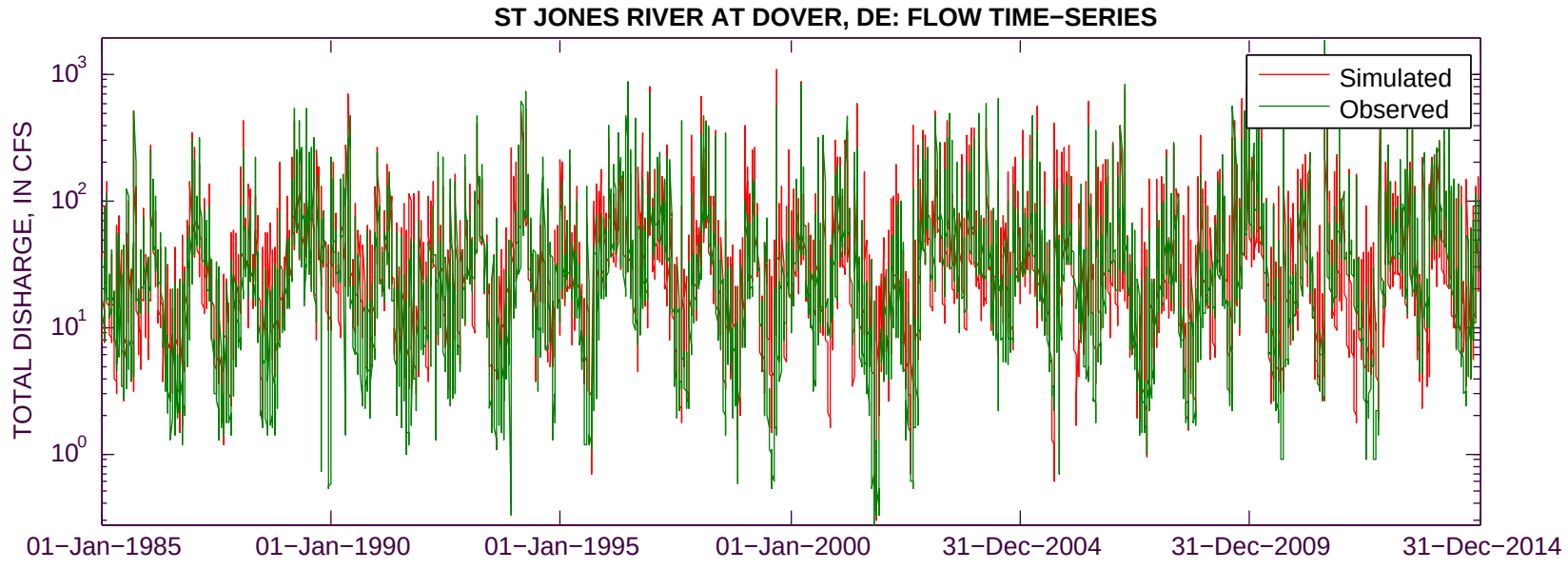
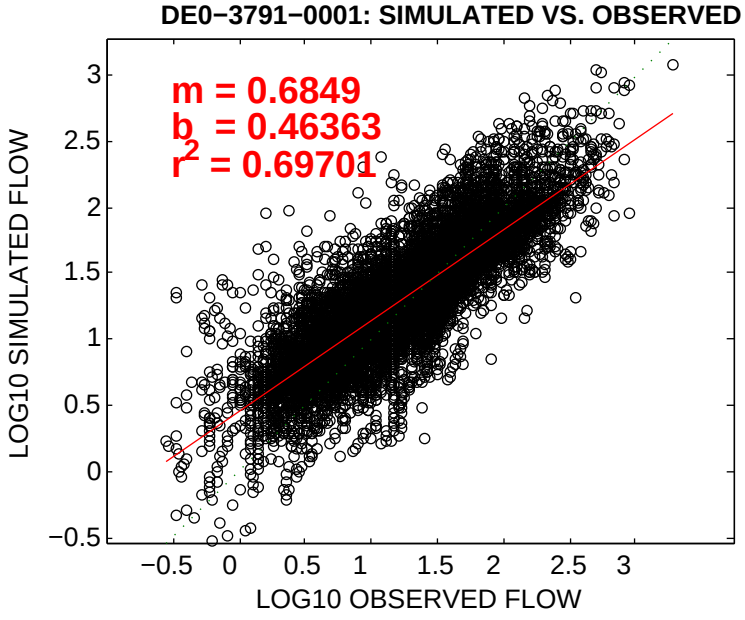
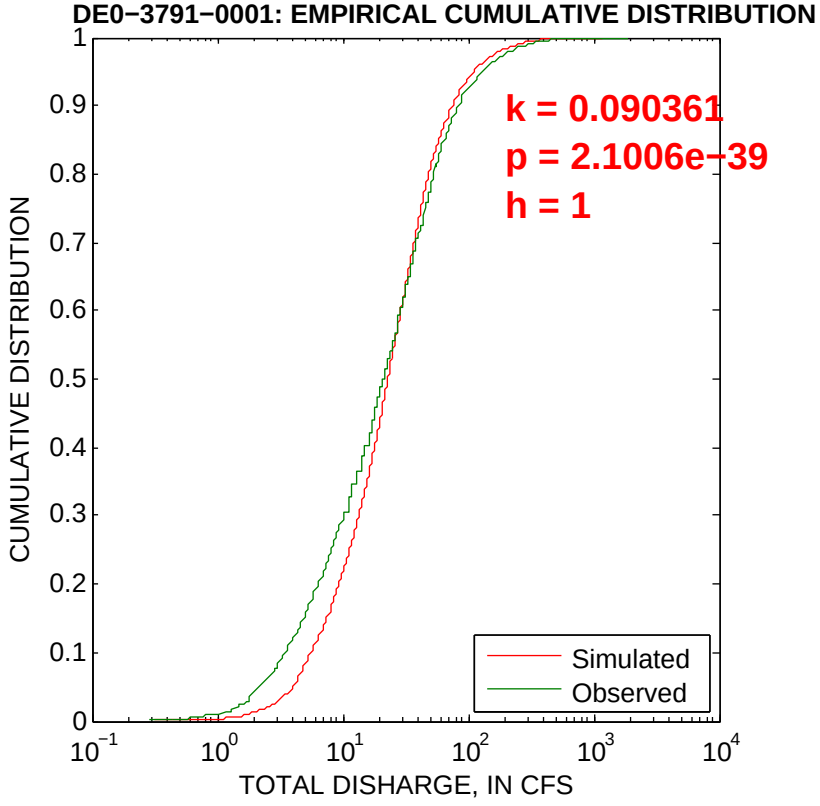






DATA SELECTION

scenario	file
P620171001WQ	FLOW.calib

plot: FLOW - total discharge

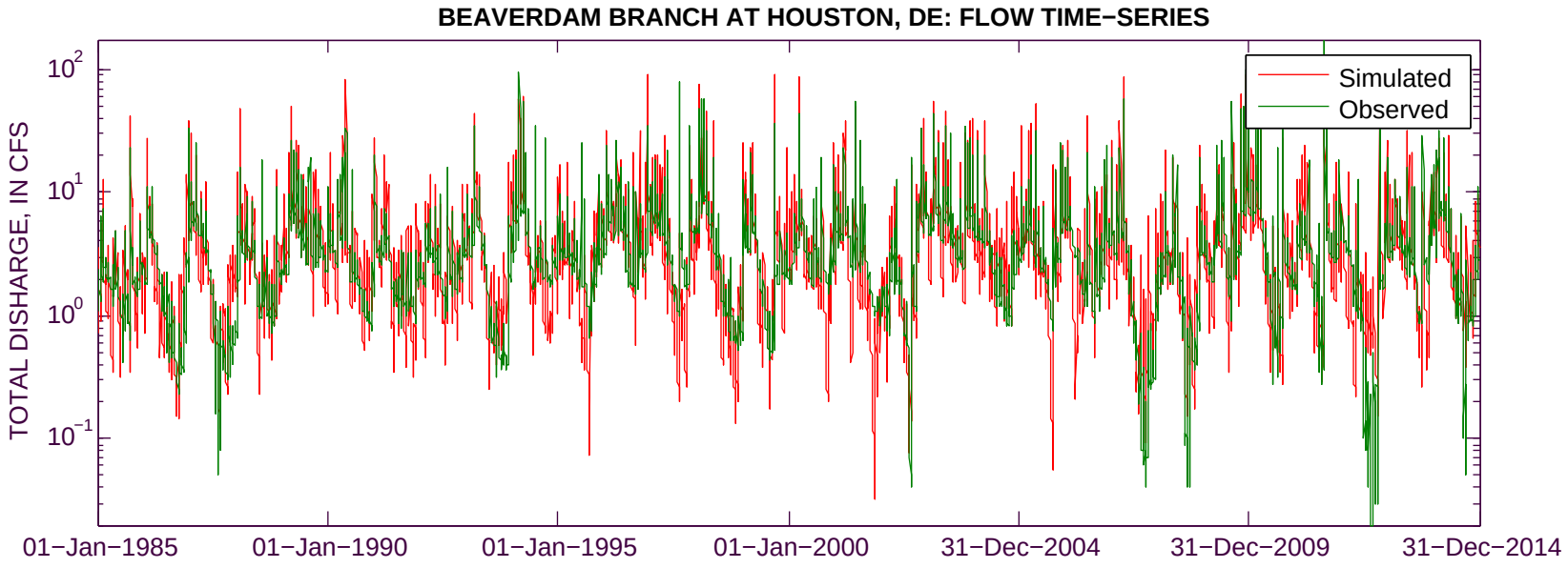
Dates: 1/1/1985 – 12/31/201

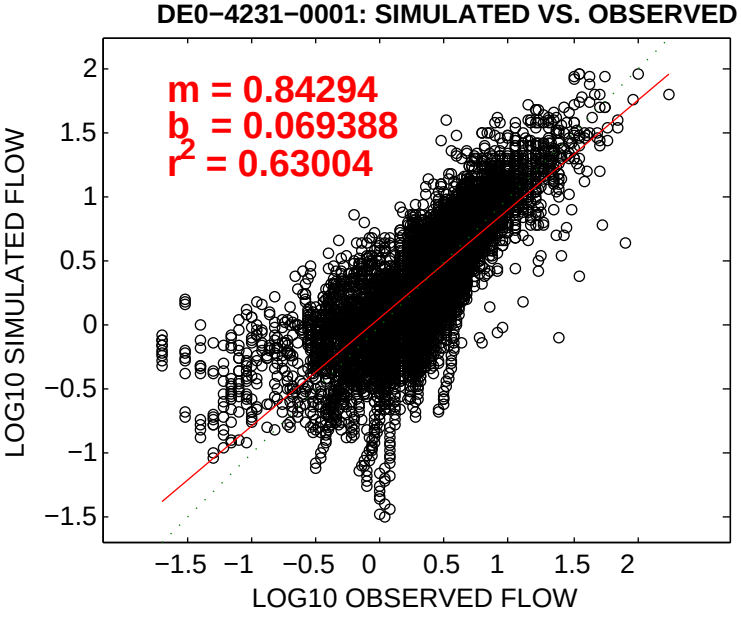
Drive	Directory	Observed
N/A	model	OBS20161101

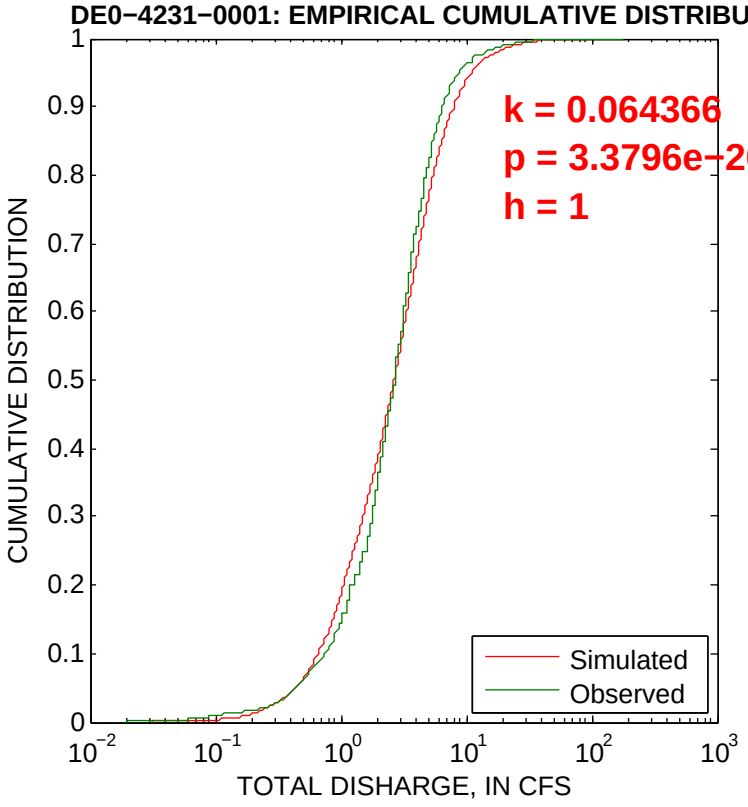
STATISTICS

	observe	simulate
n	10956	10956
min	0.28 -0.552842	0.29806 -0.525696
mean	39.3059 1.28293	37.1684 1.3423
media	21 1.32222	23.0035 1.36179
max	1910 3.28103	1196.6 3.07795
varian	4039.25 0.292988	2990.89 0.197178
JB	0.001 0.001	0.001 0.001
	ra	log
%	-5.438	4.6277
err.va	1997.01	0.092359
rel.std.err	0.494402	0.315231
mod.eff	0.505598	0.684769

VERSION 2.1







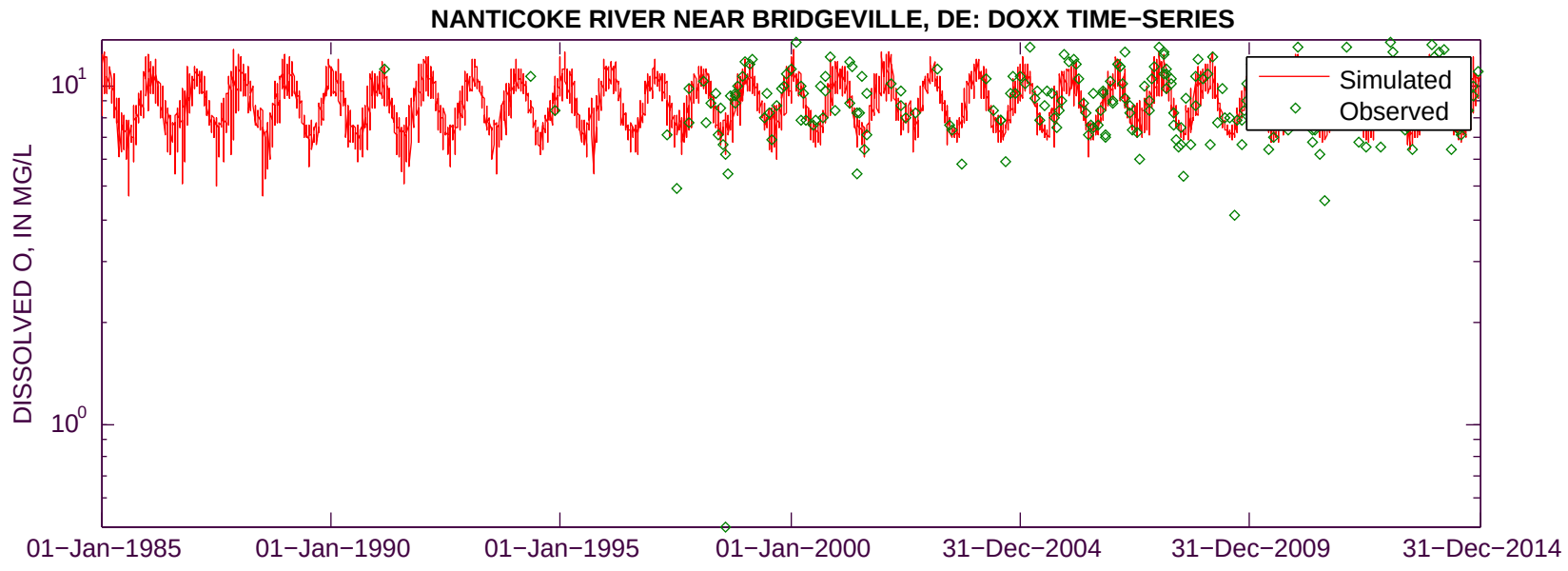
DATA SELECTION

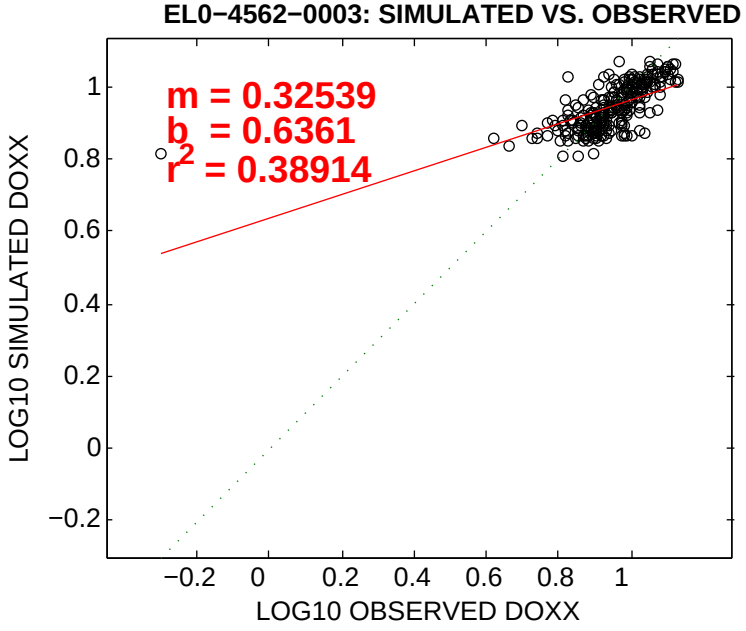
scenario: P620171001WQ
file: FLOW.calib
plot: FLOW - total discharge
Dates: 1/1/1985 12/31/201
Drive: N/A
Directory: model
Observed: OBS20161101

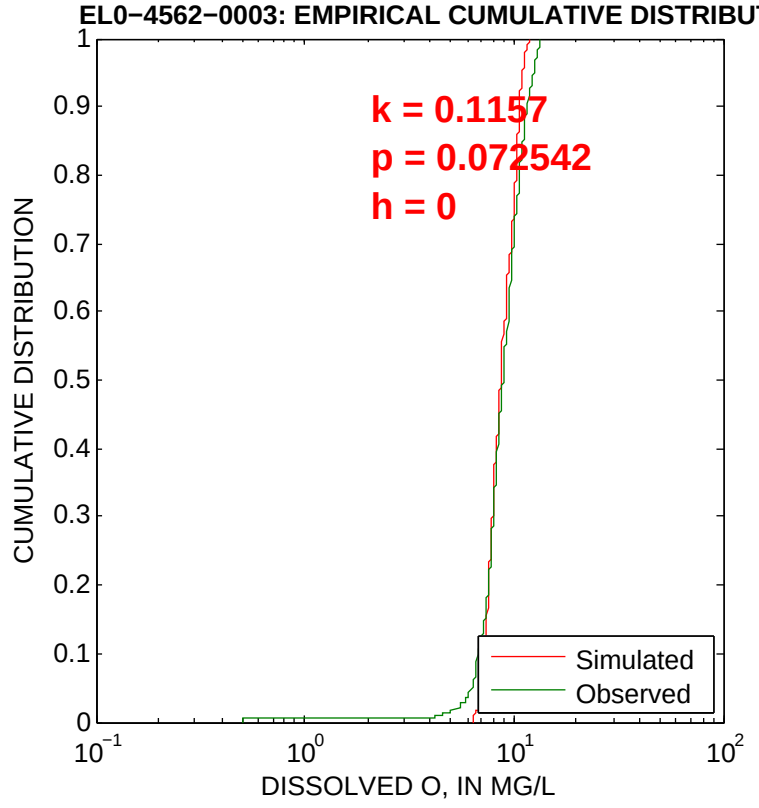
STATISTICS

	observe	simulate
n	10953	10953
min	0.02	0.032112
	-1.69897	-1.49333
mean	3.60454	3.98394
	0.382443	0.391766
media	2.7	2.6873
	0.431364	0.429316
max	176	91.159
	2.24551	1.9598
varian	21.7428	27.3237
	0.168885	0.190467
JB	0.001	0.001
	0.001	0.001
	ra	log
%	10.5257	2.43772
err.va	11.6458	0.0747182
rel.std.err	0.535617	0.44242
mod.eff	0.464383	0.55758

VERSION 2.1







DATA SELECTION

scenario	file
P620171001WQ	DOXX.calib

plot: DOXX - dissolved oxygen

Dates: 1/1/1985 — 12/31/201

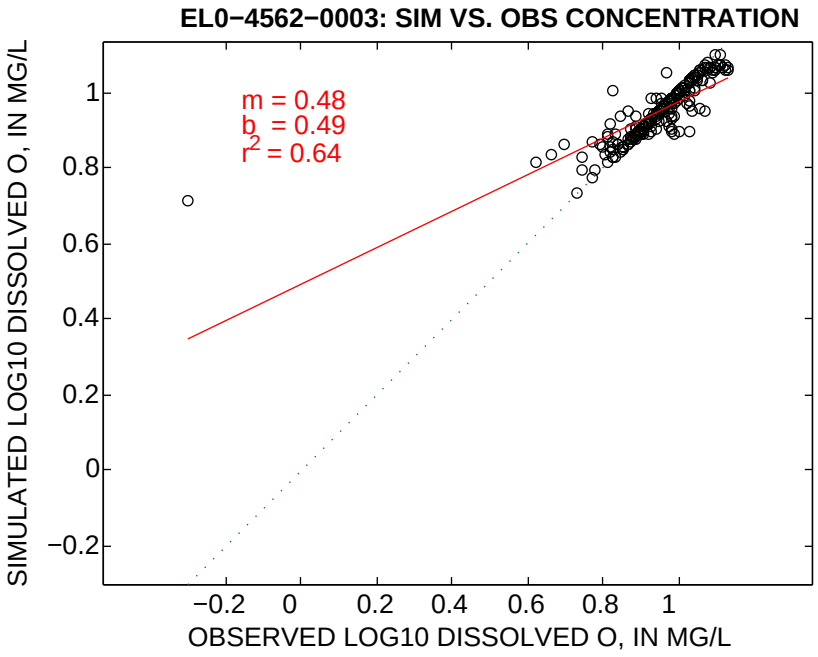
Drive	Directory	Observed
N/A	model	OBS20161101

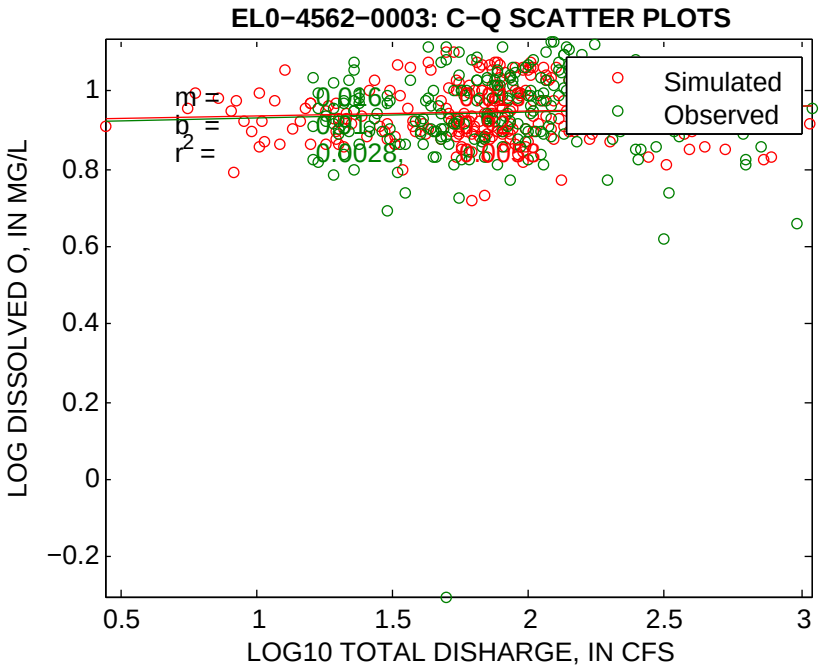
STATISTICS

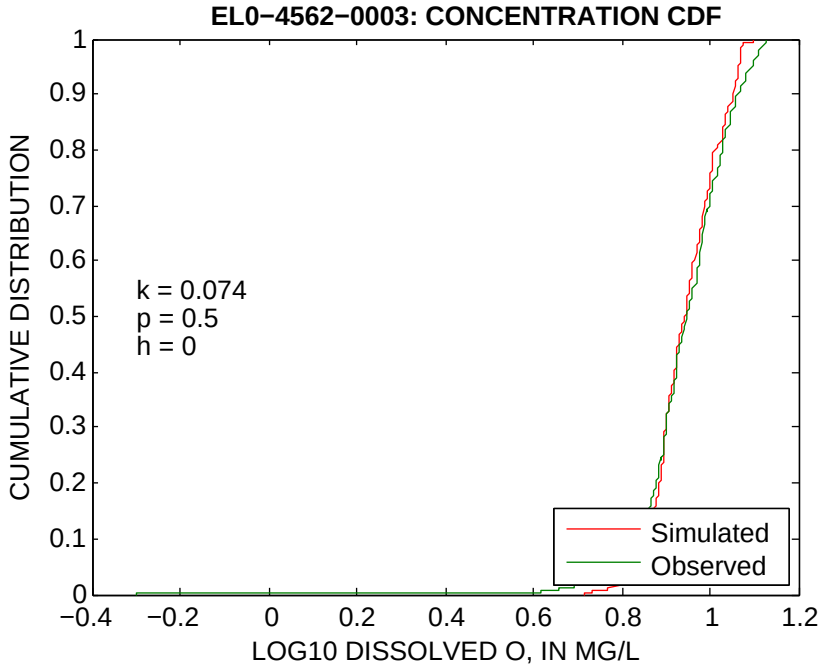
	n	242	242
		observe	simulate
min		0.5	6.4057
		-0.30103	0.806567
mean		9.04051	8.86566
		0.943602	0.943142
media		8.895	8.6507
		0.949146	0.937051
max		13.5	11.841
		1.13033	1.07339
varian		3.66345	1.67952
		0.0145881	0.00396923
JB		0.013473	0.006410
		0.001	0.009839
		ra	log
%		-1.93405	-0.0488119
err.va		1.67593	0.0090638
rel.std.err		1.457472	0.621315
mod.eff		0.542528	0.378685

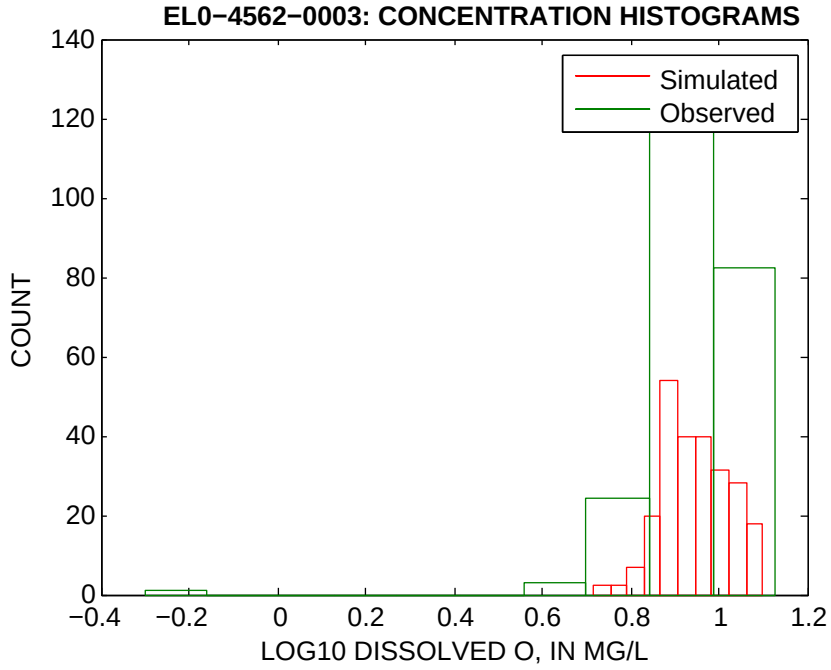
VERSION 2.1

ALL DATA
LOG10

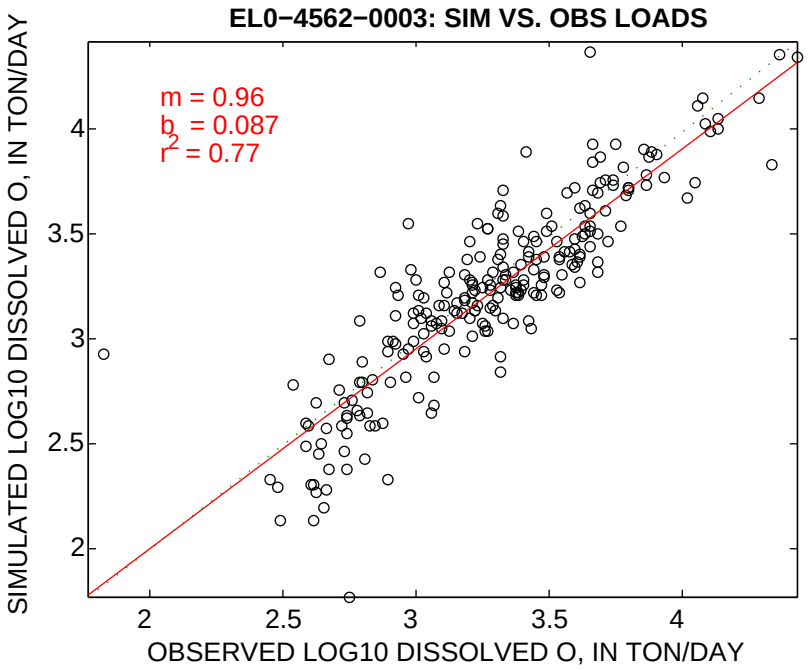


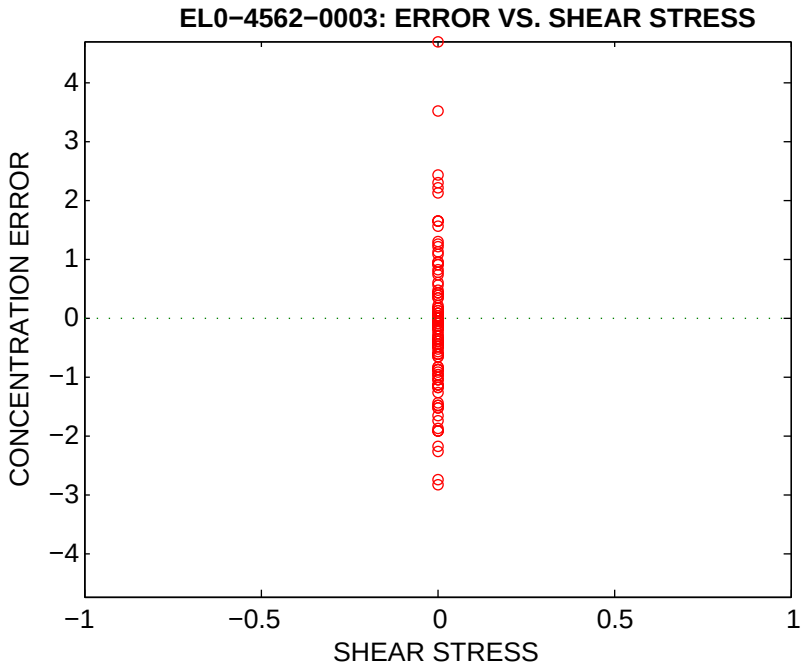


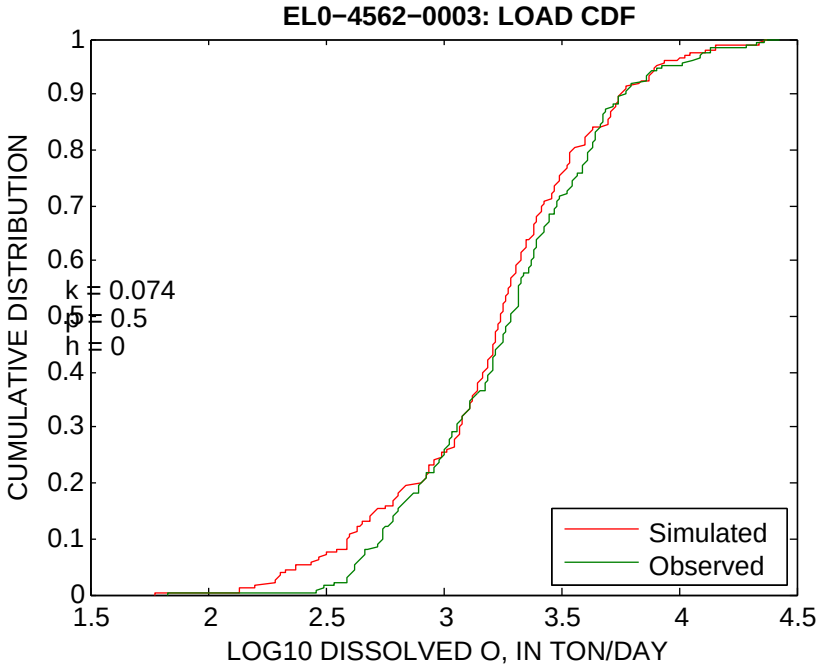


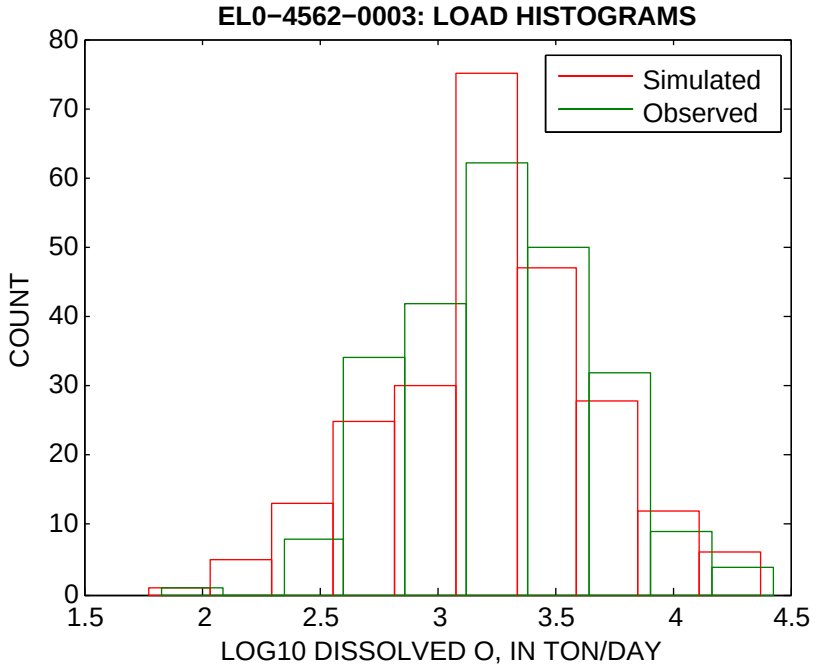


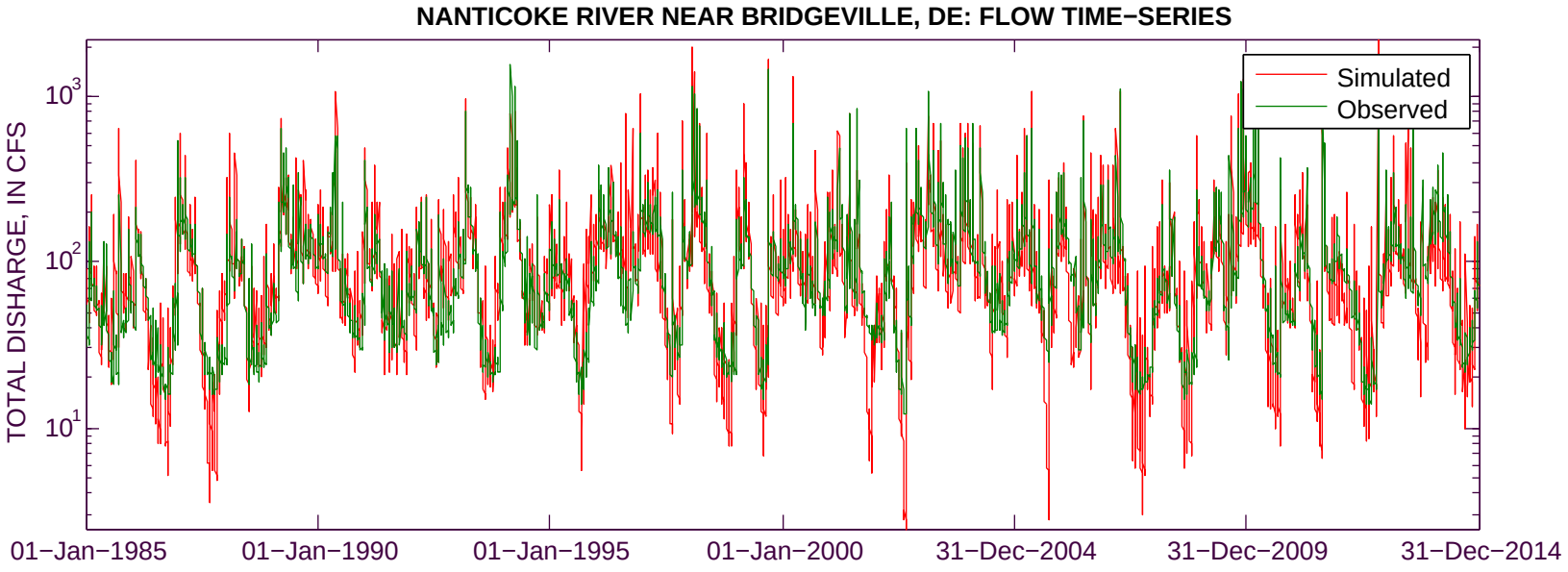
LOAD DATA
LOG10

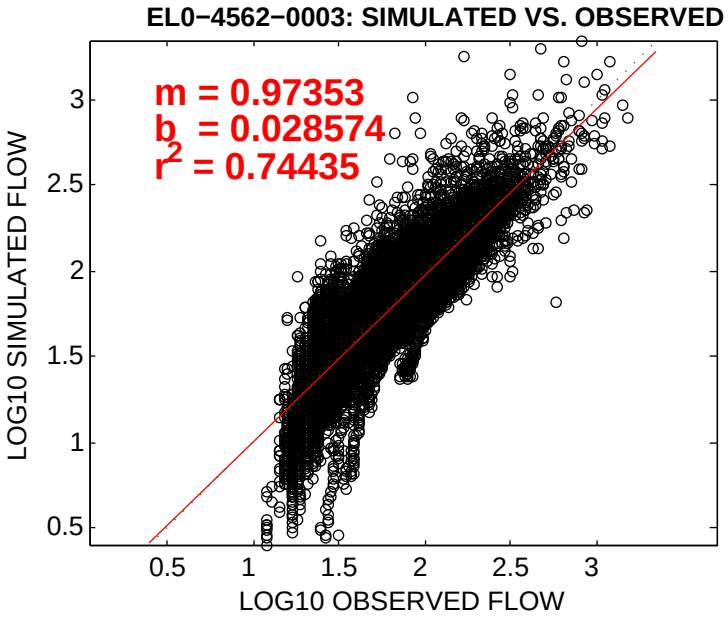


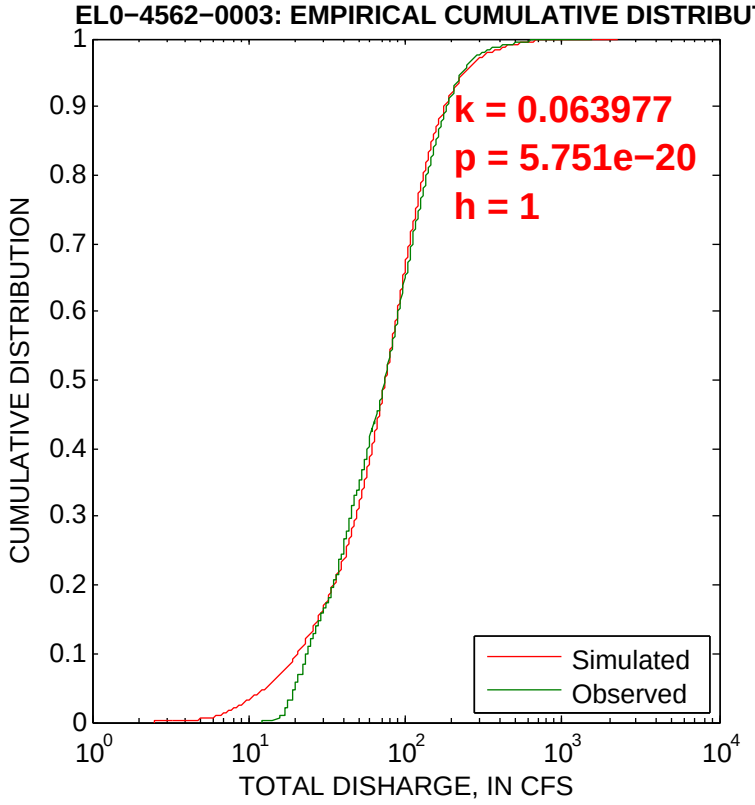












DATA SELECTION

scenario	file
P620171001WQ	FLOW.calib

plot: FLOW - total discharge

Dates 1/1/1985 12/31/201

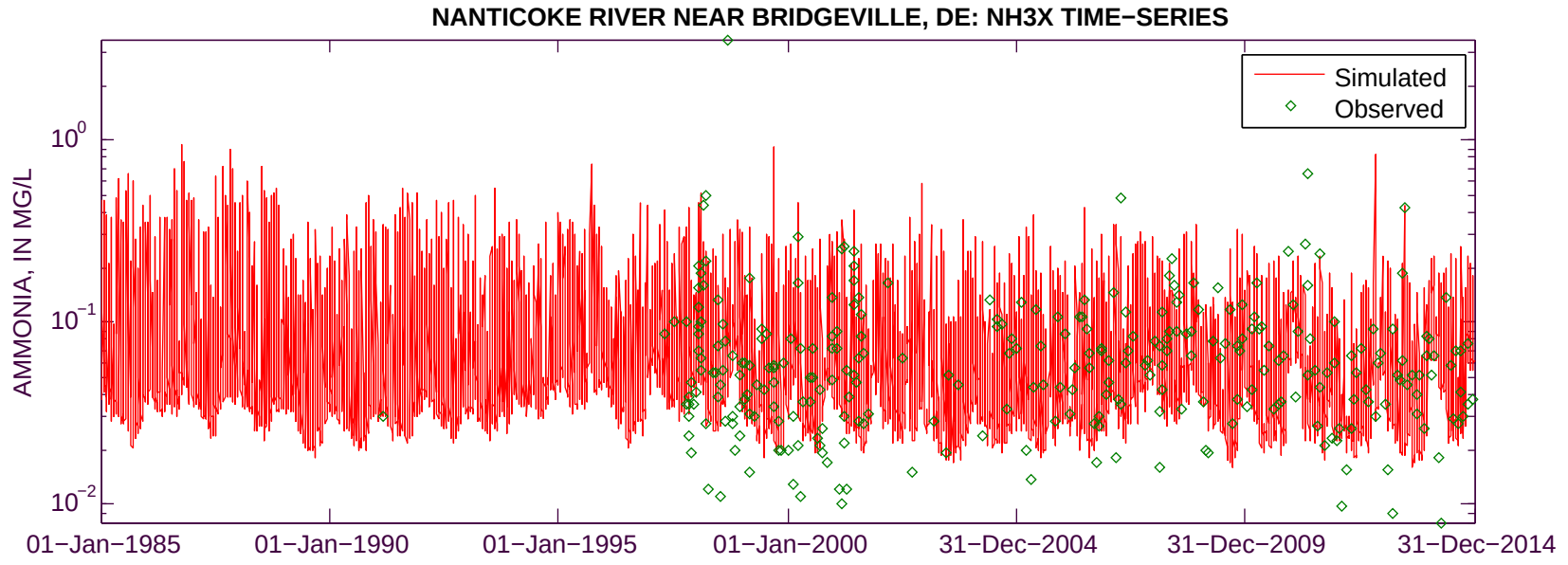
Drive Directory Observed

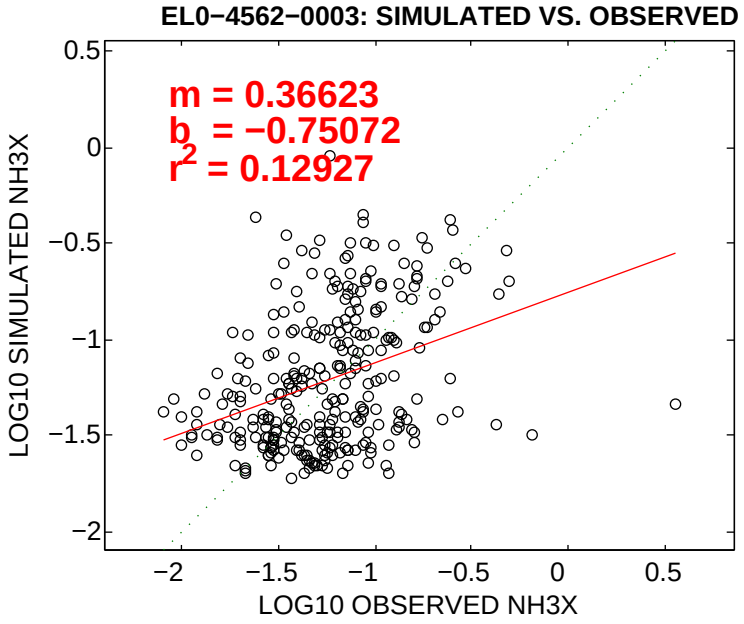
N/A model OBS20161101

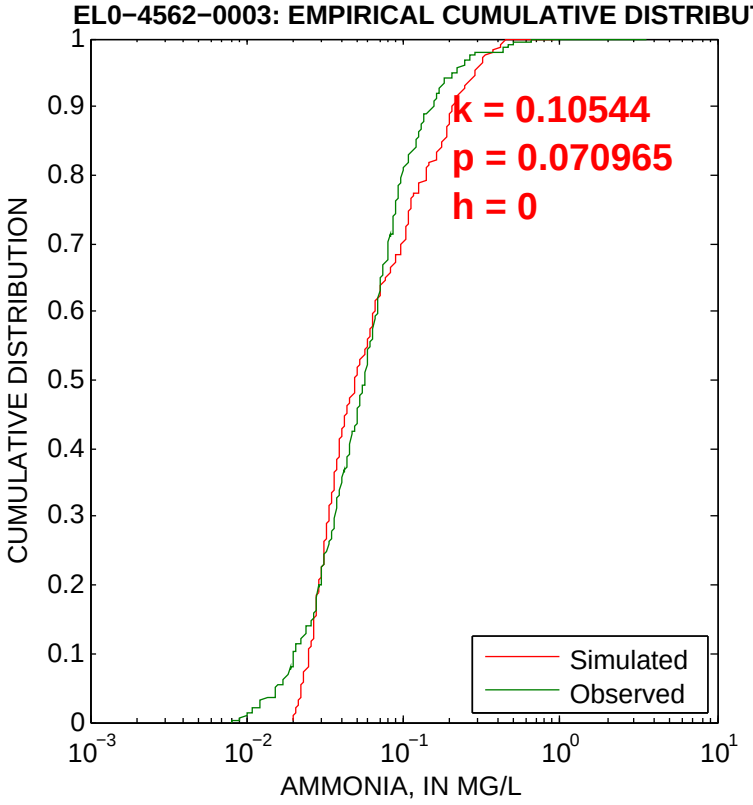
STATISTICS

	observe	simulate
n	10957	10957
min	12	2.4667
	1.07918	0.392116
mean	95.8917	95.9998
	1.85092	1.83049
media	75	75.106
	1.87506	1.87567
max	1550	2225.6
	3.19033	3.34745
varian	8135.7	9950.34
	0.112304	0.142992
JB	0.001	0.001
	0.001	0.001
	ra	log
%	0.112787	-1.10363
err.va	4075.02	0.0370516
rel.std.err	0.500881	0.329923
mod.eff	0.499119	0.670077

VERSION







DATA SELECTION

scenario: P620171001WQ | file: NH3X.calib

plot: NH3X - ammonia

Dates: 1/1/1985 – 12/31/201

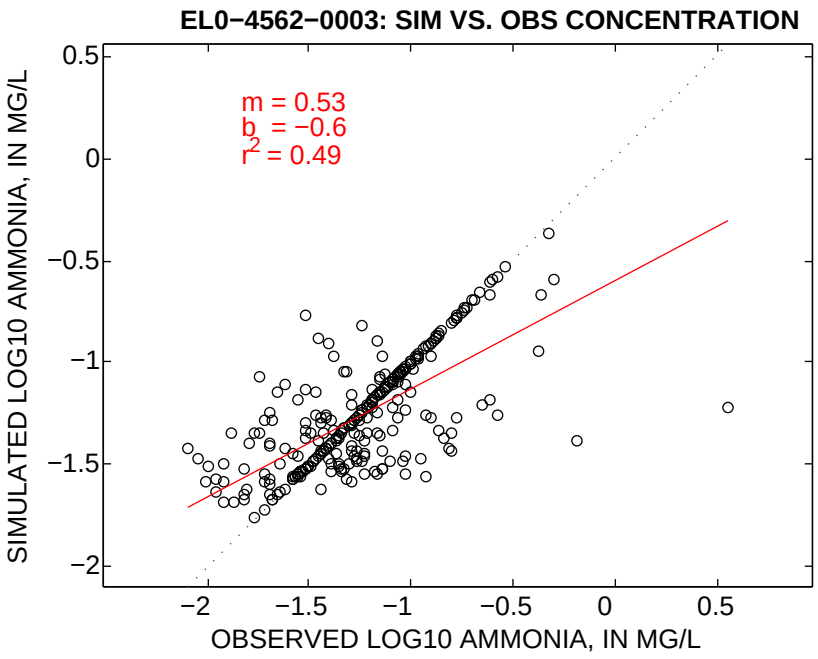
Drive: N/A | Directory: model | Observed: OBS20161101

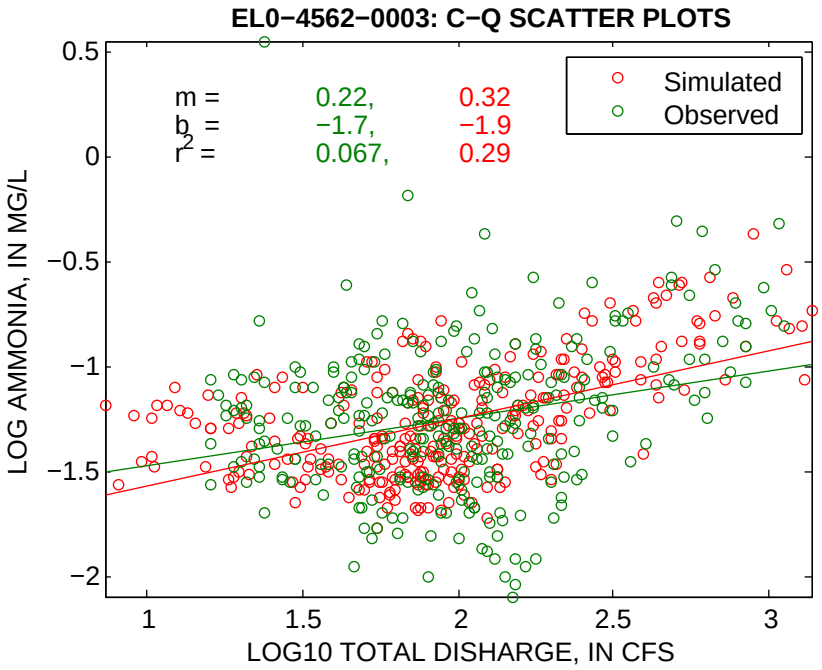
STATISTICS

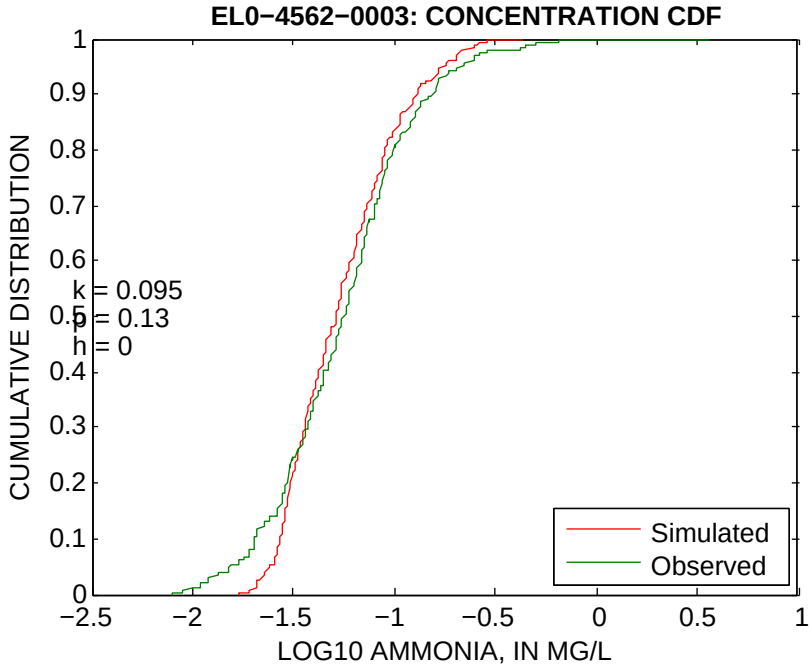
	n	observe	simulate
		294	294
min		0.008	0.018889
		-2.09691	-1.72379
mean		0.0881946	0.0907751
		-1.24894	-1.20812
media		0.0565	0.0495975
		-1.24797	-1.30454
max		3.6	0.9126
		0.556303	-0.0397195
varian		0.0481291	0.00960496
		0.123299	0.127925
JB		0.001	0.001
		0.001	0.001
		ra	log
%		2.9259	-3.26808
err.va		0.0548349	0.162584
rel.std.err		1.13933	1.31861
mod.eff		-0.13933	-0.318614

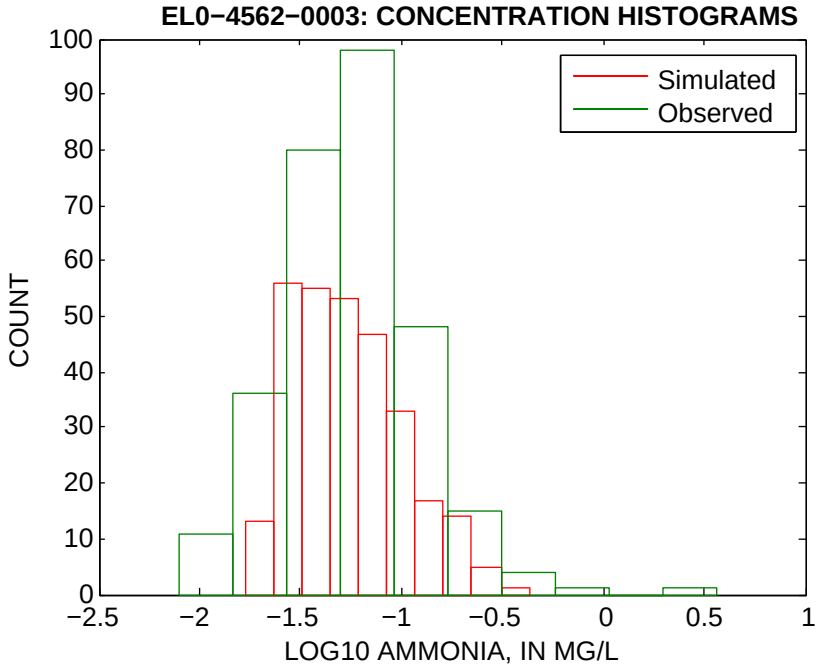
VERSION 2.1

ALL DATA
LOG10

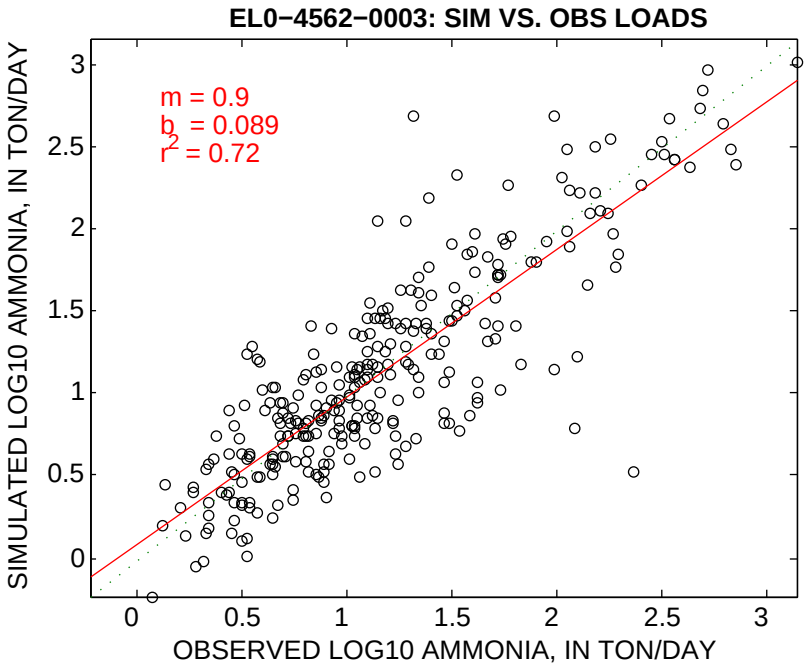


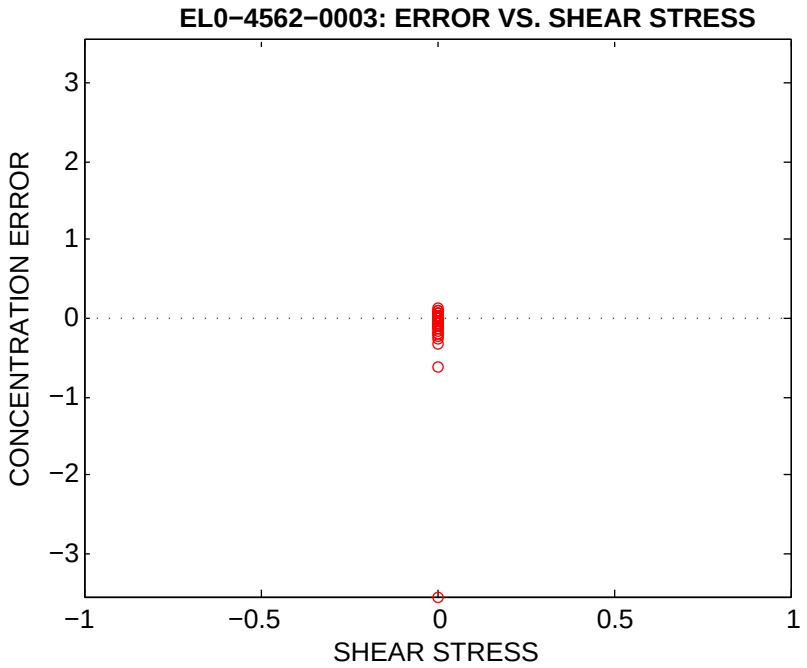


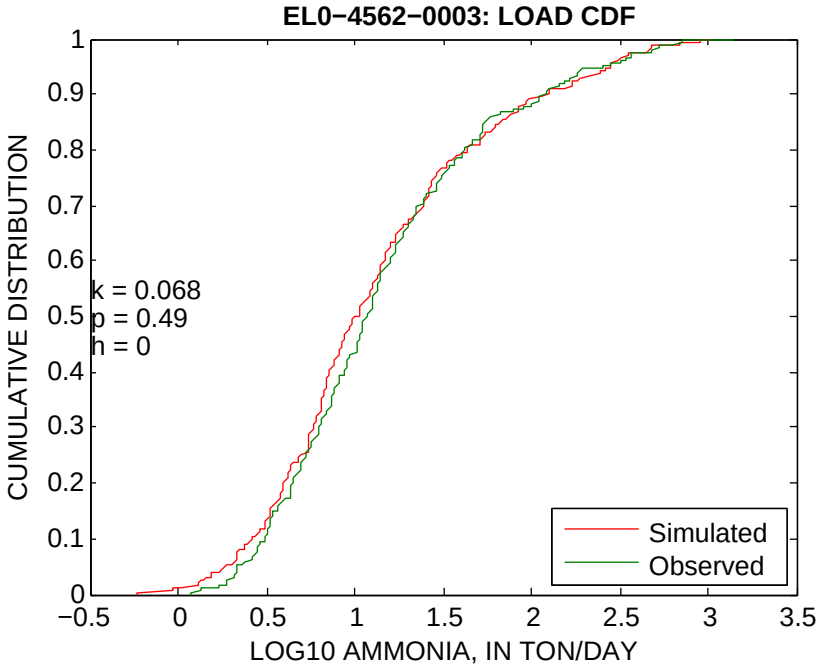


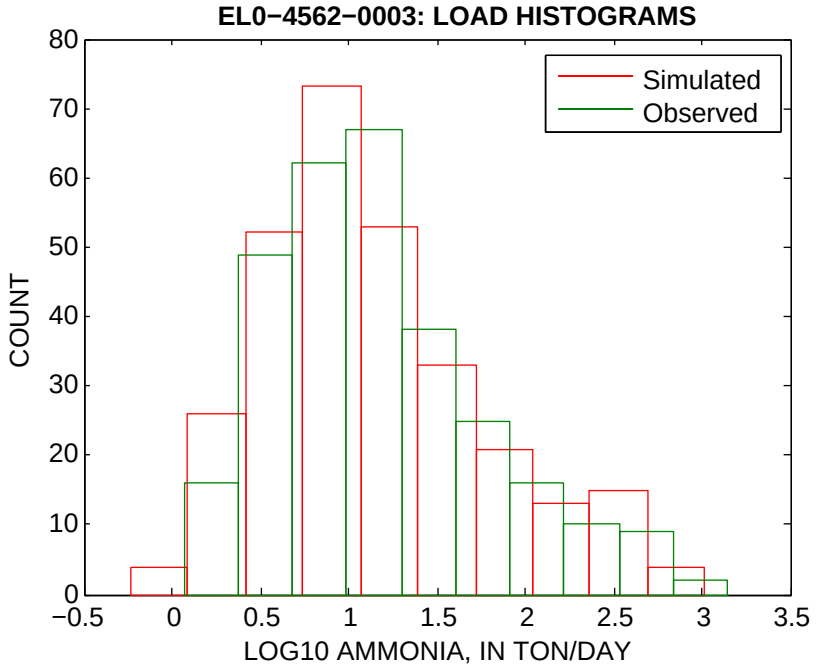


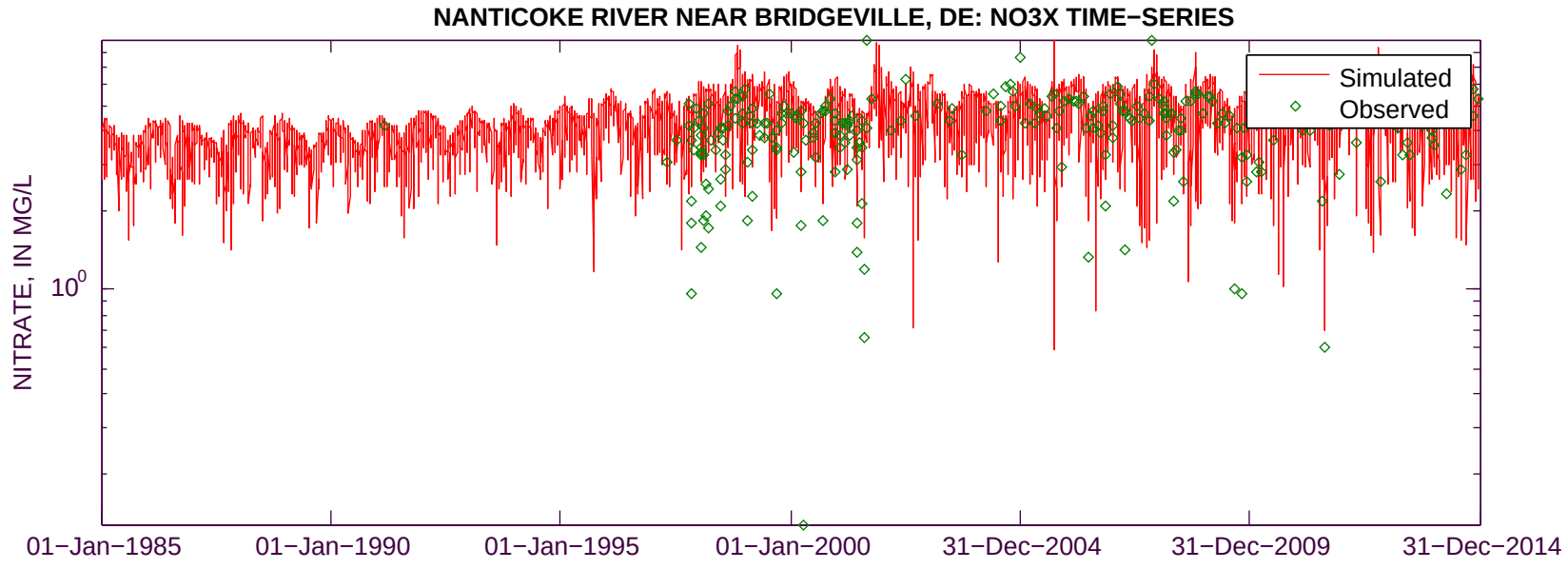
LOAD DATA
LOG10

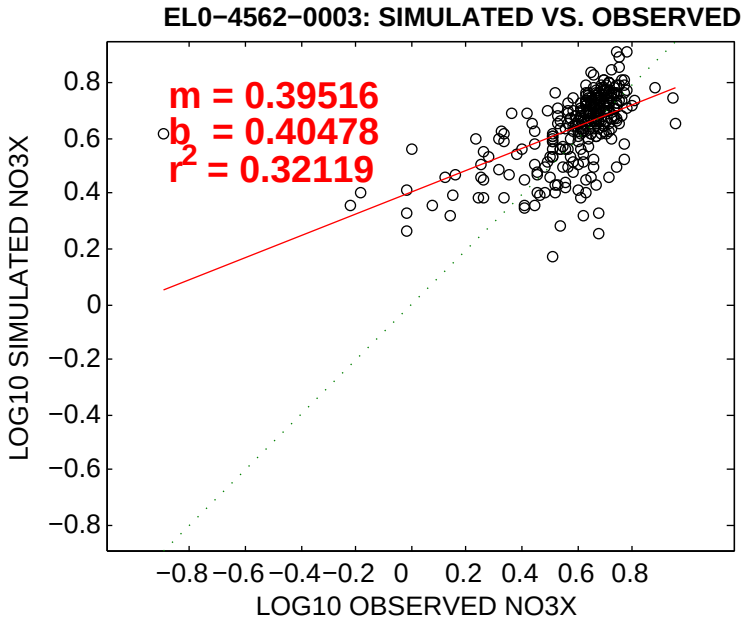


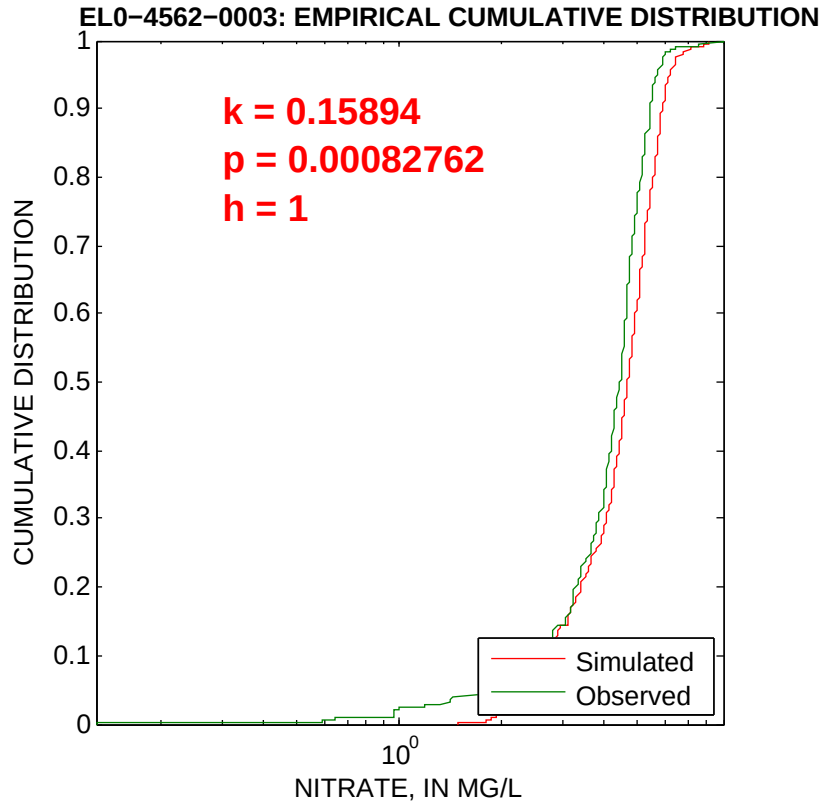












DATA SELECTION

scenario	file
P620171001WQ	NO3X.calib

plot: NO3X - nitrate

Dates: 1/1/1985 – 12/31/201

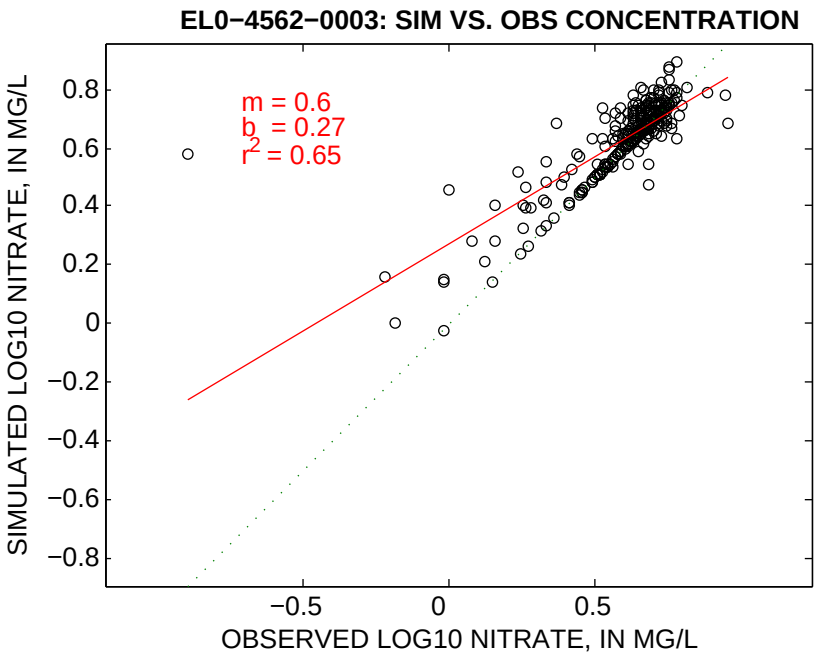
Drive	Directory	Observed
N/A	model	OBS20161101

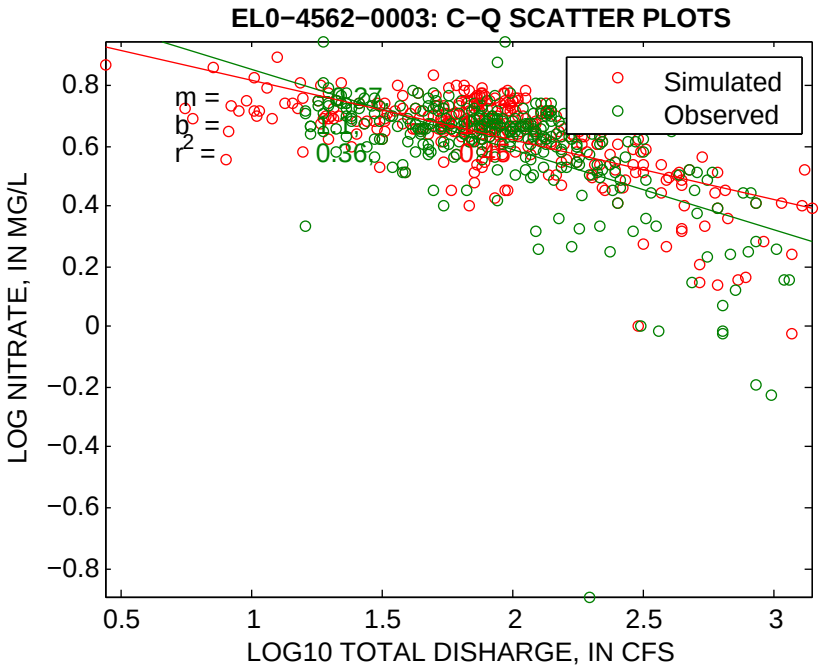
STATISTICS

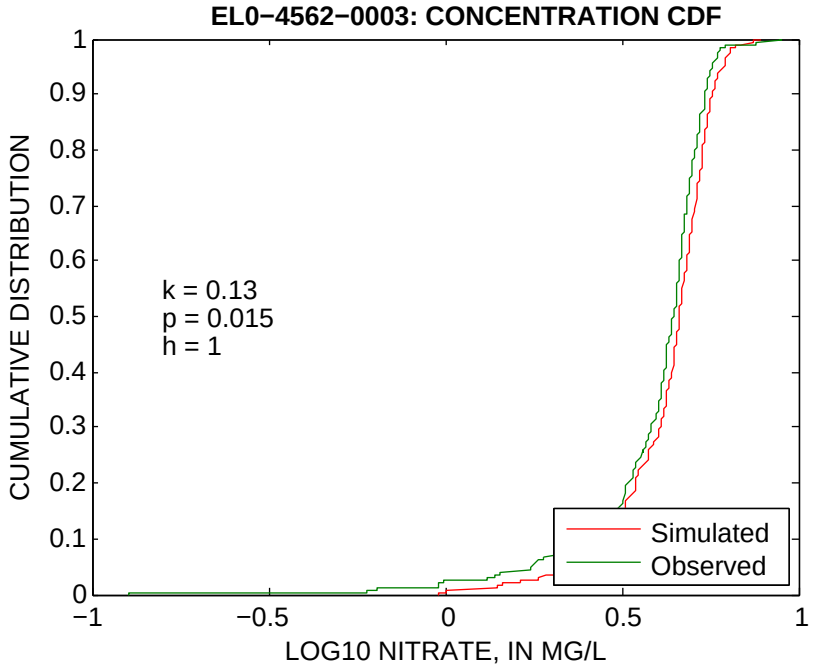
	n	302	302
		observe	simulate
min		0.128	1.4844
		-0.89279	0.171551
mean		4.21124	4.54886
		0.595923	0.640267
media		4.465	4.6637
		0.649821	0.668731
max		8.92	8.1604
		0.950365	0.911711
varian		1.521	1.45799
		0.0345897	0.0168163
JB		0.001	0.339247
		0.001	0.001
		ra	log
%		8.01707	7.4411
err.va		1.21474	0.0260421
rel.std.err		0.798647	0.752887
mod.eff		0.201353	0.247113

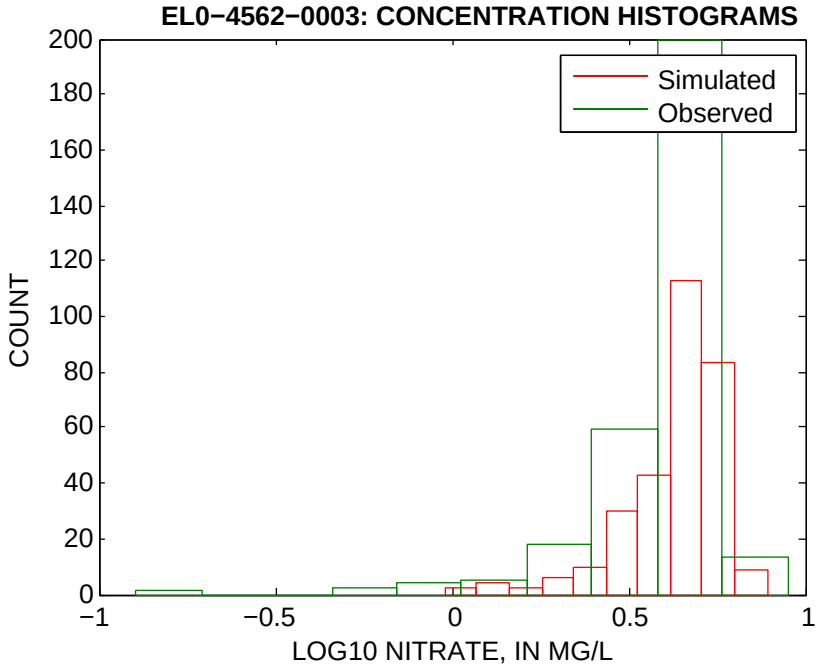
VERSION 2.1

ALL DATA
LOG10

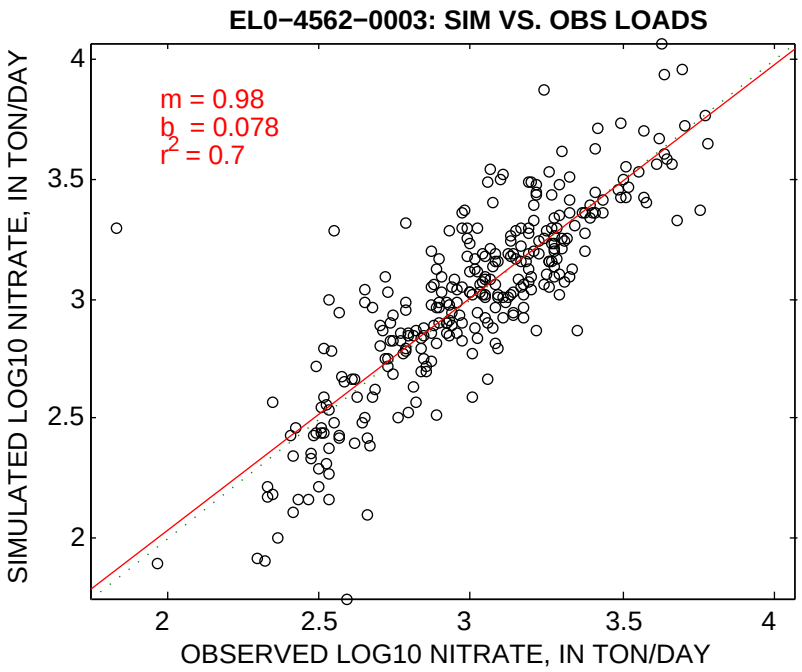




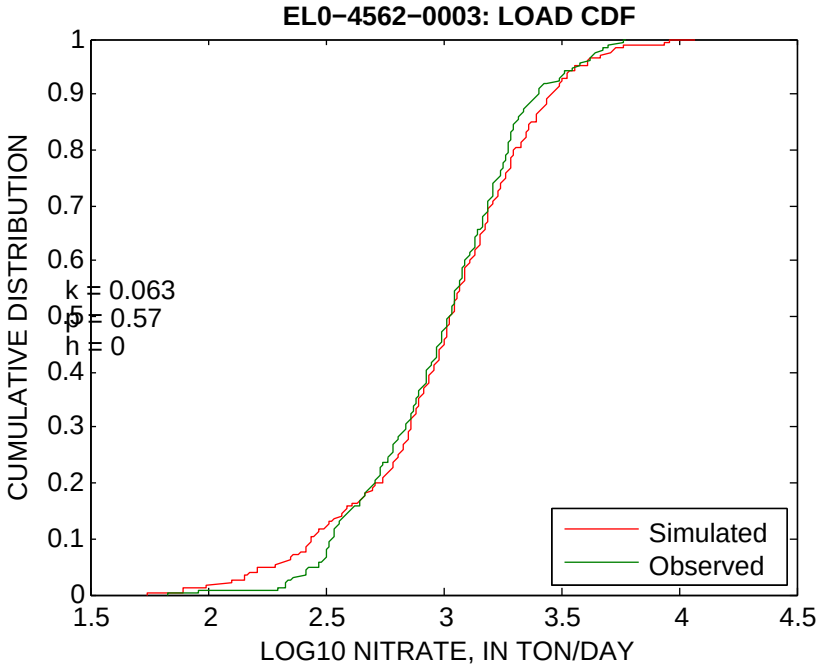


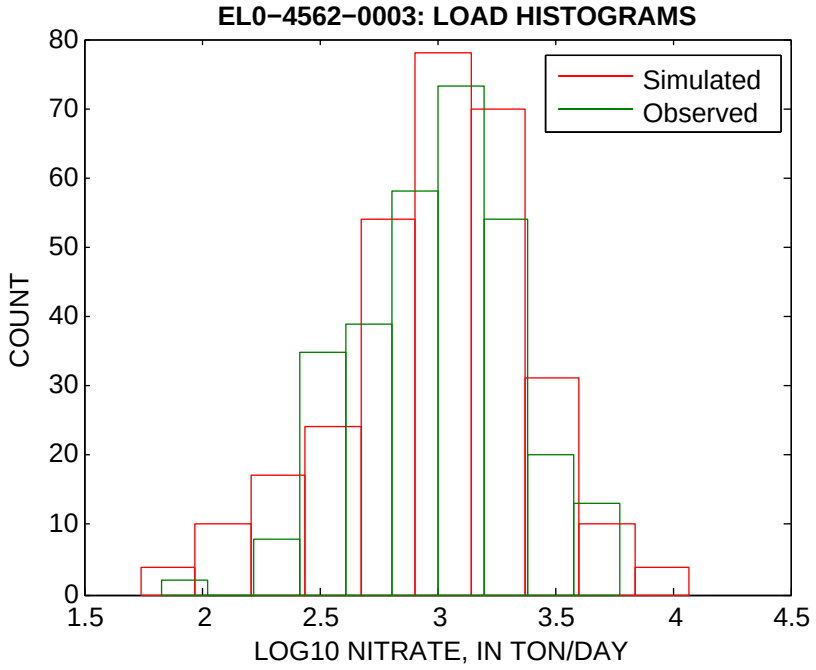


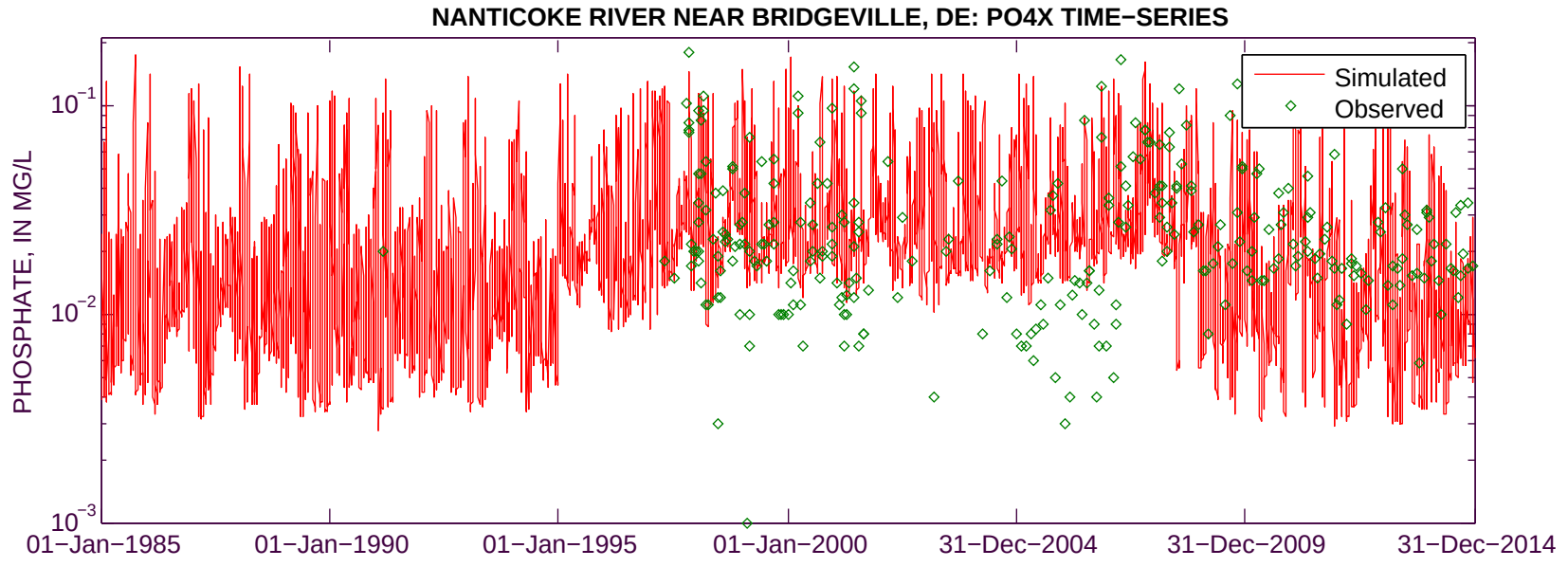
LOAD DATA
LOG10

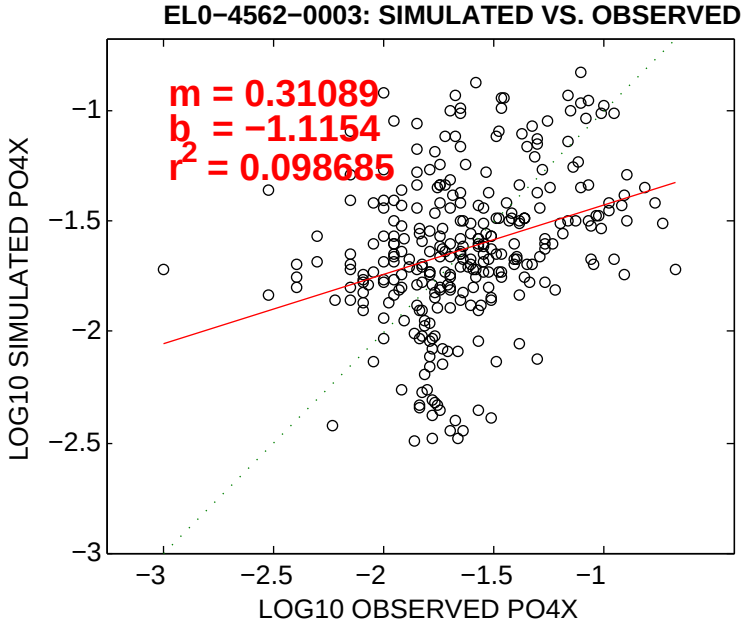


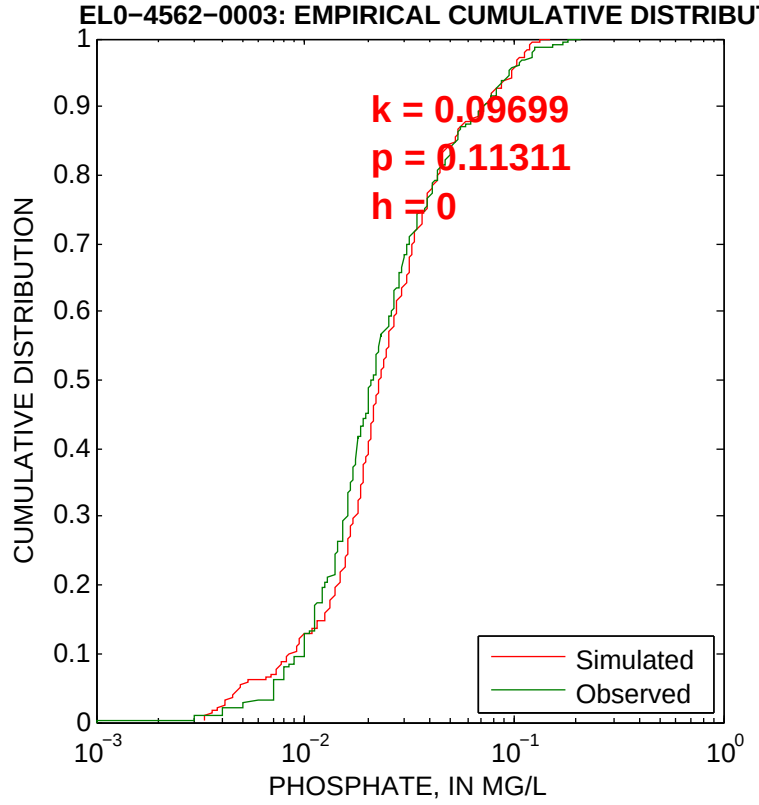












DATA SELECTION

scenario	file
P620171001WQ	PO4X.calib

plot: PO4X - phosphate

Dates: 1/1/1985 – 12/31/201

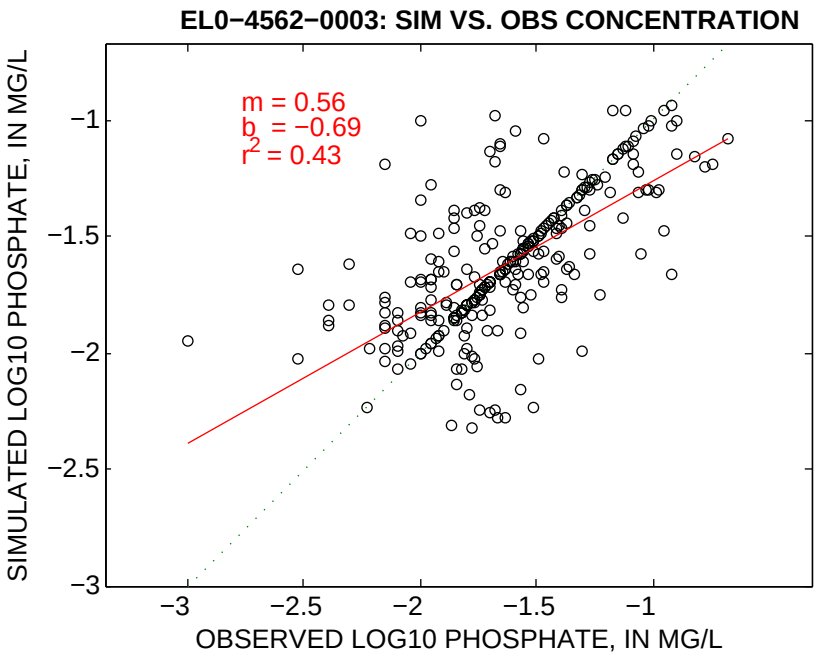
Drive	Directory	Observed
N/A	model	OBS20161101

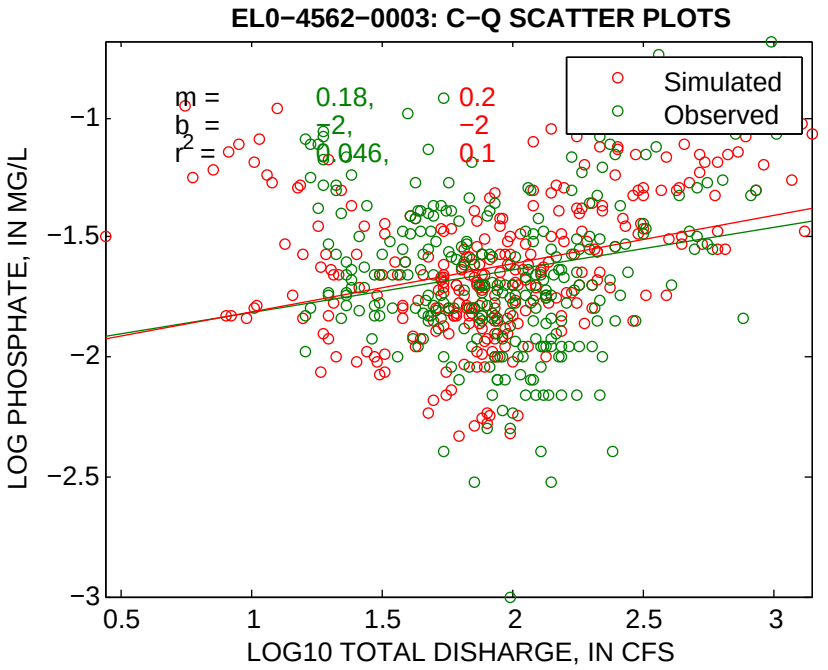
STATISTICS

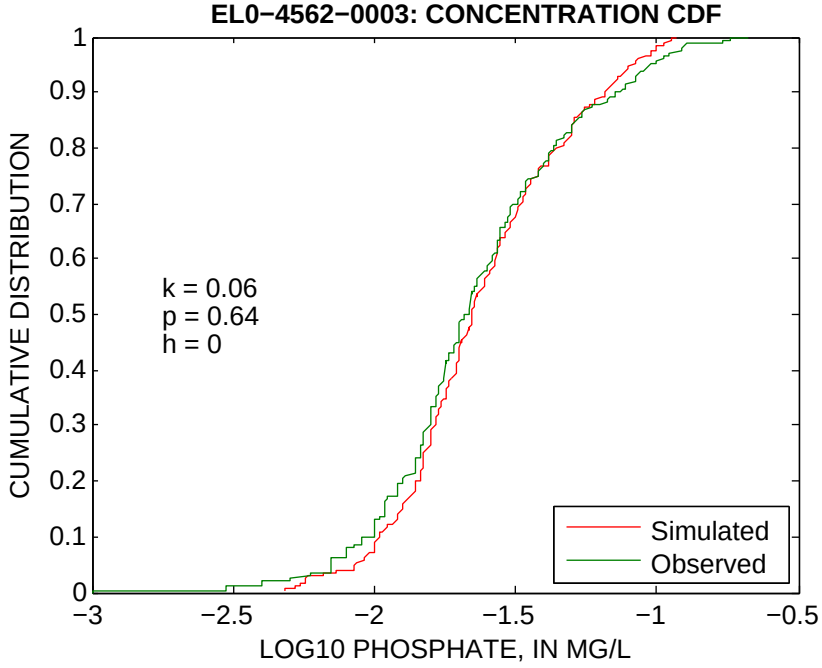
	n	299	299
		observe	simulate
min		0.001	0.0032448
		-3	-2.48881
mean		0.0318851	0.0318844
		-1.6375	-1.62444
media		0.021	0.022738
		-1.67778	-1.64325
max		0.211	0.15108
		-0.675718	-0.820793
varian		0.00093269	0.00071305
		0.118169	0.115736
JB		0.001	0.001
		0.056059	0.431967
		ra	log
%		0.0022719	-0.797497
err.va		0.00120961	0.160601
rel.std.err		1.2969	1.35908
mod.eff		-0.296898	-0.359078

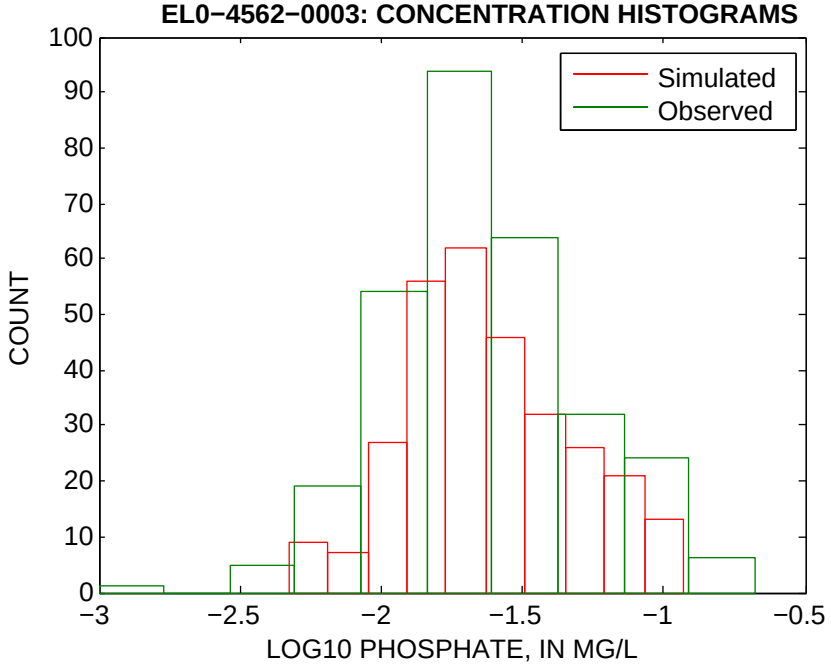
VERSION 2.1

ALL DATA
LOG10

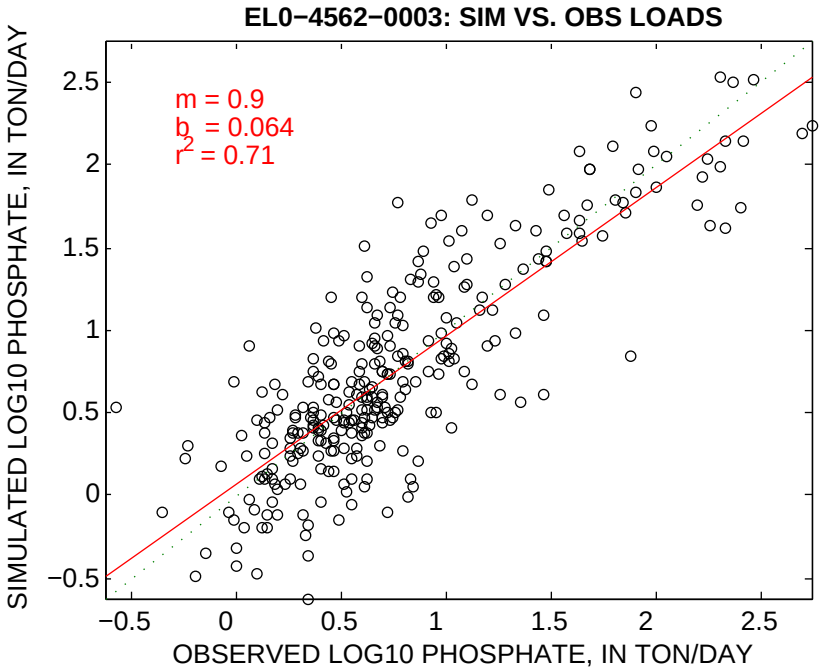




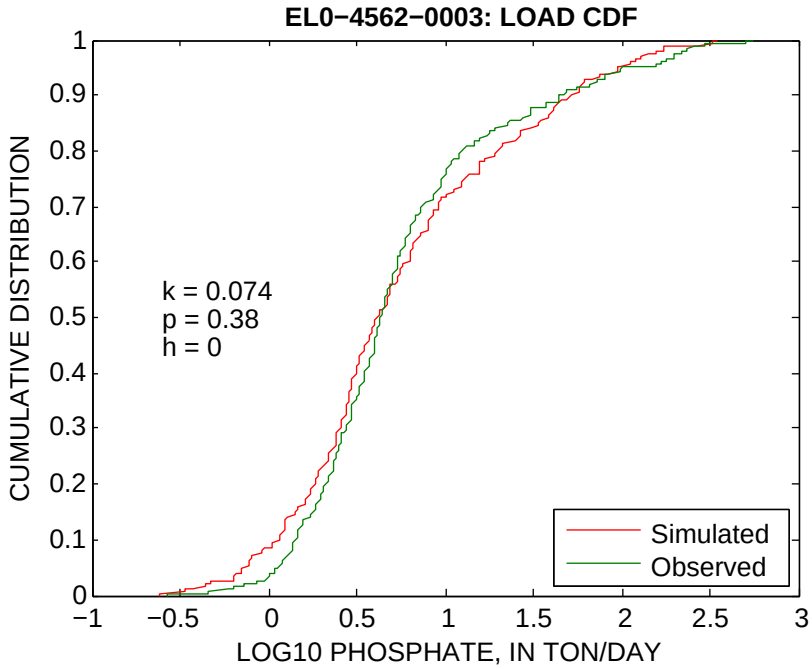


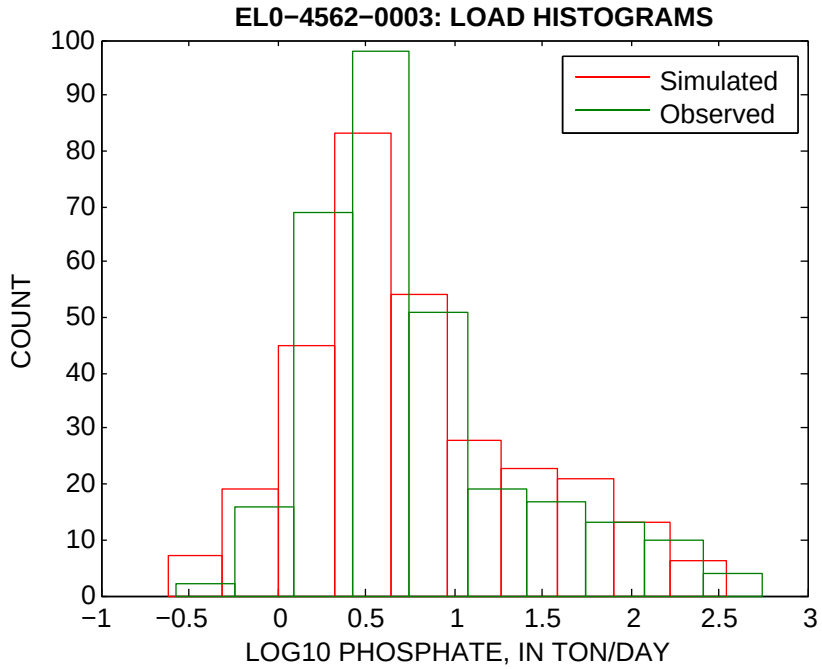


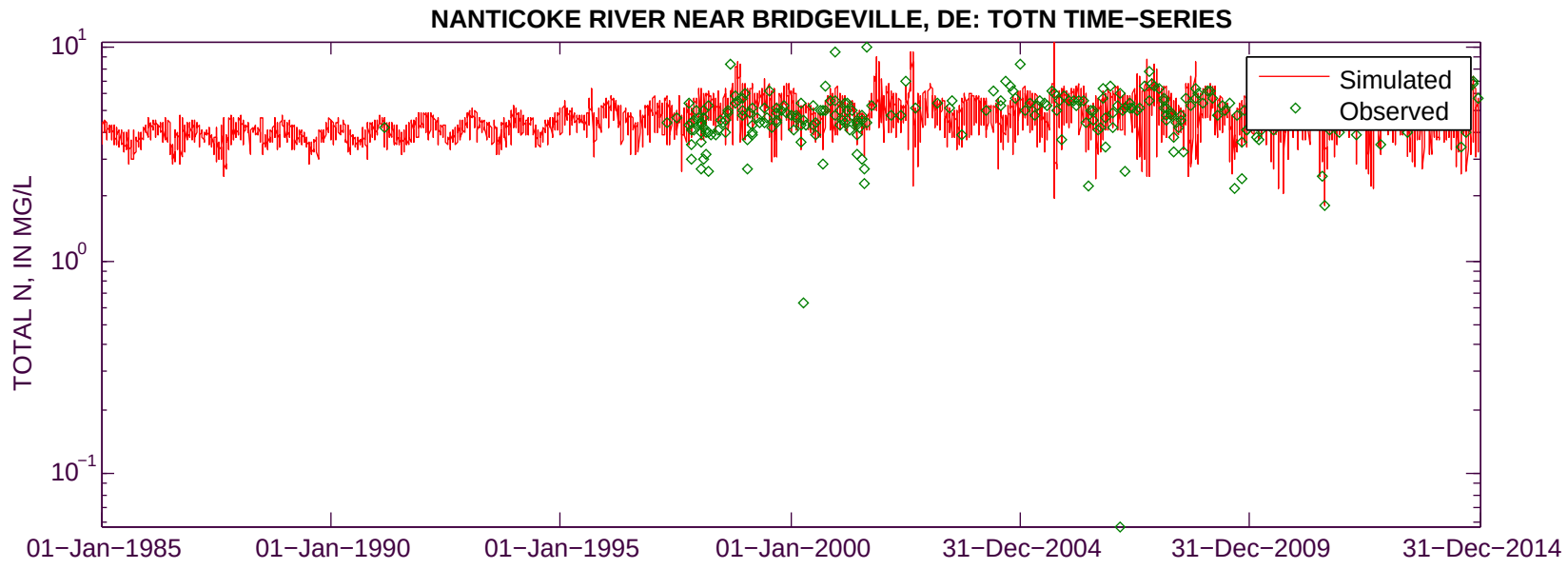
LOAD DATA
LOG10

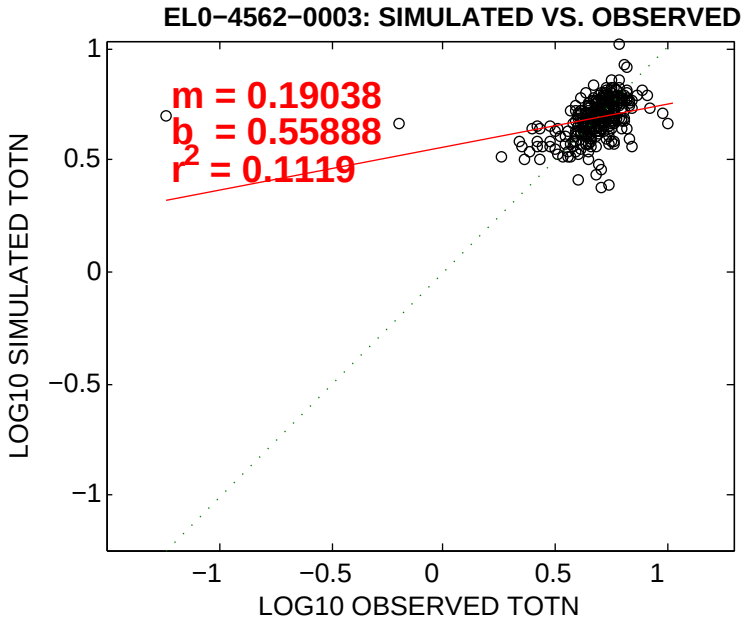


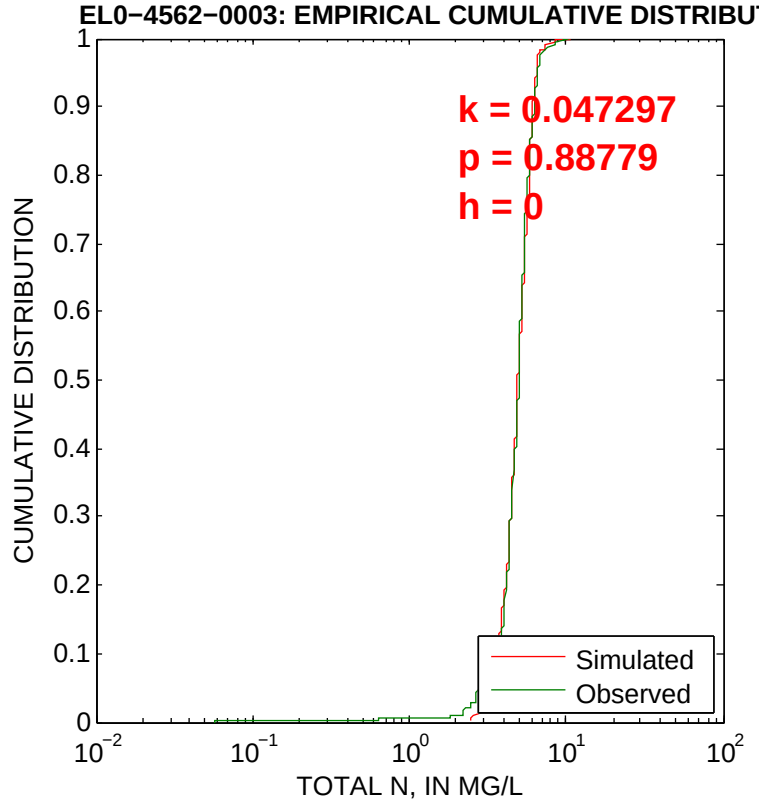












DATA SELECTION

scenario	file
P620171001WQ	TOTN.calib

plot: TOTN - total nitrogen

Dates 1/1/1985 12/31/201

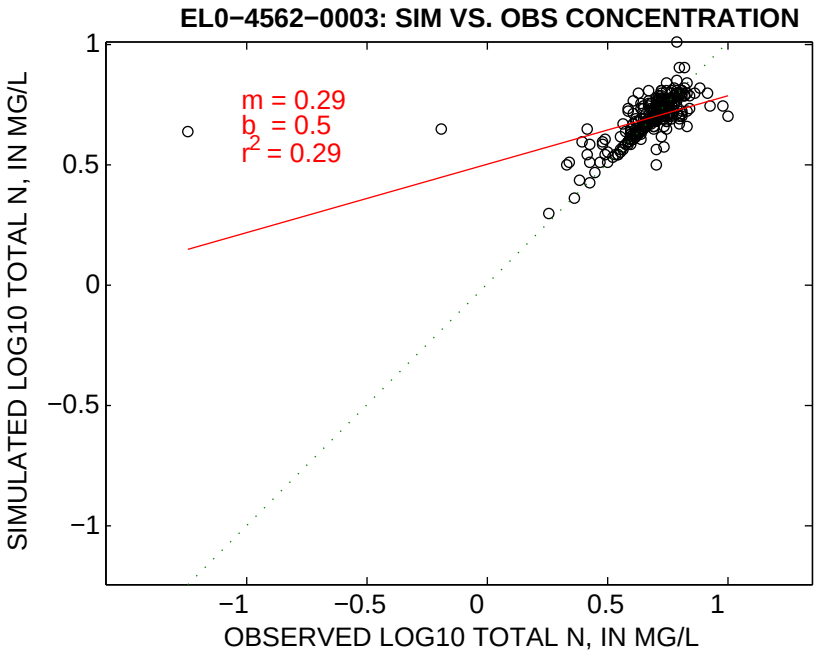
Drive	Directory	Observed
N/A	model	OBS20161101

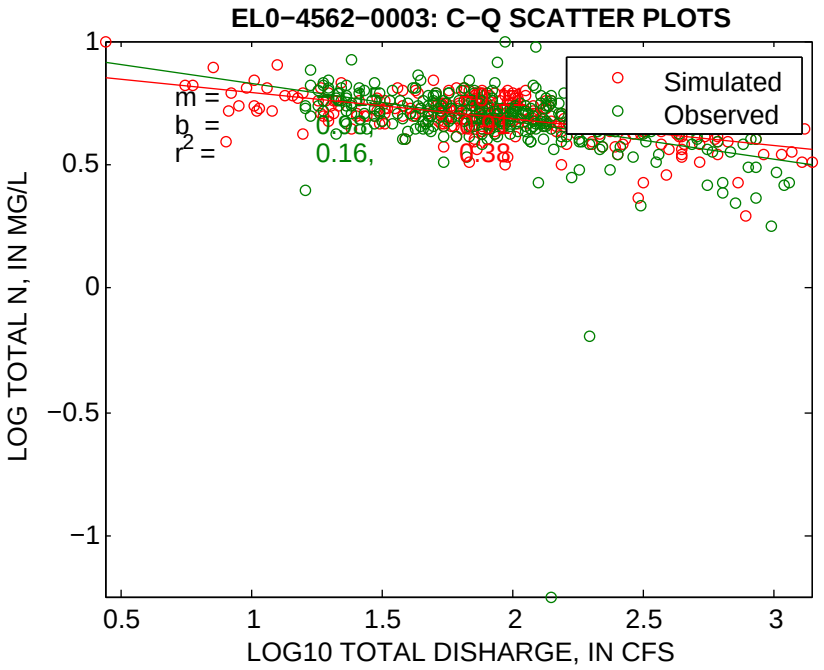
STATISTICS

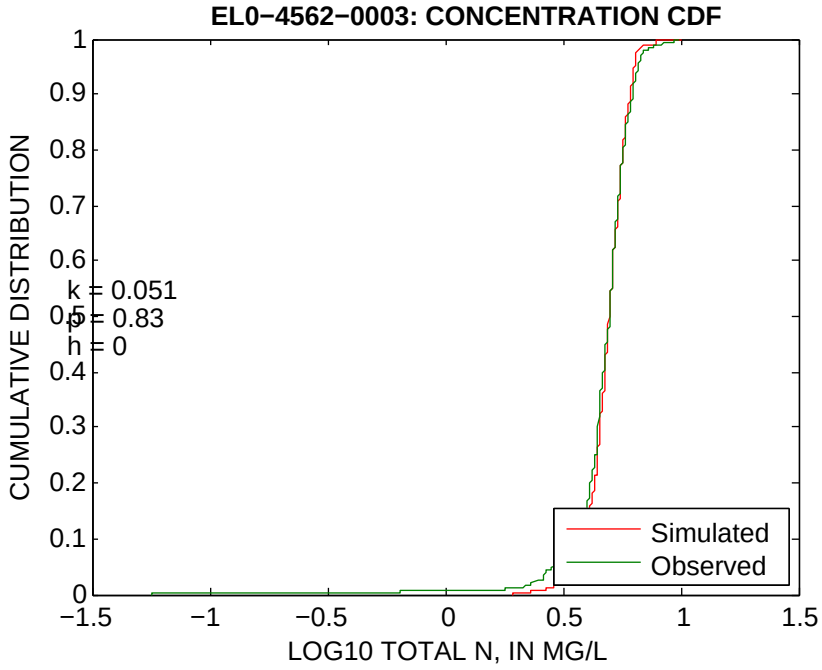
	n	296	296
		observe	simulate
min		0.057	2.3648
		-1.24413	0.373794
mean		4.94707	4.97625
		0.6764	0.68765
media		5	4.9389
		0.69897	0.69363
max		9.97	10.597
		0.998695	1.02518
varian		1.34085	1.04994
		0.0254381	0.00823868
JB		0.001	0.001
		0.001	0.004952
		ra	log
%		0.589725	1.66324
err.va		1.25029	0.0241182
rel.std.err		0.932464	0.948113
mod.eff		0.0675363	0.0518867

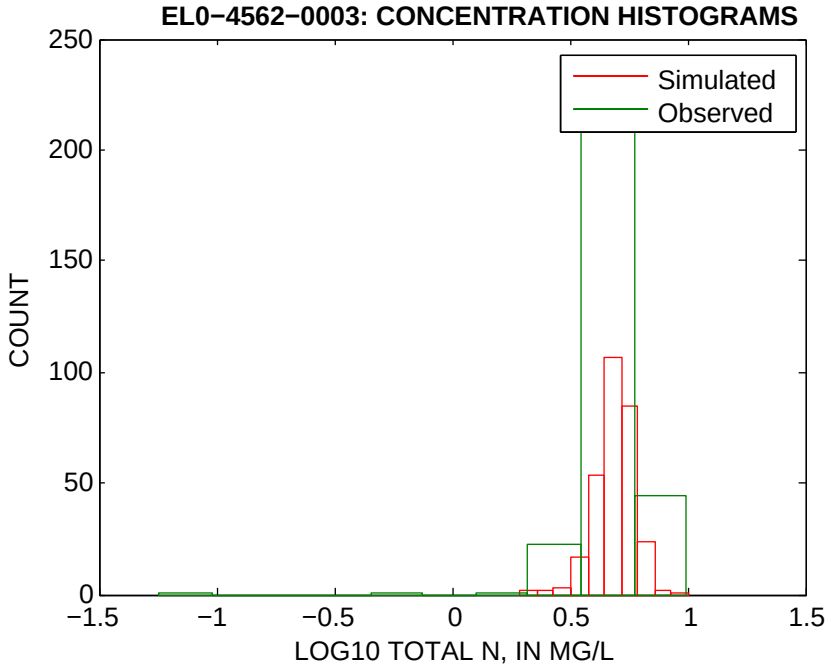
VERSION 2.1

ALL DATA
LOG10

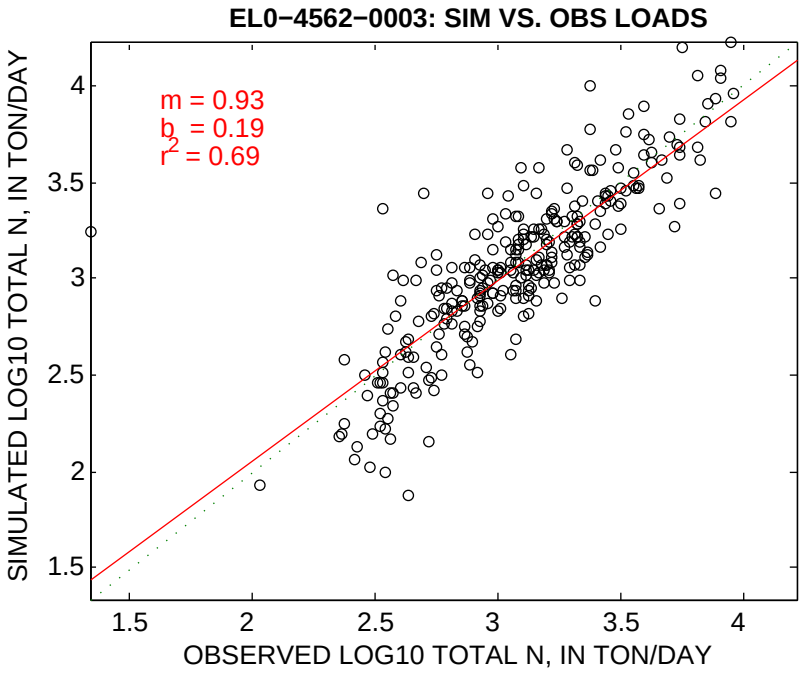


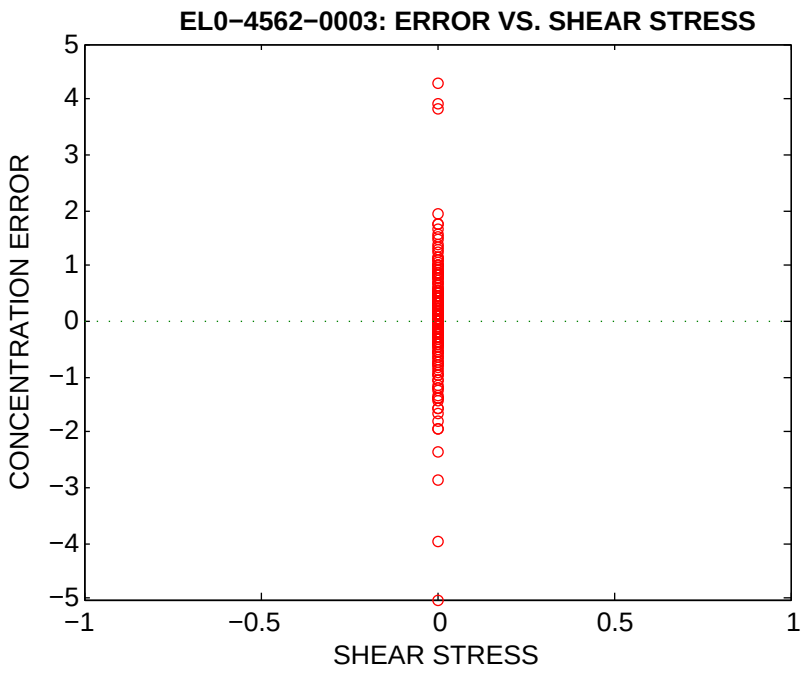


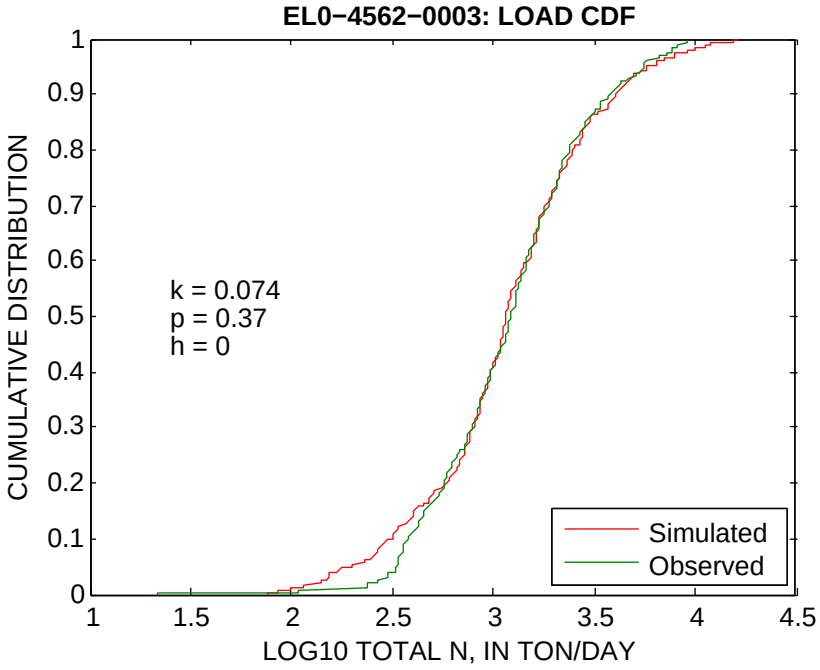


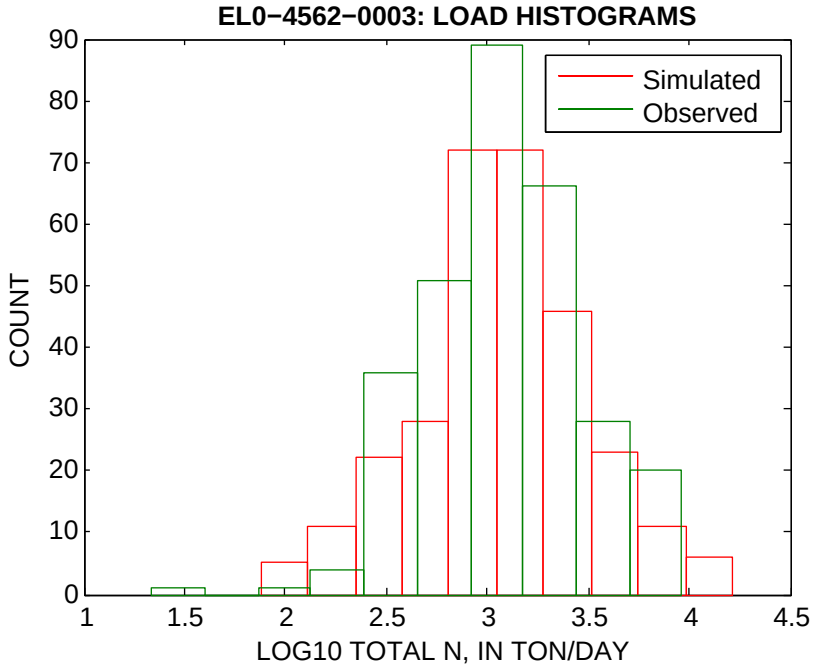


LOAD DATA
LOG10

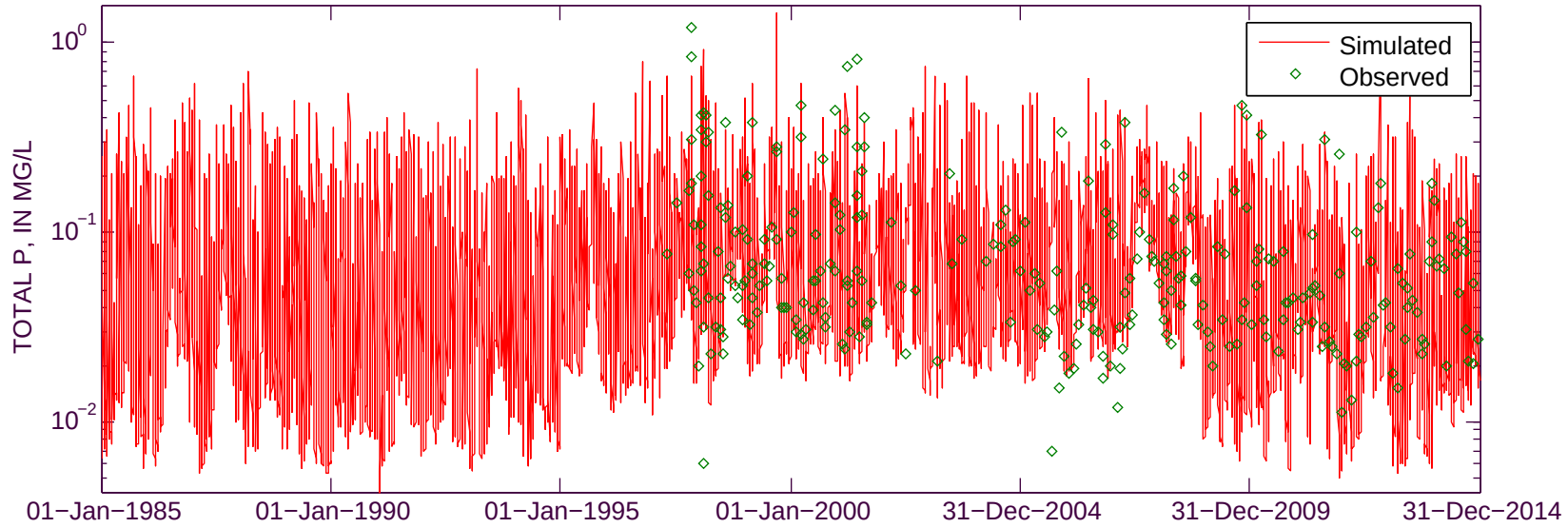




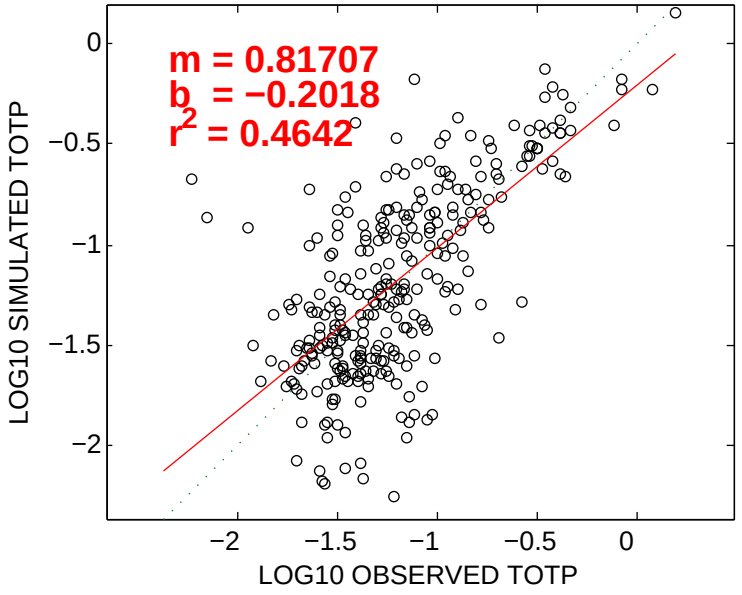




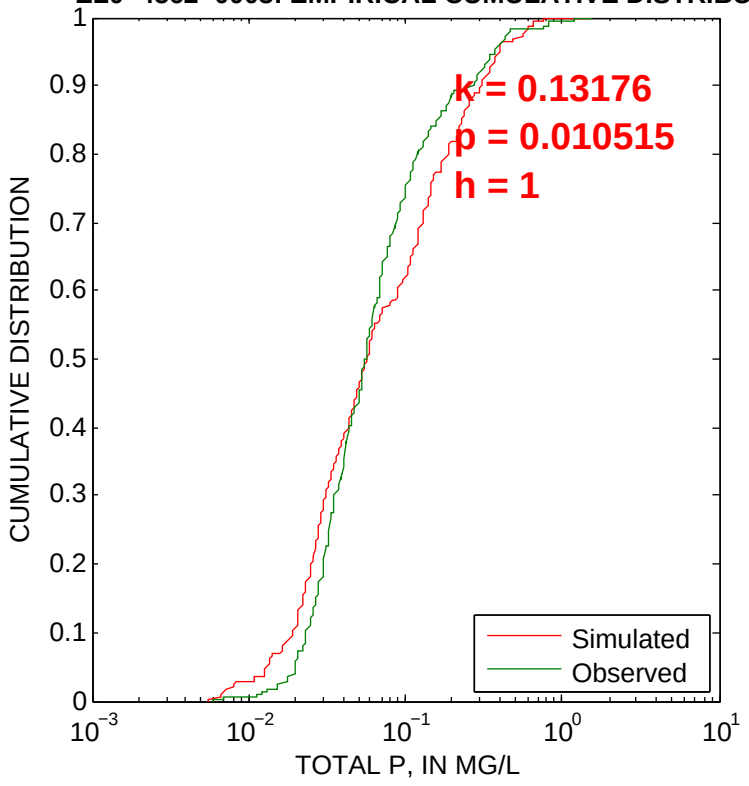
NANTICOKE RIVER NEAR BRIDGEVILLE, DE: TOTP TIME-SERIES



EL0-4562-0003: SIMULATED VS. OBSERVED



EL0-4562-0003: EMPIRICAL CUMULATIVE DISTRIBUTION



DATA SELECTION

scenario: P620171001WQ | file: TOTP.calib

plot: TOTP - total phosphorus

Dates: 1/1/1985 – 12/31/201

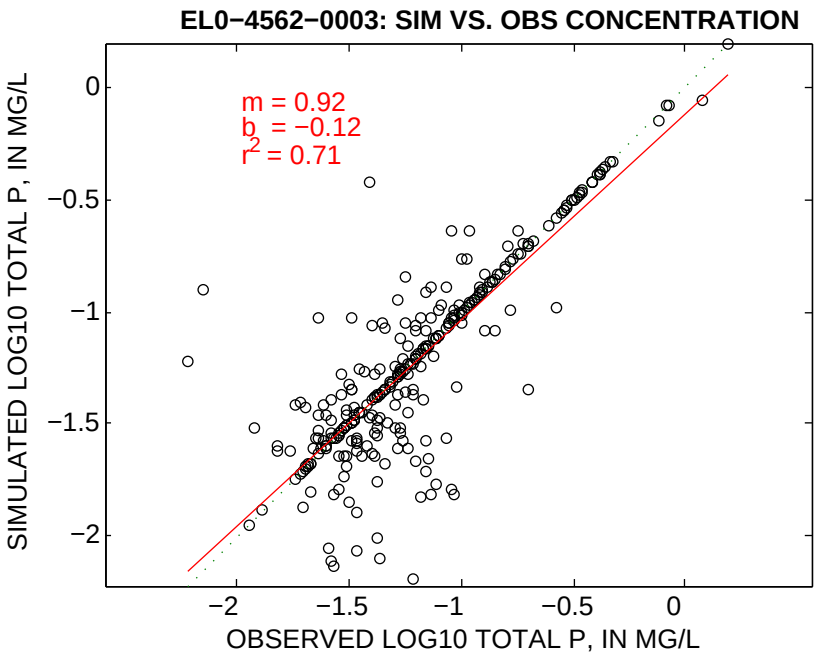
Drive: N/A | Directory: model | Observed: OBS20161101

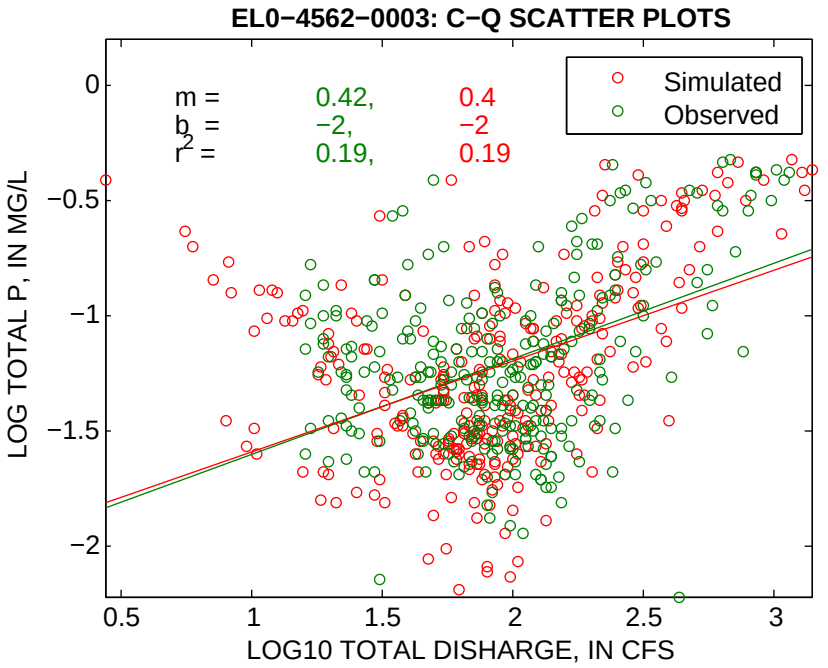
STATISTICS

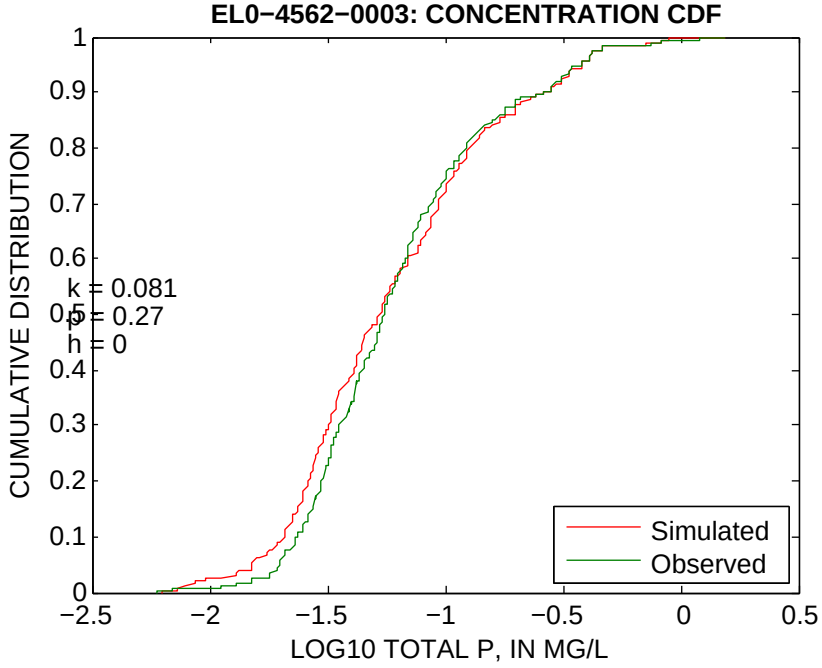
	n	observe	simulate
		296	296
min		0.006	0.0055295
		-2.22185	-2.25731
mean		0.104909	0.118902
		-1.19809	-1.18071
media		0.0555	0.0569505
		-1.25572	-1.24451
max		1.5471	1.4386
		0.189518	0.15794
varian		0.0251821	0.023408
		0.154348	0.221976
JB		0.001	0.001
		0.001	0.032230
		ra	log
%		13.3379	-1.45009
err.va		0.00893311	0.124402
rel.std.err		0.354741	0.805984
mod.eff		0.645259	0.194016

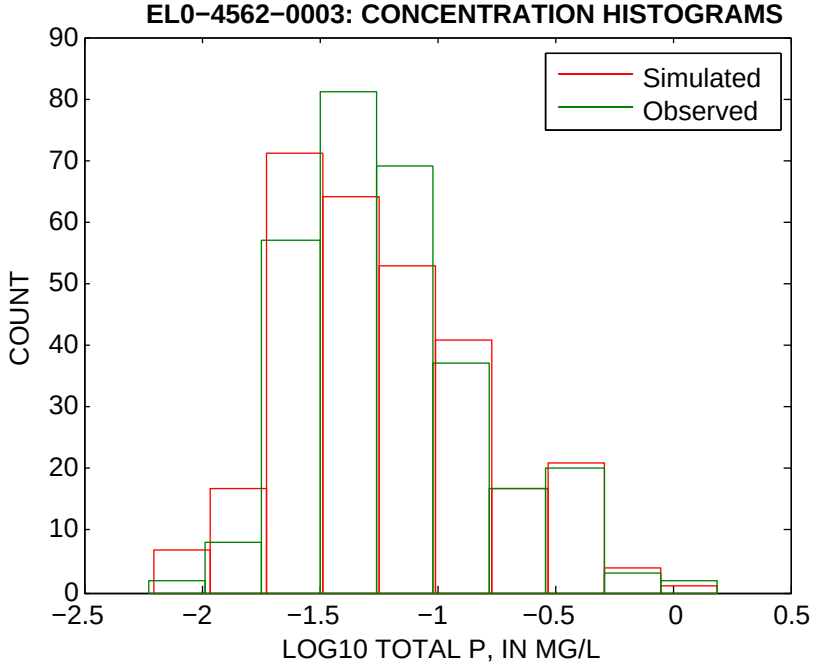
VERSION 2.1

ALL DATA
LOG10

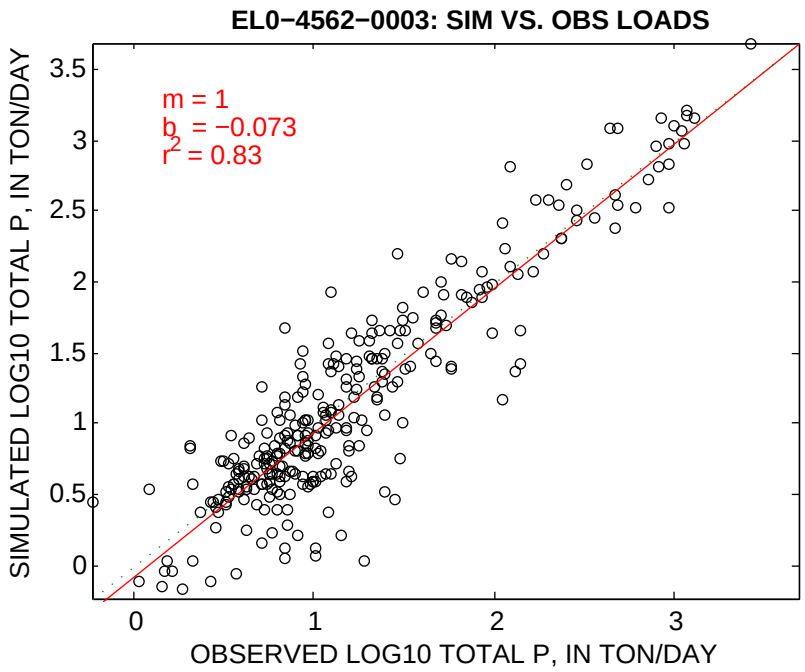


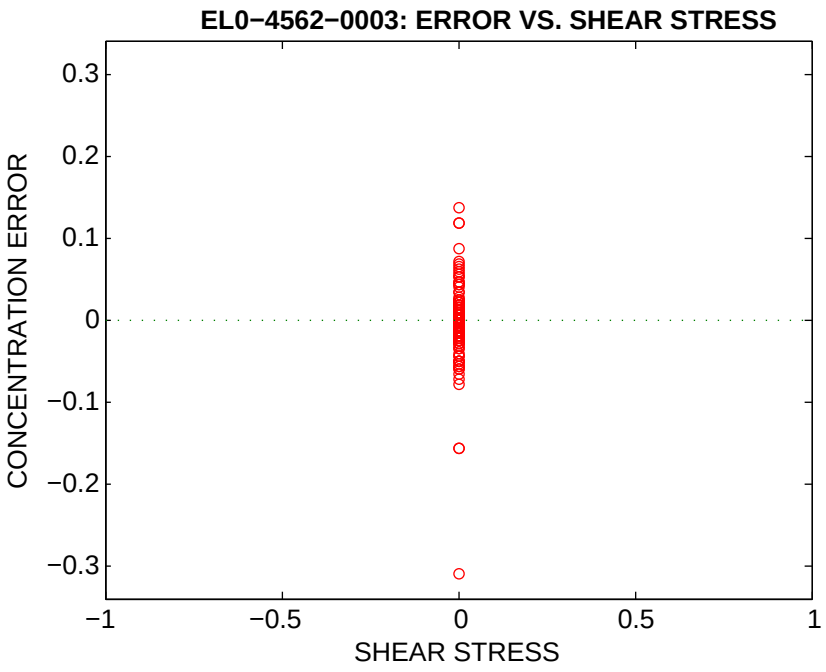


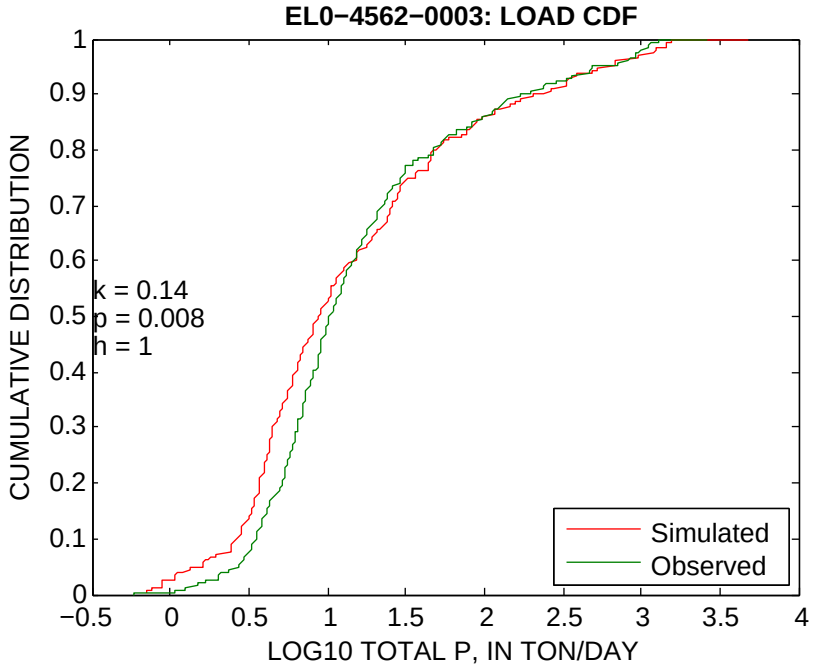


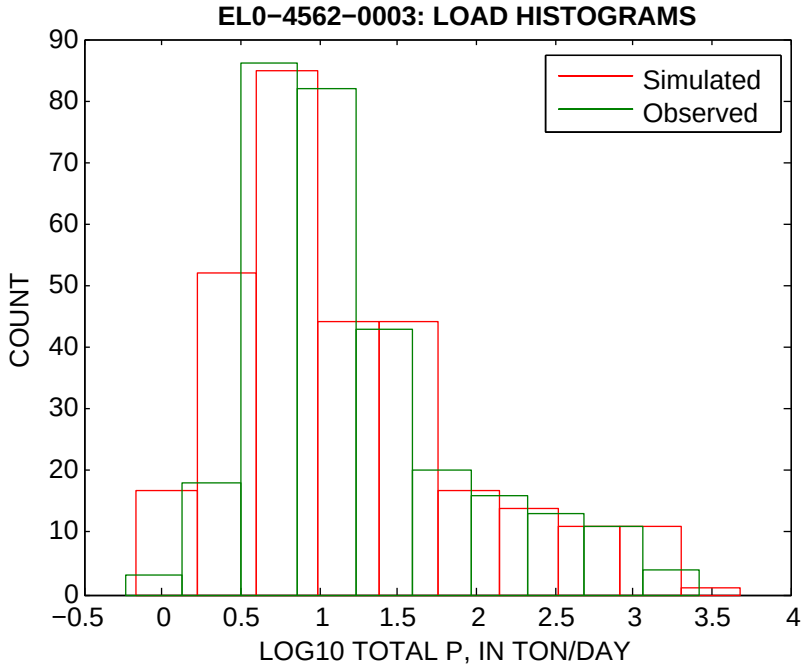


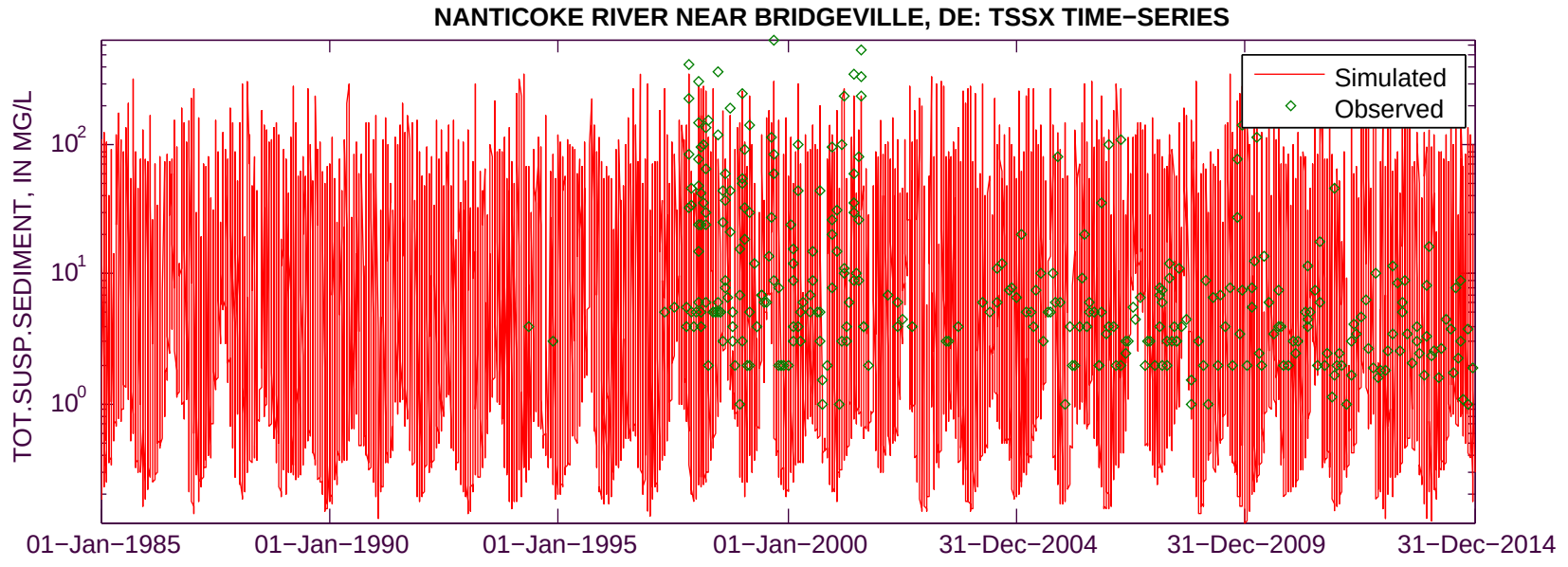
LOAD DATA
LOG10

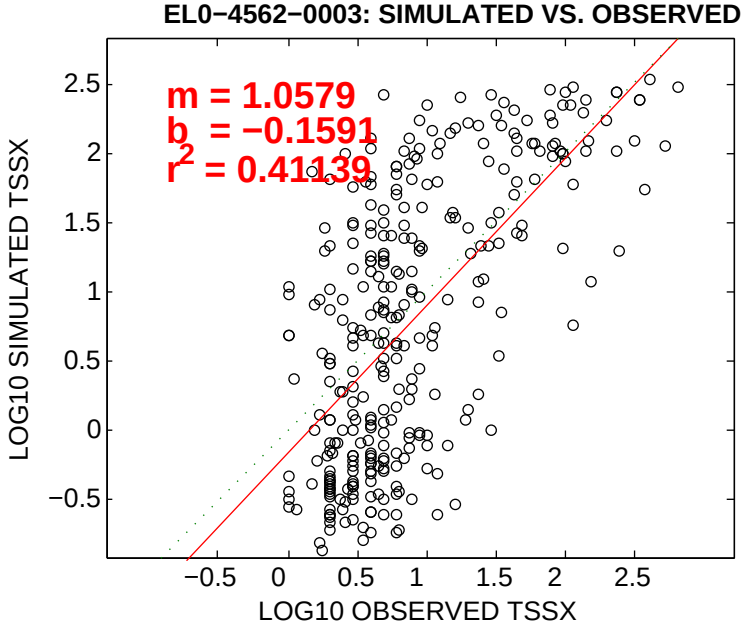


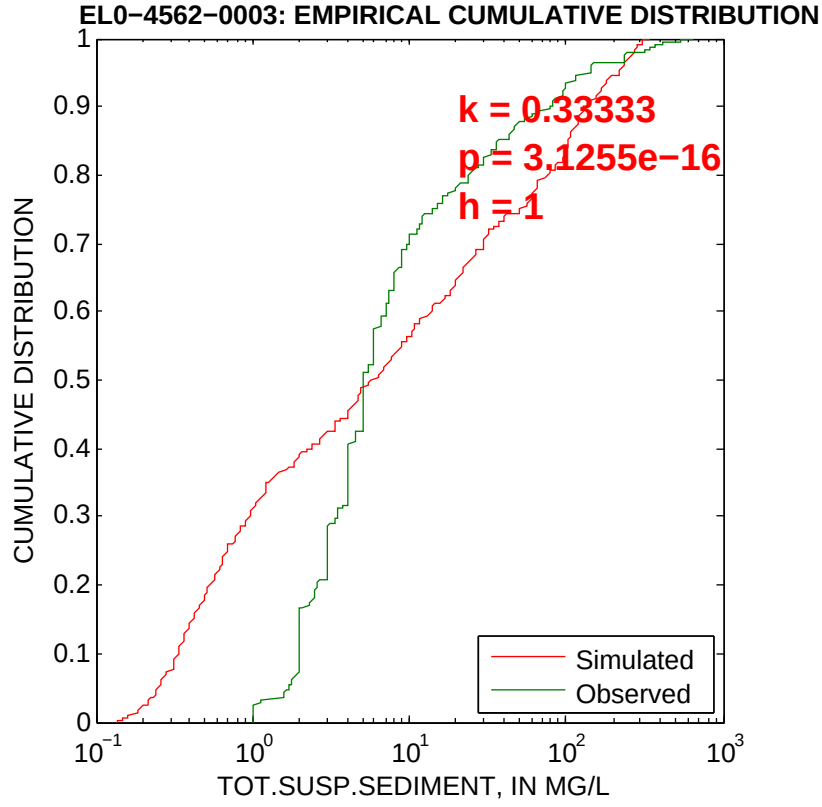












DATA SELECTION

scenario: P620171001WQ | file: TSSX.calib

plot: TSSX - total suspended ...

Dates: 1/1/1985 – 12/31/201

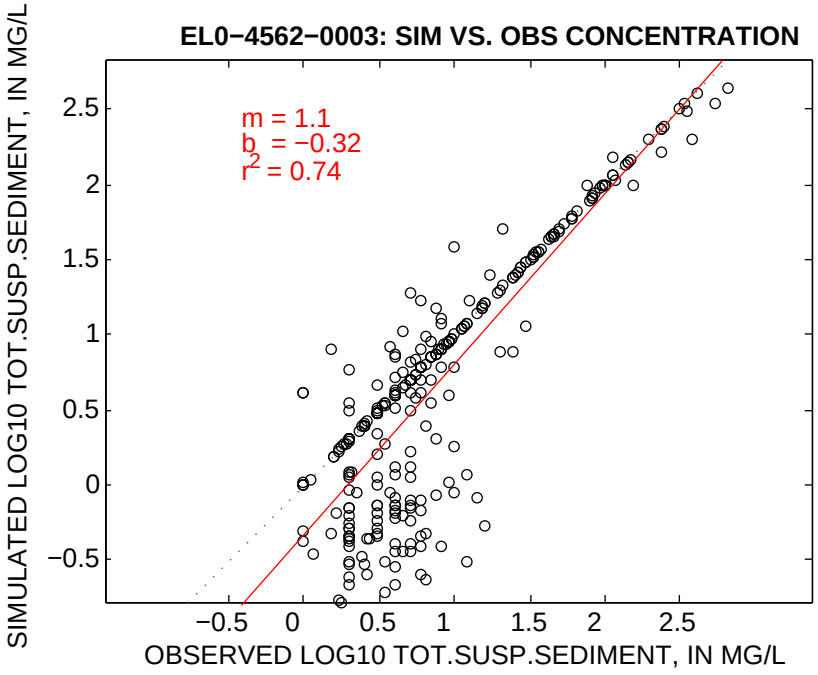
Drive: N/A | Directory: model | Observed: OBS20161101

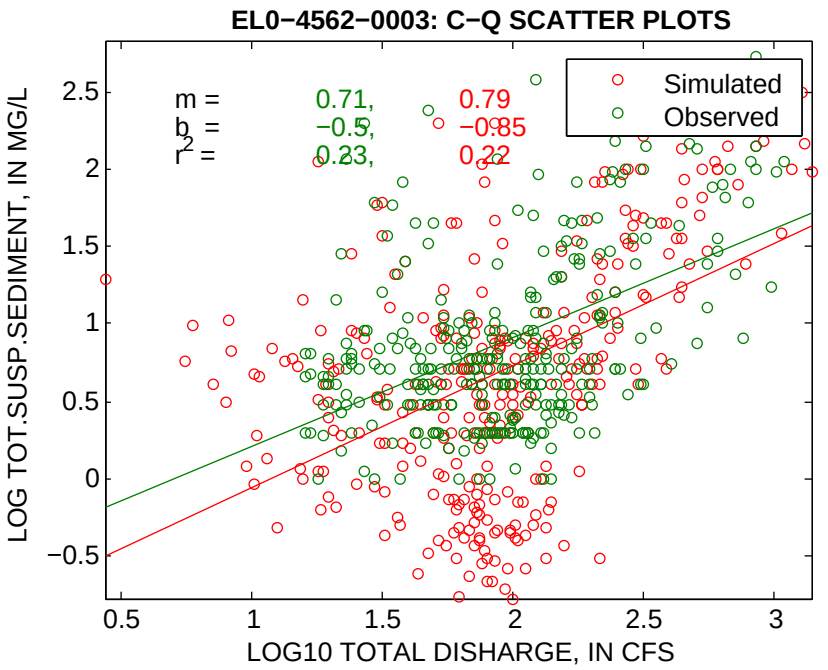
STATISTICS

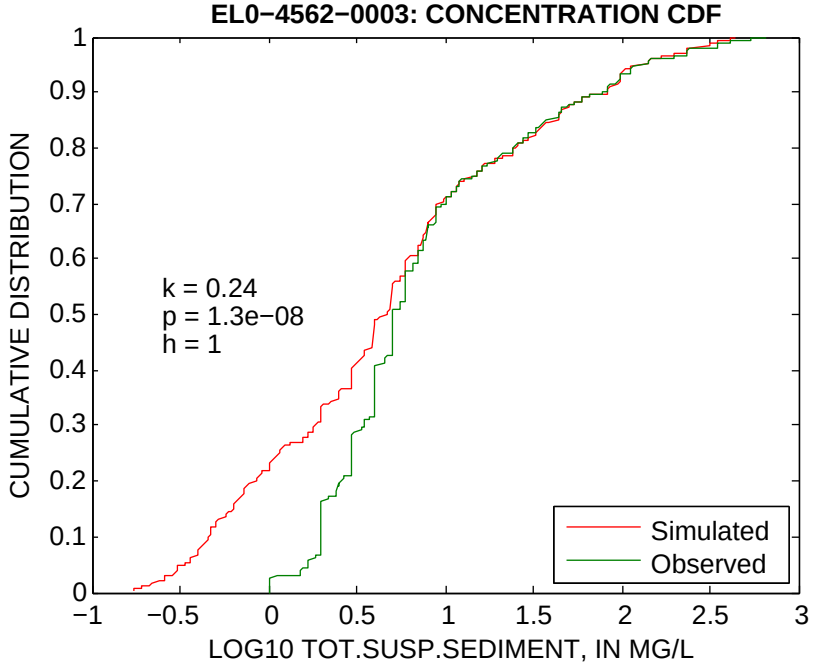
n	321	321
	observe	simulate
min	1	0.13642
	0	-0.865122
mean	28.4499	40.952
	0.893276	0.785907
media	5	5.7158
	0.69897	0.757077
max	658.457	345.3
	2.81853	2.5382
varian	5302.84	4821.89
	0.359177	0.977135
JB	0.001	0.001
	0.001	0.001
	ra	log
%	43.9442	-12.0197
err.va	4462.83	0.587924
rel.std.err	0.841592	1.63686
mod.eff	0.158408	-0.636863

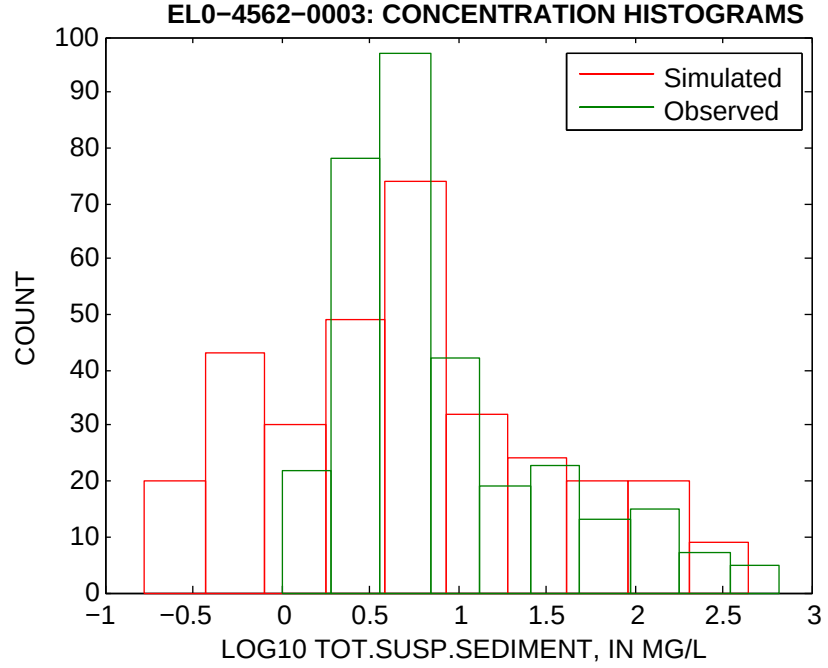
VERSION 2.1

ALL DATA
LOG10

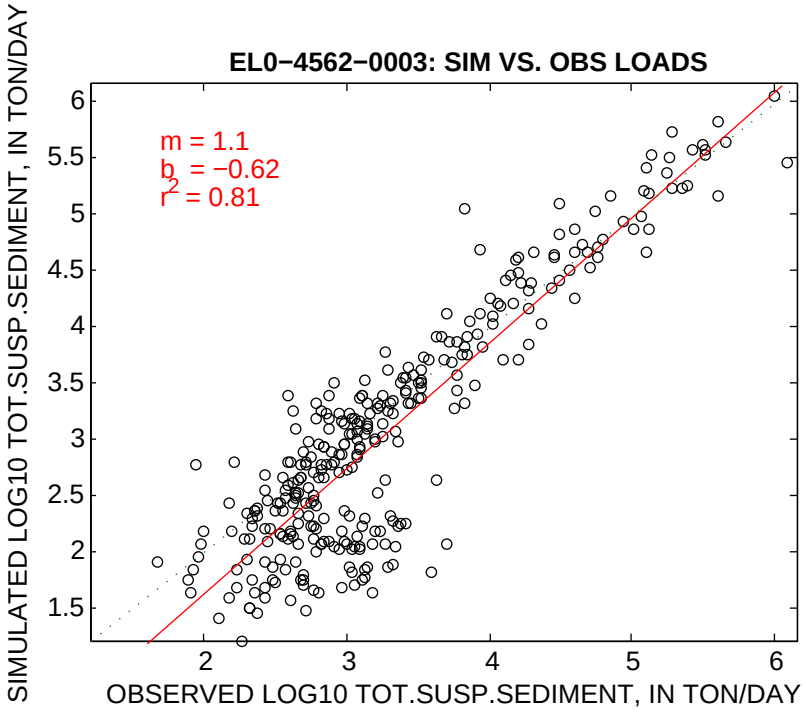


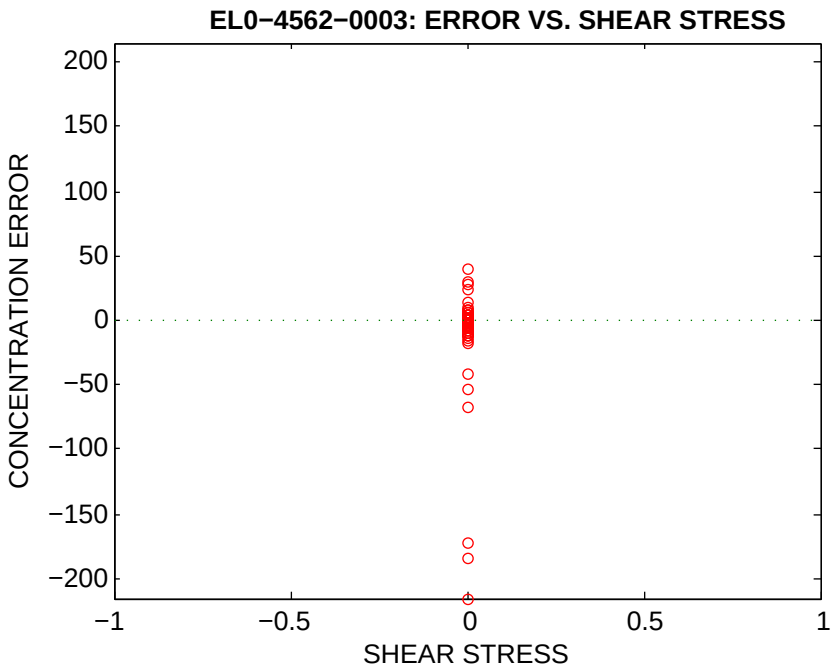


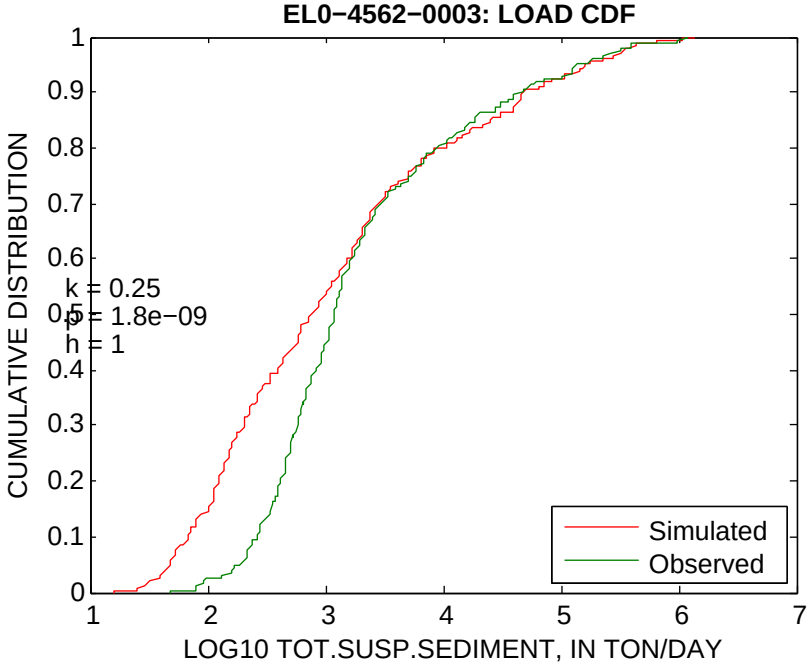


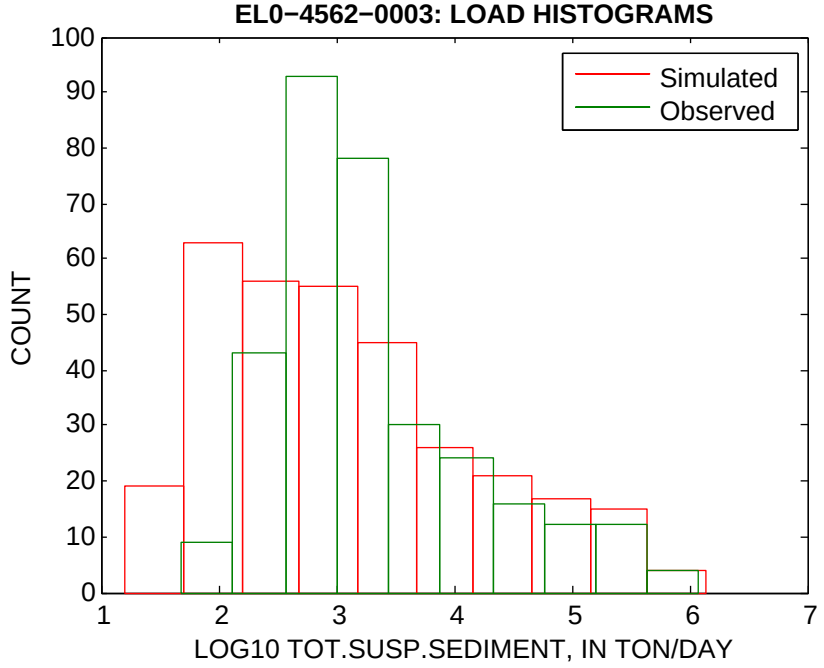


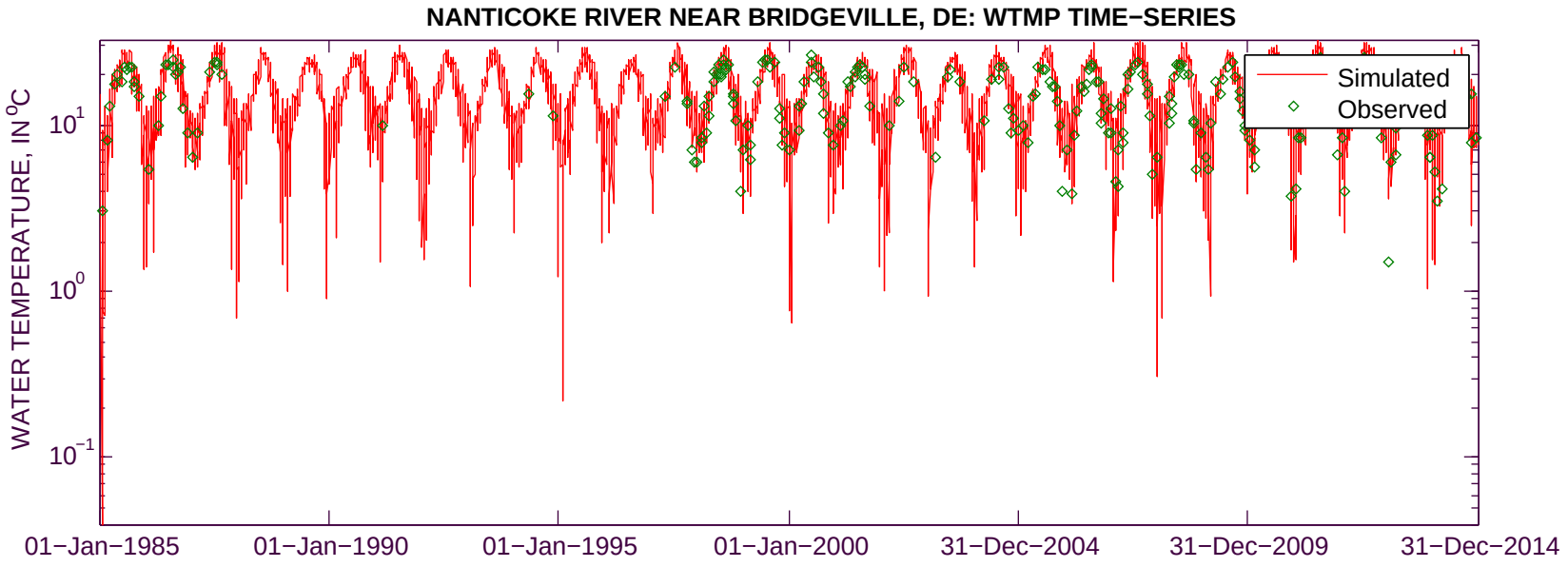
LOAD DATA
LOG10

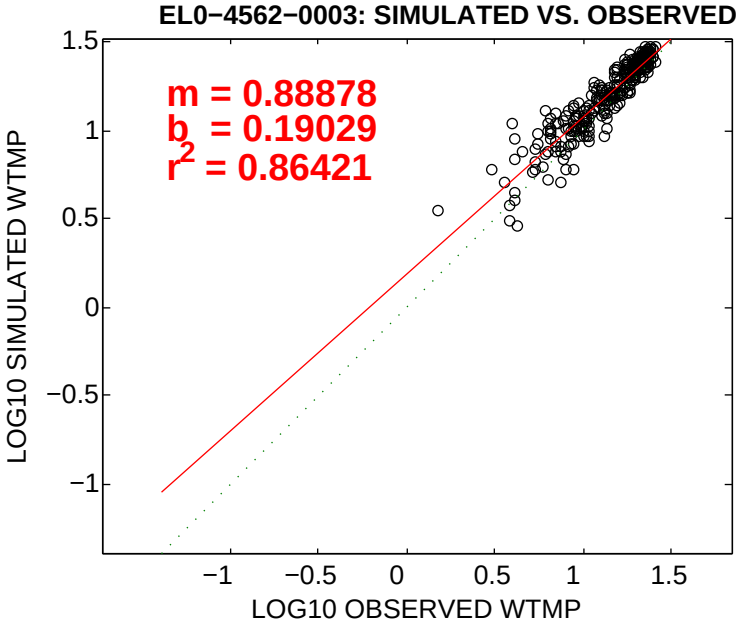


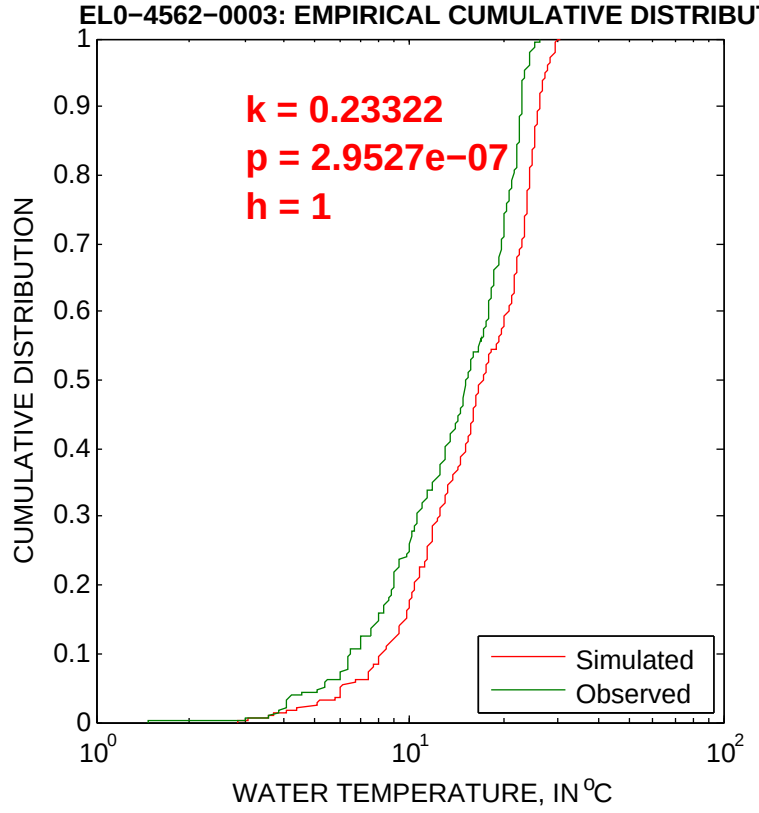












DATA SELECTION

scenario	file
P620171001WQ	WTMP.calib

plot: WTMP - water tempera...

Dates: 1/1/1985 – 12/31/201

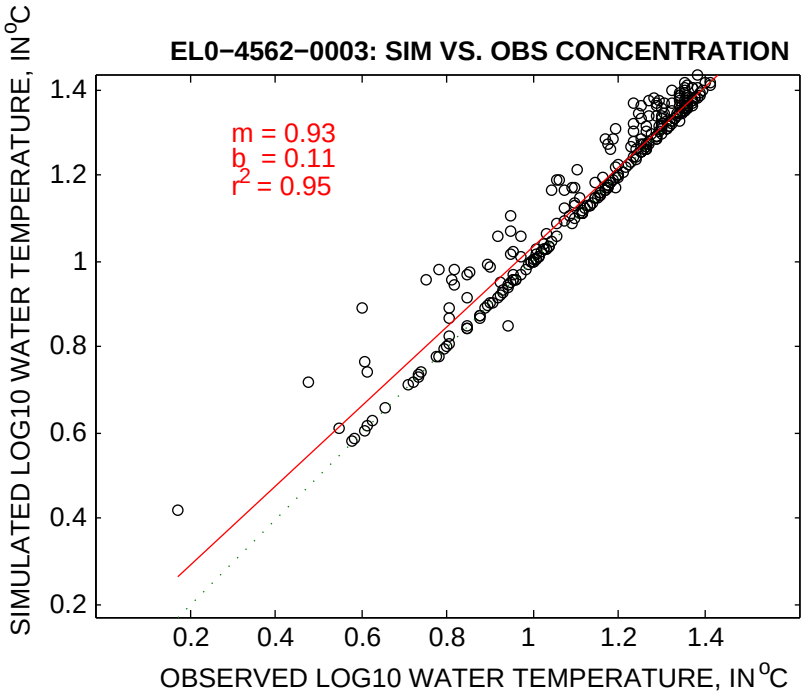
Drive	Directory	Observed
N/A	model	OBS20161101

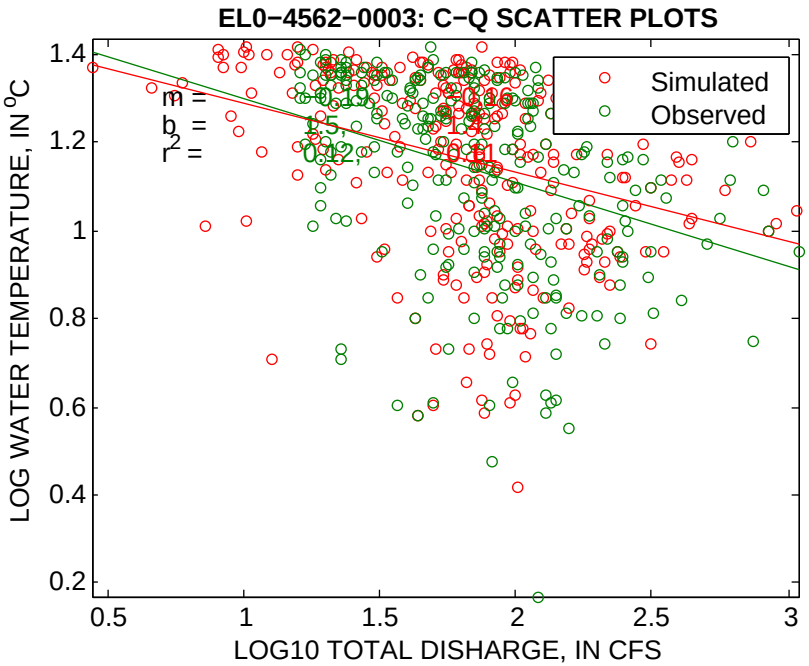
STATISTICS

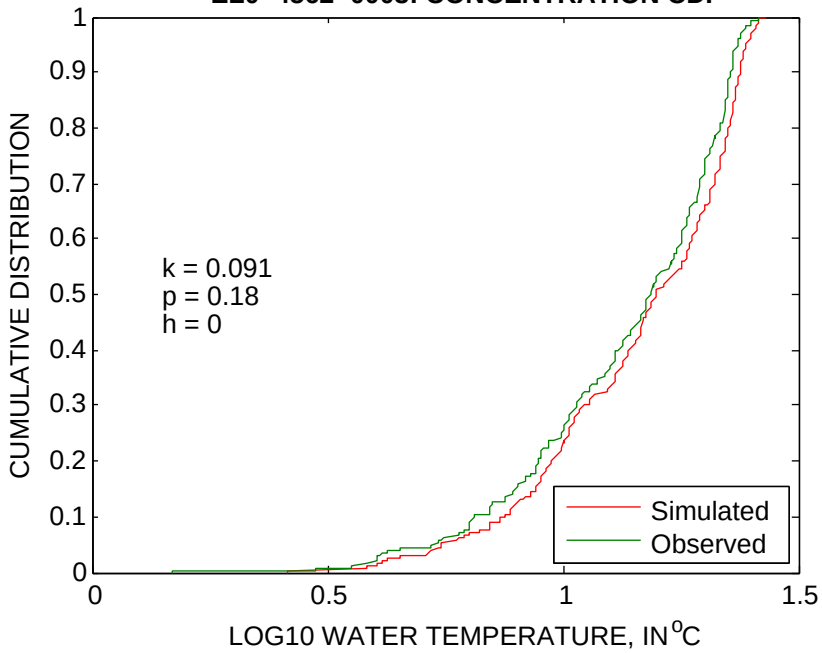
	n	observe	simulate
		283	283
min		1.48	2.8597
		0.170262	0.45632
mean		15.0959	17.3774
		1.13275	1.19706
media		15.4	16.971
		1.18752	1.22971
max		26	30.131
		1.41497	1.47901
varian		37.2306	47.3628
		0.0475476	0.0434612
JB		0.003106	0.003814
		0.001	0.001
		ra	log
%		15.1137	5.67731
err.va		10.3949	0.0106402
rel.std.err		0.279203	0.223781
mod.eff		0.720797	0.776219

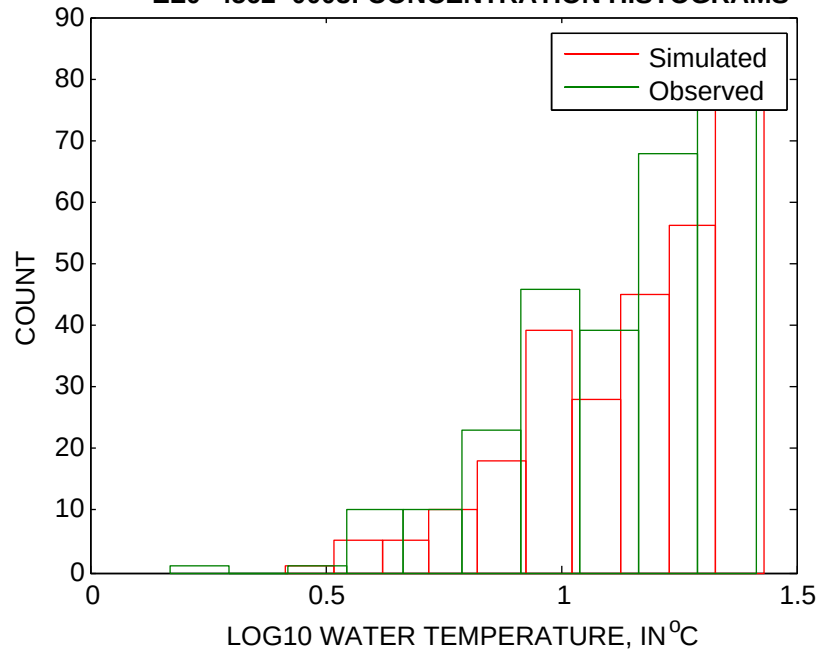
VERSION 2.1

ALL DATA
LOG10

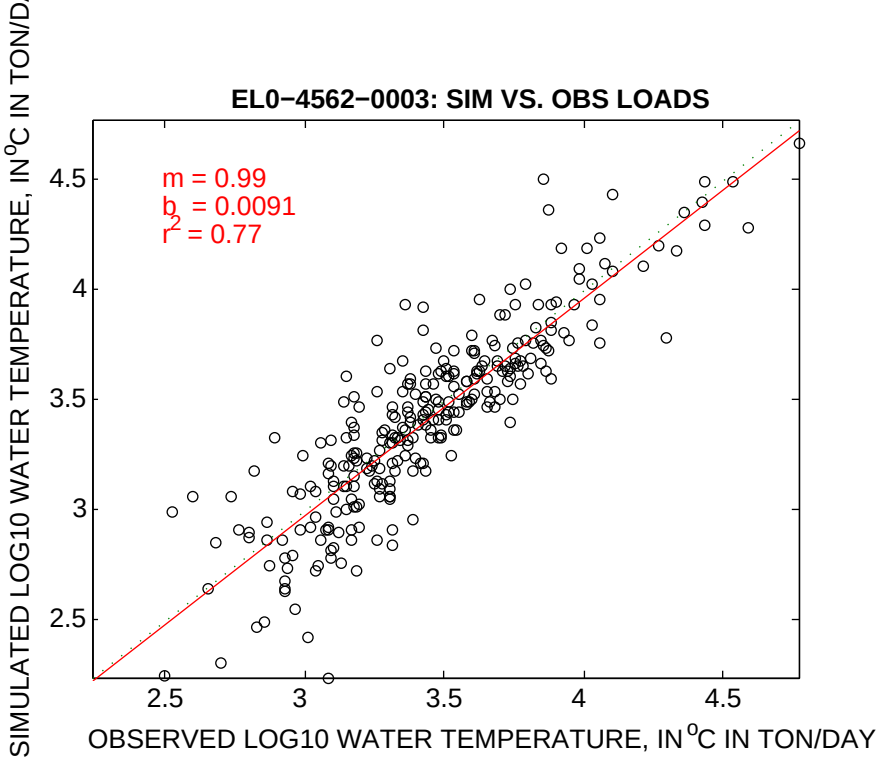


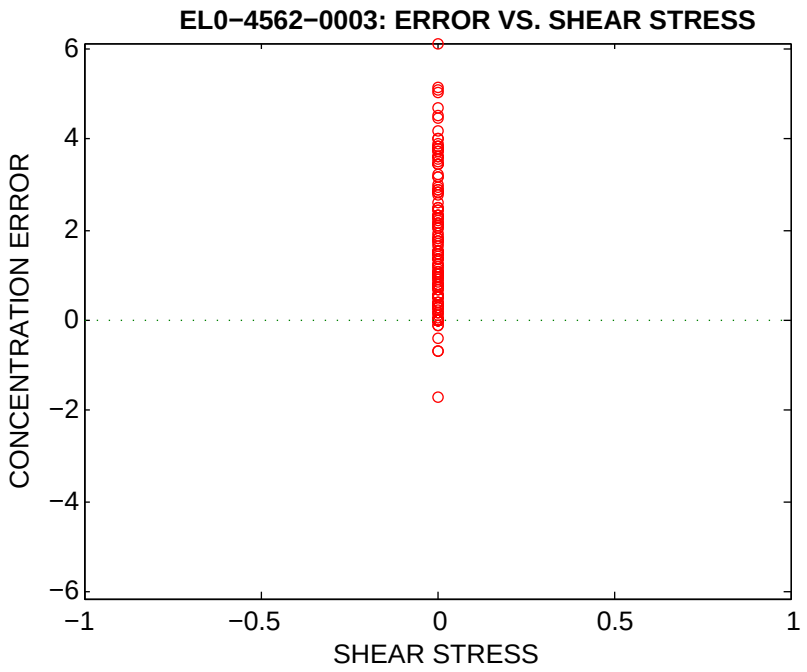


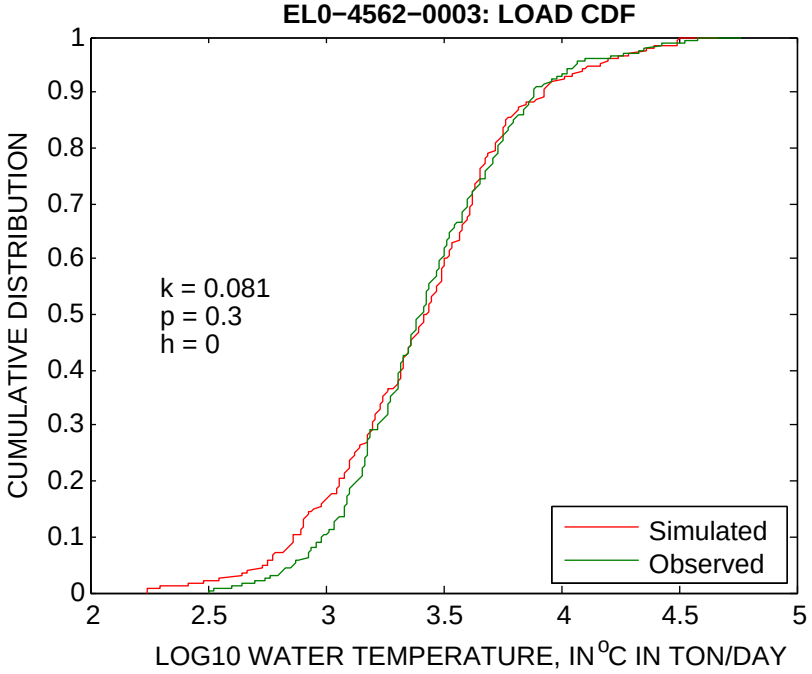


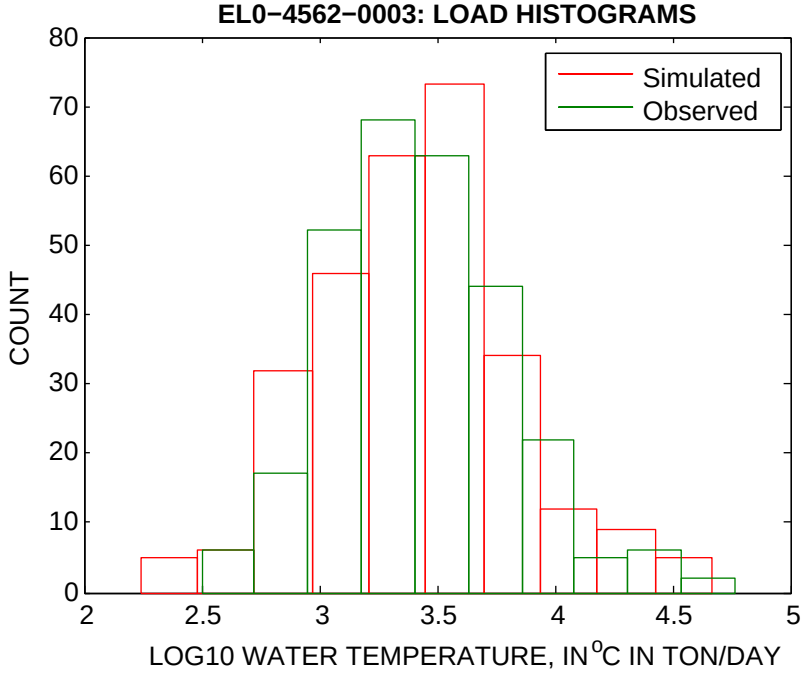


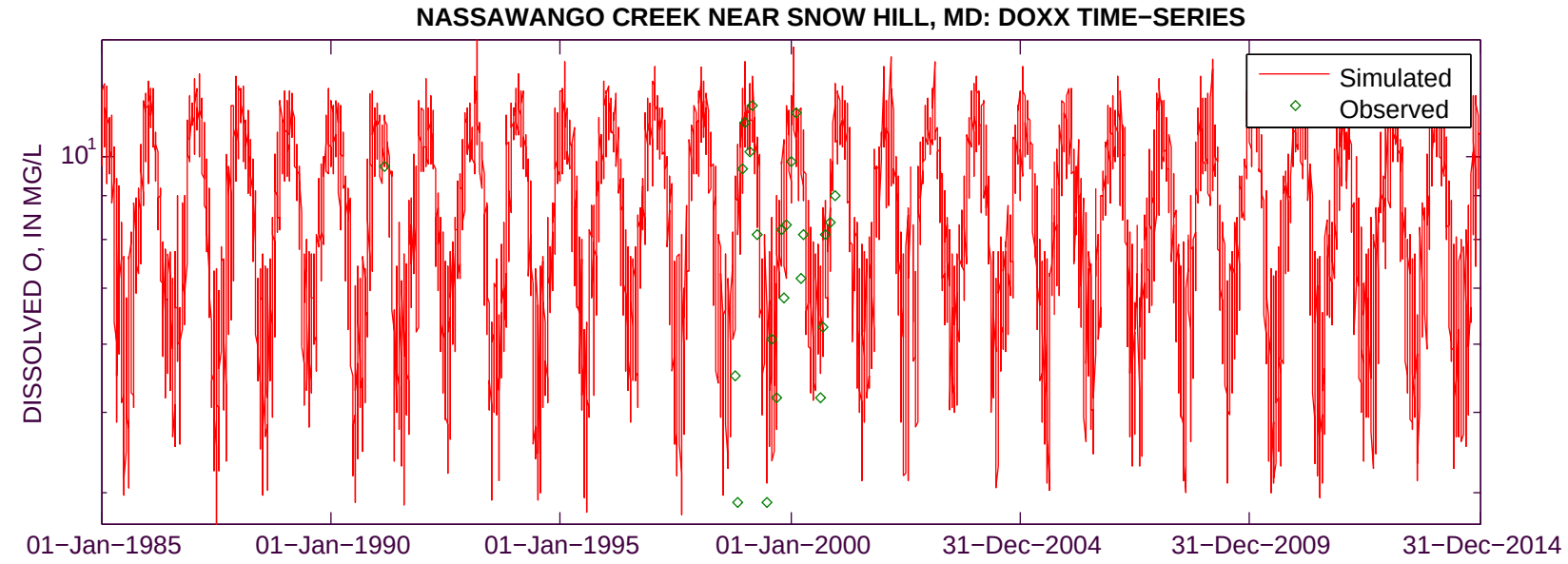
LOAD DATA
LOG10

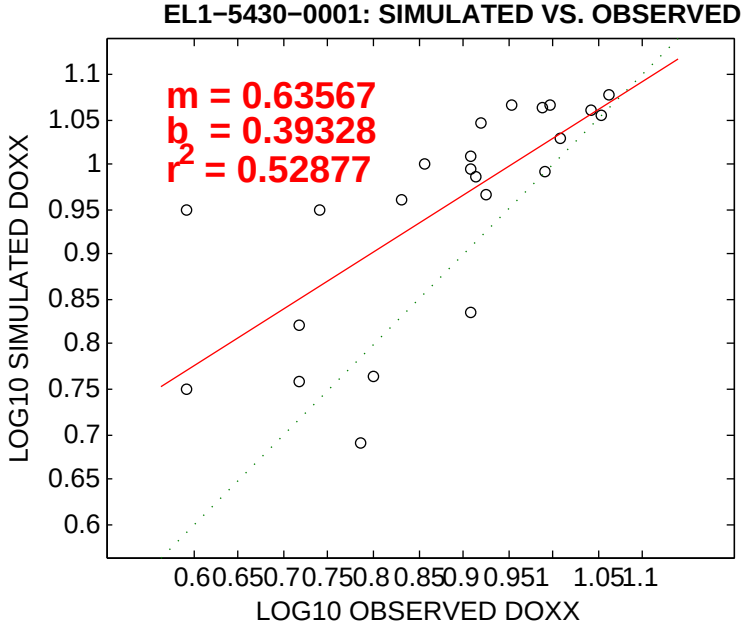


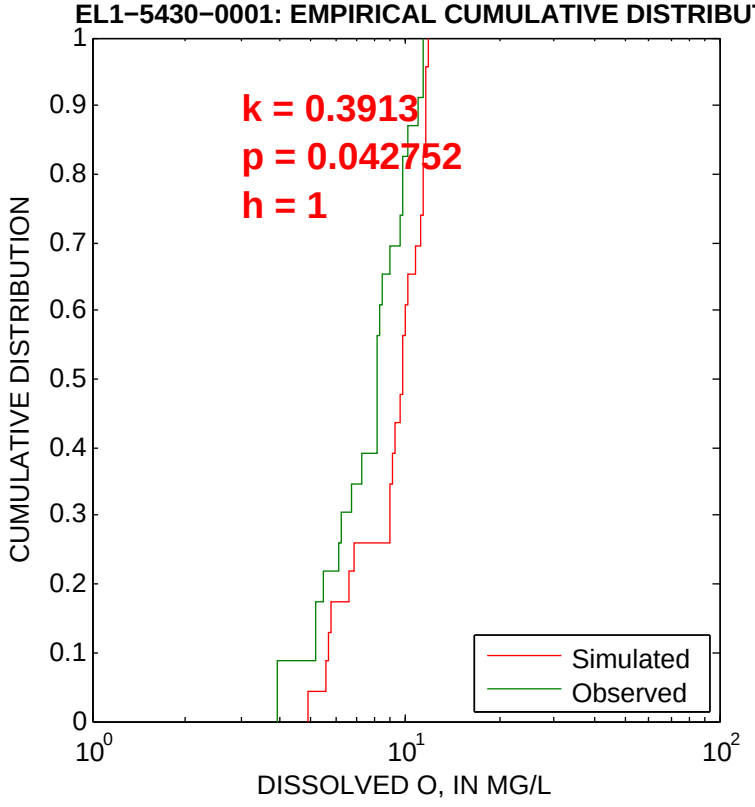












DATA SELECTION

scenario: P620171001WQ | file: DOXX.calib

plot: DOXX - dissolved oxygen

Dates: 1/1/1985 – 12/31/201

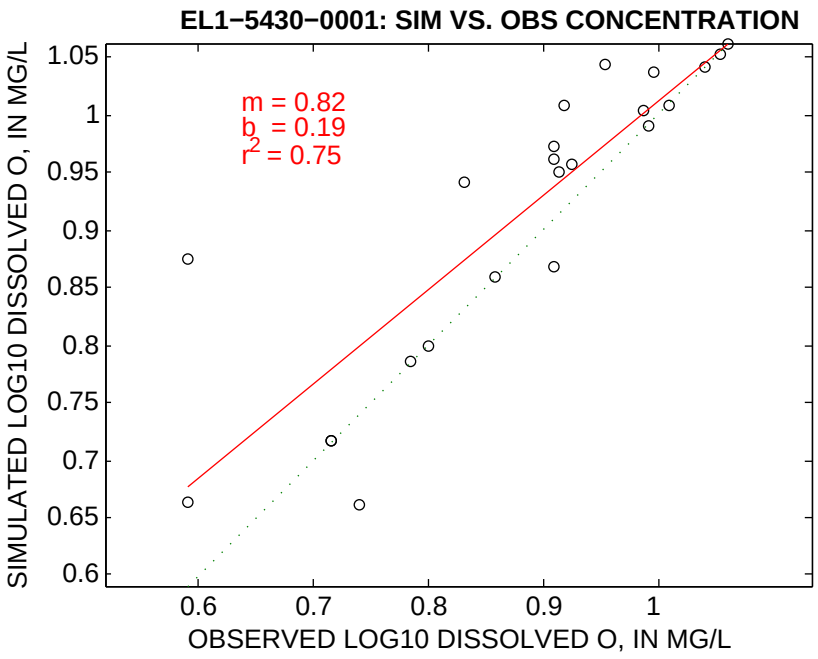
Drive: N/A | Directory: model | Observed: OBS20161101

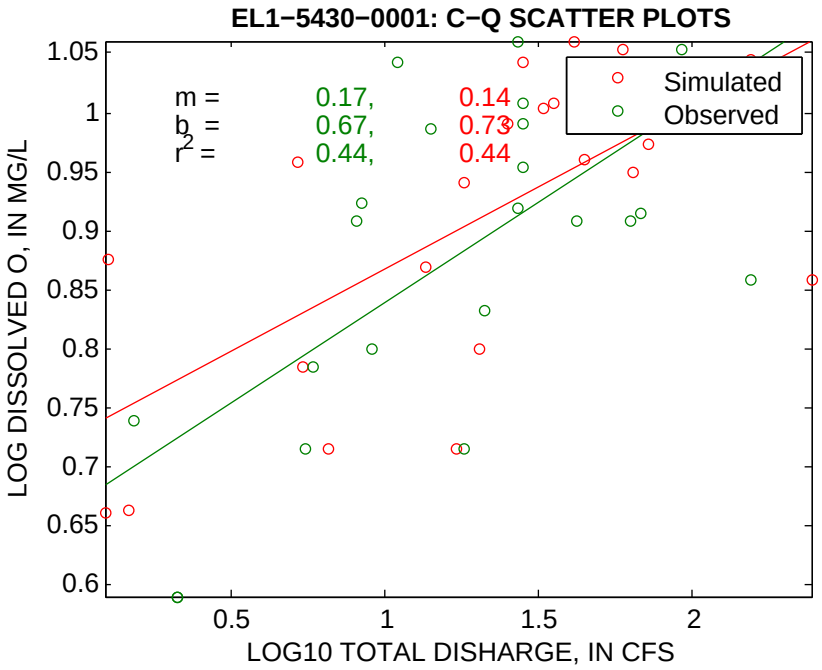
STATISTICS

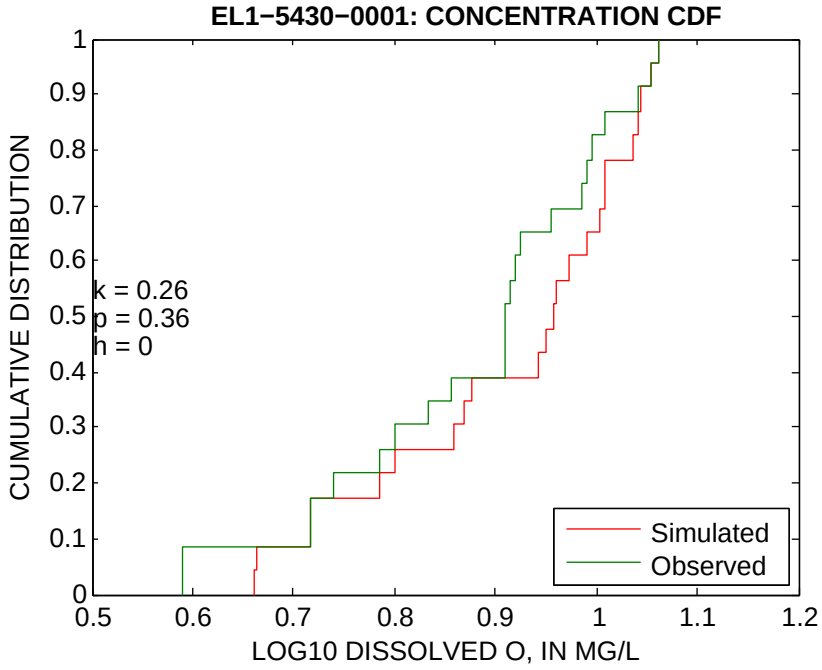
	n	23	23
		observe	simulate
min		3.9	4.8863
		0.591065	0.68898
mean		7.9	9.25017
		0.878404	0.951656
media		8.1	9.8451
		0.908485	0.99322
max		11.5	11.928
		1.0607	1.07657
varian		5.08818	5.04381
		0.0187886	0.0143577
JB		0.479442	0.107269
		0.155311	0.063064
		ra	log
%		17.0907	8.33929
err.va		4.1347	0.0148695
rel.std.err		0.812609	0.791415
mod.eff		0.187391	0.208585

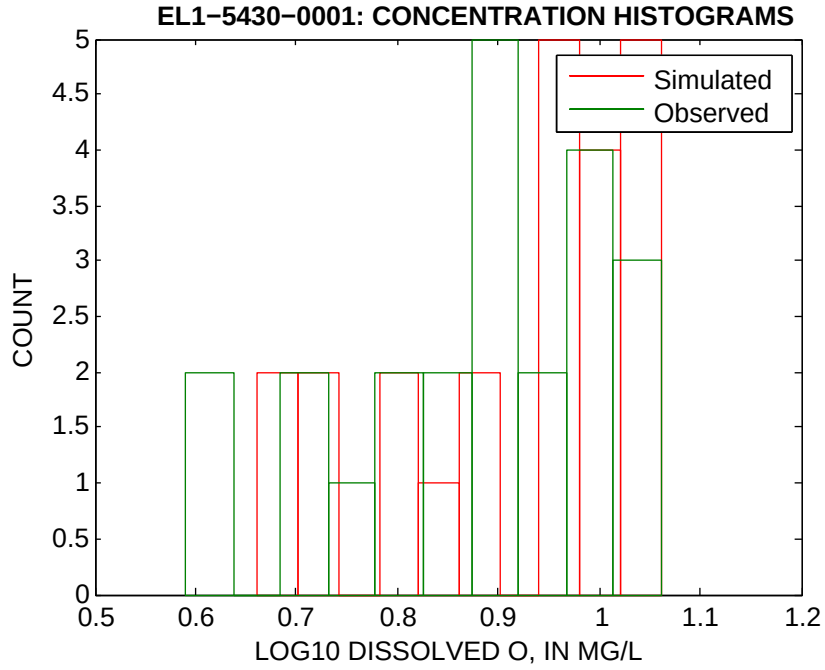
VERSION 2.1

ALL DATA
LOG10

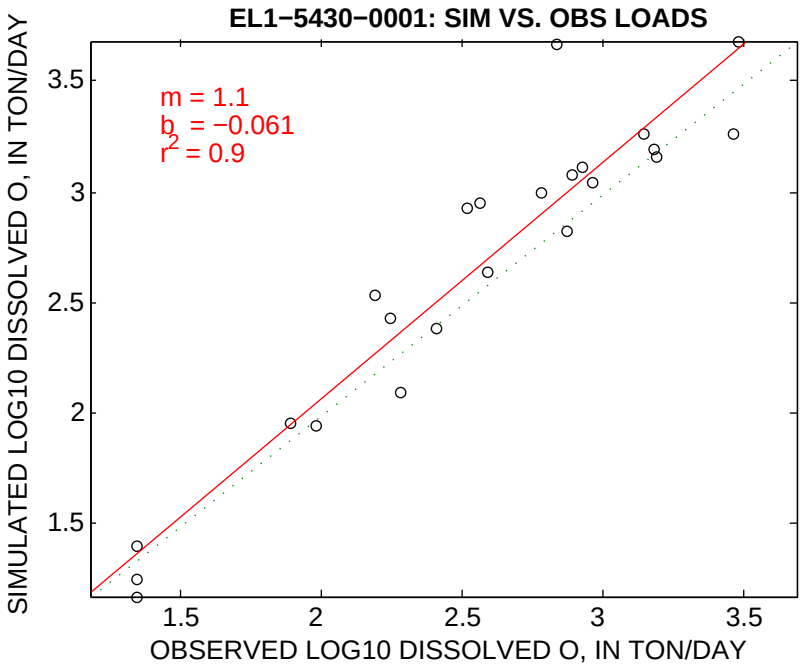


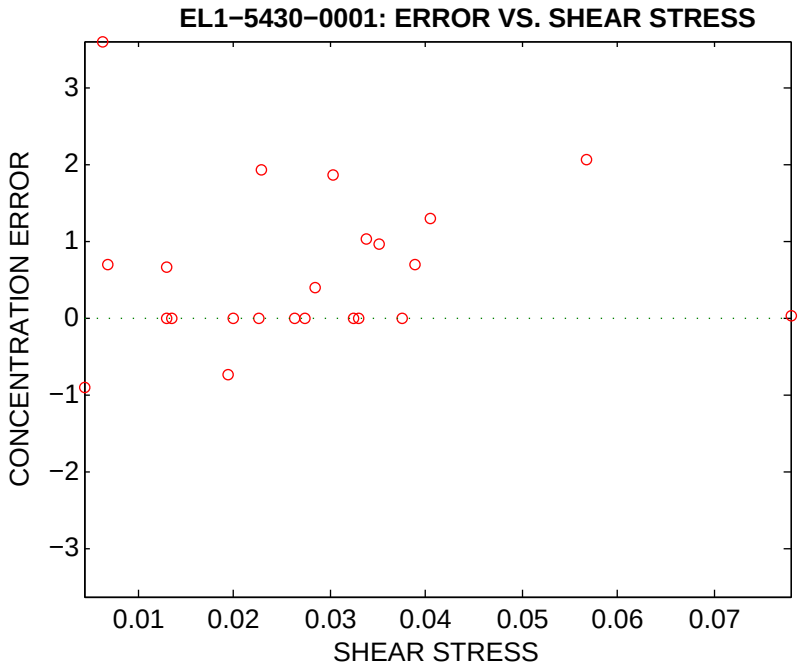


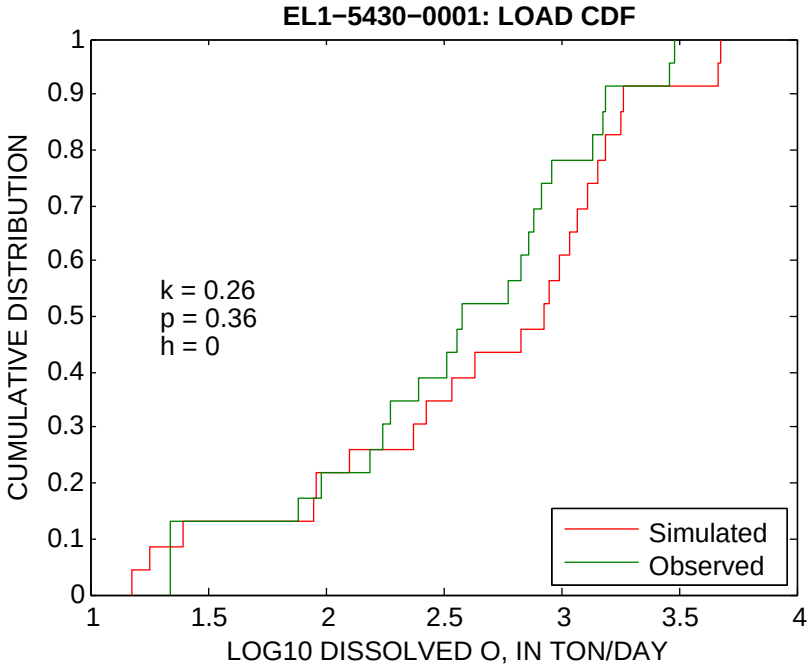


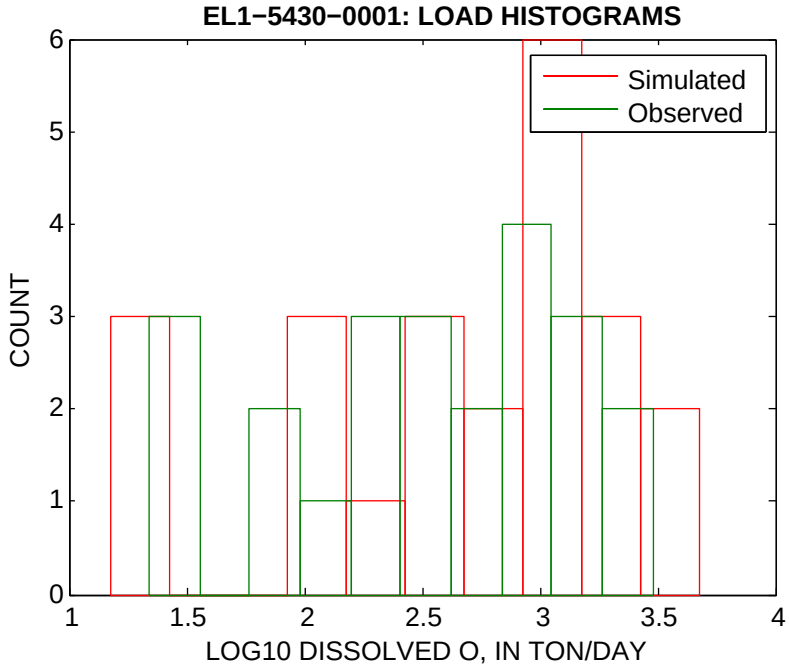


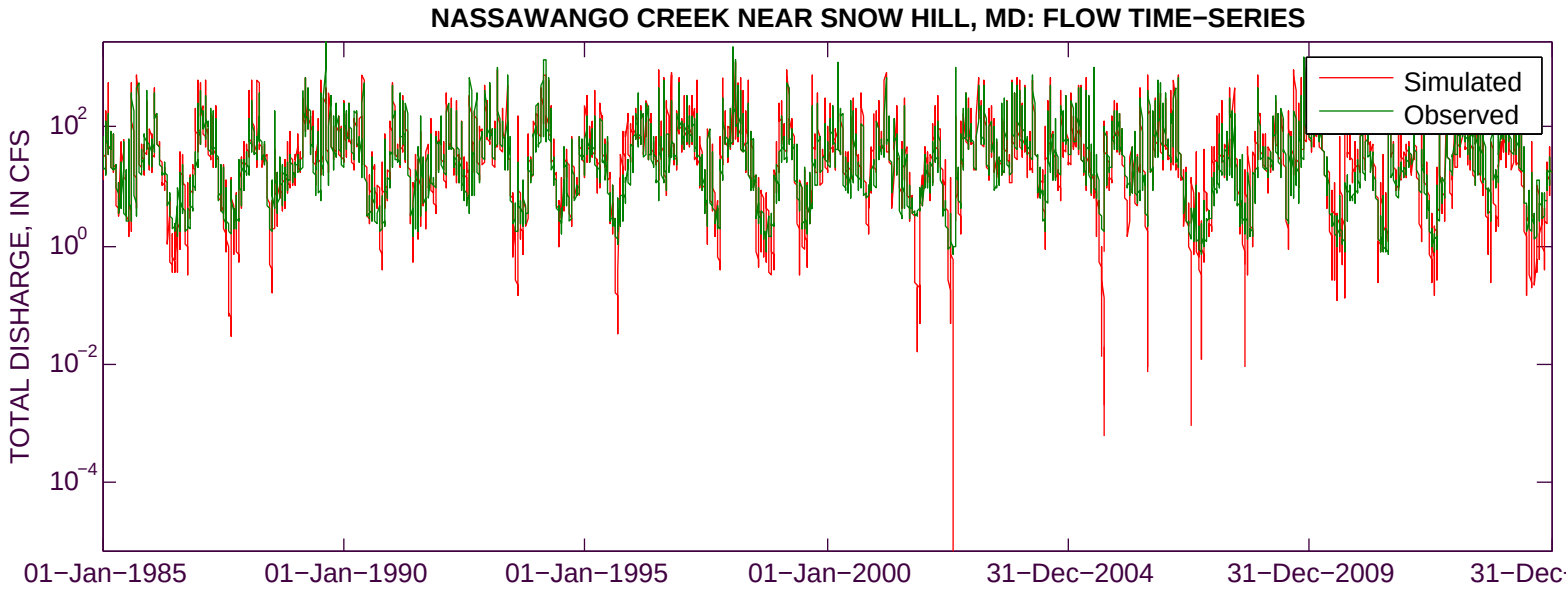
LOAD DATA
LOG10

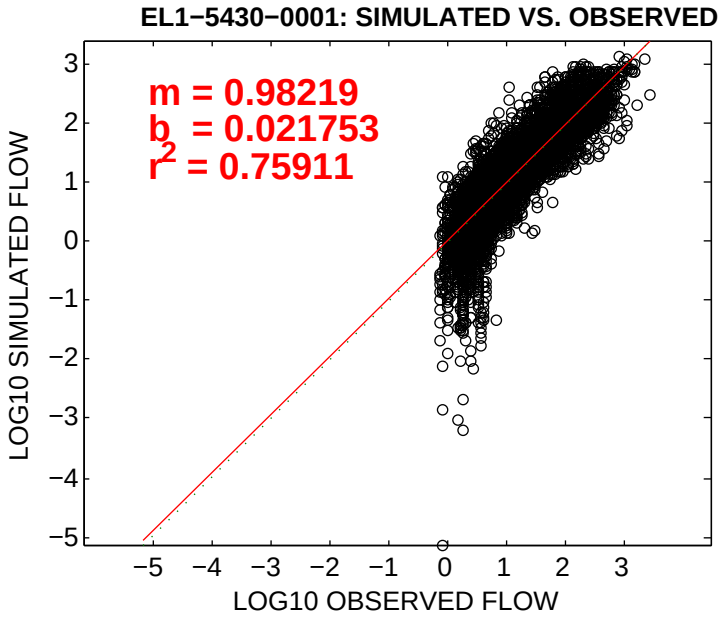


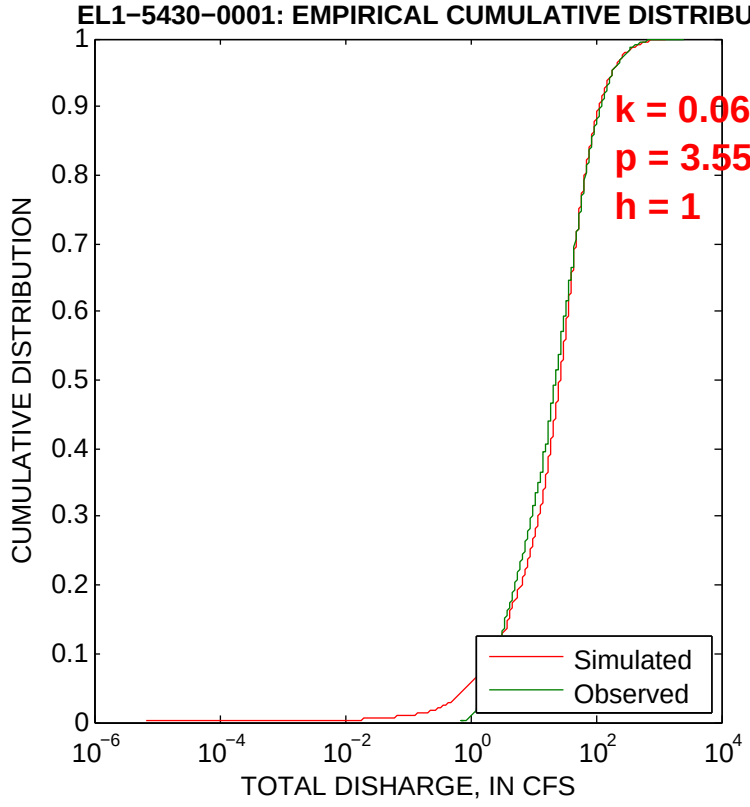












DATA SELECTION

scenario	file
P620171001WQ	FLOW.calib

plot: FLOW - total discharge

Dates 1/1/1985 12/31/201

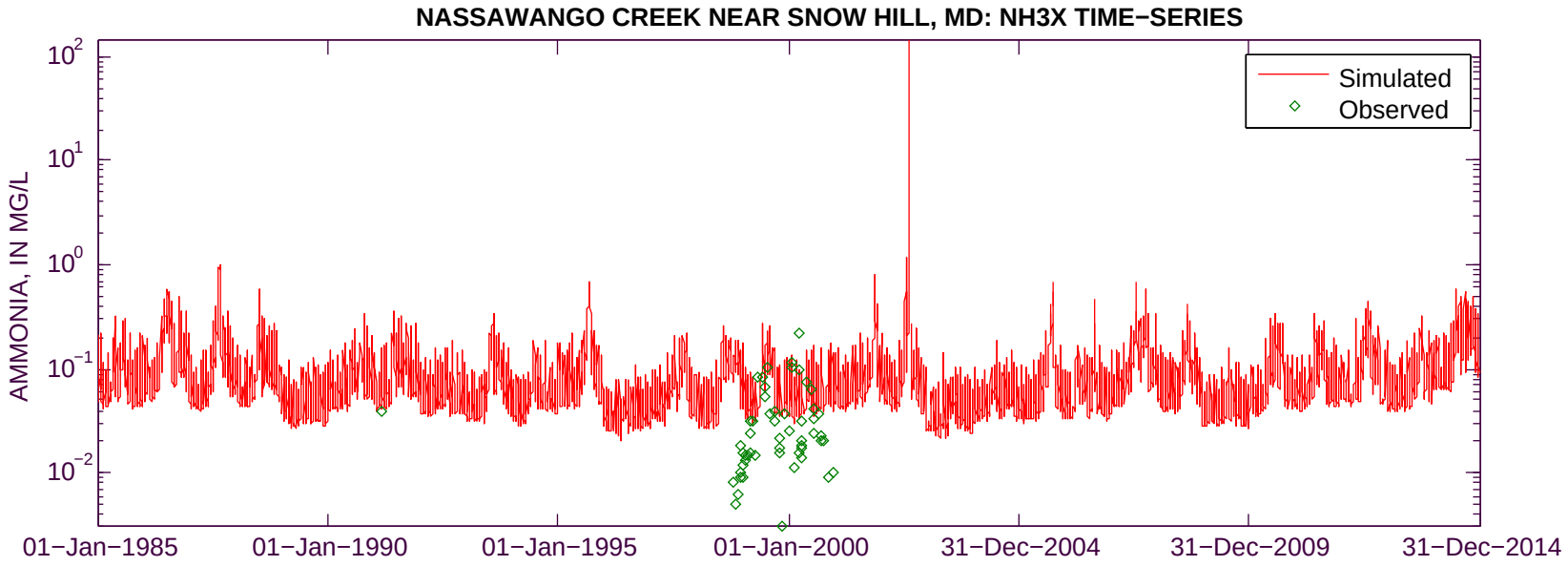
Drive Directory Observed

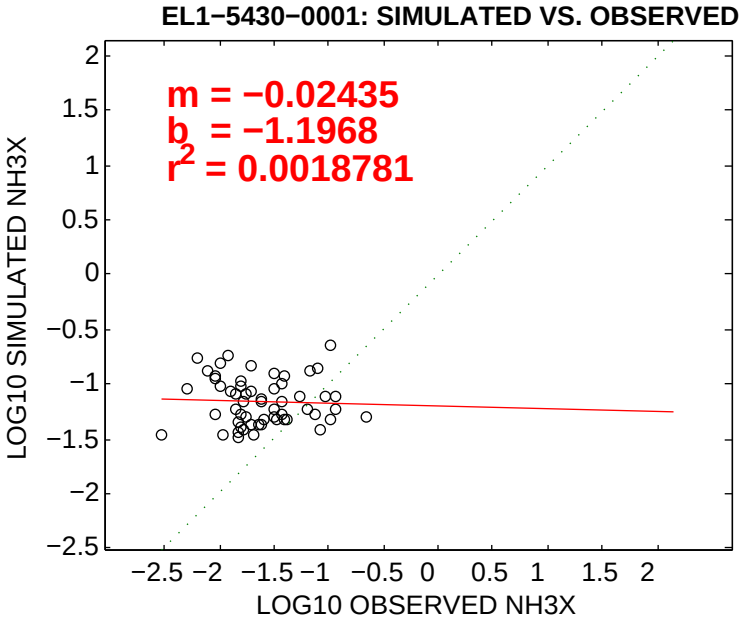
N/A model OBS20161101

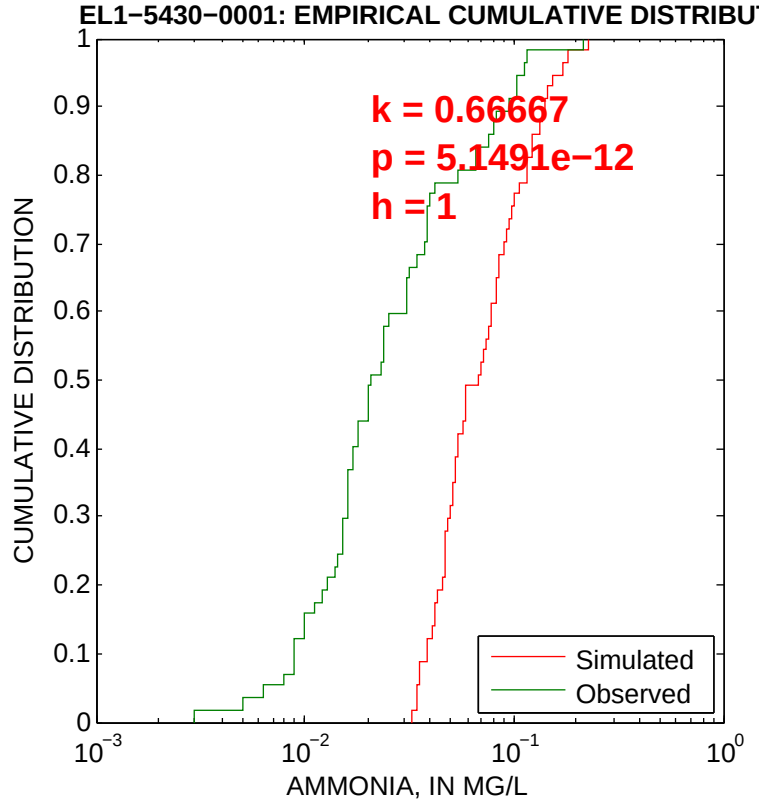
STATISTICS

		observe	simulate
n		10954	10926
min		0.71	0
		-0.148742	-5.16483
mean		52.2909	52.6765
		1.31964	1.31789
media		23	27.1255
		1.36173	1.43628
max		2590	1321.7
		3.4133	3.12113
varian		9576.64	8244.91
		0.380633	0.483719
JB		0.001	0.001
		0.001	0.001
		ra	log
%		0.73743	-0.13269
err.va		5339.99	0.116648
rel.std.err		0.557605	0.306459
mod.eff		0.442395	0.693541

VERSION







DATA SELECTION

scenario	file
P620171001WQ	NH3X.calib

plot: NH3X - ammonia

Dates: 1/1/1985 – 12/31/201

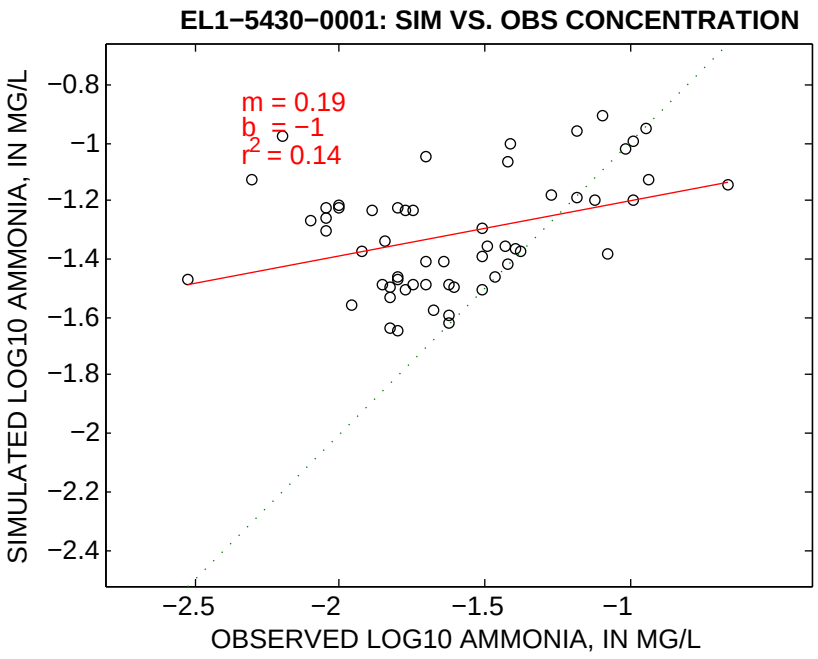
Drive	Directory	Observed
N/A	model	OBS20161101

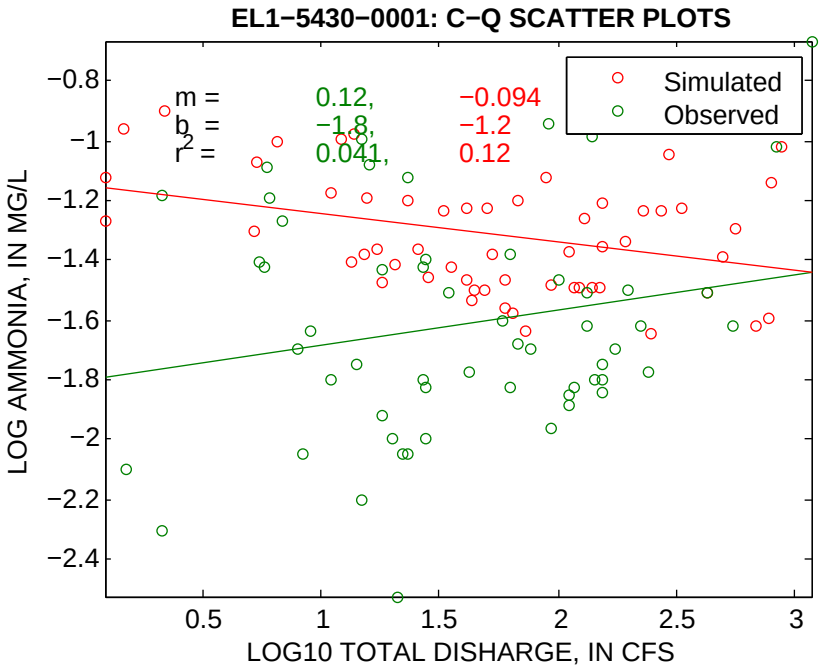
STATISTICS

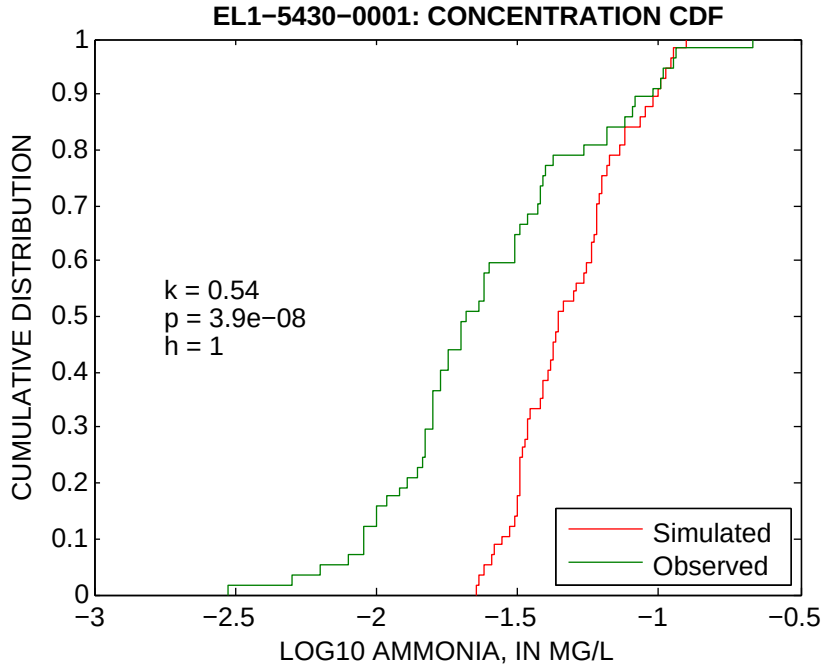
	n	57	57
		observe	simulate
min		0.003	0.032247
		-2.52288	-1.49151
mean		0.0364246	0.0787337
		-1.60879	-1.15761
media		0.021	0.068356
		-1.67778	-1.16522
max		0.217	0.22789
		-0.66354	-0.642275
varian		0.00145028	0.00180064
		0.143641	0.0453482
JB		0.001	0.002903
		0.5	0.118482
		ra	log
%		116.155	-28.0451
err.va		0.00510537	0.40319
rel.std.err		3.52028	2.80694
mod.eff		-2.52028	-1.80694

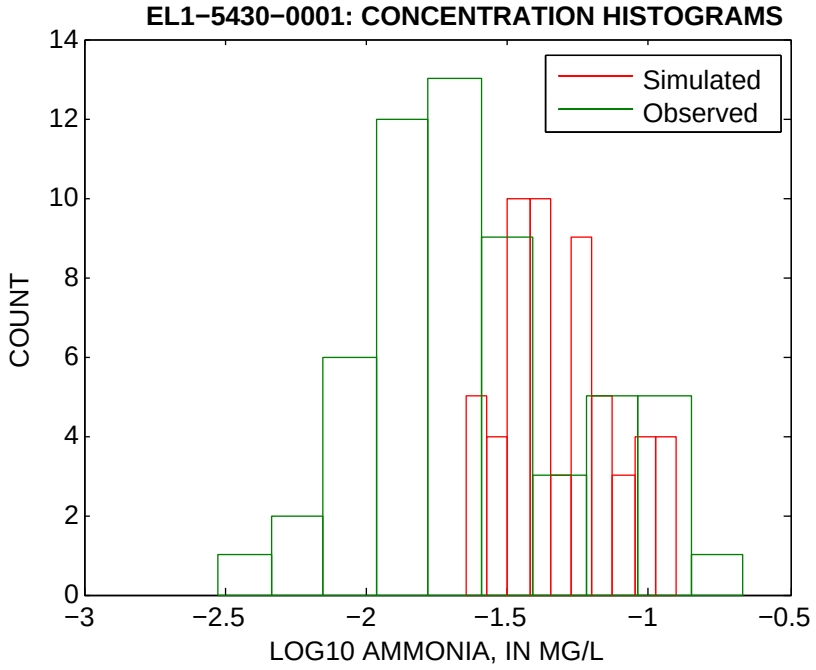
VERSION 2.1

ALL DATA
LOG10

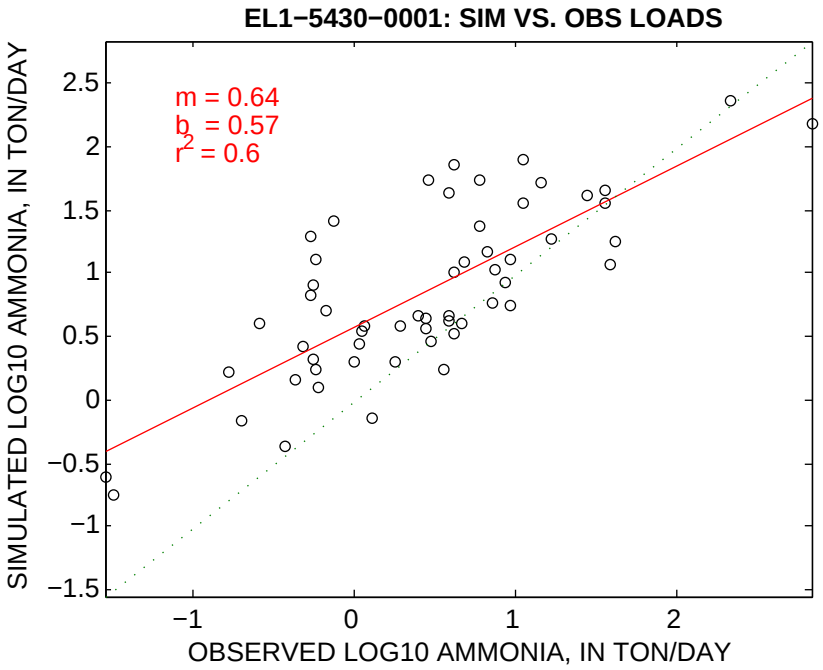


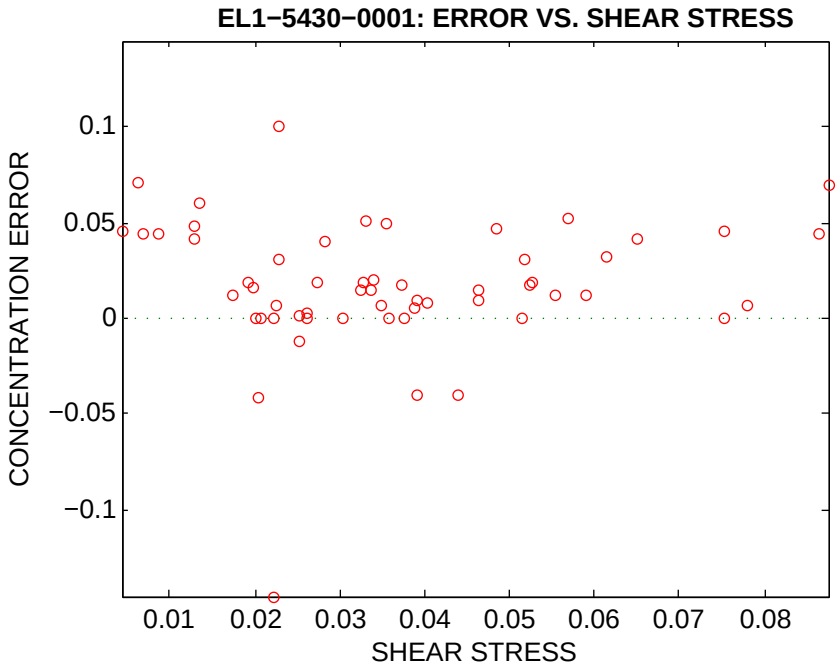


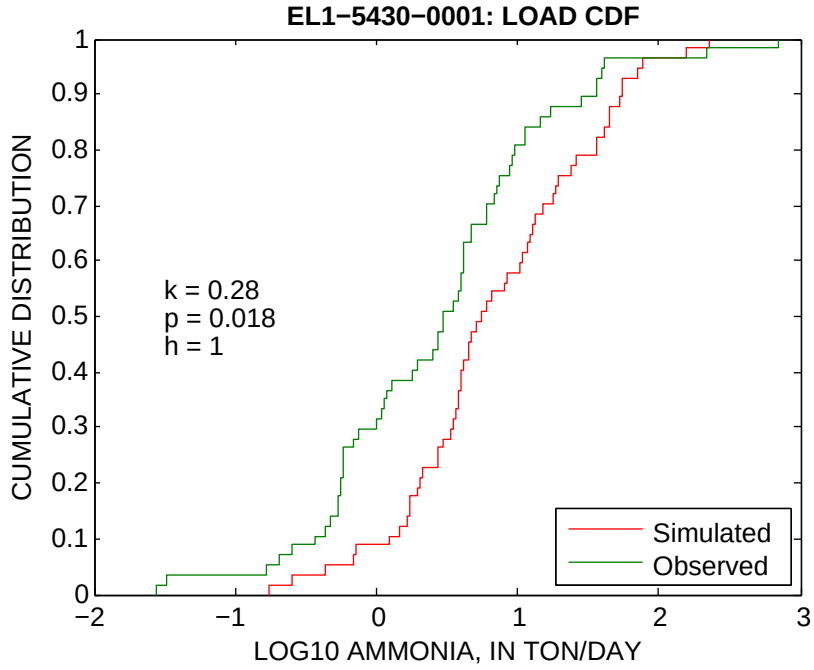


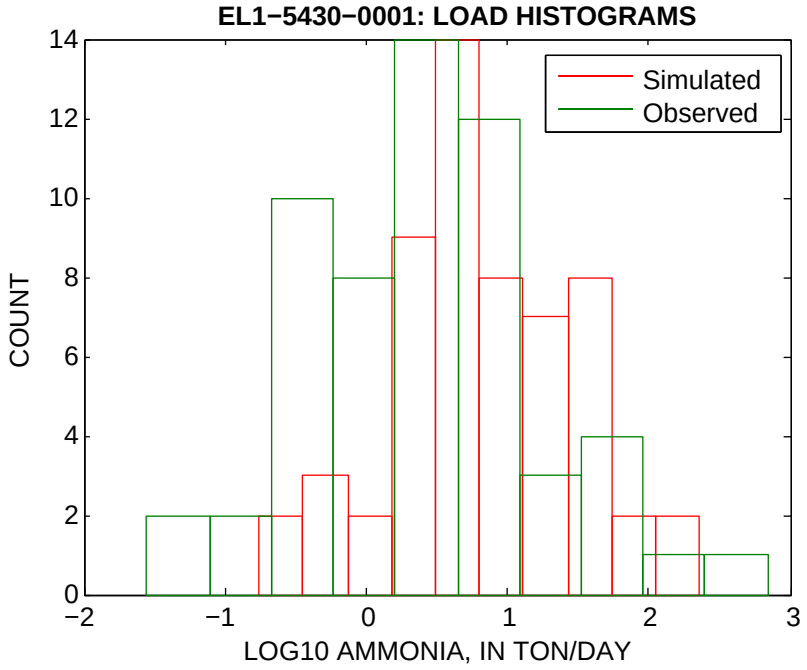


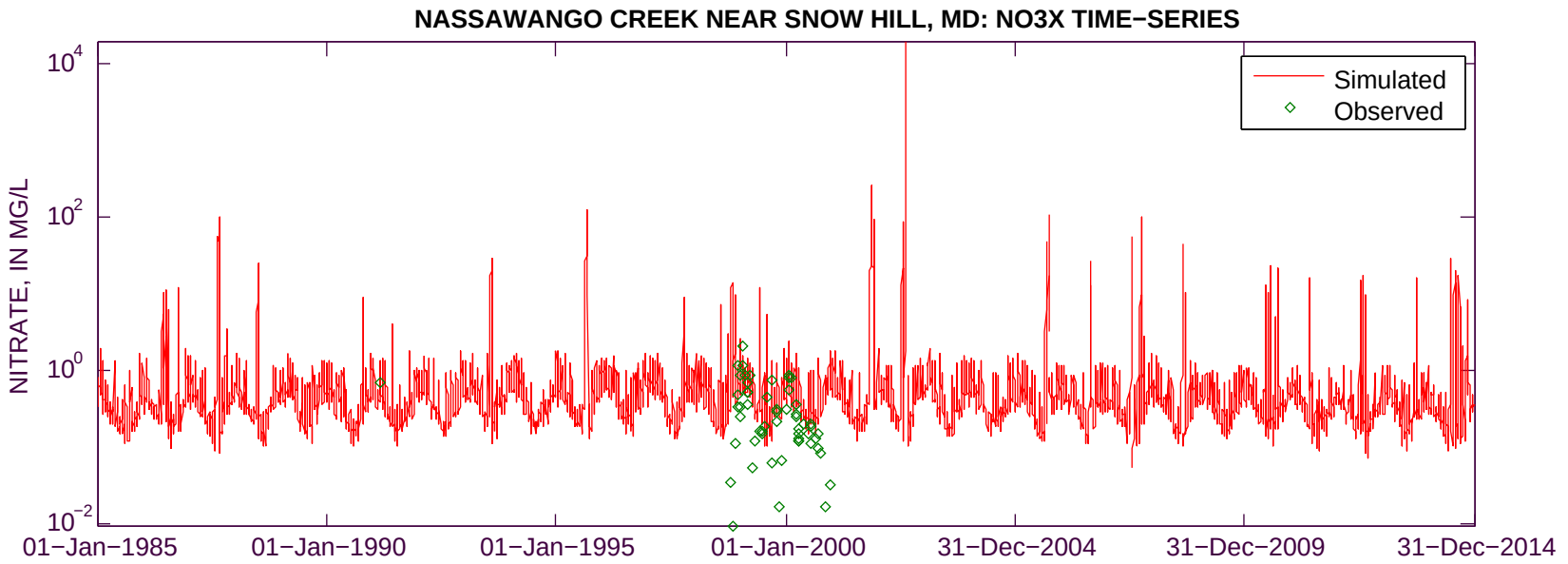
LOAD DATA
LOG10

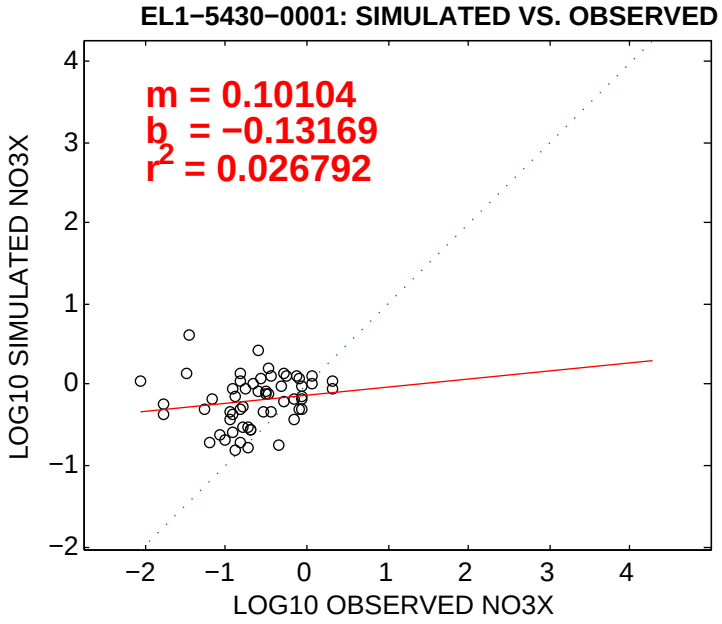


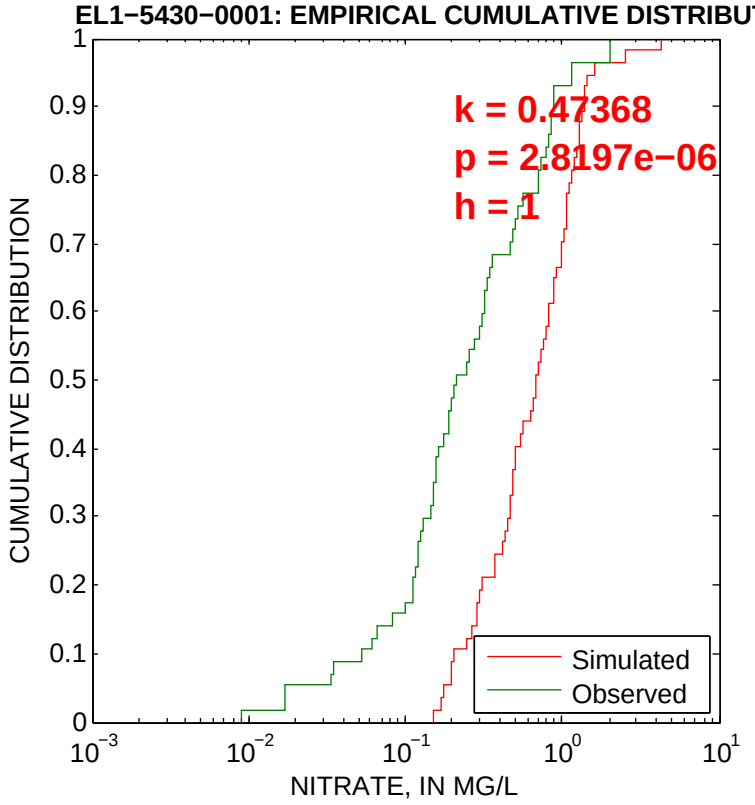












DATA SELECTION

scenario: P620171001WQ | file: NO3X.calib

plot: NO3X - nitrate

Dates: 1/1/1985 – 12/31/201

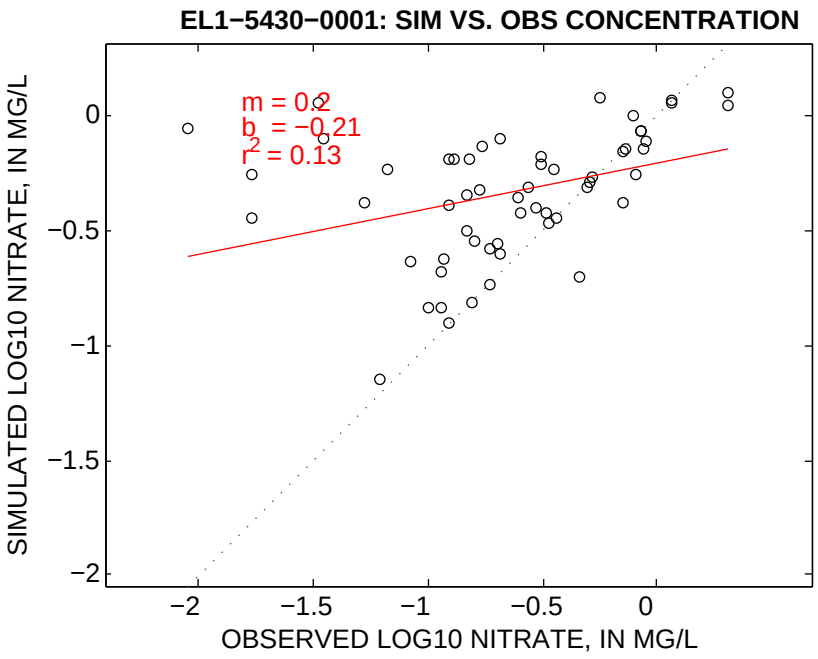
Drive: N/A | Directory: model | Observed: OBS20161101

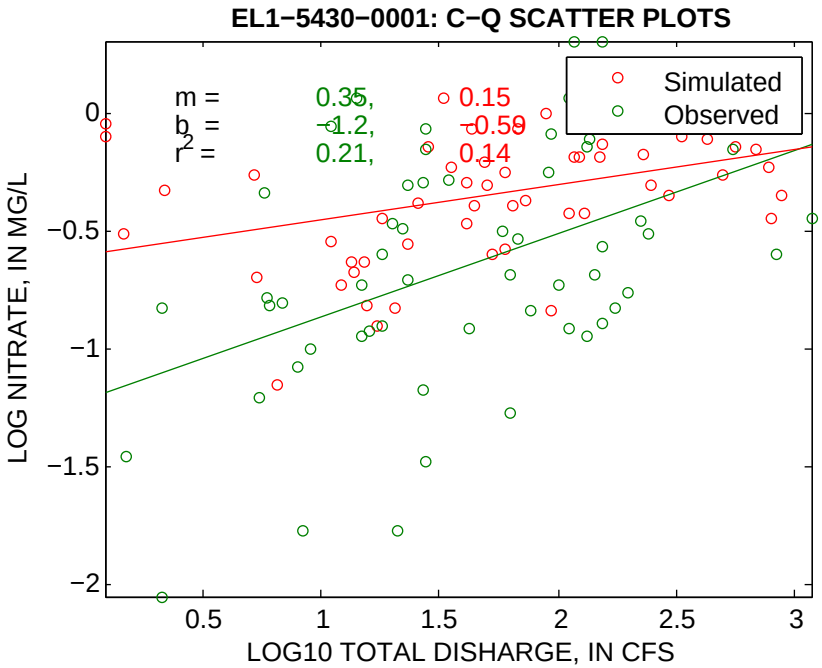
STATISTICS

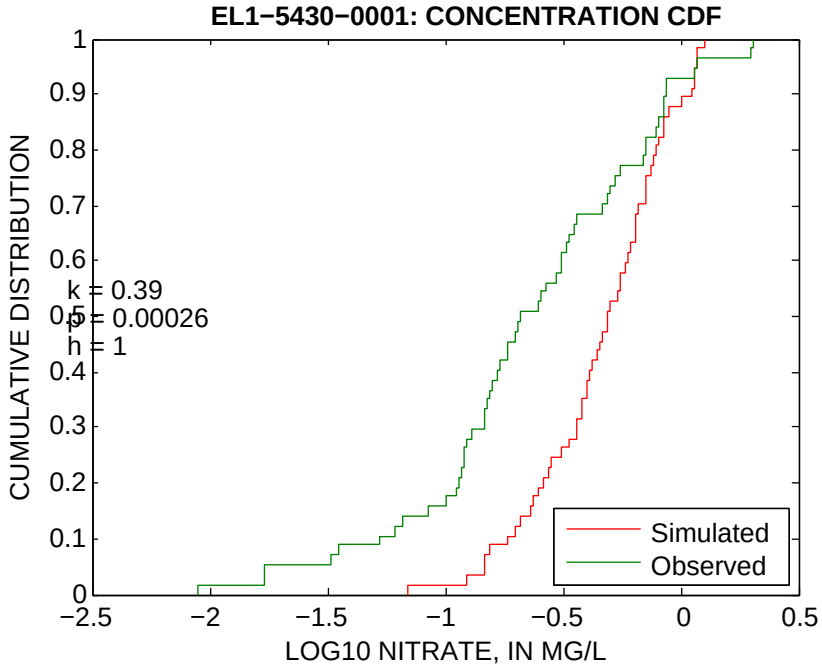
n	57	57
	observe	simulate
min	0.009	0.1526
	-2.04576	-0.816445
mean	0.39559	0.815083
	-0.643018	-0.196657
media	0.209	0.68715
	-0.679854	-0.162948
max	2.03	4.2924
	0.307496	0.6327
varian	0.186492	0.436952
	0.25352	0.0966042
JB	0.001	0.001
	0.162437	0.5
	ra	log
%	106.042	-69.4166
err.va	0.754621	0.501689
rel.std.err	4.04641	1.97889
mod.eff	-3.04641	-0.978892

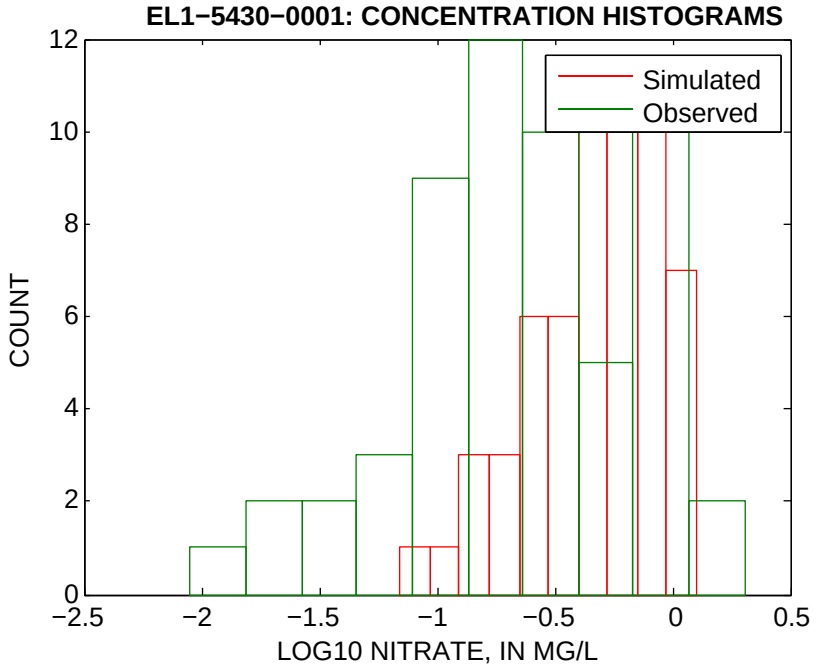
VERSION 2.1

ALL DATA
LOG10

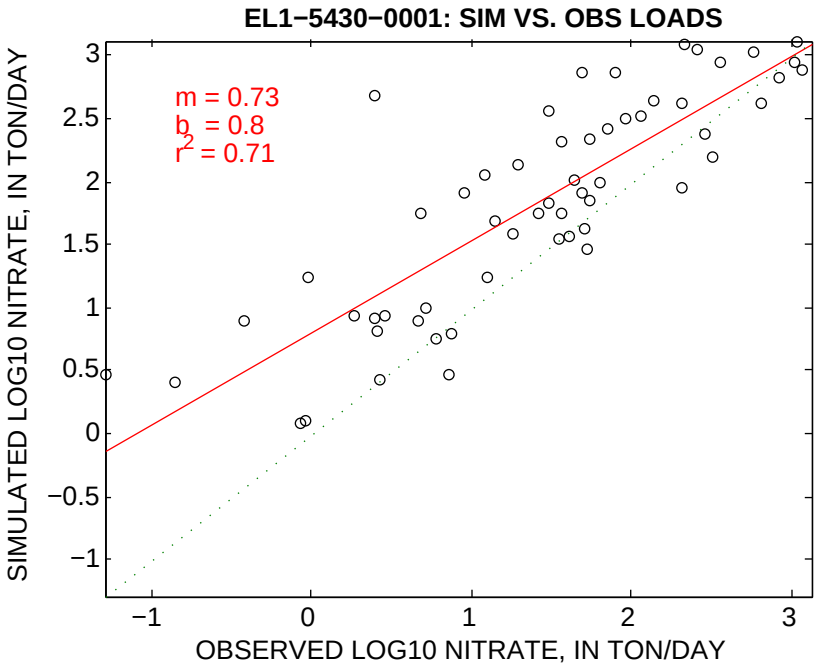


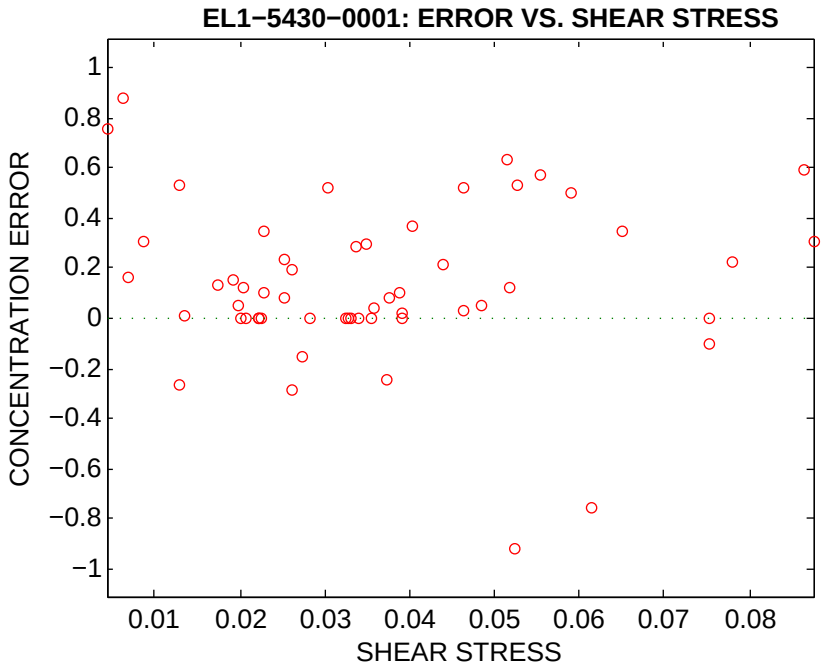


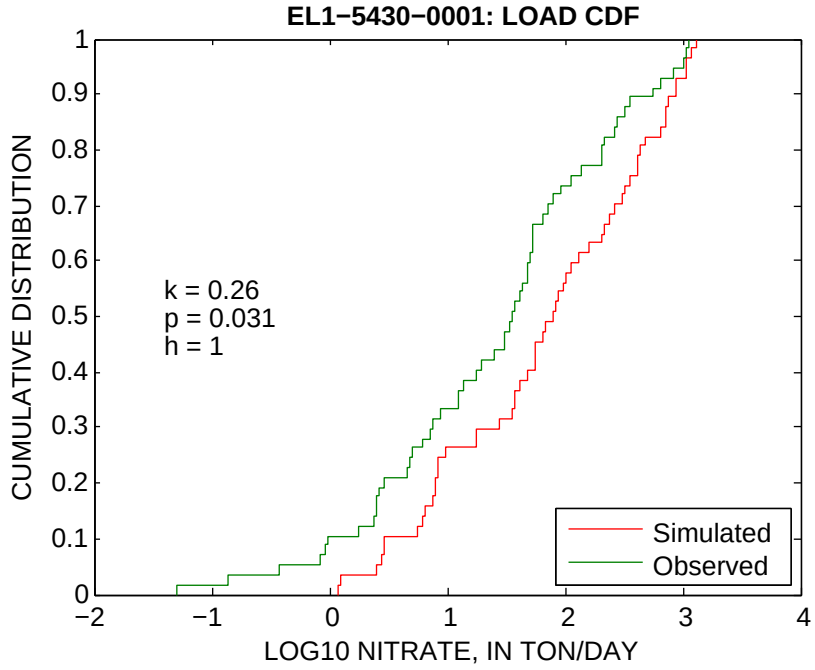


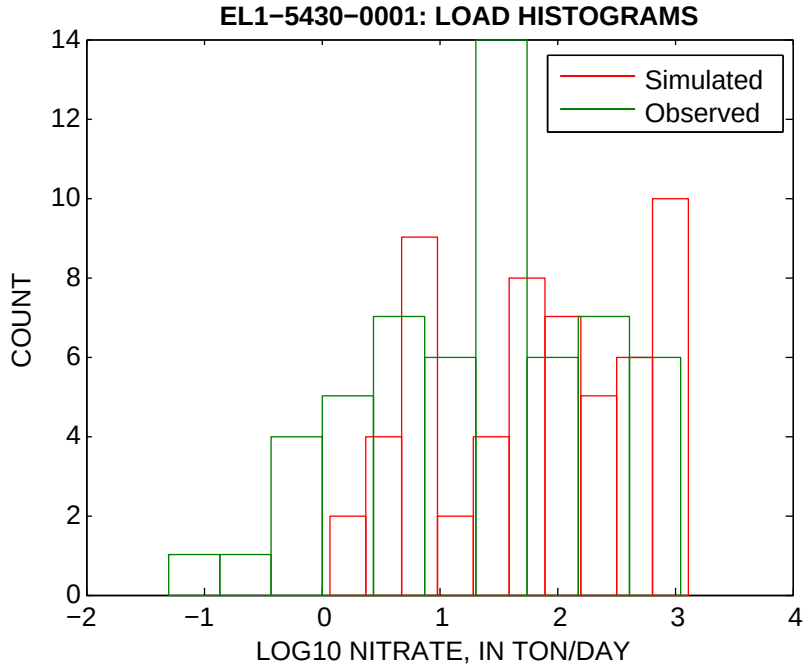


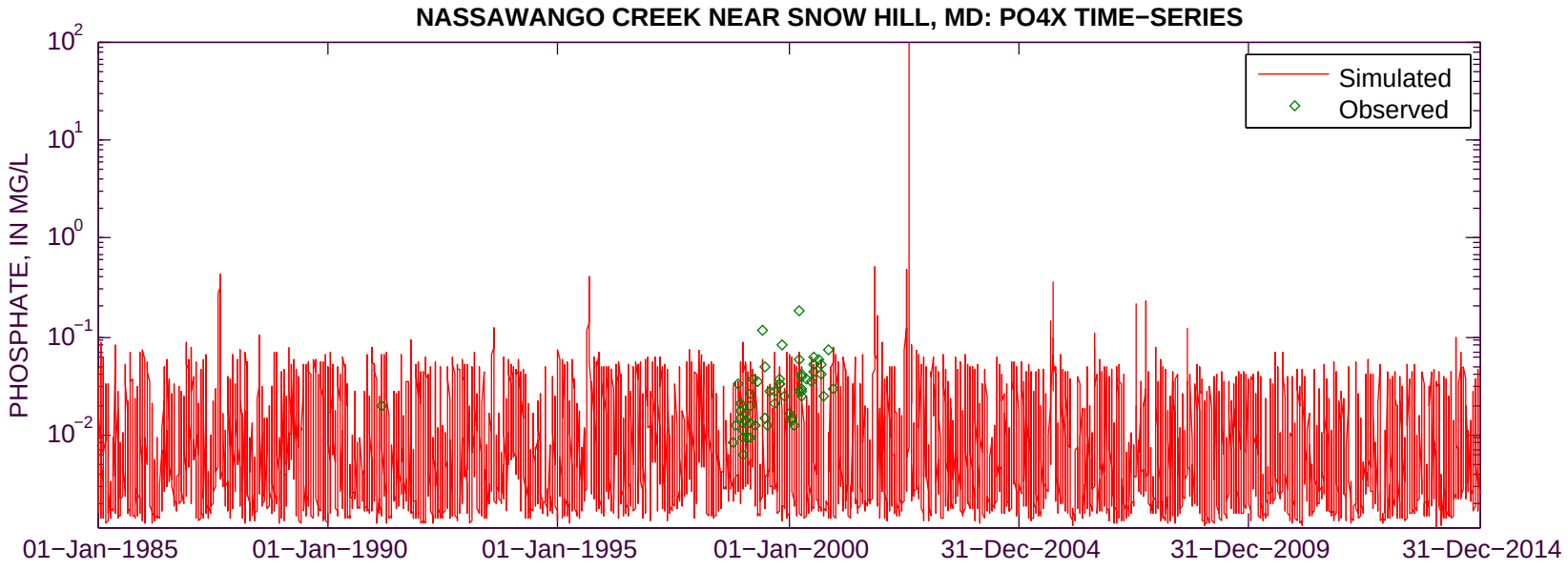
LOAD DATA
LOG10

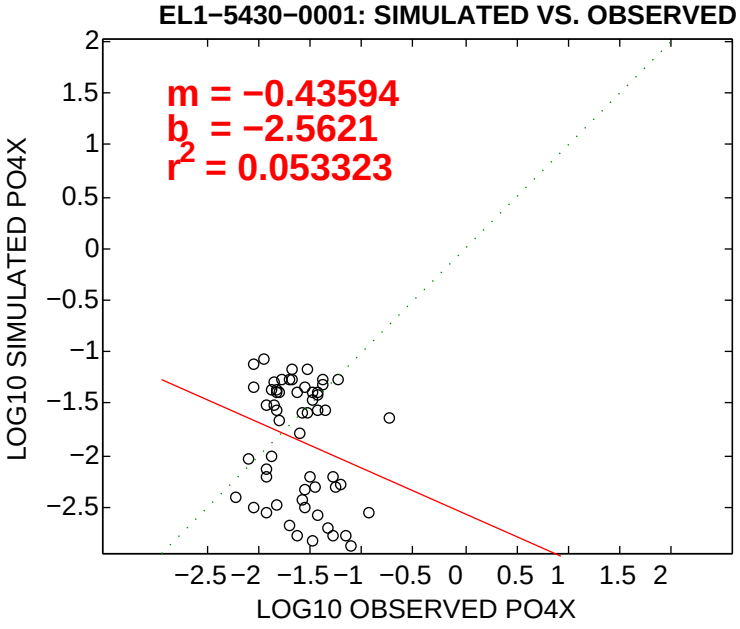


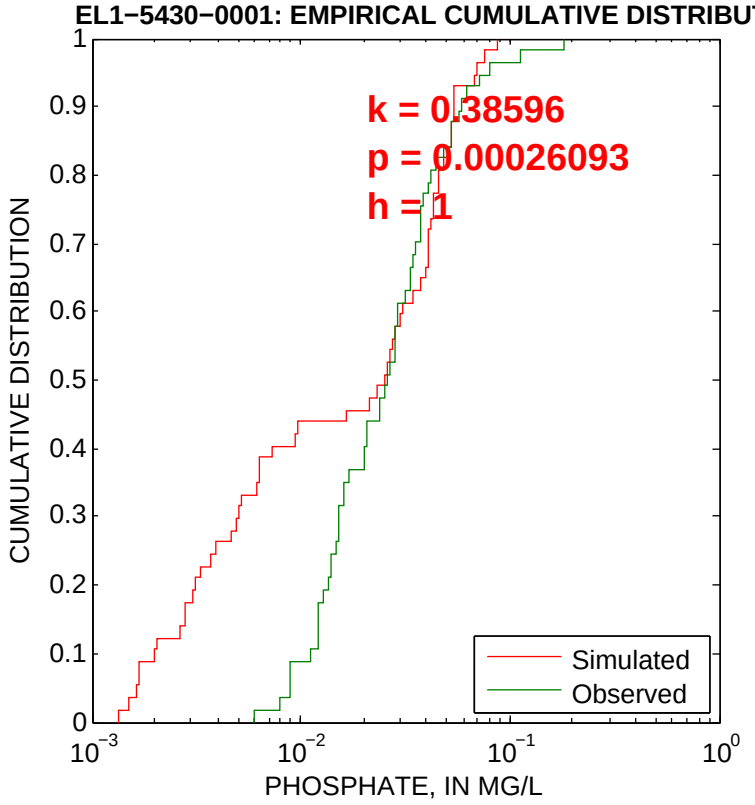












DATA SELECTION

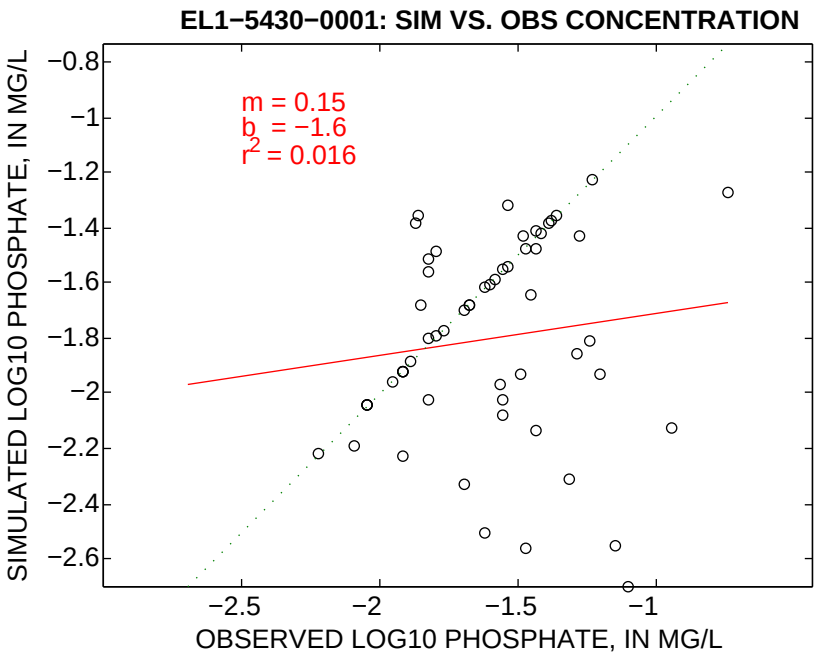
scenario: P620171001WQ
file: PO4X.calib
plot: PO4X - phosphate
Dates: 1/1/1985 12/31/201
Drive: N/A
Directory: model
Observed: OBS20161101

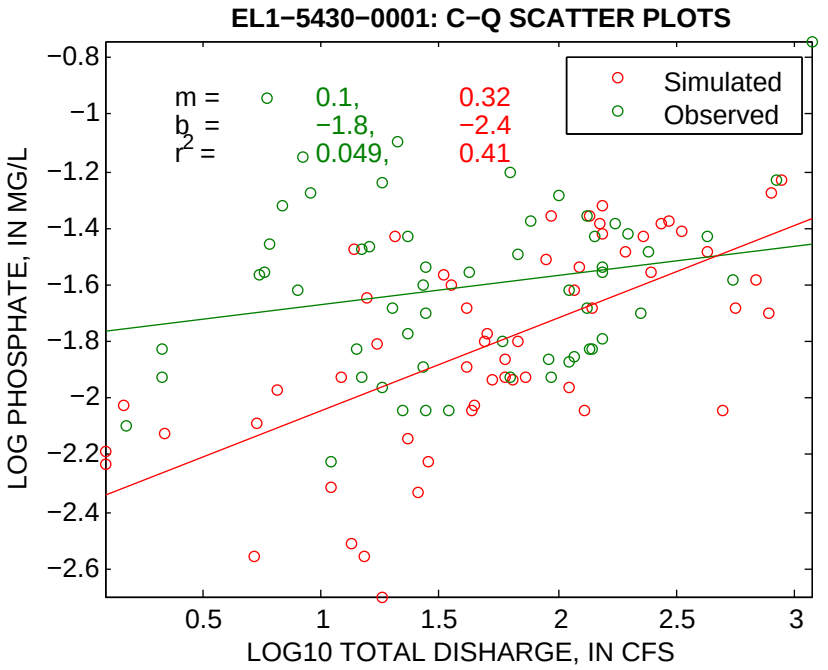
STATISTICS

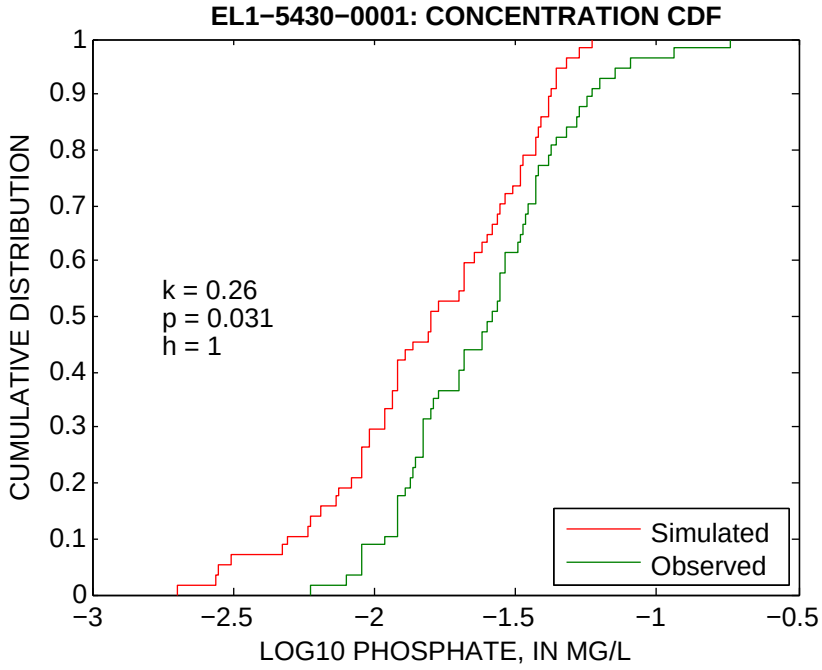
n	57	57
	observe	simulate
min	0.006	0.0013574
	-2.22185	-2.86729
mean	0.0322036	0.0258736
	-1.60356	-1.863
media	0.026	0.025297
	-1.58503	-1.59693
max	0.182	0.086344
	-0.739929	-1.06377
varian	0.00081909	0.00052767
	0.0910174	0.324393
JB	0.001	0.062413
	0.430126	0.038921
	ra	log
%	-19.6561	16.1788
err.va	0.00166843	0.563276
rel.std.err	2.03693	6.18867
mod.eff	-1.03693	-5.18867

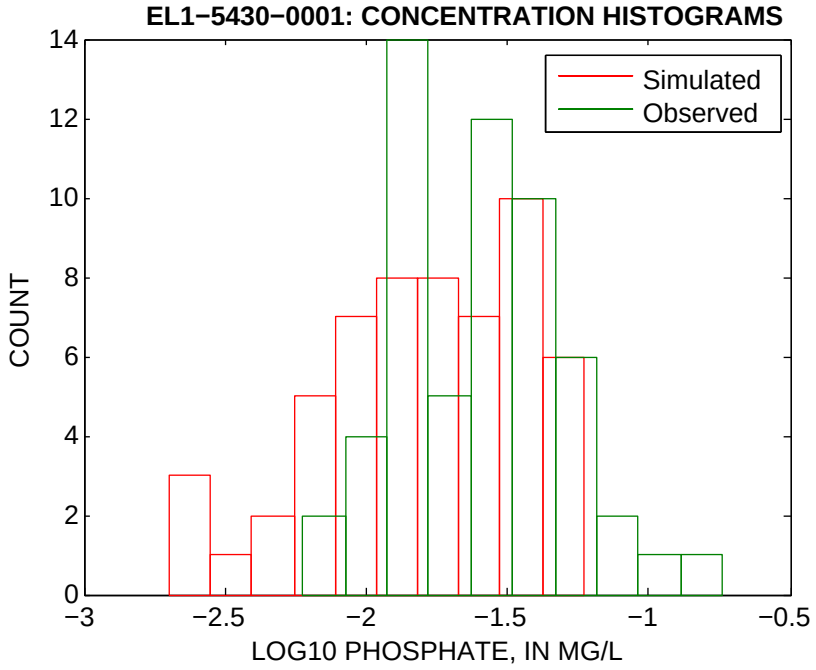
VERSION 2.1

ALL DATA
LOG10

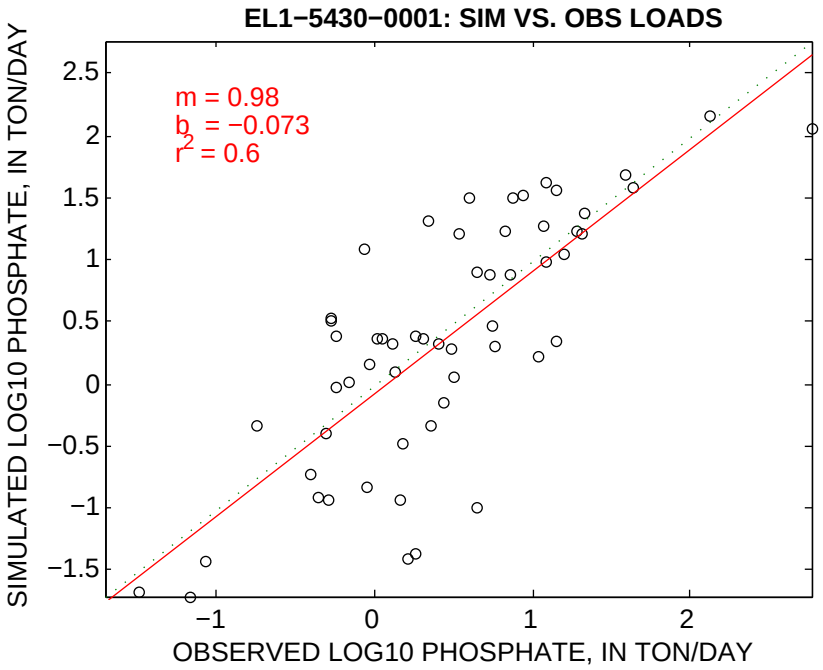


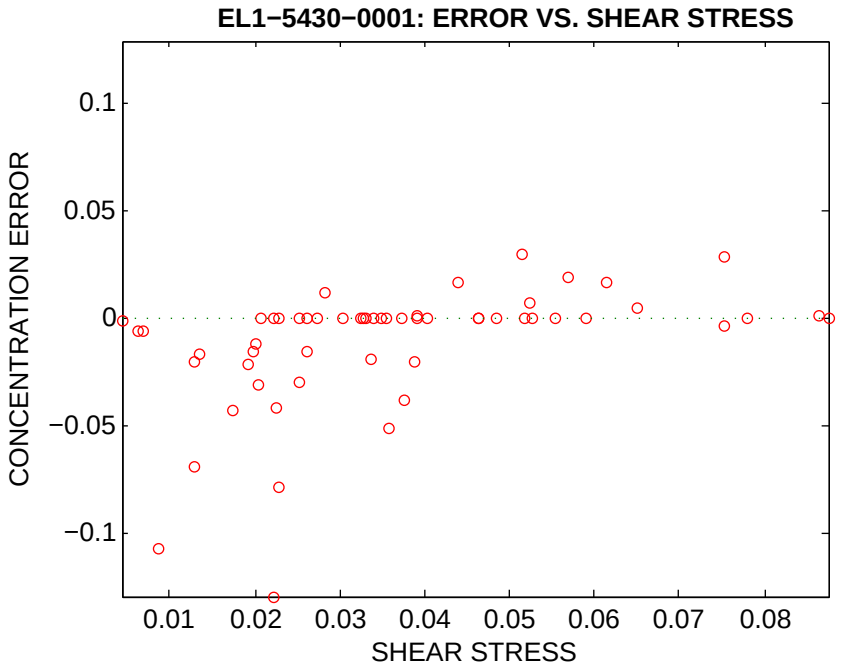


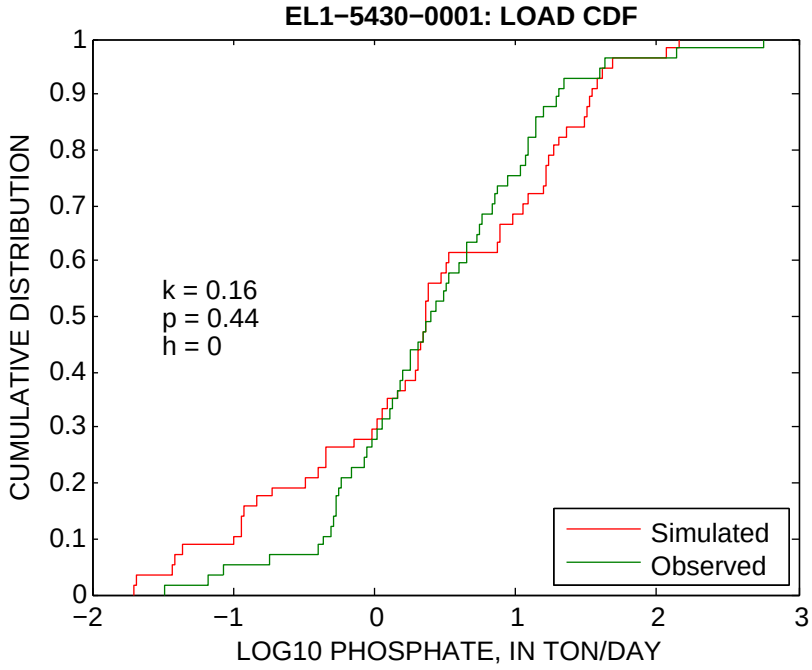


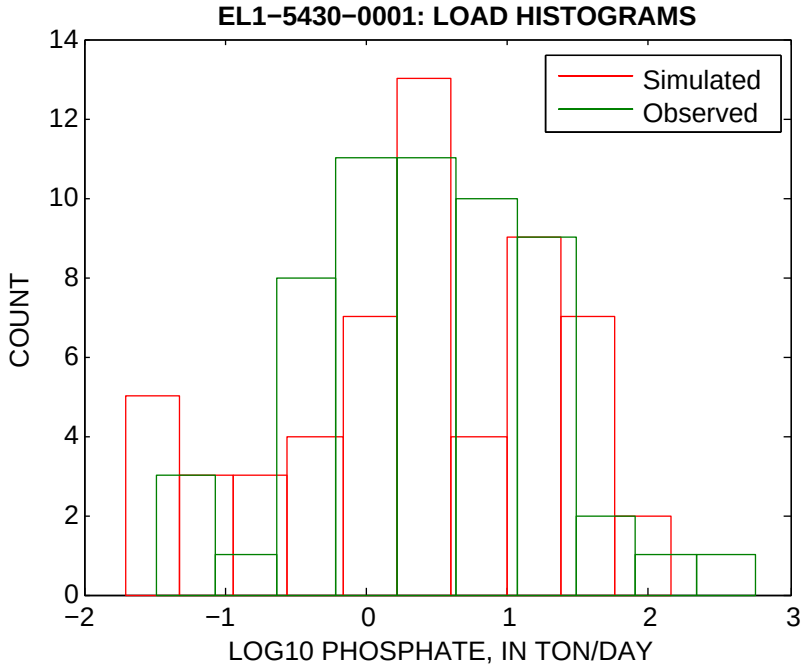


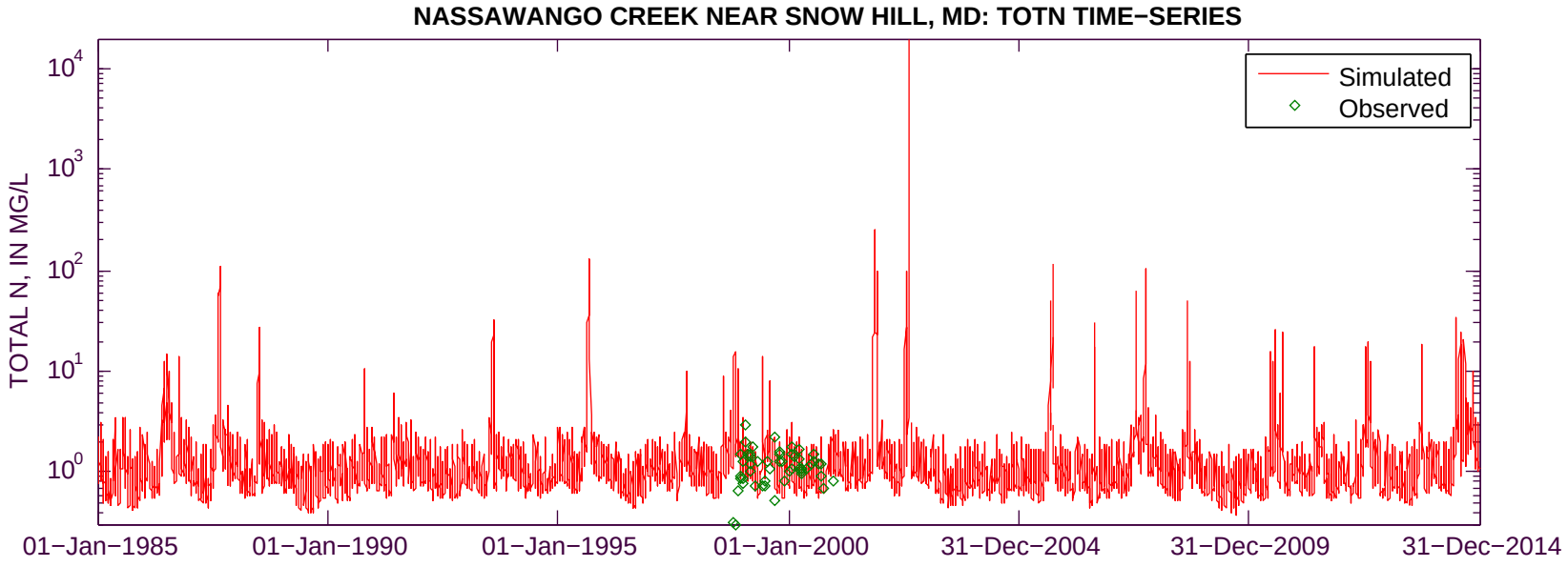
LOAD DATA
LOG10

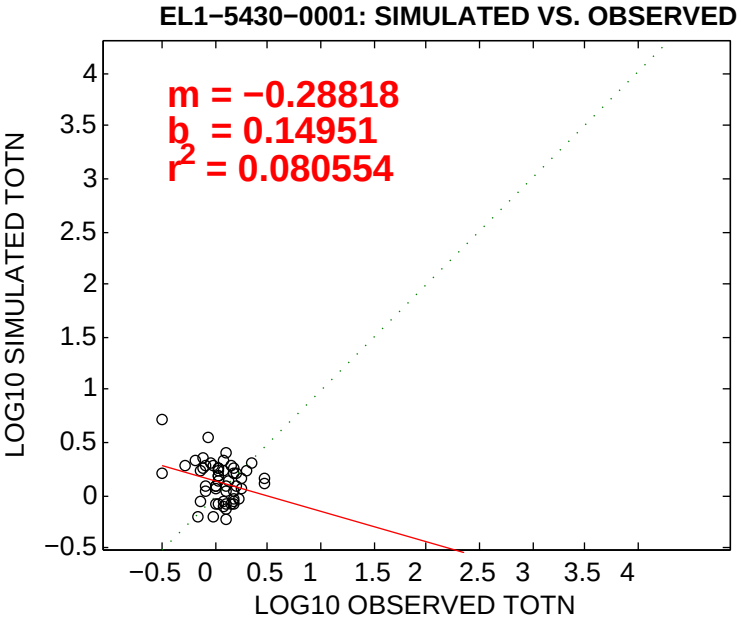


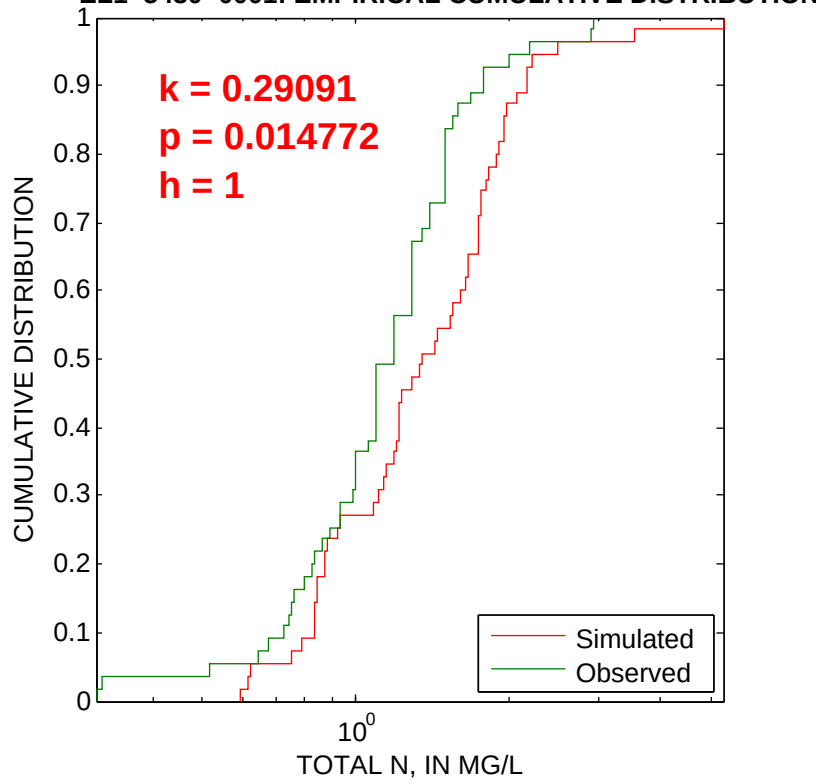












DATA SELECTION

scenario	file
P620171001WQ	TOTN.calib

plot: TOTN - total nitrogen

Dates 1/1/1985 12/31/201

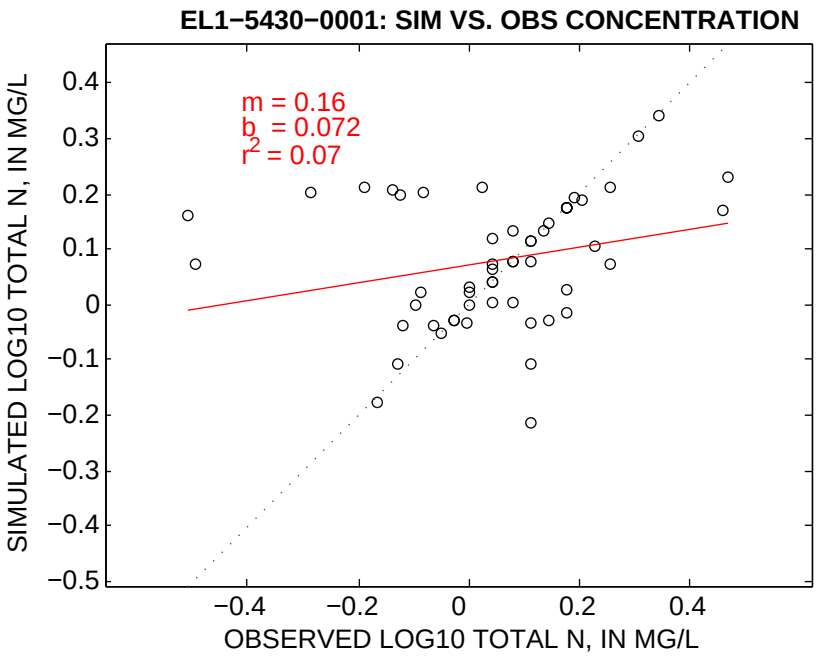
Drive	Directory	Observed
N/A	model	OBS20161101

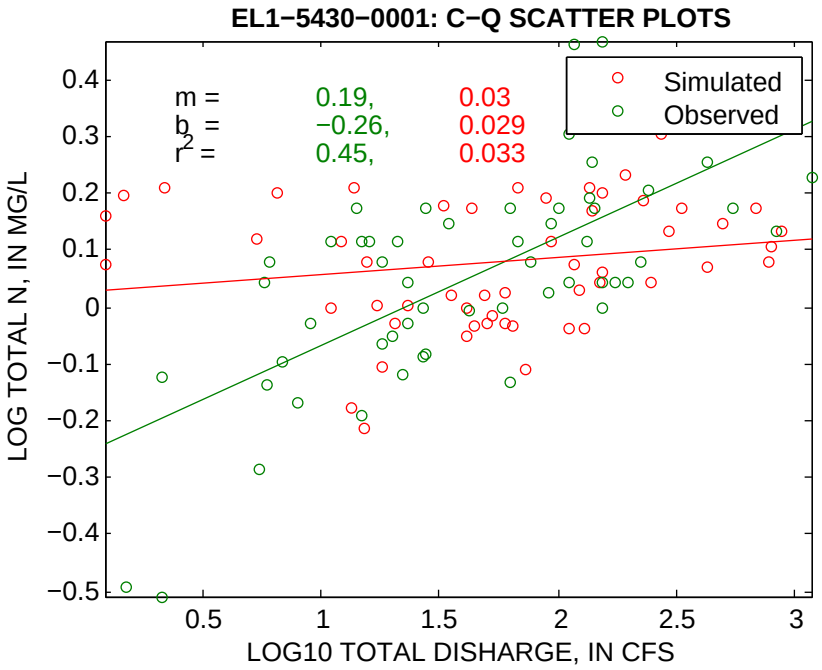
STATISTICS

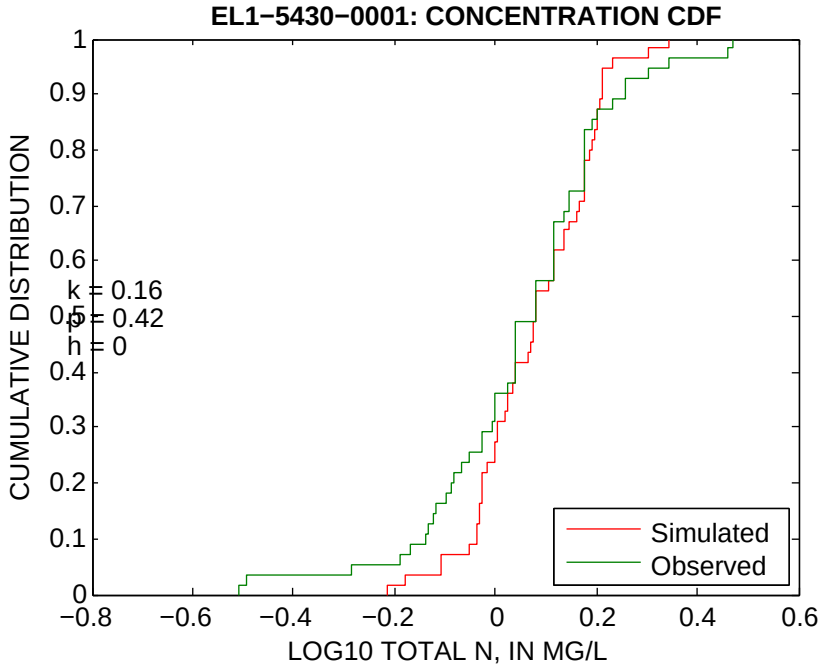
	observe	simulate
n	55	55
min	0.31 -0.508638	0.59641 -0.224455
mean	1.22672 0.0523362	1.50307 0.134428
media	1.2 0.0791812	1.3535 0.131458
max	2.9479 0.469513	5.2891 0.723382
varian	0.259356 0.0344899	0.584792 0.0355578
JB	0.001209 0.017202	0.001 0.321348
	ra	log
%	22.527	156.854
err.va	1.1208	0.0967901
rel.std.err	4.32147	2.80634
mod.eff	-3.32147	-1.80634

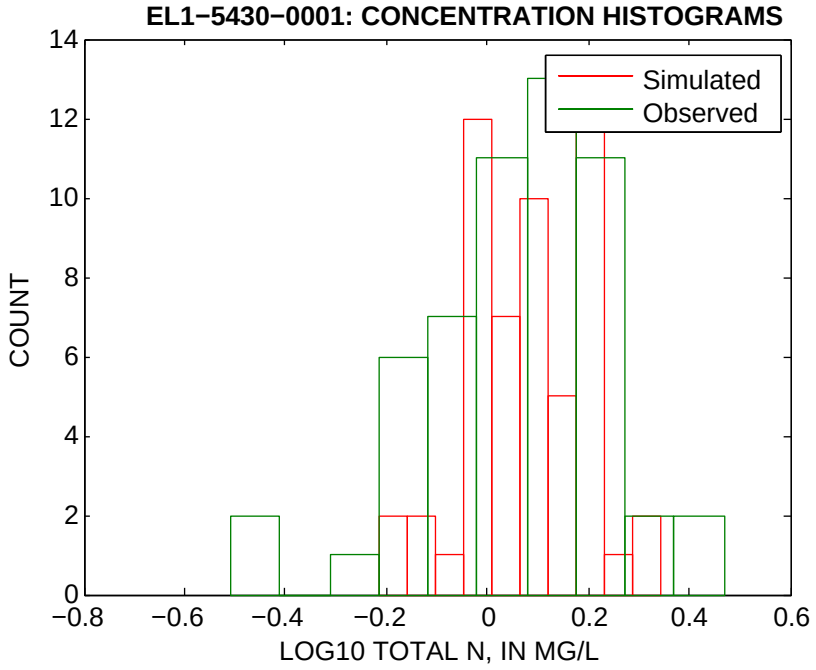
VERSION

ALL DATA
LOG10

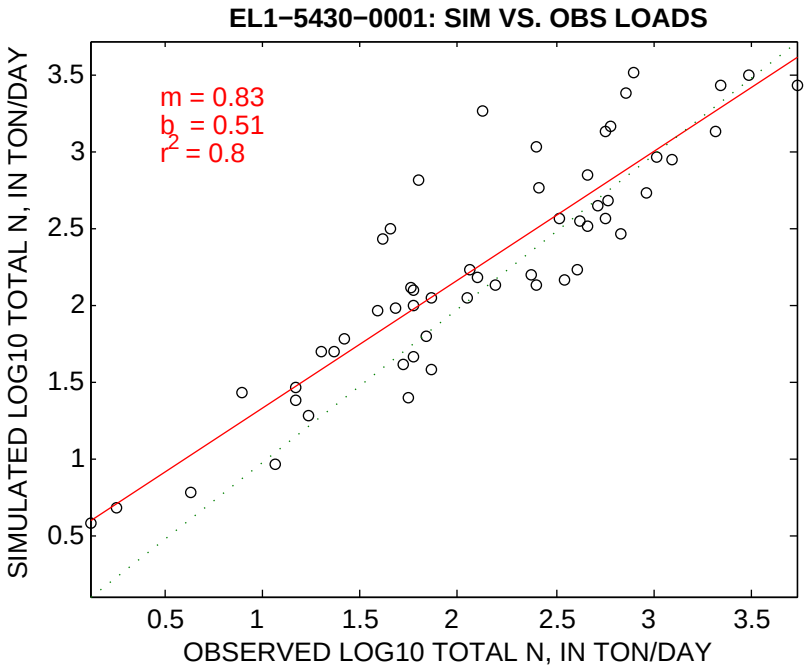


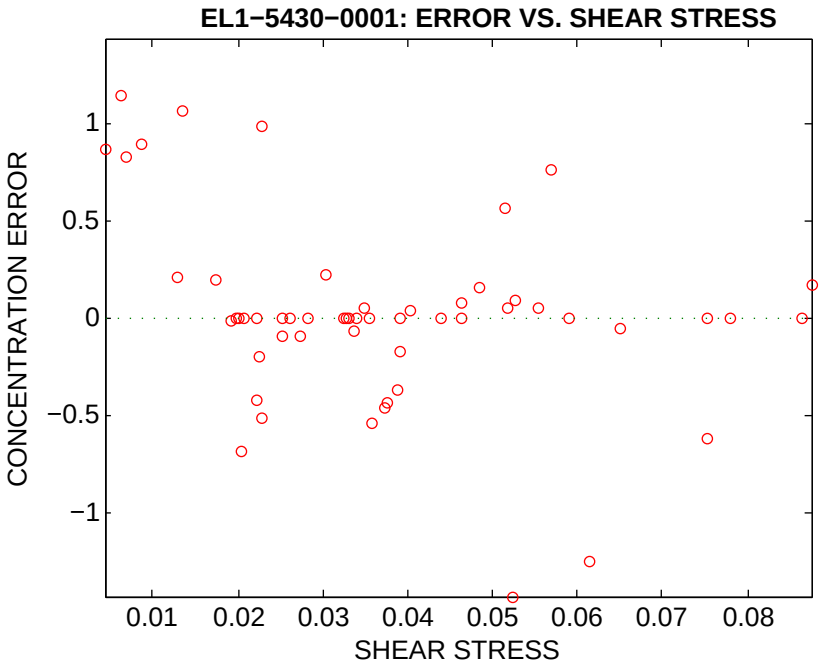


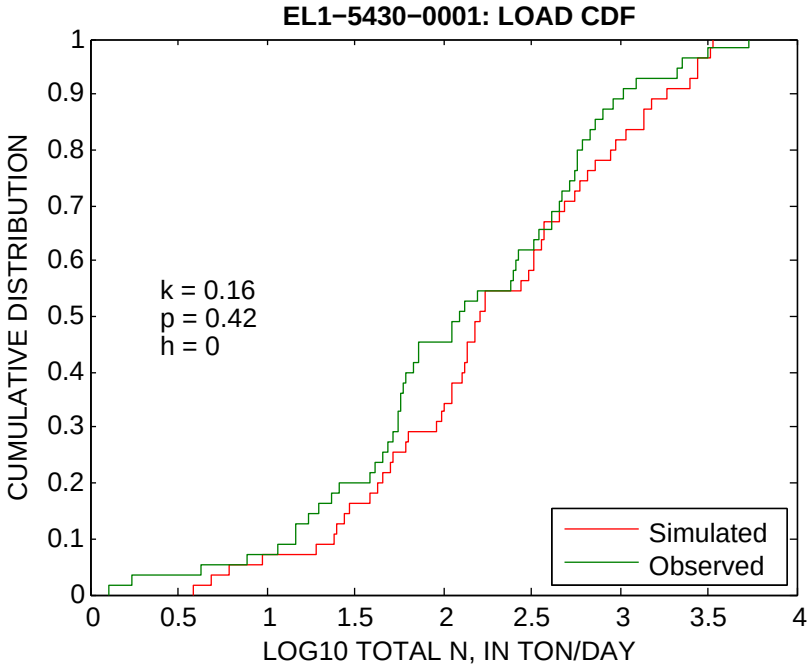


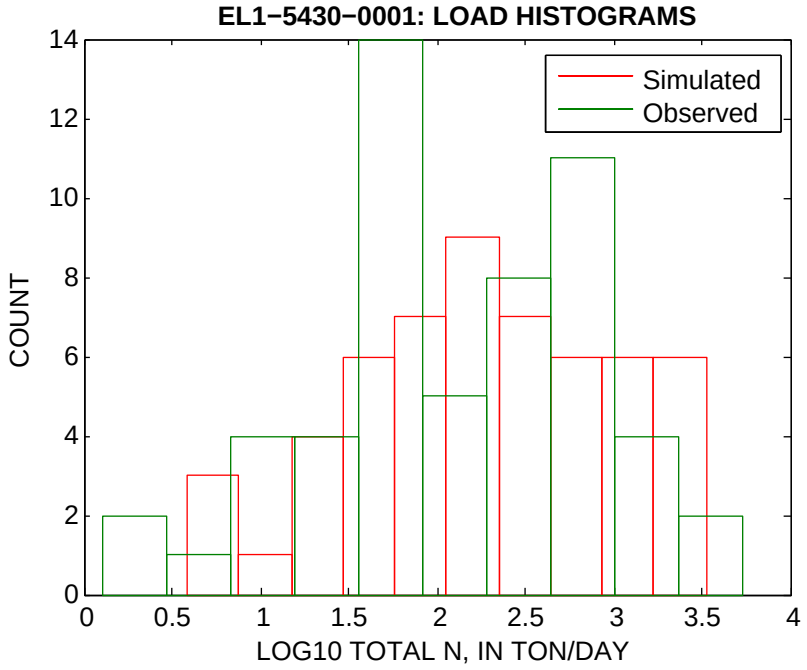


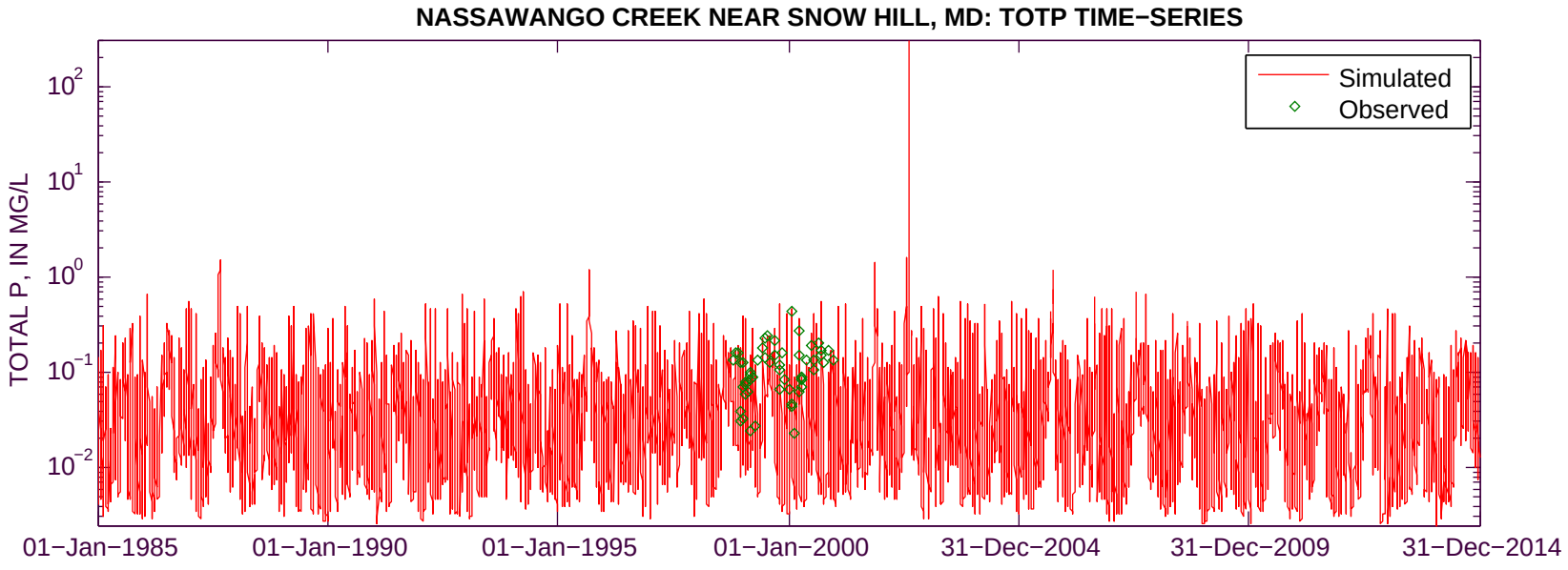
LOAD DATA
LOG10

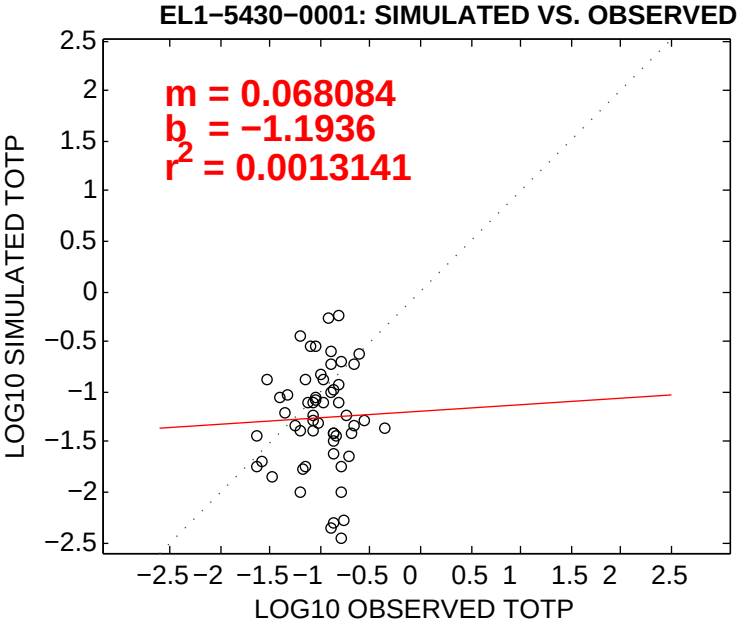


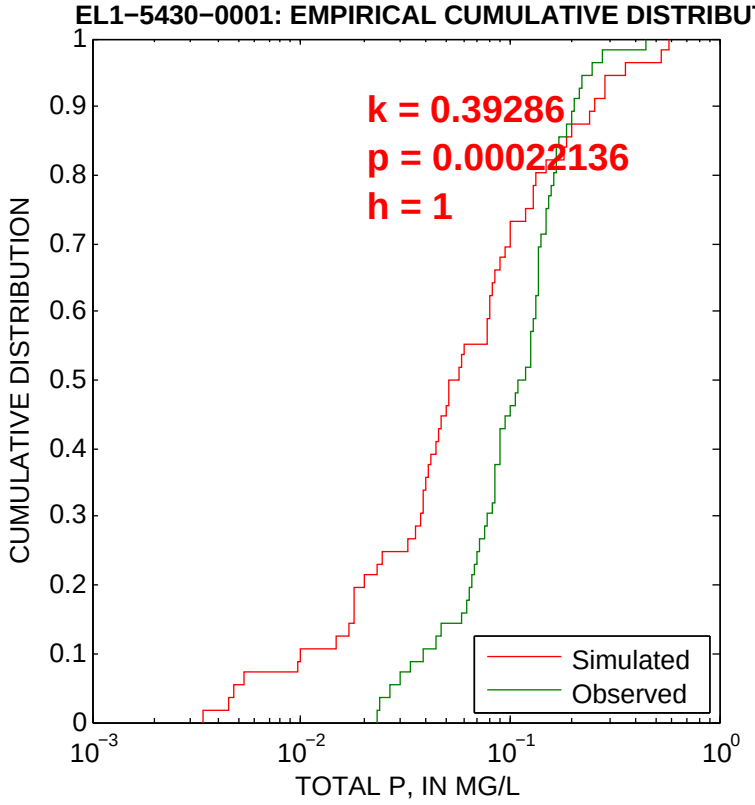












DATA SELECTION

scenario: P620171001WQ | file: TOTP.calib

plot: TOTP - total phosphorus

Dates: 1/1/1985 – 12/31/201

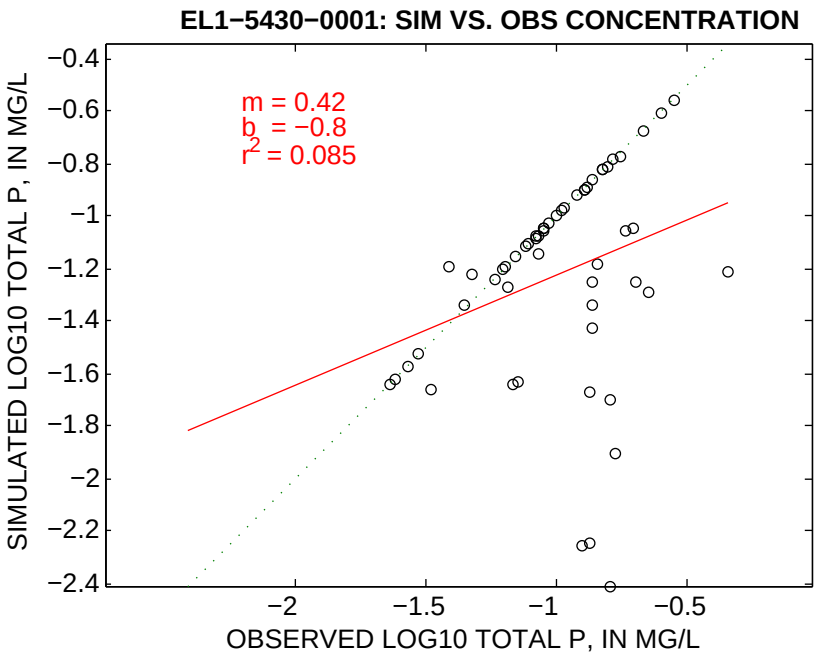
Drive: N/A | Directory: model | Observed: OBS20161101

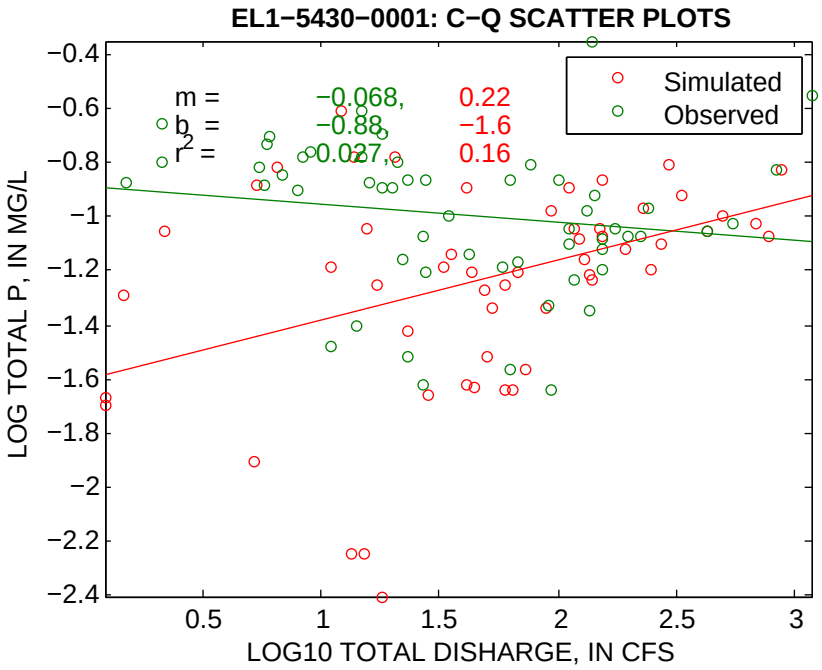
STATISTICS

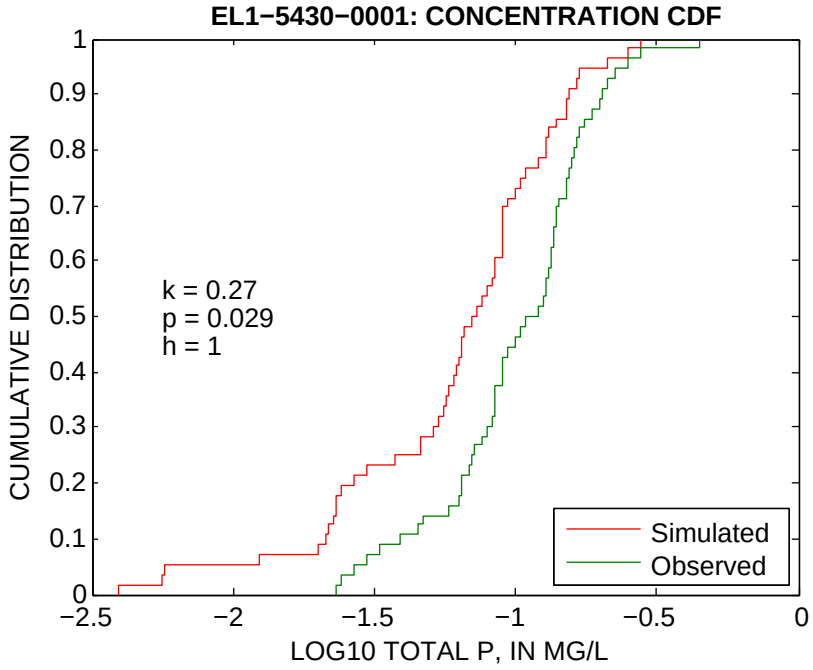
		observe	simulate
n		56	56
min		0.023	0.0034053
		-1.63827	-2.46784
mean		0.120856	0.0998184
		-0.9945	-1.26132
media		0.114	0.0539605
		-0.943697	-1.26871
max		0.45	0.56965
		-0.346787	-0.244392
varian		0.00540294	0.0141366
		0.0744438	0.262591
JB		0.001	0.001
		0.209395	0.5
		ra	log
%		-17.407	26.8291
err.va		0.0196768	0.399383
rel.std.err		3.64187	5.36489
mod.eff		-2.64187	-4.36489

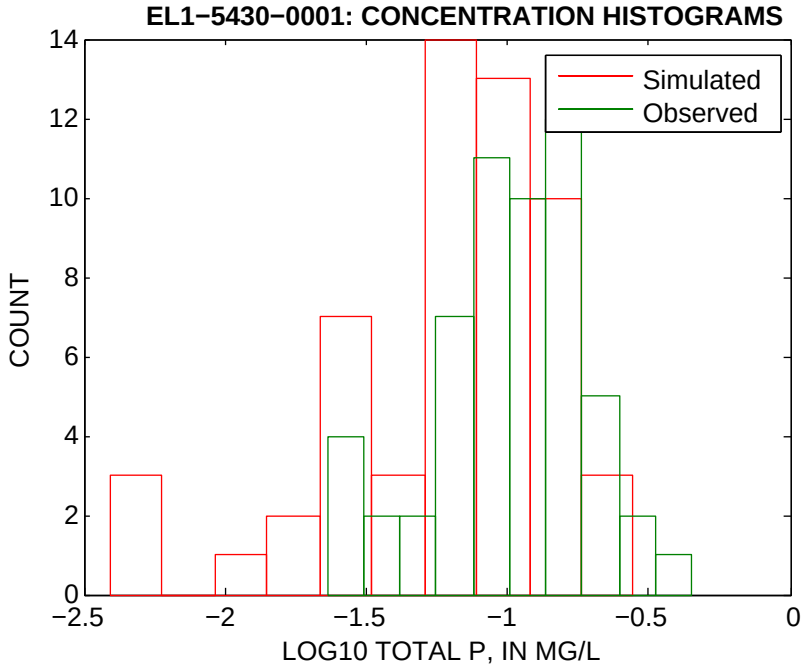
VERSION 2.1

ALL DATA
LOG10

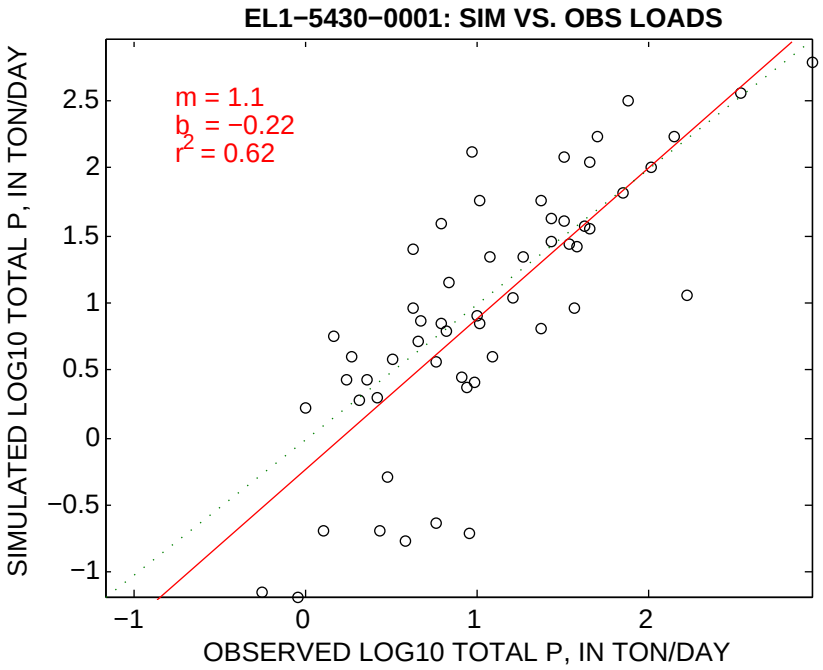


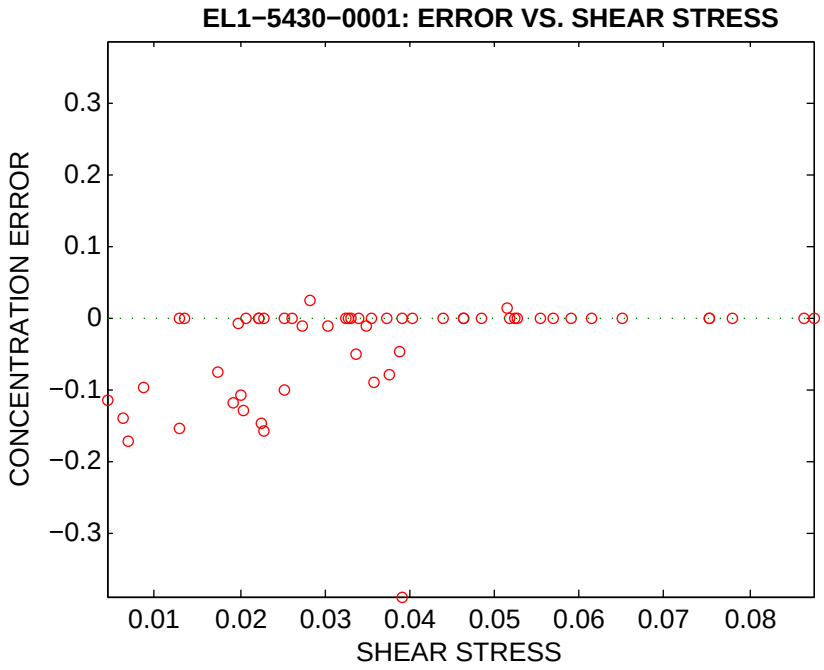


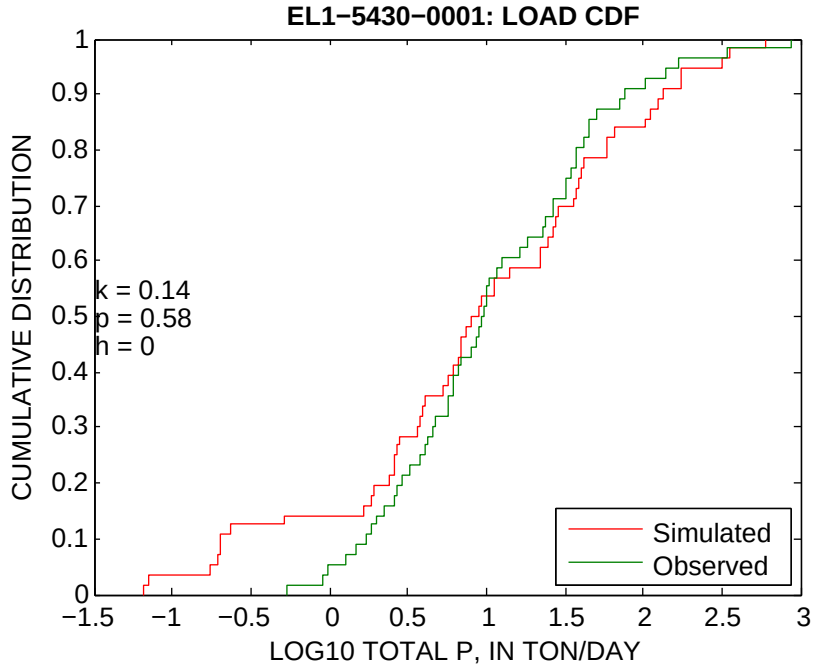


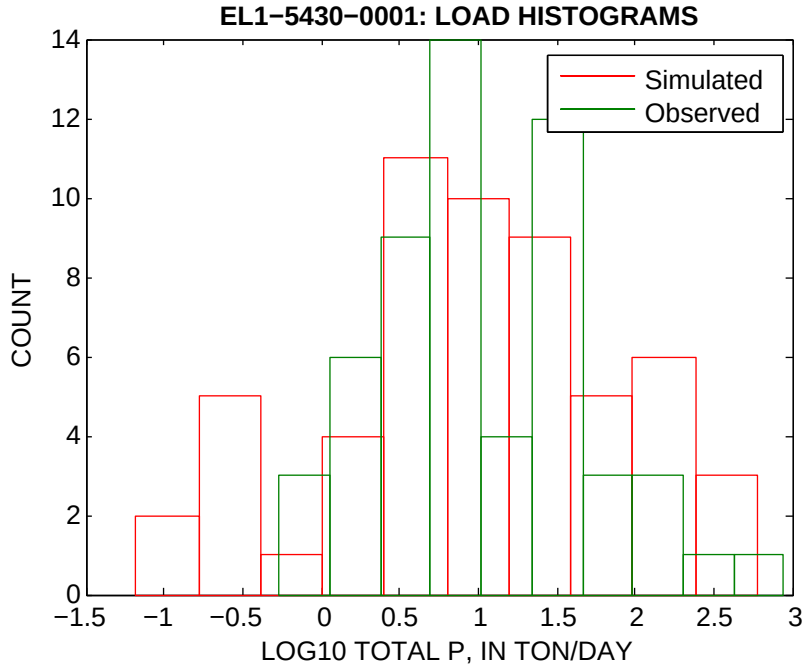


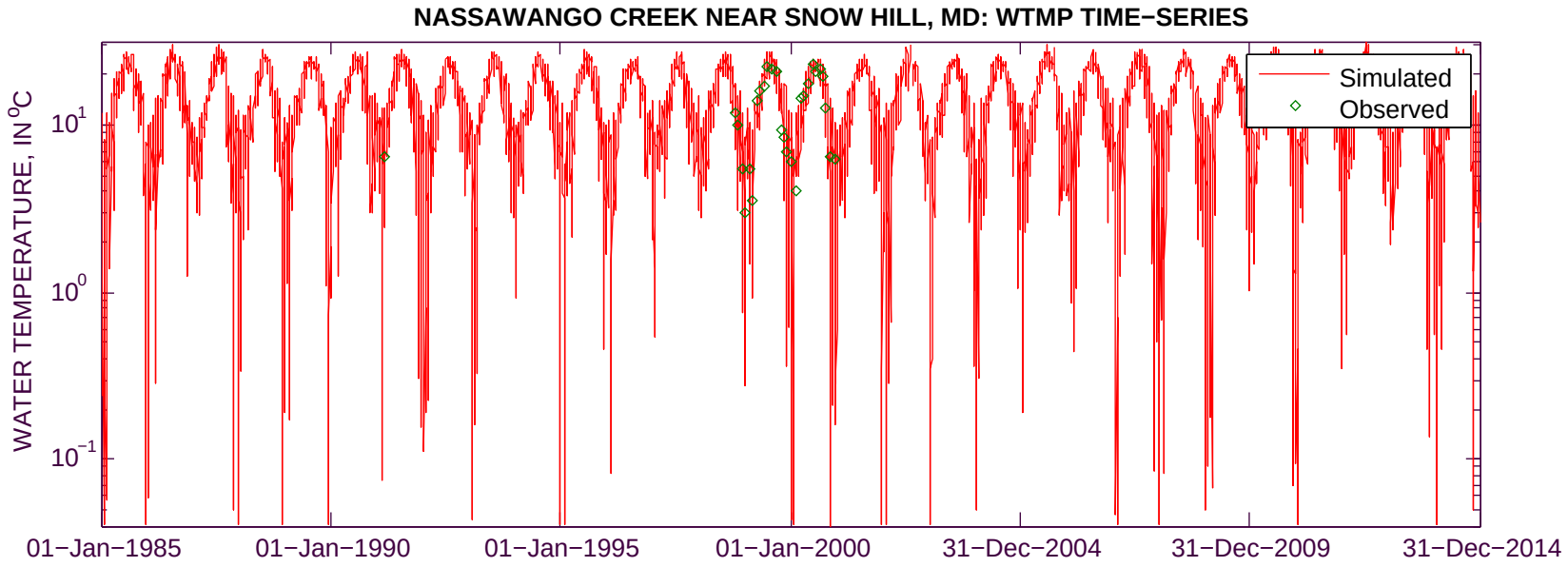
LOAD DATA
LOG10

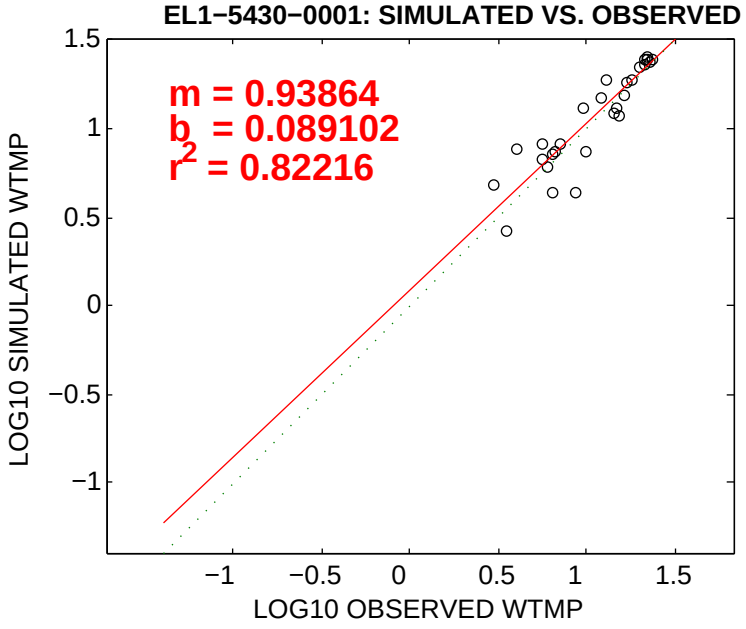


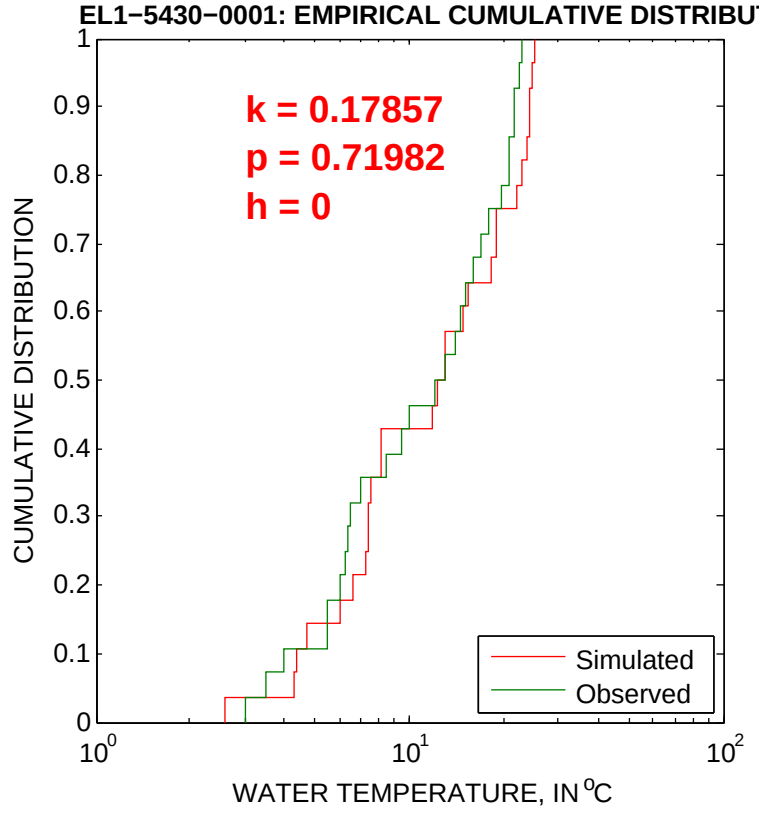












DATA SELECTION

scenario	file
P620171001WQ	WTMP.calib

plot: WTMP - water tempera...

Dates: 1/1/1985 – 12/31/201

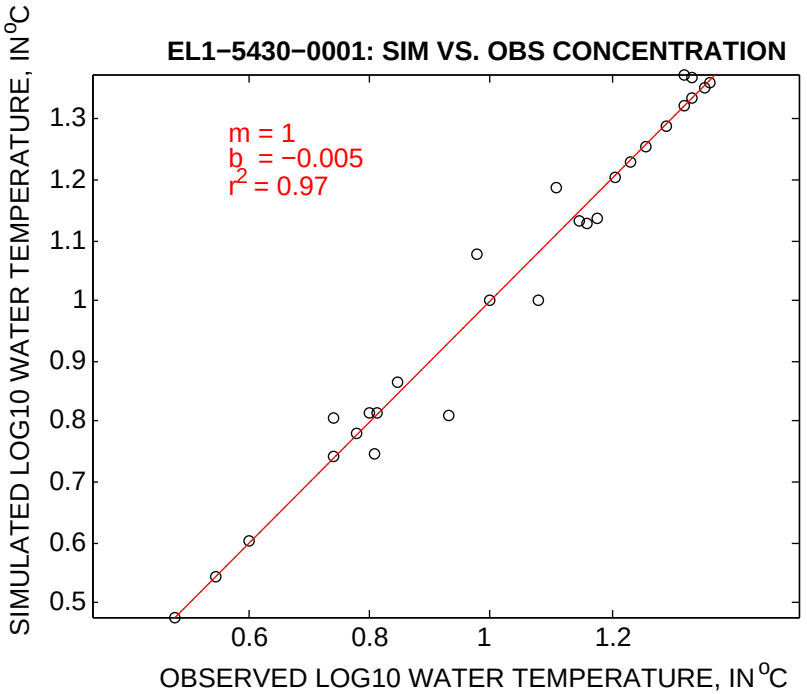
Drive	Directory	Observed
N/A	model	OBS20161101

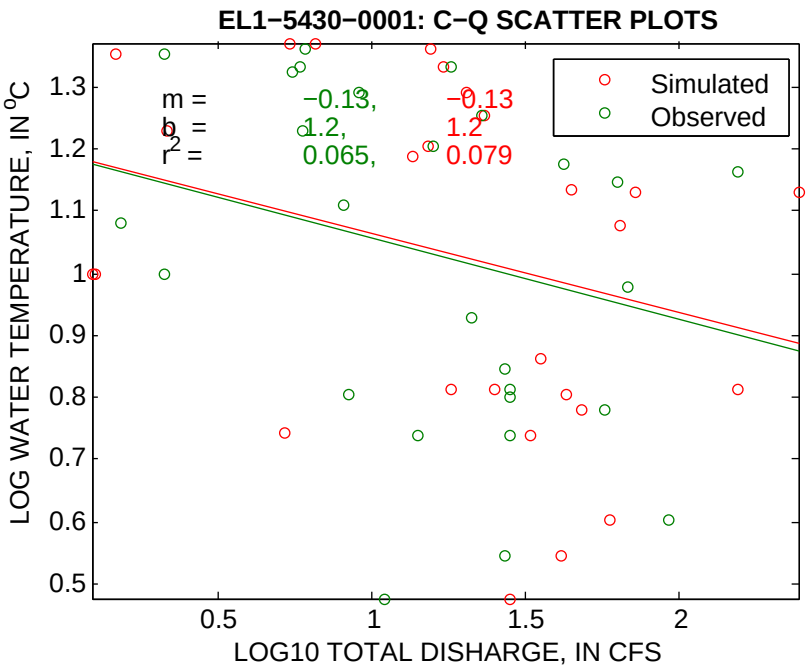
STATISTICS

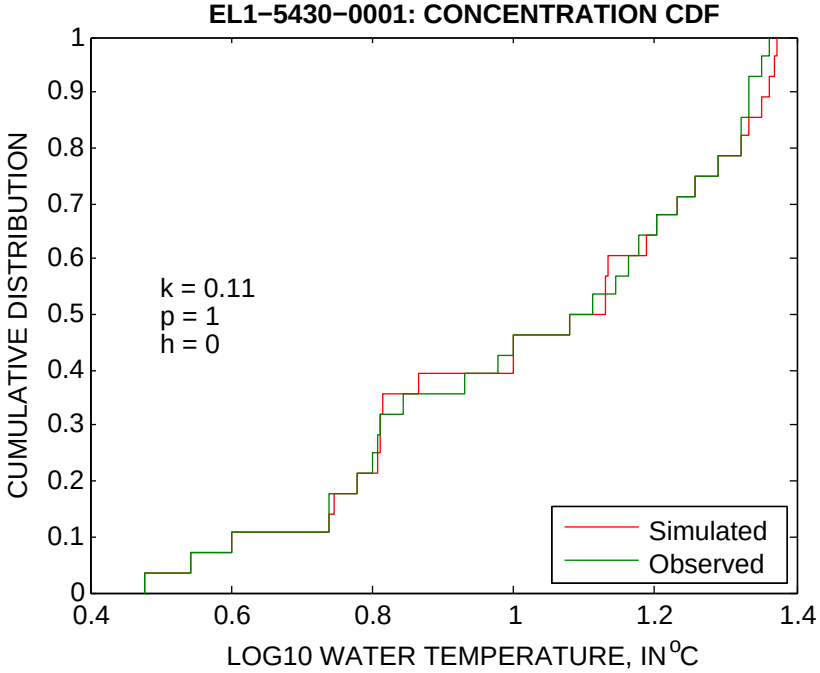
	n	observe	simulate
		28	28
min		3	2.6035
		0.477121	0.415558
mean		12.5393	13.4779
		1.02605	1.05219
media		12.45	12.5685
		1.09489	1.09911
max		23	24.987
		1.36173	1.39771
varian		44.3803	55.8093
		0.0730185	0.0782484
JB		0.114704	0.107346
		0.147826	0.228329
		ra	log
%		7.48562	2.54826
err.va		6.51206	0.0148993
rel.std.err		0.146733	0.204049
mod.eff		0.853267	0.795951

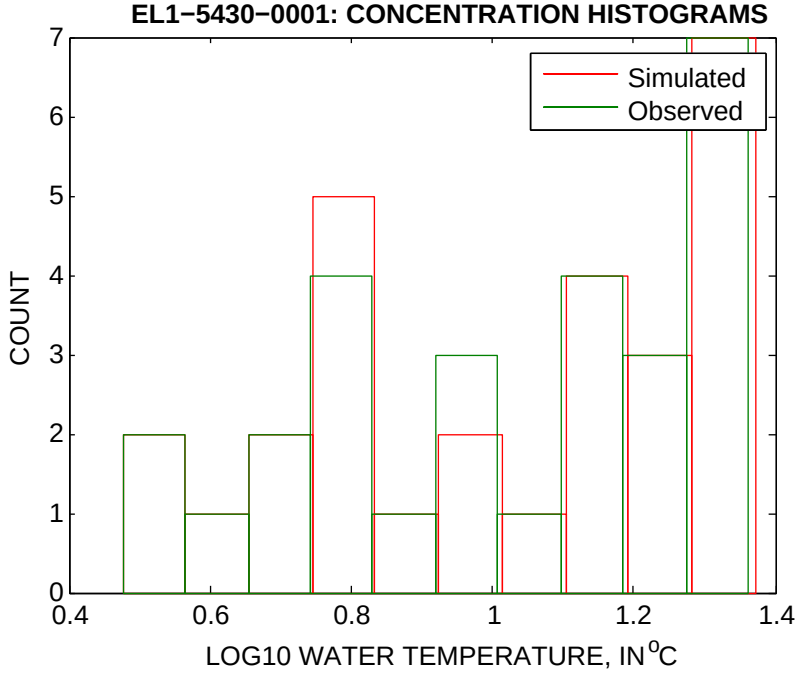
VERSION 2.1

ALL DATA
LOG10

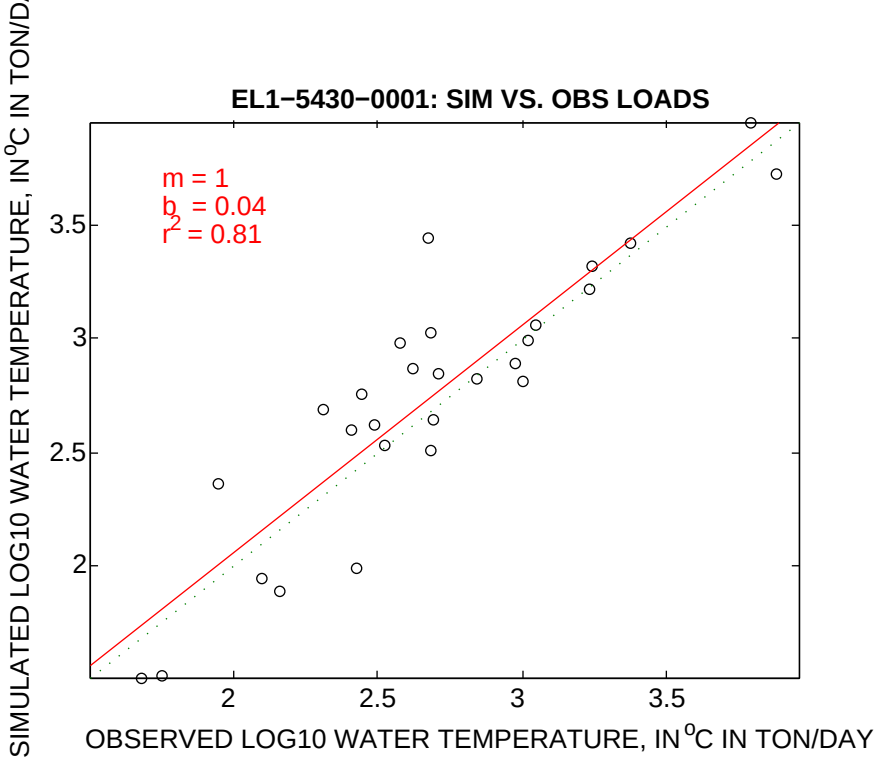


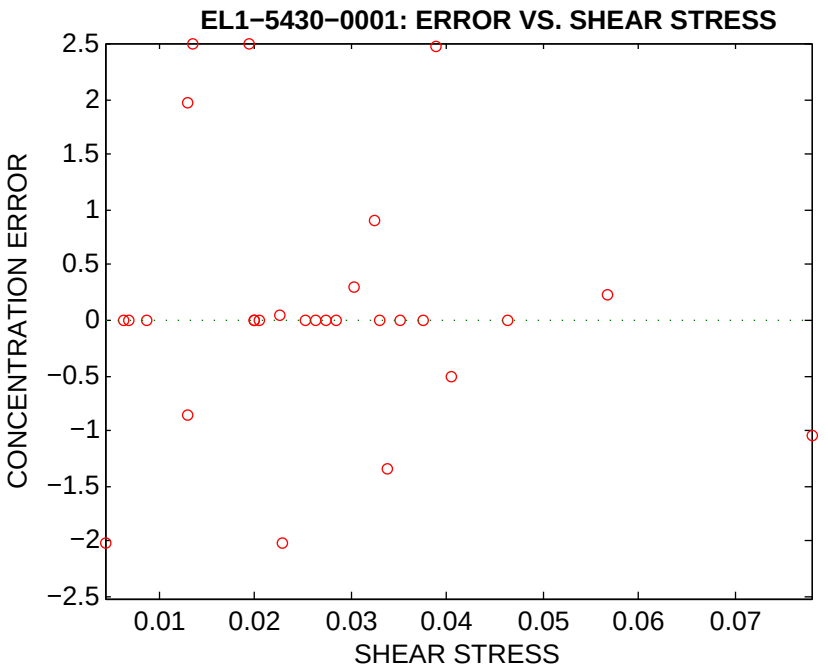


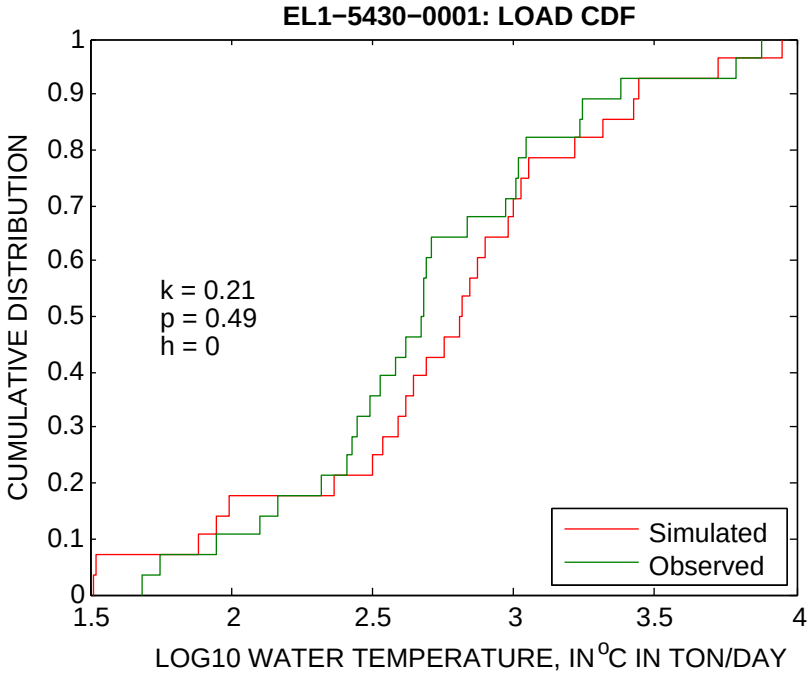


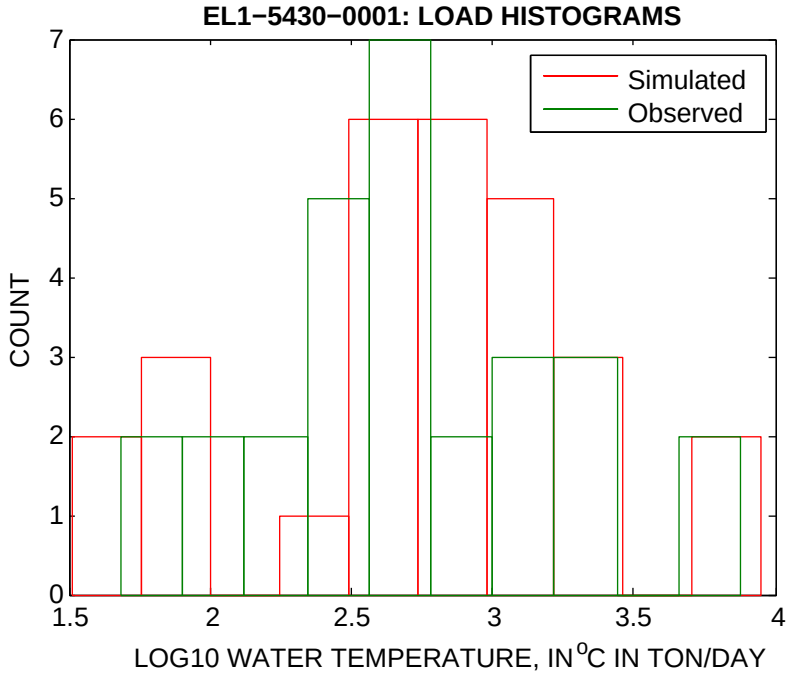


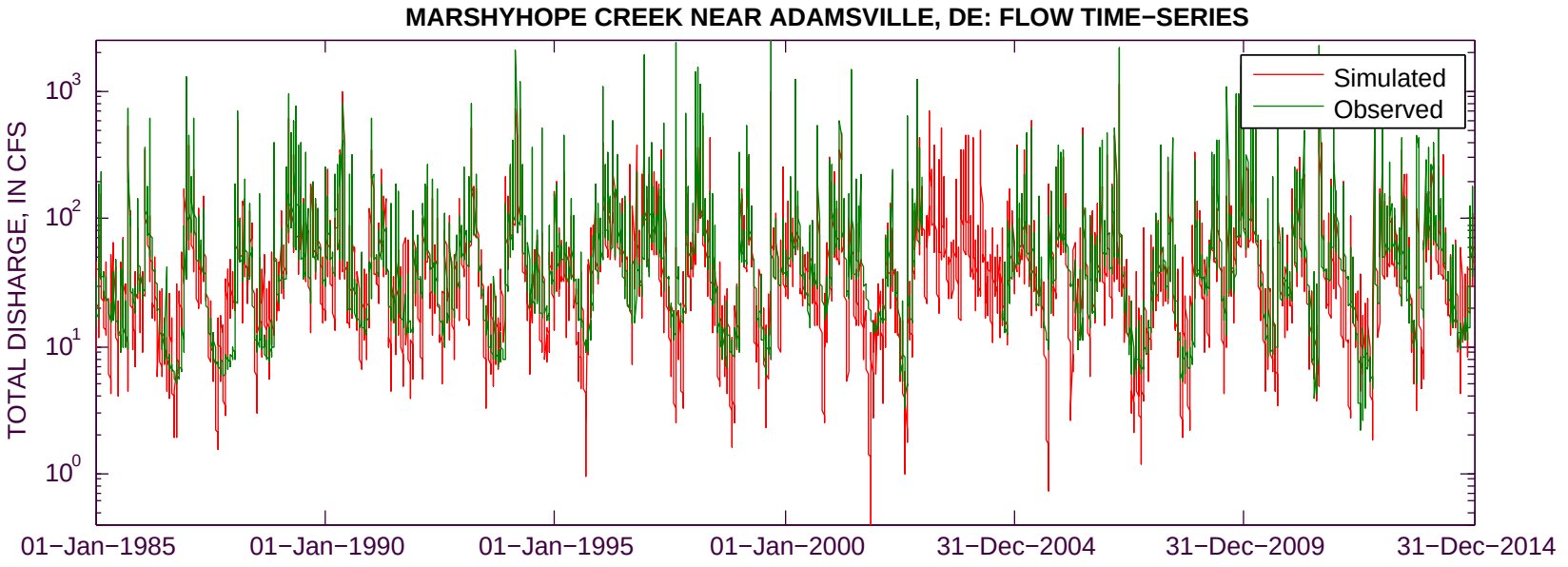
LOAD DATA
LOG10

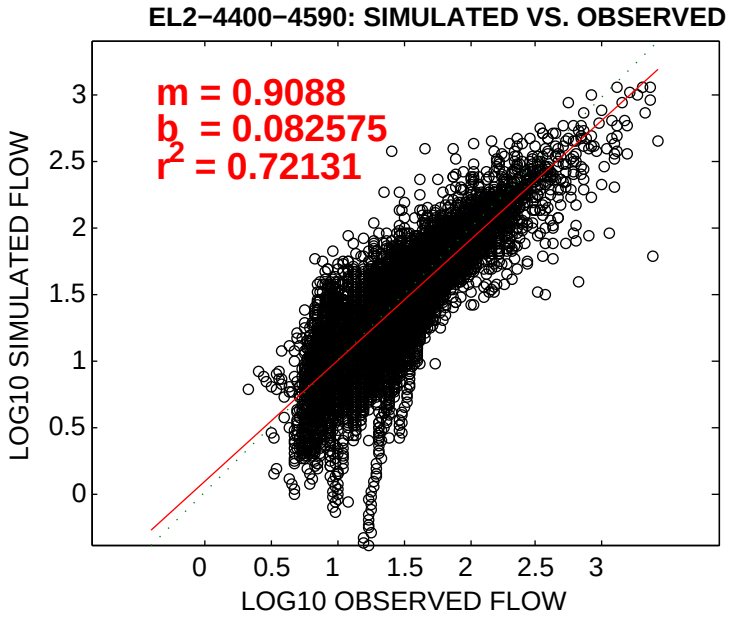


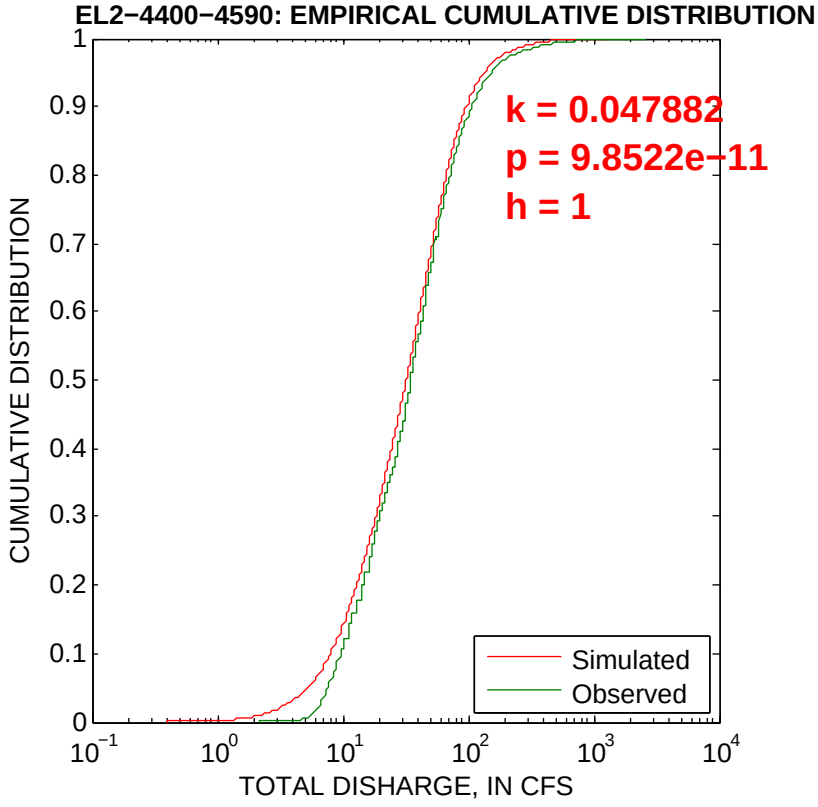












DATA SELECTION

scenario	file
P620171001WQ	FLOW.calib

plot: FLOW - total discharge

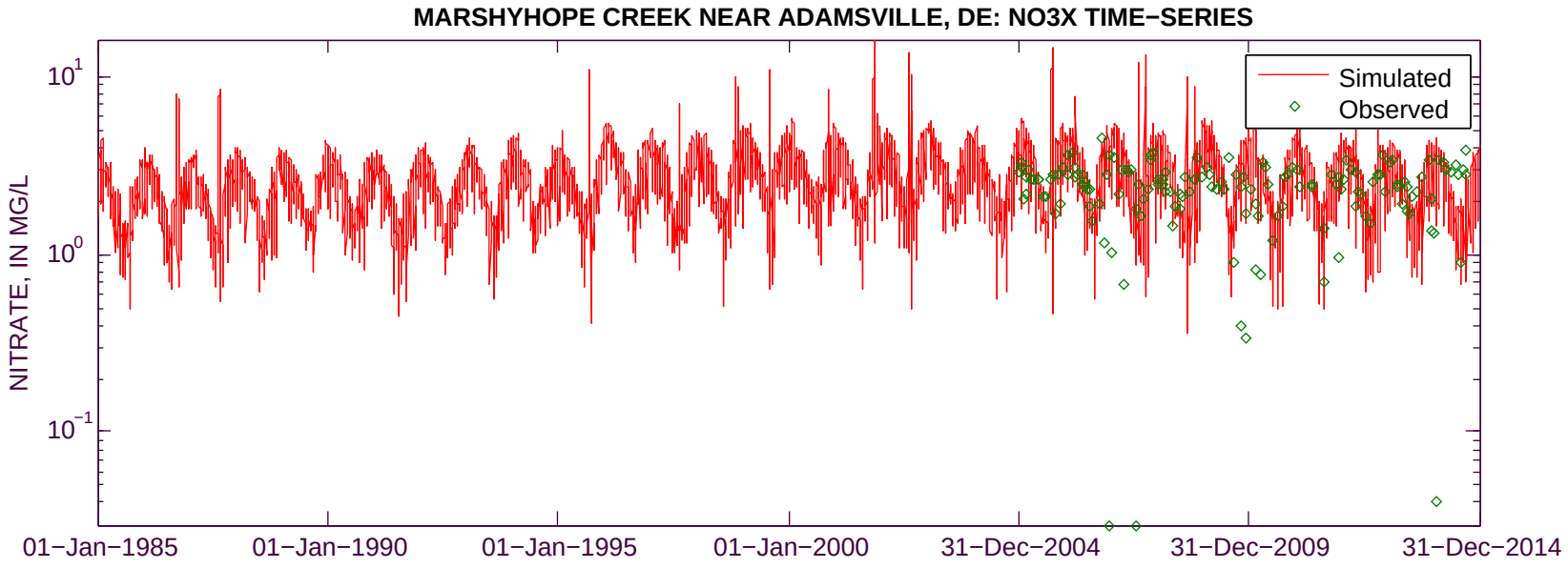
Dates: 1/1/1985 – 12/31/201

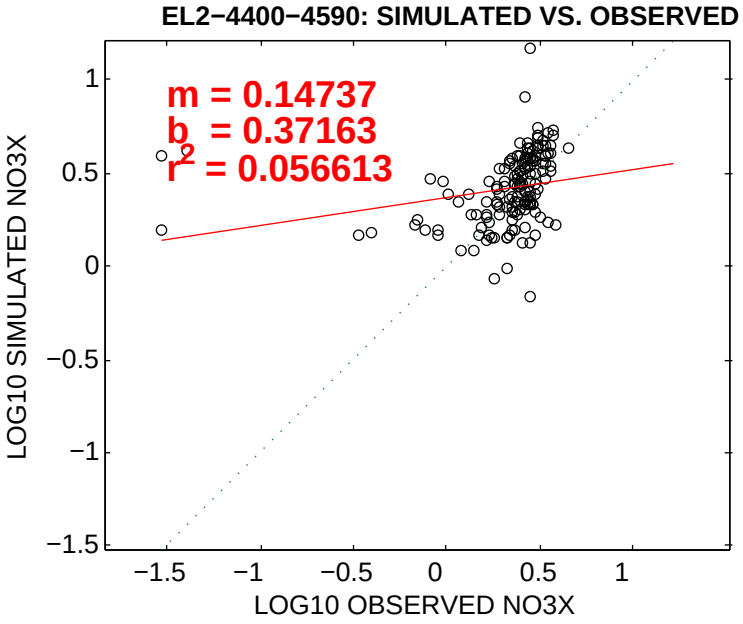
Drive	Directory	Observed
N/A	model	OBS20161101

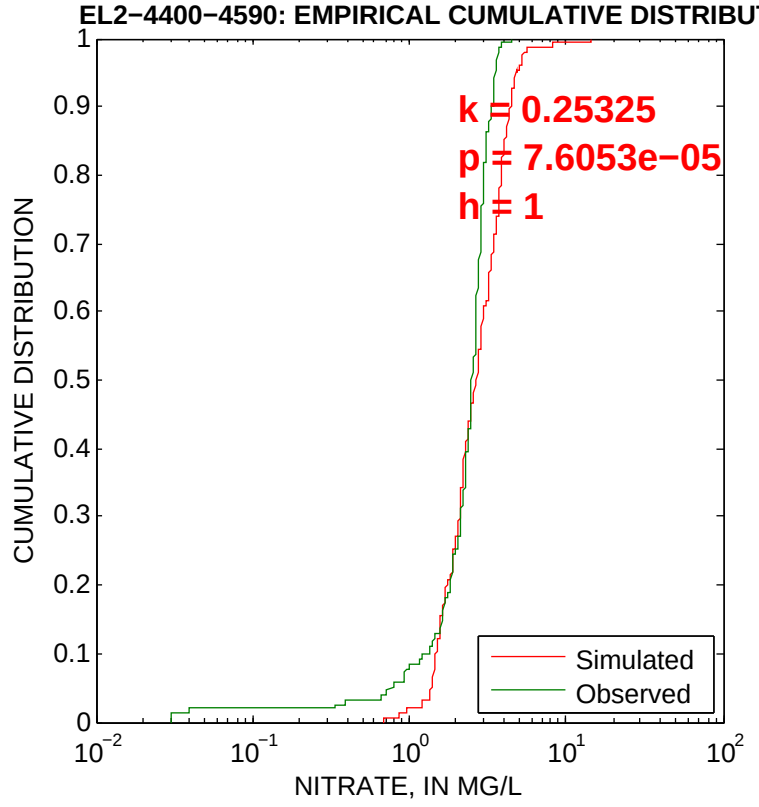
STATISTICS

		observe	simulate
n		10317	10317
min		2.2	0.40167
		0.342423	-0.396131
mean		56.6328	48.1812
		1.53234	1.47517
media		35	32.48
		1.54407	1.51162
max		2590	1160.9
		3.4133	3.06479
varian		10757.1	3942.87
		0.166047	0.190129
JB		0.001	0.001
		0.001	0.001
		ra	log
%		-14.9235	-3.73085
err.va		4339.47	0.0576368
rel.std.err		0.403406	0.347112
mod.eff		0.596594	0.652888

VERSION 2.1







DATA SELECTION

scenario	file
P620171001WQ	NO3X.calib

plot: NO3X - nitrate

Dates: 1/1/1985 – 12/31/201

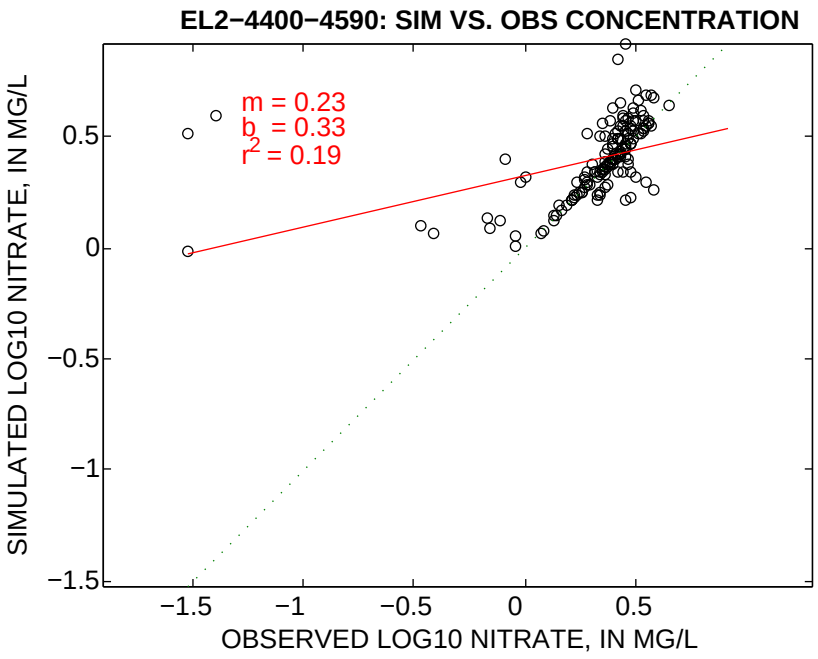
Drive	Directory	Observed
N/A	model	OBS20161101

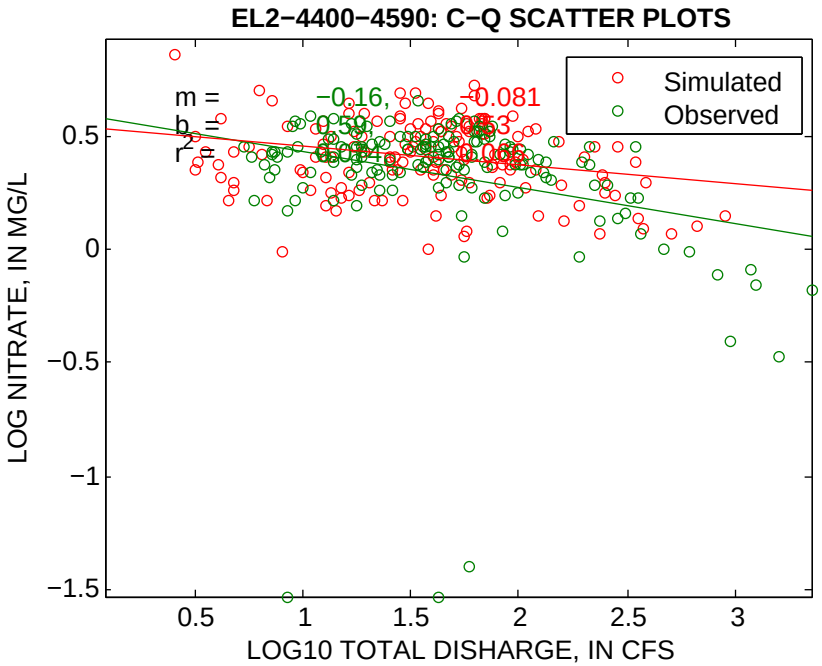
STATISTICS

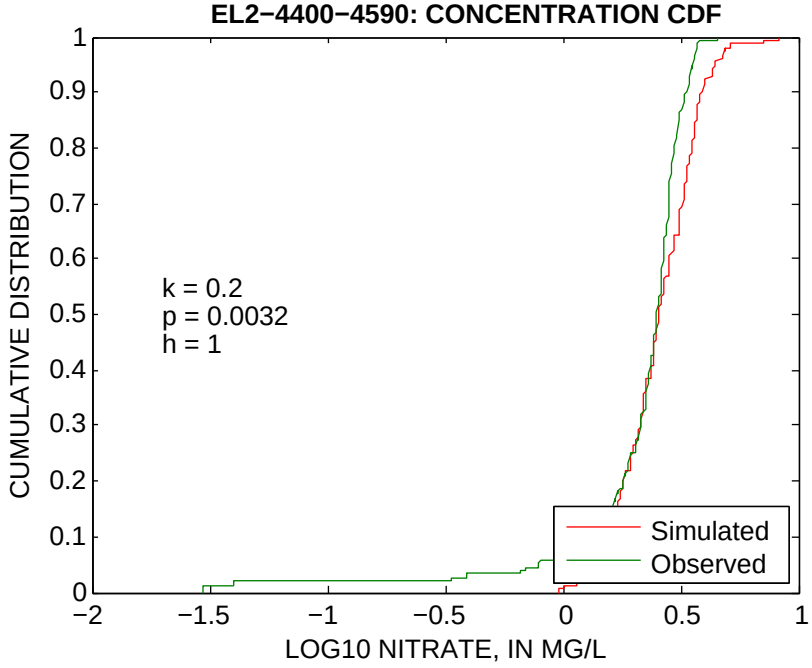
	n	154	154
		observe	simulate
min		0.03	0.68903
		-1.52288	-0.161762
mean		2.40355	2.90478
		0.324774	0.419487
media		2.5155	2.69235
		0.400623	0.430121
max		4.5	14.634
		0.653213	1.16536
varian		0.662993	2.25459
		0.0963518	0.0369616
JB		0.005061	0.001
		0.001	0.074546
		ra	log
%		20.8538	29.1625
err.va		2.22895	0.113944
rel.std.err		3.36195	1.18258
mod.eff		-2.36195	-0.182585

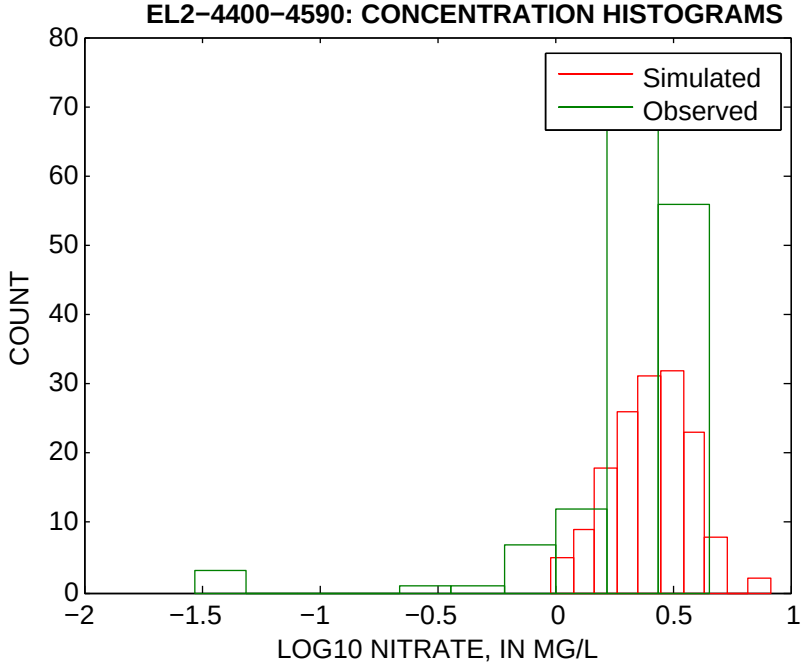
VERSION 2.1

ALL DATA
LOG10

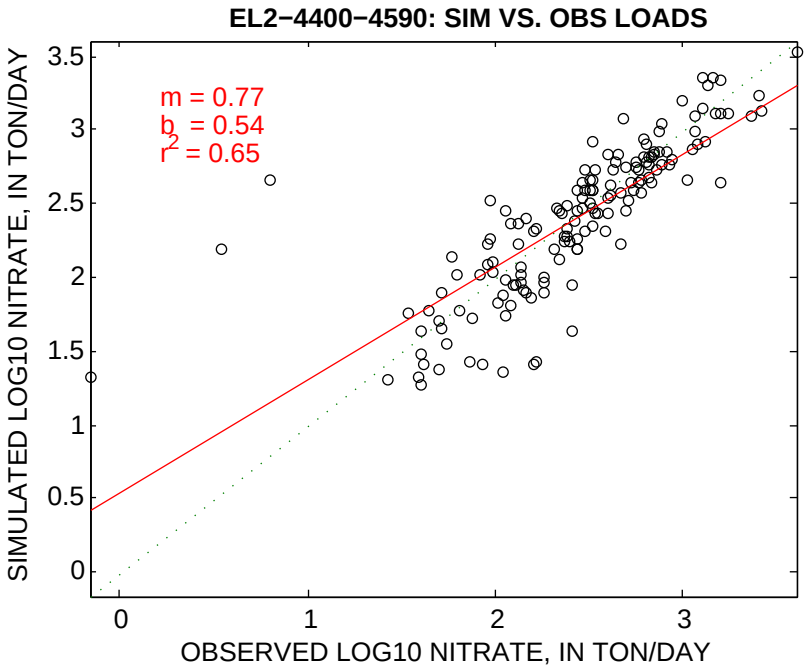


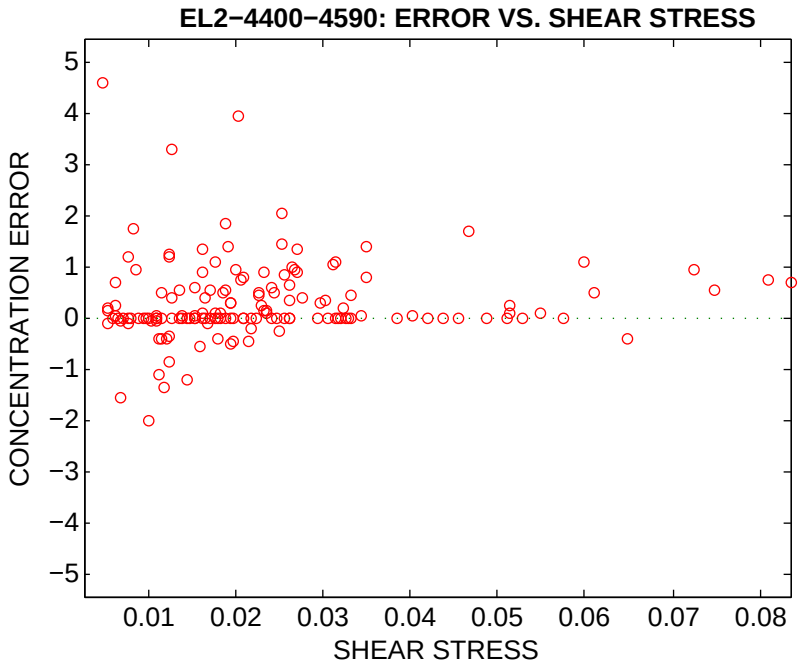


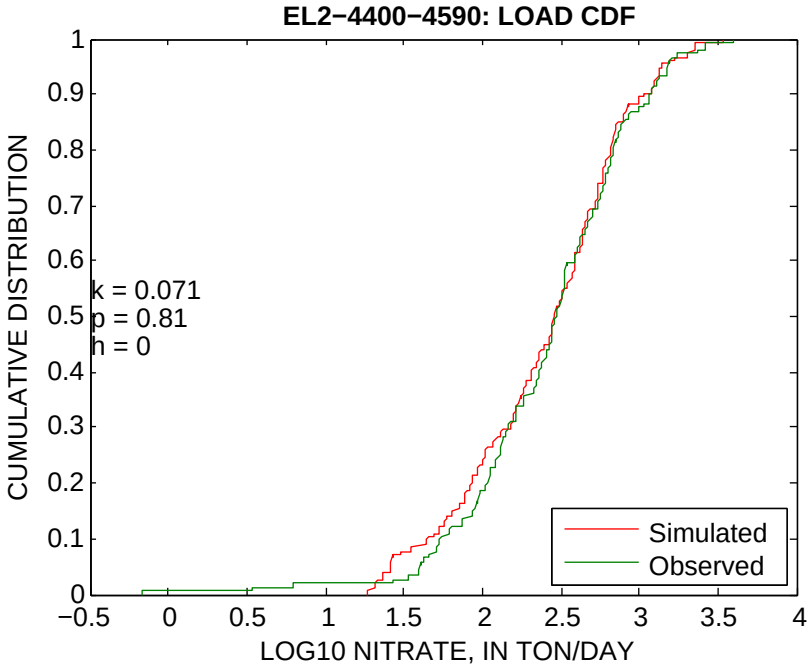


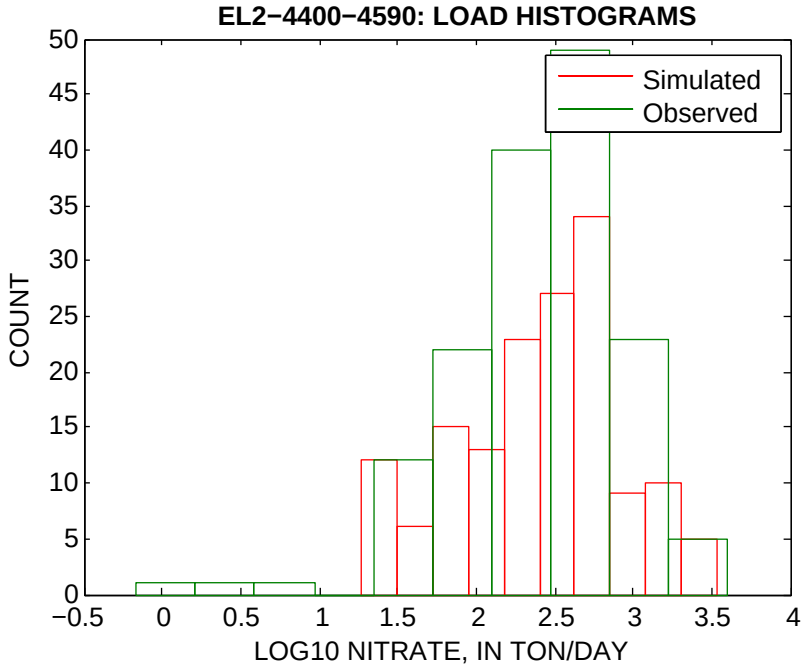


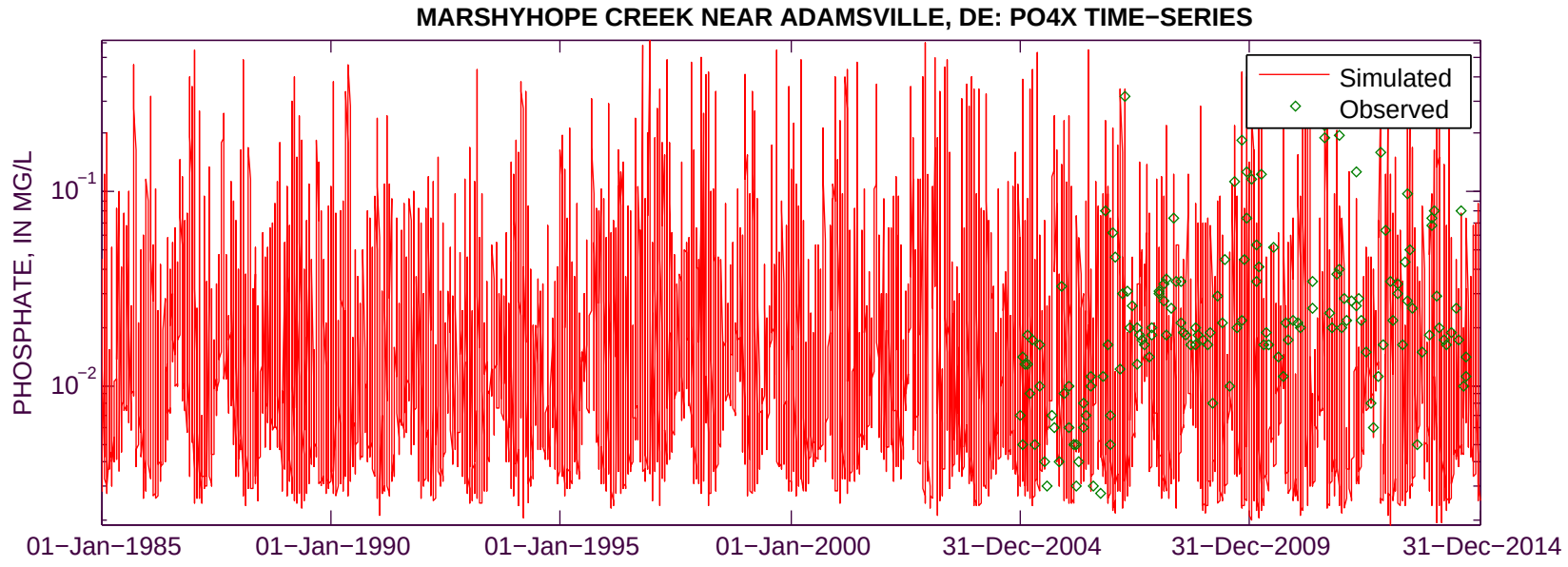
LOAD DATA
LOG10

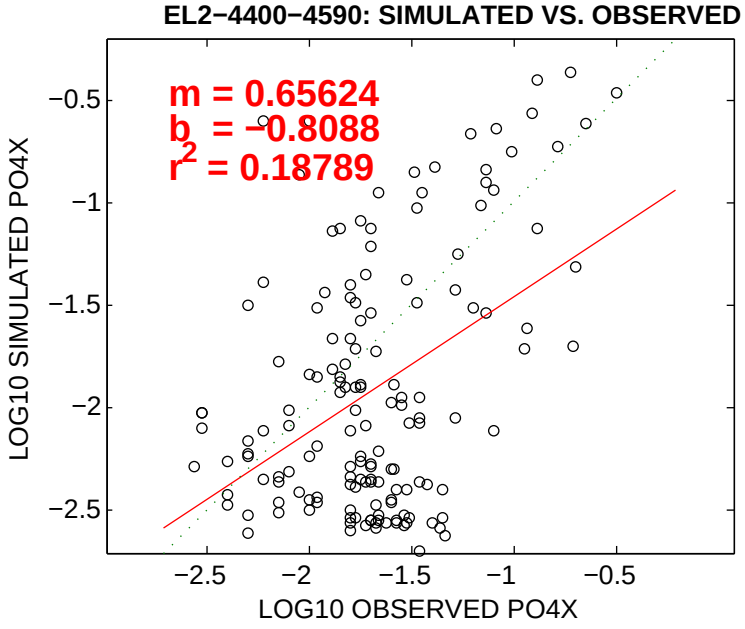


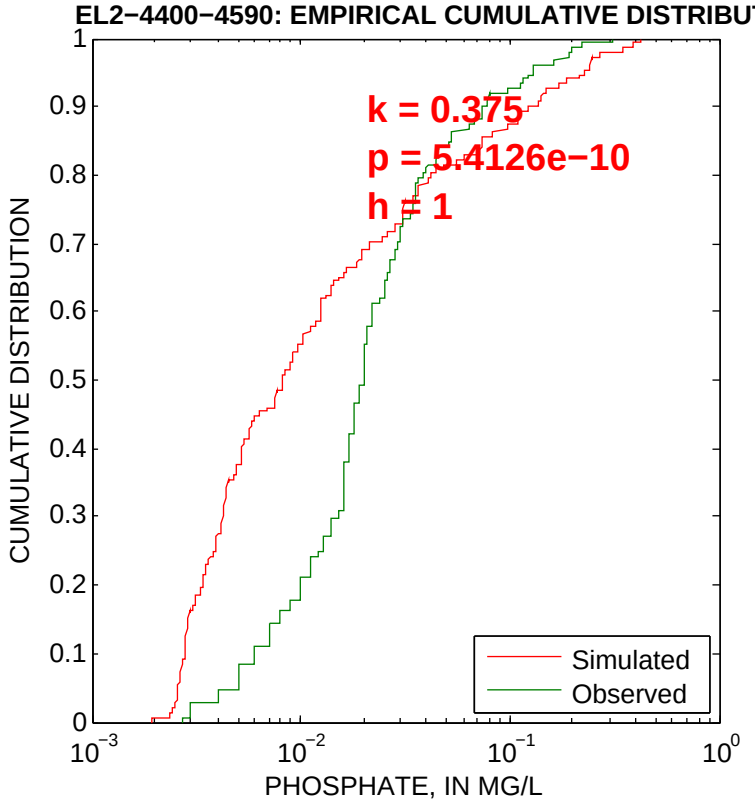












DATA SELECTION

scenario: P620171001WQ | file: PO4X.calib

plot: PO4X - phosphate

Dates: 1/1/1985 – 12/31/201

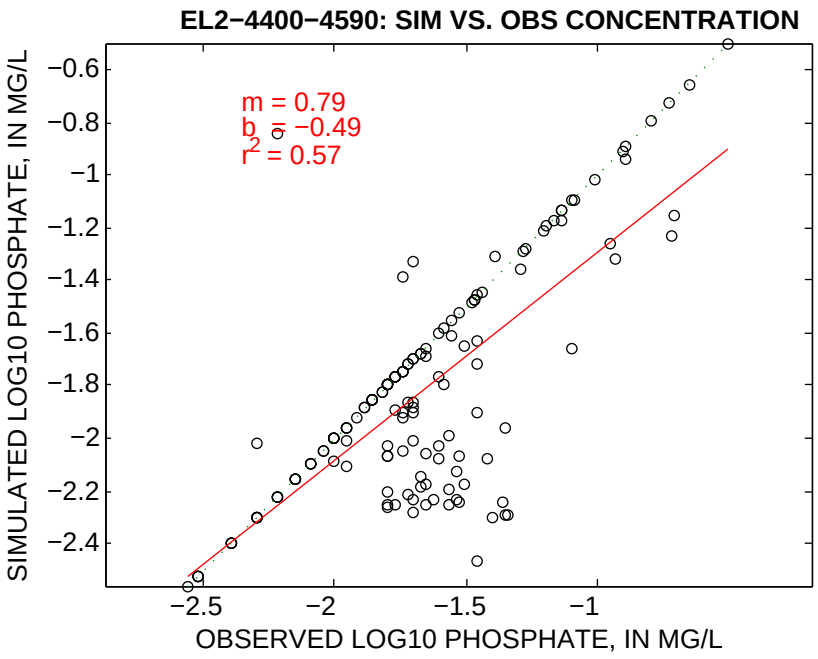
Drive: N/A | Directory: model | Observed: OBS20161101

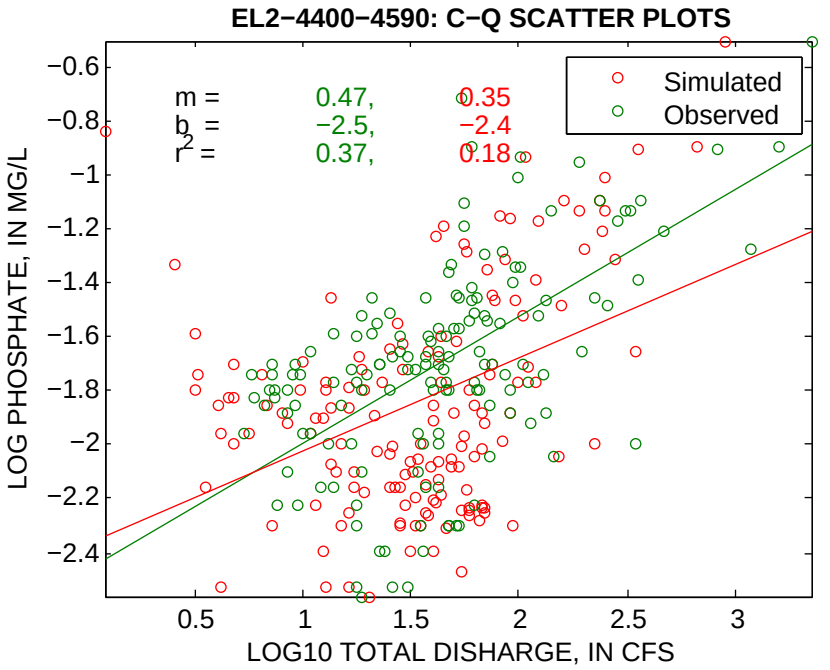
STATISTICS

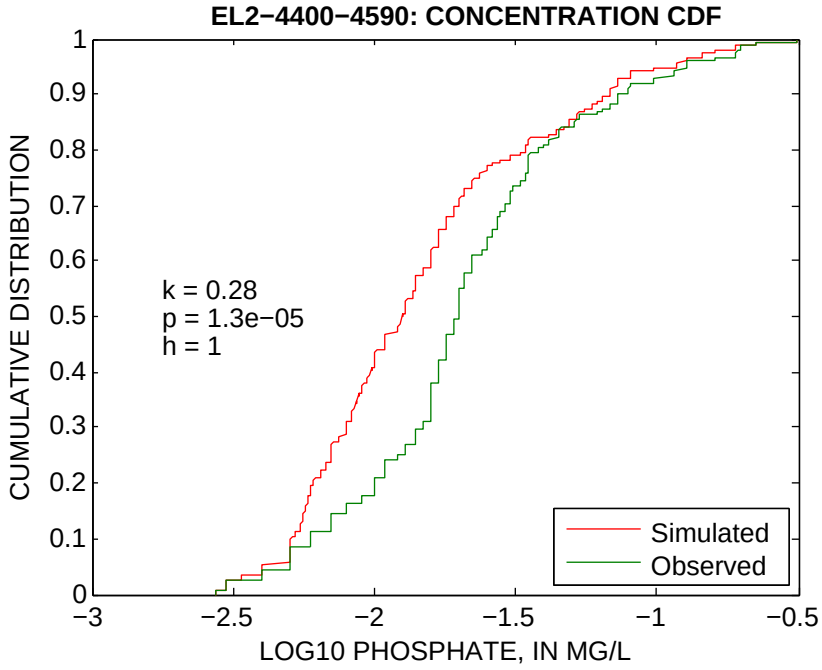
n	152	152
	observe	simulate
min	0.00275	0.0019615
	-2.56067	-2.70741
mean	0.034051	0.0393906
	-1.68144	-1.91222
media	0.02	0.00818315
	-1.69897	-2.08709
max	0.314	0.42464
	-0.50307	-0.371979
varian	0.00203557	0.00561813
	0.167133	0.383077
JB	0.001	0.001
	0.092035	0.003747
	ra	log
%	15.6812	13.725
err.va	0.00340329	0.384463
rel.std.err	1.67191	2.30034
mod.eff	-0.671909	-1.30034

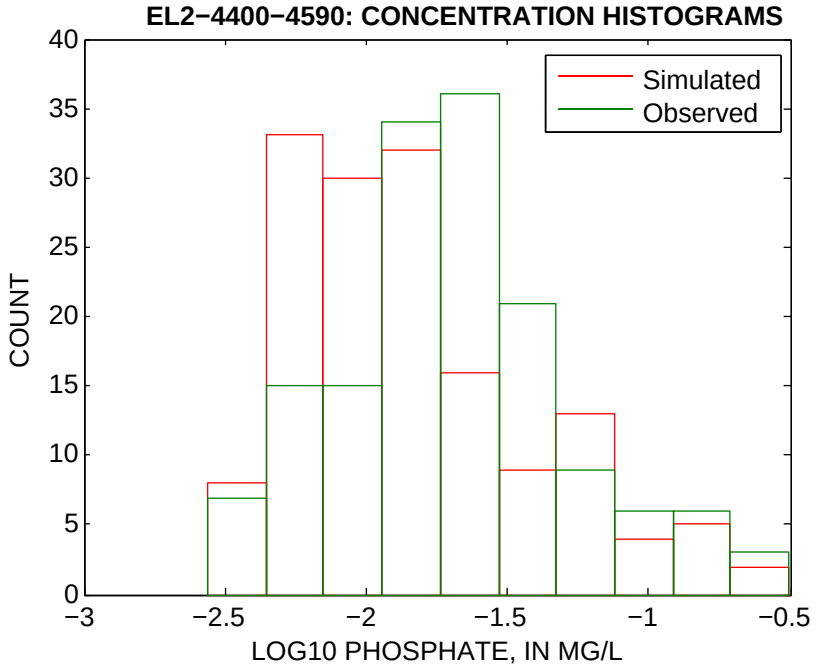
VERSION 2.1

ALL DATA
LOG10

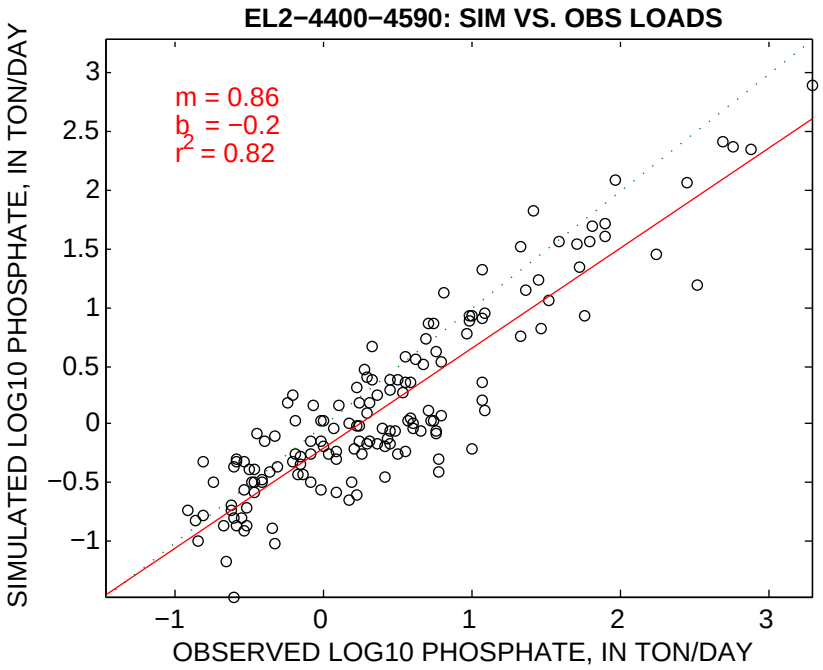


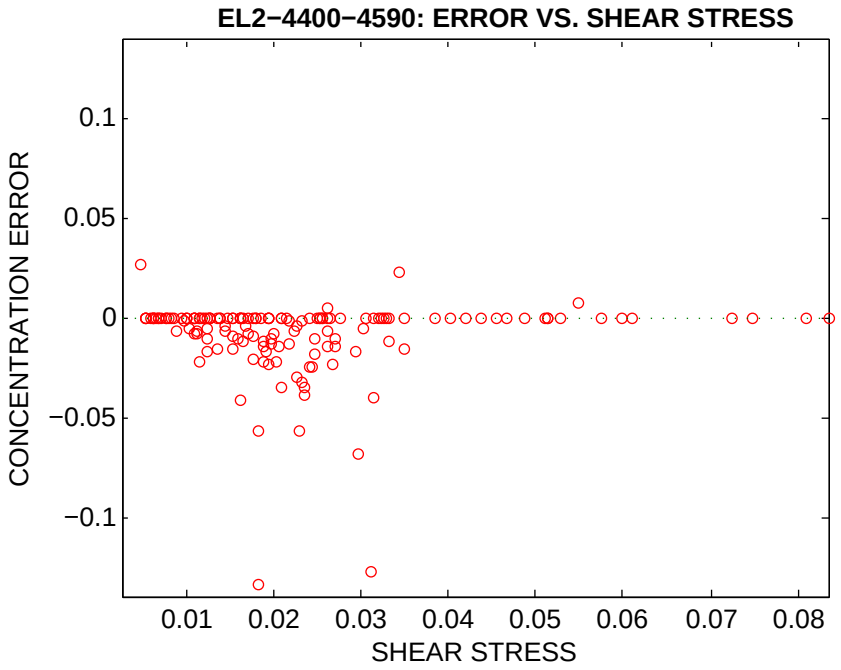


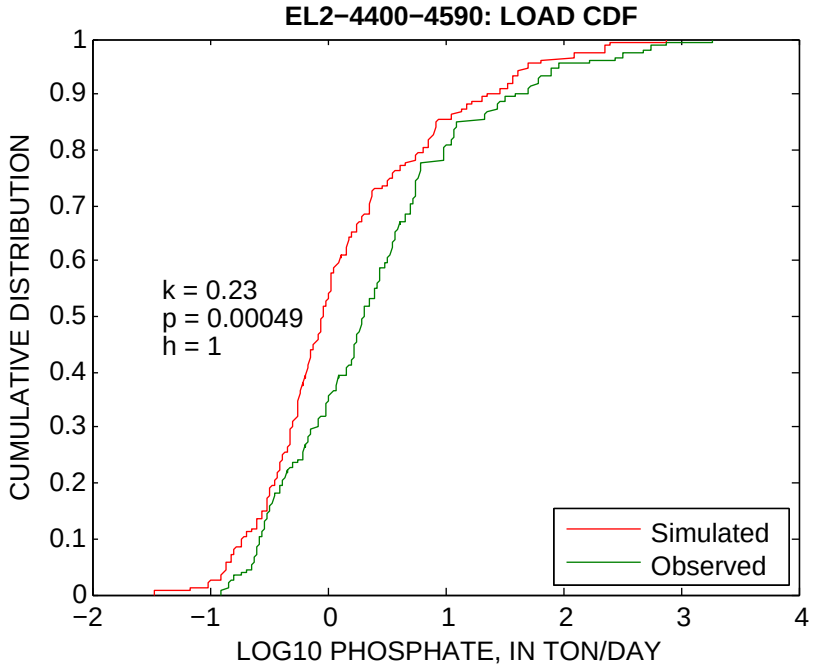


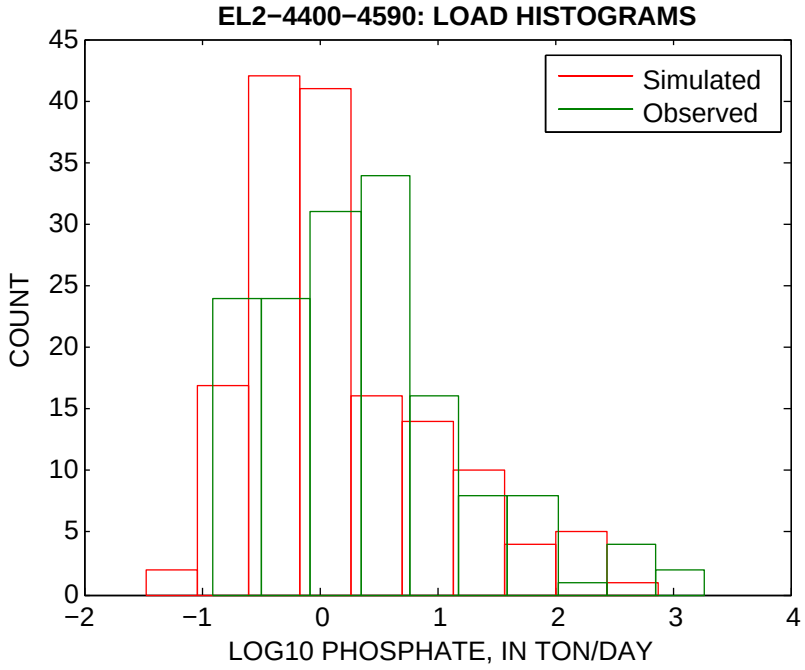


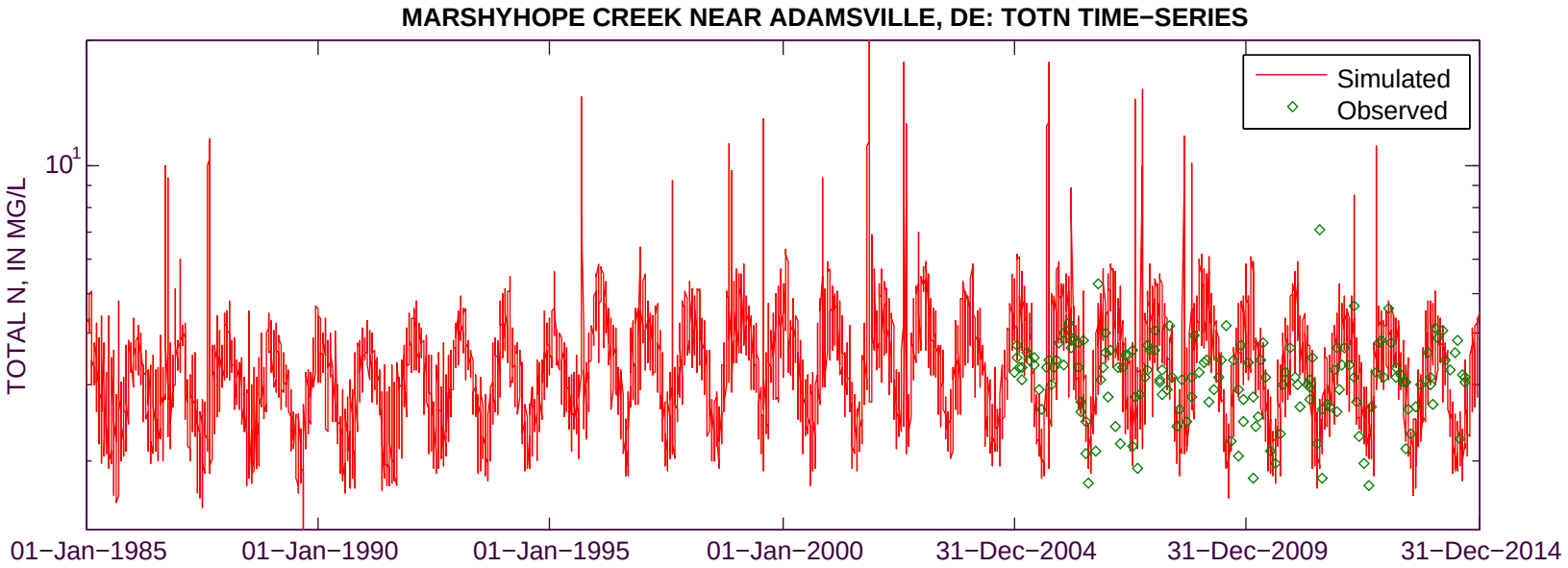
LOAD DATA
LOG10

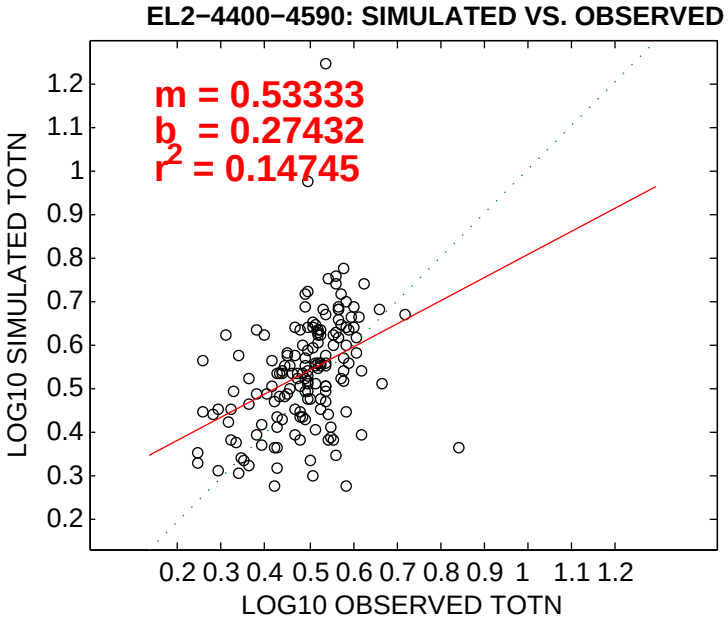


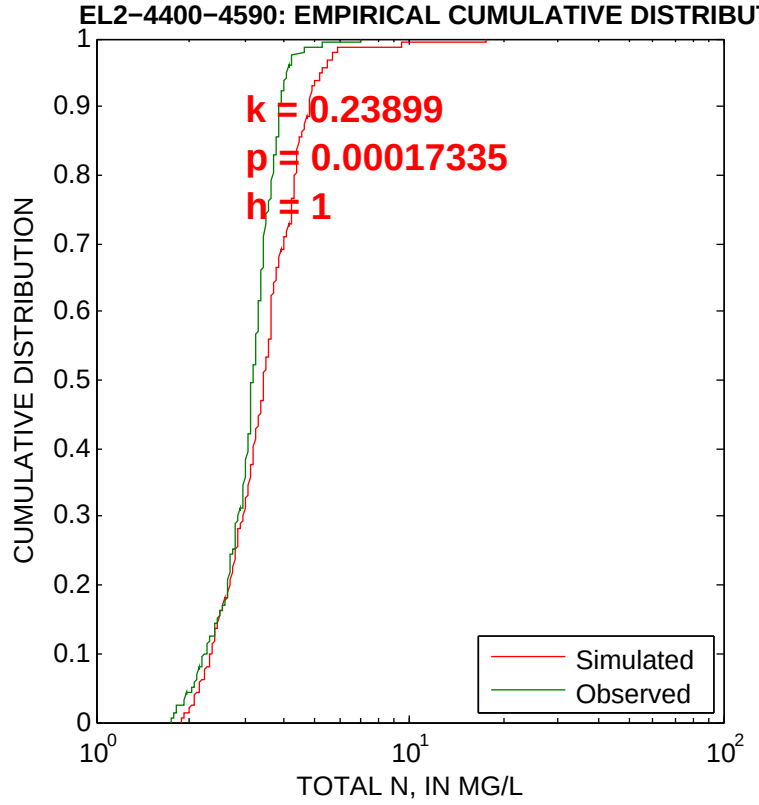












DATA SELECTION

scenario	file
P620171001WQ	TOTN.calib

plot: TOTN - total nitrogen

Dates: 1/1/1985 – 12/31/201

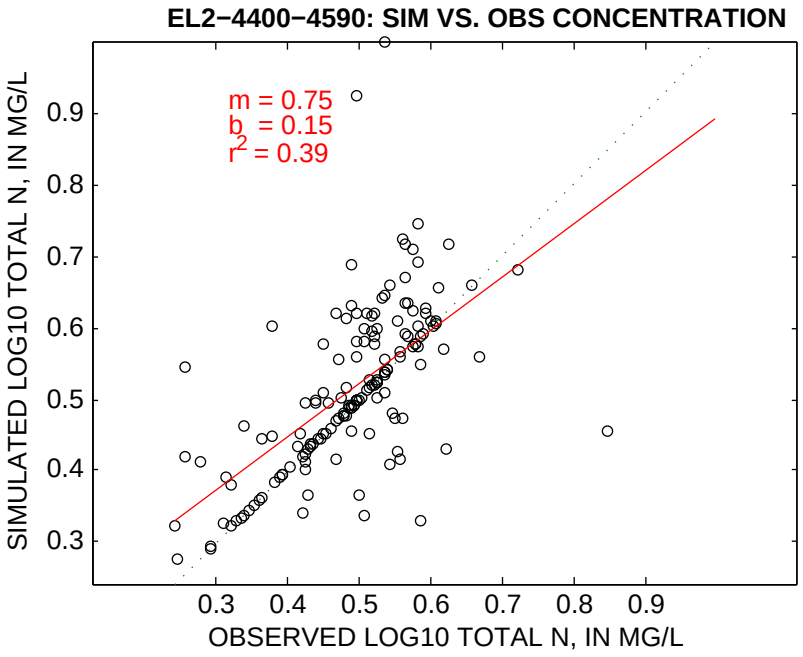
Drive	Directory	Observed
N/A	model	OBS20161101

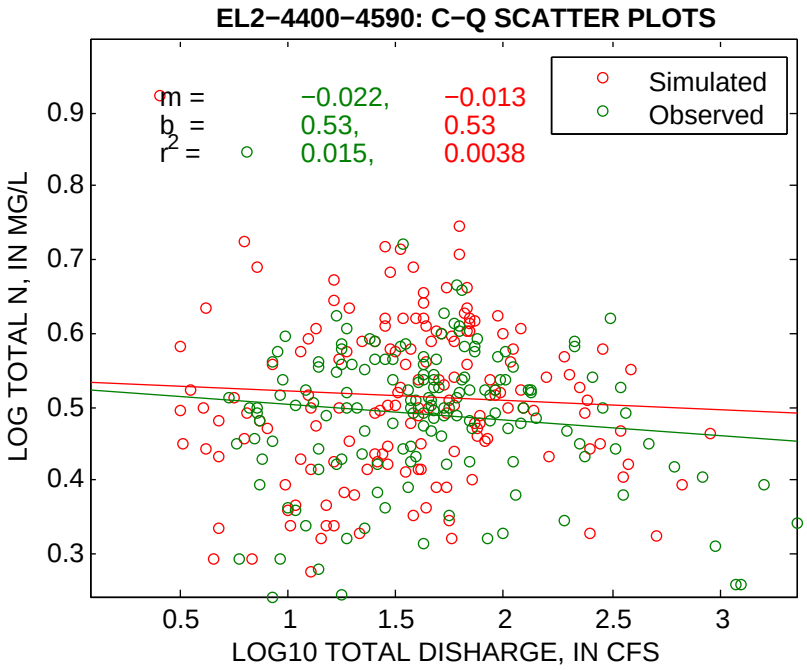
STATISTICS

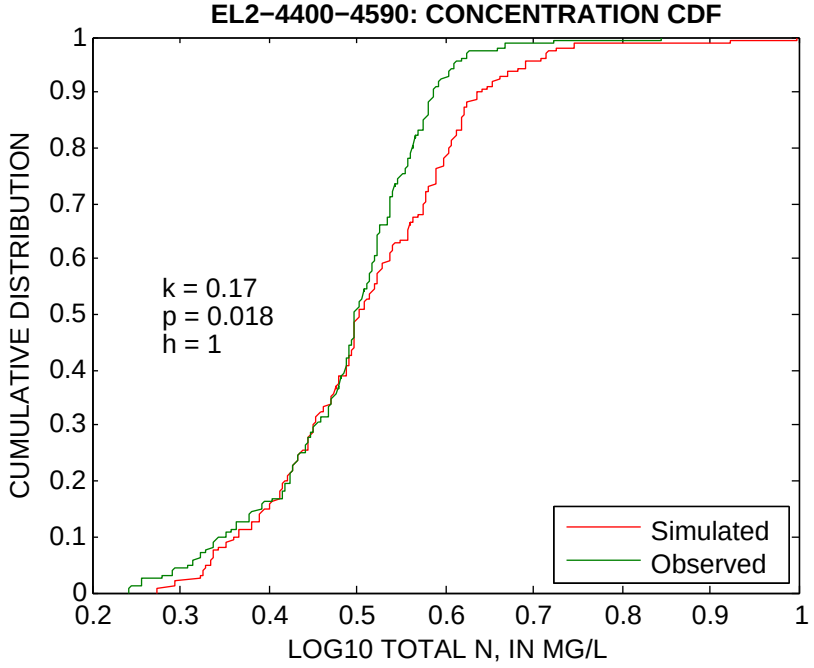
	n	159	159
		observe	simulate
min		1.746	1.8789
		0.242044	0.273904
mean		3.16179	3.6169
		0.489807	0.535551
media		3.15	3.4251
		0.498311	0.534673
max		7.02	17.592
		0.846337	1.24532
varian		0.477983	2.28006
		0.00898095	0.0173245
JB		0.001	0.001
		0.019628	0.001
		ra	log
%		14.3941	9.33916
err.va		2.43469	0.0188316
rel.std.err		5.09367	2.09683
mod.eff		-4.09367	-1.09683

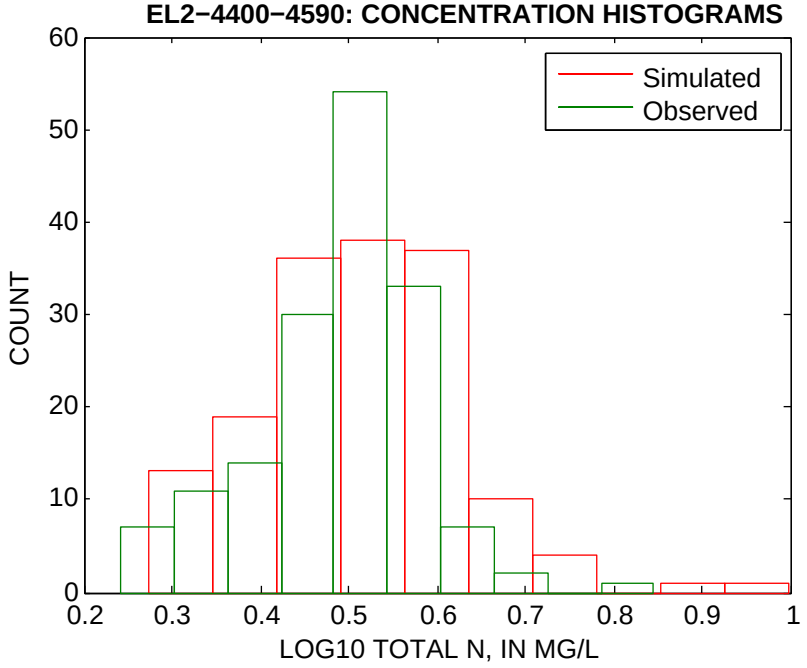
VERSION 2.1

ALL DATA
LOG10

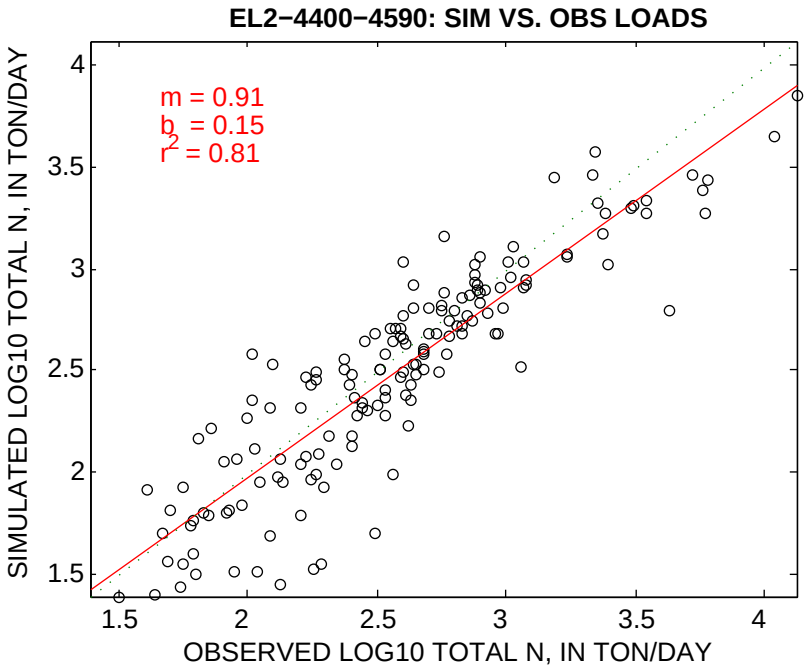


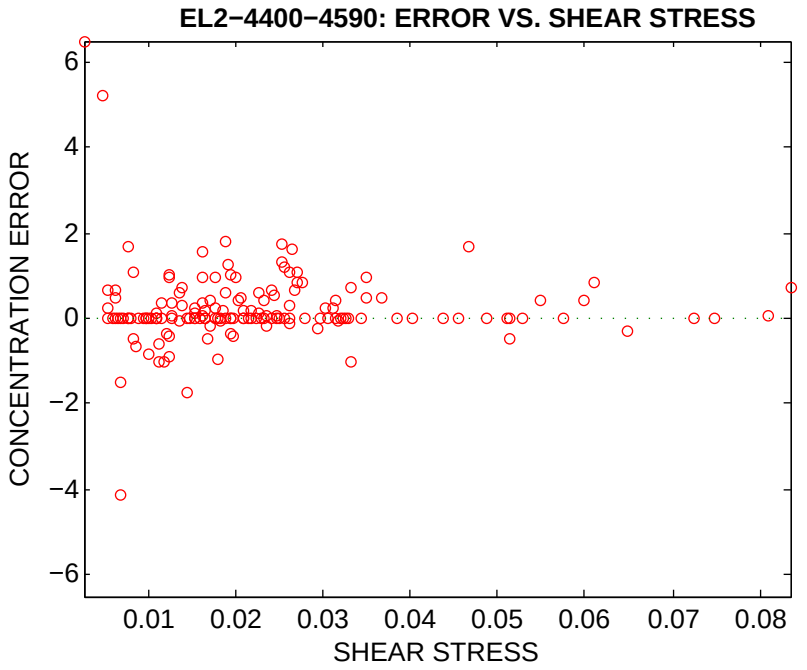


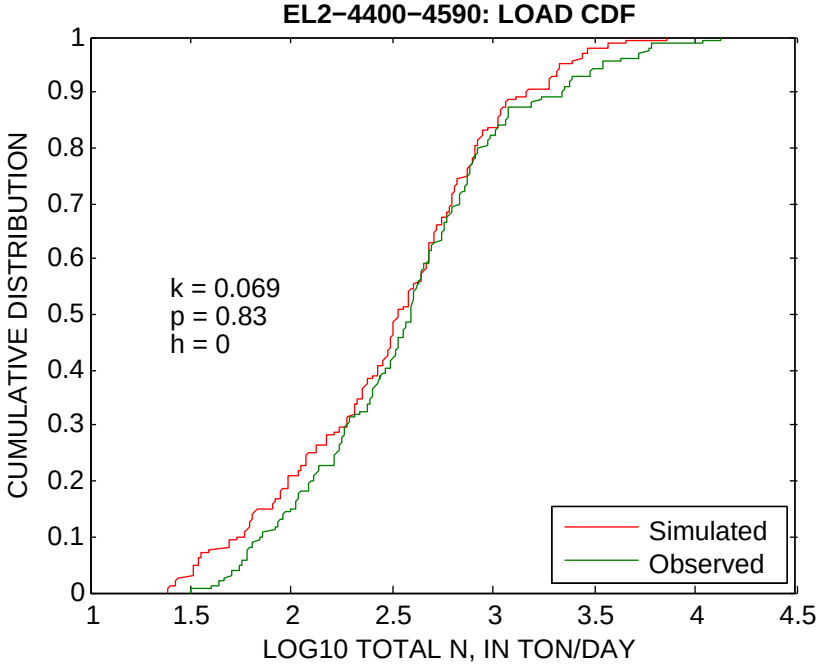


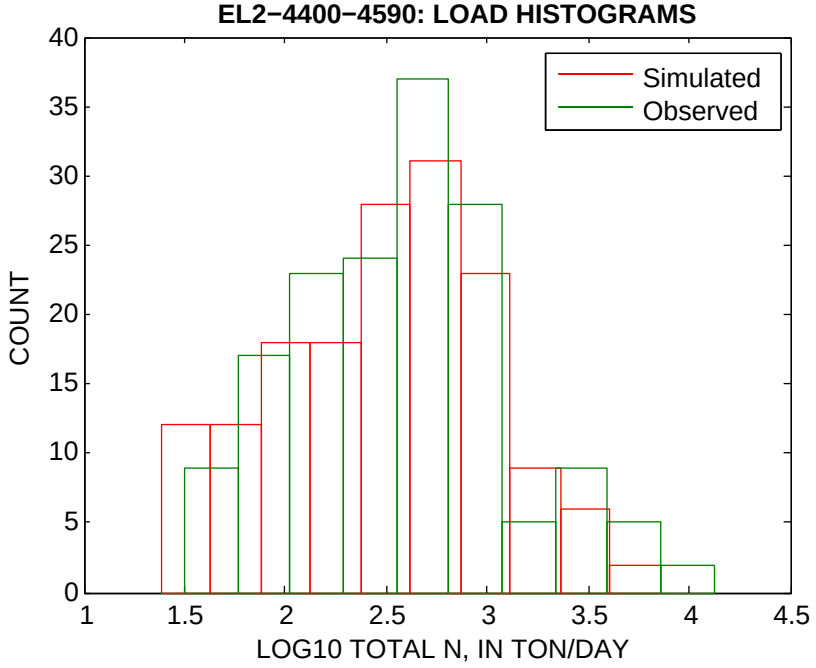


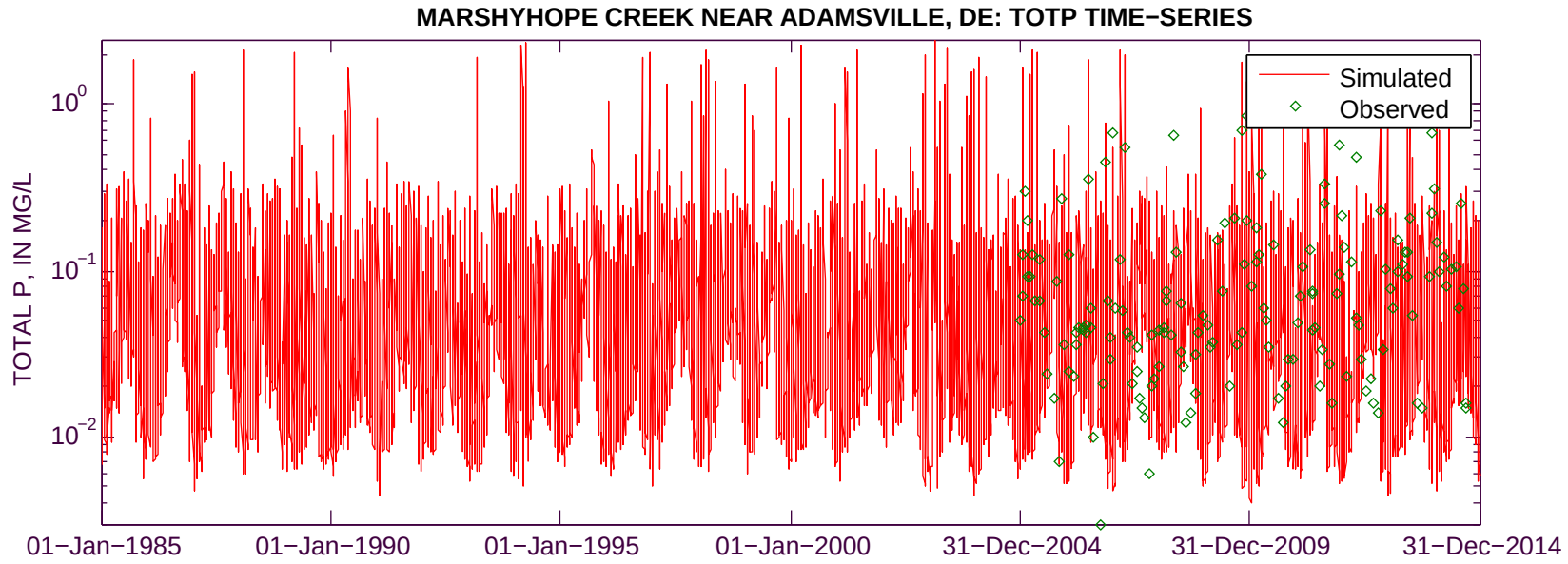
LOAD DATA
LOG10

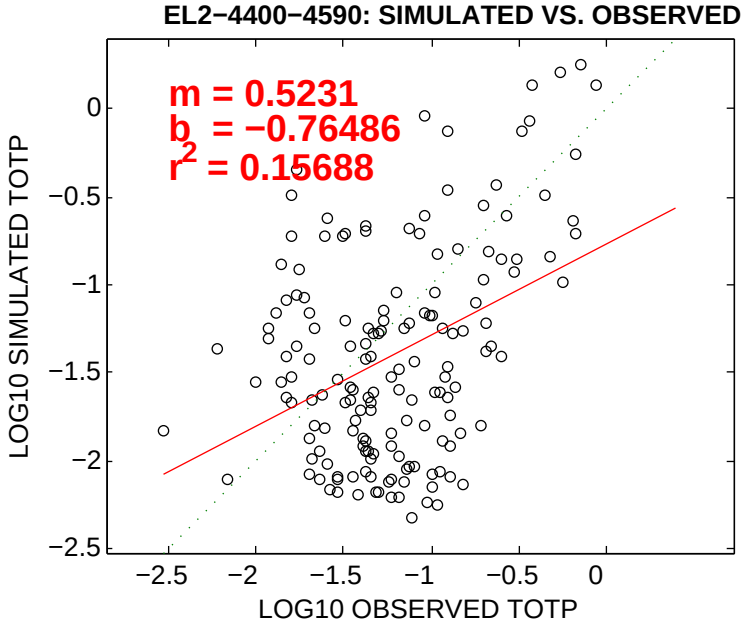


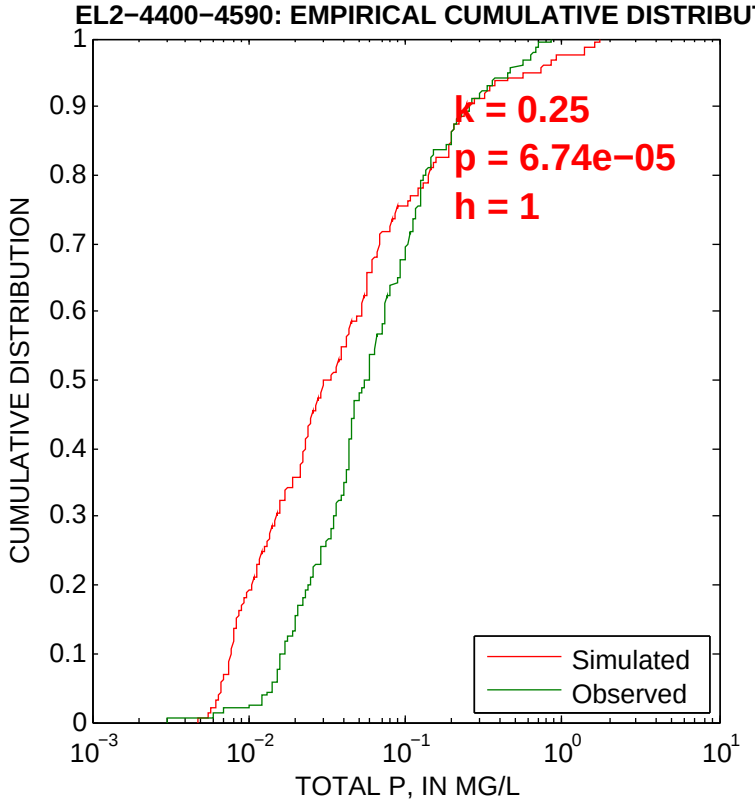












DATA SELECTION

scenario	file
P620171001WQ	TOTP.calib

plot: TOTP - total phosphorus

Dates: 1/1/1985 – 12/31/201

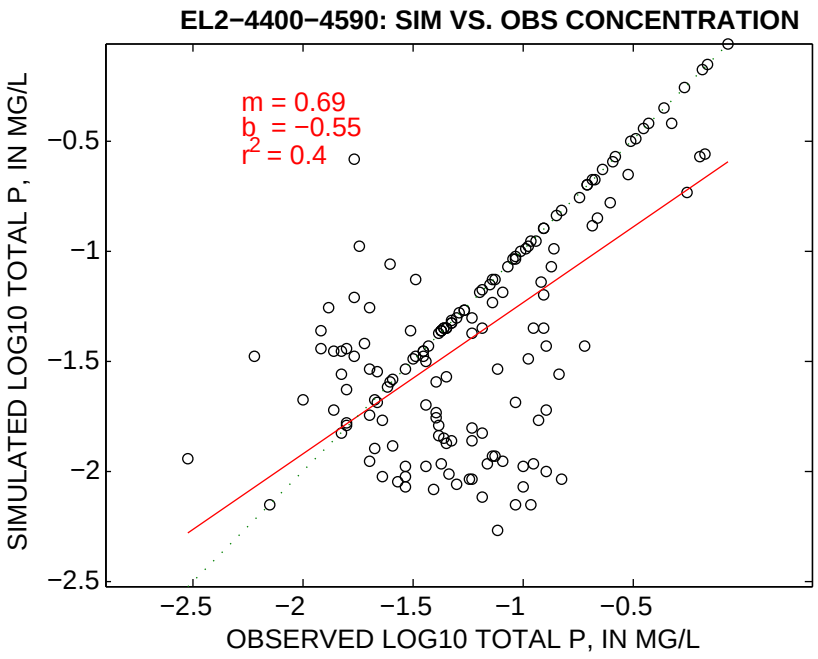
Drive	Directory	Observed
N/A	model	OBS20161101

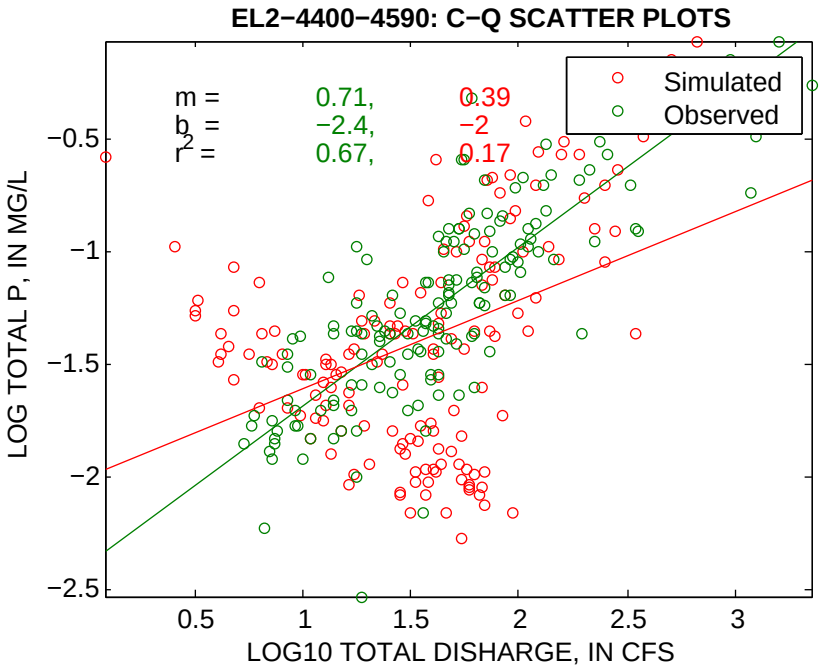
STATISTICS

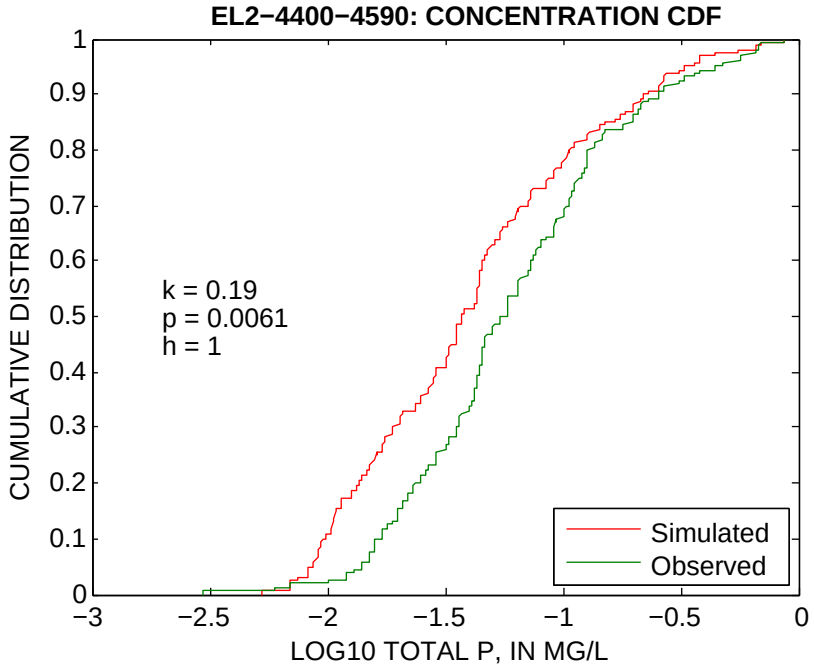
	n	160	160
		observe	simulate
min		0.003	0.0047165
		-2.52288	-2.32638
mean		0.109375	0.123494
		-1.2132	-1.39949
media		0.056	0.0318695
		-1.25209	-1.49714
max		0.862	1.7733
		-0.0644927	0.248782
varian		0.0216662	0.0738237
		0.208258	0.363262
JB		0.001	0.001
		0.362729	0.009918
		ra	log
%		12.909	15.3554
err.va		0.0437885	0.388561
rel.std.err		2.02106	1.86577
mod.eff		-1.02106	-0.865767

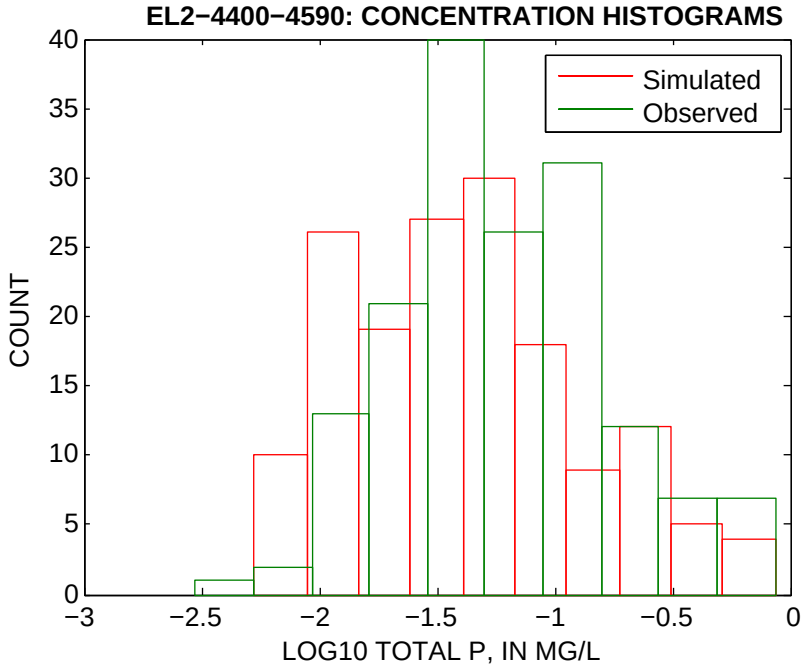
VERSION 2.1

ALL DATA
LOG10

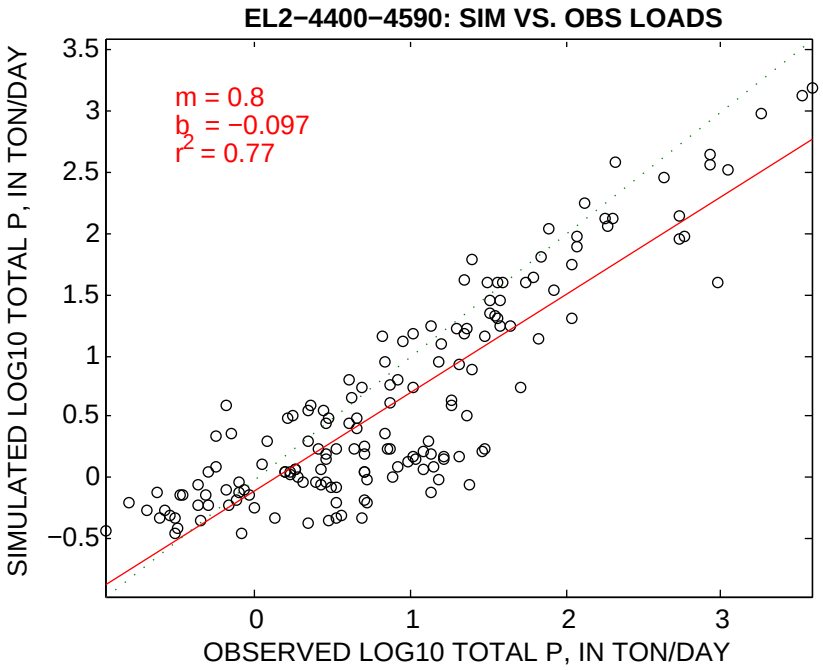


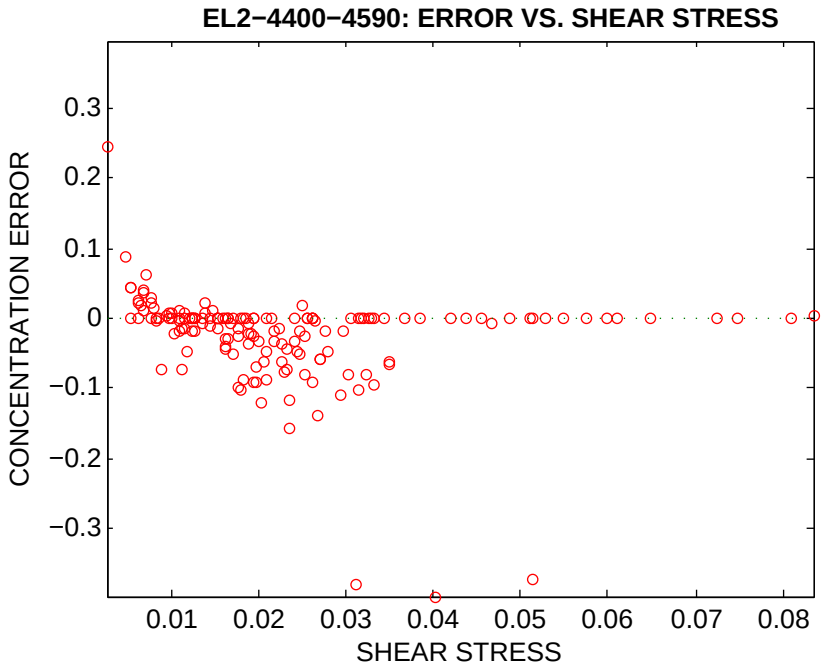


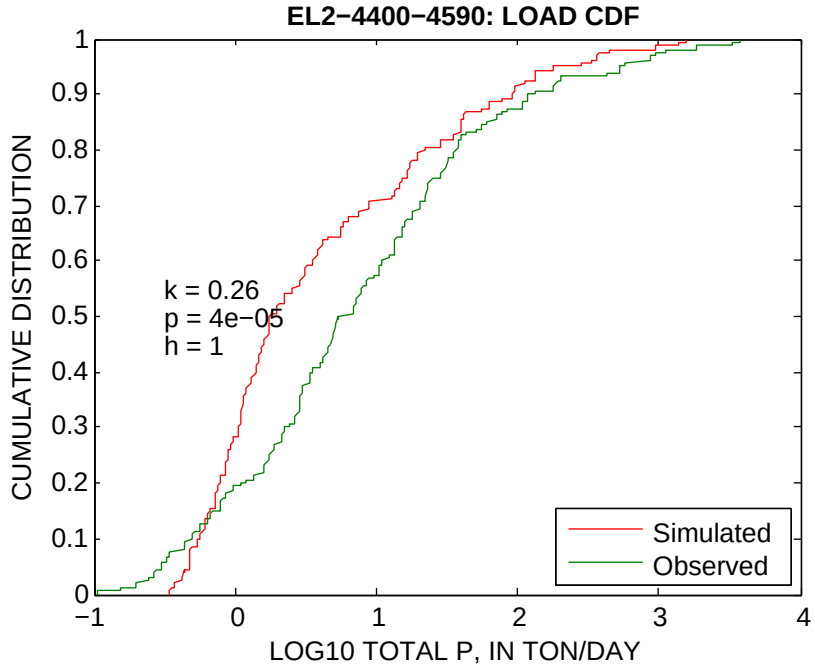


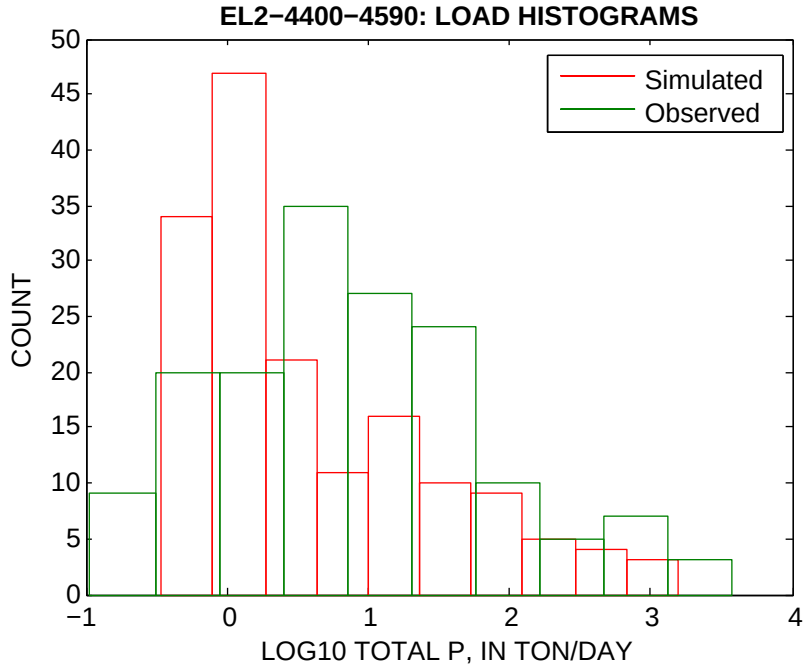


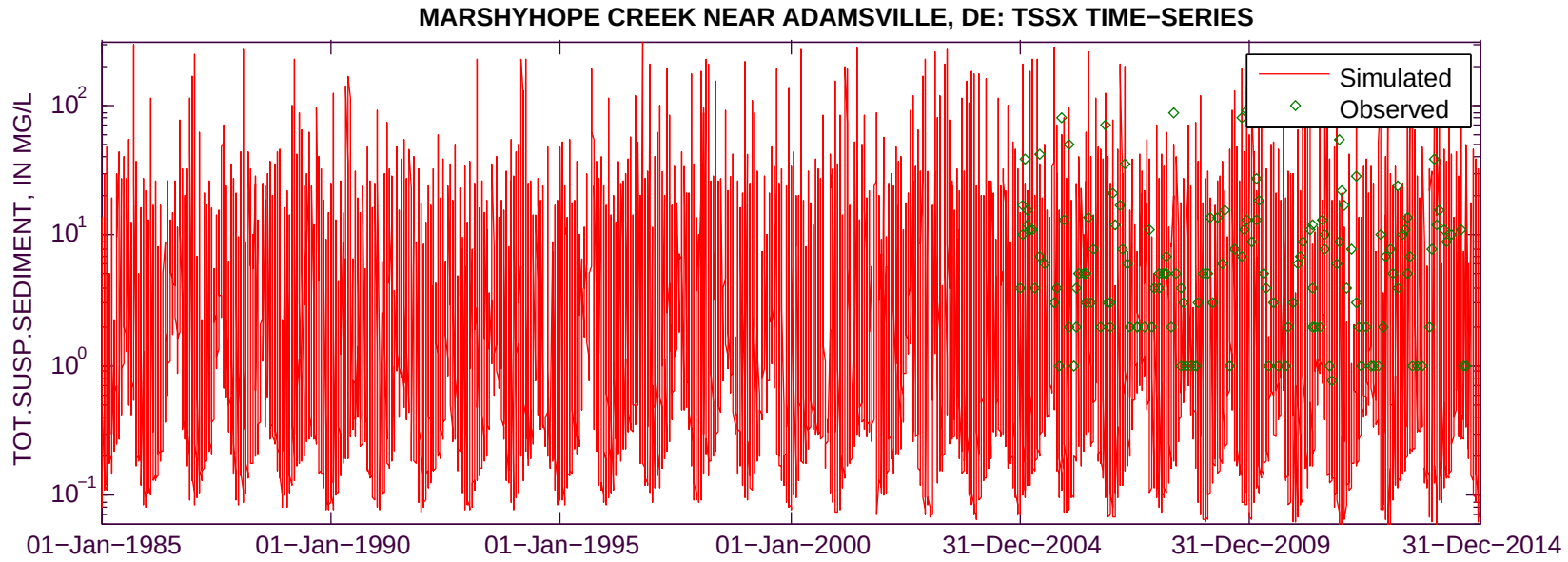
LOAD DATA
LOG10

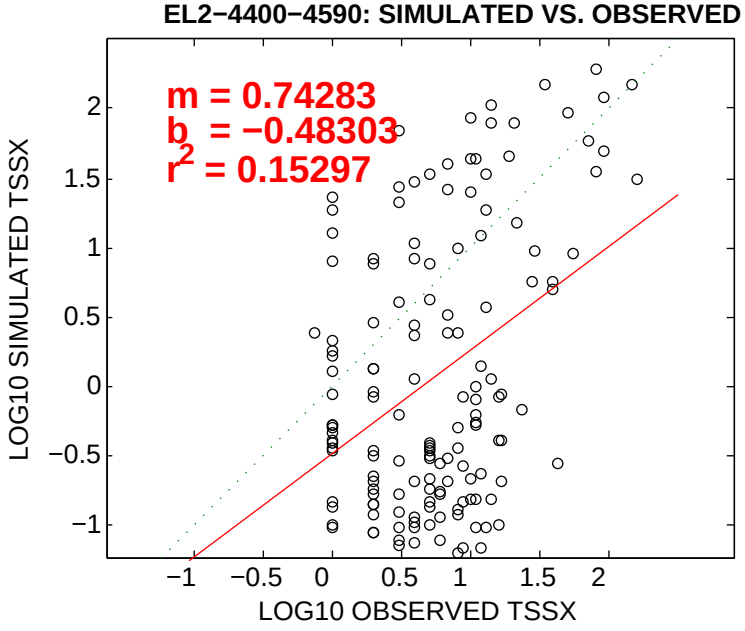


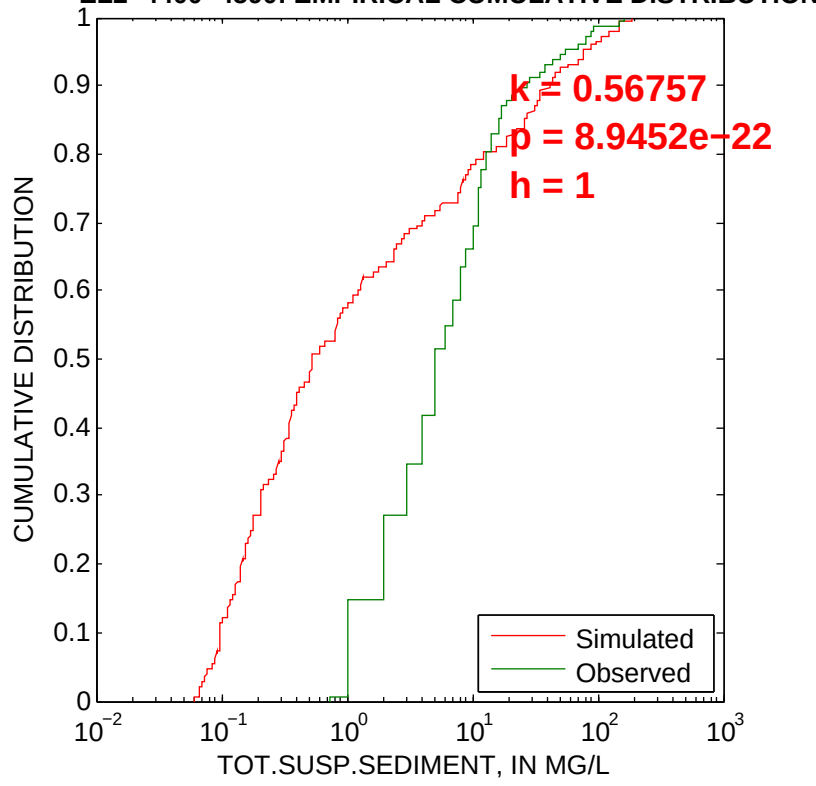












DATA SELECTION

scenario: P620171001WQ | file: TSSX.calib

plot: TSSX - total suspended ...

Dates: 1/1/1985 – 12/31/201

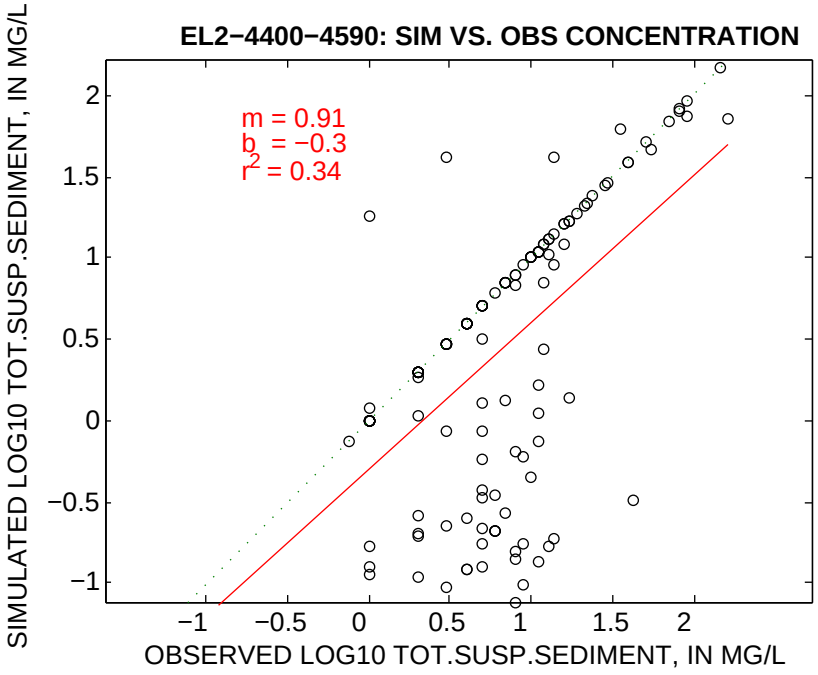
Drive: N/A | Directory: model | Observed: OBS20161101

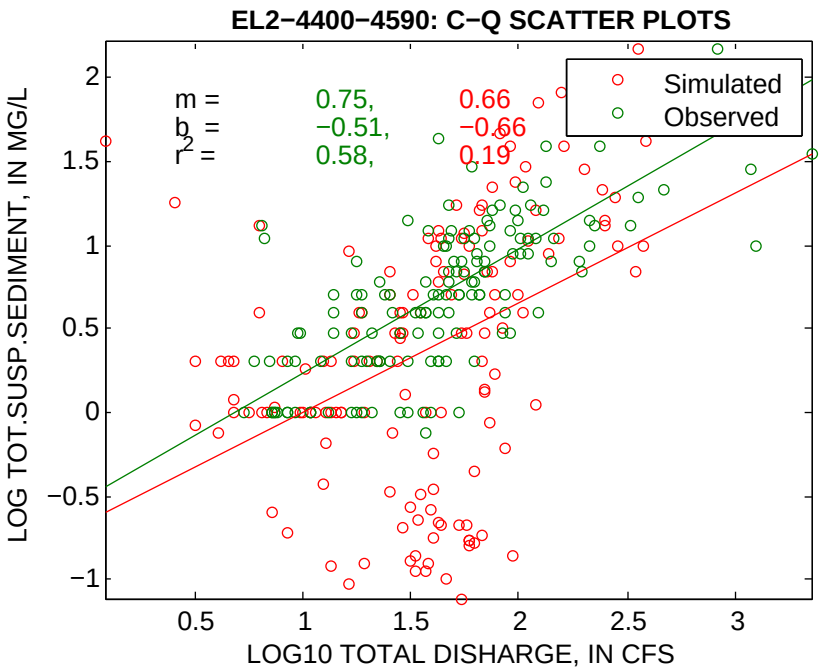
STATISTICS

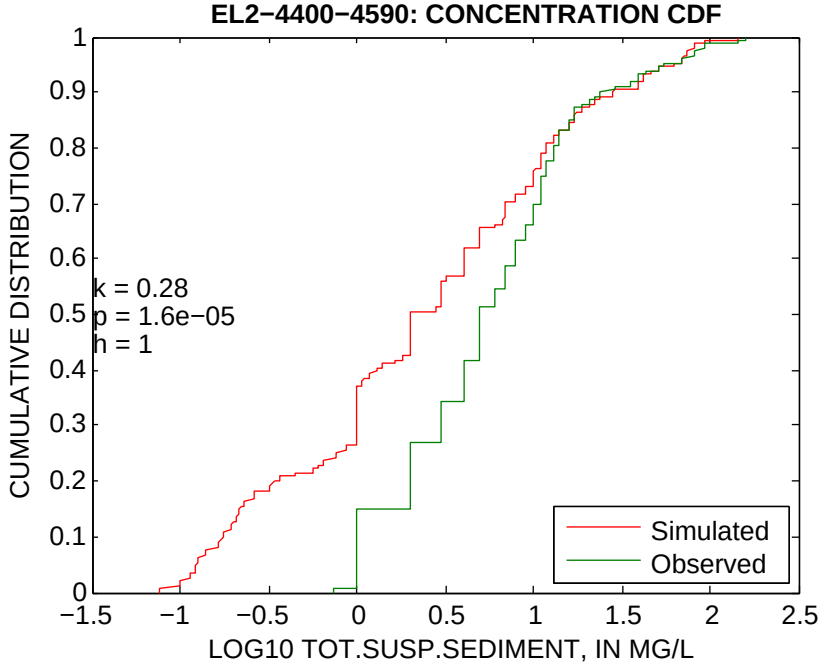
n	148	148
	observe	simulate
min	0.75	0.062055
	-0.124939	-1.20722
mean	12.7618	13.0951
	0.757004	0.0792941
media	5	0.535895
	0.69897	-0.270924
max	162	190.36
	2.20952	2.27958
varian	546.78	952.629
	0.269307	0.971464
JB	0.001	0.001
	0.069449	0.006672
	ra	log
%	2.61164	-89.5253
err.va	660.852	1.30309
rel.std.err	1.20863	4.83868
mod.eff	-0.208626	-3.83868

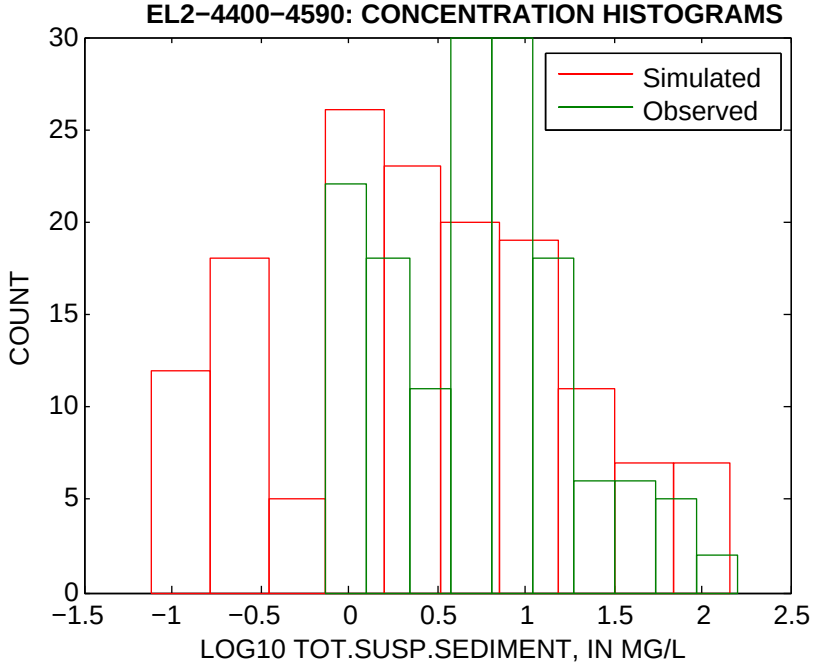
VERSION 2.1

ALL DATA
LOG10

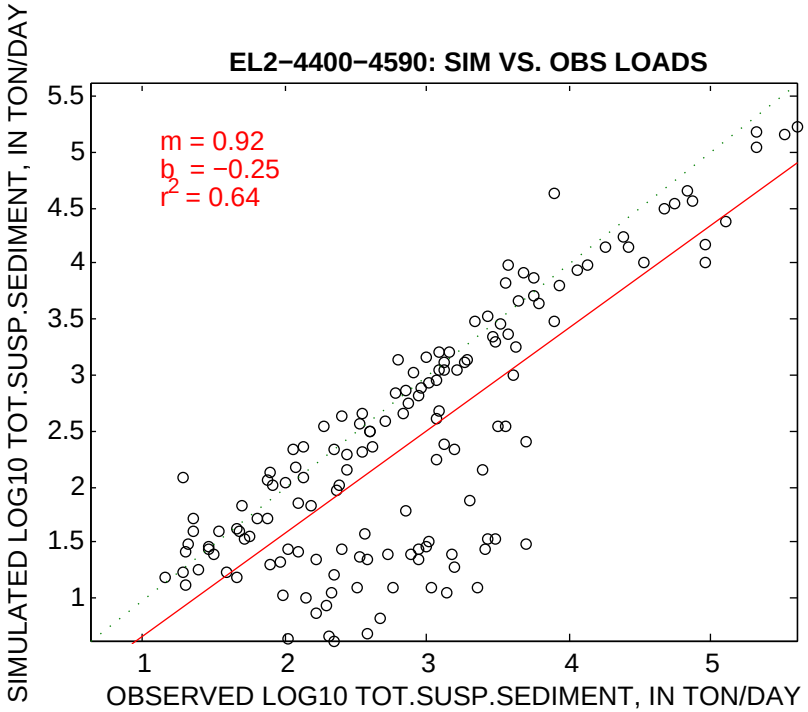




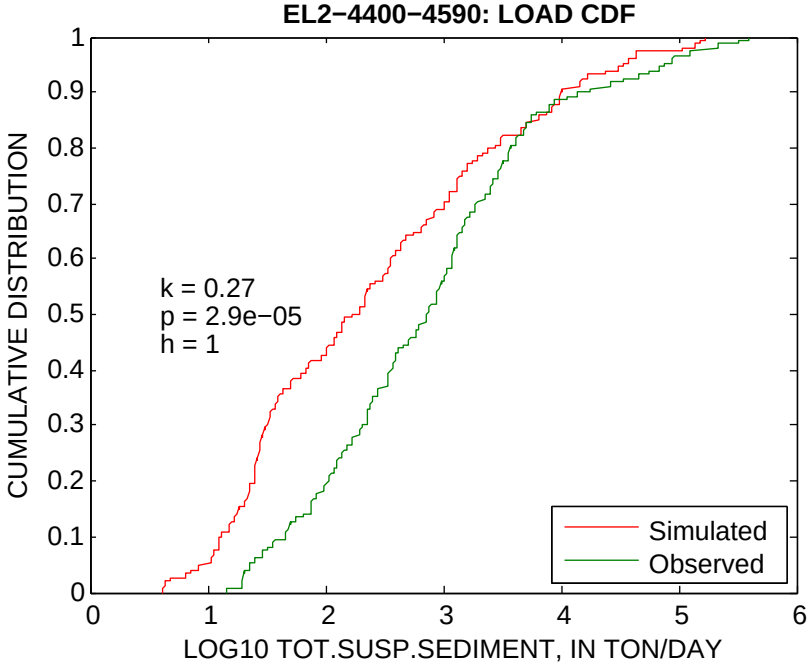


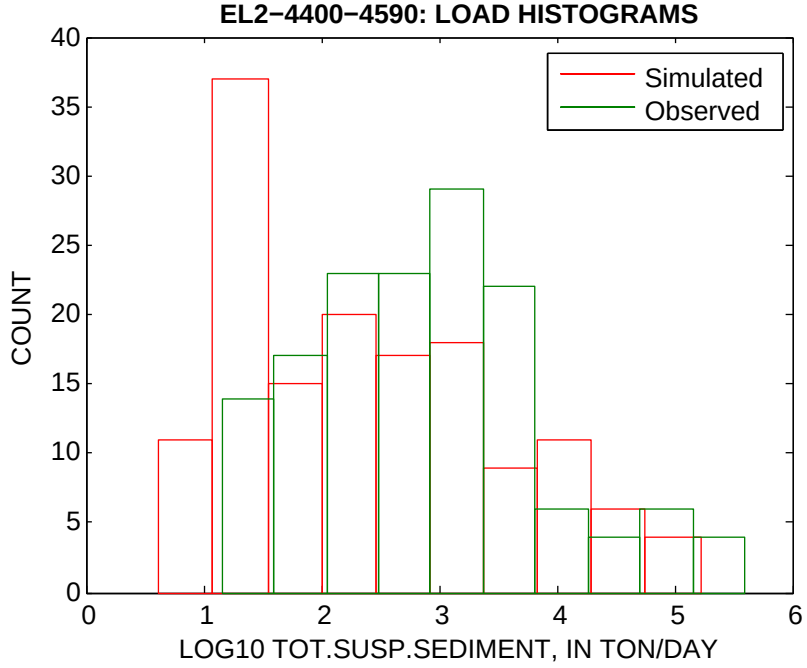


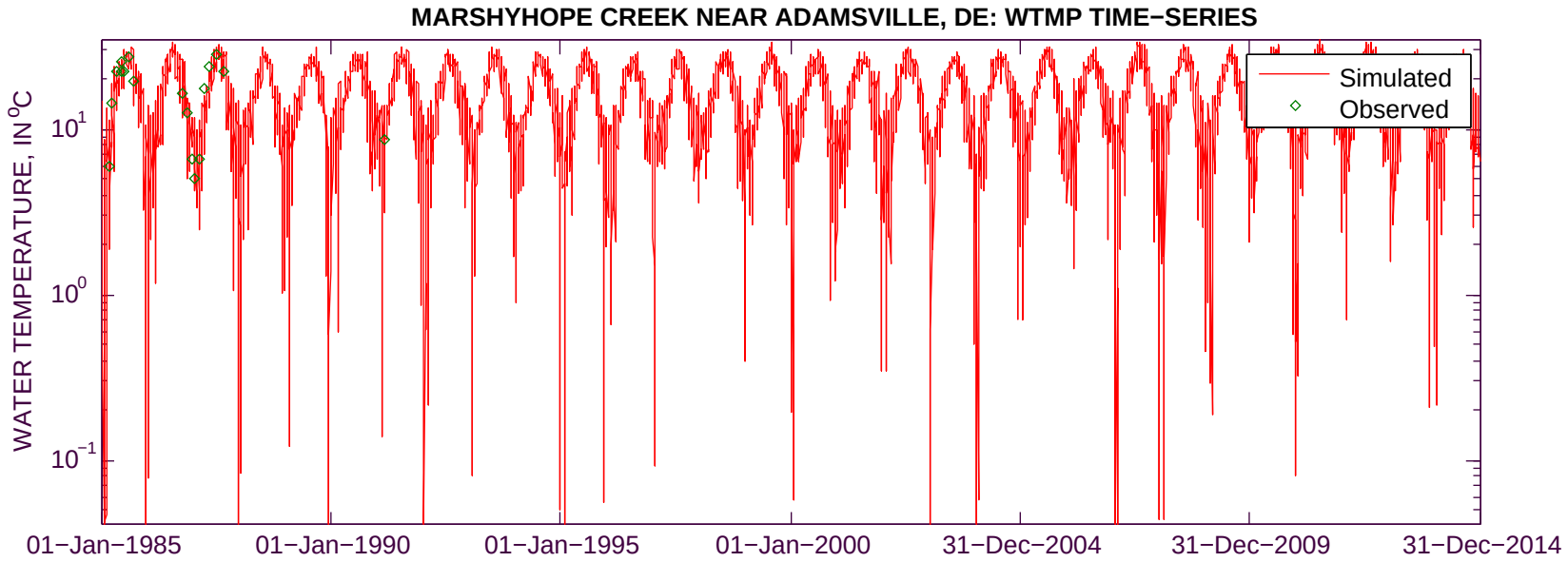
LOAD DATA
LOG10











DATA SELECTION

scenario: P620171001WQ | file: WTMP.calib

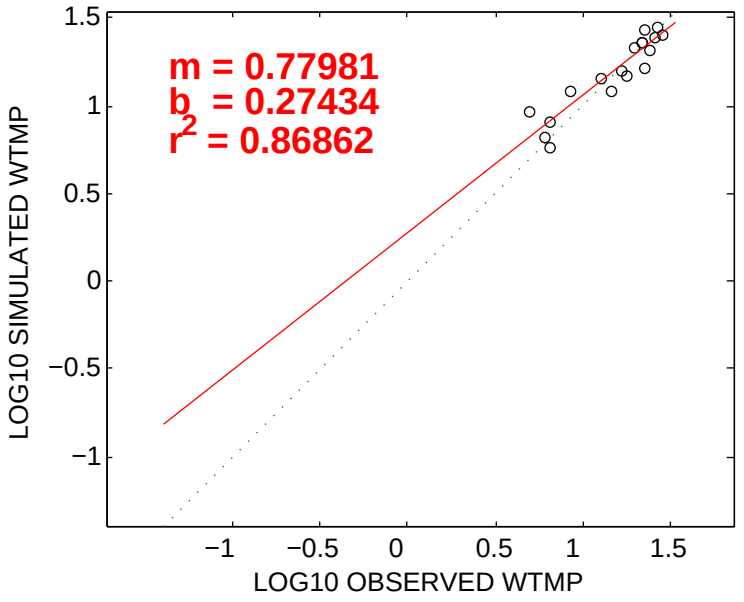
plot: WTMP - water tempera...

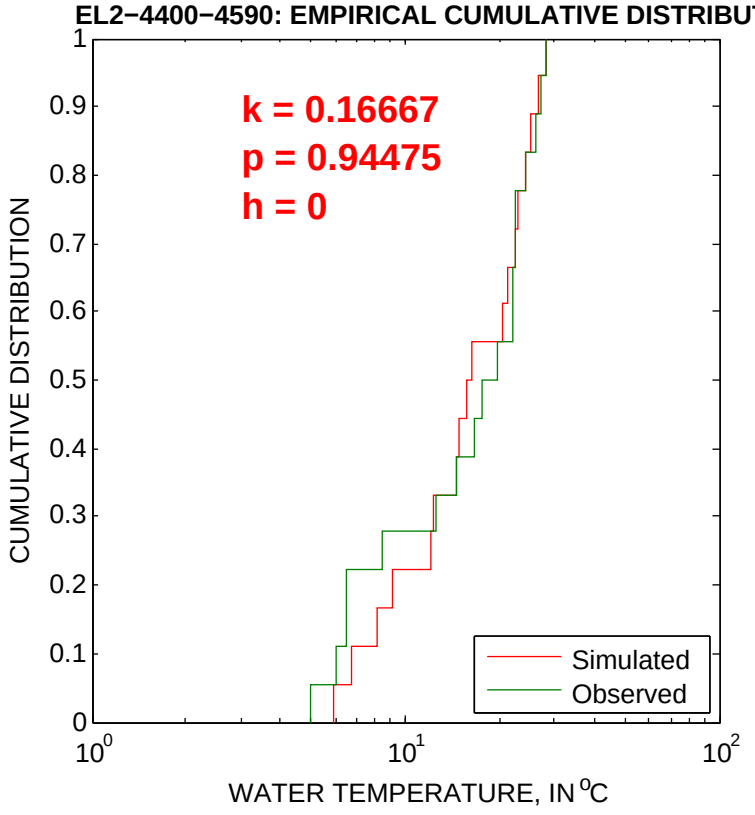
Dates: 1/1/1985 – 12/31/201

Drive: N/A | Directory: model | Observed: OBS20161101

STATISTICS

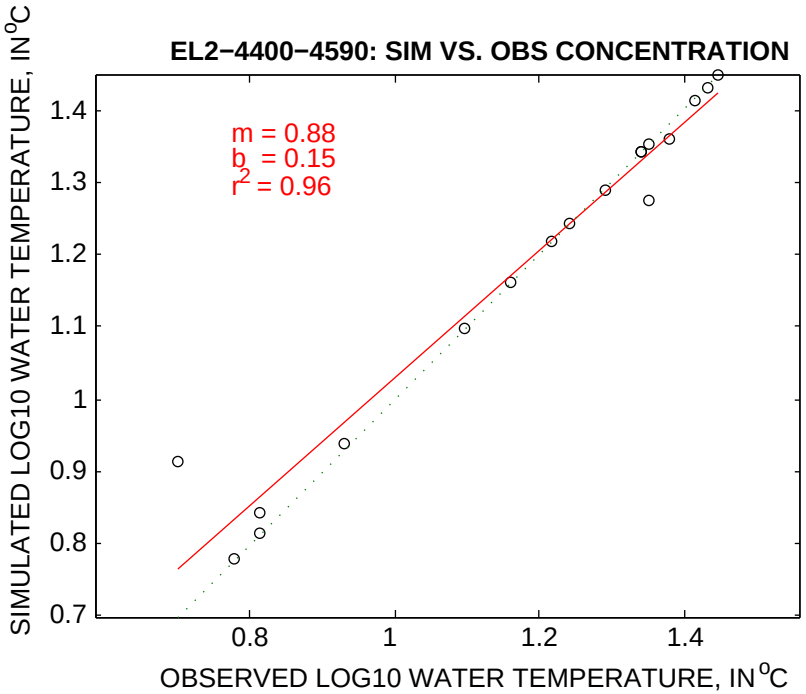
		observe	simulate
n		18	18
min		5	5.8535
		0.69897	0.767416
mean		17.0556	17.0745
		1.17245	1.18863
media		18.5	16.037
		1.26654	1.20501
max		28	28.366
		1.44716	1.4528
varian		61.9085	51.2287
		0.0641641	0.0449204
JB	✓	0.181546	0.307674 ✓
	✓	0.097166	0.183593 ✓
		ra	log
%		0.11127	1.38018
err.va		7.98715	0.00928999
rel.std.err		0.129015	0.144785
mod.eff		0.870985	0.855215

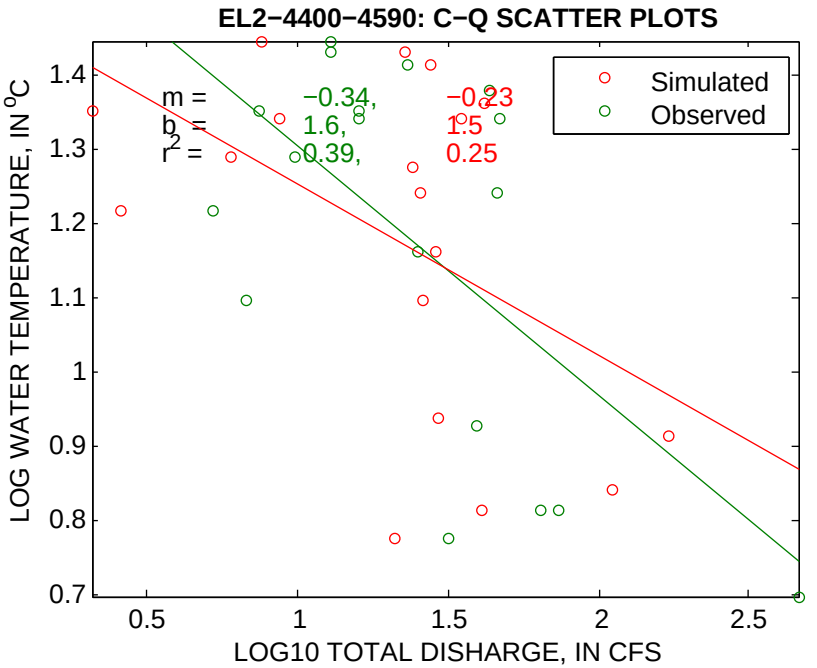


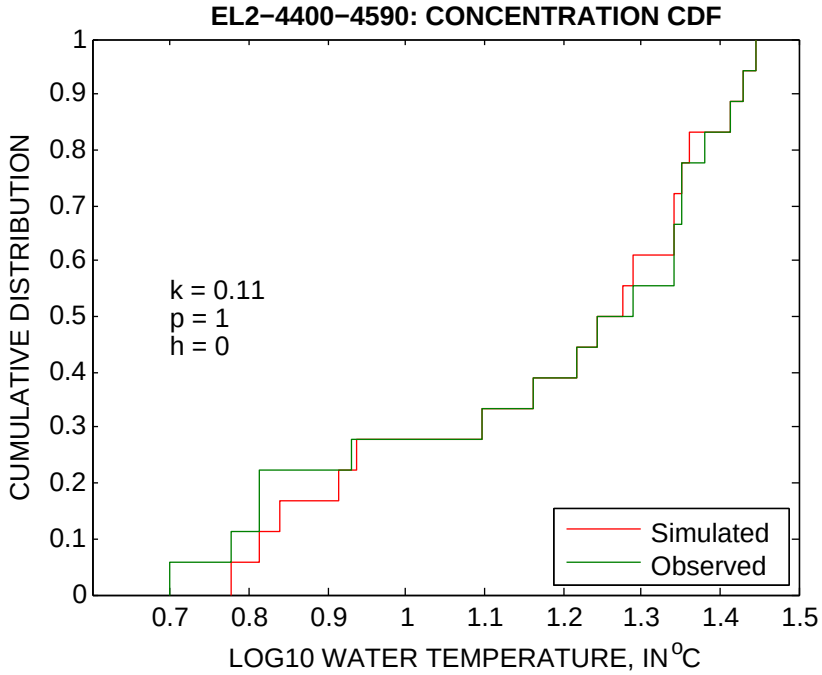


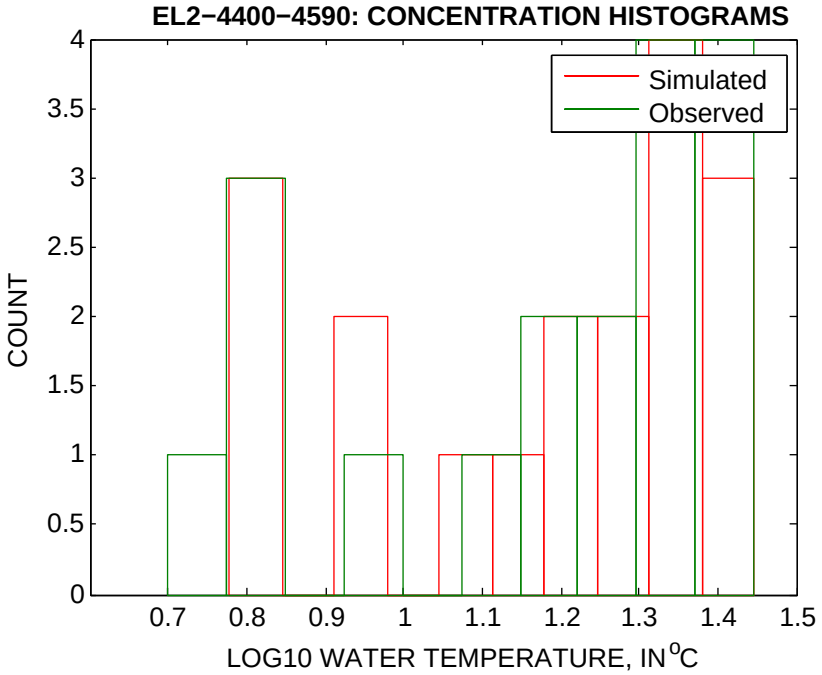
VERSION

ALL DATA
LOG10

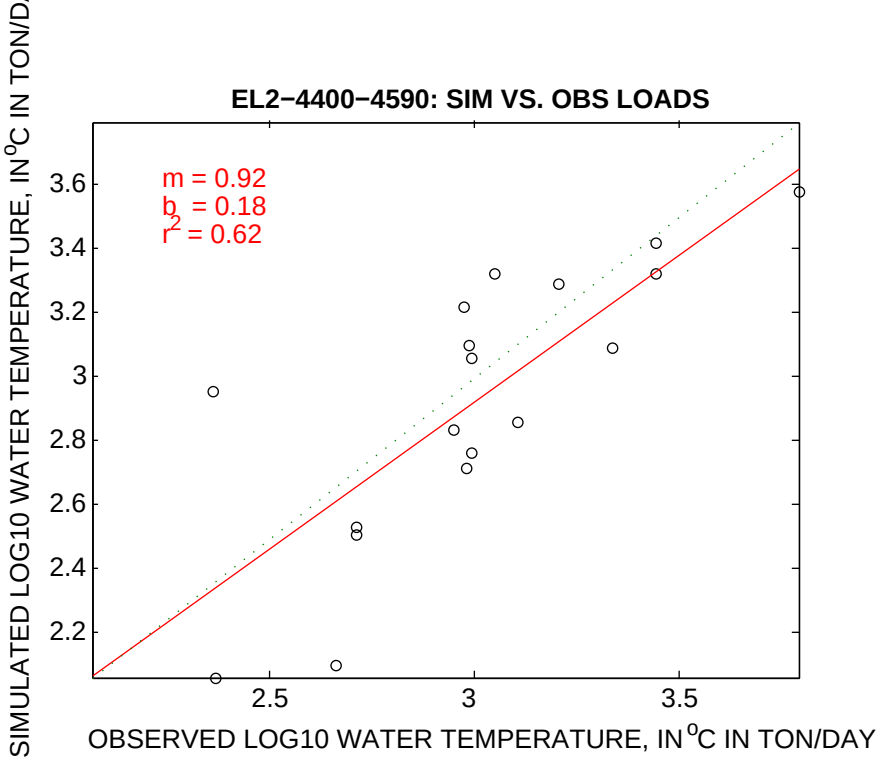


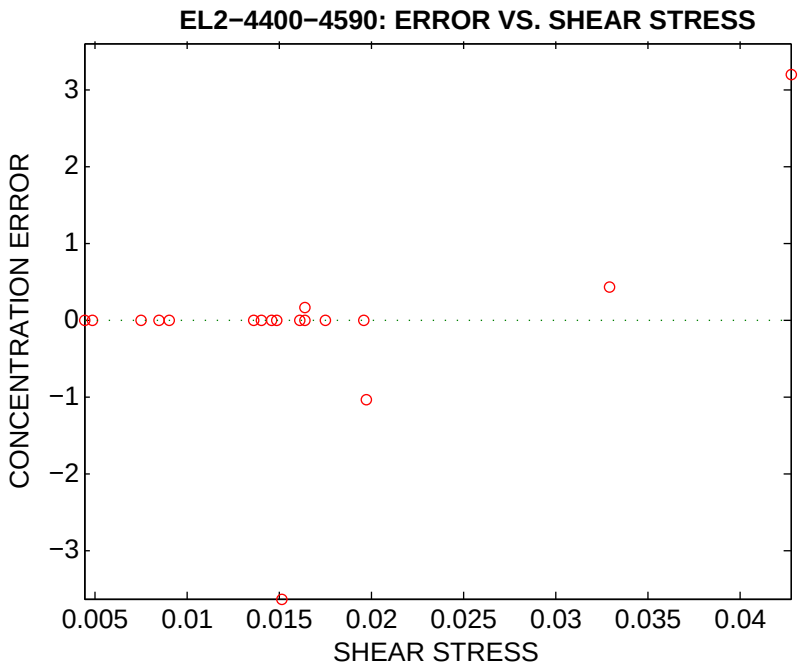


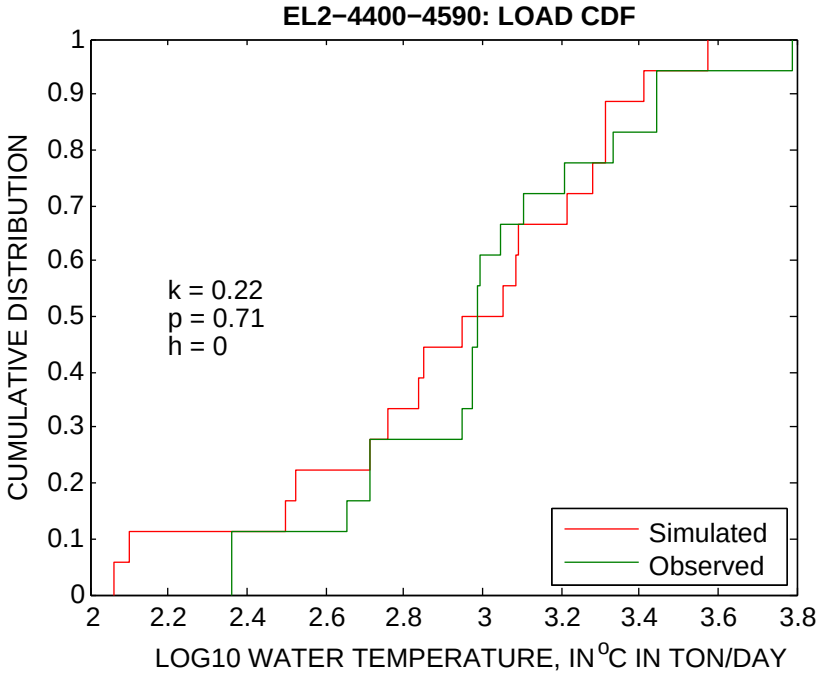


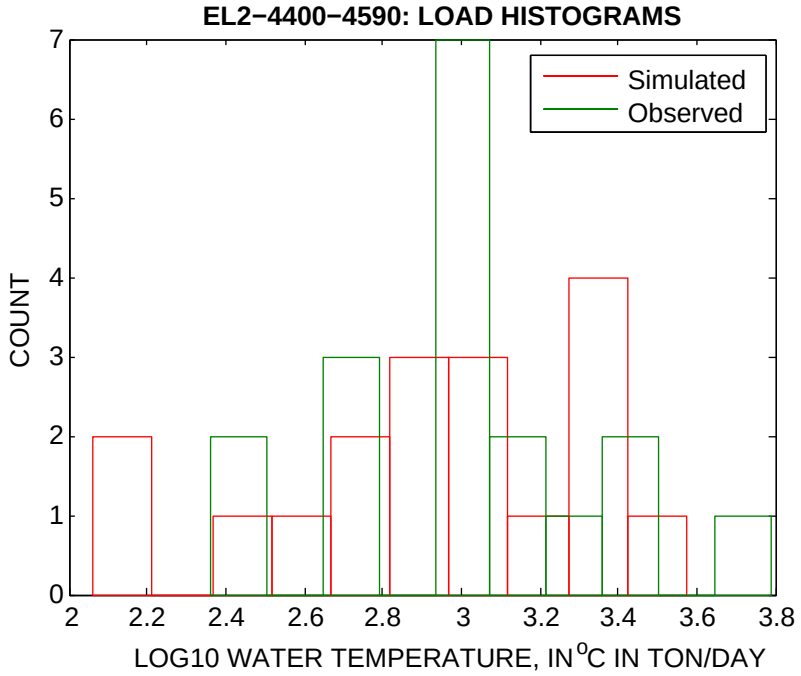


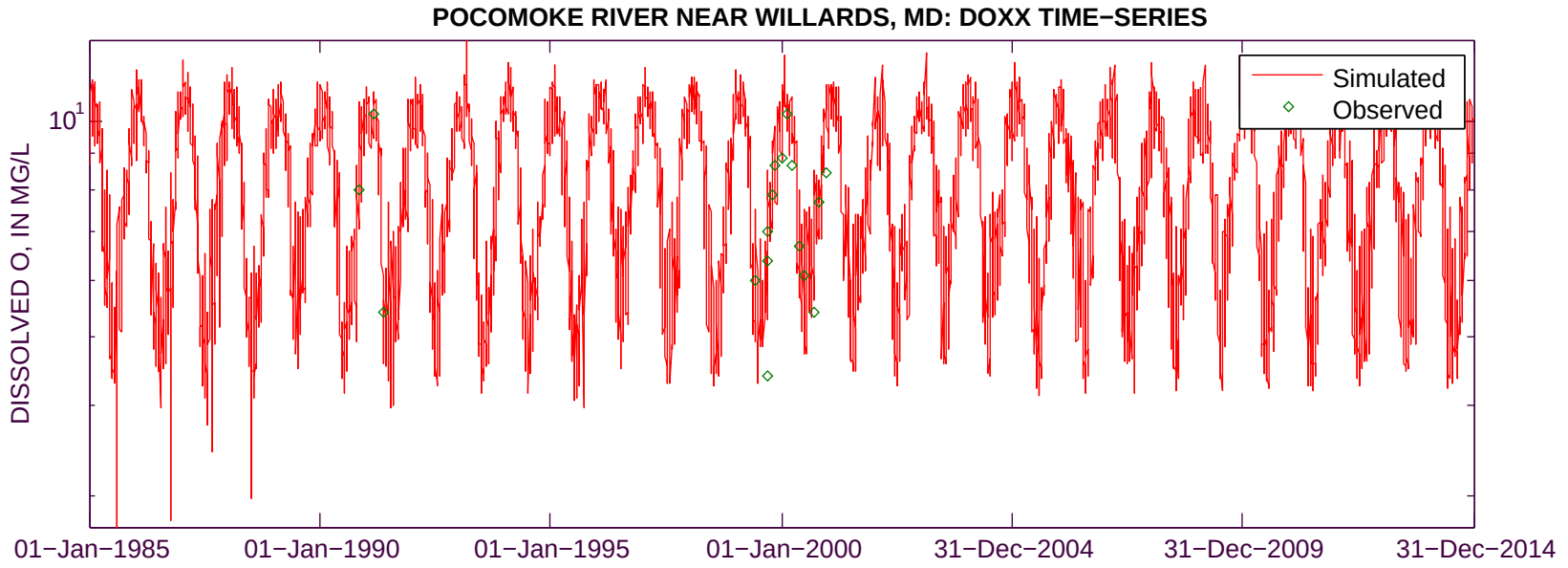
LOAD DATA
LOG10

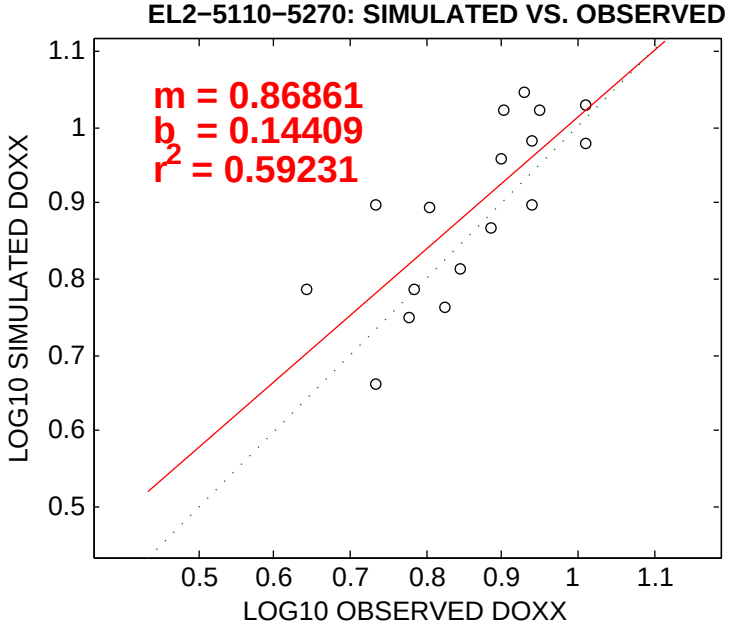


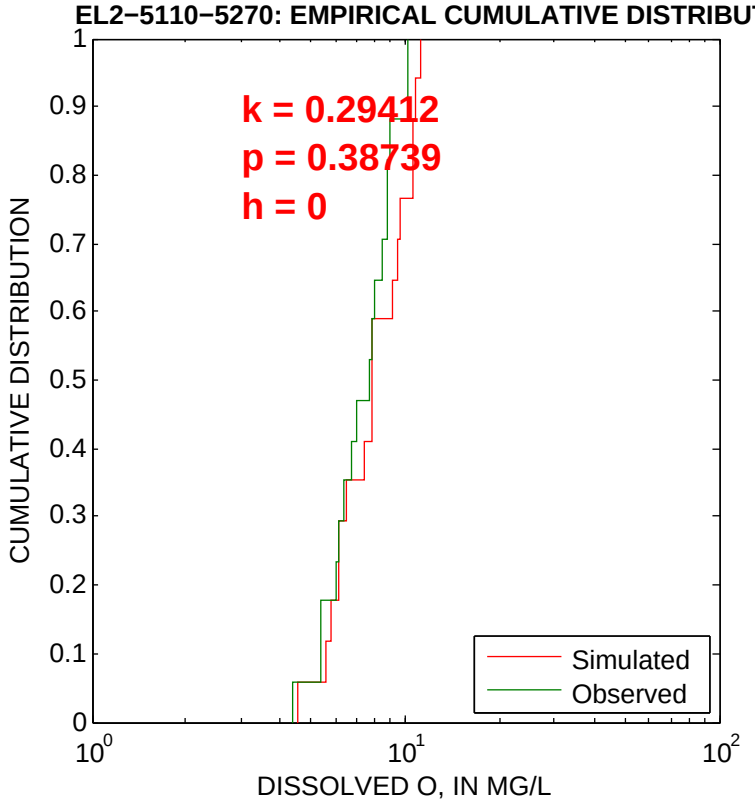












DATA SELECTION

scenario	file
P620171001WQ	DOXX.calib

plot: DOXX - dissolved oxygen

Dates: 1/1/1985 – 12/31/201

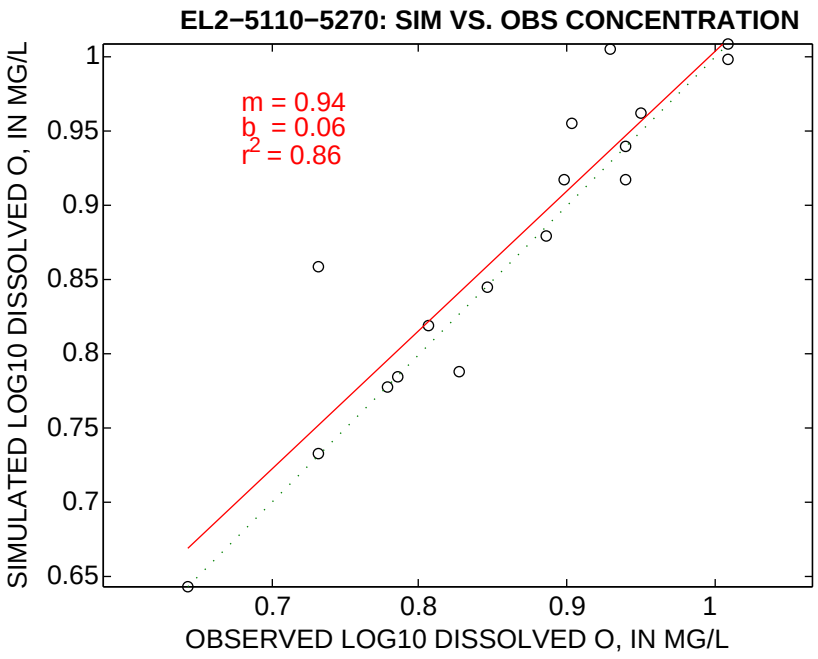
Drive	Directory	Observed
N/A	model	OBS20161101

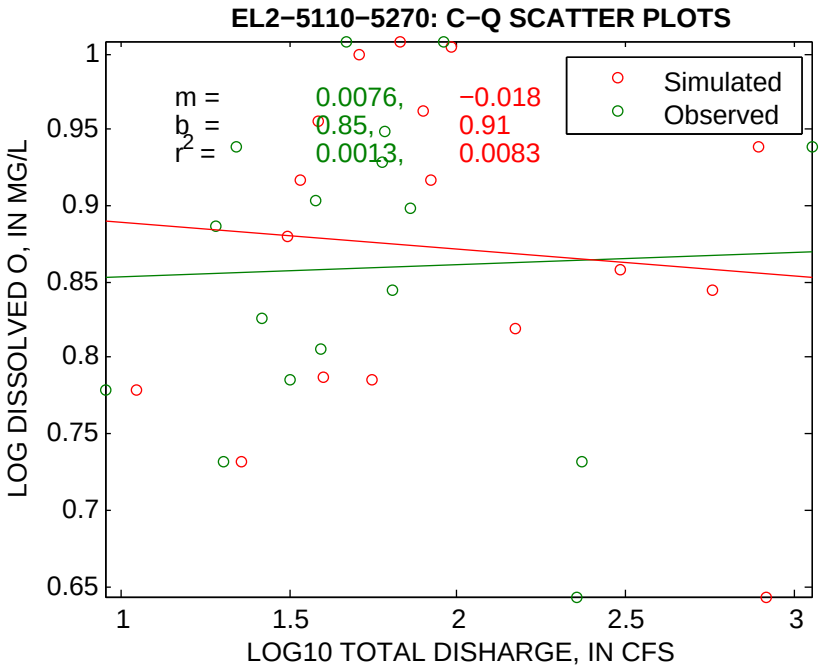
STATISTICS

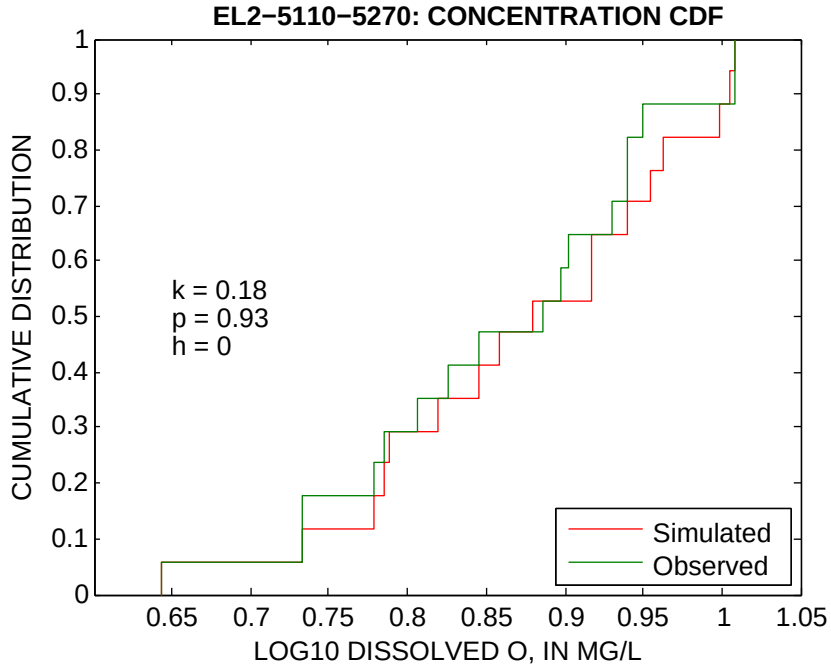
	n	17	17
		observe	simulate
min		4.4	4.5707
		0.643453	0.659983
mean		7.42353	8.03187
		0.85949	0.890652
media		7.7	7.8628
		0.886491	0.895577
max		10.2	11.097
		1.0086	1.04521
varian		2.84441	4.22413
		0.0105996	0.0135017
JB		0.5	0.307308
		0.5	0.392226
		ra	log
%		8.19477	3.62568
err.va		2.01955	0.00671933
rel.std.err		0.710007	0.633921
mod.eff		0.289993	0.366079

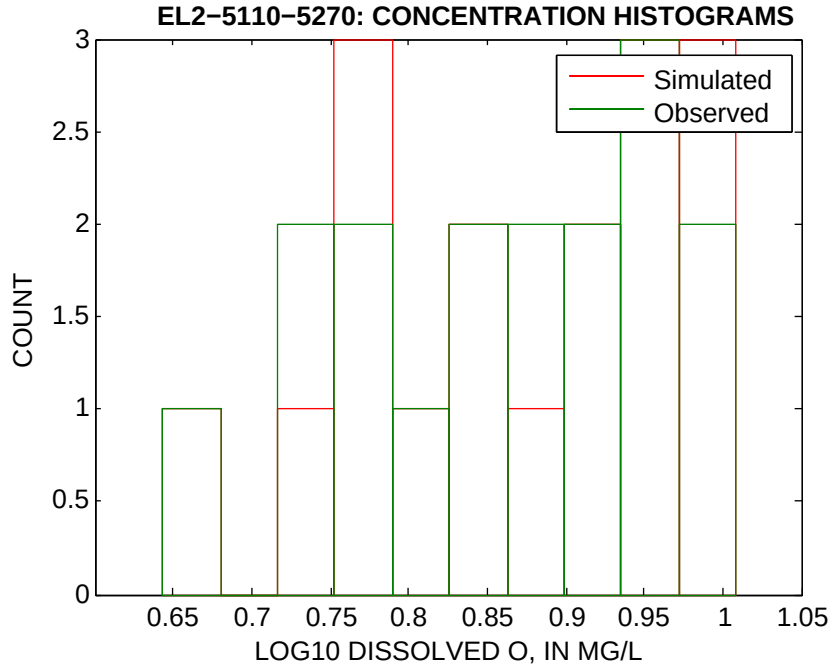
VERSION 2.1

ALL DATA
LOG10

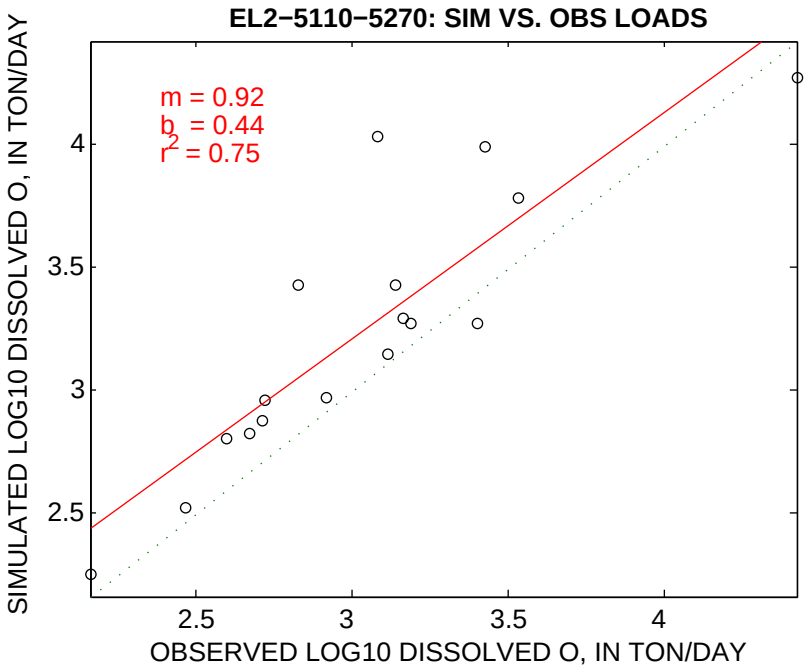


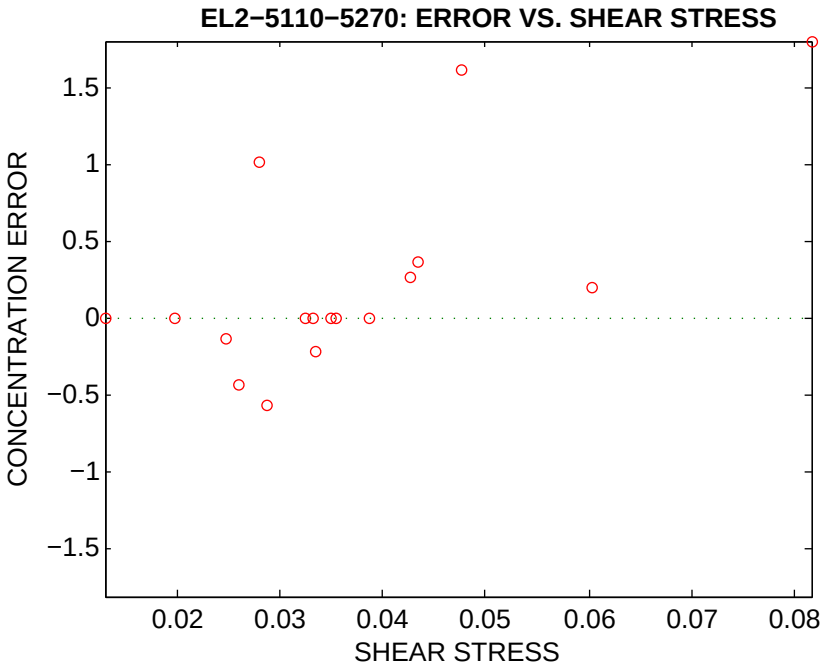


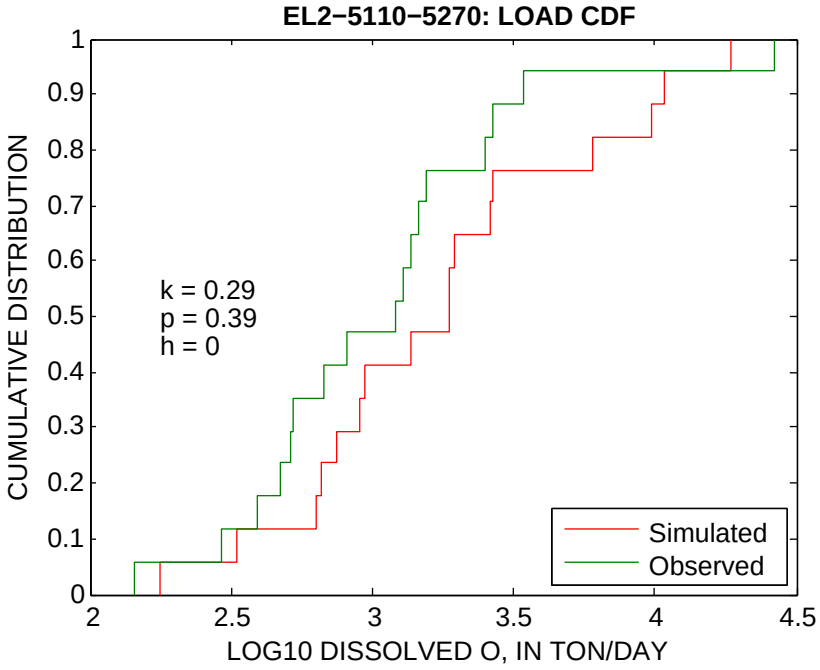


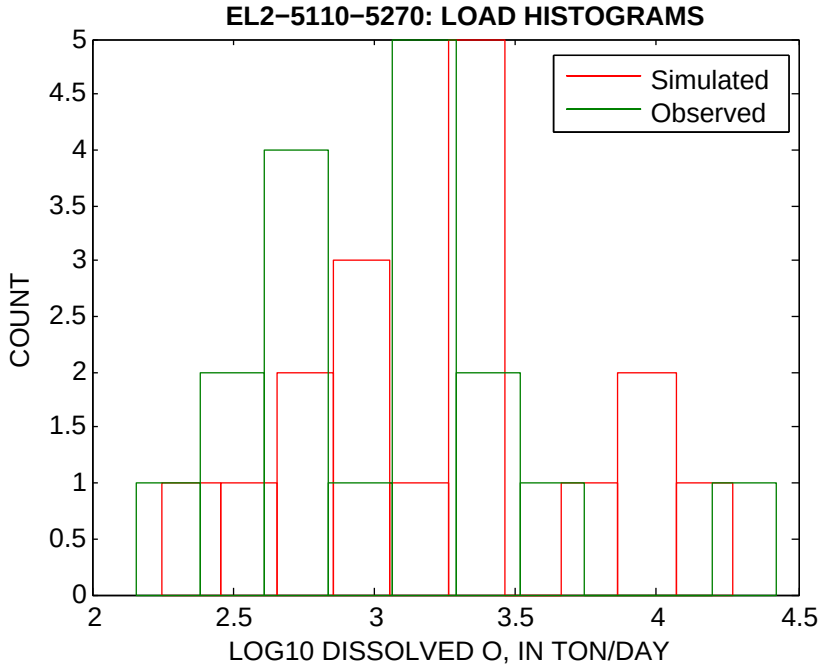


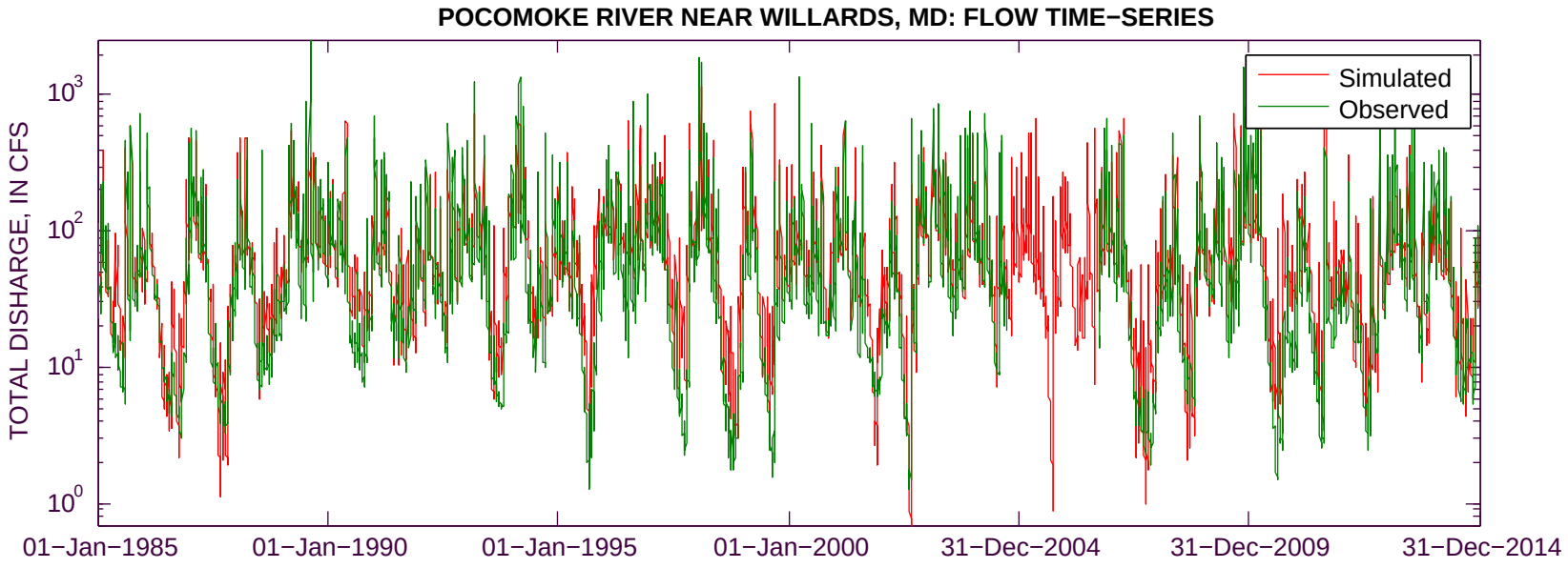
LOAD DATA
LOG10

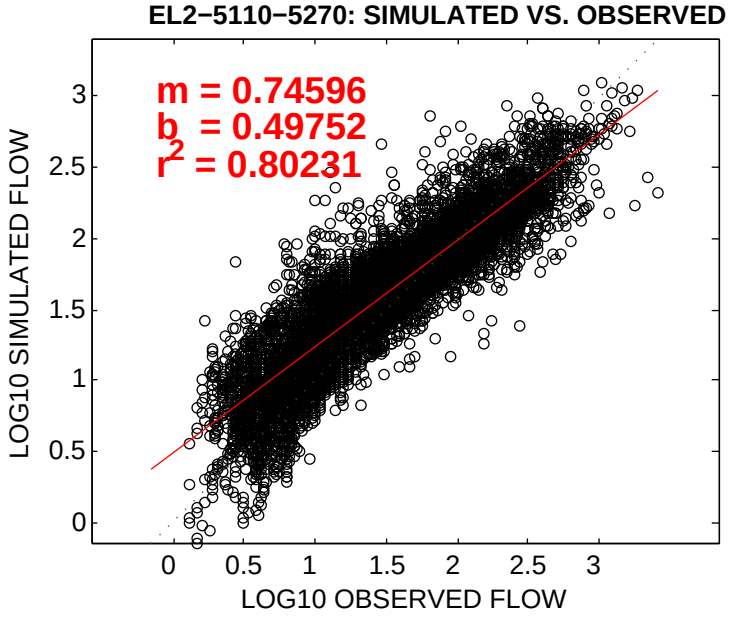


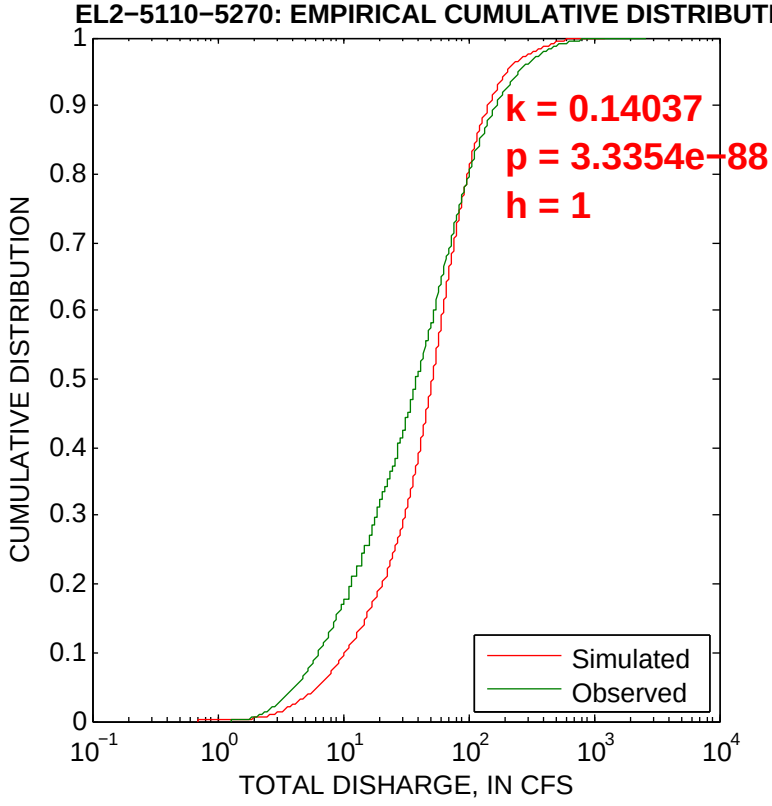












DATA SELECTION

scenario: P620171001WQ | file: FLOW.calib

plot: FLOW - total discharge

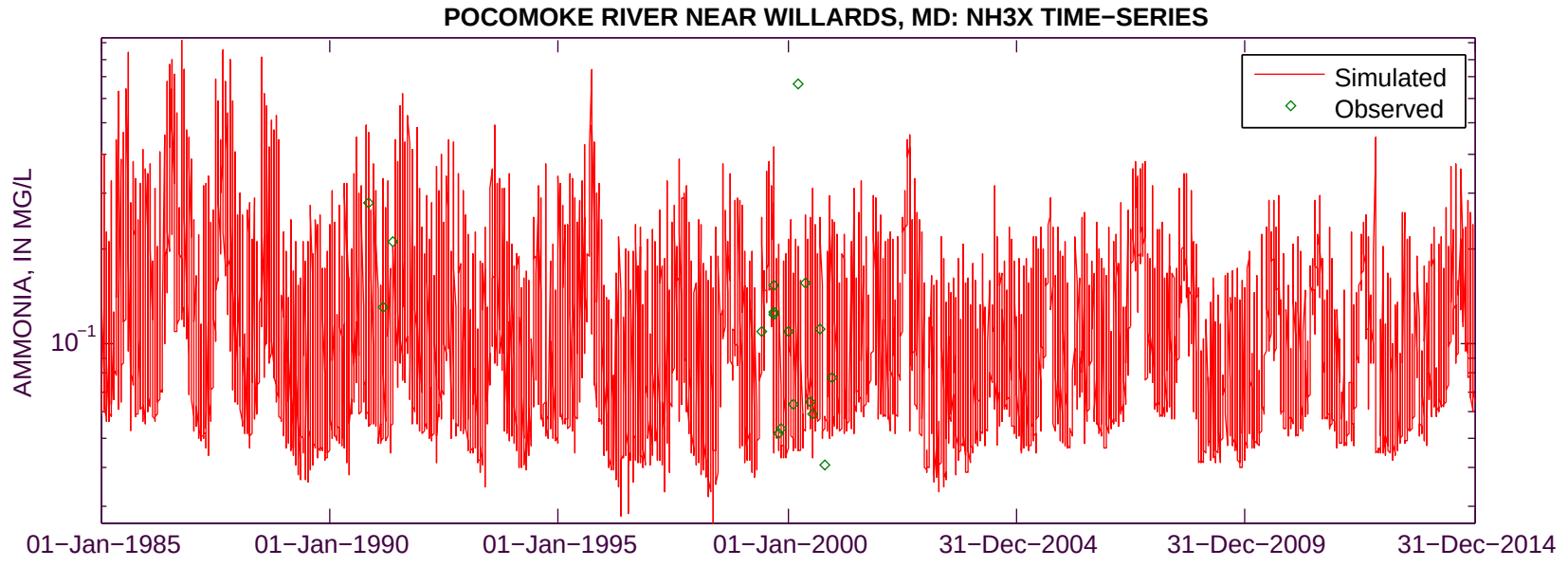
Dates: 1/1/1985 – 12/31/201

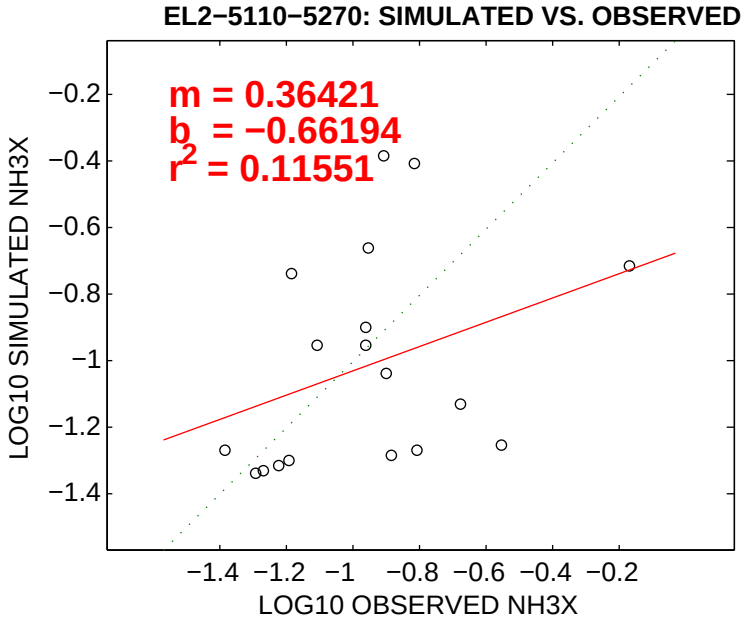
Drive: N/A | Directory: model | Observed: OBS20161101

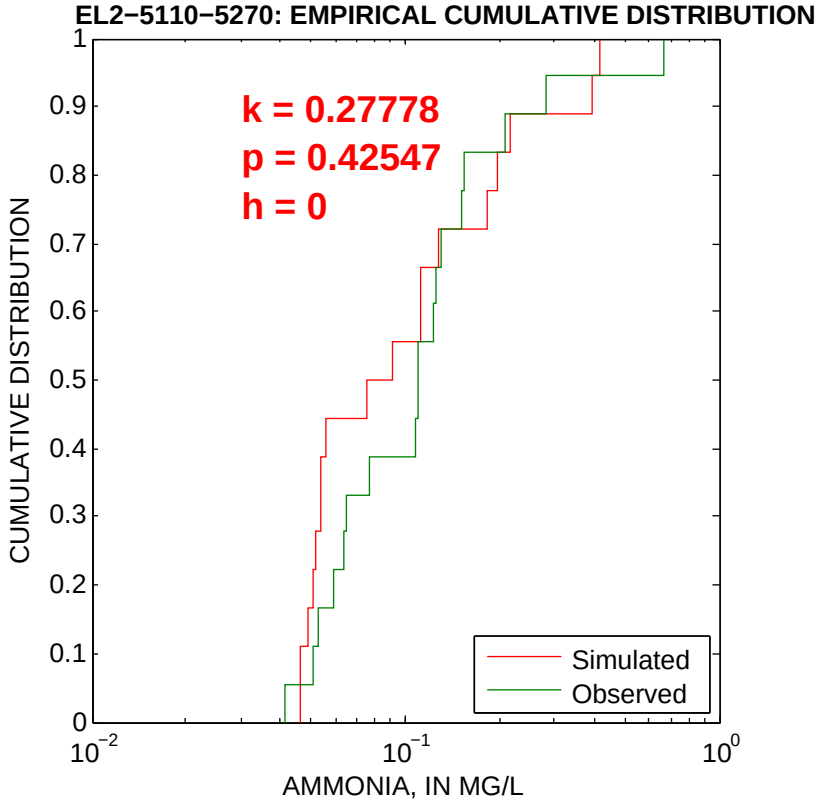
STATISTICS

		observe	simulate
n		10223	10223
min		1.3	0.70267
		0.113943	-0.153249
mean		74.6033	73.4367
		1.55638	1.65852
media		39	52.097
		1.59106	1.71681
max		2580	1237.2
		3.41162	3.09244
varian		14314.2	7632.87
		0.292044	0.202552
JB		0.001	0.001
		0.001	0.001
		ra	log
%		-1.56373	6.56259
err.va		5469.65	0.0693233
rel.std.err		0.382114	0.237373
mod.eff		0.617886	0.762627

VERSION 2.1







DATA SELECTION

scenario: P620171001WQ | file: NH3X.calib

plot: NH3X - ammonia

Dates: 1/1/1985 – 12/31/201

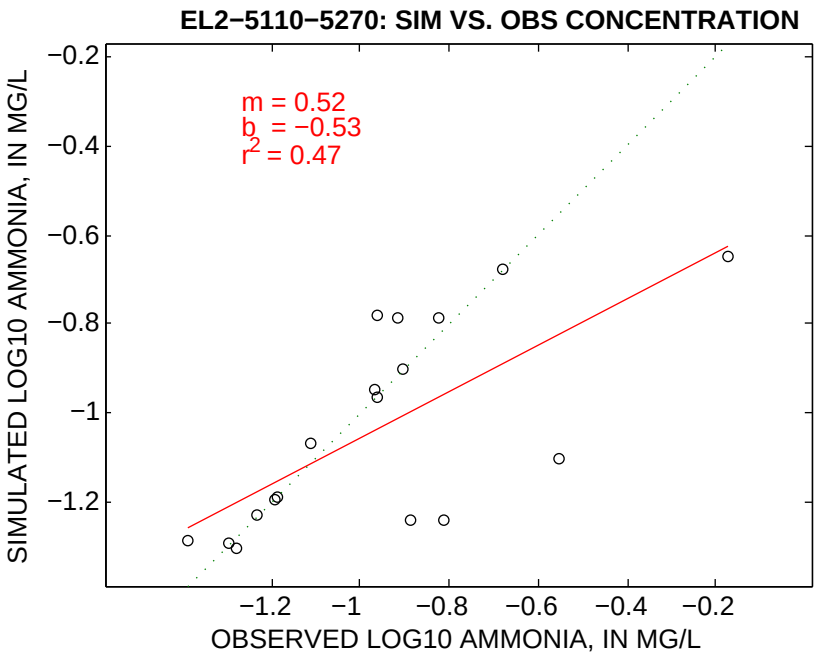
Drive: N/A | Directory: model | Observed: OBS20161101

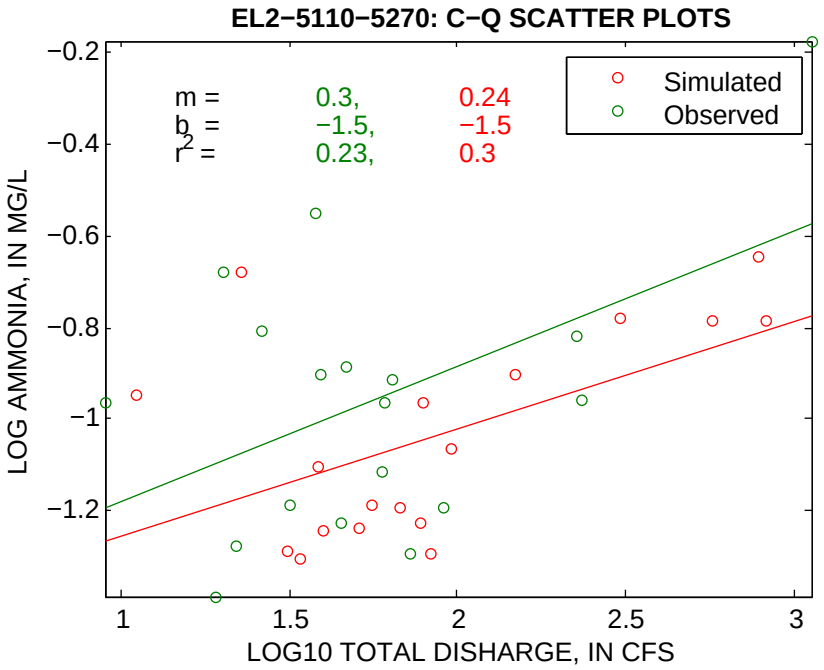
STATISTICS

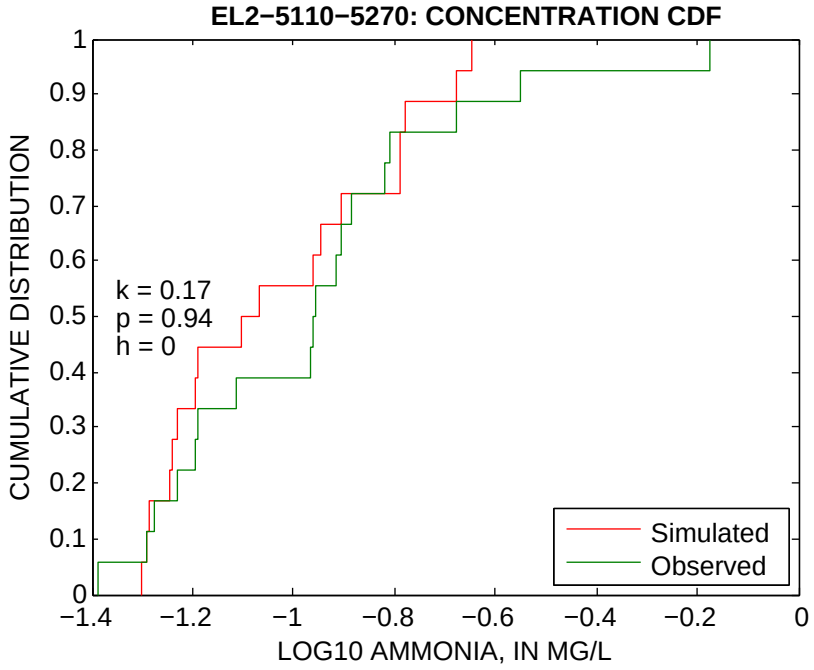
	n	observe	simulate
		18	18
min		0.041	0.046247
		-1.38722	-1.33492
mean		0.143389	0.129382
		-0.961337	-1.01207
media		0.1095	0.0829365
		-0.96059	-1.08339
max		0.671	0.41826
		-0.173277	-0.378554
varian		0.021021	0.0130168
		0.0889469	0.102143
JB		0.001	0.010327
		0.066807	0.127905
		ra	log
%		-9.76862	5.27721
err.va		0.0285837	0.129024
rel.std.err		1.35977	1.45057
mod.eff		-0.359774	-0.45057

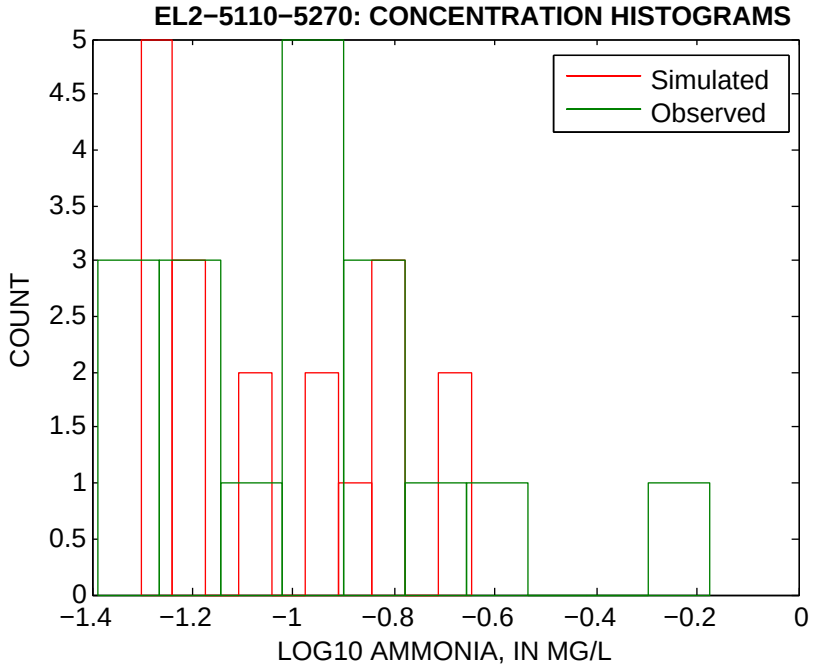
VERSION 2.1

ALL DATA
LOG10

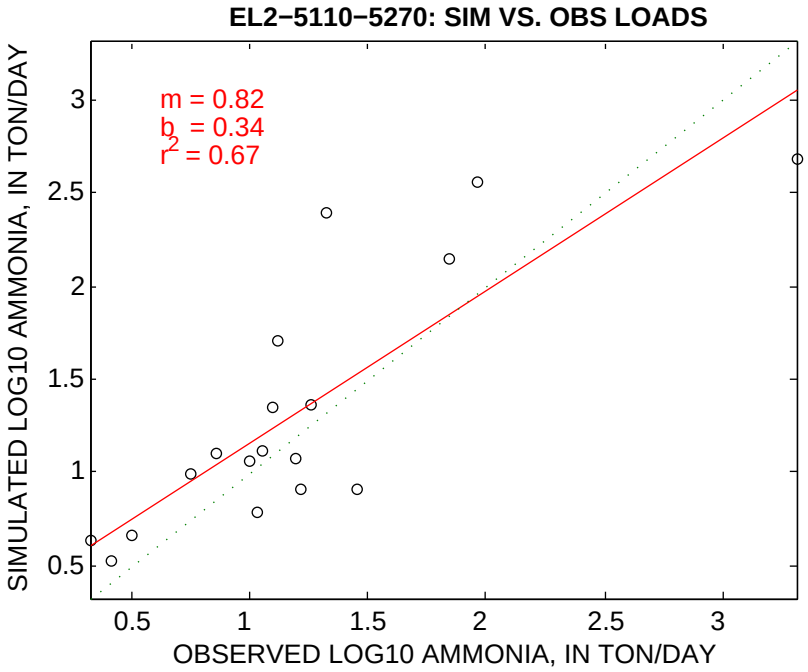


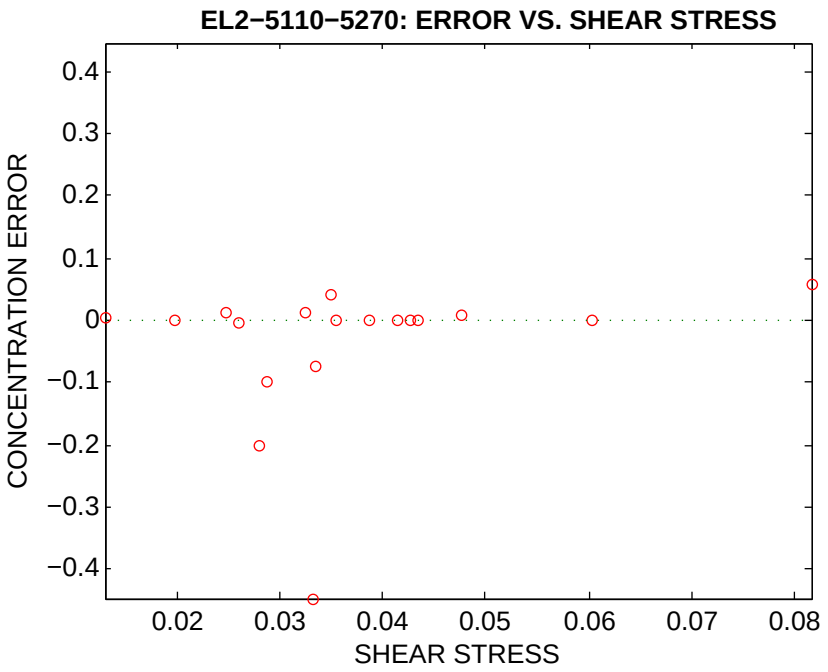


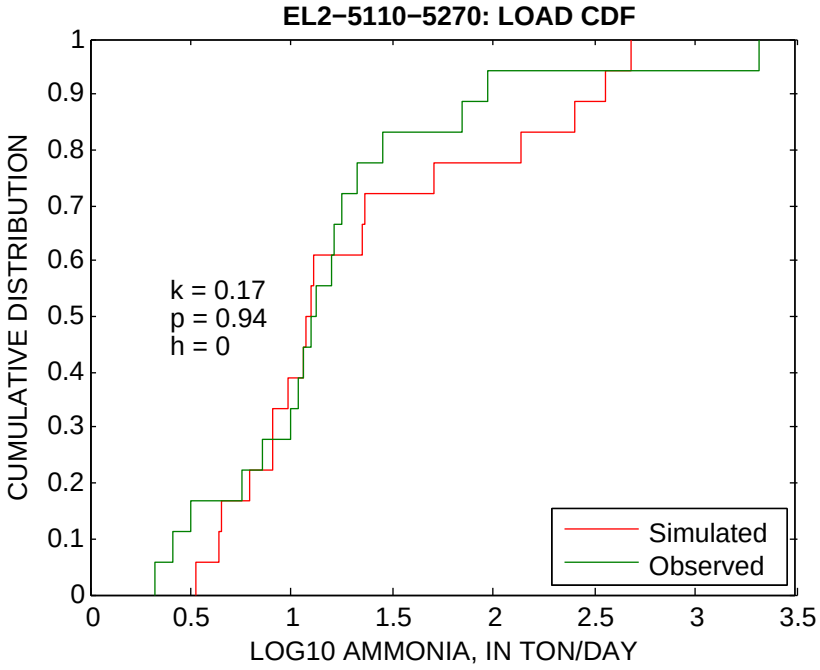


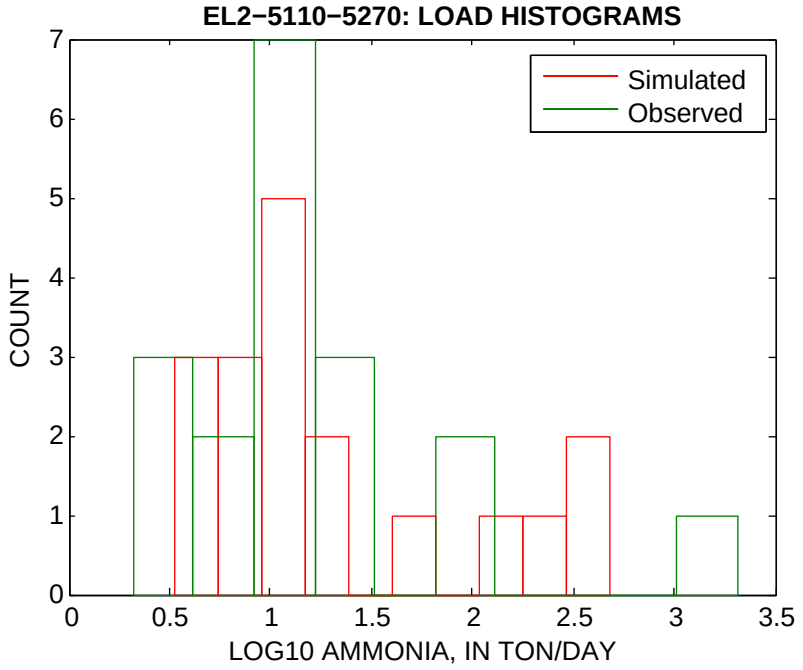


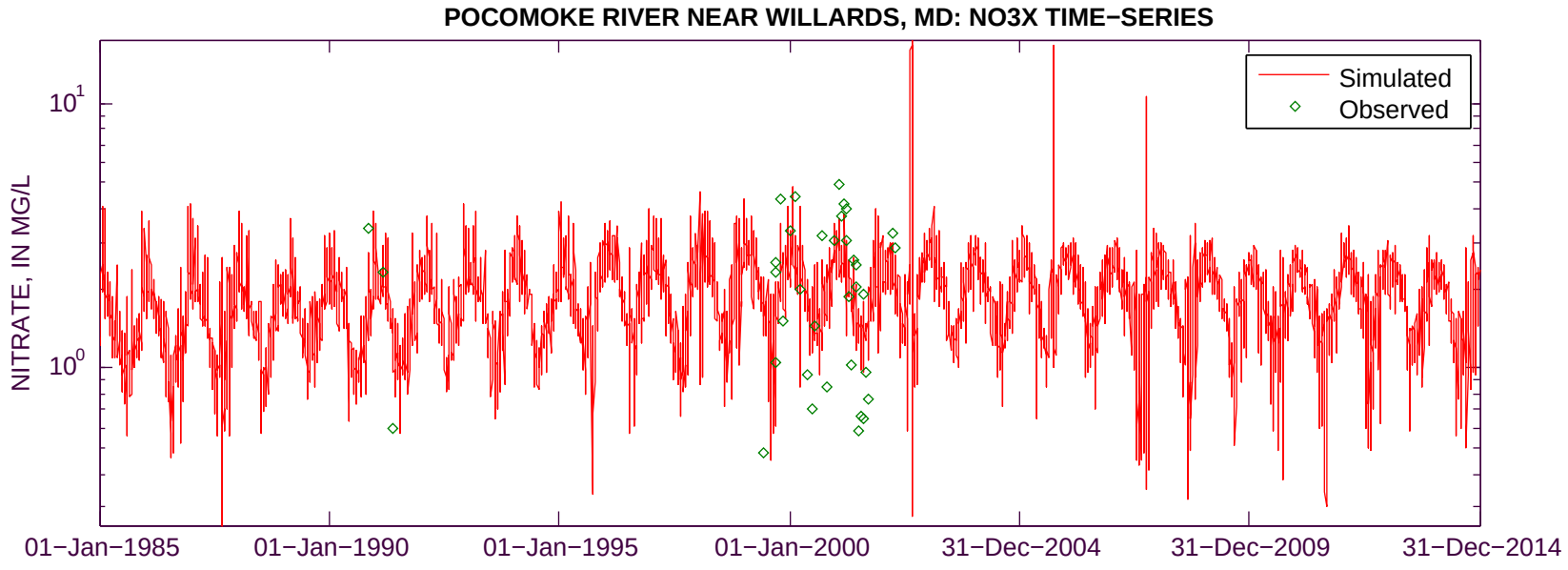
LOAD DATA
LOG10

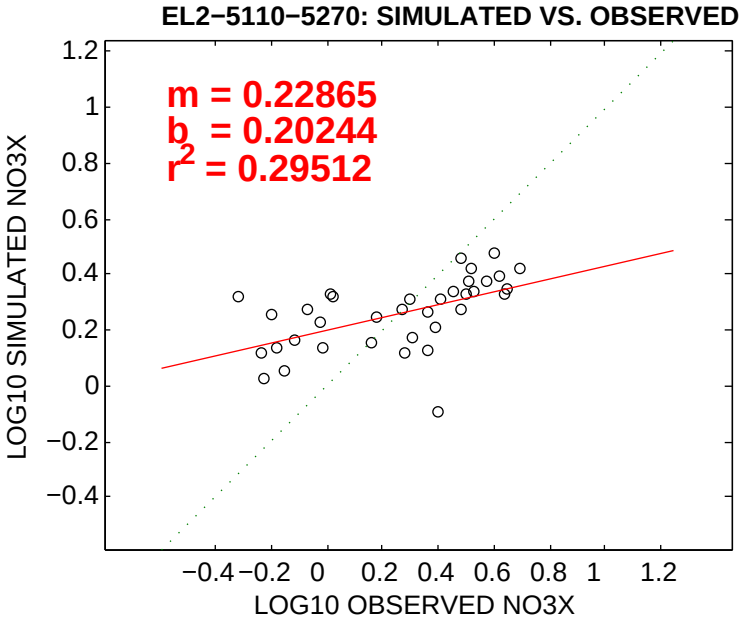


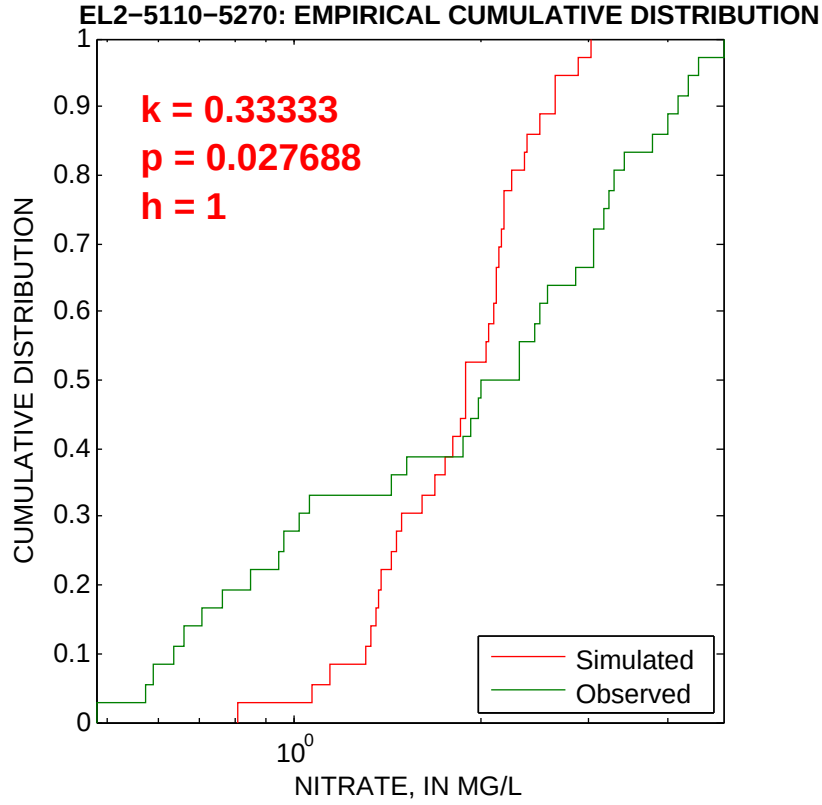












DATA SELECTION

scenario: P620171001WQ | file: NO3X.calib

plot: NO3X - nitrate

Dates: 1/1/1985 – 12/31/201

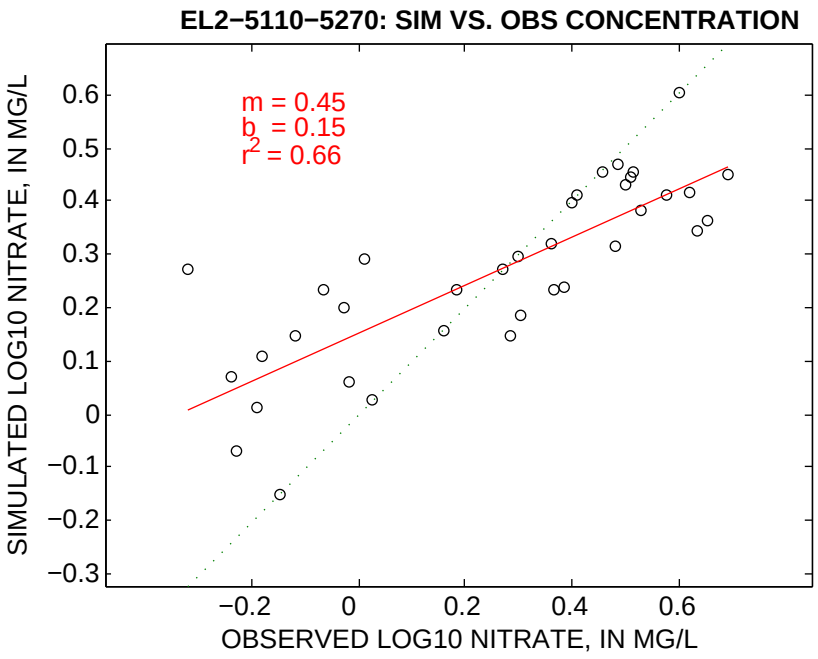
Drive: N/A | Directory: model | Observed: OBS20161101

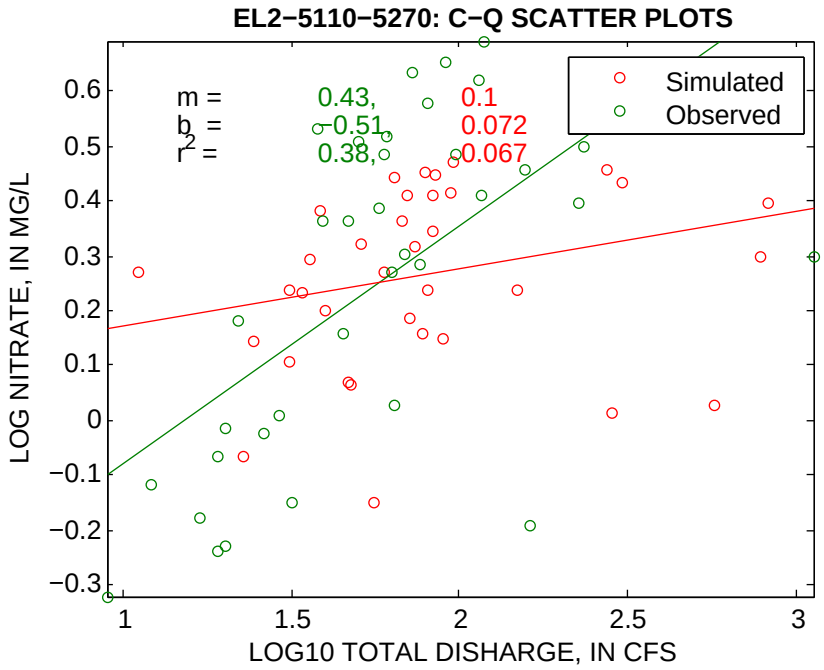
STATISTICS

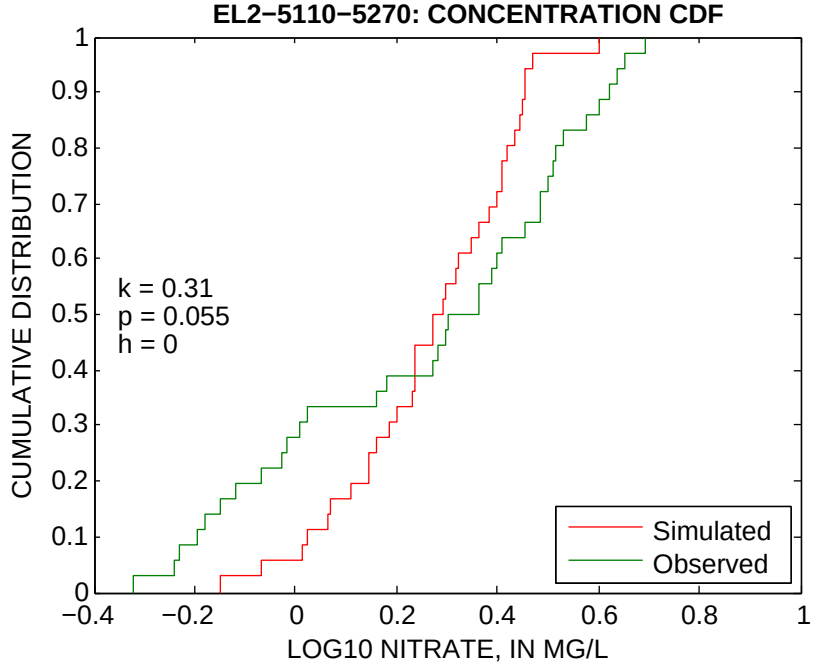
	n	36	36
		observe	simulate
min		0.477	0.80851
		-0.321482	-0.0923146
mean		2.21756	1.89674
		0.254667	0.260674
media		2.155	1.8896
		0.332462	0.276368
max		4.93	3.0052
		0.692847	0.477873
varian		1.70924	0.270606
		0.0927758	0.0164362
JB		0.154501	0.5
		0.093369	0.159048
		ra	log
%		-14.4669	2.35866
err.va		1.19987	0.0668218
rel.std.err		0.701995	0.720251
mod.eff		0.298005	0.279749

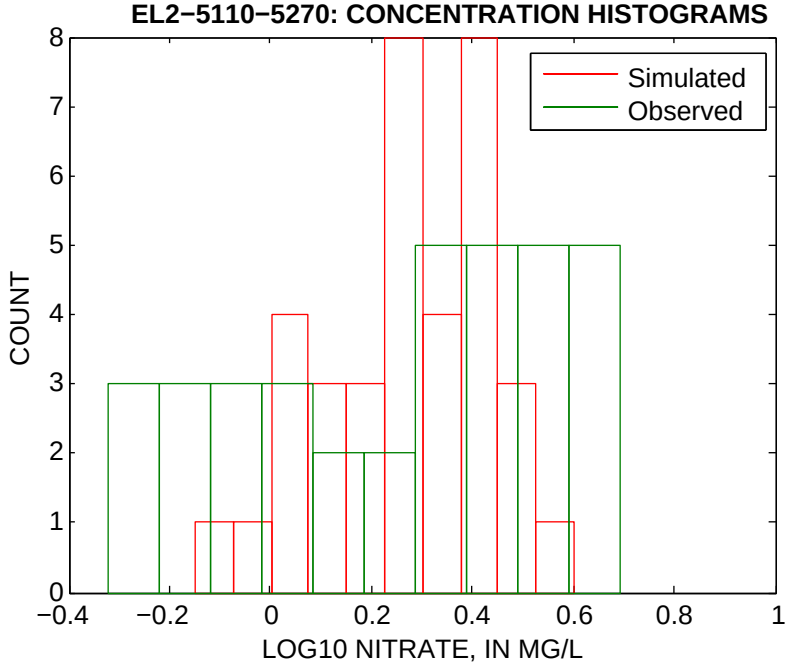
VERSION 2.1

ALL DATA
LOG10

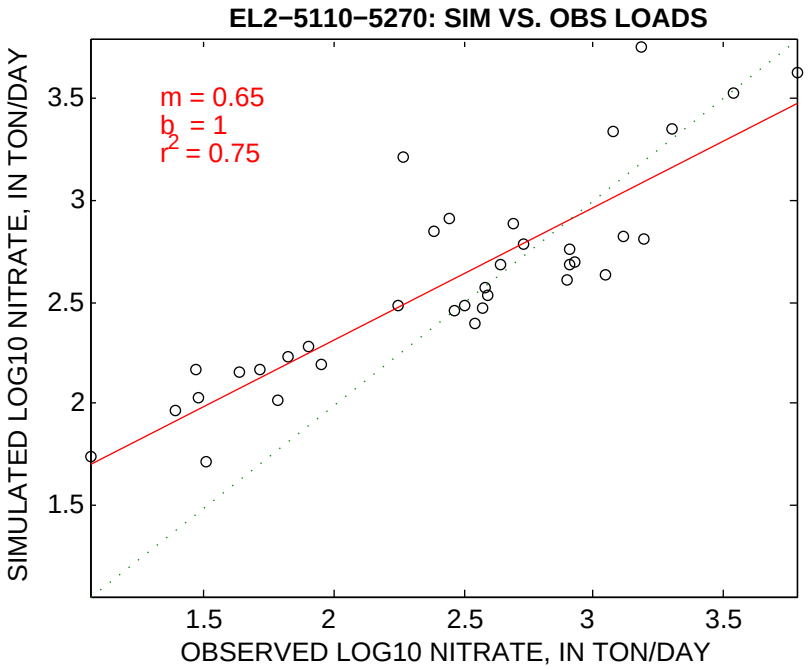


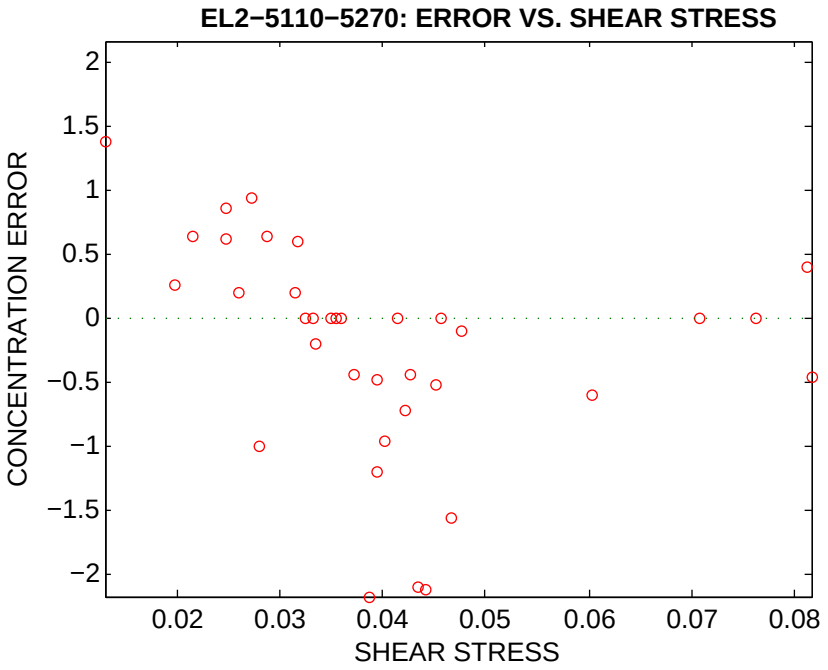


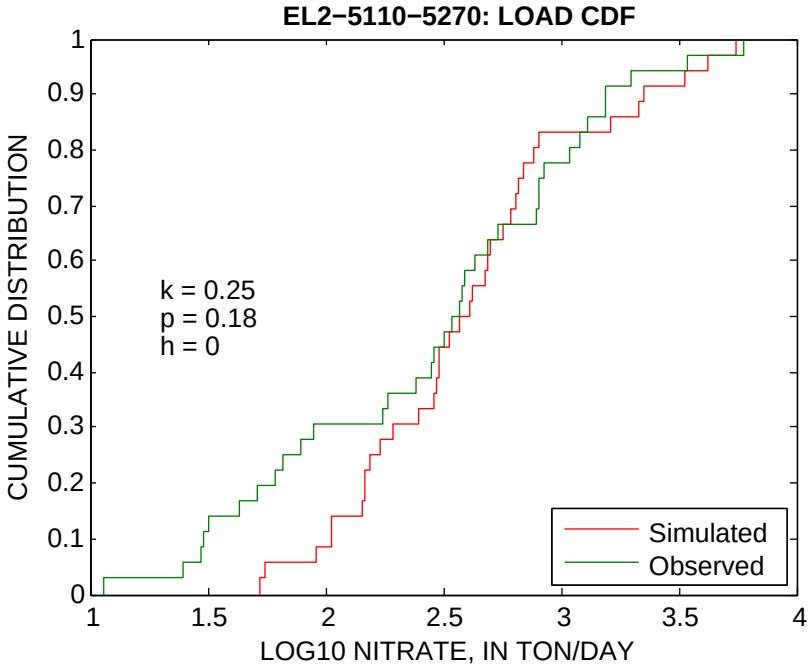


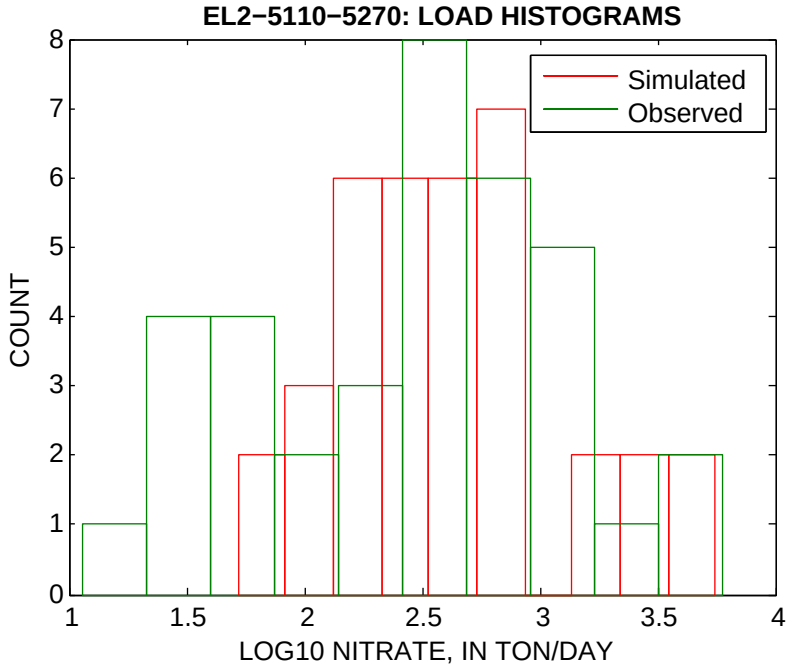


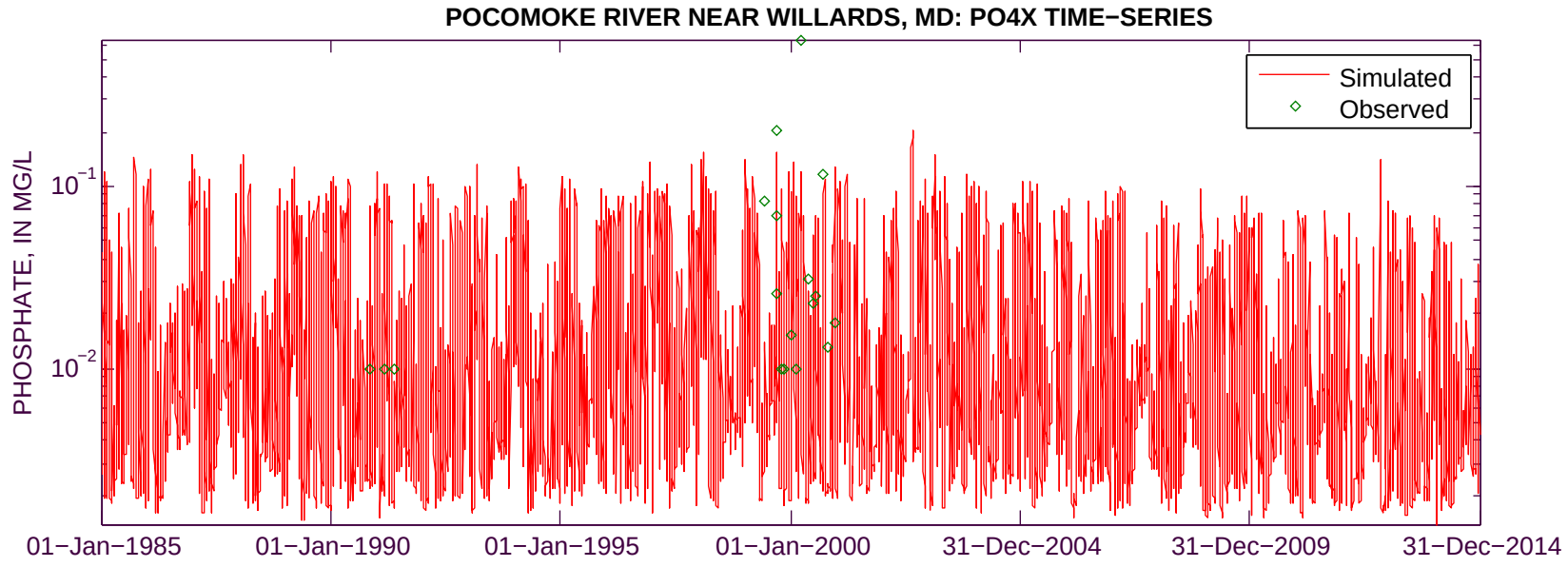
LOAD DATA
LOG10

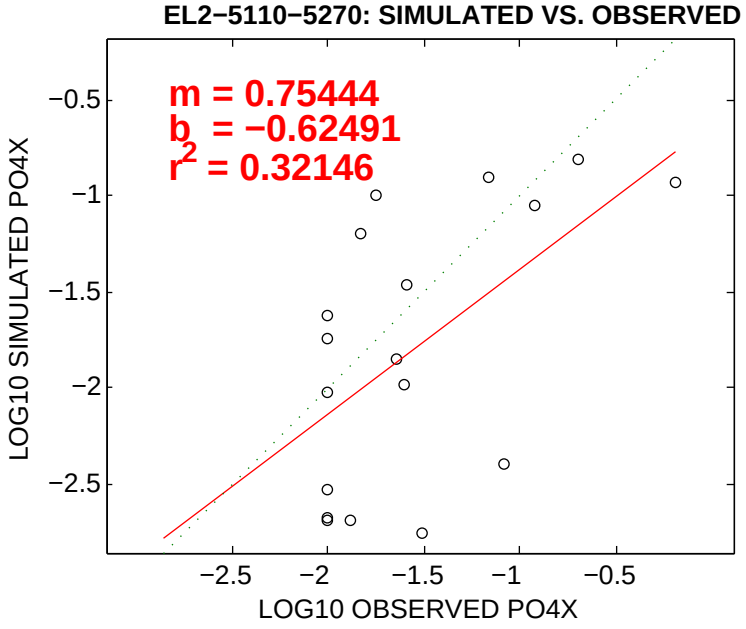


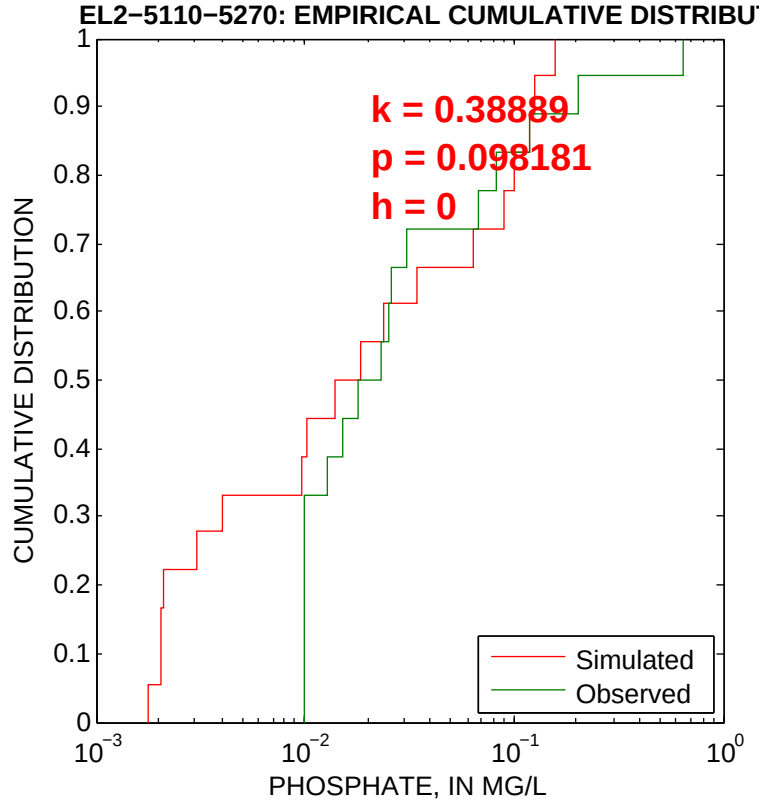












DATA SELECTION

scenario	file
P620171001WQ	PO4X.calib

plot: PO4X - phosphate

Dates: 1/1/1985 – 12/31/201

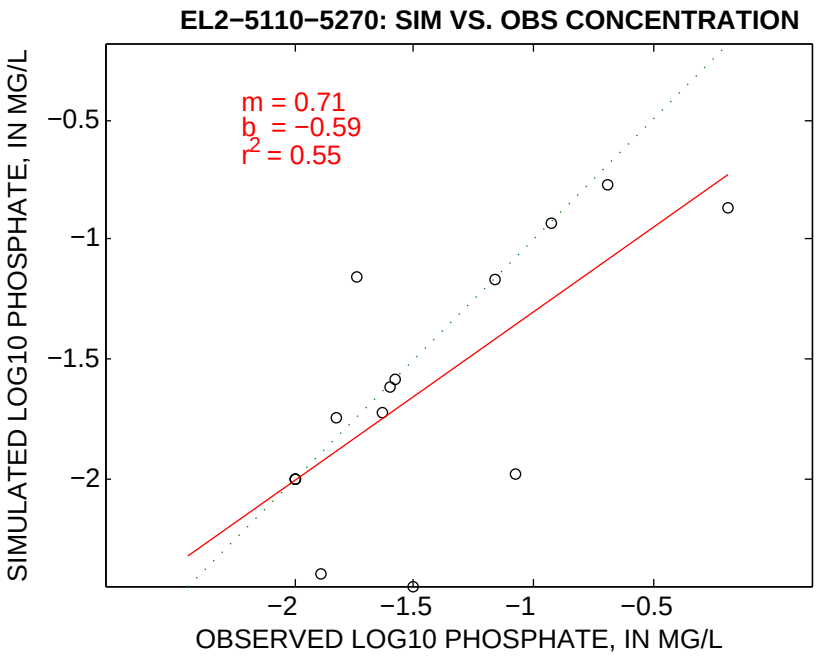
Drive	Directory	Observed
N/A	model	OBS20161101

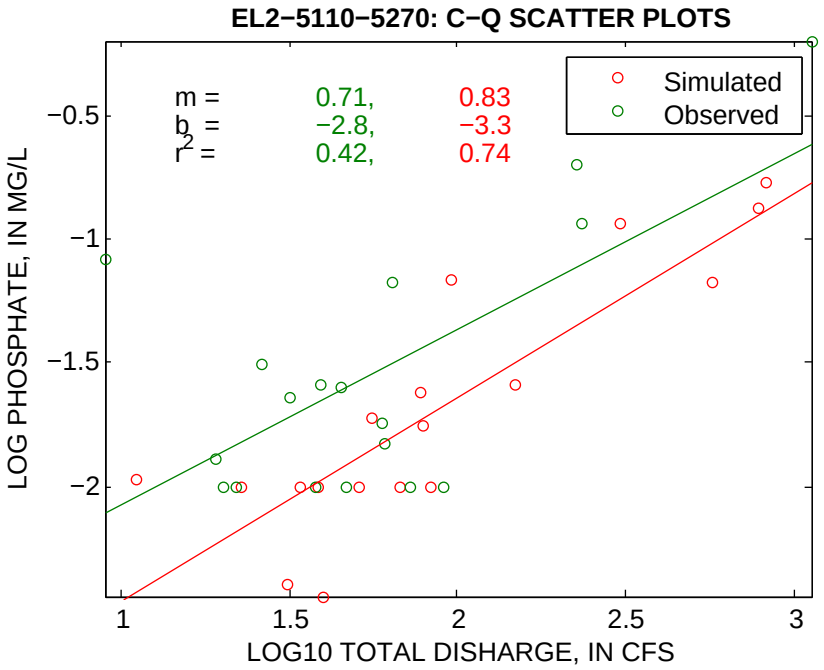
STATISTICS

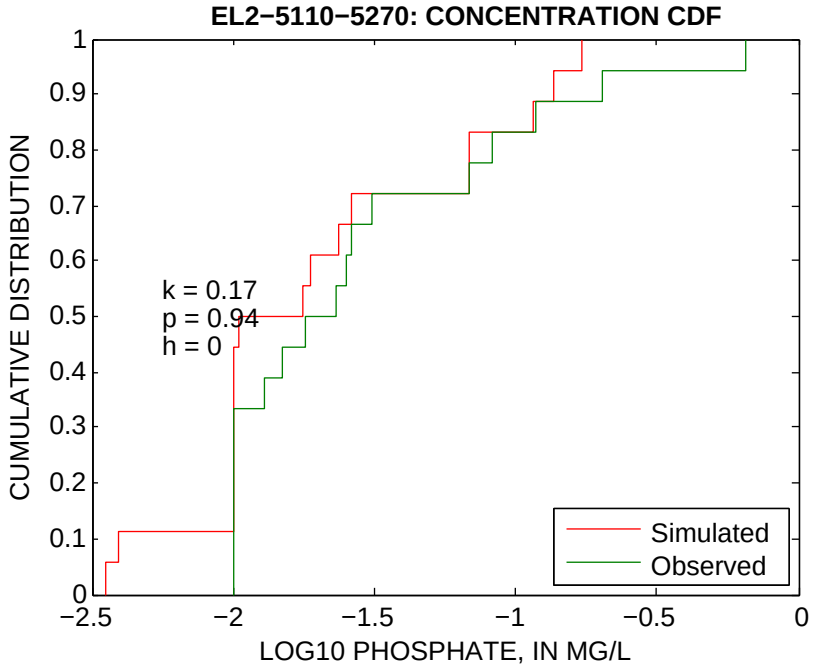
	n	18	18
		observe	simulate
min		0.01	0.0017781
		-2	-2.75004
mean		0.0738333	0.0433573
		-1.54725	-1.79221
media		0.0205	0.016231
		-1.6915	-1.79336
max		0.648	0.15597
		-0.188425	-0.806959
varian		0.0230427	0.00266045
		0.281712	0.498796
JB		0.001	0.064762
		0.038812	0.172443
		ra	log
%		-41.2767	15.832
err.va		0.0178556	0.418976
rel.std.err		0.774893	1.48725
mod.eff		0.225107	-0.487251

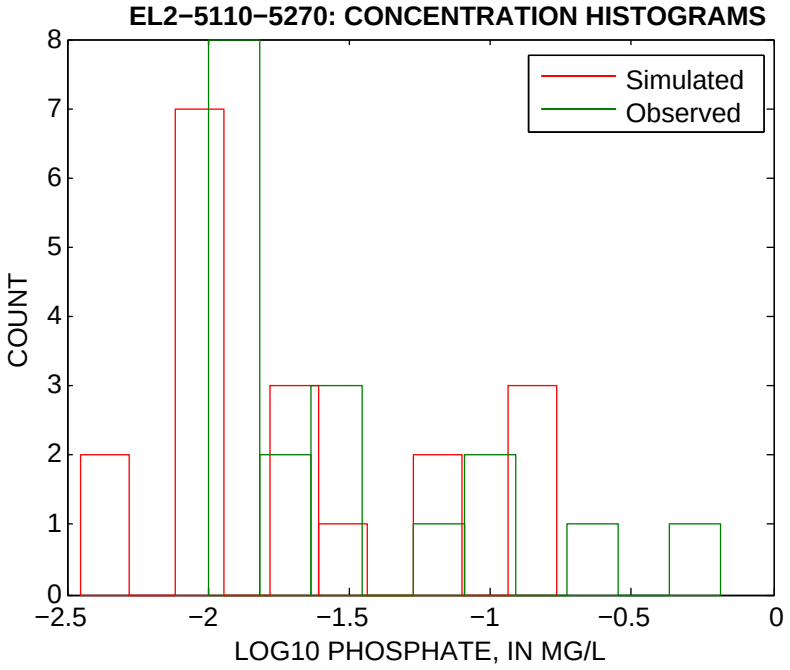
VERSION 2.1

ALL DATA
LOG10

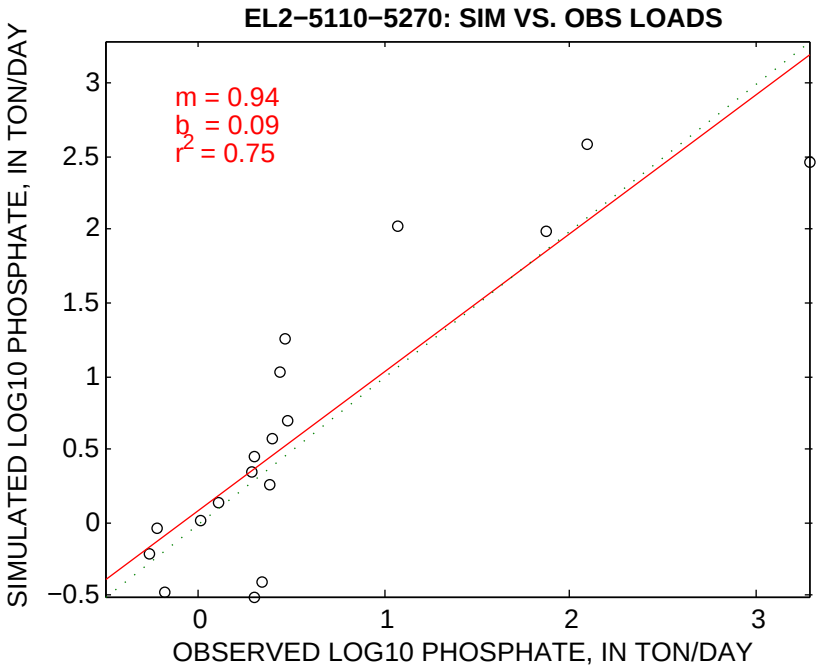


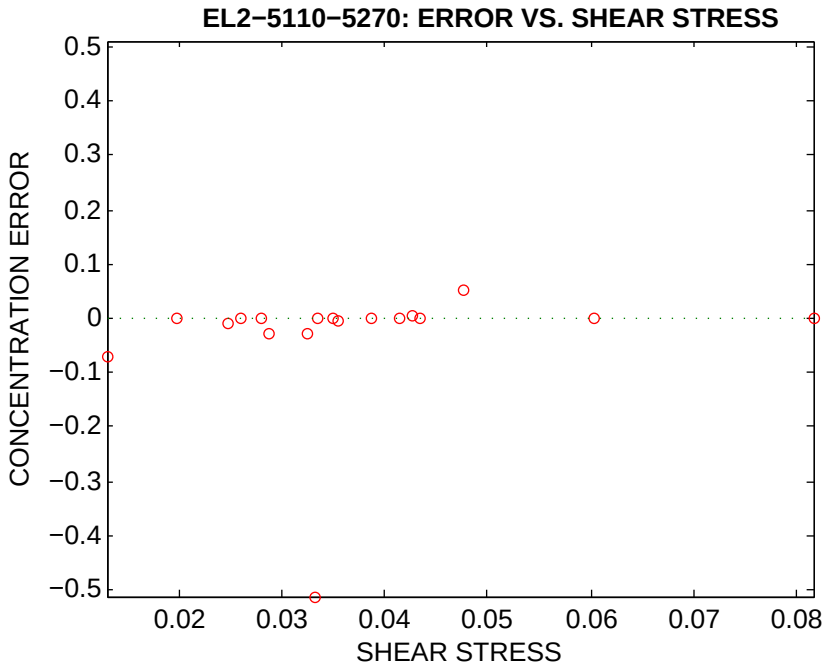


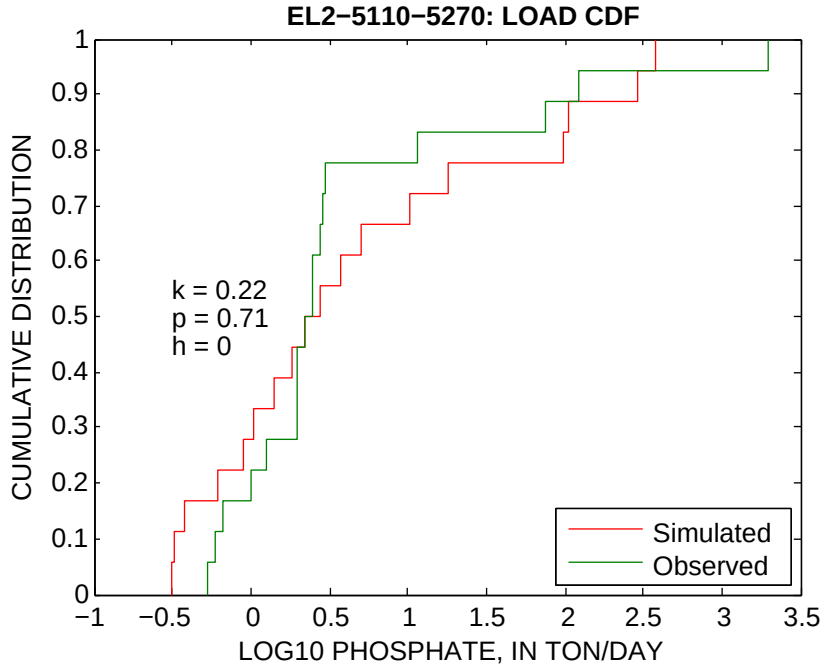


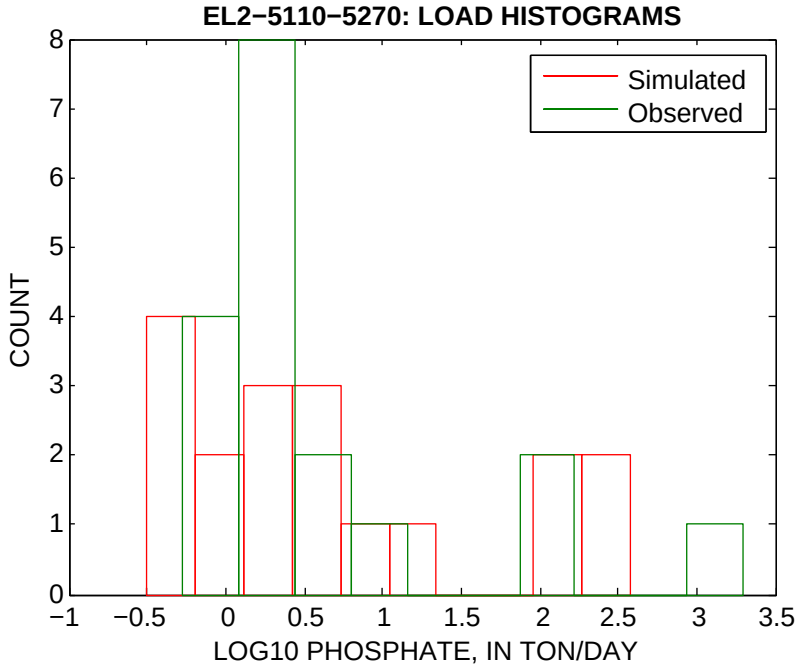


LOAD DATA
LOG10

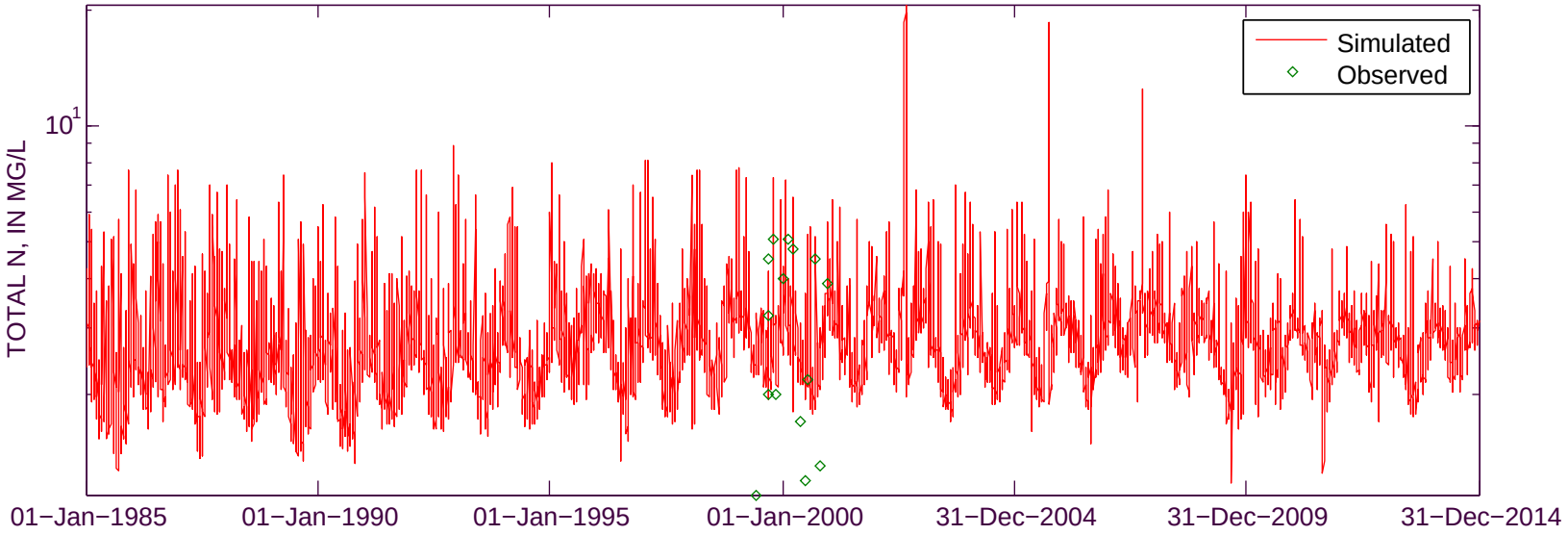




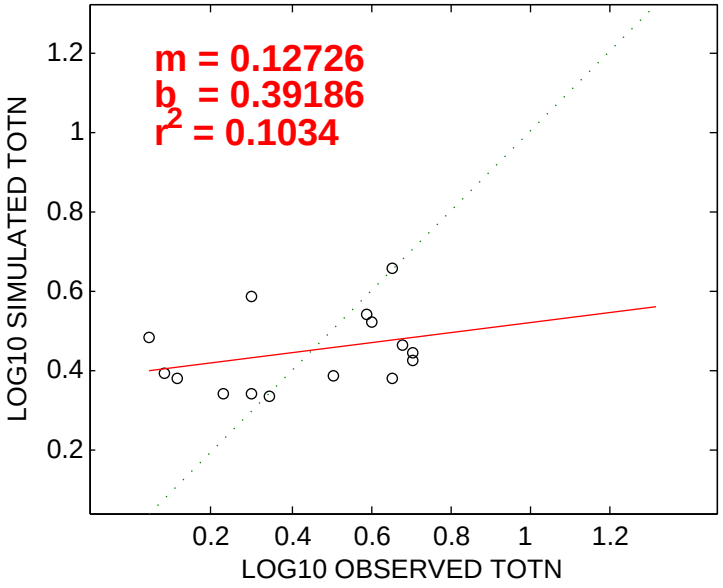




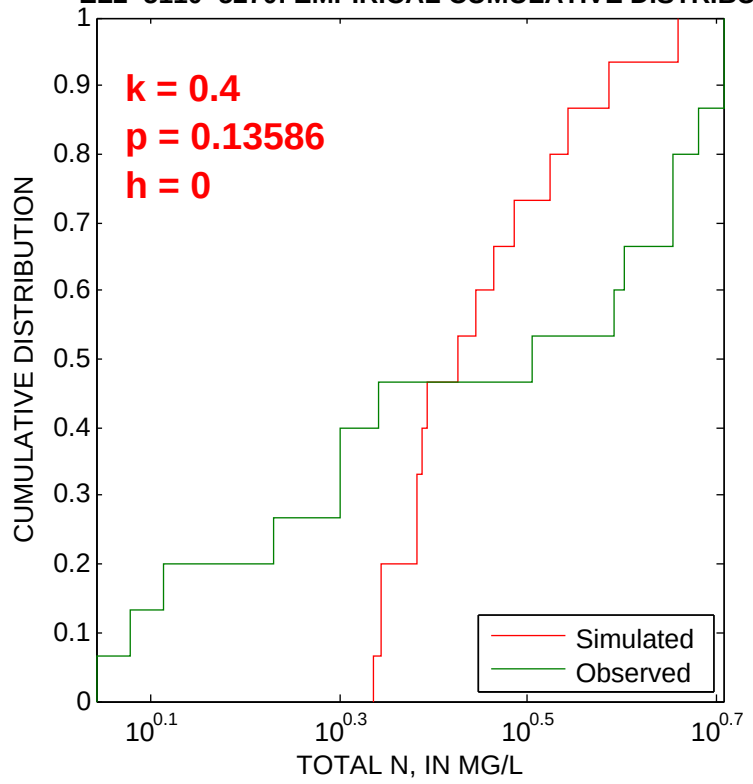
POCOMOKE RIVER NEAR WILLARDS, MD: TOTN TIME-SERIES



EL2-5110-5270: SIMULATED VS. OBSERVED



EL2-5110-5270: EMPIRICAL CUMULATIVE DISTRIBUTION



DATA SELECTION

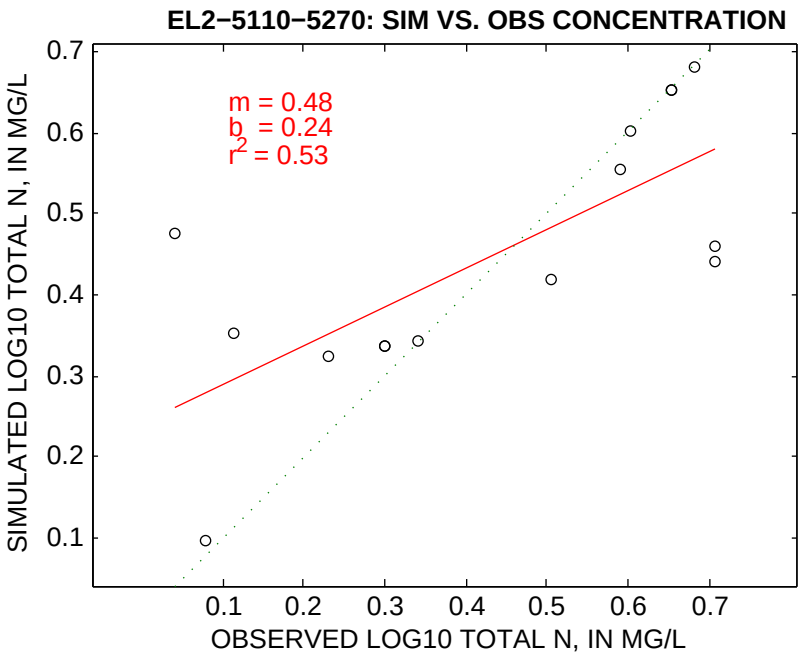
scenario: P620171001WQ
file: TOTN.calib
plot: TOTN - total nitrogen
Dates: 1/1/1985 – 12/31/201
Drive: N/A
Directory: model
Observed: OBS20161101

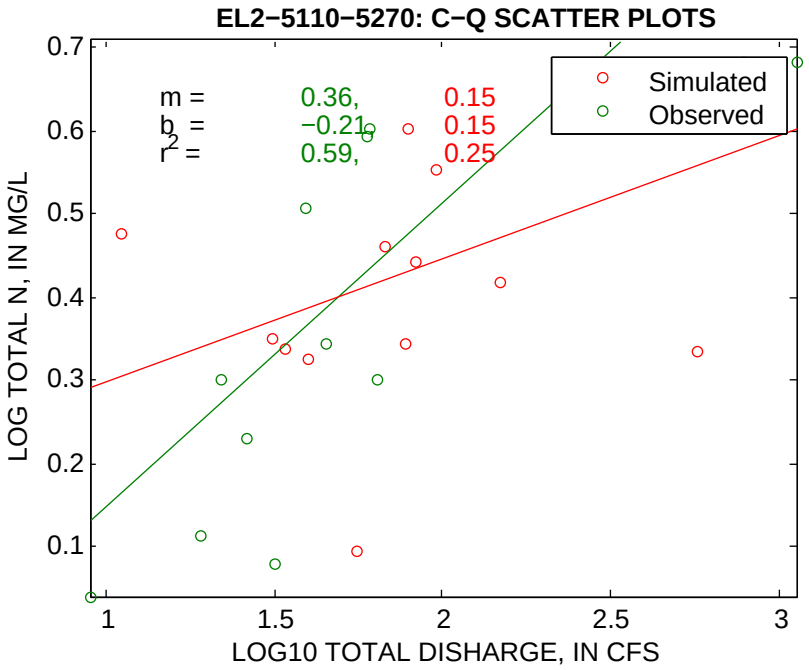
STATISTICS

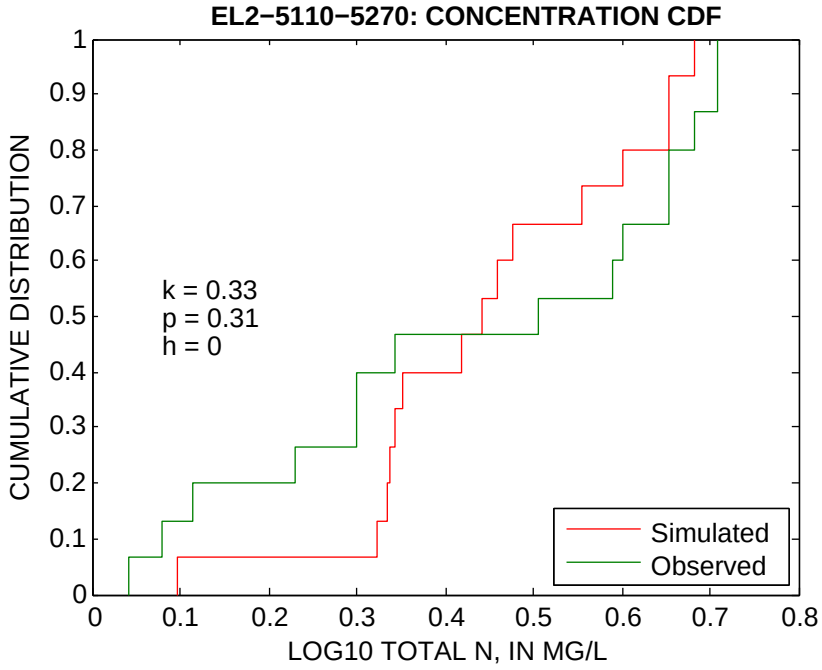
	n	15	15
		observe	simulate
min		1.1	2.1712
		0.0413927	0.3367
mean		3.10667	2.86832
		0.434035	0.447093
media		3.2	2.6657
		0.50515	0.425811
max		5.1	4.5665
		0.70757	0.659583
varian		2.30781	0.477479
		0.0594677	0.00931517
JB		0.142758	0.051863
		0.164004	0.160749
		ra	log
%		-7.6721	3.00852
err.va		2.19723	0.0538293
rel.std.err		0.952086	0.905186
mod.eff		0.0479137	0.0948142

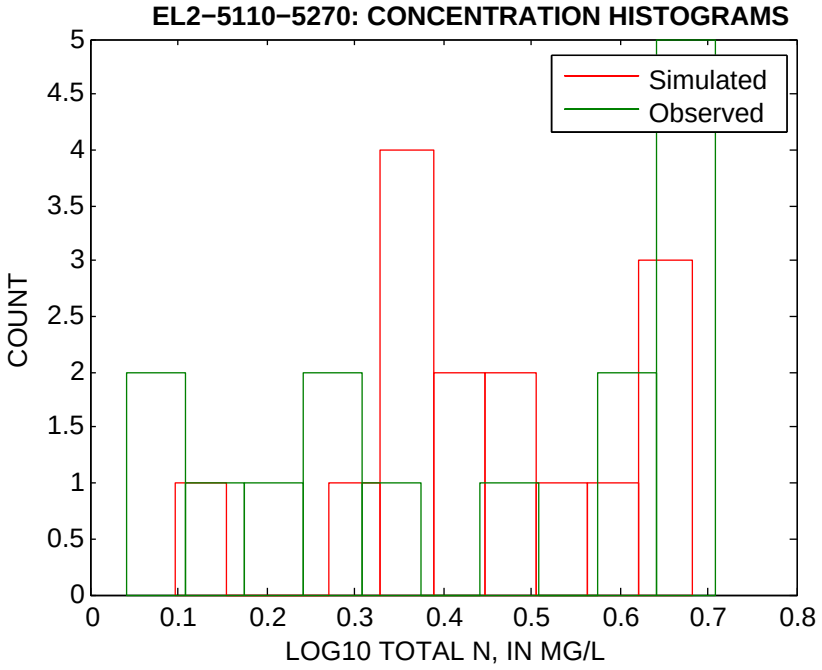
VERSION 2.1

ALL DATA
LOG10

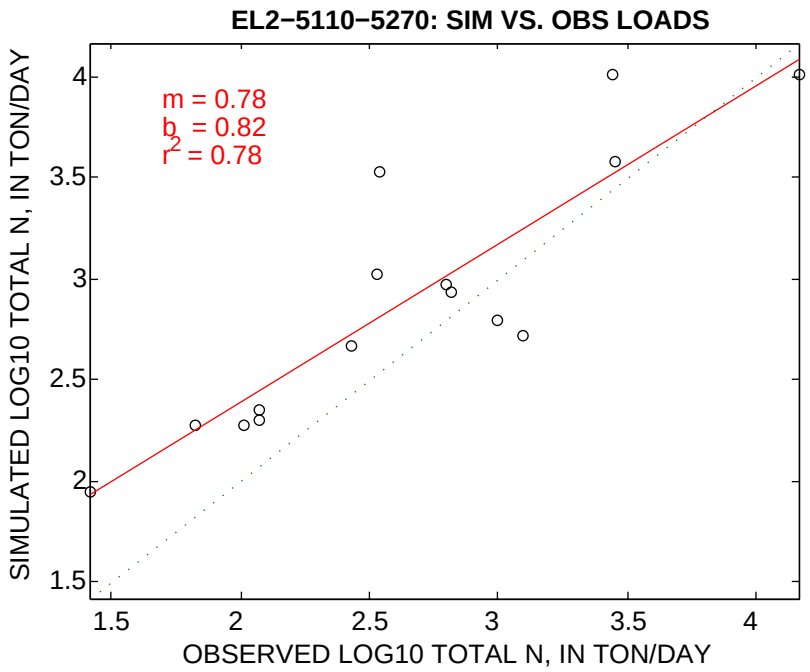


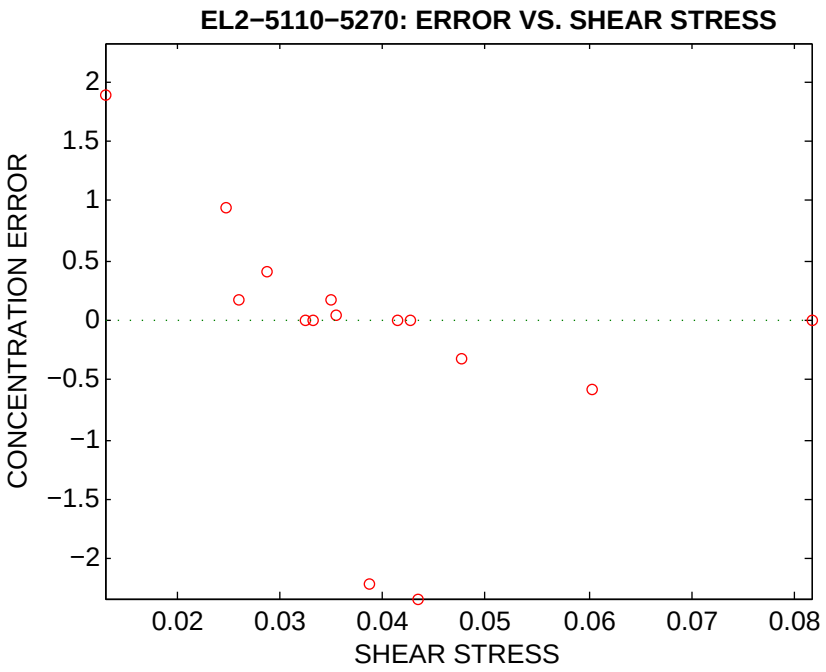


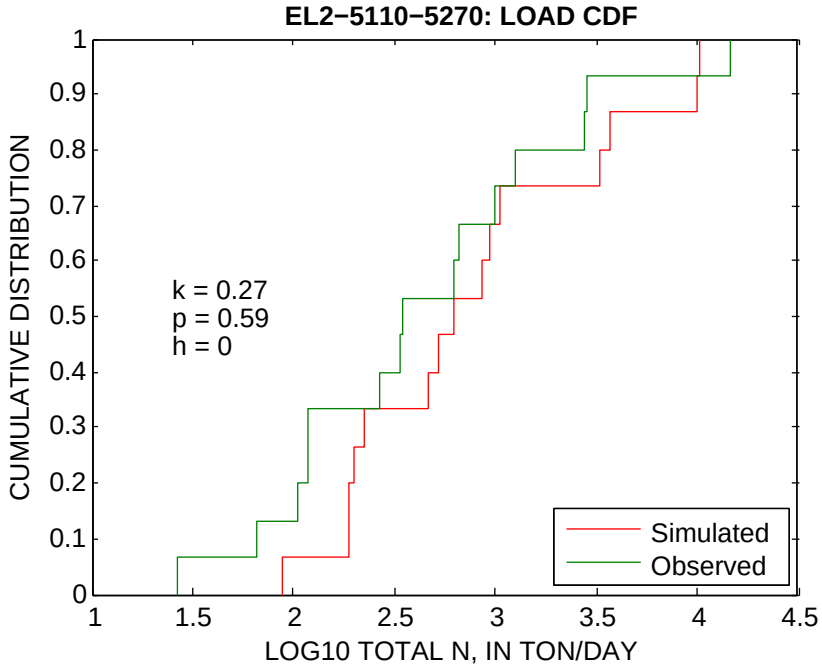


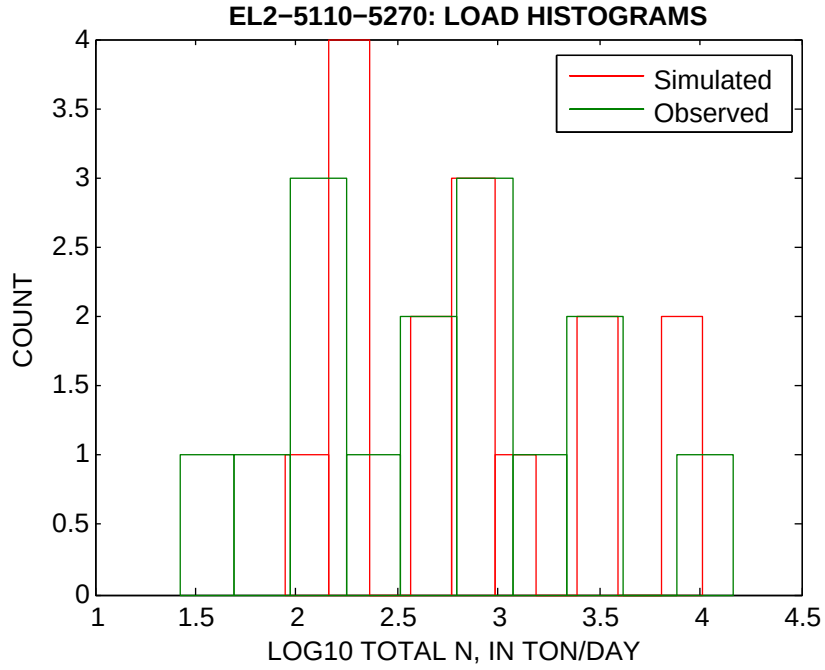


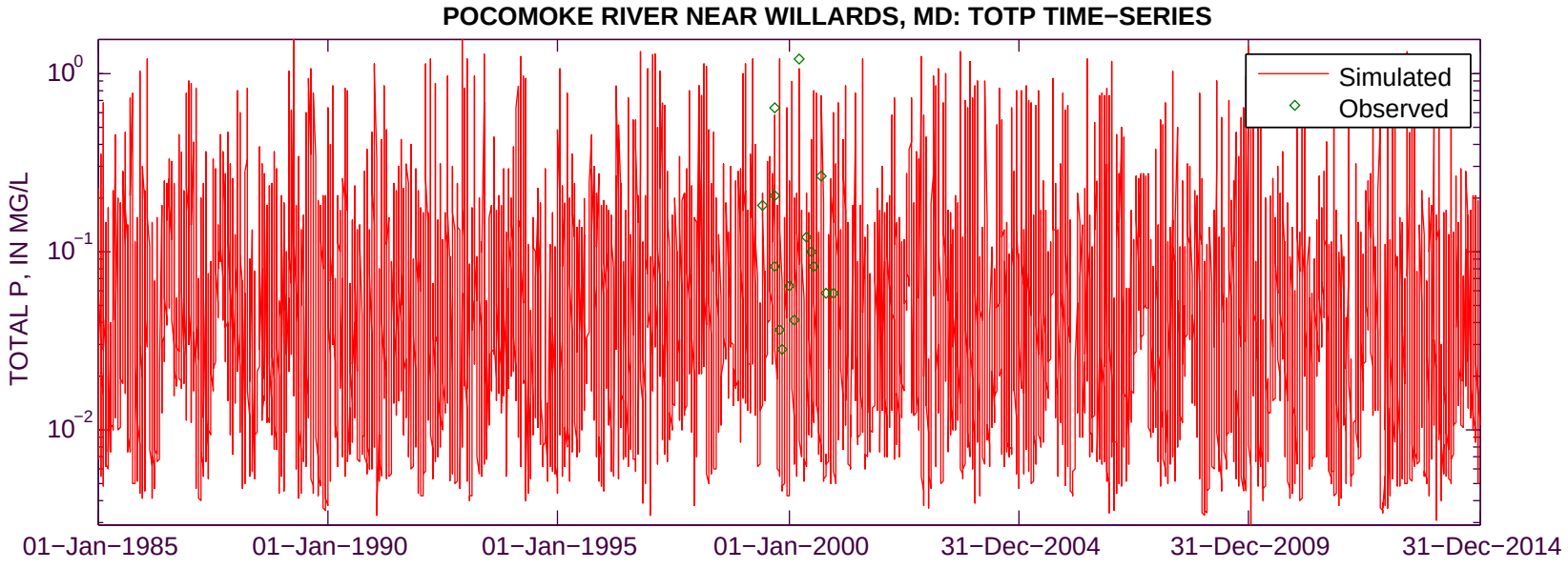
LOAD DATA
LOG10

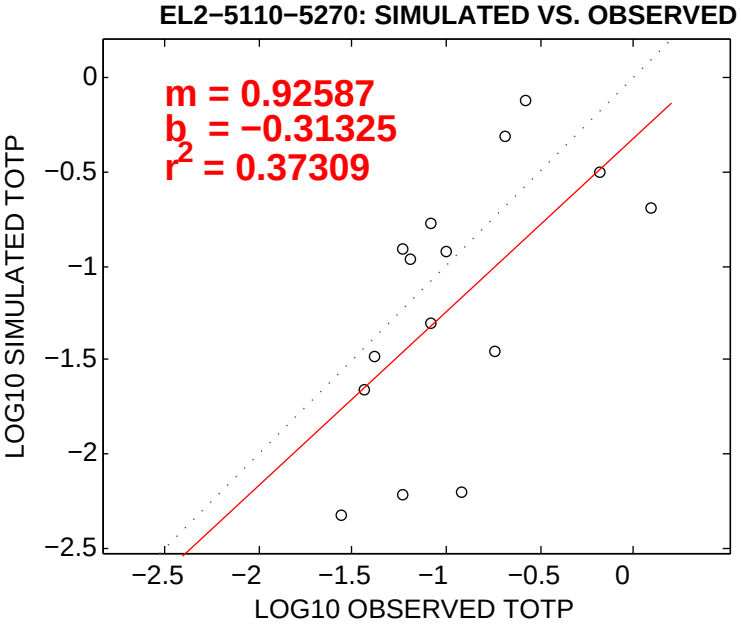


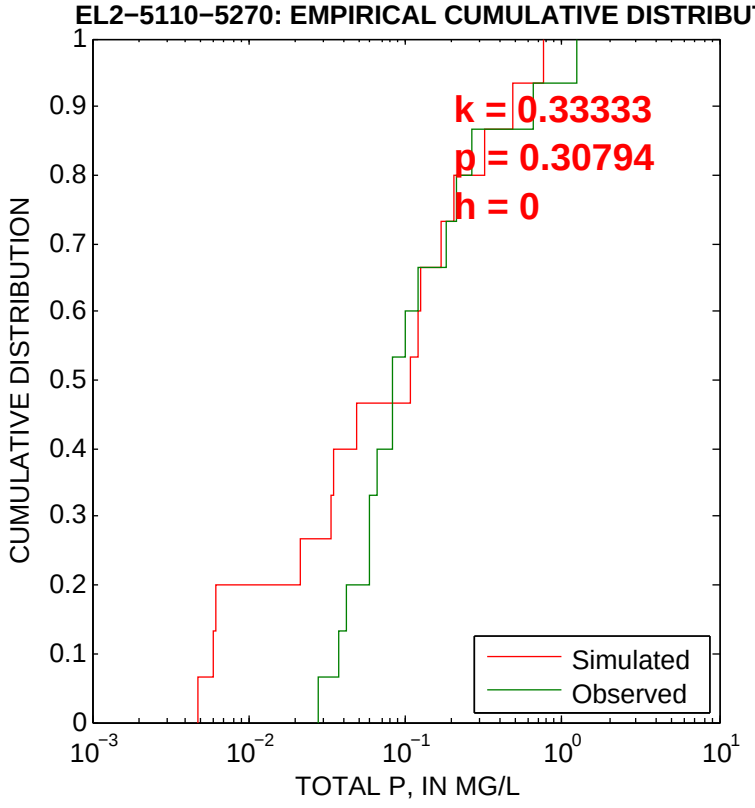












DATA SELECTION

scenario	file
P620171001WQ	TOTP.calib

plot: TOTP - total phosphorus

Dates: 1/1/1985 – 12/31/201

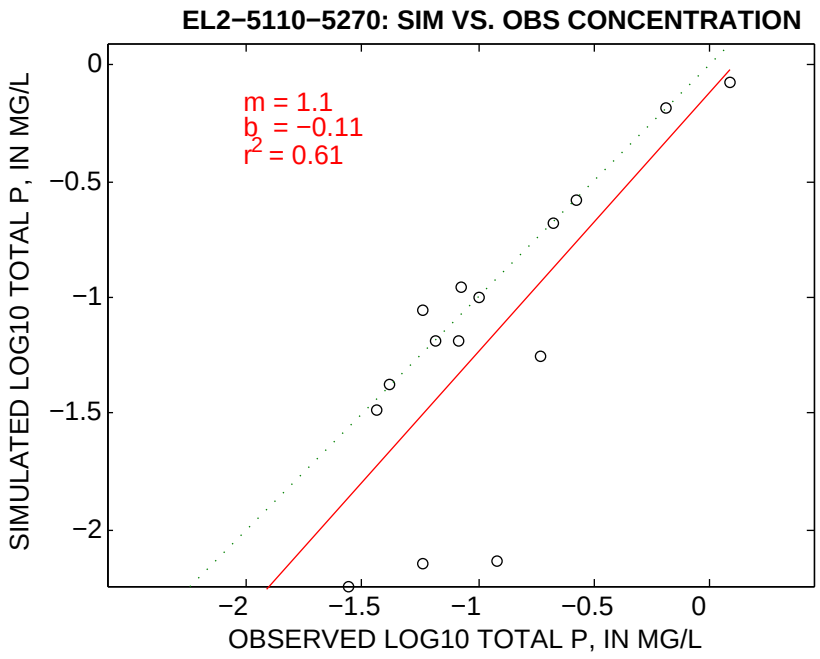
Drive	Directory	Observed
N/A	model	OBS20161101

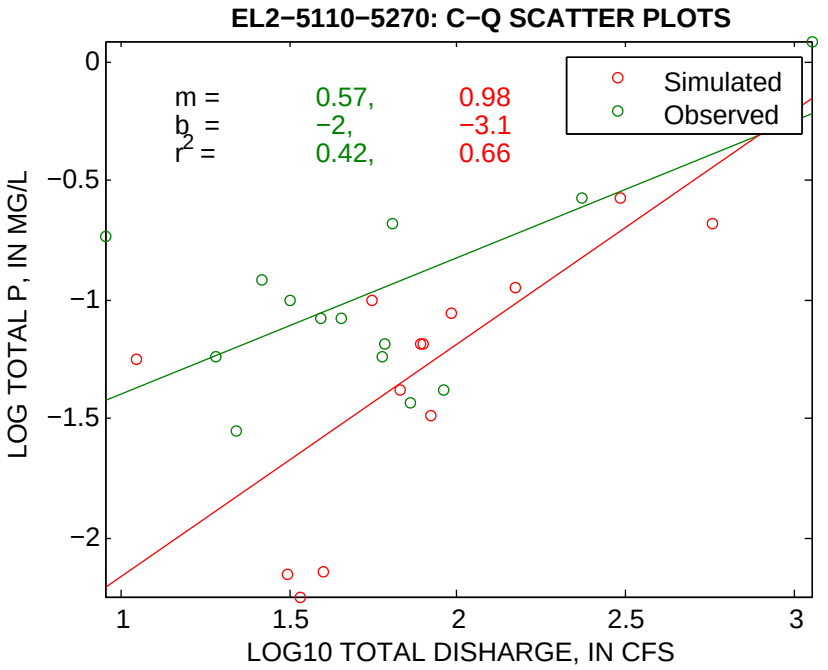
STATISTICS

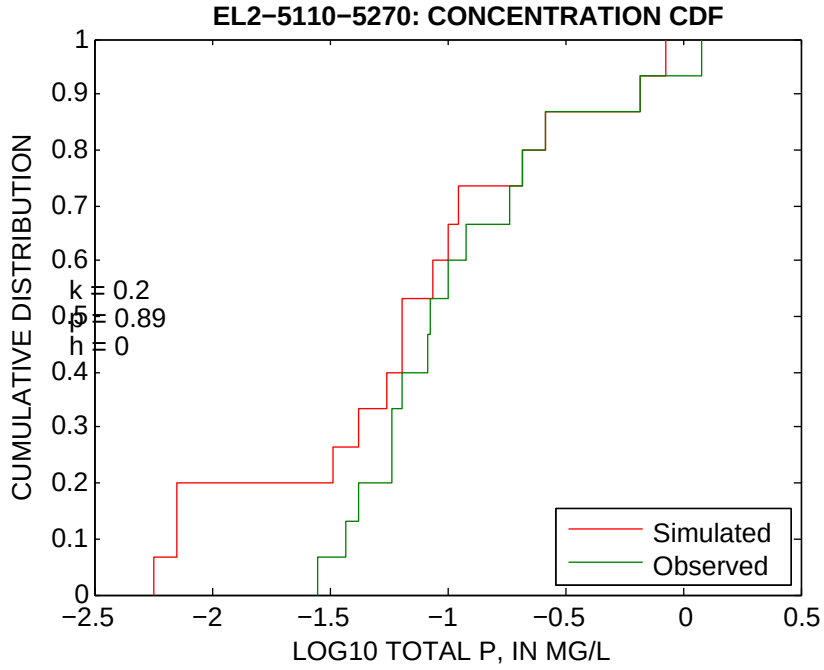
	n	15	15
		observe	simulate
min		0.028	0.0047771
		-1.55284	-2.32084
mean		0.2138	0.163008
		-0.945929	-1.18906
media		0.084	0.10979
		-1.07572	-0.959437
max		1.22	0.75595
		0.0863598	-0.121507
varian		0.102245	0.0451661
		0.210911	0.484606
JB		0.001	0.005498
		0.114263	0.479816
		ra	log
%		-23.7568	25.703
err.va		0.109103	0.368299
rel.std.err		1.06707	1.74623
mod.eff		-0.0670742	-0.746226

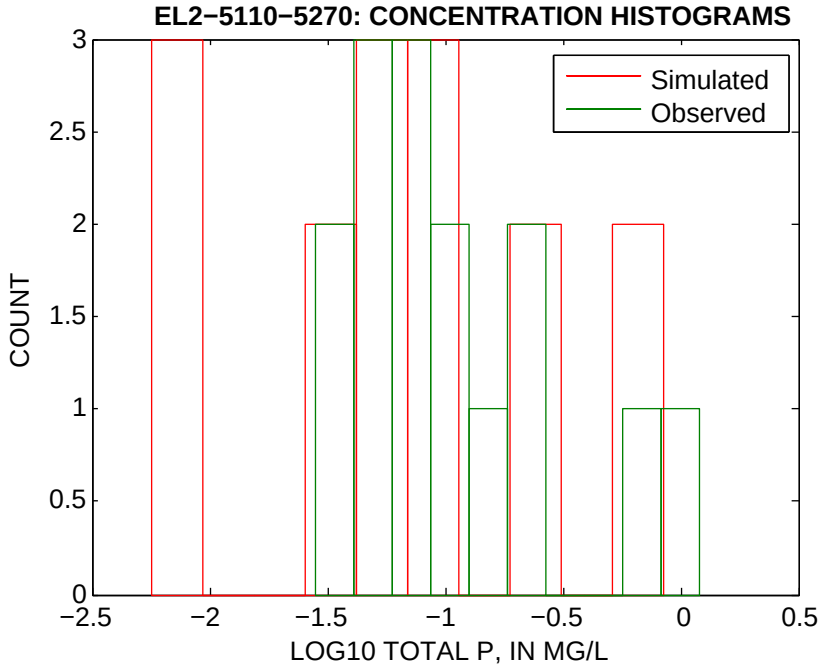
VERSION 2.1

ALL DATA
LOG10

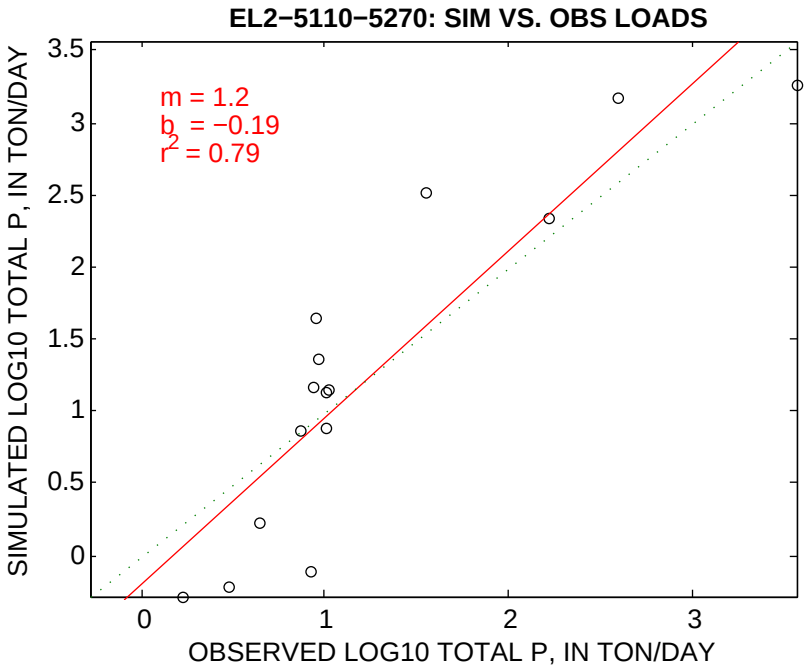


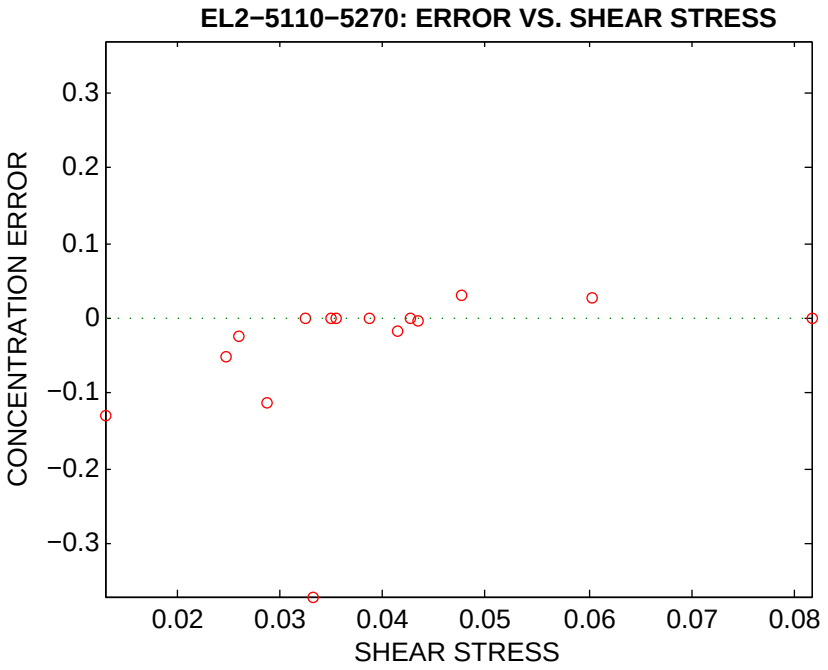


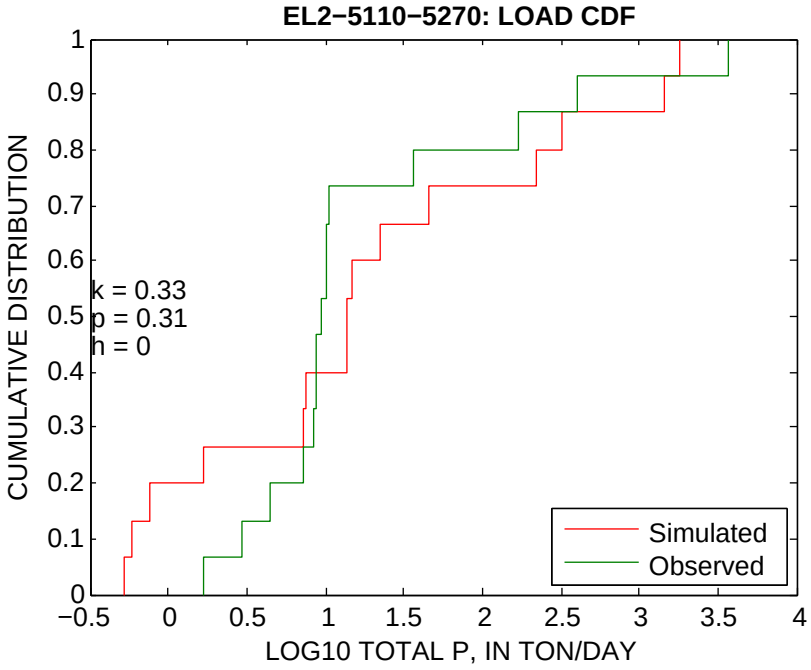


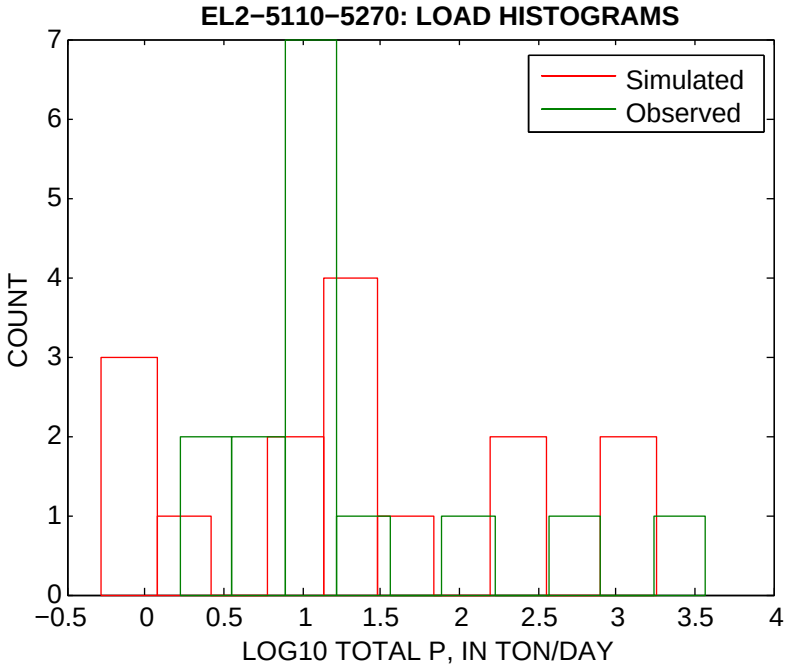


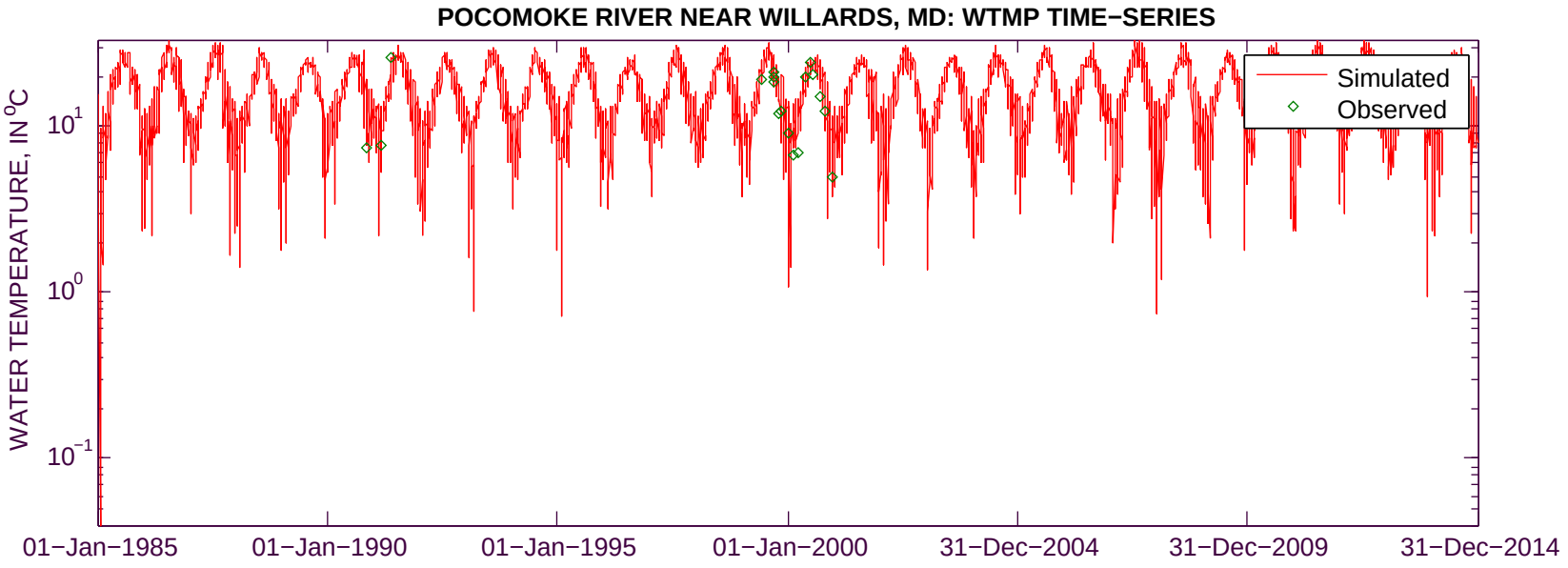
LOAD DATA
LOG10

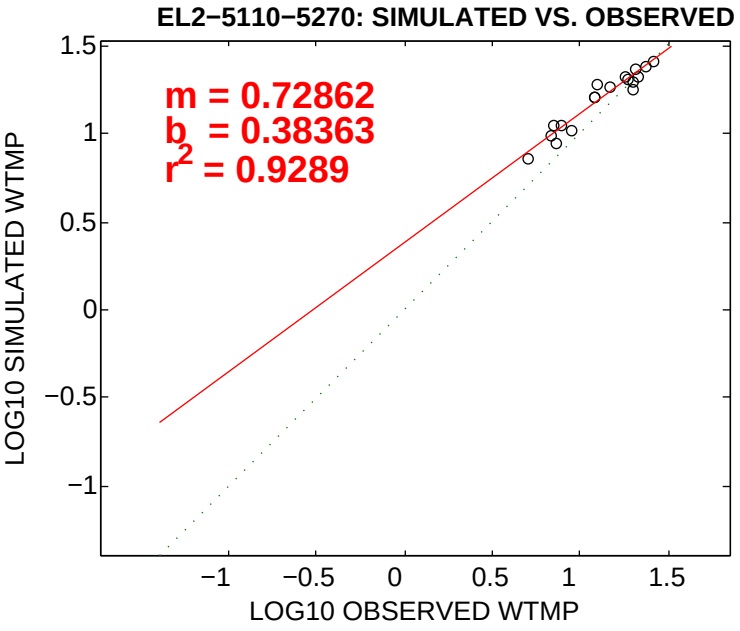


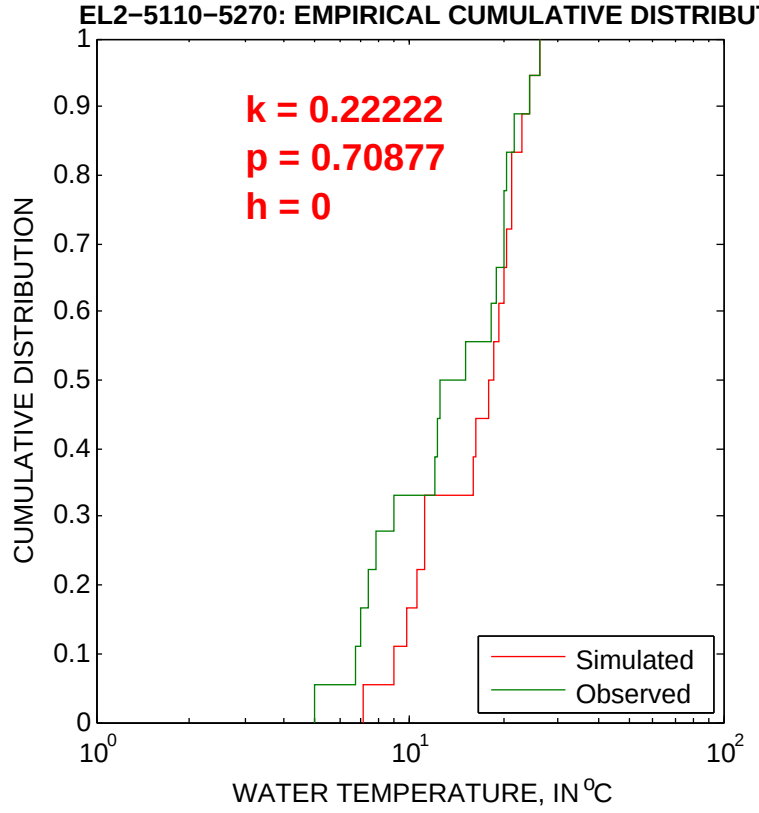












DATA SELECTION

scenario	file
P620171001WQ	WTMP.calib

plot: WTMP - water tempera...

Dates 1/1/1985 12/31/201

Drive Directory Observed

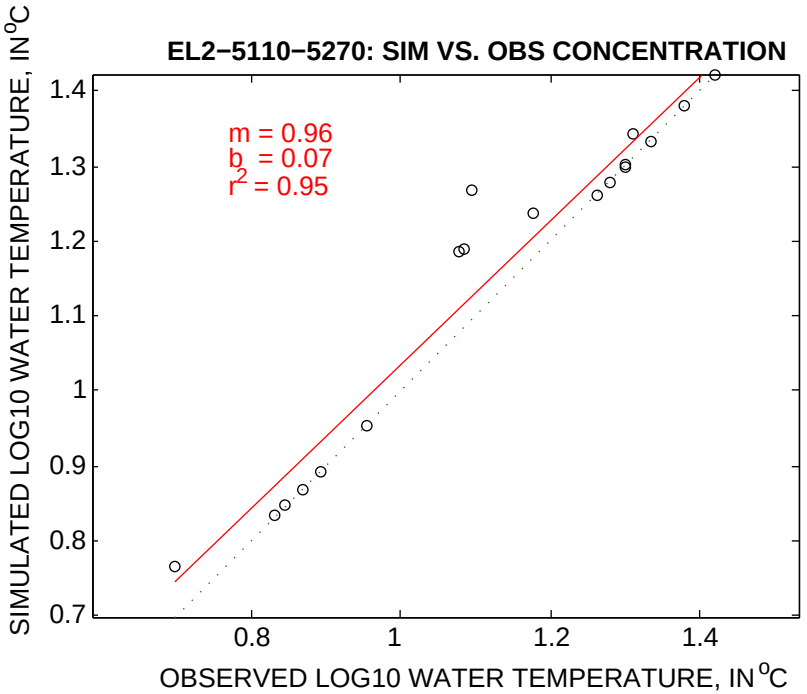
N/A model OBS20161101

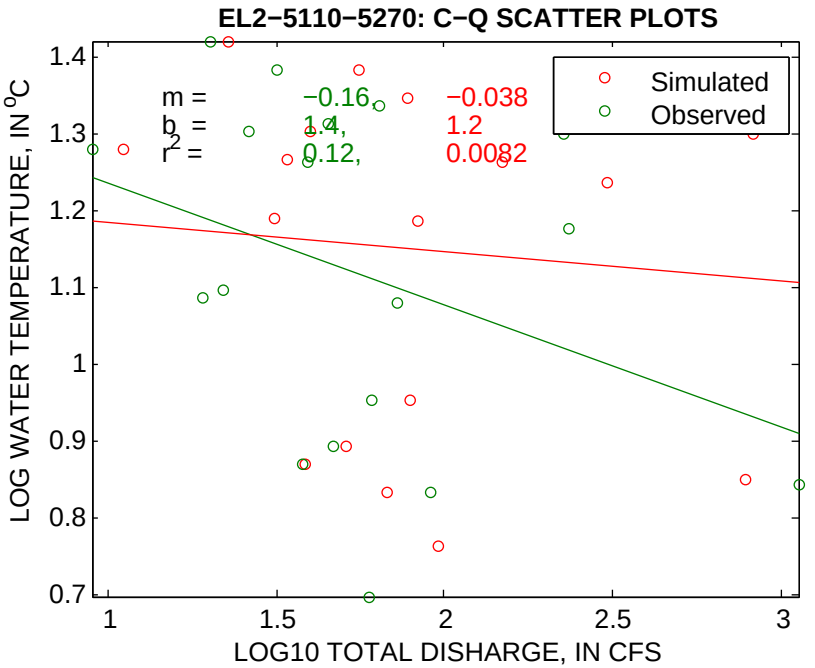
STATISTICS

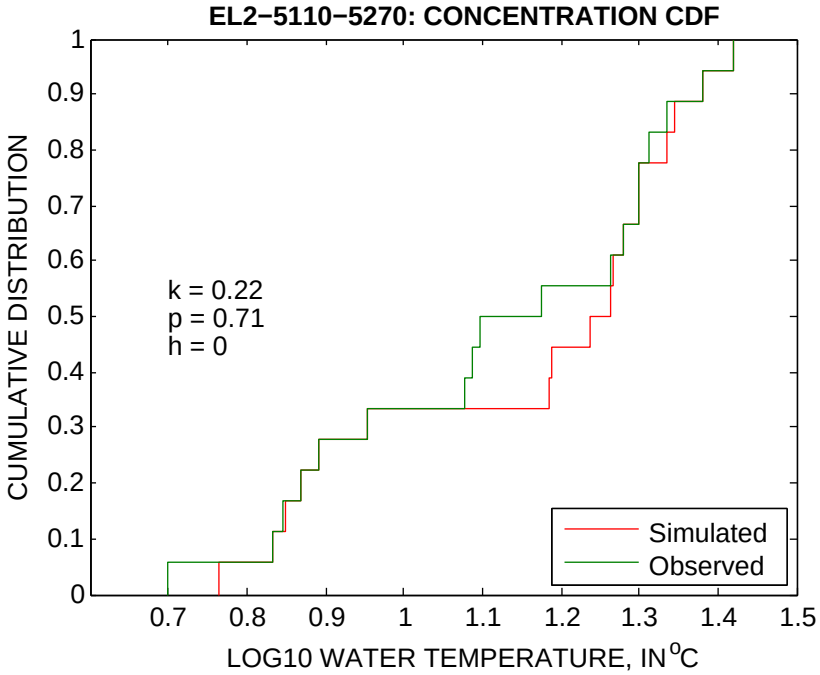
	n	18	18
		observe	simulate
min		5	7.1236
		0.69897	0.8527
mean		14.6833	16.8233
		1.11768	1.19799
media		13.75	18.2315
		1.1365	1.2608
max		26.3	25.927
		1.41996	1.41375
varian		44.5015	32.6774
		0.0491099	0.0280671
JB		0.250158	0.301054
		0.209251	0.148389
		ra	log
%		14.5739	7.18573
err.va		9.28471	0.0124421
rel.std.err		0.208638	0.253353
mod.eff		0.791362	0.746647

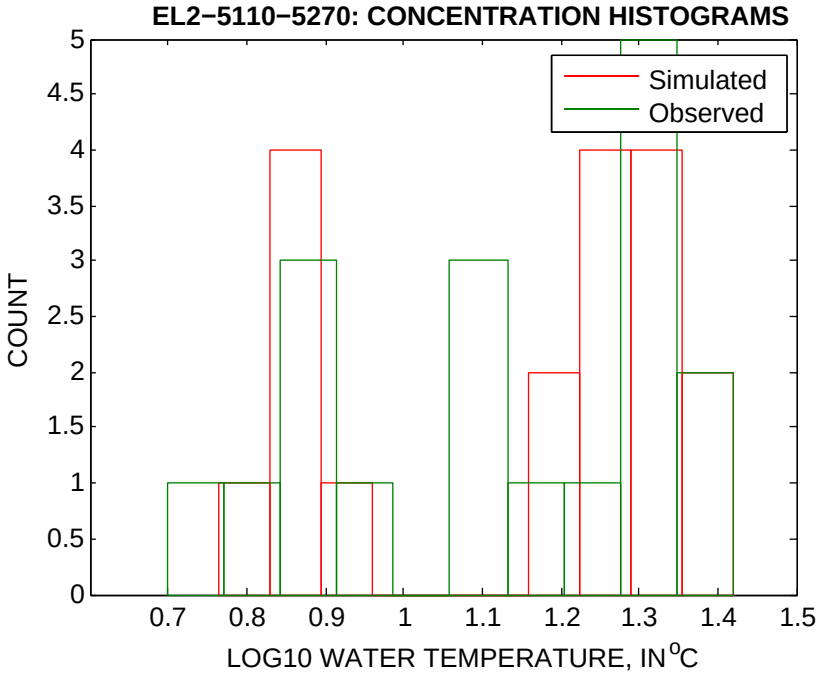
VERSION 2.1

ALL DATA
LOG10

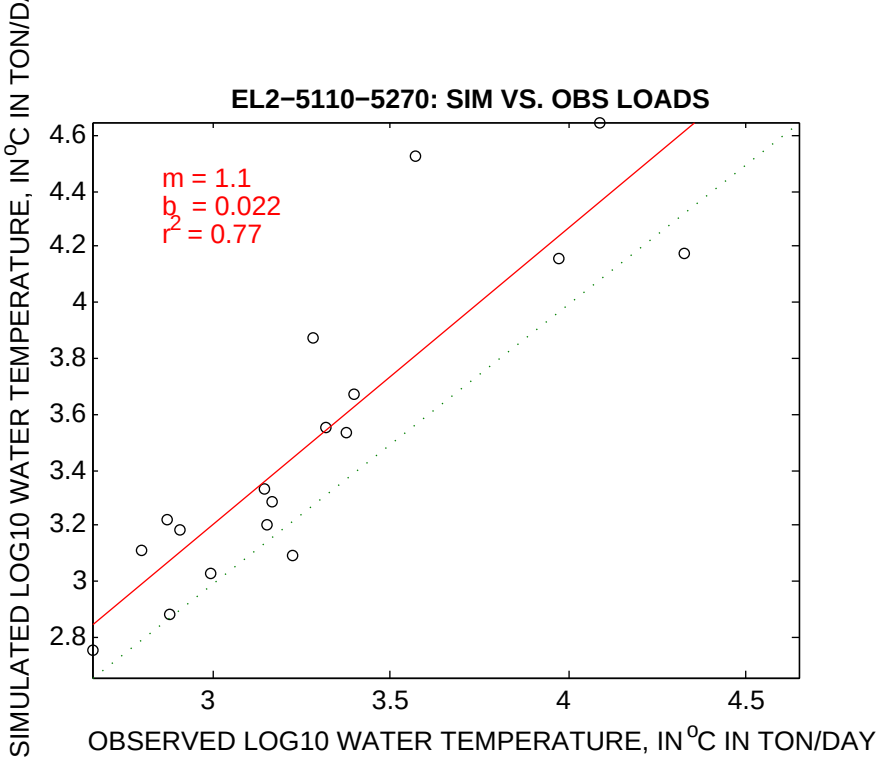


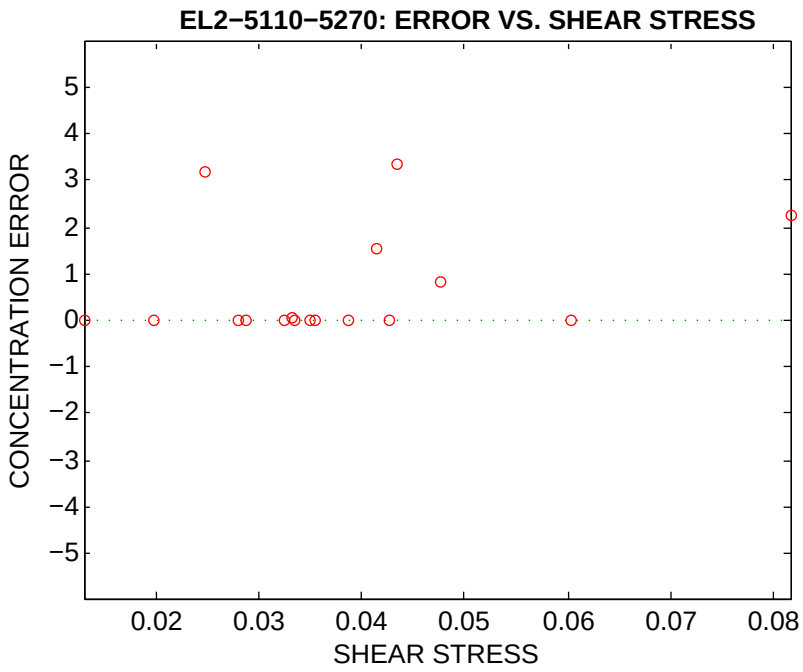


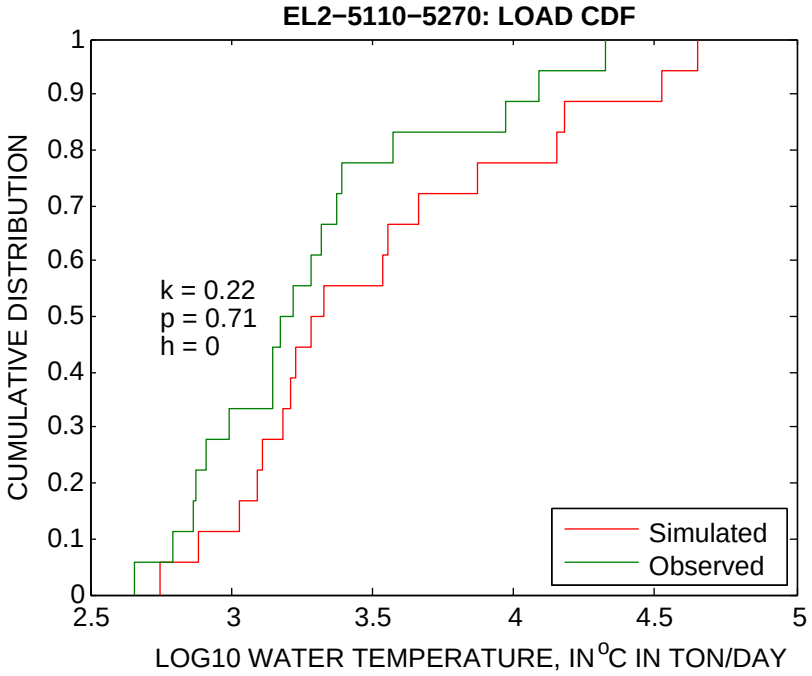


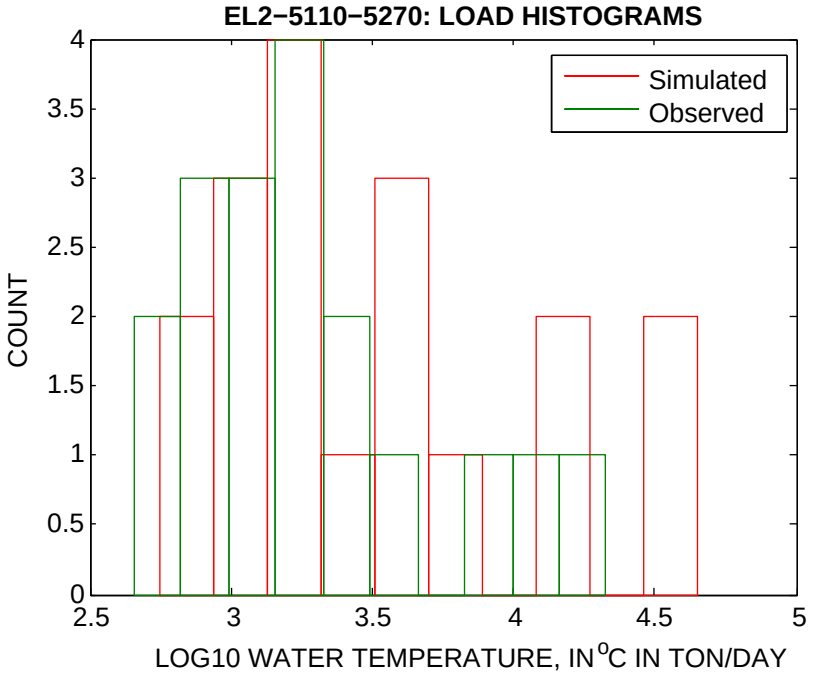


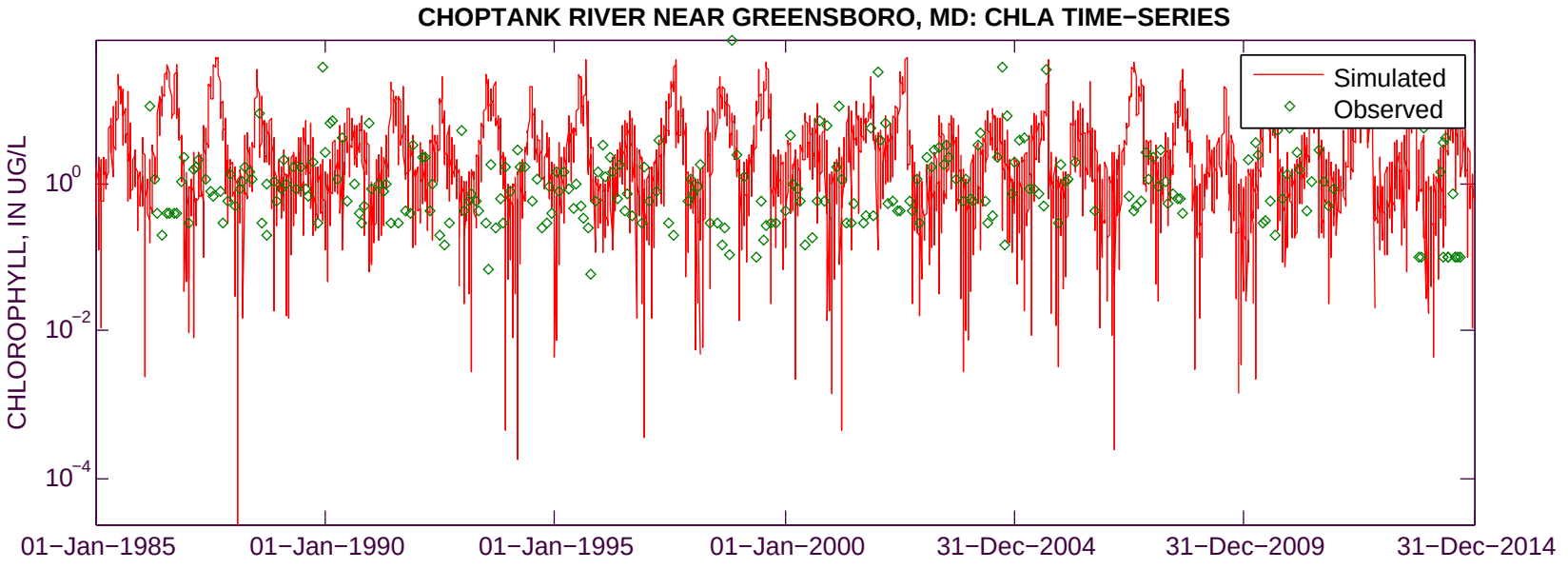
LOAD DATA
LOG10

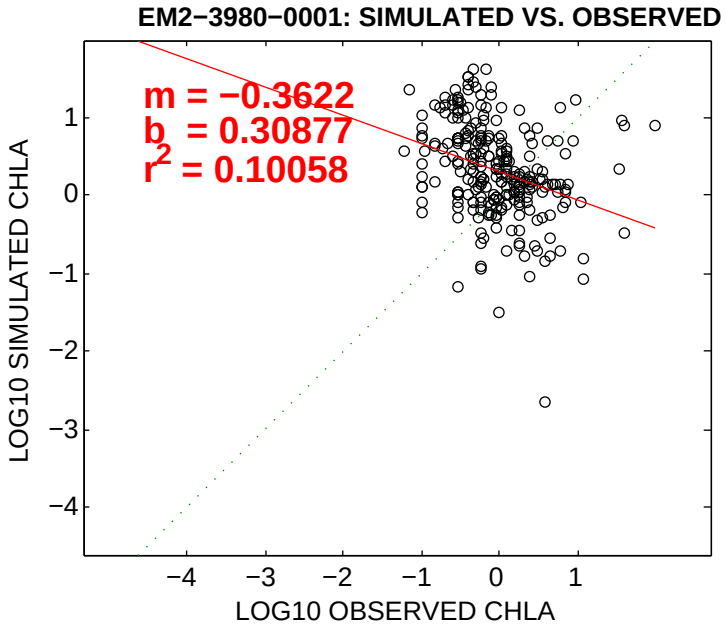


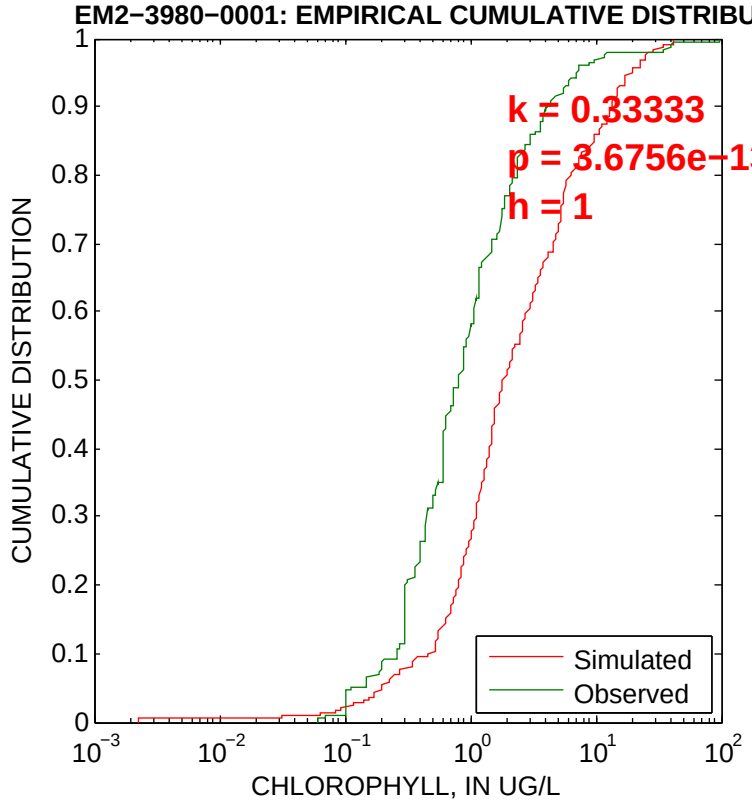












DATA SELECTION

scenario	file
P620171001WQ	CHLA.calib

plot: CHLA - chlorophyll A

Dates	1/1/1985	12/31/201

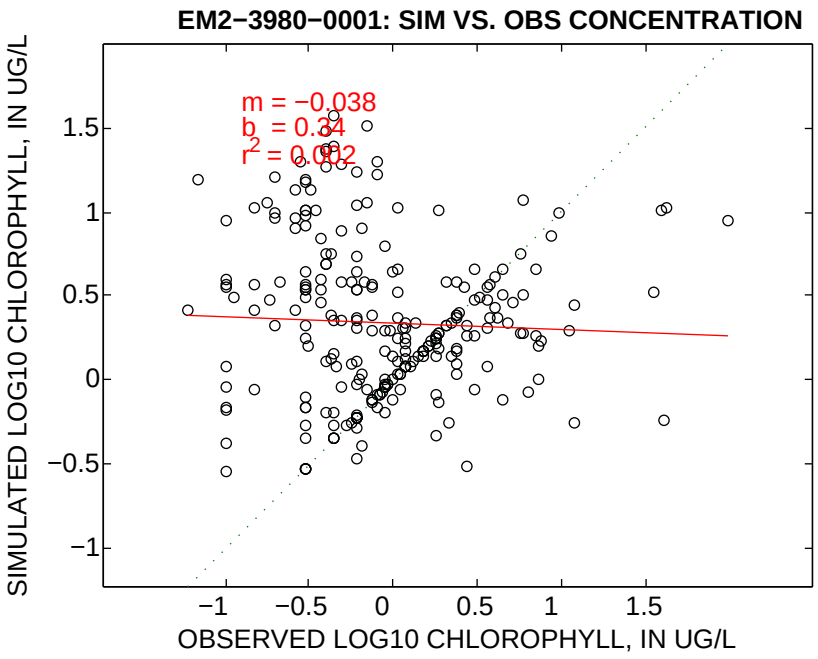
Drive	Directory	Observed
N/A	model	OBS20161101

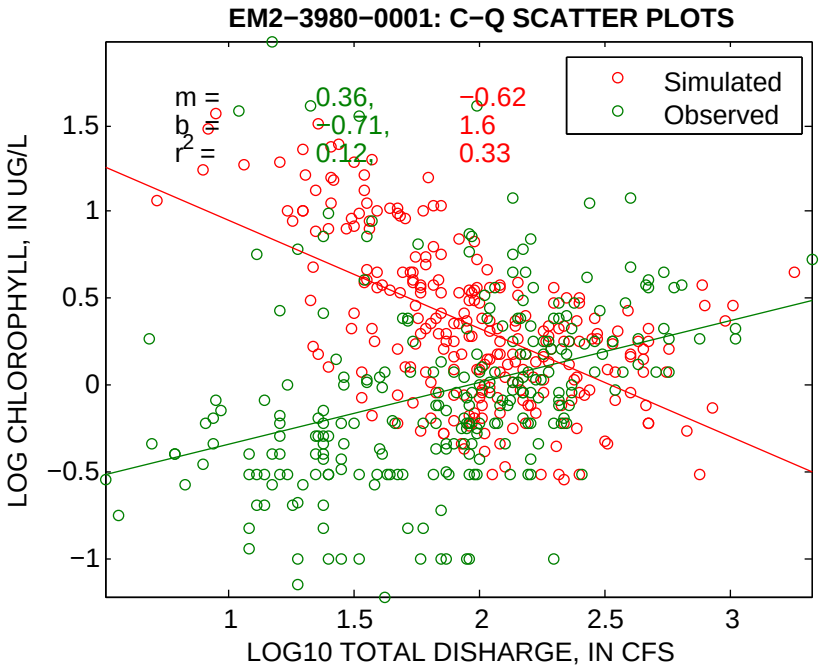
STATISTICS

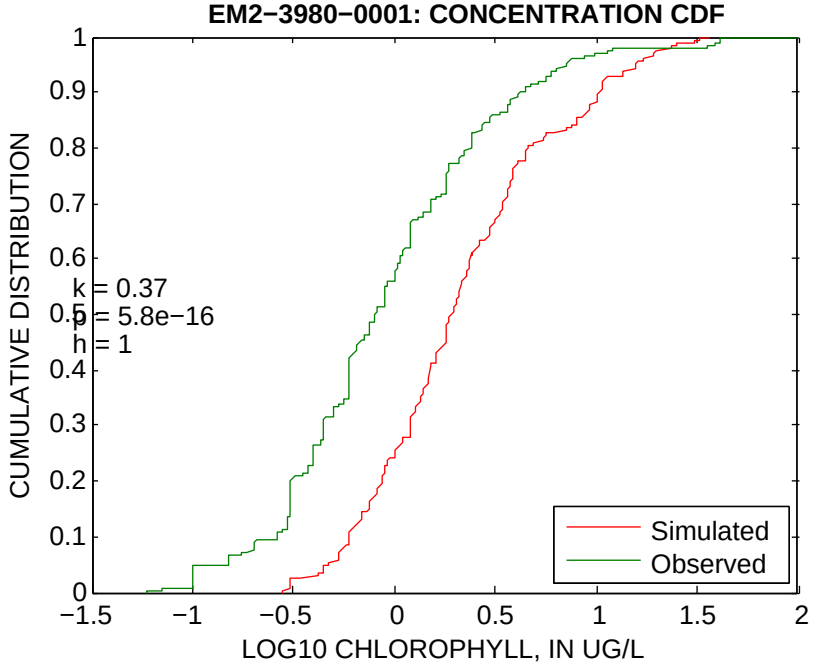
	n	258	258
		observe	simulate
min		0.06	0.0022369
		-1.22185	-2.65035
mean		2.48169	4.77748
		-0.0416652	0.323865
media		0.808	1.86035
		-0.0926099	0.269557
max		97.655	42.3
		1.98969	1.62634
varian		61.0015	47.5239
		0.27769	0.362208
JB		0.001	0.001
		0.001	0.001
		ra	log
%		92.5095	-877.303
err.va		116.52	0.975188
rel.std.err		1.91012	3.51179
mod.eff		-0.910122	-2.51179

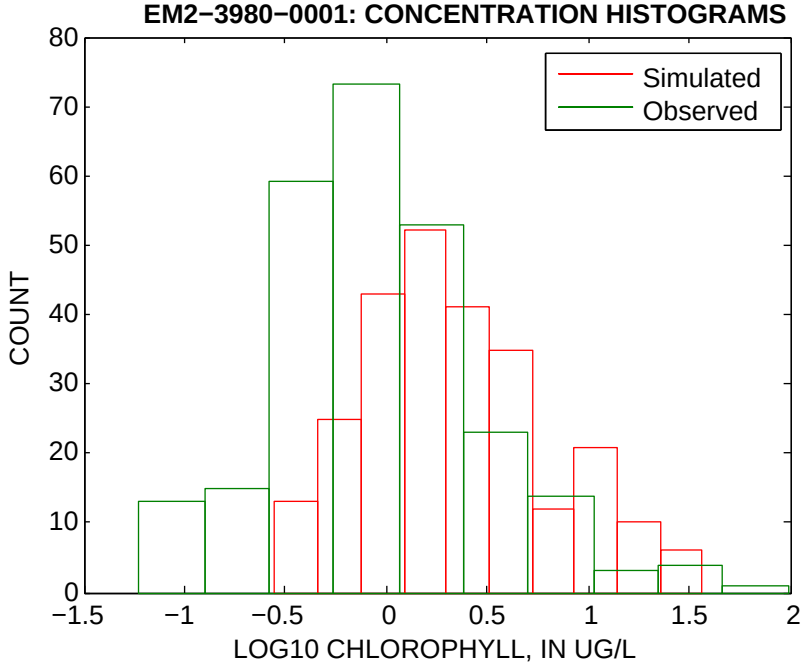
VERSION 3.1

ALL DATA
LOG10

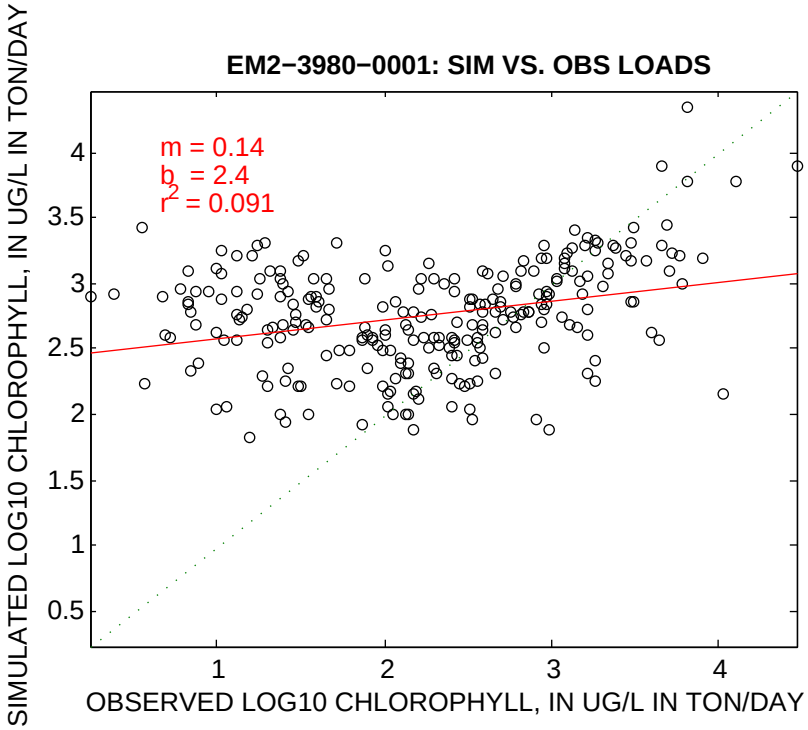


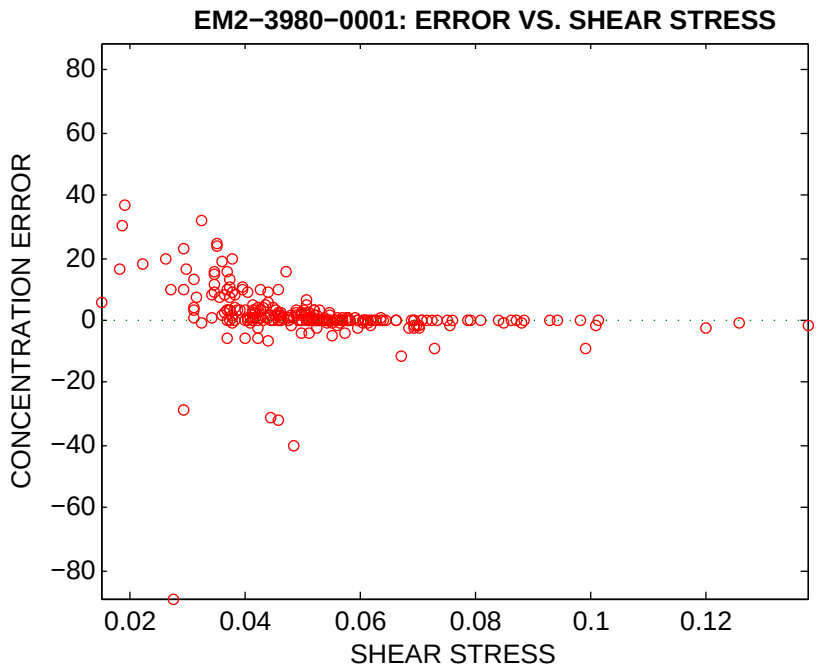


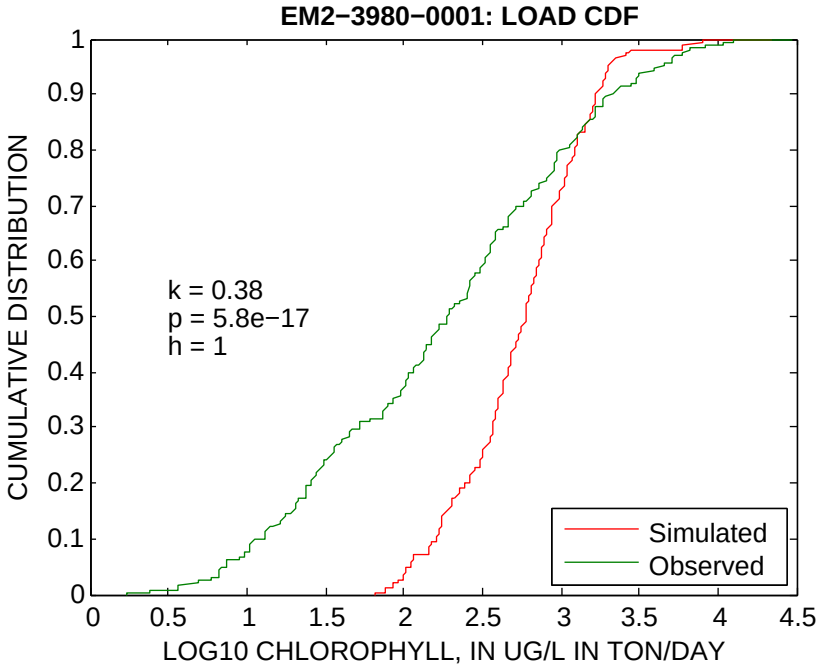


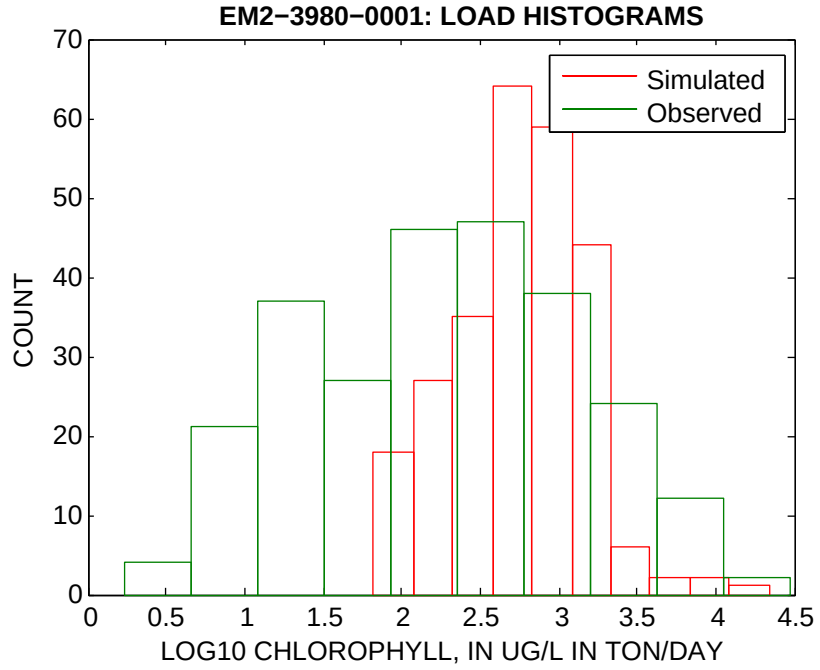


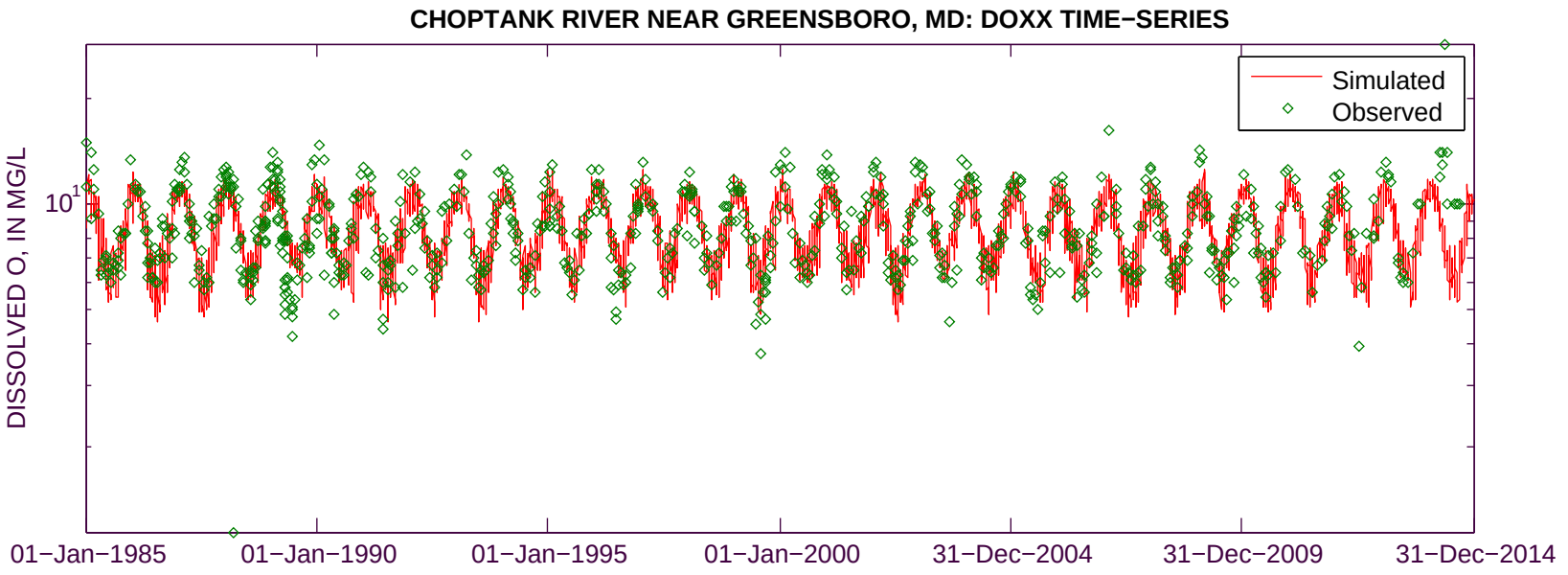
LOAD DATA
LOG10

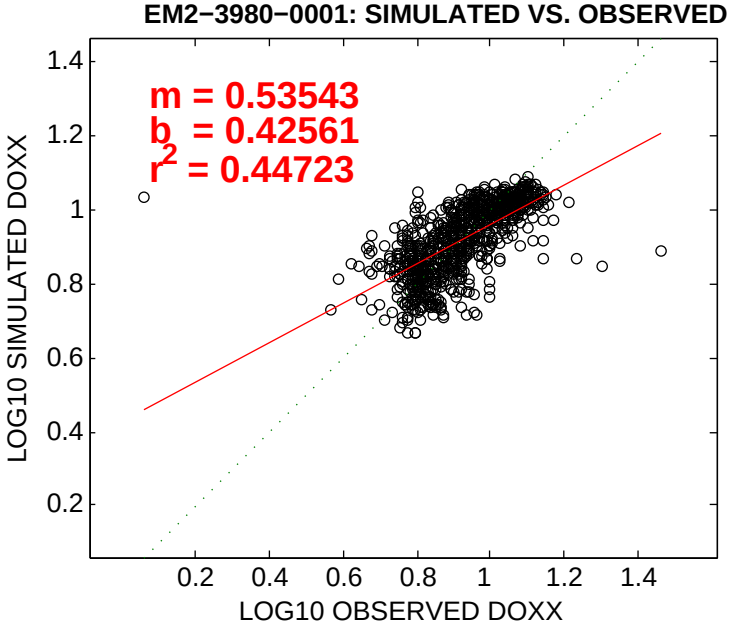


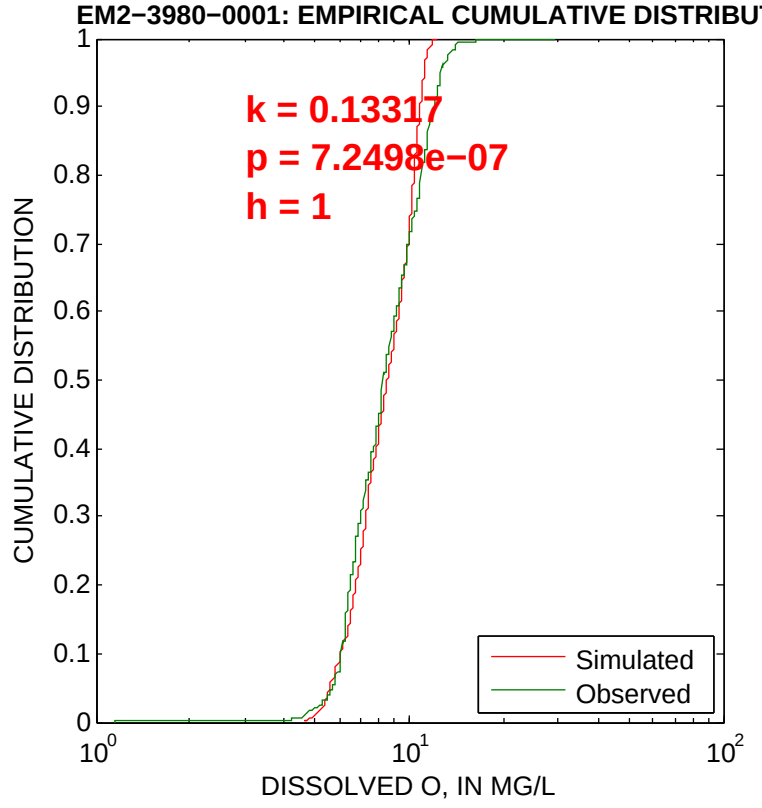












DATA SELECTION

scenario	file
P620171001WQ	DOXX.calib

plot: DOXX - dissolved oxygen

Dates: 1/1/1985 – 12/31/201

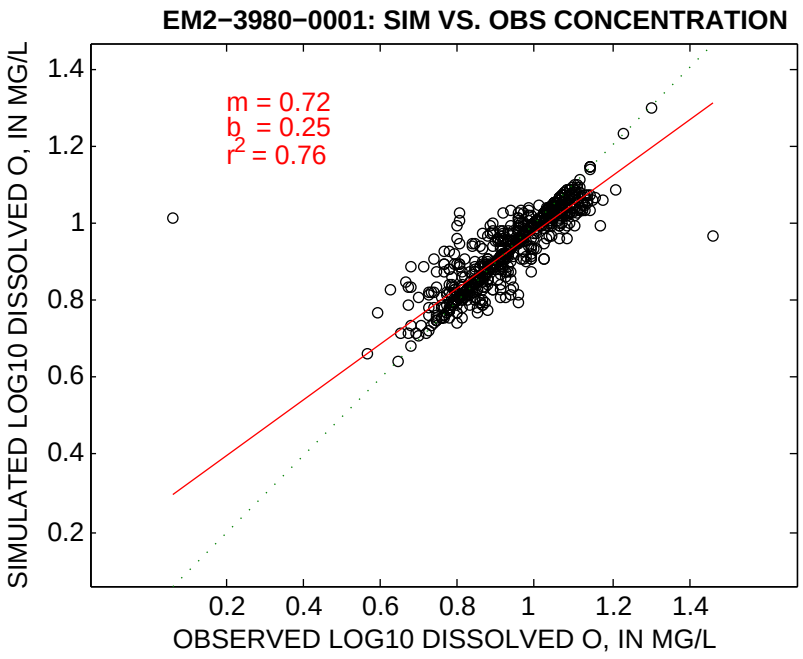
Drive	Directory	Observed
N/A	model	OBS20161101

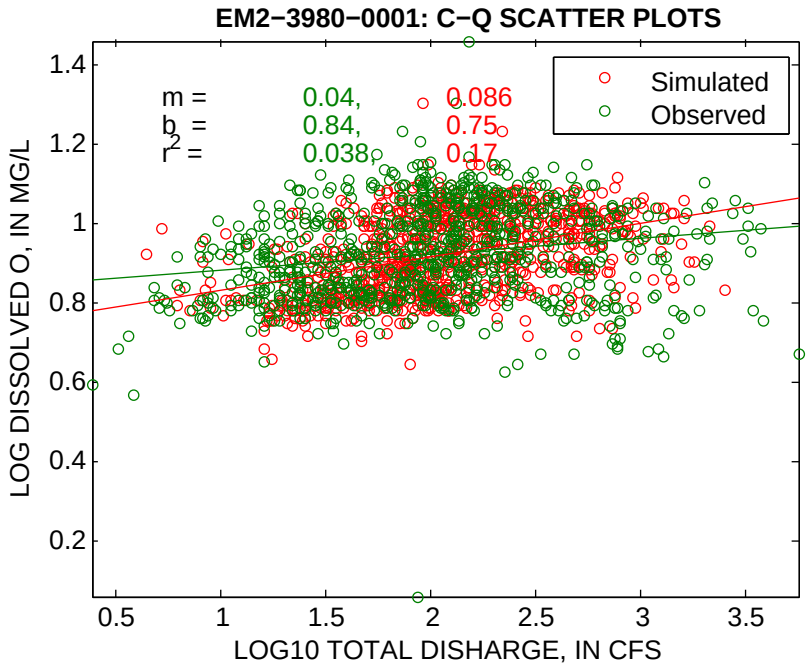
STATISTICS

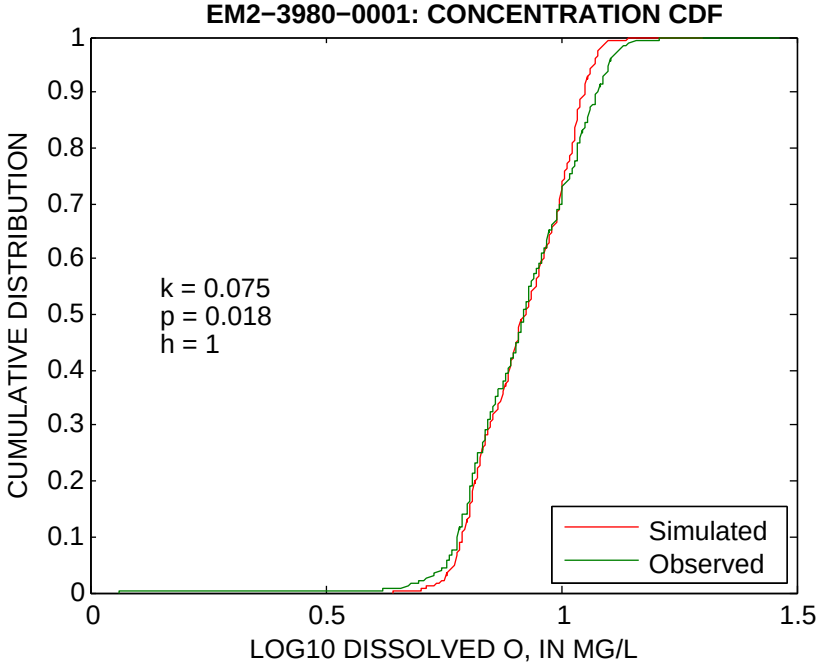
	n		826	826
			observe	simulate
min			1.15	4.6283
			0.0606978	0.665422
mean			8.7134	8.52255
			0.923832	0.920259
media			8.3	8.5211
			0.919078	0.930496
max			29	12.276
			1.4624	1.08906
varian			5.9395	3.25483
			0.0144612	0.00927014
JB			0.001	0.001
			0.001	0.001
			ra	log
%			-2.19036	-0.386738
err.va			3.29606	0.0082581
rel.std.err			0.55494	0.571053
mod.eff			0.44506	0.428947

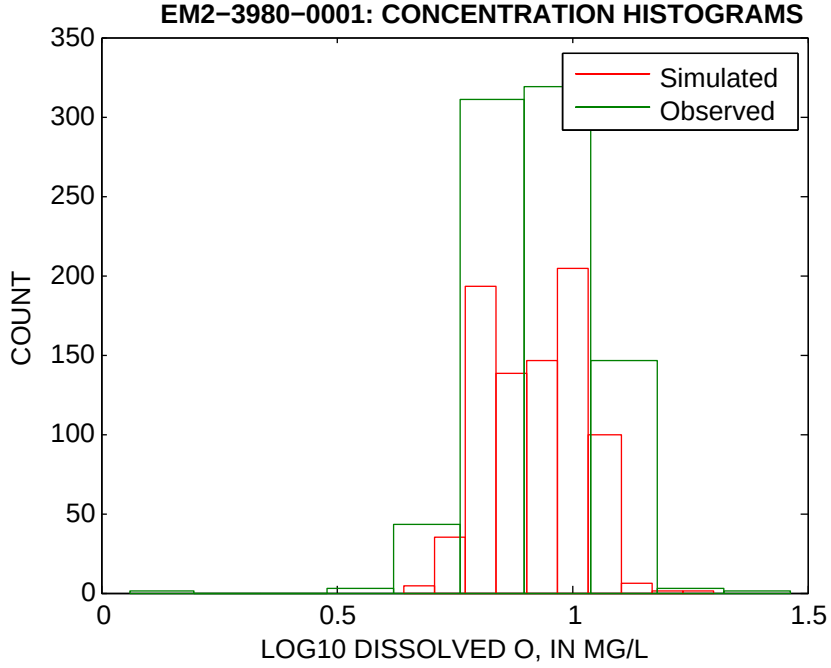
VERSION 2.1

ALL DATA
LOG10

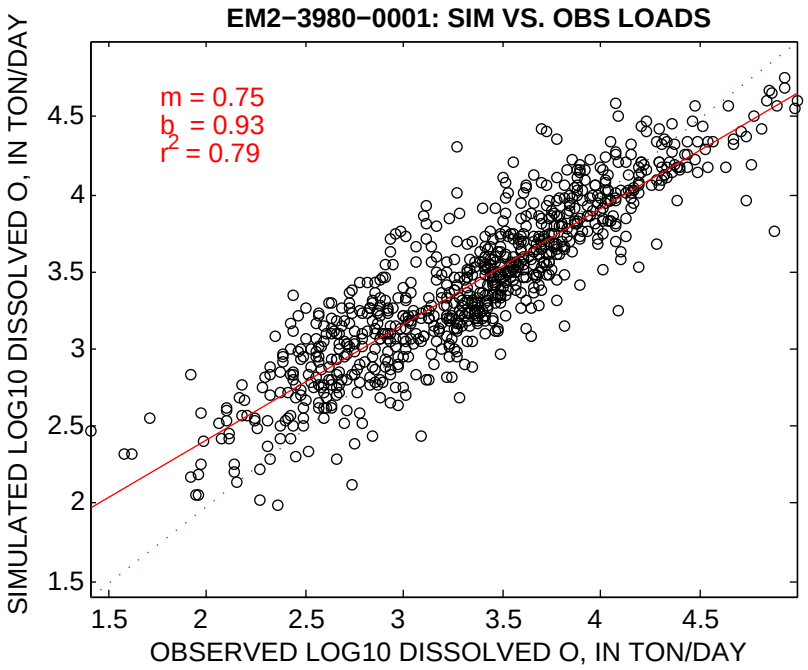


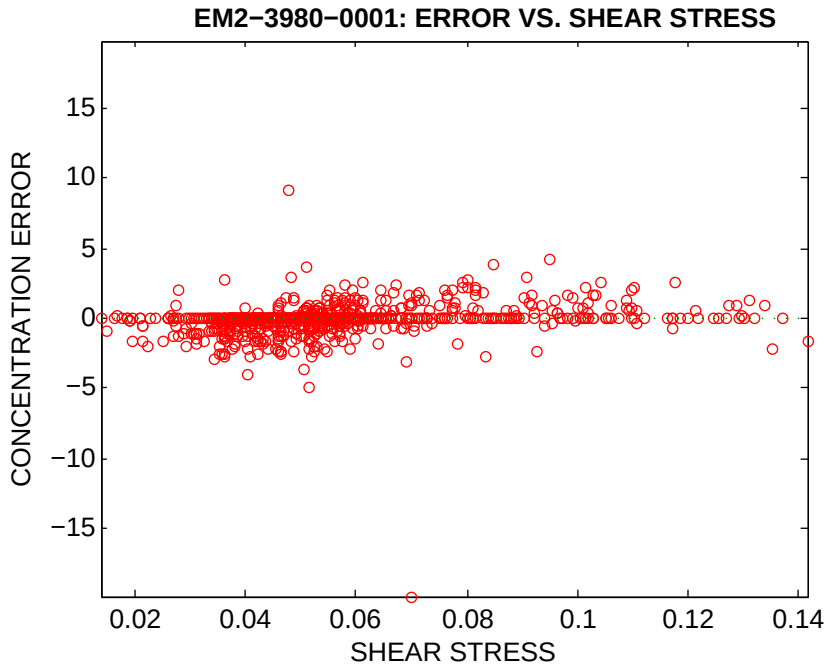


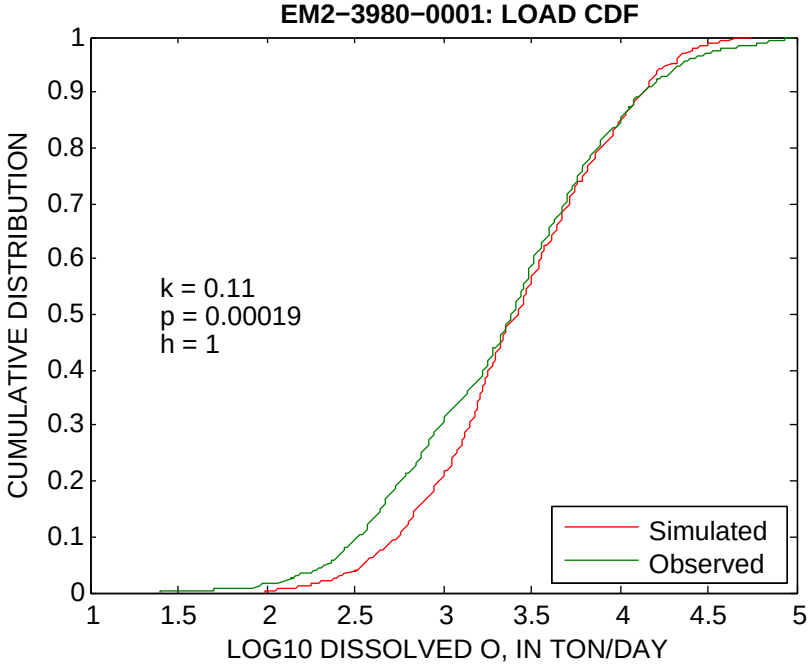


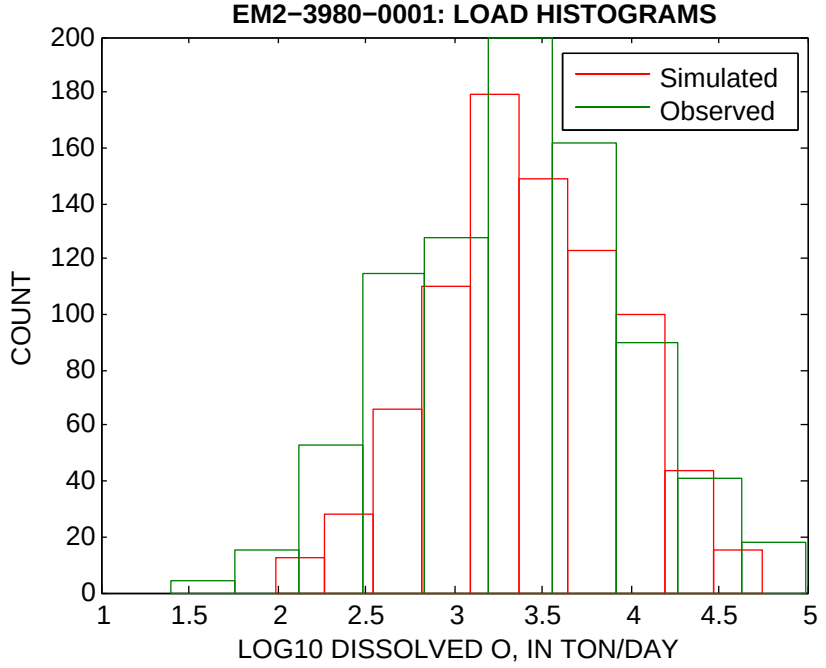


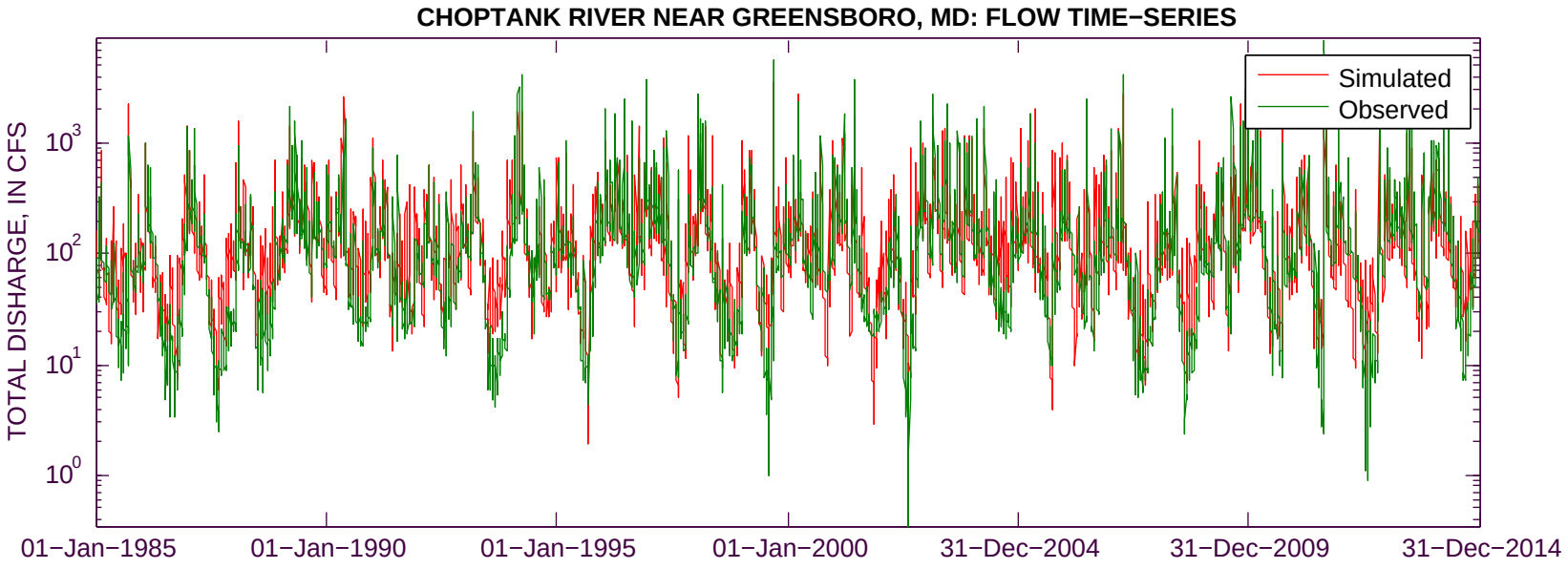
LOAD DATA
LOG10

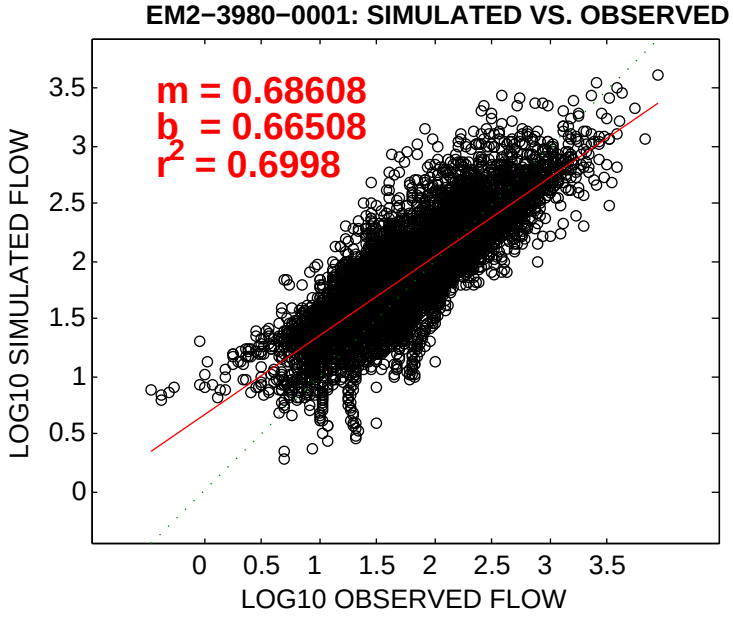


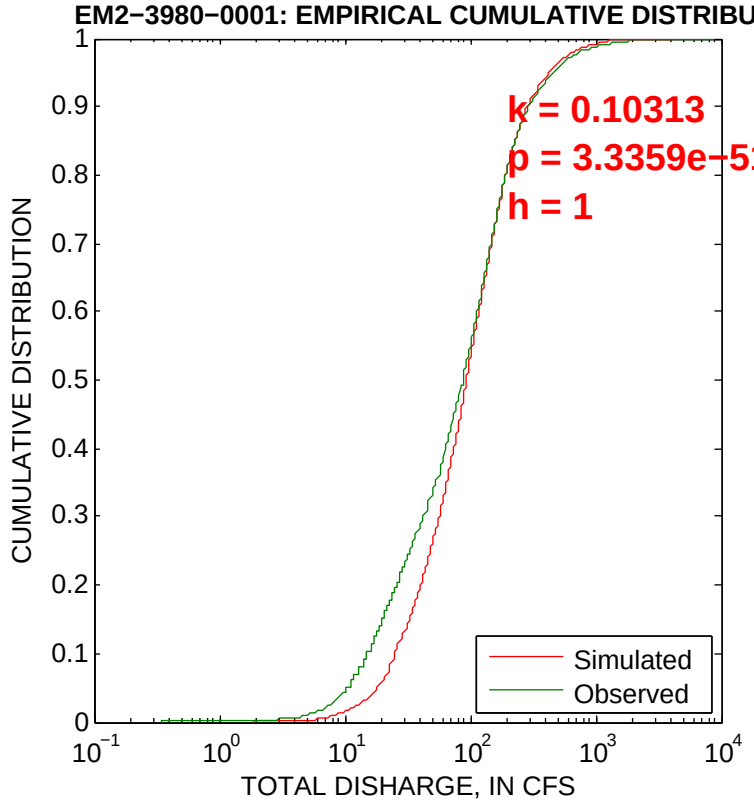












DATA SELECTION

scenario: P620171001WQ | file: FLOW.calib

plot: FLOW - total discharge

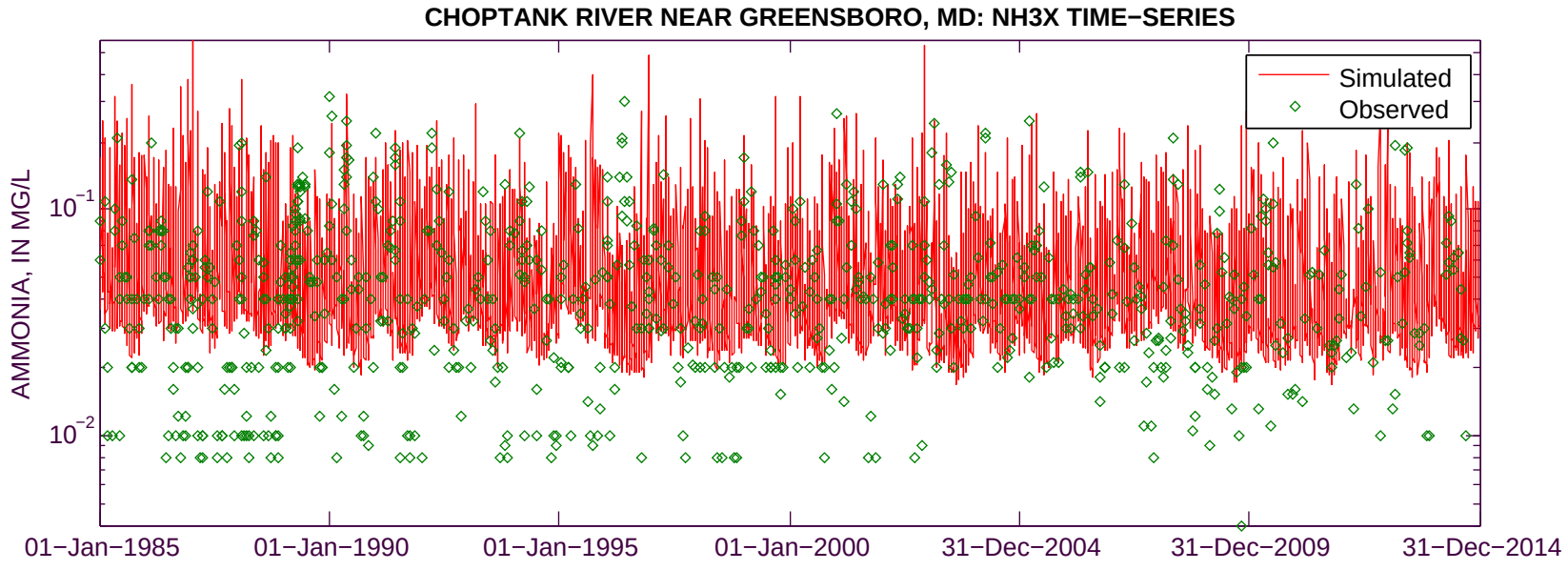
Dates: 1/1/1985 – 12/31/201

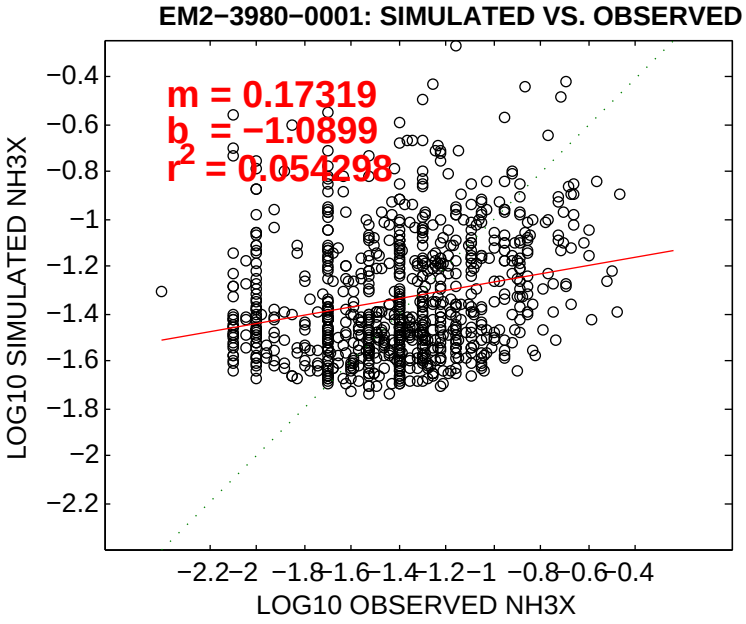
Drive: N/A | Directory: model | Observed: OBS20161101

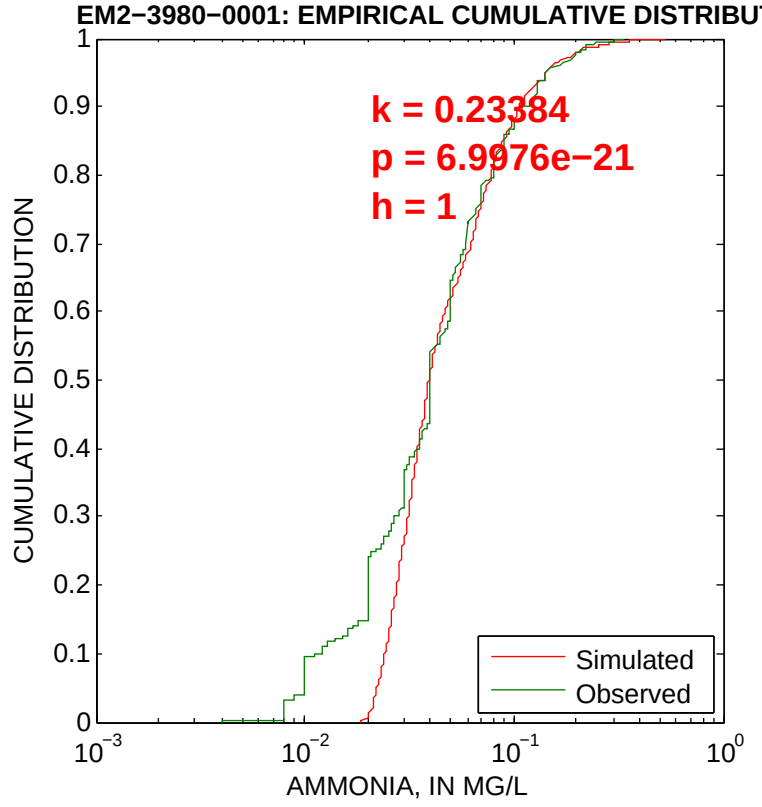
STATISTICS

		observe	simulate
n		10957	10957
min		0.35	1.9012
		-0.455932	0.279028
mean		148.516	144.687
		1.88362	1.95739
media		88	93.797
		1.94448	1.97219
max		8700	4165.2
		3.93952	3.61964
varian		70952.5	37258.2
		0.260171	0.174999
JB		0.001	0.001
		0.001	0.001
		ra	log
%		-2.57791	3.91659
err.va		35182.8	0.0836162
rel.std.err		0.495864	0.32139
mod.eff		0.504136	0.67861

VERSION 2.1







DATA SELECTION

scenario: P620171001WQ; file: NH3X.calib

plot: NH3X - ammonia

Dates: 1/1/1985 – 12/31/201

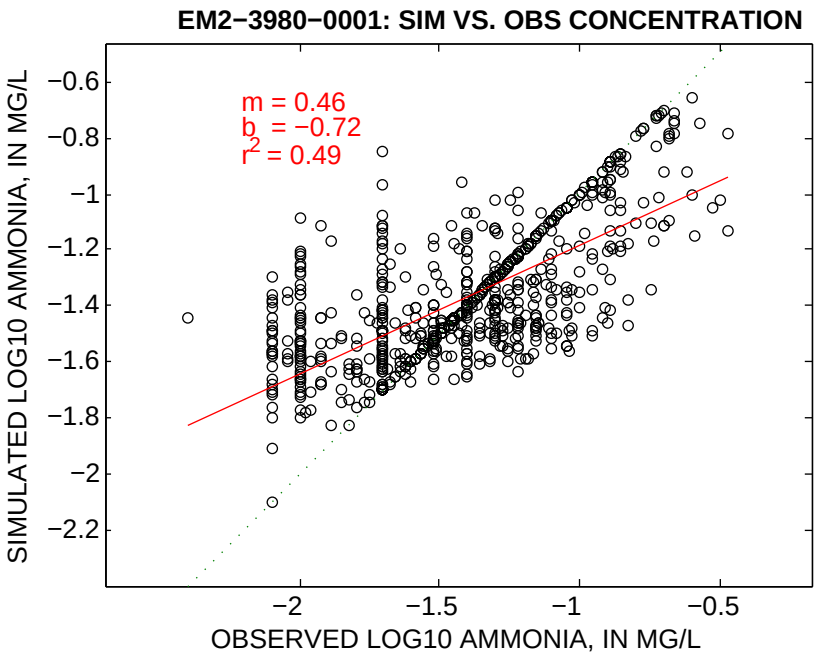
Drive: N/A; Directory: model; Observed: OBS20161101

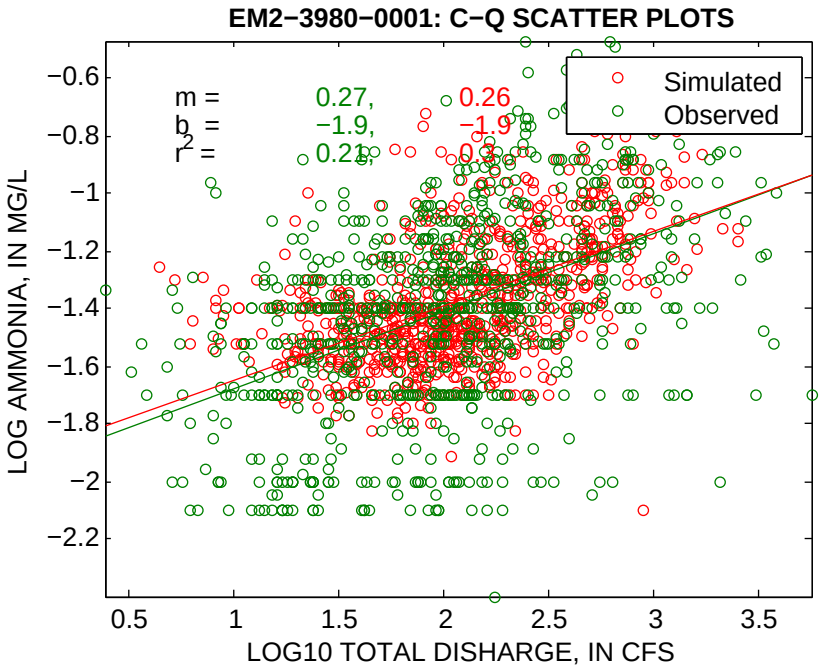
STATISTICS

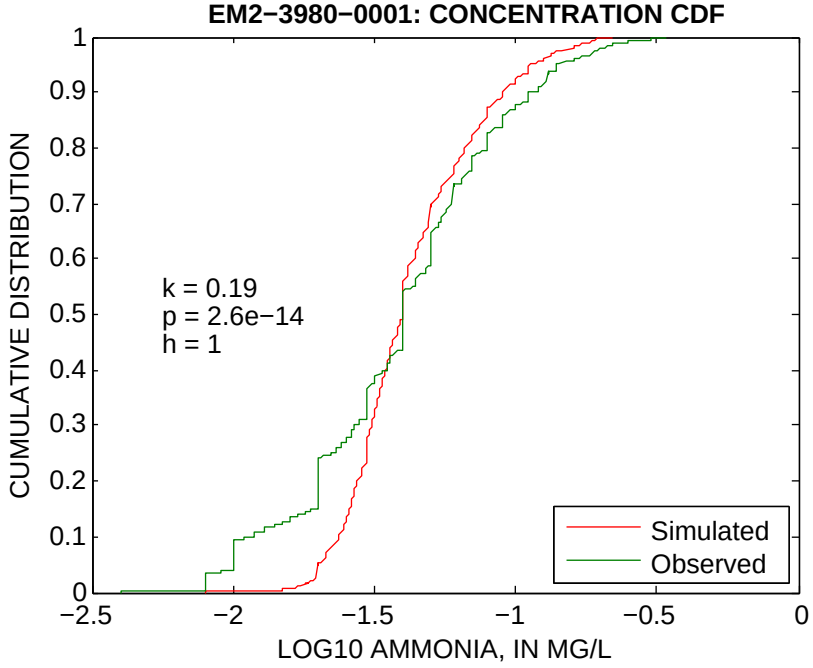
		observe	simulate
n		851	851
min		0.004	0.018281
		-2.39794	-1.738
mean		0.0541805	0.0573958
		-1.40273	-1.33287
media		0.04	0.039446
		-1.39794	-1.404
max		0.339	0.53473
		-0.4698	-0.271865
varian		0.00227513	0.00237142
		0.12139	0.0670582
JB		0.001	0.001
		0.172022	0.001
		ra	log
%		5.93435	-4.98027
err.va		0.00362118	0.151287
rel.std.err		1.59164	1.24629
mod.eff		-0.591635	-0.246287

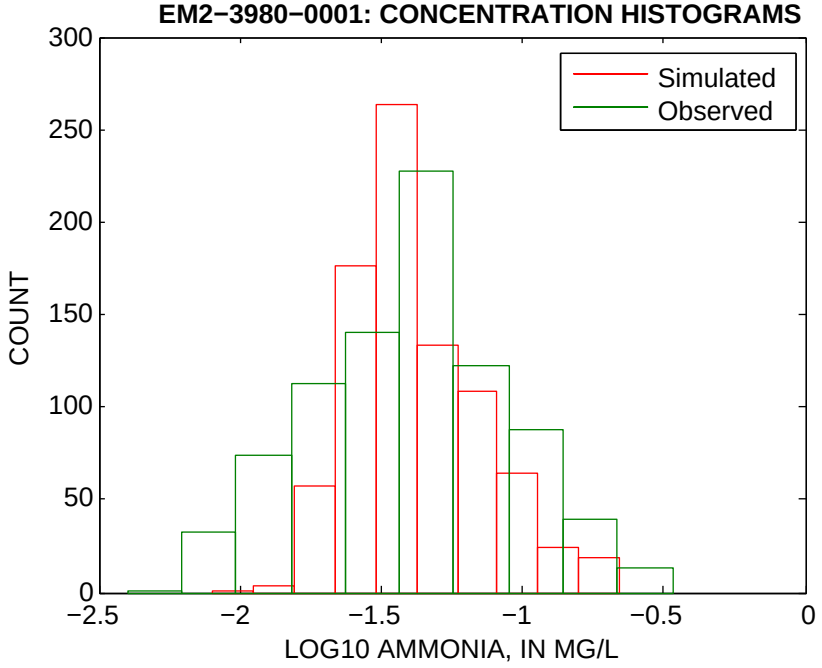
VERSION

ALL DATA
LOG10

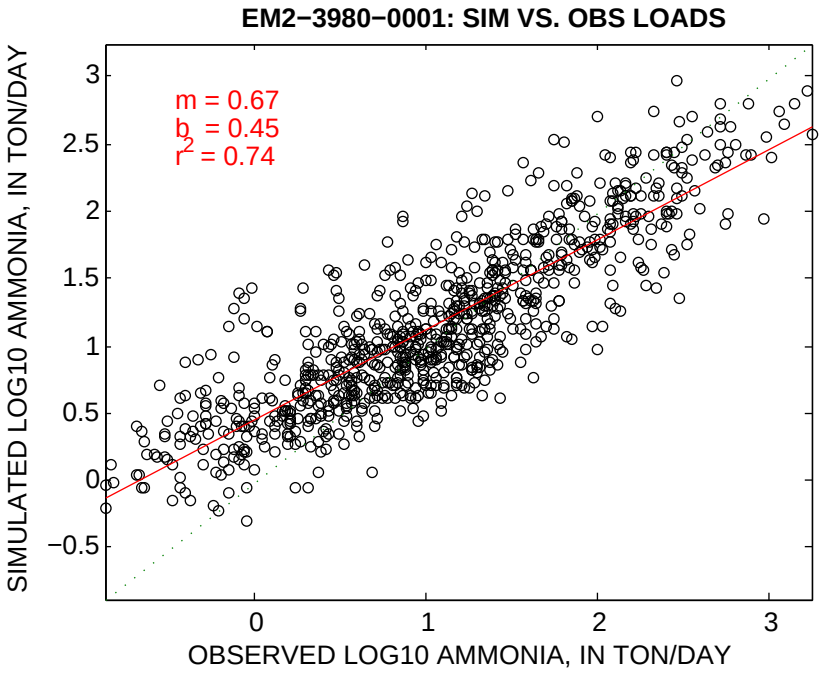


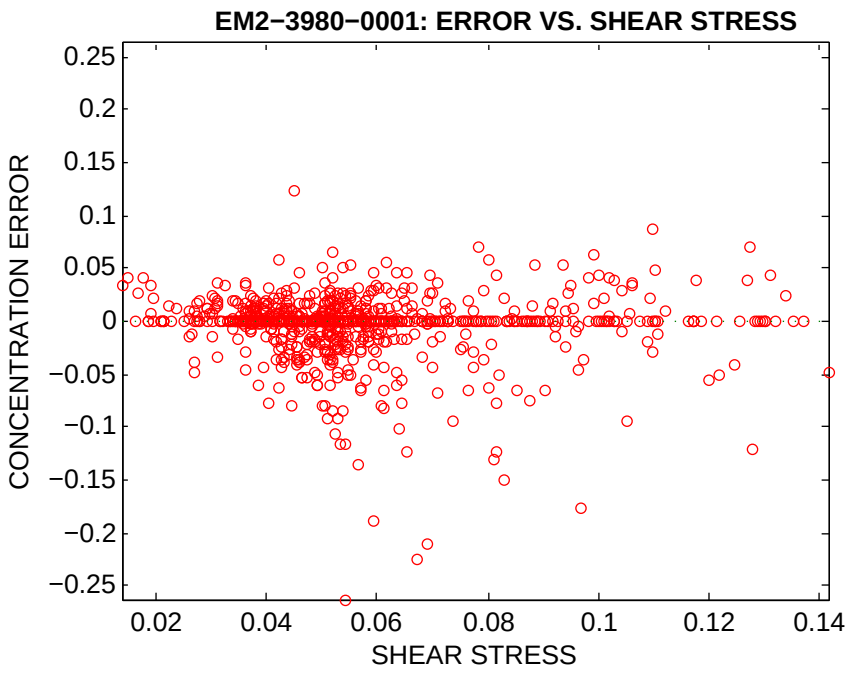


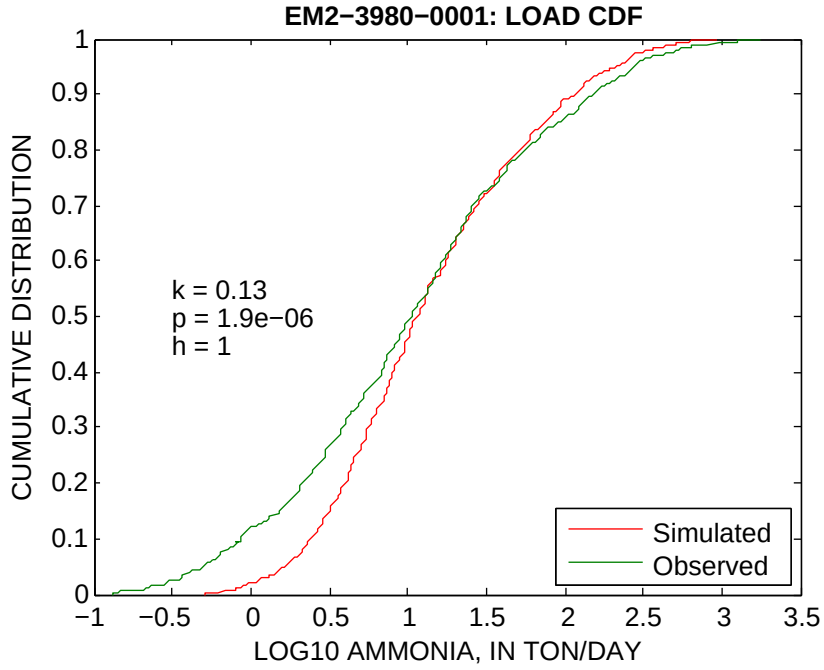


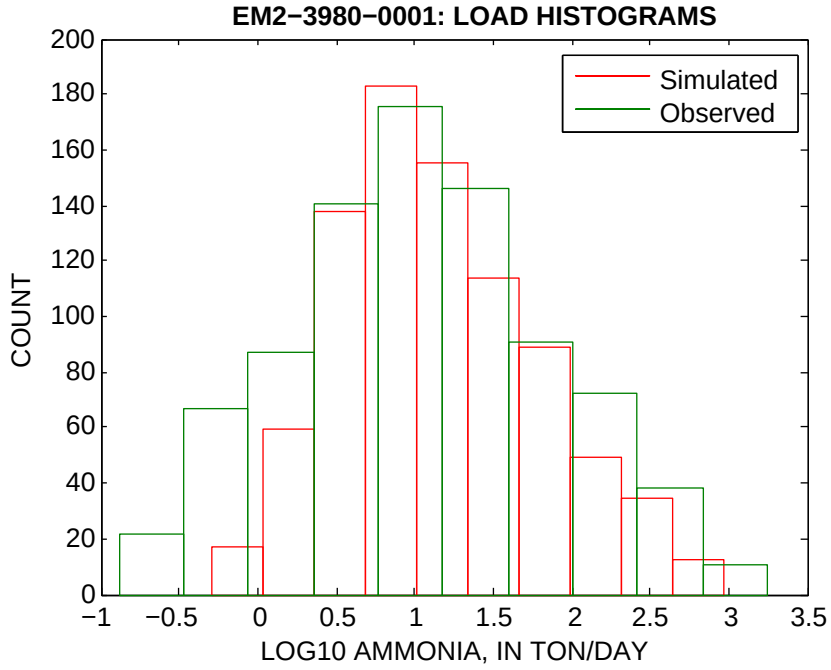


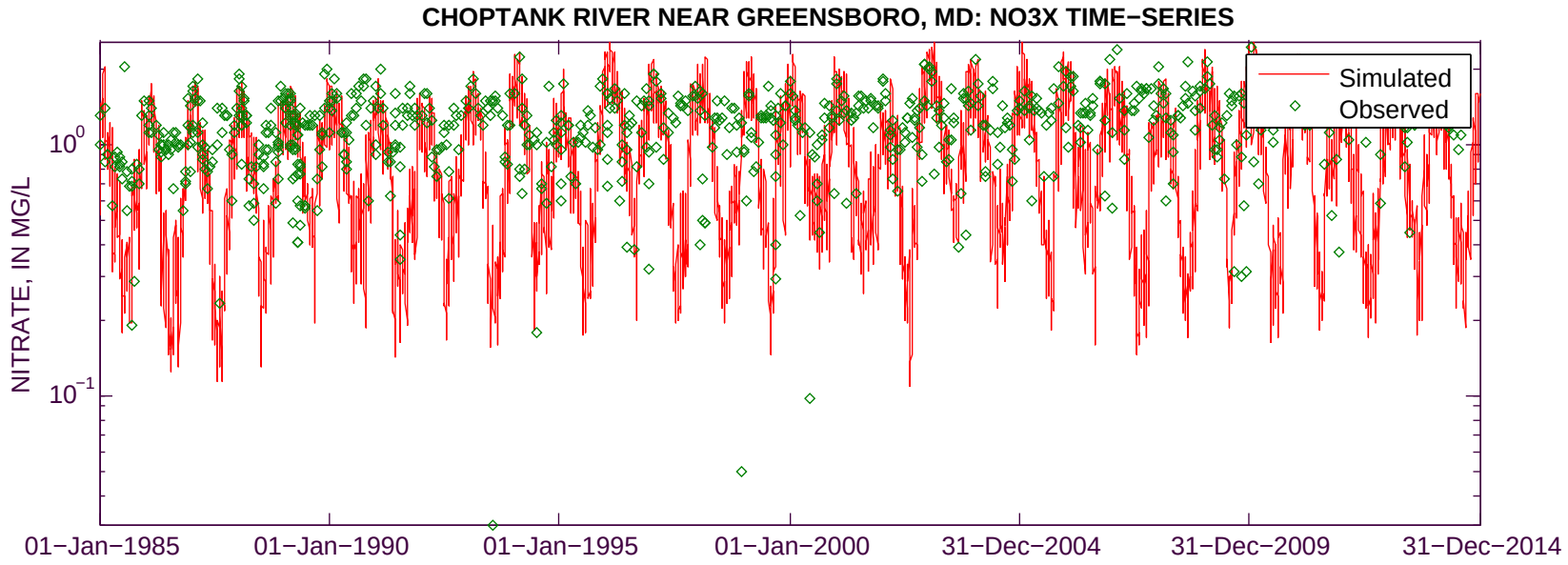
LOAD DATA
LOG10

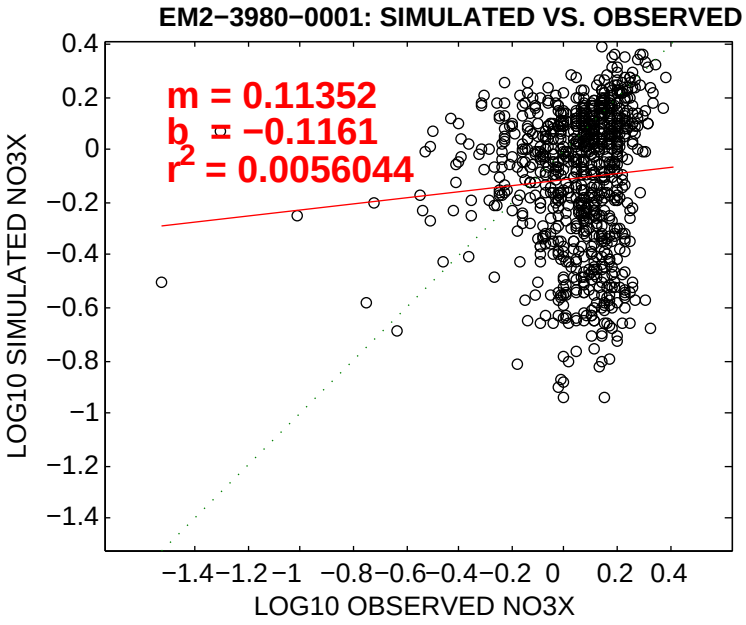


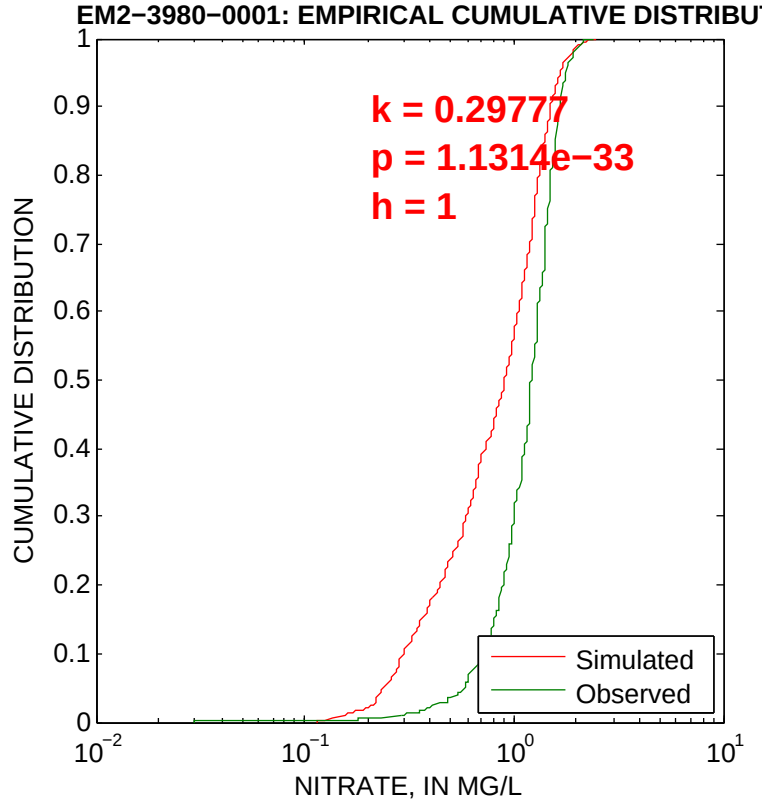












DATA SELECTION

scenario	file
P620171001WQ	NO3X.calib

plot: NO3X - nitrate

Dates: 1/1/1985 – 12/31/201

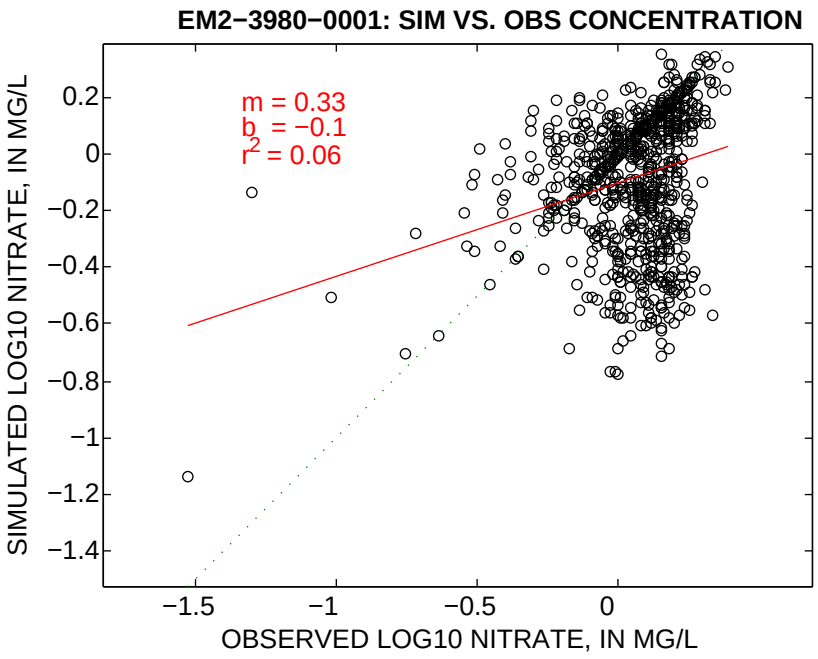
Drive	Directory	Observed
N/A	model	OBS20161101

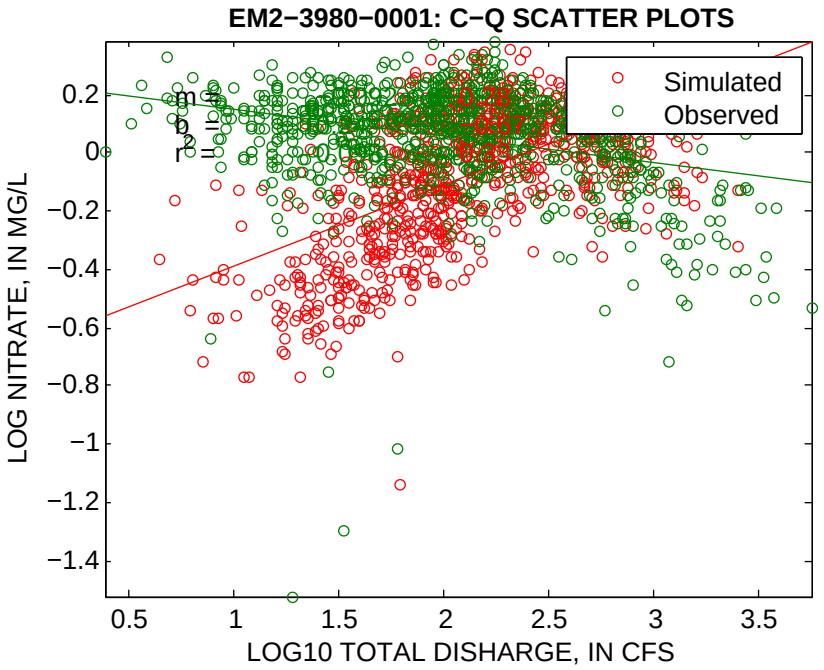
STATISTICS

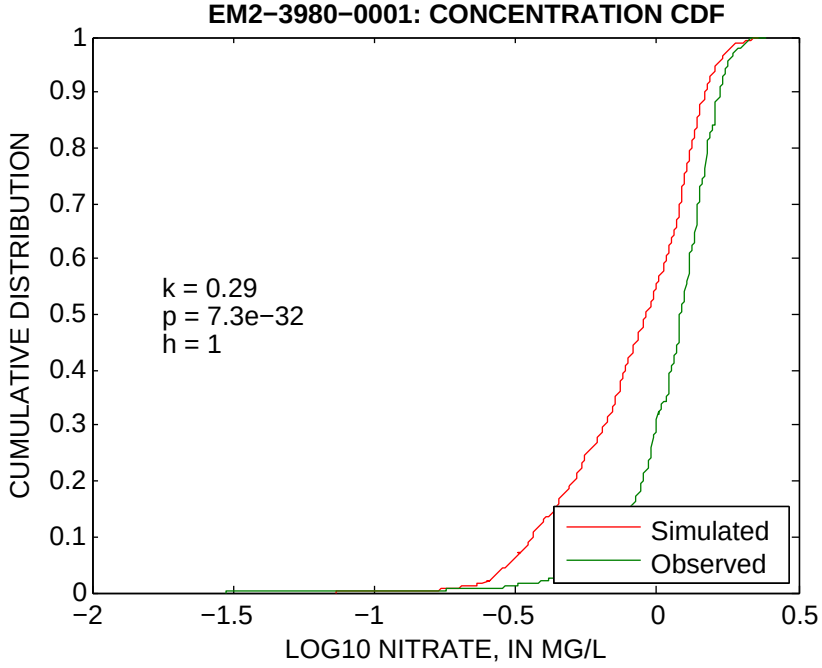
	n	853	853
		observe	simulate
min		0.03	0.11395
		-1.52288	-0.943286
mean		1.20567	0.912729
		0.0532456	-0.110057
media		1.212	0.90512
		0.0835026	-0.0432938
max		2.43	2.4791
		0.385606	0.394294
varian		0.141464	0.216748
		0.0310729	0.0714434
JB		0.235449	0.001
		0.001	0.001
		ra	log
%		-24.2967	-306.696
err.va		0.381723	0.122161
rel.std.err		2.69838	3.93143
mod.eff		-1.69838	-2.93143

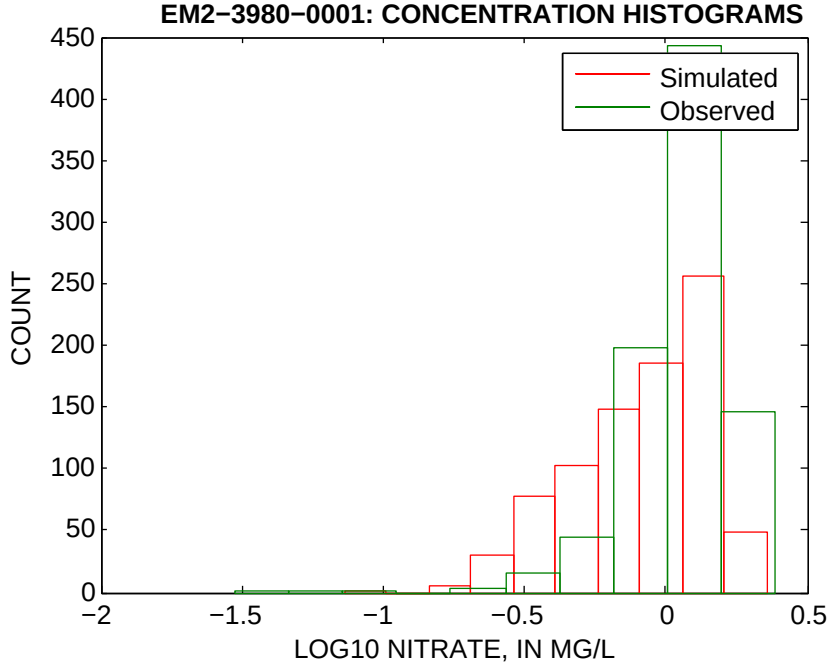
VERSION 2.1

ALL DATA
LOG10

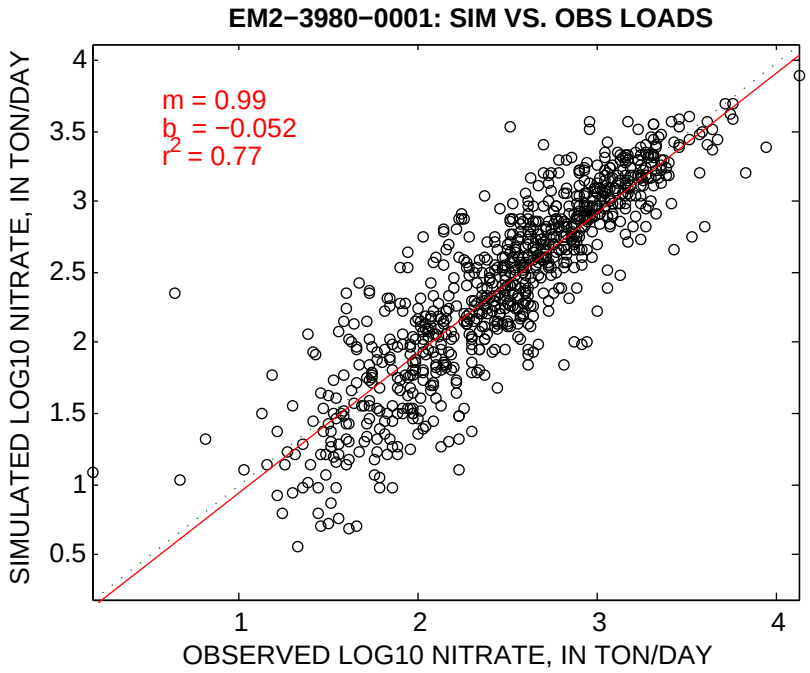


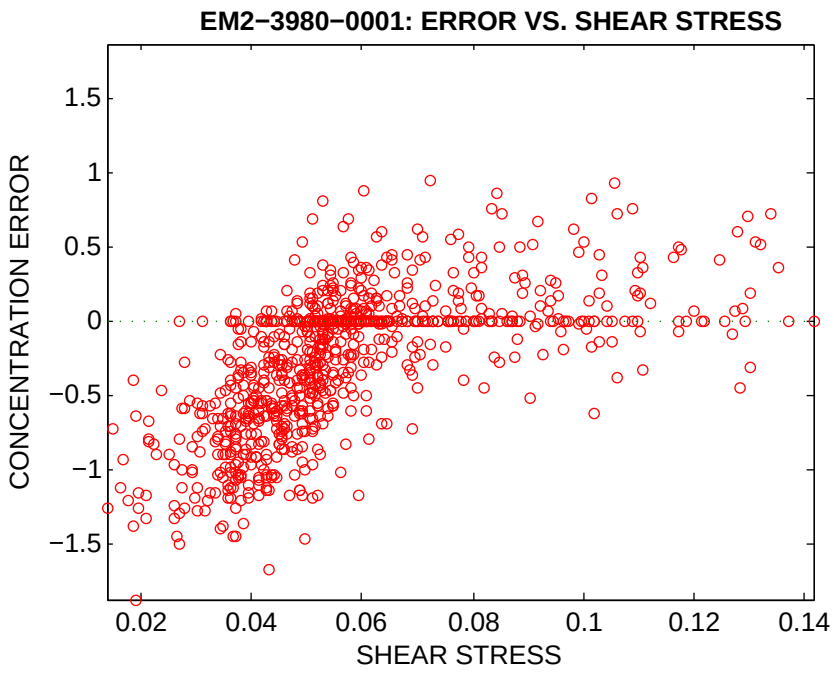


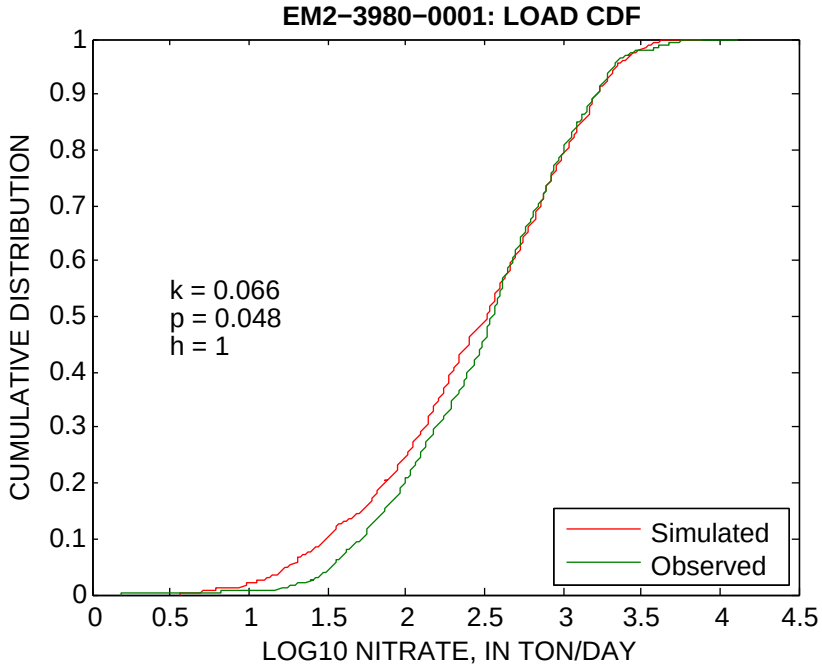


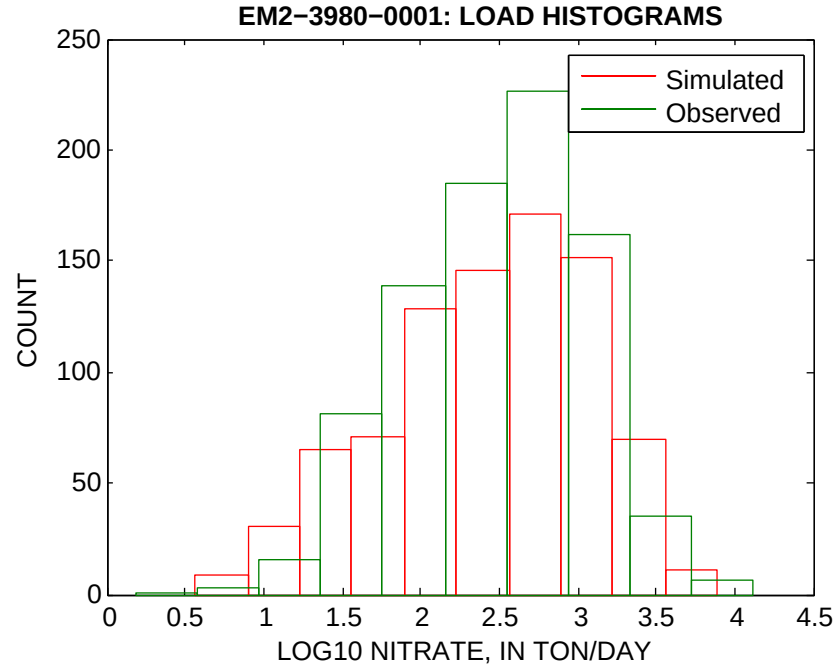


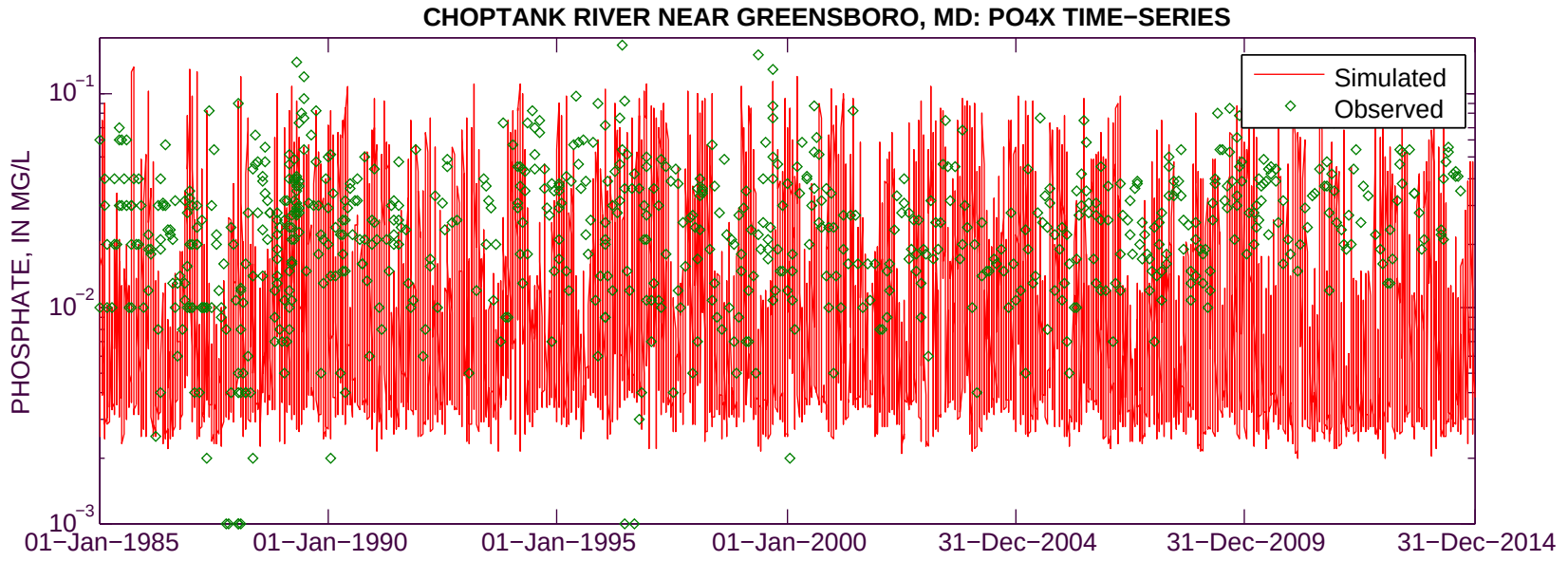
LOAD DATA
LOG10

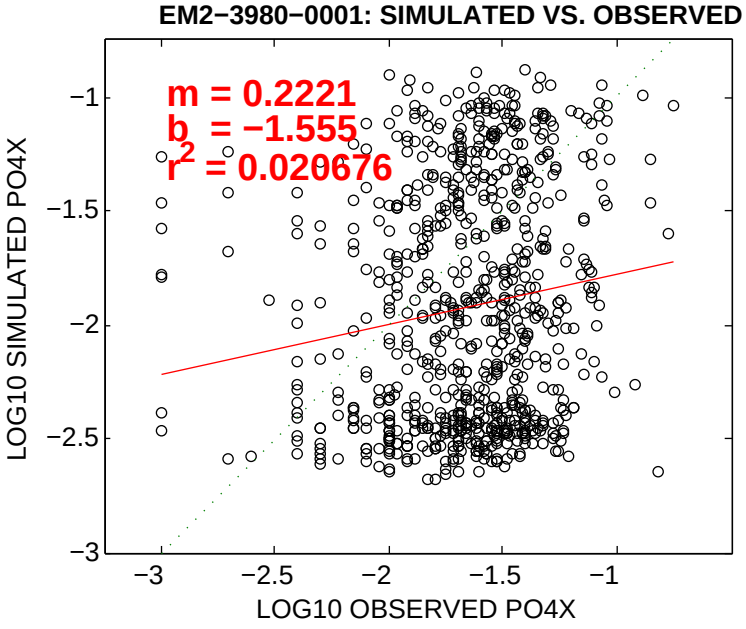


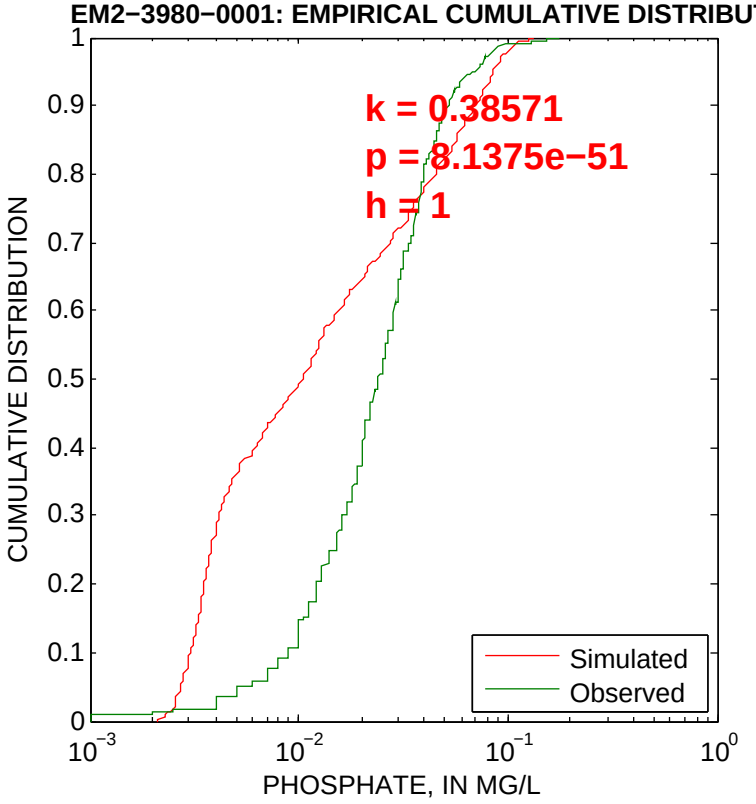












DATA SELECTION

scenario	file
P620171001WQ	PO4X.calib

plot: PO4X - phosphate

Dates: 1/1/1985 – 12/31/201

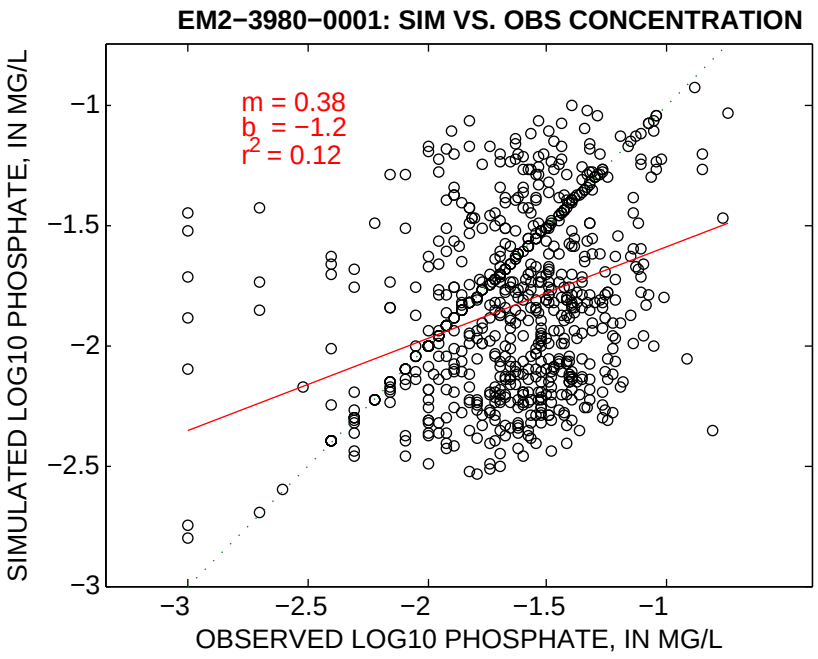
Drive	Directory	Observed
N/A	model	OBS20161101

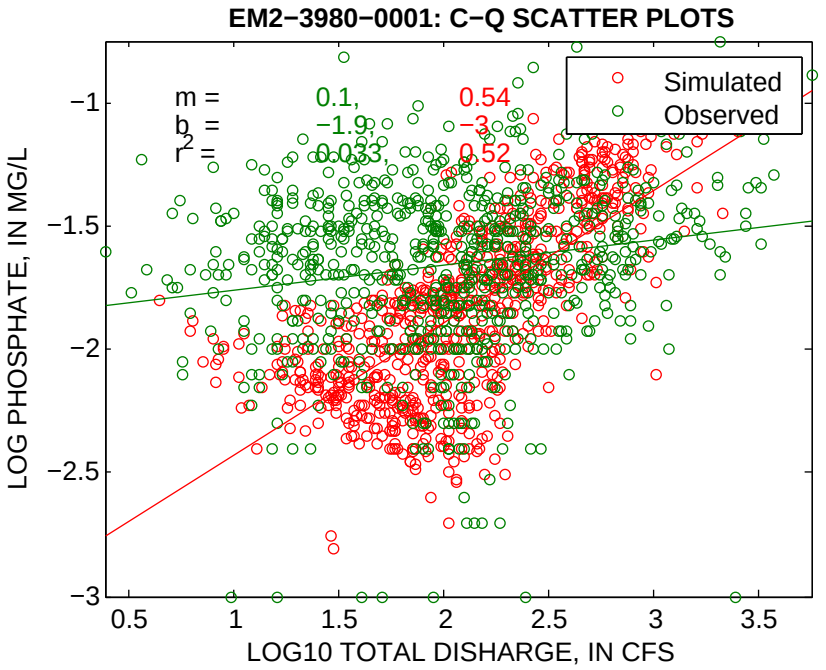
STATISTICS

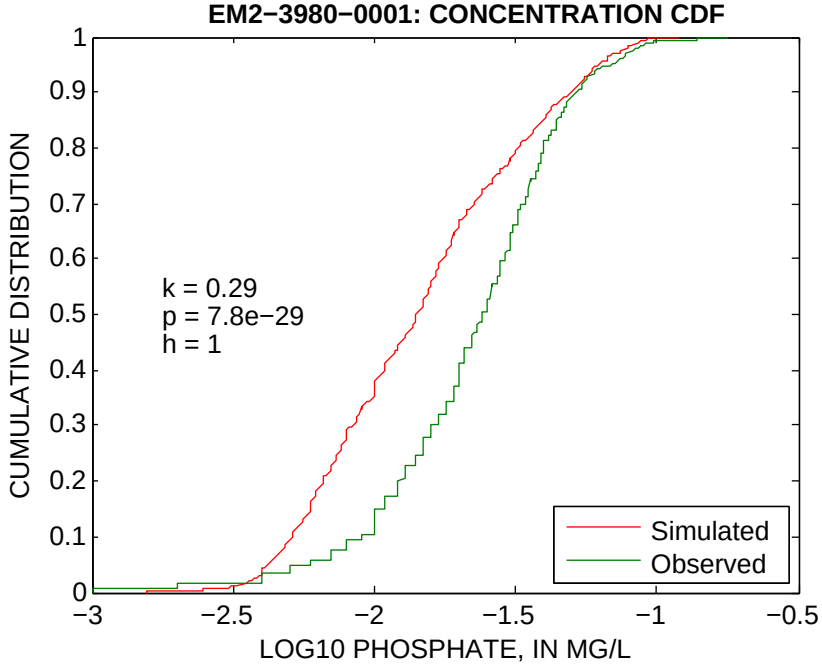
	observe	simulate
n	770	770
min	0.001 -3	0.0020823 -2.68146
mean	0.0286128 -1.65383	0.0237826 -1.92227
media	0.024 -1.61979	0.010486 -1.97939
max	0.179 -0.747147	0.1334 -0.874844
varian	0.00044816 0.111837	0.00078373 0.266822
JB	0.001 0.001 ra	0.001 0.001 log
%	-16.8813	16.2314
err.va	0.00106519	0.401135
rel.std.err	2.37677	3.58679
mod.eff	-1.37677	-2.58679

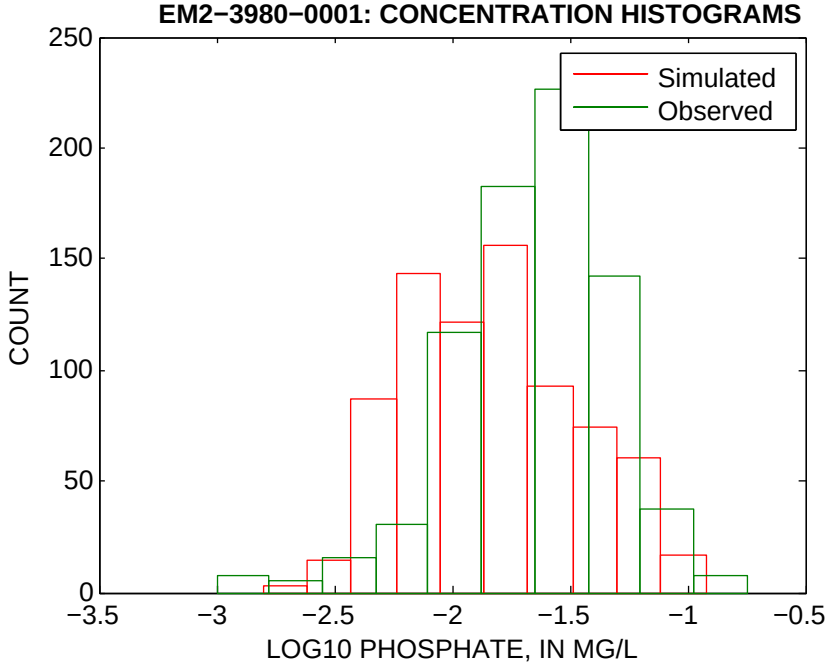
VERSION 2.1

ALL DATA
LOG10

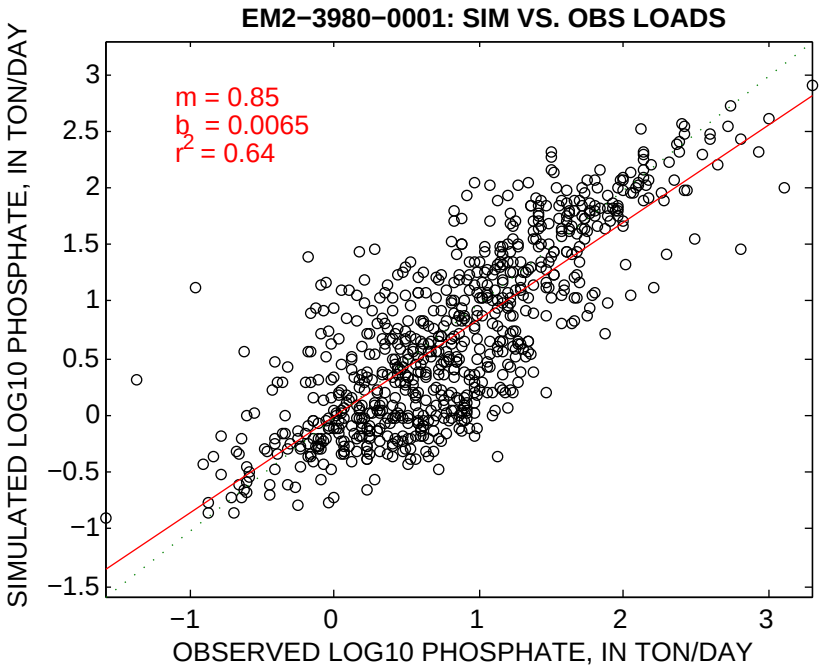


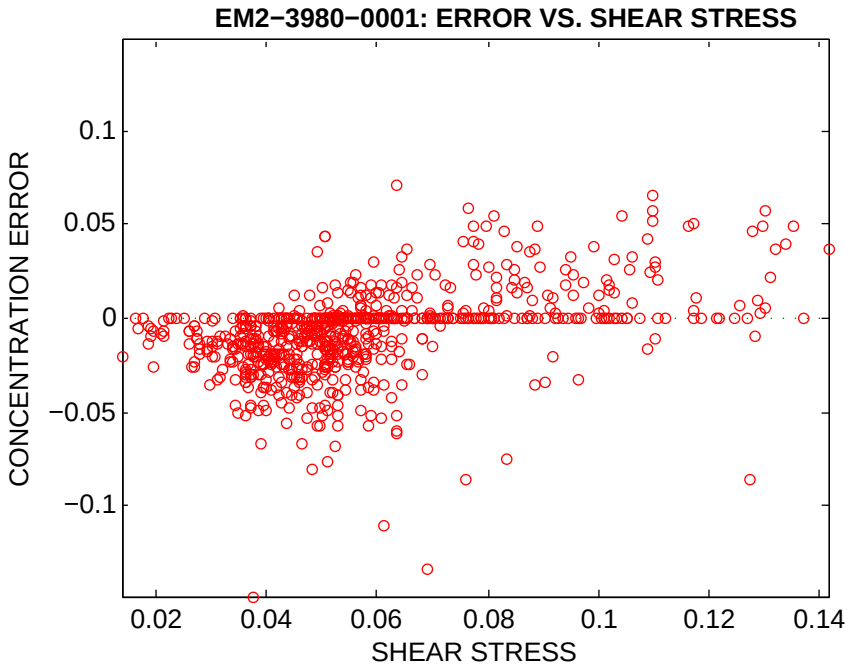


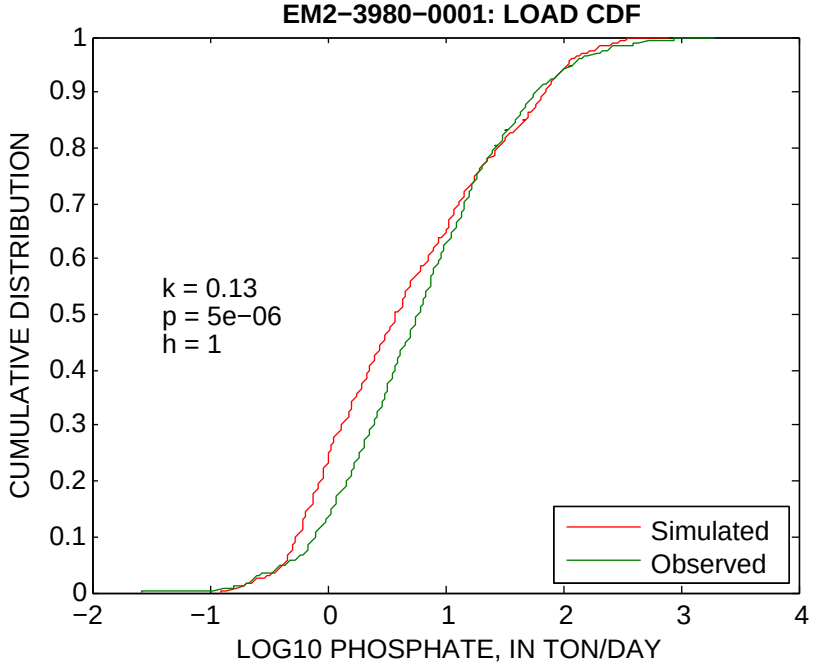


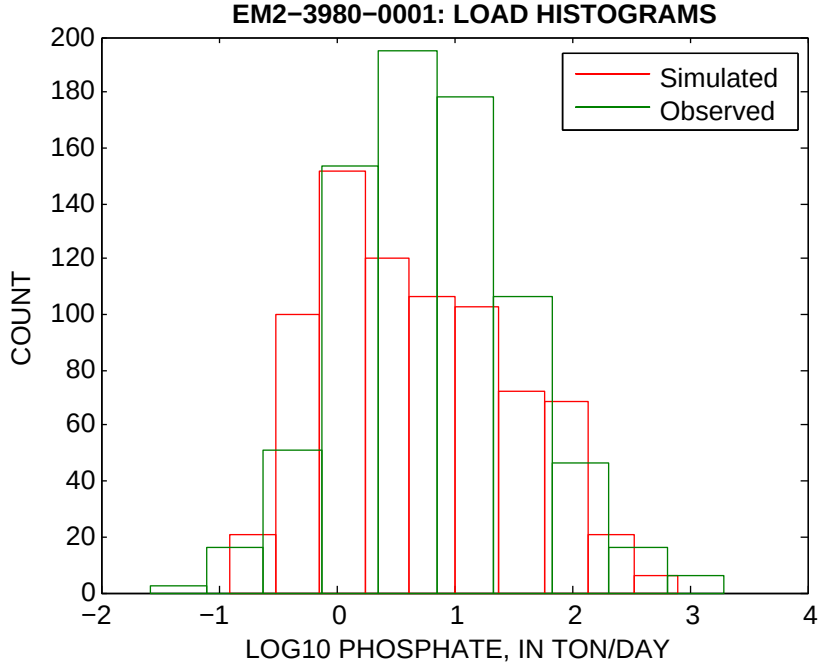


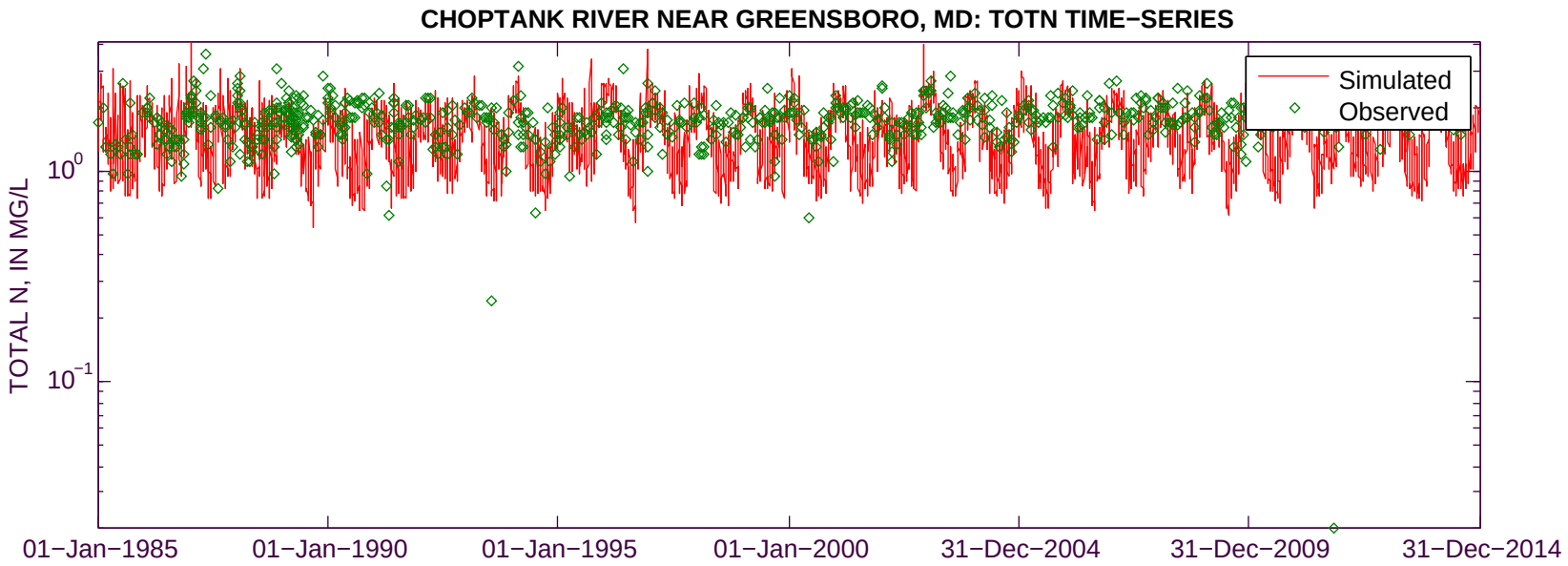
LOAD DATA
LOG10

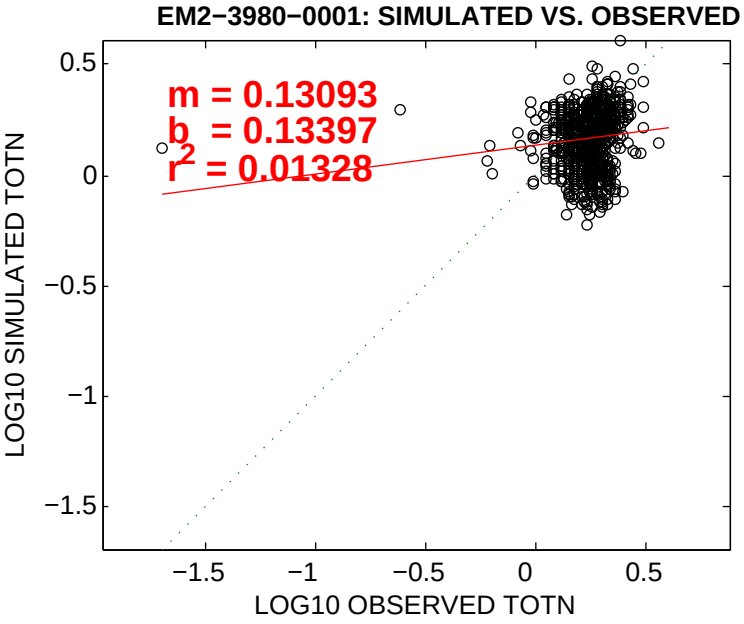


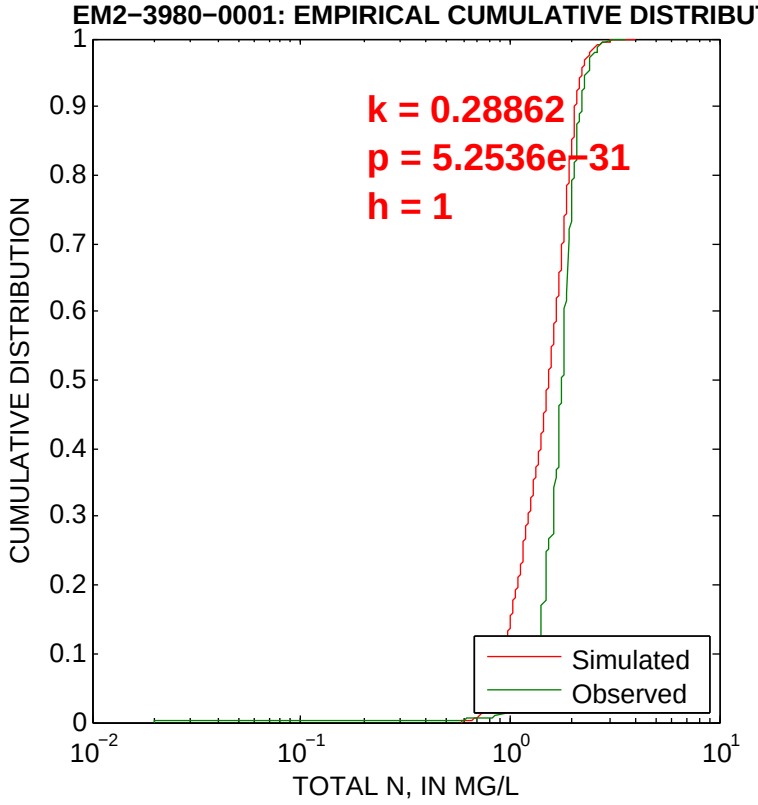












DATA SELECTION

scenario	file
P620171001WQ	TOTN.calib

plot: TOTN - total nitrogen

Dates: 1/1/1985 – 12/31/201

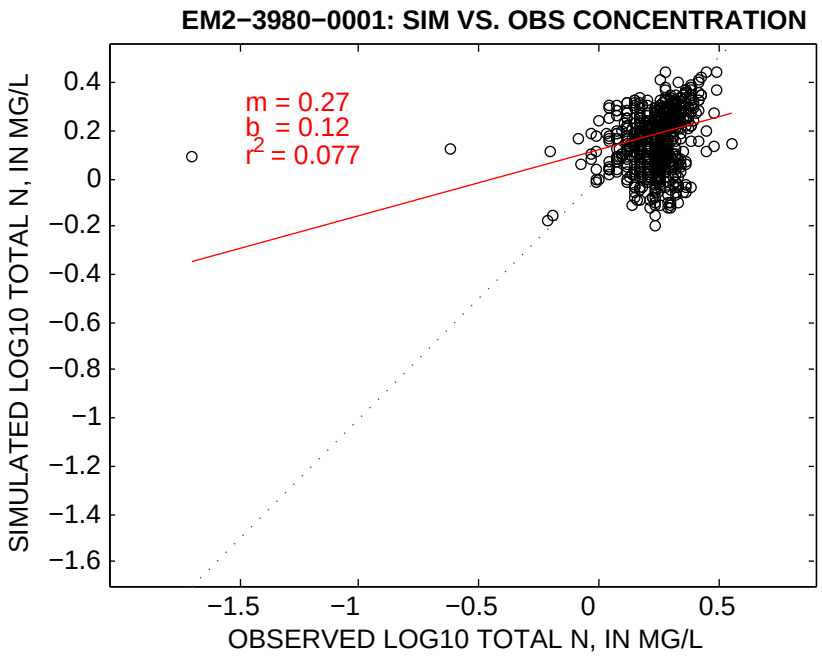
Drive	Directory	Observed
N/A	model	OBS20161101

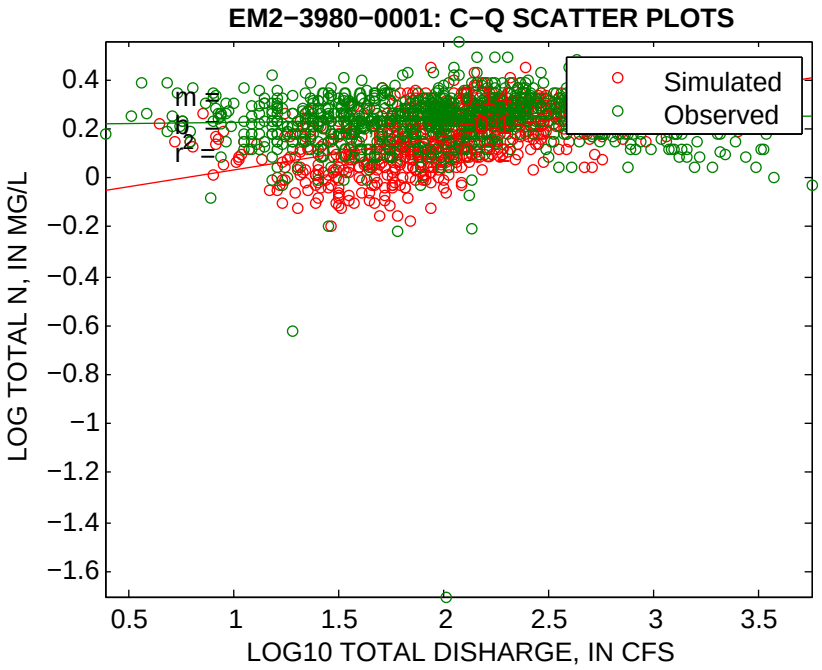
STATISTICS

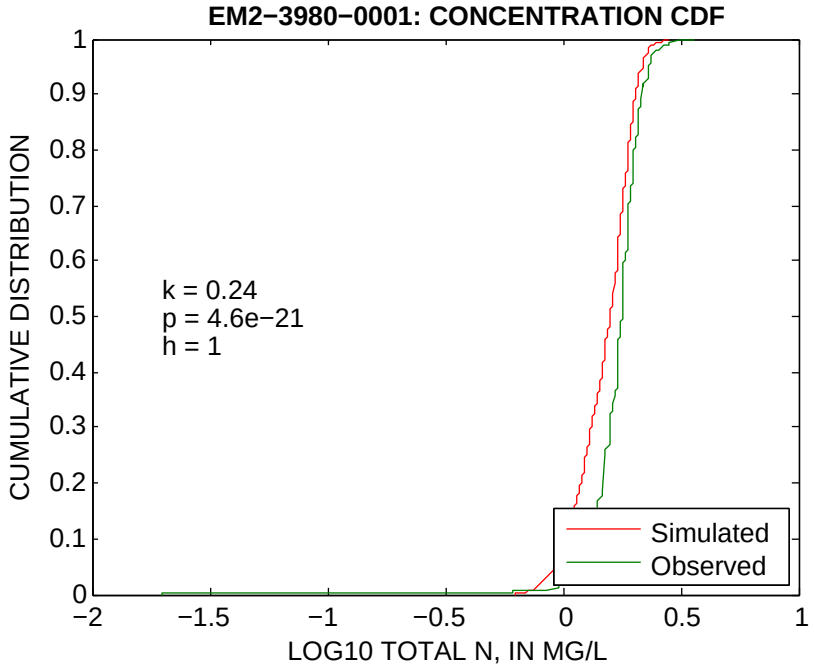
	n	835	835
		observe	simulate
min		0.02	0.59547
		-1.69897	-0.22514
mean		1.76672	1.52865
		0.235677	0.164823
media		1.79	1.5375
		0.252853	0.186815
max		3.6	4.0336
		0.556303	0.605693
varian		0.132153	0.201495
		0.0136197	0.0175797
JB		0.001	0.001
		0.001	0.001
		ra	log
%		-13.4751	-30.0643
err.va		0.328298	0.0326595
rel.std.err		2.48423	2.39795
mod.eff		-1.48423	-1.39795

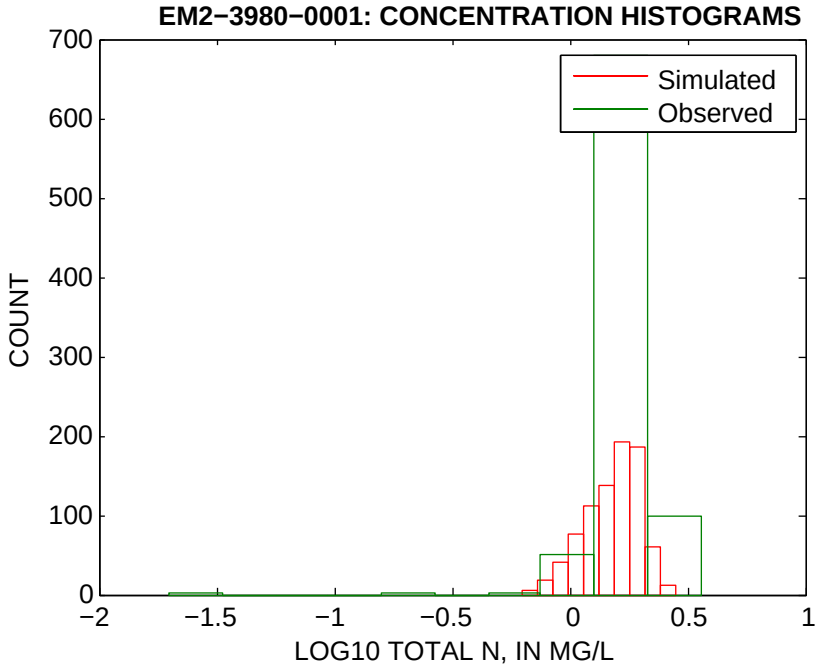
VERSION 2.1

ALL DATA
LOG10

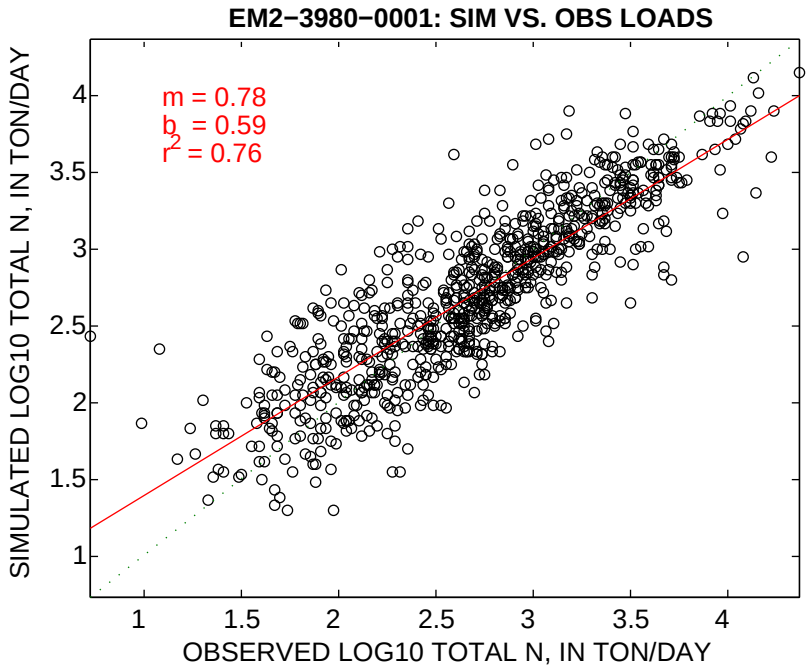


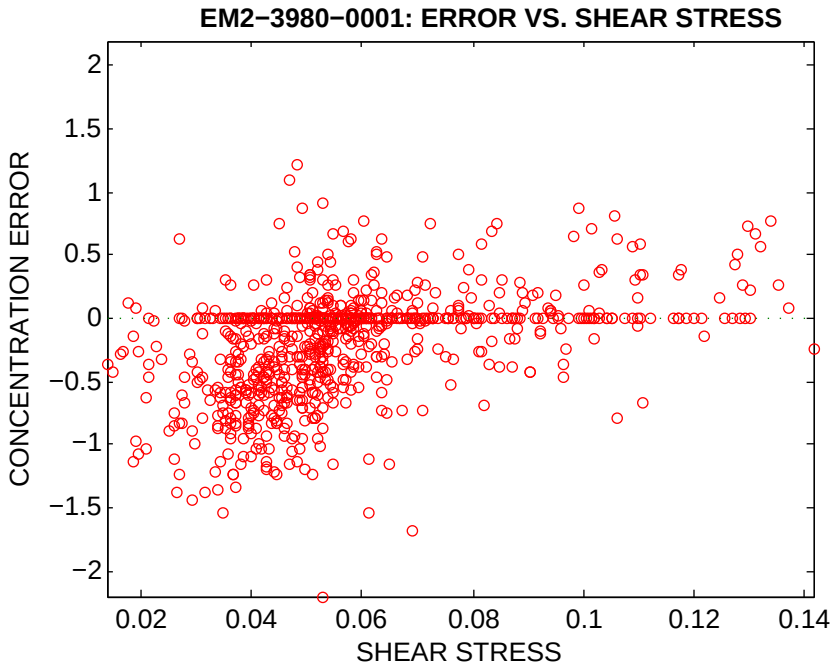


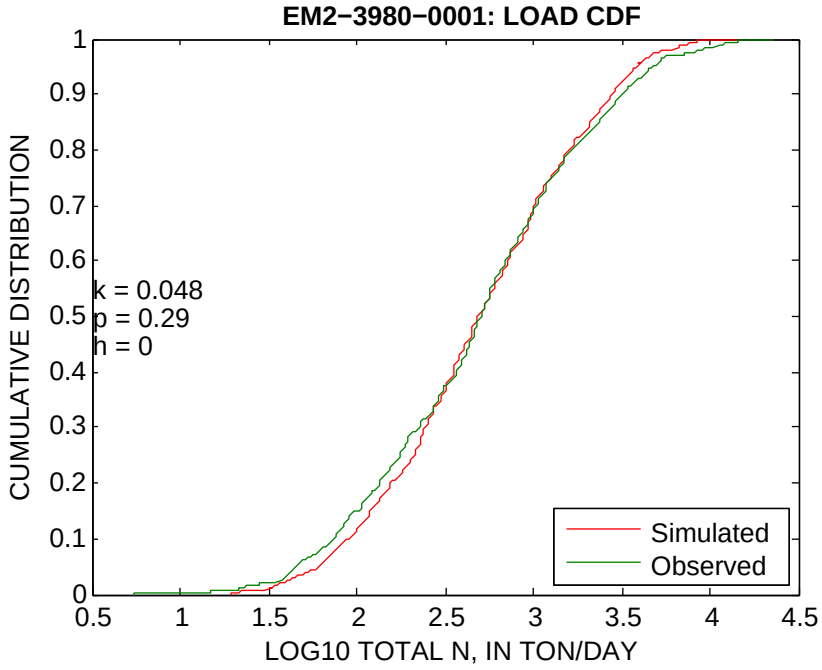


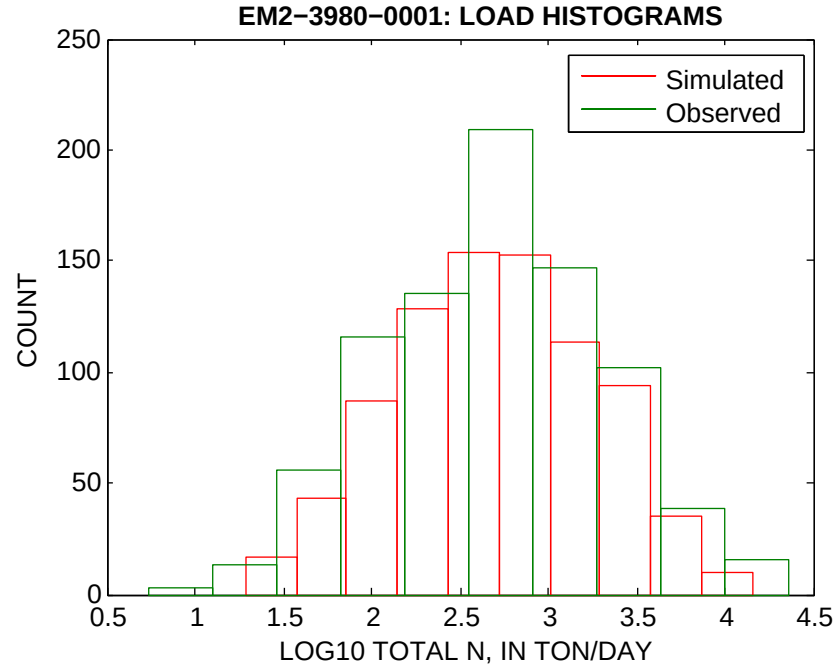


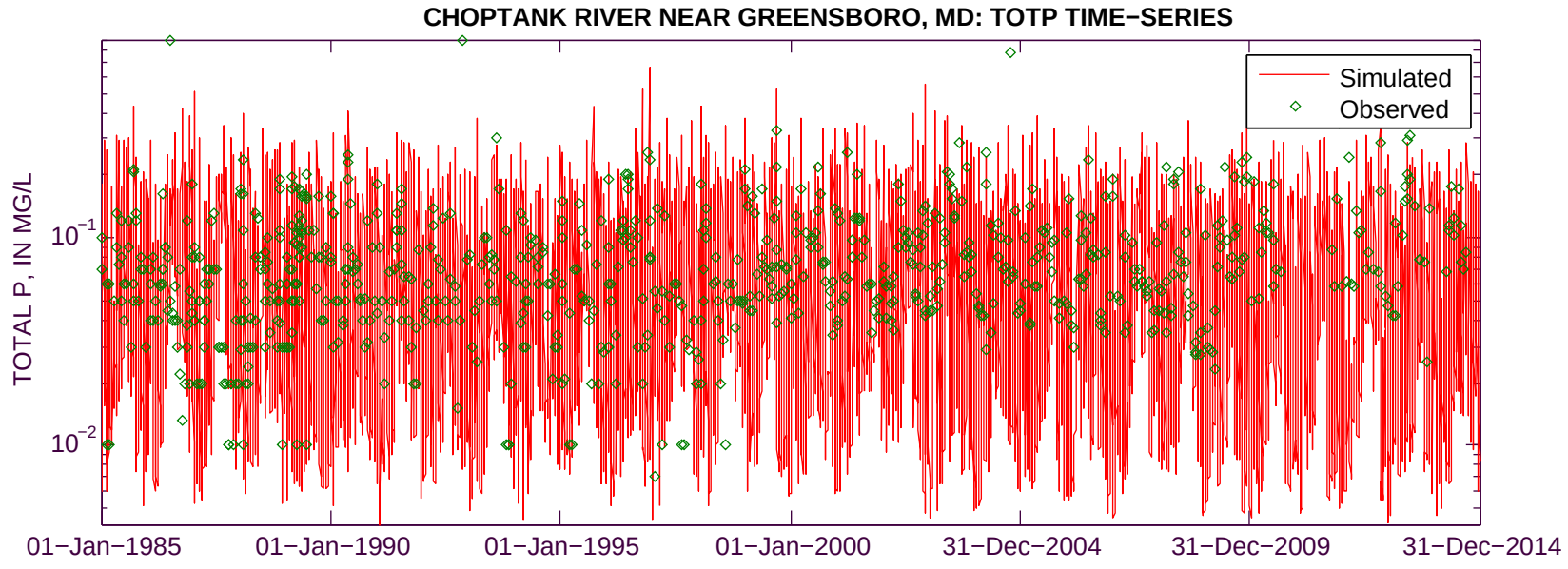
LOAD DATA
LOG10

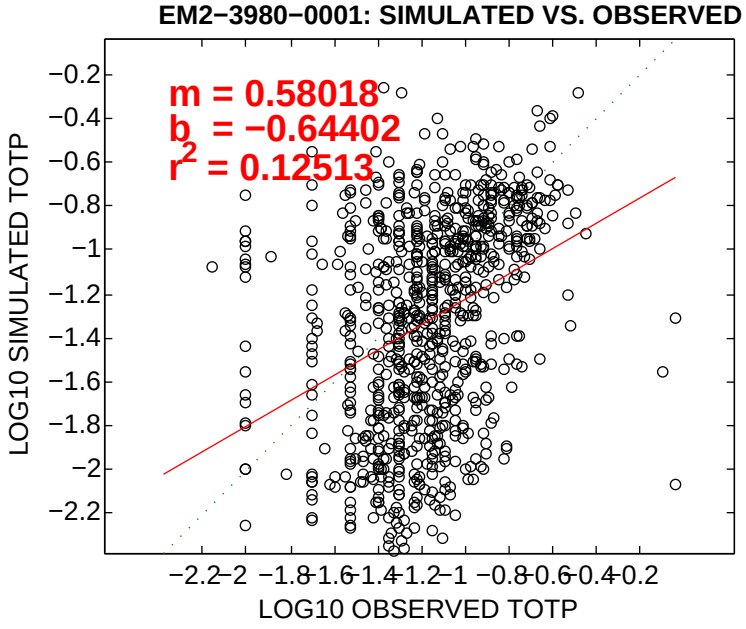


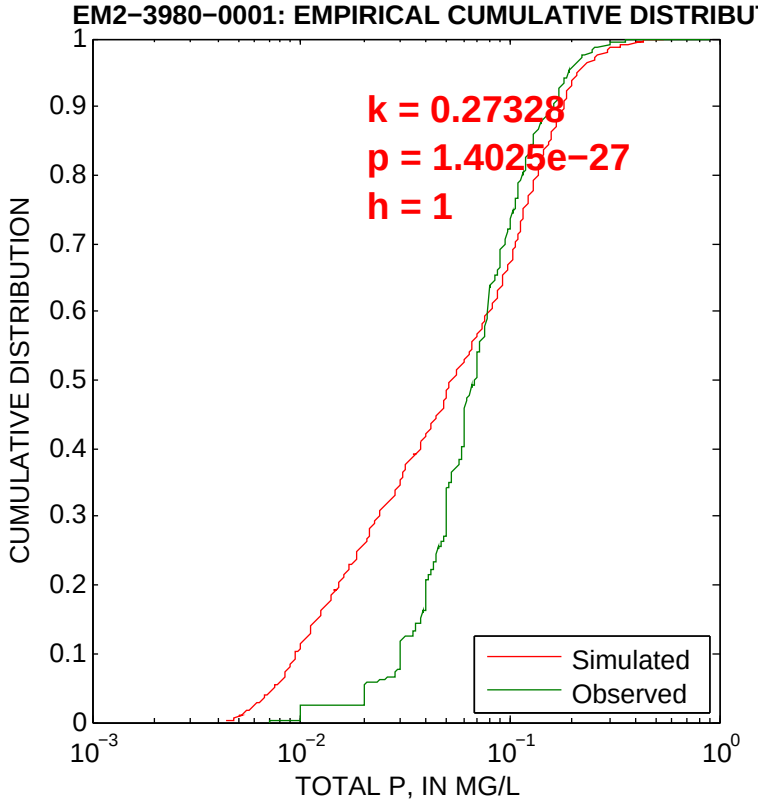












DATA SELECTION

scenario	file
P620171001WQ	TOTP.calib

plot: TOTP - total phosphorus

Dates: 1/1/1985 – 12/31/201

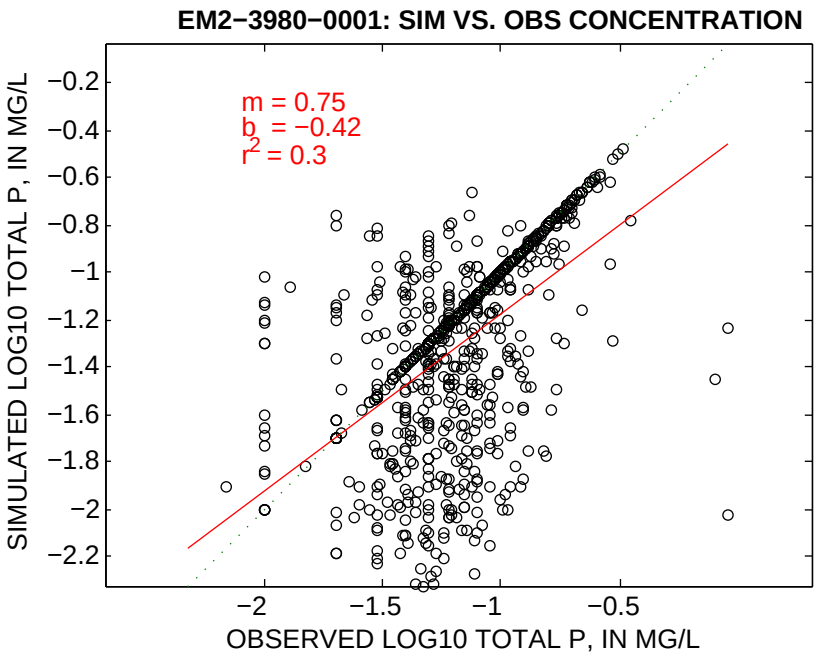
Drive	Directory	Observed
N/A	model	OBS20161101

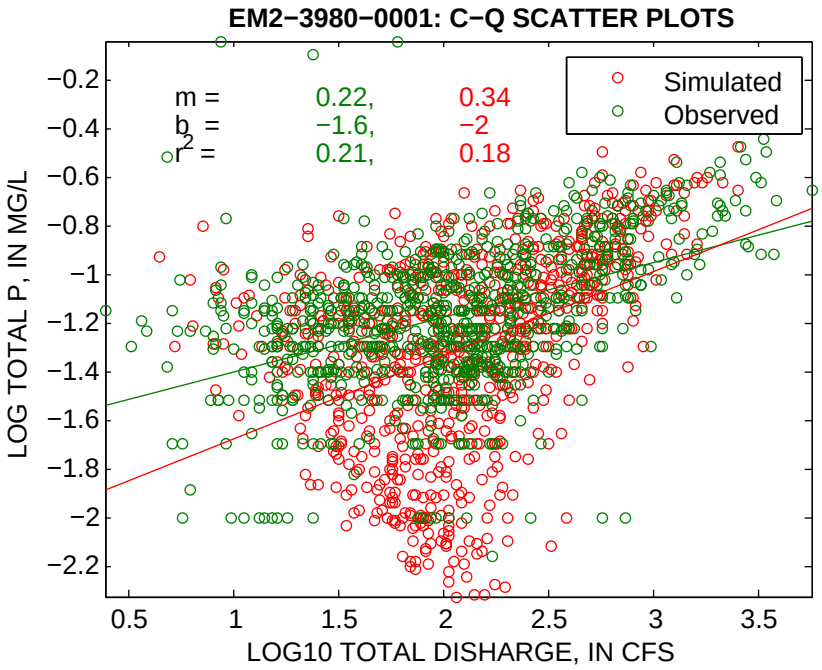
STATISTICS

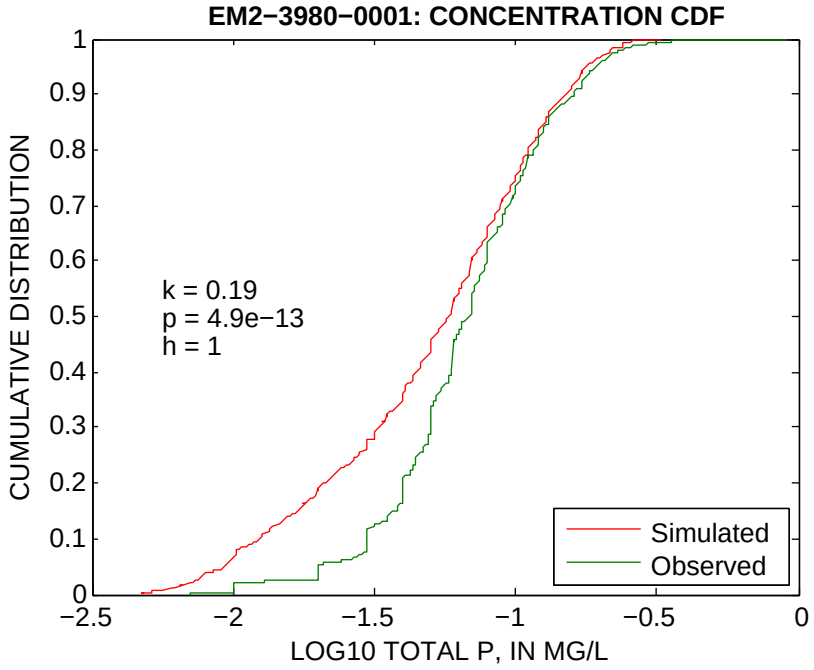
	n	observe	simulate
		827	827
min		0.007	0.004273
		-2.1549	-2.36927
mean		0.0843178	0.0793055
		-1.17184	-1.3239
media		0.069	0.052801
		-1.16115	-1.27736
max		0.91	0.54511
		-0.0409586	-0.263516
varian		0.00507804	0.00591452
		0.0849345	0.228484
JB		0.001	0.001
		0.001	0.001
		ra	log
%		-5.94453	12.976
err.va		0.00787689	0.238013
rel.std.err		1.55117	2.80231
mod.eff		-0.551169	-1.80231

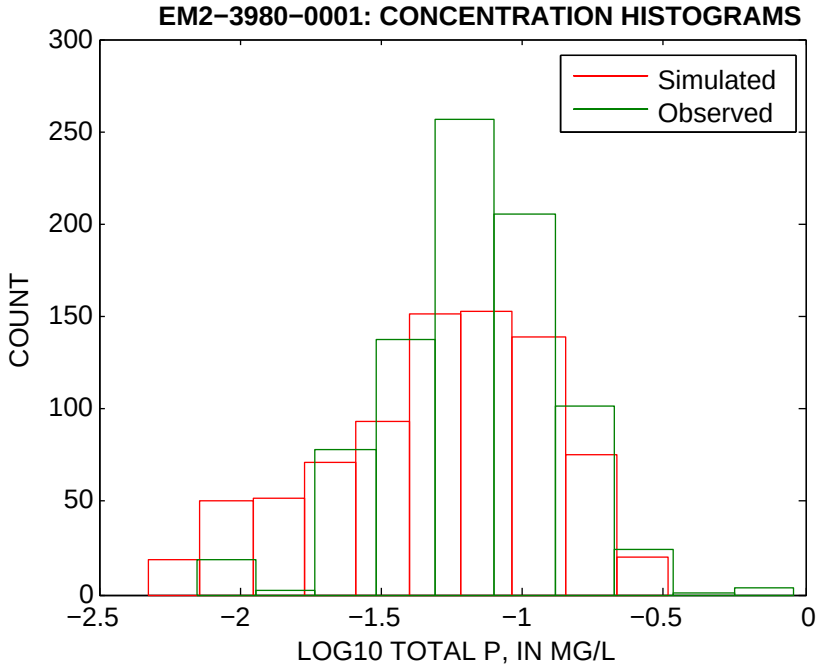
VERSION 2.1

ALL DATA
LOG10

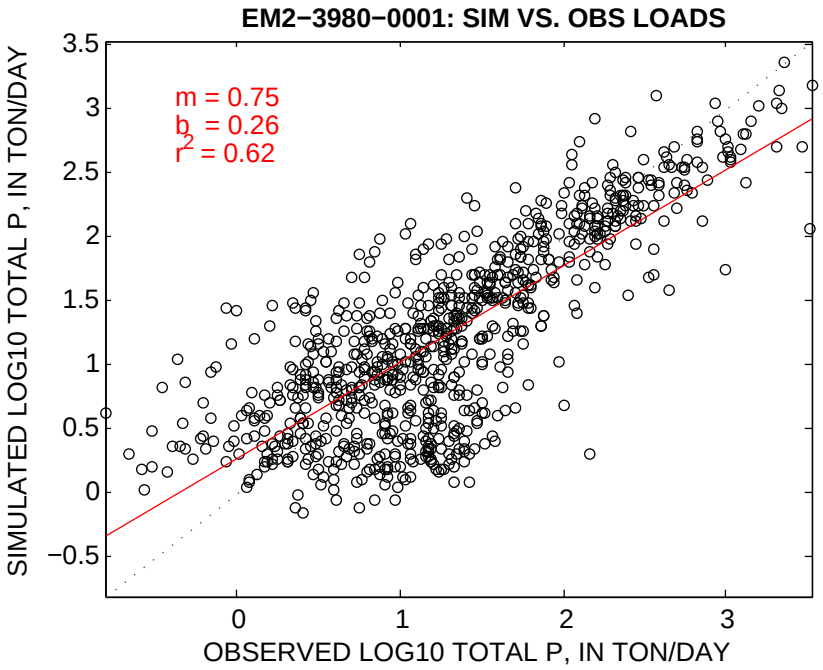


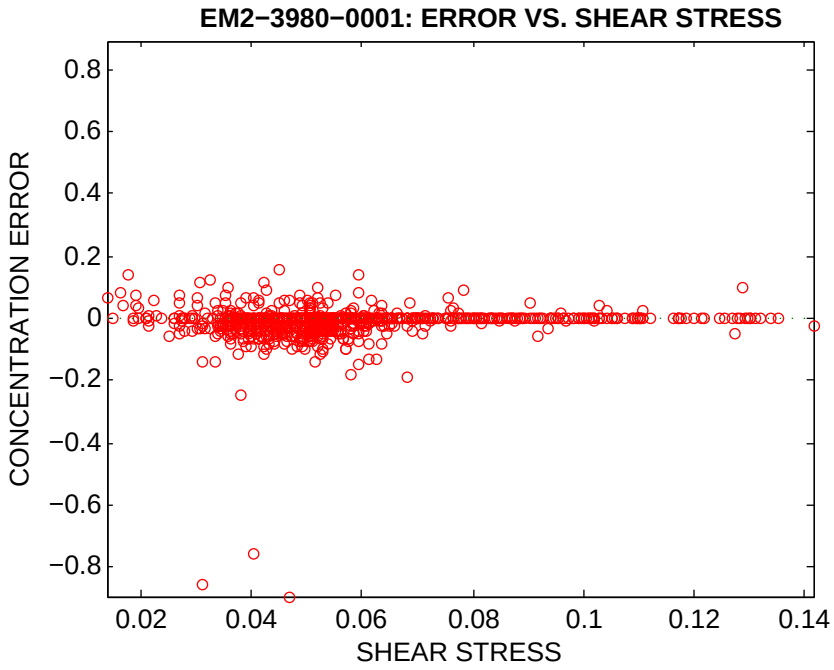


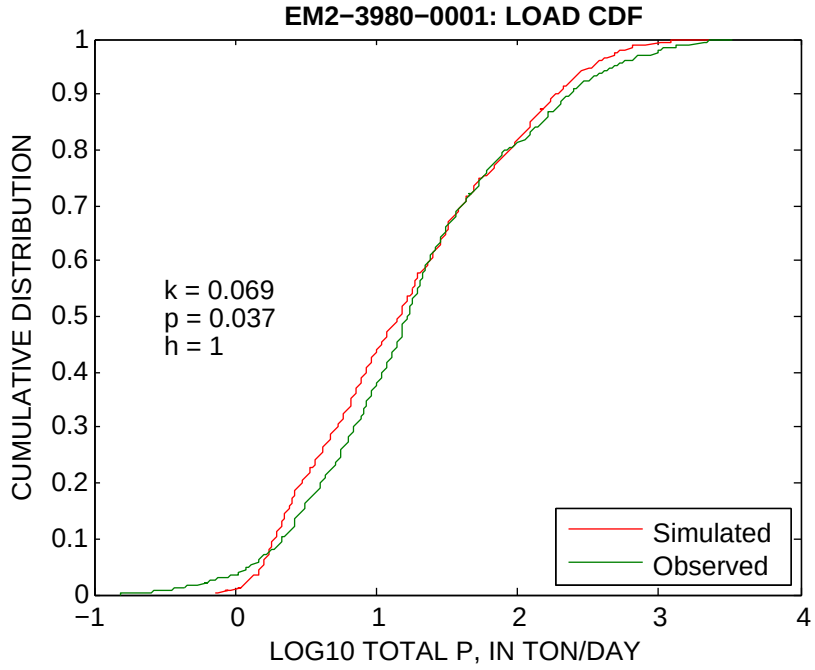


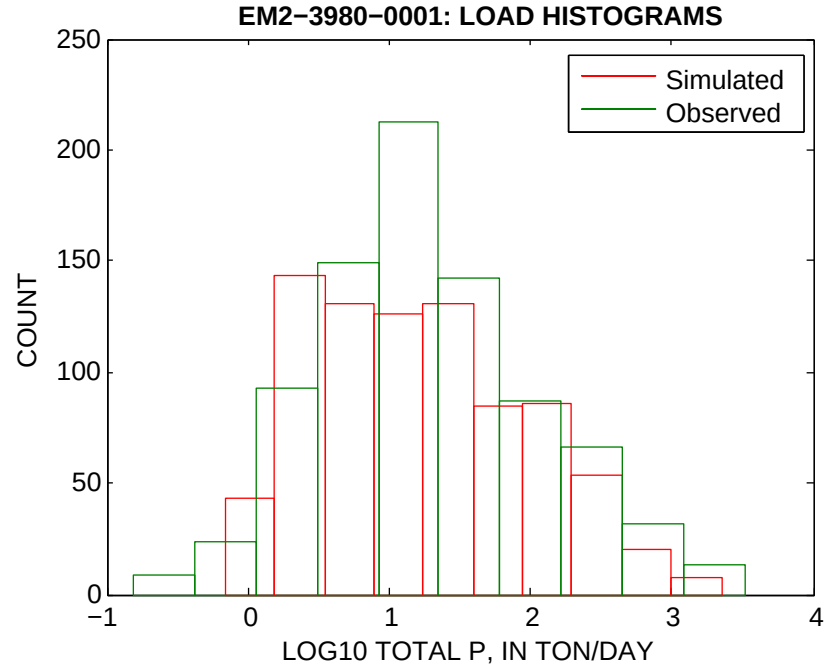


LOAD DATA
LOG10

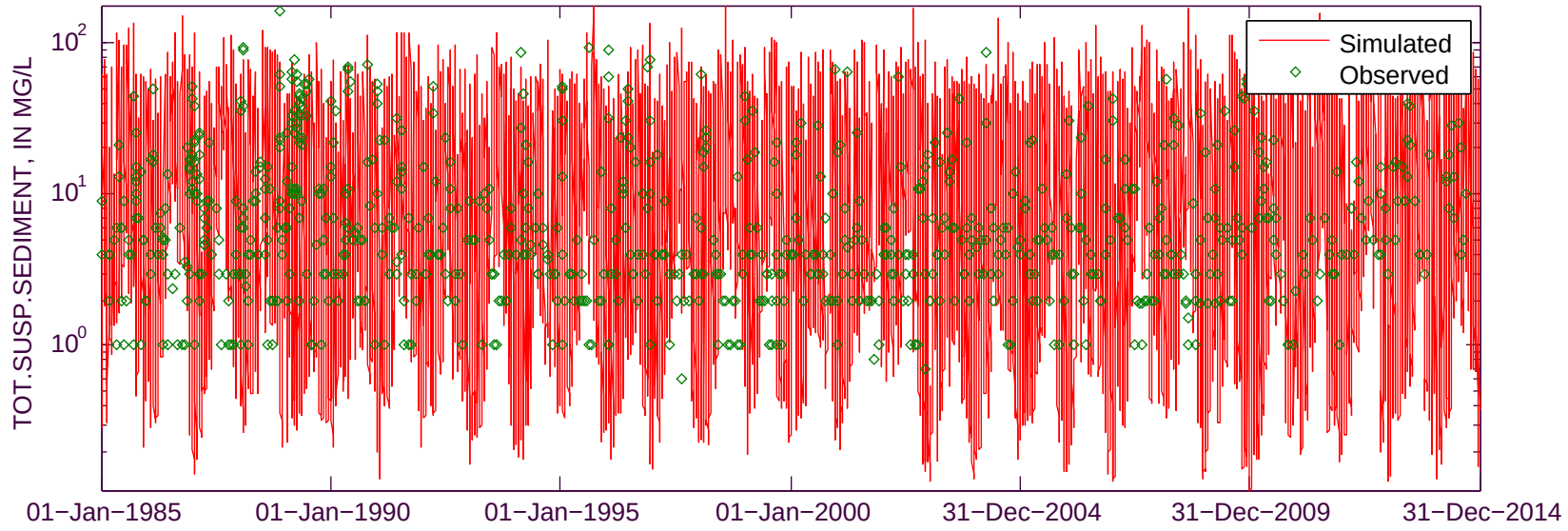




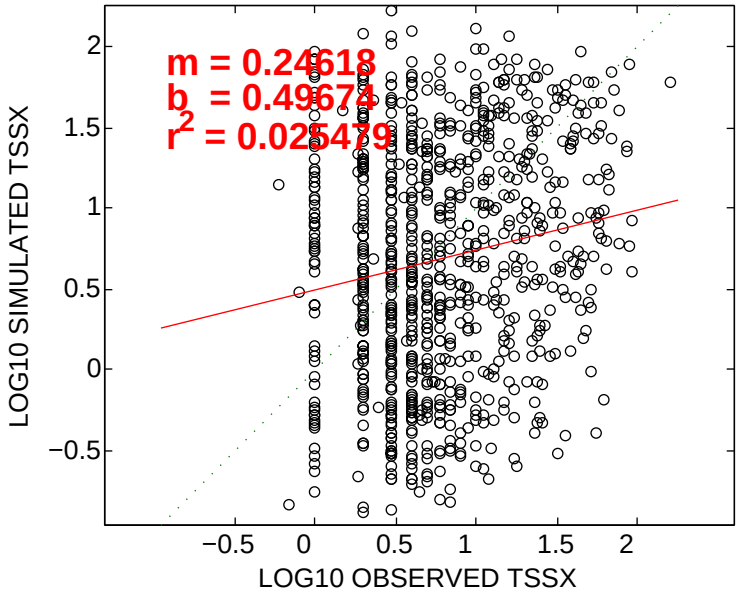




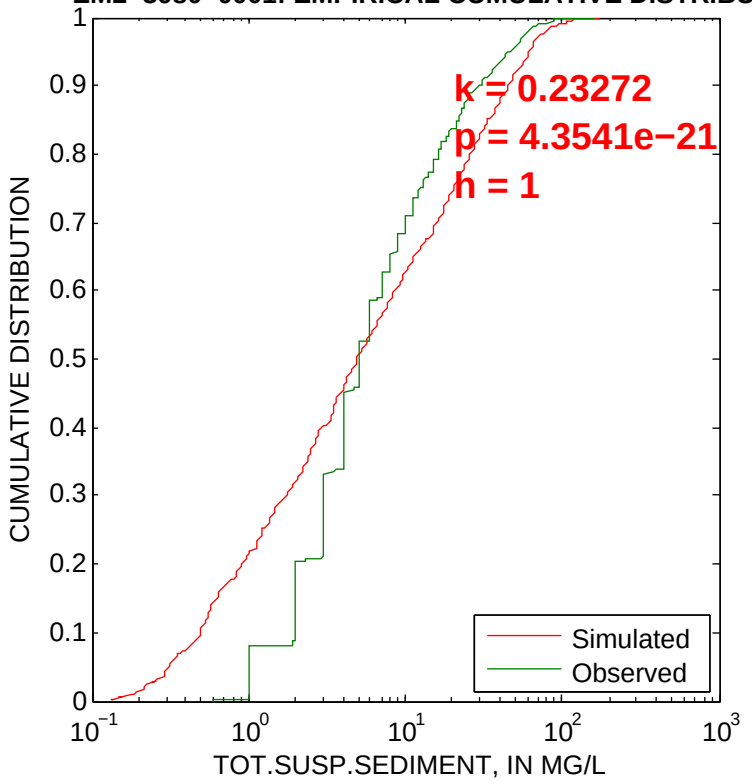
CHOPTANK RIVER NEAR GREENSBORO, MD: TSSX TIME-SERIES



EM2-3980-0001: SIMULATED VS. OBSERVED



EM2-3980-0001: EMPIRICAL CUMULATIVE DISTRIBUTION



DATA SELECTION

scenario: P620171001WQ | file: TSSX.calib

plot: TSSX - total suspended ...

Dates: 1/1/1985 – 12/31/201

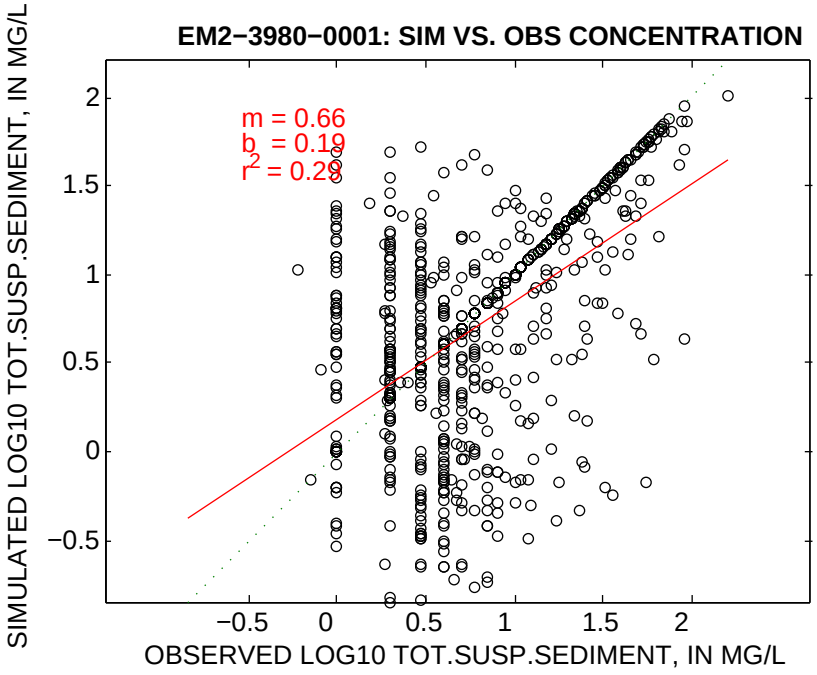
Drive: N/A | Directory: model | Observed: OBS20161101

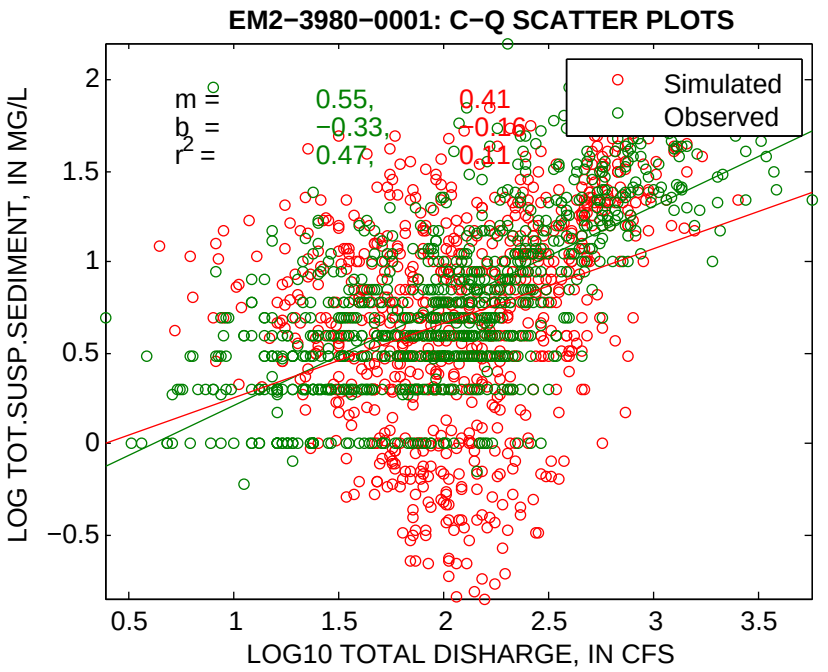
STATISTICS

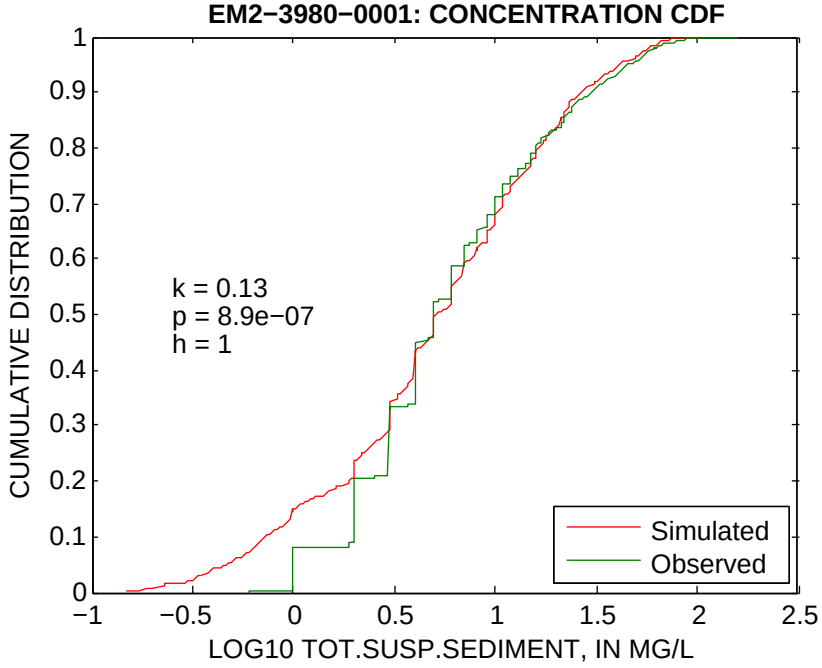
	n	observe	simulate
		868	868
min		0.6	0.13027
		-0.221849	-0.885156
mean		11.418	15.0845
		0.781997	0.68925
media		5	4.97155
		0.69897	0.696491
max		161	170.88
		2.20683	2.23269
varian		252.469	478.448
		0.223329	0.531211
JB		0.001	0.001
		0.001	0.001
		ra	log
%		32.1118	-11.8602
err.va		655.099	0.653193
rel.std.err		2.59477	2.9248
mod.eff		-1.59477	-1.9248

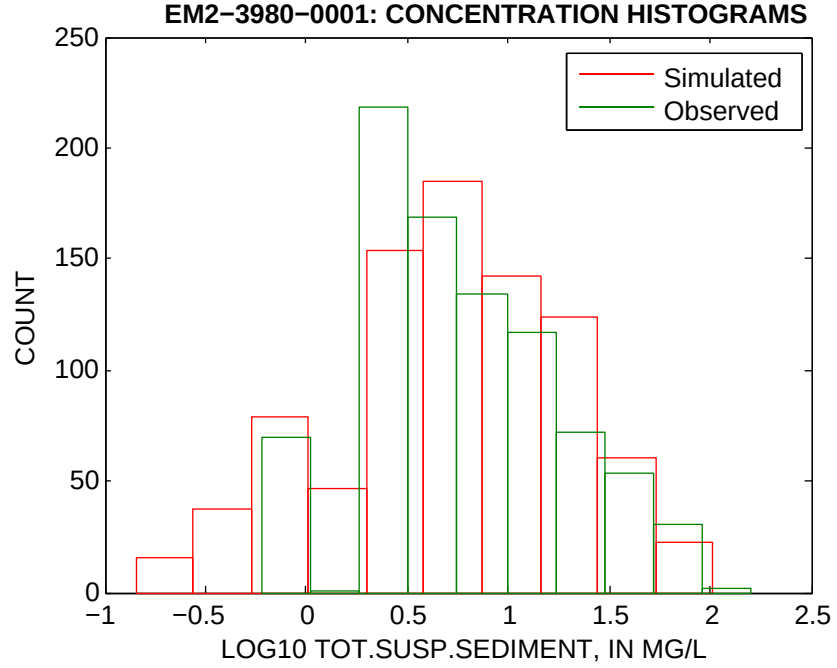
VERSION 3.1

ALL DATA
LOG10

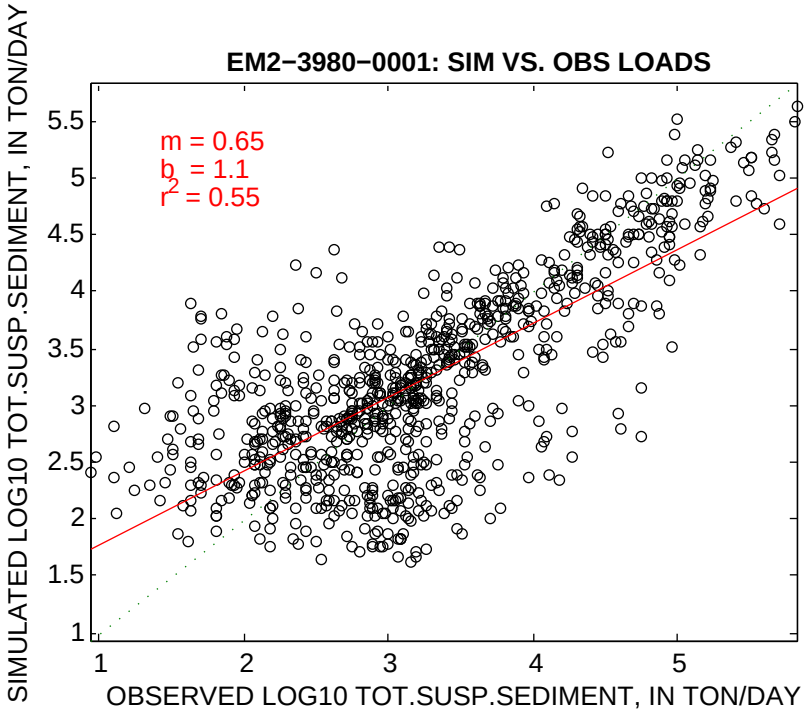


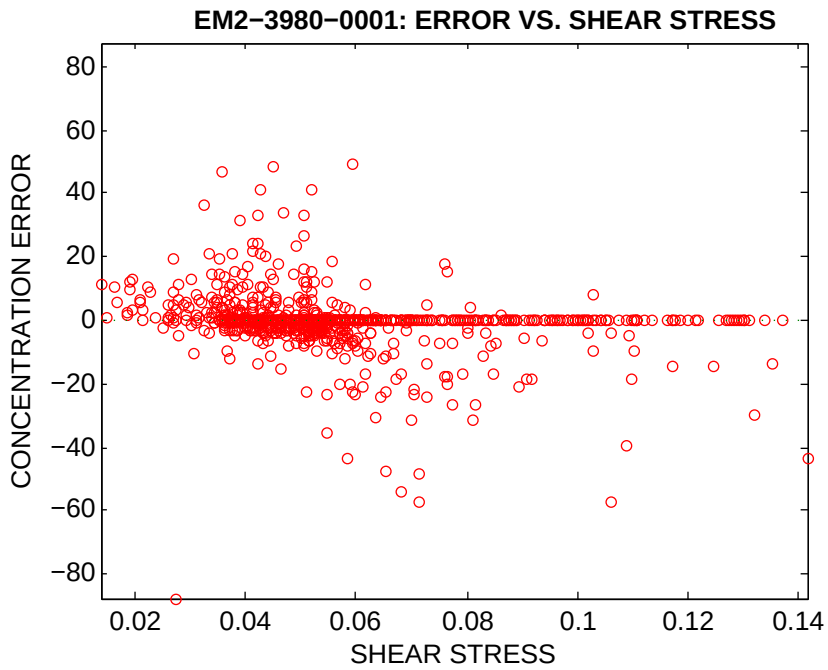


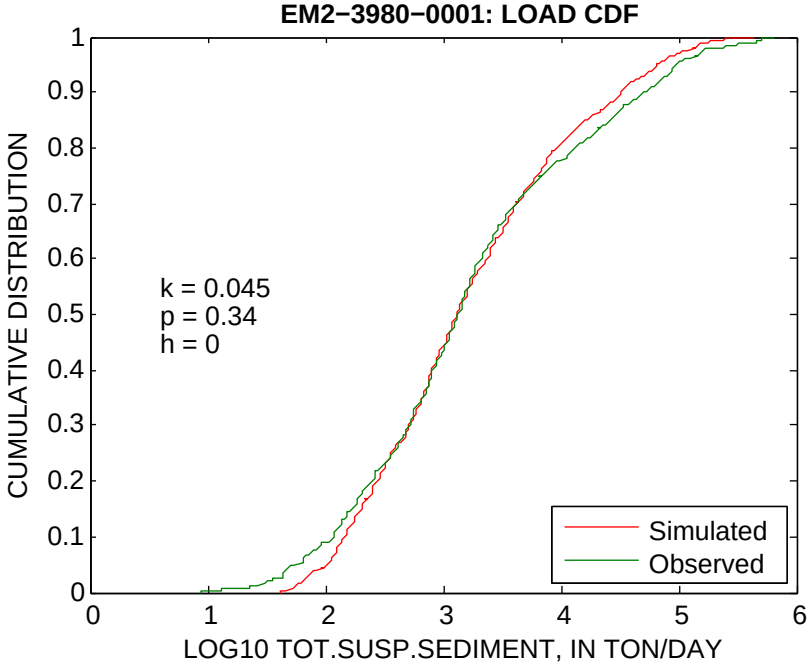


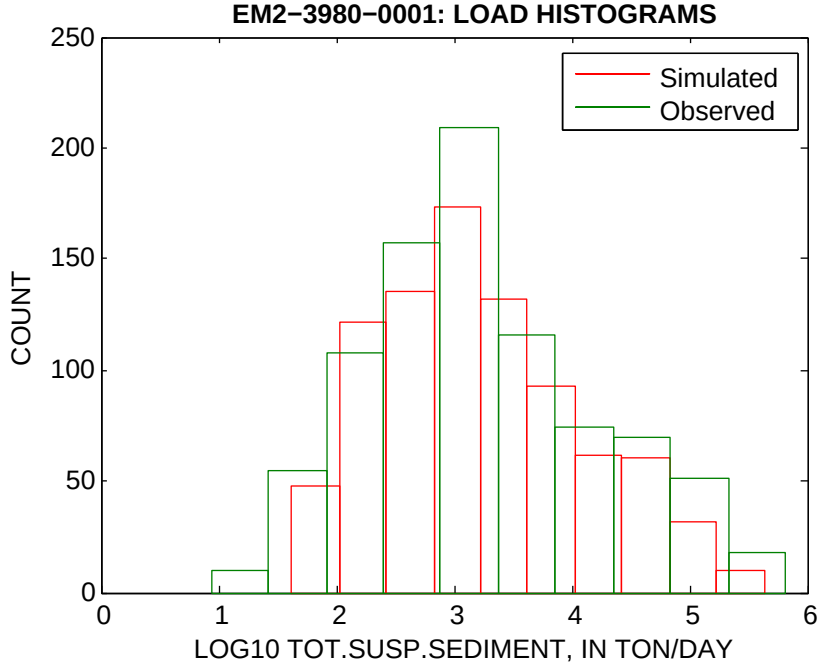


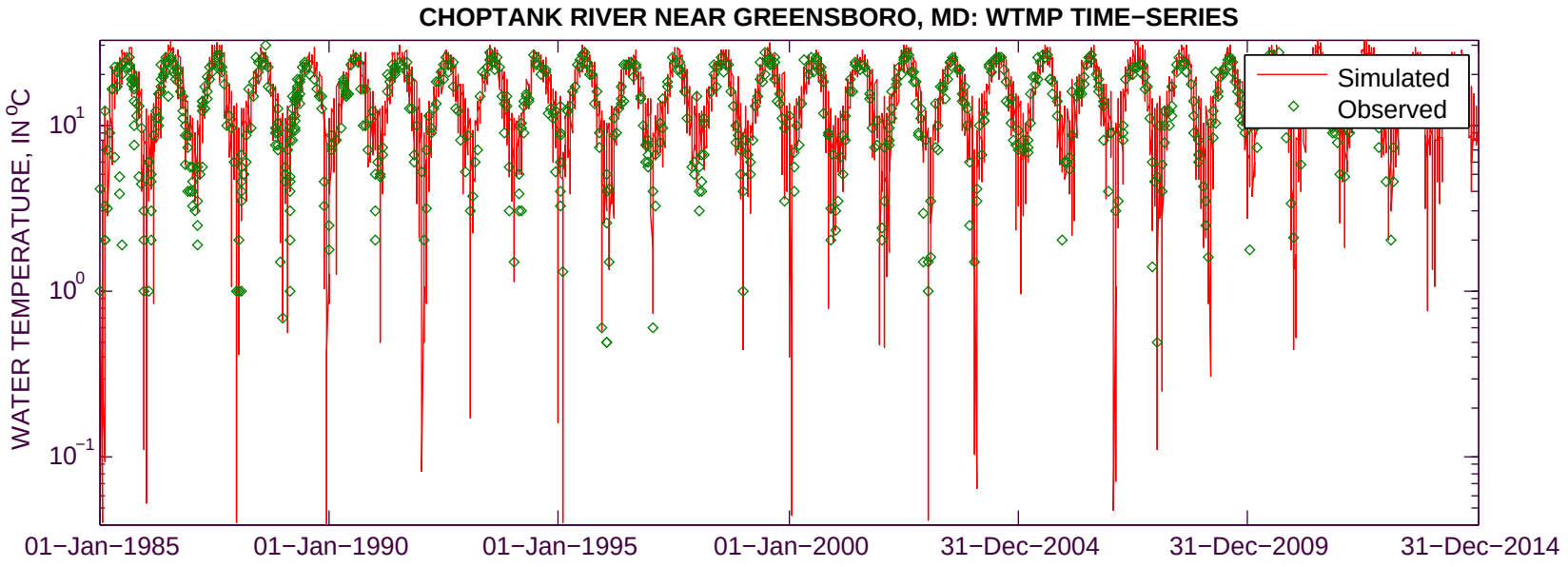
LOAD DATA
LOG10

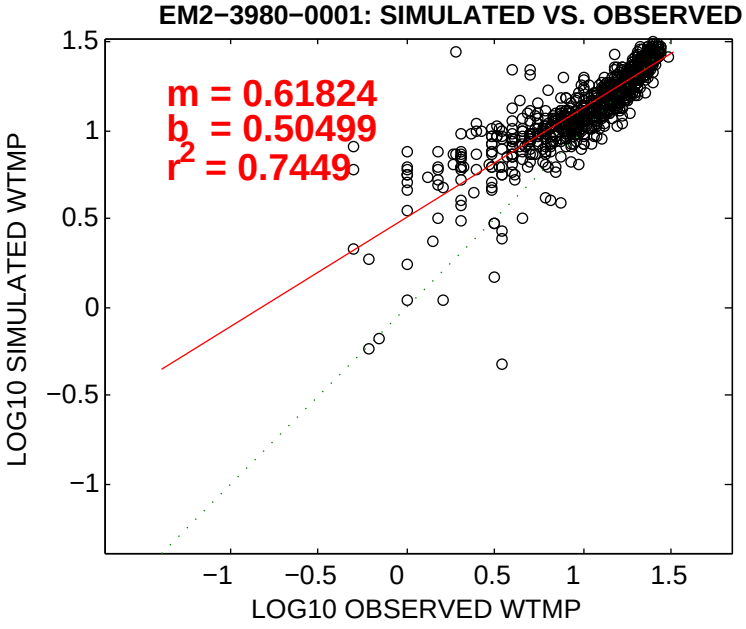


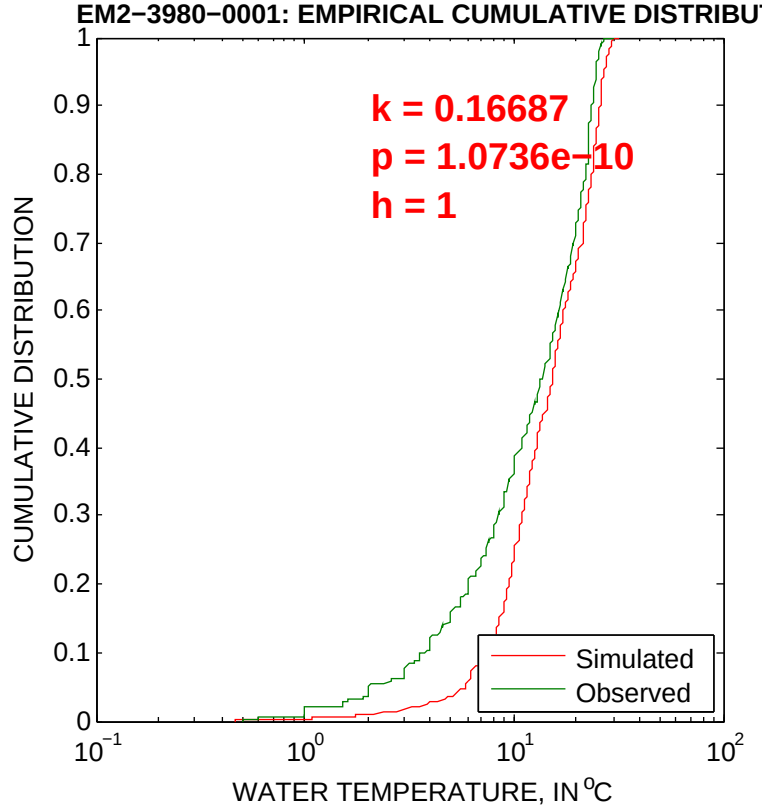












DATA SELECTION

scenario: P620171001WQ; file: WTMP.calib

plot: WTMP - water tempera...

Dates: 1/1/1985 – 12/31/201

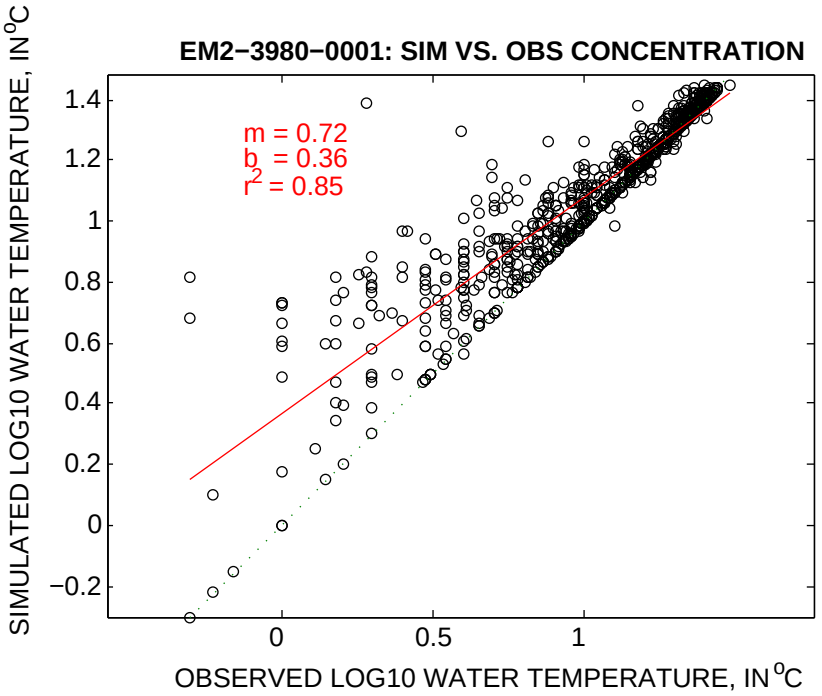
Drive: N/A; Directory: model; Observed: OBS20161101

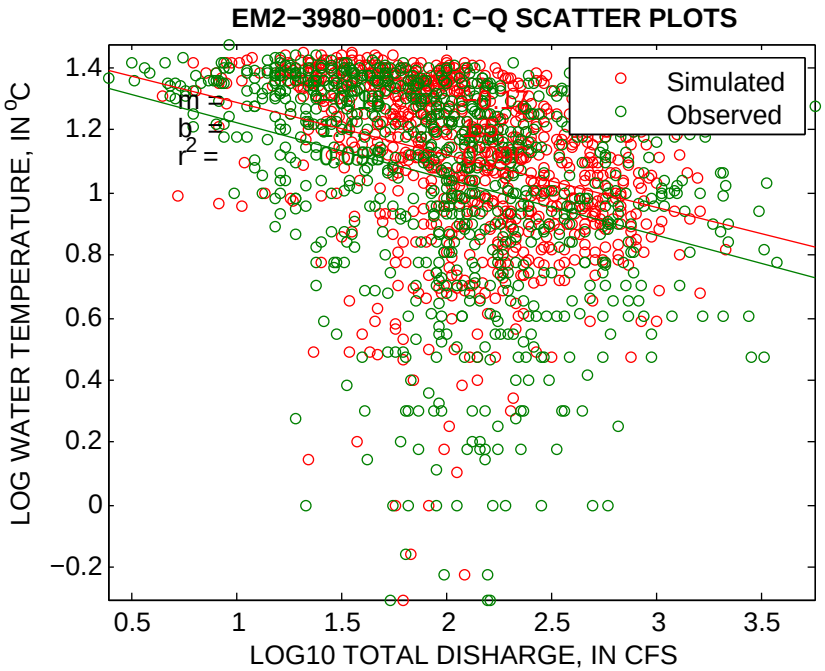
STATISTICS

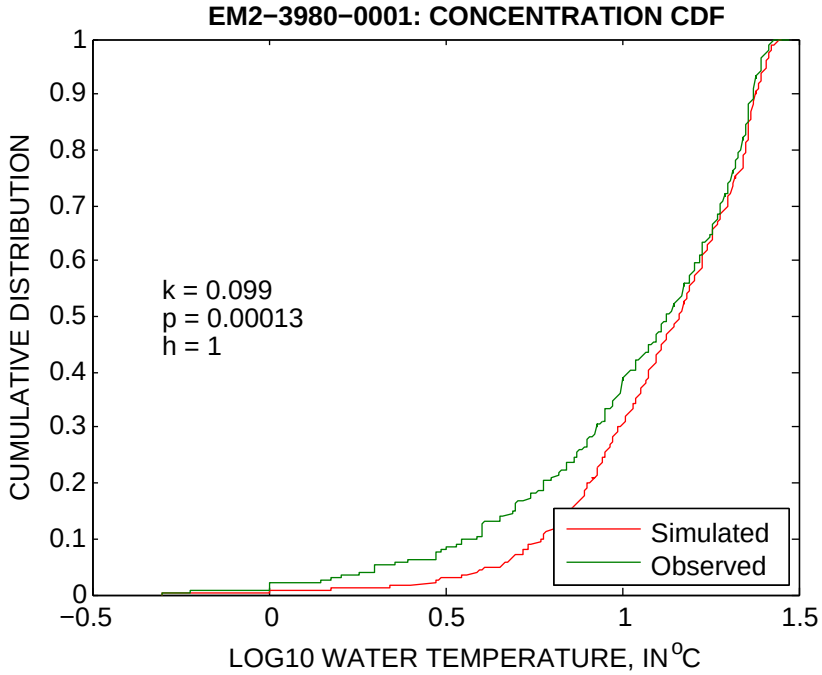
		observe	simulate
n		839	839
min		0.5	0.46751
		-0.30103	-0.330209
mean		13.8148	15.9935
		1.04261	1.14957
media		13.8	15.283
		1.13988	1.18421
max		30	31.738
		1.47712	1.50158
varian		55.7808	49.6862
		0.114754	0.0588819
JB		0.001	0.001
		0.001	0.001
		ra	log
%		15.7706	10.2595
err.va		13.1812	0.0432004
rel.std.err		0.236303	0.376462
mod.eff		0.763697	0.623538

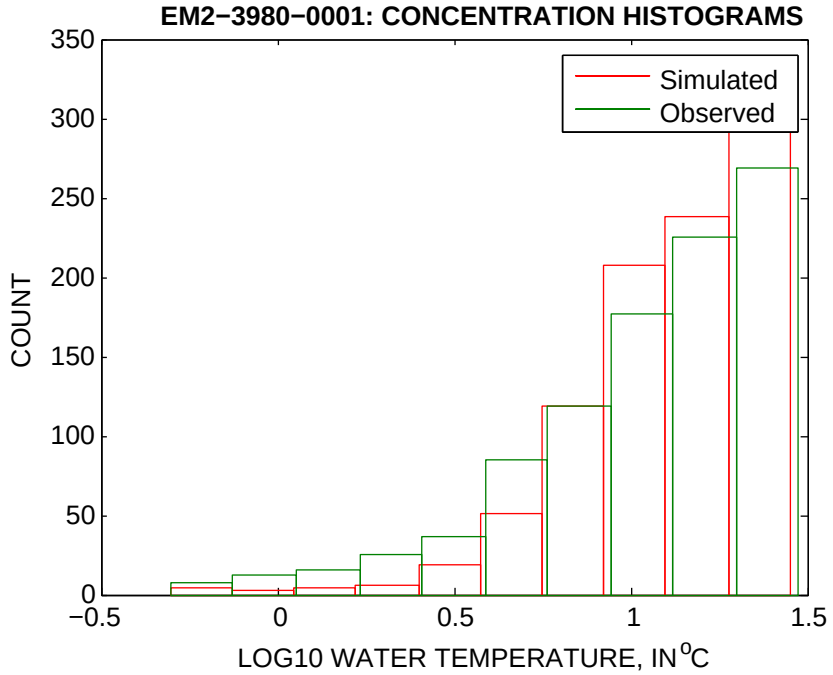
VERSION 2.1

ALL DATA
LOG10

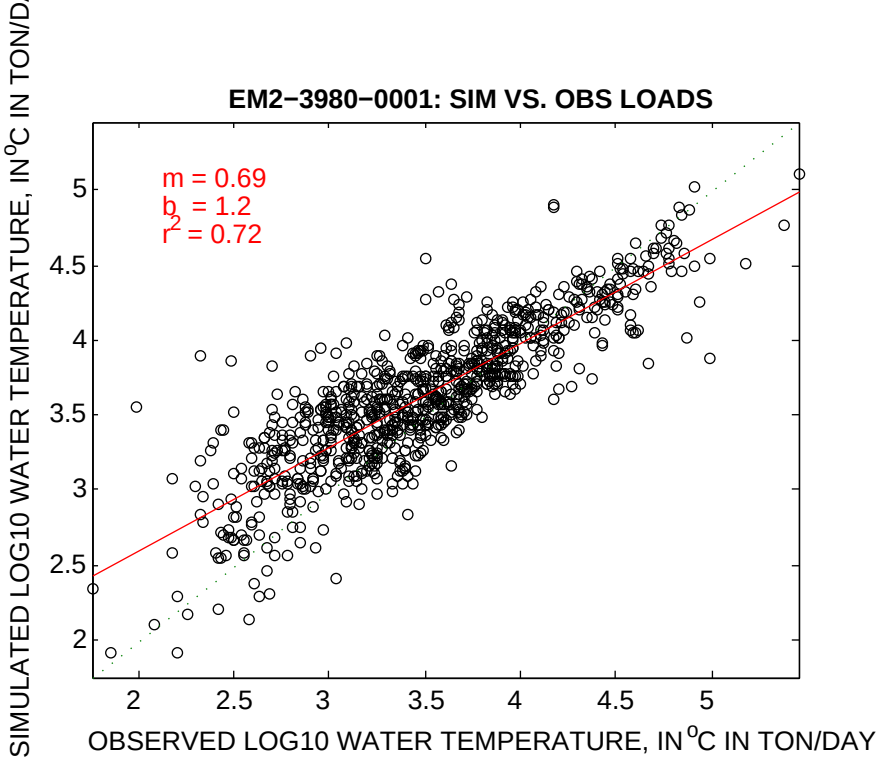


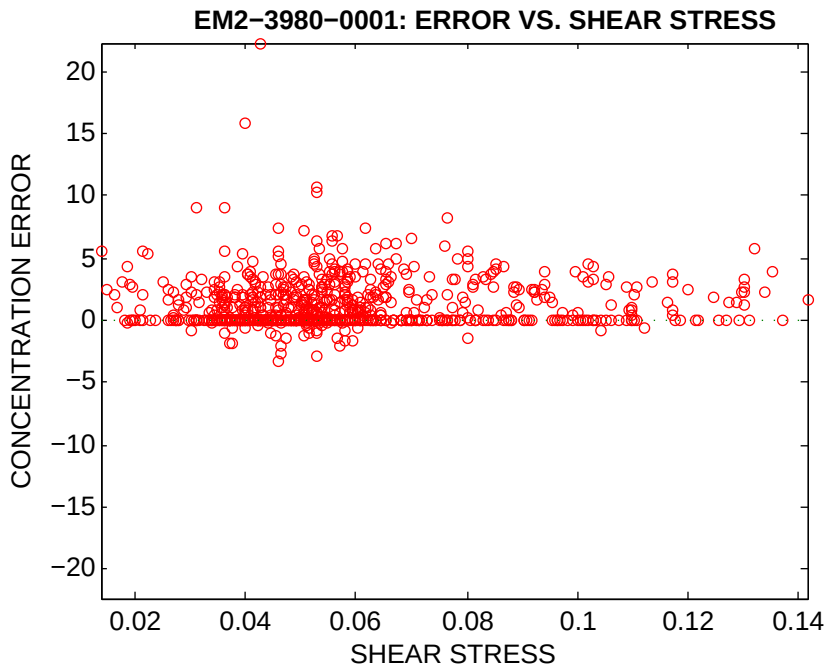


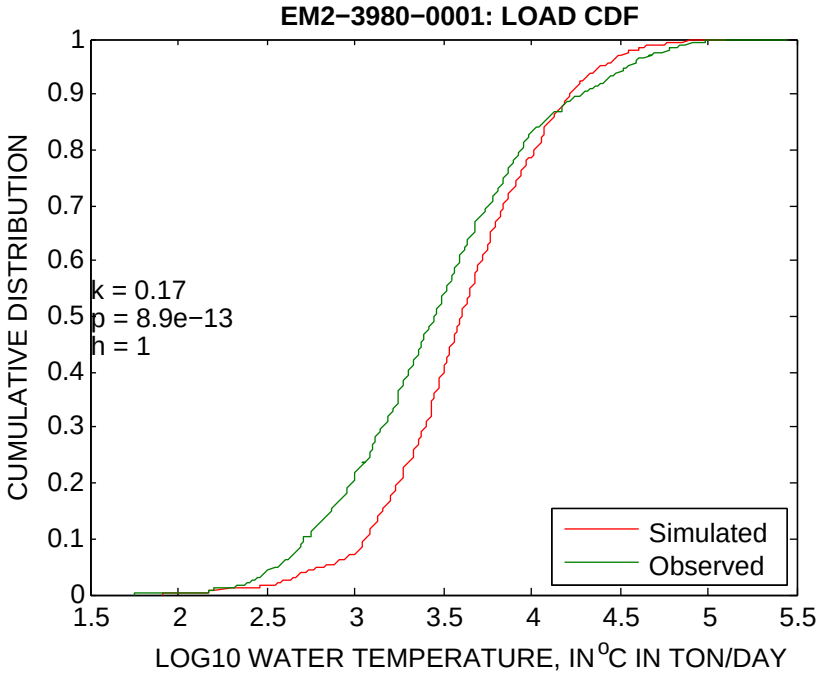


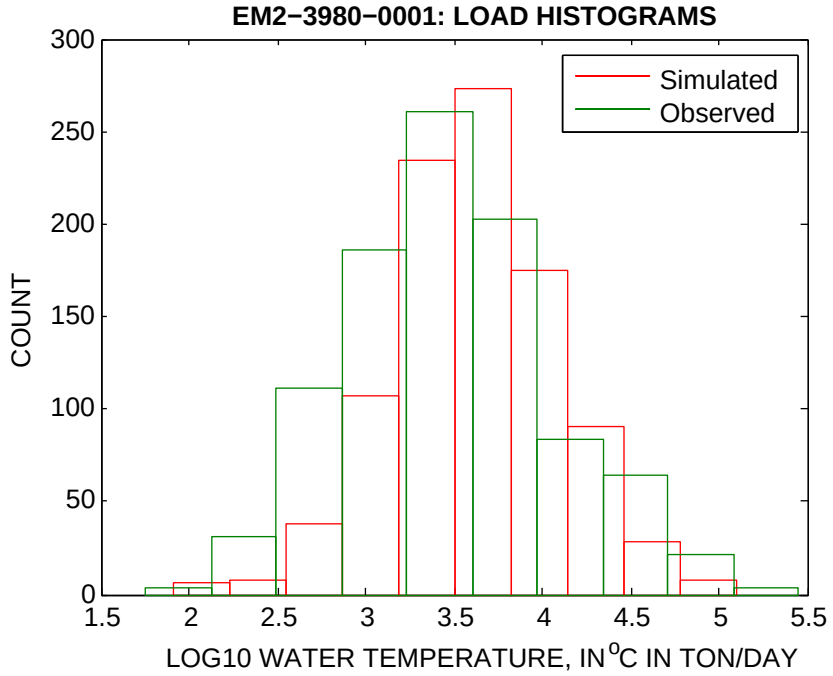


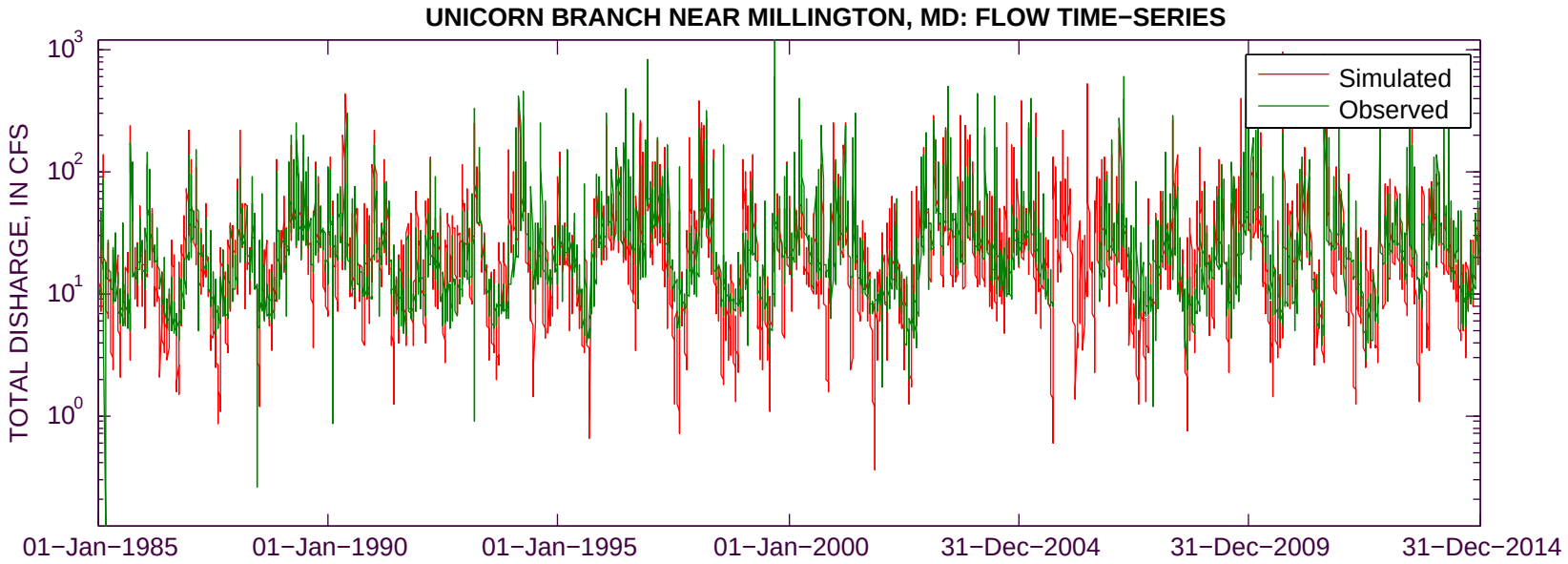
LOAD DATA
LOG10

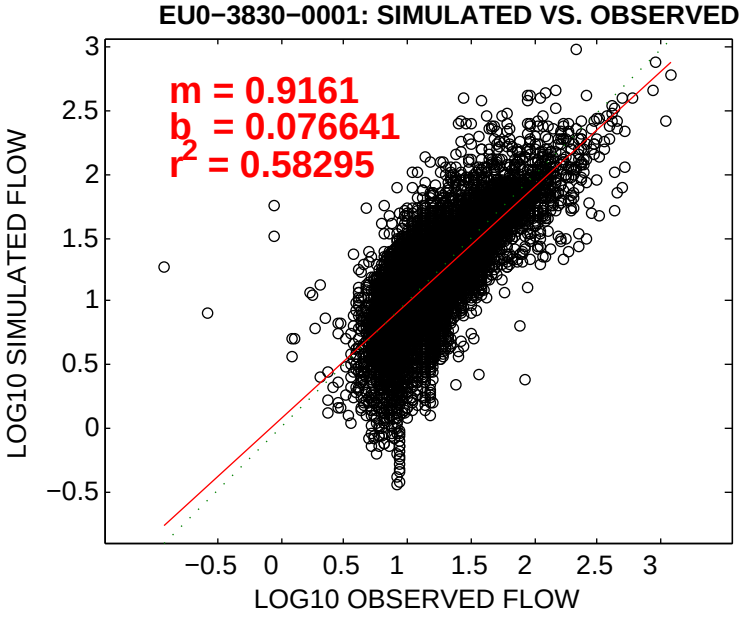


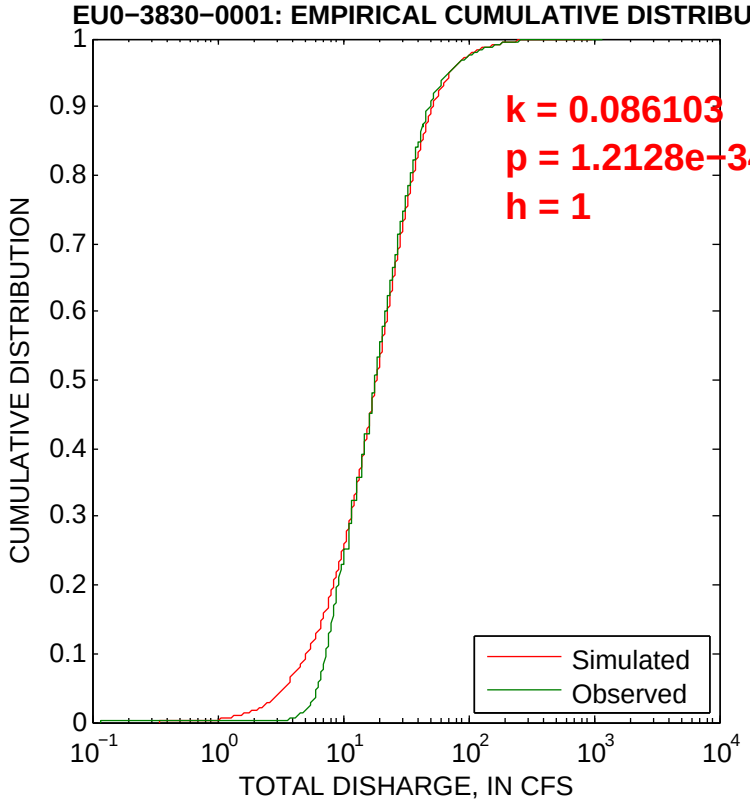












DATA SELECTION

scenario: P620171001WQ | file: FLOW.calib

plot: FLOW - total discharge

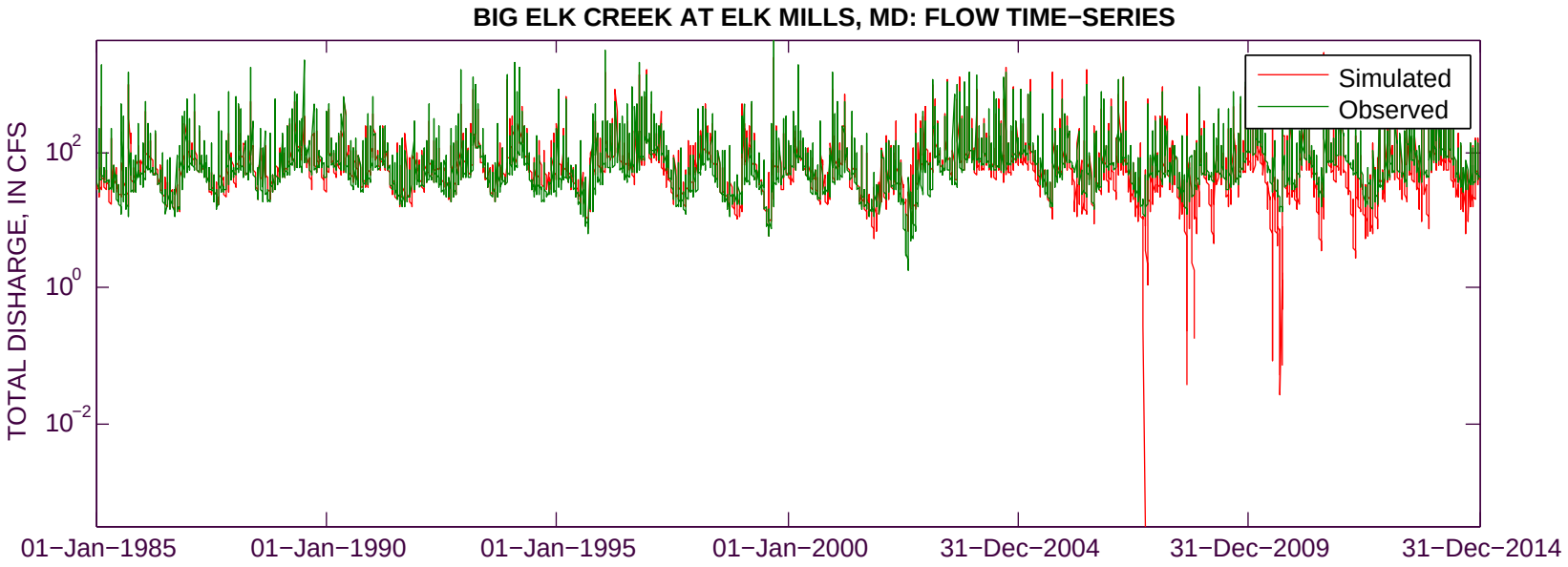
Dates: 1/1/1985 – 12/31/201

Drive: N/A | Directory: model | Observed: OBS20161101

STATISTICS

		observe	simulate
n		10592	10592
min		0.12	0.35365
		-0.920819	-0.451426
mean		27.1145	27.0078
		1.27715	1.24664
media		18	18.616
		1.25527	1.26989
max		1200	985.14
		3.07918	2.9935
varian		1484.07	1188.69
		0.113738	0.163744
JB		0.001	0.001
		0.001	0.001
		ra	log
%		-0.393733	-2.38878
err.va		814.287	0.0700211
rel.std.err		0.548684	0.615636
mod.eff		0.451316	0.384364

VERSION 2.1



DATA SELECTION

scenario: P620171001WQ | file: FLOW.calib

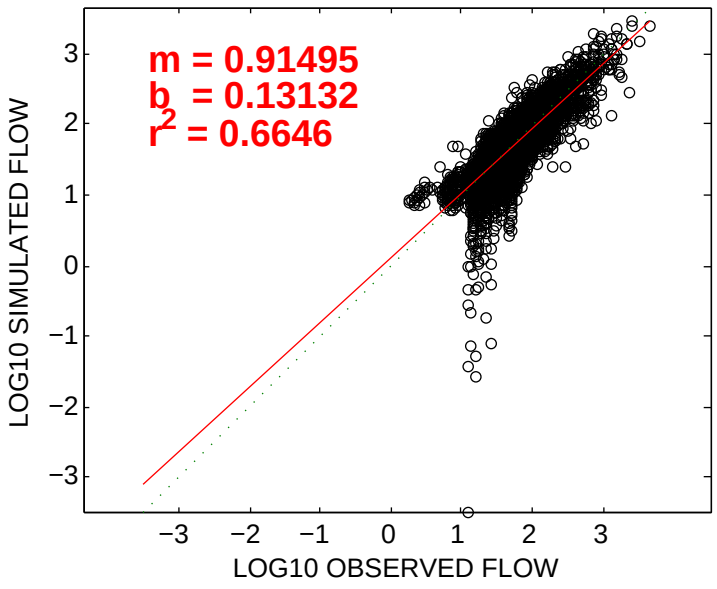
plot: FLOW - total discharge

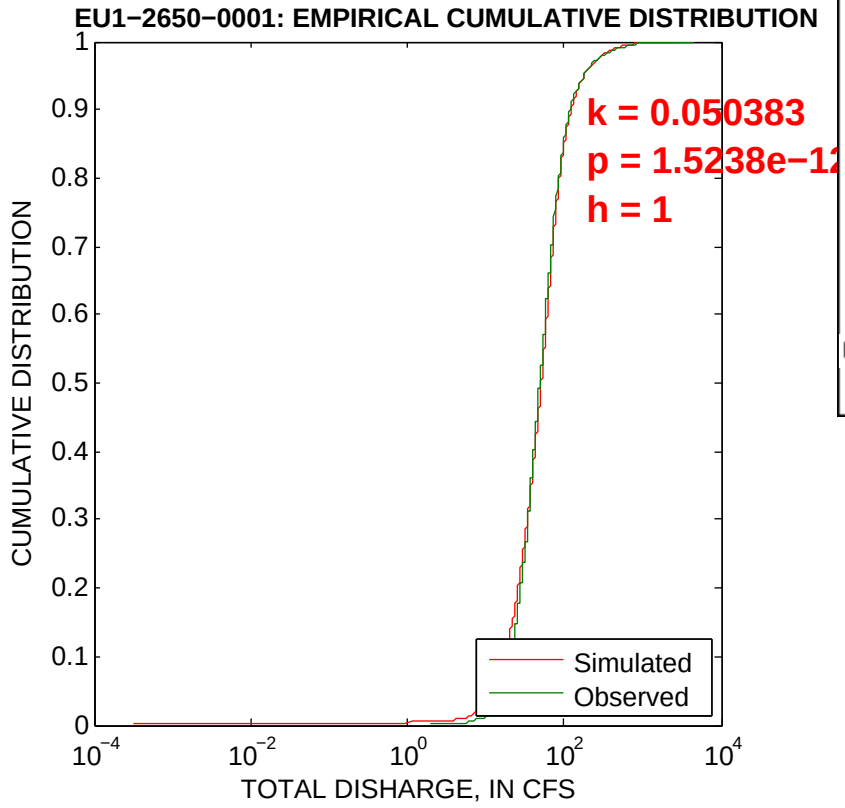
Dates: 1/1/1985 – 12/31/201

Drive: N/A | Directory: model | Observed: OBS20161101

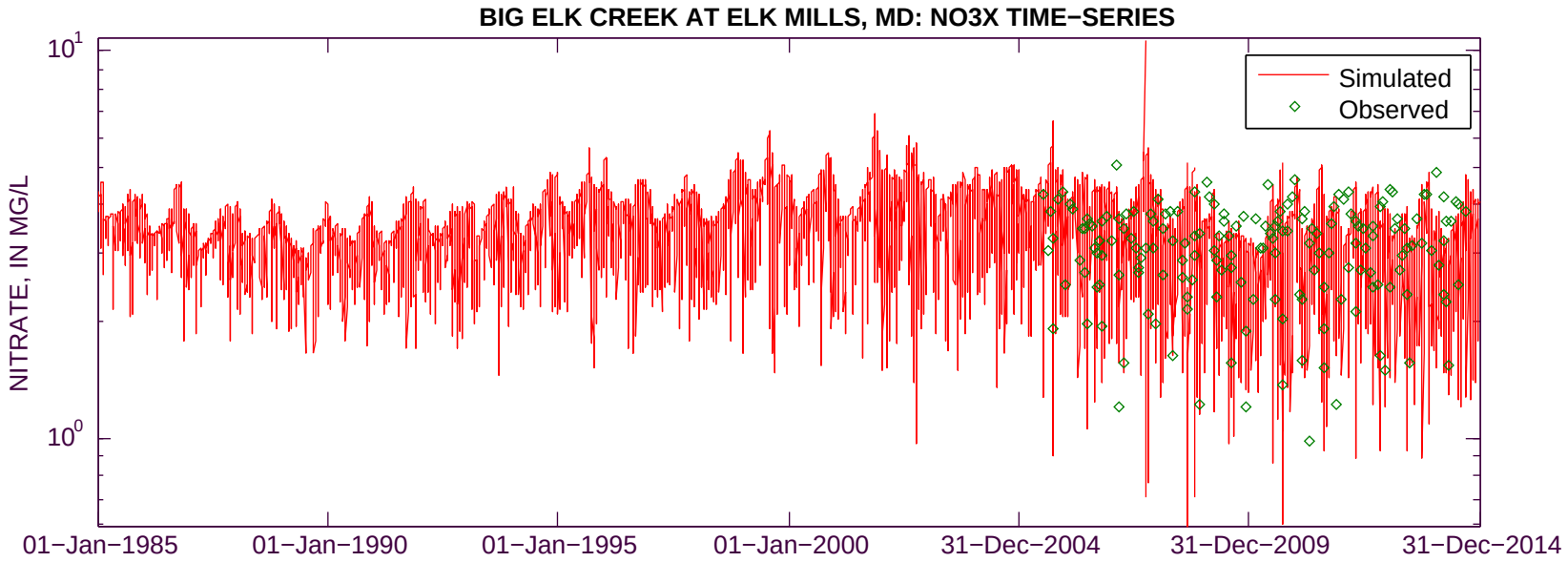
STATISTICS

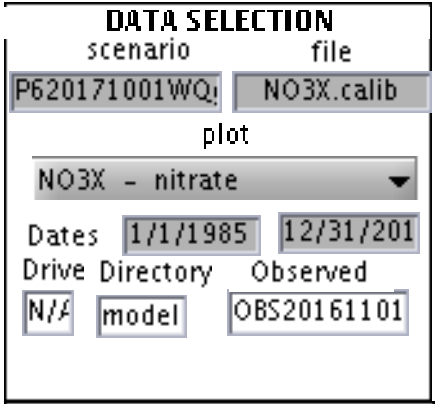
	observe	simulate
n	10956	10933
min	1.8	0
	0.255273	-3.50583
mean	73.4316	72.1119
	1.70604	1.69227
media	49	51.4555
	1.6902	1.71225
max	4570	2841.9
	3.65992	3.45361
varian	15769.9	11426.2
	0.10843	0.13658
JB	0.001	0.001
	0.001	0.001
	ra	log
%	-1.79715	-0.807212
err.va	4655.5	0.046783
rel.std.err	0.295214	0.431458
mod.eff	0.704786	0.568542

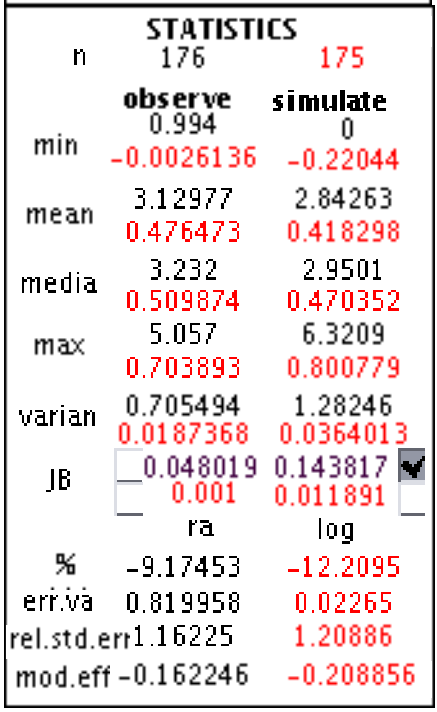


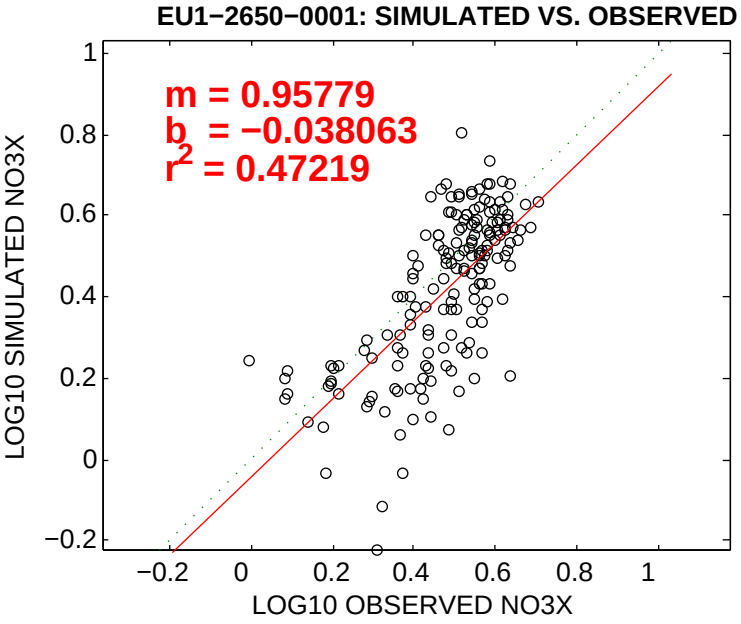


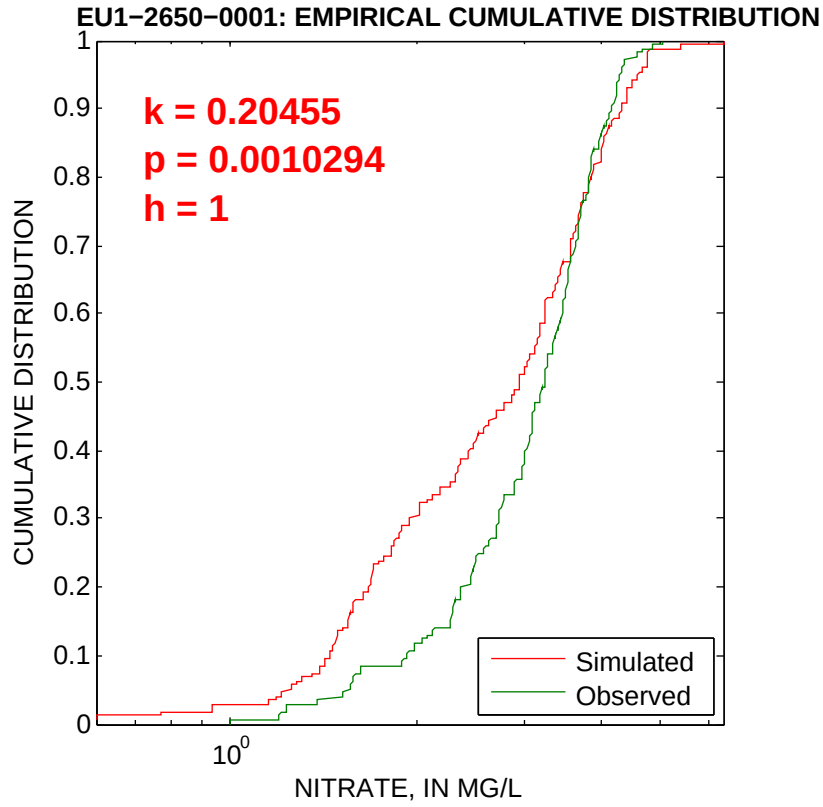
VERSION


BIG ELK CREEK AT ELK MILLS, MD: NO3X TIME-SERIES
NITRATE, IN MG/L
Simulated
Observed
01-Jan-1985
01-Jan-1990
01-Jan-1995
01-Jan-2000
31-Dec-2004
31-Dec-2009
31-Dec-2014


DATA SELECTION
scenario
file
P620171001WQ
NO3X.calib
plot
NO3X - nitrate
Dates
1/1/1985
12/31/201
Drive
Directory
Observed
N/A
model
OBS20161101

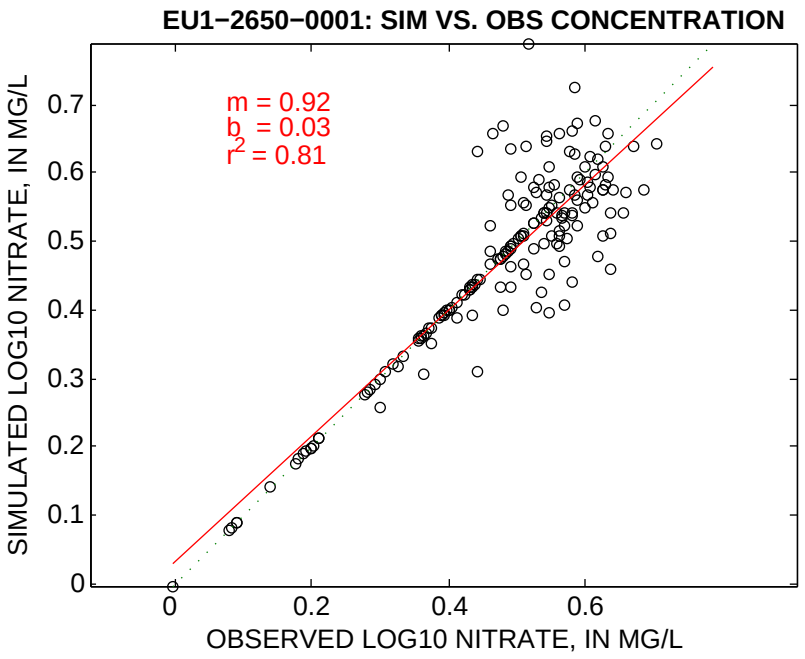

STATISTICS
n 176 175
observe simulate
min 0.994 0
-0.0026136 -0.22044
mean 3.12977 2.84263
0.476473 0.418298
media 3.232 2.9501
0.509874 0.470352
max 5.057 6.3209
0.703893 0.800779
varian 0.705494 1.28246
0.0187368 0.0364013
JB 0.048019 0.143817
0.001 0.011891
ra log
% -9.17453 -12.2095
err.va 0.819958 0.02265
rel.std.err 1.16225 1.20886
mod.eff -0.162246 -0.208856

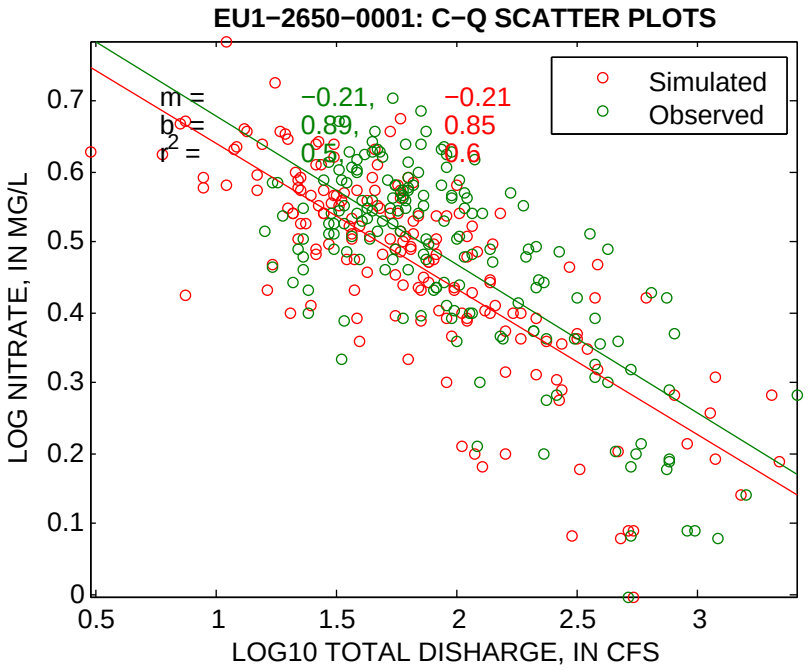

EU1-2650-0001: SIMULATED VS. OBSERVED
m = 0.95779
b = -0.038063
r2 = 0.47219
LOG10 SIMULATED NO3X
LOG10 OBSERVED NO3X

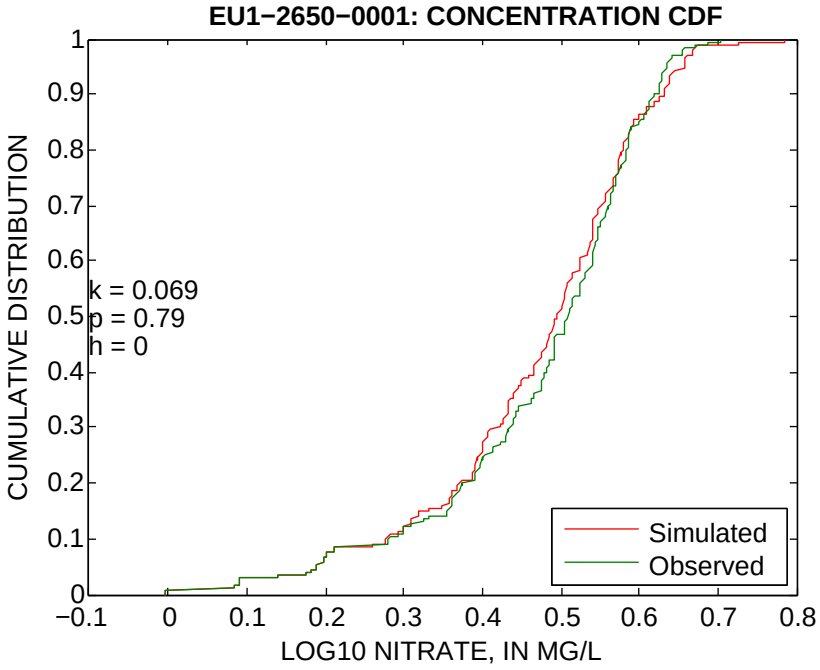

EU1-2650-0001: EMPIRICAL CUMULATIVE DISTRIBUTION
k = 0.20455
p = 0.0010294
h = 1
CUMULATIVE DISTRIBUTION
Simulated
Observed
NITRATE, IN MG/L

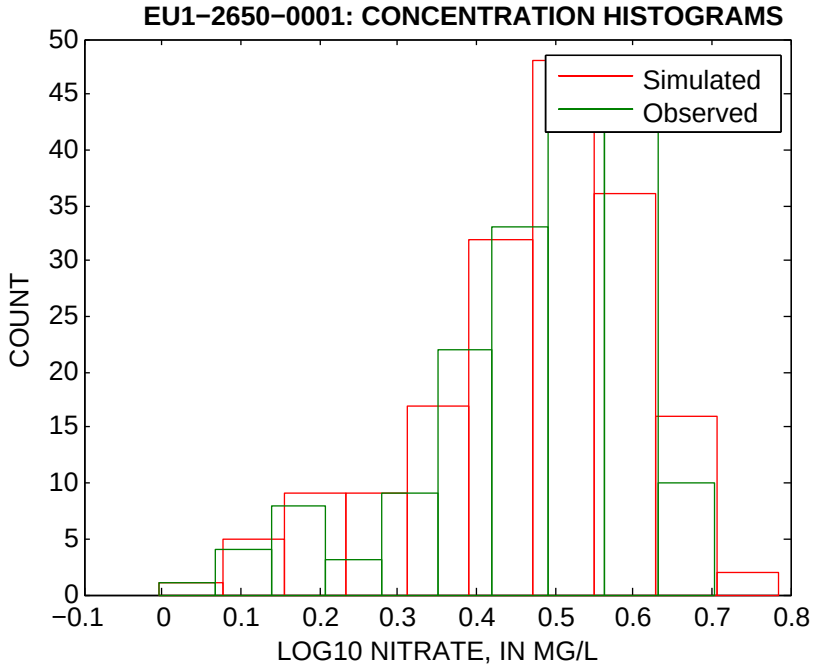
VERSION

ALL DATA
LOG10

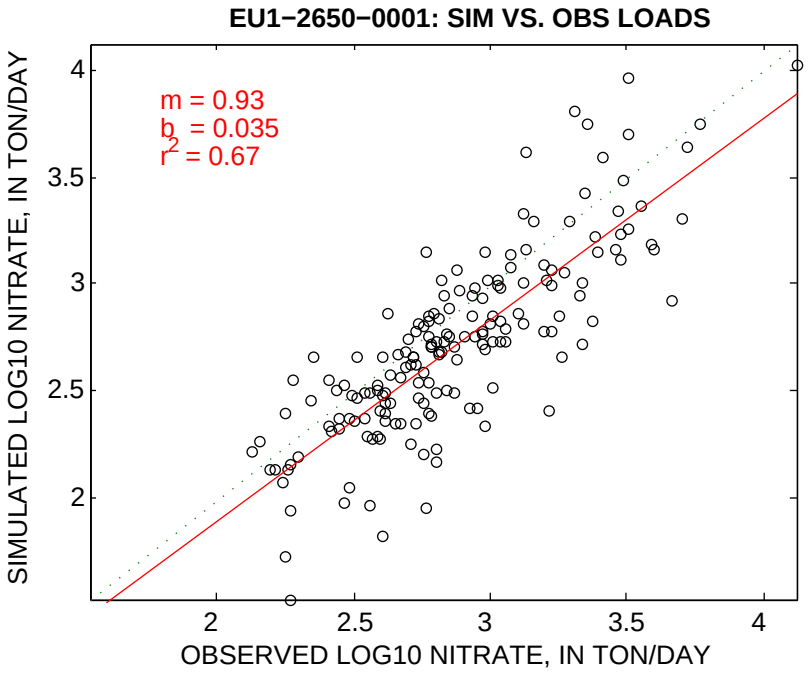


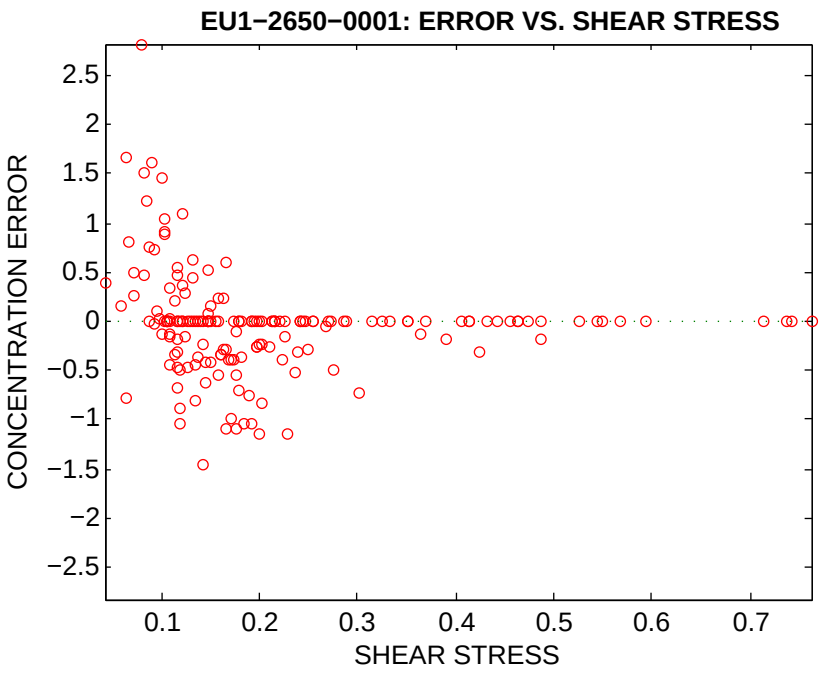


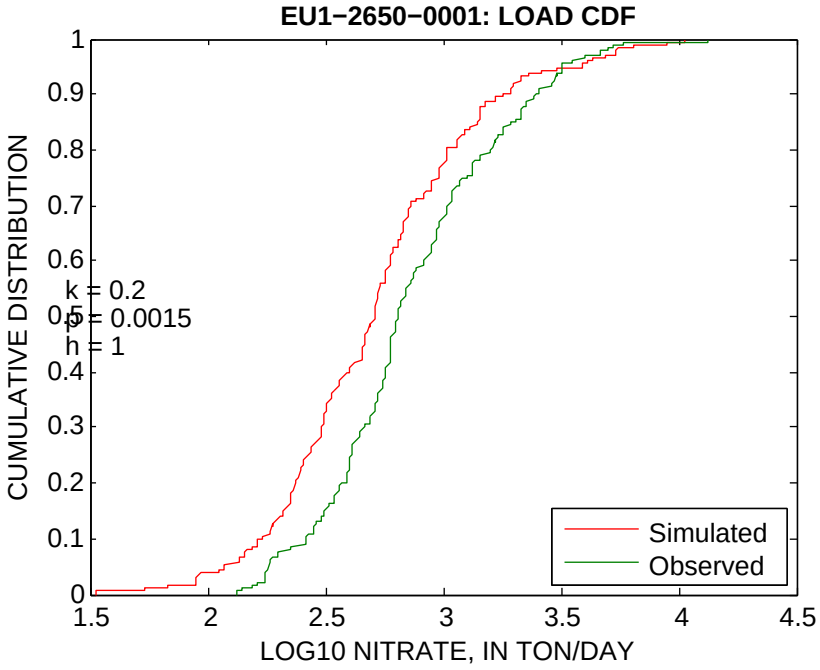


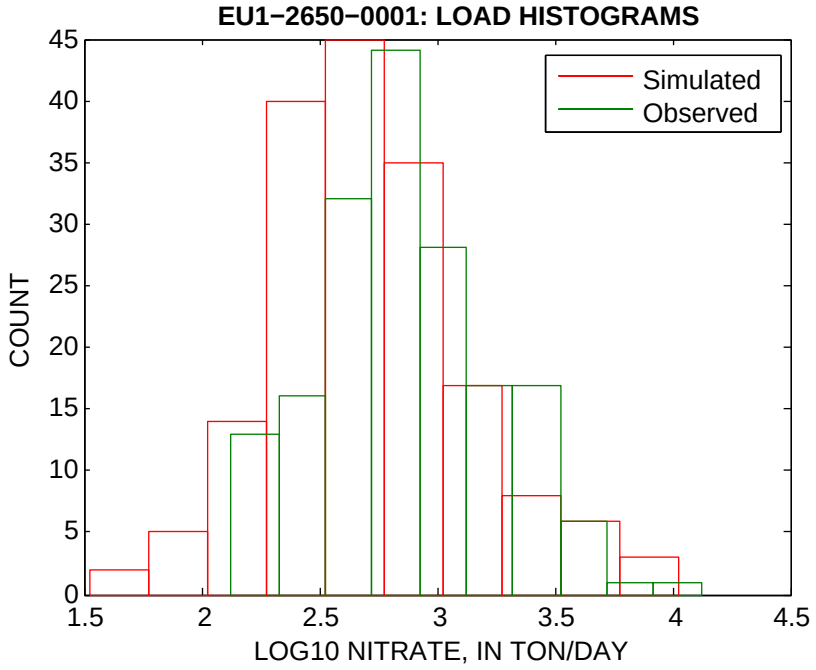


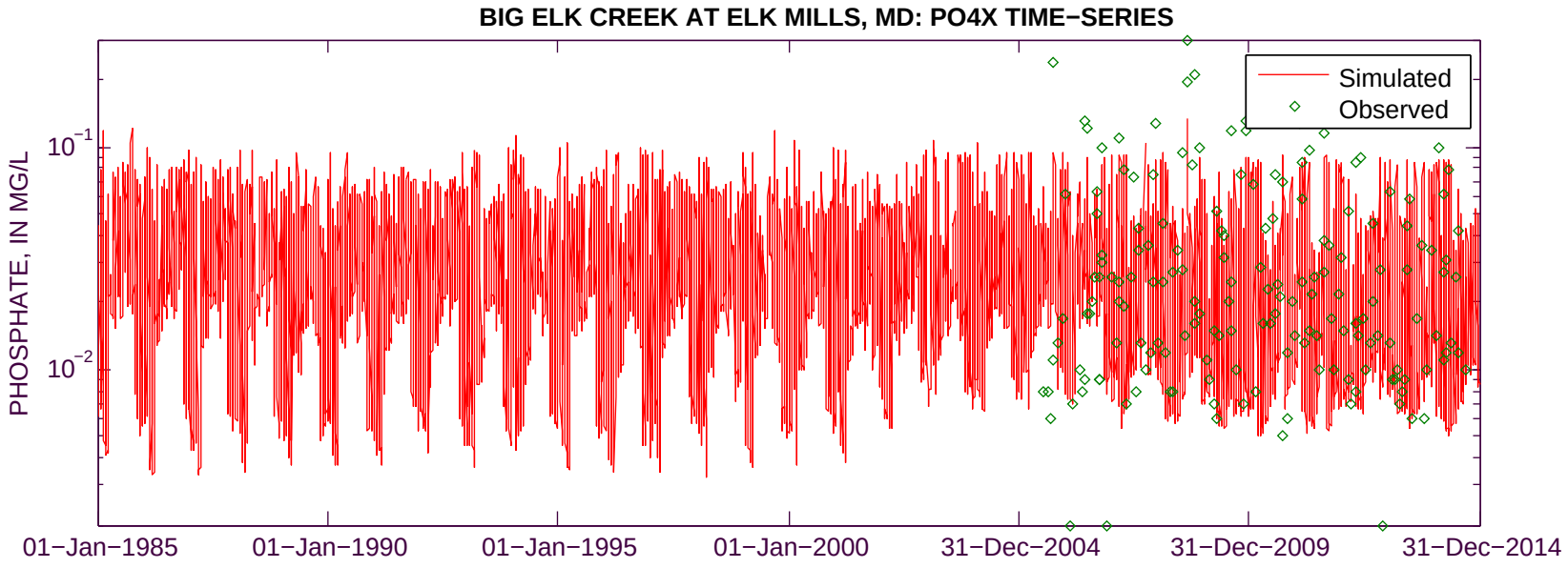
LOAD DATA
LOG10

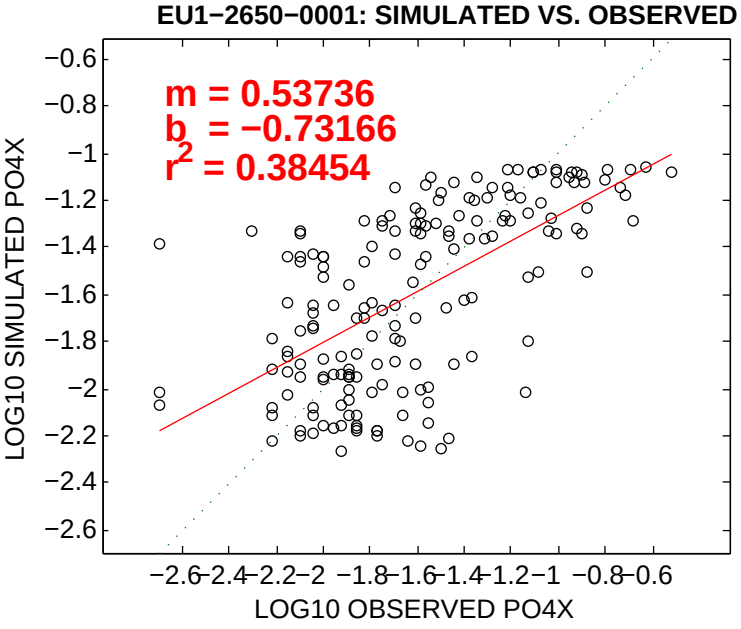


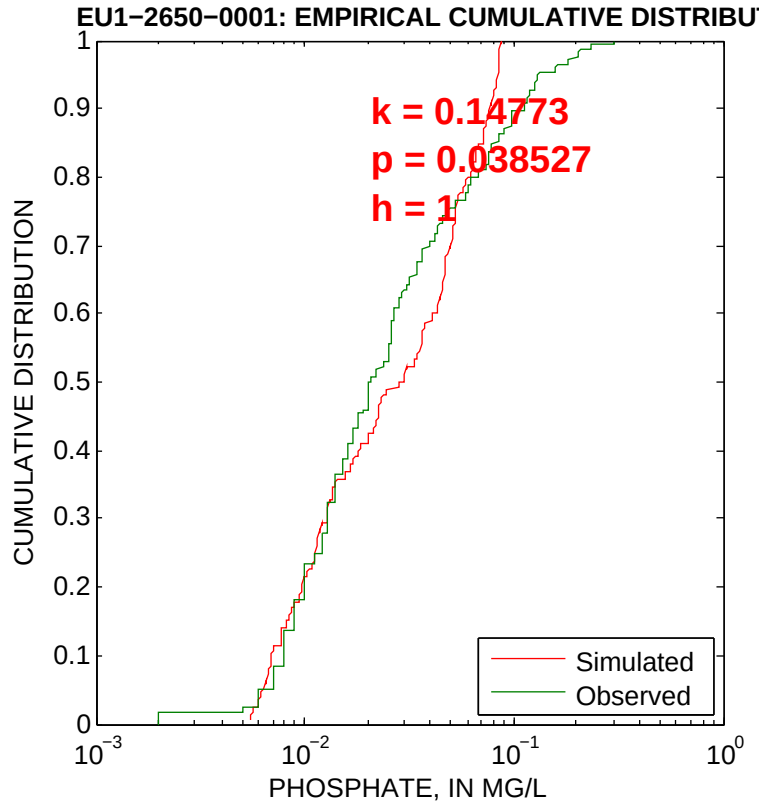












DATA SELECTION

scenario	file
P620171001WQ	PO4X.calib

plot: PO4X - phosphate

Dates: 1/1/1985 – 12/31/201

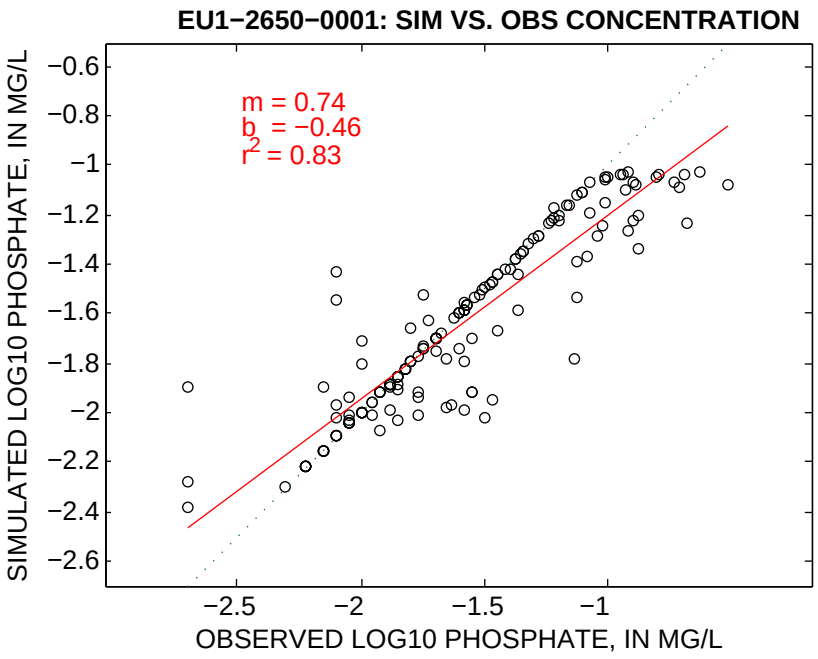
Drive	Directory	Observed
N/A	model	OBS20161101

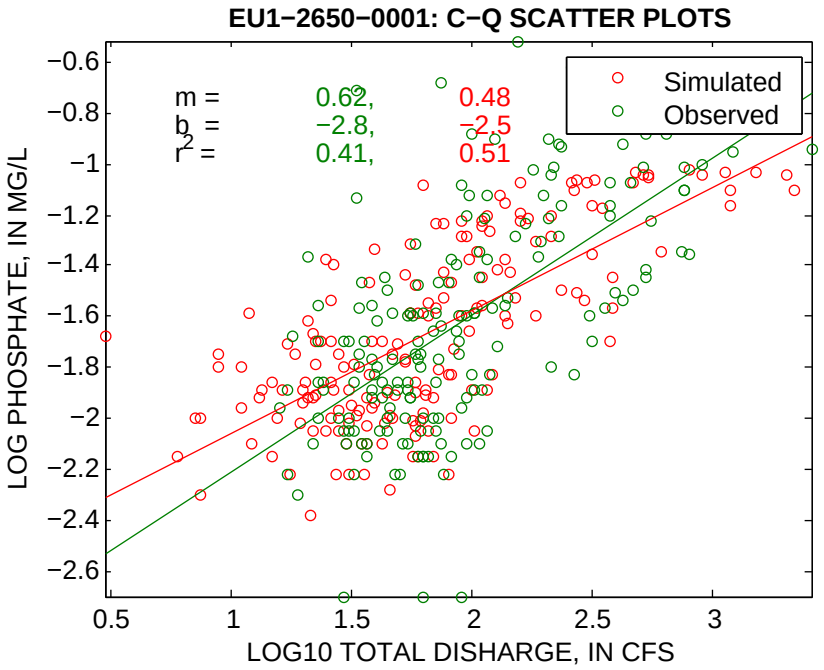
STATISTICS

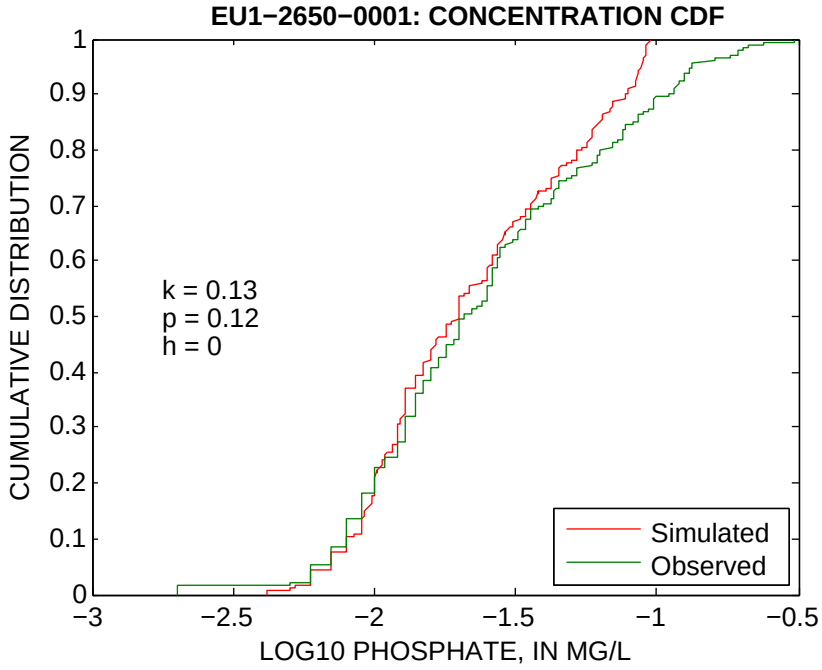
	n	176	175
		observe	simulate
min		0.002	0
		-2.69897	-2.26415
mean		0.041108	0.0350874
		-1.61251	-1.59816
media		0.0205	0.028838
		-1.67778	-1.5289
max		0.305	0.088286
		-0.5157	-1.05411
varian		0.0024011	0.00067970
		0.192543	0.144583
JB		0.001	0.004525
		0.144621	0.005767
		ra	log
%		-14.6456	-0.890069
err.va		0.00147105	0.130404
rel.std.err		0.612654	0.677269
mod.eff		0.387346	0.322731

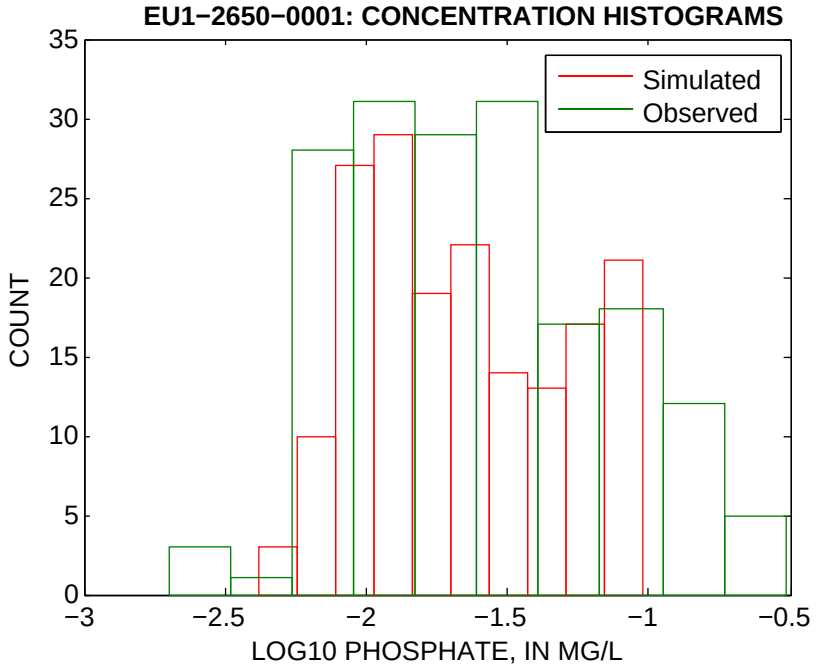
VERSION 2.1

ALL DATA
LOG10

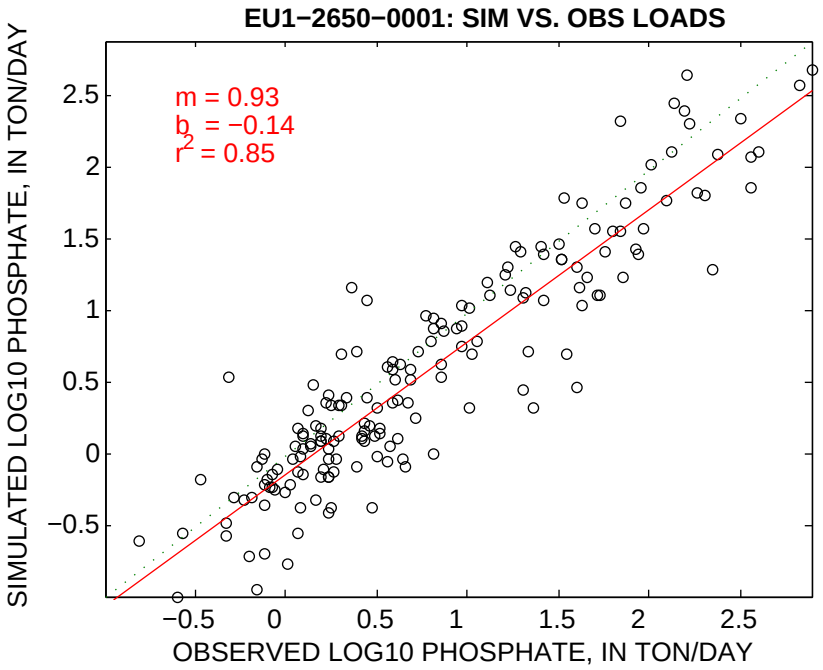


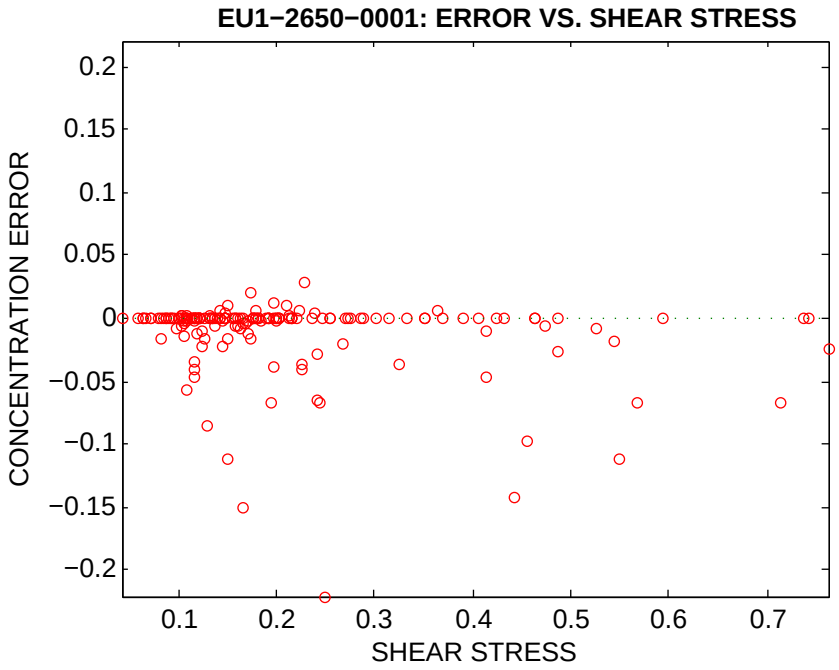


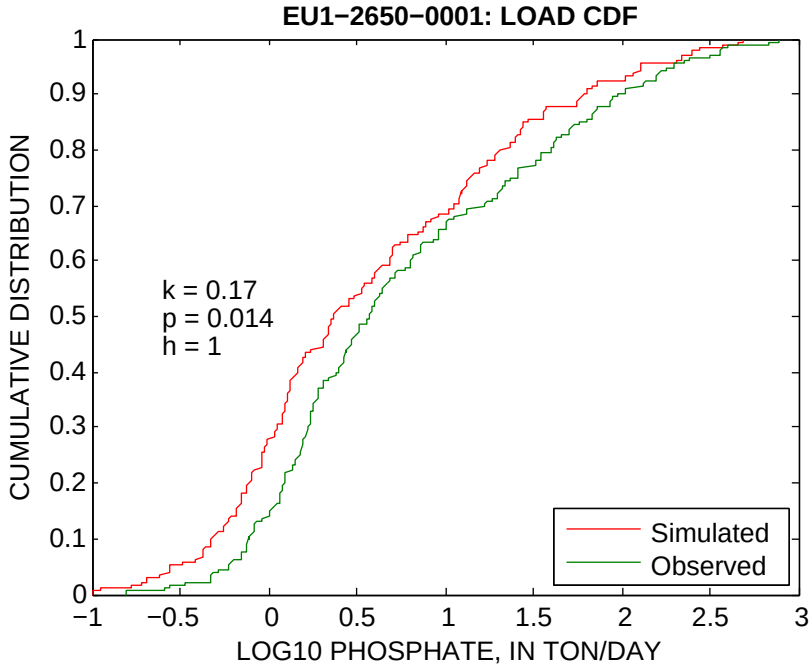


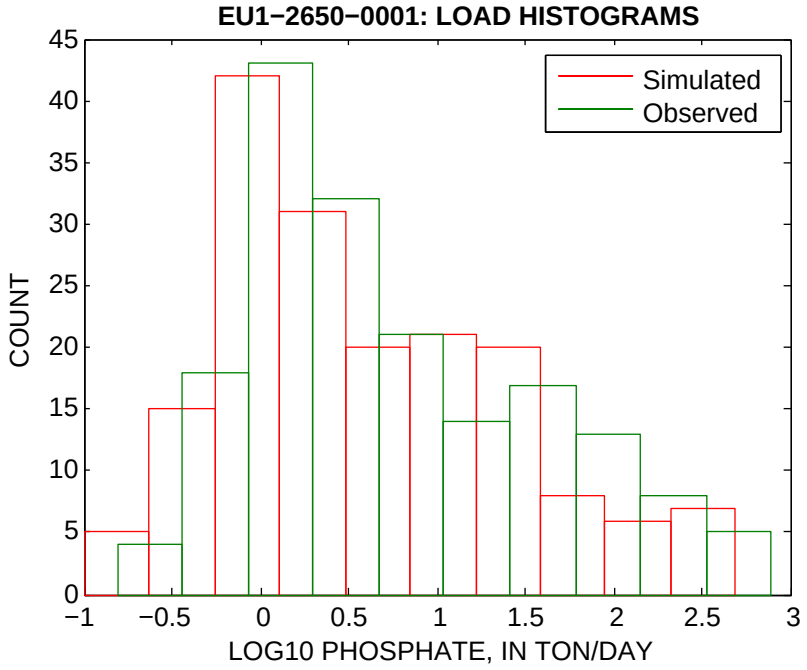


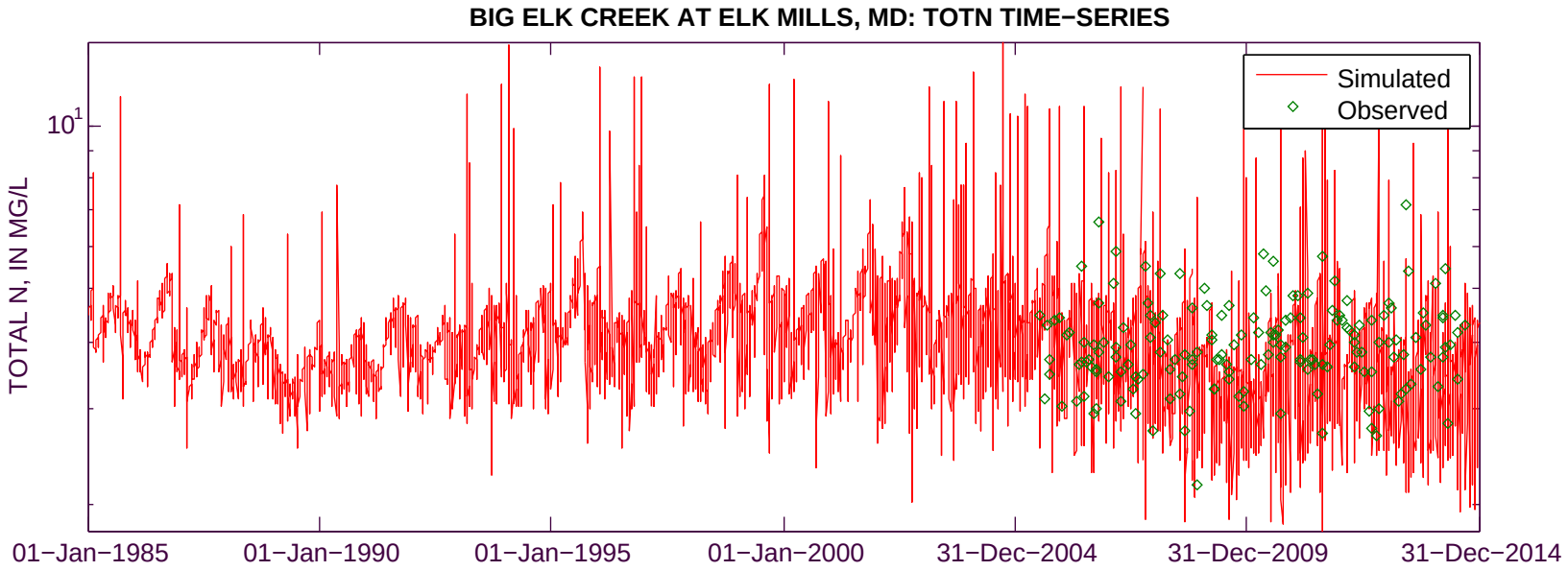
LOAD DATA
LOG10

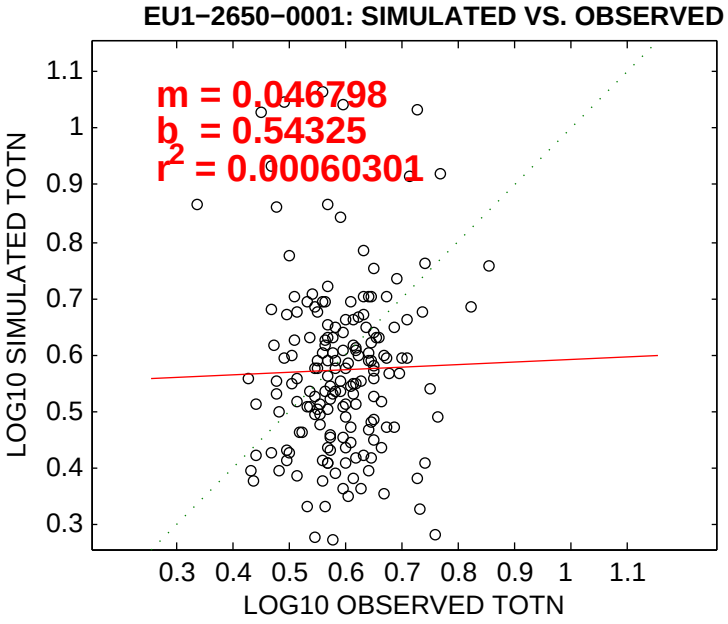


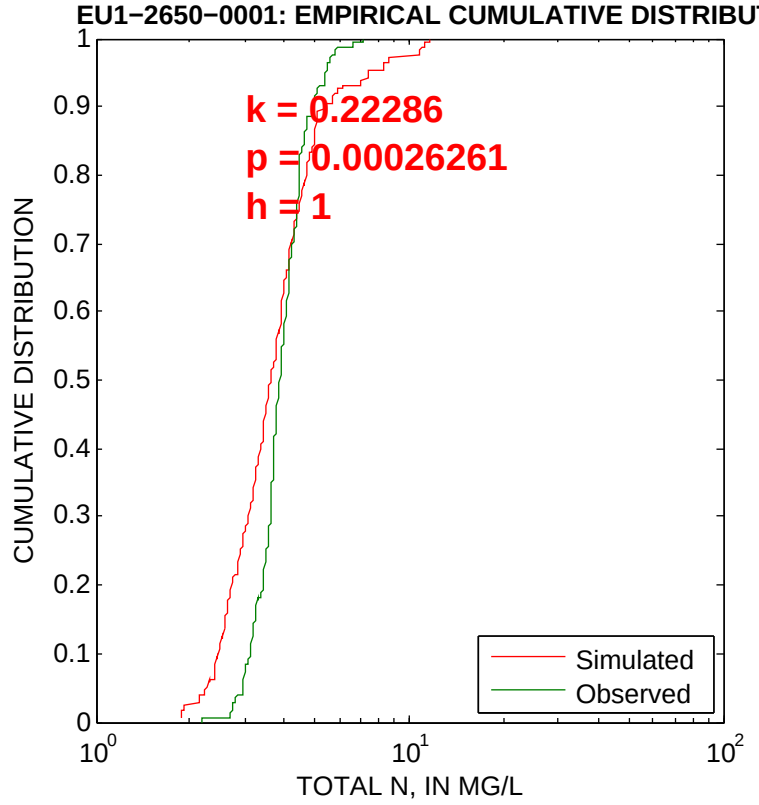












DATA SELECTION

scenario	file
P620171001WQ	TOTN.calib

plot: TOTN - total nitrogen

Dates: 1/1/1985 – 12/31/201

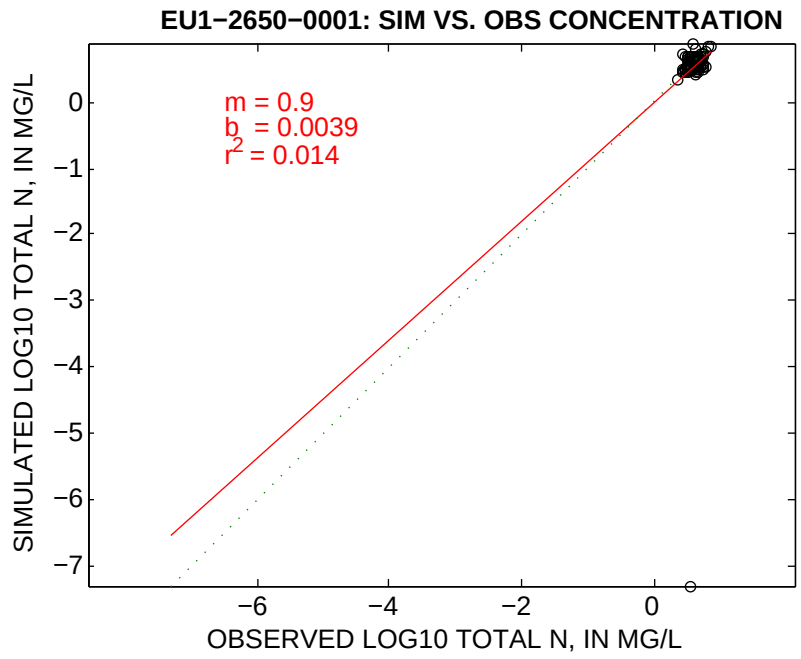
Drive	Directory	Observed
N/A	model	OBS20161101

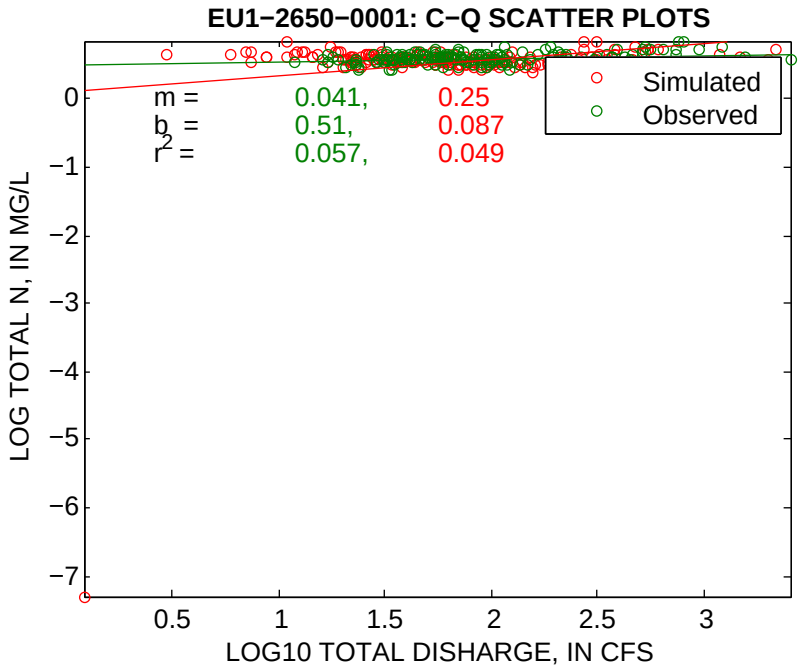
STATISTICS

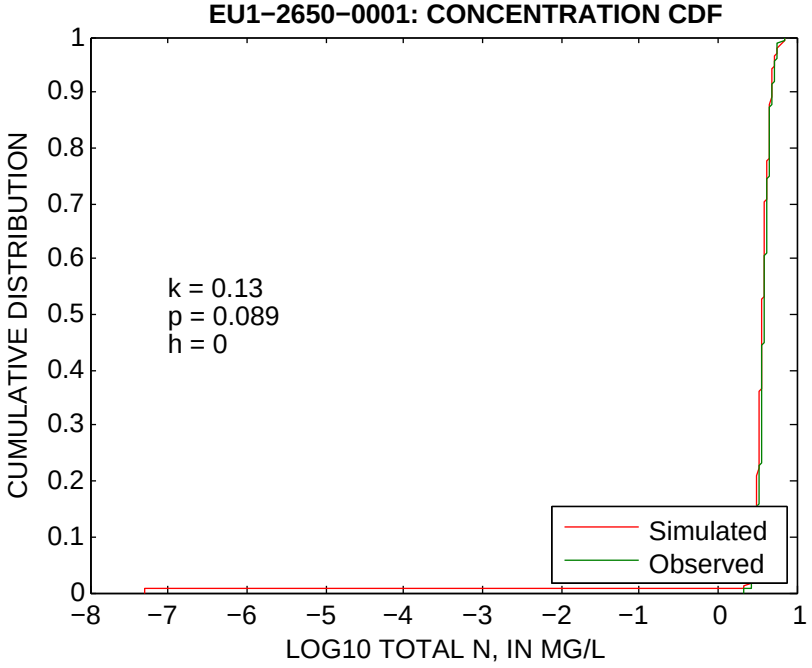
	n	175	174
		observe	simulate
min		2.174	0
		0.33726	0.271702
mean		3.97543	3.96263
		0.592313	0.57097
media		3.896	3.5986
		0.591786	0.557499
max		7.147	11.606
		0.854124	1.06468
varian		0.566813	3.0174
		0.0063516	0.0230683
JB		0.001	0.001
		0.091901	0.001
		ra	log
%		-0.322164	-3.60341
err.va		3.48067	0.0292836
rel.std.err		6.14077	4.61042
mod.eff		-5.14077	-3.61042

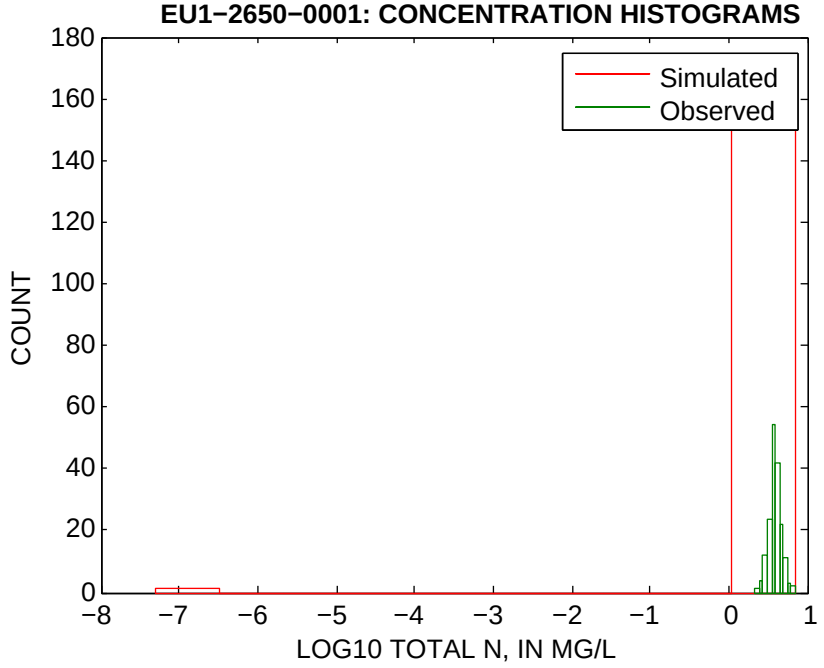
VERSION 2.1

ALL DATA
LOG10

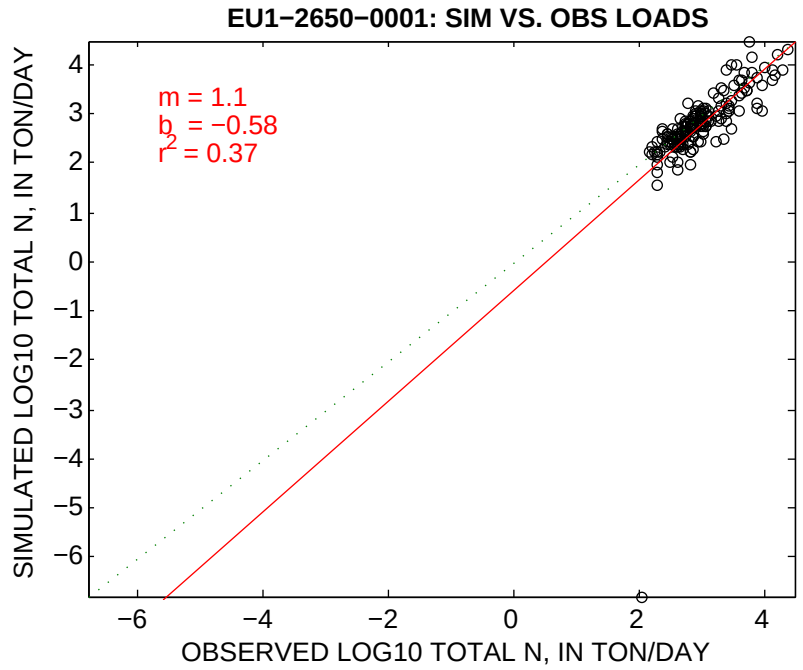


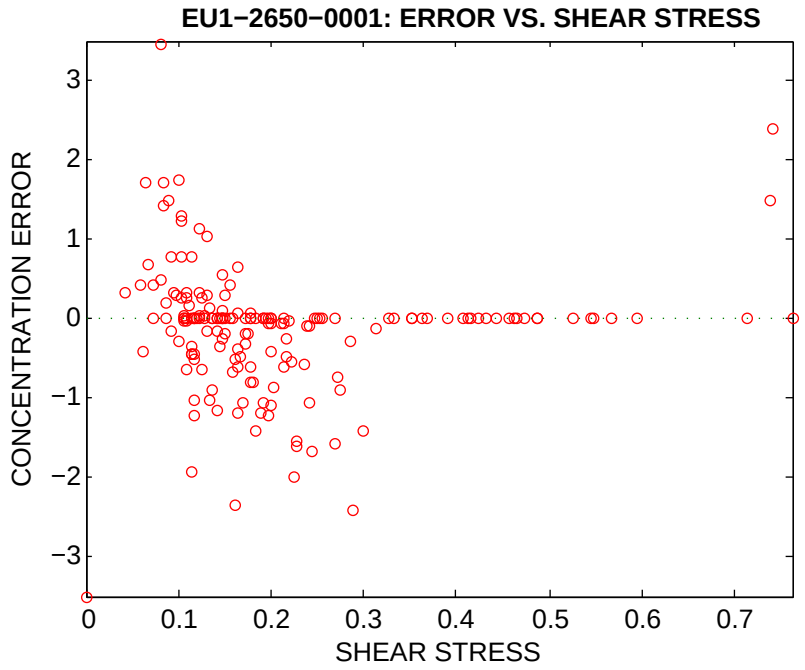


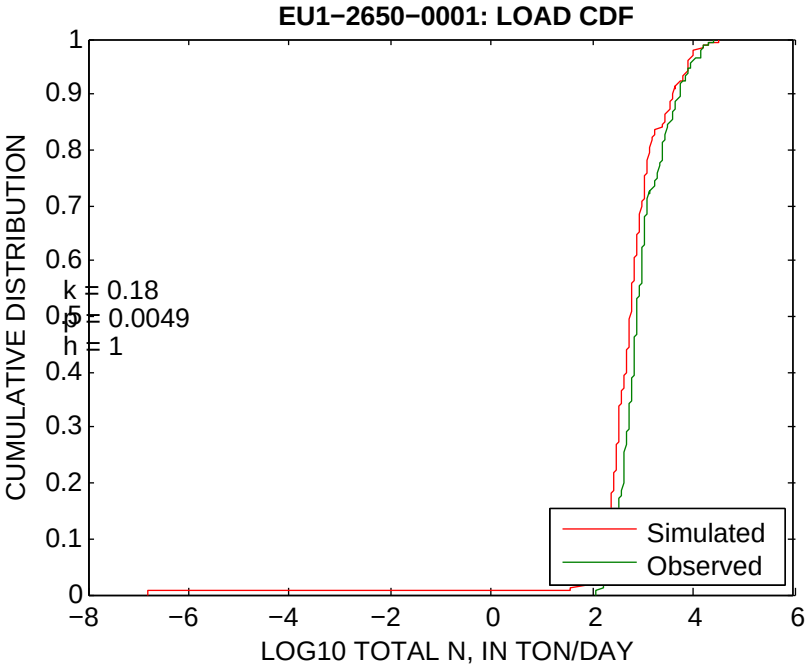


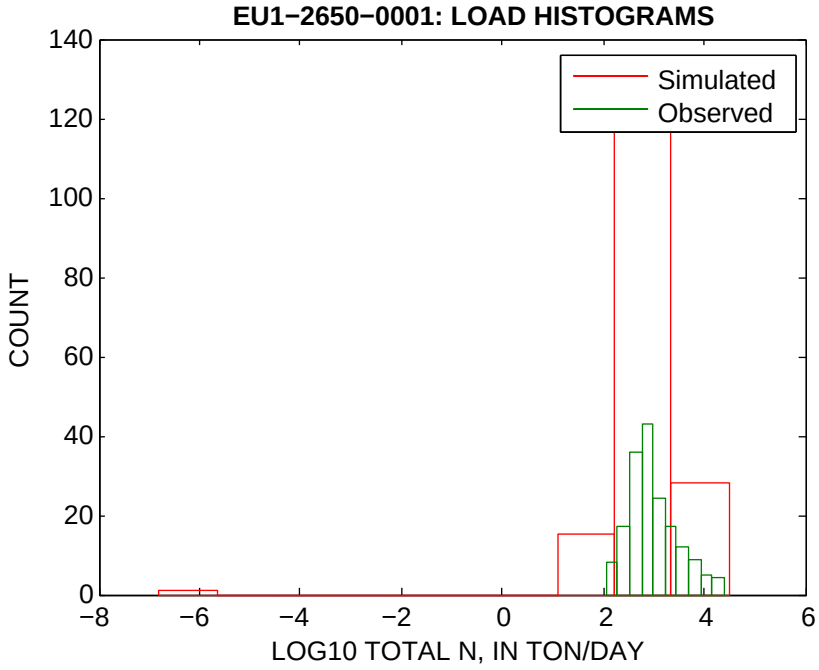


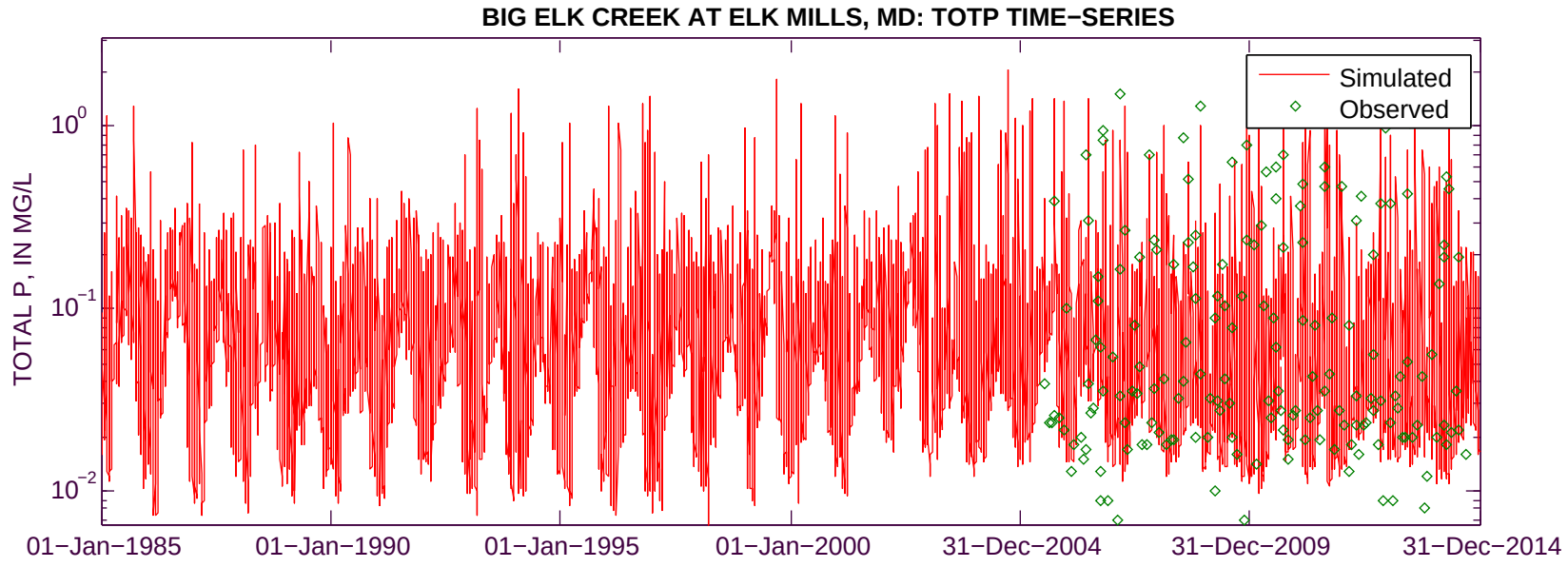
LOAD DATA
LOG10

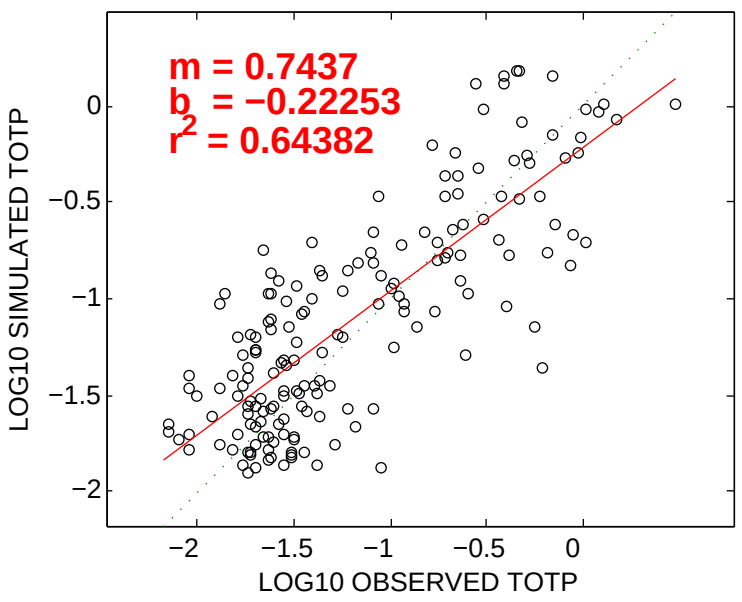


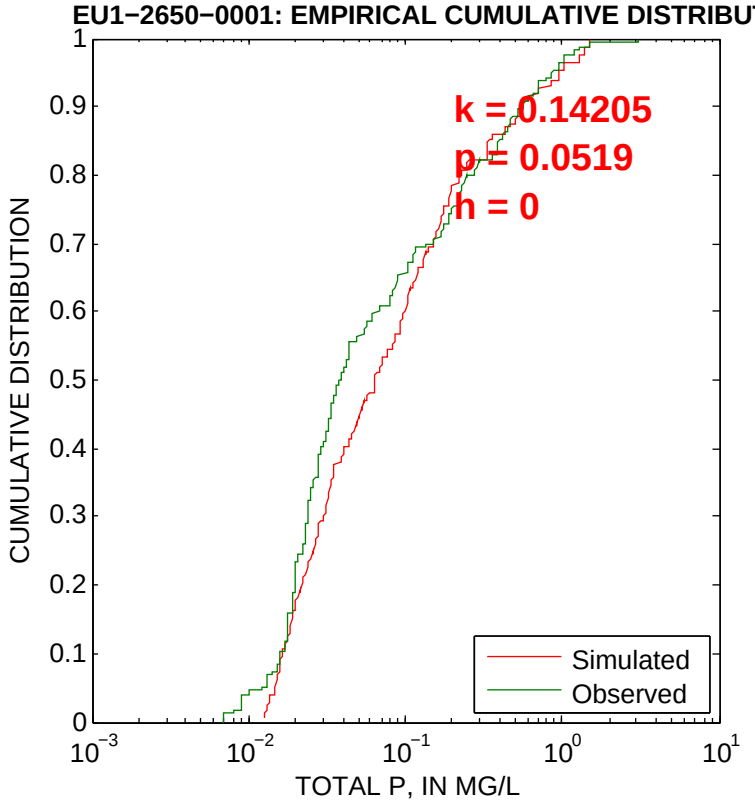












DATA SELECTION

scenario	file
P620171001WQ	TOTP.calib

plot: TOTP - total phosphorus

Dates: 1/1/1985 – 12/31/201

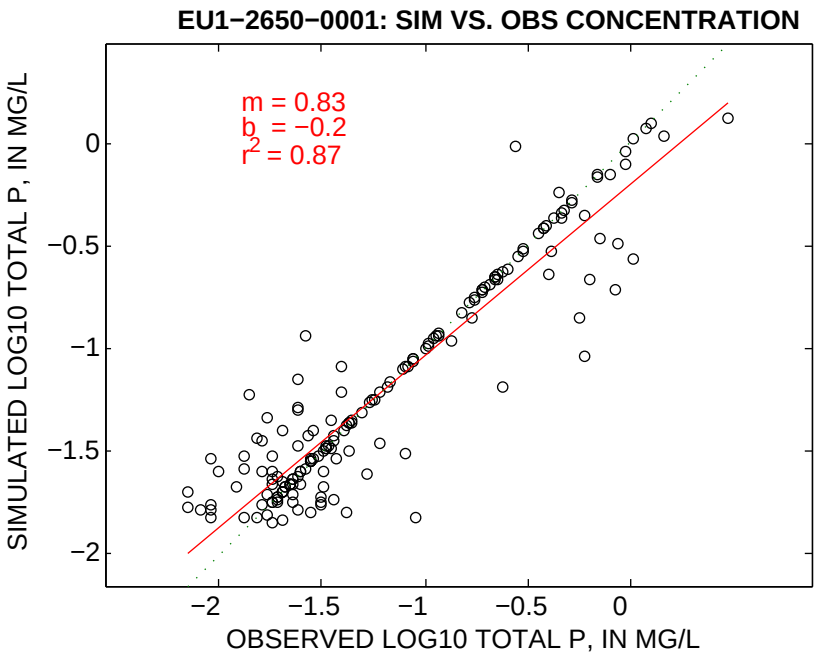
Drive	Directory	Observed
N/A	model	OBS20161101

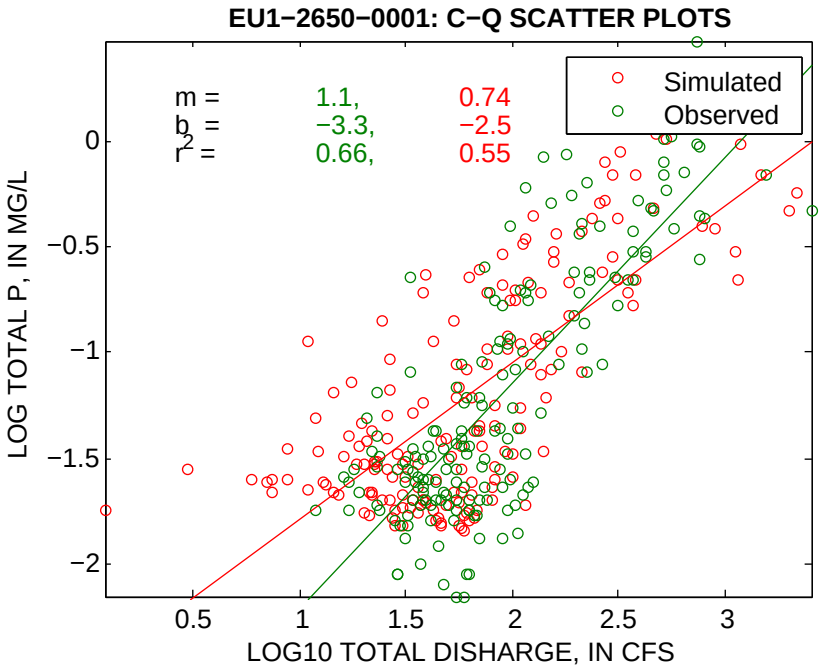
STATISTICS

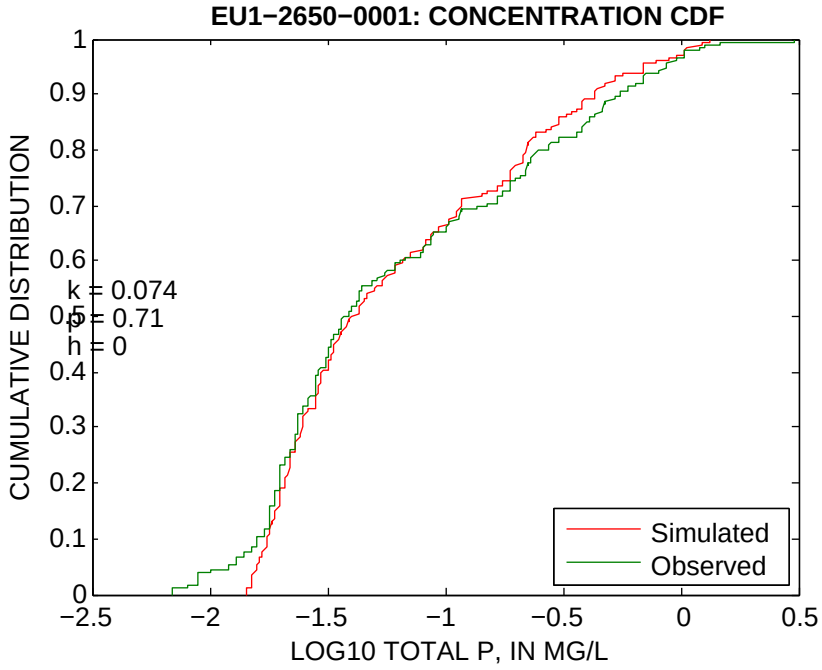
	n	176	175
		observe	simulate
min		0.007	0
		-2.1549	-1.90285
mean		0.187466	0.193297
		-1.18597	-1.10453
media		0.038	0.0639185
		-1.40894	-1.18839
max		3.015	1.5242
		0.479287	0.183042
varian		0.120644	0.0989593
		0.367738	0.315909
JB		0.001	0.001
		0.005240	0.009408
		ra	log
%		3.11069	-6.86685
err.va		0.0854729	0.143347
rel.std.err		0.70847	0.389807
mod.eff		0.29153	0.610193

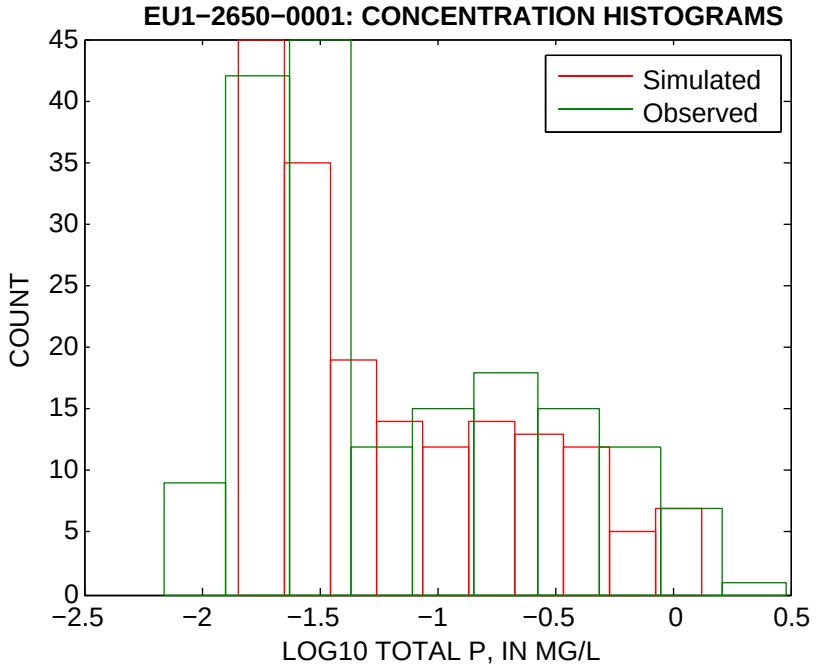
VERSION 2.1

ALL DATA
LOG10

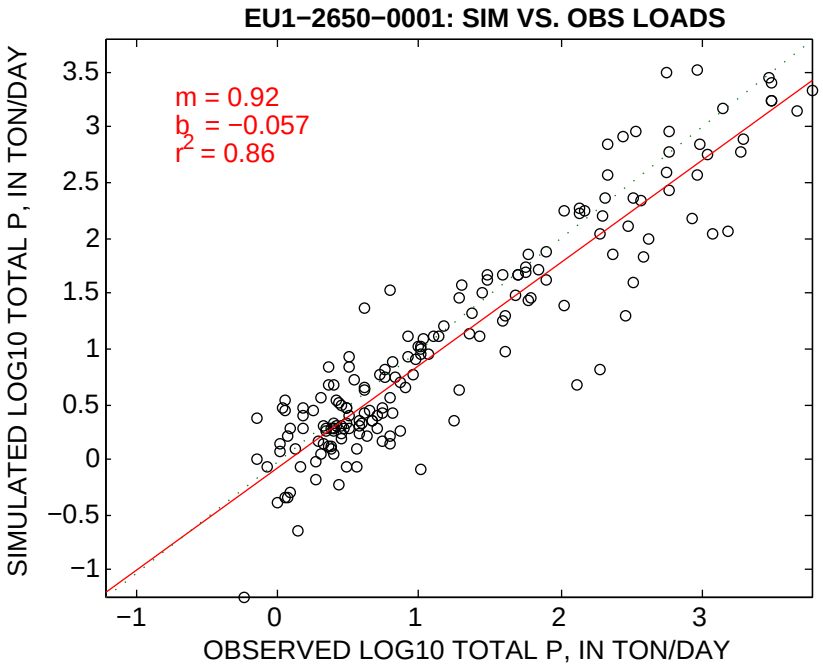


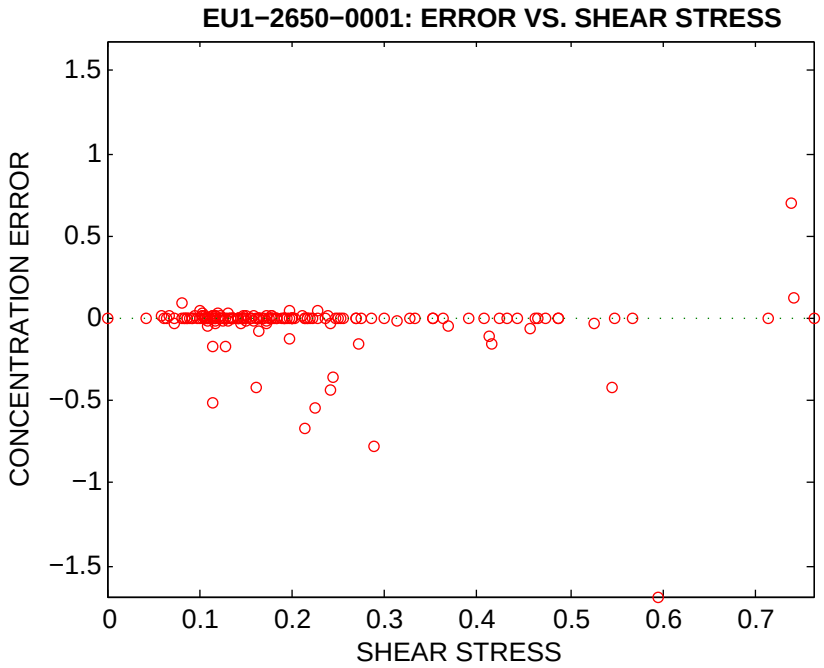


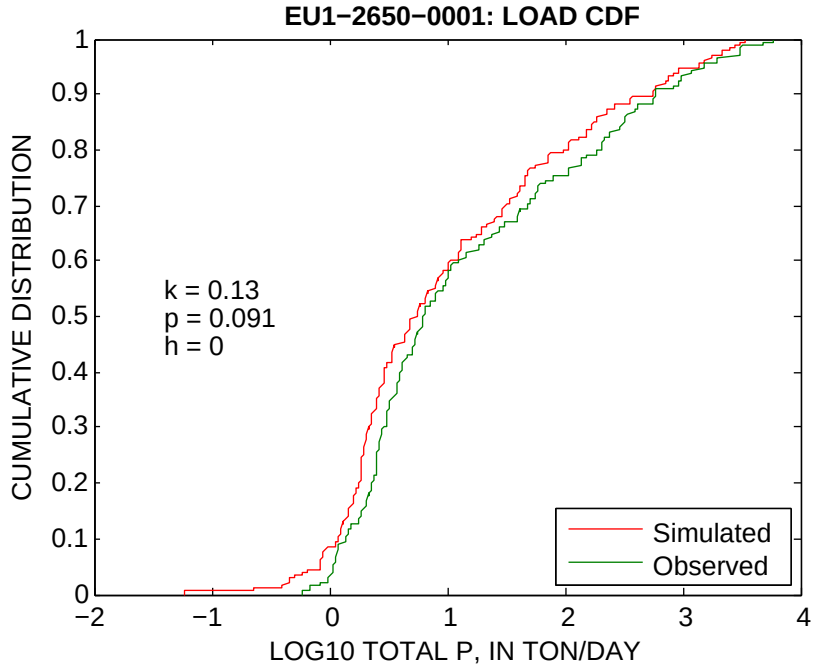


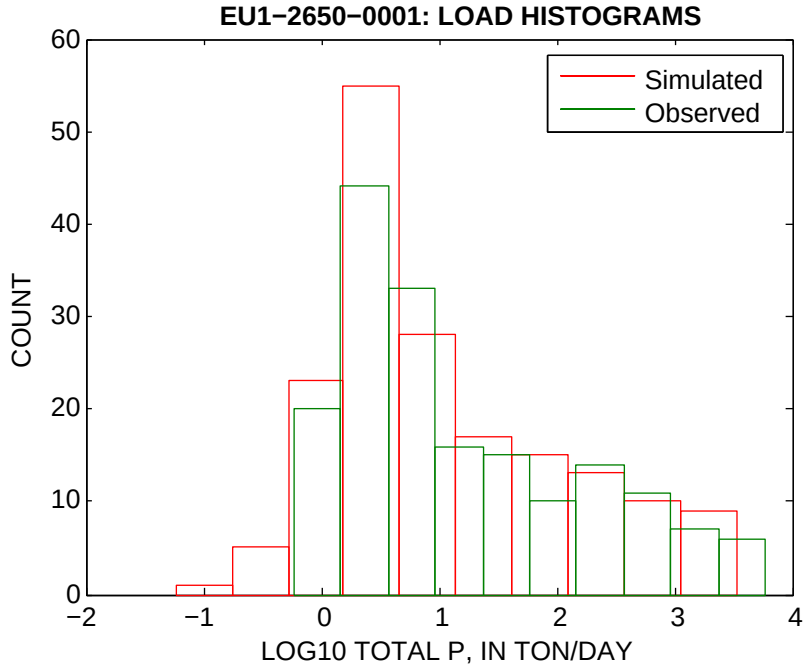


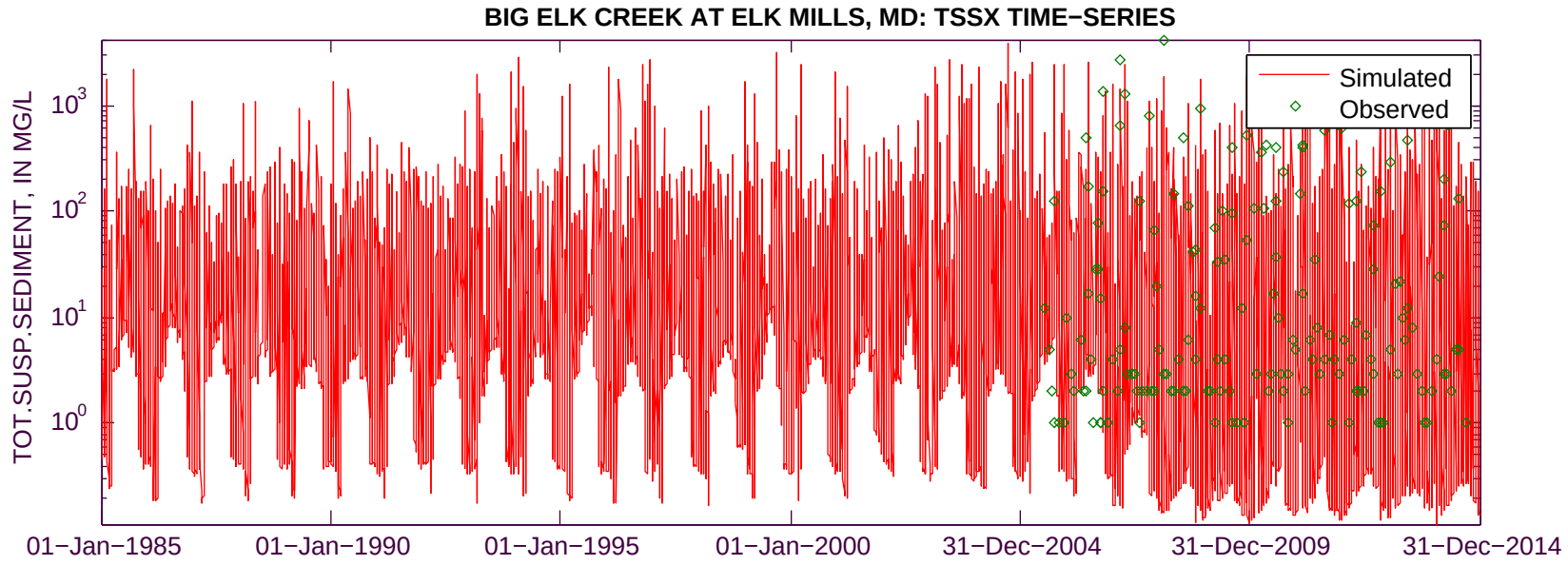
LOAD DATA
LOG10

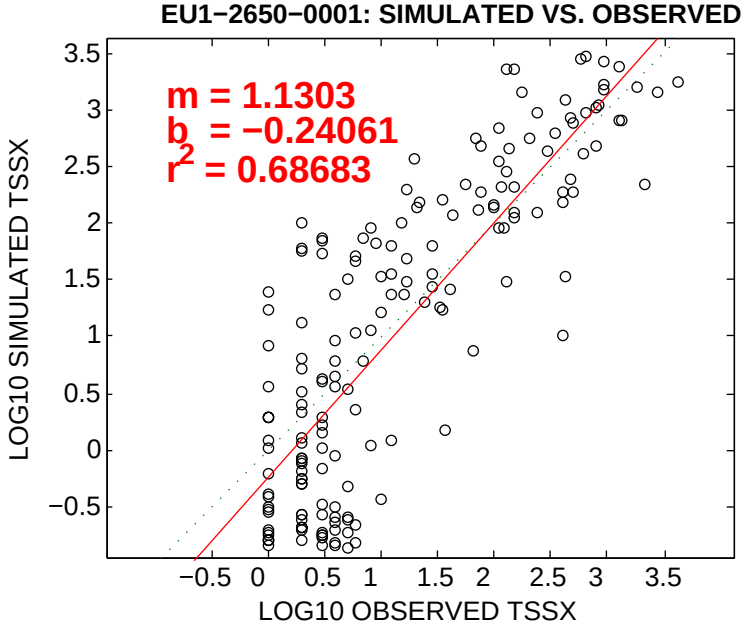


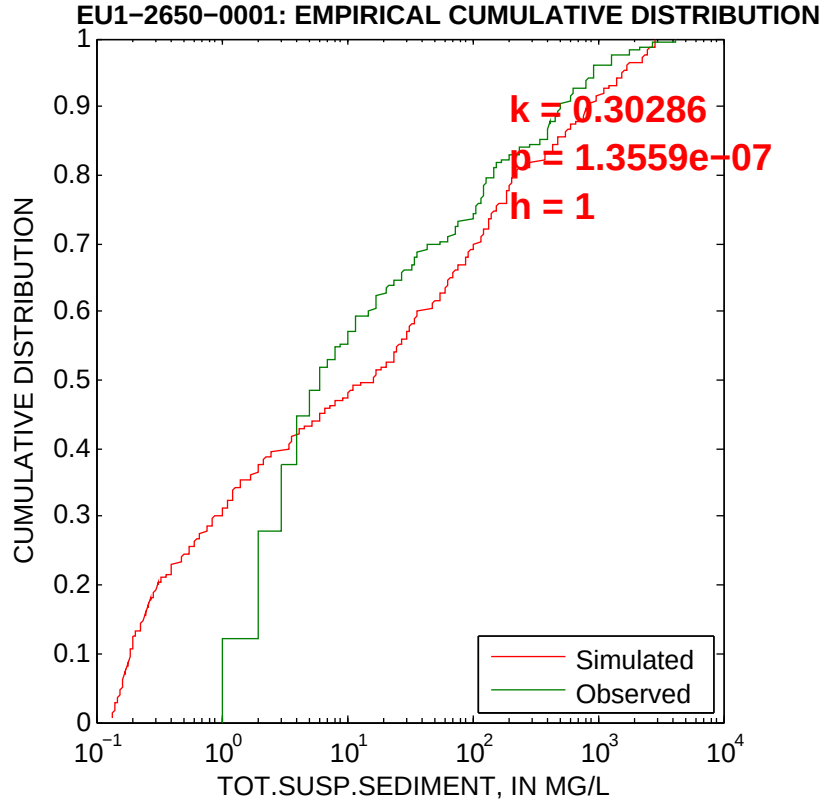












DATA SELECTION

scenario	file
P620171001WQ	TSSX.calib

plot: TSSX - total suspended ...

Dates: 1/1/1985 – 12/31/201

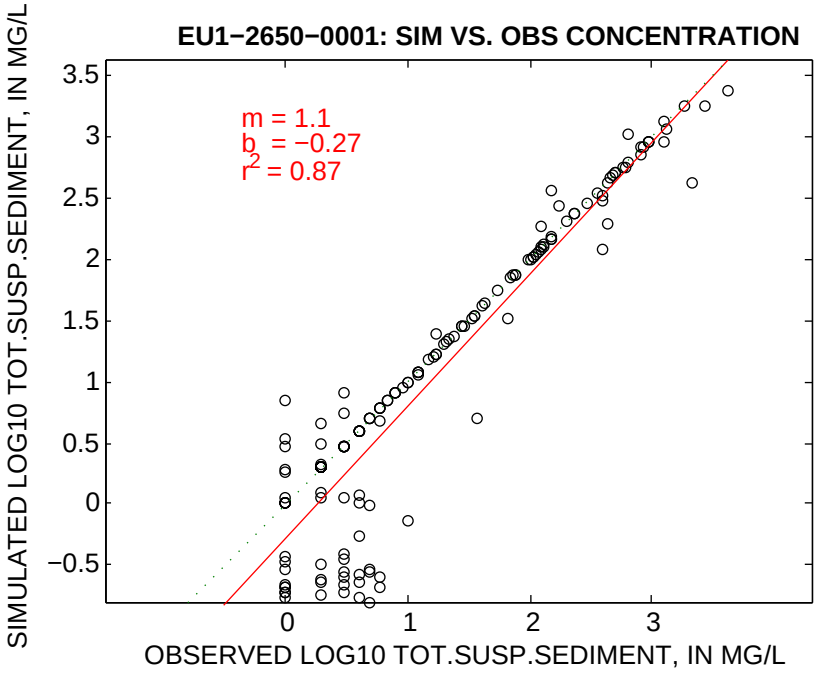
Drive	Directory	Observed
N/A	model	OBS20161101

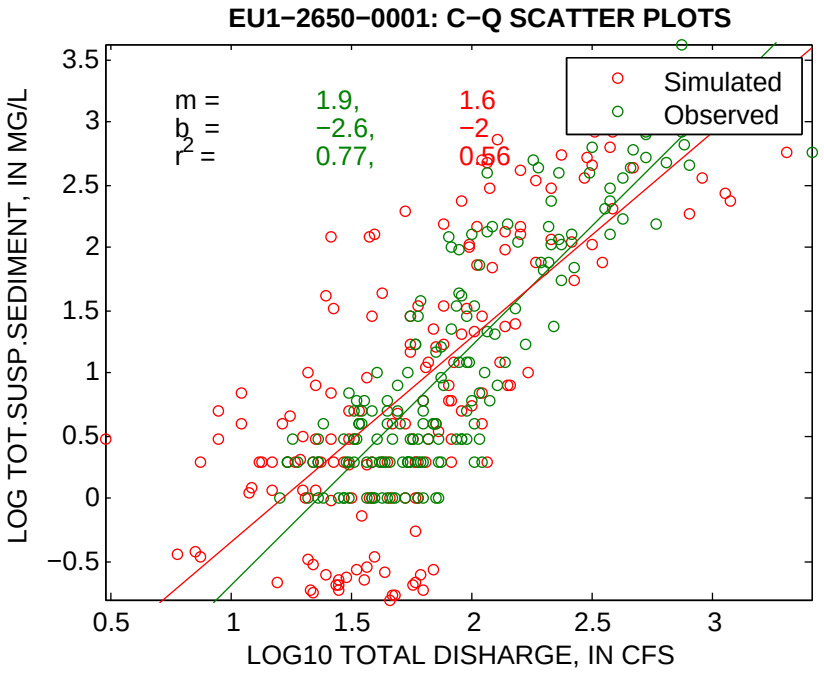
STATISTICS

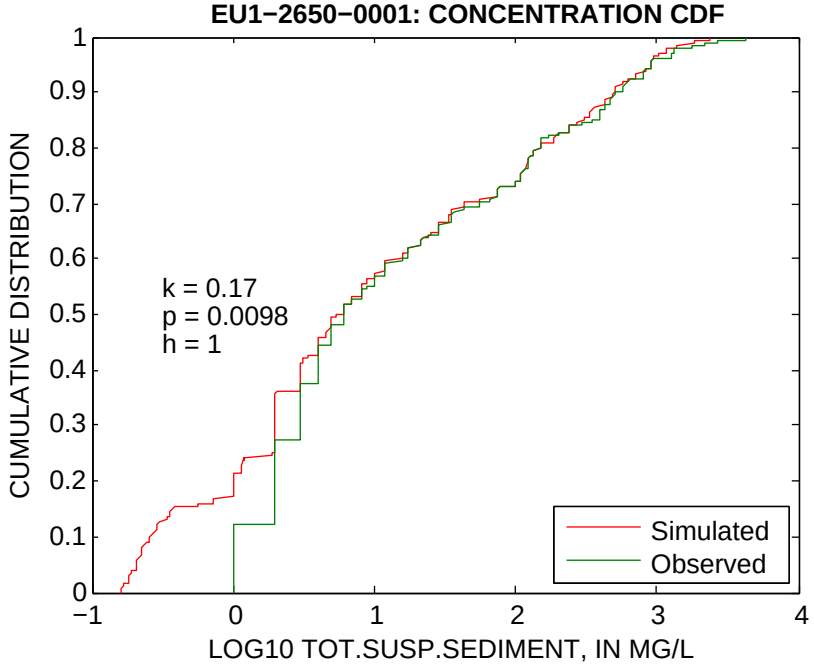
	n	observe	simulate
		175	174
min		1	0
		0	-0.871149
mean		177.64	255.493
		1.16771	1.07928
media		6	16.301
		0.778151	1.22579
max		4193	2941.2
		3.62252	3.46852
varian		235705	327326
		0.984678	1.83166
JB		0.001	0.001
		0.003700	0.008180
		ra	log
%		43.8265	-7.57311
err.va		245310	0.598201
rel.std.err		1.04075	0.607509
mod.eff		-0.0407518	0.392491

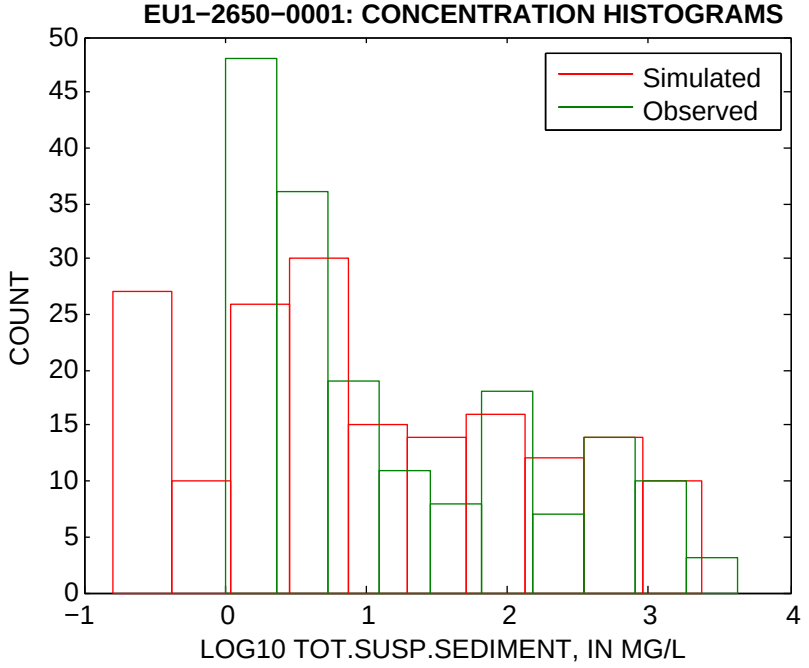
VERSION 2.1

ALL DATA
LOG10

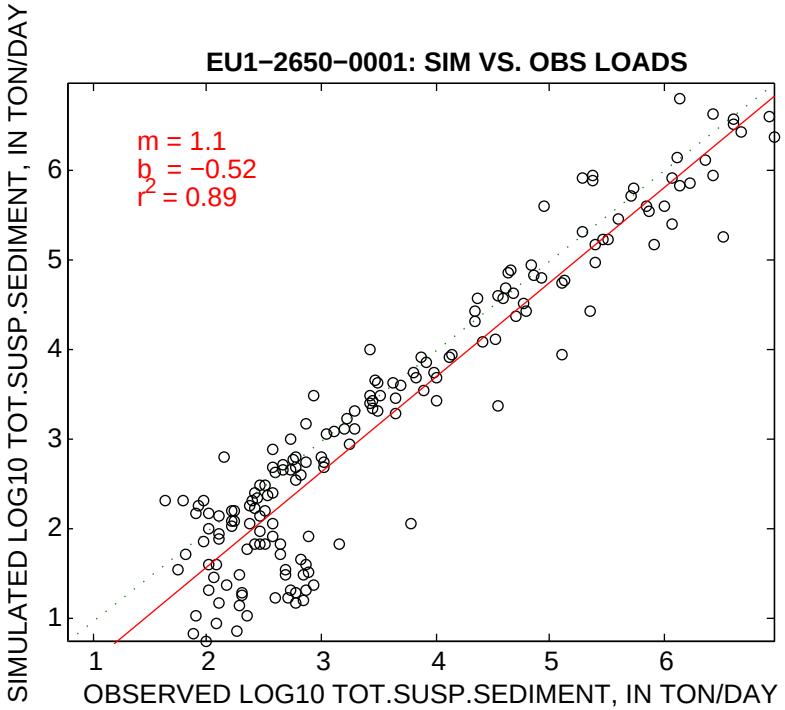


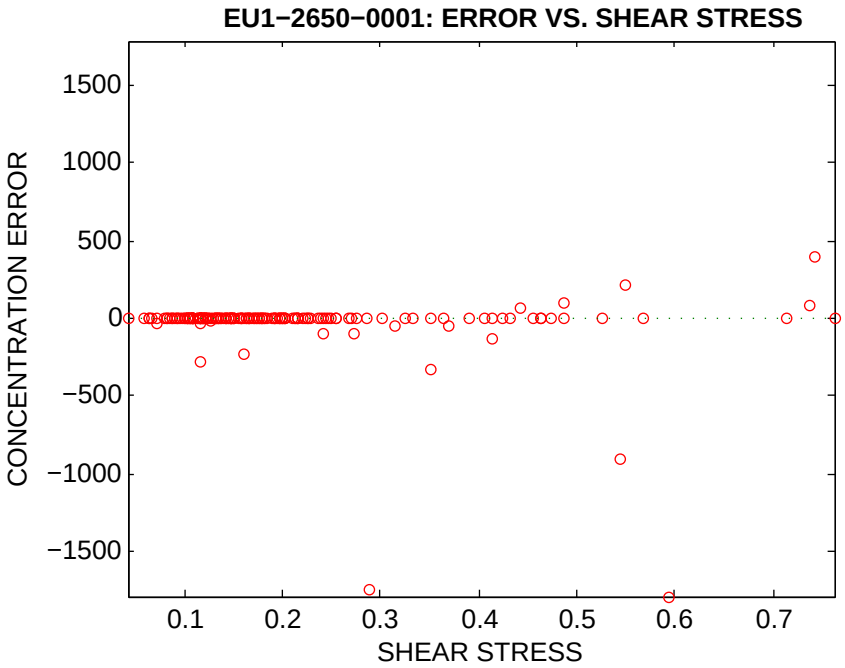


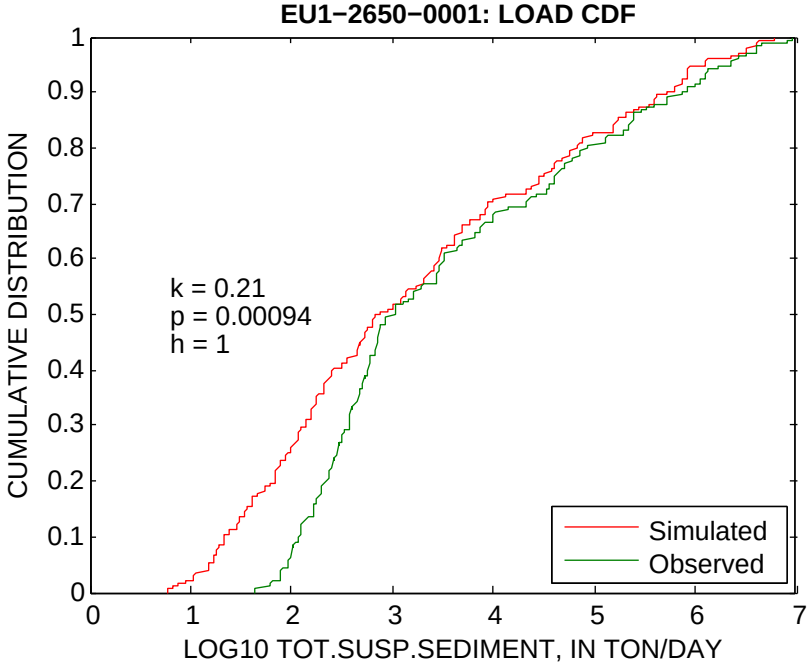


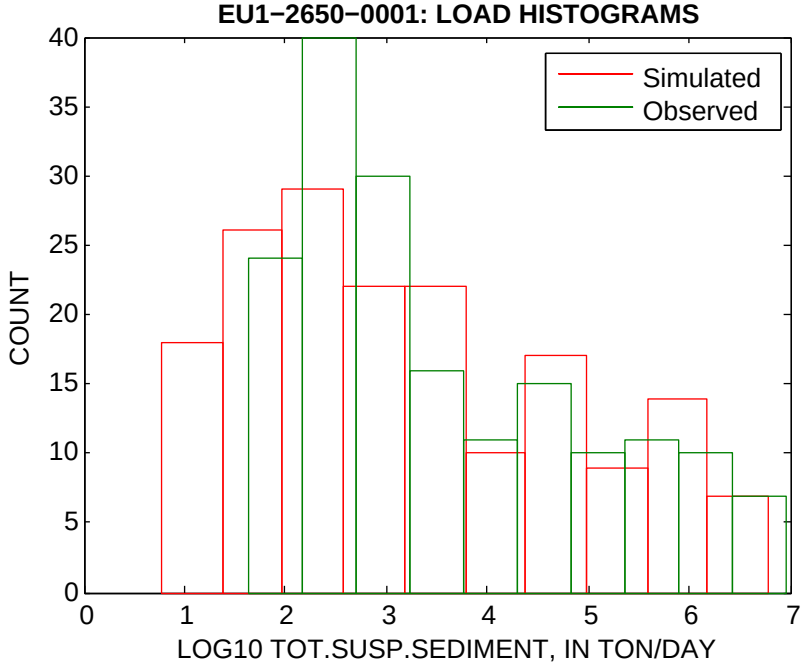


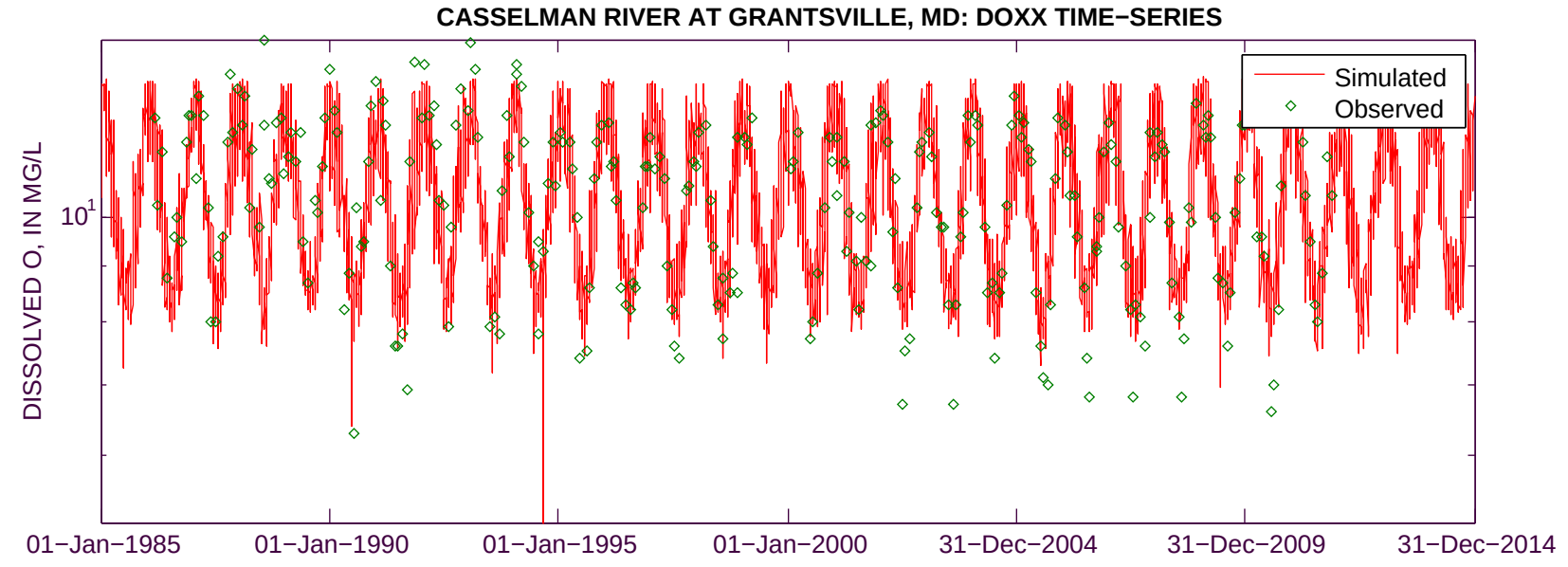
LOAD DATA
LOG10

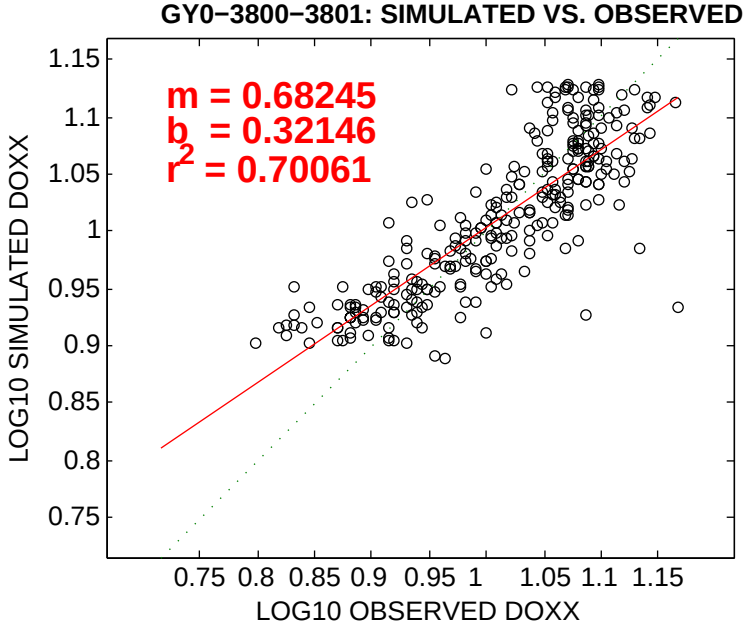


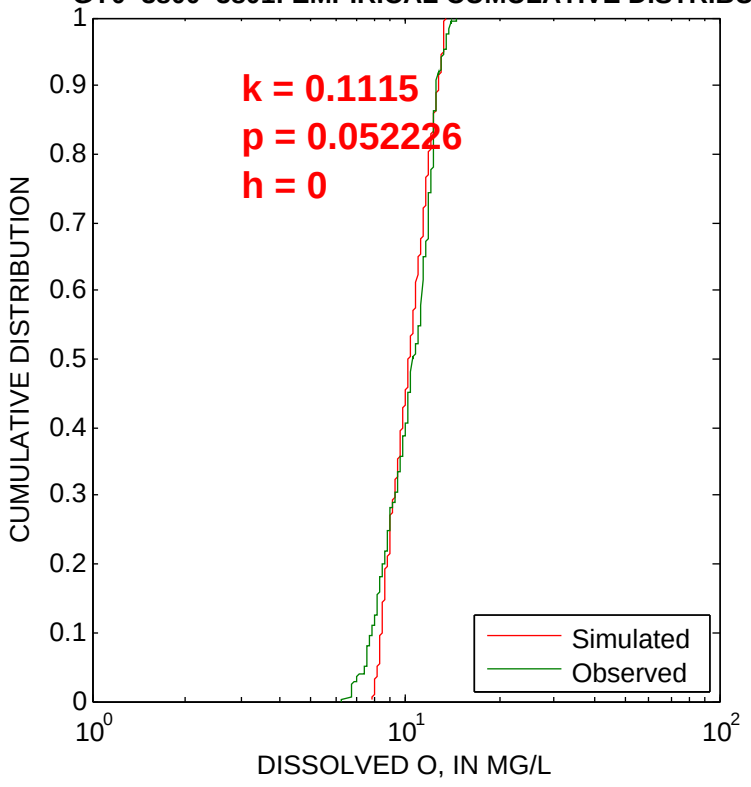












DATA SELECTION

scenario	file
P620171001WQ	DOXX.calib

plot: DOXX - dissolved oxygen

Dates: 1/1/1985 – 12/31/201

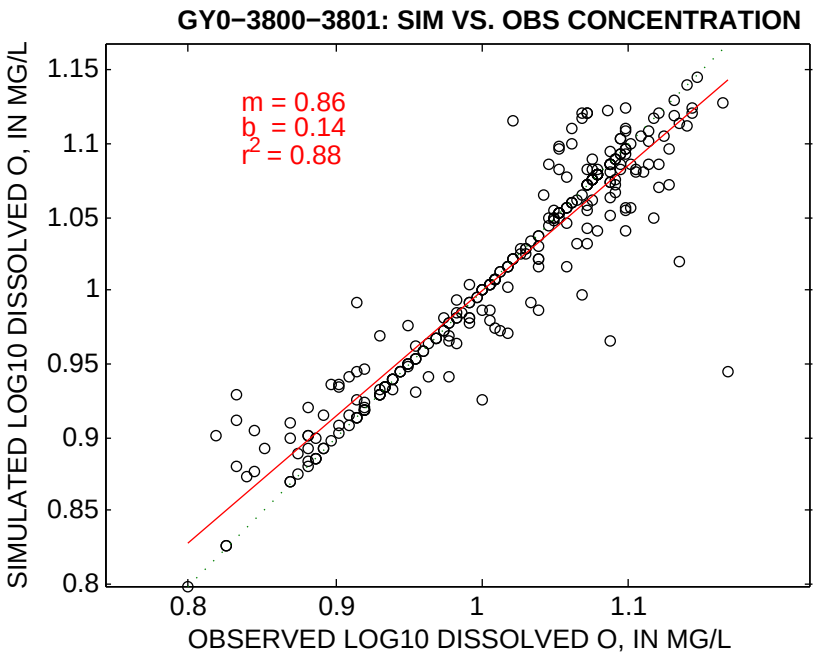
Drive	Directory	Observed
N/A	model	OBS20161101

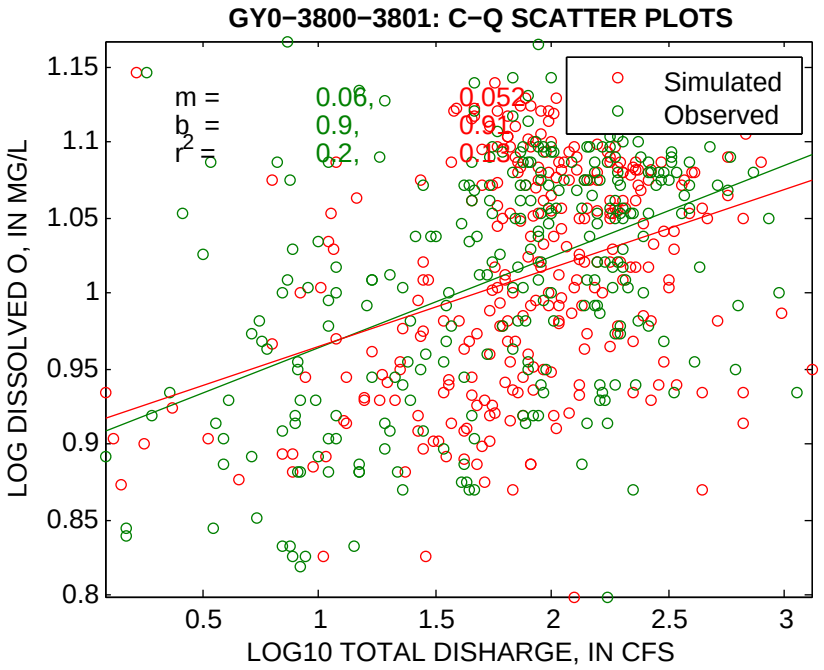
STATISTICS

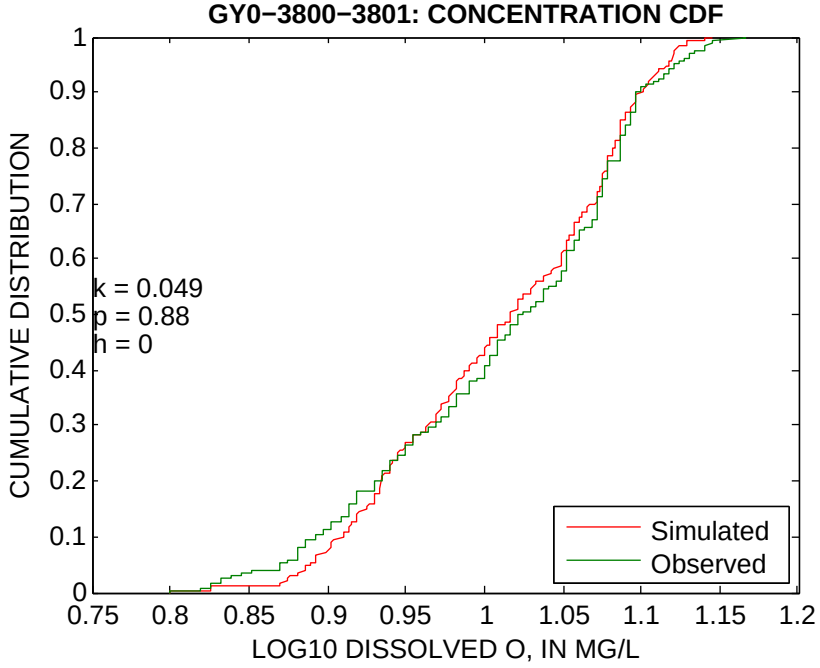
	n	observe	simulate
		287	287
min		6.3	7.7477
		0.799341	0.889173
mean		10.4569	10.4034
		1.01205	1.01213
media		10.6	10.308
		1.02531	1.01317
max		14.7	13.465
		1.16732	1.12921
varian		3.51428	2.52704
		0.00661225	0.00439561
JB		0.009711	0.003501
		0.003693	0.003798
		ra	log
%		-0.511889	0.00815509
err.va		1.12916	0.00198276
rel.std.err		0.321305	0.299862
mod.eff		0.678695	0.700138

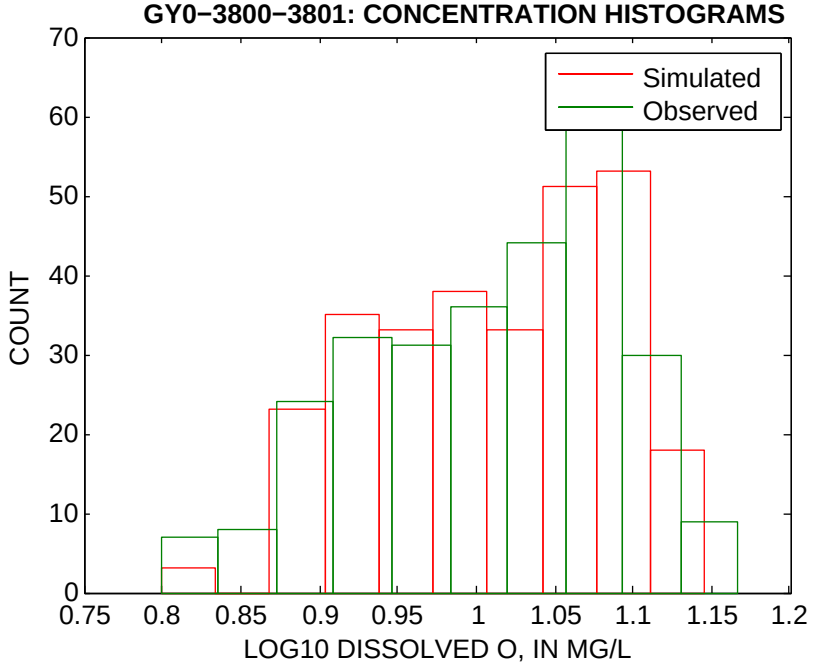
VERSION 2.1

ALL DATA
LOG10

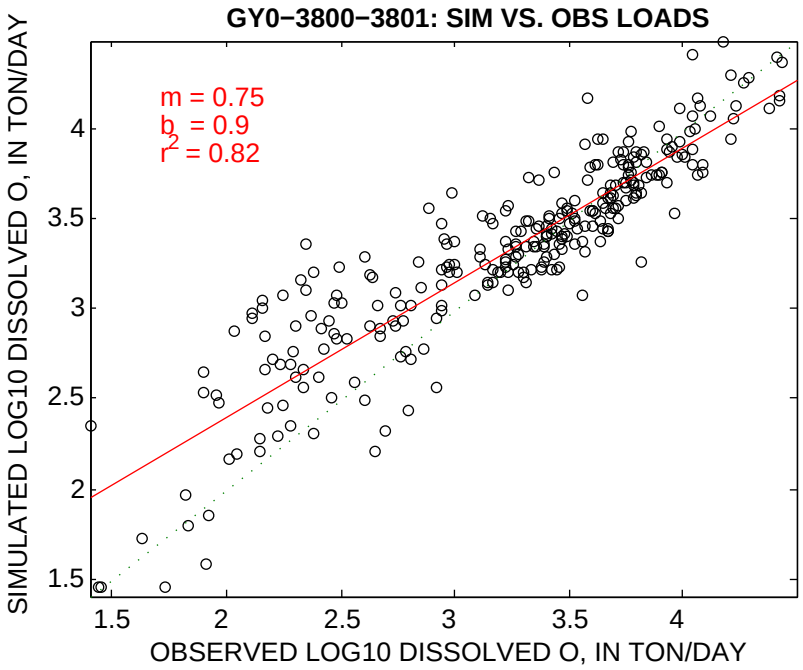


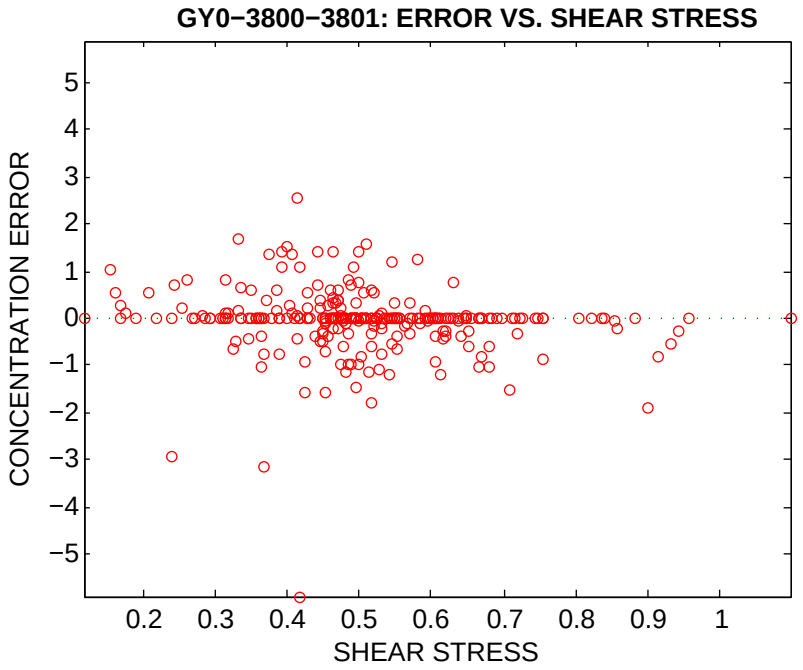


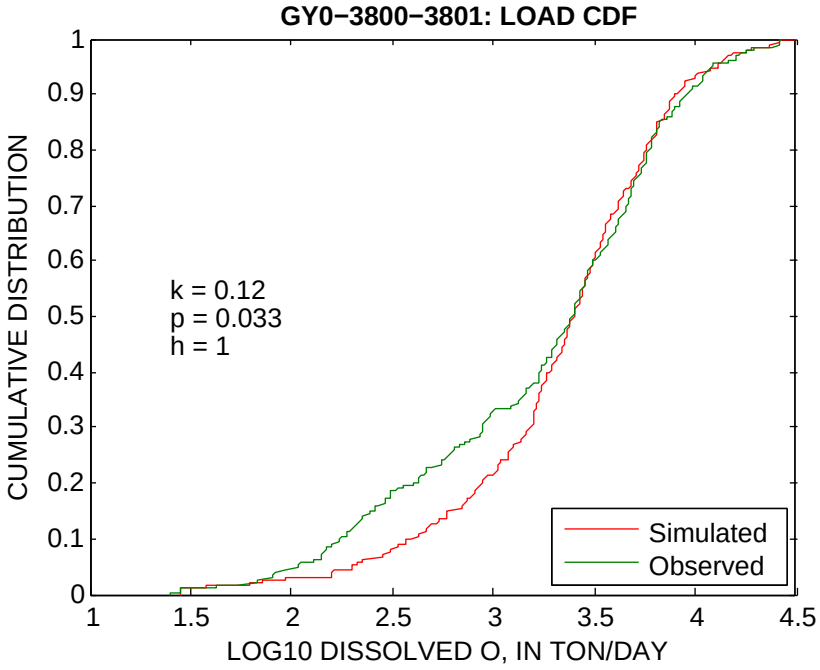


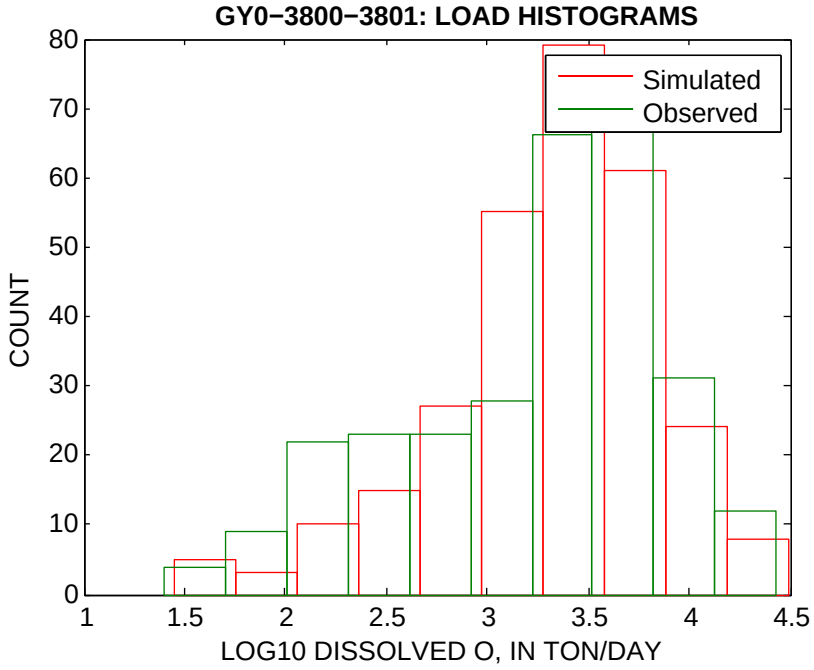


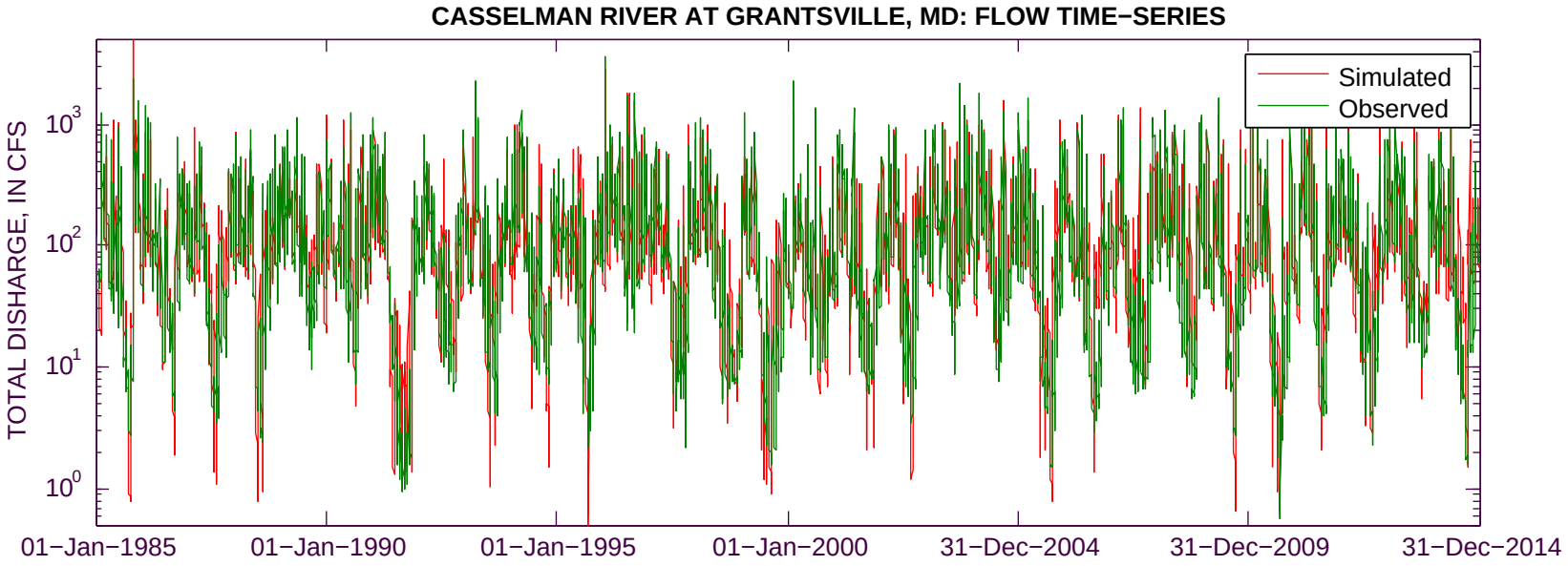
LOAD DATA
LOG10

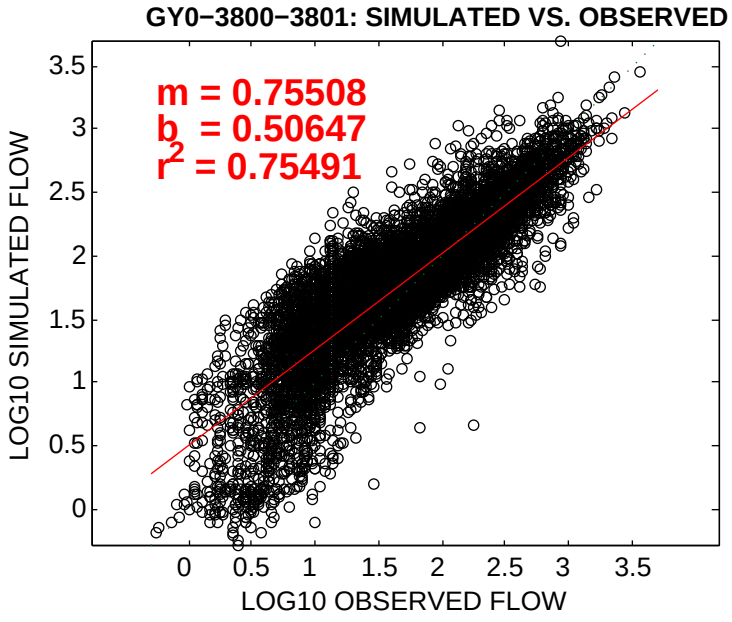


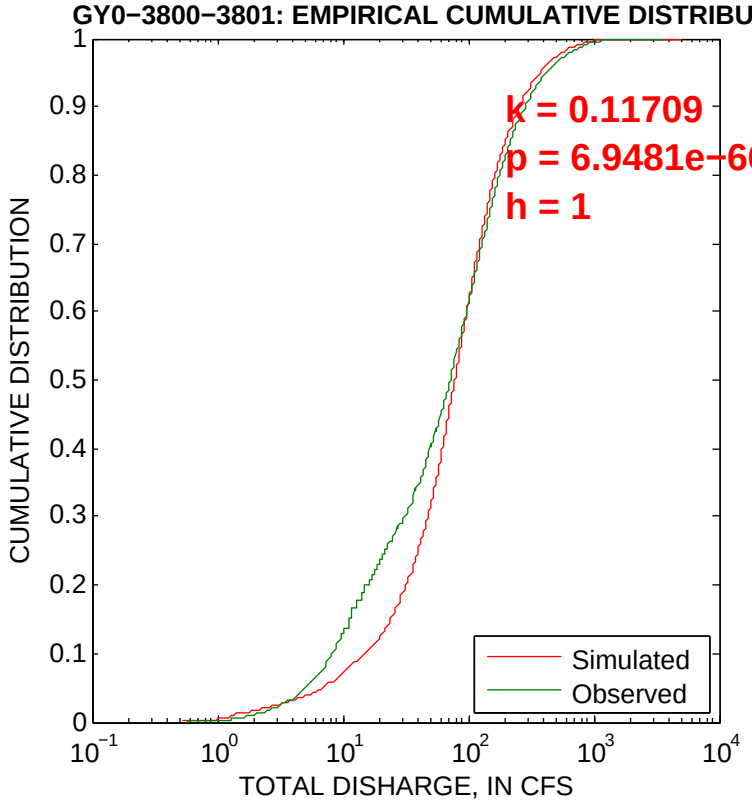












DATA SELECTION

scenario	file
P620171001WQ	FLOW.calib

plot: FLOW - total discharge

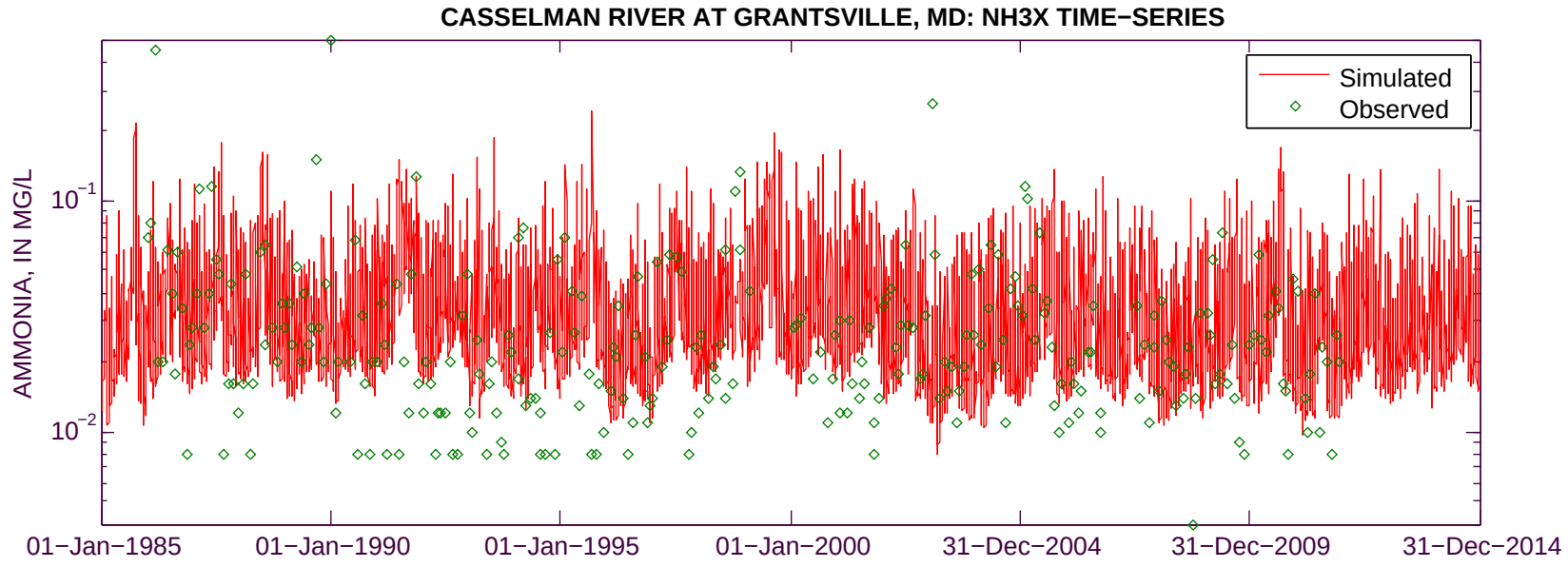
Dates: 1/1/1985 – 12/31/201

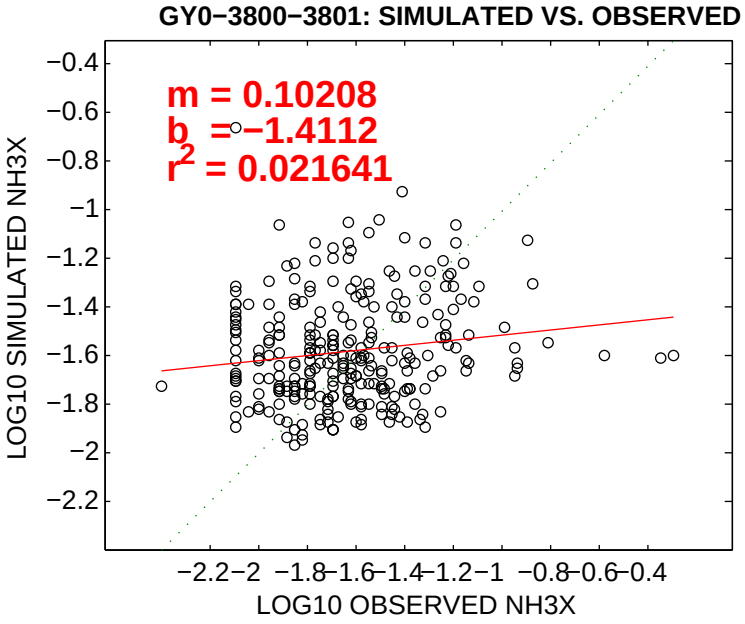
Drive	Directory	Observed
N/A	model	OBS20161101

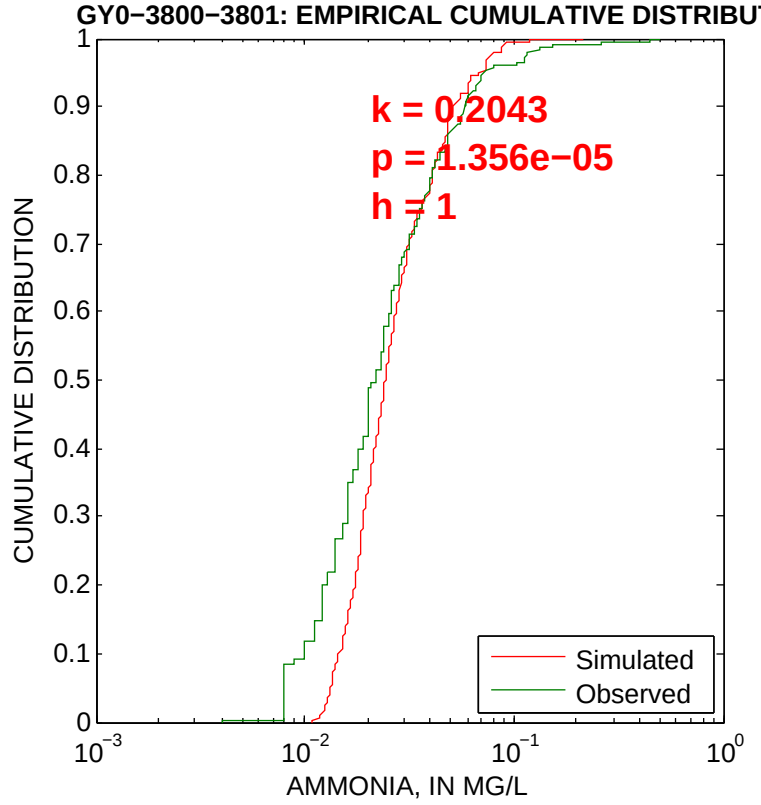
STATISTICS

	observe	simulate
n	10957	10957
min	0.57	0.50962
	-0.244125	-0.292754
mean	124.666	120.988
	1.76267	1.83744
media	72	78.788
	1.85733	1.89646
max	3600	5059.6
	3.5563	3.70412
varian	31895.6	24634.6
	0.352038	0.26588
JB	0.001	0.001
	0.001	0.001
	ra	log
%	-2.95018	4.2415
err.va	11024.6	0.0918727
rel.std.err	0.345648	0.260974
mod.eff	0.654352	0.739026

VERSION 2.1







DATA SELECTION

scenario	file
P620171001WQ	NH3X.calib

plot: NH3X - ammonia

Dates: 1/1/1985 – 12/31/201

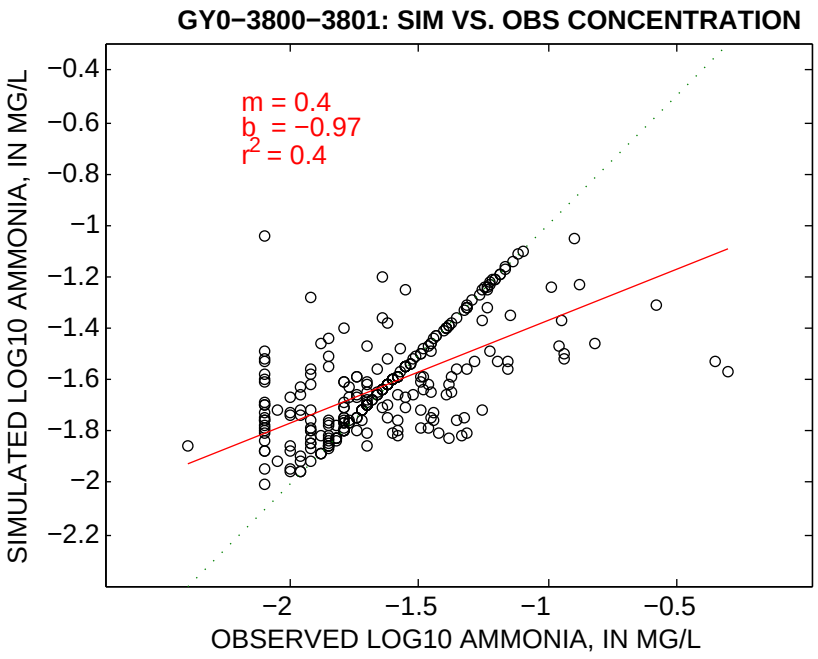
Drive	Directory	Observed
N/A	model	OBS20161101

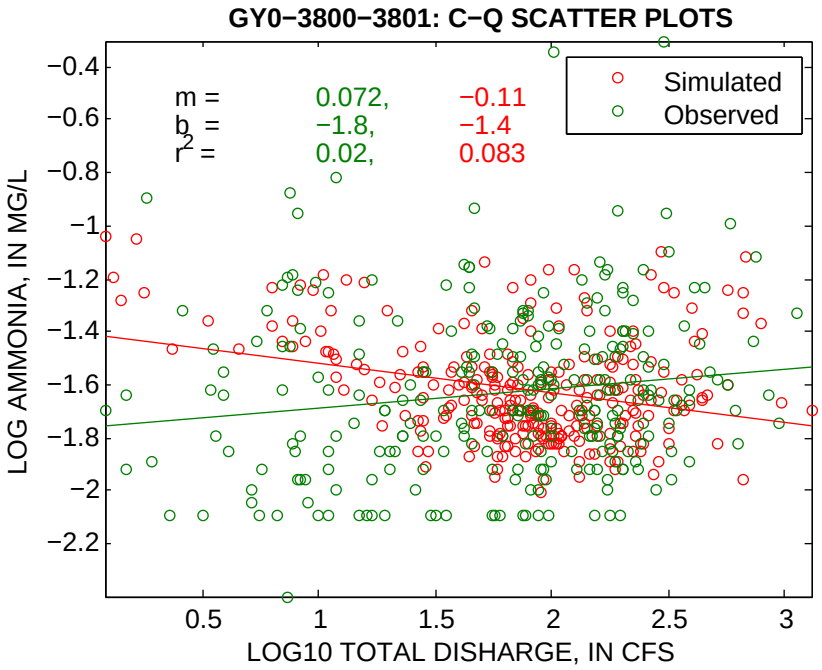
STATISTICS

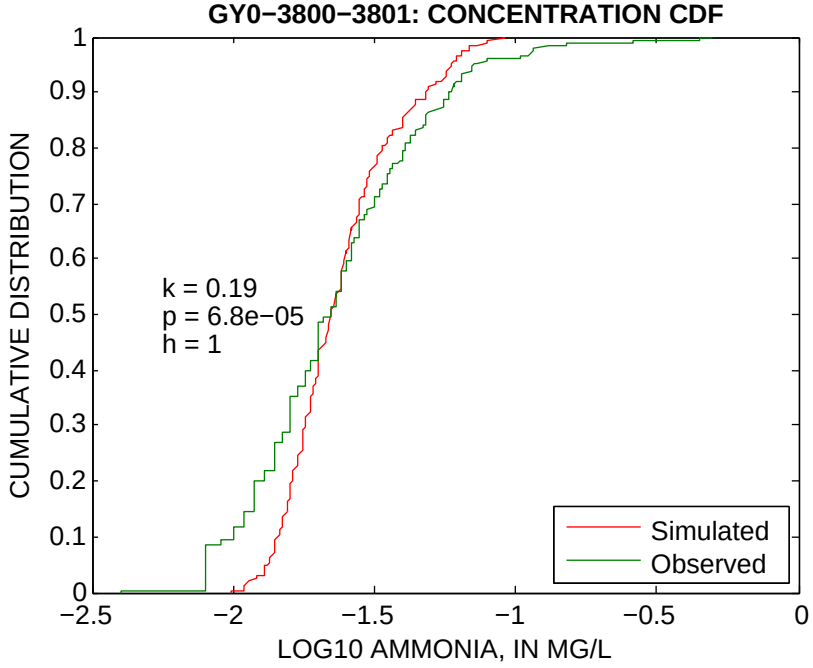
	n	279	279
		observe	simulate
min		0.004	0.010834
		-2.39794	-1.96521
mean		0.0325591	0.0304732
		-1.6326	-1.57787
media		0.022	0.024533
		-1.65758	-1.61025
max		0.5	0.2176
		-0.30103	-0.662341
varian		0.00212907	0.00041615
		0.0978938	0.047133
JB		0.001	0.001
		0.001	0.001
		ra	log
%		-6.40648	-3.35203
err.va		0.00246888	0.128047
rel.std.err		1.15961	1.30802
mod.eff		-0.159606	-0.308019

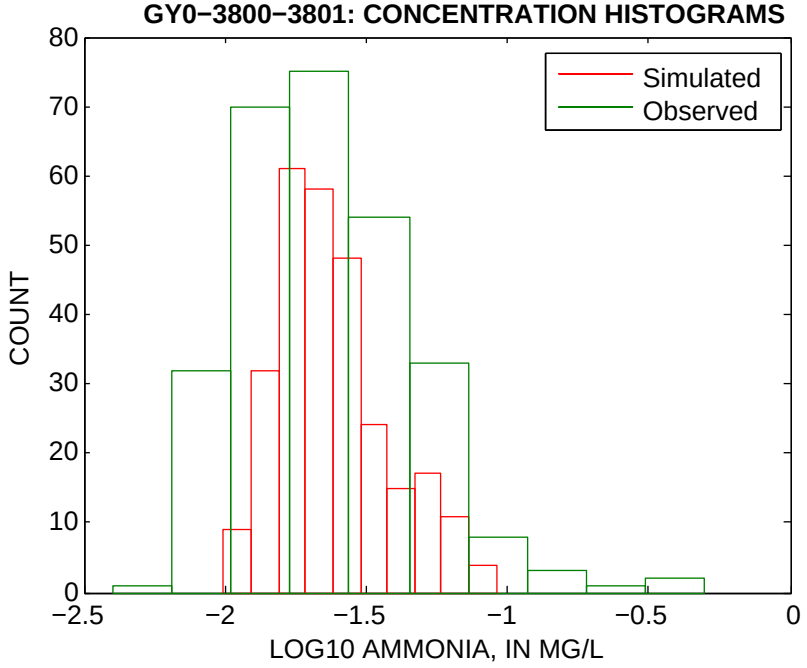
VERSION 2.1

ALL DATA
LOG10

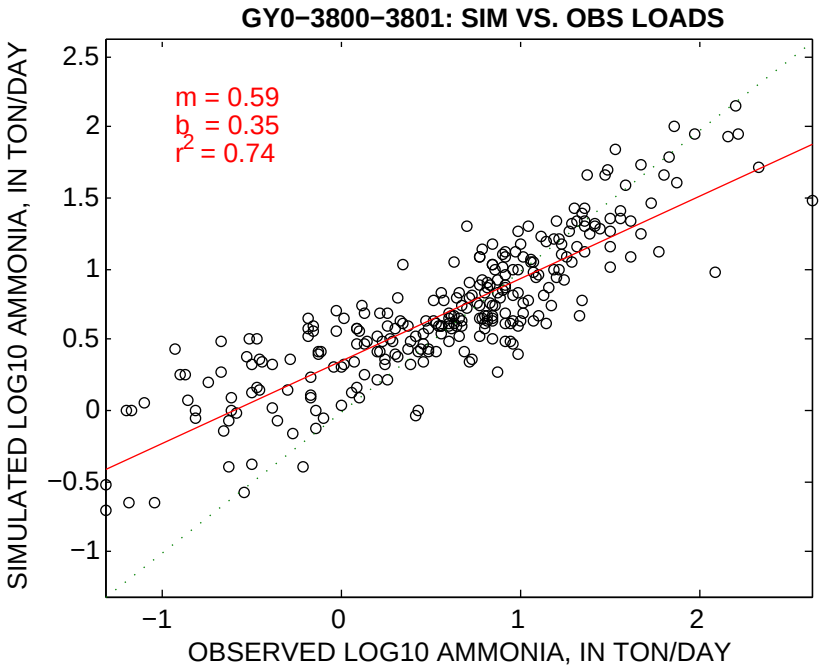


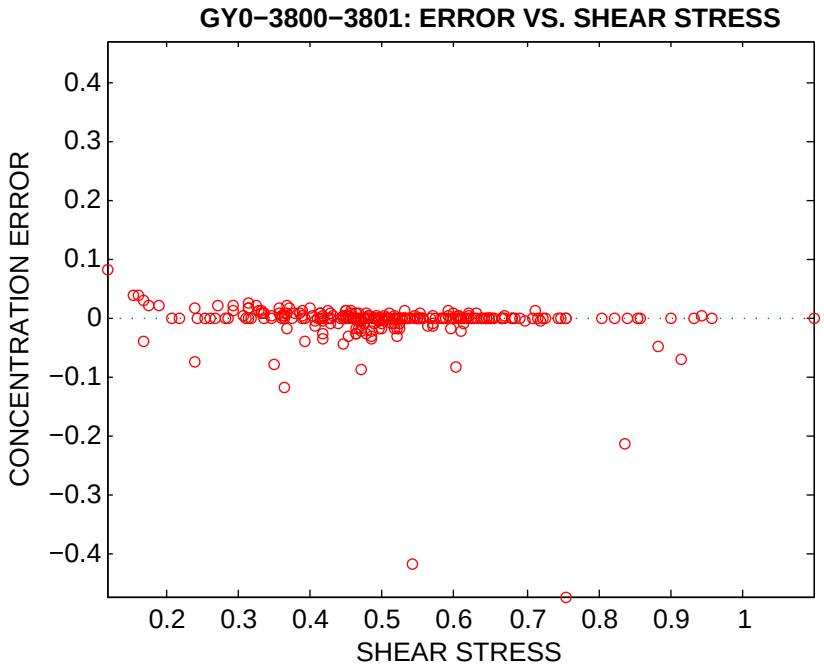


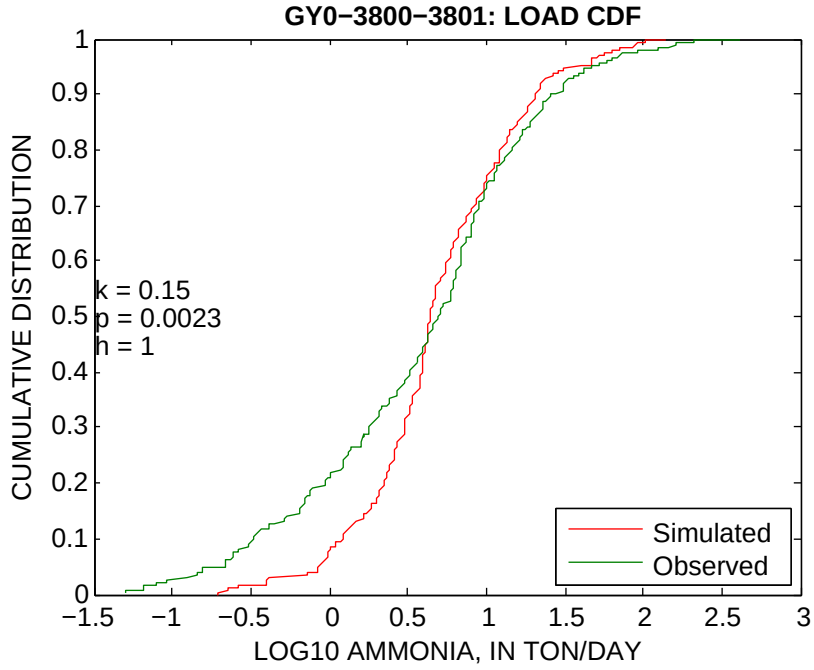


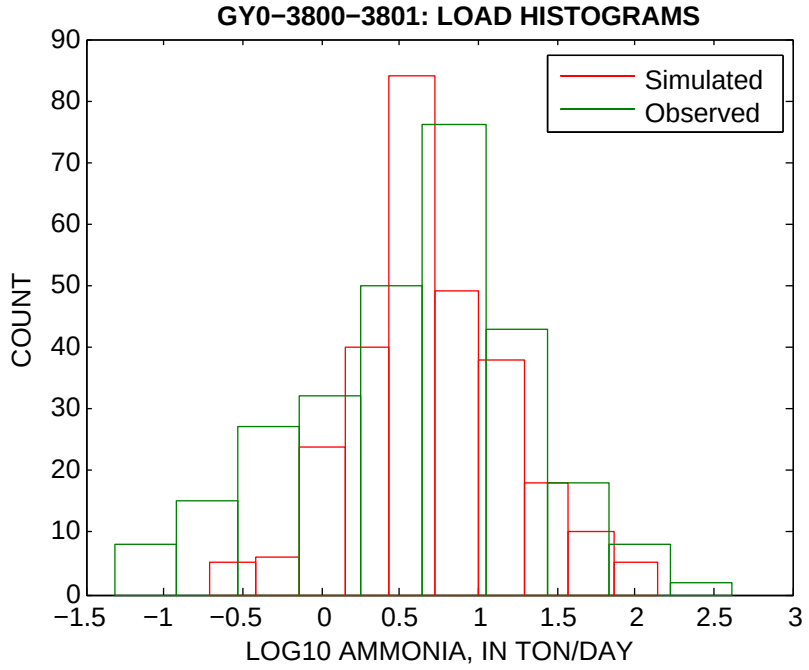


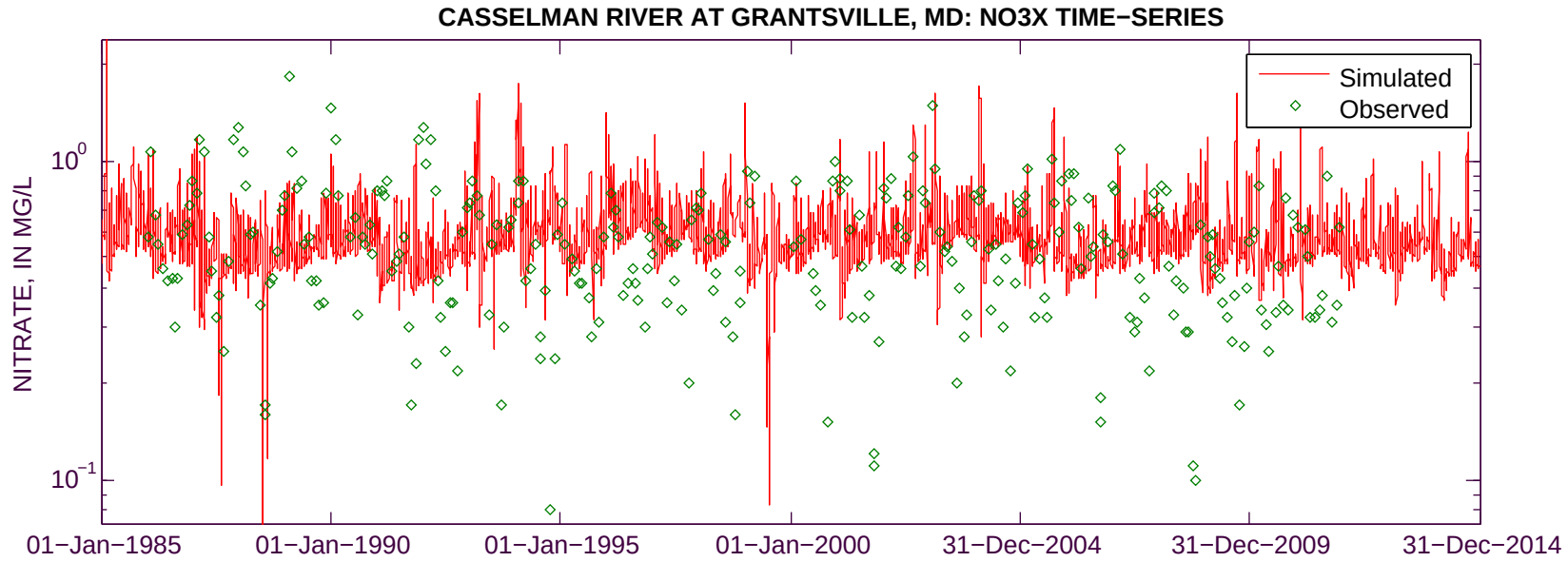
LOAD DATA
LOG10

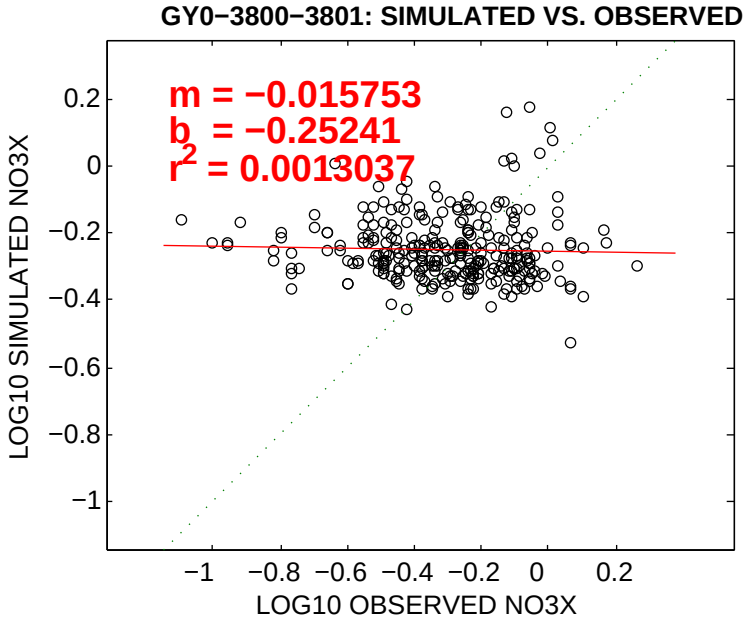


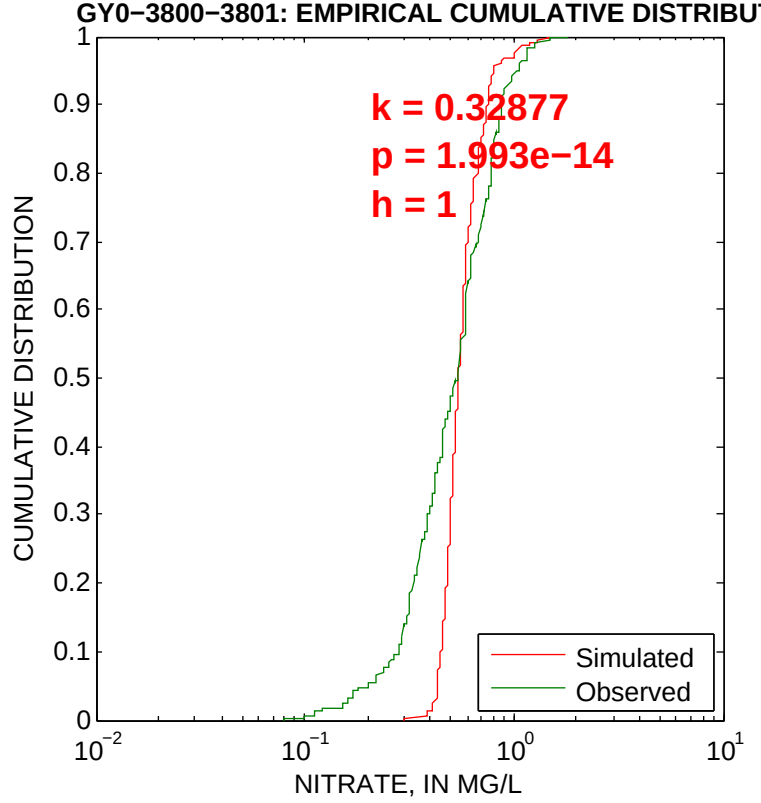












DATA SELECTION

scenario	file
P620171001WQ	NO3X.calib

plot: NO3X - nitrate

Dates: 1/1/1985 – 12/31/201

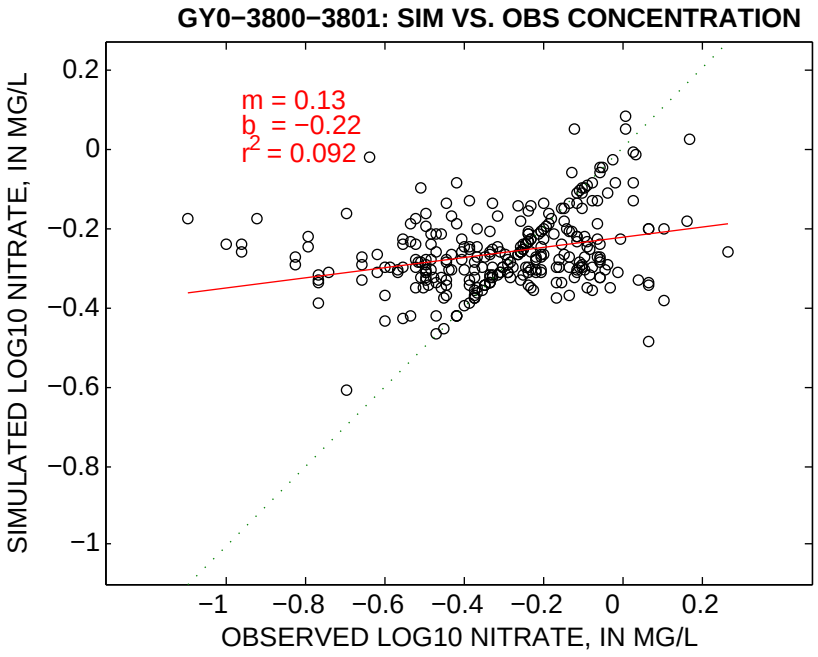
Drive	Directory	Observed
N/A	model	OBS20161101

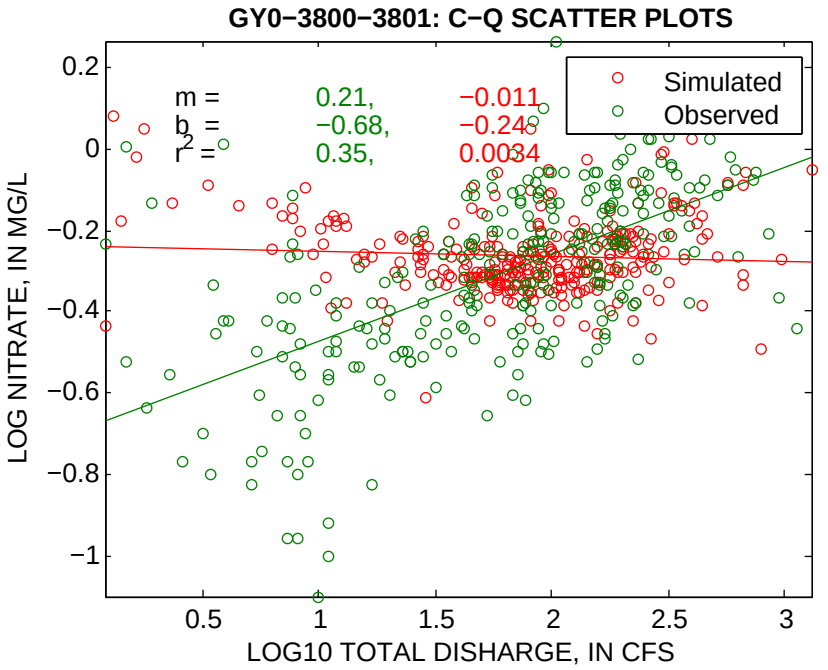
STATISTICS

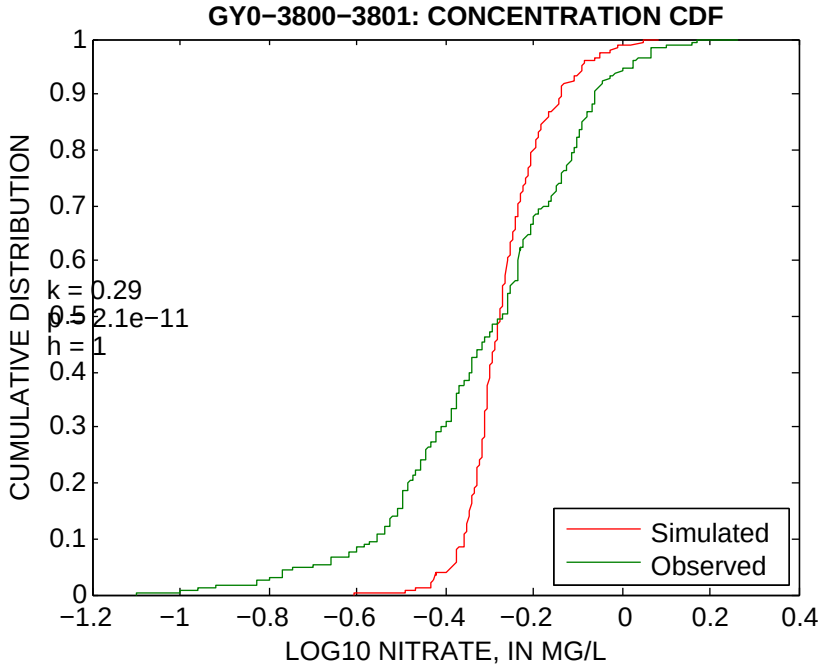
	n	292	292
		observe	simulate
min		0.08	0.29805
		-1.09691	-0.525711
mean		0.559548	0.580681
		-0.302539	-0.247643
media		0.54	0.543985
		-0.267606	-0.264413
max		1.84	1.5108
		0.264818	0.179207
varian		0.0692963	0.0231036
		0.0480843	0.00915244
JB		0.001	0.001
		0.001285	0.001
		ra	log
%		3.77679	-18.145
err.va		0.0906364	0.0617755
rel.std.err		1.30796	1.28473
mod.eff		-0.307955	-0.284734

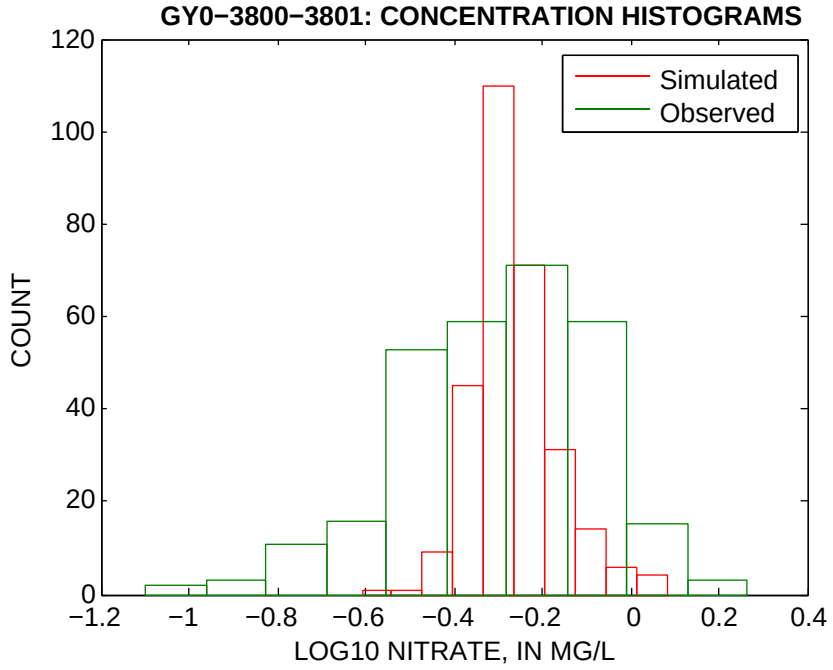
VERSION 2.1

ALL DATA
LOG10

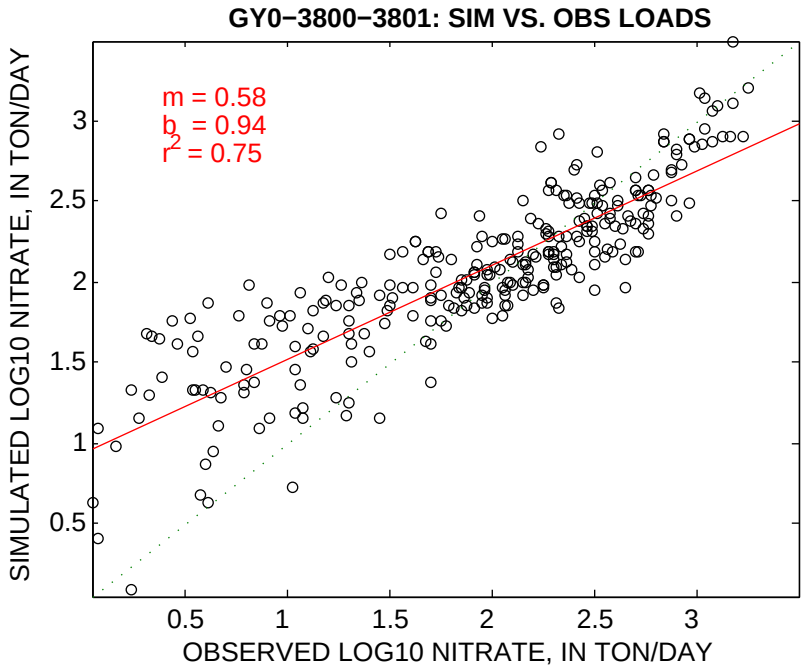


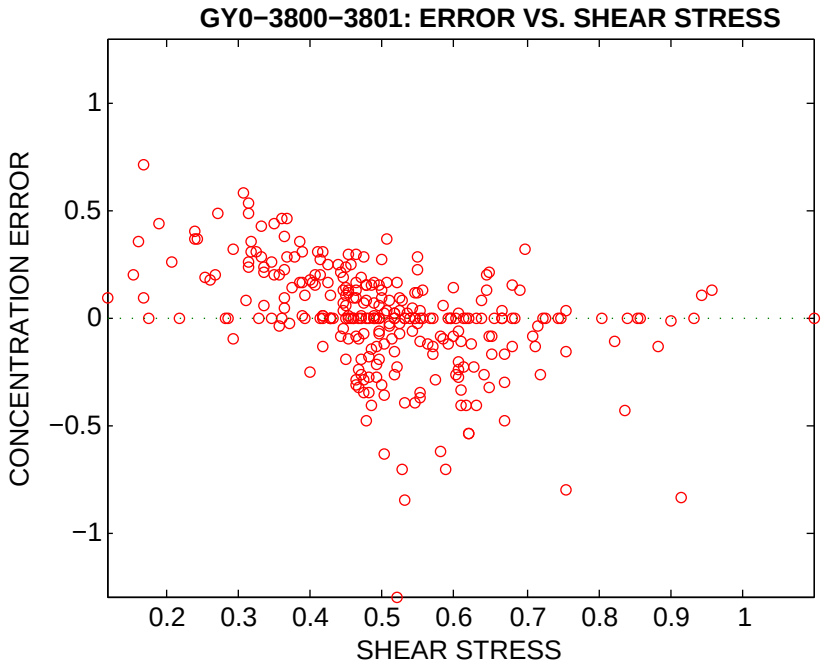


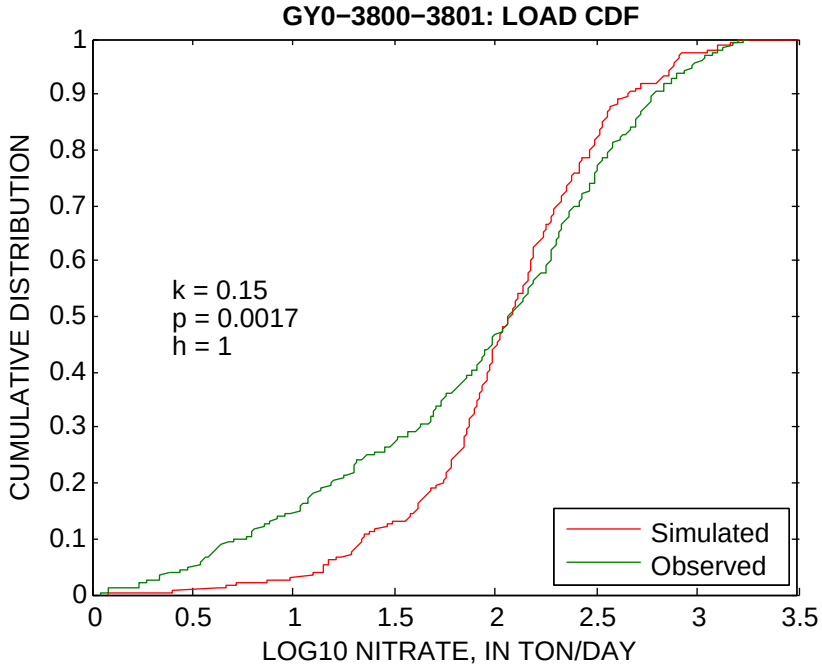


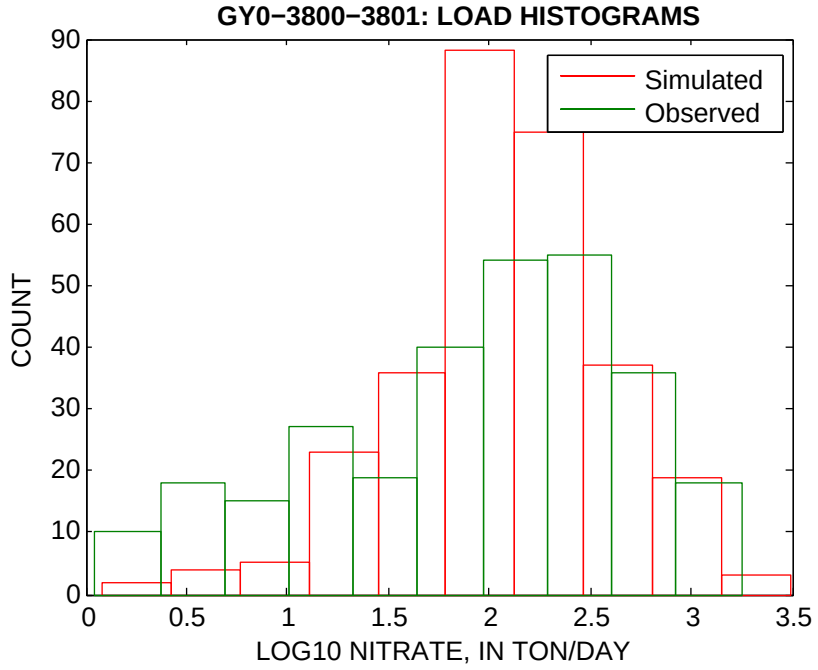


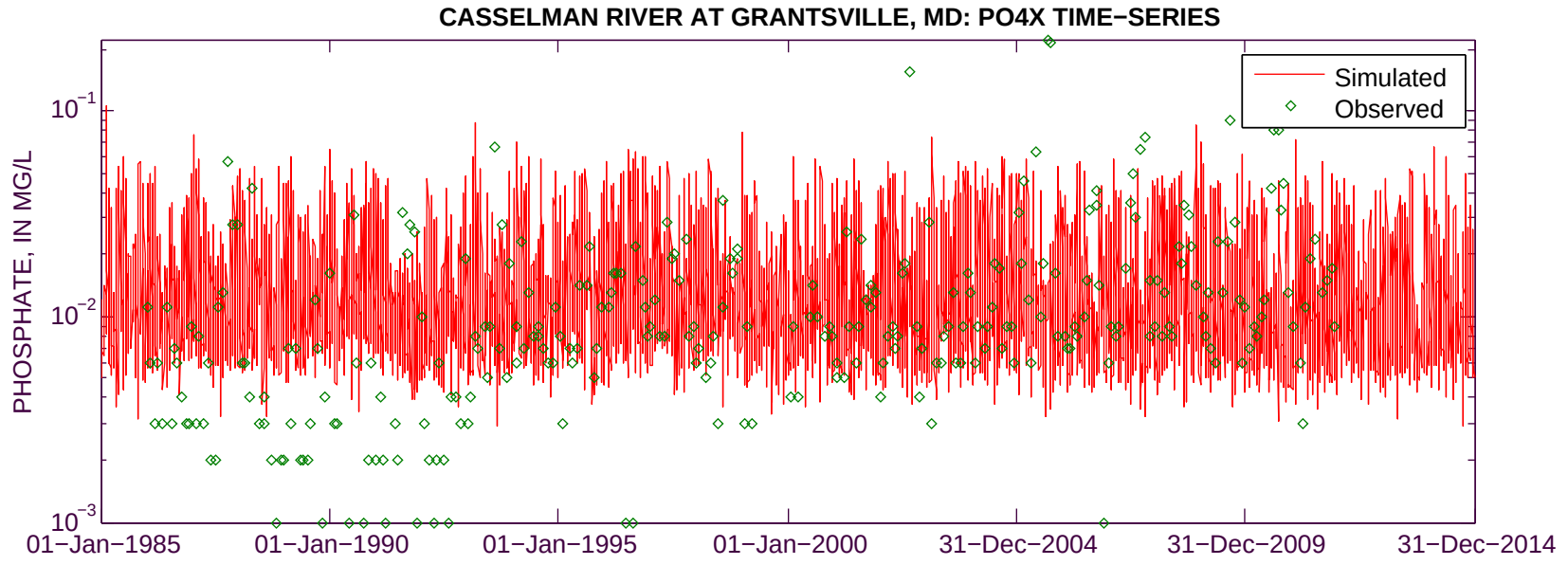
LOAD DATA
LOG10

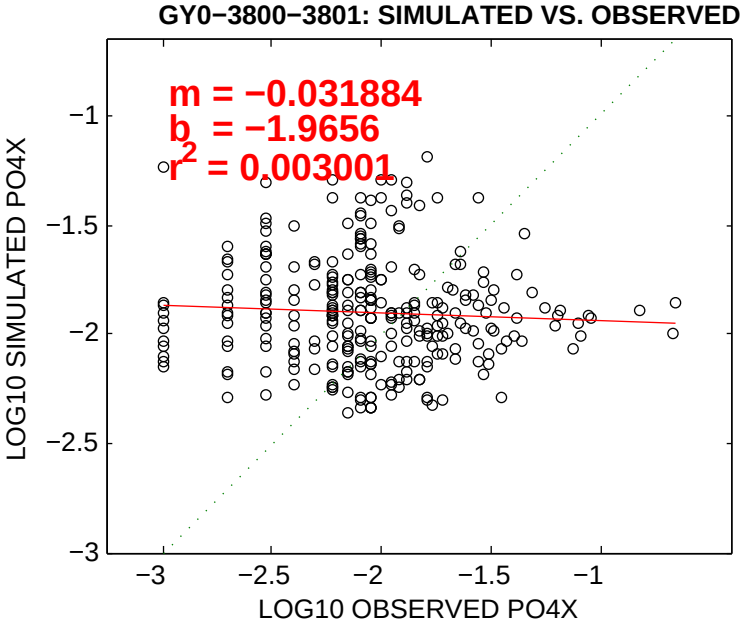


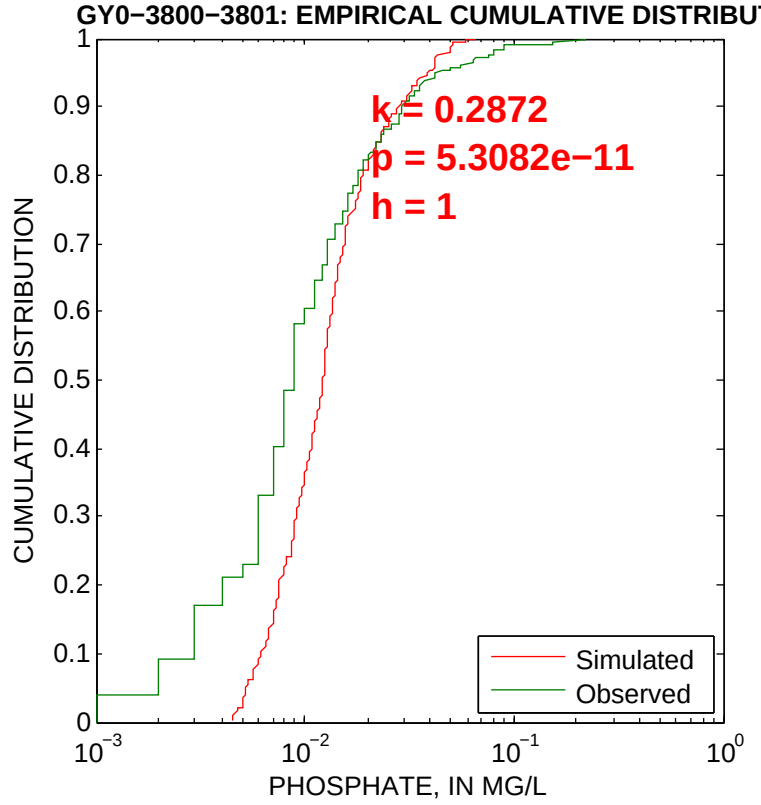












DATA SELECTION

scenario	file
P620171001WQ	PO4X.calib

plot: PO4X - phosphate

Dates: 1/1/1985 – 12/31/201

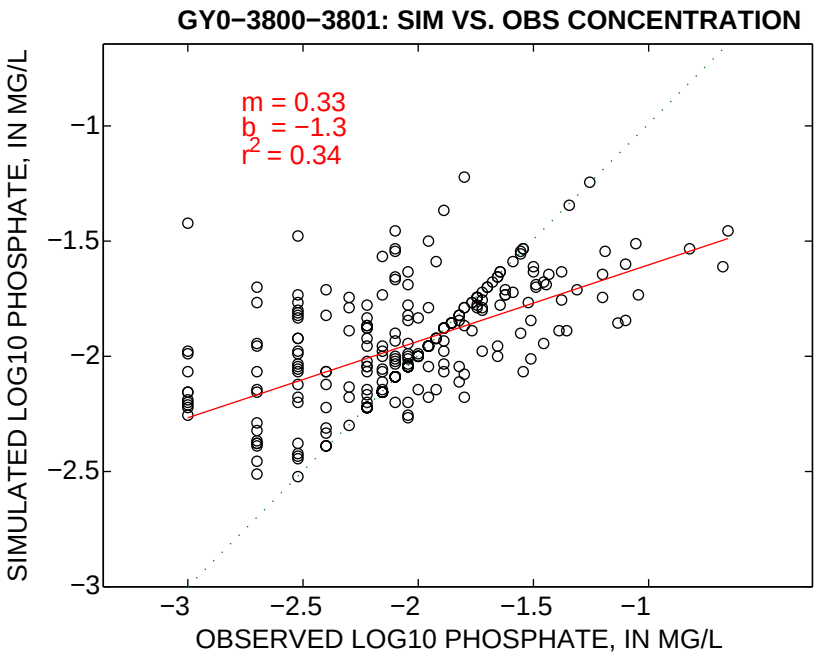
Drive: N/A Directory: model Observed: OBS20161101

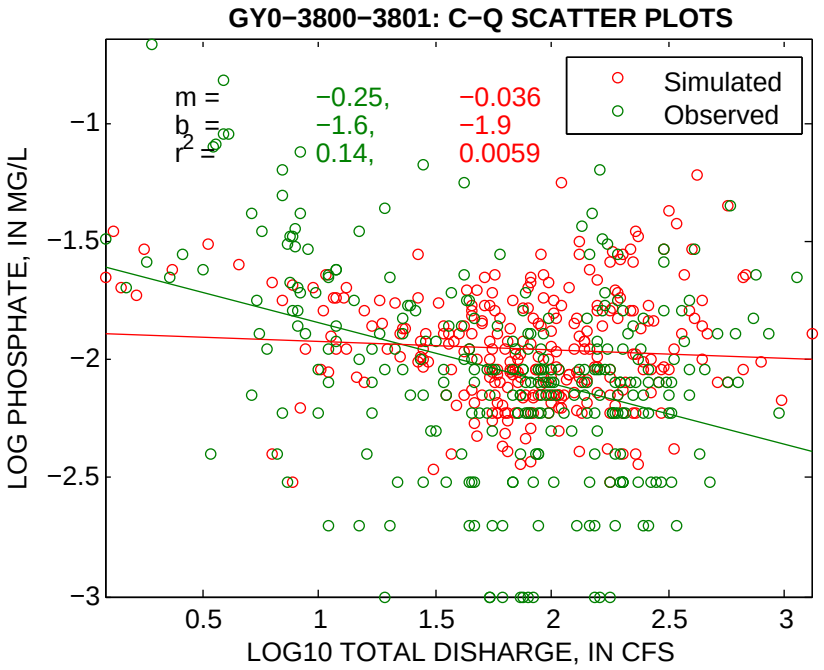
STATISTICS

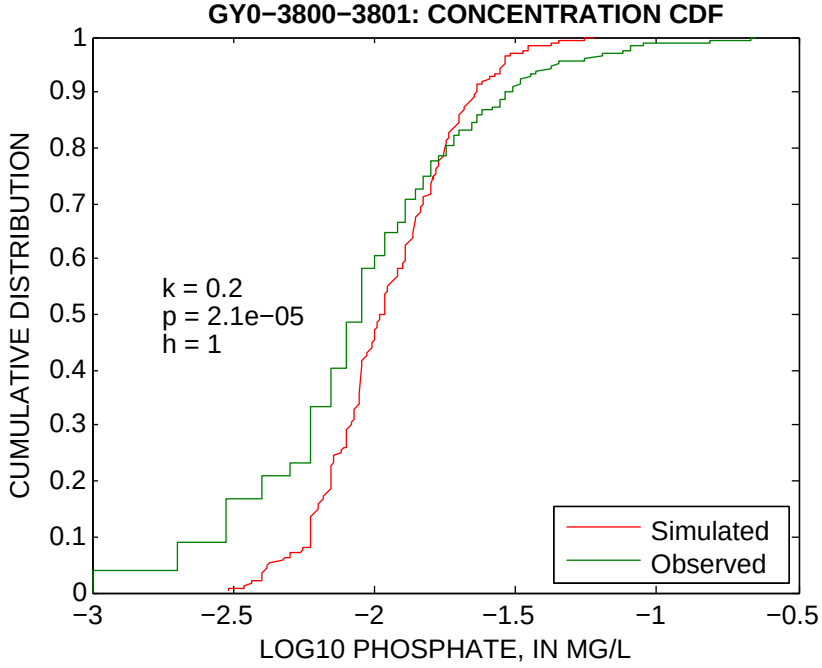
	n	observe	simulate
		289	289
min		0.001	0.0044124
		-3	-2.35533
mean		0.0150242	0.0149571
		-2.0488	-1.90027
media		0.009	0.012234
		-2.04576	-1.91243
max		0.223	0.065589
		-0.651695	-1.18317
varian		0.00056115	0.00010438
		0.176734	0.0598692
JB		0.001	0.001
		0.032660	0.006350
		ra	log
%		-0.446506	-7.24985
err.va		0.00069984	0.270013
rel.std.err		1.24715	1.52779
mod.eff		-0.247146	-0.52779

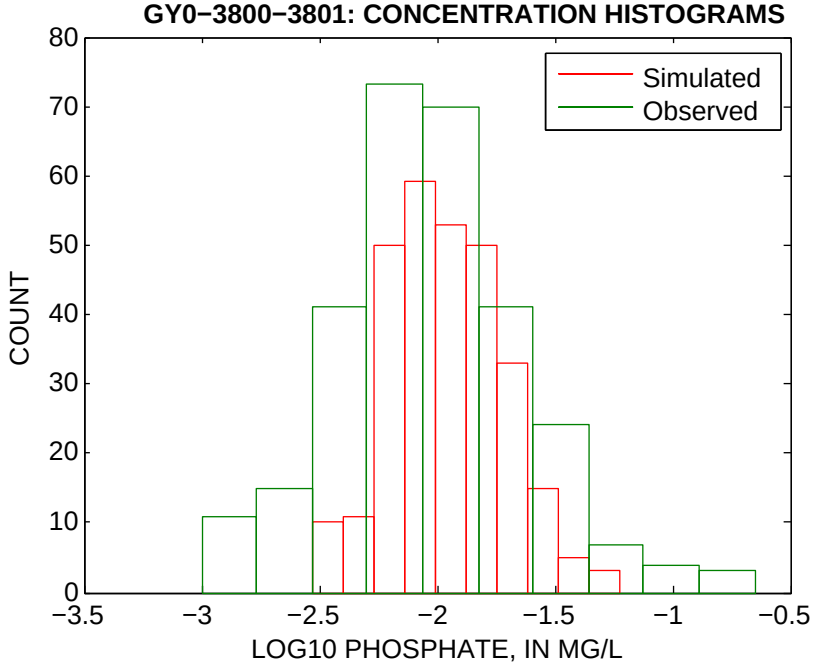
VERSION 2.1

ALL DATA
LOG10

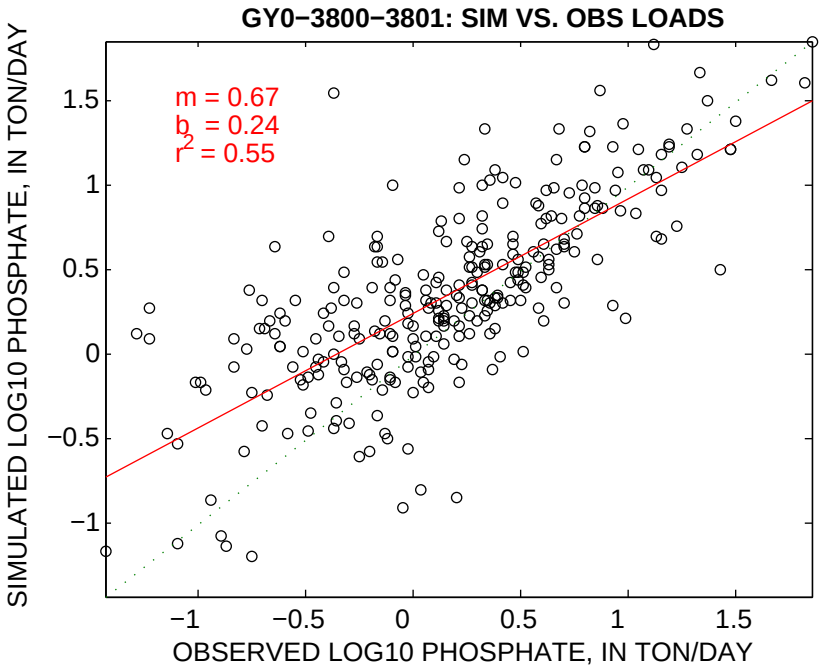


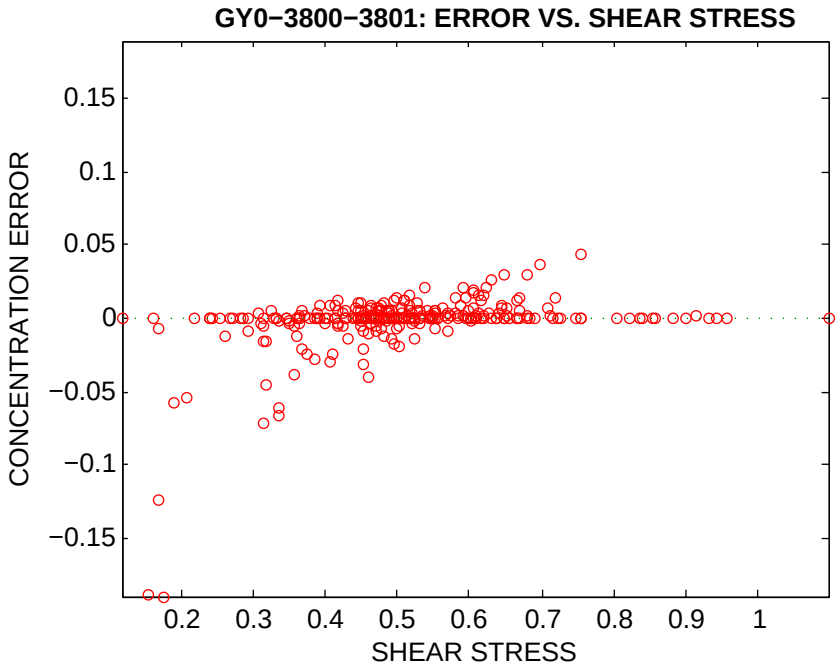


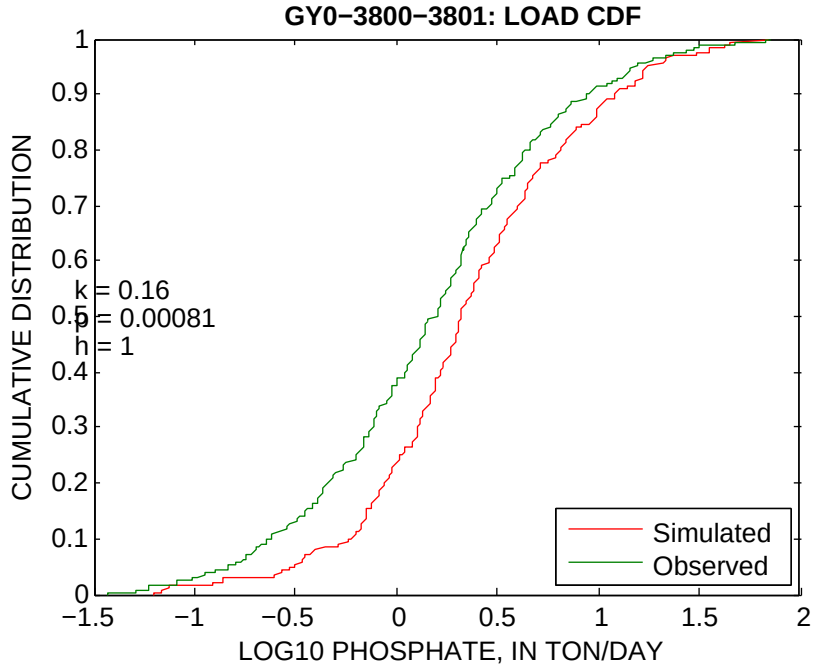


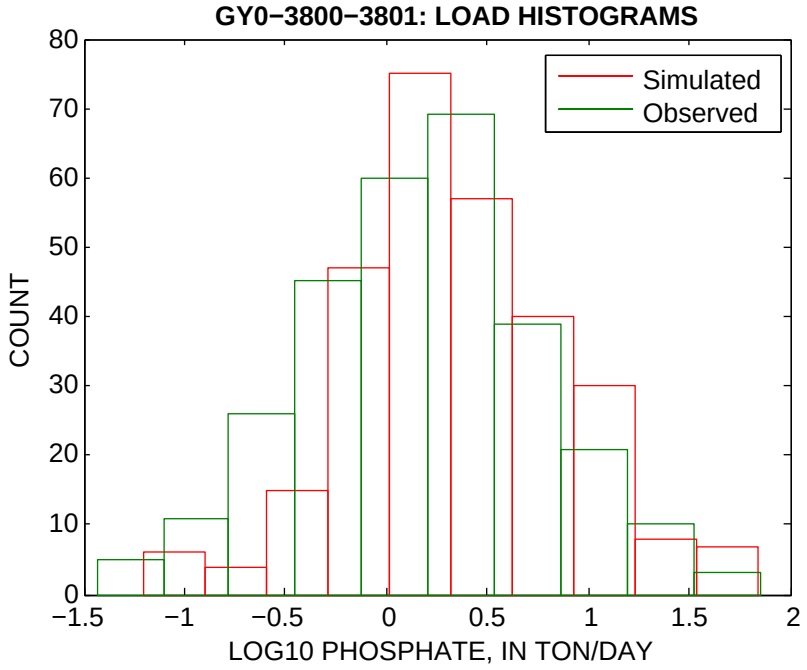


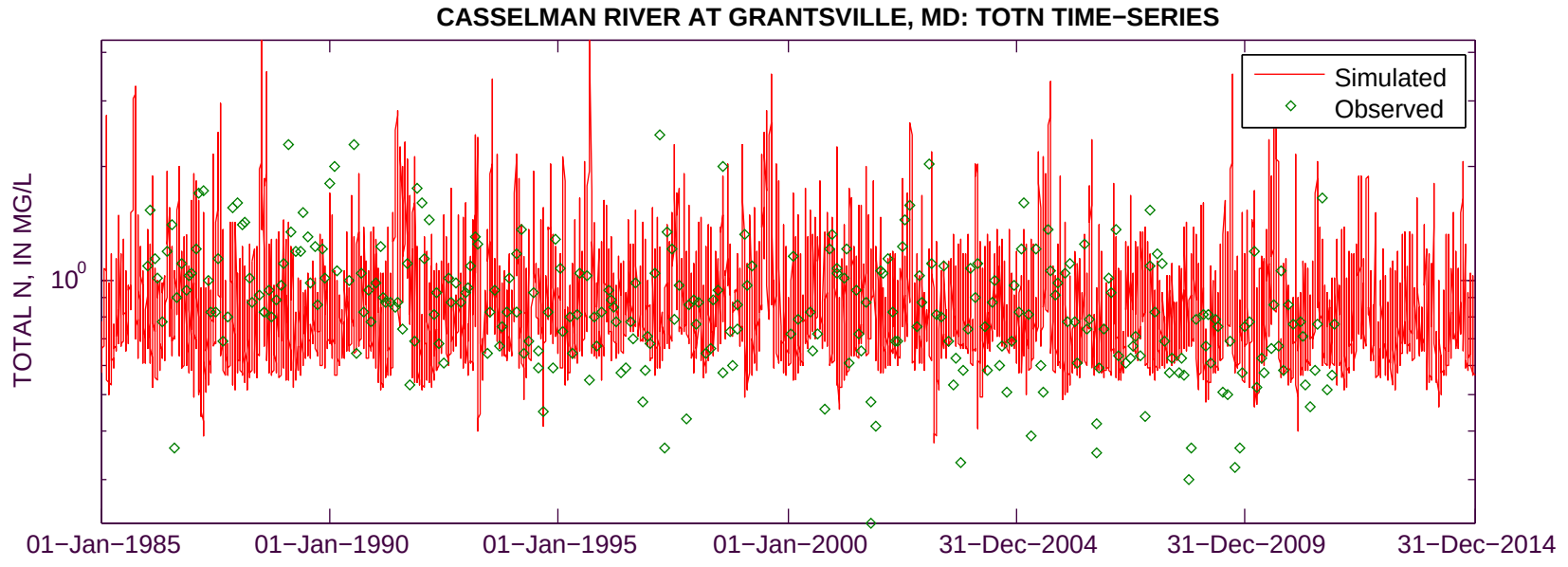
LOAD DATA
LOG10

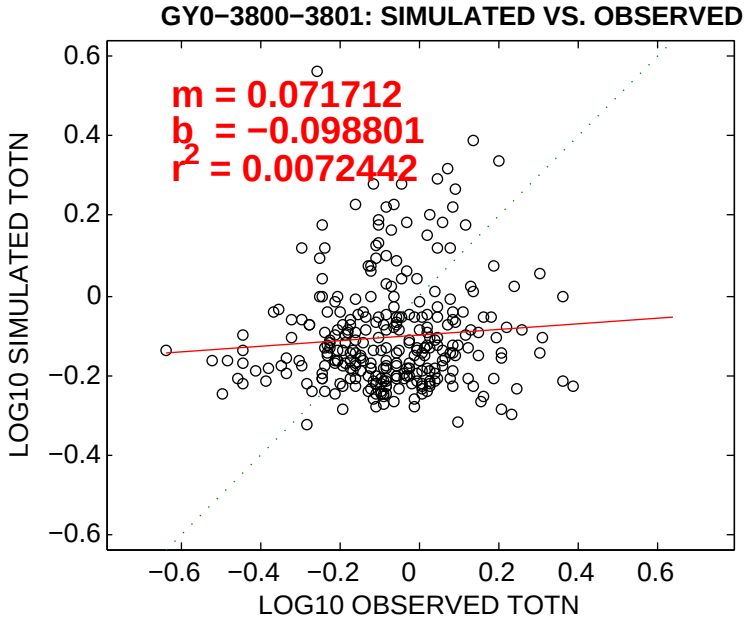


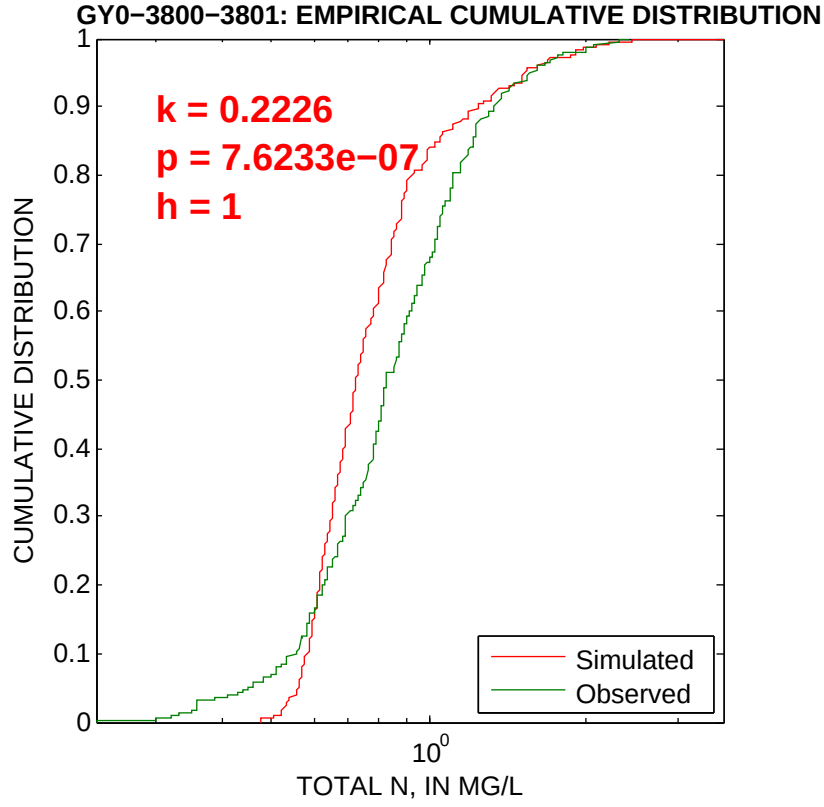












DATA SELECTION

scenario: P620171001WQ | file: TOTN.calib

plot: TOTN - total nitrogen

Dates: 1/1/1985 – 12/31/201

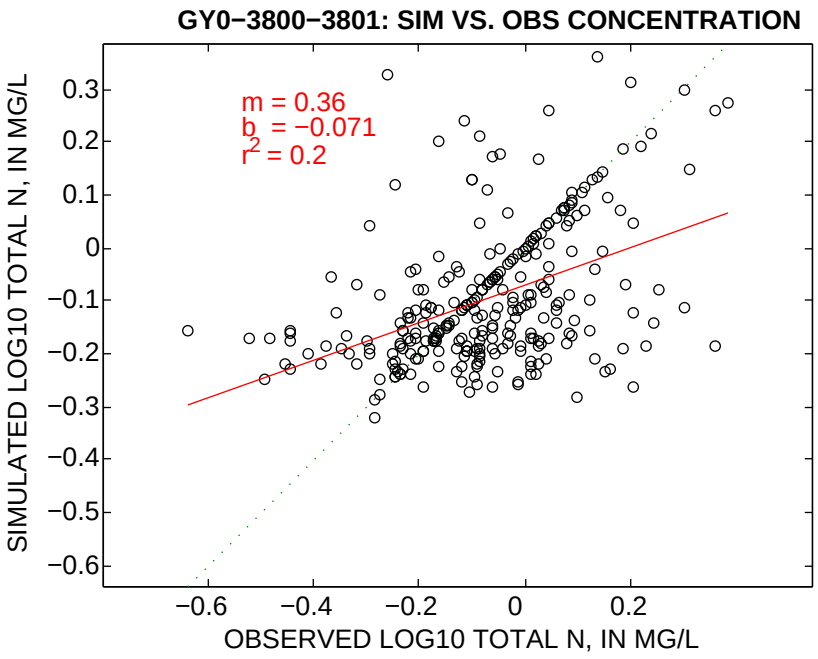
Drive | Directory | Observed: N/A | model | OBS20161101

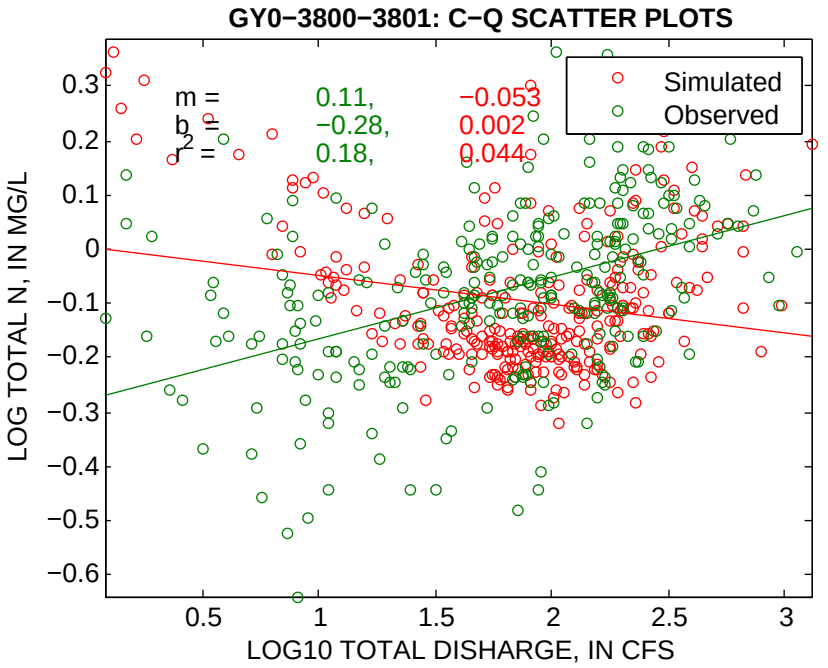
STATISTICS

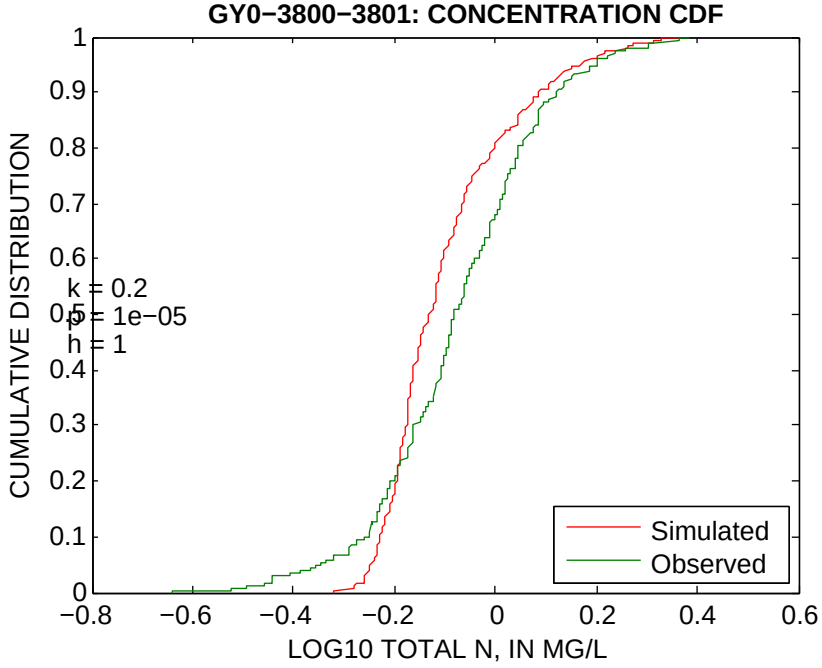
n	292	292
	observe	simulate
min	0.23	0.47326
	-0.638272	-0.3249
mean	0.903	0.833976
	-0.0742066	-0.104123
media	0.83	0.724805
	-0.0809219	-0.139779
max	2.42	3.6365
	0.383815	0.560684
varian	0.121073	0.122813
	0.0262731	0.0186509
JB	0.001	0.001
	0.075885	0.001
	ra	log
%	-7.6438	40.3145
err.va	0.232974	0.0420539
rel.std.err	1.92424	1.60064
mod.eff	-0.924243	-0.600642

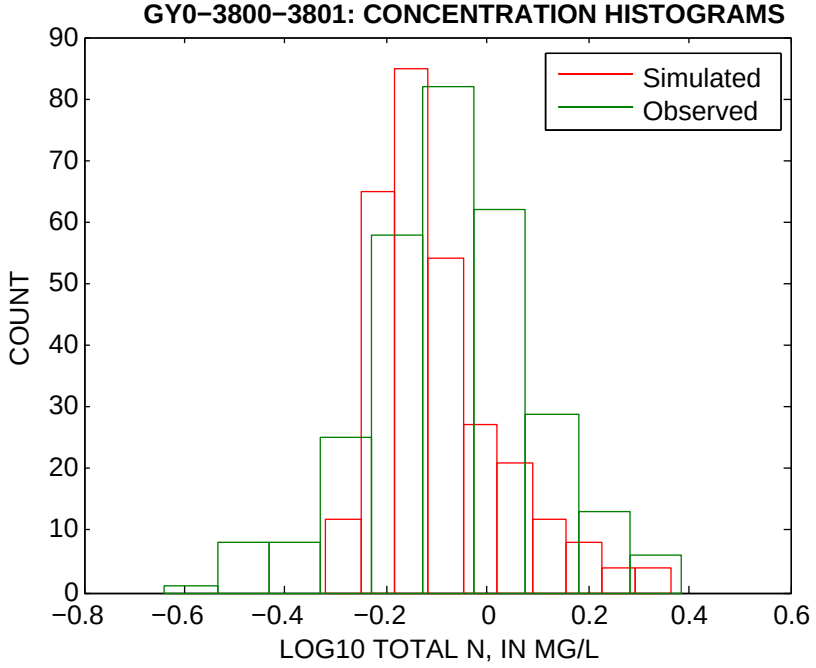
VERSION 2.1

ALL DATA
LOG10

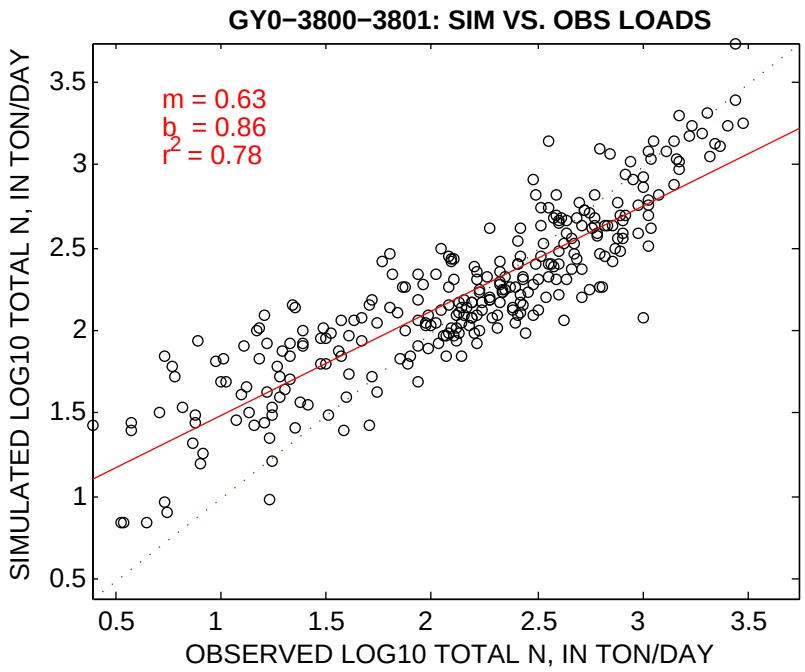


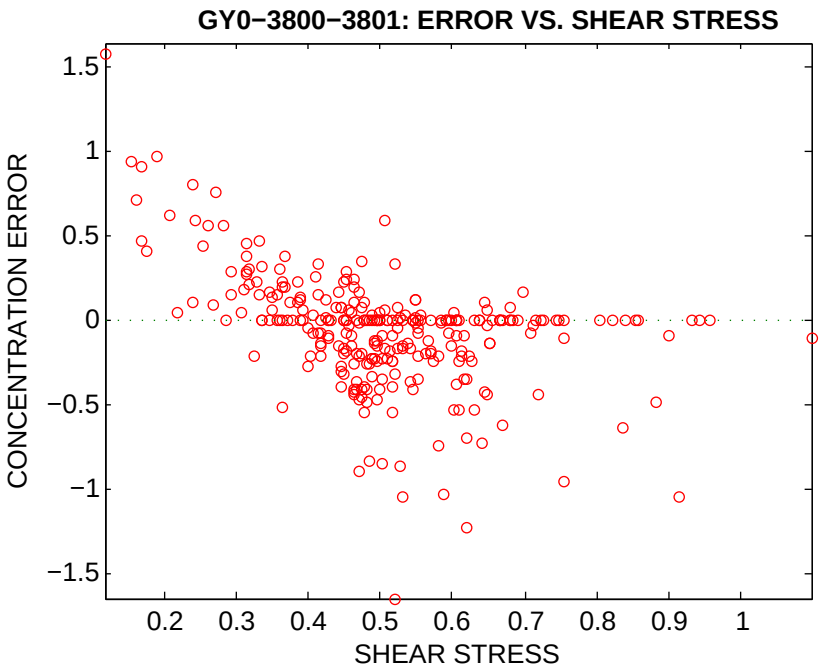


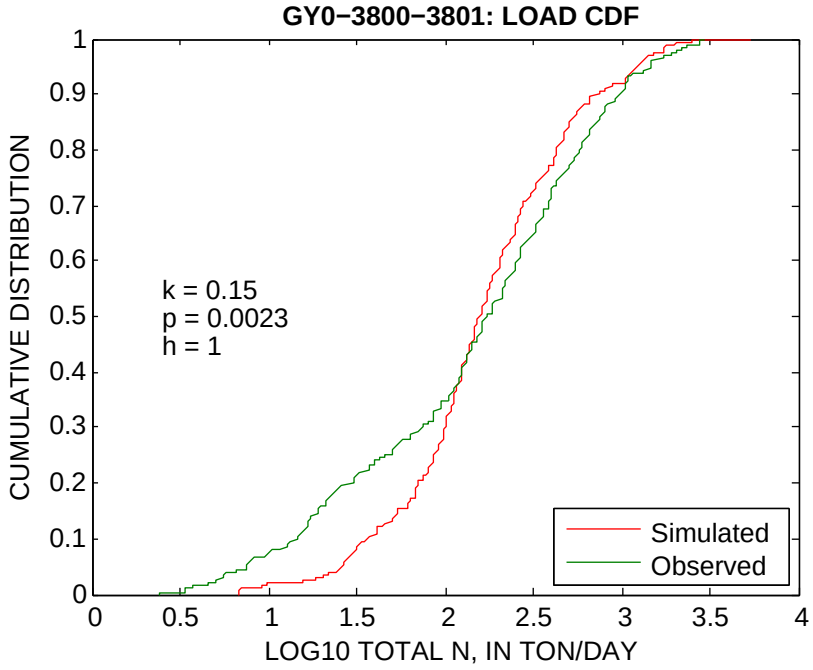


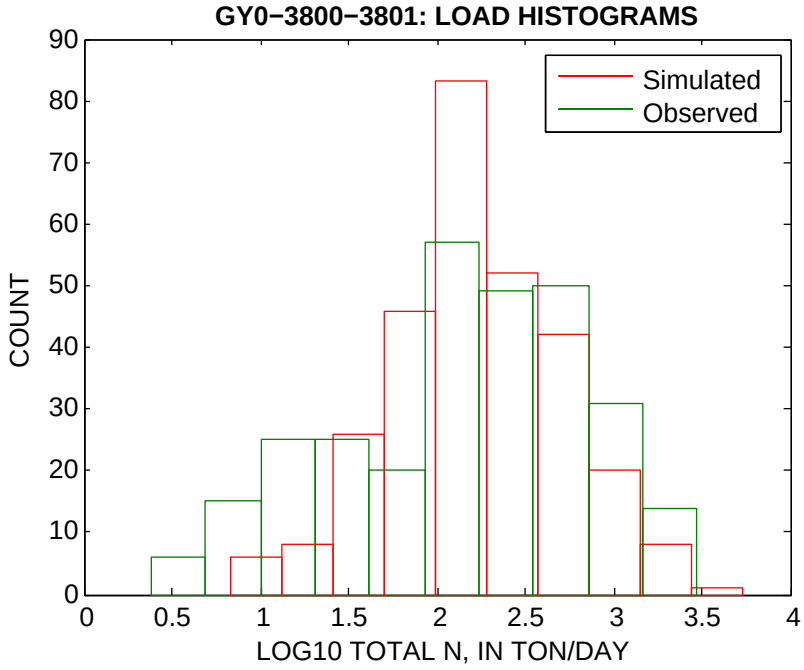


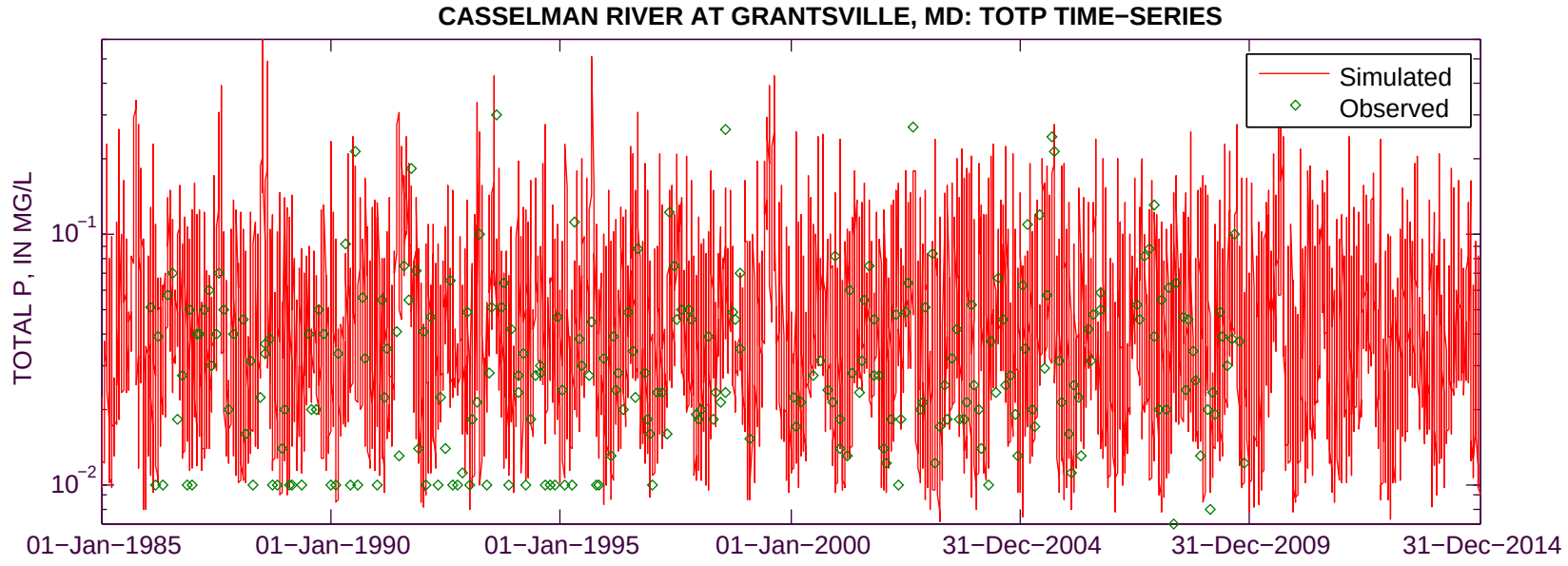
LOAD DATA
LOG10

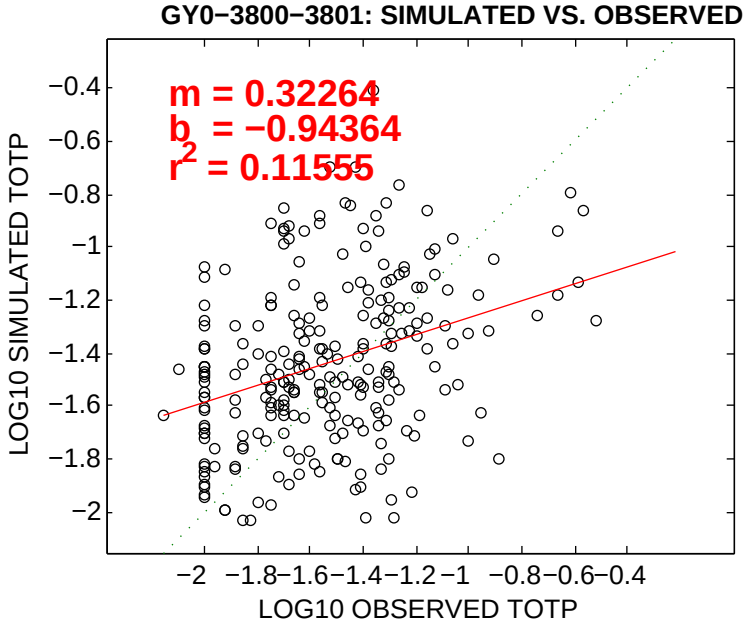


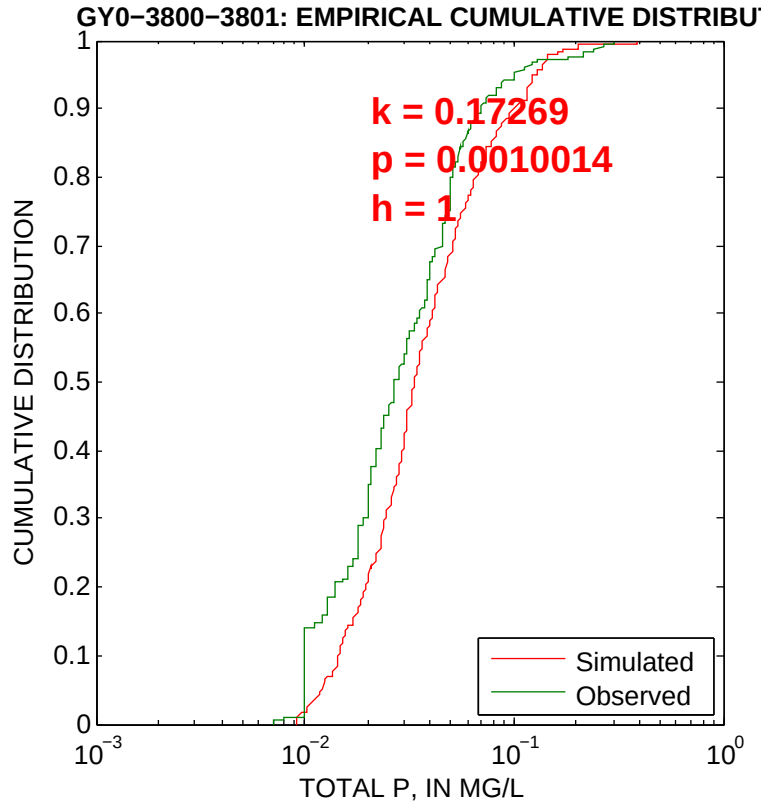












DATA SELECTION

scenario	file
P620171001WQ	TOTP.calib

plot: TOTP - total phosphorus

Dates: 1/1/1985 – 12/31/201

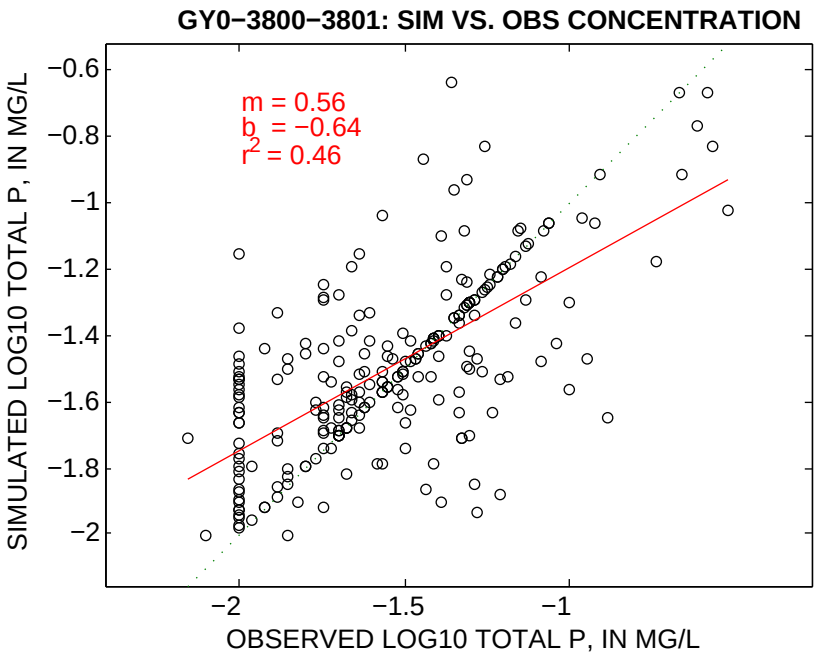
Drive	Directory	Observed
N/A	model	OBS20161101

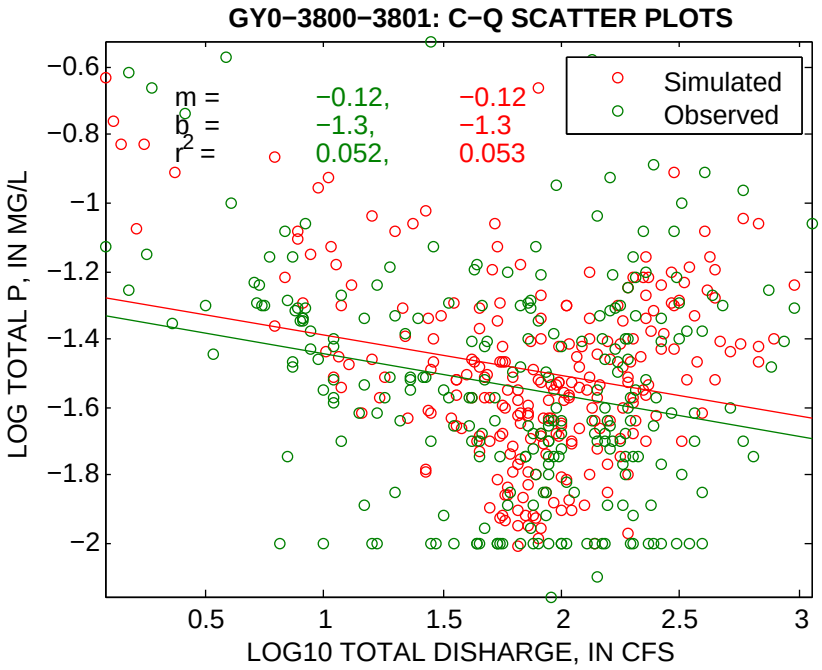
STATISTICS

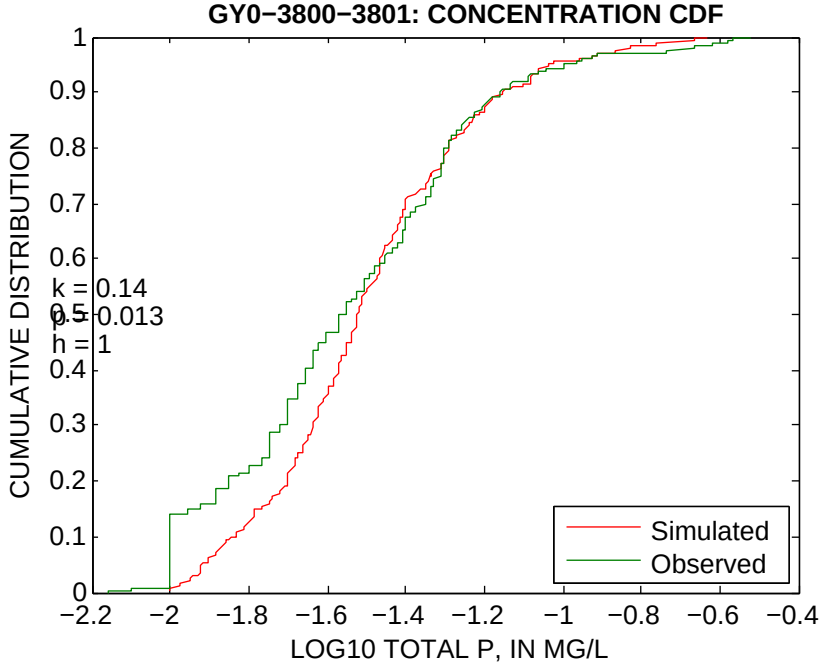
	n	249	249
		observe	simulate
min		0.007	0.0092272
		-2.1549	-2.03493
mean		0.0395261	0.0474317
		-1.53995	-1.44049
media		0.027	0.03362
		-1.56864	-1.4734
max		0.3	0.38919
		-0.522879	-0.409838
varian		0.00174473	0.00176227
		0.105224	0.0947921
JB		0.001	0.001
		0.011022	0.048272
		ra	log
%		20.0011	-6.45869
err.va		0.00268244	0.142049
rel.std.err		1.53746	1.34996
mod.eff		-0.537456	-0.349963

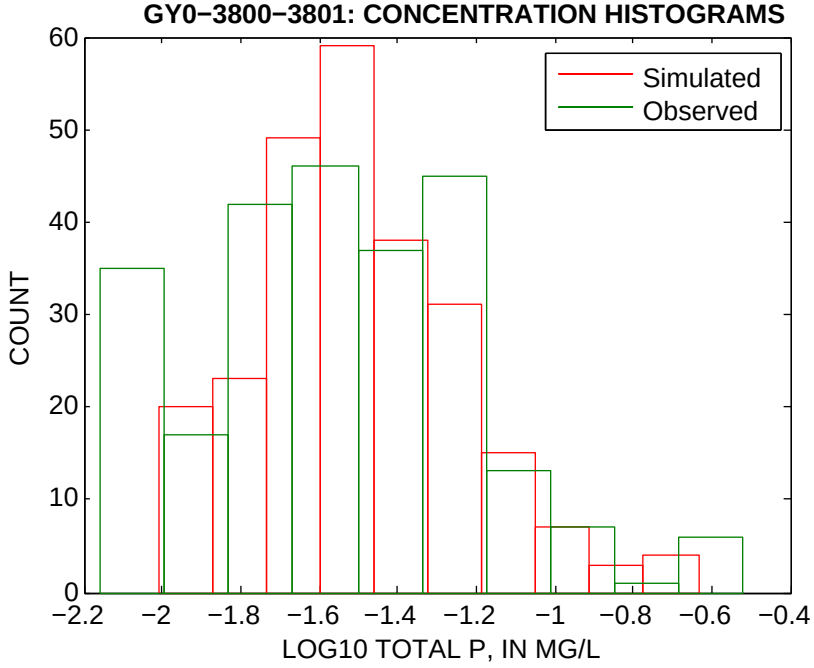
VERSION 2.1

ALL DATA
LOG10

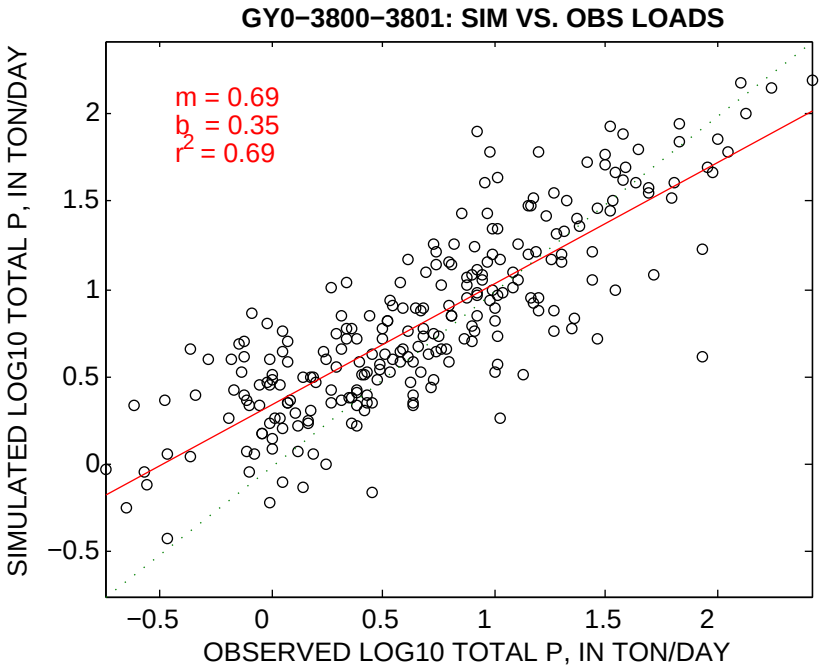


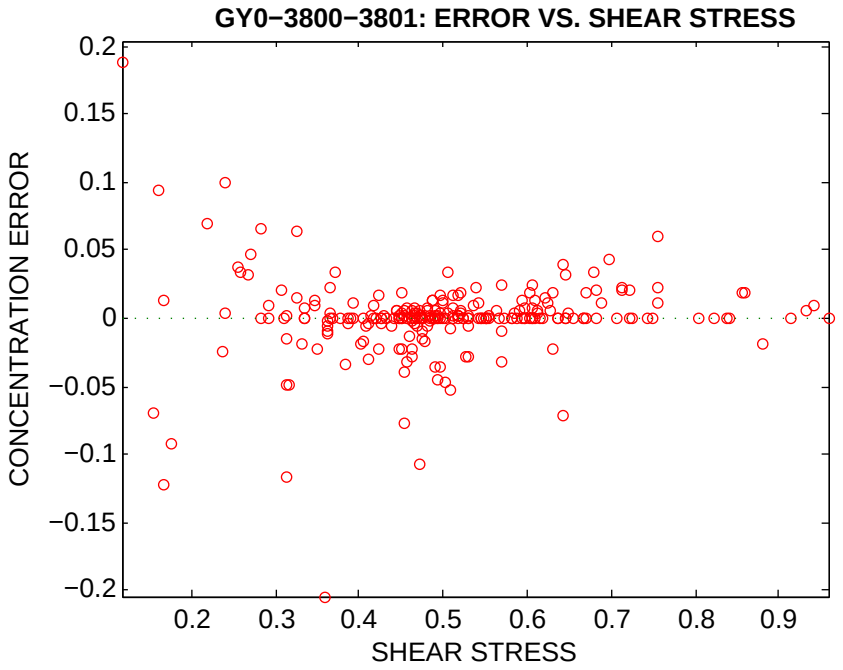


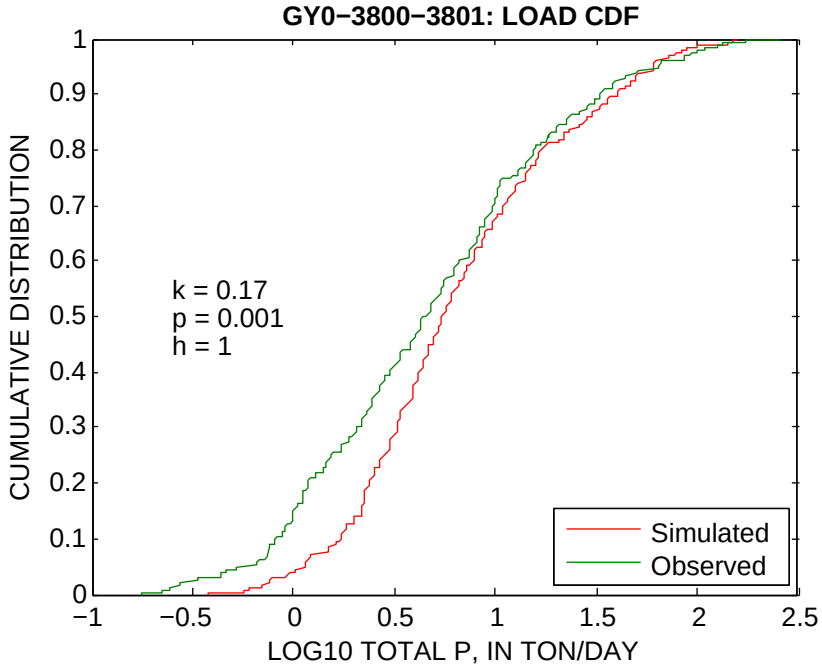


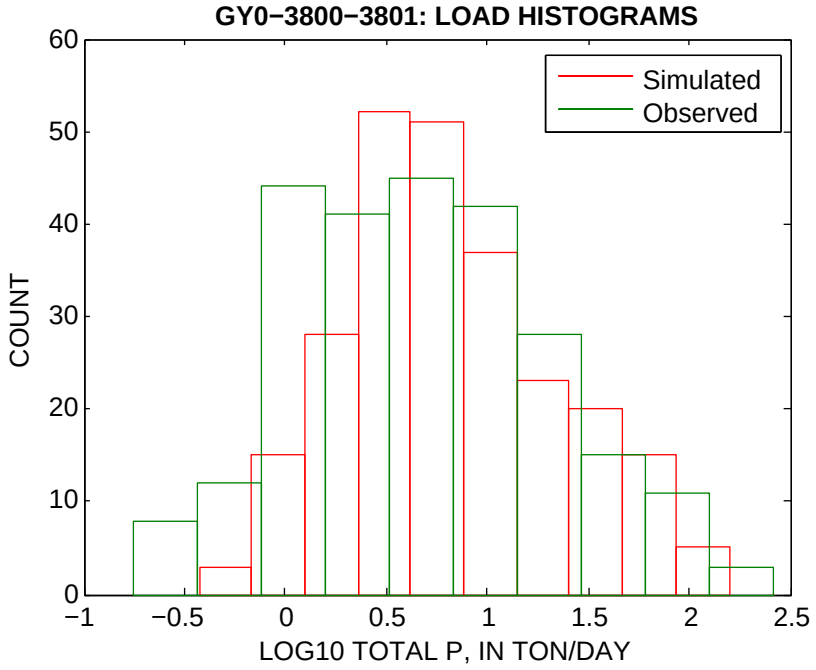


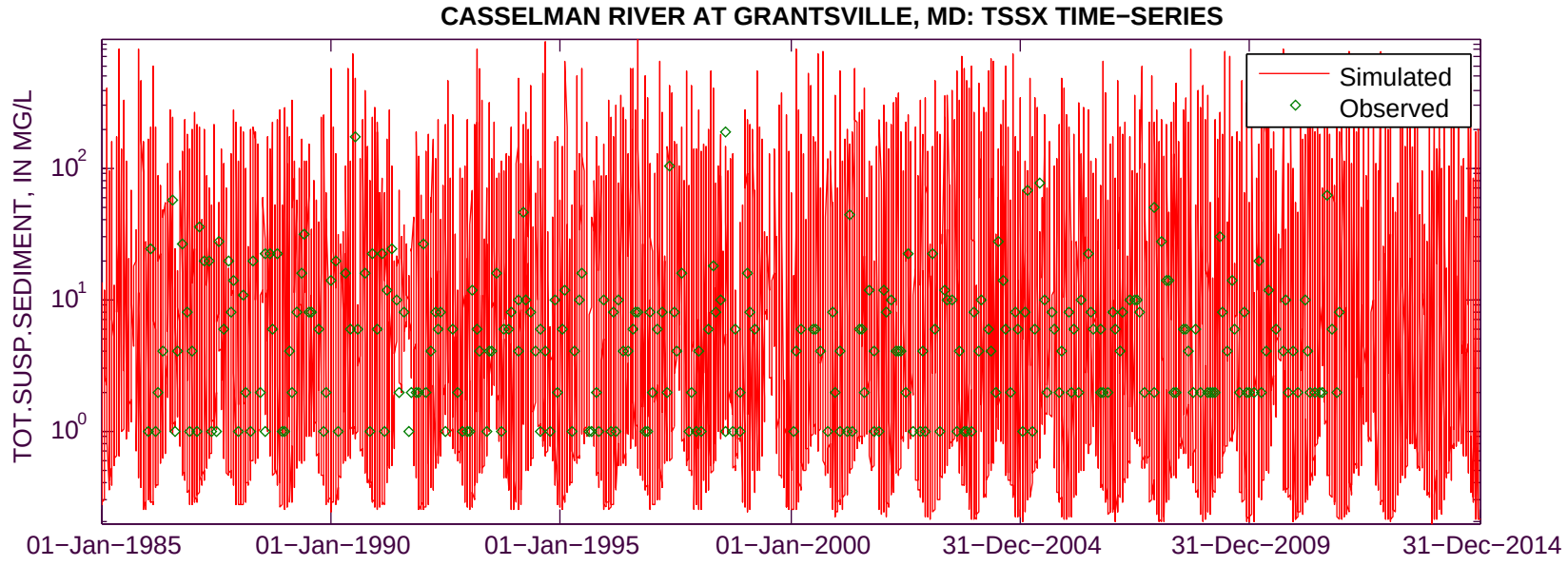
LOAD DATA
LOG10

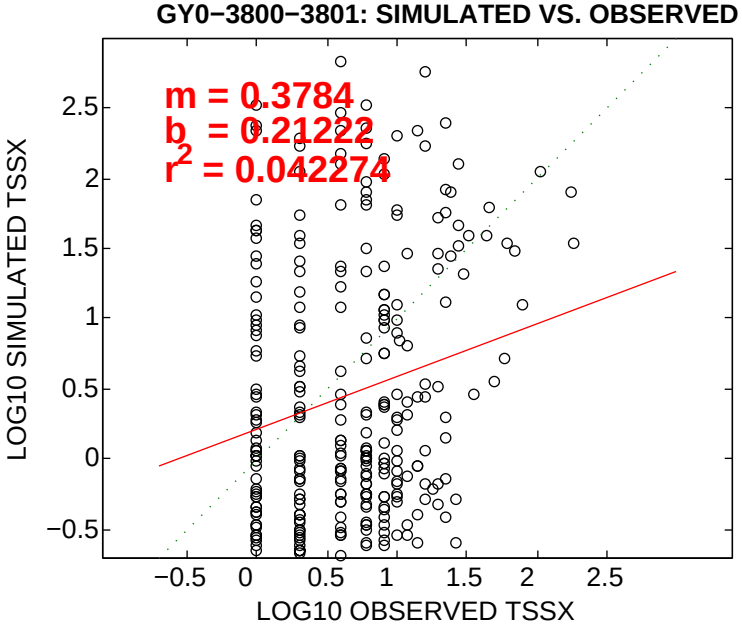


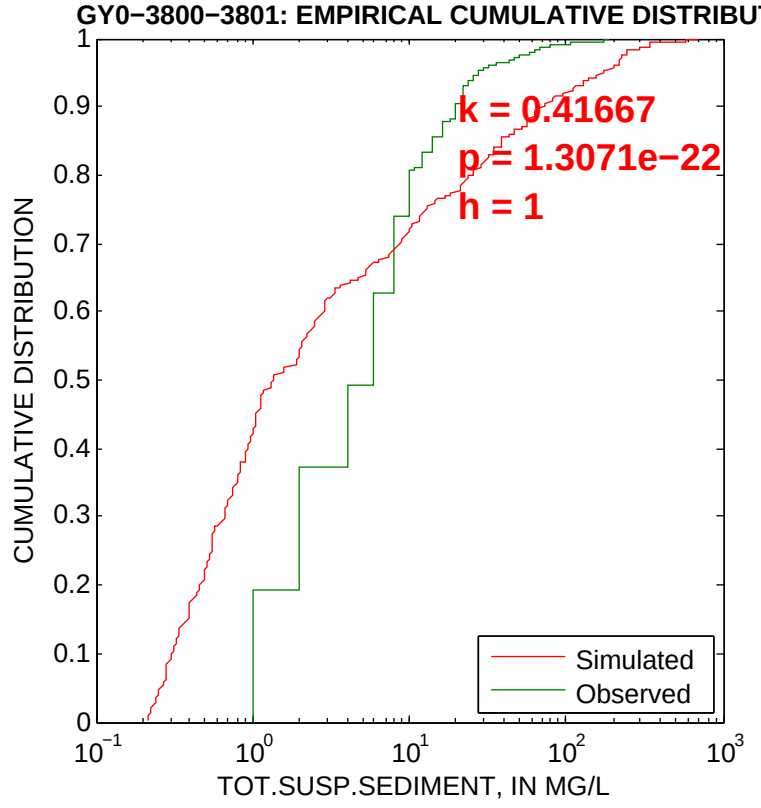












DATA SELECTION

scenario	file
P620171001WQ	TSSX.calib

plot: TSSX - total suspended ...

Dates: 1/1/1985 – 12/31/201

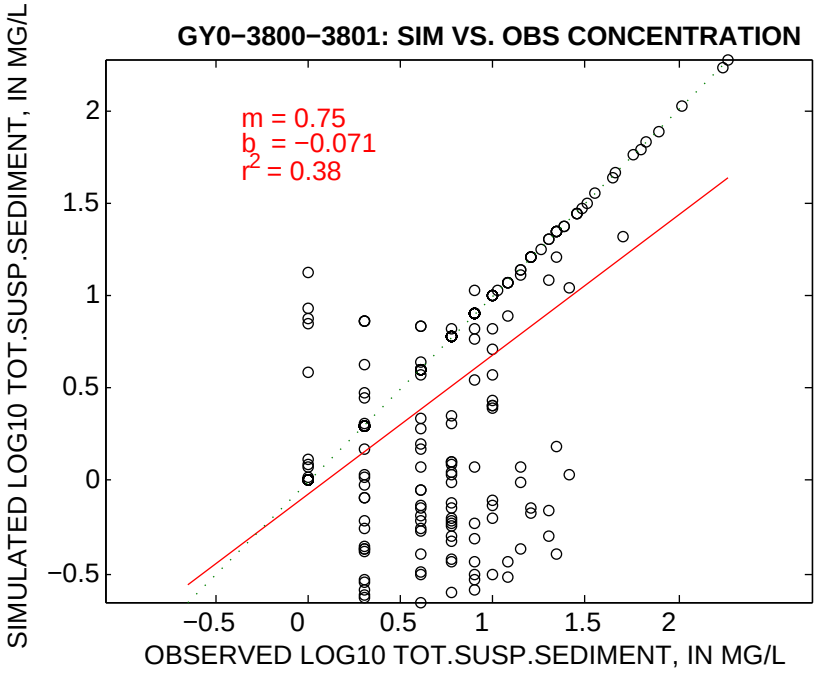
Drive	Directory	Observed
N/A	model	OBS20161101

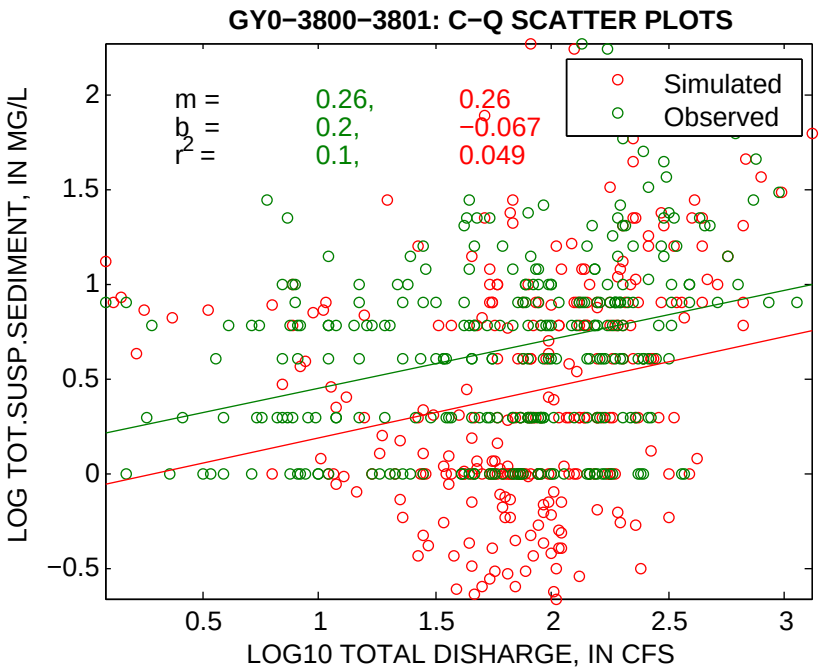
STATISTICS

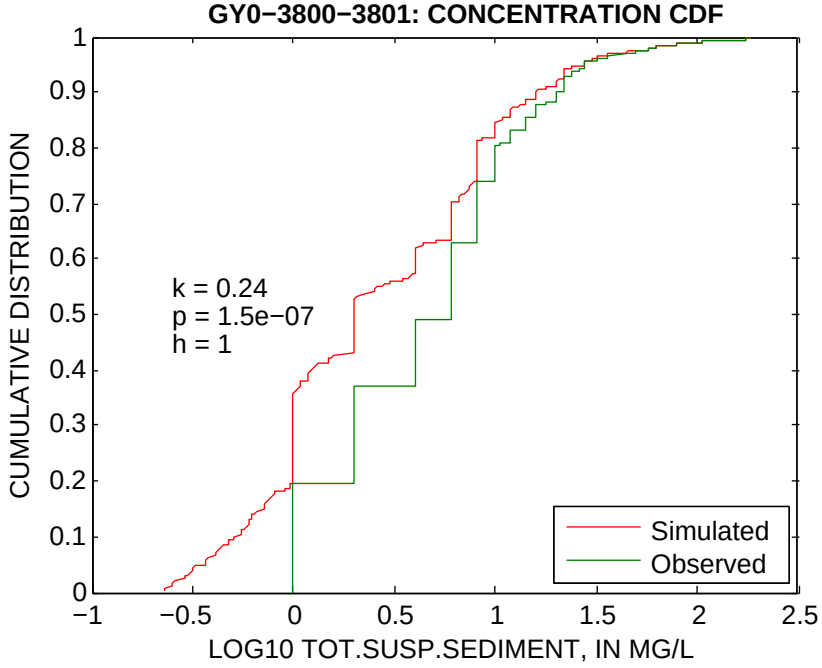
	n	288	288
		observe	simulate
min		1	0.20691
		0	-0.684219
mean		9.49514	27.3086
		0.66543	0.464019
media		6	1.3593
		0.778151	0.133274
max		186	687.08
		2.26951	2.83701
varian		344.428	5610
		0.239404	0.810896
JB		0.001	0.001
		0.024327	0.001
		ra	log
%		187.606	-30.2678
err.va		6079.26	0.909825
rel.std.err		17.6503	3.80038
mod.eff		-16.6503	-2.80038

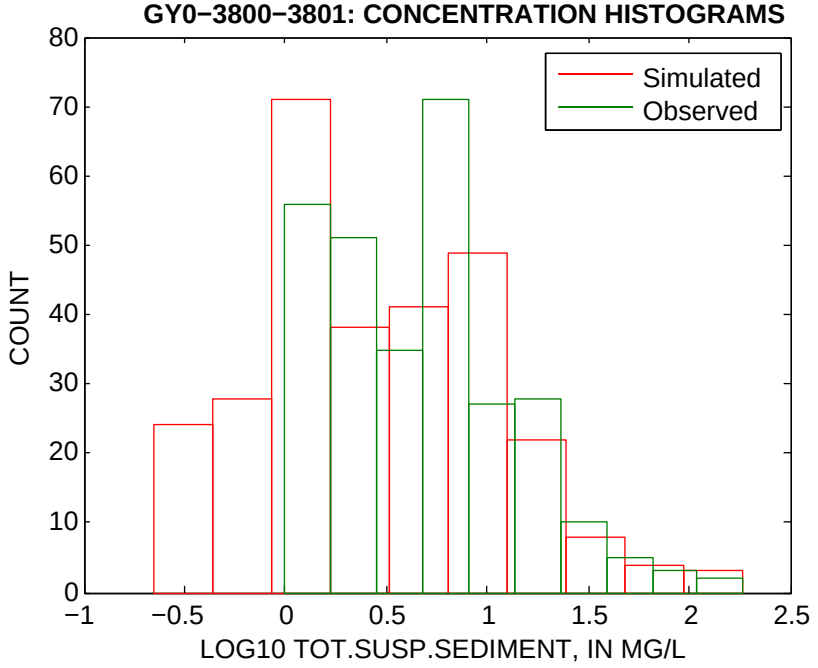
VERSION 2.1

ALL DATA
LOG10

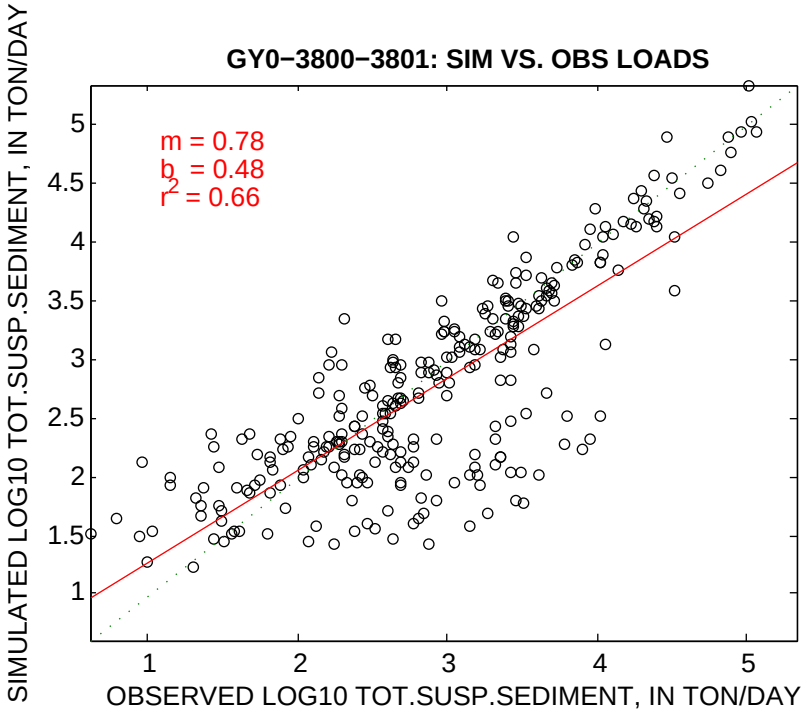


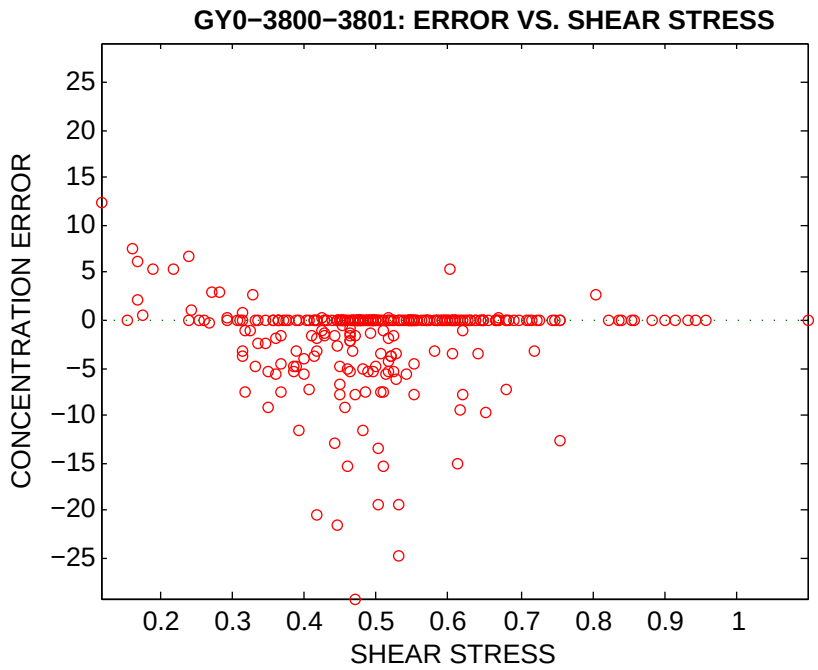


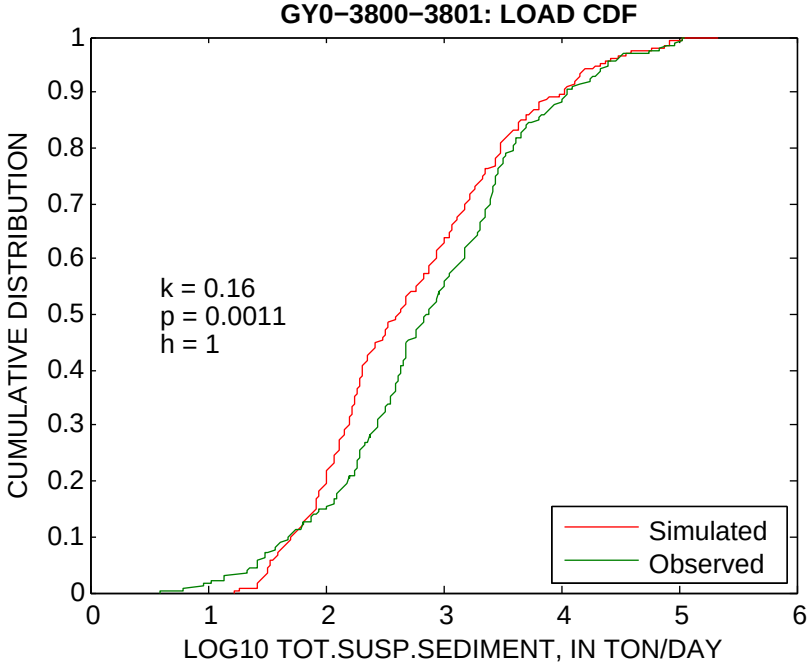


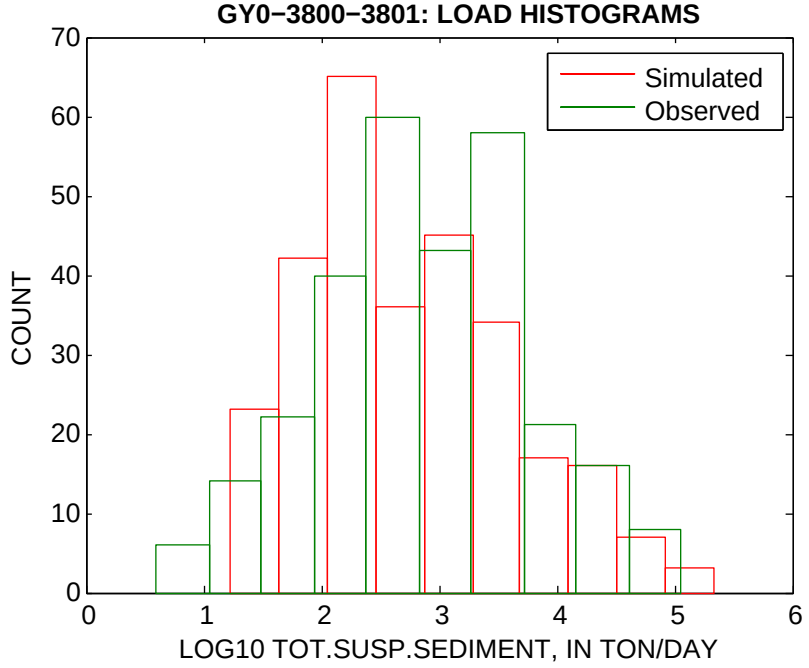


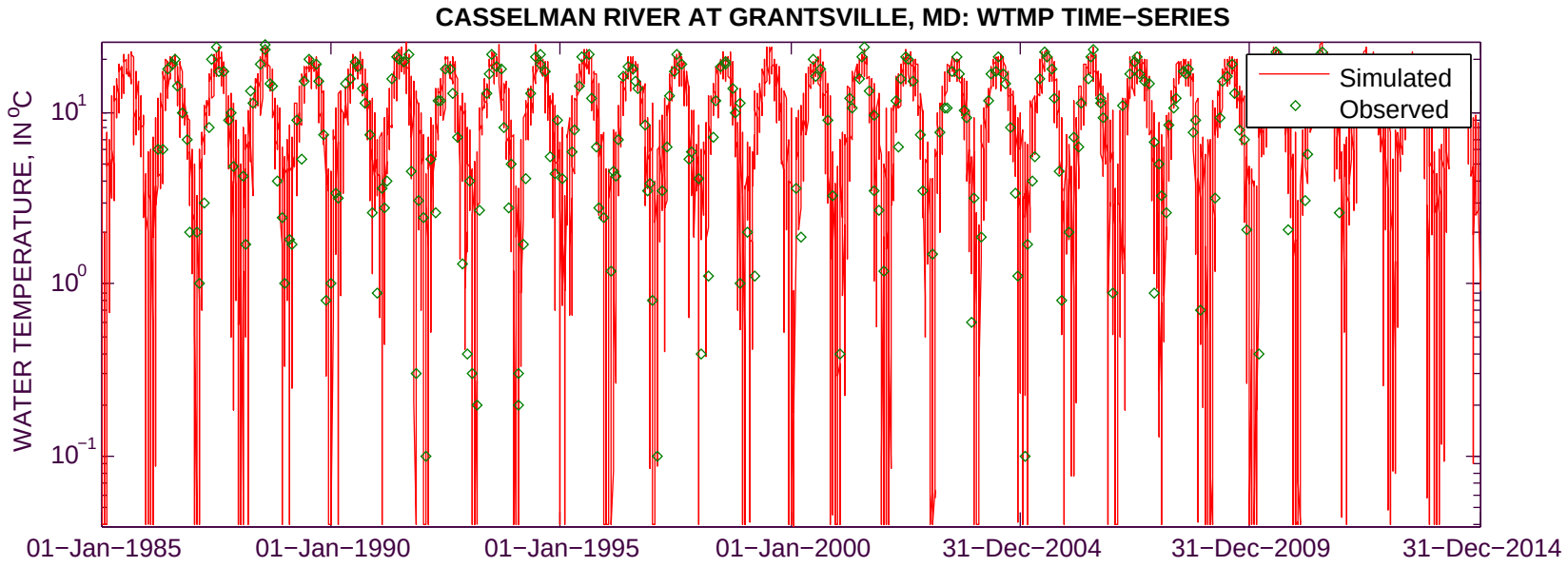
LOAD DATA
LOG10

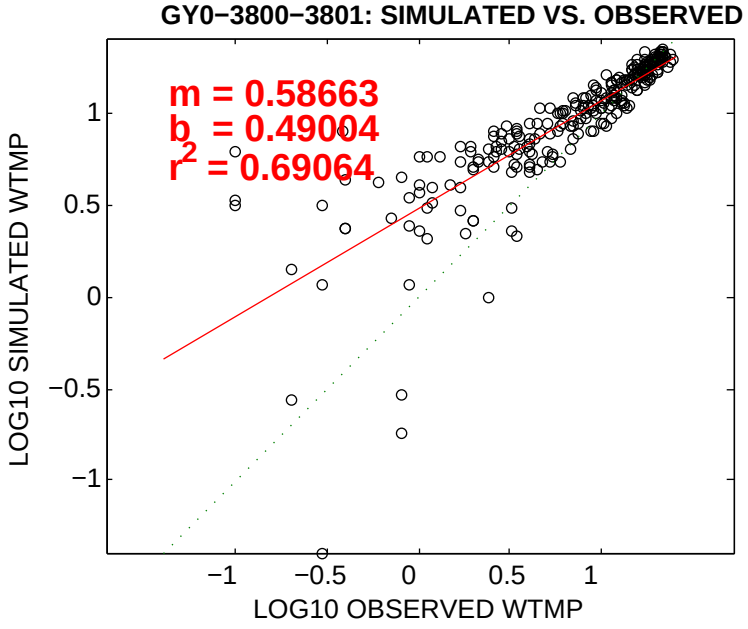


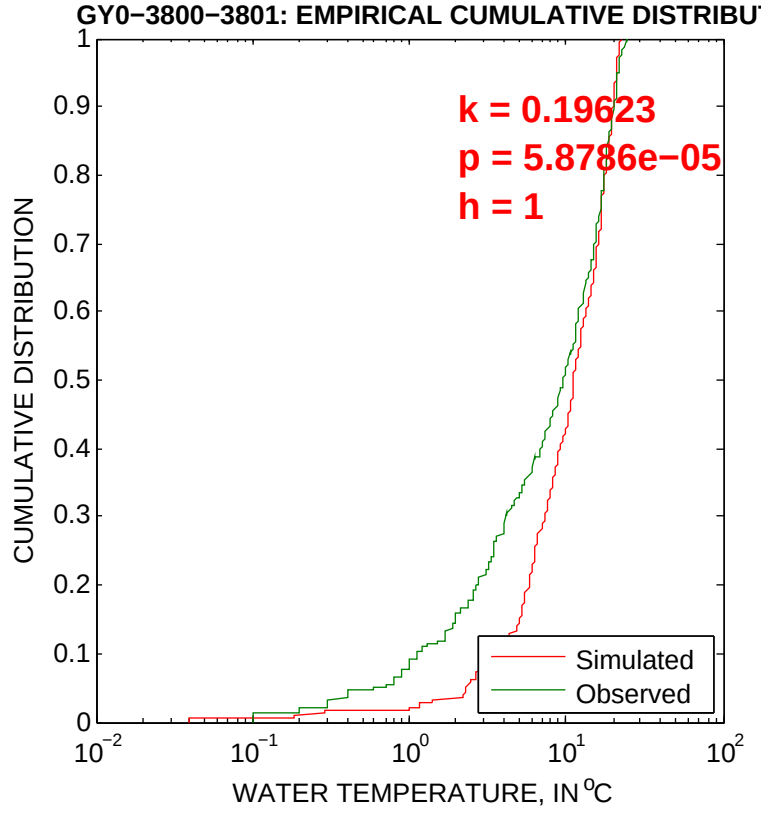












DATA SELECTION

scenario	file
P620171001WQ	WTMP.calib

plot: WTMP - water tempera...

Dates: 1/1/1985 – 12/31/201

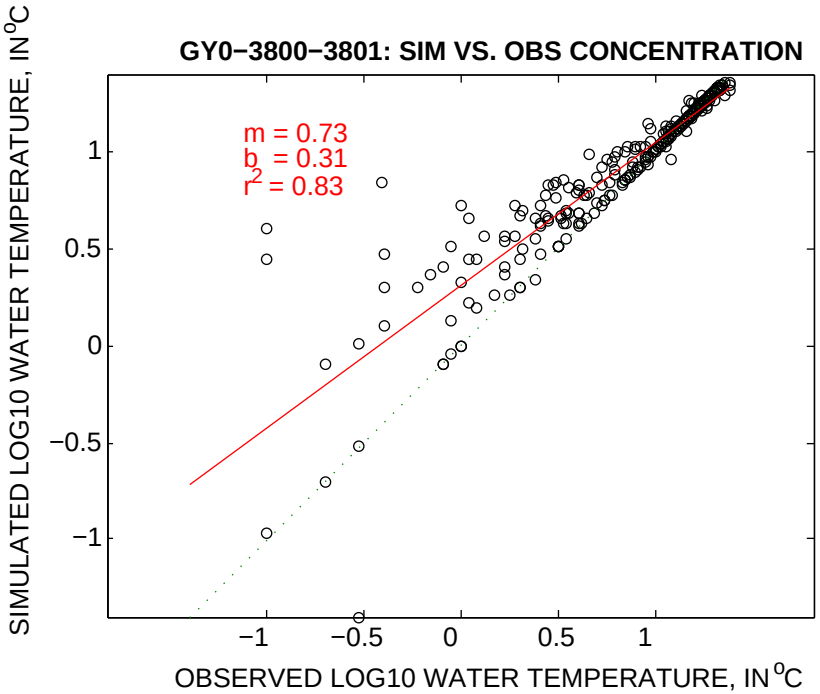
Drive	Directory	Observed
N/A	model	OBS20161101

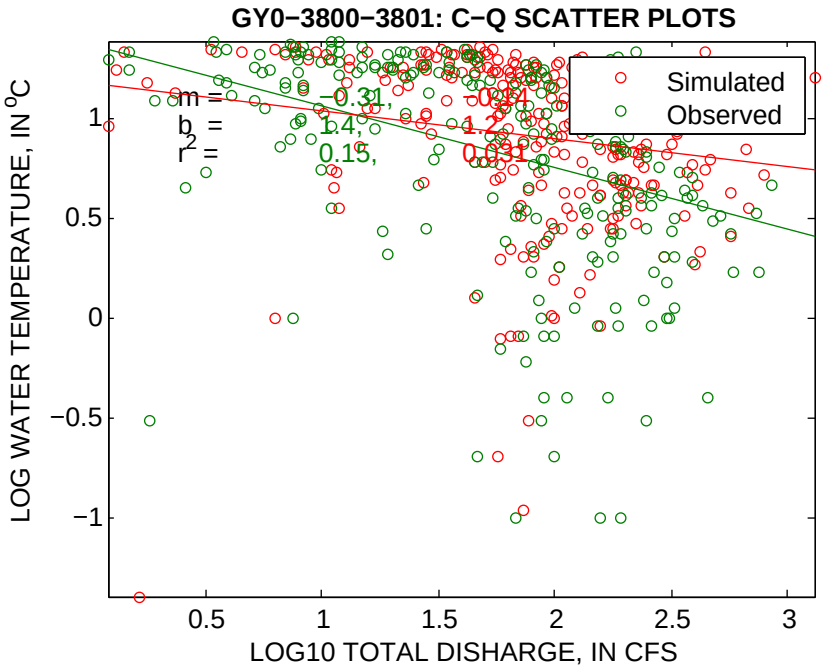
STATISTICS

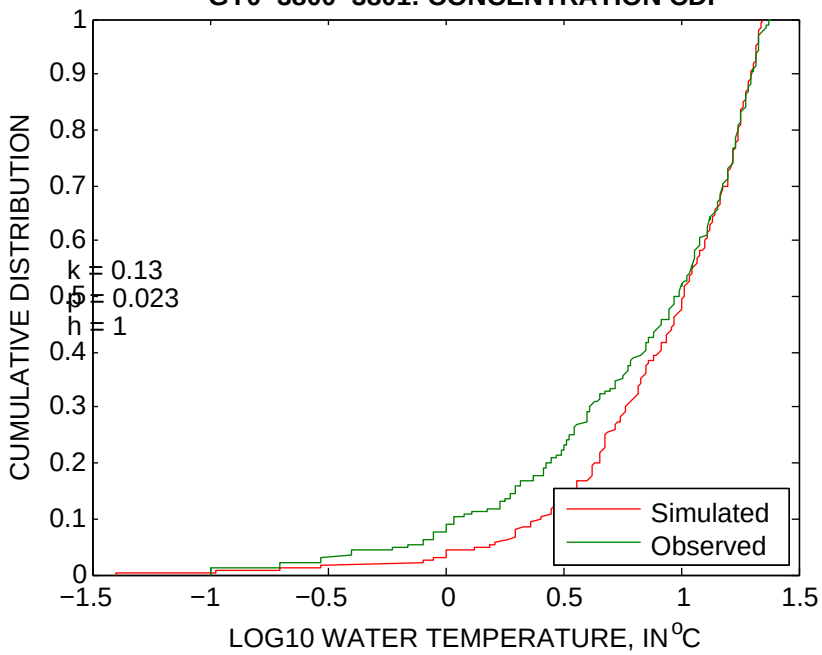
	n	observe	simulate
		265	265
min		0.1	0.040081
		-1	-1.39706
mean		10.1799	11.5938
		0.817546	0.969634
media		9.5	11.145
		0.977724	1.04708
max		24.3	22.863
		1.38561	1.35913
varian		49.8947	36.0643
		0.258625	0.128868
JB		0.002101	0.004992
		0.001	0.001
		ra	log
%		13.8892	18.6029
err.va		7.06304	0.107277
rel.std.err		0.141559	0.414799
mod.eff		0.858441	0.585201

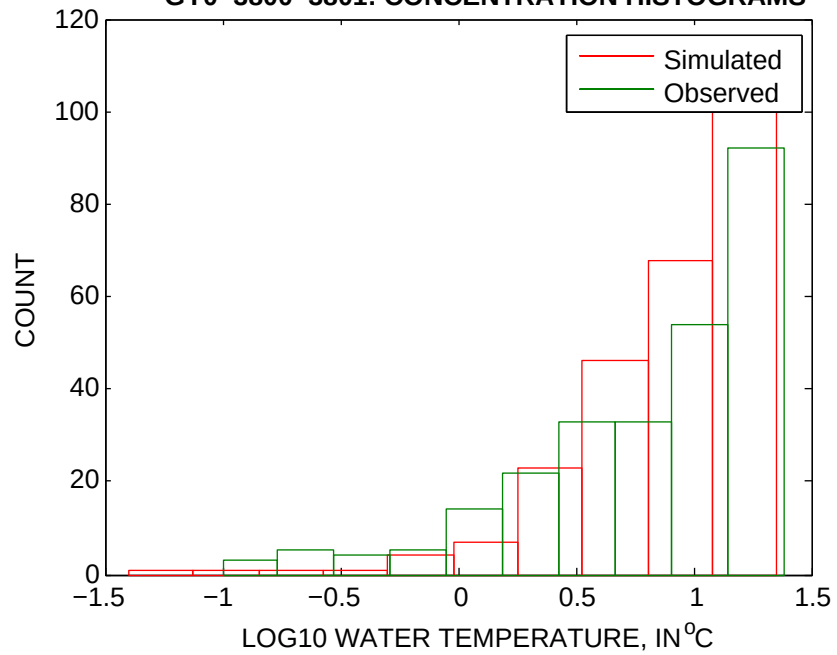
VERSION 2.1

ALL DATA
LOG10

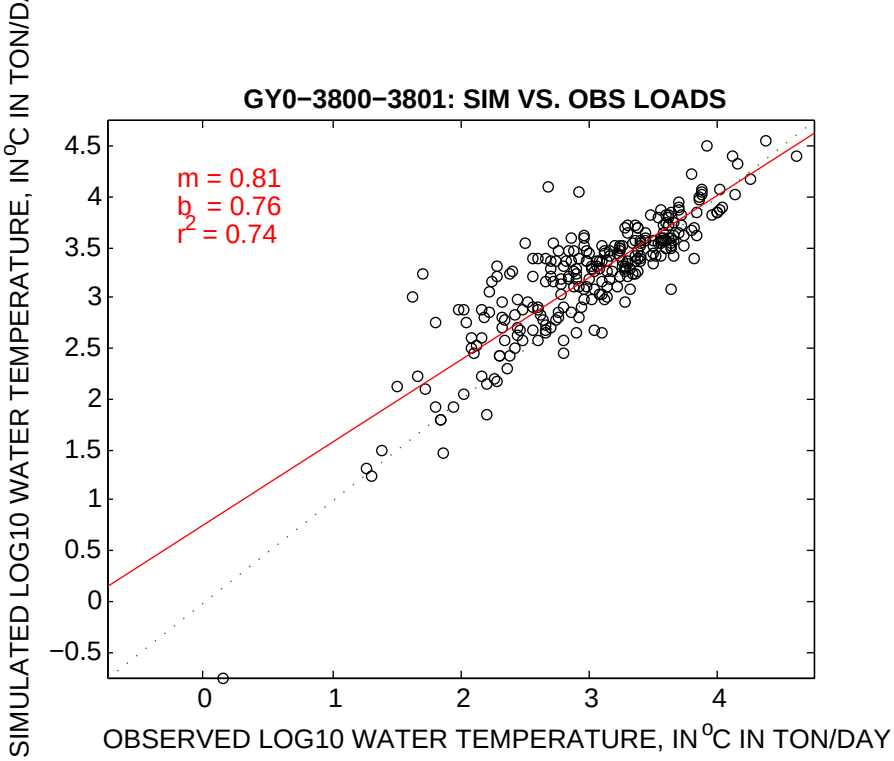


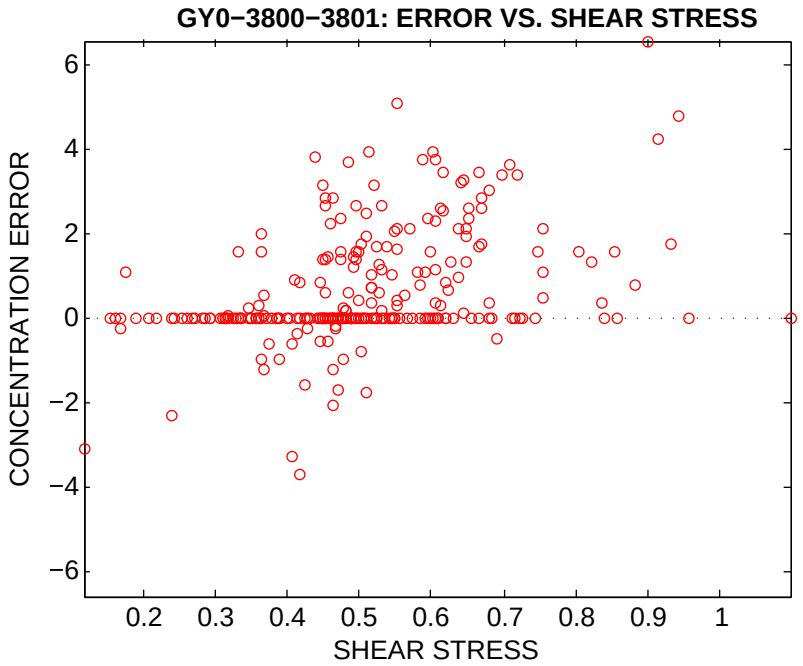


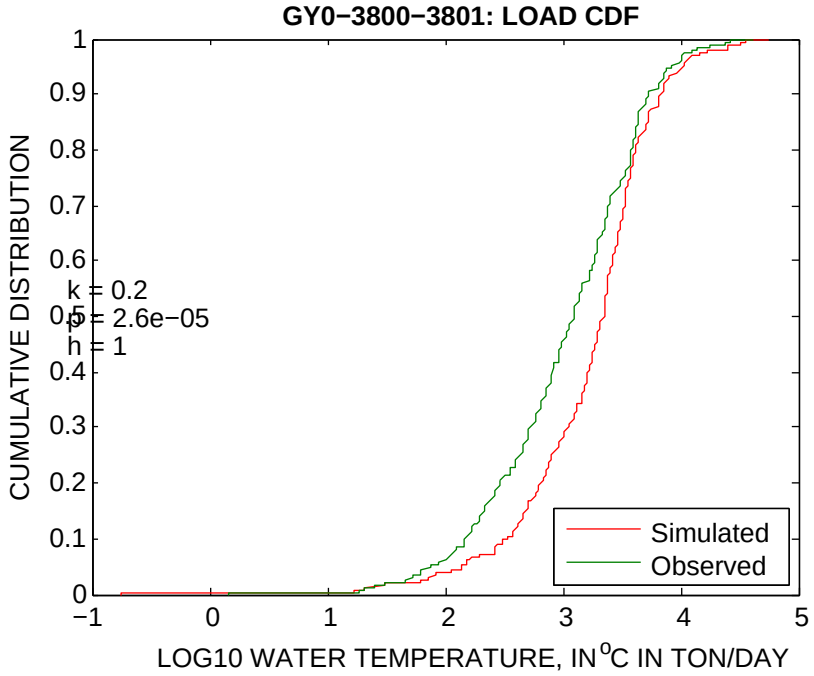


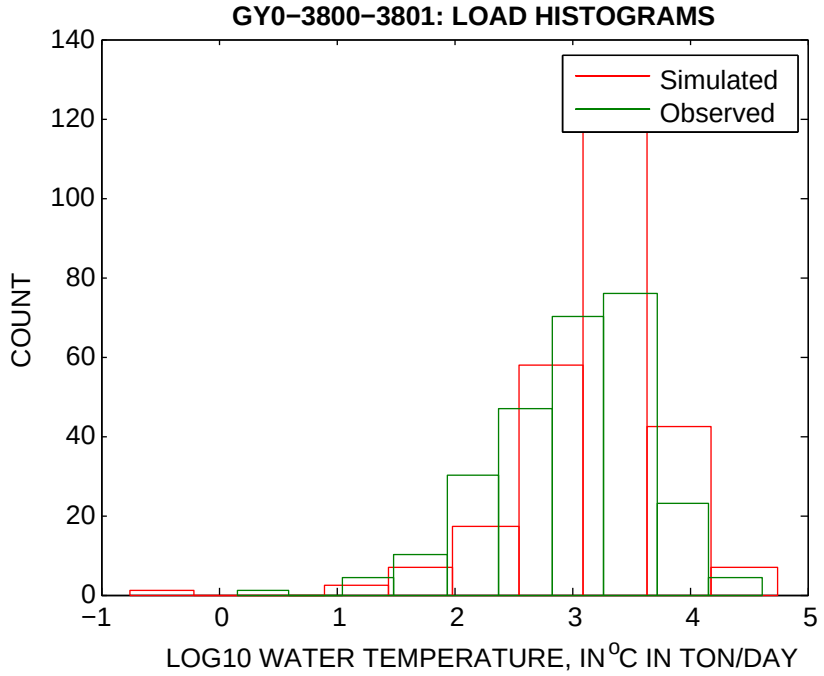


LOAD DATA
LOG10

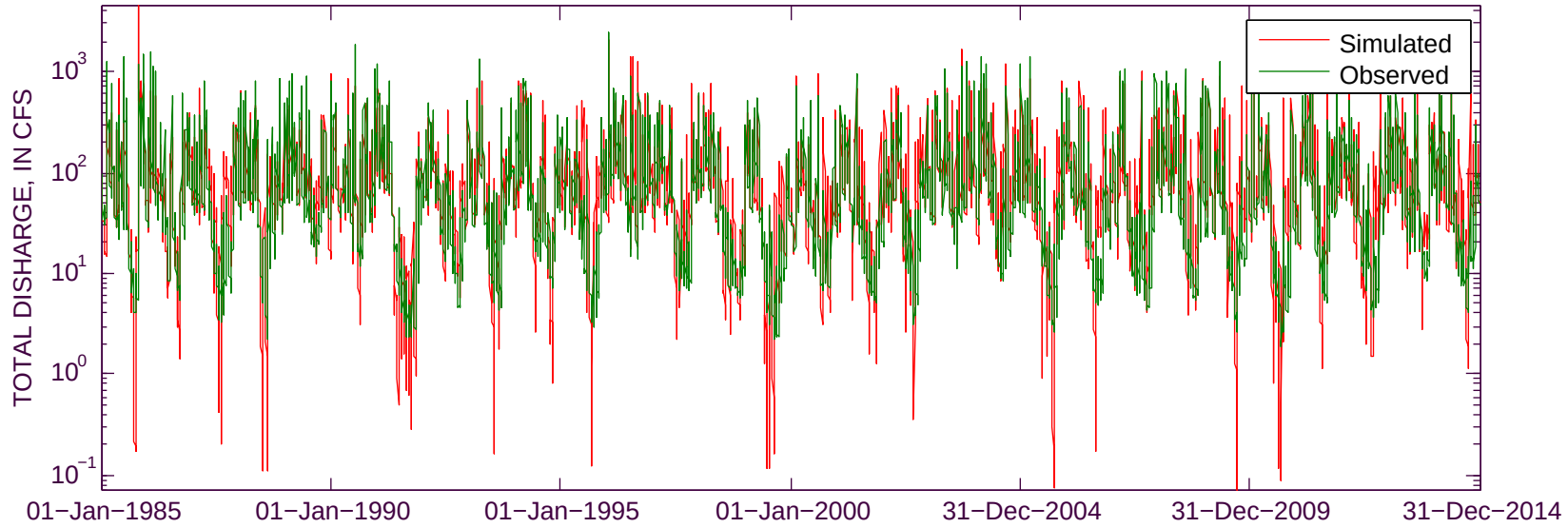




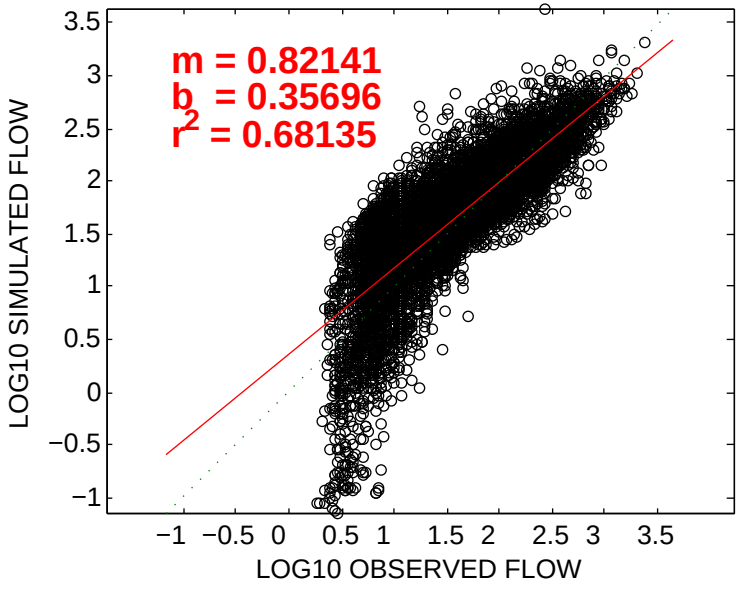




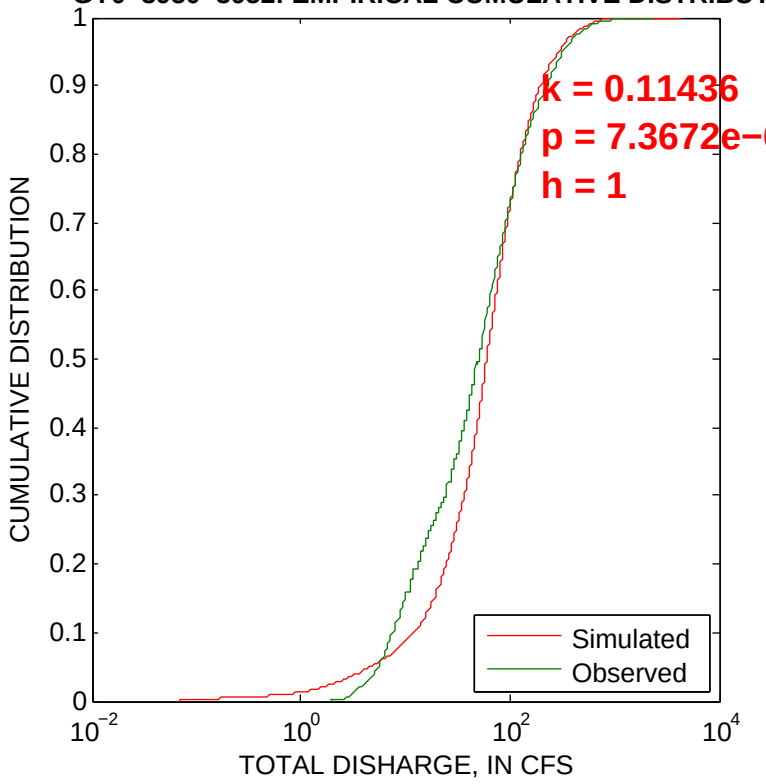
BEAR CREEK AT FRIENDSVILLE, MD: FLOW TIME-SERIES



GY0-3950-3952: SIMULATED VS. OBSERVED



GY0-3950-3952: EMPIRICAL CUMULATIVE DISTRIBUTION



DATA SELECTION

scenario: P620171001WQ | file: FLOW.calib

plot: FLOW - total discharge

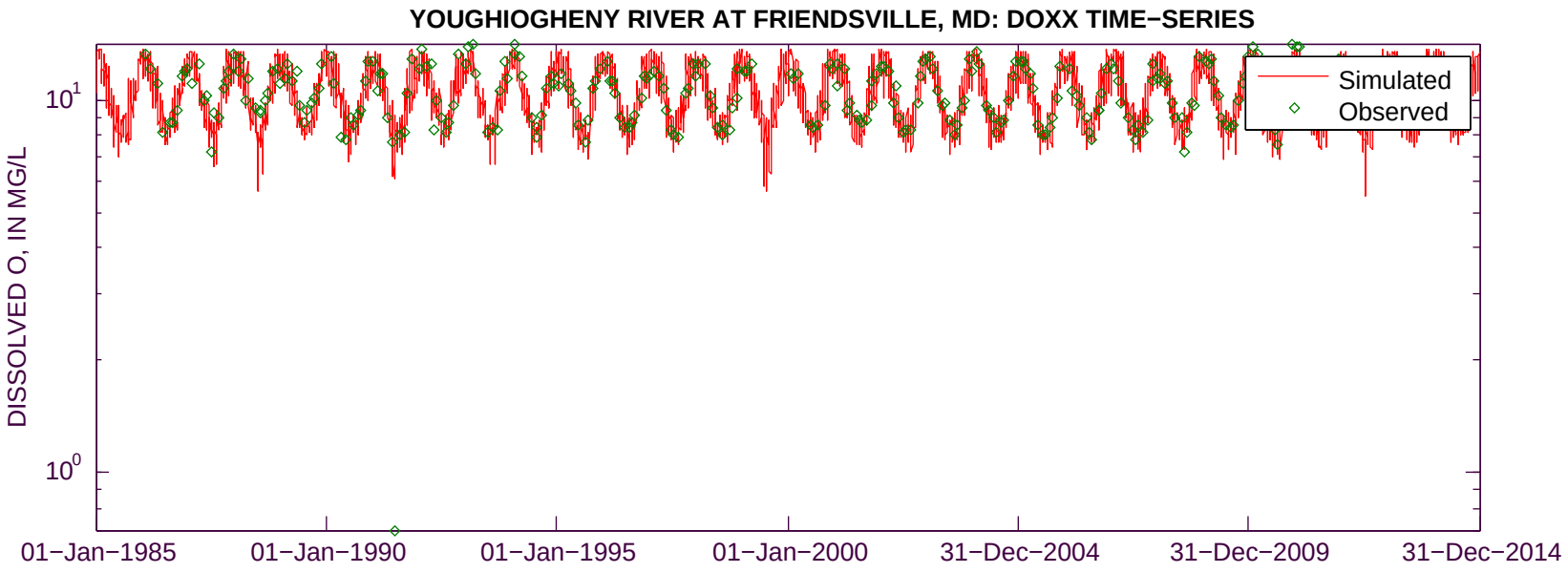
Dates: 1/1/1985 – 12/31/201

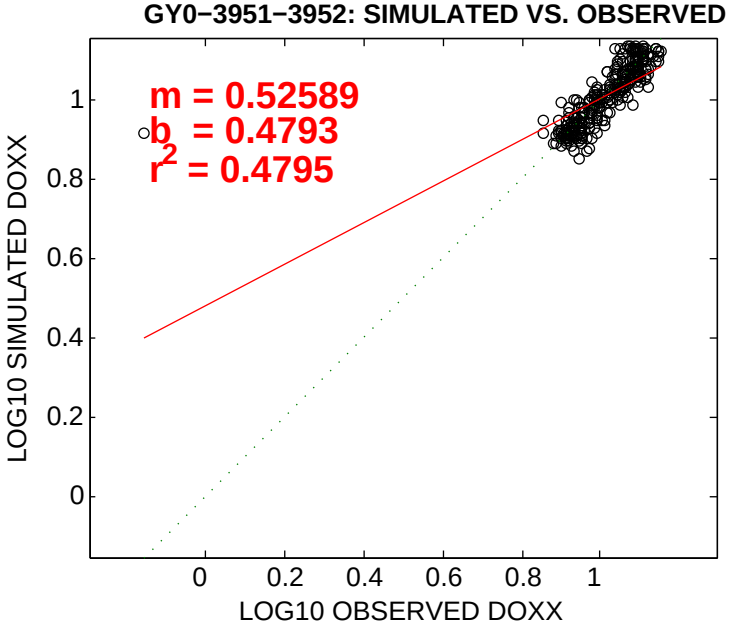
Drive: N/A | Directory: model | Observed: OBS20161101

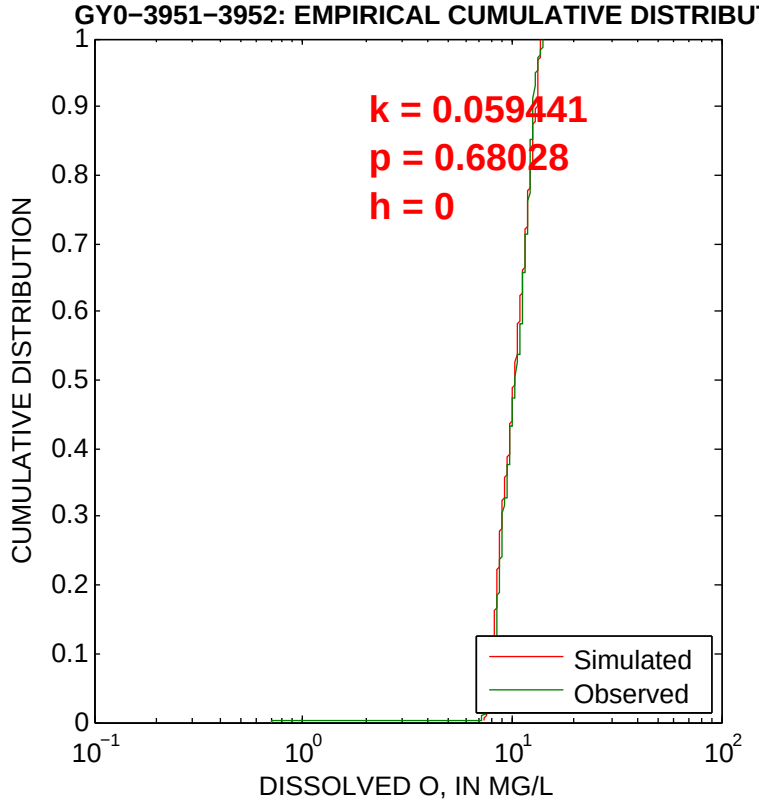
STATISTICS

		observe	simulate
n		10957	10957
min		1.9	0.068874
		0.278754	-1.16194
mean		92.951	93.0876
		1.65413	1.71568
media		50	60.187
		1.69897	1.7795
max		2400	4380
		3.38021	3.64147
varian		18704.9	14926.6
		0.297366	0.294474
JB		0.001	0.001
		0.001	0.001
		ra	log
%		0.146908	3.72155
err.va		8519.61	0.107108
rel.std.err		0.455474	0.360188
mod.eff		0.544526	0.639812

VERSION 2.1







DATA SELECTION

scenario	file
P620171001WQ	DOXX.calib

plot: DOXX - dissolved oxygen

Dates: 1/1/1985 – 12/31/201

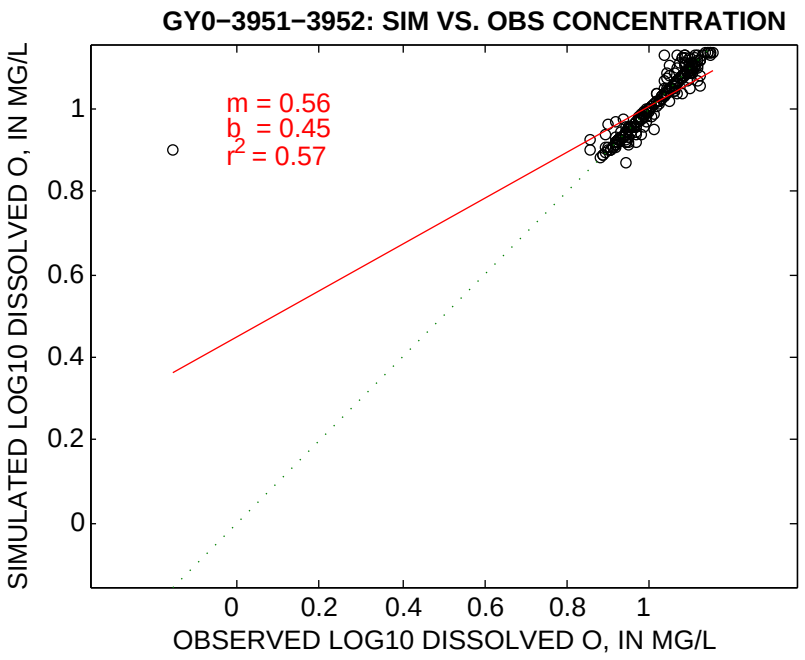
Drive	Directory	Observed
N/A	model	OBS20161101

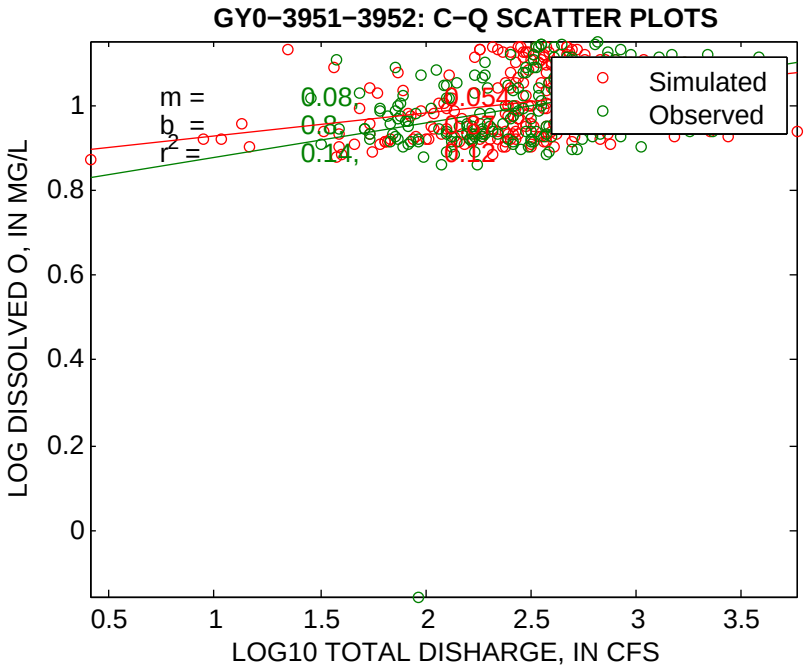
STATISTICS

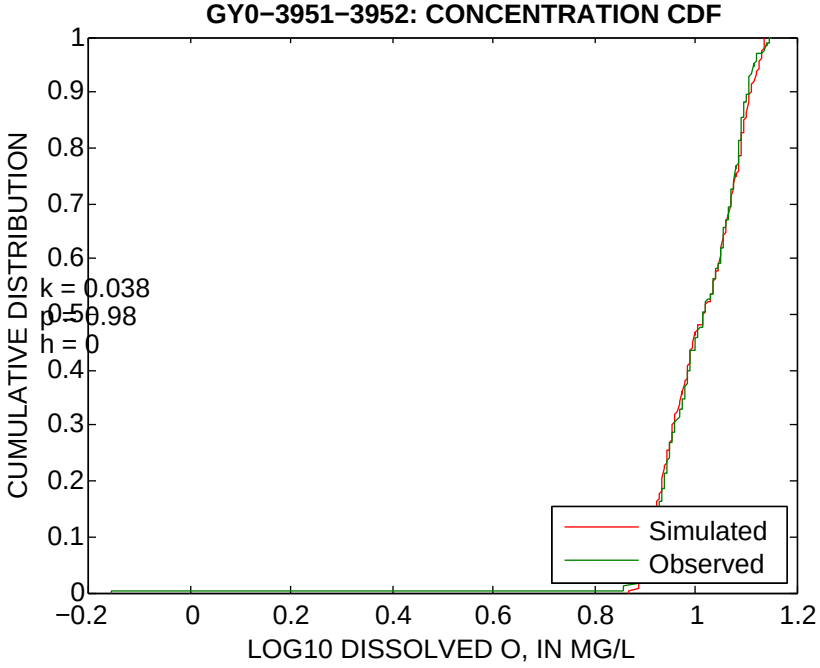
	n	286	286
		observe	simulate
min		0.7	7.1205
		-0.154902	0.85251
mean		10.4481	10.4051
		1.01052	1.01072
media		10.4	10.234
		1.01703	1.01005
max		14.2	13.66
		1.15229	1.13545
varian		3.25786	3.24618
		0.00990334	0.00571187
JB		0.001	0.002596
		0.001	0.002868
		ra	log
%		-0.411595	0.0201484
err.va		0.878812	0.00519913
rel.std.err		0.269752	0.524988
mod.eff		0.730248	0.475012

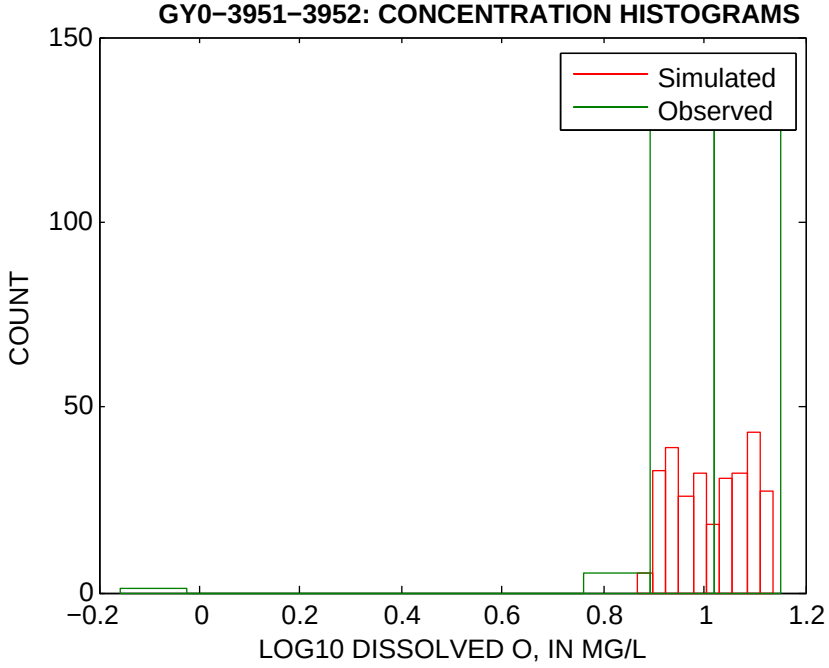
VERSION

ALL DATA
LOG10

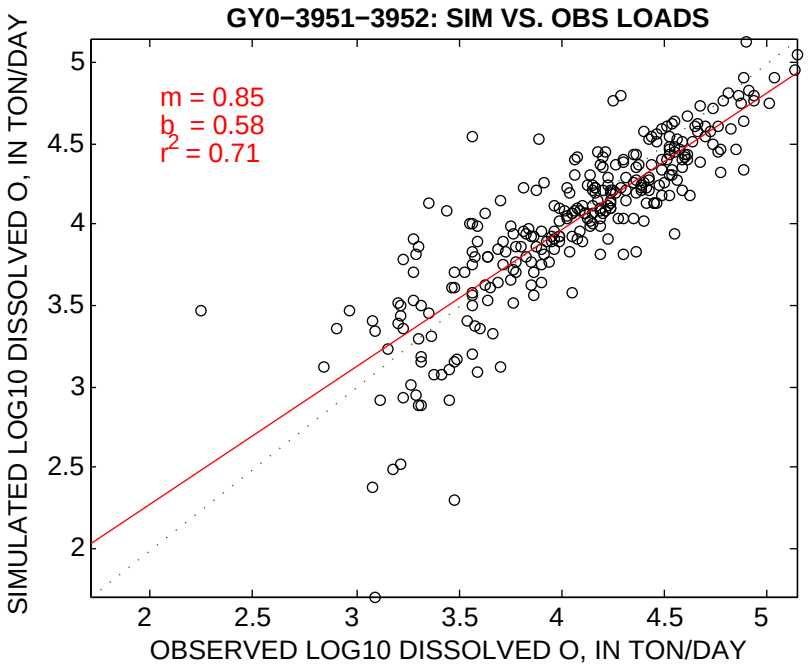


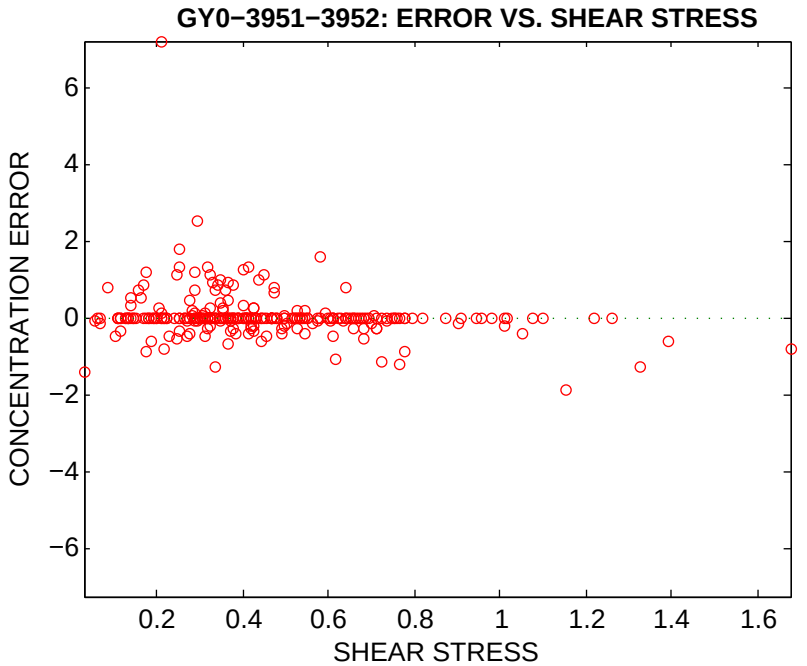


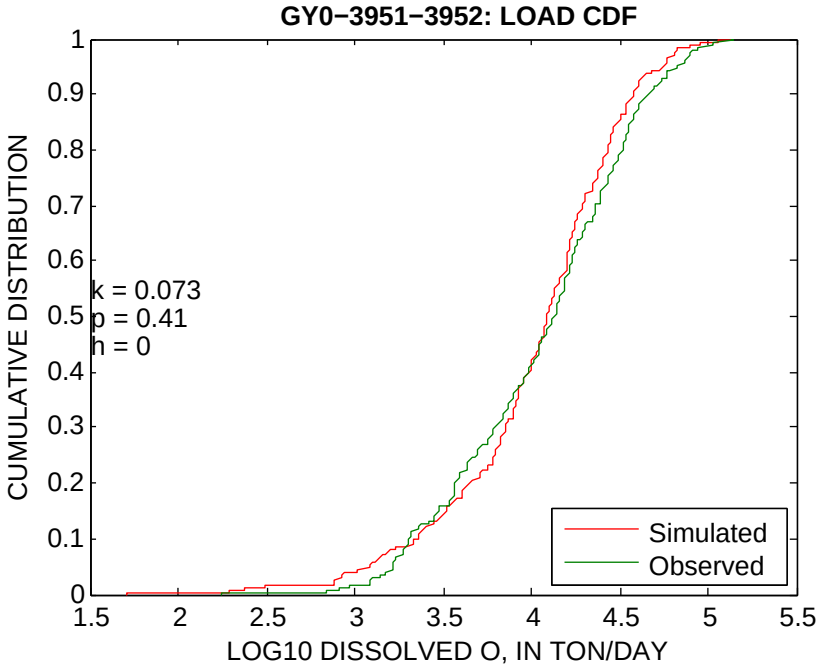


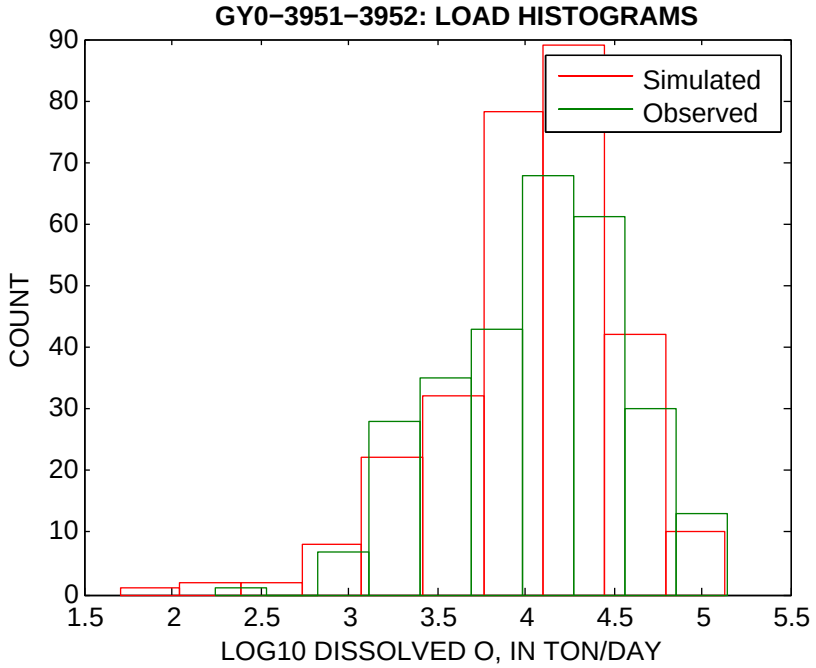


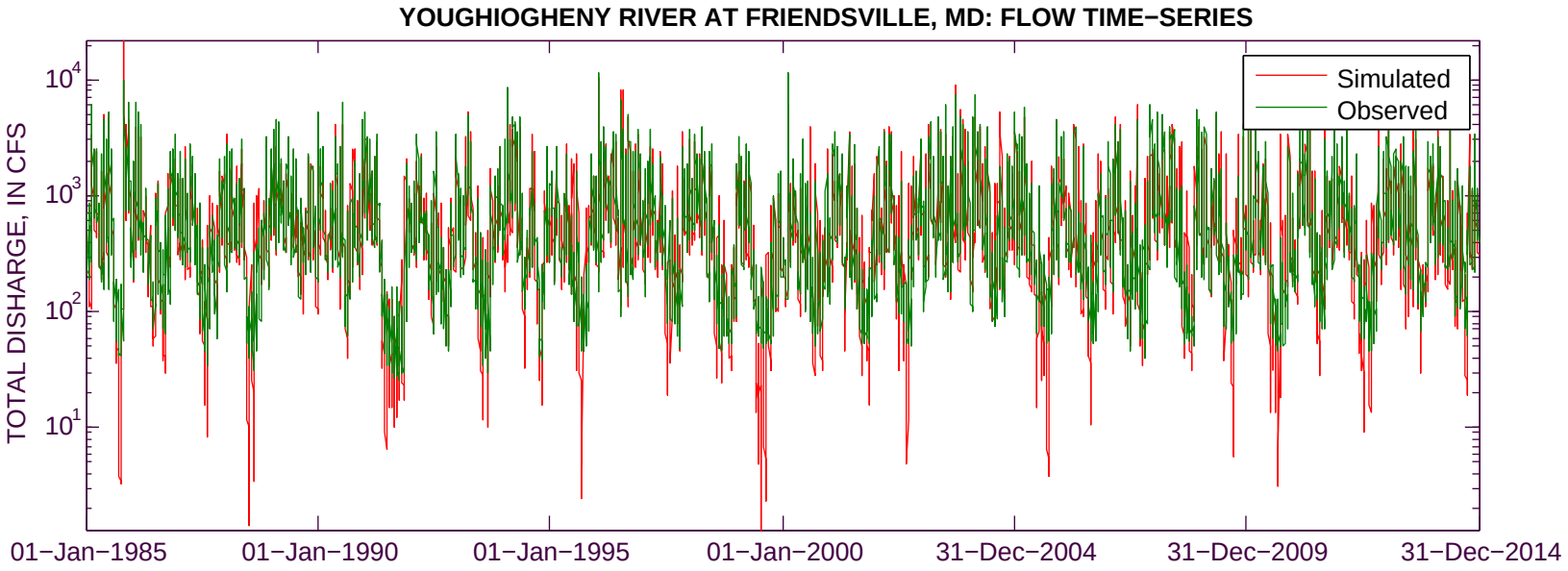
LOAD DATA
LOG10

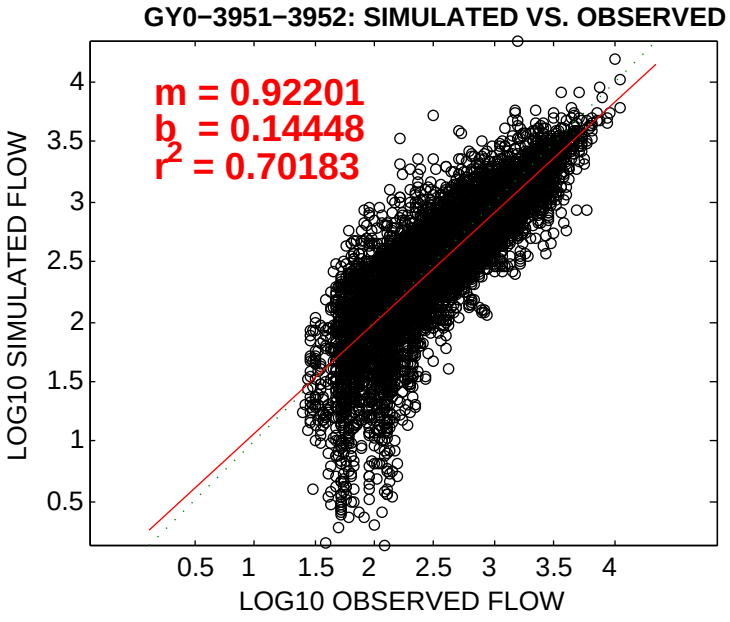


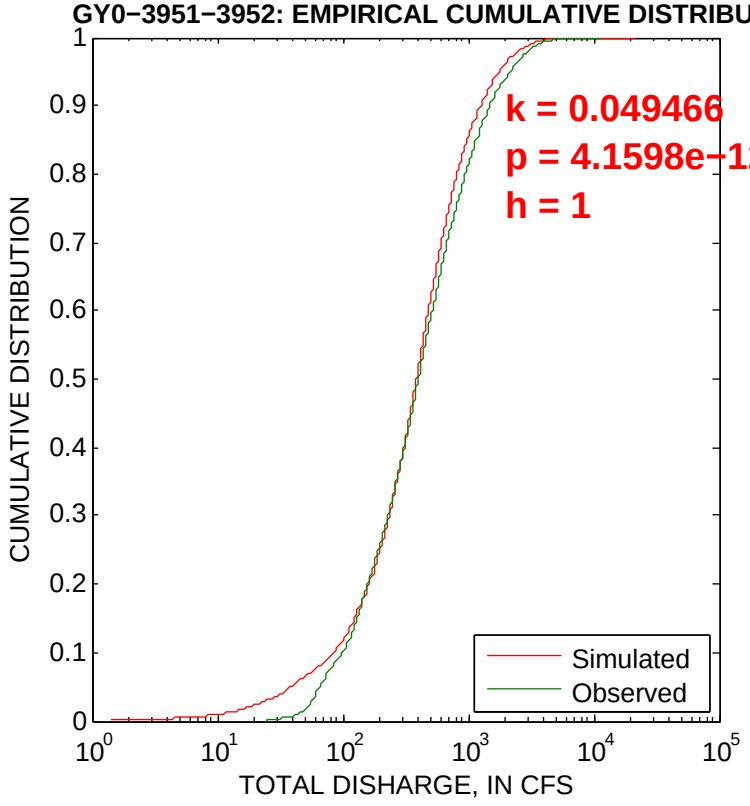












DATA SELECTION

scenario	file
P620171001WQ	FLOW.calib

plot: FLOW - total discharge

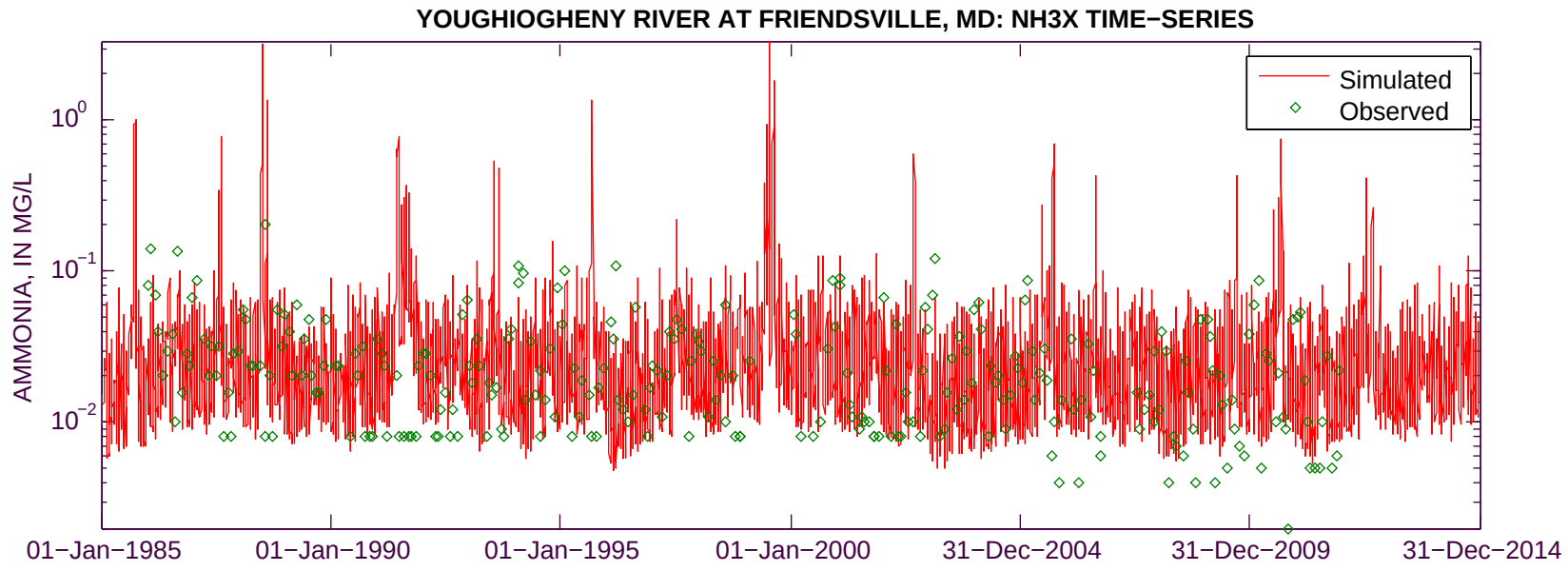
Dates: 1/1/1985 – 12/31/201

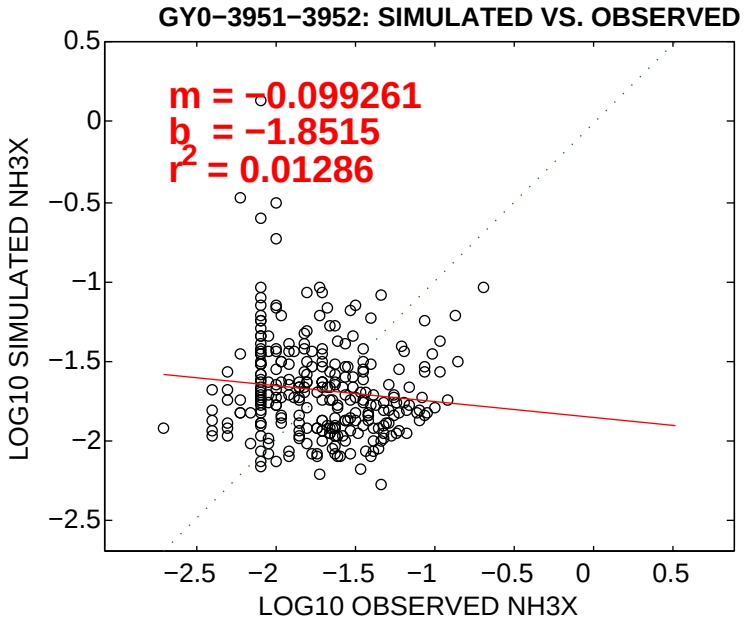
Drive	Directory	Observed
N/A	model	OBS20161101

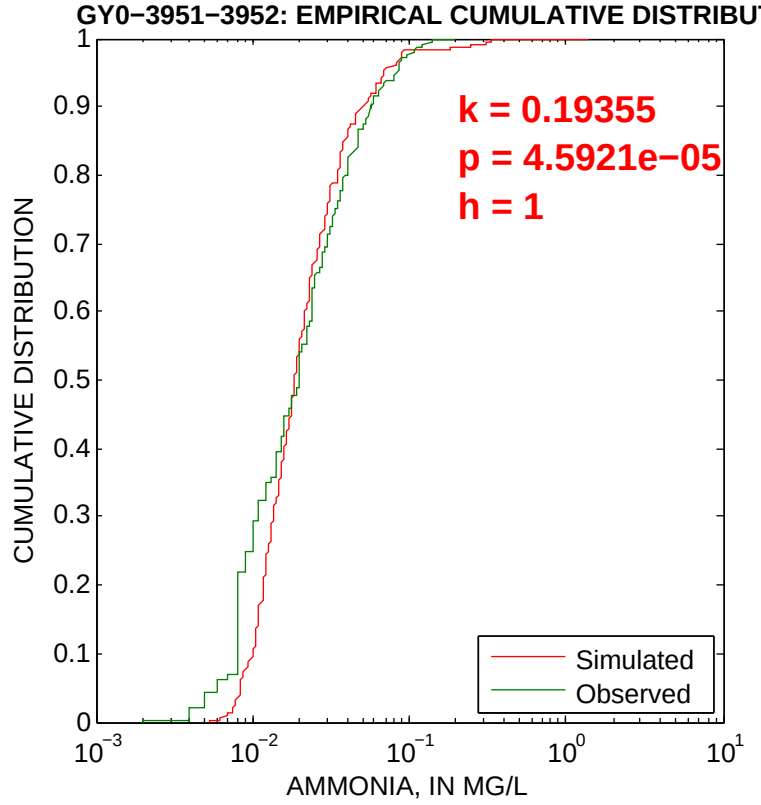
STATISTICS

	n	observe	simulate
		10957	10957
min		25	1.3378
		1.39794	0.126391
mean		659.171	581.039
		2.59743	2.53932
media		403	388.26
		2.60531	2.58912
max		11200	22055
		4.04922	4.34351
varian		617365	483249
		0.199014	0.241055
JB		0.001	0.001
		0.001	0.001
		ra	log
%		-11.8529	-2.23698
err.va		228730	0.0764617
rel.std.err		0.370494	0.384202
mod.eff		0.629506	0.615798

VERSION 2.1







DATA SELECTION

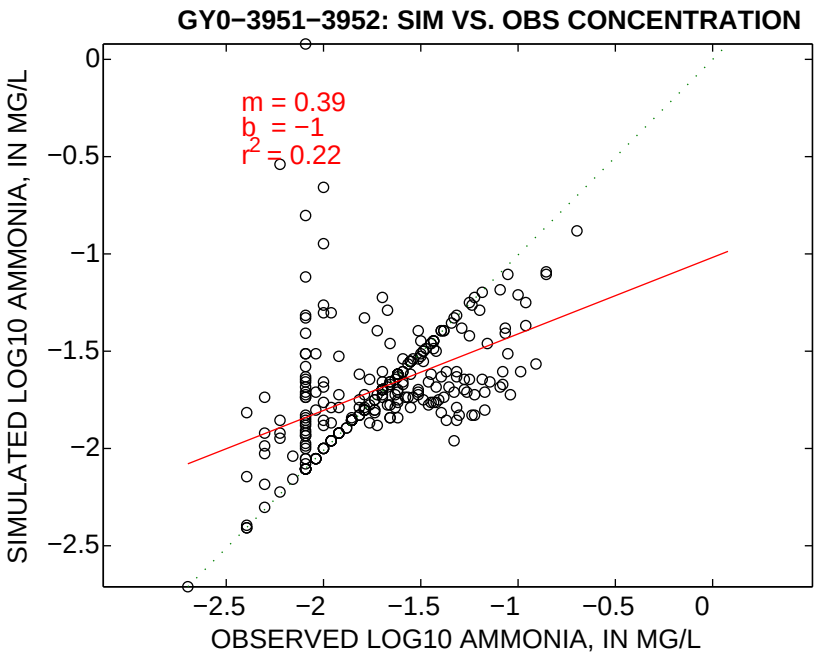
scenario: P620171001WQ
file: NH3X.calib
plot: NH3X - ammonia
Dates: 1/1/1985 – 12/31/201
Drive: N/A
Directory: model
Observed: OBS20161101

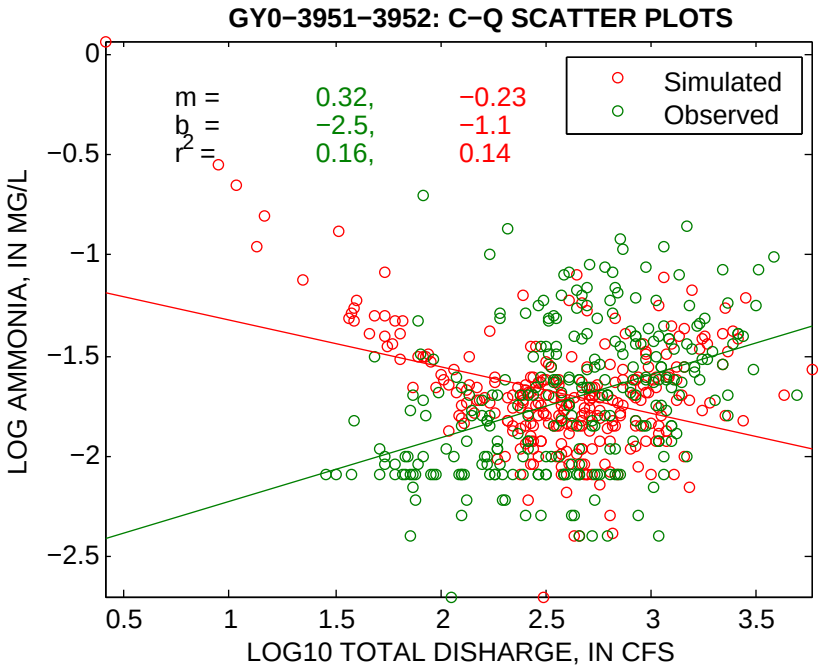
STATISTICS

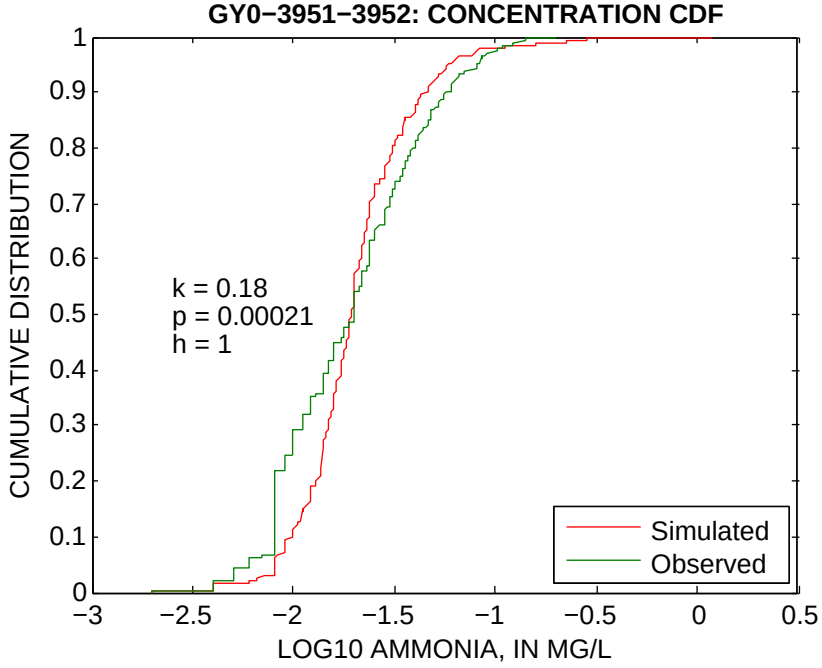
	n	observe	simulate
		279	279
min		0.002	0.0053689
		-2.69897	-2.27011
mean		0.0270789	0.0323456
		-1.7159	-1.68113
media		0.02	0.018349
		-1.69897	-1.73639
max		0.2	1.3751
		-0.69897	0.138334
varian		0.00067339	0.00770521
		0.125175	0.0959014
JB		0.001	0.001
		0.075360	0.001
		ra	log
%		19.4498	-2.0259
err.va		0.00866557	0.247139
rel.std.err		12.8685	1.97435
mod.eff		-11.8685	-0.974349

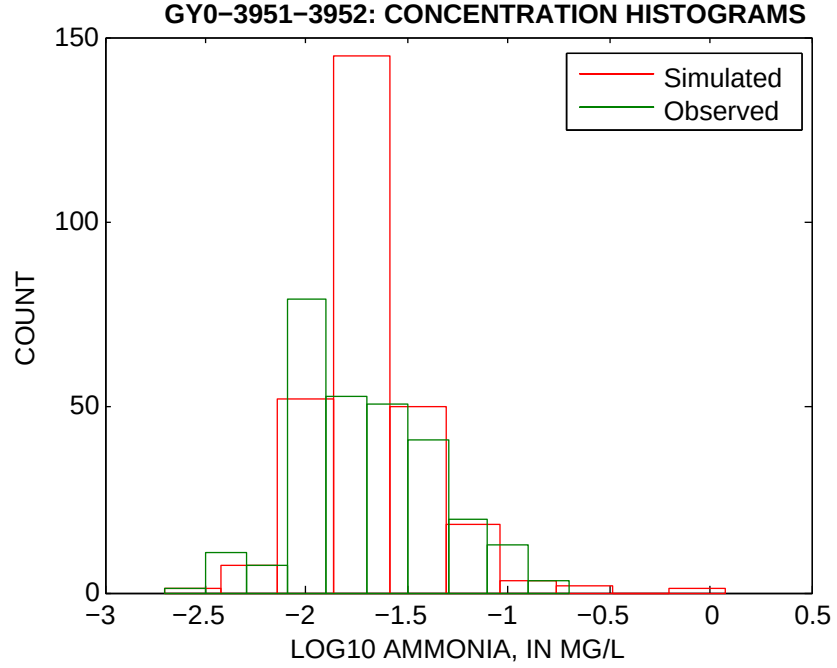
VERSION 2.1

ALL DATA
LOG10

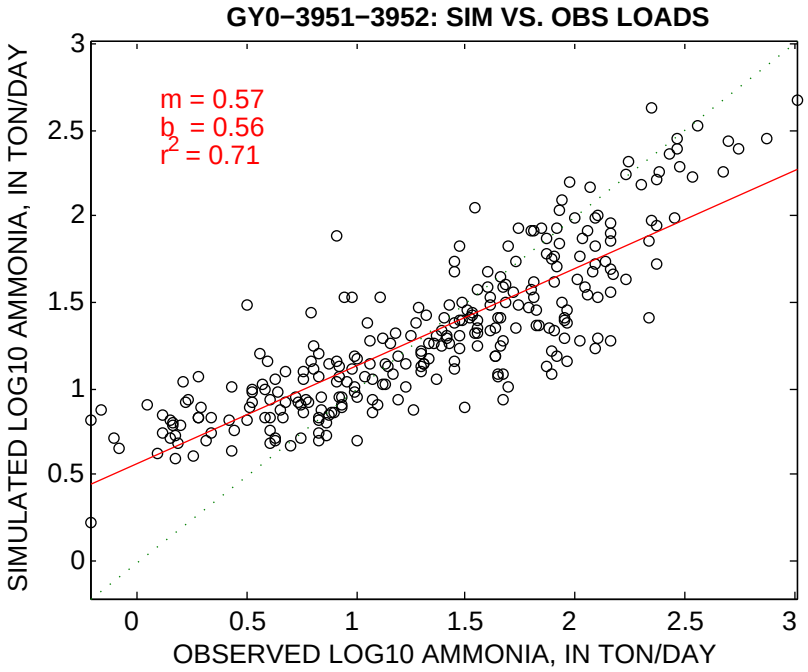


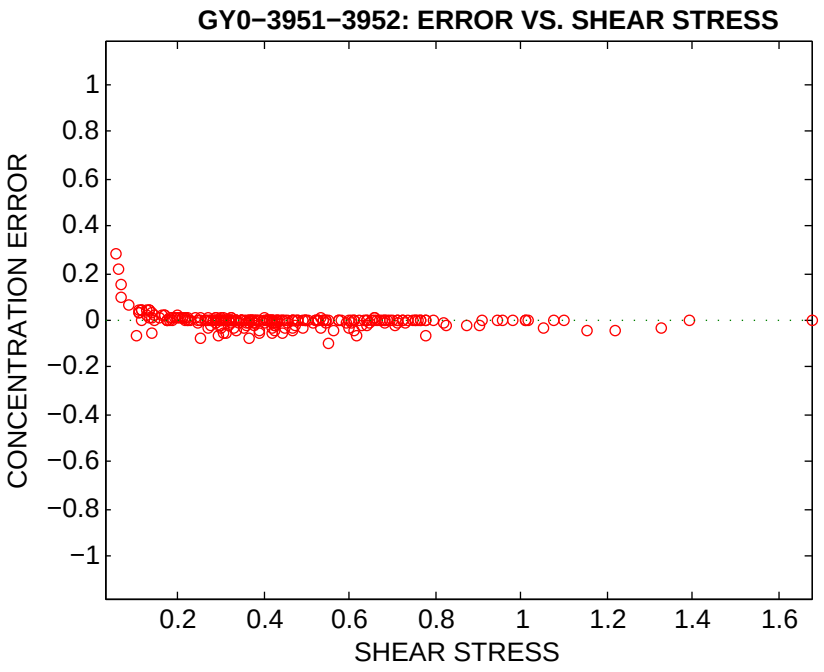


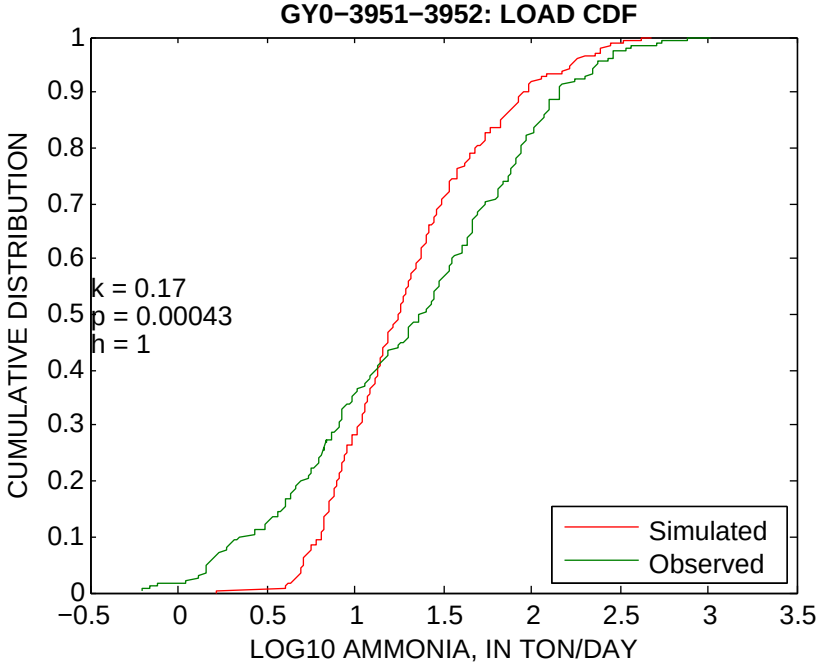


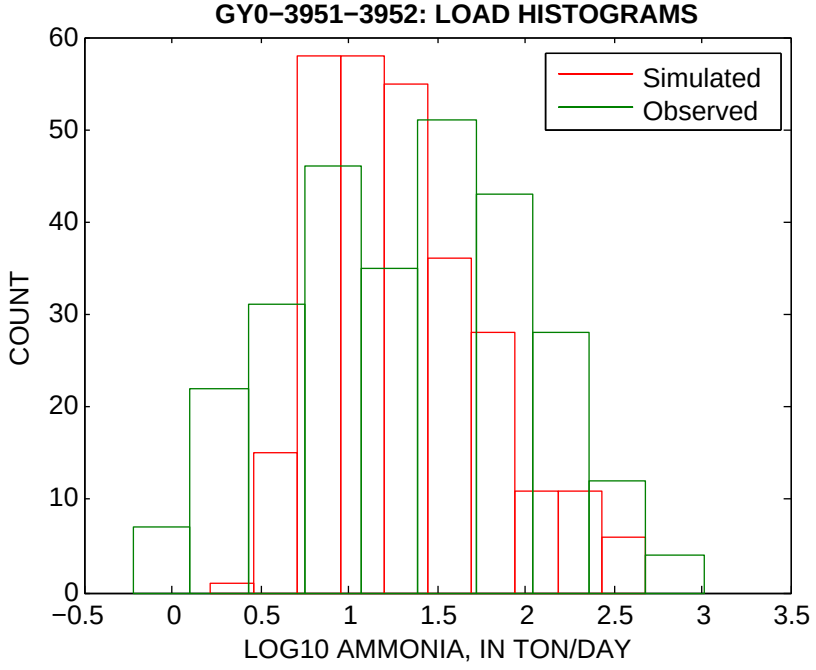


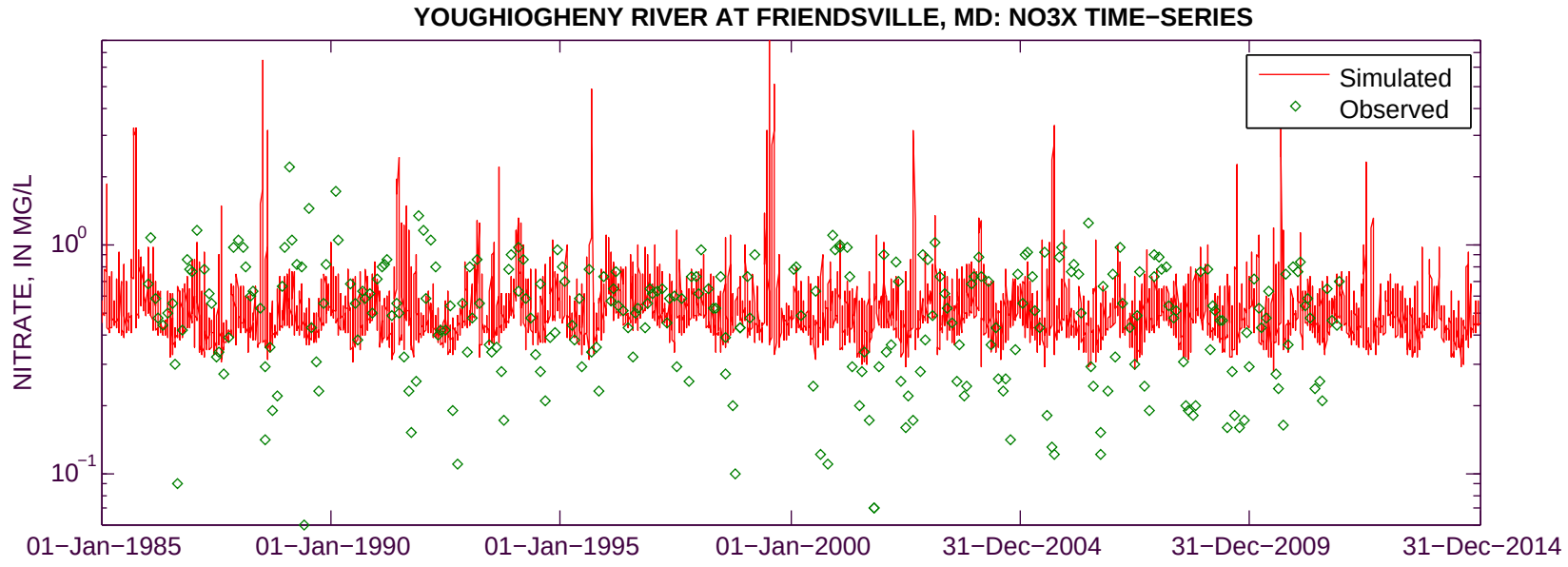
LOAD DATA
LOG10

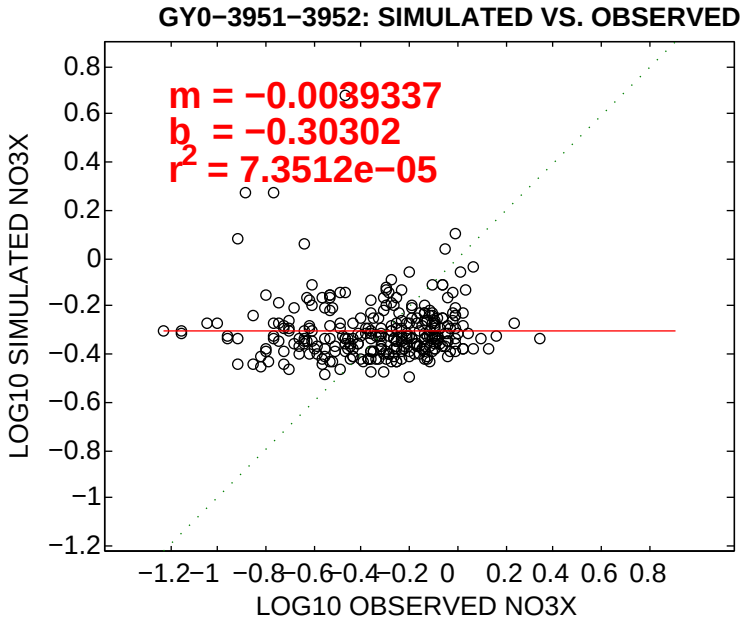


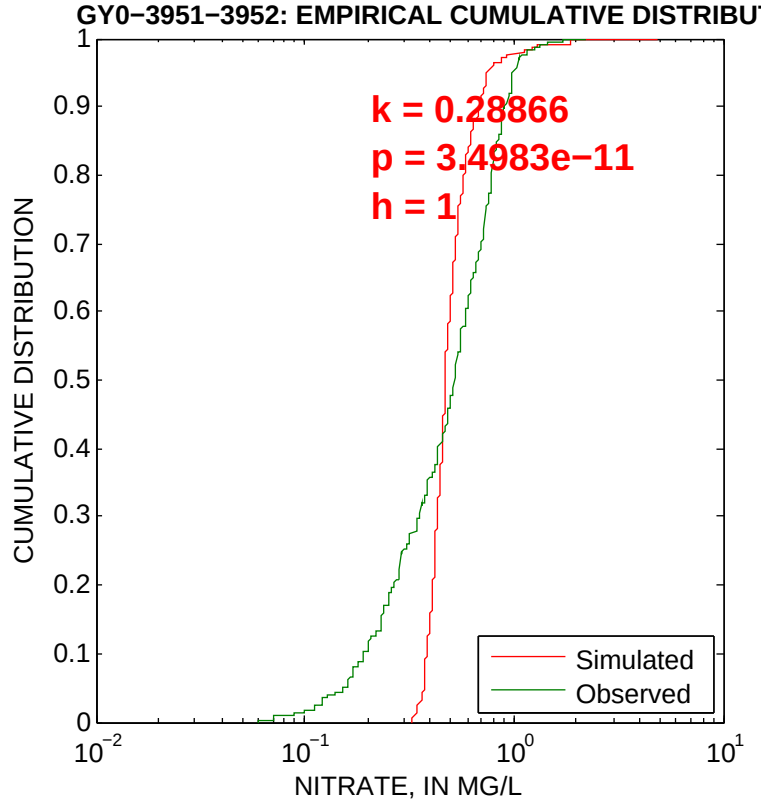












DATA SELECTION

scenario: P620171001WQ | file: NO3X.calib

plot: NO3X - nitrate

Dates: 1/1/1985 – 12/31/201

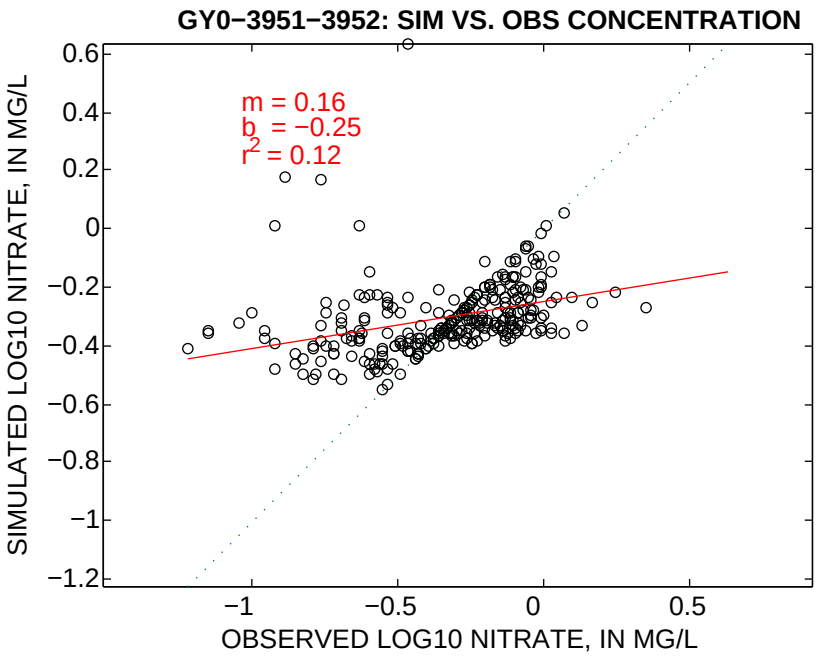
Drive: N/A | Directory: model | Observed: OBS20161101

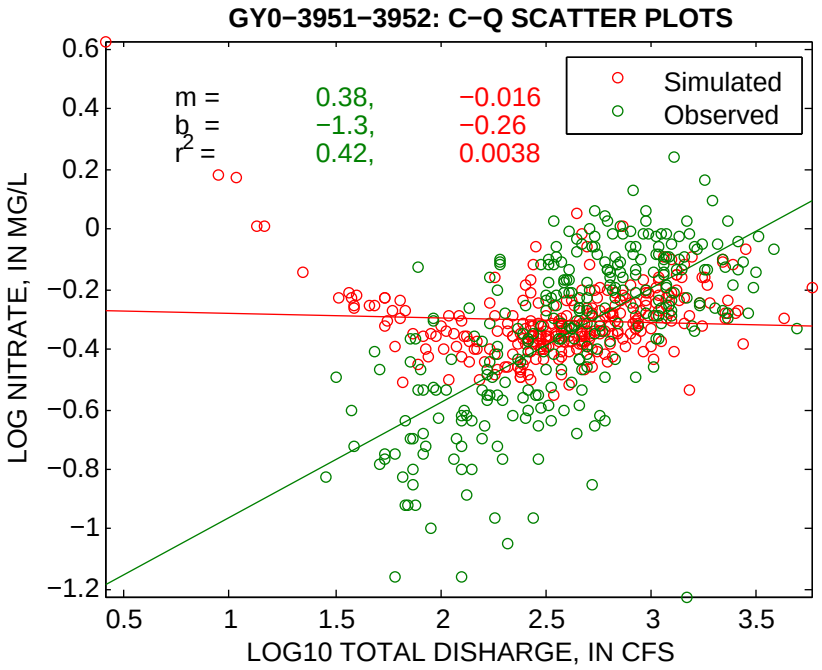
STATISTICS

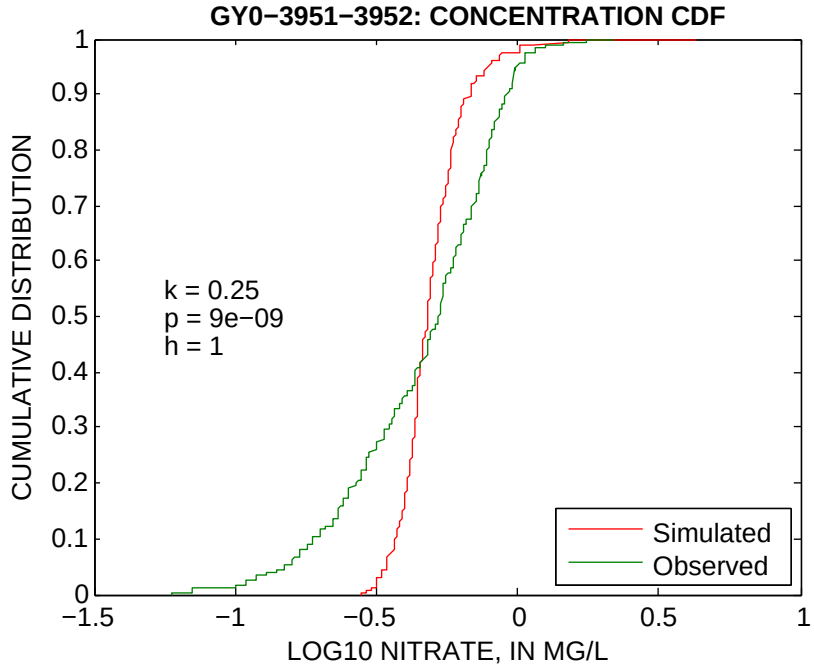
n	291	291
	observe	simulate
min	0.06	0.32319
	-1.22185	-0.490542
mean	0.54533	0.528916
	-0.335735	-0.3017
media	0.52	0.46966
	-0.283997	-0.328216
max	2.22	4.8186
	0.346353	0.682921
varian	0.0888648	0.0943974
	0.0721131	0.0151791
JB	0.001	0.001
	0.001700	0.001
	ra	log
%	-3.00989	-10.1374
err.va	0.189397	0.0890218
rel.std.err	2.13129	1.23448
mod.eff	-1.13129	-0.234476

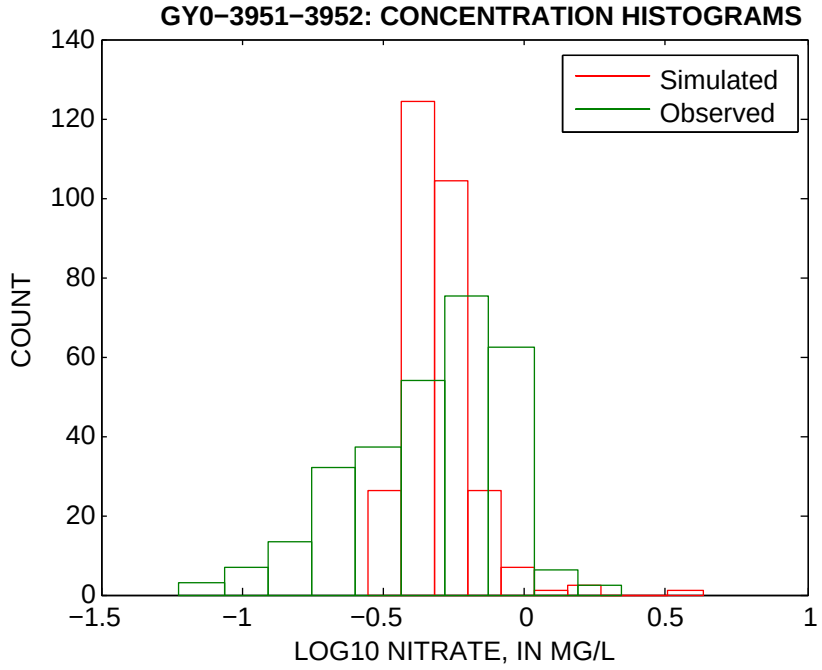
VERSION 2.1

ALL DATA
LOG10

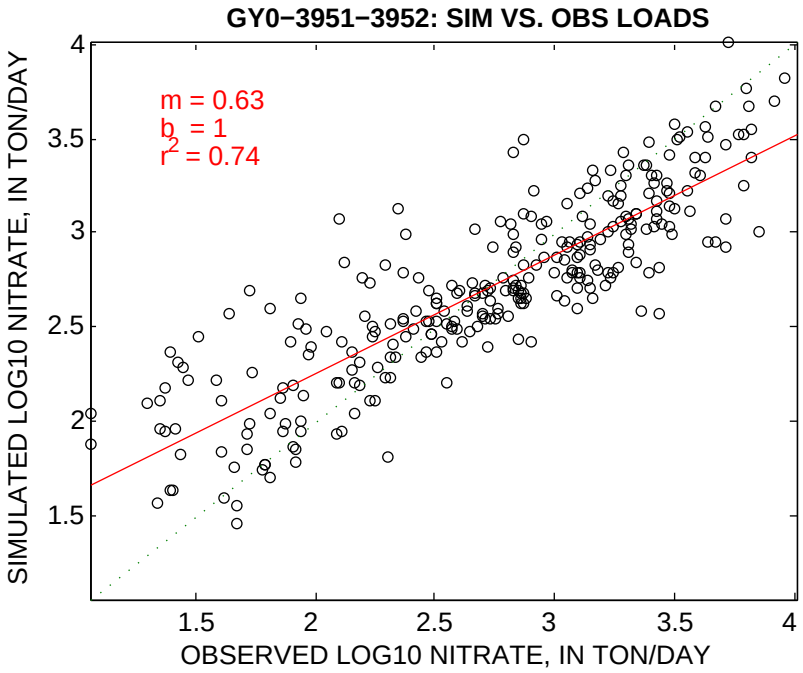


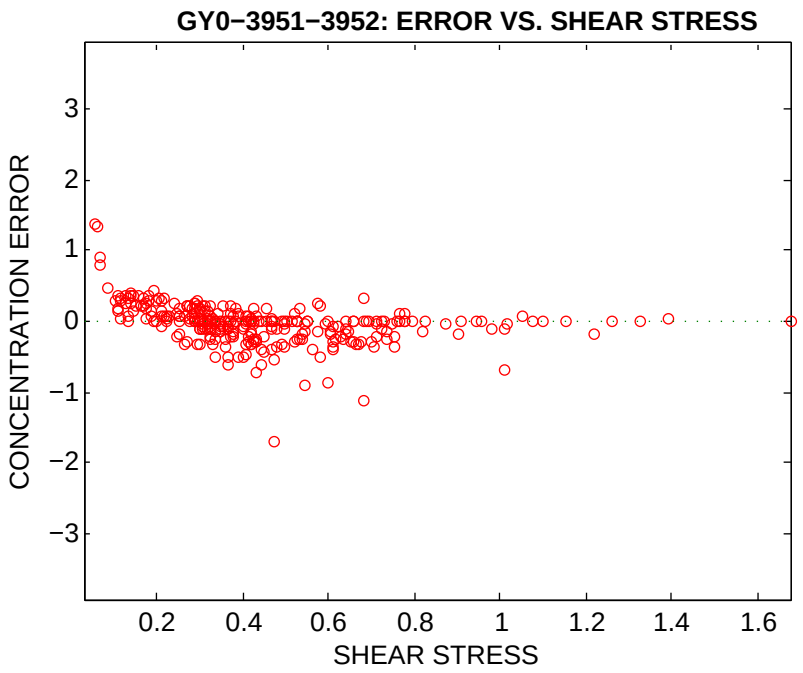


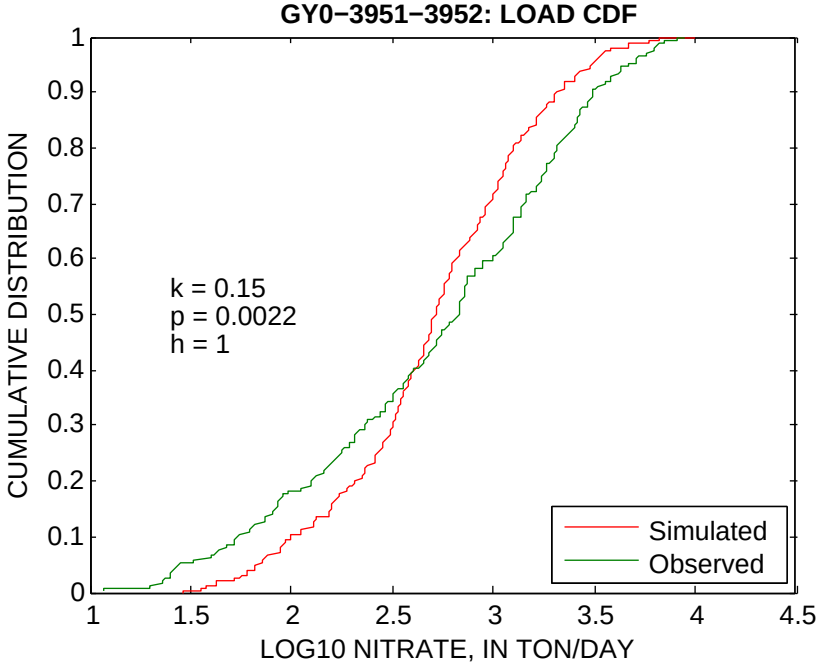


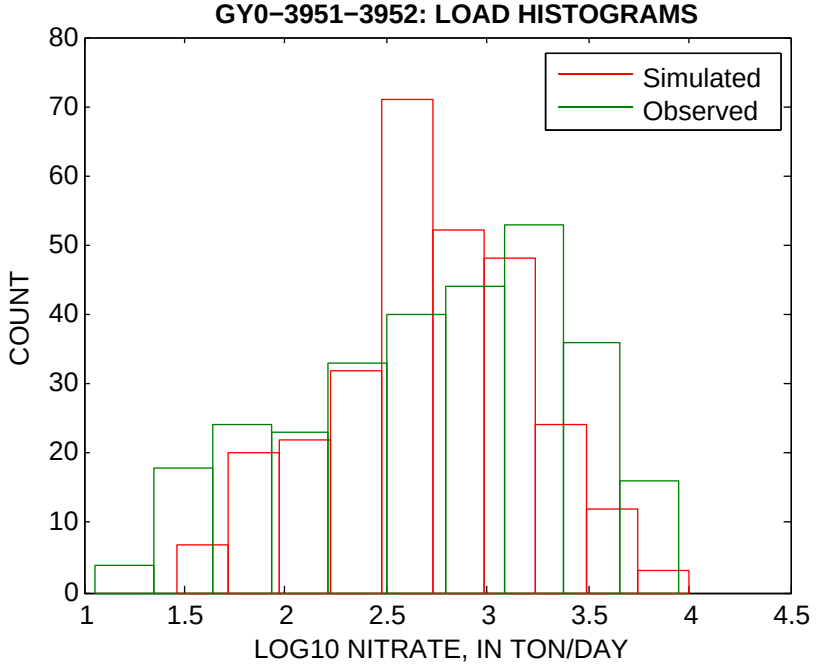


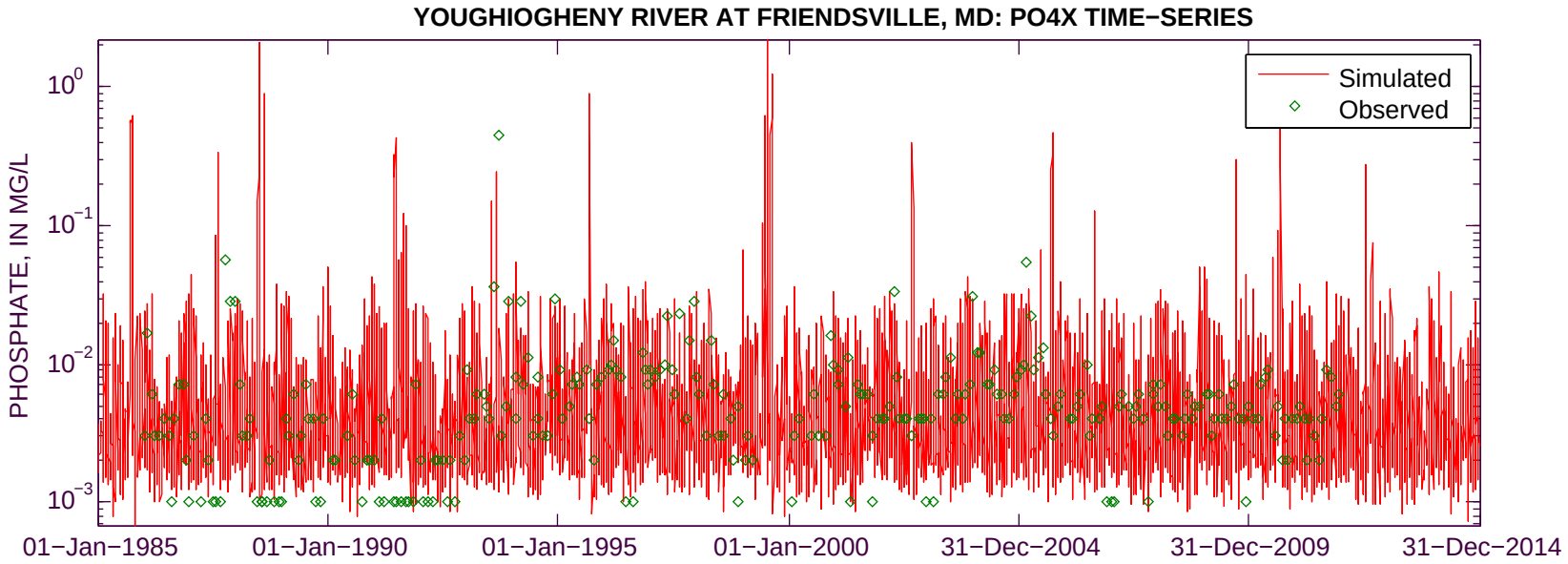
LOAD DATA
LOG10

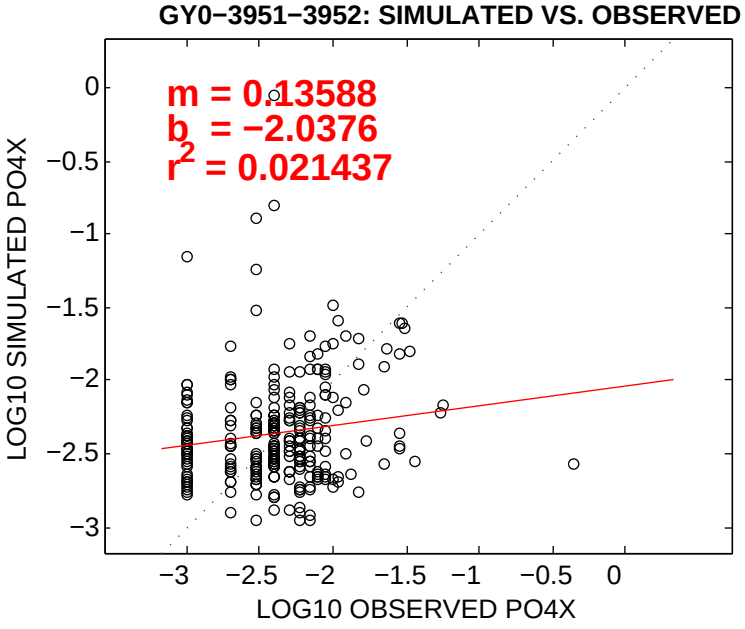


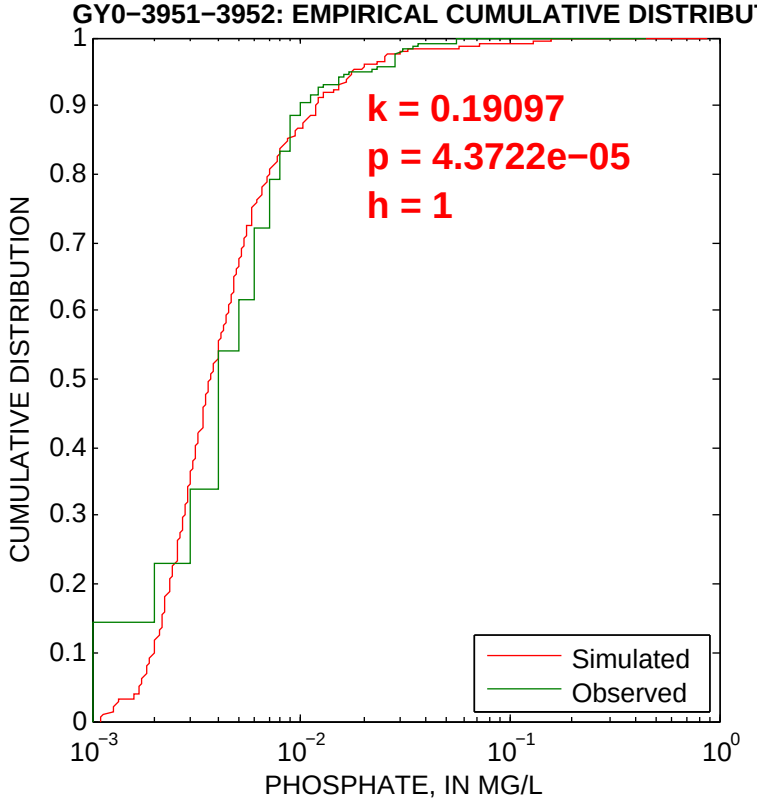












DATA SELECTION

scenario: P620171001WQ | file: PO4X.calib

plot: PO4X - phosphate

Dates: 1/1/1985 – 12/31/201

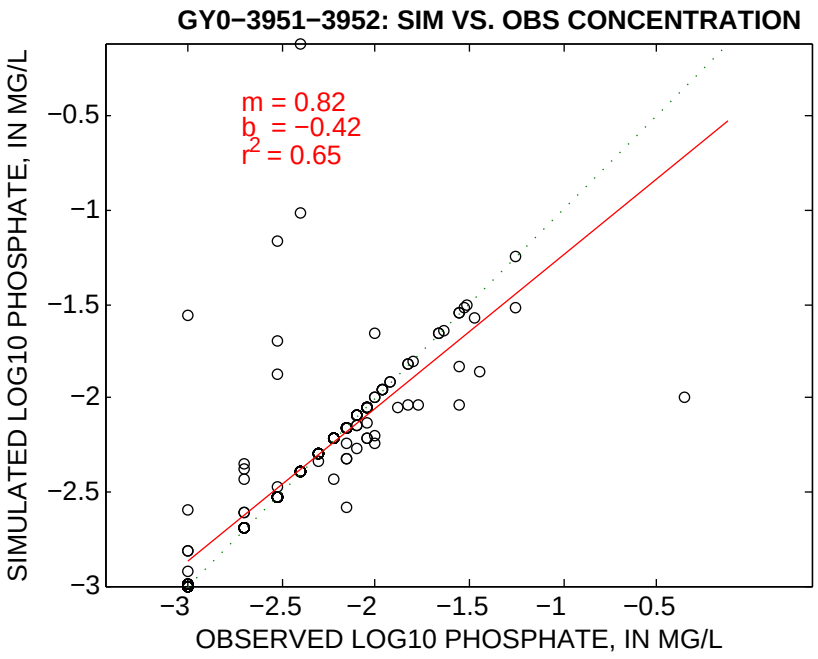
Drive: N/A | Directory: model | Observed: OBS20161101

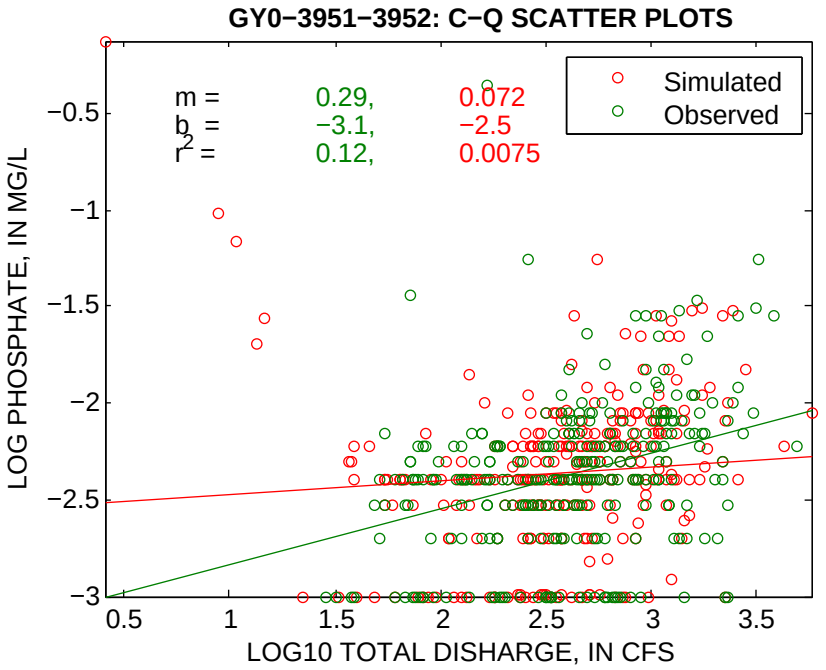
STATISTICS

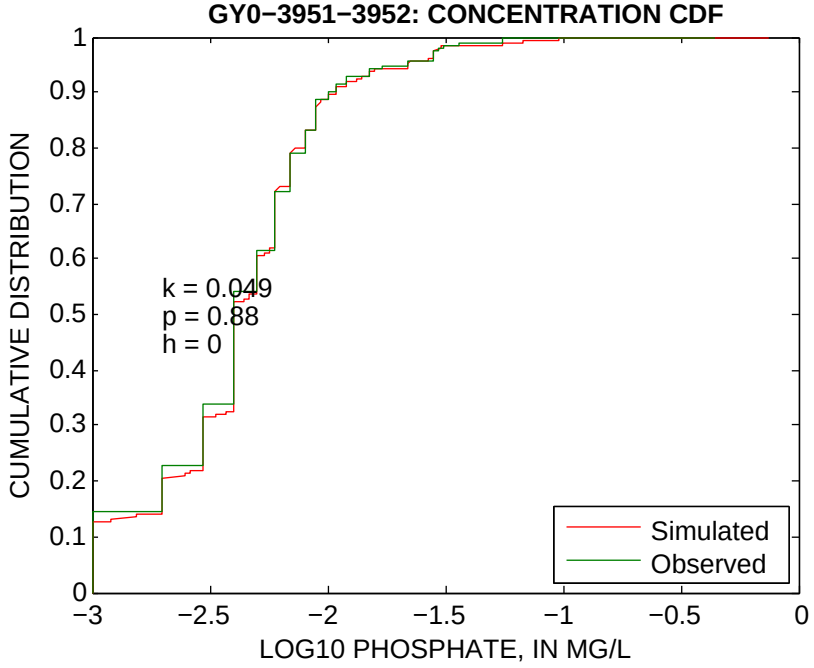
	observe	simulate
n	288	288
min	0.001 -3	0.0010953 -2.96047
mean	0.00762153 -2.37076	0.00972869 -2.35976
media	0.004 -2.39794	0.0036897 -2.43301
max	0.445 -0.35164	0.88277 -0.0541524
varian	0.00071759 0.148432	0.0028428 0.127852
JB	0.001 0.001	0.001 0.001
	ra	log
%	27.6475	-0.464063
err.va	0.00358571	0.236066
rel.std.err	4.99684	1.5904
mod.eff	-3.99684	-0.590399

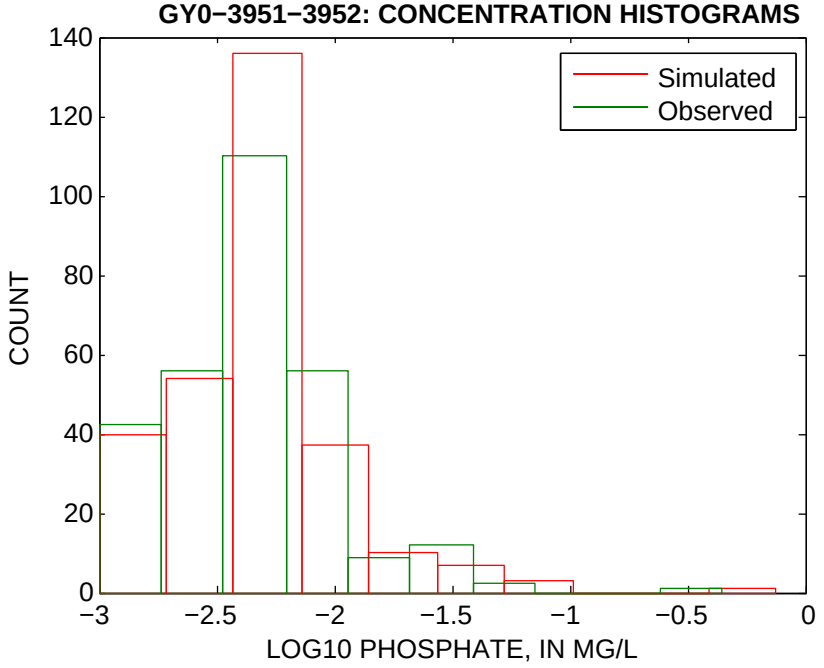
VERSION 2.1

ALL DATA
LOG10

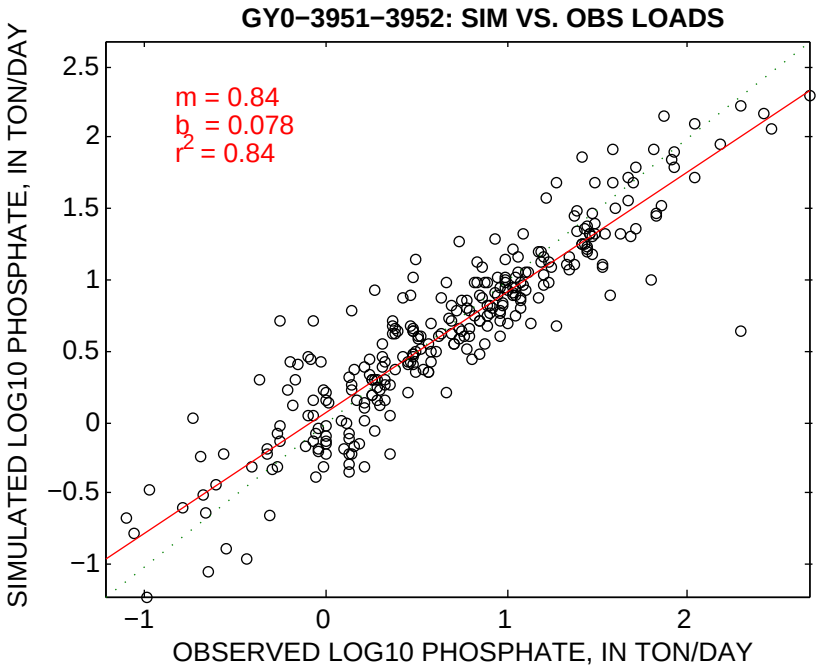


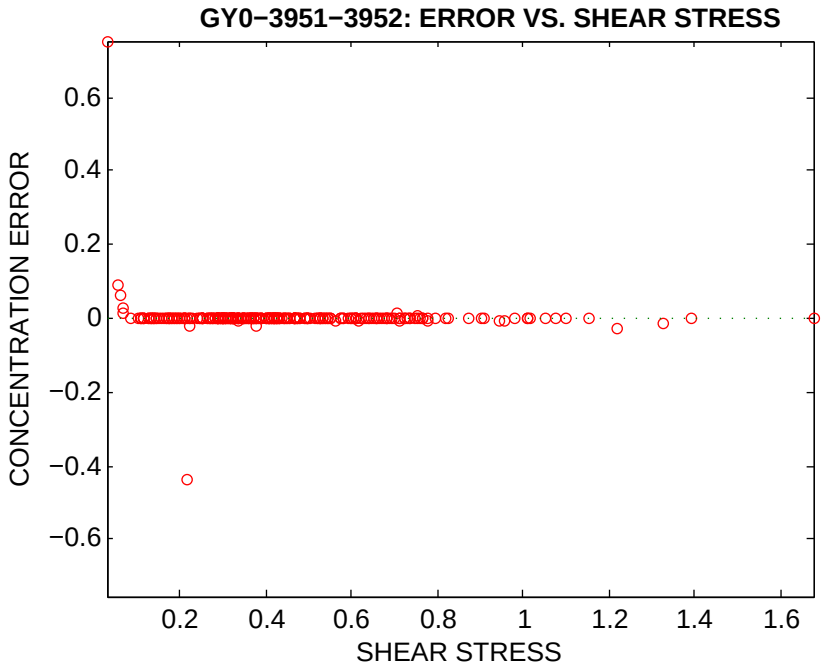


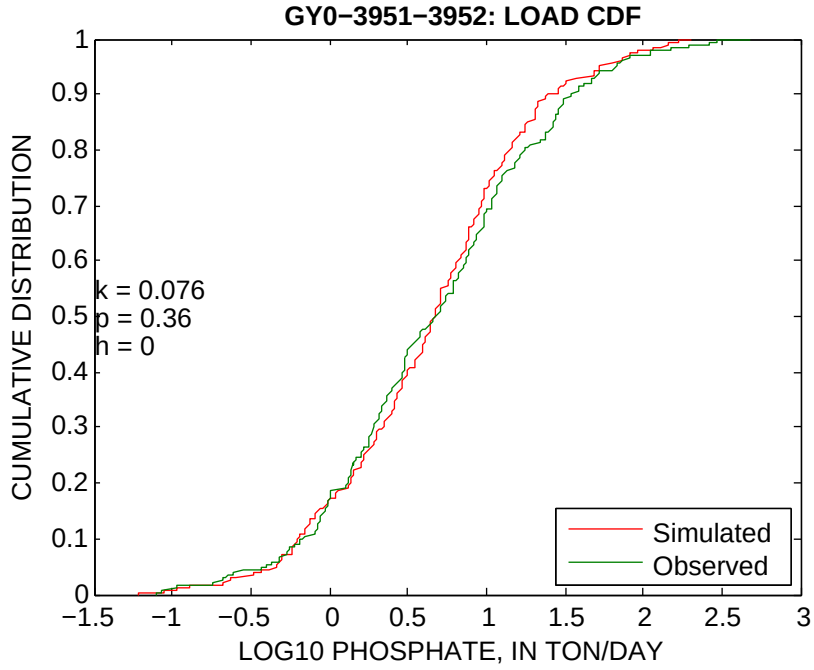


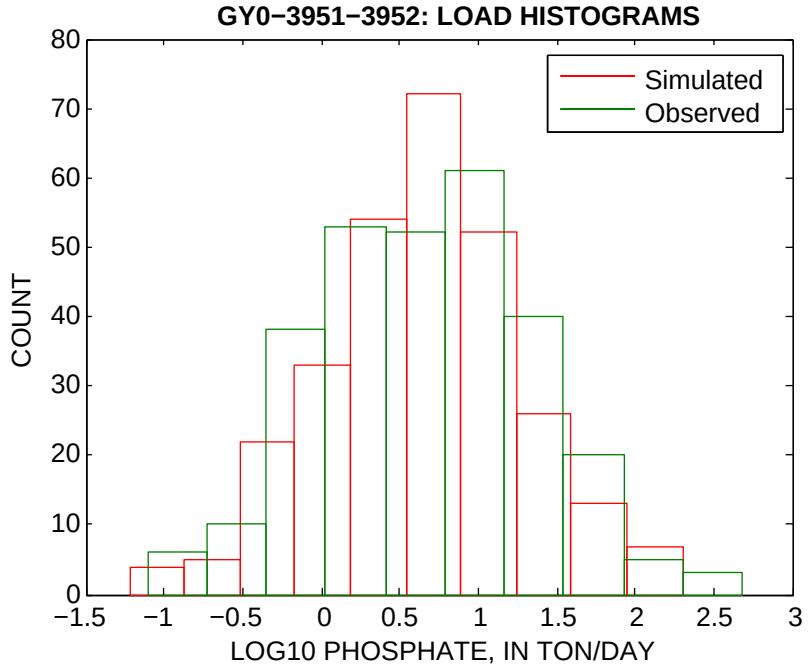


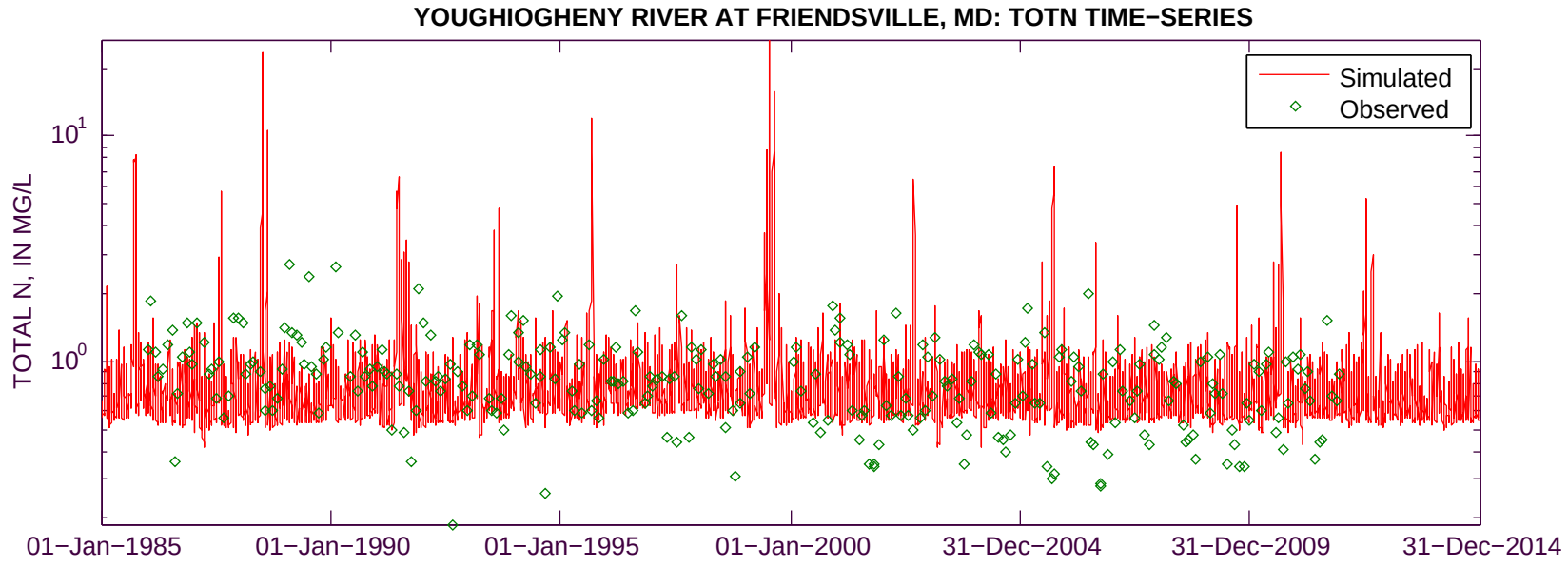
LOAD DATA
LOG10

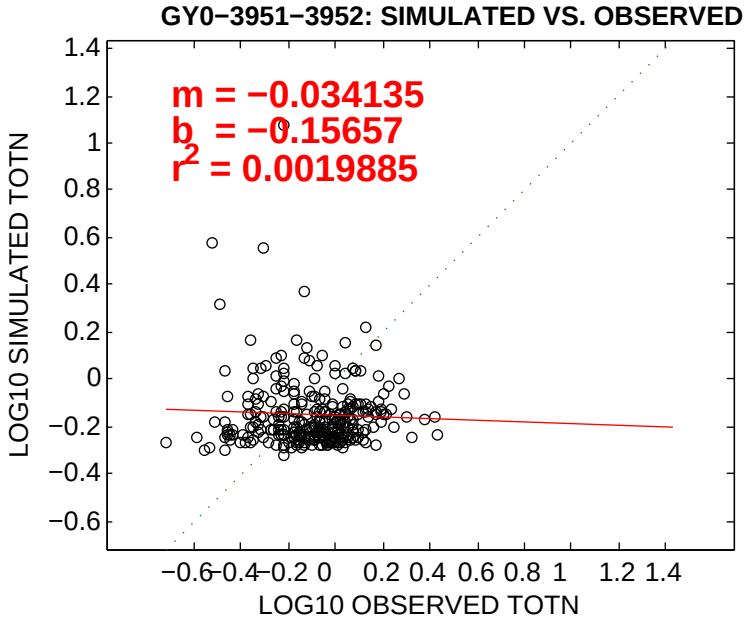


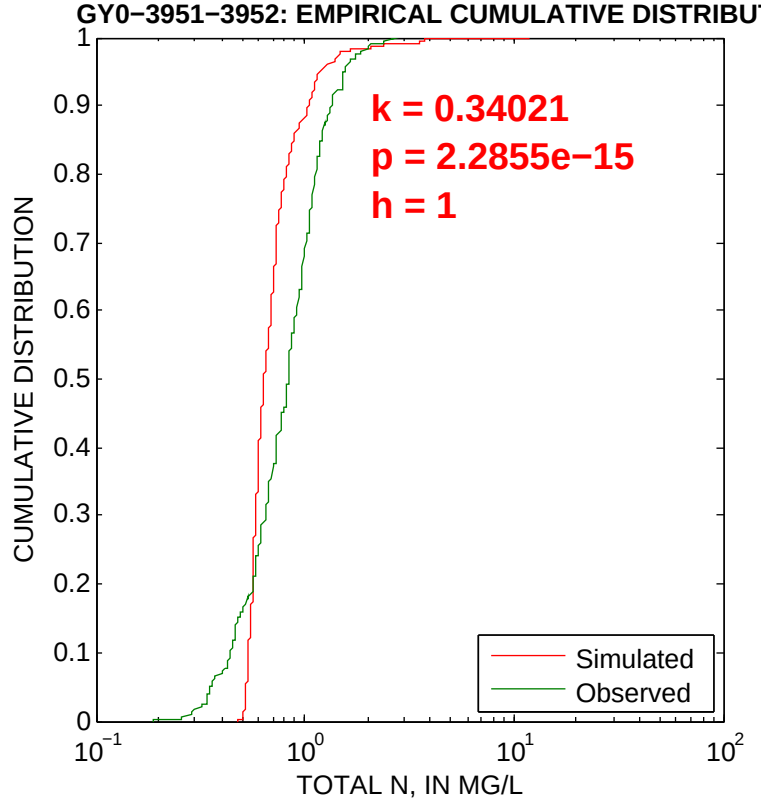












DATA SELECTION

scenario	file
P620171001WQ	TOTN.calib

plot: TOTN - total nitrogen

Dates: 1/1/1985 – 12/31/201

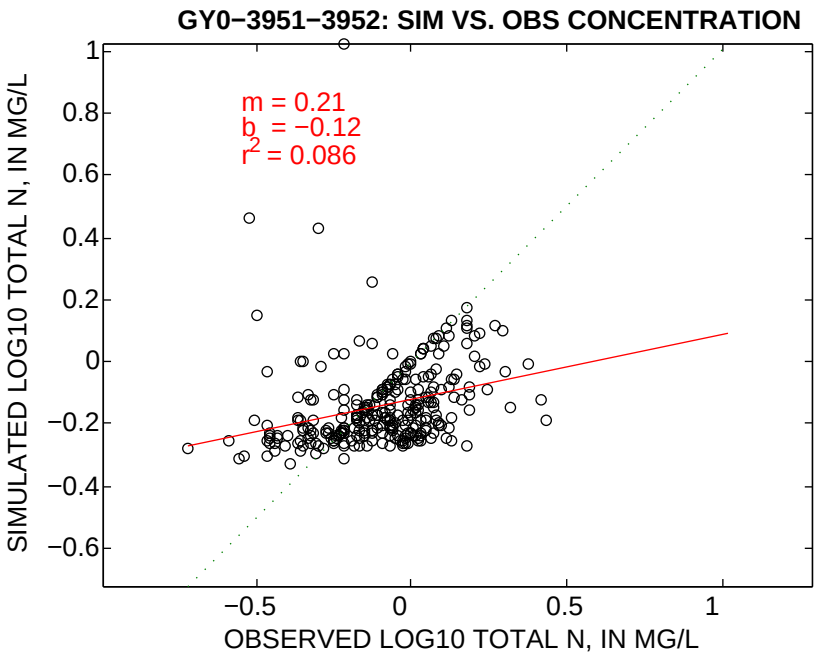
Drive	Directory	Observed
N/A	model	OBS20161101

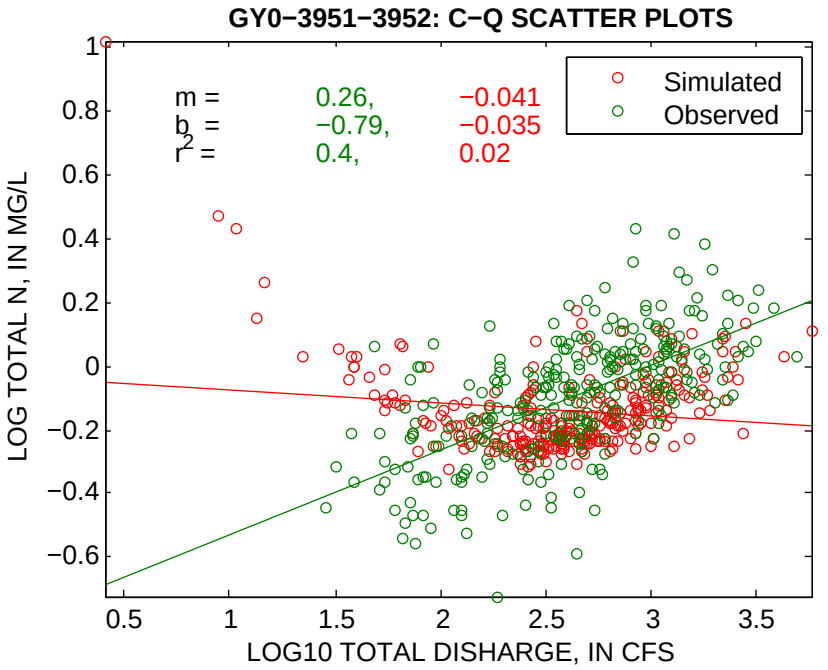
STATISTICS

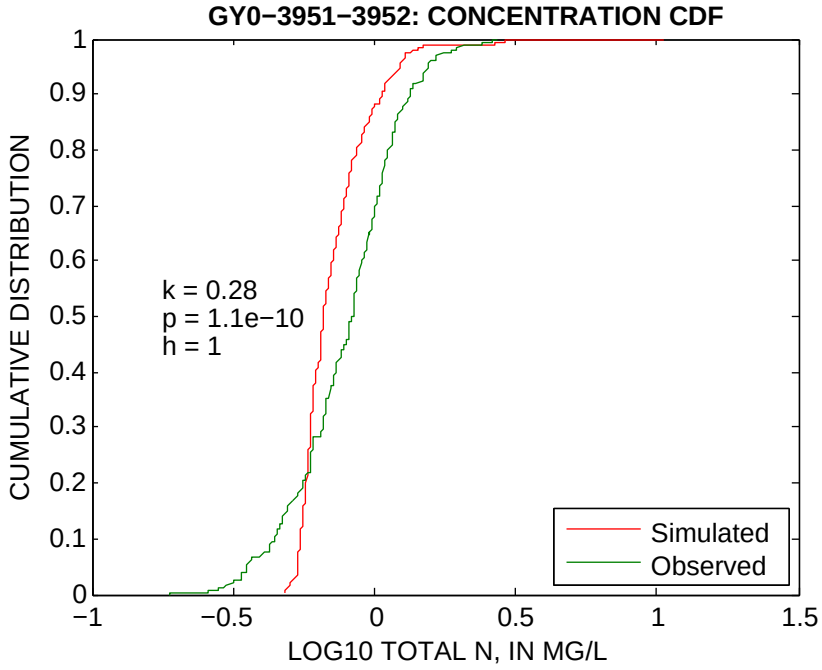
	n	observe	simulate
		291	291
min		0.19	0.47887
		-0.721246	-0.319782
mean		0.874312	0.773869
		-0.0987881	-0.153195
media		0.83	0.63629
		-0.0809219	-0.196345
max		2.7	12.034
		0.431364	1.08041
varian		0.149513	0.552908
		0.0363111	0.0212776
JB		0.001	0.001
		0.262028	0.001
		ra	log
%		-11.4882	55.074
err.va		0.750173	0.063038
rel.std.err		5.01743	1.73605
mod.eff		-4.01743	-0.736051

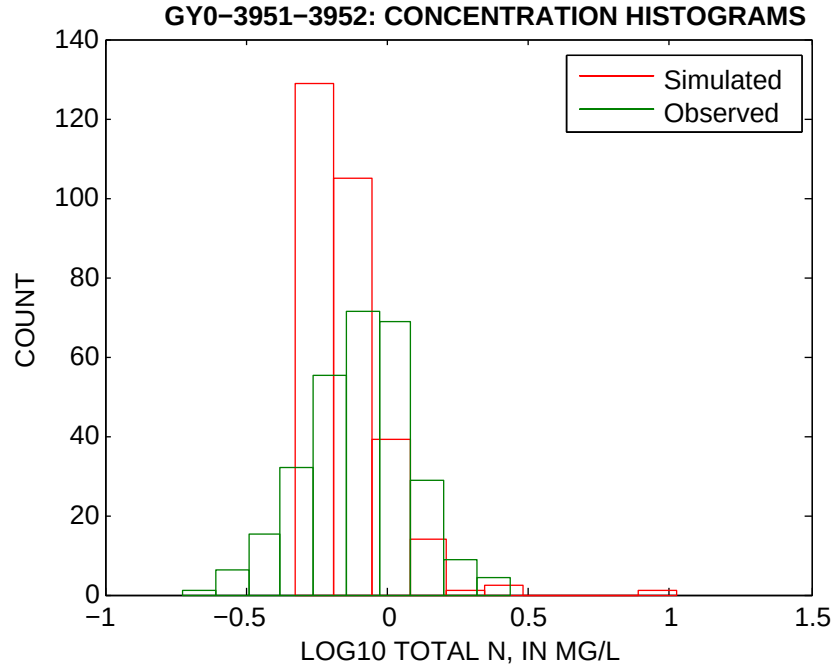
VERSION 2.1

ALL DATA
LOG10

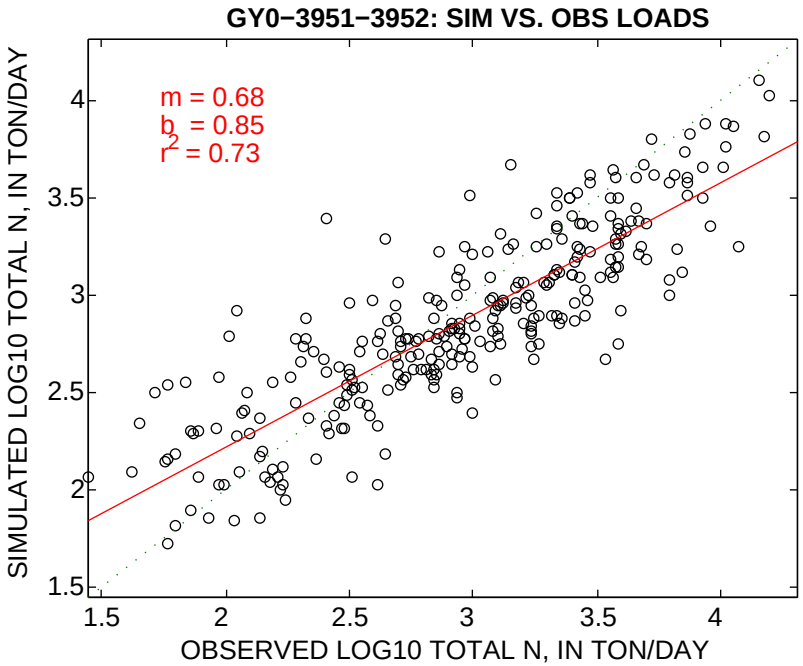


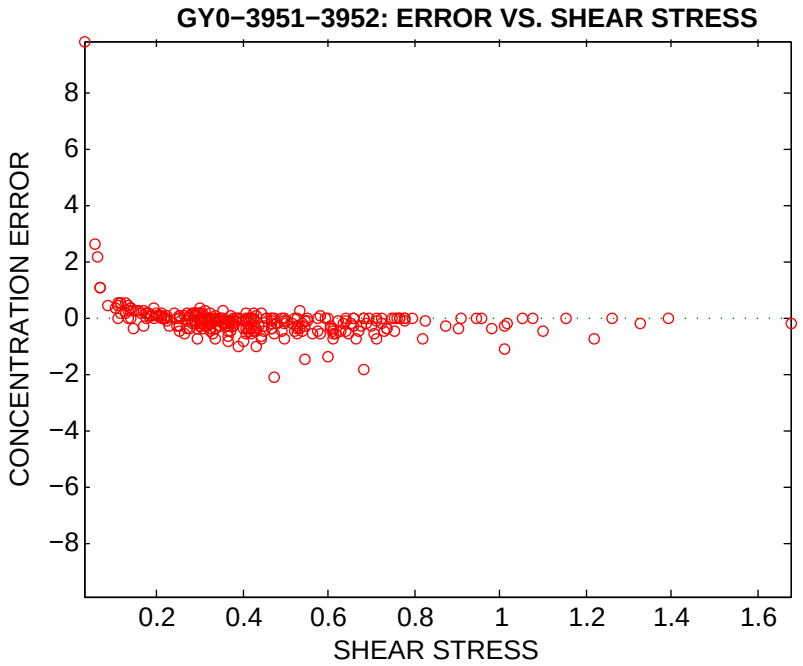


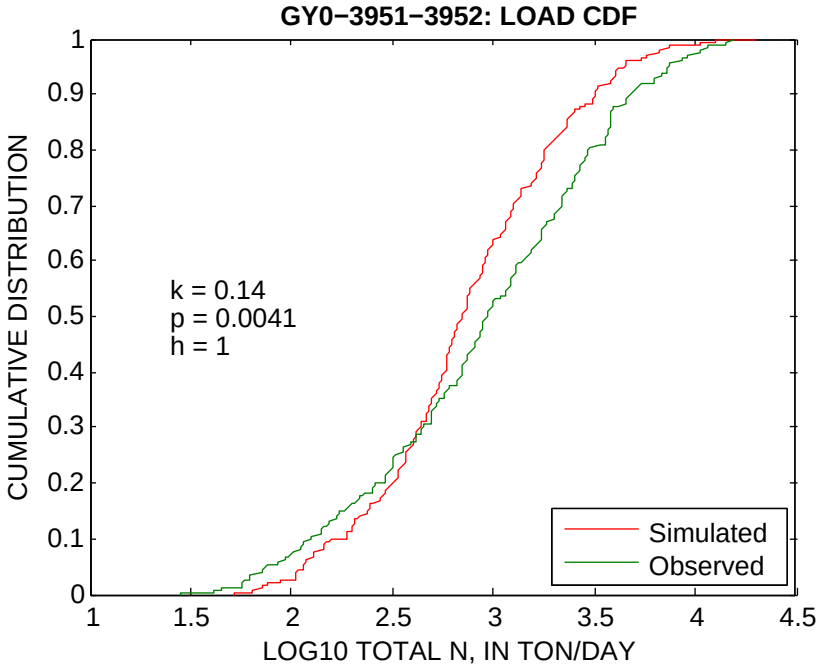


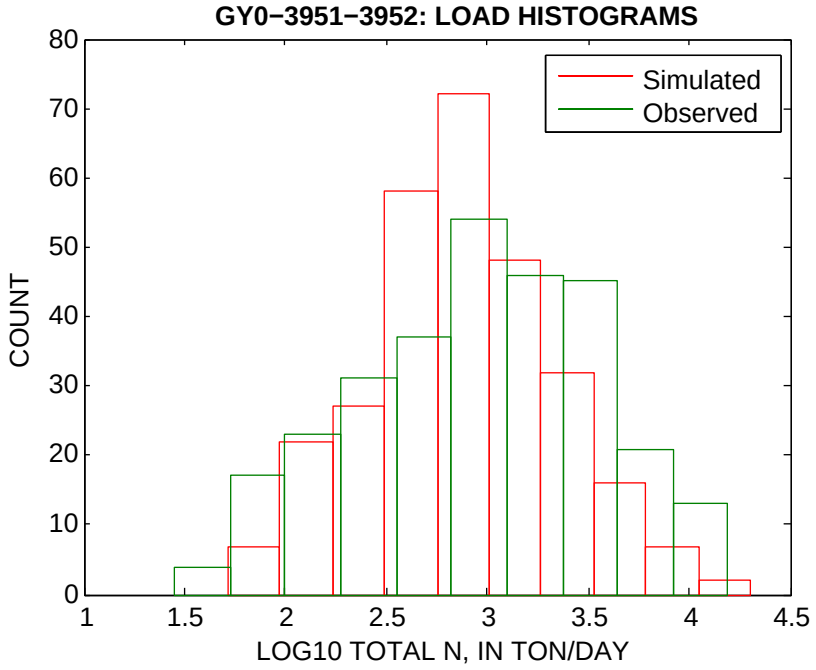


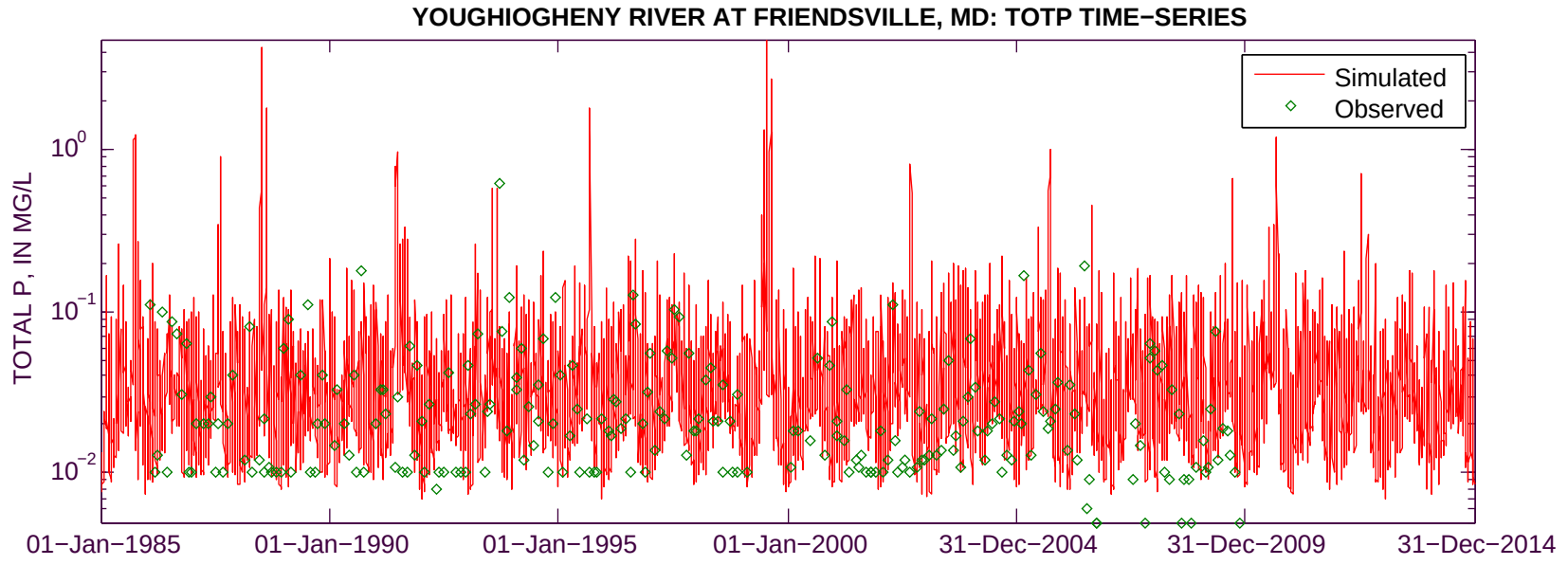
LOAD DATA
LOG10

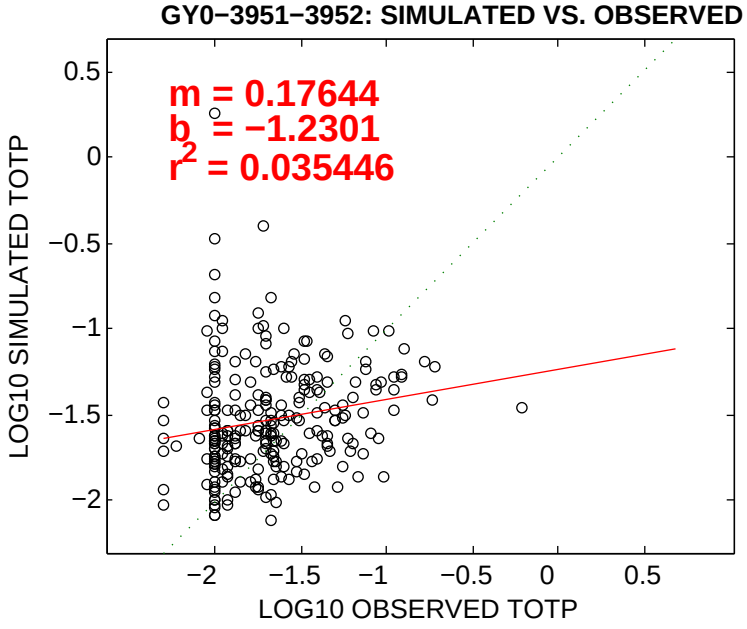


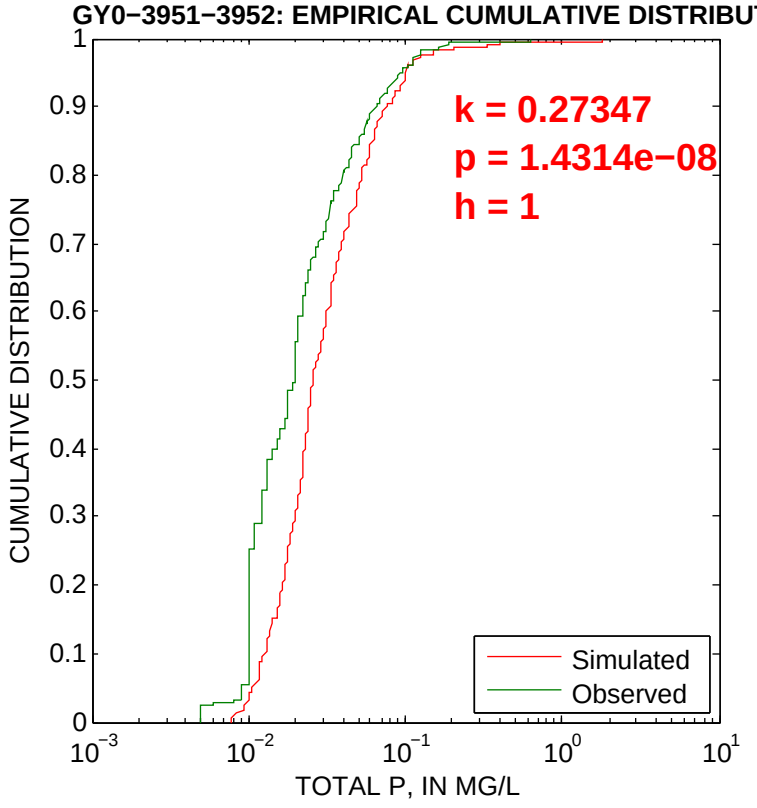












DATA SELECTION

scenario: P620171001WQ | file: TOTP.calib

plot: TOTP - total phosphorus

Dates: 1/1/1985 – 12/31/201

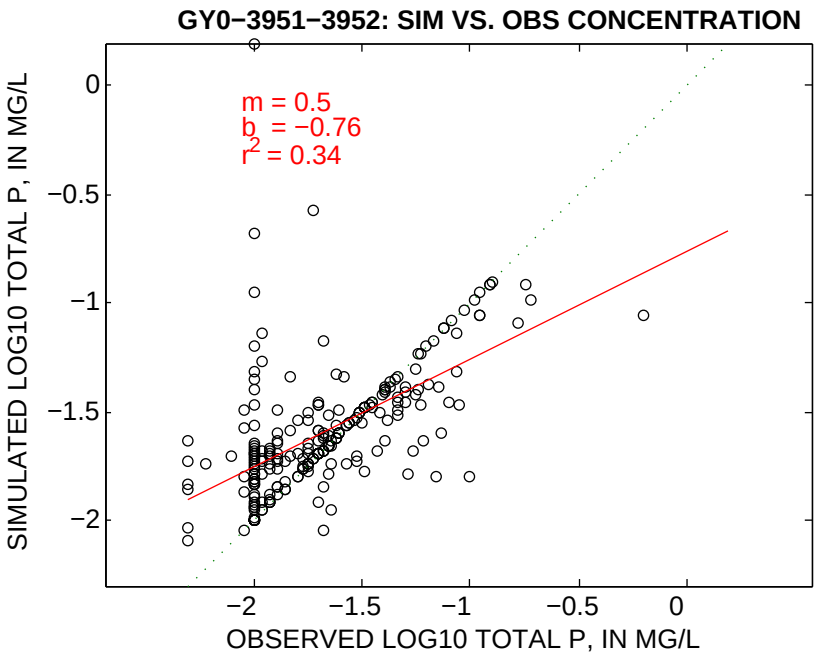
Drive: N/A | Directory: model | Observed: OBS20161101

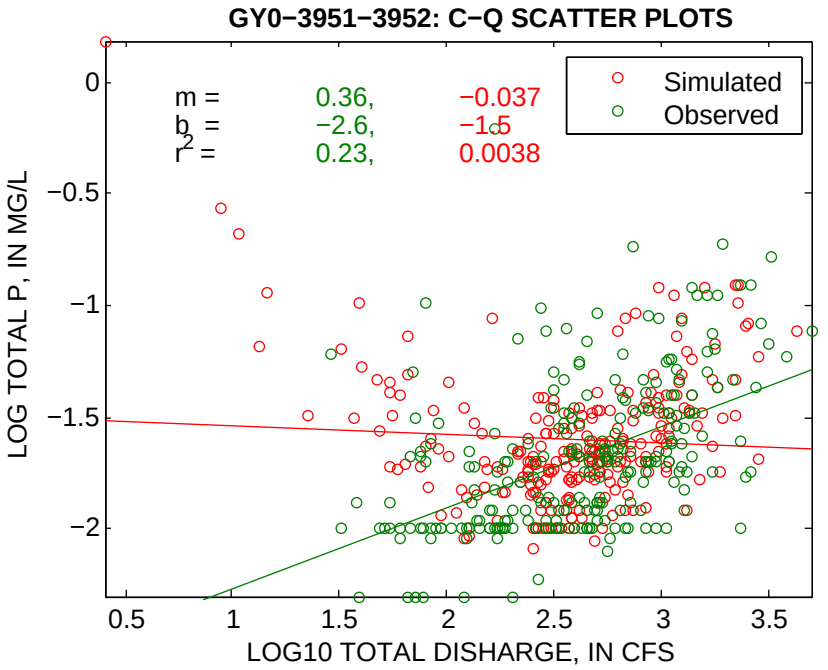
STATISTICS

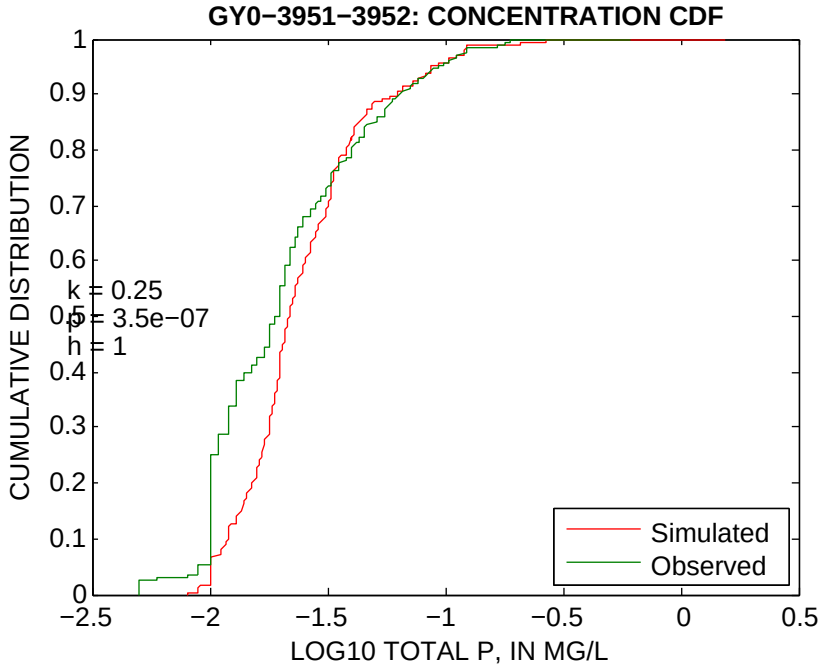
	n	245	245
		observe	simulate
min		0.005	0.0076163
		-2.30103	-2.11826
mean		0.0312857	0.0460327
		-1.67795	-1.52611
media		0.02	0.025615
		-1.69897	-1.59151
max		0.621	1.7966
		-0.206908	0.254451
varian		0.00229605	0.0143069
		0.117893	0.103541
JB		0.001	0.001
		0.001	0.001
		ra	log
%		47.1364	-9.04911
err.va		0.0169477	0.202982
rel.std.err		7.38123	1.72175
mod.eff		-6.38123	-0.721751

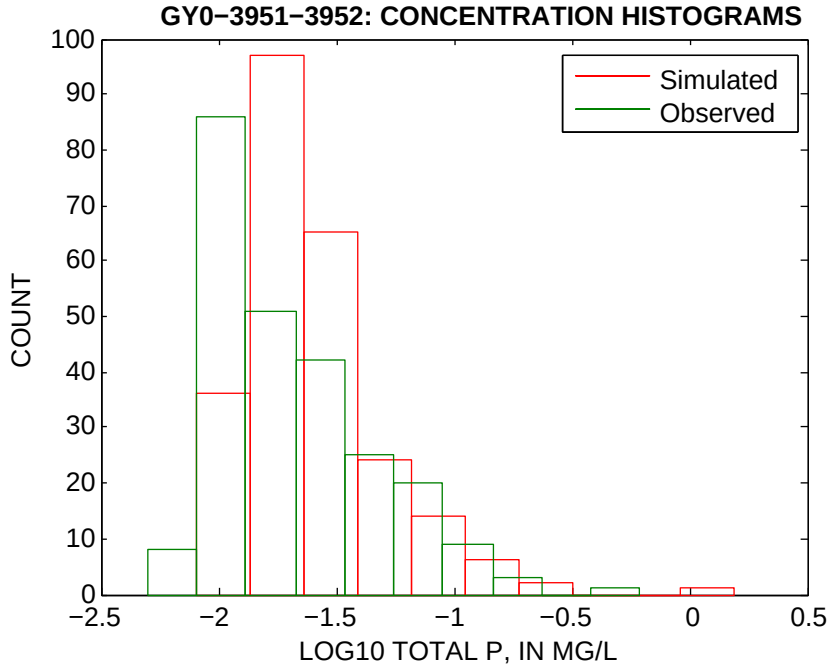
VERSION 2.1

ALL DATA
LOG10

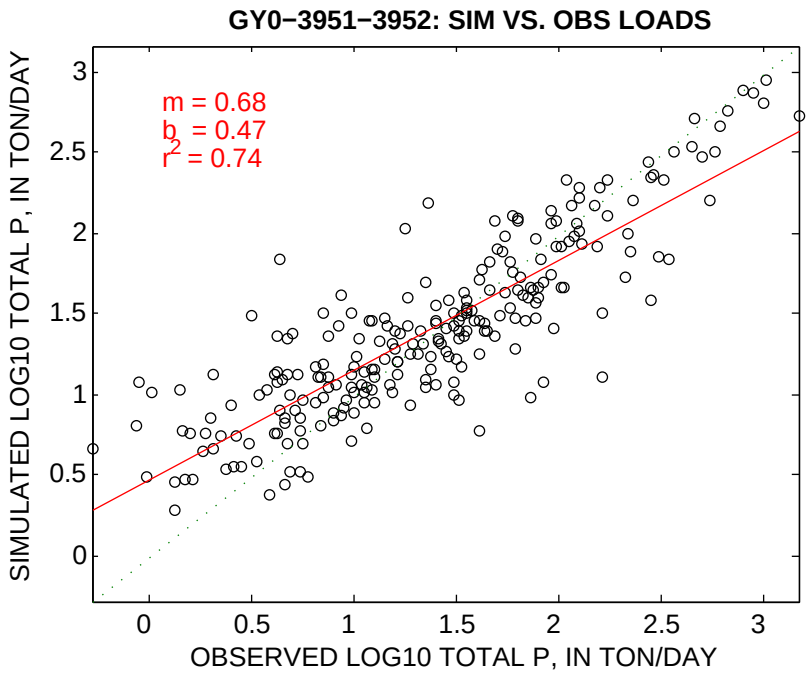


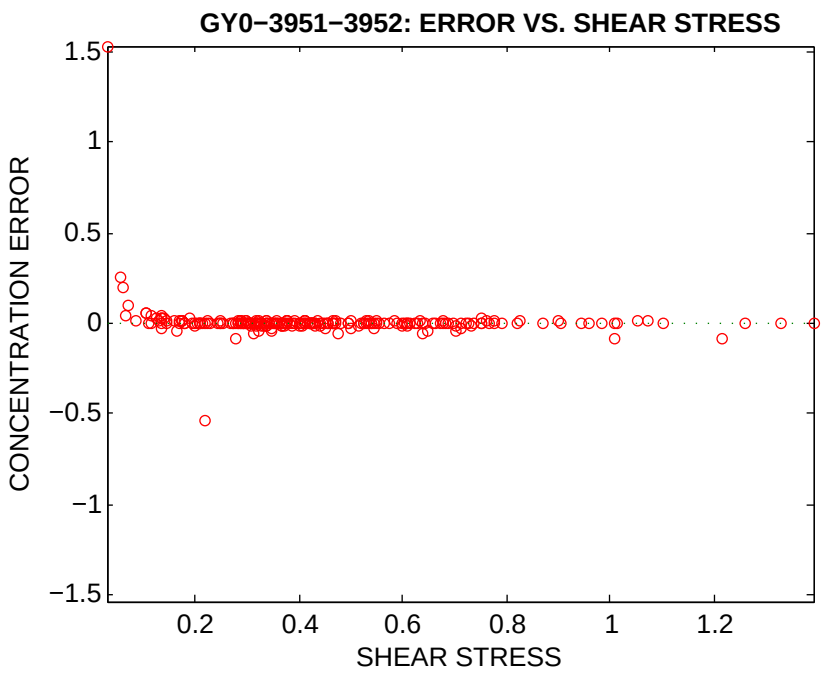


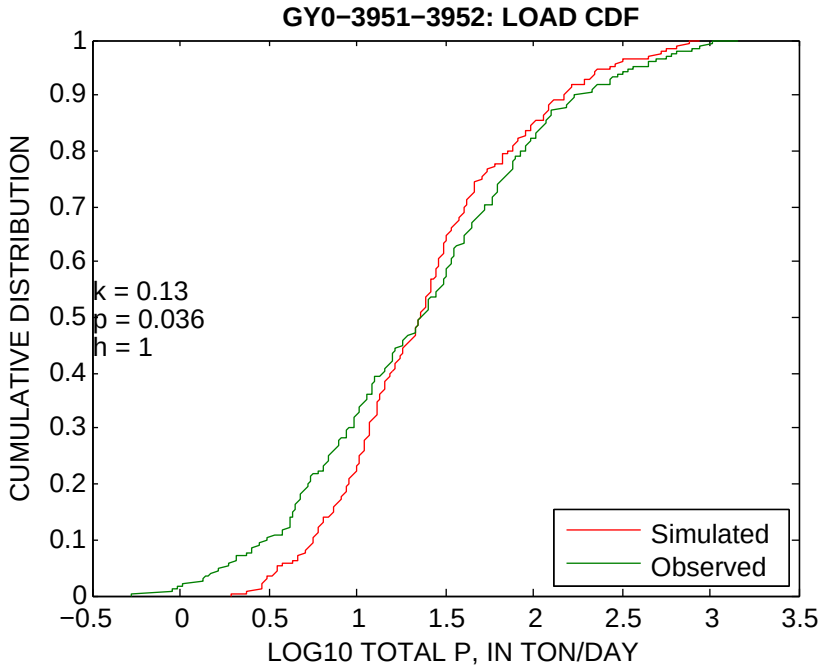


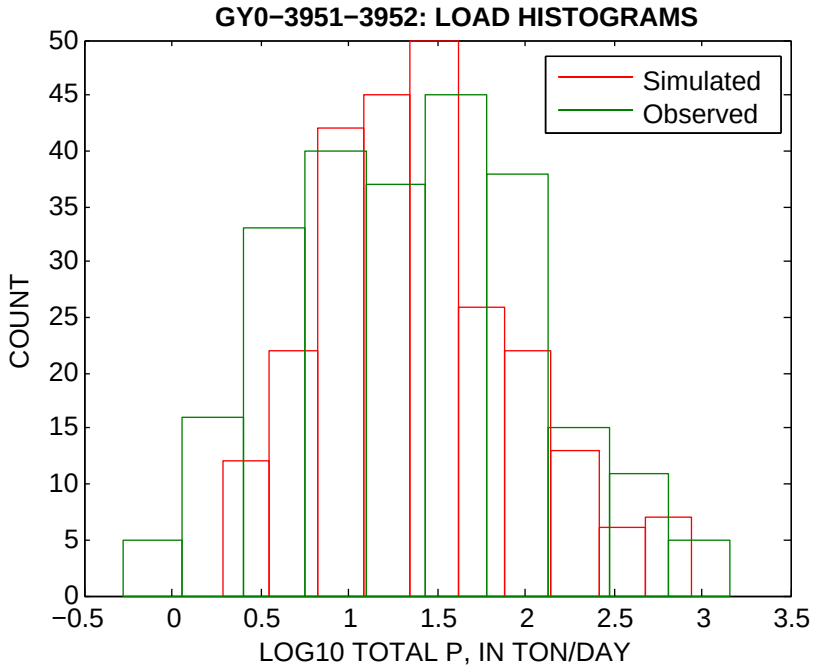


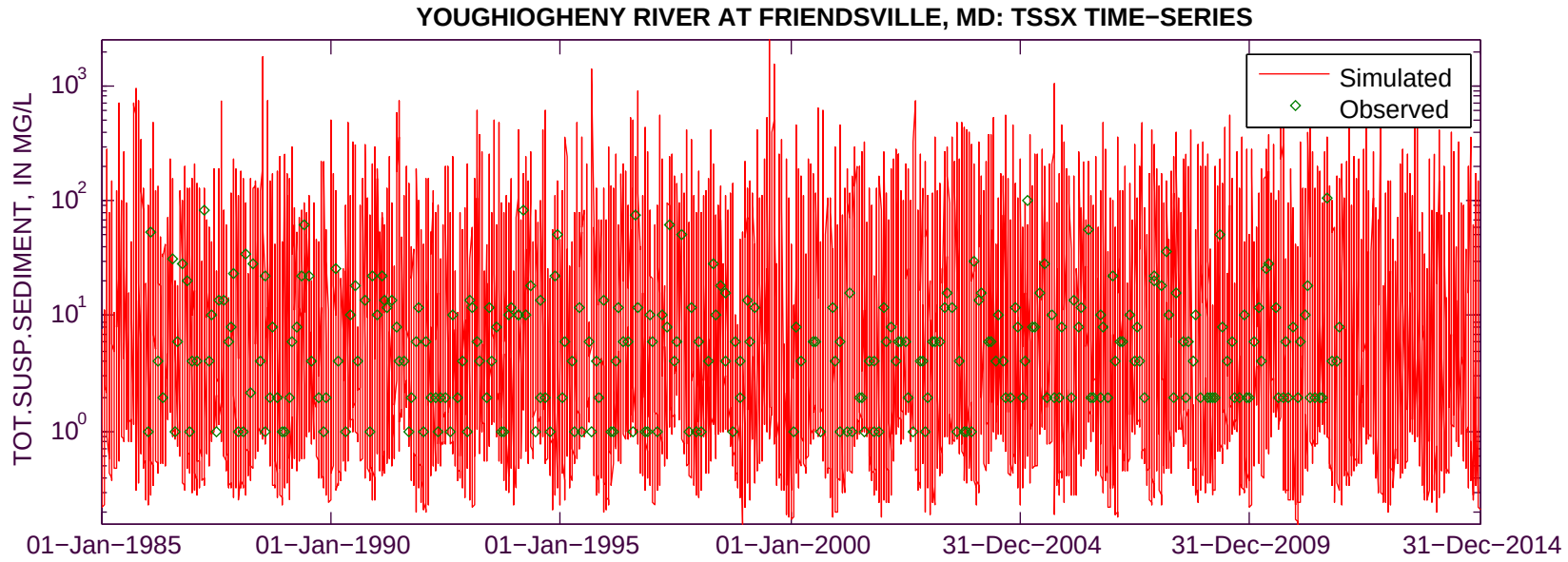
LOAD DATA
LOG10

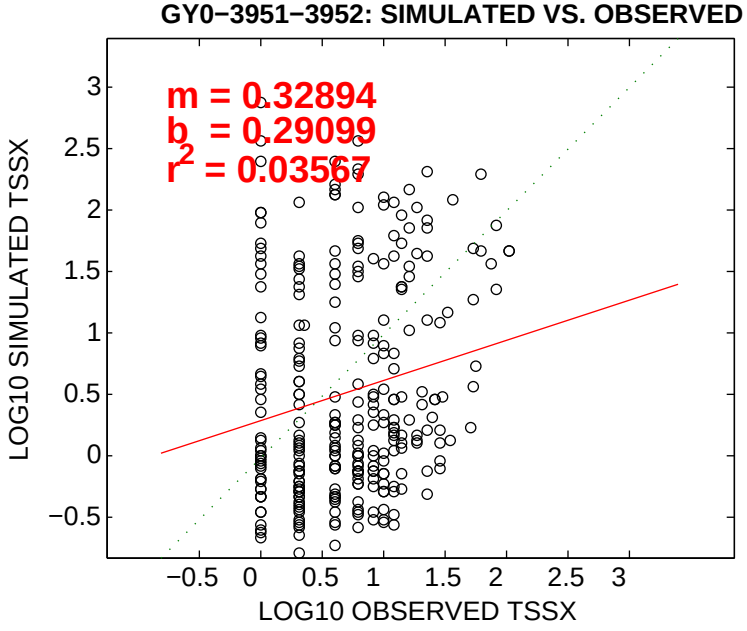


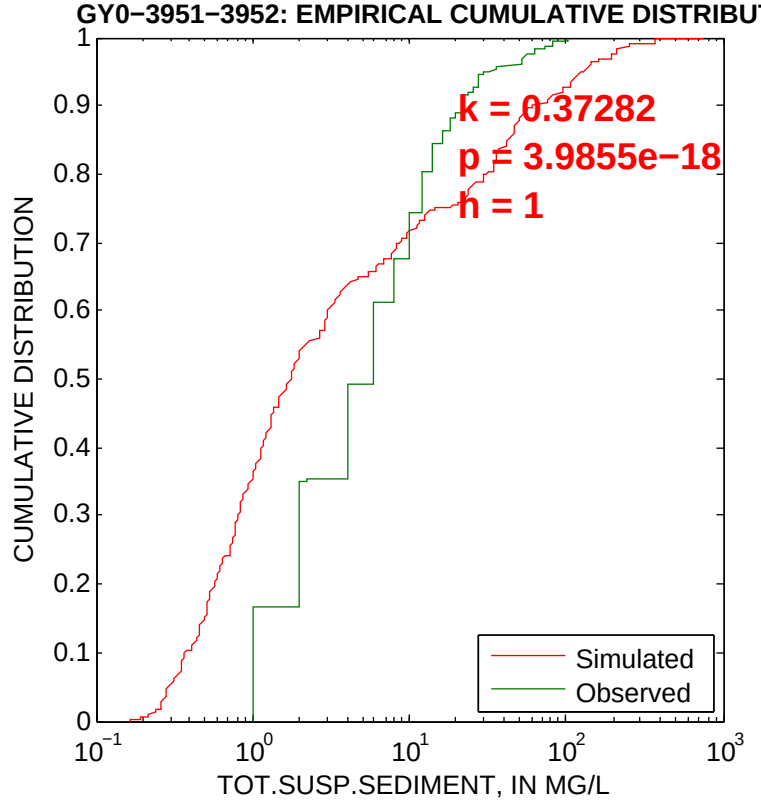












DATA SELECTION

scenario	file
P620171001WQ	TSSX.calib

plot: TSSX - total suspended ...

Dates: 1/1/1985 – 12/31/201

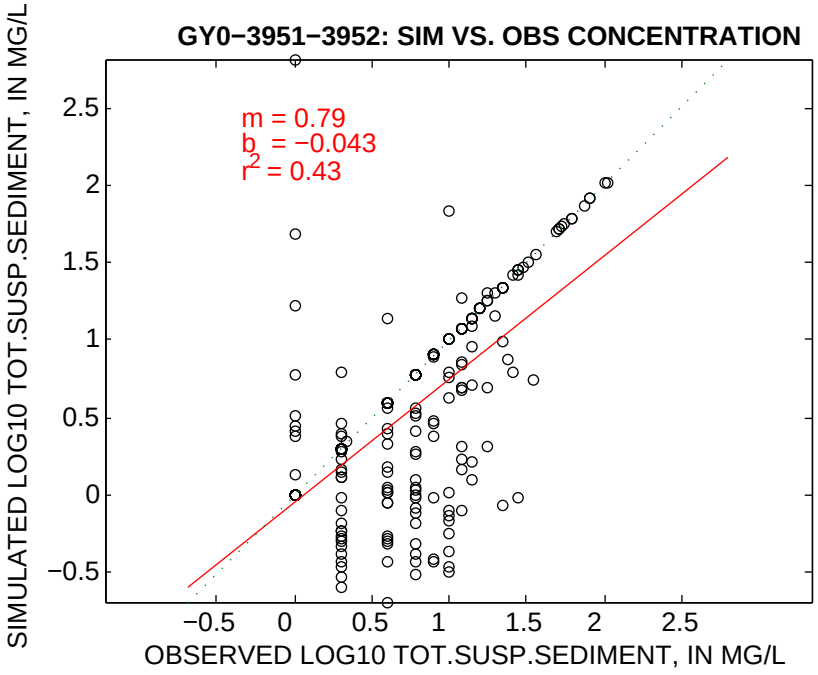
Drive	Directory	Observed
N/A	model	OBS20161101

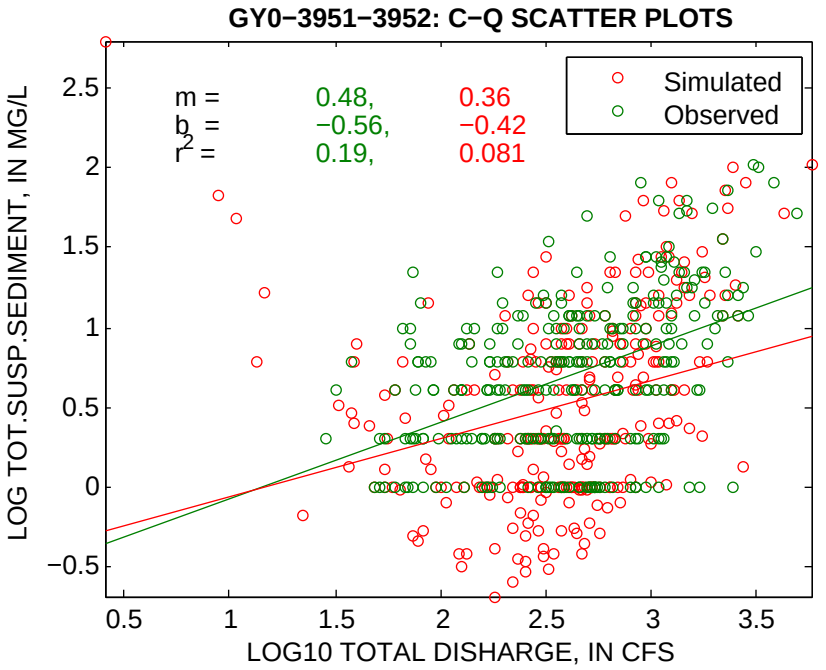
STATISTICS

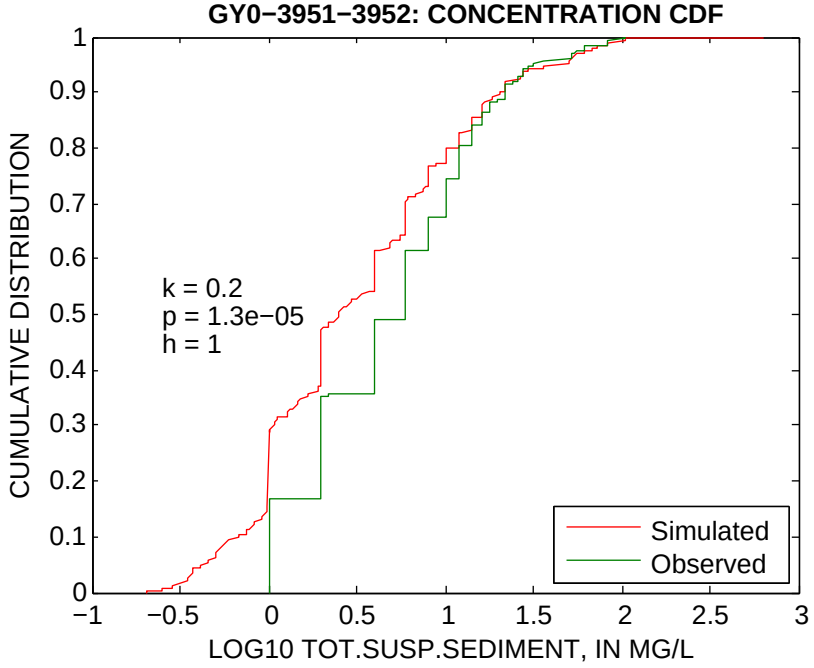
	n	observe	simulate
		287	287
min		1	0.1633
		0	-0.787014
mean		9.78815	24.6972
		0.698923	0.520896
media		6	1.7283
		0.778151	0.237619
max		104	740.29
		2.01703	2.8694
varian		218.059	4410.19
		0.24245	0.735441
JB		0.001	0.001
		0.024711	0.001
		ra	log
%		152.317	-25.4716
err.va		4732.07	0.850193
rel.std.err		21.7008	3.50667
mod.eff		-20.7008	-2.50667

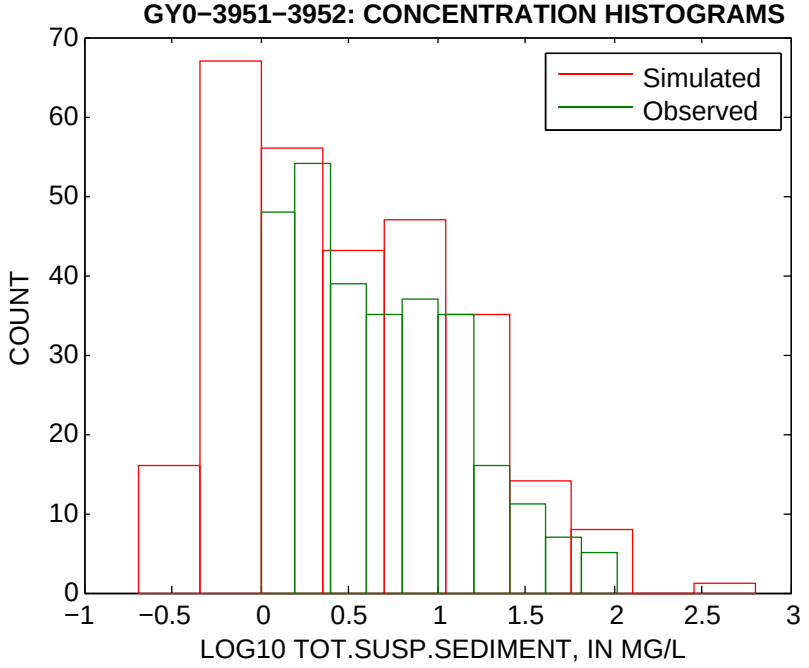
VERSION 2.1

ALL DATA
LOG10

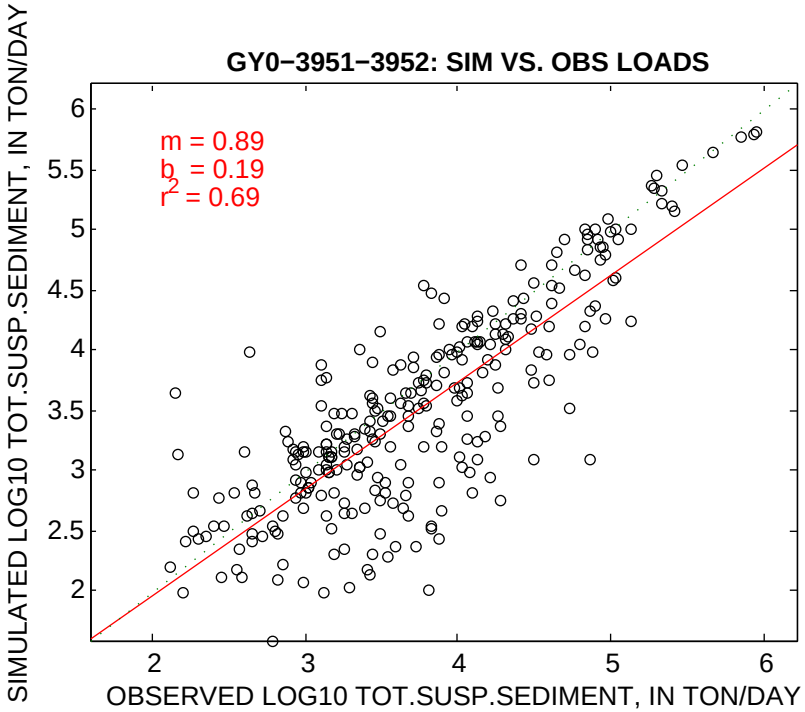


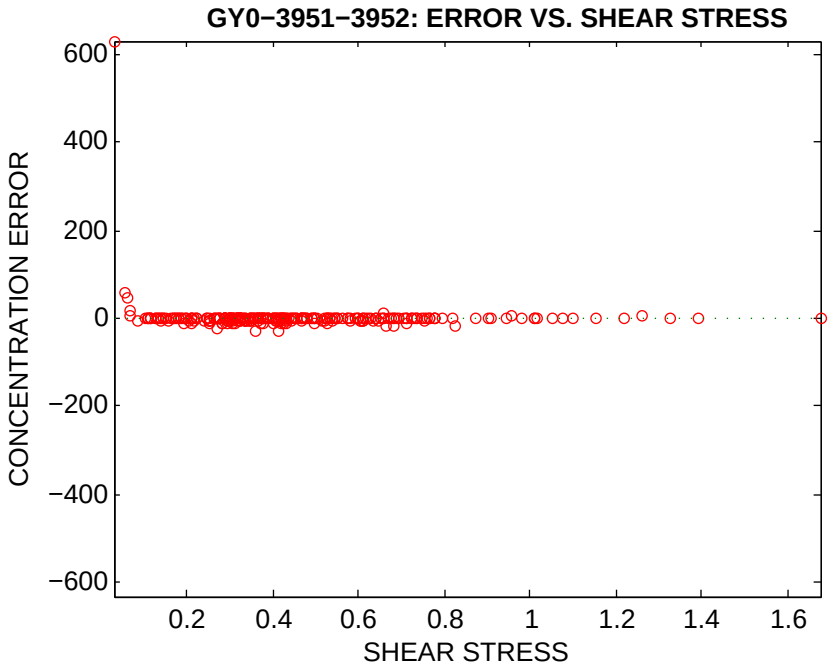


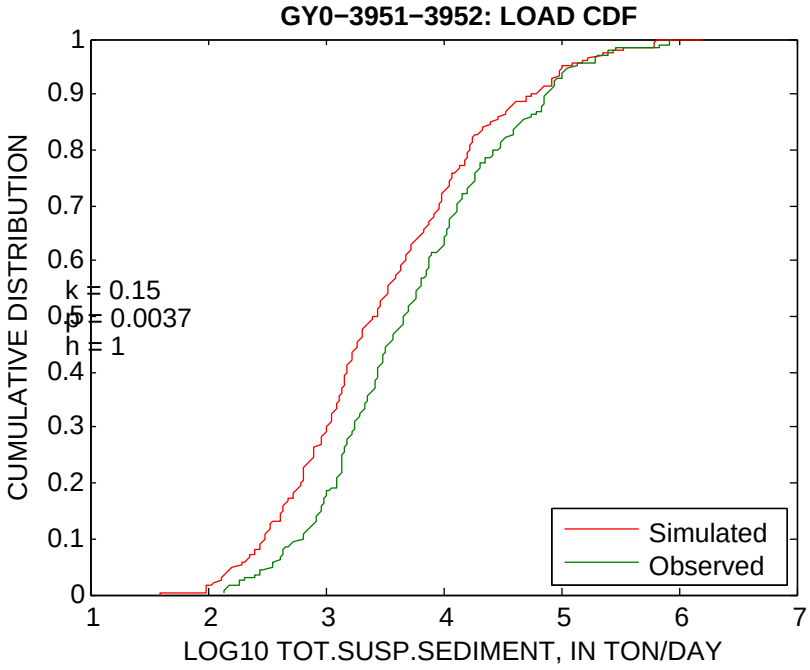


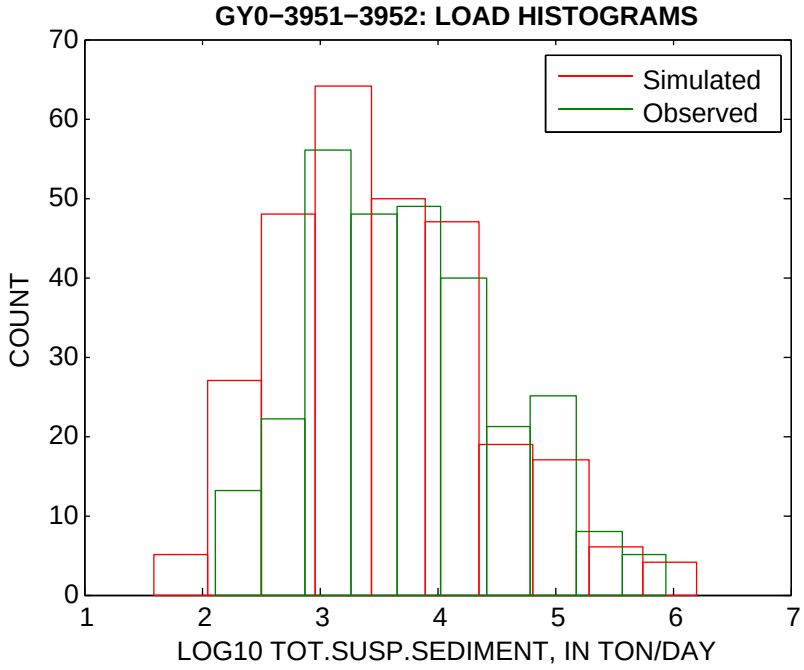


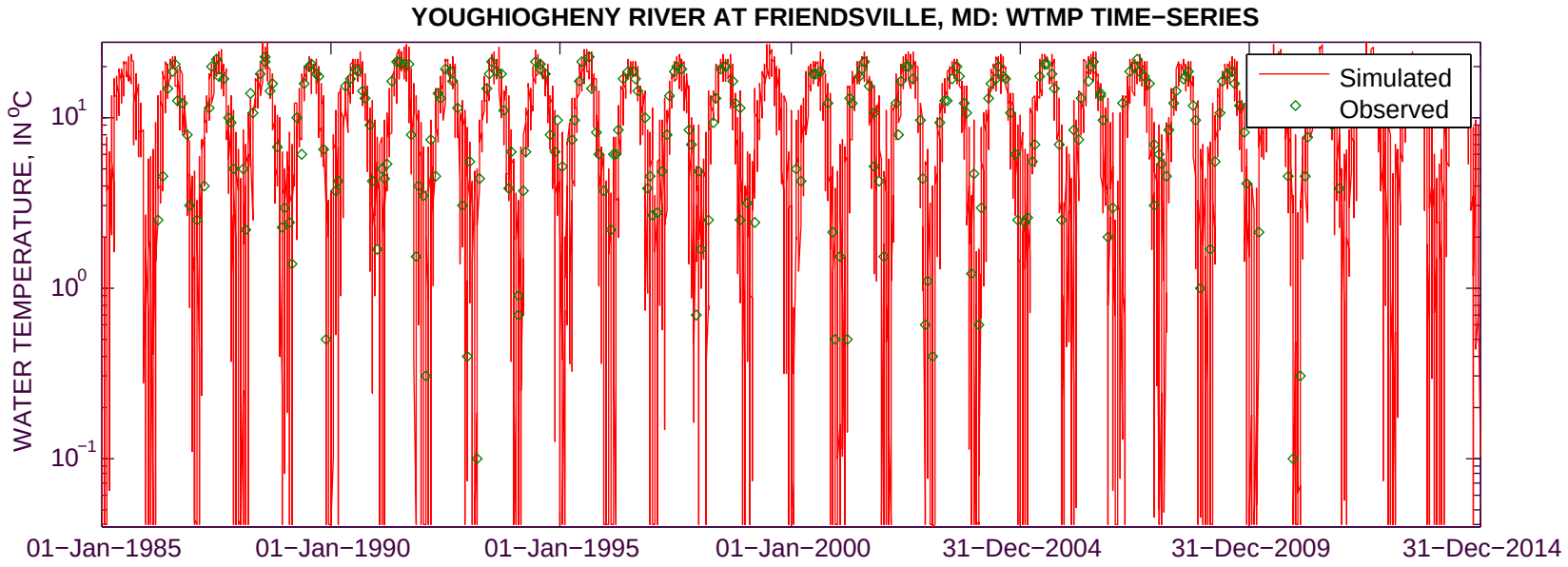
LOAD DATA
LOG10

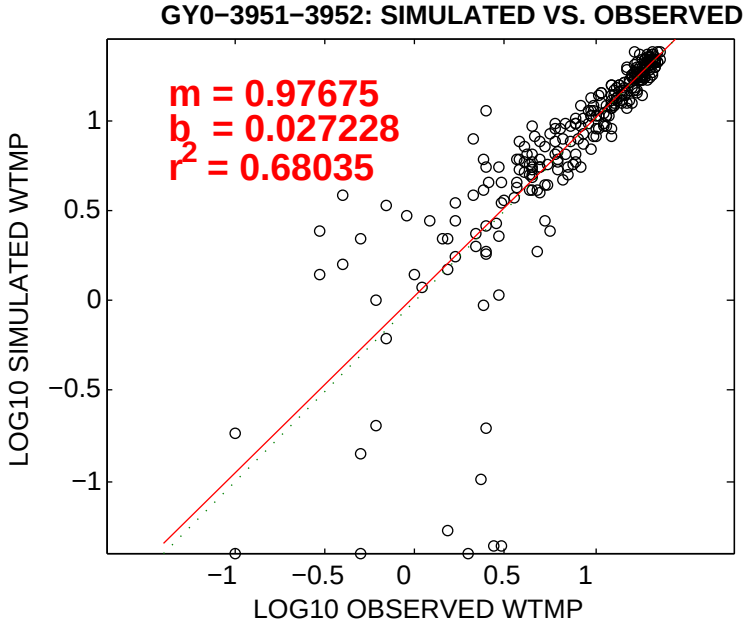


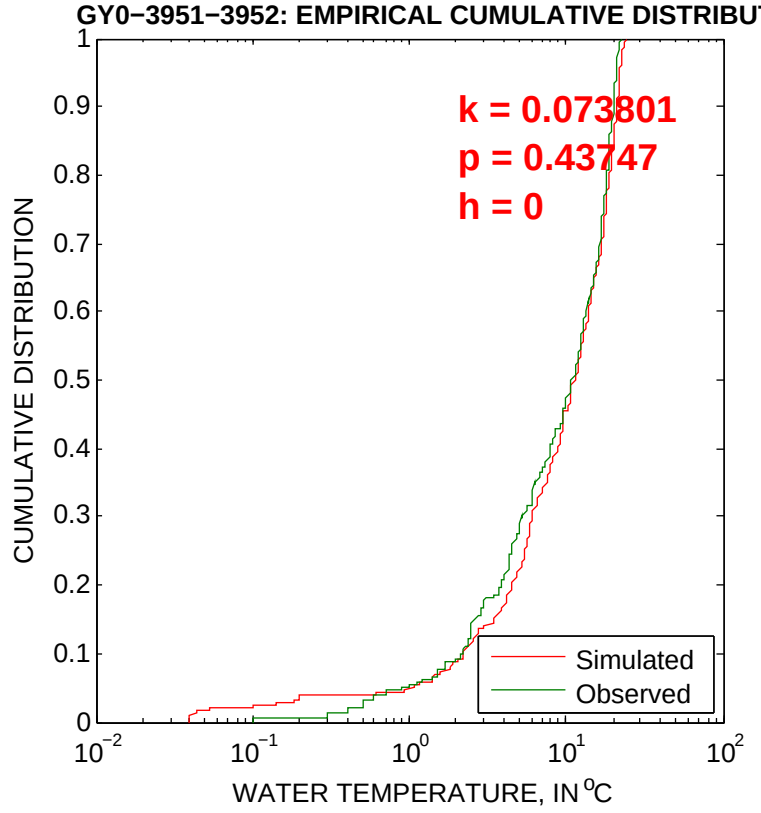












DATA SELECTION

scenario	file
P620171001WQ	WTMP.calib

plot: WTMP - water tempera...

Dates: 1/1/1985 – 12/31/201

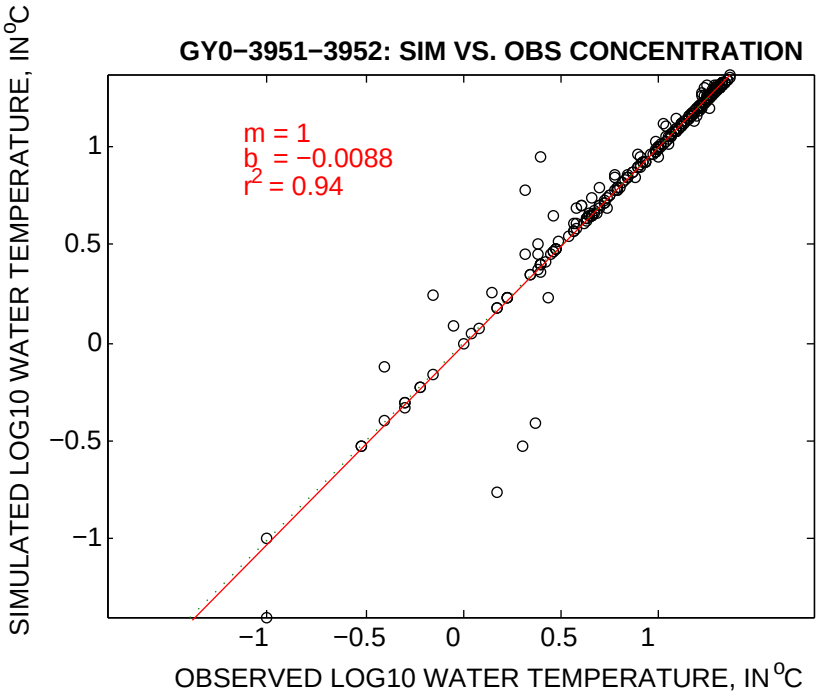
Drive	Directory	Observed
N/A	model	OBS20161101

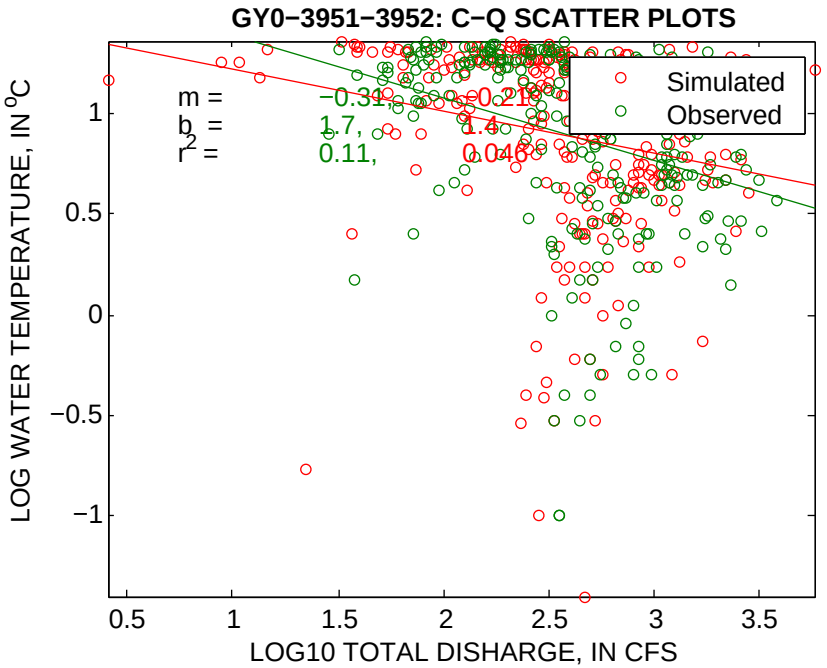
STATISTICS

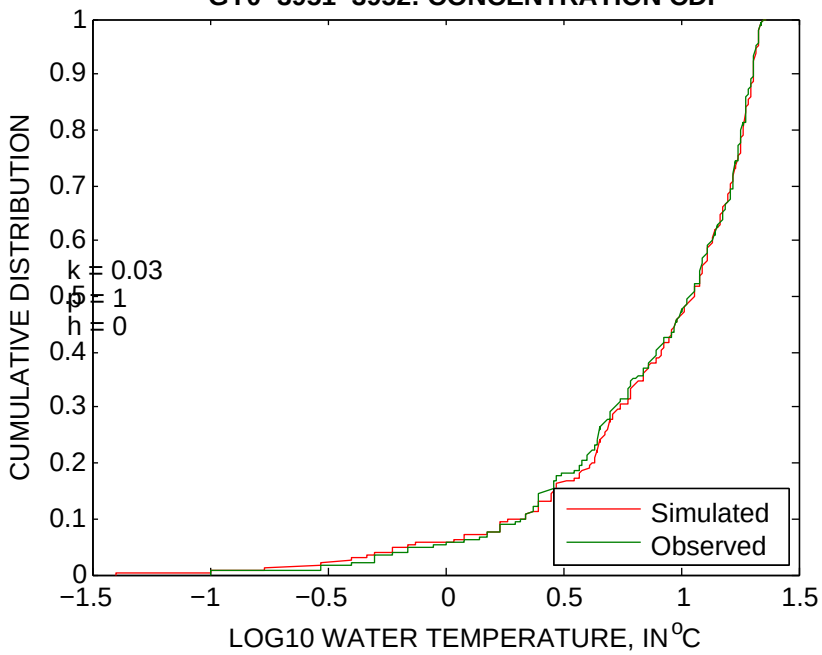
	n	271	271
		observe	simulate
min		0.1	0.040078
		-1	-1.39709
mean		10.9647	11.5612
		0.88961	0.896157
media		11	11.361
		1.04139	1.05542
max		23	24.143
		1.36173	1.38279
varian		46.5506	48.9368
		0.201287	0.28226
JB		0.001603	0.002792
		0.001	0.001
		ra	log
%		5.43952	0.735936
err.va		4.12296	0.0903751
rel.std.err		0.0885695	0.448987
mod.eff		0.911431	0.551013

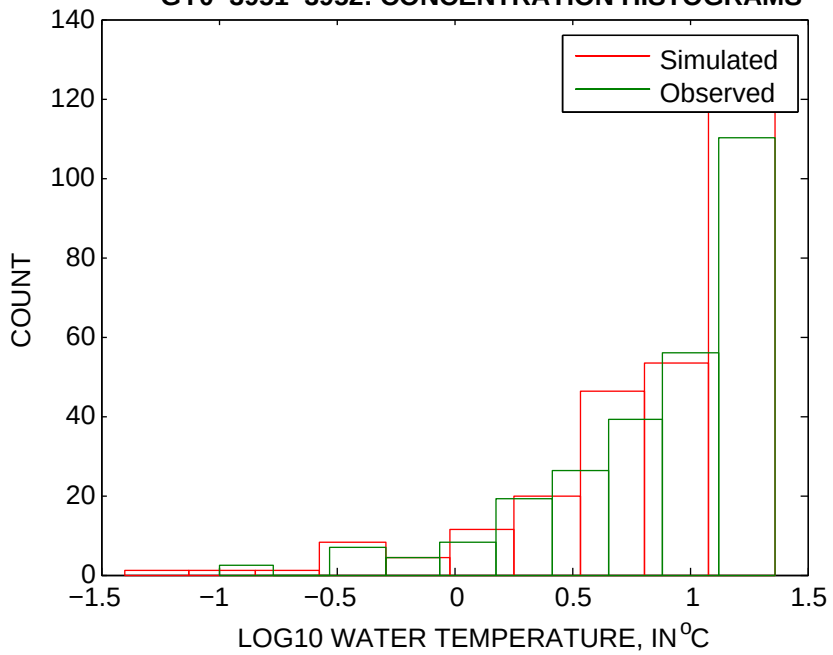
VERSION 2.1

ALL DATA
LOG10

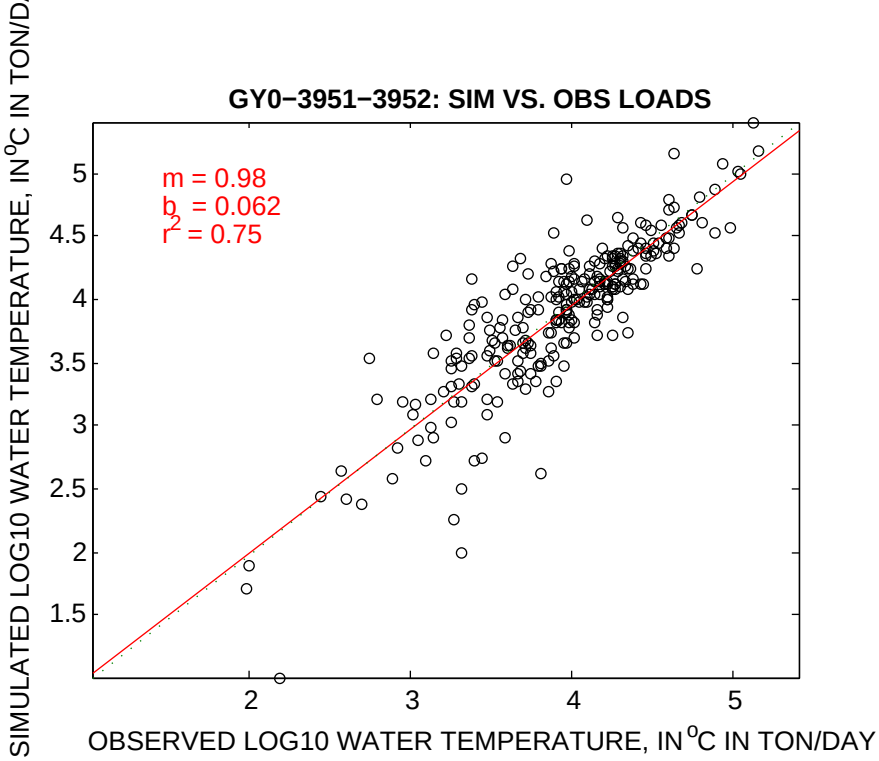


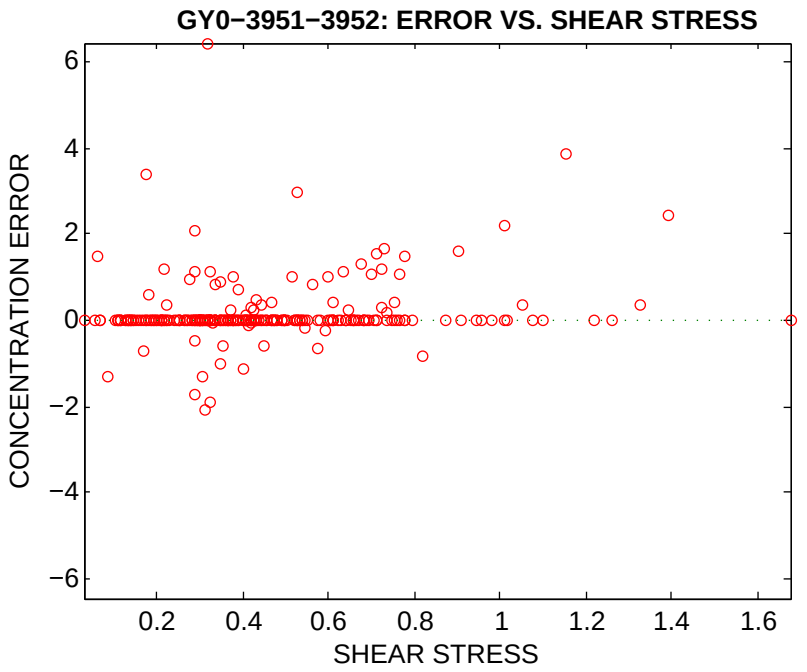


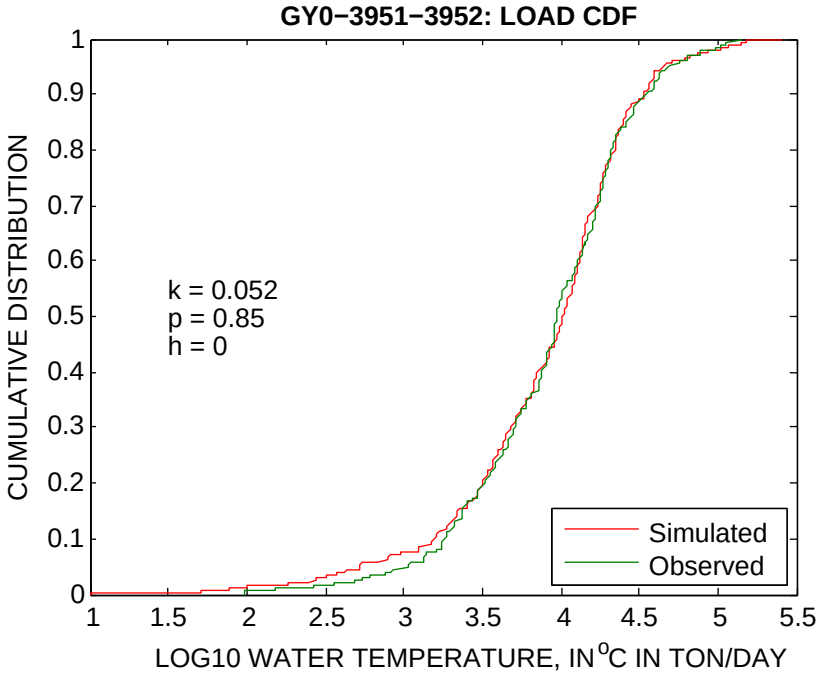


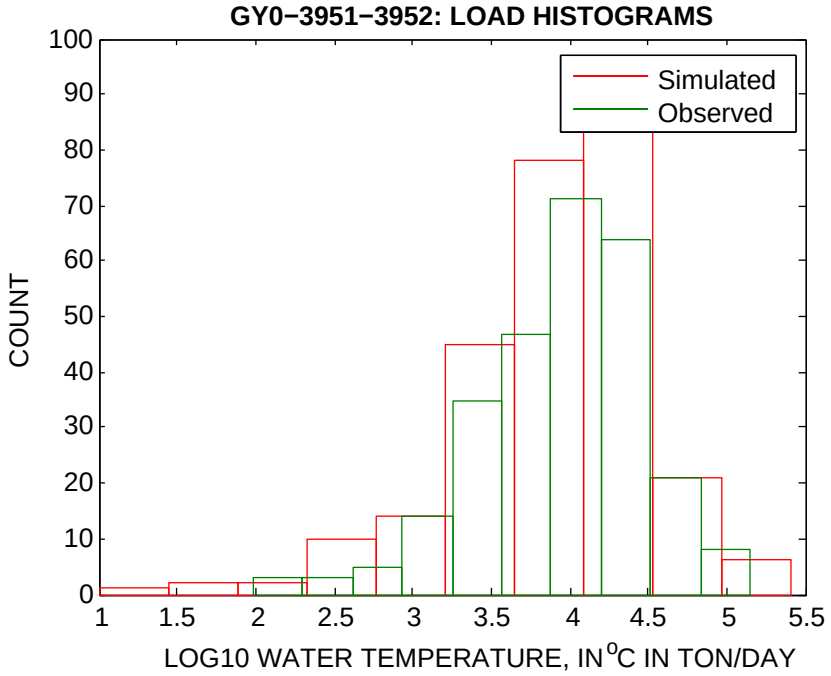


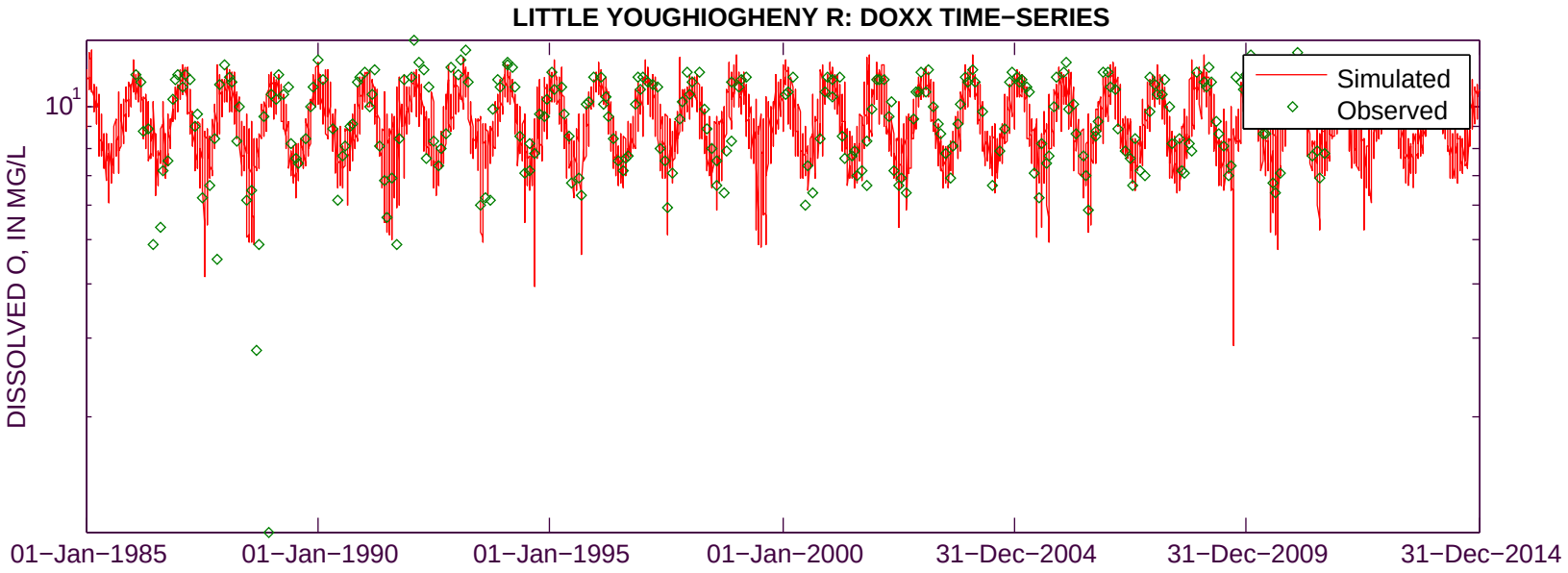
LOAD DATA
LOG10

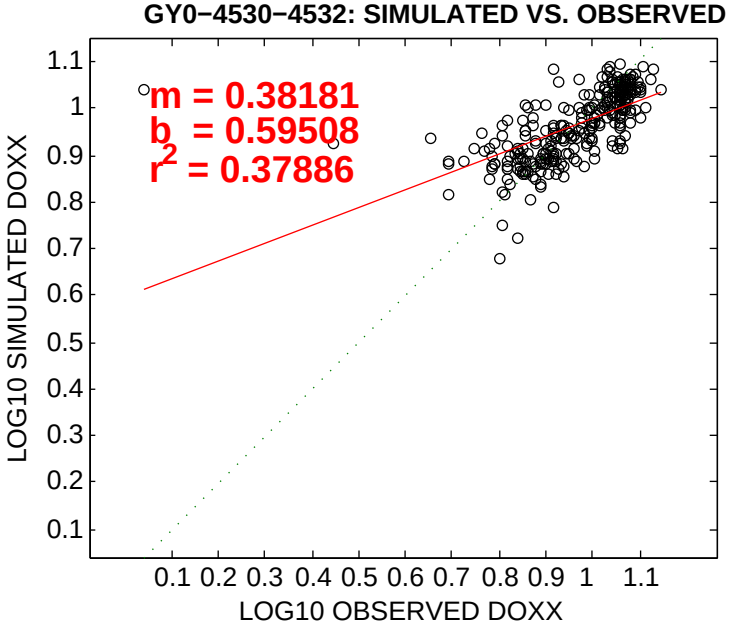


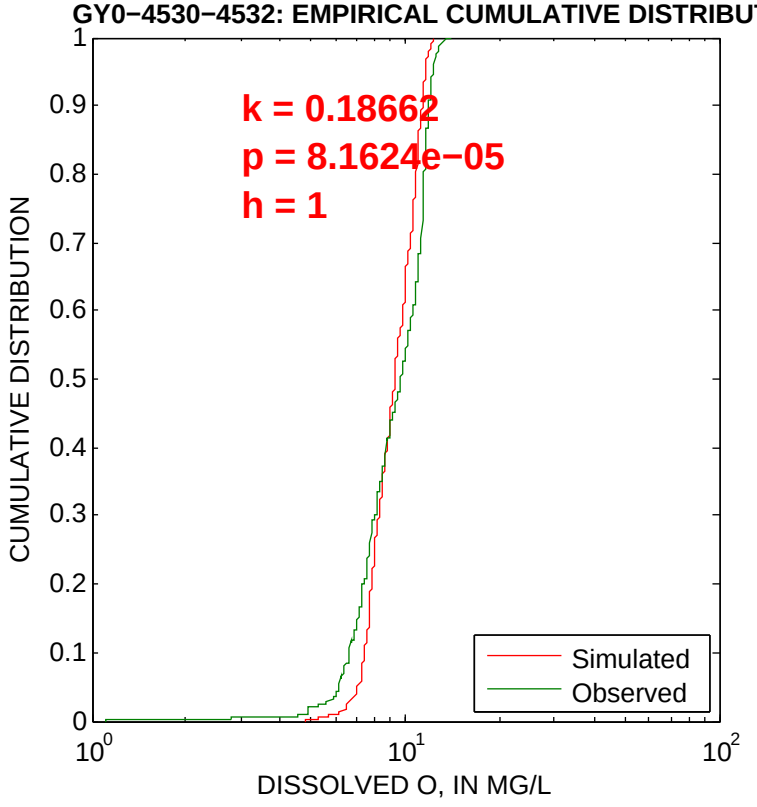












DATA SELECTION

scenario: P620171001WQ | file: DOXX.calib

plot: DOXX - dissolved oxygen

Dates: 1/1/1985 – 12/31/201

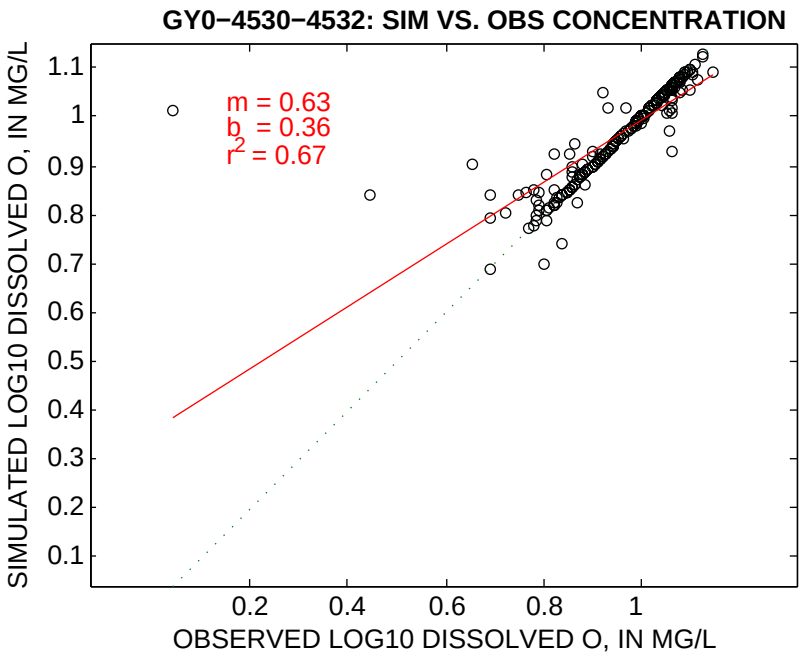
Drive: N/A | Directory: model | Observed: OBS20161101

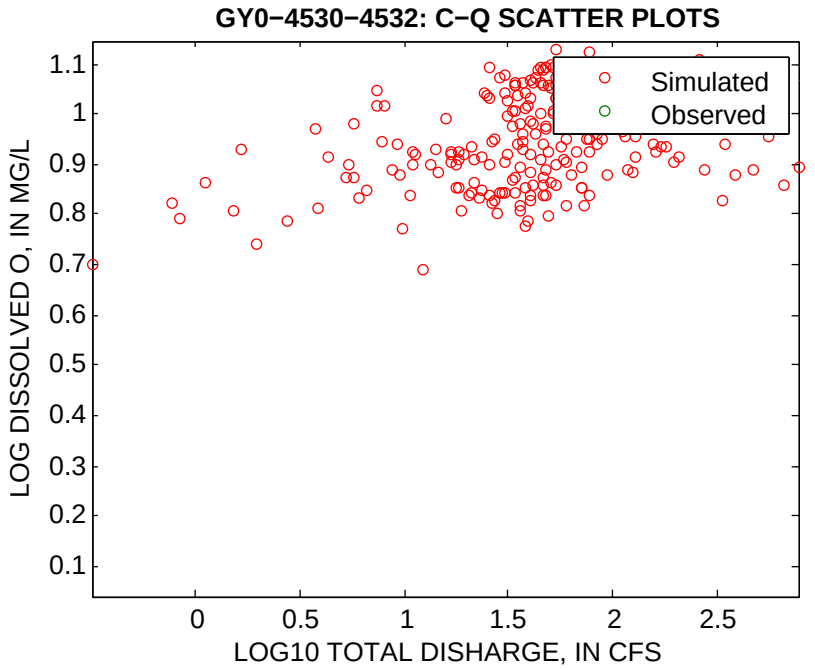
STATISTICS

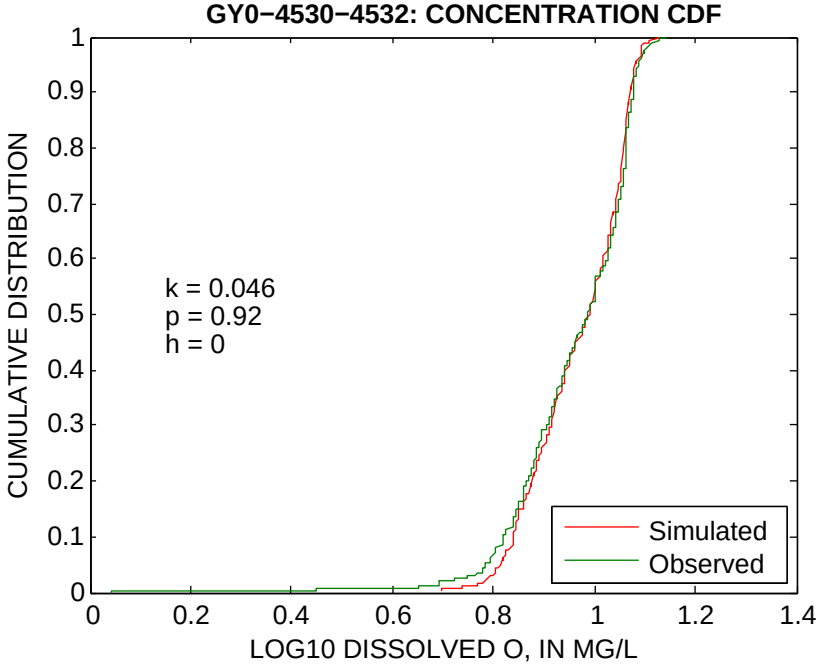
	observe	simulate
n	284	284
min	1.1	4.7762
	0.0413927	0.679083
mean	9.45264	9.29704
	0.961743	0.962288
media	9.7	9.2325
	0.986772	0.965319
max	14	12.396
	1.14613	1.09328
varian	4.6573	2.31981
	0.0140835	0.00541921
JB	0.014287	0.026389
	0.001	0.014902
	ra	log
%	-1.64615	0.0565681
err.va	2.21755	0.00874844
rel.std.err	1.476144	0.621184
mod.eff	0.523856	0.378816

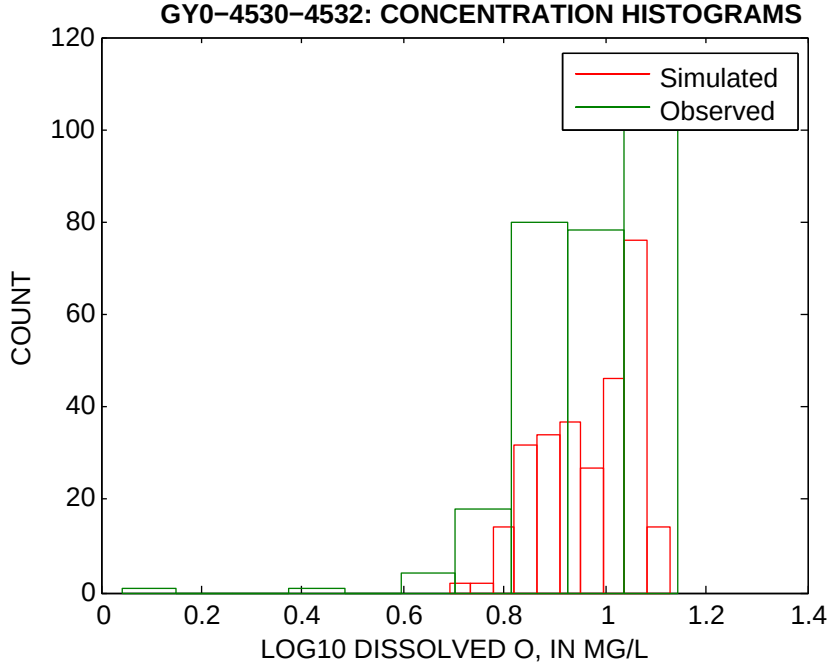
VERSION 2.1

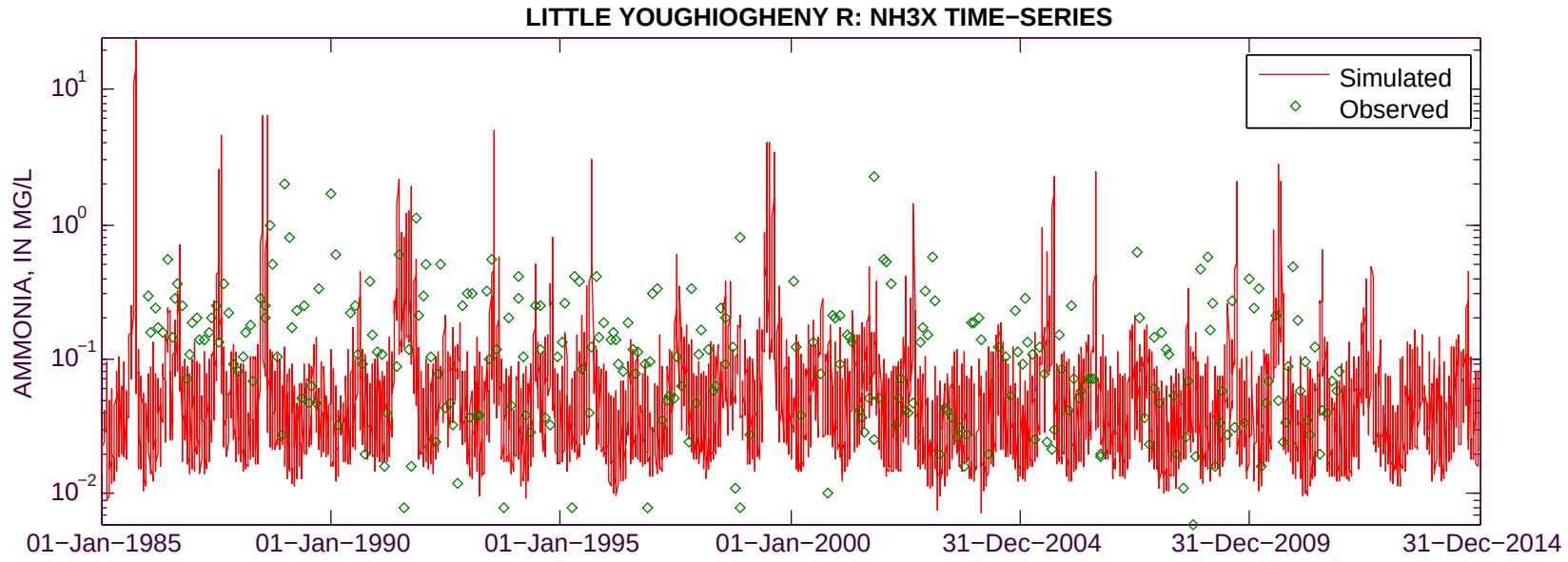
ALL DATA
LOG10

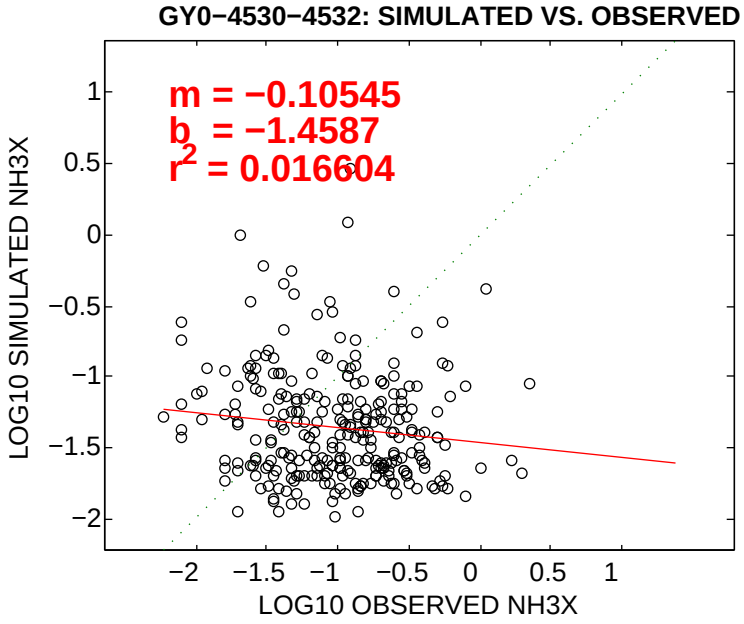


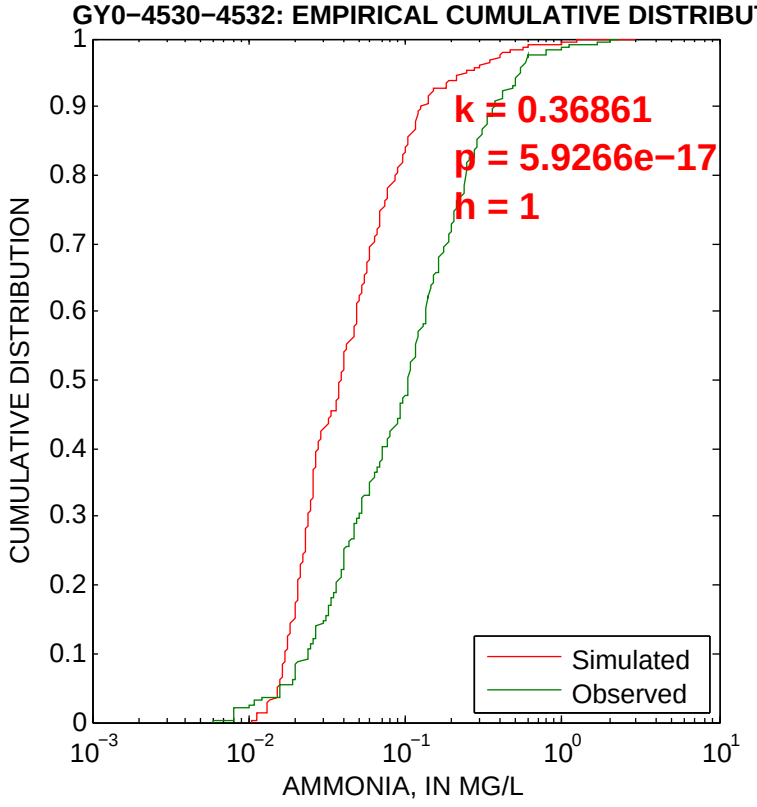












DATA SELECTION

scenario: P620171001WQ | file: NH3X.calib

plot: NH3X - ammonia

Dates: 1/1/1985 – 12/31/201

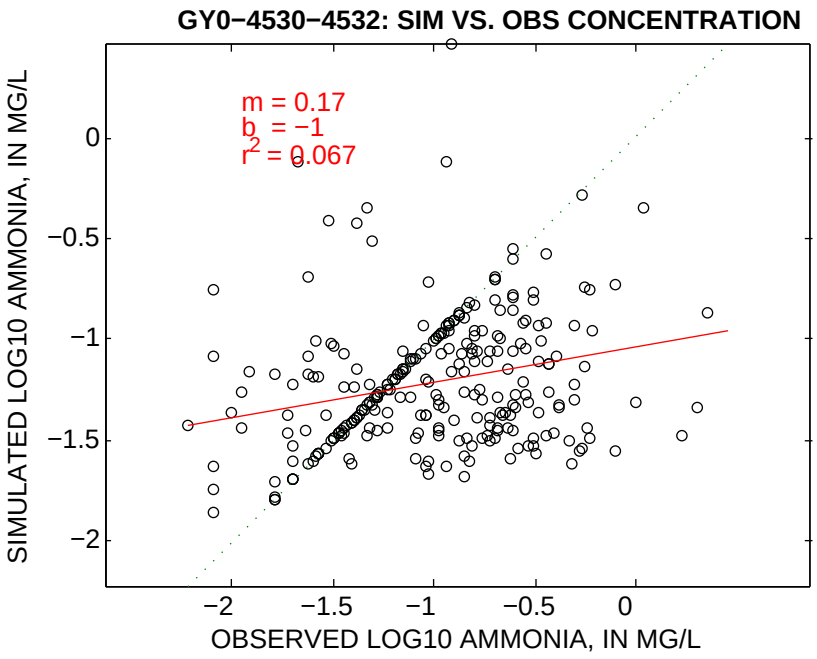
Drive | Directory | Observed: N/A | model | OBS20161101

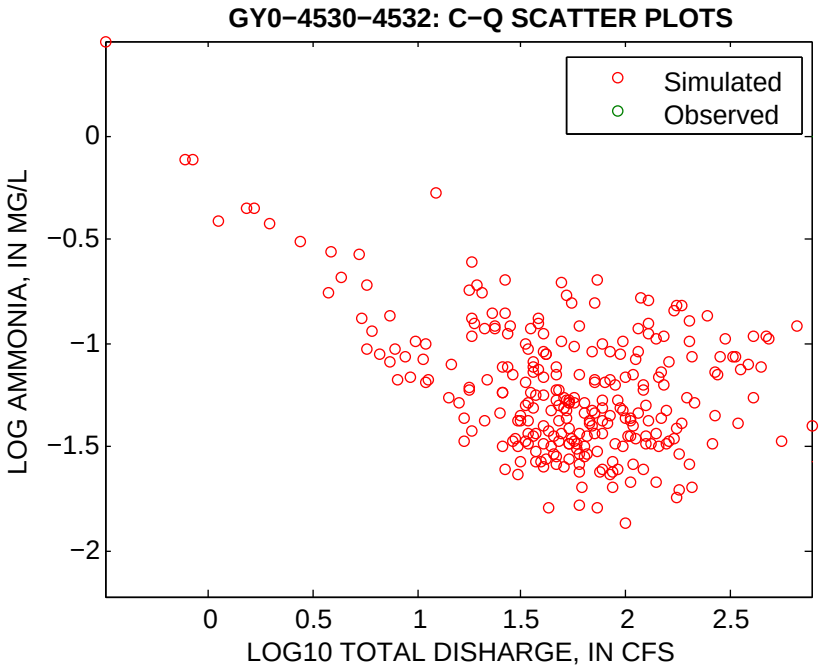
STATISTICS

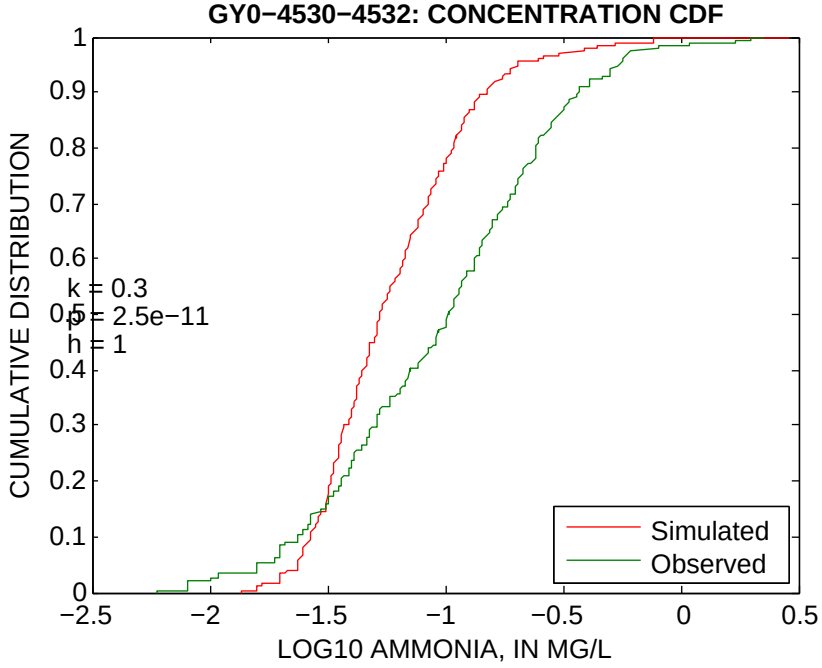
	n	274	274
		observe	simulate
min		0.006	0.010375
		-2.22185	-1.98401
mean		0.174832	0.0826512
		-1.01362	-1.35178
media		0.1045	0.038761
		-0.980889	-1.41161
max		2.264	2.967
		0.354876	0.472318
varian		0.0639631	0.0454679
		0.226723	0.151843
JB		0.001	0.001
		0.5	0.001
		ra	log
%		-52.7254	33.3612
err.va		0.121293	0.541152
rel.std.err		1.8963	2.38684
mod.eff		-0.896304	-1.38684

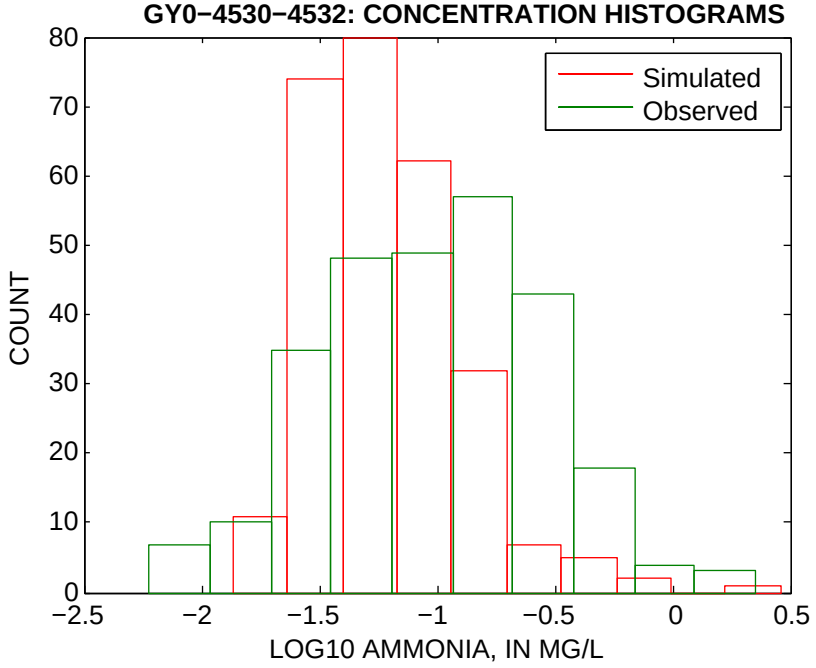
VERSION 2.1

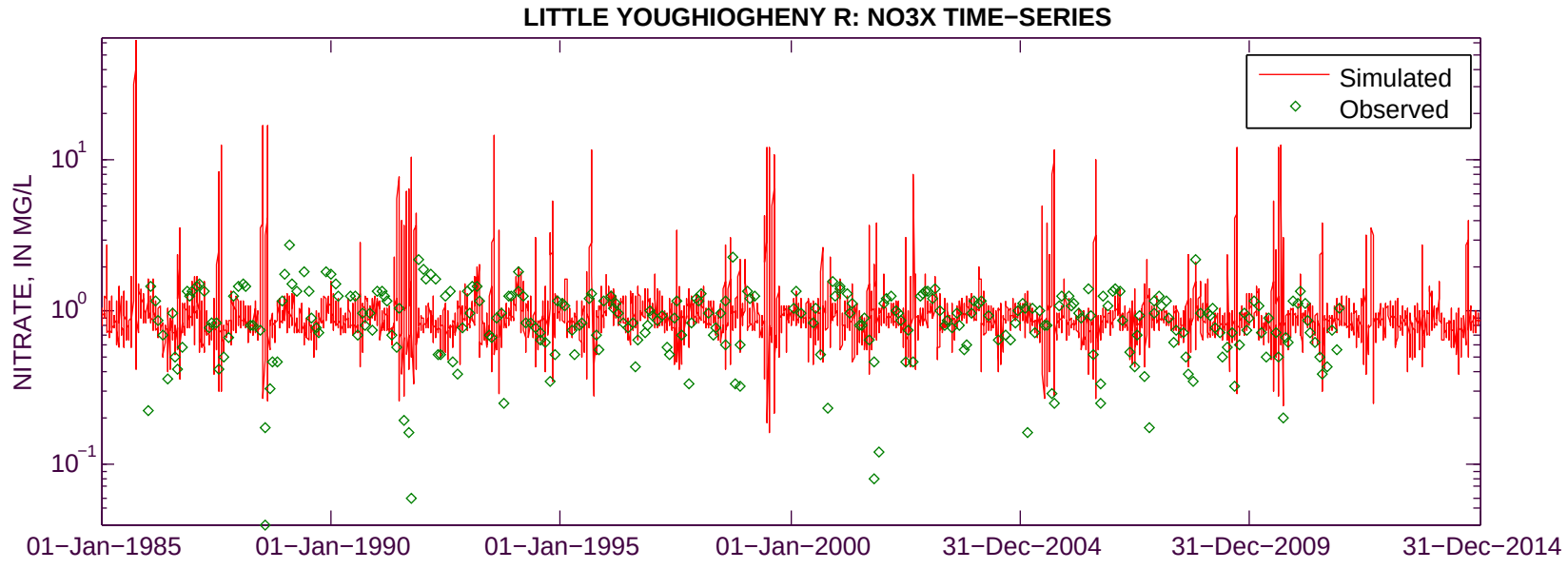
ALL DATA
LOG10

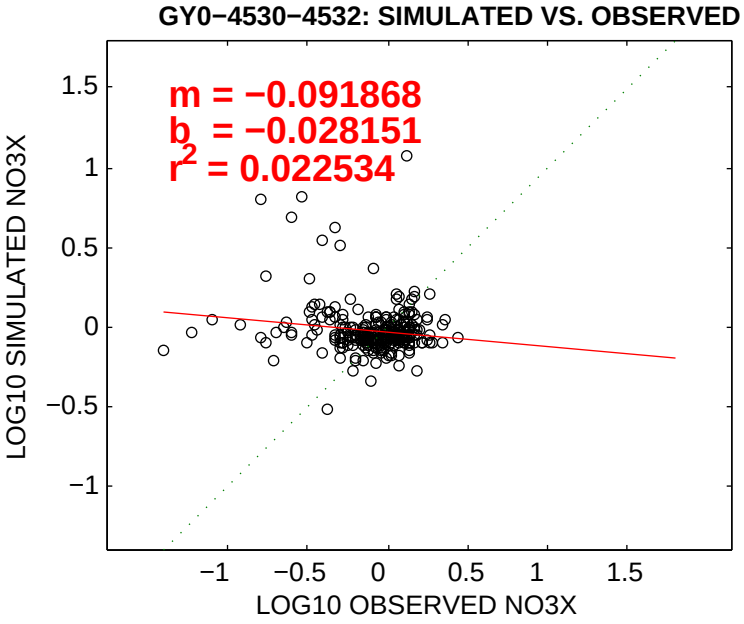


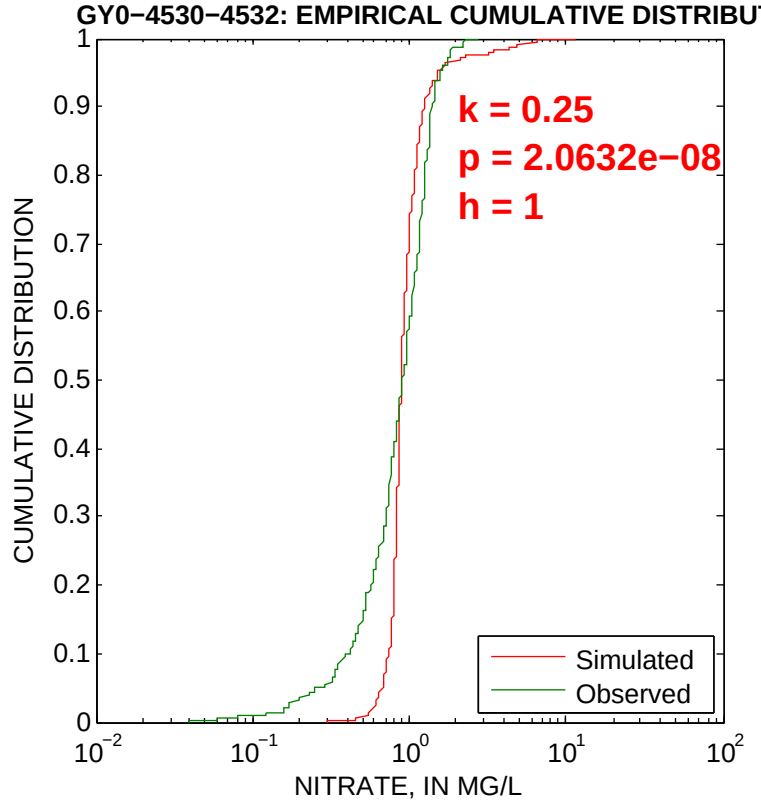












DATA SELECTION

scenario	file
P620171001WQ	NO3X.calib

plot: NO3X - nitrate

Dates: 1/1/1985 – 12/31/201

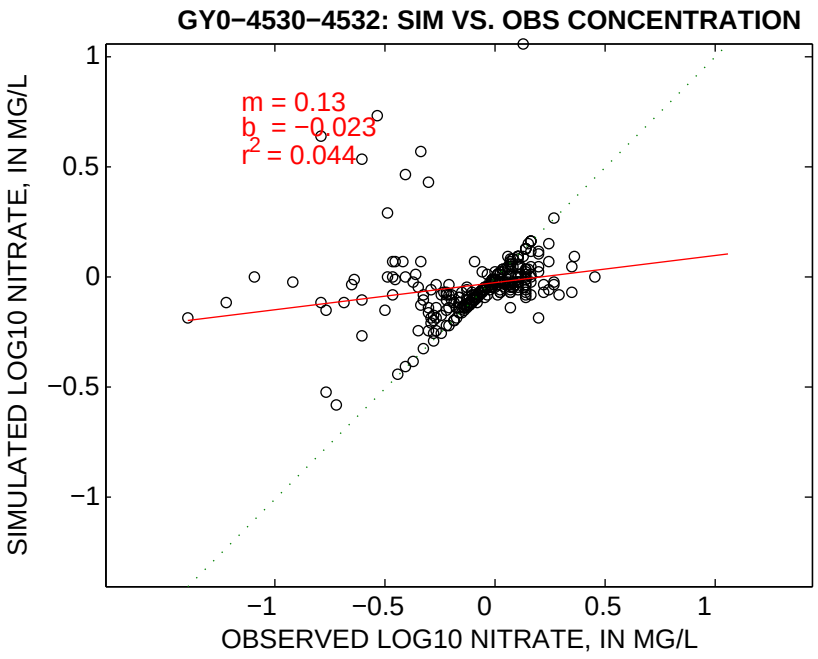
Drive	Directory	Observed
N/A	model	OBS20161101

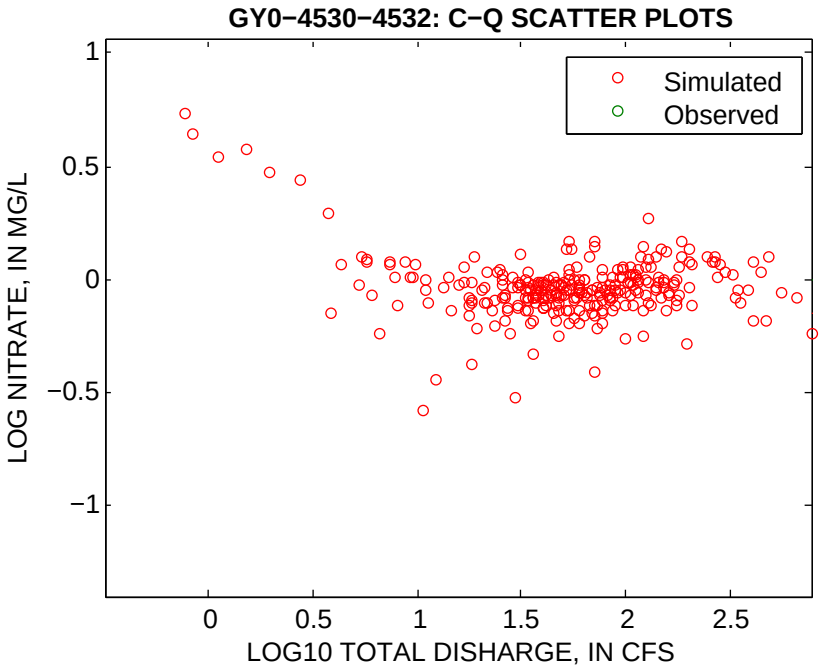
STATISTICS

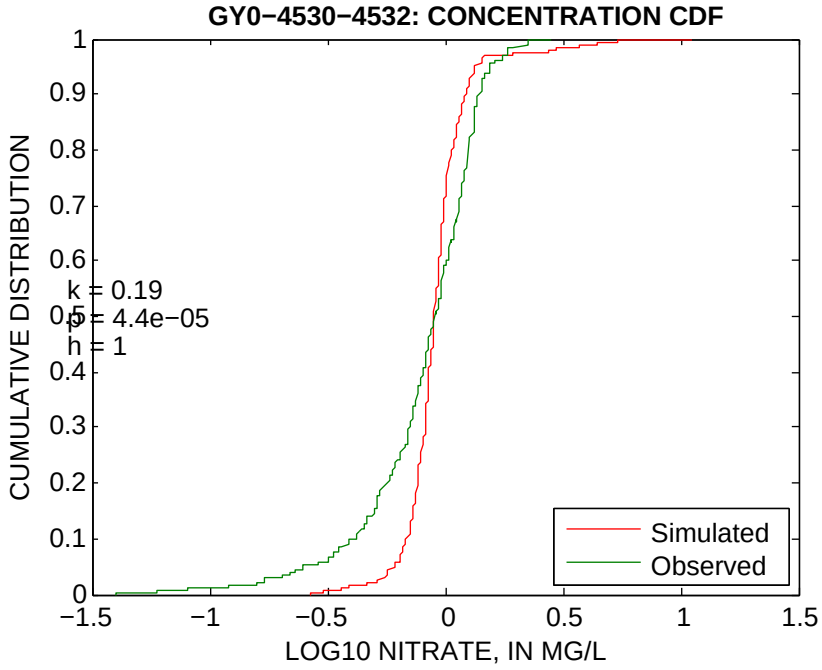
	n	288	288
		observe	simulate
min		0.04	0.30577
		-1.39794	-0.514605
mean		0.930372	1.05713
		-0.0883392	-0.0200359
media		0.91	0.889455
		-0.0409586	-0.0508761
max		2.8	11.676
		0.447158	1.06729
varian		0.175045	0.787085
		0.0637791	0.0238877
JB		0.001	0.001
		0.001	0.001
		ra	log
%		13.6249	-77.3193
err.va		1.0478	0.104067
rel.std.err		5.9859	1.63168
mod.eff		-4.9859	-0.631677

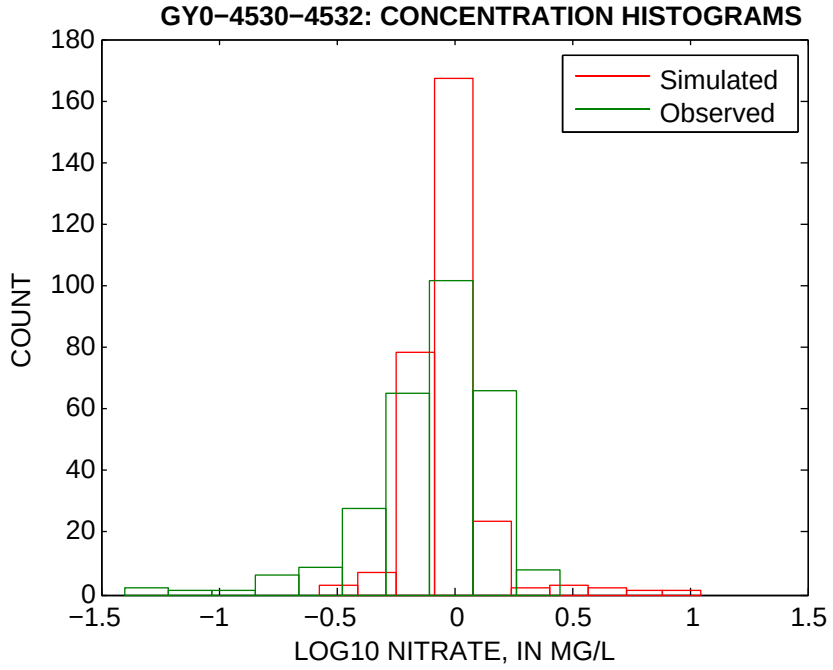
VERSION

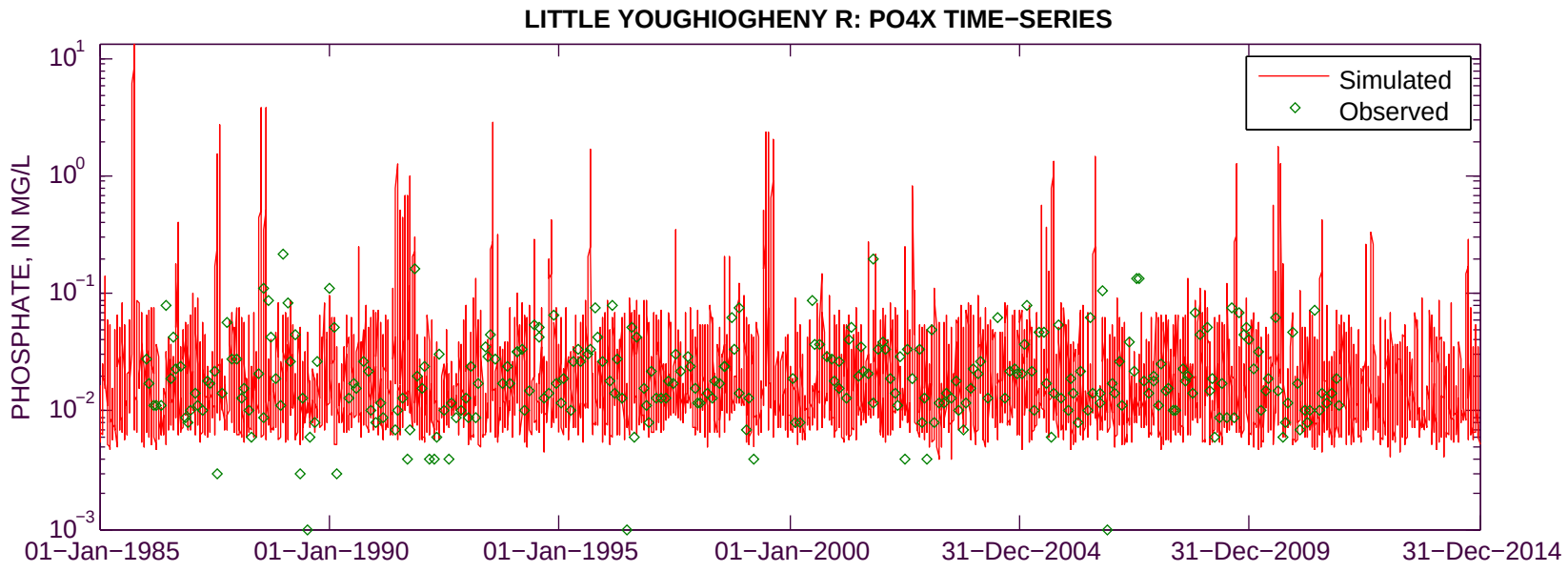
ALL DATA
LOG10

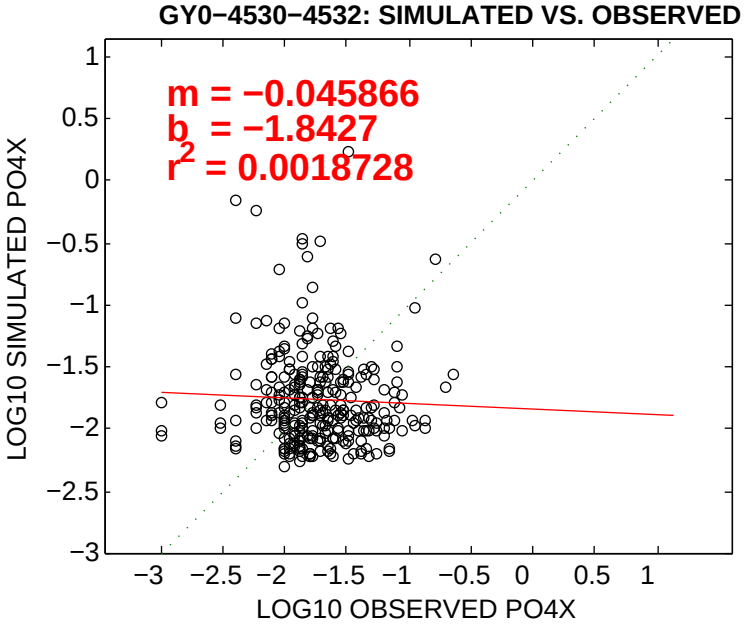


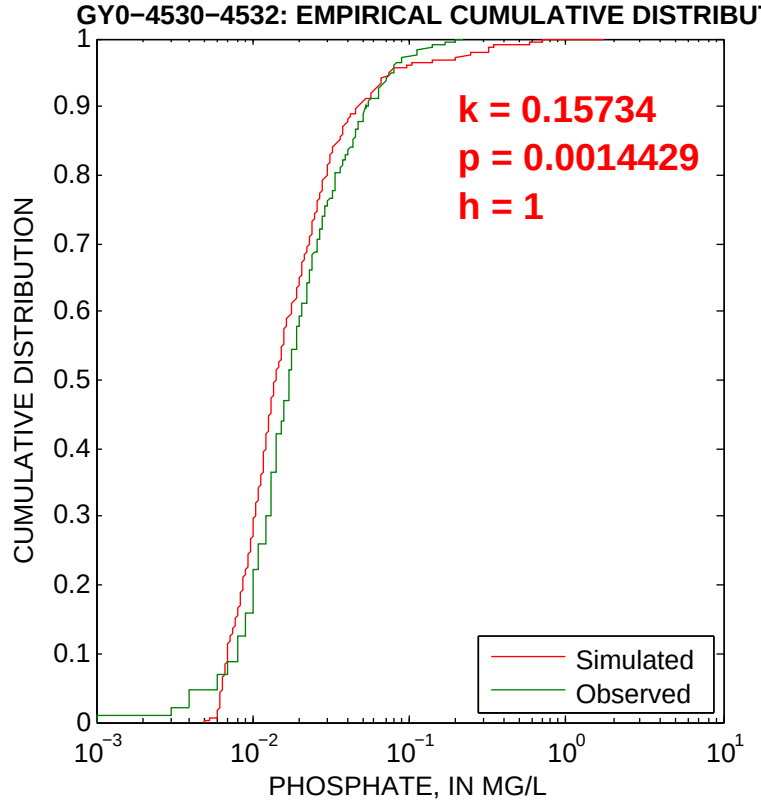












DATA SELECTION

scenario	file
P620171001WQ	PO4X.calib

plot: PO4X - phosphate

Dates: 1/1/1985 – 12/31/201

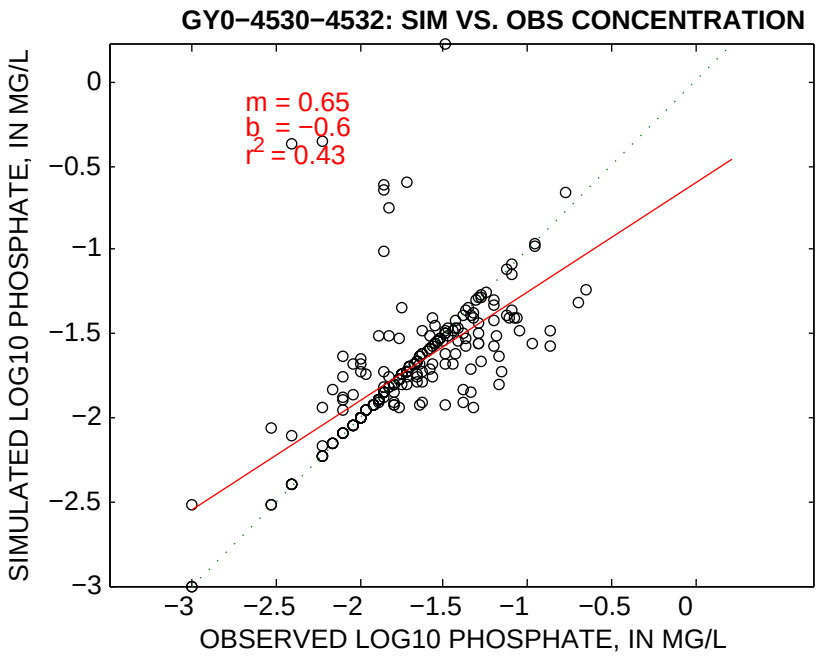
Drive	Directory	Observed
N/A	model	OBS20161101

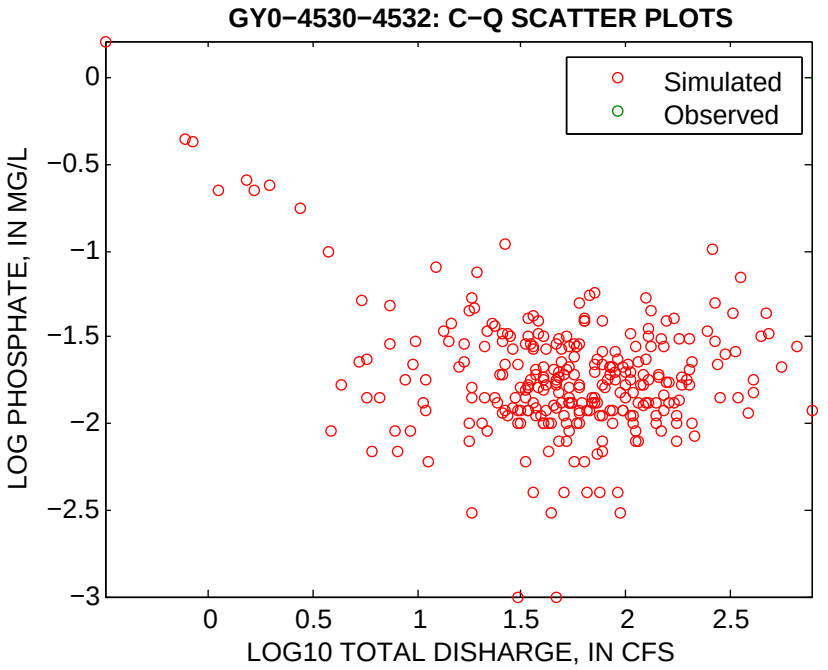
STATISTICS

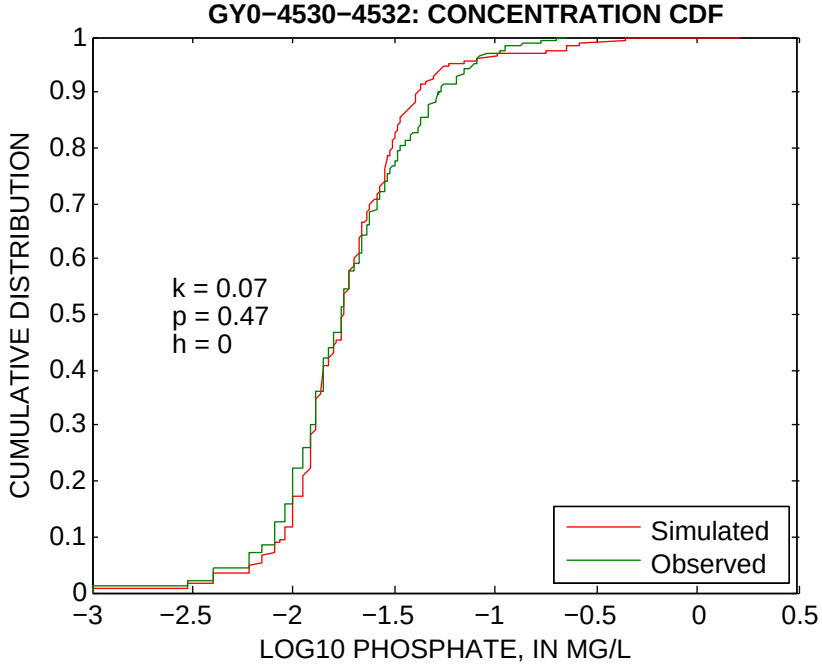
	n	286	286
		observe	simulate
min		0.001	0.0049246
		-3	-2.30763
mean		0.0262378	0.0357333
		-1.73486	-1.76317
media		0.017	0.0140085
		-1.76955	-1.85361
max		0.223	1.7151
		-0.651695	0.234289
varian		0.00078939	0.0143601
		0.128754	0.144634
JB		0.001	0.001
		0.002706	0.001
		ra	log
%		36.1903	1.63139
err.va		0.0152615	0.286002
rel.std.err		19.3332	2.22131
mod.eff		-18.3332	-1.22131

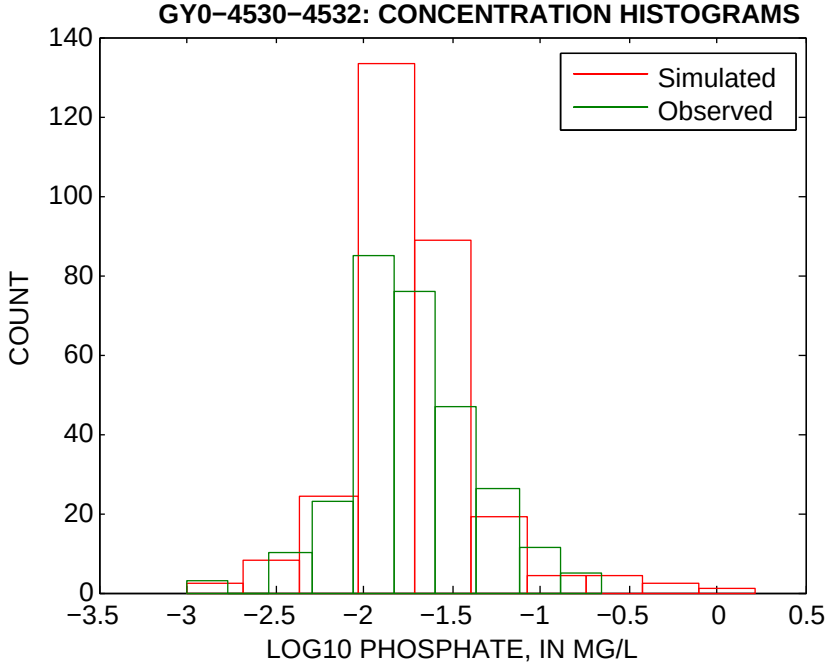
VERSION 2.1

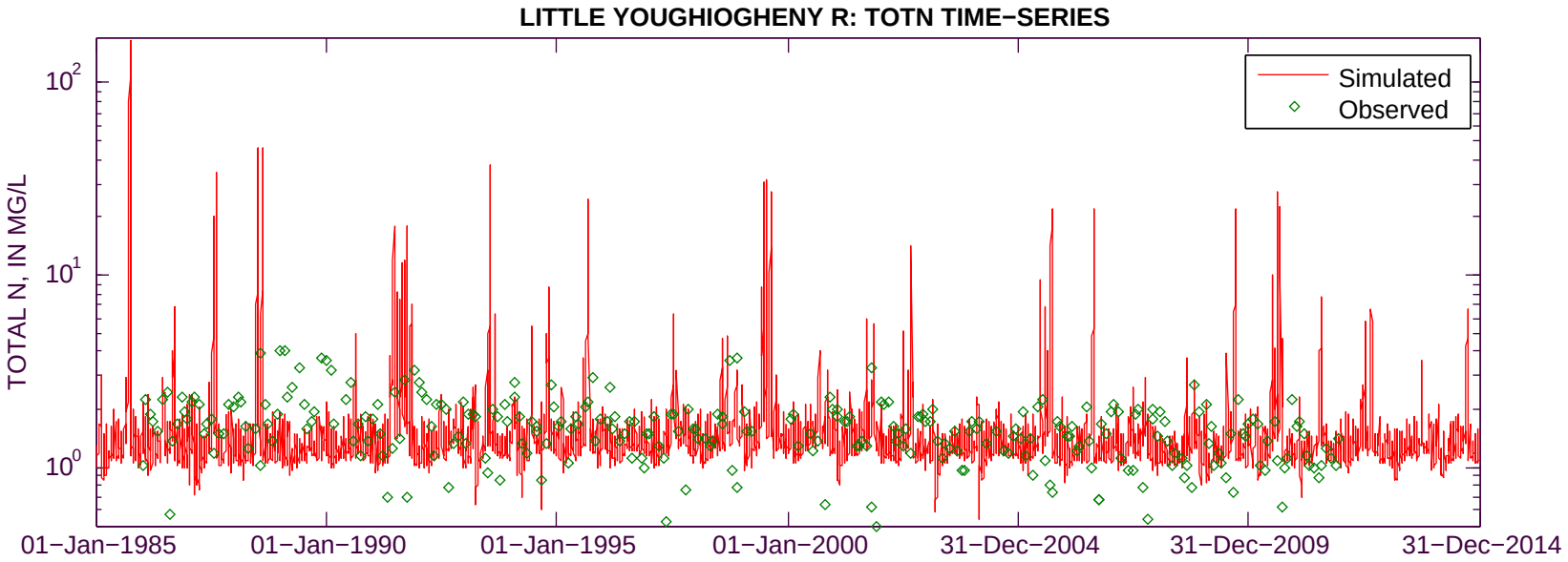
ALL DATA
LOG10

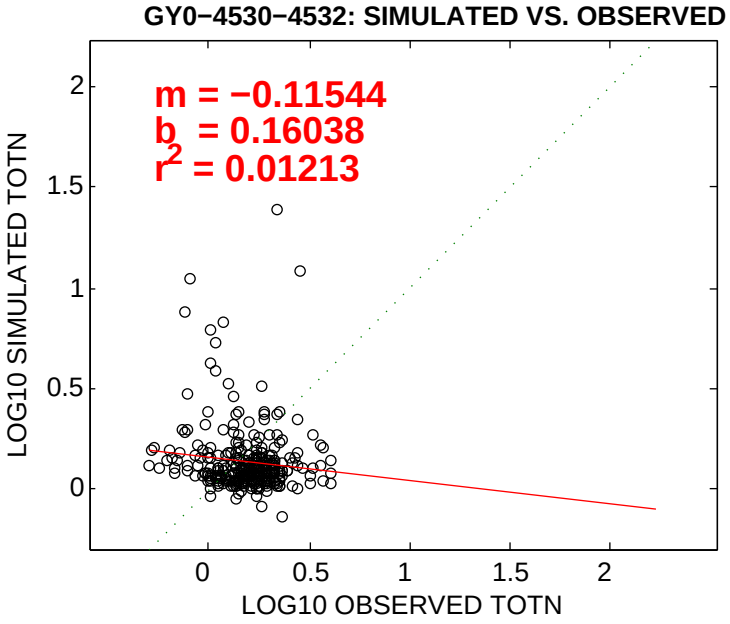


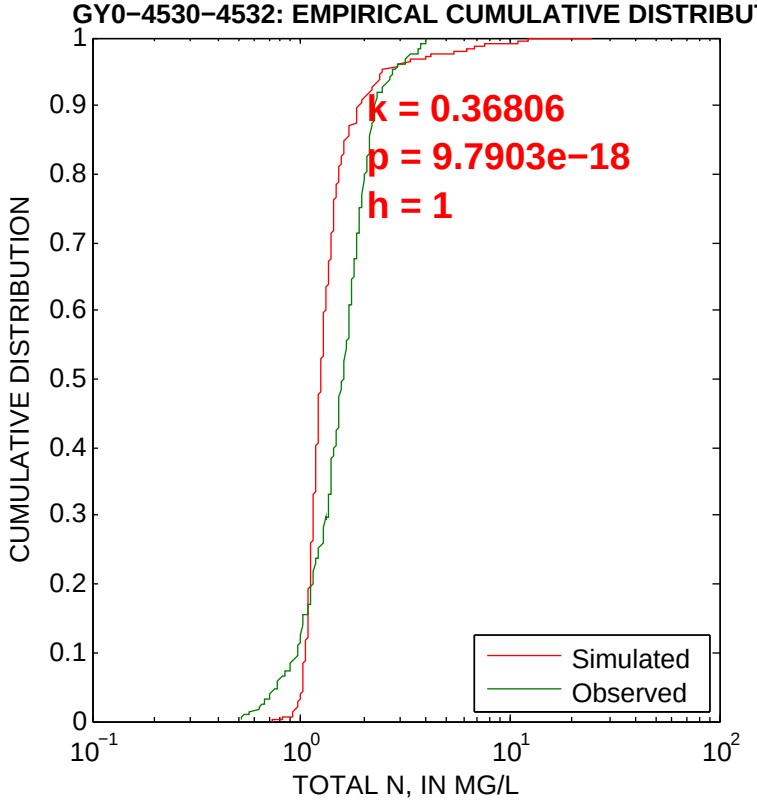












DATA SELECTION

scenario	file
P620171001WQ	TOTN.calib

plot: TOTN - total nitrogen

Dates: 1/1/1985 – 12/31/201

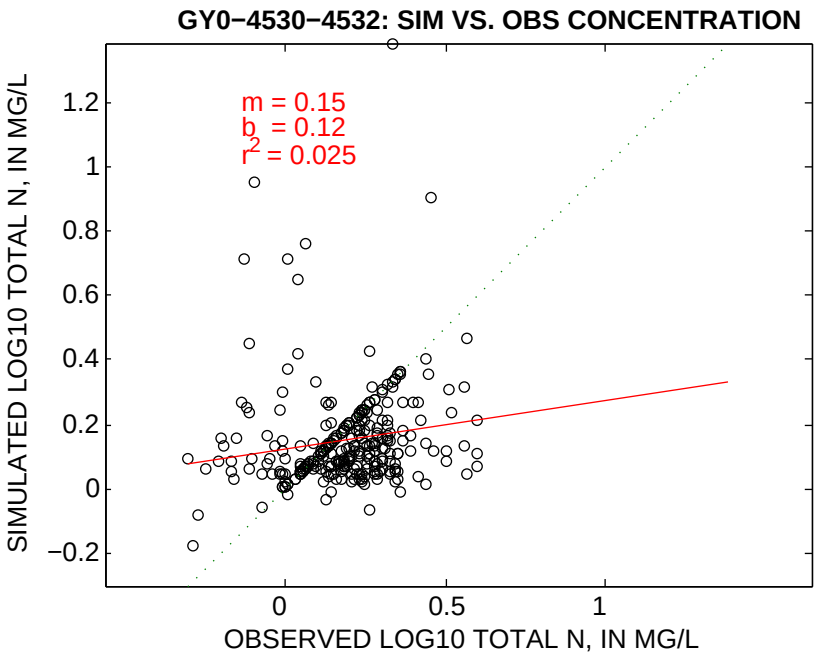
Drive	Directory	Observed
N/A	model	OBS20161101

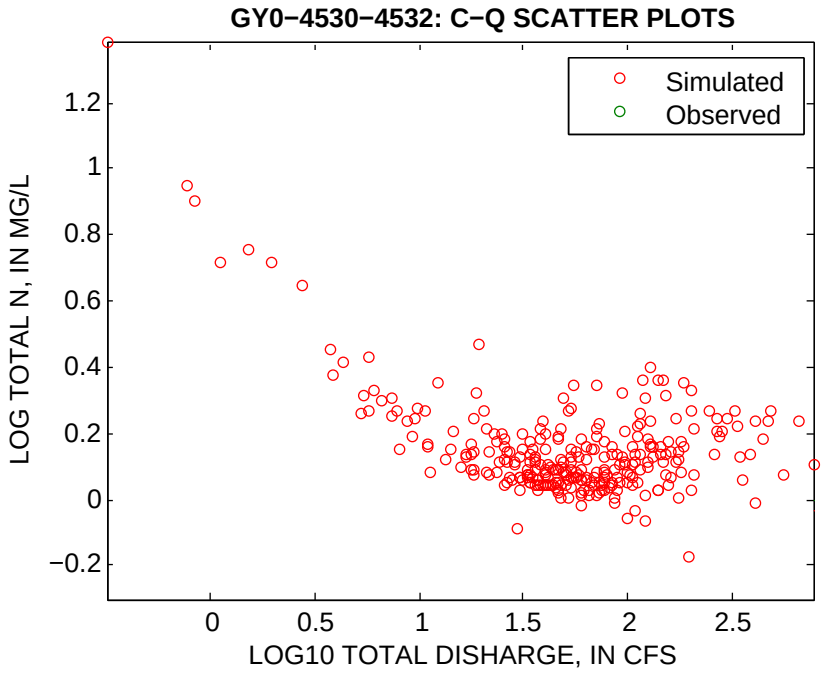
STATISTICS

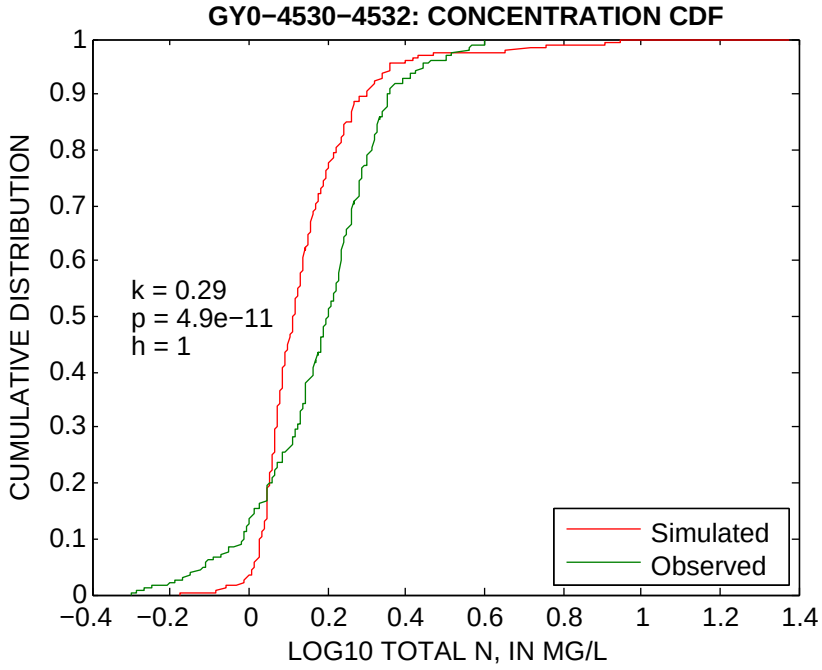
	n	288	288
		observe	simulate
min		0.5	0.72916
		-0.30103	-0.137177
mean		1.64621	1.58275
		0.186775	0.138816
media		1.595	1.24485
		0.202759	0.0951166
max		4	24.643
		0.60206	1.39169
varian		0.385119	3.12626
		0.0266238	0.02925
JB		0.001	0.001
		0.041801	0.001
		ra	log
%		-3.85501	-25.6776
err.va		3.534	0.0643289
rel.std.err		9.17638	2.41622
mod.eff		-8.17638	-1.41622

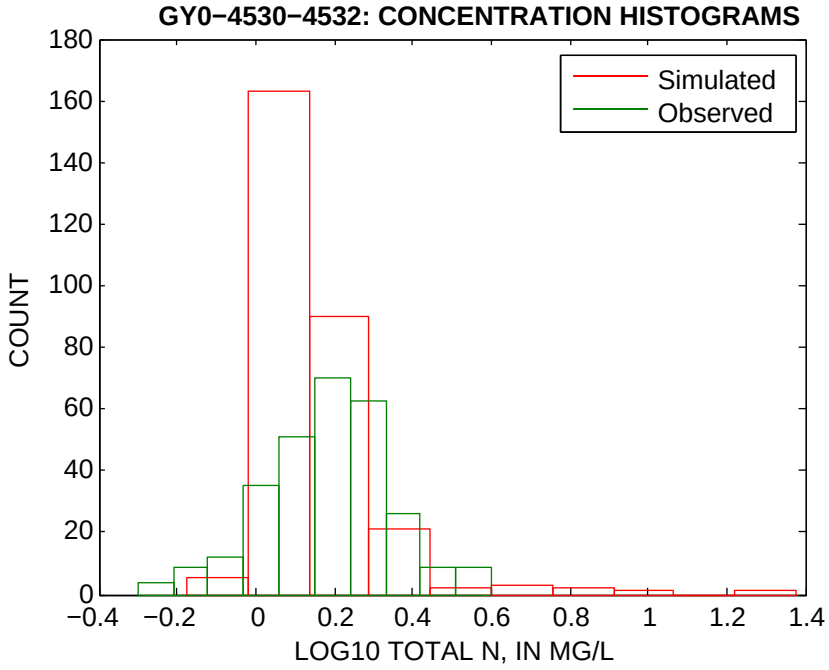
VERSION 3.1

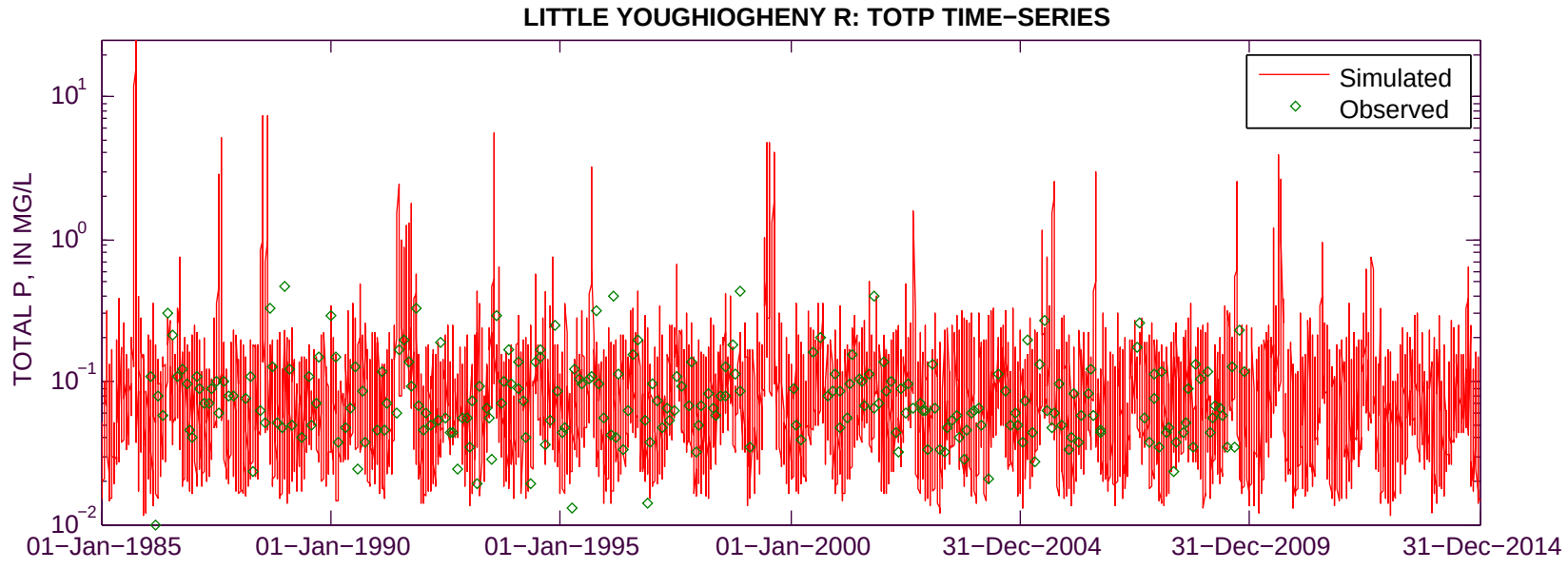
ALL DATA
LOG10

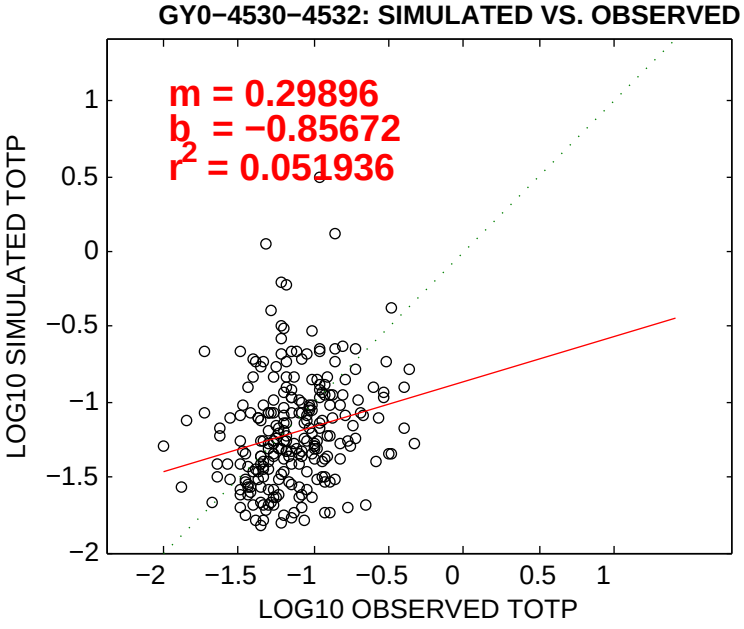


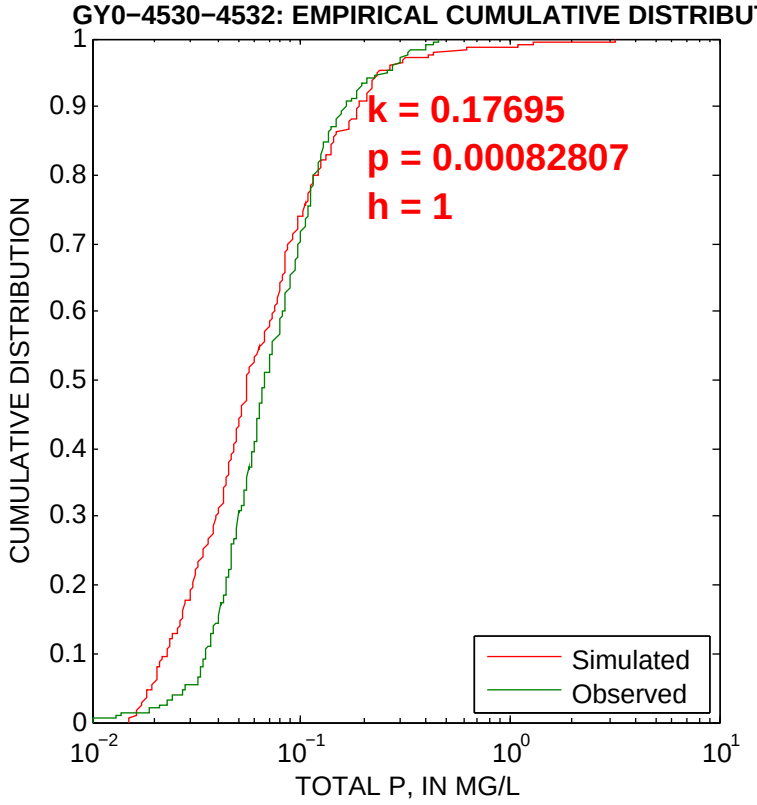












DATA SELECTION

scenario	file
P620171001WQ	TOTP.calib

plot: TOTP - total phosphorus

Dates: 1/1/1985 – 12/31/201

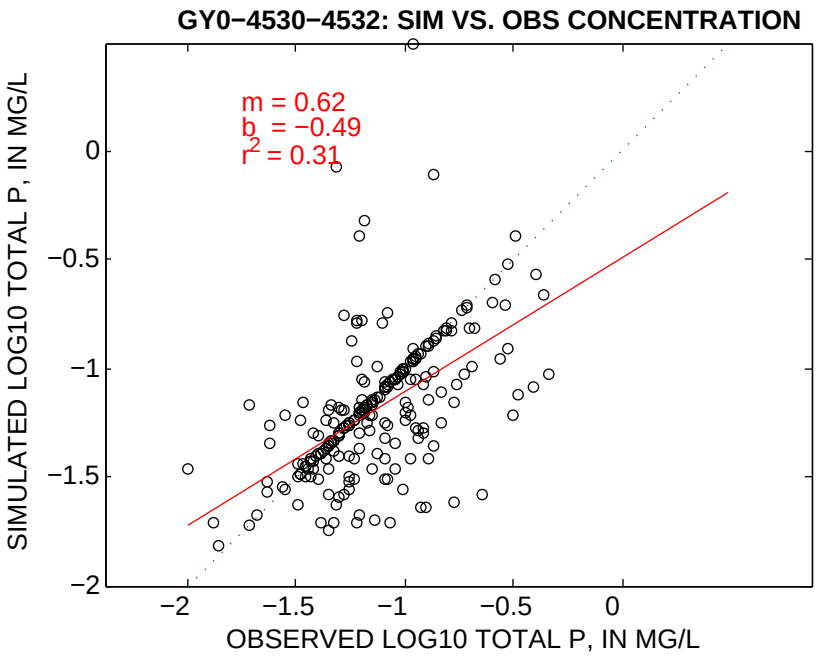
Drive	Directory	Observed
N/A	model	OBS20161101

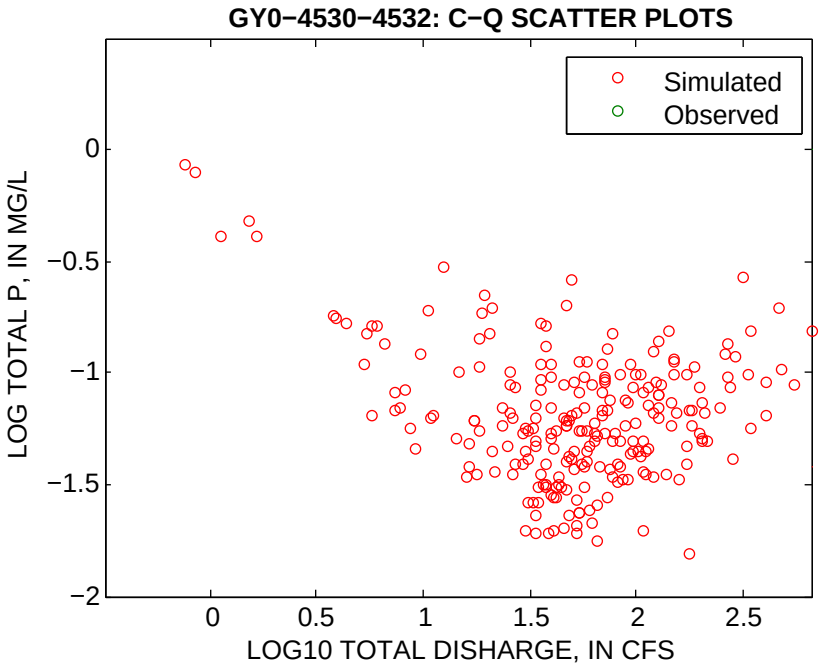
STATISTICS

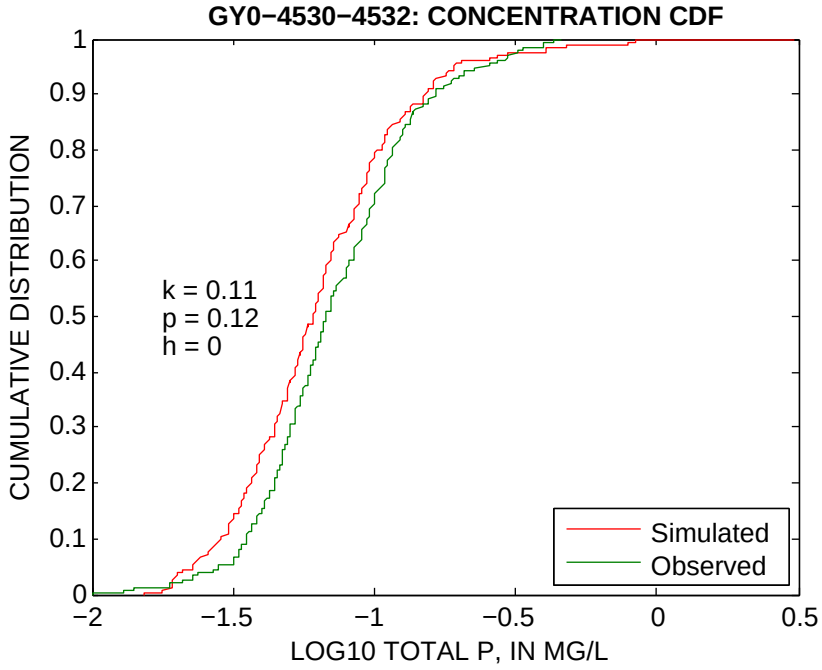
	n	243	243
		observe	simulate
min		0.01	0.014876
		-2	-1.82751
mean		0.0907243	0.105738
		-1.13843	-1.19706
media		0.067	0.055426
		-1.17393	-1.25629
max		0.46	3.1733
		-0.337242	0.501511
varian		0.00519615	0.0561554
		0.0783197	0.134777
JB		0.001	0.001
		0.047960	0.001
		ra	log
%		16.5485	5.15029
err.va		0.0594007	0.16972
rel.std.err		11.4317	2.16702
mod.eff		-10.4317	-1.16702

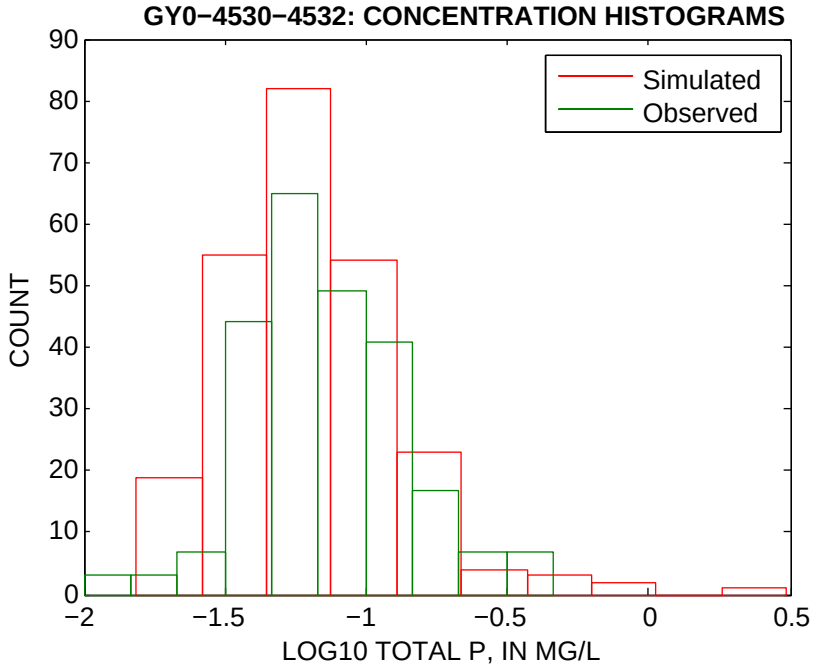
VERSION 2.1

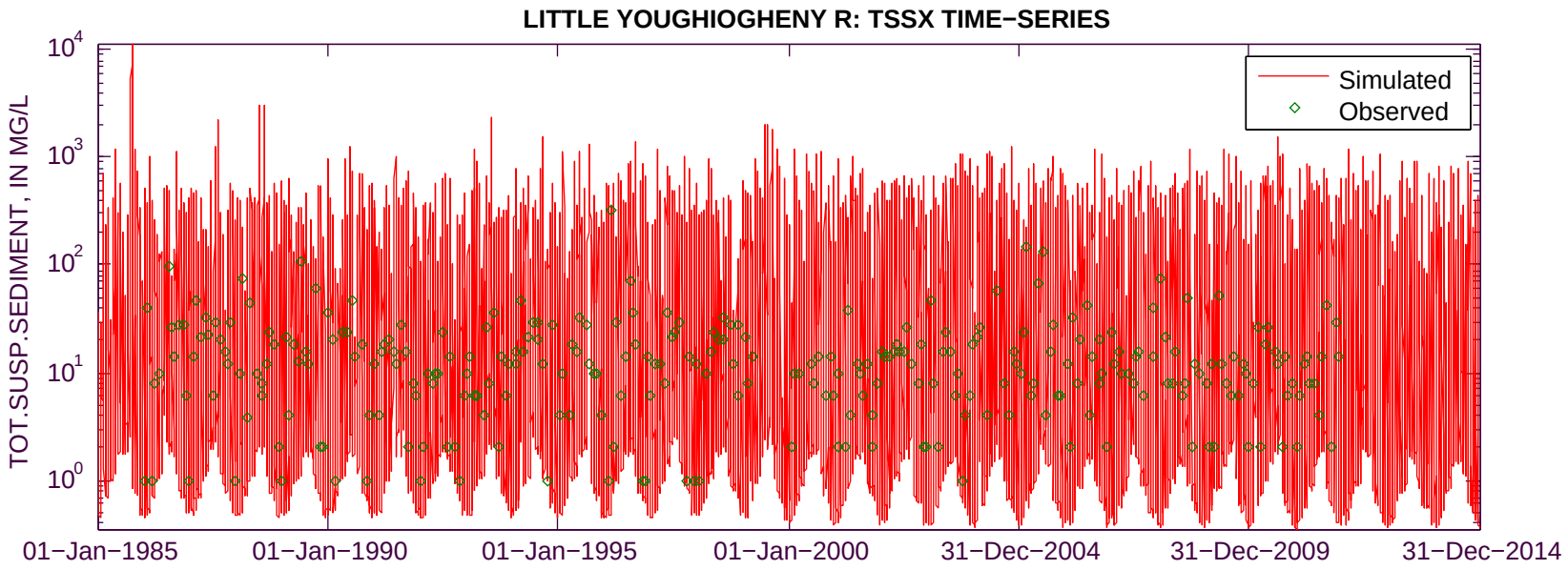
ALL DATA
LOG10

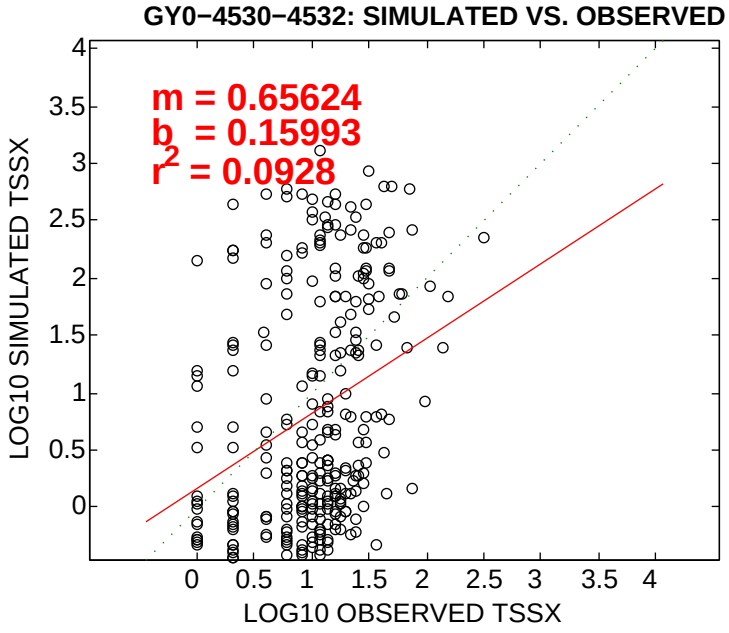


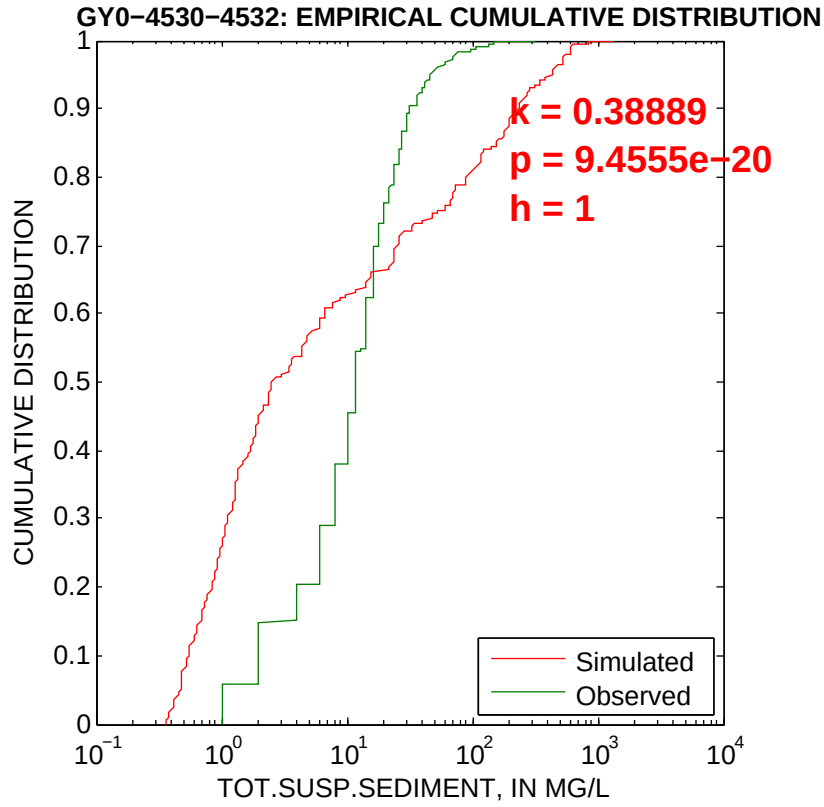












DATA SELECTION

scenario	file
P620171001WQ	TSSX.calib

plot: TSSX - total suspended ...

Dates 1/1/1985 12/31/201

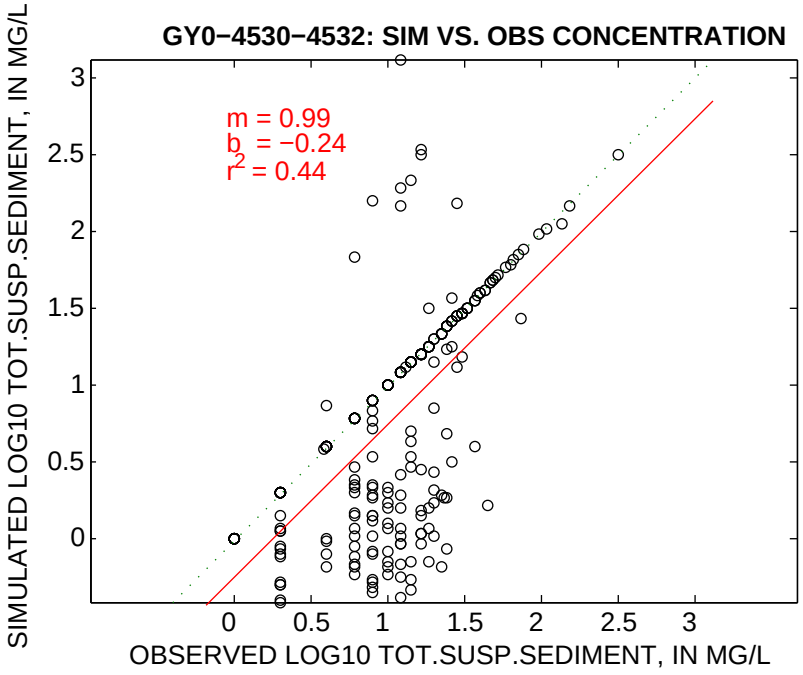
Drive	Directory	Observed
N/A	model	OBS20161101

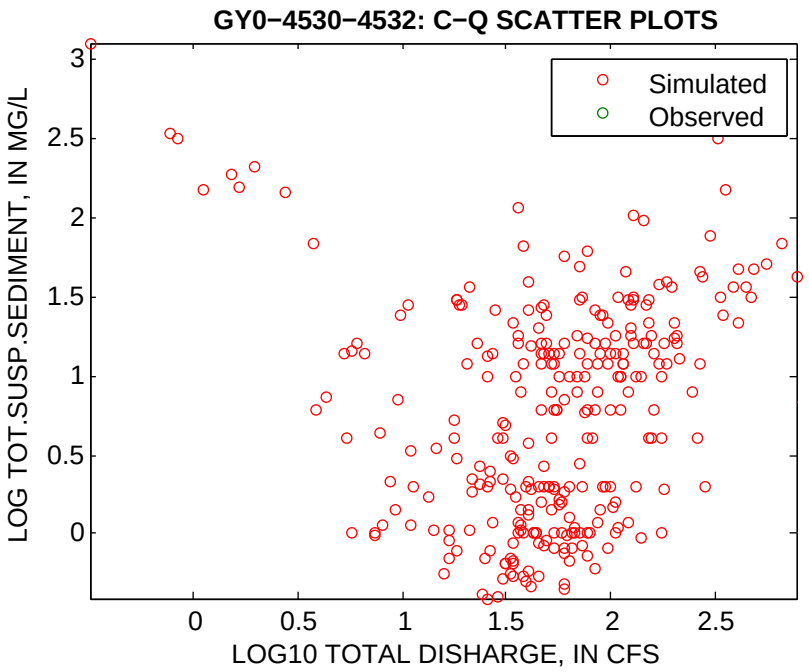
STATISTICS

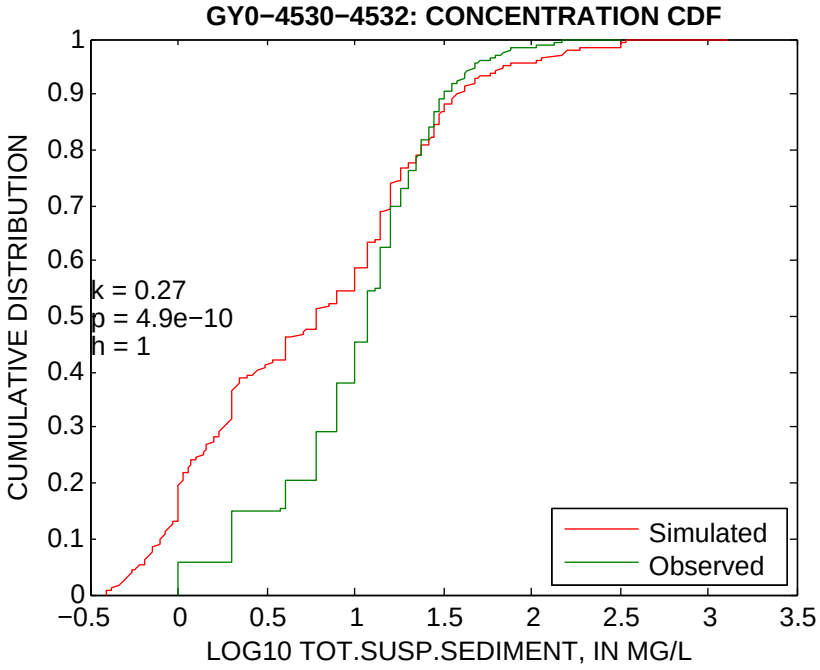
	n	observe	simulate
		288	288
min		1	0.3568
		0	-0.447575
mean		17.4125	69.7323
		1.01217	0.82416
media		12	2.6185
		1.07918	0.417928
max		318	1333.7
		2.50243	3.12506
varian		652.422	24333.2
		0.214081	0.993477
JB		0.001	0.001
		0.046875	0.001
		ra	log
%		300.473	-18.5746
err.va		26648.2	0.96205
rel.std.err		40.845	4.49385
mod.eff		-39.845	-3.49385

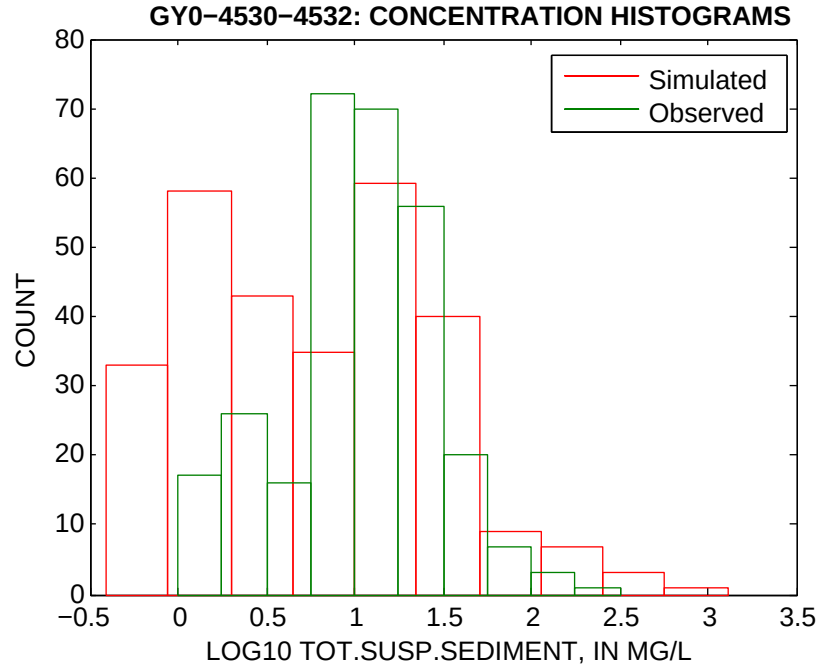
VERSION 2.1

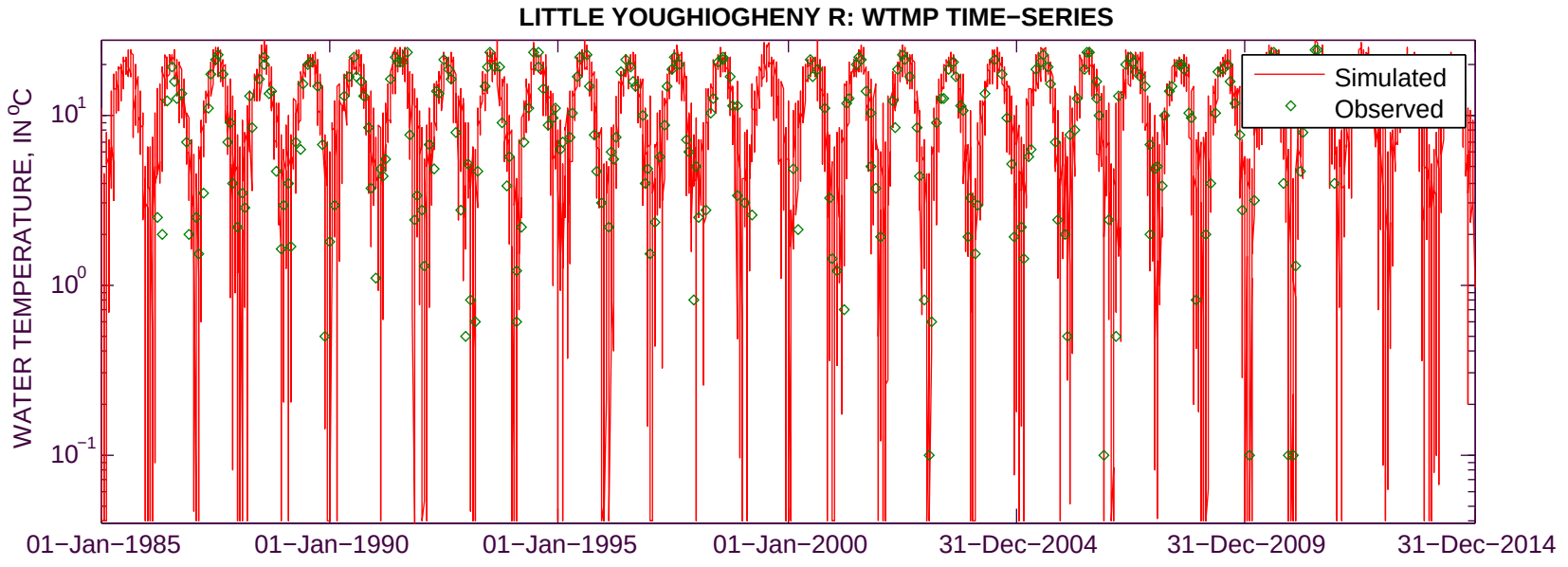
ALL DATA
LOG10

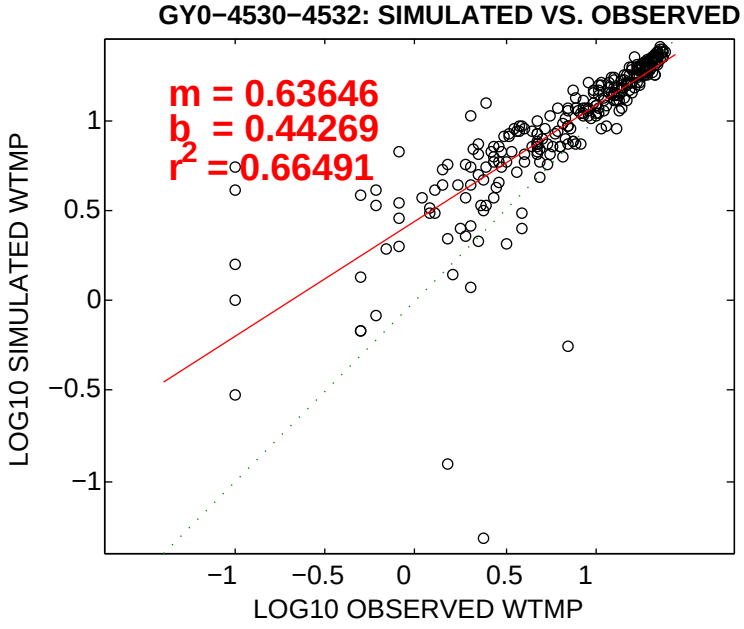


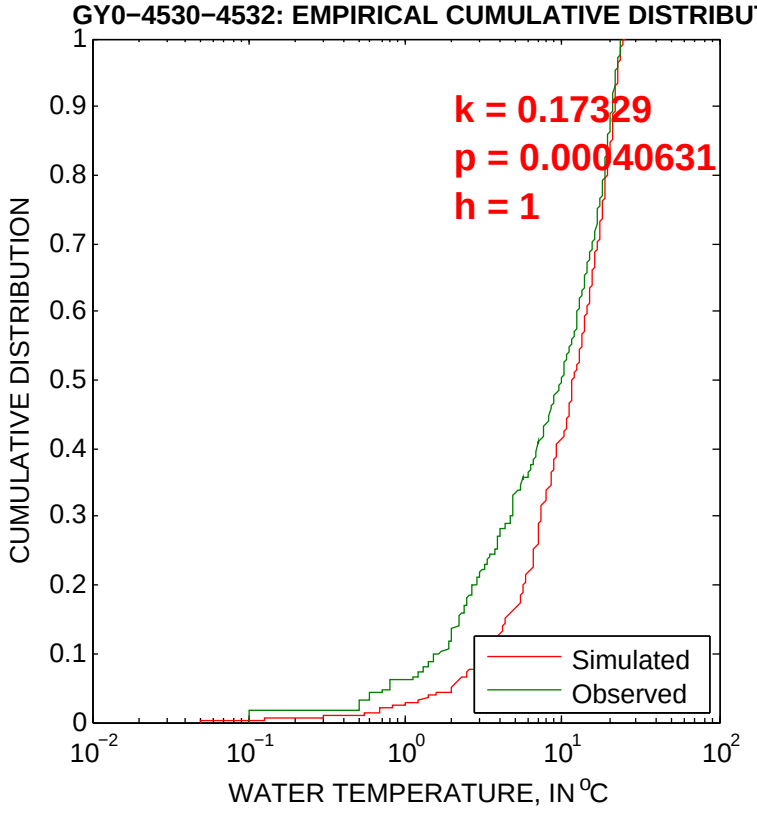












DATA SELECTION

scenario	file
P620171001WQ	WTMP.calib

plot: WTMP - water tempera...

Dates: 1/1/1985 – 12/31/201

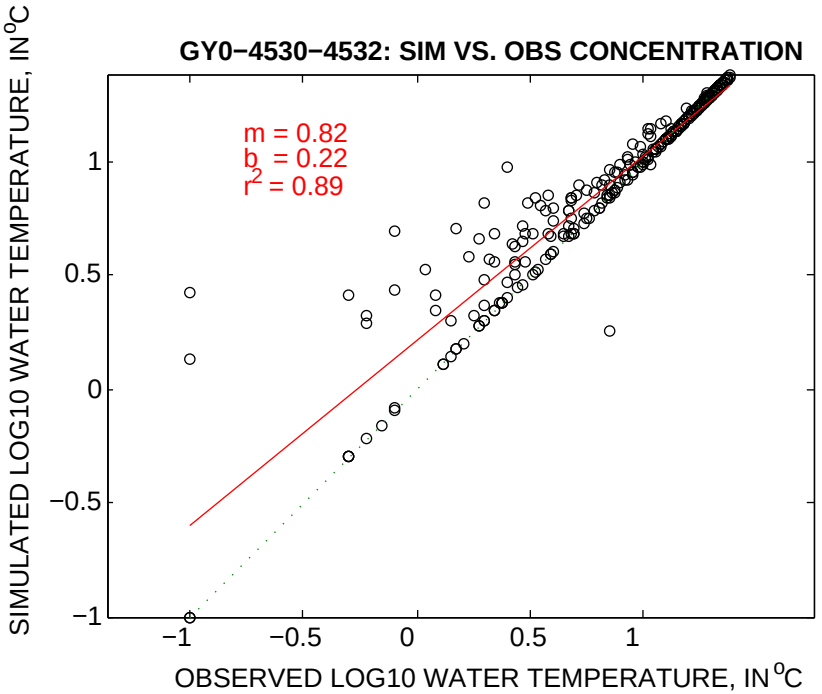
Drive	Directory	Observed
N/A	model	OBS20161101

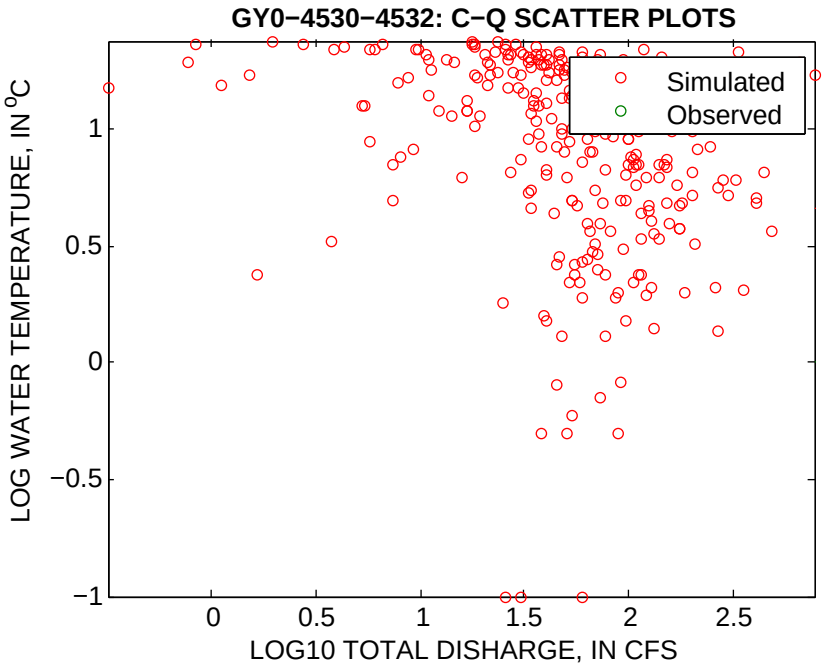
STATISTICS

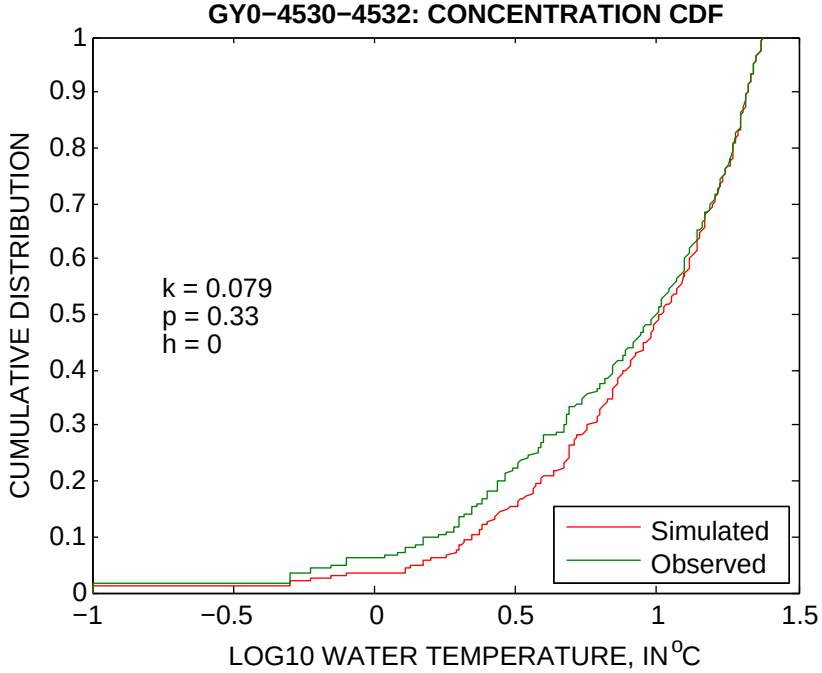
	n	277	277
		observe	simulate
min		0.1	0.049165
		-1	-1.30834
mean		10.5555	12.2614
		0.844186	0.979981
media		10	11.699
		1	1.06815
max		23.898	25.441
		1.37836	1.40553
varian		52.7289	45.381
		0.2405	0.146519
JB		0.001486	0.004199
		0.001	0.001
		ra	log
%		16.161	16.086
err.va		7.49529	0.0993892
rel.std.err		0.142148	0.413261
mod.eff		0.857852	0.586739

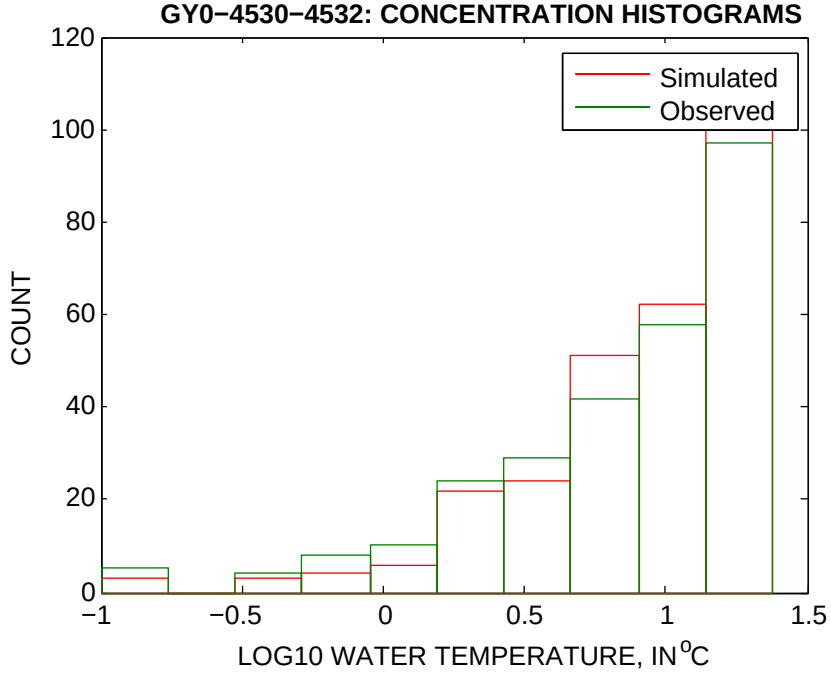
VERSION 2.1

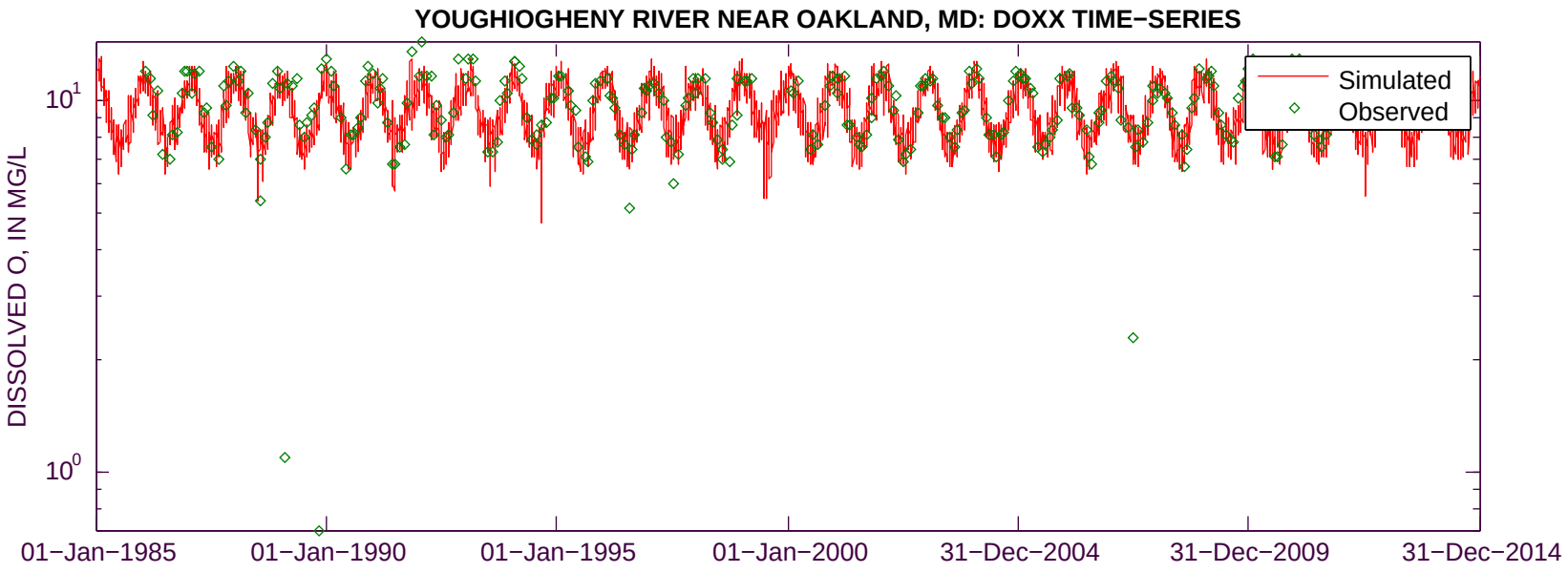
ALL DATA
LOG10

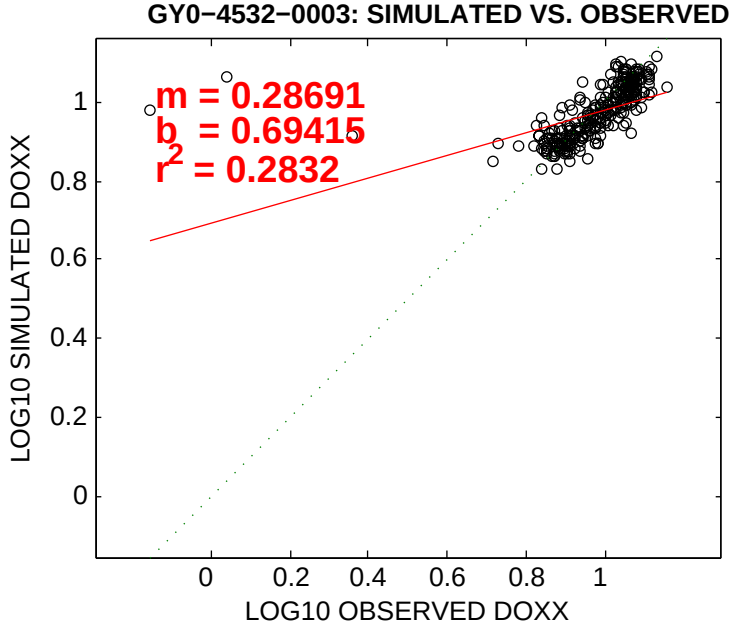


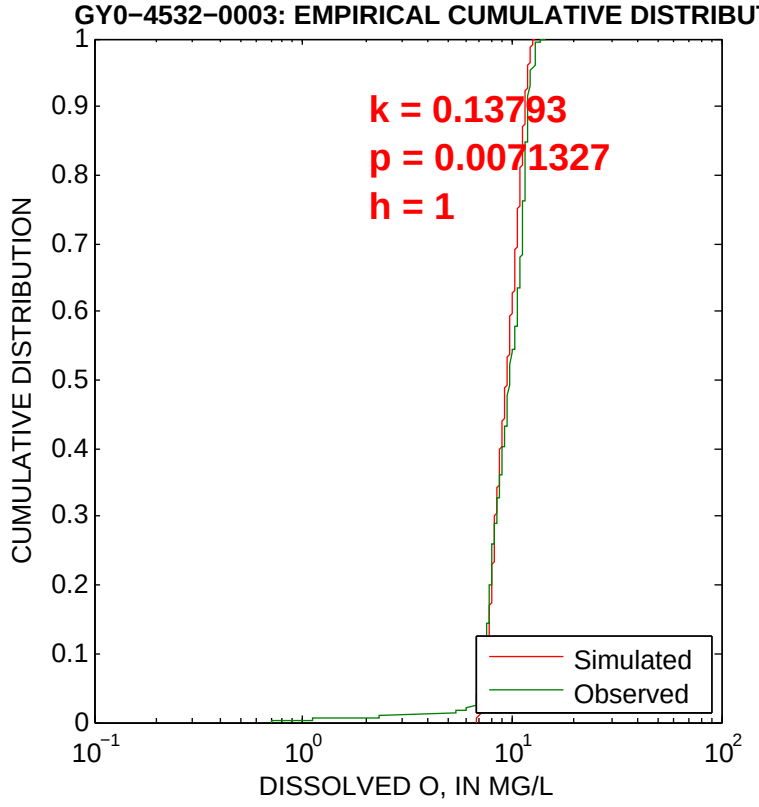












DATA SELECTION

scenario	file
P620171001WQ	DOXX.calib

plot: DOXX - dissolved oxygen

Dates: 1/1/1985 – 12/31/201

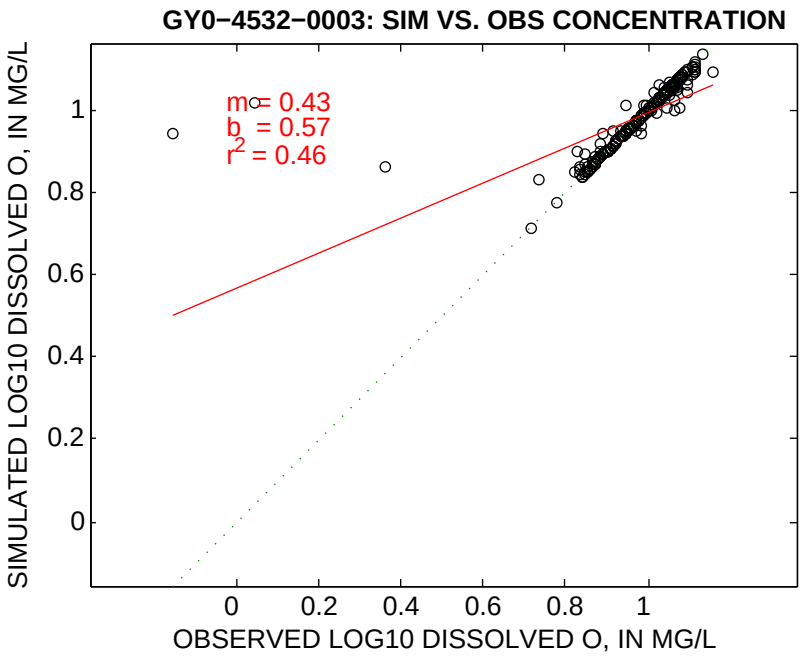
Drive	Directory	Observed
N/A	model	OBS20161101

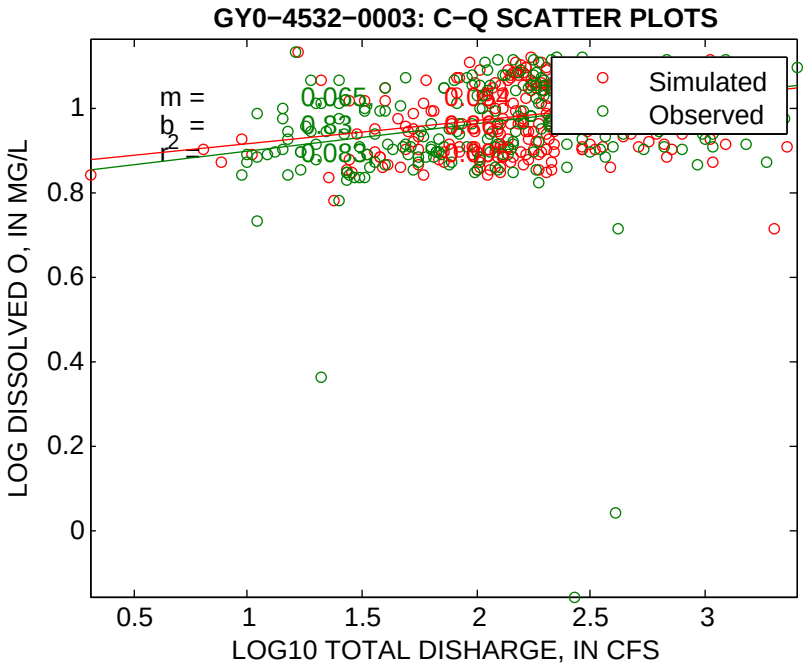
STATISTICS

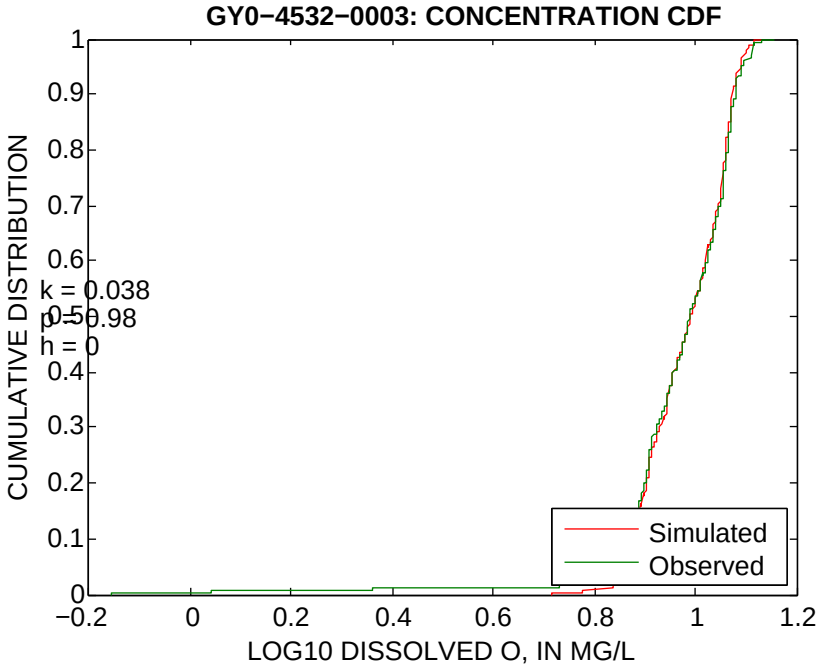
	n	290	290
		observe	simulate
min		0.7	6.7326
		-0.154902	0.828183
mean		9.70812	9.52357
		0.973937	0.973579
media		9.8	9.4383
		0.991226	0.974894
max		14.4	12.995
		1.15836	1.11378
varian		3.99545	2.18751
		0.0156759	0.00455646
JB		0.001	0.003407
		0.001	0.003900
		ra	log
%		-1.90108	-0.0367299
err.va		1.78794	0.0112374
rel.std.err		1.447494	0.716857
mod.eff		0.552506	0.283143

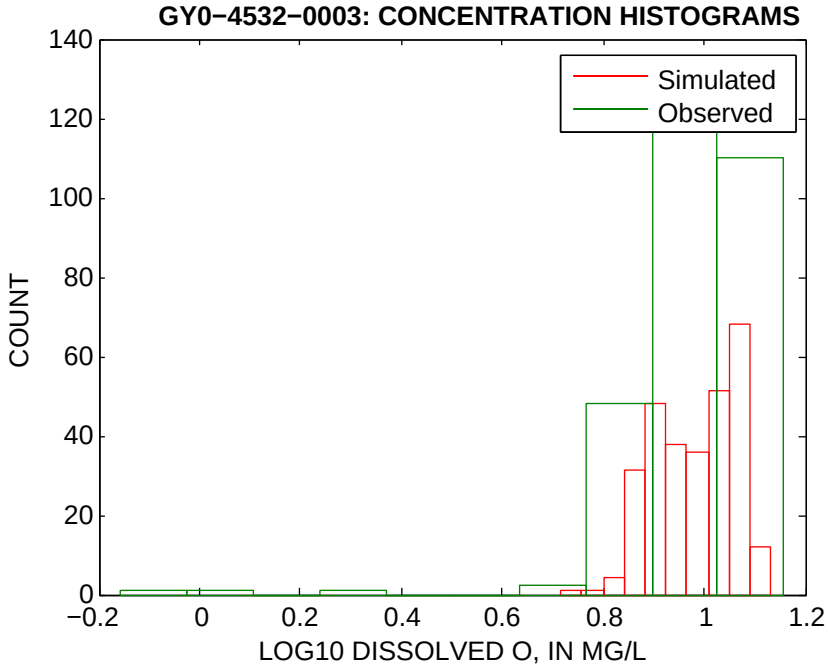
VERSION 2.1

ALL DATA
LOG10

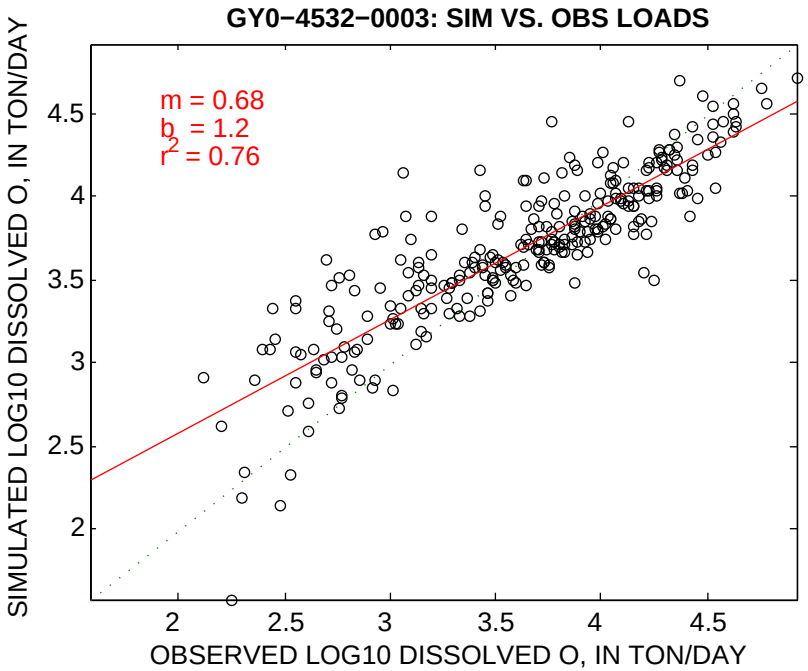


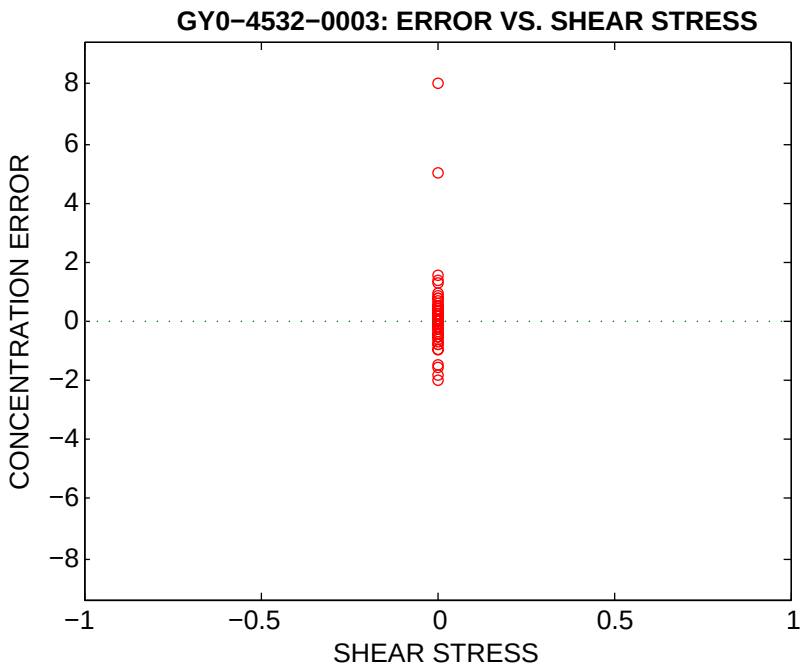


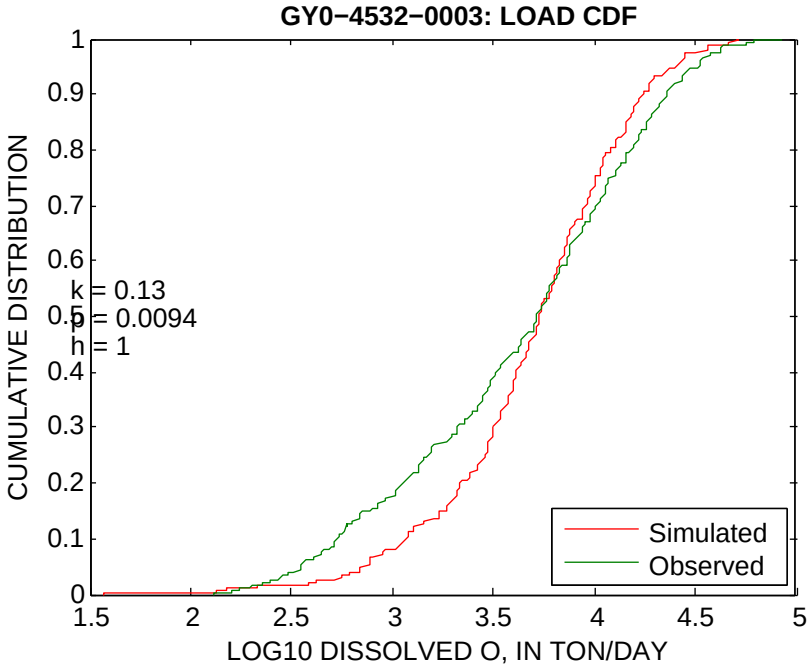


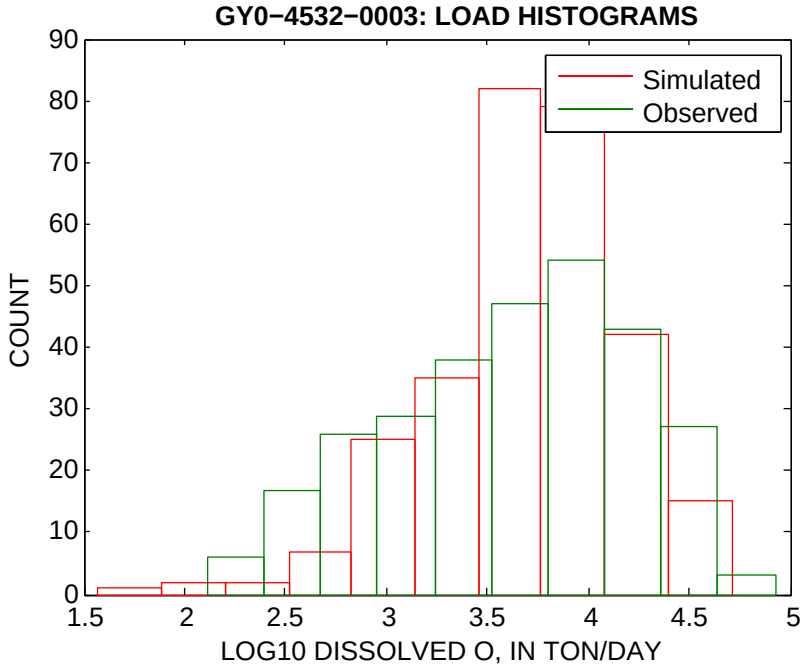


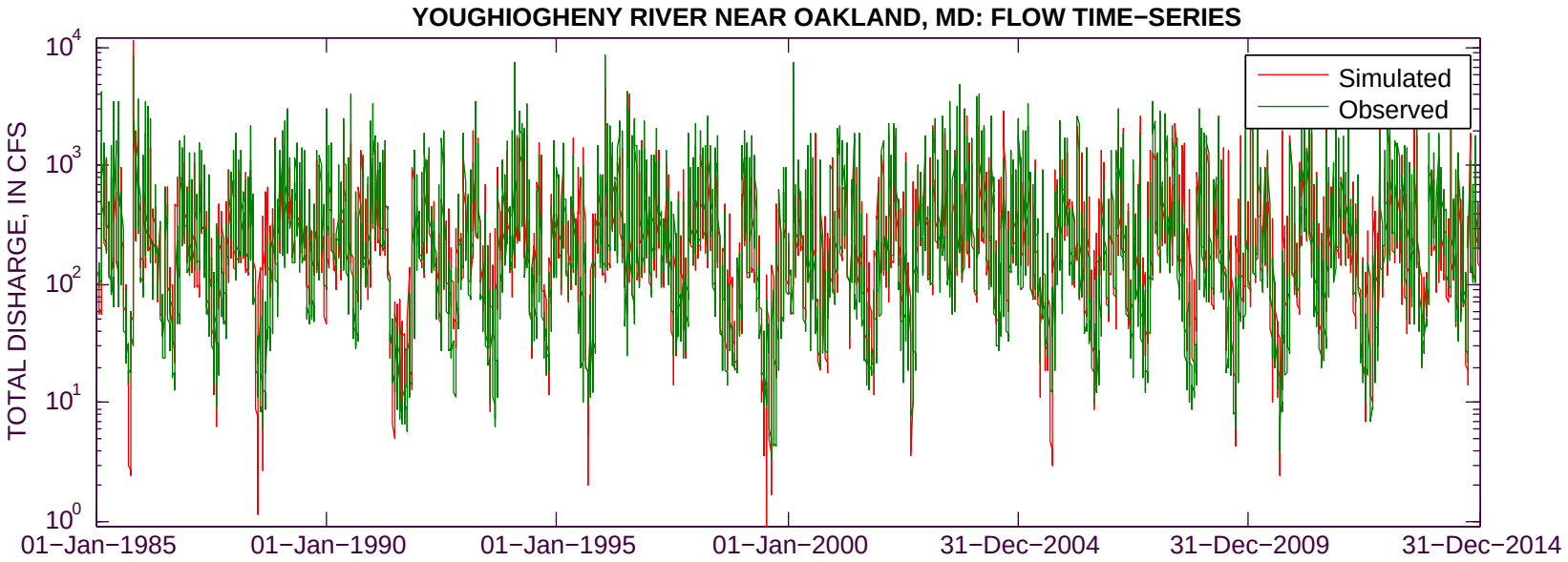
LOAD DATA
LOG10

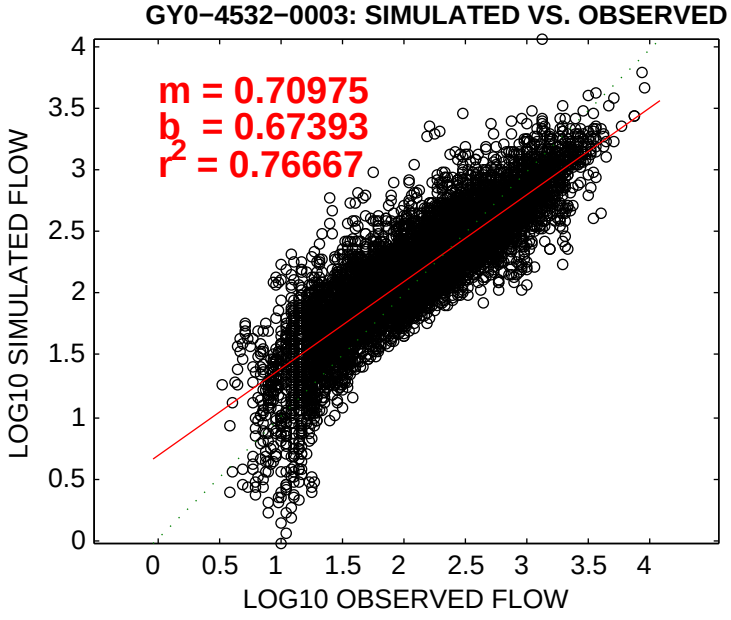


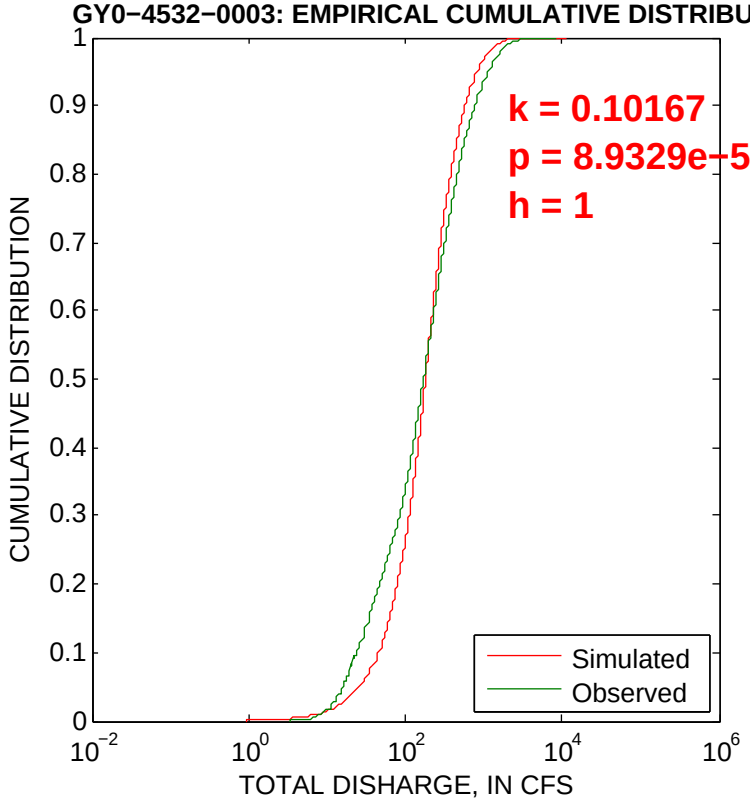












DATA SELECTION

scenario: P620171001WQ | file: FLOW.calib

plot: FLOW - total discharge

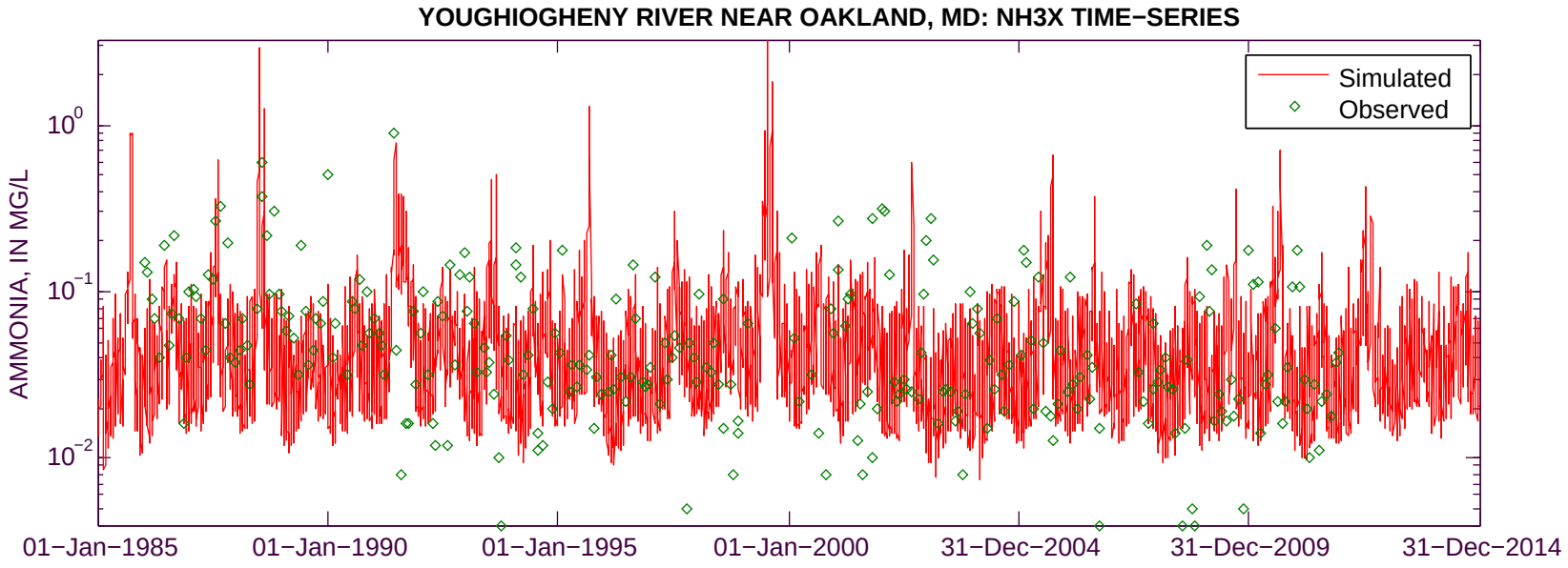
Dates: 1/1/1985 – 12/31/201

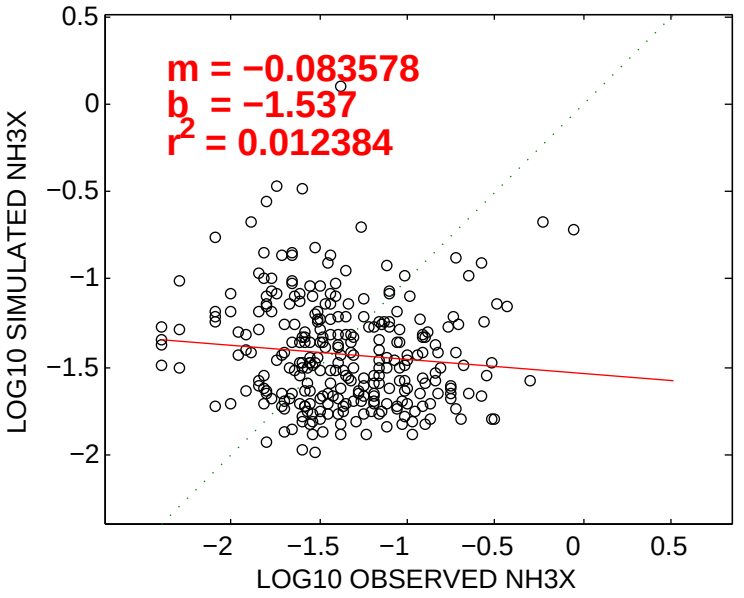
Drive | Directory: N/A | model | Observed: OBS20161101

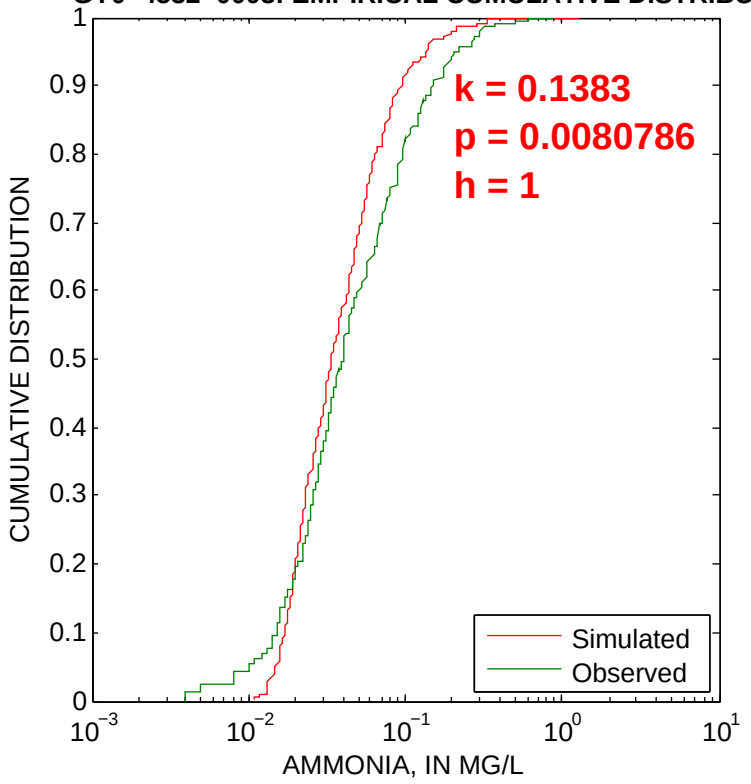
STATISTICS

		observe	simulate
n		10957	10957
min		3.4	0.91967
		0.531479	-0.036368
mean		321.282	273.11
		2.18931	2.22779
media		172	181.69
		2.23553	2.25933
max		8740	11818
		3.94151	4.07254
varian		213696	110748
		0.31299	0.205654
JB		0.001	0.001
		0.001	0.001
		ra	log
%		-14.9936	1.7578
err.va		89047	0.0758348
rel.std.err		0.416699	0.242291
mod.eff		0.583301	0.757709

VERSION 2.1







DATA SELECTION

scenario	file
P620171001WQ	NH3X.calib

plot: NH3X - ammonia

Dates: 1/1/1985 – 12/31/201

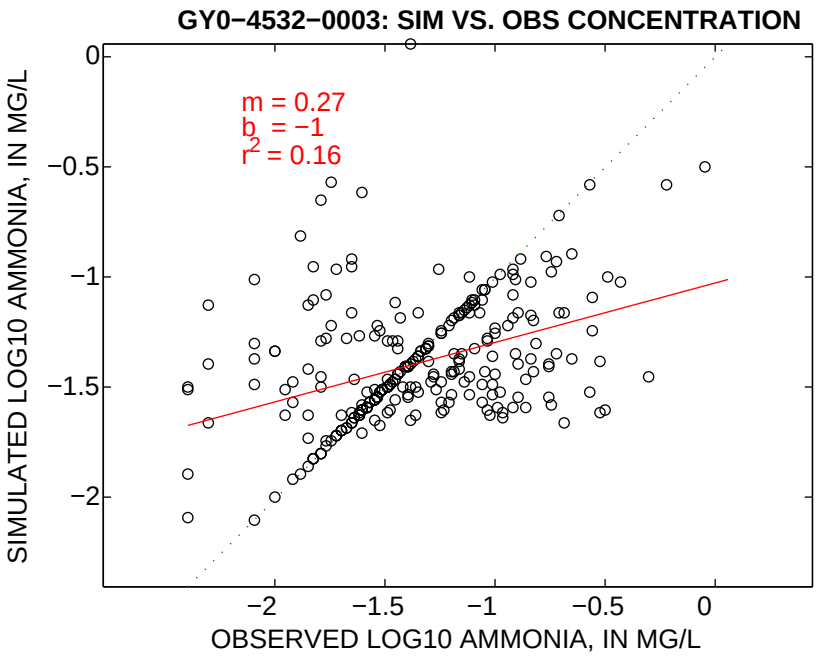
Drive	Directory	Observed
N/A	model	OBS20161101

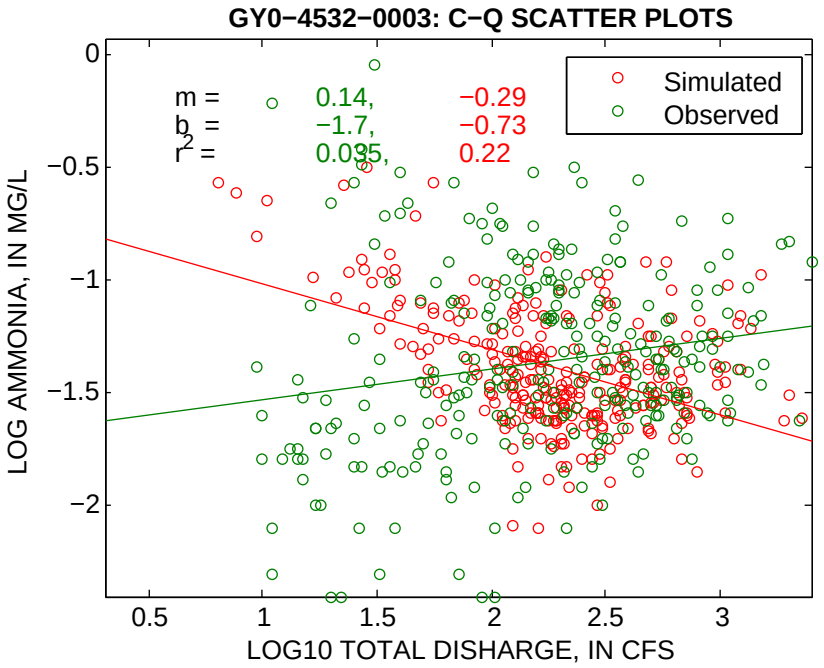
STATISTICS

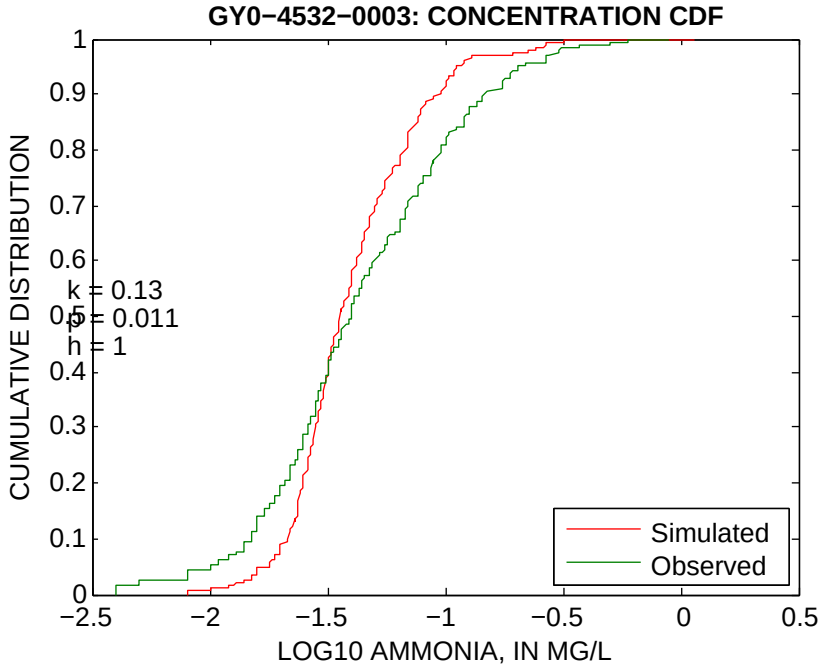
	n	282	282
		observe	simulate
min		0.004	0.010447
		-2.39794	-1.98101
mean		0.0694149	0.0528465
		-1.36318	-1.42309
media		0.04	0.033917
		-1.39794	-1.46958
max		0.9	1.2739
		-0.0457575	0.105135
varian		0.00812841	0.00734335
		0.168369	0.0949719
JB		0.001	0.001
		0.355138	0.001
		ra	log
%		-23.8687	4.39442
err.va		0.0151463	0.295086
rel.std.err		1.86338	1.75262
mod.eff		-0.863384	-0.752616

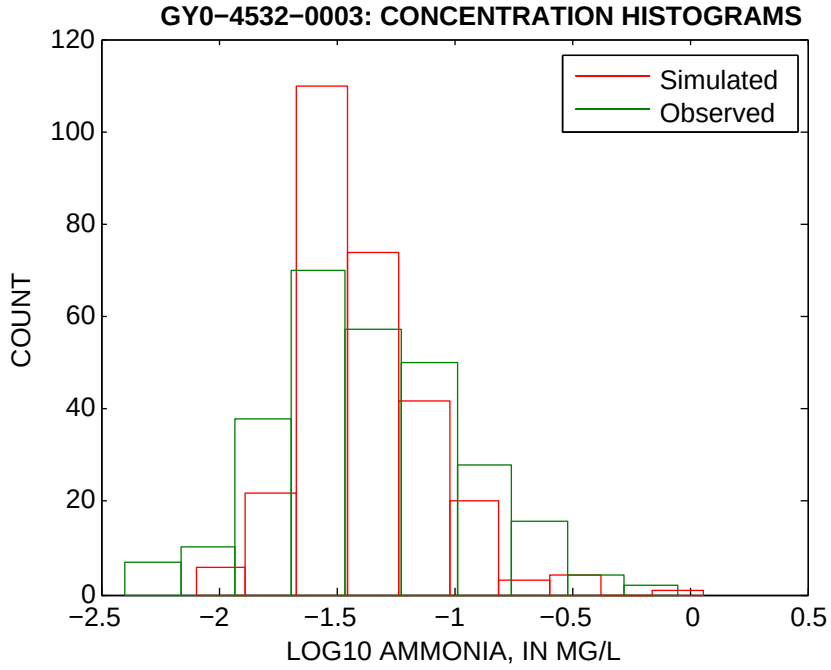
VERSION 2.1

ALL DATA
LOG10

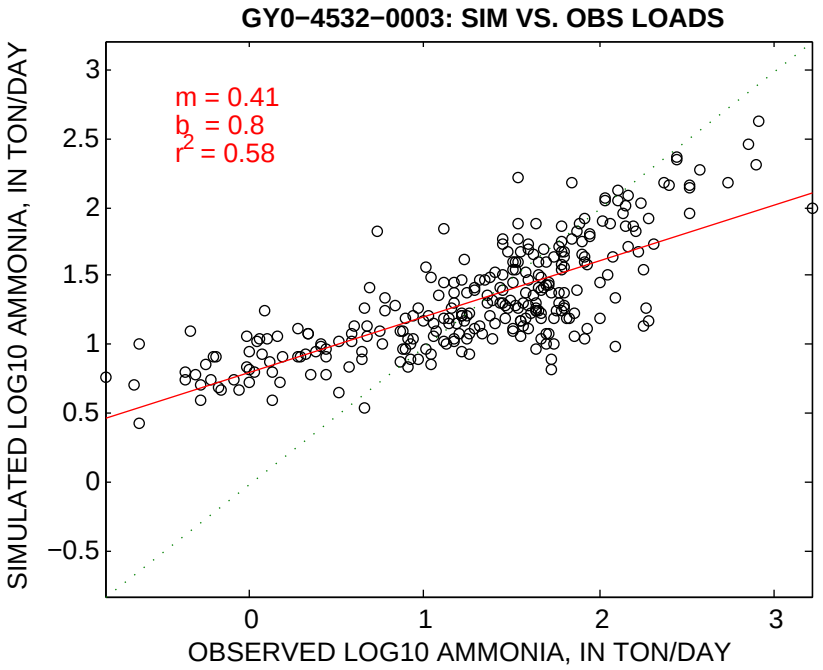


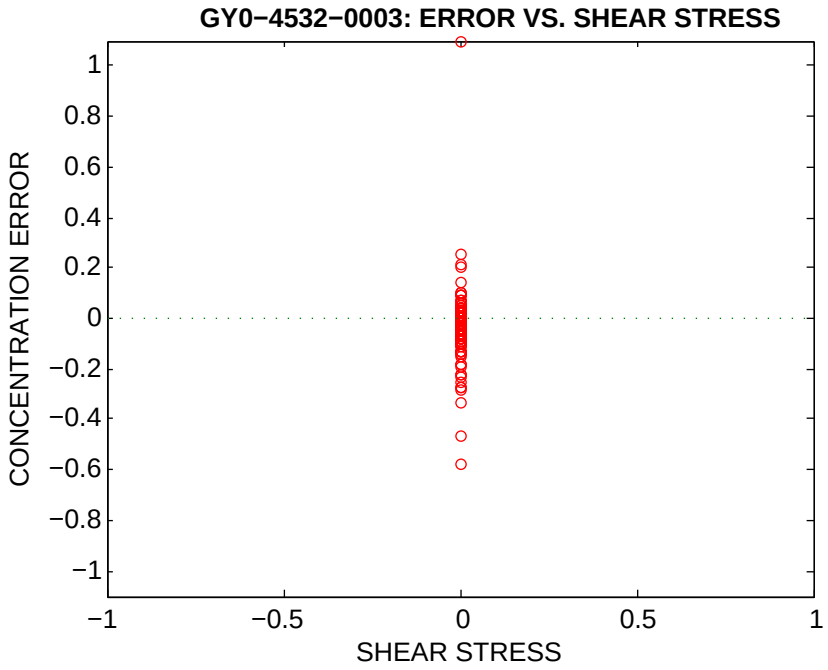


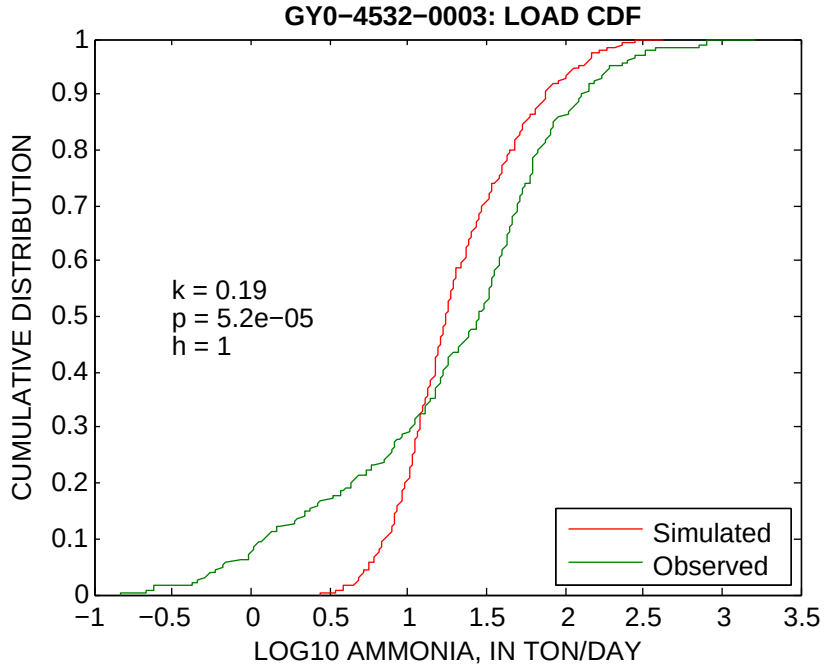


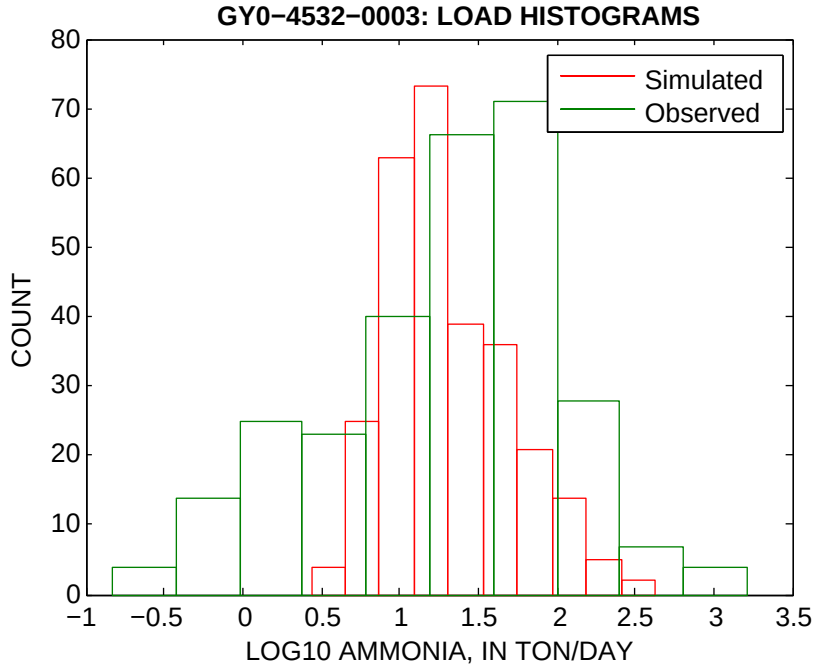


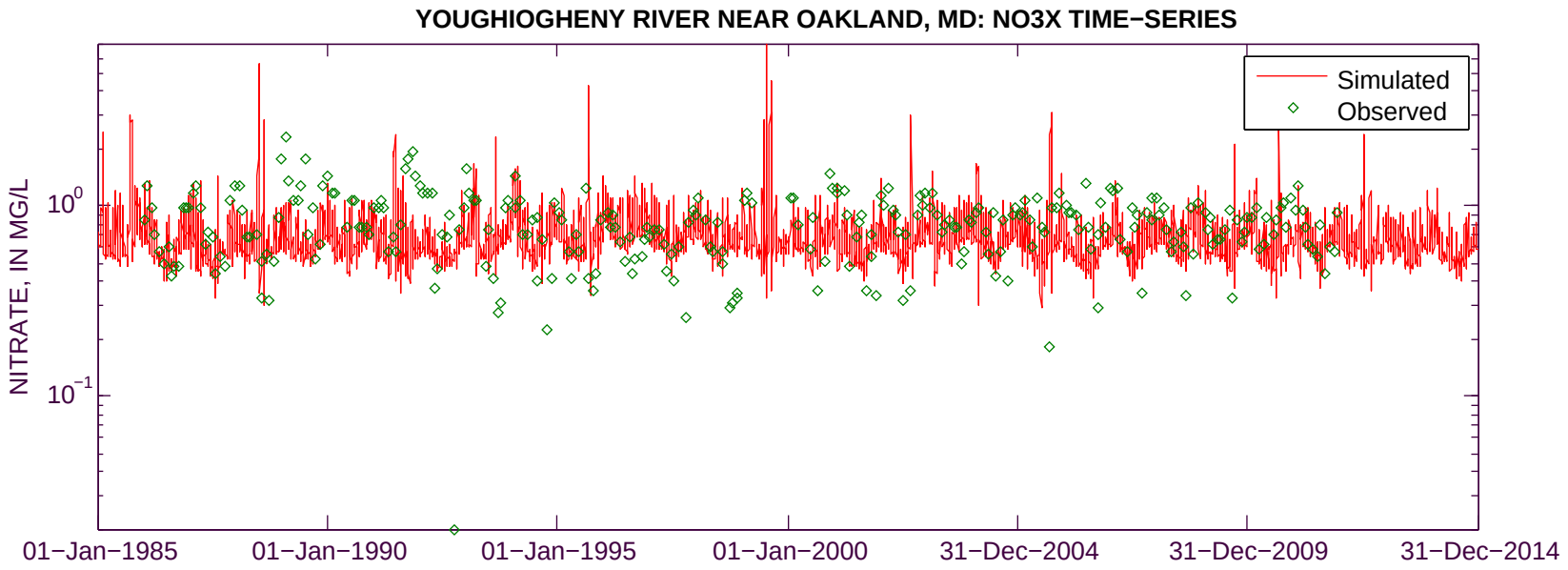
LOAD DATA
LOG10

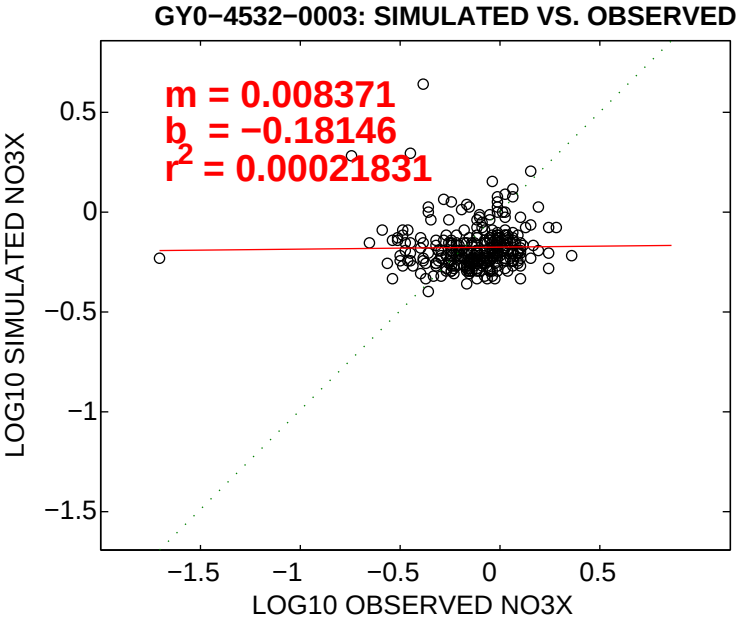


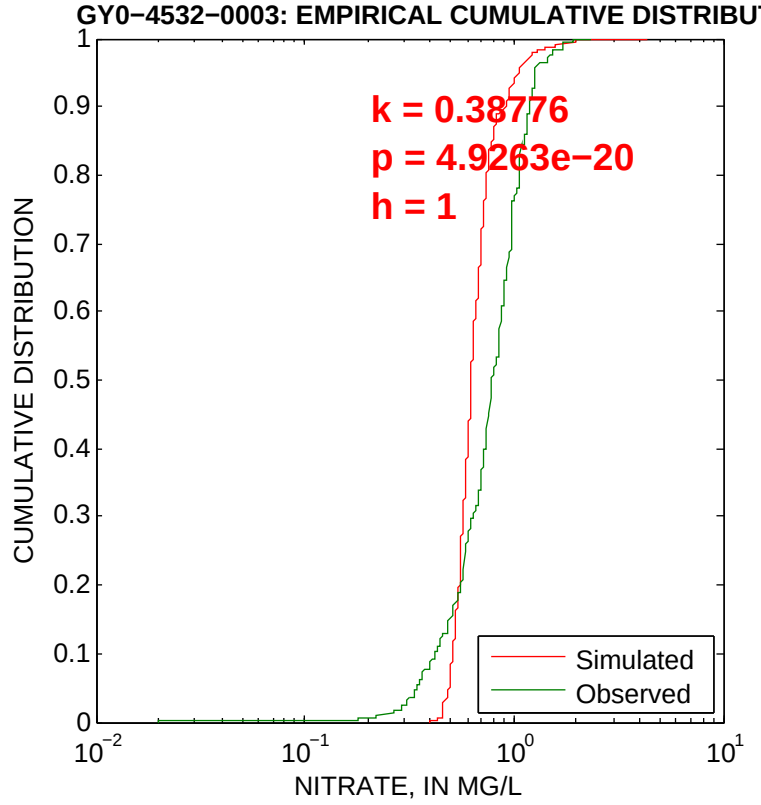












DATA SELECTION

scenario	file
P620171001WQ	NO3X.calib

plot: NO3X - nitrate

Dates: 1/1/1985 – 12/31/201

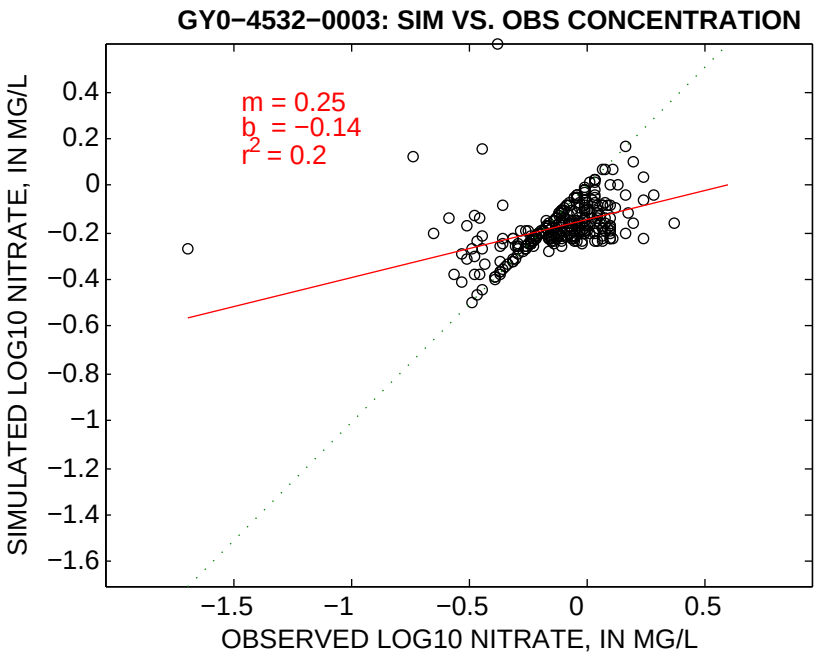
Drive	Directory	Observed
N/A	model	OBS20161101

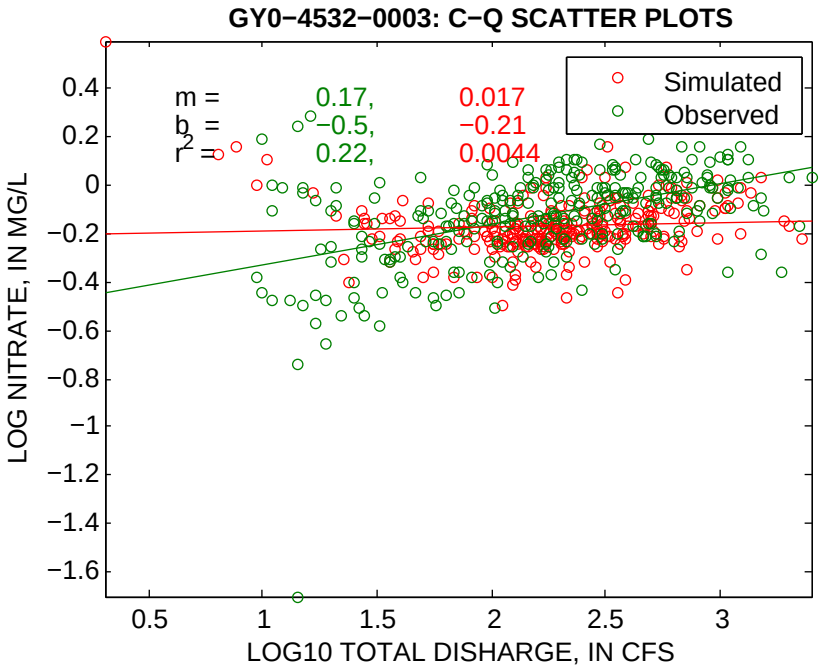
STATISTICS

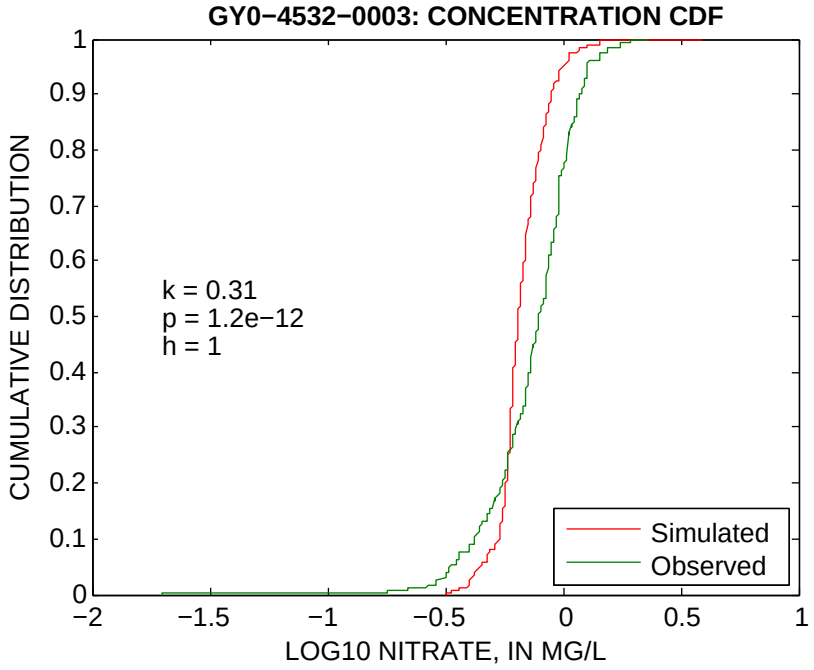
	n	294	294
		observe	simulate
min		0.02	0.39832
		-1.69897	-0.399768
mean		0.814524	0.685698
		-0.126187	-0.182513
media		0.79	0.627515
		-0.102373	-0.202376
max		2.32	4.3227
		0.365488	0.635755
varian		0.0985092	0.0835787
		0.0394626	0.0126665
JB		0.001	0.001
		0.001	0.001
		ra	log
%		-15.8161	44.6374
err.va		0.20128	0.0546519
rel.std.err		2.04326	1.3849
mod.eff		-1.04326	-0.384903

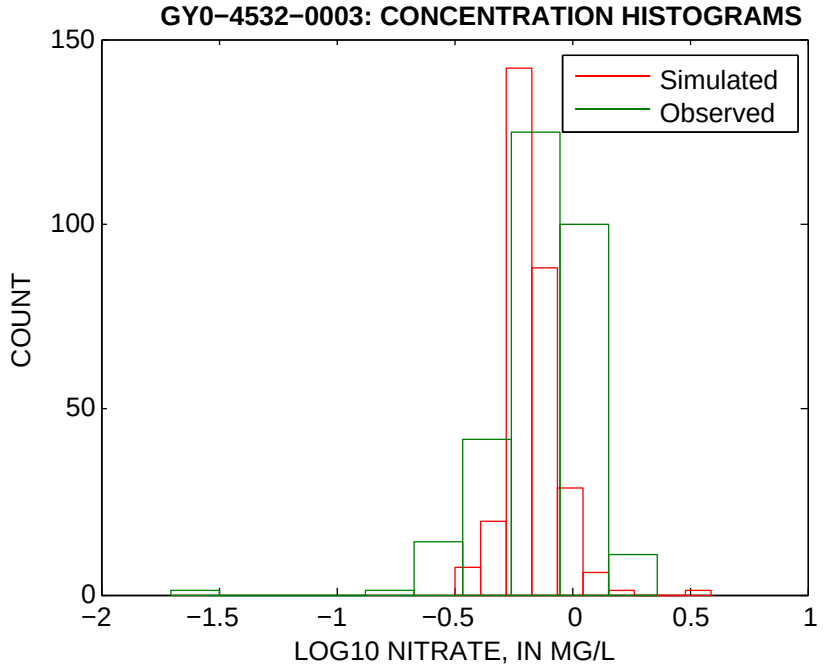
VERSION 2.1

ALL DATA
LOG10

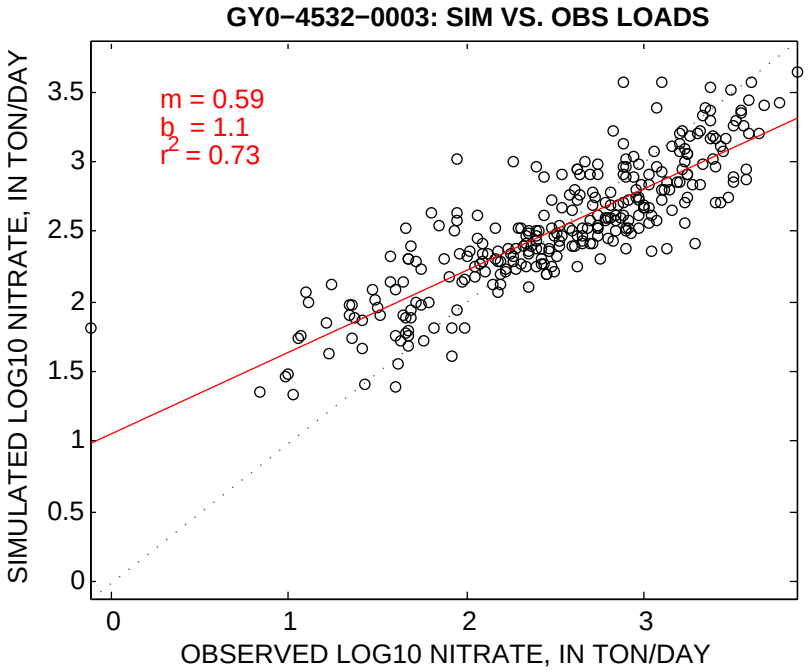


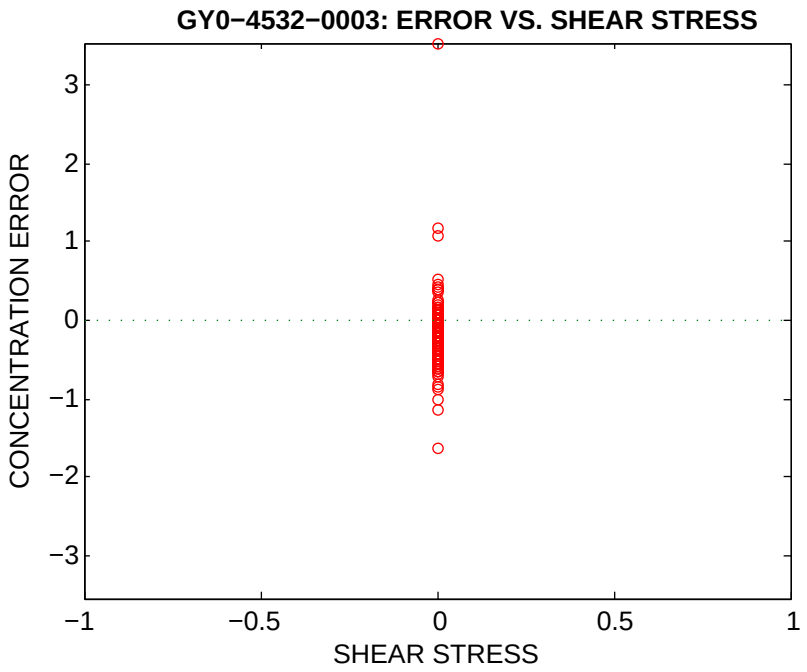


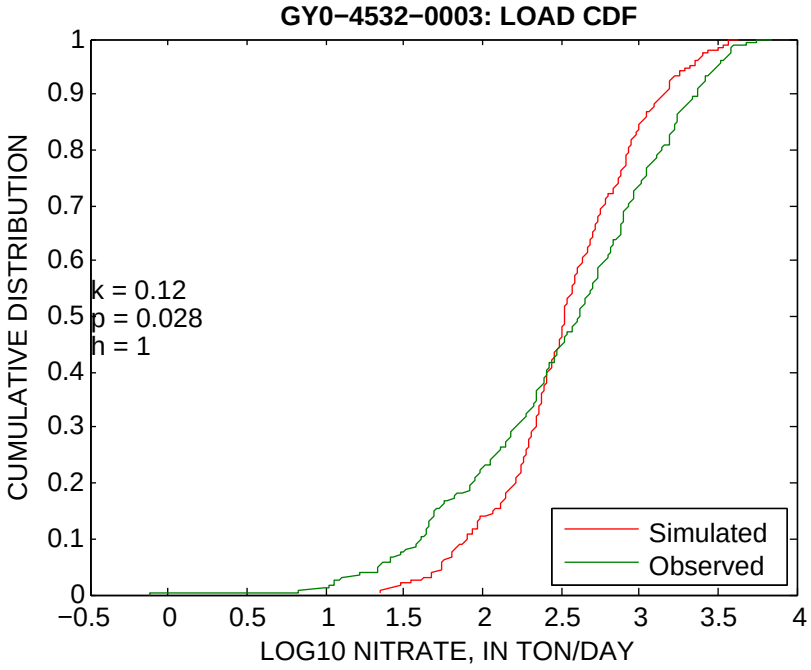


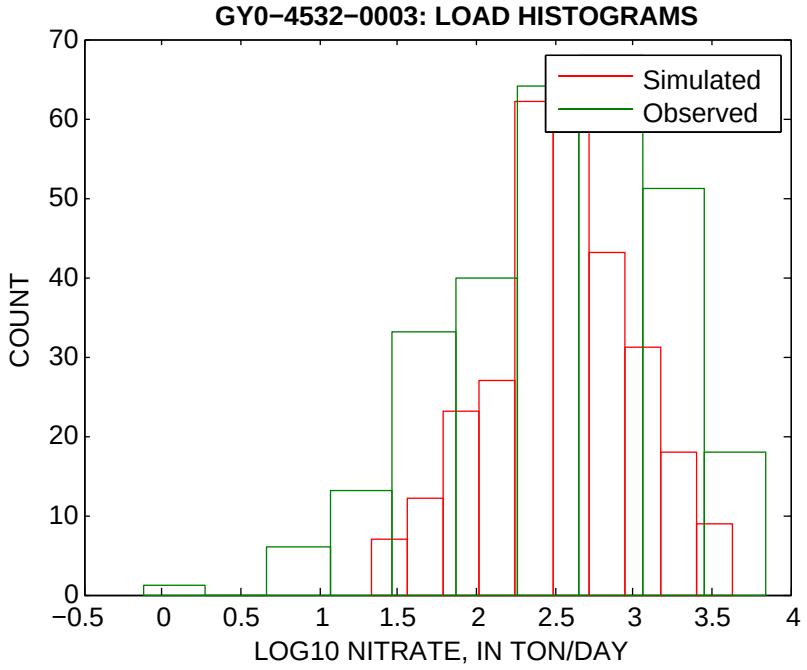


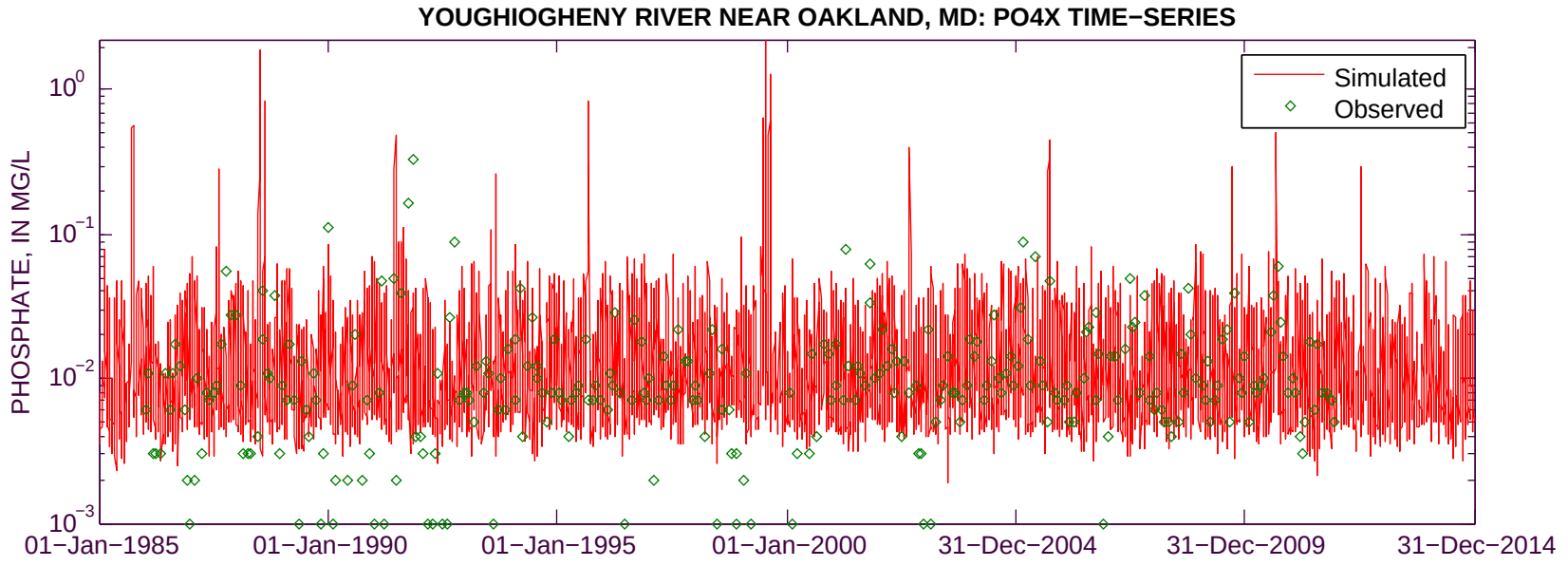
LOAD DATA
LOG10

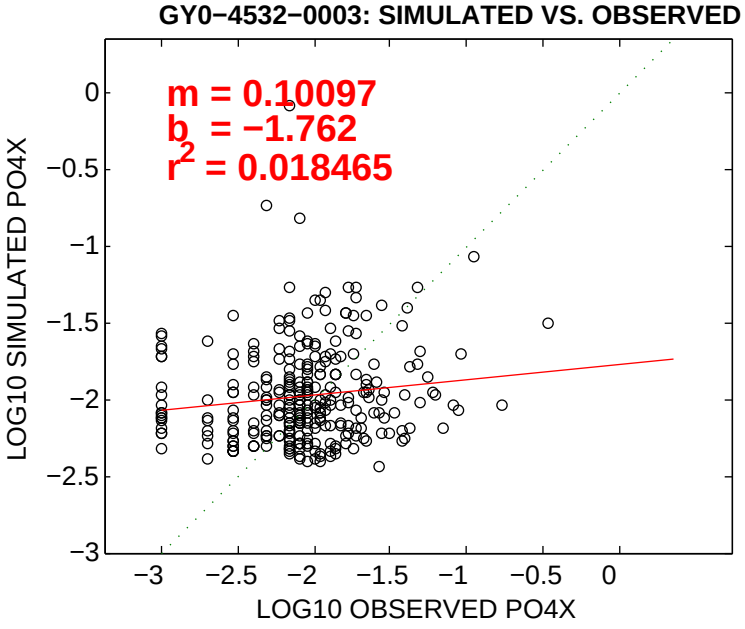


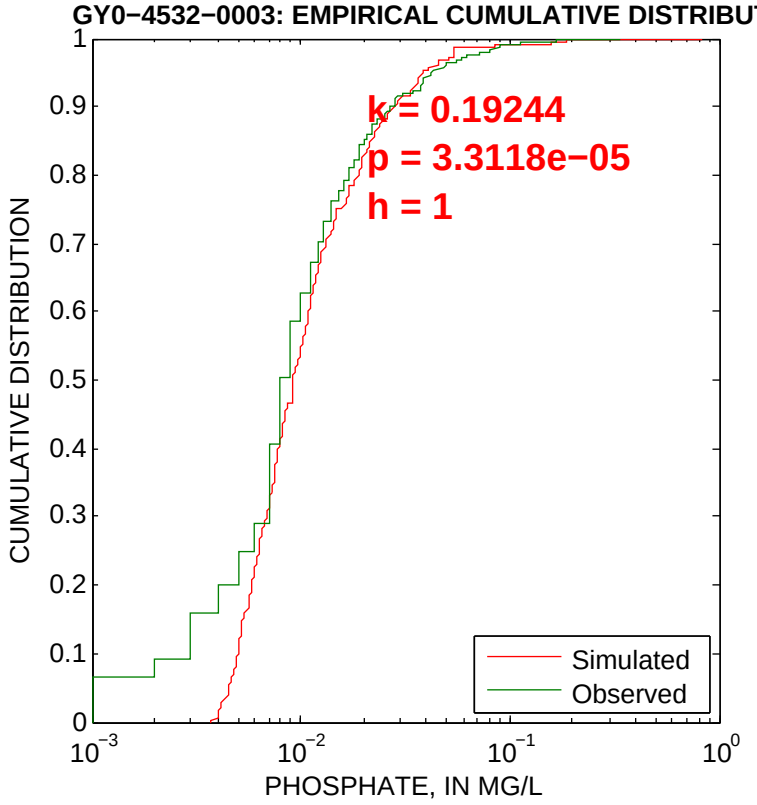












DATA SELECTION

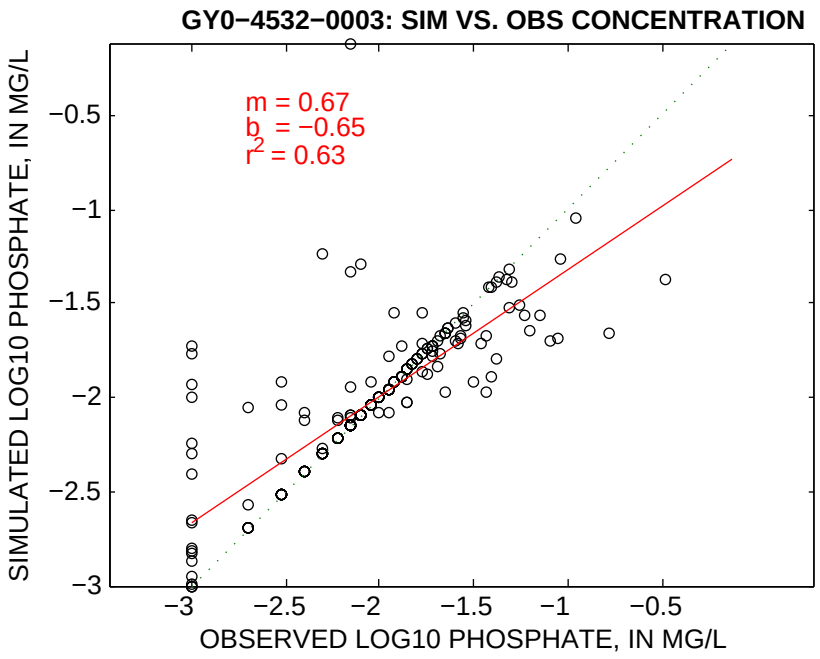
scenario: P620171001WQ
file: PO4X.calib
plot: PO4X - phosphate
Dates: 1/1/1985 12/31/201
Drive: N/A
Directory: model
Observed: OBS20161101

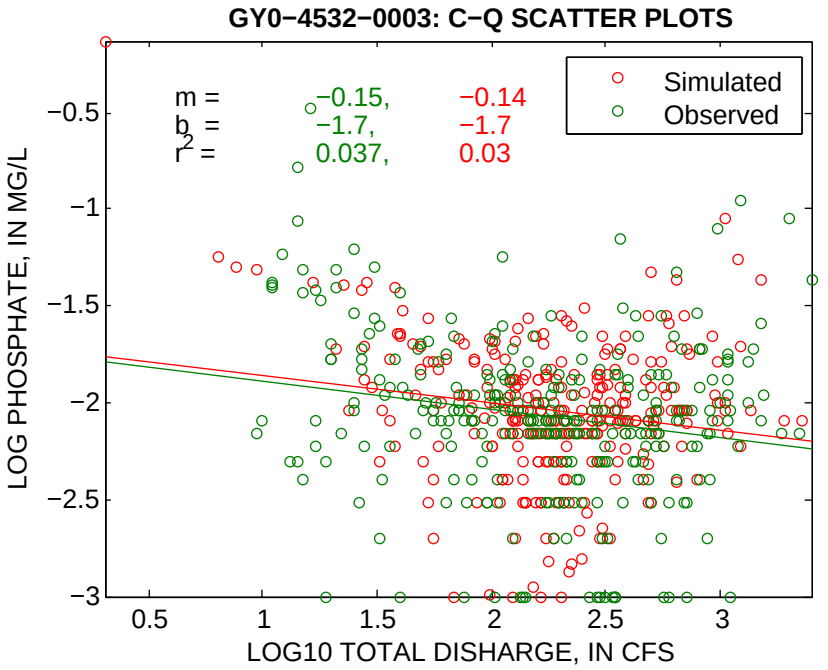
STATISTICS

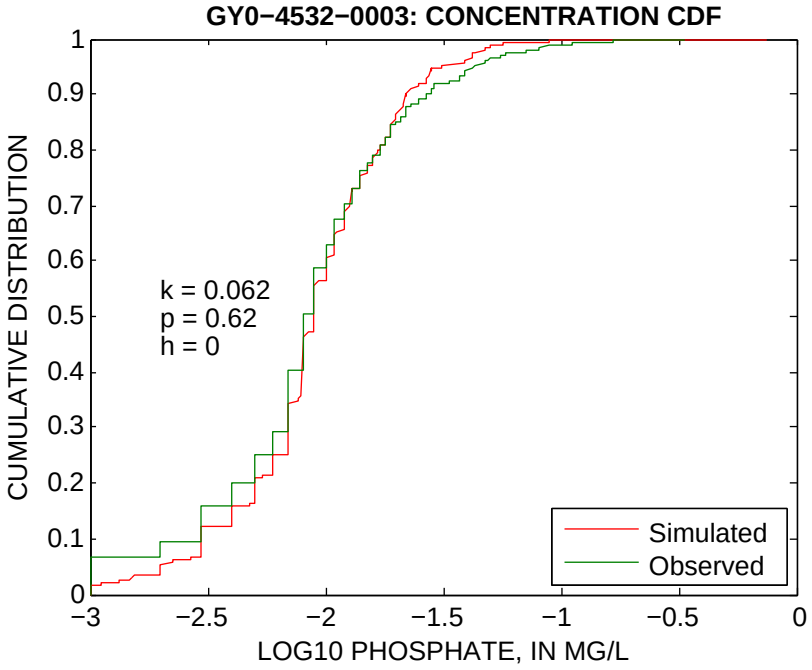
	n	291	291
		observe	simulate
min		0.001	0.003691
		-3	-2.43286
mean		0.0143746	0.0169498
		-2.06894	-1.97089
media		0.008	0.0092596
		-2.09691	-2.03341
max		0.334	0.83049
		-0.476254	-0.0806656
varian		0.00064427	0.00258053
		0.178675	0.0986588
JB		0.001	0.001
		0.008779	0.001
		ra	log
%		17.9153	-4.73893
err.va		0.00317446	0.250897
rel.std.err		4.92717	1.40421
mod.eff		-3.92717	-0.404209

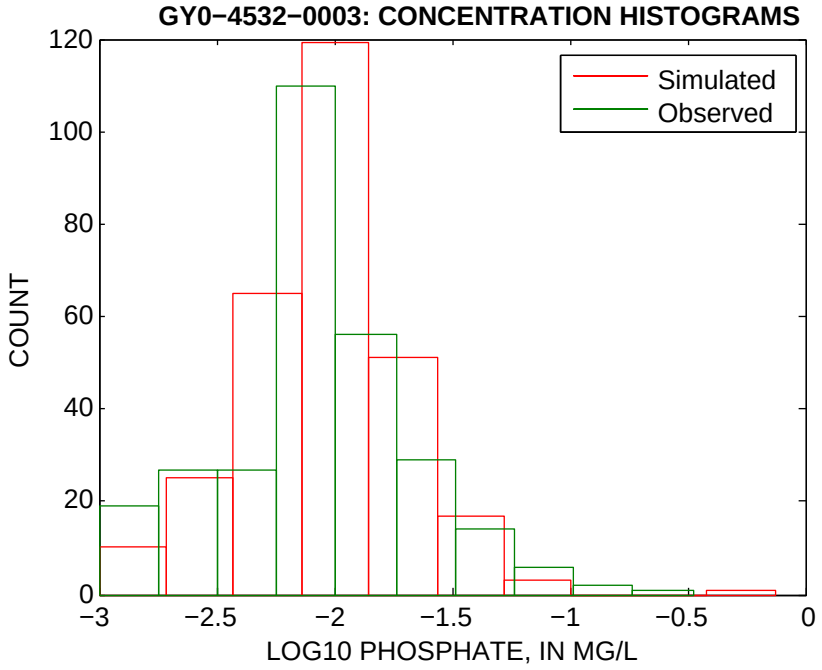
VERSION 2.1

ALL DATA
LOG10

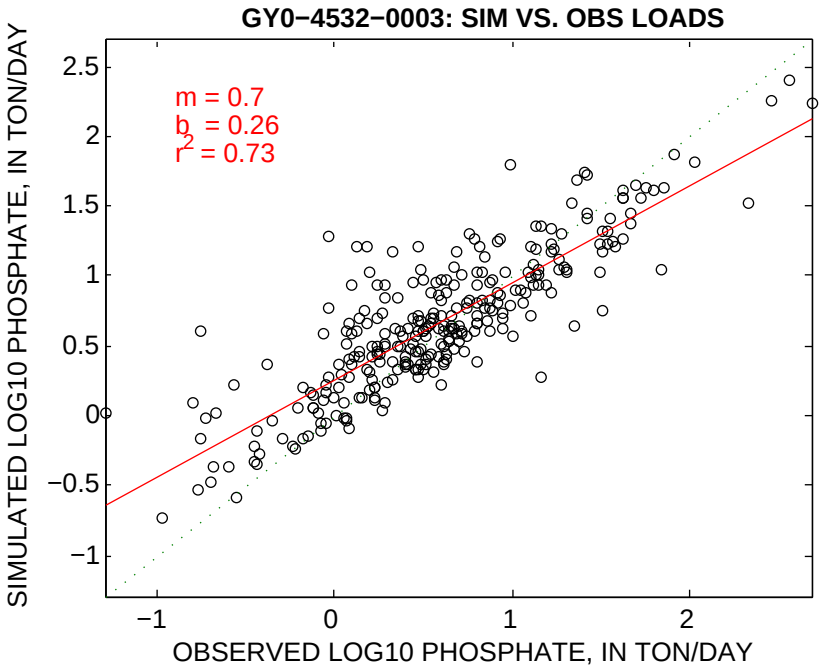


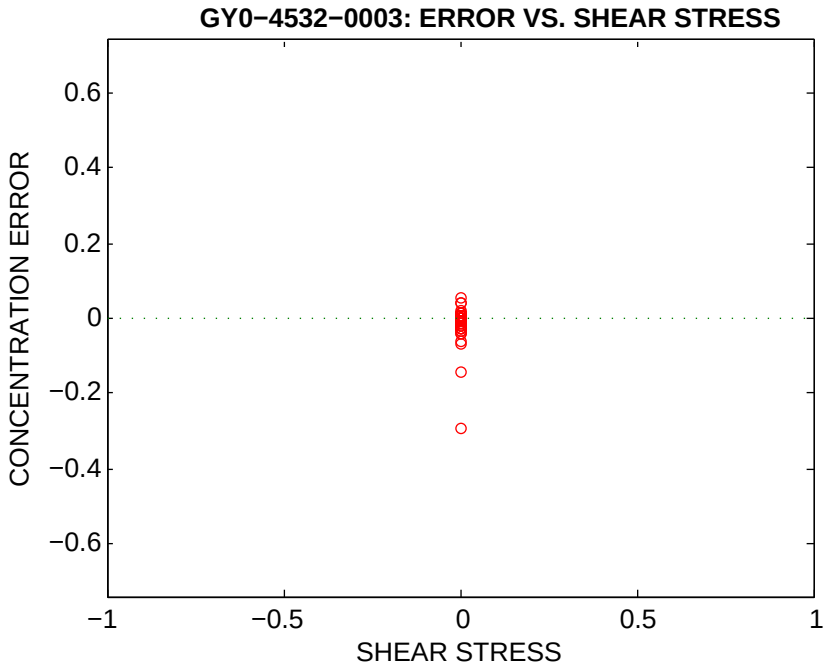


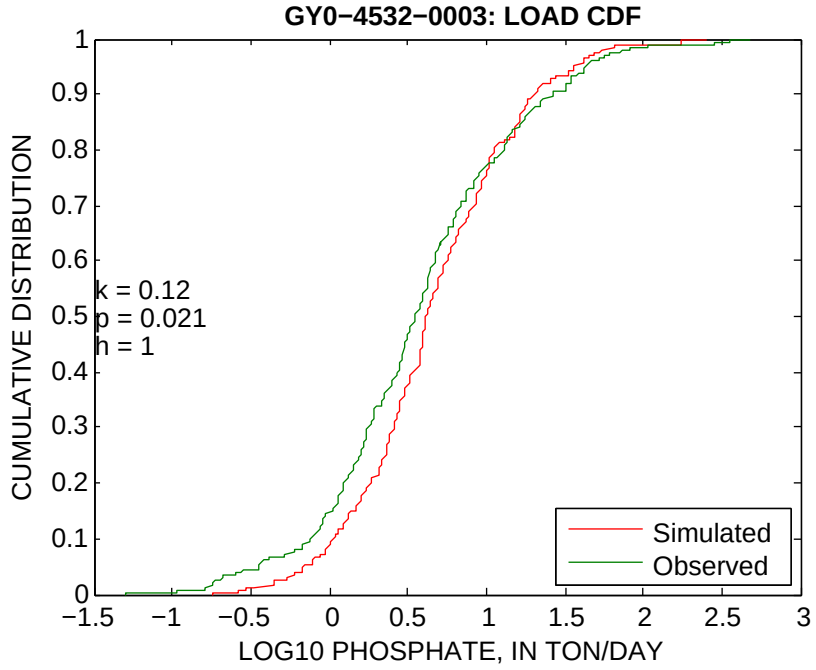


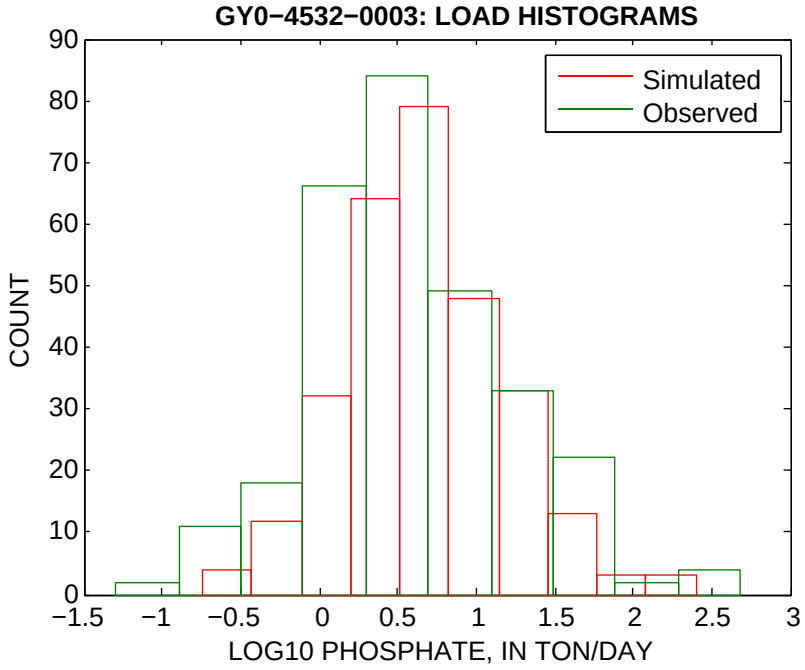


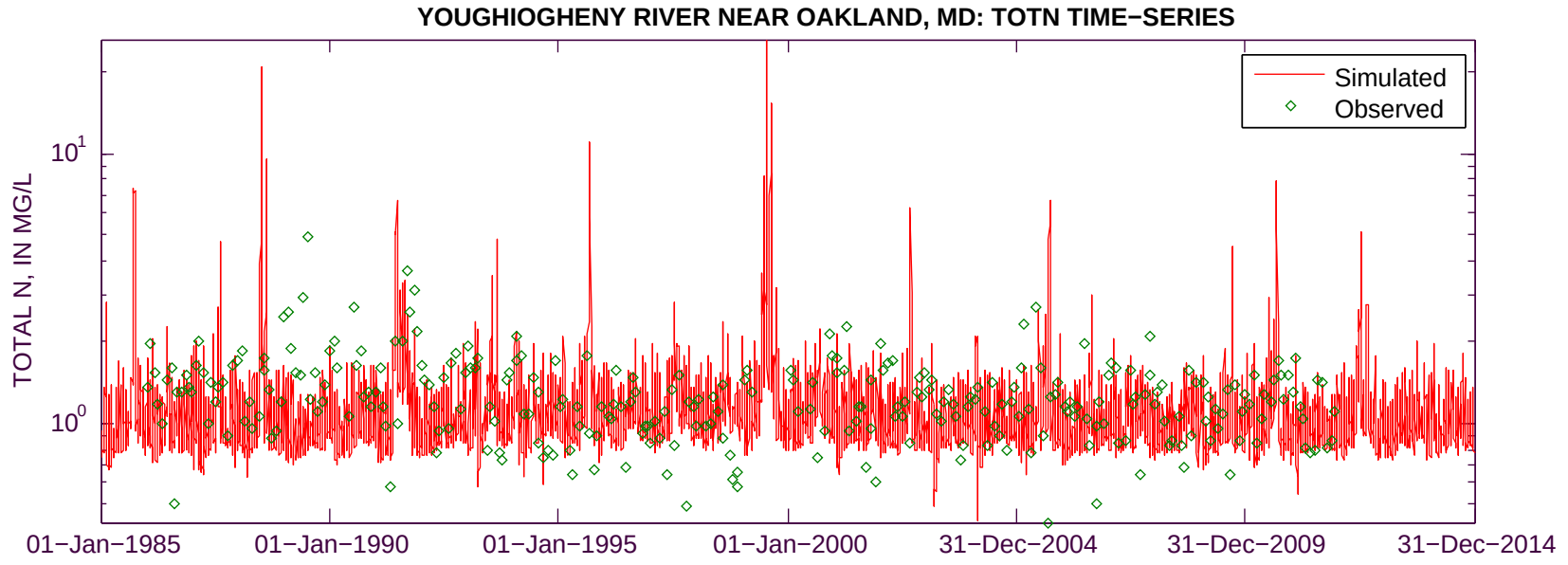
LOAD DATA
LOG10

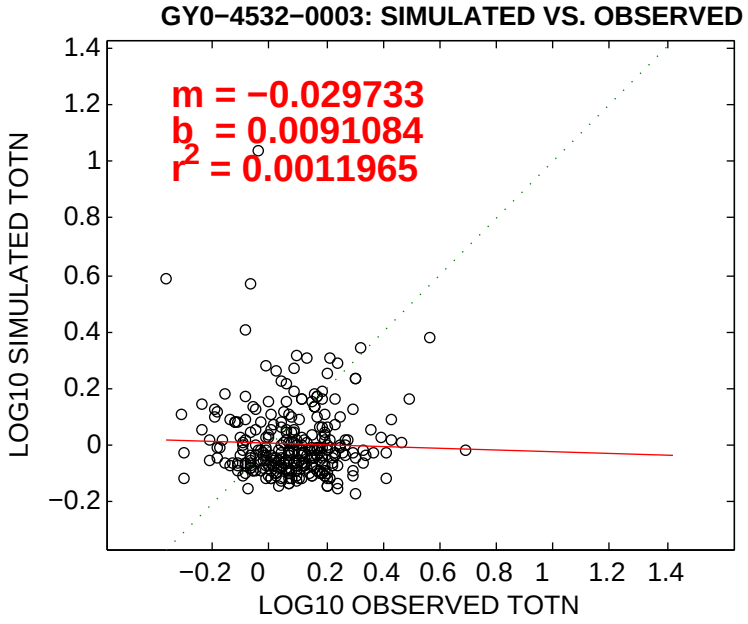


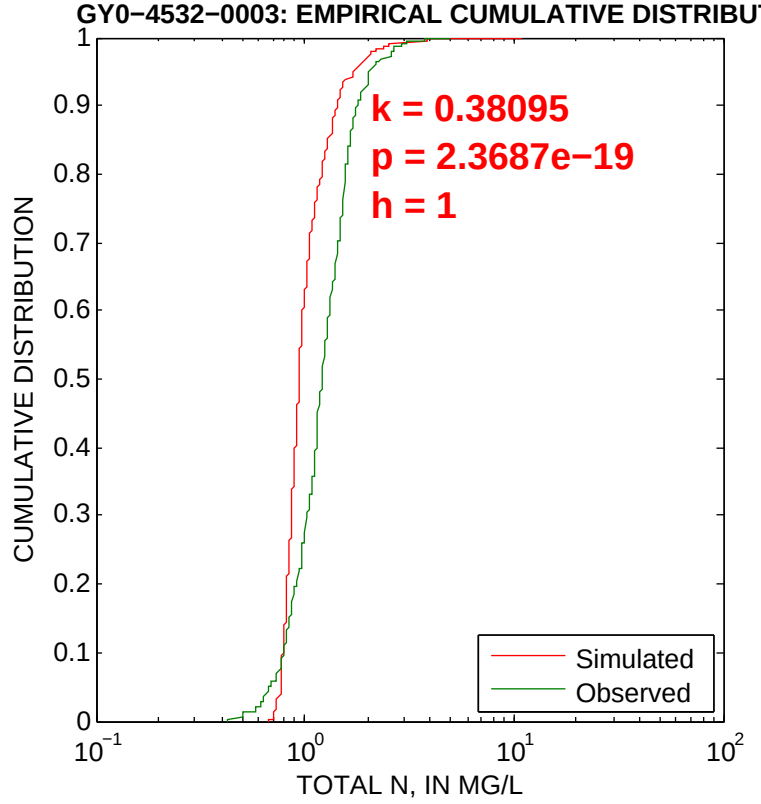












DATA SELECTION

scenario	file
P620171001WQ	TOTN.calib

plot: TOTN - total nitrogen

Dates: 1/1/1985 – 12/31/201

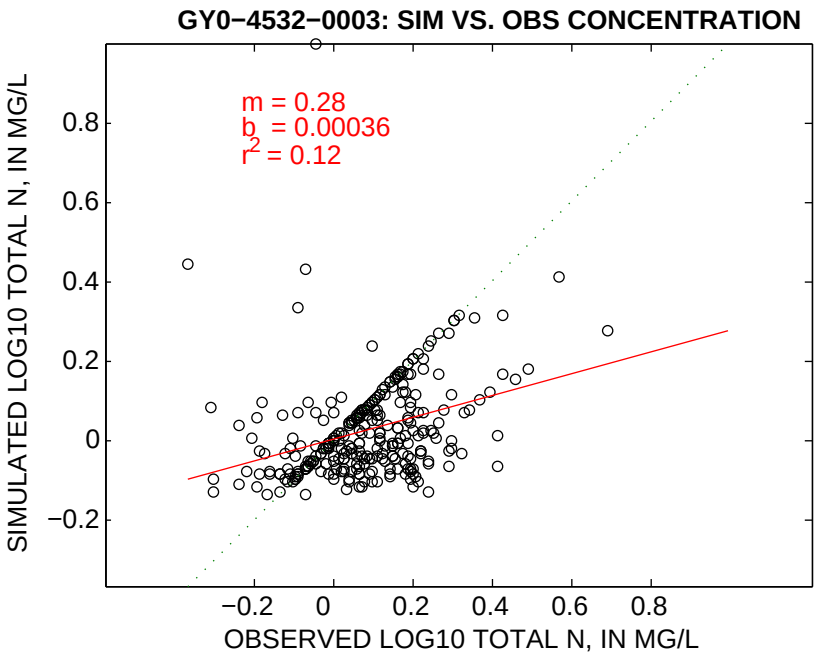
Drive	Directory	Observed
N/A	model	OBS20161101

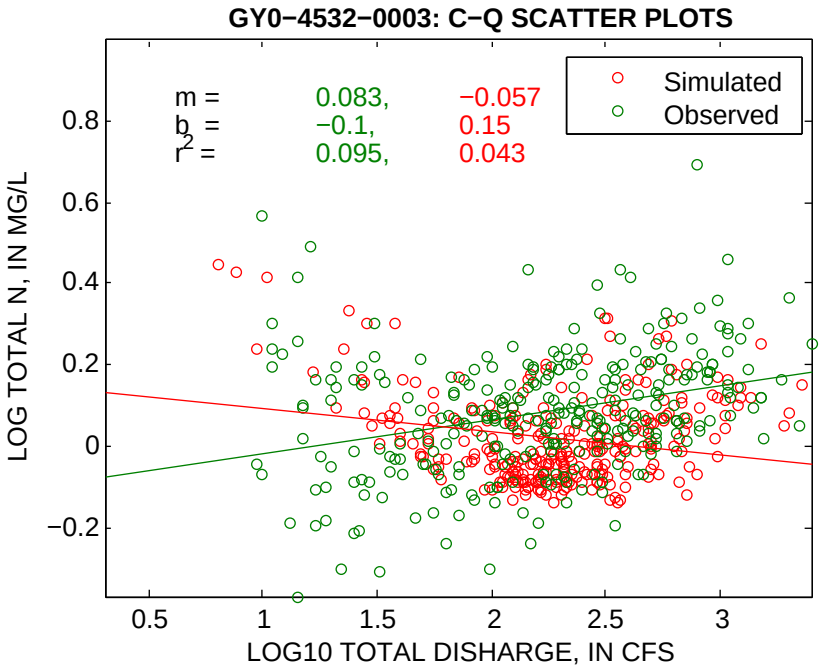
STATISTICS

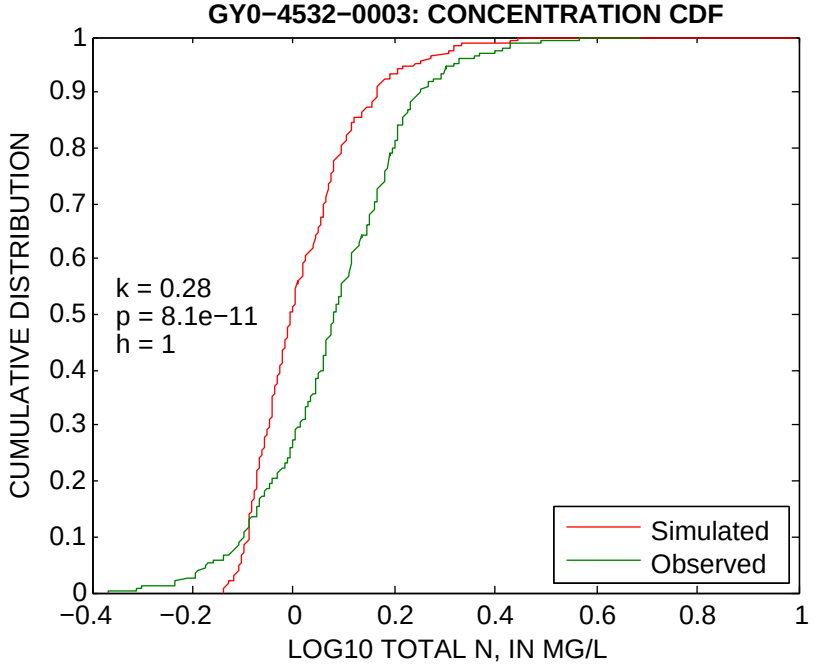
	n	294	294
		observe	simulate
min		0.43	0.67905
		-0.366532	-0.168098
mean		1.28939	1.08282
		0.0837023	0.00661973
media		1.2	0.94093
		0.0791812	-0.0264427
max		4.9	10.99
		0.690196	1.041
varian		0.246239	0.472962
		0.0225037	0.0166273
JB		0.001	0.001
		0.005048	0.001
		ra	log
%		-16.0201	-92.0913
err.va		0.777949	0.0464311
rel.std.err		3.15932	2.06327
mod.eff		-2.15932	-1.06327

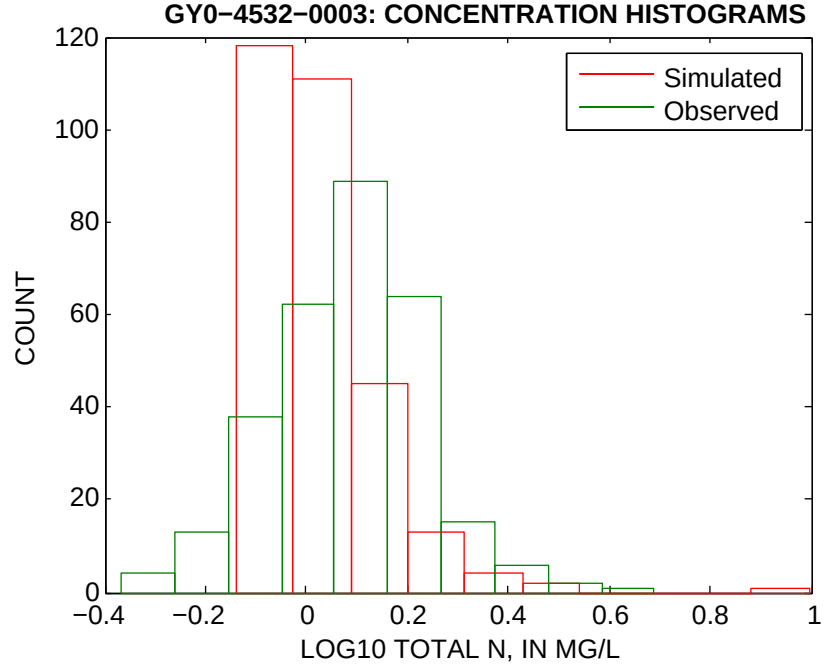
VERSION

ALL DATA
LOG10

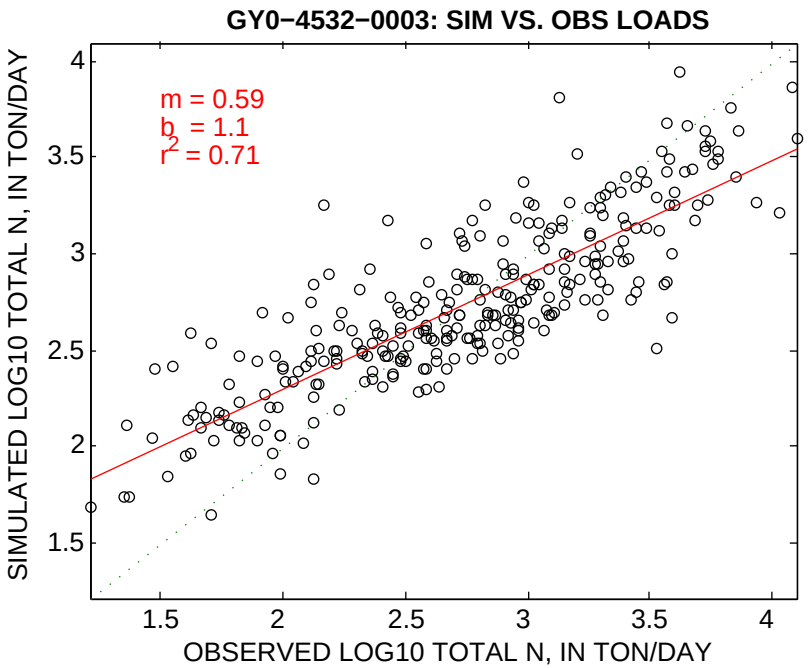


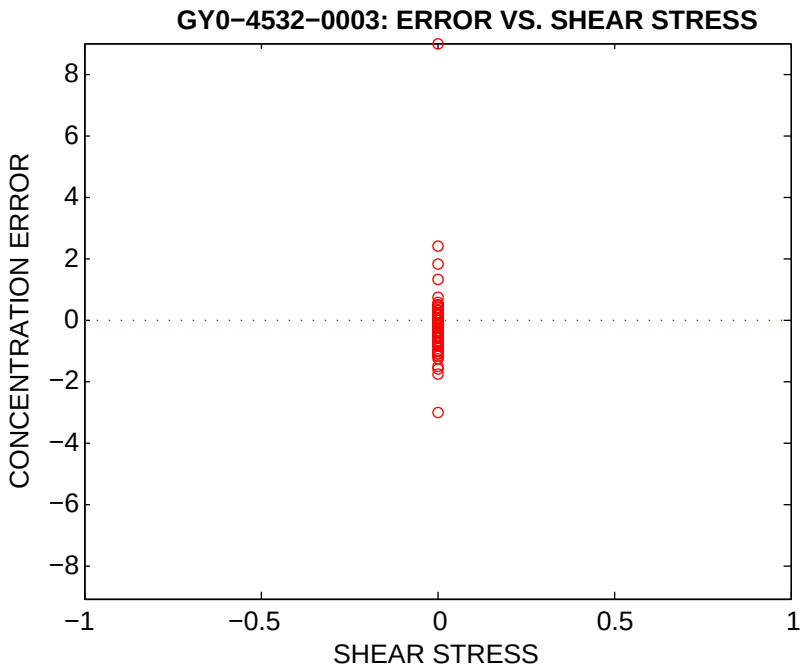


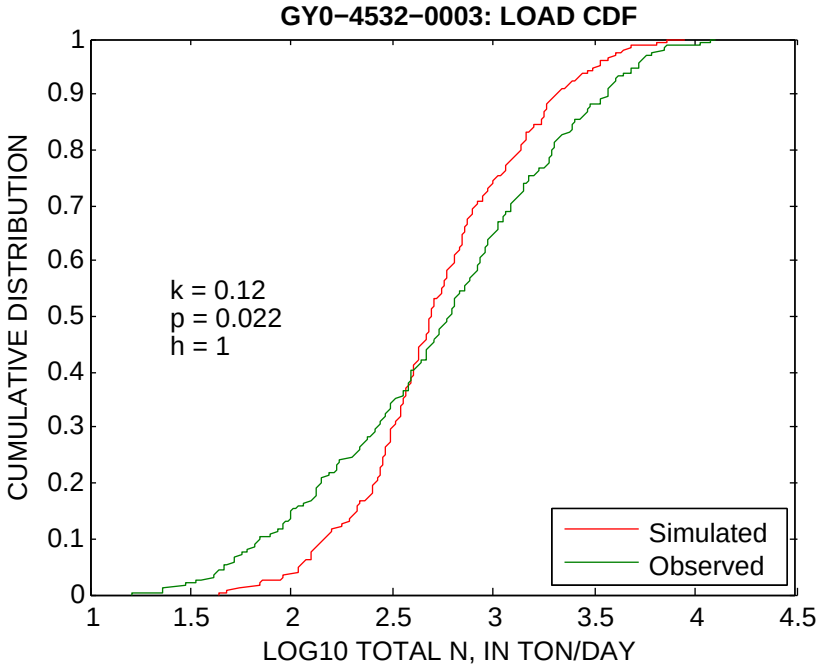


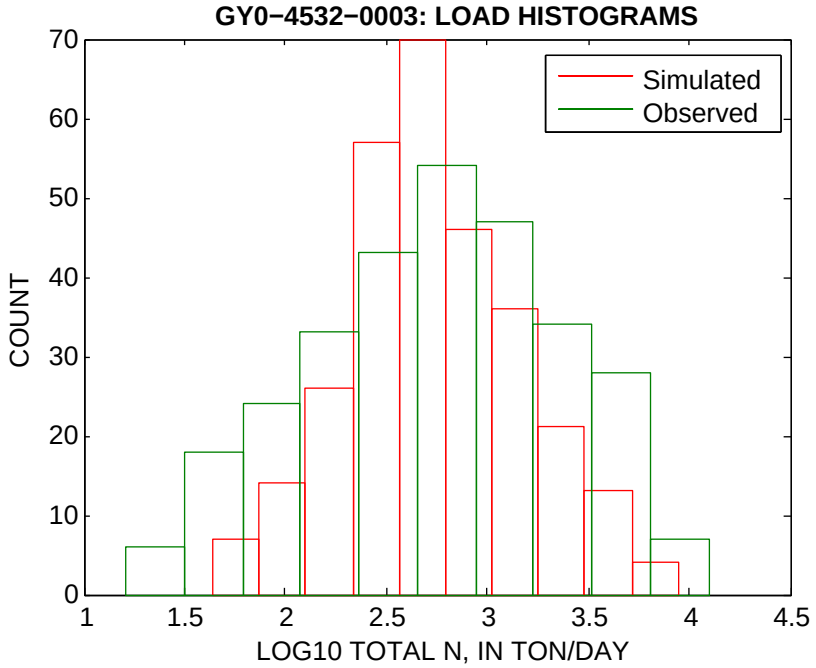


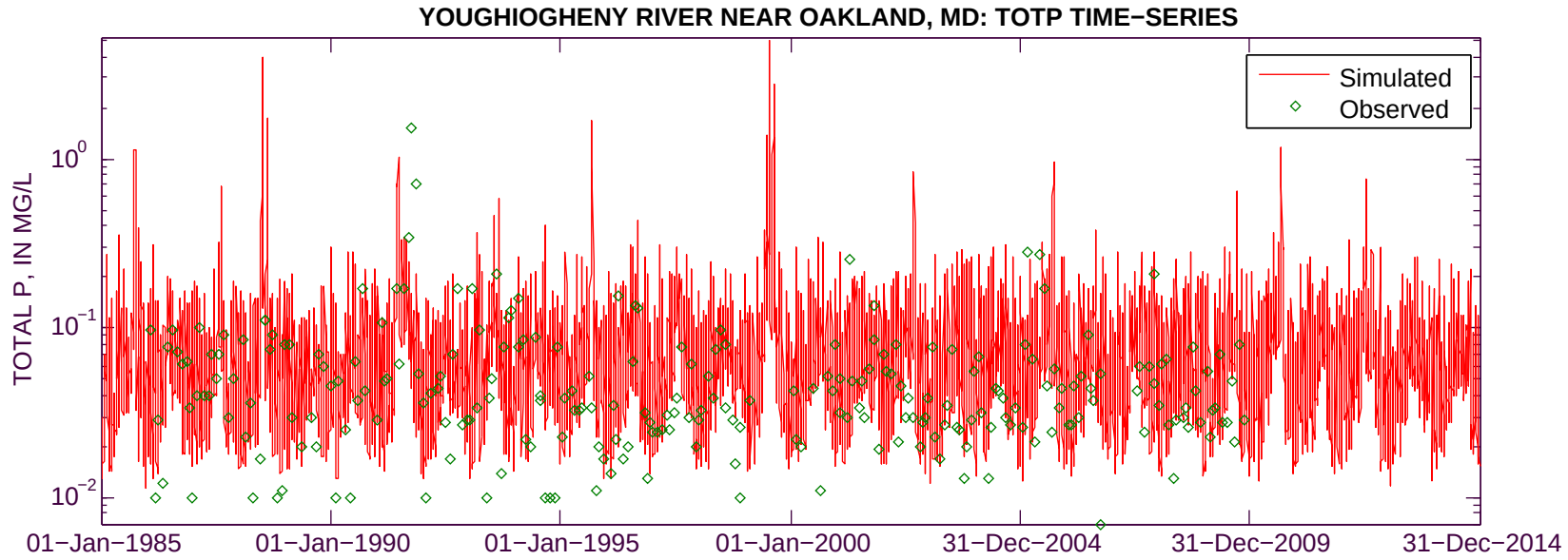
LOAD DATA
LOG10

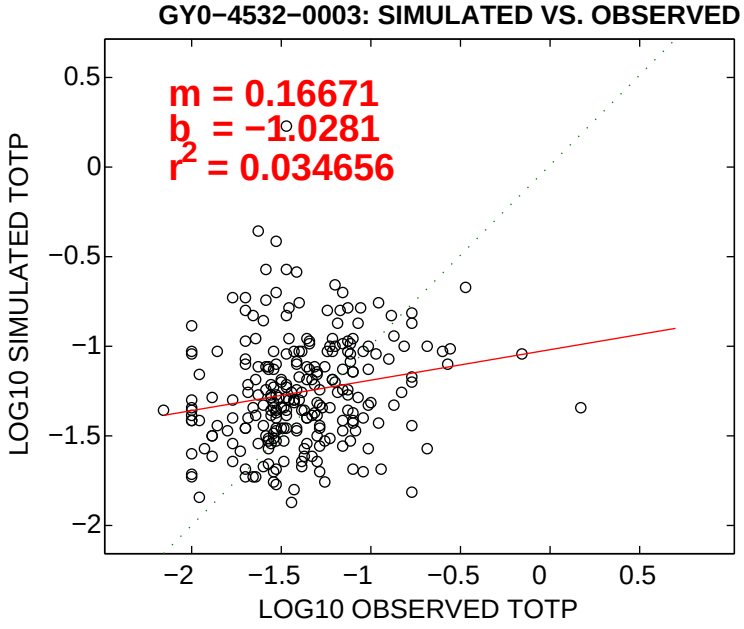


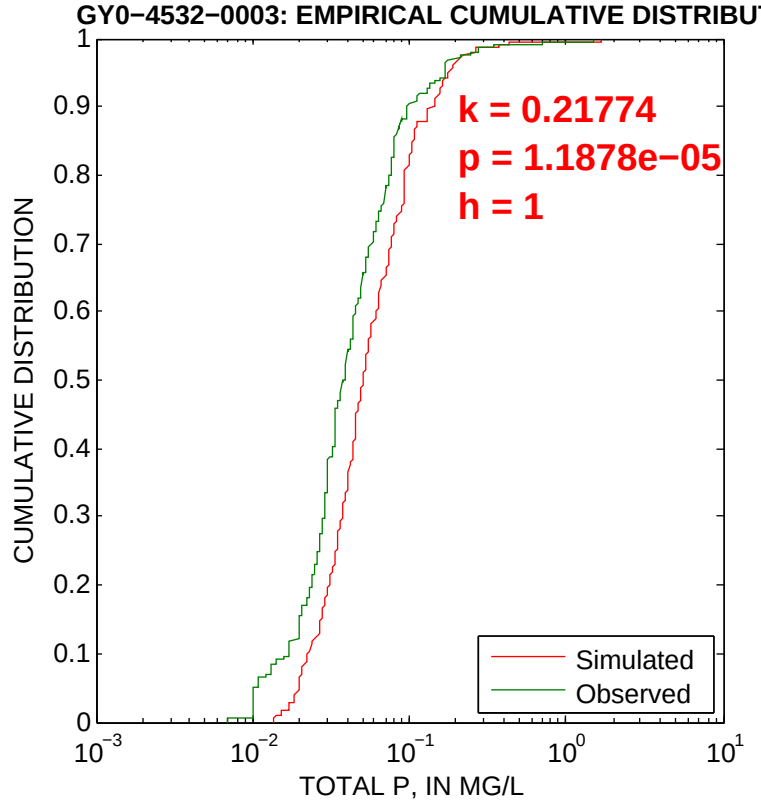












DATA SELECTION

scenario: P620171001WQ | file: TOTP.calib

plot: TOTP - total phosphorus

Dates: 1/1/1985 – 12/31/201

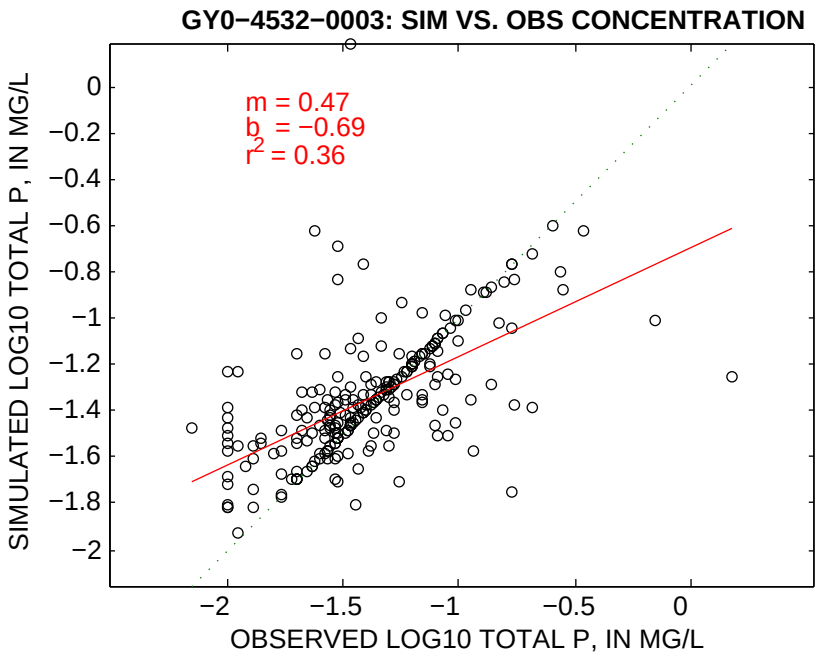
Drive: N/A | Directory: model | Observed: OBS20161101

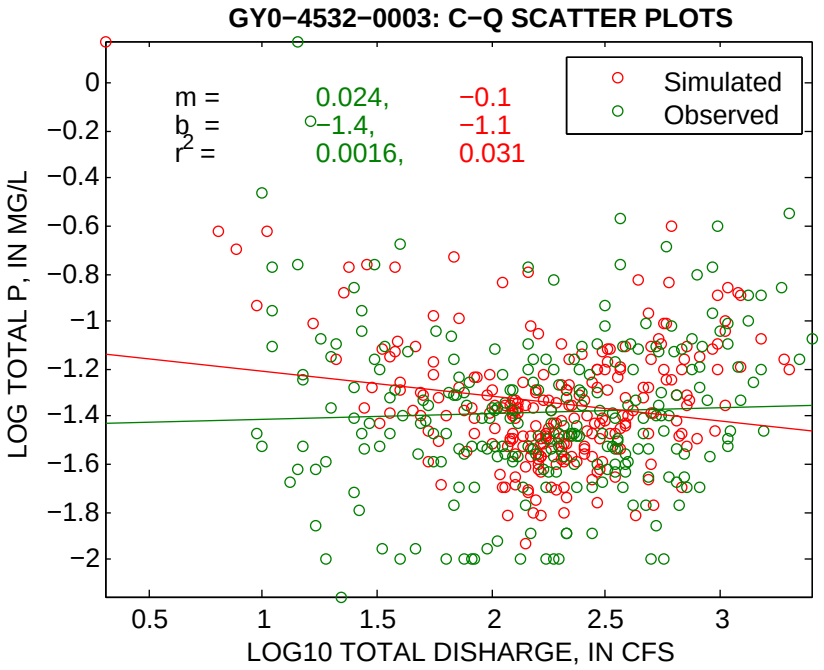
STATISTICS

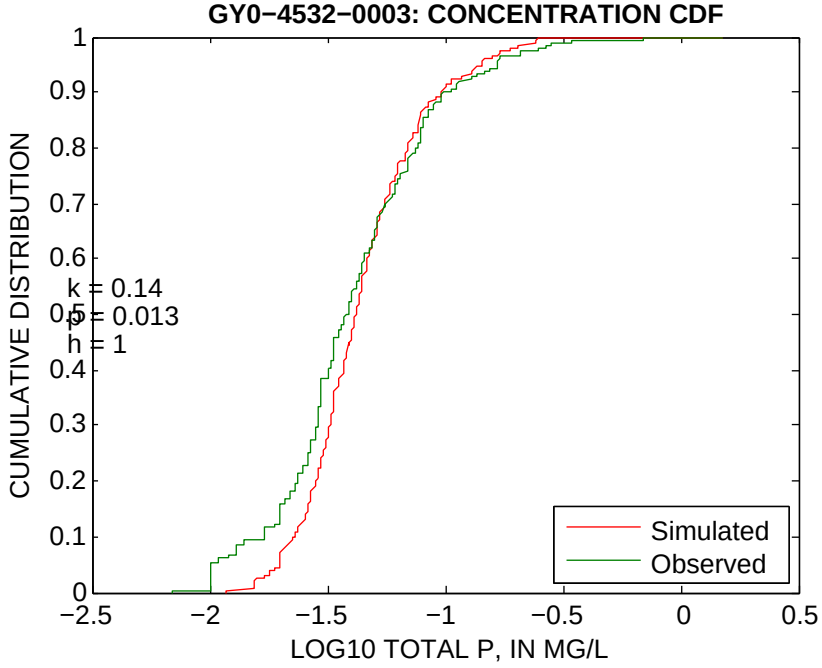
		observe	simulate
n		248	248
min		0.007	0.013503
		-2.1549	-1.86957
mean		0.0613347	0.0753601
		-1.38627	-1.25918
media		0.0385	0.0510105
		-1.41458	-1.29237
max		1.5	1.6885
		0.176091	0.227501
varian		0.0123556	0.0137524
		0.114937	0.0921751
JB		0.001	0.001
		0.001	0.001
		ra	log
%		22.867	-9.16819
err.va		0.0260359	0.185009
rel.std.err		2.10722	1.60965
mod.eff		-1.10722	-0.609648

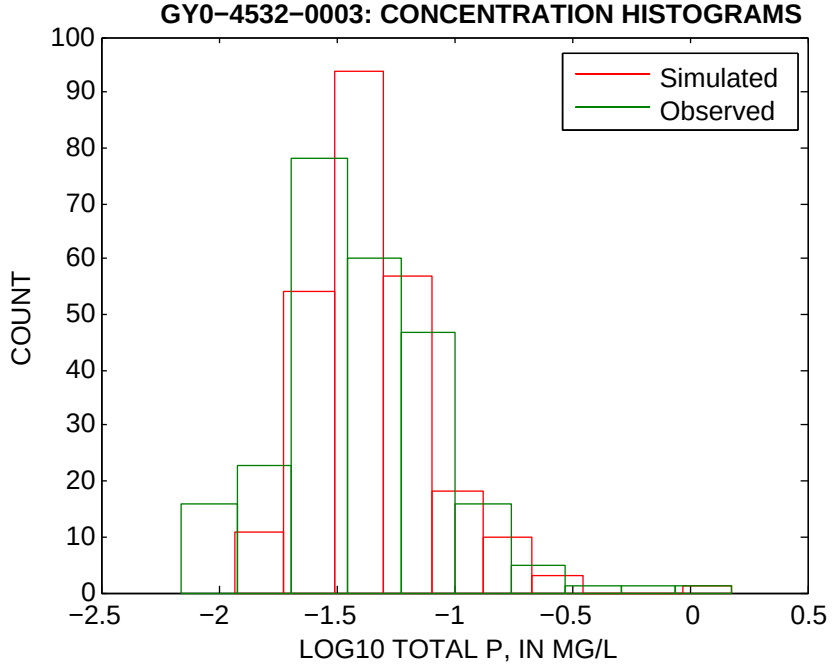
VERSION 2.1

ALL DATA
LOG10

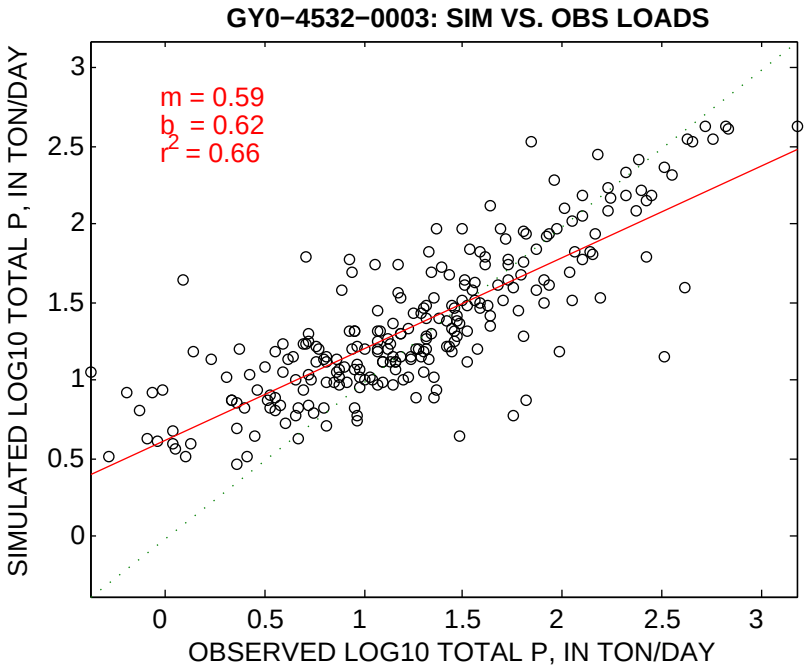


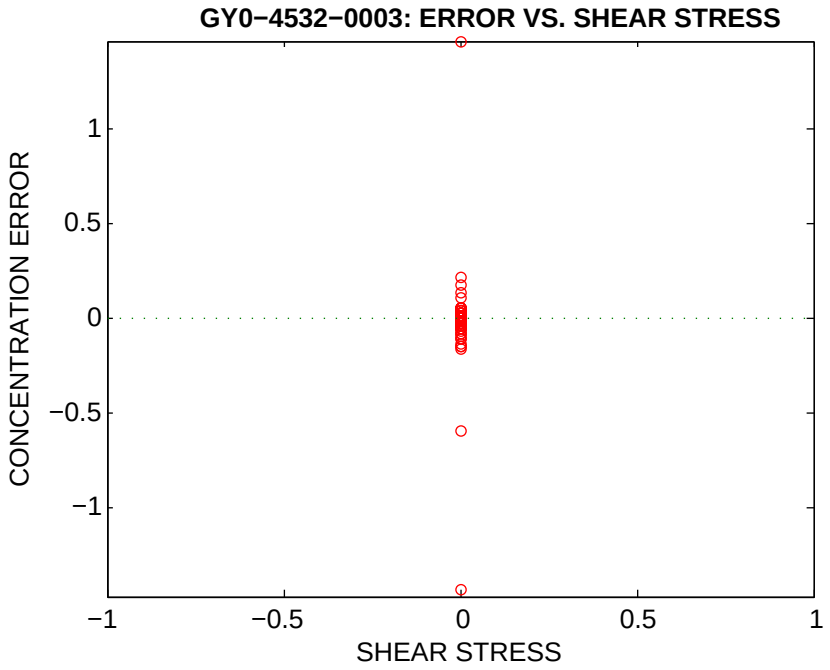


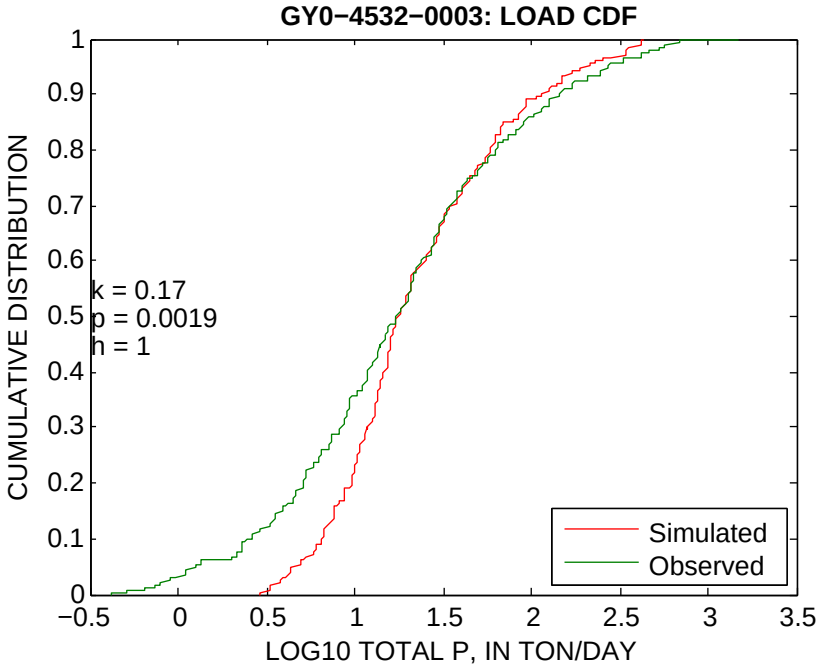


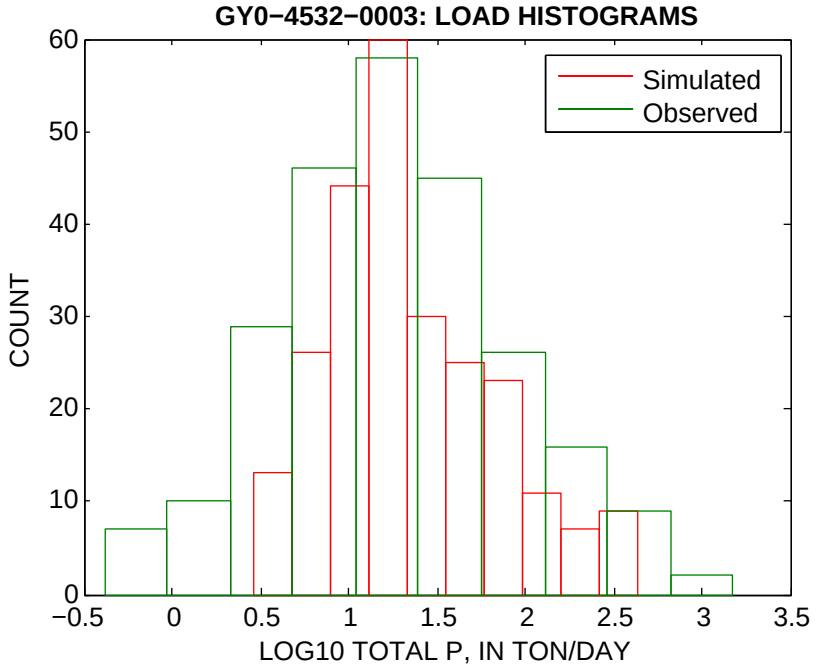


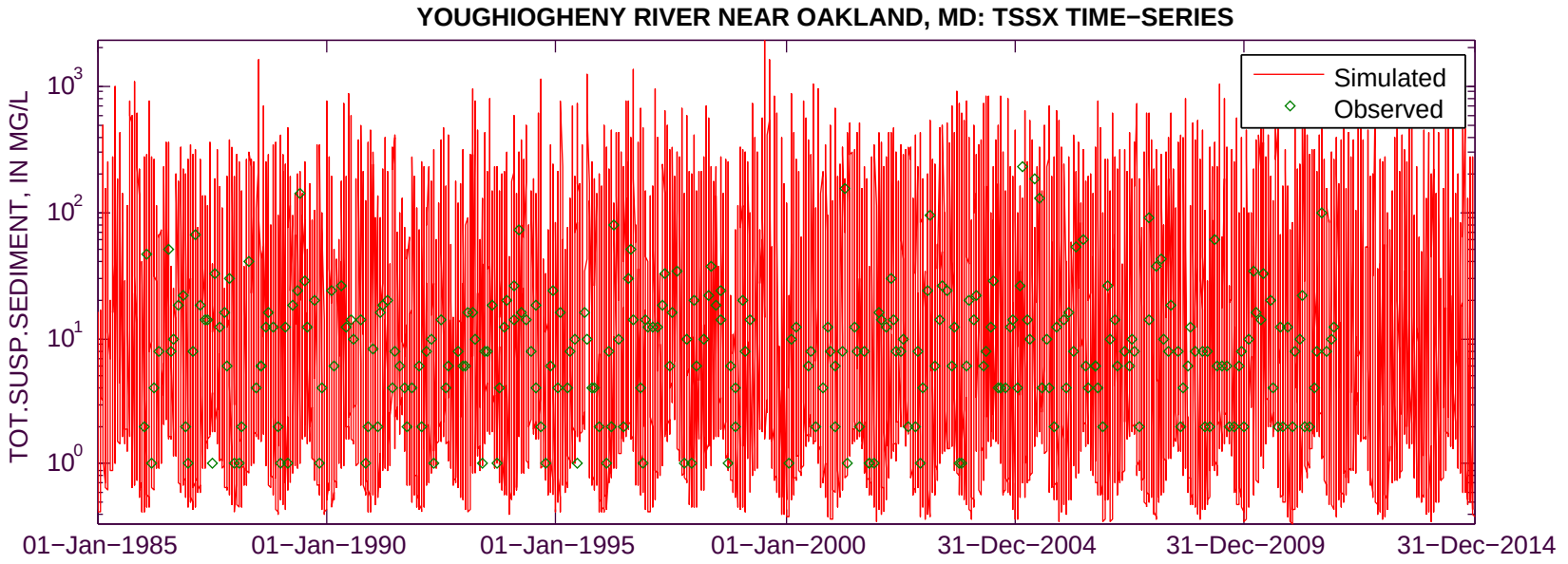
LOAD DATA
LOG10

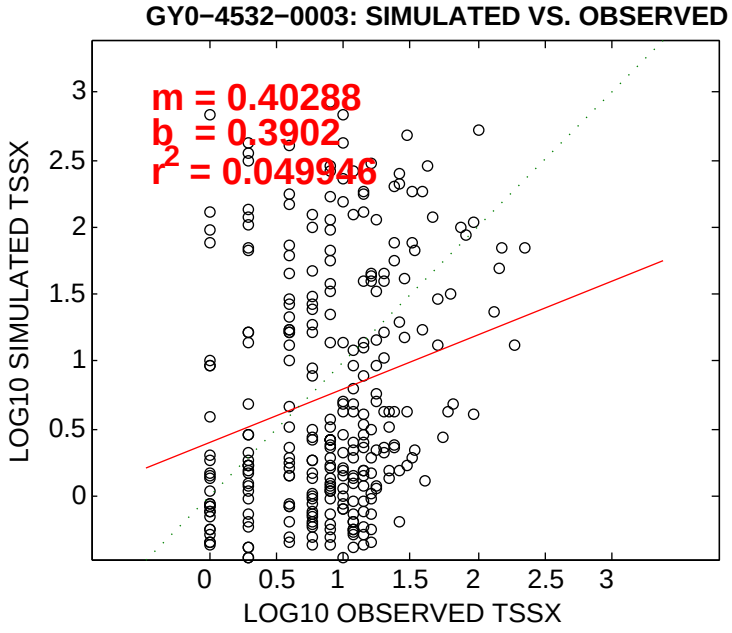


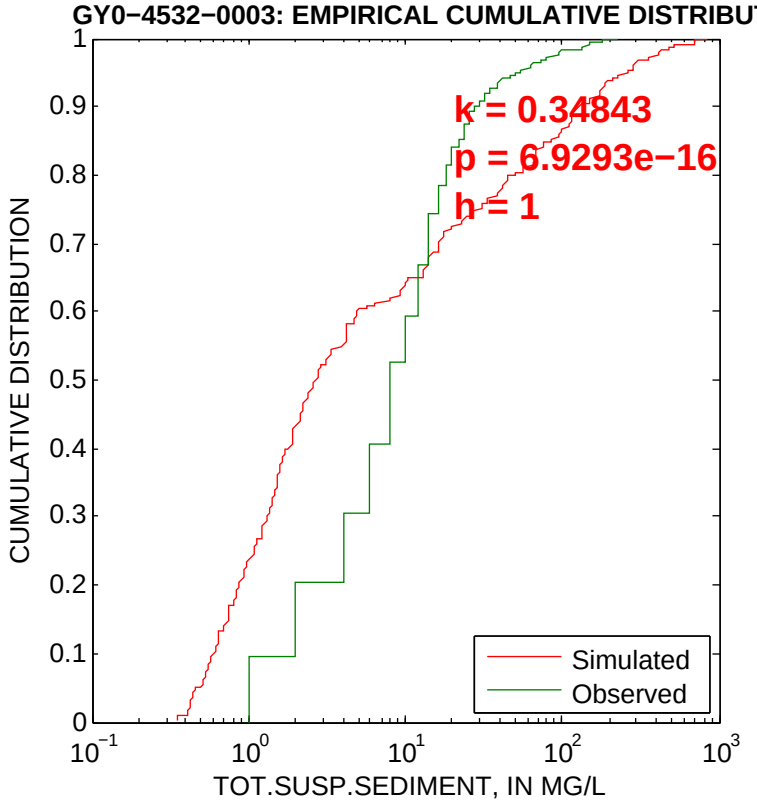












DATA SELECTION

scenario	file
P620171001WQ	TSSX.calib

plot: TSSX - total suspended ...

Dates: 1/1/1985 – 12/31/201

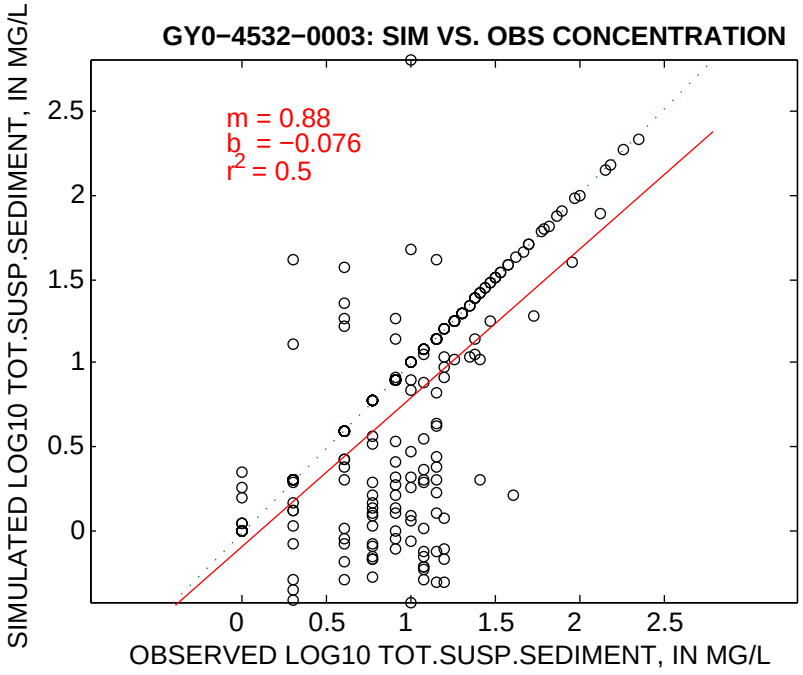
Drive	Directory	Observed
N/A	model	OBS20161101

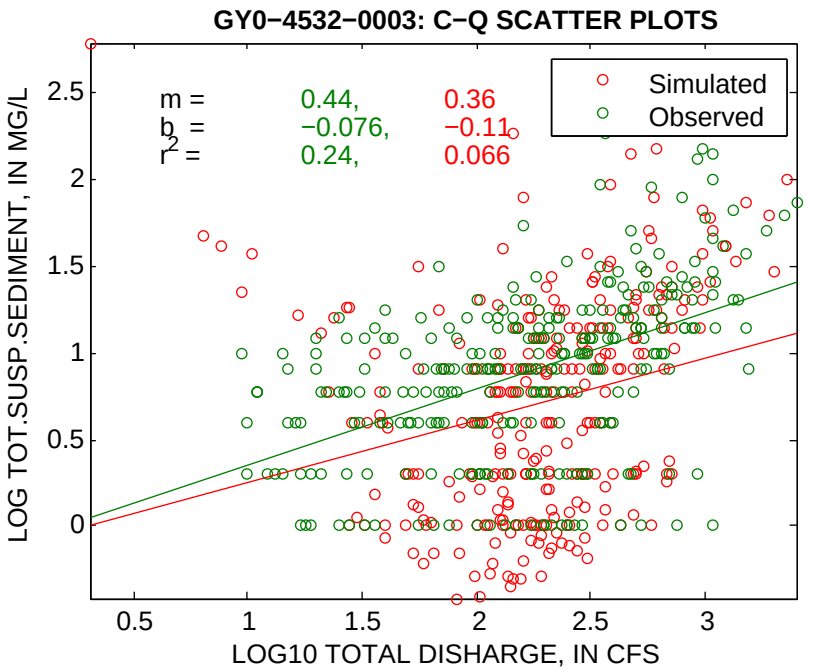
STATISTICS

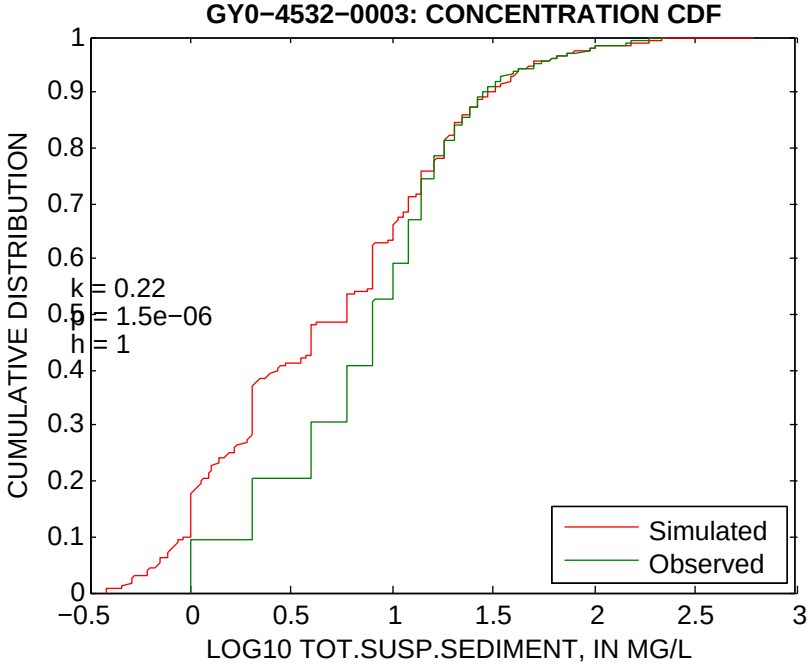
	n	observe	simulate
		287	287
min		1	0.34492
		0	-0.462282
mean		15.293	45.3298
		0.895523	0.750991
media		8	2.6589
		0.90309	0.424702
max		226	842.87
		2.35411	2.92576
varian		650.343	12097.9
		0.244401	0.794252
JB		0.001	0.001
		0.5	0.001
		ra	log
%		196.408	-16.1394
err.va		13205.6	0.862685
rel.std.err		20.3056	3.5298
mod.eff		-19.3056	-2.5298

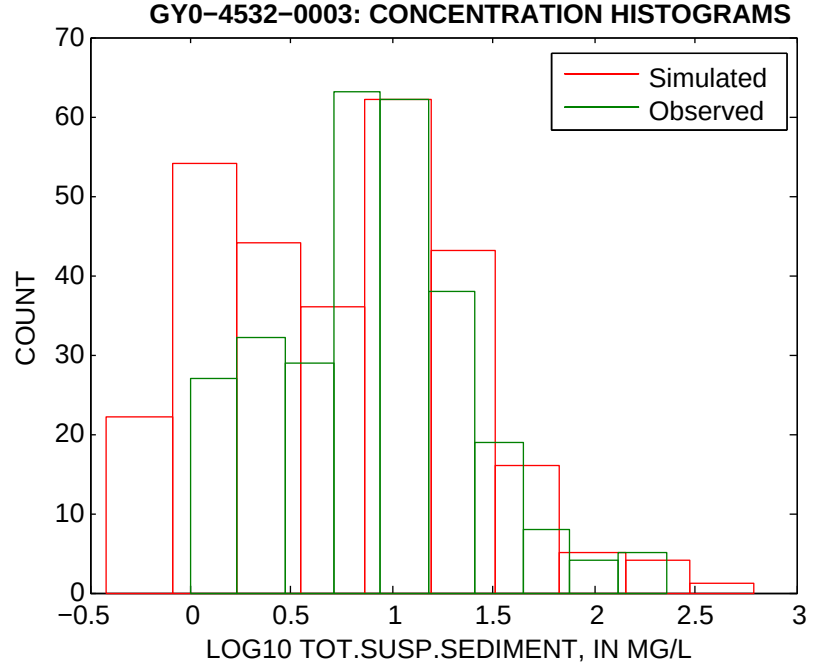
VERSION 2.1

ALL DATA
LOG10

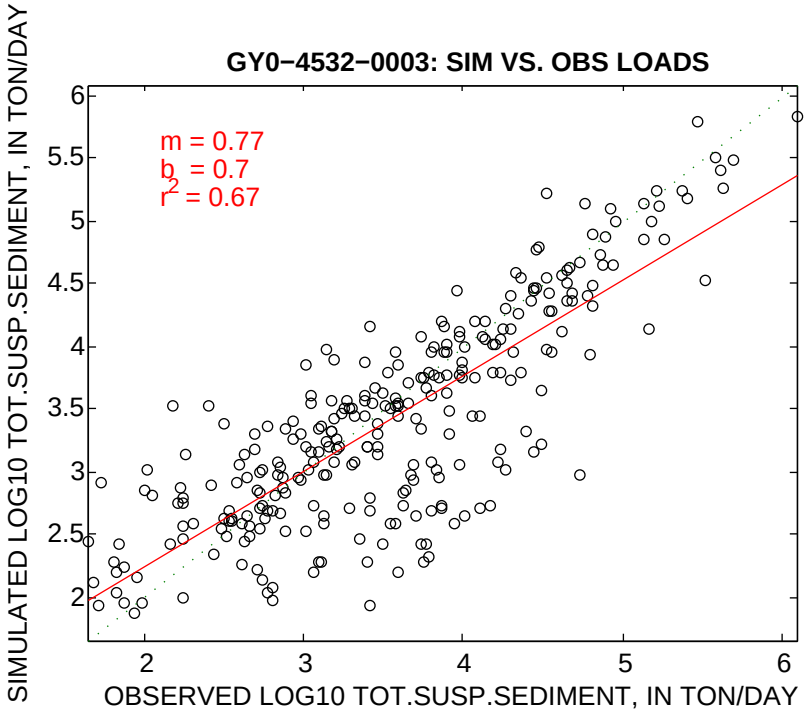


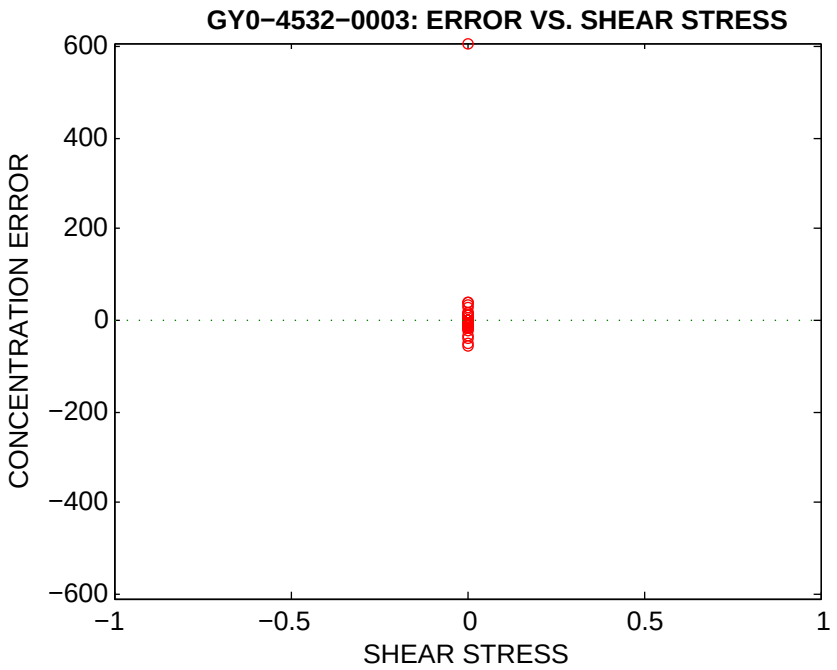


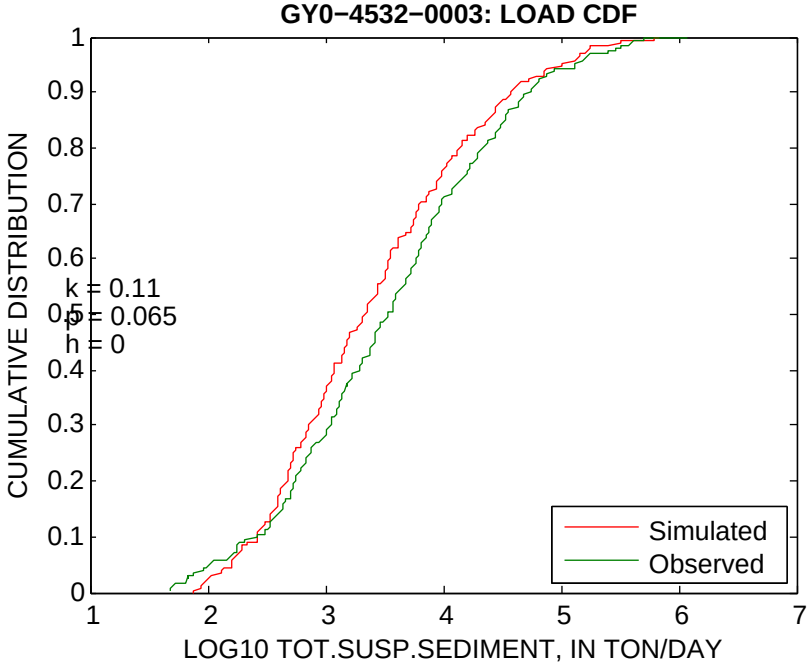


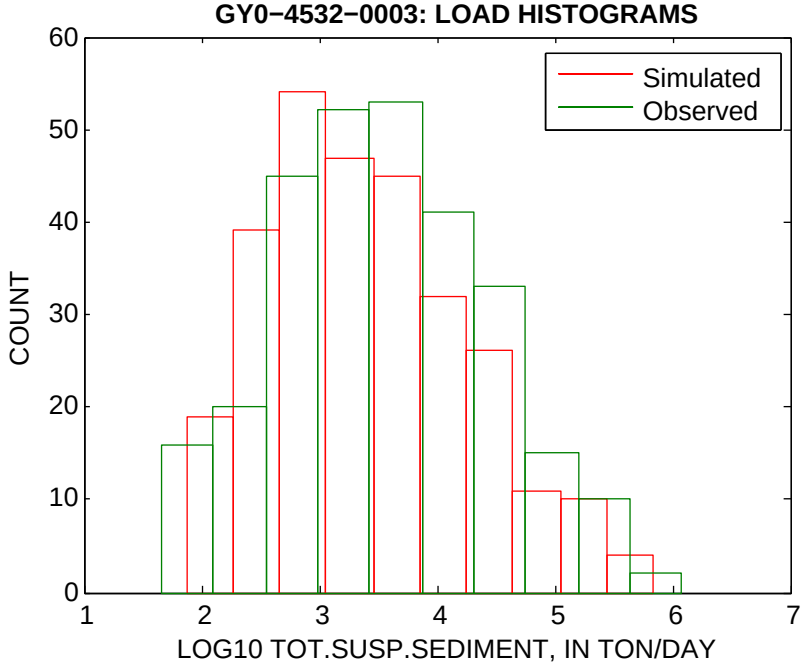


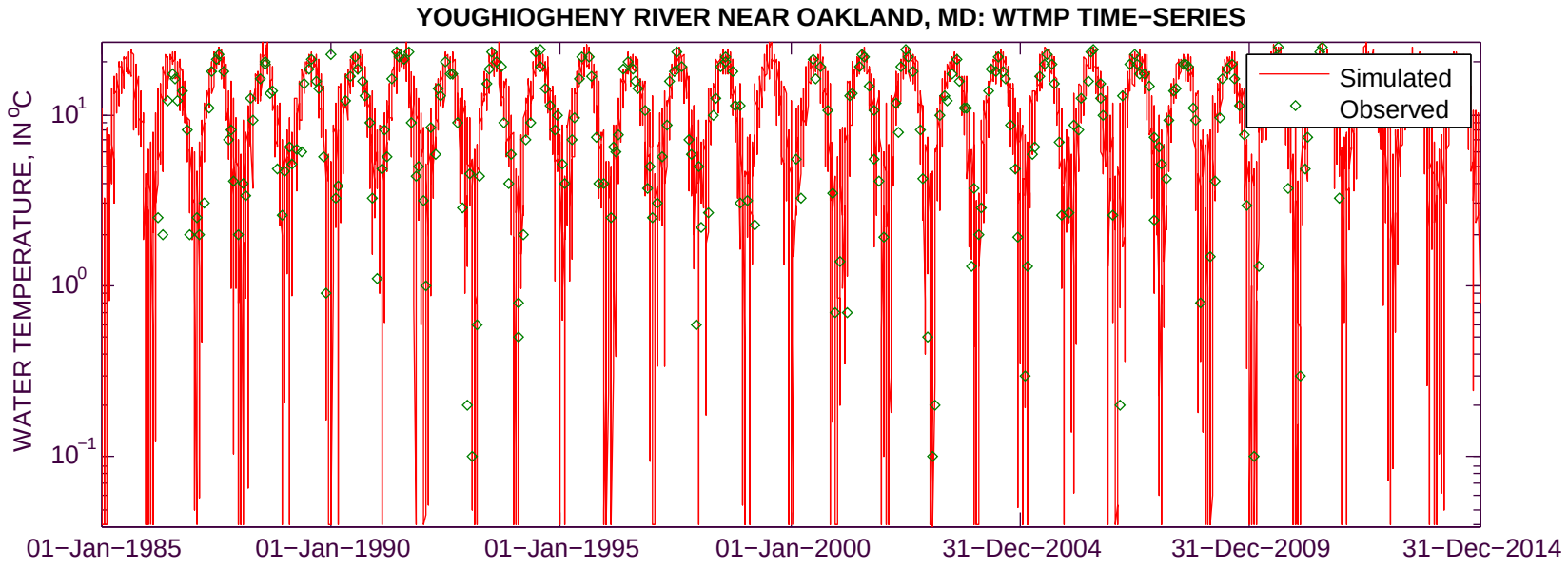
LOAD DATA
LOG10

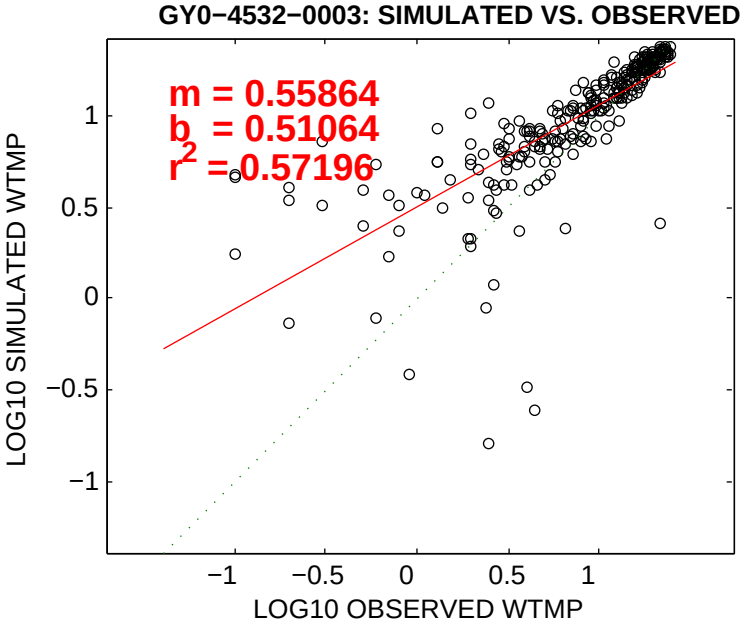


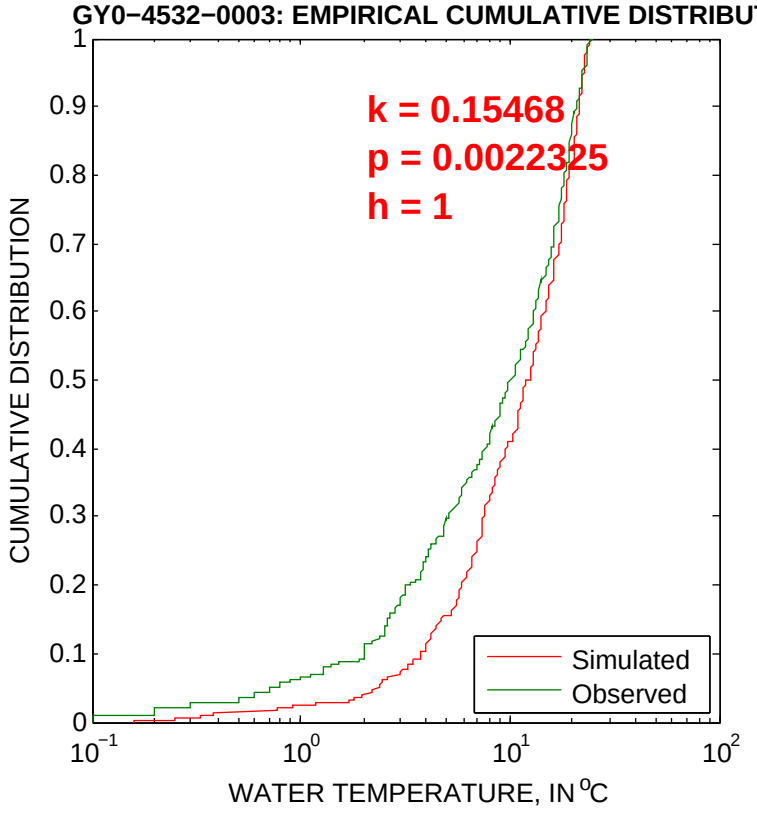












DATA SELECTION

scenario	file
P620171001WQ	WTMP.calib

plot: WTMP - water tempera...

Dates: 1/1/1985 – 12/31/201

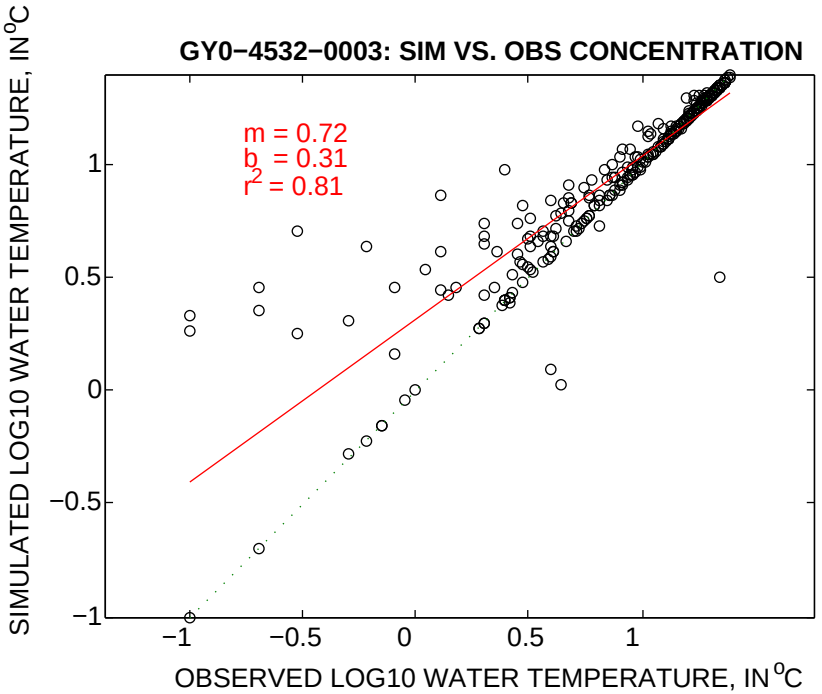
Drive	Directory	Observed
N/A	model	OBS20161101

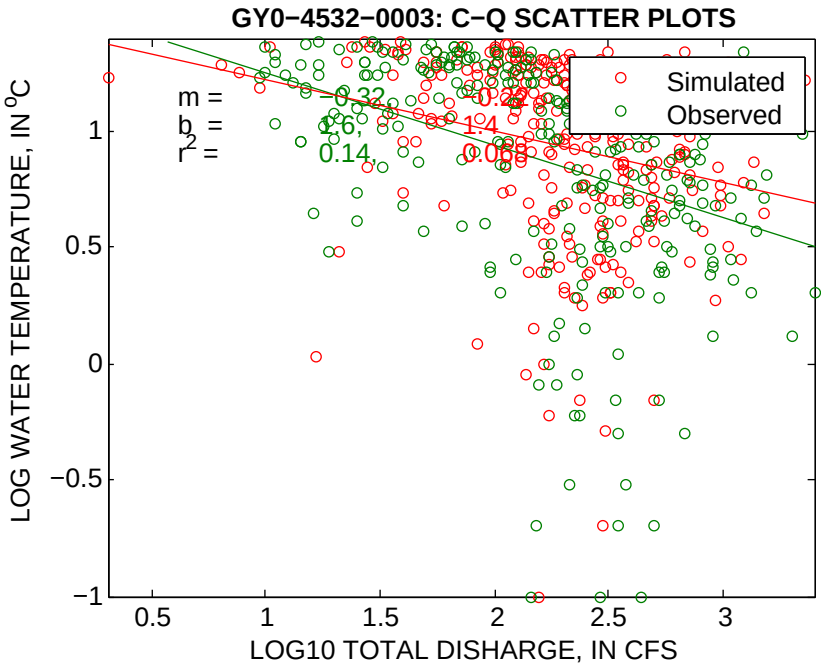
STATISTICS

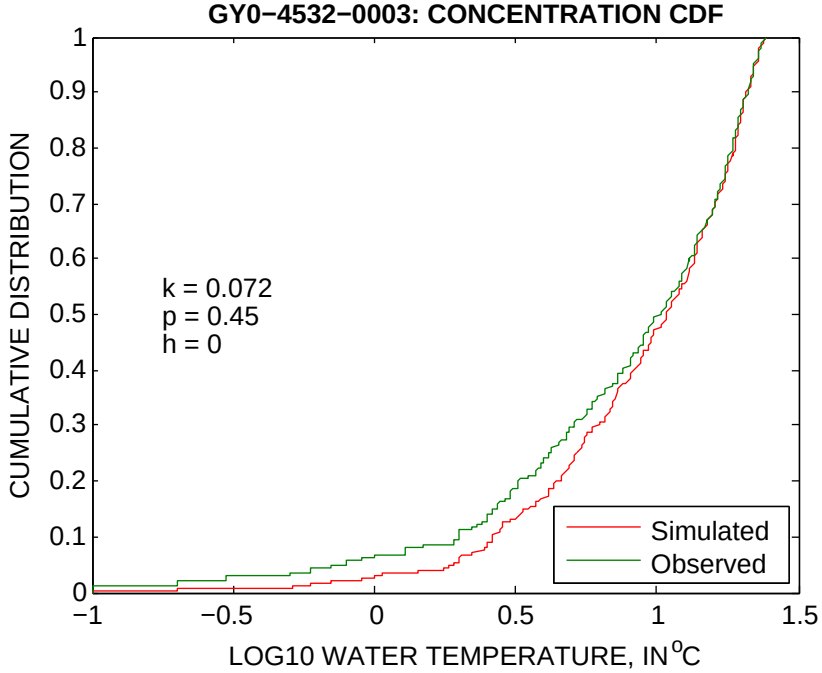
	n	observe	simulate
		278	278
min		0.1	0.15882
		-1	-0.799095
mean		10.8582	12.4133
		0.868271	0.995688
media		10.1995	12.1715
		1.00856	1.08524
max		24.5	24.355
		1.38917	1.38659
varian		51.0272	43.642
		0.230376	0.1257
JB		0.001965	0.003528
		0.001	0.001
		ra	log
%		14.3216	14.6749
err.va		9.29343	0.114974
rel.std.err		0.182127	0.499074
mod.eff		0.817873	0.500926

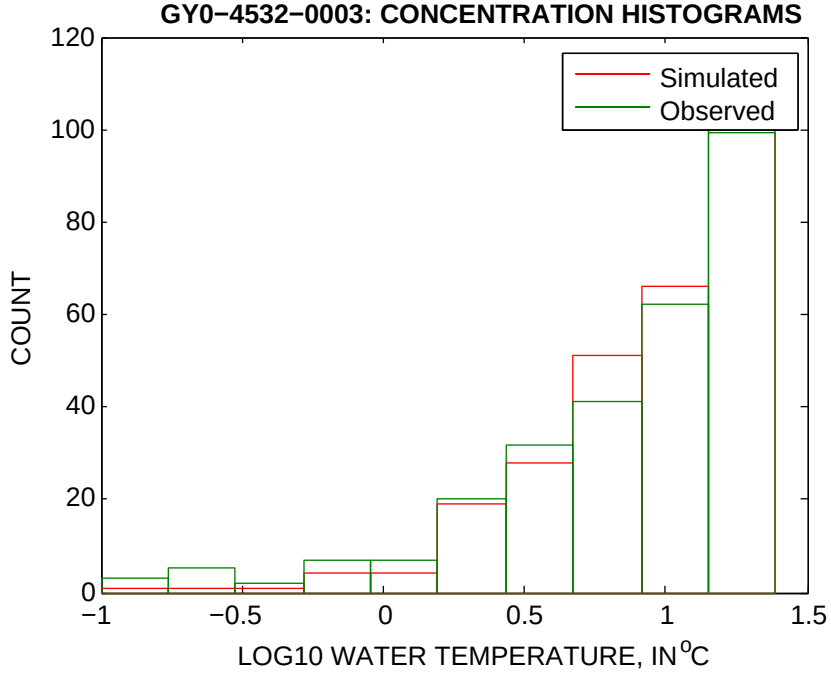
VERSION 2.1

ALL DATA
LOG10

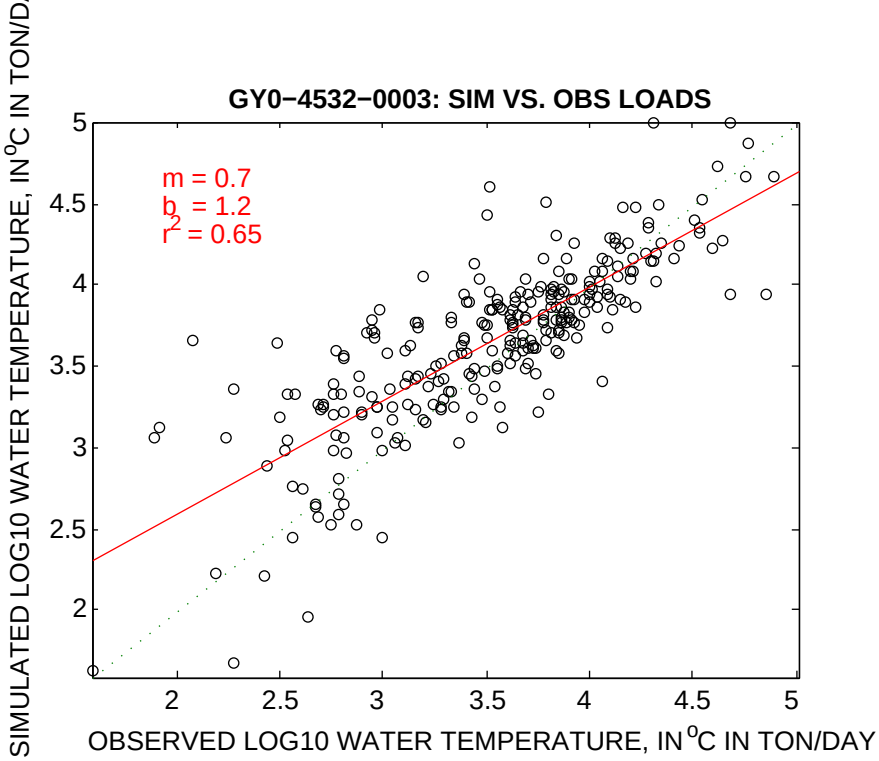


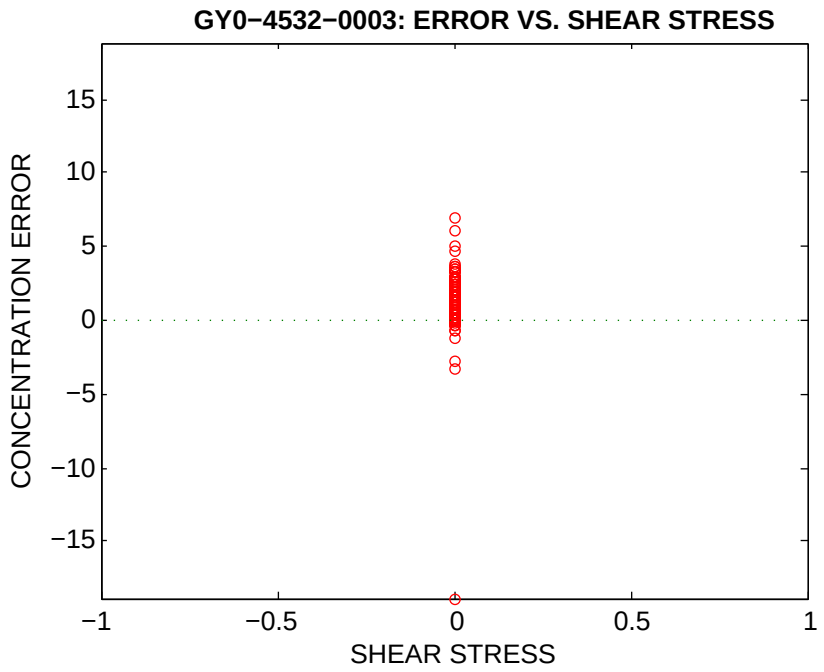


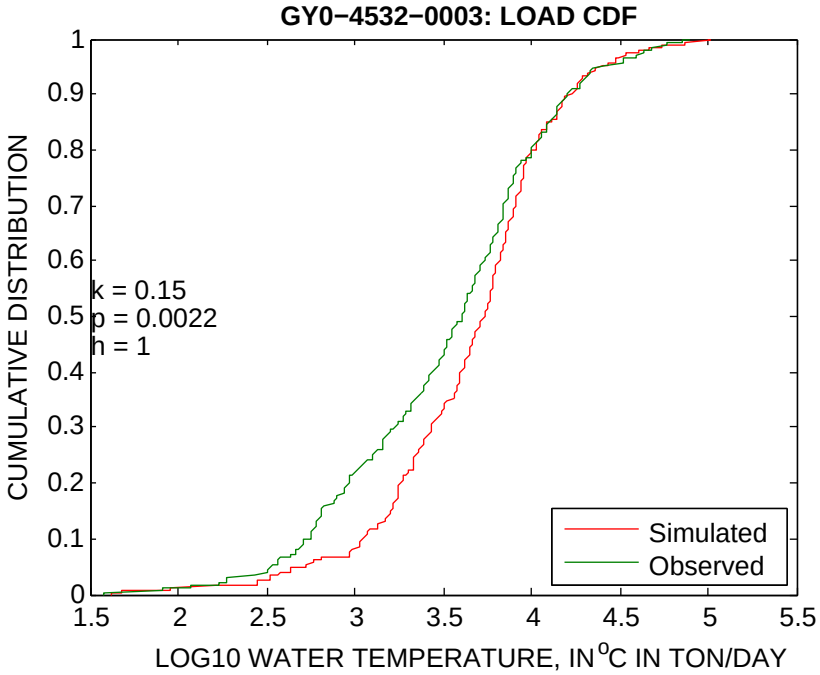


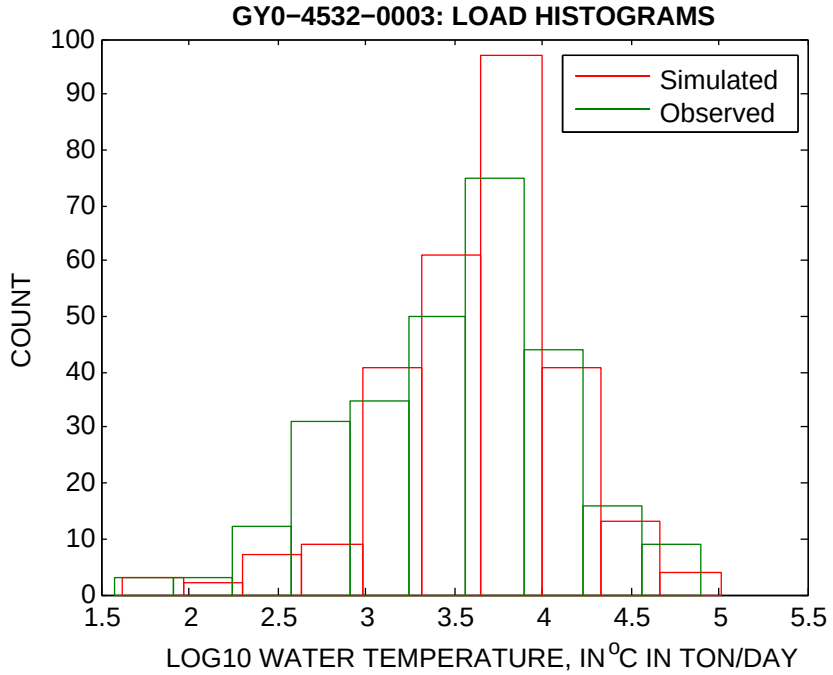


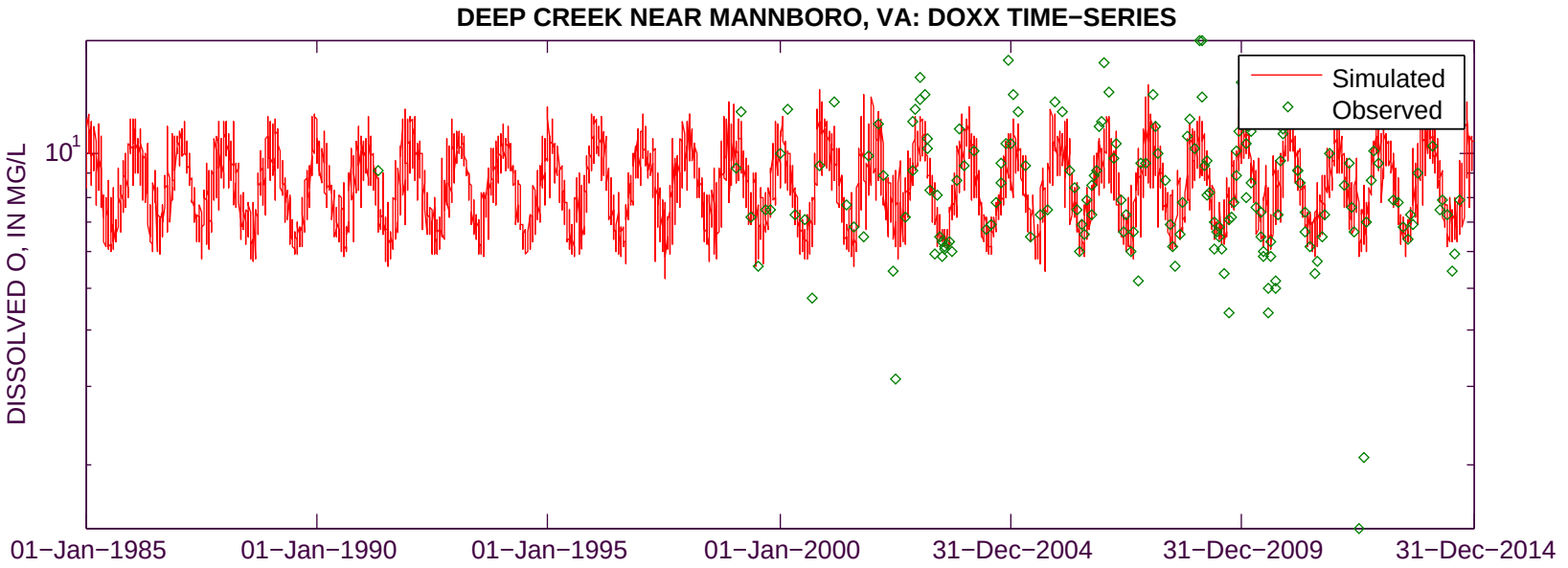
LOAD DATA
LOG10











DATA SELECTION

scenario	file
P620171001WQ	DOXX.calib

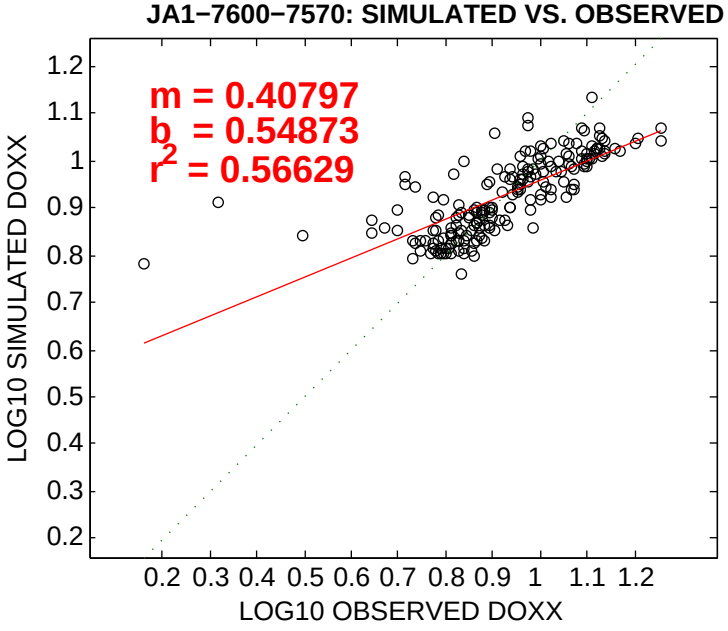
plot: DOXX - dissolved oxygen

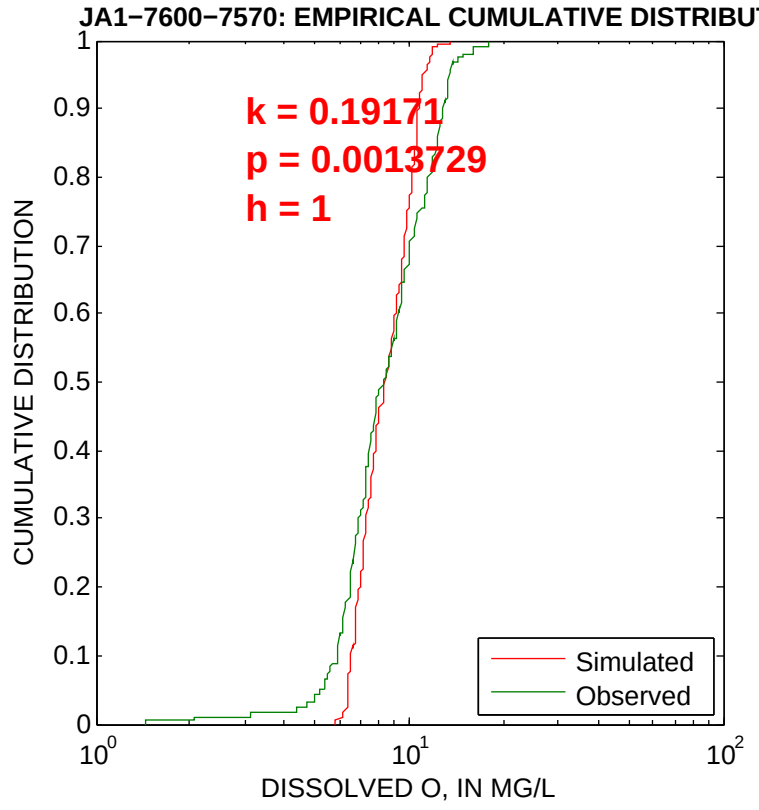
Dates: 1/1/1985 – 12/31/201

Drive	Directory	Observed
N/A	model	OBS20161101

STATISTICS

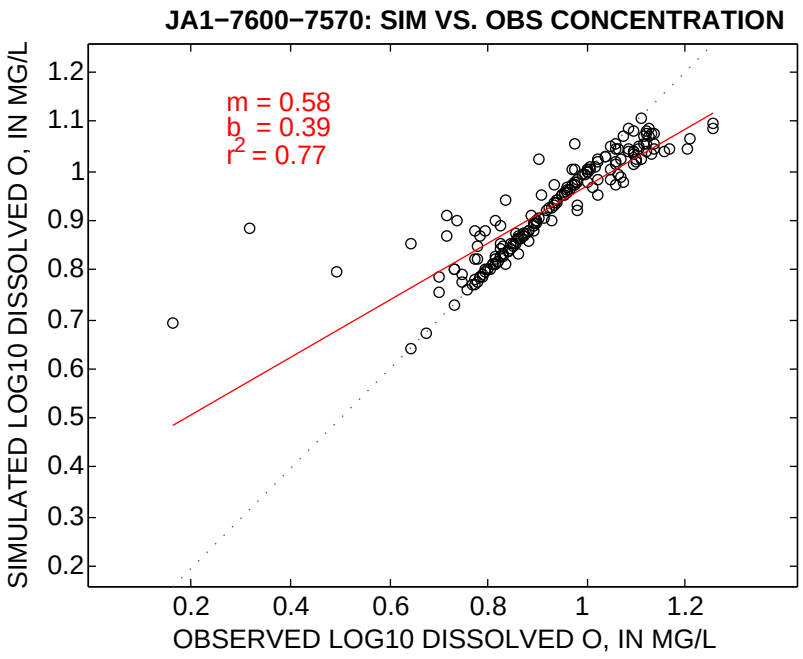
	n	193	193
		observe	simulate
min		1.45	5.7553
		0.161368	0.760068
mean		8.85529	8.57116
		0.923206	0.925375
media		8.31	8.3954
		0.919601	0.924041
max		18	13.607
		1.25527	1.13376
varian		8.20818	2.63423
		0.0227042	0.00667323
JB		0.015198	0.017440
		0.001	0.015304
		ra	log
%		-3.20865	0.234915
err.va		3.48122	0.0108567
rel.std.err		0.424116	0.47818
mod.eff		0.575884	0.52182

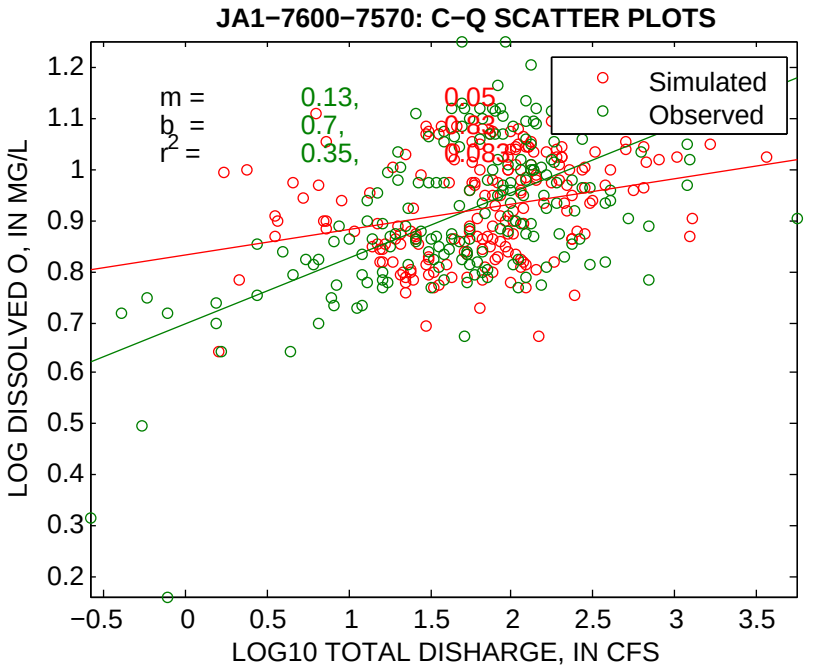


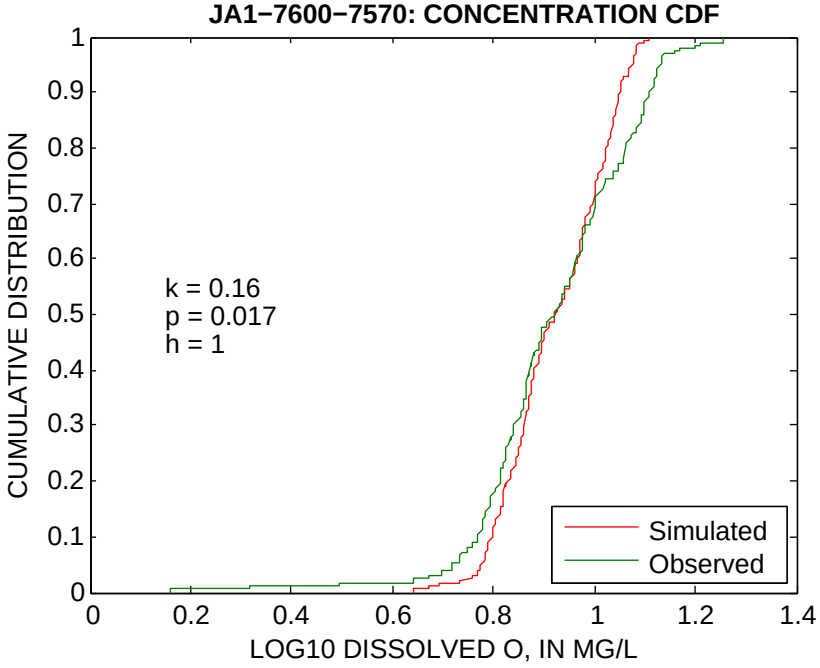


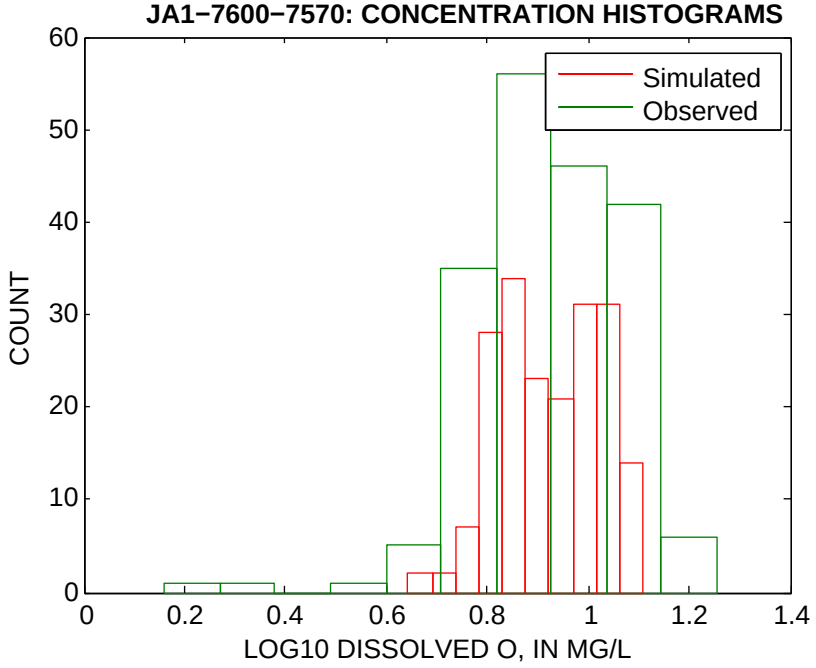
VERSION

ALL DATA
LOG10

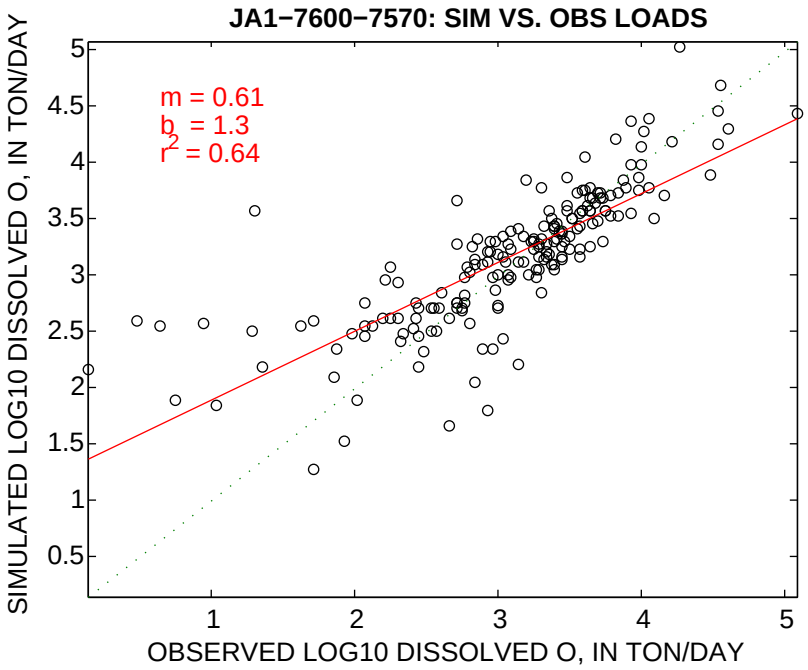


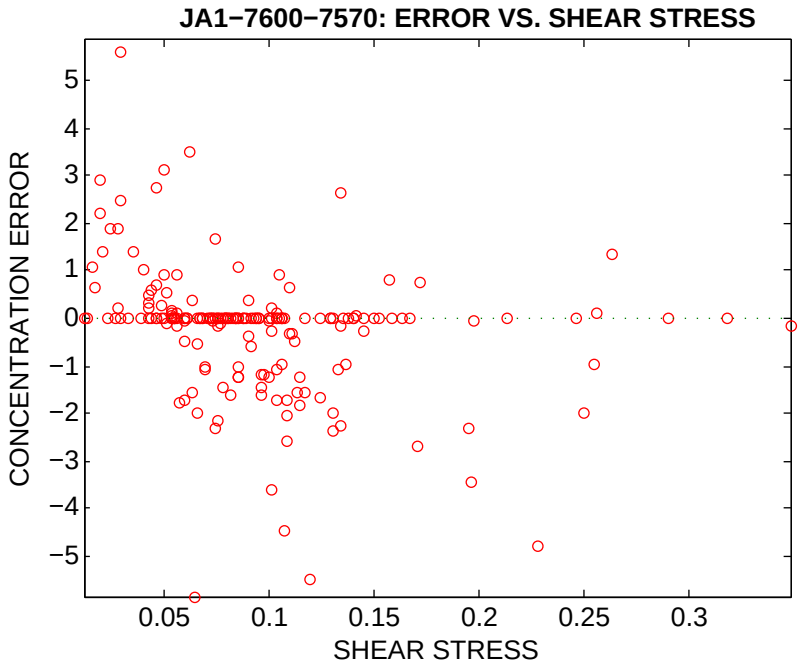


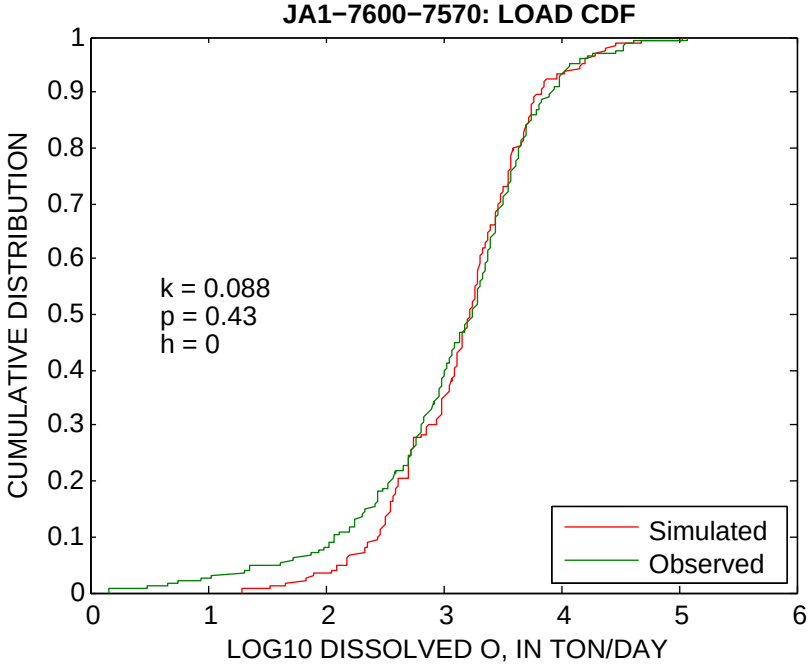


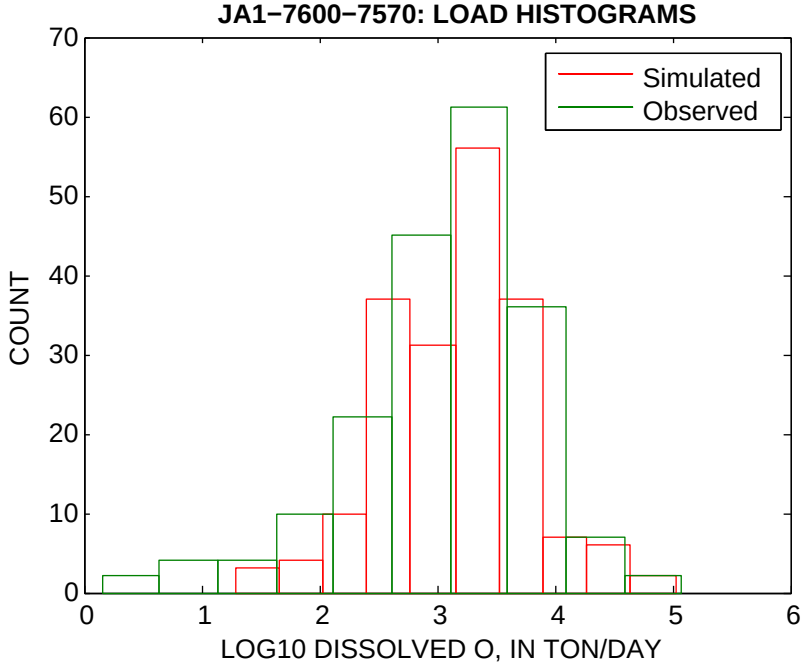


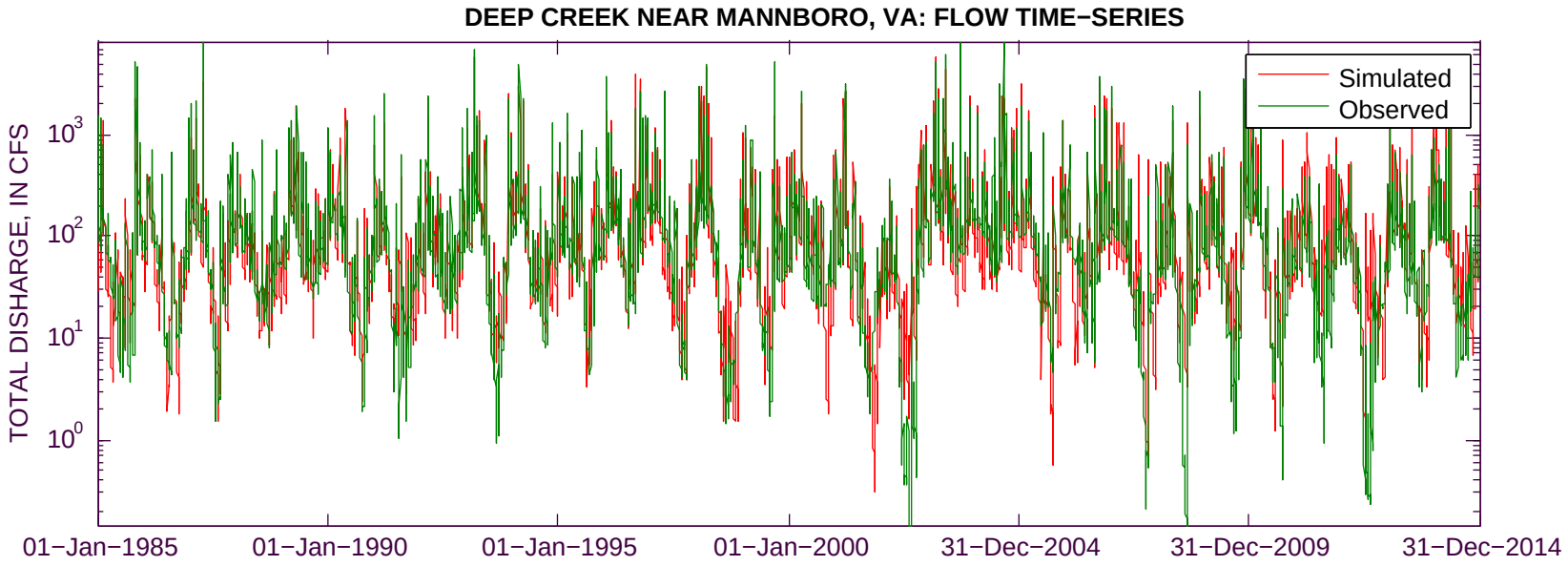
LOAD DATA
LOG10

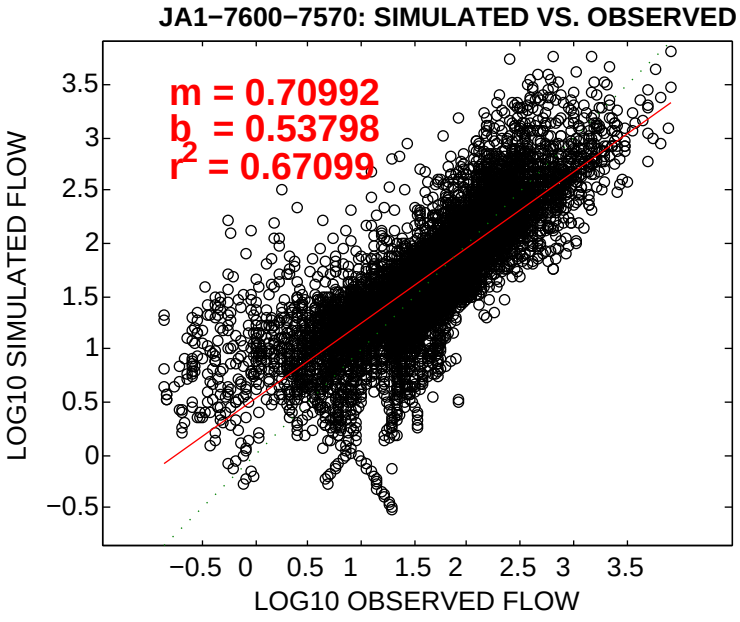


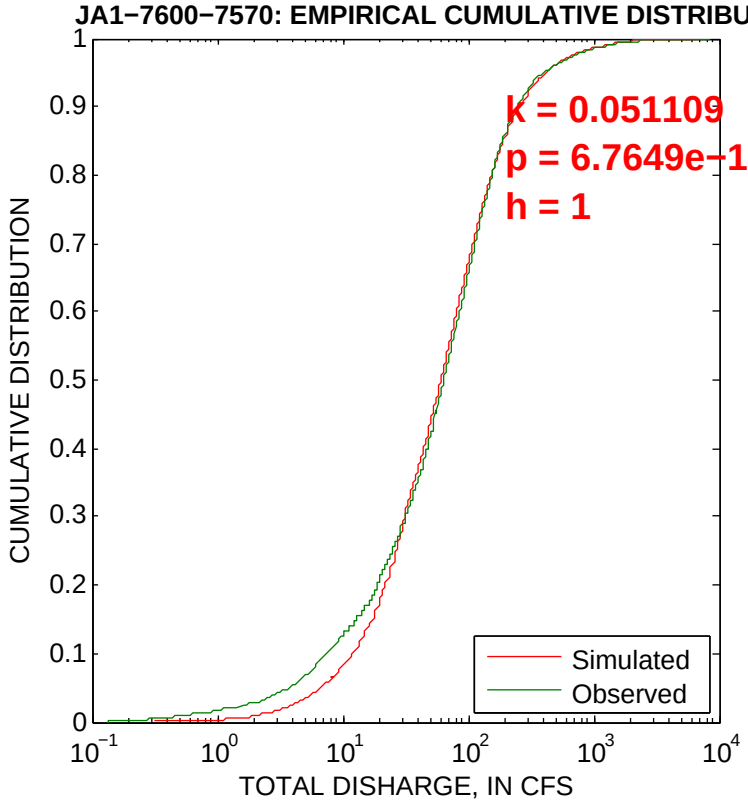












DATA SELECTION

scenario	file
P620171001WQ	FLOW.calib

plot: FLOW - total discharge

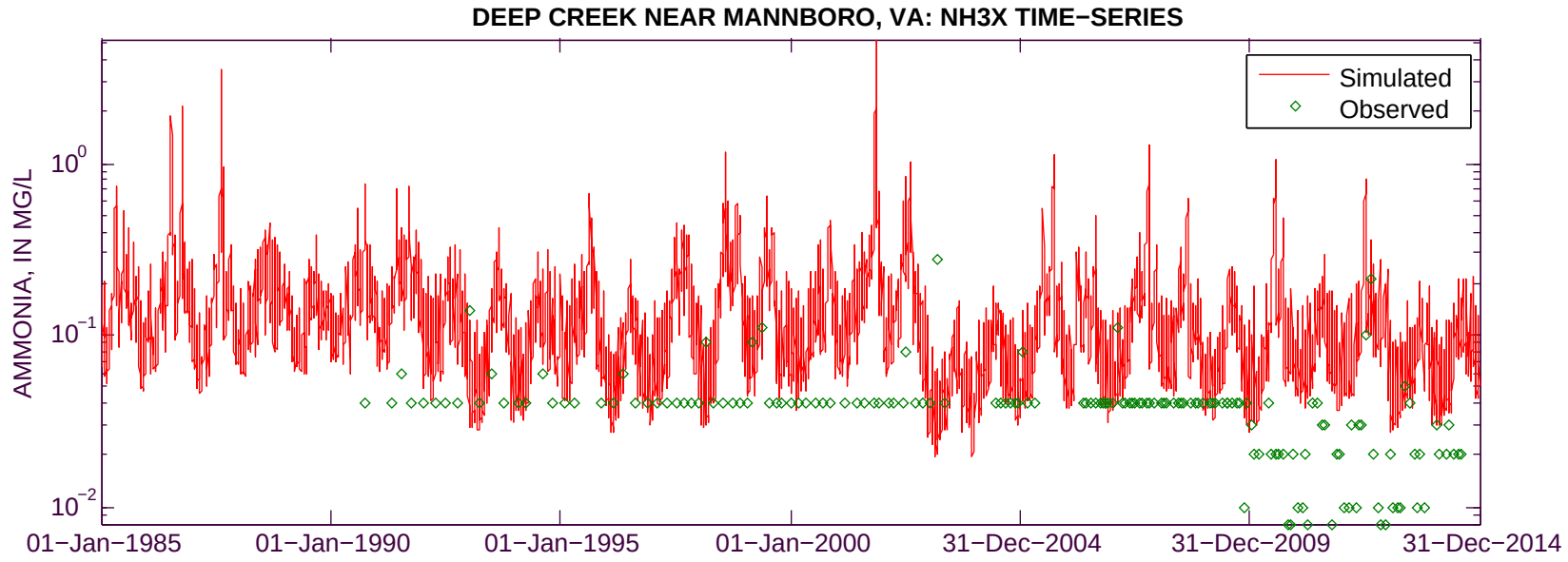
Dates: 1/1/1985 – 12/31/201

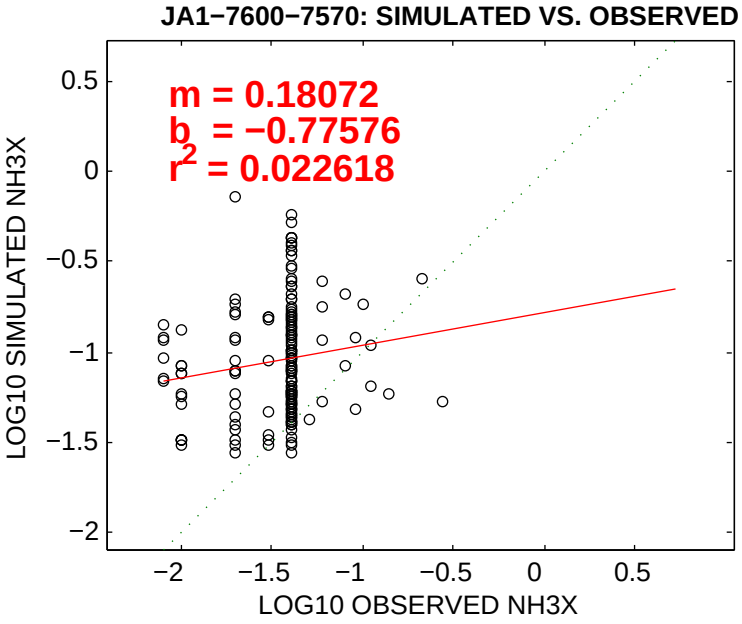
Drive	Directory	Observed
N/A	model	OBS20161101

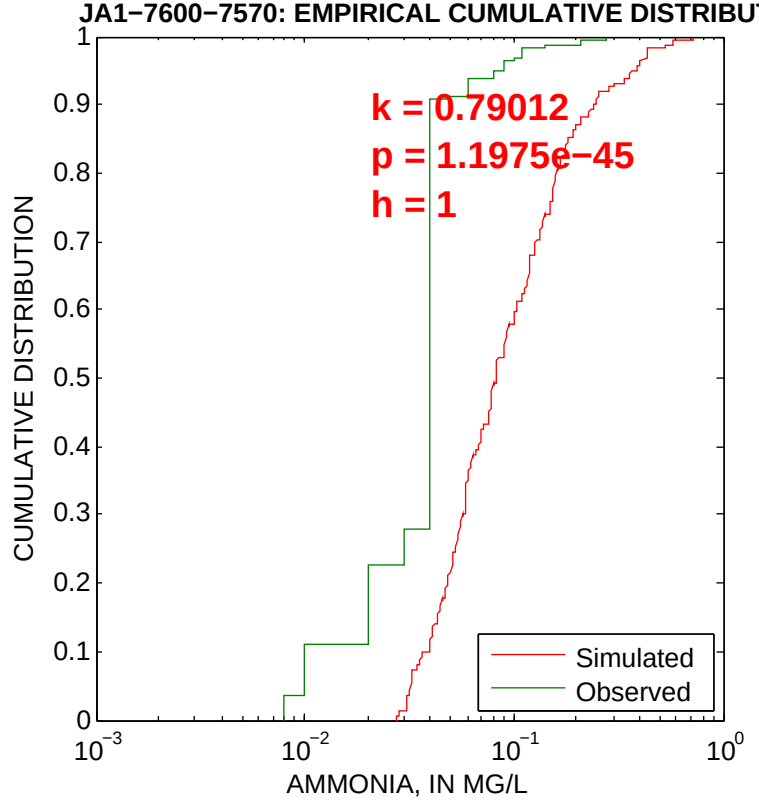
STATISTICS

		observe	simulate
n		10957	10957
min		0.137319	0.29856
		-0.862269	-0.524968
mean		132.814	128.933
		1.72612	1.76339
media		65.1373	61.251
		1.81383	1.78711
max		8320.14	6404.5
		3.92013	3.80649
varian		103820	76653.6
		0.398196	0.299089
JB		0.001	0.001
		0.001	0.001
		ra	log
%		-2.92255	2.15941
err.va		74939.7	0.133299
rel.std.err		0.721821	0.334758
mod.eff		0.278179	0.665242

VERSION 2.1







DATA SELECTION

scenario	file
P620171001WQ	NH3X.calib

plot: NH3X - ammonia

Dates 1/1/1985 12/31/201

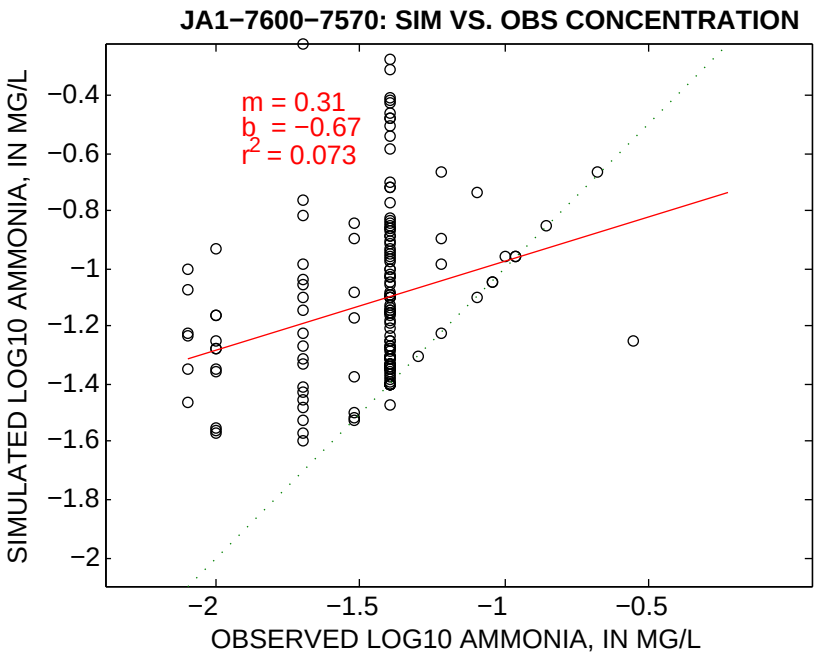
Drive	Directory	Observed
N/A	model	OBS20161101

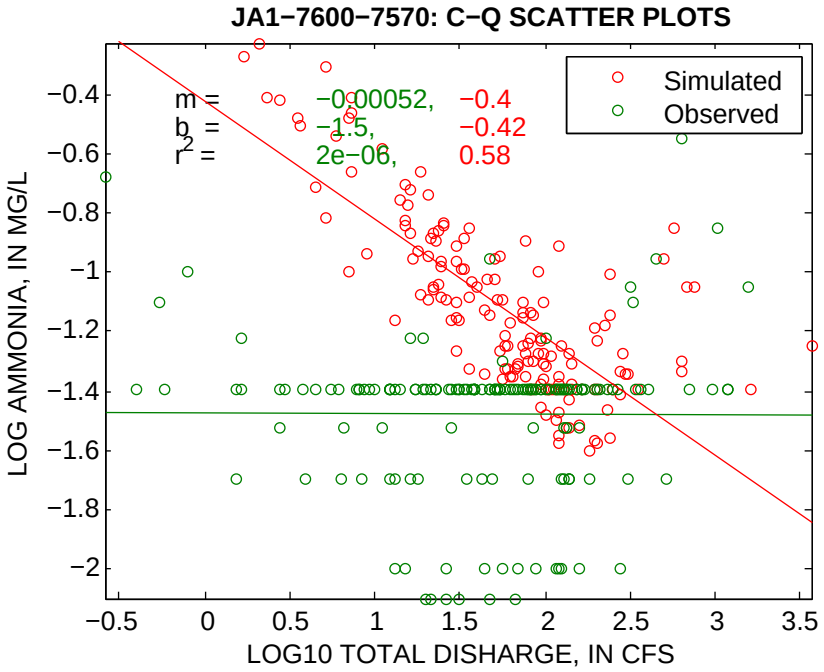
STATISTICS

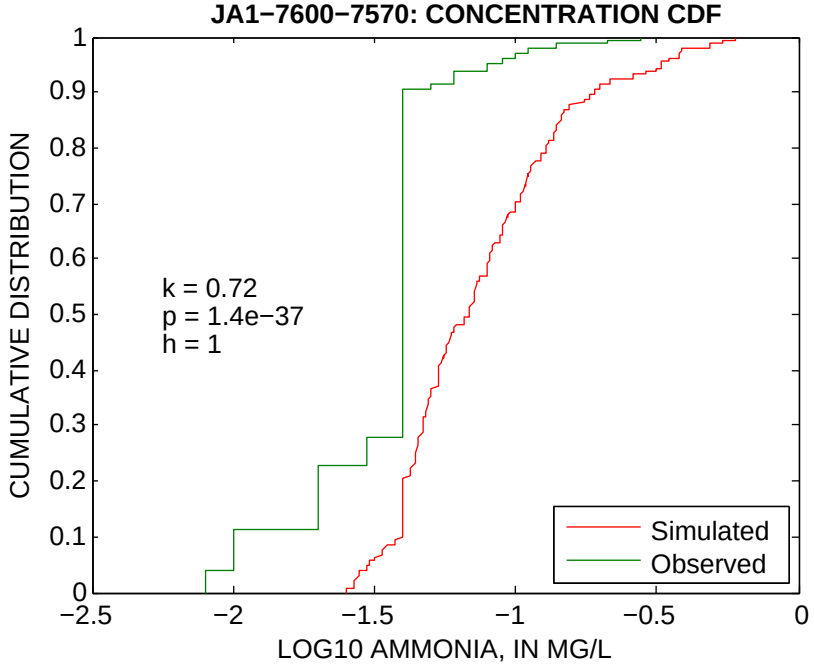
	n	162	162
		observe	simulate
min		0.008	0.027471
		-2.09691	-1.56113
mean		0.0398025	0.120431
		-1.47599	-1.0425
media		0.04	0.0823705
		-1.39794	-1.08423
max		0.28	0.71835
		-0.552842	-0.143664
varian		0.00090147	0.0121524
		0.0669366	0.0966557
JB		0.001	0.001
		0.001347	0.019911
		ra	log
%		202.571	-29.3696
err.va		0.0192715	0.328481
rel.std.err		21.3777	4.90734
mod.eff		-20.3777	-3.90734

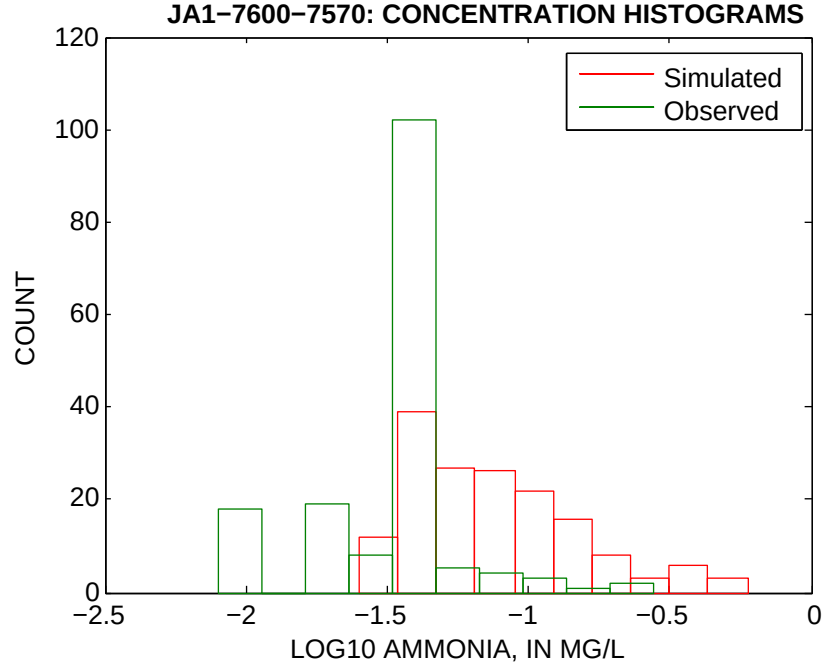
VERSION 2.1

ALL DATA
LOG10

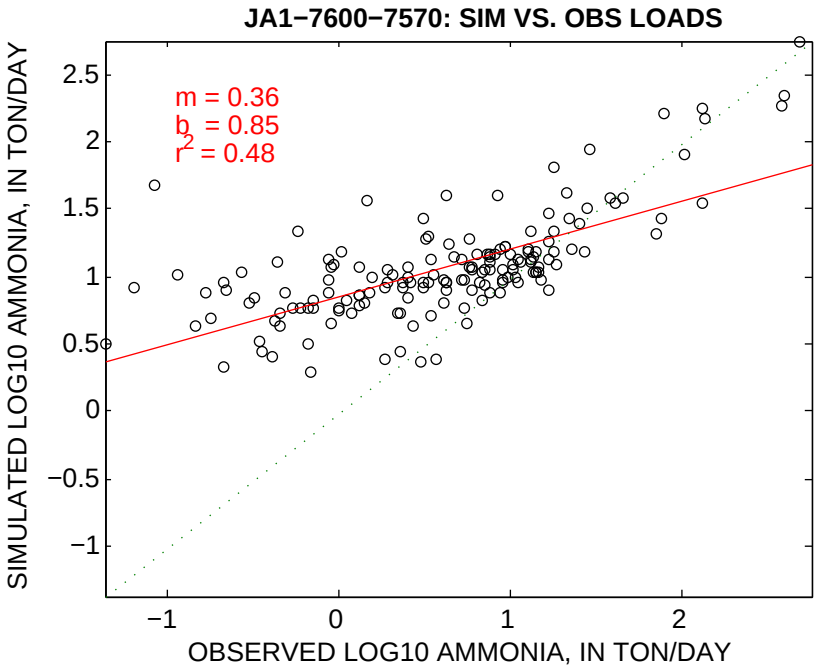


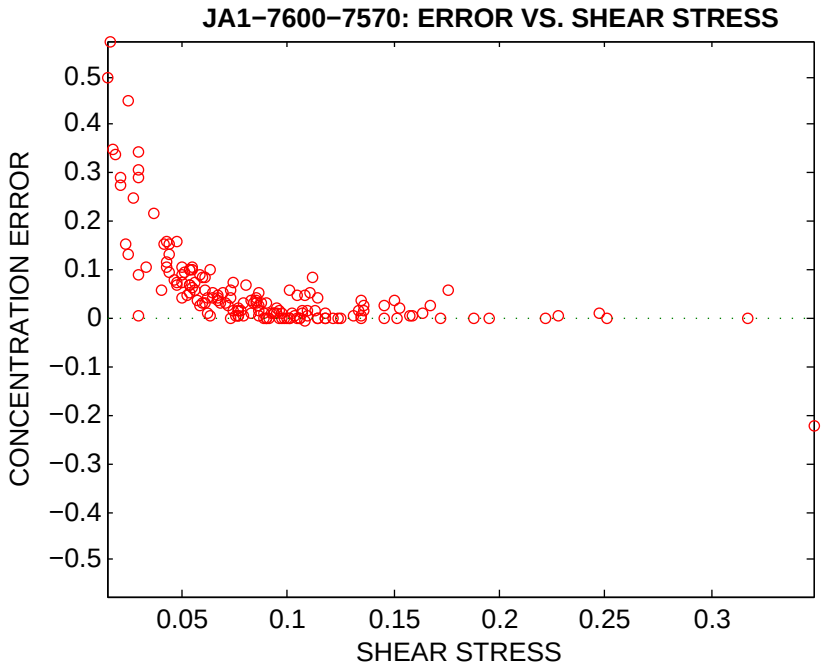


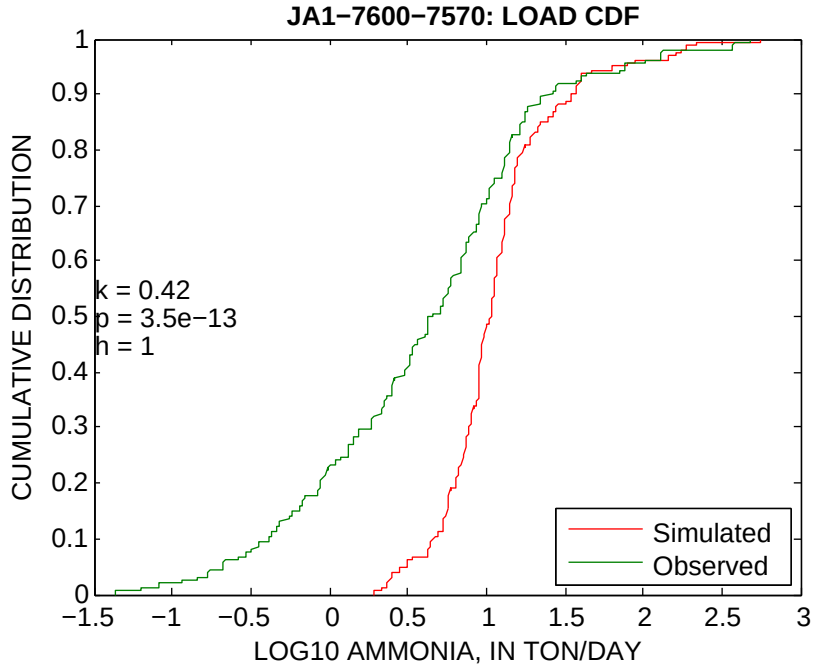


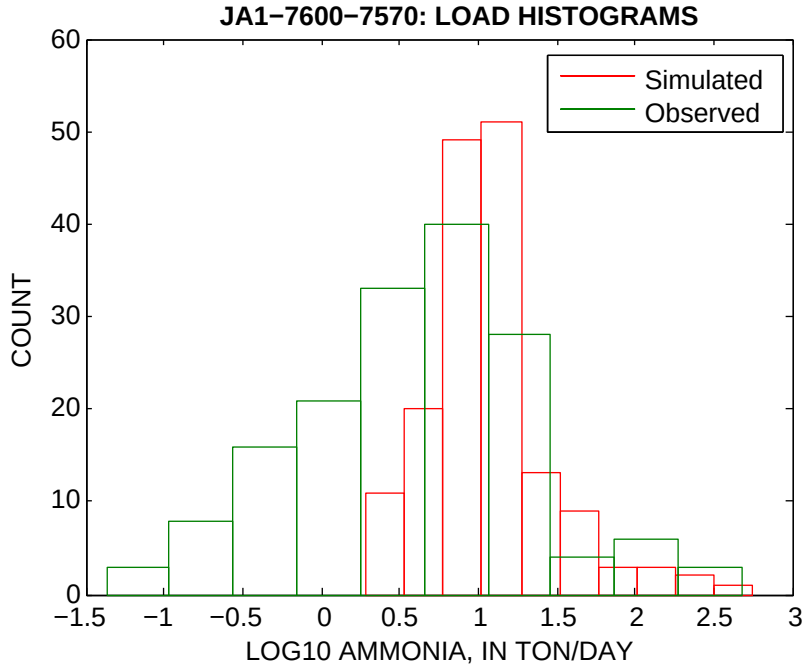


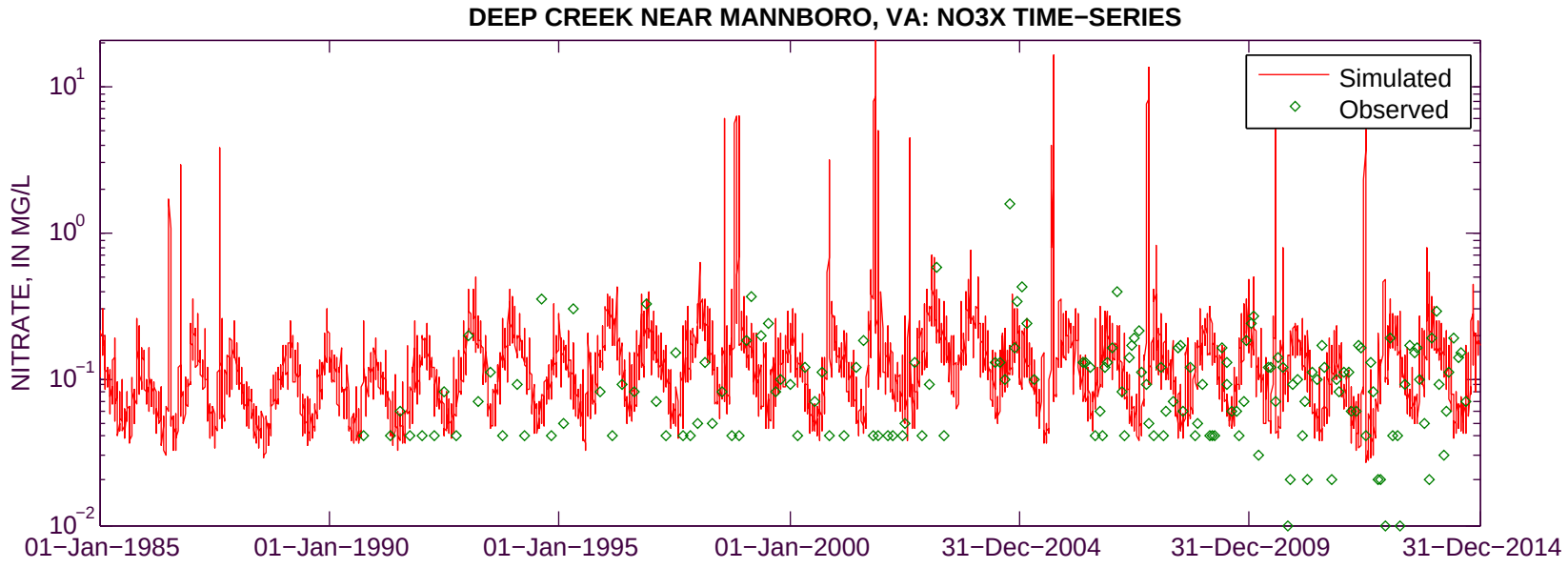
LOAD DATA
LOG10

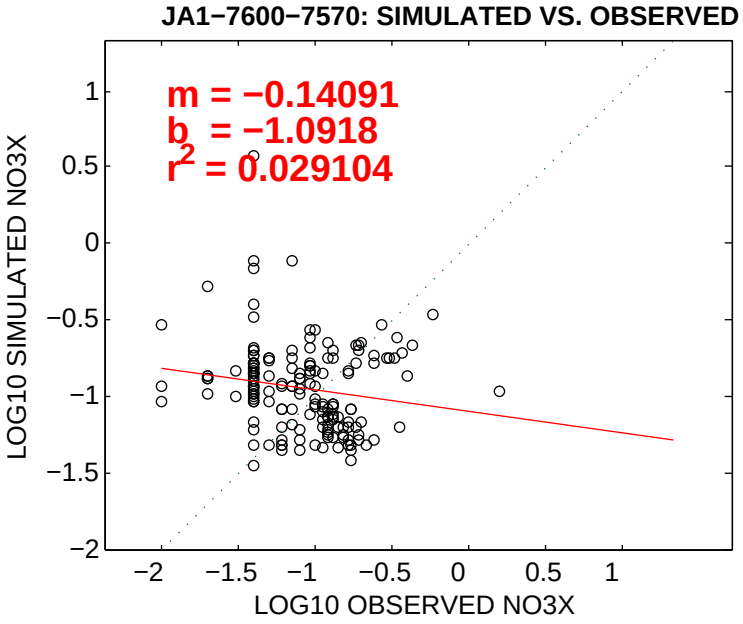


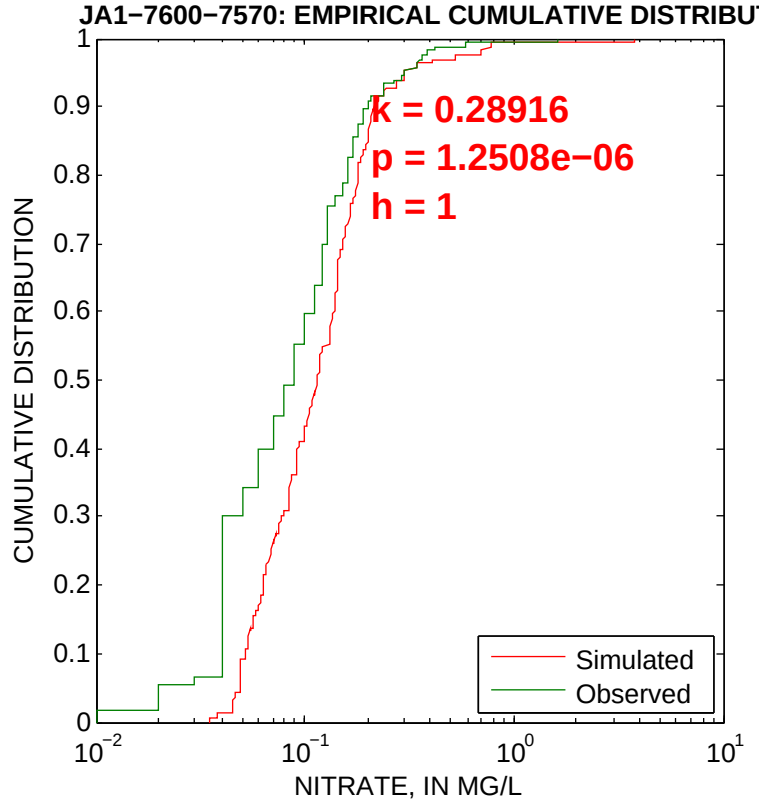












DATA SELECTION

scenario	file
P620171001WQ	NO3X.calib

plot: NO3X - nitrate

Dates: 1/1/1985 – 12/31/201

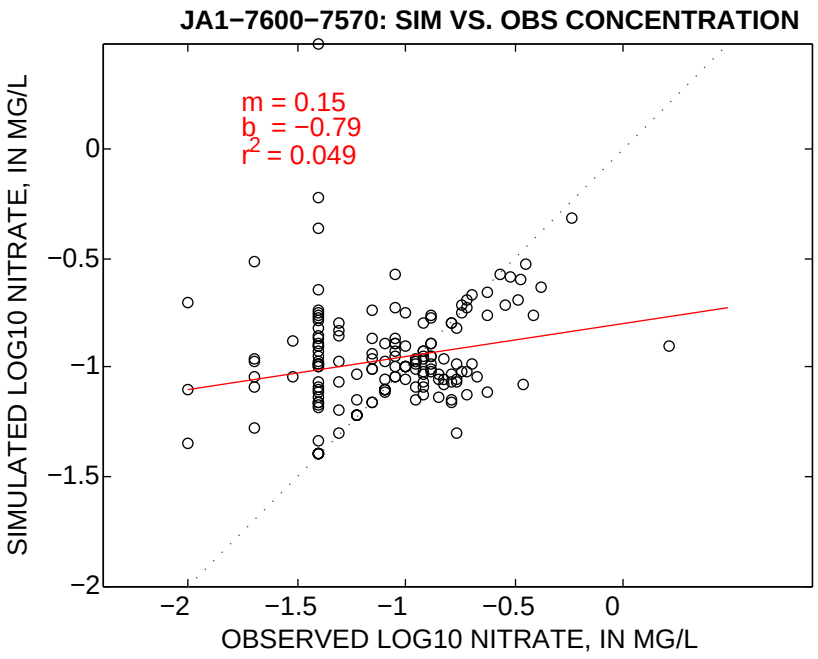
Drive	Directory	Observed
N/A	model	OBS20161101

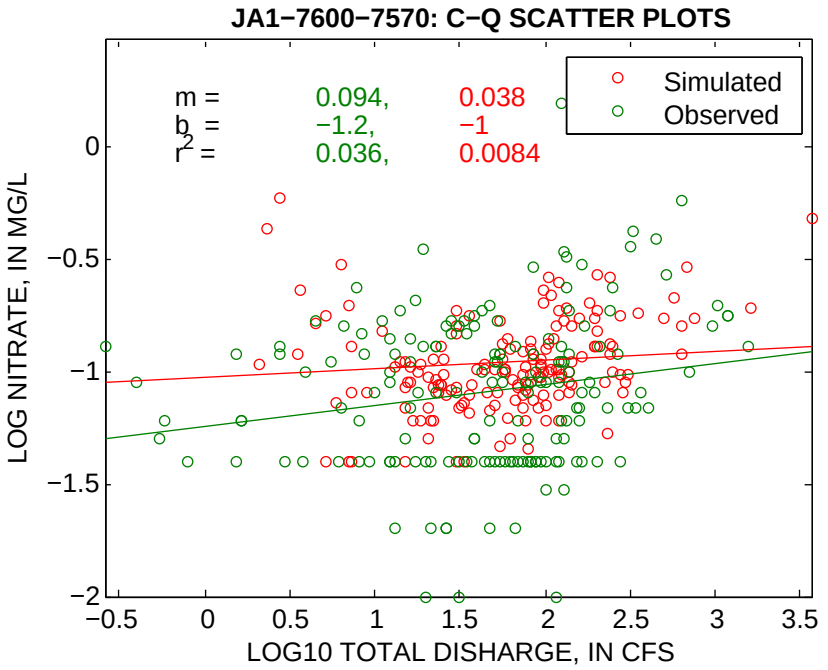
STATISTICS

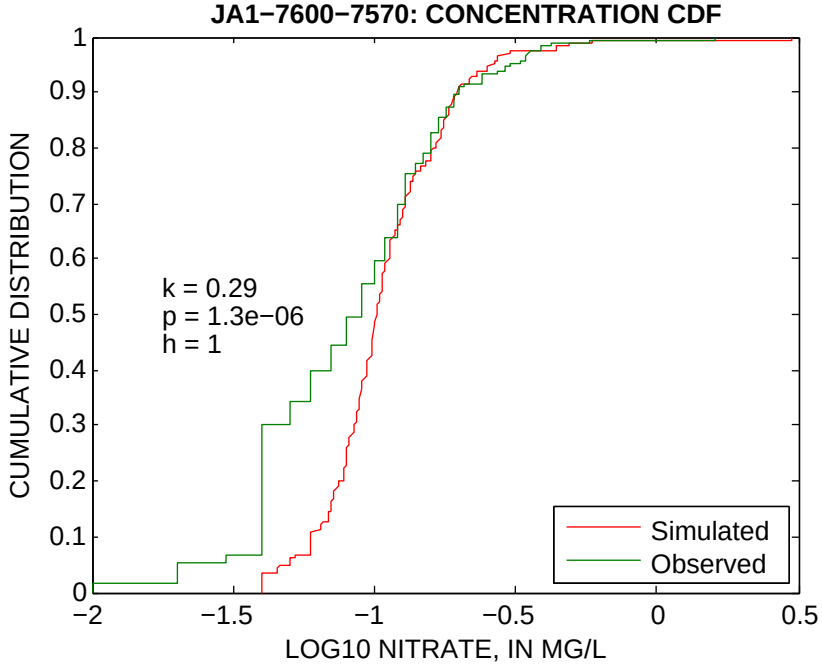
	n	observe	simulate
		166	166
min		0.01	0.035483
		-2	-1.44998
mean		0.115301	0.159307
		-1.08576	-0.938764
media		0.09	0.115815
		-1.04576	-0.936235
max		1.6	3.7795
		0.20412	0.577434
varian		0.0208699	0.0920354
		0.117834	0.0803962
JB		0.001	0.001
		0.080968	0.001
		ra	log
%		38.1663	-13.5383
err.va		0.118784	0.253177
rel.std.err		5.69162	2.14859
mod.eff		-4.69162	-1.14859

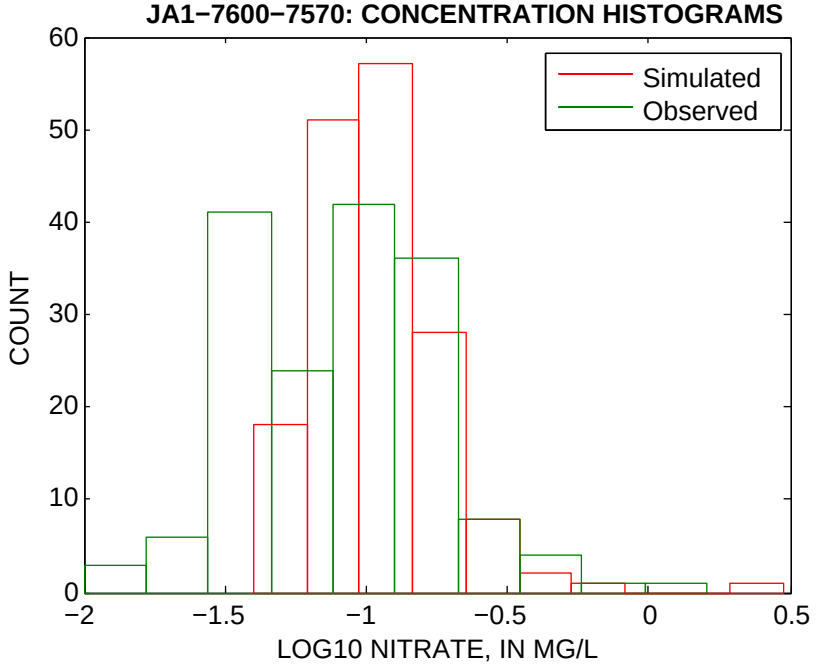
VERSION 2.1

ALL DATA
LOG10

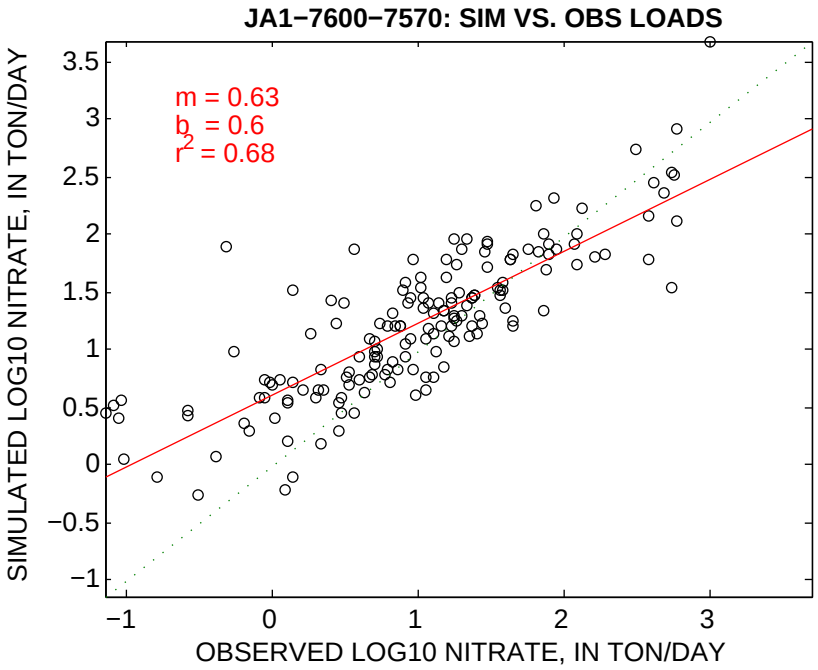


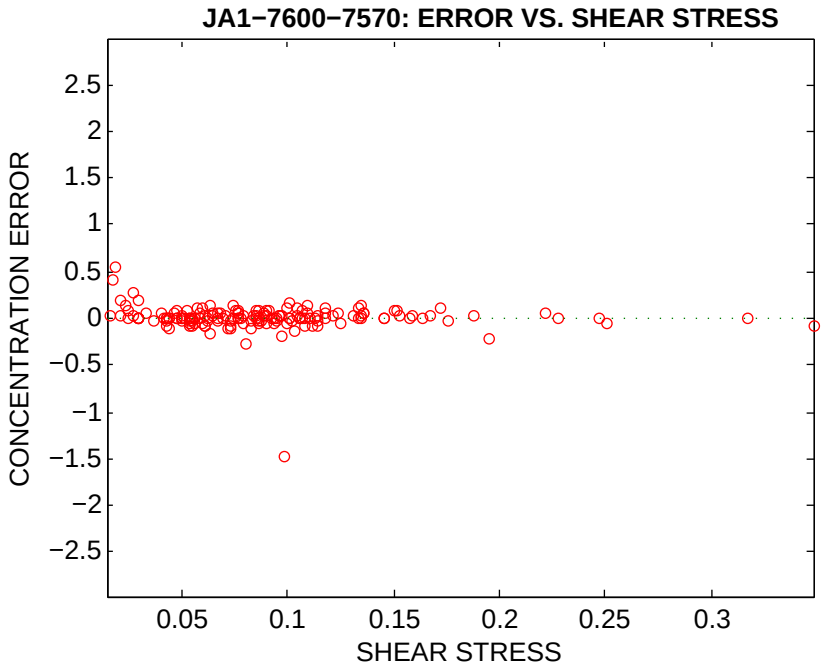


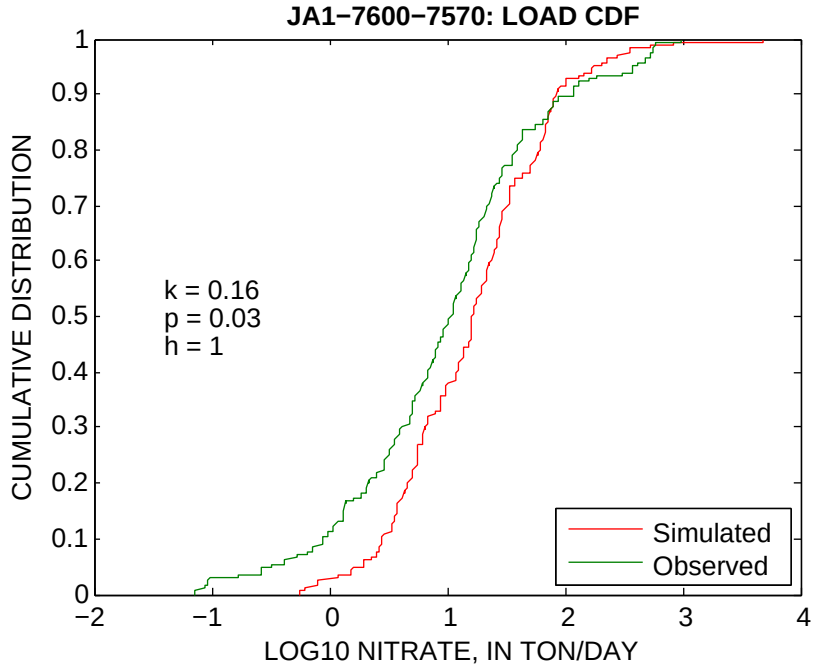


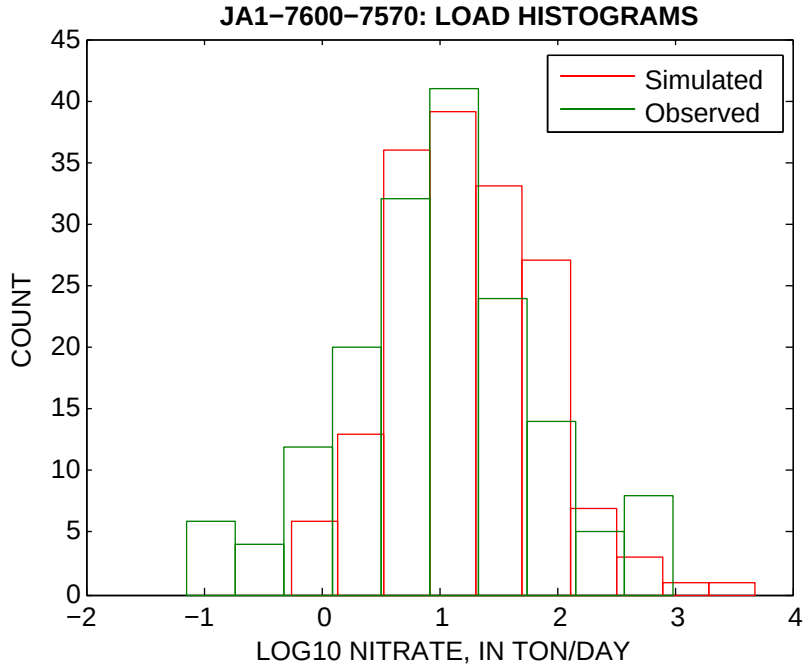


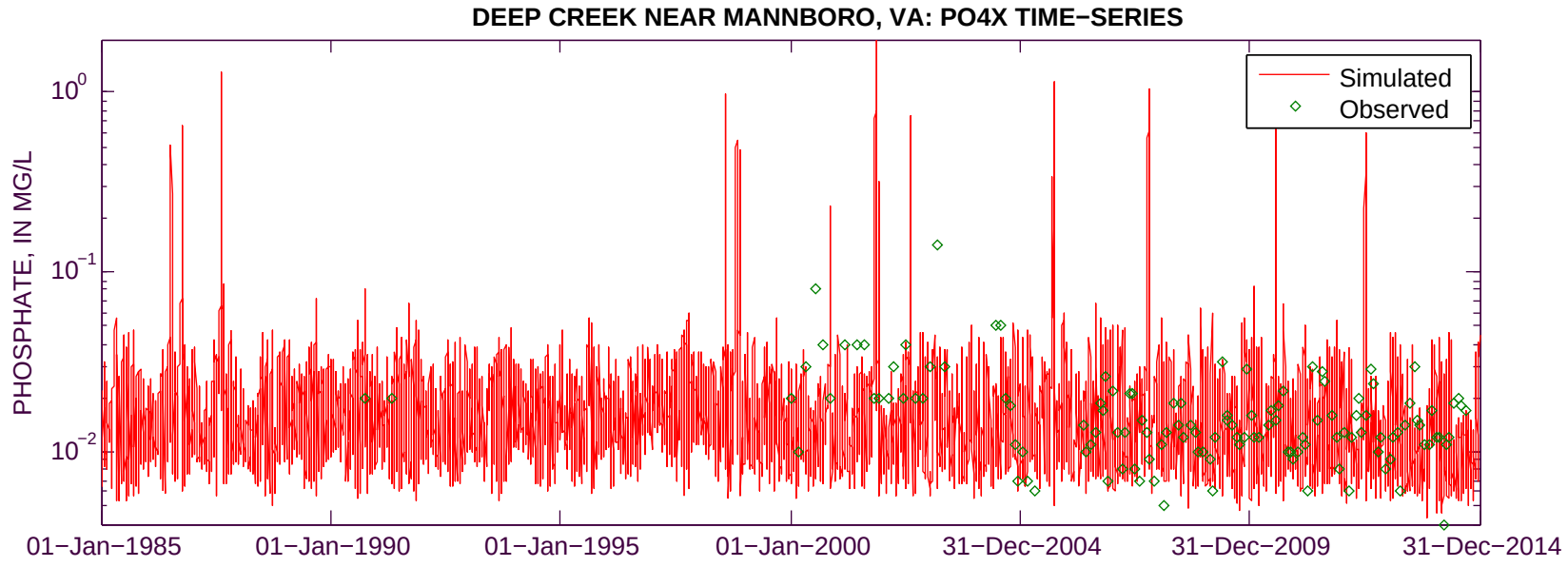
LOAD DATA
LOG10

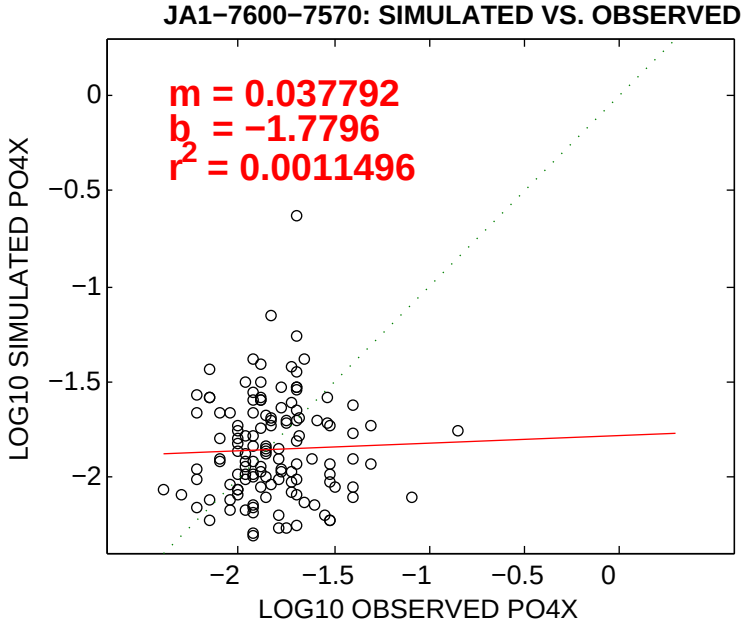


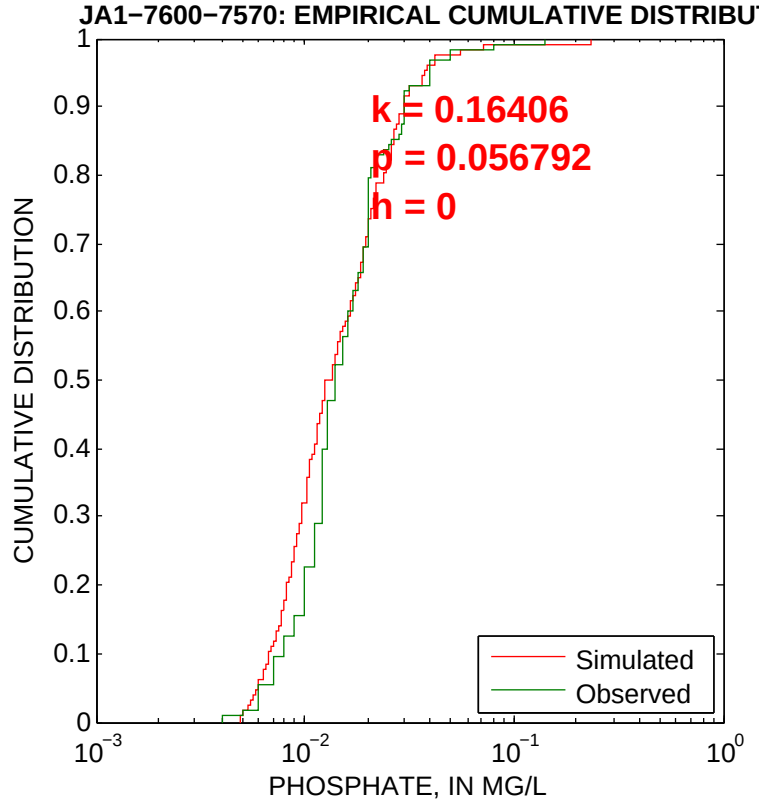












DATA SELECTION

scenario: P620171001WQ | file: PO4X.calib

plot: PO4X - phosphate

Dates: 1/1/1985 – 12/31/201

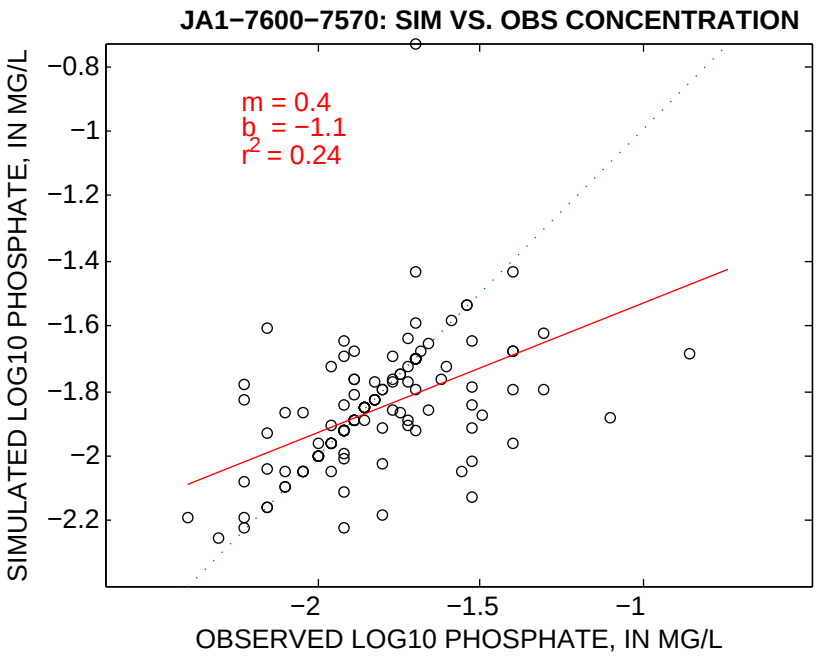
Drive: N/A | Directory: model | Observed: OBS20161101

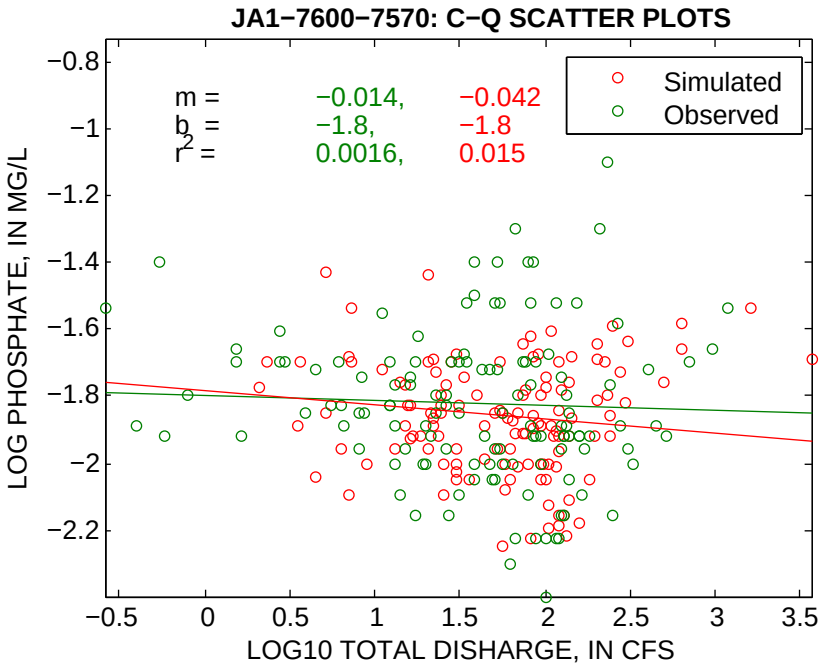
STATISTICS

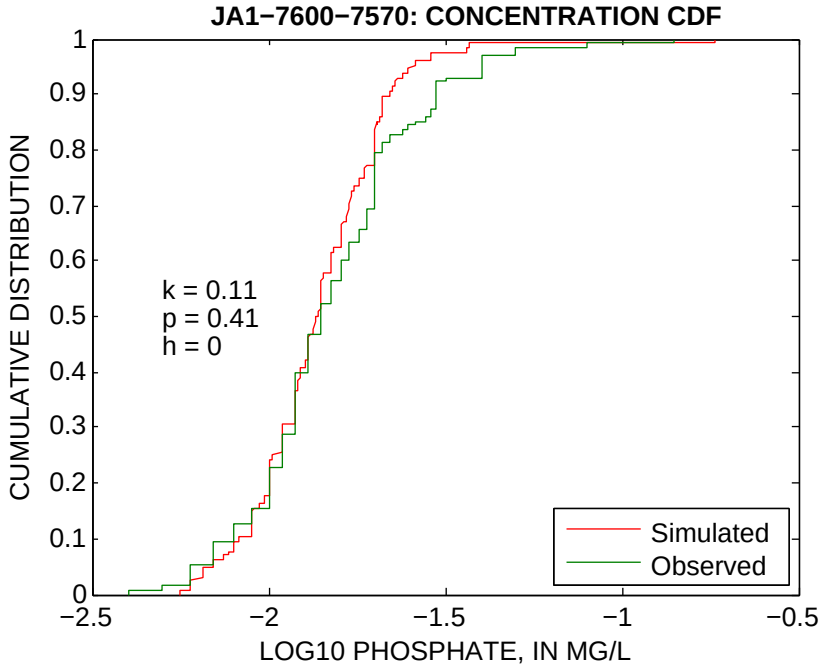
		observe	simulate
n		128	128
min		0.004	0.0048923
		-2.39794	-2.31049
mean		0.0180781	0.018091
		-1.8207	-1.84841
media		0.014	0.013018
		-1.85387	-1.88565
max		0.14	0.23497
		-0.853872	-0.628988
varian		0.00022949	0.00048376
		0.0577659	0.0717667
JB		0.001	0.001
		0.001762	0.001
		ra	log
%		1.0712921	1.52206
err.va		0.00071578	0.12594
rel.std.err		3.11903	2.18019
mod.eff		-2.11903	-1.18019

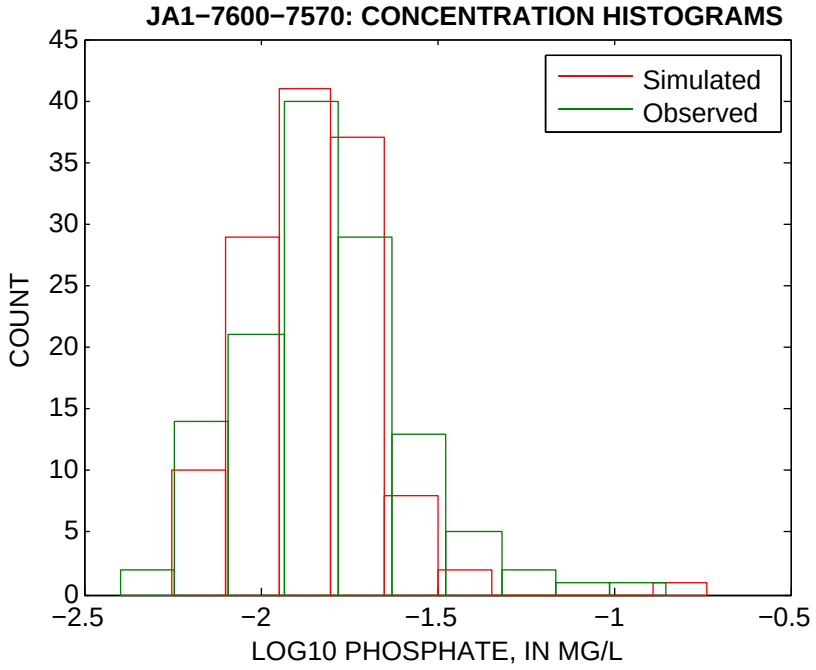
VERSION 2.1

ALL DATA
LOG10

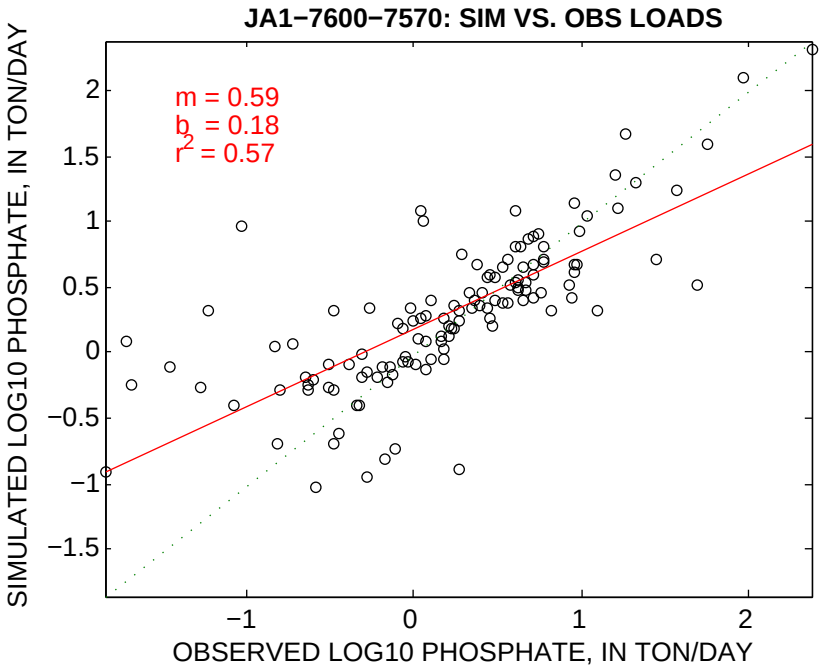


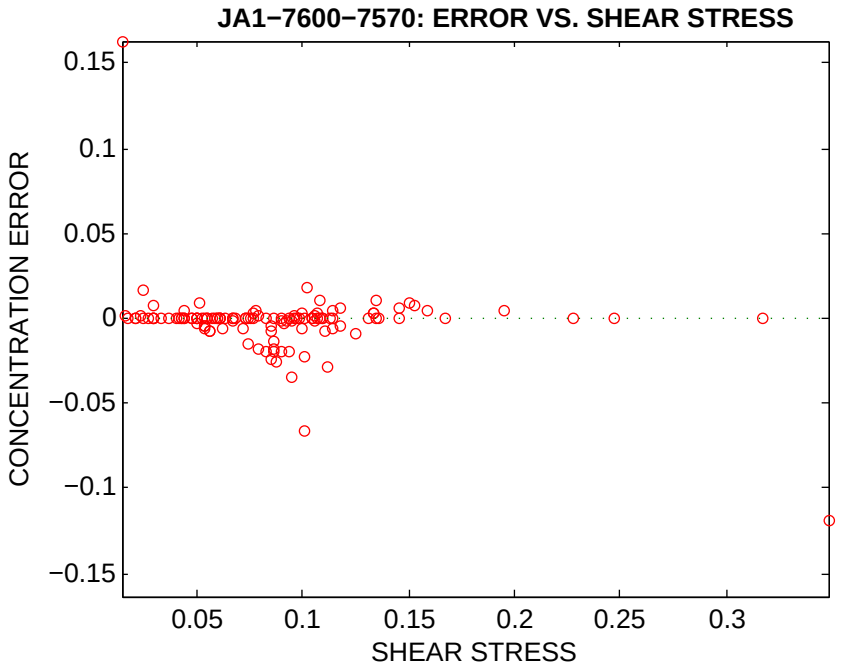


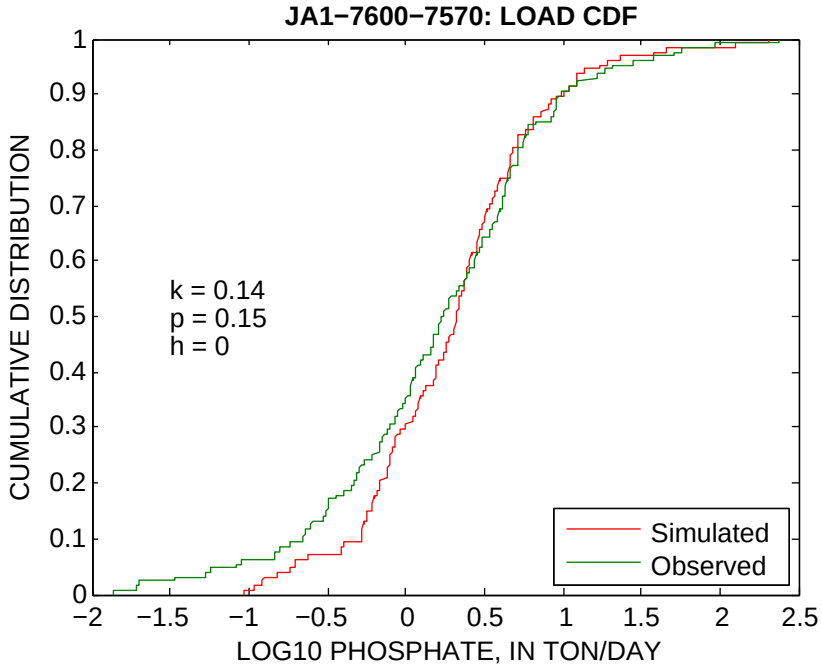


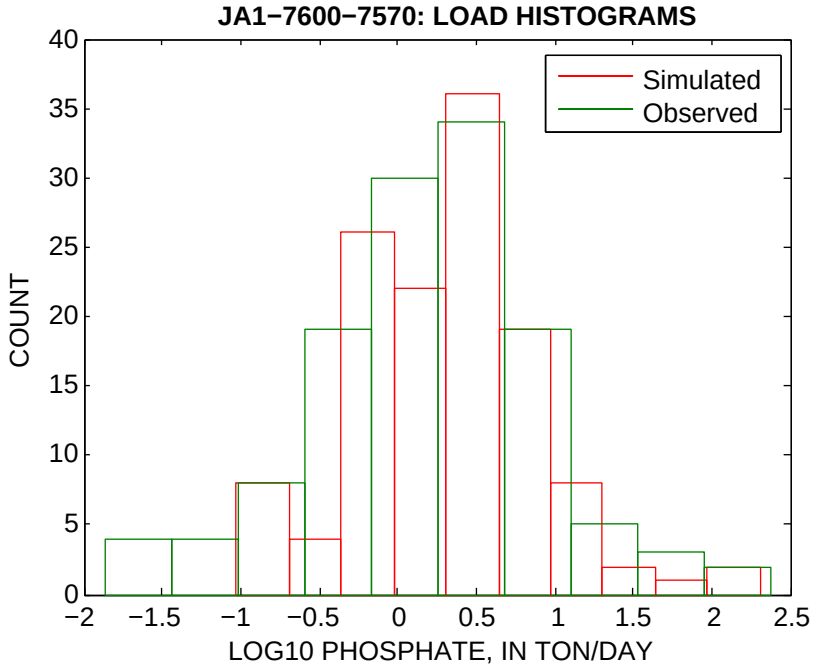


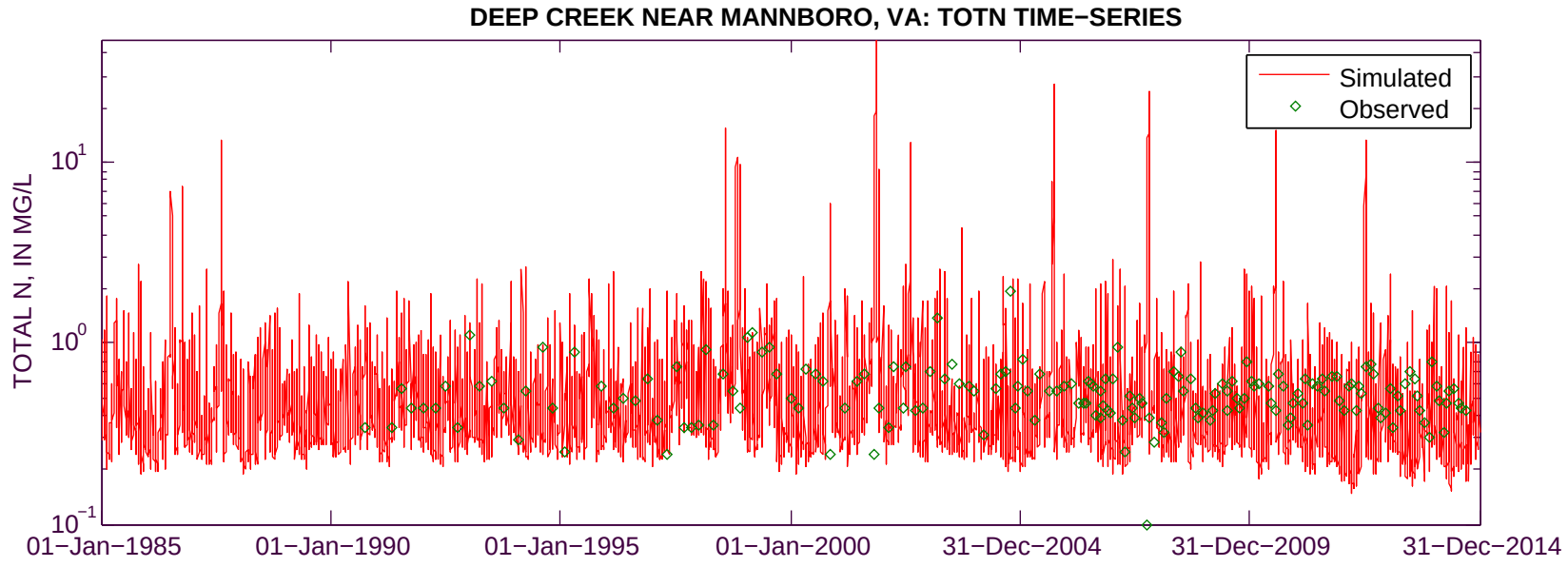
LOAD DATA
LOG10

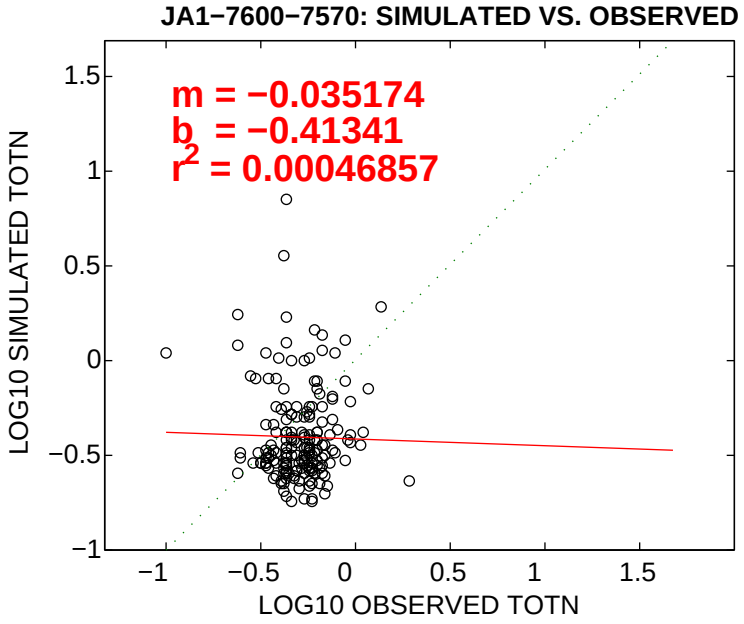


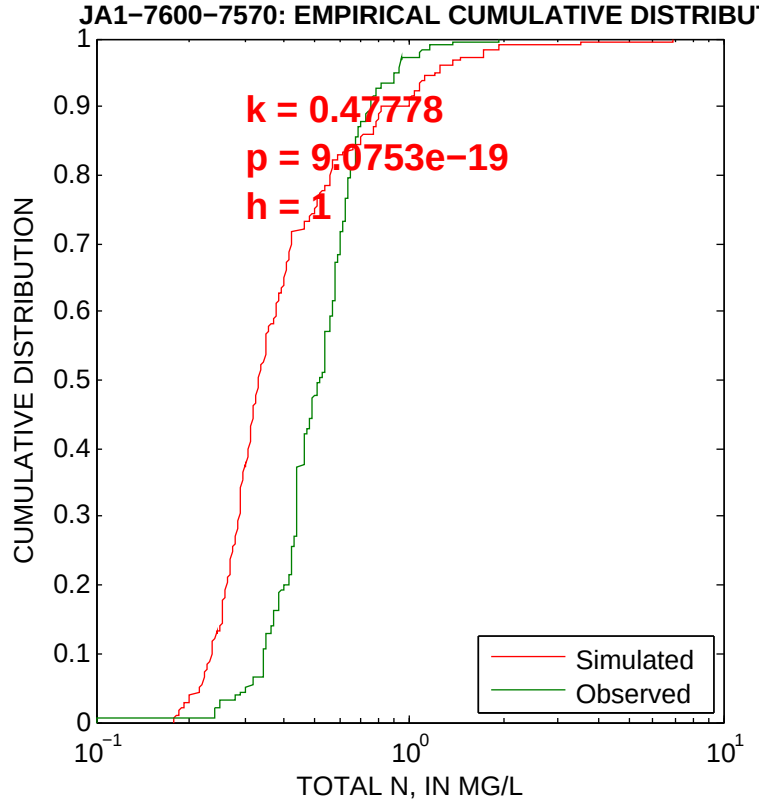












DATA SELECTION

scenario	file
P620171001WQ	TOTN.calib

plot: TOTN - total nitrogen

Dates: 1/1/1985 – 12/31/201

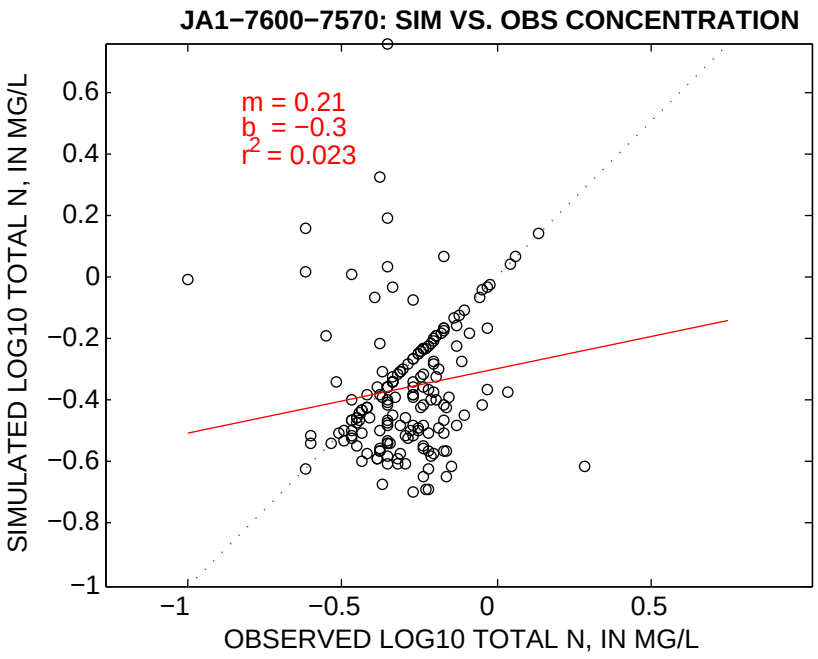
Drive	Directory	Observed
N/A	model	OBS20161101

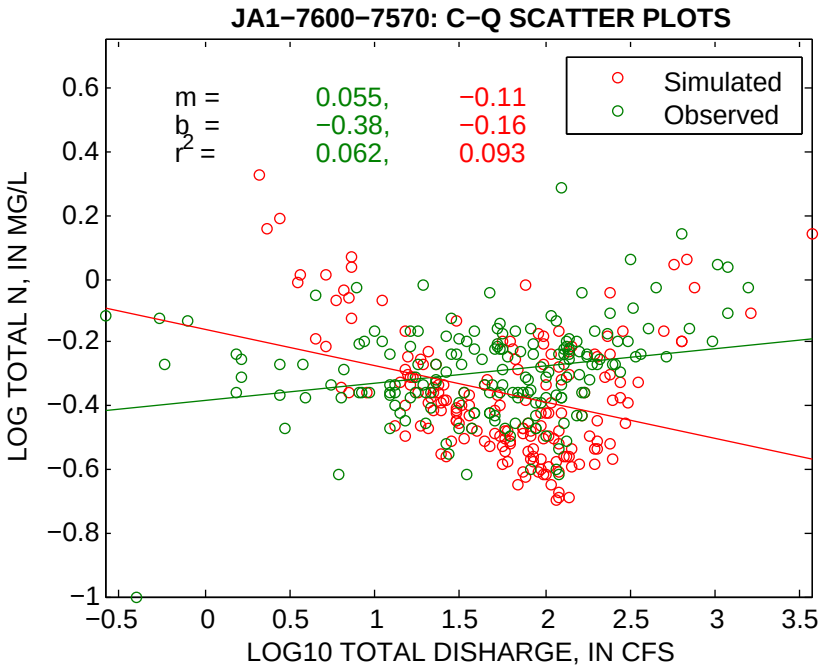
STATISTICS

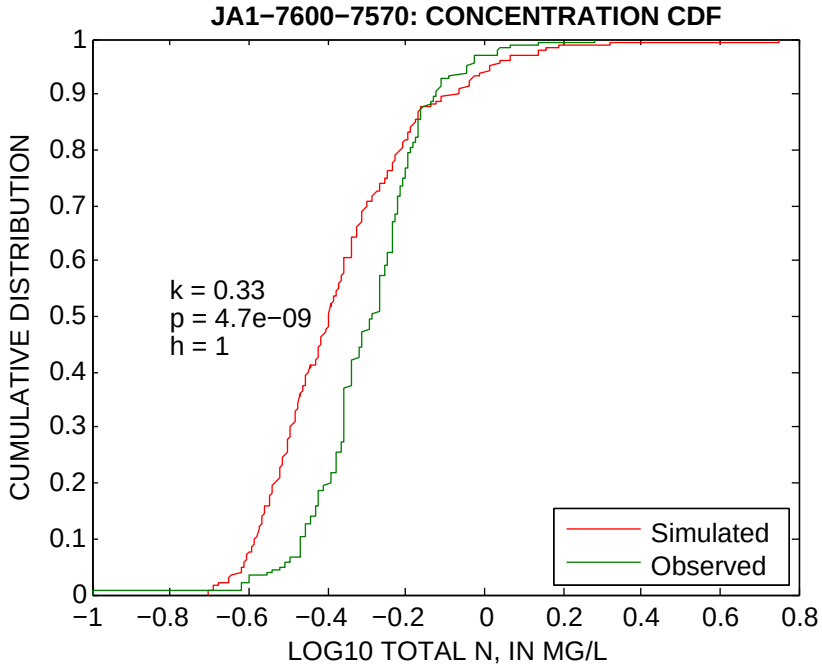
	n	observe	simulate
		180	180
min		0.1	0.17824
		-1	-0.748995
mean		0.544056	0.499784
		-0.290949	-0.403181
media		0.52	0.33238
		-0.283997	-0.478365
max		1.92	6.9508
		0.283301	0.842035
varian		0.0432868	0.378954
		0.023051	0.0608642
JB		0.001	0.001
		0.001	0.001
		ra	log
%		-8.13731	38.5744
err.va		0.425455	0.0982031
rel.std.err		9.82875	4.26026
mod.eff		-8.82875	-3.26026

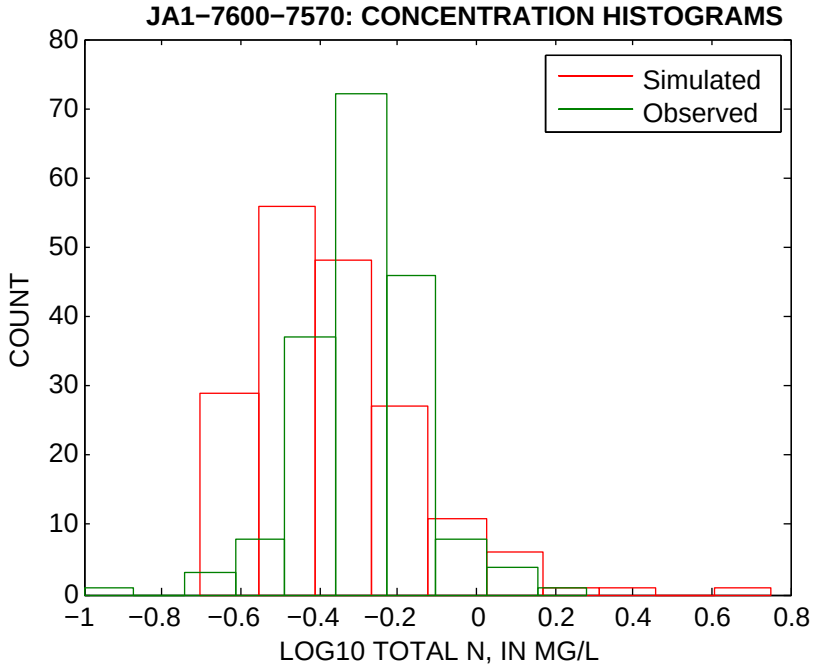
VERSION 2.1

ALL DATA
LOG10

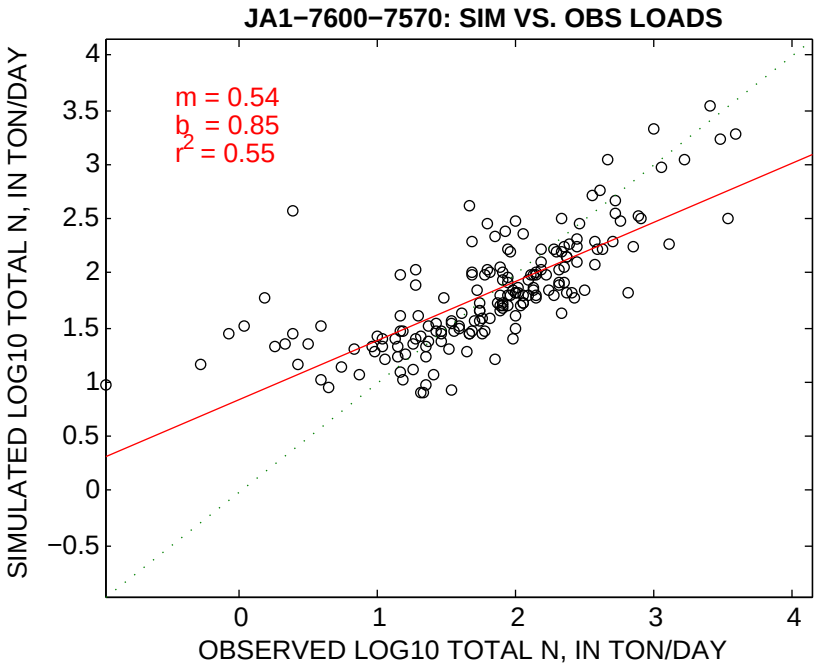


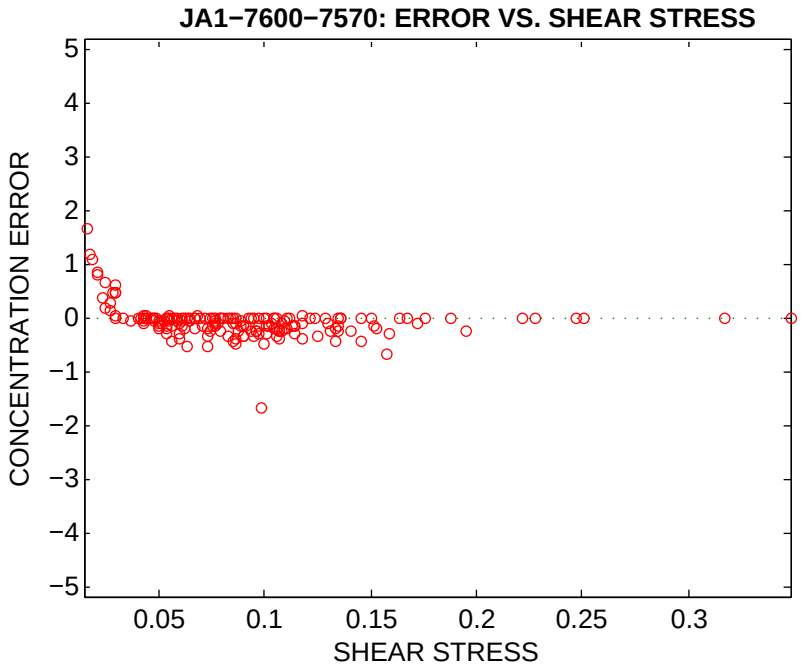


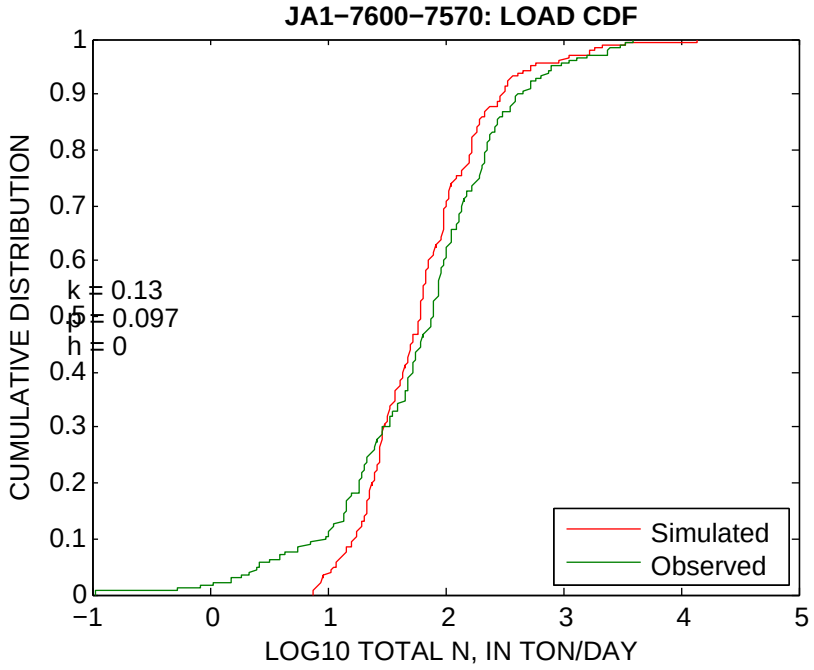


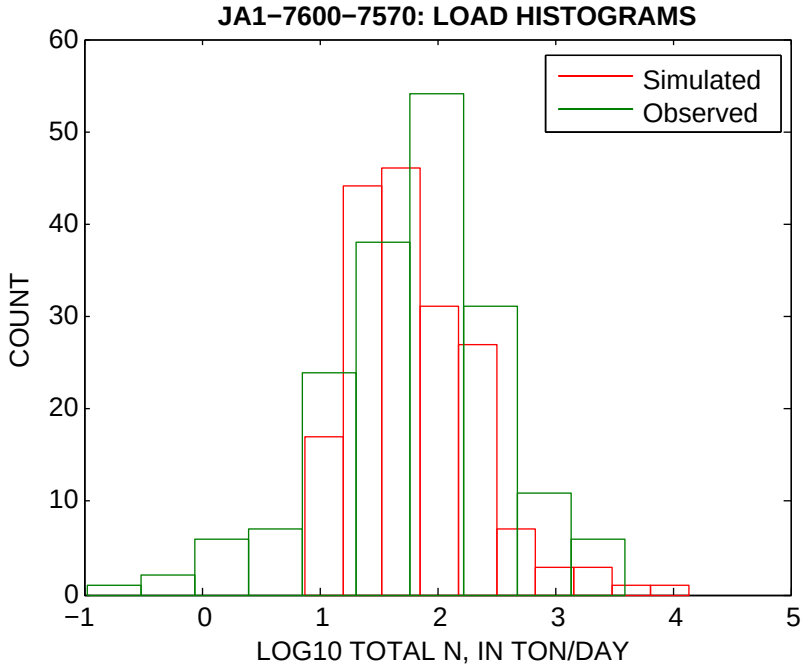


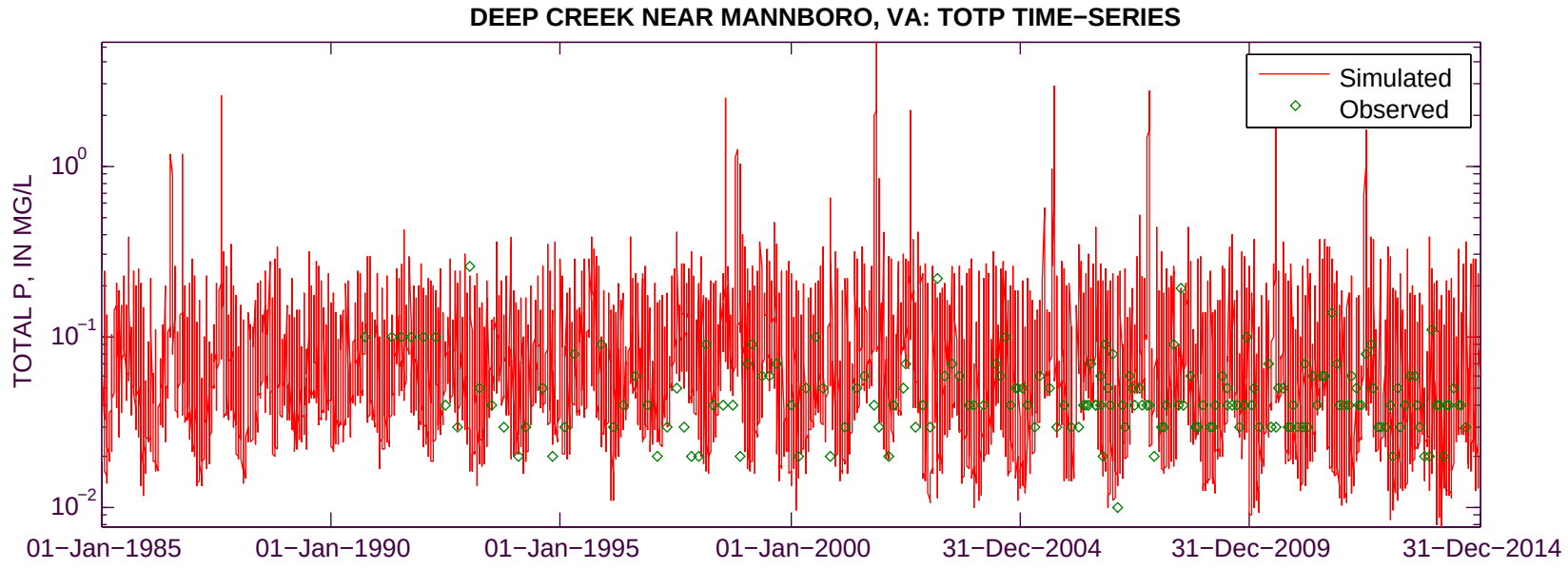
LOAD DATA
LOG10

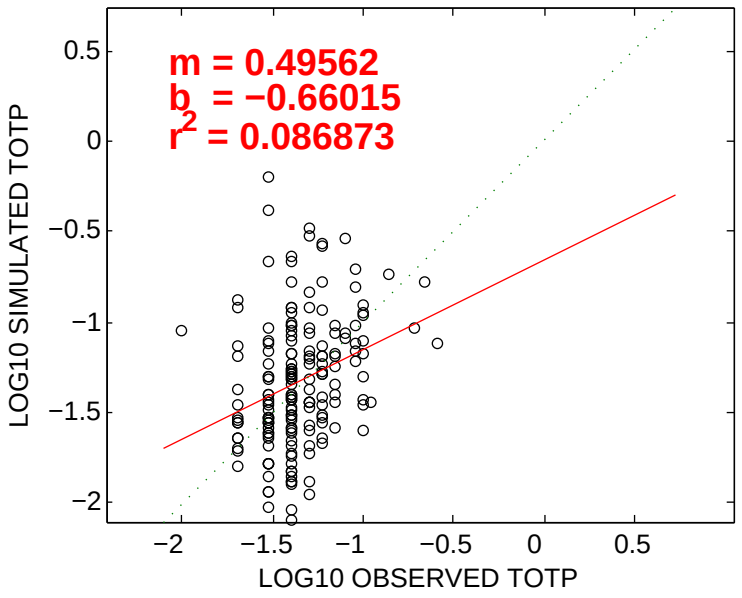


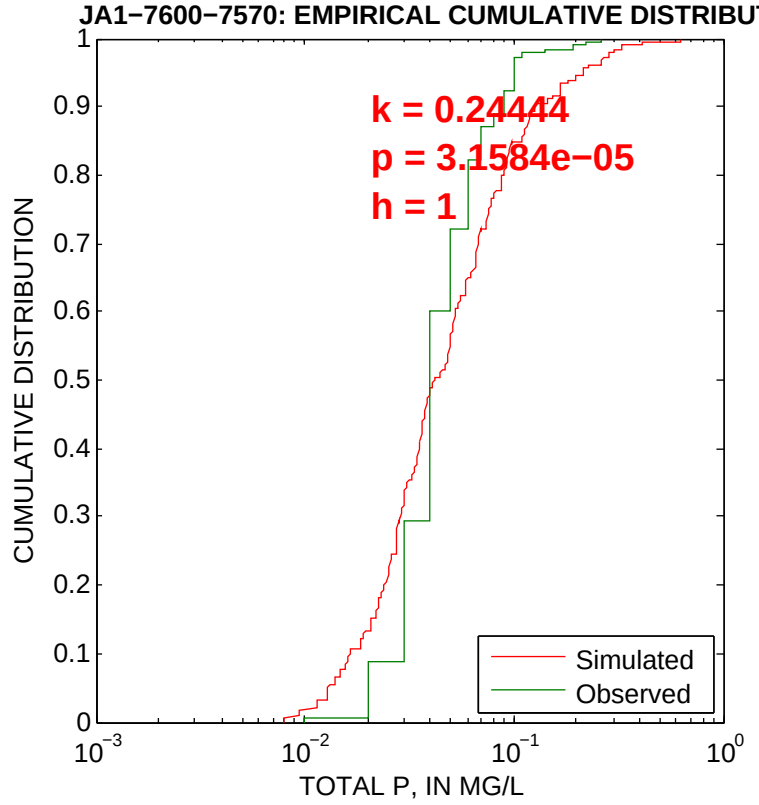












DATA SELECTION

scenario	file
P620171001WQ	TOTP.calib

plot: TOTP - total phosphorus

Dates: 1/1/1985 – 12/31/201

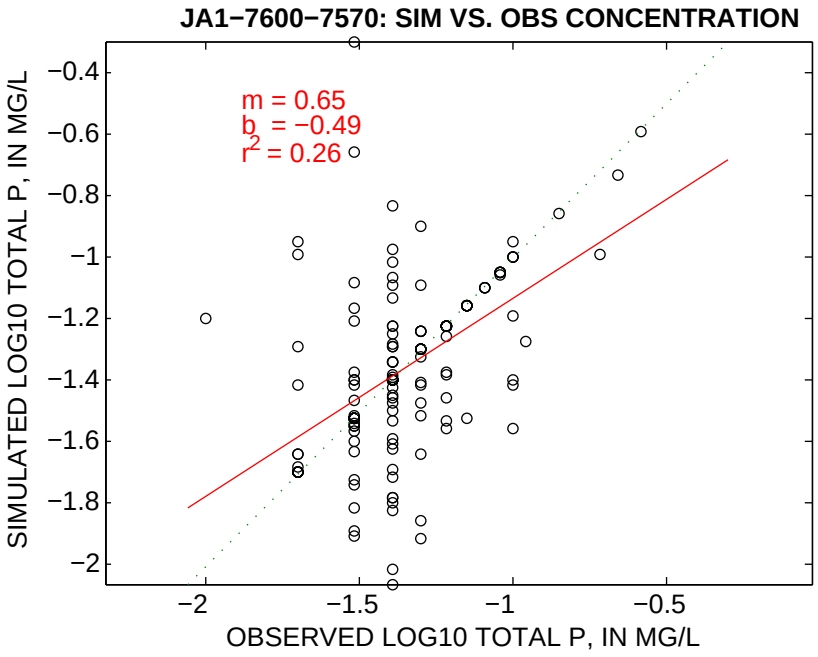
Drive	Directory	Observed
N/A	model	OBS20161101

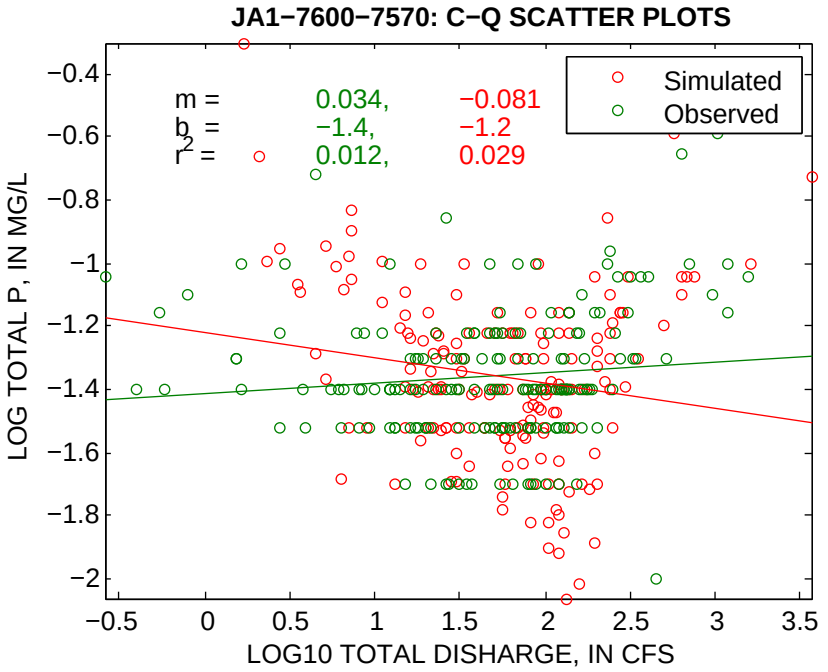
STATISTICS

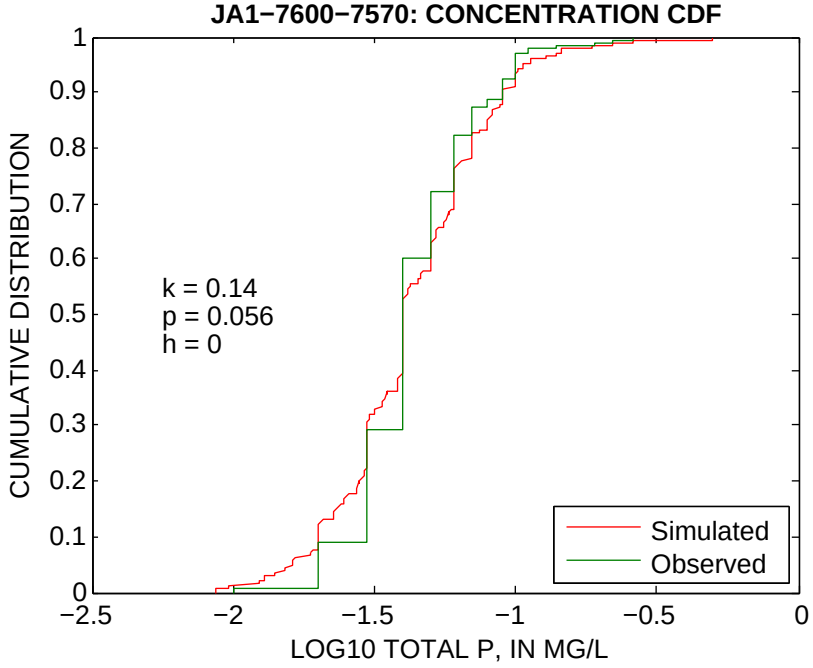
	n	180	180
		observe	simulate
min		0.01	0.0080105
		-2	-2.09634
mean		0.0501667	0.0672019
		-1.35594	-1.33217
media		0.04	0.0419215
		-1.39794	-1.37758
max		0.26	0.63239
		-0.585027	-0.199015
varian		0.001005	0.00577987
		0.0439964	0.124401
JB		0.001	0.001
		0.001847	0.040605
		ra	log
%		33.9573	-1.75293
err.va		0.00631946	0.125355
rel.std.err		6.28802	2.84921
mod.eff		-5.28802	-1.84921

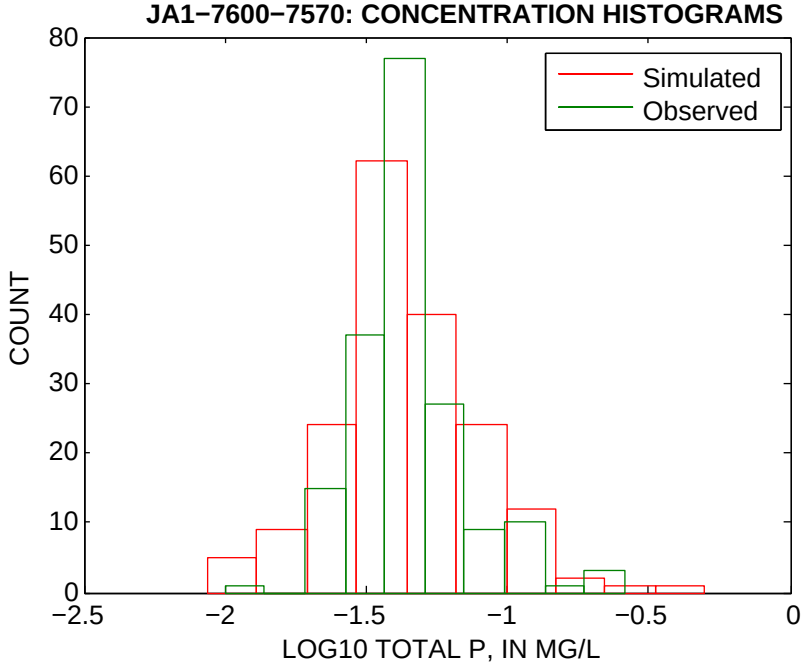
VERSION 2.1

ALL DATA
LOG10

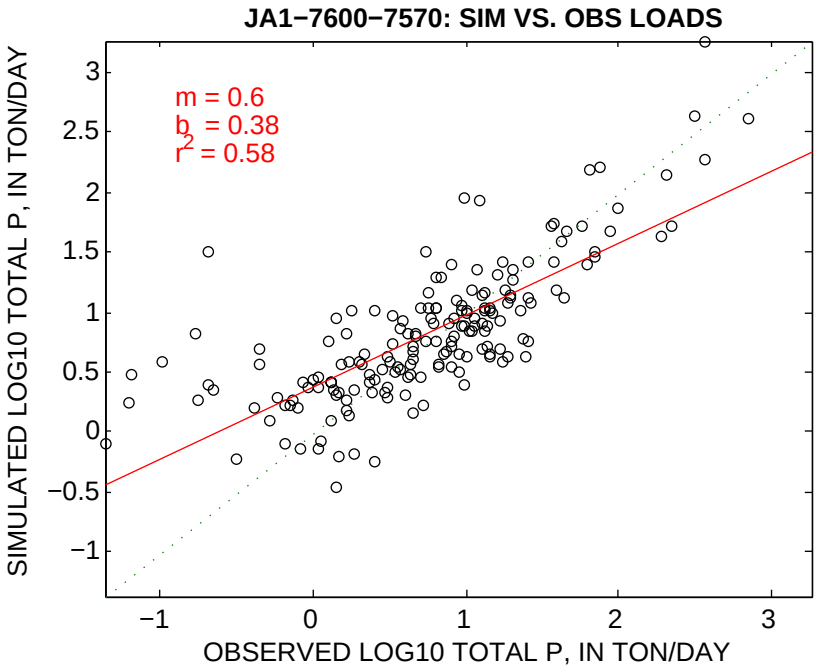


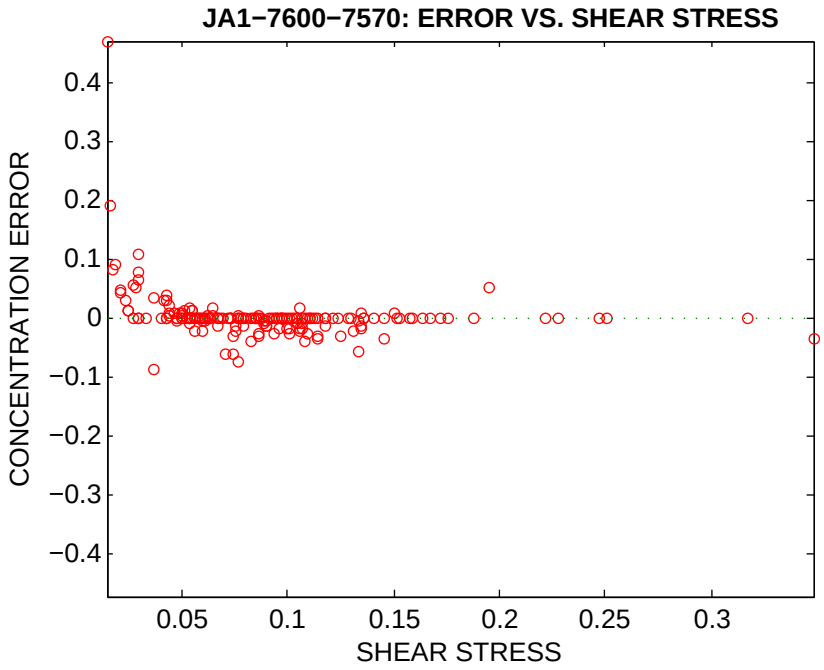


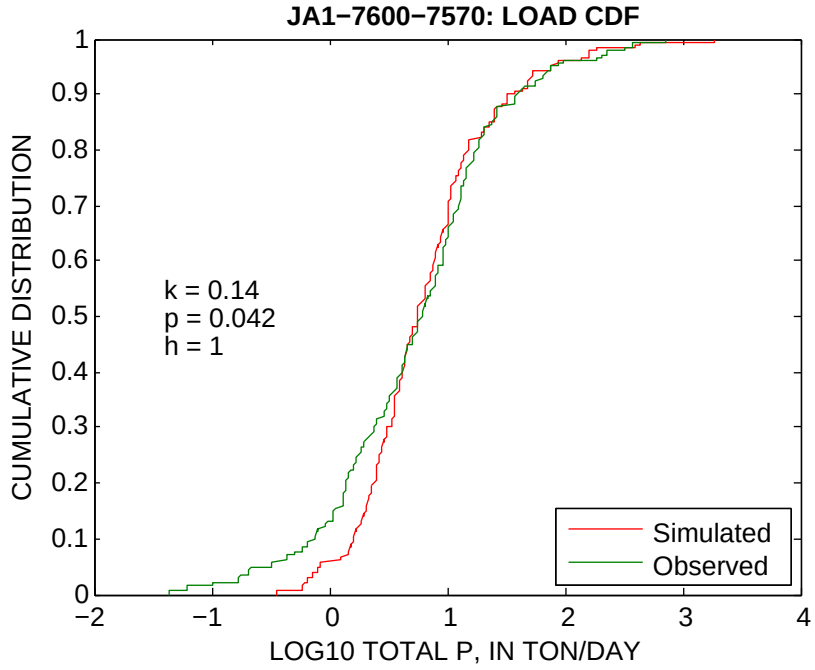


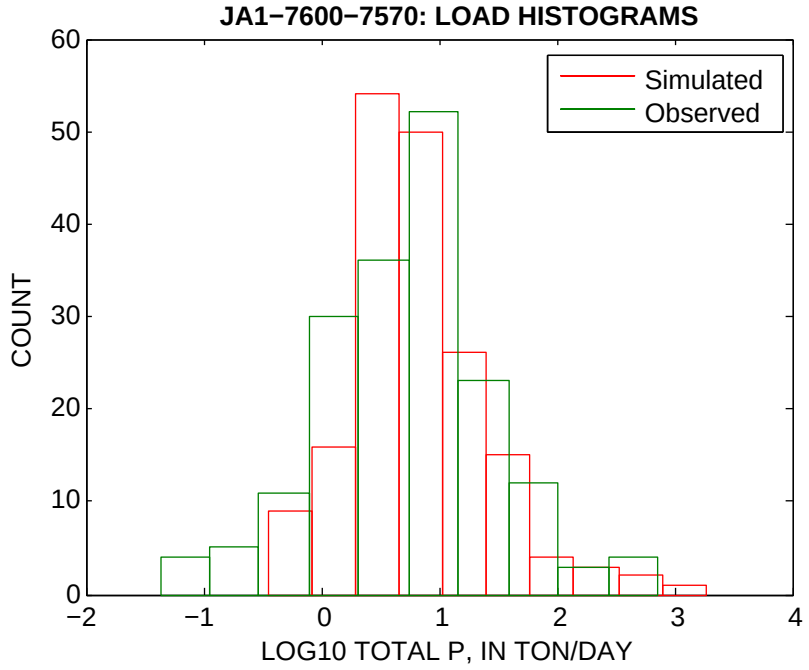


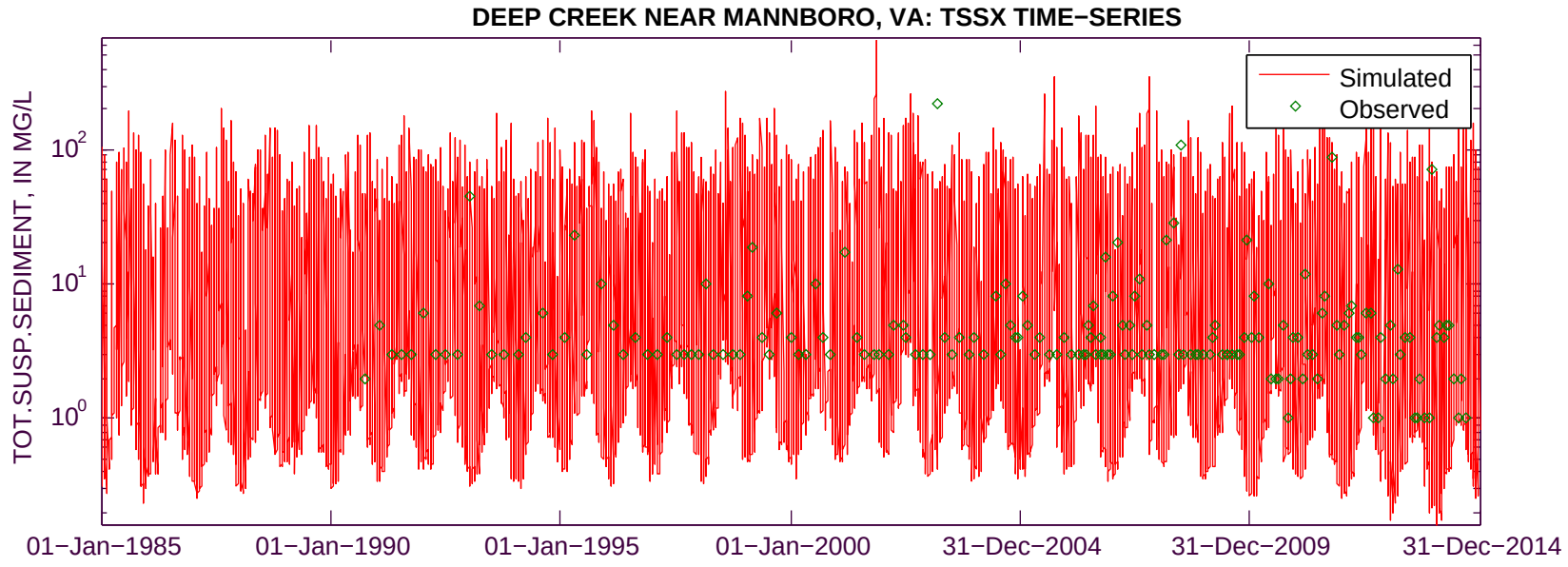
LOAD DATA
LOG10

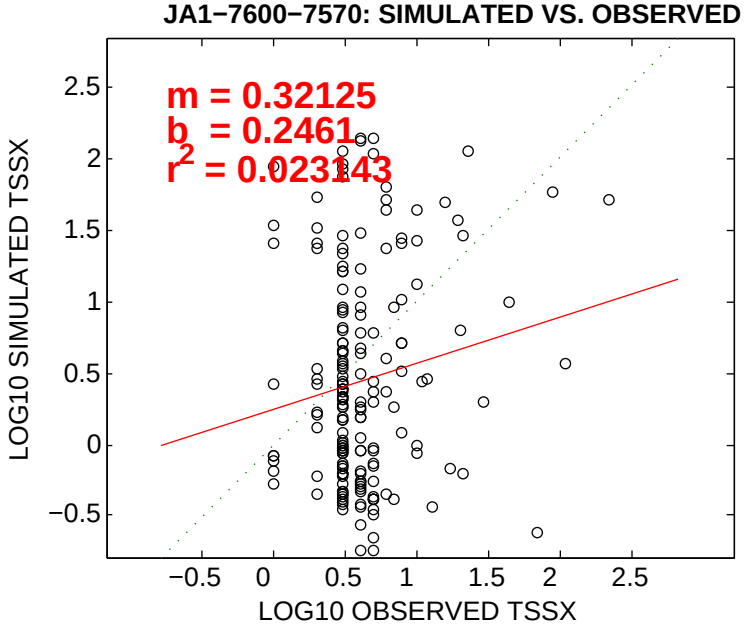


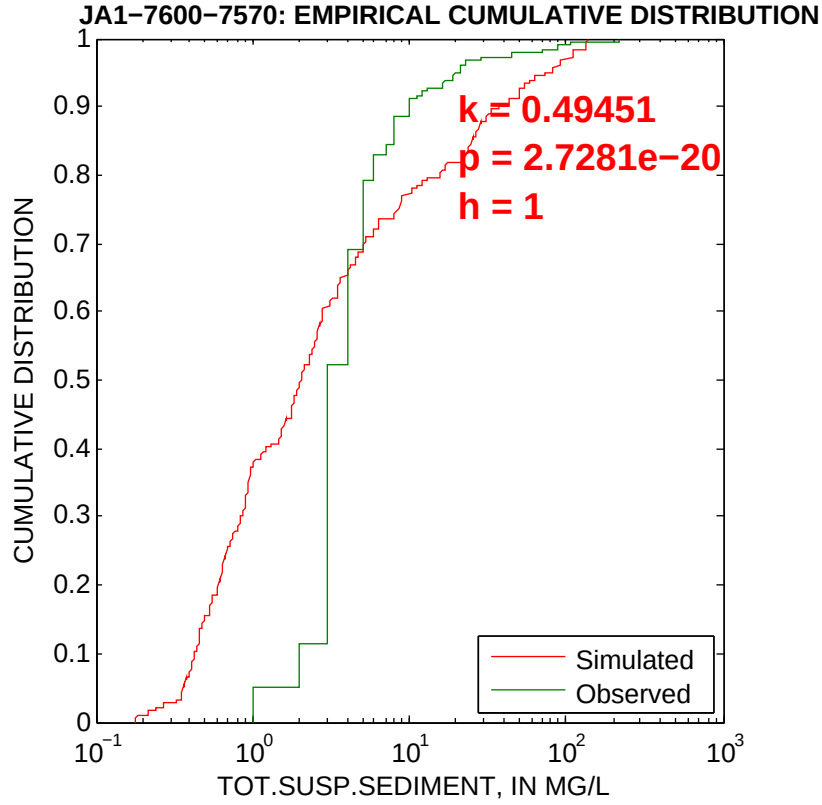












DATA SELECTION

scenario	file
P620171001WQ	TSSX.calib

plot: TSSX - total suspended ...

Dates: 1/1/1985 12/31/201

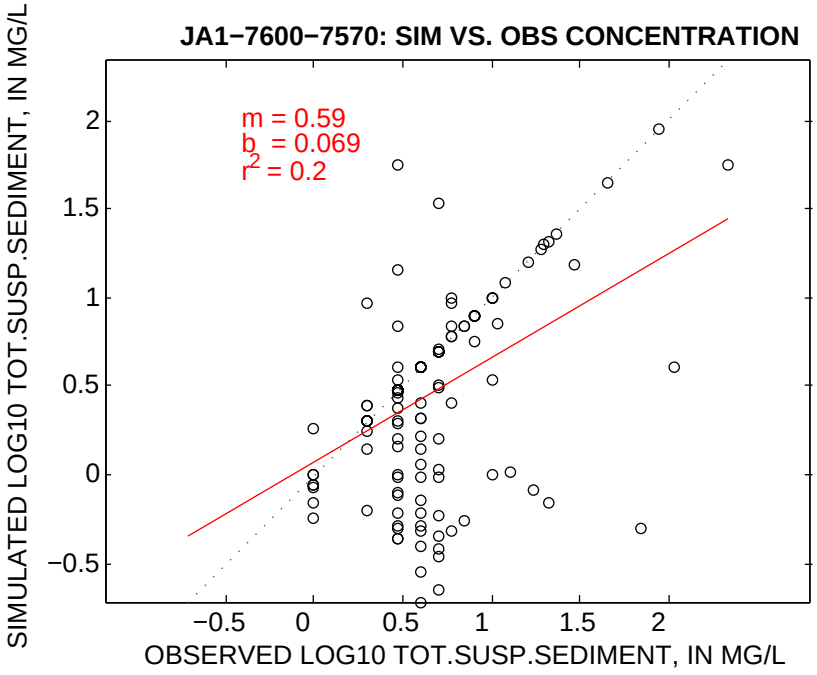
Drive	Directory	Observed
N/A	model	OBS20161101

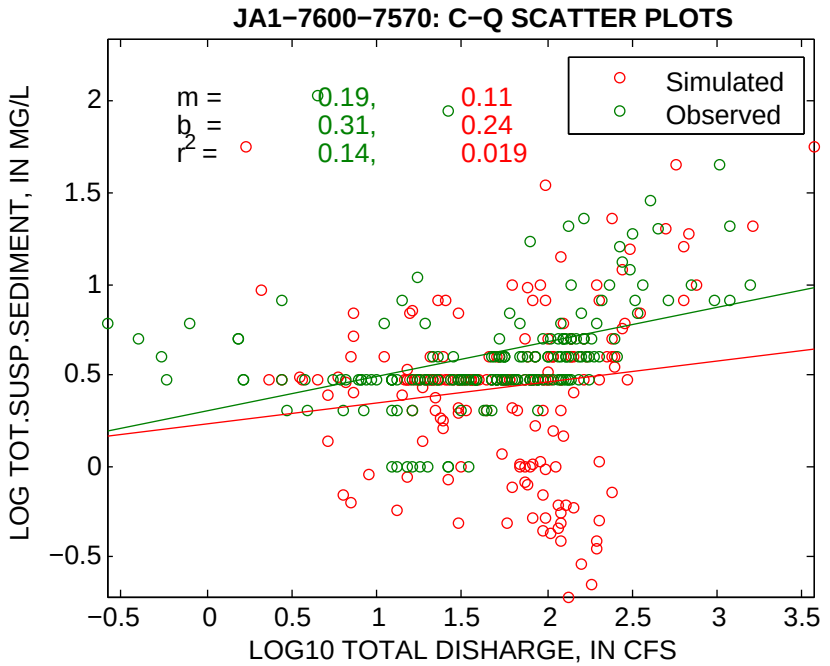
STATISTICS

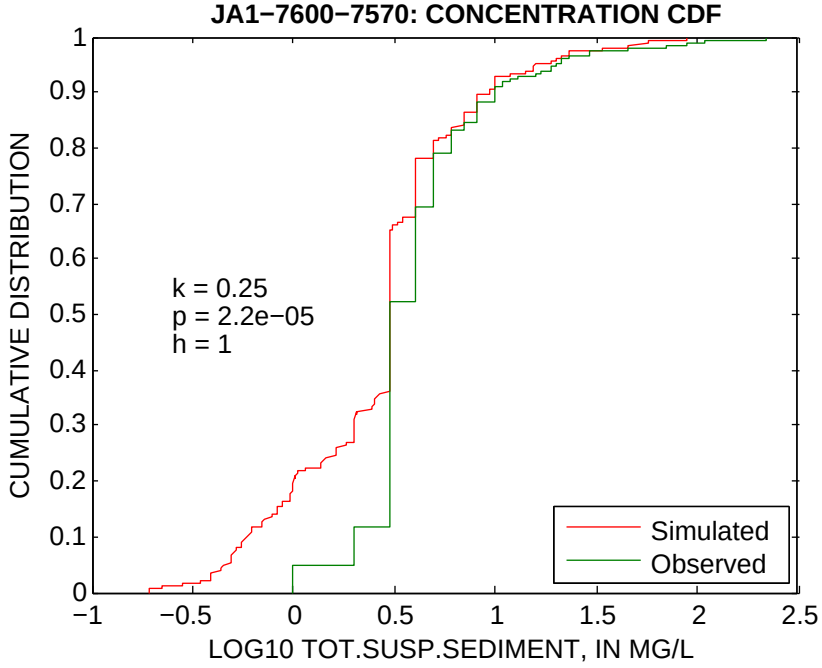
n	182	182
	observe	simulate
min	1	0.17878
	0	-0.747681
mean	7.52198	12.681
	0.620899	0.44557
media	3	2.06425
	0.477121	0.314758
max	217	137.65
	2.33646	2.13878
varian	388.45	702.279
	0.119851	0.534476
JB	0.001	0.001
	0.001	0.005556
	ra	log
%	68.586	-28.238
err.va	978.409	0.608232
rel.std.err	2.51875	5.07491
mod.eff	-1.51875	-4.07491

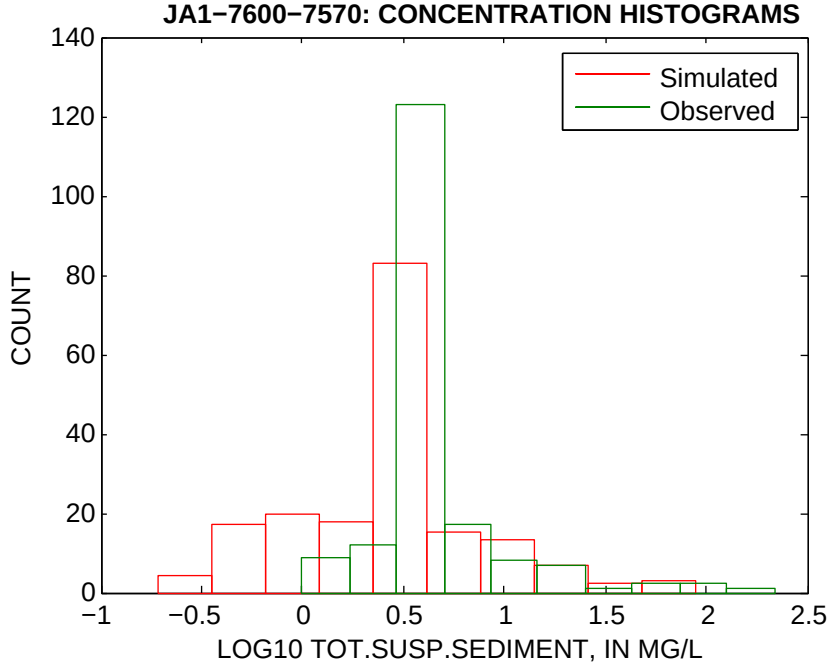
VERSION 2.1

ALL DATA
LOG10

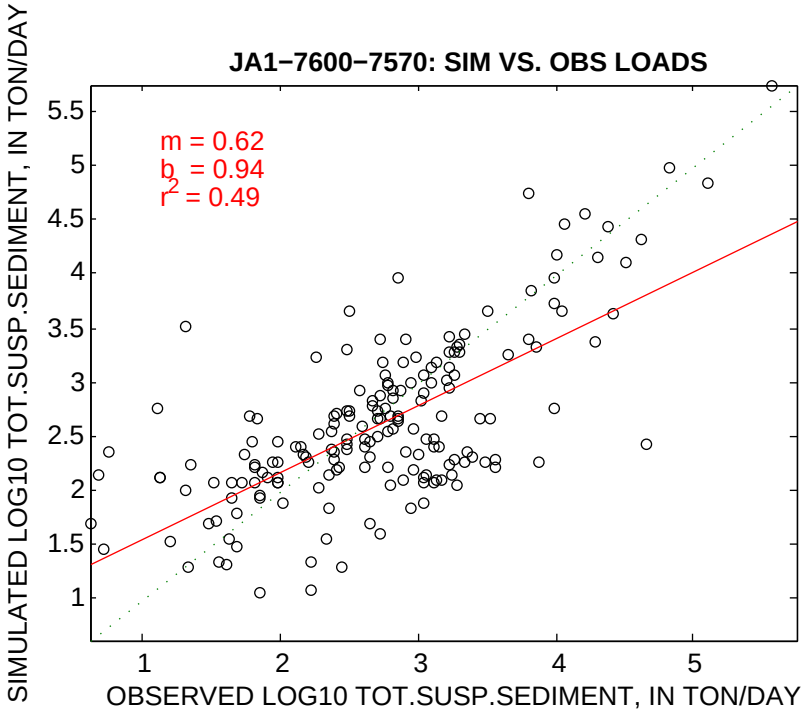


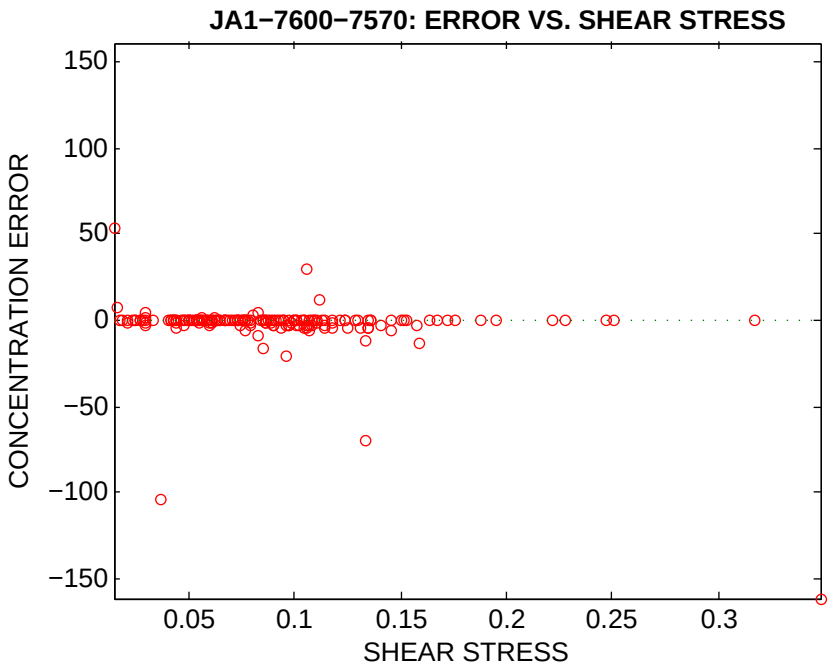


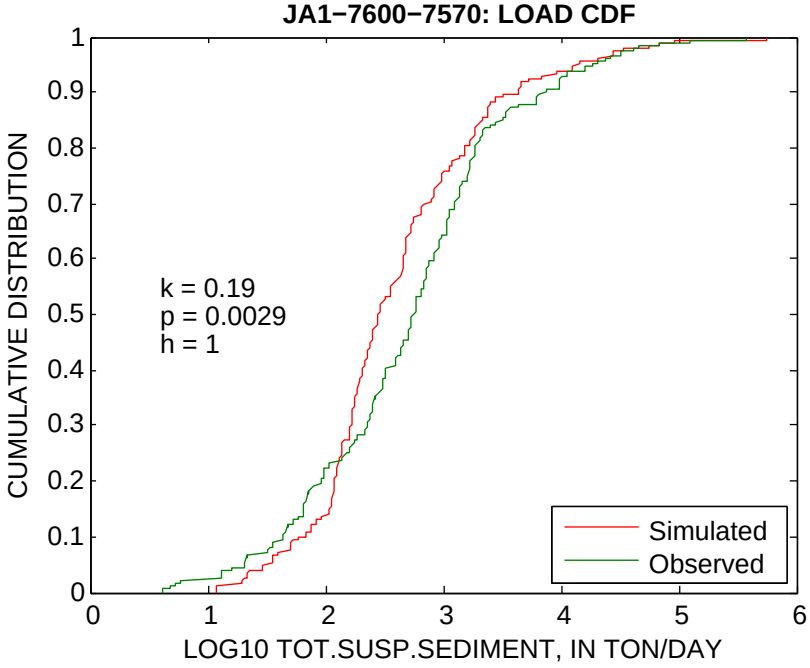


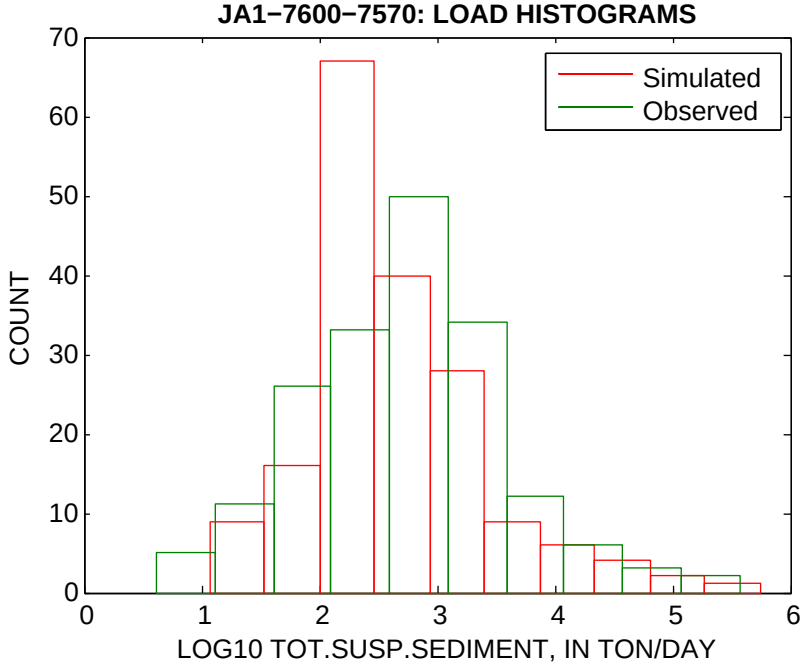


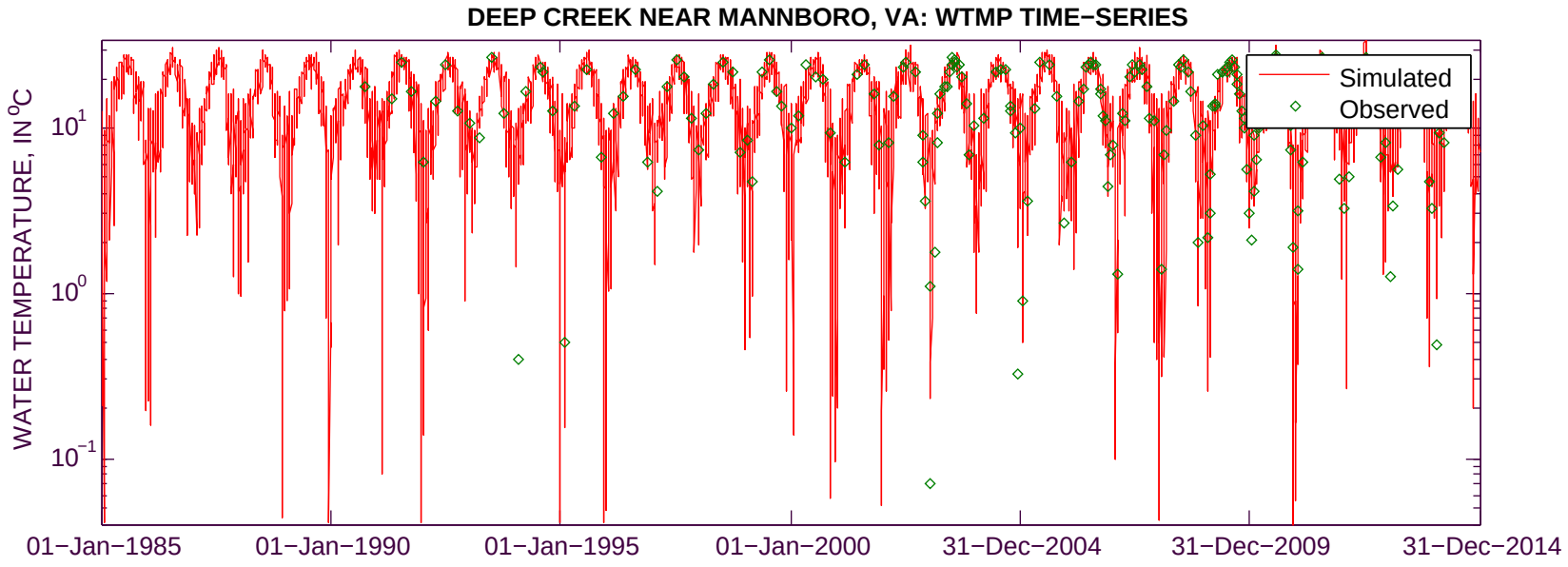
LOAD DATA
LOG10

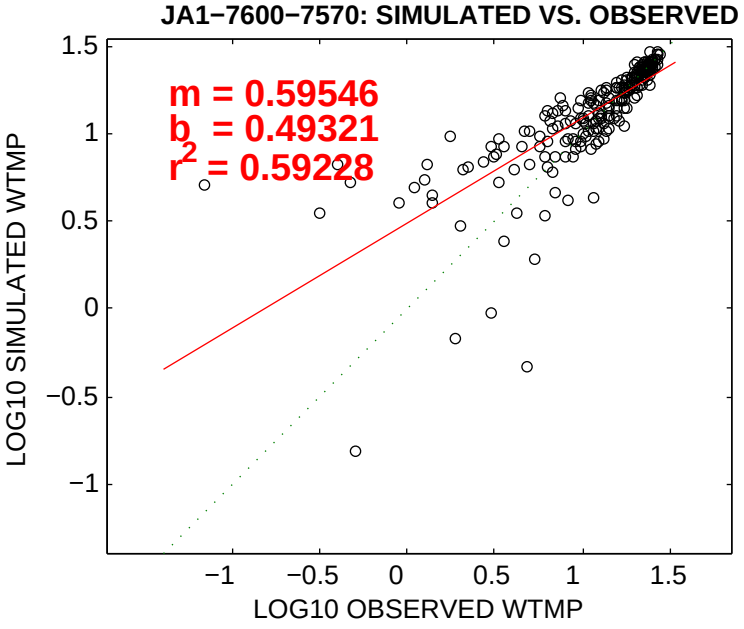


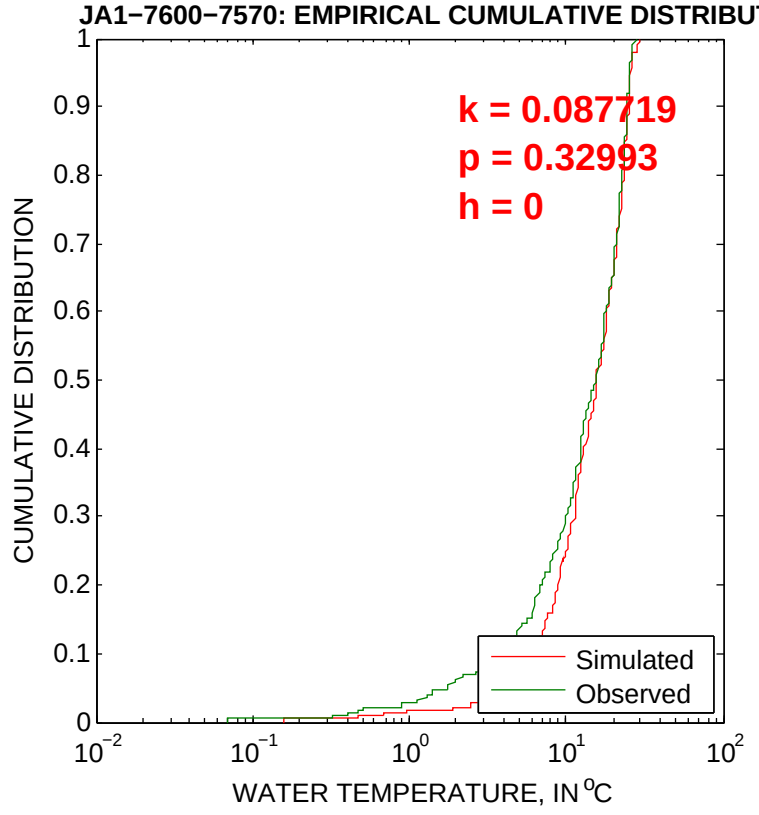












DATA SELECTION

scenario	file
P620171001WQ	WTMP.calib

plot: WTMP - water tempera...

Dates: 1/1/1985 – 12/31/201

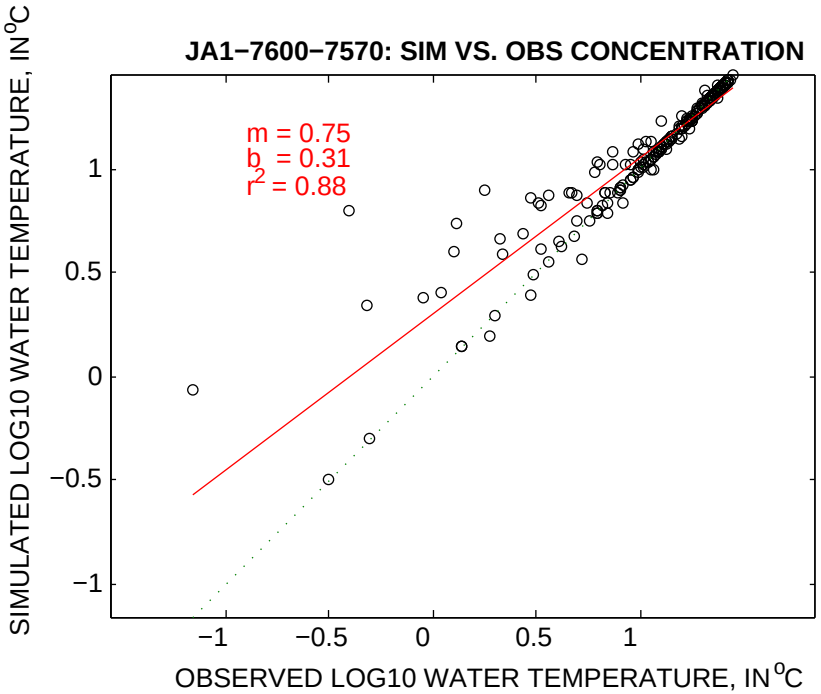
Drive	Directory	Observed
N/A	model	OBS20161101

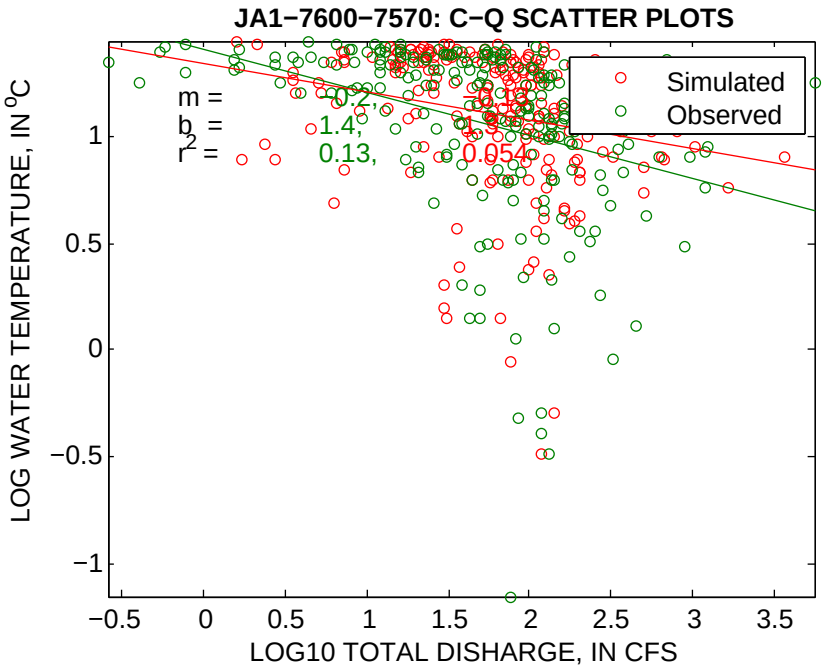
STATISTICS

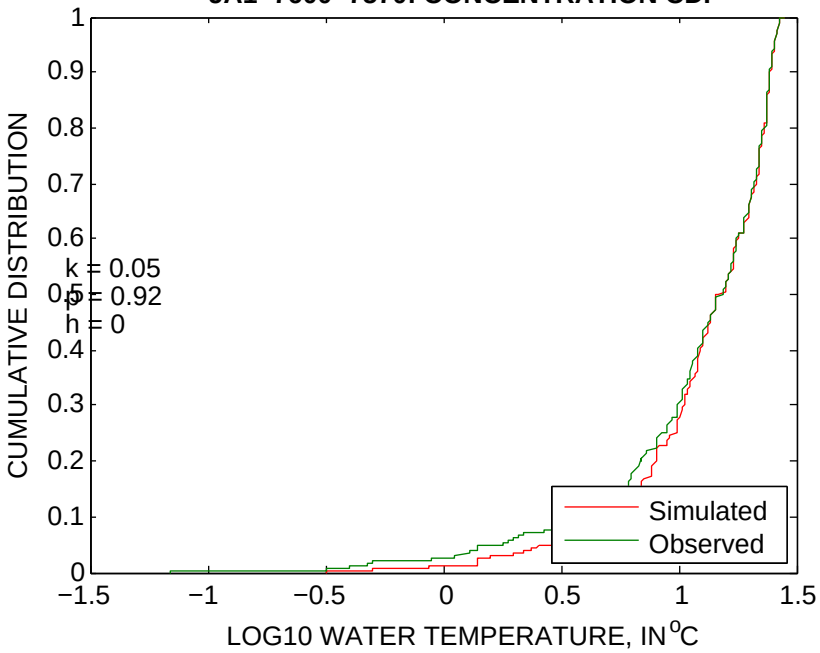
	n	observe	simulate
		228	228
min		0.07	0.15563
		-1.1549	-0.807907
mean		14.8861	15.7698
		1.06131	1.12518
media		15.605	15.734
		1.19326	1.19684
max		28.1	29.115
		1.44871	1.46412
varian		59.9855	51.7578
		0.15914	0.0952693
JB		0.005694	0.011851
		0.001	0.001
		ra	log
%		5.93658	6.01764
err.va		8.60283	0.0689843
rel.std.err		0.143415	0.433481
mod.eff		0.856585	0.566519

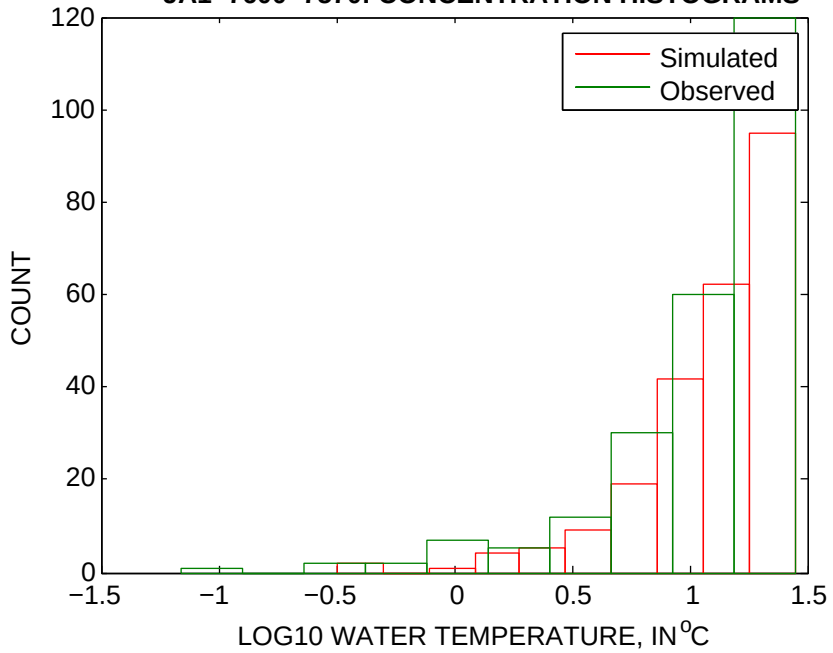
VERSION 2.1

ALL DATA
LOG10

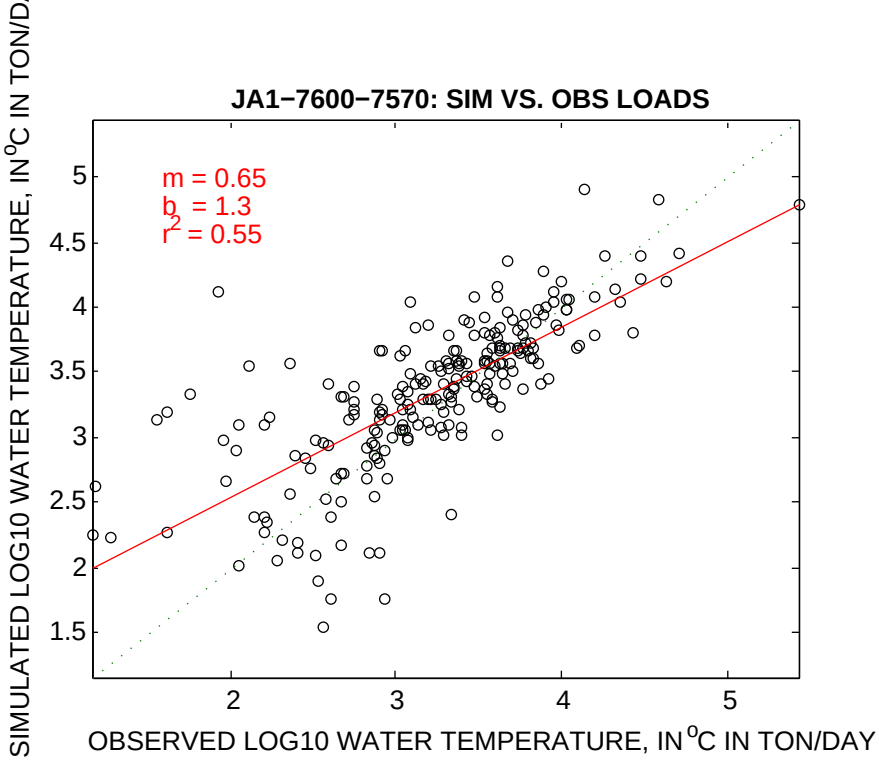


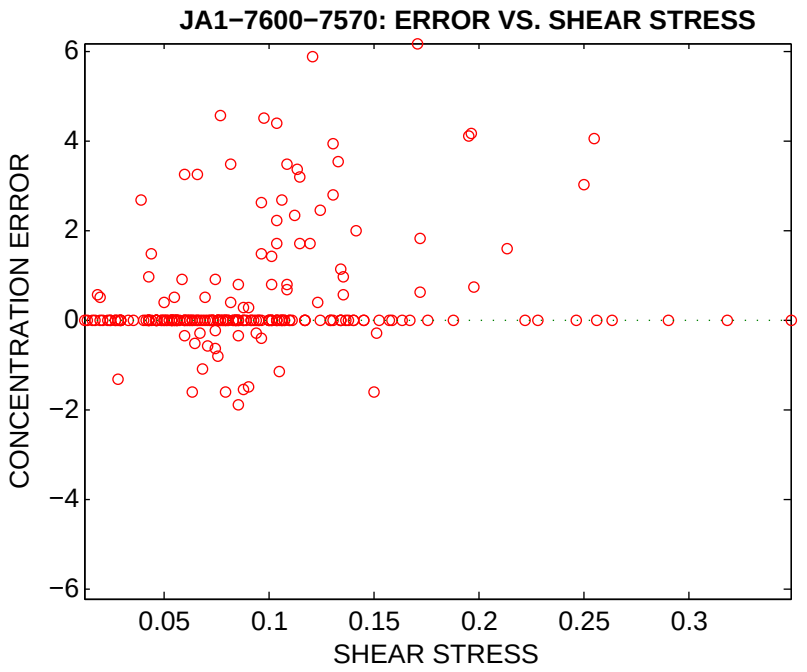


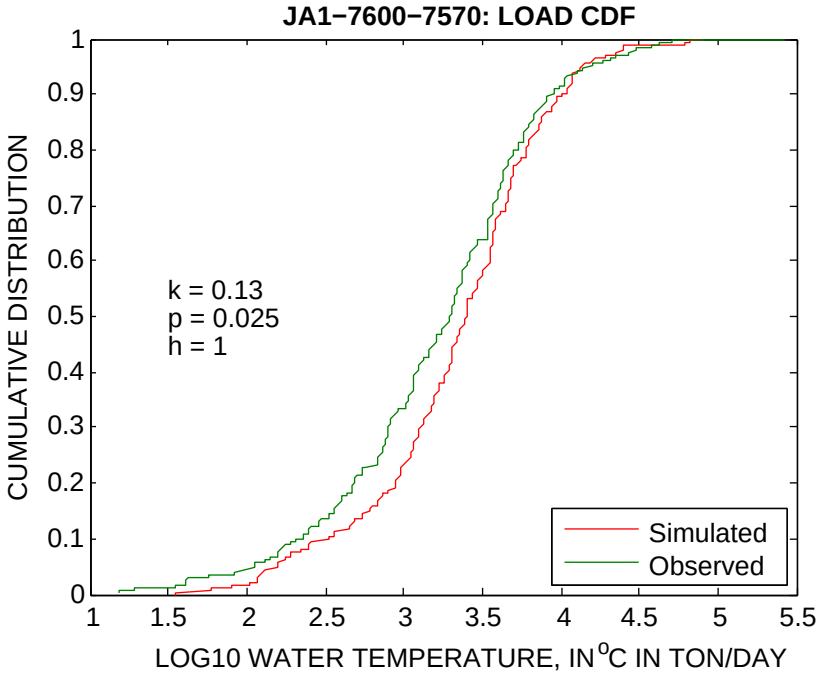


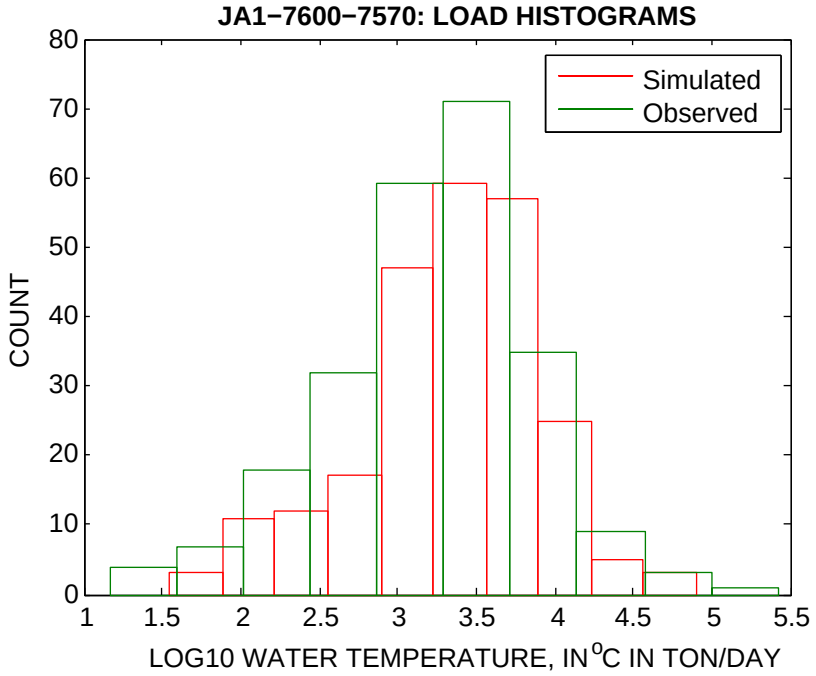


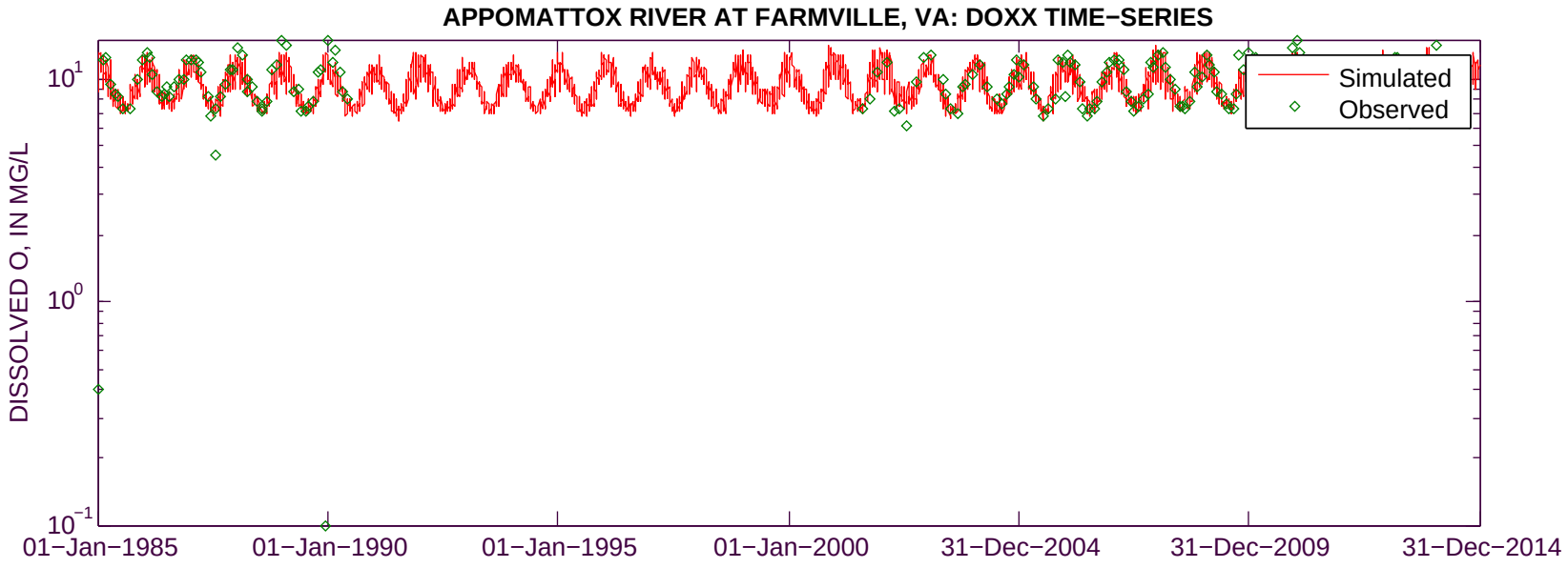
LOAD DATA
LOG10

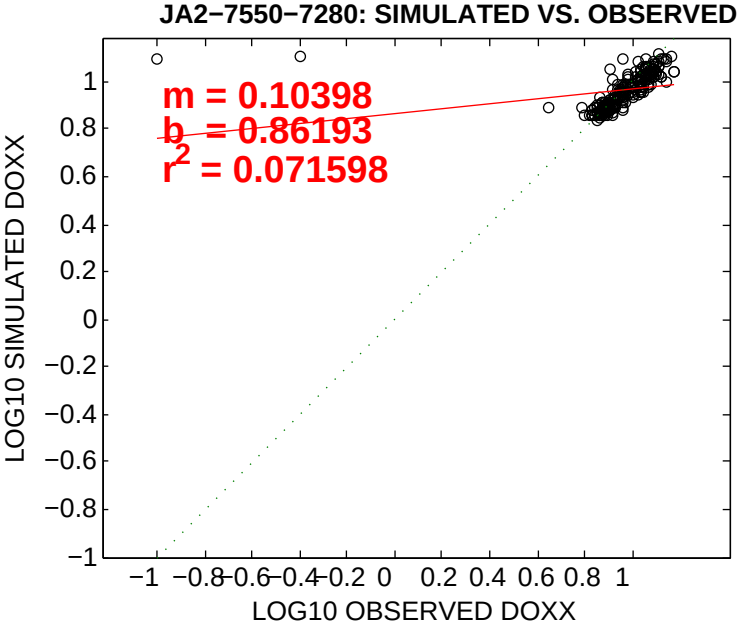


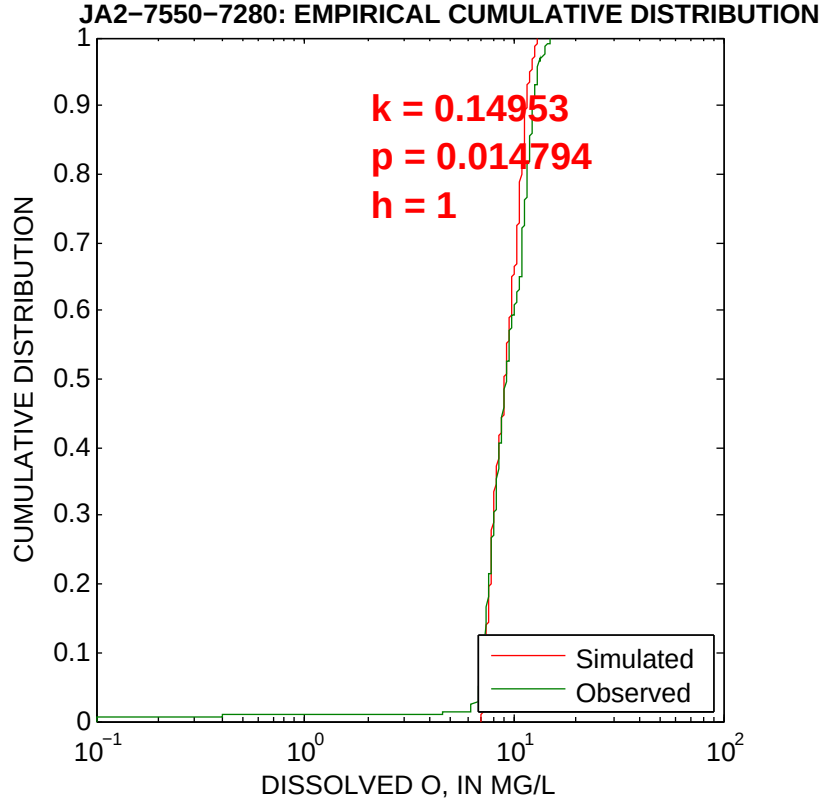












DATA SELECTION

scenario	file
P620171001WQ	DOXX.calib

plot: DOXX - dissolved oxygen

Dates: 1/1/1985 – 12/31/201

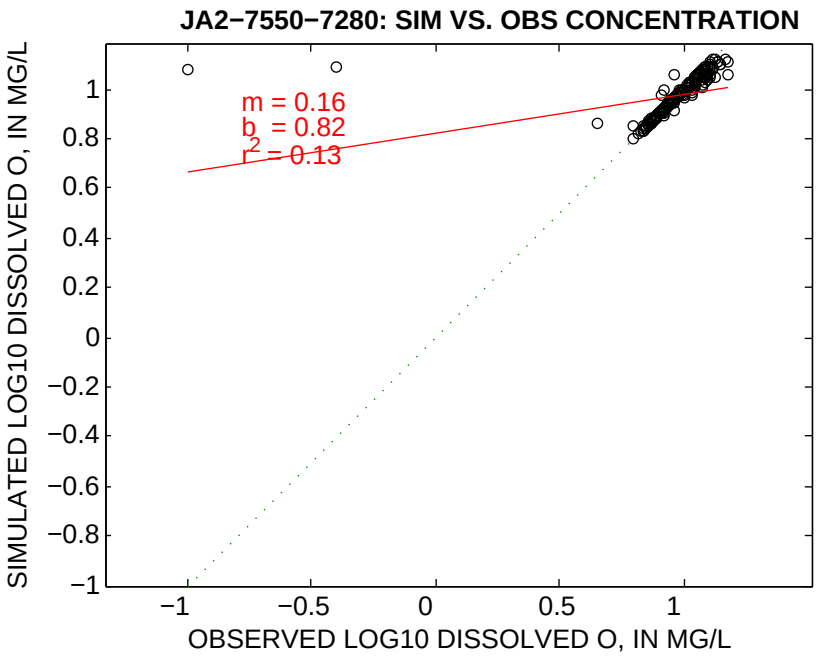
Drive	Directory	Observed
N/A	model	OBS20161101

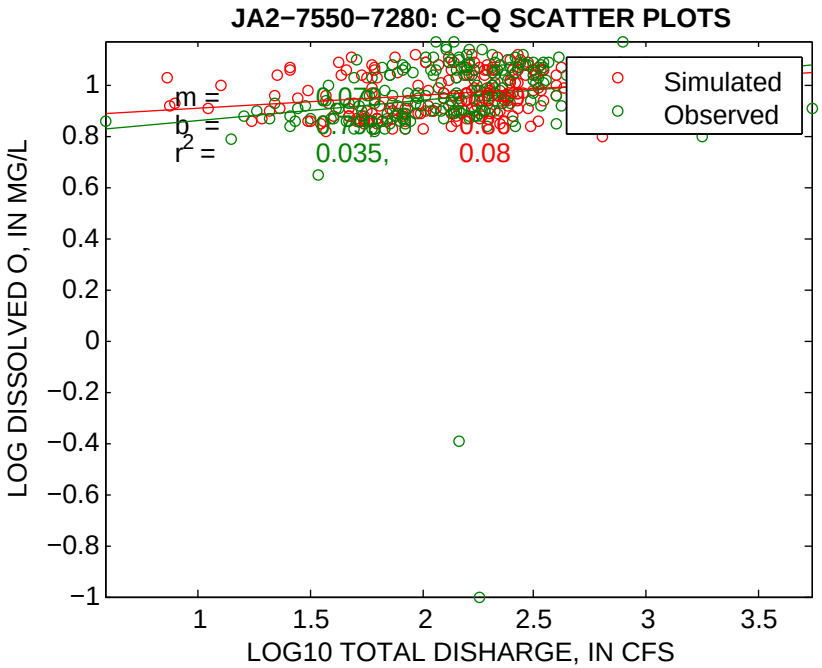
STATISTICS

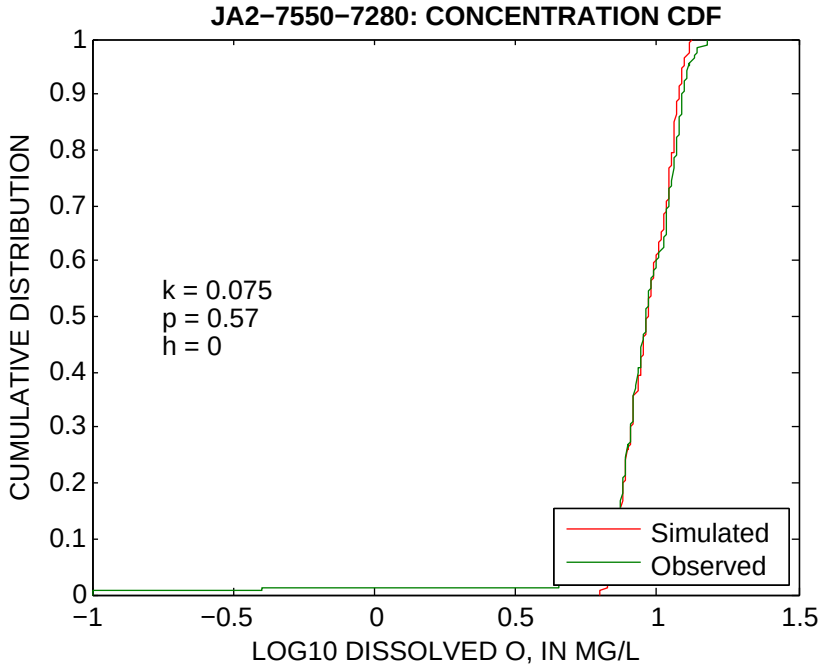
	n	observe	simulate
		214	214
min		0.1	6.9301
		-1	0.84074
mean		9.54692	9.28435
		0.958328	0.961571
media		9.195	9.0883
		0.963552	0.958483
max		15	13.033
		1.17609	1.11504
varian		5.03474	2.50971
		0.0354515	0.00535299
JB		0.001979	0.006657
		0.001	0.006979
		ra	log
%		-2.75023	0.338383
err.va		2.61964	0.0334429
rel.std.err		0.520314	0.943341
mod.eff		0.479686	0.056659

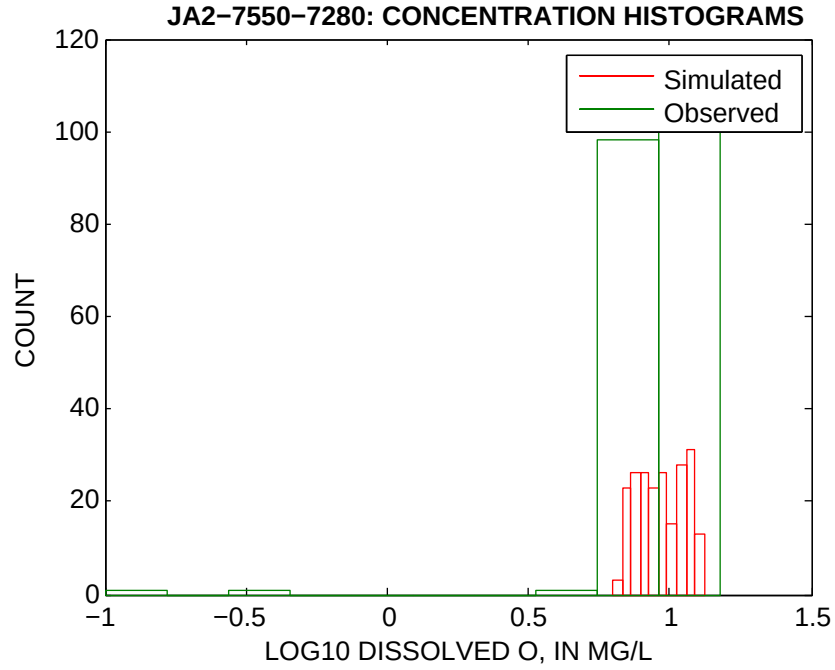
VERSION 2.1

ALL DATA
LOG10

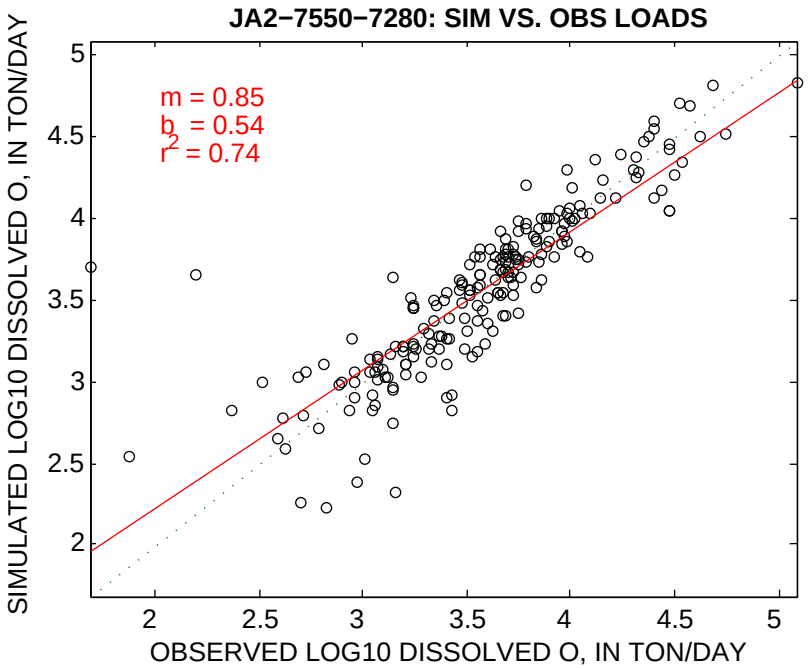


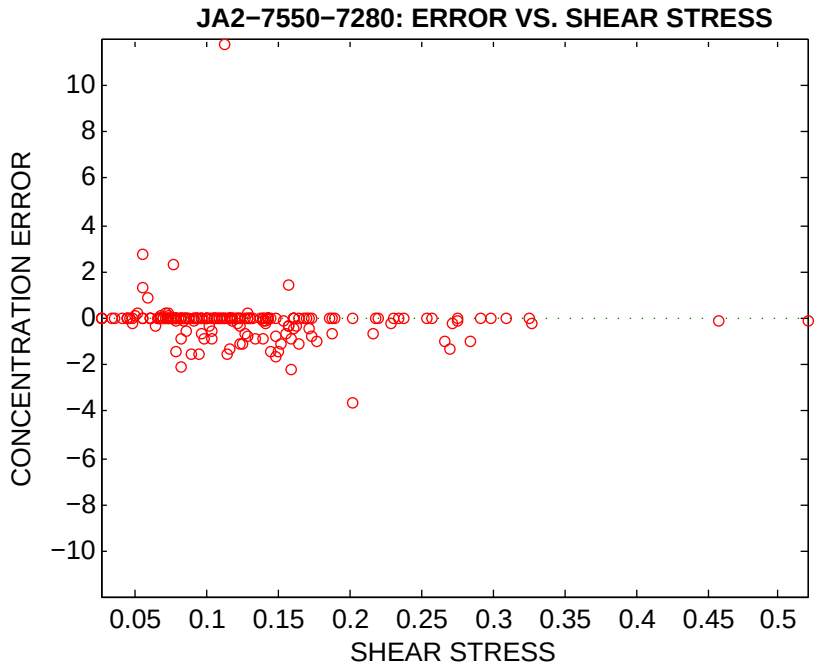


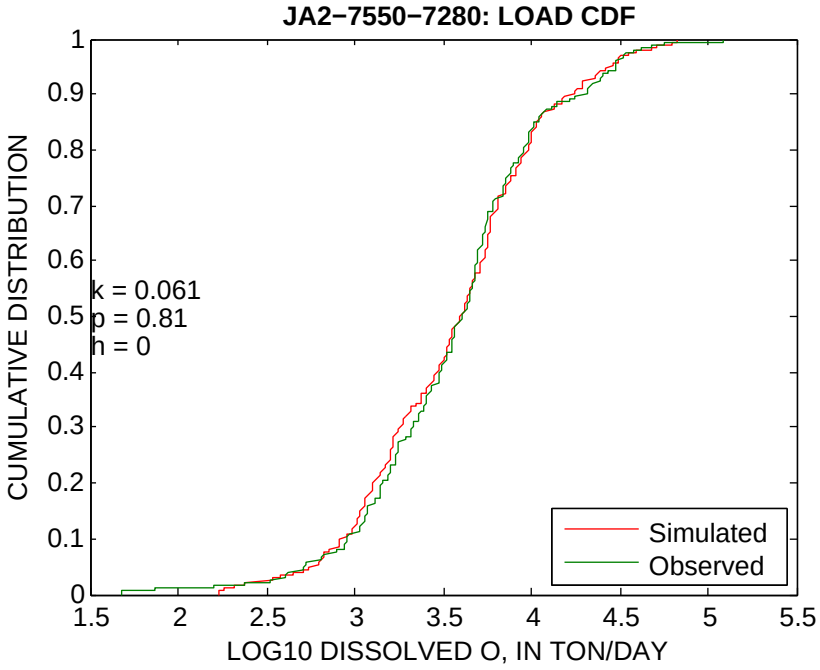


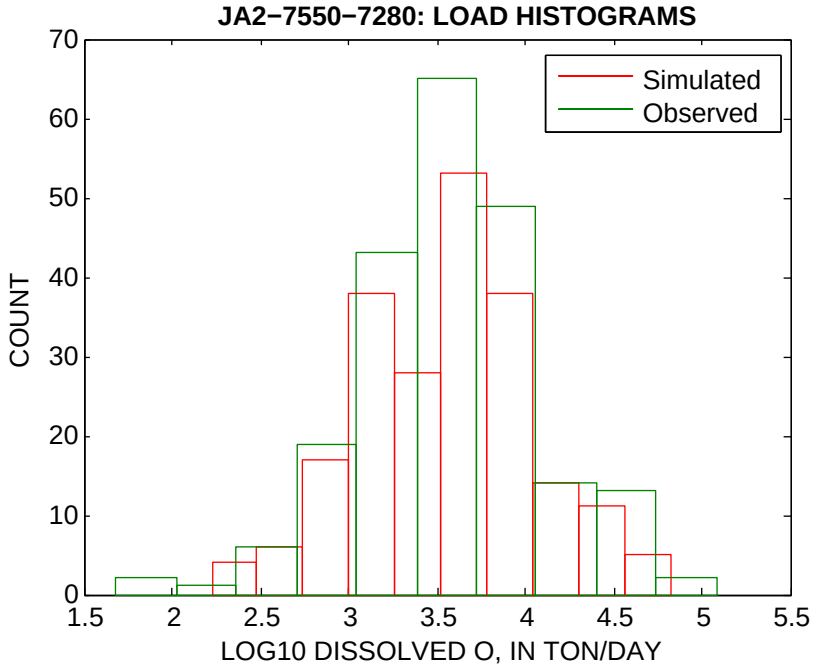


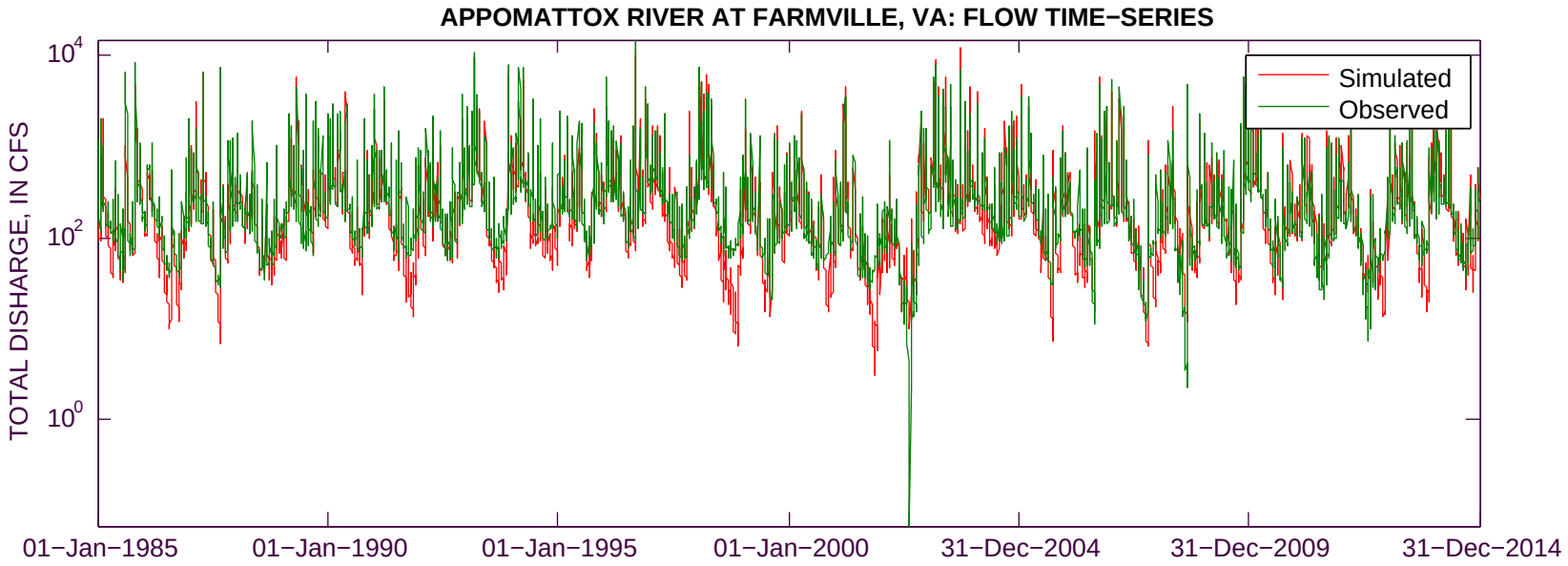
LOAD DATA
LOG10

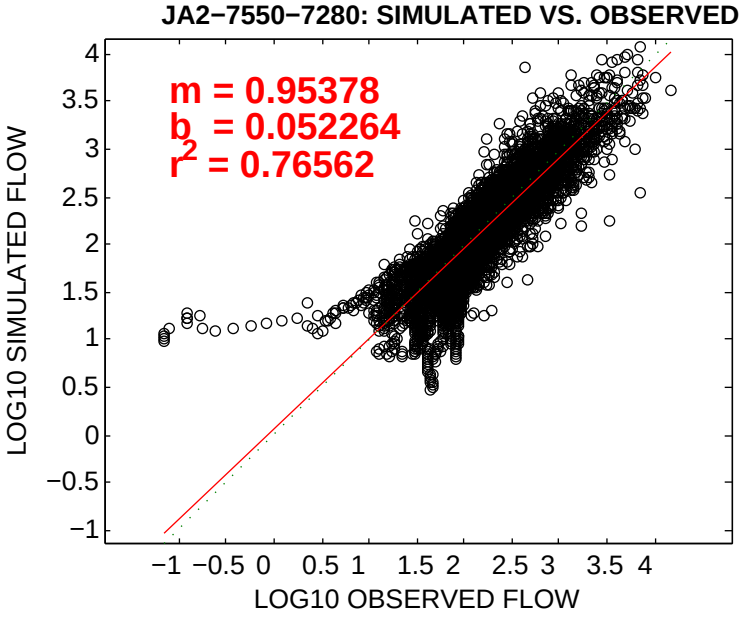


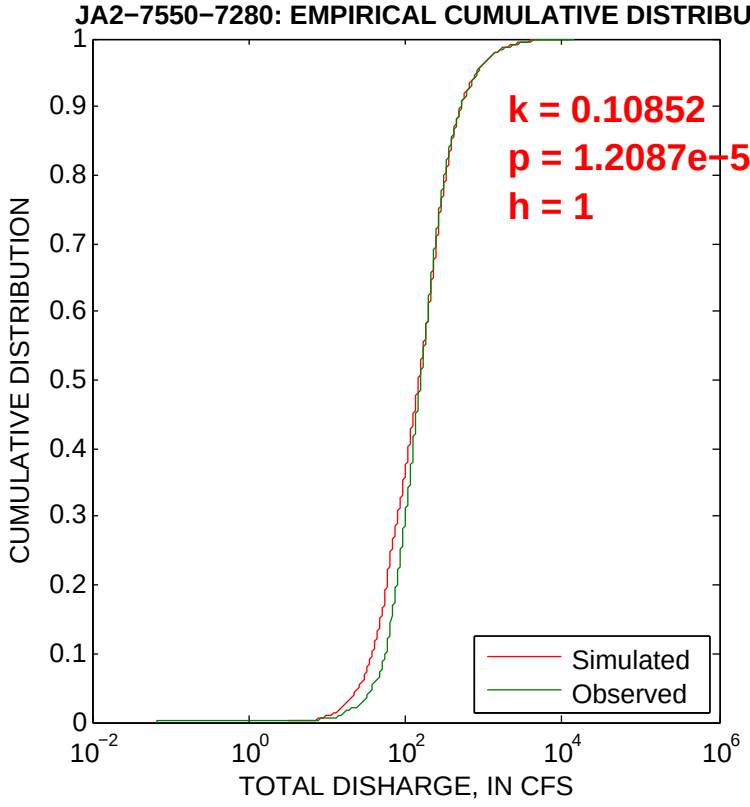












DATA SELECTION

scenario: P620171001WQ | file: FLOW.calib

plot: FLOW - total discharge

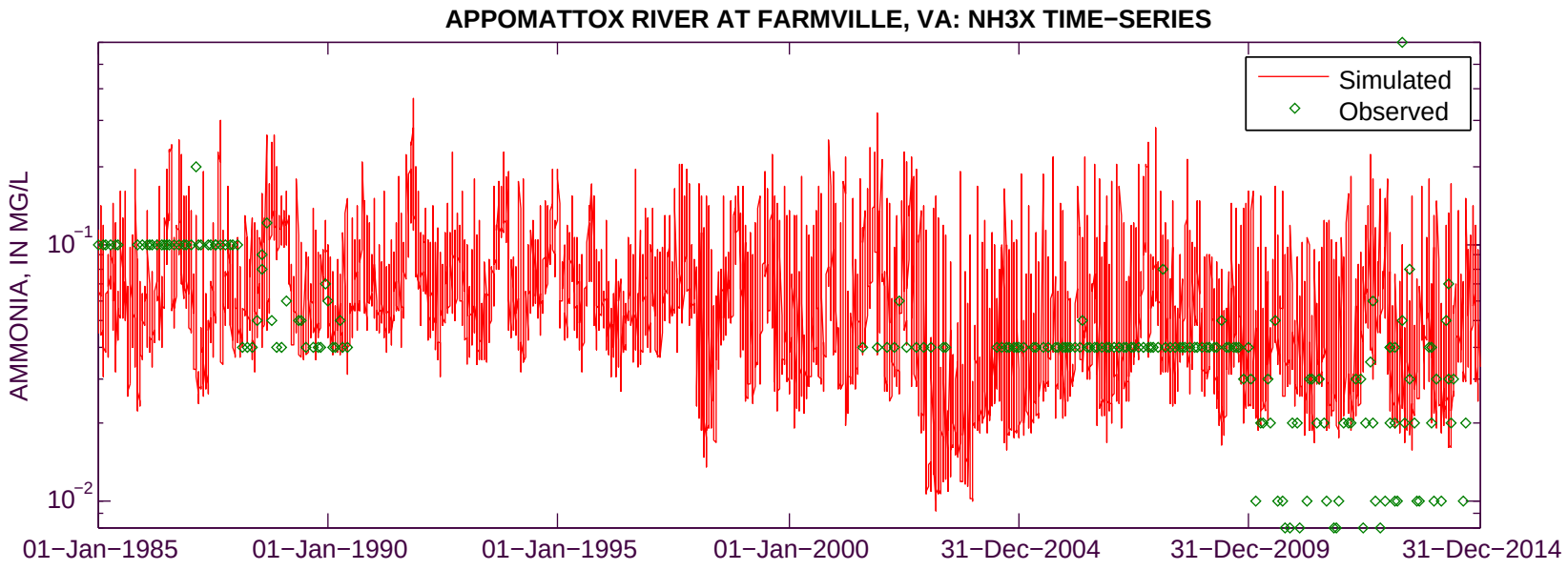
Dates: 1/1/1985 – 12/31/201

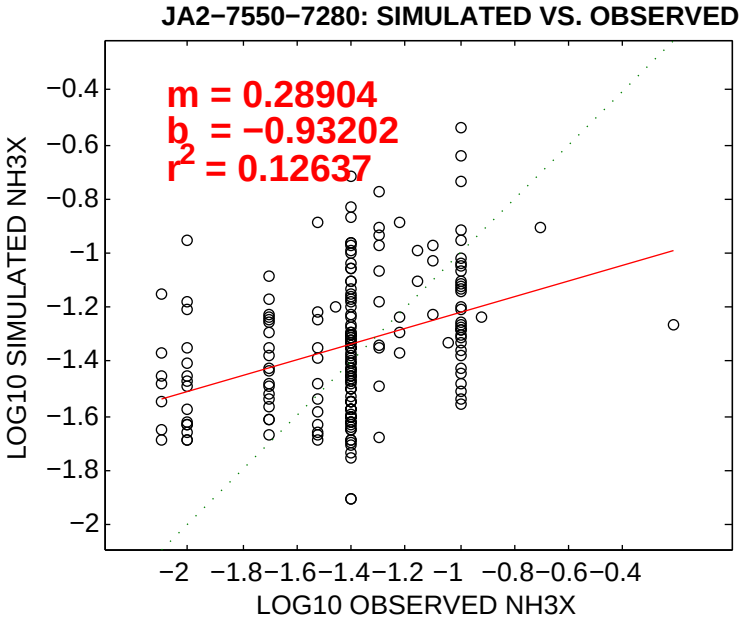
Drive: N/A | Directory: model | Observed: OBS20161101

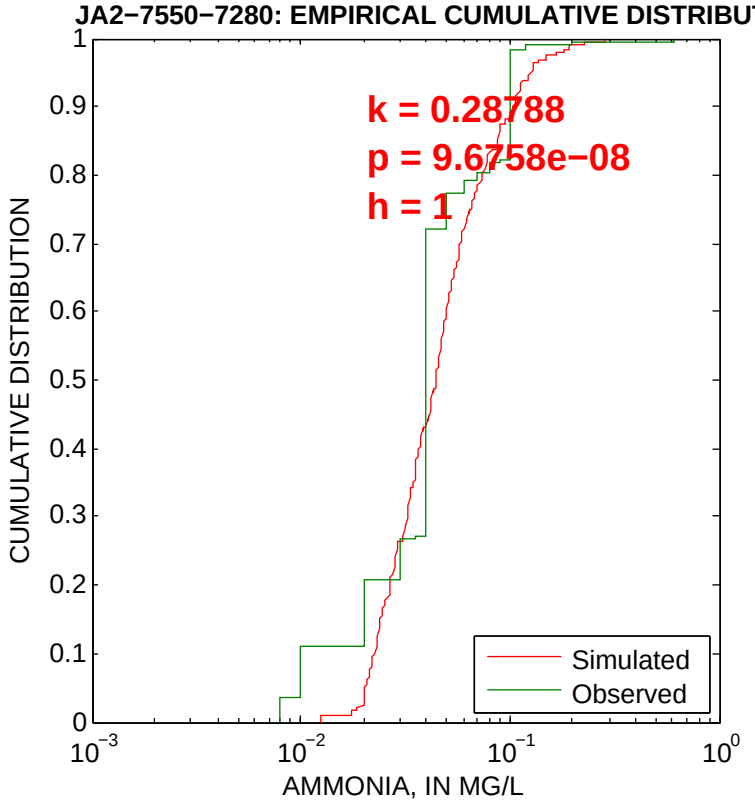
STATISTICS

		observe	simulate
n		10957	10957
min		0.07	3.0219
		-1.1549	0.48028
mean		279.236	268.461
		2.20875	2.15892
media		158	149.8
		2.19866	2.17551
max		14800	12038
		4.17026	4.08055
varian		271398	249515
		0.182766	0.217159
JB		0.001	0.001
		0.001	0.001
		ra	log
%		-3.8587	-2.25583
err.va		118467	0.053771
rel.std.err		0.436505	0.294207
mod.eff		0.563495	0.705793

VERSION 2.1







DATA SELECTION

scenario	file
P620171001WQ	NH3X.calib

plot: NH3X - ammonia

Dates: 1/1/1985 – 12/31/201

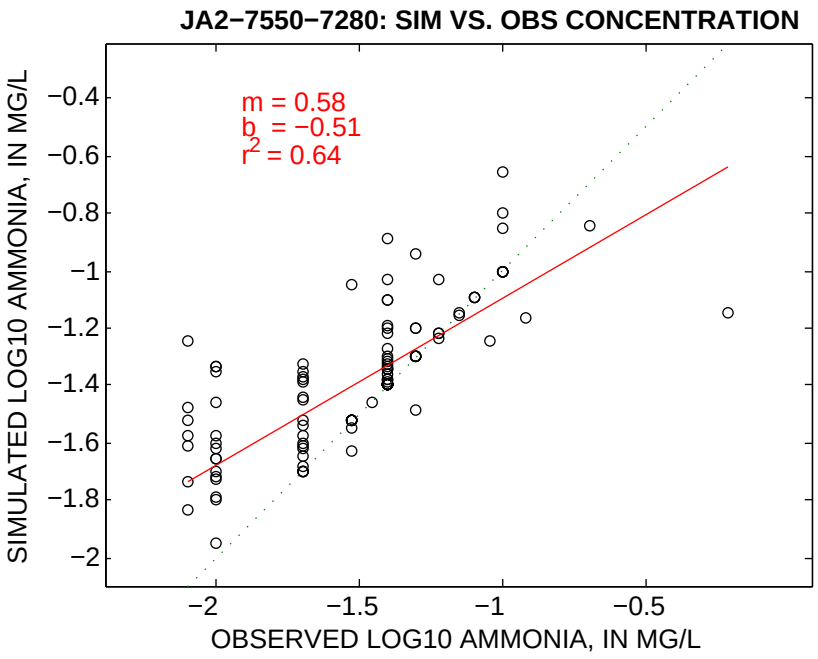
Drive	Directory	Observed
N/A	model	OBS20161101

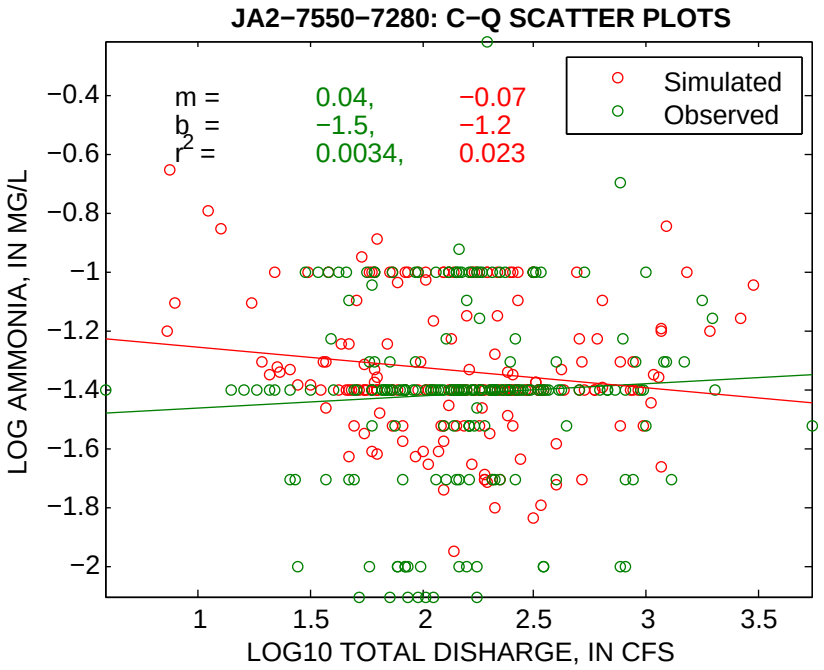
STATISTICS

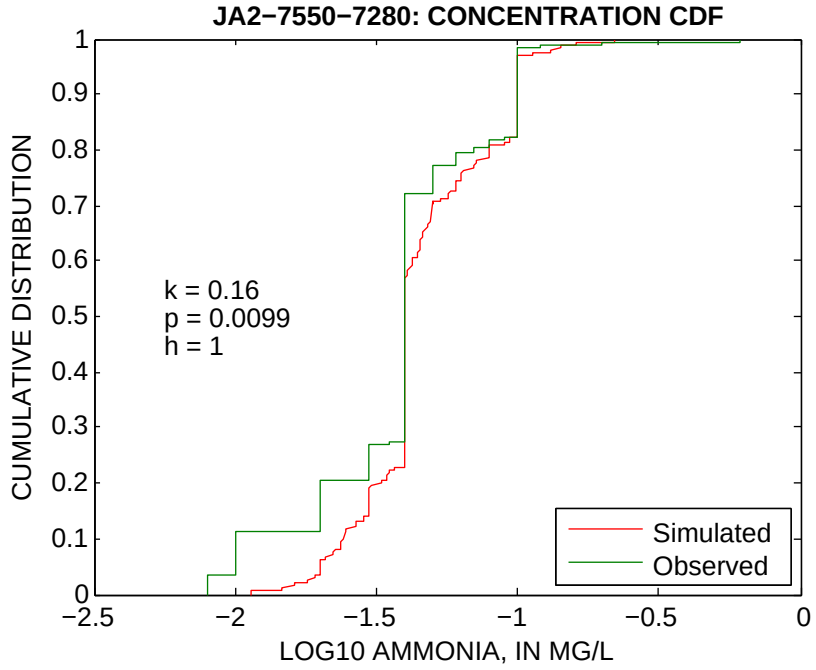
	n	198	198
		observe	simulate
min		0.008	0.012365
		-2.09691	-1.90781
mean		0.049904	0.0546767
		-1.41154	-1.34001
media		0.04	0.0448955
		-1.39794	-1.3478
max		0.61	0.28684
		-0.21467	-0.54236
varian		0.00250696	0.00147324
		0.0946629	0.062582
JB		0.001	0.001
		0.026178	0.029551
		ra	log
%		9.56368	-5.06741
err.va		0.00316348	0.107665
rel.std.err		1.26188	1.13735
mod.eff		-0.261879	-0.137348

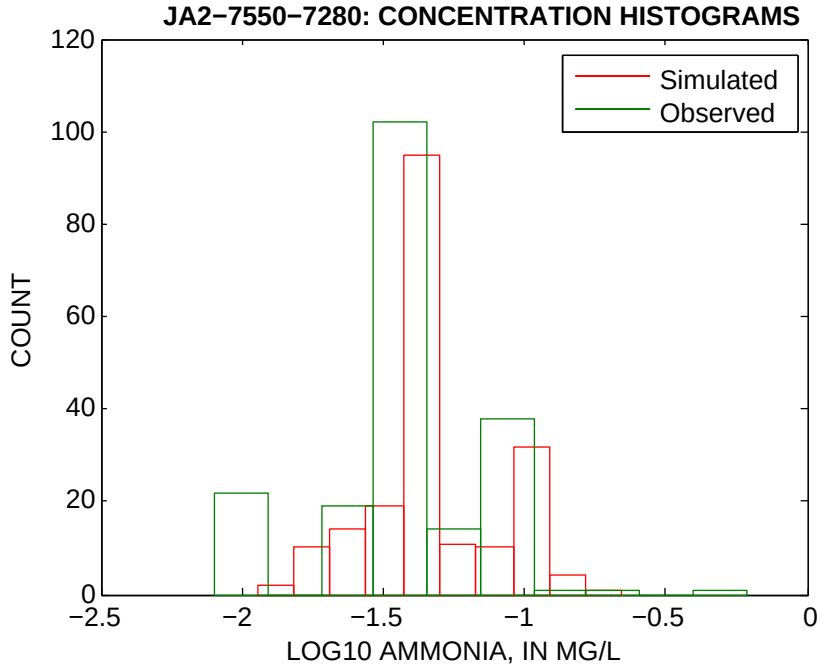
VERSION 2.1

ALL DATA
LOG10

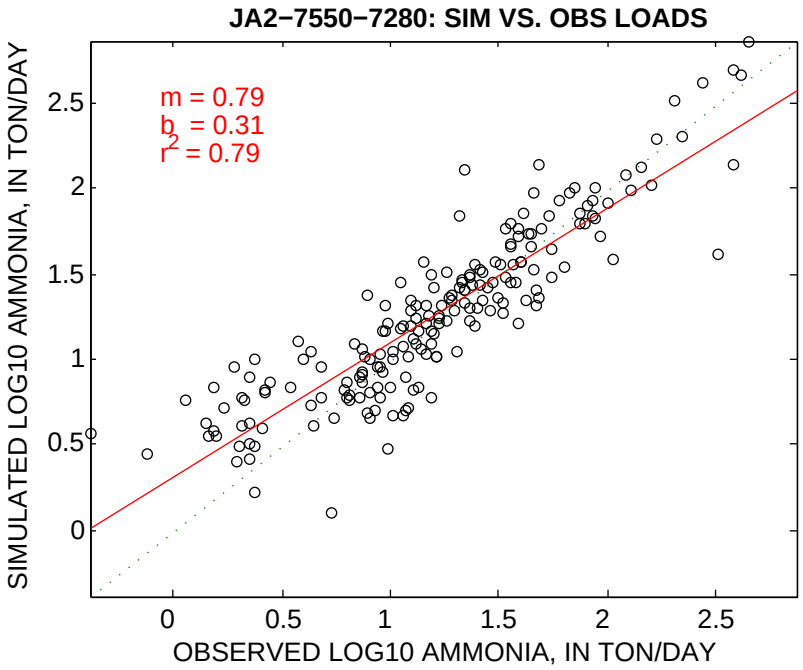


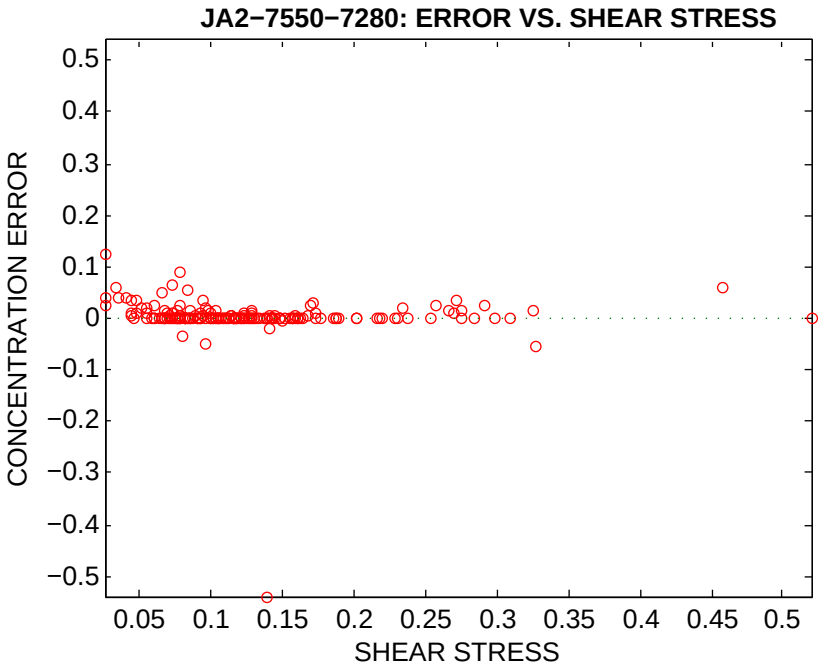


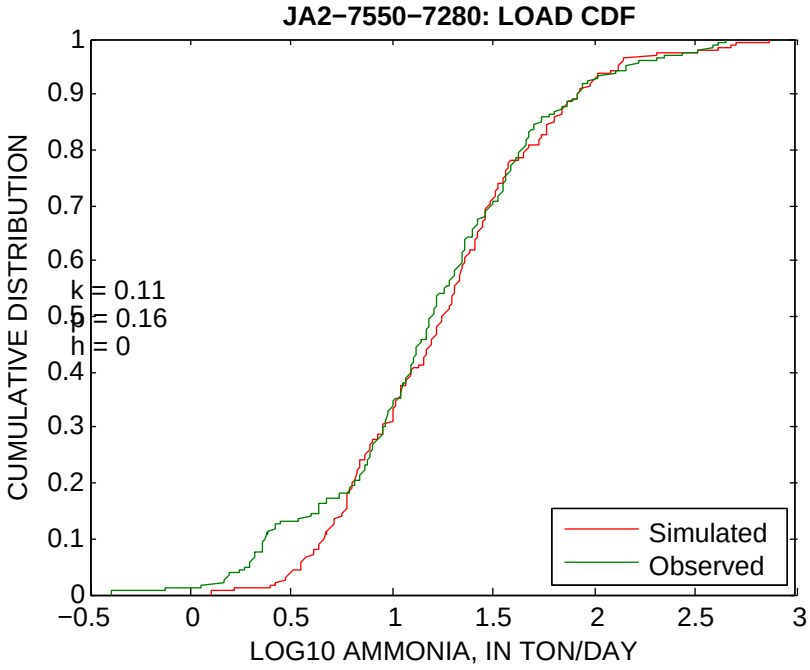


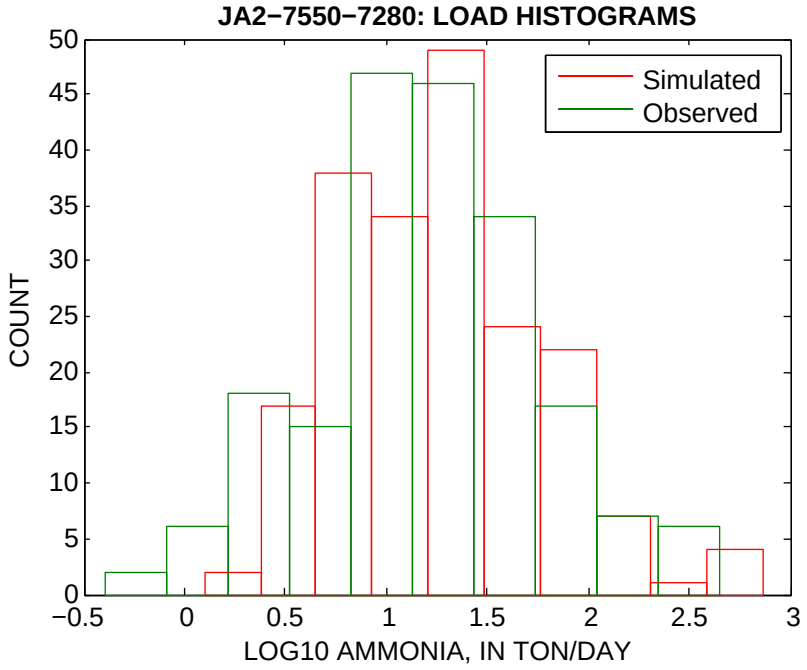


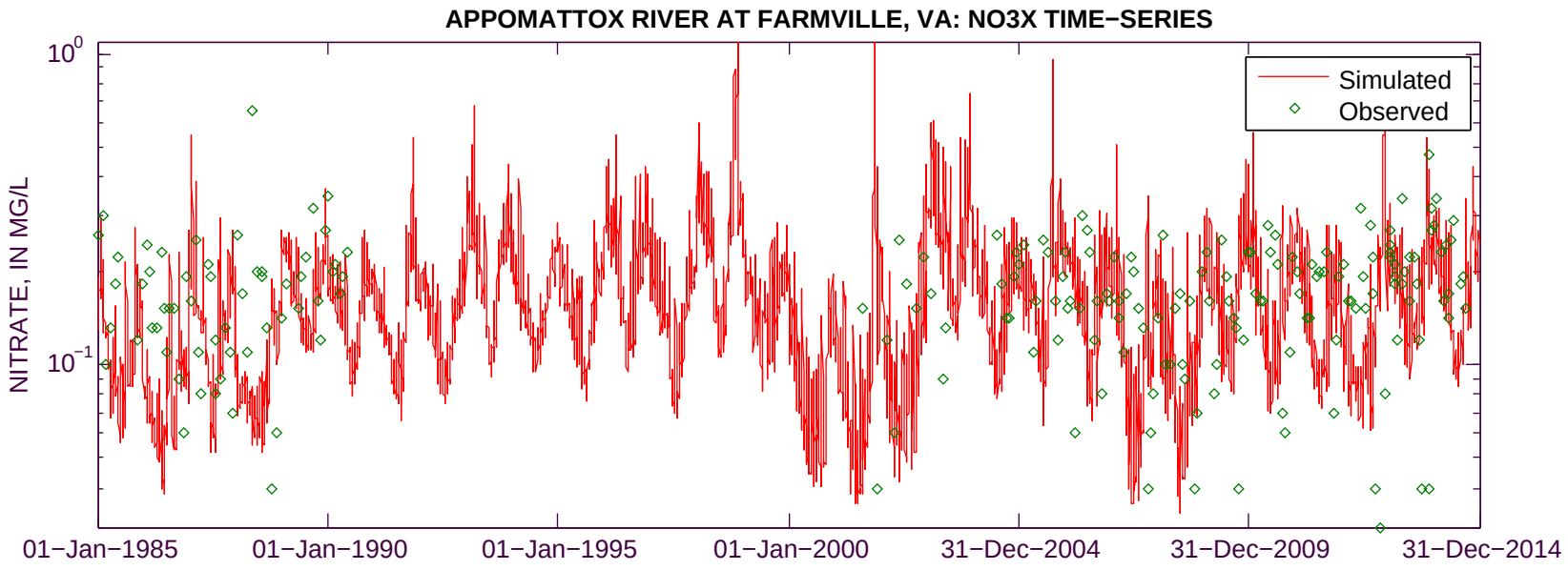
LOAD DATA
LOG10

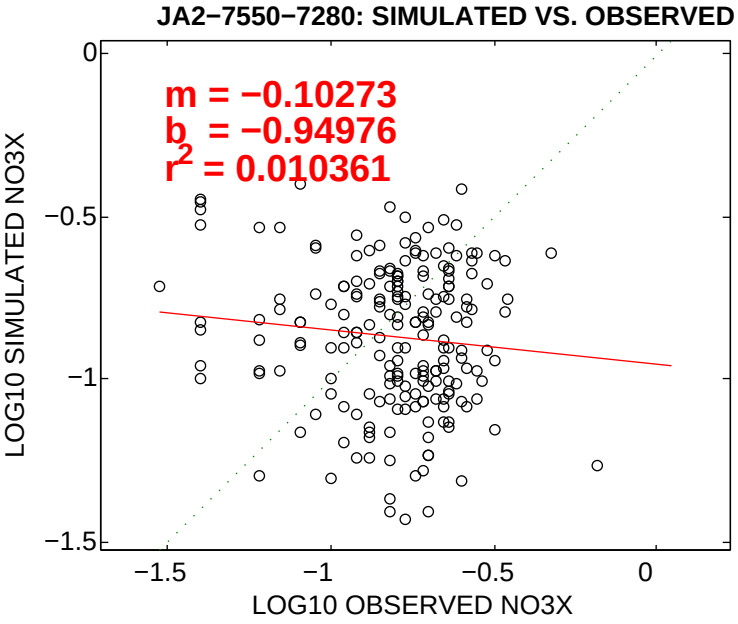


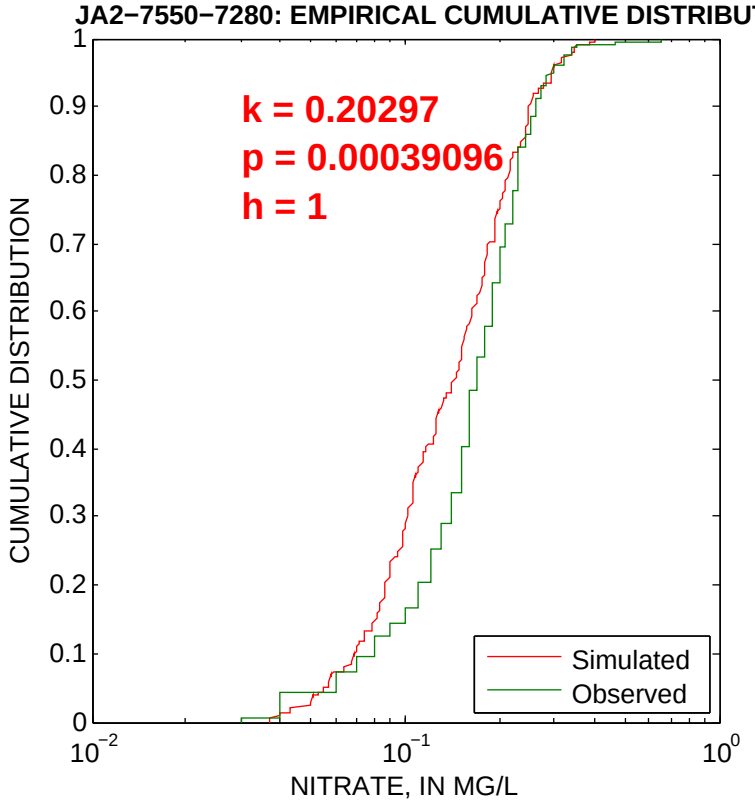












DATA SELECTION

scenario: P620171001WQ | file: NO3X.calib

plot: NO3X - nitrate

Dates: 1/1/1985 – 12/31/201

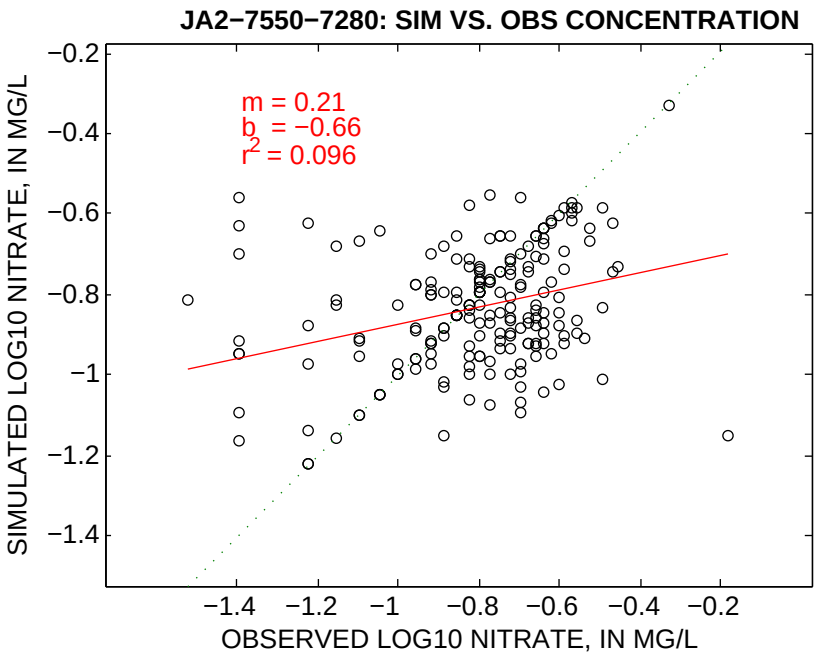
Drive: N/A | Directory: model | Observed: OBS20161101

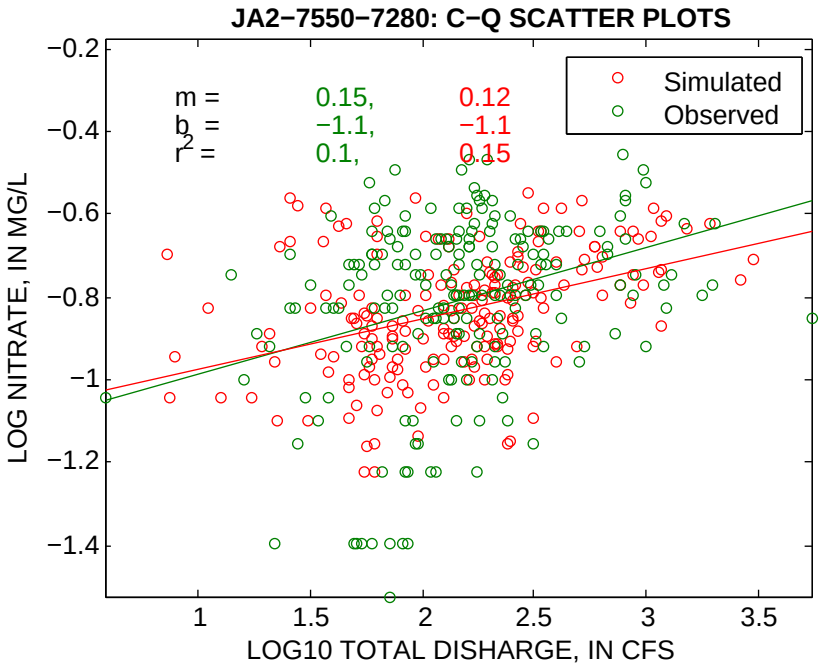
STATISTICS

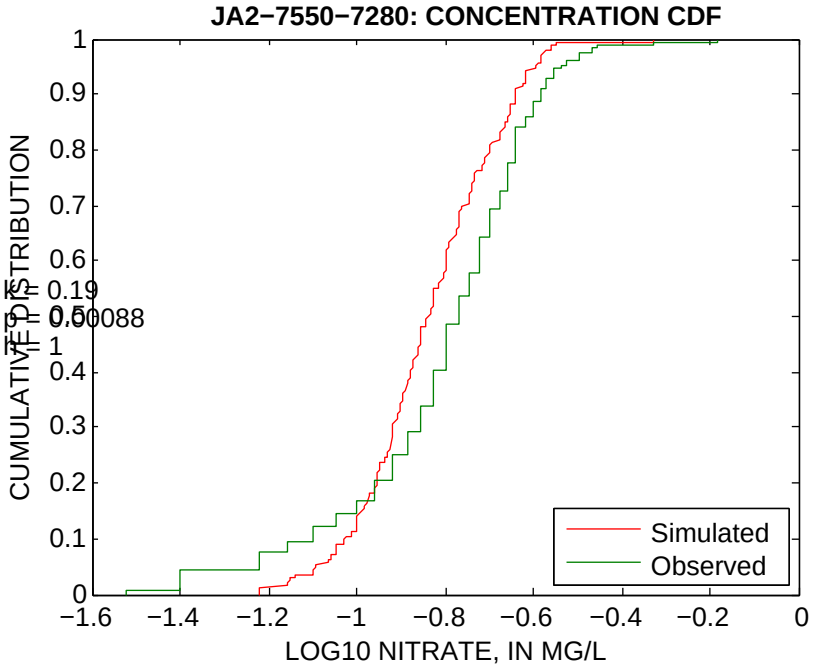
	n	202	202
		observe	simulate
min		0.03	0.037213
		-1.52288	-1.42931
mean		0.174059	0.153455
		-0.807192	-0.866835
media		0.17	0.144825
		-0.769551	-0.839193
max		0.66	0.39986
		-0.180456	-0.398092
varian		0.00618543	0.00556857
		0.0477482	0.0486372
JB		0.001	0.002118
		0.001	0.084397
		ra	log
%		-11.8375	7.38903
err.va		0.0130824	0.109771
rel.std.err		2.11504	2.29896
mod.eff		-1.11504	-1.29896

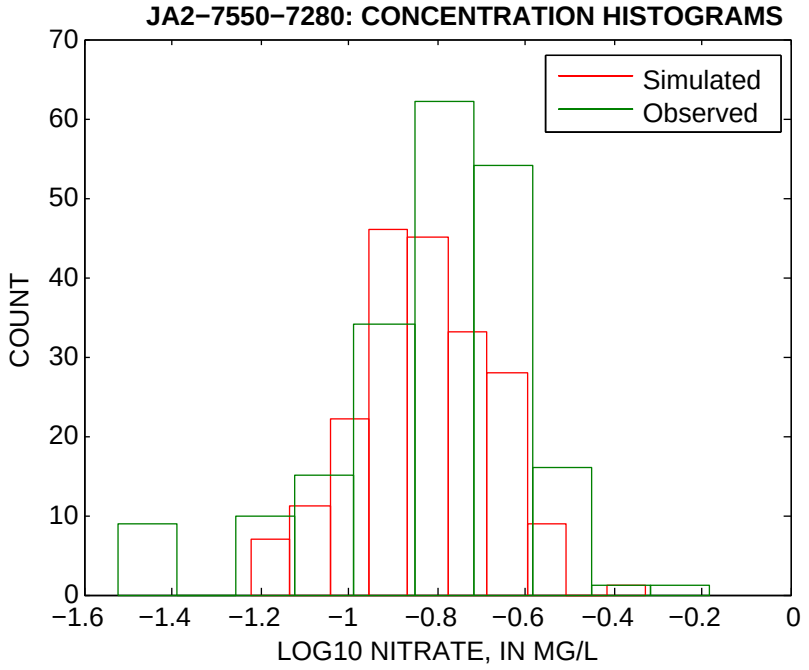
VERSION 2.1

ALL DATA
LOG10

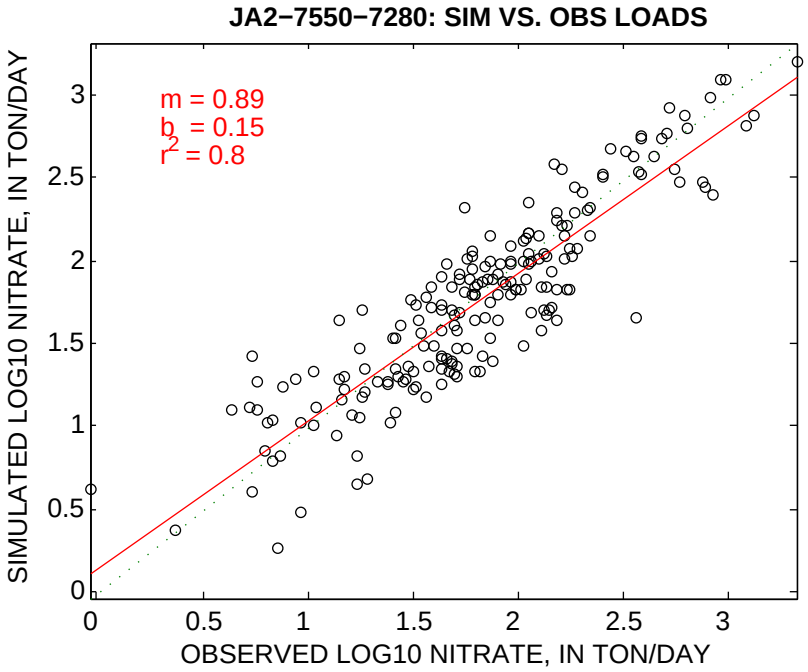


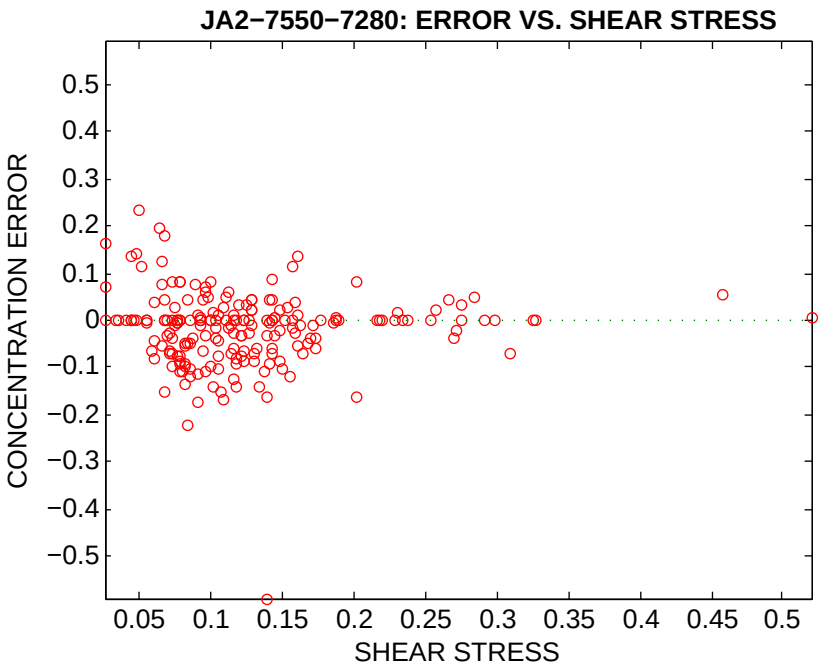


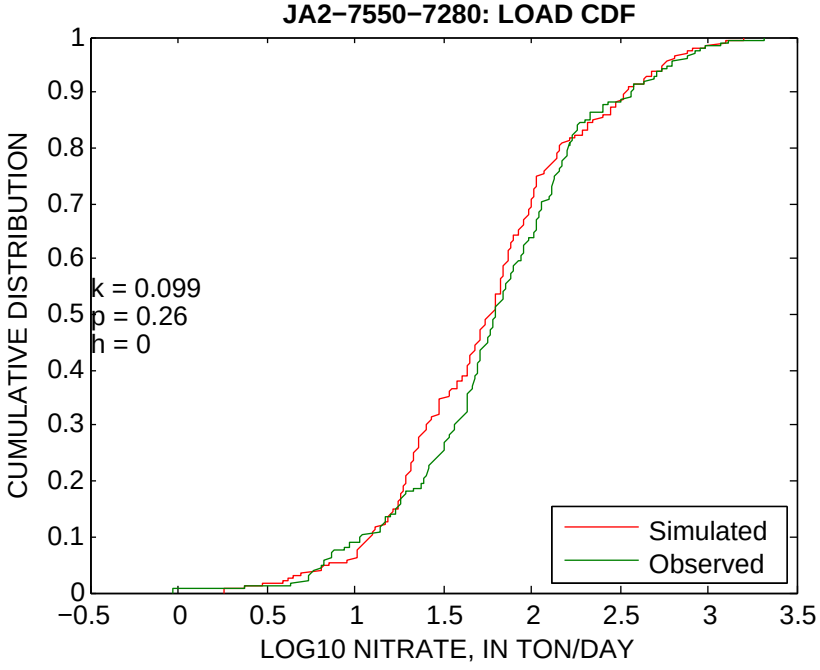


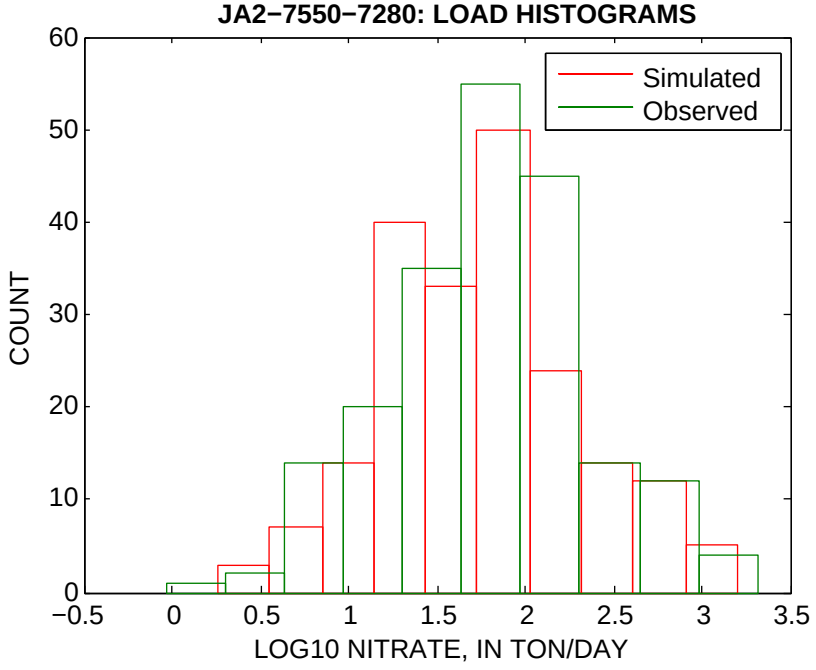


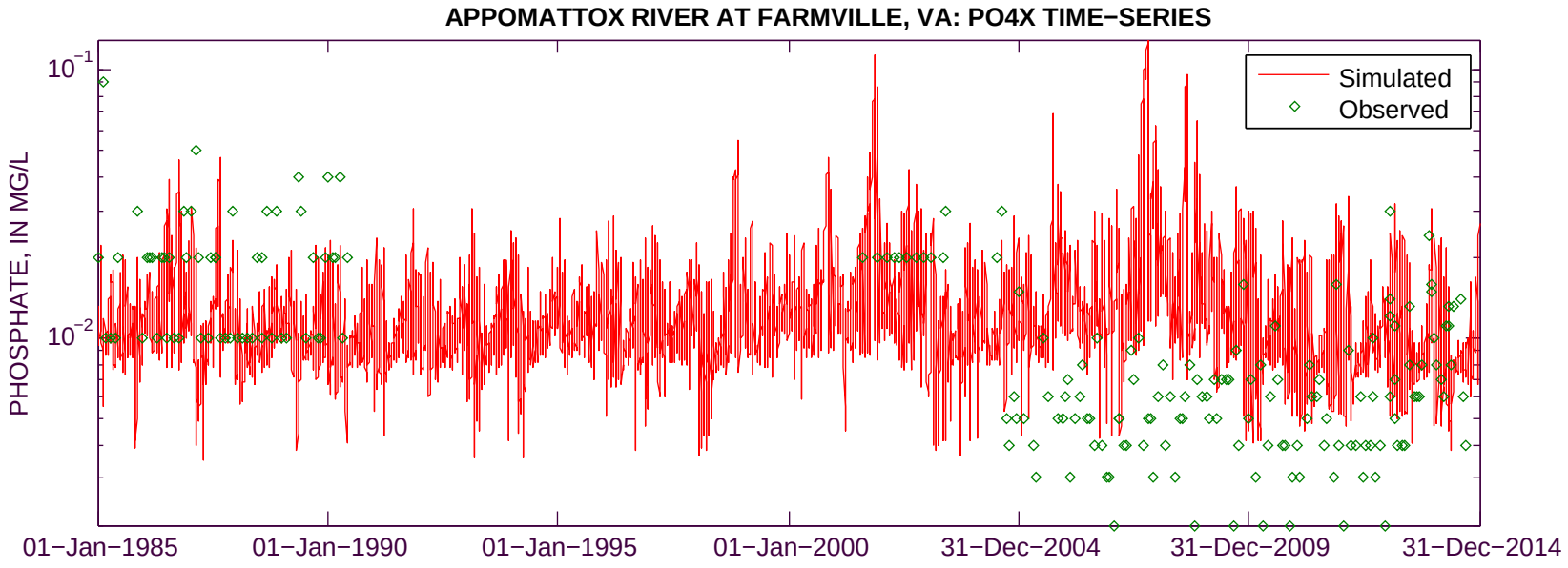
LOAD DATA
LOG10

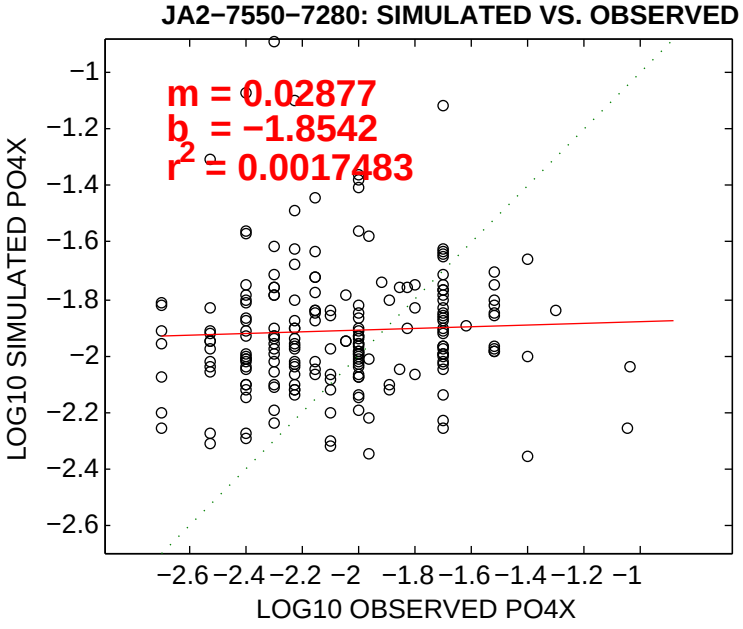


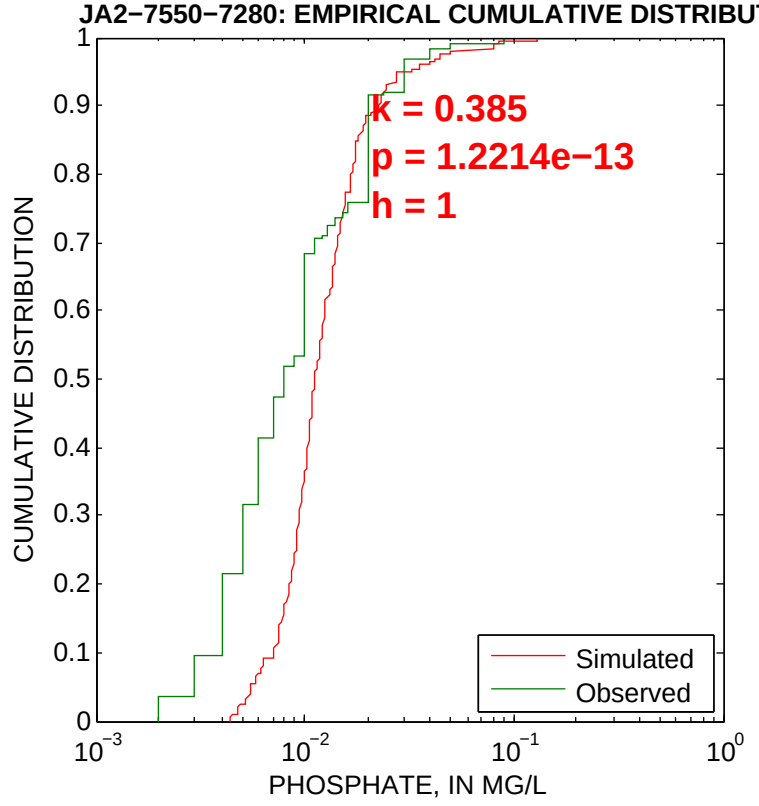












DATA SELECTION

scenario	file
P620171001WQ	PO4X.calib

plot: PO4X - phosphate

Dates: 1/1/1985 – 12/31/201

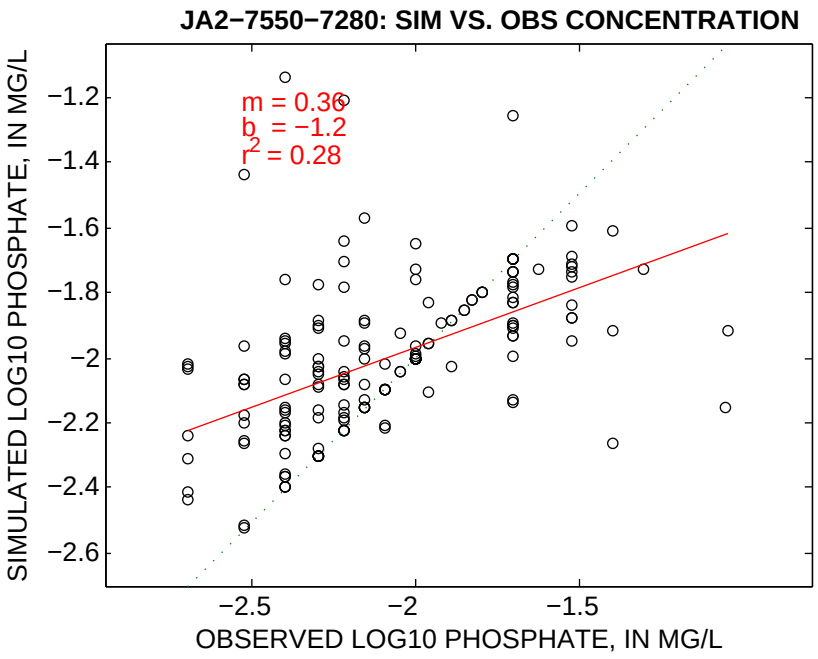
Drive	Directory	Observed
N/A	model	OBS20161101

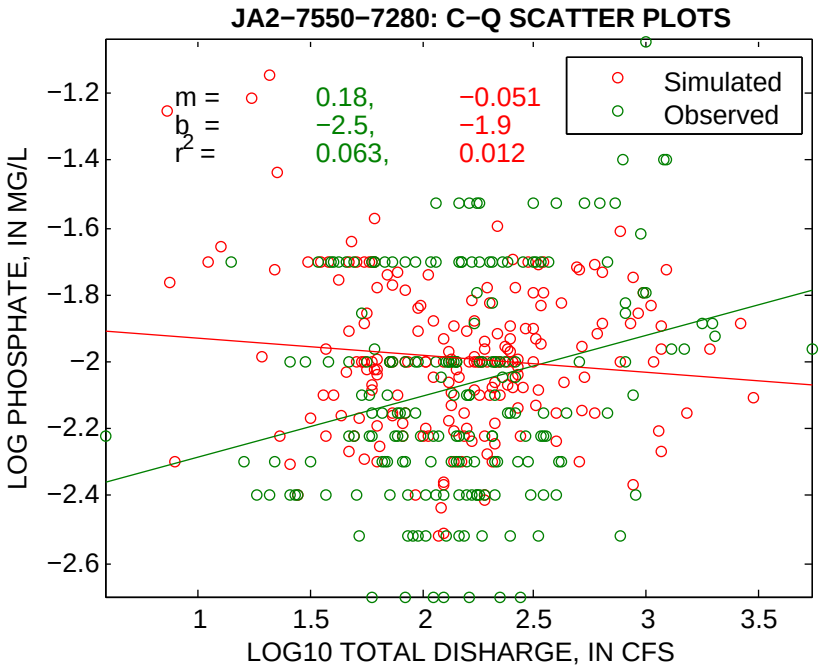
STATISTICS

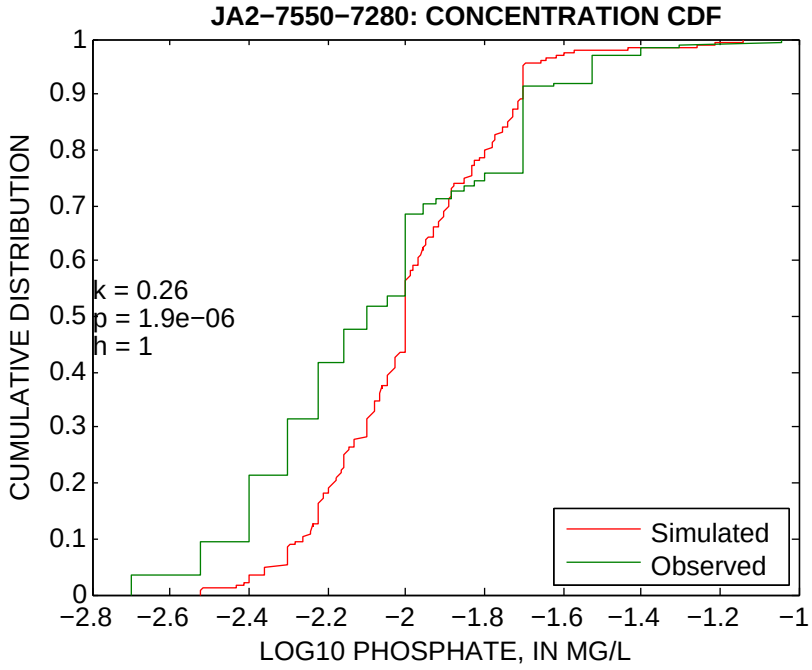
	n	200	200
		observe	simulate
min		0.002	0.0043848
		-2.69897	-2.35805
mean		0.011725	0.0145955
		-2.06649	-1.91364
media		0.008	0.011242
		-2.09691	-1.94916
max		0.091	0.12877
		-1.04096	-0.890185
varian		0.00013594	0.00018023
		0.1091	0.0516506
JB		0.001	0.001
		0.061163	0.001
		ra	log
%		24.4816	-7.39654
err.va		0.00033911	0.177953
rel.std.err		2.49439	1.63111
mod.eff		-1.49439	-0.631105

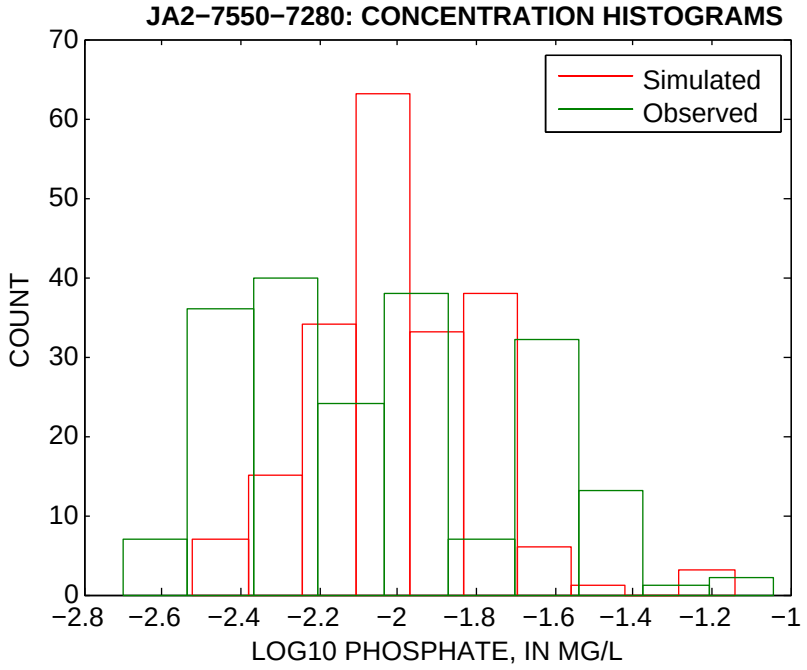
VERSION 2.1

ALL DATA
LOG10

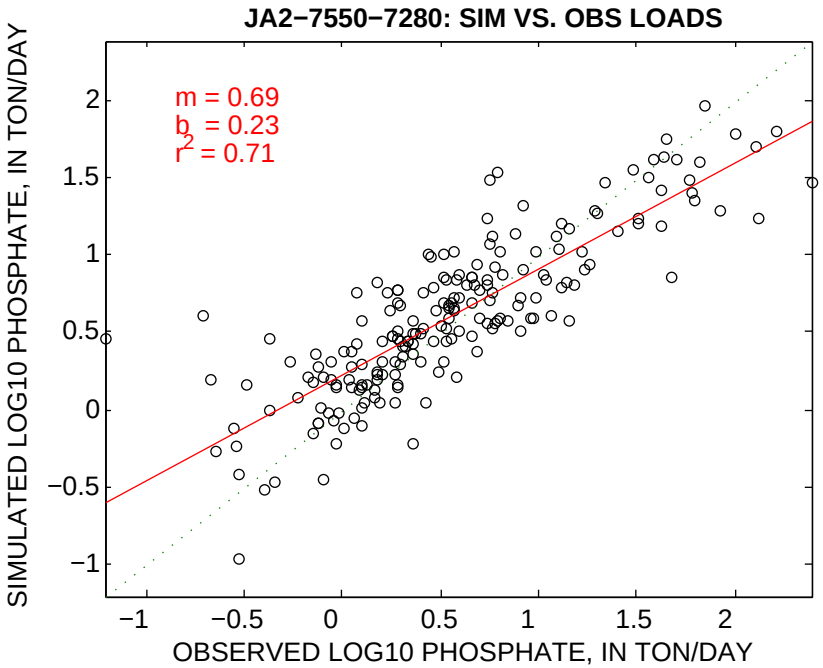


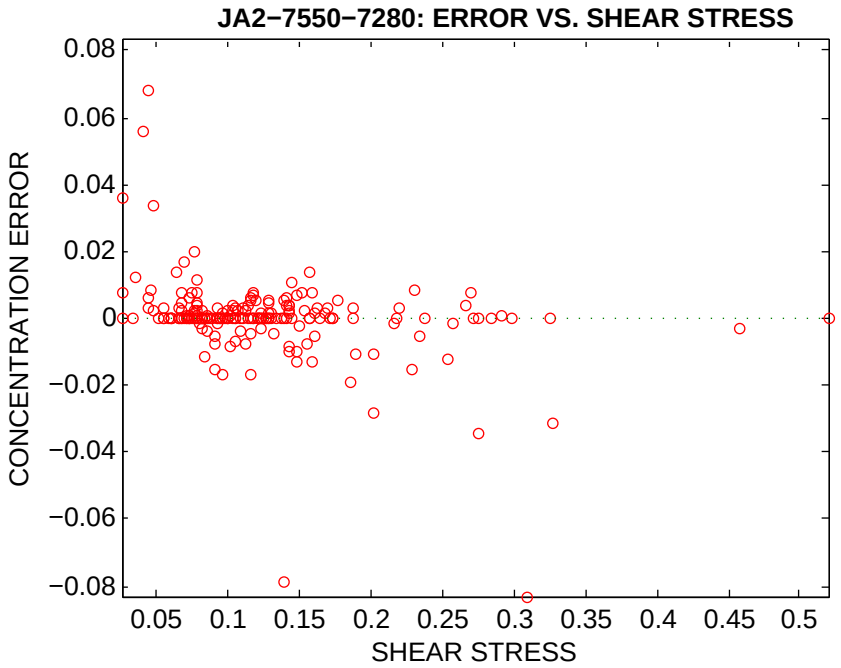


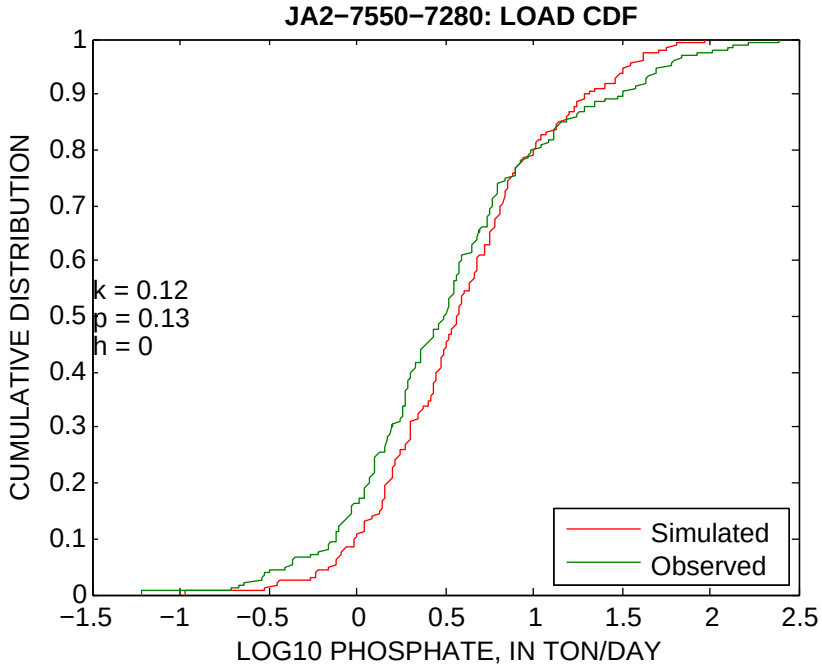


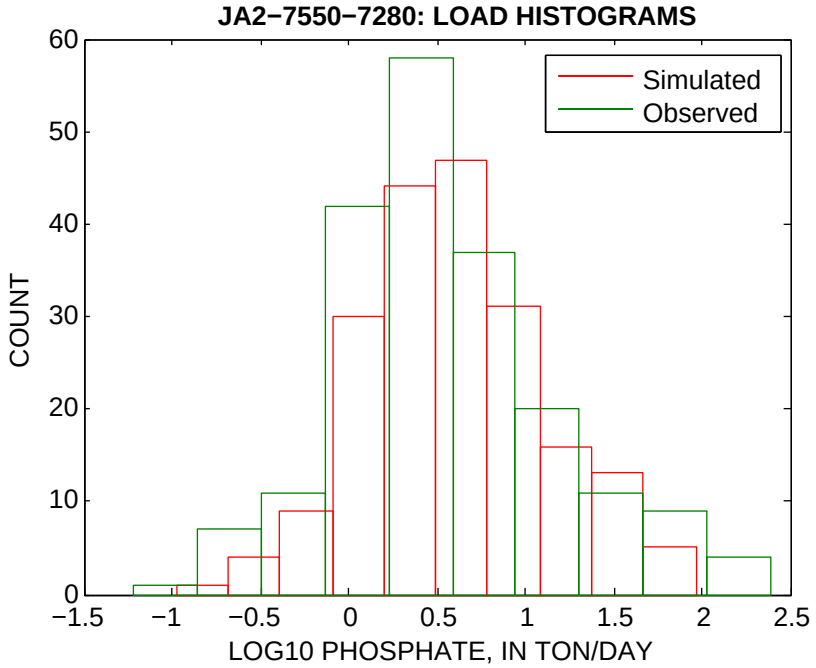


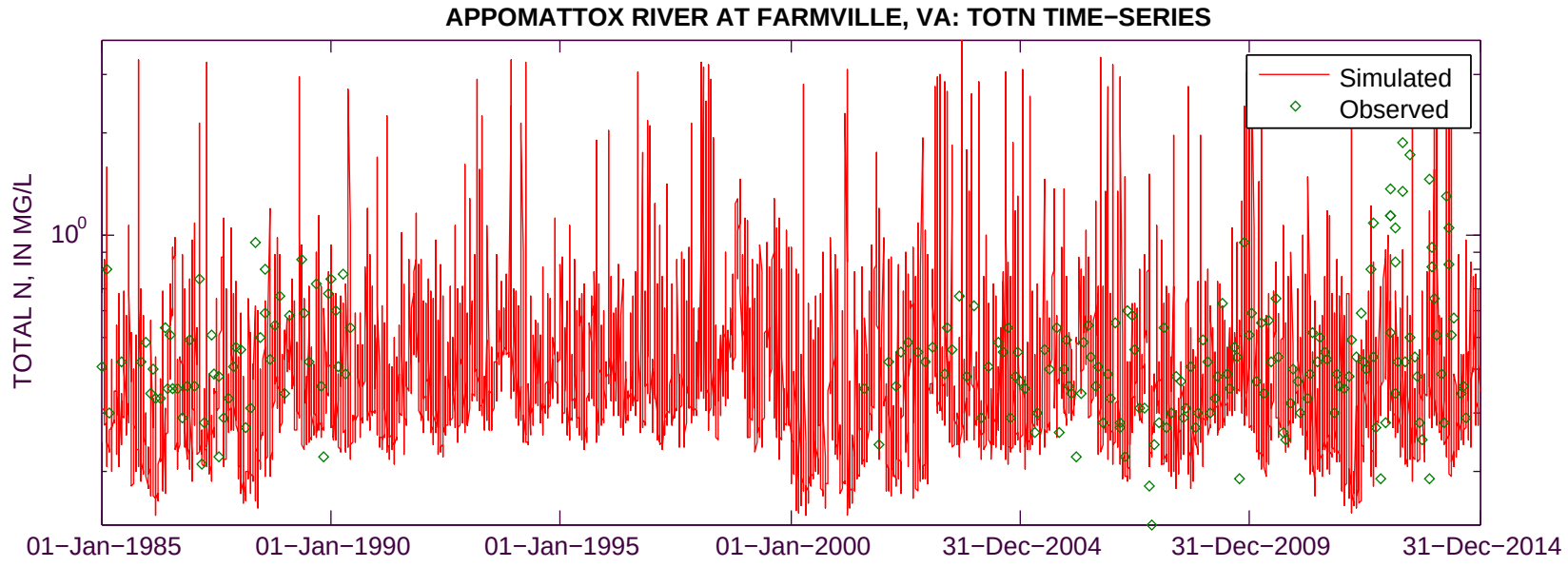
LOAD DATA
LOG10

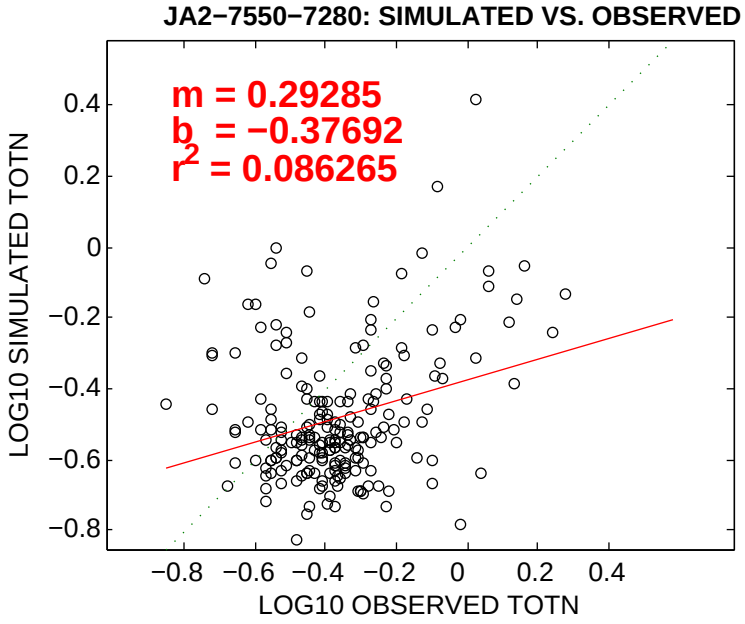


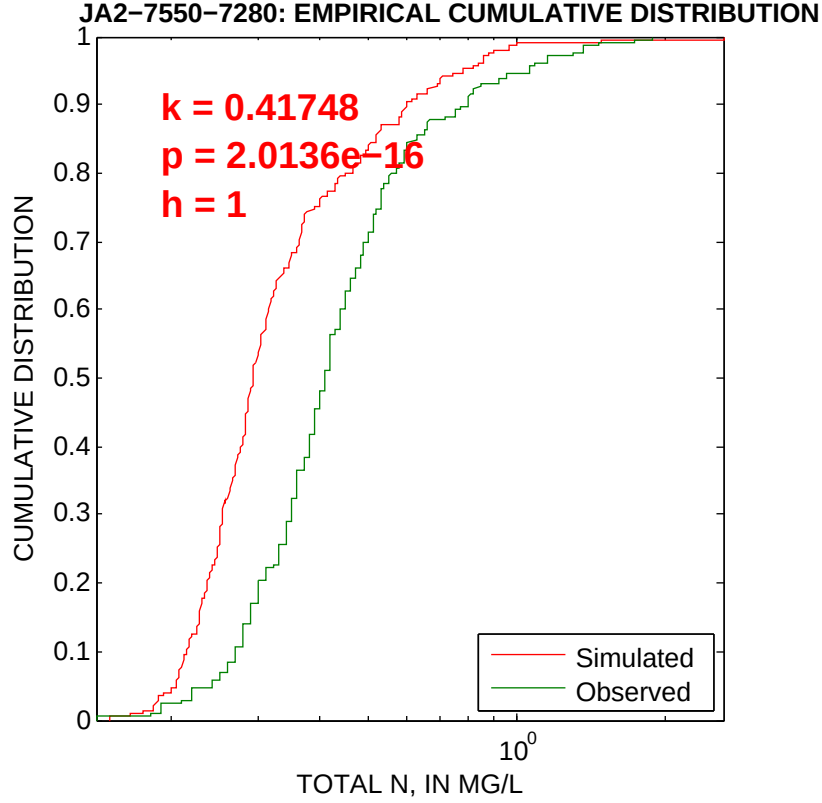












DATA SELECTION

scenario: P620171001WQ; file: TOTN.calib

plot: TOTN - total nitrogen

Dates: 1/1/1985 – 12/31/201

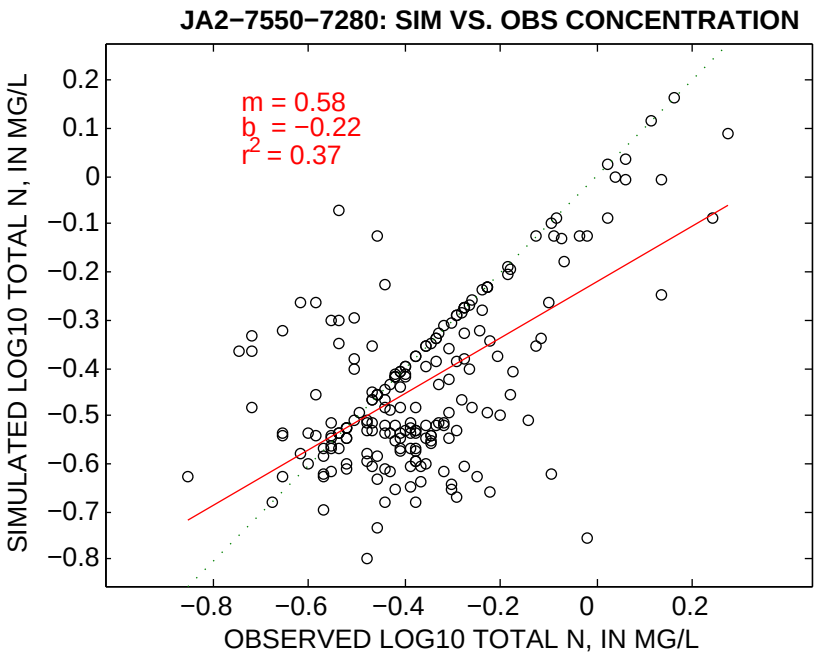
Drive: N/A; Directory: model; Observed: OBS20161101

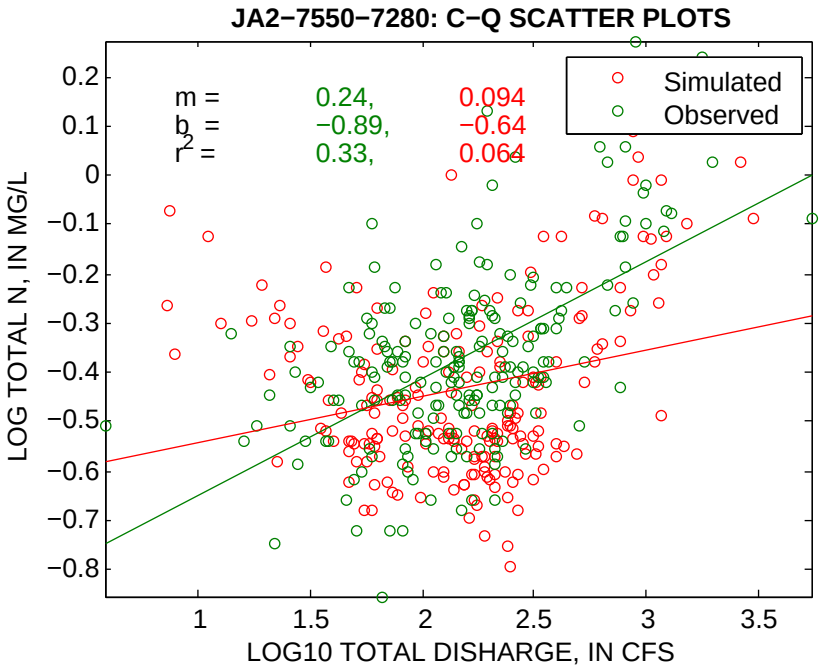
STATISTICS

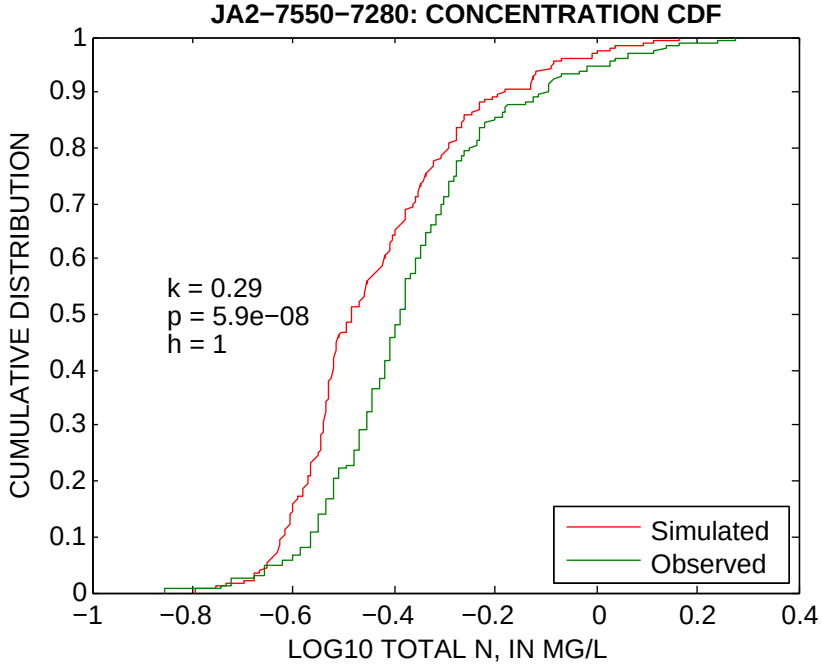
		observe	simulate
n		206	206
min		0.14	0.14865
		-0.853872	-0.827835
mean		0.4775	0.367444
		-0.365869	-0.484065
media		0.41	0.292355
		-0.387216	-0.53409
max		1.88	2.6232
		0.274158	0.418831
varian		0.0675241	0.0585778
		0.0347363	0.0345329
JB		0.001	0.001
		0.001	0.001
		ra	log
%		-23.0484	32.3056
err.va		0.0908458	0.0629628
rel.std.err		1.34538	1.81259
mod.eff		-0.345384	-0.812592

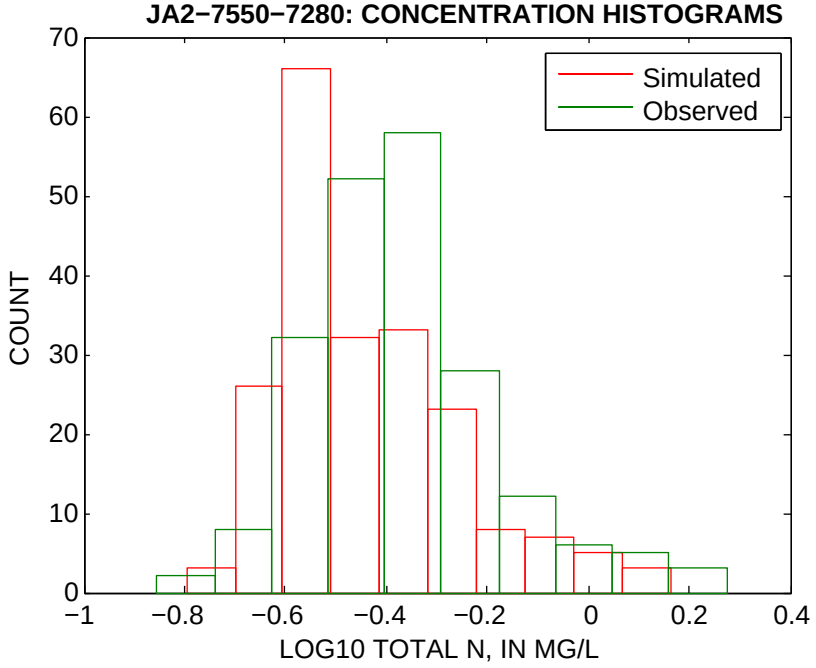
VERSION 2.1

ALL DATA
LOG10

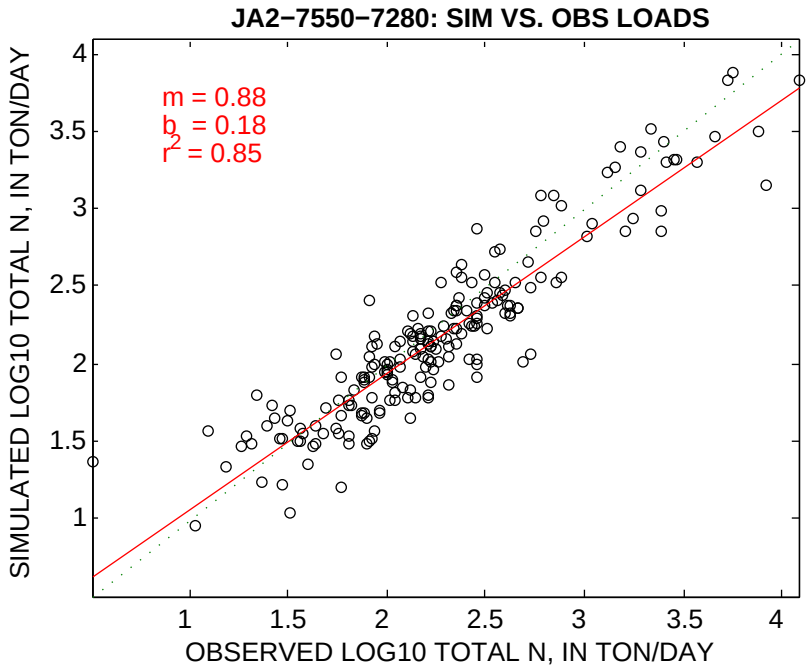


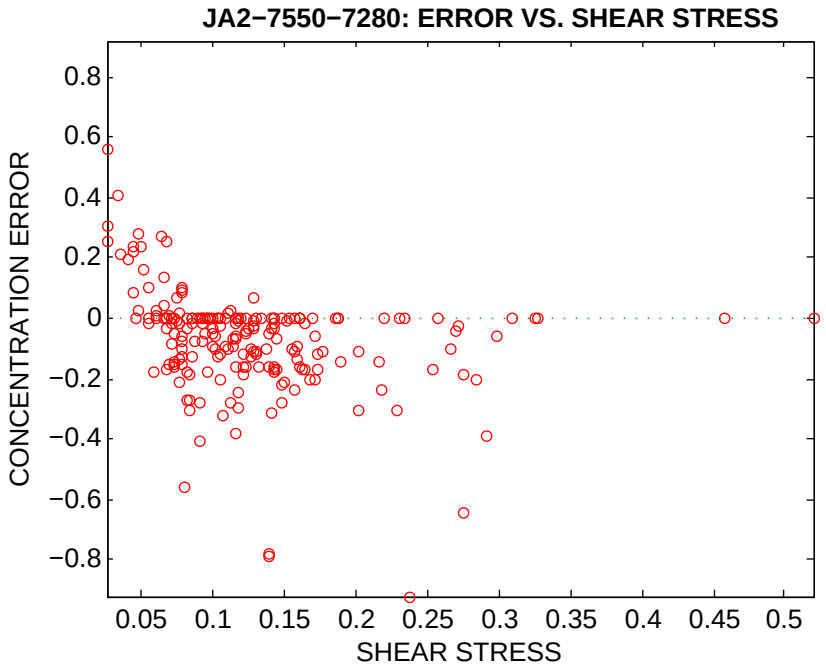


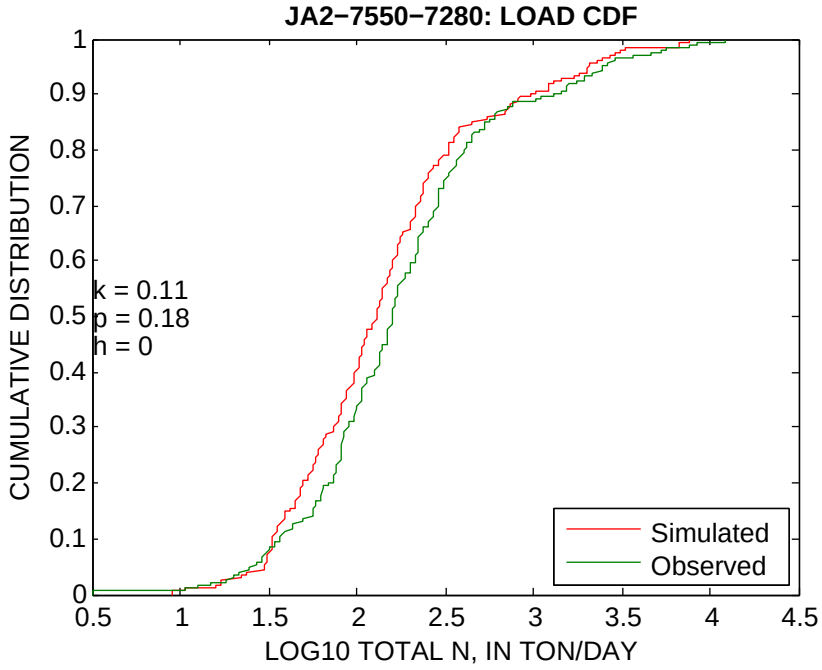


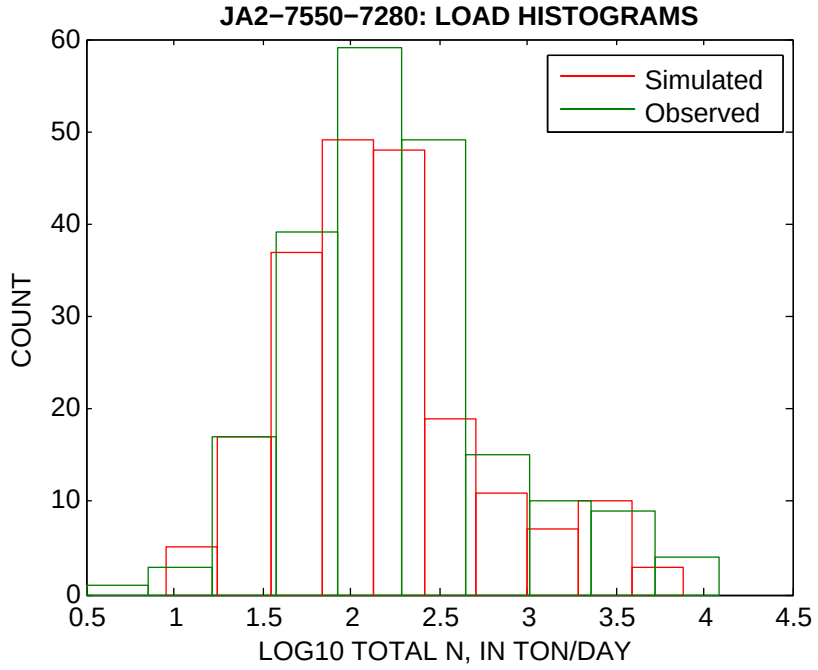


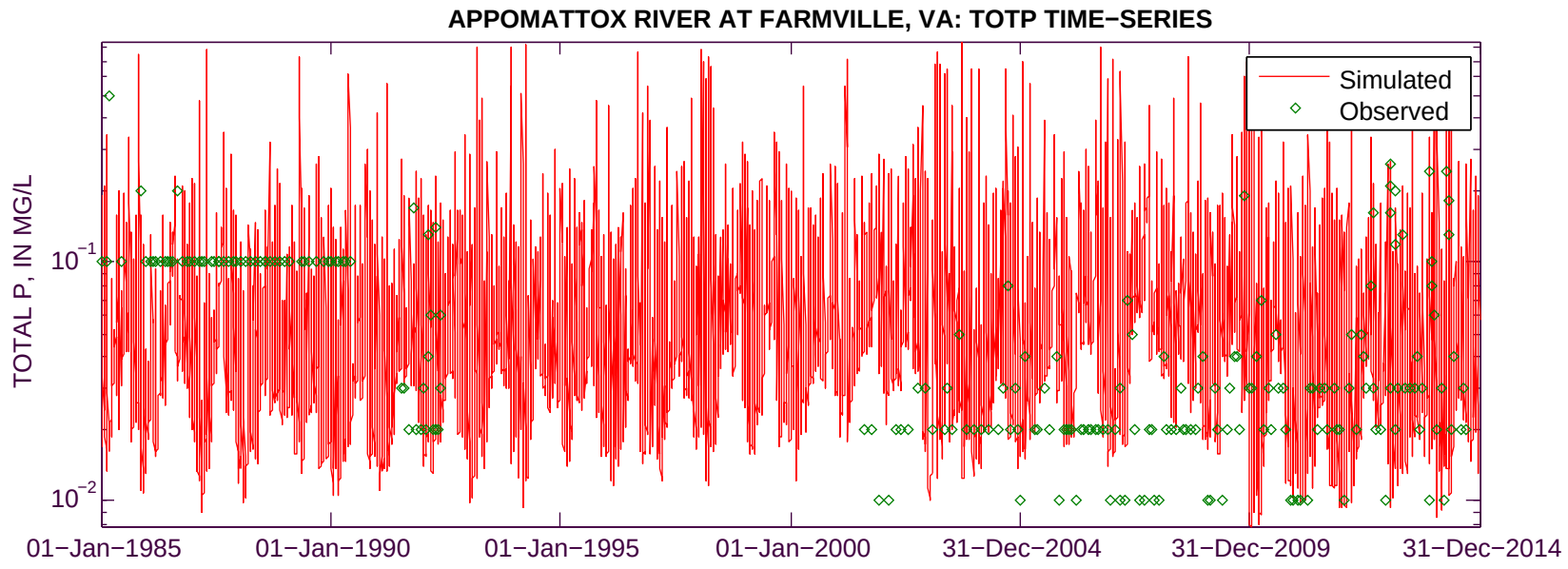
LOAD DATA
LOG10

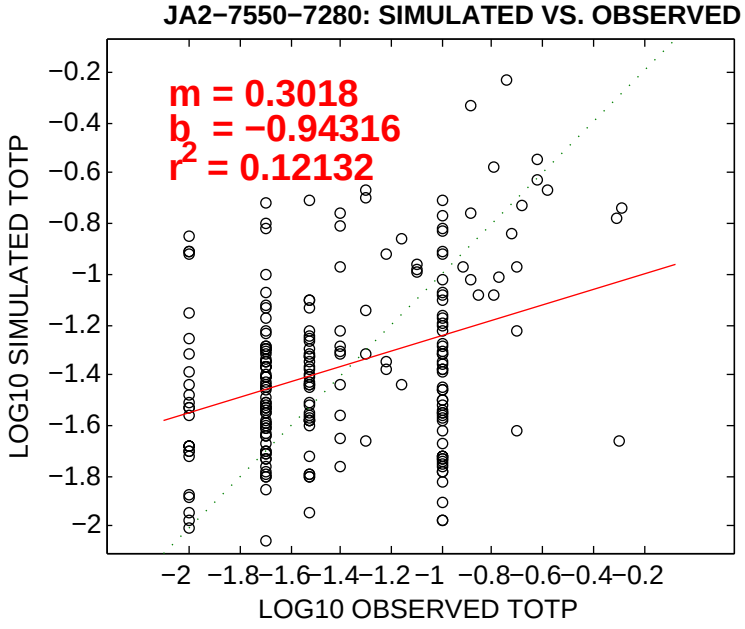


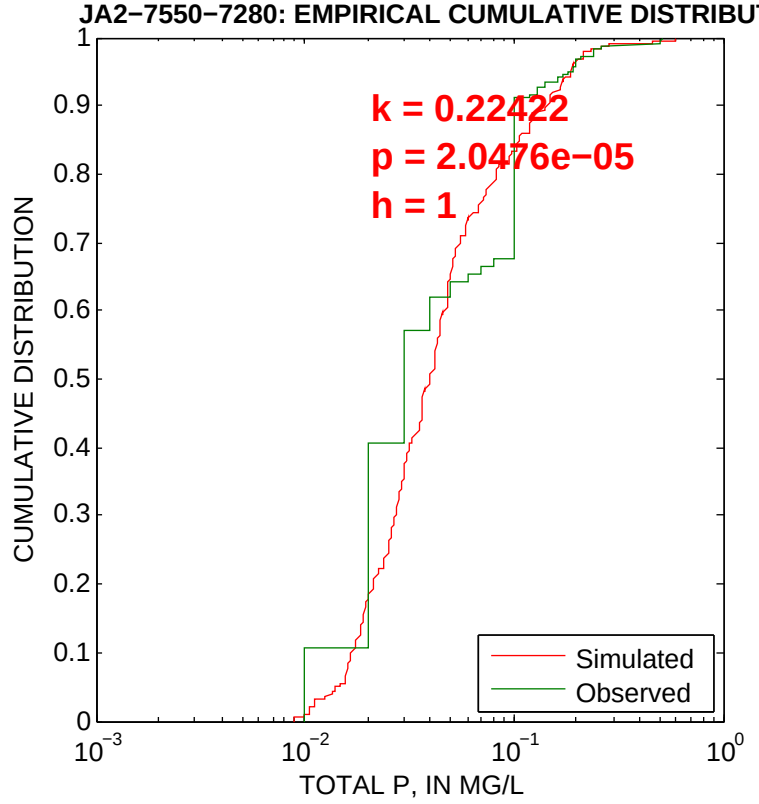












DATA SELECTION

scenario	file
P620171001WQ	TOTP.calib

plot: TOTP - total phosphorus

Dates: 1/1/1985 – 12/31/201

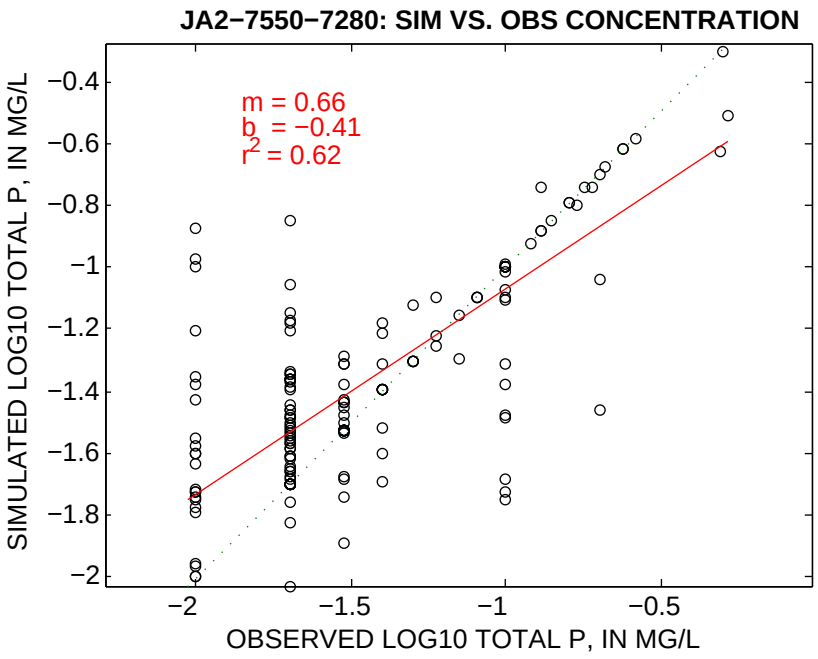
Drive	Directory	Observed
N/A	model	OBS20161101

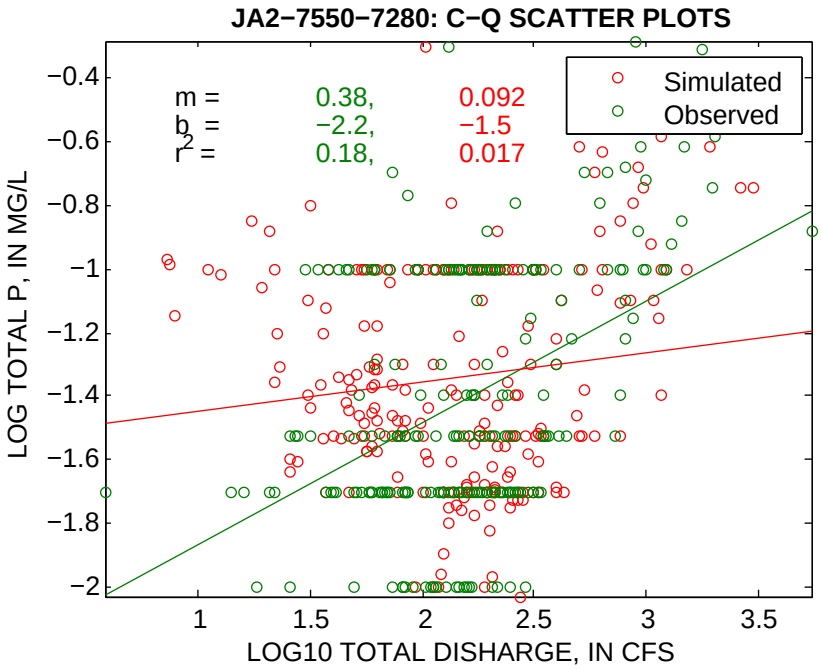
STATISTICS

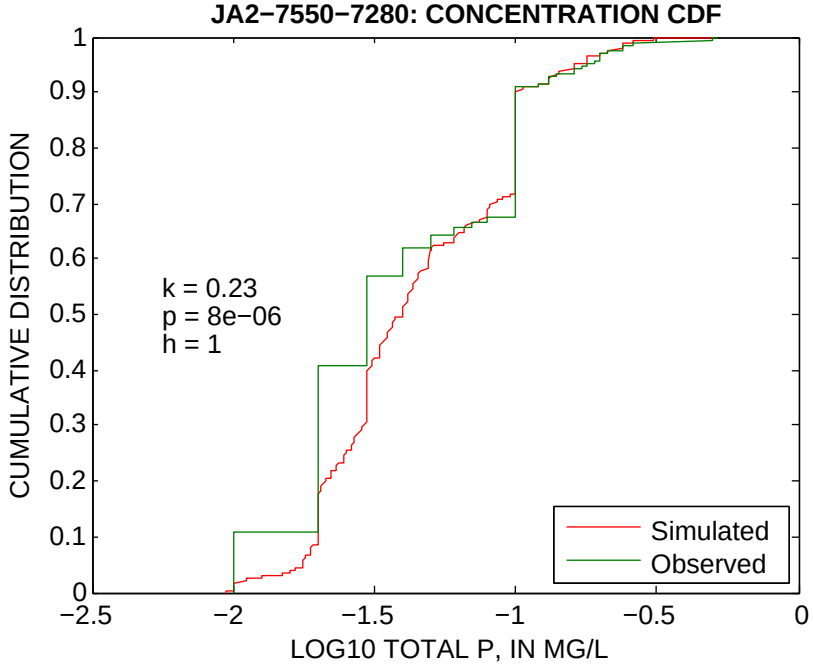
	n	223	223
		observe	simulate
min		0.01	0.0087856
		-2	-2.05623
mean		0.0613453	0.0613067
		-1.40609	-1.36752
media		0.03	0.039541
		-1.52288	-1.40295
max		0.52	0.59156
		-0.283997	-0.228001
varian		0.00519368	0.00466198
		0.157122	0.117958
JB		0.001	0.001
		0.012863	0.007227
		ra	log
%		0.0629269	-2.74313
err.va		0.00607129	0.181737
rel.std.err		1.16898	1.15666
mod.eff		-0.168976	-0.156663

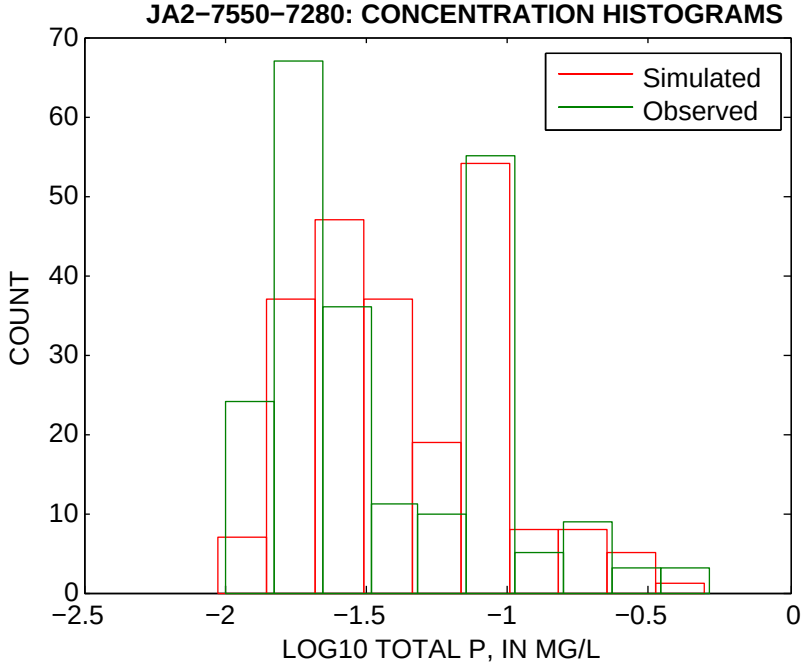
VERSION 2.1

ALL DATA
LOG10

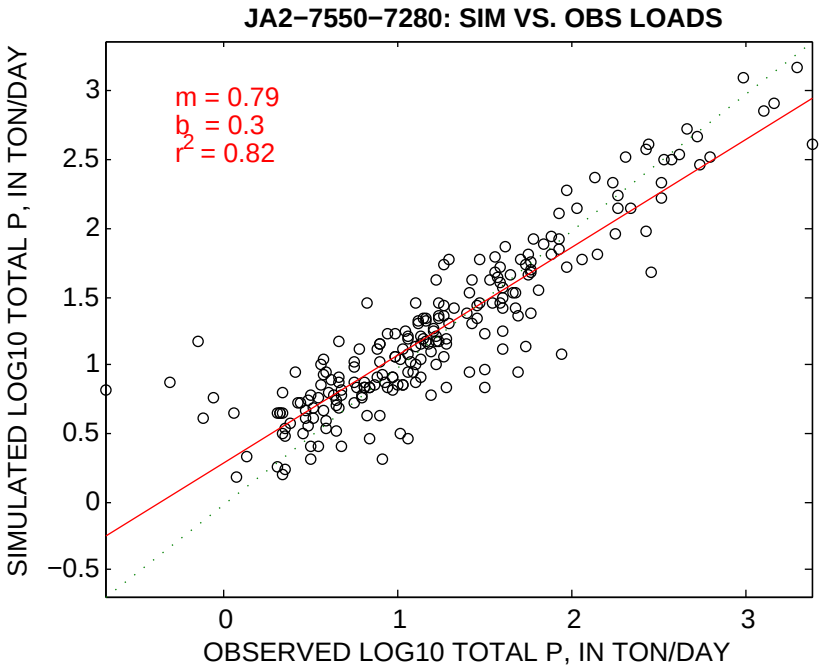


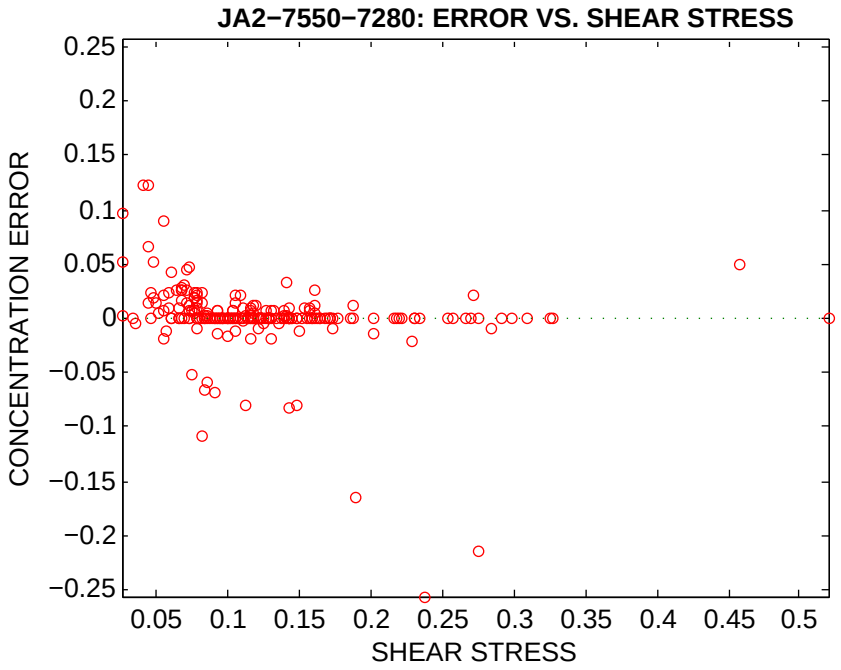


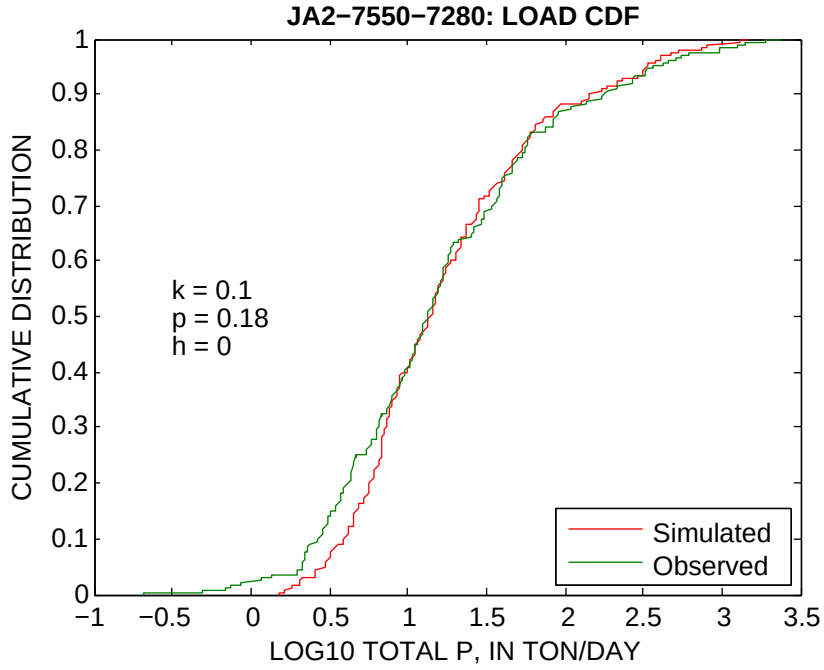


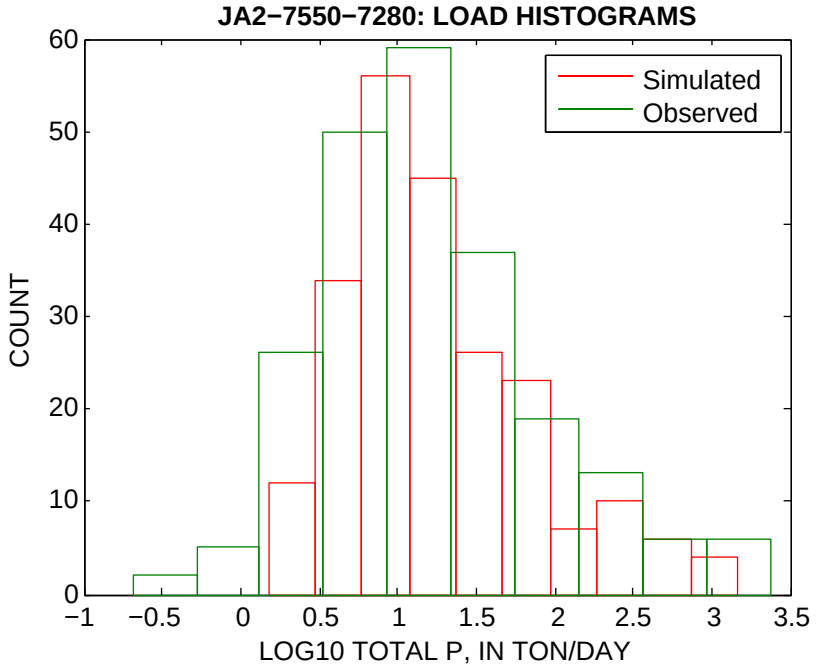


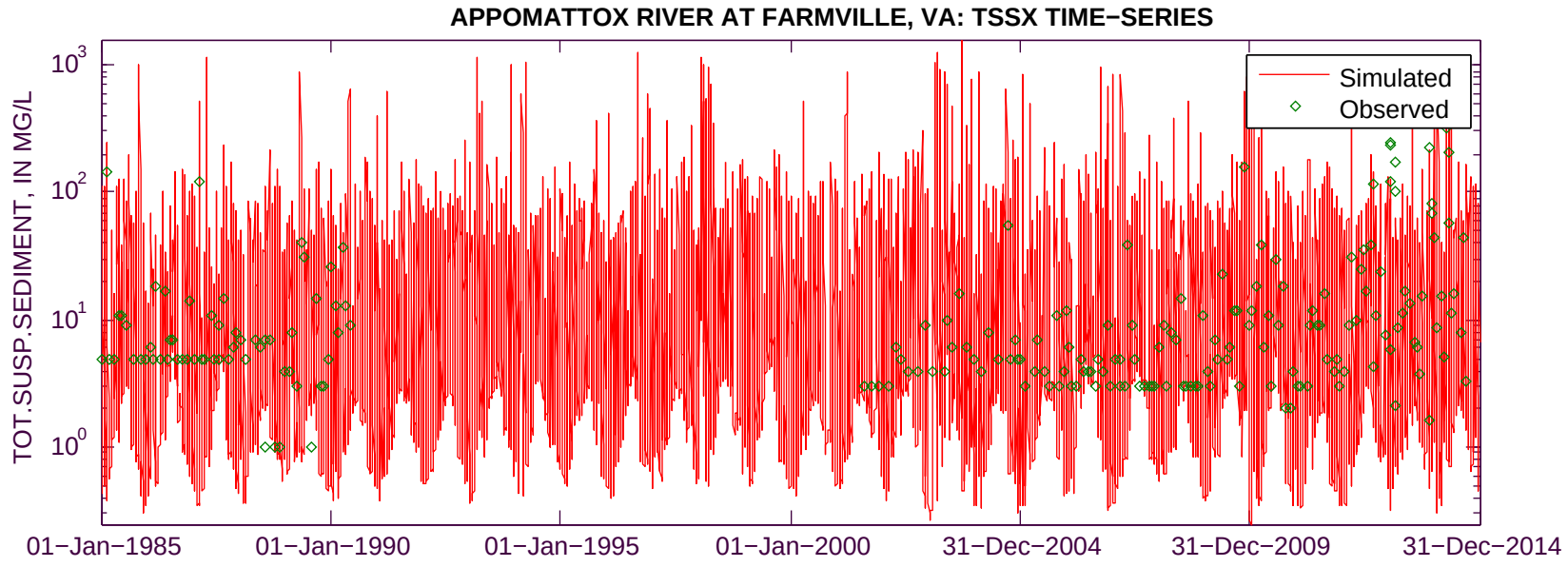
LOAD DATA
LOG10

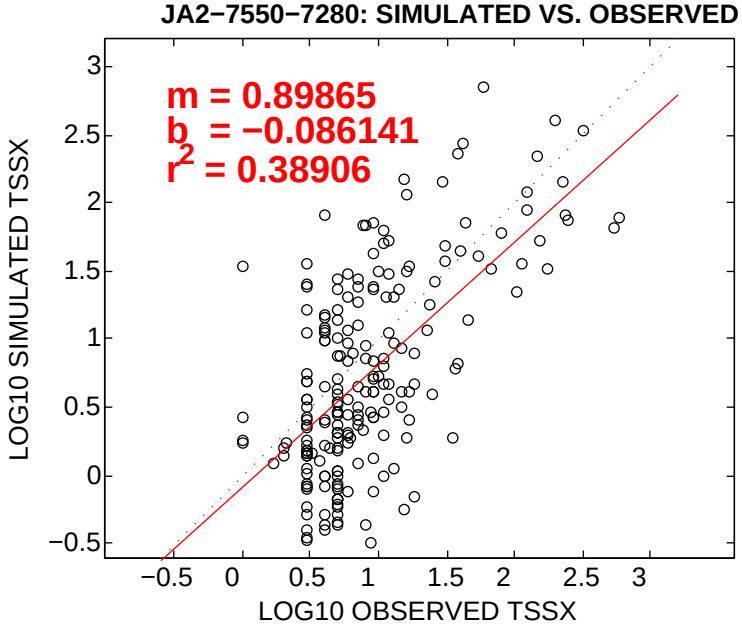


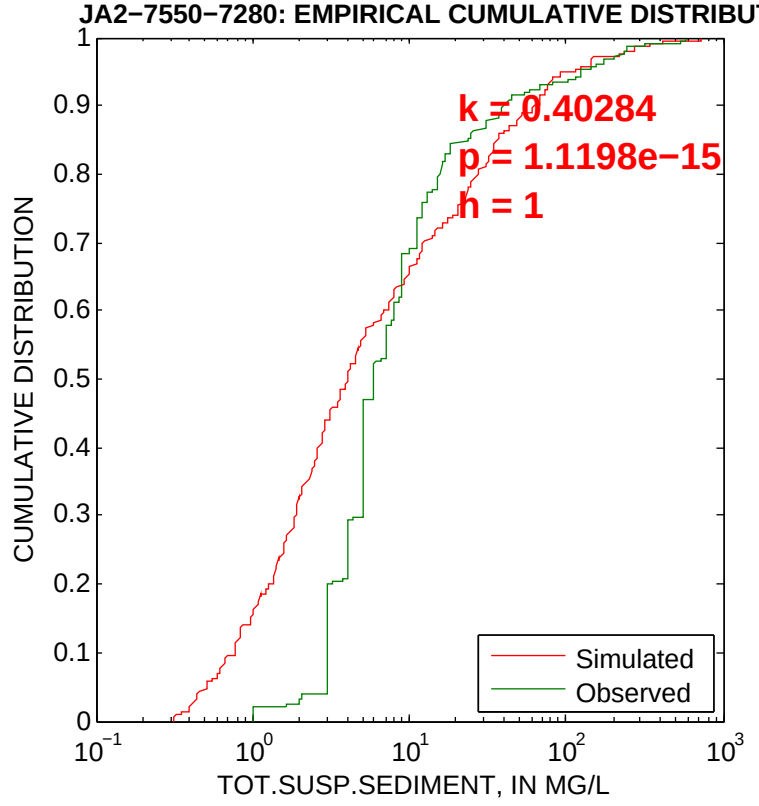












DATA SELECTION

scenario	file
P620171001WQ	TSSX.calib

plot: TSSX - total suspended ...

Dates: 1/1/1985 – 12/31/201

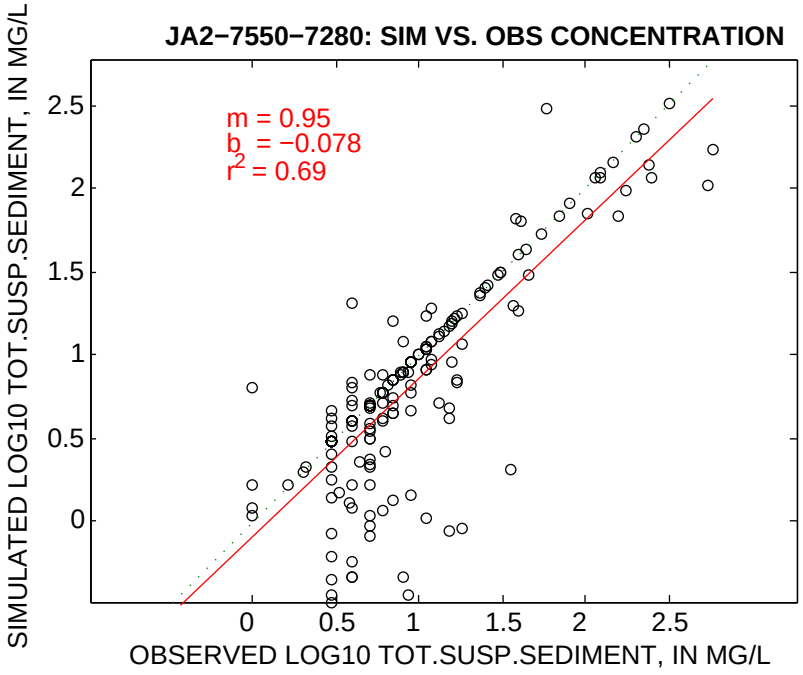
Drive	Directory	Observed
N/A	model	OBS20161101

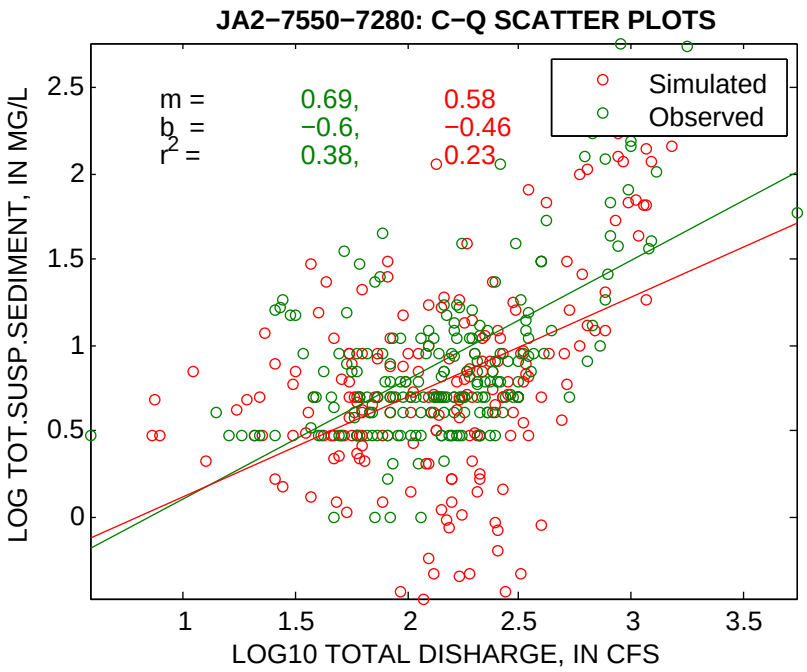
STATISTICS

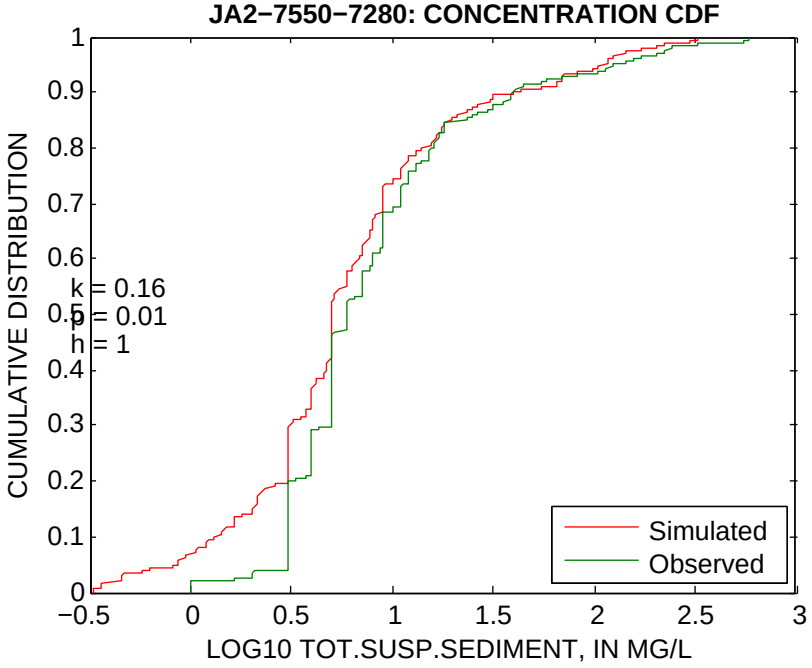
	n	211	211
		observe	simulate
min		1	0.32067
		0	-0.493942
mean		24.8232	25.7495
		0.923441	0.743711
media		6	4.0598
		0.778151	0.608505
max		579	729.93
		2.76268	2.86328
varian		4697.08	5047.2
		0.256579	0.532582
JB		0.001	0.001
		0.001	0.011675
		ra	log
%		3.73167	-19.4631
err.va		5987.88	0.360468
rel.std.err		1.27481	1.4049
mod.eff		-0.27481	-0.404901

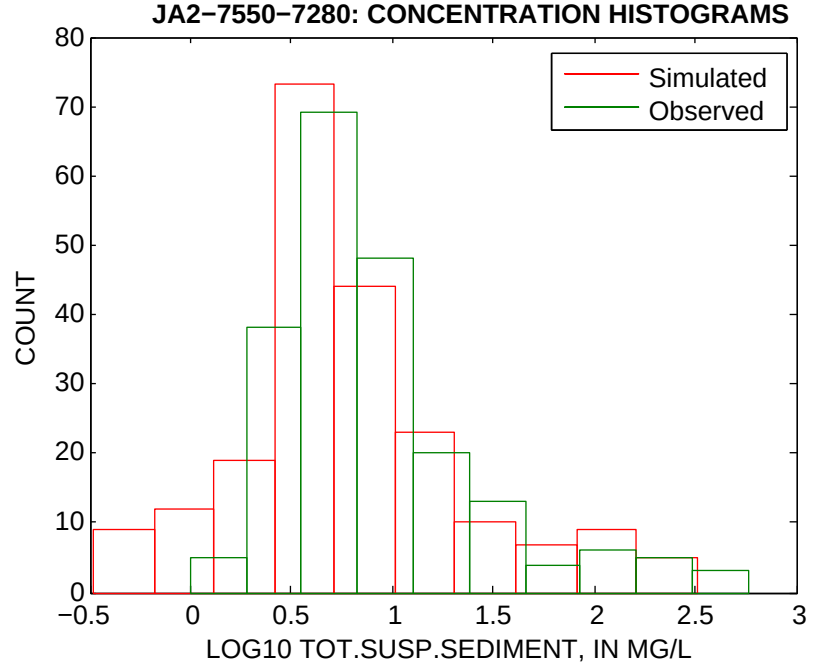
VERSION 2.1

ALL DATA
LOG10

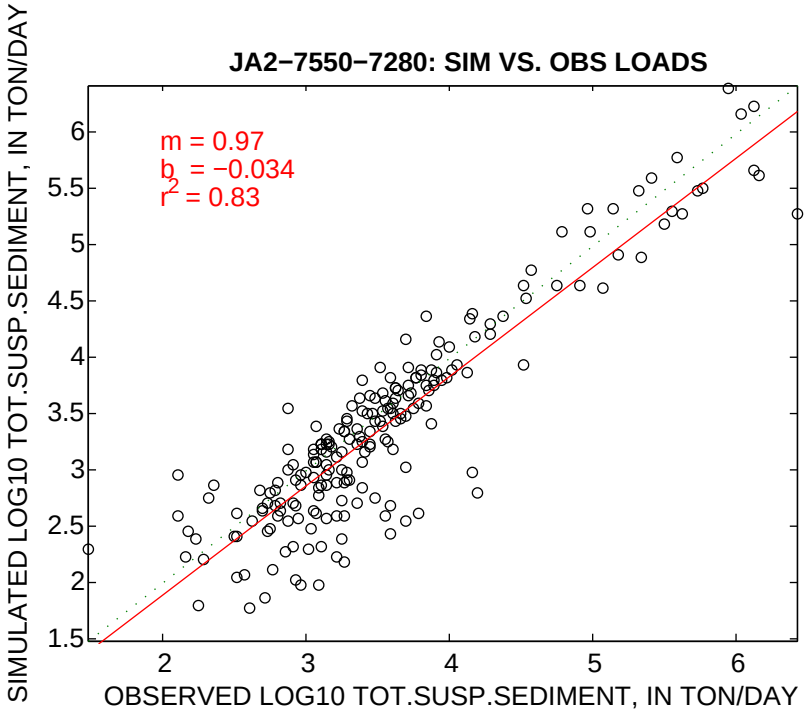


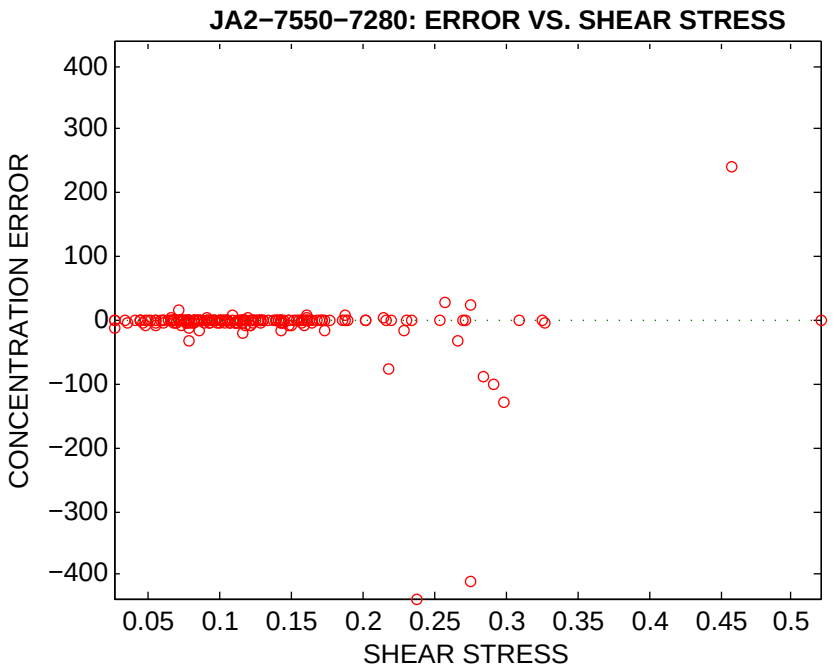


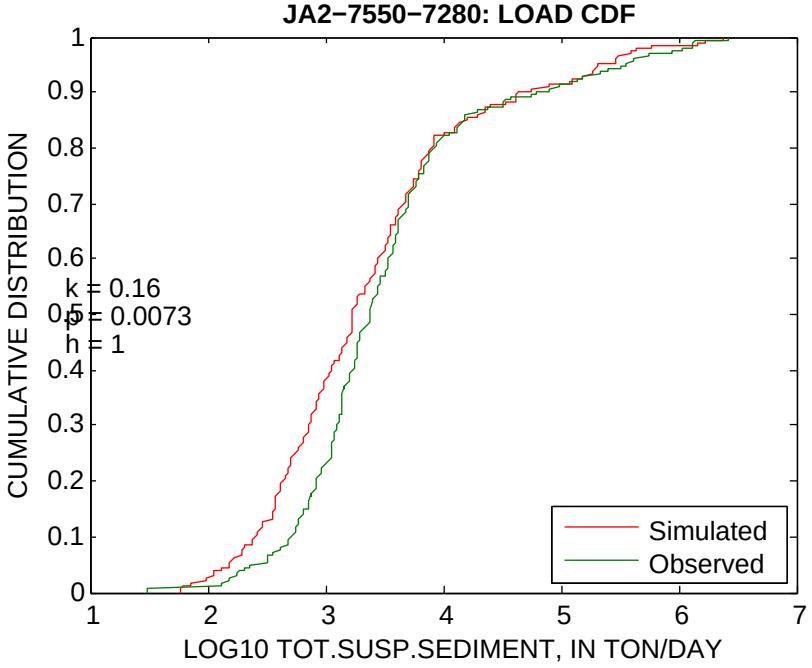


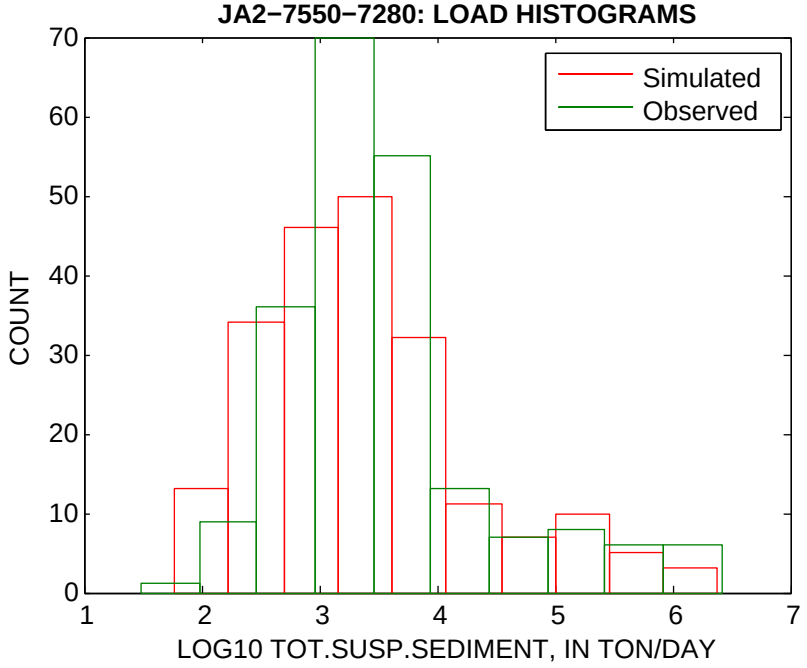


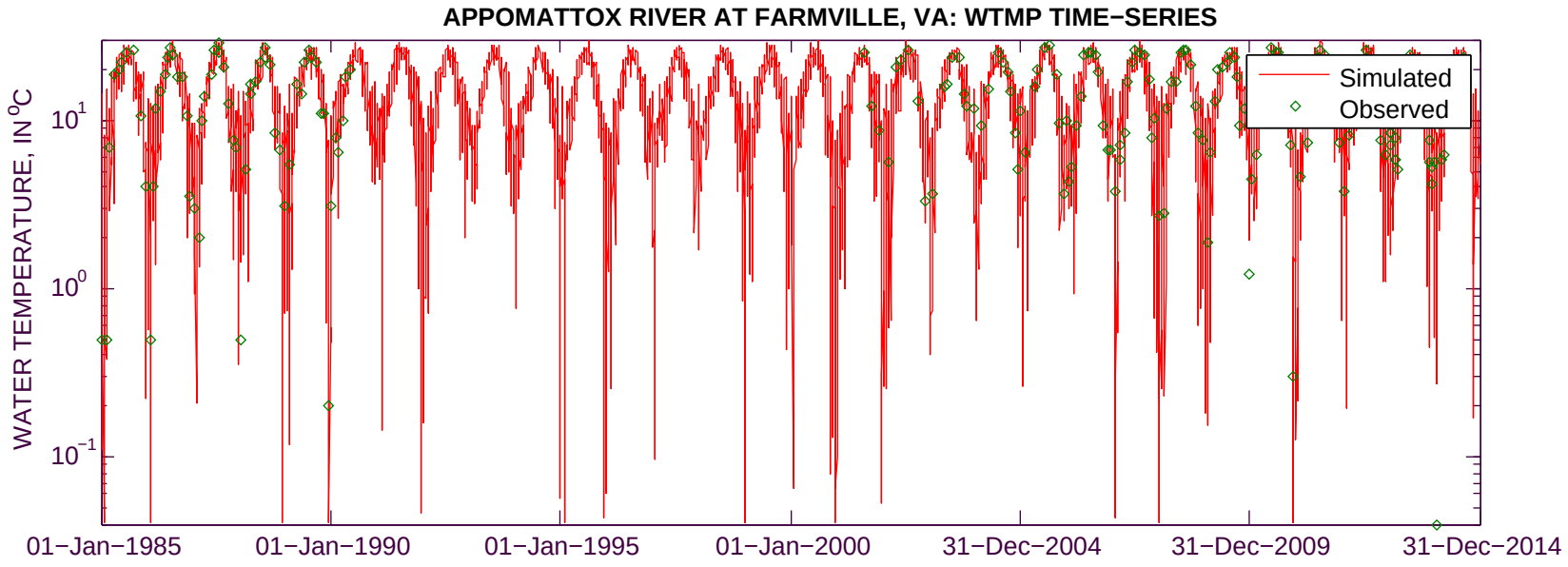
LOAD DATA
LOG10

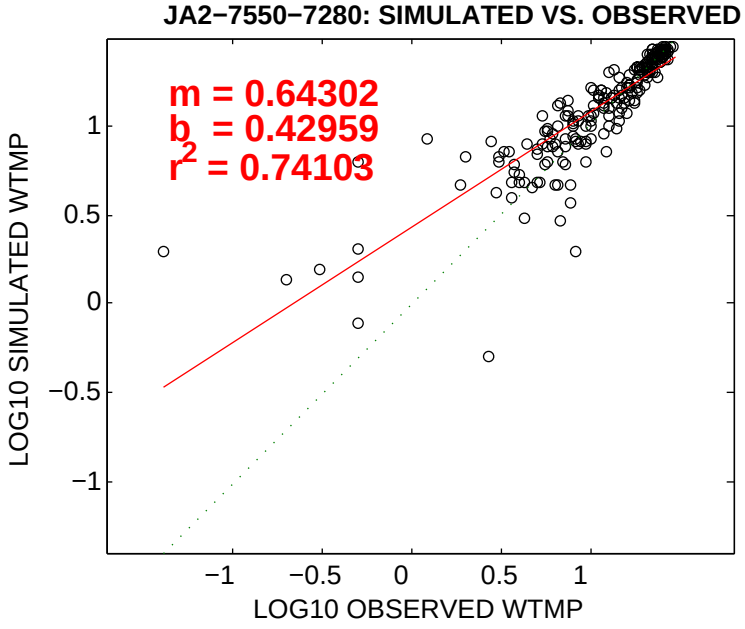


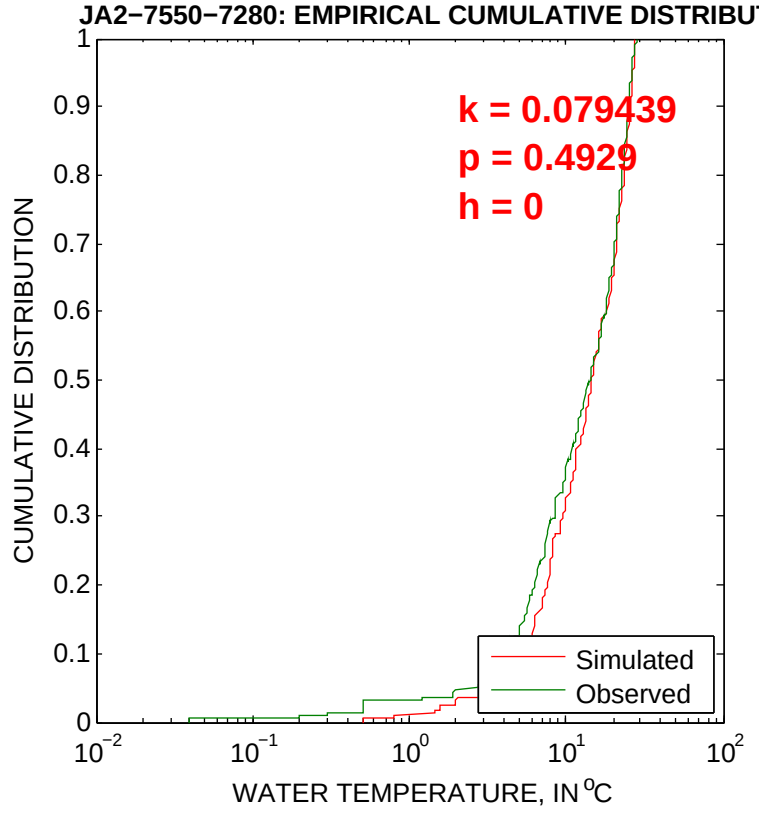












DATA SELECTION

scenario	file
P620171001WQ	WTMP.calib

plot: WTMP - water tempera...

Dates: 1/1/1985 — 12/31/201

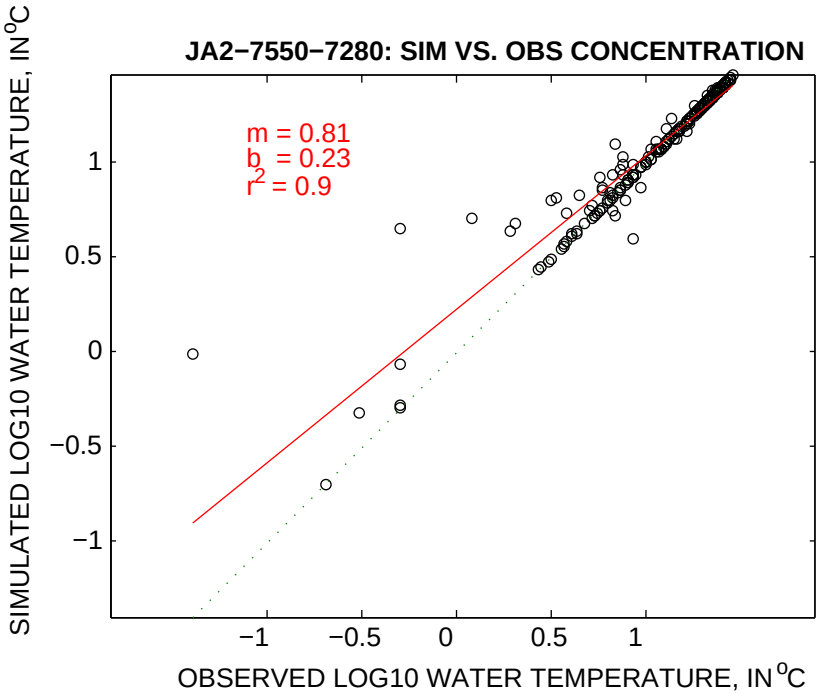
Drive	Directory	Observed
N/A	model	OBS20161101

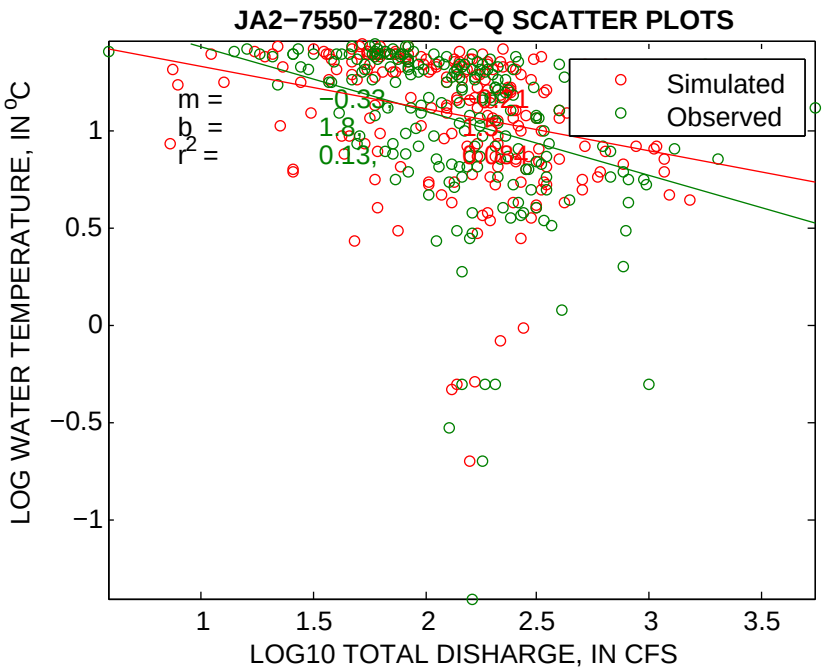
STATISTICS

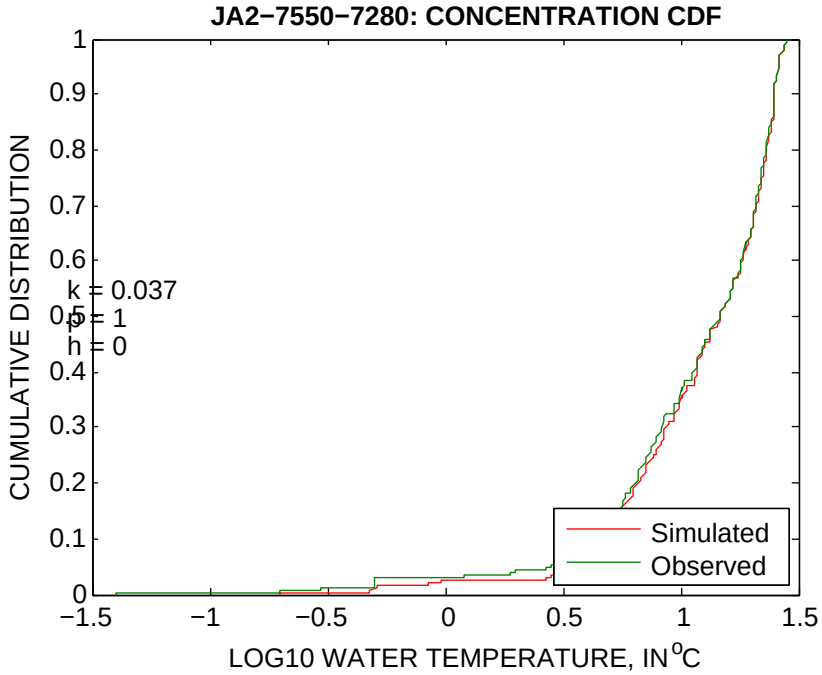
	n	observe	simulate
		214	214
min		0.04	0.50407
		-1.39794	-0.297509
mean		14.4101	15.1497
		1.04063	1.09873
media		14.45	14.5945
		1.15987	1.16418
max		28.5	27.825
		1.45484	1.44444
varian		63.7352	58.7039
		0.170656	0.0952206
JB		0.005289	0.006627
		0.001	0.001
		ra	log
%		5.13238	5.58304
err.va		6.72855	0.0497989
rel.std.err		0.10557	0.291808
mod.eff		0.89443	0.708192

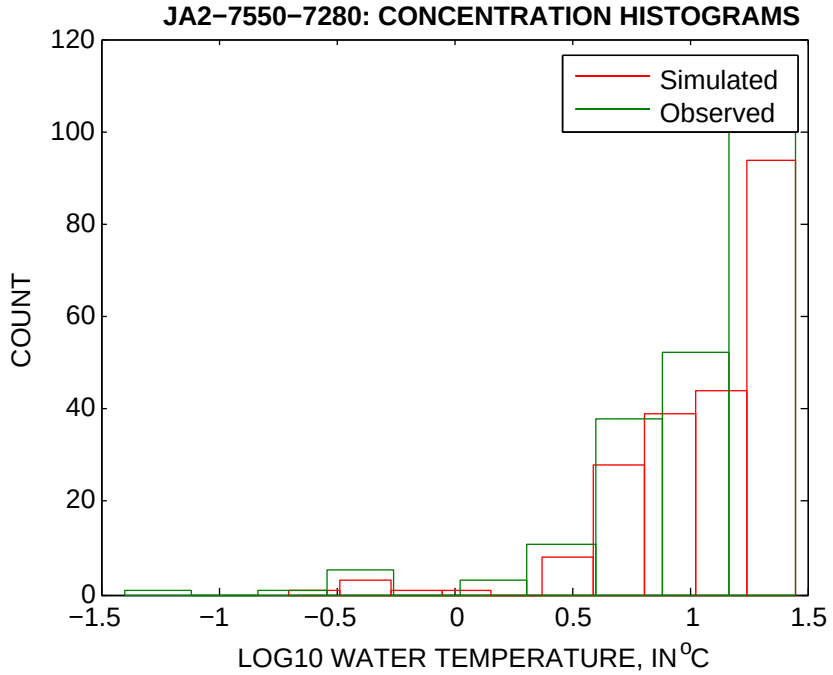
VERSION 2.1

ALL DATA
LOG10

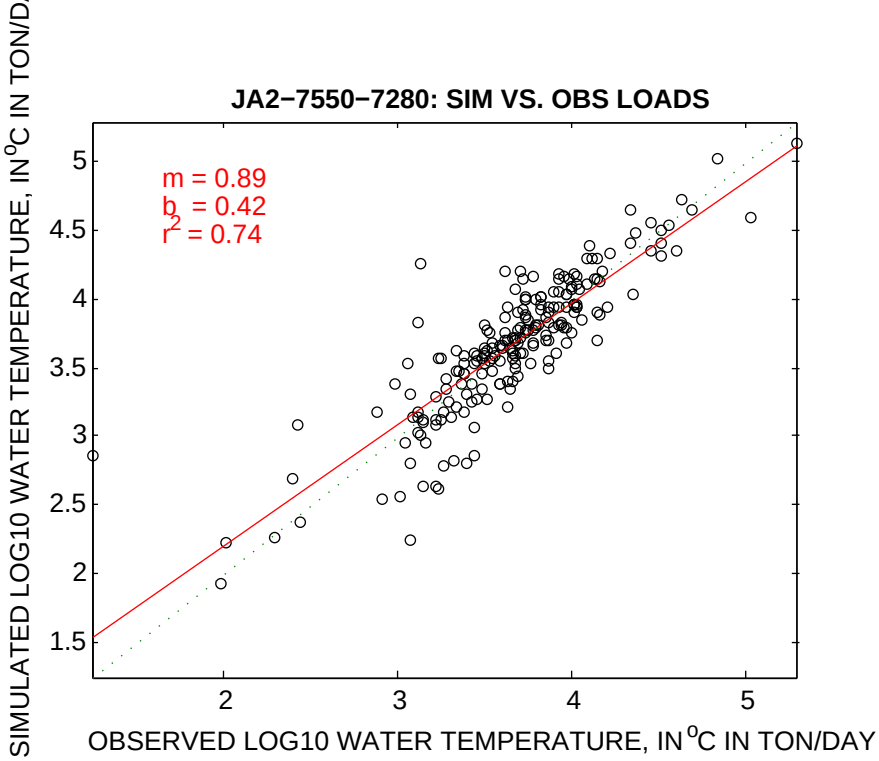


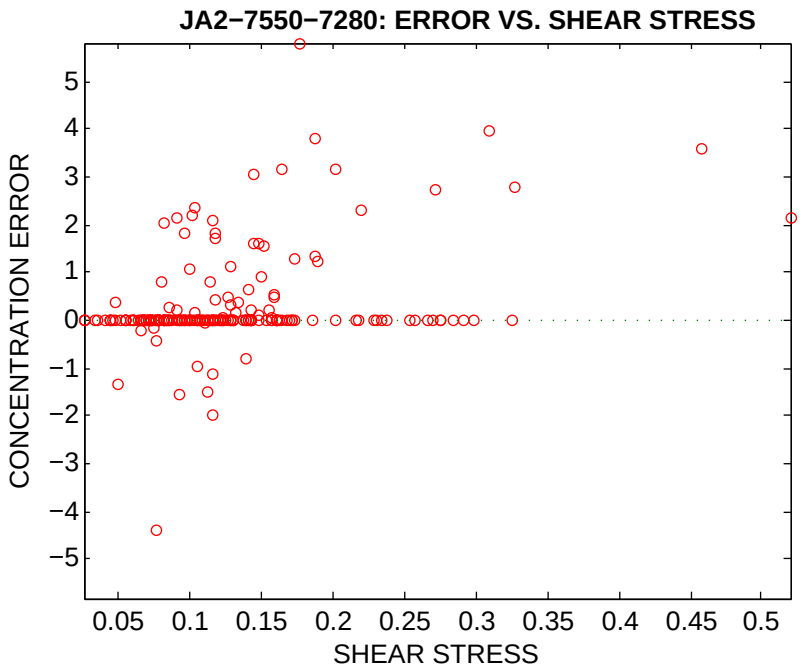


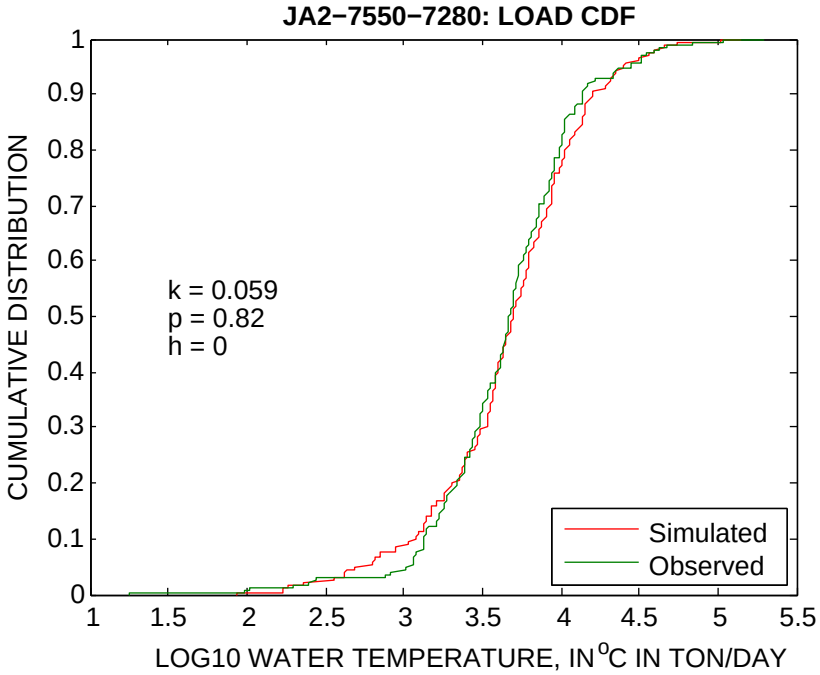


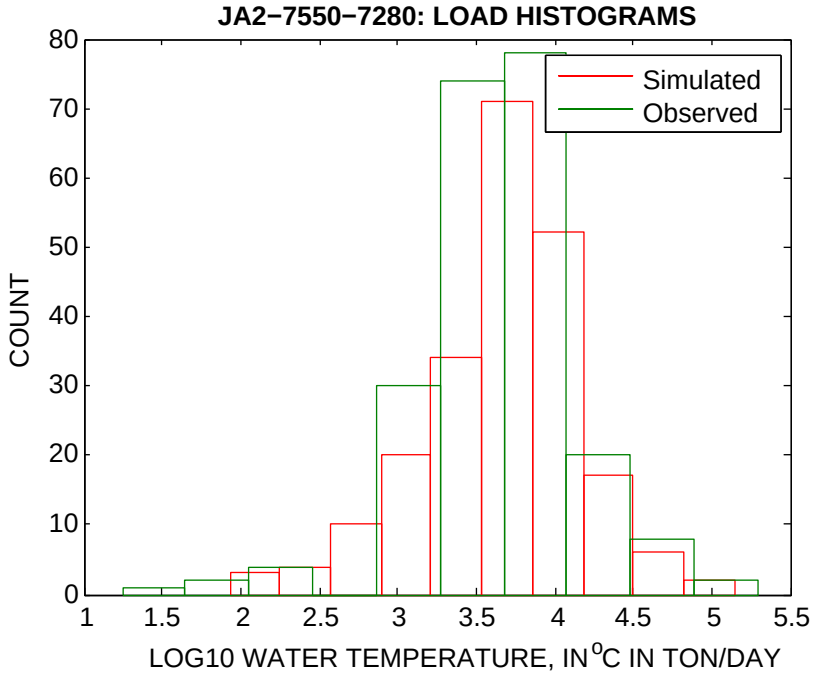


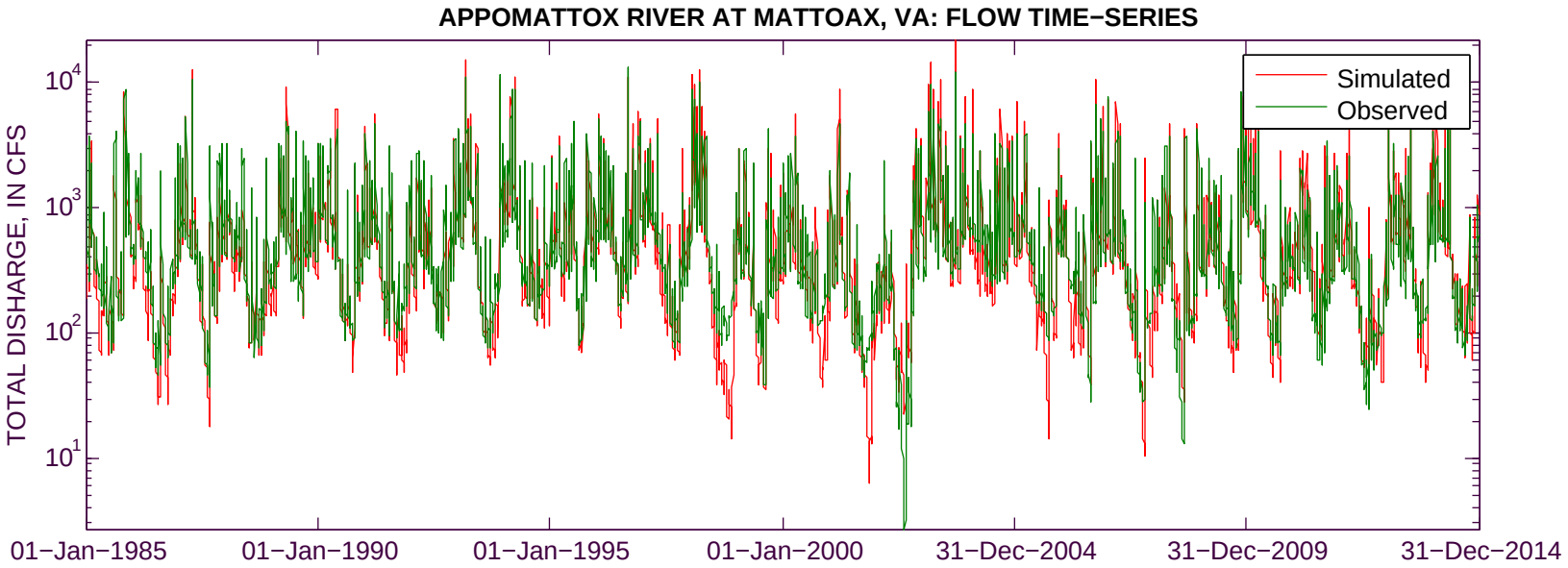
LOAD DATA
LOG10

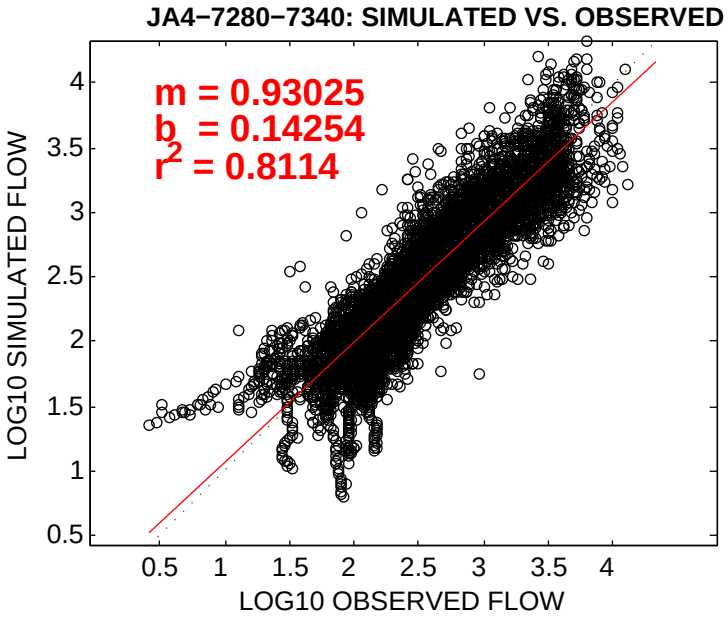


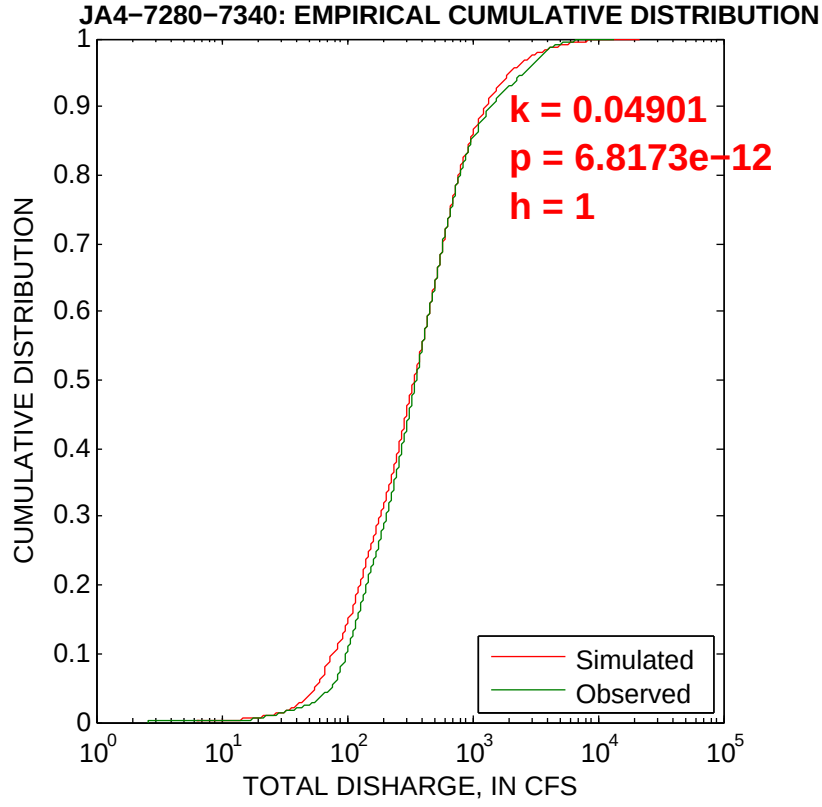












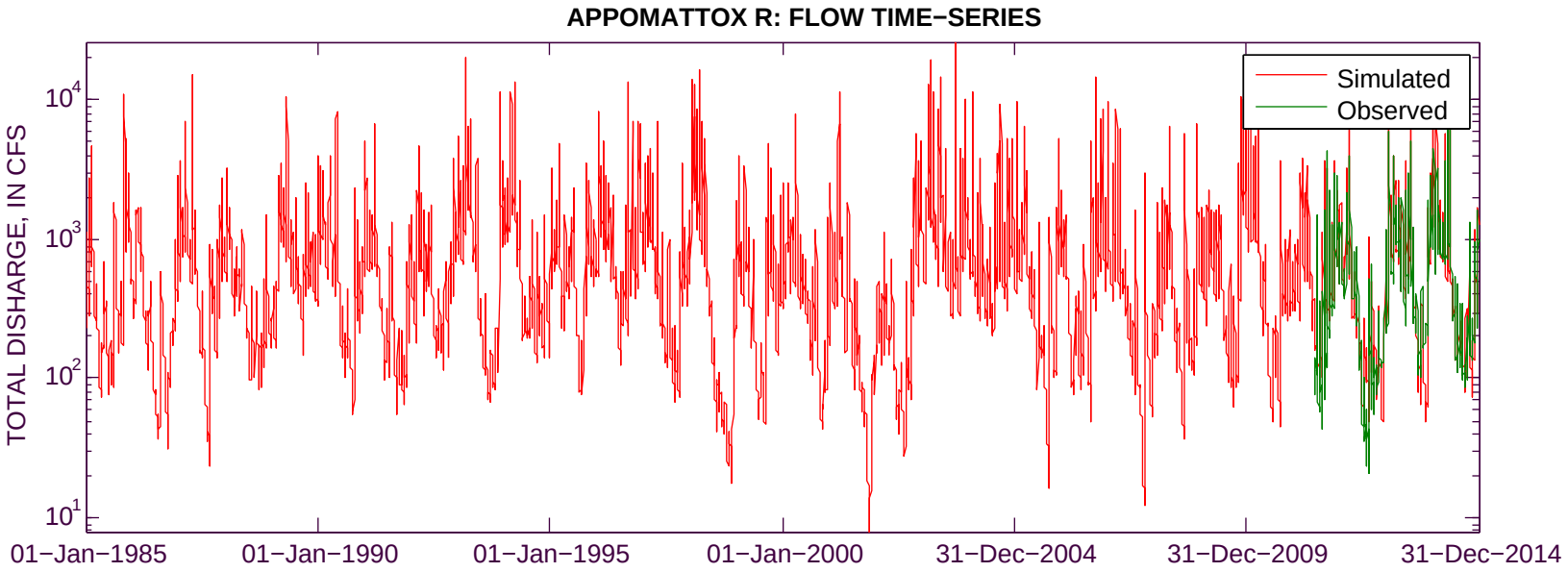
DATA SELECTION

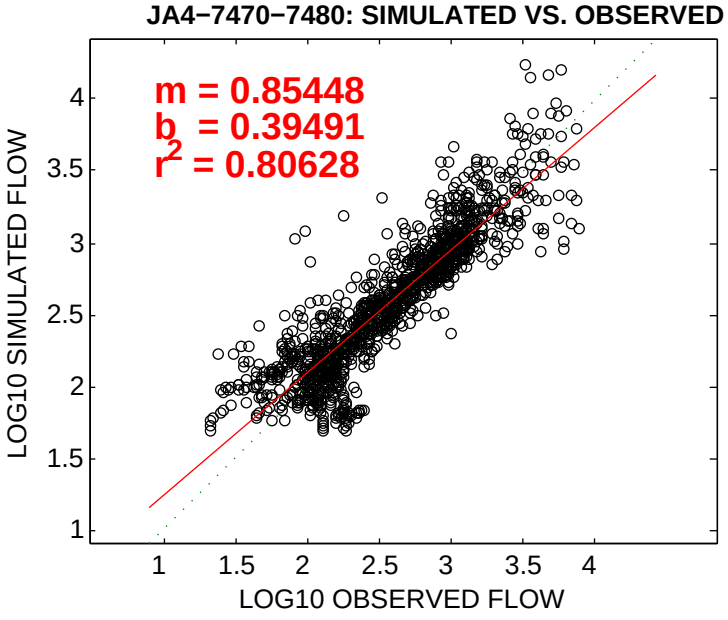
scenario: P620171001WQ
file: FLOW.calib
plot: FLOW - total discharge
Dates: 1/1/1985 12/31/201
Drive: N/A
Directory: model
Observed: OBS20161101

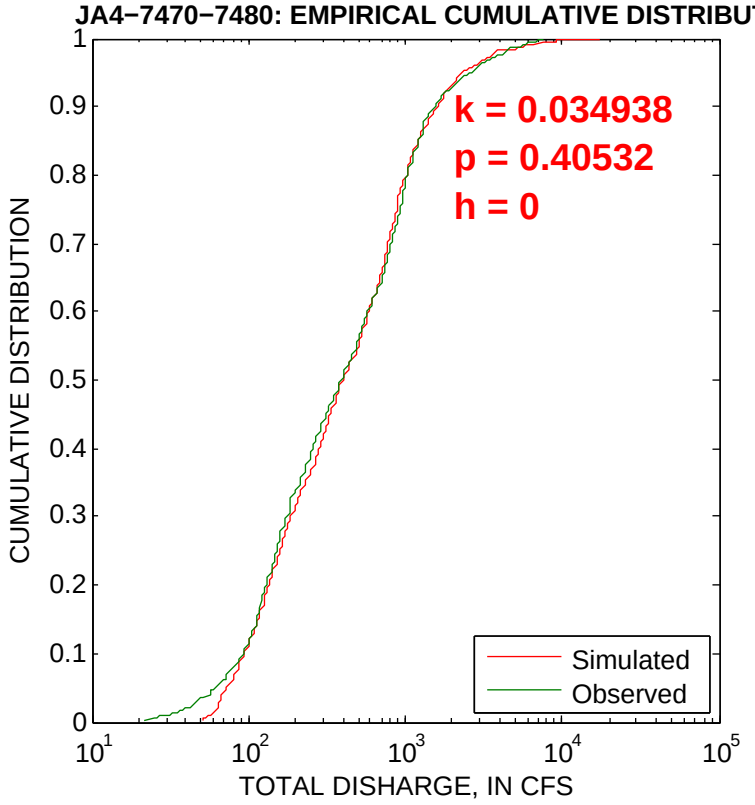
STATISTICS

		observe	simulate
n		10957	10957
min		2.6	6.3015
		0.414973	0.799444
mean		664.825	629.489
		2.56007	2.52405
media		359	345.5
		2.55509	2.53845
max		13400	21575
		4.1271	4.33395
varian		999168	1.11161e+
		0.216209	0.230589
JB		0.001	0.001
		0.001	0.001
		ra	log
%		-5.31512	-1.40728
err.va		580971	0.0458399
rel.std.err		0.581455	0.212017
mod.eff		0.418545	0.787983

VERSION 2.1







DATA SELECTION

scenario	file
P620171001WQ	FLOW.calib

plot: FLOW - total discharge

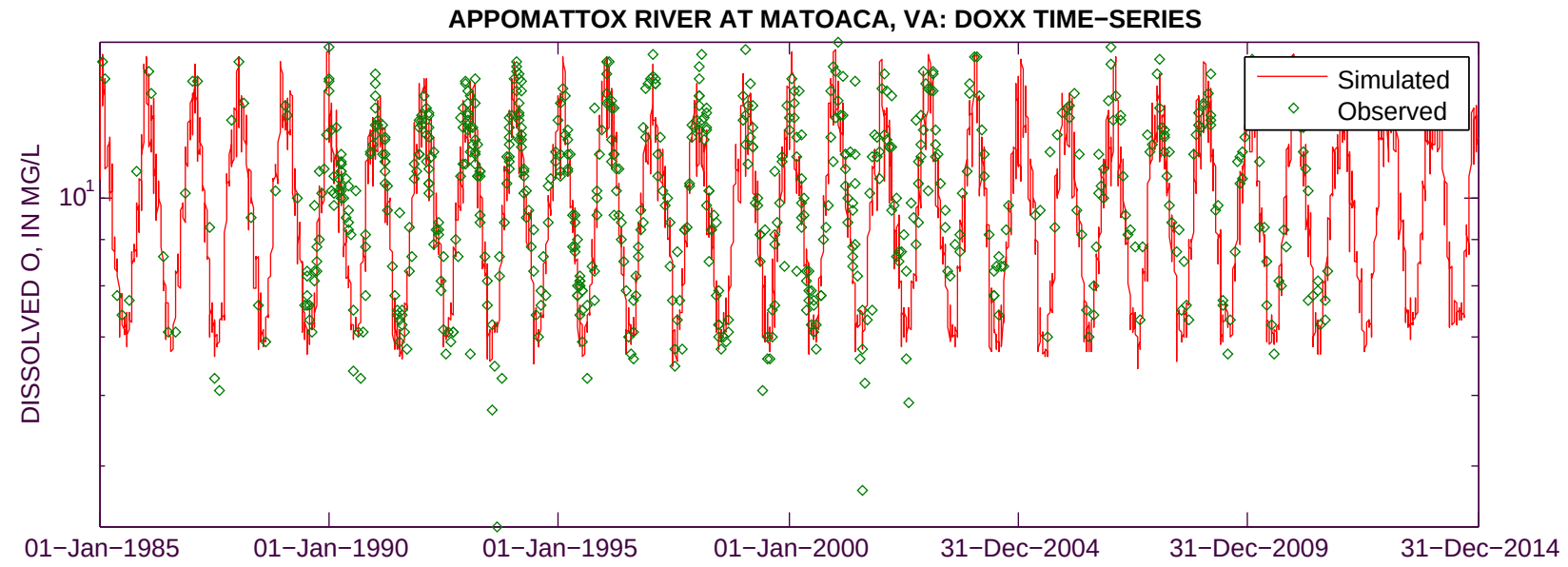
Dates: 1/1/1985 – 12/31/201

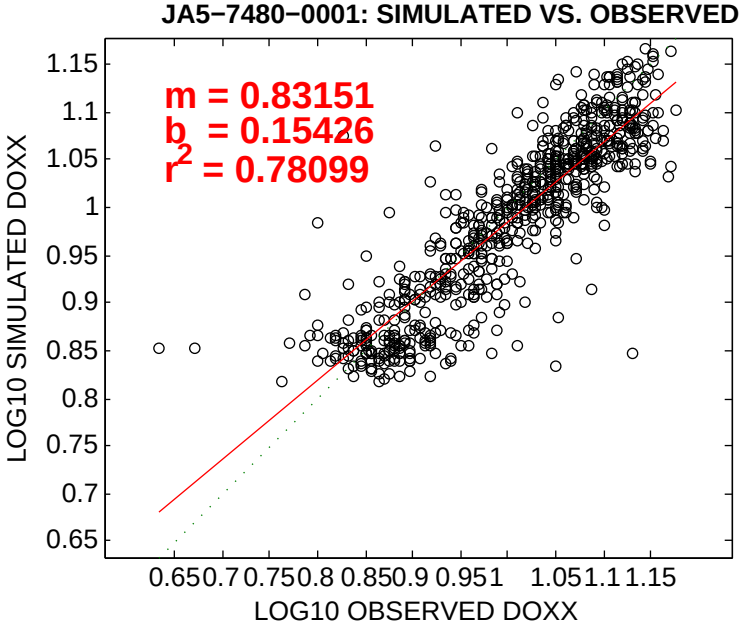
Drive	Directory	Observed
N/A	model	OBS20161101

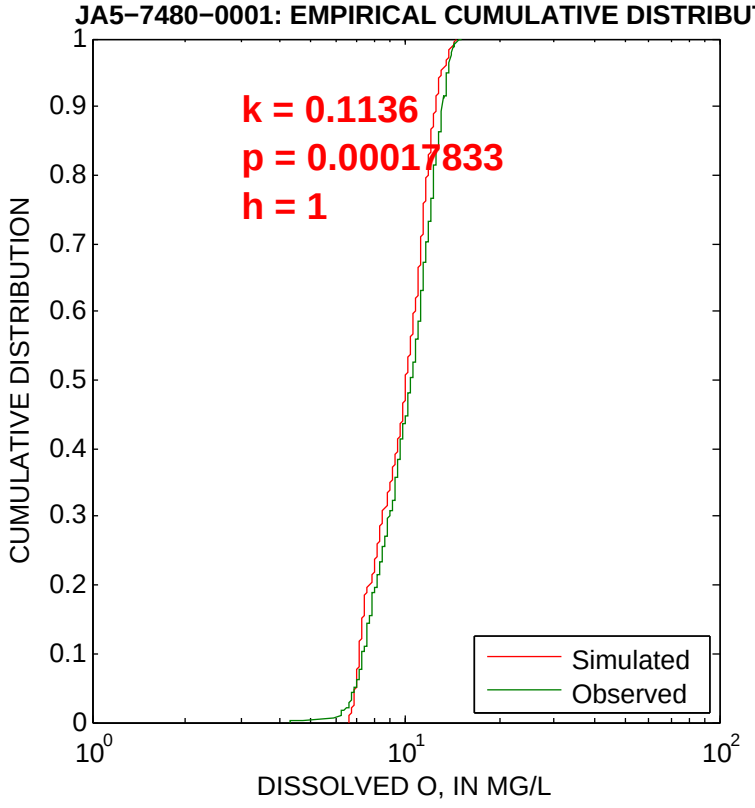
STATISTICS

	n	observe	simulate
		1288	1288
min		21	49.487
		1.32222	1.69449
mean		734.542	762.226
		2.58416	2.60301
media		390	397.45
		2.59106	2.59928
max		7720	17339
		3.88762	4.23902
varian		1.02095e+0	1.63384e+
		0.2528	0.228924
JB		0.001	0.001
		0.001773	0.001
		ra	log
%		3.76894	0.729546
err.va		859987	0.0500572
rel.std.err		0.842337	0.198012
mod.eff		0.157663	0.801988

VERSION 2.1







DATA SELECTION

scenario	file
P620171001WQ	DOXX.calib

plot: DOXX - dissolved oxygen

Dates: 1/1/1985 – 12/31/201

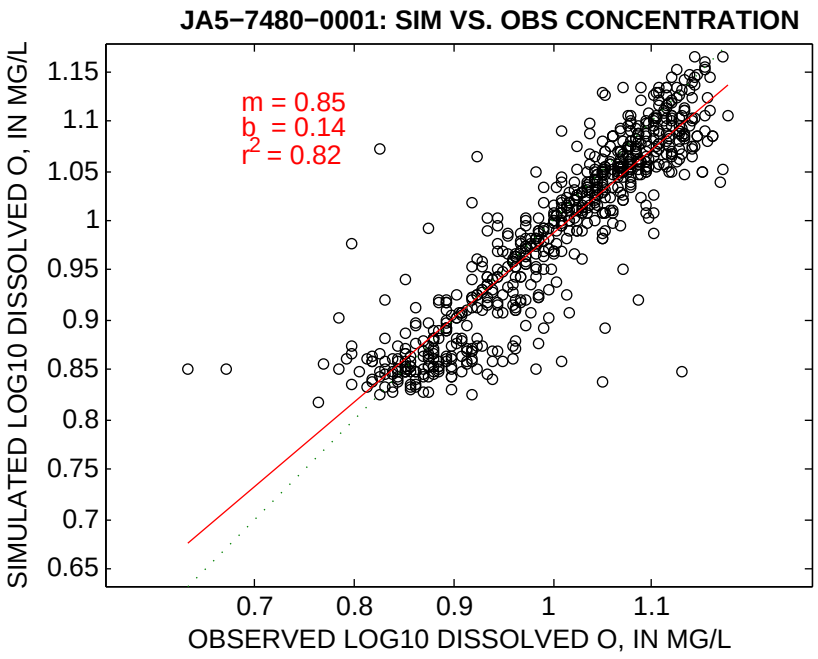
Drive	Directory	Observed
N/A	model	OBS20161101

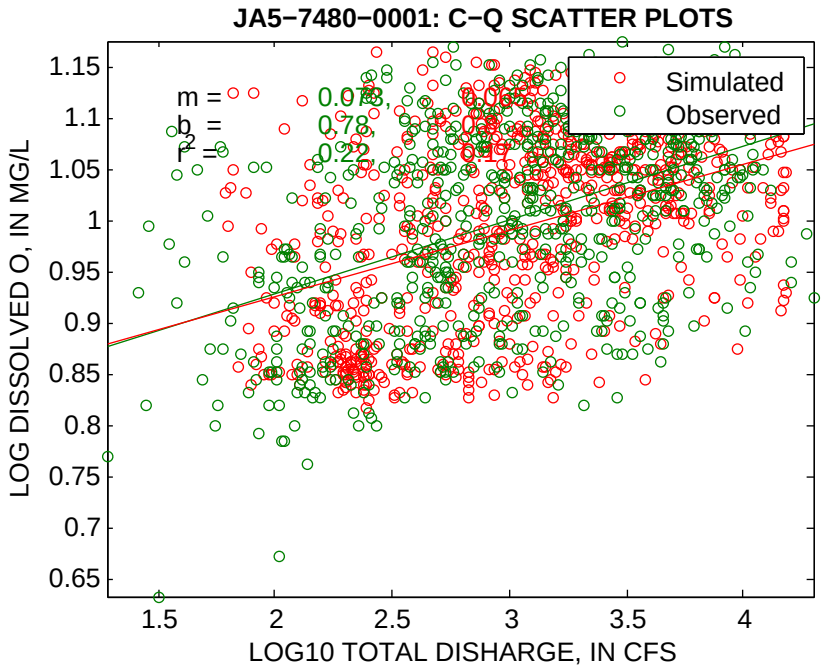
STATISTICS

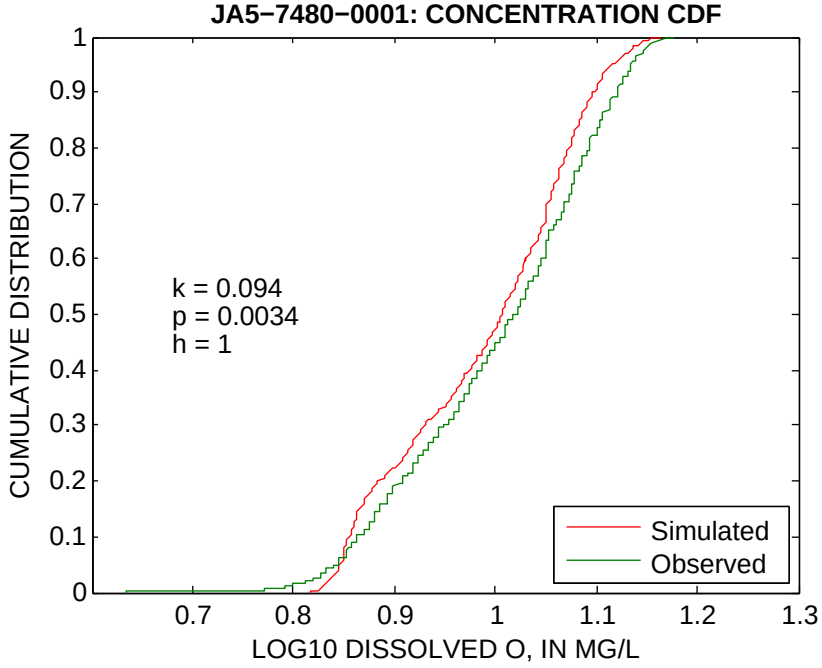
	n	713	713
		observe	simulate
min		4.3	6.5781
		0.633468	0.8181
mean		10.3092	9.94148
		1.0031	0.988356
media		10.4	10.07
		1.01703	1.00303
max		15	14.639
		1.17609	1.16551
varian		4.67751	4.00457
		0.00911699	0.00807137
JB		0.001	0.001
		0.001	0.001
		ra	log
%		-3.56648	-1.46993
err.va		1.16201	0.00224426
rel.std.err		0.248425	0.246162
mod.eff		0.751575	0.753838

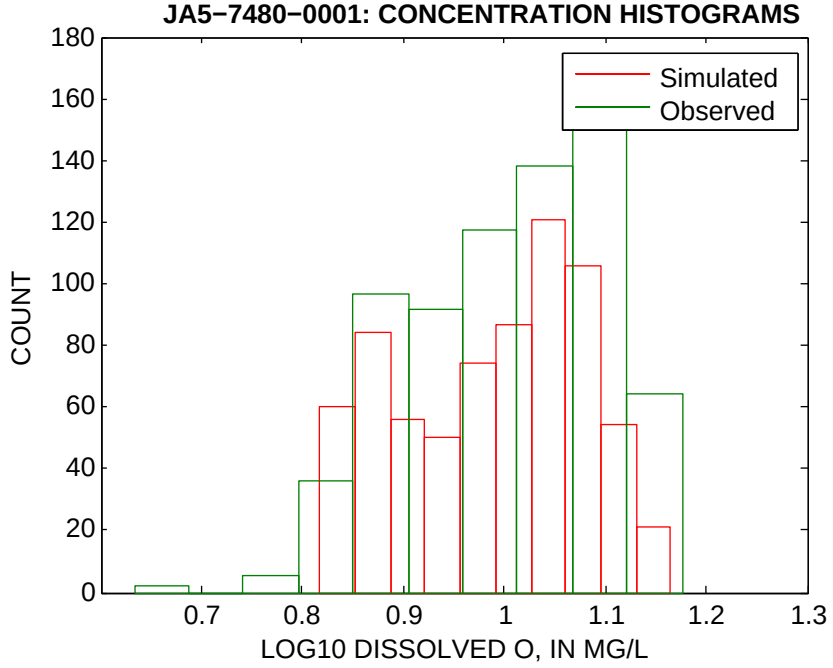
VERSION

ALL DATA
LOG10

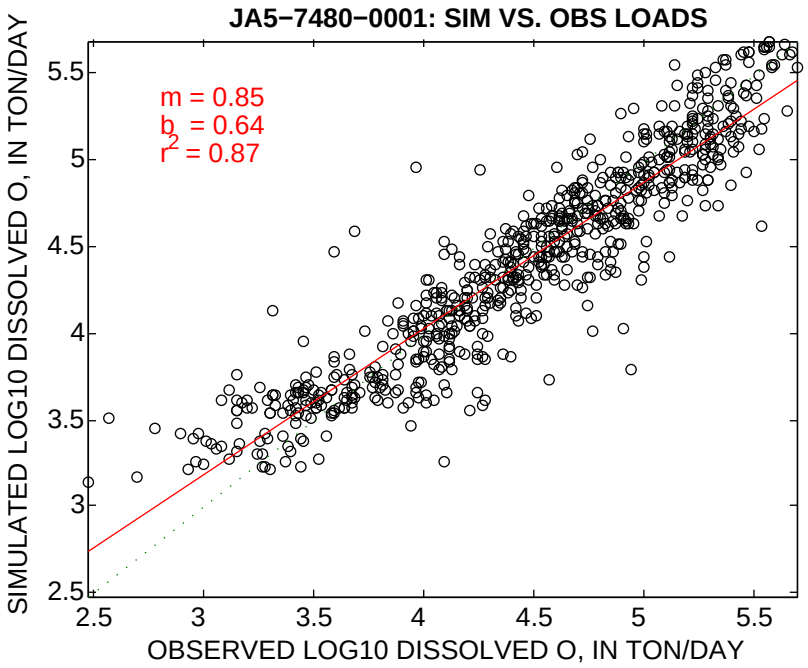


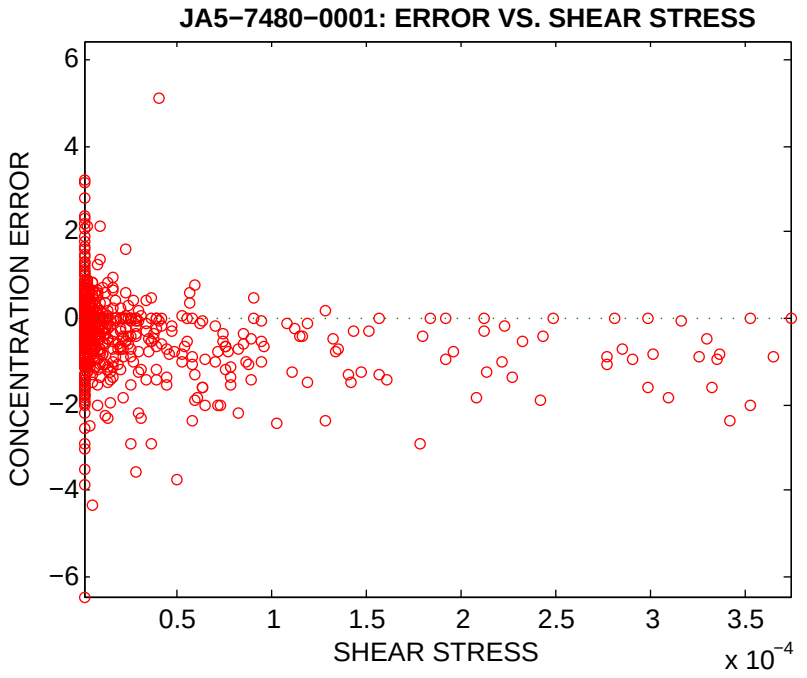


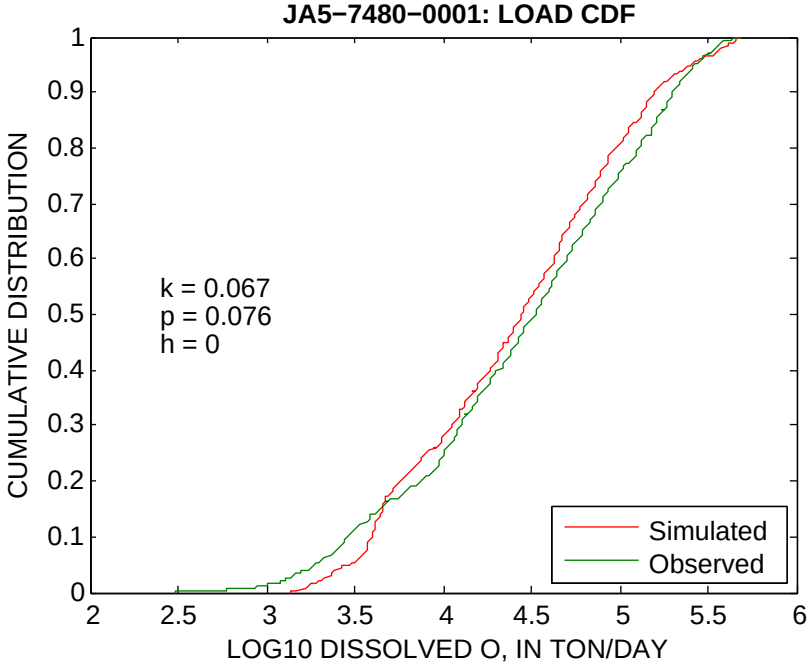


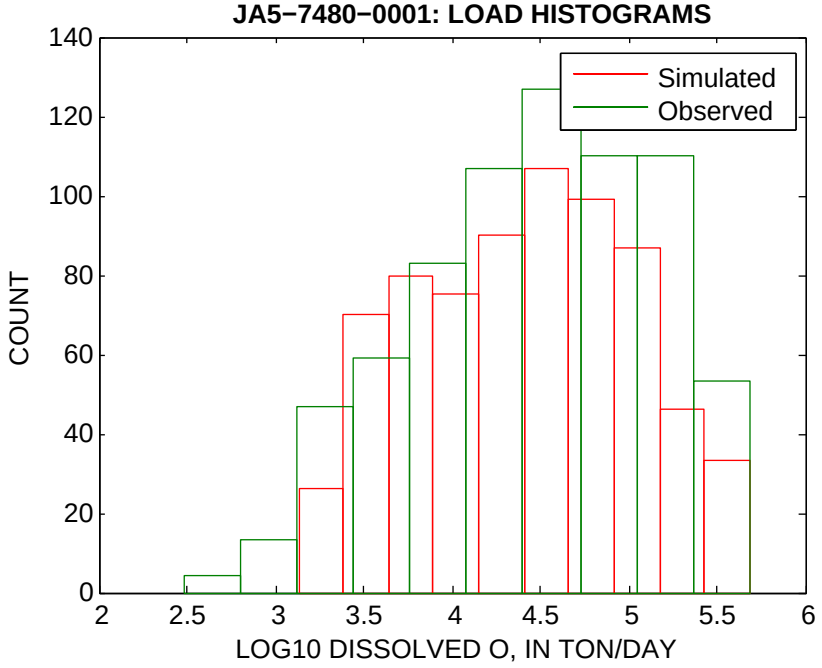


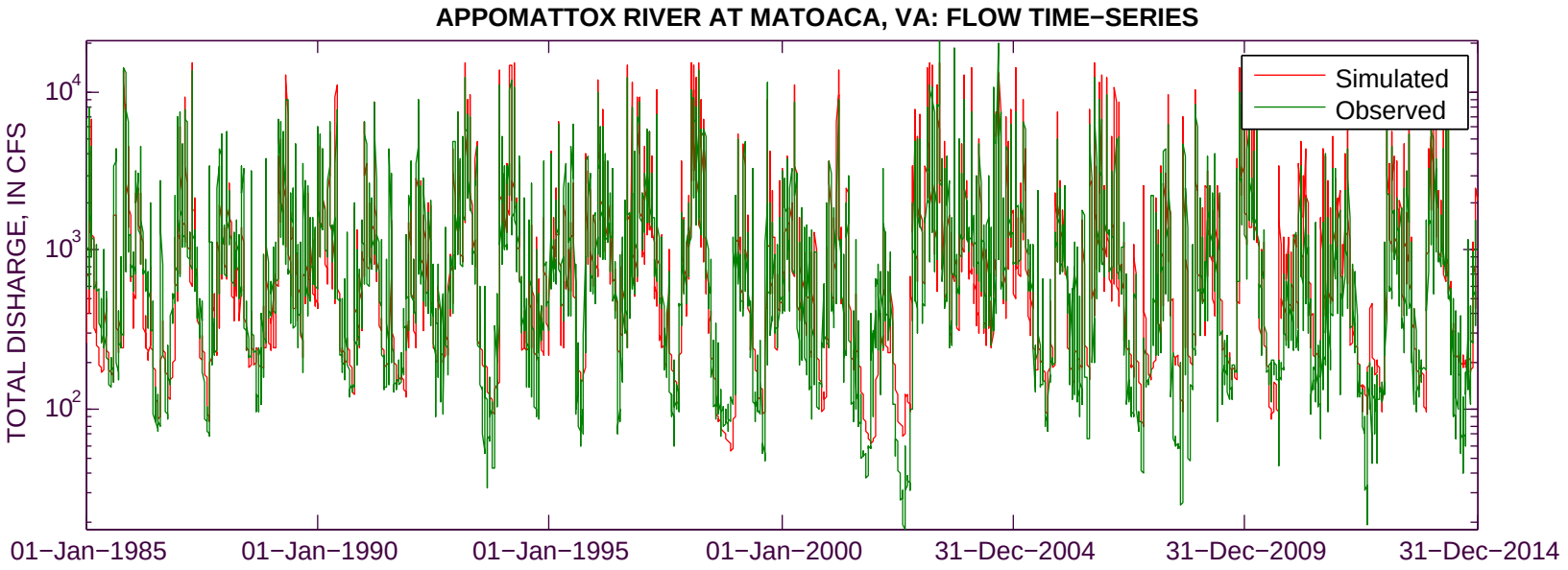
LOAD DATA
LOG10

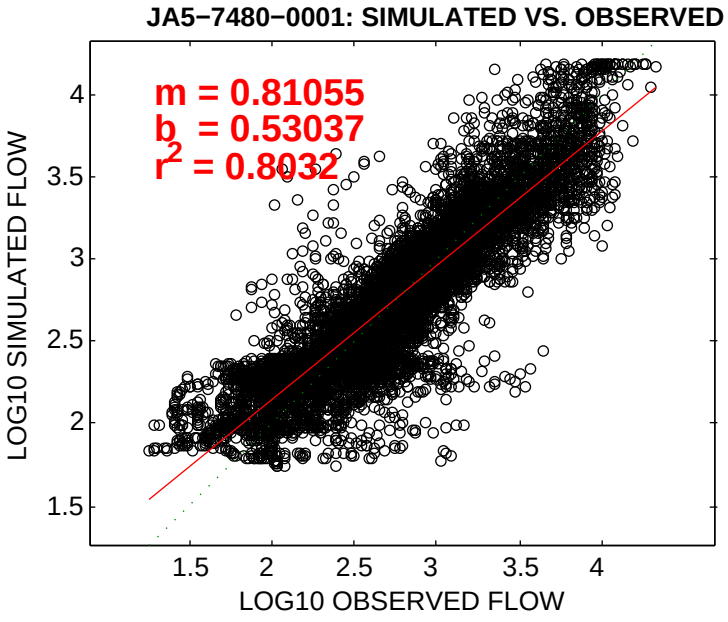


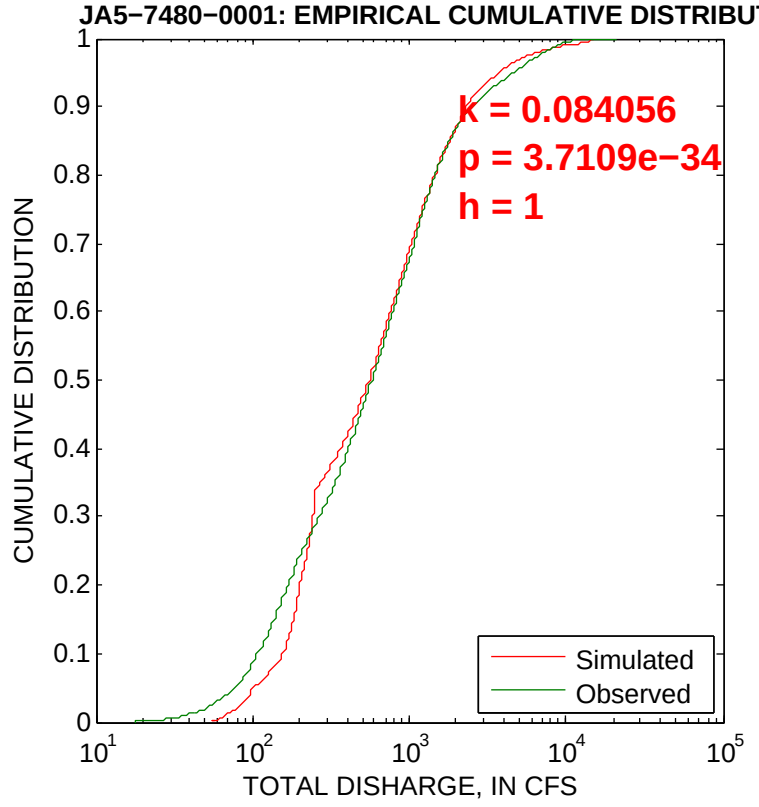












DATA SELECTION

scenario: P620171001WQ | file: FLOW.calib

plot: FLOW - total discharge

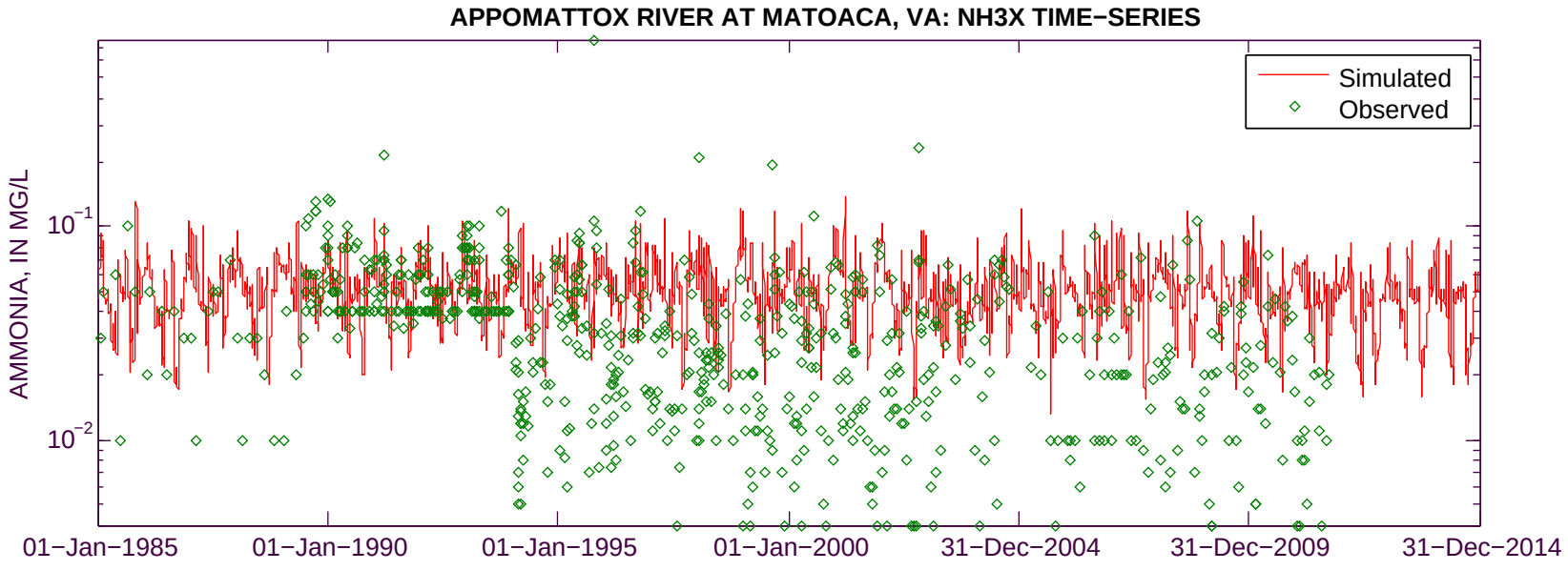
Dates: 1/1/1985 – 12/31/201

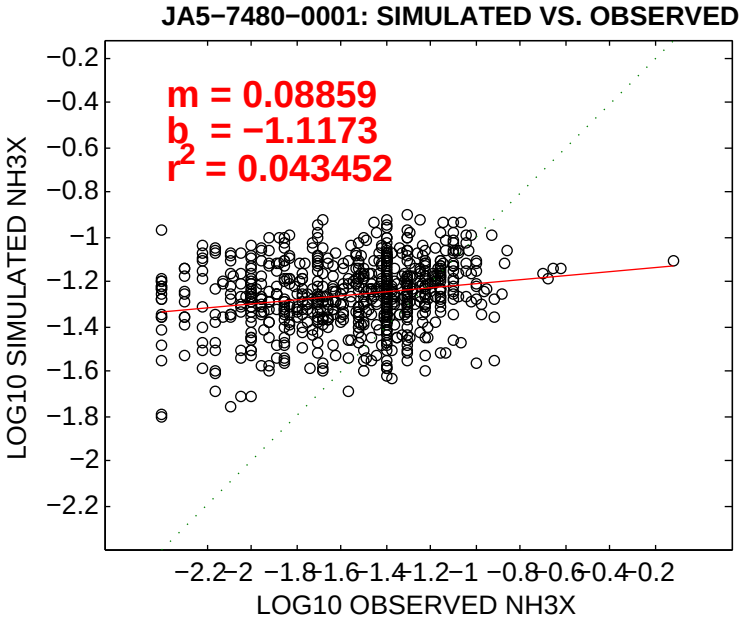
Drive: N/A | Directory: model | Observed: OBS20161101

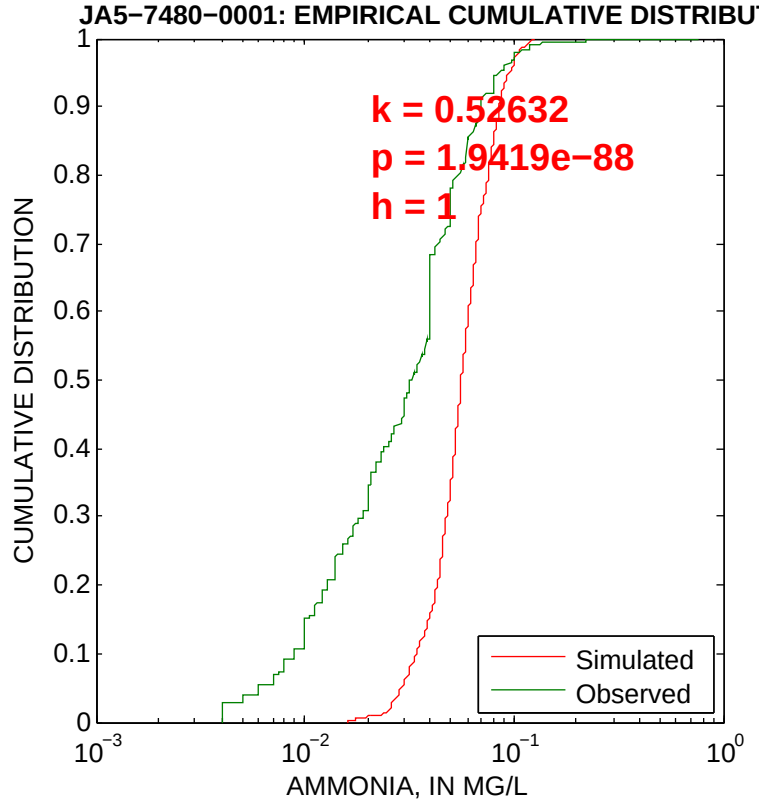
STATISTICS

		observe	simulate
n		10957	10957
min		18	55.659
		1.25527	1.74554
mean		1141.59	1098.91
		2.73613	2.74812
media		574	554.59
		2.75891	2.74397
max		21200	15044
		4.32634	4.17736
varian		3.0569e+06	3.21181e+
		0.284852	0.232997
JB		0.001	0.001
		0.001	0.001
		ra	log
%		-3.73891	0.438371
err.va		1.1576e+06	0.0562216
rel.std.err		0.378685	0.197371
mod.eff		0.621315	0.802629

VERSION 2.1







DATA SELECTION

scenario	file
P620171001WQ	NH3X.calib

plot: NH3X - ammonia

Dates: 1/1/1985 – 12/31/201

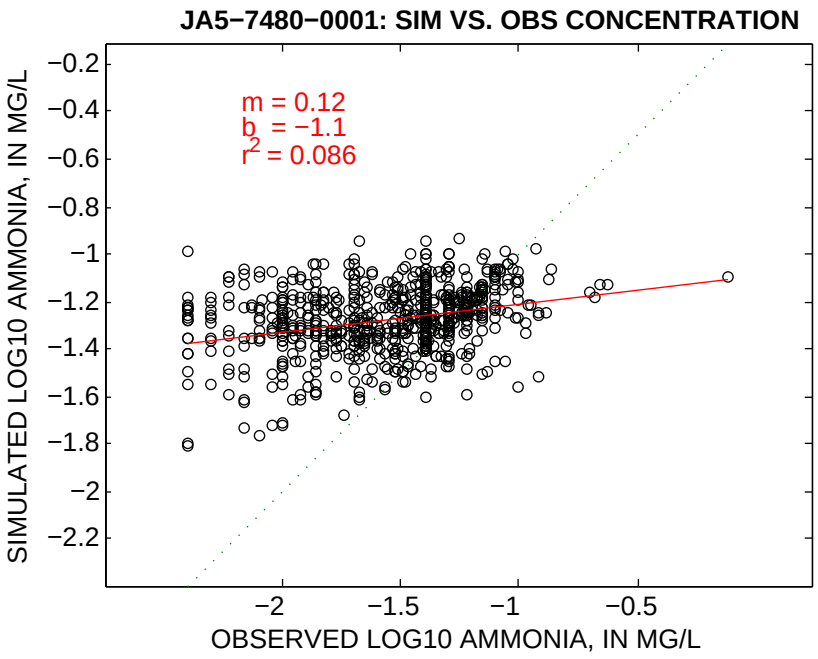
Drive	Directory	Observed
N/A	model	OBS20161101

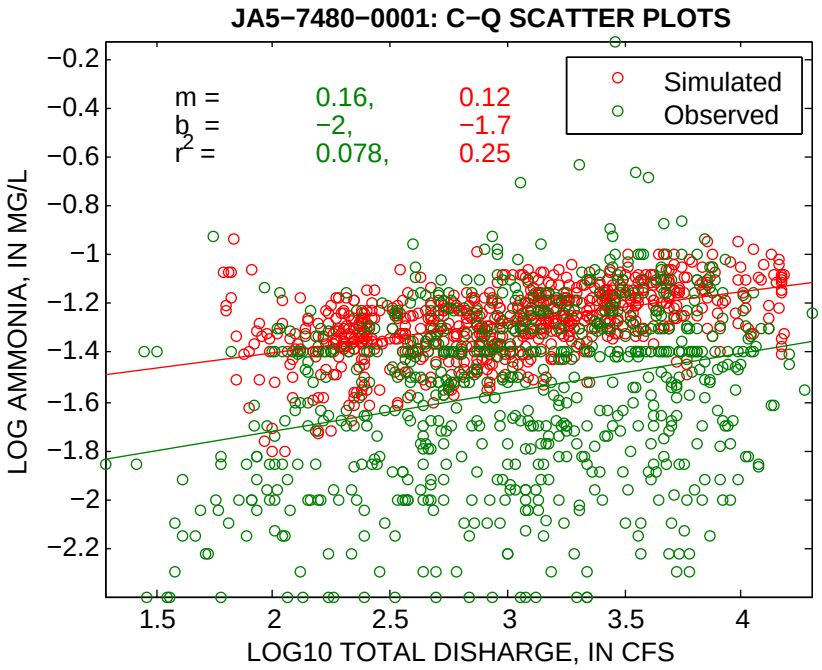
STATISTICS

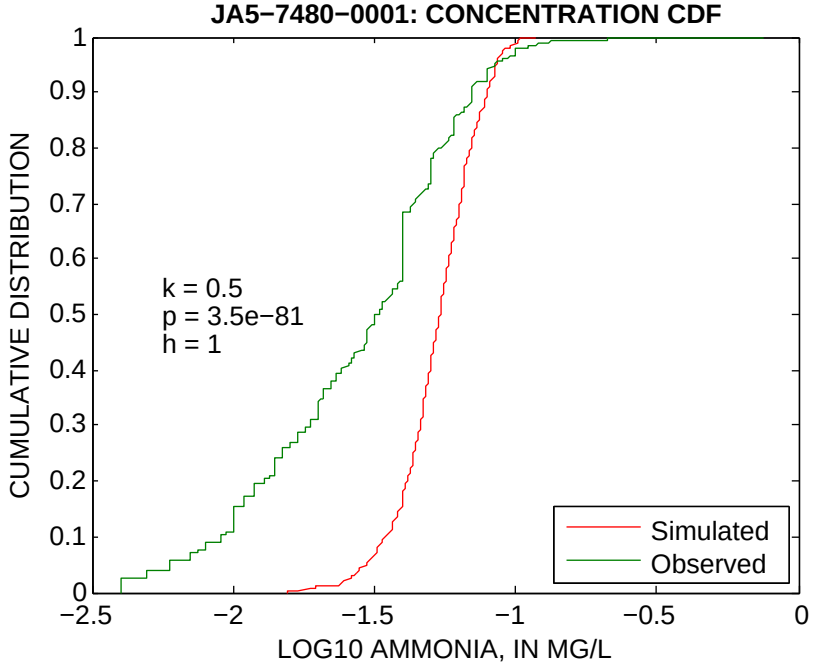
	n	722	722
		observe	simulate
min		0.004	0.015995
		-2.39794	-1.79602
mean		0.0377455	0.0588605
		-1.55901	-1.25539
media		0.03225	0.0560235
		-1.49148	-1.25163
max		0.76	0.12692
		-0.119186	-0.89647
varian		0.00151361	0.00038929
		0.127147	0.0229652
JB		0.001	0.001
		0.004476	0.001
		ra	log
%		55.9402	-19.4756
err.va		0.00209497	0.219902
rel.std.err		1.38409	1.72951
mod.eff		-0.384089	-0.729509

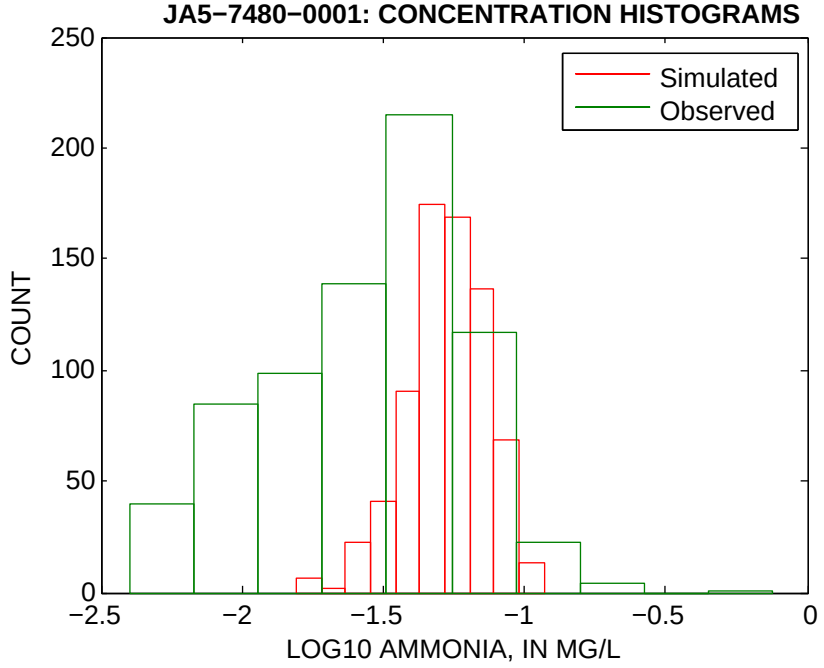
VERSION

ALL DATA
LOG10

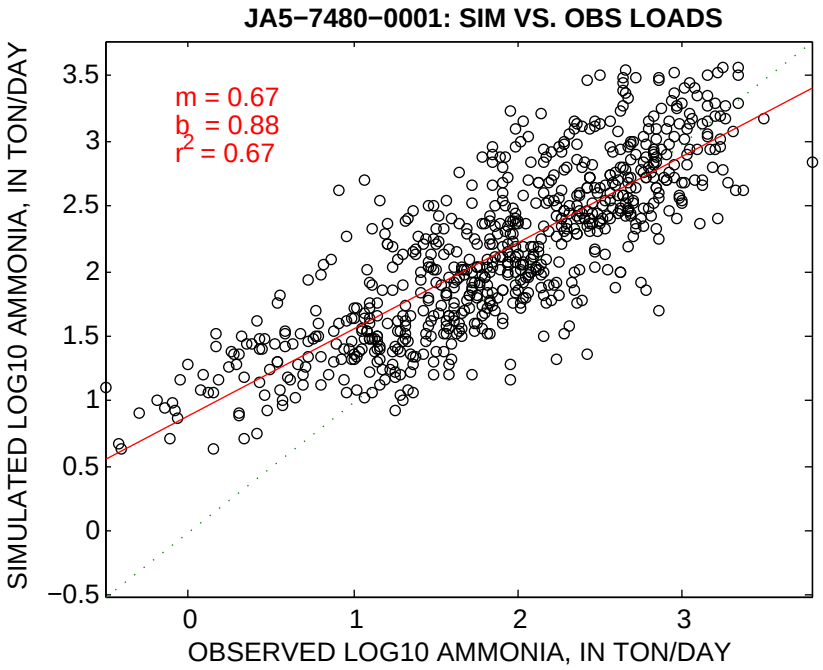


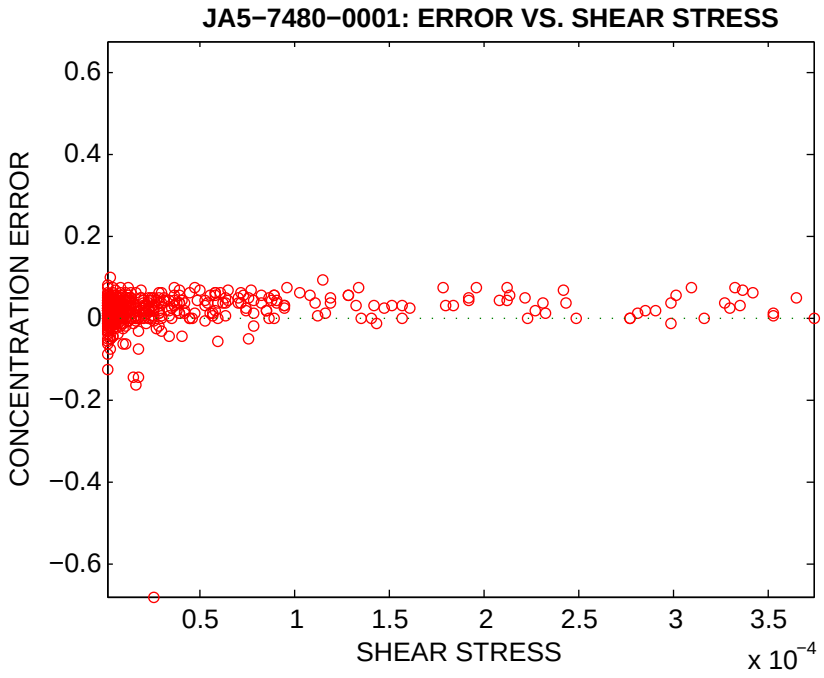


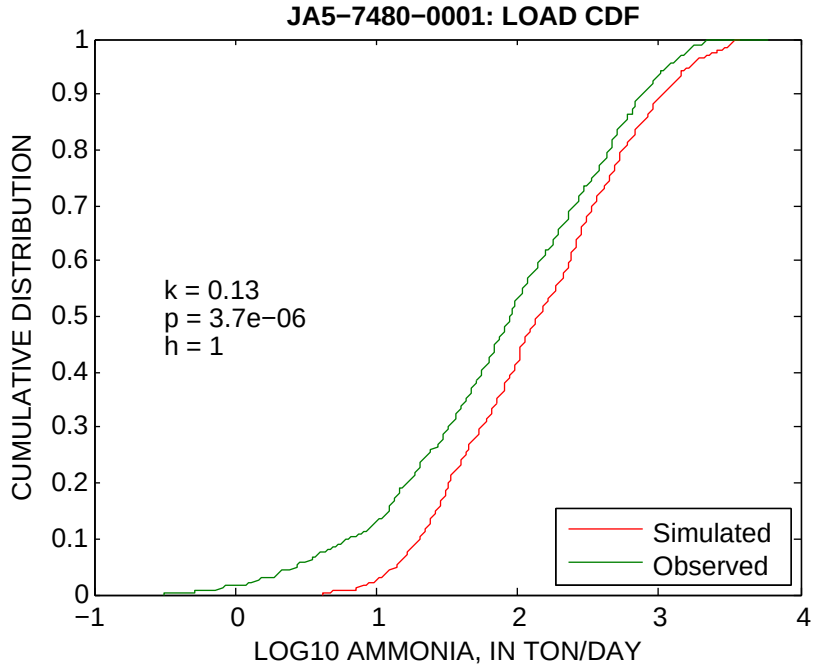


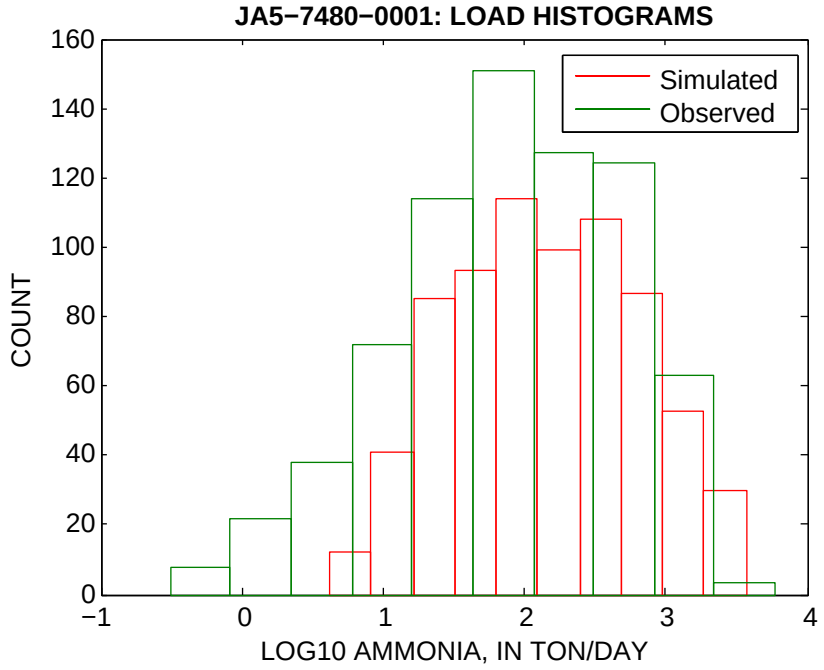


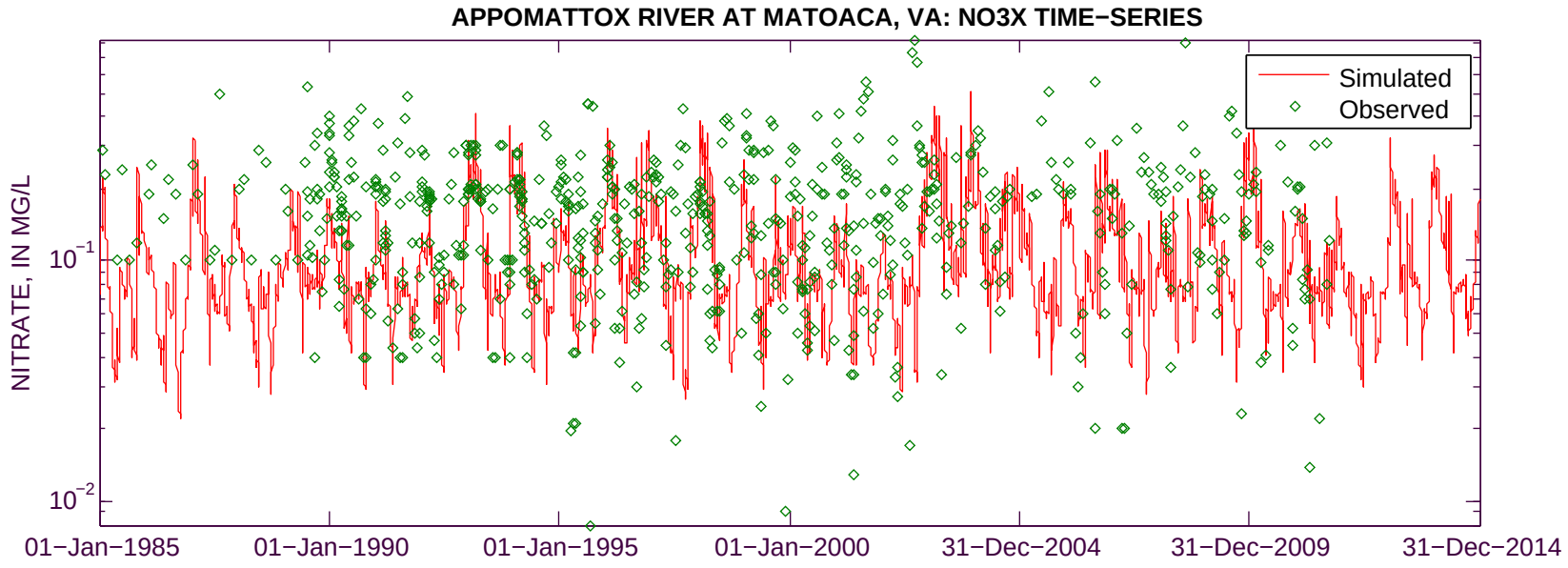
LOAD DATA
LOG10

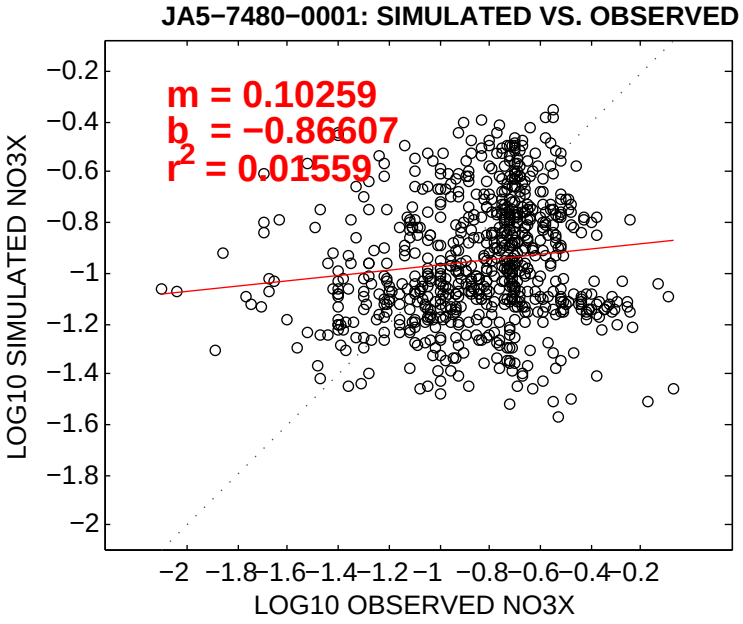


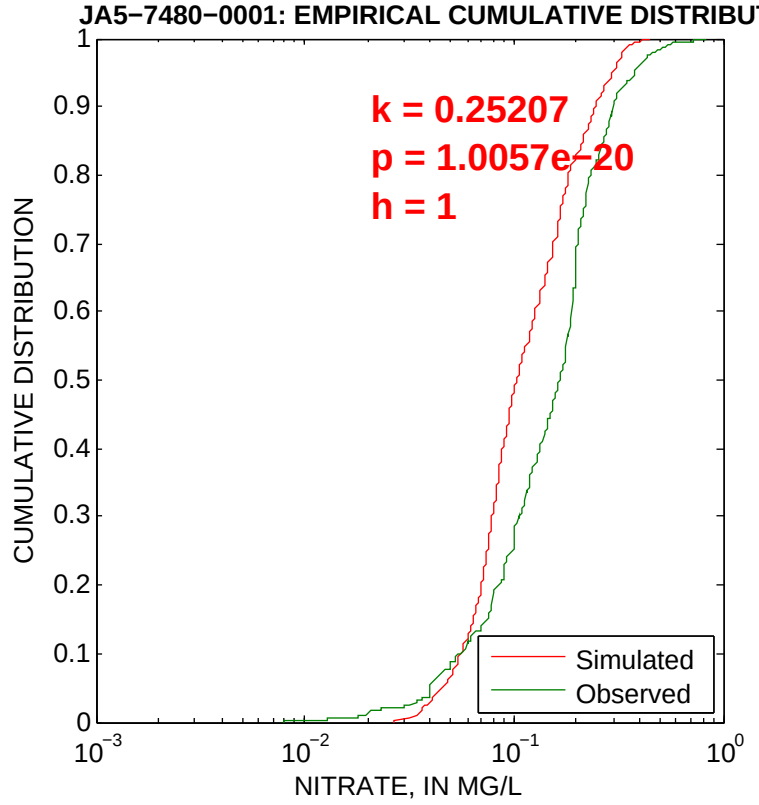












DATA SELECTION

scenario: P620171001WQ | file: NO3X.calib

plot: NO3X - nitrate

Dates: 1/1/1985 – 12/31/201

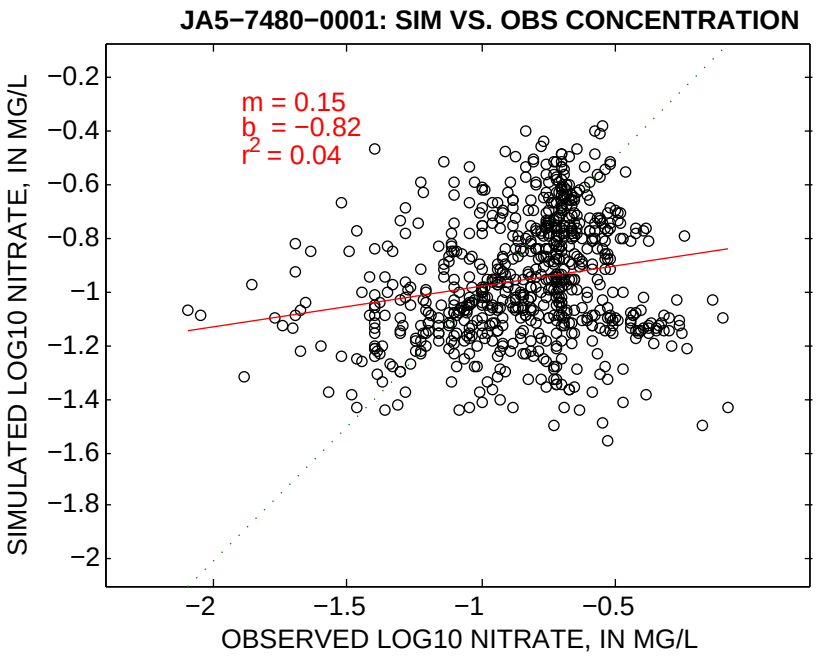
Drive: N/A | Directory: model | Observed: OBS20161101

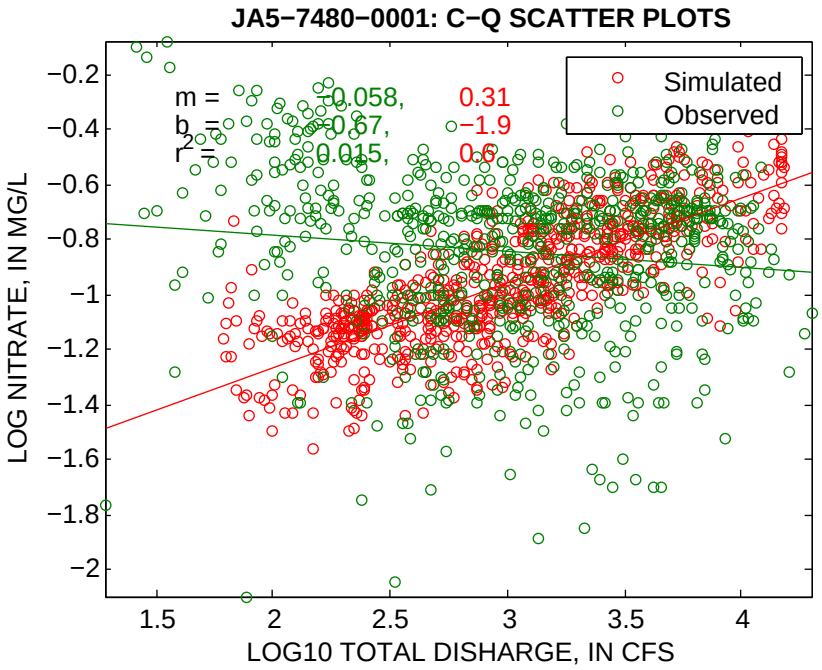
STATISTICS

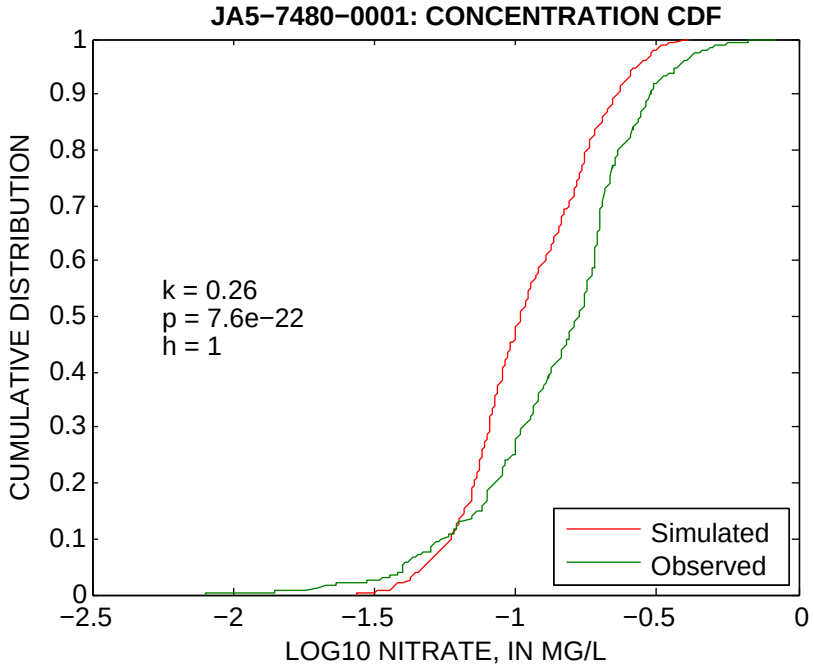
		observe	simulate
n		726	726
min		0.008	0.026728
		-2.09691	-1.57303
mean		0.174864	0.13074
		-0.845174	-0.952778
media		0.166334	0.10374
		-0.779021	-0.984054
max		0.837	0.44892
		-0.0772745	-0.347831
varian		0.0120011	0.00602882
		0.0882376	0.0595727
JB		0.001	0.001
		0.001	0.004836
		ra	log
%		-25.233	12.7315
err.va		0.0194833	0.141299
rel.std.err		1.62346	1.60135
mod.eff		-0.623456	-0.601352

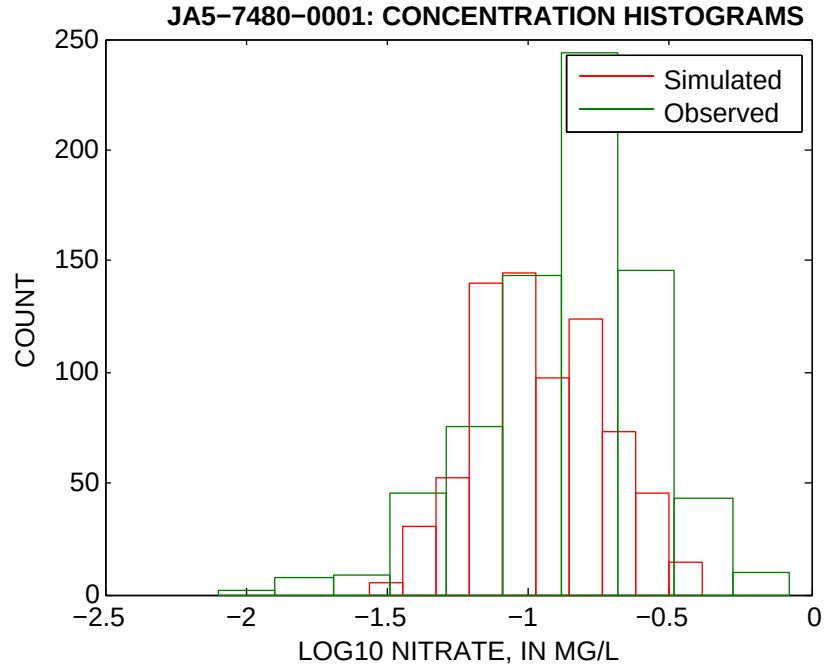
VERSION 2.1

ALL DATA
LOG10

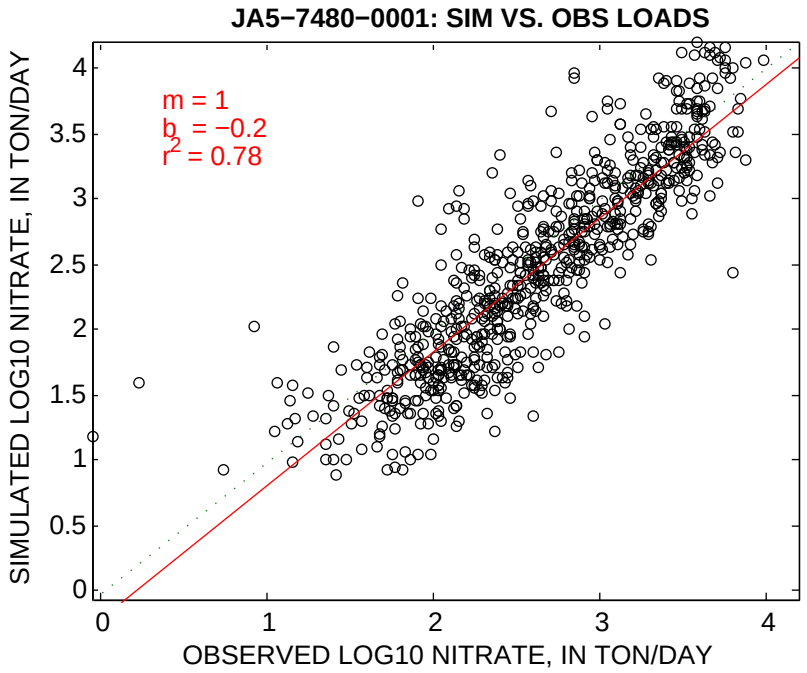


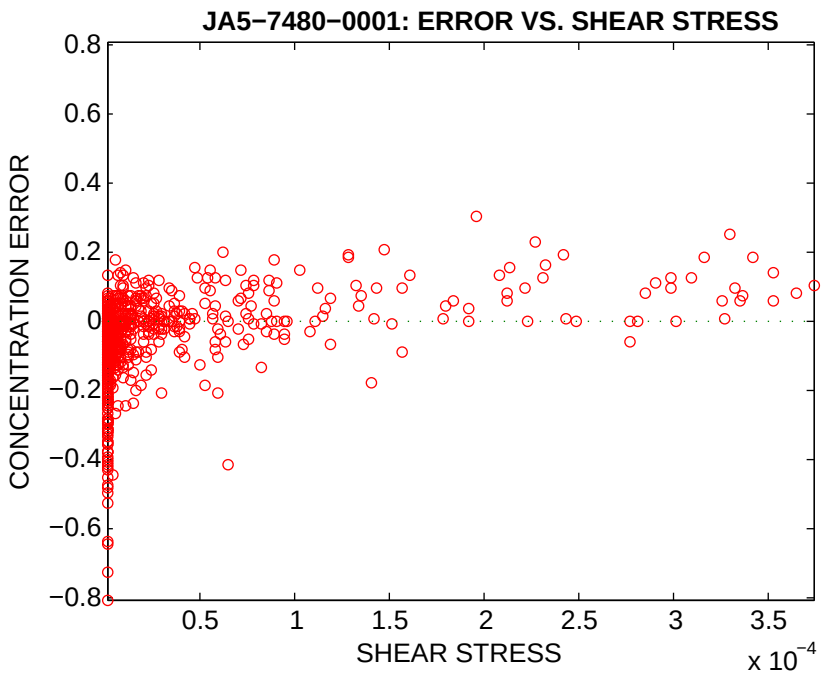


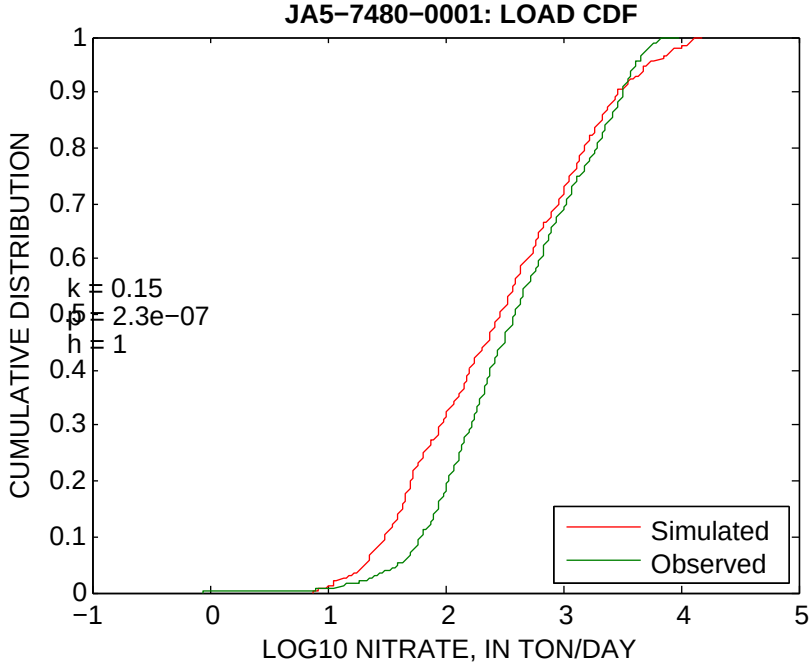


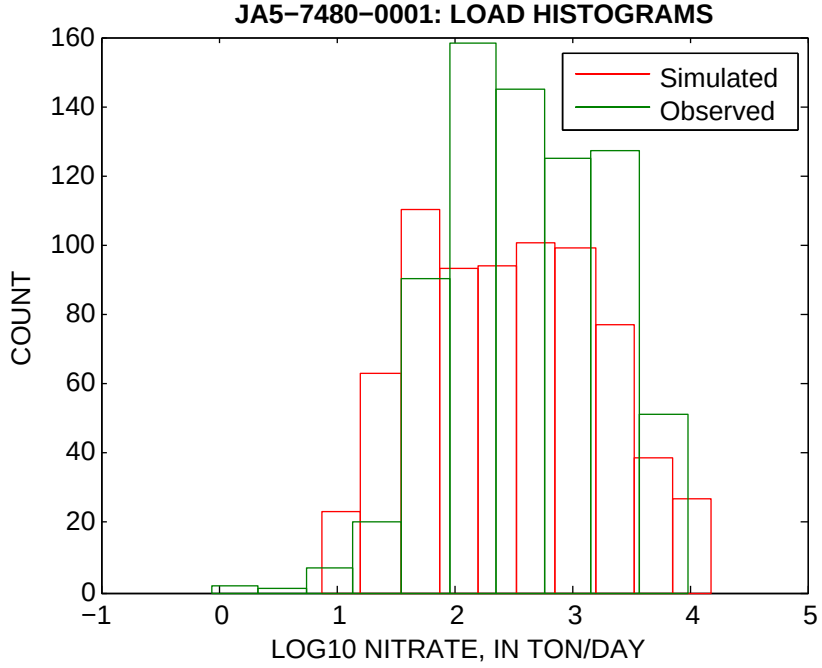


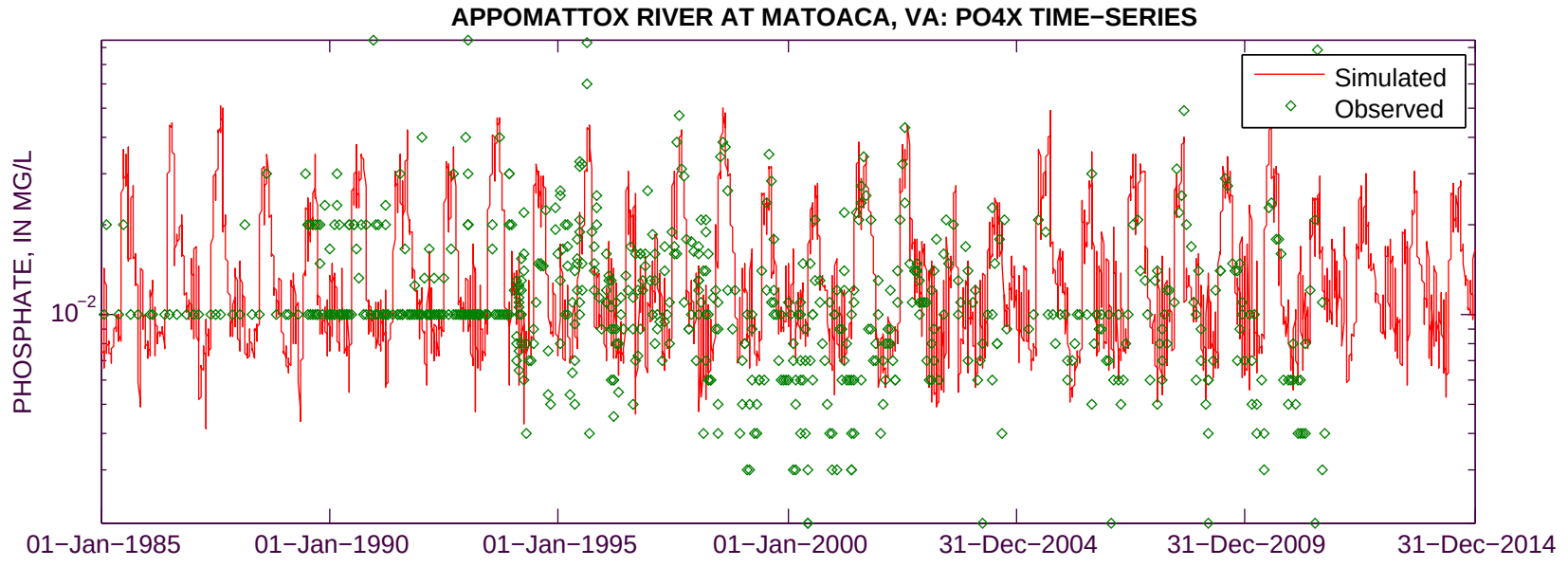
LOAD DATA
LOG10

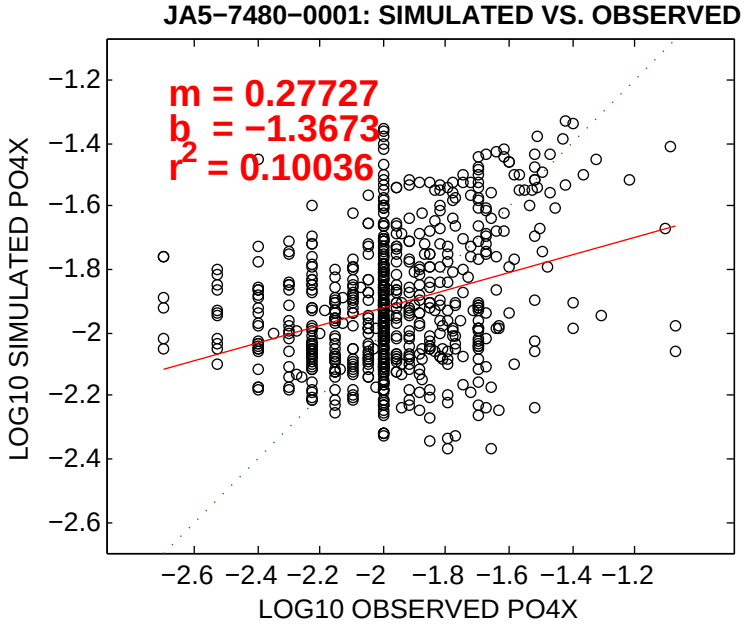


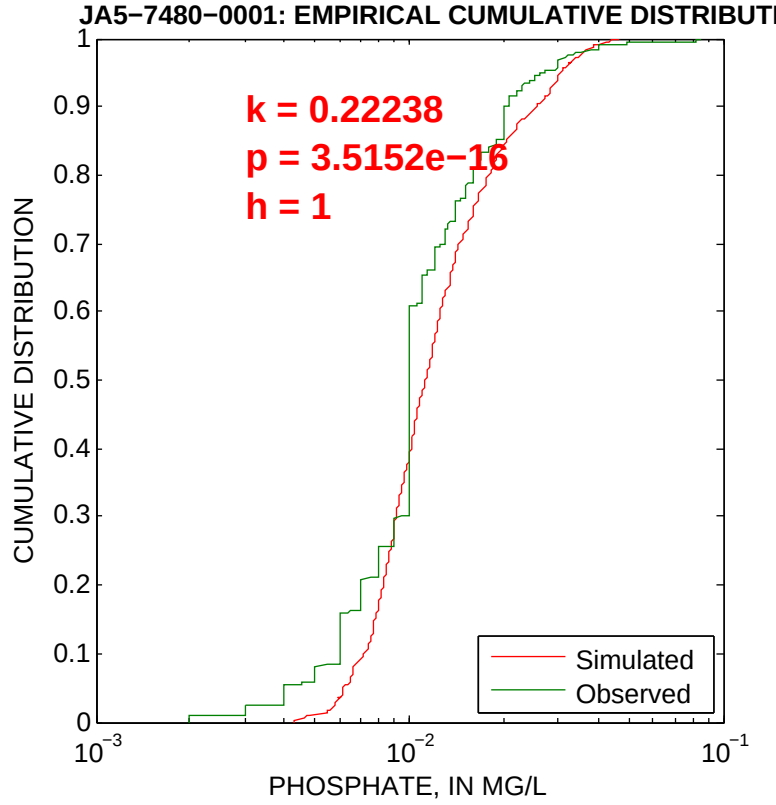












DATA SELECTION

scenario	file
P620171001WQ	PO4X.calib

plot: PO4X - phosphate

Dates: 1/1/1985 – 12/31/201

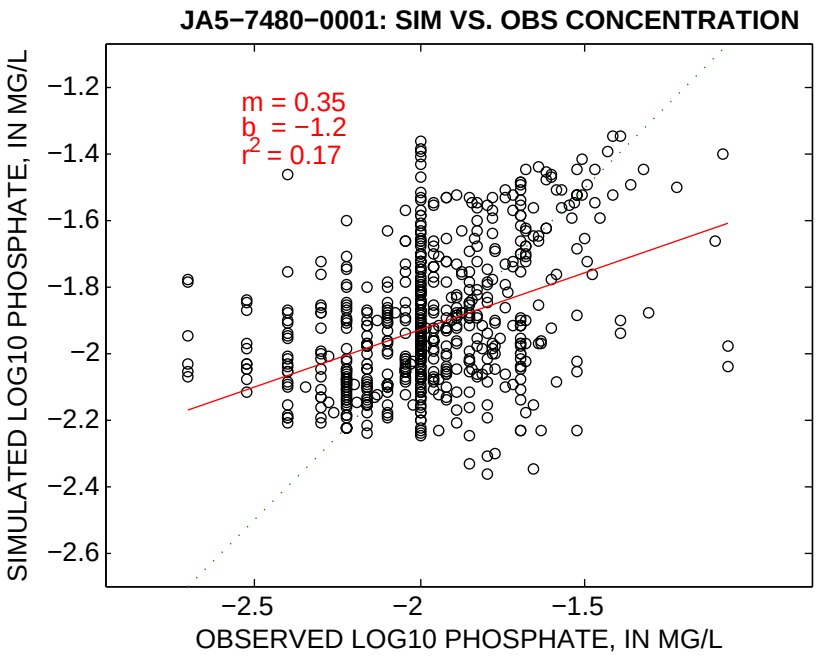
Drive: N/A | Directory: model | Observed: OBS20161101

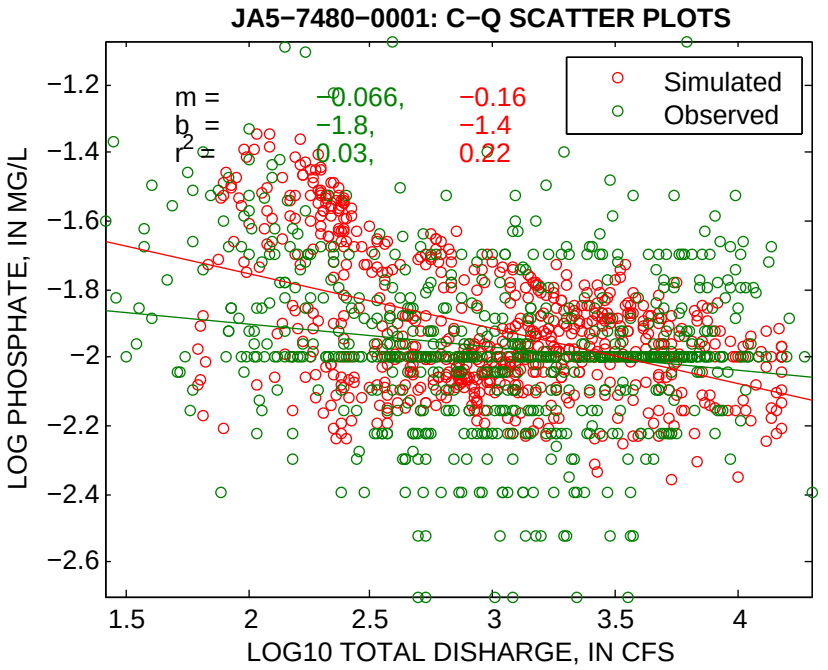
STATISTICS

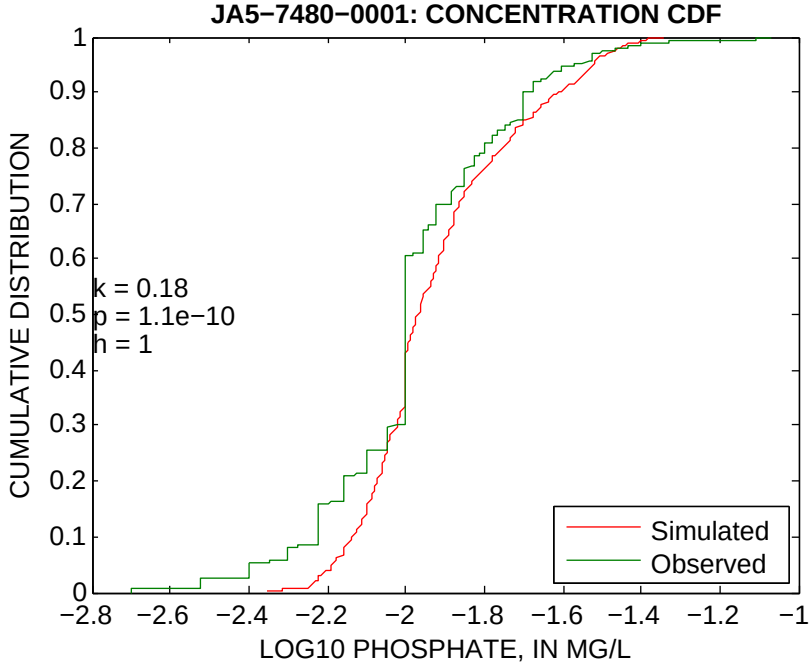
	n	observe	simulate
		724	724
min		0.002	0.0042681
		-2.69897	-2.36977
mean		0.012456	0.0137481
		-1.97224	-1.91412
media		0.01	0.011312
		-2	-1.94646
max		0.085	0.046504
		-1.07058	-1.33251
varian		7.55203e-0	5.76996e-0
		0.054658	0.0418712
JB		0.001	0.001
		0.001	0.001
		ra	log
%		10.3727	-2.94648
err.va		8.47034e-0	0.0696008
rel.std.err		1.1216	1.27339
mod.eff		-0.121598	-0.273389

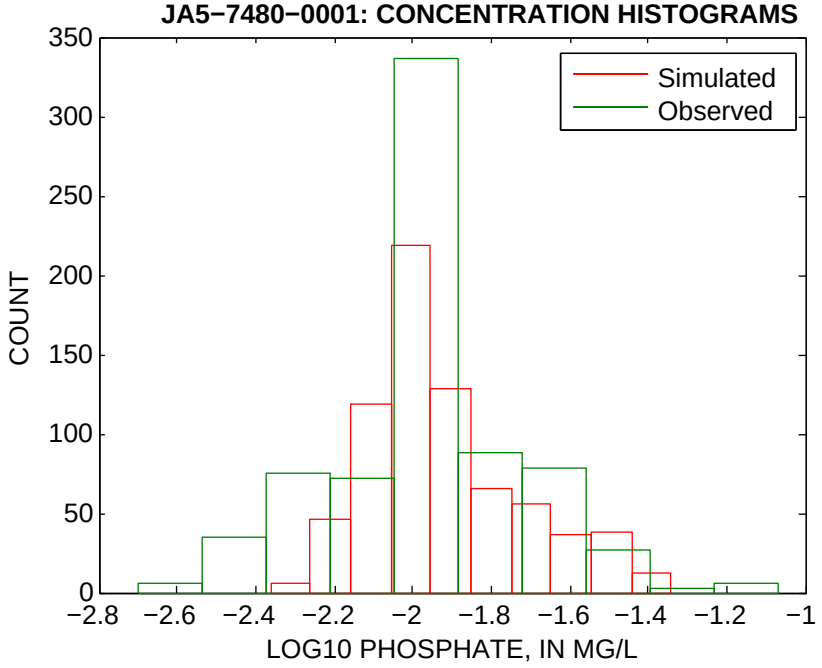
VERSION 2.1

ALL DATA
LOG10

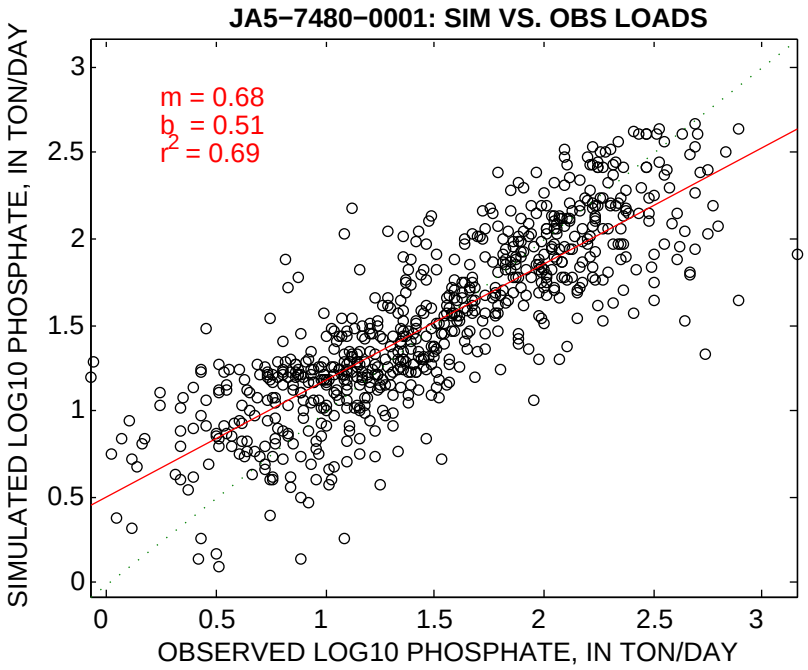


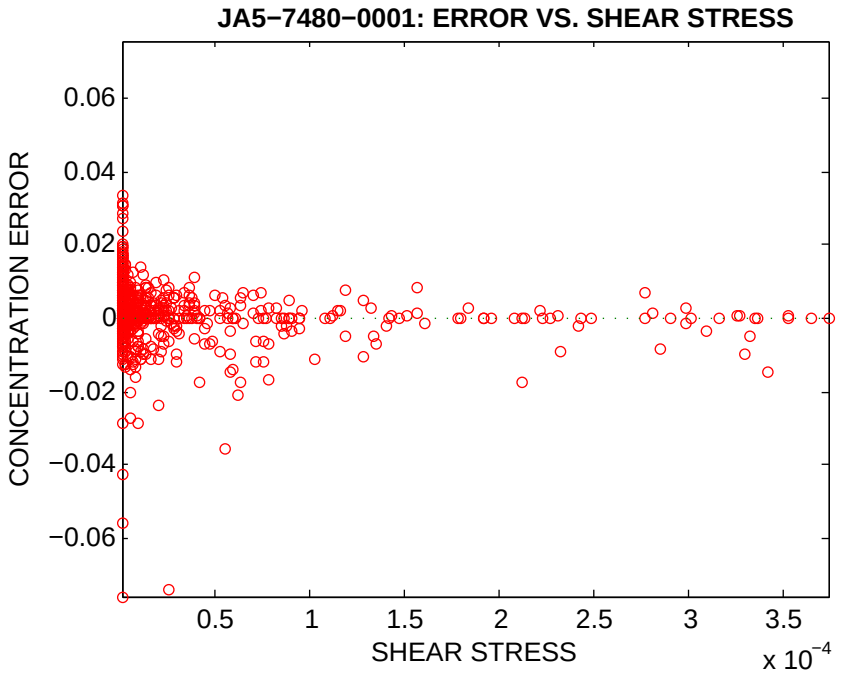


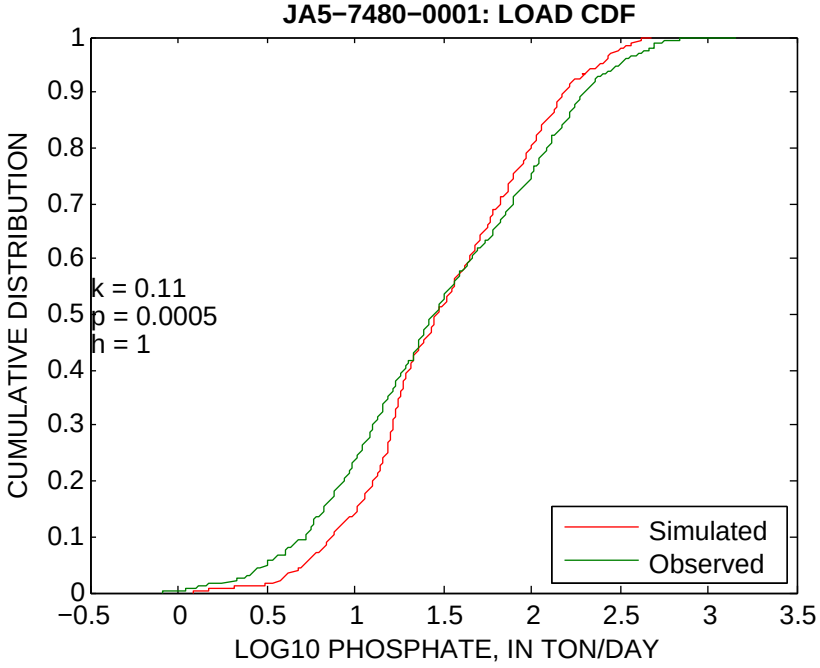


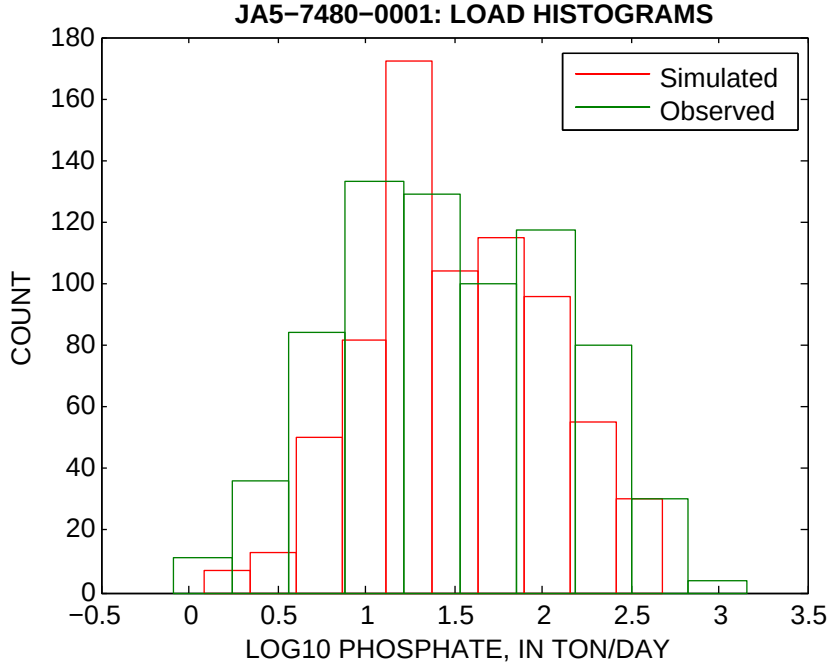


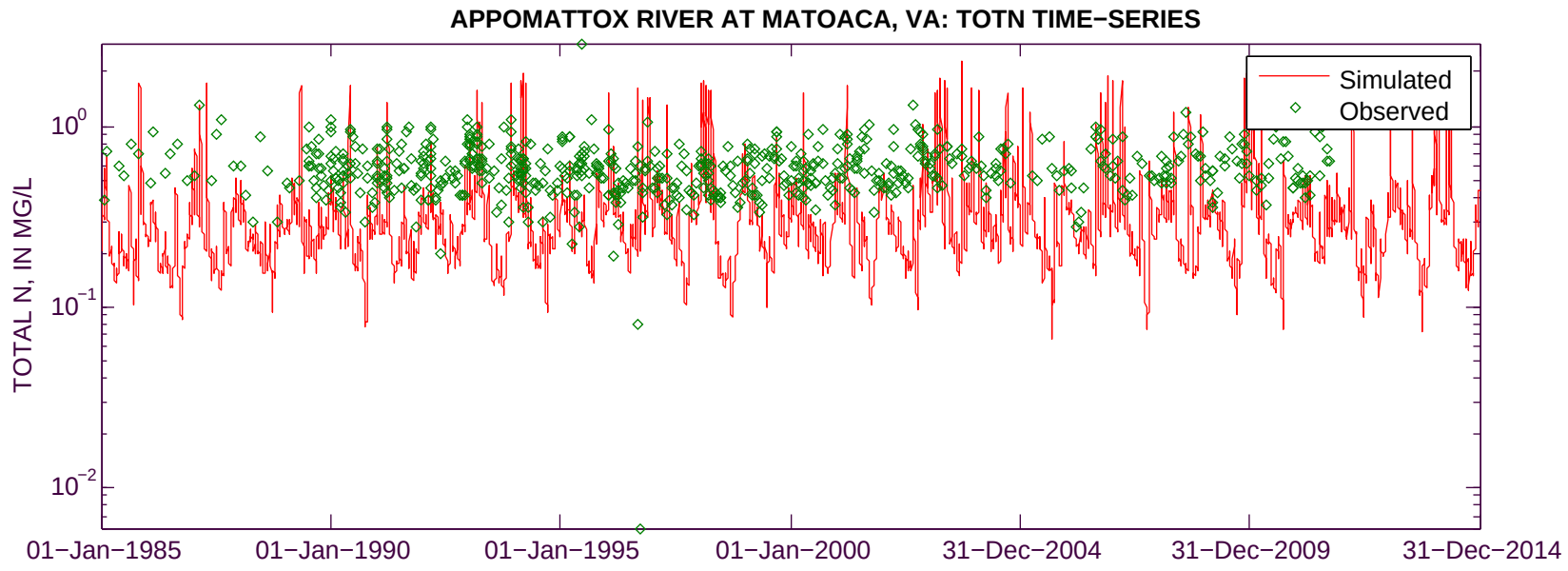
LOAD DATA
LOG10

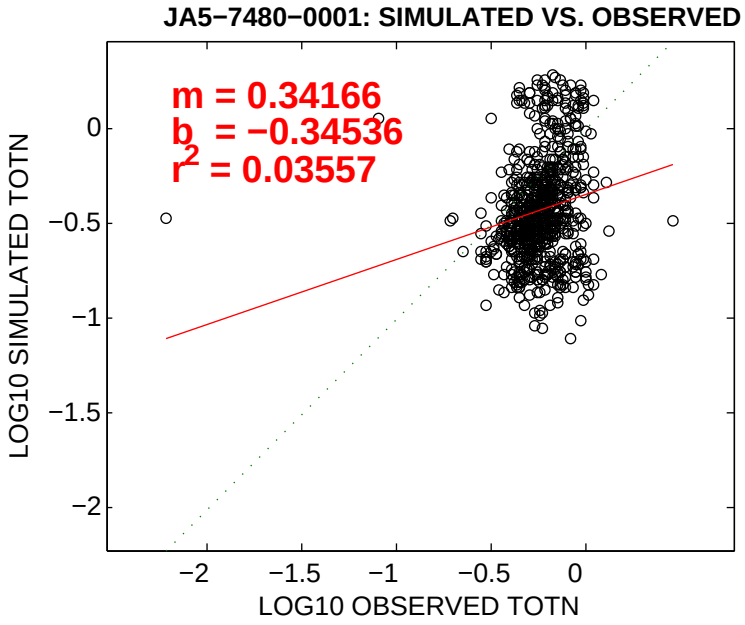


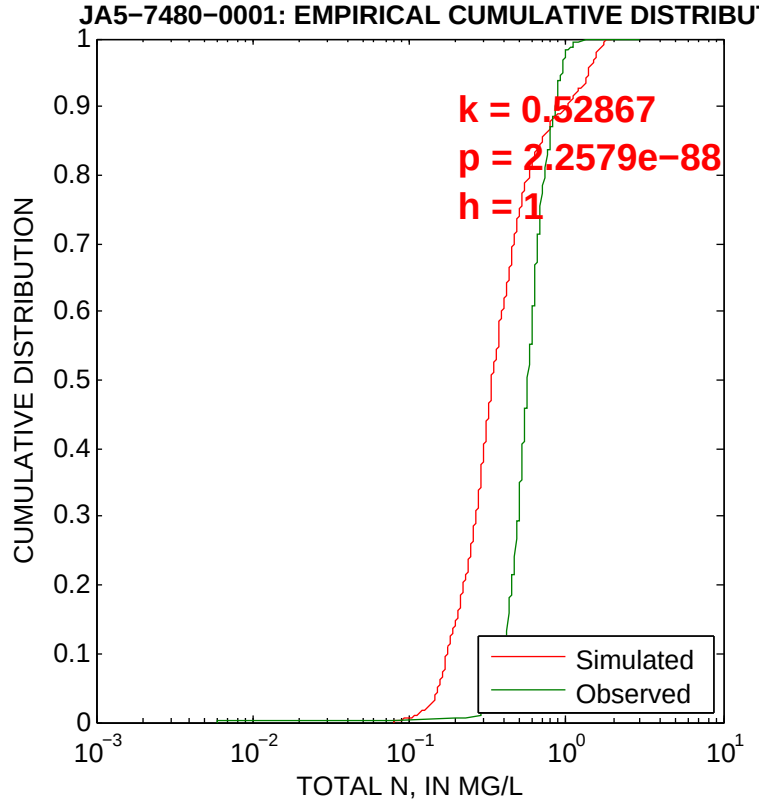












DATA SELECTION

scenario: P620171001WQ | file: TOTN.calib

plot: TOTN - total nitrogen

Dates: 1/1/1985 – 12/31/201

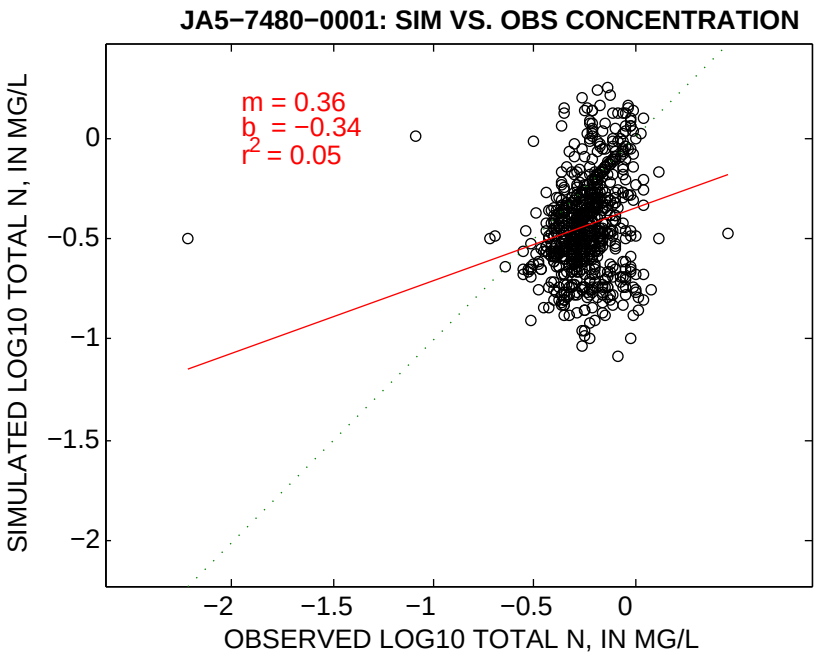
Drive: N/A | Directory: model | Observed: OBS20161101

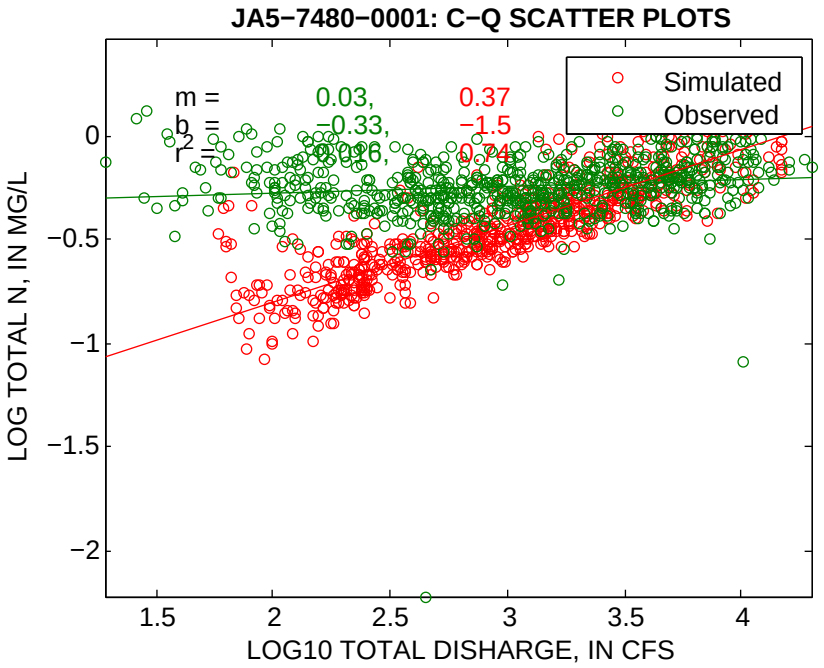
STATISTICS

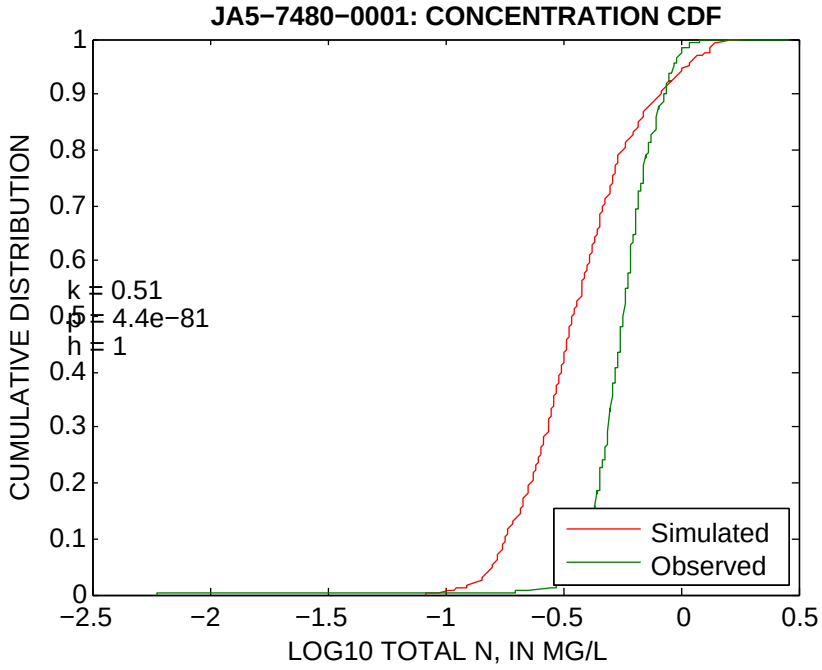
n	715	715
	observe	simulate
min	0.006	0.079071
	-2.22185	-1.10198
mean	0.60152	0.464223
	-0.242606	-0.428249
media	0.57	0.3381
	-0.244125	-0.470955
max	2.9	1.9432
	0.462398	0.288518
varian	0.0383918	0.131158
	0.0225945	0.0741476
JB	0.001	0.001
	0.001	0.001
	ra	log
%	-22.8249	76.5203
err.va	0.158822	0.115815
rel.std.err	4.13687	5.12579
mod.eff	-3.13687	-4.12579

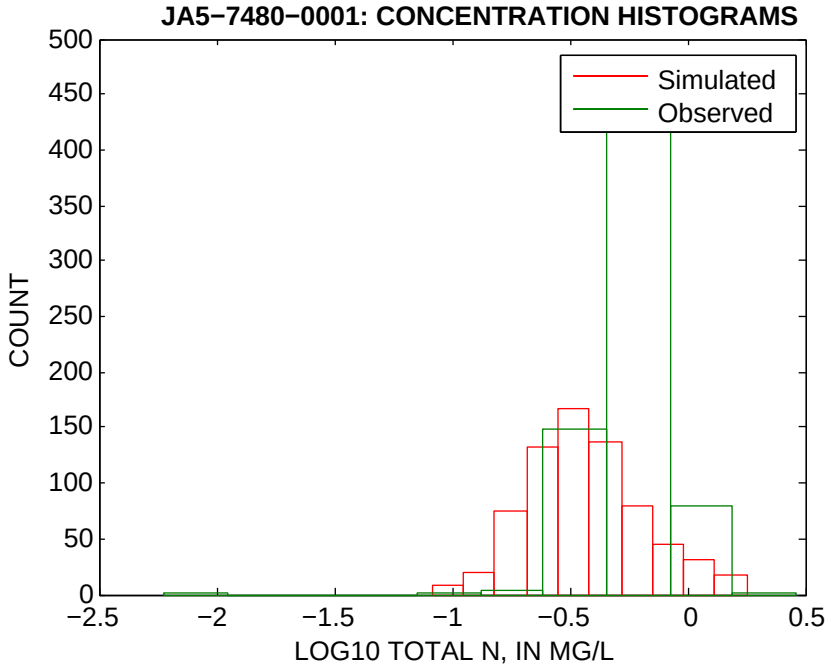
VERSION 2.1

ALL DATA
LOG10

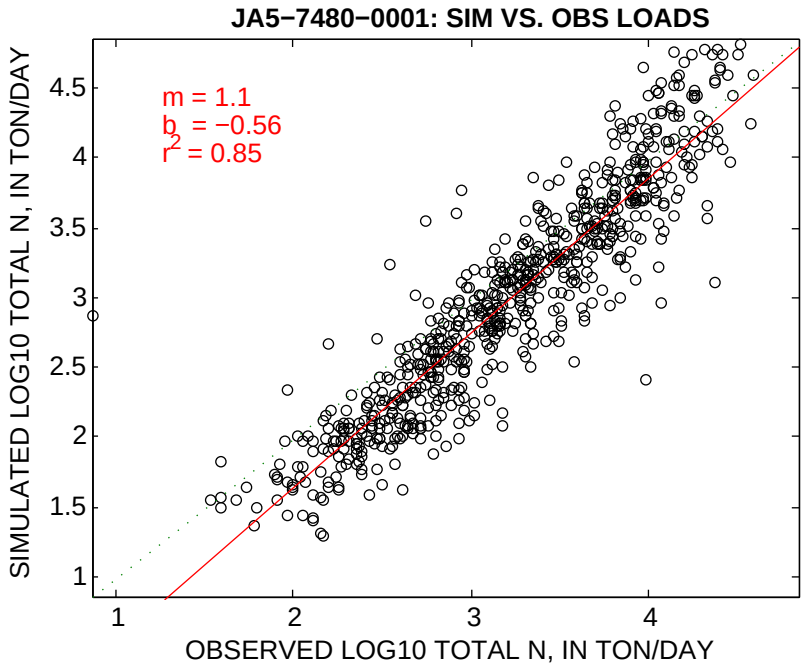


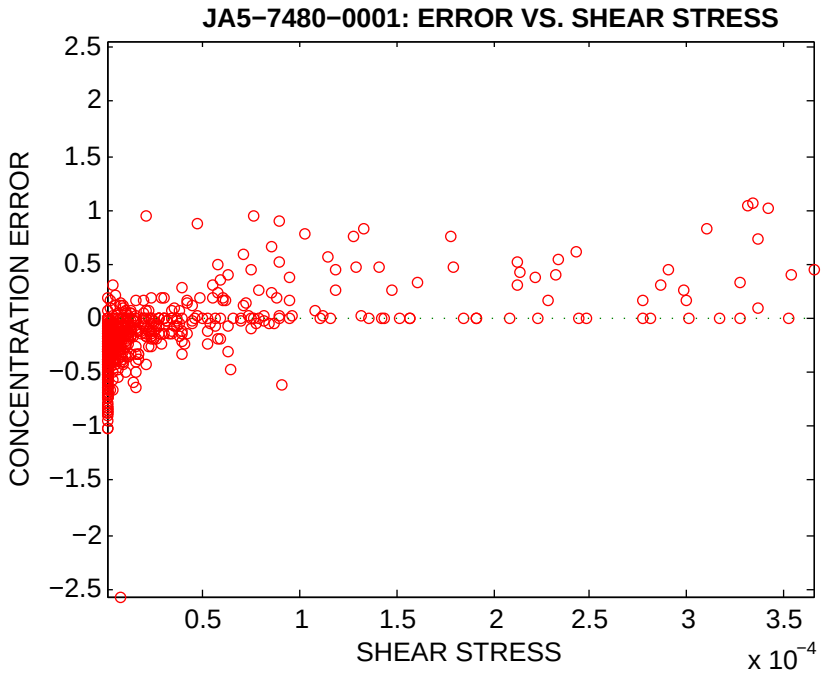


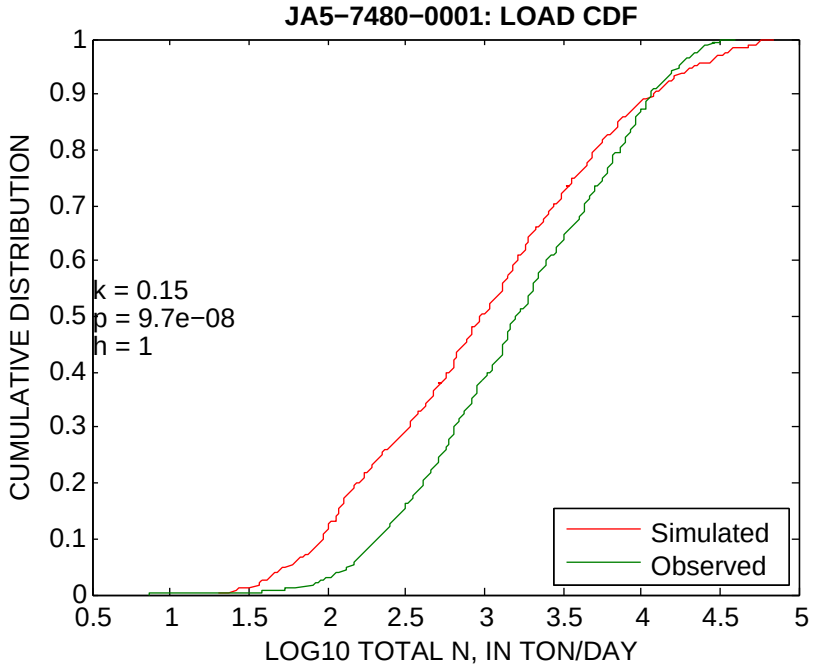


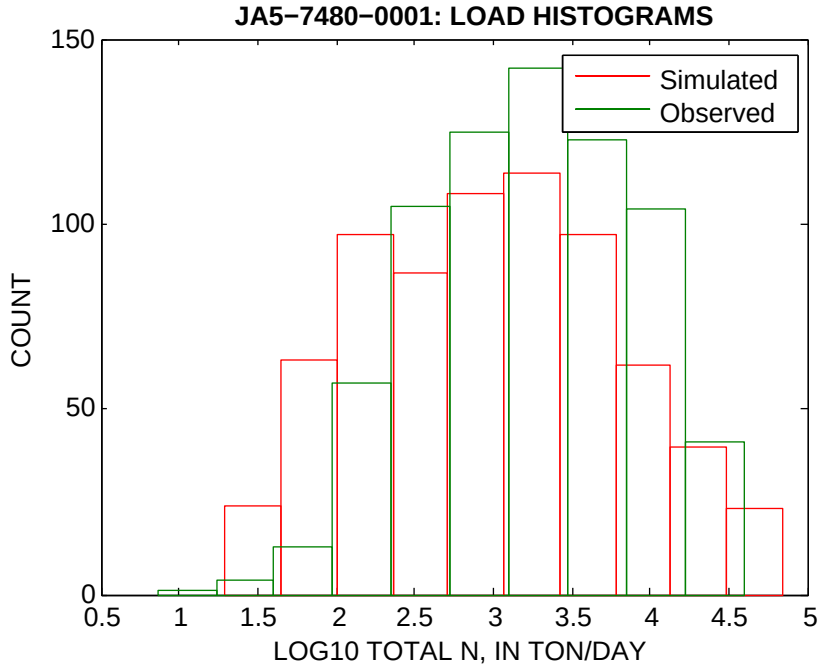


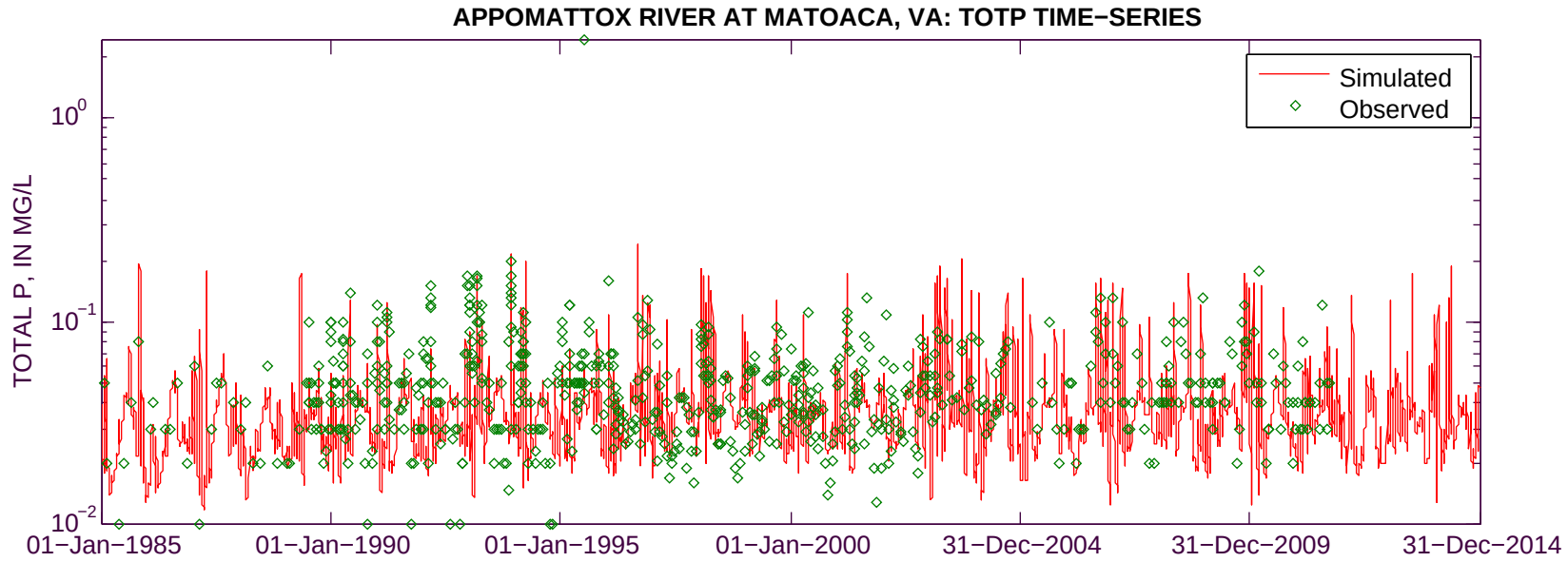
LOAD DATA
LOG10

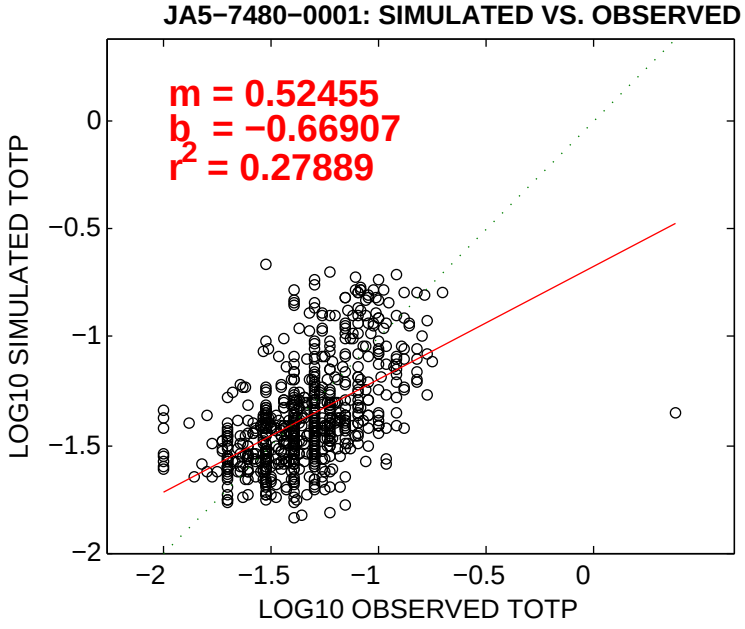


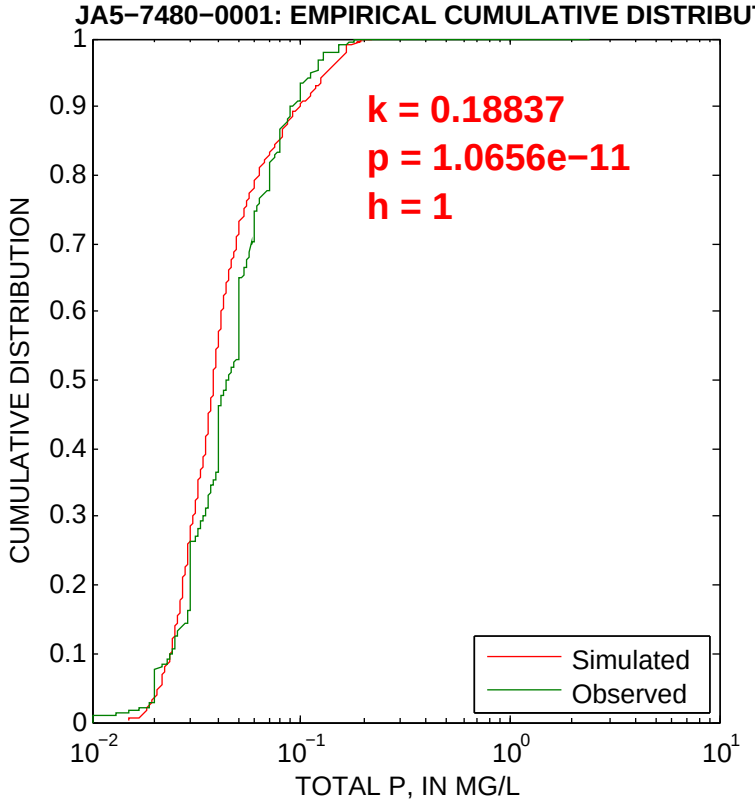












DATA SELECTION

scenario: P620171001WQ | file: TOTP.calib

plot: TOTP - total phosphorus

Dates: 1/1/1985 – 12/31/201

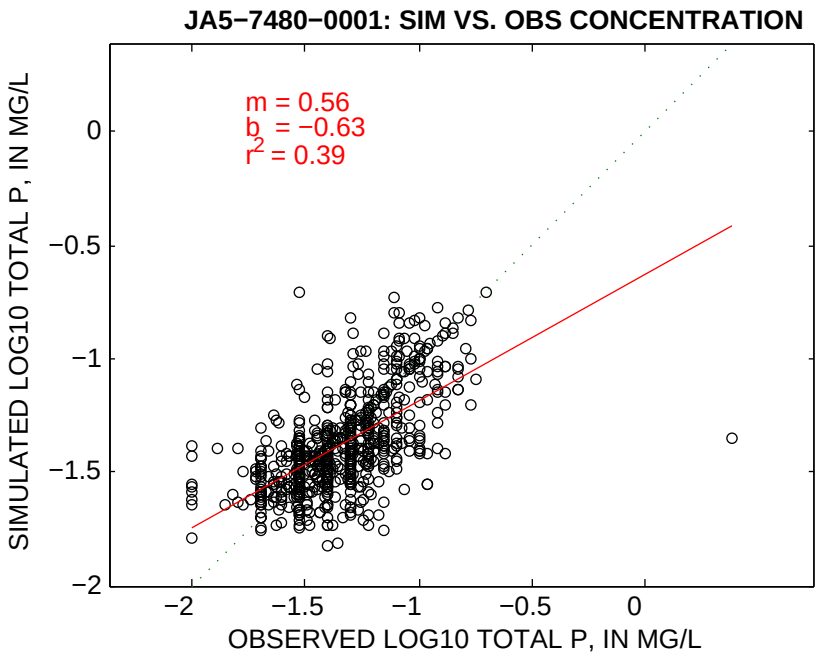
Drive: N/A | Directory: model | Observed: OBS20161101

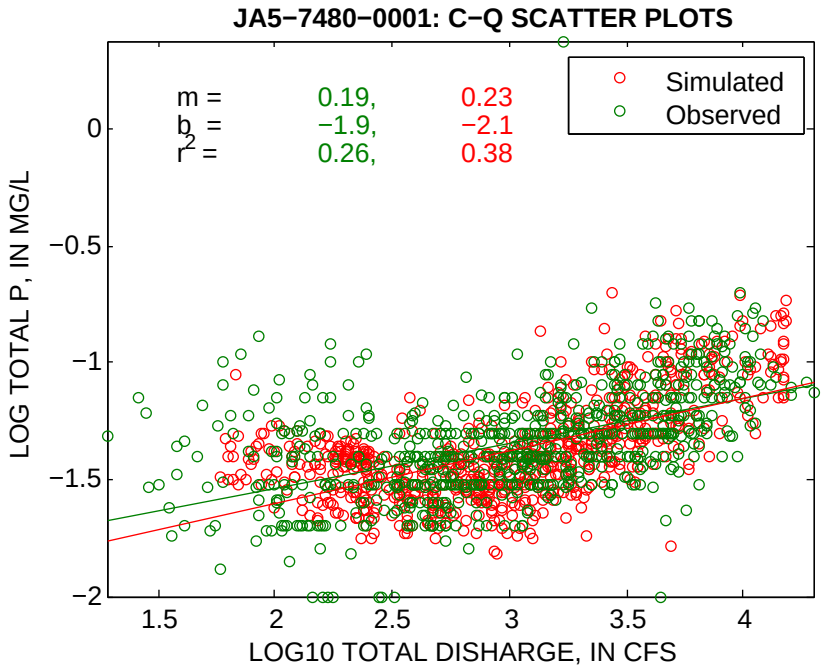
STATISTICS

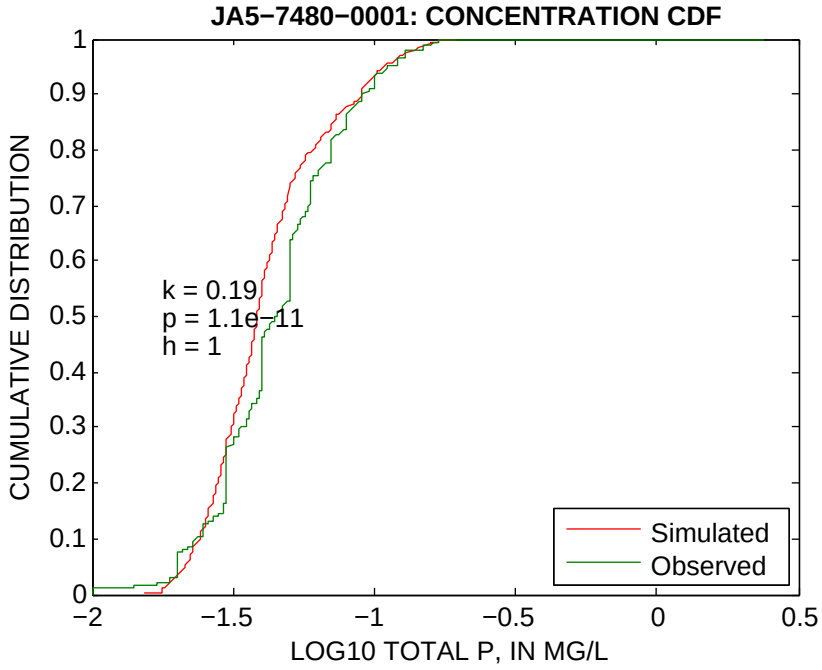
		observe	simulate
n		722	722
min		0.01	0.014568
		-2	-1.8366
mean		0.0553453	0.0501346
		-1.34038	-1.37217
media		0.045	0.0383815
		-1.34679	-1.41588
max		2.4	0.21632
		0.380211	-0.664903
varian		0.00849435	0.00120458
		0.0552794	0.0545385
JB		0.001	0.001
		0.001	0.001
		ra	log
%		-9.41489	2.37184
err.va		0.00871576	0.052836
rel.std.err		1.02607	0.955799
mod.eff		-0.0260651	0.0442008

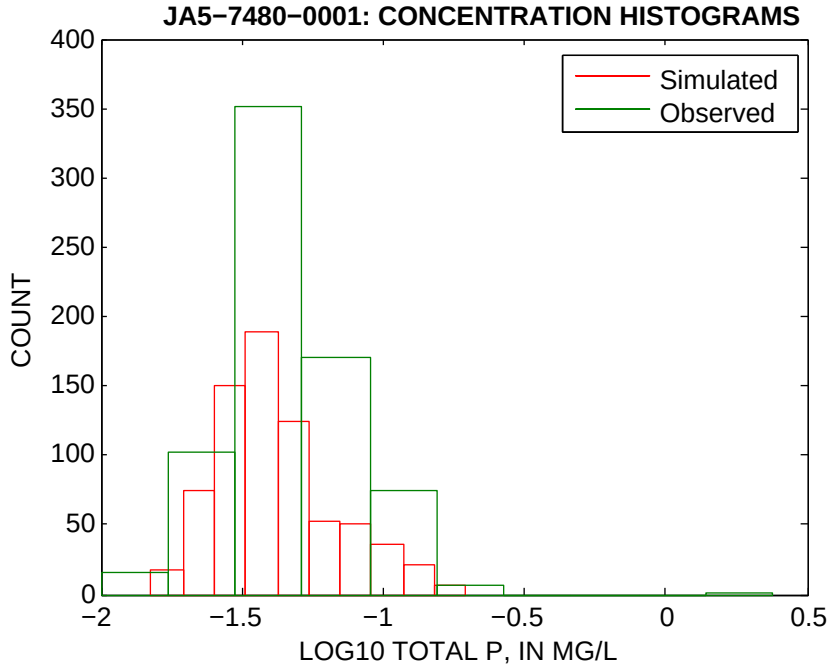
VERSION 2.1

ALL DATA
LOG10

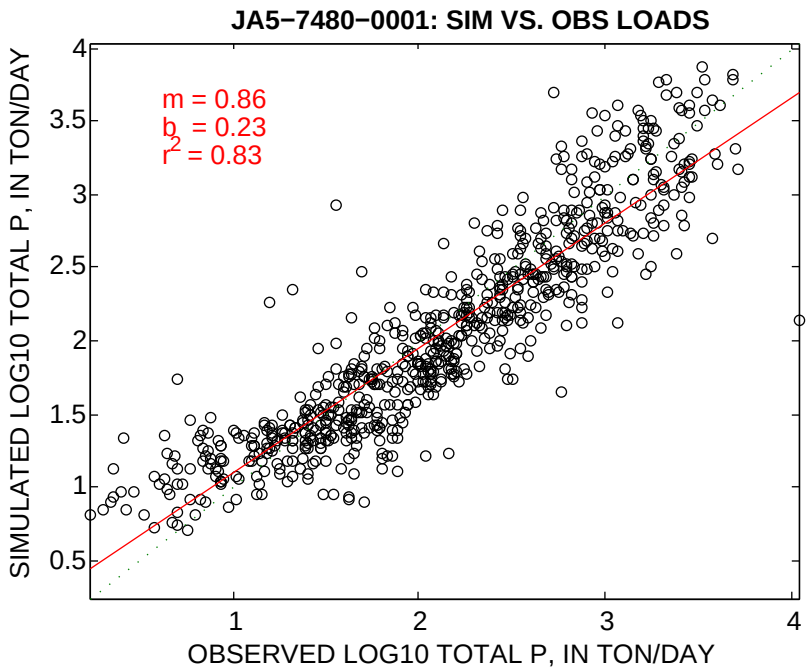




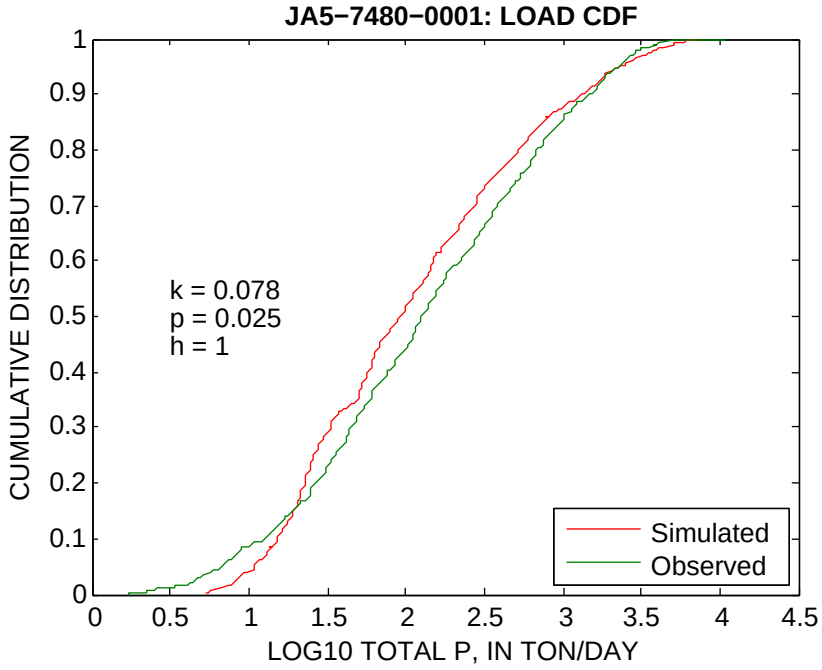


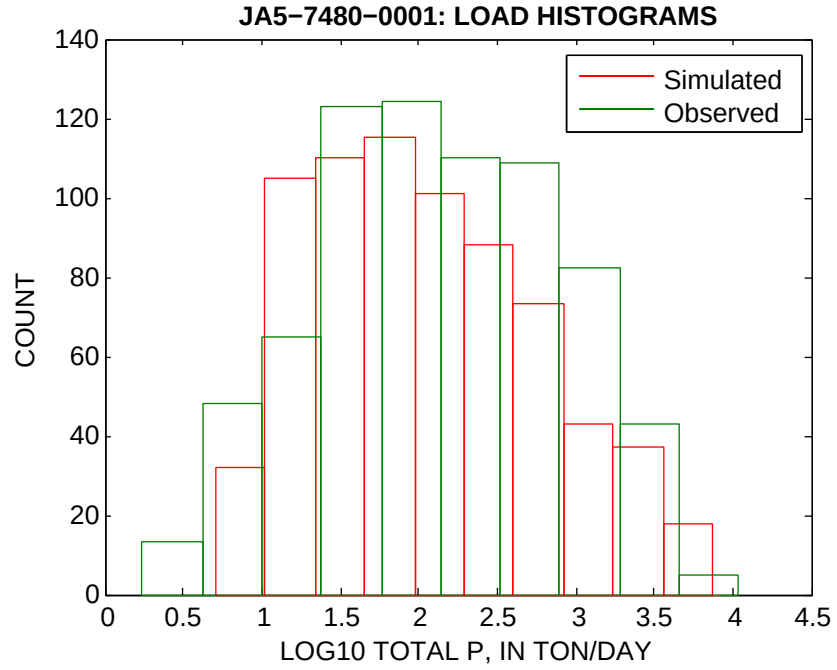


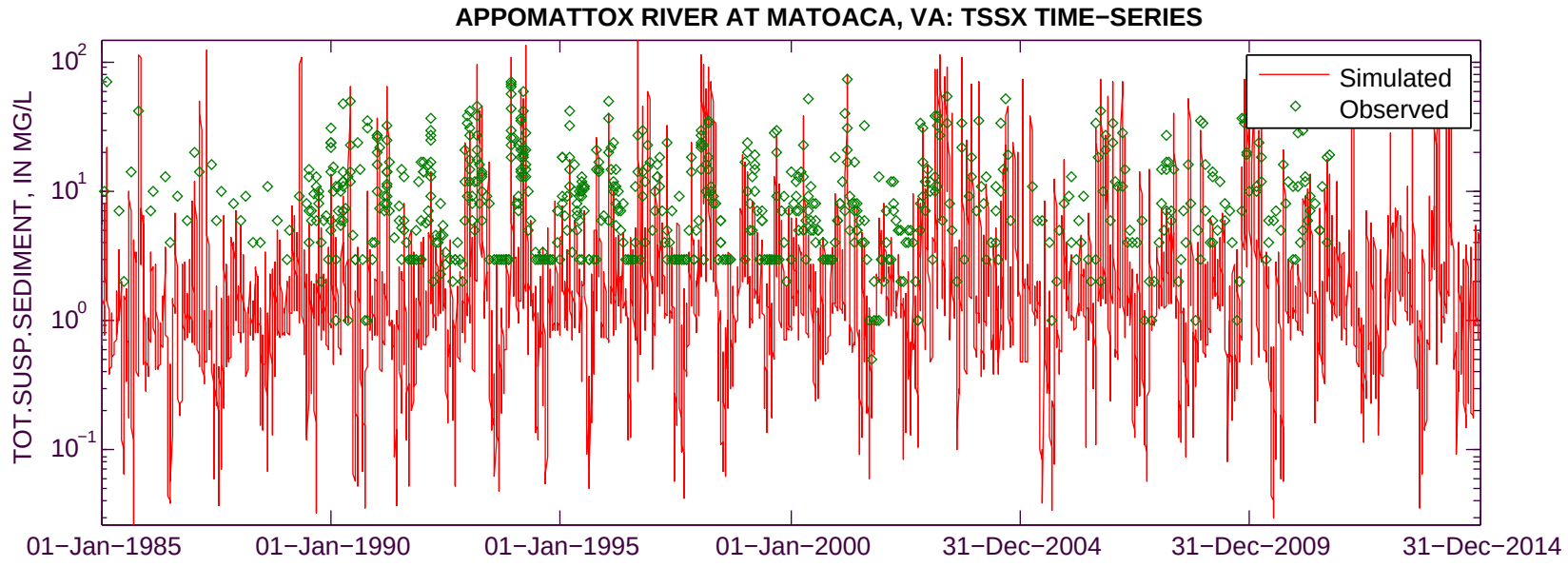
LOAD DATA
LOG10

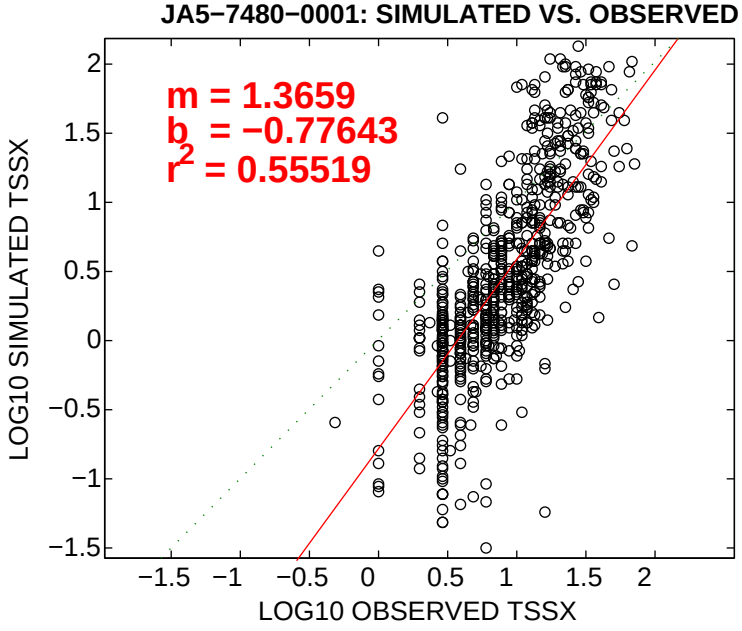


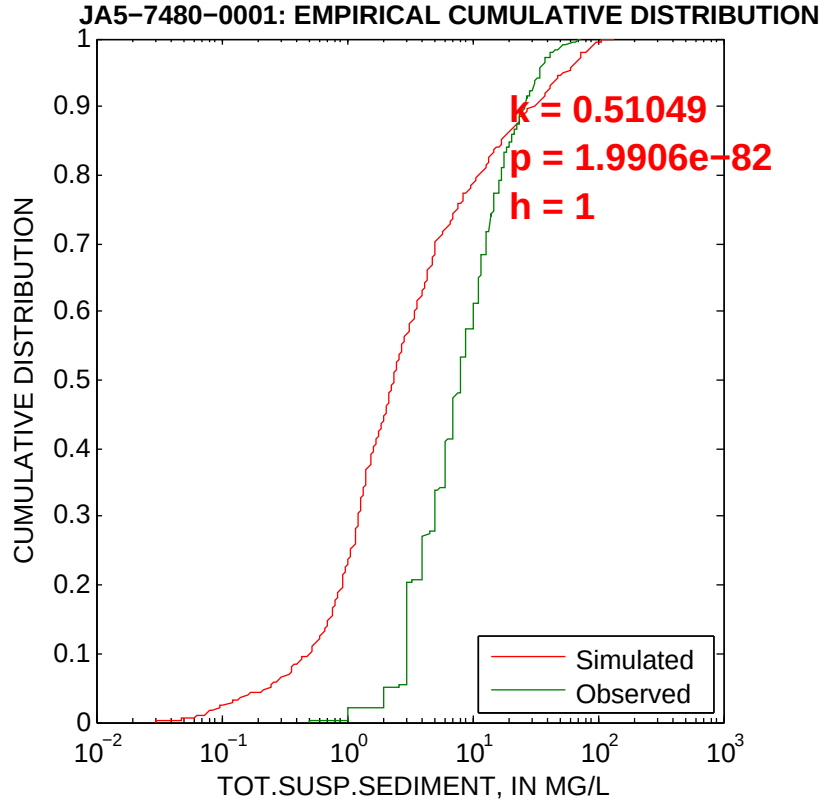












DATA SELECTION

scenario: P620171001WQ | file: TSSX.calib

plot: TSSX - total suspended ...

Dates: 1/1/1985 – 12/31/201

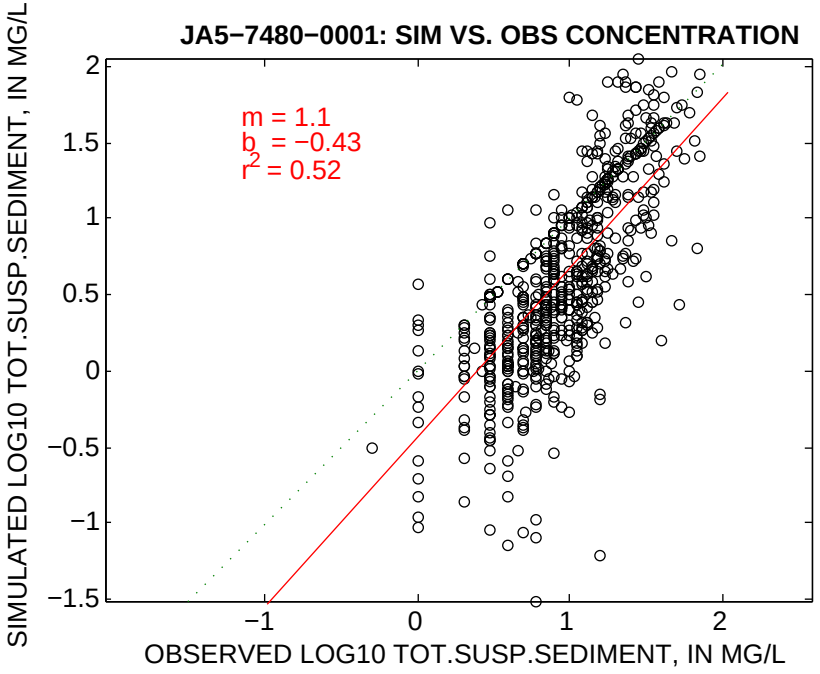
Drive: N/A | Directory: model | Observed: OBS20161101

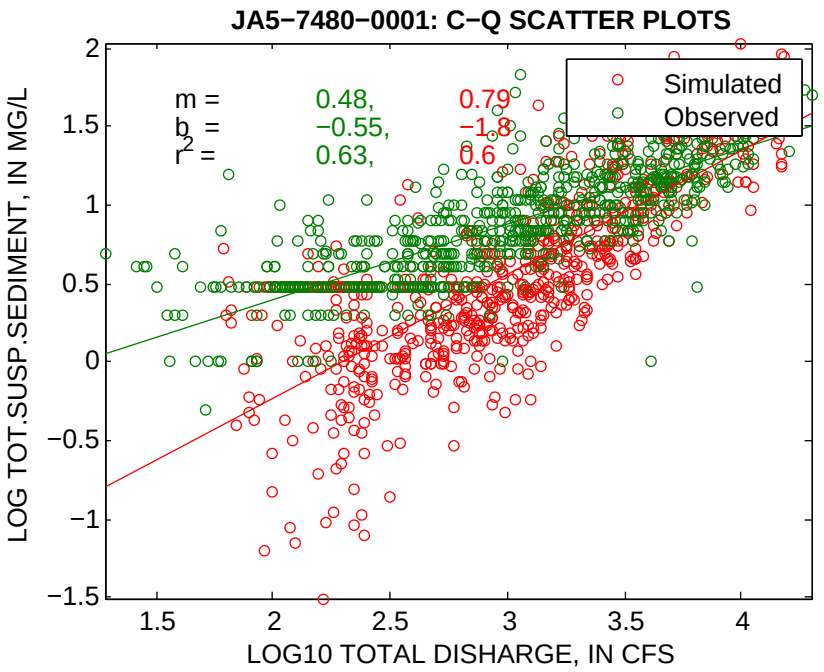
STATISTICS

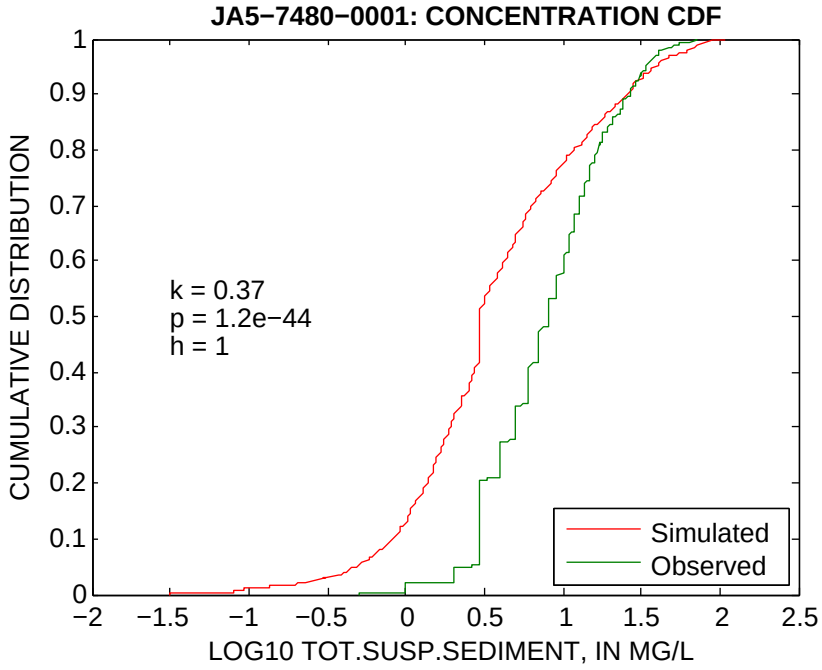
n	715	715
	observe	simulate
min	0.5	0.030779
	-0.30103	-1.51175
mean	11.6242	9.98899
	0.90626	0.461403
media	8	2.3952
	0.90309	0.379342
max	72	134.88
	1.85733	2.12995
varian	121.794	370.393
	0.140507	0.472145
JB	0.001	0.001
	0.227801	0.136463
	ra	log
%	-14.0671	-49.0871
err.va	238.877	0.426997
rel.std.err	1.96133	3.03897
mod.eff	-0.961329	-2.03897

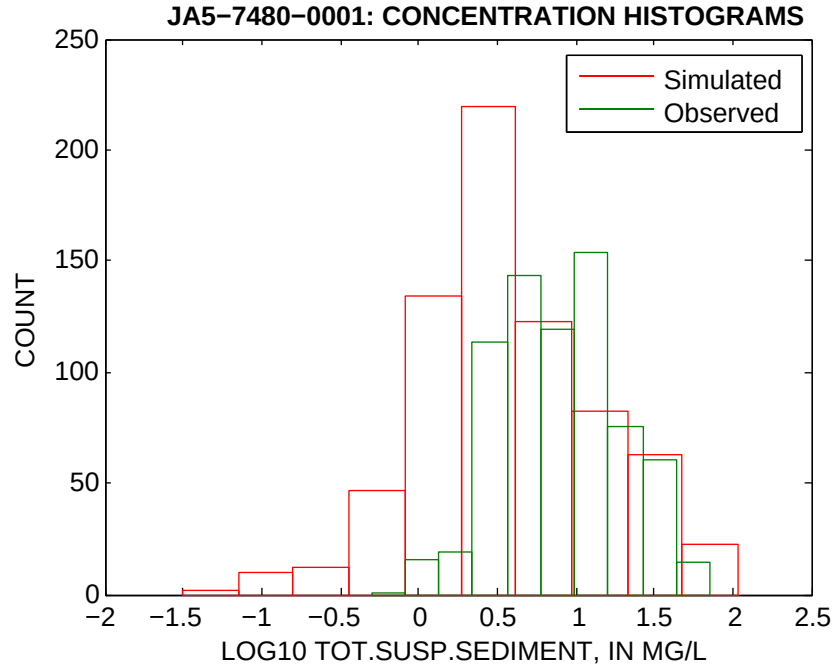
VERSION 2.1

ALL DATA
LOG10

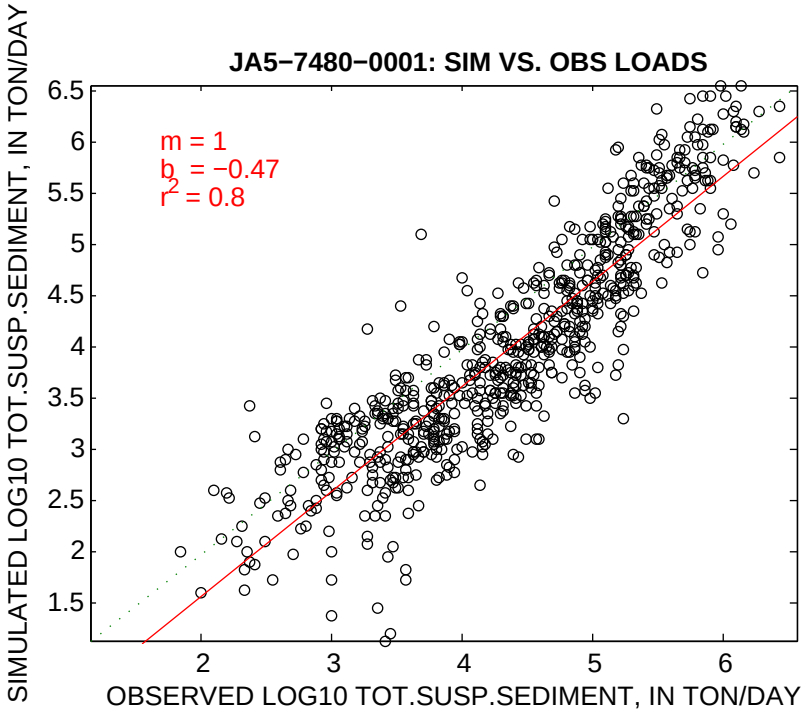


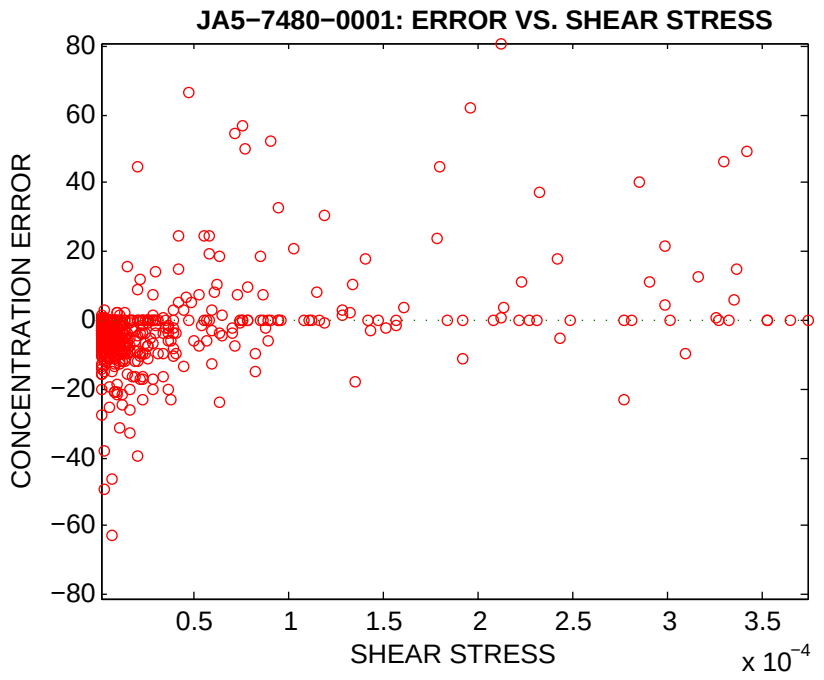


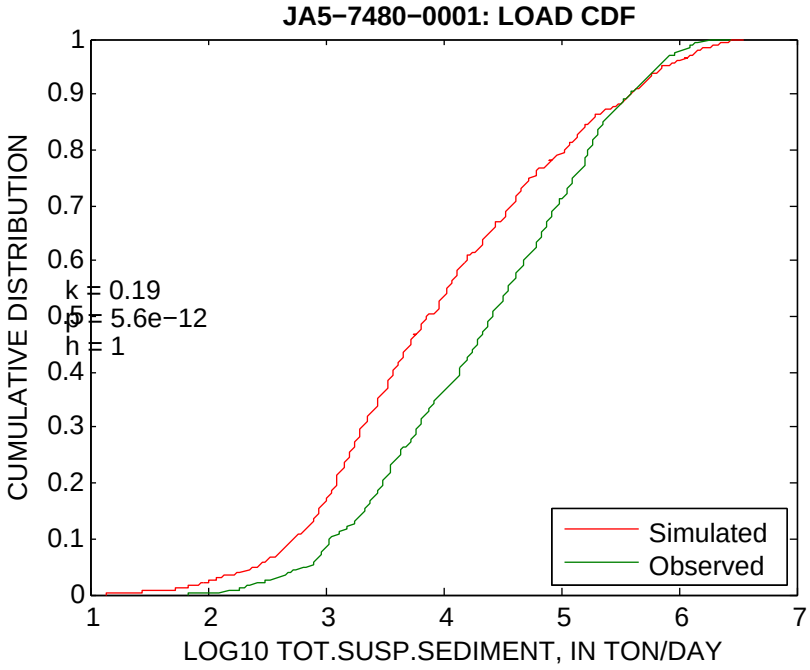


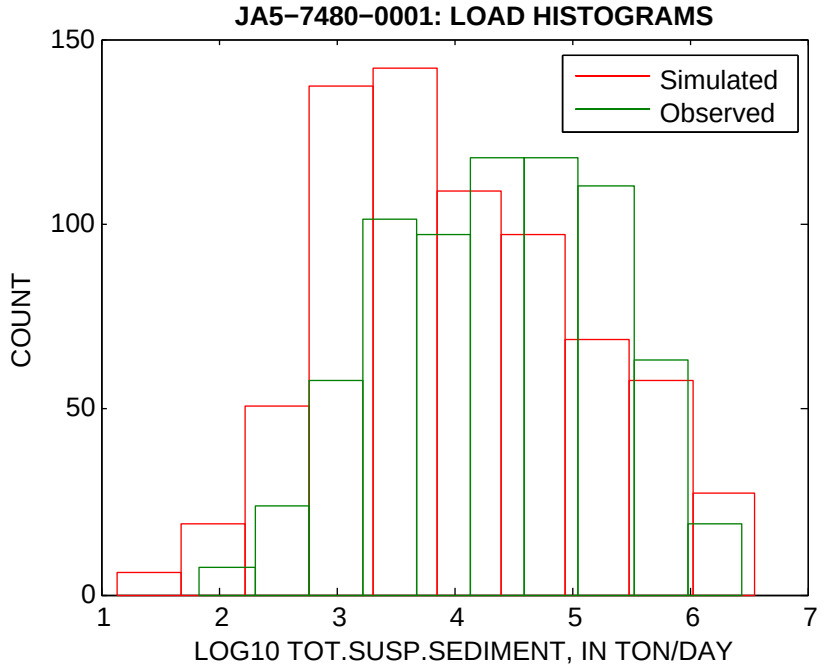


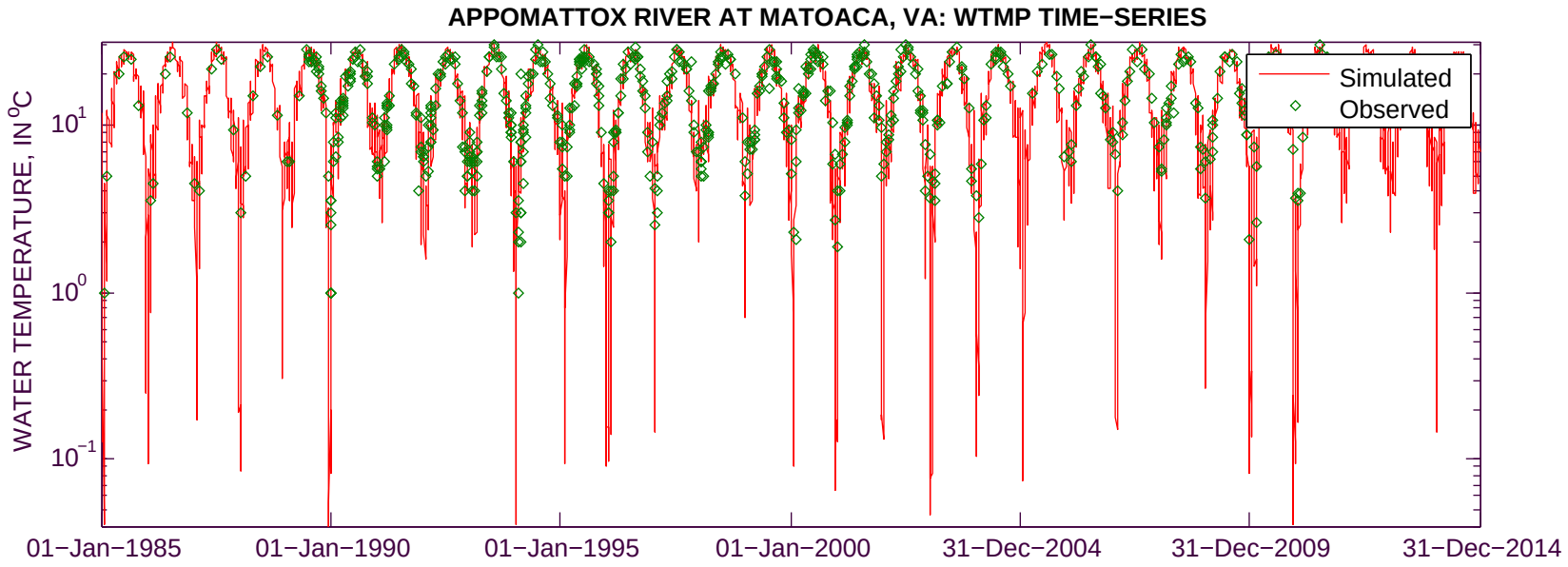
LOAD DATA
LOG10

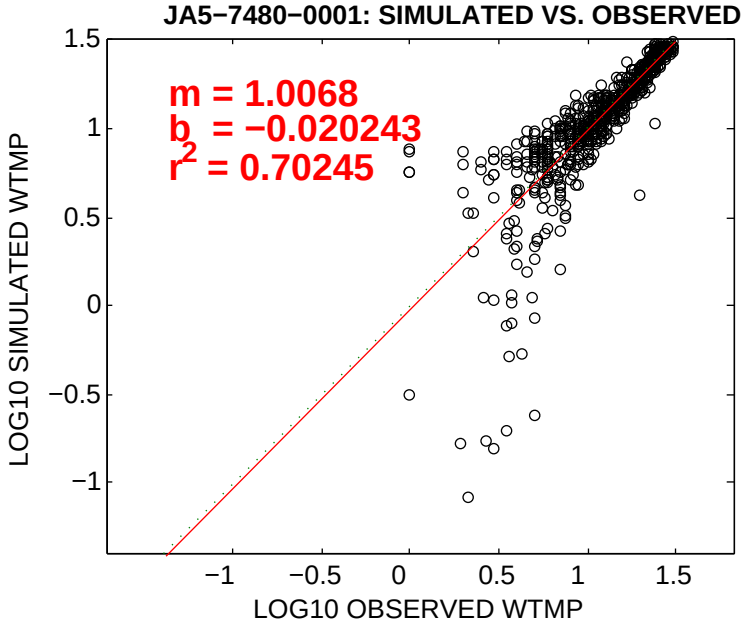


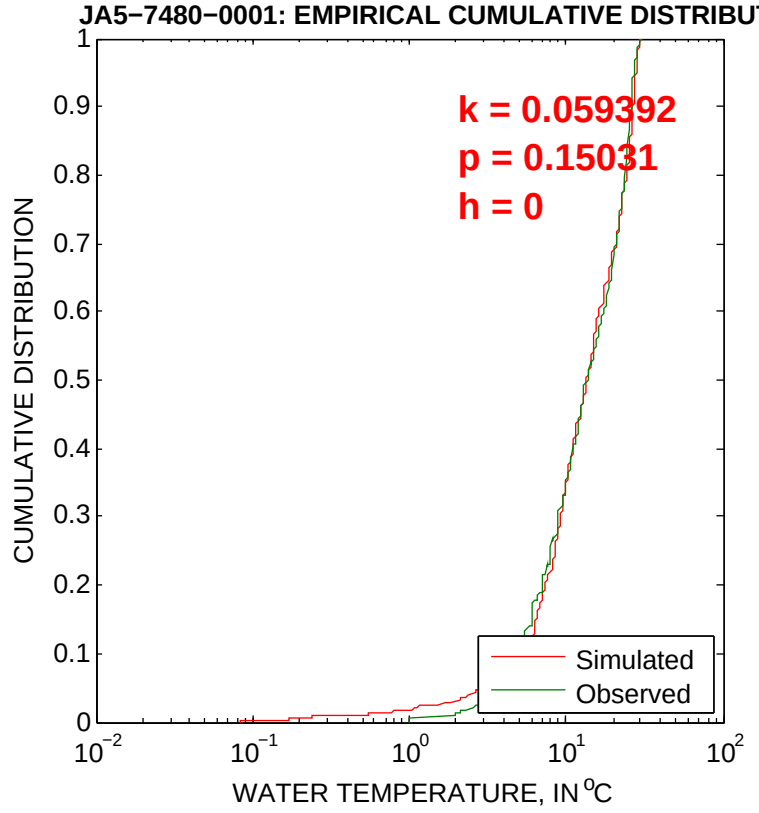












DATA SELECTION

scenario	file
P620171001WQ	WTMP.calib

plot: WTMP - water tempera...

Dates: 1/1/1985 – 12/31/201

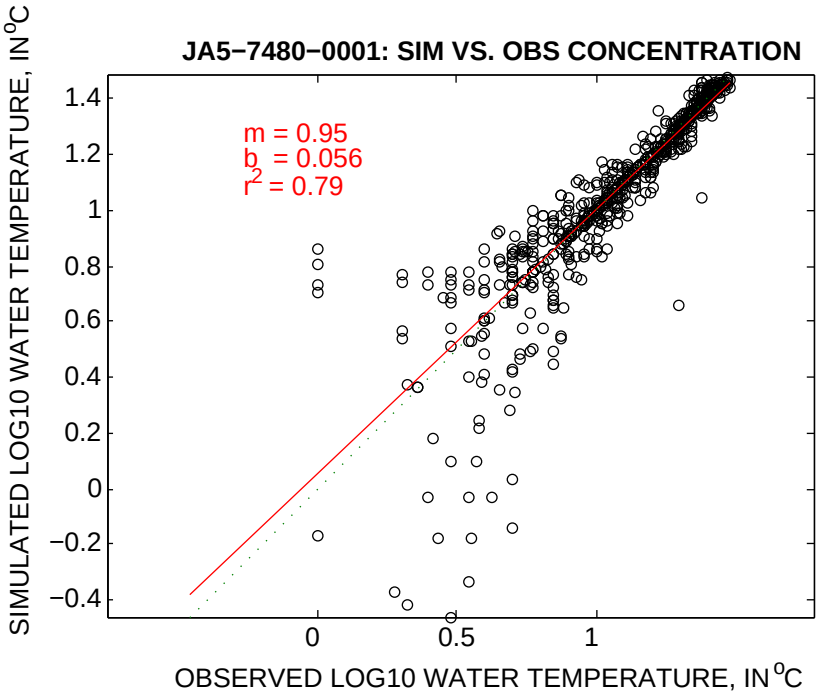
Drive	Directory	Observed
N/A	model	OBS20161101

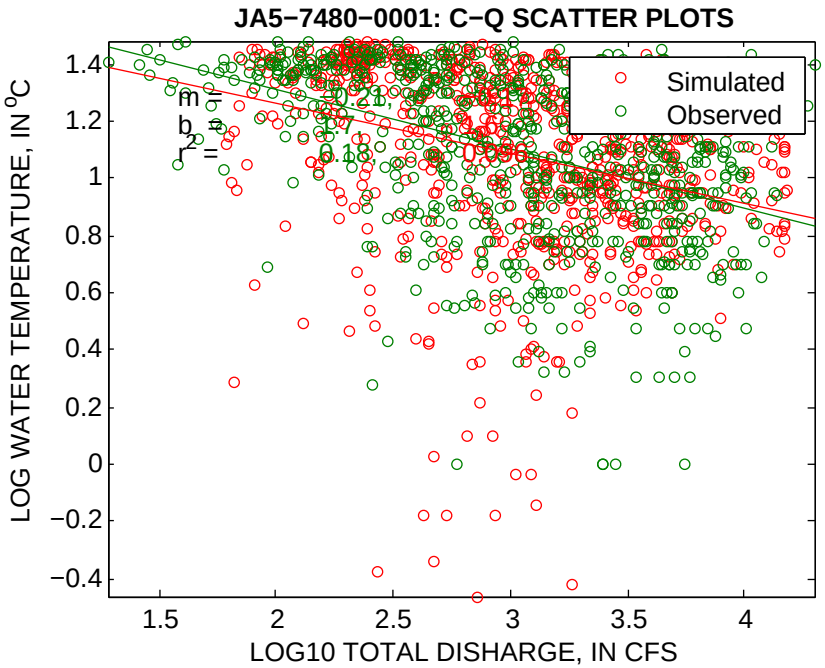
STATISTICS

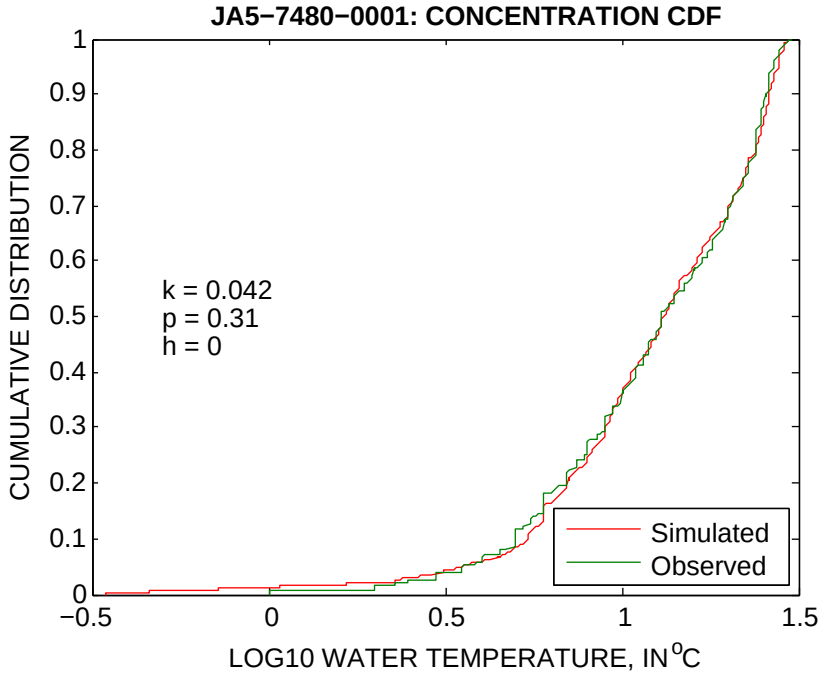
	n	724	724
		observe	simulate
min		1	0.082935
		0	-1.08126
mean		14.9311	14.9955
		1.09386	1.08107
media		13.65	13.6025
		1.13513	1.13362
max		30.4	30.679
		1.48287	1.48684
varian		62.5169	65.5153
		0.0844636	0.121883
JB		0.001	0.001
		0.001	0.001
		ra	log
%		0.431759	-1.17006
err.va		5.45199	0.036434
rel.std.err		0.0872083	0.431357
mod.eff		0.912792	0.568643

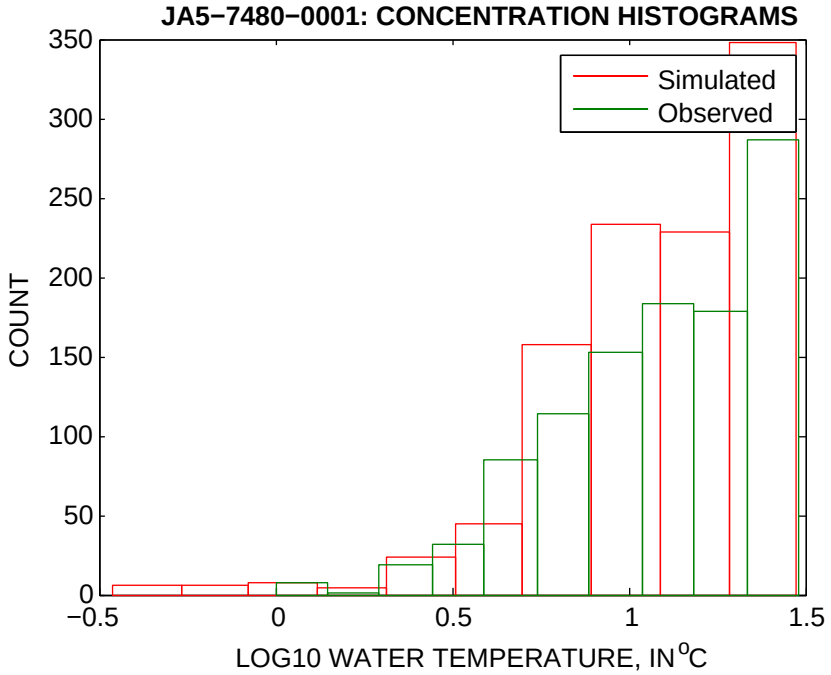
VERSION 2.1

ALL DATA
LOG10

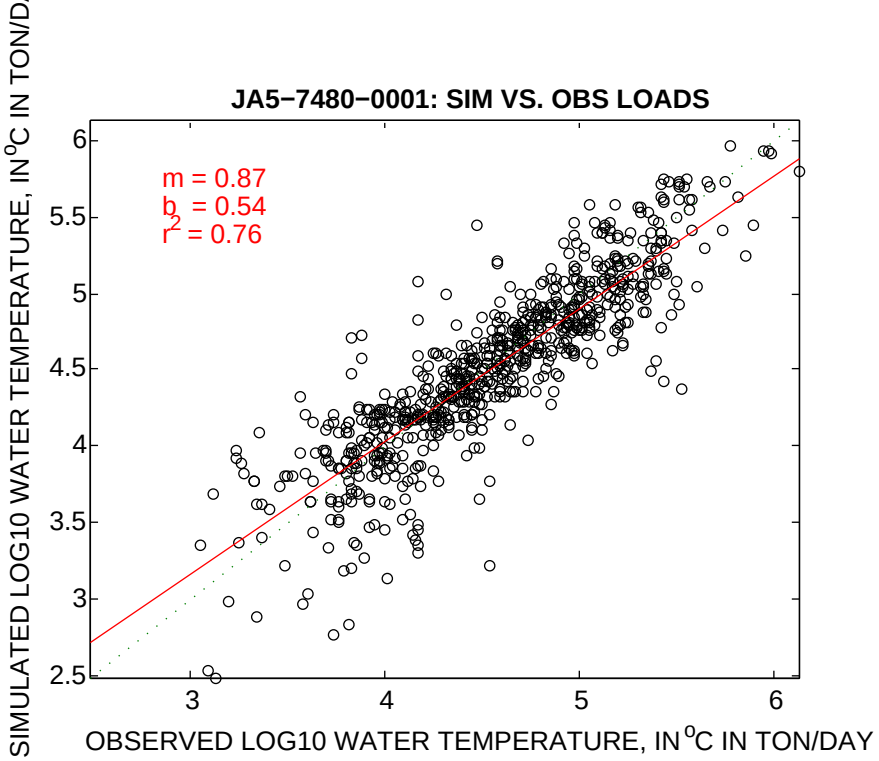


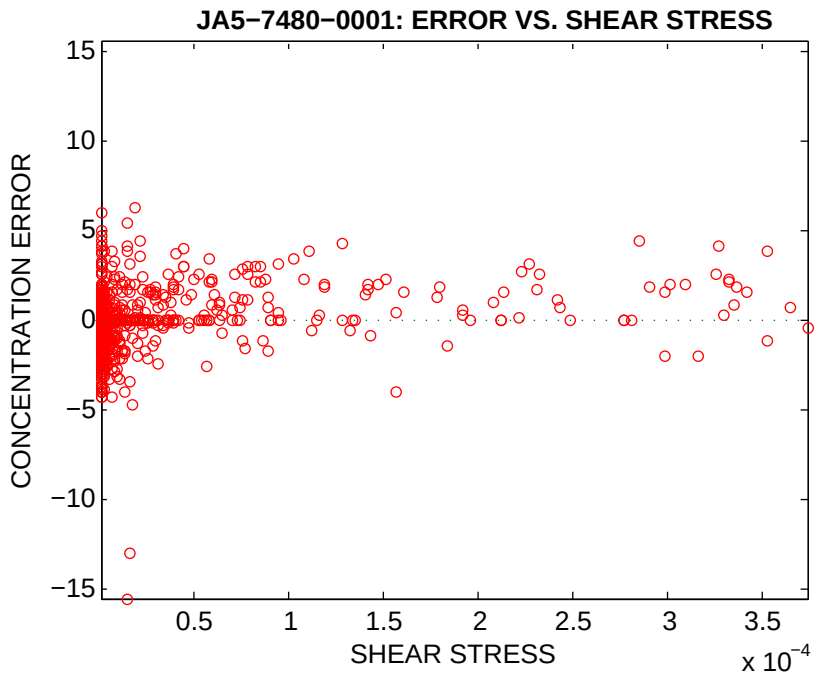


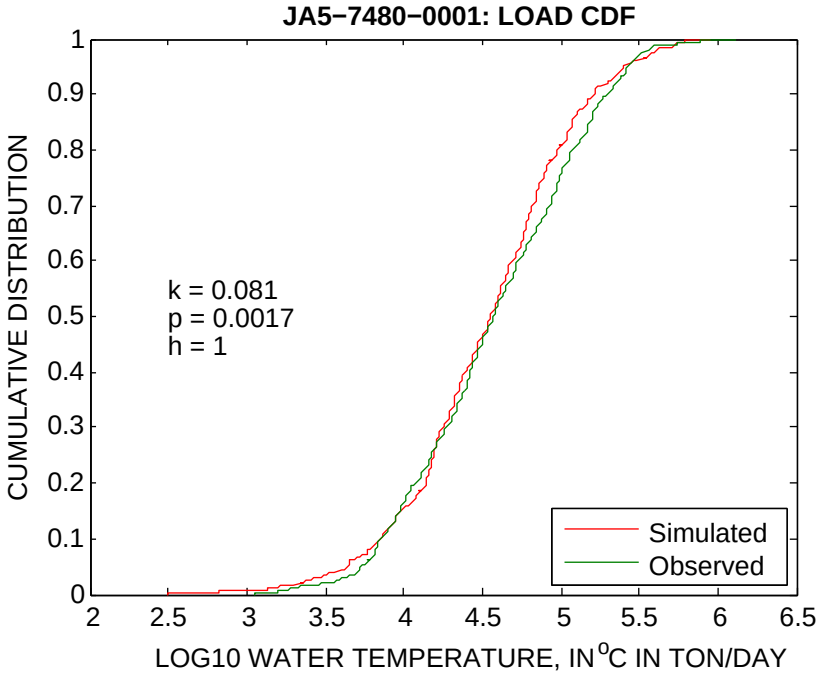


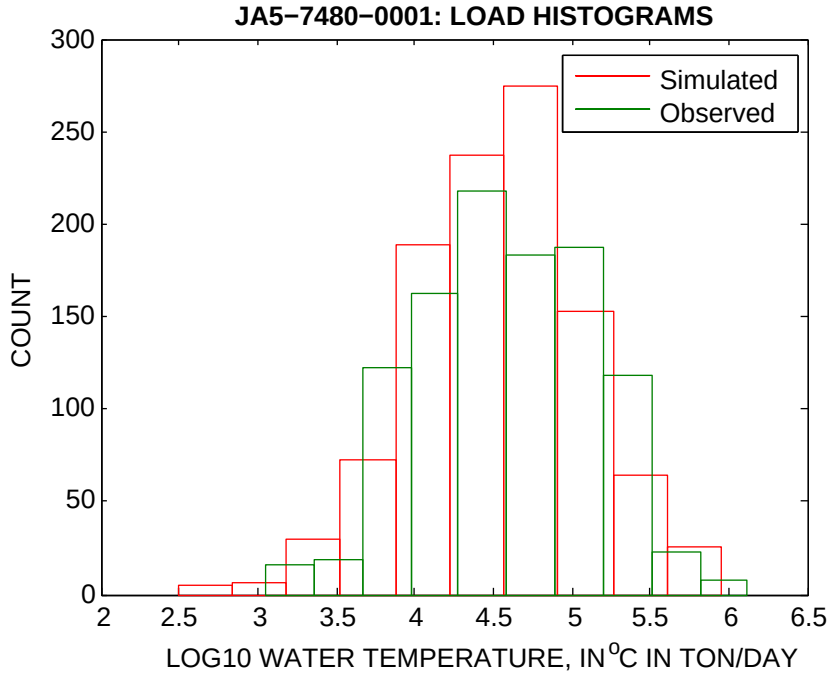


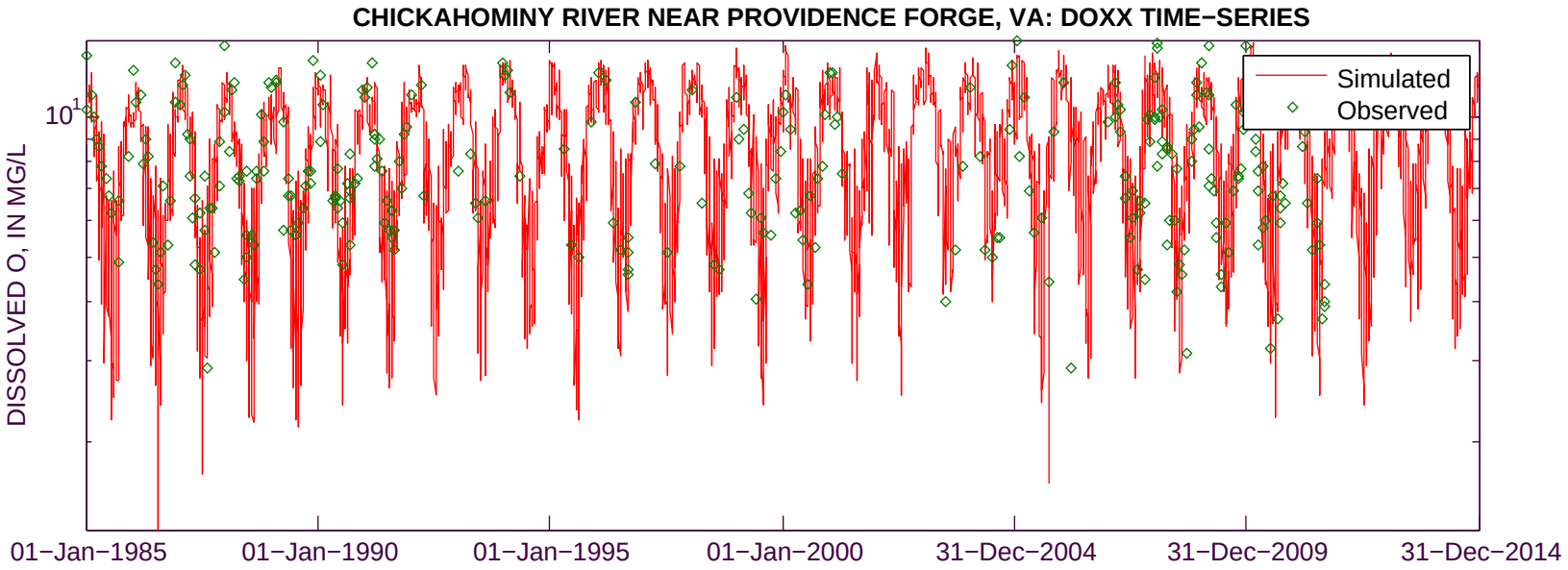
LOAD DATA
LOG10

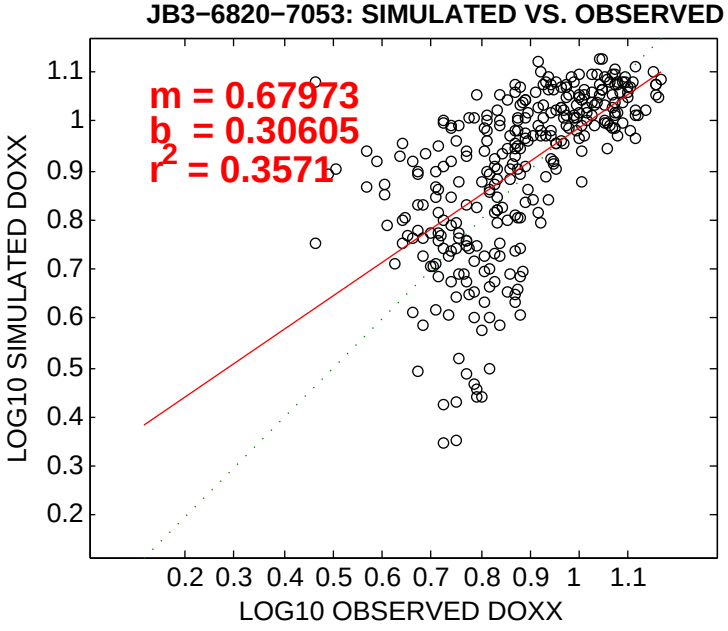


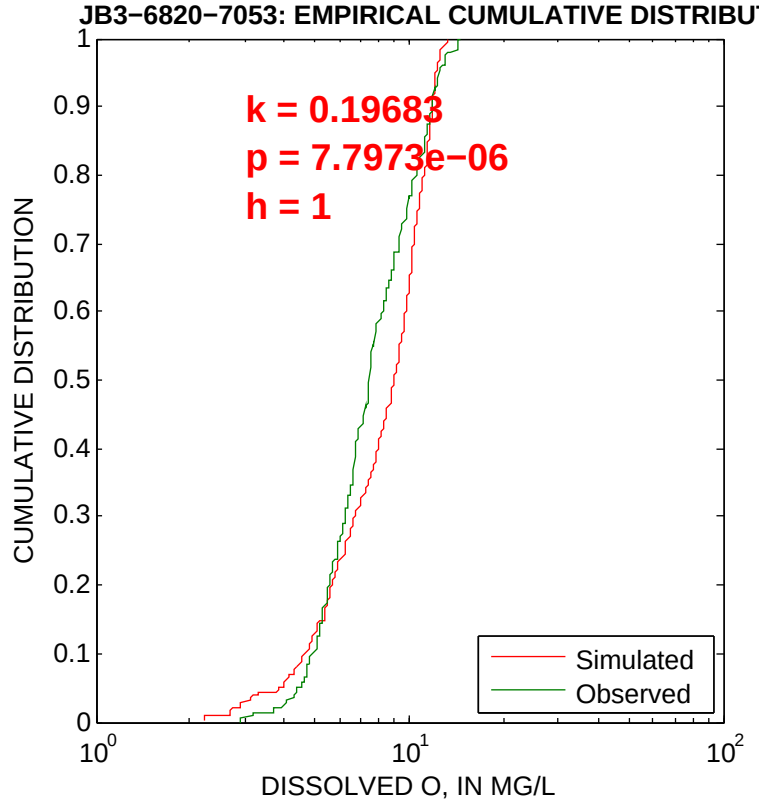












DATA SELECTION

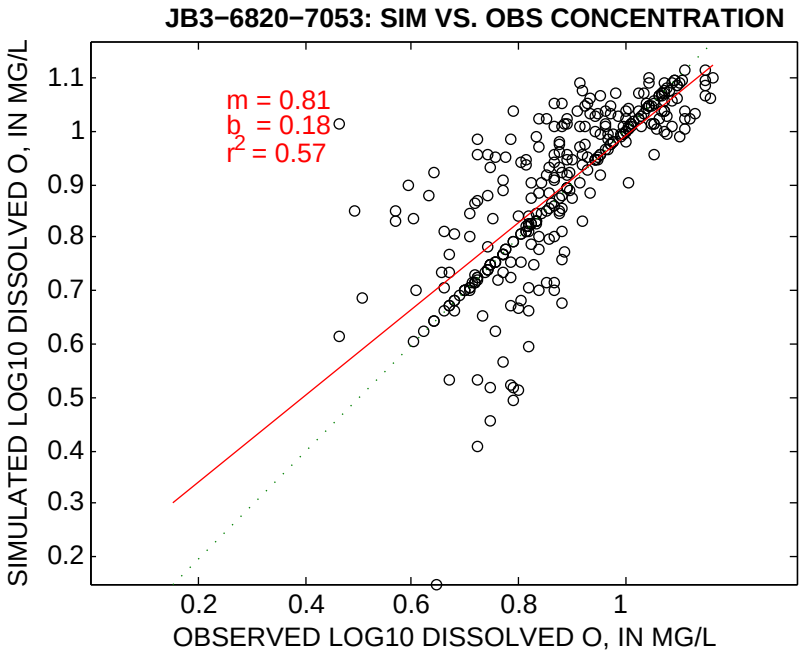
scenario: P620171001WQ
file: DOXX.calib
plot: DOXX - dissolved oxygen
Dates: 1/1/1985 12/31/201
Drive: N/A
Directory: model
Observed: OBS20161101

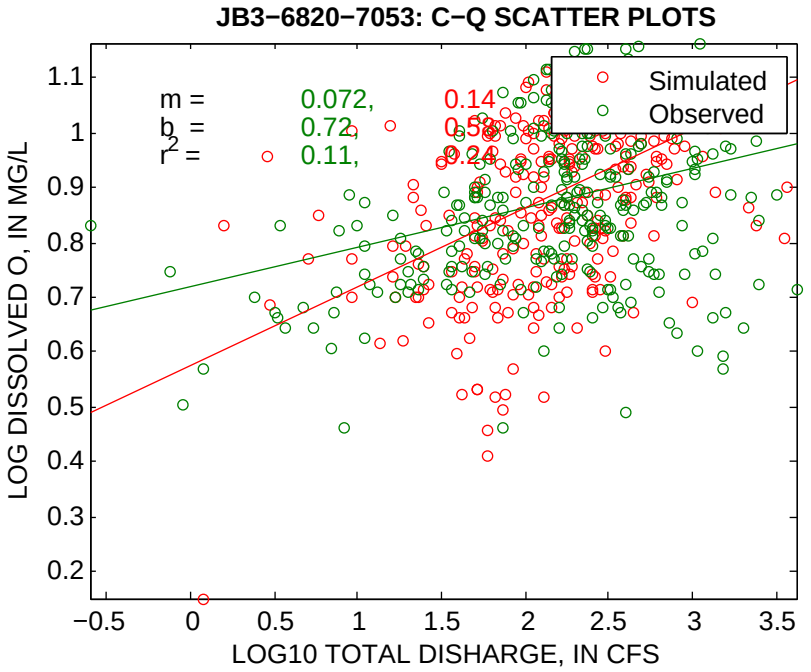
STATISTICS

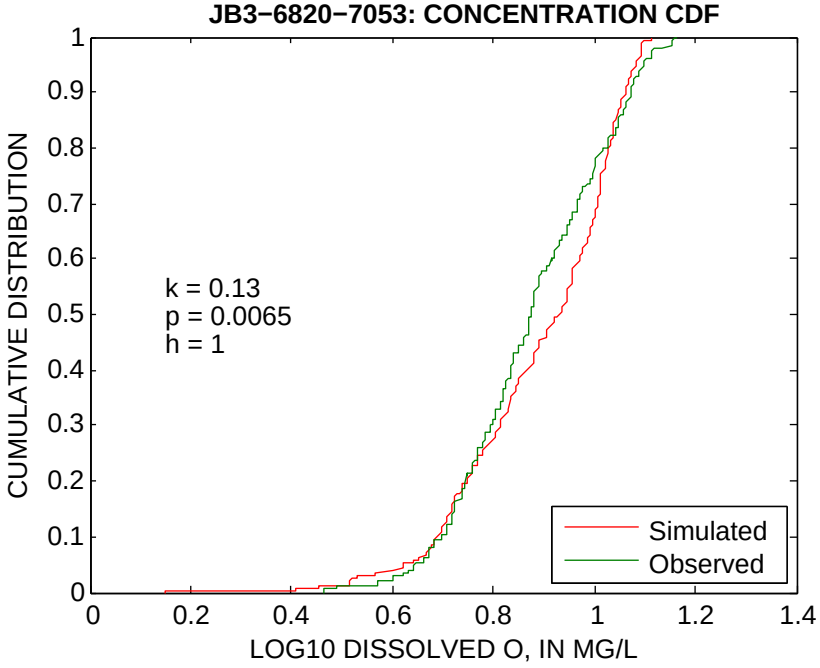
	observe	simulate
n	315	314
min	2.9	0
	0.462398	0.345511
mean	7.94768	8.47923
	0.877441	0.902477
media	7.5	8.9965
	0.875061	0.954221
max	14.63	13.339
	1.16524	1.12512
varian	6.75894	7.54727
	0.0208616	0.026992
JB	0.003358	0.003975
	0.087739	0.001
	ra	log
%	6.68808	2.85339
err.va	4.95222	0.0201219
rel.std.err	0.732692	0.964543
mod.eff	0.267308	0.0354569

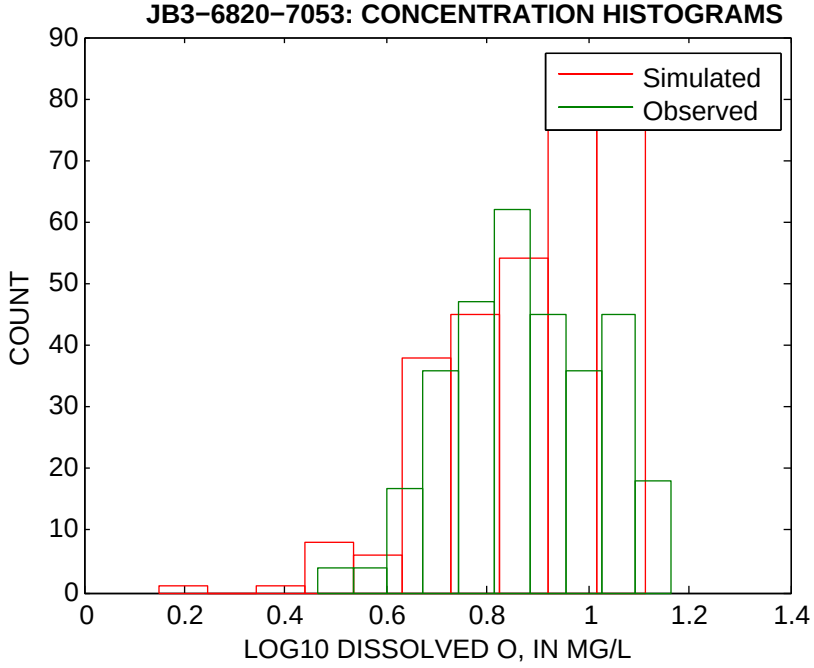
VERSION 2.1

ALL DATA
LOG10

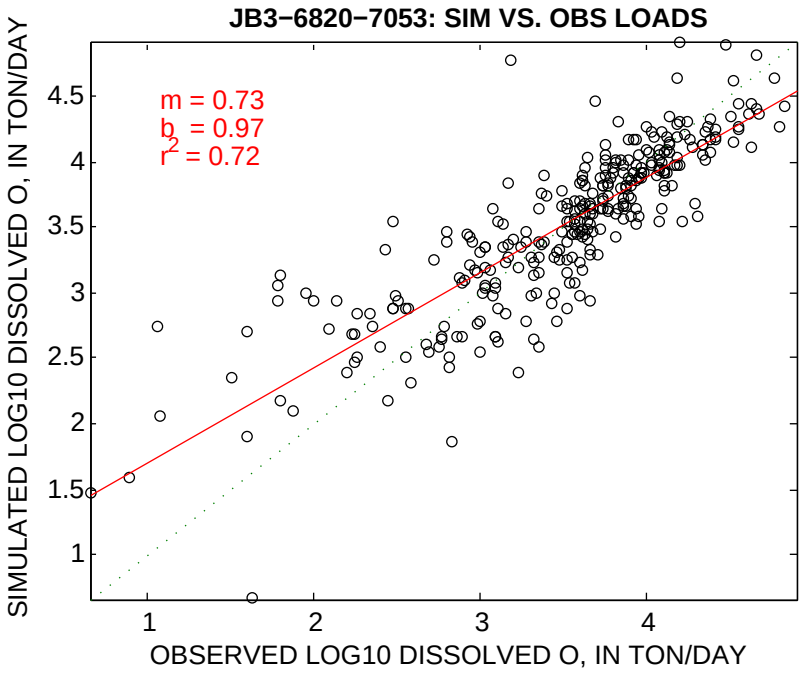


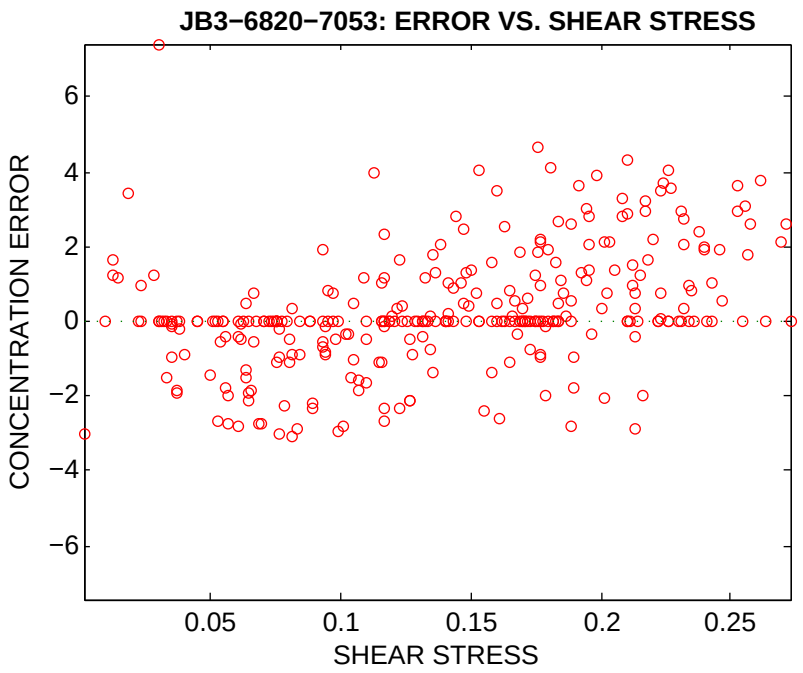


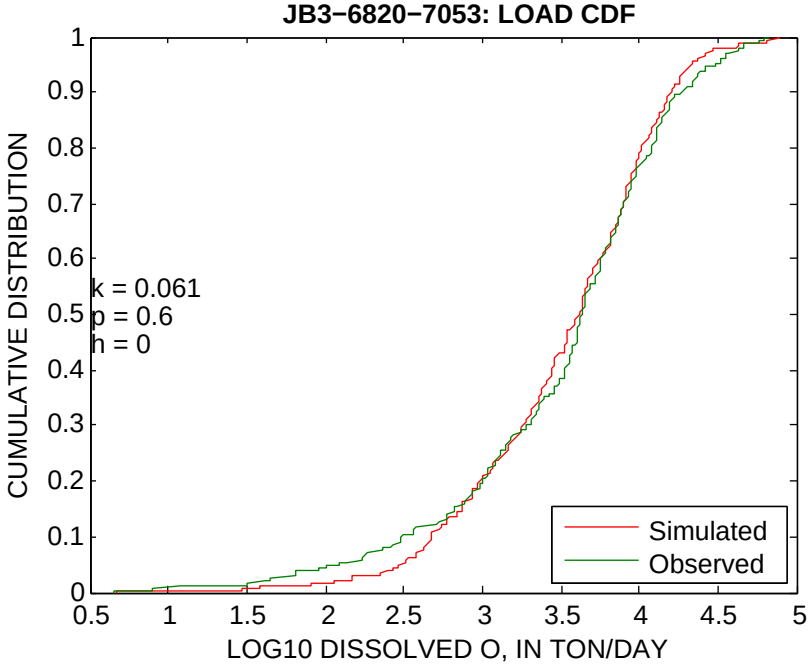


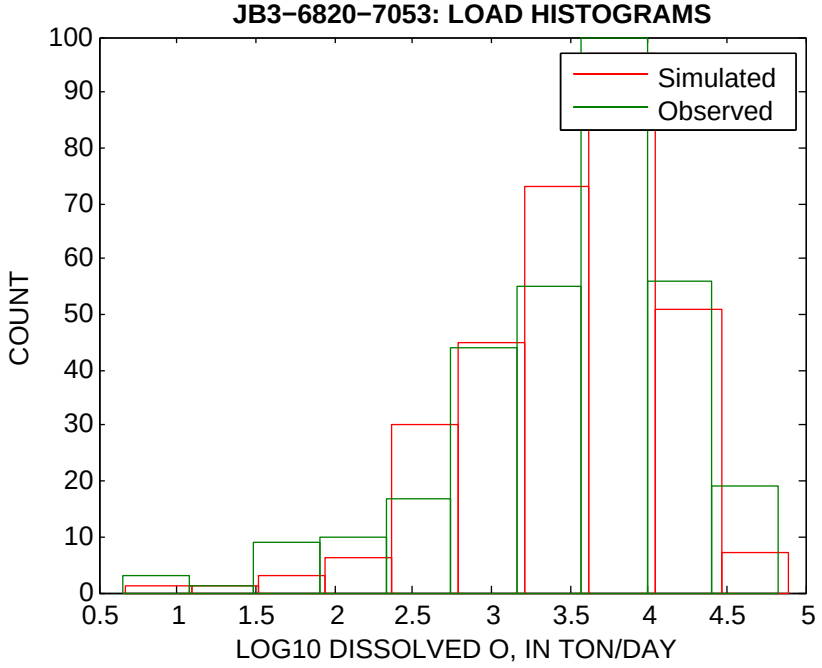


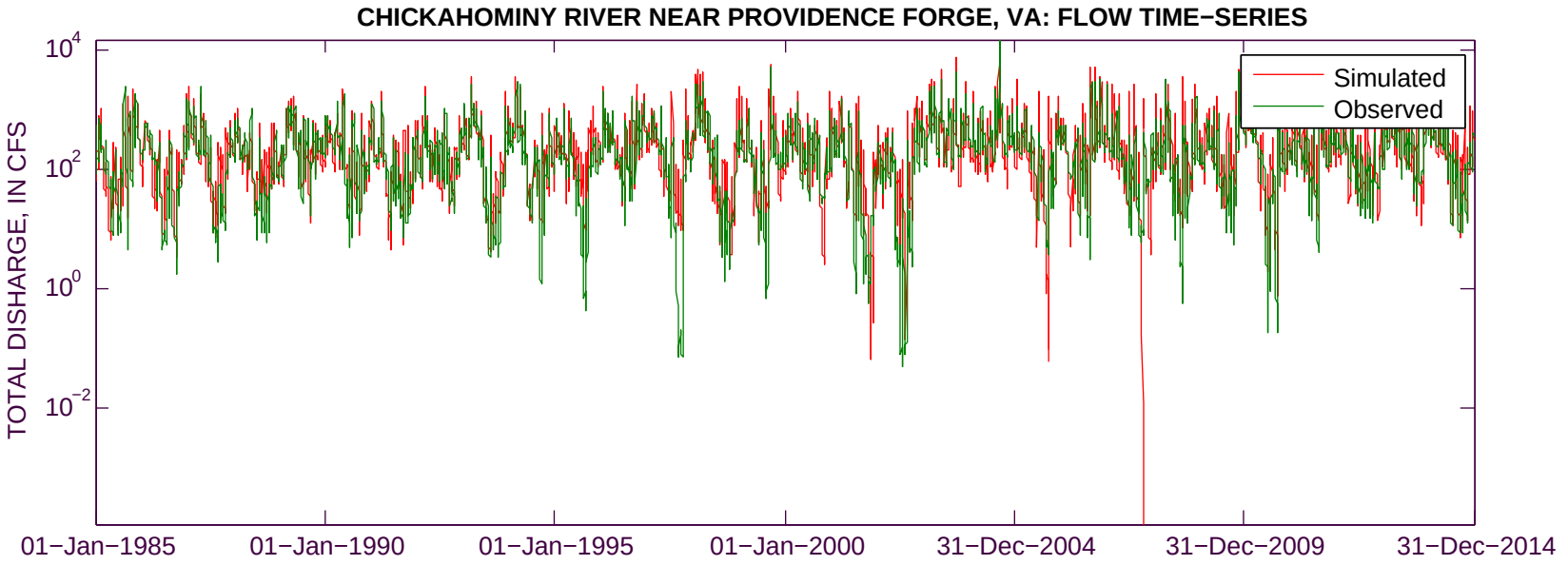
LOAD DATA
LOG10

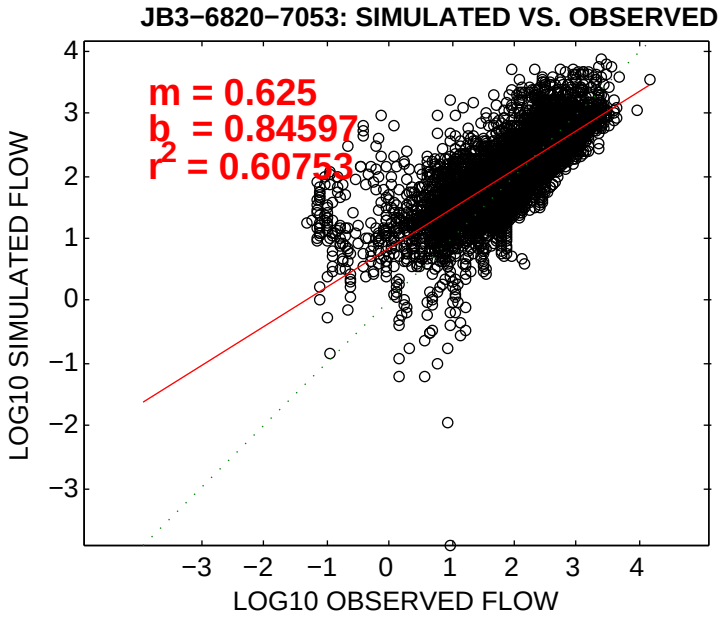


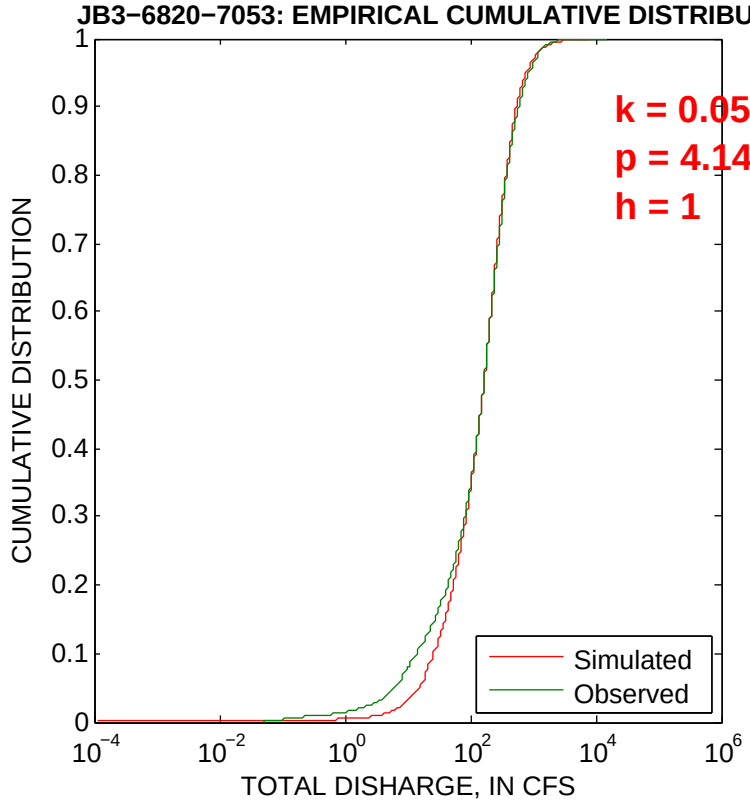












DATA SELECTION

scenario: P620171001WQ | file: FLOW.calib

plot: FLOW - total discharge

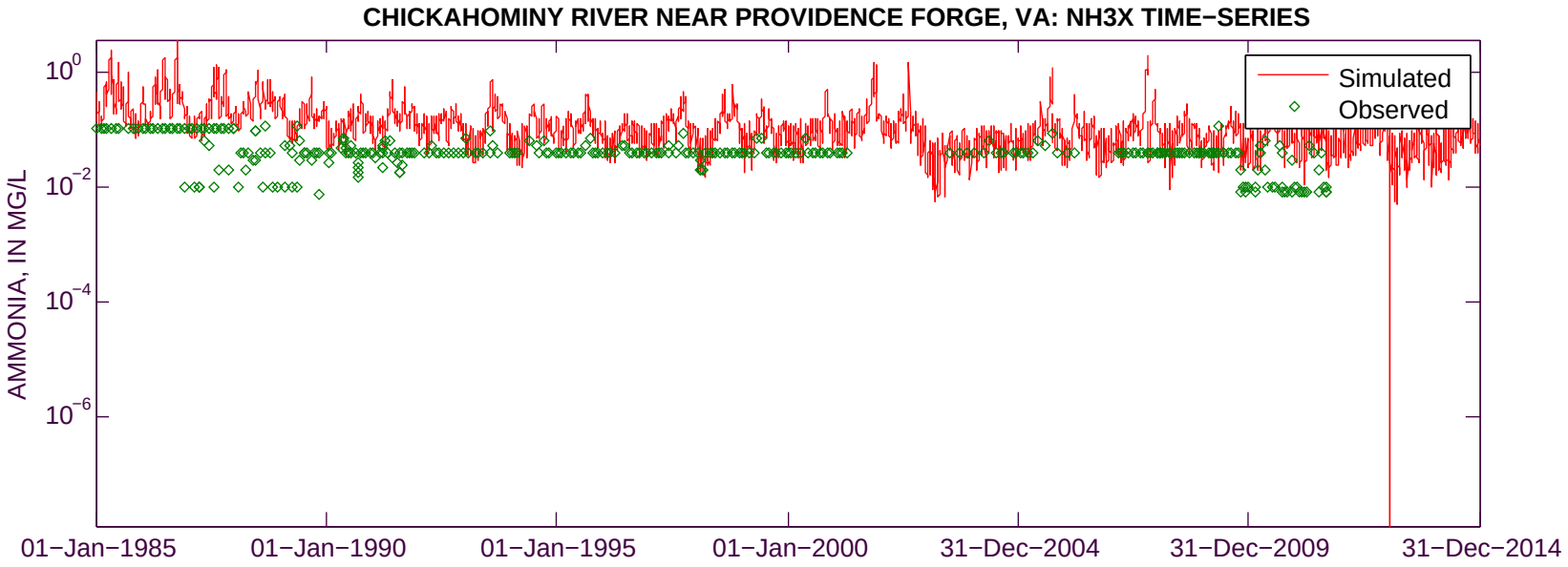
Dates: 1/1/1985 – 12/31/201

Drive: N/A | Directory: model | Observed: OBS20161101

STATISTICS

	n	observe	simulate
		10957	10944
min		0.05	0
		-1.30103	-3.93256
mean		268.564	267.043
		2.08782	2.15086
media		170	169.6
		2.23045	2.23047
max		14700	7552.5
		4.16732	3.87809
varian		147530	149861
		0.461471	0.296714
JB		0.001	0.001
		0.001	0.001
		ra	log
%		-0.56627	3.01944
err.va		131985	0.18532
rel.std.err		0.894631	0.401586
mod.eff		0.105369	0.598414

VERSION 2.1



DATA SELECTION

scenario: P620171001WQ | file: NH3X.calib

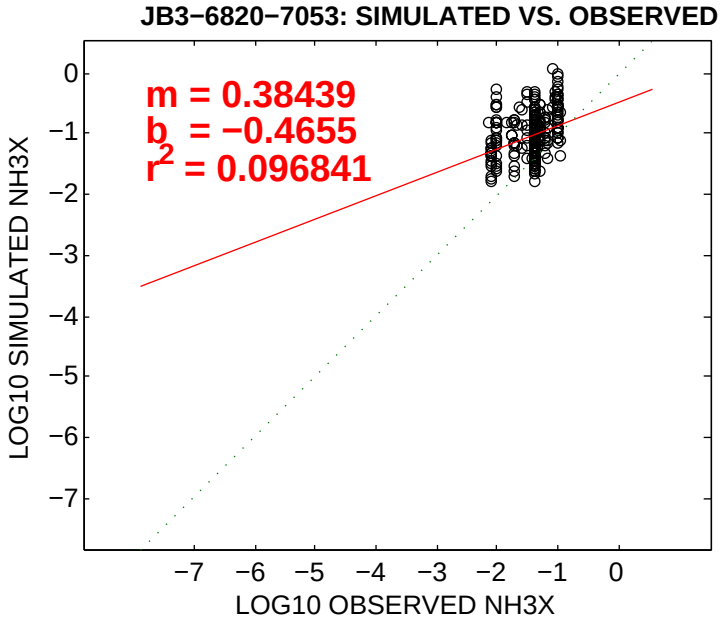
plot: NH3X - ammonia

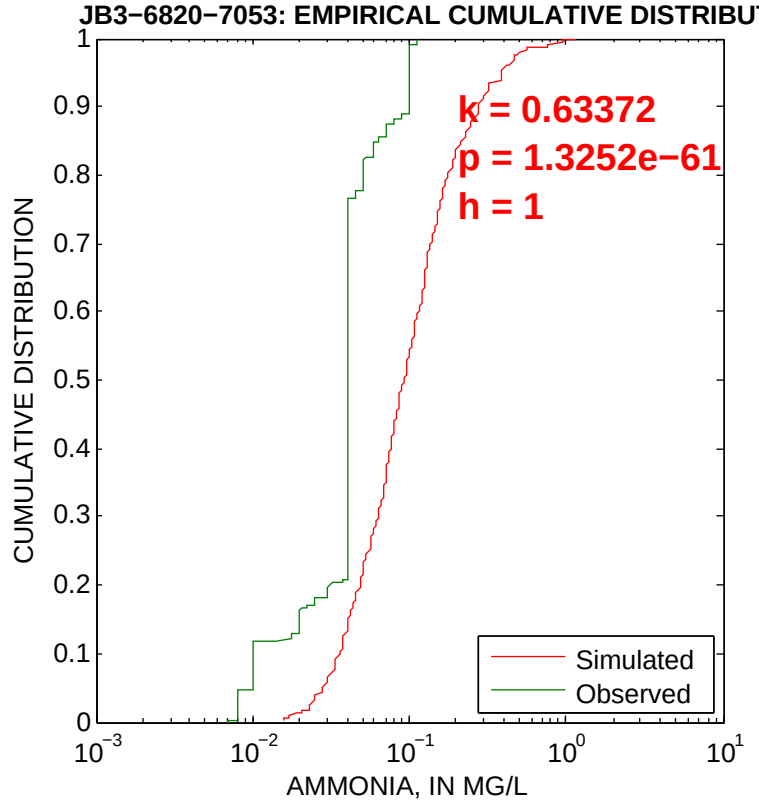
Dates: 1/1/1985 – 12/31/201

Drive | Directory | Observed: N/A | model | OBS20161101

STATISTICS

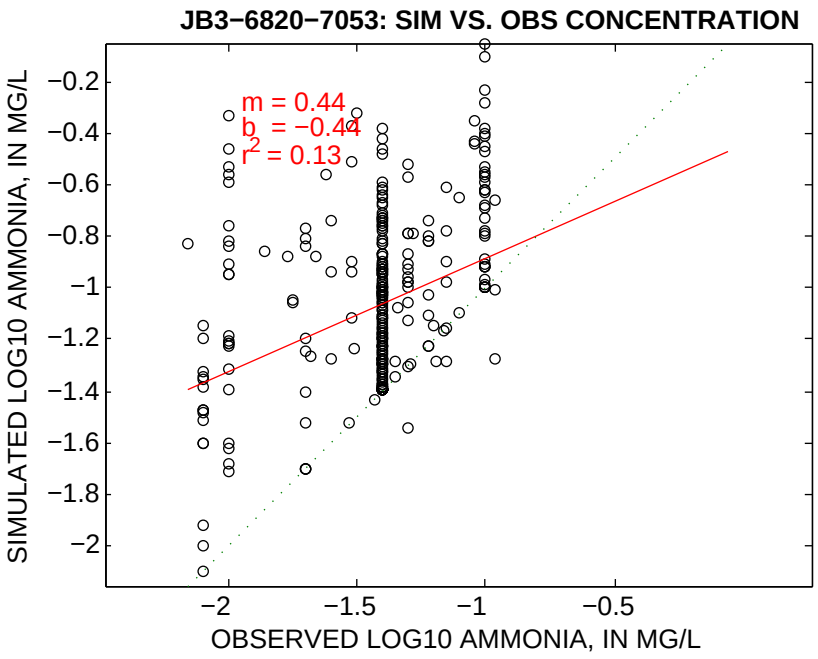
	n	observe	simulate
		344	343
min		0.007	0
		-2.1549	-1.79466
mean		0.0440752	0.134044
		-1.42983	-1.0151
media		0.04	0.0943405
		-1.39794	-1.02494
max		0.11	1.1404
		-0.958607	0.0570572
varian		0.00059913	0.0188006
		0.0758851	0.115781
JB		0.001	0.001
		0.001	0.040166
		ra	log
%		204.125	-29.0051
err.va		0.0248728	0.305825
rel.std.err		41.5143	4.03011
mod.eff		-40.5143	-3.03011

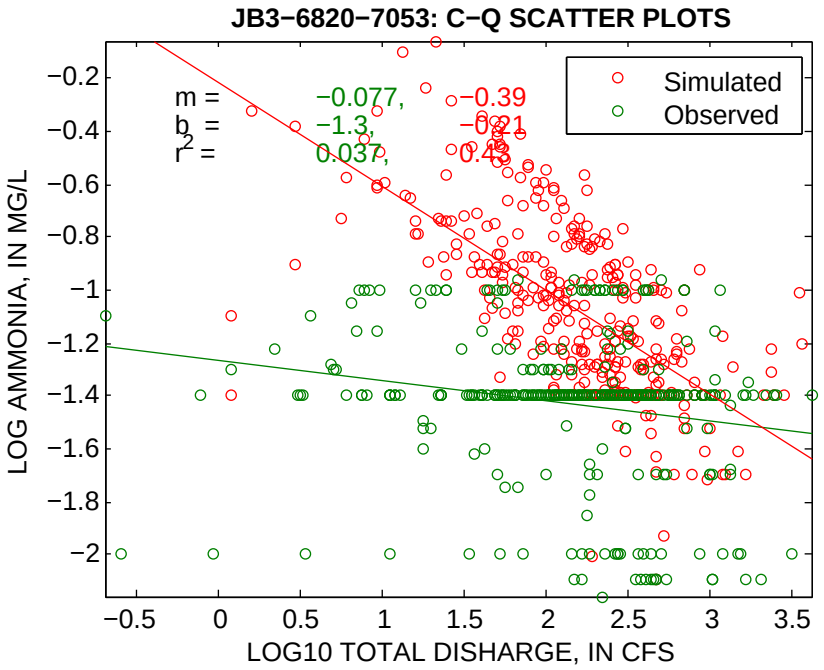


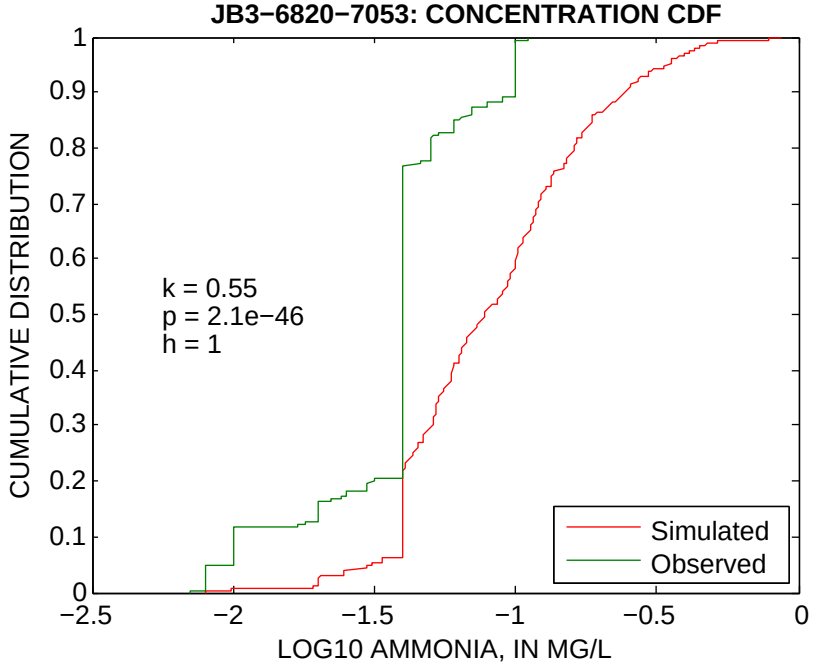


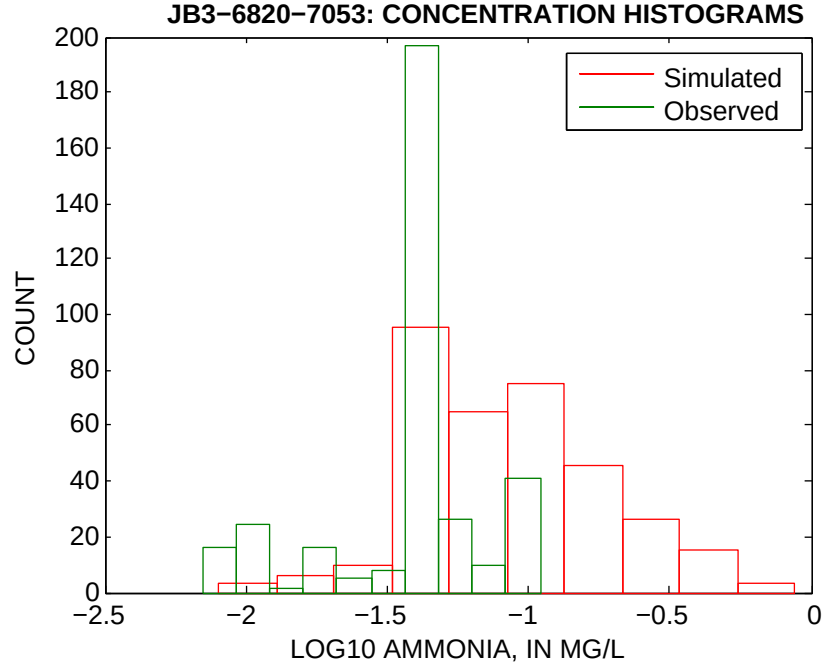
VERSION 2.1

ALL DATA
LOG10

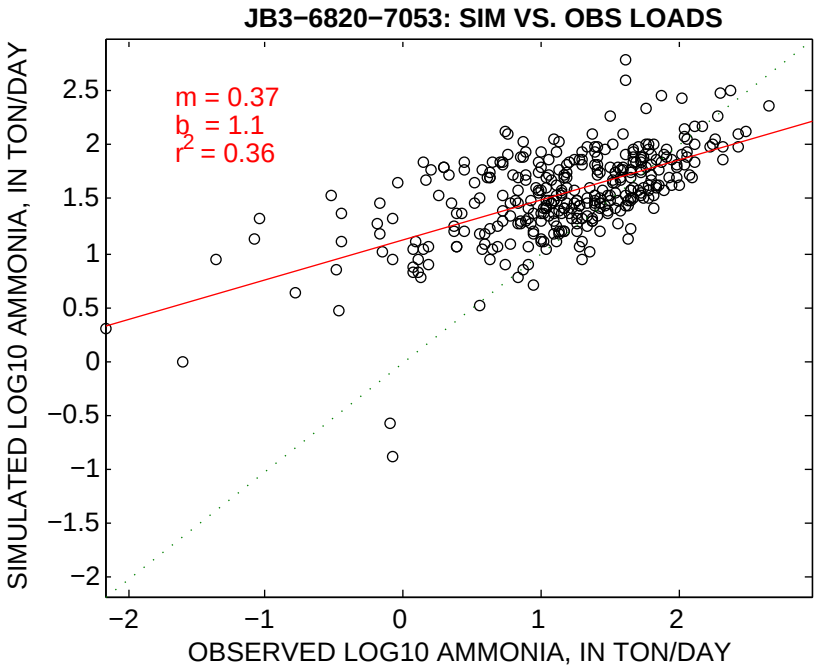


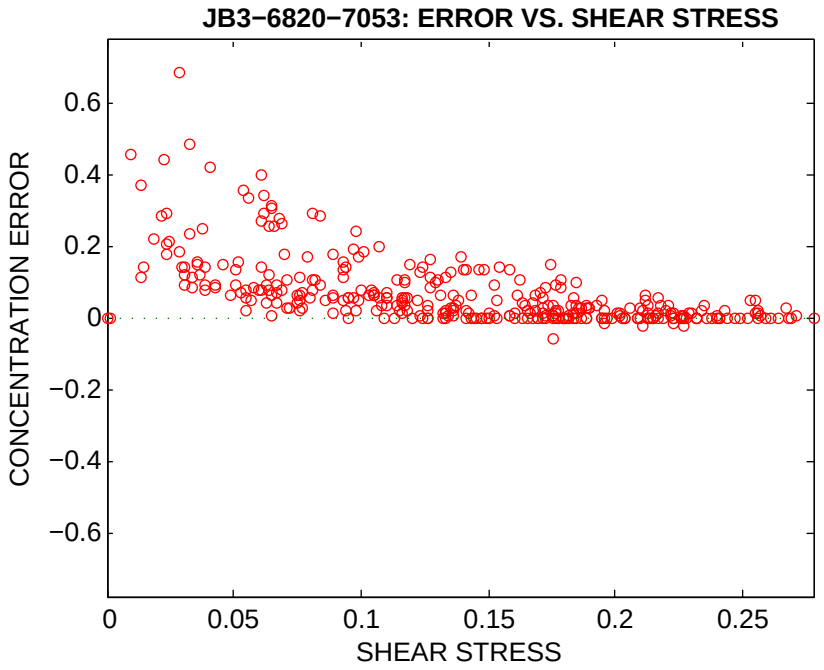


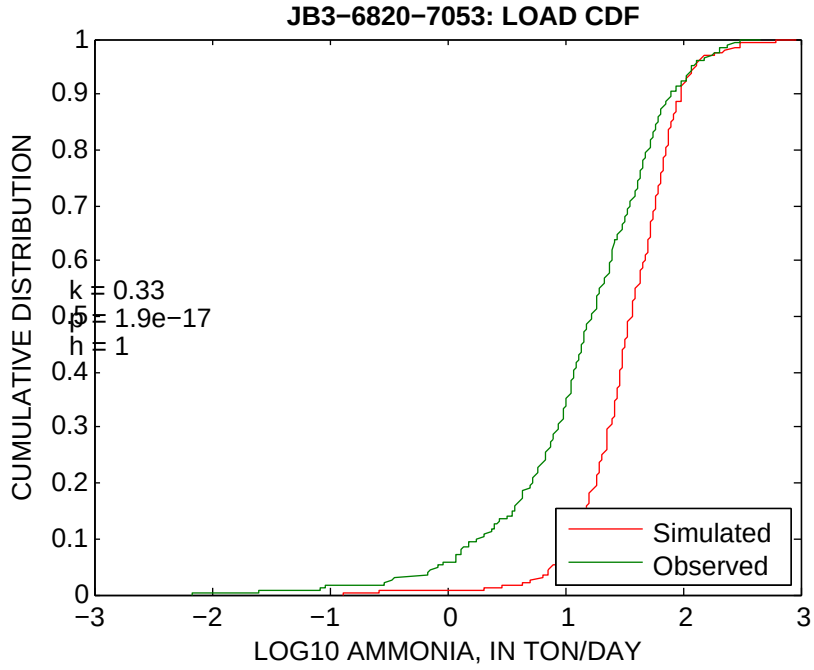


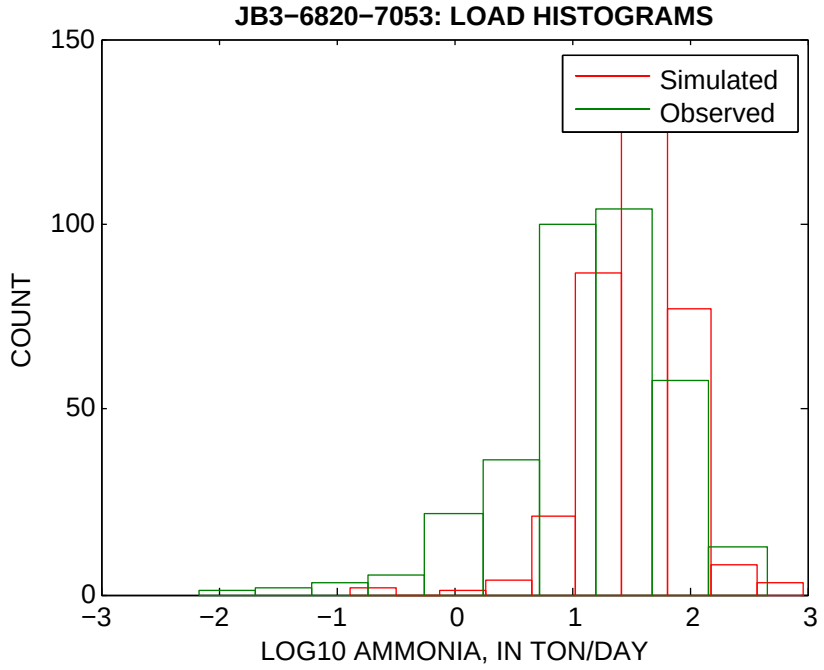


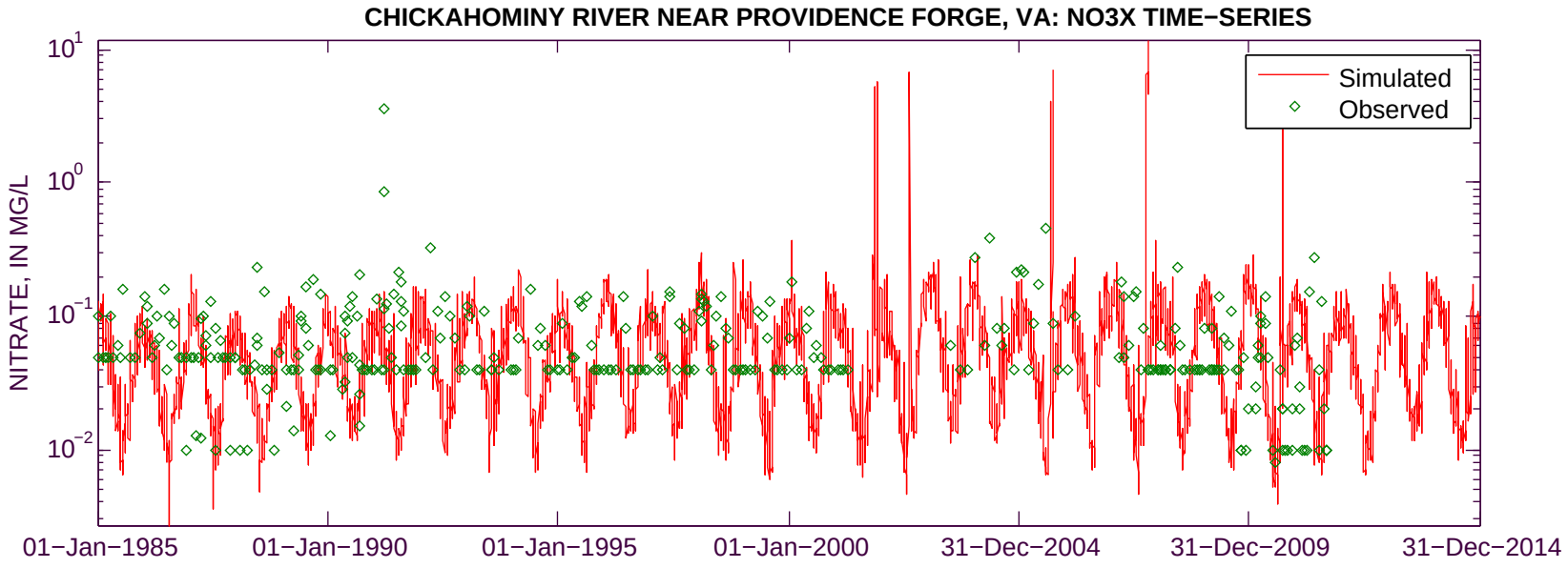
LOAD DATA
LOG10

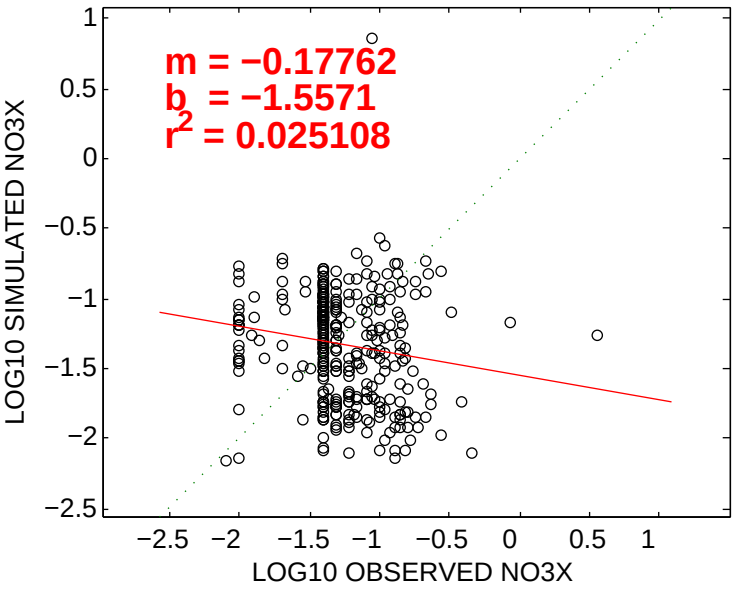


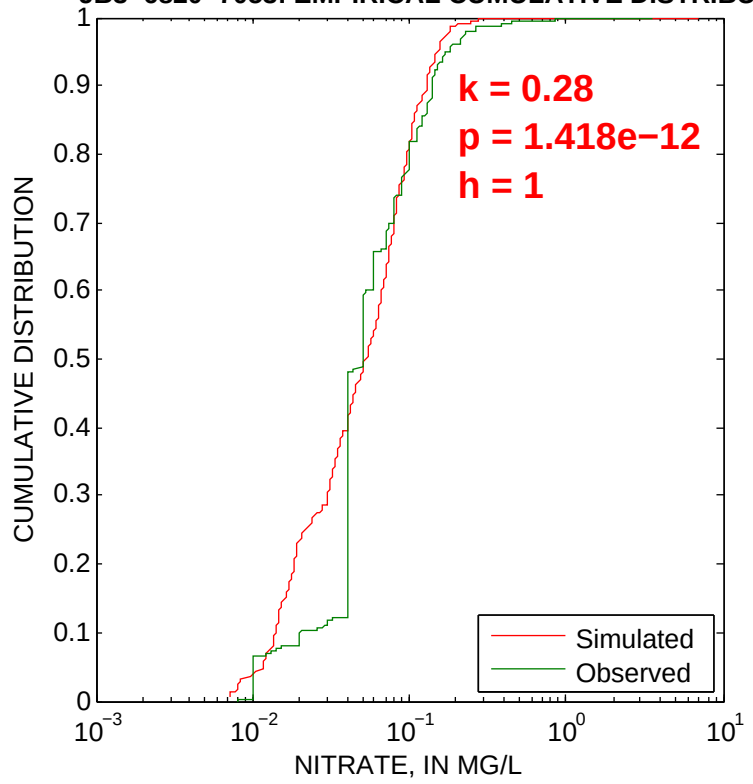












DATA SELECTION

scenario: P620171001WQ | file: NO3X.calib

plot: NO3X - nitrate

Dates: 1/1/1985 – 12/31/201

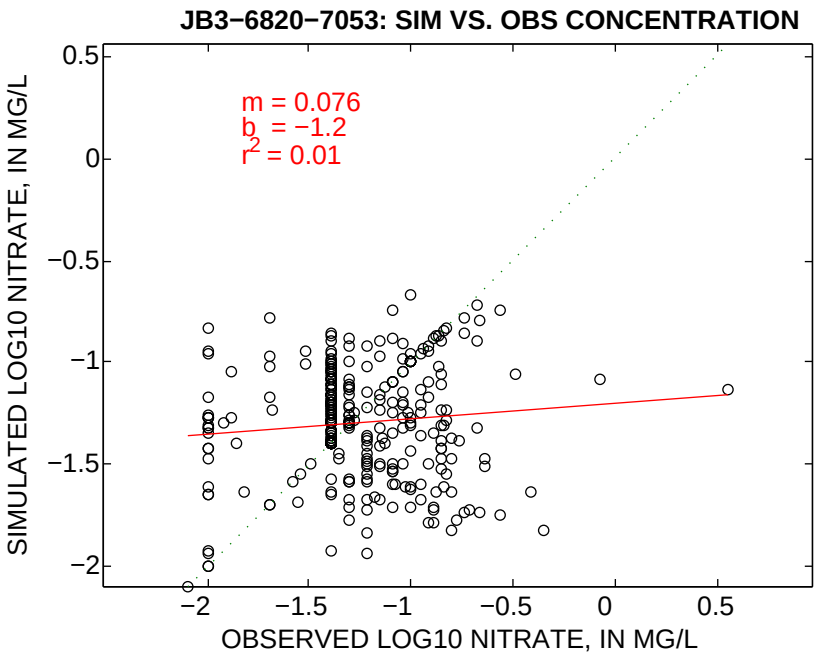
Drive: N/A | Directory: model | Observed: OBS20161101

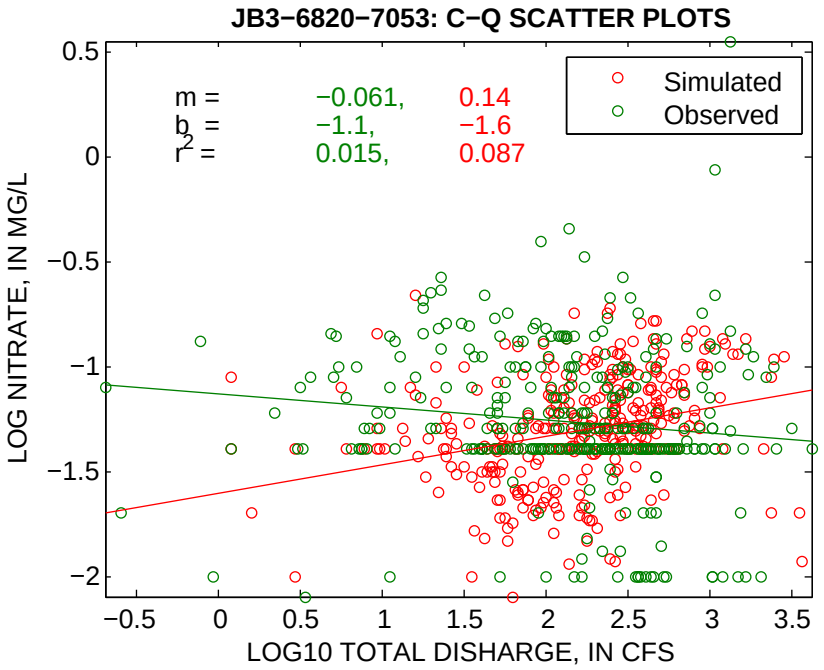
STATISTICS

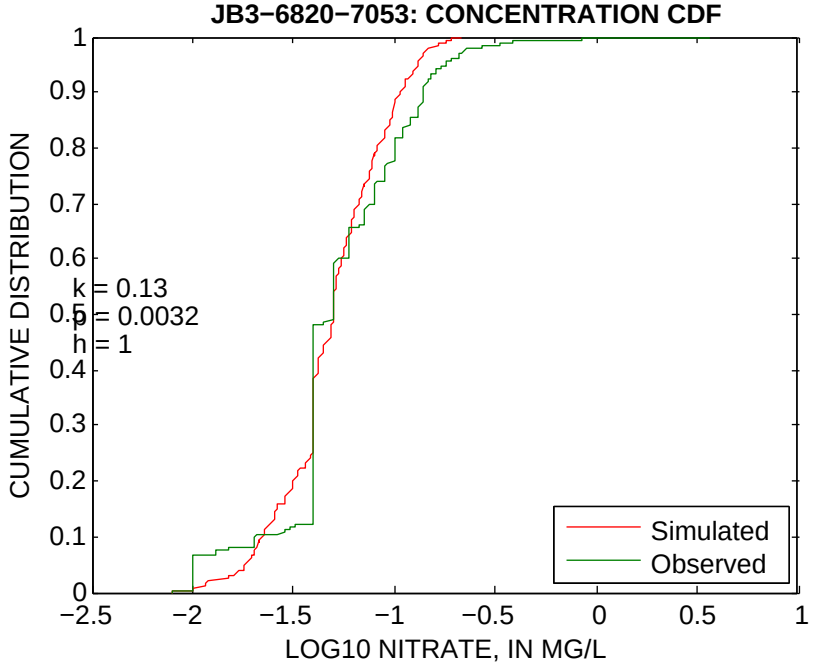
		observe	simulate
n		350	349
min		0.008	0
		-2.09691	-2.15778
mean		0.0810477	0.081888
		-1.26612	-1.33217
media		0.05	0.053094
		-1.30103	-1.26841
max		3.6	7.0533
		0.556303	0.848392
varian		0.040468	0.14175
		0.114074	0.143334
JB		0.001	0.001
		0.001	0.001
		ra	log
%		1.03688	5.2166
err.va		0.182418	0.302306
rel.std.err		4.5077	2.65009
mod.eff		-3.5077	-1.65009

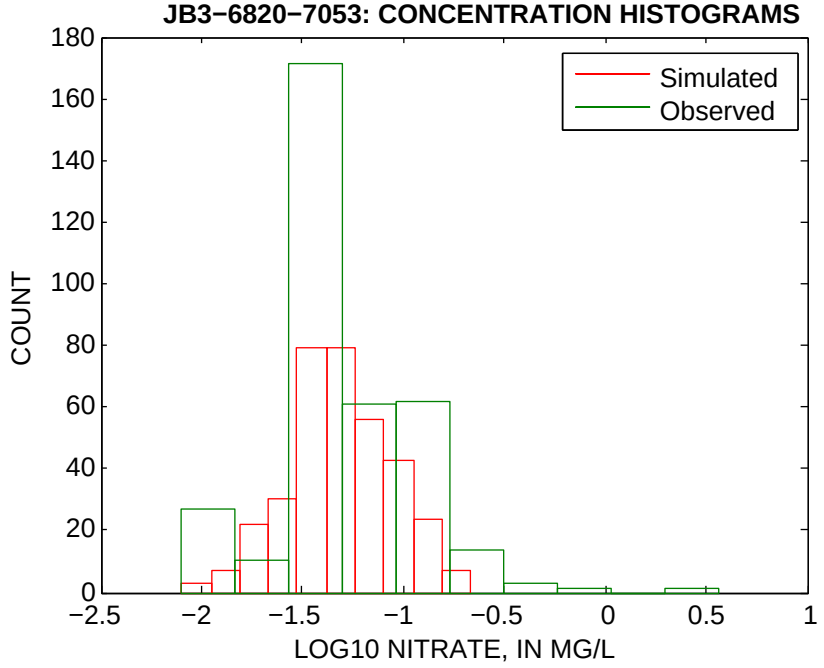
VERSION 2.1

ALL DATA
LOG10

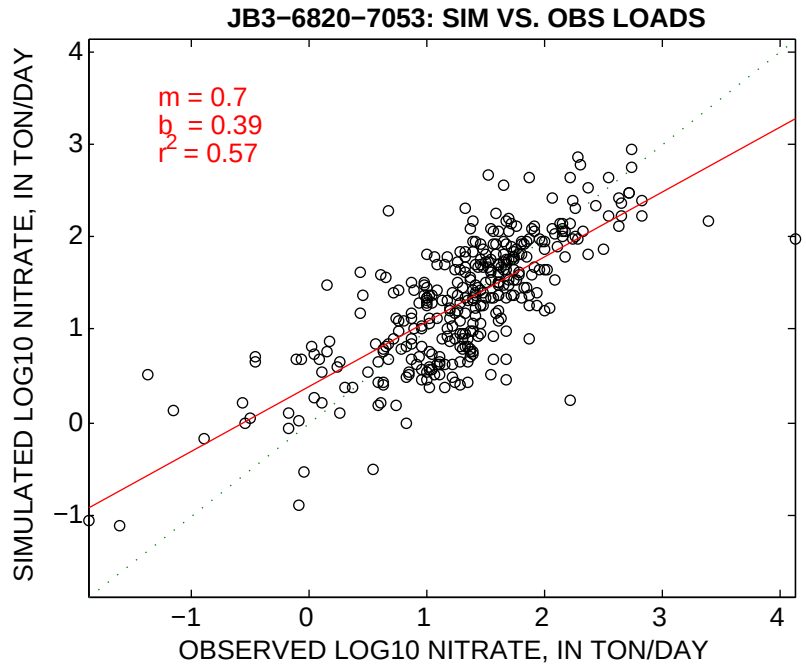


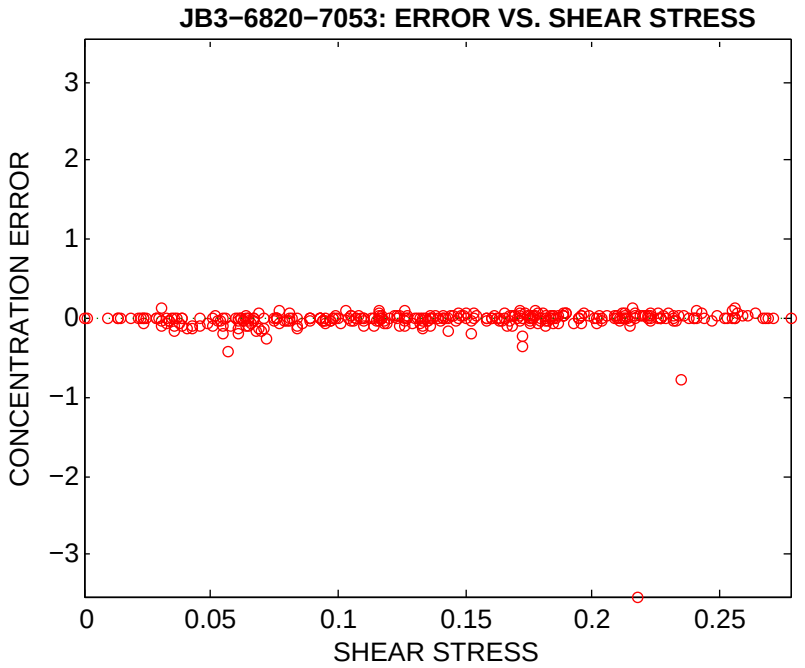


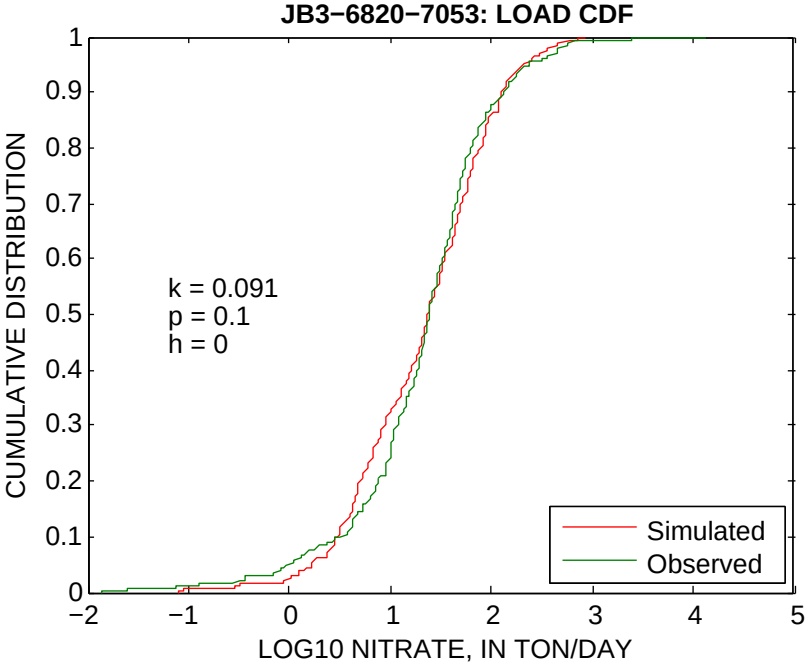


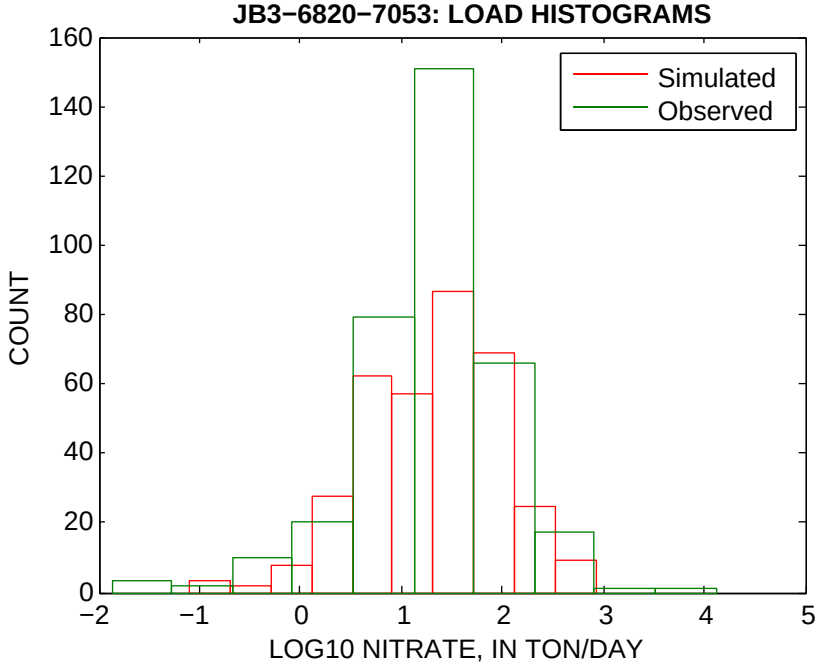


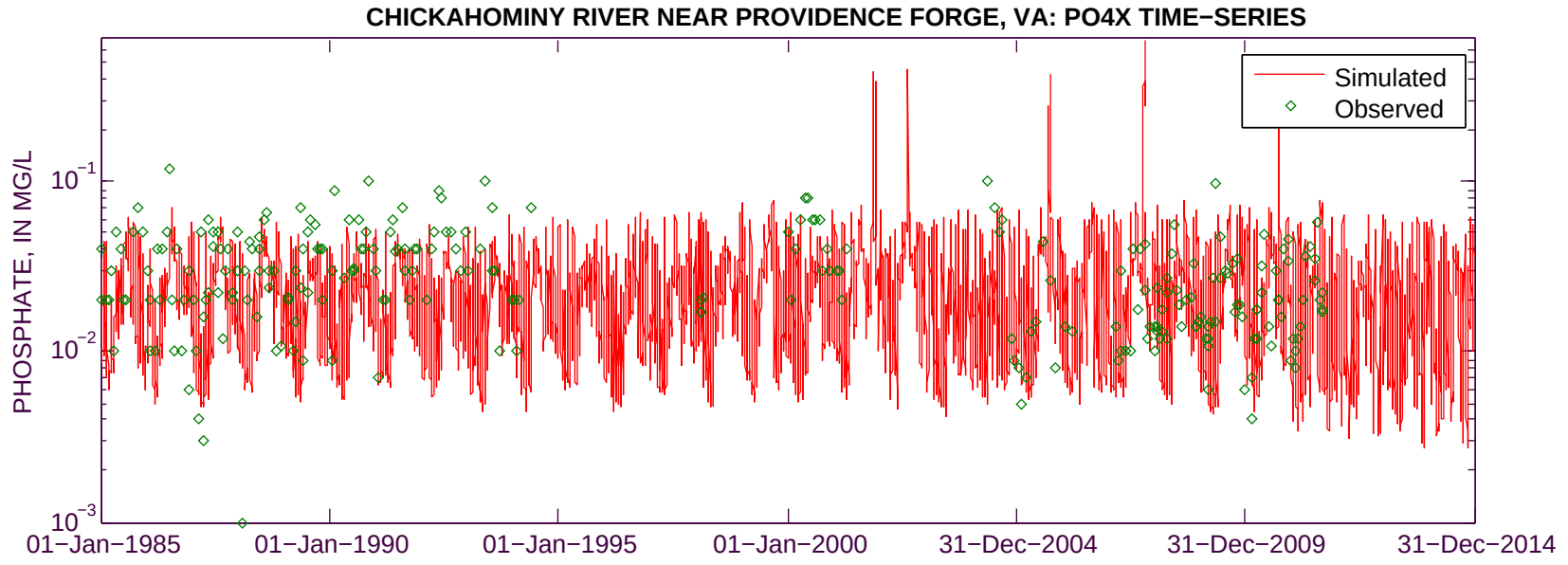
LOAD DATA
LOG10

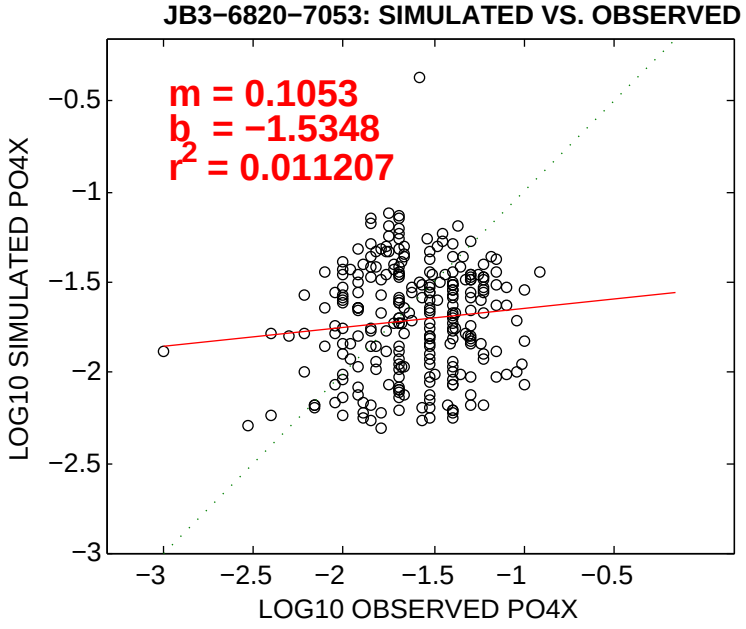


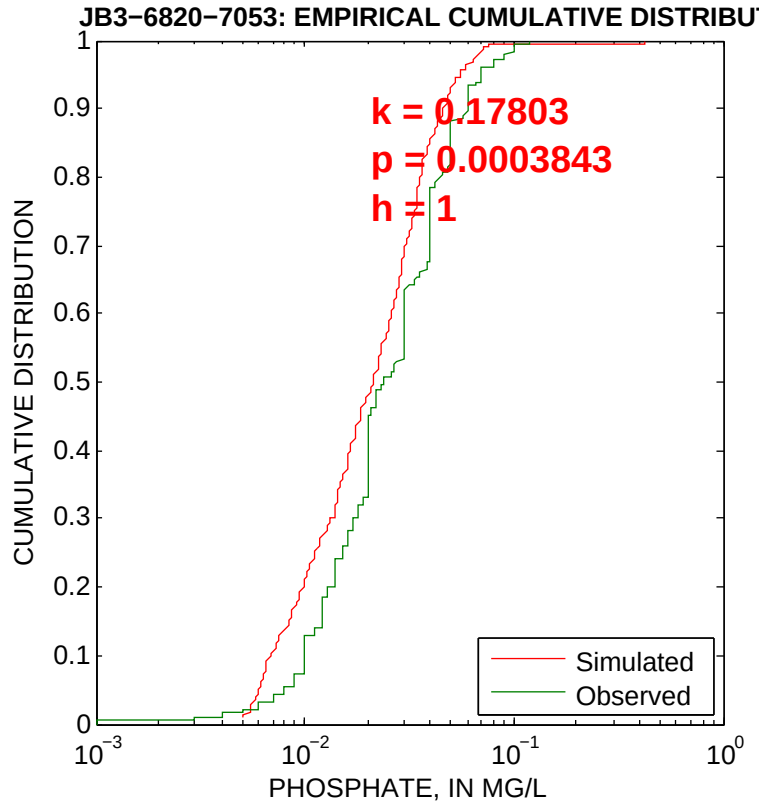












DATA SELECTION

scenario	file
P620171001WQ	PO4X.calib

plot: PO4X - phosphate

Dates: 1/1/1985 – 12/31/201

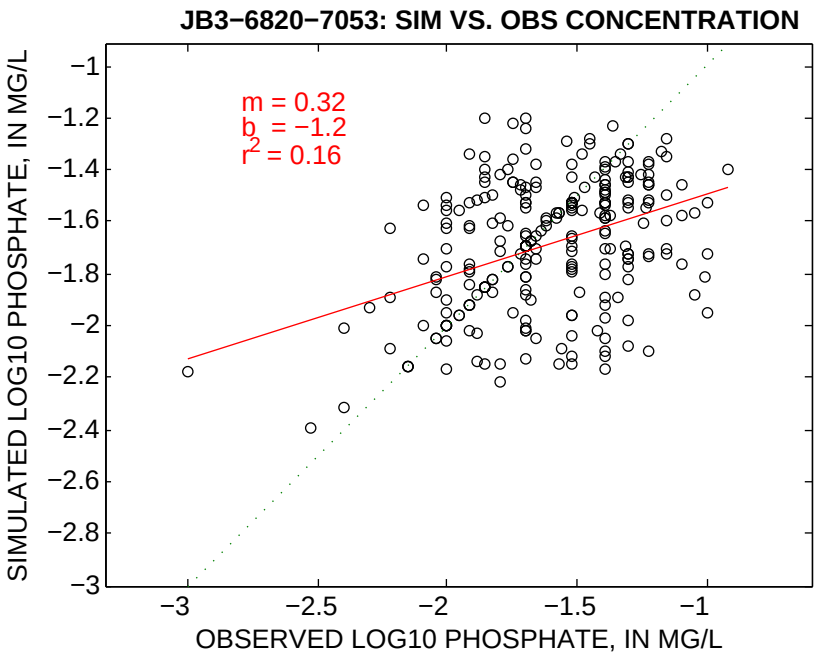
Drive	Directory	Observed
N/A	model	OBS20161101

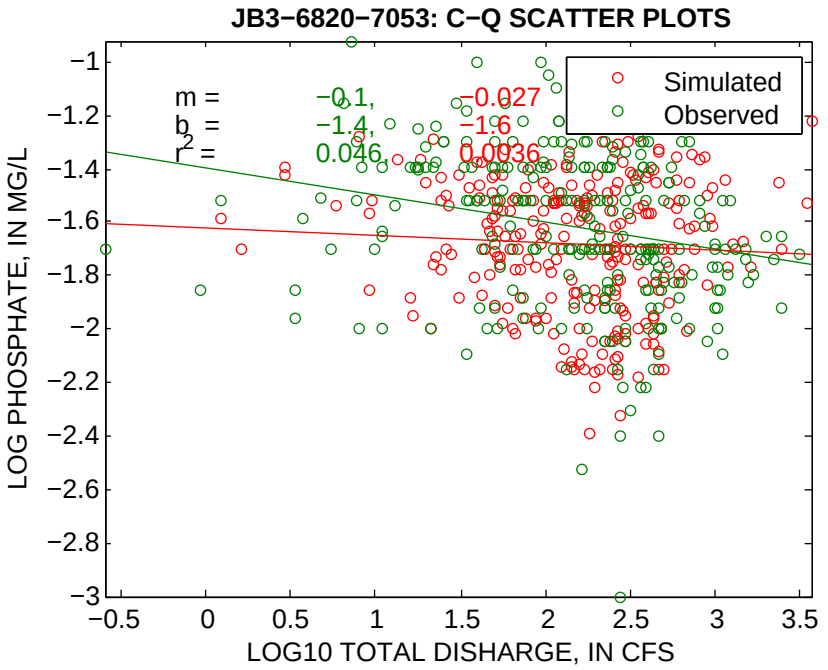
STATISTICS

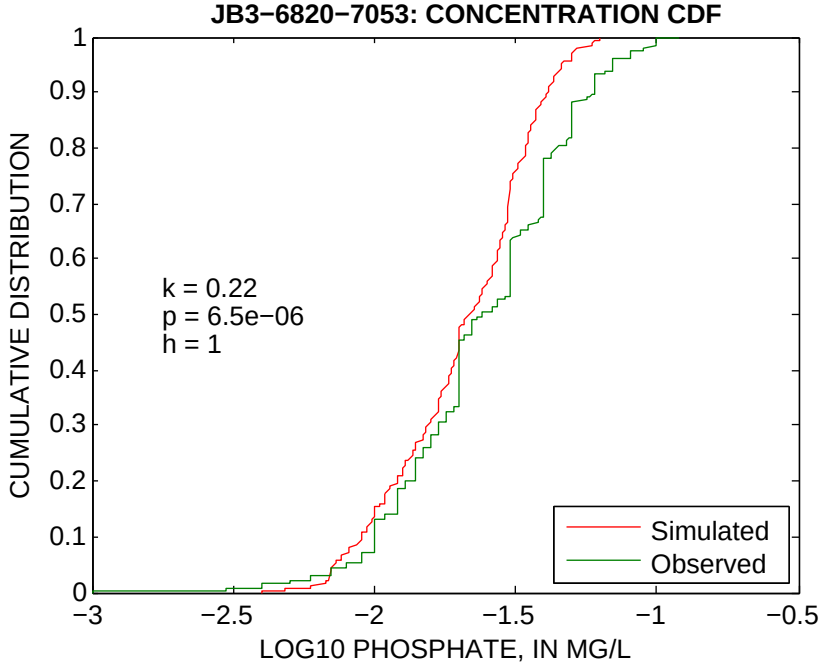
	n	observe	simulate
		264	263
min		0.001	0
		-3	-2.30827
mean		0.0304261	0.0255663
		-1.61458	-1.70478
media		0.024	0.0212985
		-1.61979	-1.67074
max		0.12	0.42421
		-0.920819	-0.372419
varian		0.00042109	0.00084342
		0.0944802	0.0934806
JB		0.001	0.001
		0.002662	0.5
		ra	log
%		-15.9726	5.586
err.va		0.00130443	0.176229
rel.std.err		3.09772	1.86524
mod.eff		-2.09772	-0.865244

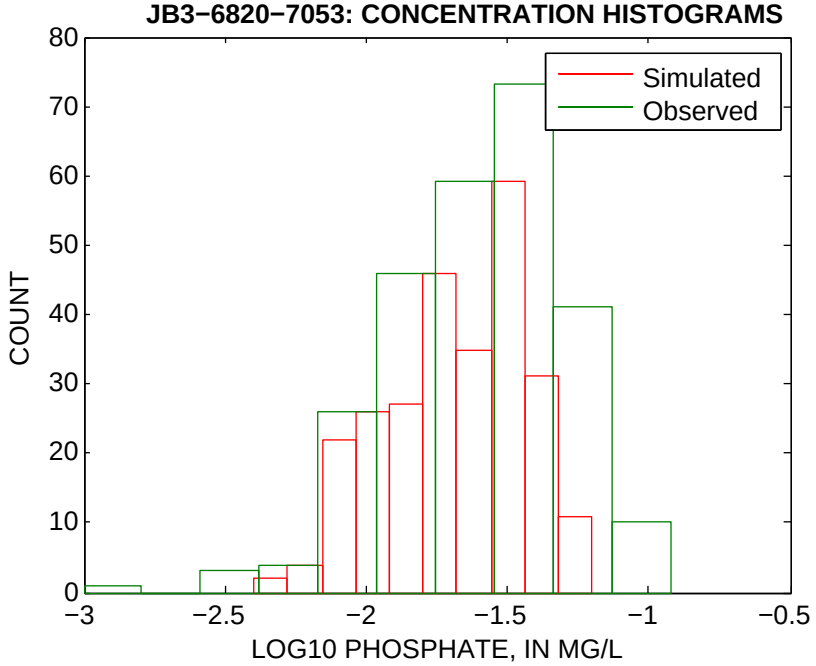
VERSION 2.1

ALL DATA
LOG10

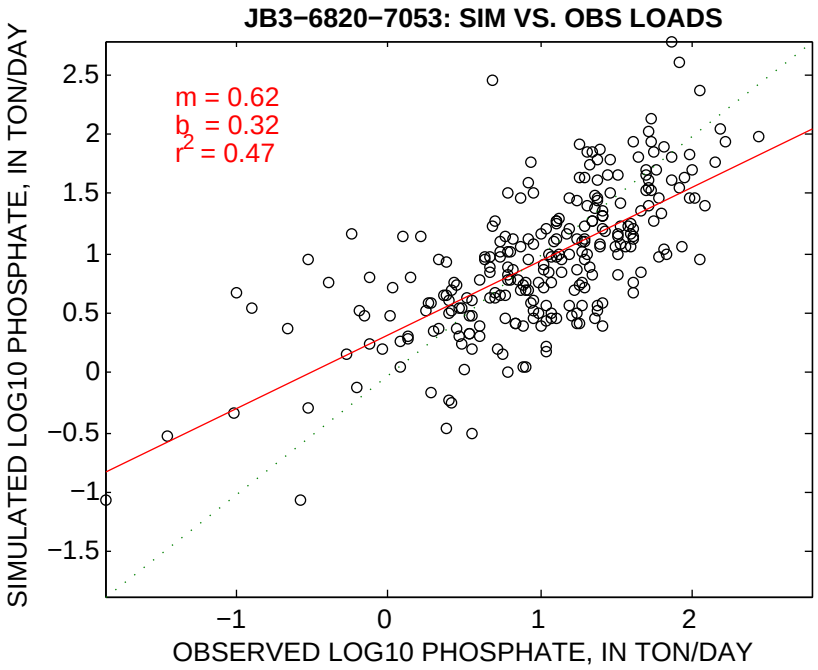


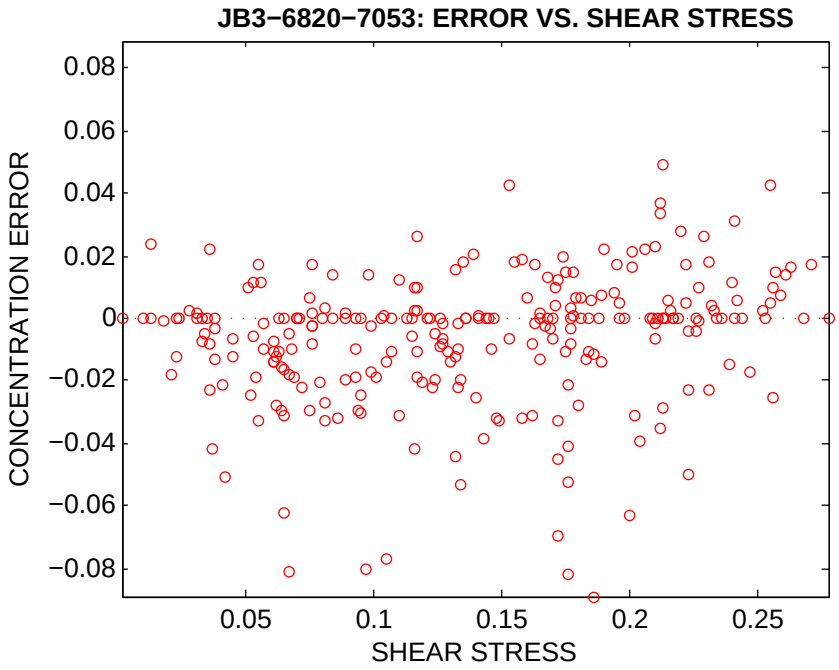


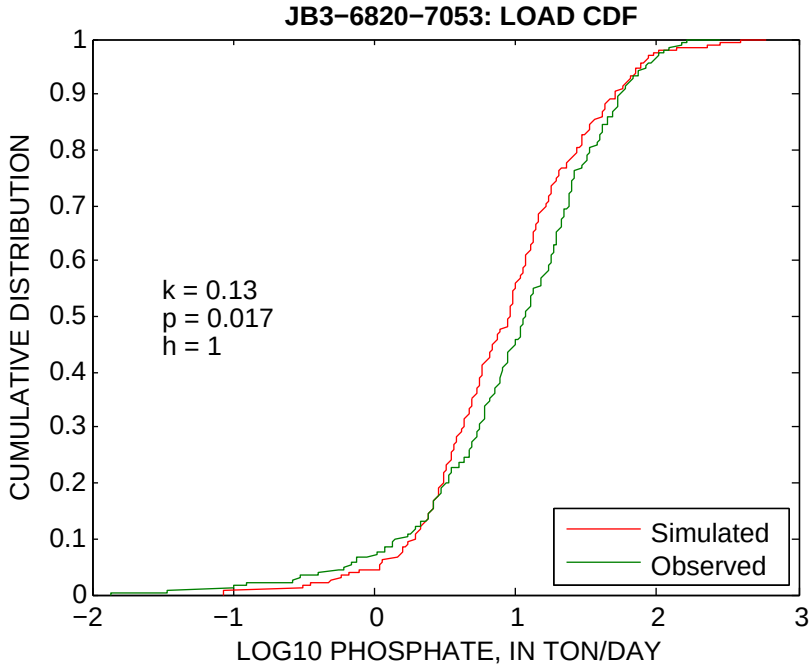


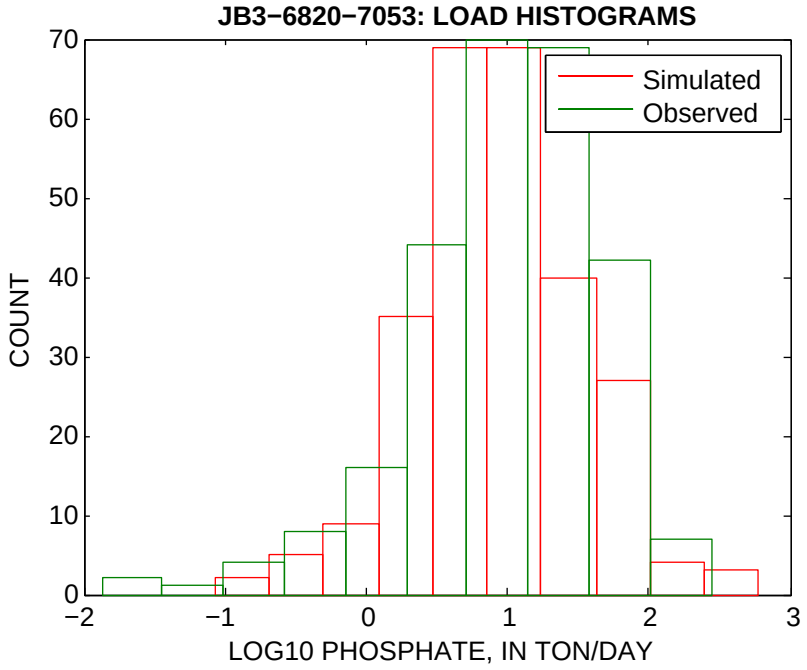


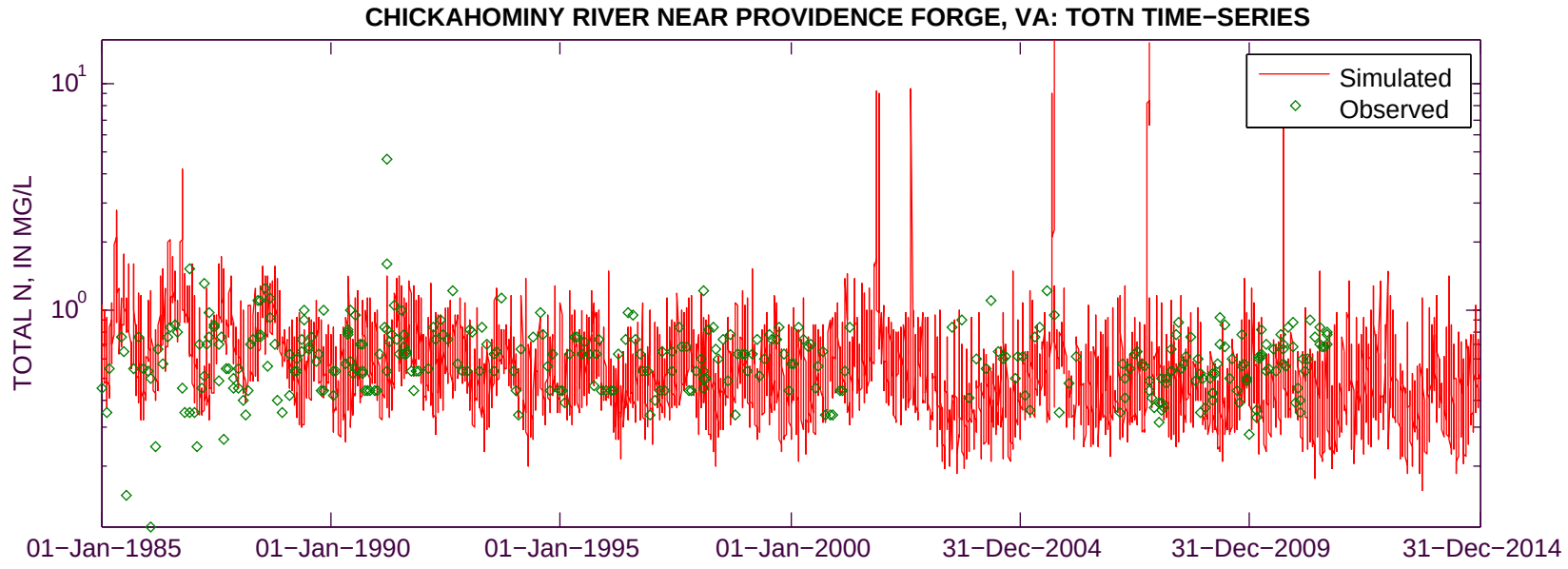
LOAD DATA
LOG10

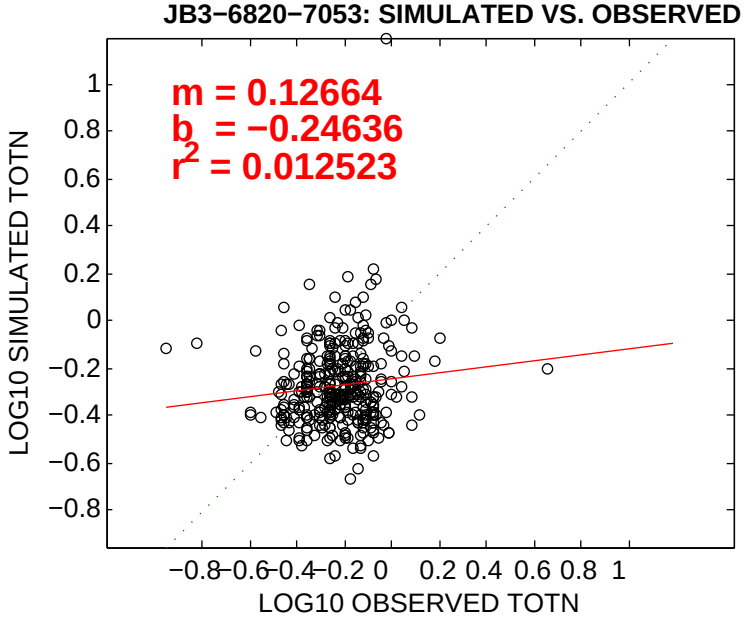


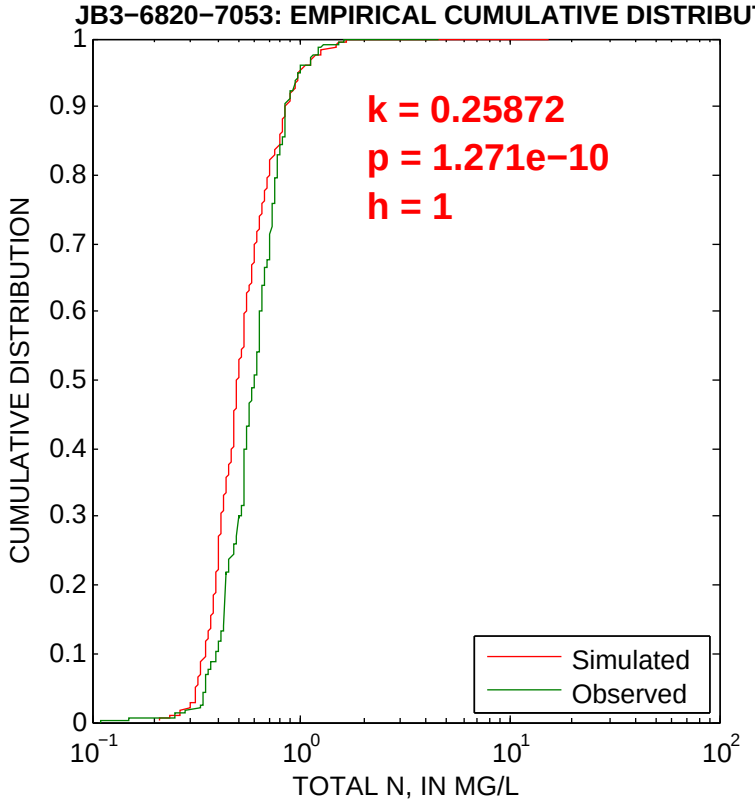












DATA SELECTION

scenario: P620171001WQ | file: TOTN.calib

plot: TOTN - total nitrogen

Dates: 1/1/1985 – 12/31/201

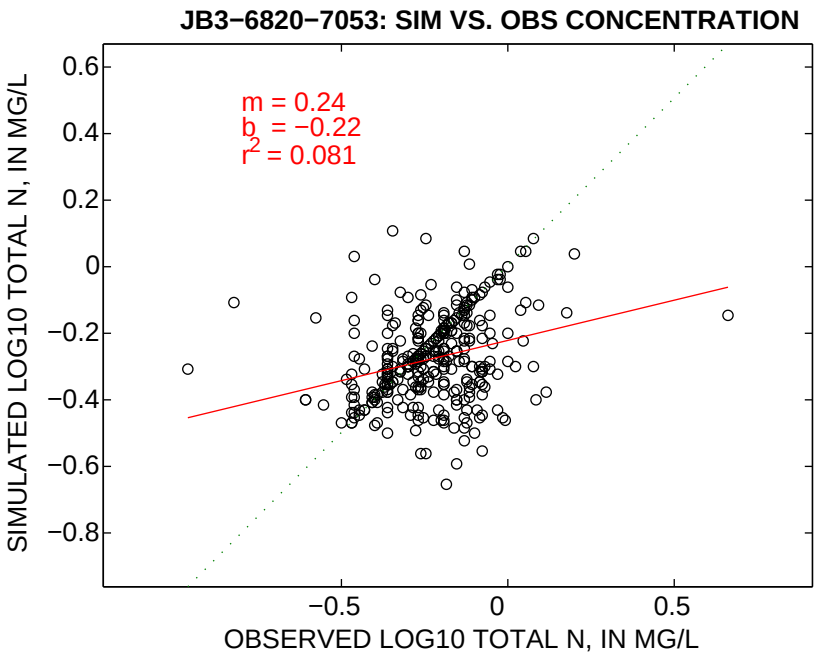
Drive | Directory: N/A | model | Observed: OBS20161101

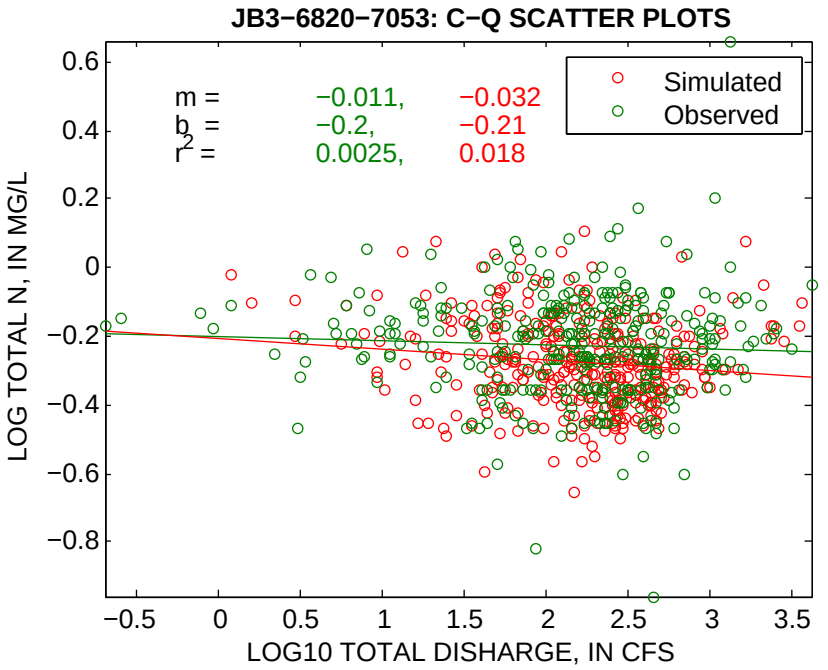
STATISTICS

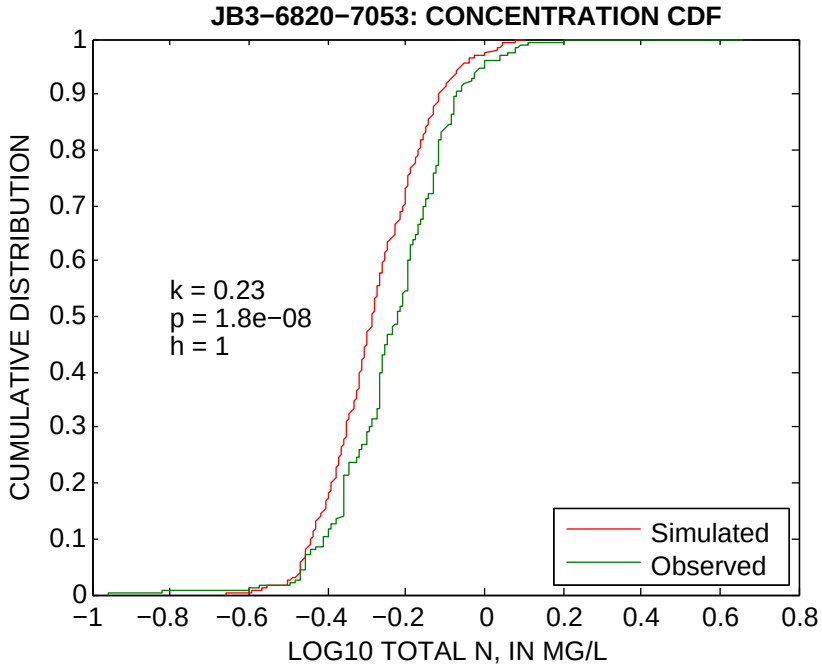
n	344	343
	observe	simulate
min	0.11	0
	-0.958607	-0.673787
mean	0.633593	0.60355
	-0.226318	-0.275018
media	0.6	0.499035
	-0.221849	-0.301325
max	4.6	15.544
	0.662758	1.19156
varian	0.0878463	0.704099
	0.0231772	0.0296822
JB	0.001	0.001
	0.001	0.001
	ra	log
%	-4.74177	21.5186
err.va	0.751446	0.0493678
rel.std.err	8.5541	2.13002
mod.eff	-7.5541	-1.13002

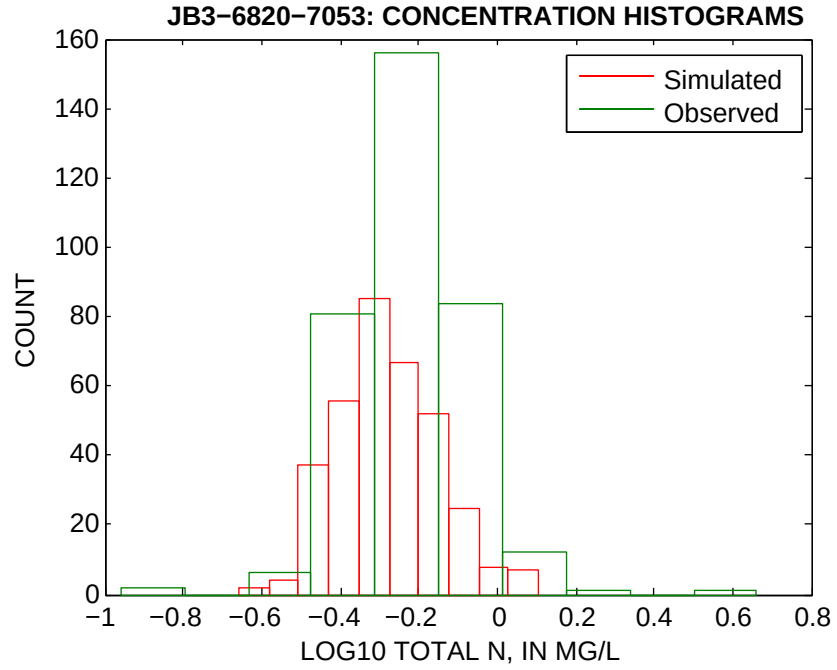
VERSION 2.1

ALL DATA
LOG10

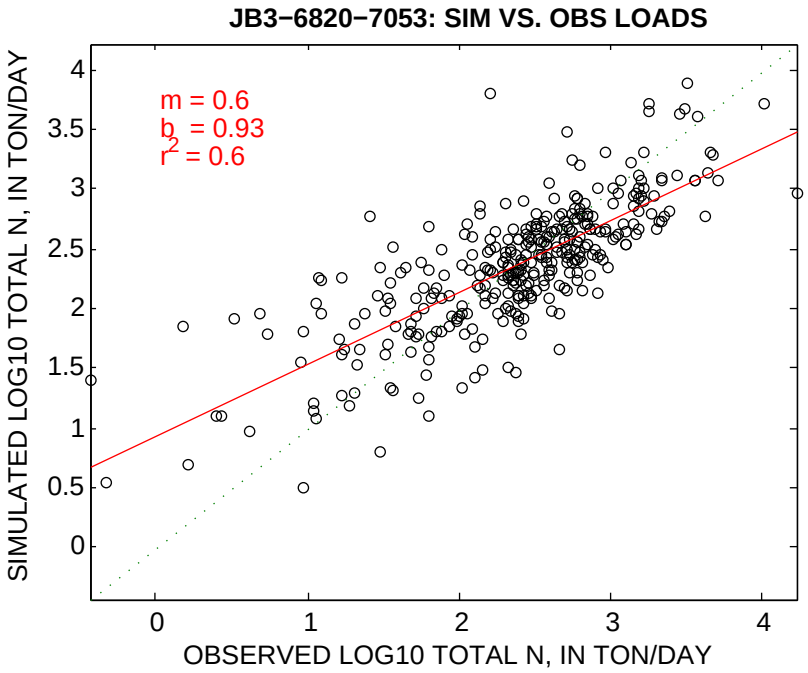


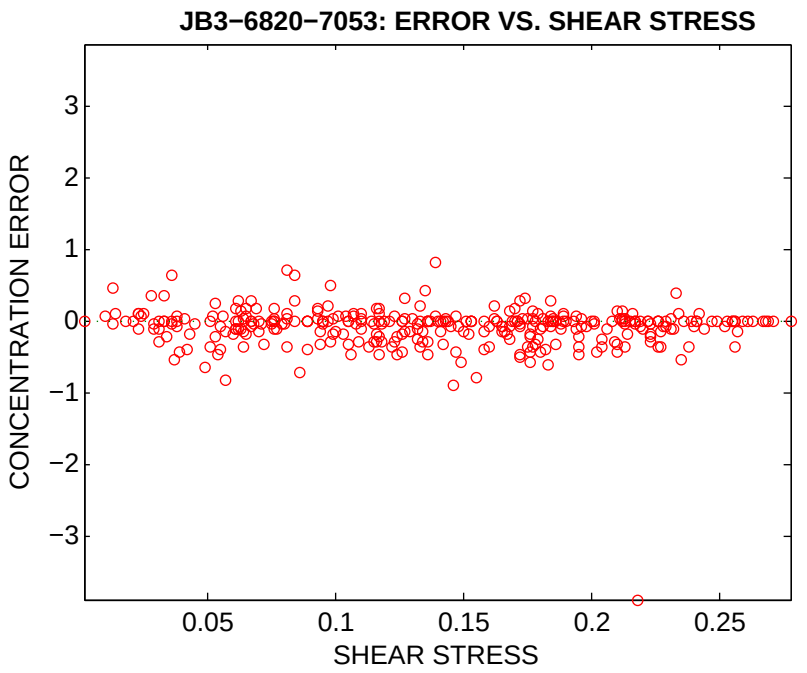


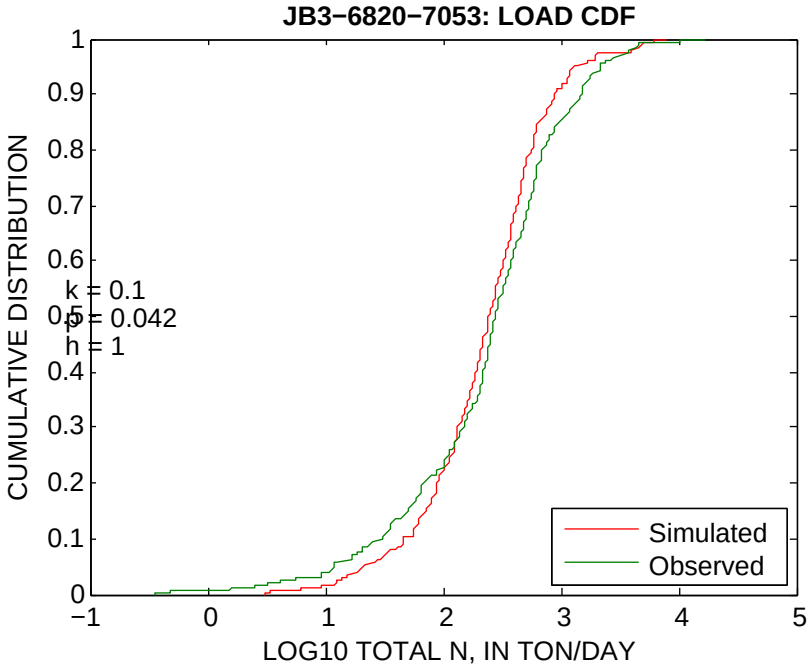


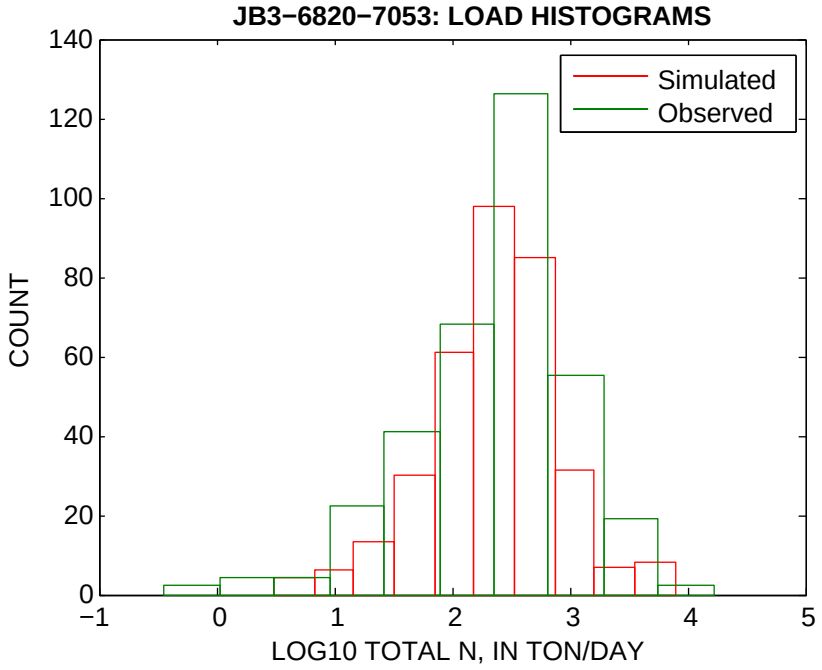


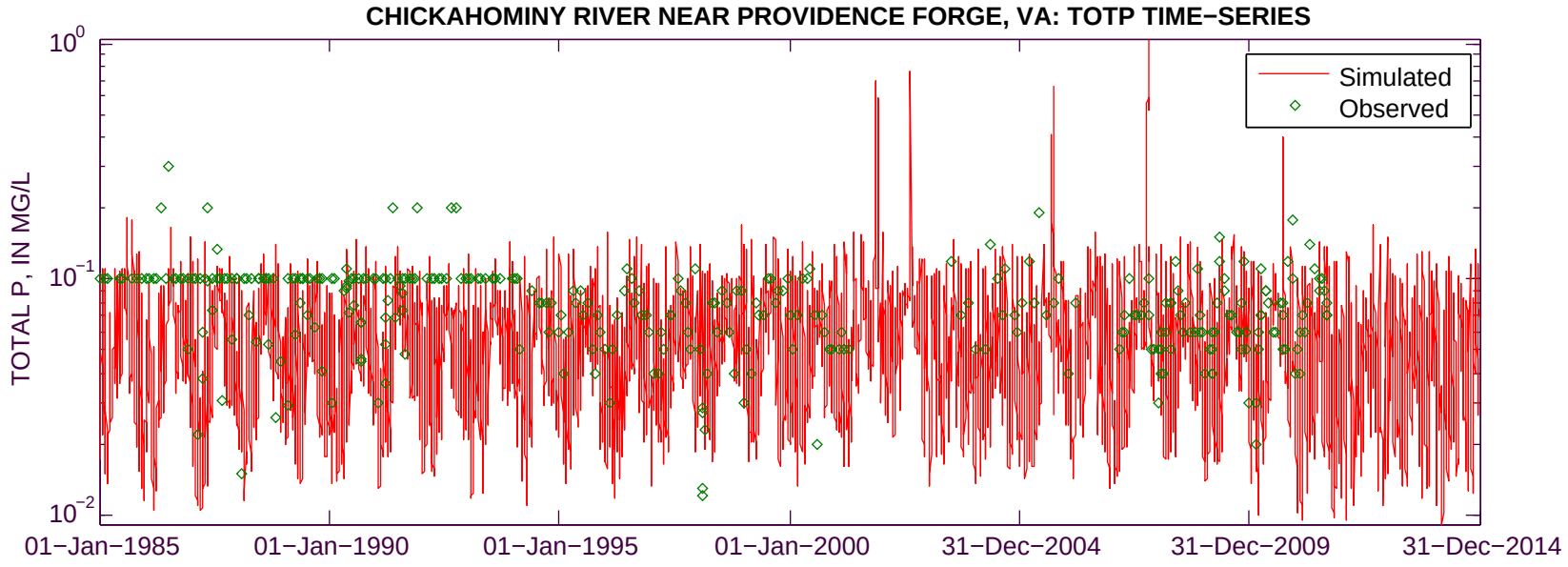
LOAD DATA
LOG10

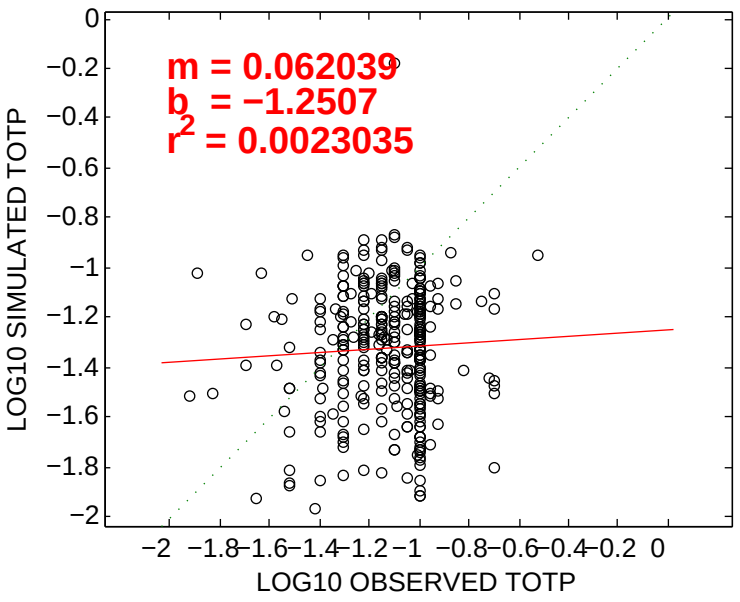


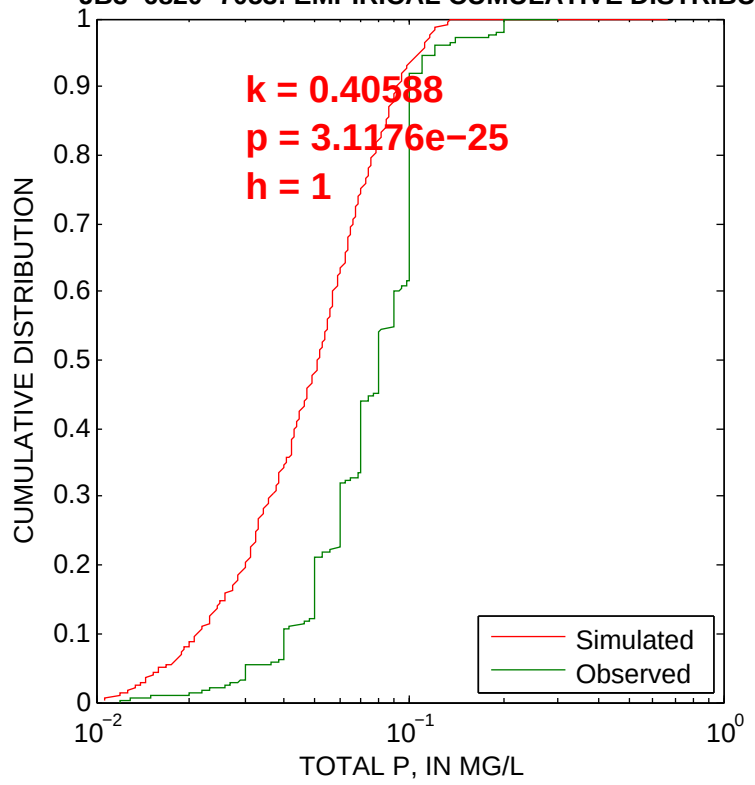












DATA SELECTION

scenario	file
P620171001WQ	TOTP.calib

plot: TOTP - total phosphorus

Dates 1/1/1985 12/31/201

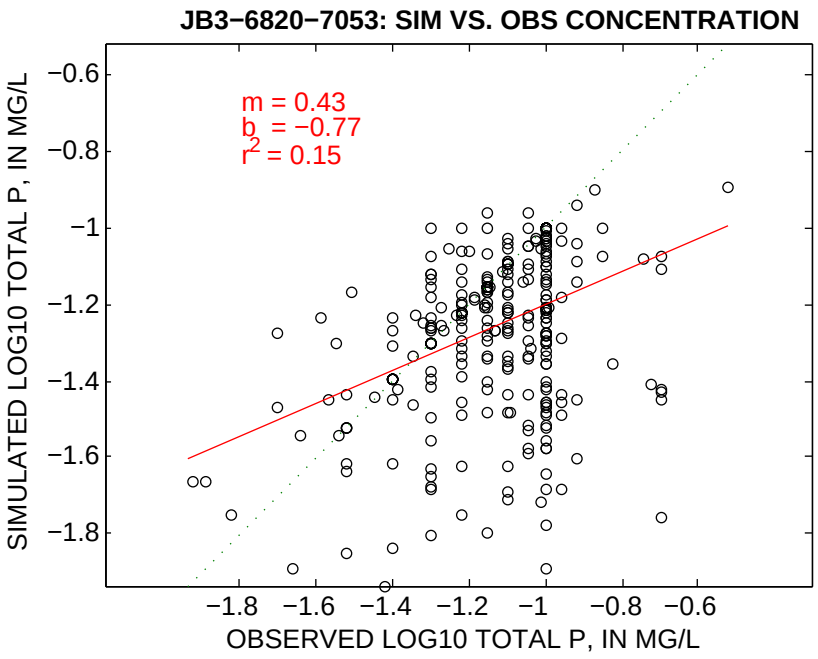
Drive	Directory	Observed
N/A	model	OBS20161101

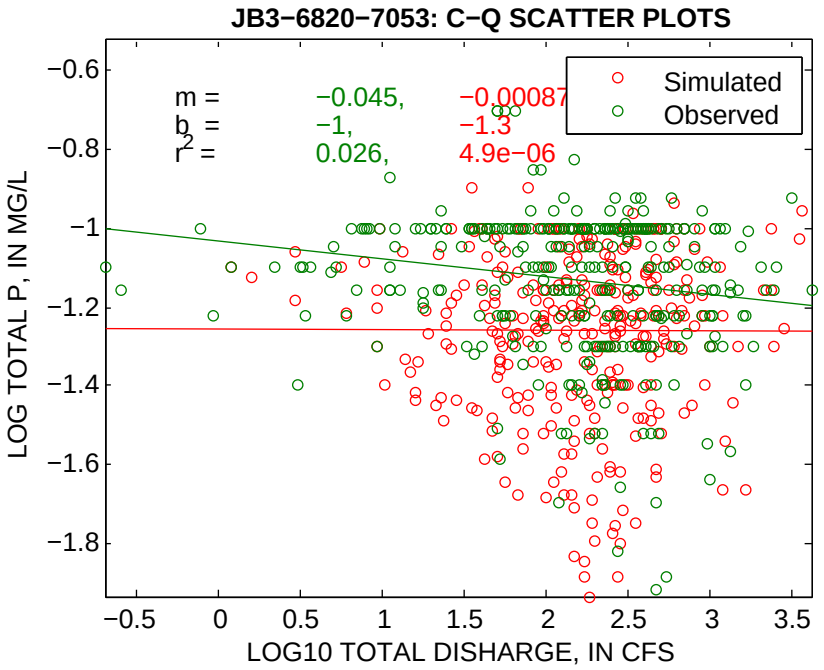
STATISTICS

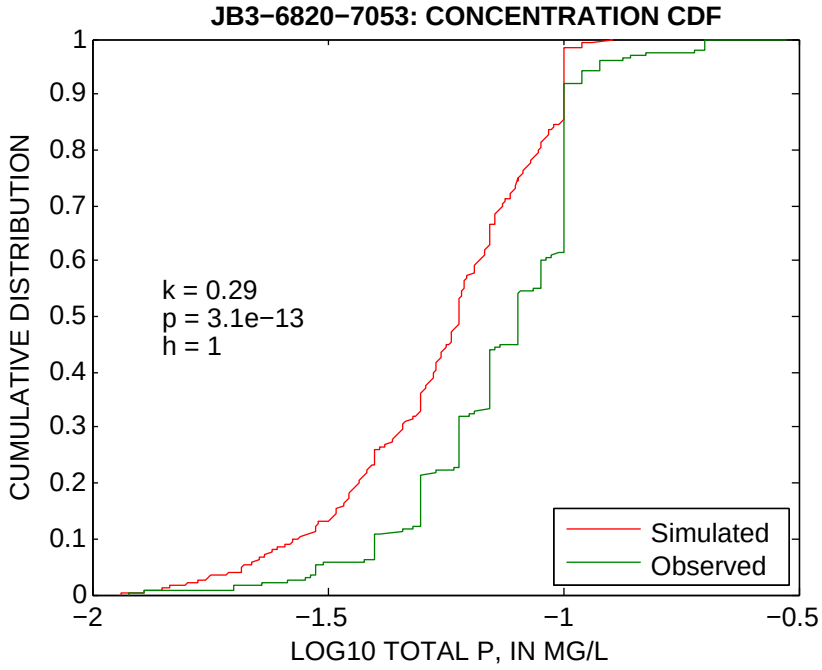
	observe	simulate
n	340	339
min	0.012 -1.92082	0 -1.96851
mean	0.080526 -1.13194	0.0559295 -1.32097
media	0.08 -1.09691	0.051314 -1.2891
max	0.3 -0.522879	0.66261 -0.178742
varian	0.00110244 0.0360988	0.00182186 0.0603179
JB	0.001 0.001	0.001 0.015810
	ra	log
%	-30.5448	16.6998
err.va	0.00350408	0.127776
rel.std.err	3.17849	3.53962
mod.eff	-2.17849	-2.53962

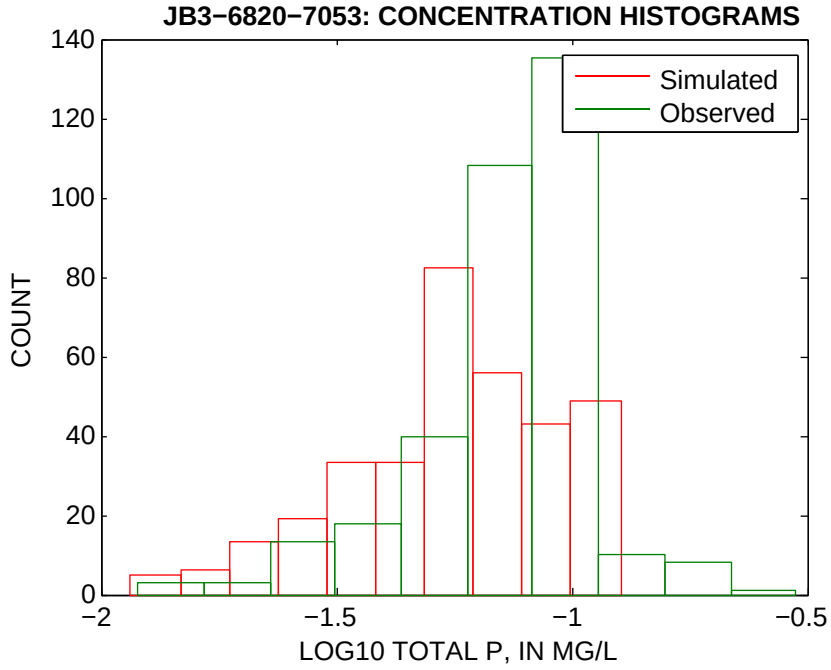
VERSION 2.1

ALL DATA
LOG10

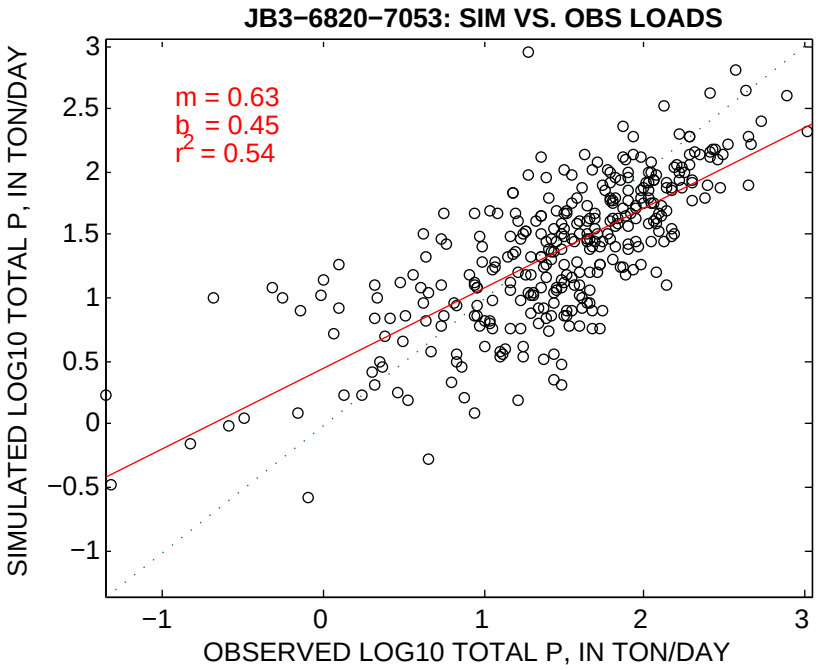


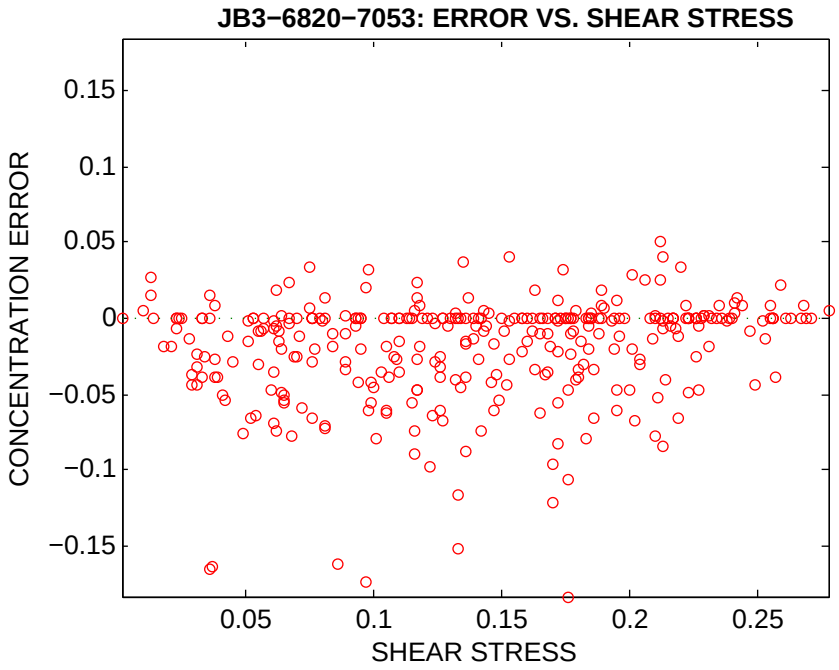


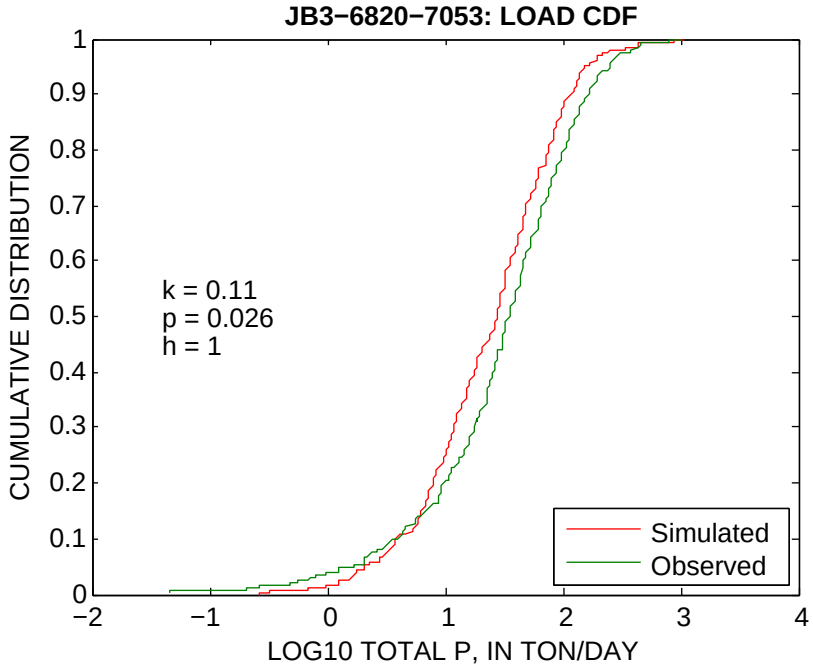


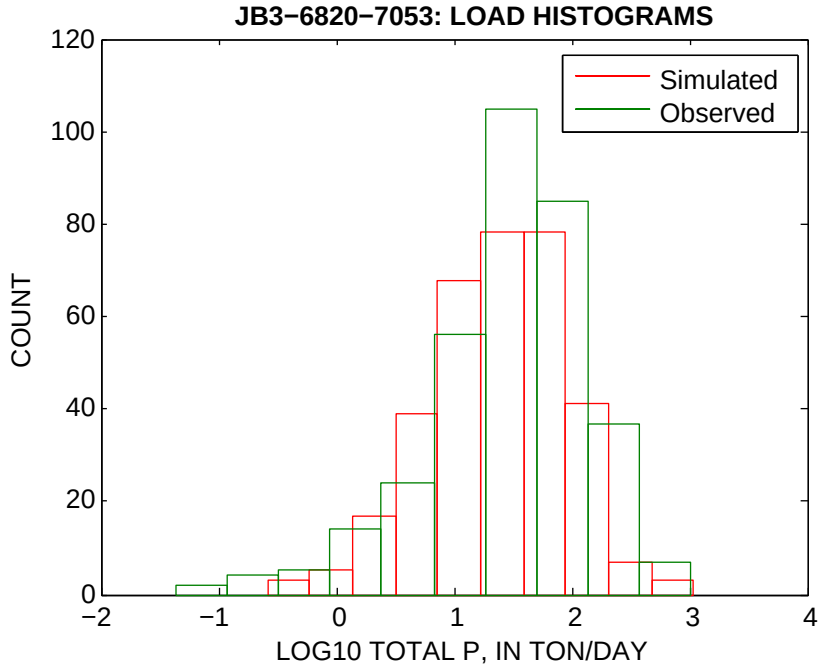


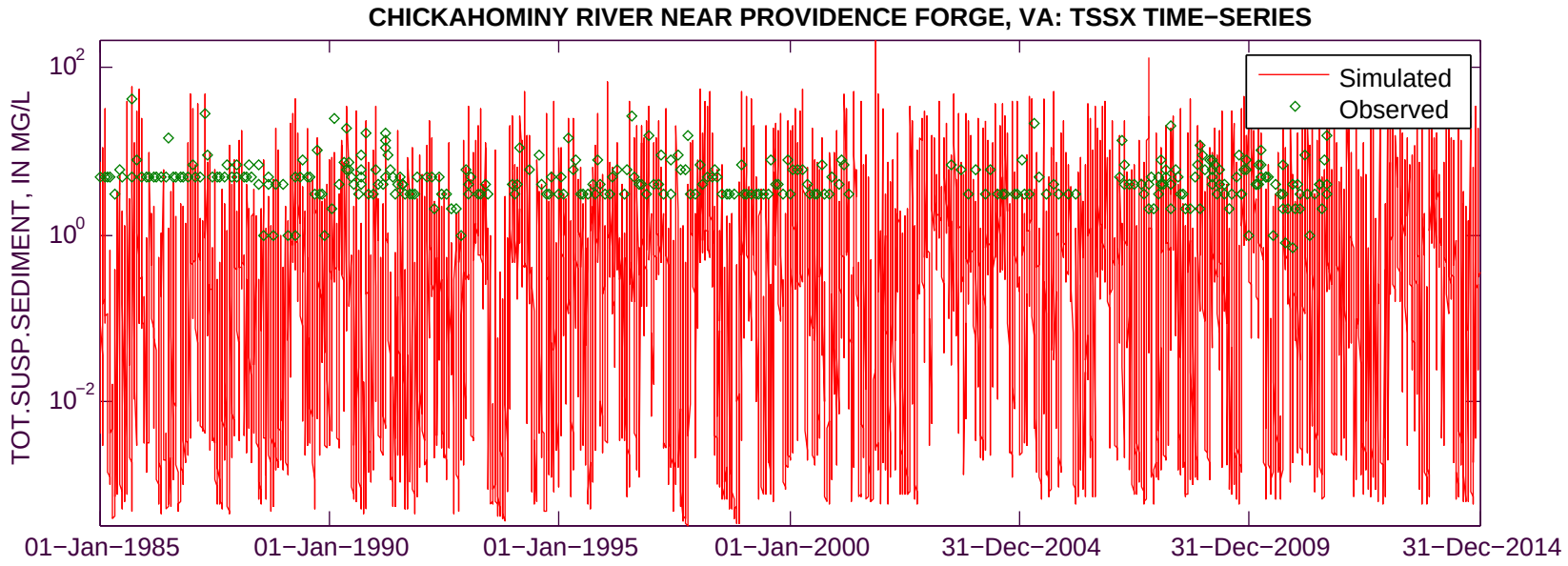
LOAD DATA
LOG10

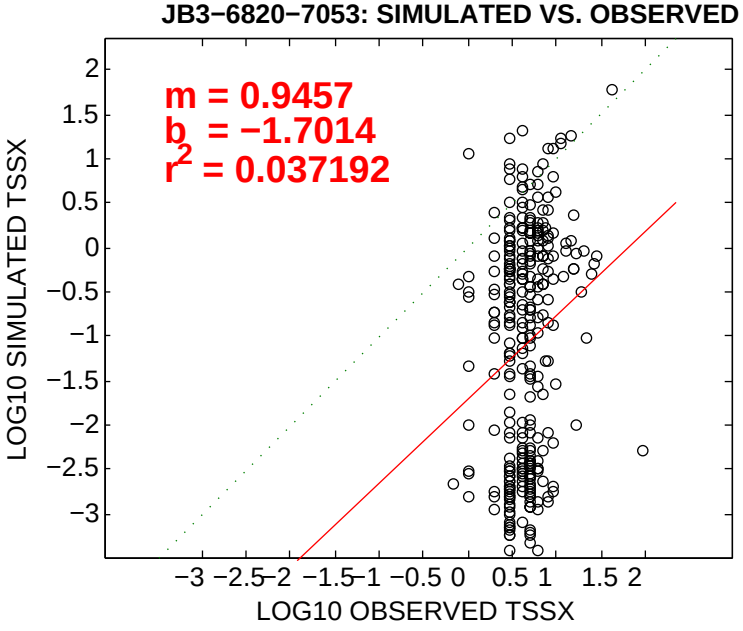


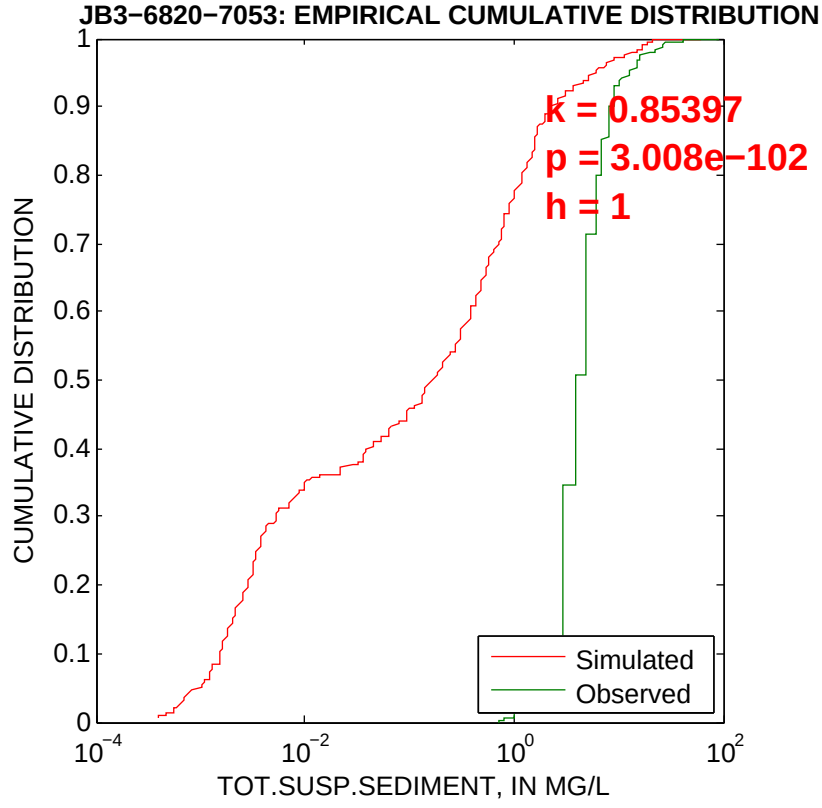












DATA SELECTION

scenario: P620171001WQ | file: TSSX.calib

plot: TSSX - total suspended ...

Dates: 1/1/1985 – 12/31/201

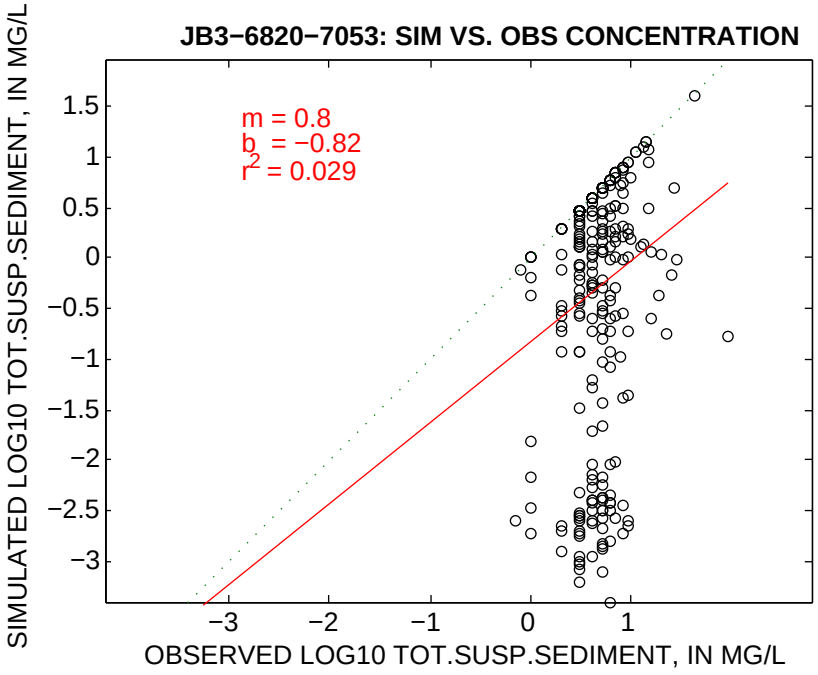
Drive: N/A | Directory: model | Observed: OBS20161101

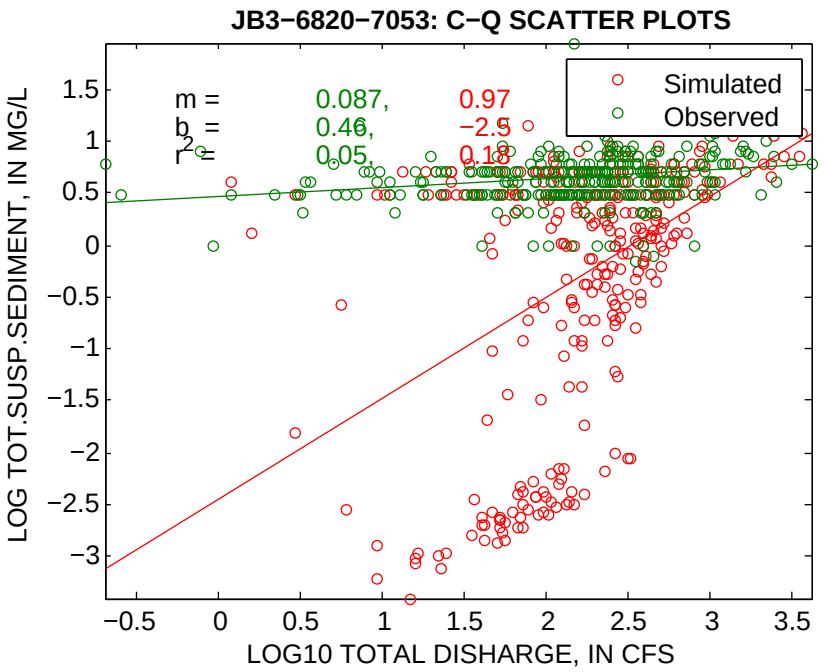
STATISTICS

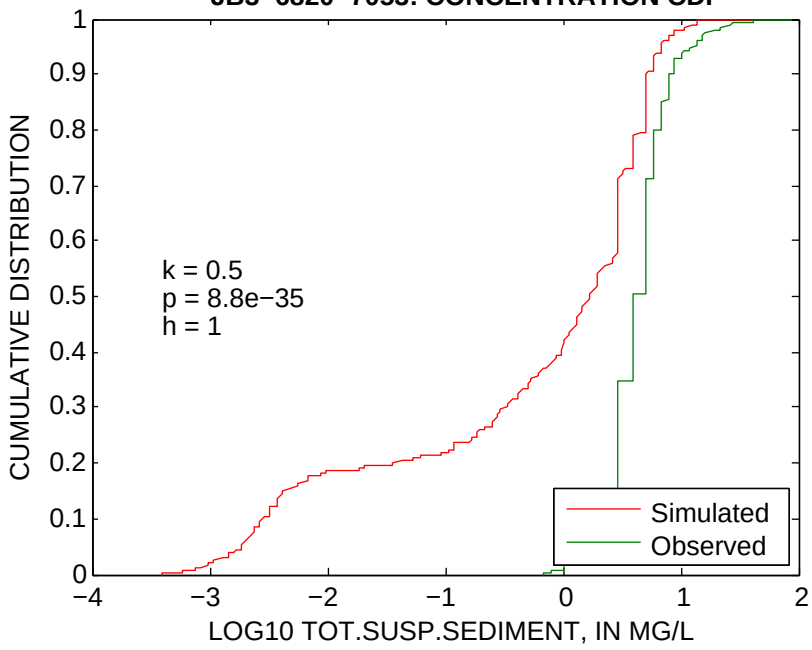
	n	observe	simulate
		315	314
min		0.7	0
		-0.154902	-3.42107
mean		5.57619	1.29898
		0.650071	-1.08661
media		4	0.16863
		0.60206	-0.768466
max		90	60.39
		1.95424	1.78097
varian		40.1881	19.0534
		0.0683597	1.64381
JB		0.001	0.001
		0.001	0.001398
		ra	log
%		-76.7049	-267.152
err.va		62.1487	4.60855
rel.std.err		1.54645	67.4162
mod.eff		-0.546447	-66.4162

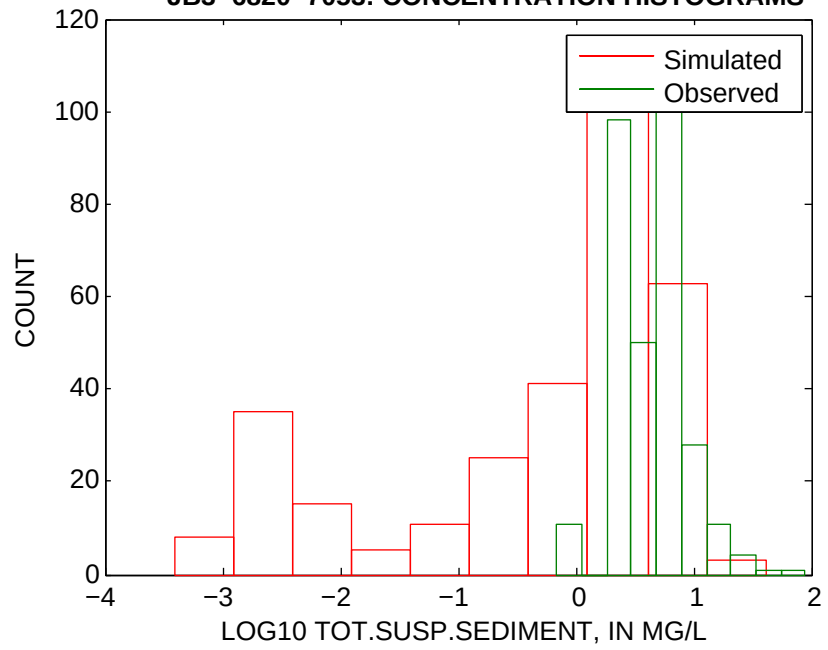
VERSION 2.1

ALL DATA
LOG10

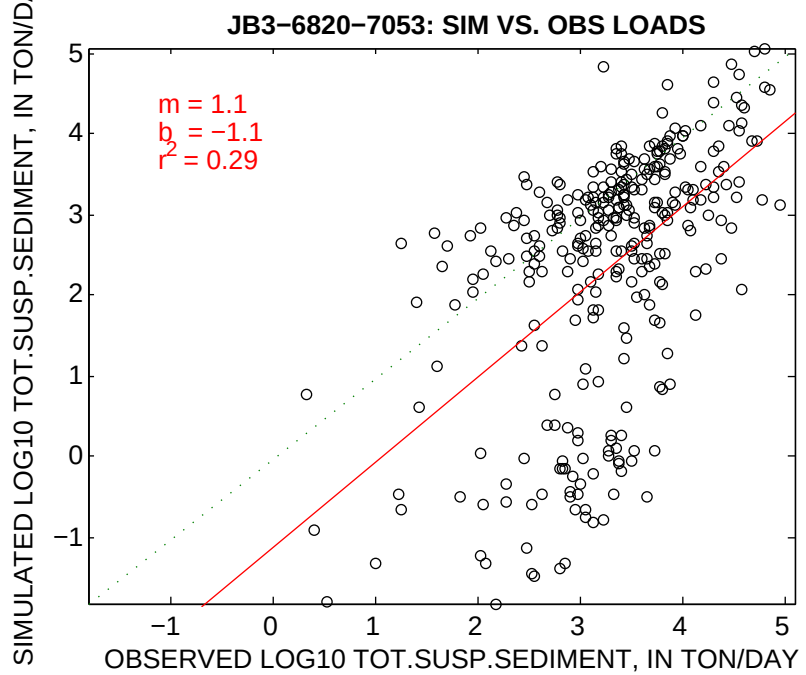


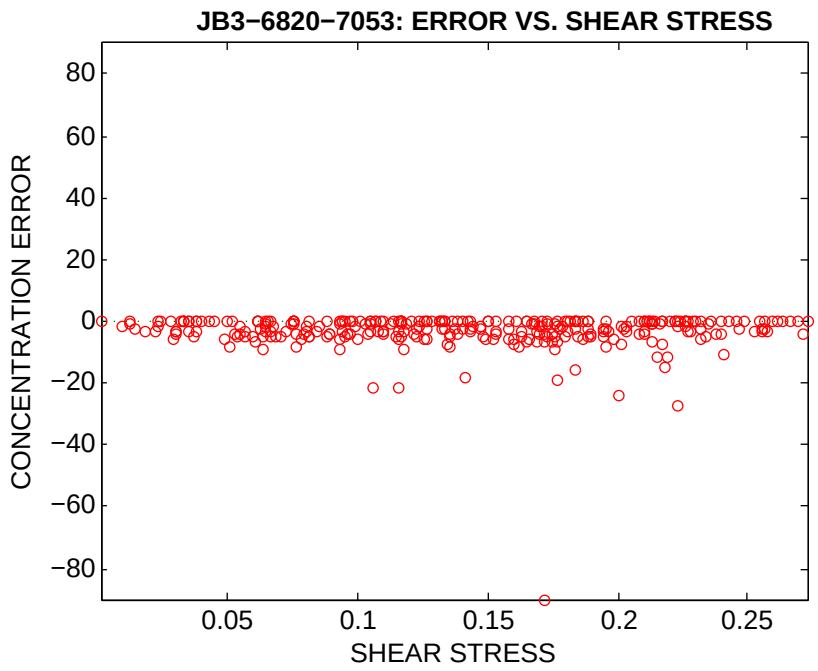


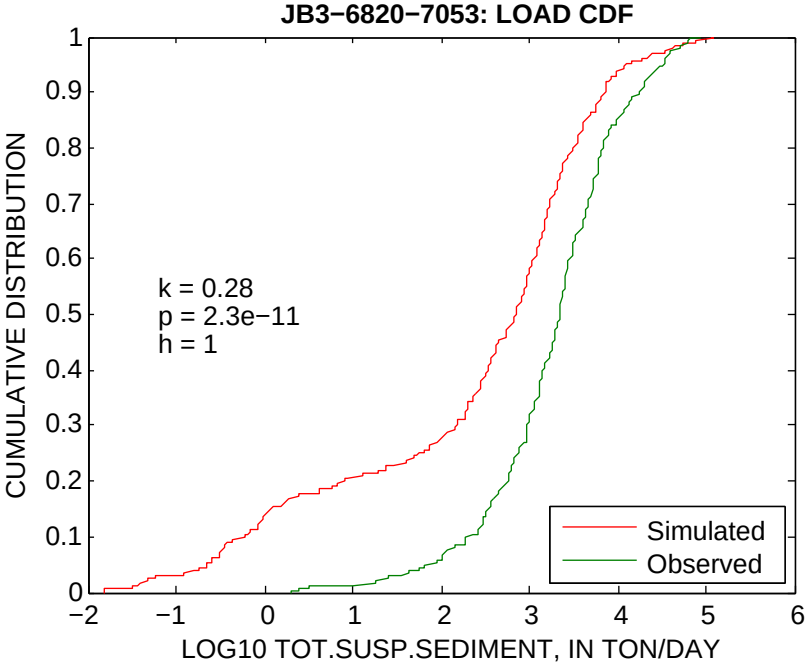


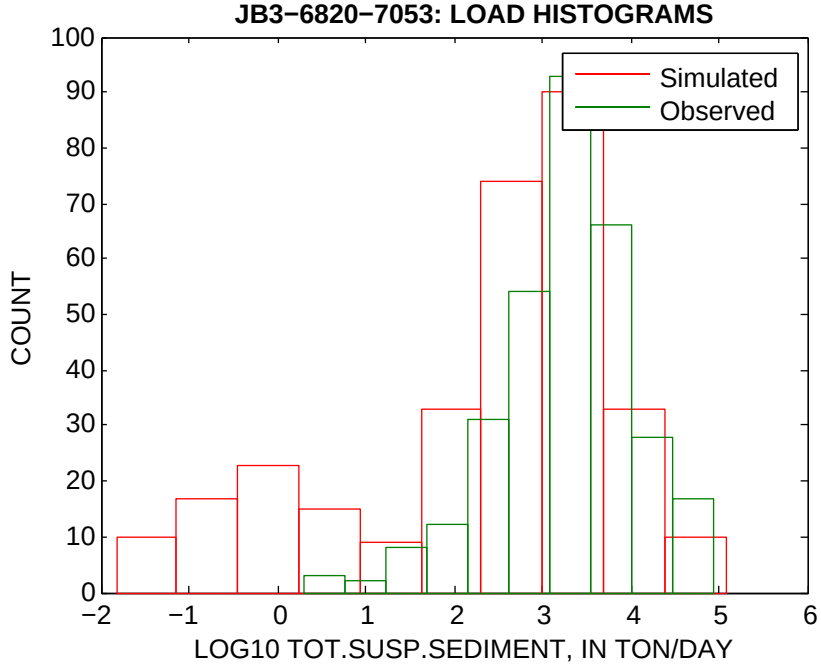


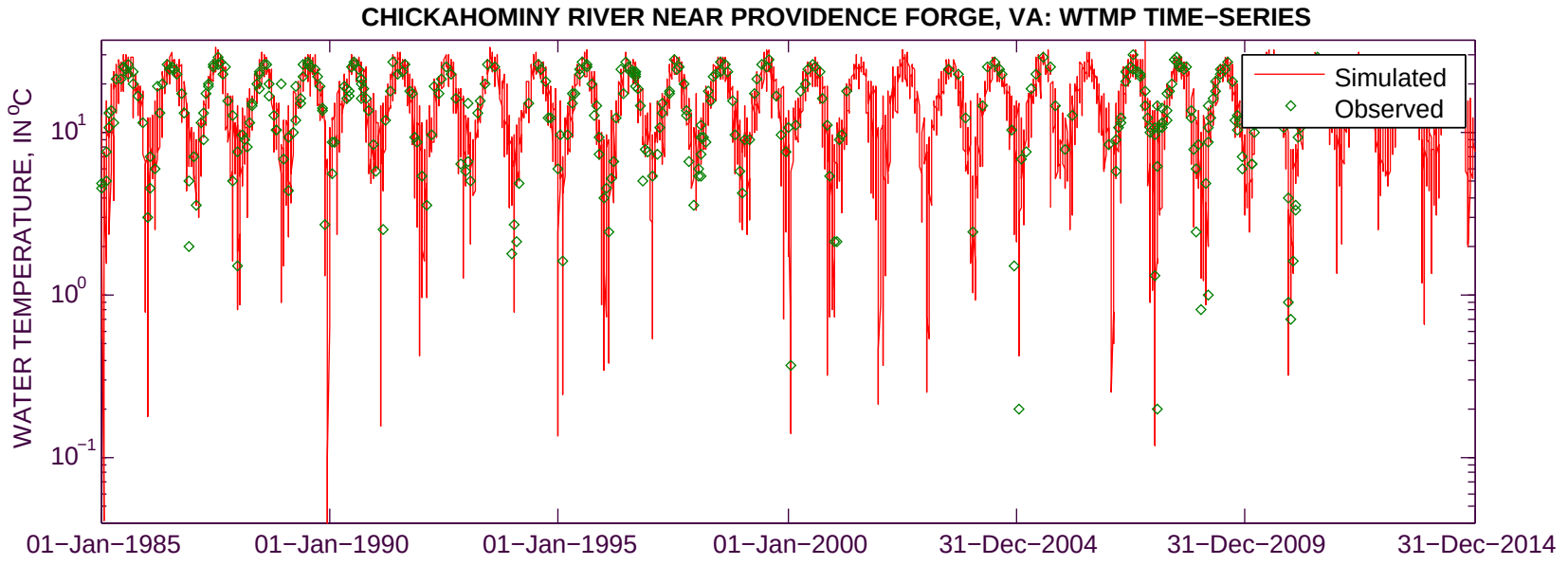
LOAD DATA
LOG10

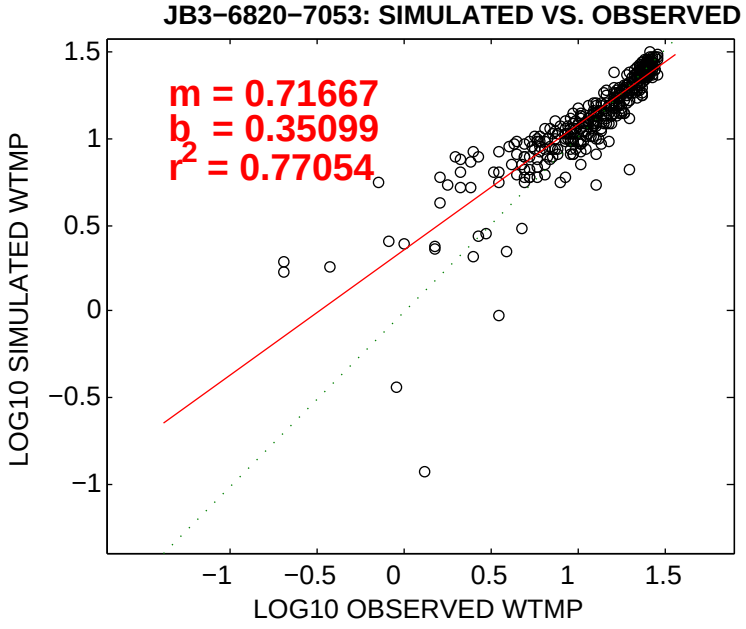


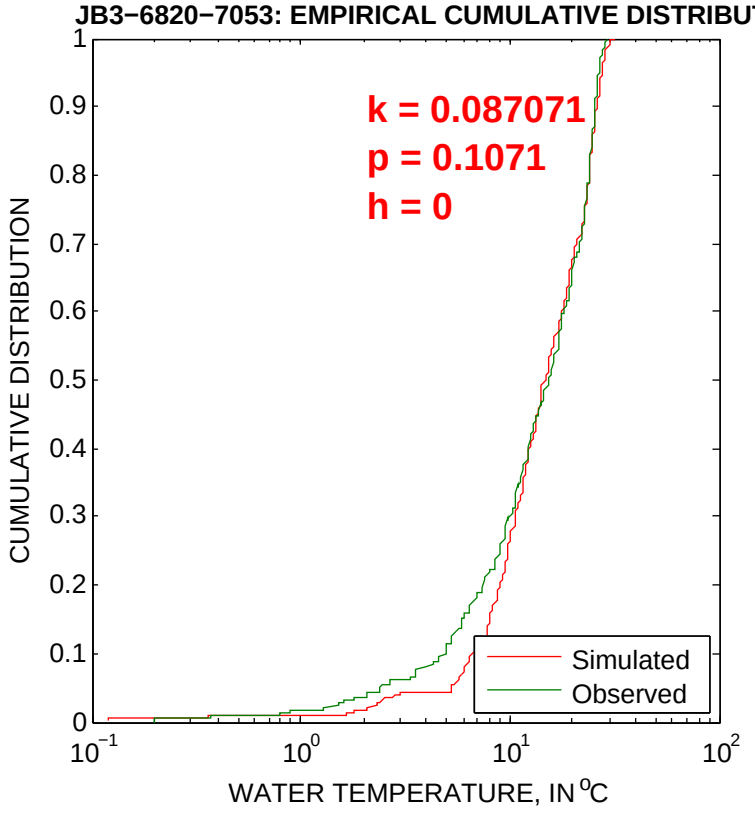












DATA SELECTION

scenario	file
P620171001WQ	WTMP.calib

plot: WTMP - water tempera...

Dates: 1/1/1985 – 12/31/201

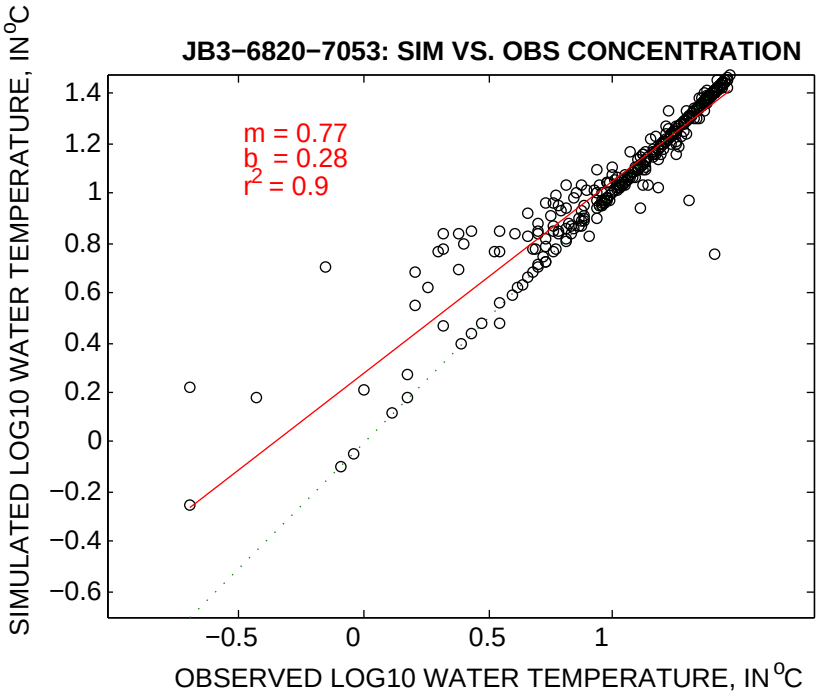
Drive	Directory	Observed
N/A	model	OBS20161101

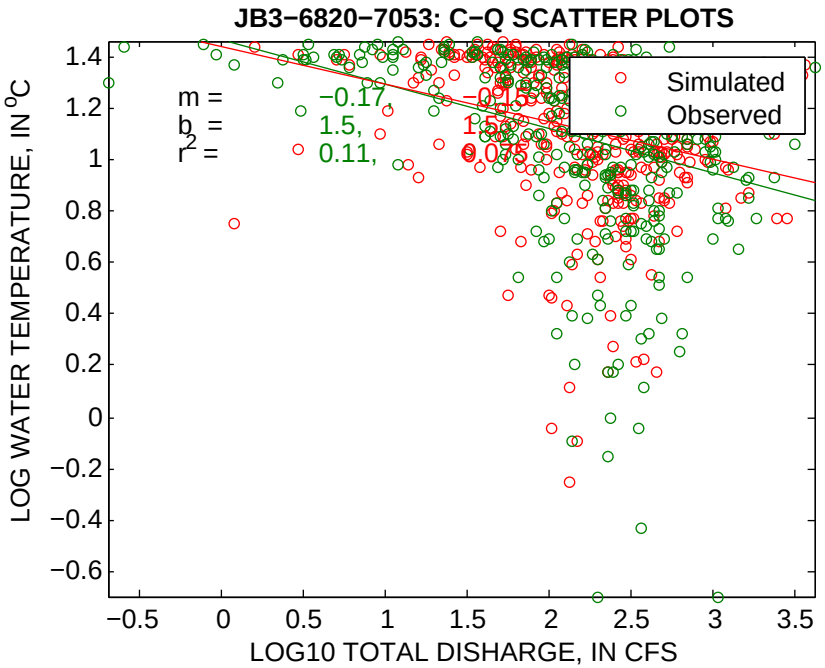
STATISTICS

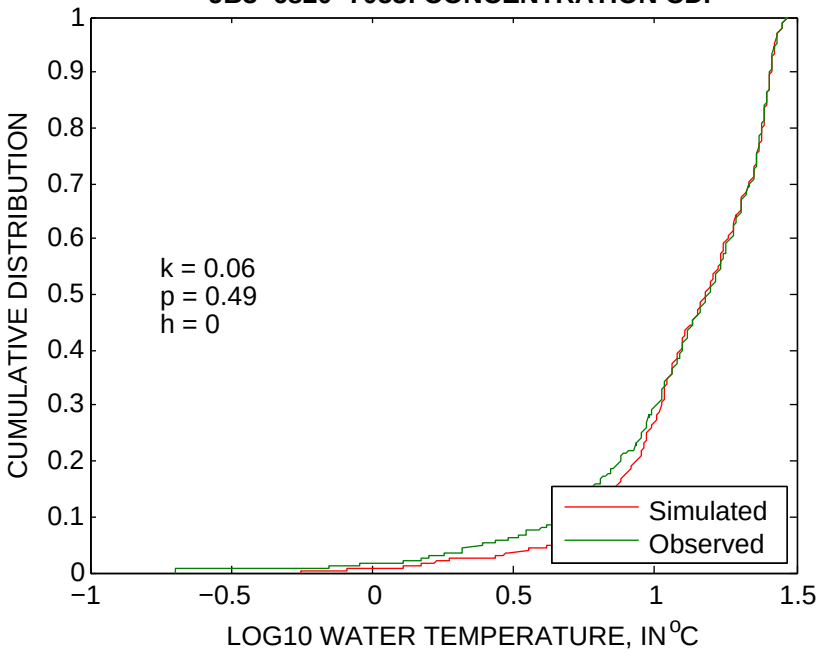
	observe	simulate
n	379	378
min	0.2	0
	-0.69897	-0.922959
mean	15.3901	15.8276
	1.09185	1.13348
media	15.3	14.608
	1.18469	1.16829
max	29.4	31.504
	1.46835	1.49837
varian	62.9528	55.4358
	0.121968	0.0812993
JB	0.001	0.002554
	0.001	0.001
	ra	log
%	2.84227	3.81283
err.va	7.52775	0.0301842
rel.std.err	0.119578	0.247477
mod.eff	0.880422	0.752523

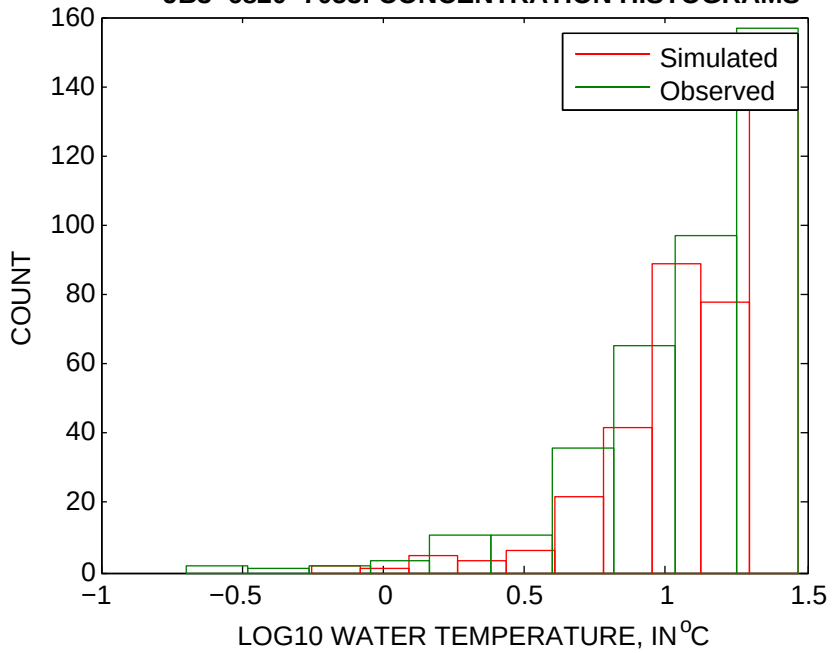
VERSION 2.1

ALL DATA
LOG10

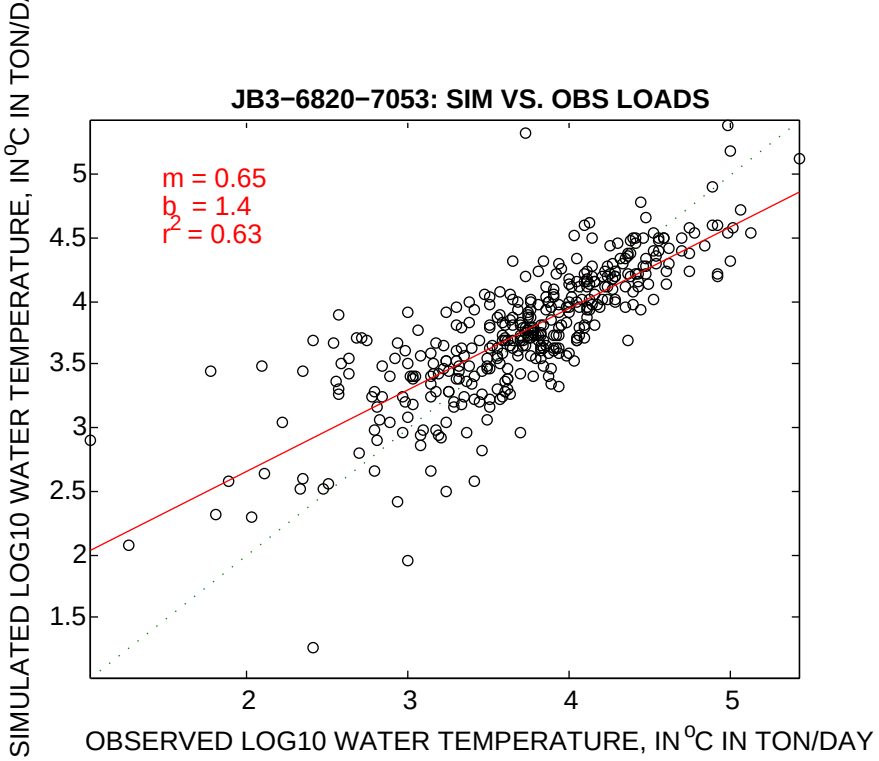


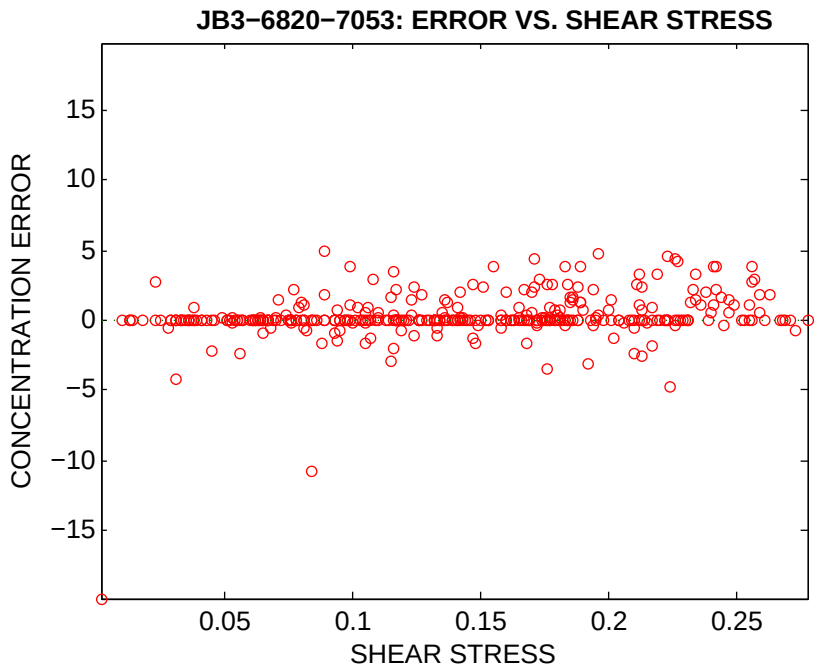


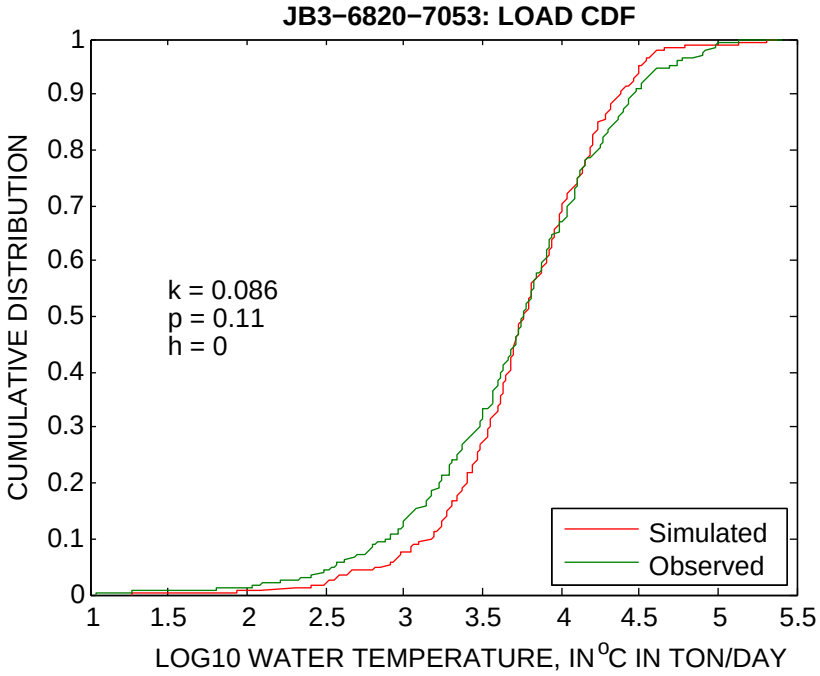


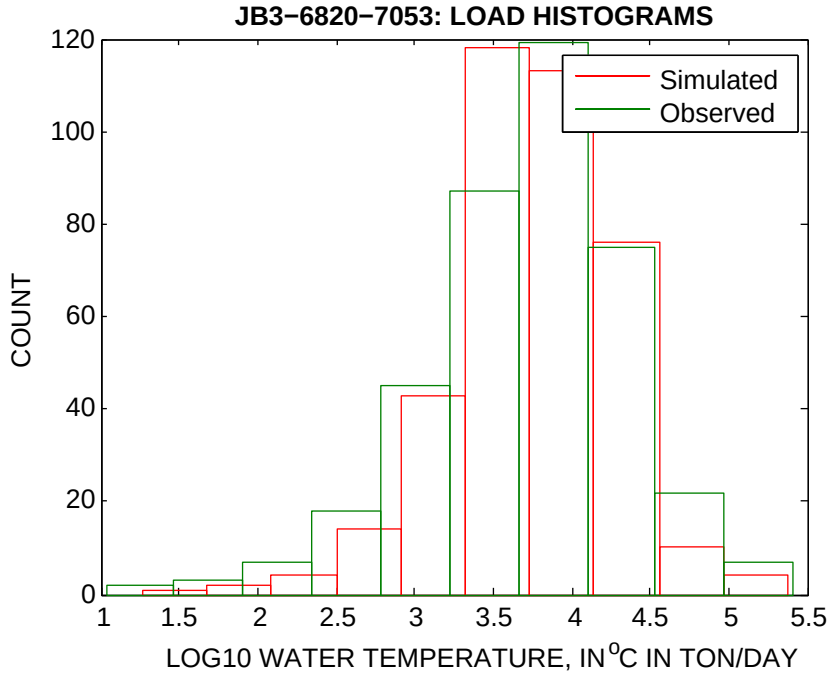


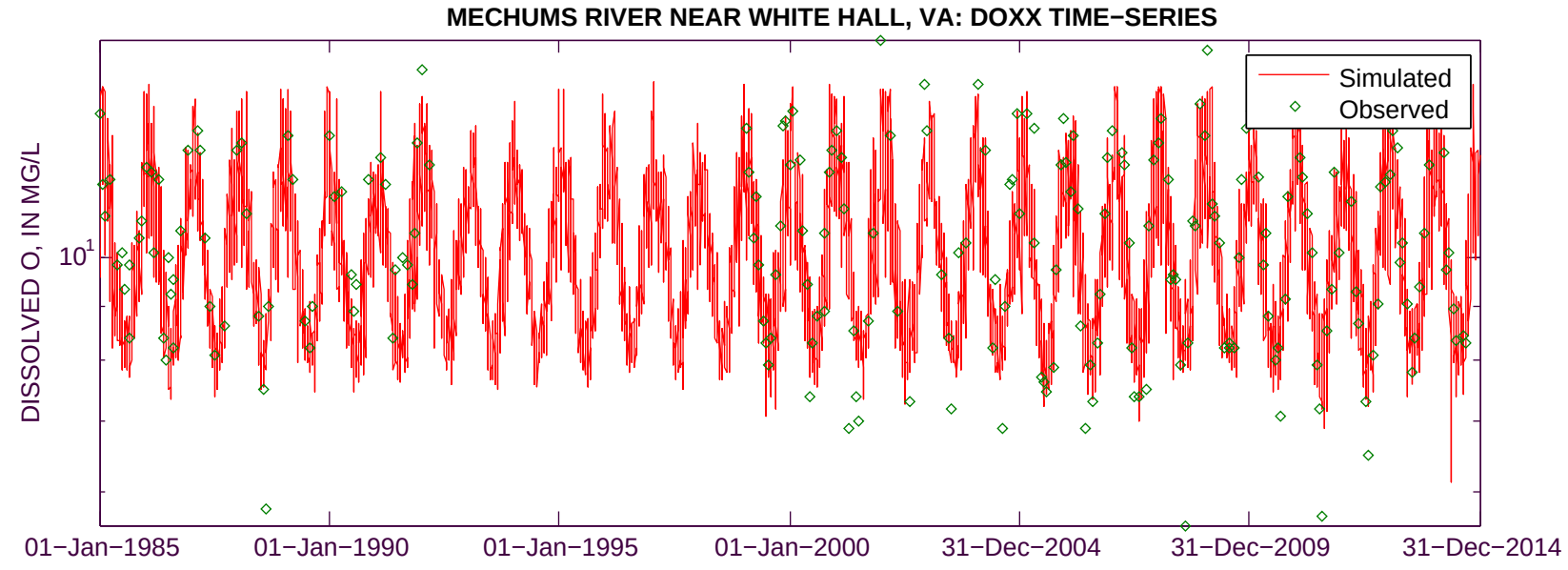
LOAD DATA
LOG10

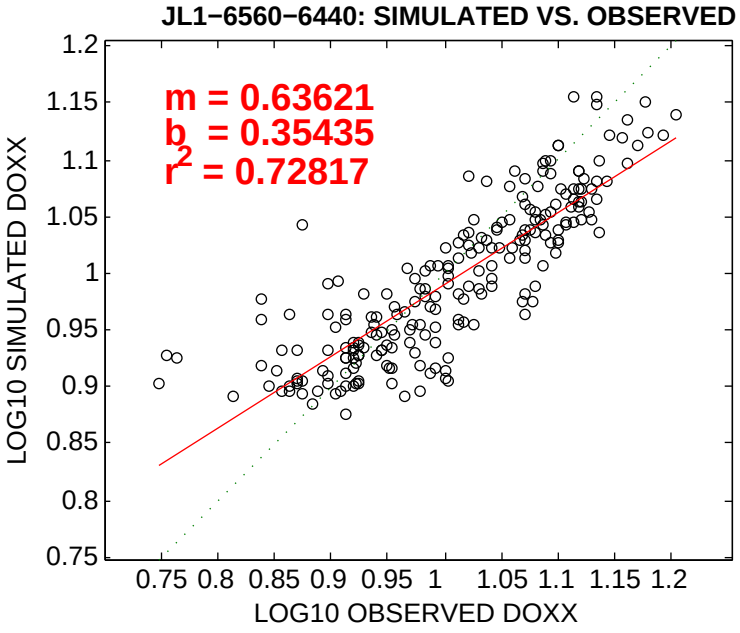


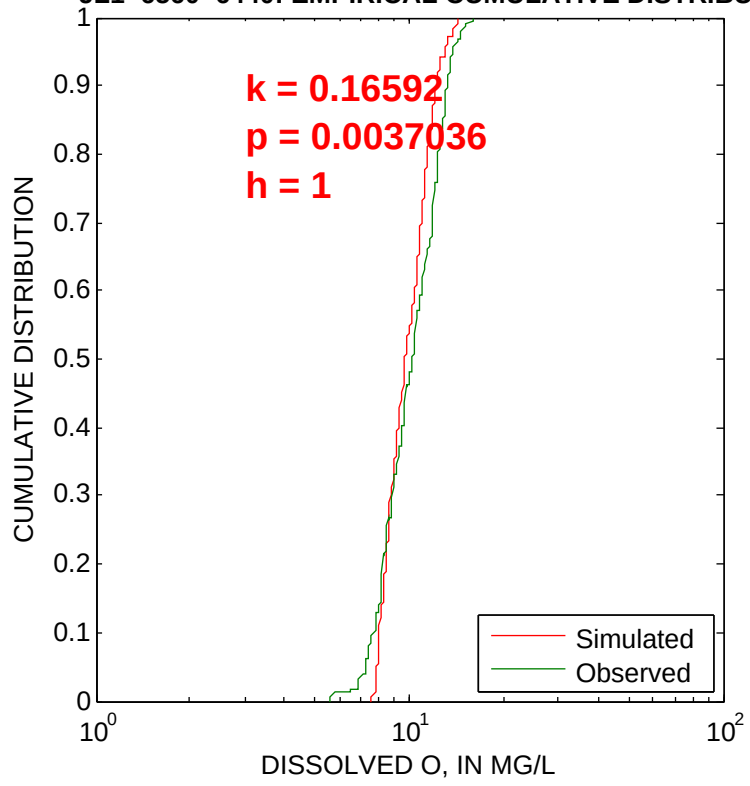












DATA SELECTION

scenario: P620171001WQ | file: DOXX.calib

plot: DOXX - dissolved oxygen

Dates: 1/1/1985 – 12/31/201

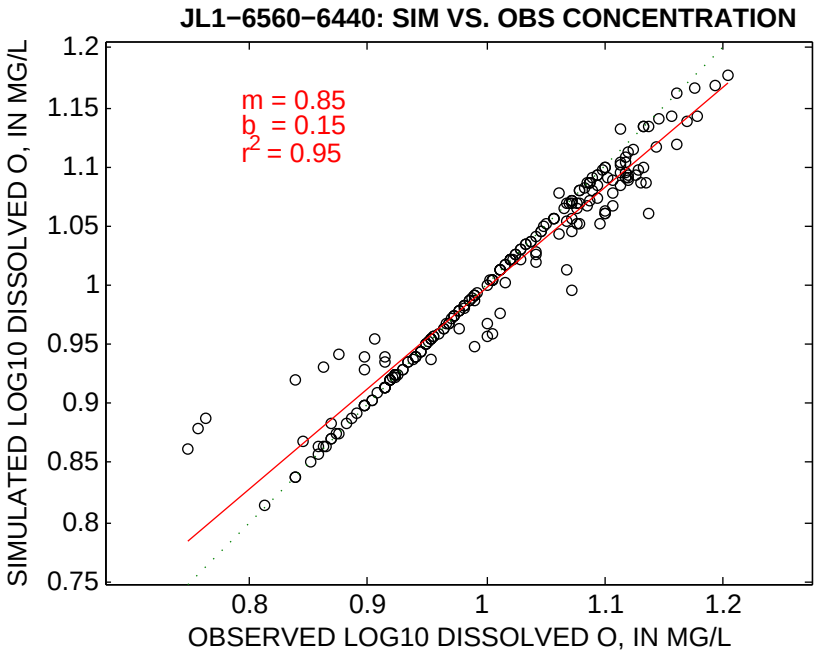
Drive | Directory | Observed: N/A | model | OBS20161101

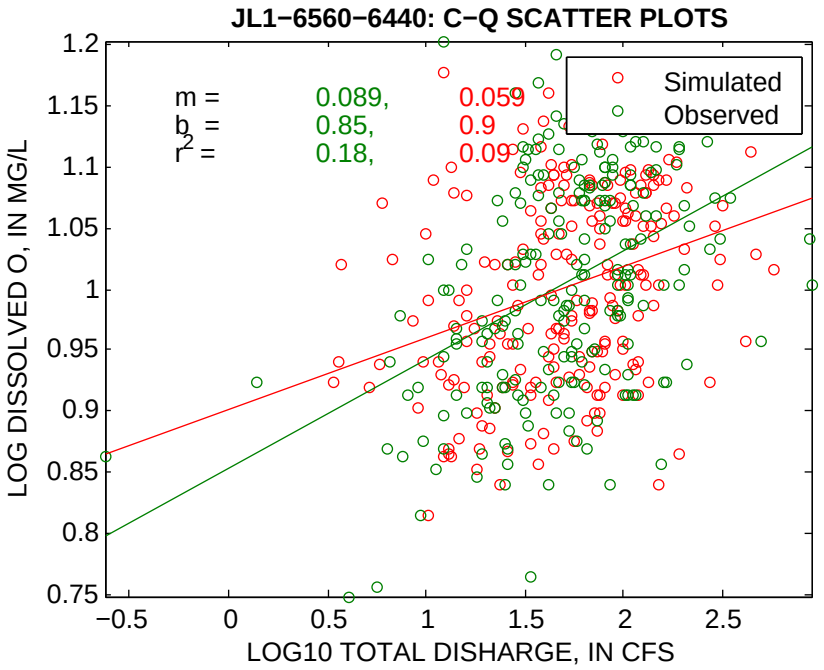
STATISTICS

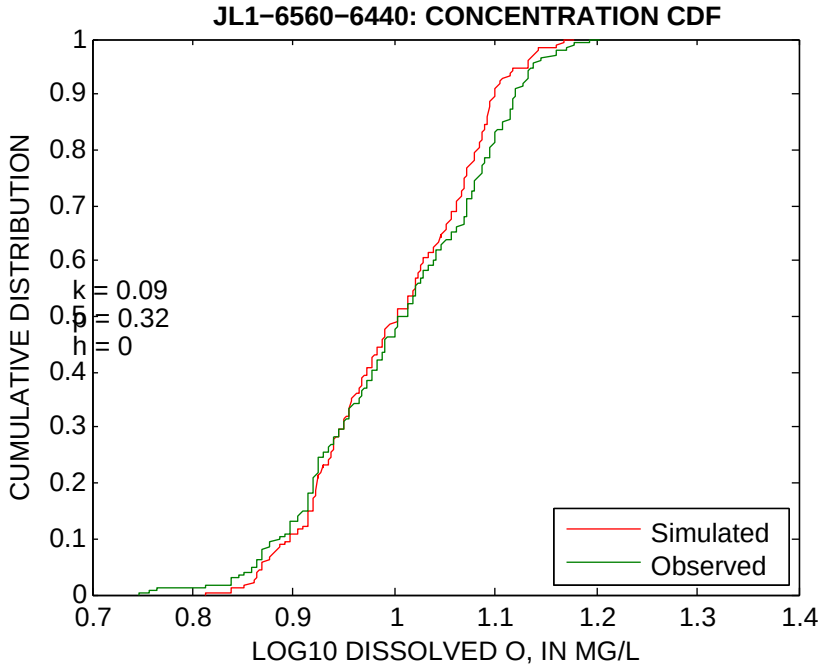
		observe	simulate
n		223	223
min		5.6	7.5172
		0.748188	0.876056
mean		10.3662	9.99739
		1.00598	0.994364
media		10.1	9.7186
		1.00432	0.987604
max		16	14.33
		1.20412	1.15625
varian		4.68212	2.63374
		0.00855467	0.0047552
JB		0.037505	0.006822
	☑	0.064636	0.011979
		ra	log
% err.va		-3.5577	-1.15497
		1.34373	0.00256037
rel.std.err		0.286993	0.299294
mod.eff		0.713007	0.700706

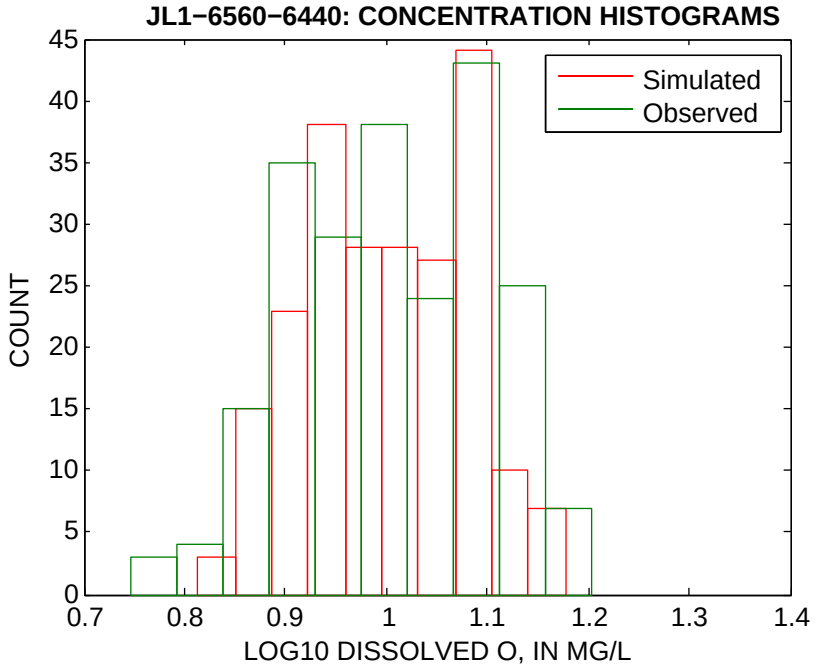
VERSION 2.1

ALL DATA
LOG10

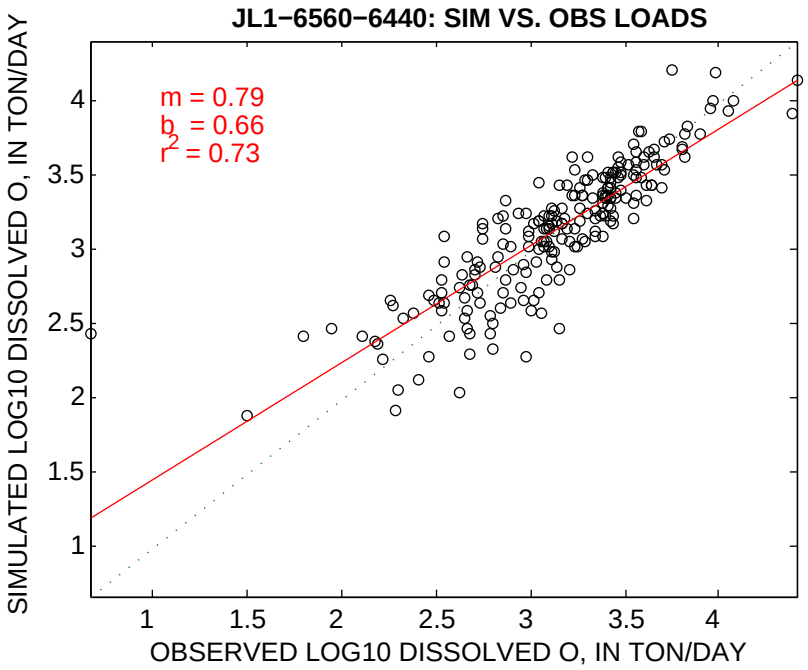


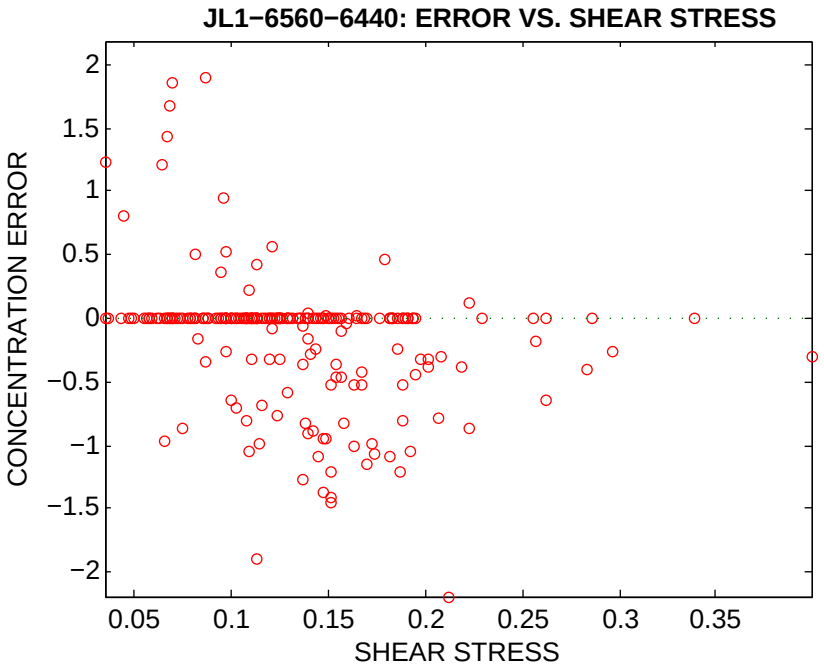


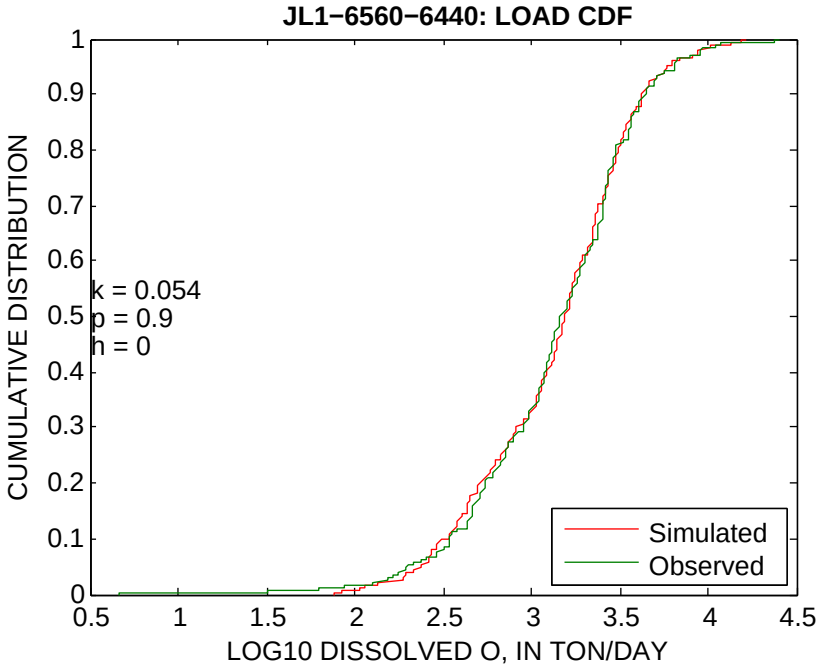


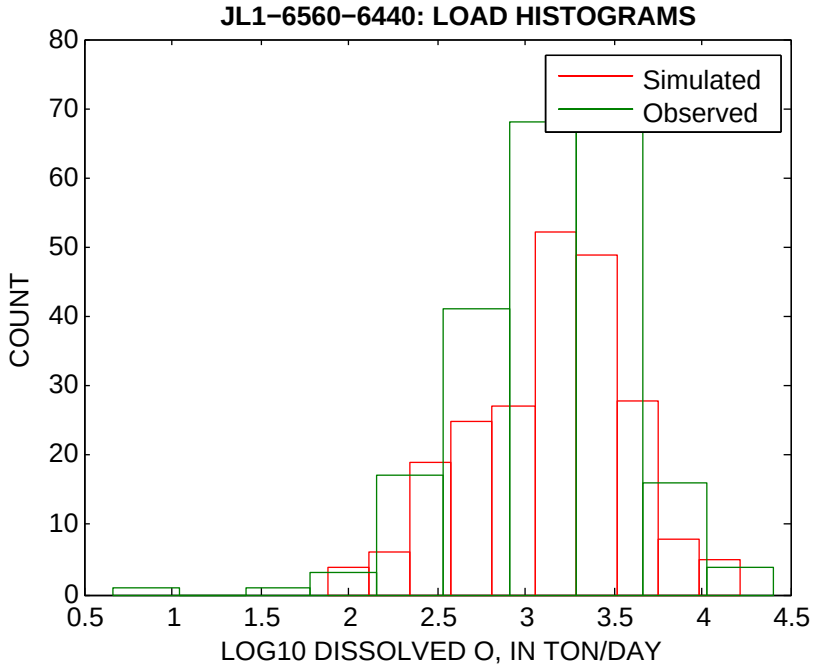


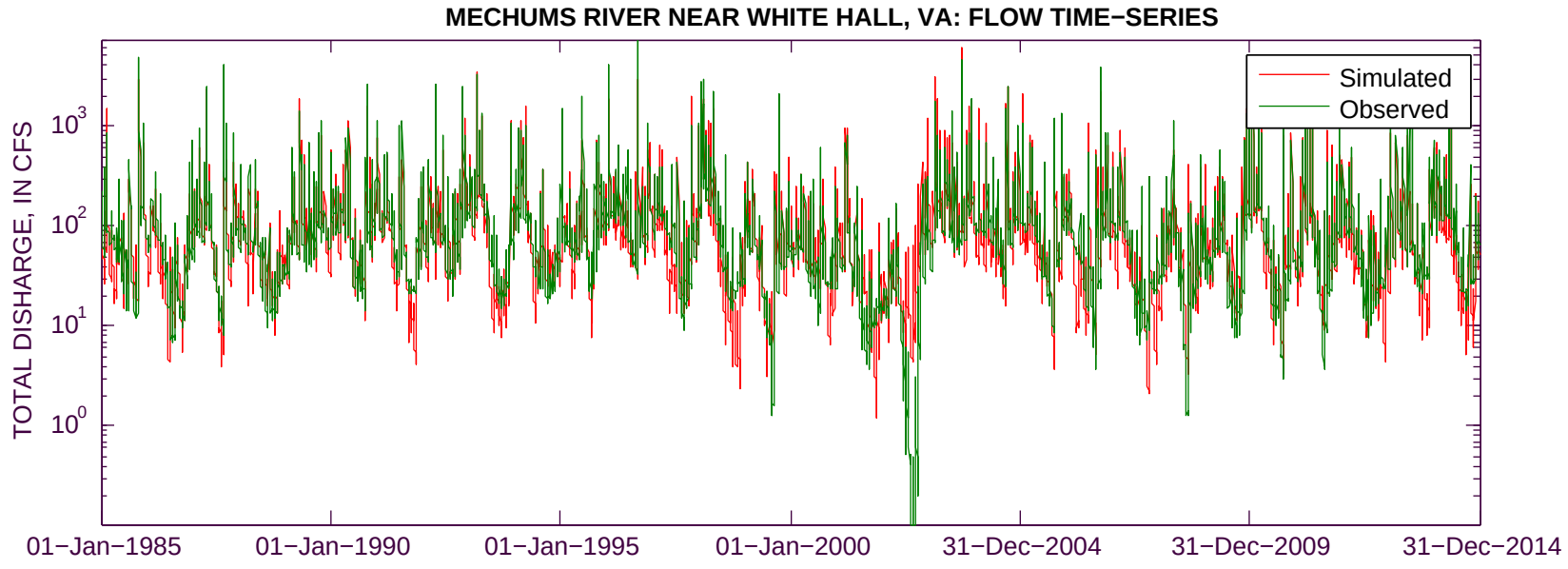
LOAD DATA
LOG10

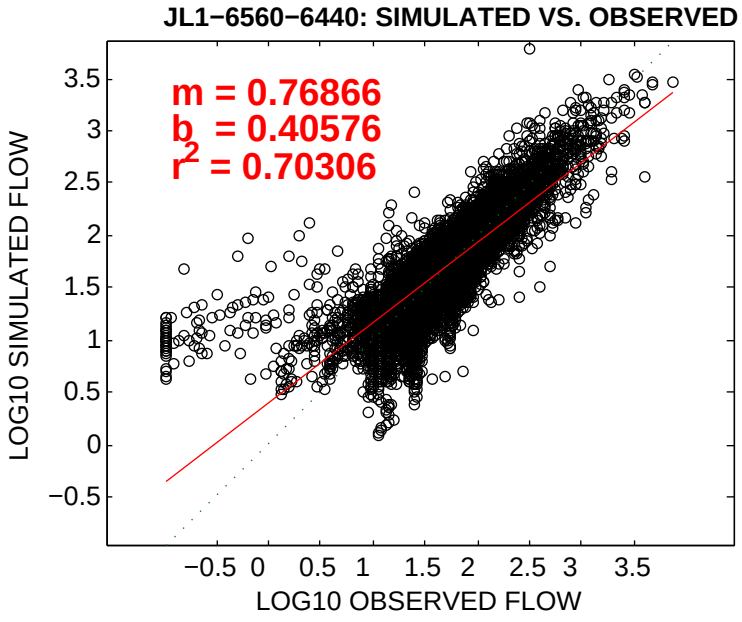


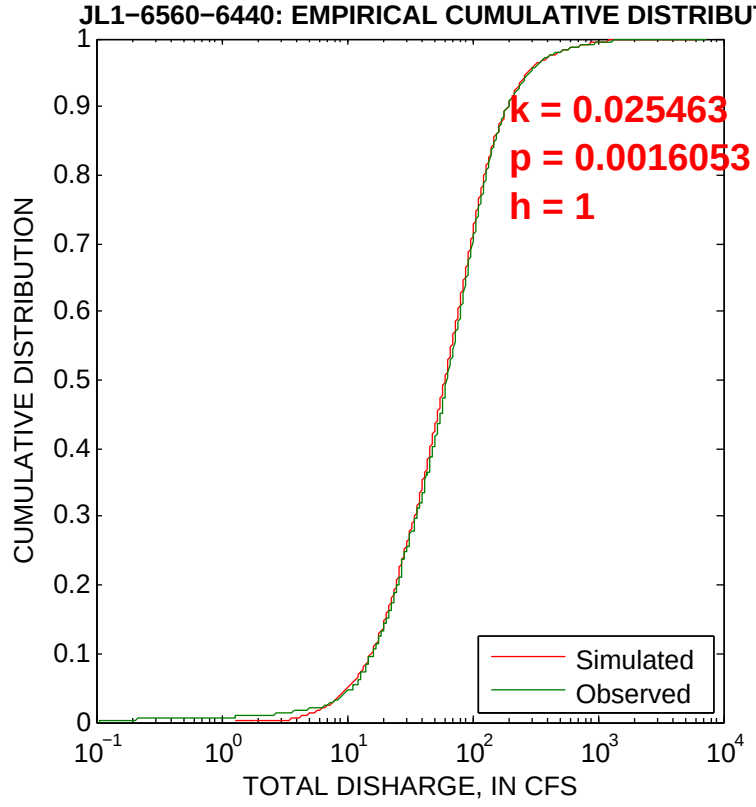












DATA SELECTION

scenario: P620171001WQ | file: FLOW.calib

plot: FLOW - total discharge

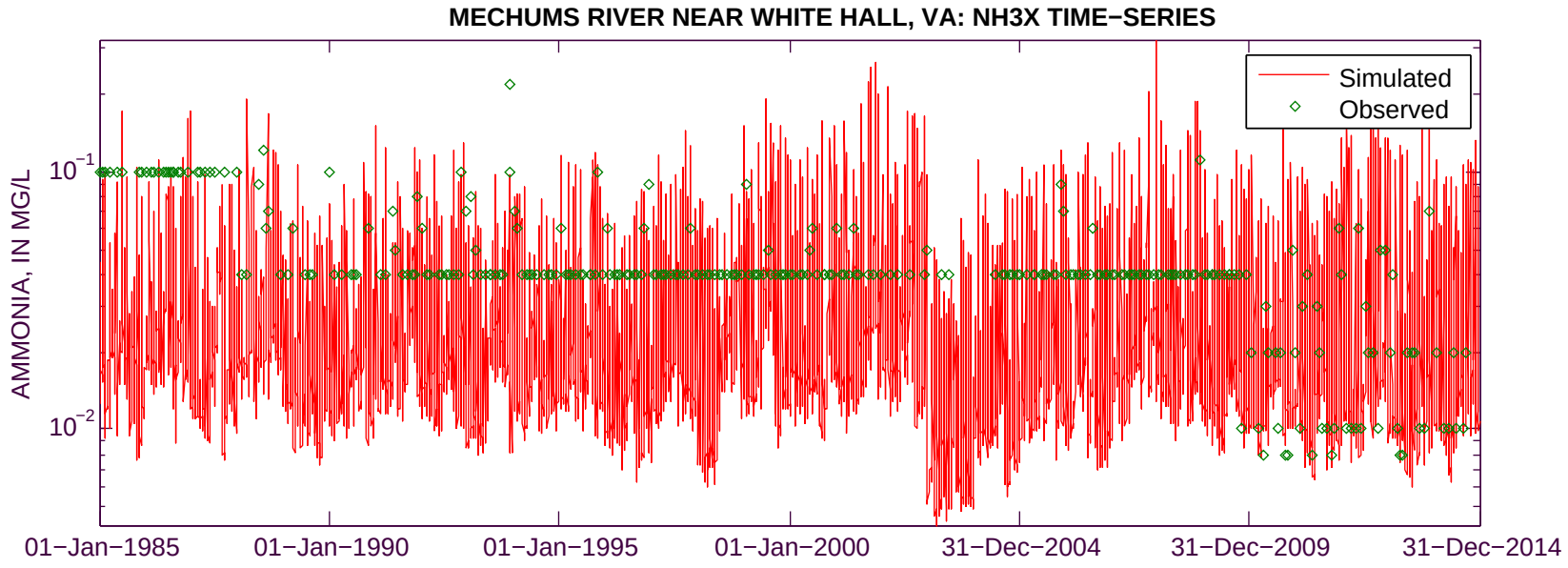
Dates: 1/1/1985 – 12/31/201

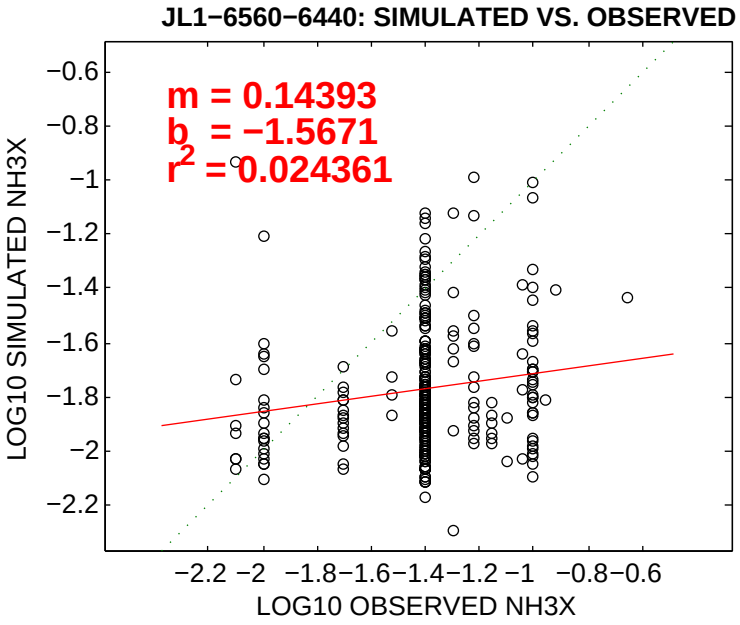
Drive: N/A | Directory: model | Observed: OBS20161101

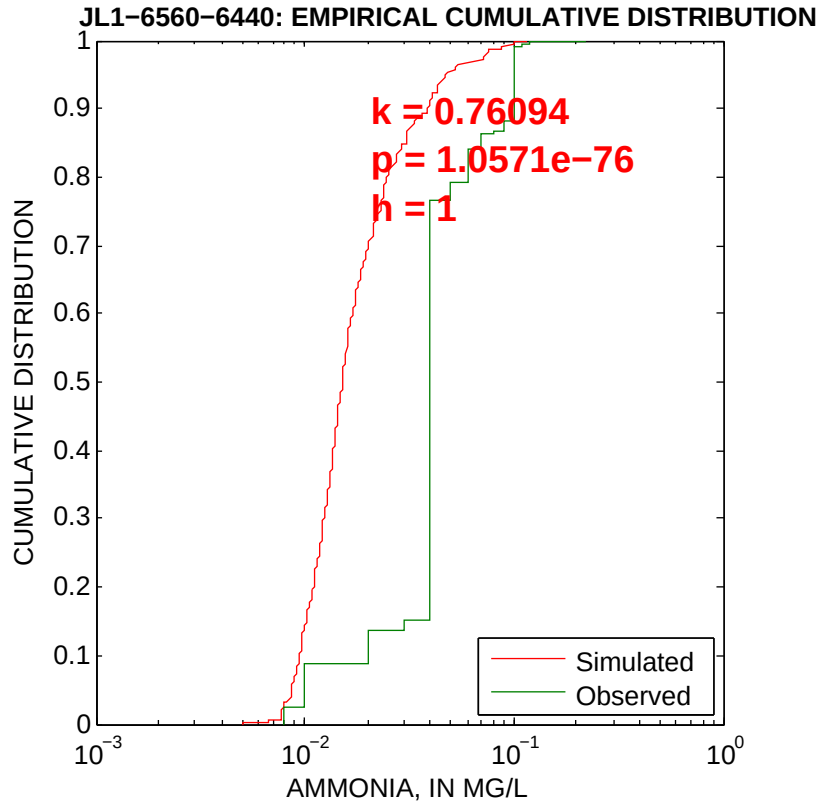
STATISTICS

		observe	simulate
n		10957	10957
min		0.105472	1.2127
		-0.976863	0.0837534
mean		103.9	99.9206
		1.76509	1.76251
media		64.1055	61.314
		1.8069	1.78756
max		7400.11	6245
		3.86924	3.79553
varian		40856.5	30607.8
		0.232098	0.195049
JB		0.001	0.001
		0.001	0.001
		ra	log
%		-3.82986	-0.14622
err.va		15320.8	0.0703458
rel.std.err		0.374992	0.303087
mod.eff		0.625008	0.696913

VERSION 2.1







DATA SELECTION

scenario	file
P620171001WQ	NH3X.calib

plot: NH3X - ammonia

Dates: 1/1/1985 – 12/31/201

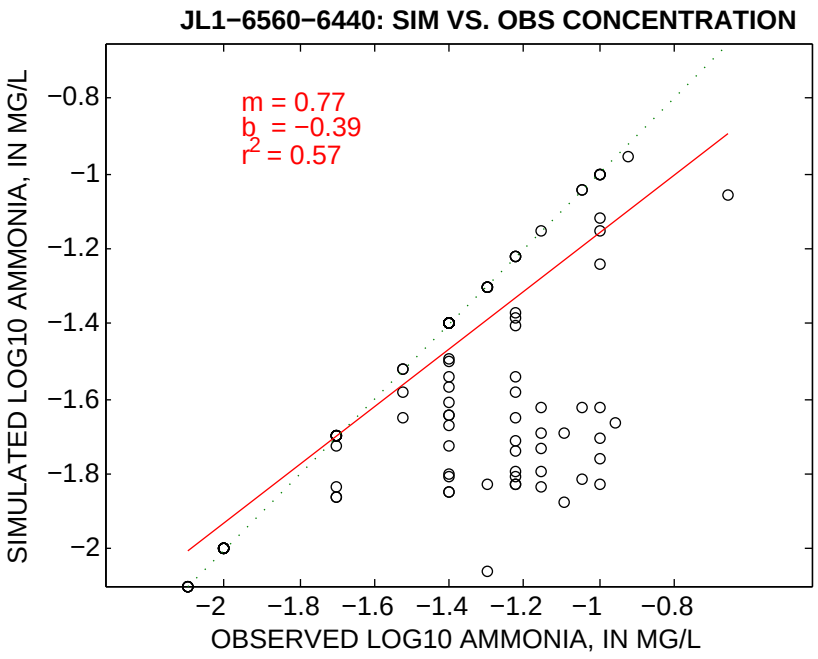
Drive	Directory	Observed
N/A	model	OBS20161101

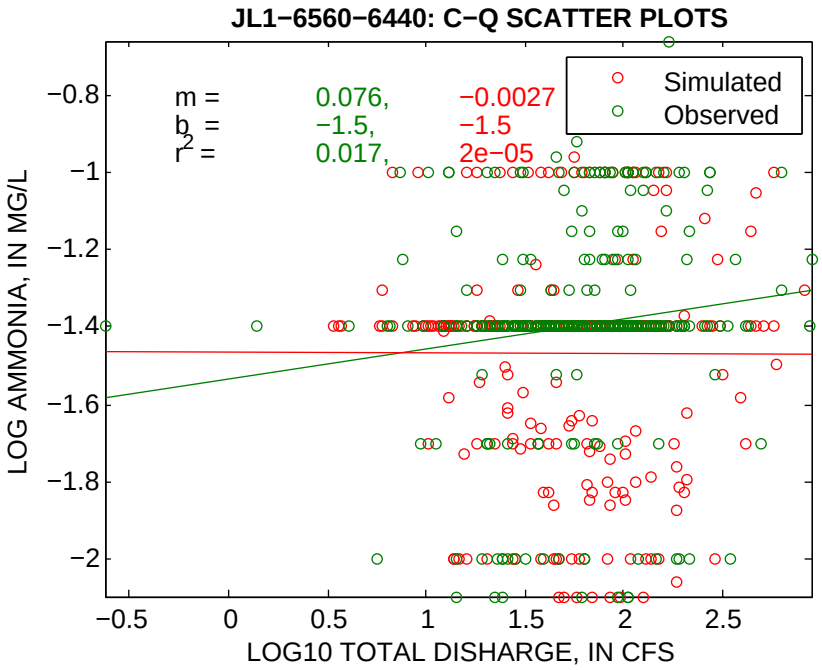
STATISTICS

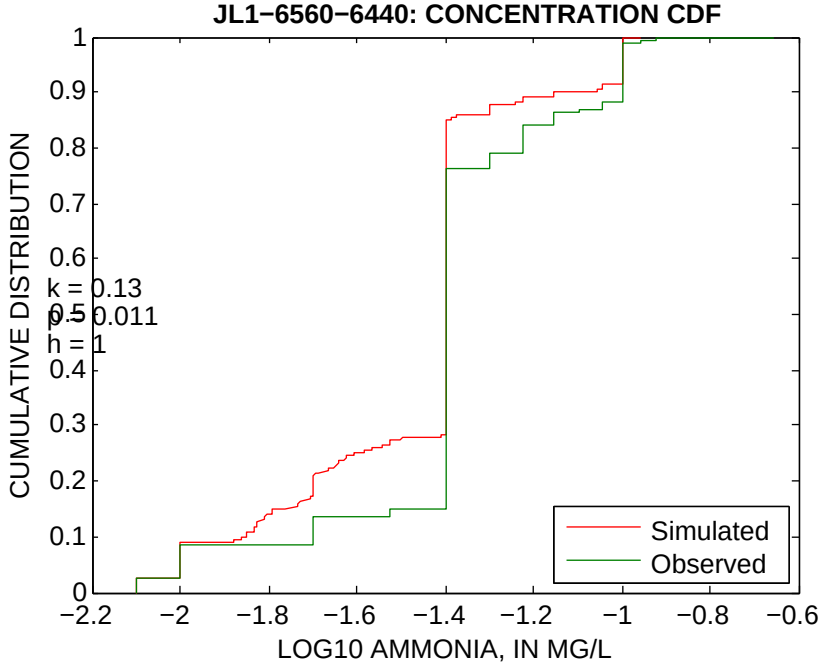
	n	297	297
		observe	simulate
min		0.008	0.0051225
		-2.09691	-2.29052
mean		0.0465859	0.0203308
		-1.39818	-1.76833
media		0.04	0.015161
		-1.39794	-1.81927
max		0.22	0.11692
		-0.657577	-0.932111
varian		0.00068272	0.00024162
		0.0653273	0.0555485
JB		0.001	0.001
		0.001	0.001
		ra	log
%		-56.3584	26.4742
err.va		0.00151791	0.23955
rel.std.err		2.22332	3.66692
mod.eff		-1.22332	-2.66692

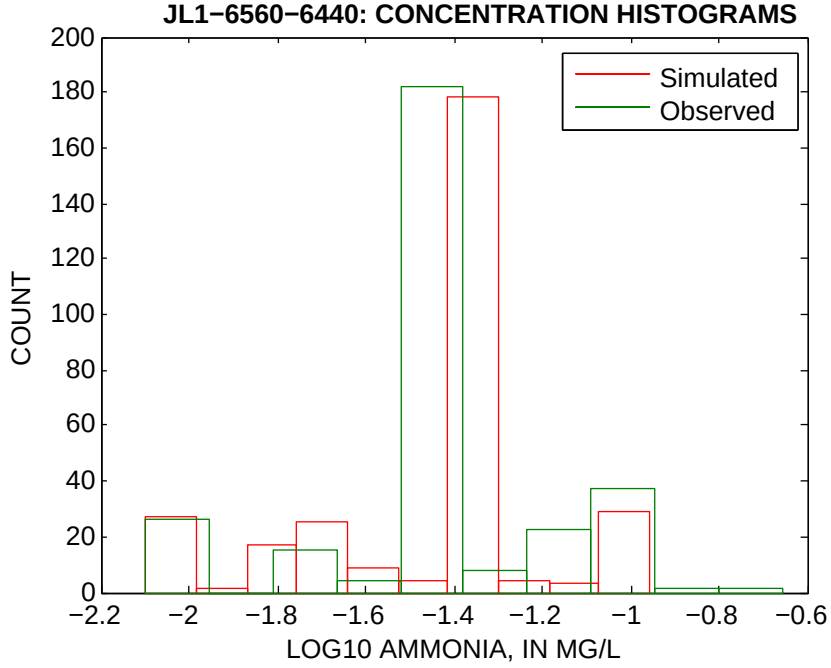
VERSION 2.1

ALL DATA
LOG10

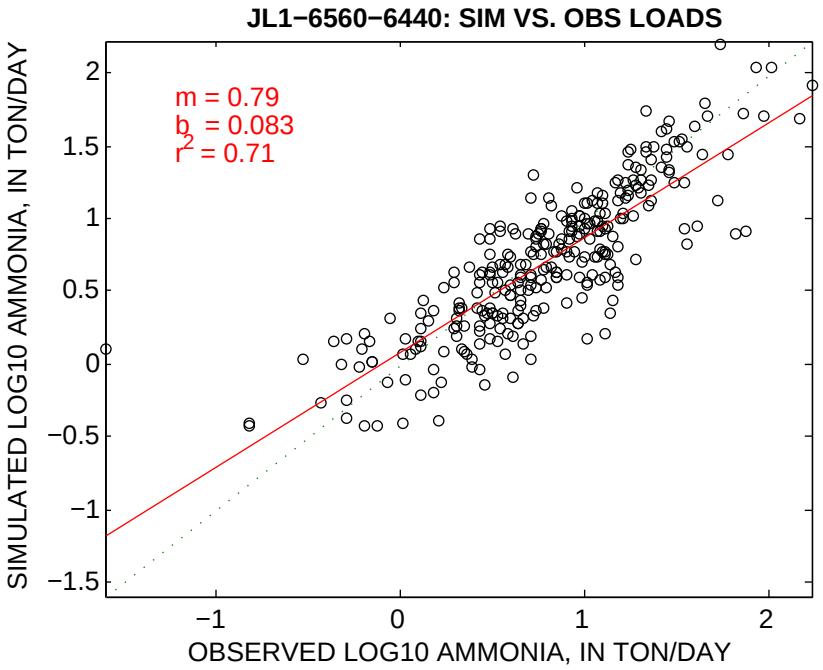


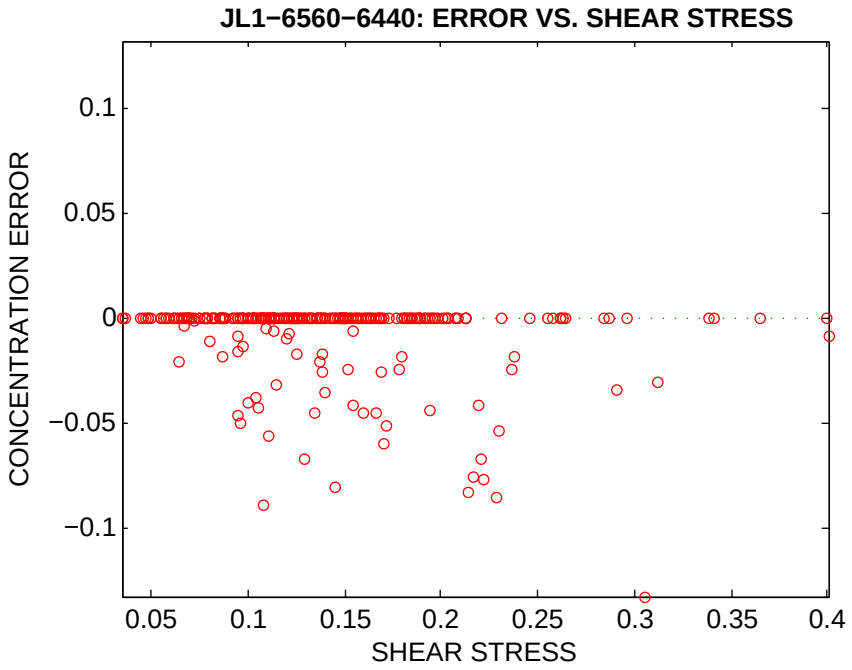


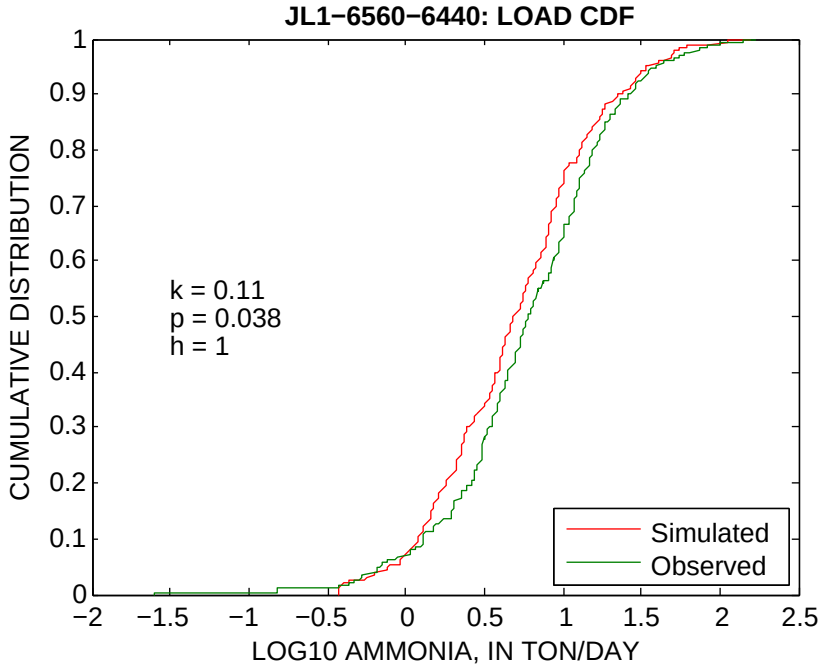


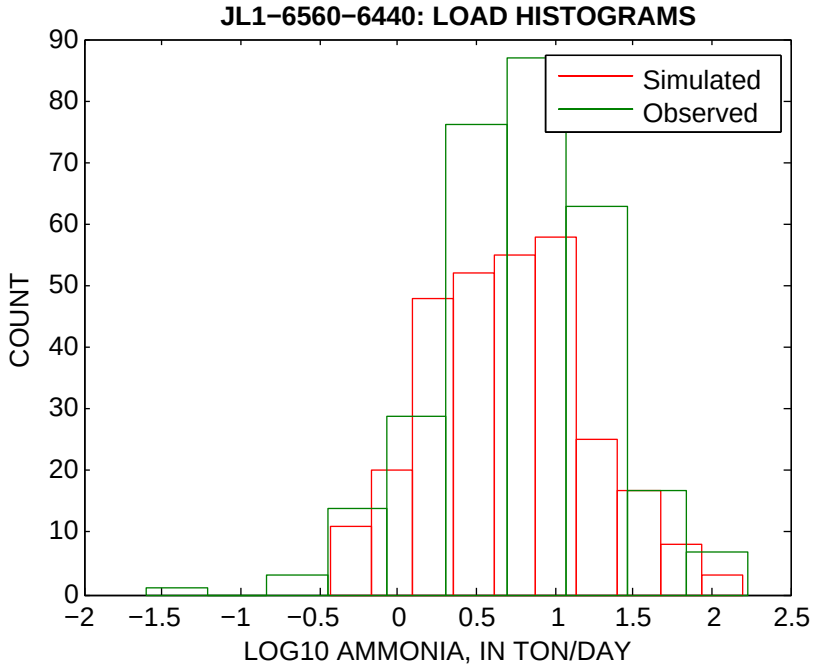


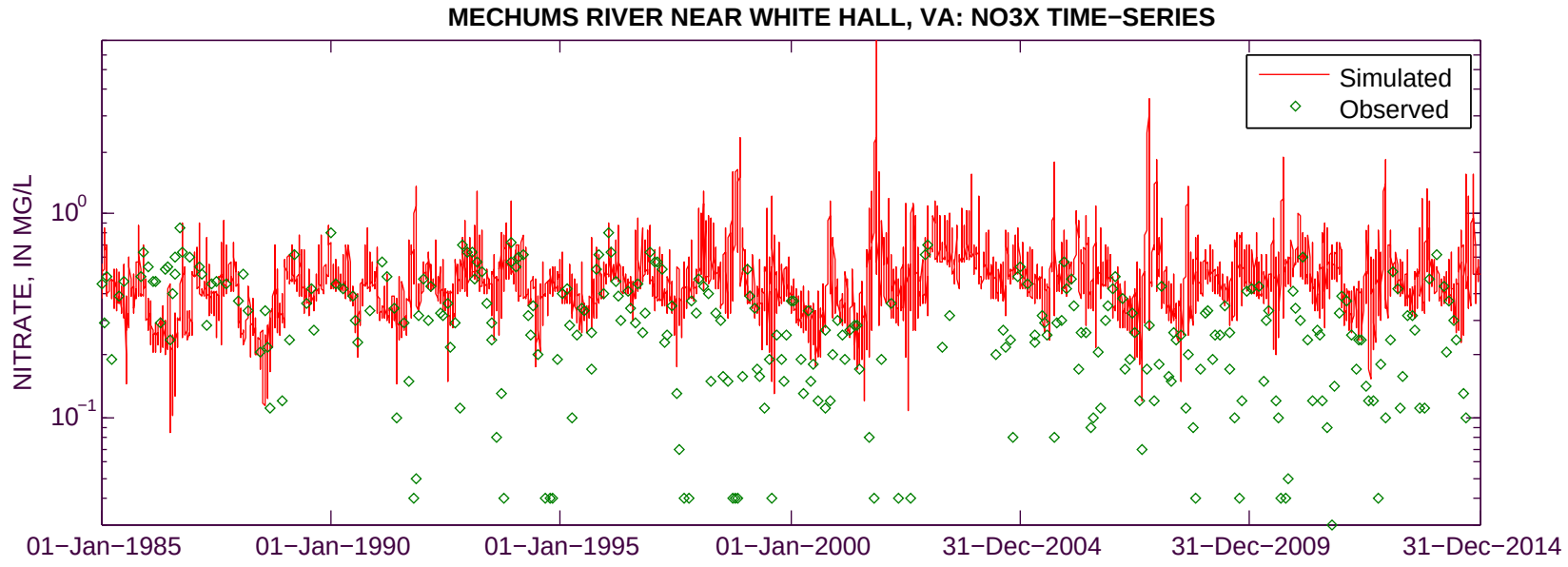
LOAD DATA
LOG10

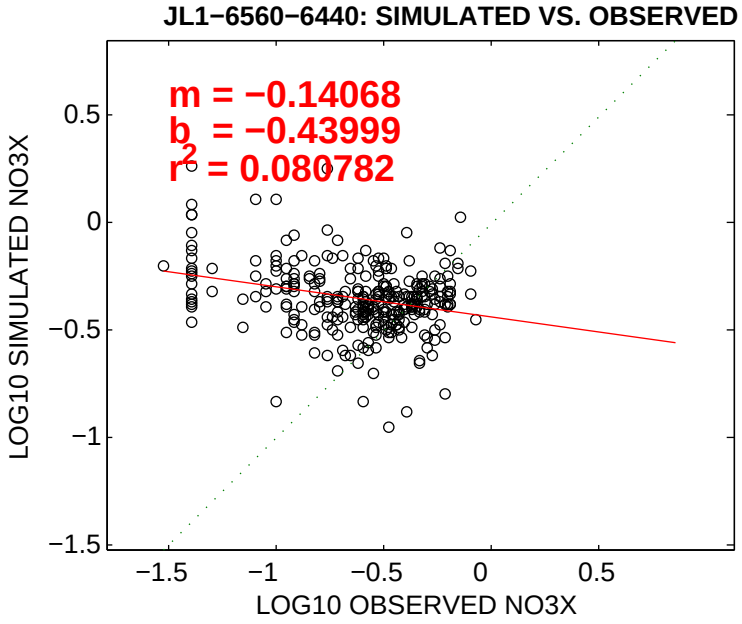


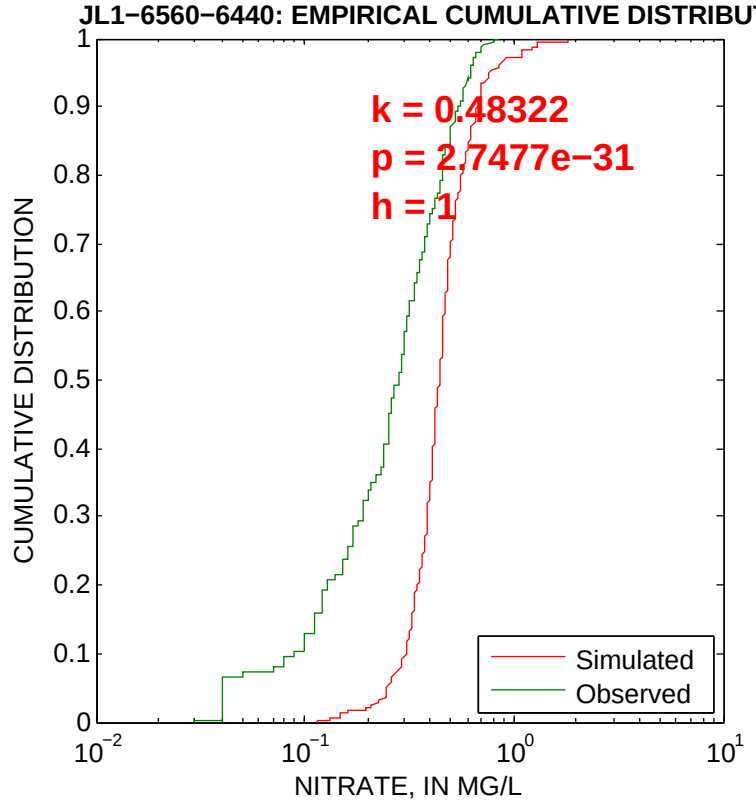












DATA SELECTION

scenario	file
P620171001WQ	NO3X.calib

plot: NO3X - nitrate

Dates: 1/1/1985 – 12/31/201

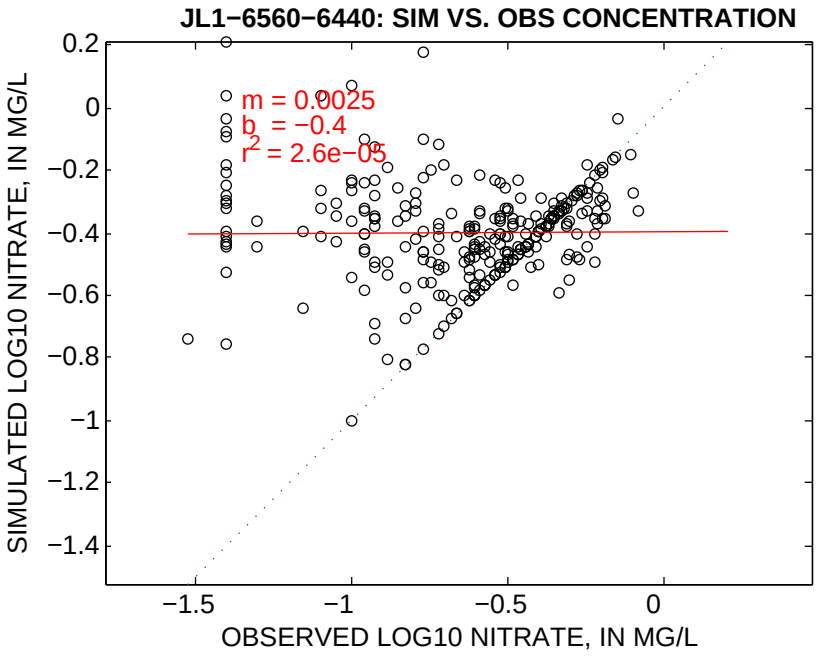
Drive	Directory	Observed
N/A	model	OBS20161101

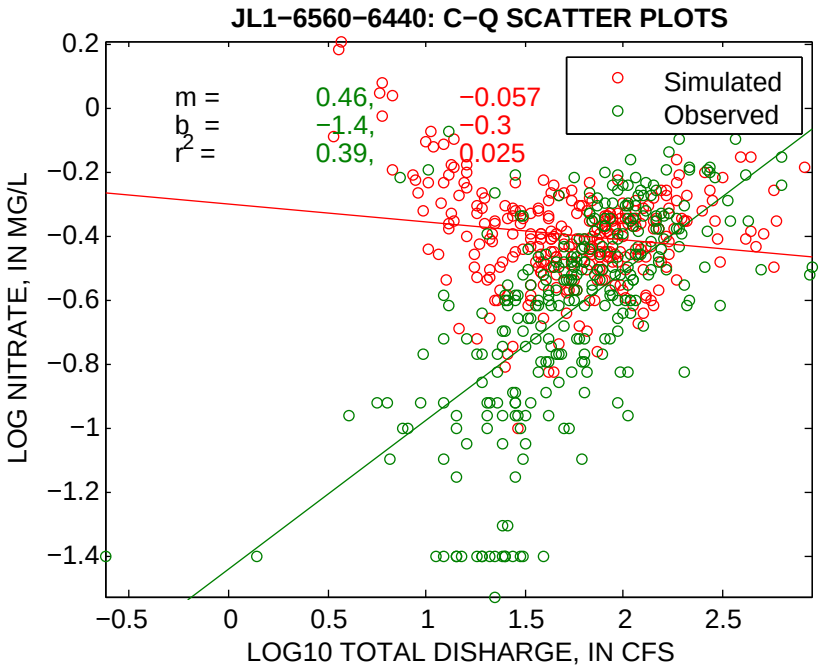
STATISTICS

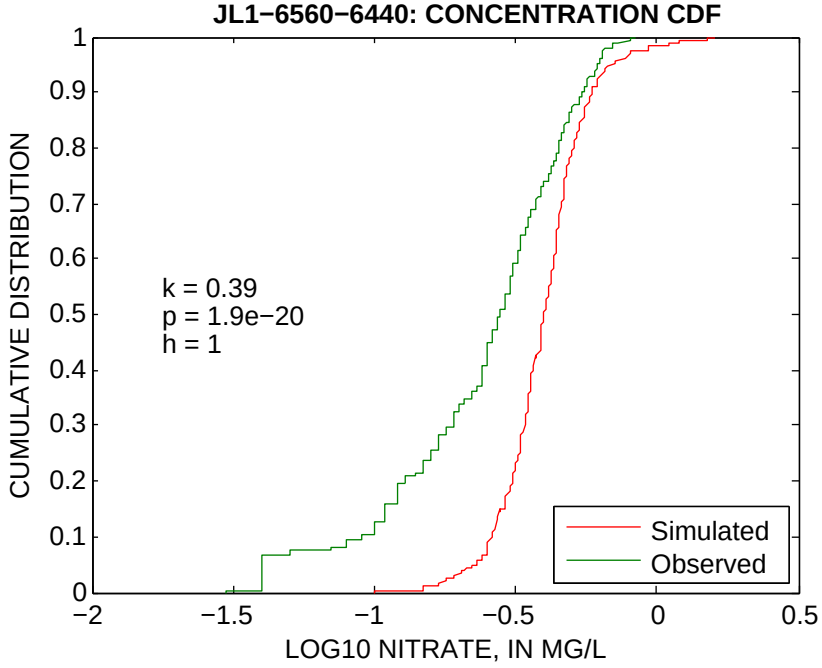
	n	observe	simulate
		298	298
min		0.03	0.11356
		-1.52288	-0.944775
mean		0.297248	0.476055
		-0.621493	-0.352561
media		0.28	0.44358
		-0.552842	-0.353028
max		0.84	1.8417
		-0.0757207	0.265219
varian		0.0297156	0.0416371
		0.102315	0.0250661
JB		0.003901	0.001
		0.001	0.001
		ra	log
%		60.154	-43.2719
err.va		0.117523	0.228737
rel.std.err		3.95491	2.2356
mod.eff		-2.95491	-1.2356

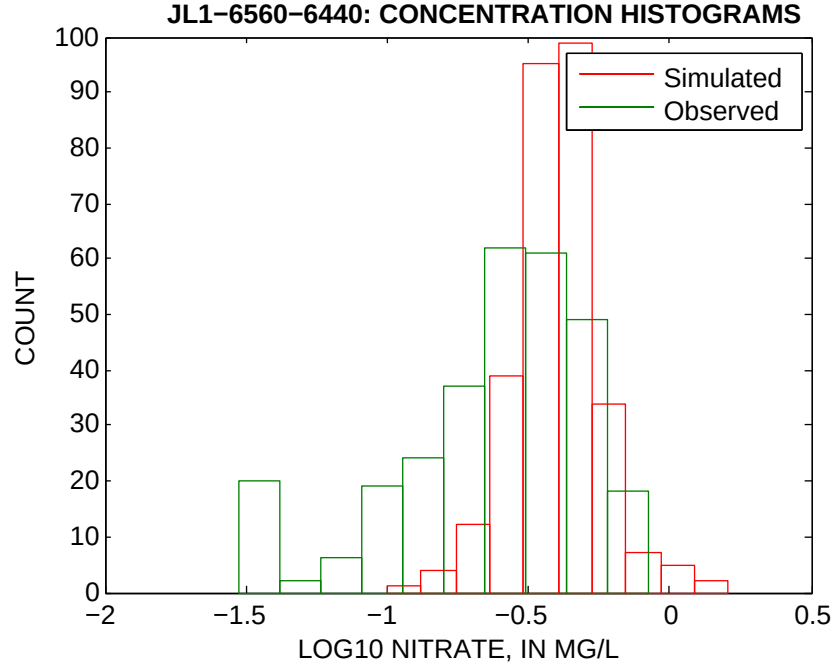
VERSION 2.1

ALL DATA
LOG10

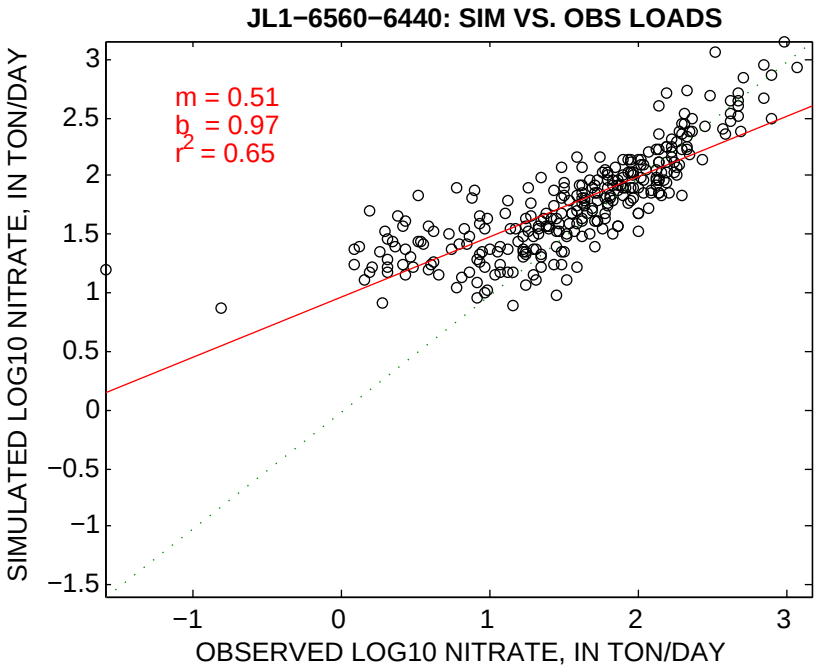


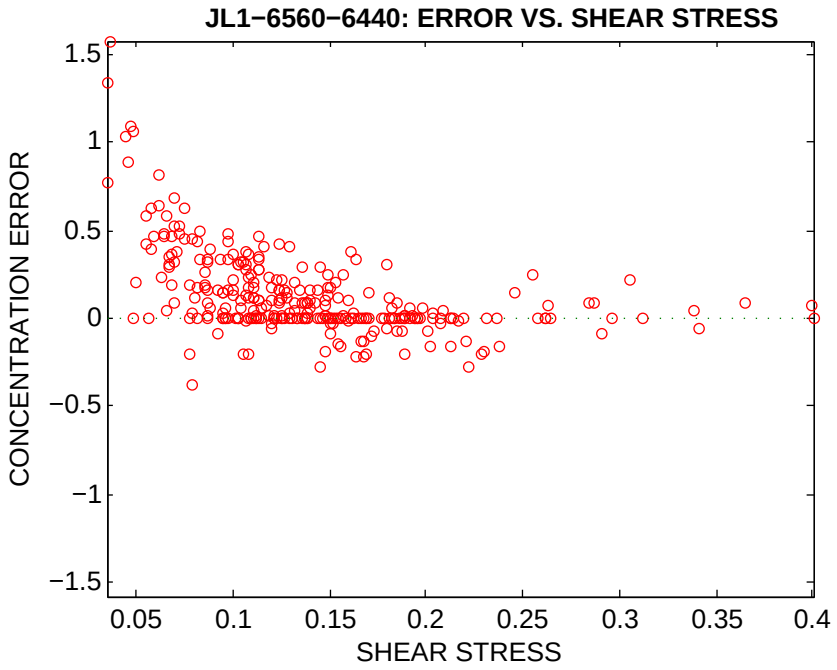


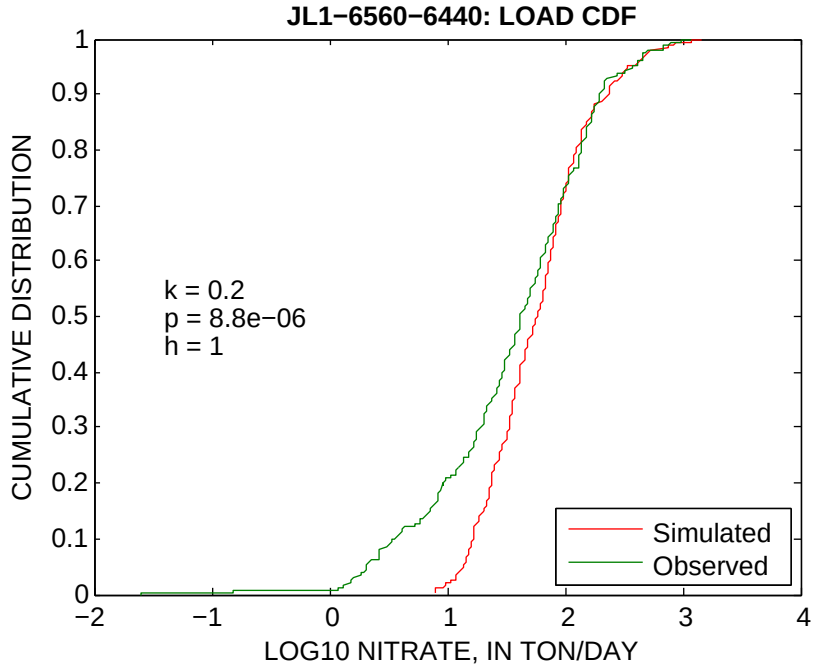


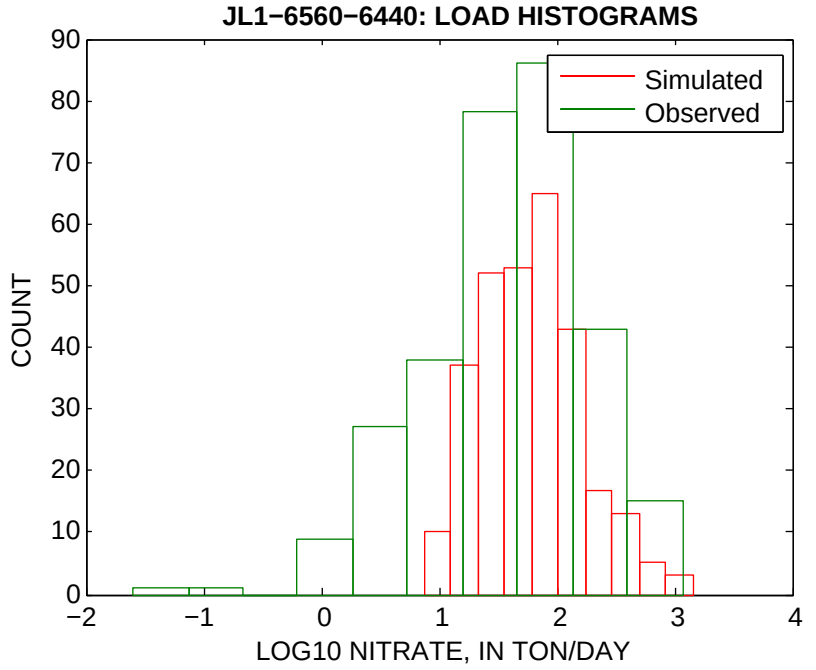


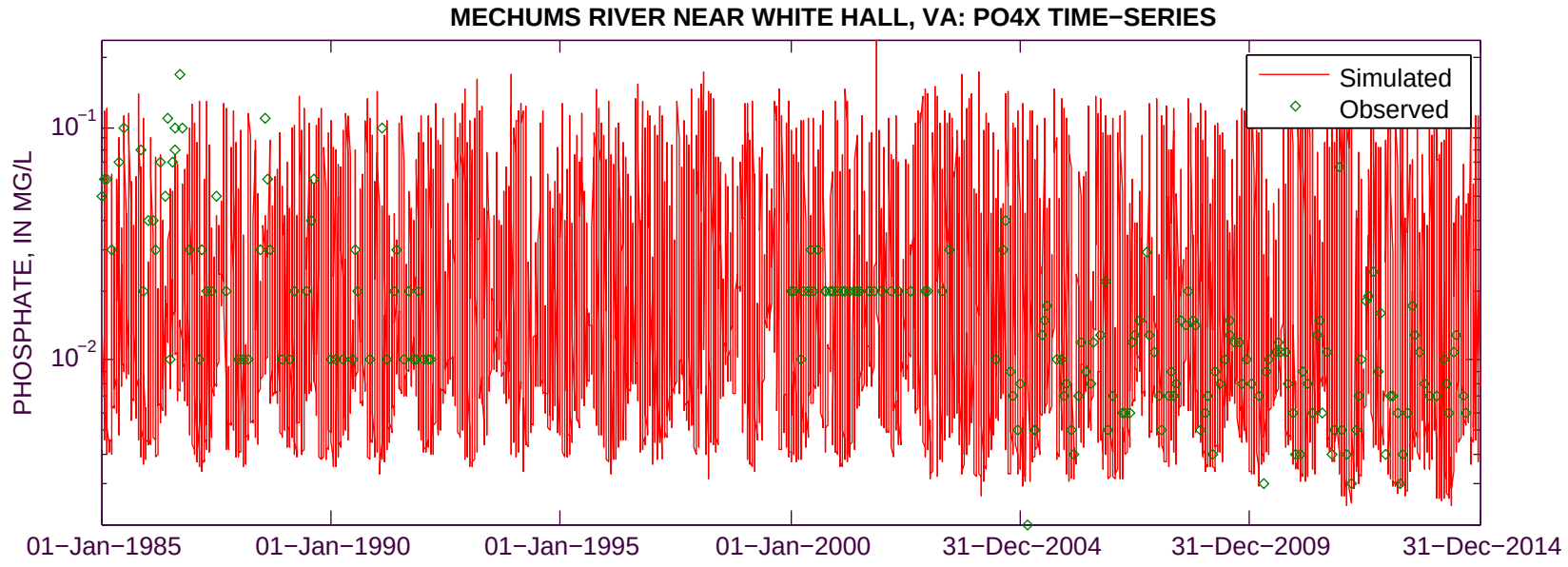
LOAD DATA
LOG10

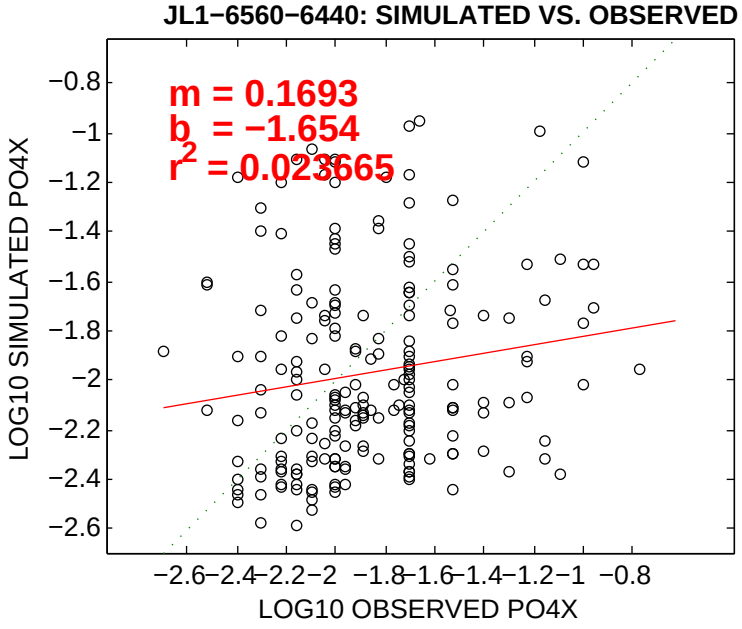


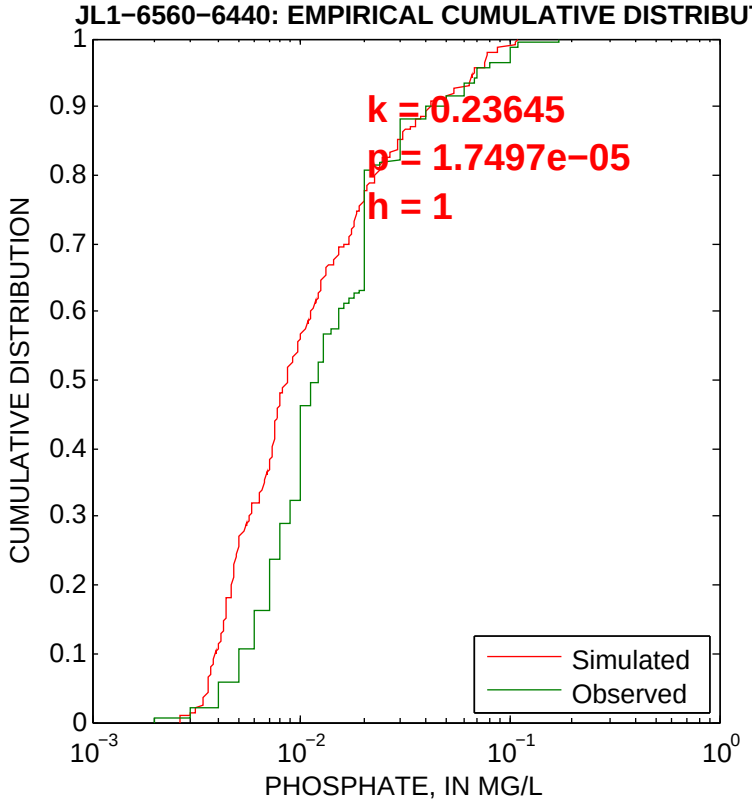












DATA SELECTION

scenario: P620171001WQ | file: PO4X.calib

plot: PO4X - phosphate

Dates: 1/1/1985 – 12/31/201

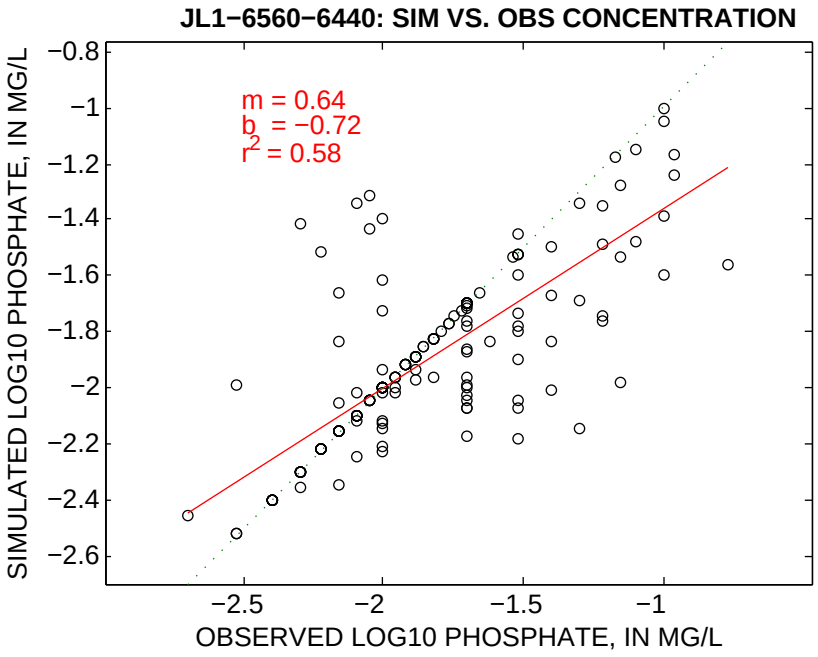
Drive: N/A | Directory: model | Observed: OBS20161101

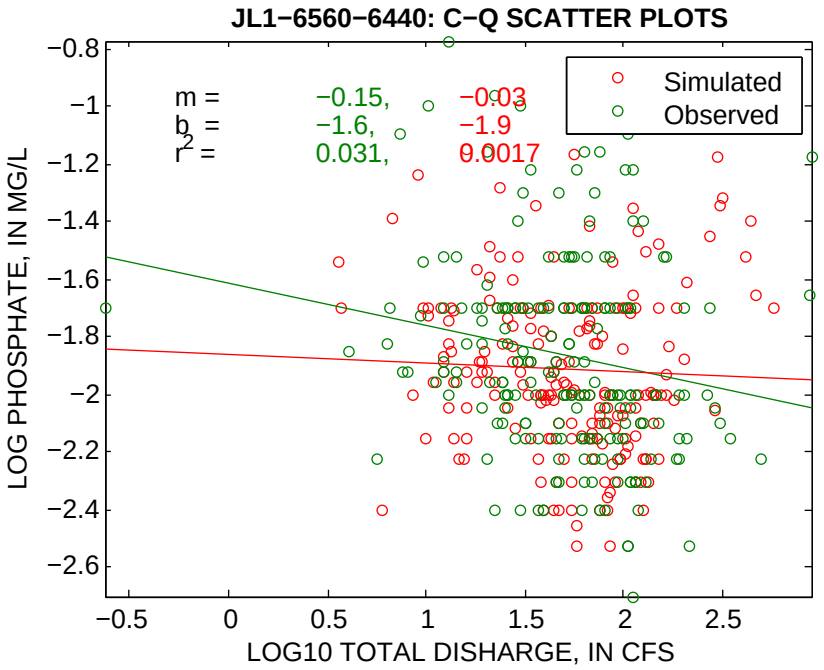
STATISTICS

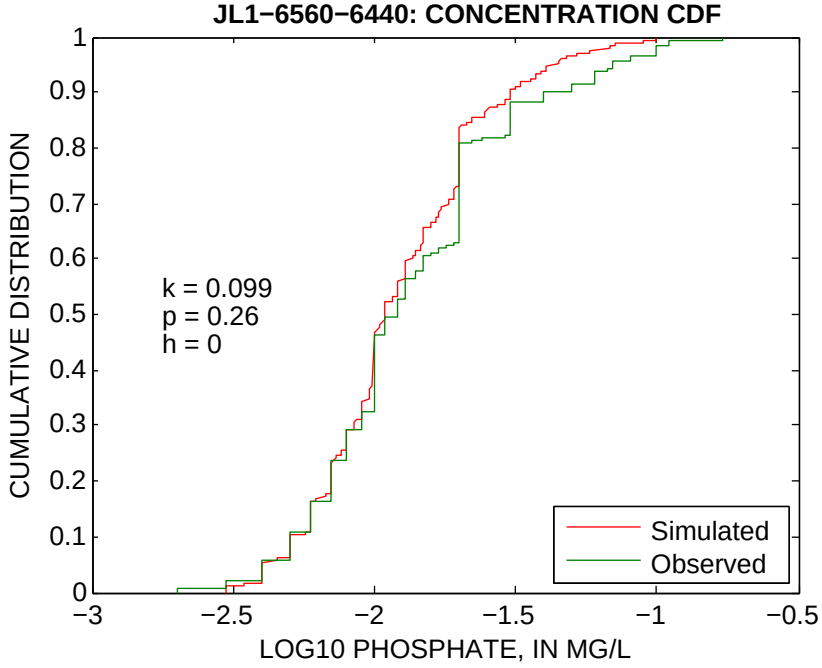
	n	203	203
		observe	simulate
min		0.002	0.0026181
		-2.69897	-2.58201
mean		0.0201232	0.0171326
		-1.86474	-1.96966
media		0.012	0.0085409
		-1.92082	-2.0685
max		0.17	0.11057
		-0.769551	-0.956363
varian		0.00054565	0.00042802
		0.125774	0.152336
JB		0.001	0.001
		0.005630	0.002679
		ra	log
%		-14.8615	5.62704
err.va		0.00089705	0.246587
rel.std.err		1.644	1.96056
mod.eff		-0.643995	-0.960562

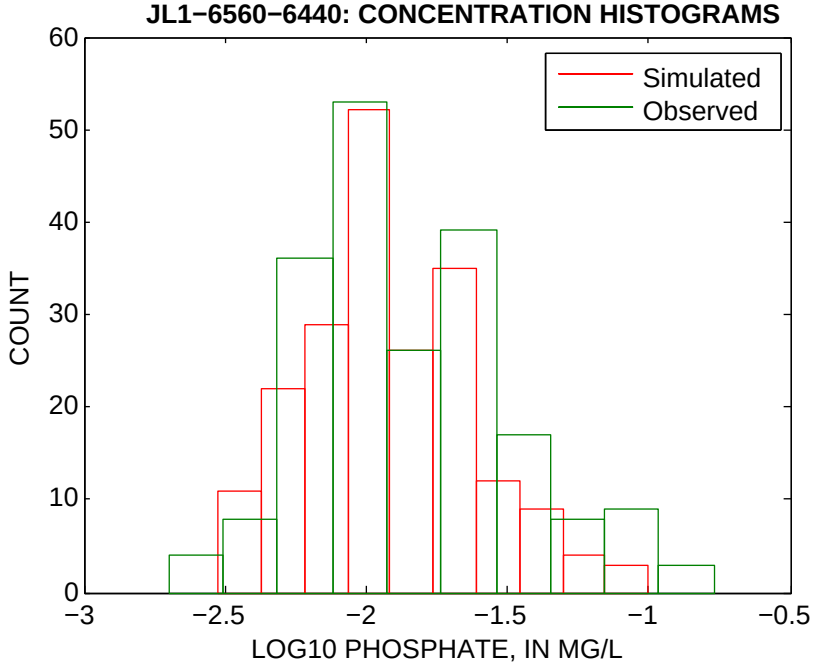
VERSION 2.1

ALL DATA
LOG10

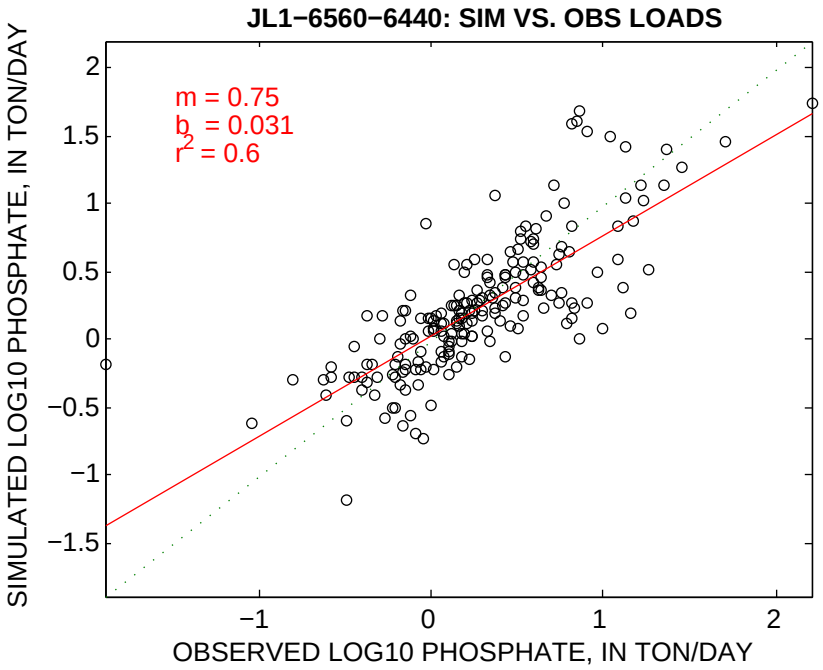




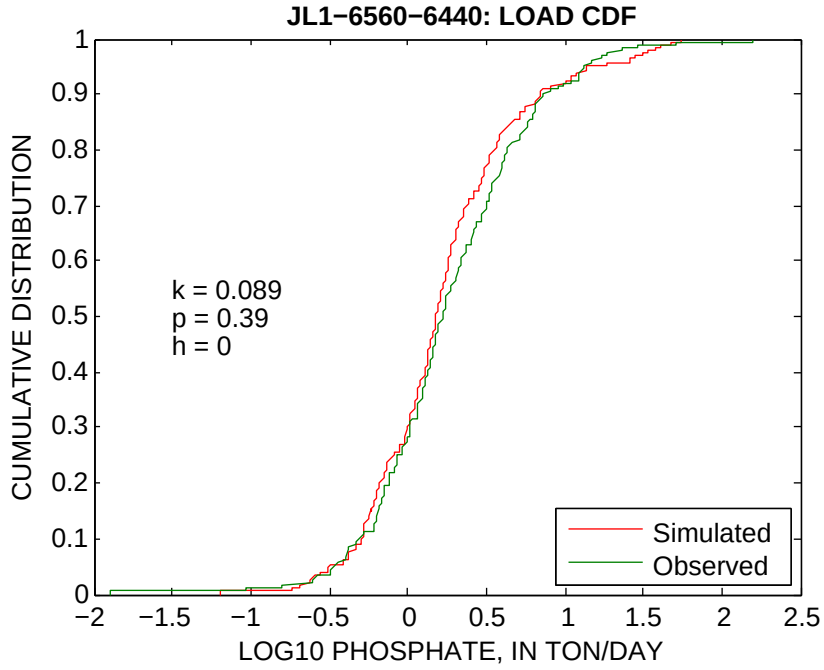


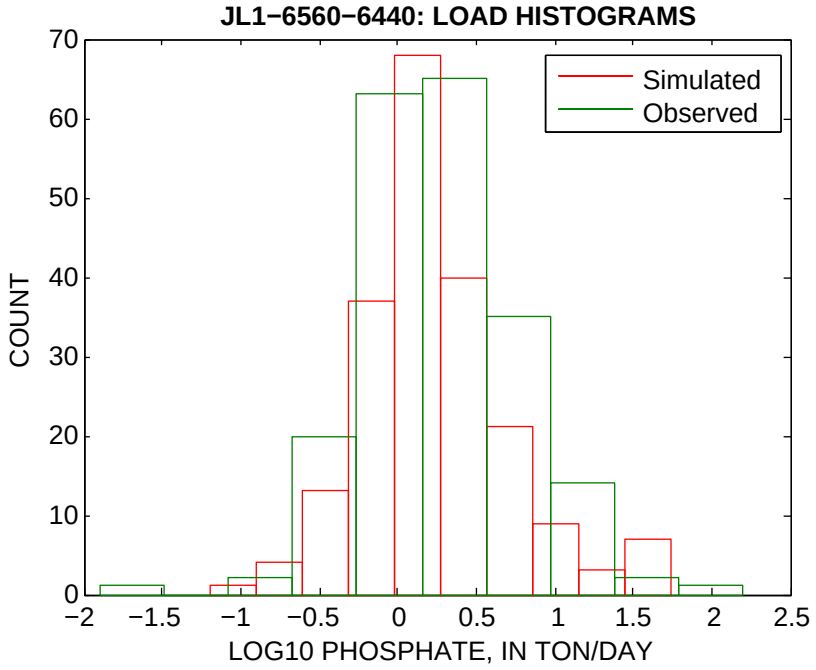


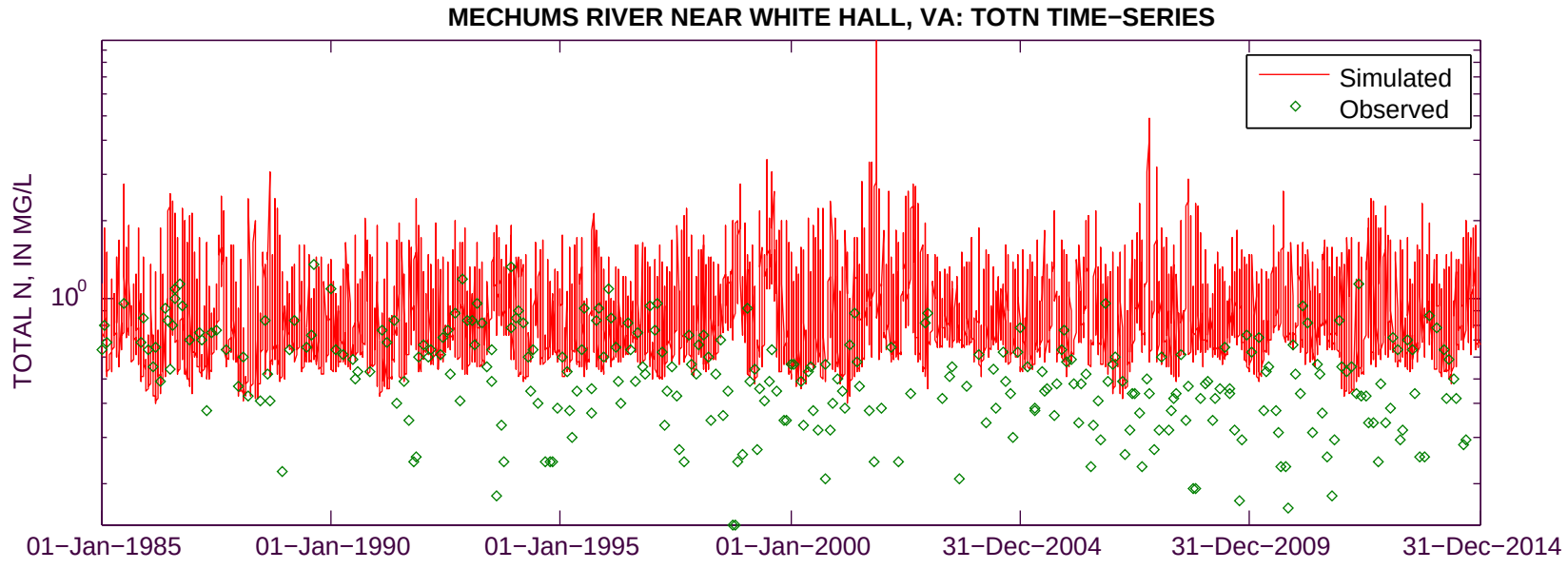
LOAD DATA
LOG10

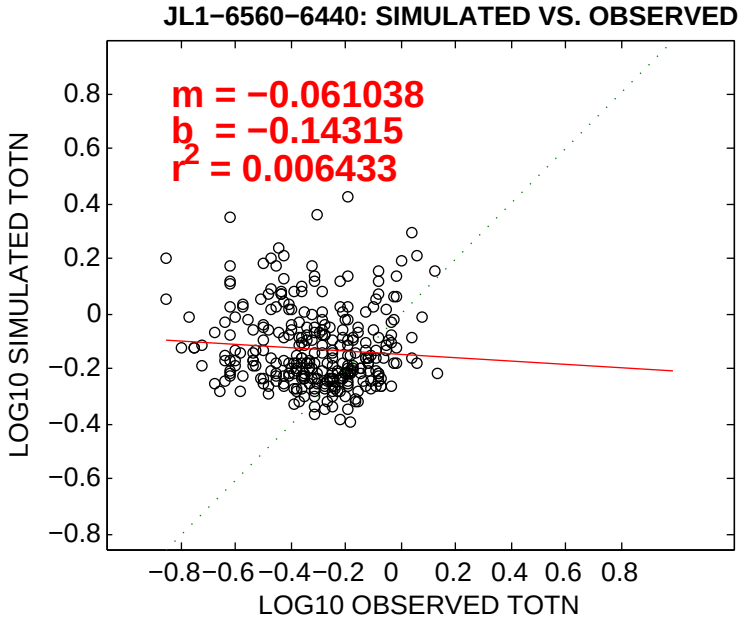


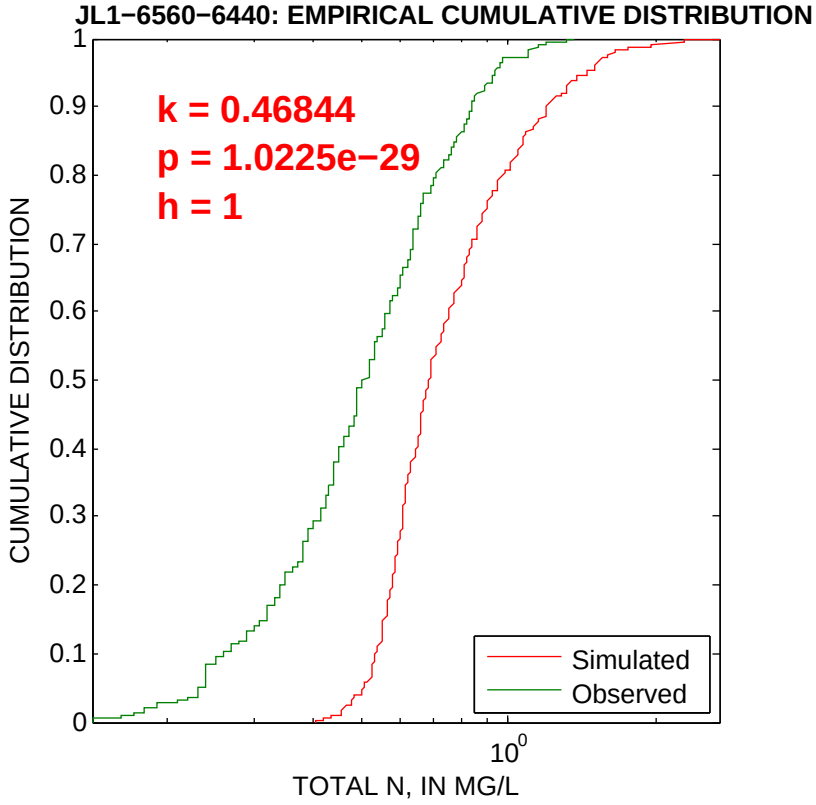












DATA SELECTION

scenario	file
P620171001WQ	TOTN.calib

plot: TOTN - total nitrogen

Dates: 1/1/1985 – 12/31/201

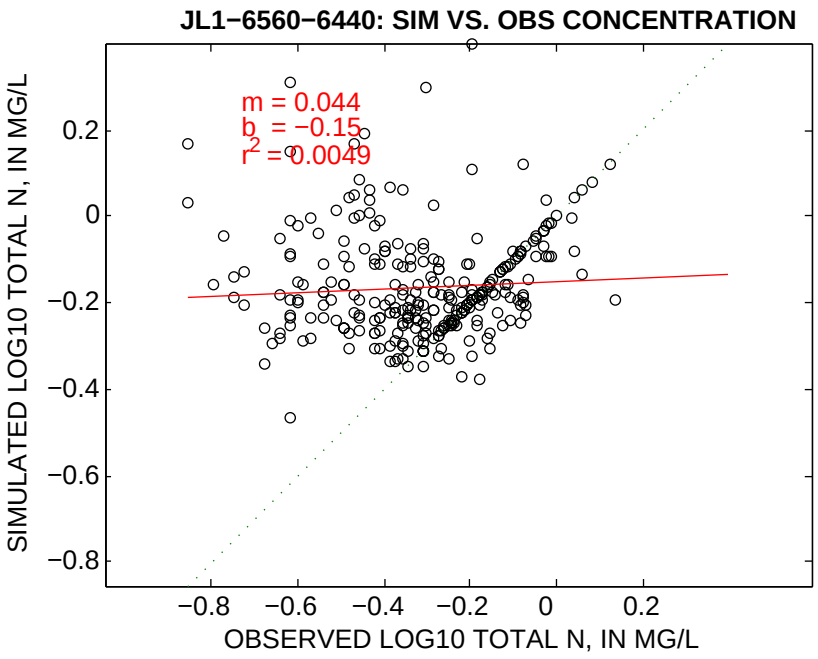
Drive	Directory	Observed
N/A	model	OBS20161101

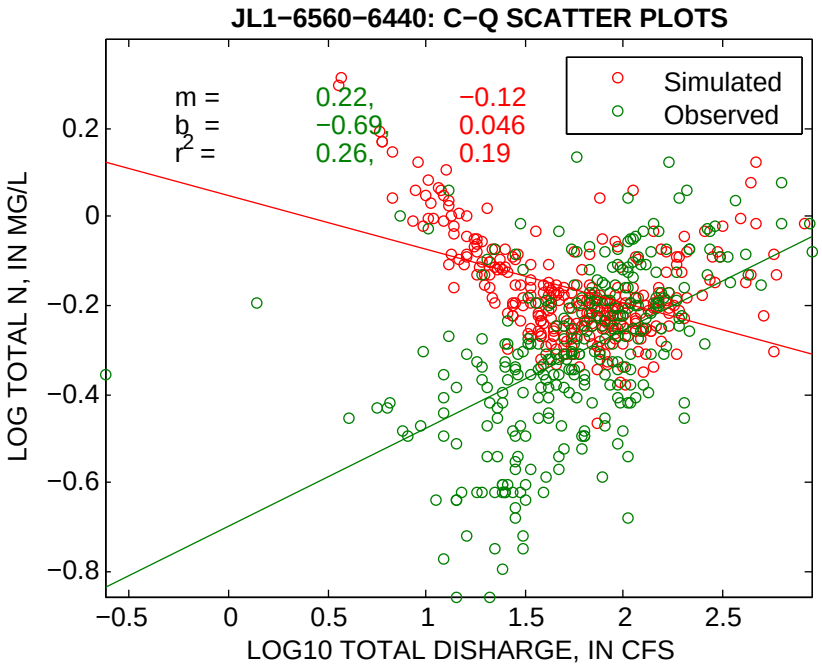
STATISTICS

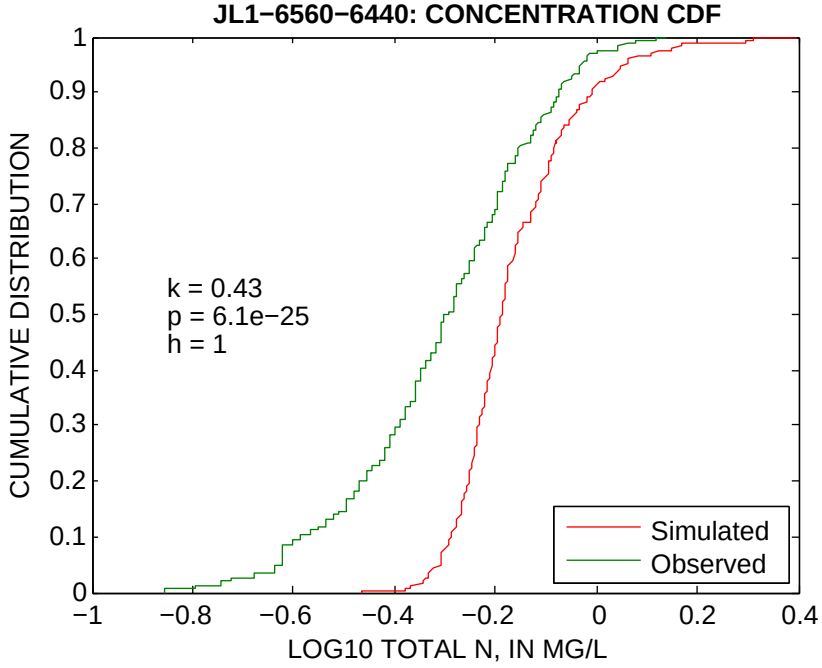
	n	301	301
		observe	simulate
min		0.14	0.40475
		-0.853872	-0.392813
mean		0.539136	0.797474
		-0.306622	-0.124436
media		0.5	0.6883
		-0.30103	-0.162222
max		1.37	2.6951
		0.136721	0.430575
varian		0.0497479	0.101393
		0.0352429	0.0204106
JB		0.001	0.001
		0.036394	0.001
		ra	log
%		47.917	-59.417
err.va		0.218776	0.0932579
rel.std.err		4.39769	2.64615
mod.eff		-3.39769	-1.64615

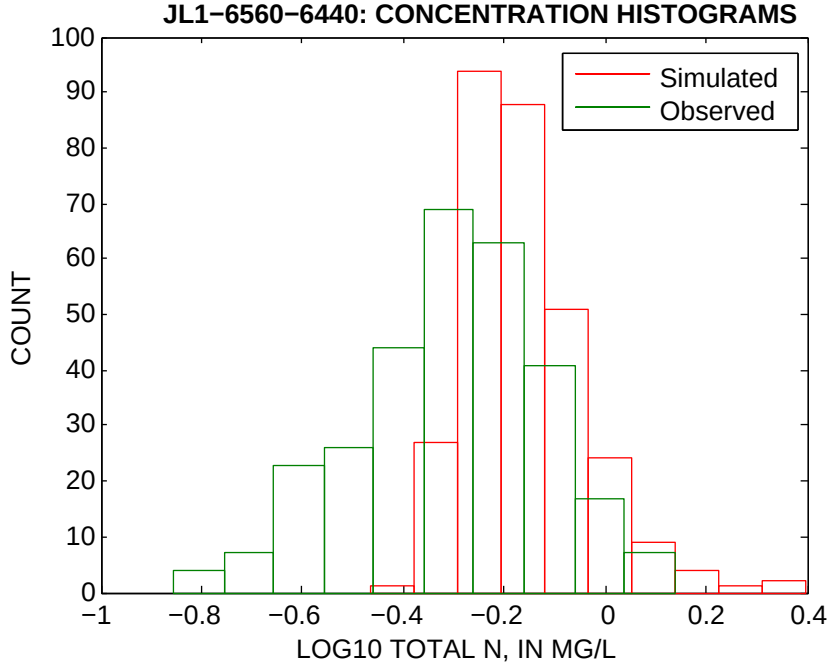
VERSION

ALL DATA
LOG10

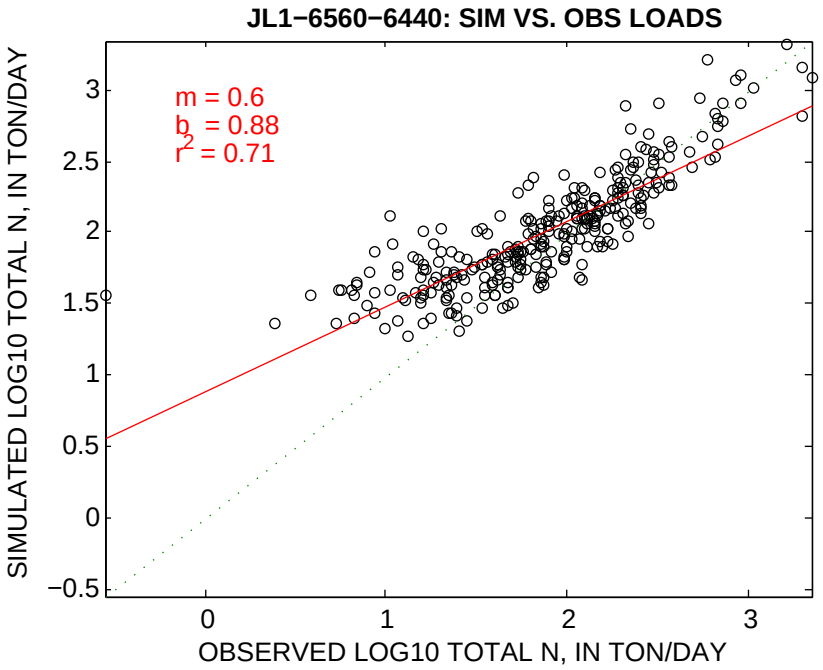


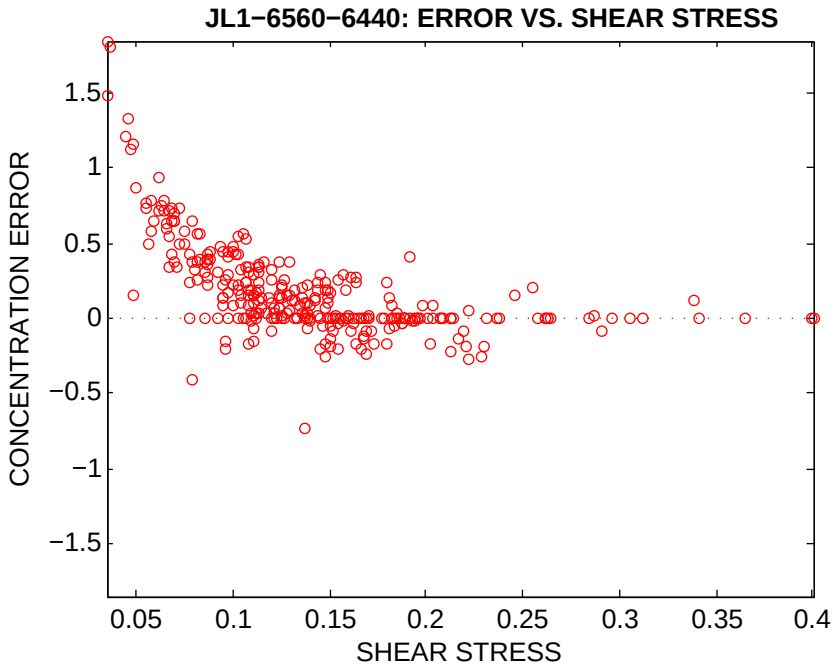


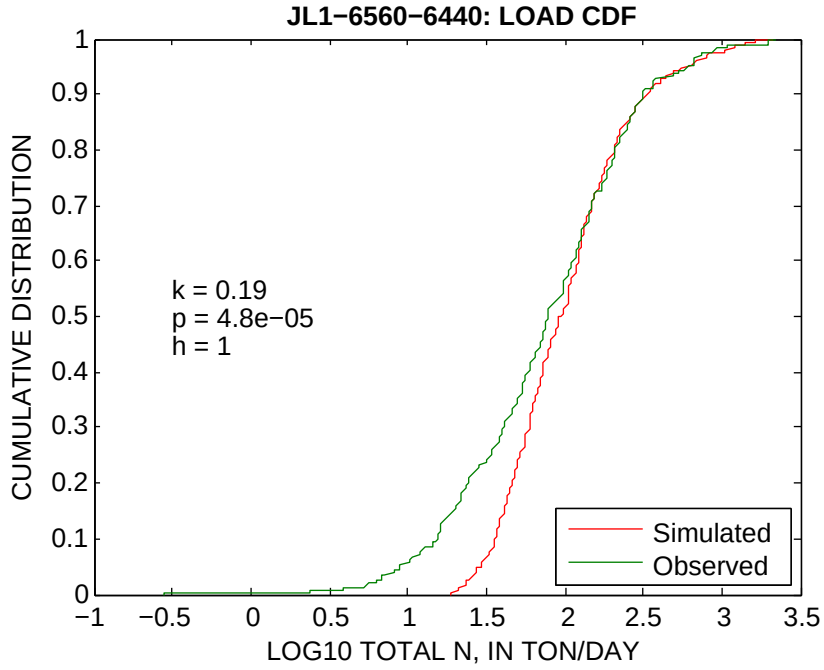


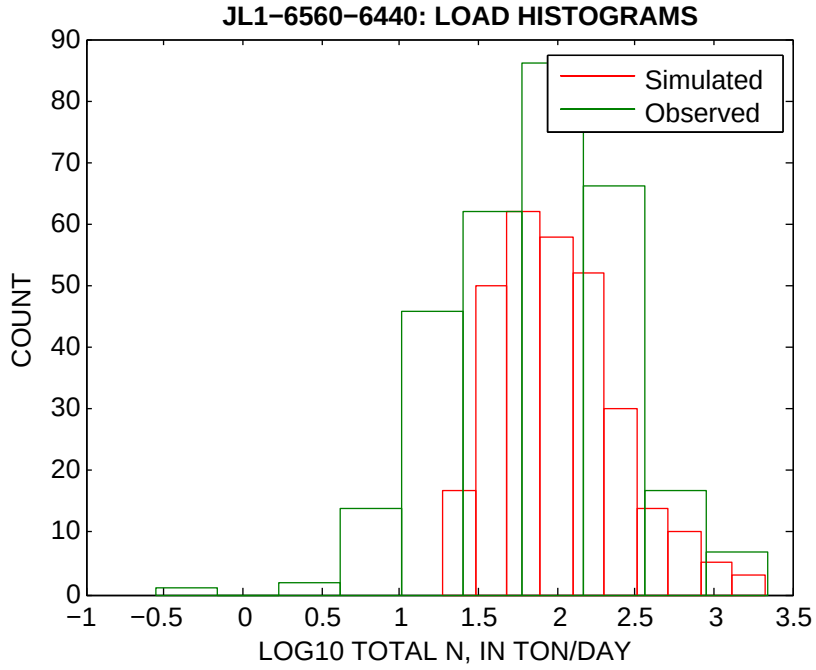


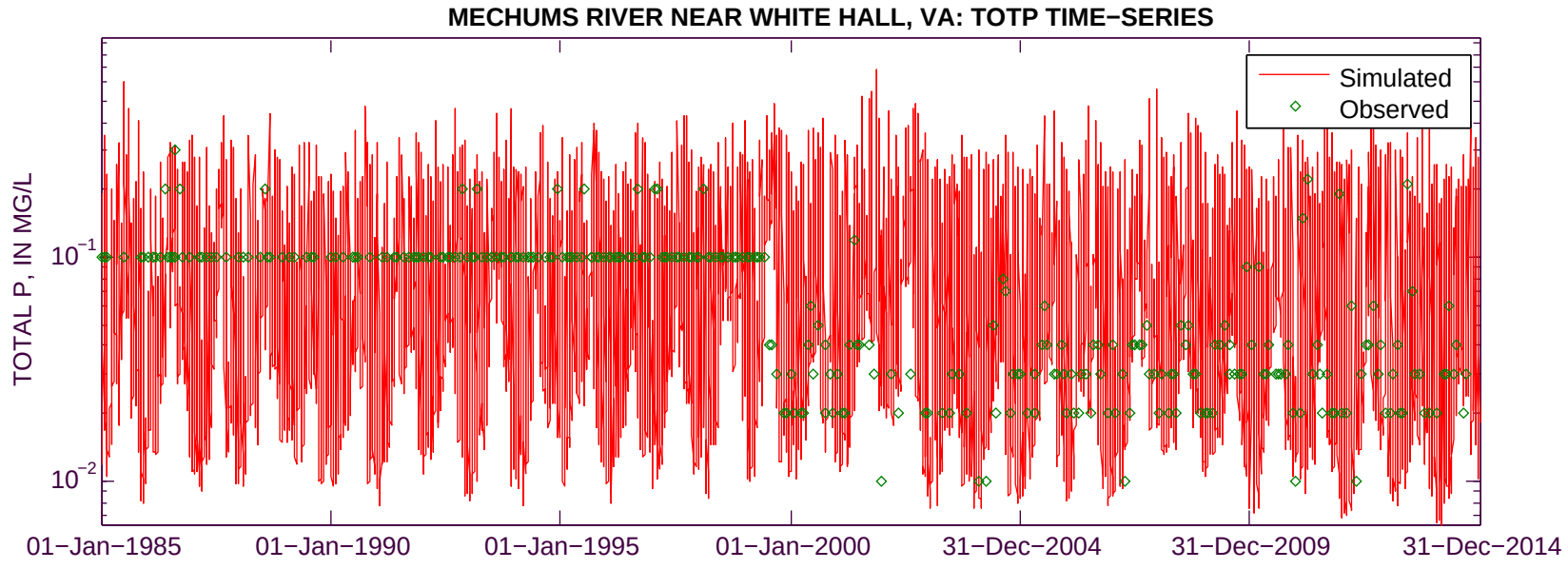
LOAD DATA
LOG10

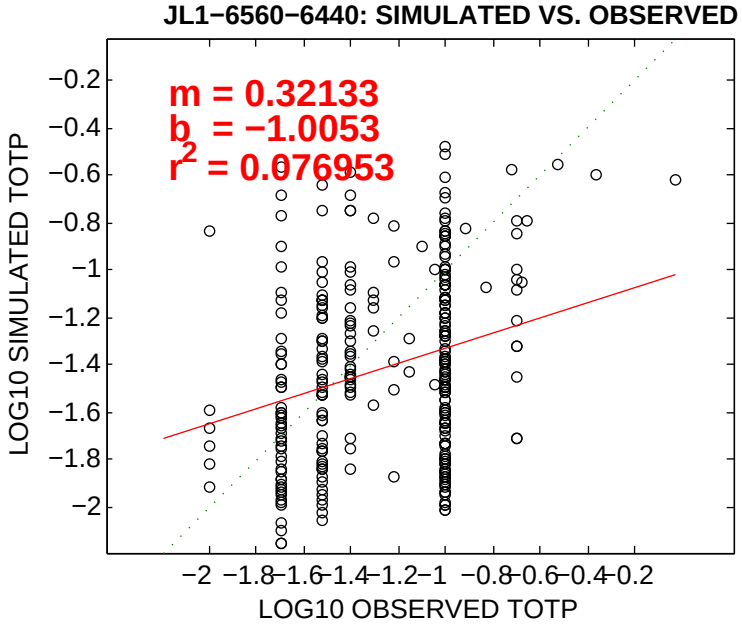


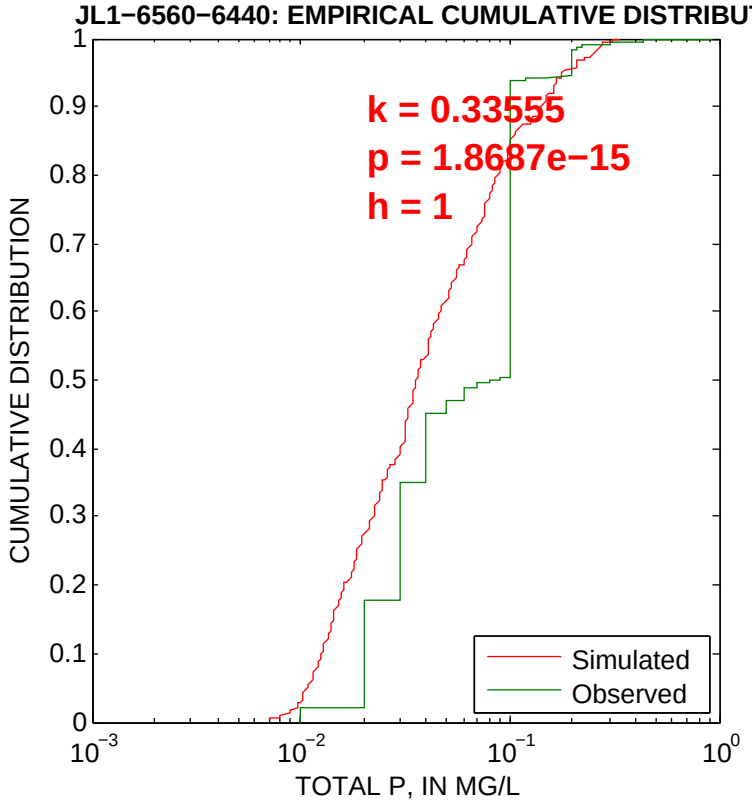












DATA SELECTION

scenario	file
P620171001WQ	TOTP.calib

plot: TOTP - total phosphorus

Dates: 1/1/1985 – 12/31/201

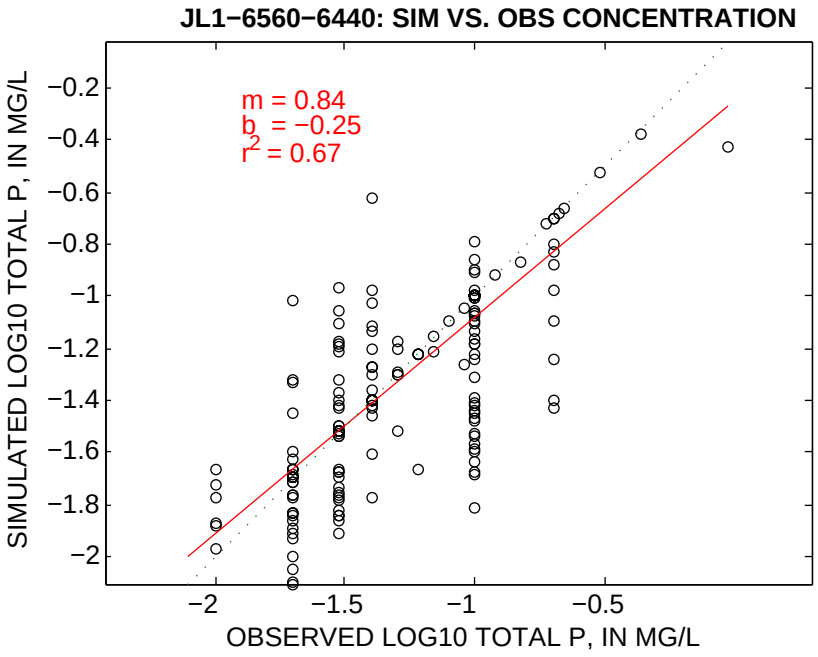
Drive	Directory	Observed
N/A	model	OBS20161101

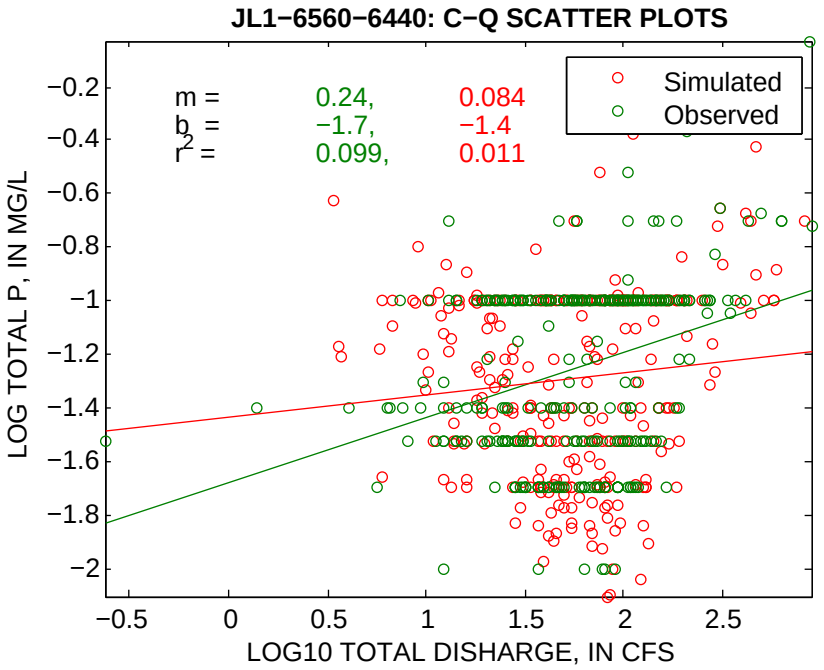
STATISTICS

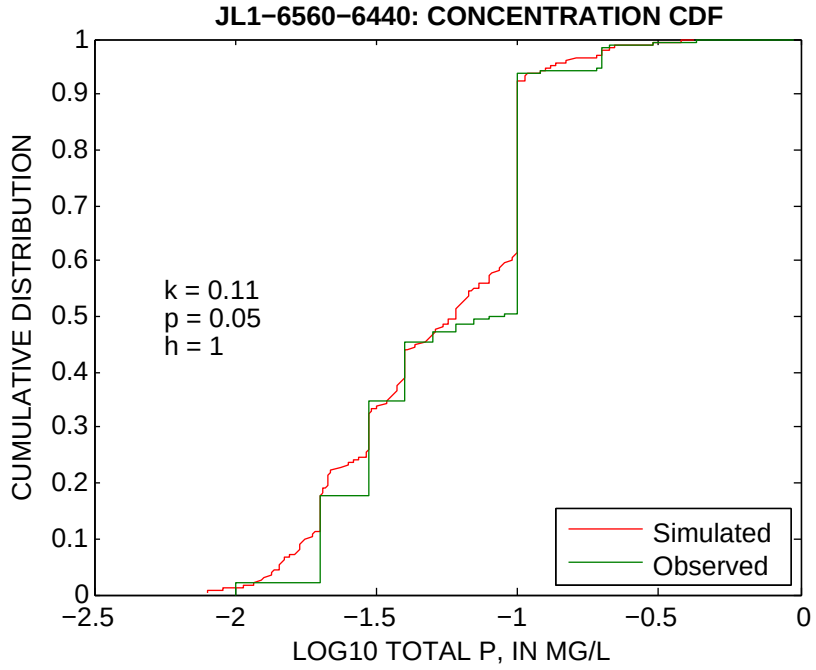
	n	301	301
		observe	simulate
min		0.01	0.0069455
		-2	-2.1583
mean		0.0749169	0.0586558
		-1.25041	-1.40707
media		0.09	0.035798
		-1.04576	-1.44614
max		0.94	0.33689
		-0.0268721	-0.472512
varian		0.00518441	0.00349739
		0.110631	0.148441
JB		0.001	0.001
		0.163891	0.011418
		ra	log
%		-21.7055	12.5287
err.va		0.00616736	0.212598
rel.std.err		1.1896	1.92169
mod.eff		-0.189597	-0.92169

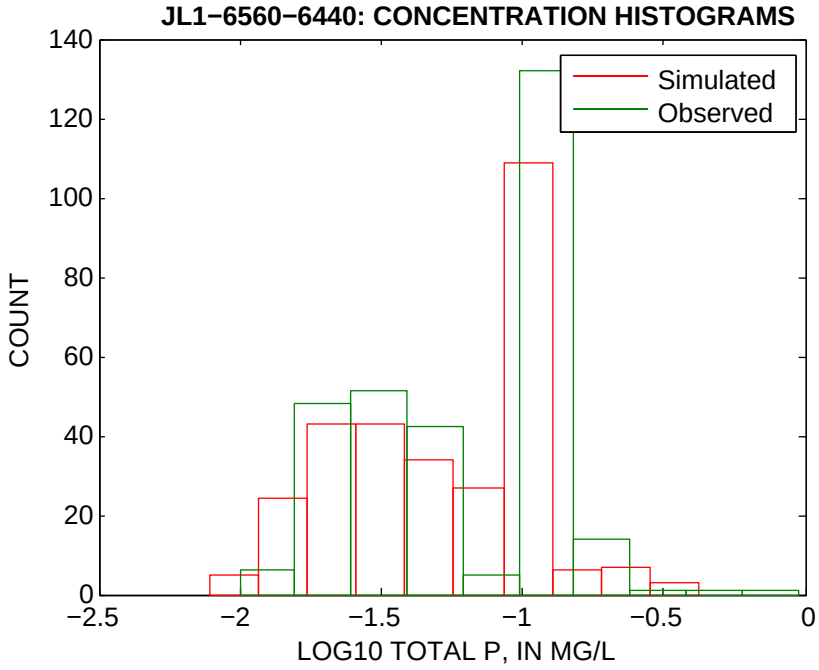
VERSION

ALL DATA
LOG10

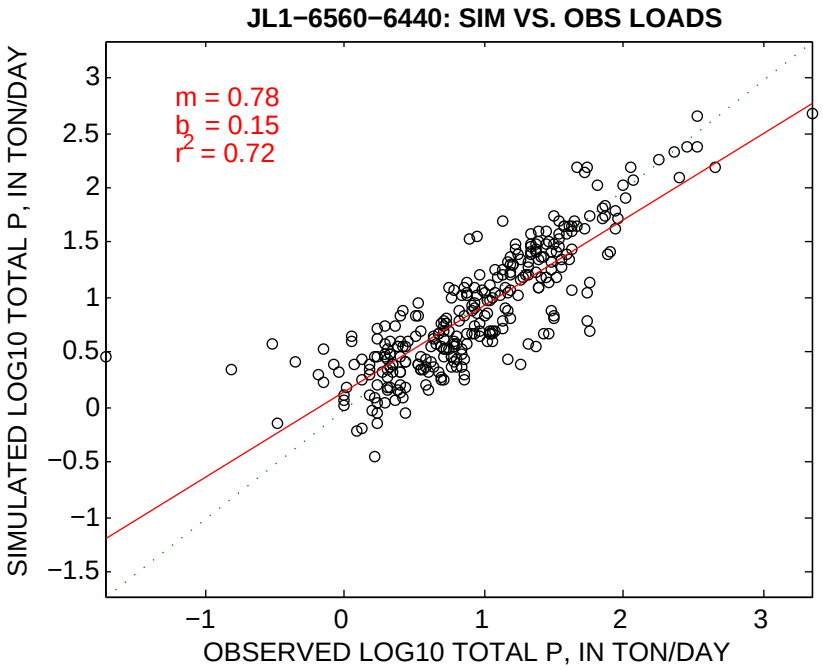




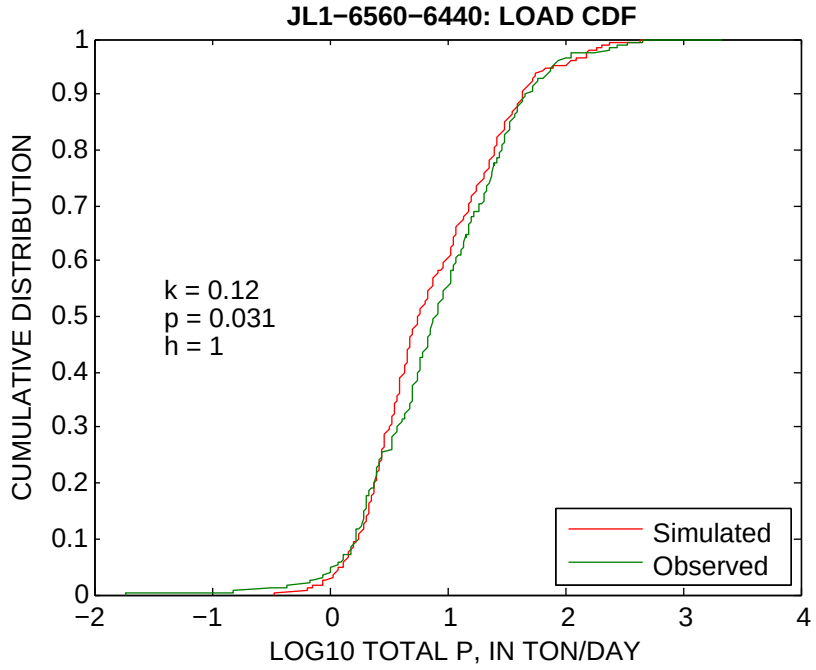


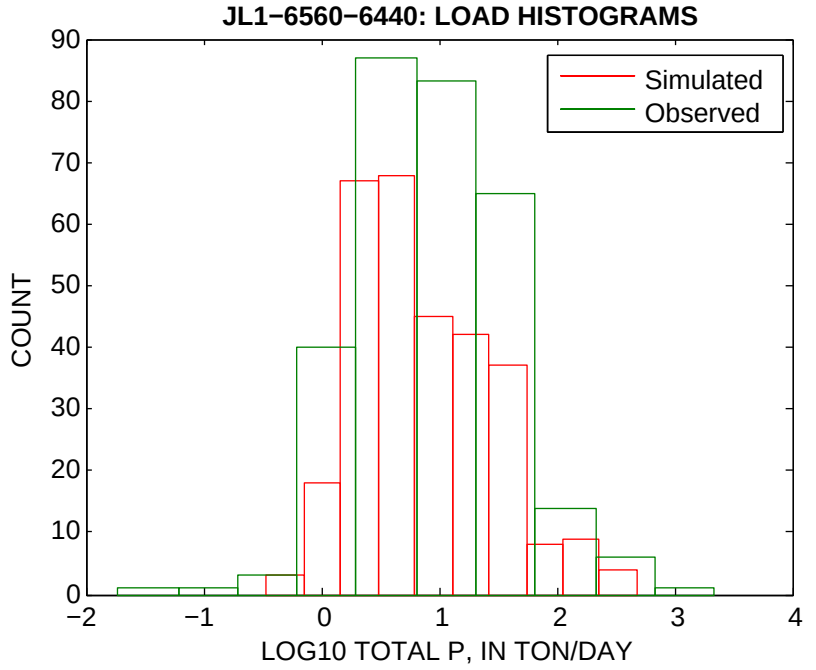


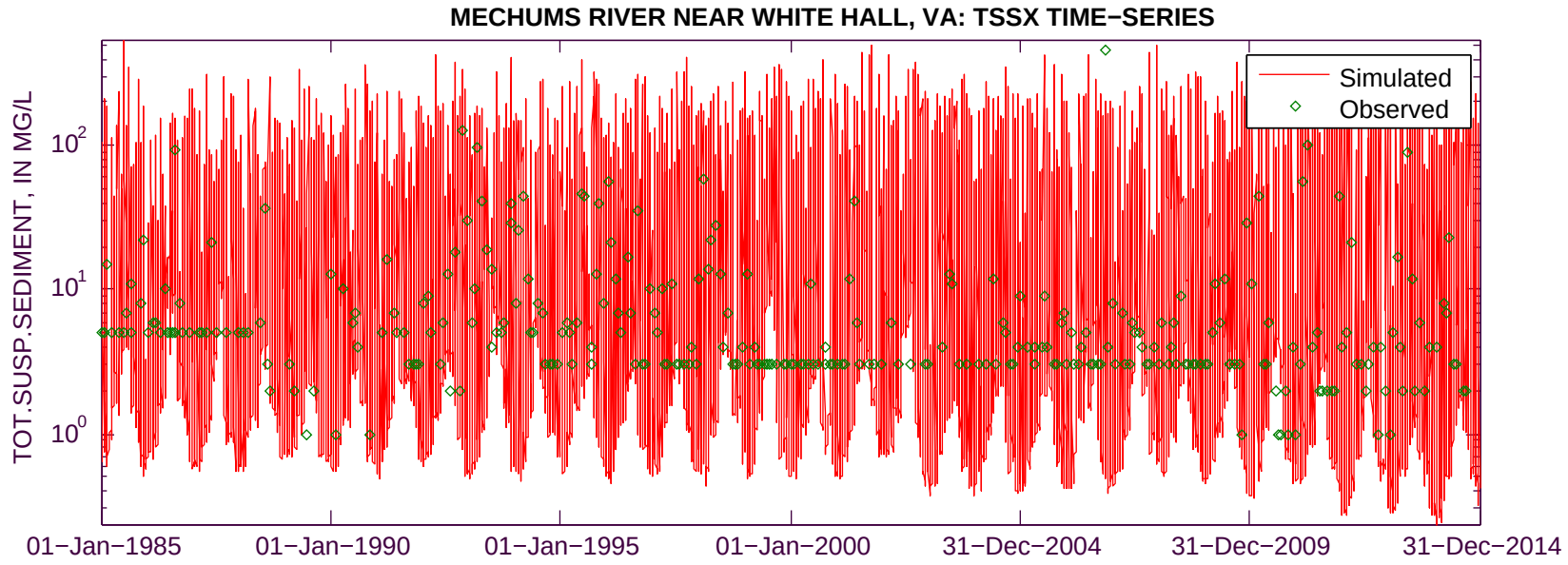
LOAD DATA
LOG10

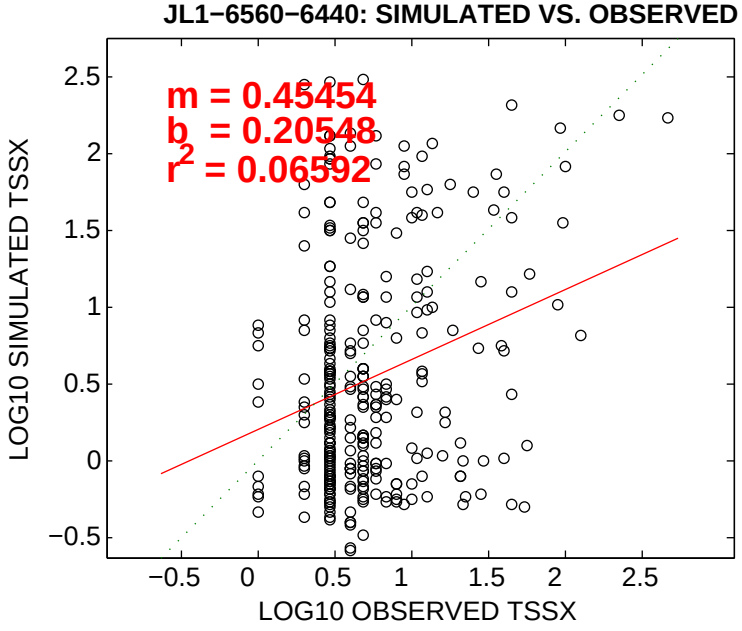


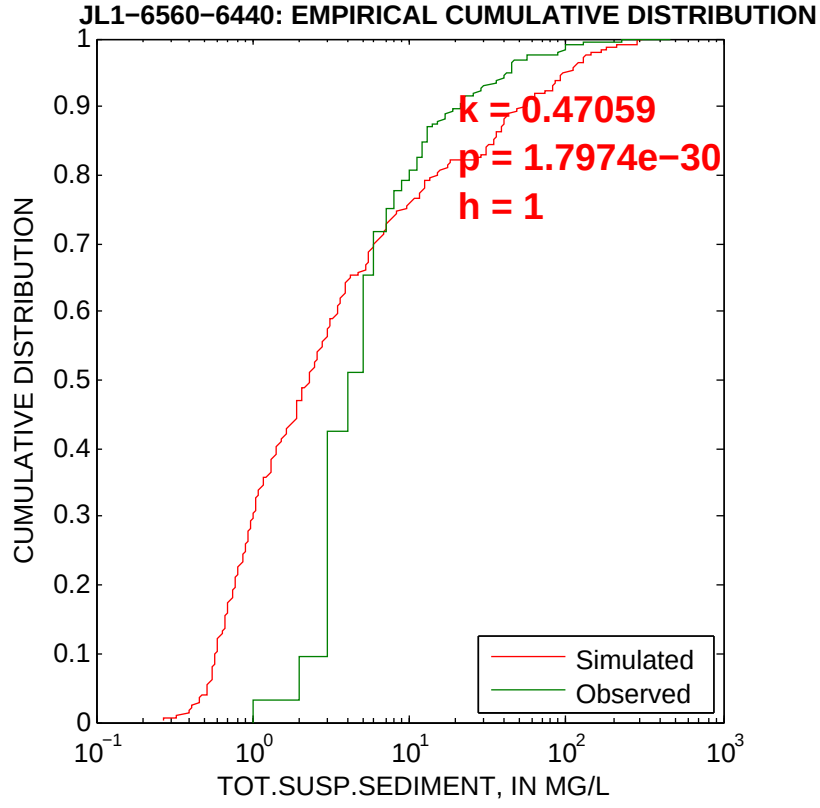












DATA SELECTION

scenario	file
P620171001WQ	TSSX.calib

plot: TSSX - total suspended ...

Dates: 1/1/1985 – 12/31/201

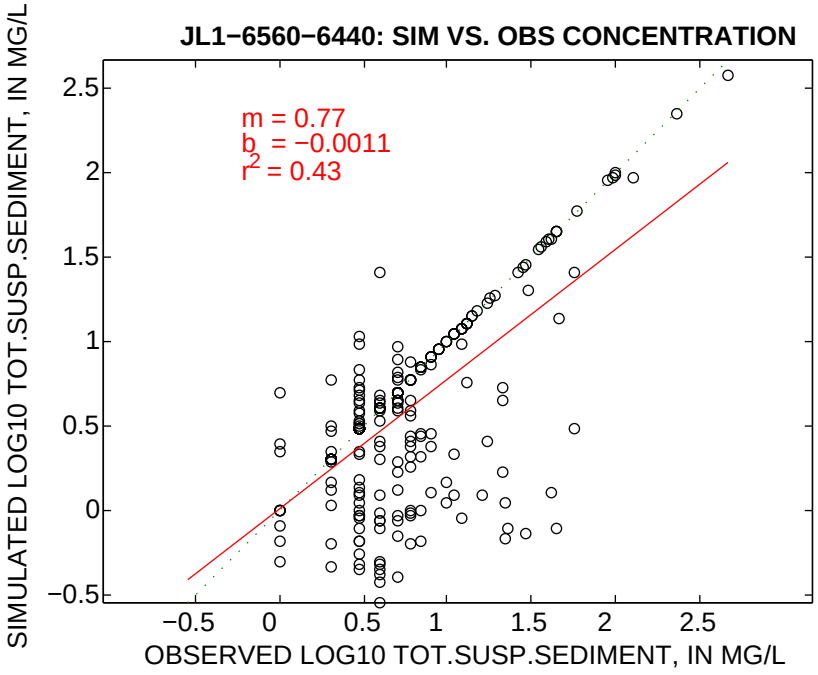
Drive	Directory	Observed
N/A	model	OBS20161101

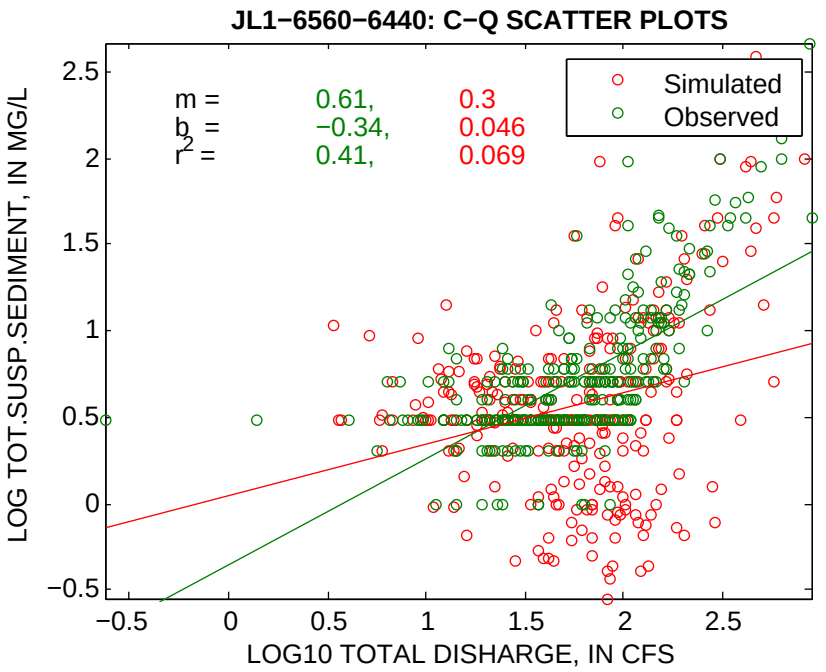
STATISTICS

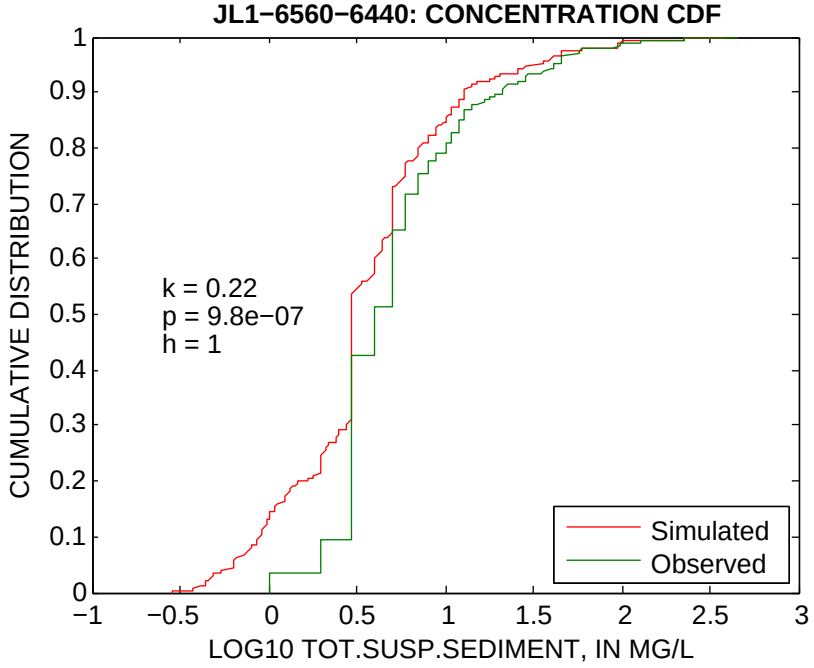
	n	306	306
		observe	simulate
min		1	0.2577
		0	-0.588886
mean		11.3758	17.7155
		0.731717	0.538071
media		4	2.27835
		0.60206	0.35762
max		464	307.05
		2.66652	2.48721
varian		1074.95	1769.29
		0.171085	0.536205
JB		0.001	0.001
		0.001	0.001
		ra	log
%		55.7295	-26.4646
err.va		2031.34	0.589383
rel.std.err		1.88971	3.44497
mod.eff		-0.88971	-2.44497

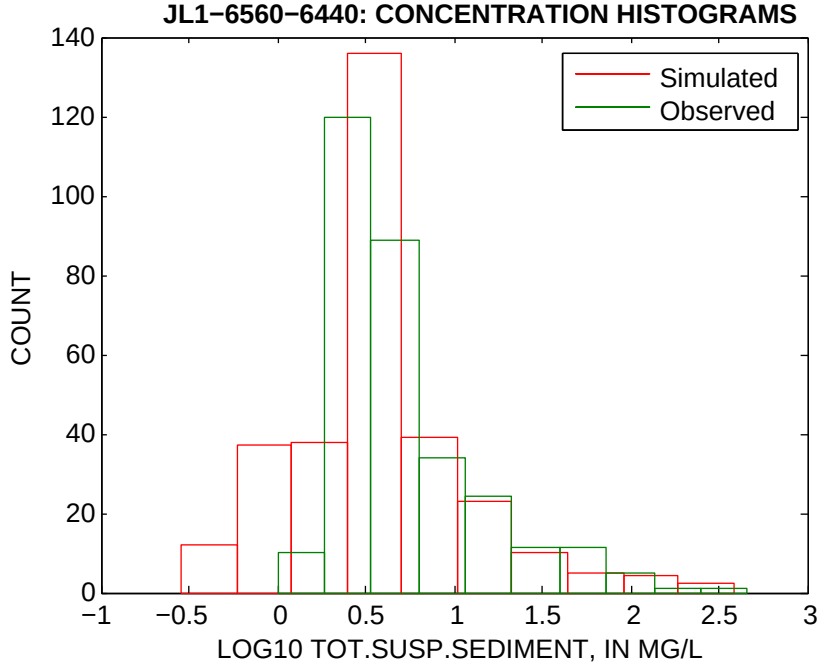
VERSION 2.1

ALL DATA
LOG10

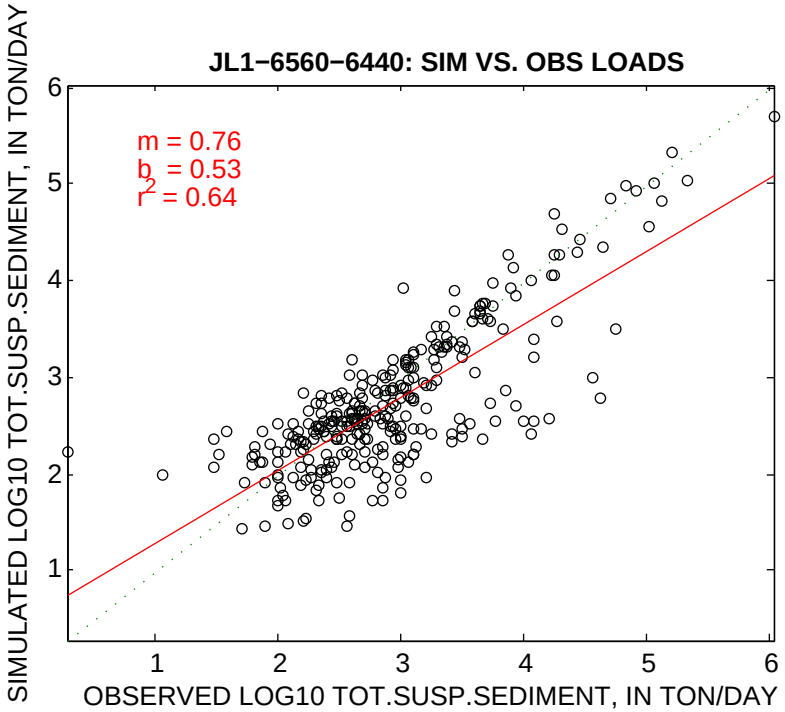




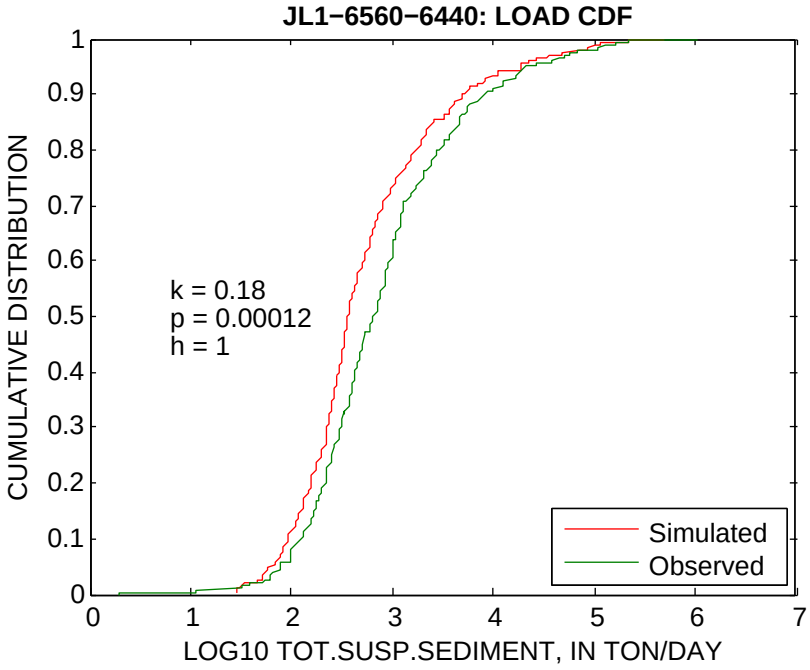


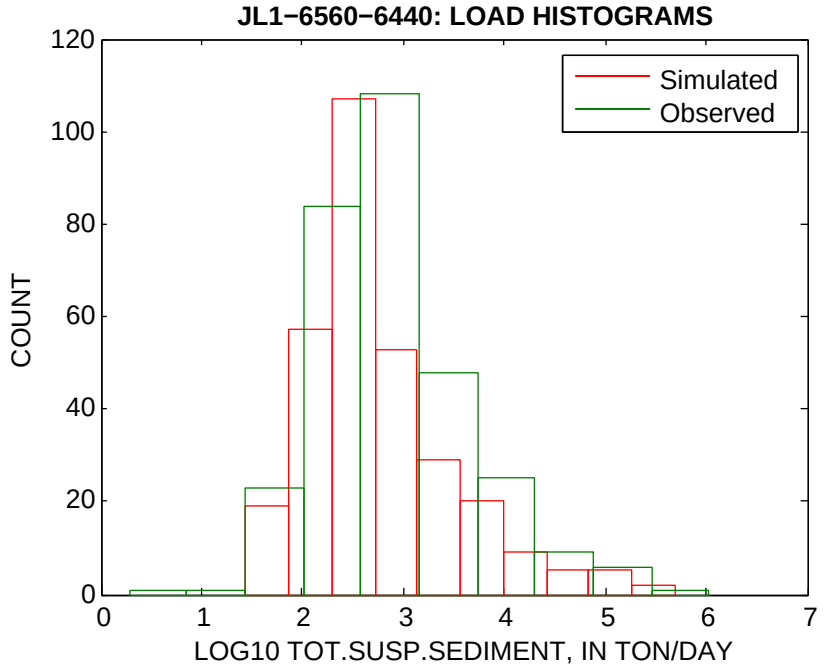


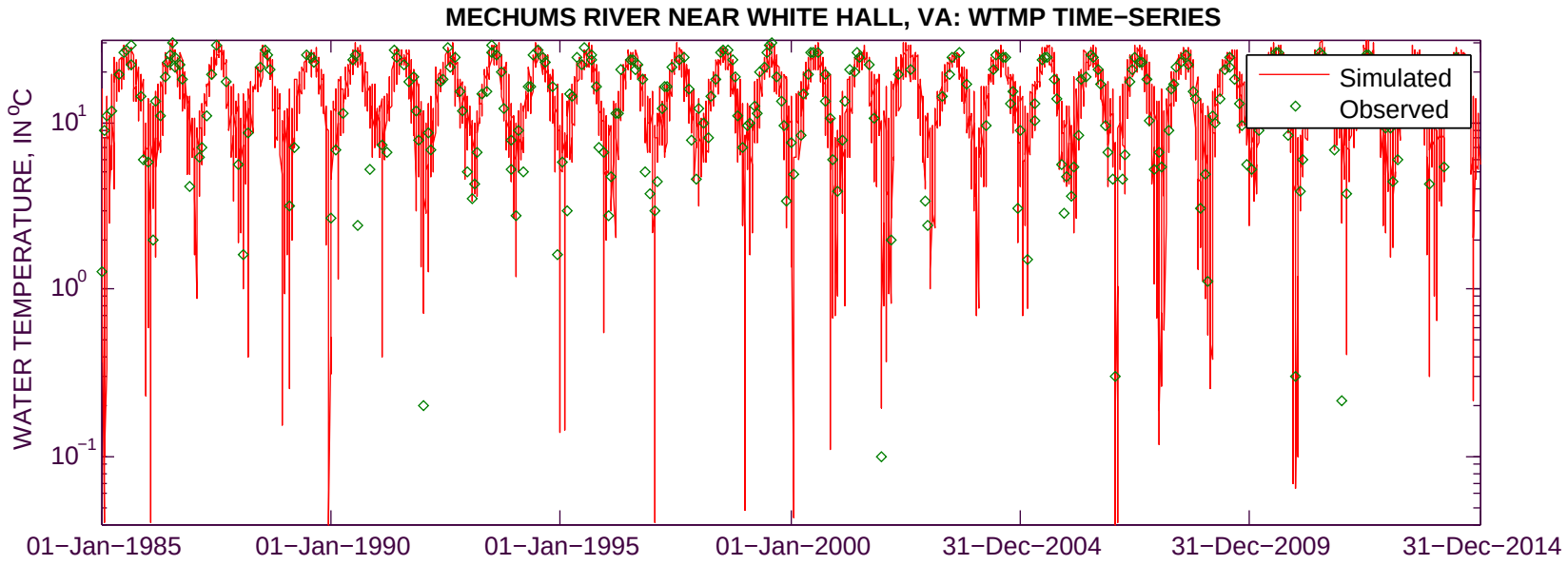
LOAD DATA
LOG10

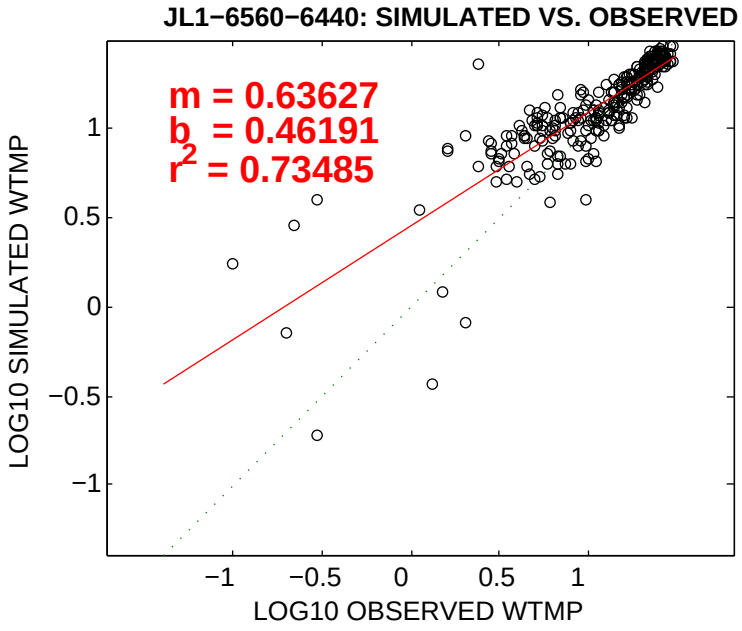


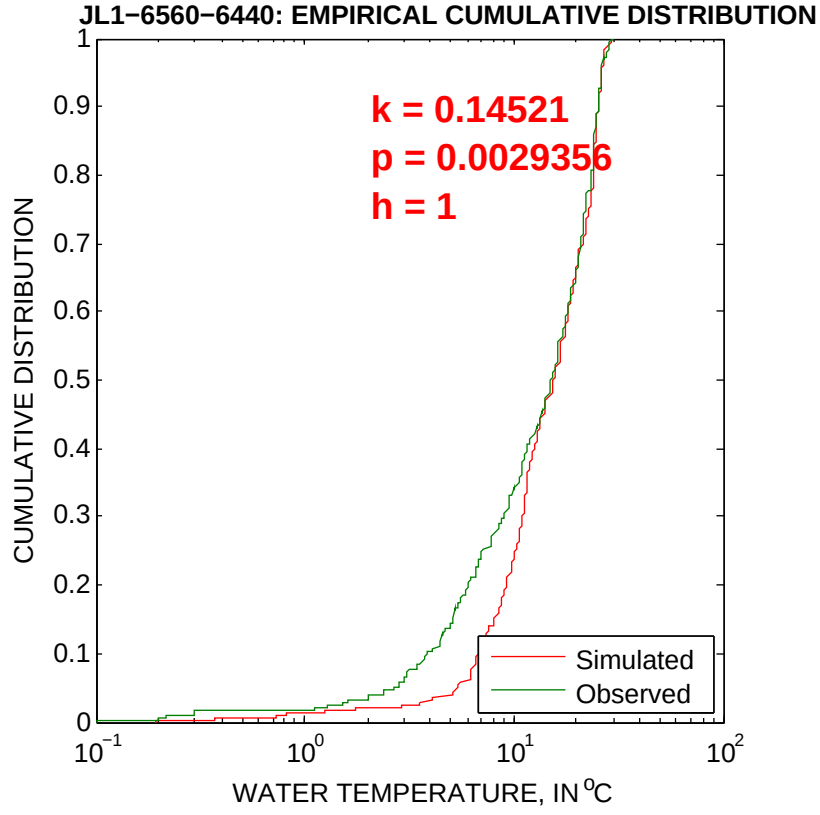












DATA SELECTION

scenario	file
P620171001WQ	WTMP.calib

plot: WTMP - water tempera...

Dates 1/1/1985 12/31/201

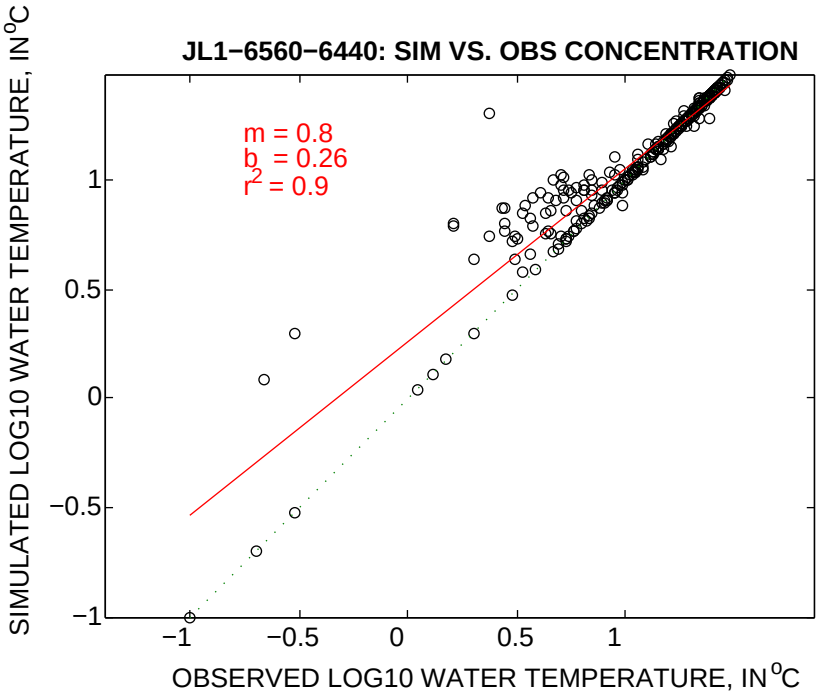
Drive	Directory	Observed
N/A	model	OBS20161101

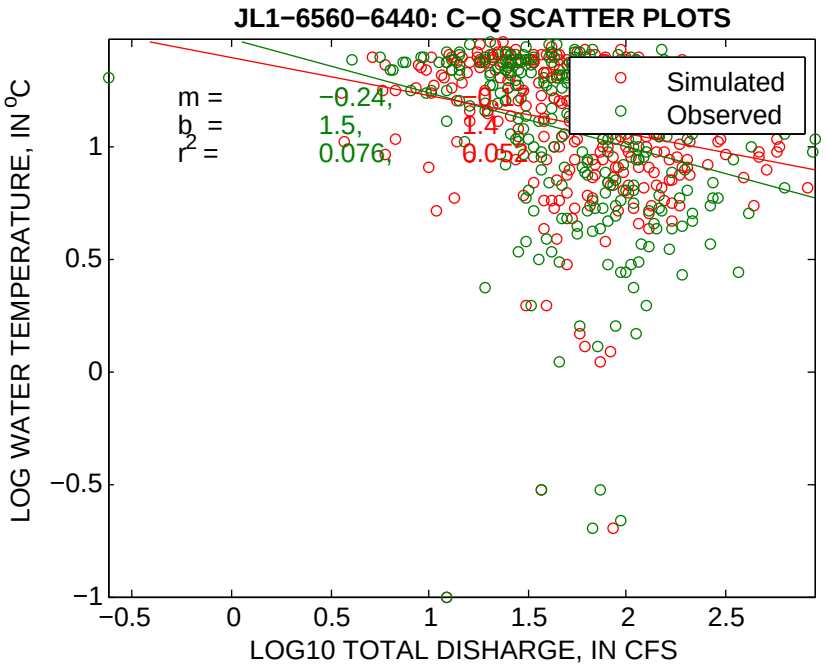
STATISTICS

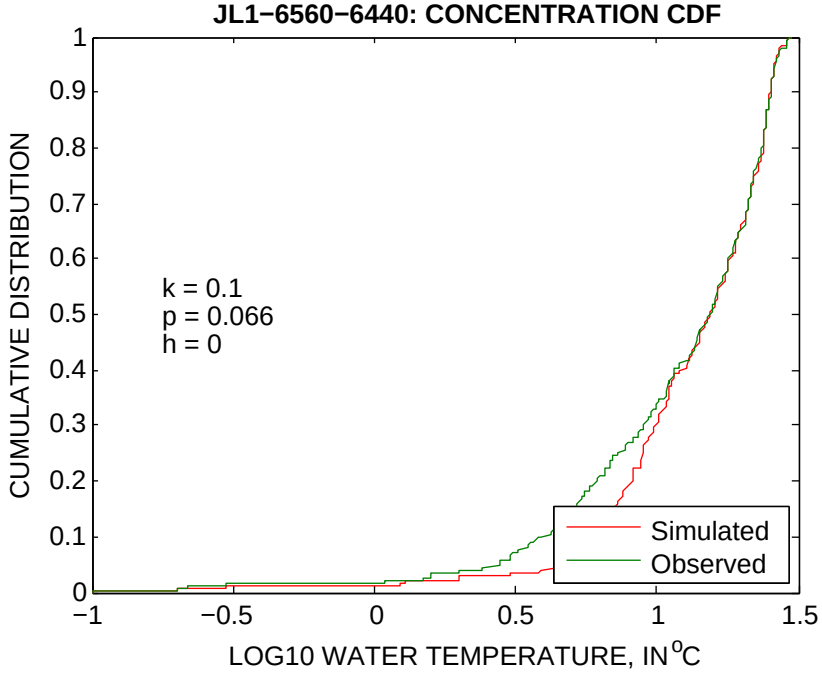
	observe	simulate
n	303	303
min	0.1	0.19193
	-1	-0.716857
mean	14.8189	15.9018
	1.06112	1.13707
media	15.2	15.517
	1.18184	1.19081
max	30.1	29.061
	1.47857	1.46331
varian	65.4589	50.6482
	0.146805	0.0808778
JB	0.001803	0.004105
	0.001	0.001
	ra	log
%	7.30775	7.15751
err.va	10.9995	0.0466548
rel.std.err	0.168036	0.317801
mod.eff	0.831964	0.682199

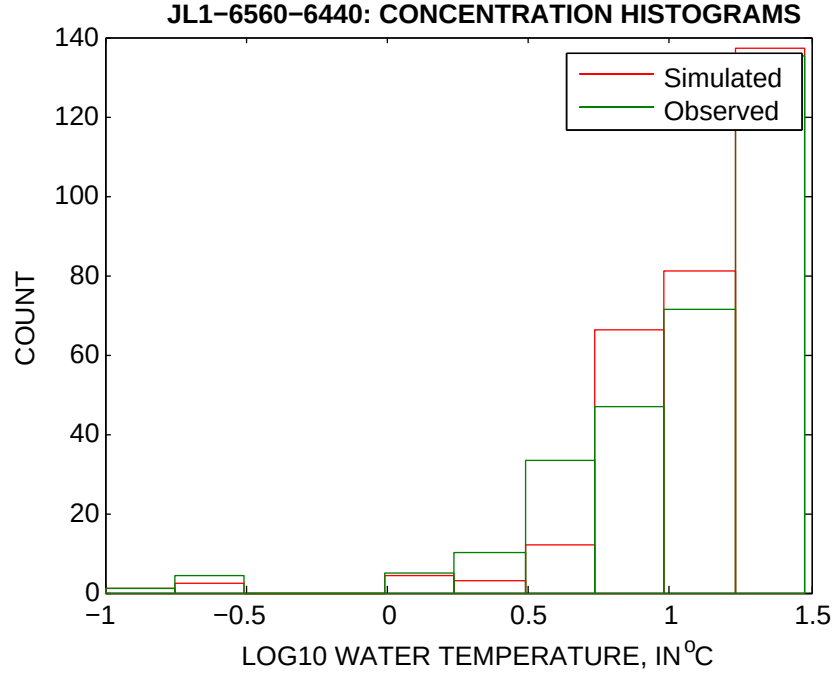
VERSION 2.1

ALL DATA
LOG10

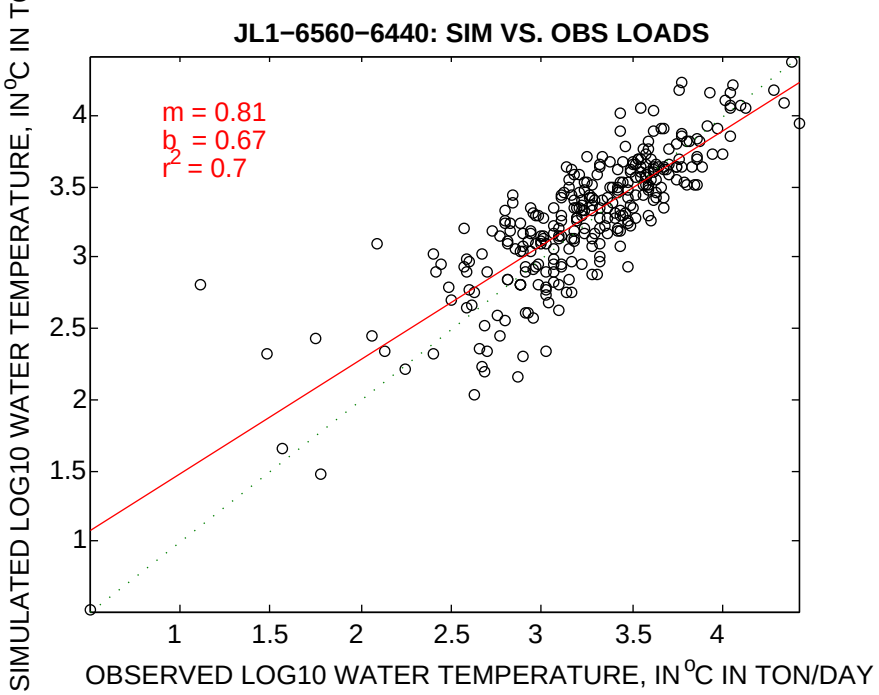


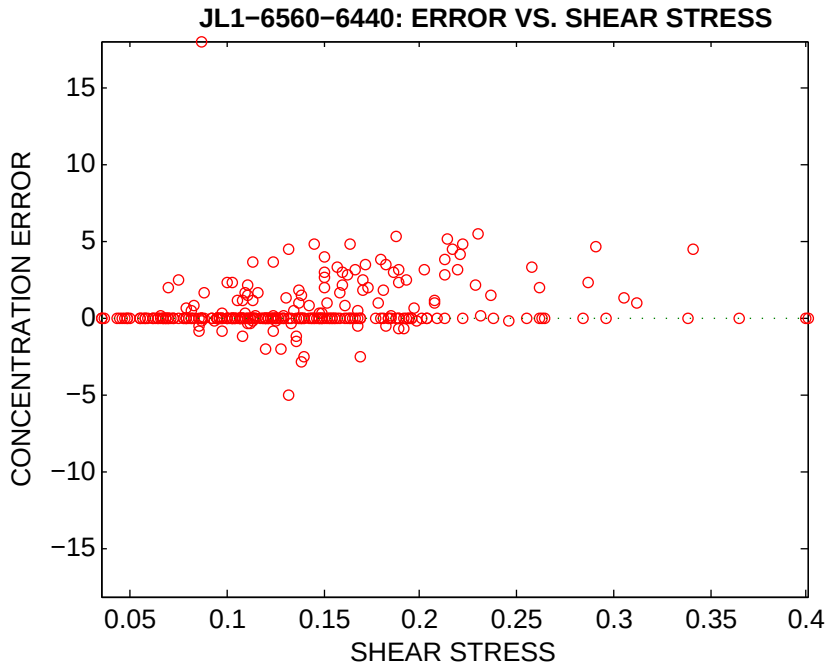


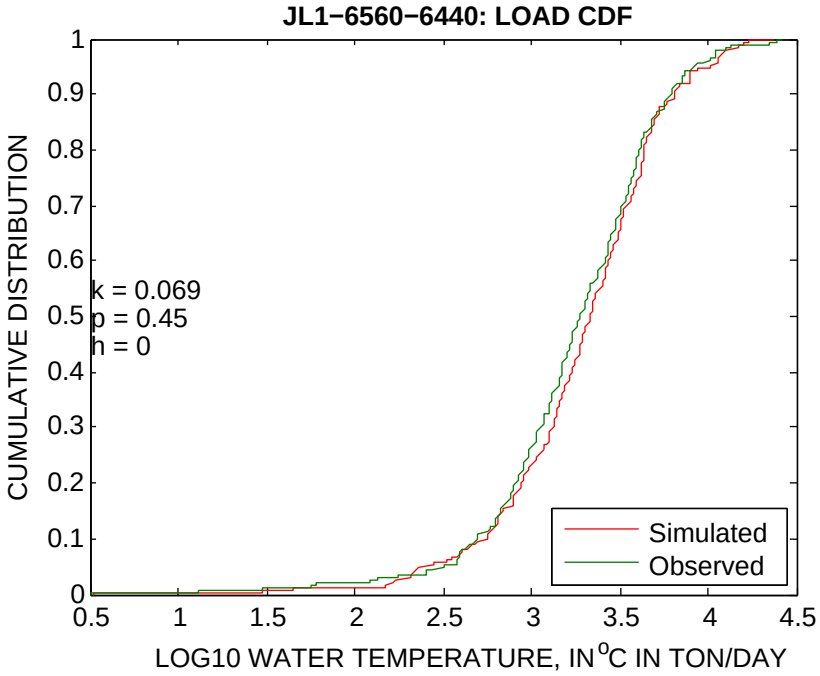


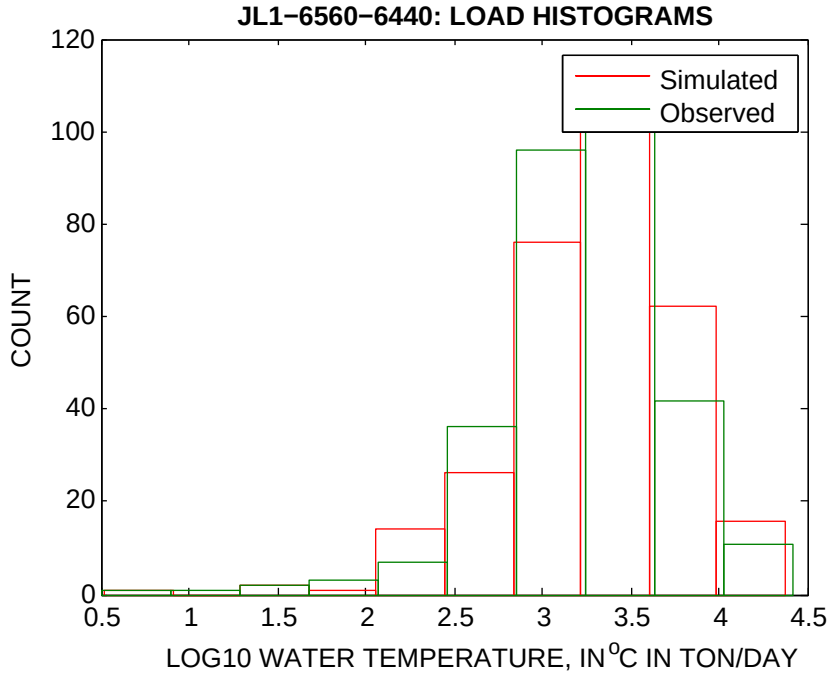


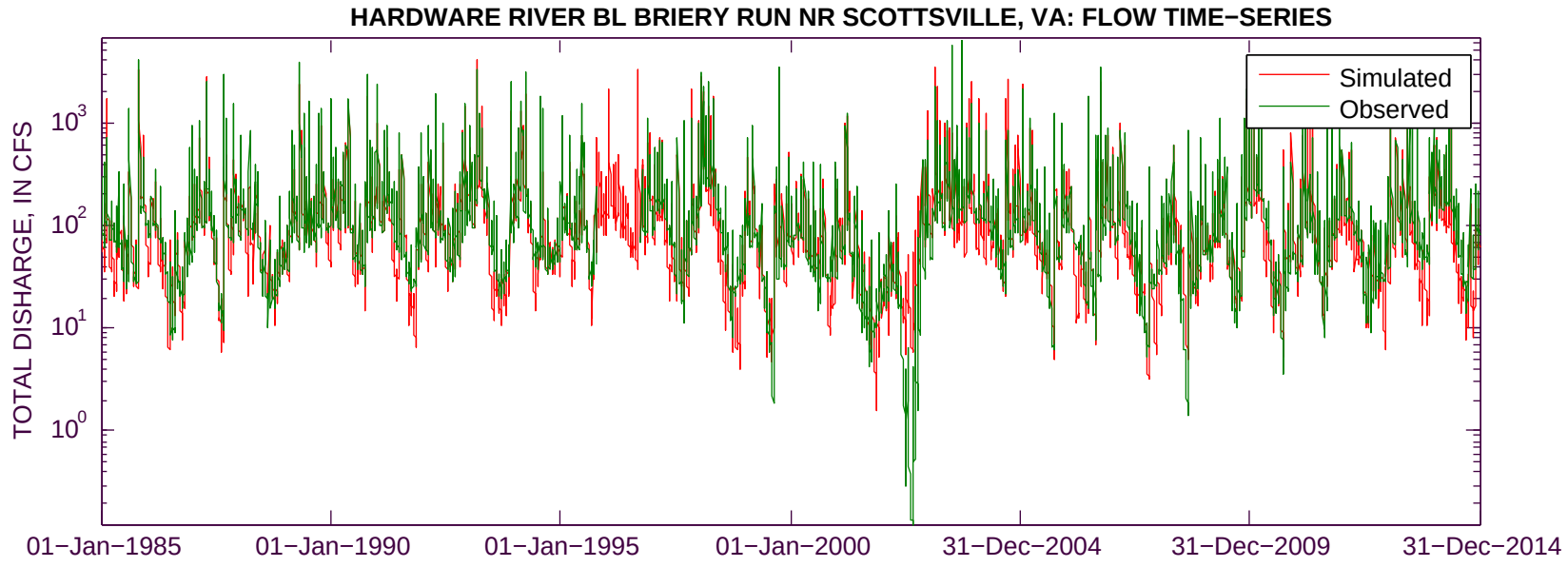
LOAD DATA
LOG10

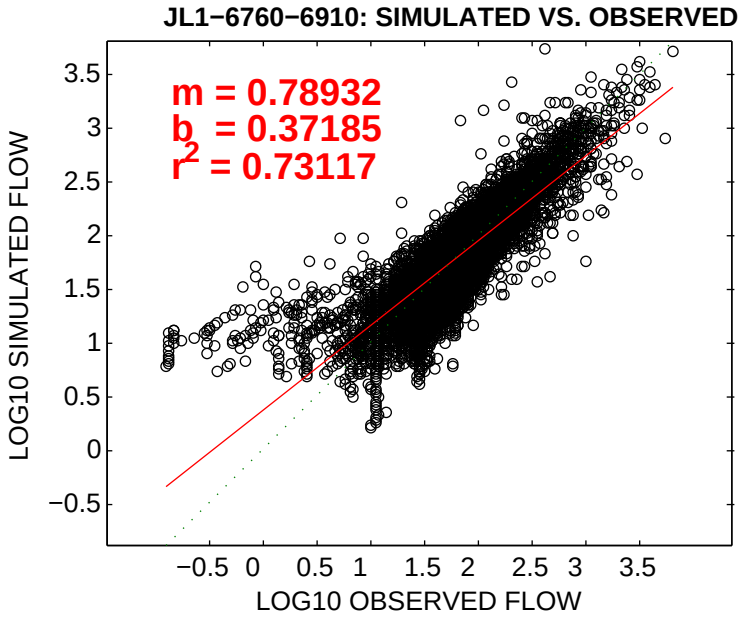


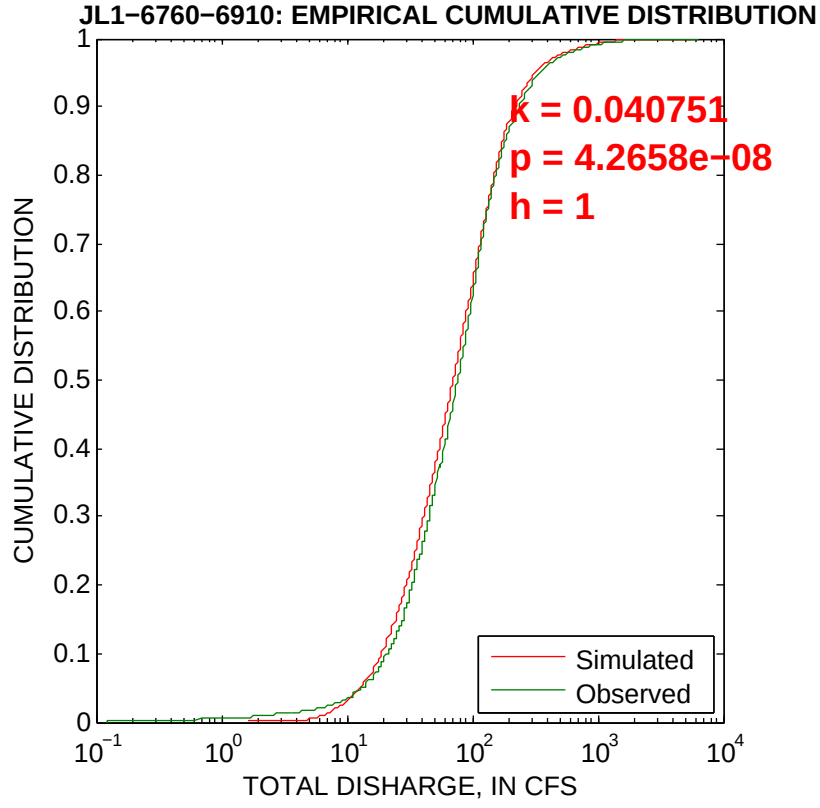












DATA SELECTION

scenario	file
P620171001WQ	FLOW.calib

plot: FLOW - total discharge

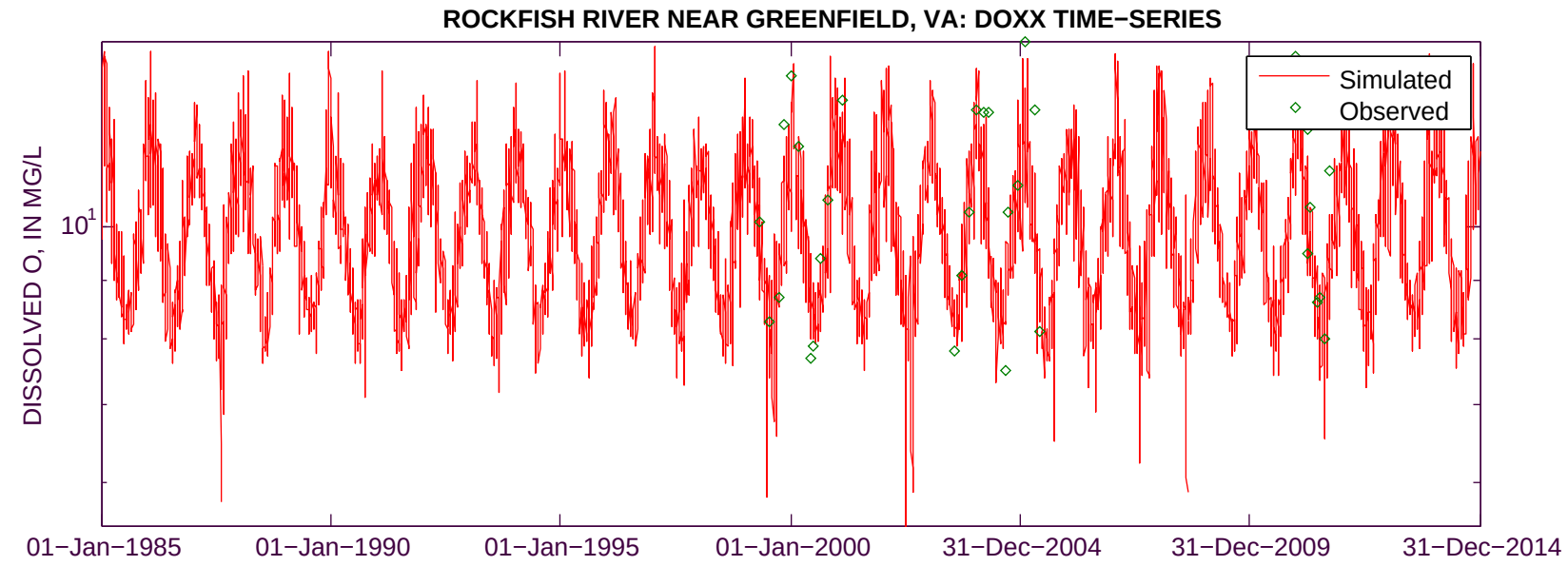
Dates: 1/1/1985 – 12/31/201

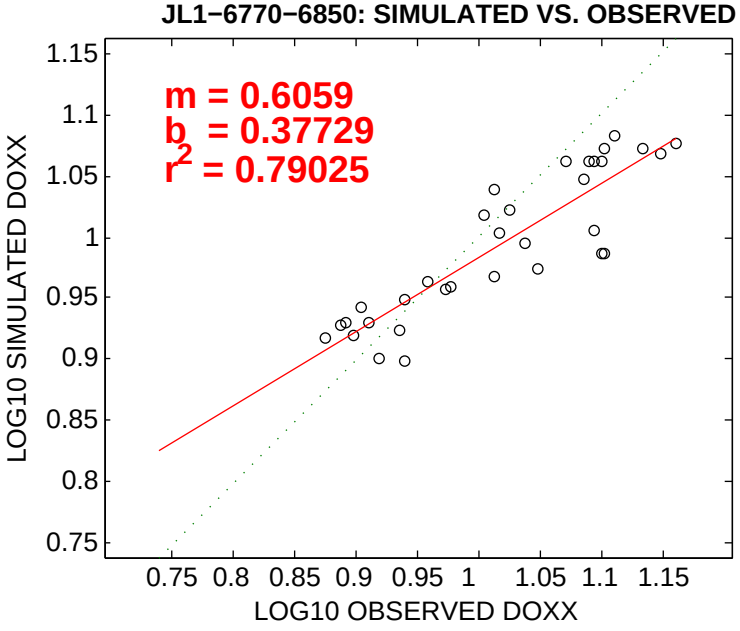
Drive	Directory	Observed
N/A	model	OBS20161101

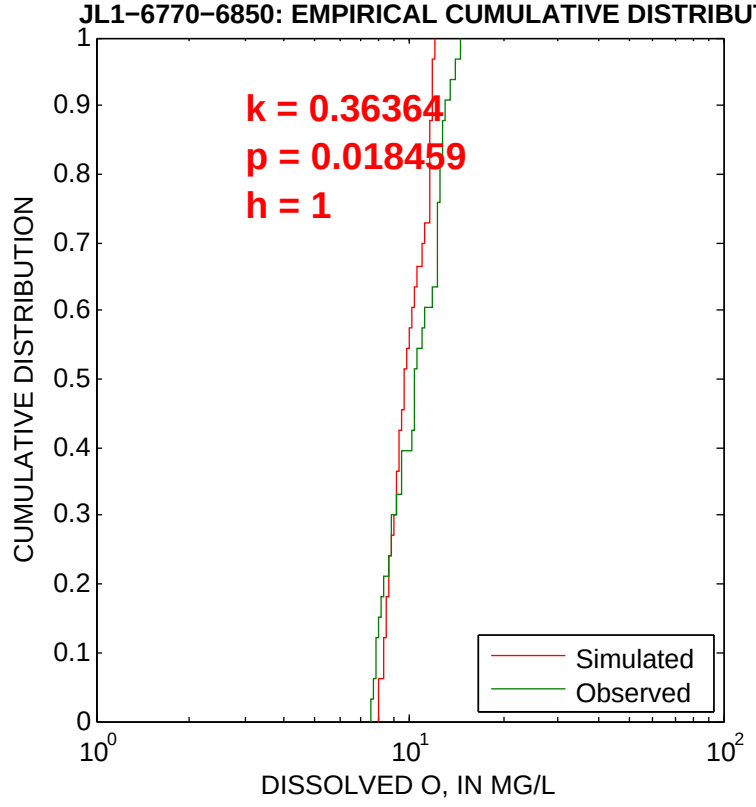
STATISTICS

	n	observe	simulate
		10601	10601
min		0.125618	1.5679
		-0.900948	0.195318
mean		125.028	116.368
		1.85598	1.83682
media		77.1256	71.225
		1.8872	1.85263
max		6510.13	5486.6
		3.81359	3.7393
varian		49370.6	39202.8
		0.218993	0.186604
JB		0.001	0.001
		0.001	0.001
		ra	log
%		-6.92688	-1.03237
err.va		17689.5	0.0602525
rel.std.err		1.358301	0.275135
mod.eff		0.641699	0.724865

VERSION 2.1







DATA SELECTION

scenario: P620171001WQ | file: DOXX.calib

plot: DOXX - dissolved oxygen

Dates: 1/1/1985 – 12/31/201

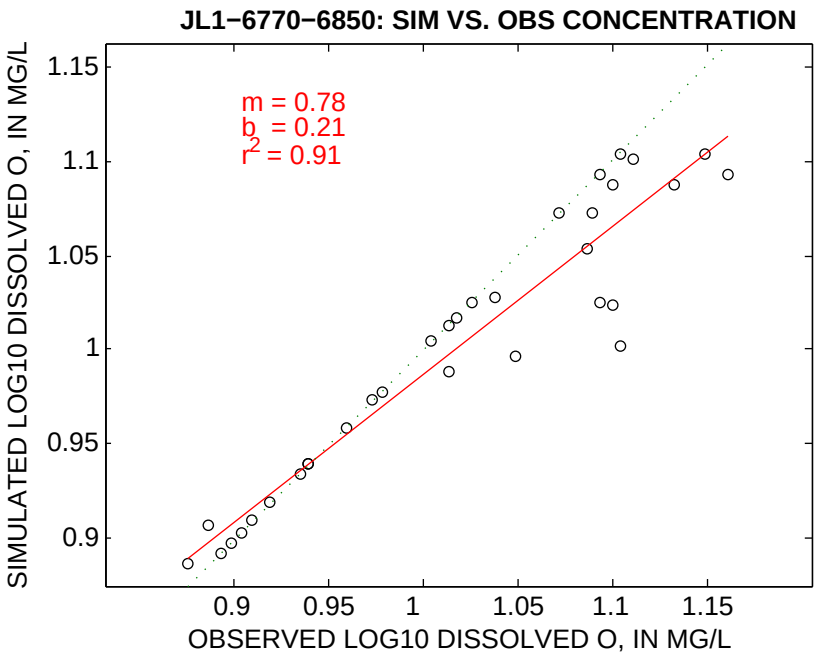
Drive | Directory | Observed: N/A | model | OBS20161101

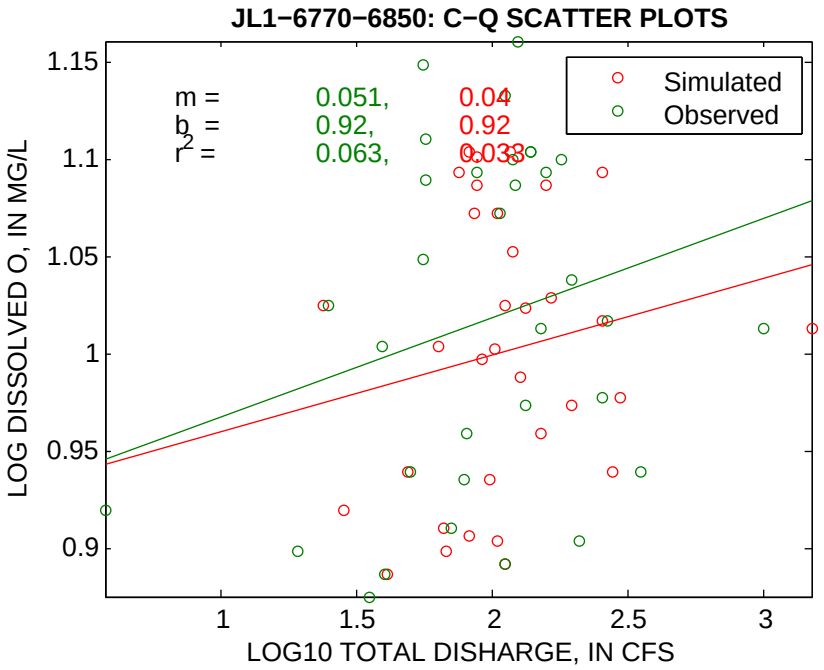
STATISTICS

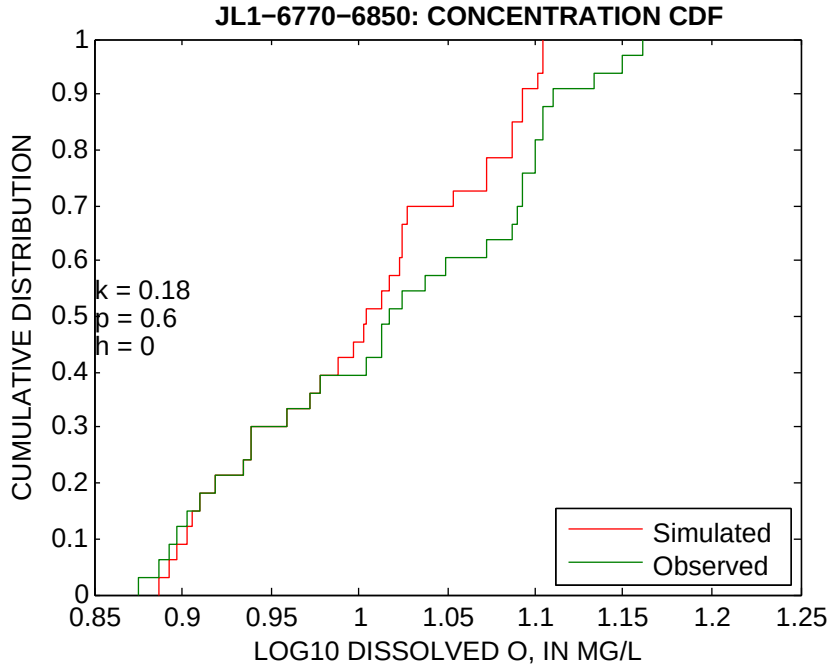
		observe	simulate
n		33	33
min		7.5	7.9385
		0.875061	0.899738
mean		10.6036	9.94208
		1.01707	0.993539
media		10.4	9.6946
		1.01703	0.98653
max		14.5	12.119
		1.16137	1.08347
varian		4.38531	1.85006
		0.00759225	0.00352701
JB		0.147696	0.097992
		0.12632	0.108372
		ra	log
%		-6.23894	-2.31402
err.va		1.65836	0.00249019
rel.std.err		0.378162	0.327991
mod.eff		0.621838	0.672009

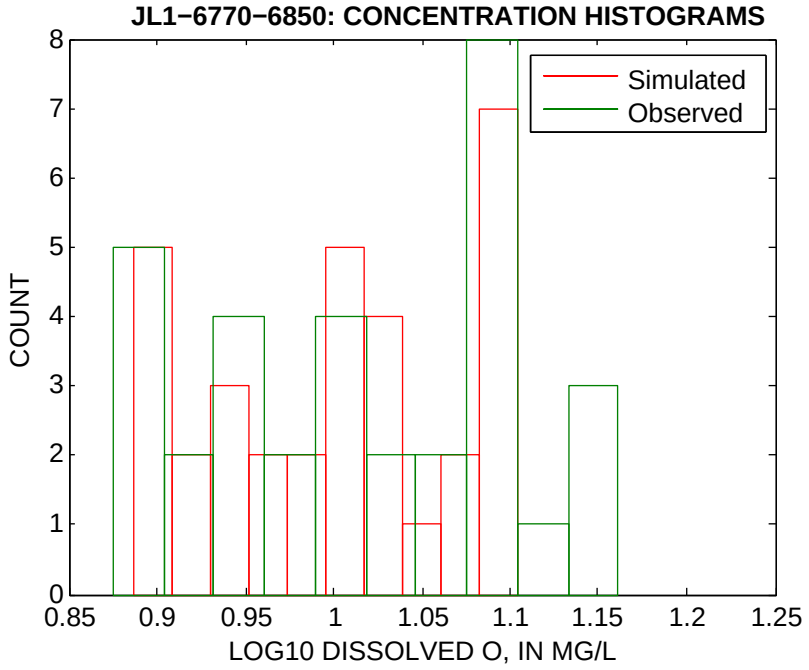
VERSION 2.1

ALL DATA
LOG10

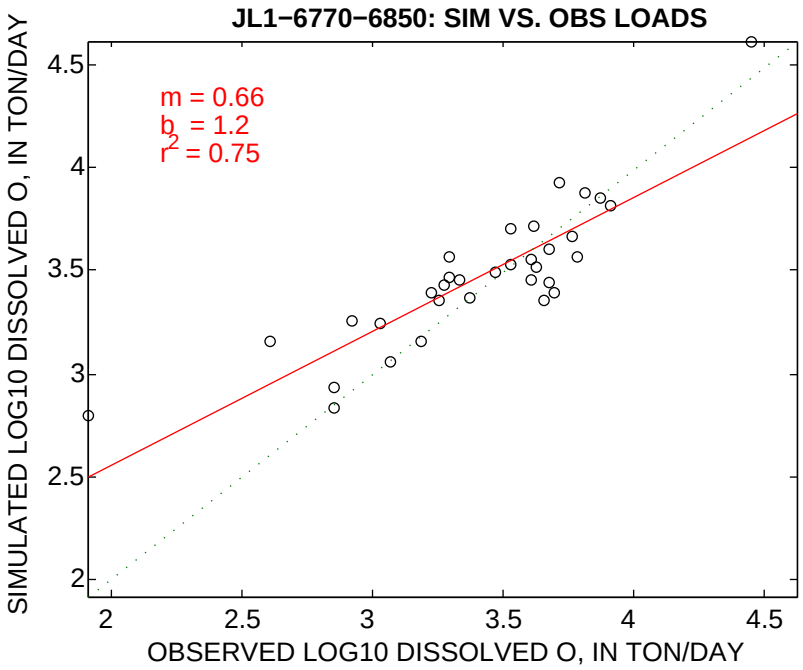




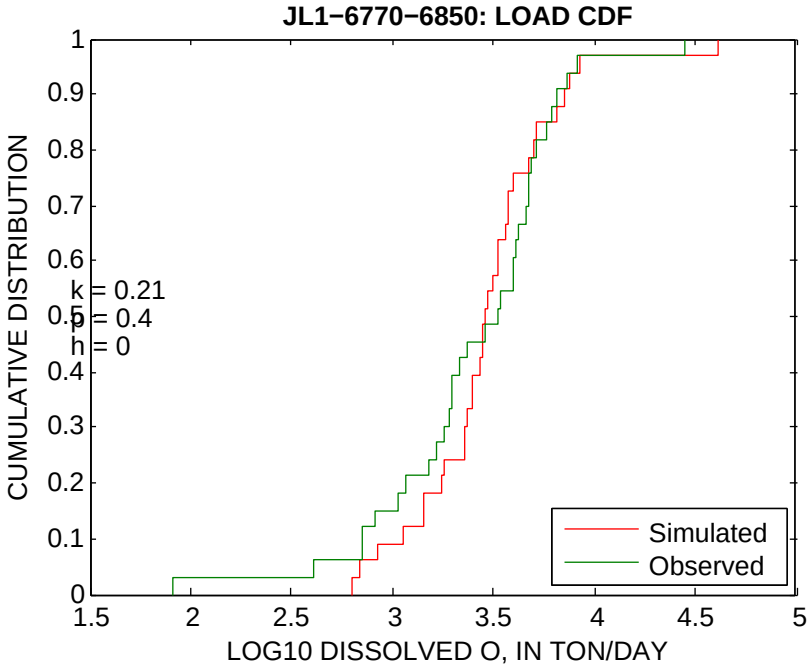


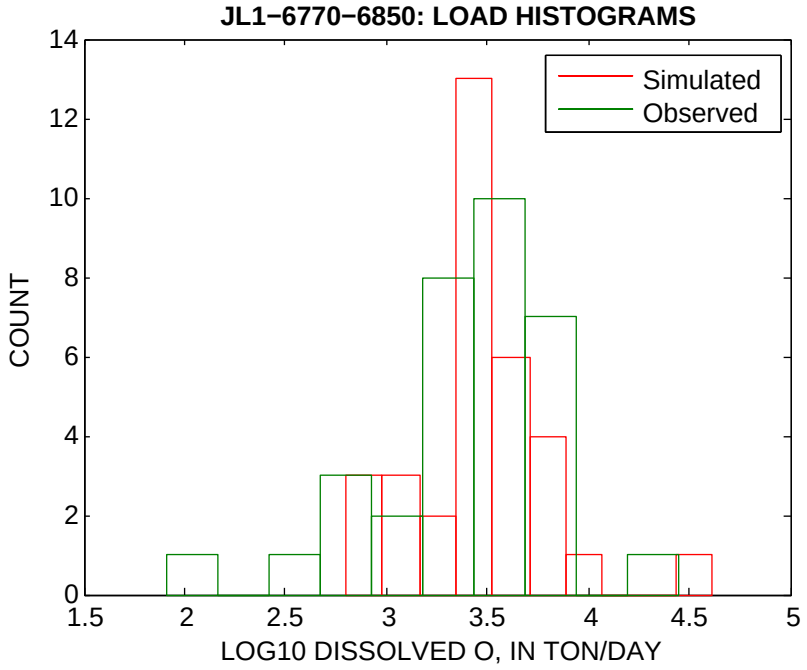


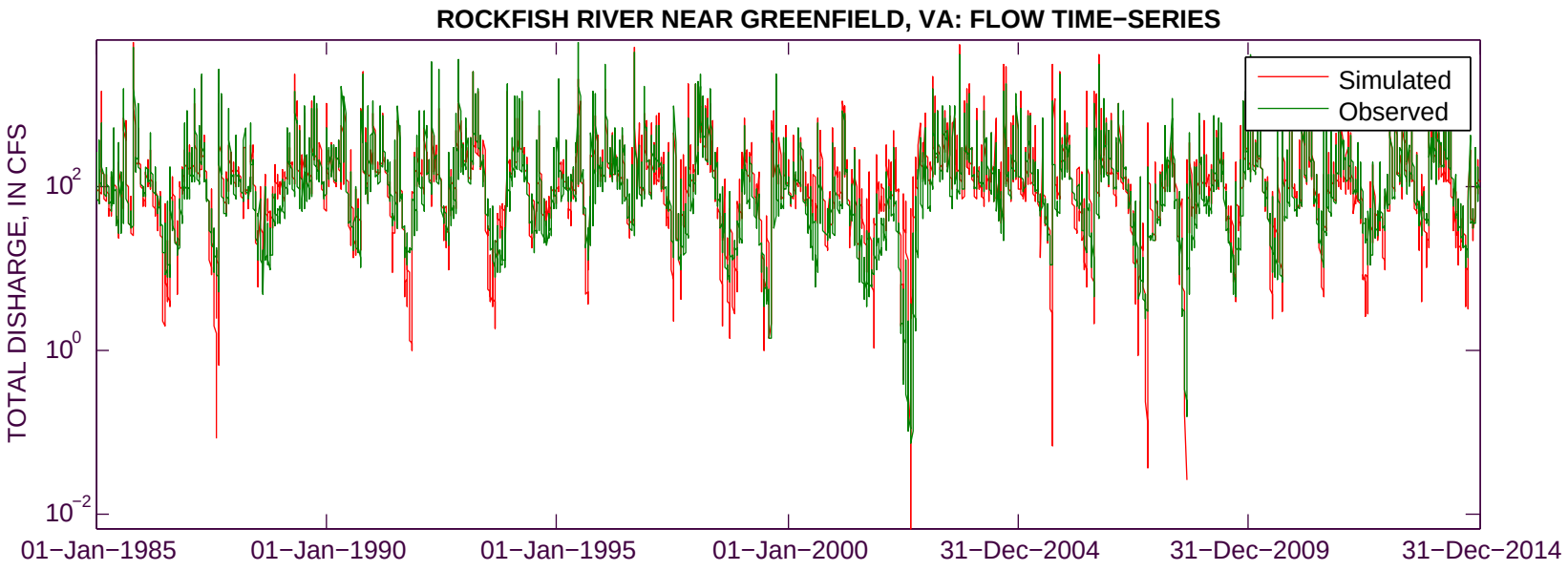
LOAD DATA
LOG10

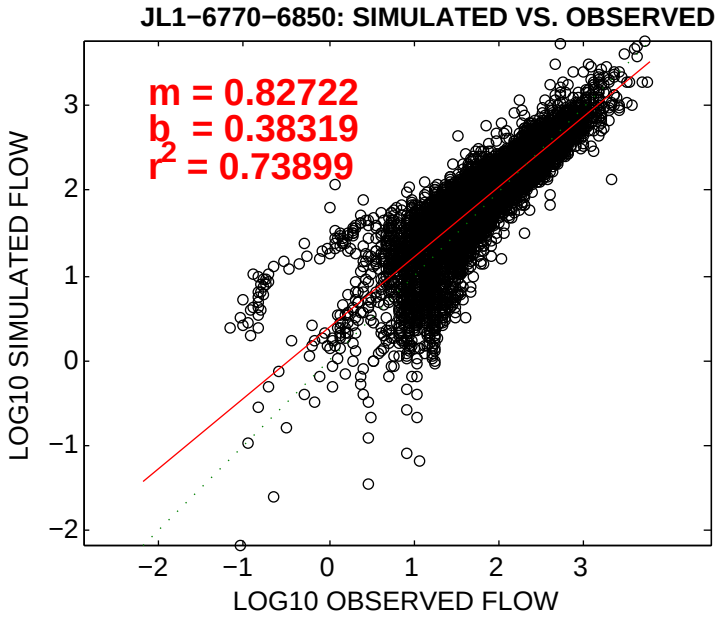


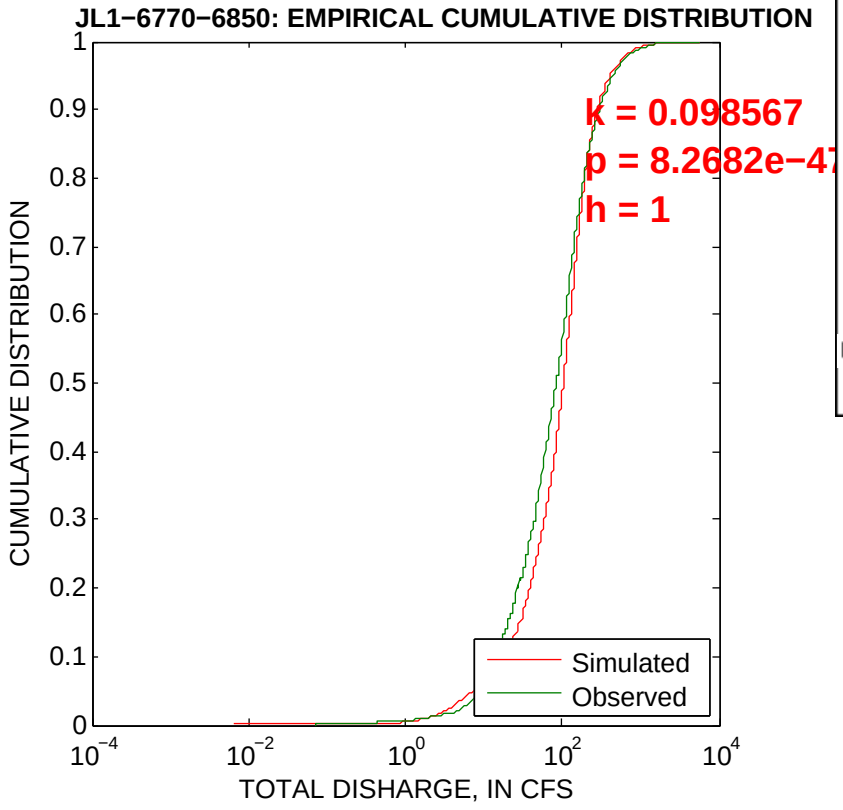












DATA SELECTION

scenario: P620171001WQ | file: FLOW.calib

plot: FLOW - total discharge

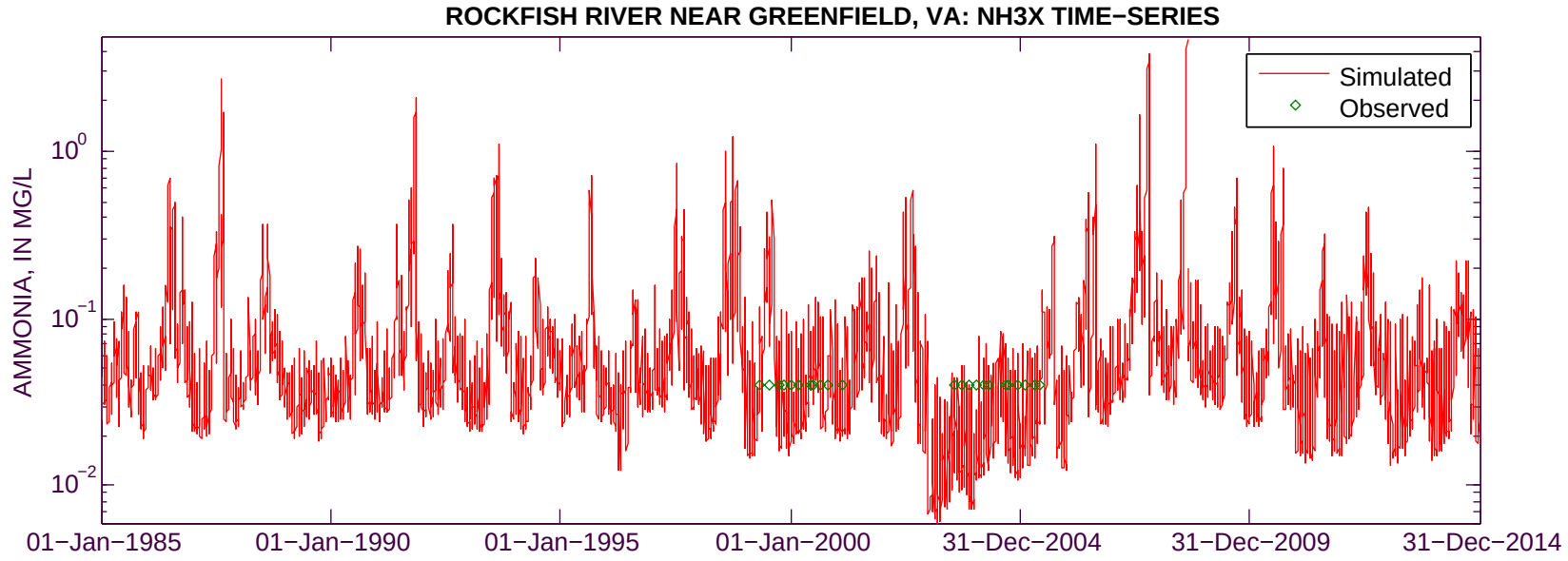
Dates: 1/1/1985 – 12/31/201

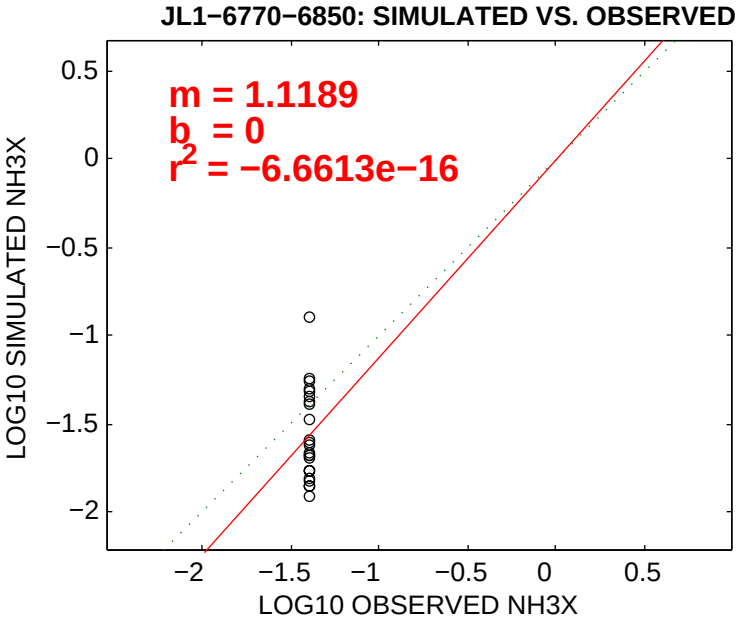
Drive: N/A | Directory: model | Observed: OBS20161101

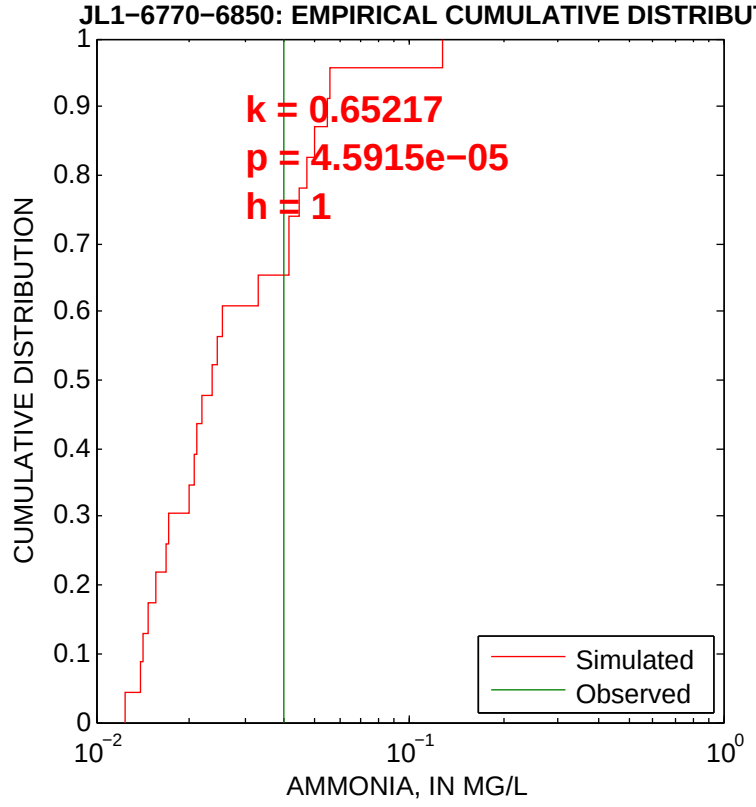
STATISTICS

		observe	simulate
n		10957	10949
min		0.07	0
		-1.1549	-2.17902
mean		142.746	148.375
		1.86602	1.92679
media		84	104.16
		1.92428	2.01812
max		5600	5860.9
		3.74819	3.76796
varian		54800.2	48212.5
		0.291109	0.269562
JB		0.001	0.001
		0.001	0.001
		ra	log
%		3.94325	3.25687
err.va		17913.6	0.0827442
rel.std.err		0.326889	0.284238
mod.eff		0.673111	0.715762

VERSION 2.1







DATA SELECTION

scenario	file
P620171001WQ	NH3X.calib

plot: NH3X - ammonia

Dates: 1/1/1985 – 12/31/201

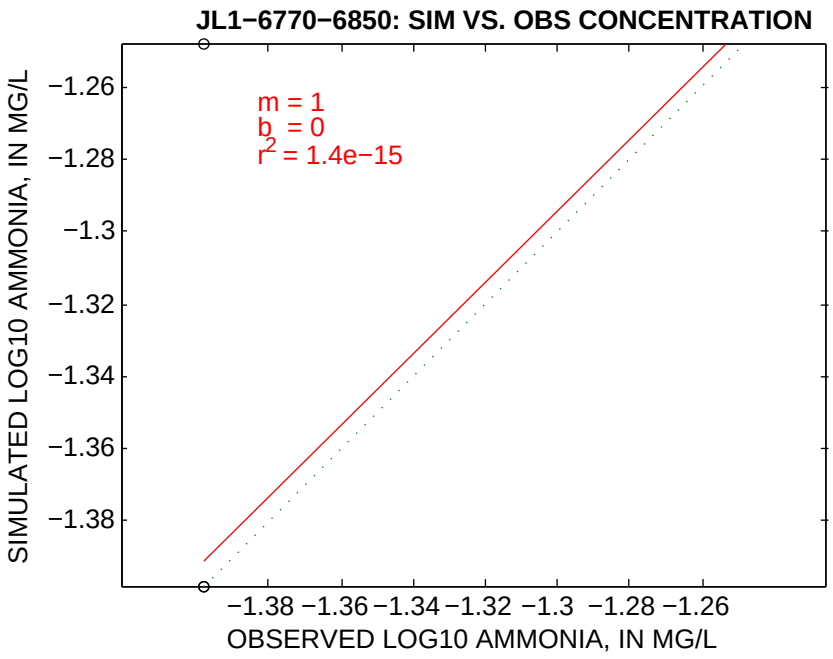
Drive	Directory	Observed
N/A	model	OBS20161101

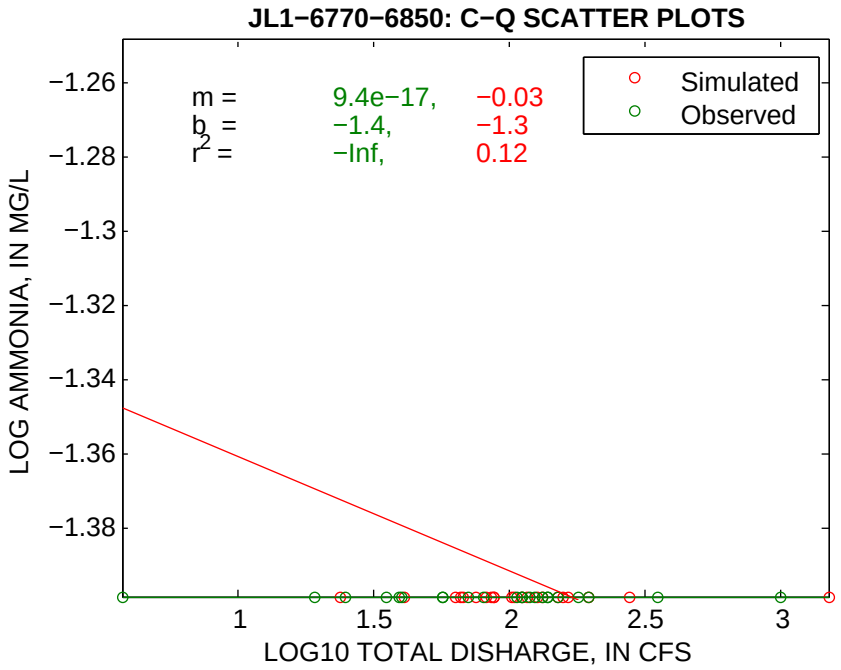
STATISTICS

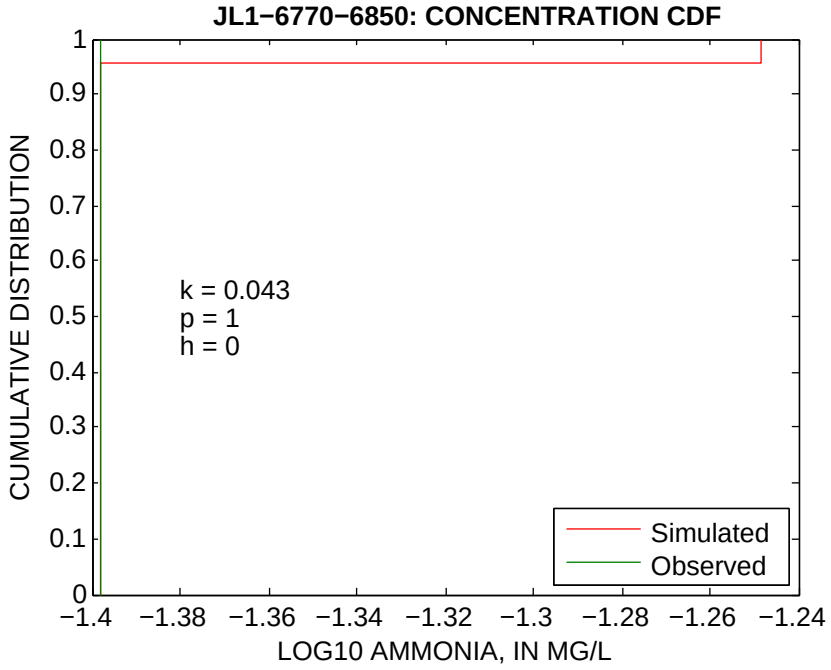
	n	23	23
		observe	simulate
min		0.04	0.012446
		-1.39794	-1.90497
mean		0.04	0.032998
		-1.39794	-1.56412
media		0.04	0.023664
		-1.39794	-1.62591
max		0.04	0.12805
		-1.39794	-0.89262
varian		2.01347e-3	0.00063419
		0	0.0659995
JB		0.017571	0.001
		NaN	0.129694
		ra	log
%		-17.5051	11.8873
err.va		0.00068545	0.0948698
rel.std.err		40434e+3	Inf
mod.eff		-3.40434e+	-Inf

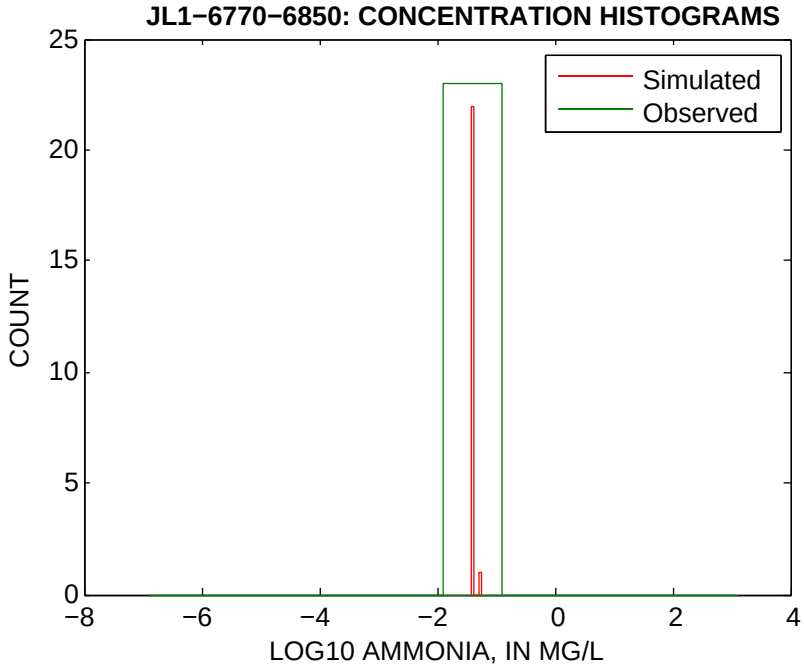
VERSION 2.1

ALL DATA
LOG10

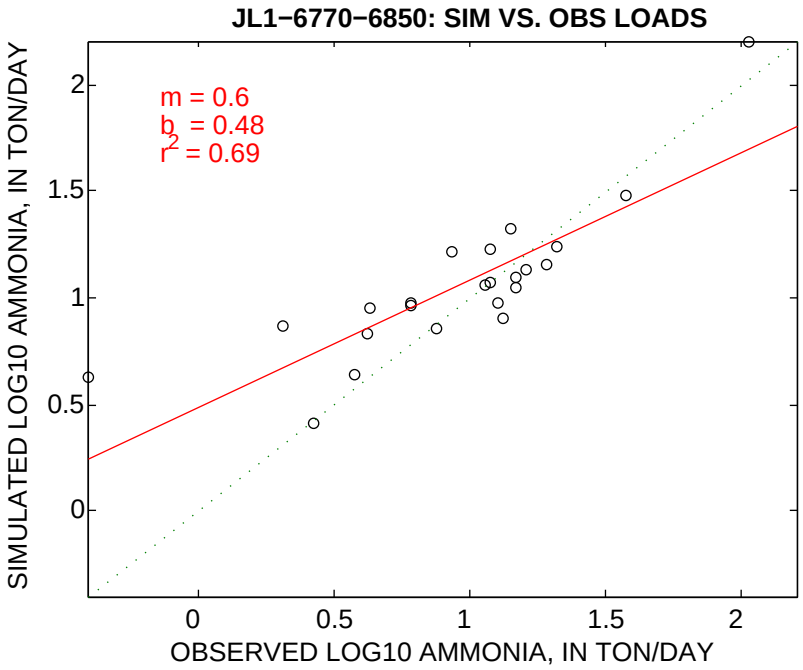


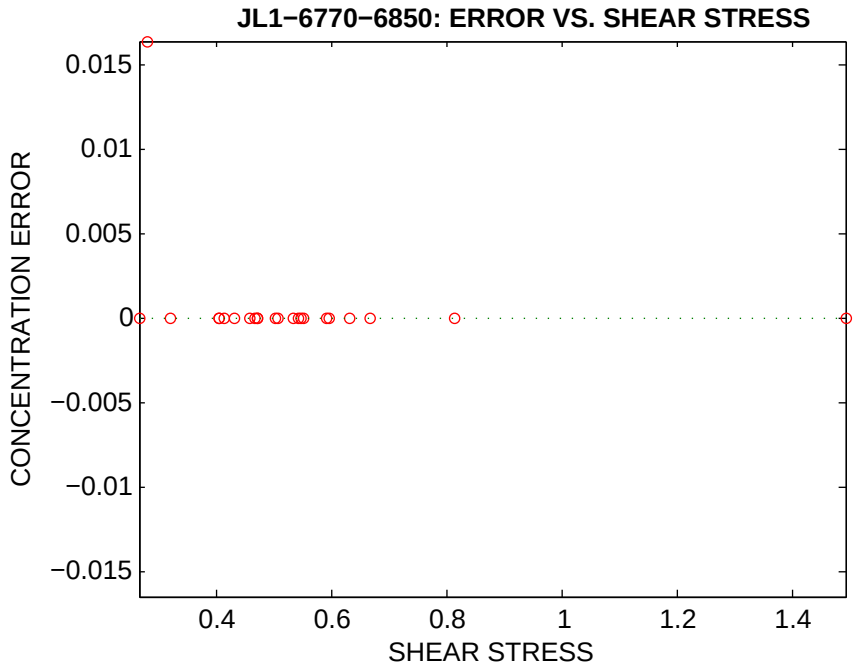


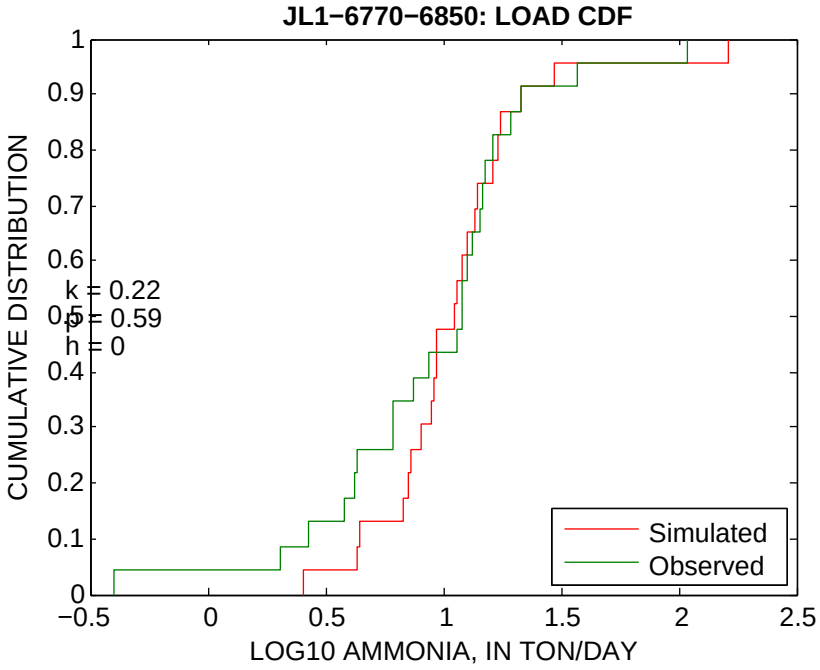


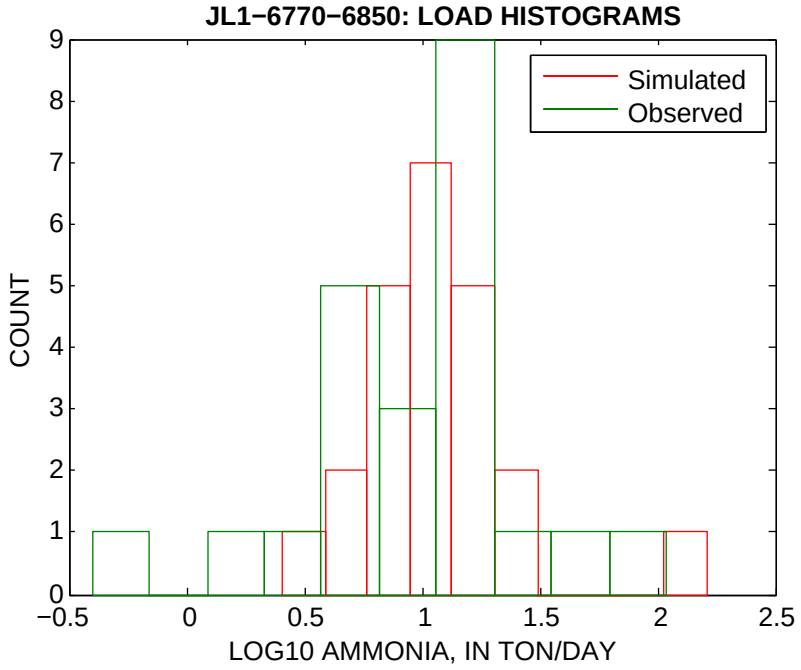


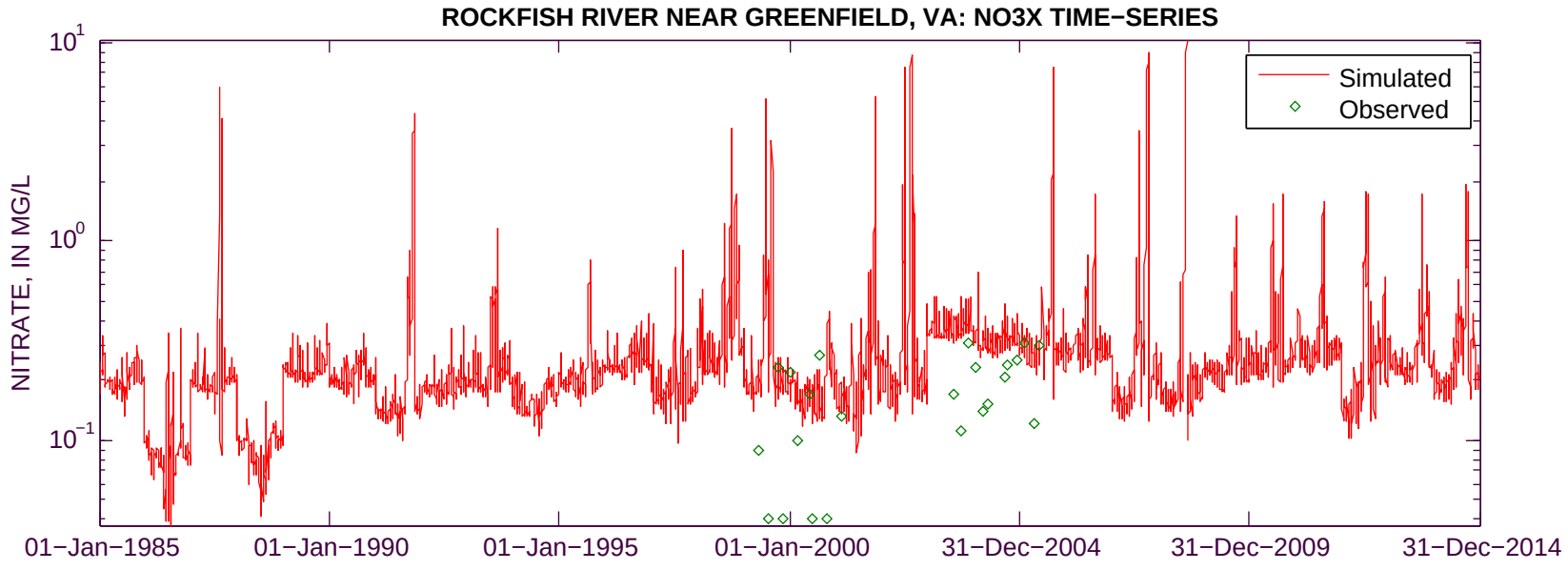
LOAD DATA
LOG10

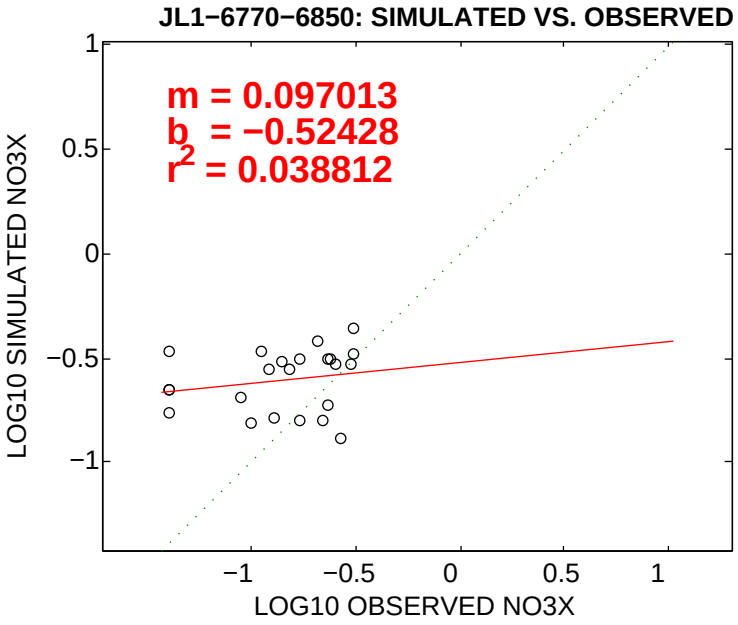


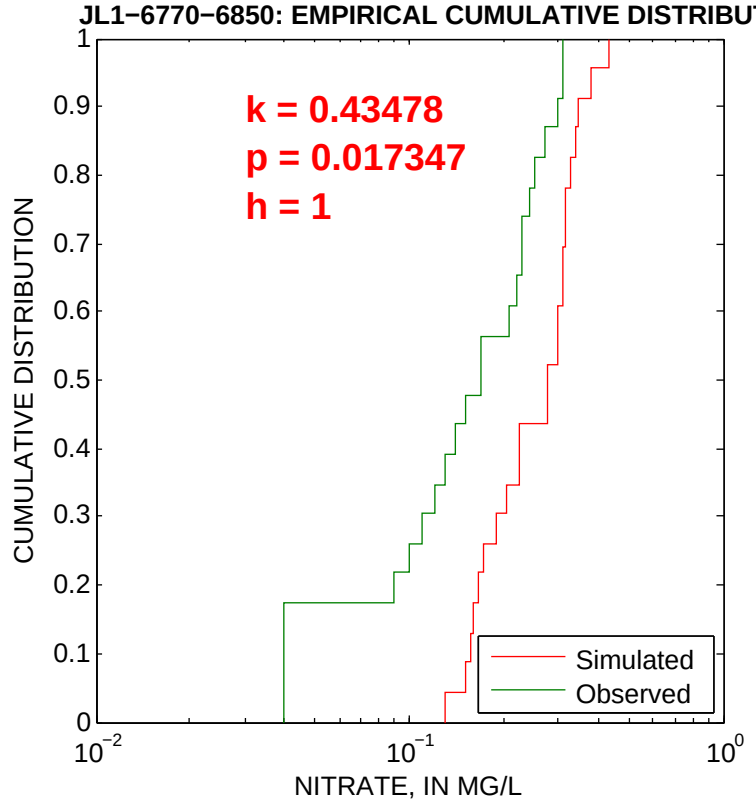












DATA SELECTION

scenario	file
P620171001WQ	NO3X.calib

plot: NO3X - nitrate

Dates: 1/1/1985 – 12/31/201

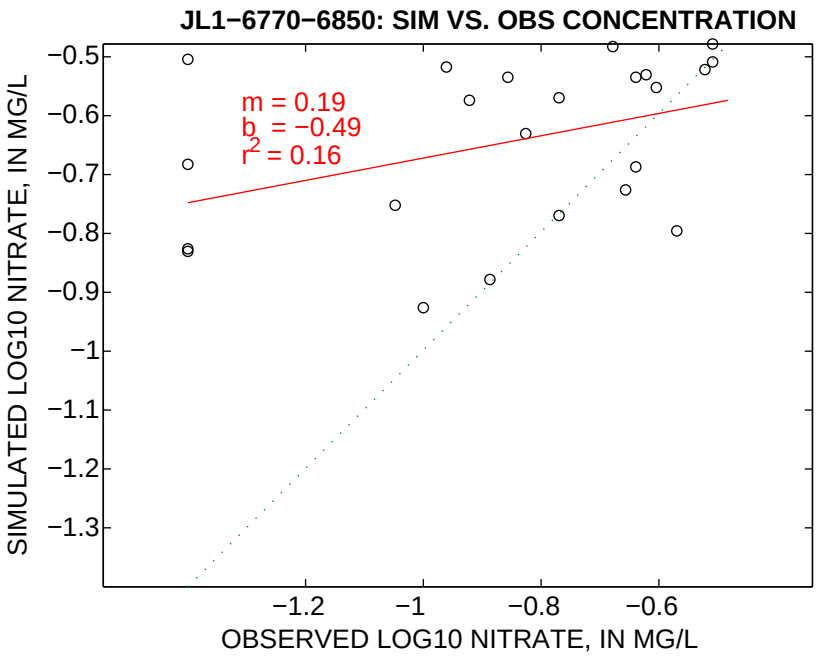
Drive	Directory	Observed
N/A	model	OBS20161101

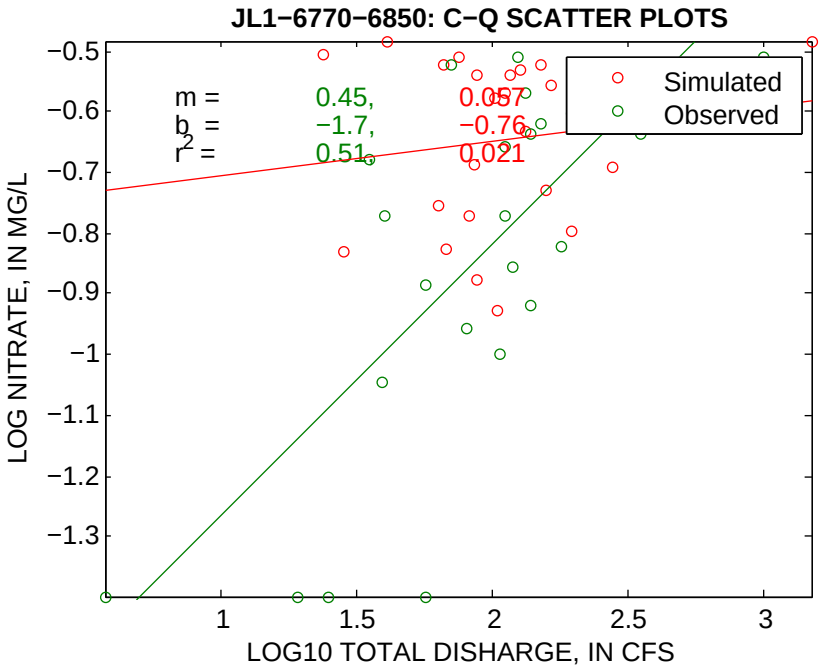
STATISTICS

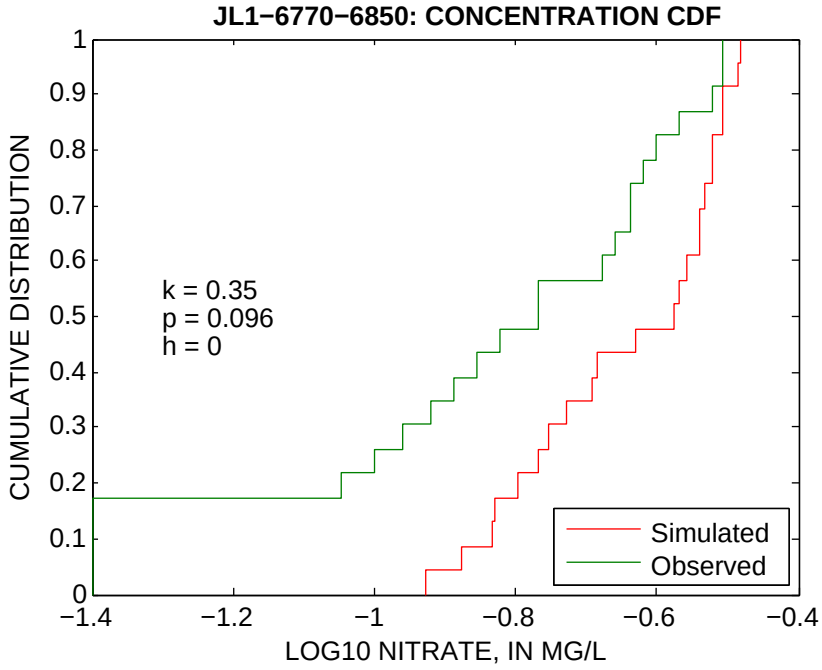
	n	23	23
		observe	simulate
min		0.04	0.13127
		-1.39794	-0.881835
mean		0.17	0.260724
		-0.85054	-0.606791
media		0.17	0.27778
		-0.769551	-0.556299
max		0.31	0.43359
		-0.508638	-0.362921
varian		0.00802727	0.00692632
		0.0901619	0.0218637
JB		0.30231	0.477383
		0.084562	0.191115
		ra	log
%		53.367	-28.6582
err.va		0.0190771	0.156646
rel.std.err		2.37654	1.73739
mod.eff		-1.37654	-0.737386

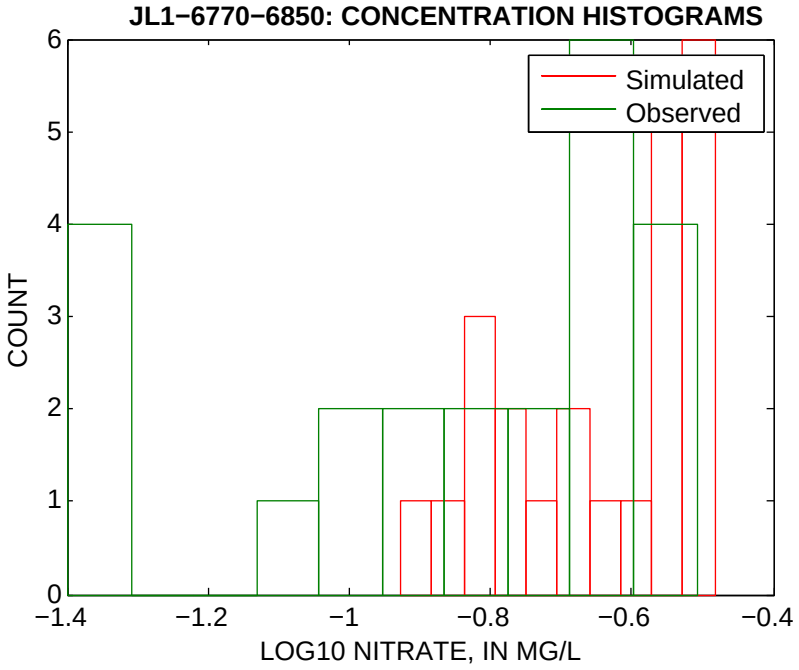
VERSION 2.1

ALL DATA
LOG10

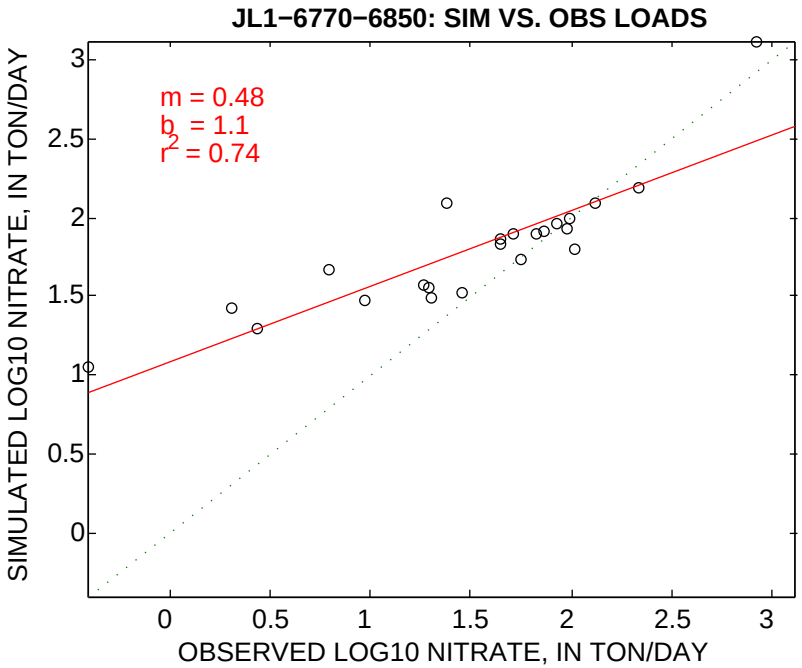


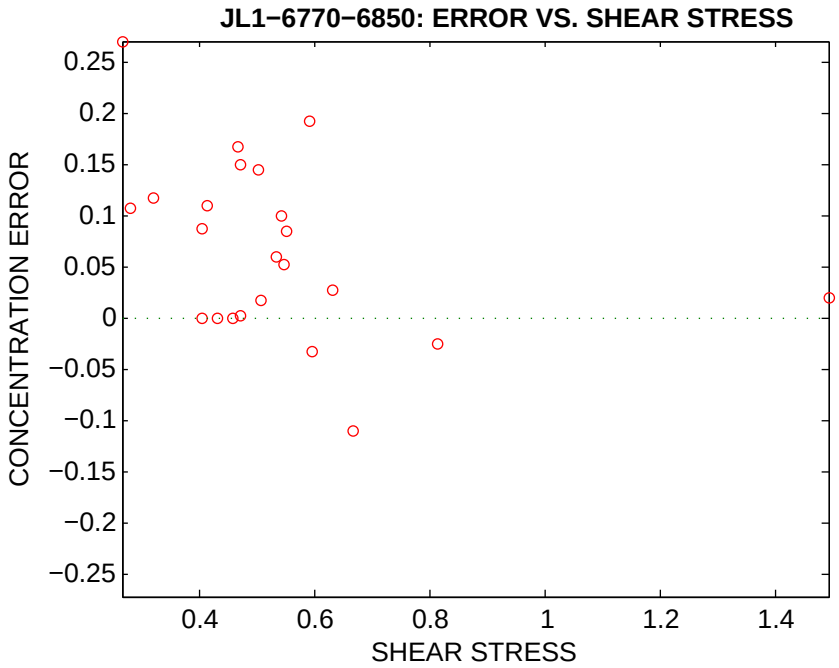


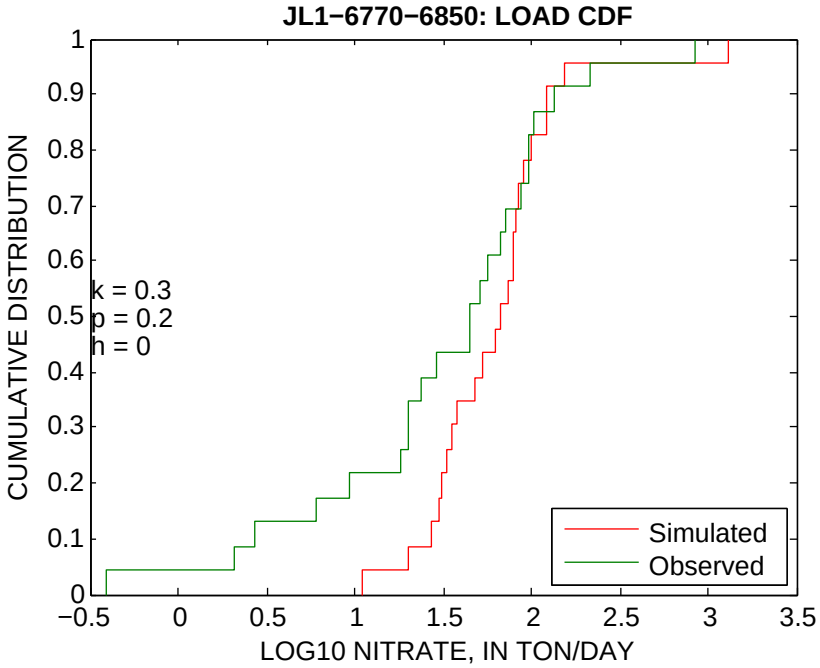


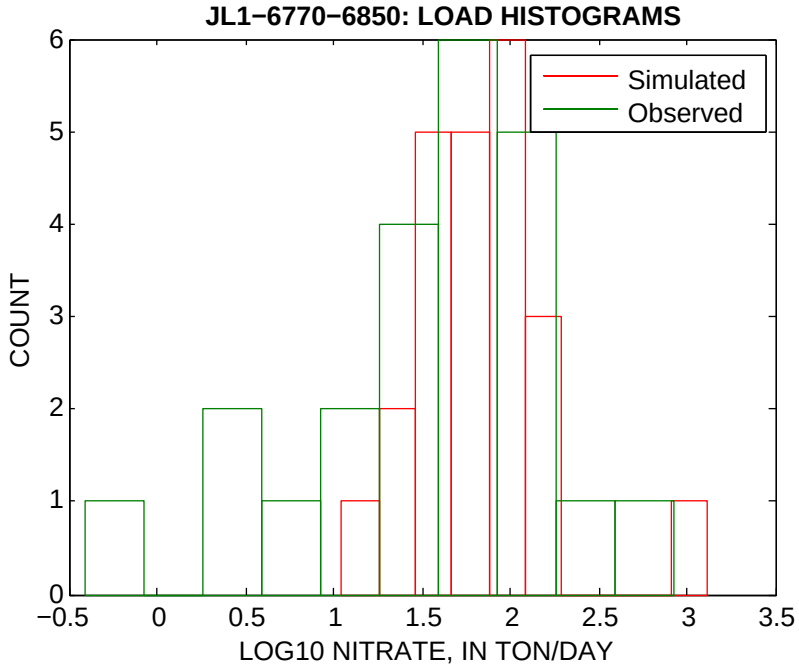


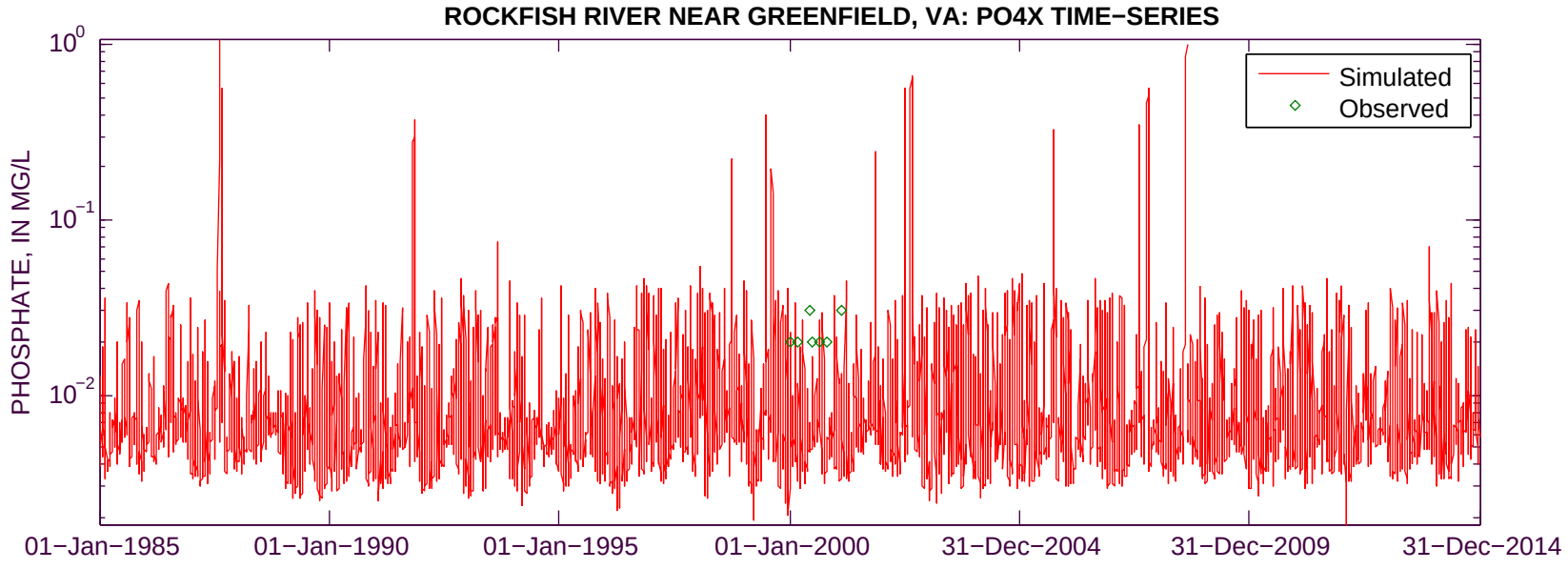
LOAD DATA
LOG10

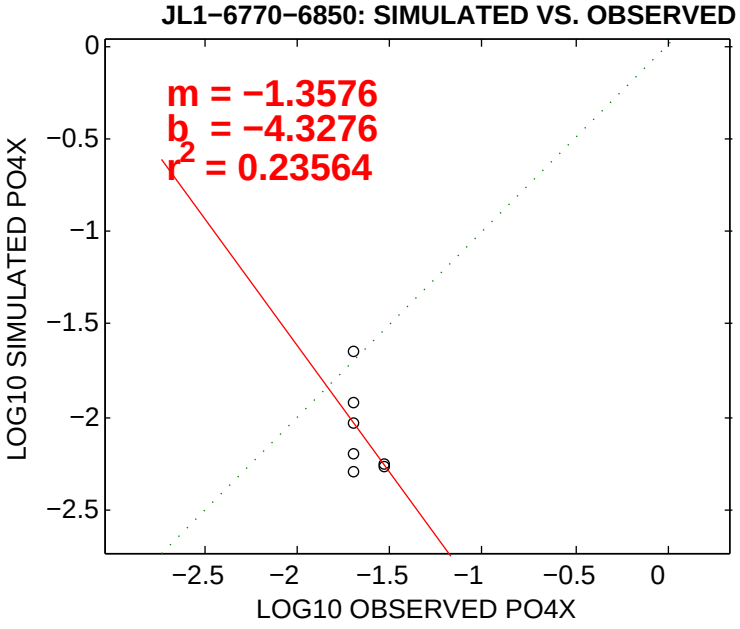


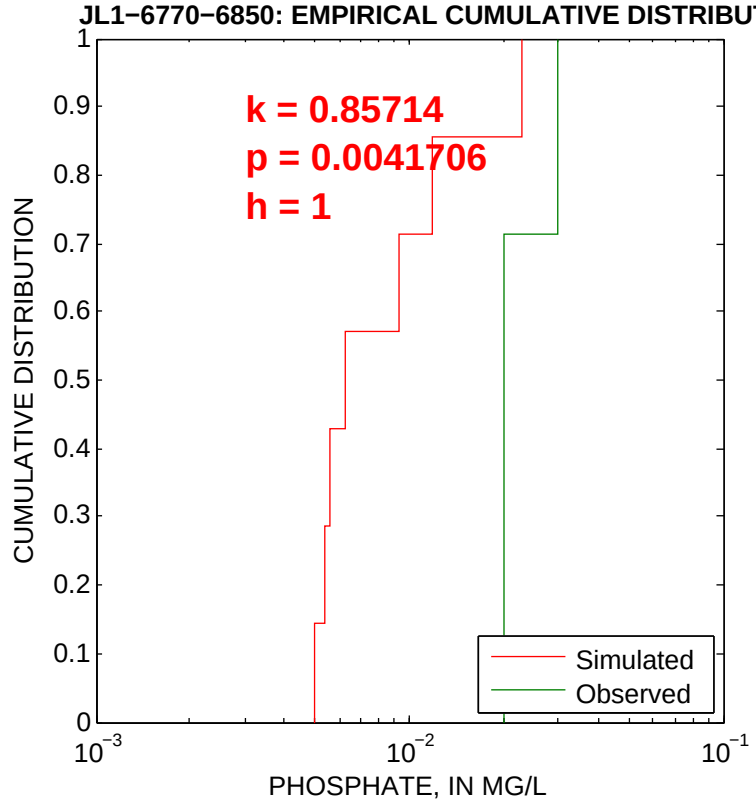












DATA SELECTION

scenario: P620171001WQ | file: PO4X.calib

plot: PO4X - phosphate

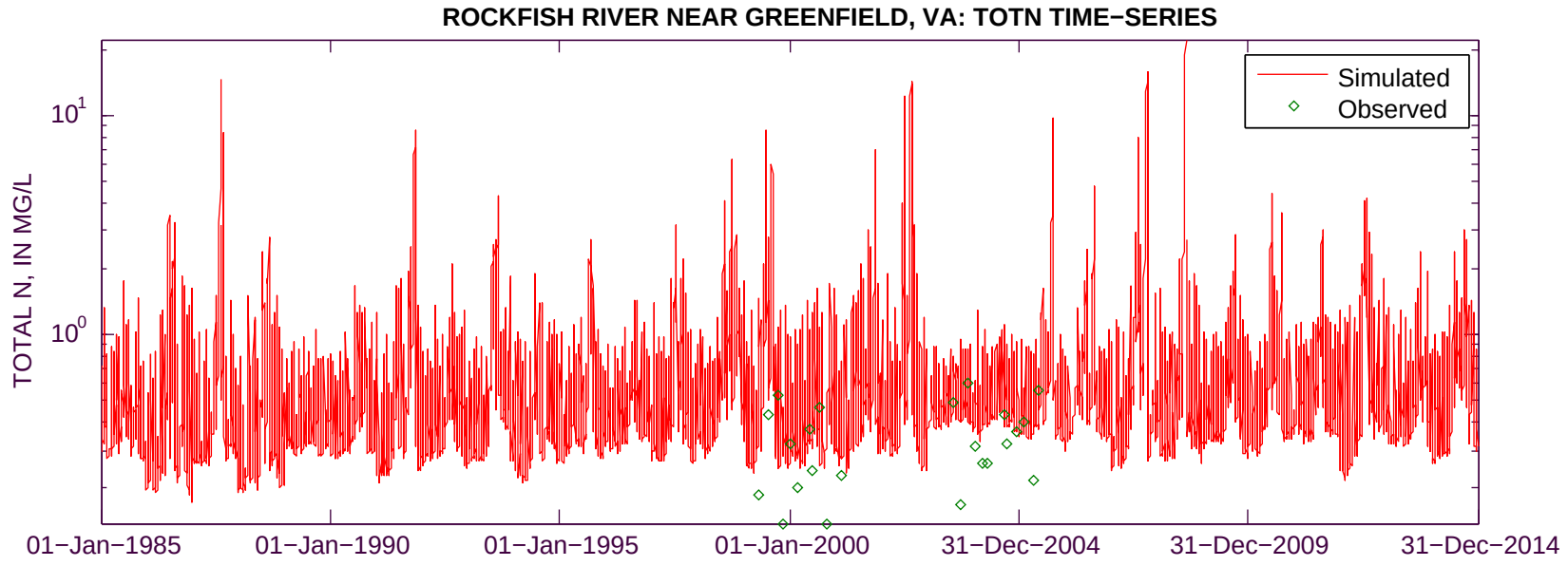
Dates: 1/1/1985 – 12/31/201

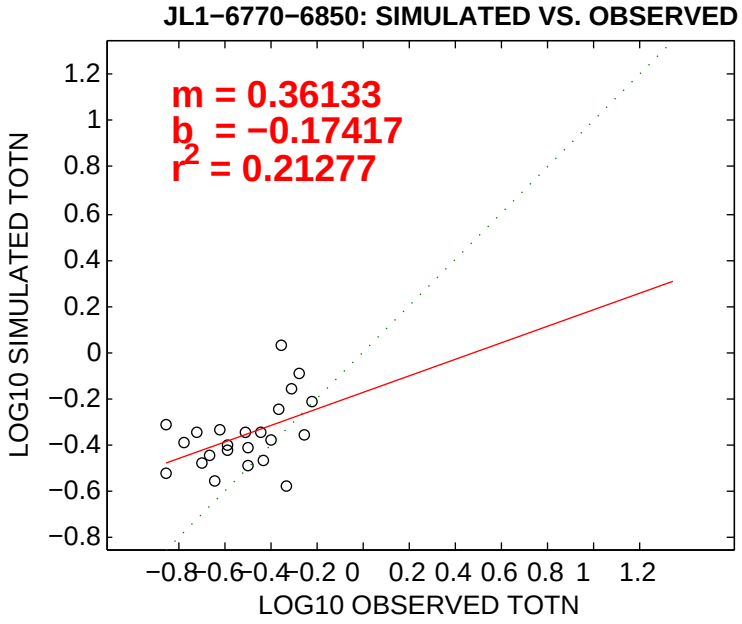
Drive: N/A | Directory: model | Observed: OBS20161101

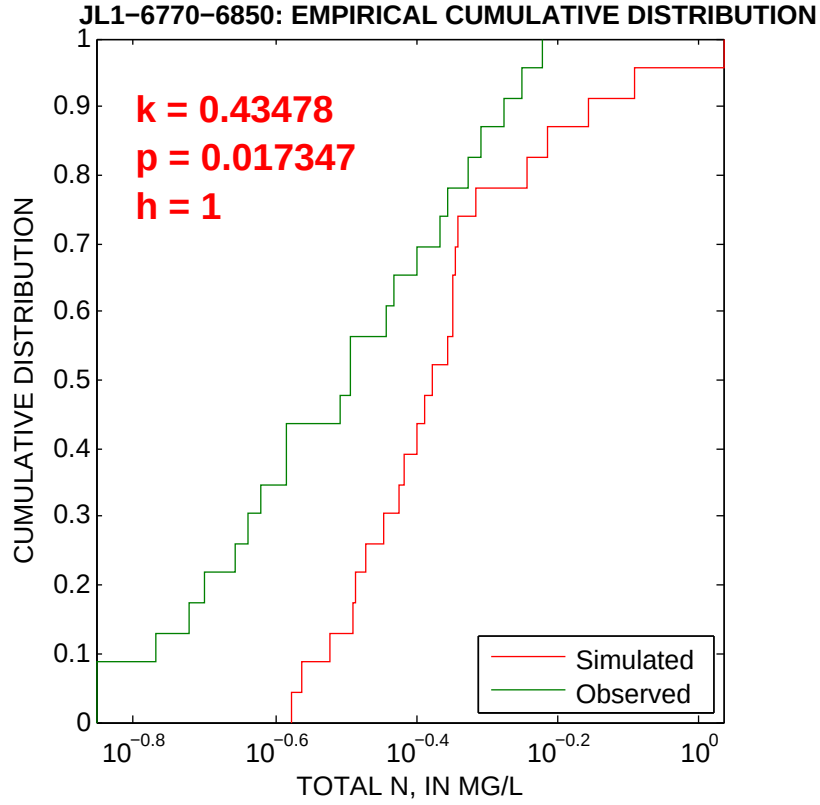
STATISTICS

	n	7	7
		observe	simulate
min		0.02	0.005003
		-1.69897	-2.30077
mean		0.0228571	0.00945507
		-1.64866	-2.08934
media		0.02	0.0062309
		-1.69897	-2.20545
max		0.03	0.022801
		-1.52288	-1.64205
varian		2.38095e-0	4.08727e-0
		0.00738289	0.0577473
JB		0.082428	0.019823
		0.082428	0.128618
		ra	log
%		-58.6341	26.7297
err.va		0.00030062	0.311743
rel.std.err		12.6264	42.2251
mod.eff		-11.6264	-41.2251

VERSION 2.1







DATA SELECTION

scenario	file
P620171001WQ	TOTN.calib

plot: TOTN - total nitrogen

Dates: 1/1/1985 – 12/31/201

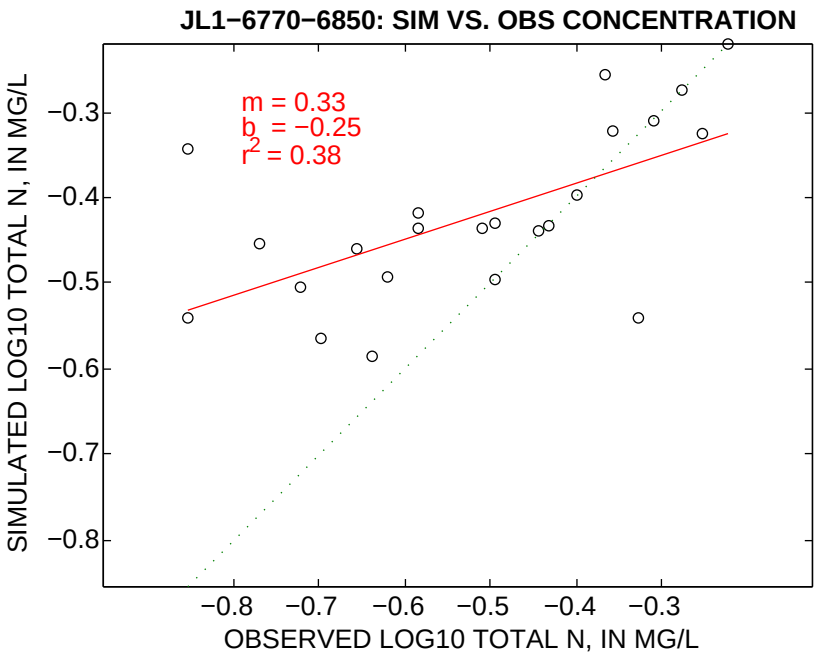
Drive	Directory	Observed
N/A	model	OBS20161101

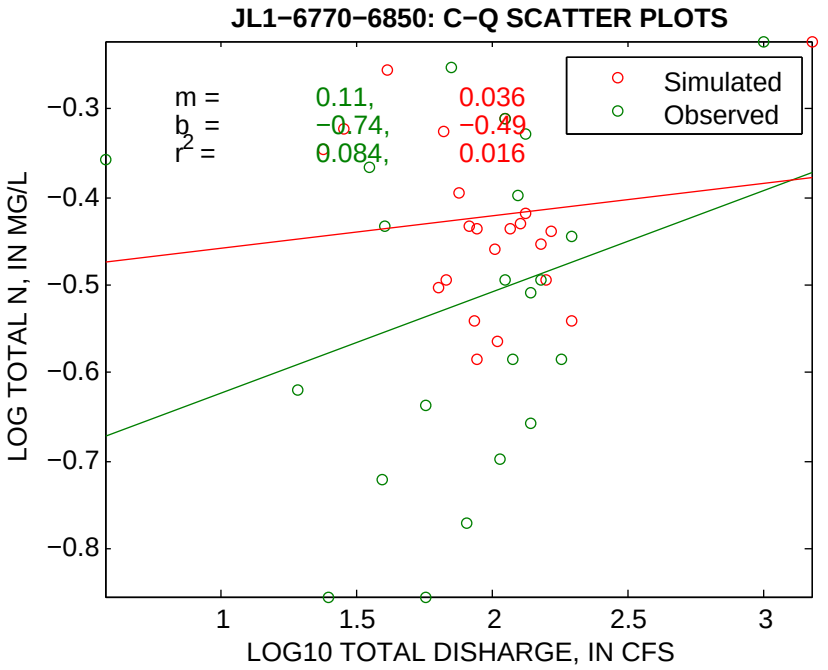
STATISTICS

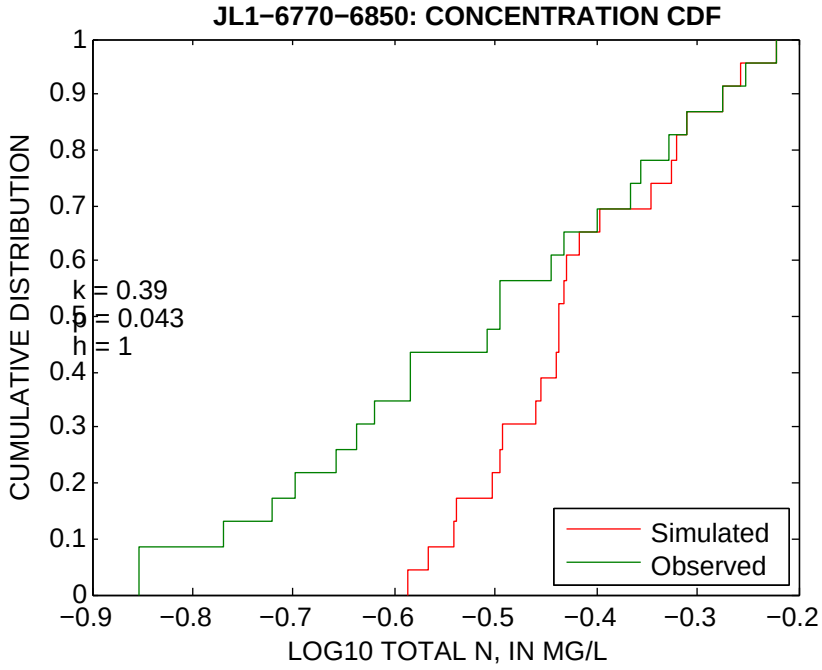
		observe	simulate
n		23	23
min		0.14	0.26435
		-0.853872	-0.577821
mean		0.332609	0.463757
		-0.515876	-0.360577
media		0.32	0.41956
		-0.49485	-0.377206
max		0.6	1.0797
		-0.221849	0.0333031
varian		0.0188747	0.0355829
		0.0359284	0.0220466
JB		0.266775	0.001612
		0.363737	0.058271
		ra	log
%		39.4301	-30.104
err.va		0.0465871	0.057225
rel.std.err		2.46823	1.59275
mod.eff		-1.46823	-0.592754

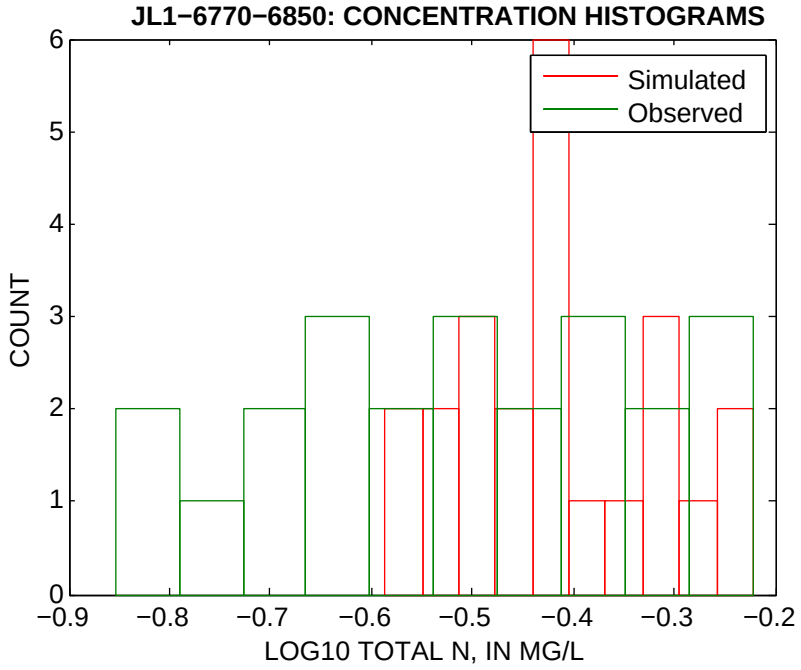
VERSION 2.1

ALL DATA
LOG10

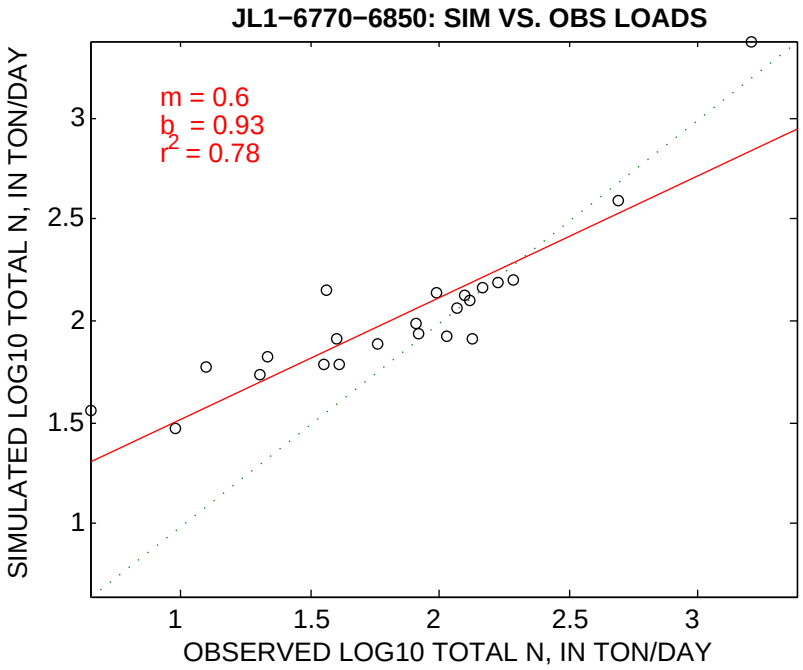


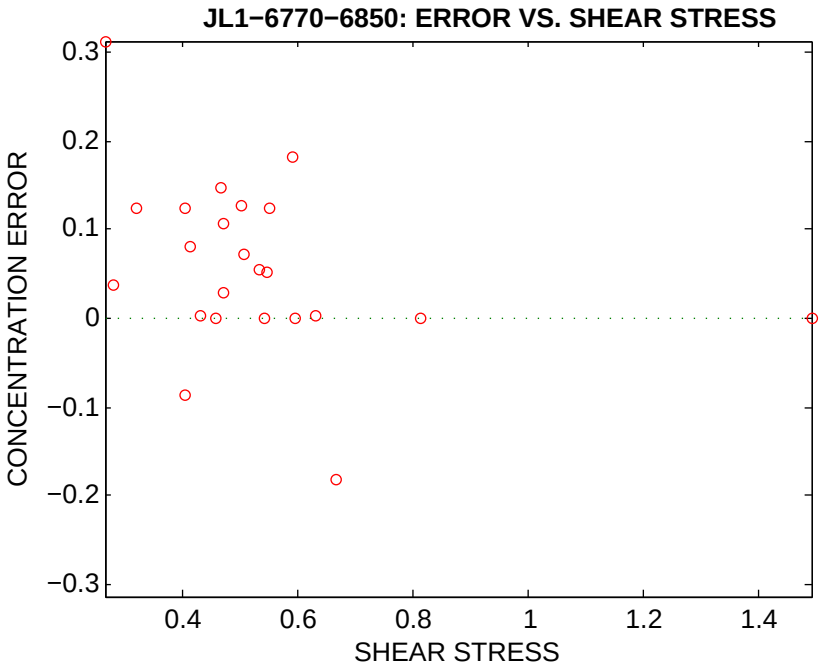


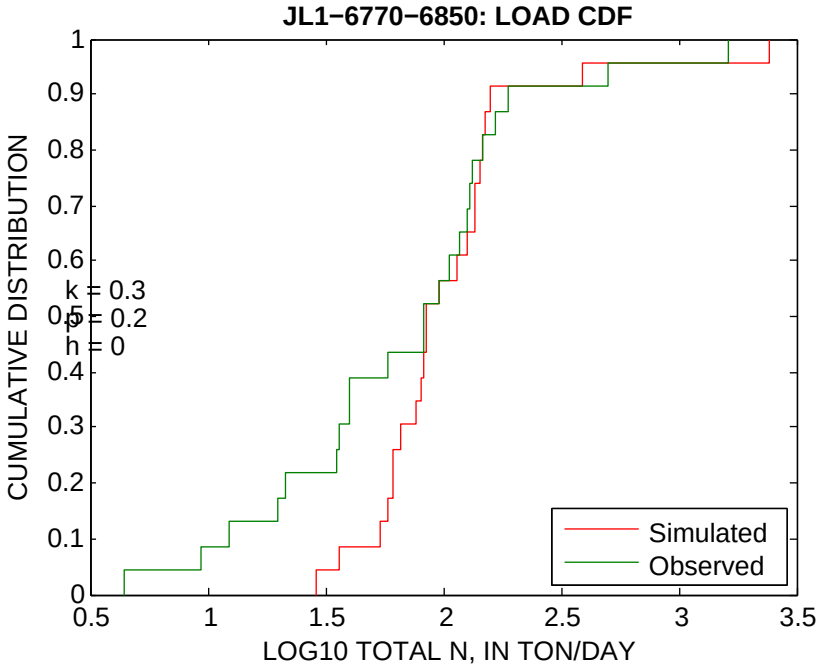


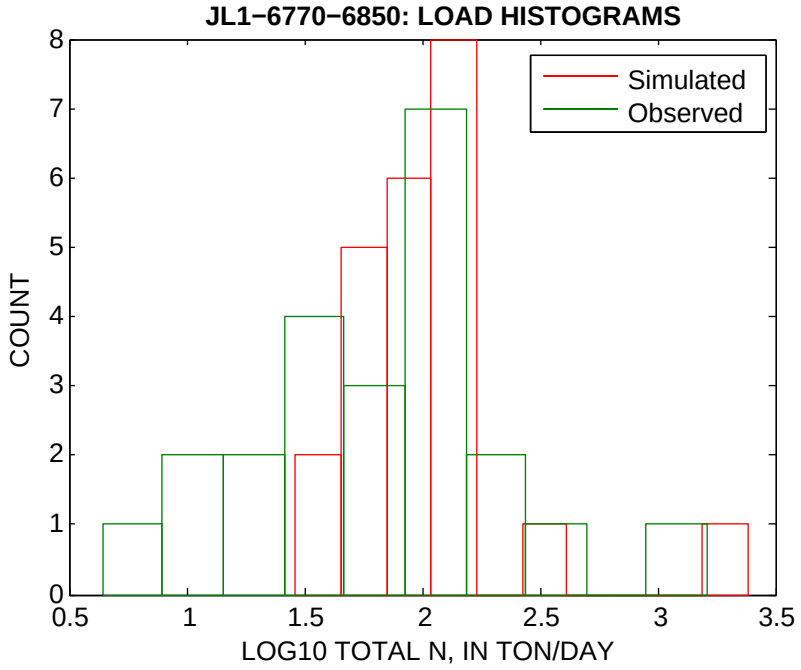


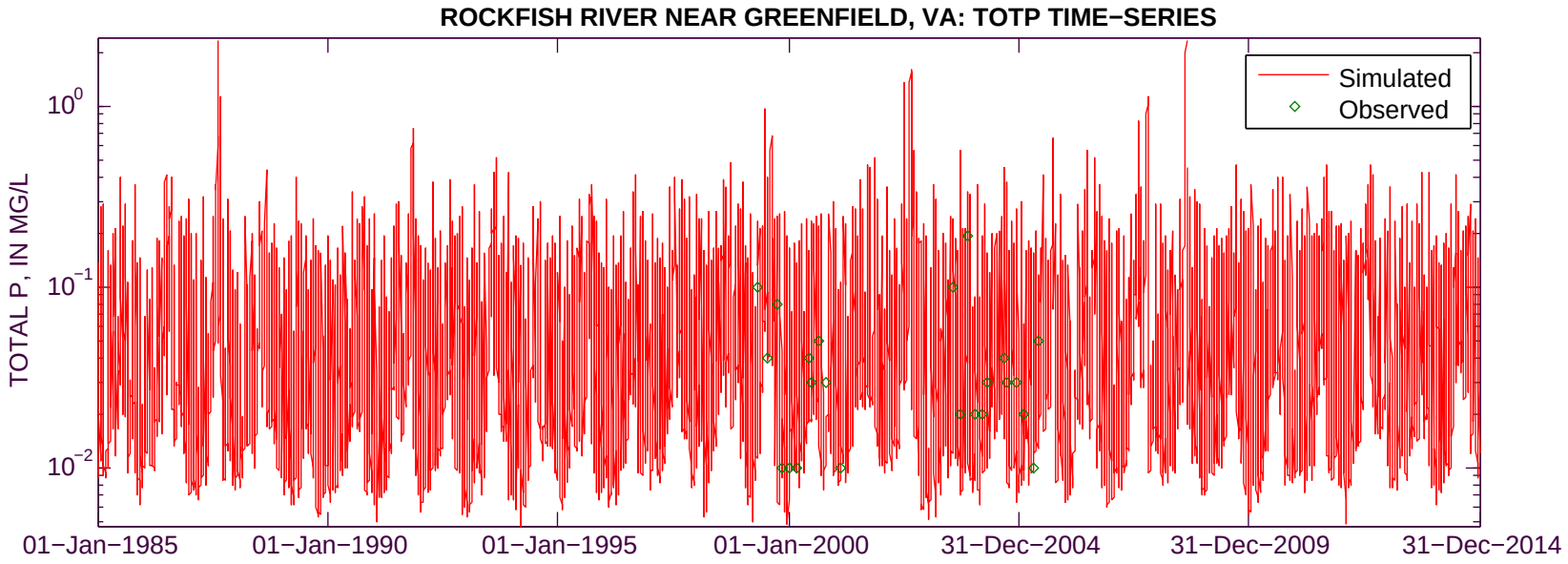
LOAD DATA
LOG10

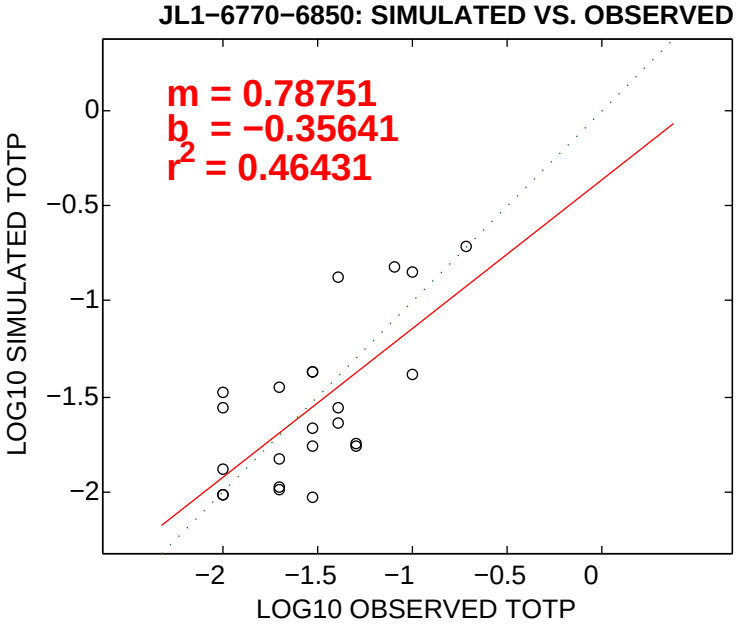


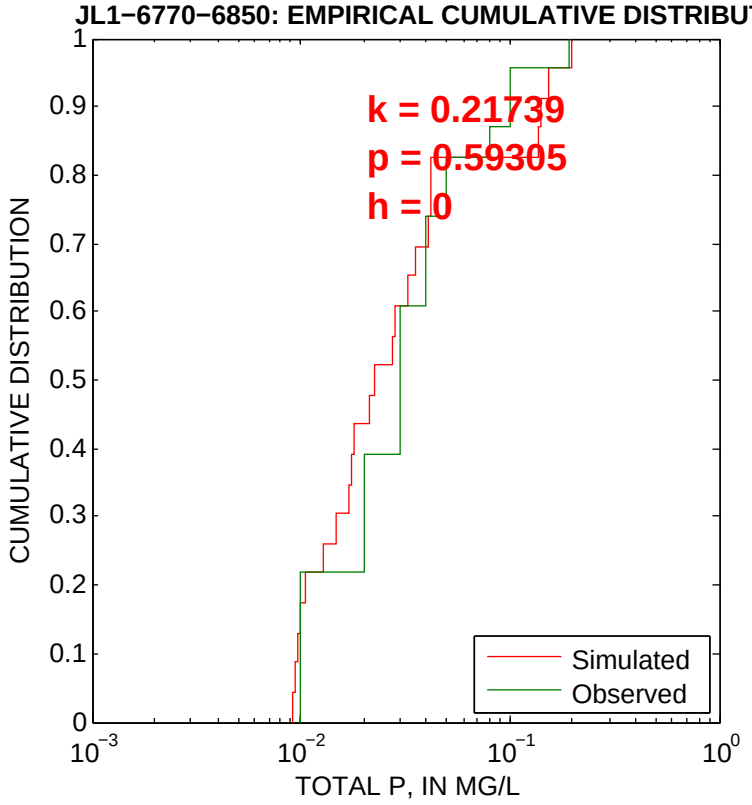












DATA SELECTION

scenario	file
P620171001WQ	TOTP.calib

plot: TOTP - total phosphorus

Dates 1/1/1985 12/31/201

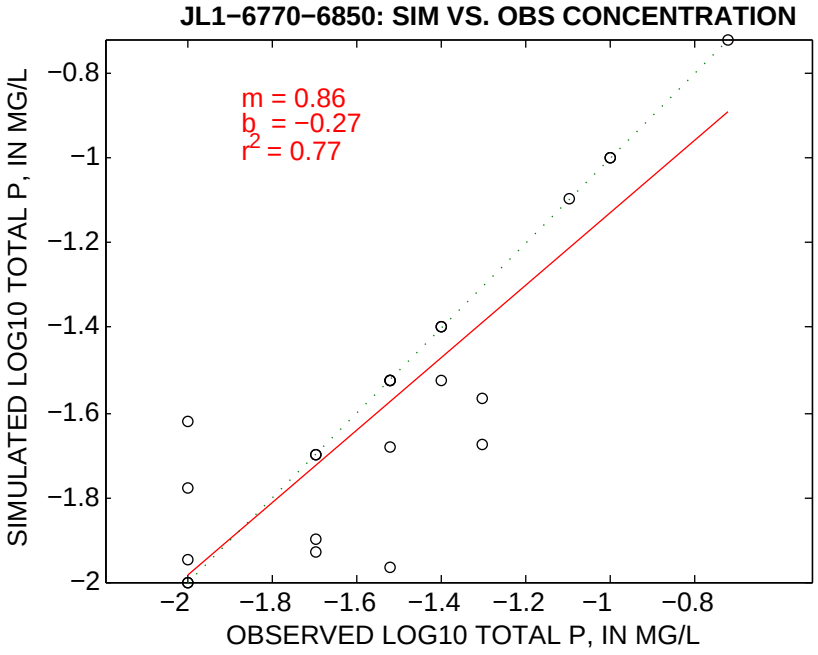
Drive	Directory	Observed
N/A	model	OBS20161101

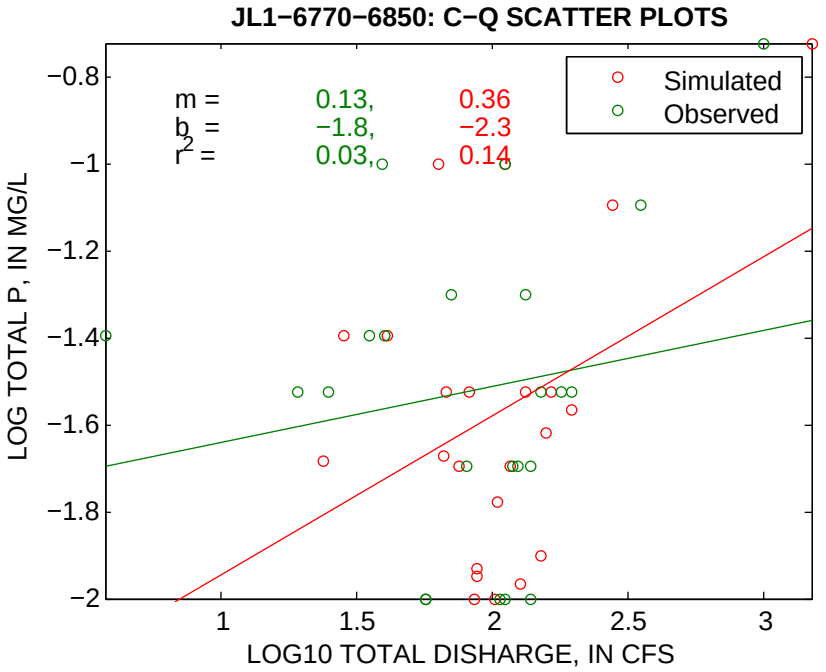
STATISTICS

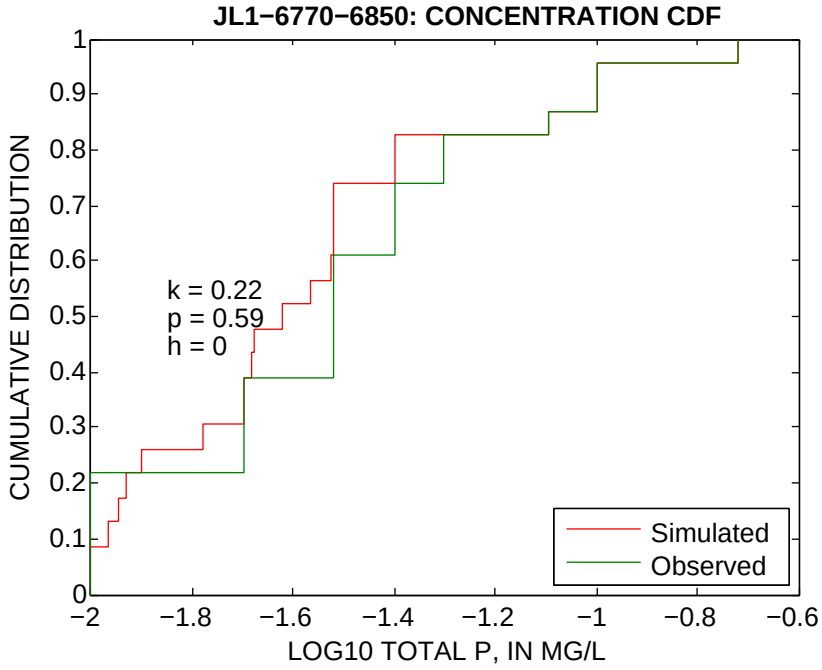
	n	23	23
		observe	simulate
min		0.01	0.0091956
		-2	-2.03642
mean		0.0421739	0.0455584
		-1.5228	-1.55562
media		0.03	0.022688
		-1.52288	-1.6442
max		0.19	0.19567
		-0.721246	-0.708476
varian		0.00172688	0.00291489
		0.12629	0.168684
JB		0.001	0.005822
		0.5	0.100889
		ra	log
%		8.02499	2.15555
err.va		0.00111057	0.0971913
rel.std.err		0.643111	0.769587
mod.eff		0.356889	0.230413

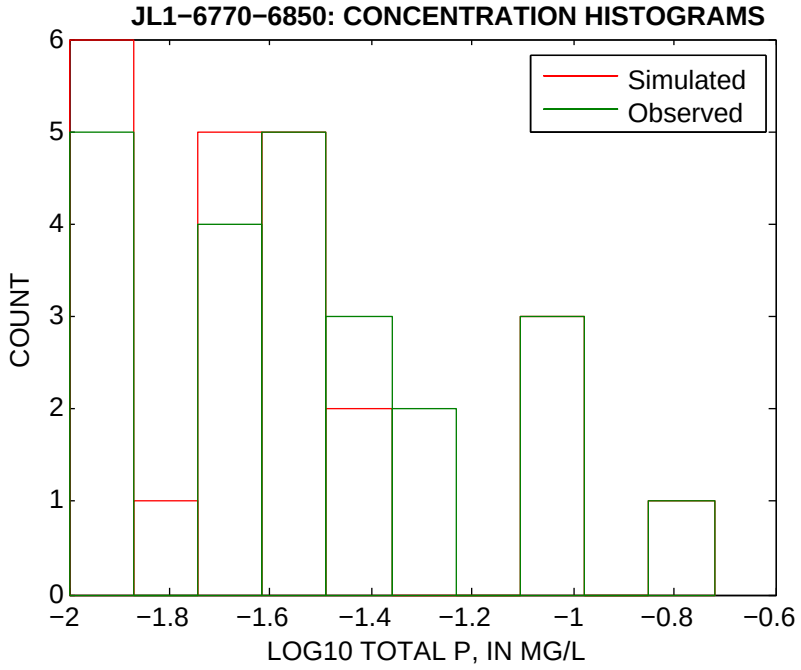
VERSION

ALL DATA
LOG10

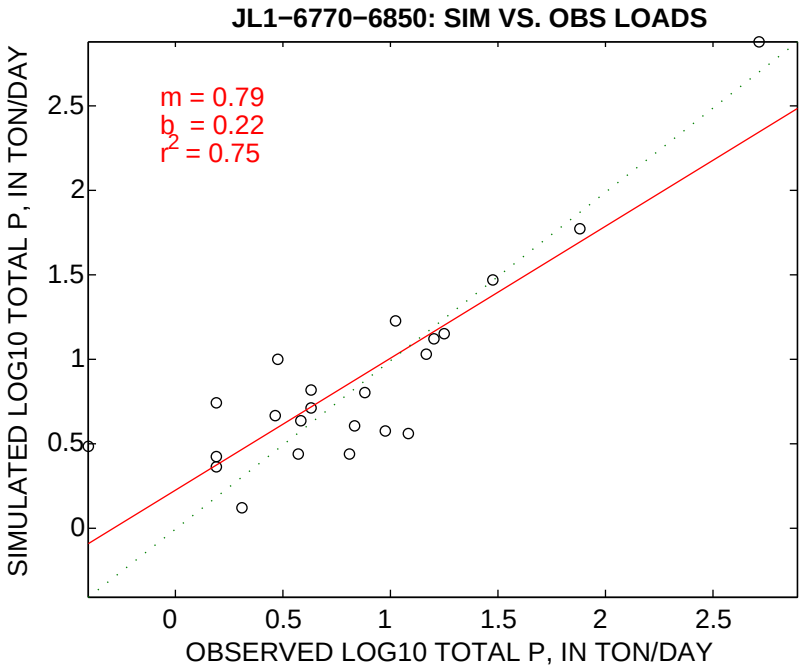


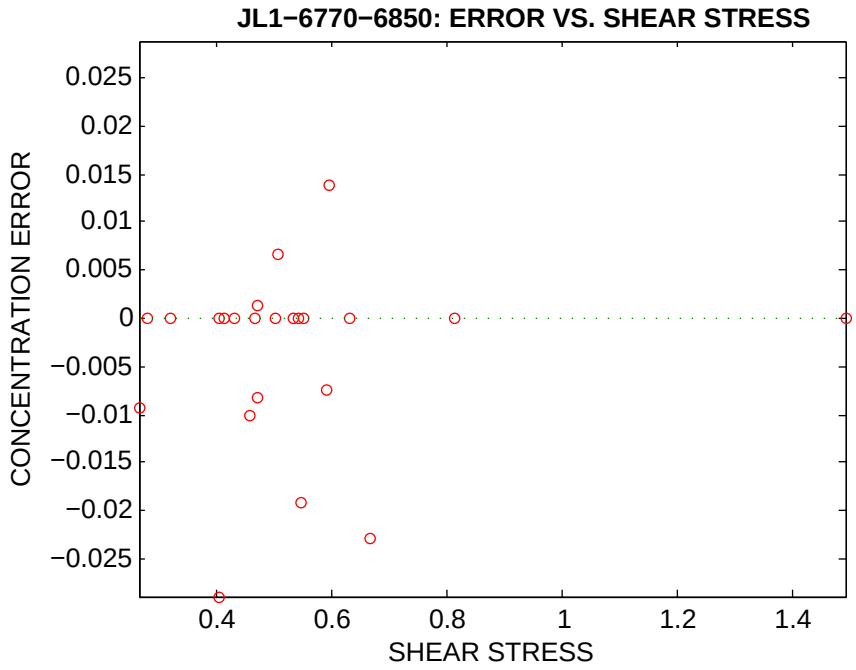


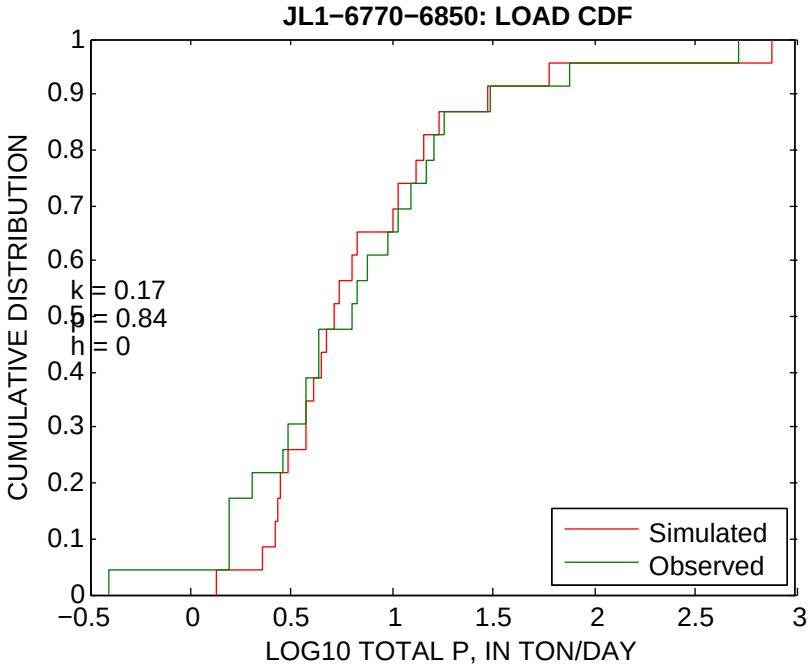


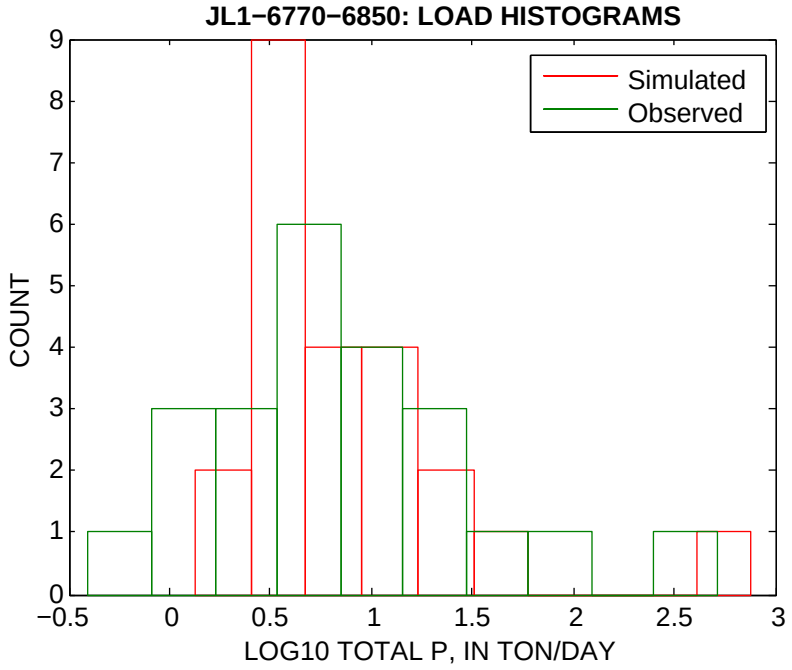


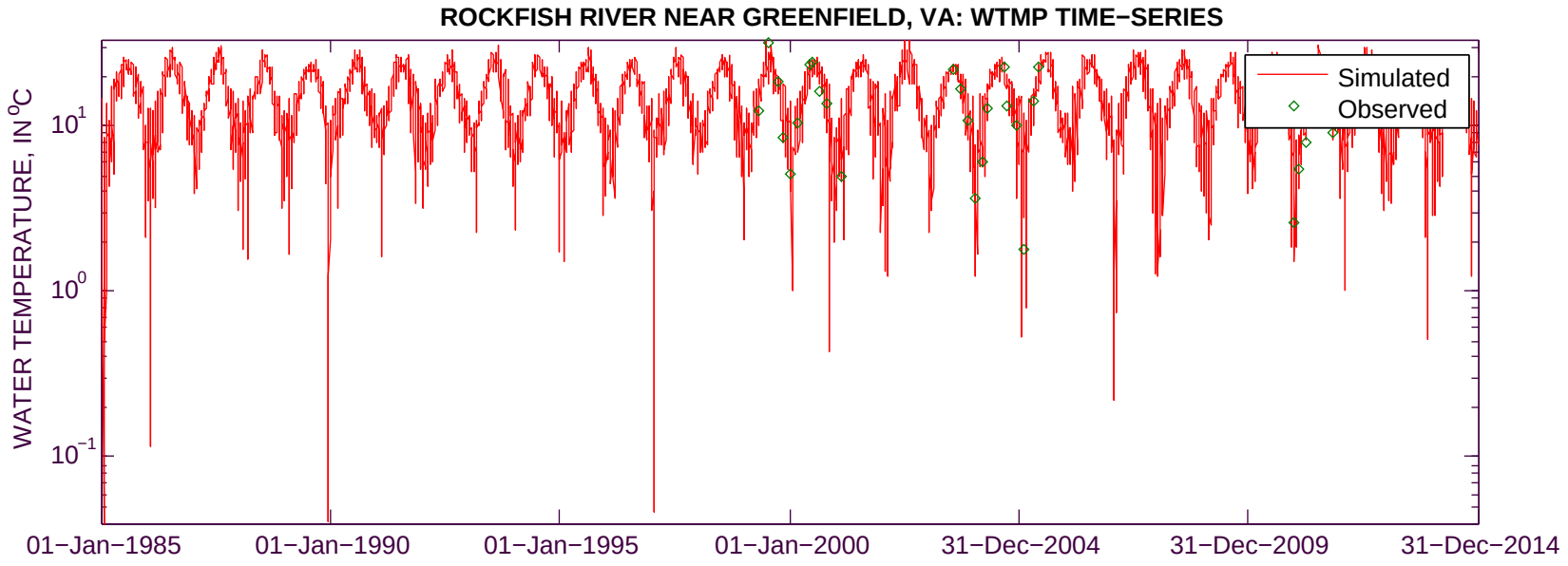
LOAD DATA
LOG10

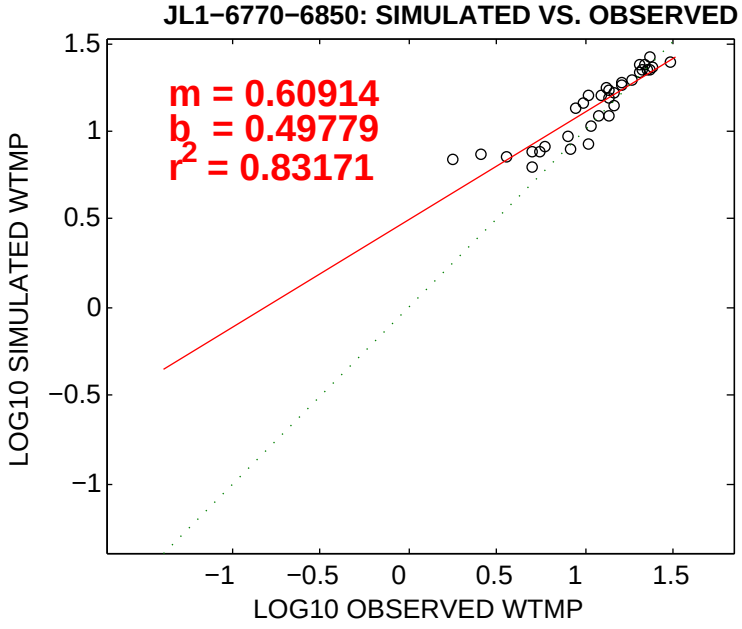


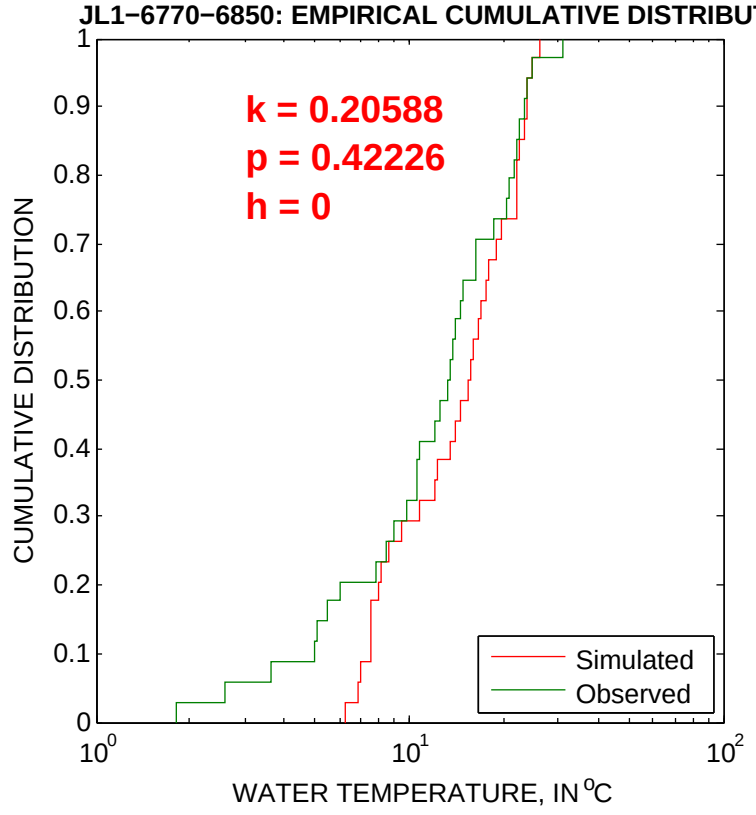












DATA SELECTION

scenario	file
P620171001WQ	WTMP.calib

plot: WTMP - water tempera...

Dates 1/1/1985 12/31/201

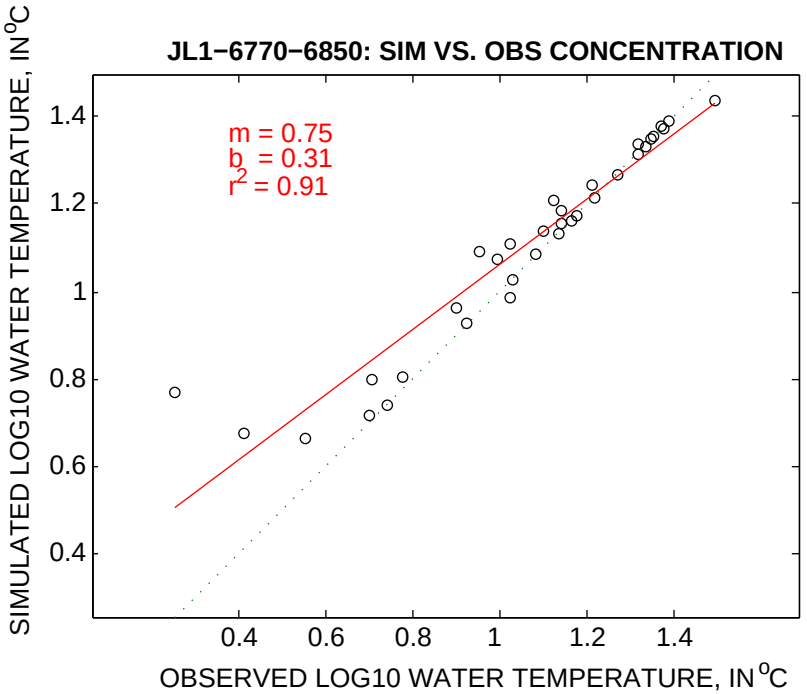
Drive	Directory	Observed
N/A	model	OBS20161101

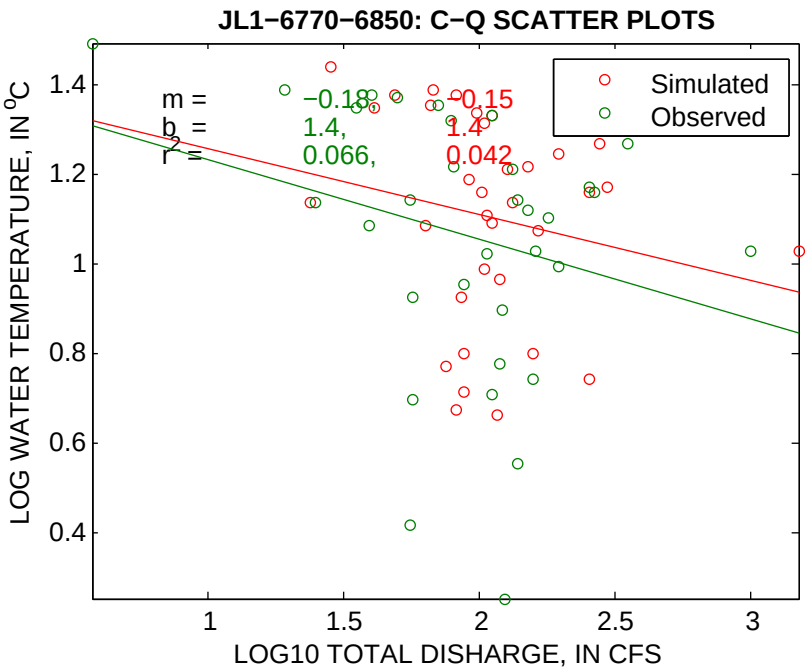
STATISTICS

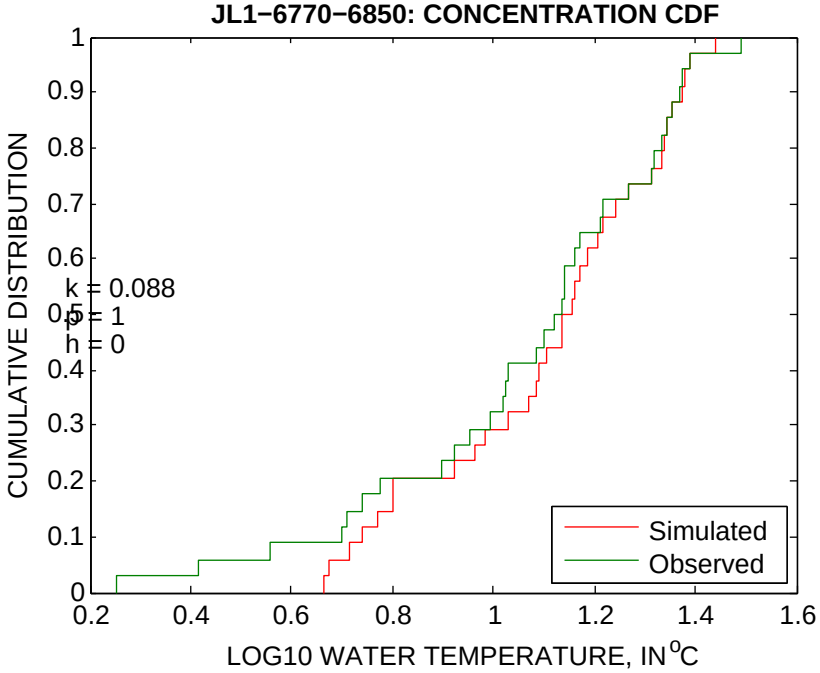
	n	34	34
		observe	simulate
min		1.8	6.1928
		0.255273	0.791887
mean		13.7306	15.2455
		1.05999	1.14347
media		13.4	15.612
		1.12706	1.19344
max		31.1	26.015
		1.49276	1.41522
varian		52.6677	38.4071
		0.0854383	0.0381168
JB		0.441617	0.126957
		0.038726	0.094698
		ra	log
%		11.0333	7.87584
err.va		8.45969	0.0266479
rel.std.err		0.160624	0.311896
mod.eff		0.839376	0.688104

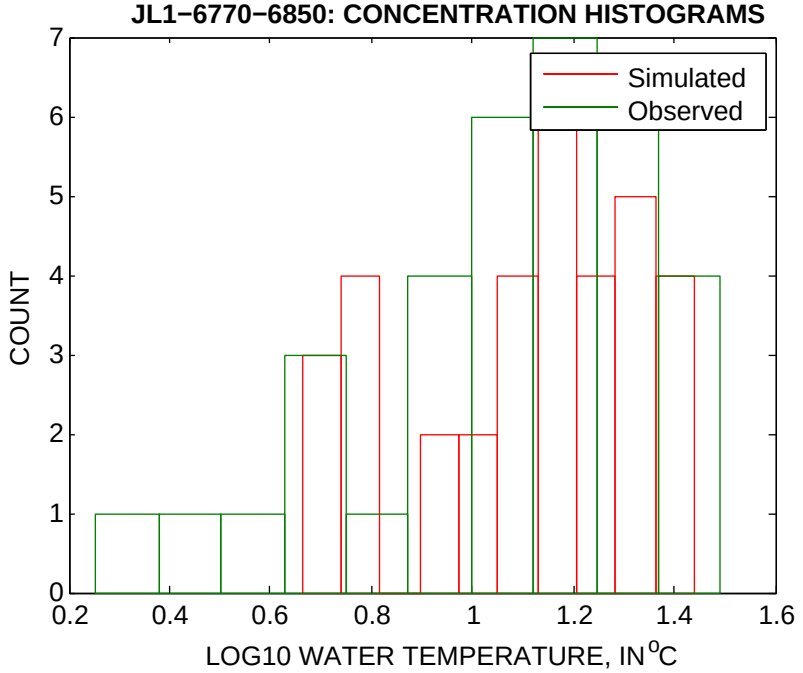
VERSION 2.1

ALL DATA
LOG10

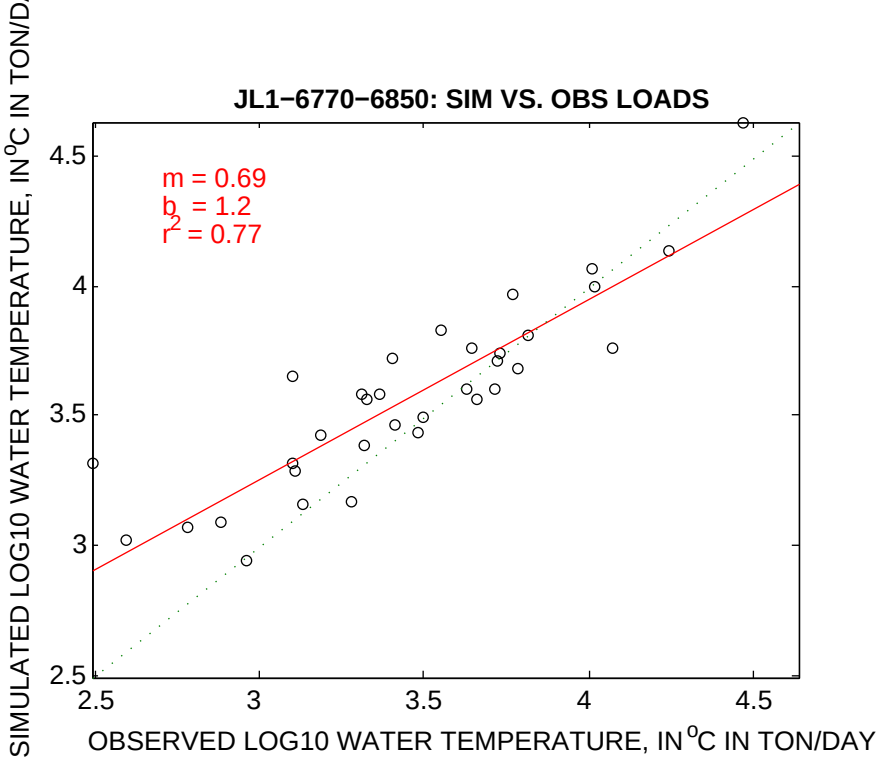


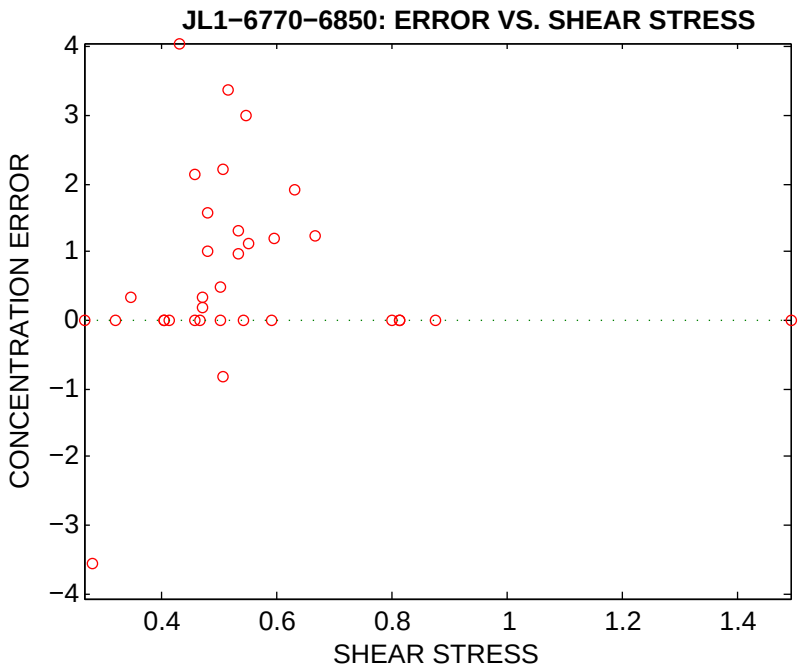


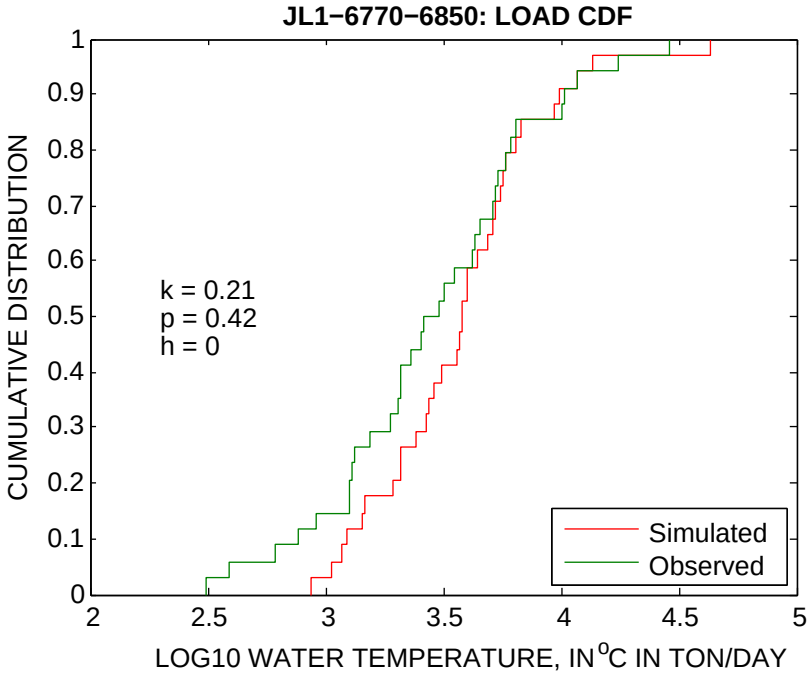


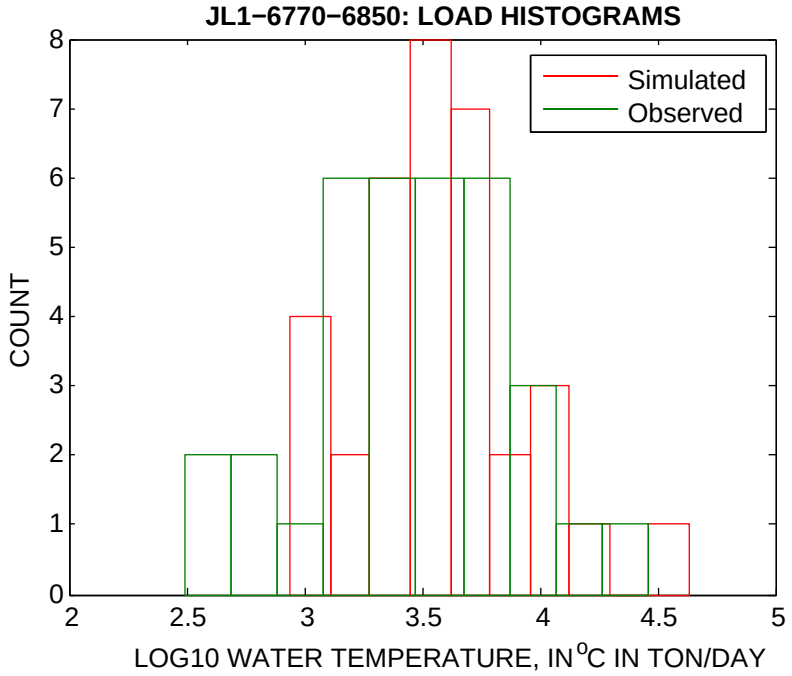


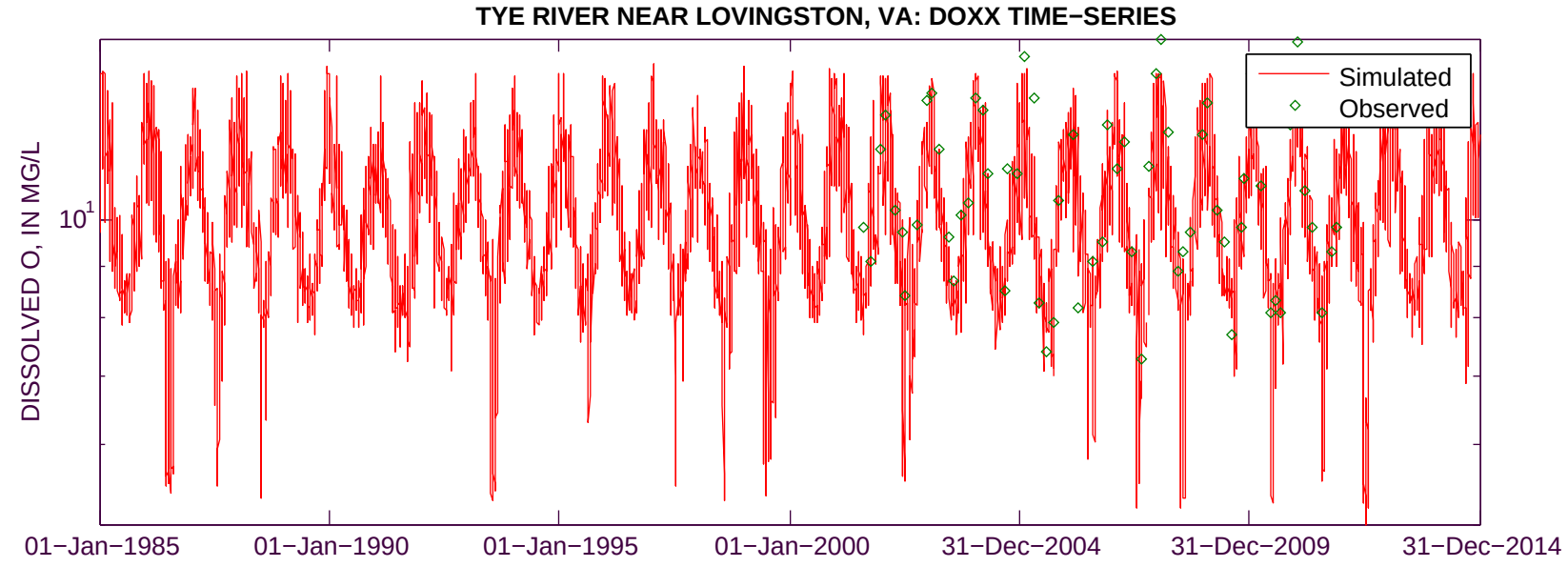
LOAD DATA
LOG10

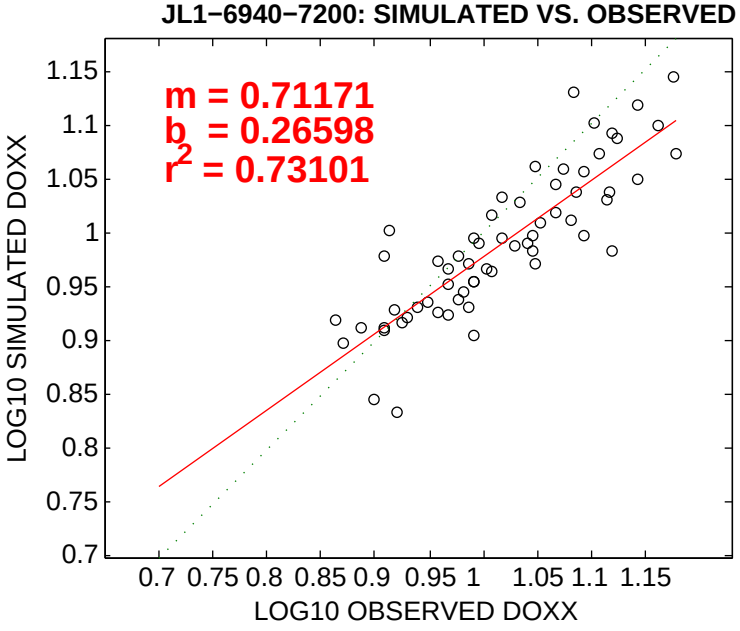


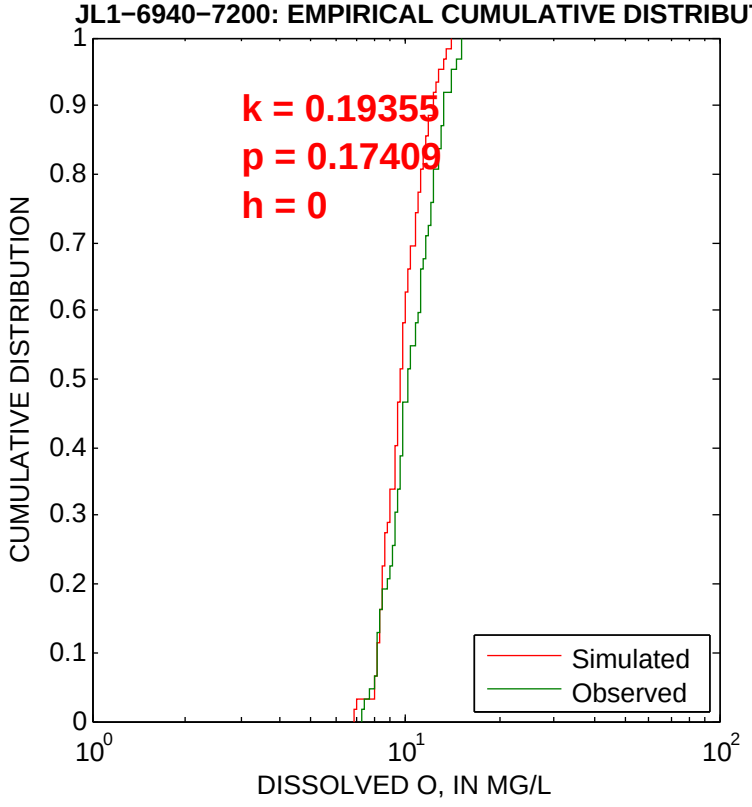












DATA SELECTION

scenario: P620171001WQ | file: DOXX.calib

plot: DOXX - dissolved oxygen

Dates: 1/1/1985 – 12/31/201

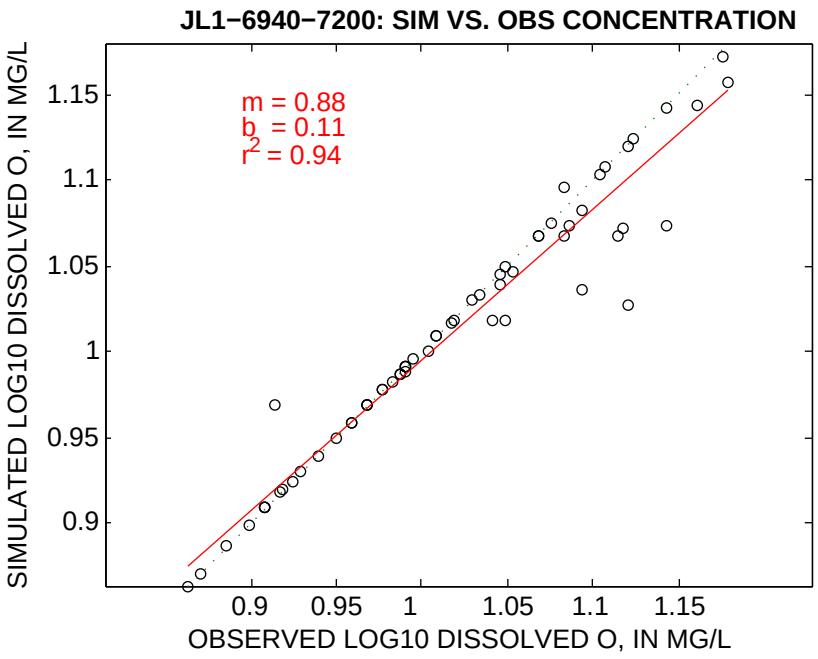
Drive: N/A | Directory: model | Observed: OBS20161101

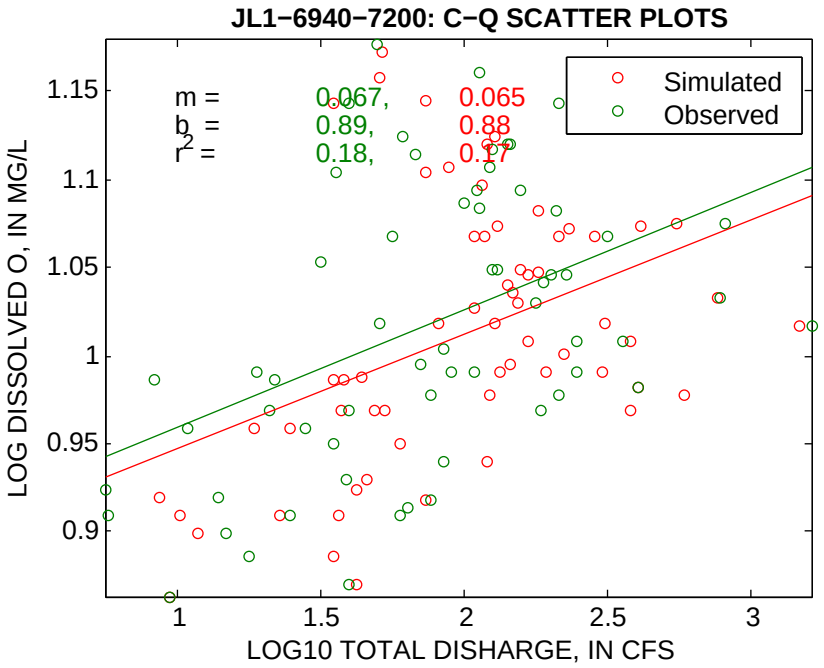
STATISTICS

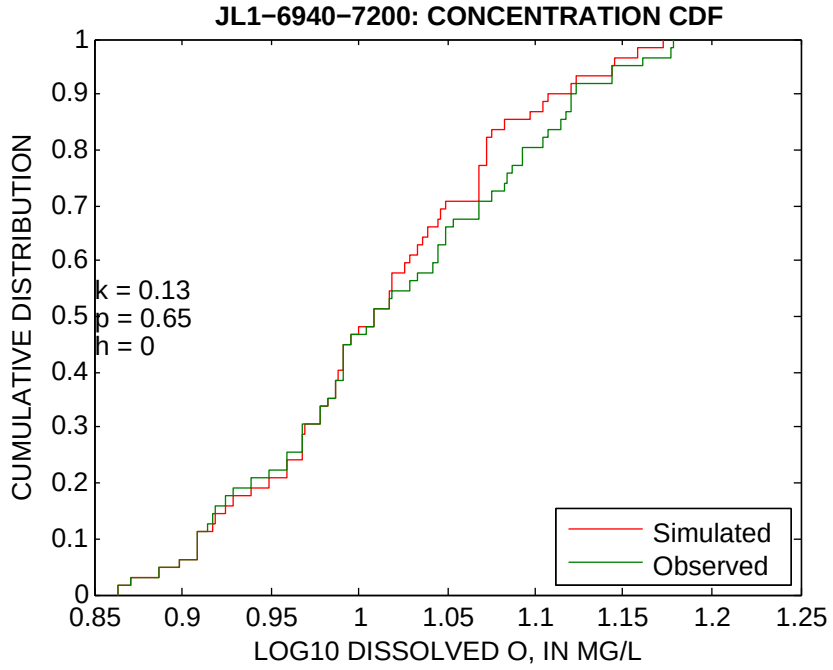
		observe	simulate
n		62	62
min		7.3	6.8232
		0.863323	0.833988
mean		10.5979	9.89766
		1.0177	0.990291
media		10.2	9.66205
		1.0086	0.985066
max		15.1	13.936
		1.17898	1.14414
varian		4.00333	2.46668
		0.00662002	0.0045872
JB		0.125869	0.109125
		0.221245	0.5
		ra	log
%		-6.60735	-2.69322
err.va		1.58637	0.00254765
rel.std.err		0.396262	0.384841
mod.eff		0.603738	0.615159

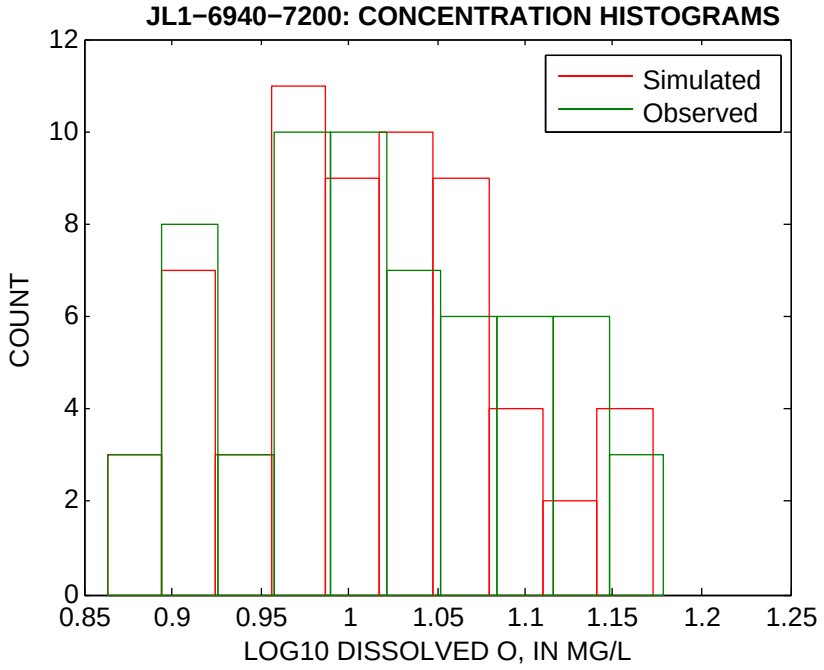
VERSION 2.1

ALL DATA
LOG10

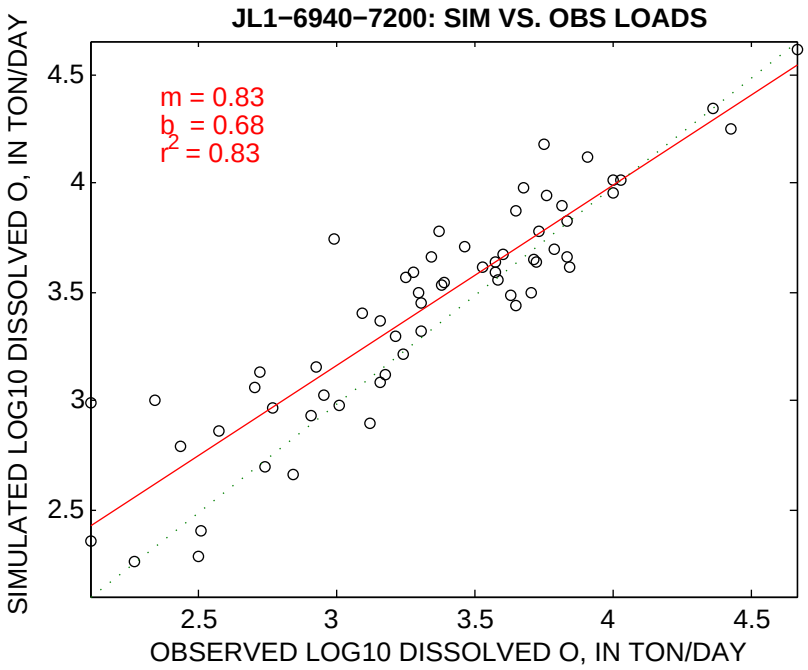


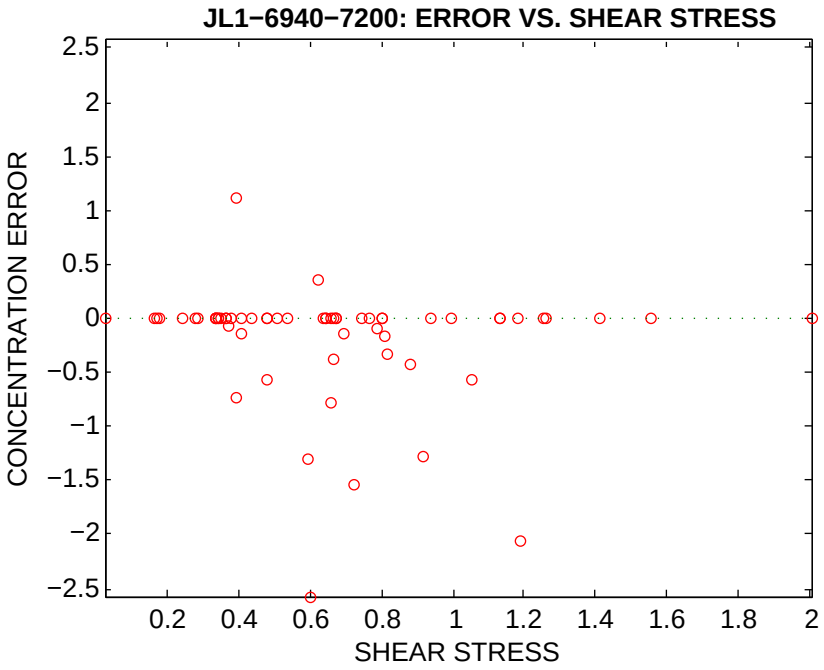


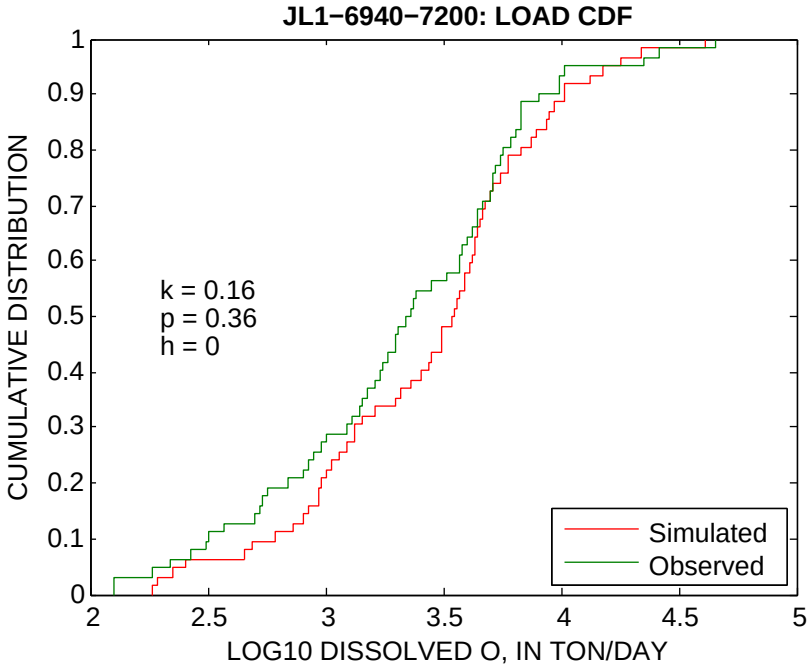


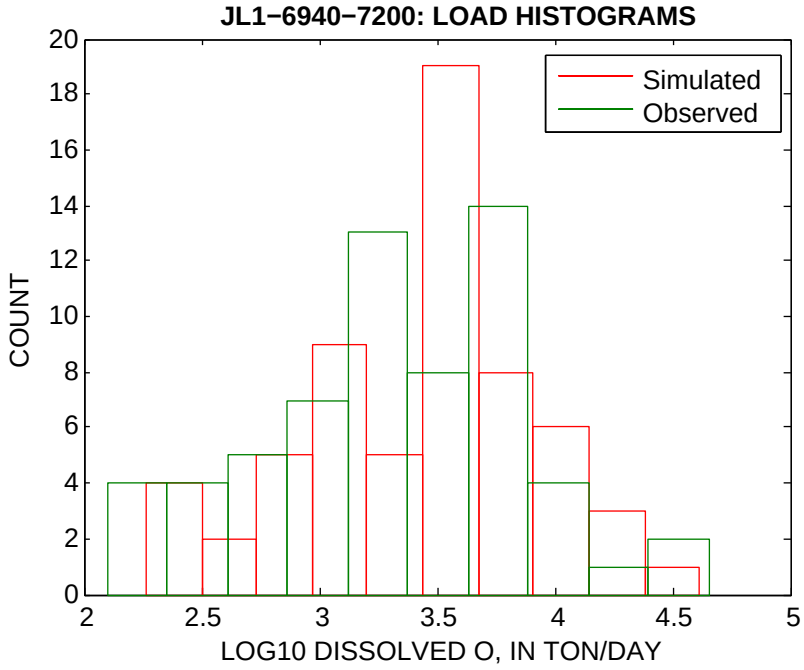


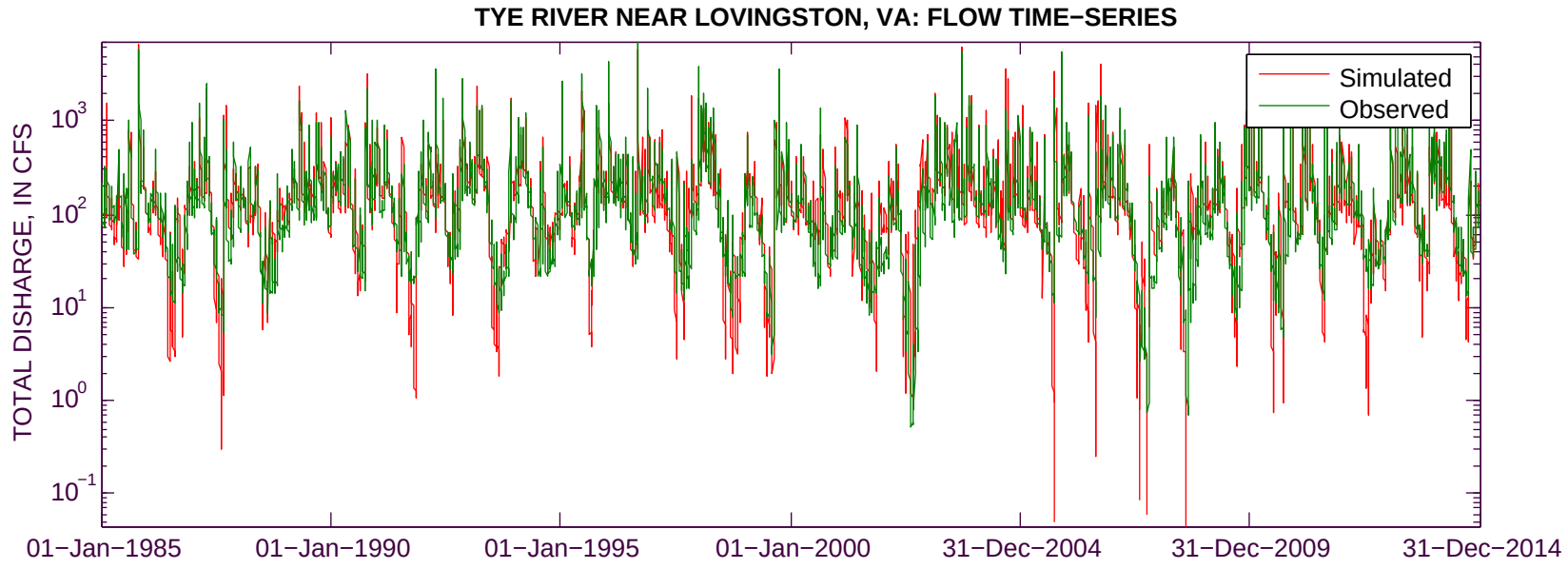
LOAD DATA
LOG10

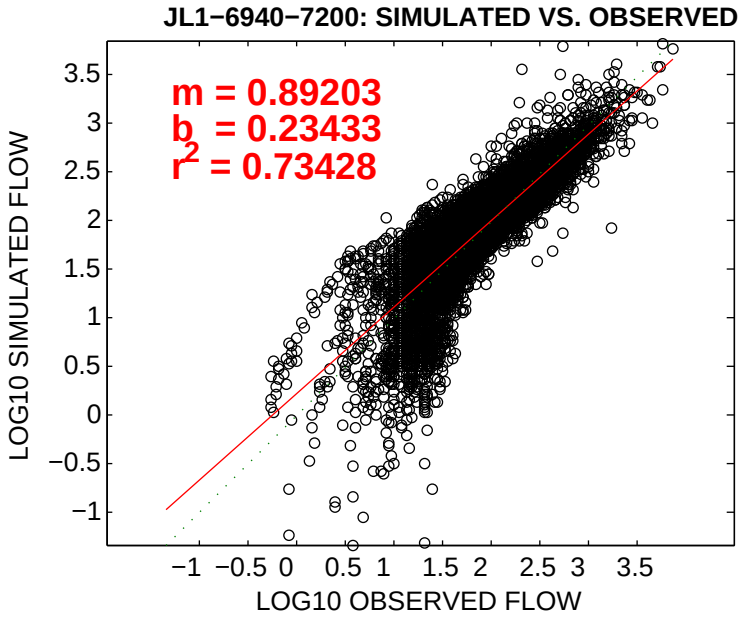


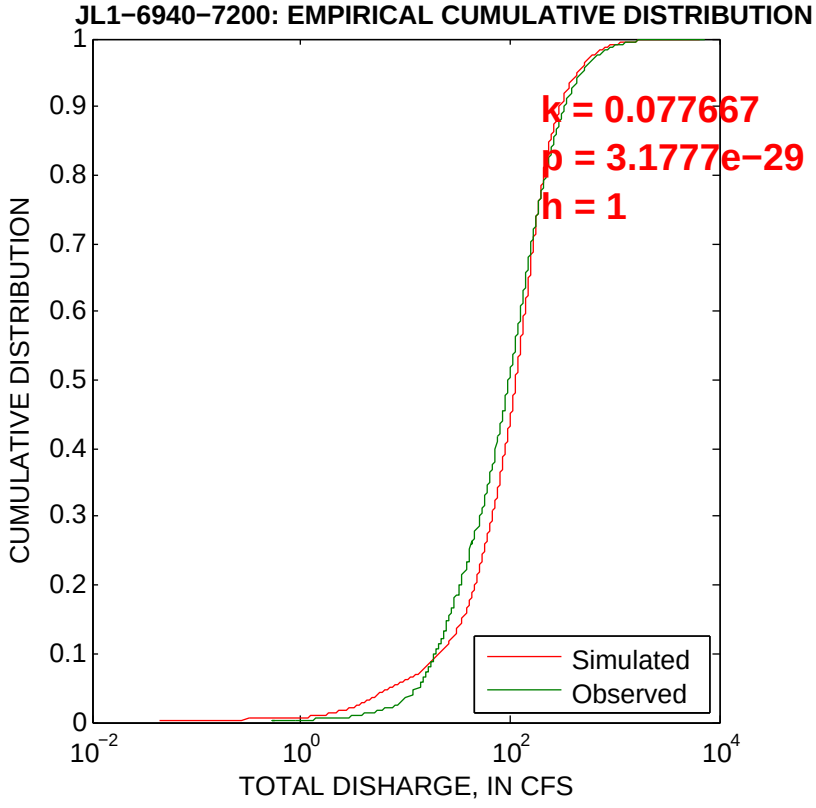












DATA SELECTION

scenario: P620171001WQ | file: FLOW.calib

plot: FLOW - total discharge

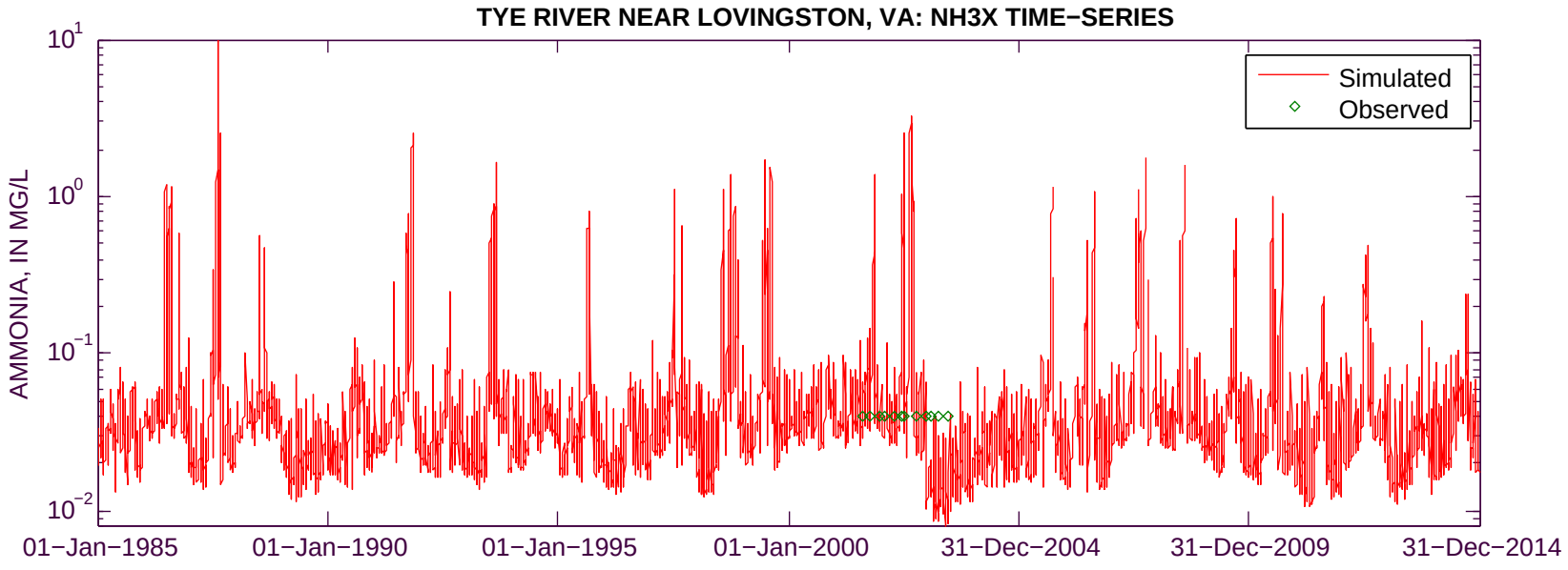
Dates: 1/1/1985 – 12/31/201

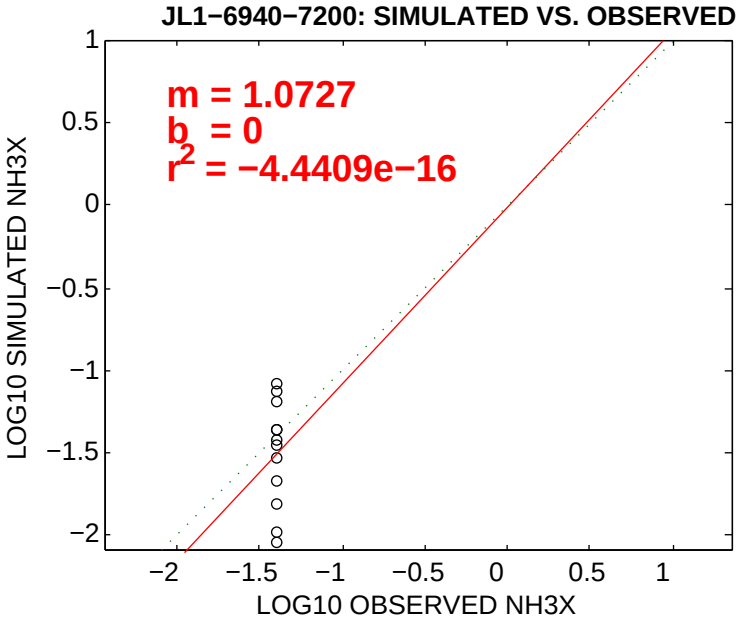
Drive | Directory | Observed: N/A | model | OBS20161101

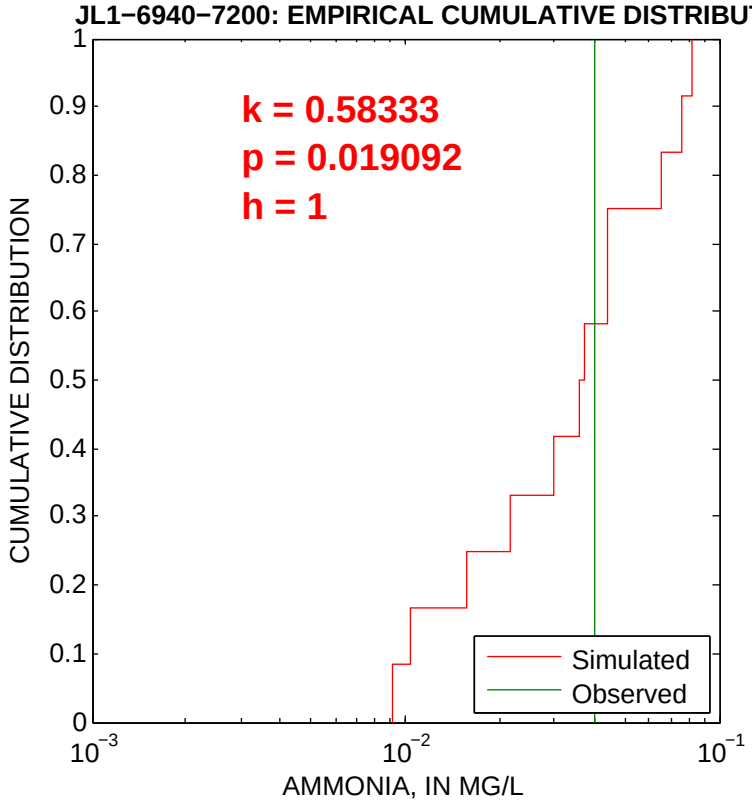
STATISTICS

	observe	simulate
n	10957	10929
min	0.53	0
	-0.275724	-1.3437
mean	161.424	160.943
	1.9487	1.97261
media	99	114.94
	1.99564	2.0619
max	7180	6447.4
	3.85612	3.80938
varian	66205	54066.2
	0.244438	0.264887
JB	0.001	0.001
	0.001	0.001
	ra	log
%	-0.297981	1.22744
err.va	23825.4	0.0738081
rel.std.err	0.359874	0.301951
mod.eff	0.640126	0.698049

VERSION 2.1







DATA SELECTION

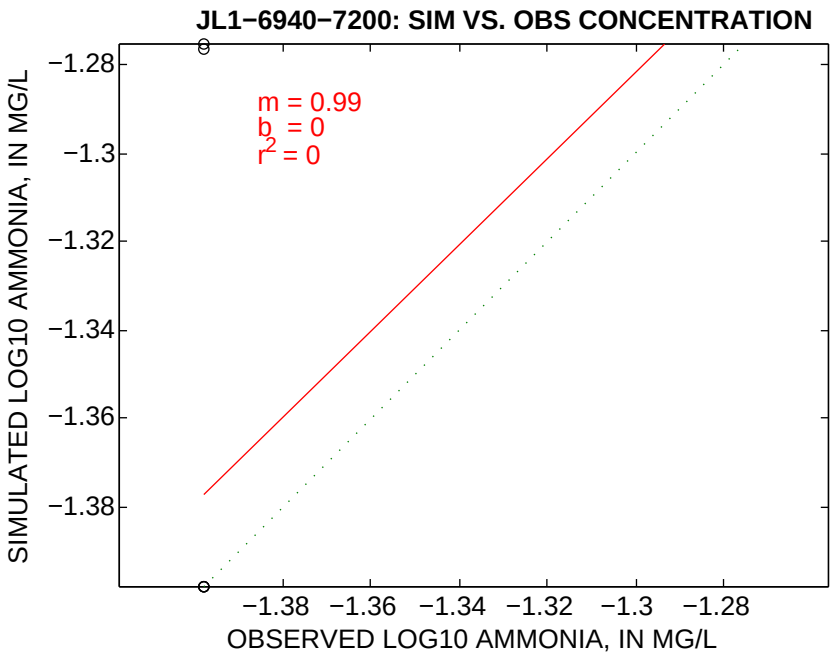
scenario: P620171001WQ
file: NH3X.calib
plot: NH3X - ammonia
Dates: 1/1/1985 12/31/201
Drive: N/A
Directory: model
Observed: OBS20161101

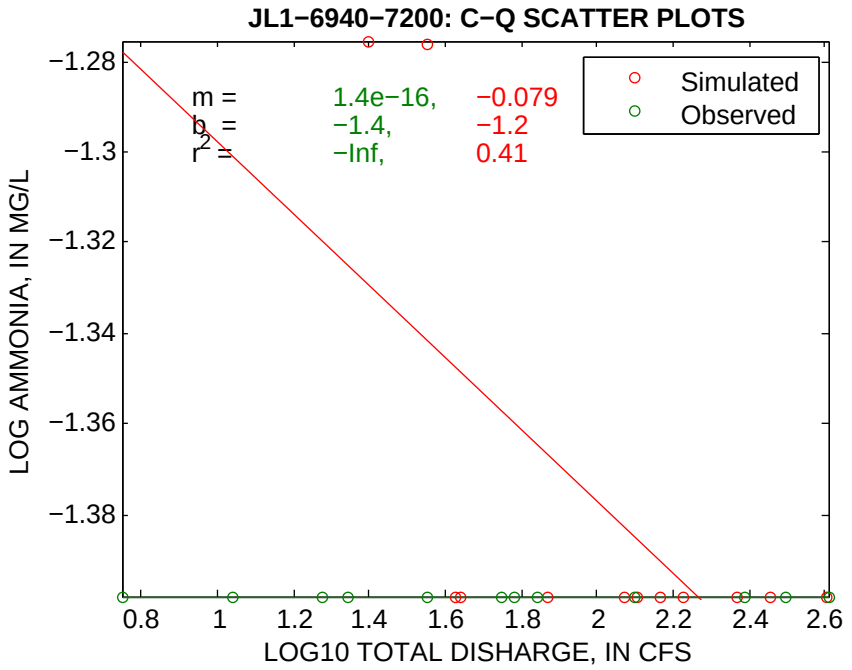
STATISTICS

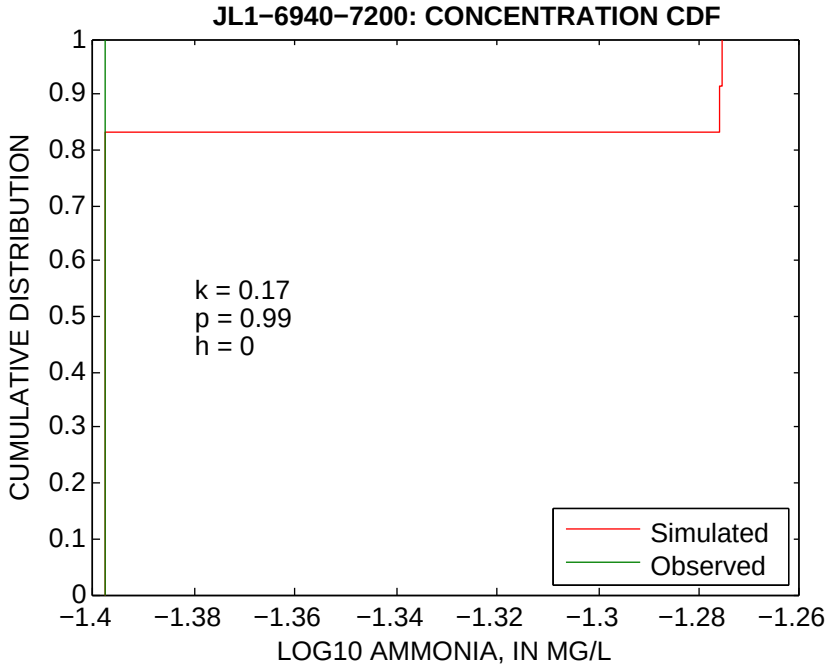
n	12	12
	observe	simulate
min	0.04	0.0090337
	-1.39794	-2.04413
mean	0.04	0.0392637
	-1.39794	-1.49955
media	0.04	0.0365405
	-1.39794	-1.43734
max	0.04	0.081905
	-1.39794	-1.08669
varian	5.25254e-3	0.00059981
	0	0.101101
JB	0.029114	0.384487
	NaN	0.446727
	ra	log
%	-1.84069	7.26868
err.va	0.00060040	0.112364
rel.std.err	14308e+3	Inf
mod.eff	-1.14308e+	-Inf

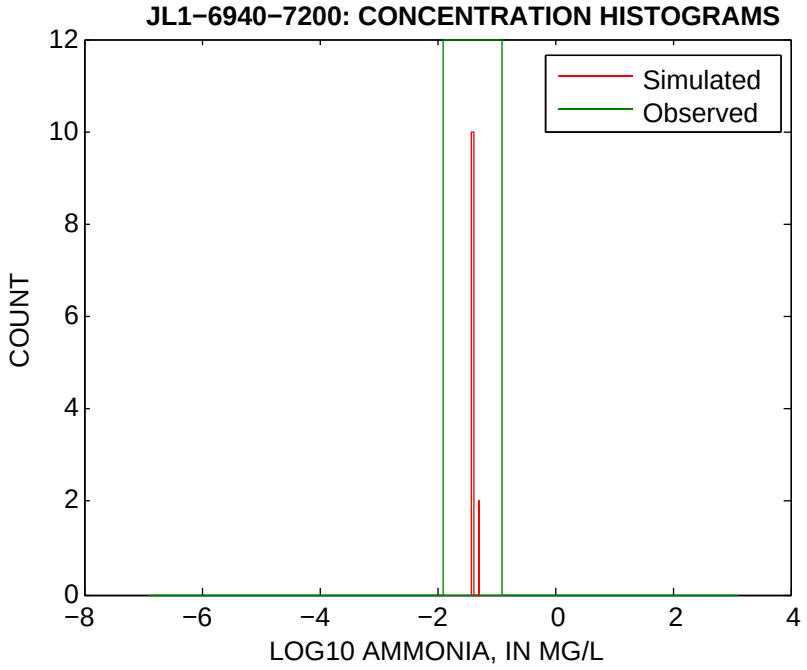
VERSION 2.1

ALL DATA
LOG10

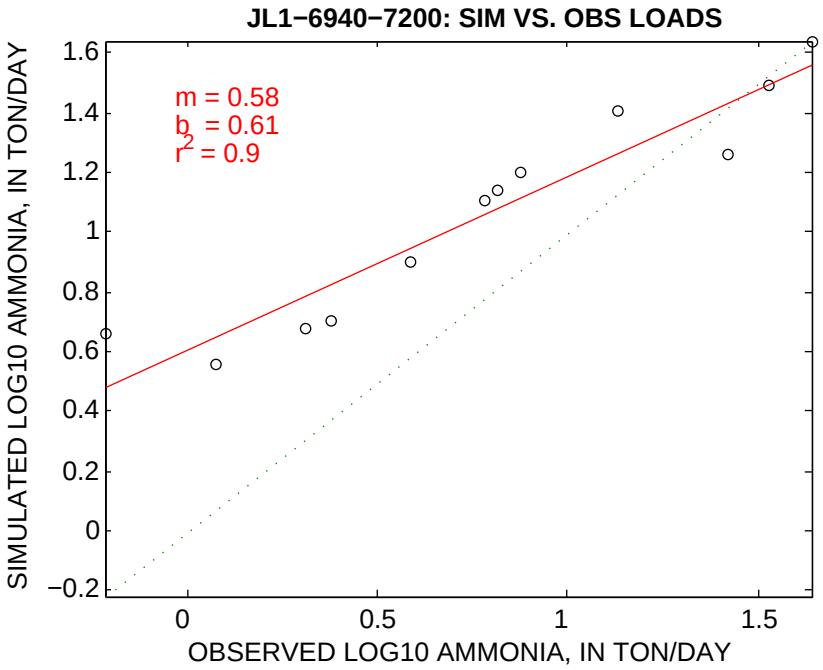




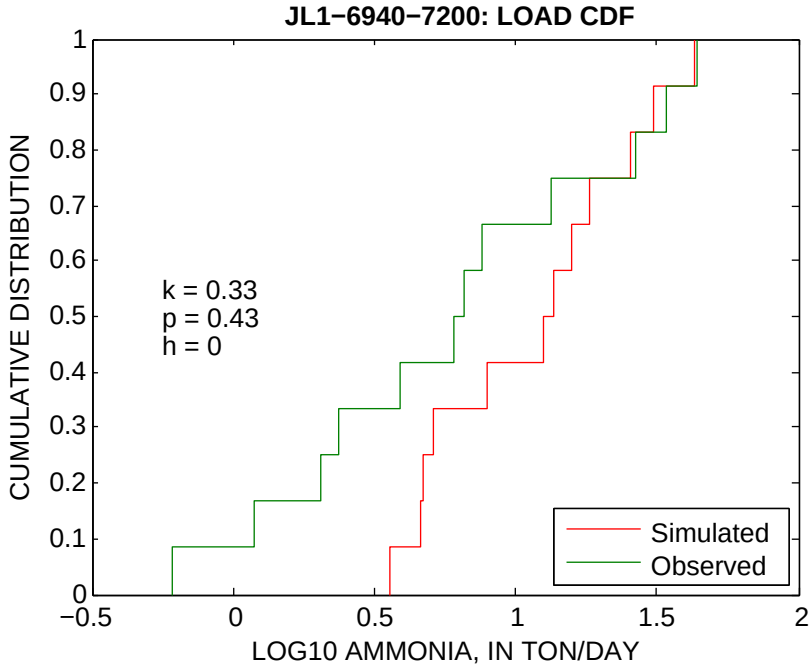


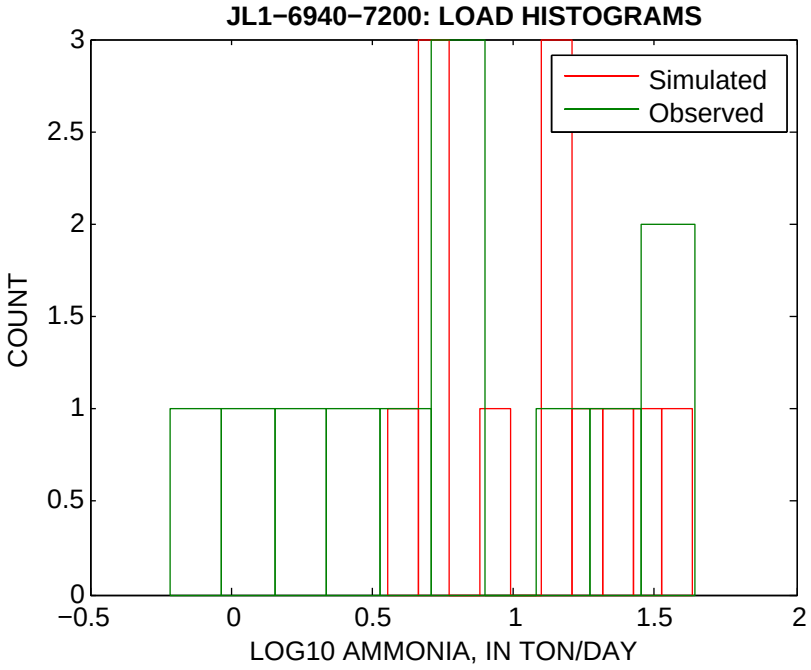


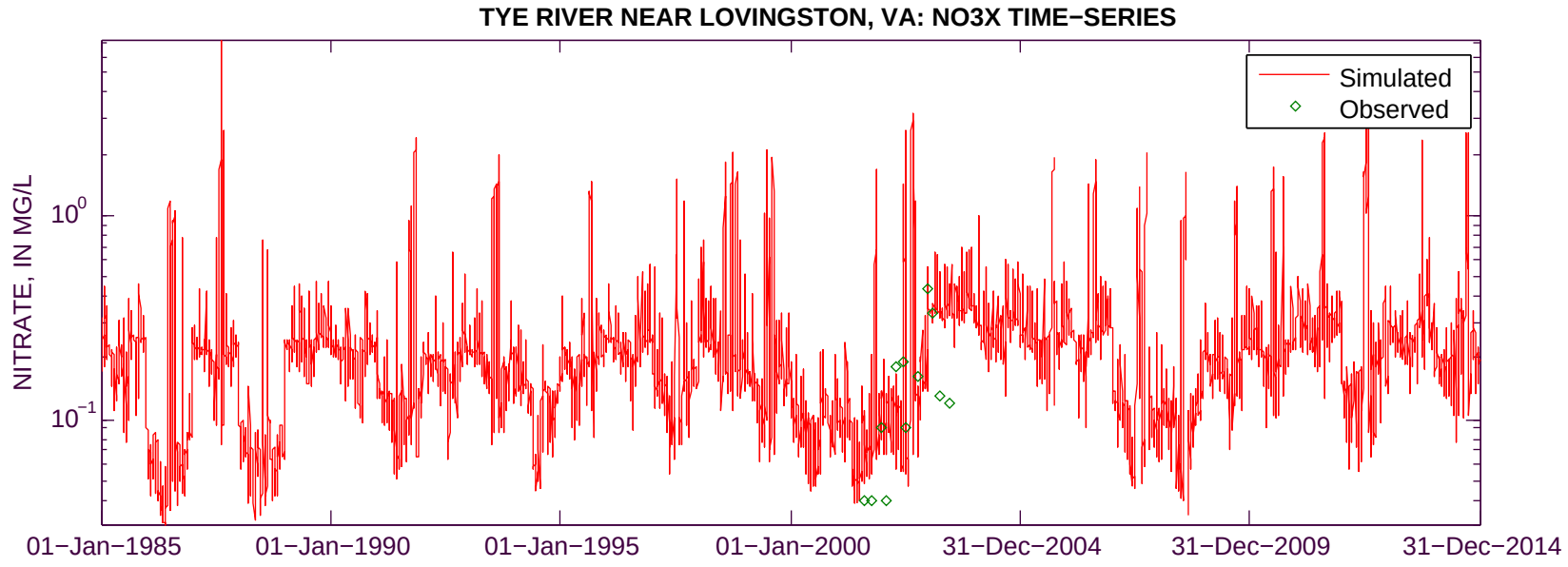
LOAD DATA
LOG10

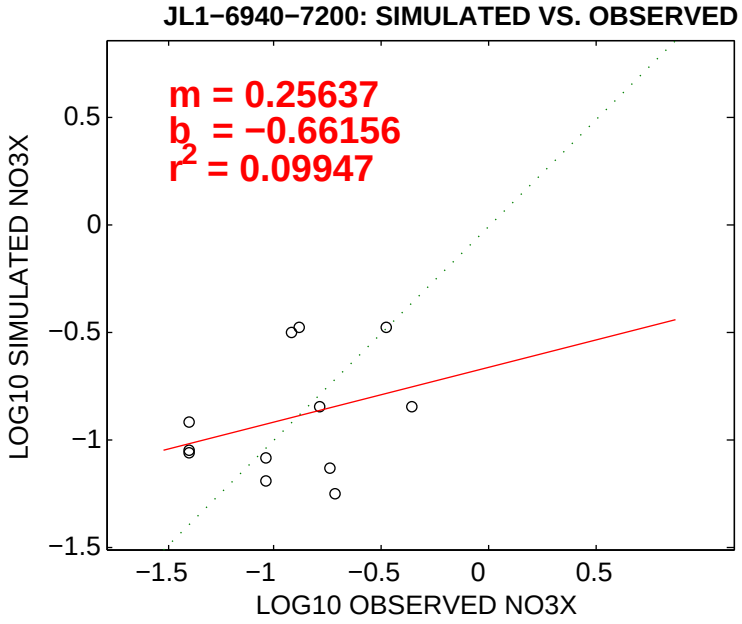


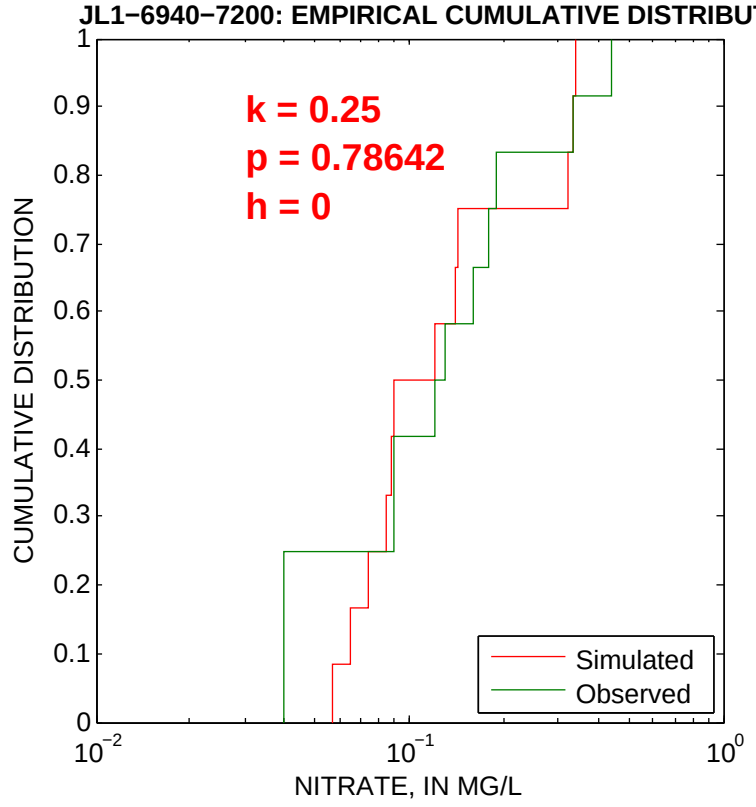












DATA SELECTION

scenario	file
P620171001WQ	NO3X.calib

plot: NO3X - nitrate

Dates: 1/1/1985 – 12/31/201

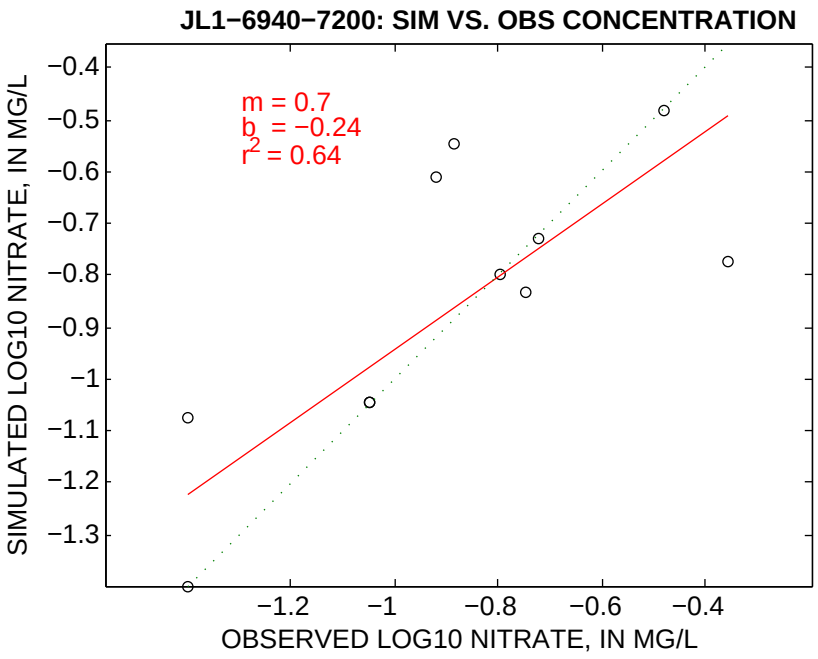
Drive	Directory	Observed
N/A	model	OBS20161101

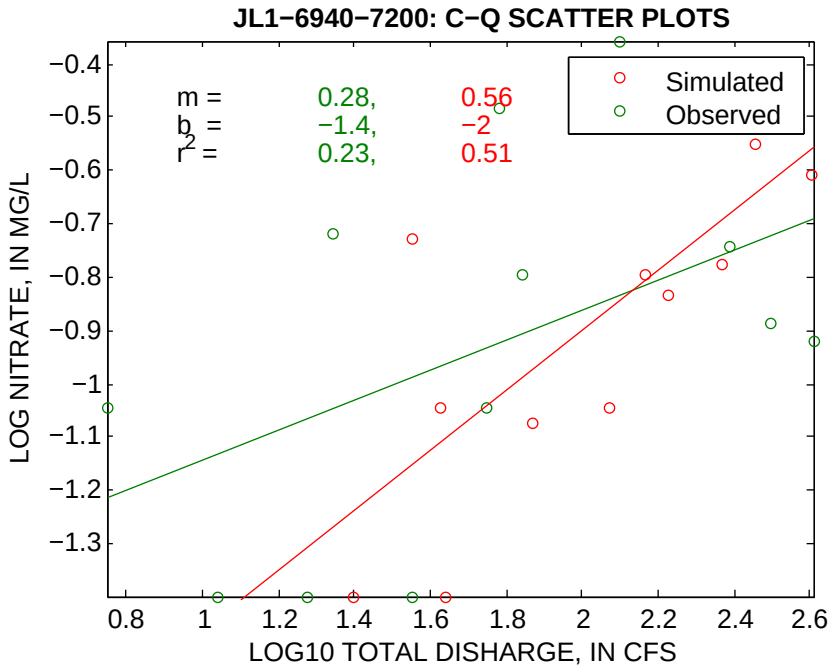
STATISTICS

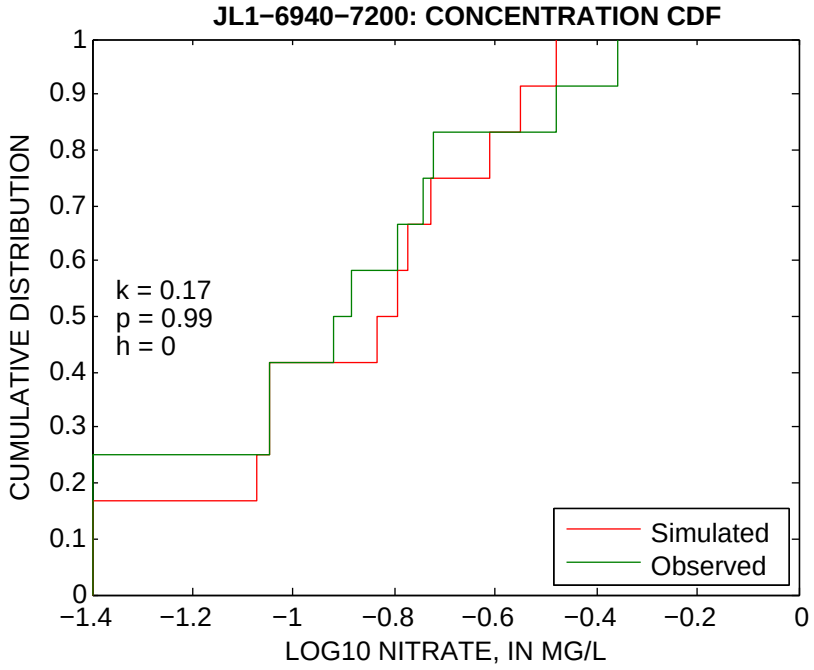
	n	12	12
		observe	simulate
min		0.04	0.056506
		-1.39794	-1.24791
mean		0.154167	0.154192
		-0.932675	-0.900672
media		0.125	0.105132
		-0.903438	-0.983244
max		0.44	0.33692
		-0.356547	-0.472473
varian		0.0148811	0.0119321
		0.119231	0.078783
JB		0.039792	0.077161
		0.5	0.203628
		ra	log
%		1.0161081	-3.43129
err.va		0.0194029	0.137996
rel.std.err		1.30387	1.15739
mod.eff		-0.303867	-0.15739

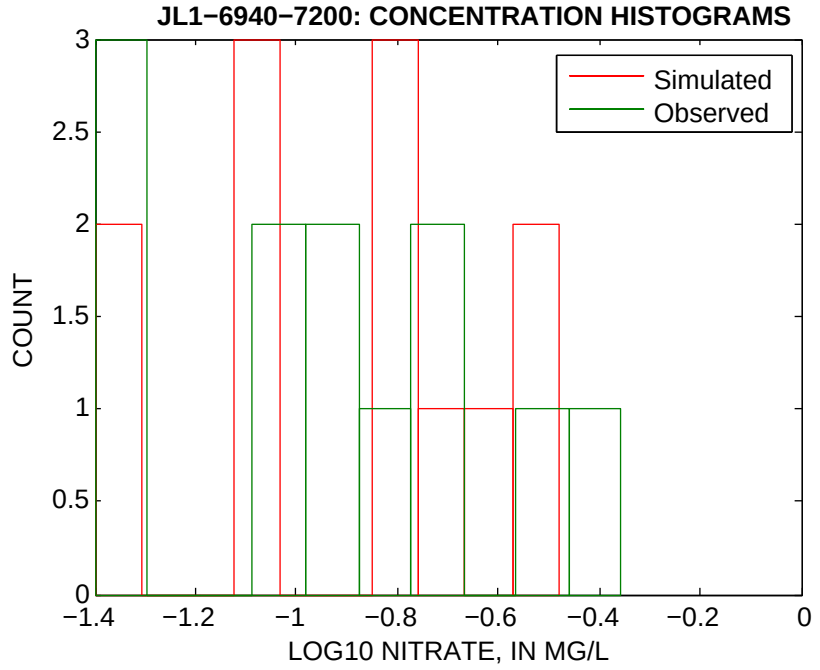
VERSION 2.1

ALL DATA
LOG10

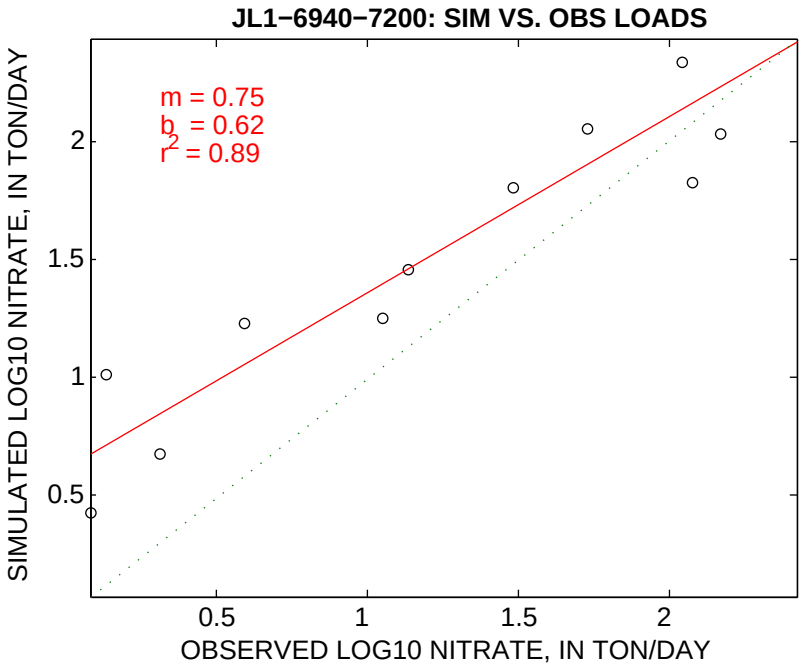


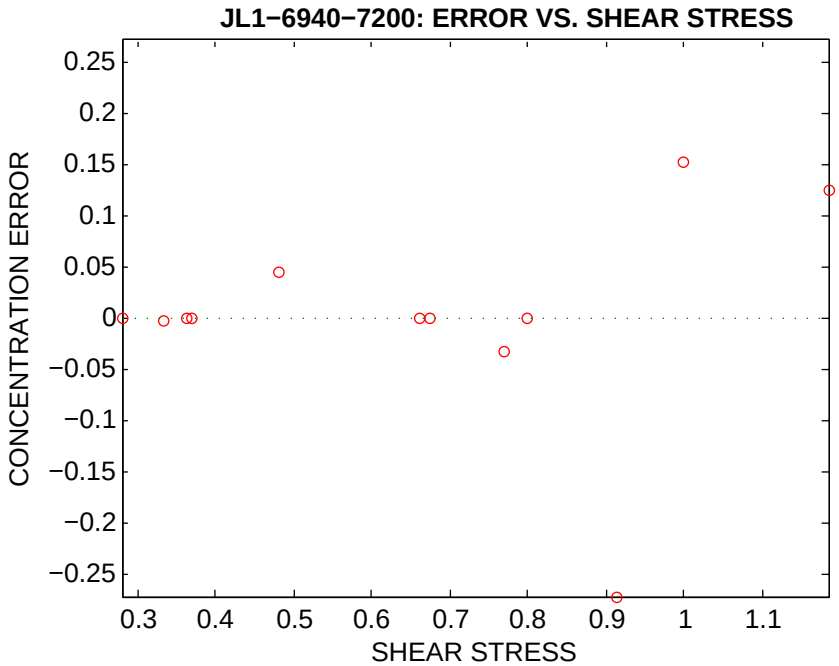


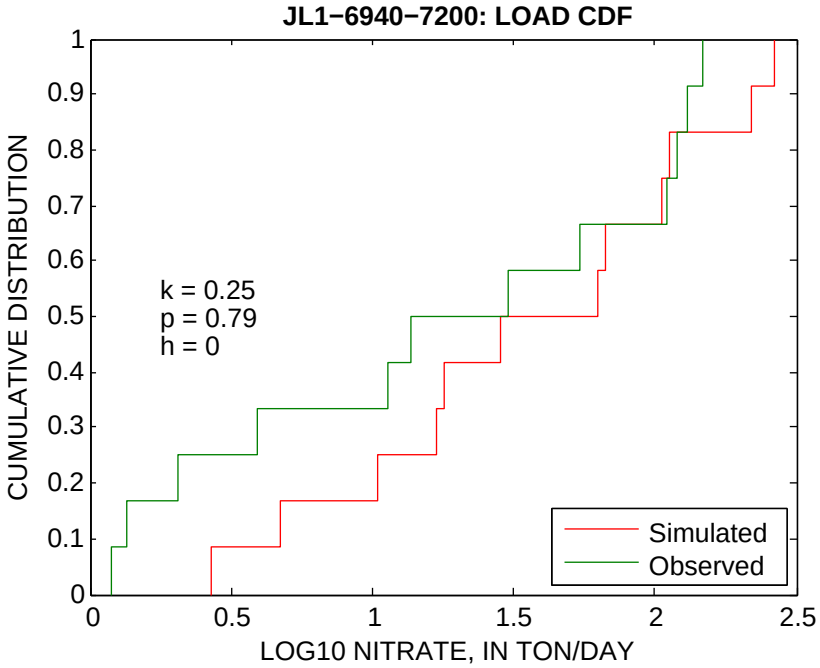


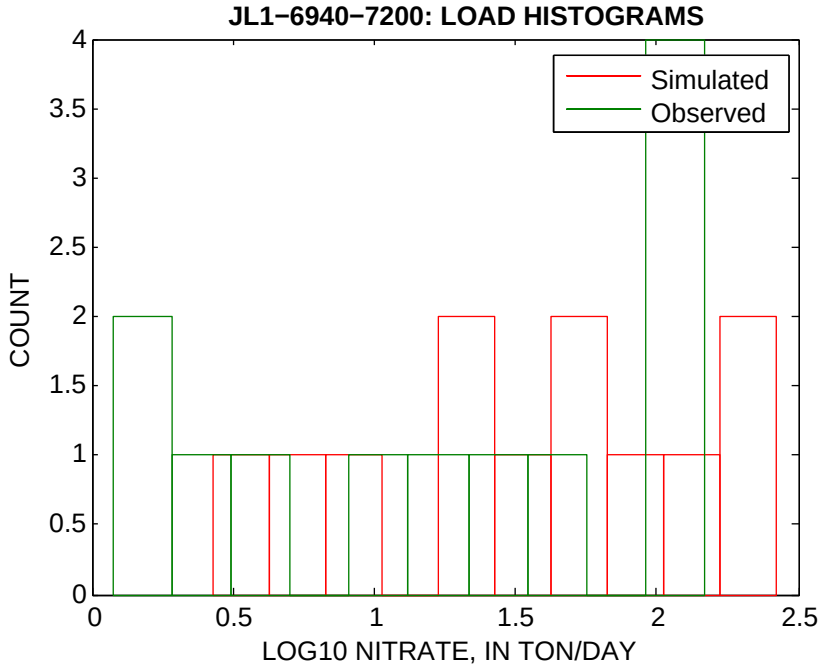


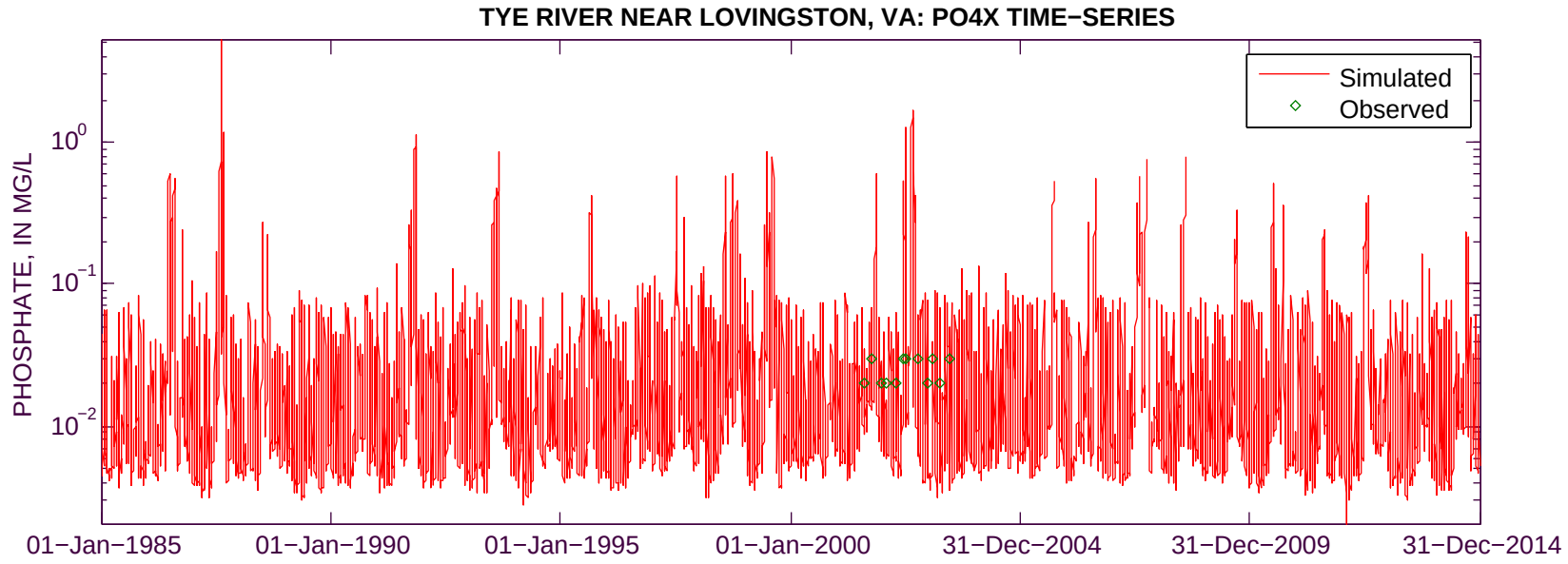
LOAD DATA
LOG10

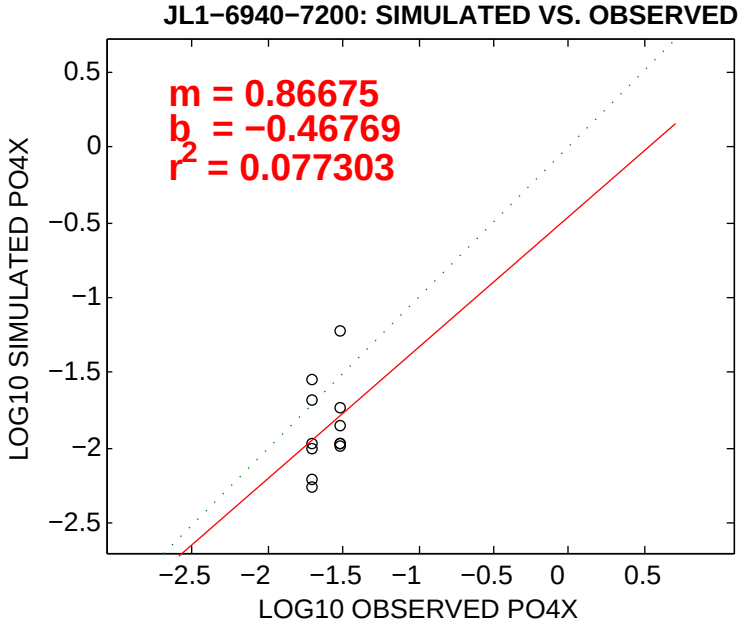


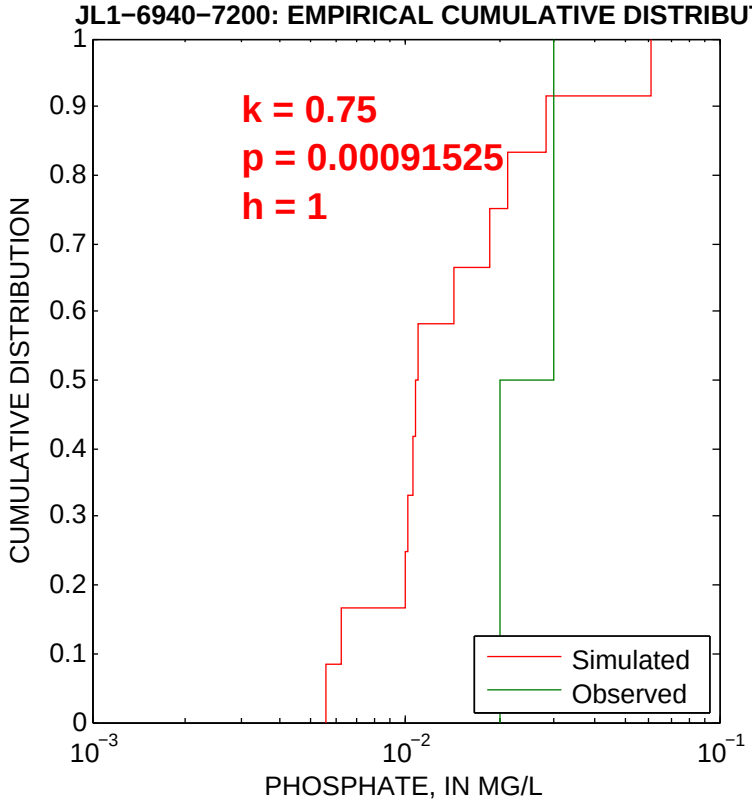












DATA SELECTION

scenario	file
P620171001WQ	PO4X.calib

plot: PO4X - phosphate

Dates: 1/1/1985 – 12/31/201

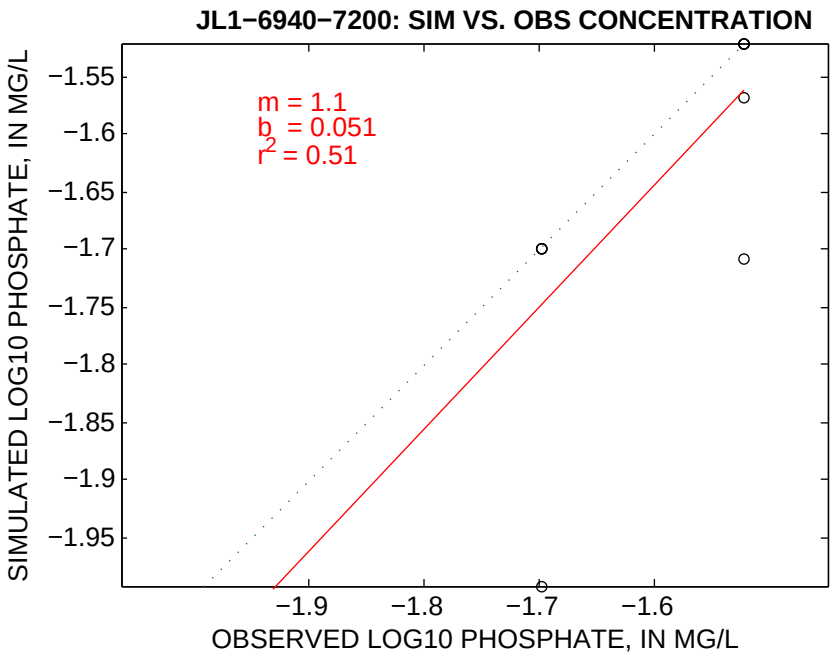
Drive	Directory	Observed
N/A	model	OBS20161101

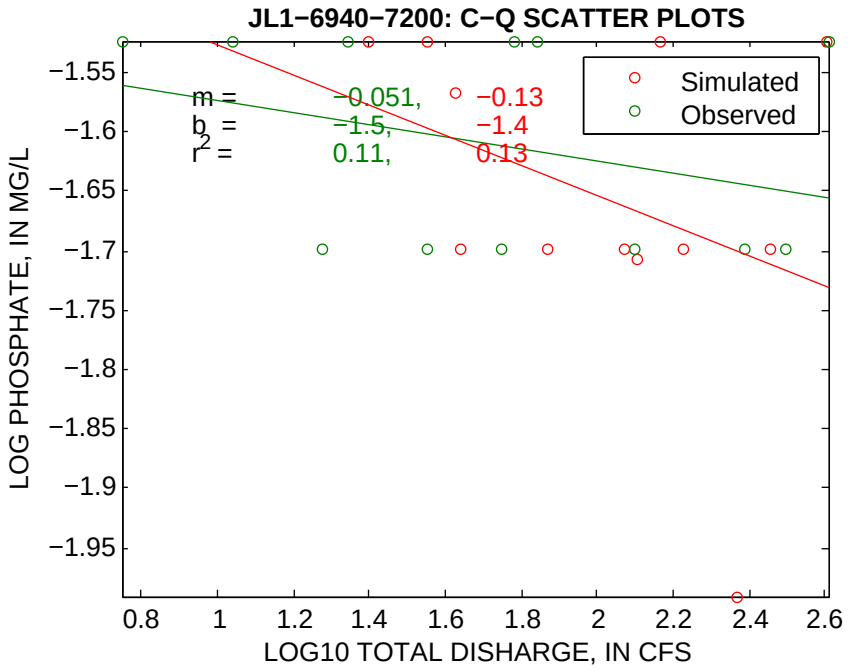
STATISTICS

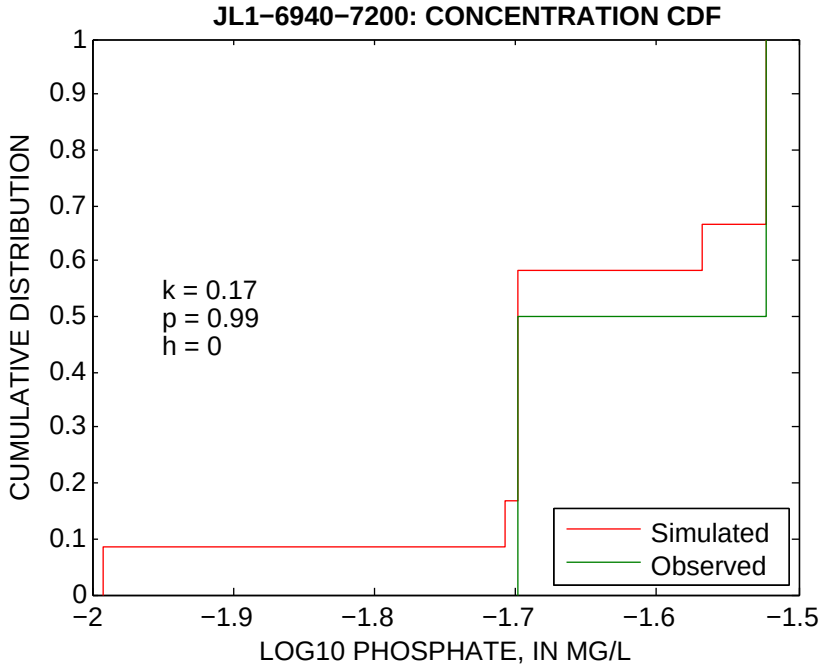
	n	12	12
		observe	simulate
min		0.02	0.0056058
		-1.69897	-2.25136
mean		0.025	0.0172744
		-1.61092	-1.86395
media		0.025	0.0108015
		-1.61092	-1.96653
max		0.03	0.060647
		-1.52288	-1.21719
varian		2.72727e-0	0.00022882
		0.00845676	0.0821853
JB		0.086853	0.001
		0.086853	0.149149
		ra	log
%		-30.9024	15.7071
err.va		0.00028213	0.145827
rel.std.err		10.345	17.2438
mod.eff		-9.34503	-16.2438

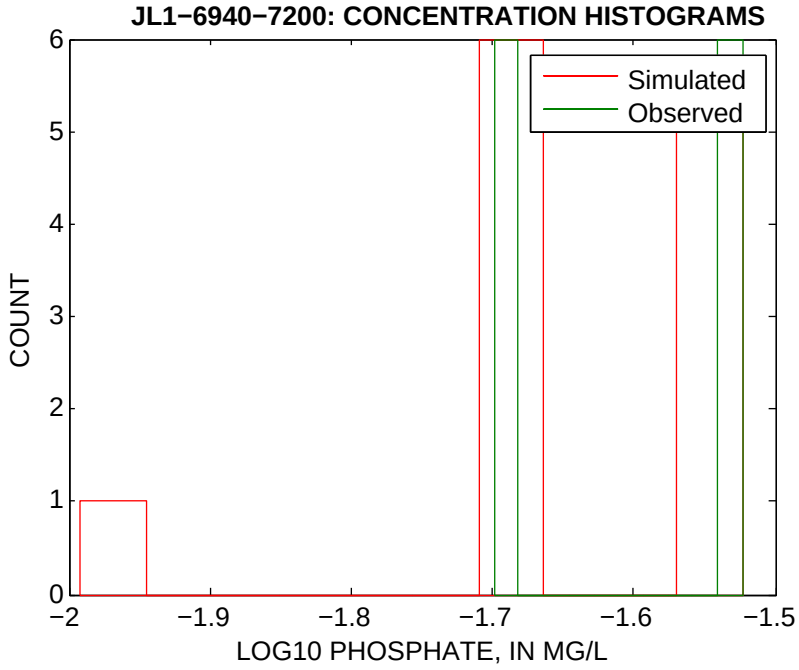
VERSION 2.1

ALL DATA
LOG10

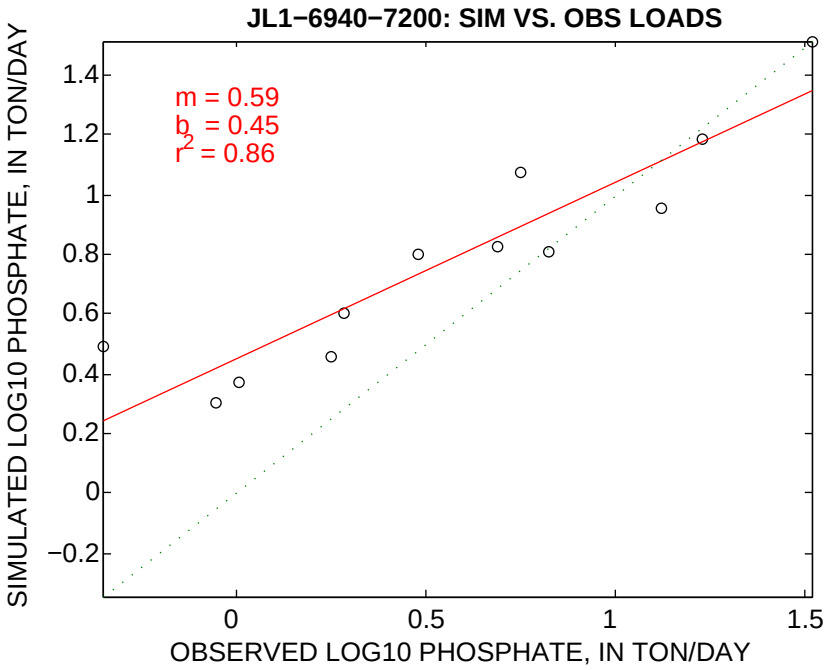




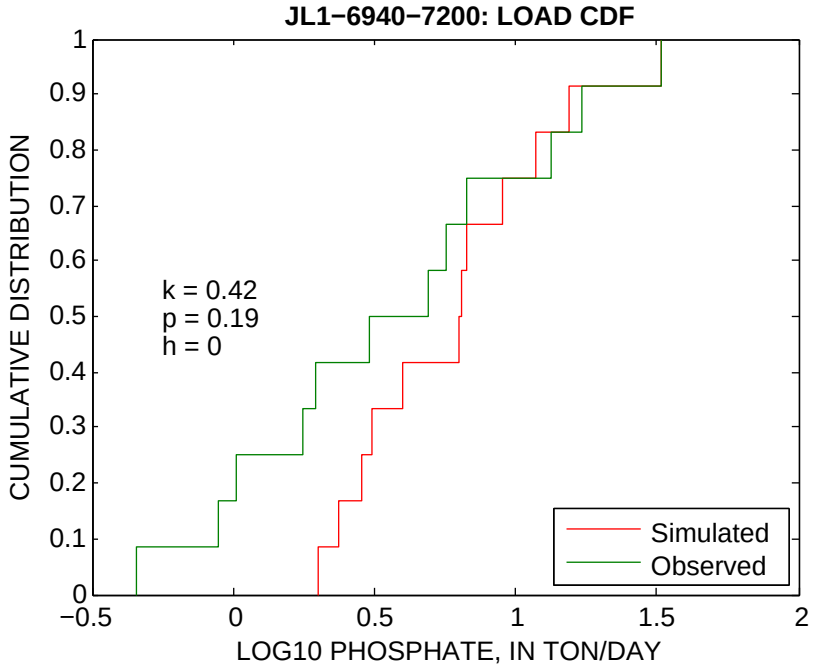


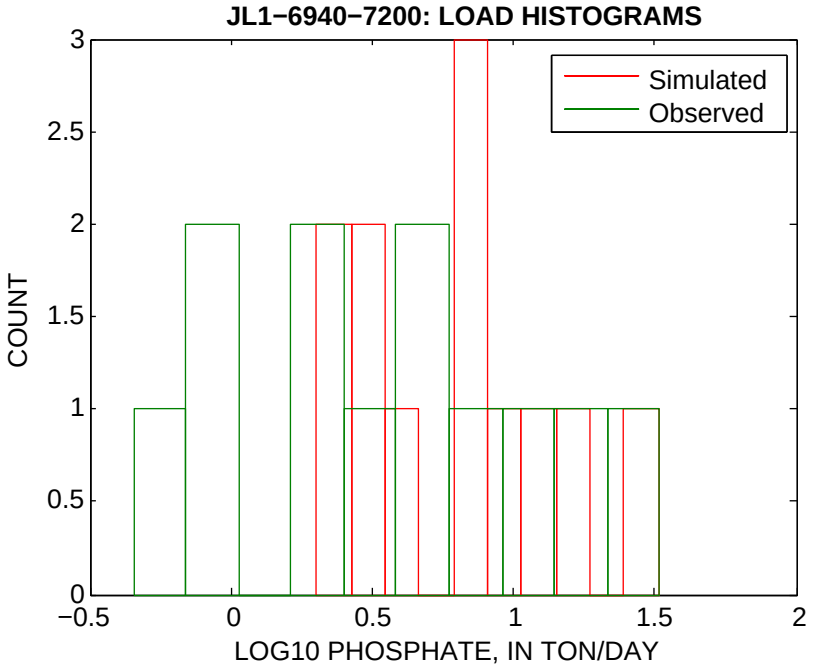


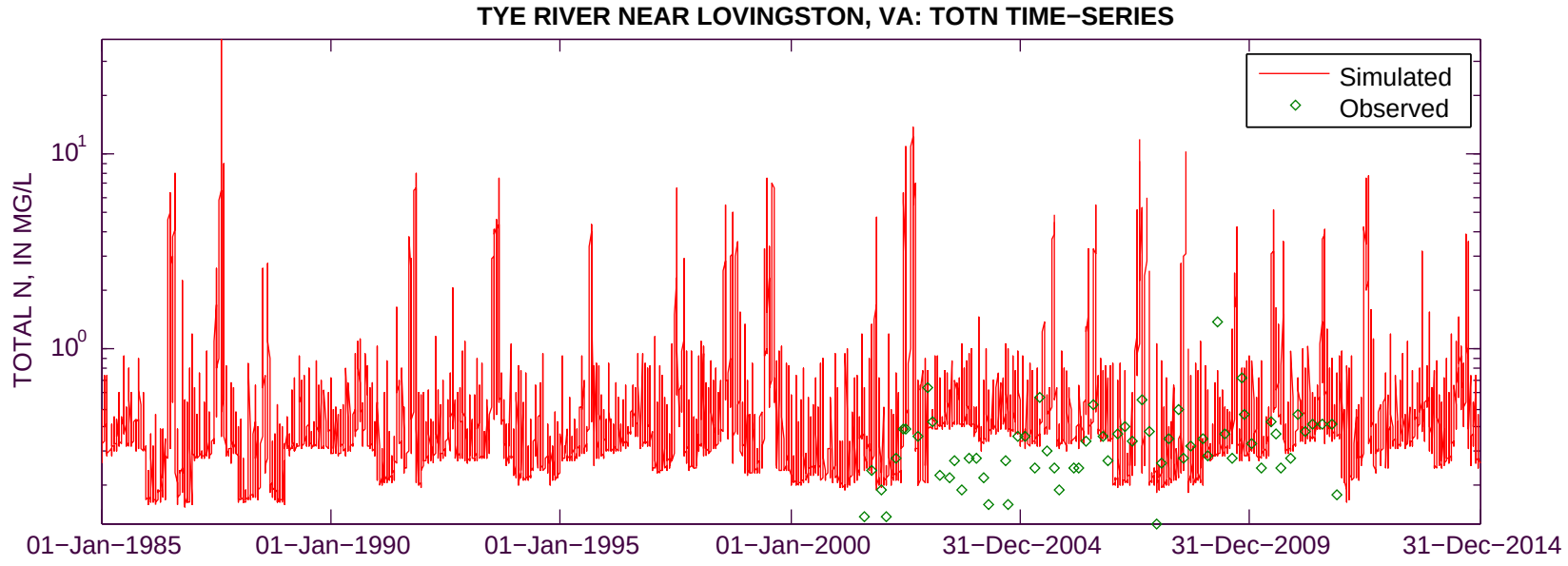
LOAD DATA
LOG10

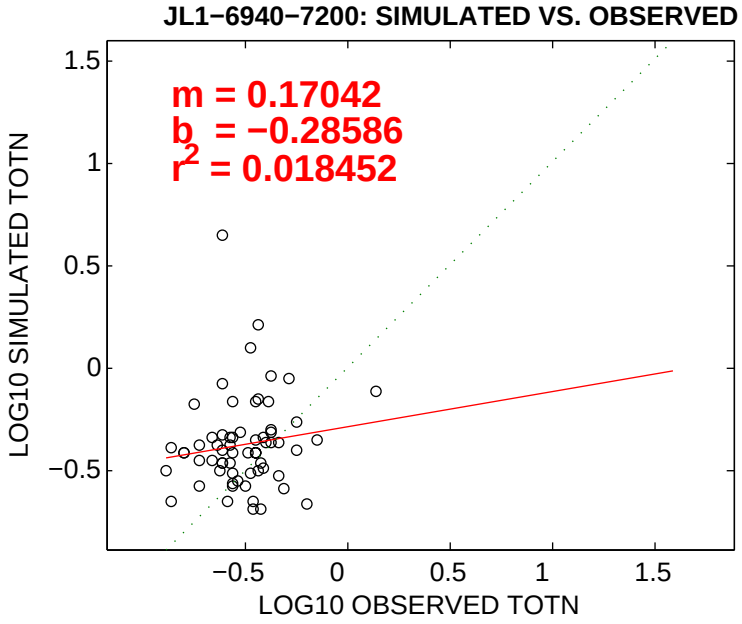


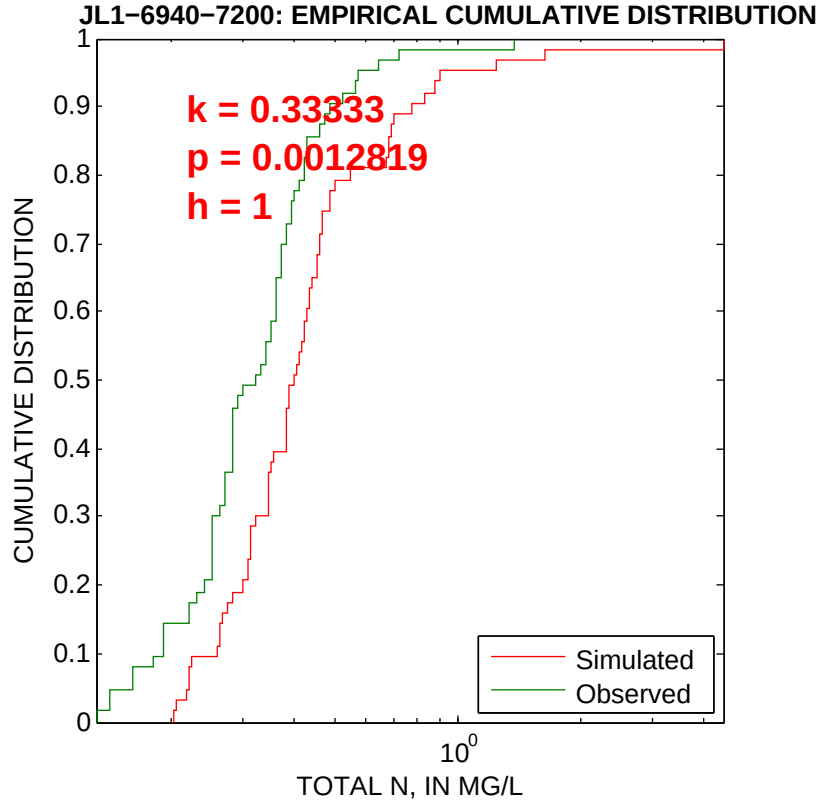












DATA SELECTION

scenario	file
P620171001WQ	TOTN.calib

plot: TOTN - total nitrogen

Dates: 1/1/1985 – 12/31/201

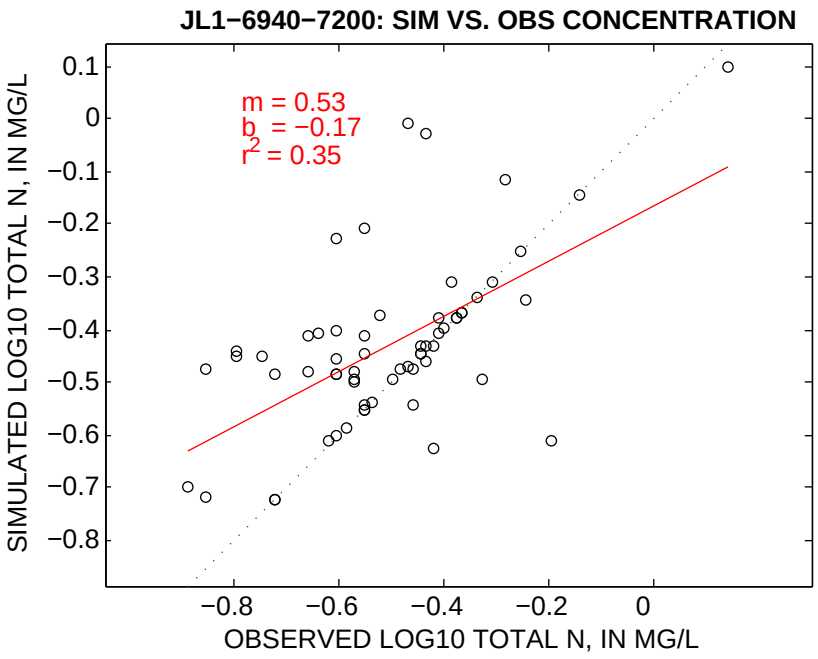
Drive	Directory	Observed
N/A	model	OBS20161101

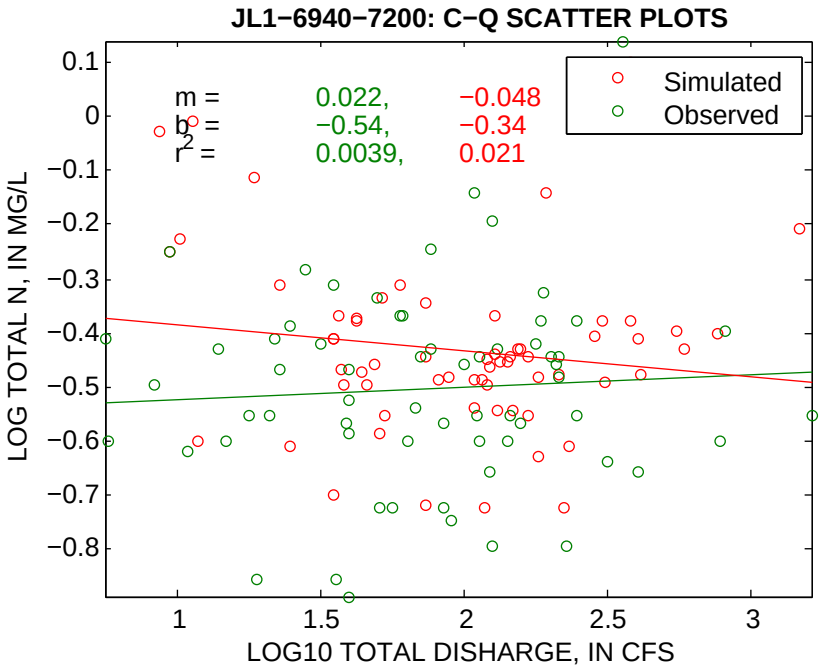
STATISTICS

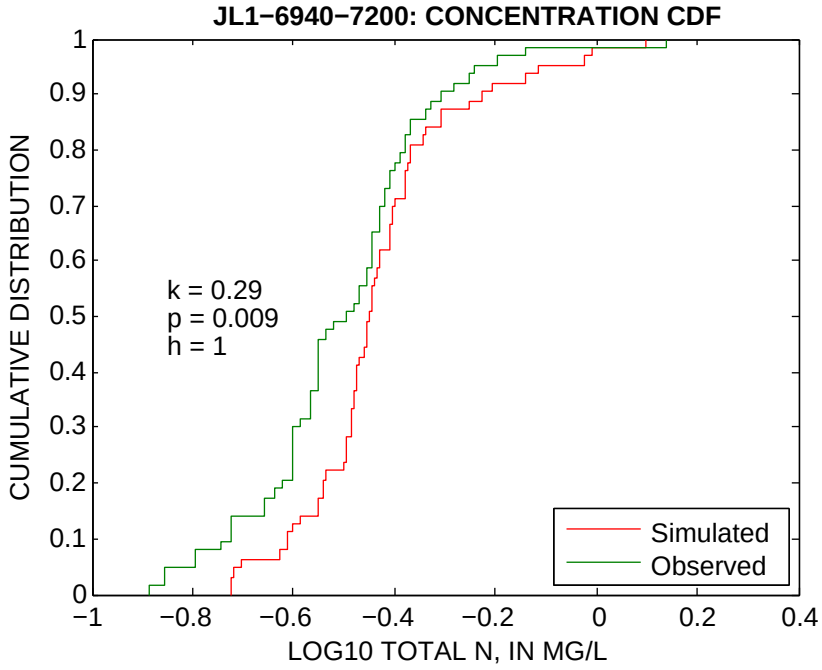
	n	63	63
		observe	simulate
min		0.13	0.20318
		-0.886057	-0.692119
mean		0.343968	0.516814
		-0.503572	-0.371678
media		0.32	0.39809
		-0.49485	-0.400019
max		1.38	4.4637
		0.139879	0.649695
varian		0.0319598	0.31523
		0.0324906	0.0511406
JB		0.001	0.001
		0.021679	0.001
		ra	log
%		50.2505	-26.1916
err.va		0.371486	0.0902335
rel.std.err		11.6235	2.77722
mod.eff		-10.6235	-1.77722

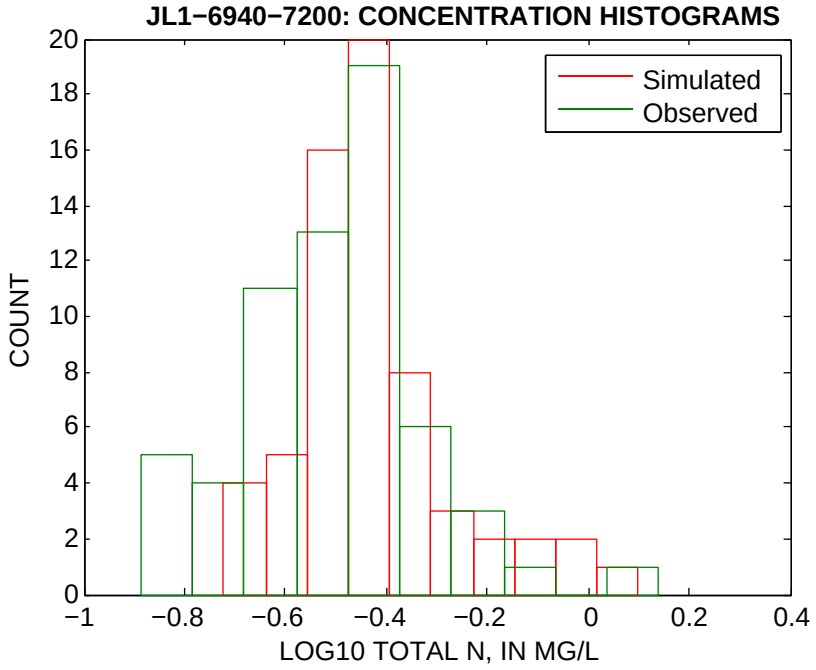
VERSION 2.1

ALL DATA
LOG10

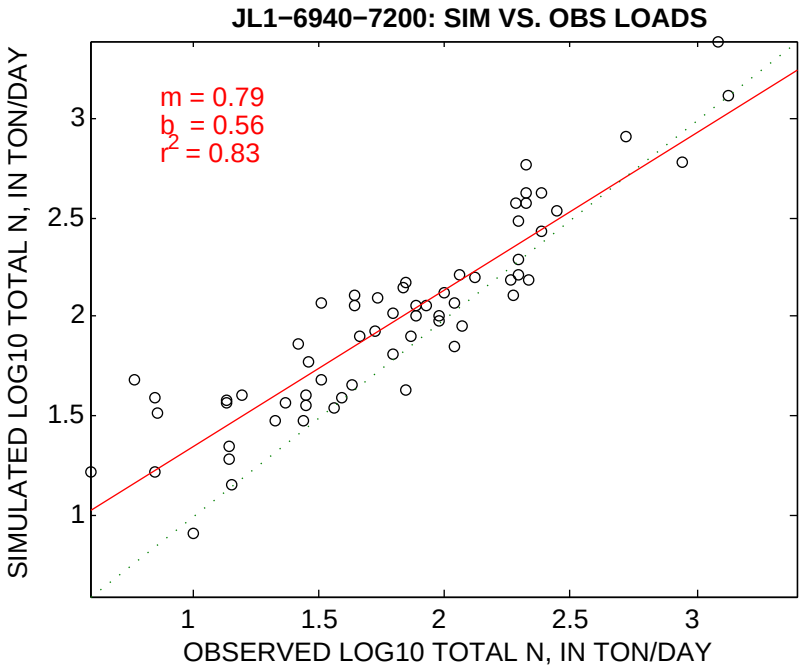


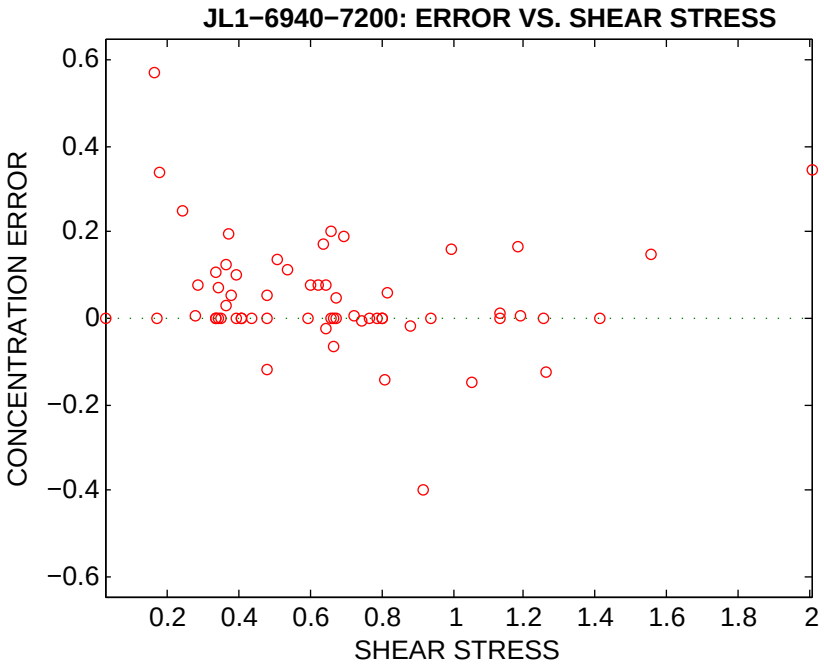


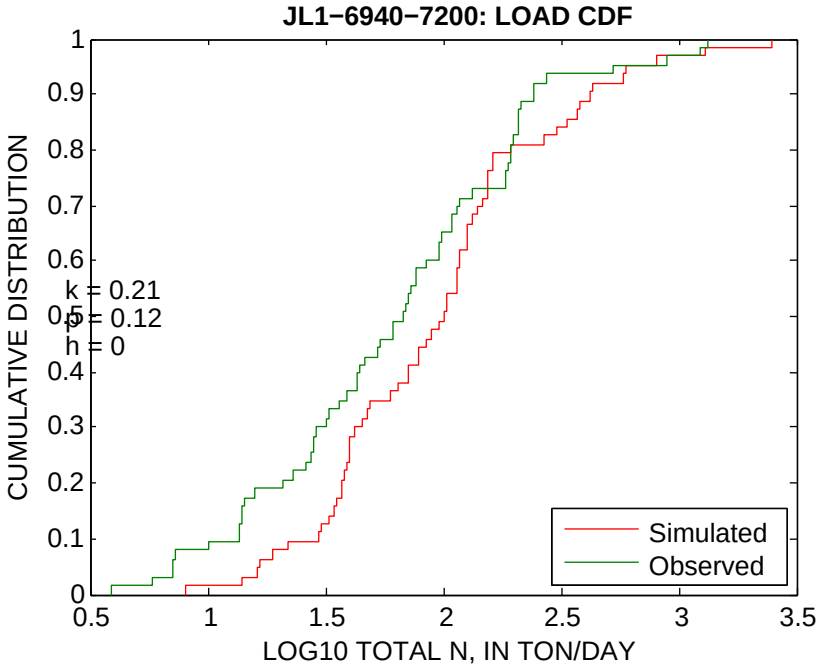


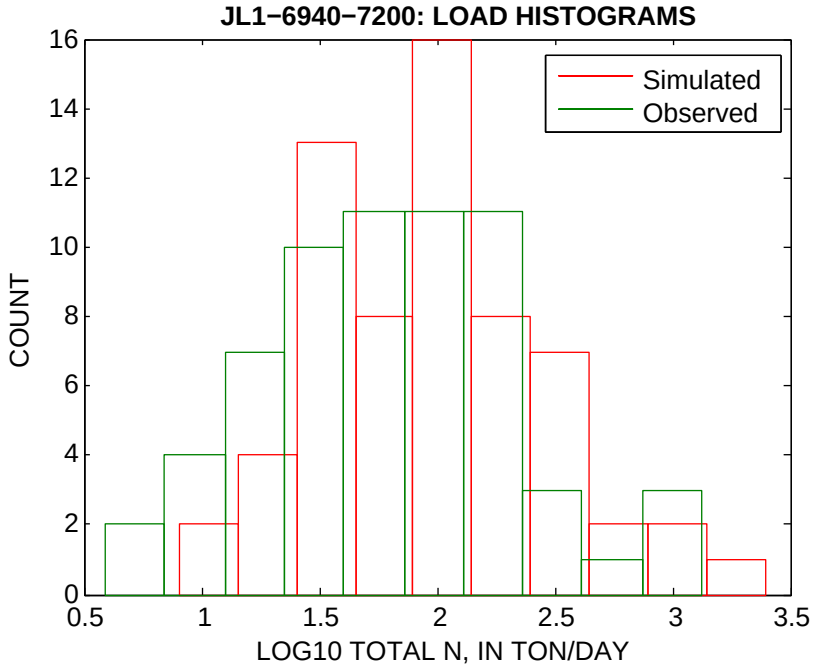


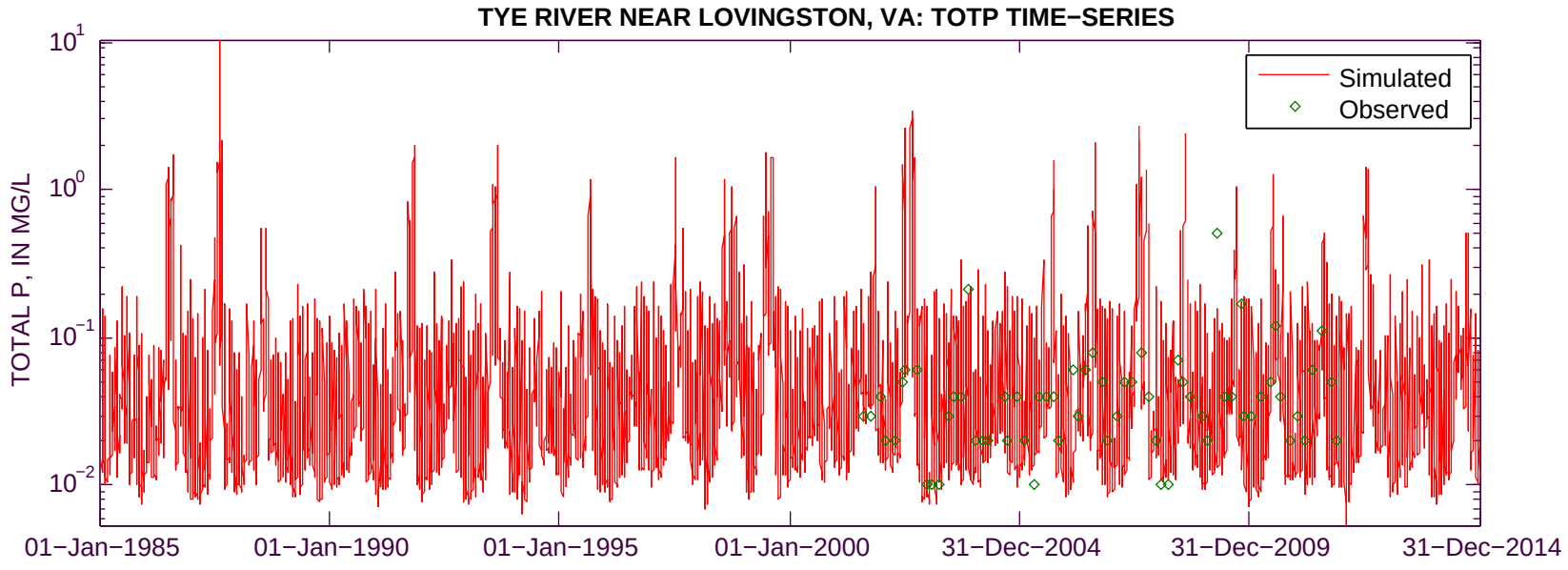
LOAD DATA
LOG10

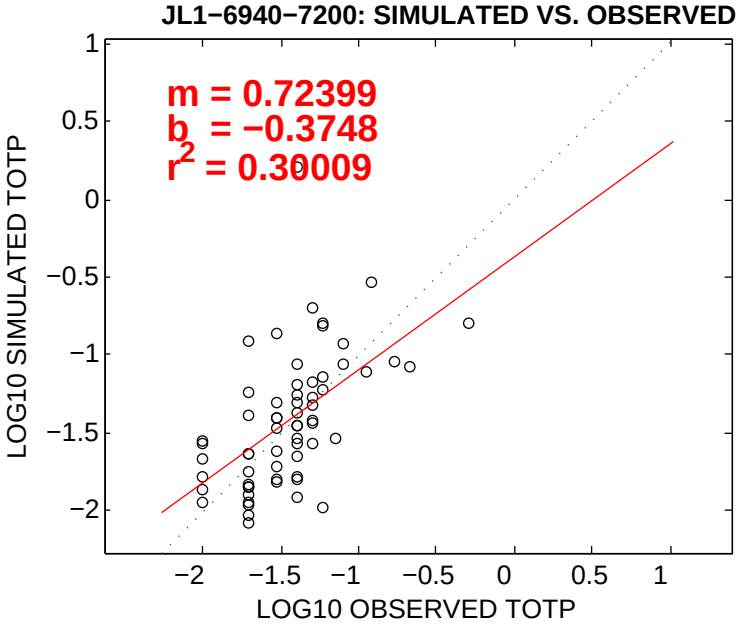


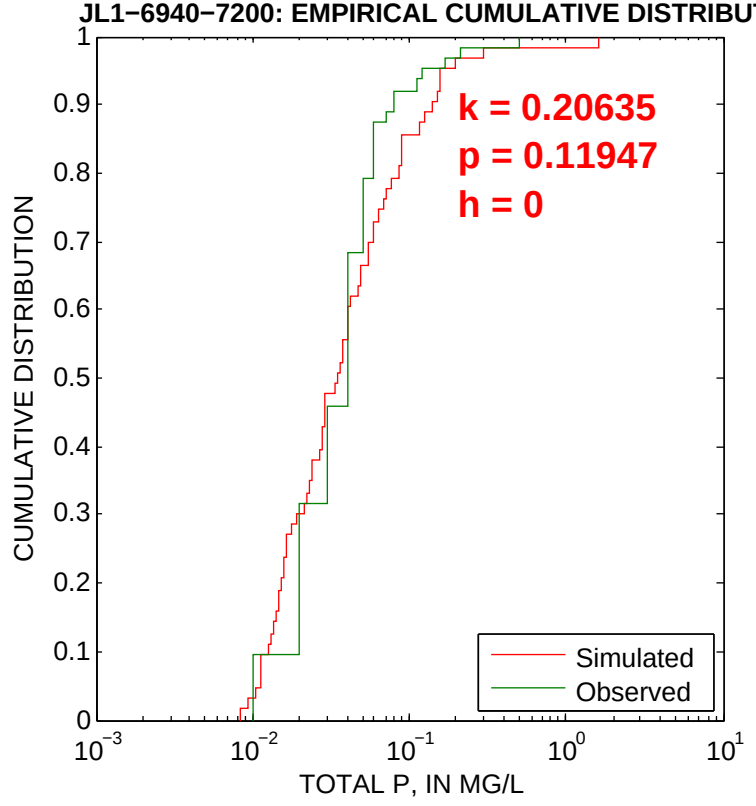












DATA SELECTION

scenario	file
P620171001WQ	TOTP.calib

plot: TOTP - total phosphorus

Dates: 1/1/1985 – 12/31/201

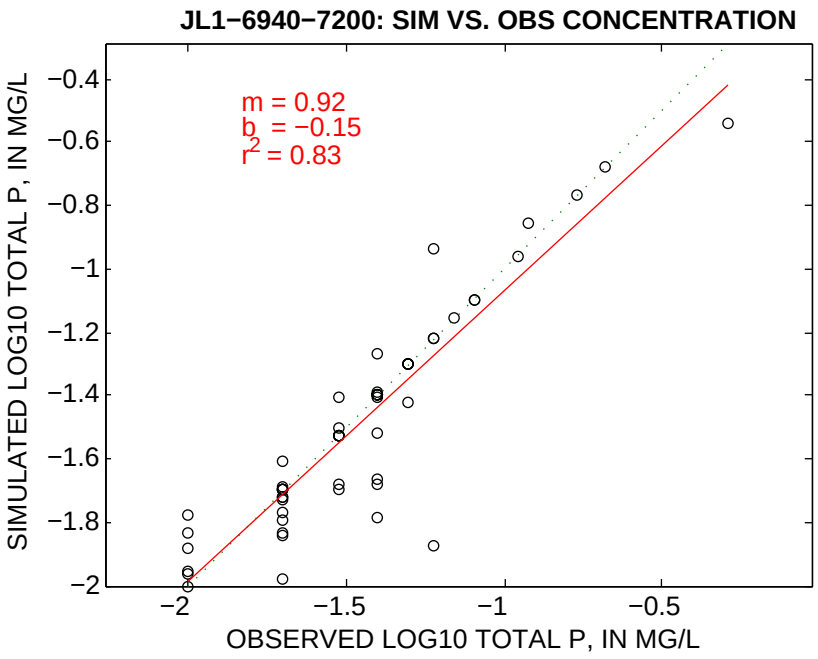
Drive	Directory	Observed
N/A	model	OBS20161101

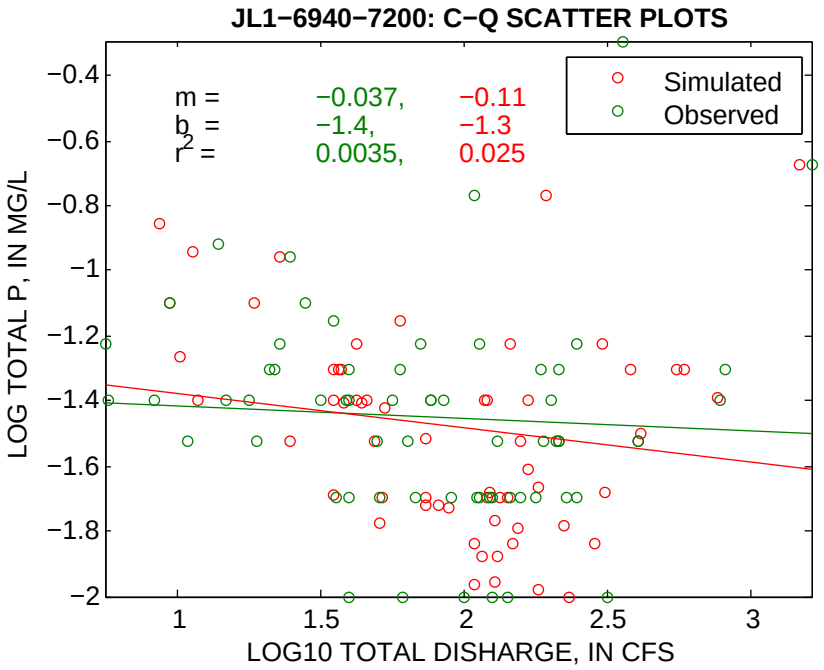
STATISTICS

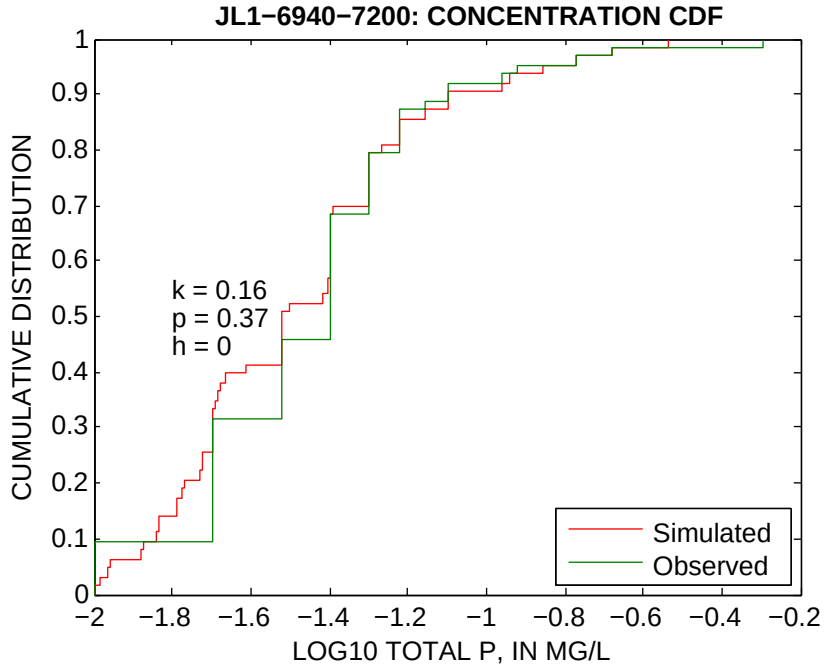
	n	observe	simulate
		63	63
min		0.01	0.0085202
		-2	-2.06955
mean		0.0503175	0.0769037
		-1.44837	-1.4234
media		0.04	0.035092
		-1.39794	-1.45479
max		0.51	1.6018
		-0.29243	0.204608
varian		0.00467732	0.0409165
		0.103891	0.181465
JB		0.001	0.001
		0.007682	0.003723
		ra	log
%		52.837	-1.72339
err.va		0.0434842	0.135558
rel.std.err		9.29683	1.30481
mod.eff		-8.29683	-0.304811

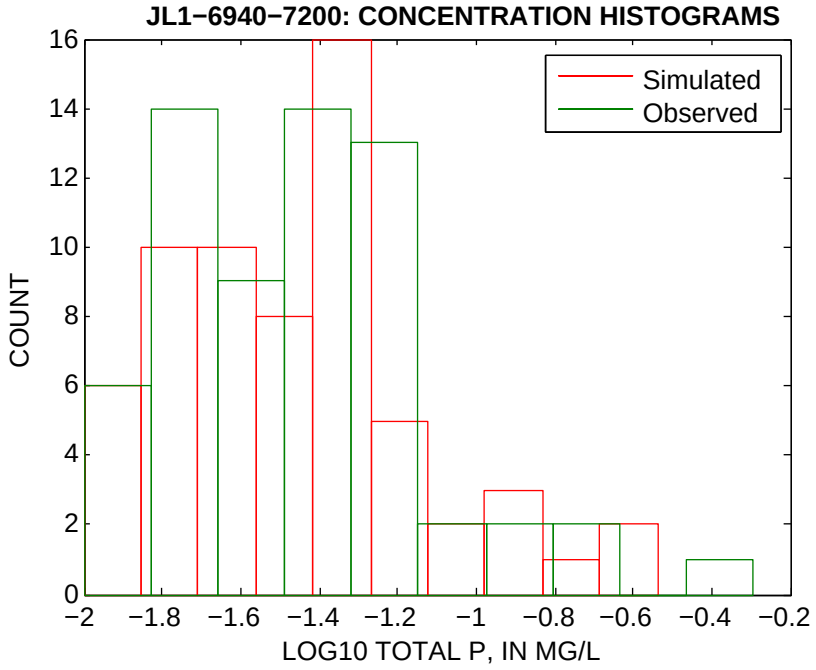
VERSION 2.1

ALL DATA
LOG10

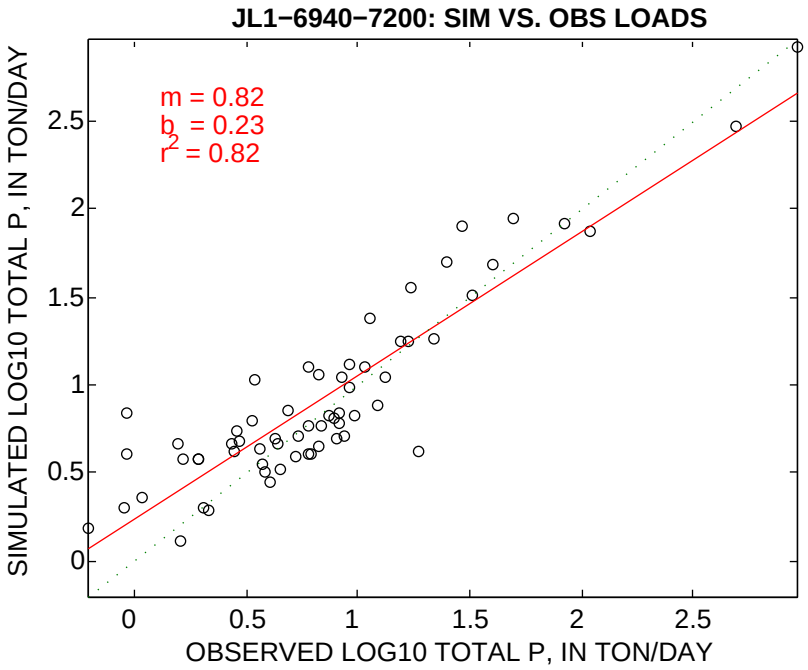


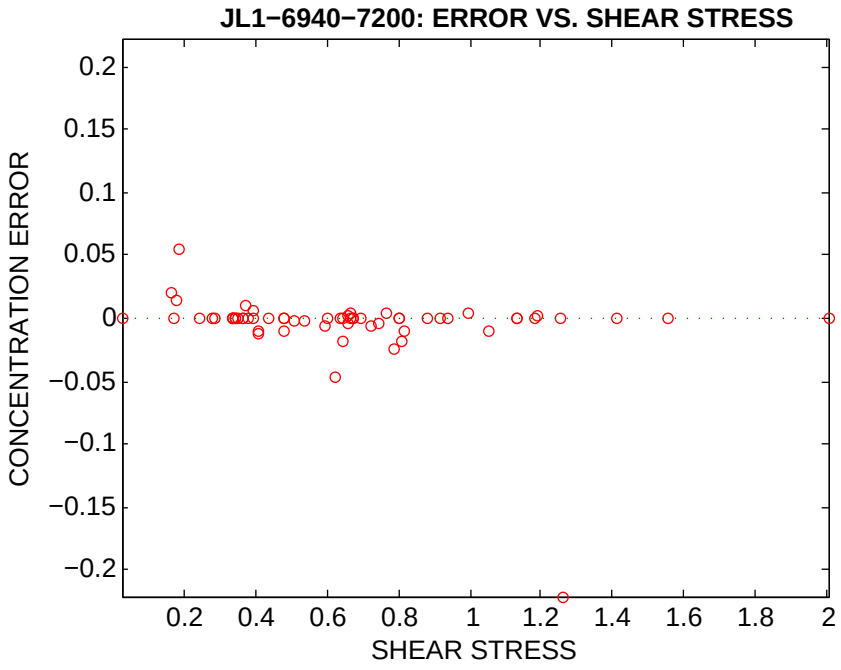


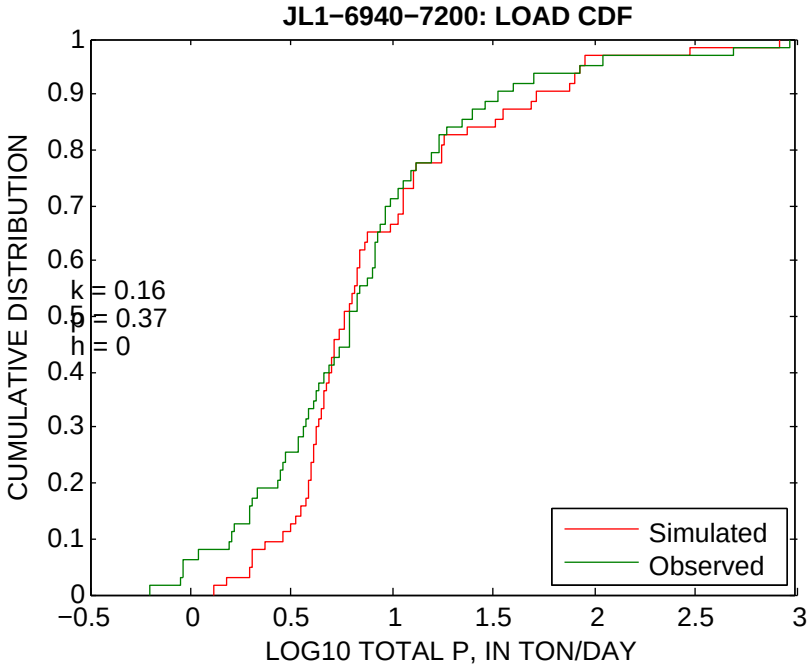


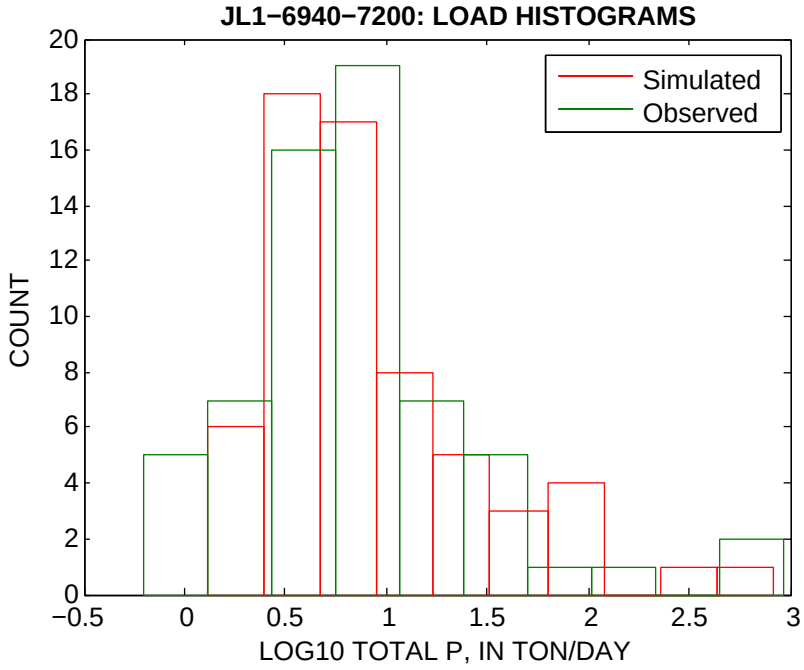


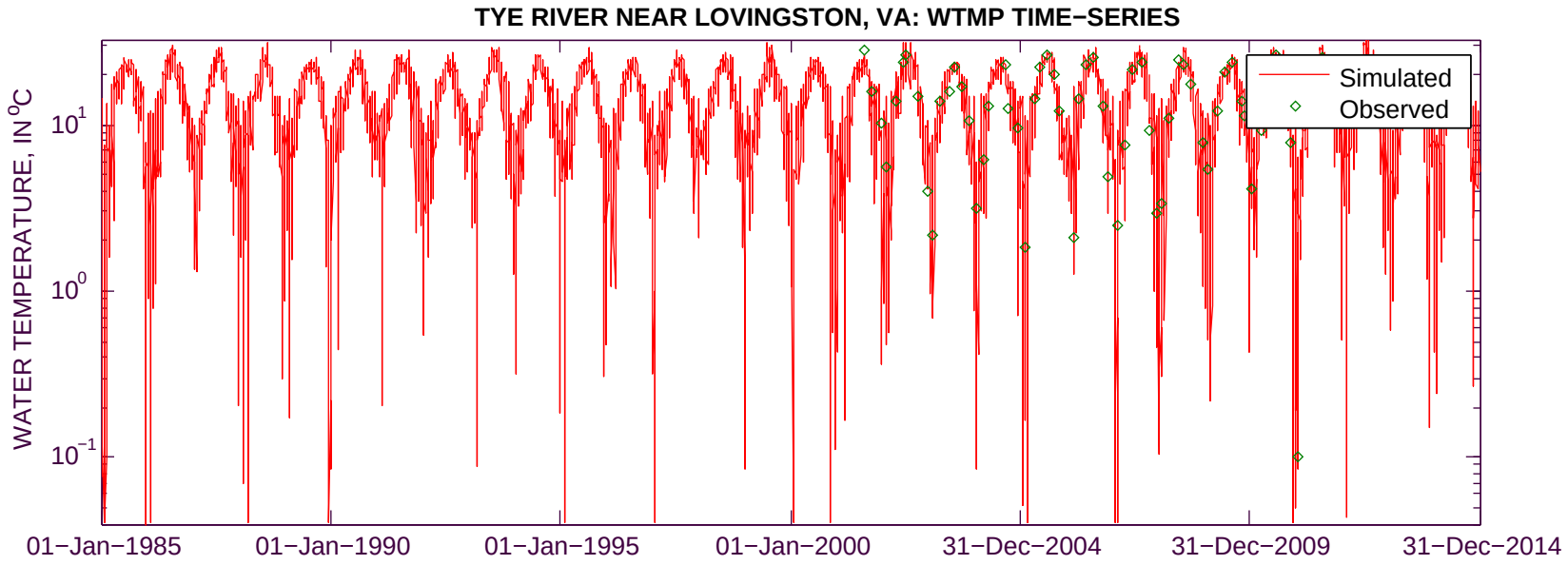
LOAD DATA
LOG10

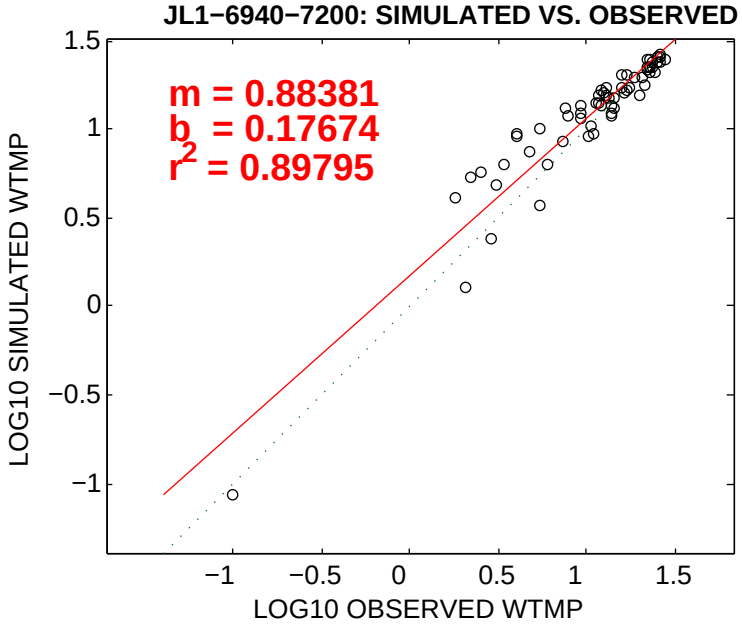


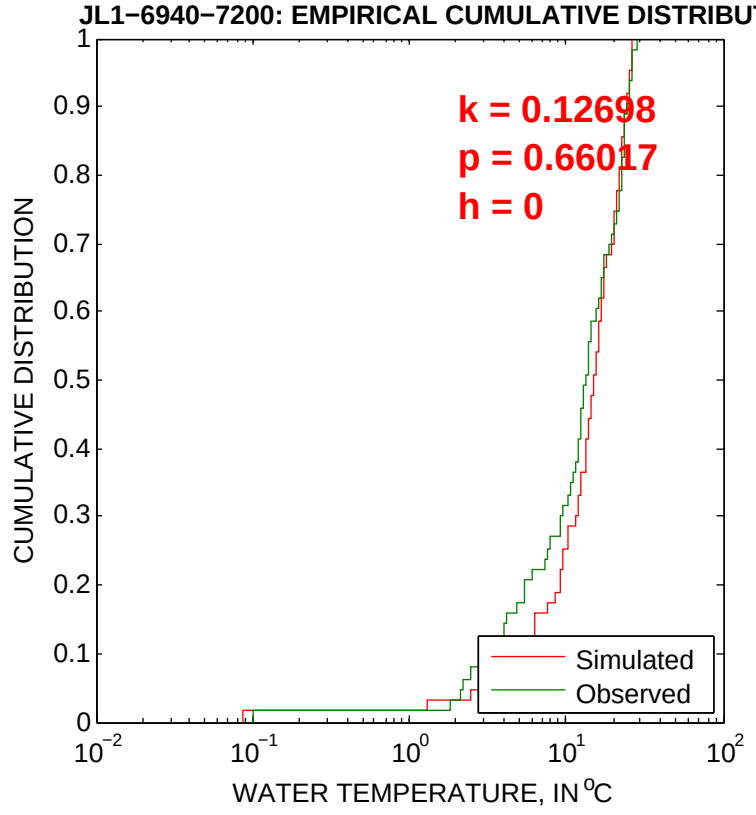












DATA SELECTION

scenario	file
P620171001WQ	WTMP.calib

plot: WTMP - water tempera...

Dates: 1/1/1985 – 12/31/201

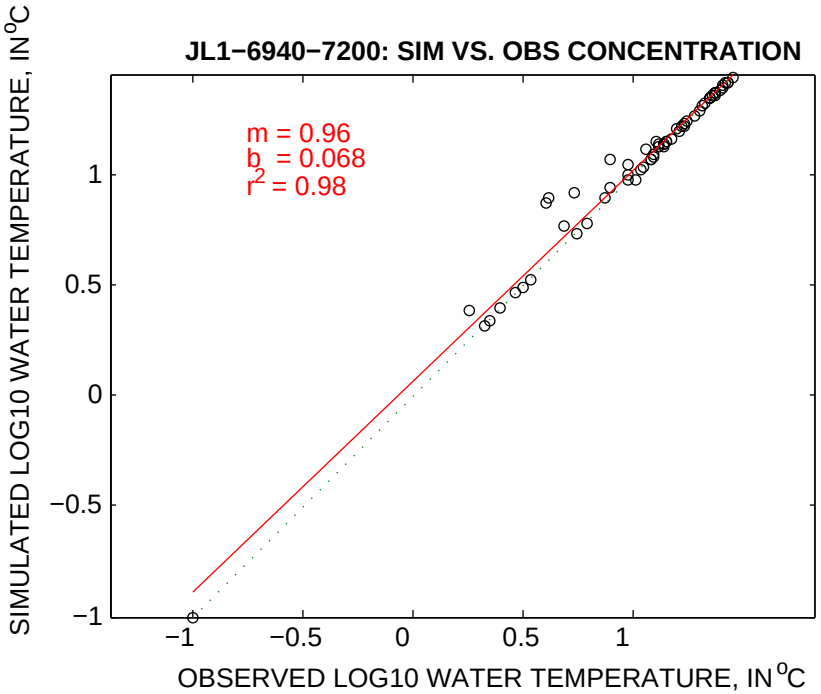
Drive	Directory	Observed
N/A	model	OBS20161101

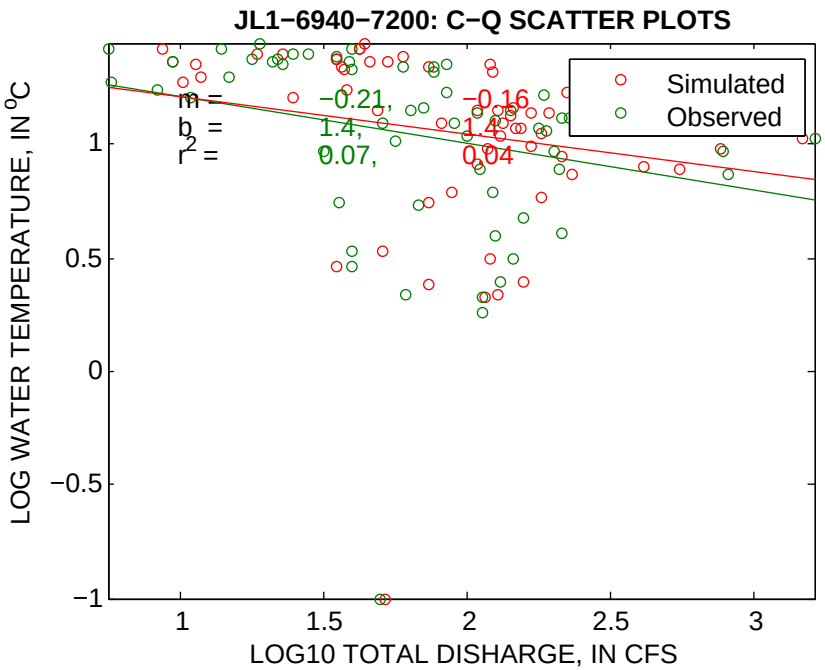
STATISTICS

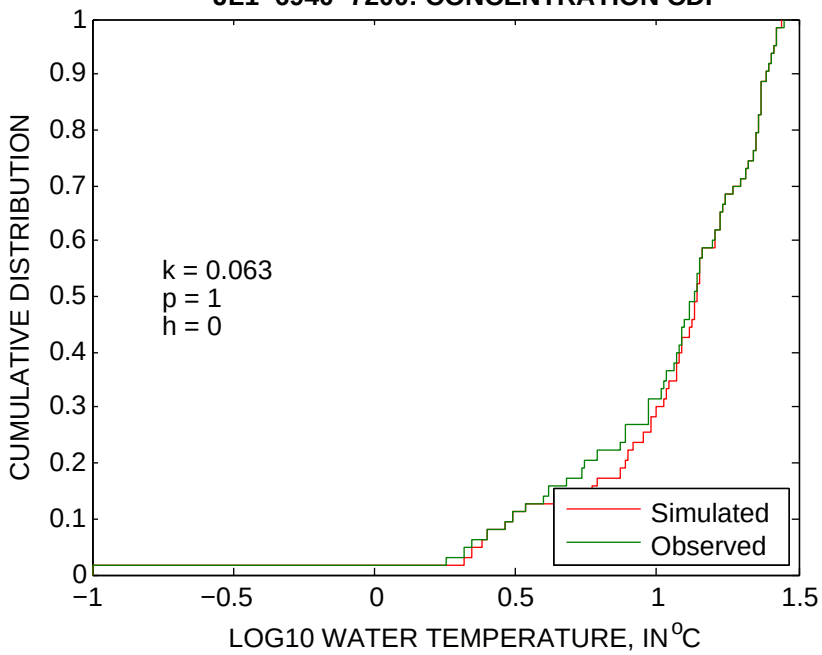
	n	observe	simulate
		63	63
min		0.1	0.08556
		-1	-1.06773
mean		13.9841	14.9792
		1.02935	1.0865
media		13.6	15.157
		1.13354	1.18061
max		28.1	26.265
		1.44871	1.41938
varian		60.806	47.9548
		0.167526	0.145731
JB		0.100522	0.216609
		0.001	0.001
		ra	log
%		7.11602	5.55151
err.va		6.80092	0.0204519
rel.std.err		0.111846	0.122082
mod.eff		0.888154	0.877918

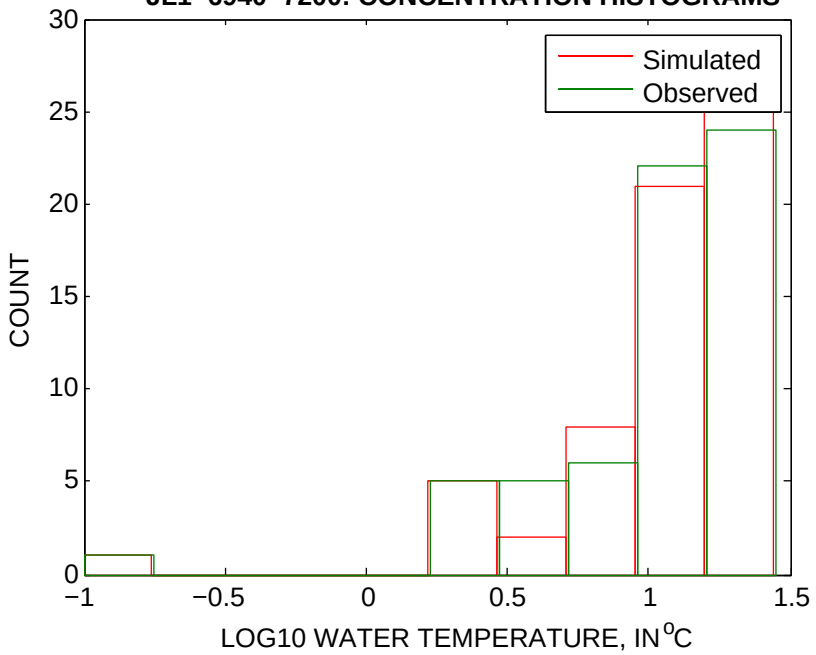
VERSION 2.1

ALL DATA
LOG10

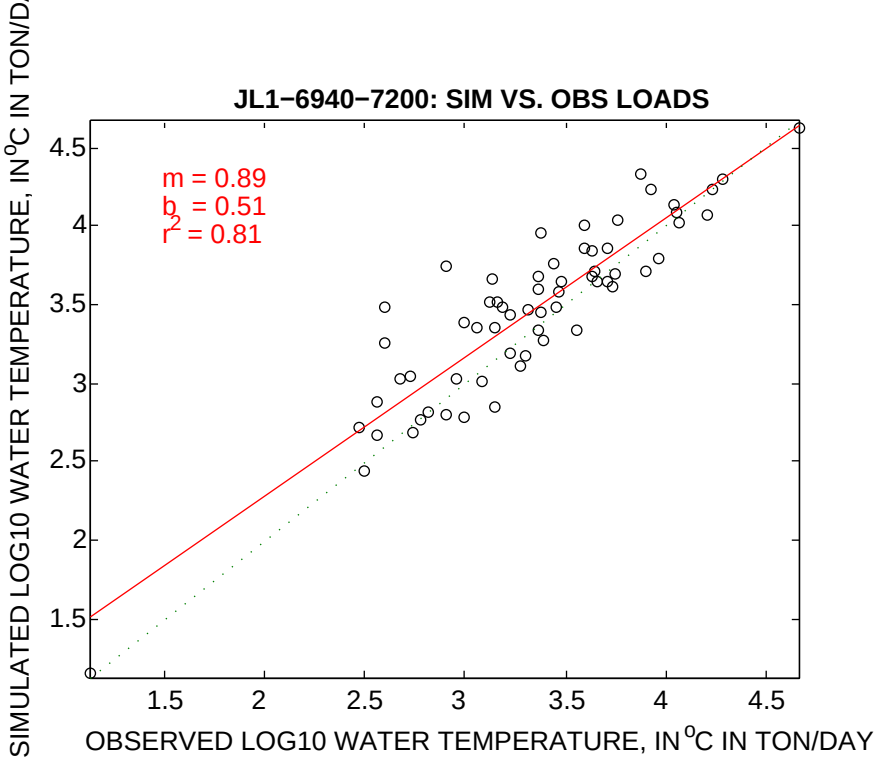


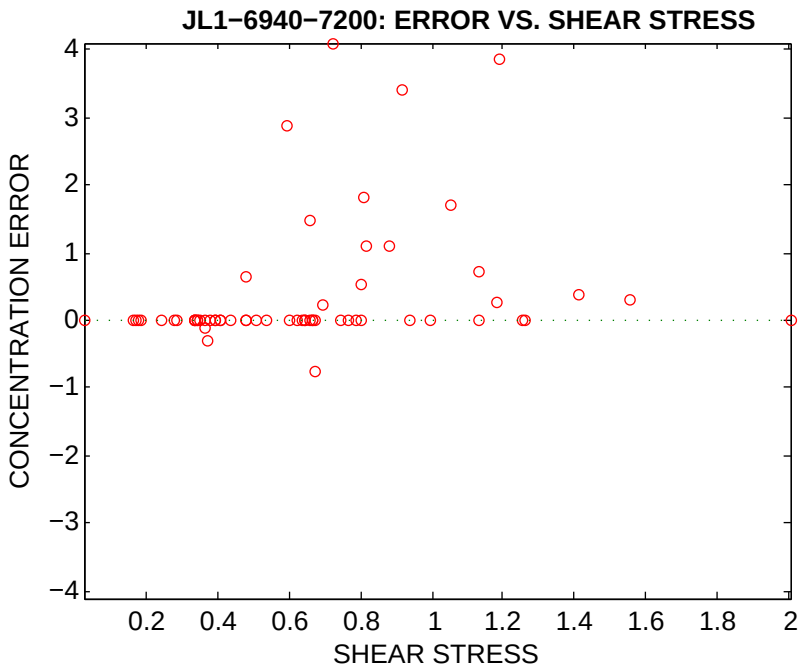


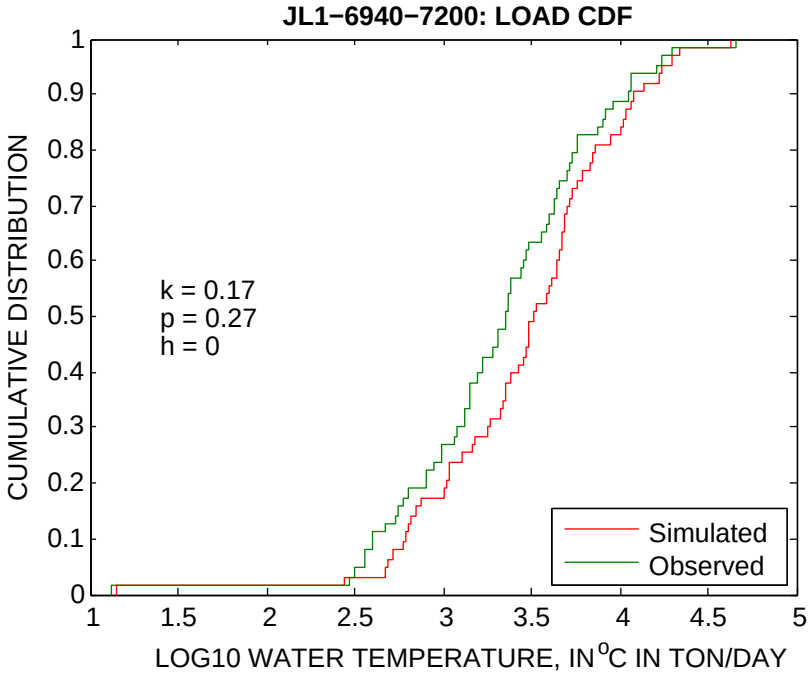


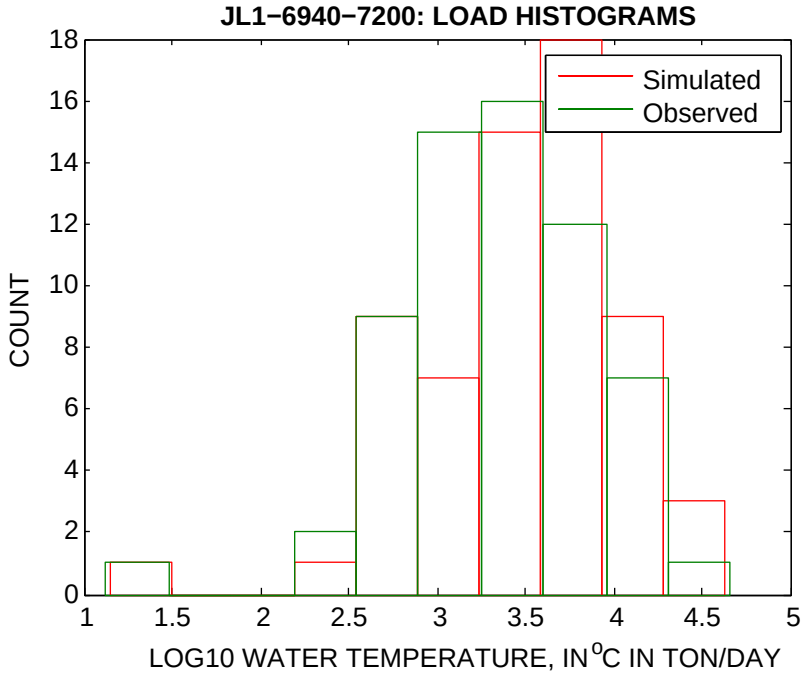


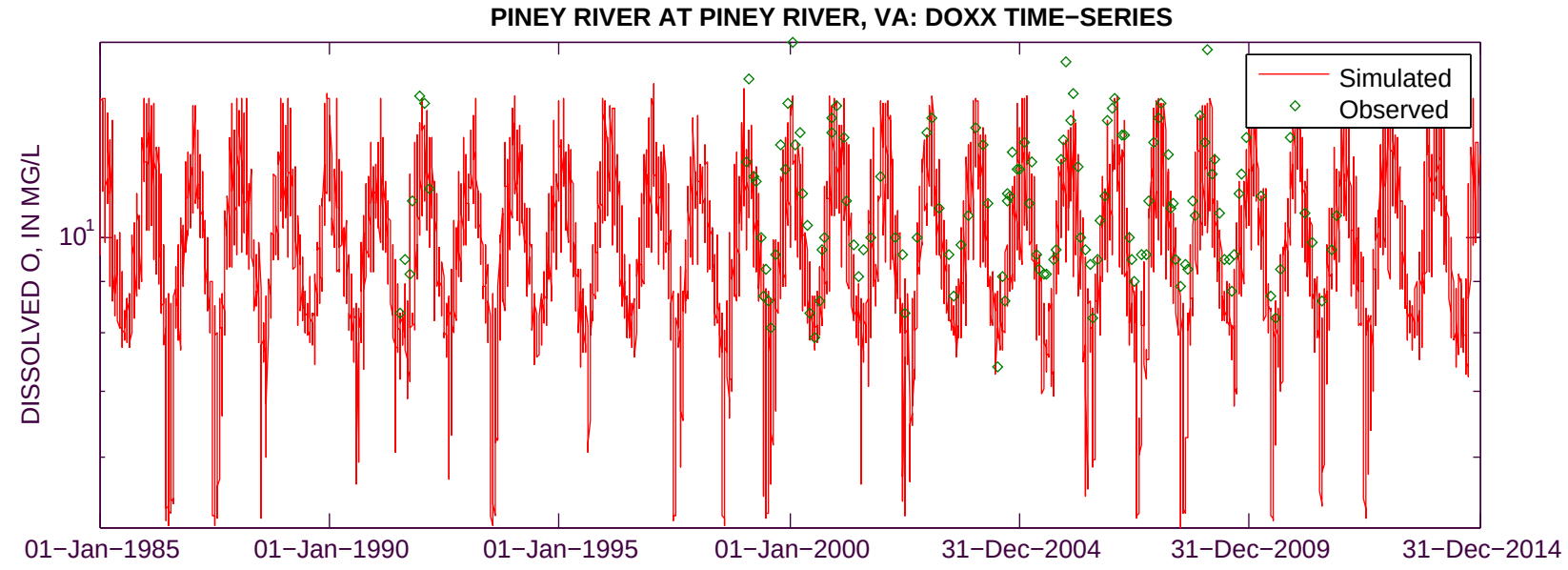
LOAD DATA
LOG10

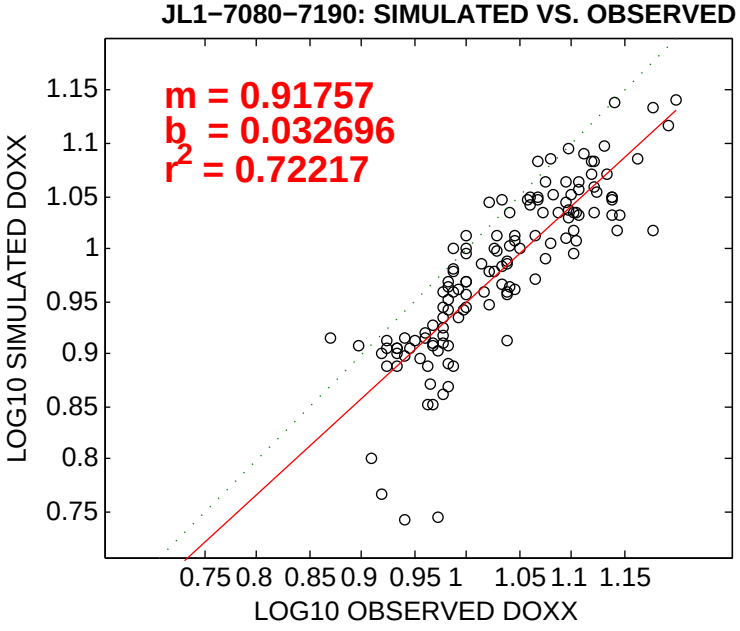


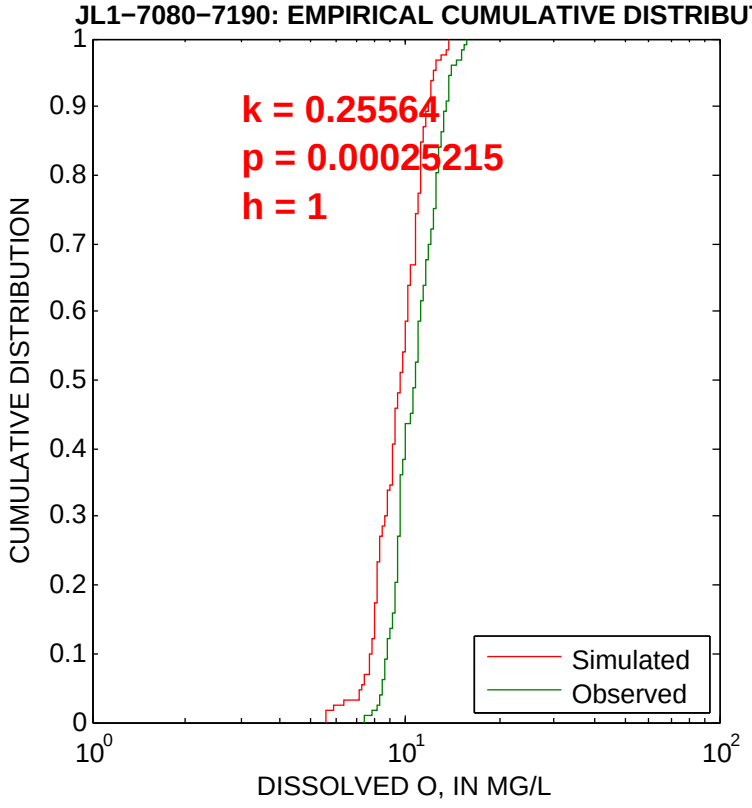












DATA SELECTION

scenario	file
P620171001WQ	DOXX.calib

plot: DOXX - dissolved oxygen

Dates: 1/1/1985 – 12/31/201

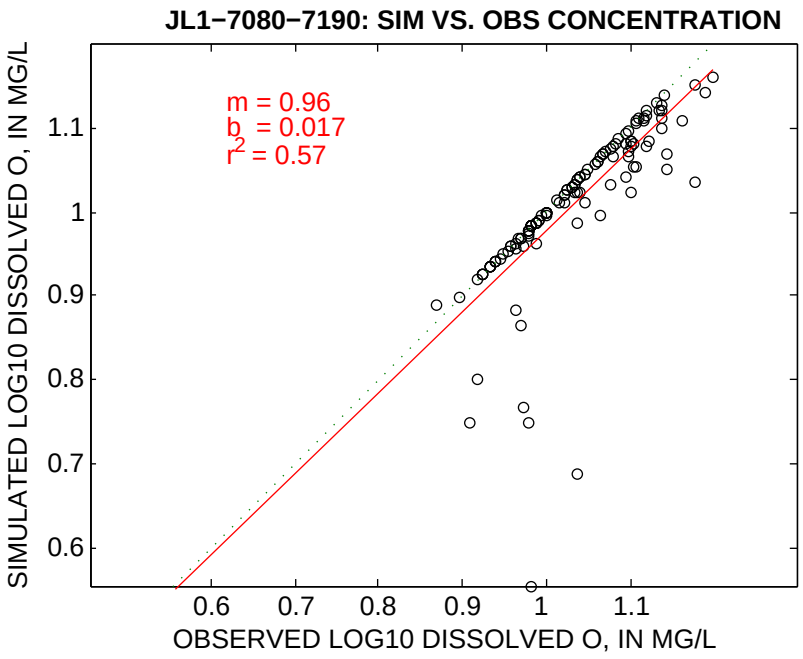
Drive	Directory	Observed
N/A	model	OBS20161101

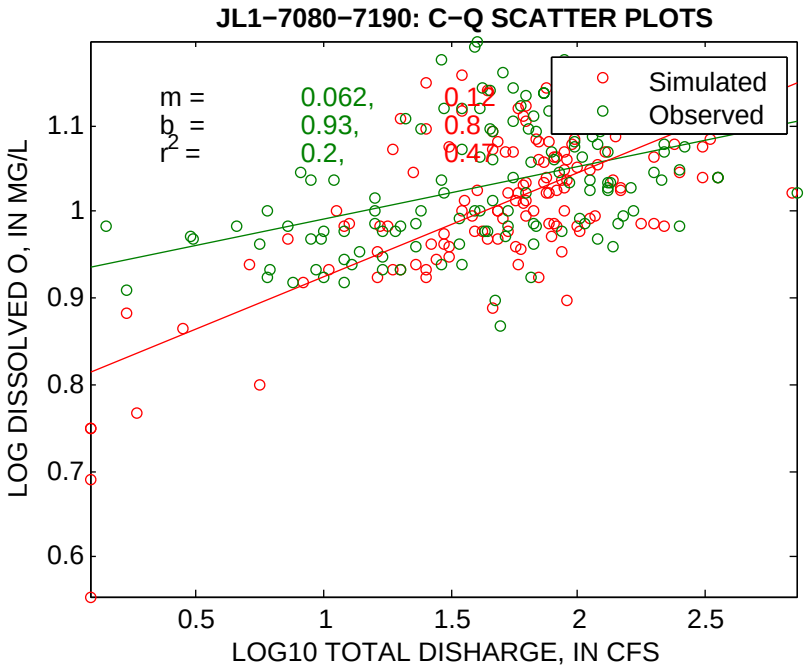
STATISTICS

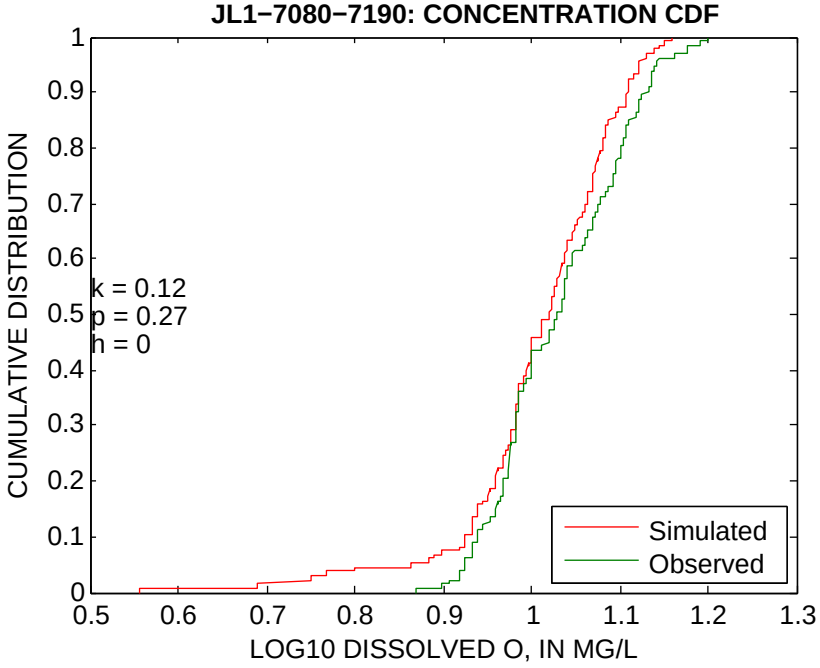
	n	observe	simulate
		133	133
min		7.4	5.5397
		0.869232	0.743486
mean		10.9171	9.69298
		1.03224	0.979843
media		10.7	9.6619
		1.02938	0.985063
max		15.8	13.854
		1.19866	1.14158
varian		3.31633	2.77777
		0.00509813	0.00594362
JB		0.037463	0.5
		0.087013	0.057386
		ra	log
%		-11.2126	-5.07567
err.va		2.36274	0.00445179
rel.std.err		0.712456	0.873219
mod.eff		0.287544	0.126781

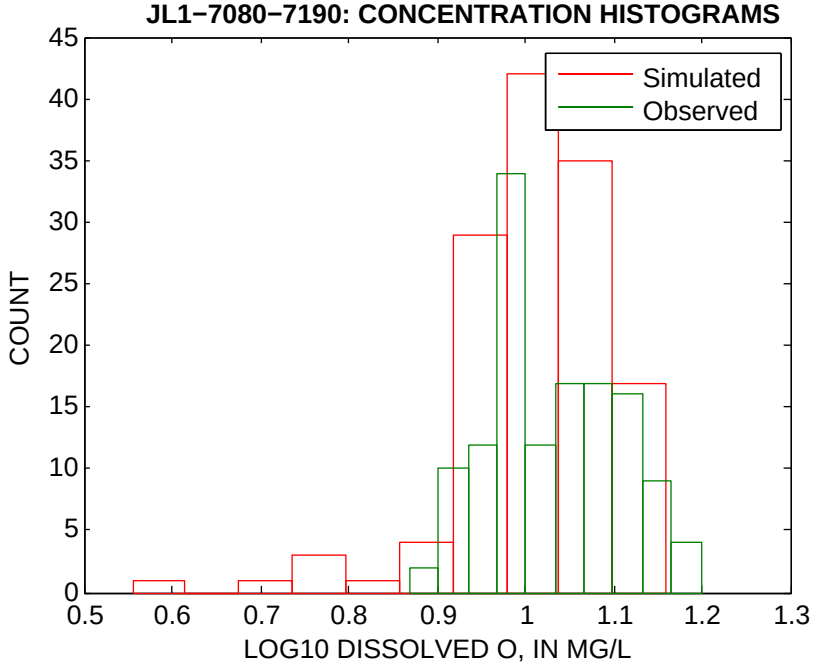
VERSION 2.1

ALL DATA
LOG10

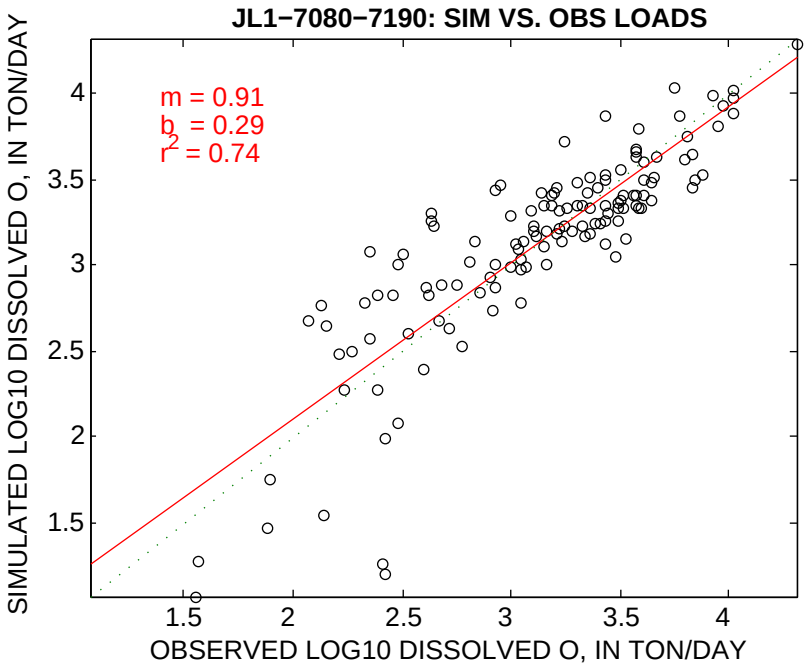


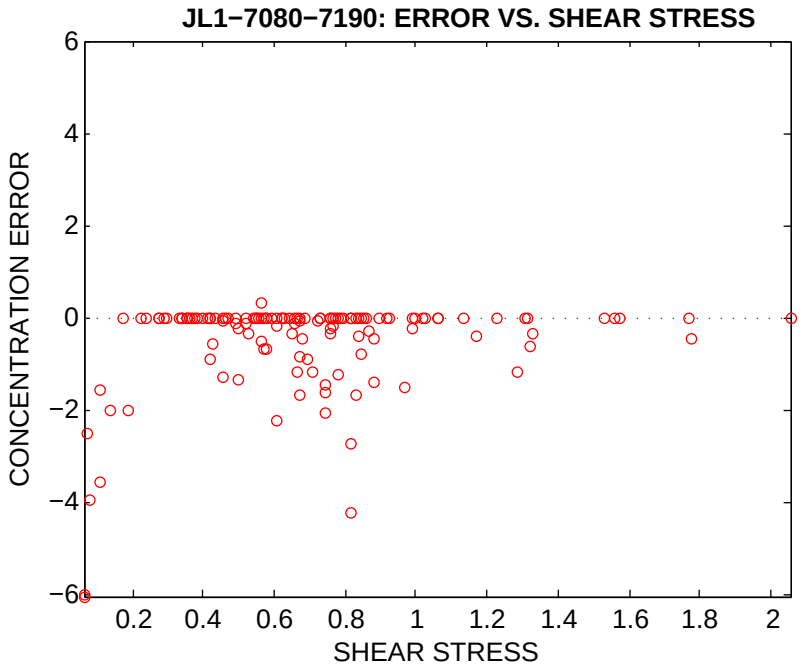


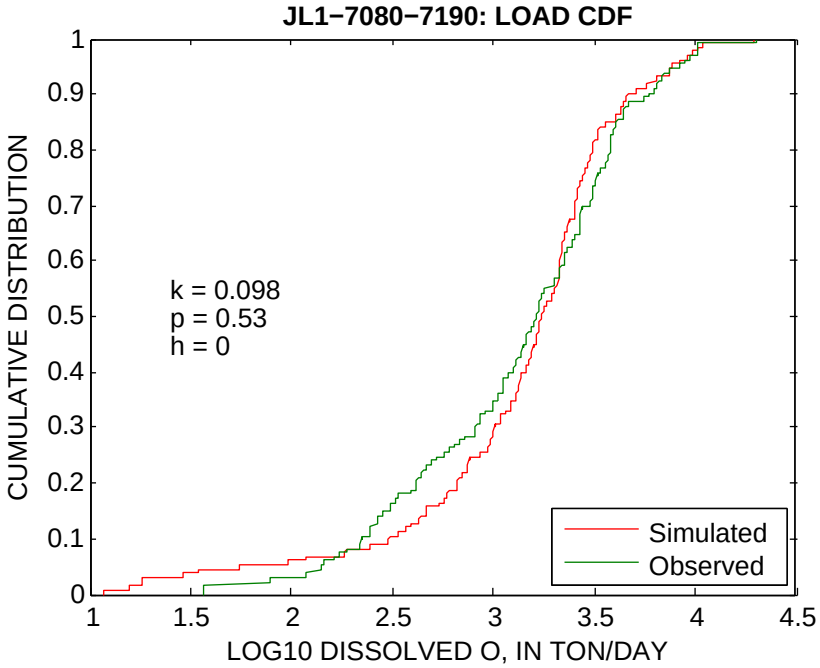


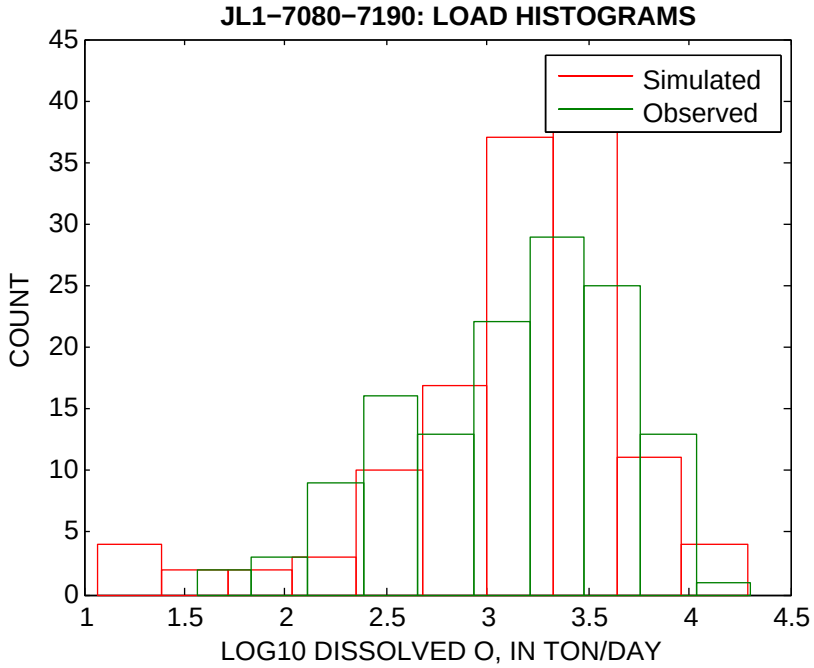


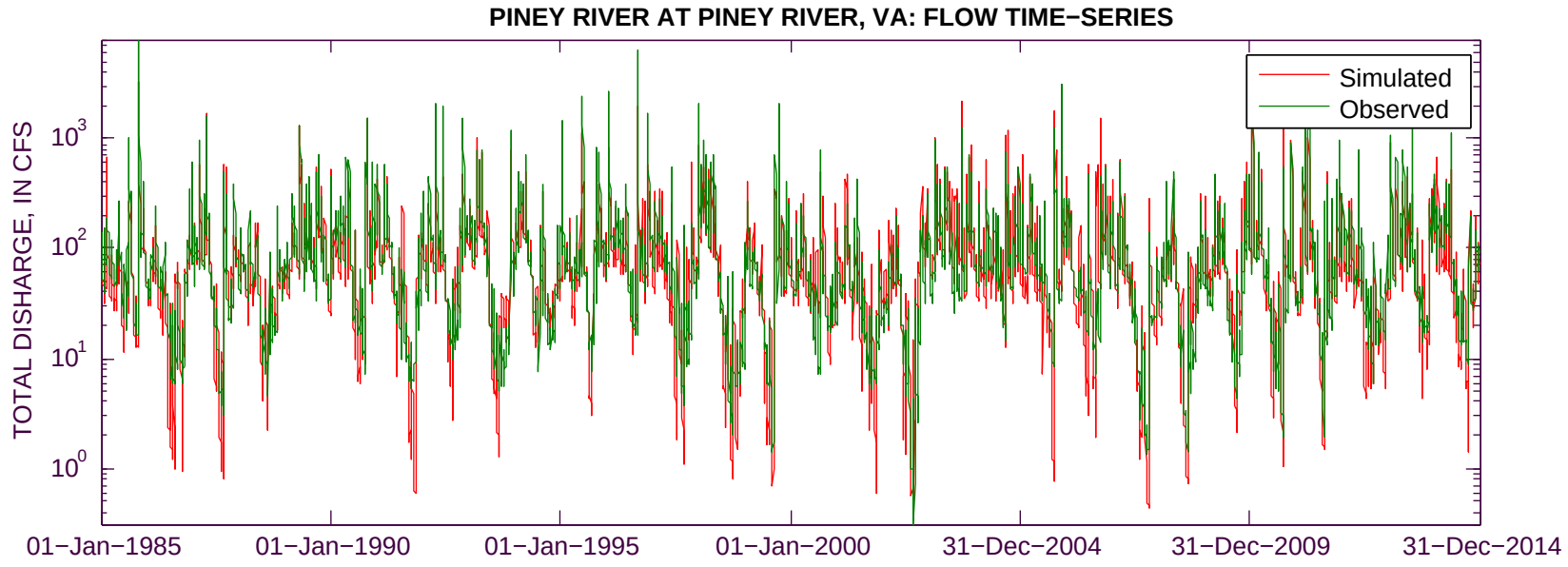
LOAD DATA
LOG10

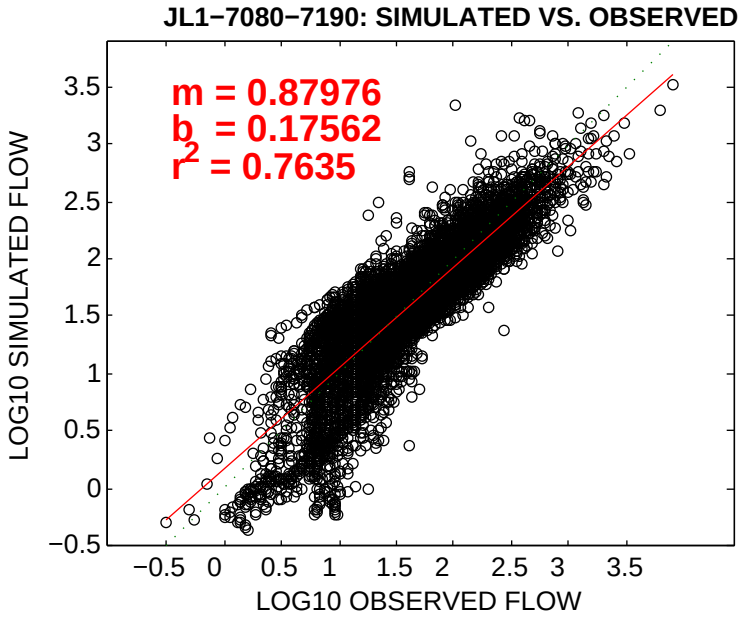


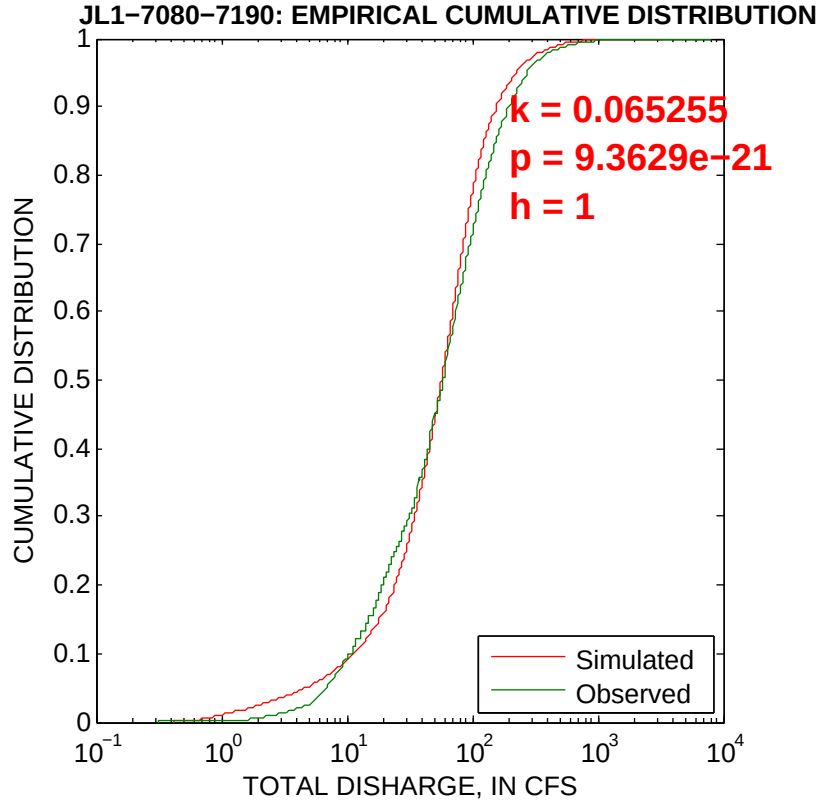












DATA SELECTION

scenario	file
P620171001WQ	FLOW.calib

plot: FLOW - total discharge

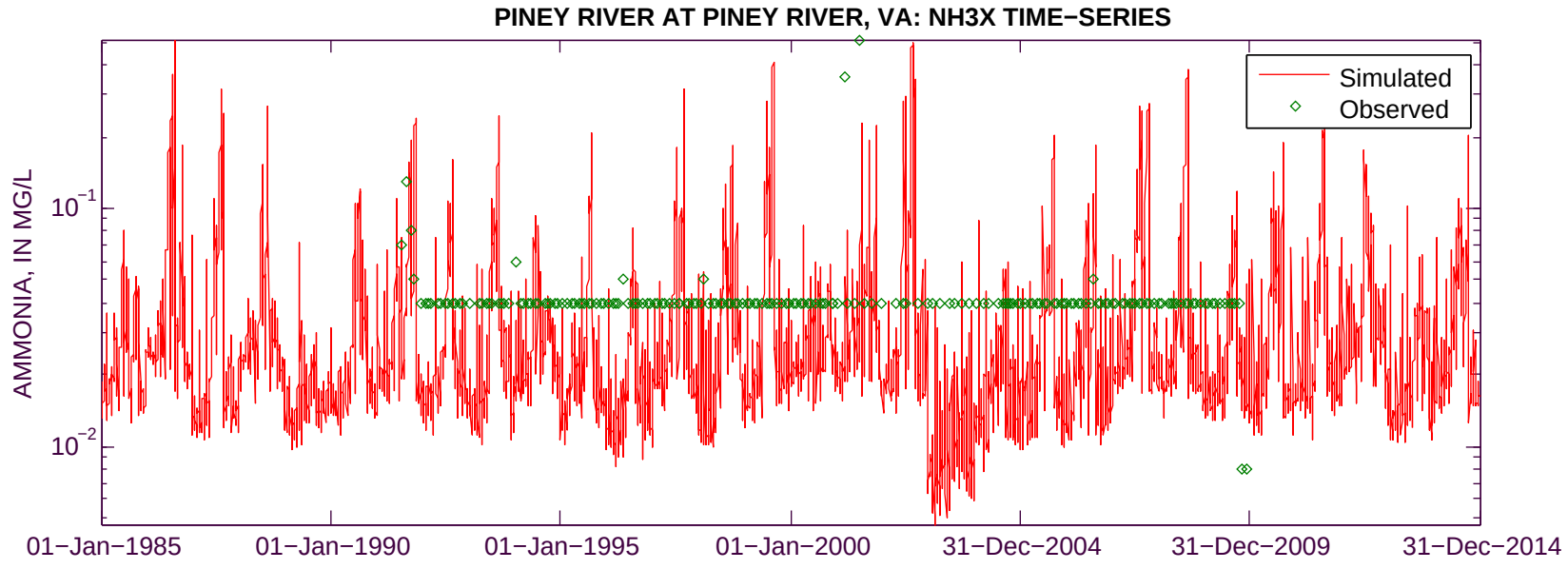
Dates: 1/1/1985 – 12/31/201

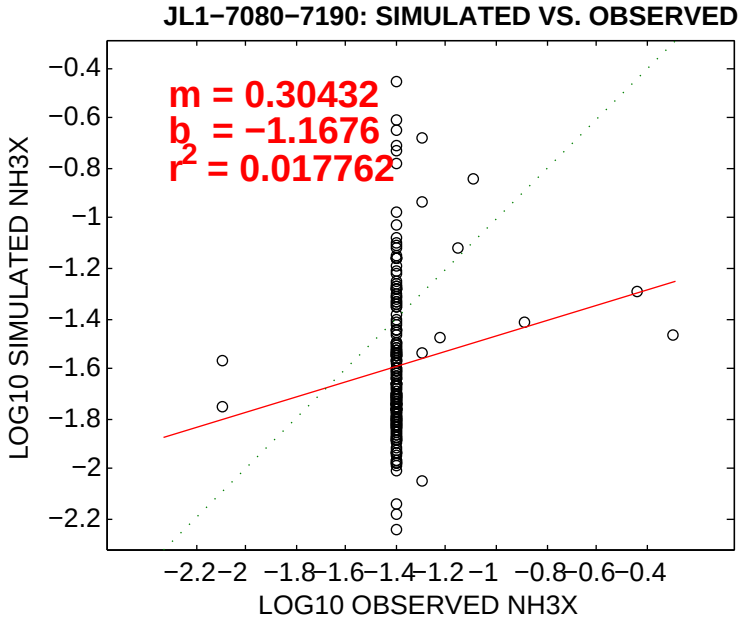
Drive	Directory	Observed
N/A	model	OBS20161101

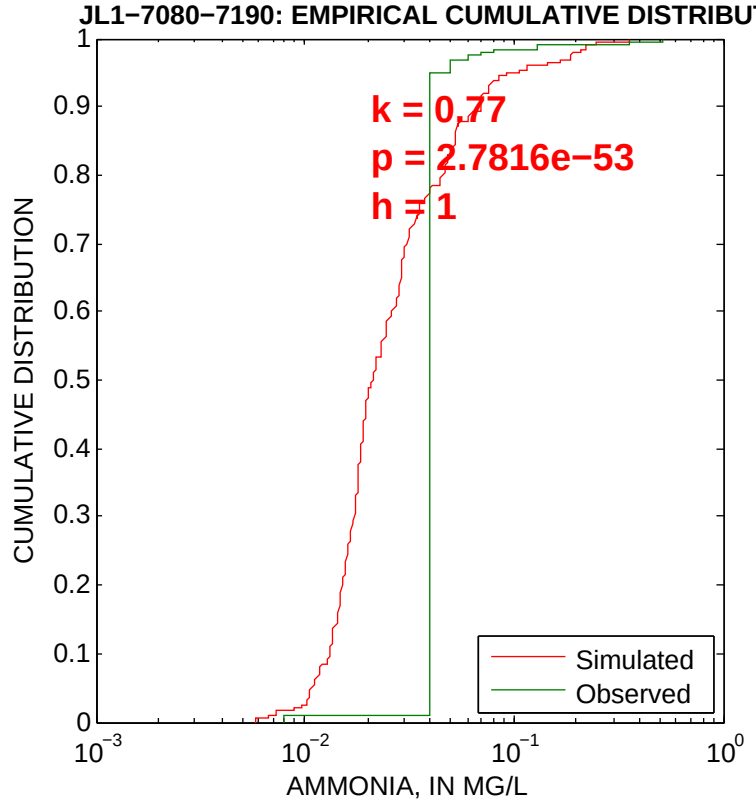
STATISTICS

	n	observe	simulate
		10957	10957
min		0.31	0.42722
		-0.508638	-0.369348
mean		94.4151	81.3105
		1.71328	1.68289
media		59	57.337
		1.77085	1.75843
max		8110	3377.3
		3.90902	3.52857
varian		29067	12286.2
		0.24525	0.248616
JB		0.001	0.001
		0.001	0.001
		ra	log
%		-13.8798	-1.77369
err.va		11958.9	0.0632682
rel.std.err		0.411423	0.257974
mod.eff		0.588577	0.742026

VERSION 2.1







DATA SELECTION

scenario	file
P620171001WQ	NH3X.calib

plot: NH3X - ammonia

Dates: 1/1/1985 – 12/31/201

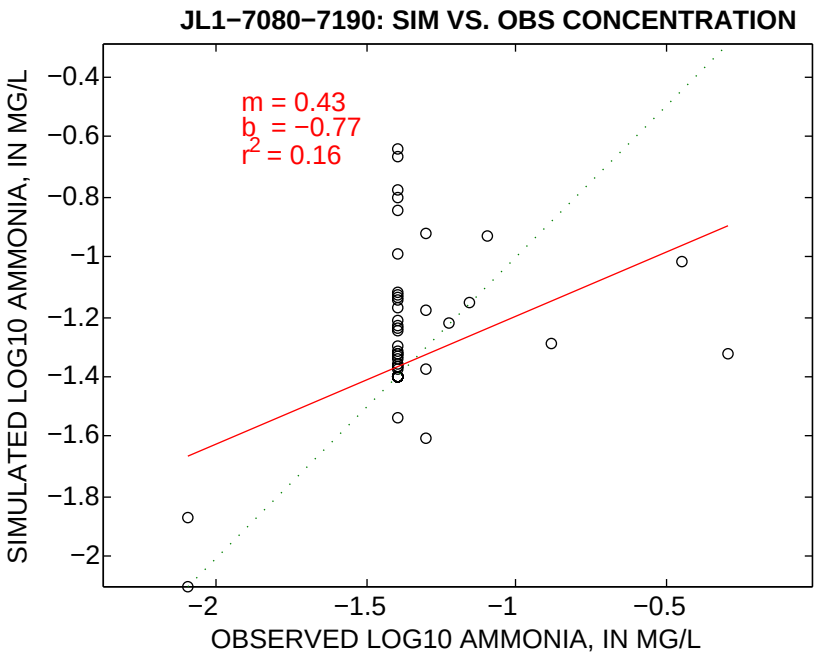
Drive	Directory	Observed
N/A	model	OBS20161101

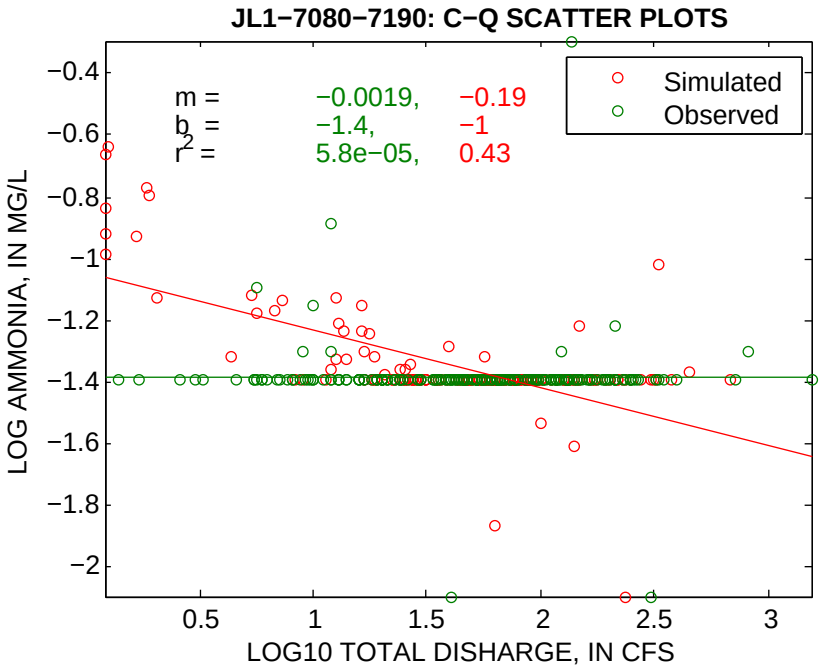
STATISTICS

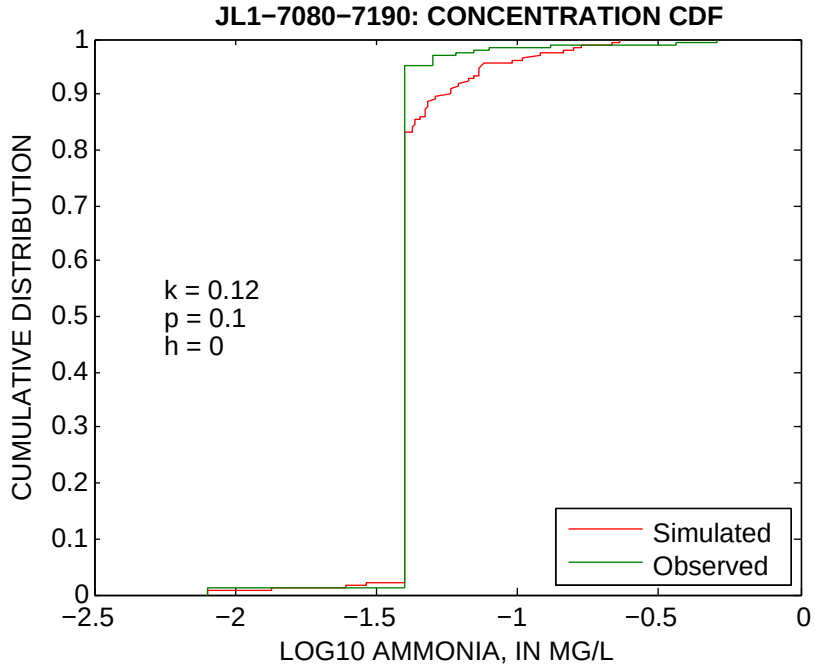
	n	200	200
		observe	simulate
min		0.008	0.0057512
		-2.09691	-2.24024
mean		0.04473	0.0355762
		-1.38653	-1.58956
media		0.04	0.021148
		-1.39794	-1.67473
max		0.51	0.35259
		-0.29243	-0.45273
varian		0.00166972	0.00183949
		0.0179101	0.0933797
JB		0.001	0.001
		0.001	0.001
		ra	log
%		-20.4645	14.6432
err.va		0.00345945	0.141818
rel.std.err		2.07188	7.91834
mod.eff		-1.07188	-6.91834

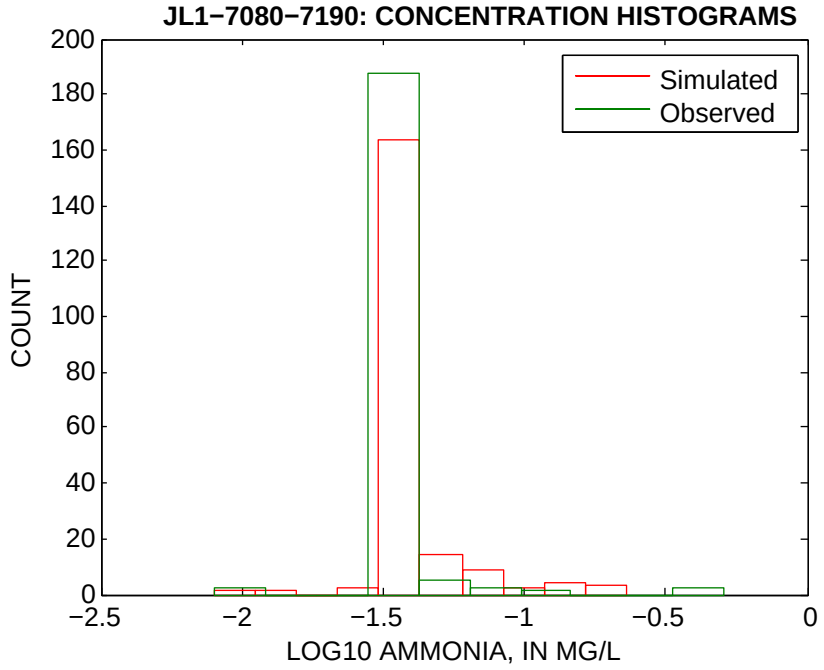
VERSION

ALL DATA
LOG10

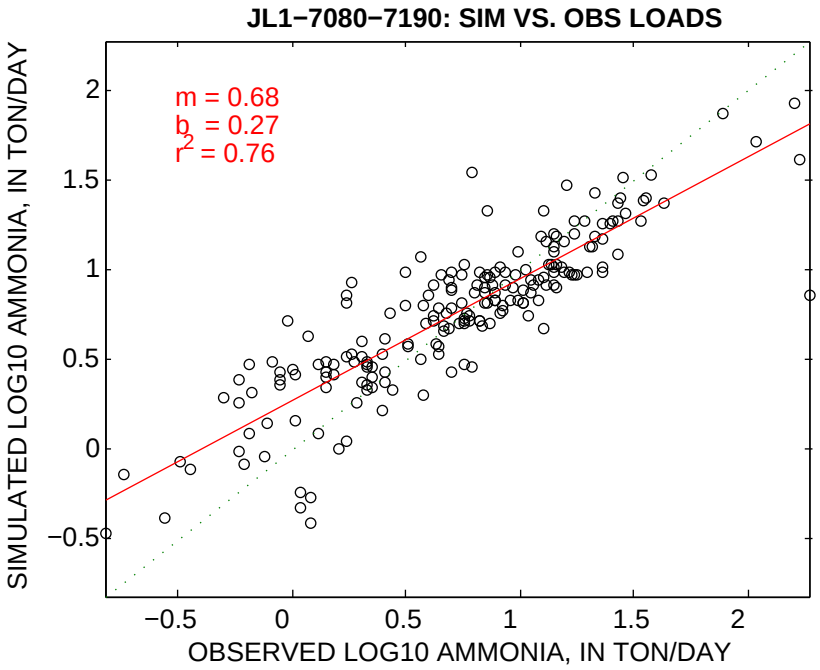




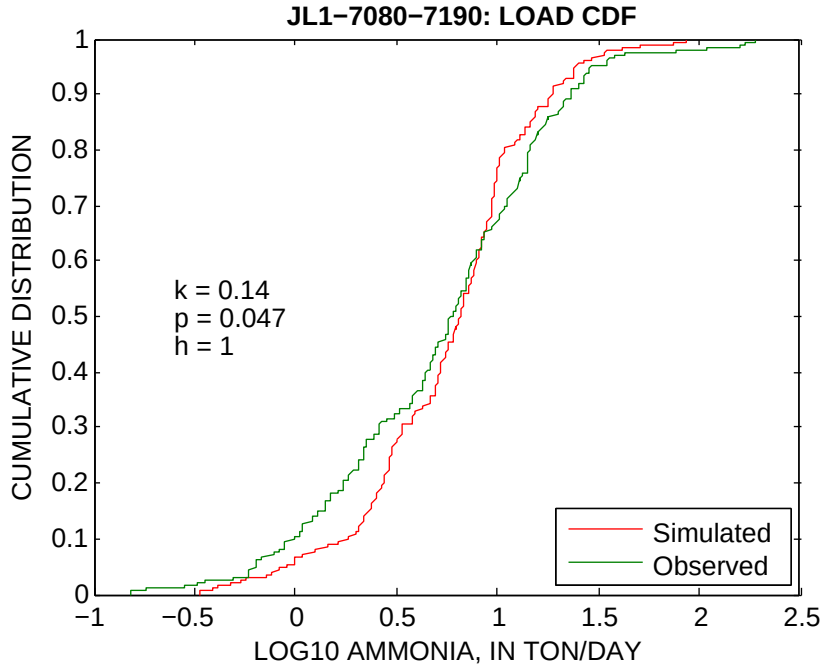


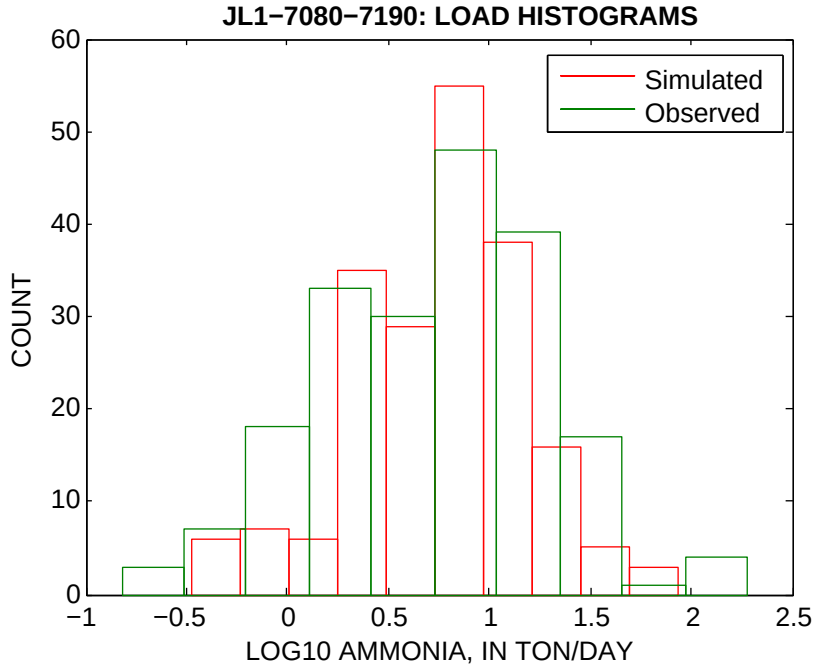


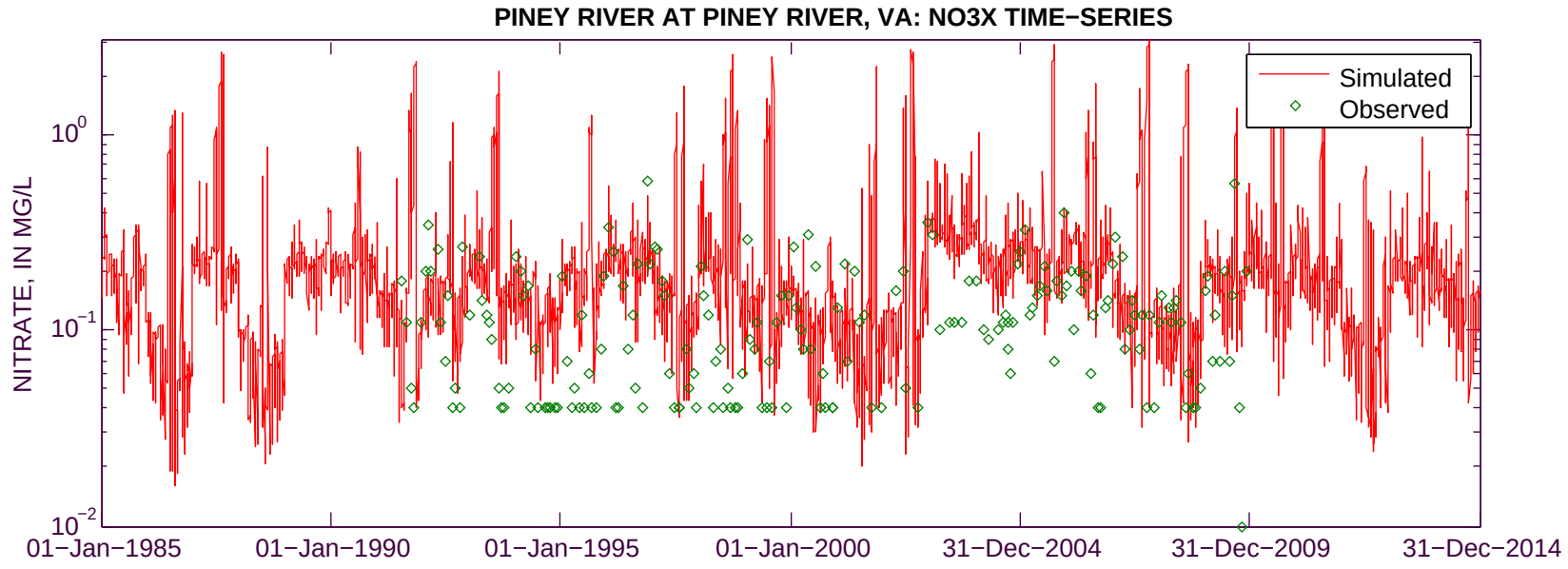
LOAD DATA
LOG10

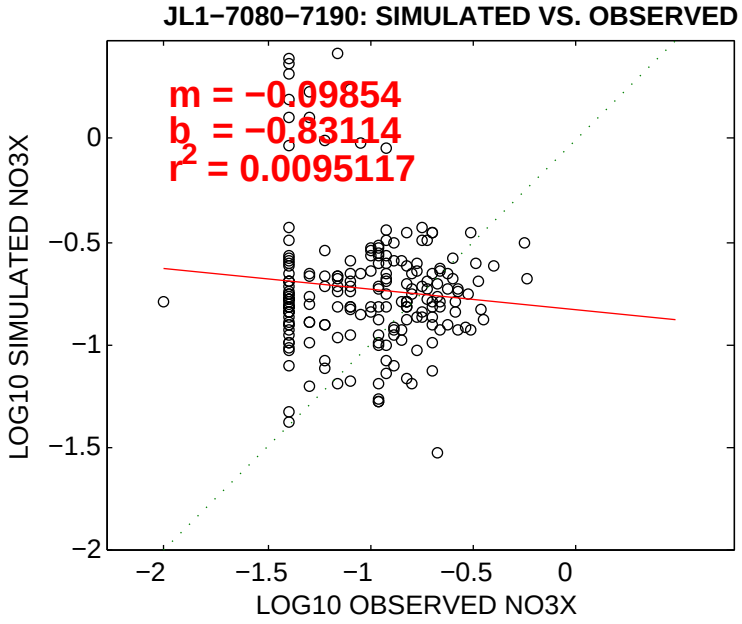


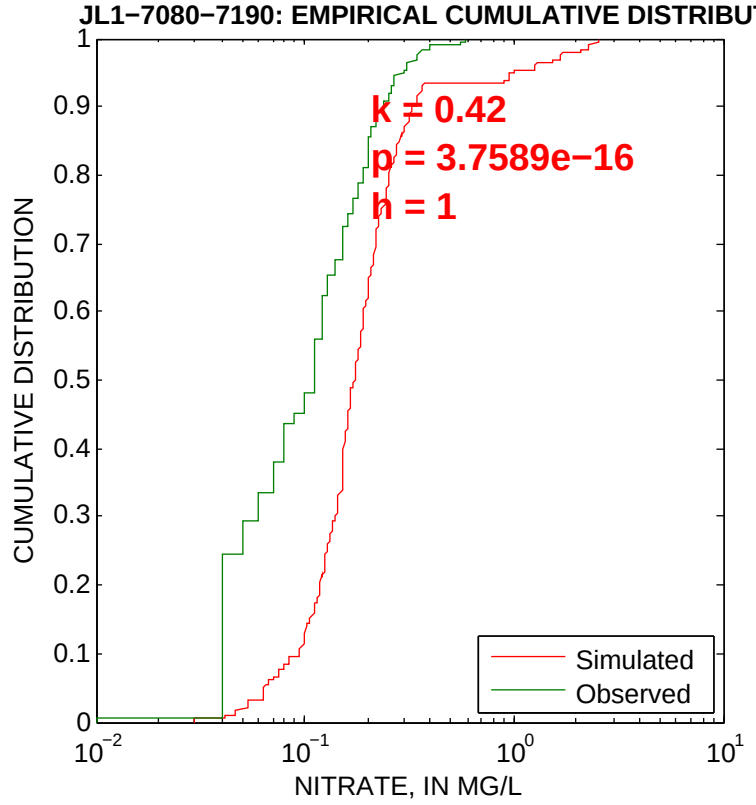












DATA SELECTION

scenario: P620171001WQ | file: NO3X.calib

plot: NO3X - nitrate

Dates: 1/1/1985 – 12/31/201

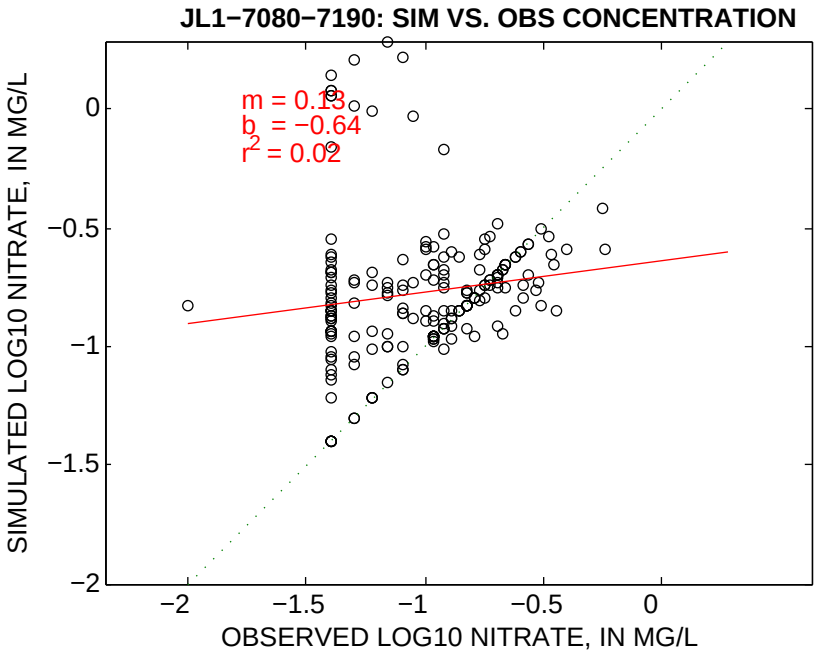
Drive | Directory | Observed: N/A | model | OBS20161101

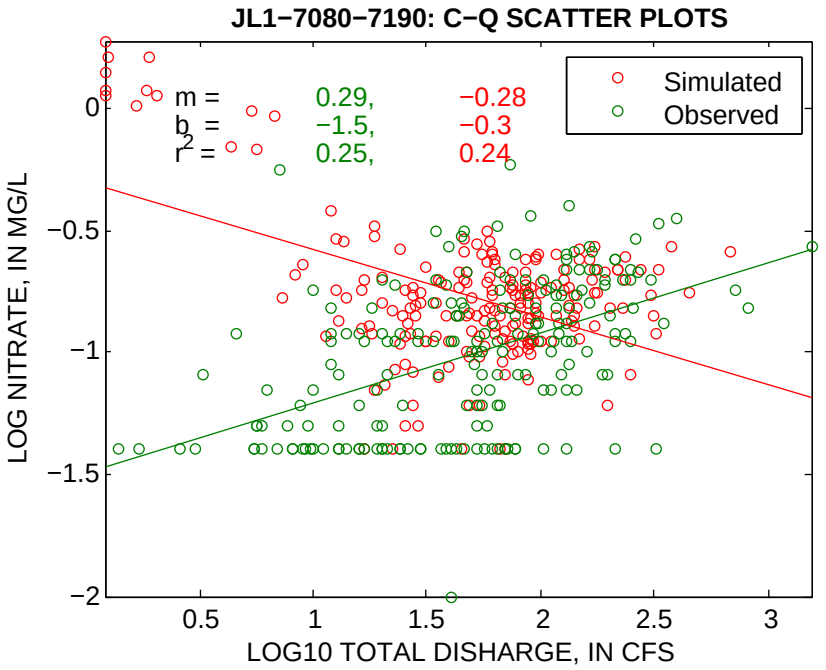
STATISTICS

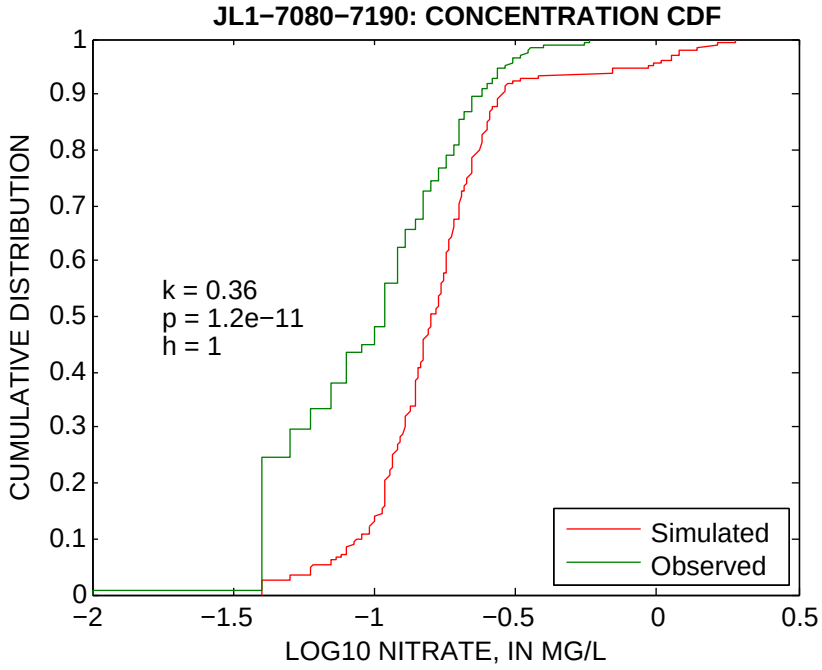
	n	observe	simulate
		200	200
min		0.01	0.029911
		-2	-1.52417
mean		0.1232	0.268809
		-1.01499	-0.731118
media		0.11	0.172915
		-0.958607	-0.762168
max		0.58	2.5773
		-0.236572	0.411165
varian		0.00825504	0.149395
		0.0941317	0.0960952
JB		0.001	0.001
		0.1433	0.001
		ra	log
%		118.189	-27.968
err.va		0.189665	0.289767
rel.std.err		22.9757	3.07832
mod.eff		-21.9757	-2.07832

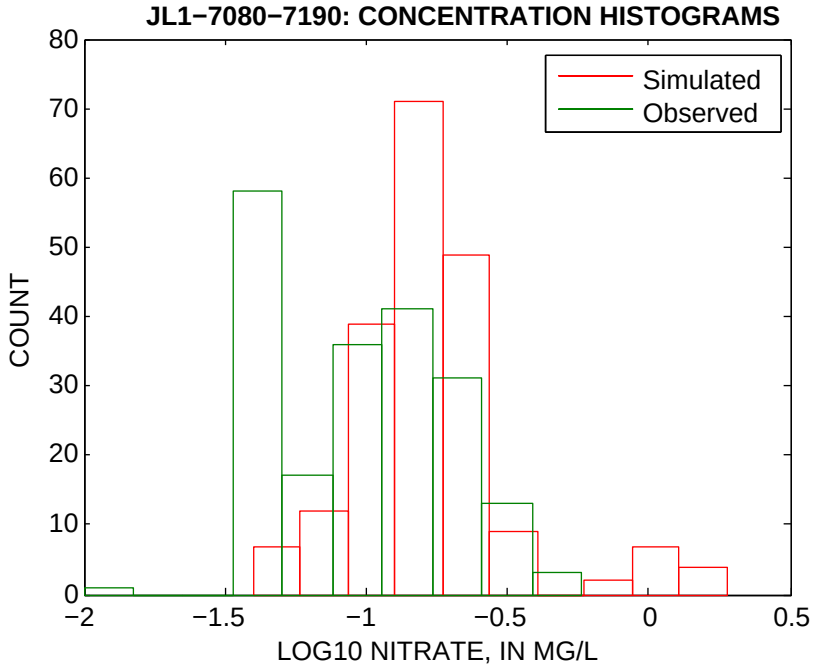
VERSION

ALL DATA
LOG10

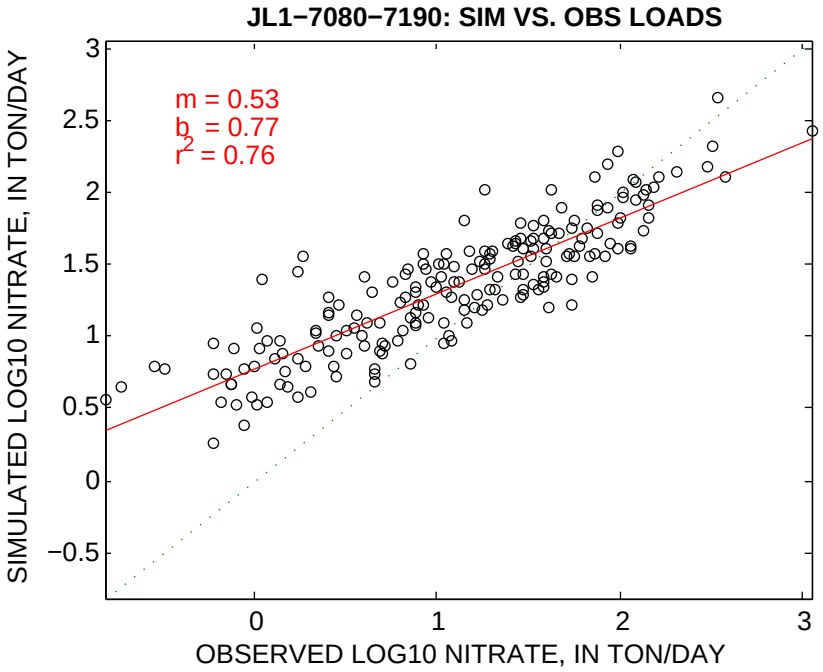


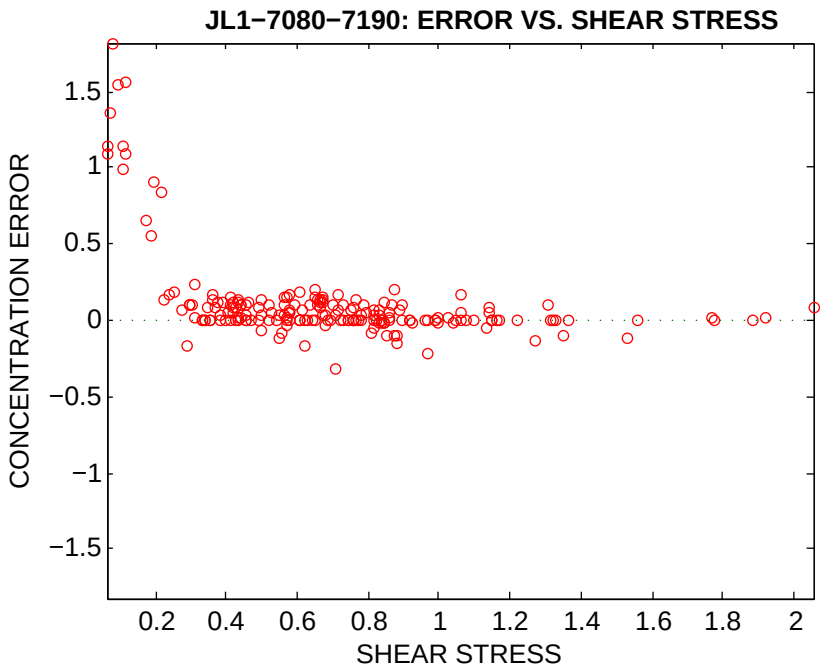


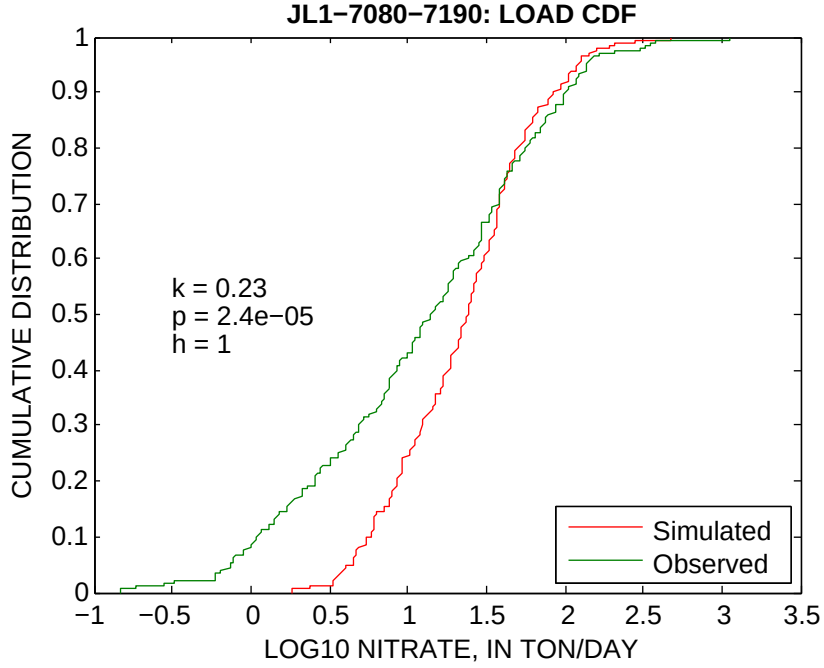


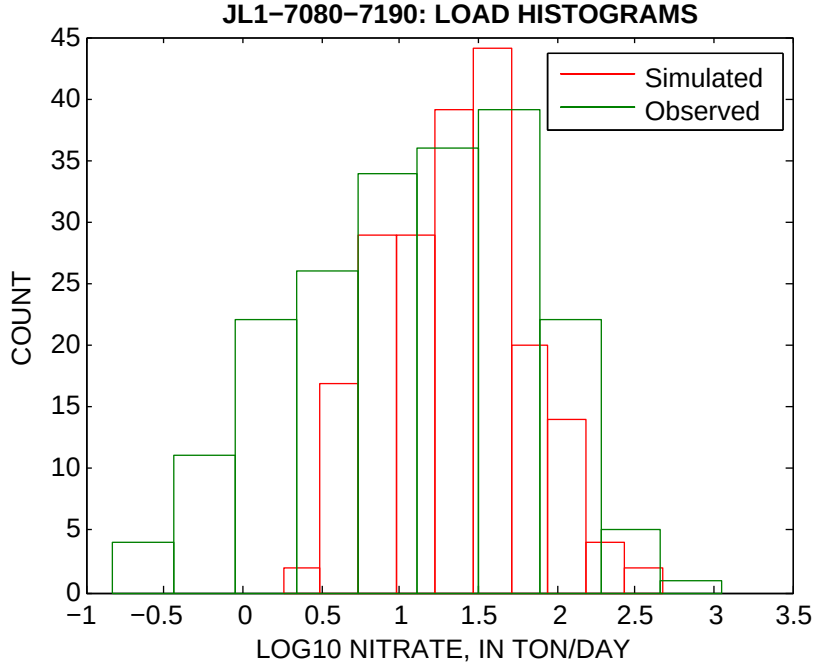


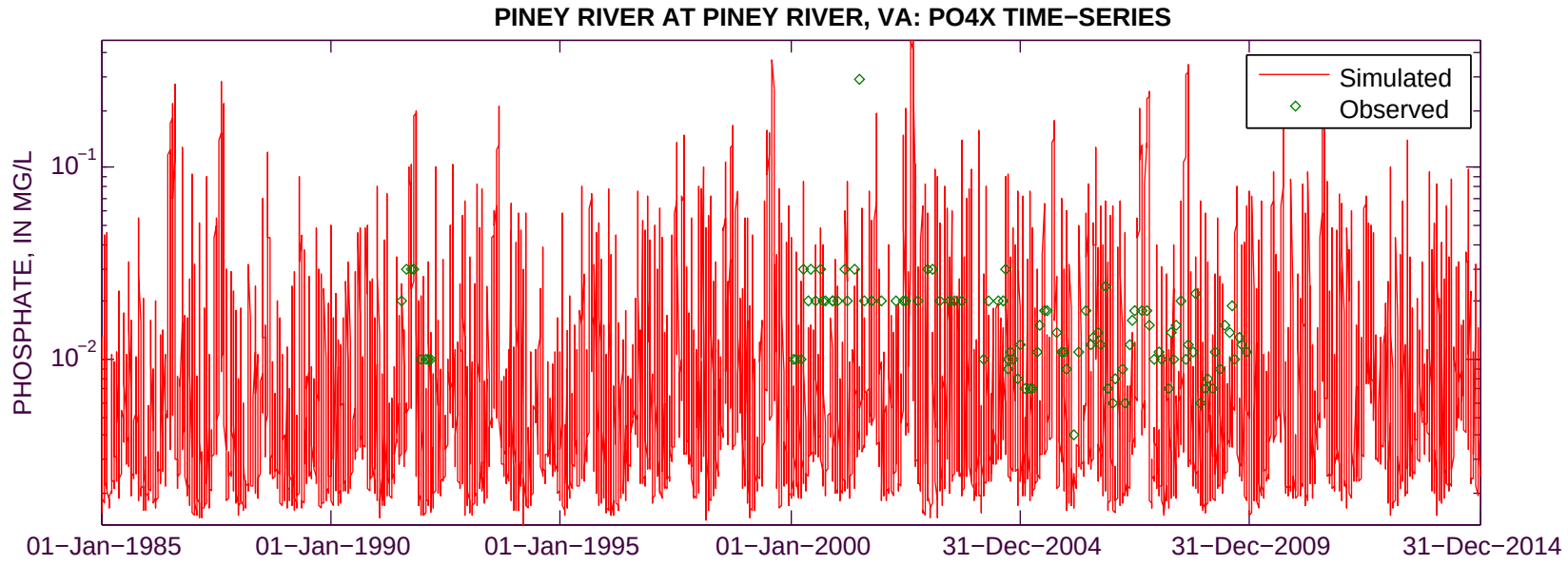
LOAD DATA
LOG10

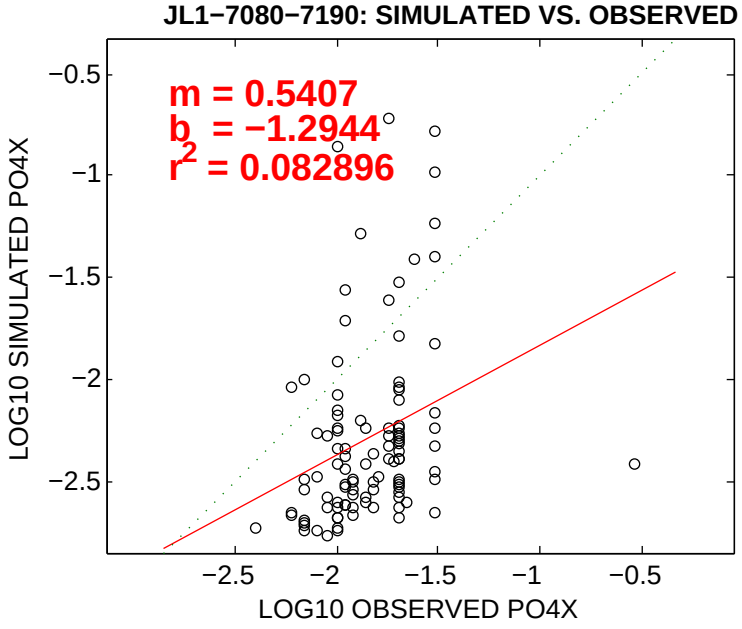


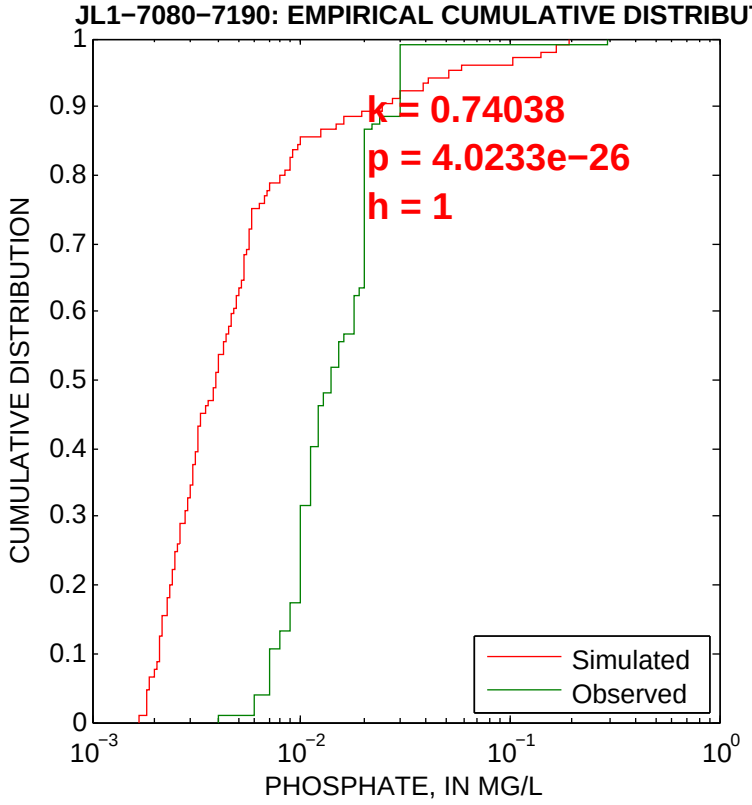












DATA SELECTION

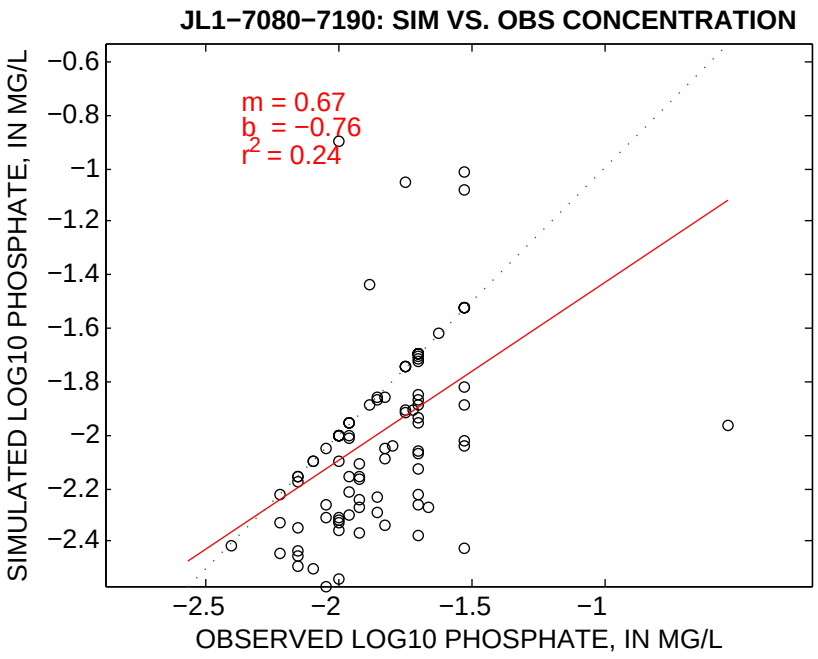
scenario: P620171001WQ
file: PO4X.calib
plot: PO4X - phosphate
Dates: 1/1/1985 12/31/201
Drive: N/A
Directory: model
Observed: OBS20161101

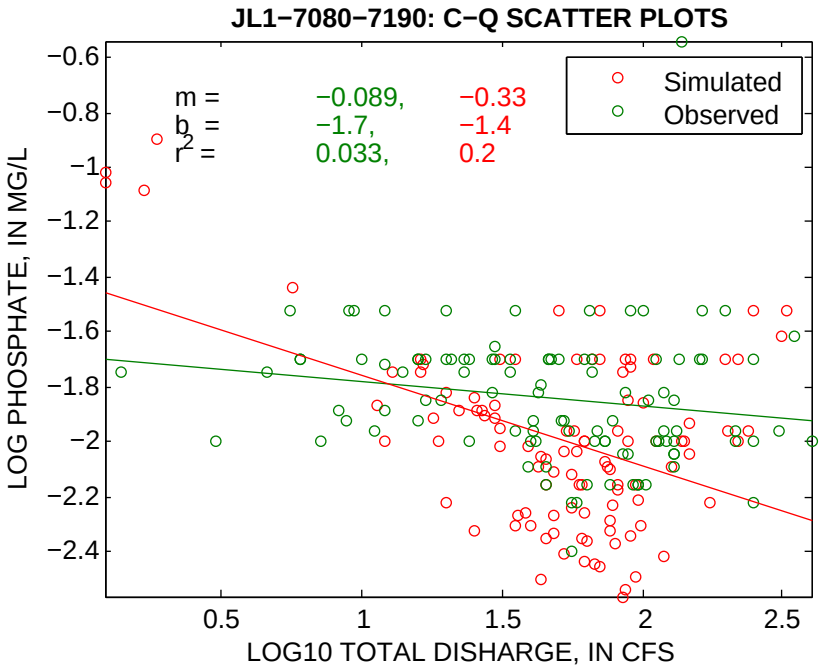
STATISTICS

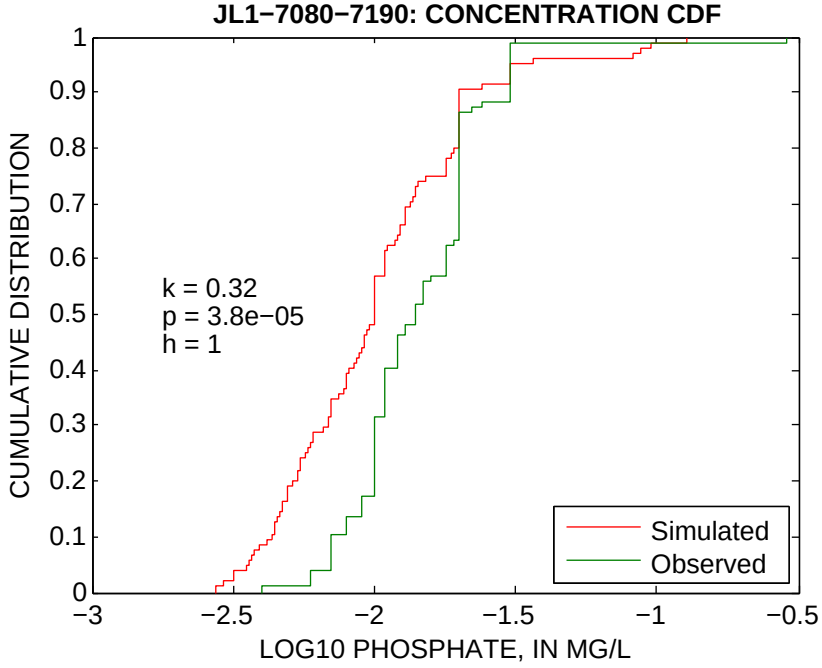
		observe	simulate
n		104	104
min		0.004	0.0017026
		-2.39794	-2.76889
mean		0.0181058	0.0124223
		-1.84216	-2.29047
media		0.014	0.0038877
		-1.85387	-2.41031
max		0.29	0.18964
		-0.537602	-0.72207
varian		0.00077267	0.00089856
		0.0562881	0.198519
JB		0.001	0.001
		0.001	0.001
		ra	log
%		-31.3902	24.3362
err.va		0.00164389	0.396872
rel.std.err		2.12752	7.05072
mod.eff		-1.12752	-6.05072

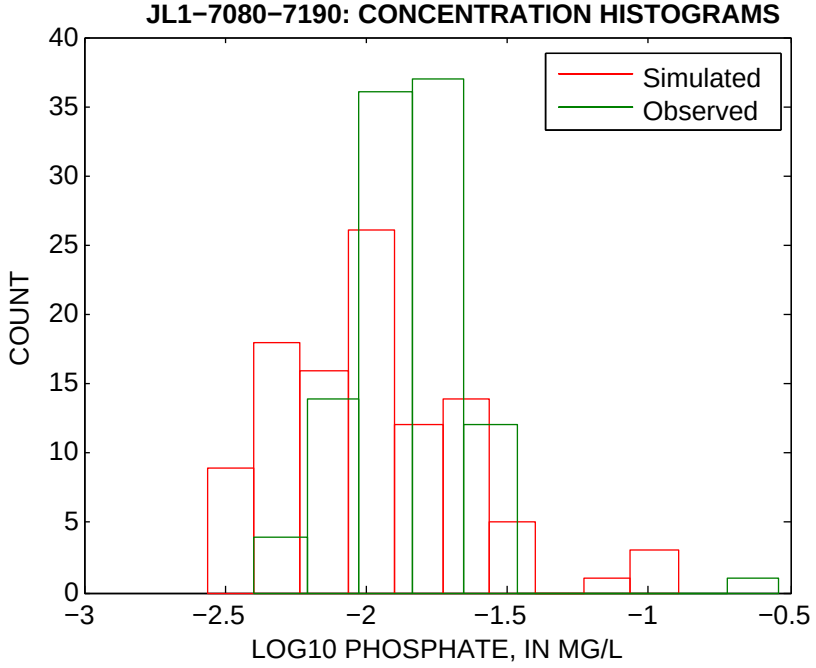
VERSION 2.1

ALL DATA
LOG10

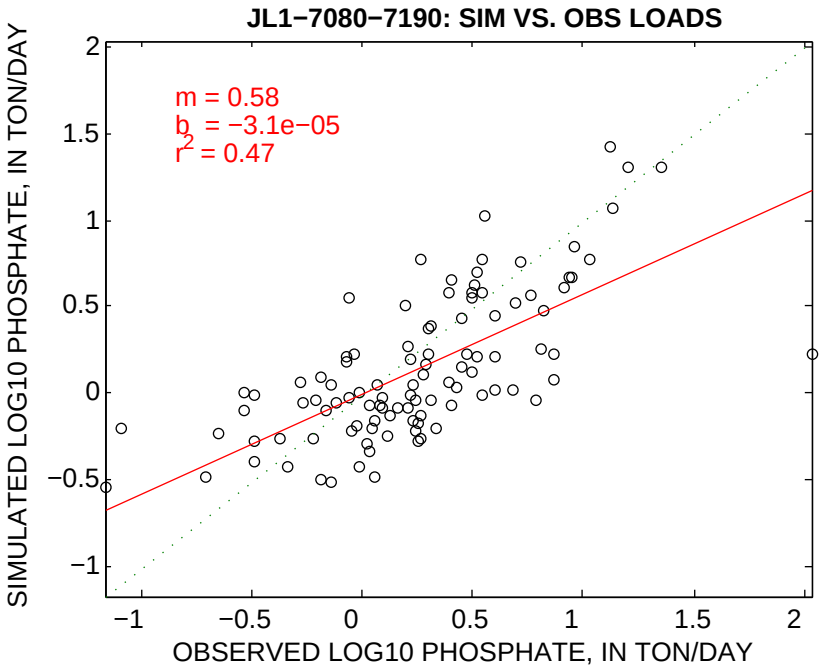


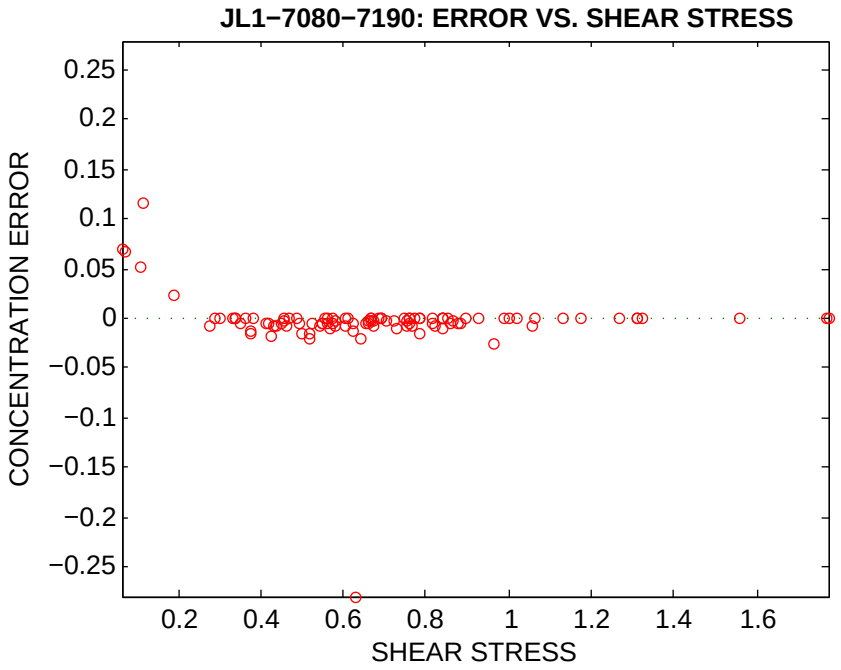


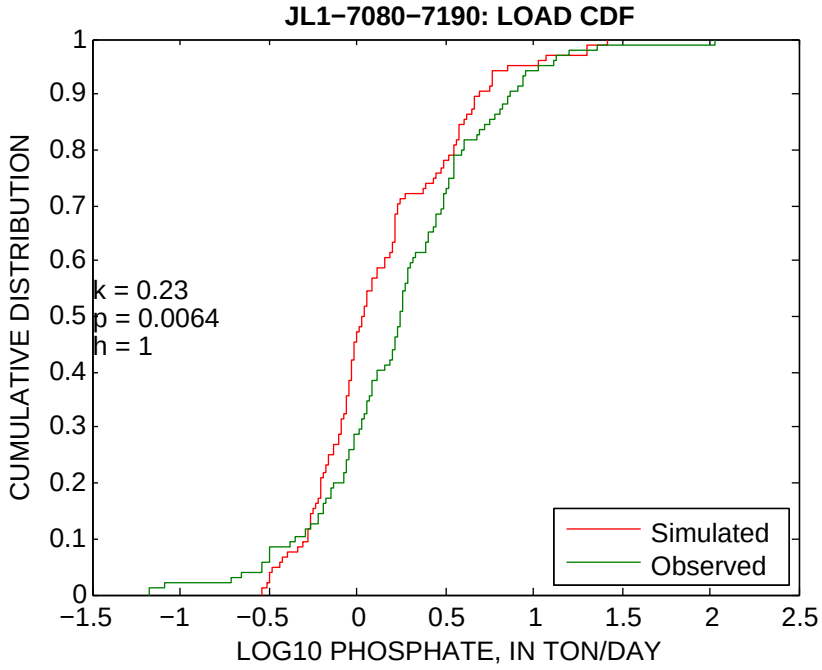


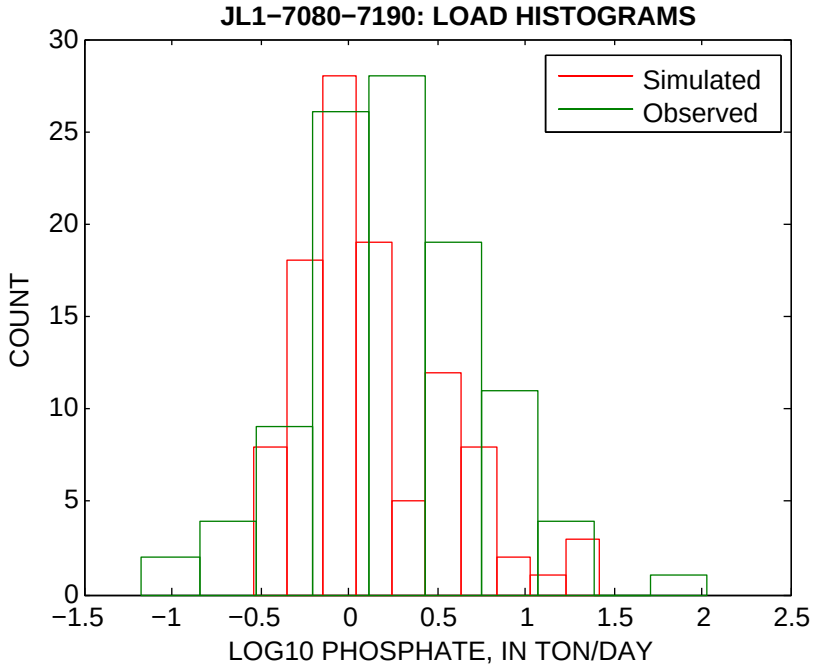


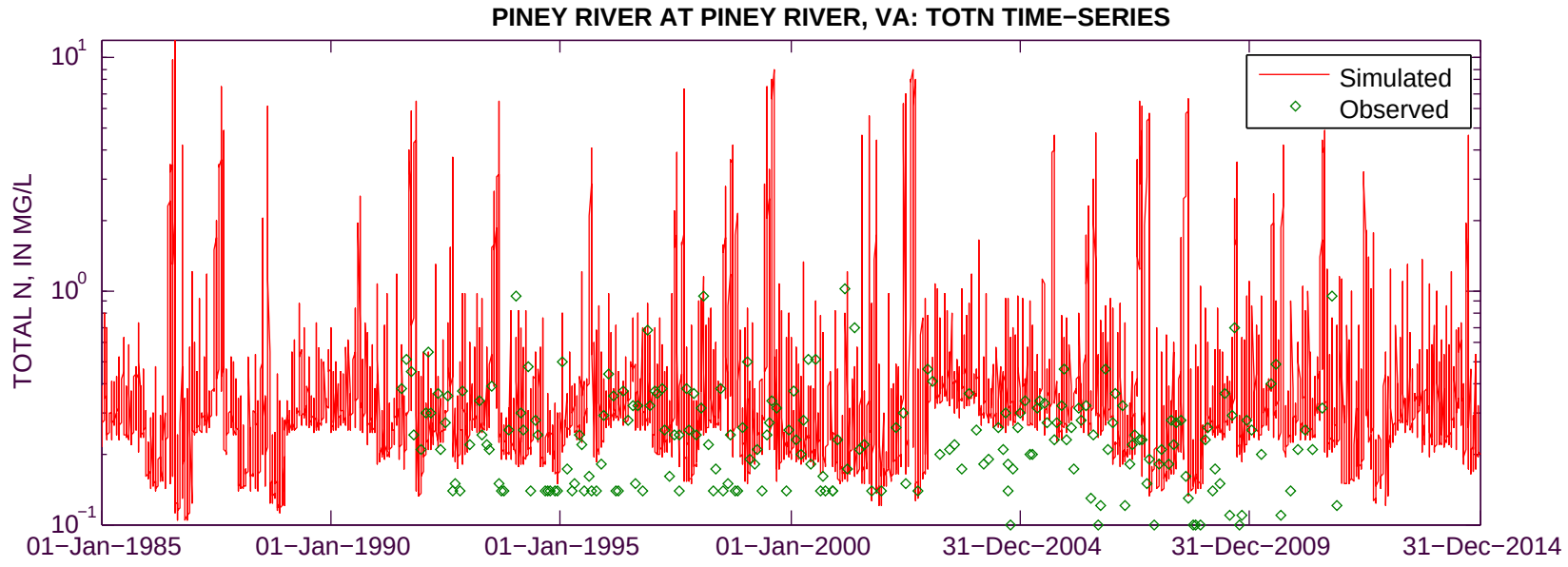
LOAD DATA
LOG10

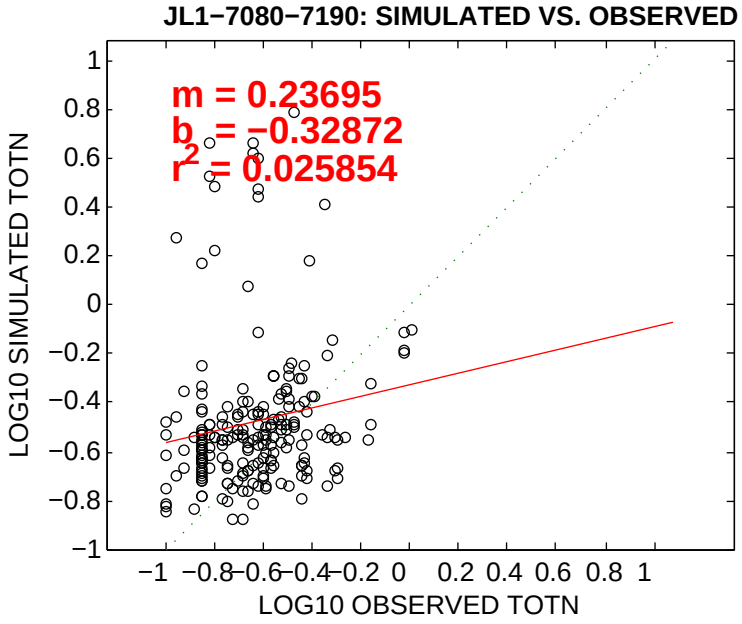


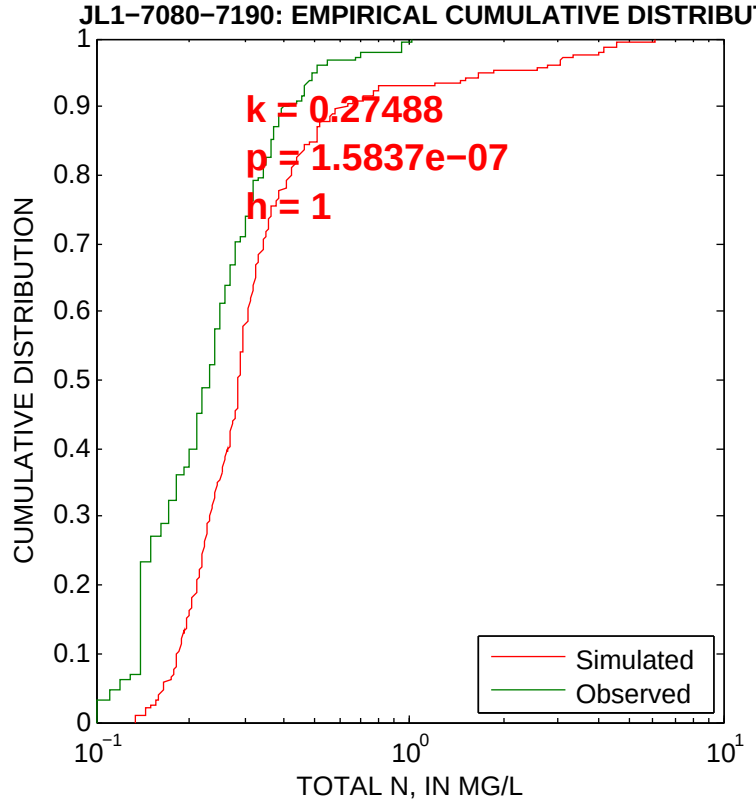












DATA SELECTION

scenario	file
P620171001WQ	TOTN.calib

plot: TOTN - total nitrogen

Dates: 1/1/1985 – 12/31/201

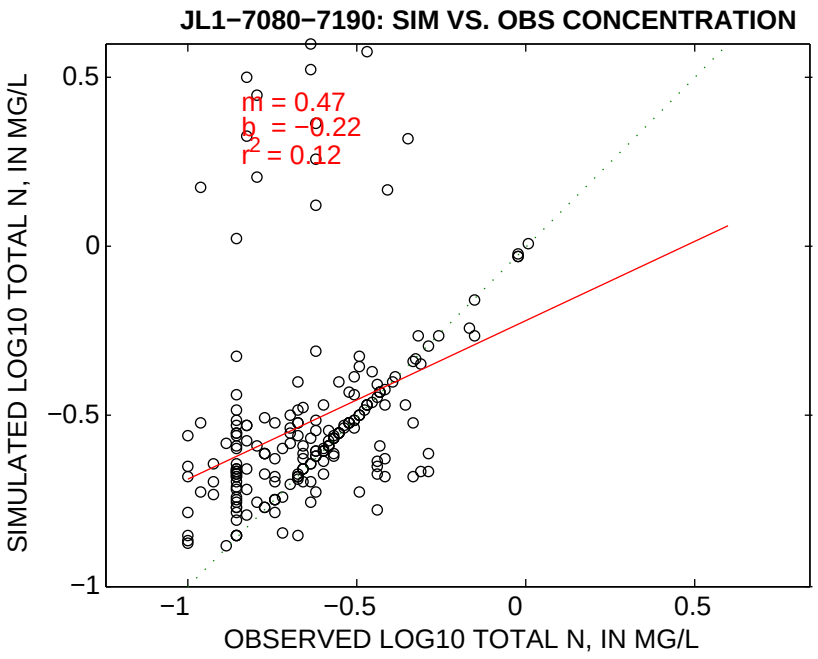
Drive	Directory	Observed
N/A	model	OBS20161101

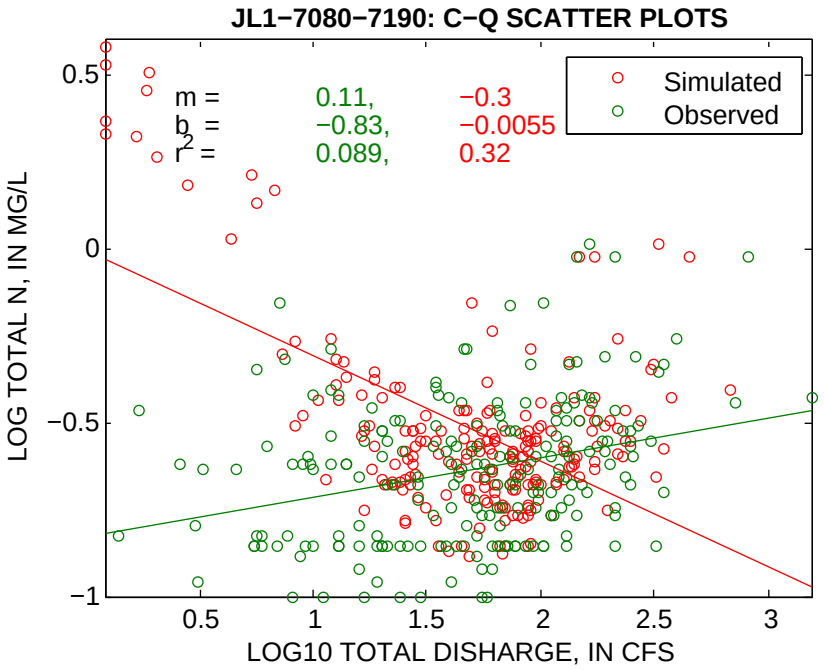
STATISTICS

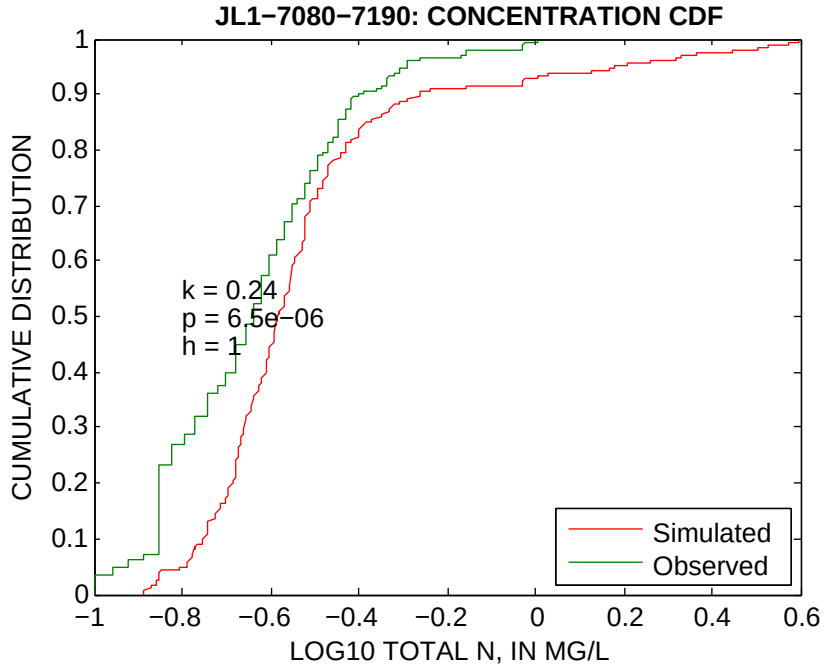
	n	observe	simulate
		211	211
min		0.1	0.13306
		-1	-0.875952
mean		0.259336	0.498103
		-0.638624	-0.480038
media		0.23	0.28605
		-0.638272	-0.543558
max		1.02	6.1174
		0.00860017	0.786567
varian		0.0222815	0.656534
		0.0418367	0.0908493
JB		0.001	0.001
		0.008879	0.001
		ra	log
%		92.0681	-24.8325
err.va		0.728225	0.138129
rel.std.err		32.683	3.30163
mod.eff		-31.683	-2.30163

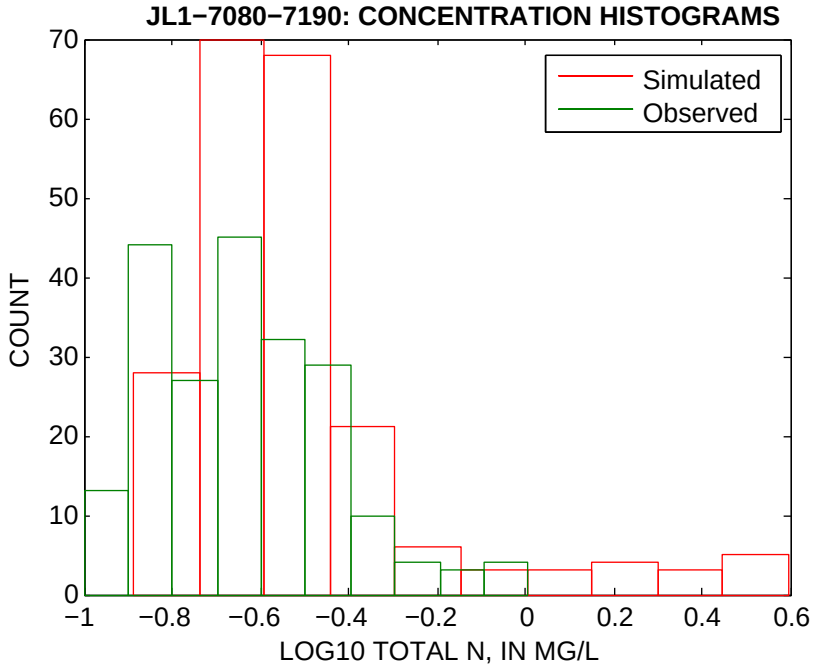
VERSION 2.1

ALL DATA
LOG10

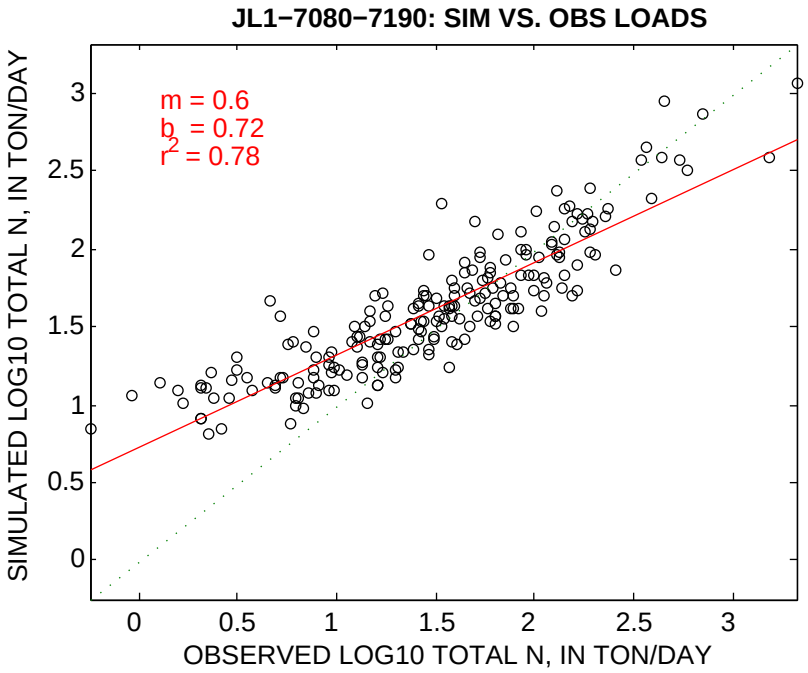


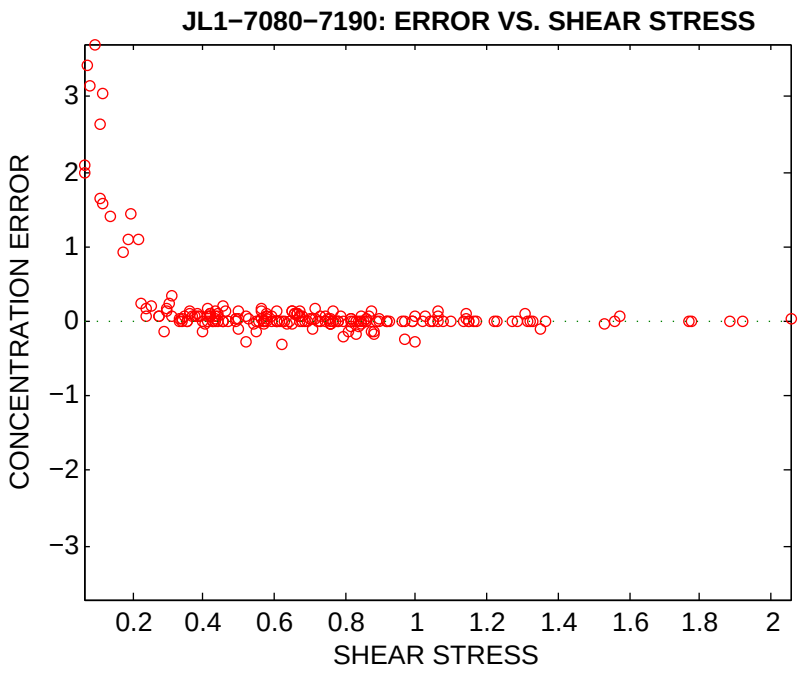


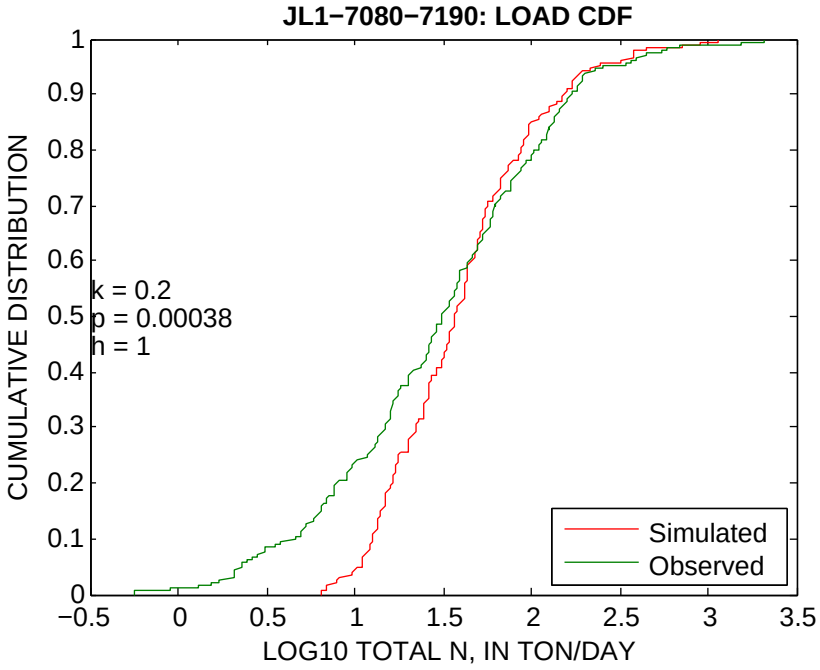


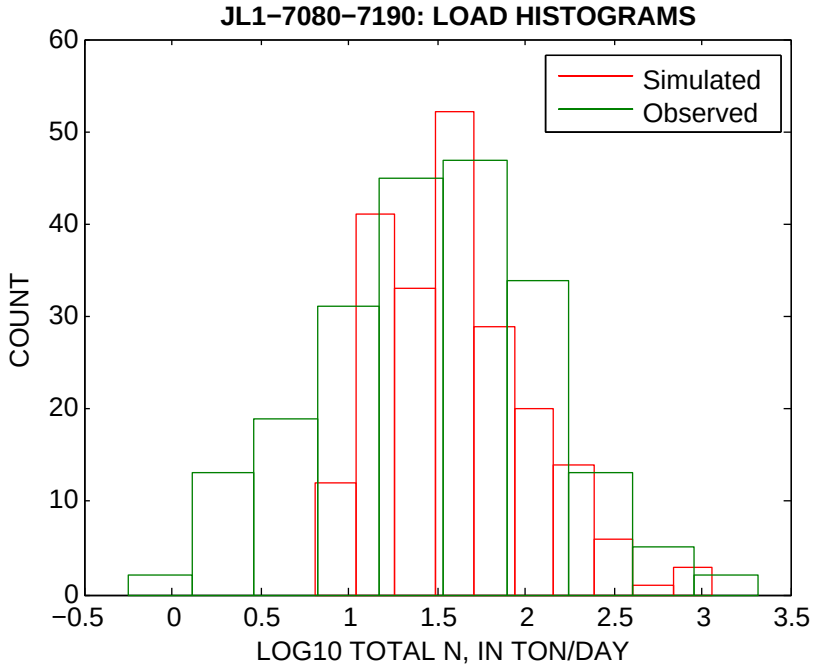


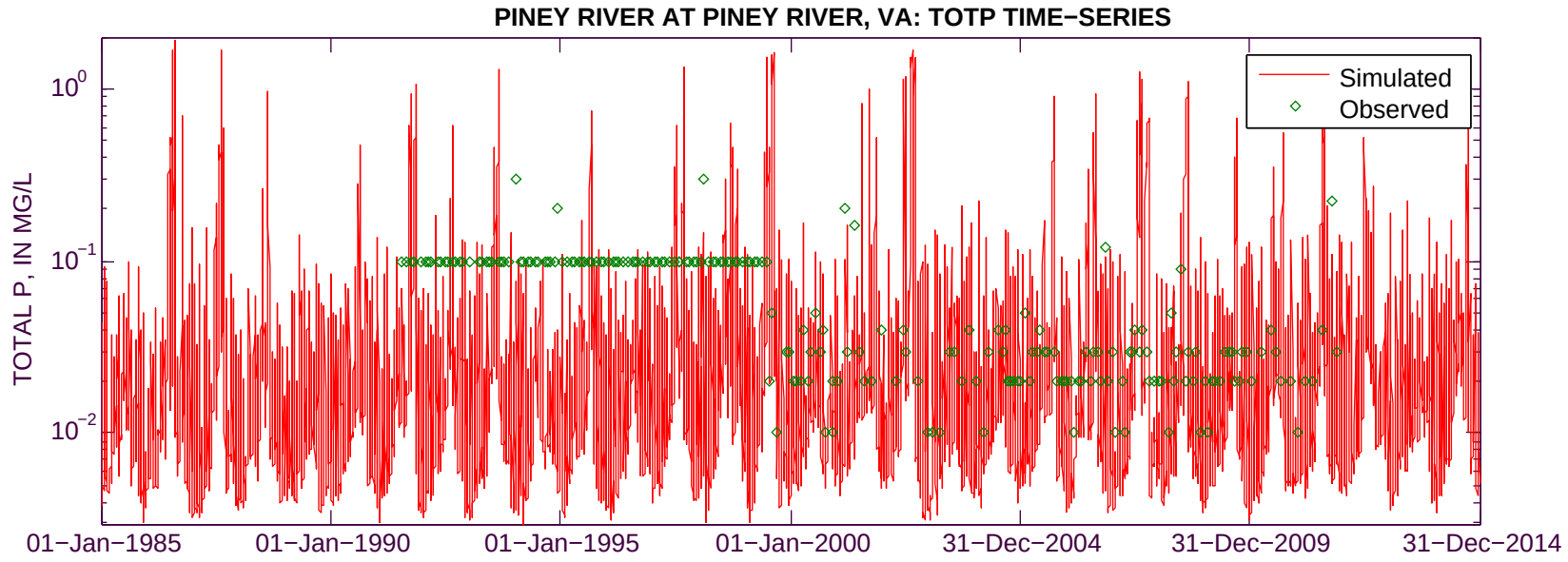
LOAD DATA
LOG10

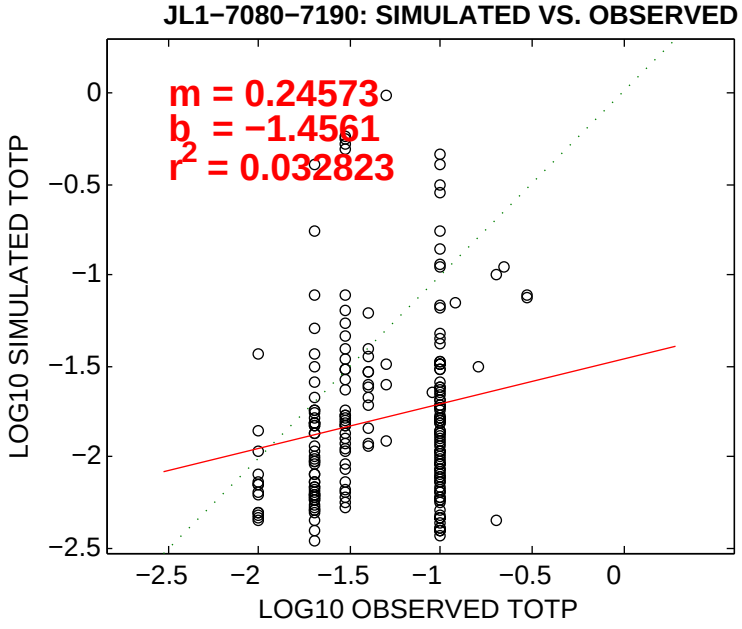


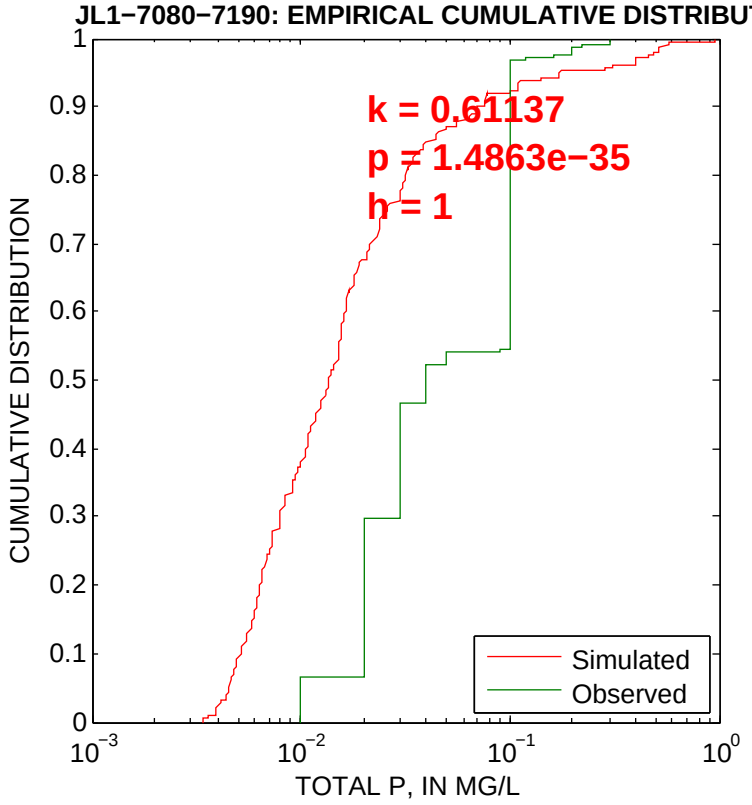












DATA SELECTION

scenario	file
P620171001WQ	TOTP.calib

plot: TOTP - total phosphorus

Dates: 1/1/1985 – 12/31/201

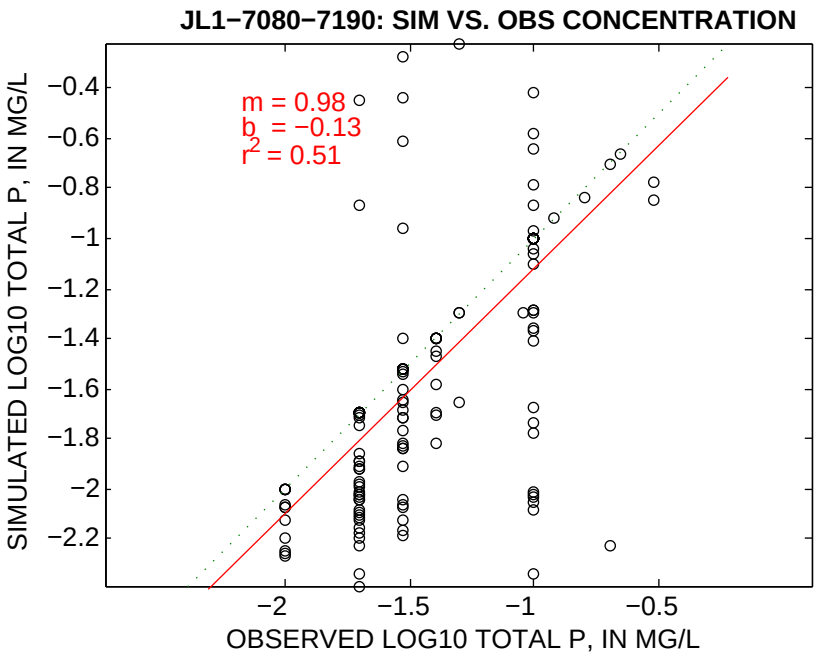
Drive	Directory	Observed
N/A	model	OBS20161101

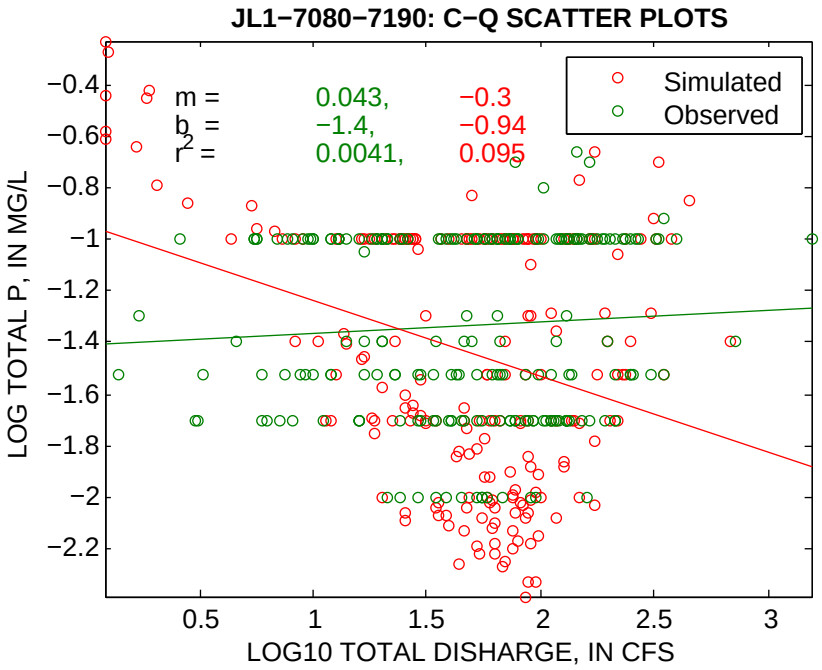
STATISTICS

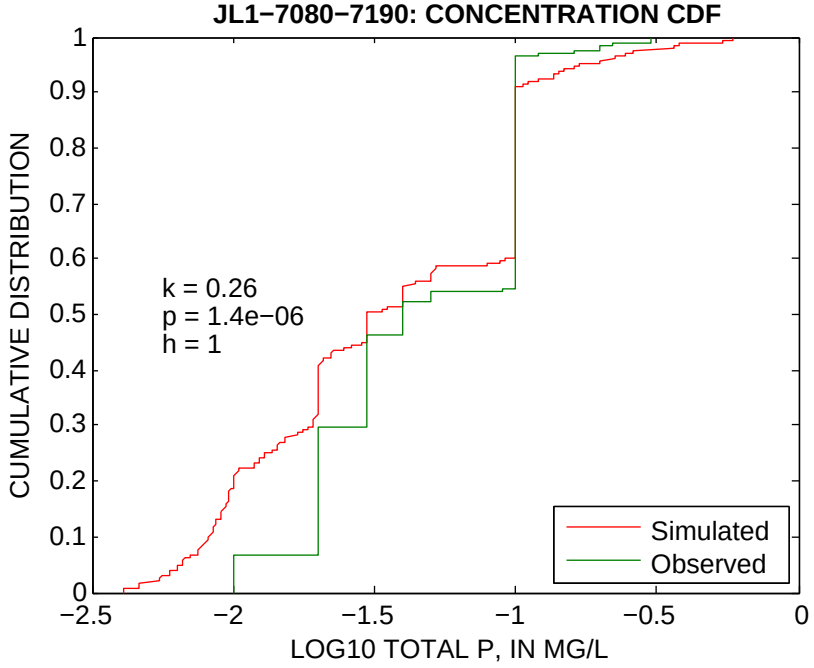
	n	211	211
		observe	simulate
min		0.01	0.0034424
		-2	-2.46314
mean		0.0632227	0.043787
		-1.33362	-1.78379
media		0.04	0.013636
		-1.39794	-1.86531
max		0.3	0.95392
		-0.522879	-0.020488
varian		0.00230861	0.0123156
		0.129002	0.237328
JB		0.001	0.001
		0.007721	0.001
		ra	log
%		-30.7417	33.7554
err.va		0.0147865	0.506546
rel.std.err		6.40494	3.92664
mod.eff		-5.40494	-2.92664

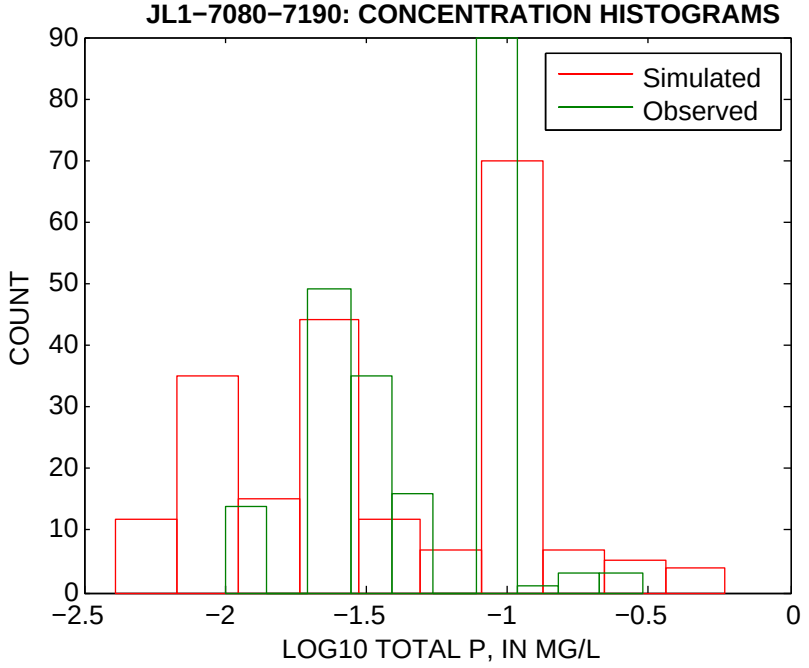
VERSION

ALL DATA
LOG10

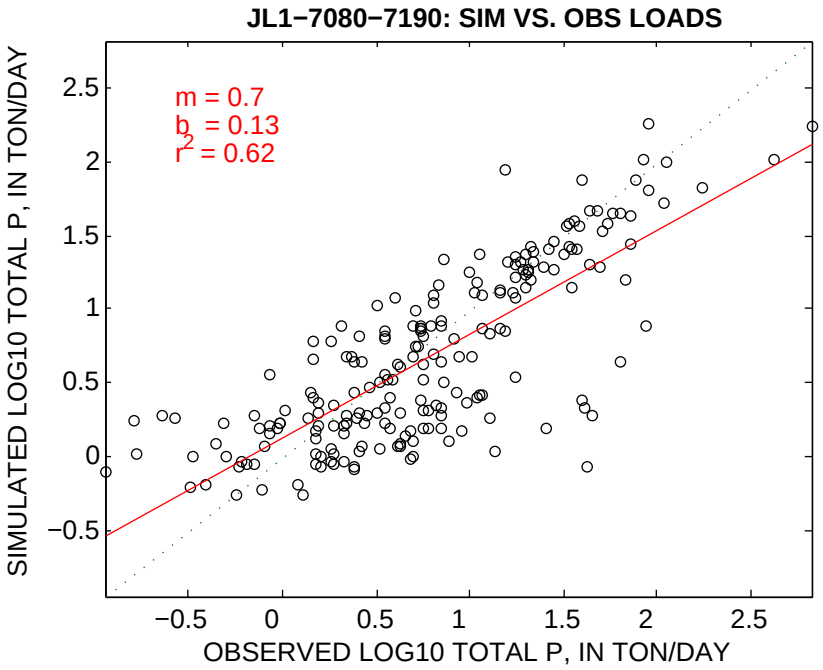


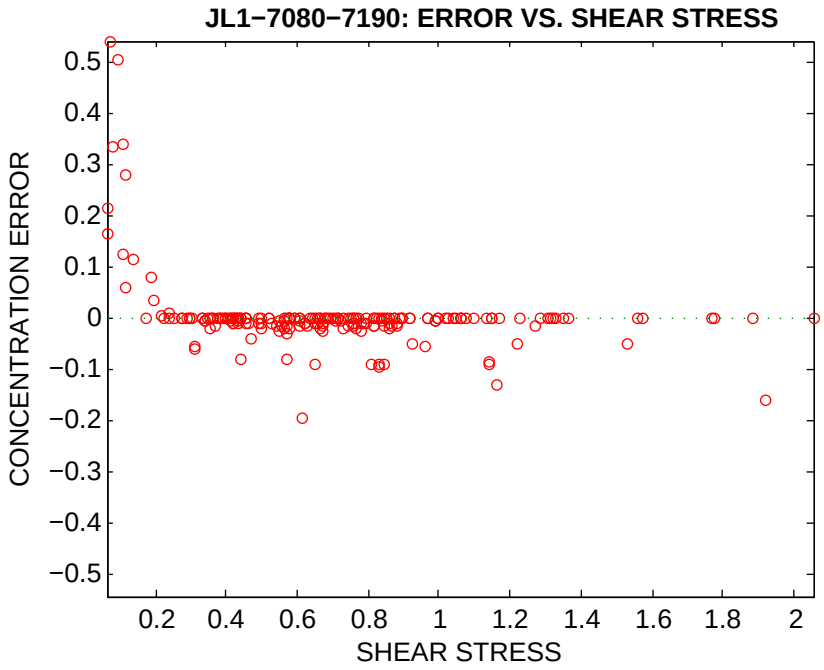


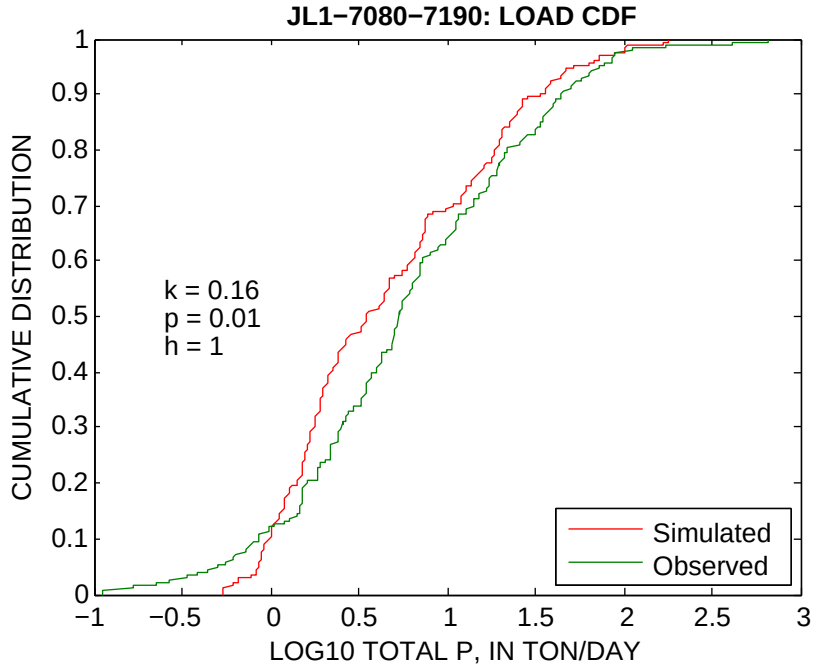


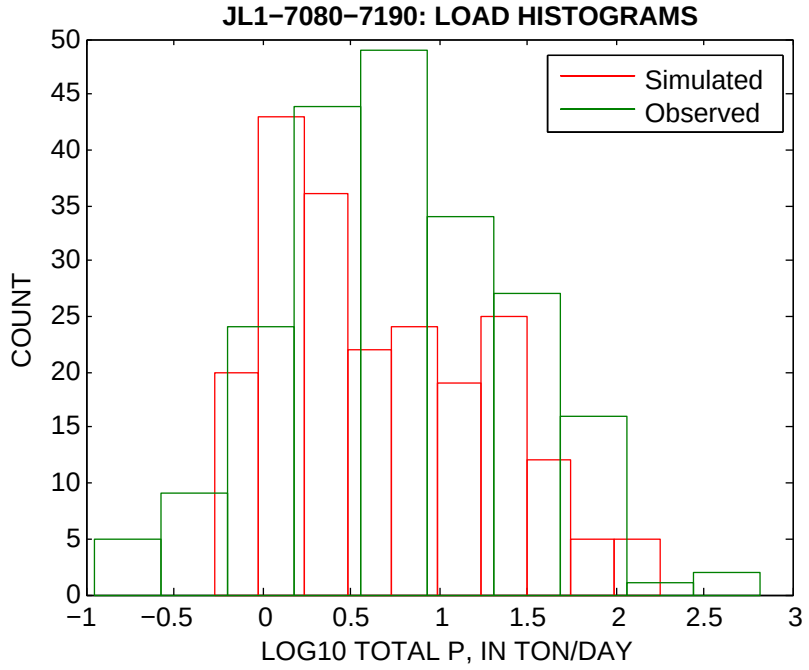


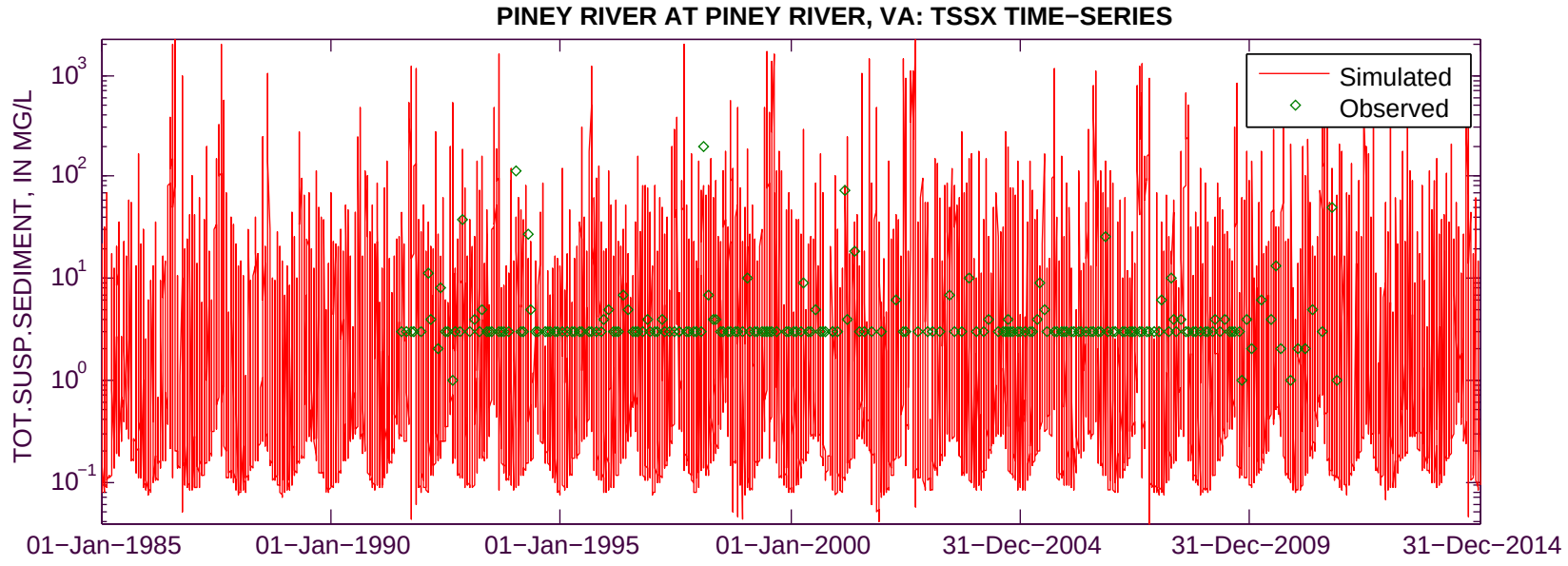
LOAD DATA
LOG10

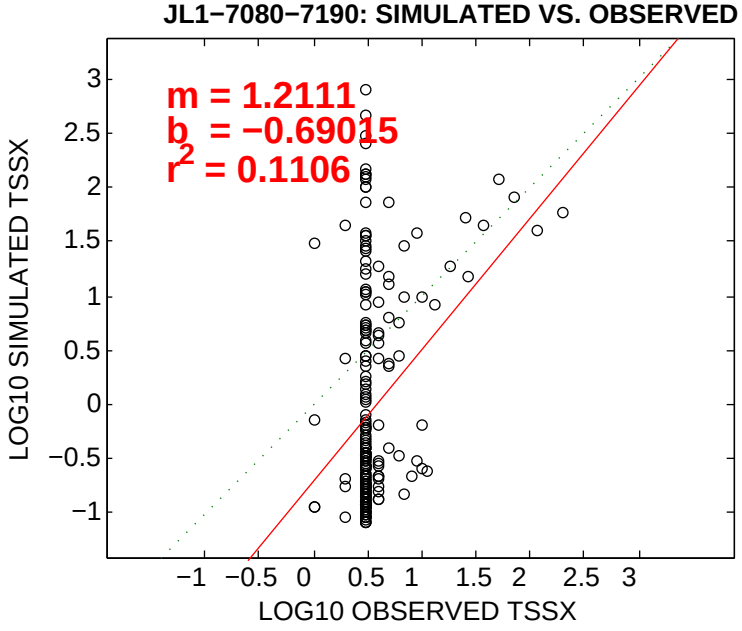


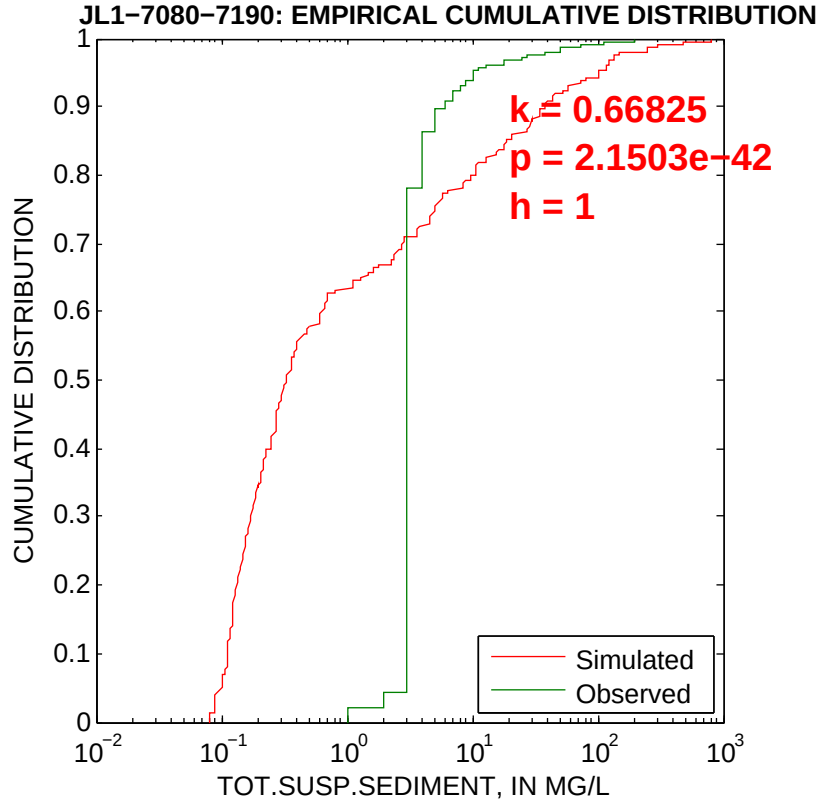












DATA SELECTION

scenario	file
P620171001WQ	TSSX.calib

plot: TSSX - total suspended ...

Dates: 1/1/1985 – 12/31/201

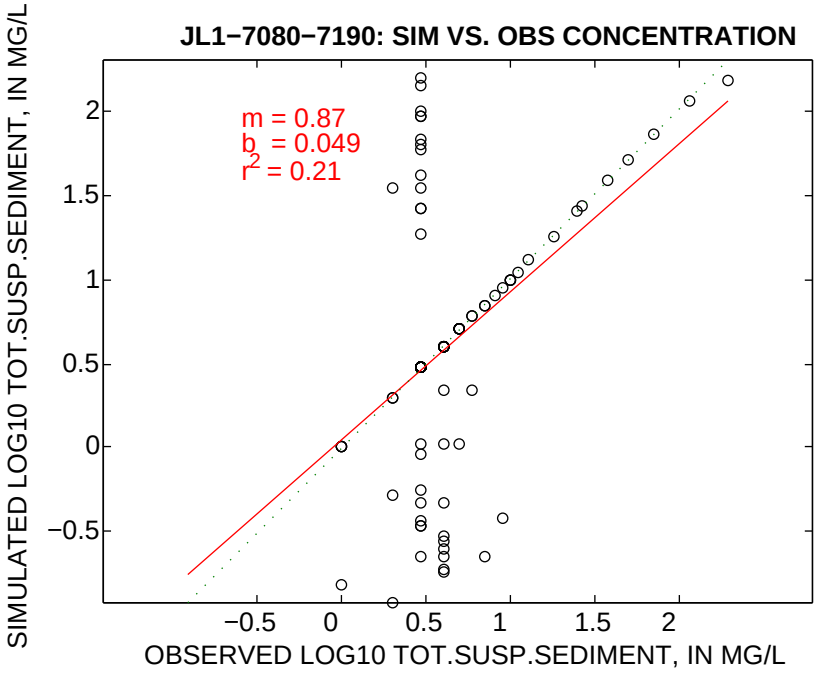
Drive	Directory	Observed
N/A	model	OBS20161101

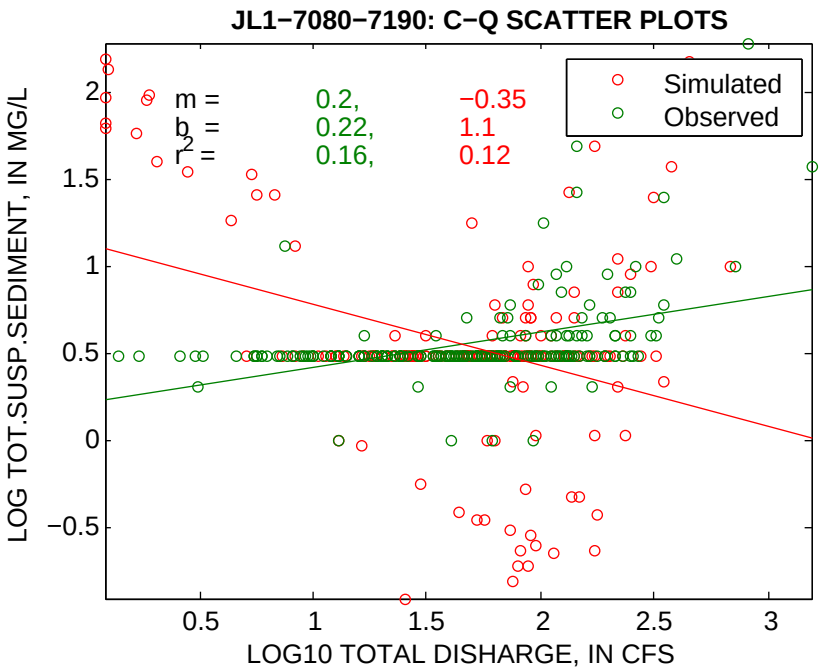
STATISTICS

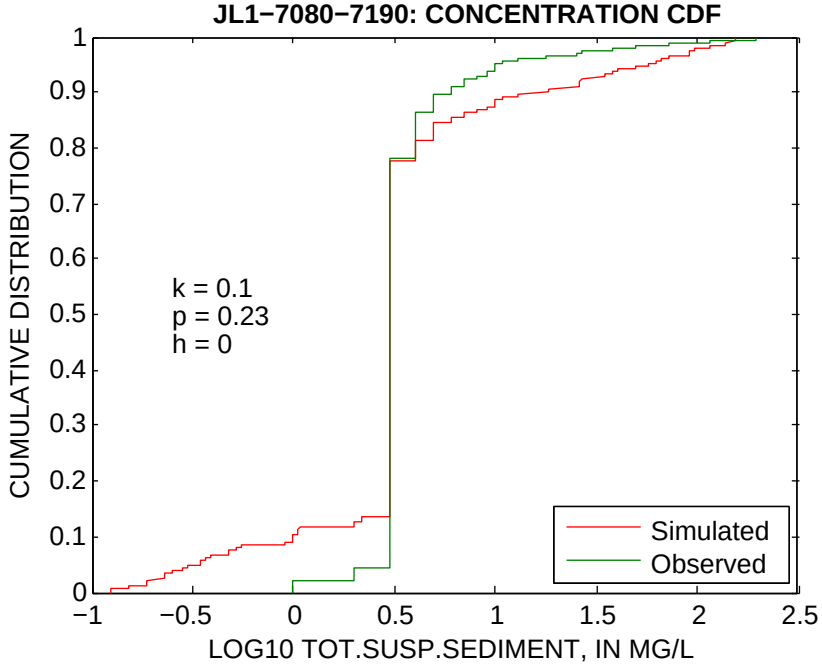
n	211	211
	observe	simulate
min	1	0.0805
	0	-1.0942
mean	5.891	18.7747
	0.556721	-0.0159157
media	3	0.33621
	0.477121	-0.473389
max	195	801.59
	2.29003	2.90395
varian	273.574	5308.31
	0.075989	1.00774
JB	0.001	0.001
	0.001	0.001
	ra	log
%	218.702	-102.859
err.va	5560.56	1.22914
rel.std.err	20.3256	16.1752
mod.eff	-19.3256	-15.1752

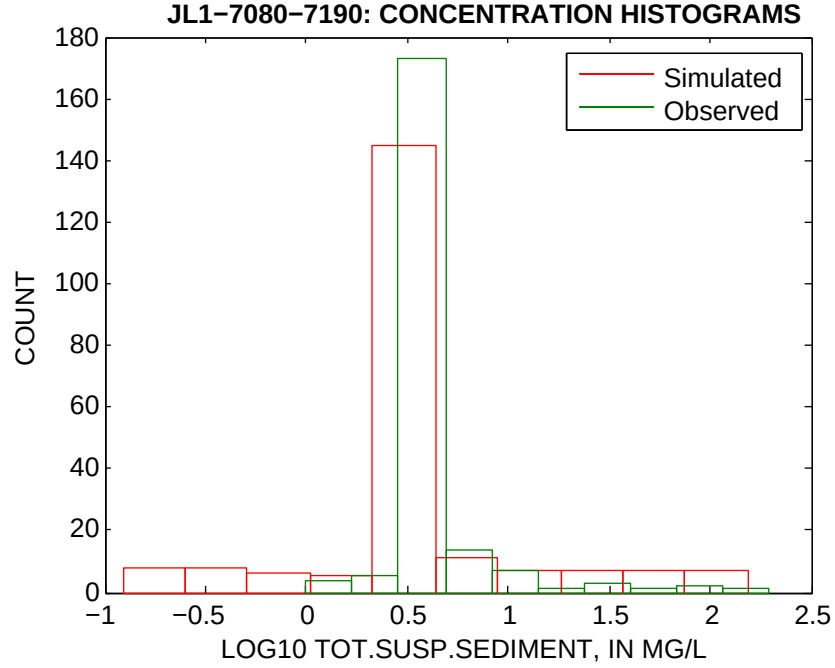
VERSION 2.1

ALL DATA
LOG10

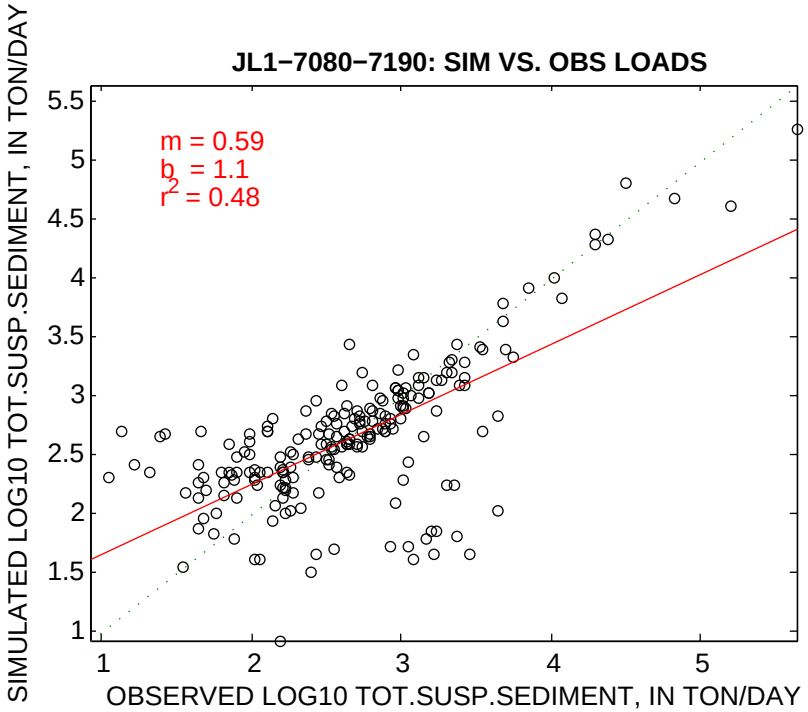


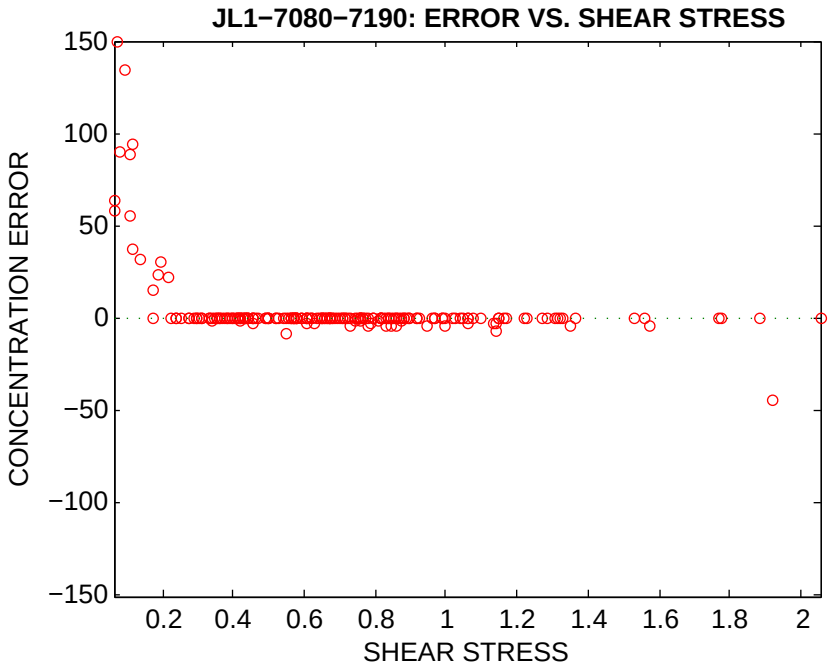


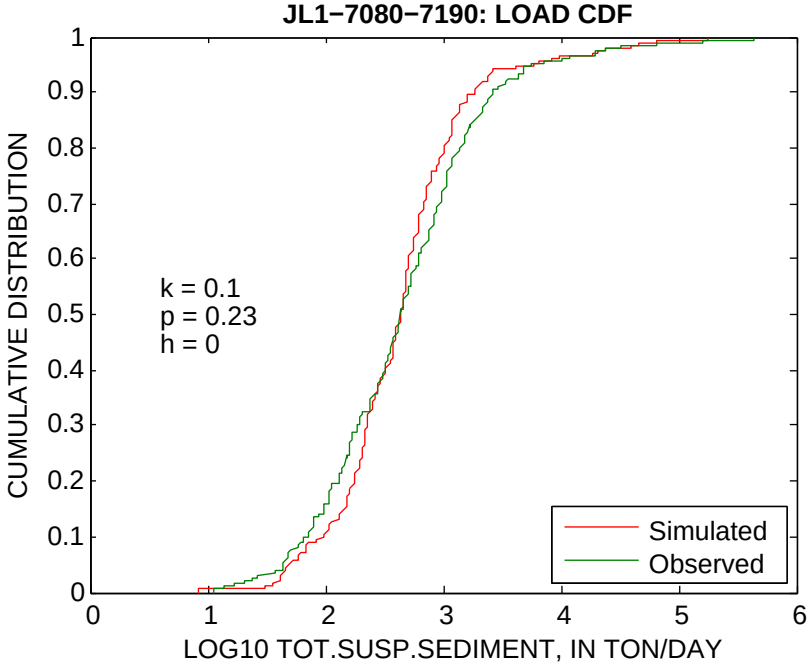


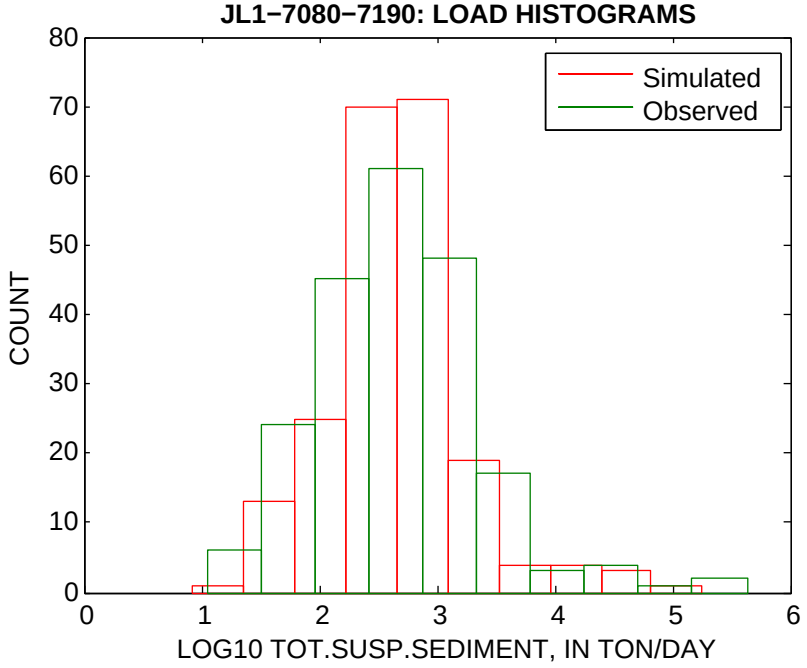


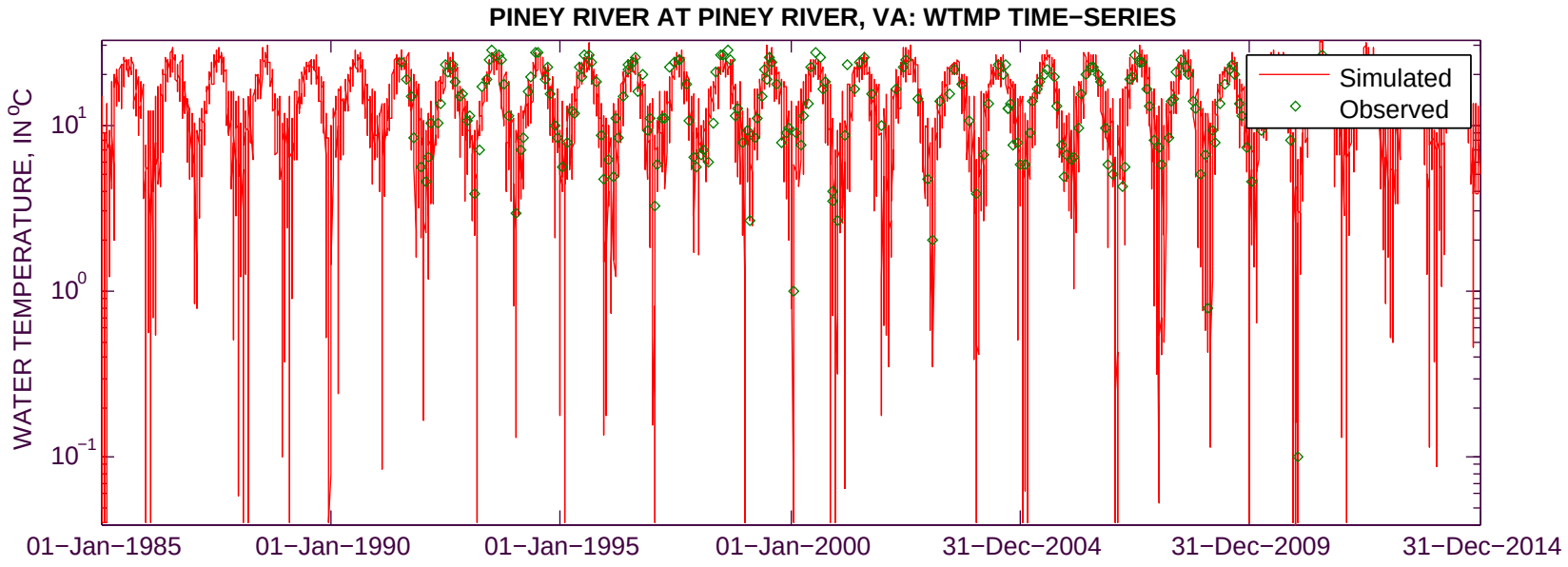
LOAD DATA
LOG10

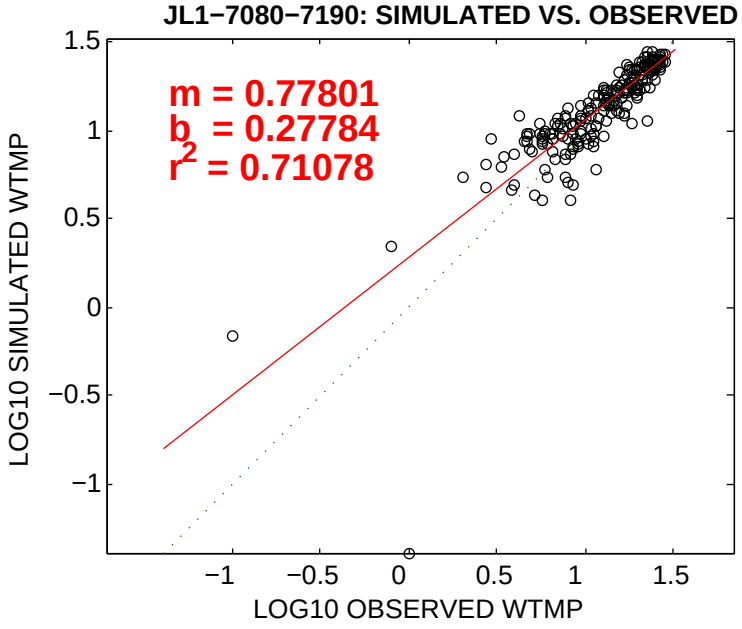


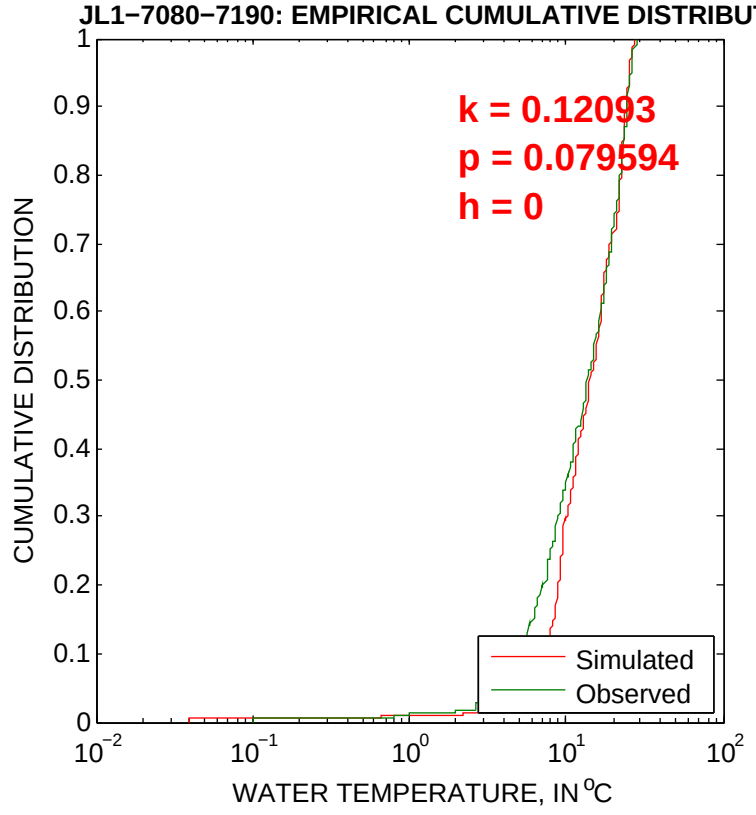












DATA SELECTION

scenario	file
P620171001WQ	WTMP.calib

plot: WTMP - water tempera...

Dates: 1/1/1985 – 12/31/201

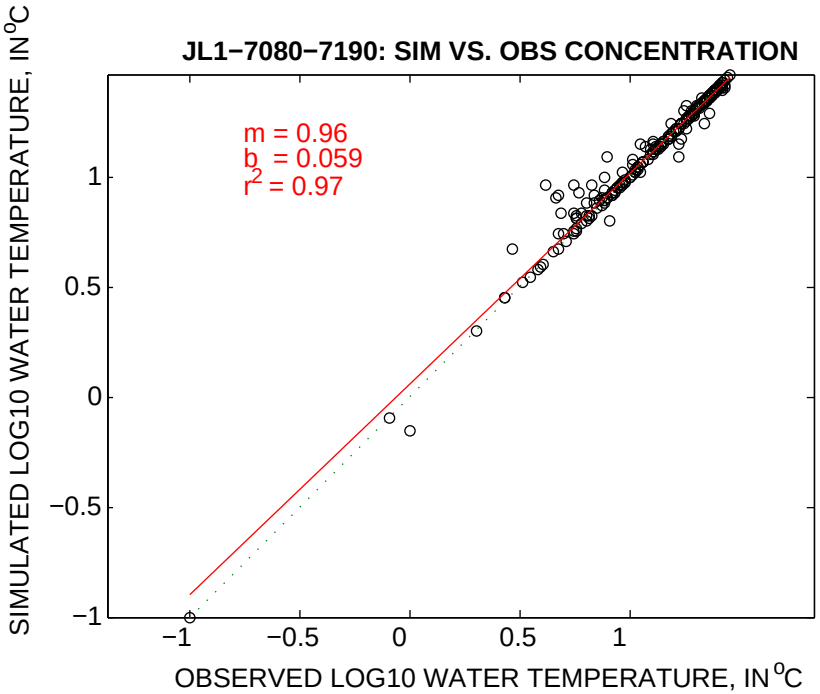
Drive	Directory	Observed
N/A	model	OBS20161101

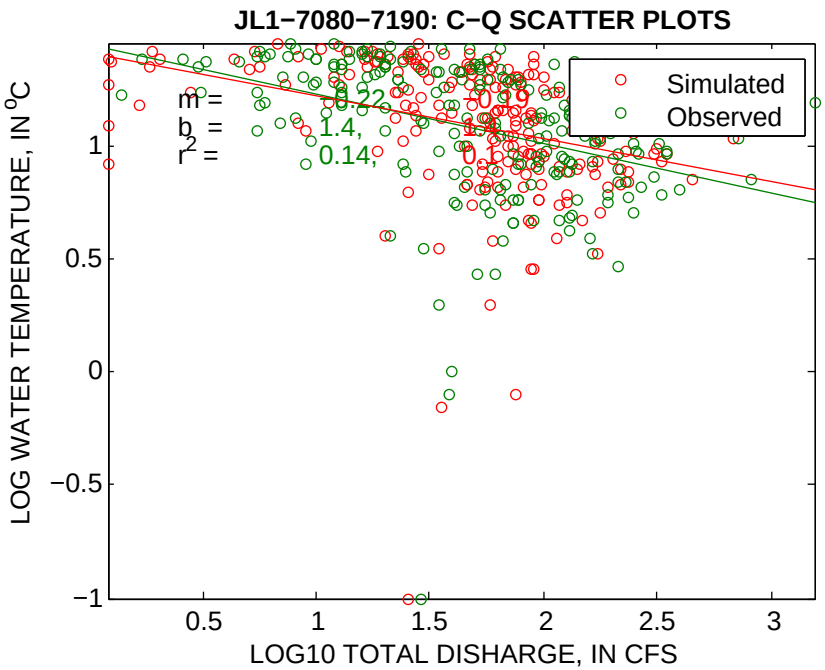
STATISTICS

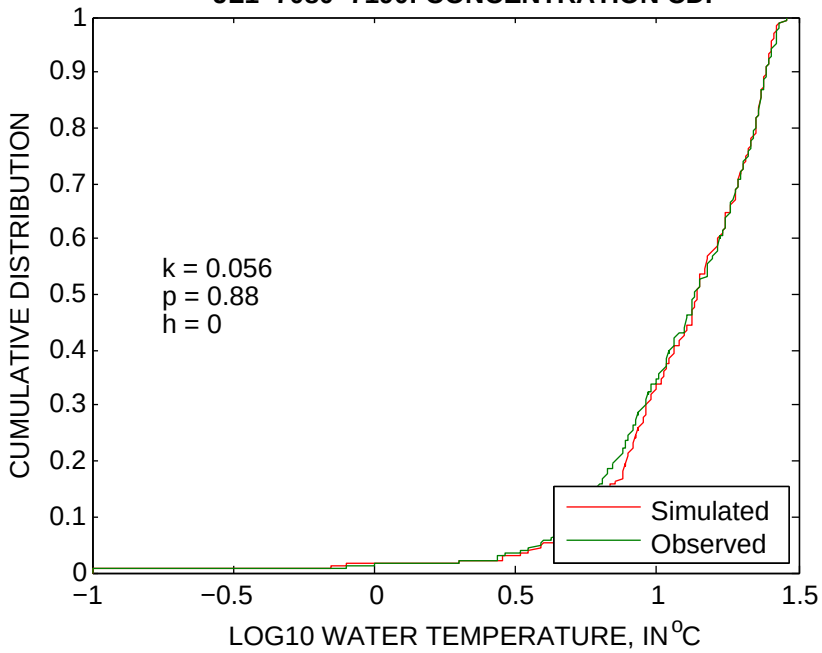
	n	observe	simulate
		215	215
min		0.1	0.040025
		-1	-1.39767
mean		14.403	15.0538
		1.07945	1.11767
media		13.7	14.361
		1.13672	1.15718
max		28.6	27.781
		1.45637	1.44375
varian		52.9207	43.6434
		0.0963473	0.0820496
JB		0.007916	0.012378
		0.001	0.001
		ra	log
%		4.51866	3.54036
err.va		8.36663	0.0299459
rel.std.err		0.158098	0.310812
mod.eff		0.841902	0.689188

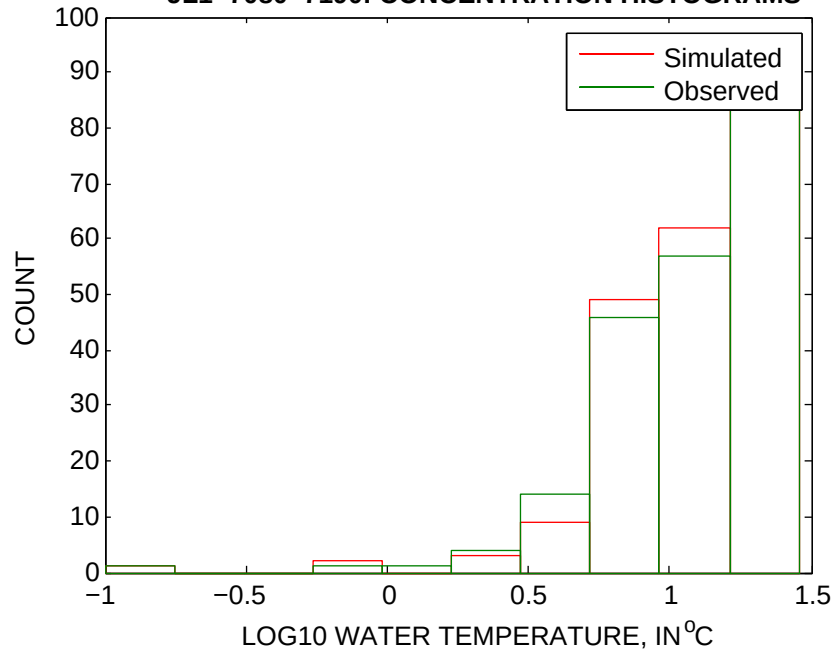
VERSION 2.1

ALL DATA
LOG10

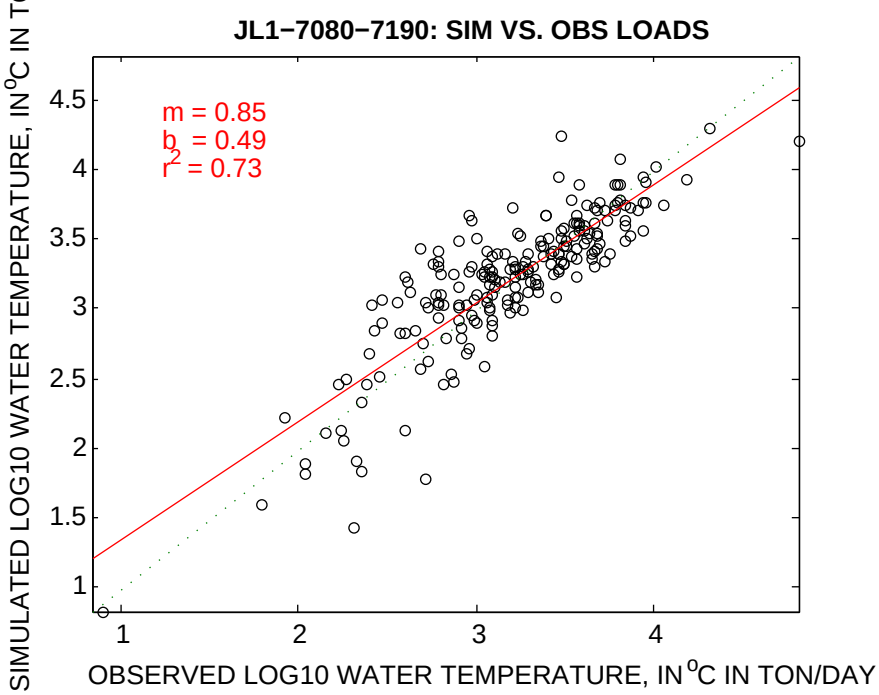


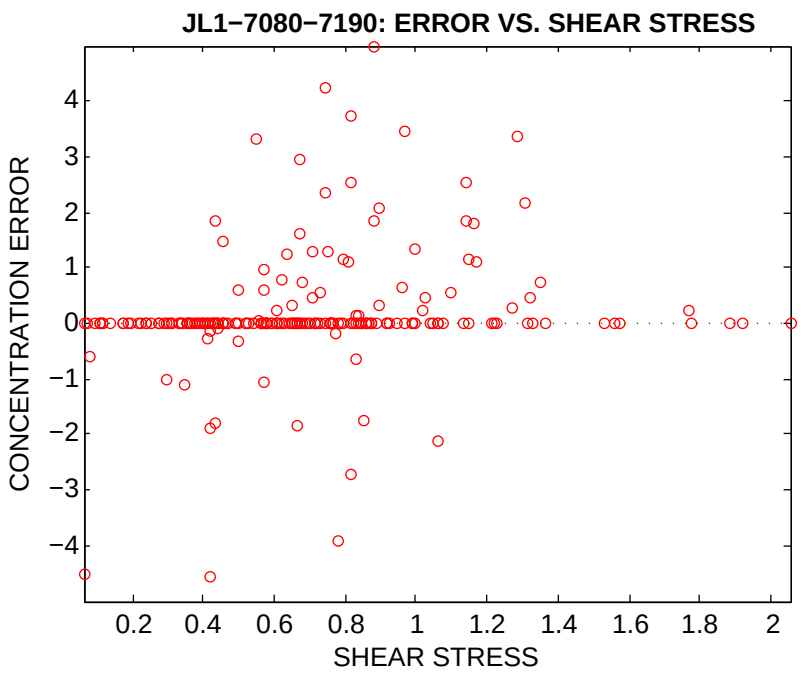


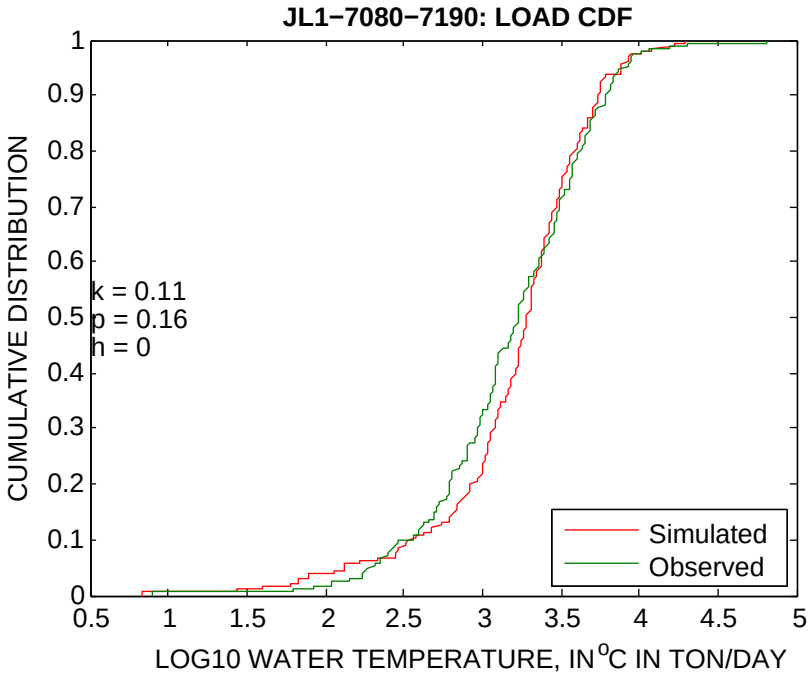


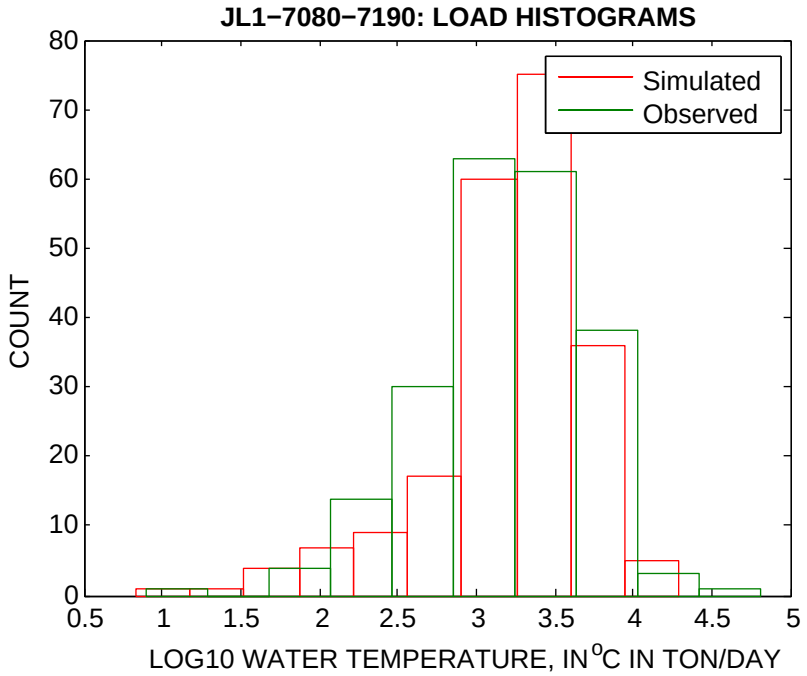


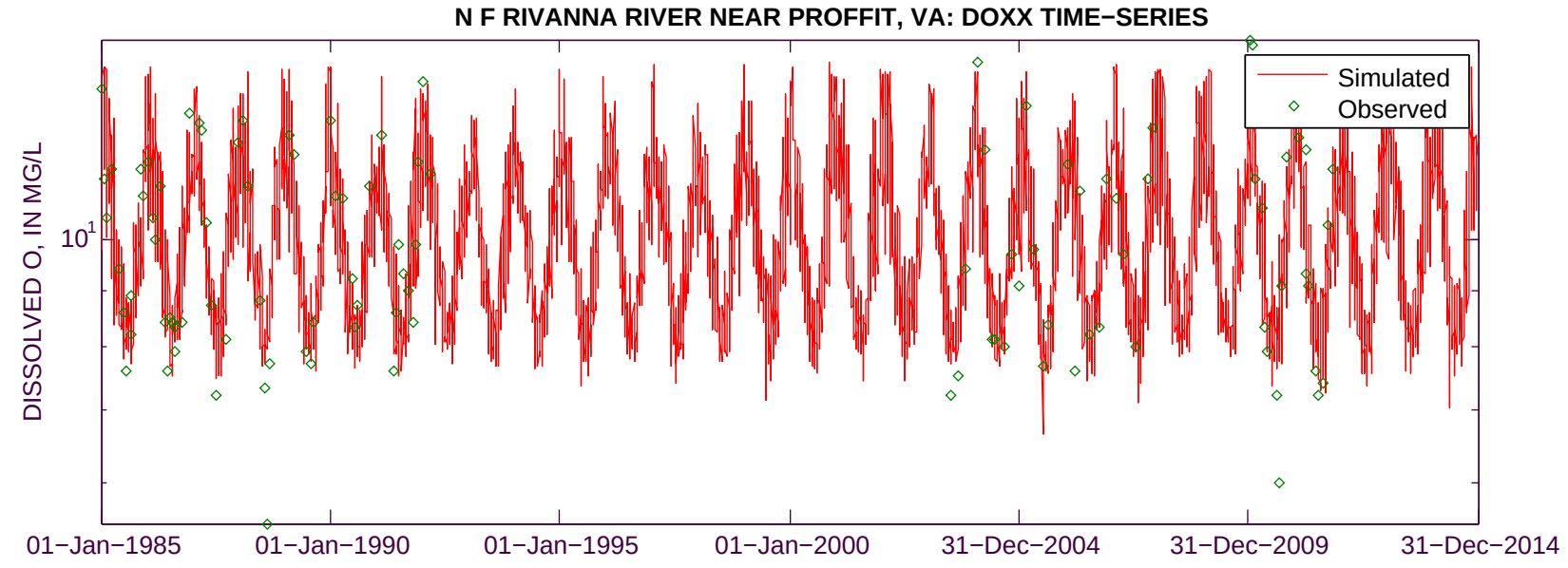
LOAD DATA
LOG10

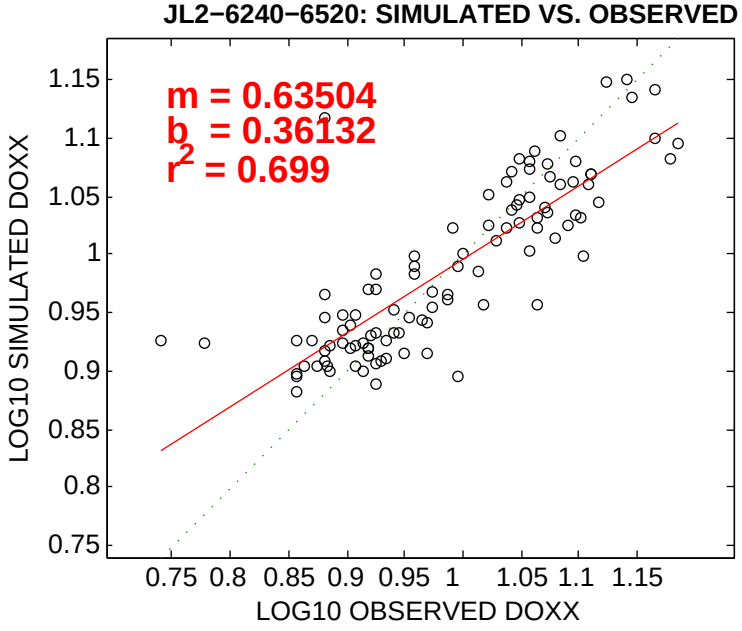


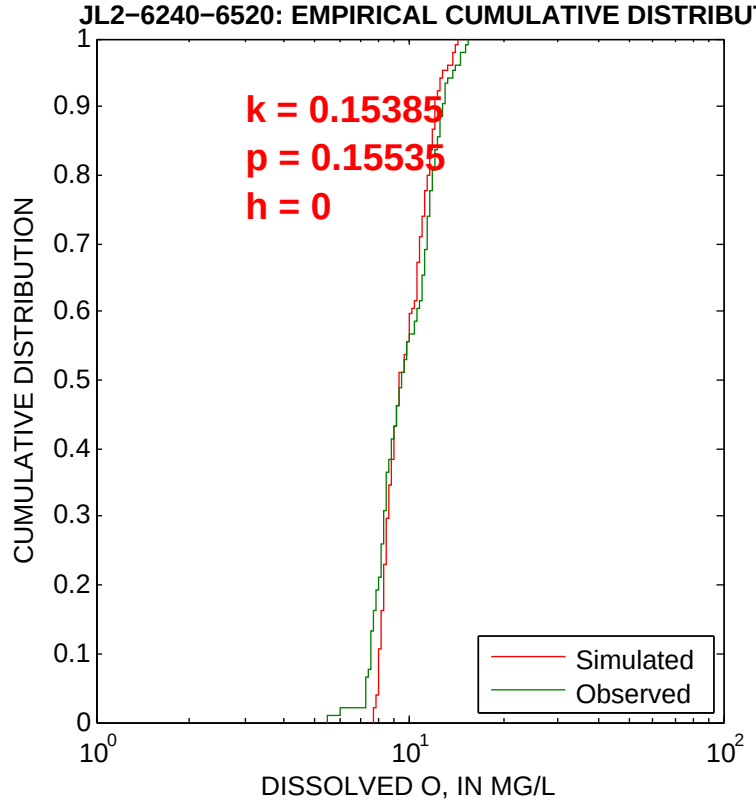












DATA SELECTION

scenario	file
P620171001WQ	DOXX.calib

plot: DOXX - dissolved oxygen

Dates: 1/1/1985 – 12/31/201

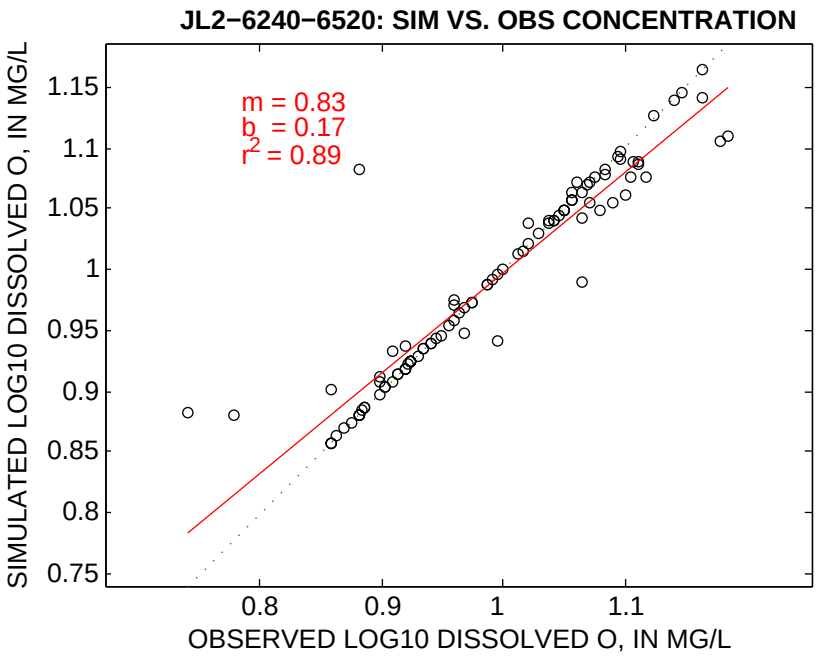
Drive	Directory	Observed
N/A	model	OBS20161101

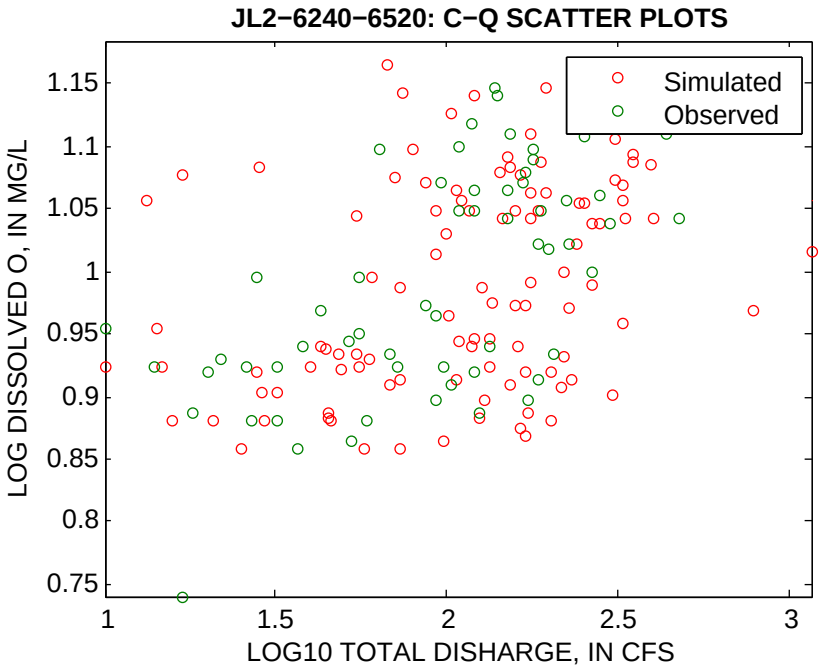
STATISTICS

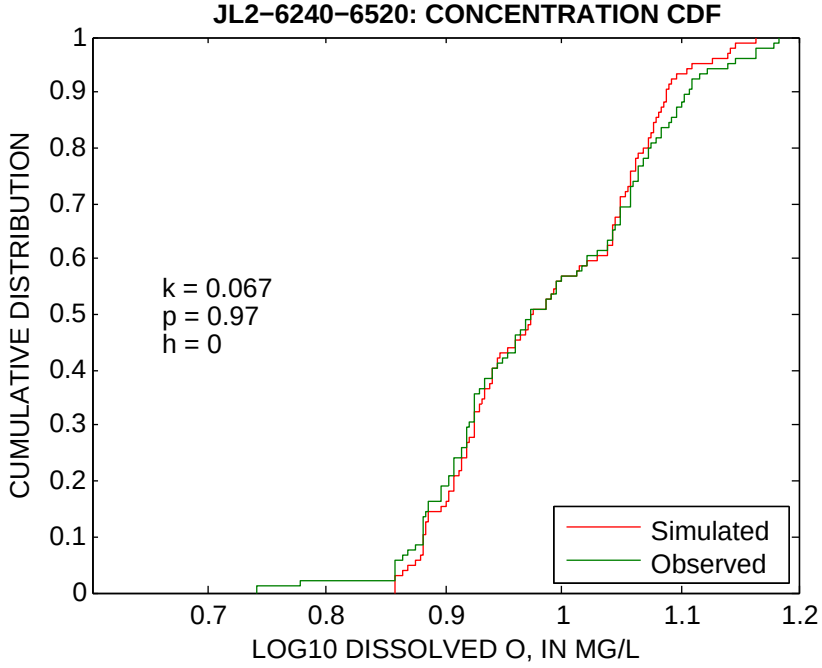
	n	104	104
		observe	simulate
min		5.5	7.6286
		0.740363	0.882445
mean		9.94067	9.86857
		0.987404	0.988362
media		9.4	9.3212
		0.973128	0.969472
max		15.3	14.162
		1.18469	1.15112
varian		4.65982	2.79063
		0.00877264	0.00506131
JB		0.057667	0.021259
		0.239683	0.030372
		ra	log
%		-0.725342	0.0970812
err.va		1.3816	0.00269284
rel.std.err		0.296491	0.306959
mod.eff		0.703509	0.693041

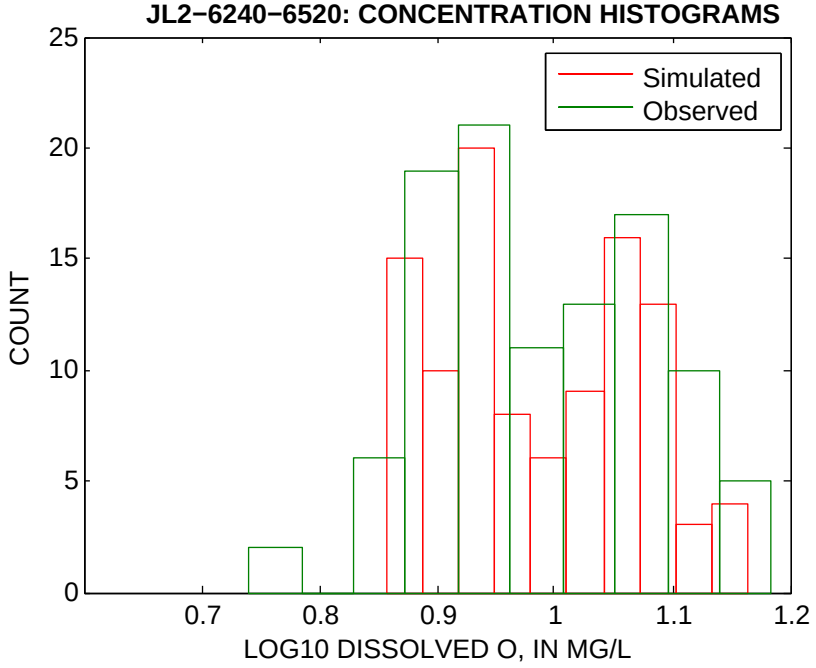
VERSION 2.1

ALL DATA
LOG10

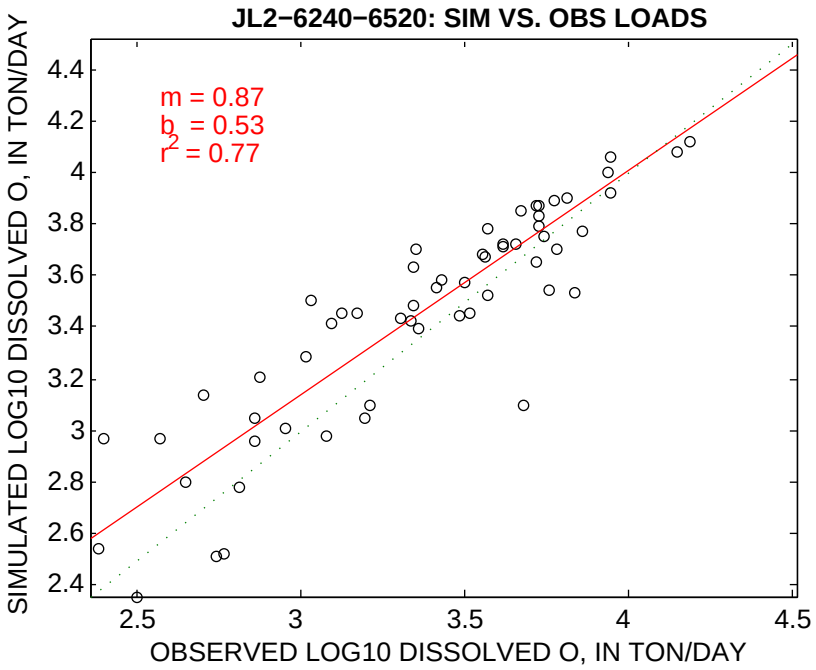


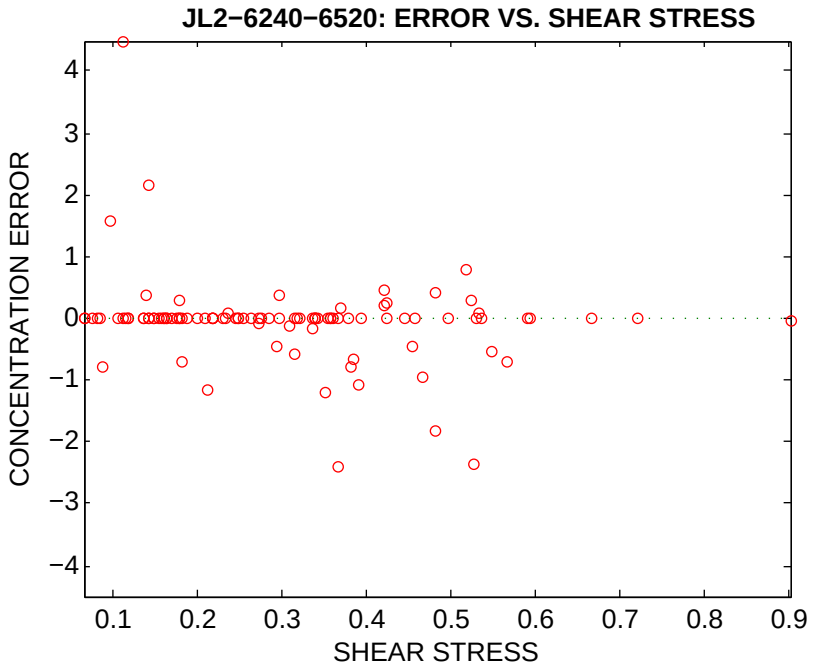


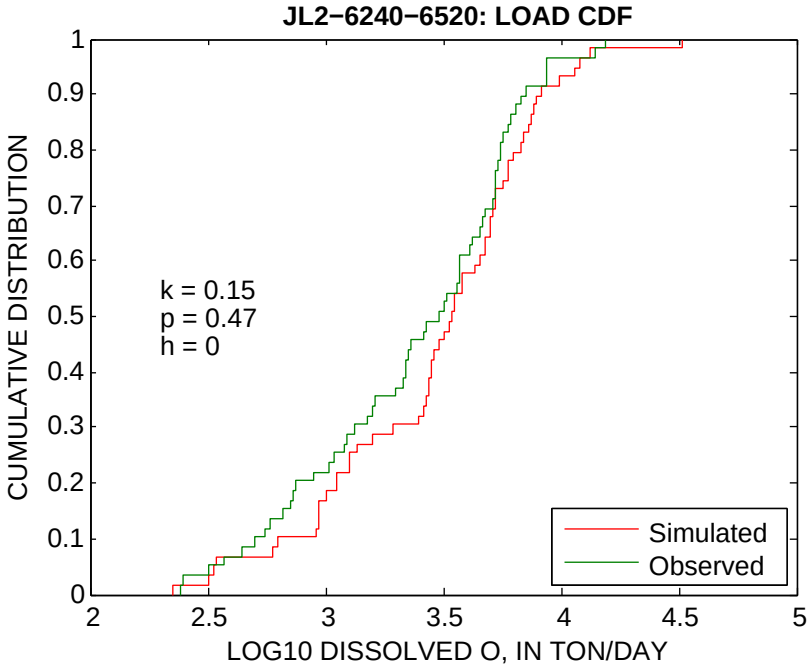


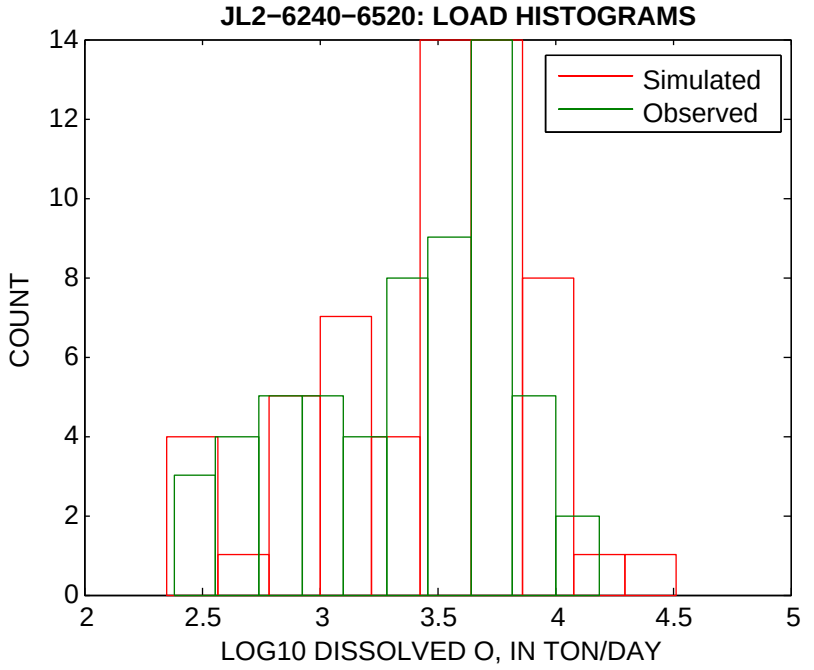


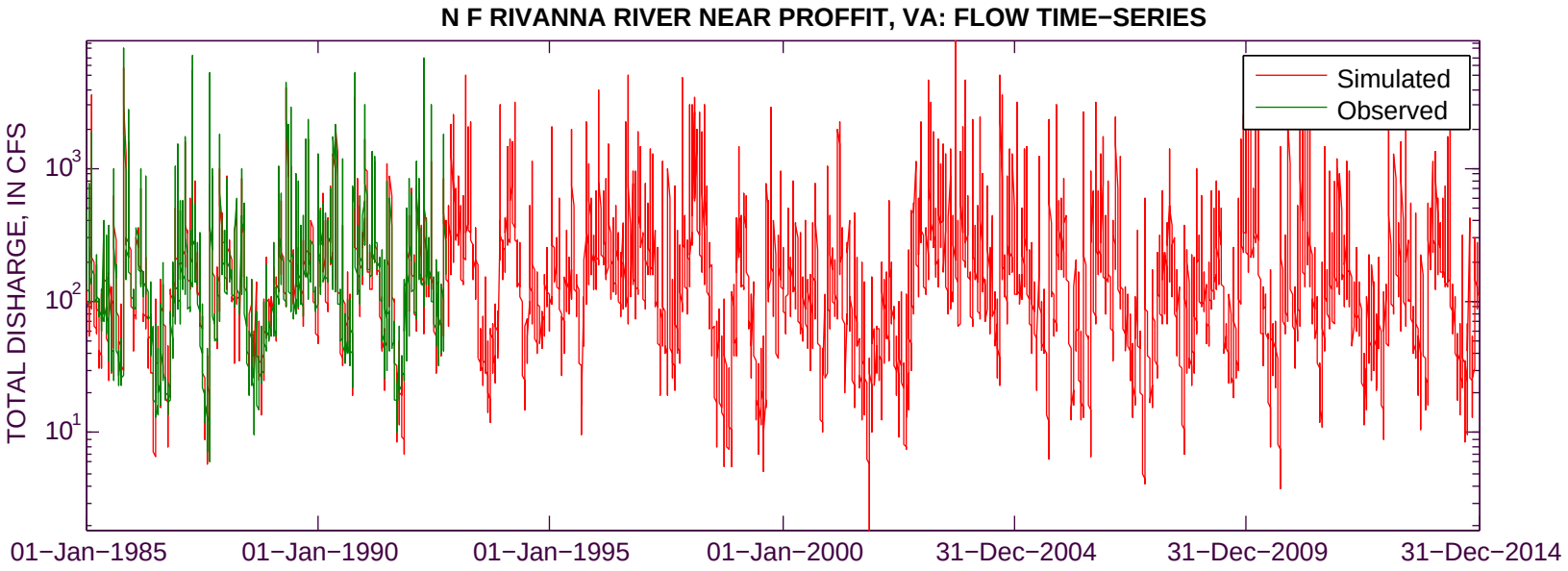
LOAD DATA
LOG10

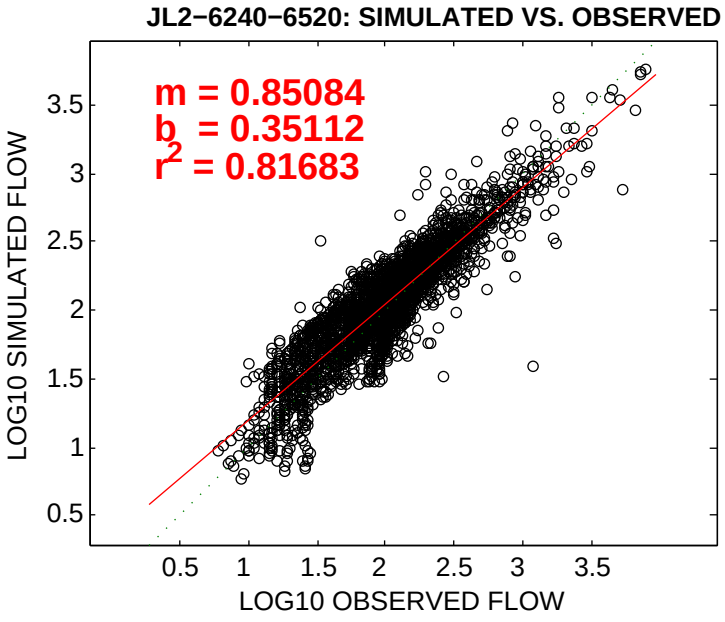


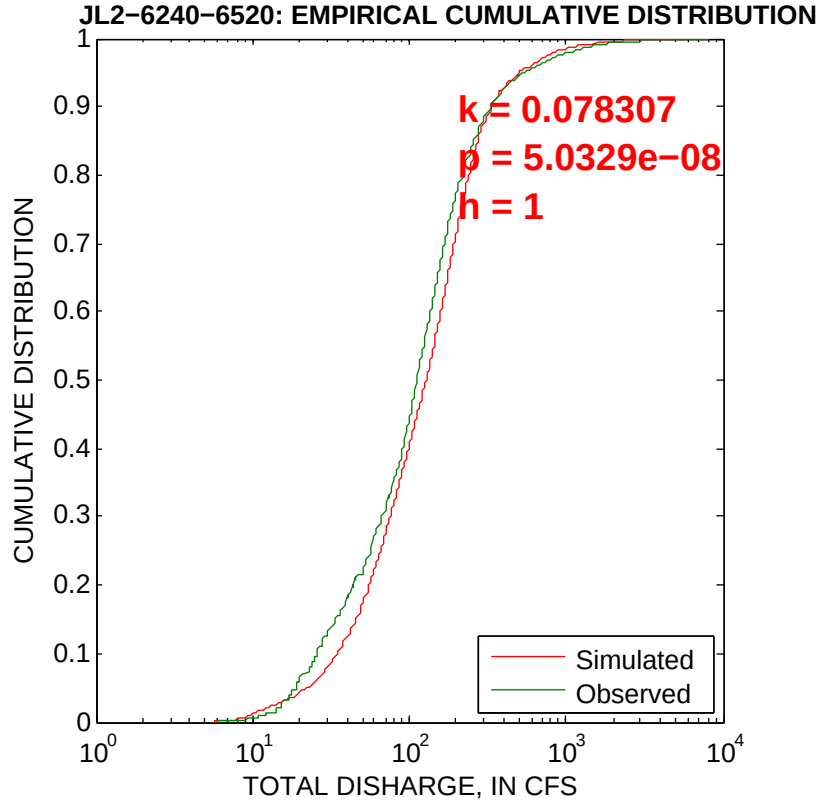












DATA SELECTION

scenario	file
P620171001WQ	FLOW.calib

plot: FLOW - total discharge

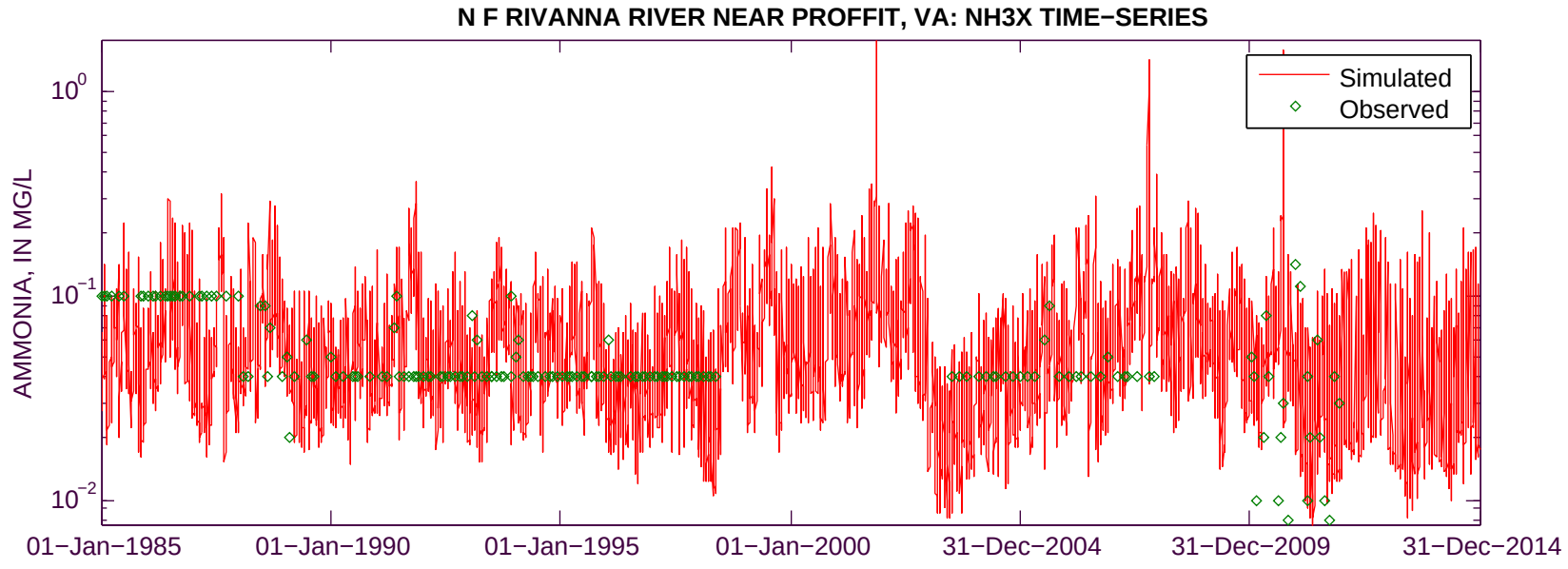
Dates: 1/1/1985 – 12/31/201

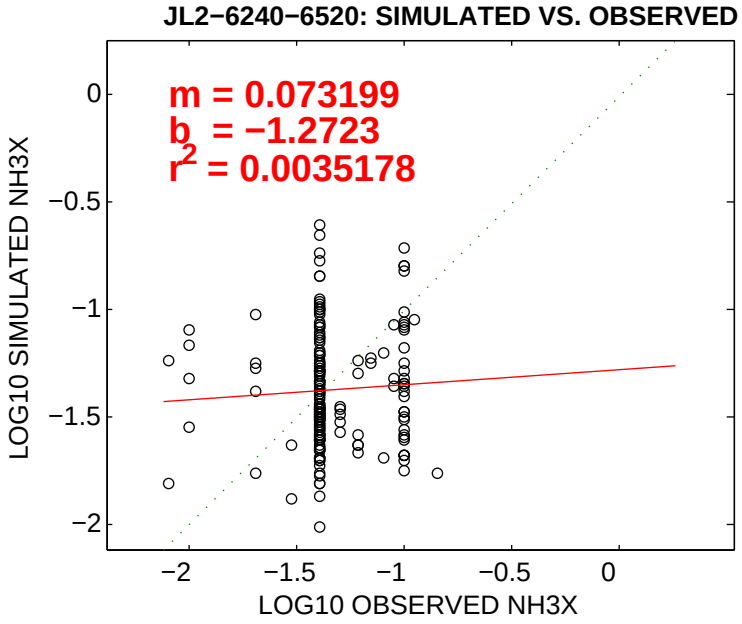
Drive	Directory	Observed
N/A	model	OBS20161101

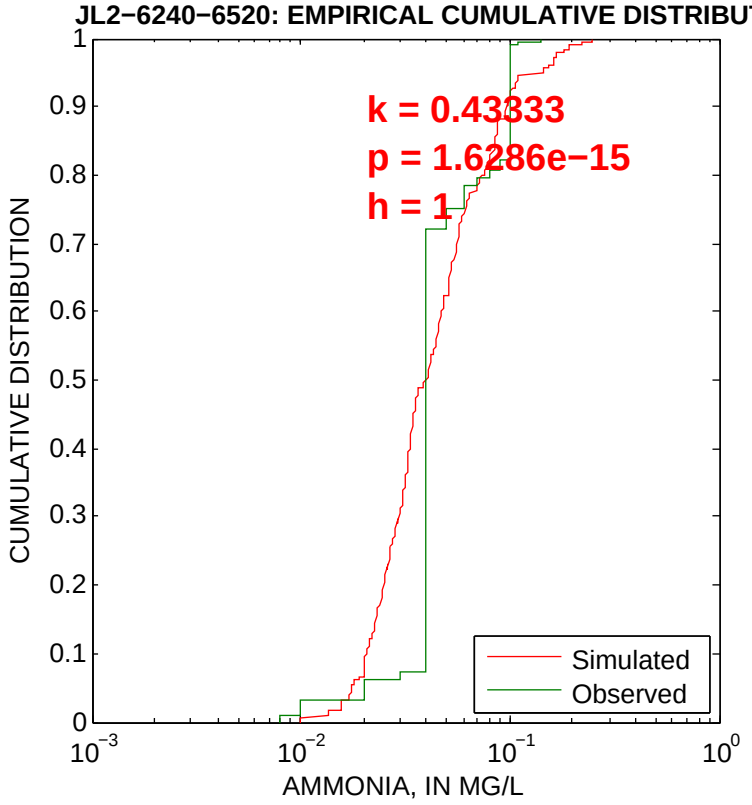
STATISTICS

n	2835	2835
	observe	simulate
min	6	5.8318
	0.778151	0.765803
mean	192.561	191.19
	2.0233	2.07262
media	112	128.79
	2.04922	2.10988
max	7990	5824.4
	3.90255	3.76525
varian	174261	99405.7
	0.194263	0.172167
JB	0.001	0.001
	0.001	0.001
	ra	log
%	-0.712301	2.43747
err.va	38299.6	0.0382912
rel.std.err	0.219783	0.197111
mod.eff	0.780217	0.802889

VERSION 2.1







DATA SELECTION

scenario	file
P620171001WQ	NH3X.calib

plot: NH3X - ammonia

Dates: 1/1/1985 – 12/31/201

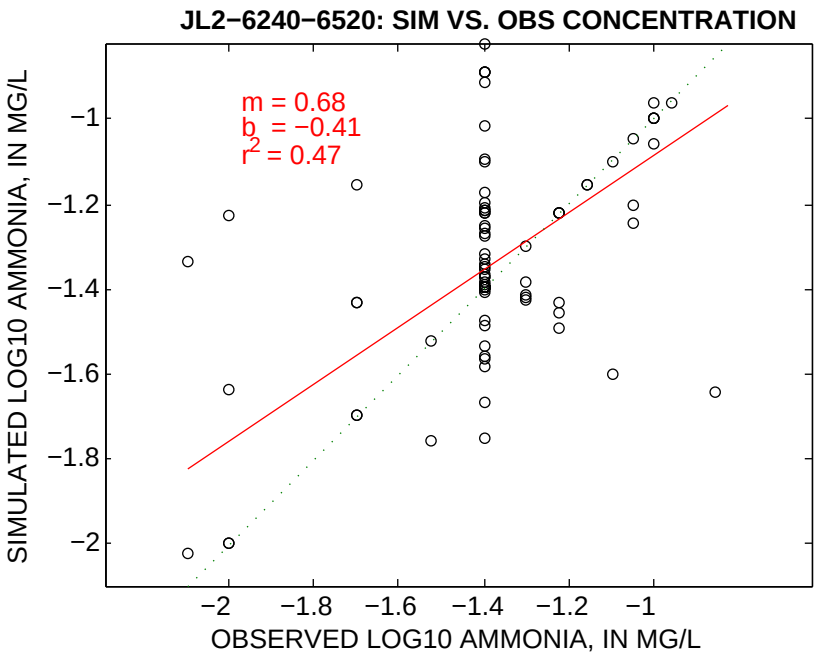
Drive	Directory	Observed
N/A	model	OBS20161101

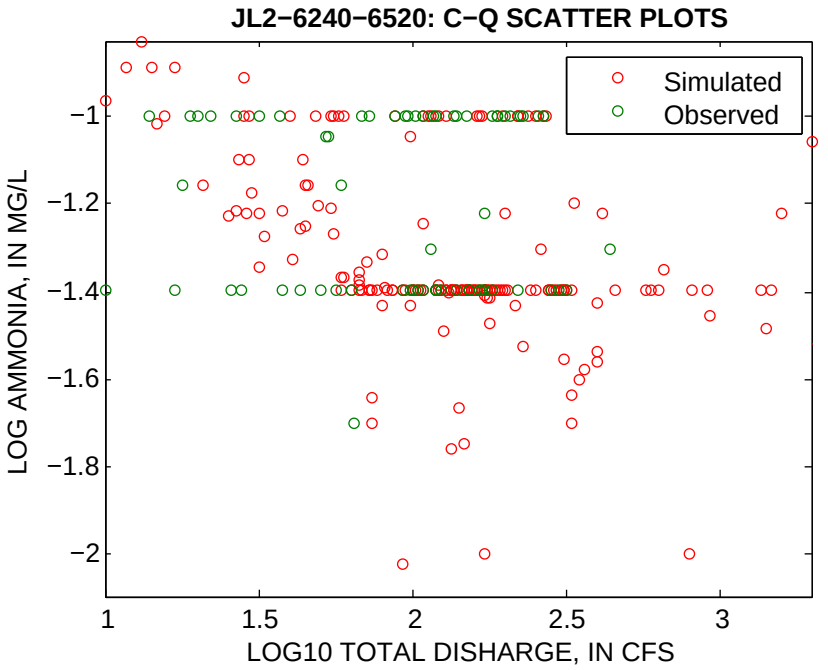
STATISTICS

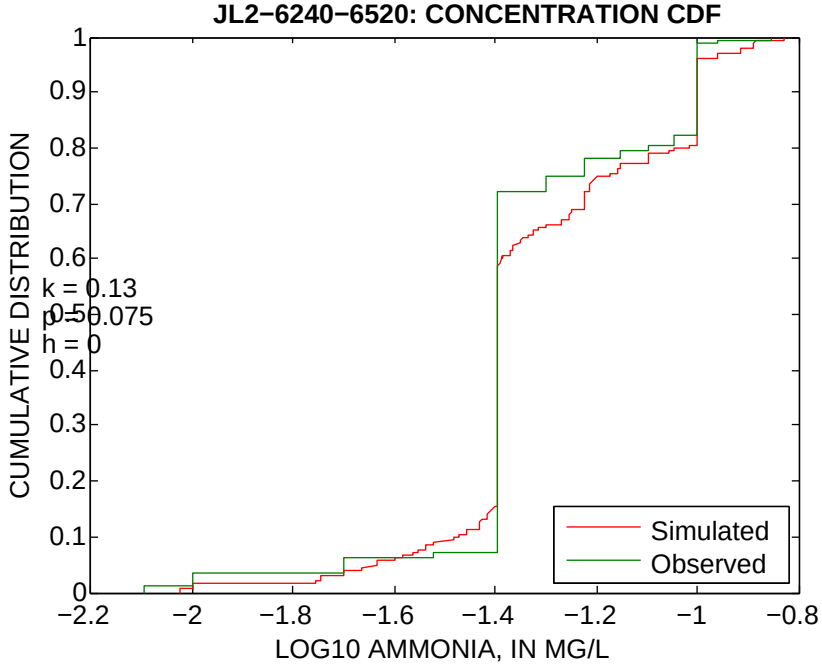
	n	180	180
		observe	simulate
min		0.008	0.0099068
		-2.09691	-2.00407
mean		0.0518111	0.0523286
		-1.33657	-1.37018
media		0.04	0.039924
		-1.39794	-1.39877
max		0.14	0.24985
		-0.853872	-0.602321
varian		0.00067618	0.00154088
		0.0468025	0.0712866
JB		0.001	0.001
		0.001	0.032023
		ra	log
%		0.998808	2.51441
err.va		0.00205059	0.112373
rel.std.err		3.03257	2.40101
mod.eff		-2.03257	-1.40101

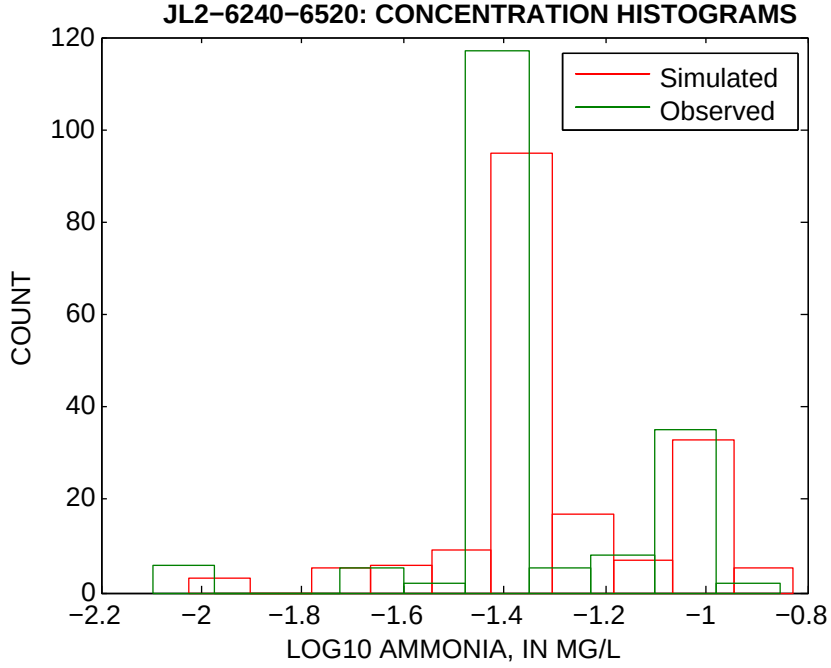
VERSION 2.1

ALL DATA
LOG10

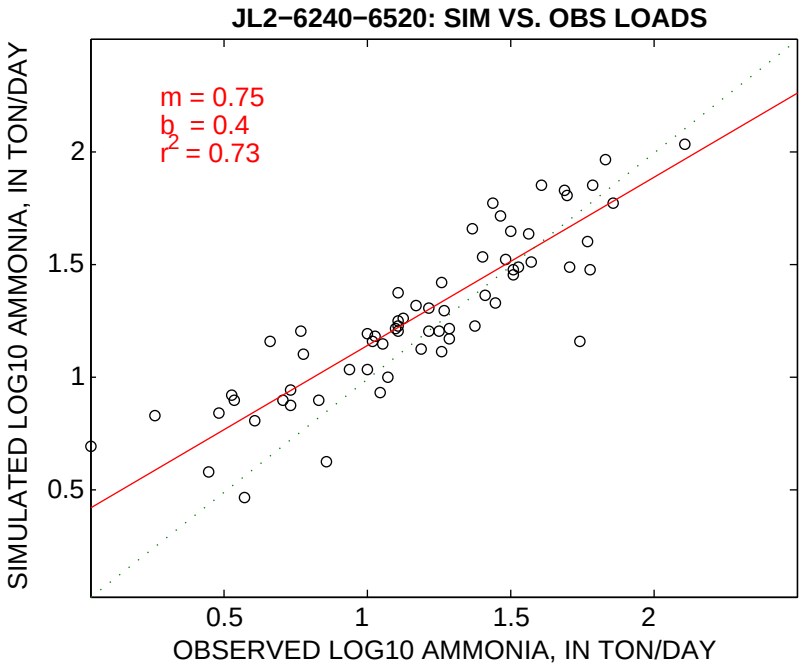


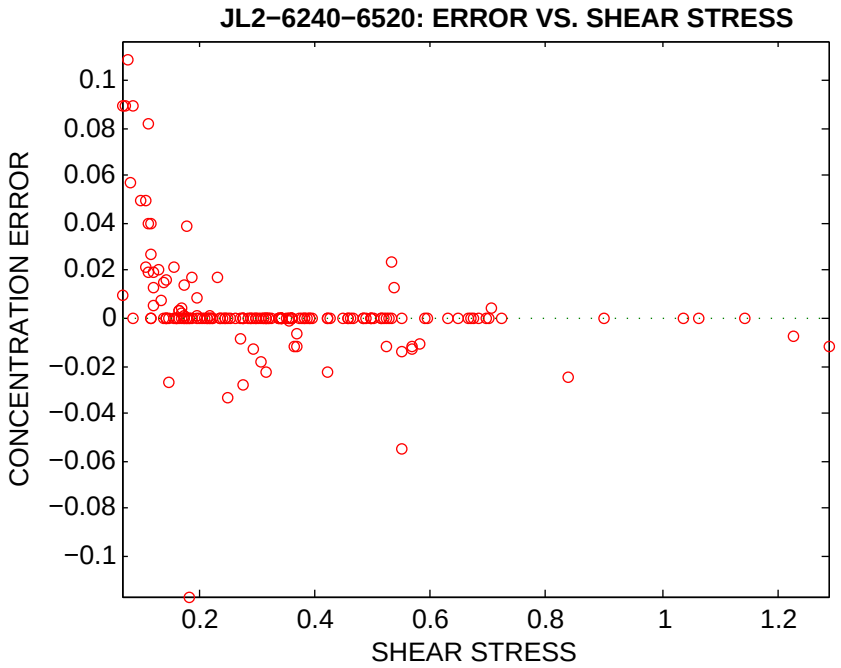


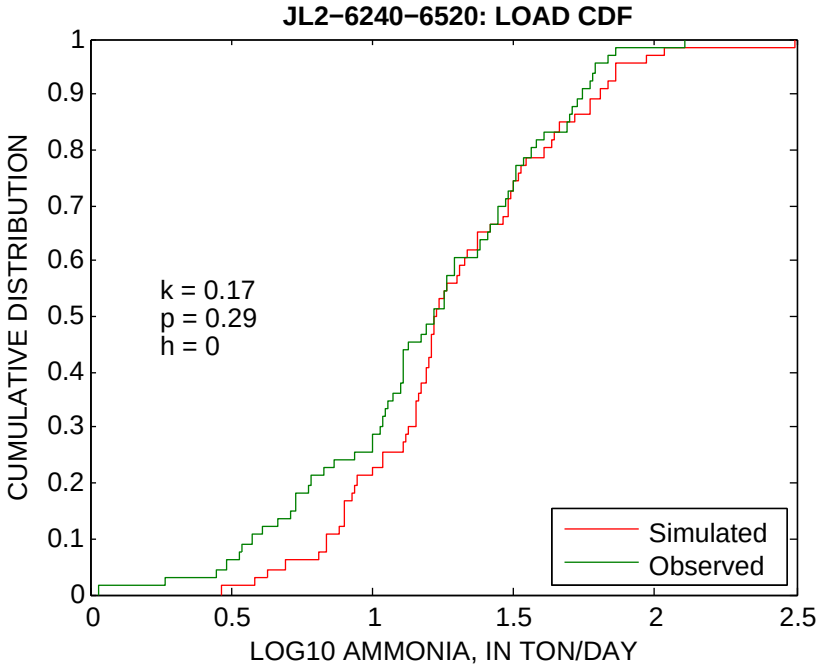


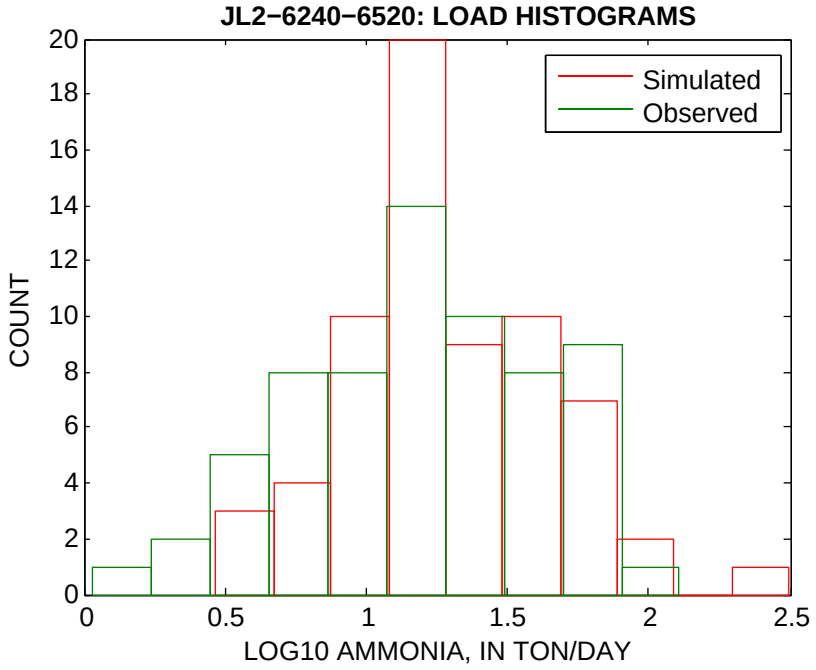


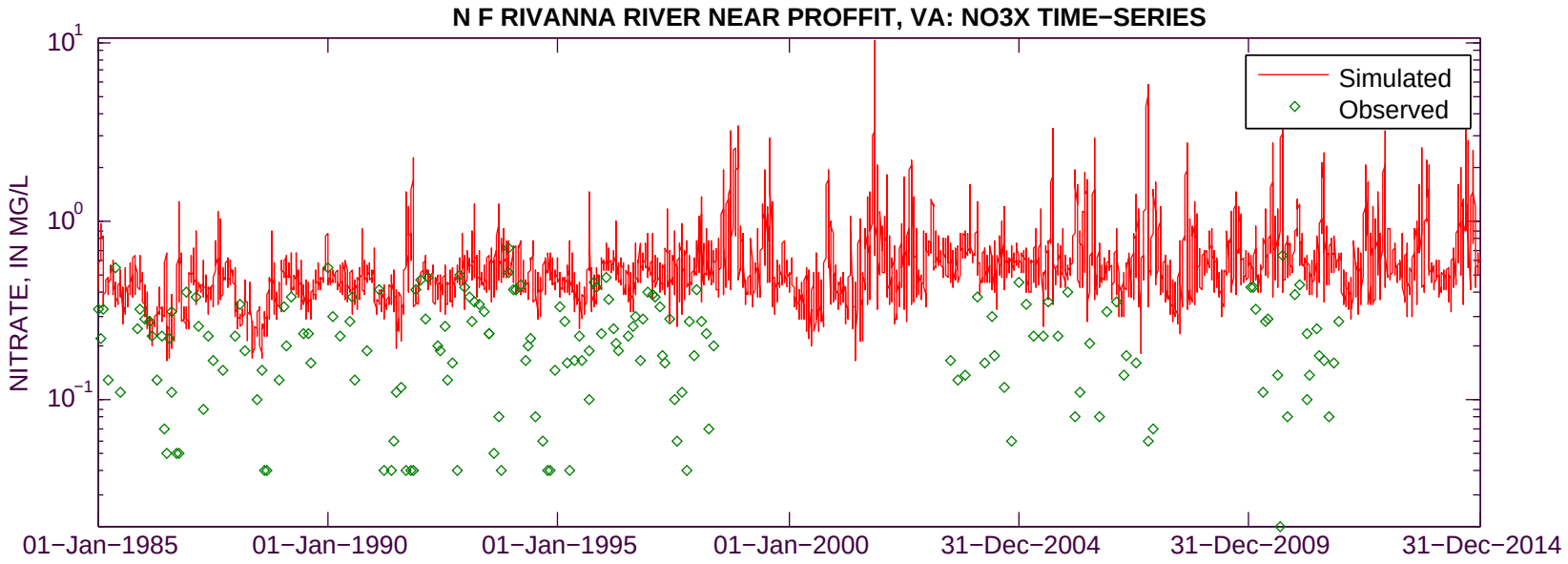
LOAD DATA
LOG10

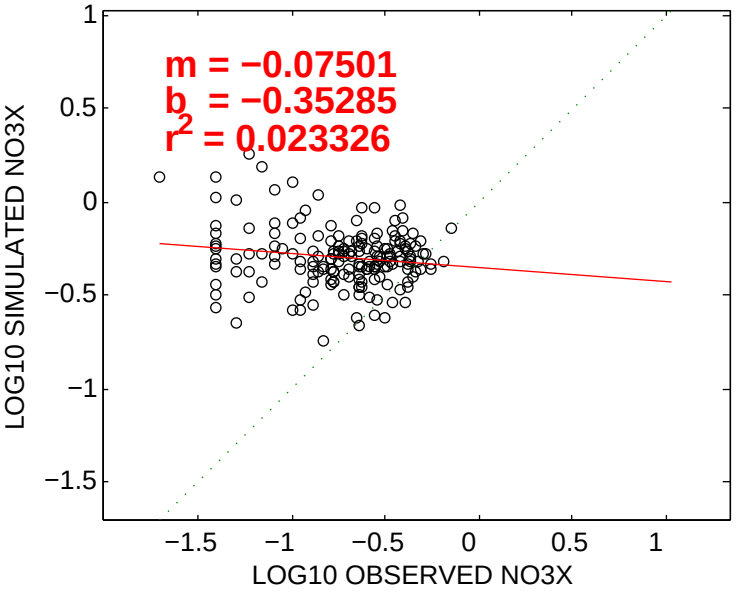


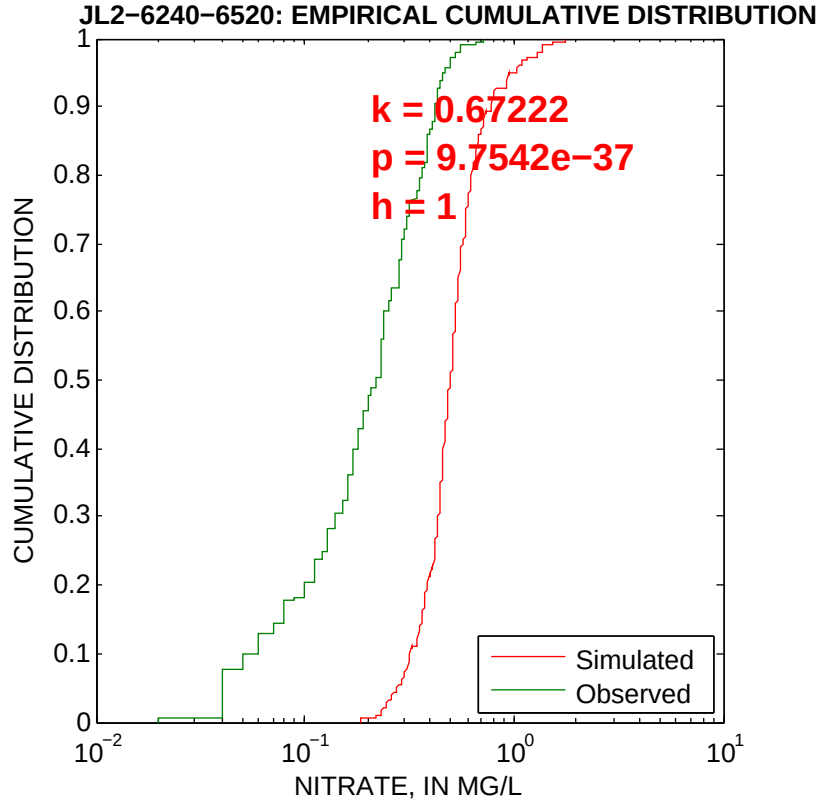












DATA SELECTION

scenario	file
P620171001WQ	NO3X.calib

plot: NO3X - nitrate

Dates: 1/1/1985 – 12/31/201

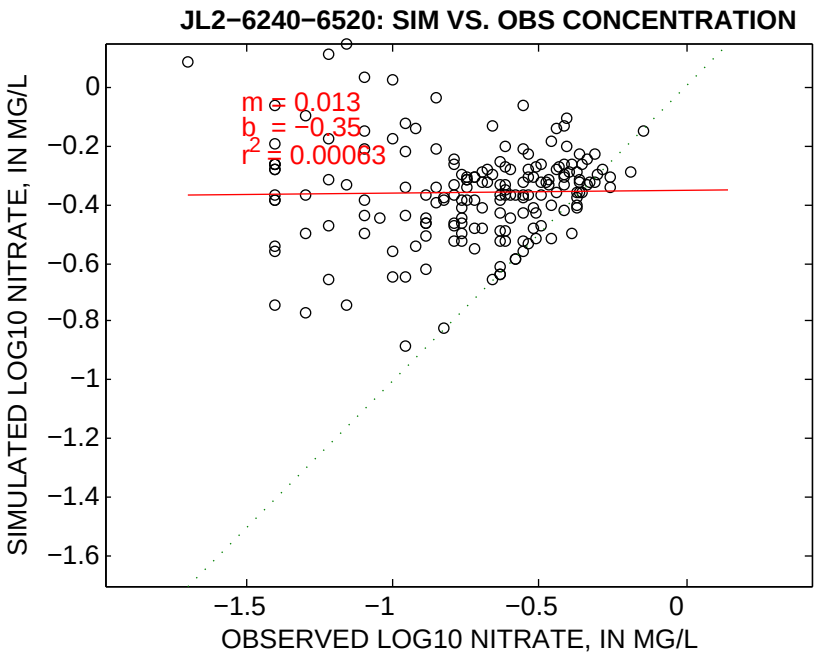
Drive	Directory	Observed
N/A	model	OBS20161101

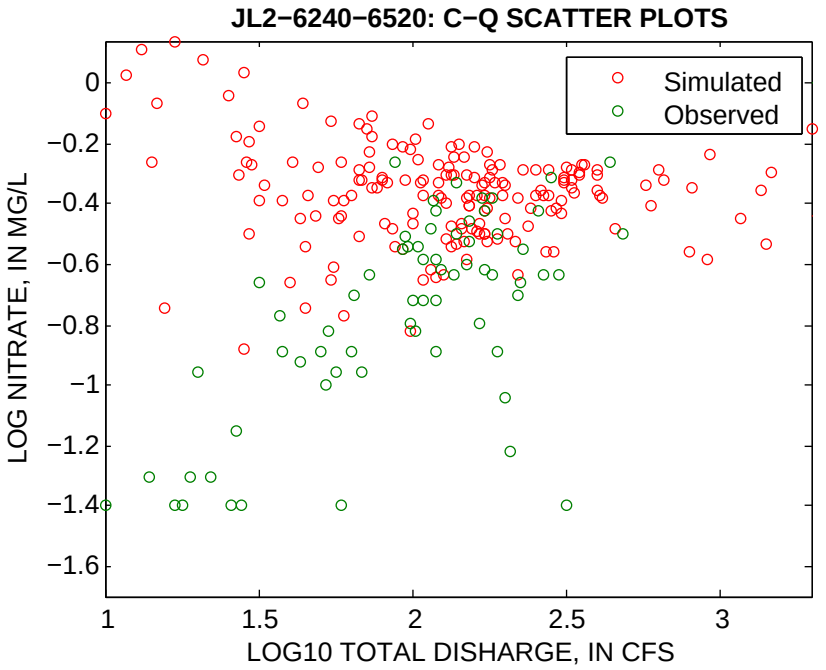
STATISTICS

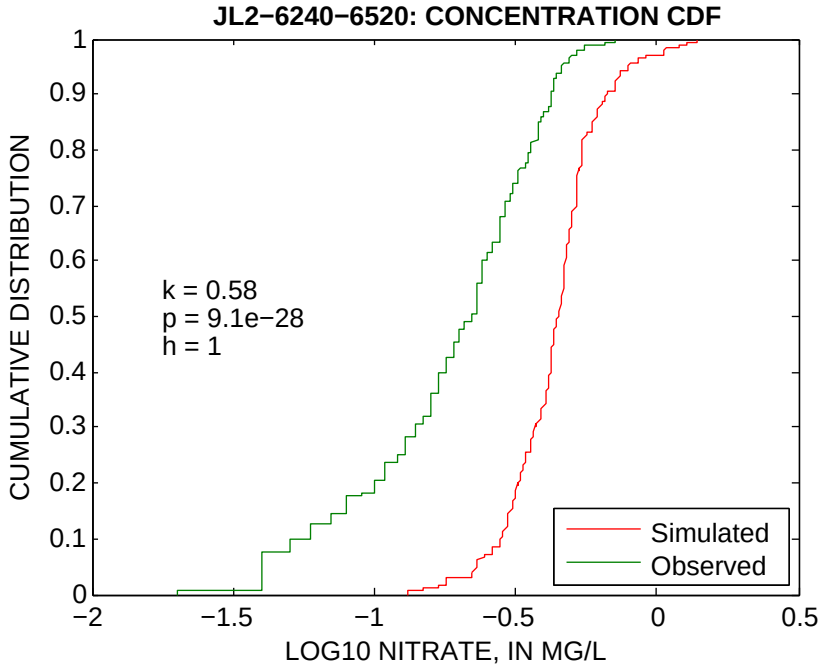
	n	180	180
		observe	simulate
min		0.02	0.18359
		-1.69897	-0.736151
mean		0.231111	0.540542
		-0.734108	-0.297783
media		0.22	0.495115
		-0.657577	-0.30531
max		0.71	1.7842
		-0.148742	0.251444
varian		0.0191373	0.0534197
		0.103304	0.0249177
JB		0.010922	0.001
		0.004929	0.002440
		ra	log
%		133.888	-59.4361
err.va		0.17878	0.335162
rel.std.err		9.34199	3.24443
mod.eff		-8.34199	-2.24443

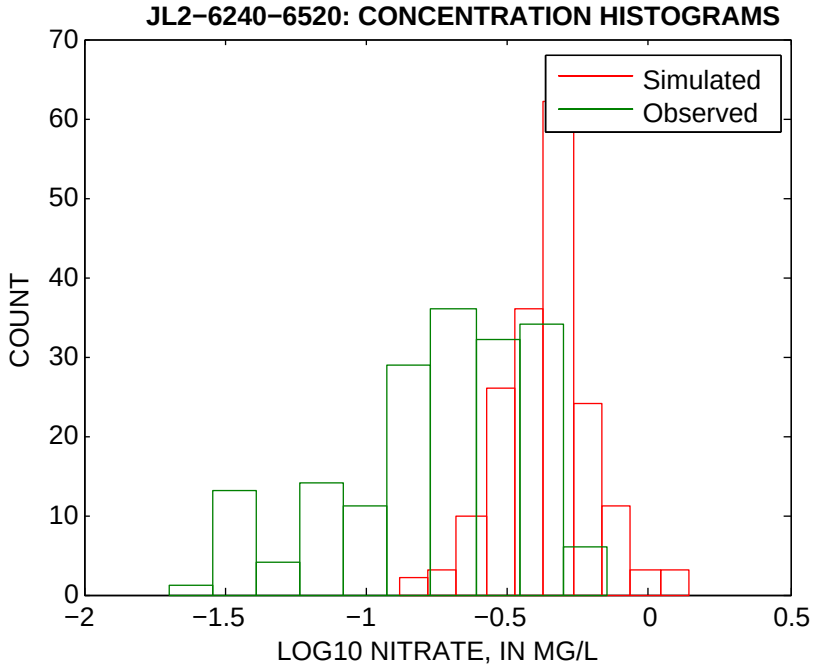
VERSION 2.1

ALL DATA
LOG10

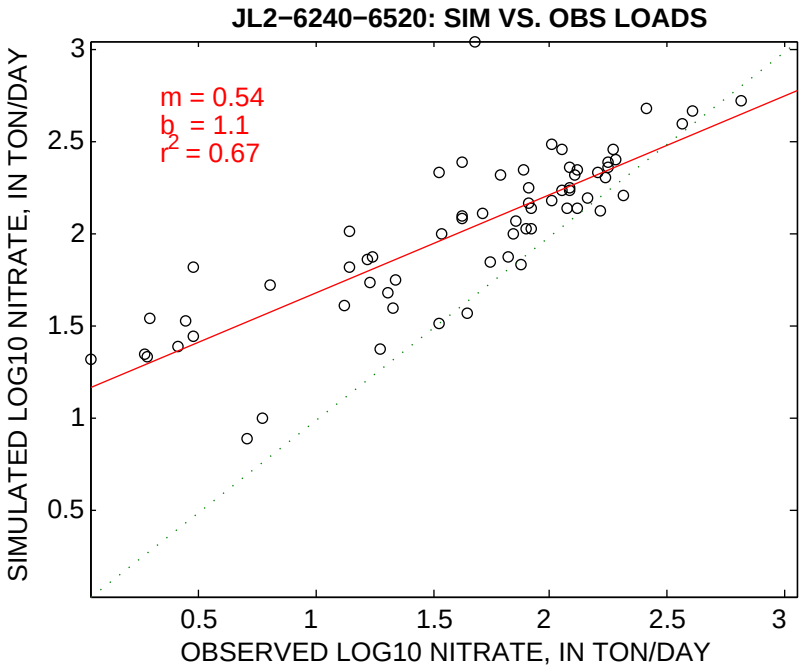




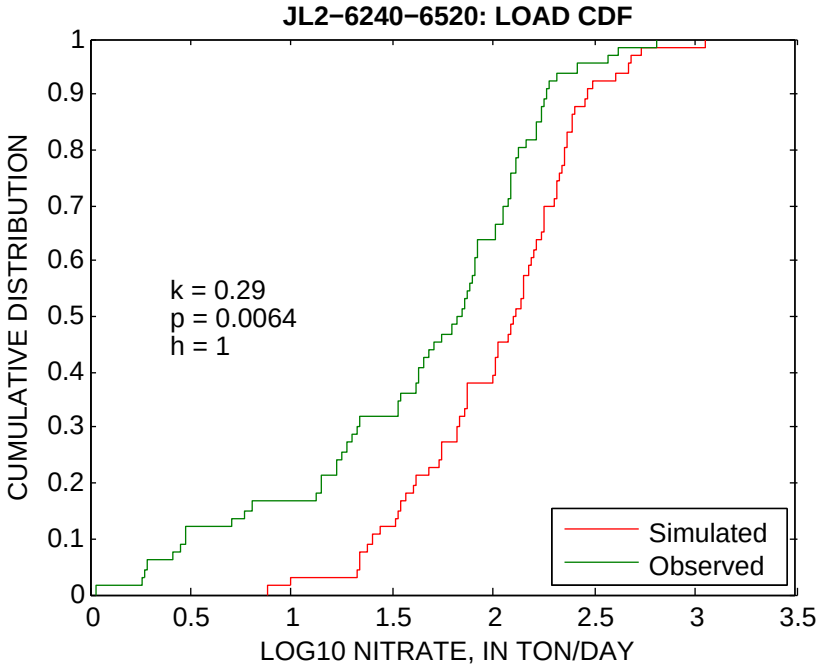


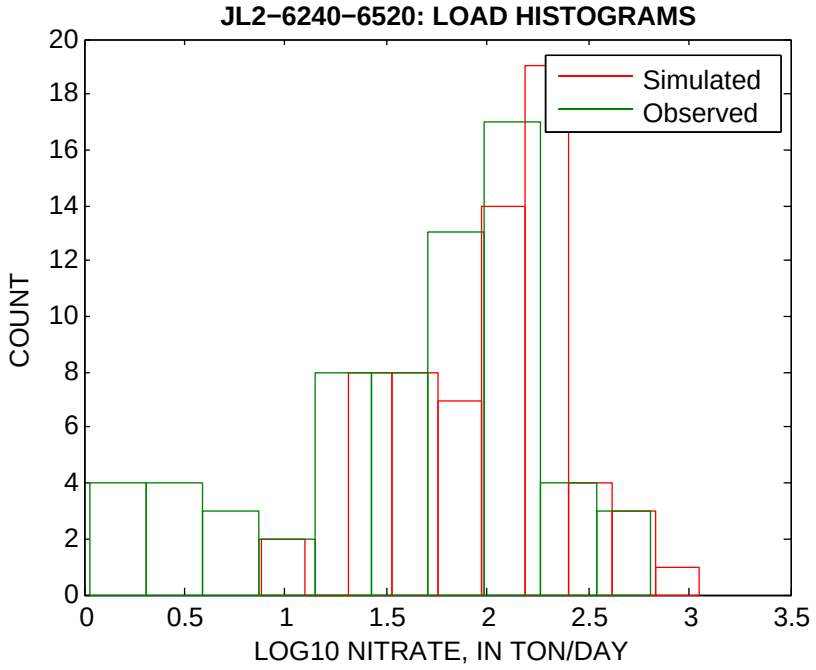


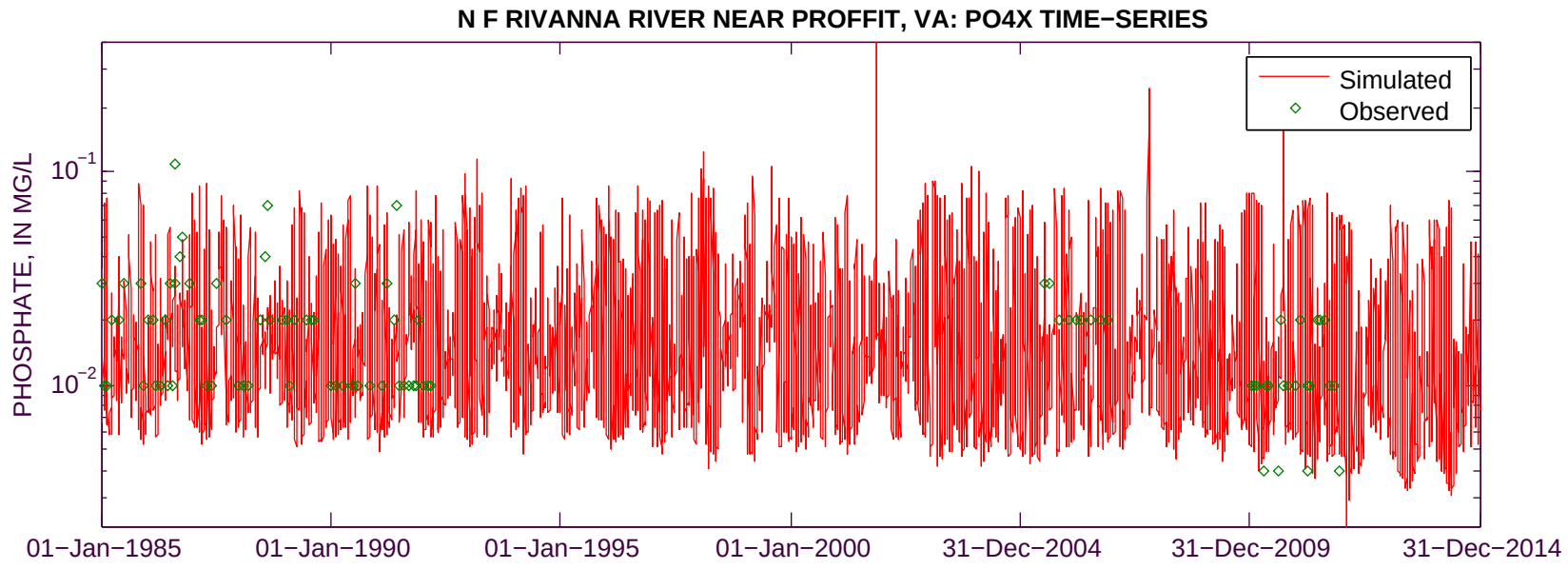
LOAD DATA
LOG10

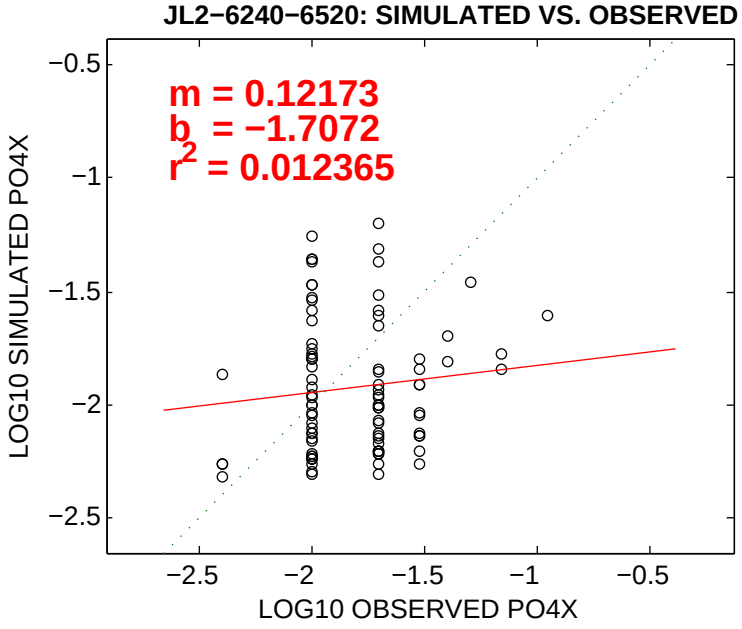


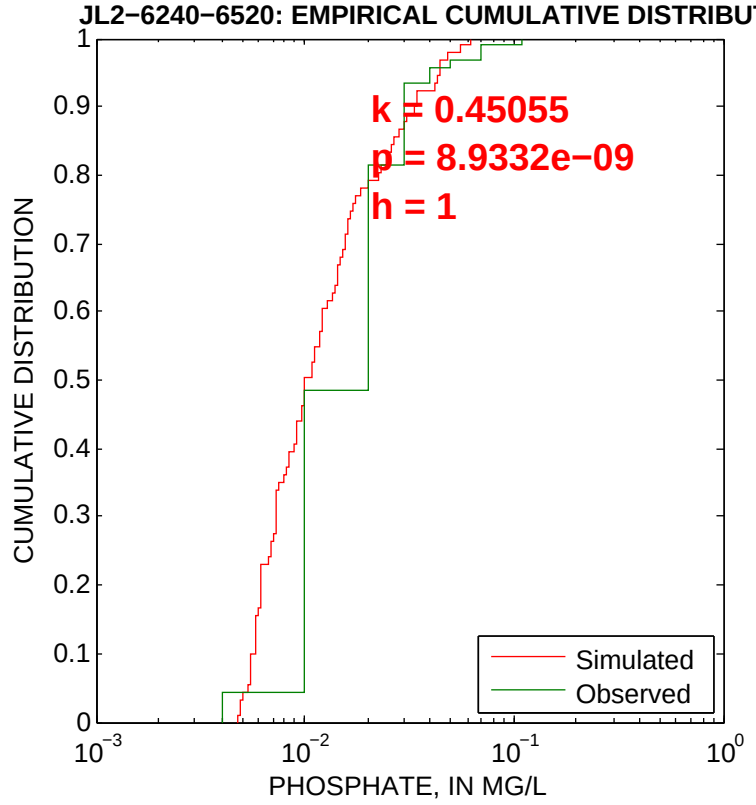












DATA SELECTION

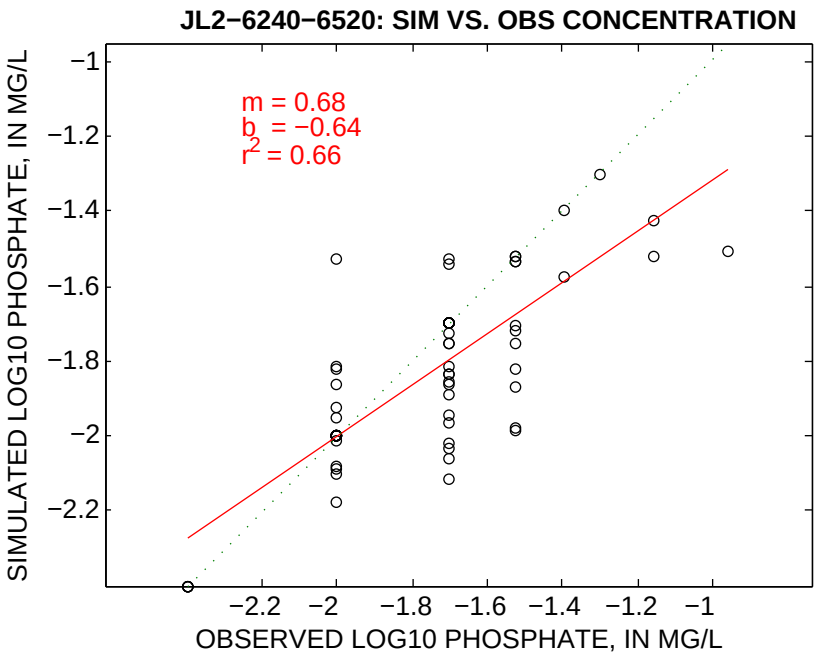
scenario: P620171001WQ
file: PO4X.calib
plot: PO4X - phosphate
Dates: 1/1/1985 12/31/201
Drive: N/A
Directory: model
Observed: OBS20161101

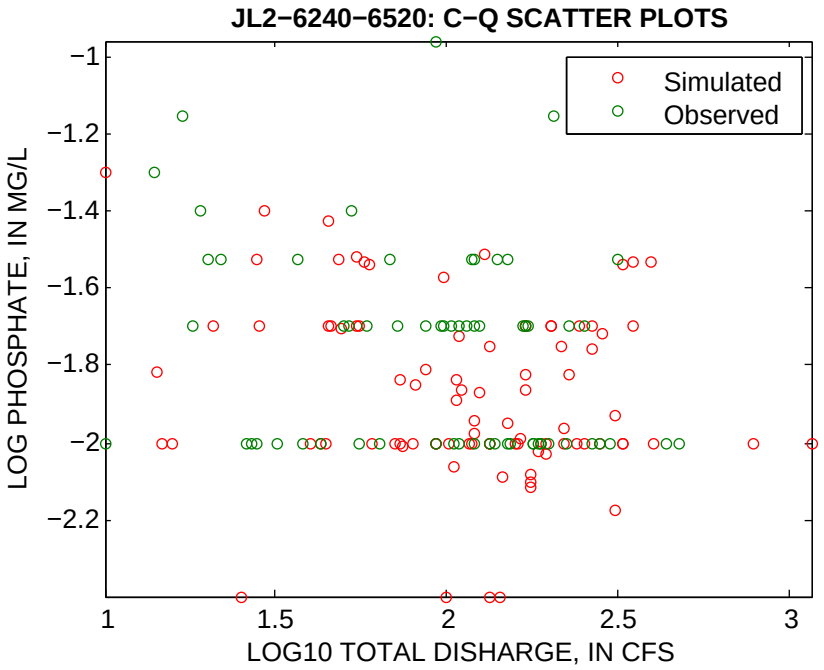
STATISTICS

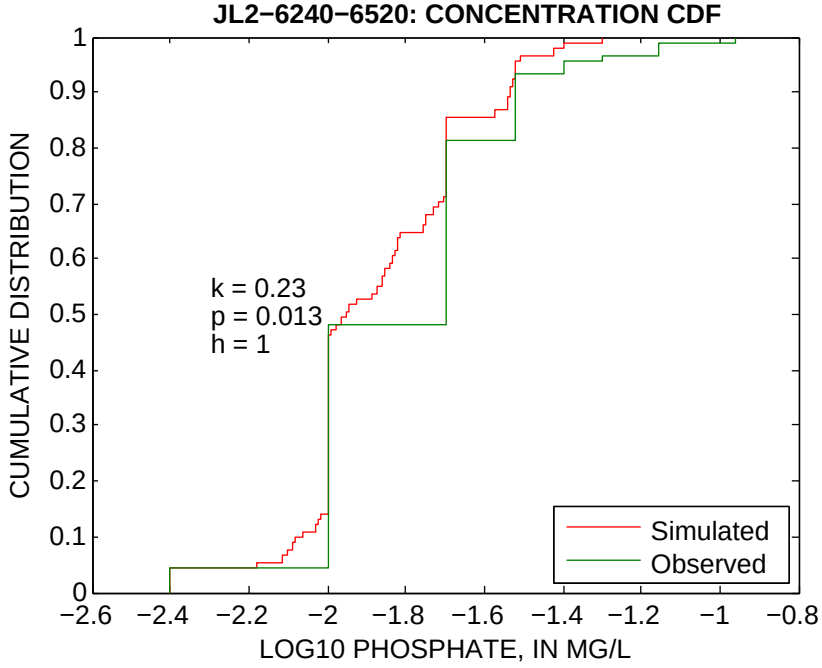
	n	91	91
		observe	simulate
min		0.004	0.0047477
		-2.39794	-2.32352
mean		0.018967	0.0151068
		-1.80965	-1.92753
media		0.02	0.010027
		-1.69897	-1.99883
max		0.11	0.062682
		-0.958607	-1.20286
varian		0.00023141	0.00015210
		0.069835	0.0836947
JB		0.001	0.001
		0.067025	0.024337
		ra	log
%		-20.3523	6.51401
err.va		0.00037799	0.150577
rel.std.err		1.63345	2.15619
mod.eff		-0.633455	-1.15619

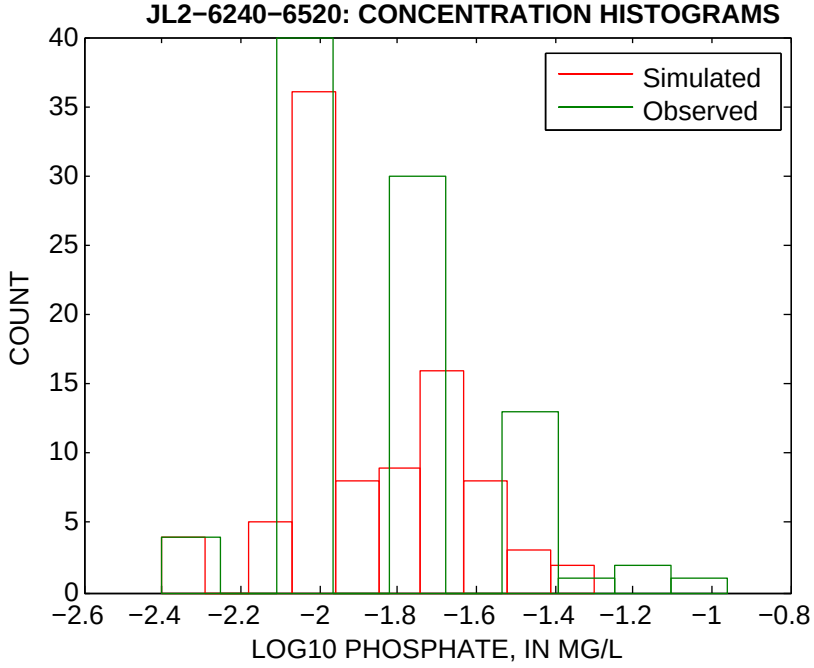
VERSION 2.1

ALL DATA
LOG10

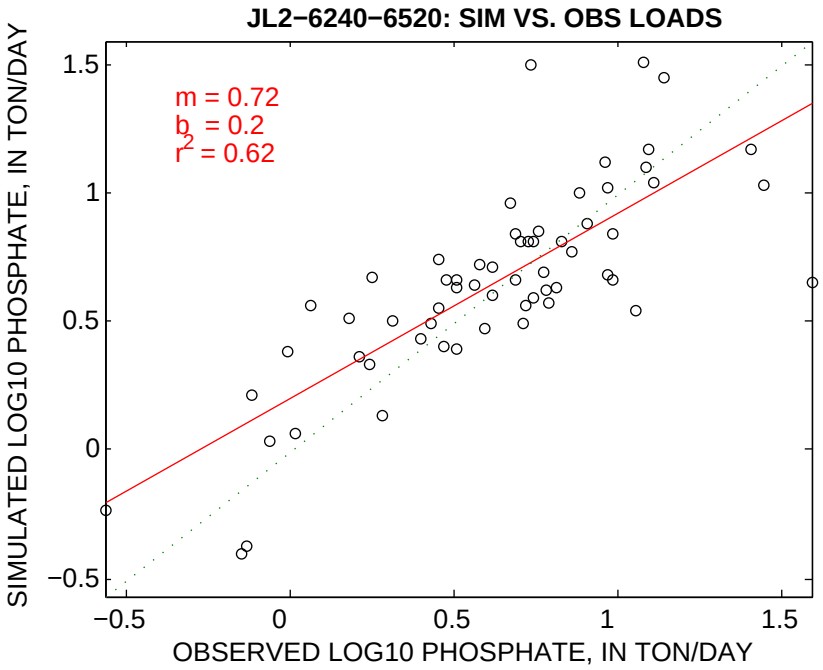


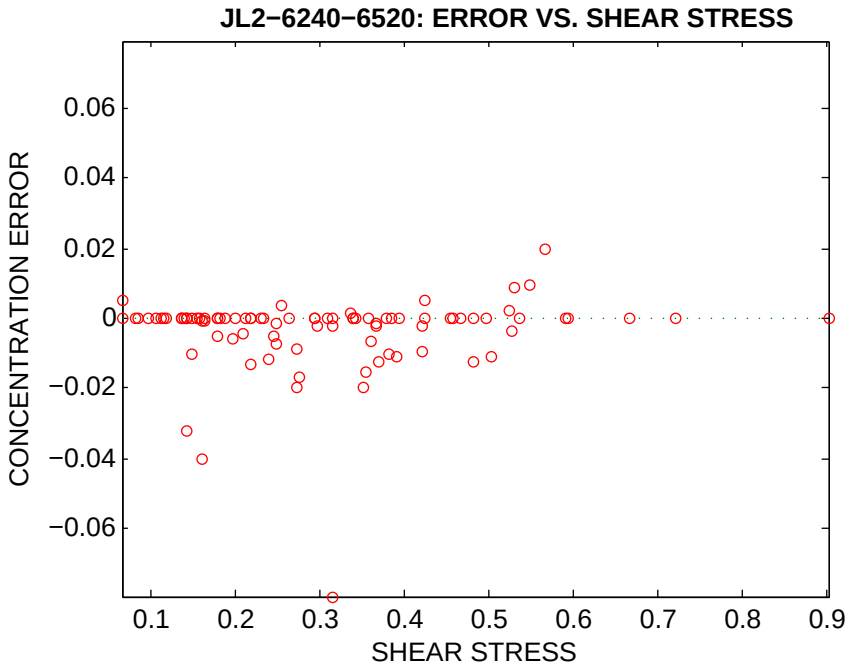


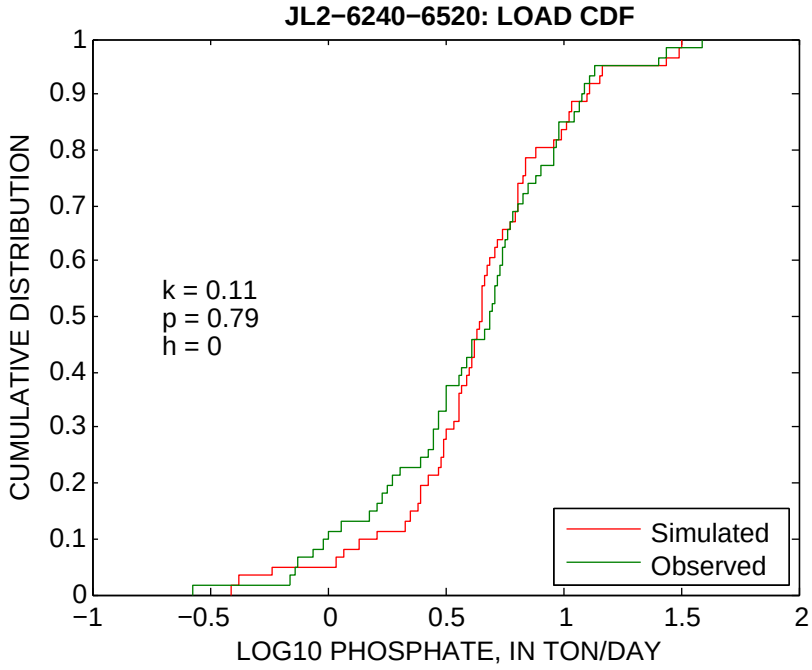


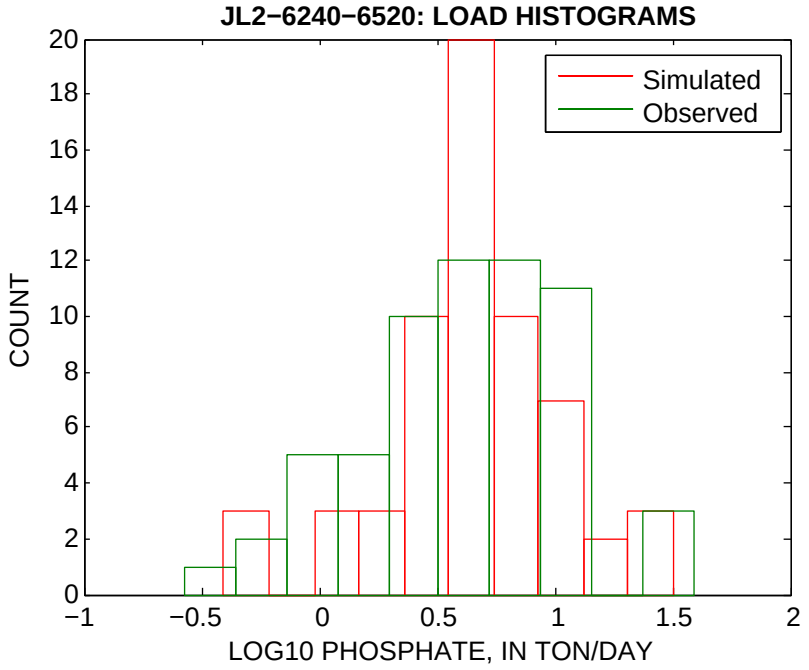


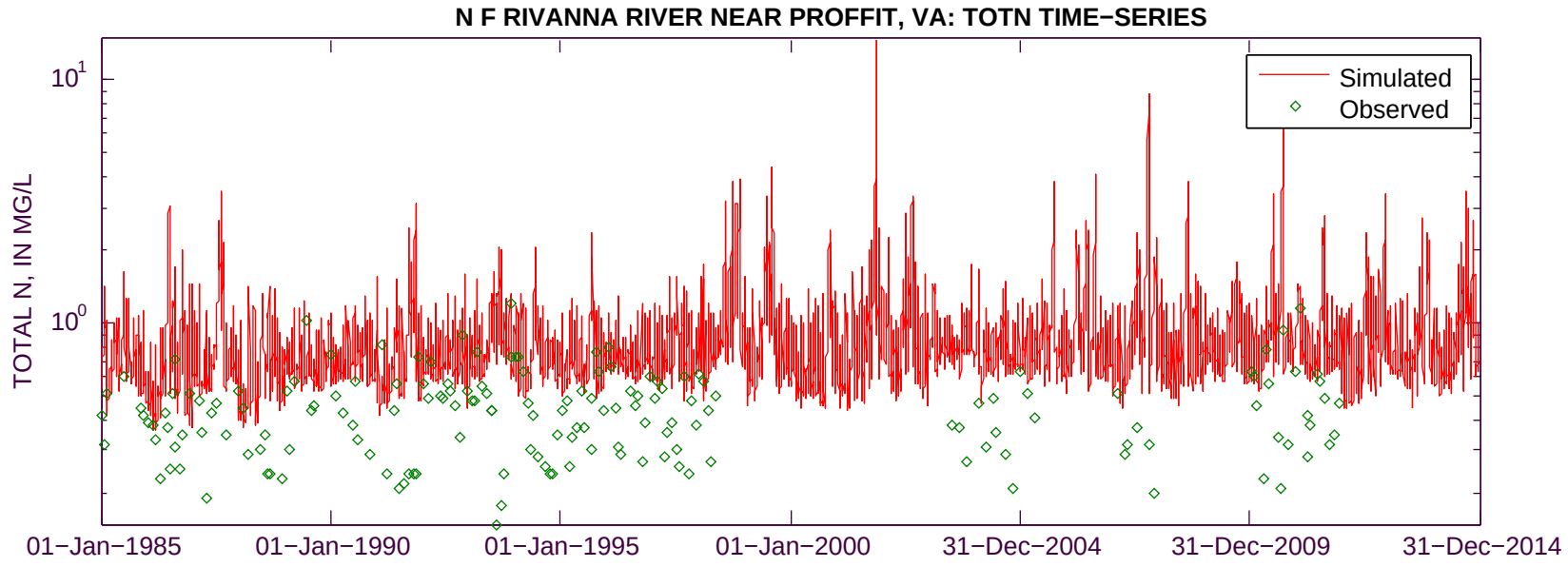
LOAD DATA
LOG10

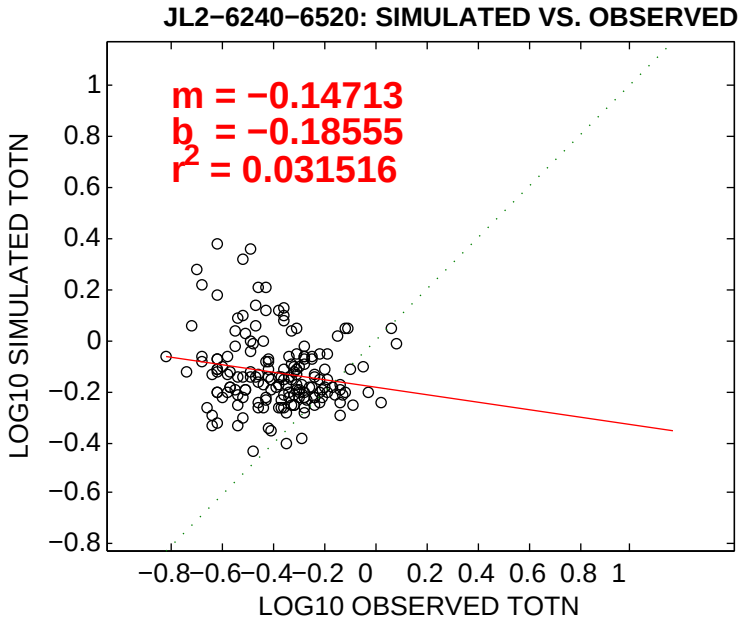


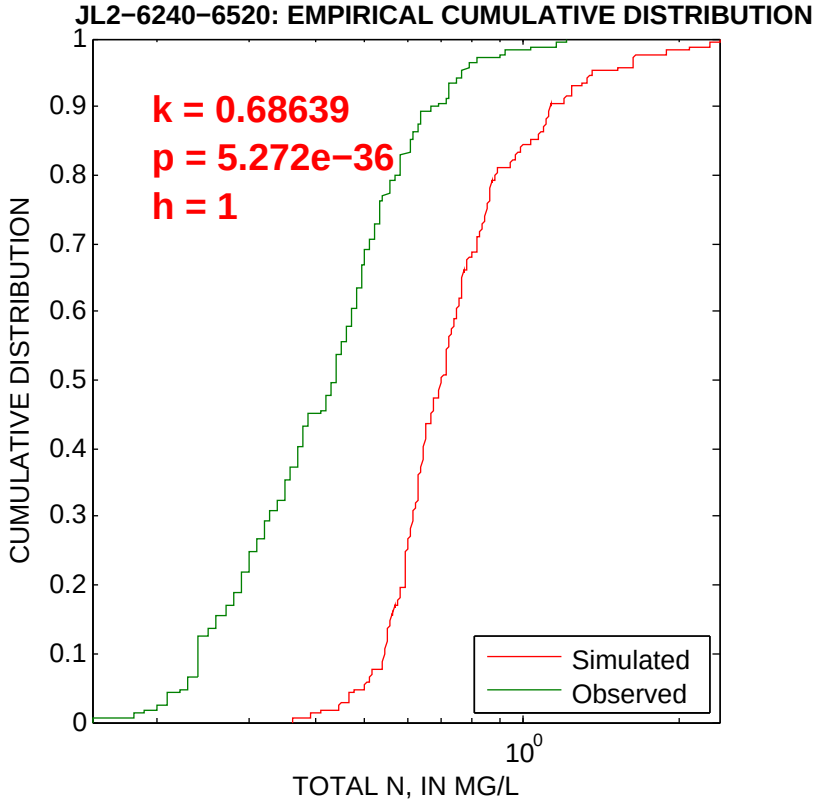












DATA SELECTION

scenario: P620171001WQ | file: TOTN.calib

plot: TOTN - total nitrogen

Dates: 1/1/1985 – 12/31/201

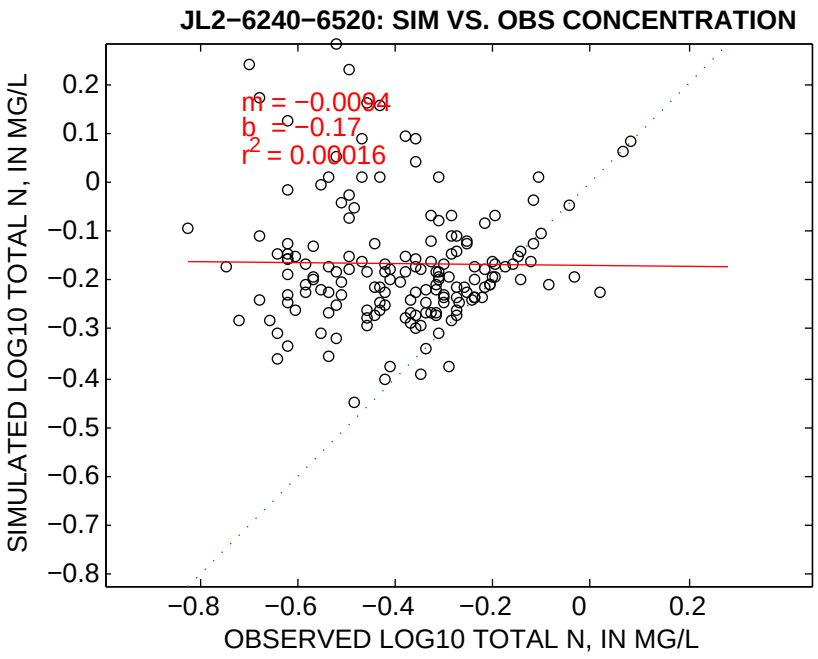
Drive | Directory | Observed: N/A | model | OBS20161101

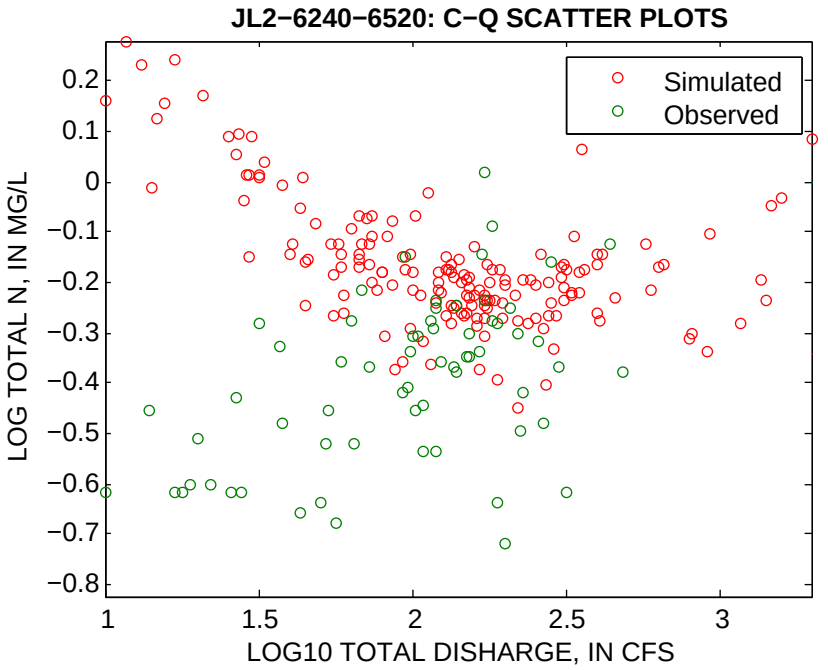
STATISTICS

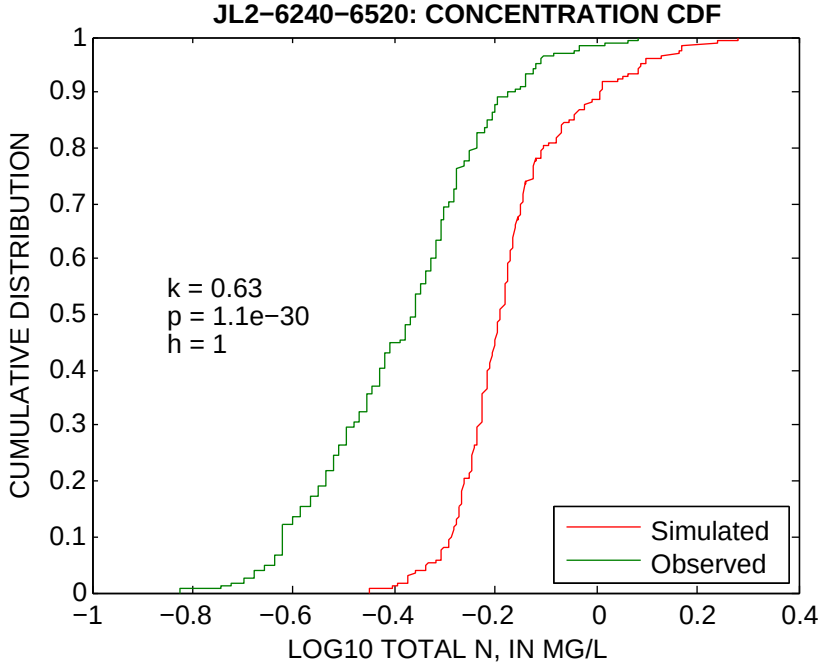
		observe	simulate
n		169	169
min		0.15	0.36415
		-0.823909	-0.43872
mean		0.447278	0.788397
		-0.382888	-0.129216
media		0.44	0.69867
		-0.356547	-0.155728
max		1.21	2.3692
		0.0827854	0.374602
varian		0.0334509	0.102621
		0.0291458	0.0200196
JB		0.001	0.001
		0.5	0.001
		ra	log
%		76.2655	-66.2523
err.va		0.2725	0.122475
rel.std.err		8.14628	4.20214
mod.eff		-7.14628	-3.20214

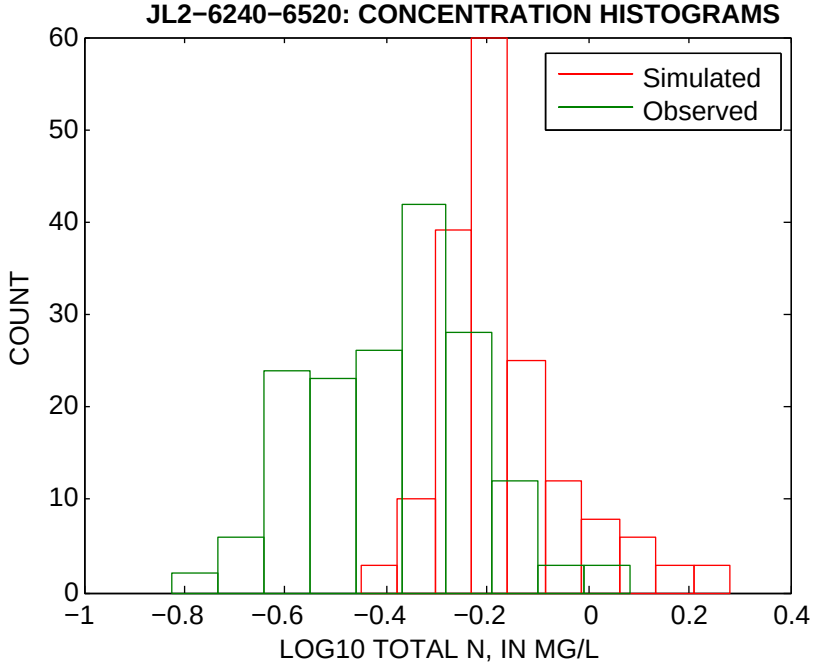
VERSION 3.1

ALL DATA
LOG10

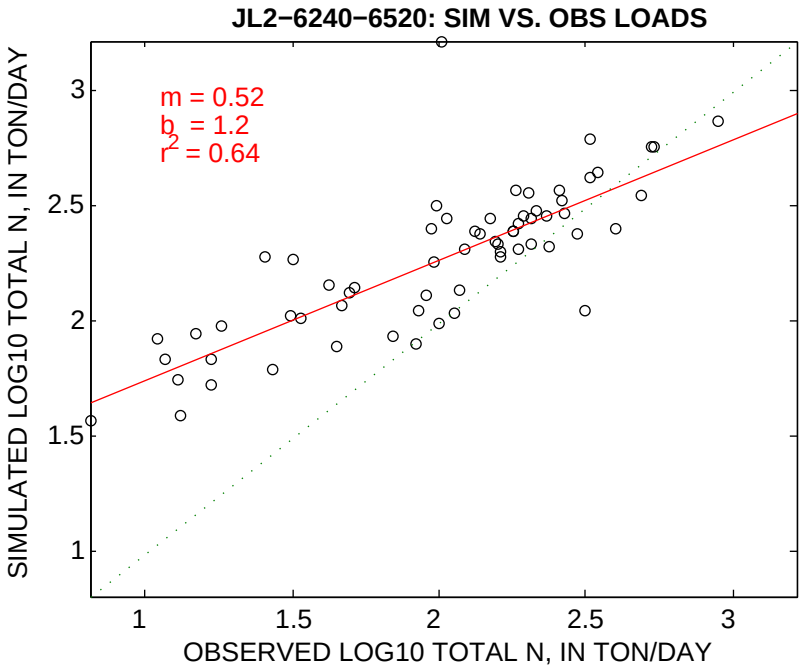


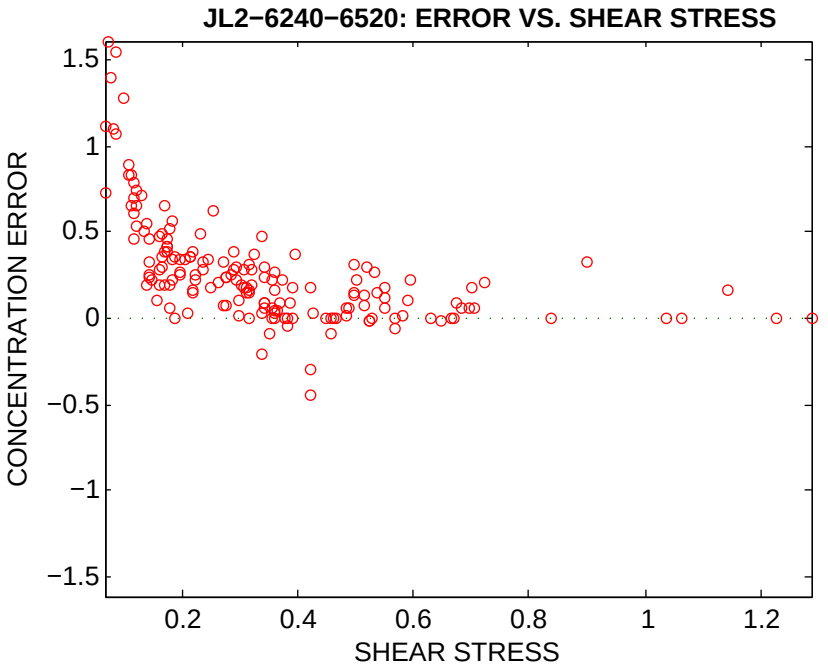


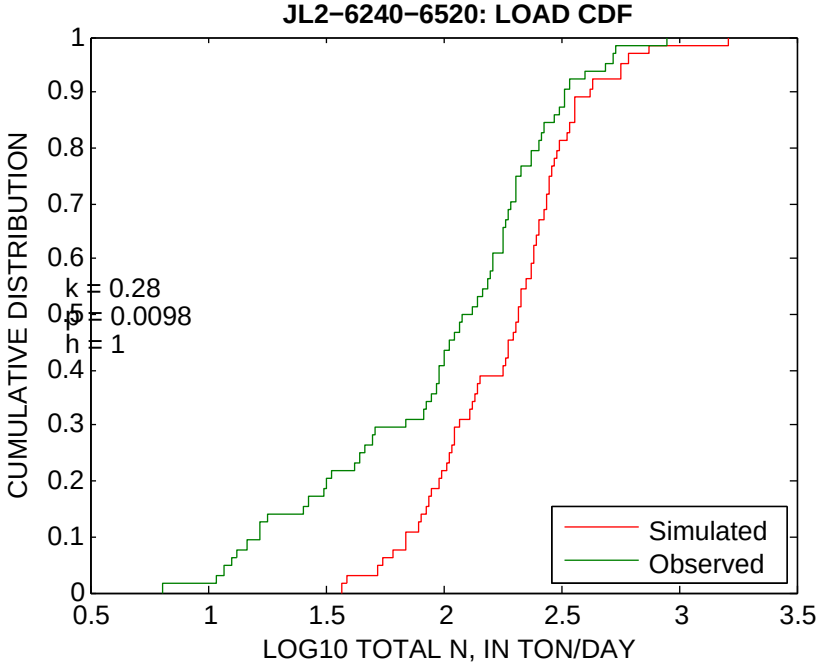


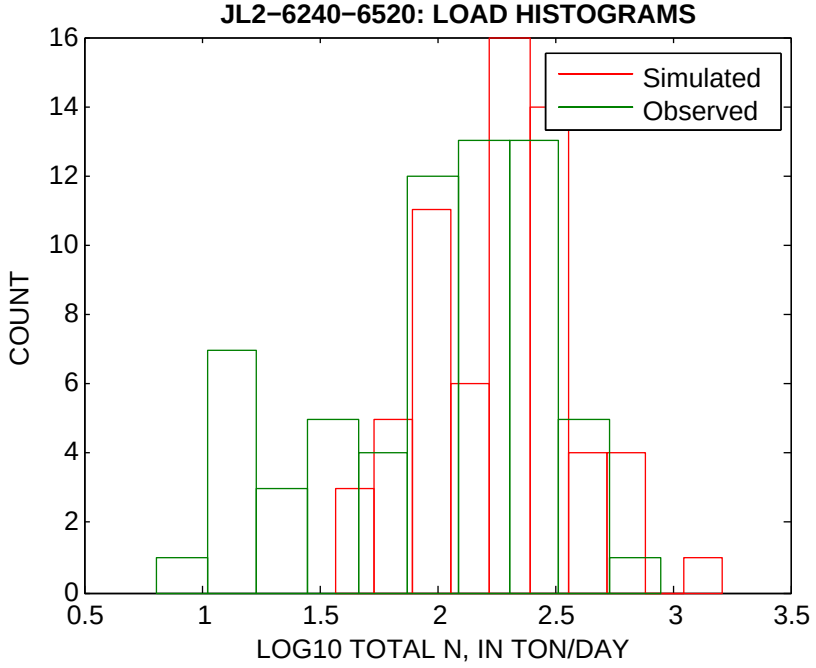


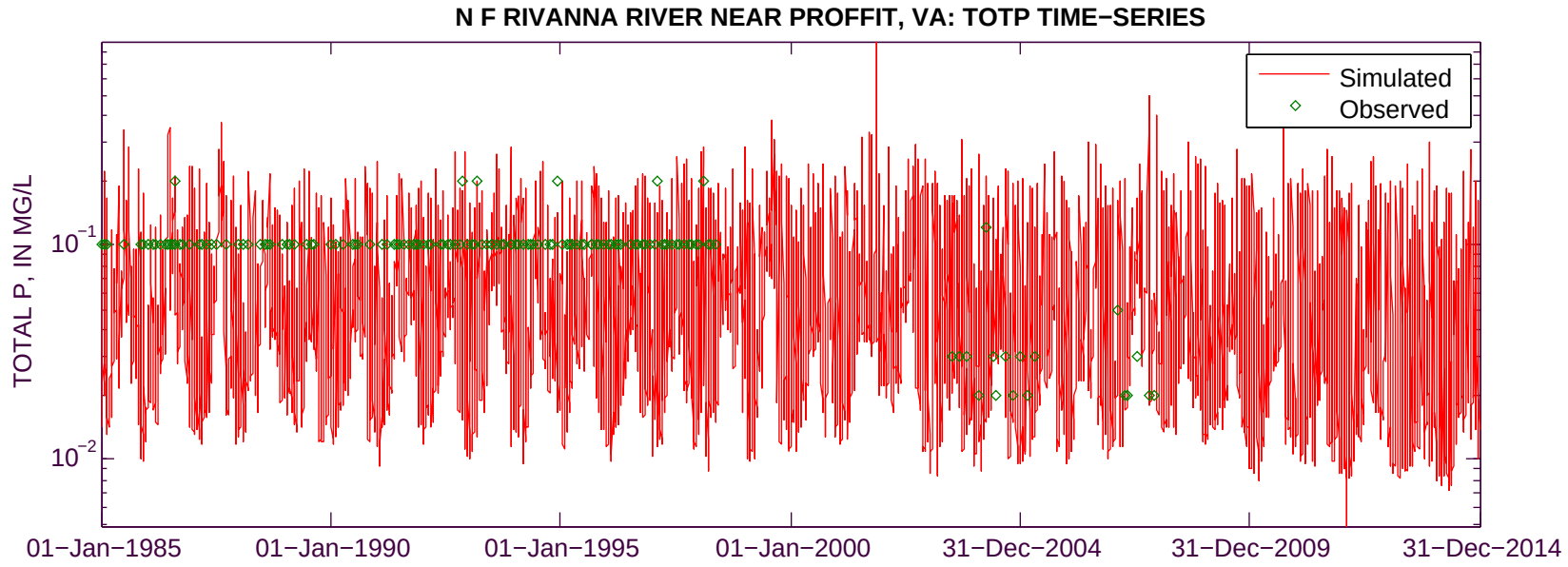
LOAD DATA
LOG10

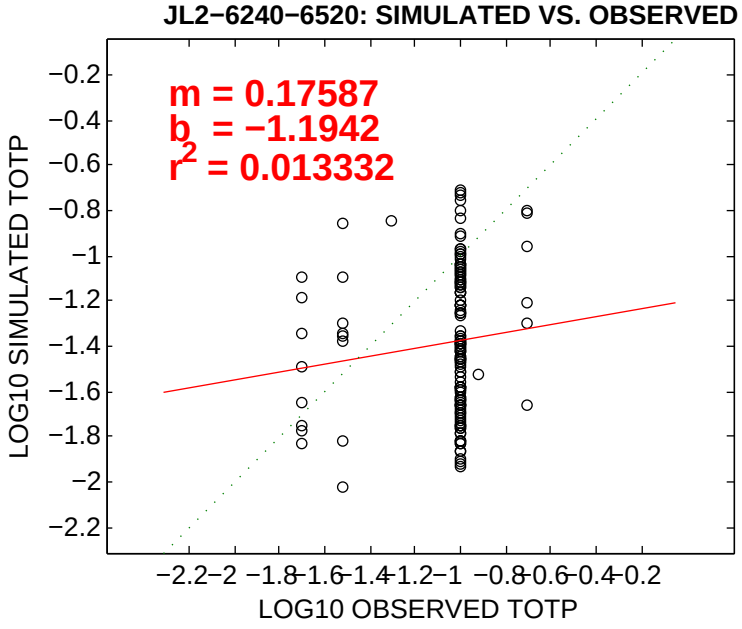


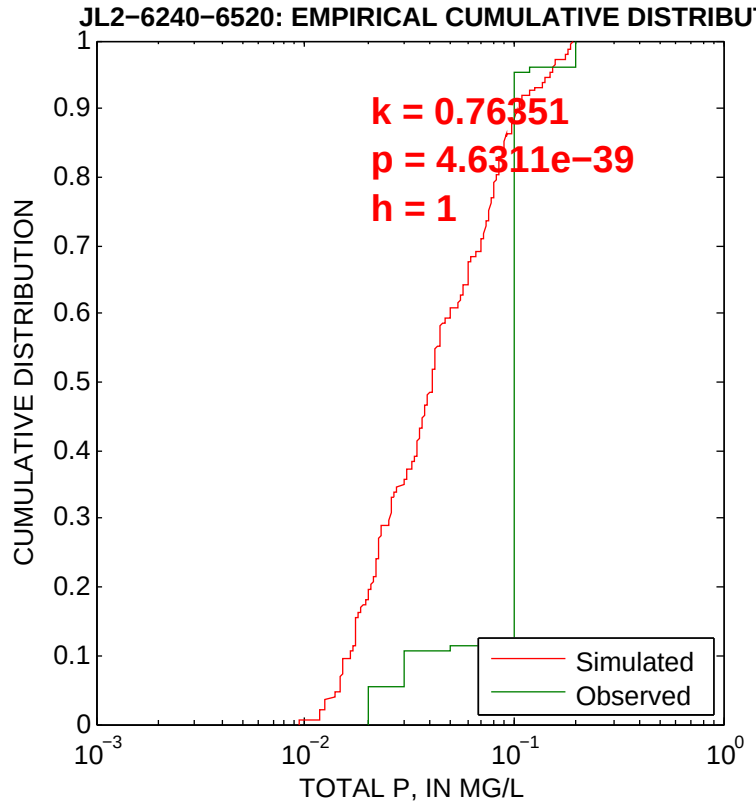












DATA SELECTION

scenario	file
P620171001WQ	TOTP.calib

plot: TOTP - total phosphorus

Dates: 1/1/1985 – 12/31/201

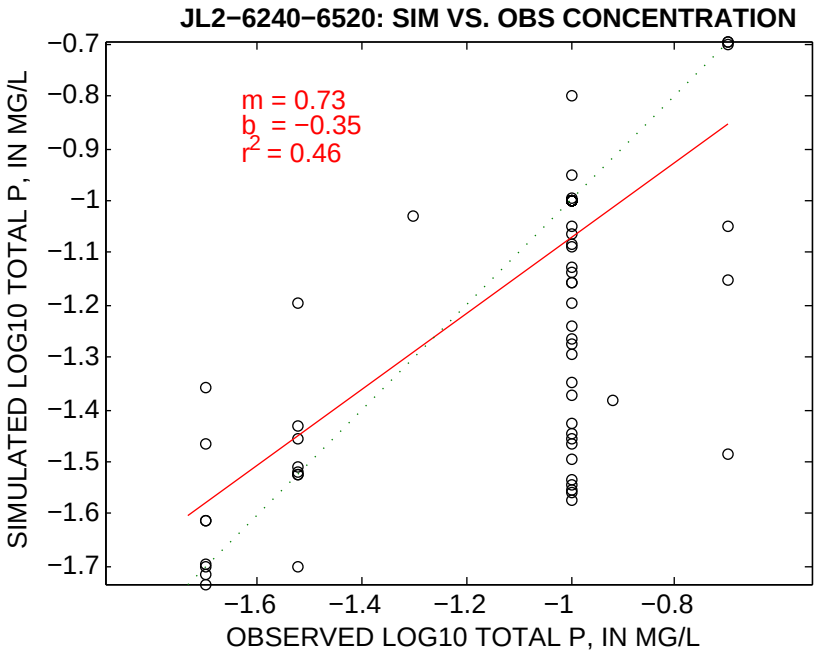
Drive	Directory	Observed
N/A	model	OBS20161101

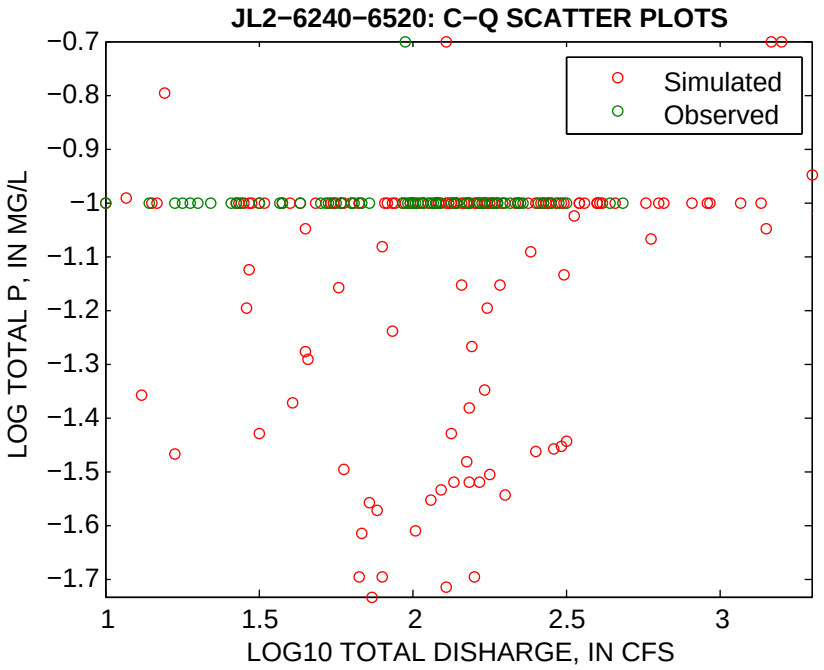
STATISTICS

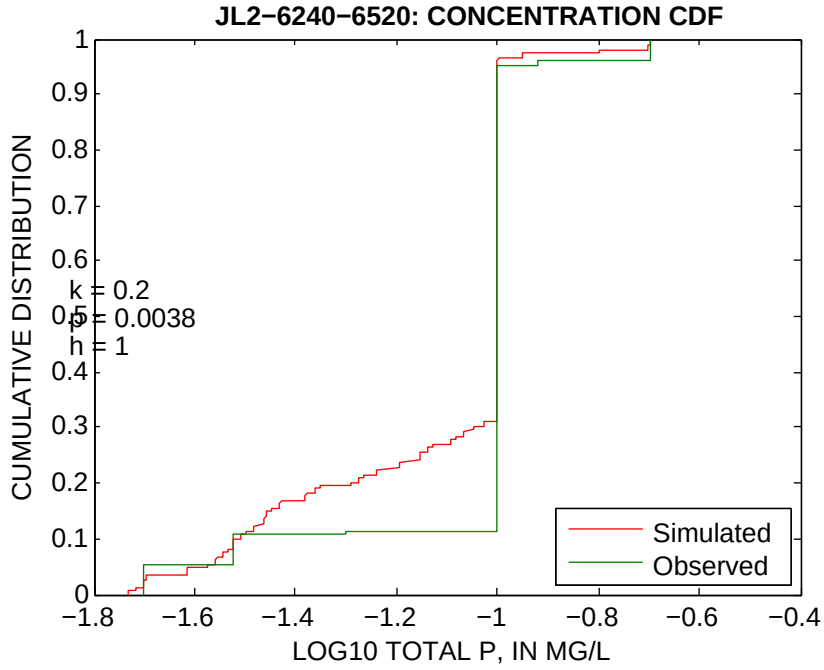
	n	148	148
		observe	simulate
min		0.02	0.0095407
		-1.69897	-2.02042
mean		0.0957432	0.0540688
		-1.05534	-1.37976
media		0.1	0.0410045
		-1	-1.38717
max		0.2	0.19303
		-0.69897	-0.714375
varian		0.00102461	0.00167098
		0.0427417	0.0991573
JB		0.001	0.001
		0.001	0.050864
		ra	log
%		-43.5273	30.7404
err.va		0.00404449	0.232827
rel.std.err		3.94733	5.44731
mod.eff		-2.94733	-4.44731

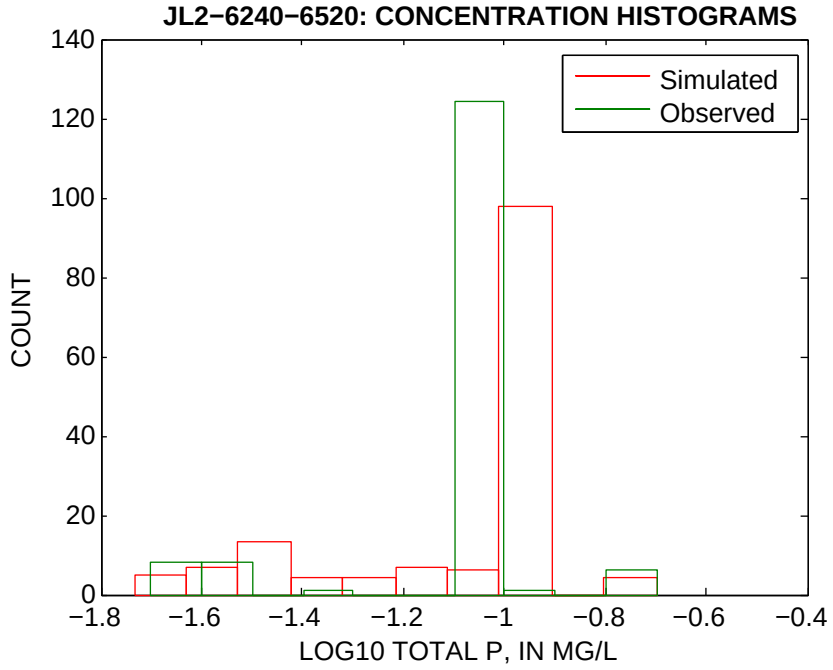
VERSION 2.1

ALL DATA
LOG10

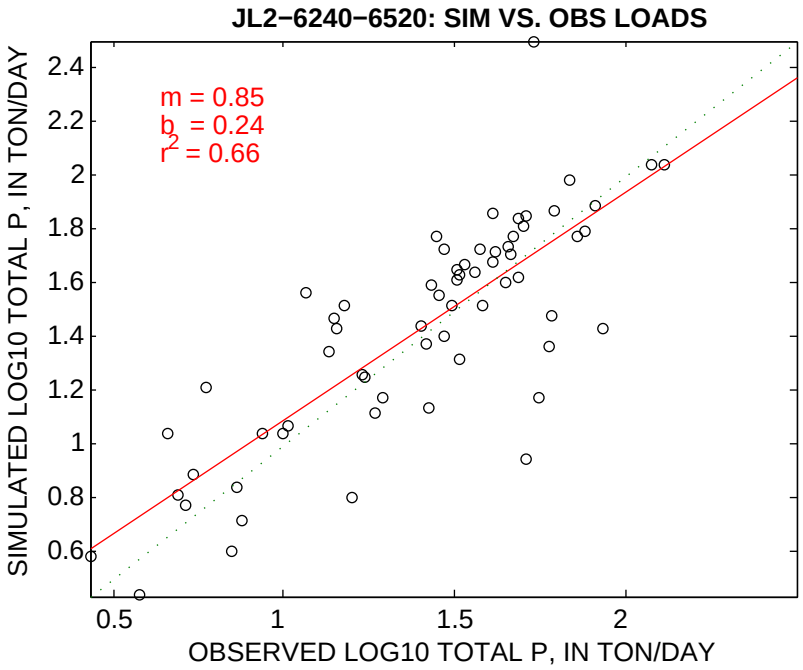


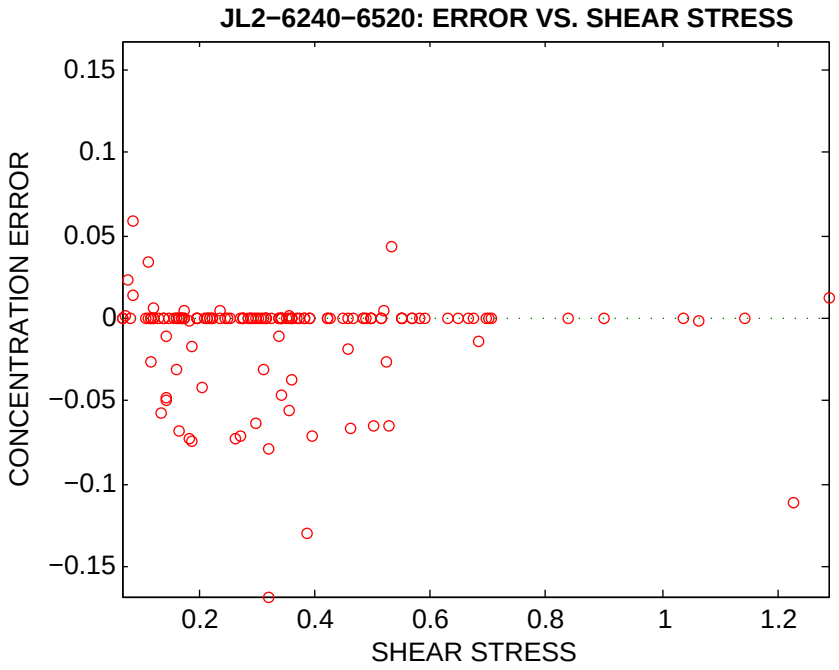


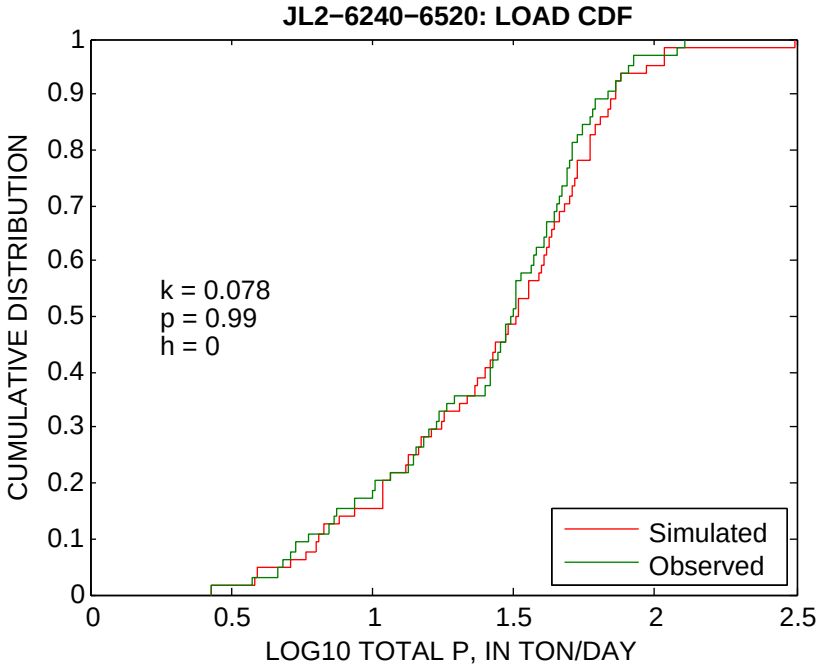


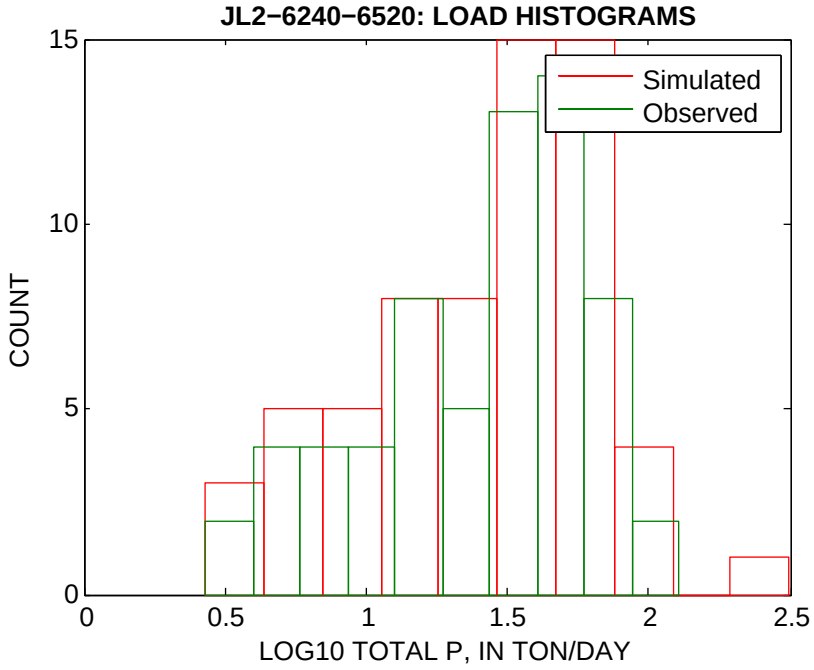


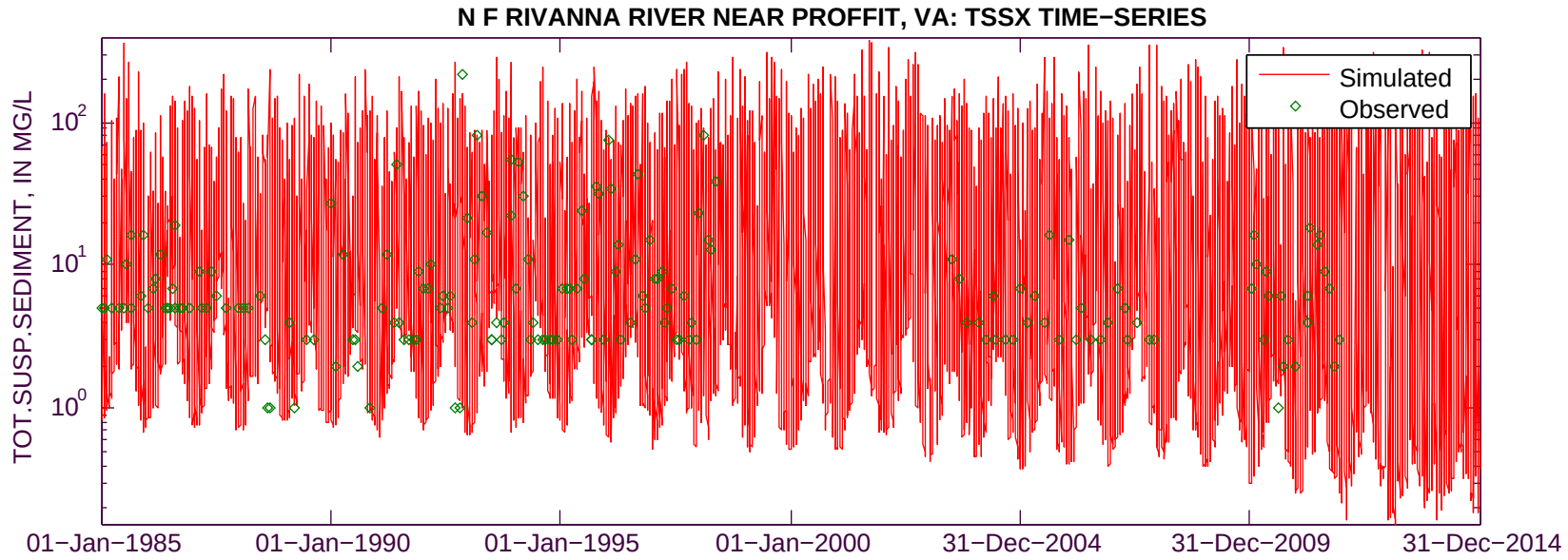
LOAD DATA
LOG10

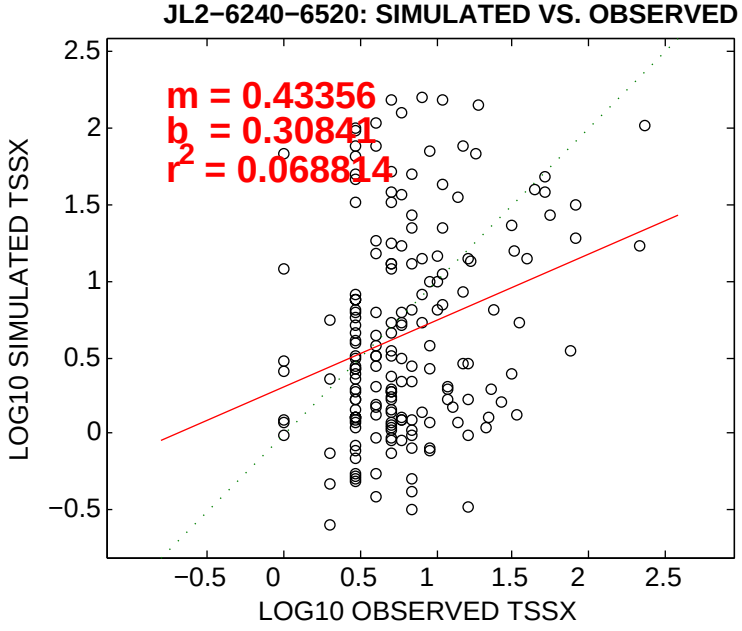


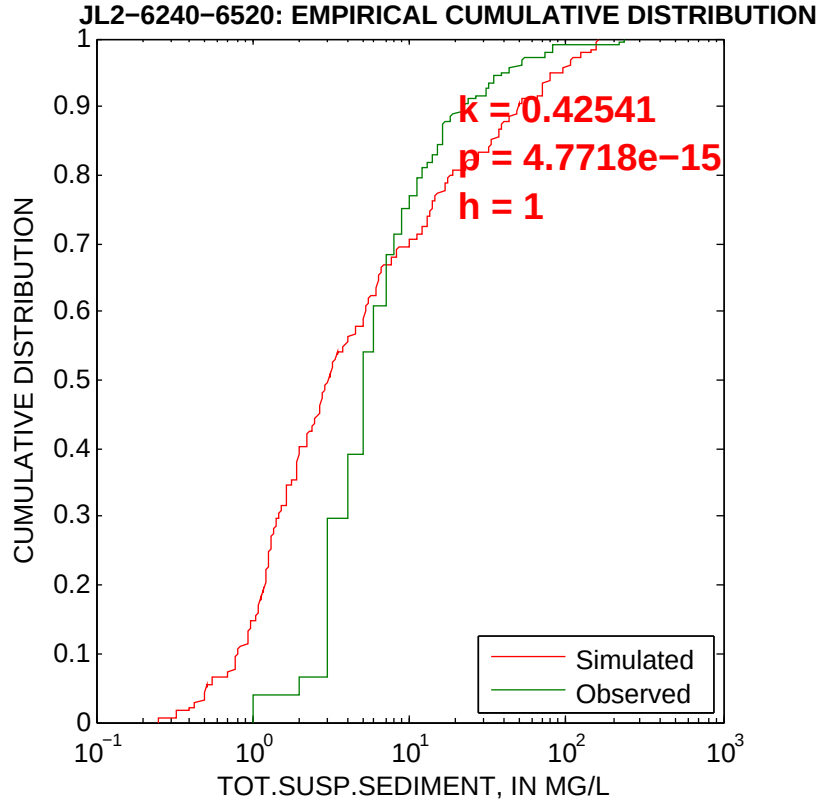












DATA SELECTION

scenario	file
P620171001WQ	TSSX.calib

plot: TSSX - total suspended ...

Dates: 1/1/1985 – 12/31/201

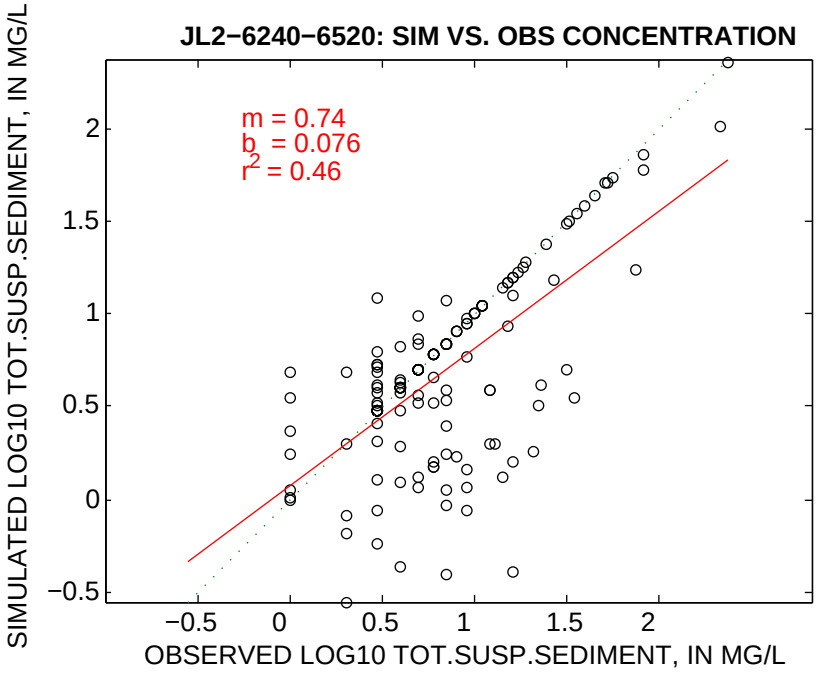
Drive	Directory	Observed
N/A	model	OBS20161101

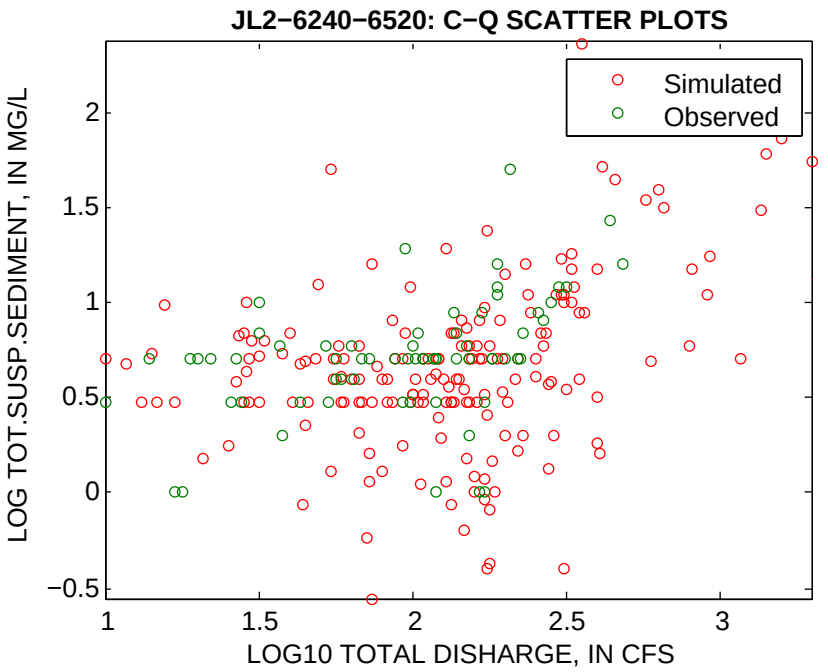
STATISTICS

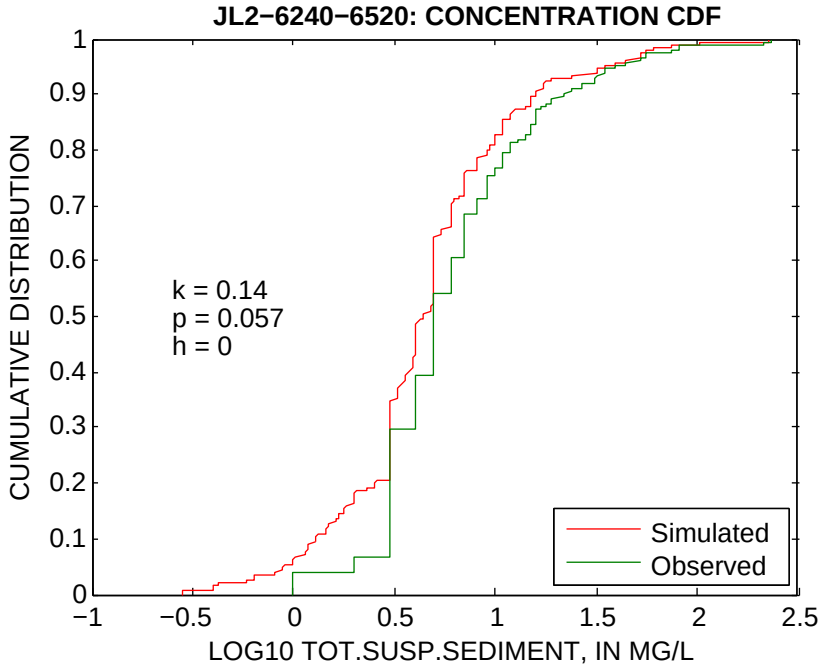
	n	observe	simulate
		181	181
min		1	0.2548
		0	-0.593801
mean		11.9669	16.3949
		0.79763	0.654232
media		5	3.0892
		0.69897	0.489846
max		233	159.74
		2.36736	2.20341
varian		674.51	966.693
		0.17003	0.464453
JB		0.001	0.001
		0.001	0.009182
		ra	log
%		37.0022	-17.978
err.va		1373.22	0.507725
rel.std.err		2.03588	2.9861
mod.eff		-1.03588	-1.9861

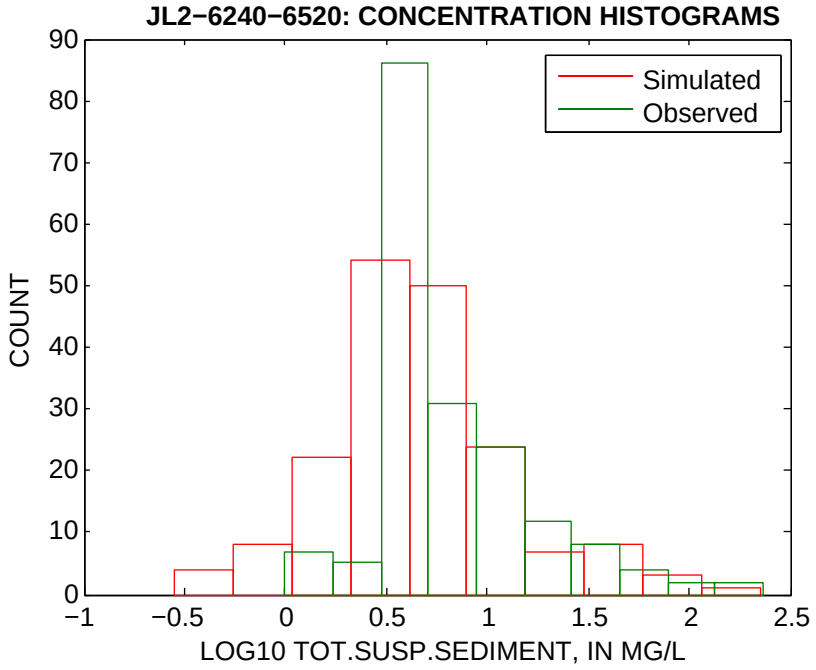
VERSION 2.1

ALL DATA
LOG10

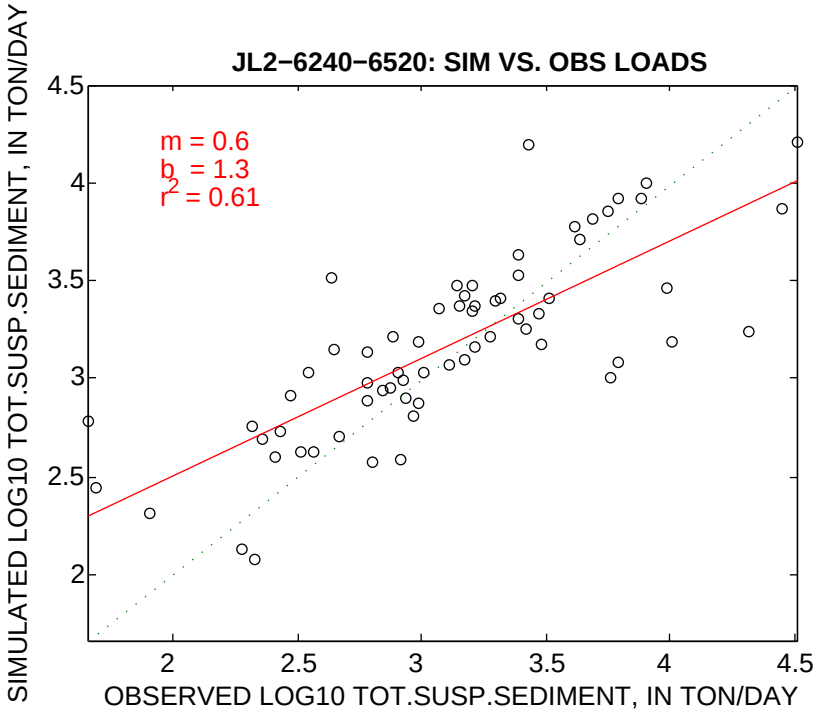




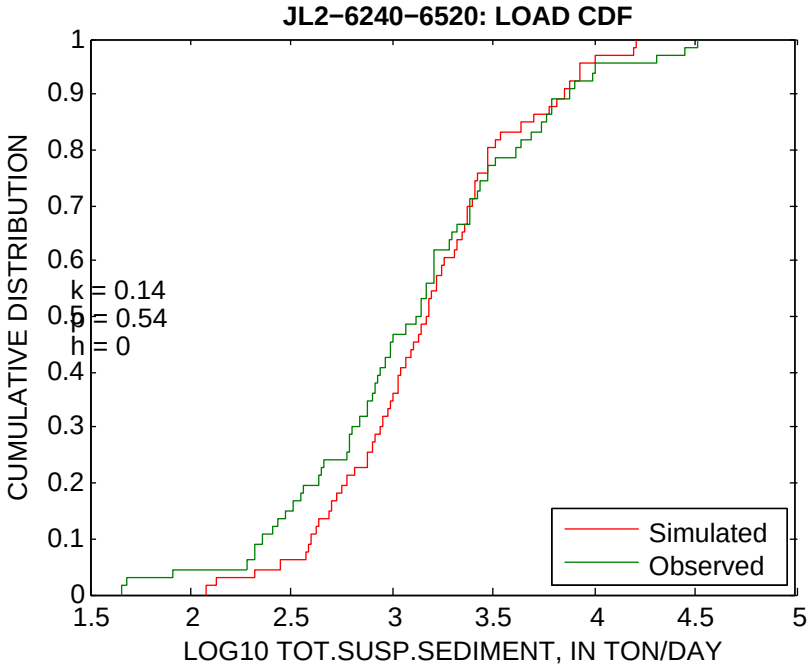


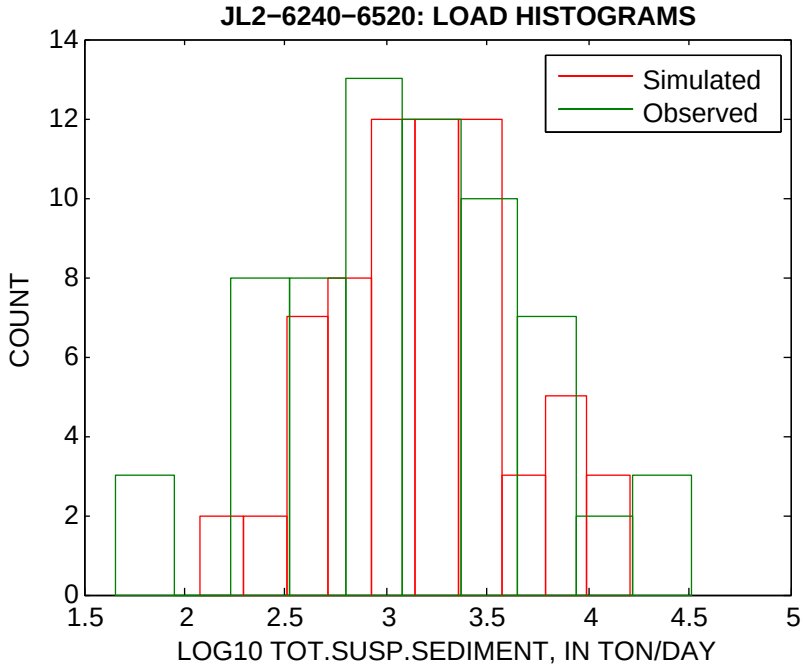


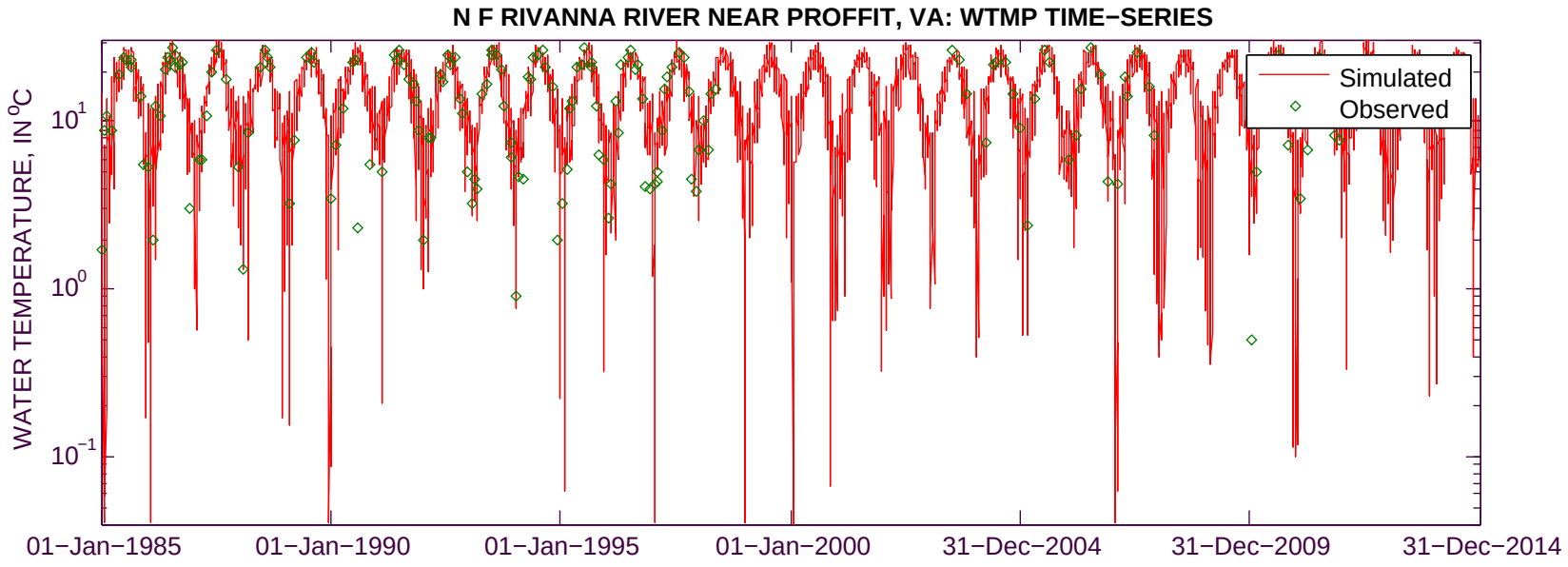
LOAD DATA
LOG10

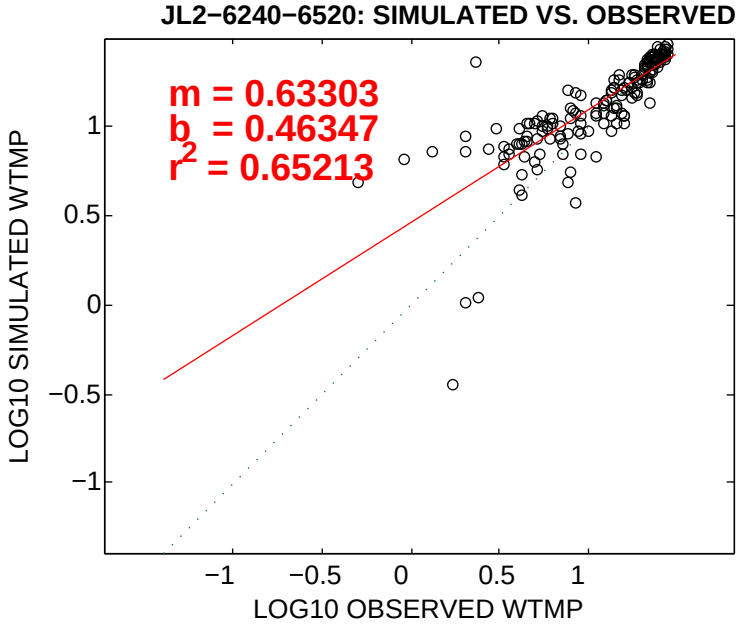


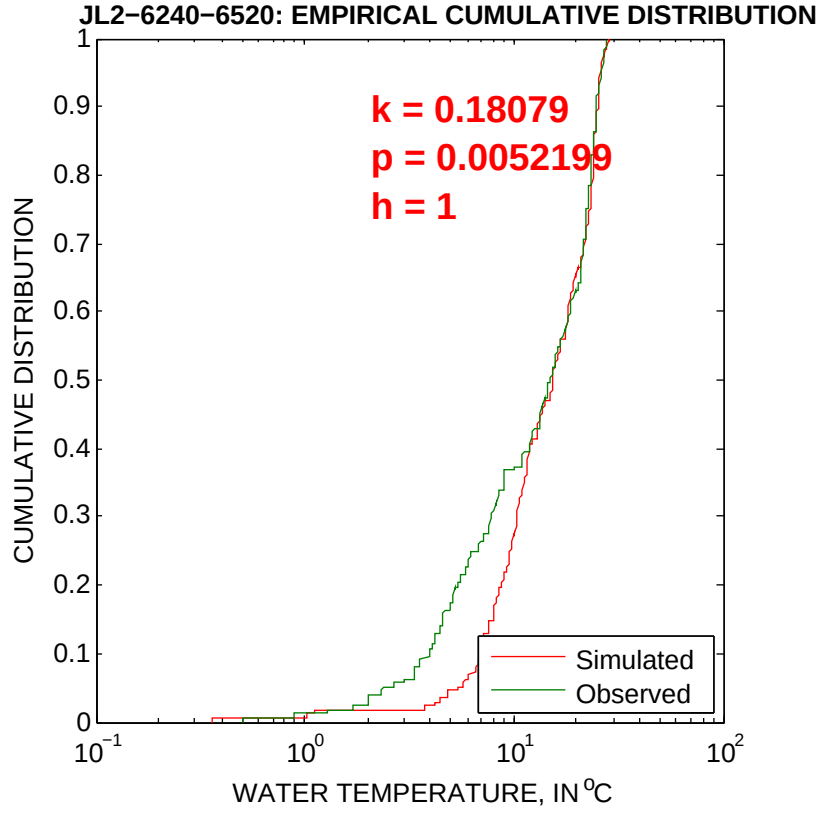












DATA SELECTION

scenario	file
P620171001WQ	WTMP.calib

plot: WTMP - water tempera...

Dates 1/1/1985 12/31/201

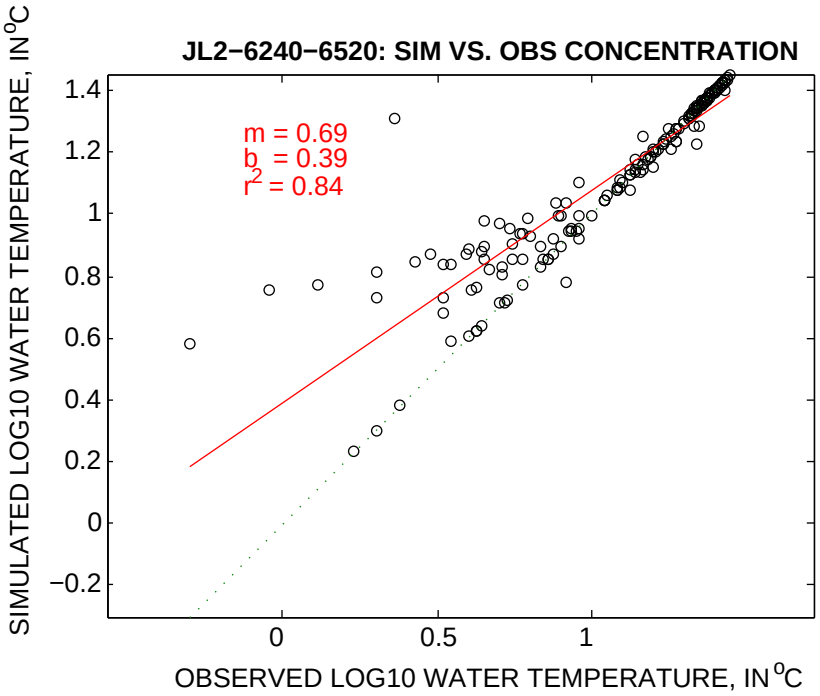
Drive	Directory	Observed
N/A	model	OBS20161101

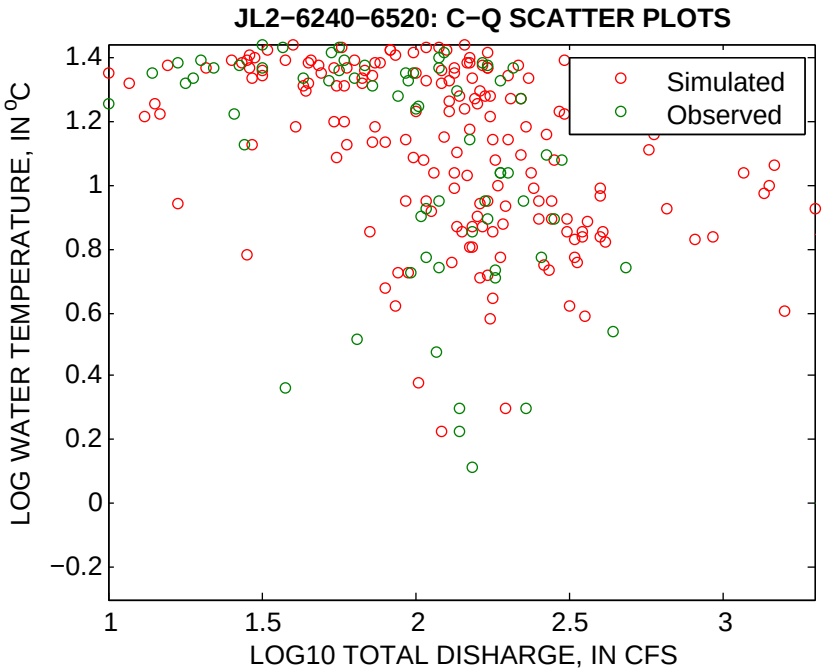
STATISTICS

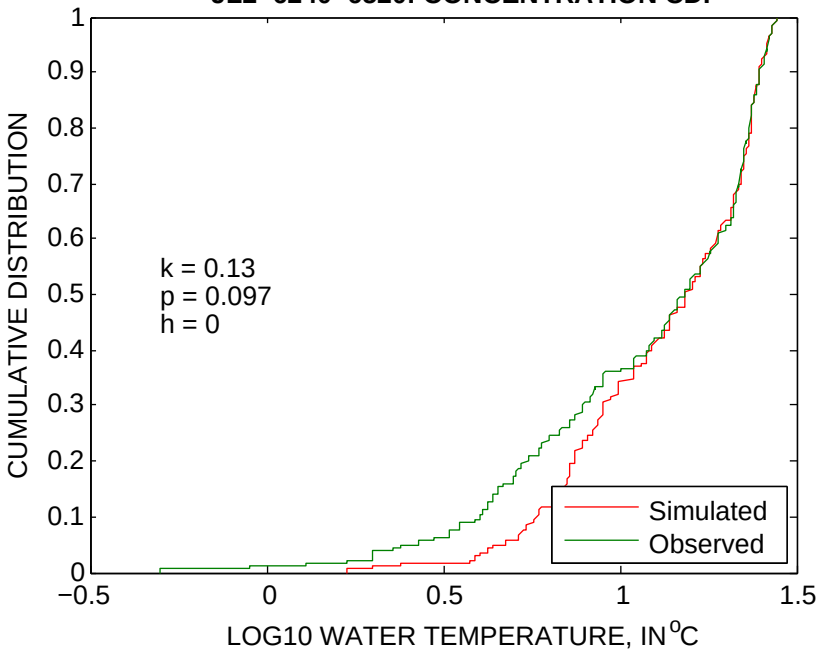
	n	177	177
		observe	simulate
min		0.5	0.35864
		-0.30103	-0.445341
mean		14.6666	15.7891
		1.06127	1.13528
media		14.8	15.451
		1.17026	1.18896
max		28	28.745
		1.44716	1.45856
varian		67.9371	51.8019
		0.121113	0.0744222
JB		0.005322	0.011121
		0.001	0.001
		ra	log
%		7.65387	6.97429
err.va		11.4223	0.0477085
rel.std.err		0.168131	0.393918
mod.eff		0.831869	0.606082

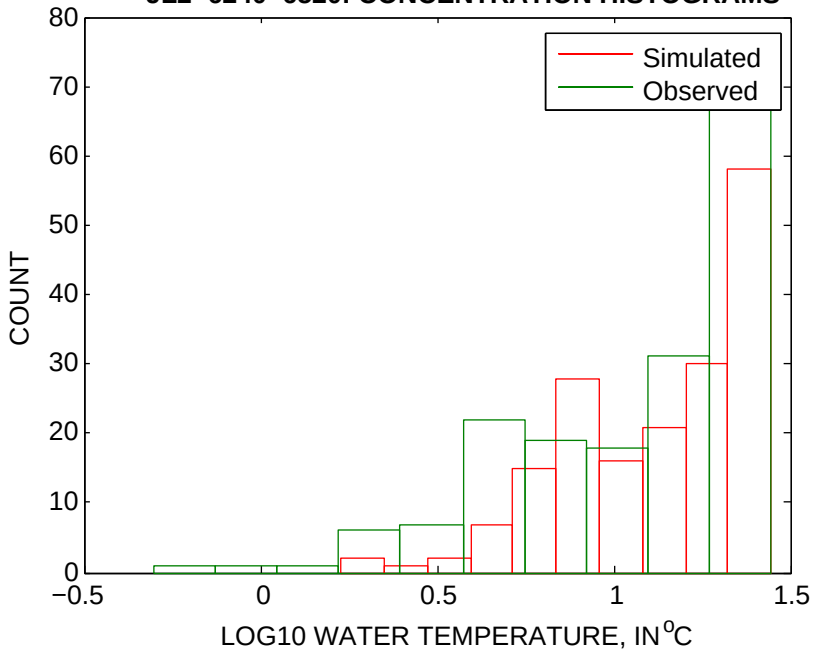
VERSION 2.1

ALL DATA
LOG10

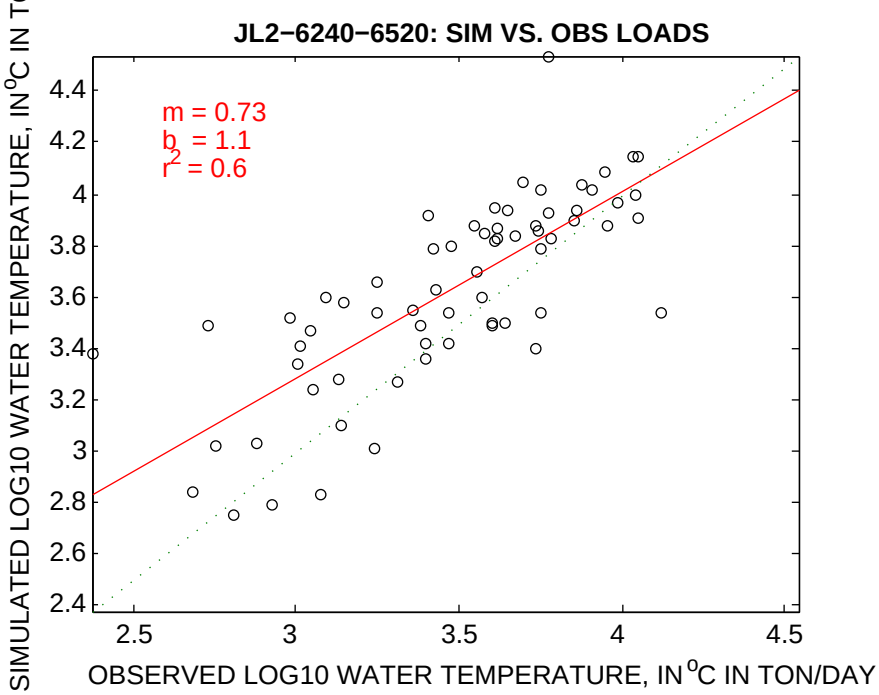




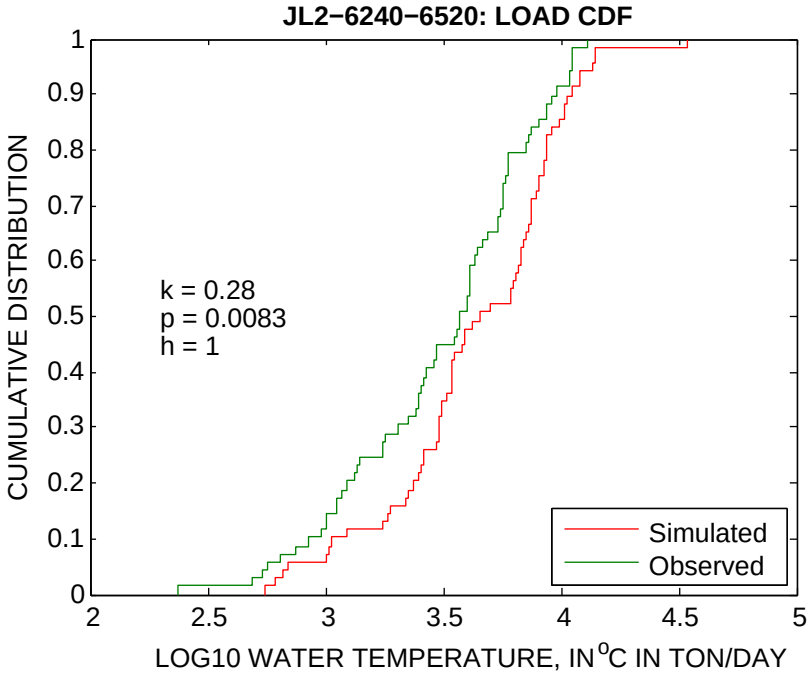


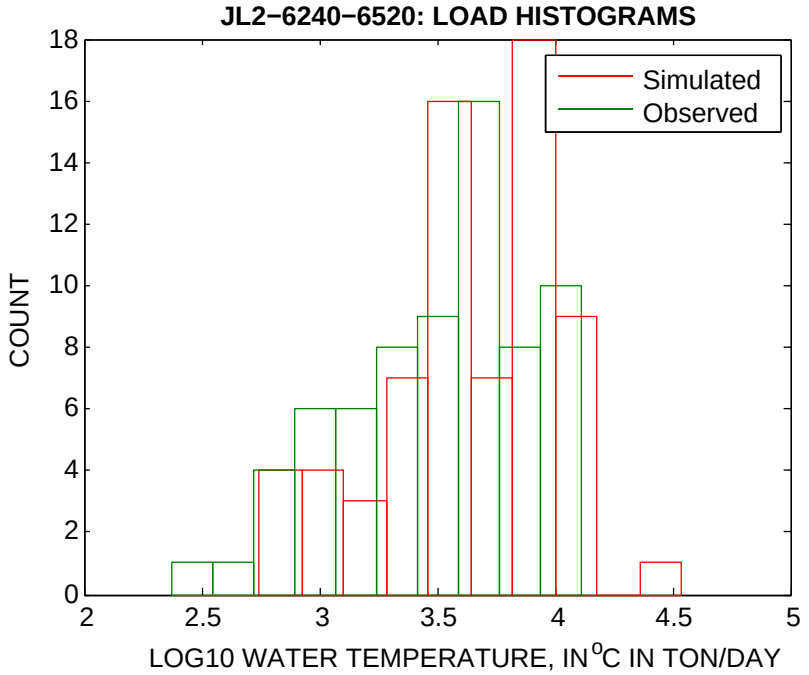


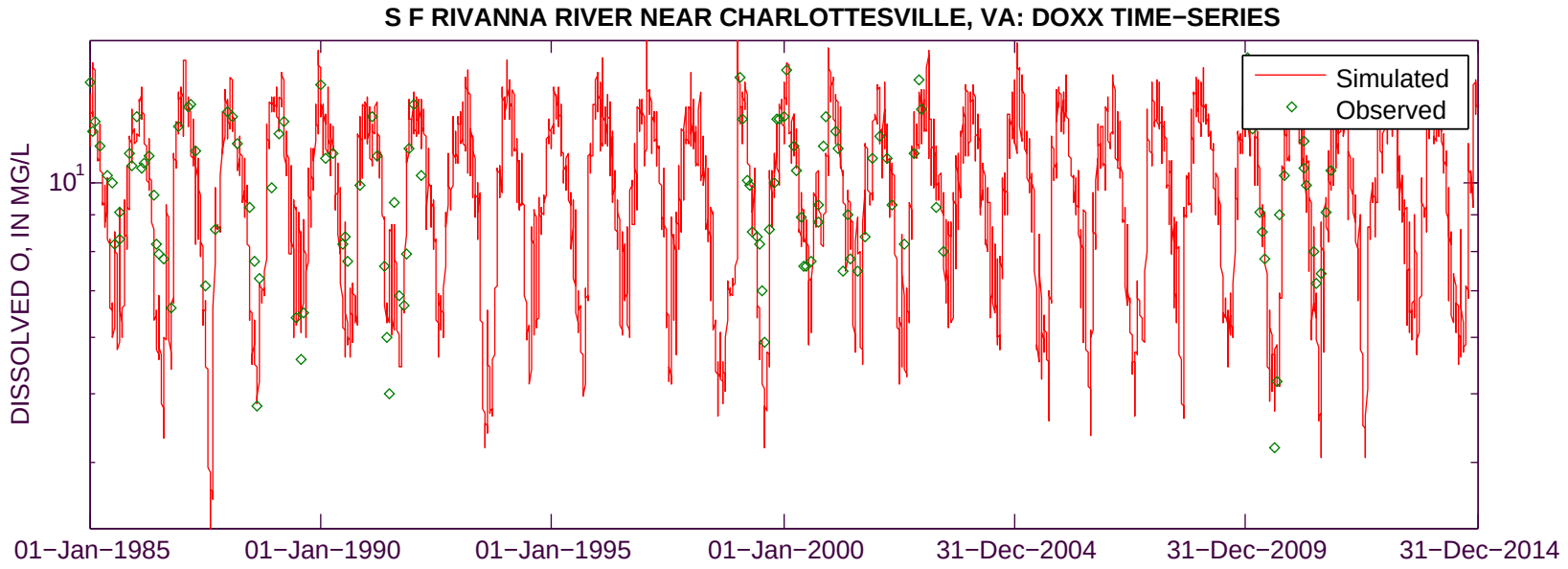
LOAD DATA
LOG10

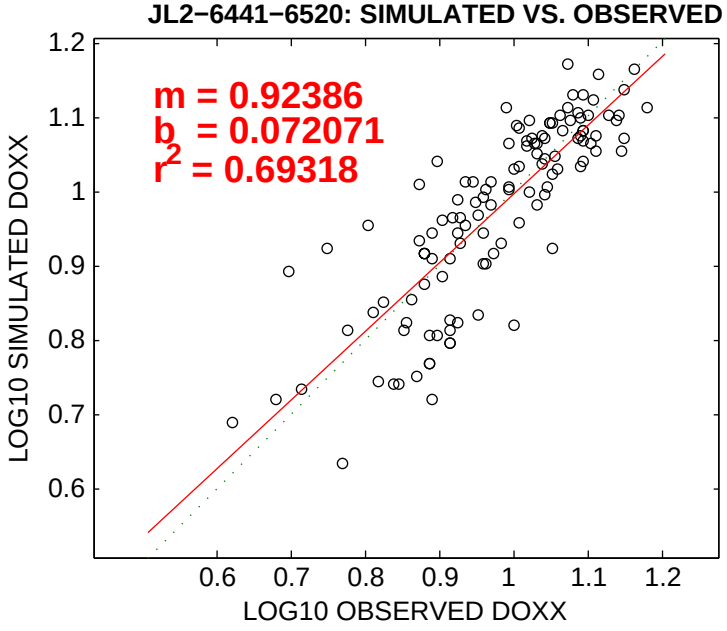


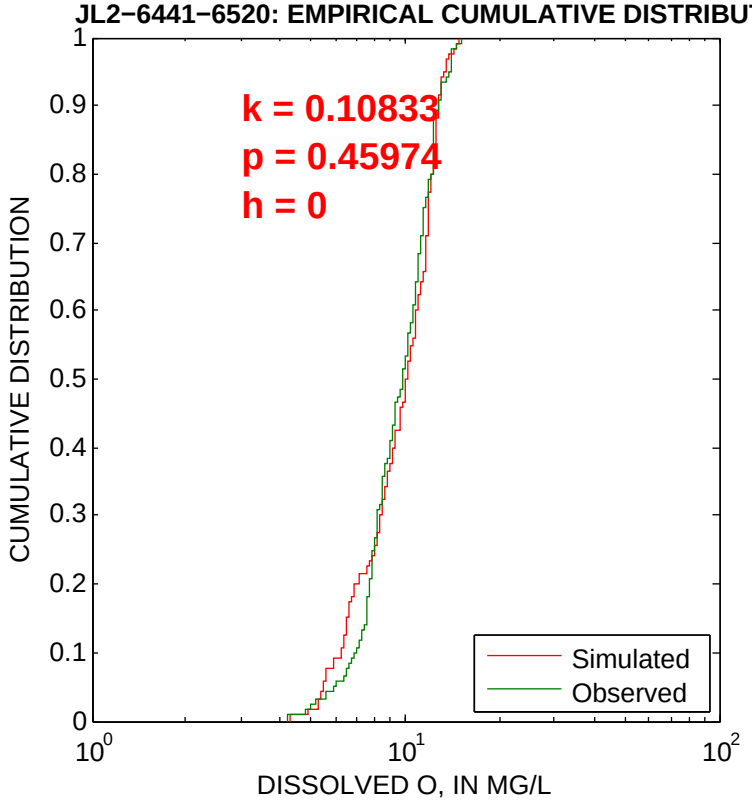












DATA SELECTION

scenario	file
P620171001WQ	DOXX.calib

plot: DOXX - dissolved oxygen

Dates: 1/1/1985 – 12/31/201

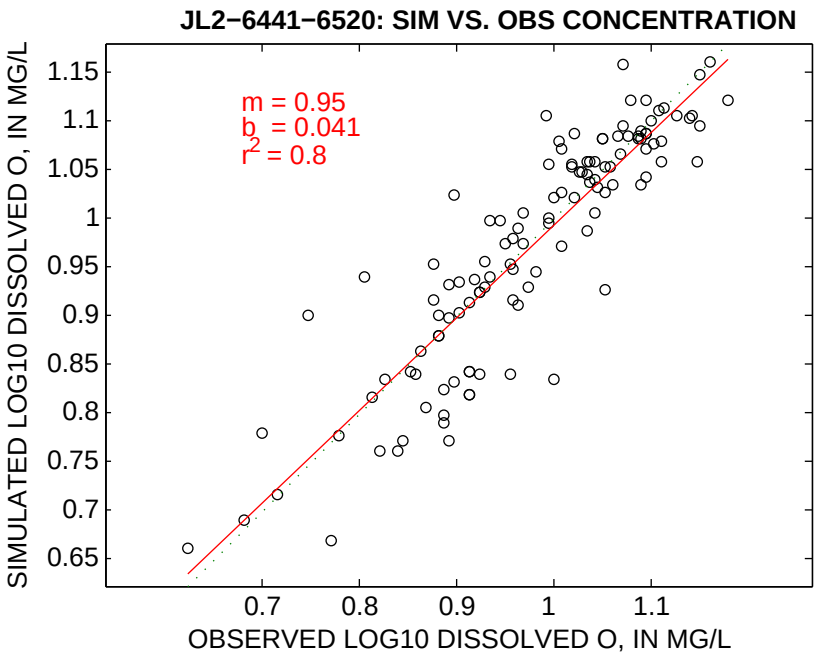
Drive	Directory	Observed
N/A	model	OBS20161101

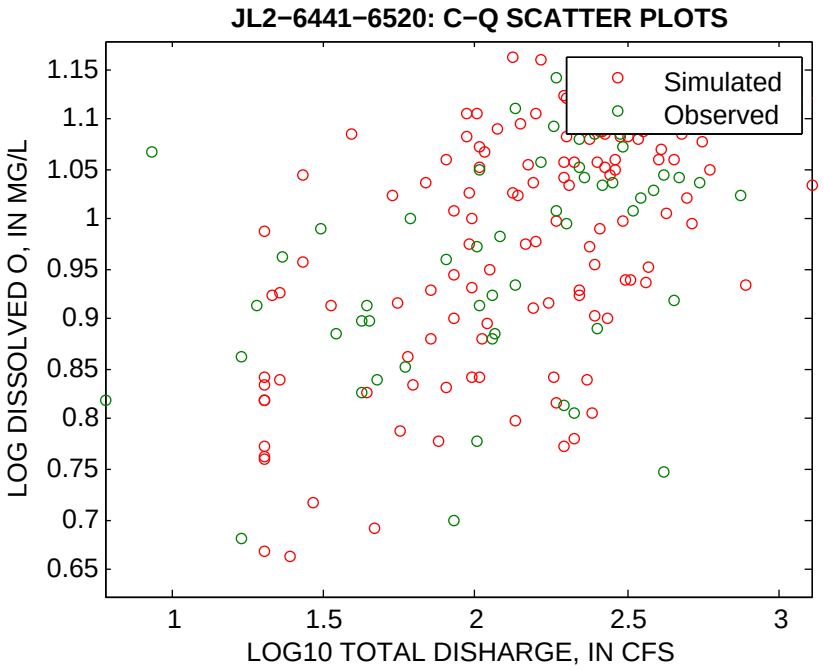
STATISTICS

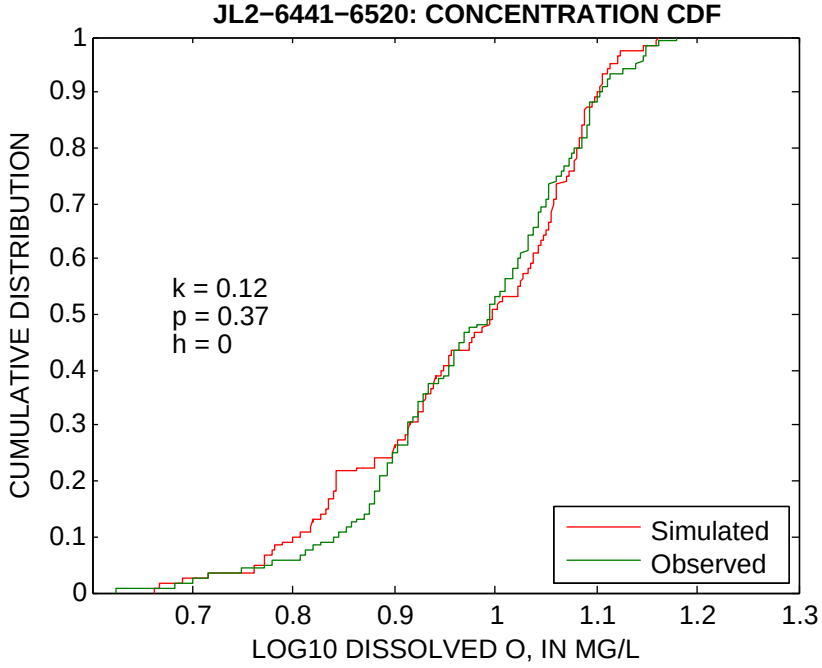
	n	120	120
		observe	simulate
min		4.2	4.3216
		0.623249	0.635645
mean		9.78583	9.79726
		0.977215	0.974883
media		9.9	10.096
		0.995635	1.00415
max		15.1	14.808
		1.17898	1.1705
varian		5.49971	6.41157
		0.0123456	0.0152014
JB		0.298864	0.046634
		0.027899	0.015164
		ra	log
%		0.11681	-0.238639
err.va		1.87929	0.0047412
rel.std.err		0.341707	0.384038
mod.eff		0.658293	0.615962

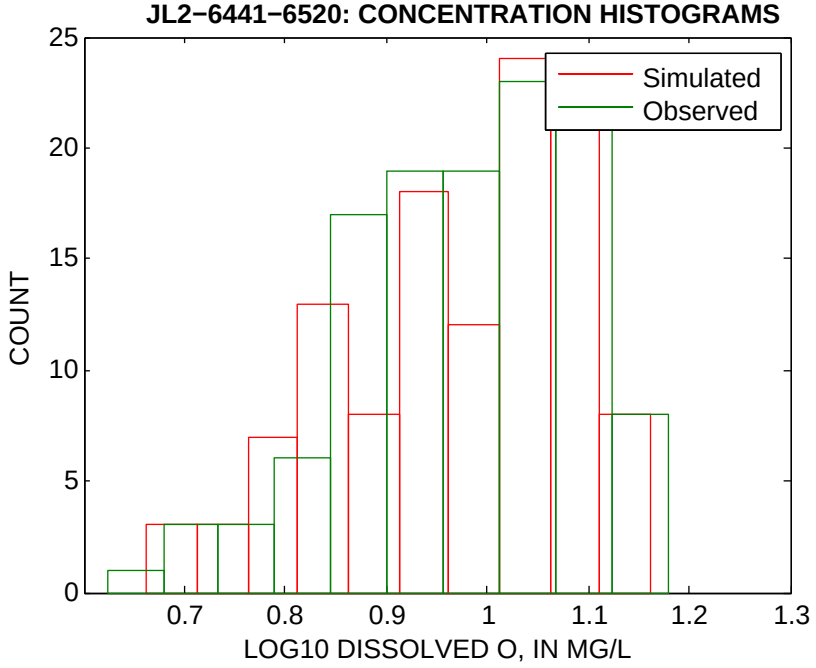
VERSION

ALL DATA
LOG10

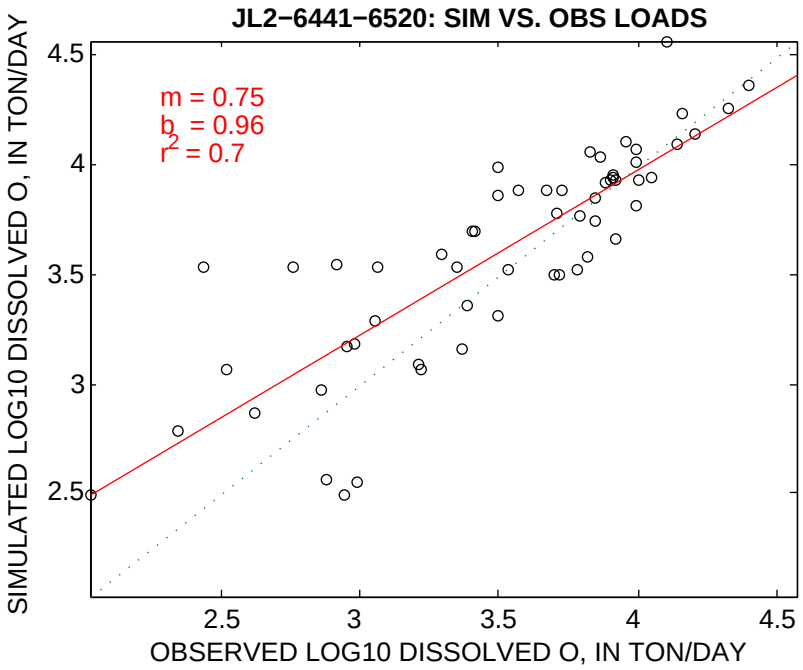


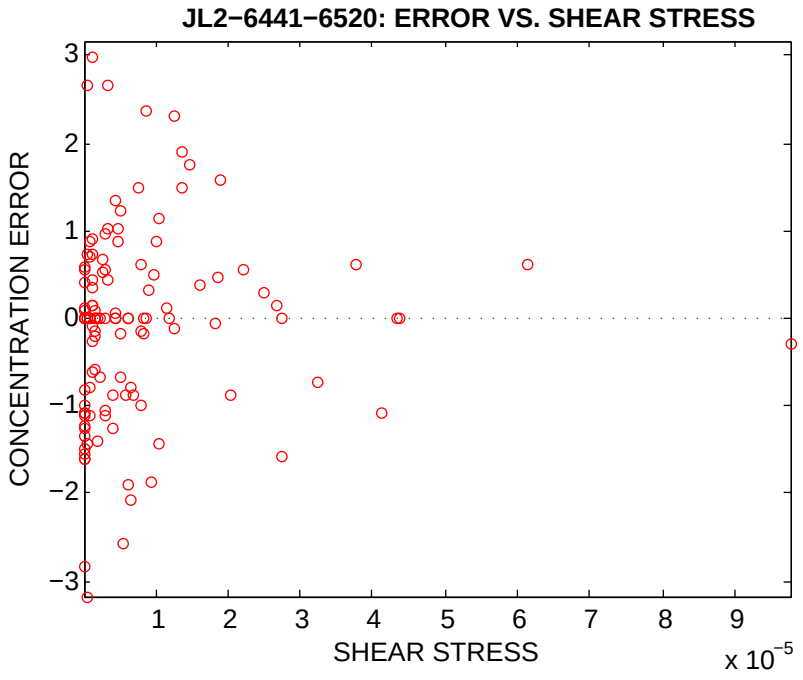


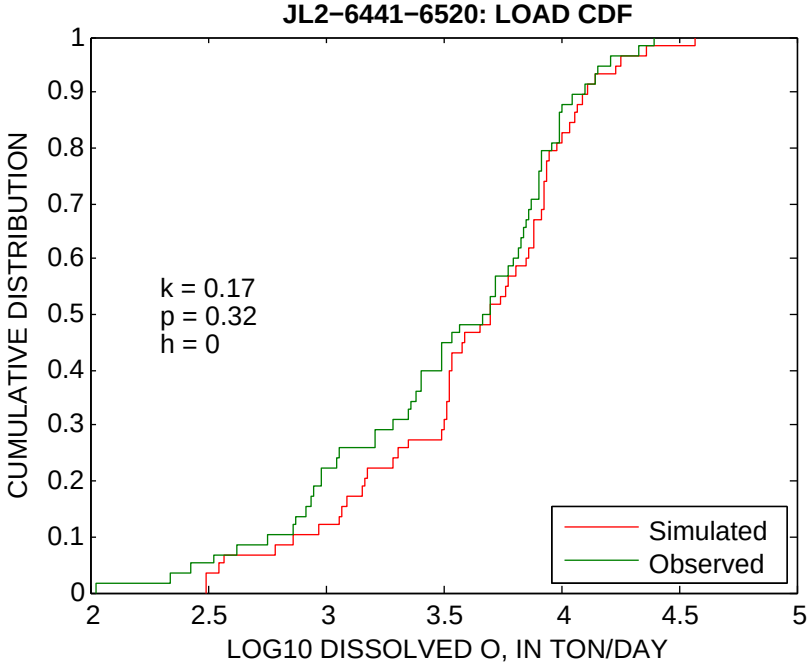


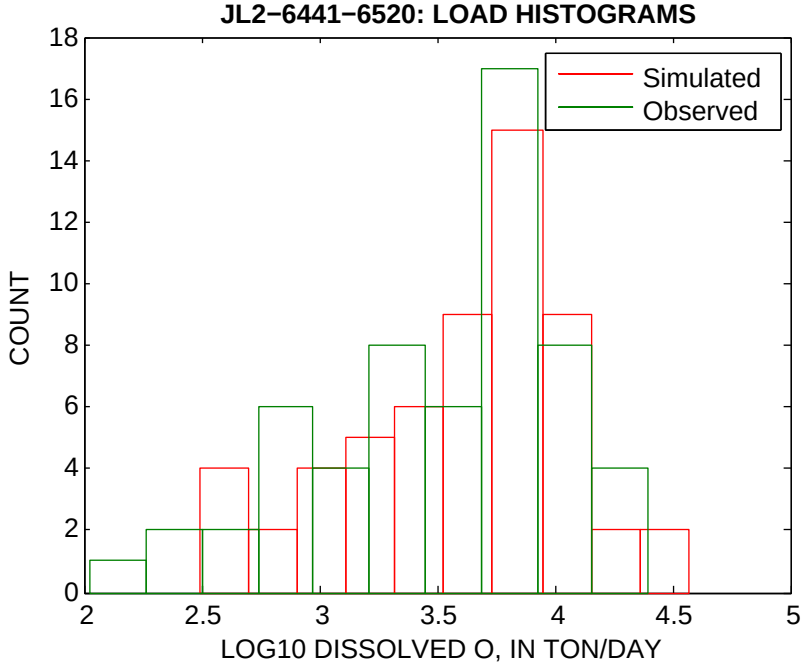


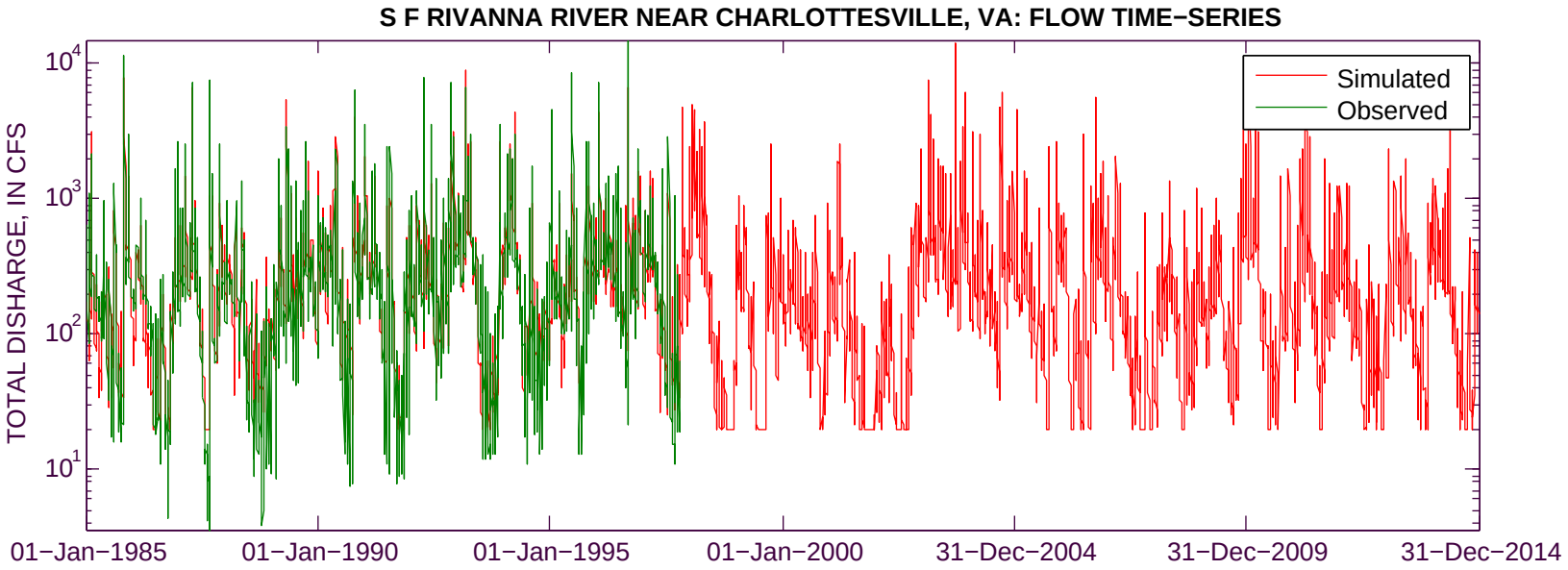
LOAD DATA
LOG10

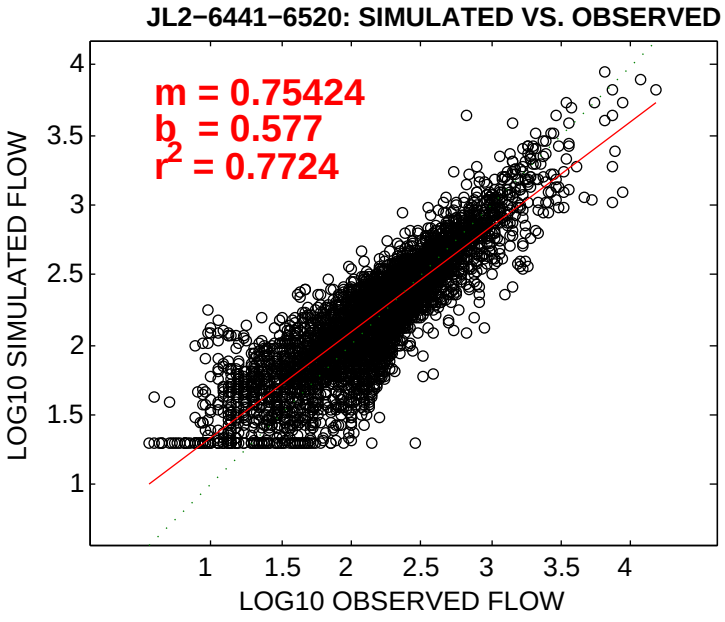


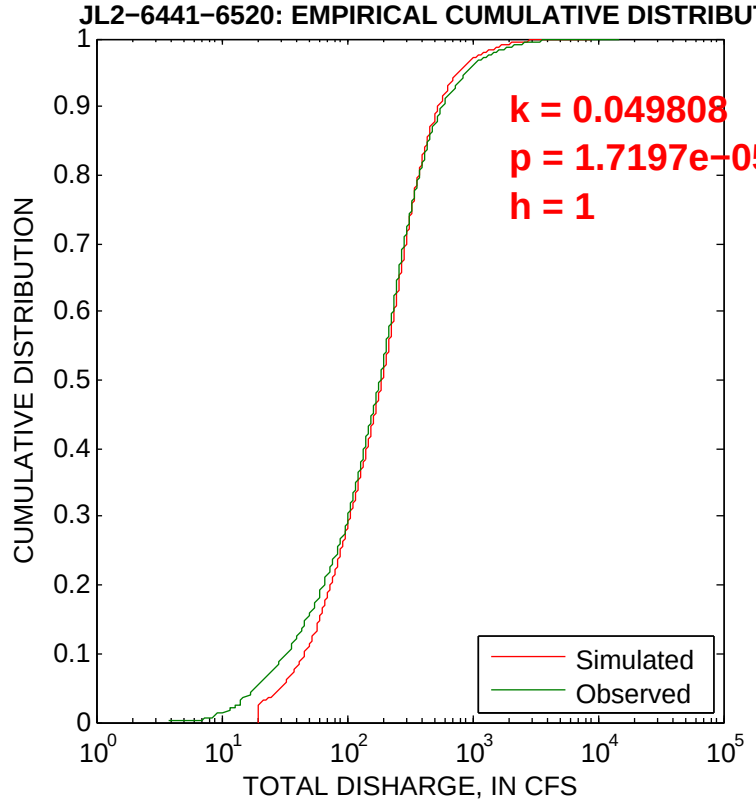












DATA SELECTION

scenario	file
P620171001WQ	FLOW.calib

plot: FLOW - total discharge

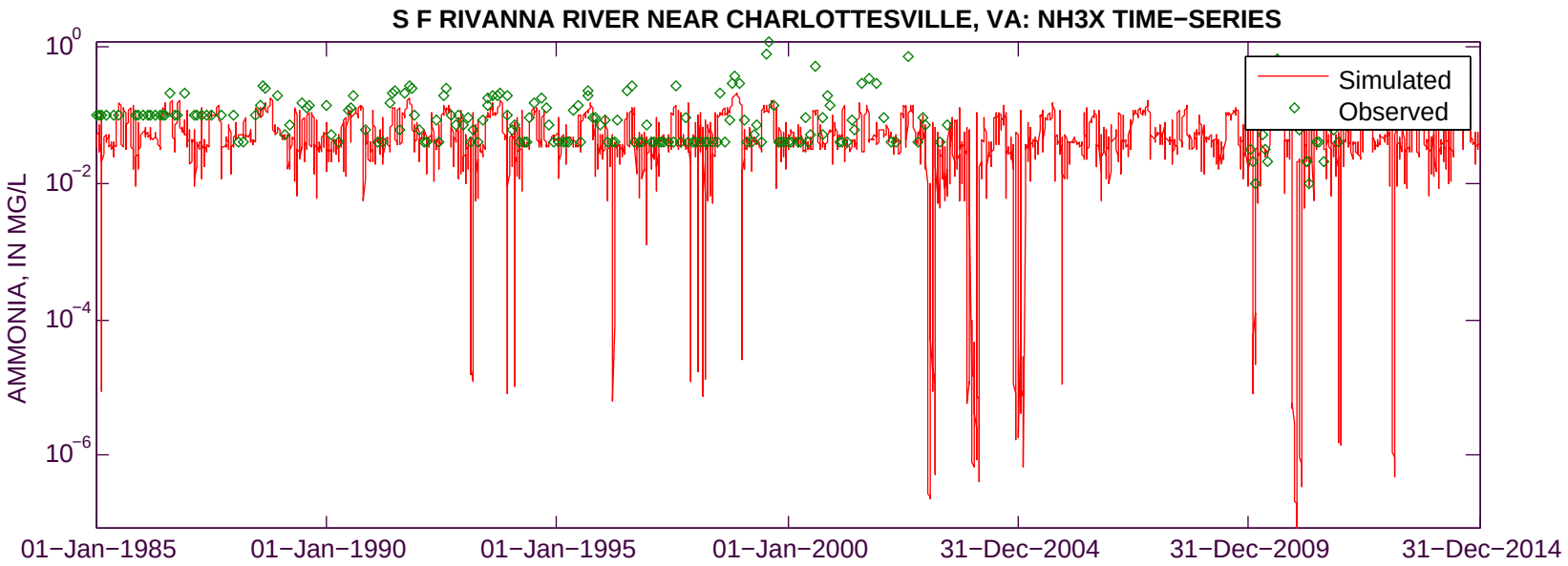
Dates: 1/1/1985 – 12/31/201

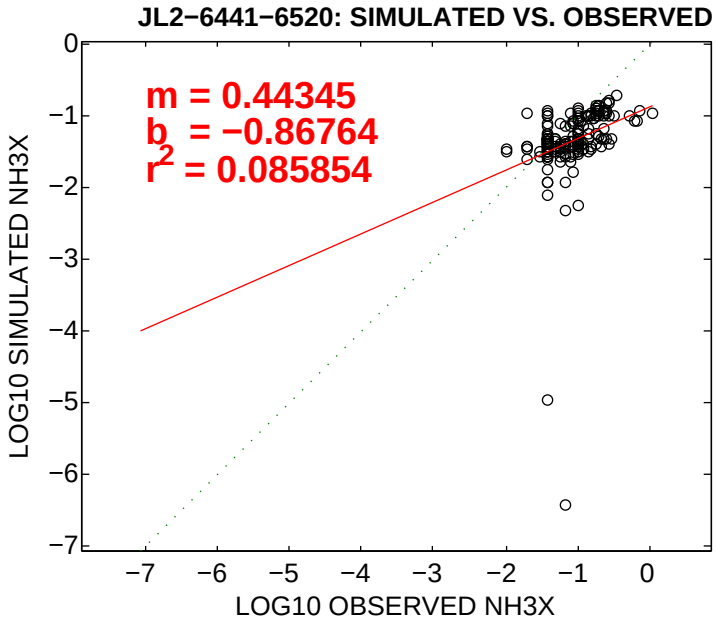
Drive	Directory	Observed
N/A	model	OBS20161101

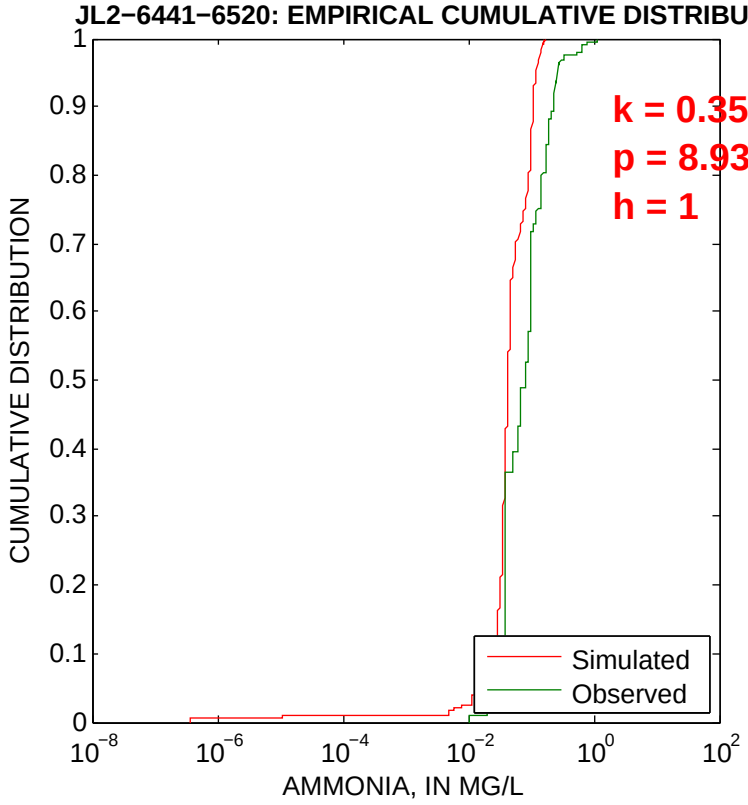
STATISTICS

	n	observe	simulate
		4678	4678
min		3.6	20
		0.556303	1.30103
mean		304.318	284.329
		2.20898	2.24309
media		186	192.74
		2.26951	2.28497
max		15000	8975.5
		4.17609	3.95306
varian		327496	177774
		0.244847	0.18033
JB		0.001	0.001
		0.001	0.120863
		ra	log
%		-6.56846	1.54423
err.va		103786	0.0569962
rel.std.err		0.316908	0.232783
mod.eff		0.683092	0.767217

VERSION 2.1







DATA SELECTION

scenario	file
P620171001WQ	NH3X.calib

plot: NH3X - ammonia

Dates: 1/1/1985 – 12/31/201

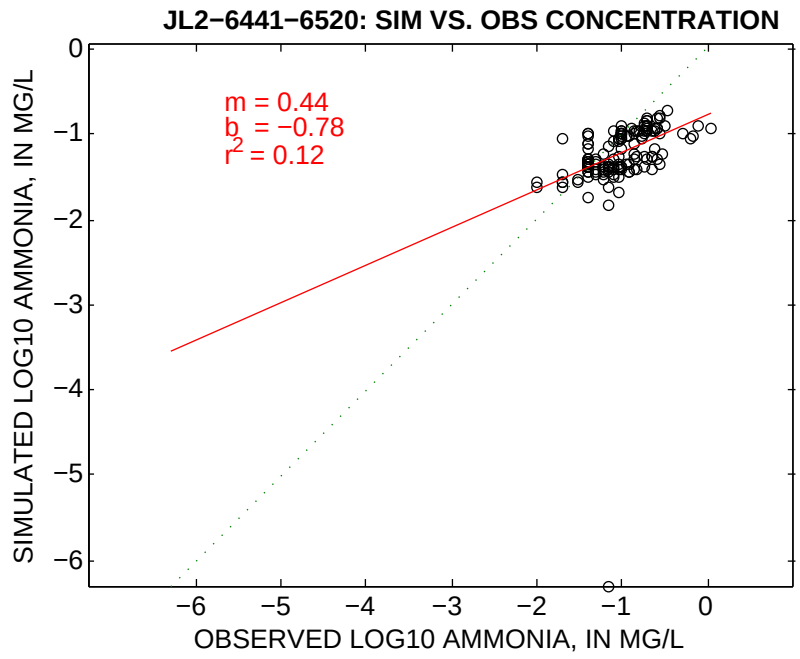
Drive	Directory	Observed
N/A	model	OBS20161101

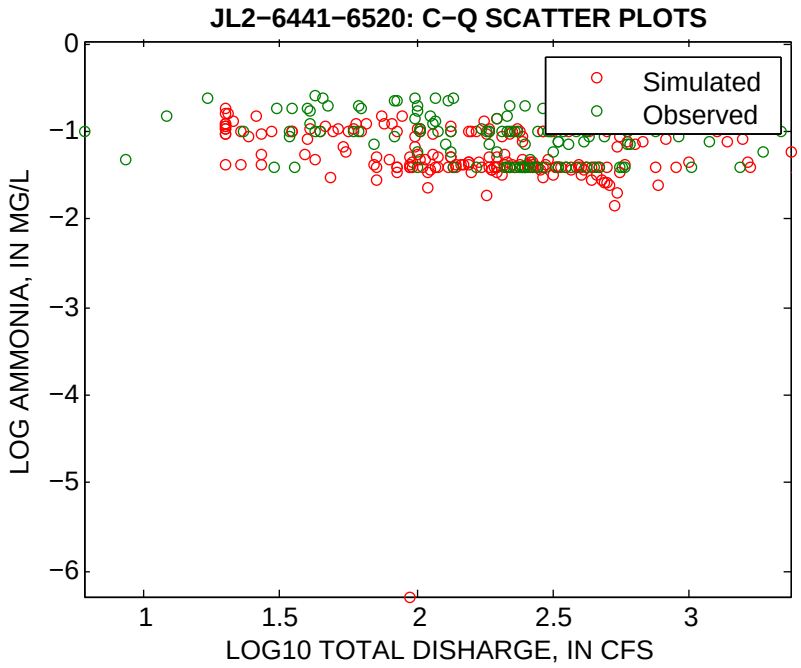
STATISTICS

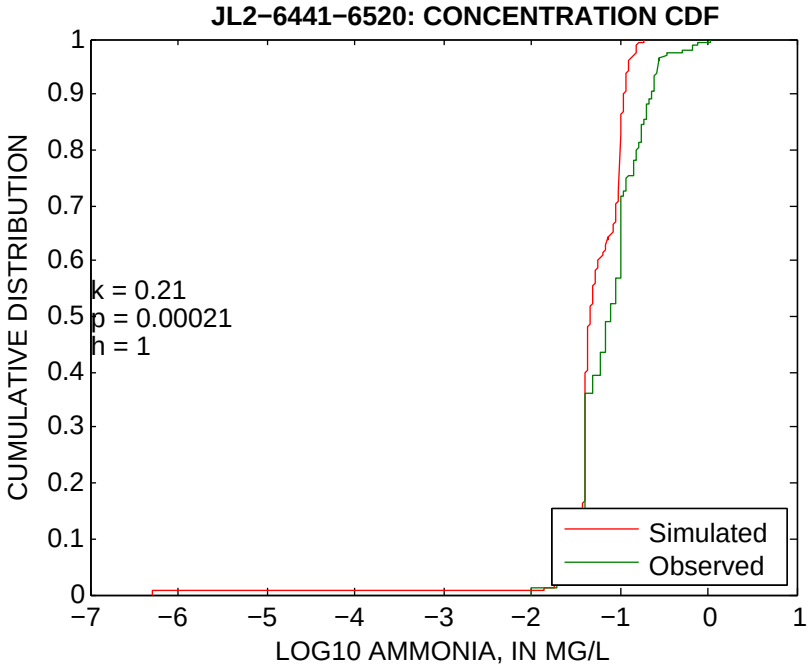
	n	observe	simulate
		198	198
min		0.01	3.888e-07
		-2	-6.41027
mean		0.112273	0.0571916
		-1.0998	-1.35534
media		0.08	0.0428605
		-1.09691	-1.36794
max		1.1	0.18392
		0.0413927	-0.735371
varian		0.016241	0.00121344
		0.115023	0.263456
JB		0.001	0.001
		0.018321	0.001
		ra	log
%		-49.0601	23.2357
err.va		0.0161279	0.342101
rel.std.err		0.993039	2.9742
mod.eff		0.00696093	-1.9742

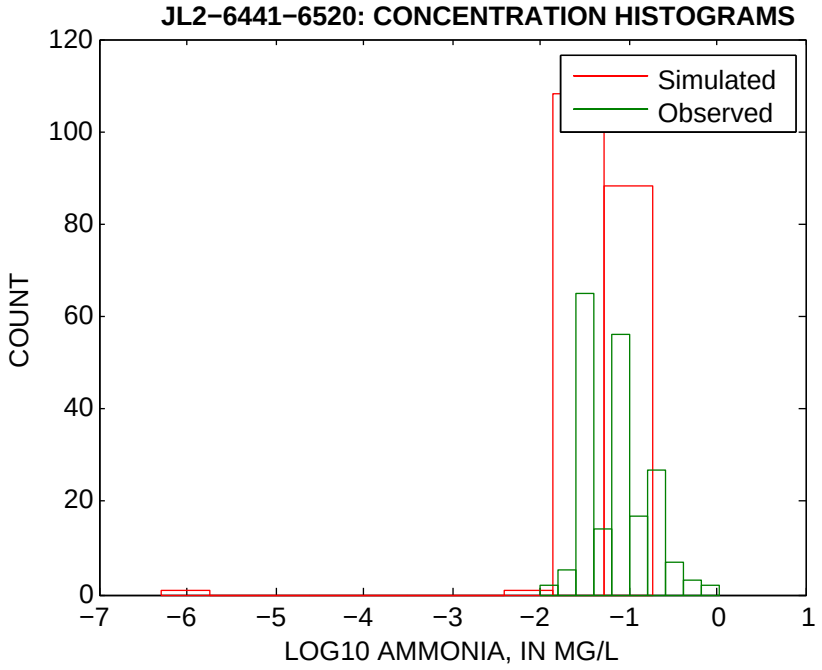
VERSION 2.1

ALL DATA
LOG10

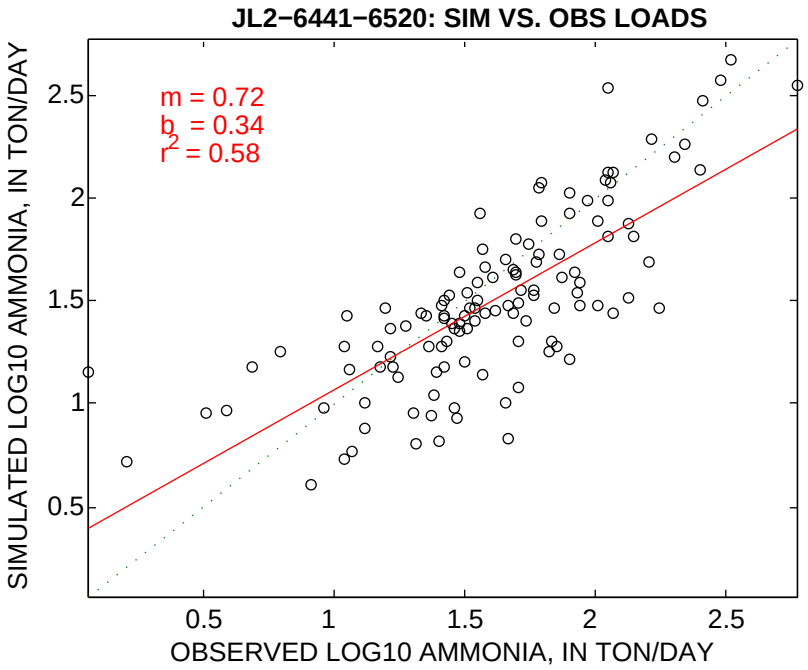


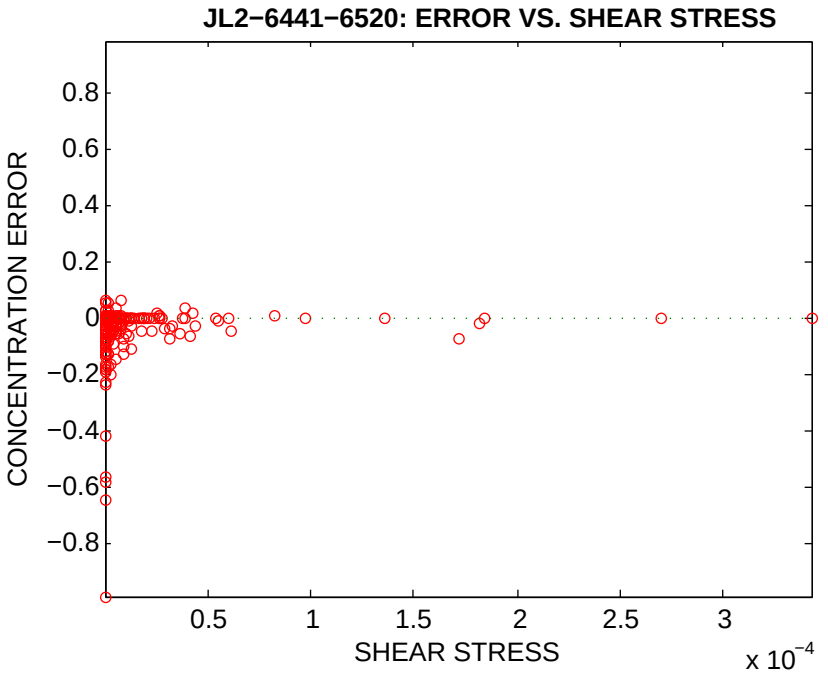


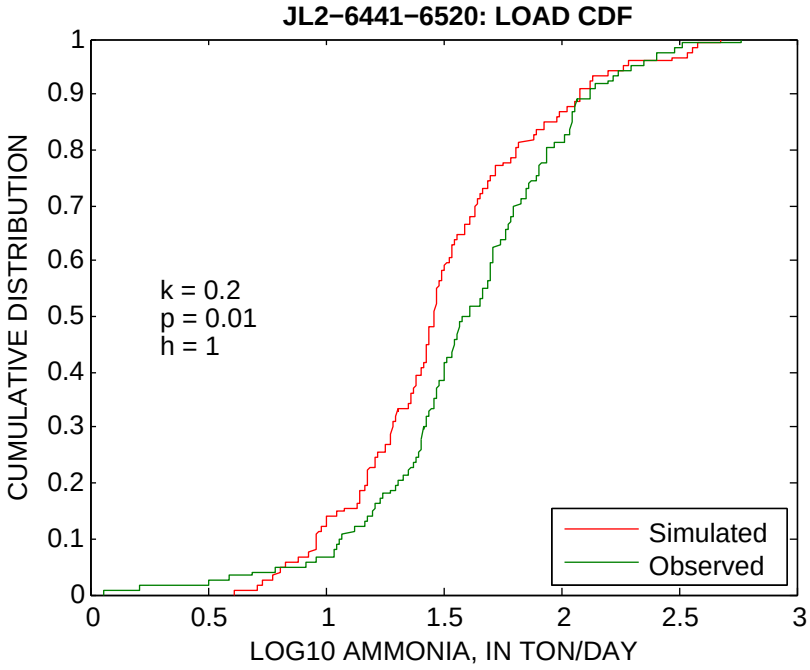


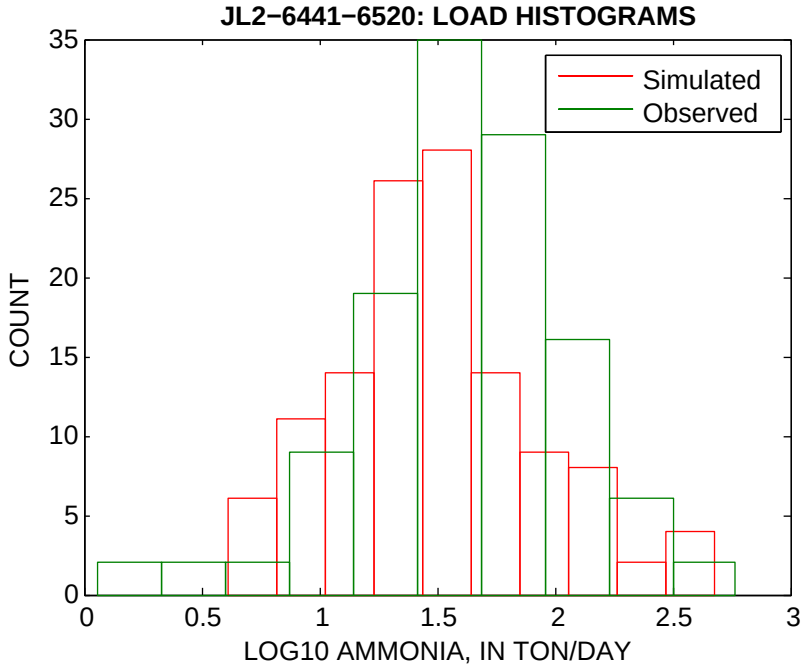


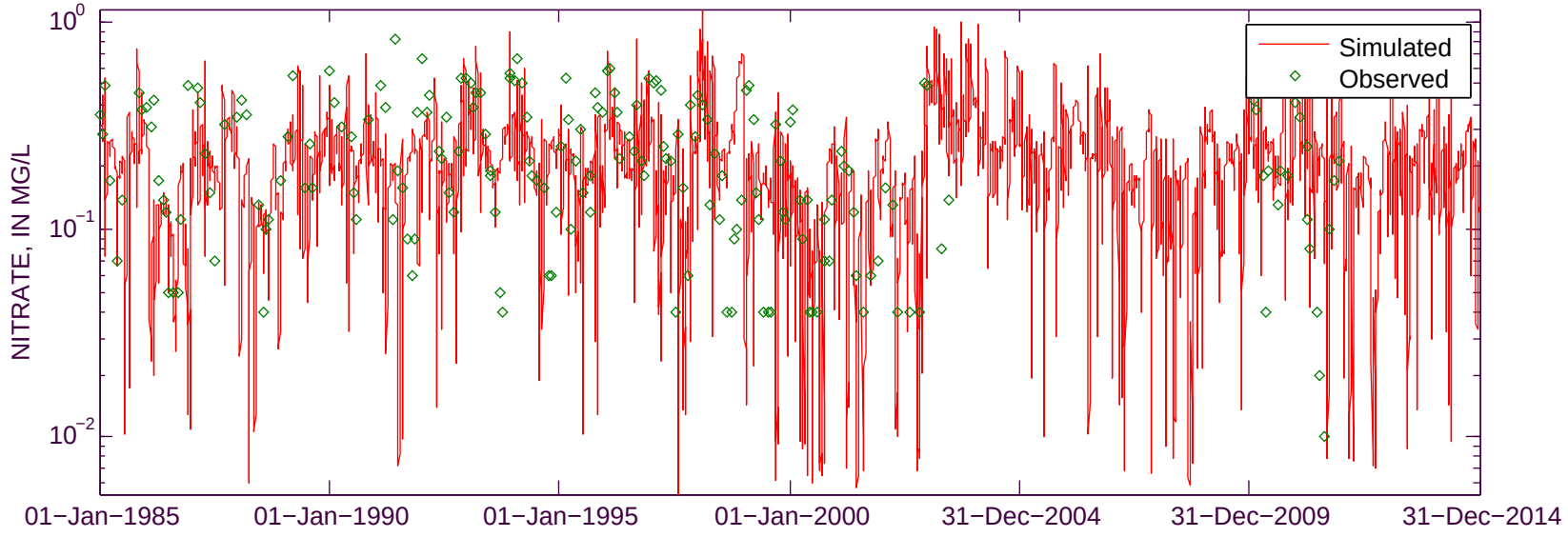
LOAD DATA
LOG10

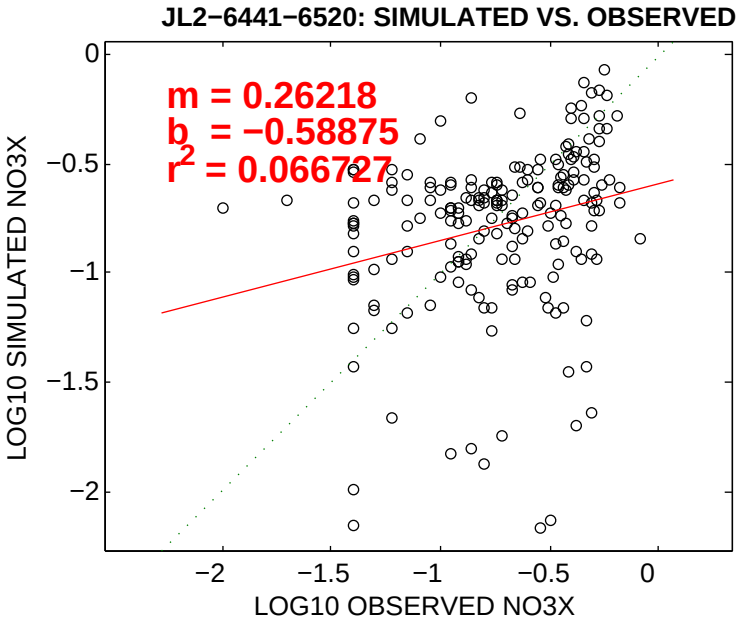


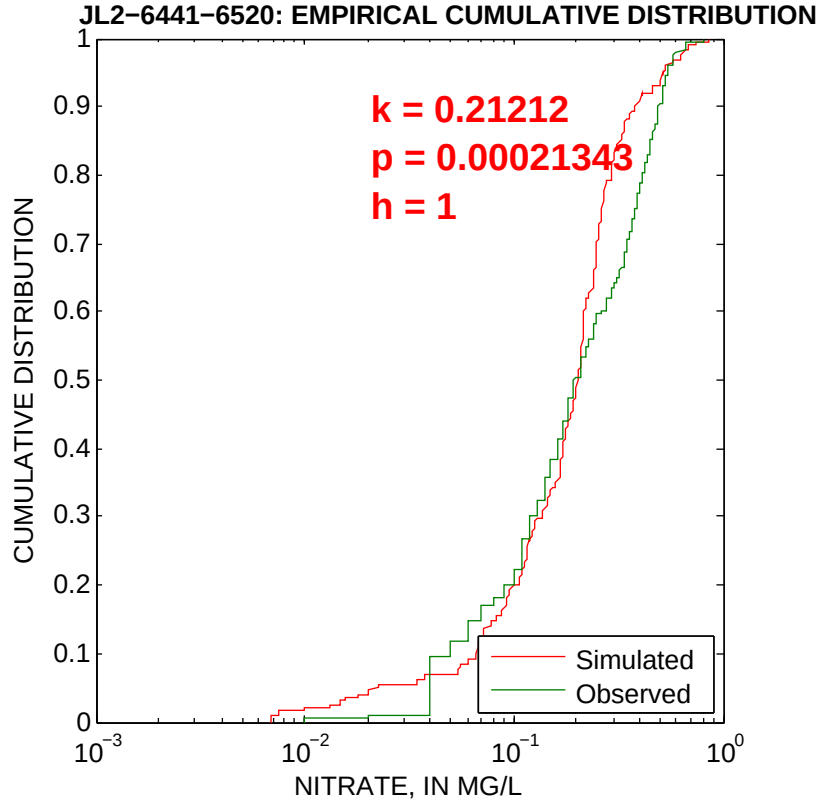












DATA SELECTION

scenario: P620171001WQ | file: NO3X.calib

plot: NO3X - nitrate

Dates: 1/1/1985 – 12/31/201

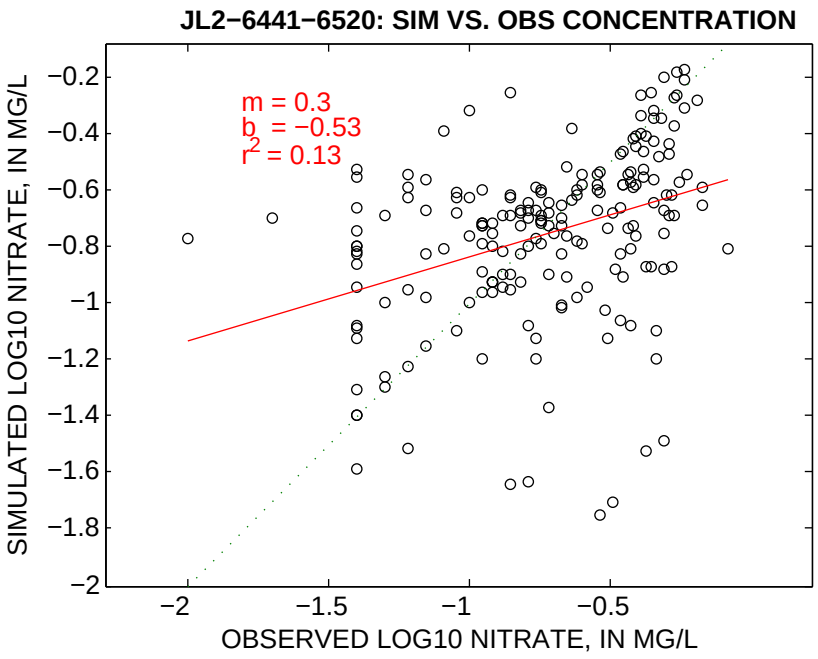
Drive: N/A | Directory: model | Observed: OBS20161101

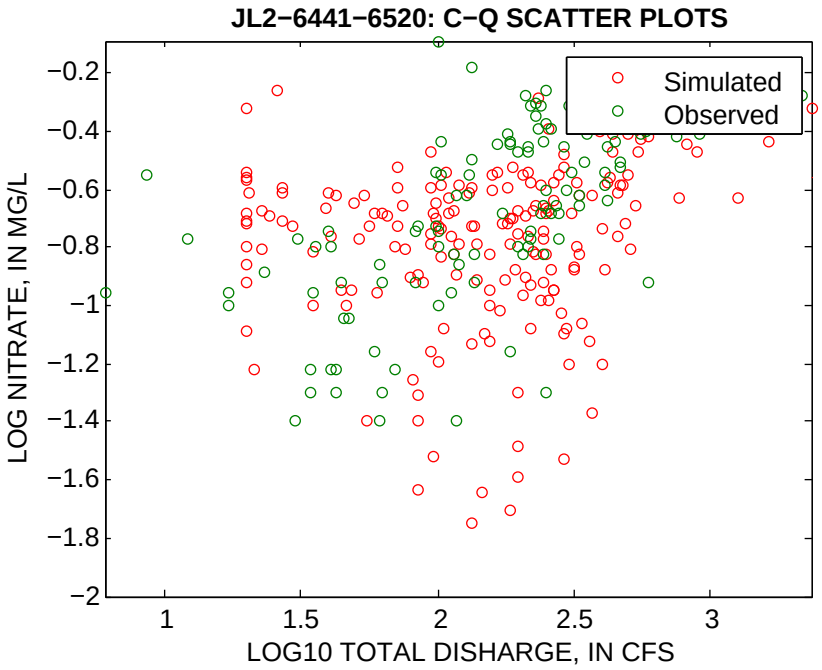
STATISTICS

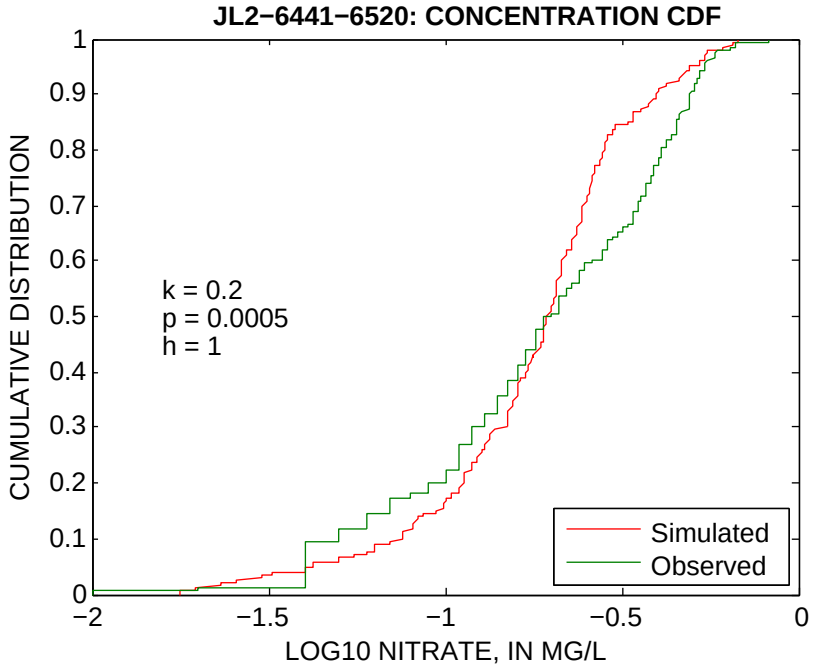
	n	198	198
		observe	simulate
min		0.01	0.0068499
		-2	-2.16432
mean		0.248788	0.216844
		-0.732299	-0.780739
media		0.195	0.202695
		-0.710108	-0.693157
max		0.82	0.85886
		-0.0861861	-0.0660776
varian		0.0291193	0.0212016
		0.134886	0.138948
JB		0.005005	0.001
		0.009098	0.001
		ra	log
%		-12.8397	6.61479
err.va		0.0313663	0.205464
rel.std.err		1.07716	1.52324
mod.eff		-0.0771632	-0.523242

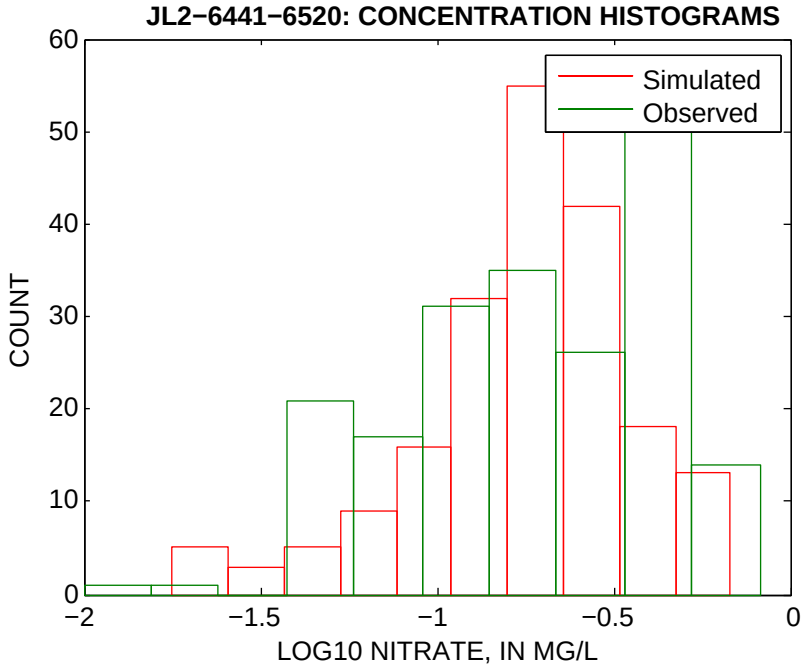
VERSION 2.1

ALL DATA
LOG10

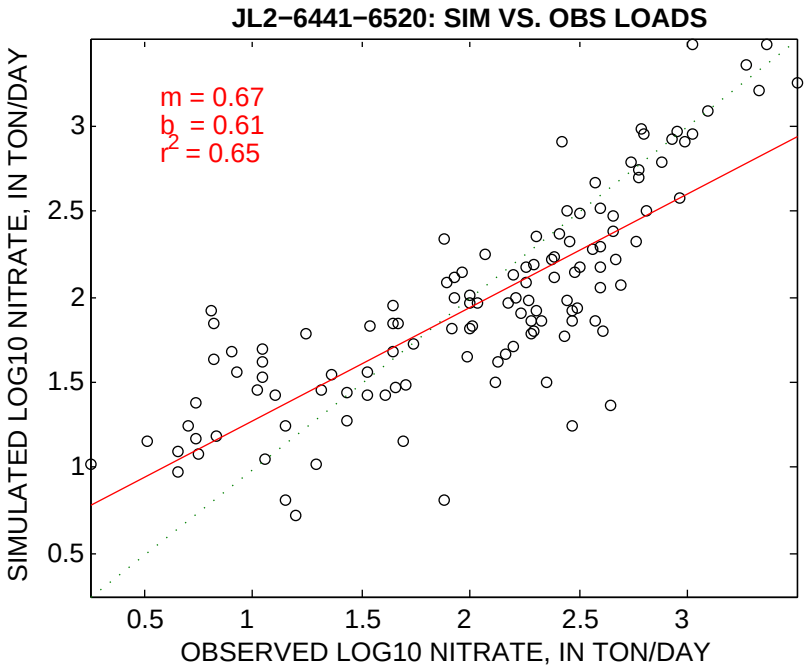


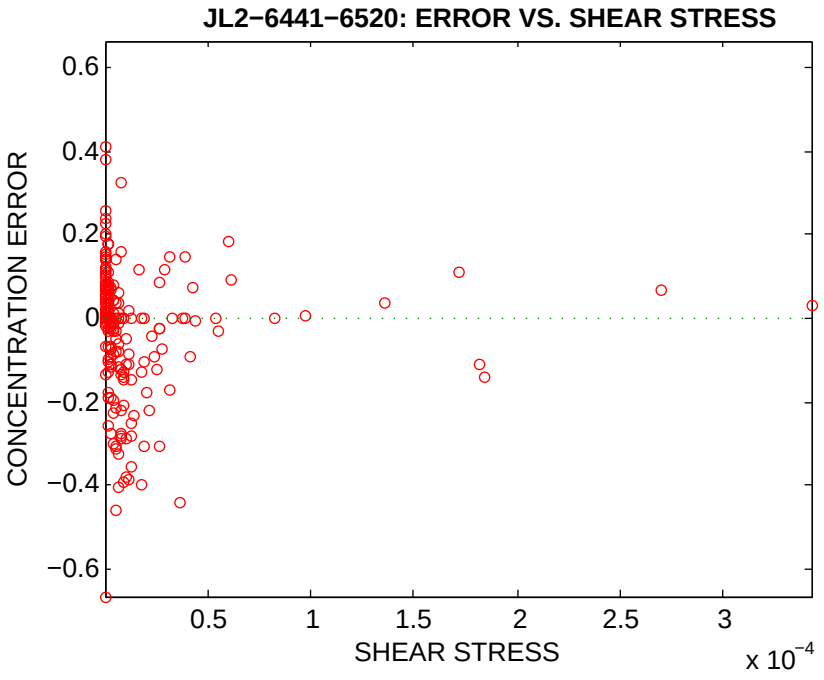


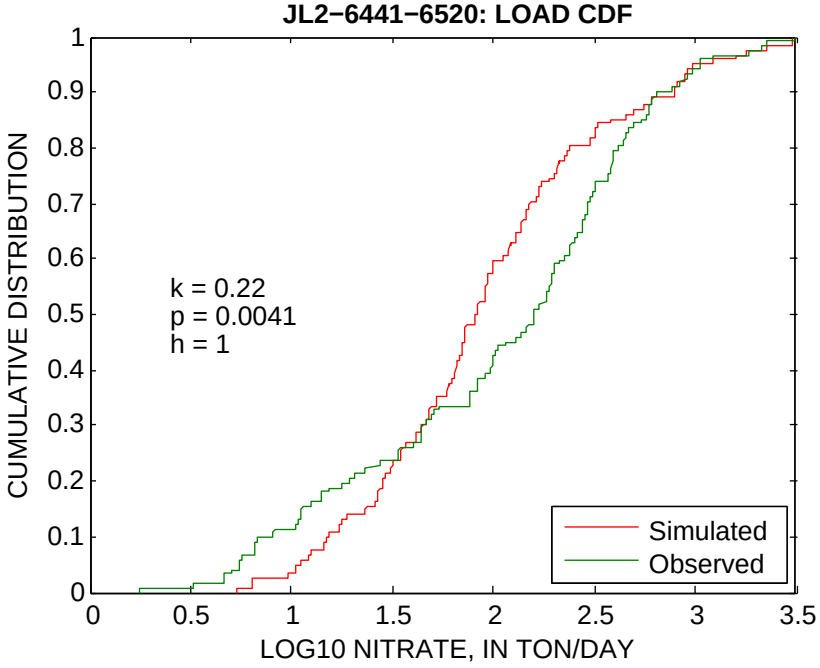


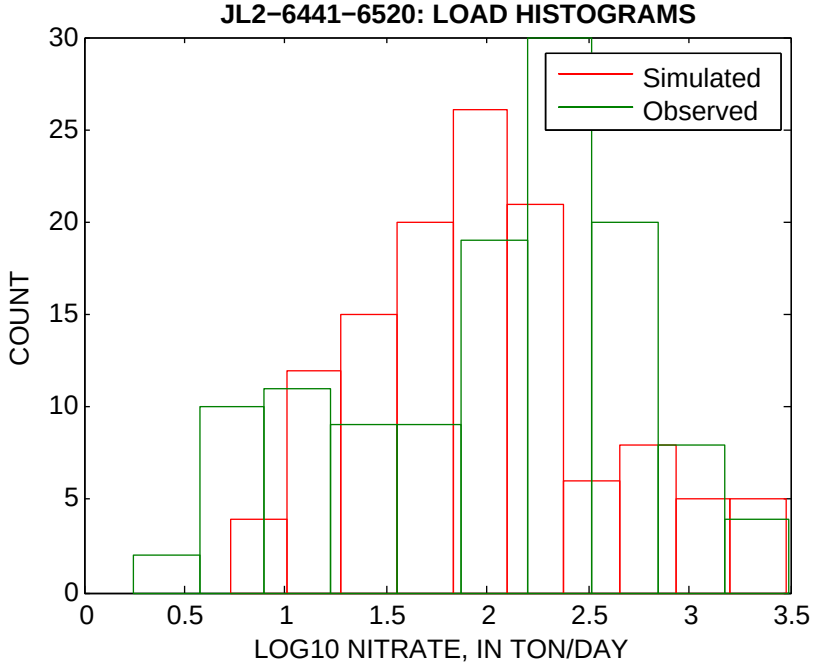


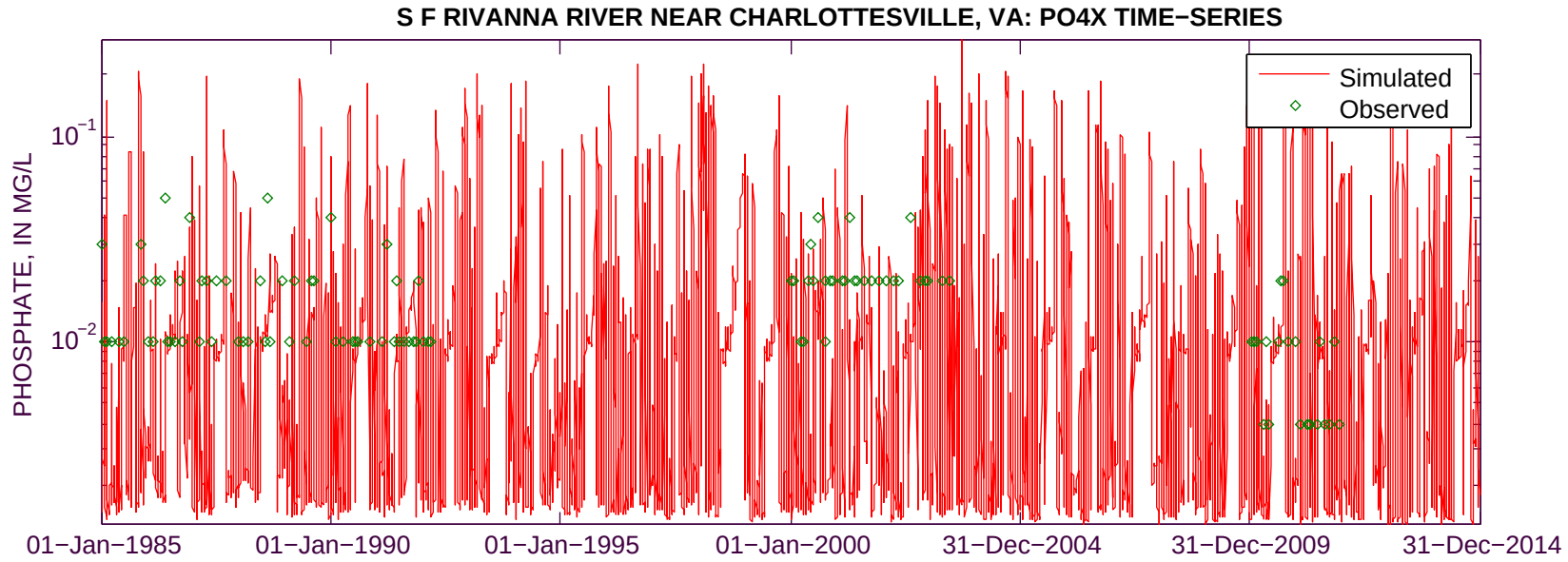
LOAD DATA
LOG10

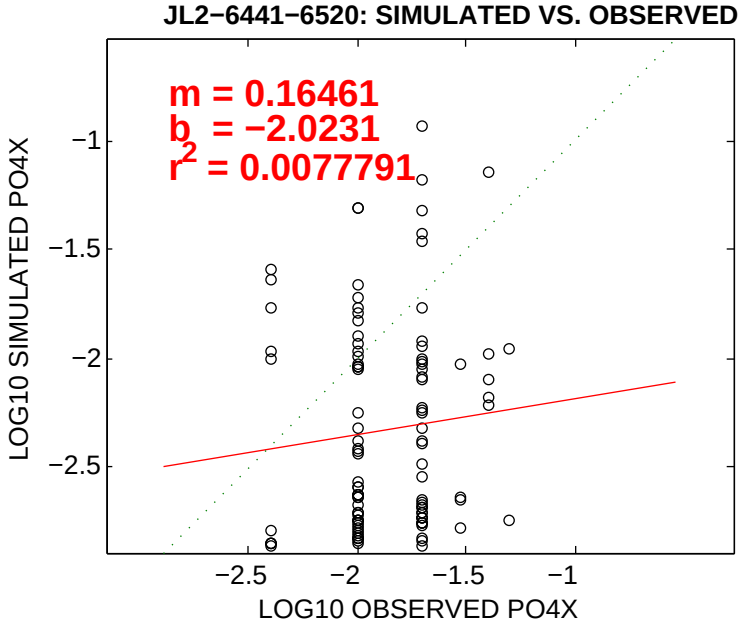


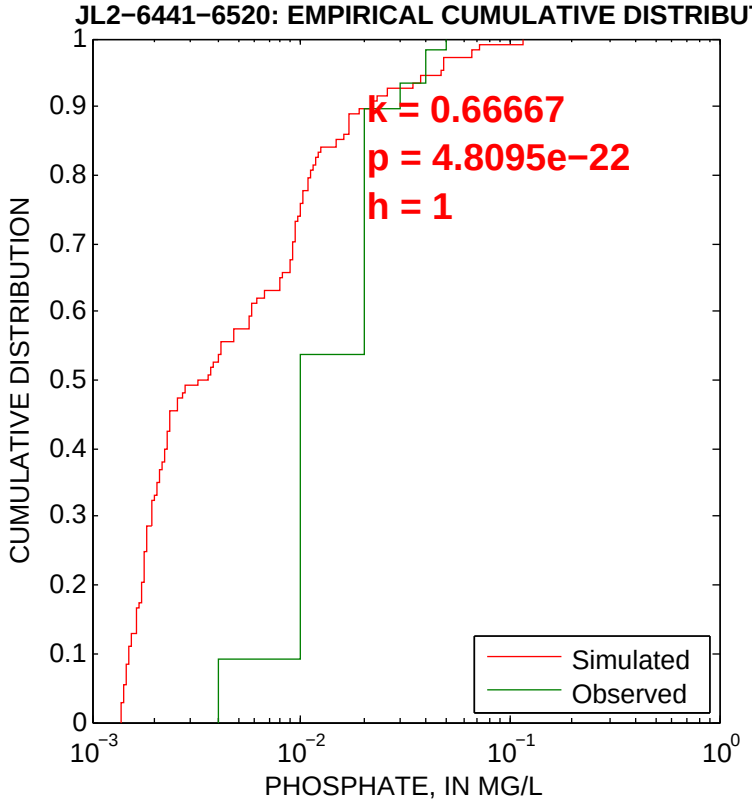












DATA SELECTION

scenario: P620171001WQ; file: PO4X.calib

plot: PO4X - phosphate

Dates: 1/1/1985 – 12/31/201

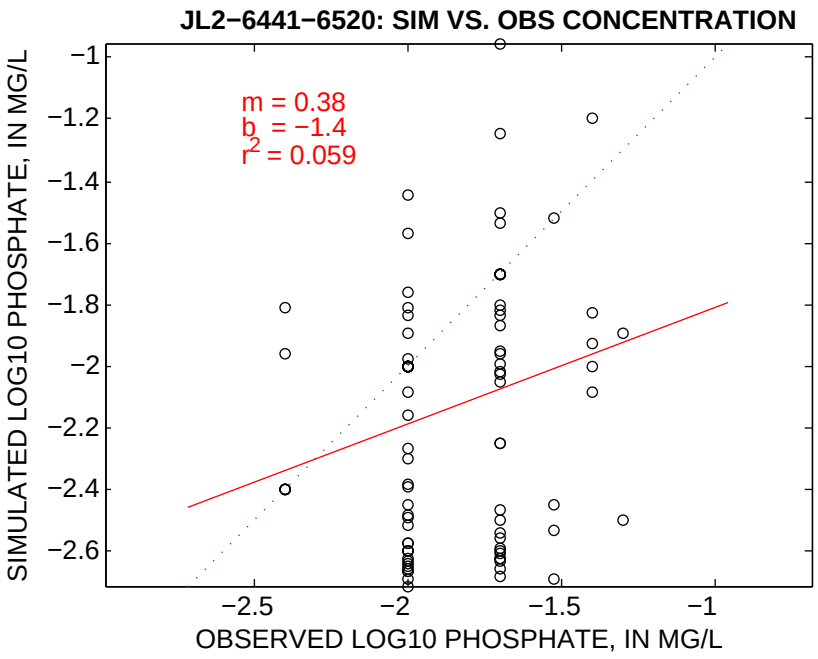
Drive: N/A; Directory: model; Observed: OBS20161101

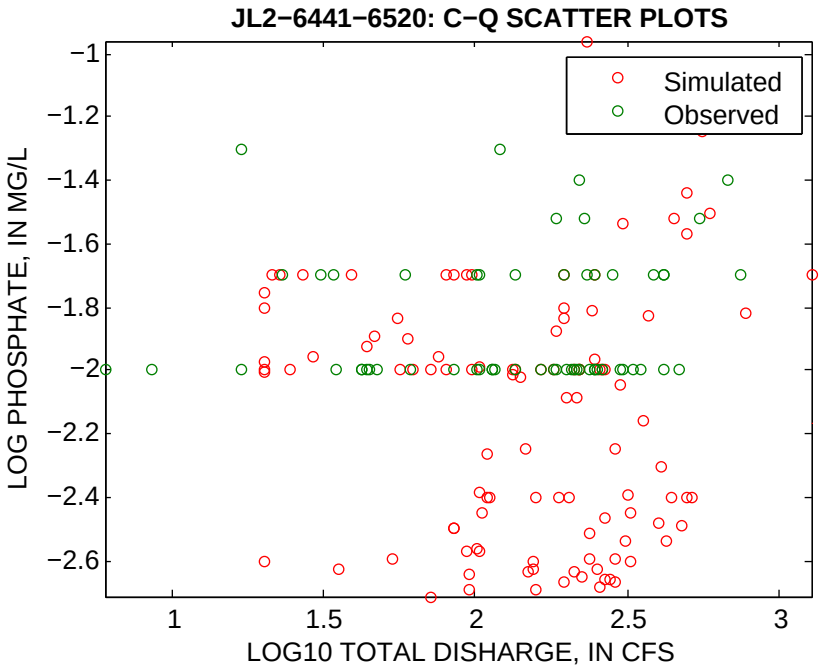
STATISTICS

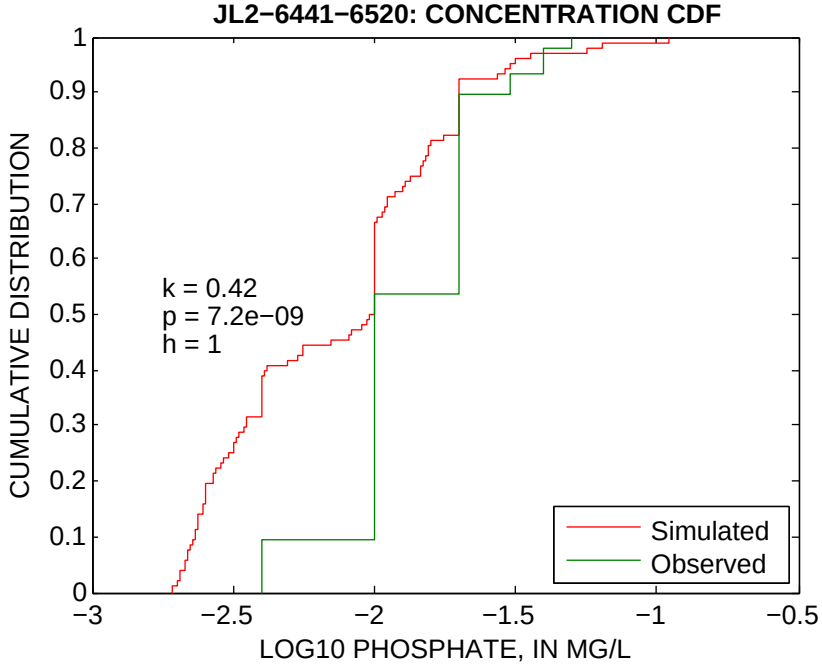
	n	108	108
		observe	simulate
min		0.004	0.0013642
		-2.39794	-2.86512
mean		0.0159259	0.00963953
		-1.86965	-2.33085
media		0.01	0.00343285
		-2	-2.46493
max		0.05	0.11548
		-1.30103	-0.937493
varian		9.12842e-0	0.00026809
		0.06526	0.227322
JB		0.001	0.001
		0.5	0.010575
		ra	log
%		-39.4727	24.6675
err.va		0.00036546	0.485787
rel.std.err		4.00354	7.44387
mod.eff		-3.00354	-6.44387

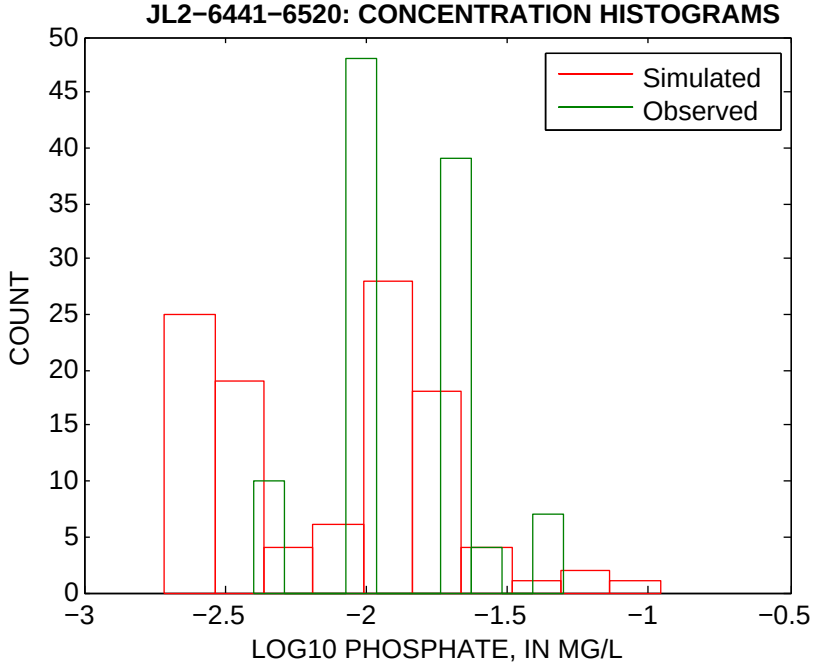
VERSION 2.1

ALL DATA
LOG10

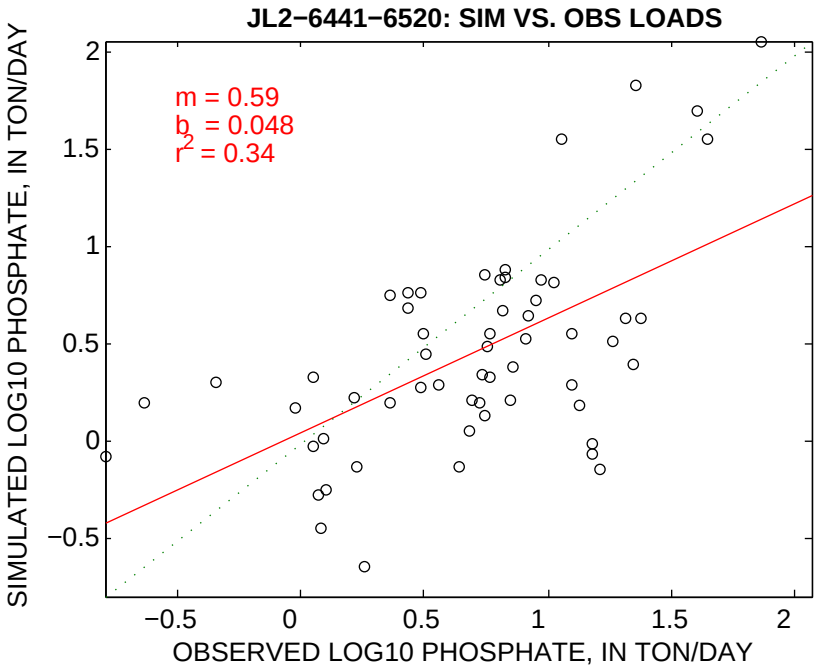


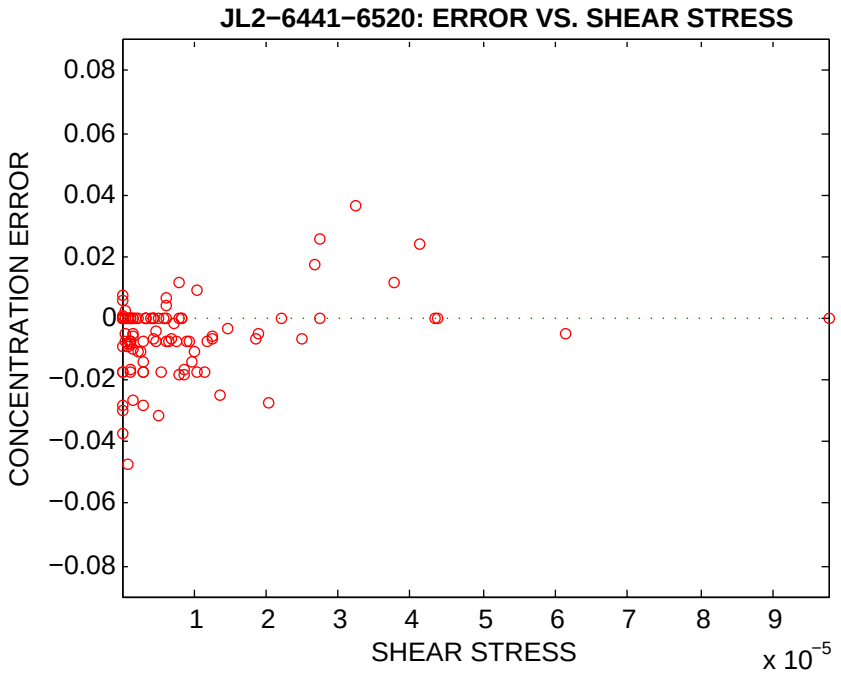


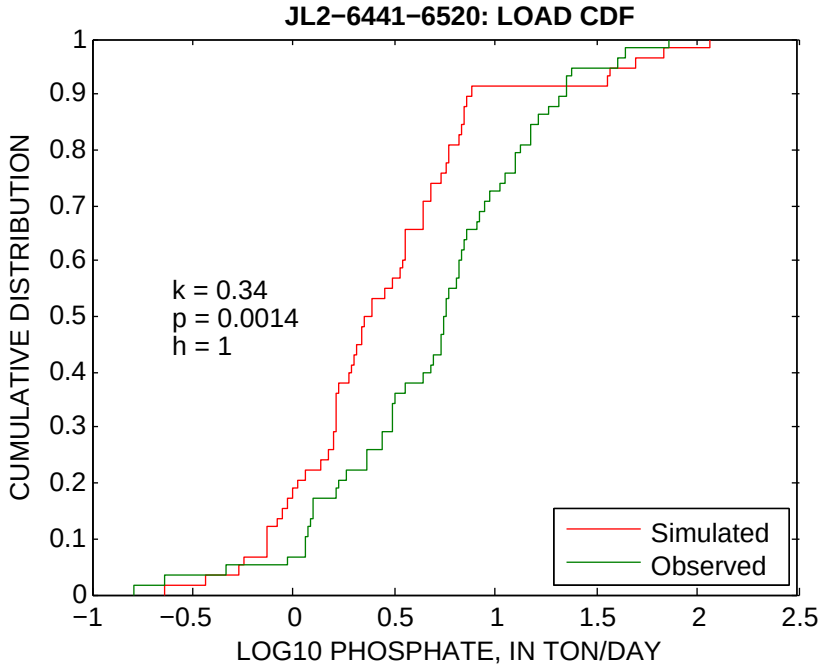


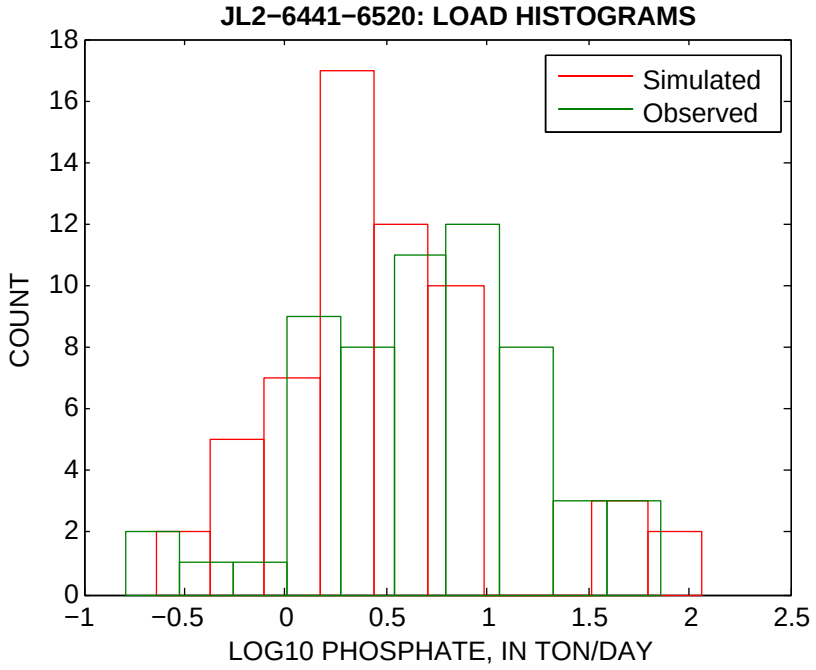


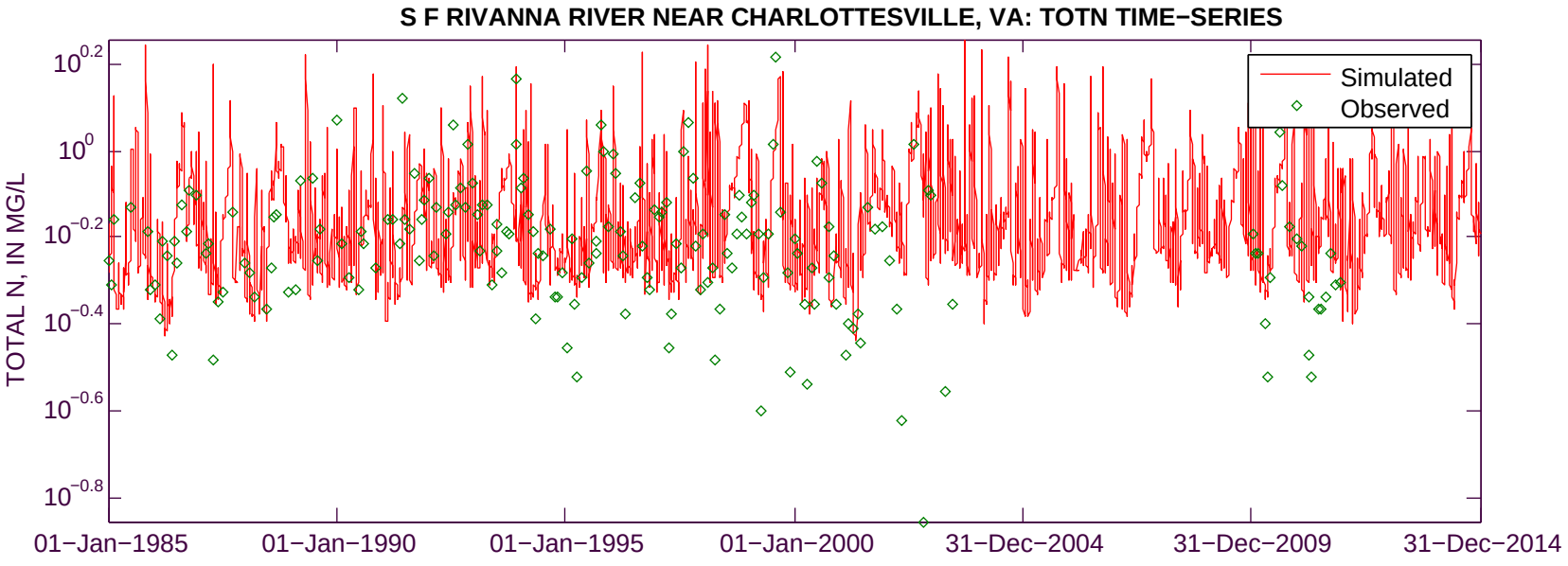
LOAD DATA
LOG10

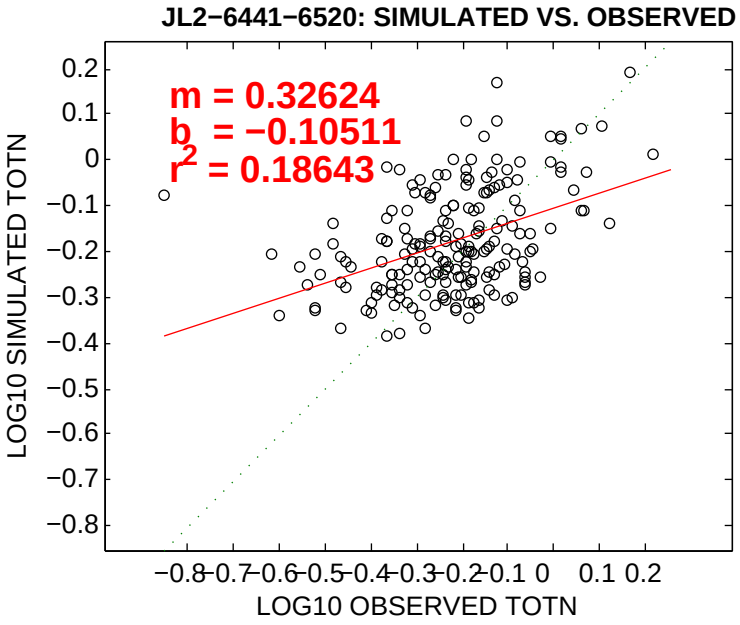


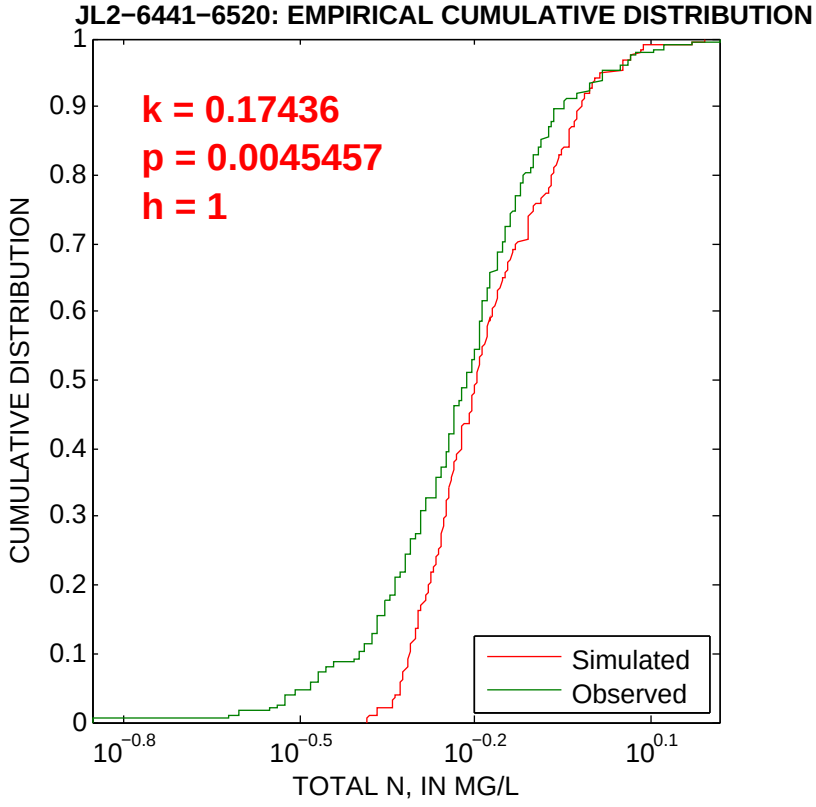












DATA SELECTION

scenario: P620171001WQ; file: TOTN.calib

plot: TOTN - total nitrogen

Dates: 1/1/1985 – 12/31/201

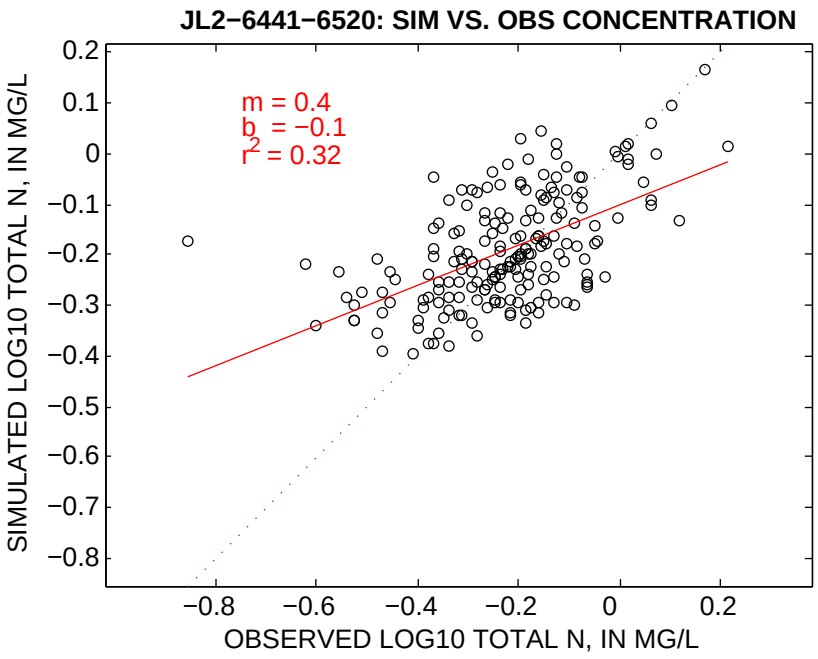
Drive: N/A; Directory: model; Observed: OBS20161101

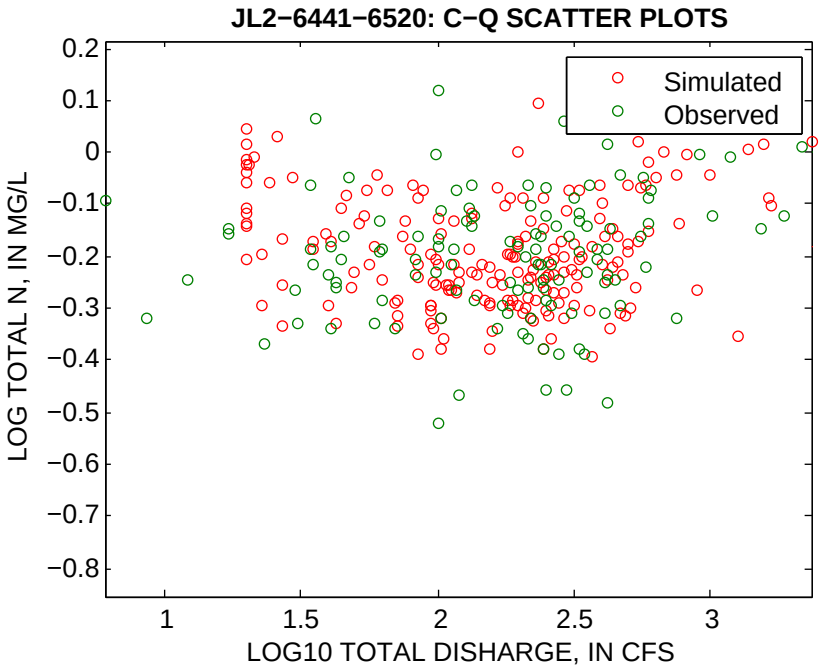
STATISTICS

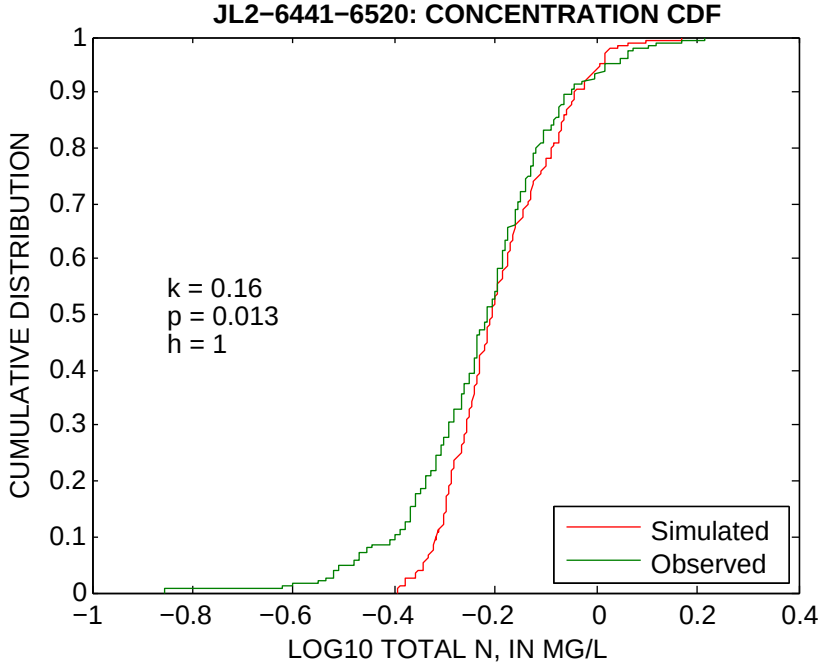
	n	195	195
		observe	simulate
min		0.14	0.41393
		-0.853872	-0.383073
mean		0.634103	0.688402
		-0.22344	-0.178003
media		0.61	0.63243
		-0.21467	-0.198988
max		1.64	1.5588
		0.214844	0.19279
varian		0.0497058	0.0397376
		0.0229574	0.0131064
JB		0.001	0.001
		0.002822	0.007390
		ra	log
%		8.56314	-20.3351
err.va		0.0486486	0.0231597
rel.std.err		0.978732	1.00881
mod.eff		0.021268	-0.00881252

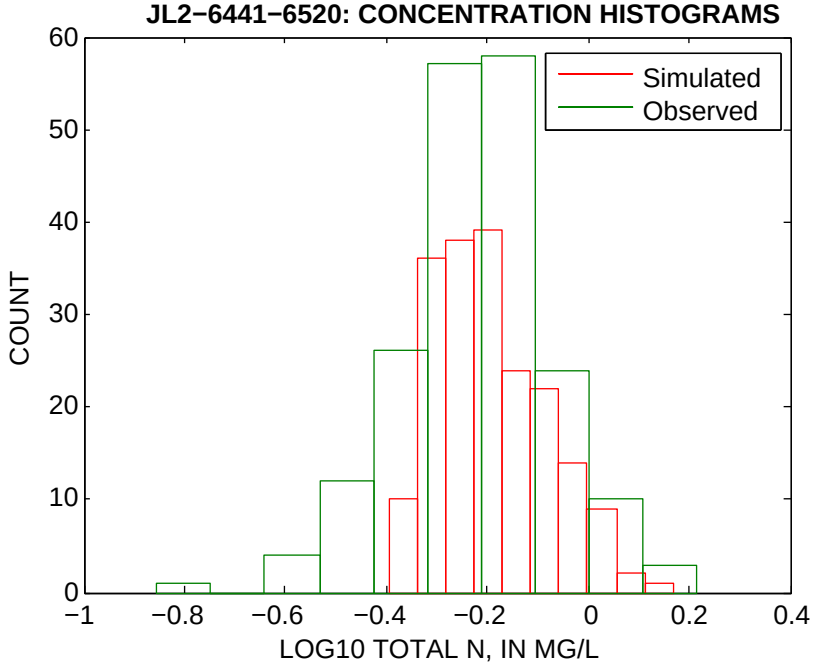
VERSION 2.1

ALL DATA
LOG10

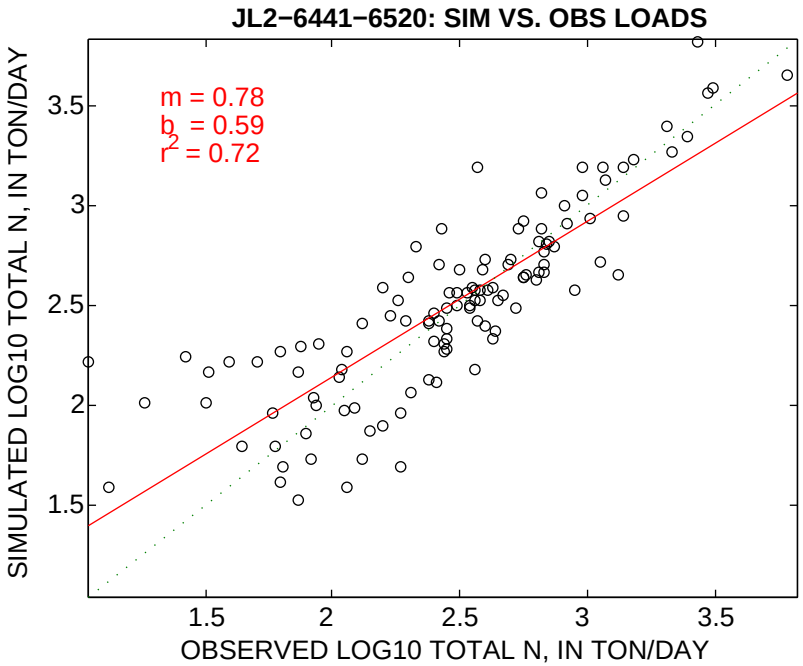


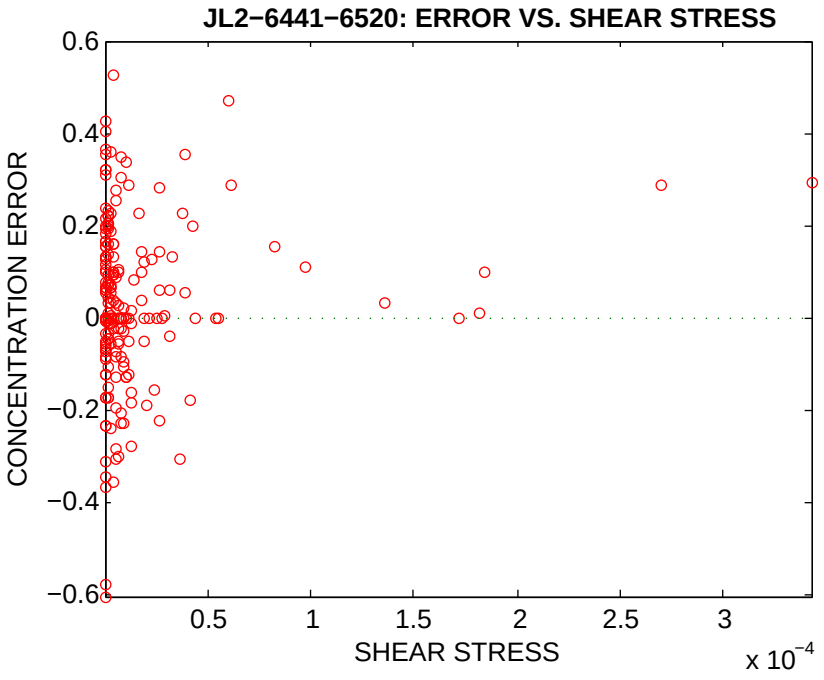


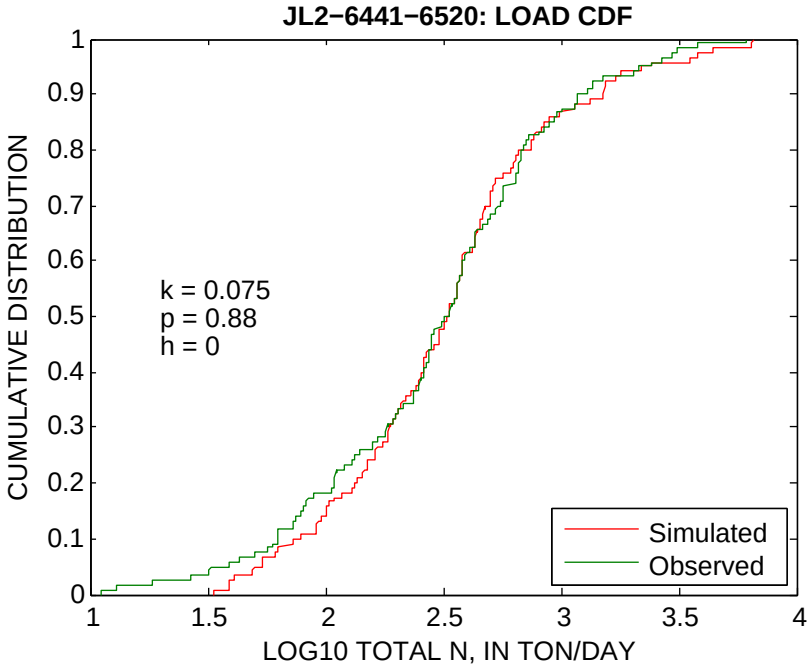


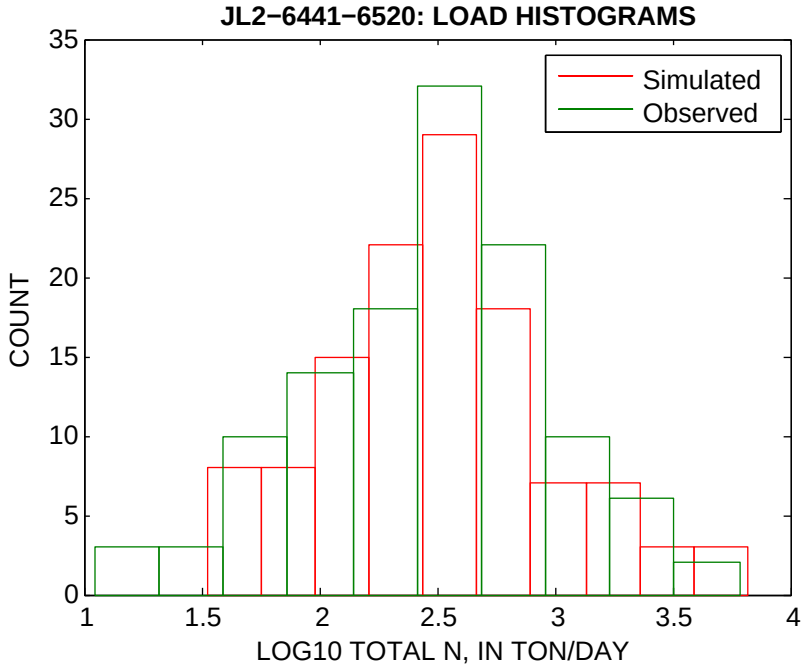


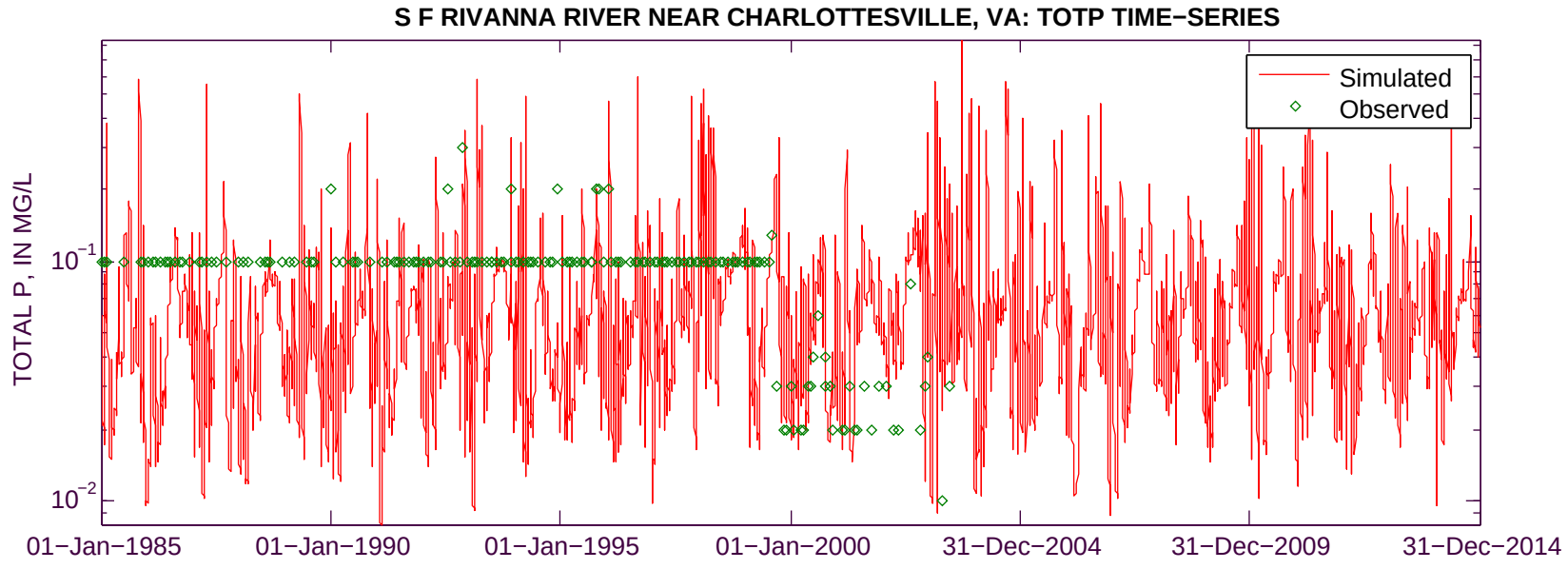
LOAD DATA
LOG10

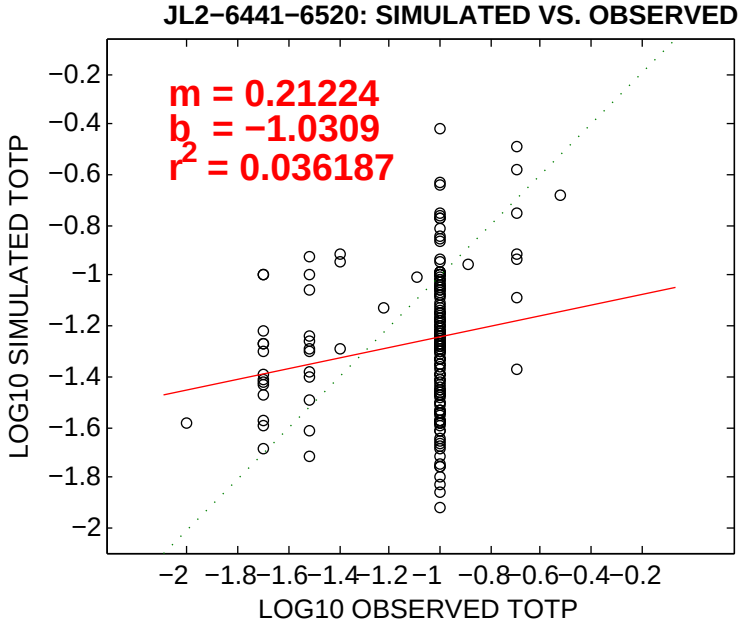


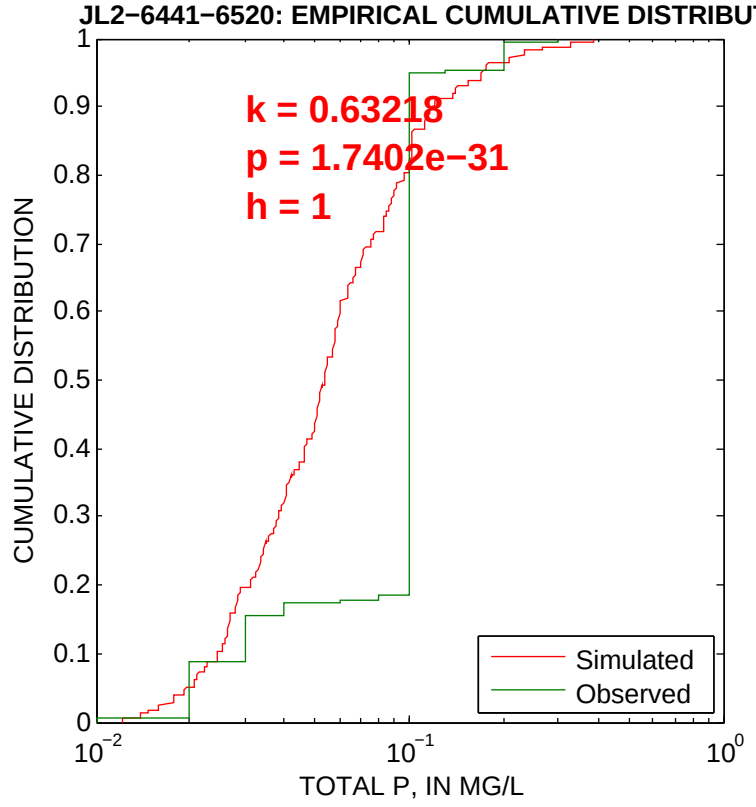












DATA SELECTION

scenario: P620171001WQ | file: TOTP.calib

plot: TOTP - total phosphorus

Dates: 1/1/1985 – 12/31/201

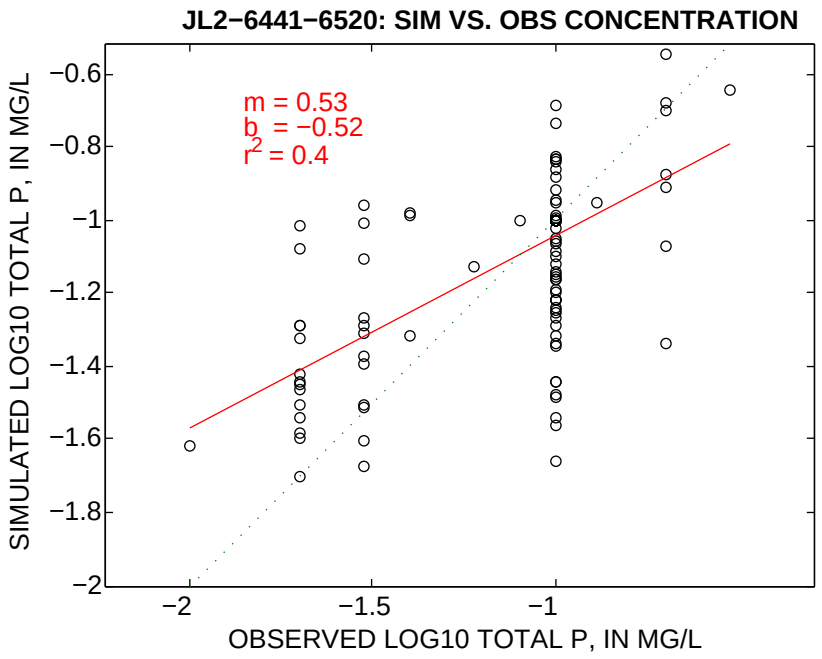
Drive | Directory: N/A | model | Observed: OBS20161101

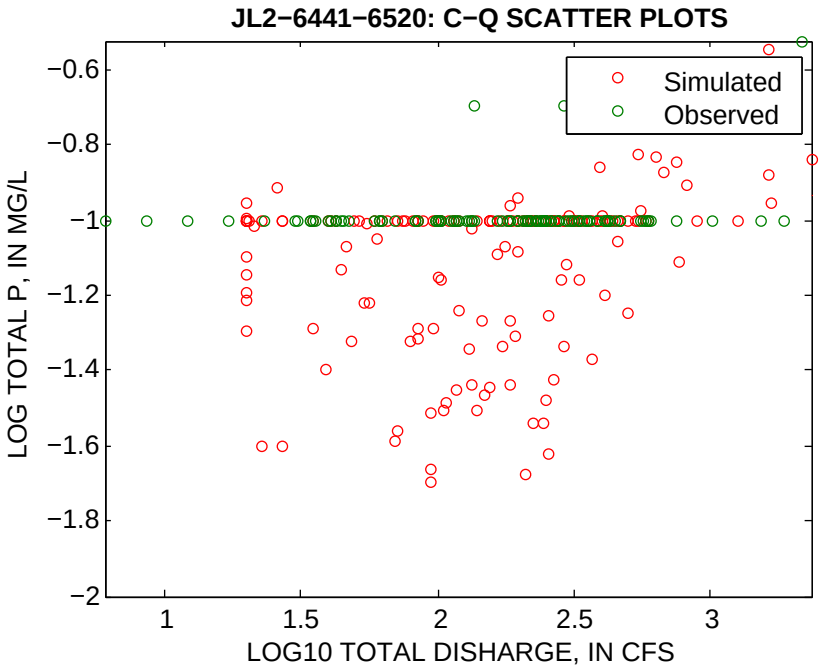
STATISTICS

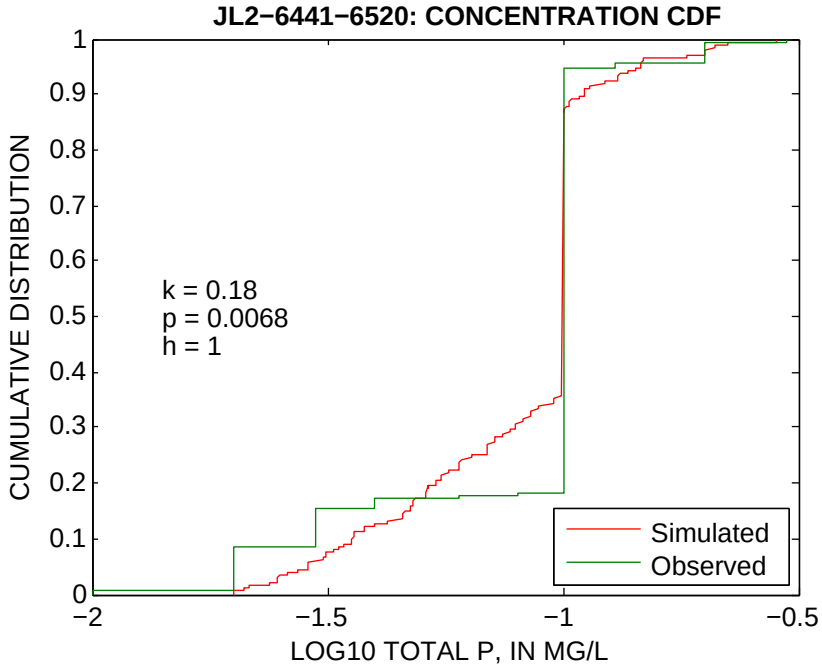
		observe	simulate
n		174	174
min		0.01	0.012079
		-2	-1.91797
mean		0.0921839	0.0682991
		-1.09123	-1.26245
media		0.1	0.0537355
		-1	-1.26974
max		0.3	0.38394
		-0.522879	-0.415737
varian		0.00155821	0.00291919
		0.0640522	0.0797283
JB		0.001	0.001
		0.001	0.236186
		ra	log
%		-25.91	15.6902
err.va		0.00360801	0.146077
rel.std.err		2.31549	2.28059
mod.eff		-1.31549	-1.28059

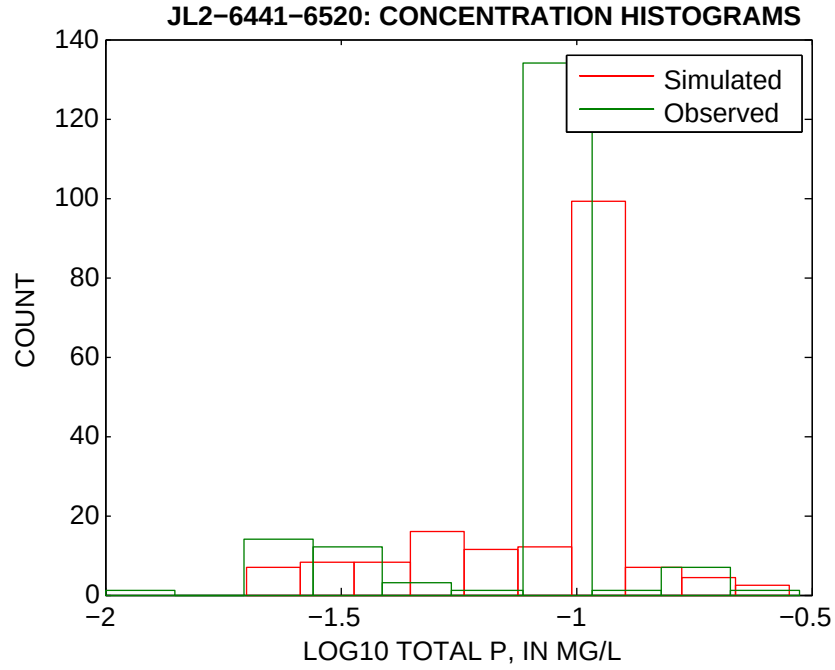
VERSION 2.1

ALL DATA
LOG10

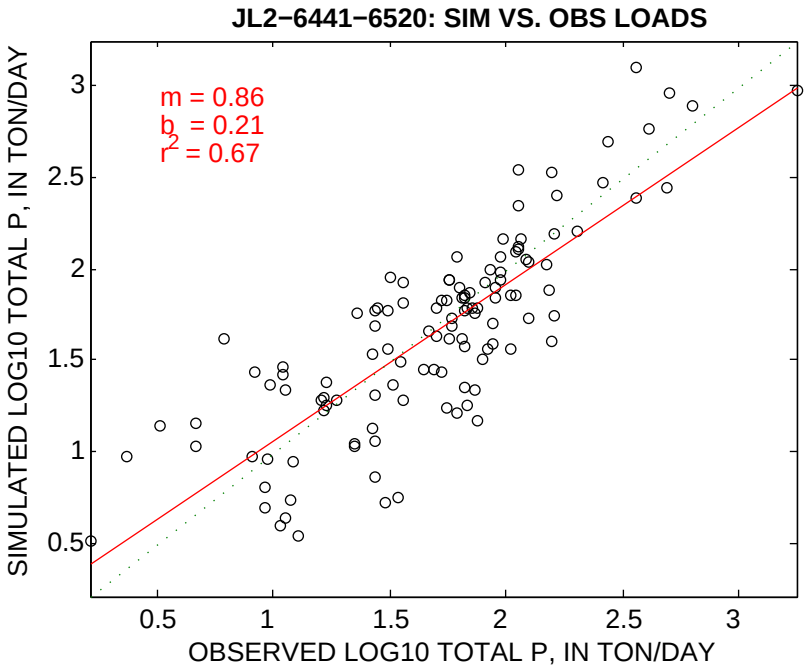


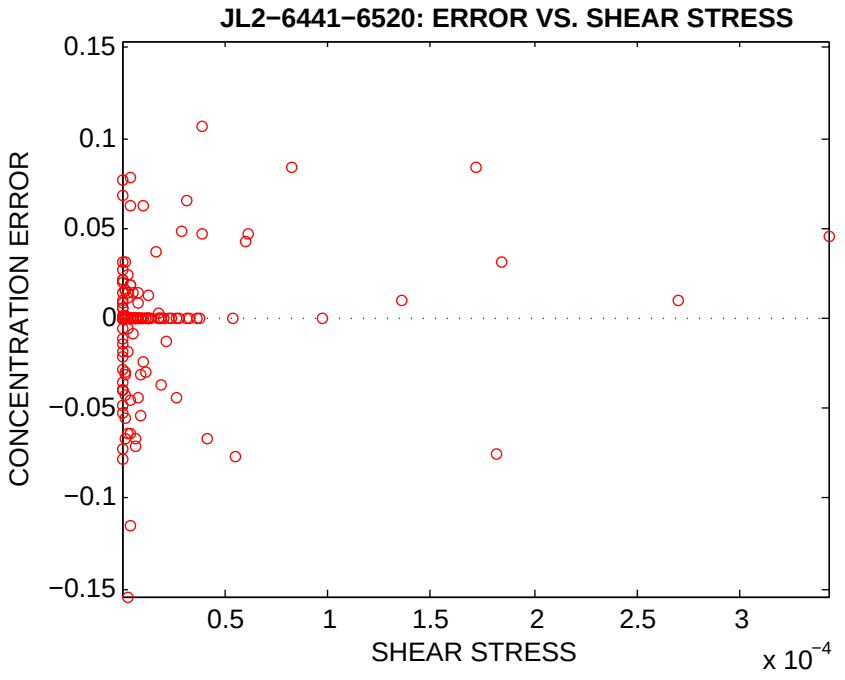


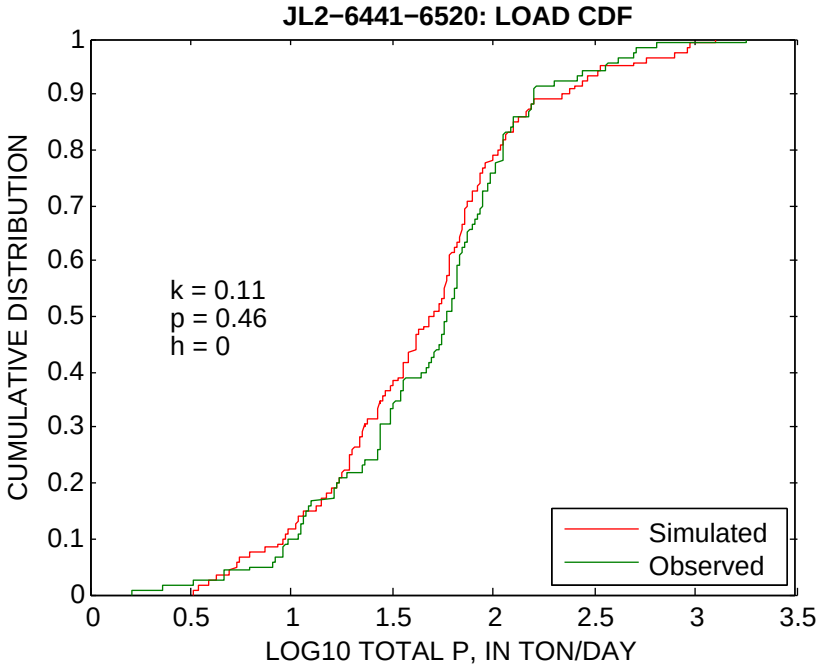


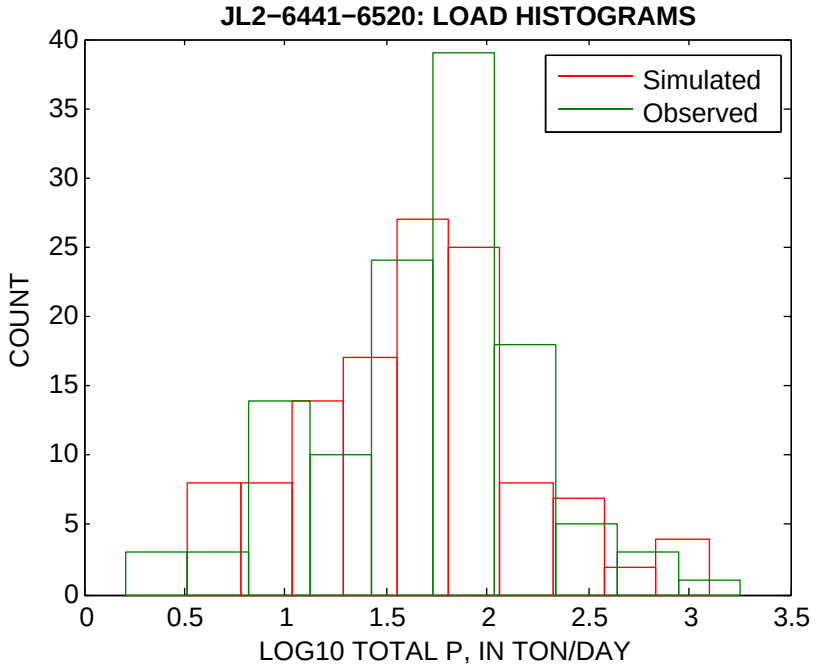


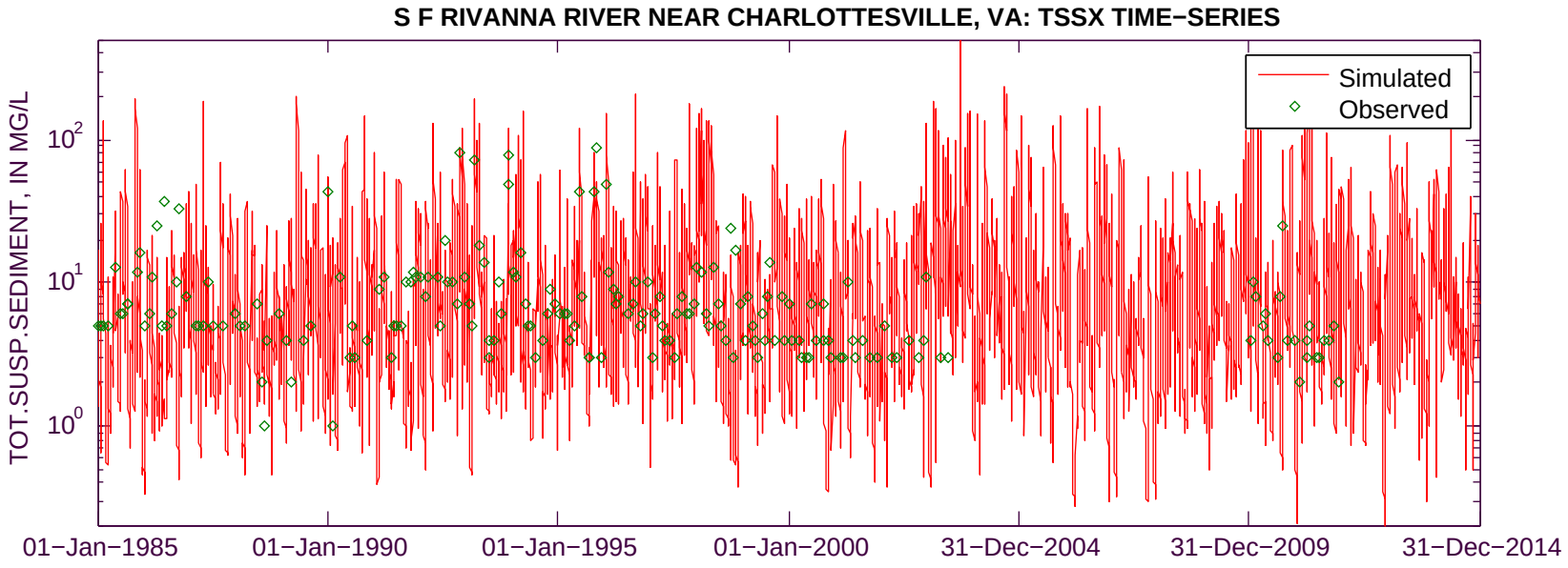
LOAD DATA
LOG10

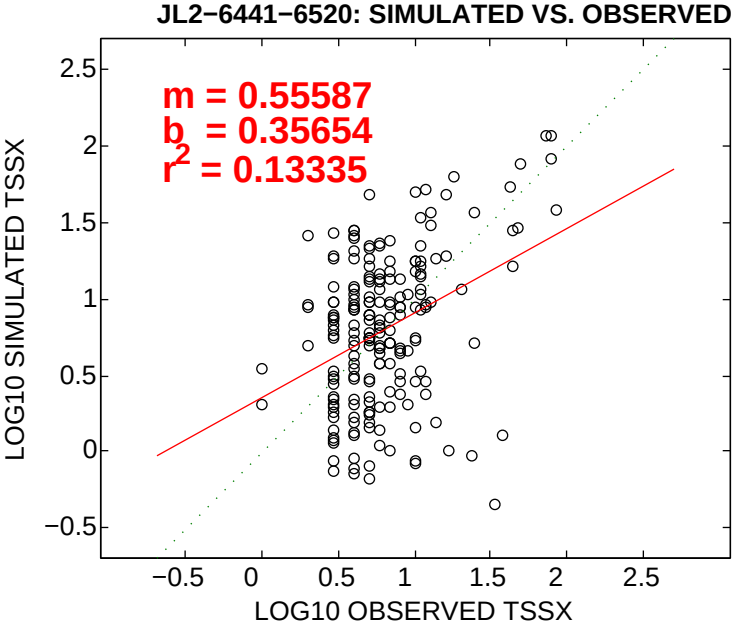


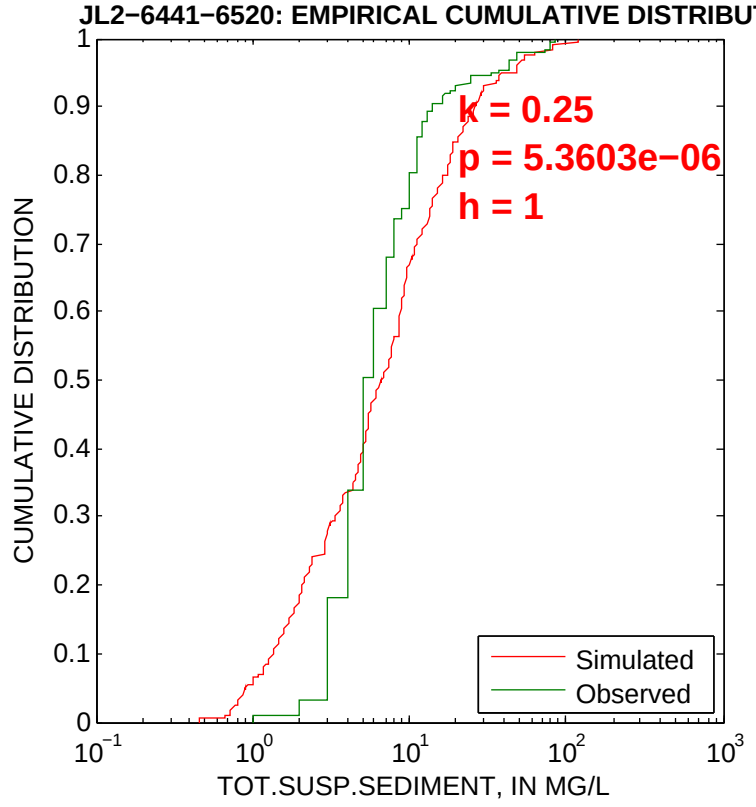












DATA SELECTION

scenario: P620171001WQ | file: TSSX.calib

plot: TSSX - total suspended ...

Dates: 1/1/1985 – 12/31/201

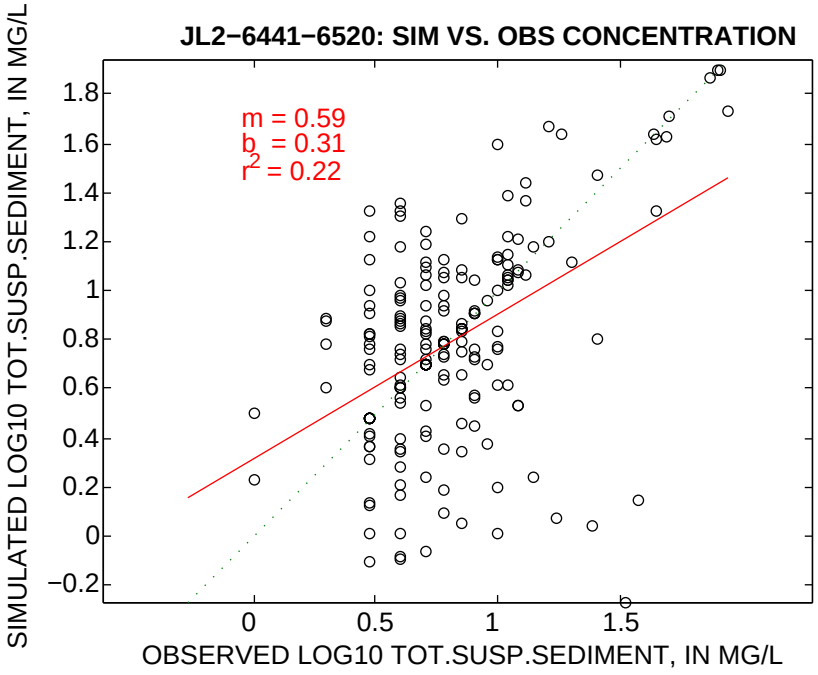
Drive | Directory | Observed: N/A | model | OBS20161101

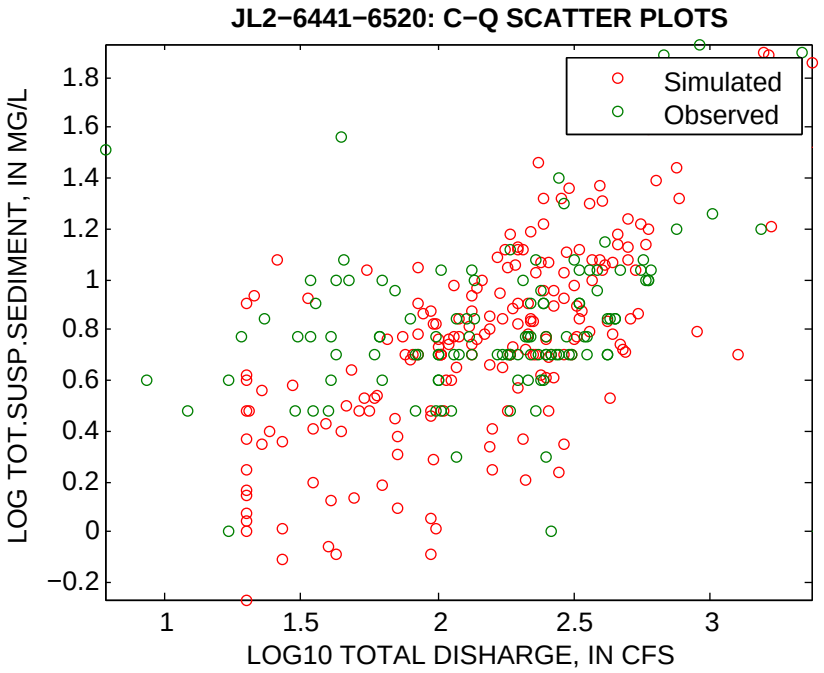
STATISTICS

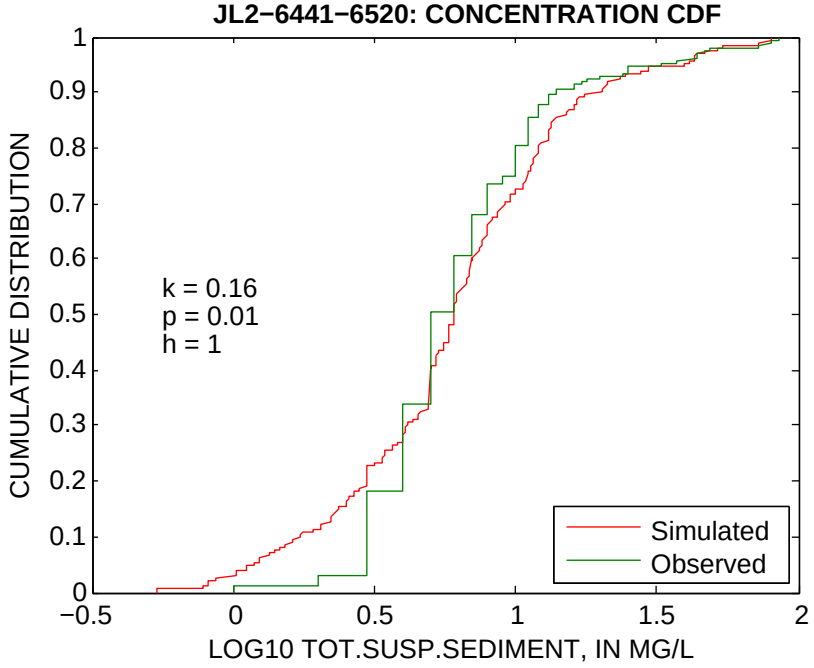
n	200	200
	observe	simulate
min	1	0.46035
	0	-0.336912
mean	9.28	11.9351
	0.803362	0.803106
media	5	6.7315
	0.69897	0.828111
max	86	118.38
	1.9345	2.07328
varian	161.69	282.571
	0.104572	0.242309
JB	0.001	0.001
	0.001	0.421114
	ra	log
%	28.6113	-0.0319011
err.va	154.71	0.230624
rel.std.err	0.956831	2.20541
mod.eff	0.0431686	-1.20541

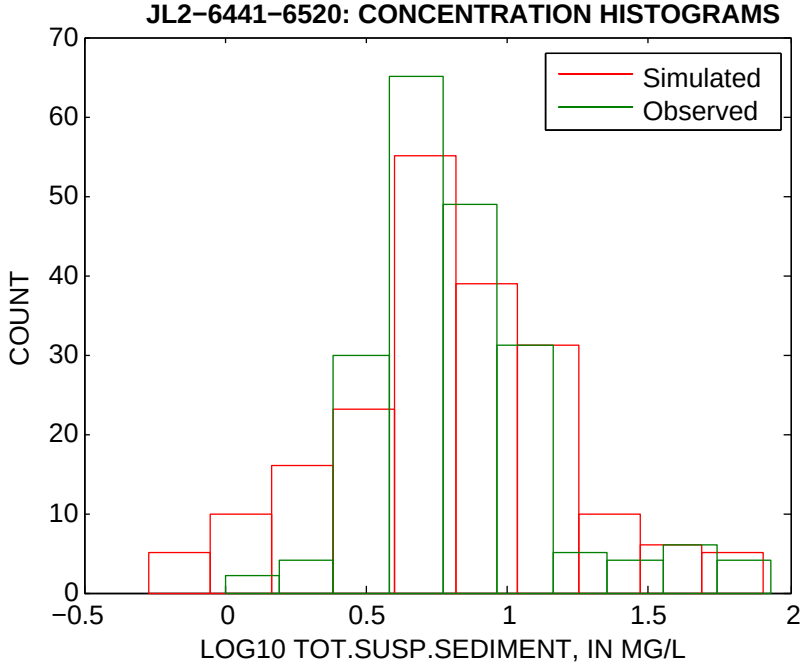
VERSION 2.1

ALL DATA
LOG10

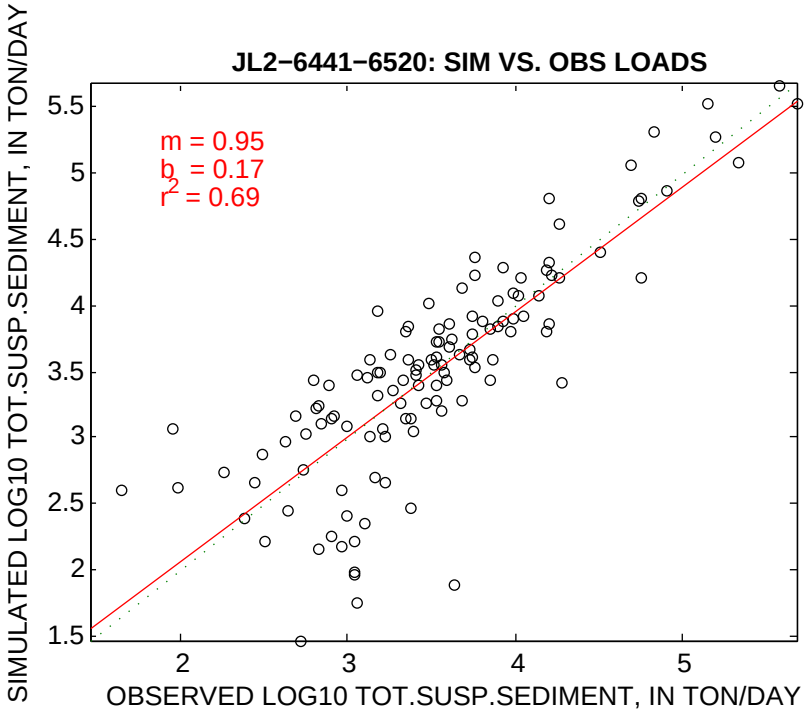


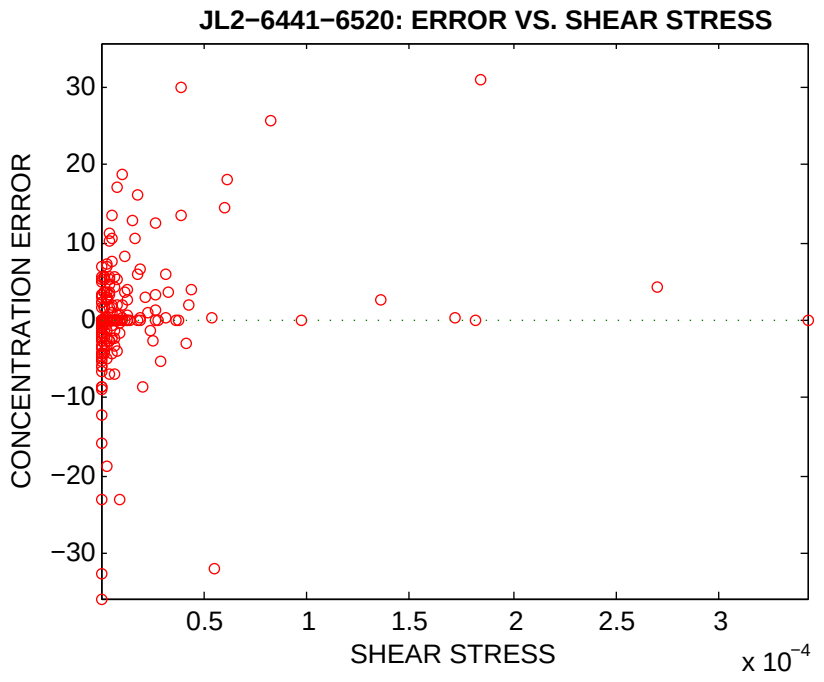


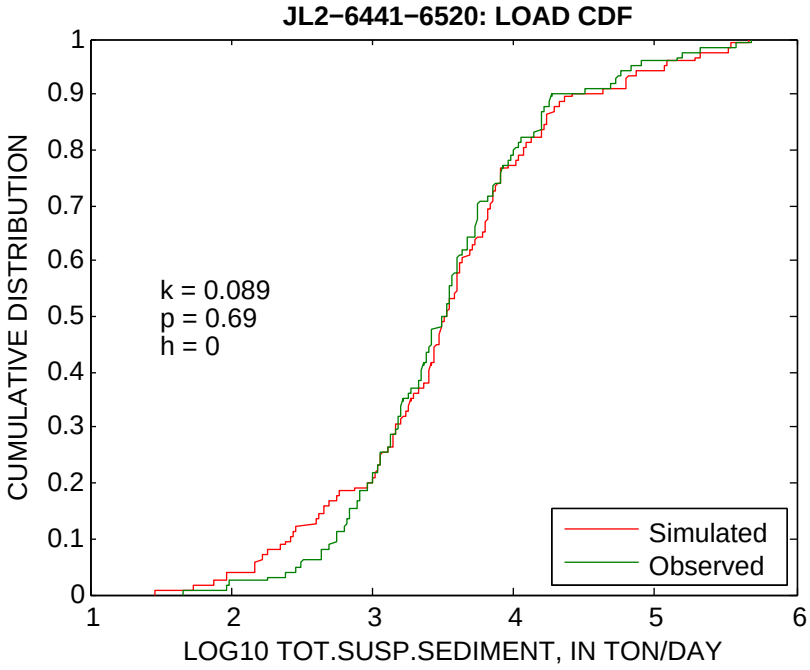


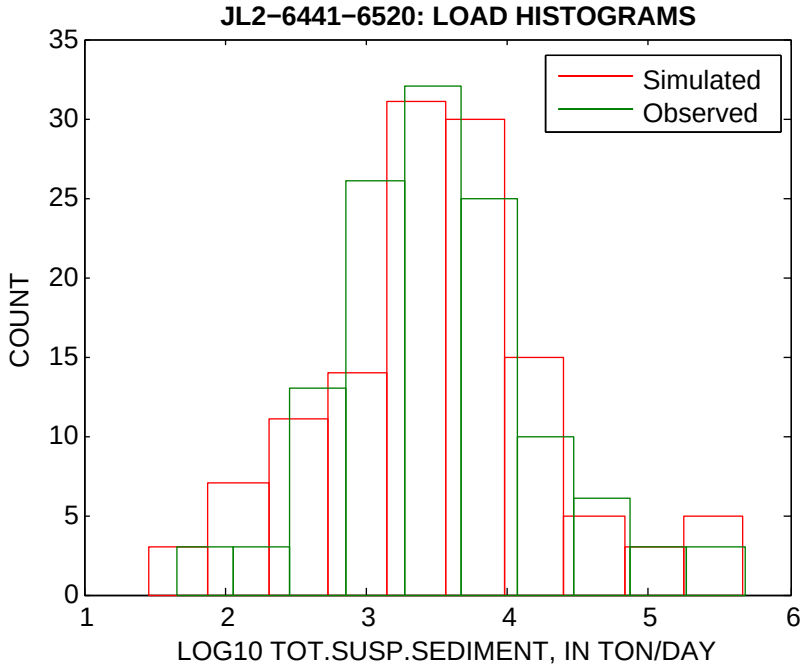


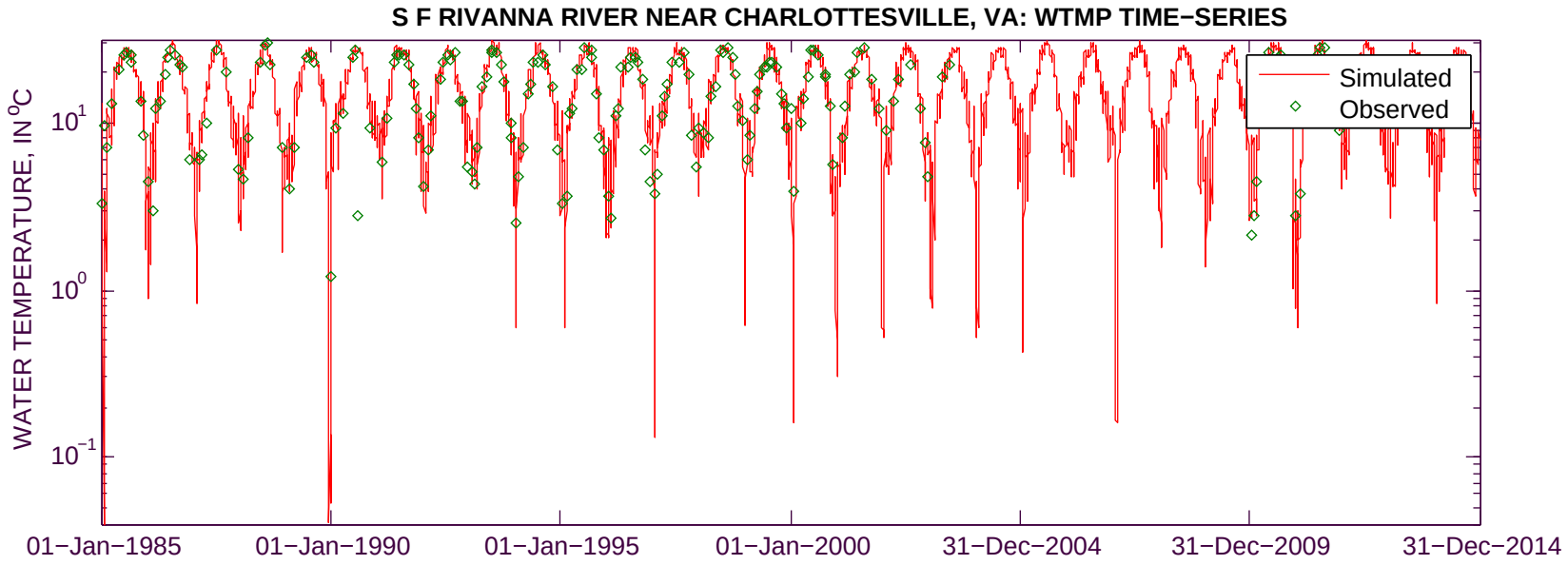
LOAD DATA
LOG10

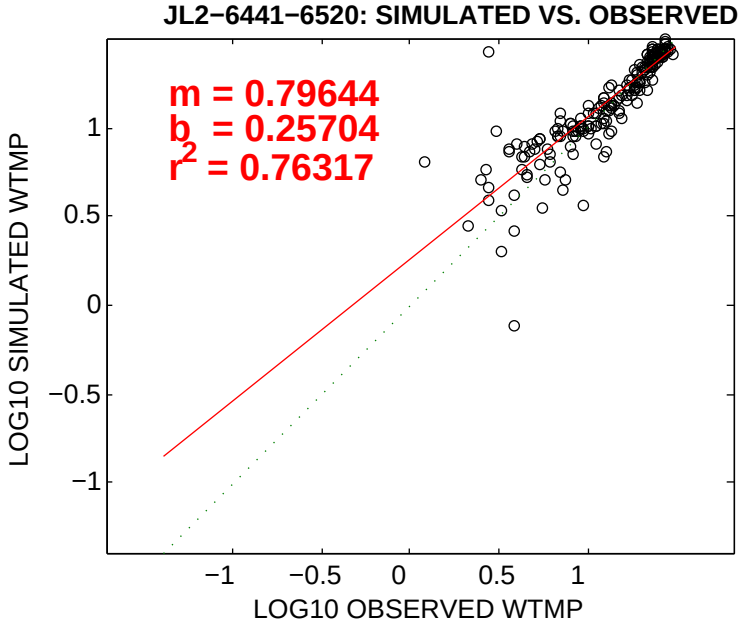


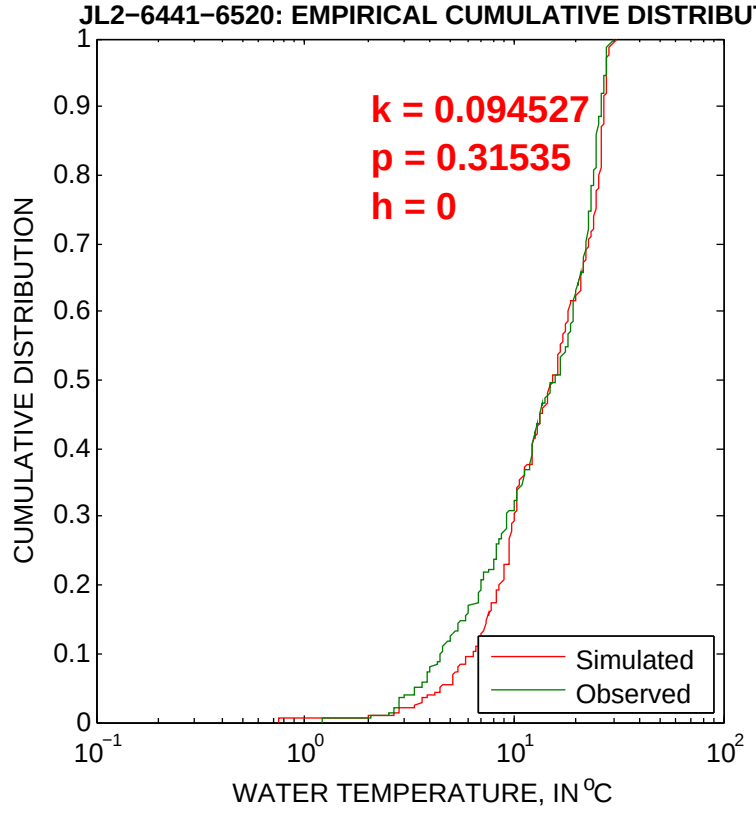












DATA SELECTION

scenario	file
P620171001WQ	WTMP.calib

plot: WTMP - water tempera...

Dates 1/1/1985 12/31/201

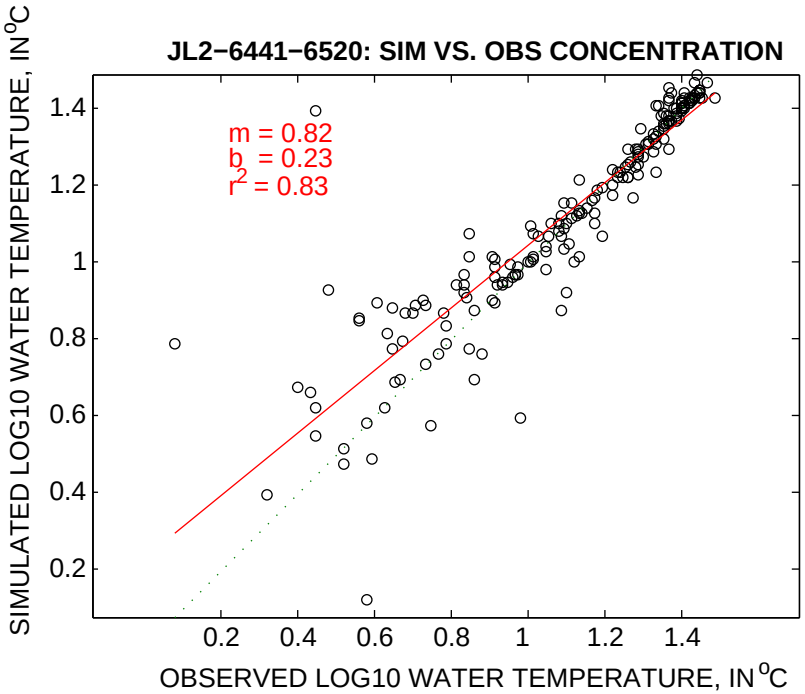
Drive	Directory	Observed
N/A	model	OBS20161101

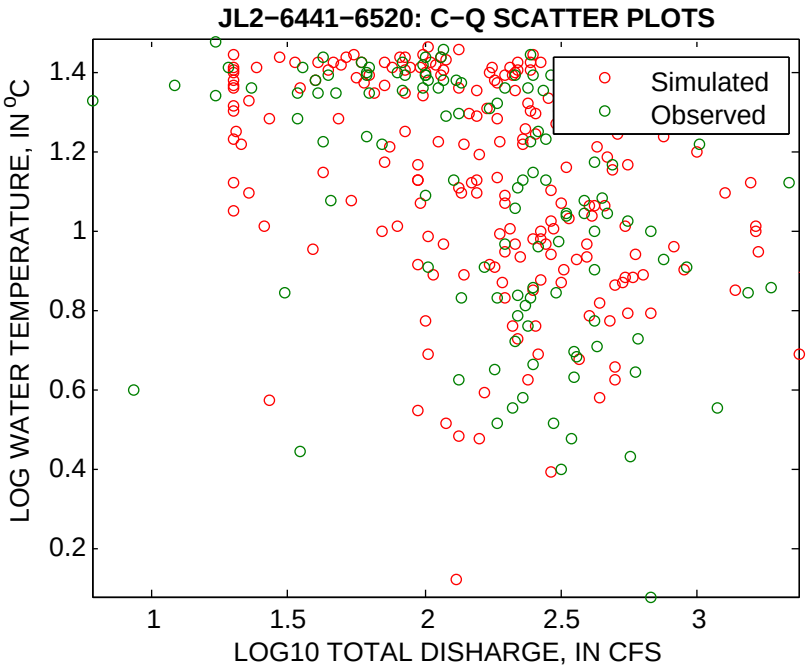
STATISTICS

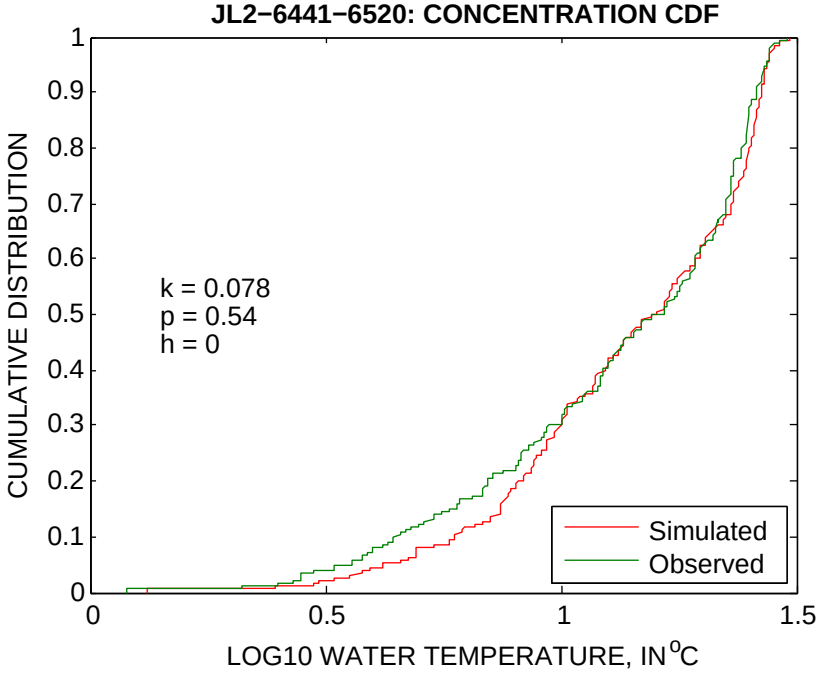
	n	observe	simulate
		201	201
min		1.2	0.75718
		0.0791812	-0.120801
mean		15.6303	16.2857
		1.11204	1.14271
media		15.6	15.252
		1.19312	1.18333
max		30.4	31.151
		1.48287	1.49347
varian		65.6955	64.7428
		0.0883353	0.0734205
JB		0.005000	0.005219
		0.001205	0.001
		ra	log
% err.va		4.19311	2.75821
		8.18117	0.0219943
rel.std.err		0.124532	0.248986
mod.eff		0.875468	0.751014

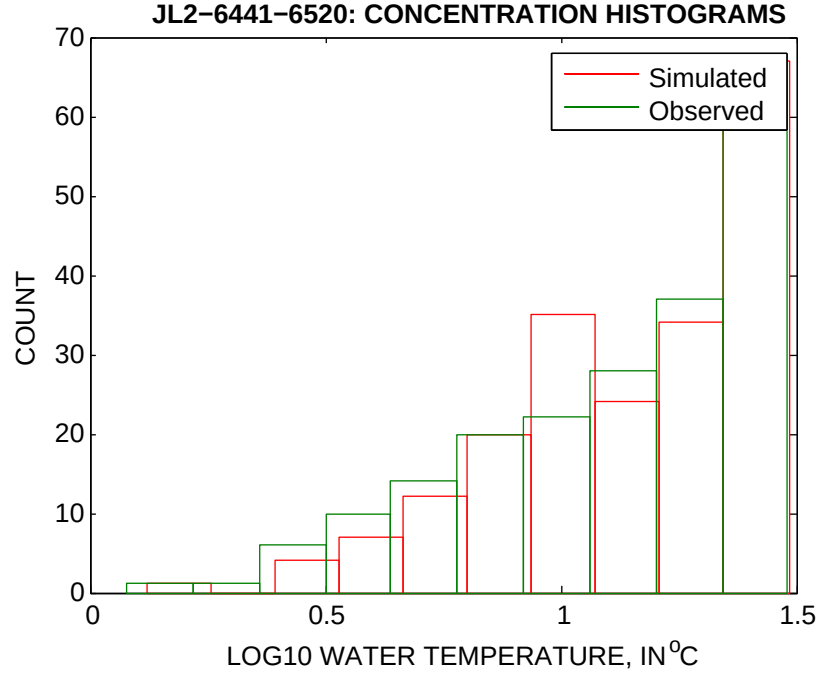
VERSION 2.1

ALL DATA
LOG10

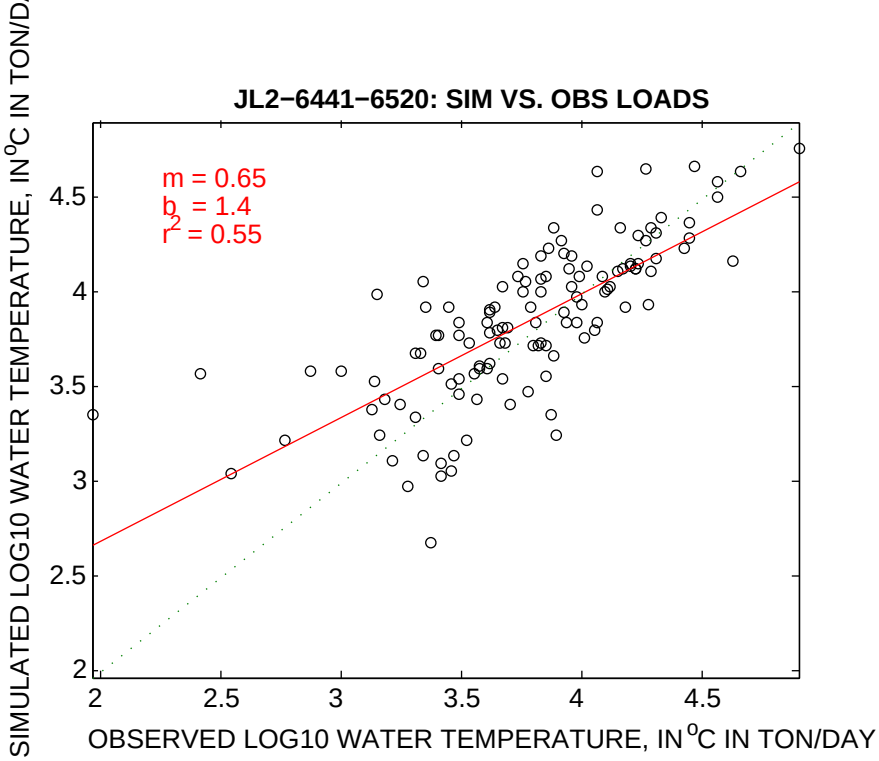


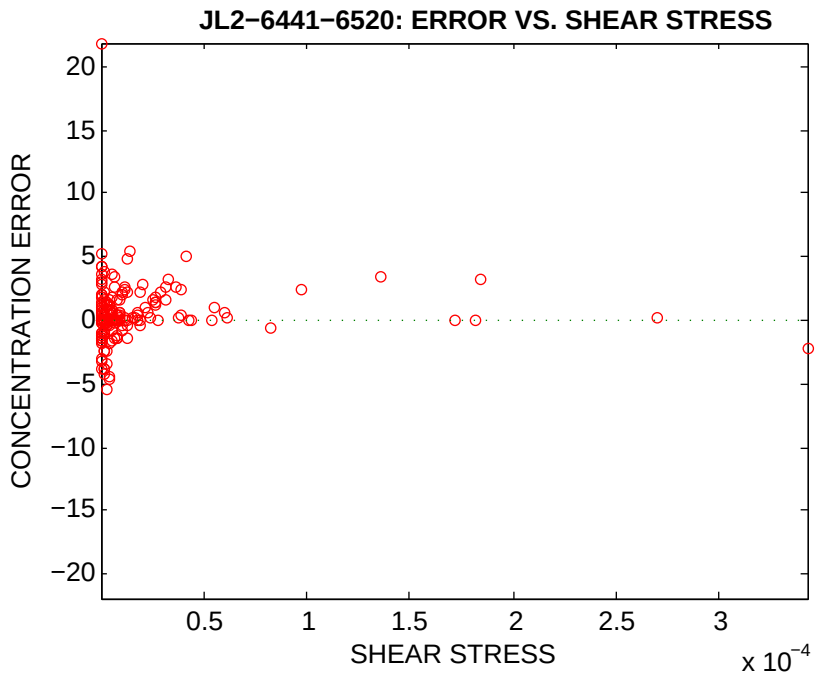


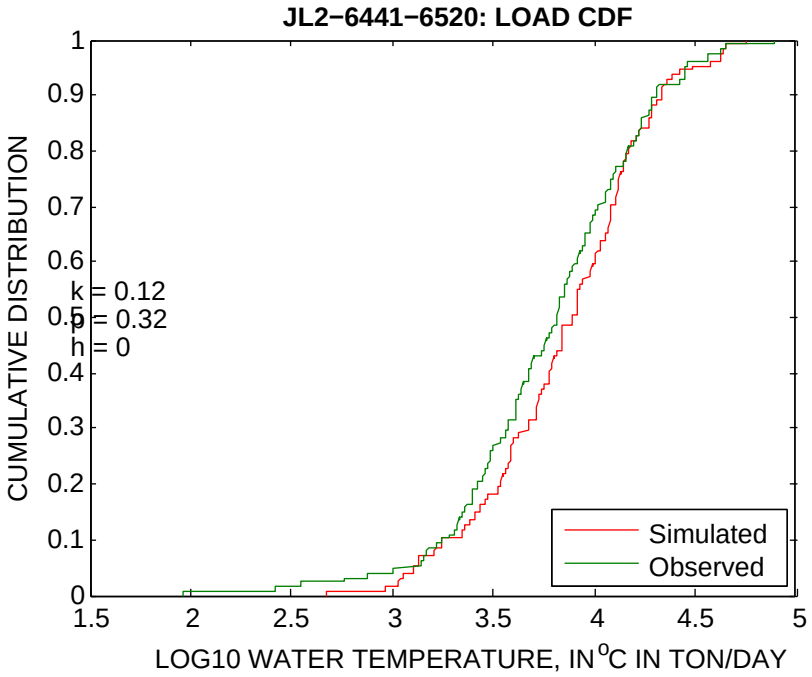


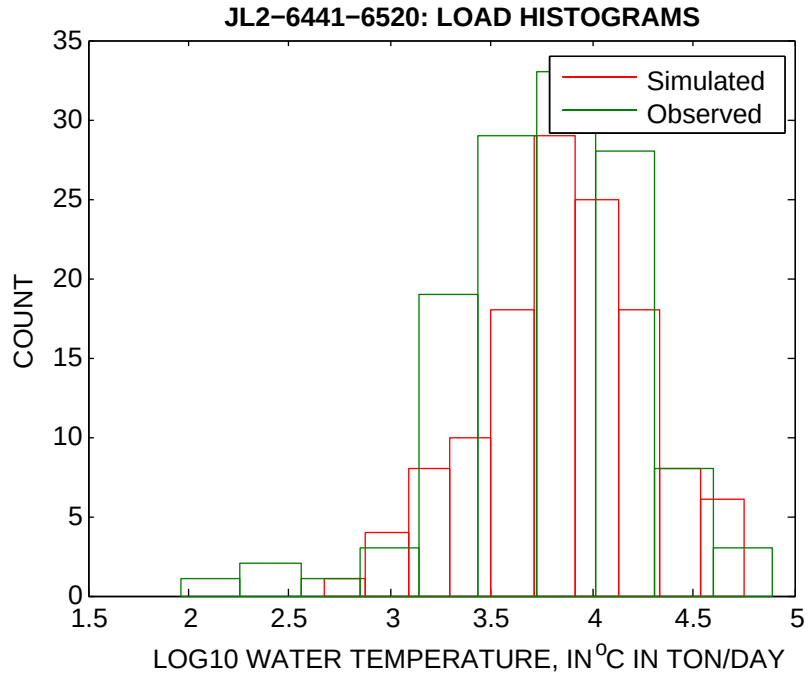


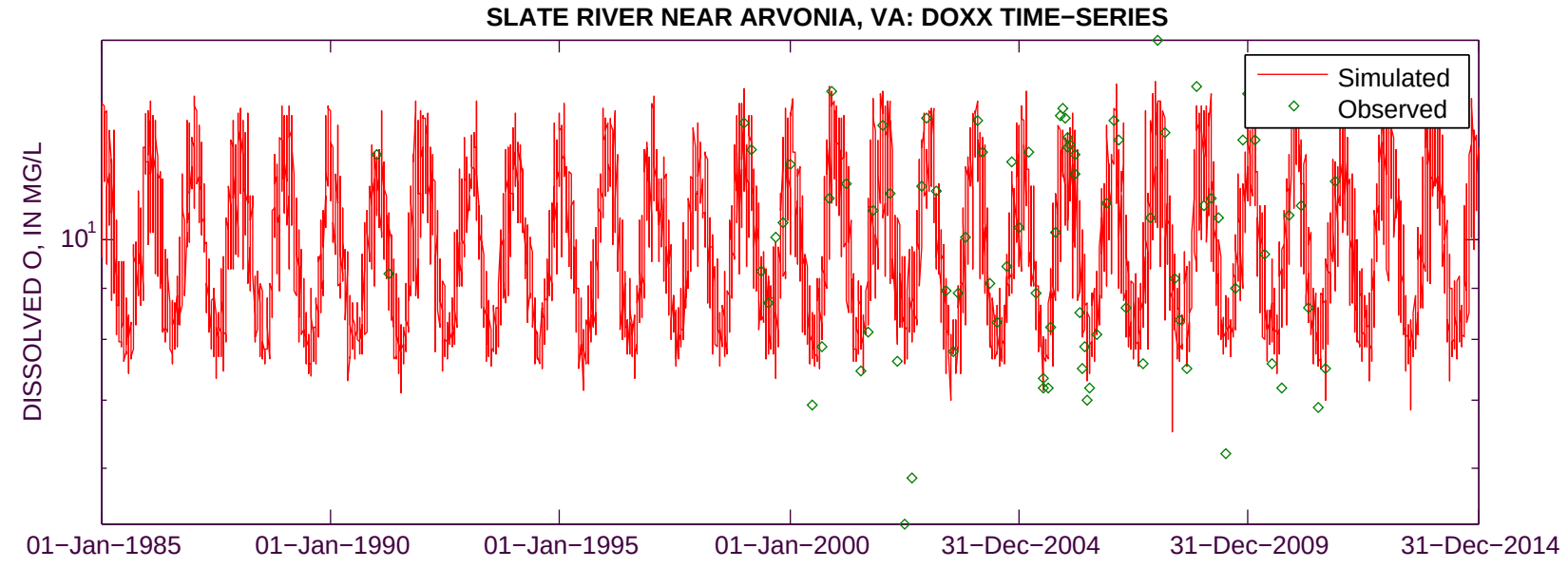
LOAD DATA
LOG10

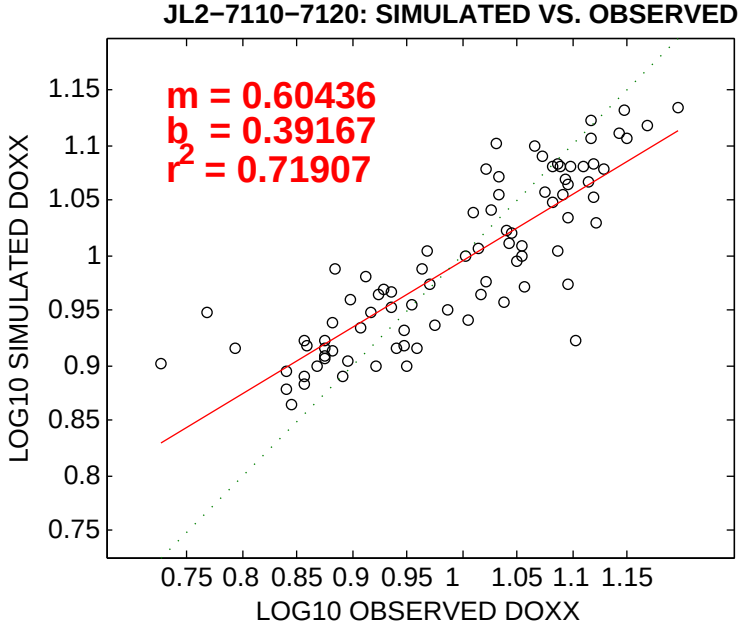


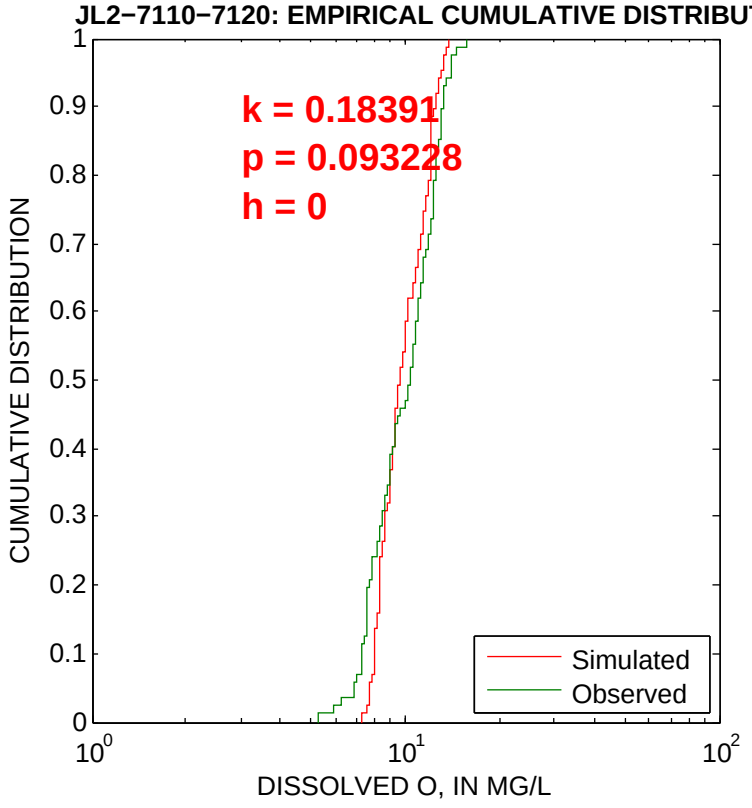












DATA SELECTION

scenario	file
P620171001WQ	DOXX.calib

plot: DOXX - dissolved oxygen

Dates: 1/1/1985 – 12/31/201

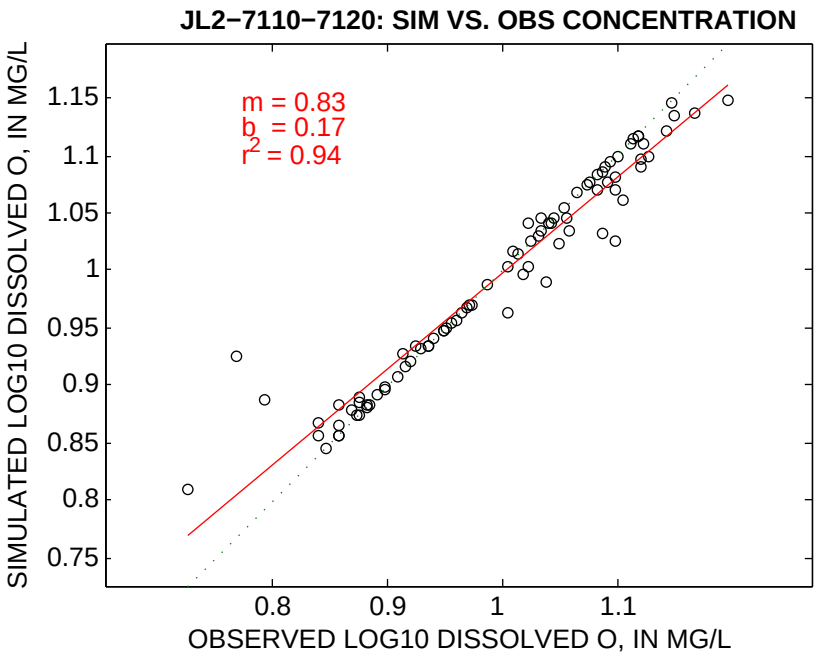
Drive	Directory	Observed
N/A	model	OBS20161101

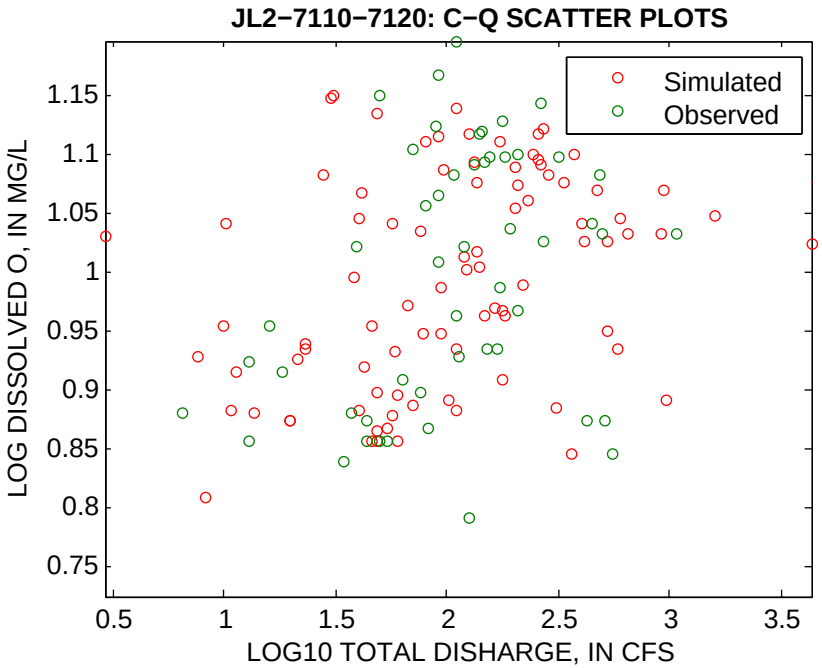
STATISTICS

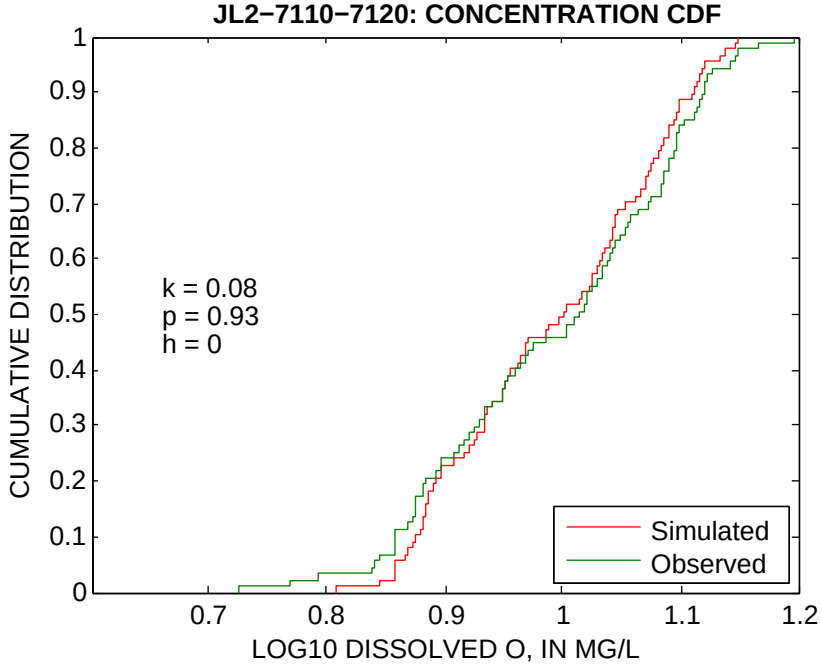
	n	87	87
		observe	simulate
min		5.32	7.3122
		0.725912	0.864048
mean		10.1578	9.98148
		0.994759	0.992859
media		10.32	9.5684
		1.01368	0.980839
max		15.7	13.654
		1.1959	1.13526
varian		5.54924	2.99895
		0.010865	0.00551883
JB		0.105696	0.036204
		0.103953	0.042748
		ra	log
%		-1.73599	-0.190971
err.va		1.57208	0.00325477
rel.std.err		0.283297	0.299564
mod.eff		0.716703	0.700436

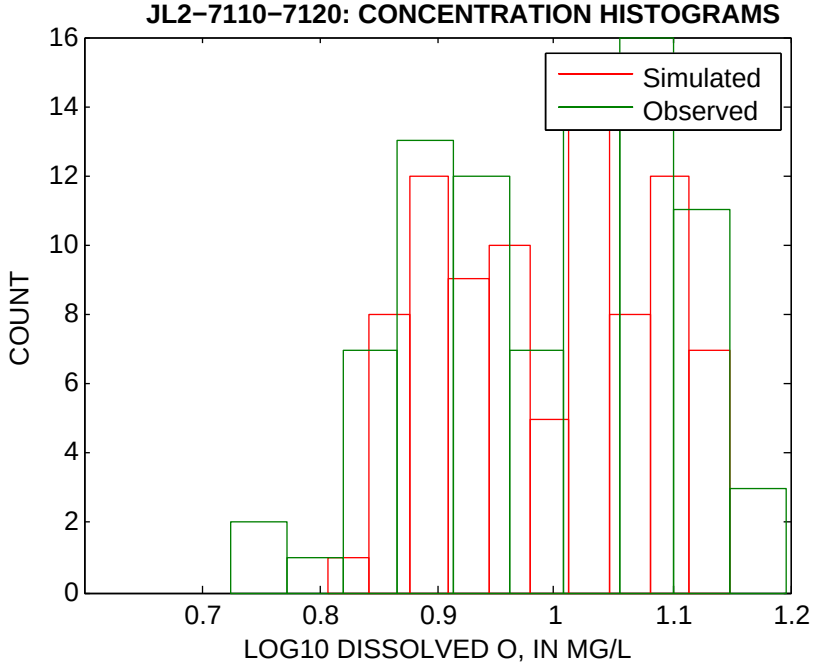
VERSION 2.1

ALL DATA
LOG10

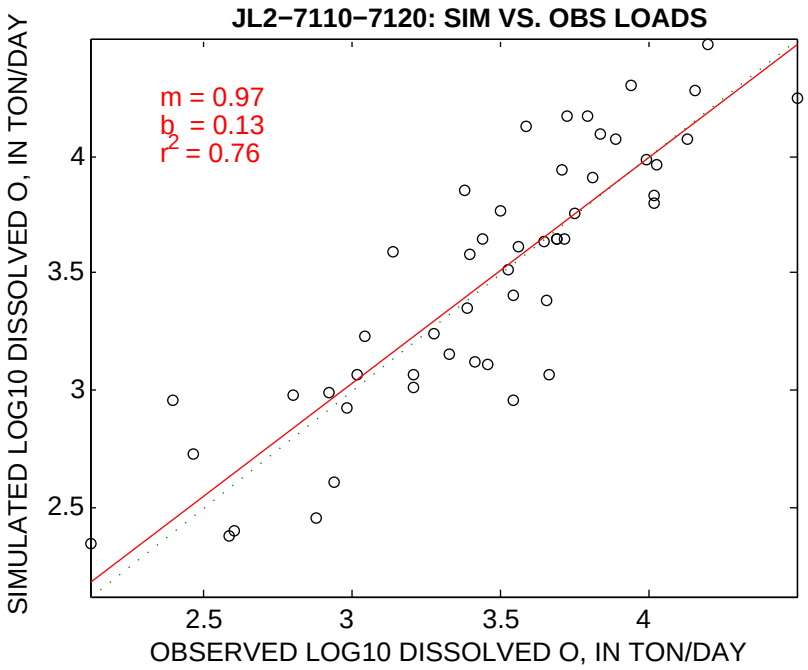


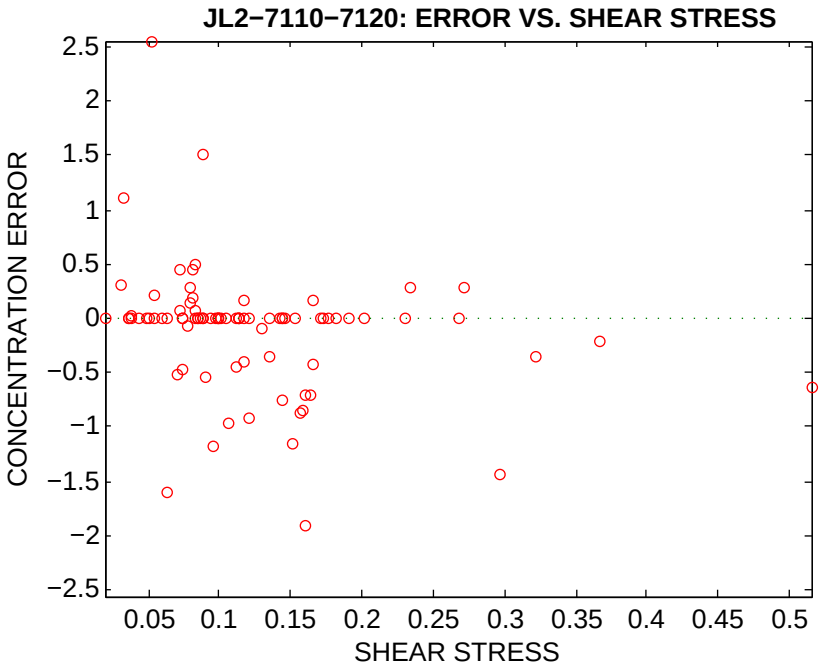


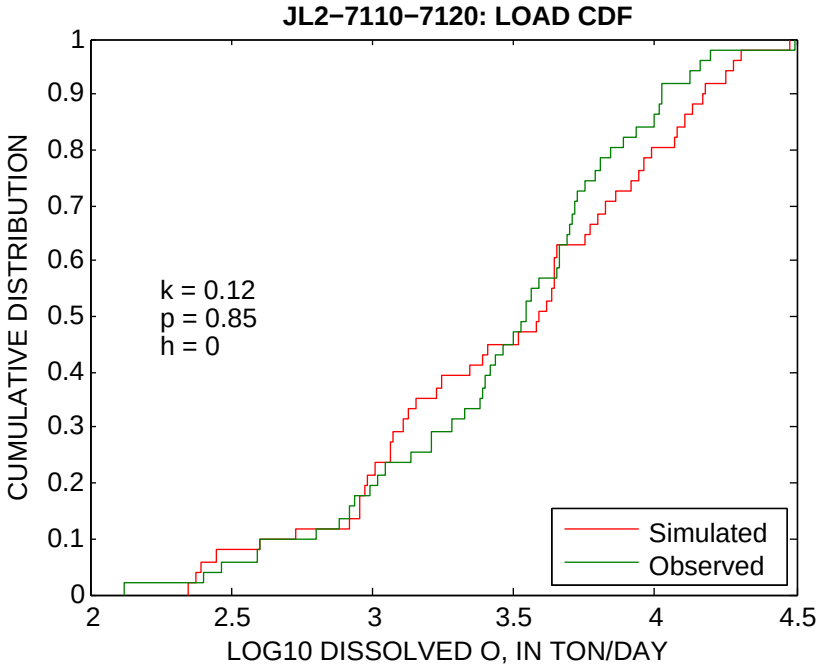


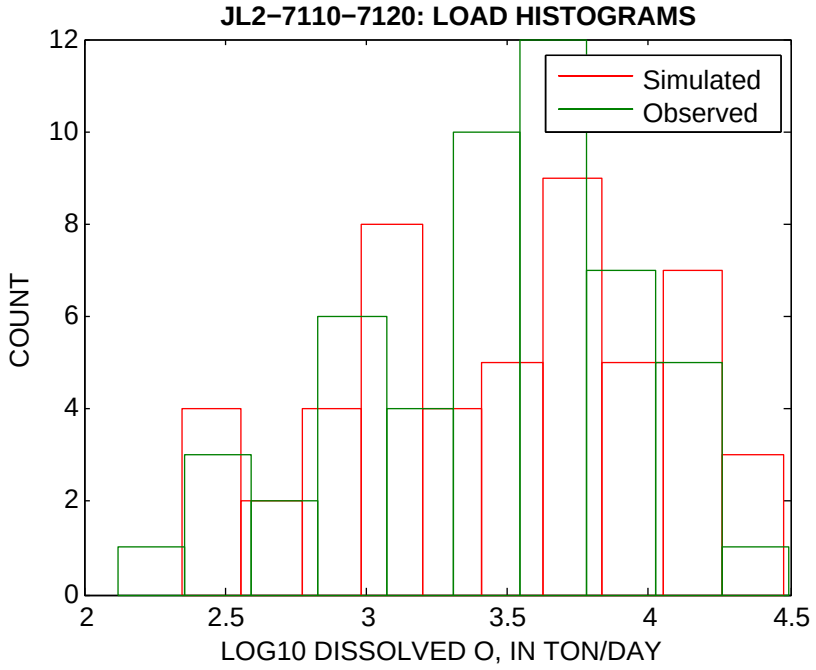


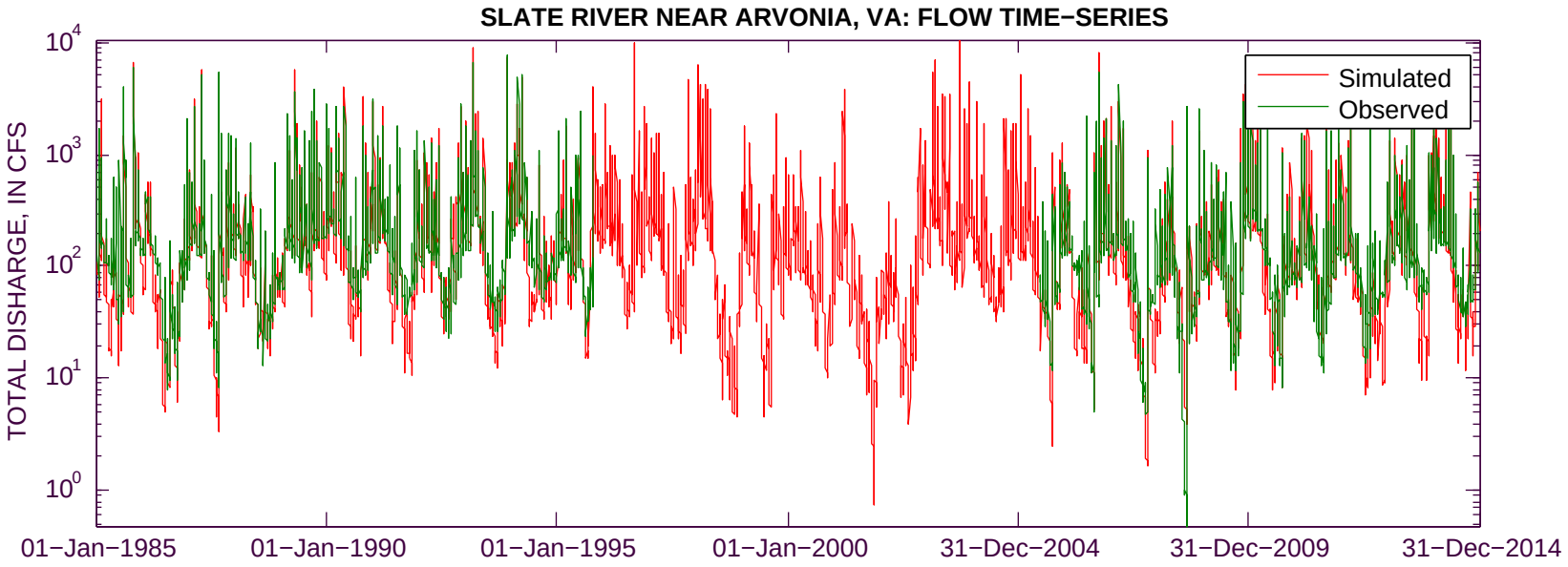
LOAD DATA
LOG10

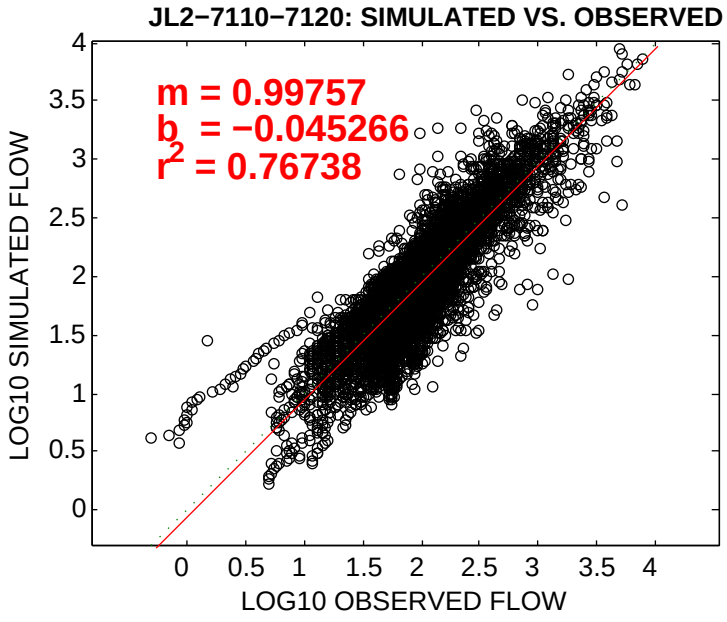


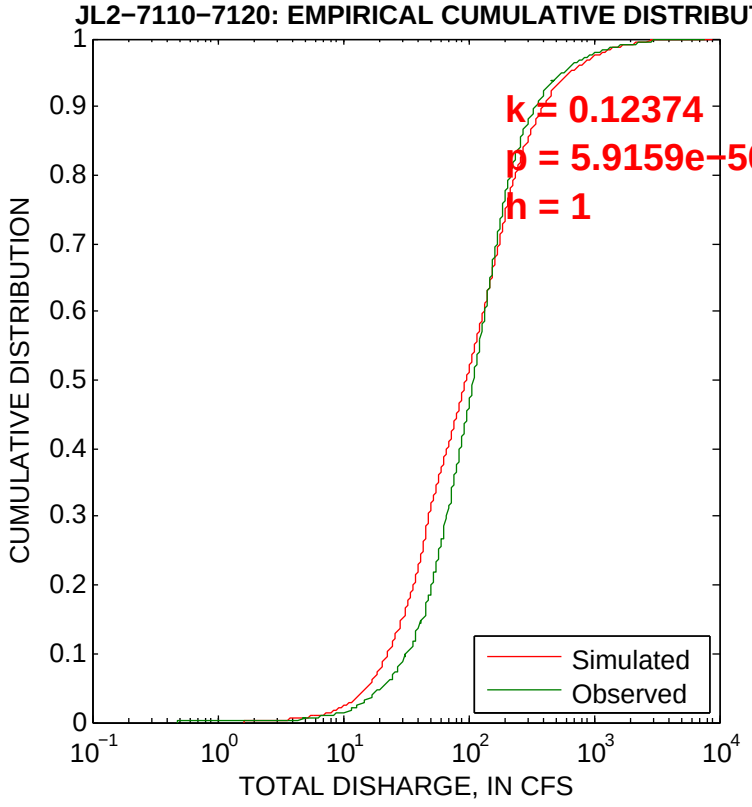












DATA SELECTION

scenario	file
P620171001WQ	FLOW.calib

plot: FLOW - total discharge

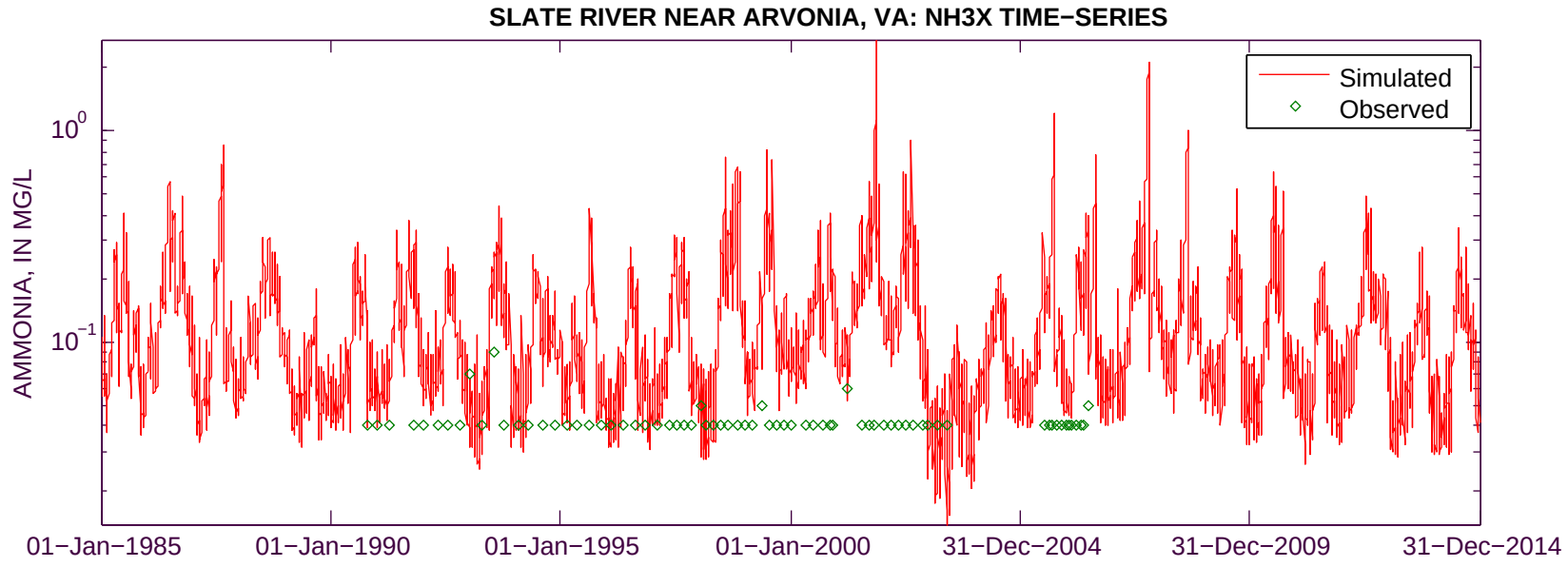
Dates 1/1/1985 12/31/201

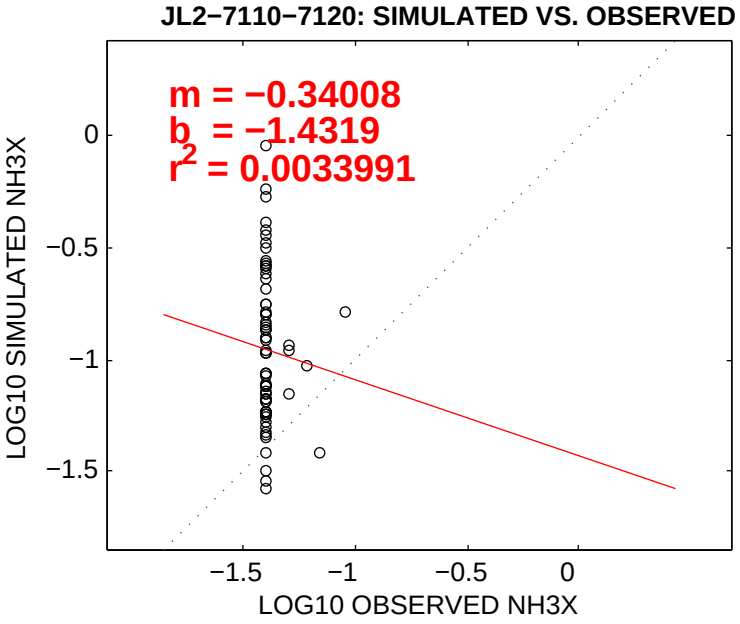
Drive	Directory	Observed
N/A	model	OBS20161101

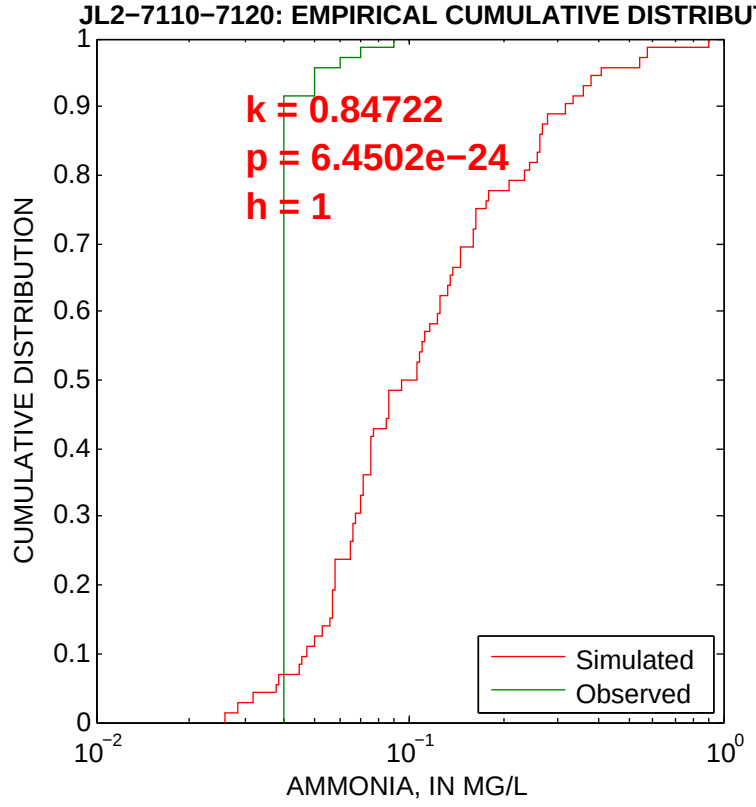
STATISTICS

		observe	simulate
n		7419	7419
min		0.49	1.6726
		-0.309804	0.223392
mean		193.812	198.491
		2.0345	1.98429
media		111	97.052
		2.04532	1.987
max		7640	8957.5
		3.88309	3.95219
varian		143409	157463
		0.194604	0.252365
JB		0.001	0.001
		0.001	0.001
		ra	log
%		2.41423	-2.46783
err.va		46974.2	0.0612282
rel.std.err		0.327553	0.31463
mod.eff		0.672447	0.68537

VERSION 2.1







DATA SELECTION

scenario	file
P620171001WQ	NH3X.calib

plot: NH3X - ammonia

Dates: 1/1/1985 – 12/31/201

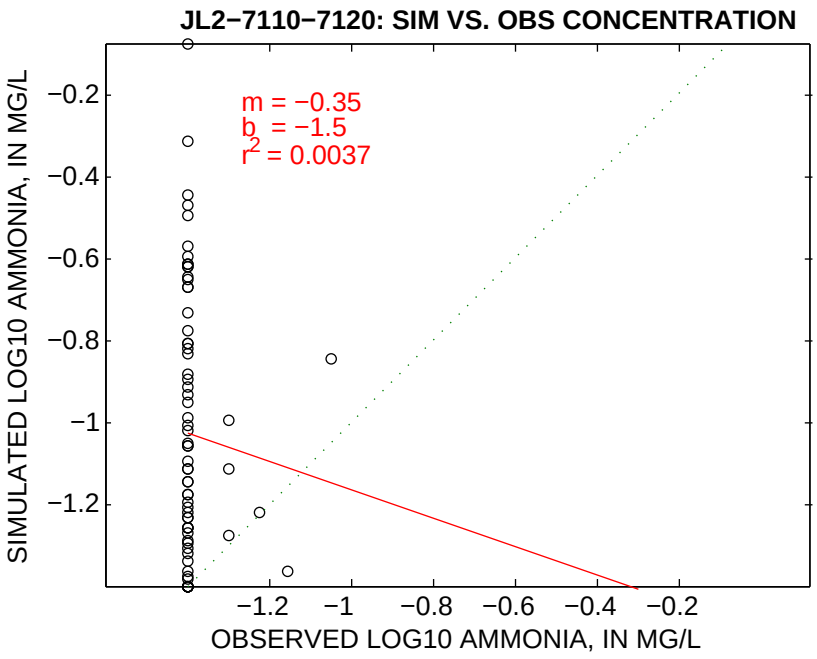
Drive	Directory	Observed
N/A	model	OBS20161101

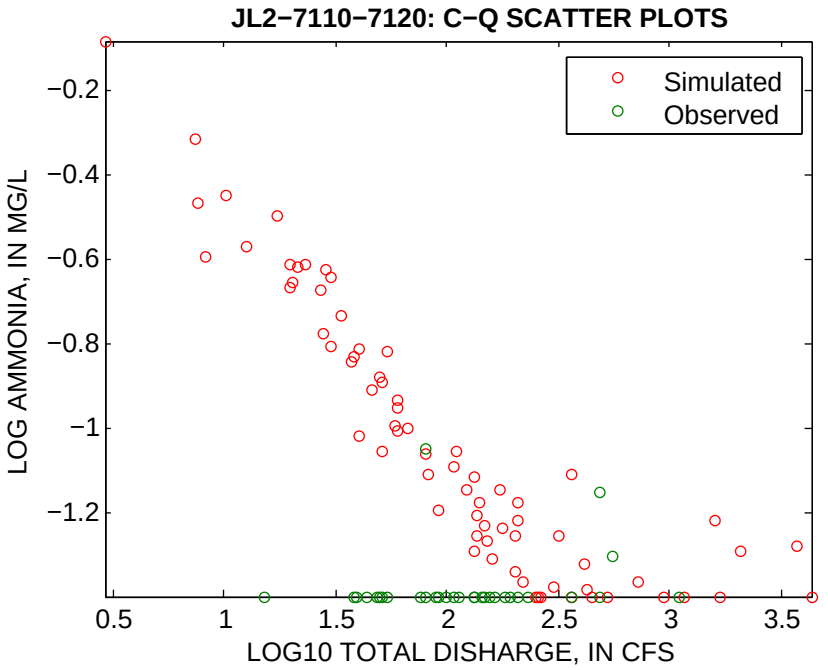
STATISTICS

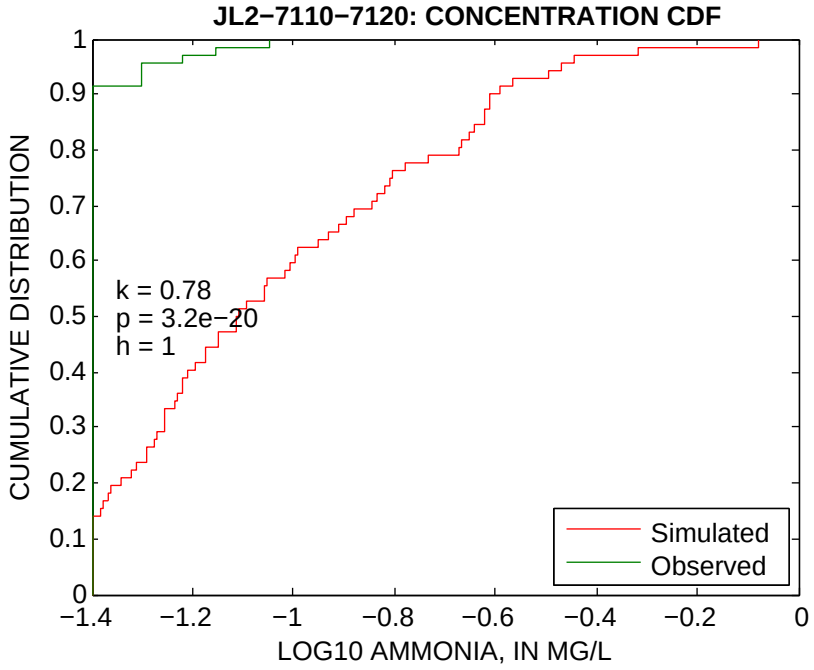
	n	72	72
		observe	simulate
min		0.04	0.026052
		-1.39794	-1.58416
mean		0.0418056	0.149723
		-1.38319	-0.961551
media		0.04	0.099818
		-1.39794	-1.00157
max		0.09	0.90876
		-1.04576	-0.0415508
varian		5.44405e-0	0.0214512
		0.00319179	0.108598
JB		0.001	0.001
		0.001	0.10502
		ra	log
%		258.142	-30.4831
err.va		0.0334663	0.294244
rel.std.err		614.732	92.1879
mod.eff		-613.732	-91.1879

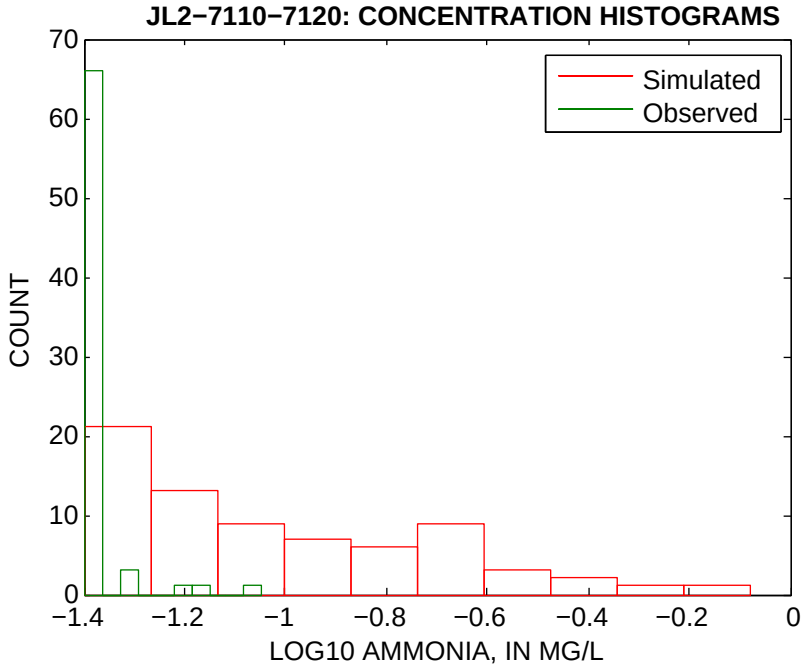
VERSION

ALL DATA
LOG10

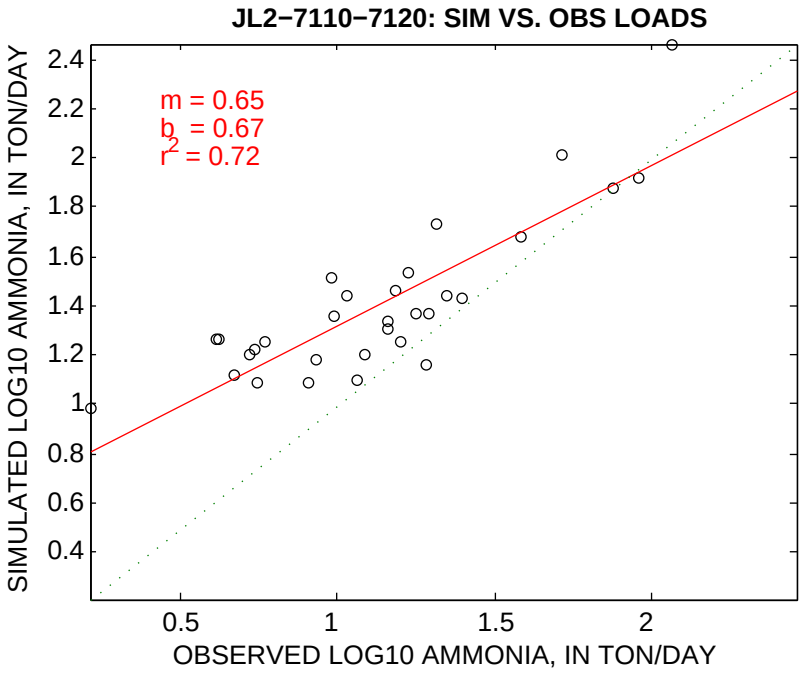




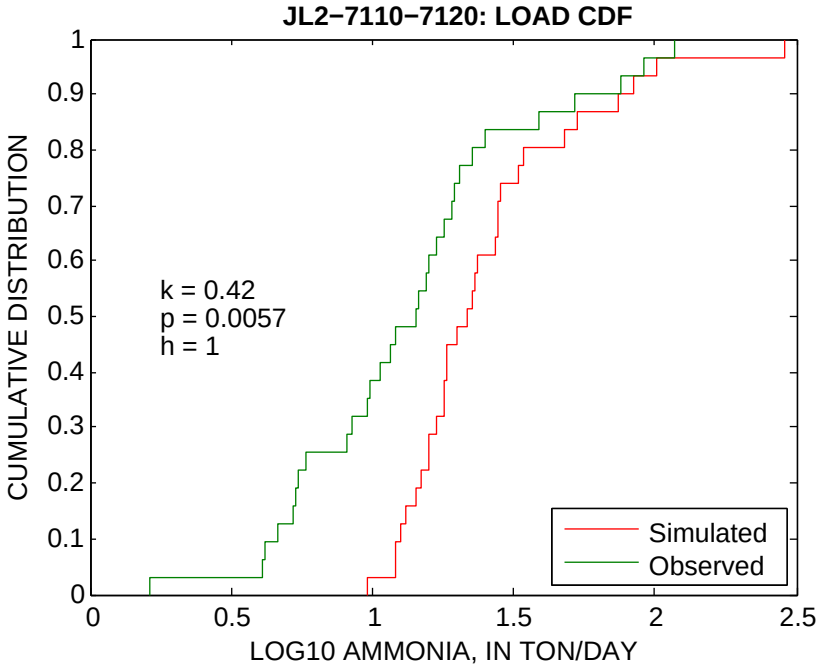


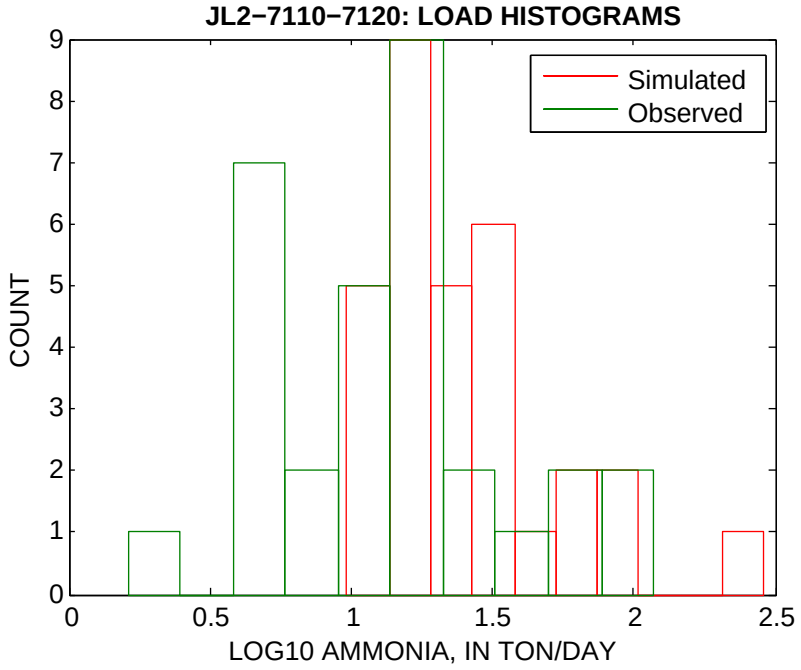


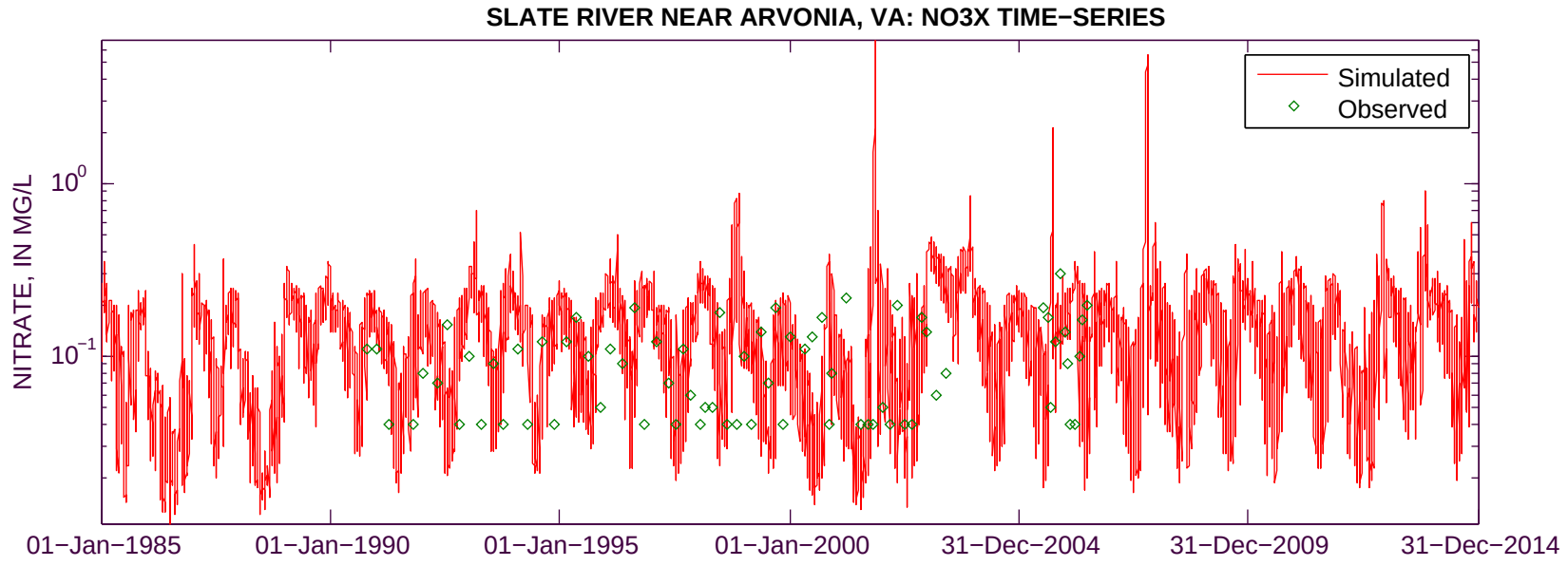
LOAD DATA
LOG10

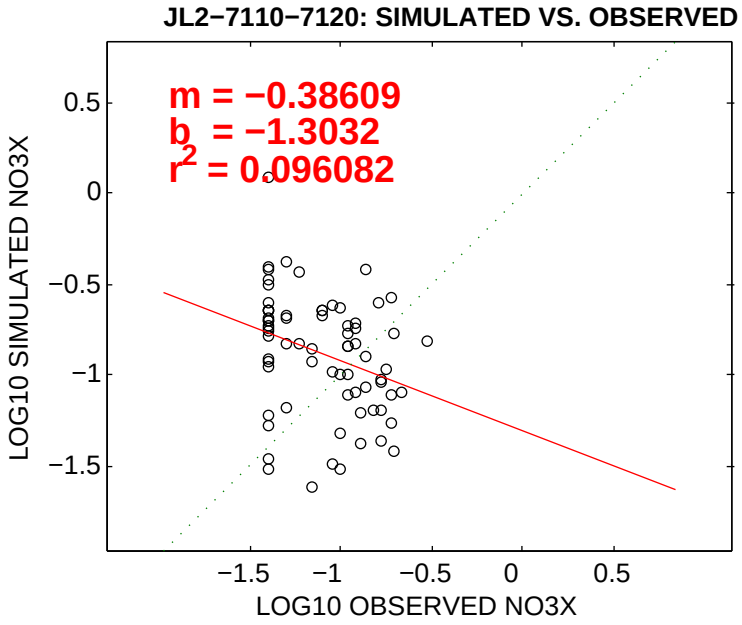


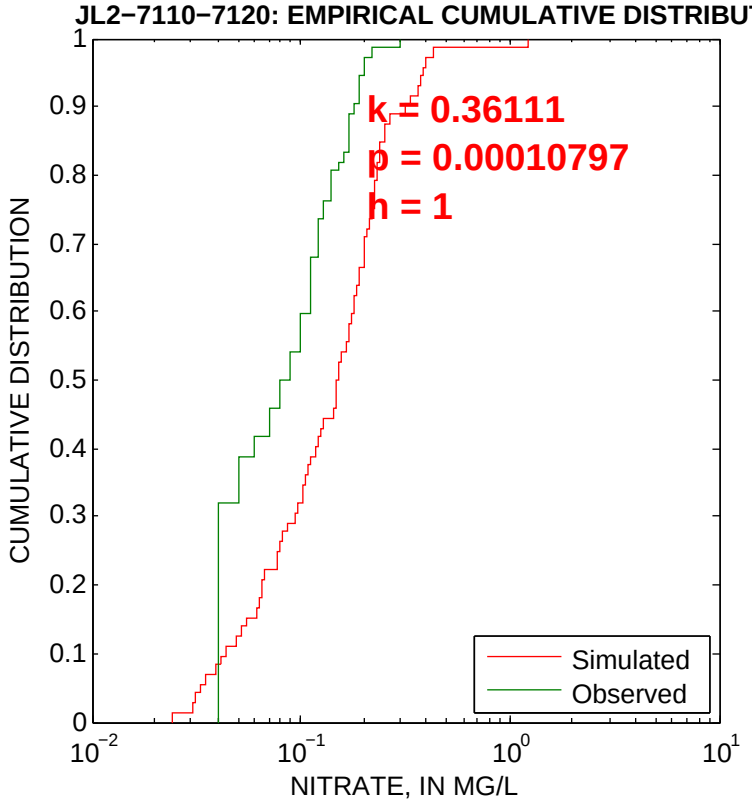












DATA SELECTION

scenario	file
P620171001WQ	NO3X.calib

plot: NO3X - nitrate

Dates 1/1/1985 12/31/201

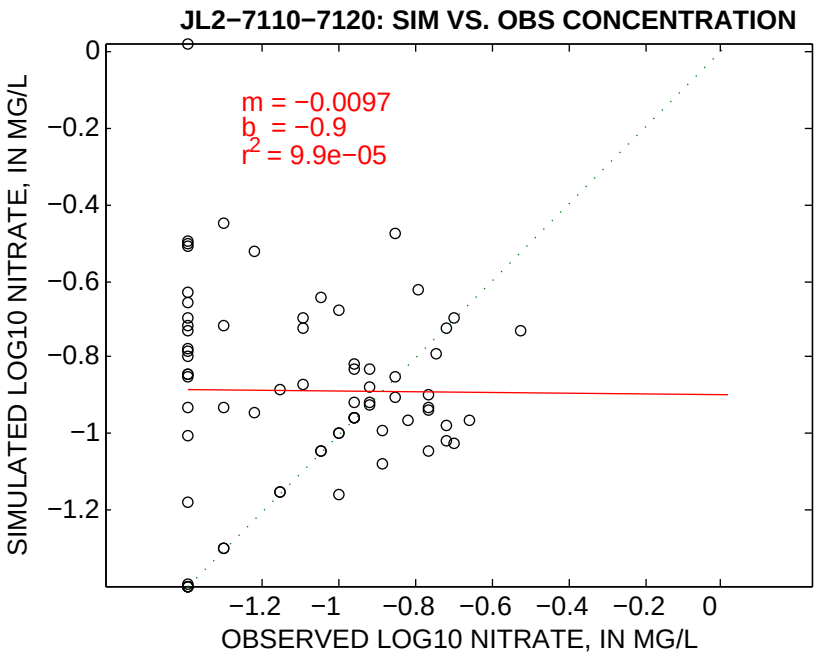
Drive	Directory	Observed
N/A	model	OBS20161101

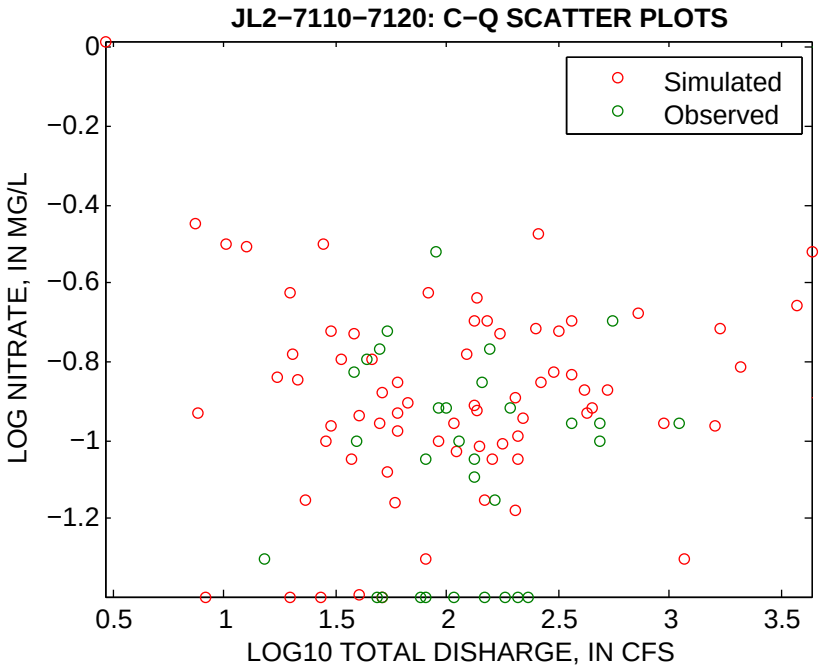
STATISTICS

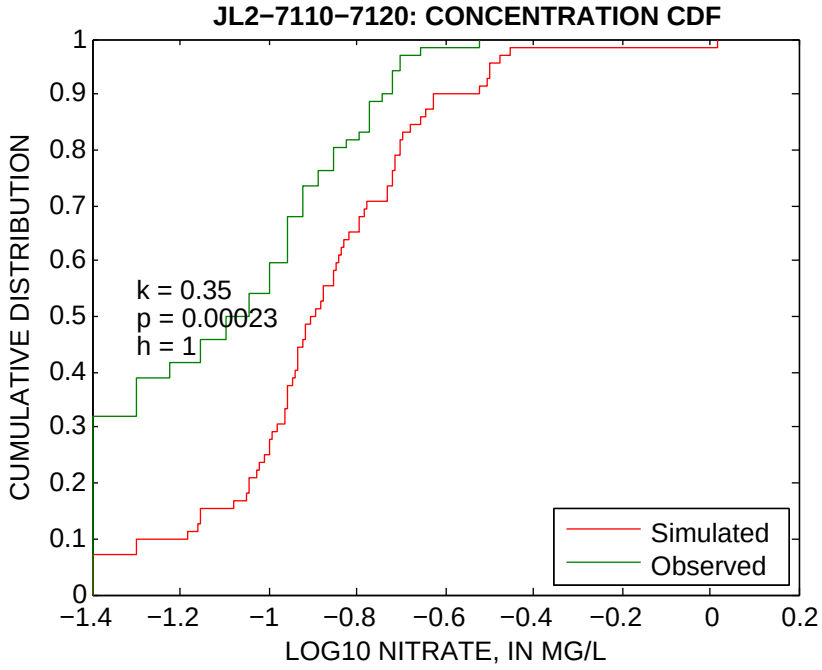
	n	72	72
		observe	simulate
min		0.04	0.024414
		-1.39794	-1.61236
mean		0.0956944	0.173564
		-1.0965	-0.879873
media		0.085	0.14917
		-1.07133	-0.826328
max		0.3	1.2353
		-0.522879	0.0917724
varian		0.00339388	0.0255844
		0.068516	0.106296
JB		0.009722	0.001
		0.044356	0.5
		ra	log
%		81.3733	-19.7559
err.va		0.0402127	0.275304
rel.std.err		11.8486	4.0181
mod.eff		-10.8486	-3.0181

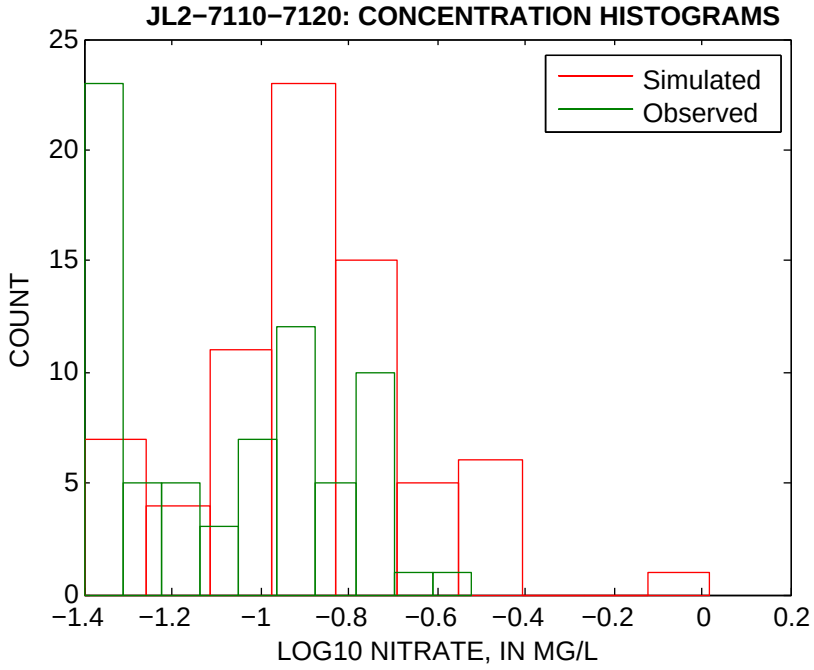
VERSION 2.1

ALL DATA
LOG10

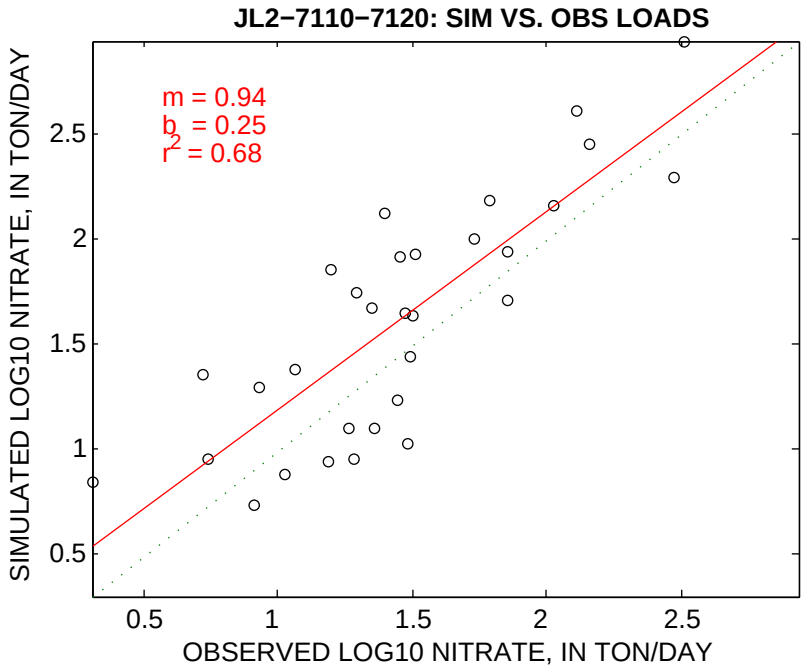




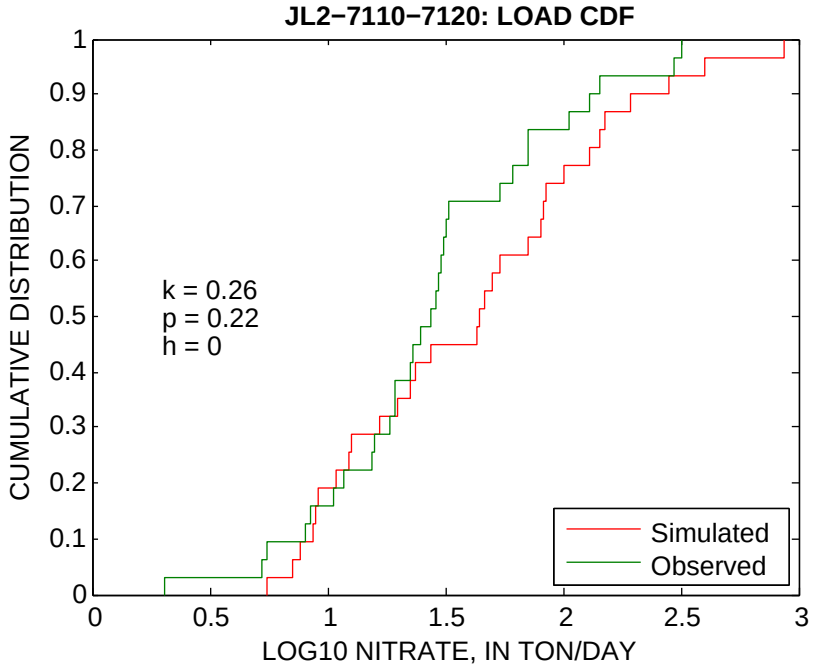


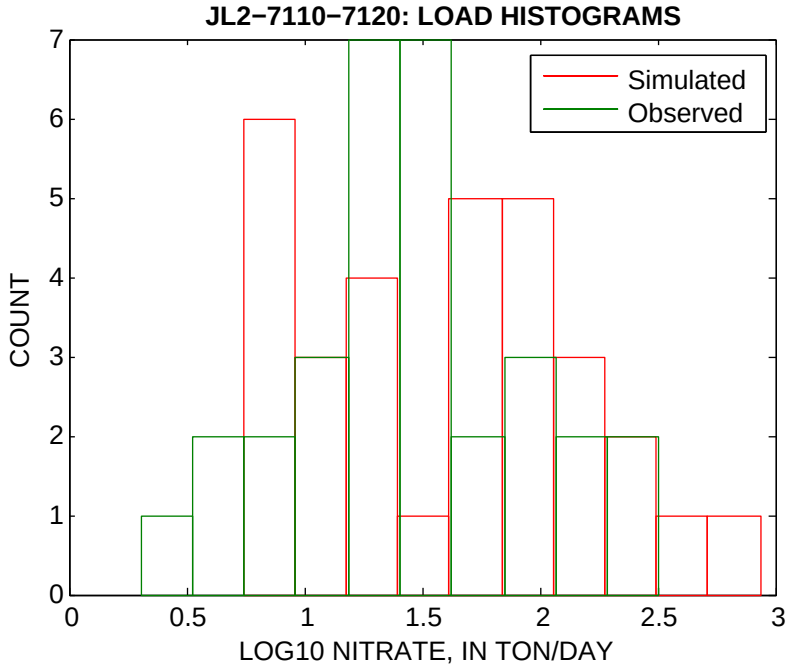


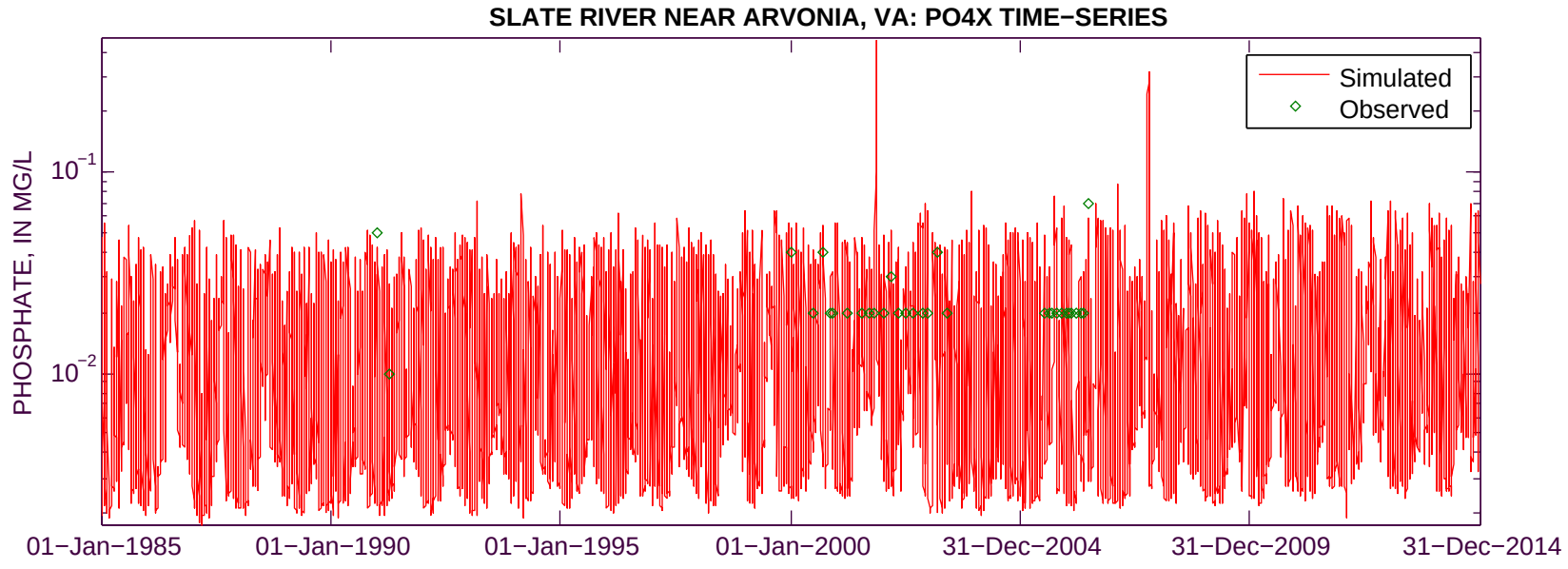
LOAD DATA
LOG10

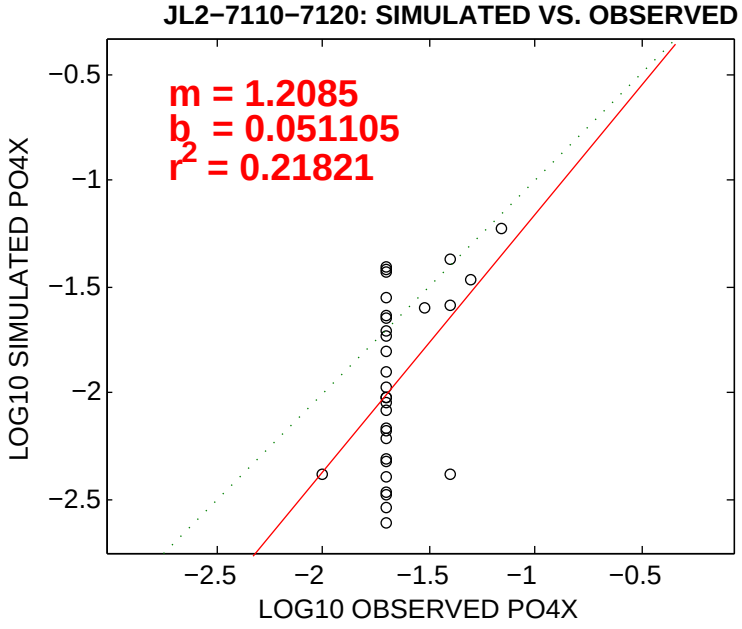


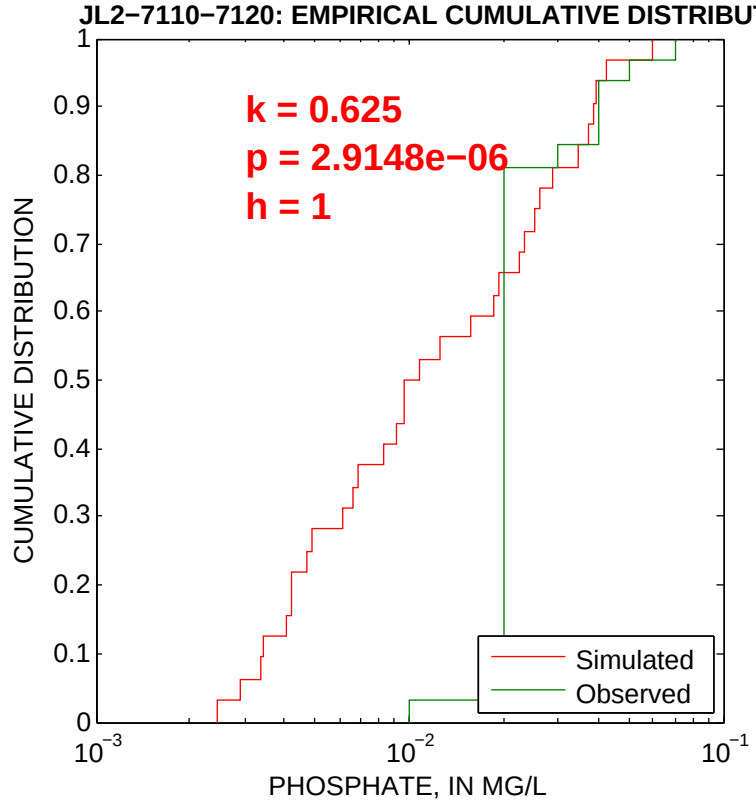












DATA SELECTION

scenario	file
P620171001WQ	PO4X.calib

plot: PO4X - phosphate

Dates: 1/1/1985 – 12/31/201

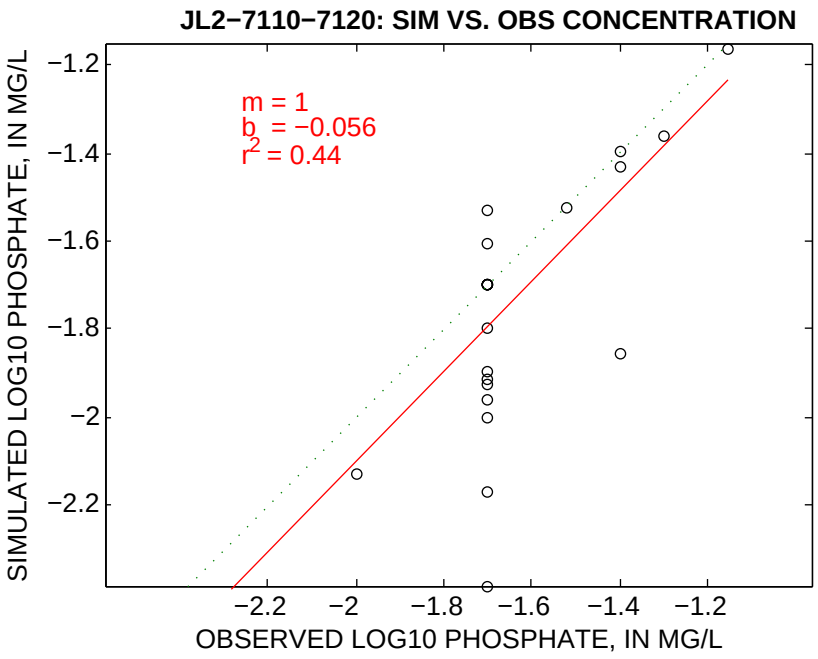
Drive	Directory	Observed
N/A	model	OBS20161101

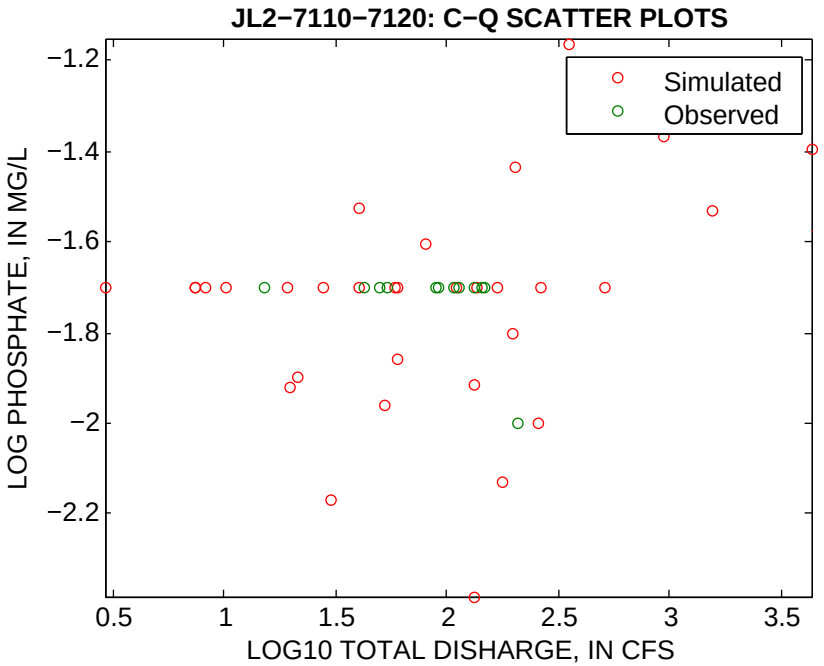
STATISTICS

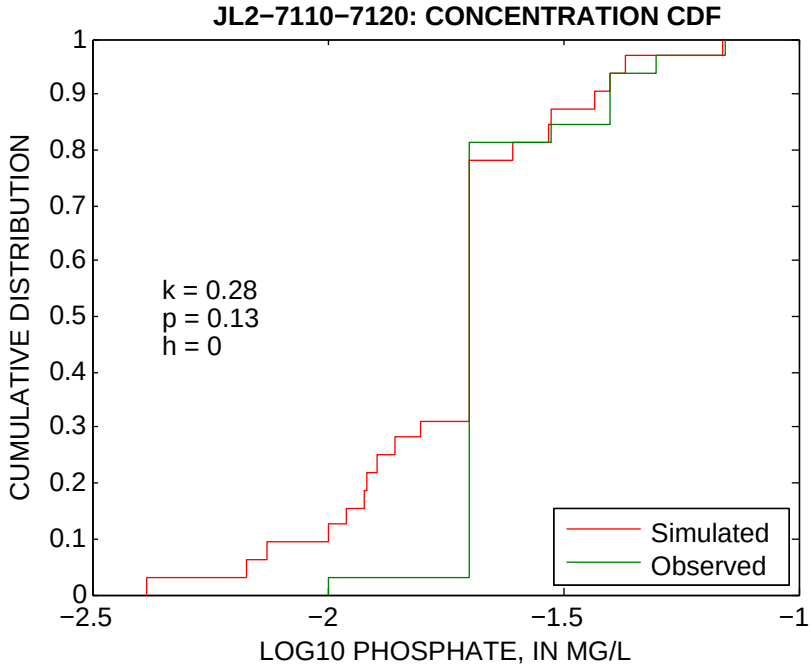
	n	32	32
		observe	simulate
min		0.01	0.0024449
		-2	-2.61174
mean		0.024375	0.0170618
		-1.64522	-1.93721
media		0.02	0.0102354
		-1.69897	-1.9906
max		0.07	0.059804
		-1.1549	-1.22327
varian		0.00013508	0.00021796
		0.0243672	0.163099
JB		0.001	0.028286
		0.003637	0.153194
		ra	log
%		-30.0031	17.7481
err.va		0.00019536	0.21658
rel.std.err		1.44631	8.88816
mod.eff		-0.446306	-7.88816

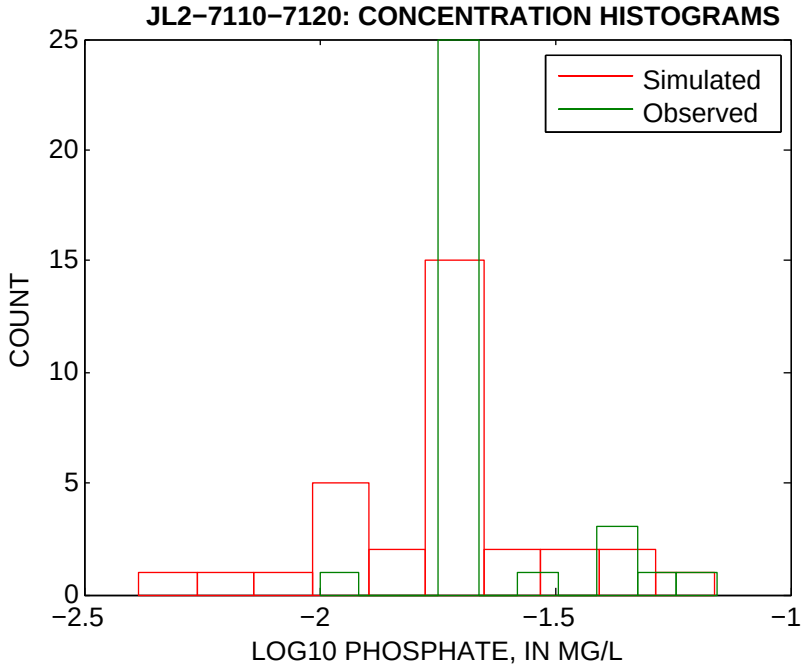
VERSION 2.1

ALL DATA
LOG10

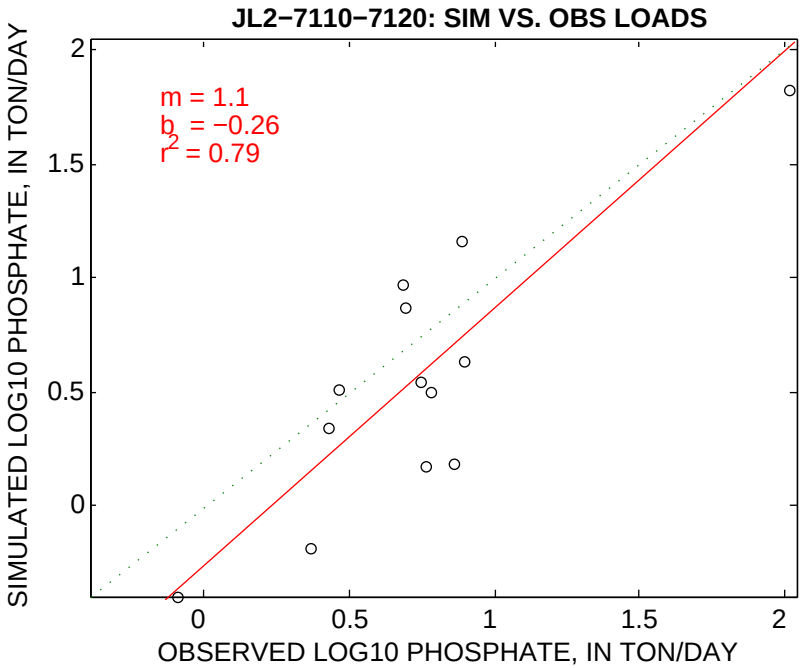


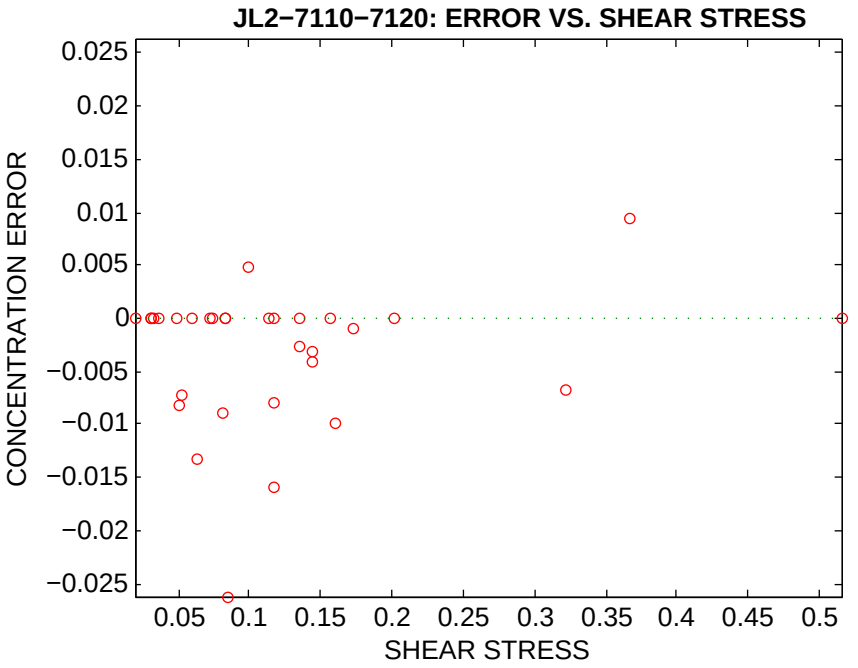


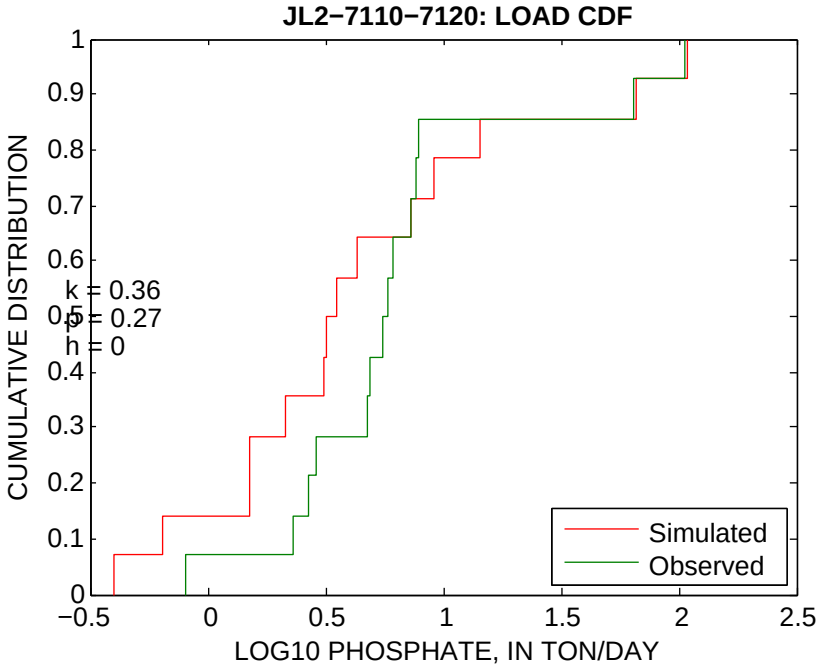


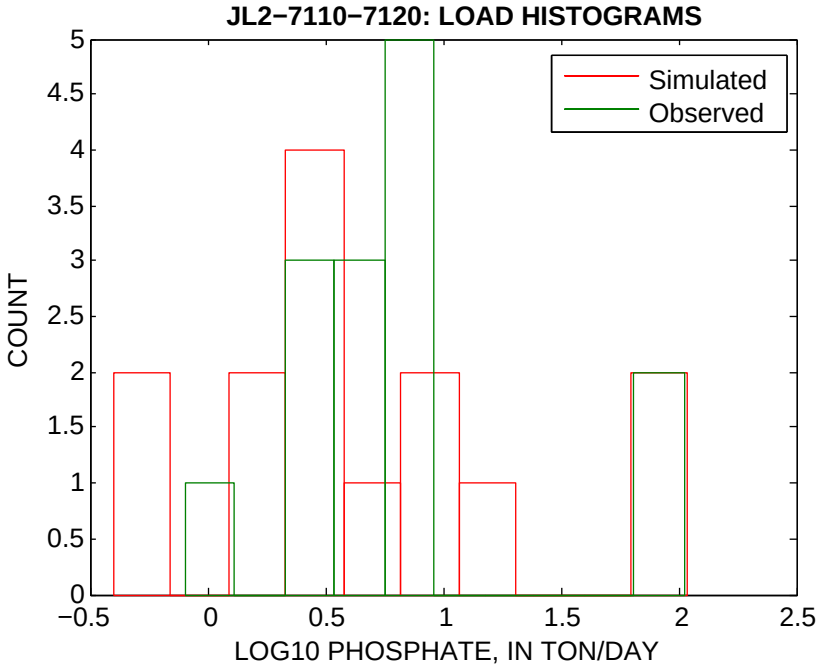


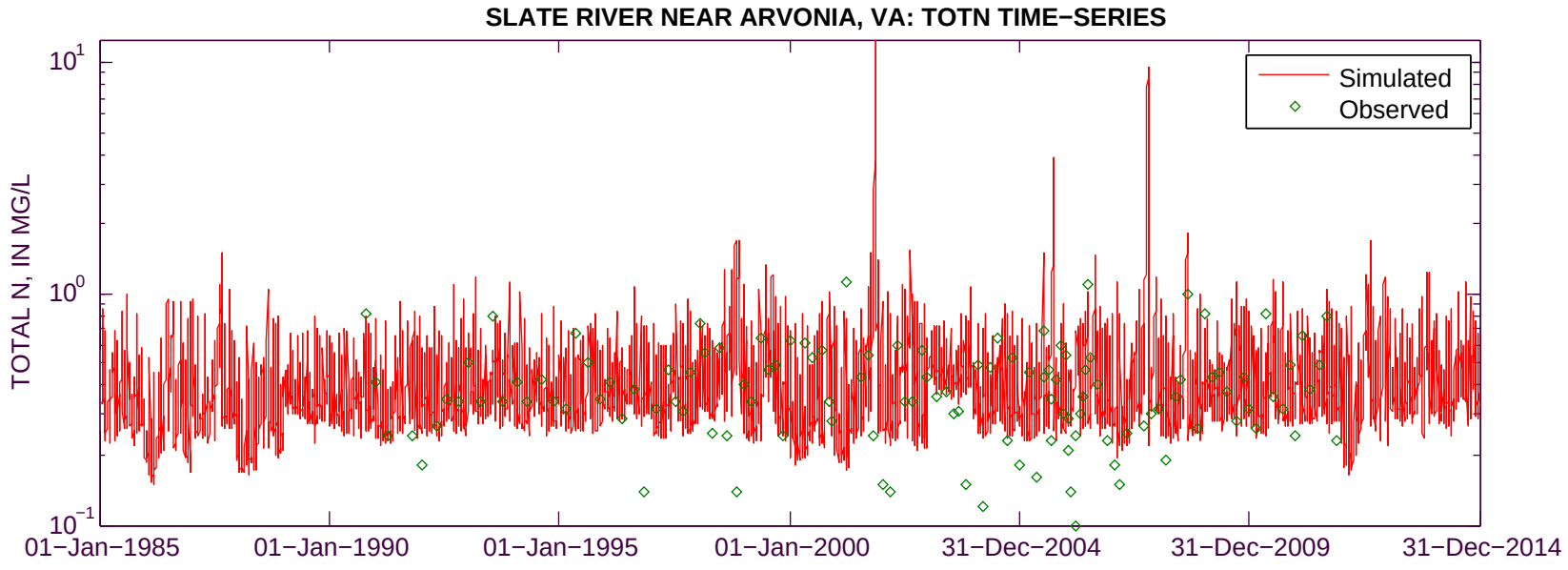
LOAD DATA
LOG10

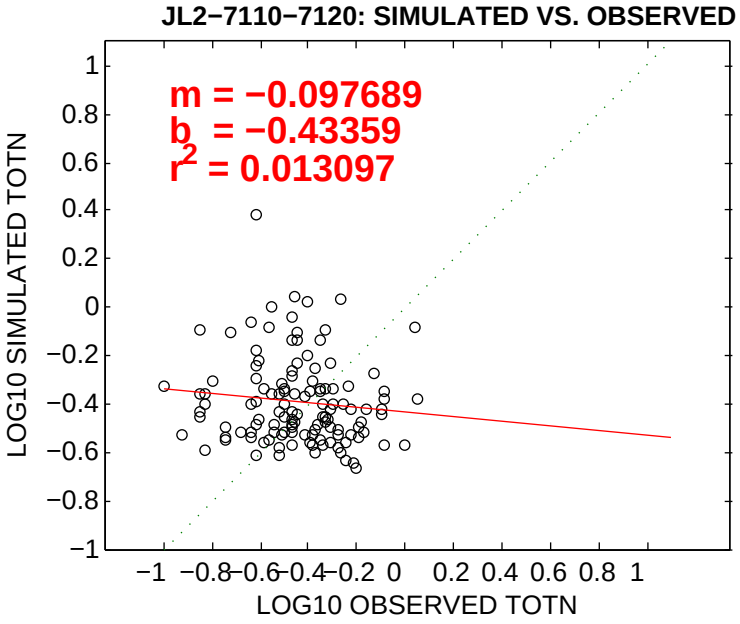


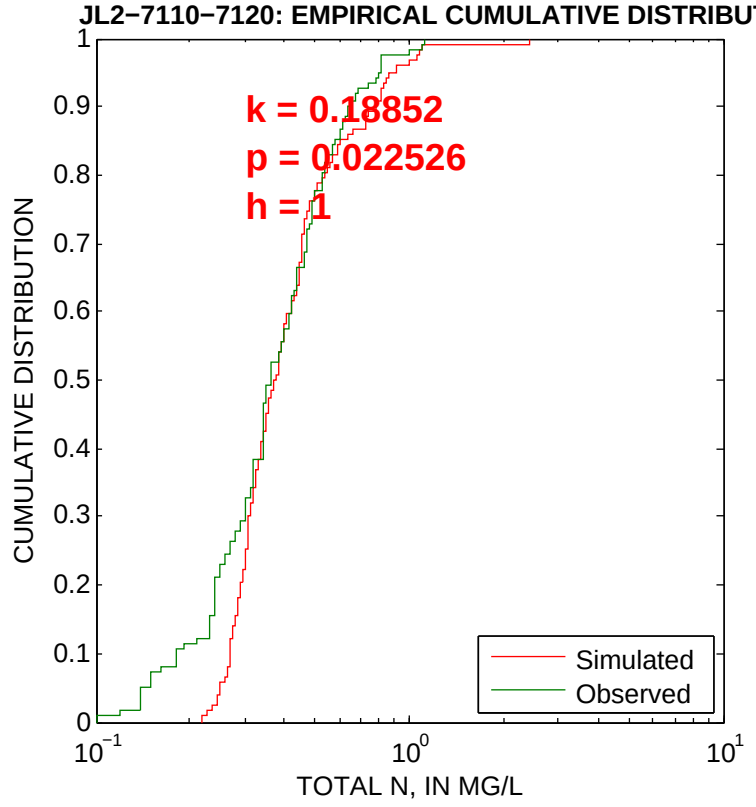












DATA SELECTION

scenario	file
P620171001WQ	TOTN.calib

plot: TOTN - total nitrogen

Dates: 1/1/1985 – 12/31/201

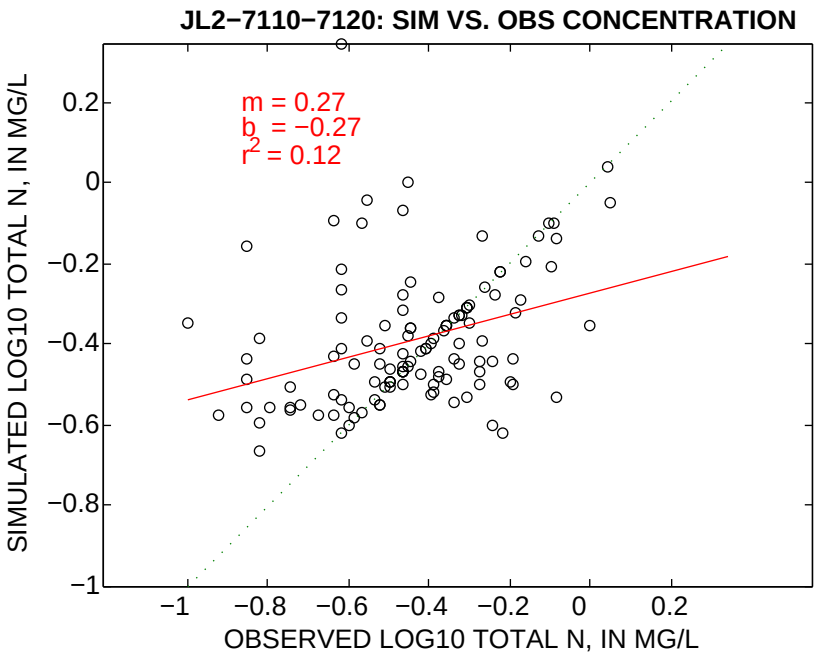
Drive	Directory	Observed
N/A	model	OBS20161101

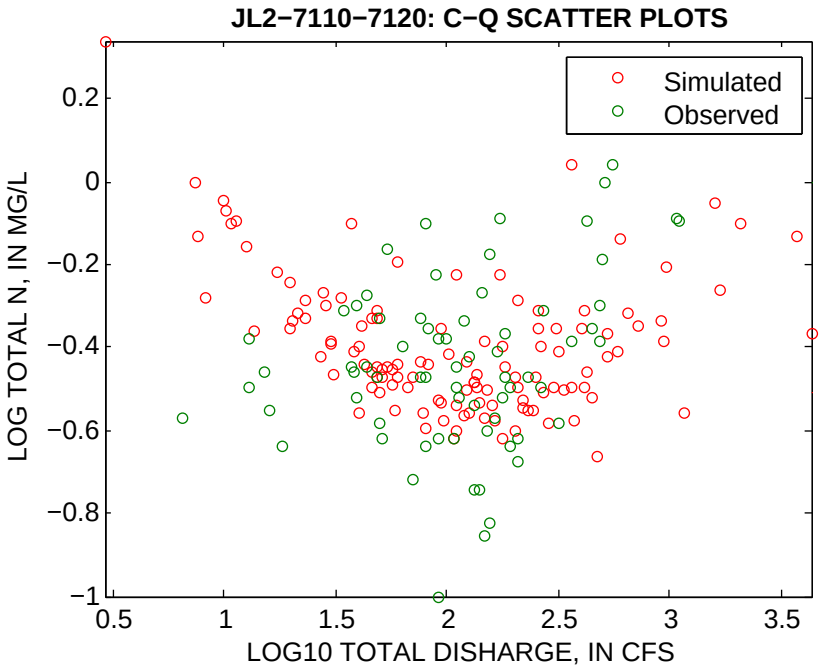
STATISTICS

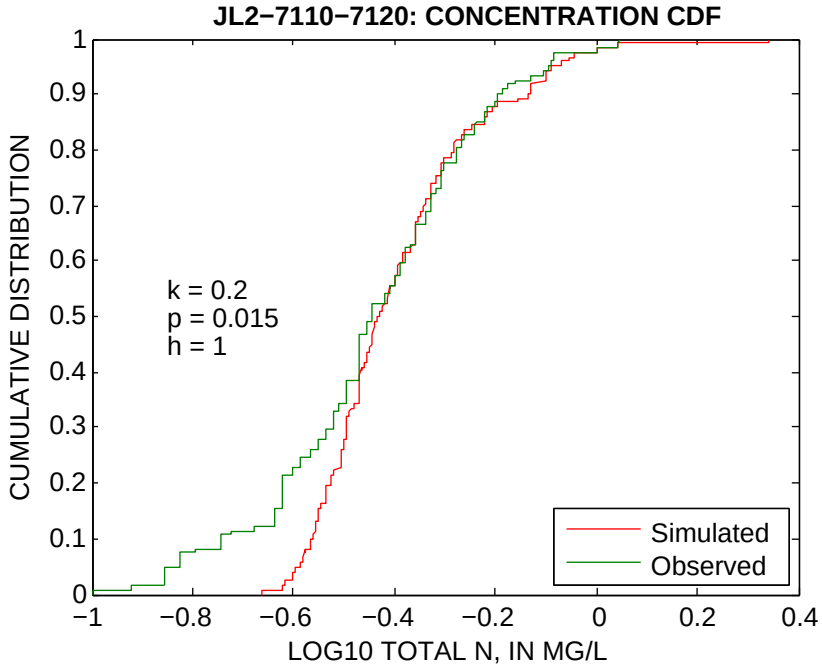
	n	122	122
		observe	simulate
min		0.1	0.21883
		-1	-0.659893
mean		0.404344	0.450123
		-0.441583	-0.390453
media		0.36	0.37341
		-0.443697	-0.427815
max		1.12	2.4121
		0.049218	0.382395
varian		0.038357	0.0697891
		0.0436697	0.0318199
JB		0.001	0.001
		0.5	0.001
		ra	log
%		11.3217	-11.5787
err.va		0.121273	0.0866576
rel.std.err		3.16169	1.98439
mod.eff		-2.16169	-0.984386

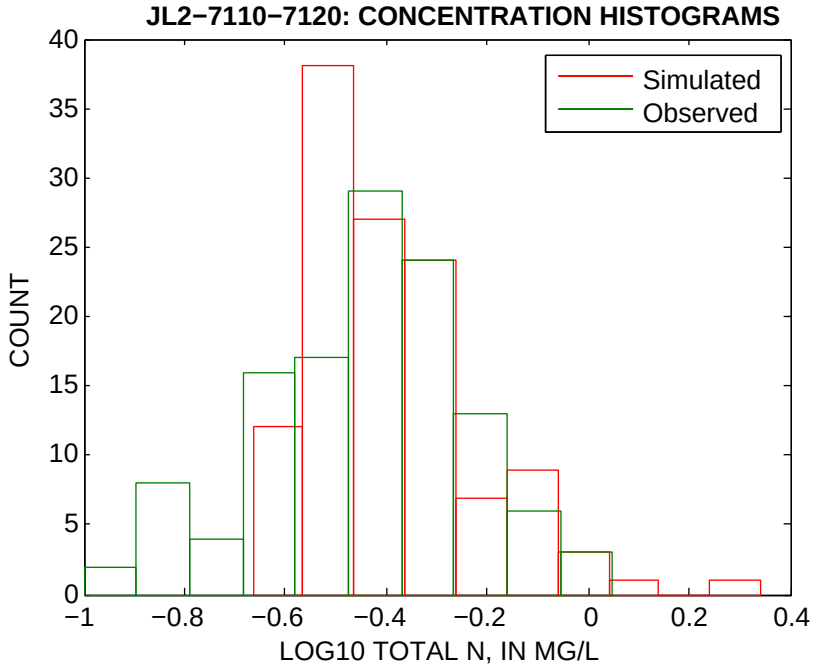
VERSION

ALL DATA
LOG10

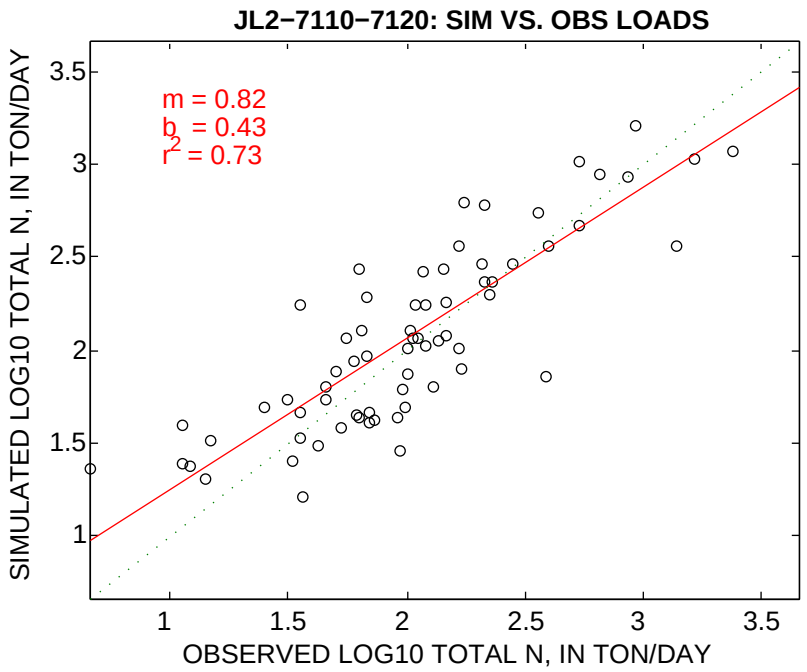


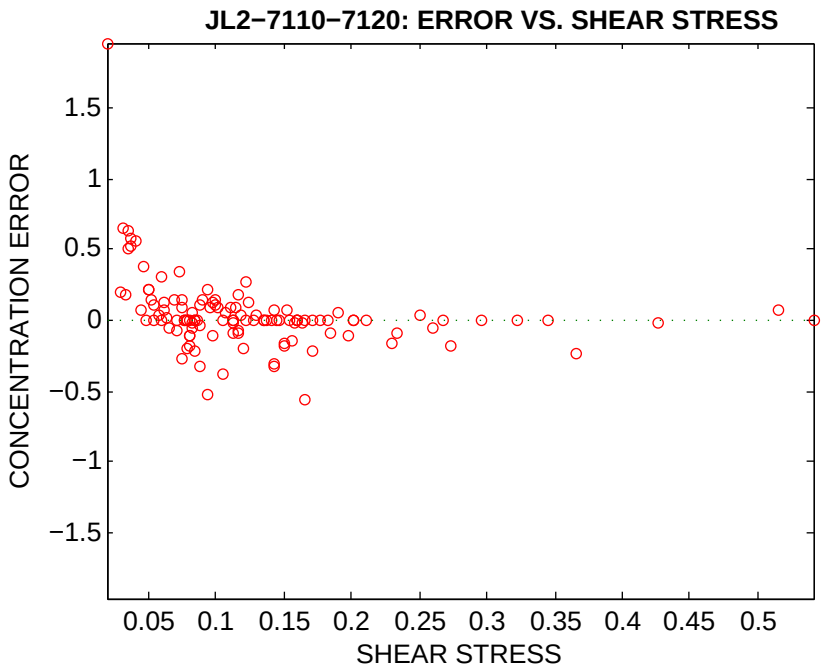


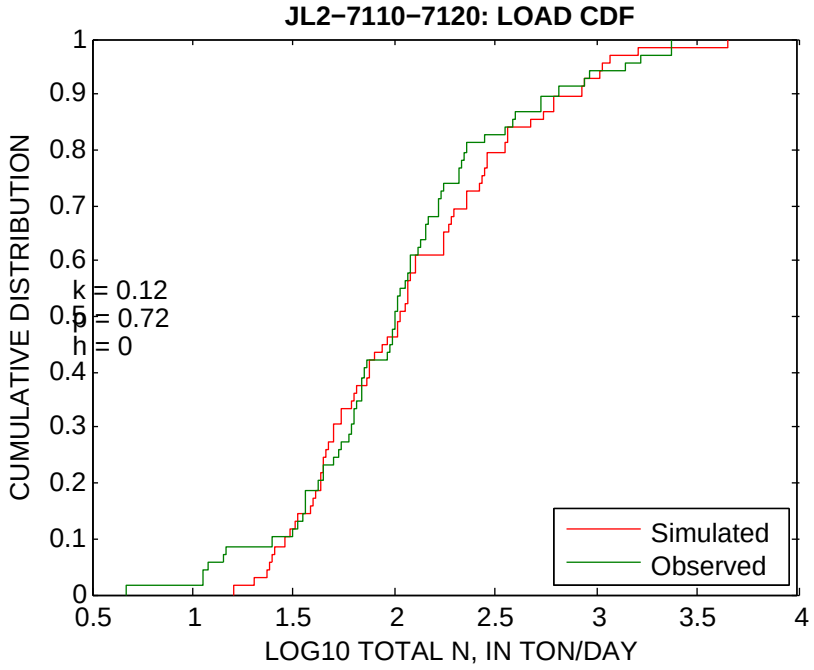


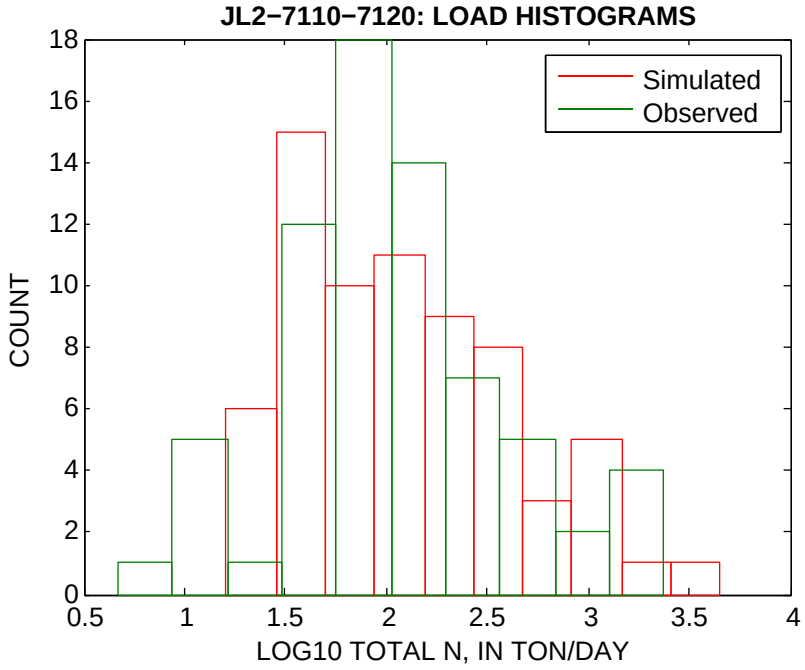


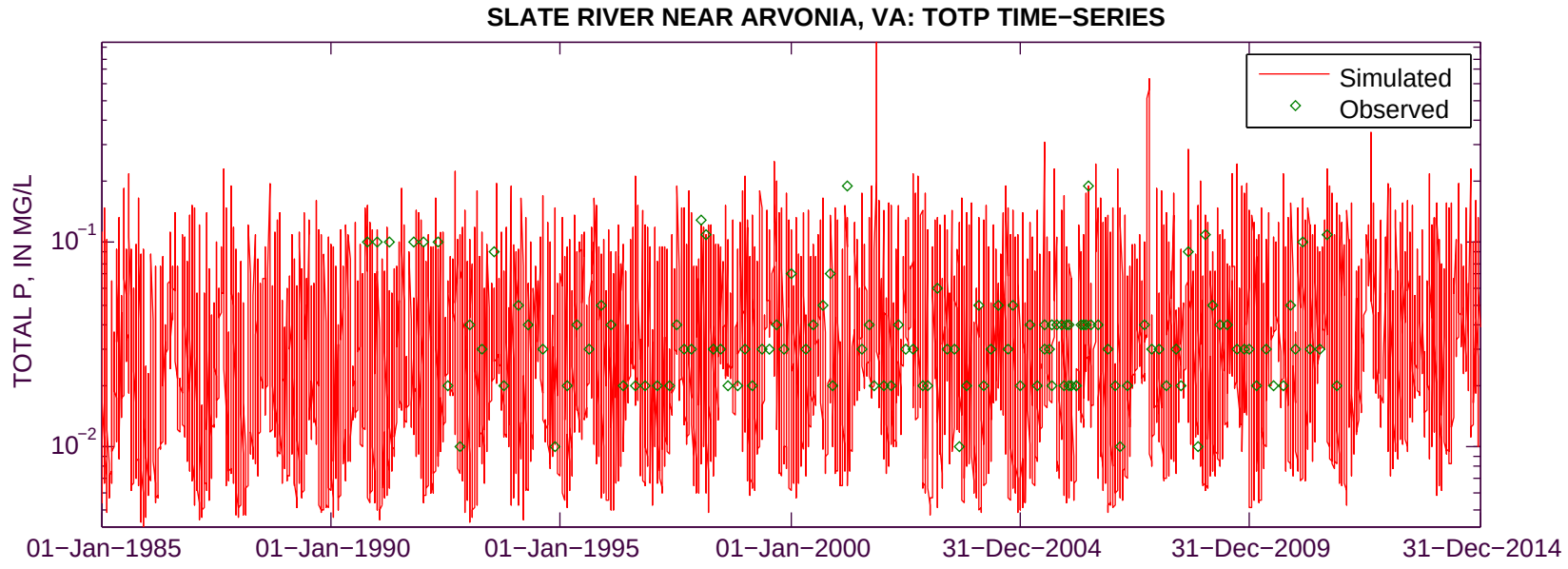
LOAD DATA
LOG10

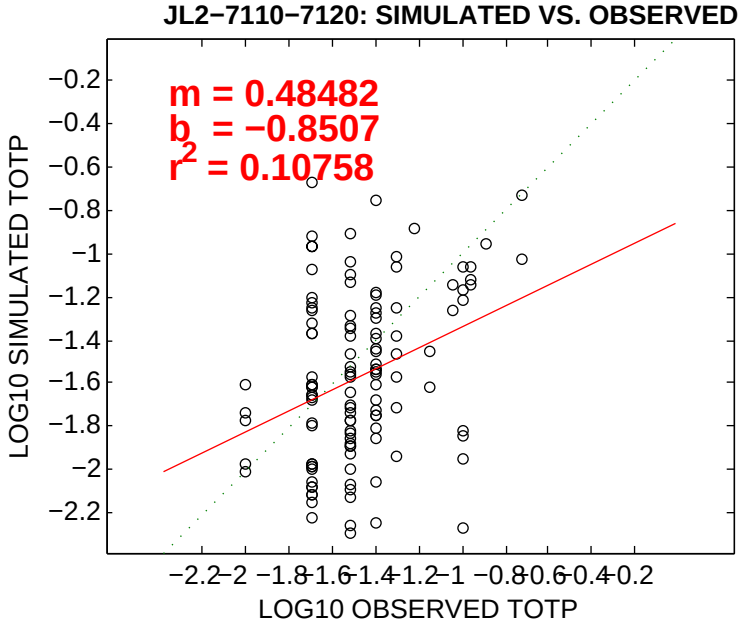


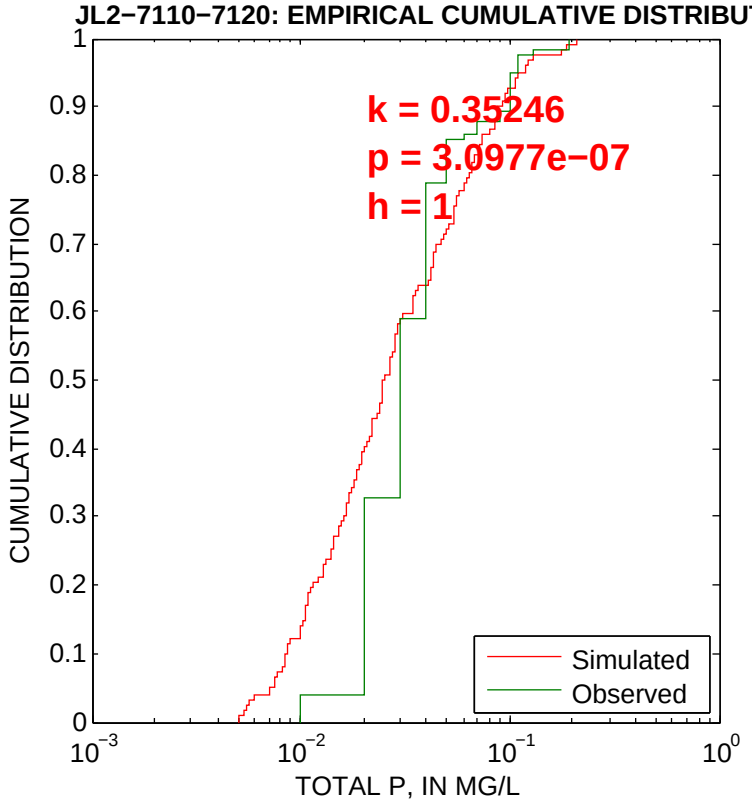












DATA SELECTION

scenario	file
P620171001WQ	TOTP.calib

plot: TOTP - total phosphorus

Dates: 1/1/1985 – 12/31/201

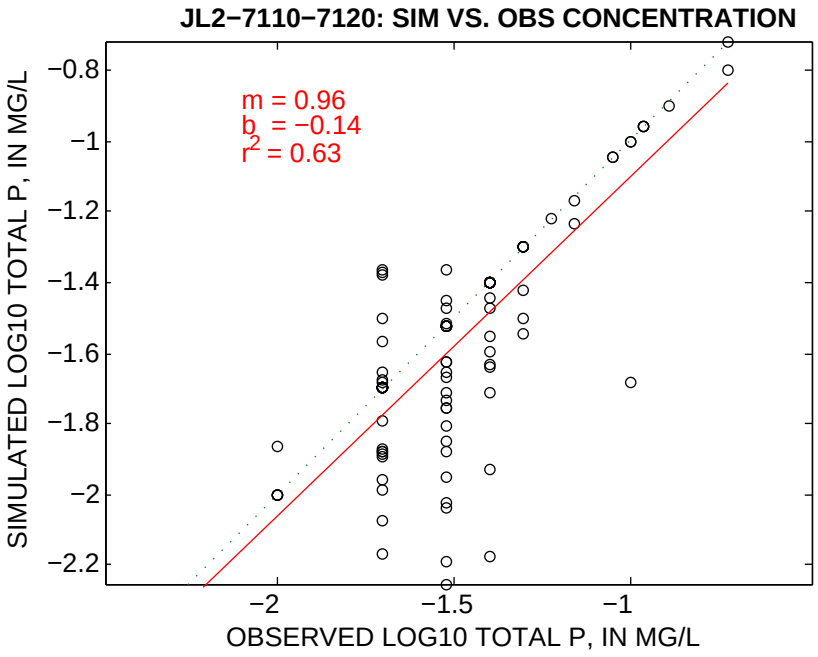
Drive	Directory	Observed
N/A	model	OBS20161101

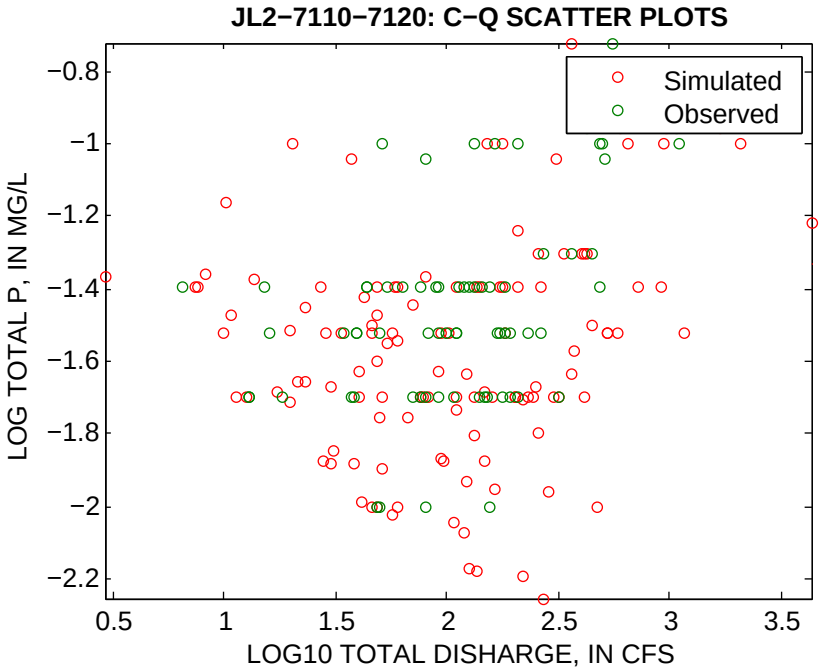
STATISTICS

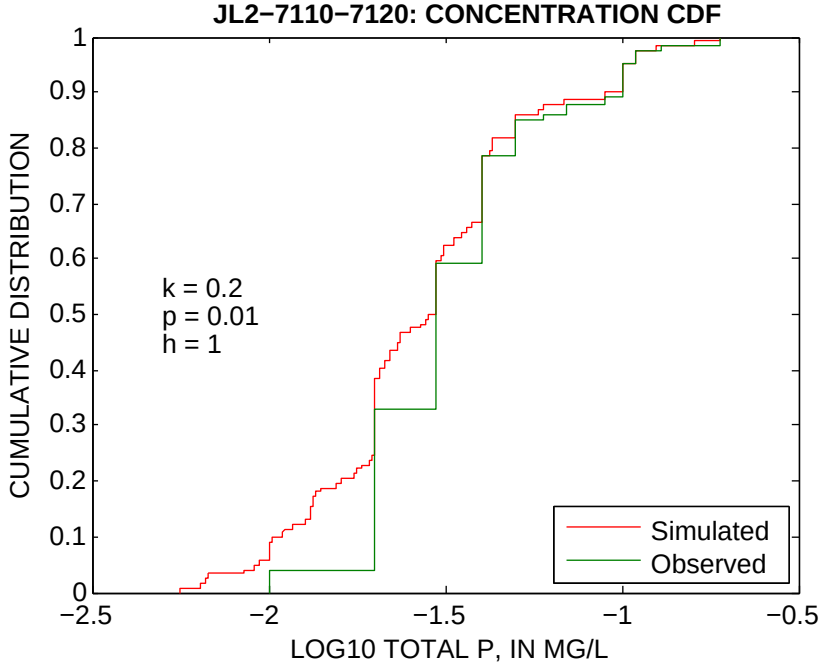
	n	122	122
		observe	simulate
min		0.01	0.0051006
		-2	-2.29238
mean		0.0409016	0.0398503
		-1.47527	-1.56594
media		0.03	0.0248395
		-1.52288	-1.60486
max		0.19	0.21103
		-0.721246	-0.675656
varian		0.00101323	0.00145749
		0.0668745	0.146108
JB		0.001	0.001
		0.013538	0.113763
		ra	log
%		-2.57049	6.14626
err.va		0.00155579	0.156428
rel.std.err		1.53547	2.33913
mod.eff		-0.535475	-1.33913

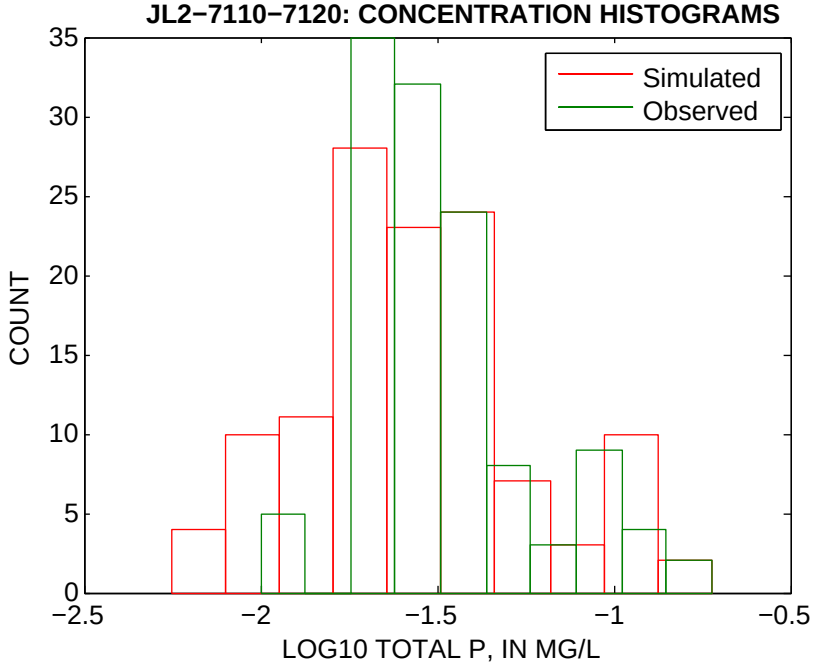
VERSION 2.1

ALL DATA
LOG10

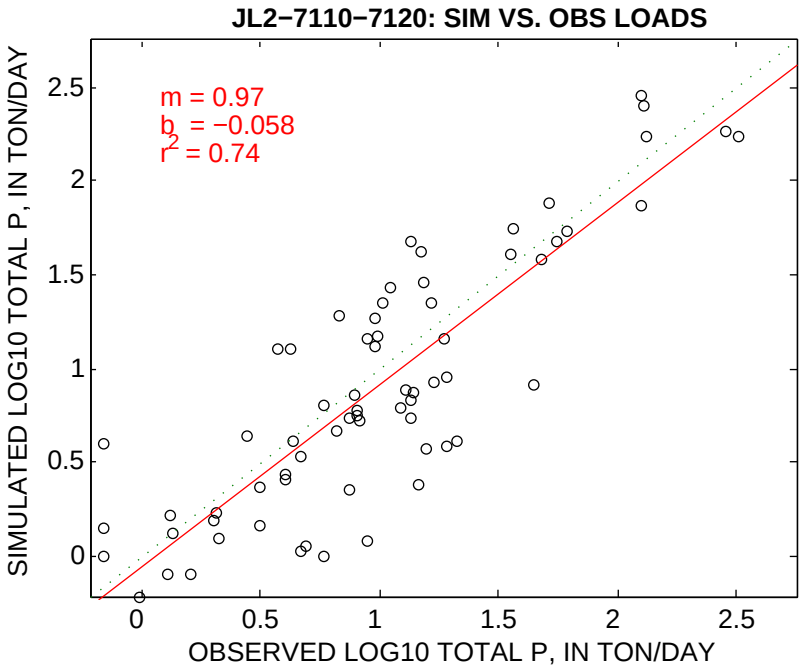


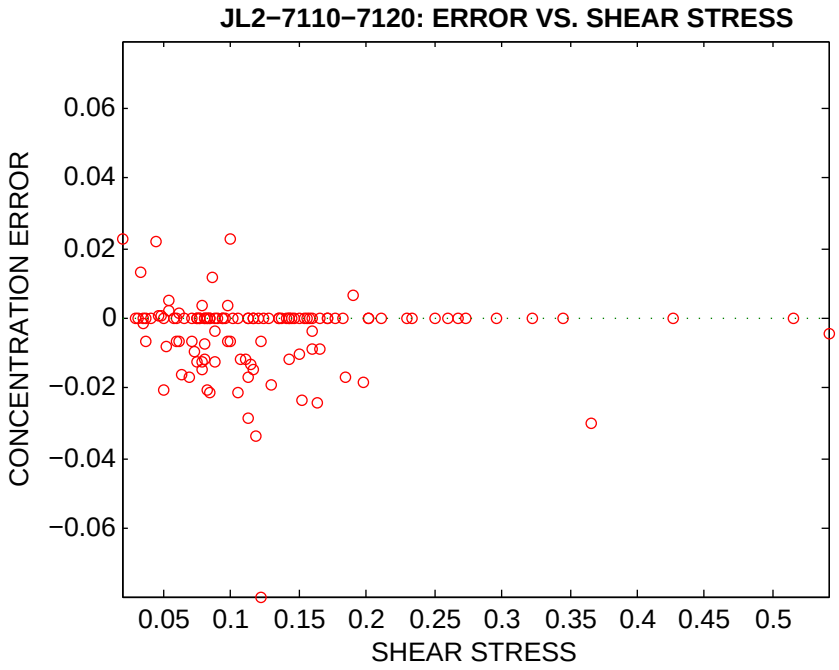


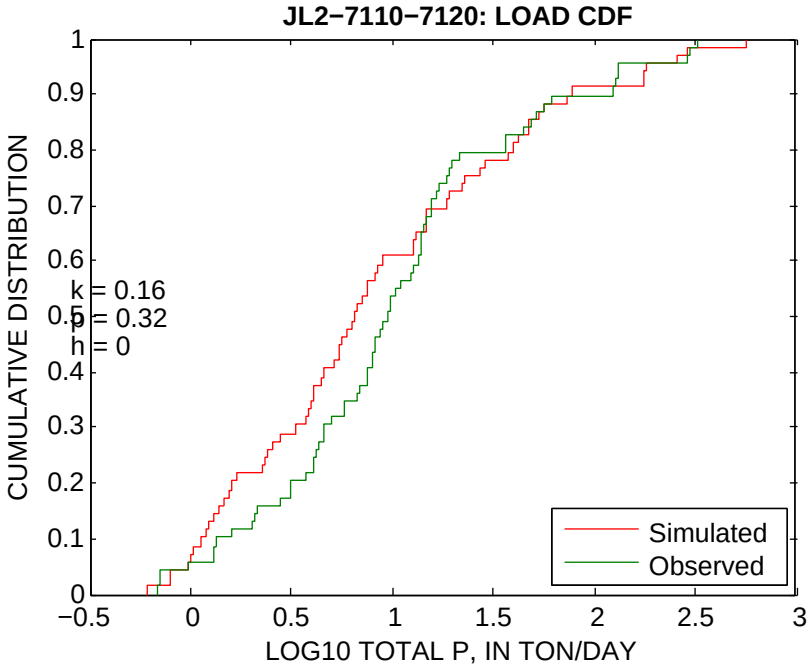


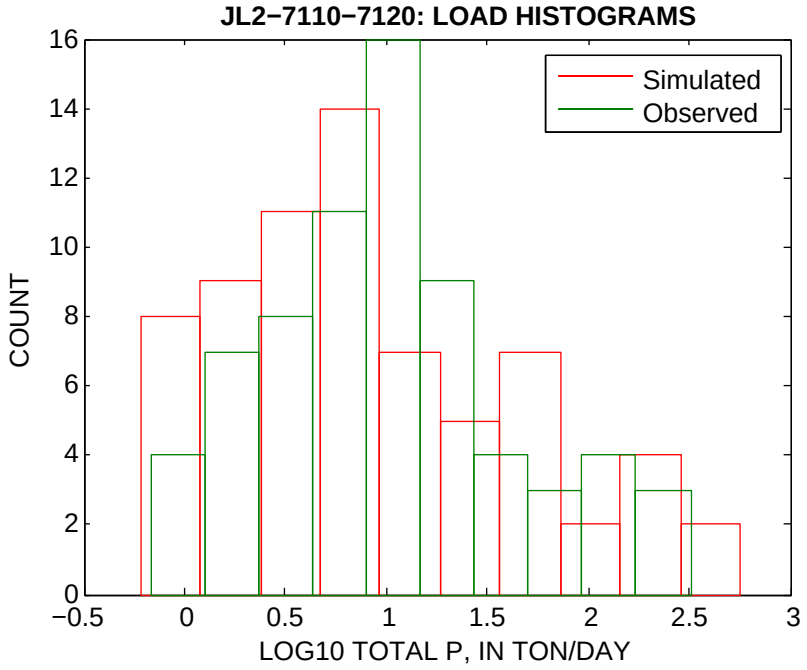


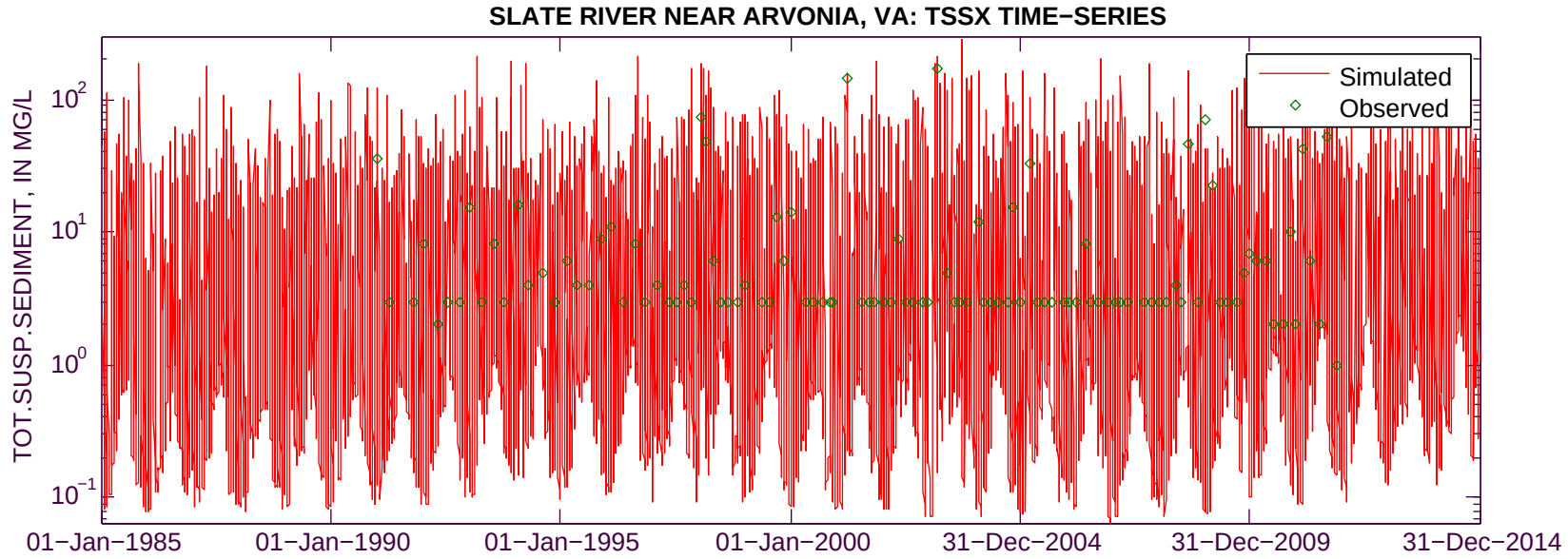
LOAD DATA
LOG10

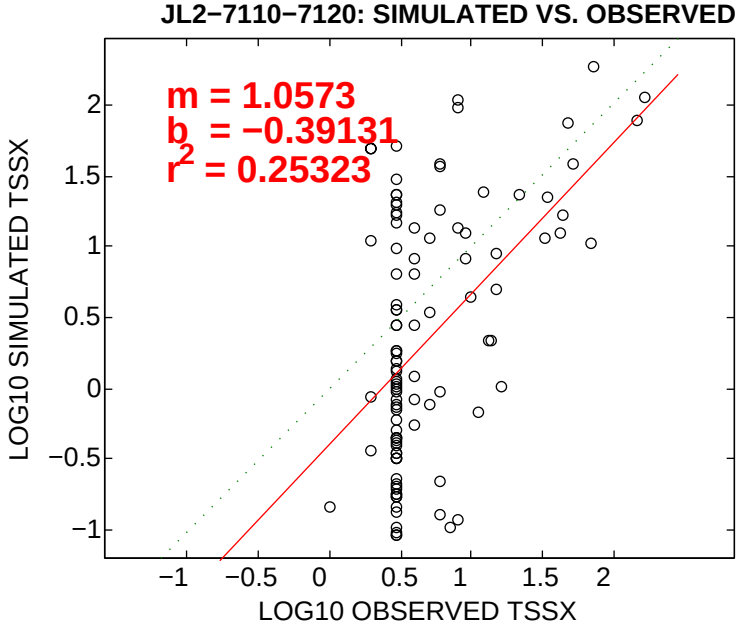


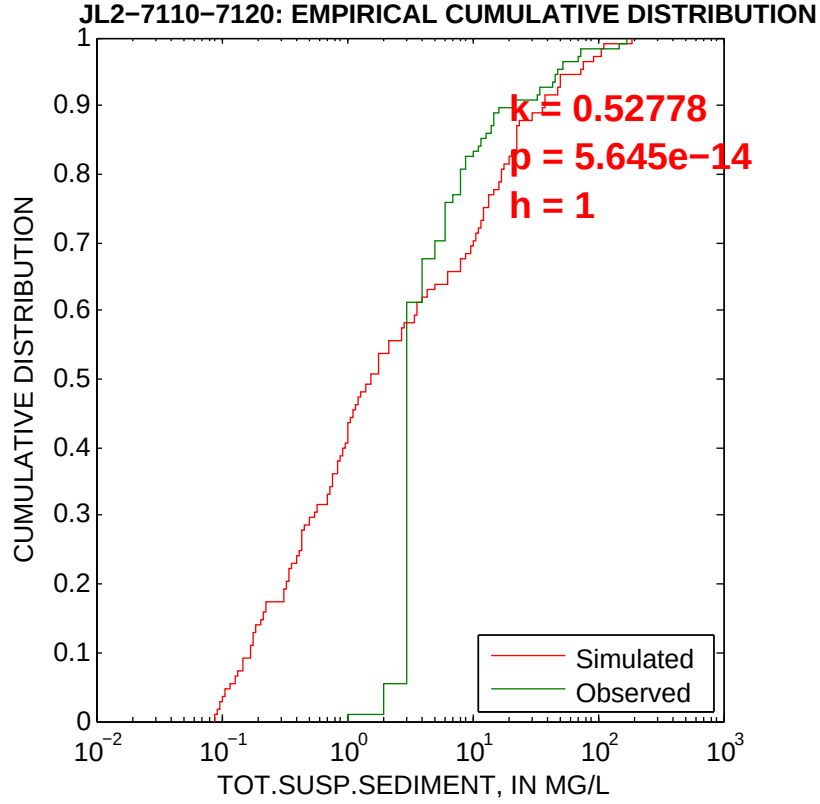












DATA SELECTION

scenario: P620171001WQ | file: TSSX.calib

plot: TSSX - total suspended ...

Dates: 1/1/1985 – 12/31/201

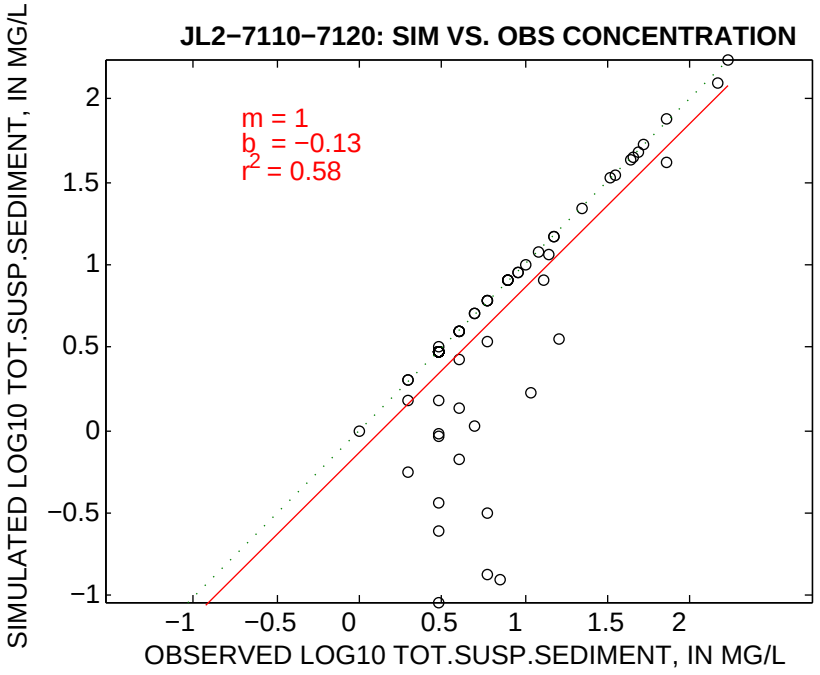
Drive: N/A | Directory: model | Observed: OBS20161101

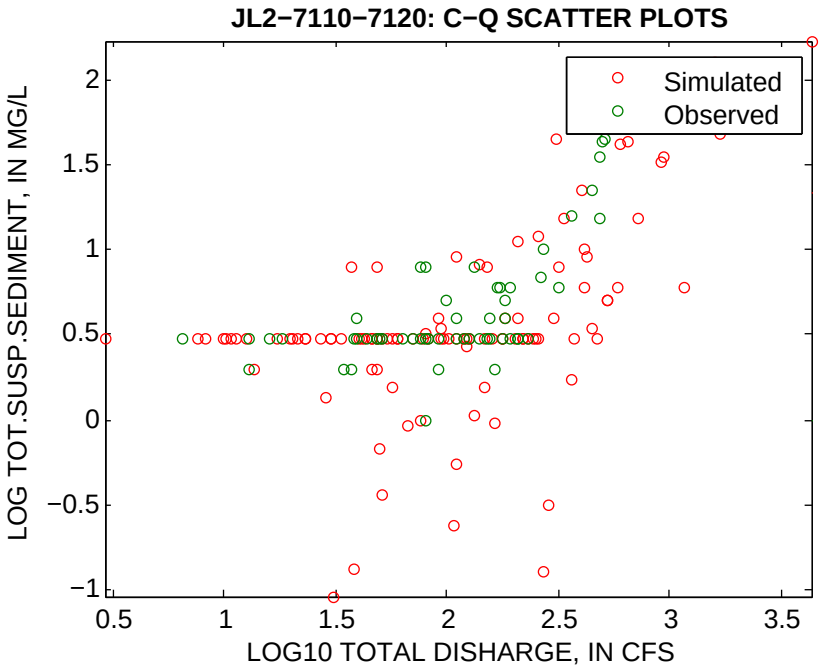
STATISTICS

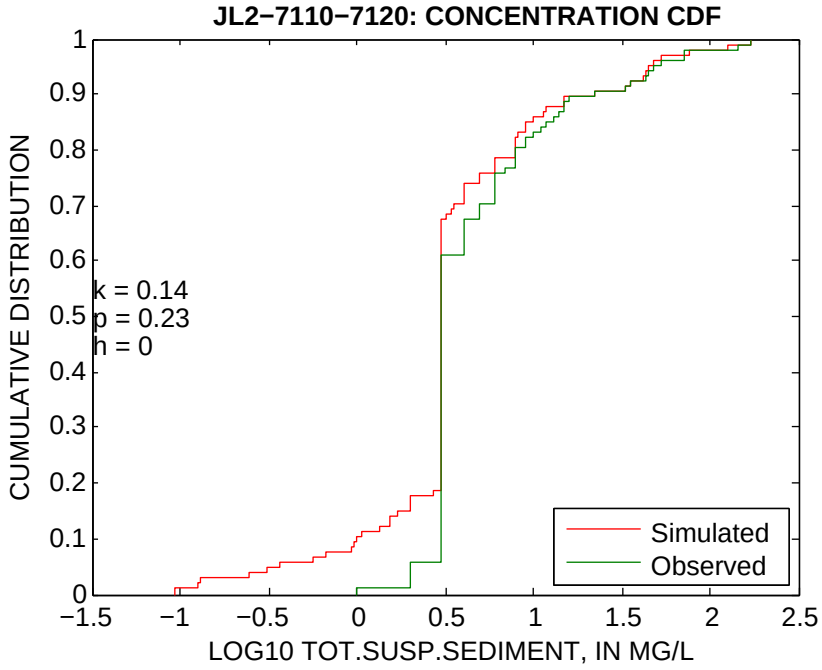
n	108	108
	observe	simulate
min	1	0.090962
	0	-1.04114
mean	10.8333	12.9827
	0.700126	0.348962
media	3	1.55975
	0.477121	0.193006
max	169	188.24
	2.22789	2.27471
varian	580.178	755.043
	0.176115	0.777514
JB	0.001	0.001
	0.001	0.040959
	ra	log
%	19.8401	-50.1573
err.va	551.355	0.705672
rel.std.err	0.950321	4.00688
mod.eff	0.0496787	-3.00688

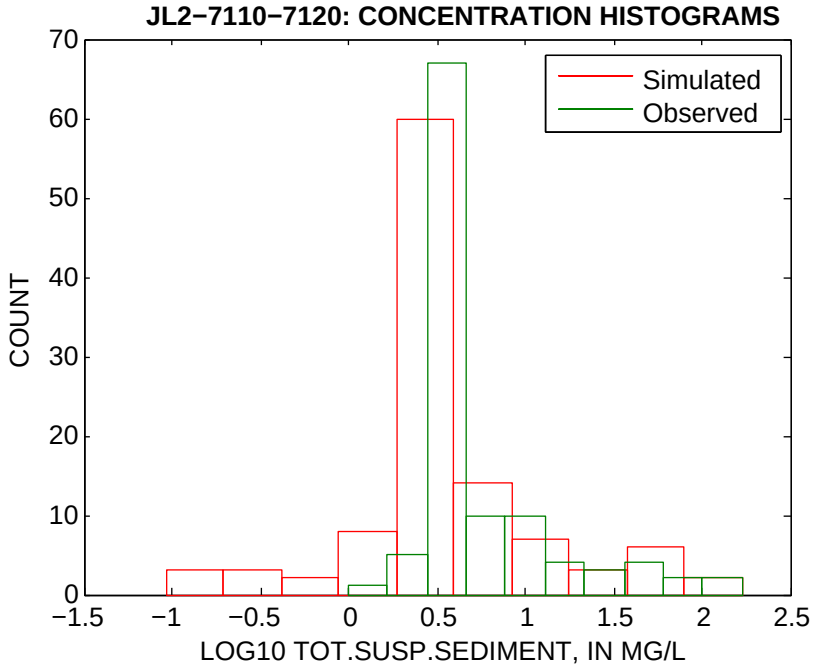
VERSION 2.1

ALL DATA
LOG10

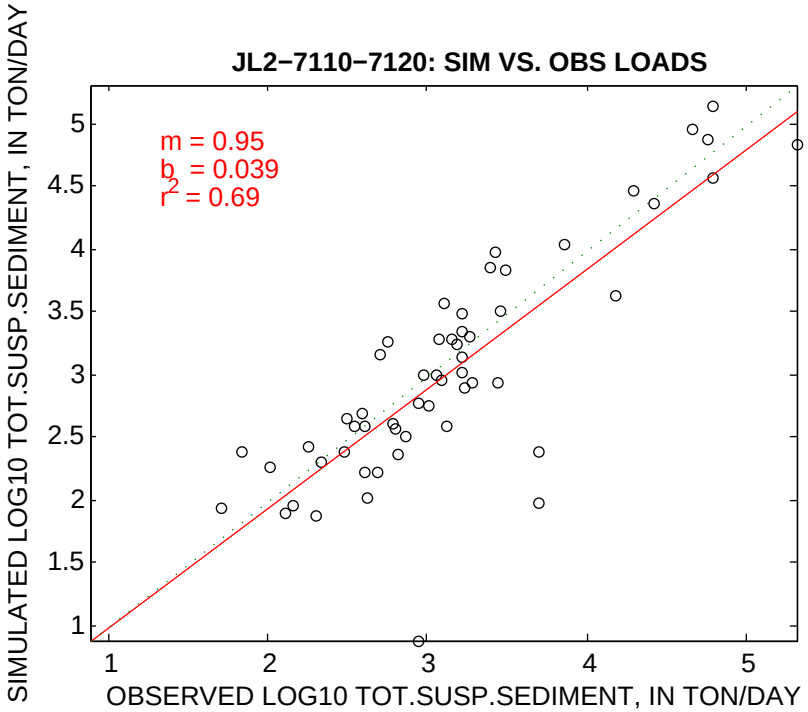


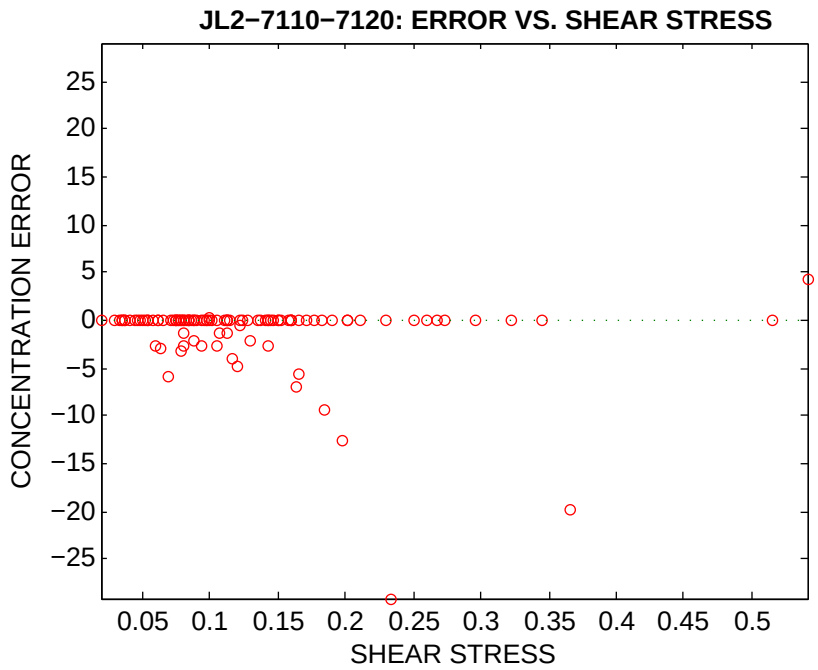


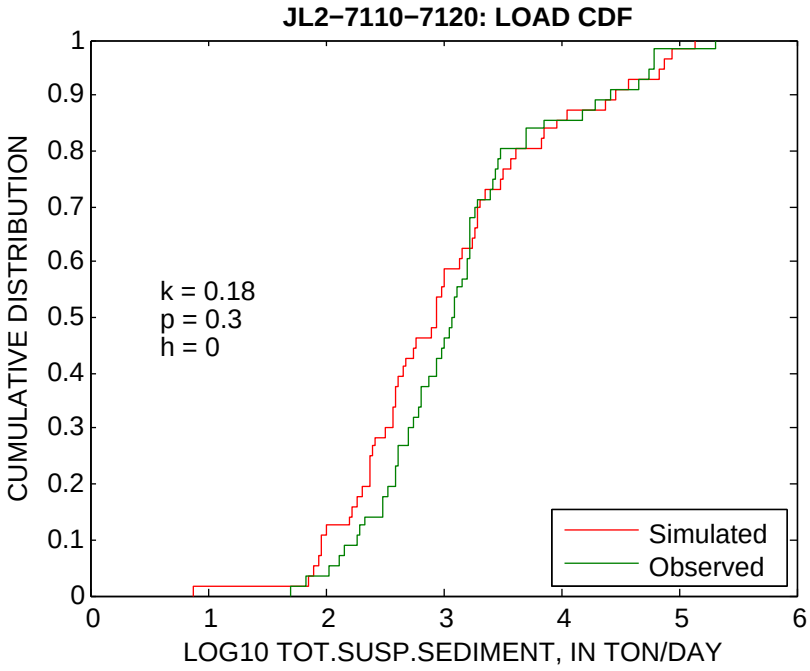


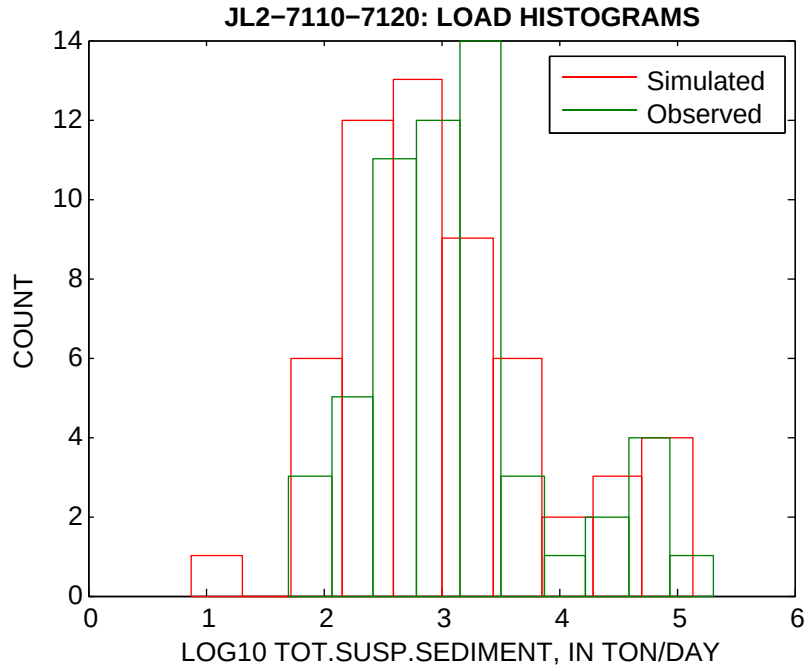


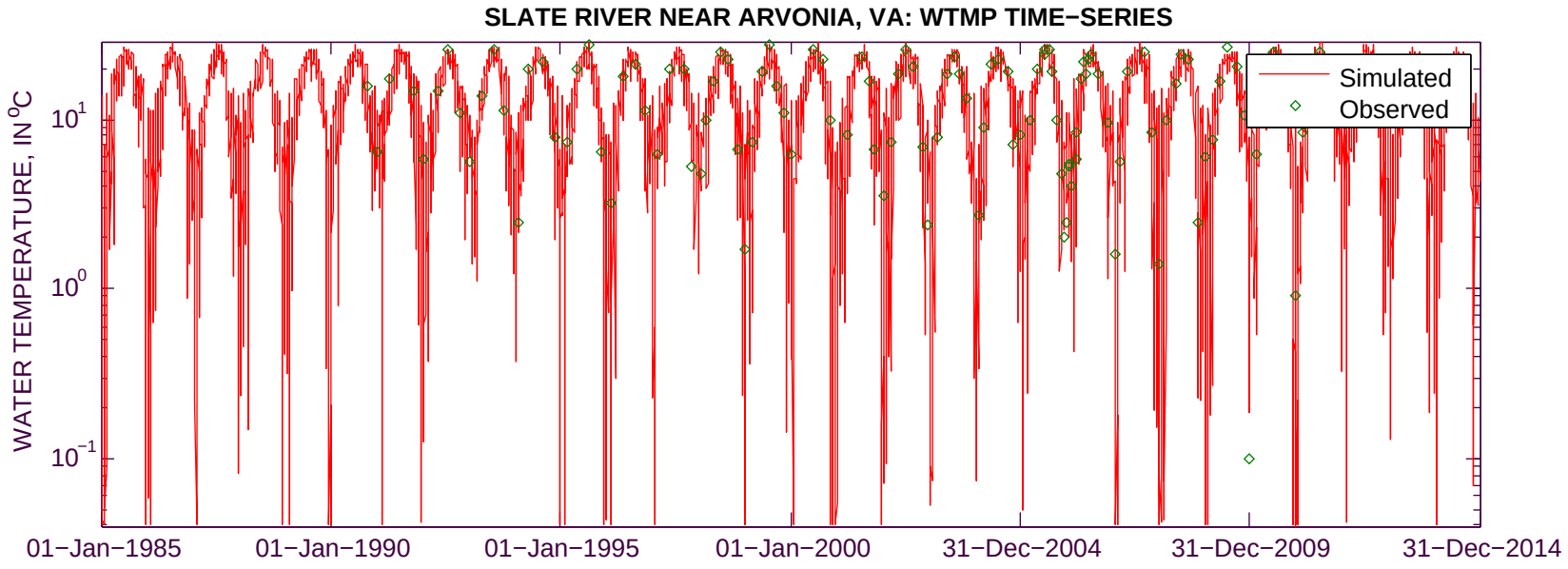
LOAD DATA
LOG10

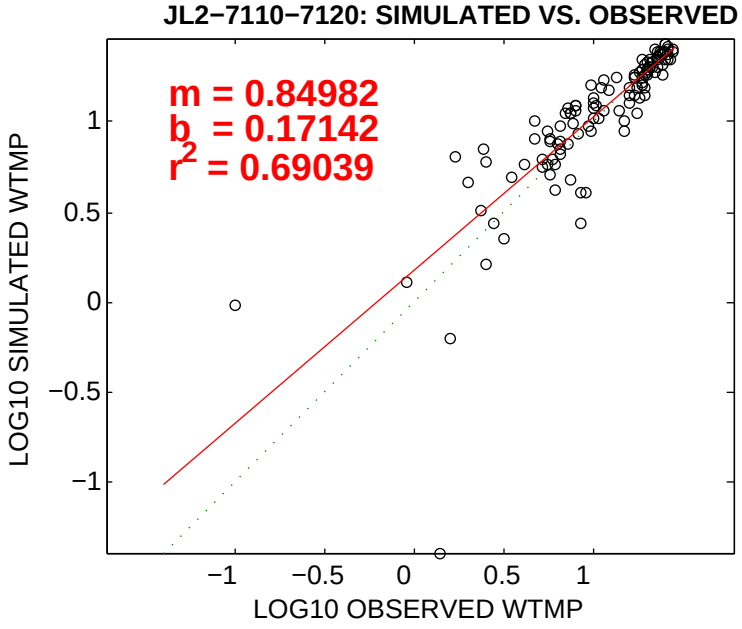


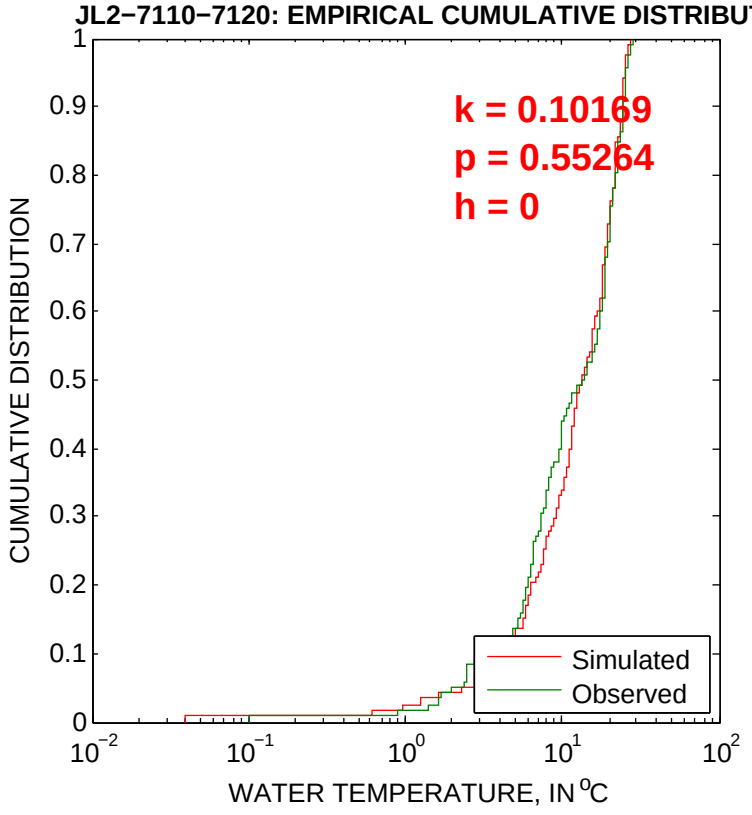












DATA SELECTION

scenario	file
P620171001WQ	WTMP.calib

plot: WTMP - water tempera...

Dates: 1/1/1985 – 12/31/201

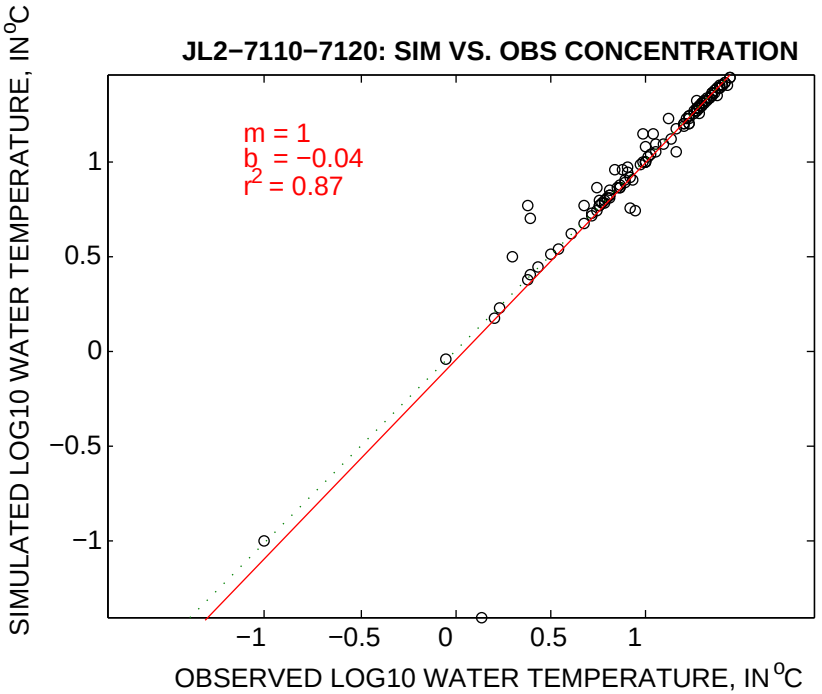
Drive	Directory	Observed
N/A	model	OBS20161101

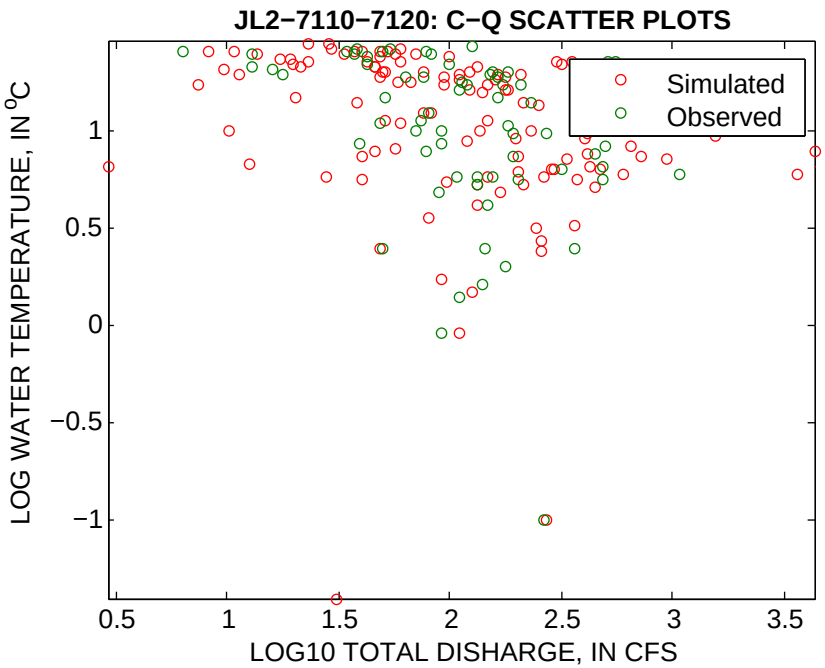
STATISTICS

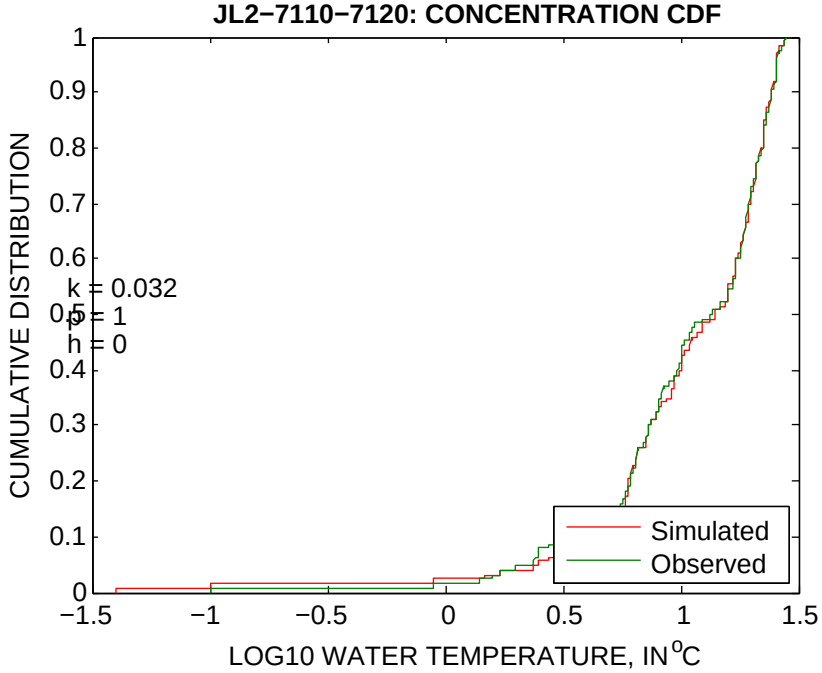
	n	118	118
		observe	simulate
min		0.1	0.040037
		-1	-1.39754
mean		13.7654	14.0095
		1.02445	1.04202
media		13.455	13.5755
		1.12881	1.13275
max		28	27.118
		1.44716	1.43326
varian		63.1489	54.5067
		0.147321	0.154106
JB		0.019311	0.035741
		0.001	0.001
		ra	log
%		1.77306	1.71487
err.va		7.66179	0.0513468
rel.std.err		0.121329	0.348537
mod.eff		0.878671	0.651463

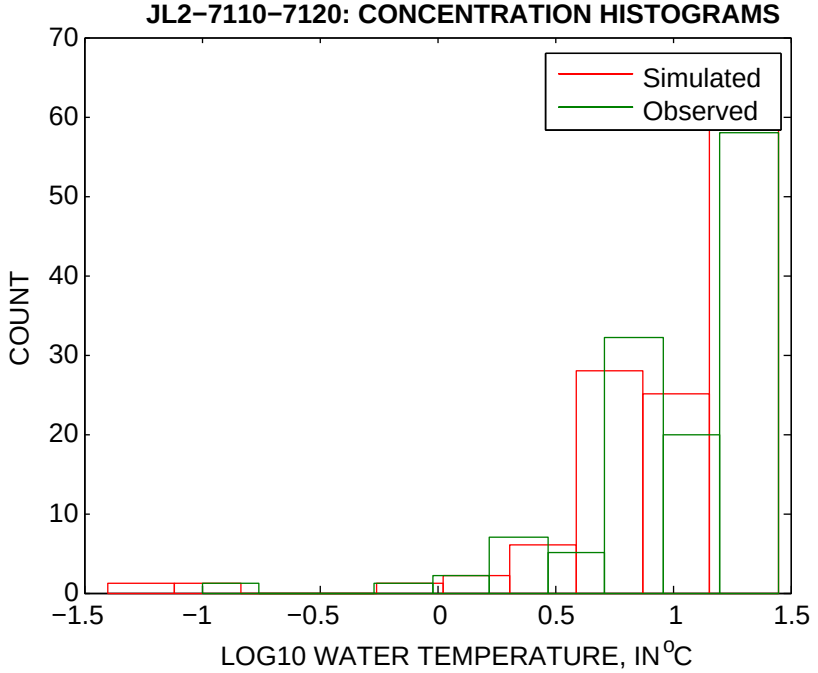
VERSION 2.1

ALL DATA
LOG10

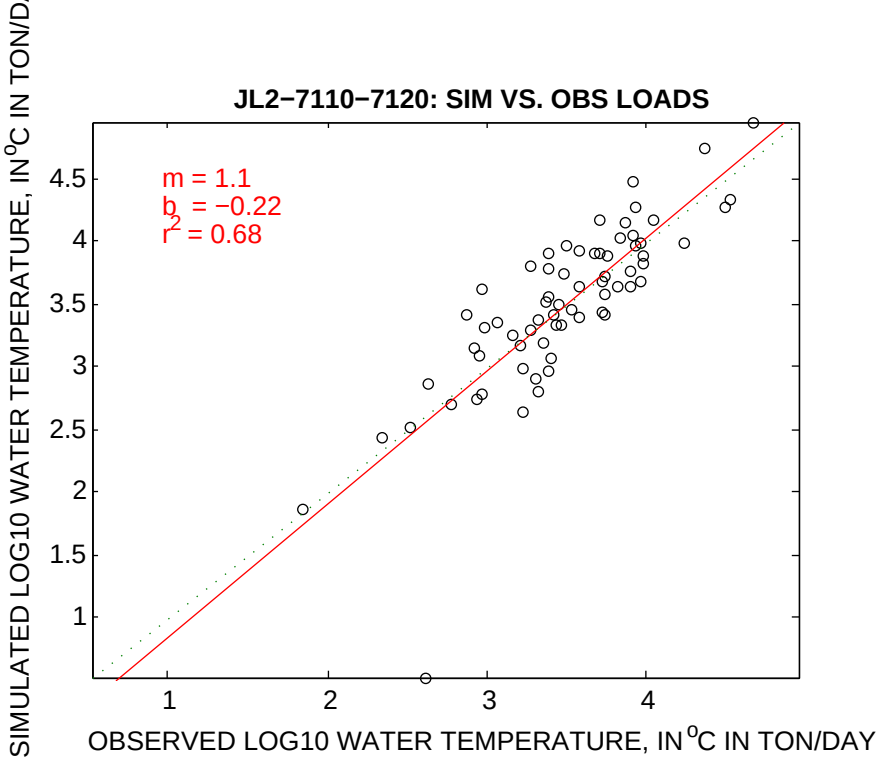


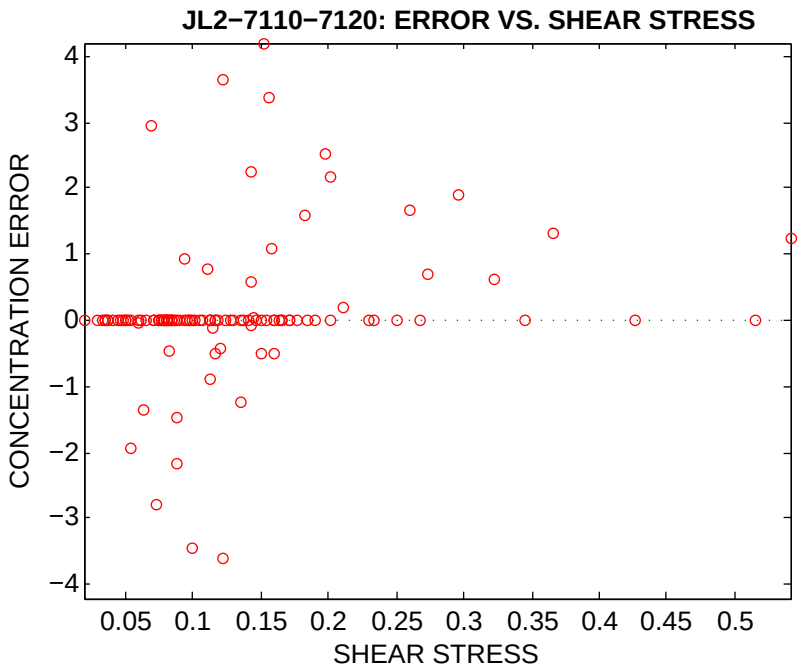


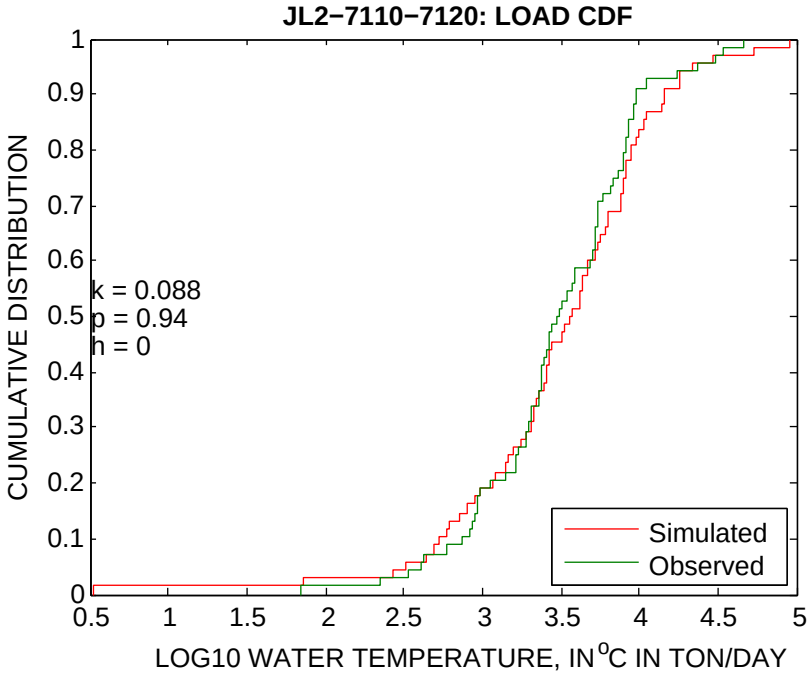


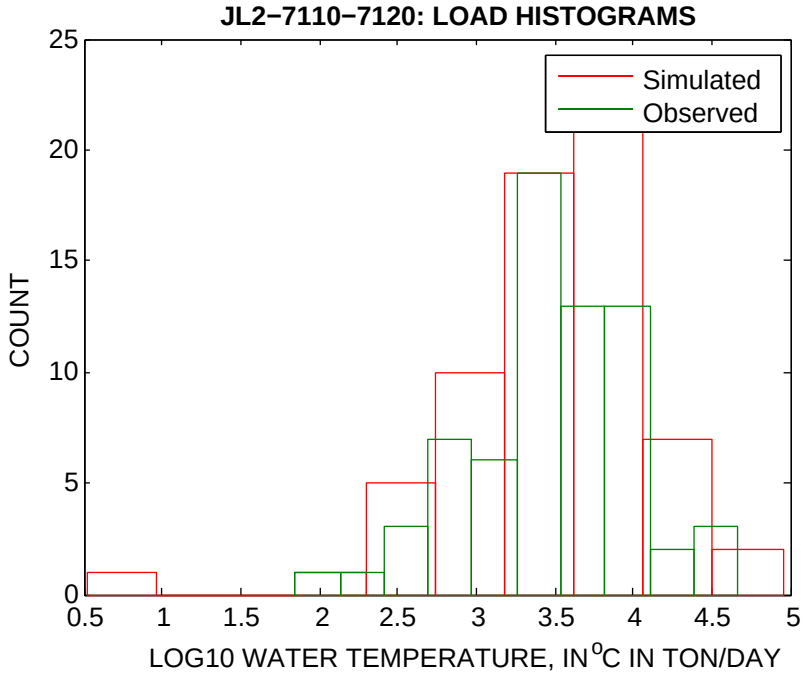


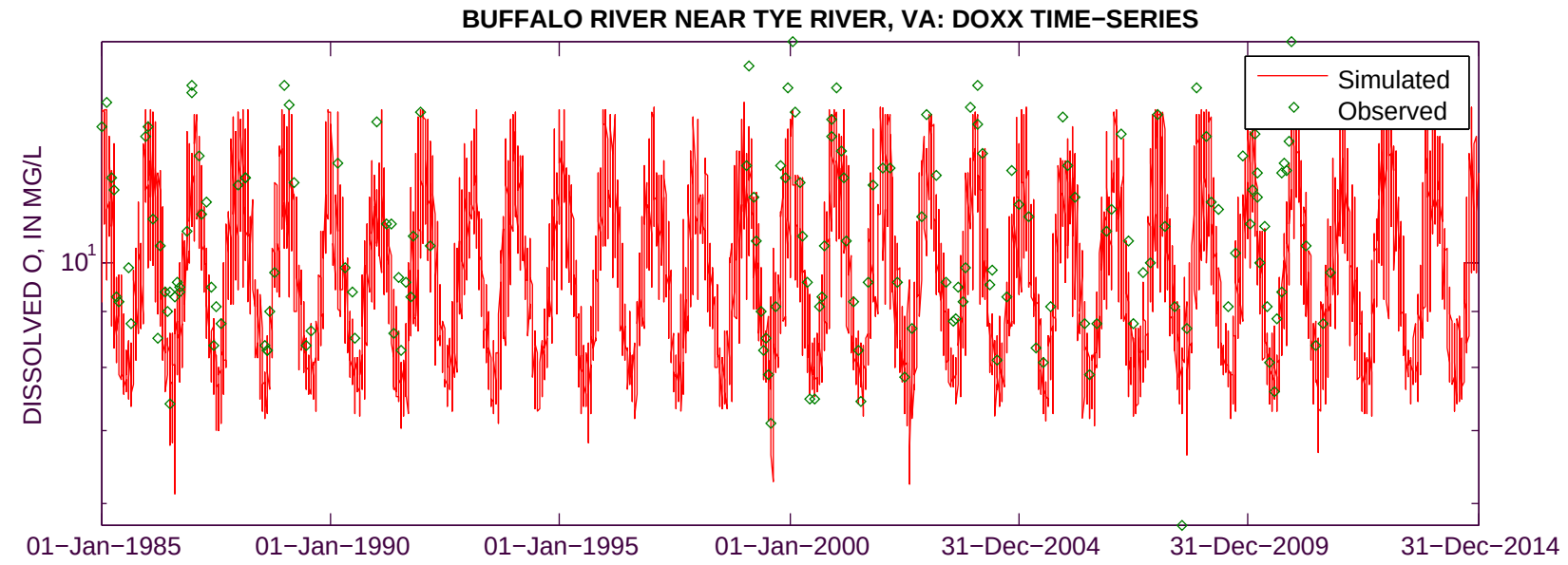
LOAD DATA
LOG10

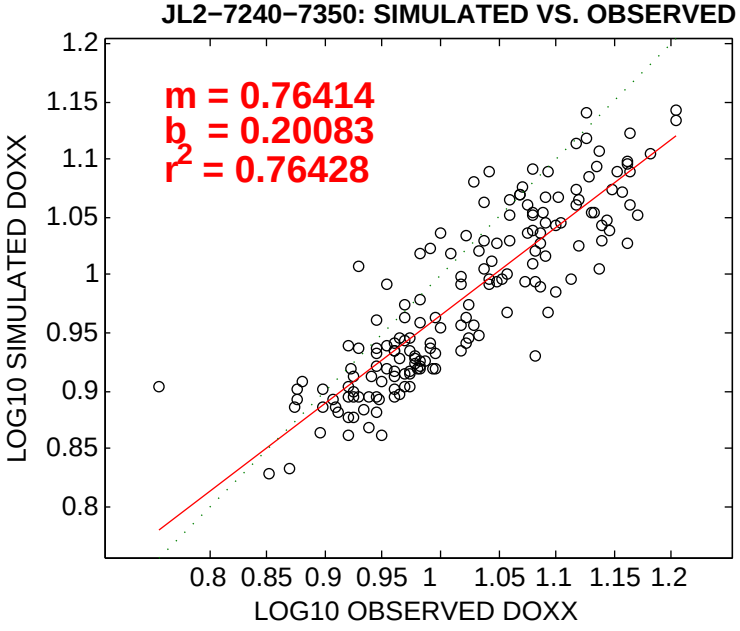


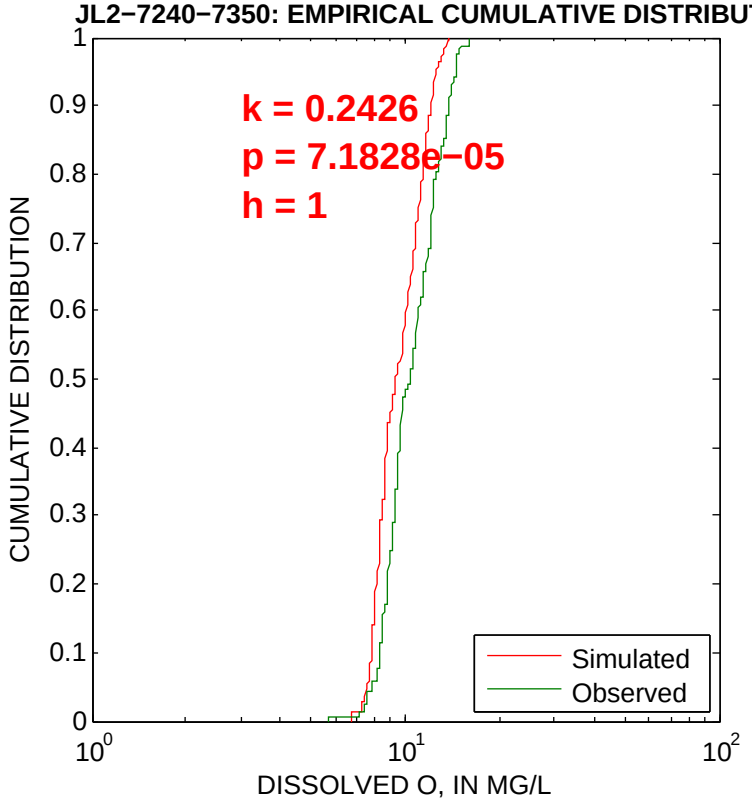












DATA SELECTION

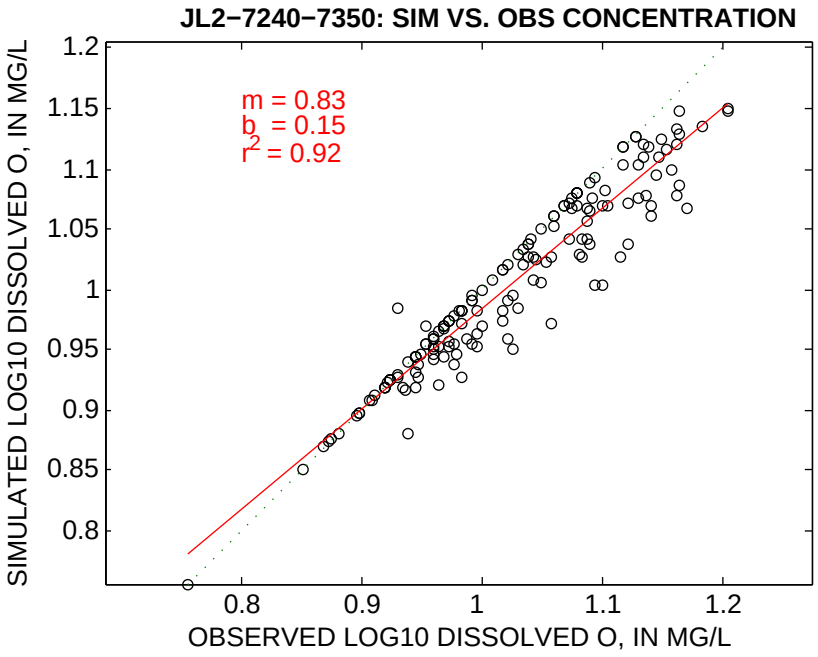
scenario: P620171001WQ
file: DOXX.calib
plot: DOXX - dissolved oxygen
Dates: 1/1/1985 12/31/201
Drive: N/A
Directory: model
Observed: OBS20161101

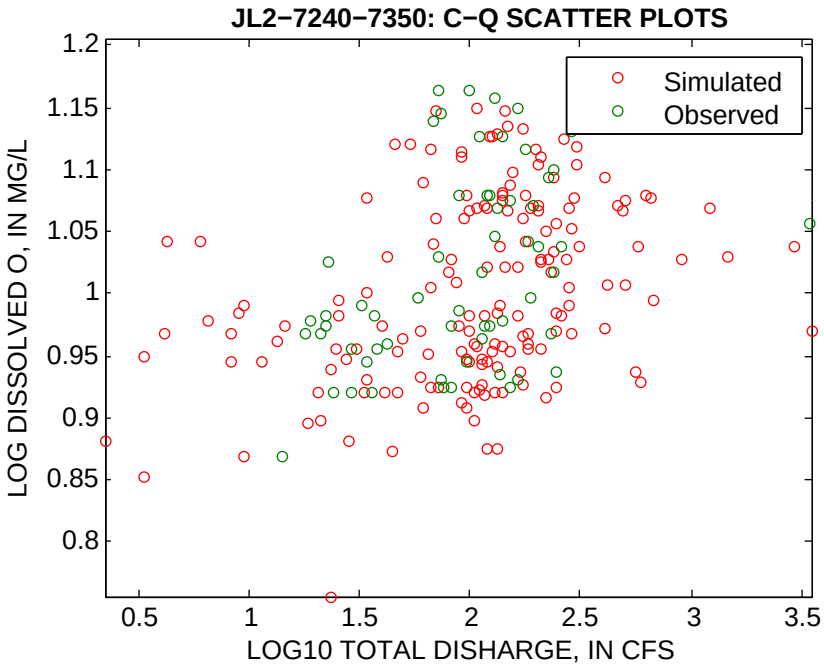
STATISTICS

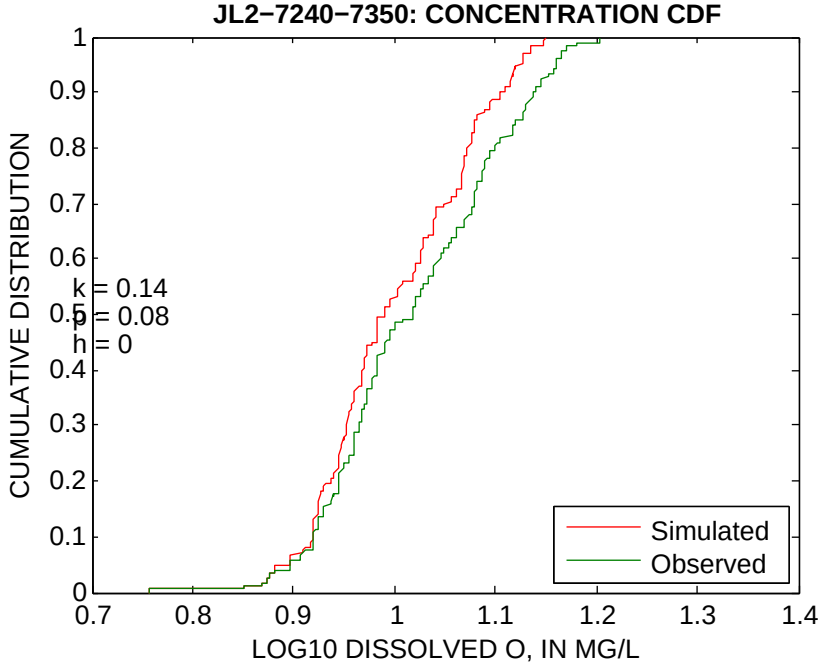
n	169	169
	observe	simulate
min	5.7	6.7348
	0.755875	0.828325
mean	10.6847	9.7051
	1.02043	0.980583
media	10.4	9.3076
	1.01703	0.968838
max	16	13.889
	1.20412	1.14267
varian	4.45569	2.86465
	0.00726947	0.00555383
JB	0.025243	0.013632
	0.213128	0.019426
	ra	log
%	-9.16797	-3.90527
err.va	2.05338	0.00331107
rel.std.err	0.460845	0.455476
mod.eff	0.539155	0.544524

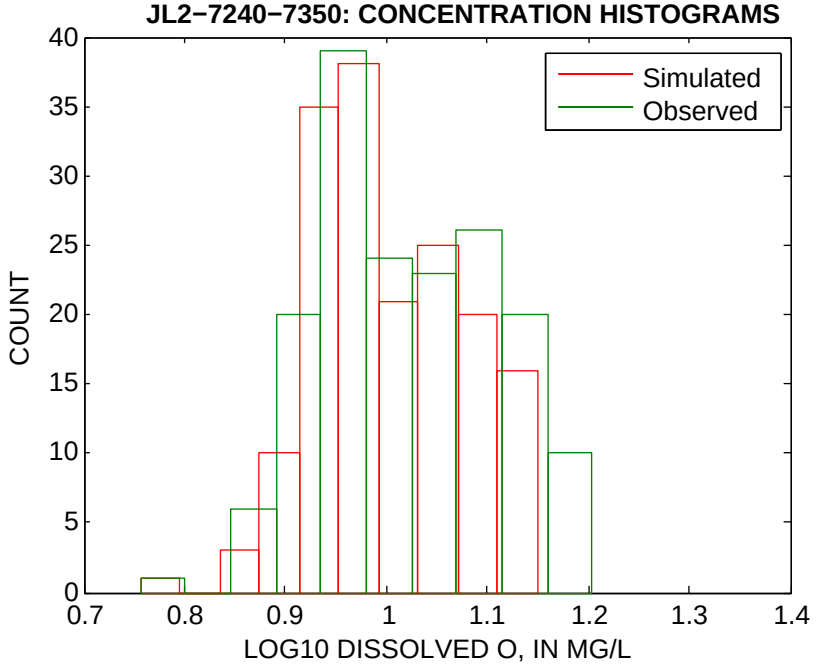
VERSION 2.1

ALL DATA
LOG10

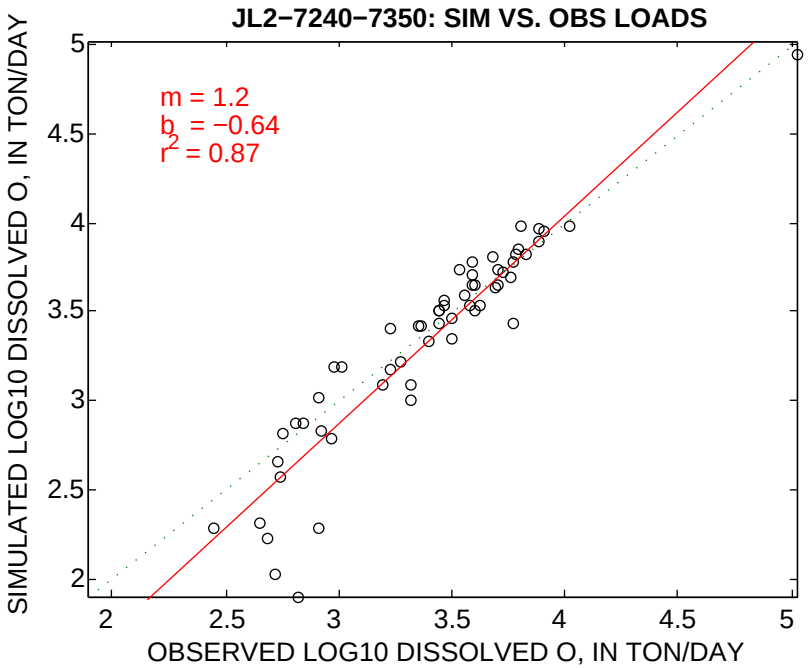


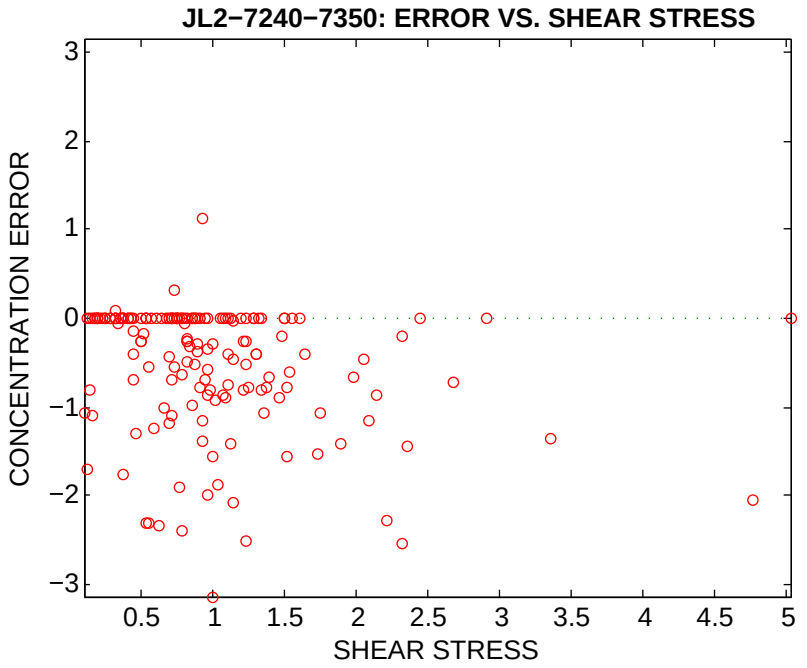


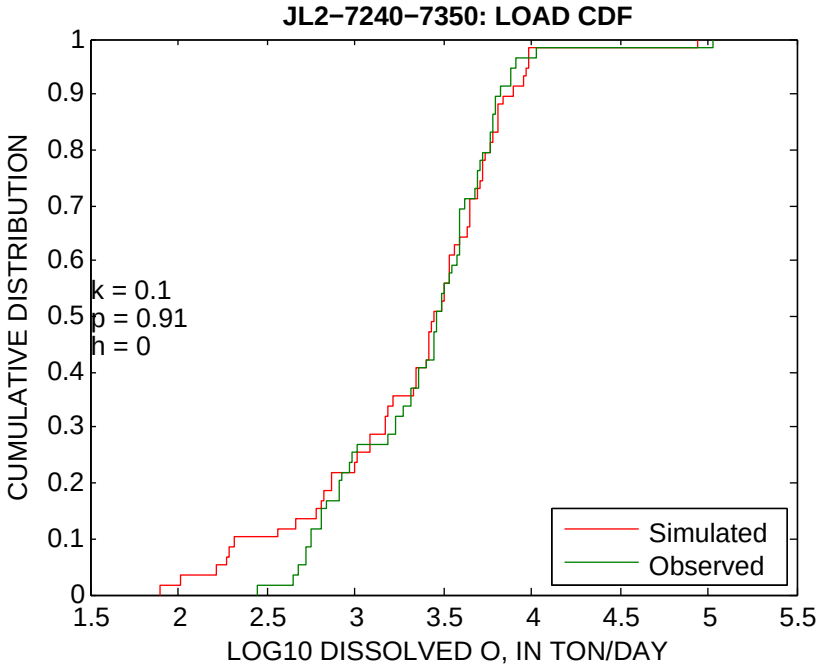


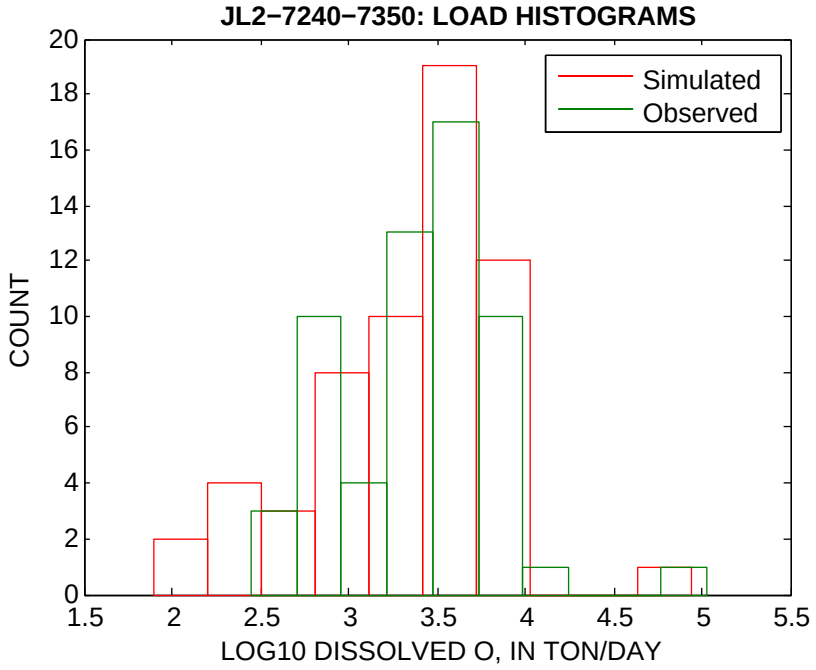


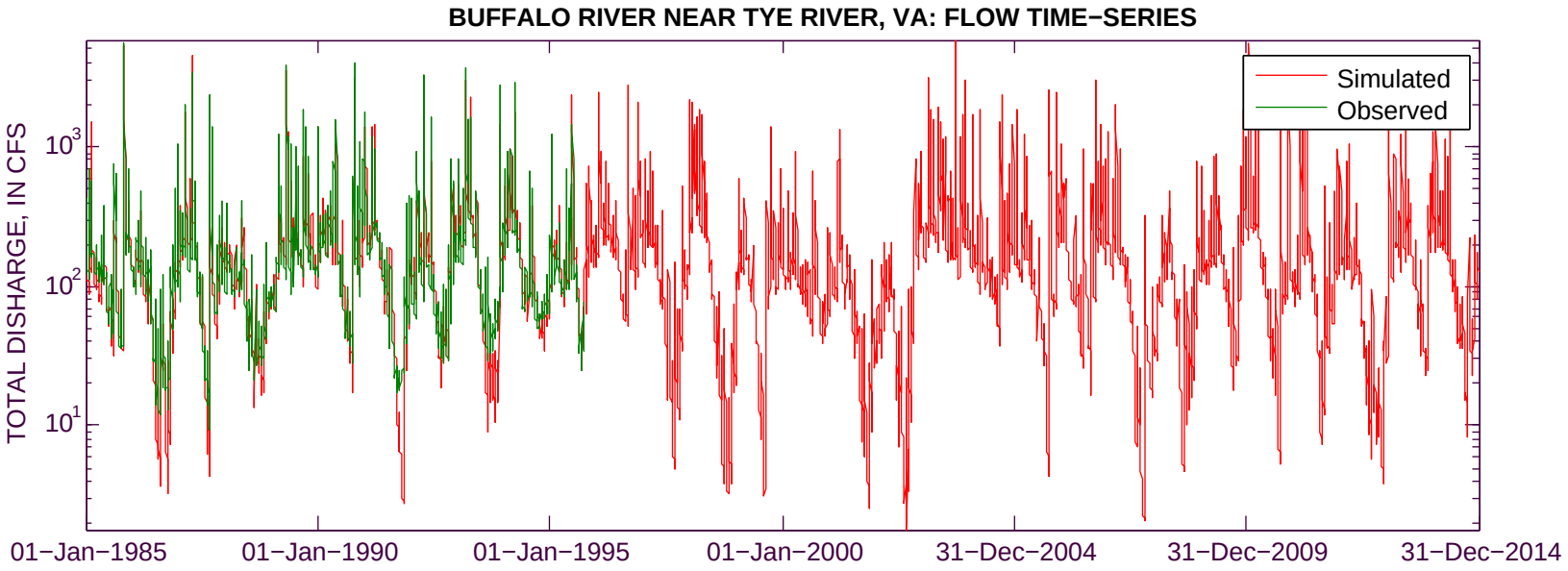
LOAD DATA
LOG10

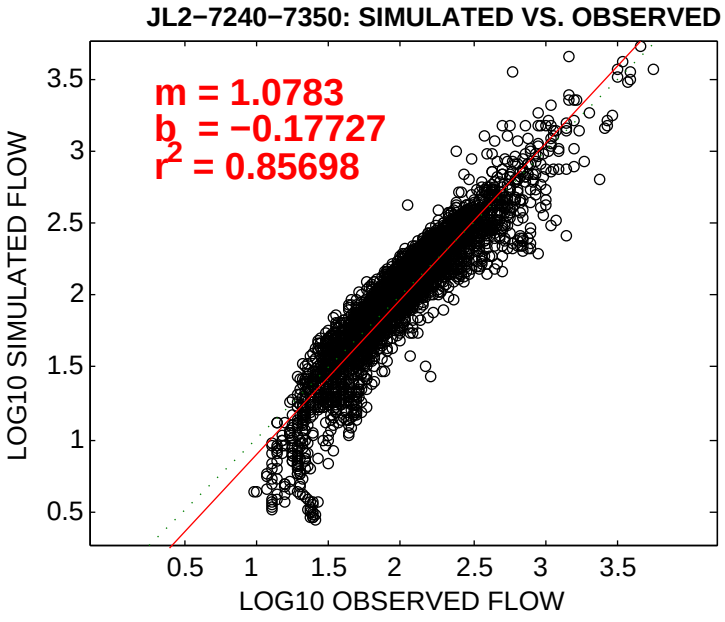


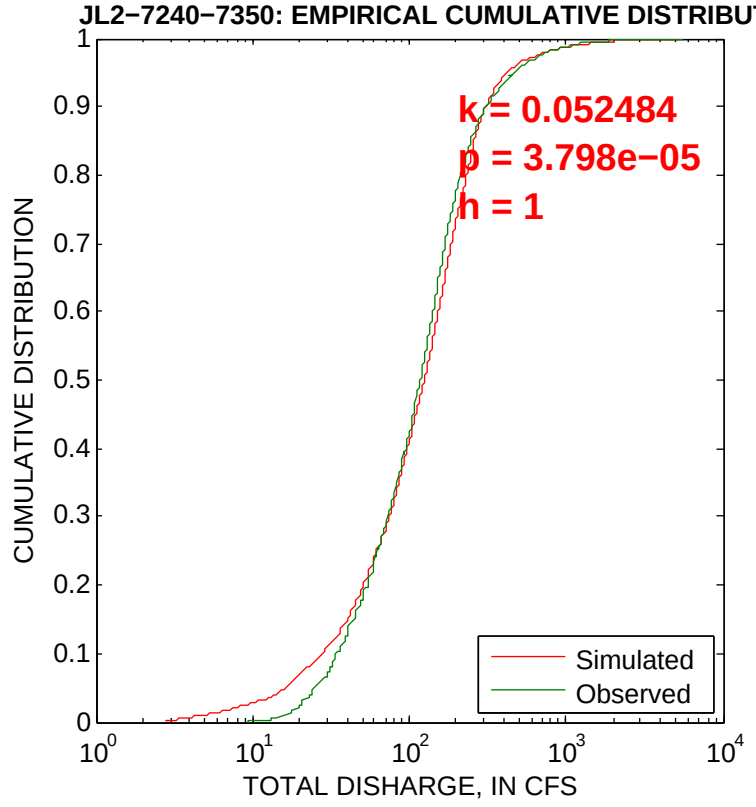












DATA SELECTION

scenario	file
P620171001WQ	FLOW.calib

plot: FLOW - total discharge

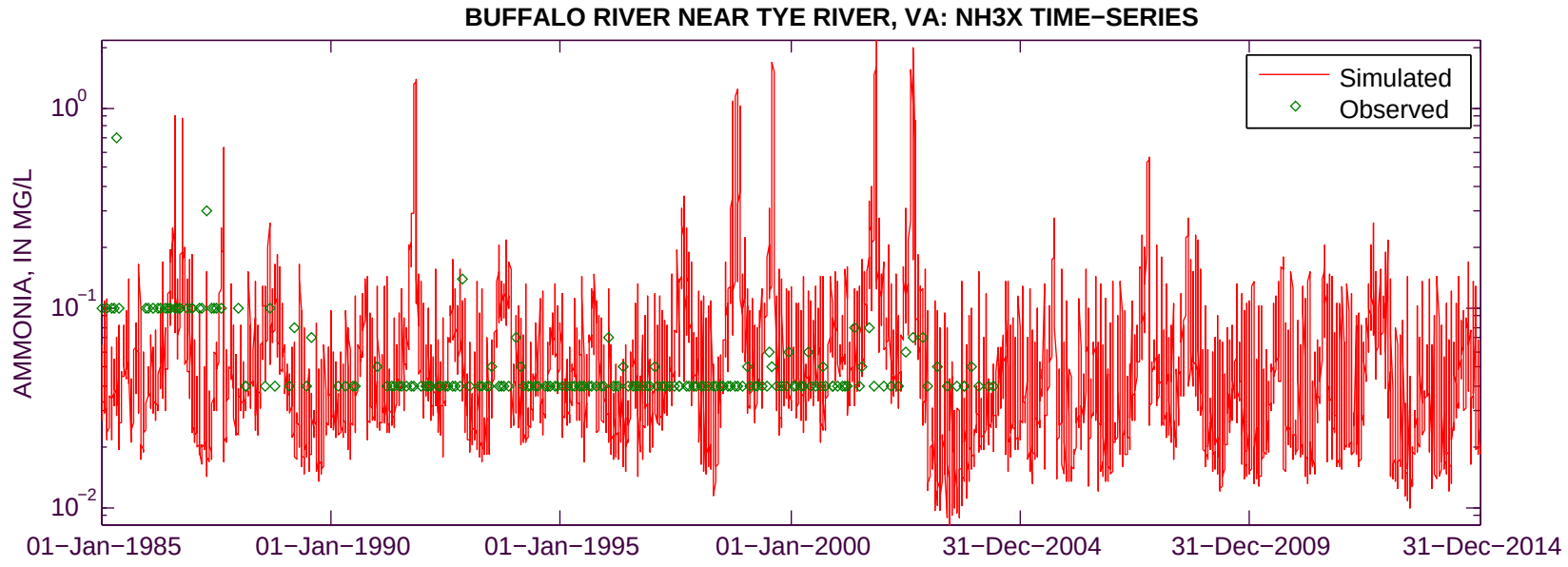
Dates 1/1/1985 12/31/201

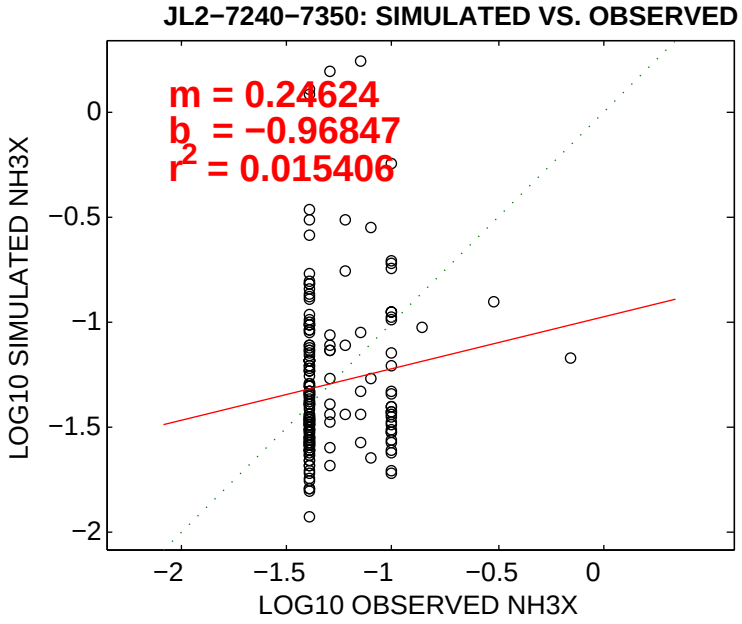
Drive	Directory	Observed
N/A	model	OBS20161101

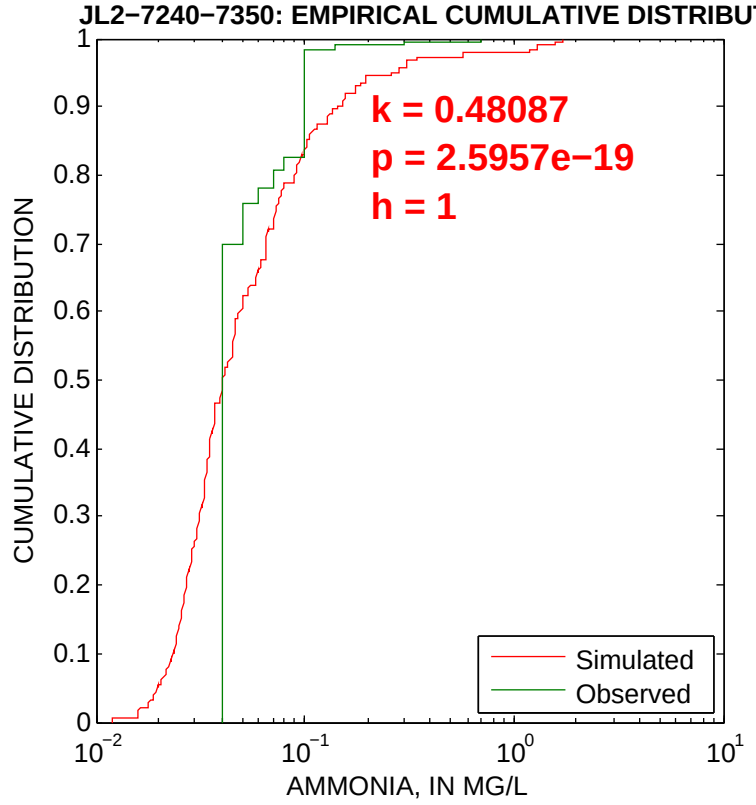
STATISTICS

n	3925	3925
	observe	simulate
min	9.5	2.8002
	0.977724	0.447189
mean	172.23	174.889
	2.05017	2.03339
media	118	124.55
	2.07188	2.09534
max	5560	5248.8
	3.74507	3.72006
varian	69381	69934.3
	0.144838	0.196508
JB	0.001	0.001
	0.001	0.001
	ra	log
%	1.54371	-0.818156
err.va	17175.2	0.0292733
rel.std.err	0.24755	0.20211
mod.eff	0.75245	0.79789

VERSION 2.1







DATA SELECTION

scenario	file
P620171001WQ	NH3X.calib

plot: NH3X - ammonia

Dates: 1/1/1985 – 12/31/201

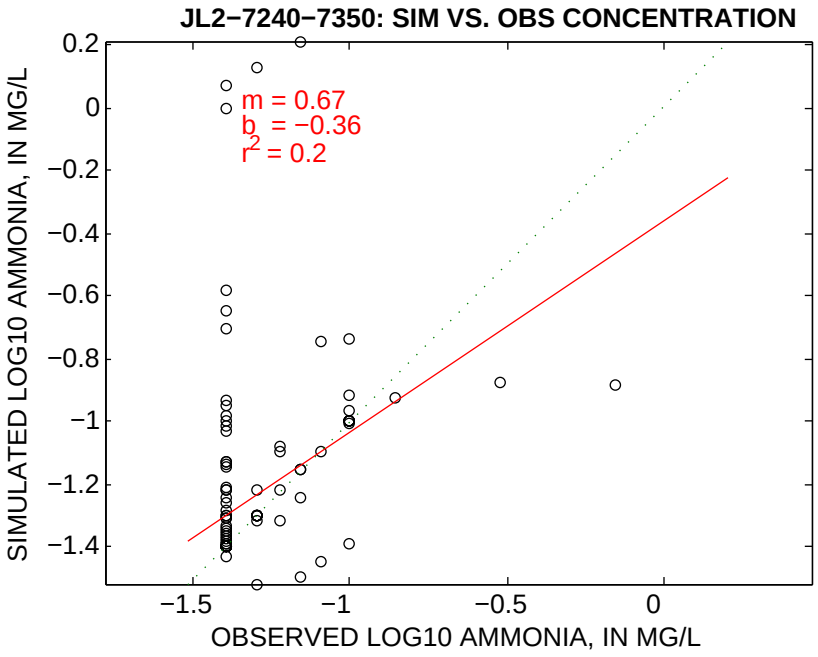
Drive	Directory	Observed
N/A	model	OBS20161101

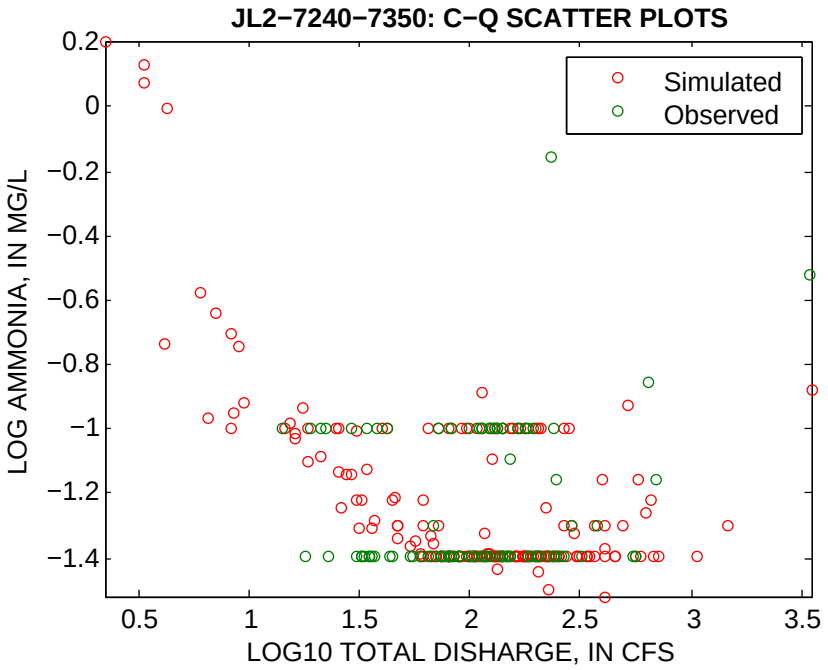
STATISTICS

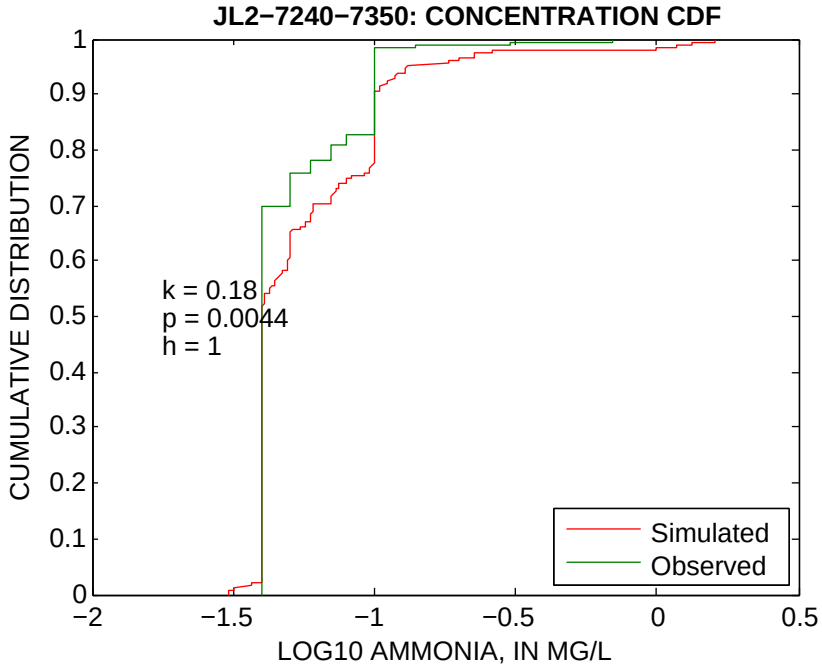
	n	183	183
		observe	simulate
min		0.04	0.012042
		-1.39794	-1.9193
mean		0.0575956	0.0939373
		-1.29908	-1.28836
media		0.04	0.040943
		-1.39794	-1.38782
max		0.7	1.7227
		-0.154902	0.23621
varian		0.00314803	0.04618
		0.034095	0.134188
JB		0.001	0.001
		0.001	0.001
		ra	log
%		63.0979	-0.825531
err.va		0.0503347	0.151607
rel.std.err		15.9893	4.44661
mod.eff		-14.9893	-3.44661

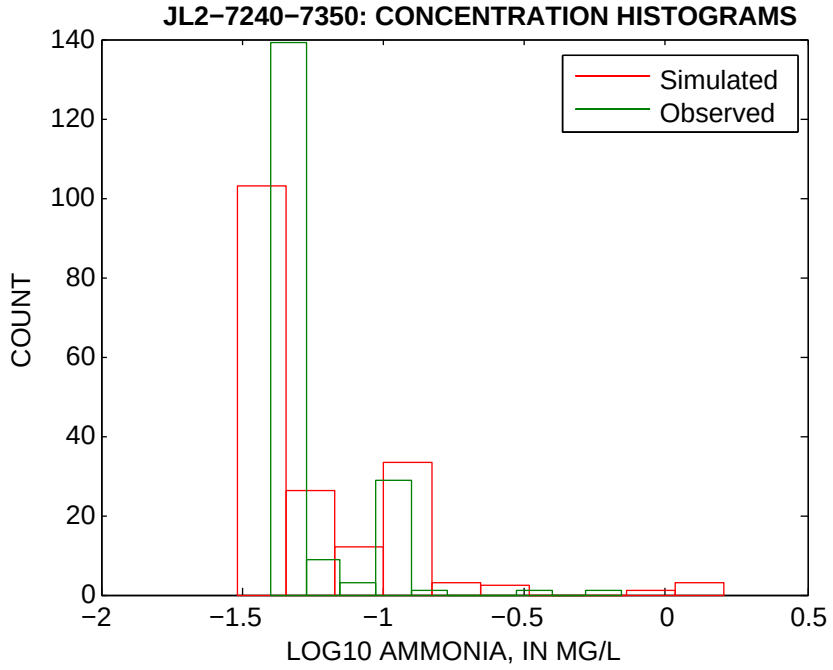
VERSION 2.1

ALL DATA
LOG10

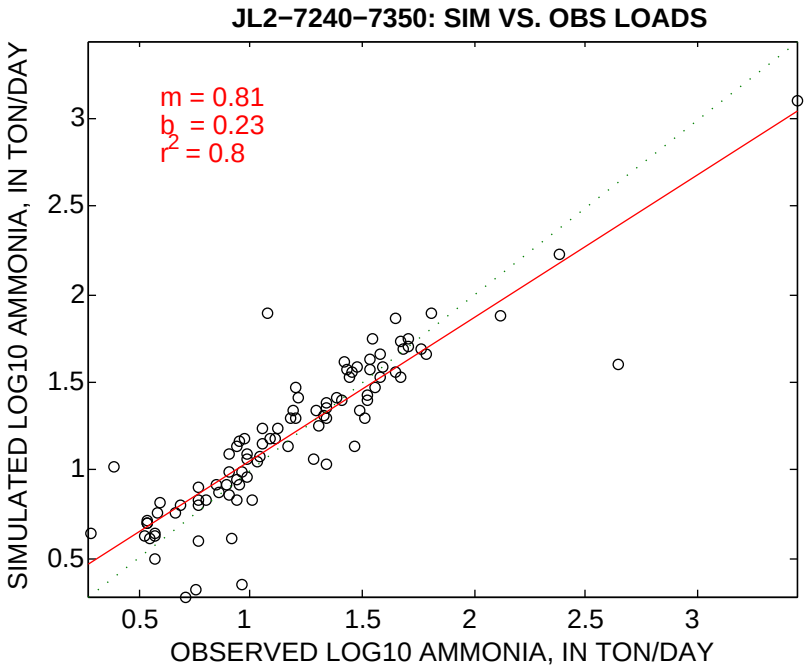


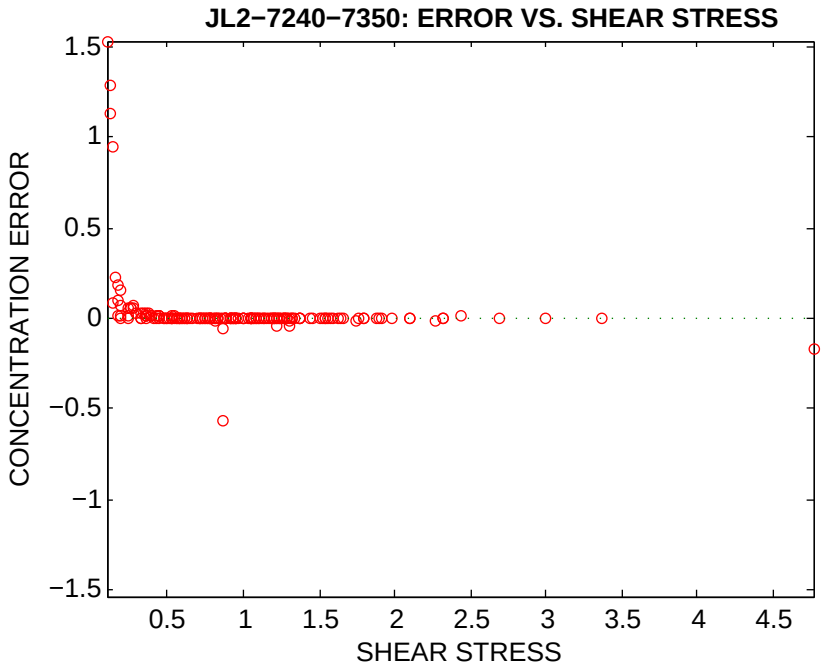


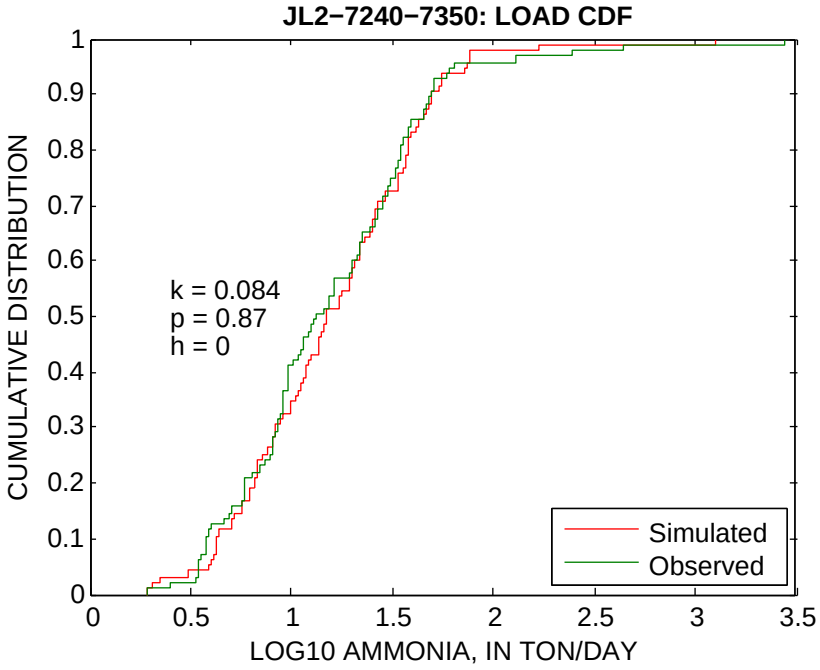


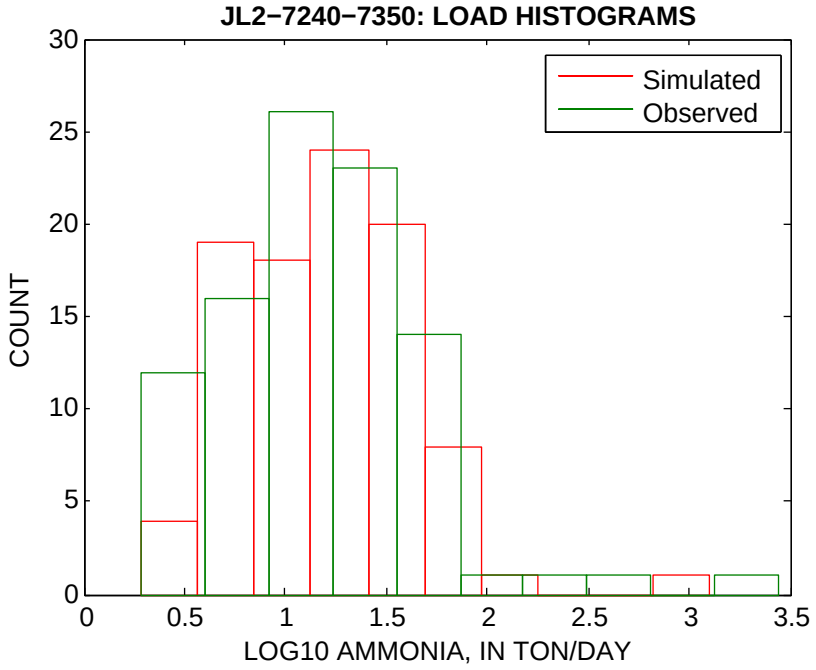


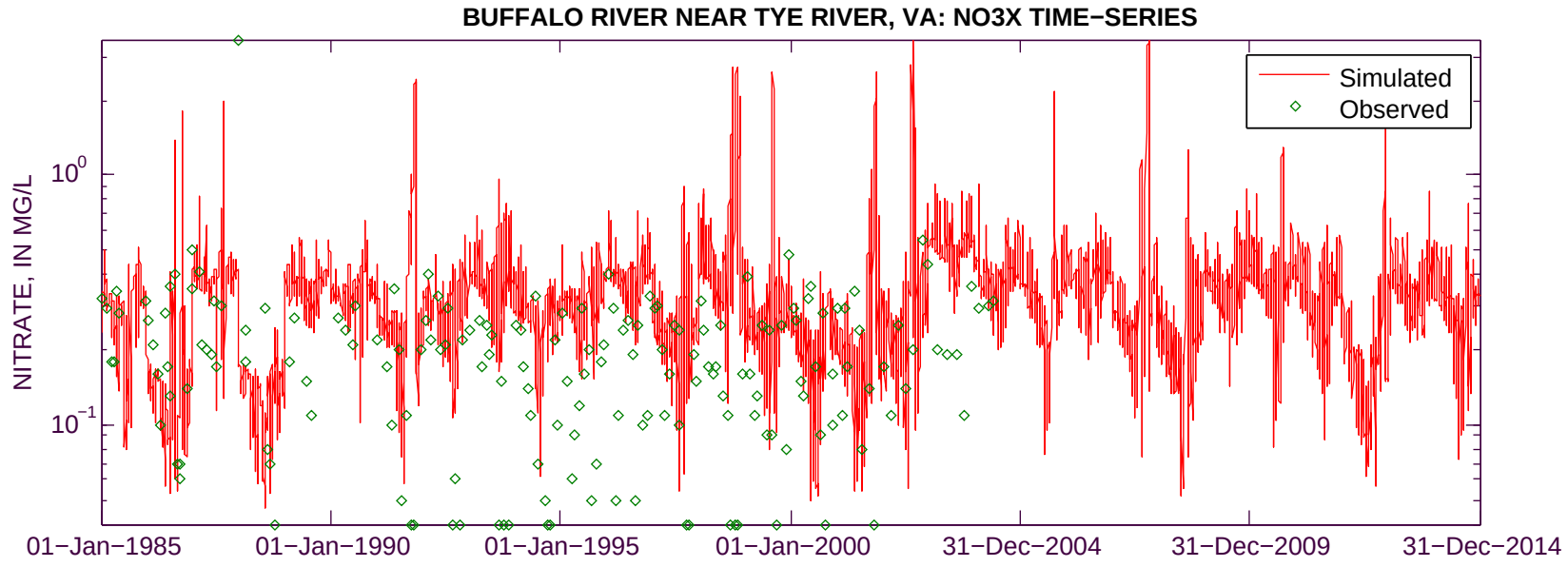
LOAD DATA
LOG10

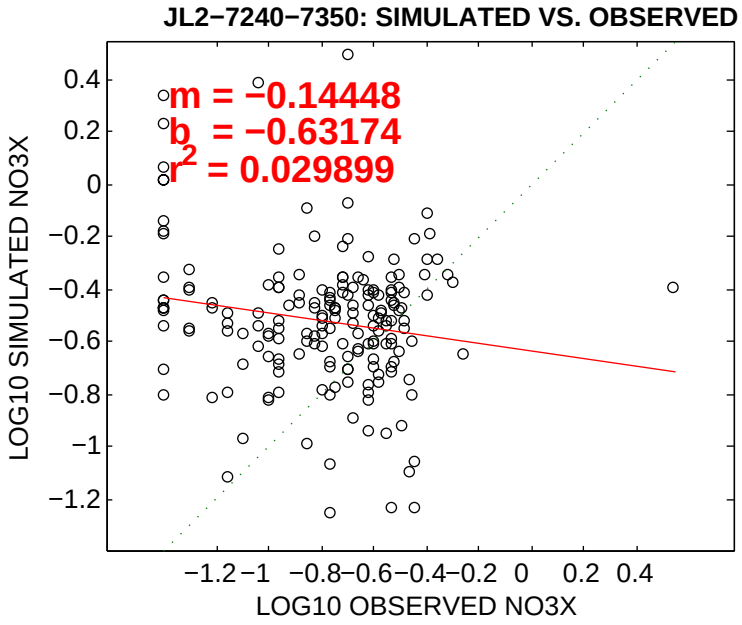


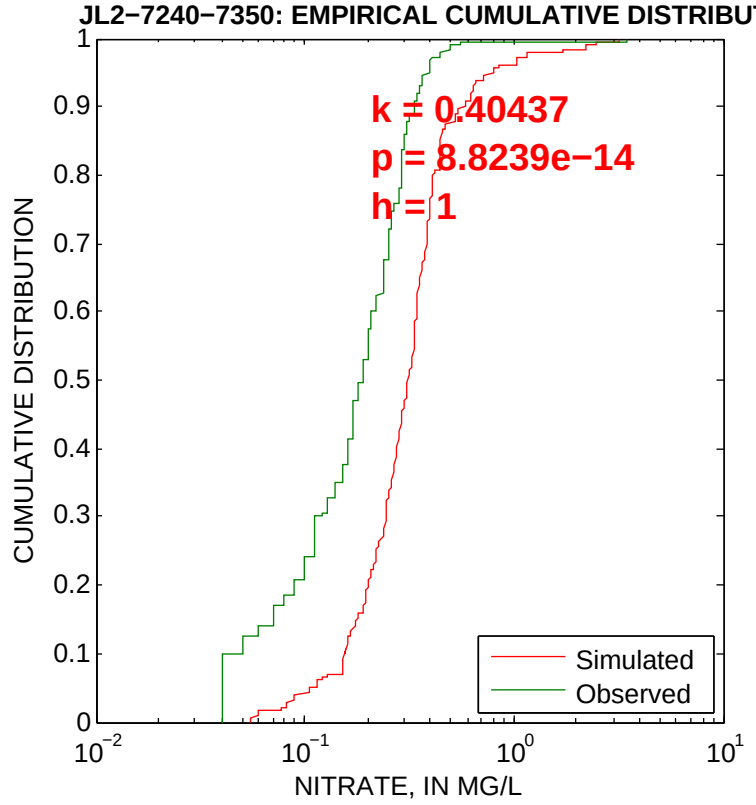












DATA SELECTION

scenario	file
P620171001WQ	NO3X.calib

plot: NO3X - nitrate

Dates: 1/1/1985 – 12/31/201

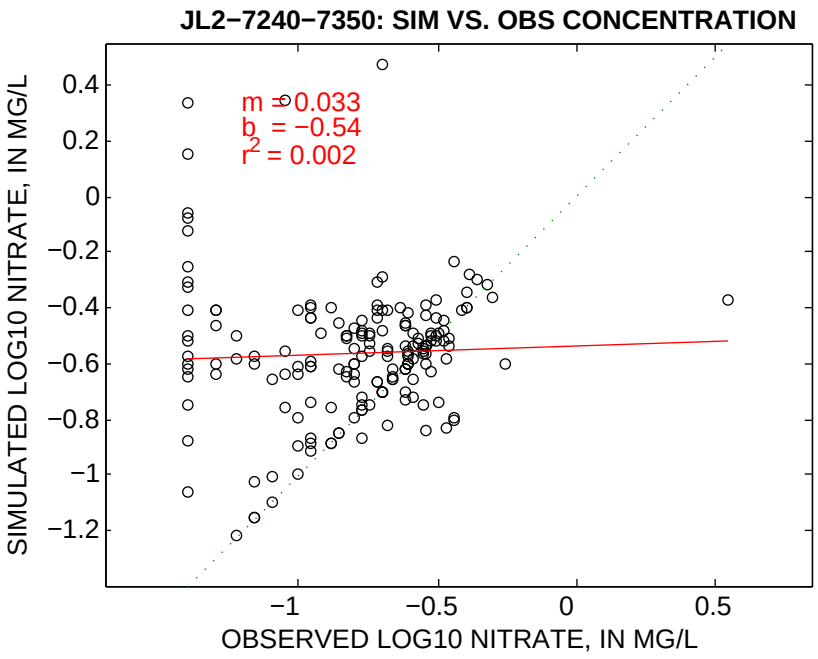
Drive	Directory	Observed
N/A	model	OBS20161101

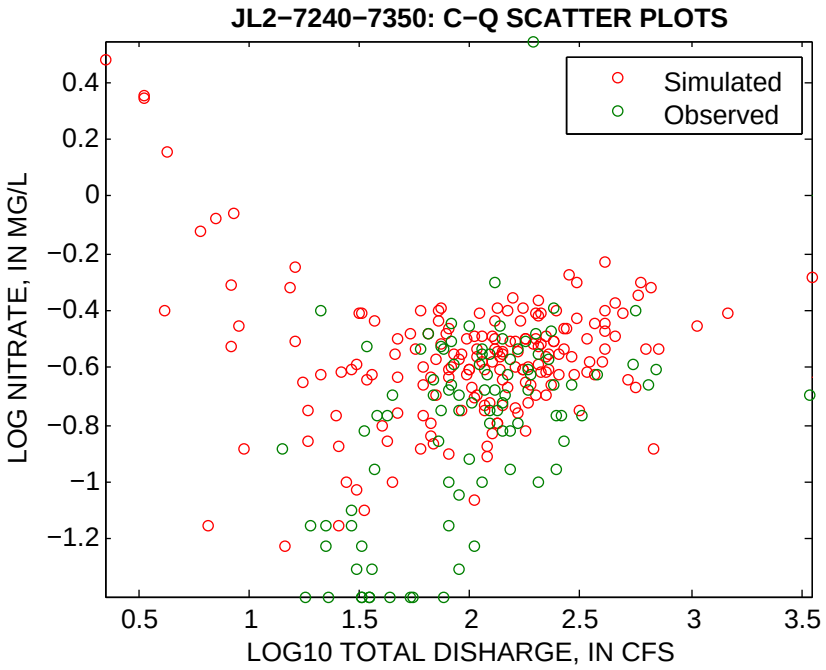
STATISTICS

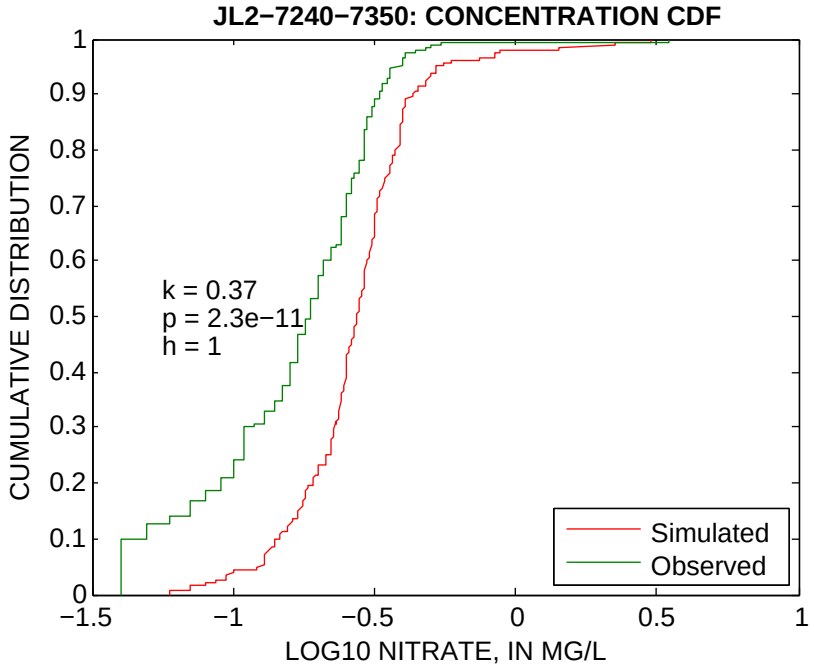
	n	183	183
		observe	simulate
min		0.04	0.055742
		-1.39794	-1.25382
mean		0.210383	0.374729
		-0.793225	-0.51714
media		0.19	0.31305
		-0.721246	-0.504386
max		3.5	3.1672
		0.544068	0.500675
varian		0.0711685	0.126632
		0.097189	0.0678549
JB		0.001	0.001
		0.019951	0.001
		ra	log
%		78.1179	-34.8054
err.va		0.234357	0.269769
rel.std.err		3.29298	2.77572
mod.eff		-2.29298	-1.77572

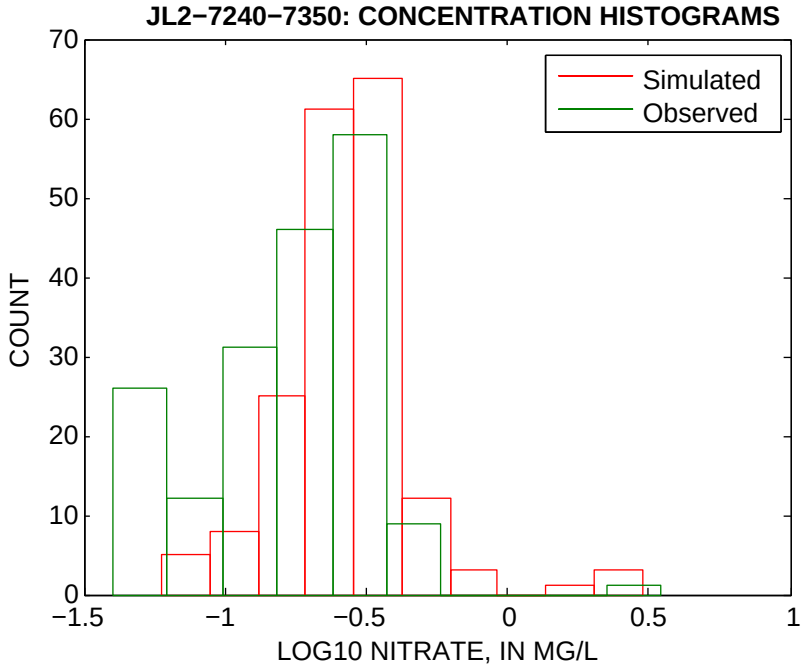
VERSION 2.1

ALL DATA
LOG10

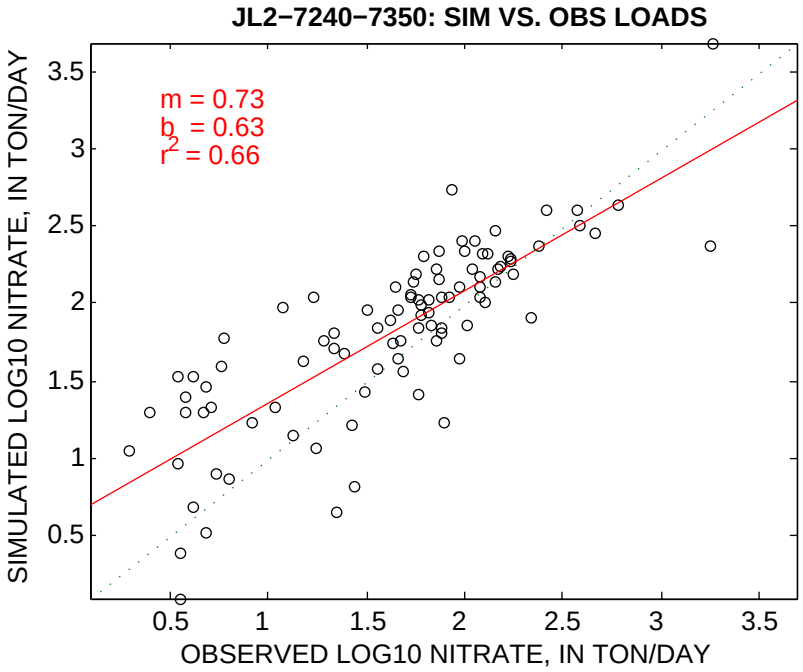


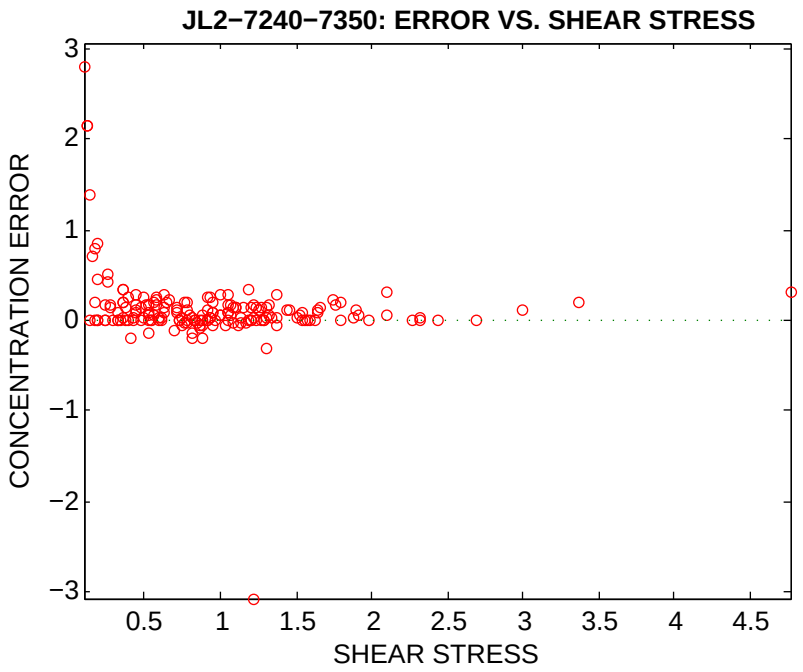


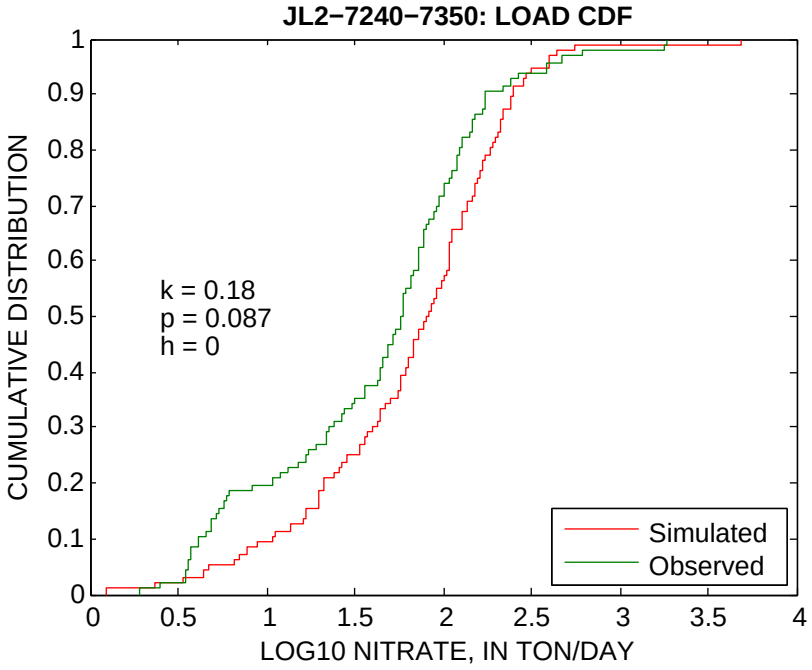


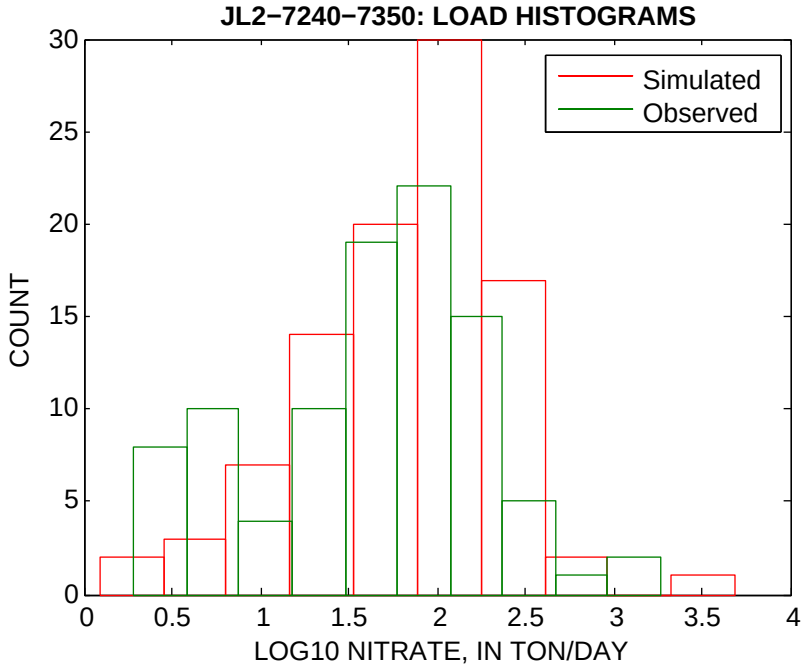


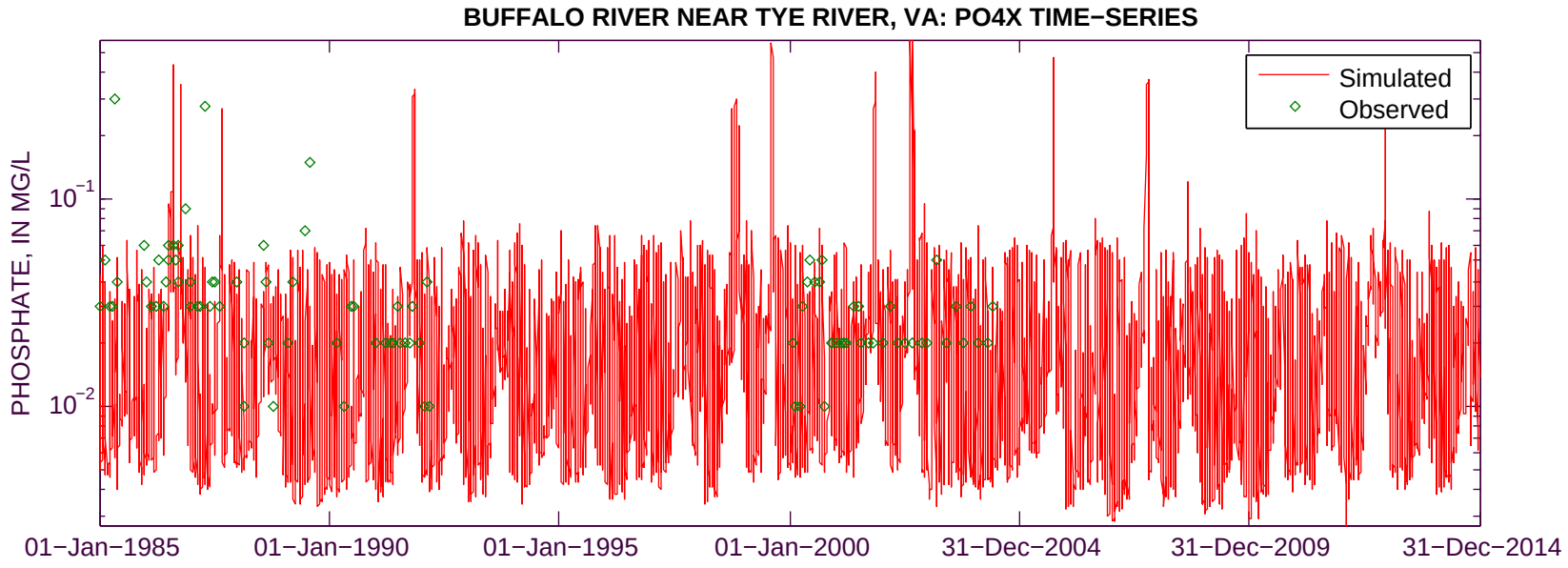
LOAD DATA
LOG10

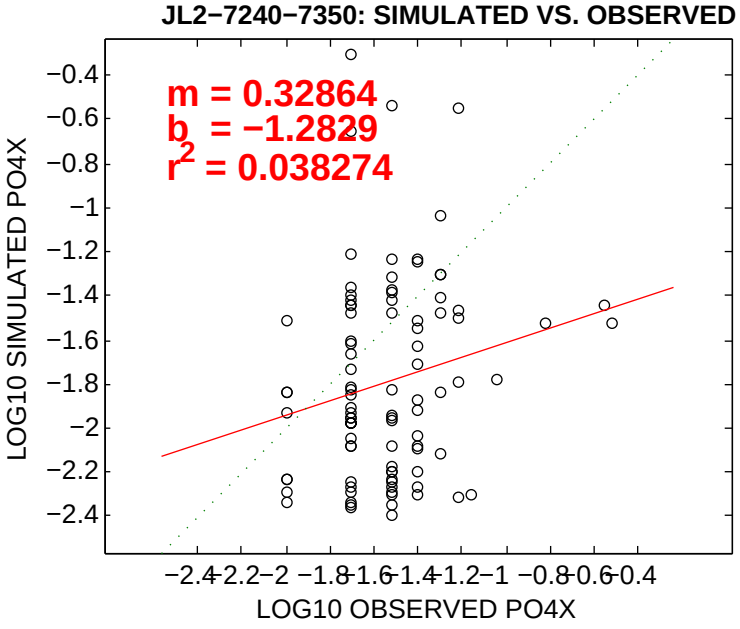


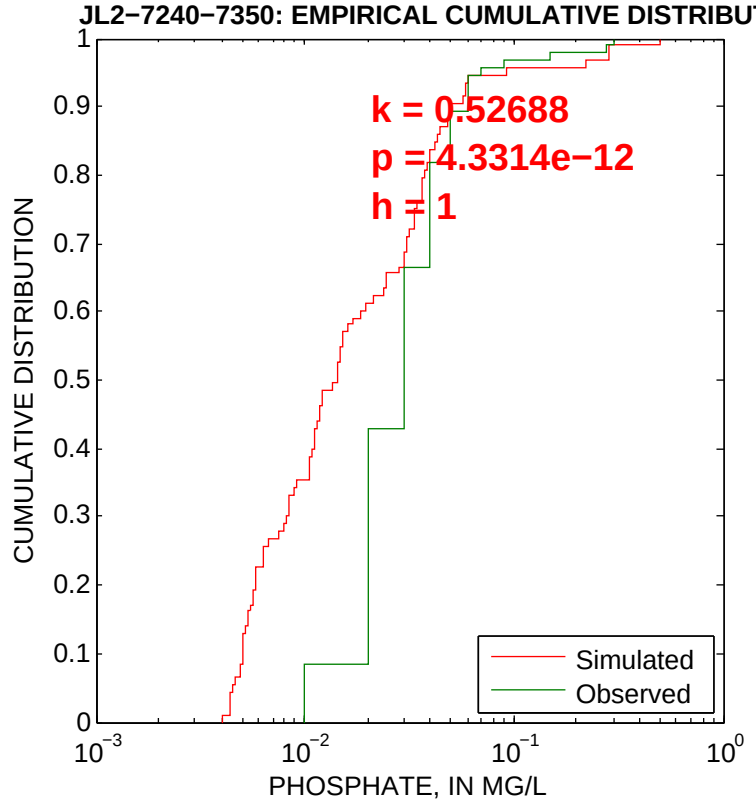












DATA SELECTION

scenario	file
P620171001WQ	PO4X.calib

plot: PO4X - phosphate

Dates: 1/1/1985 – 12/31/201

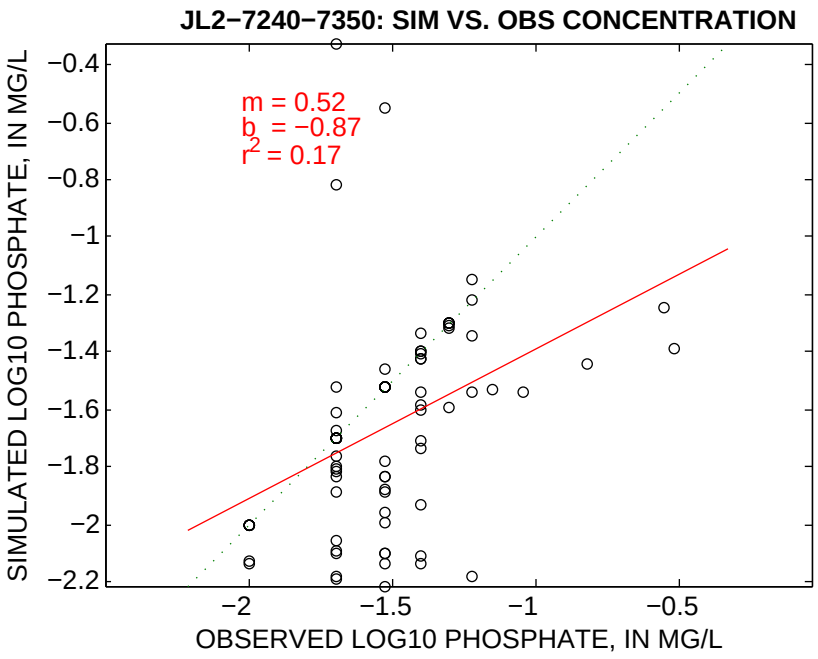
Drive	Directory	Observed
N/A	model	OBS20161101

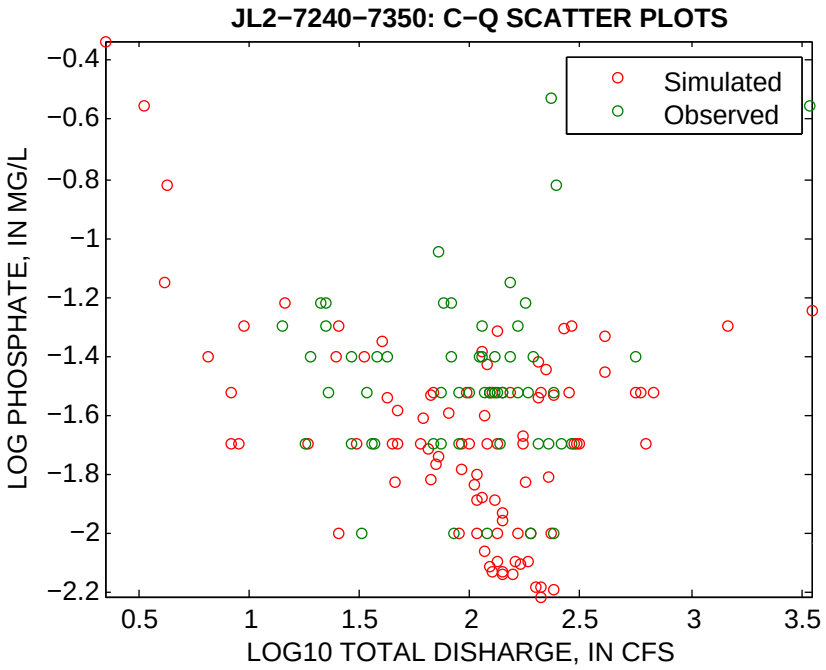
STATISTICS

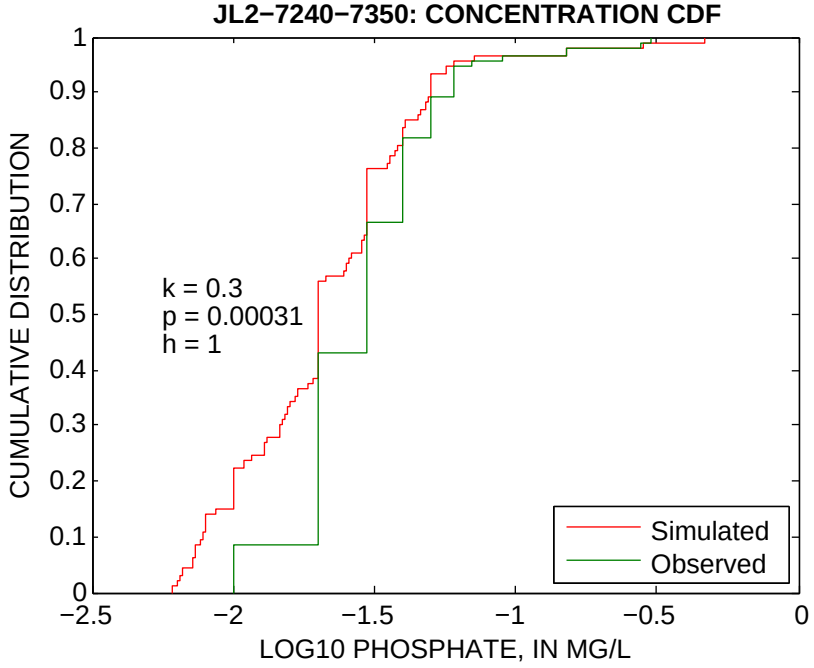
	n	93	93
		observe	simulate
min		0.01	0.0040284
		-2	-2.39487
mean		0.0374194	0.0332725
		-1.53504	-1.78741
media		0.03	0.014204
		-1.52288	-1.84759
max		0.3	0.49986
		-0.522879	-0.301152
varian		0.00179327	0.00459492
		0.0718305	0.202694
JB		0.001	0.001
		0.001	0.006877
		ra	log
%		-11.0821	16.4412
err.va		0.00631753	0.291699
rel.std.err		3.52292	4.06093
mod.eff		-2.52292	-3.06093

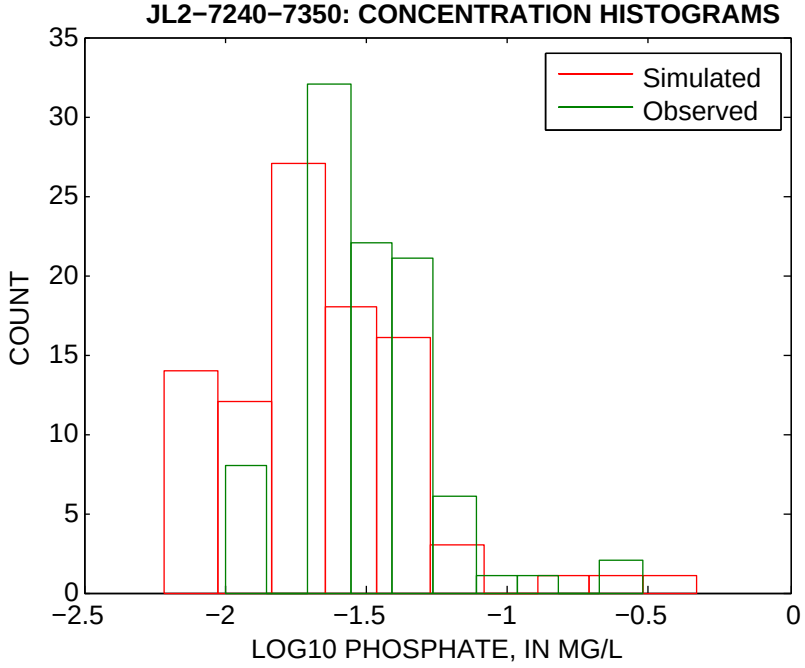
VERSION 2.1

ALL DATA
LOG10

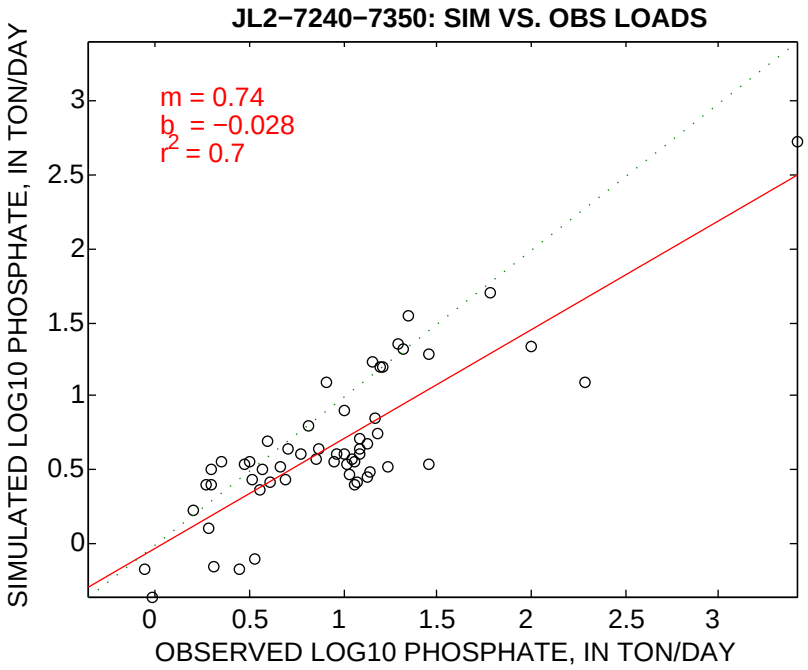




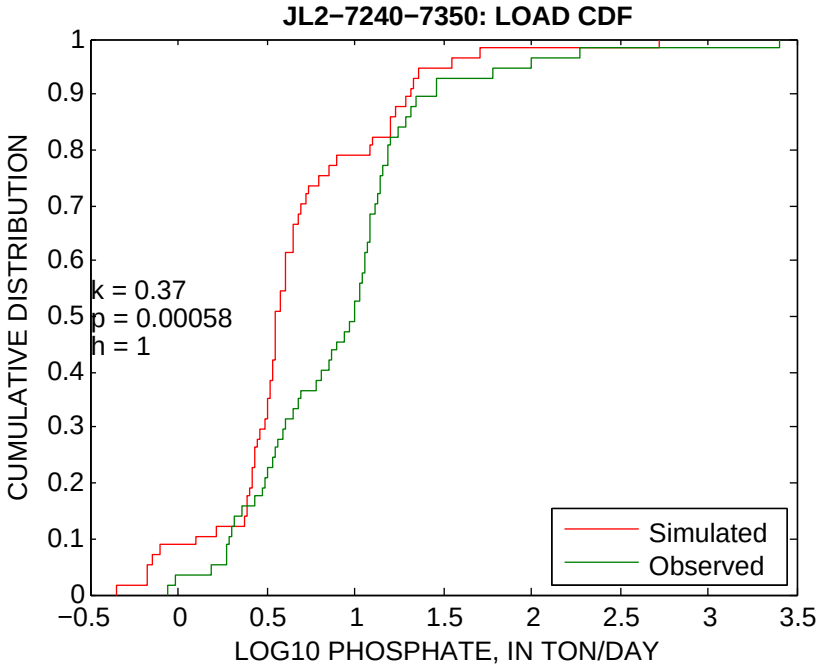


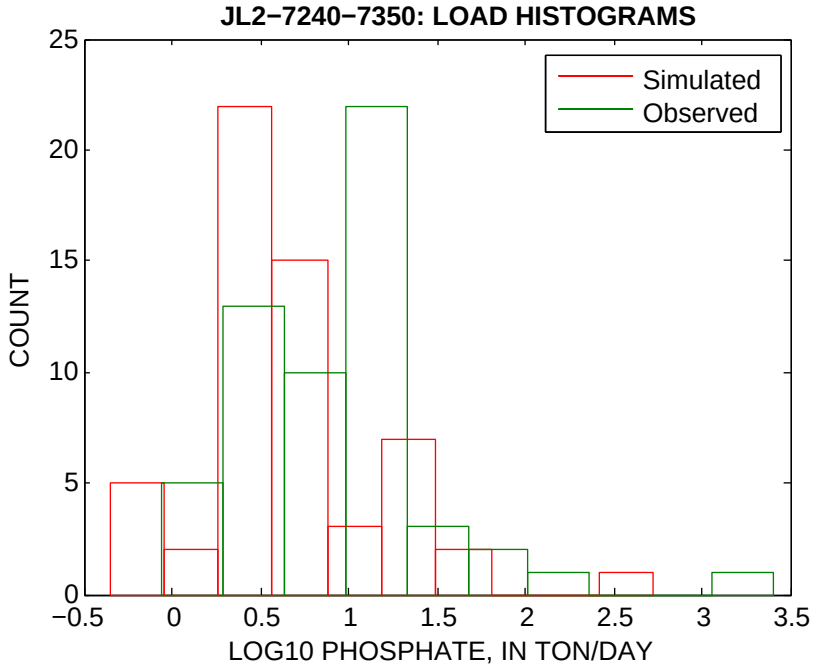


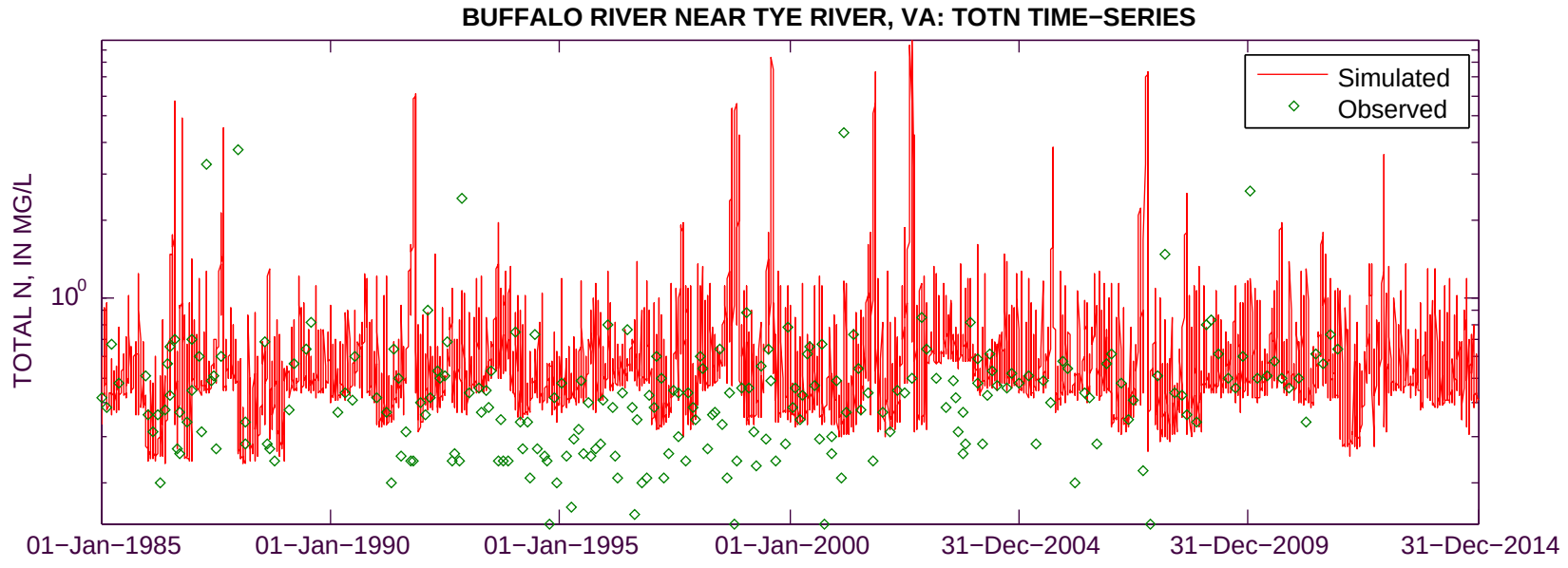
LOAD DATA
LOG10

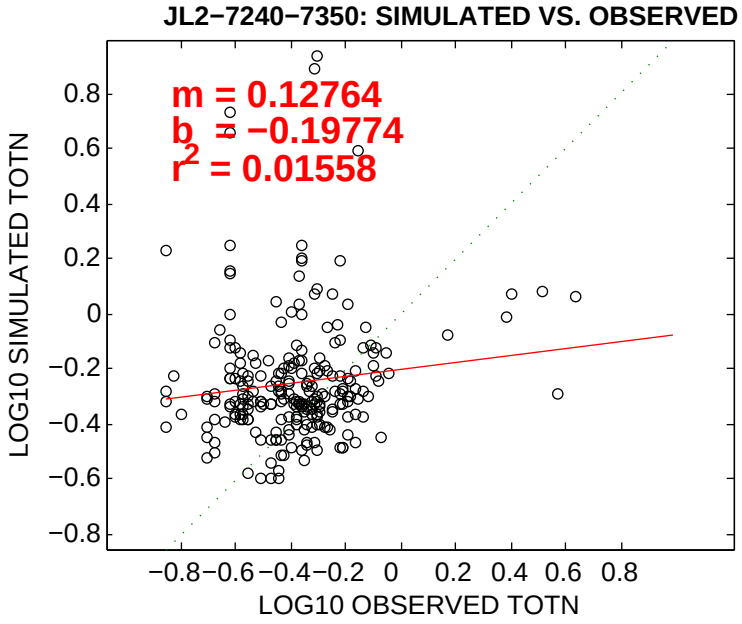


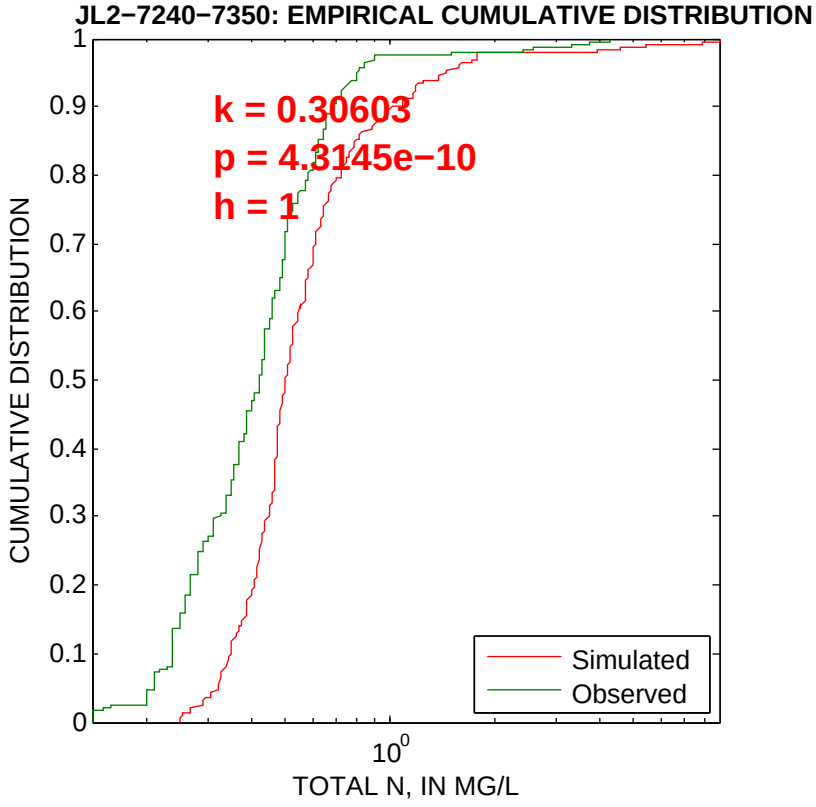












DATA SELECTION

scenario	file
P620171001WQ	TOTN.calib

plot: TOTN - total nitrogen

Dates: 1/1/1985 – 12/31/201

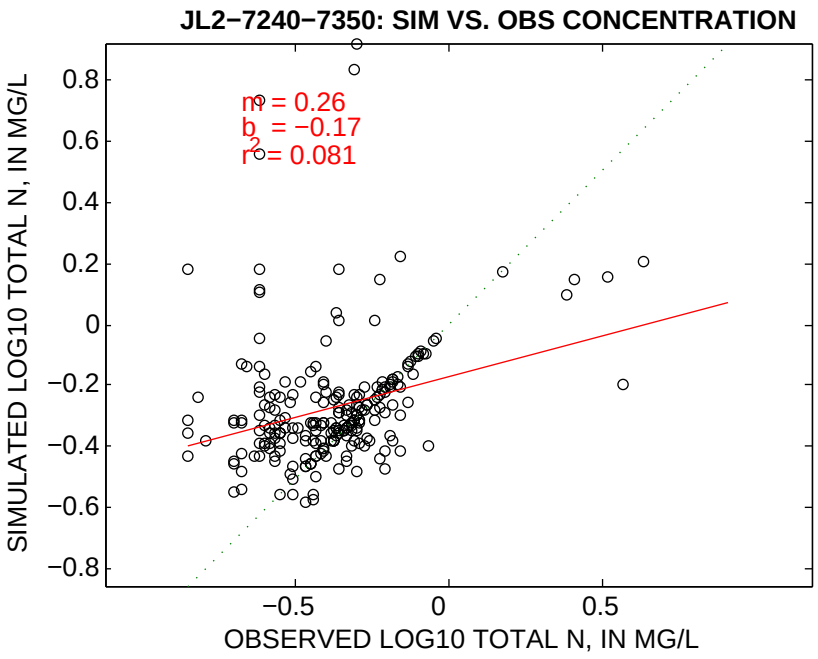
Drive	Directory	Observed
N/A	model	OBS20161101

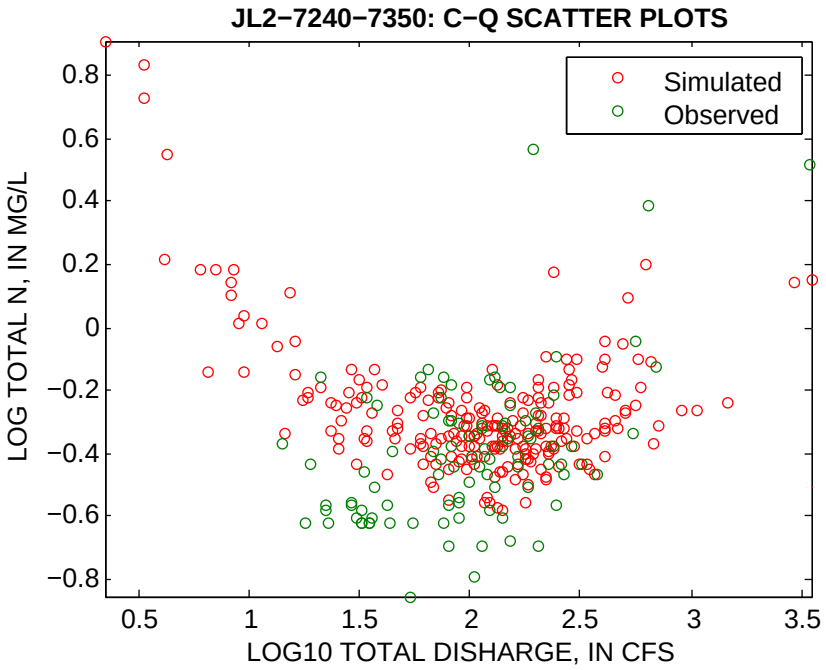
STATISTICS

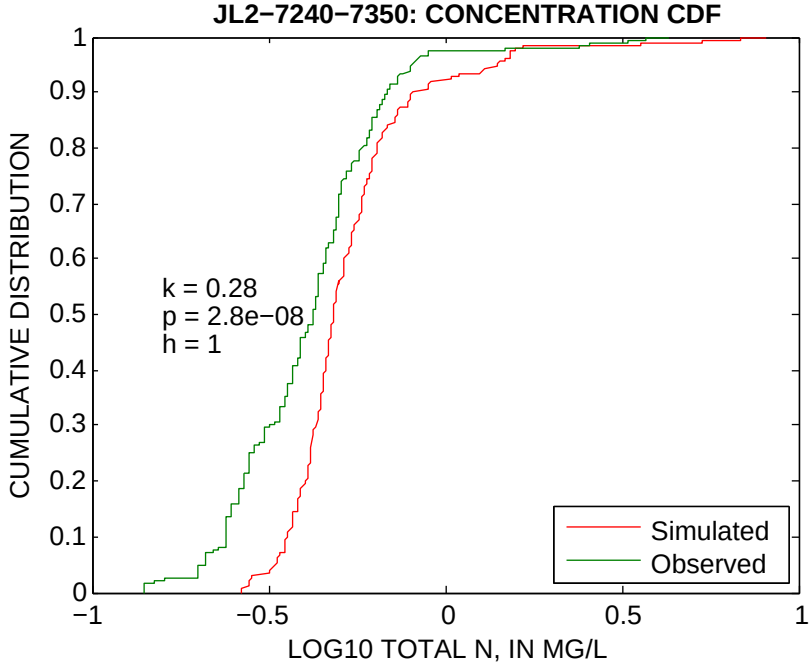
	n	232	232
		observe	simulate
min		0.14	0.25263
		-0.853872	-0.597515
mean		0.491897	0.704924
		-0.381668	-0.246453
media		0.42	0.50154
		-0.376751	-0.299695
max		4.29	8.7273
		0.632457	0.94088
varian		0.210775	0.79742
		0.0485842	0.0508087
JB		0.001	0.001
		0.001	0.001
		ra	log
%		43.3074	-35.4275
err.va		1.01164	0.105352
rel.std.err		4.79964	2.16845
mod.eff		-3.79964	-1.16845

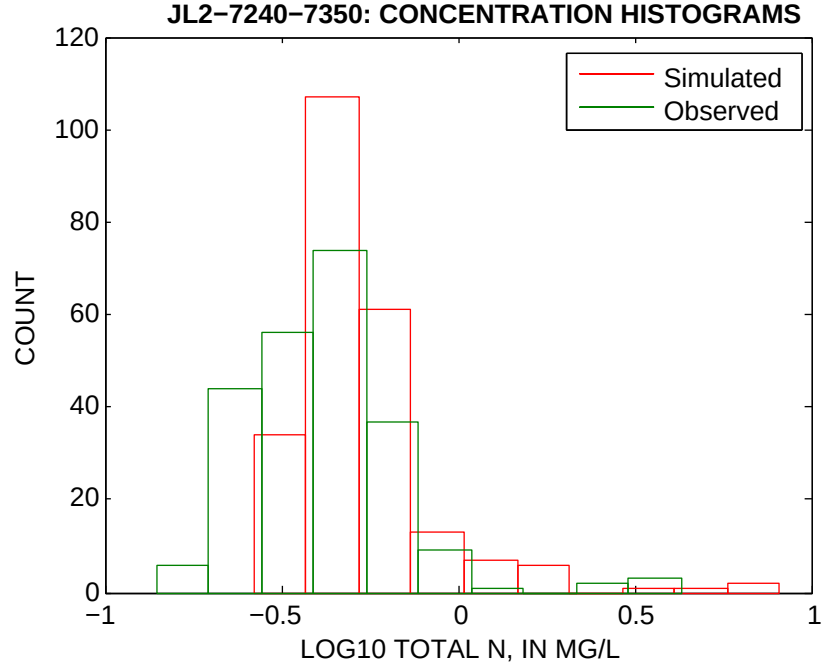
VERSION

ALL DATA
LOG10

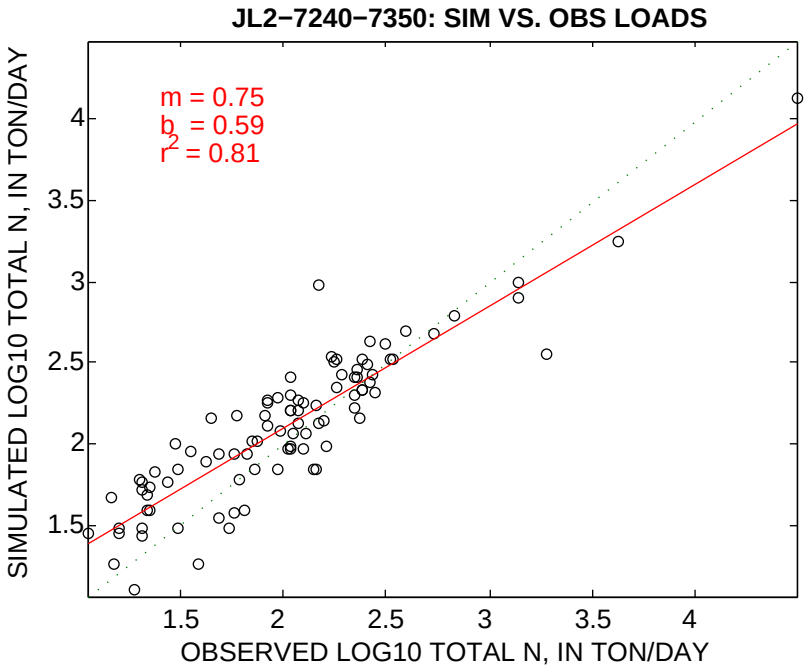


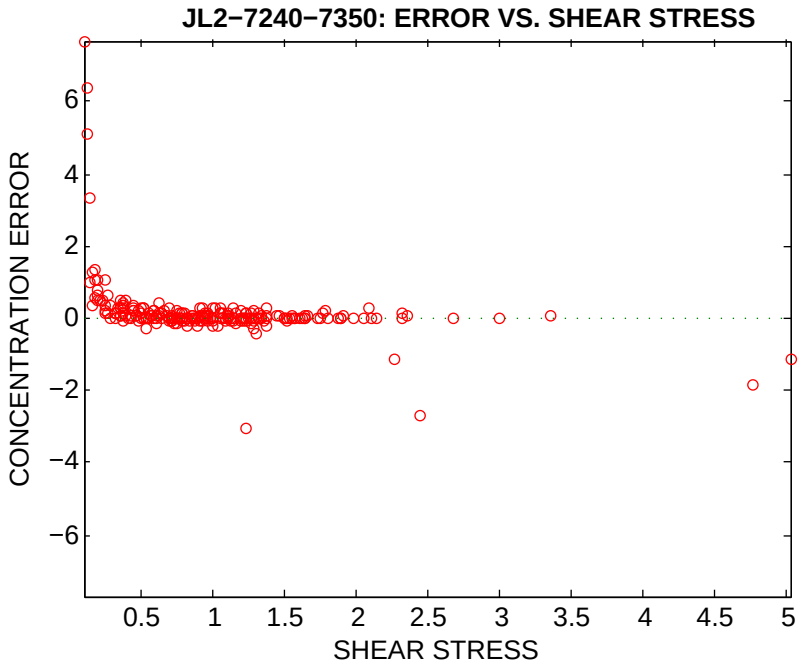


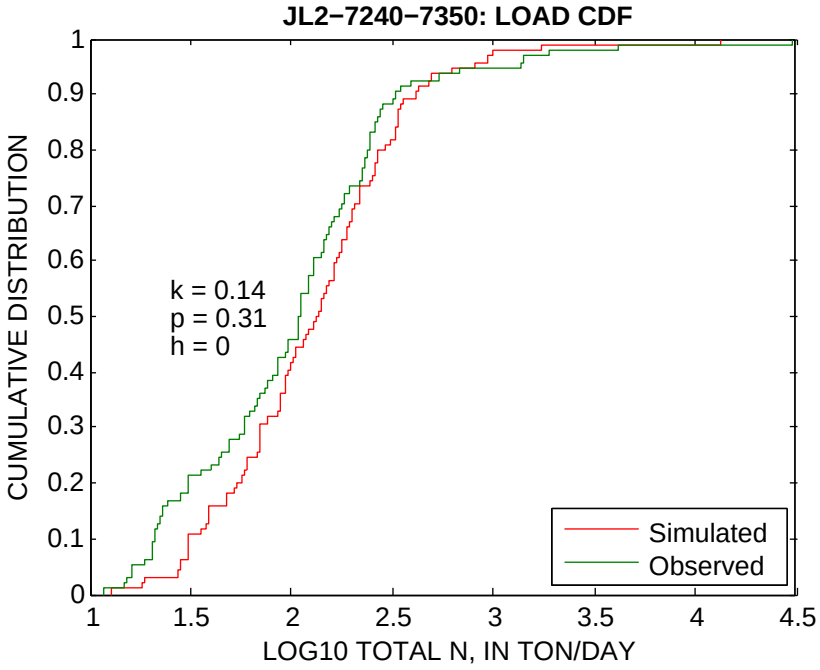


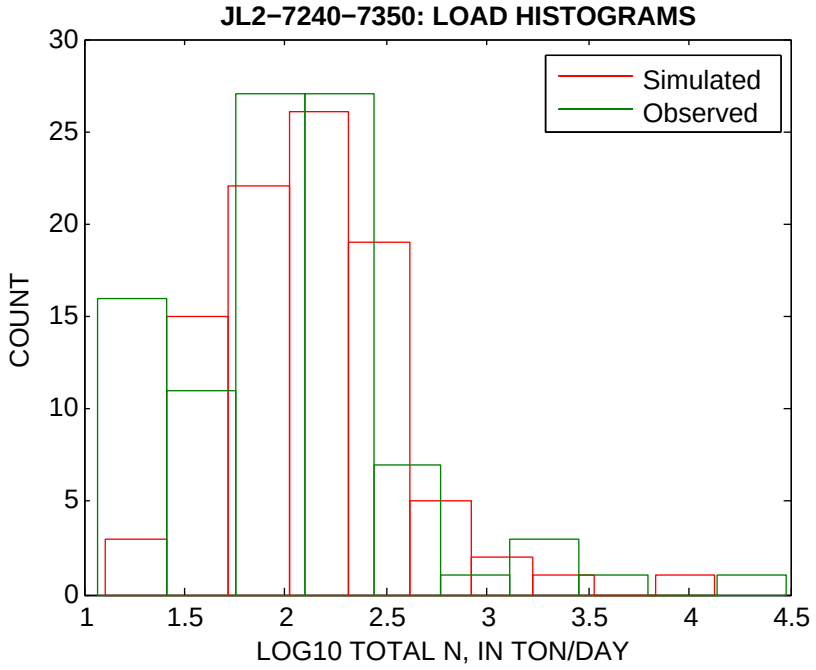


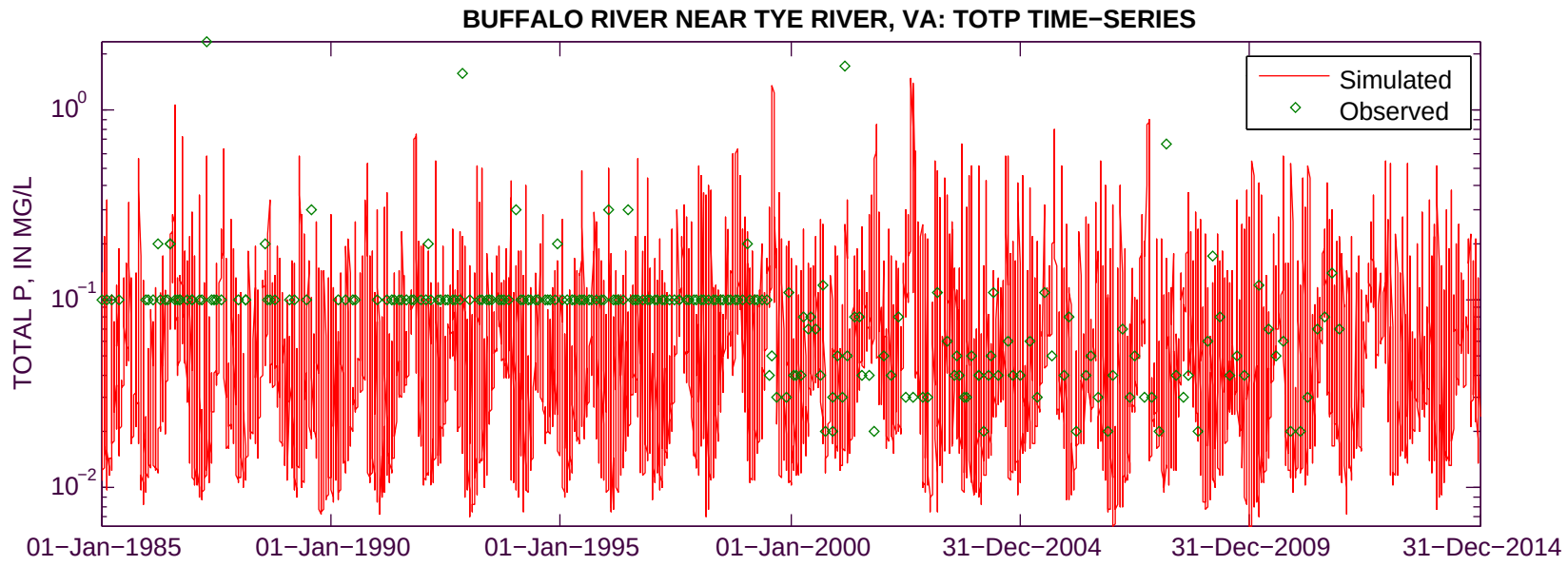
LOAD DATA
LOG10

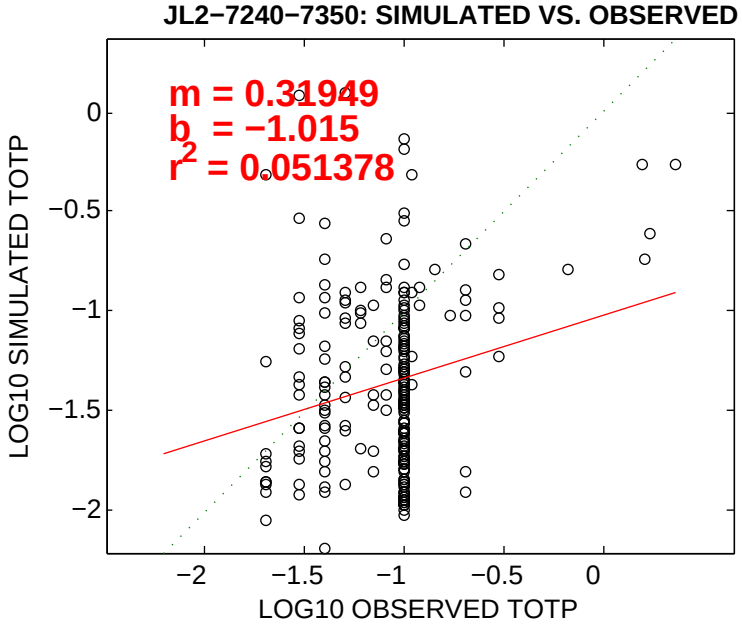


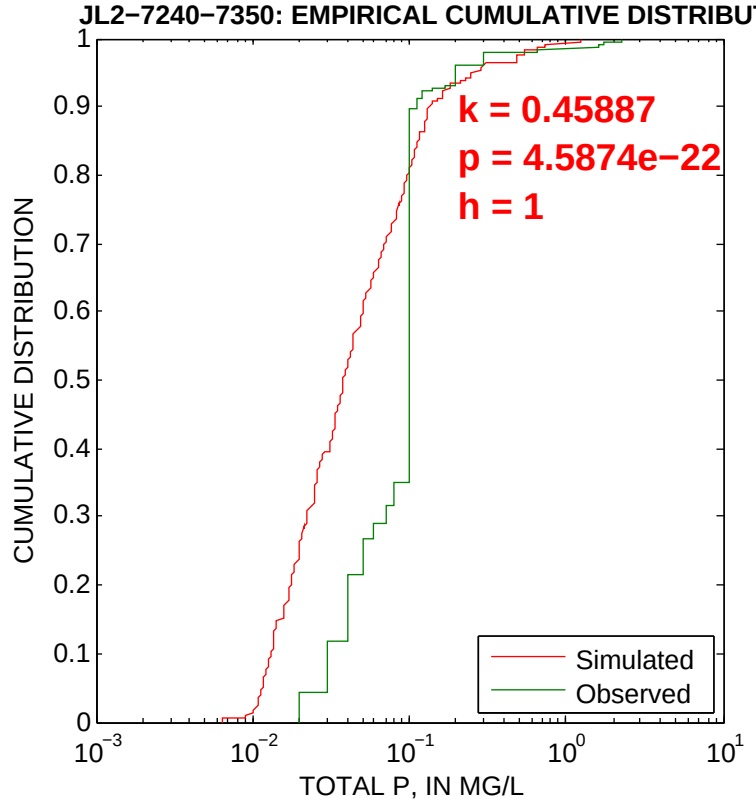












DATA SELECTION

scenario	file
P620171001WQ	TOTP.calib

plot: TOTP - total phosphorus

Dates 1/1/1985 12/31/201

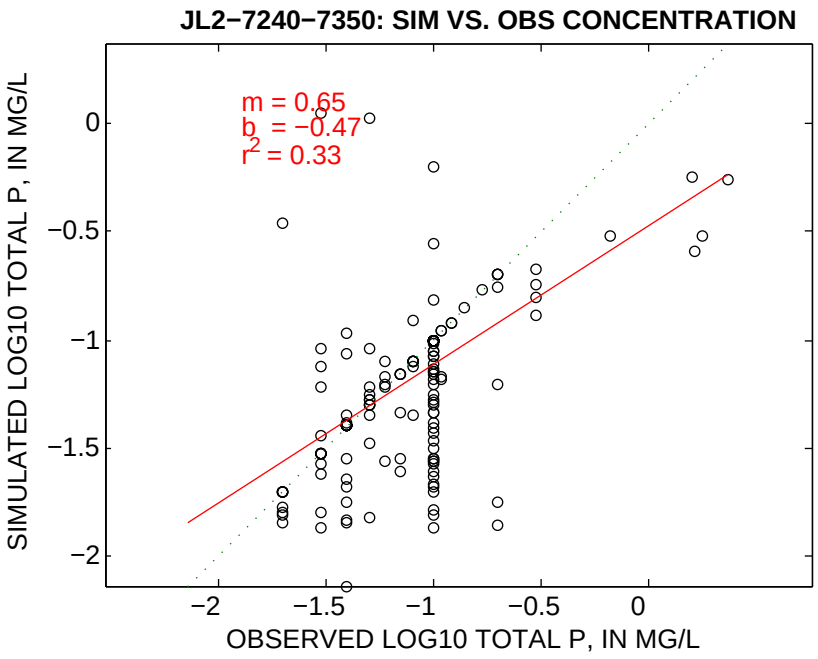
Drive	Directory	Observed
N/A	model	OBS20161101

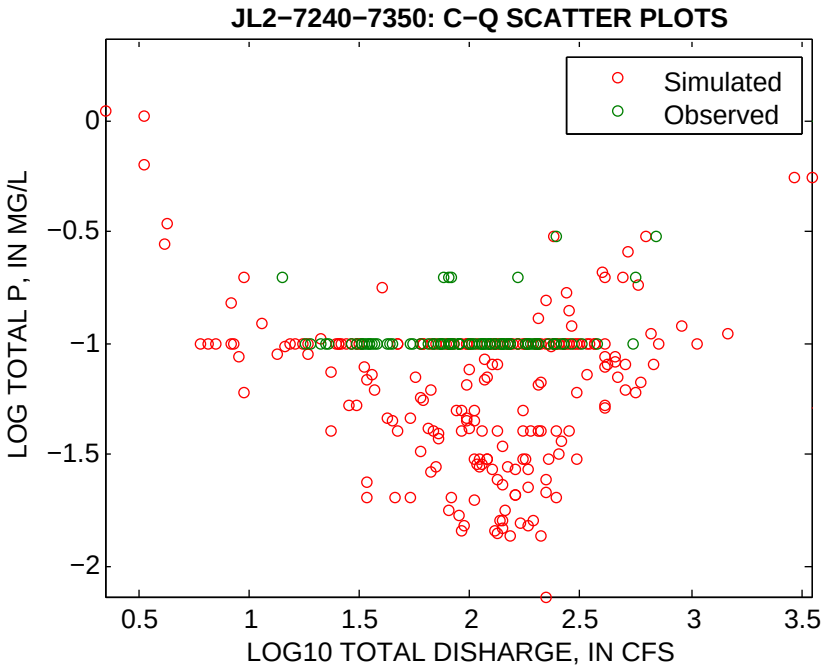
STATISTICS

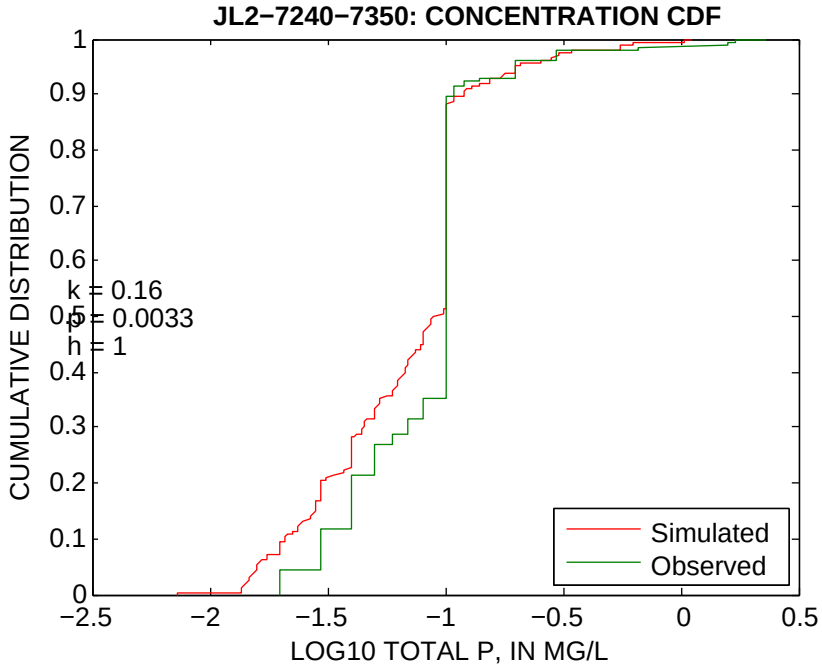
	n	observe	simulate
		231	231
min		0.02	0.0065149
		-1.69897	-2.18609
mean		0.11961	0.0803579
		-1.09058	-1.36346
media		0.1	0.038295
		-1	-1.41686
max		2.3	1.2441
		0.361728	0.0948553
varian		0.0548594	0.0214458
		0.0930597	0.184883
JB		0.001	0.001
		0.001	0.001350
		ra	log
%		-32.817	25.0211
err.va		0.0592826	0.293264
rel.std.err		1.08063	3.15136
mod.eff		-0.0806273	-2.15136

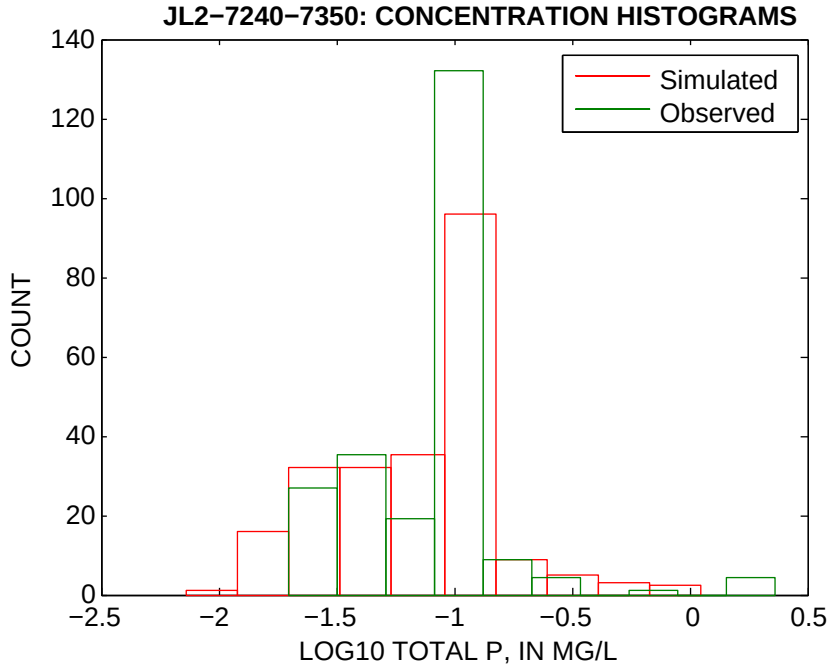
VERSION

ALL DATA
LOG10

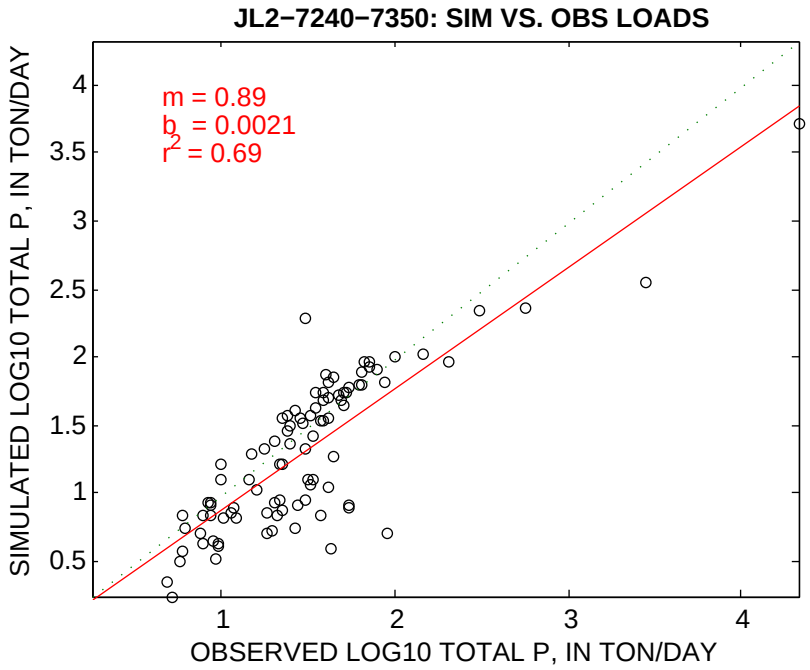




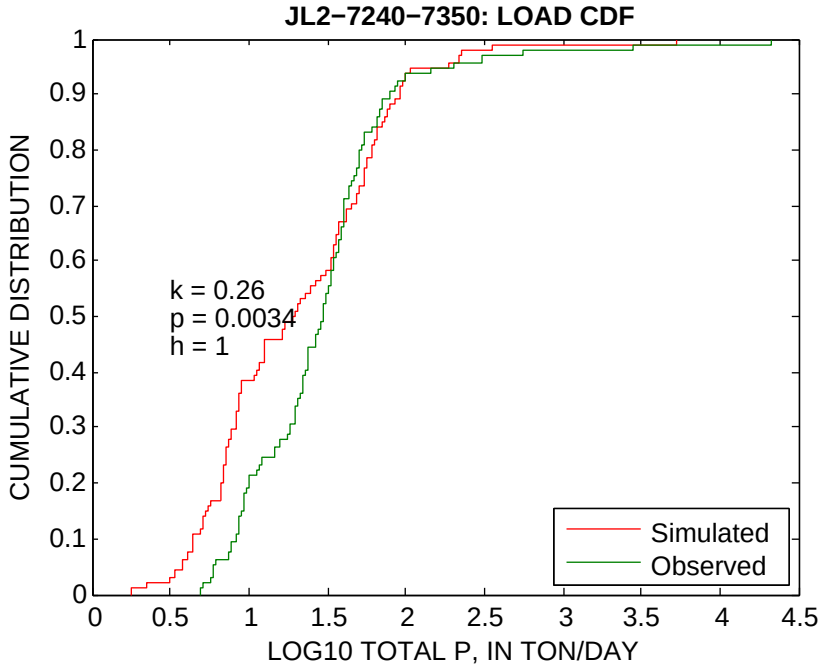


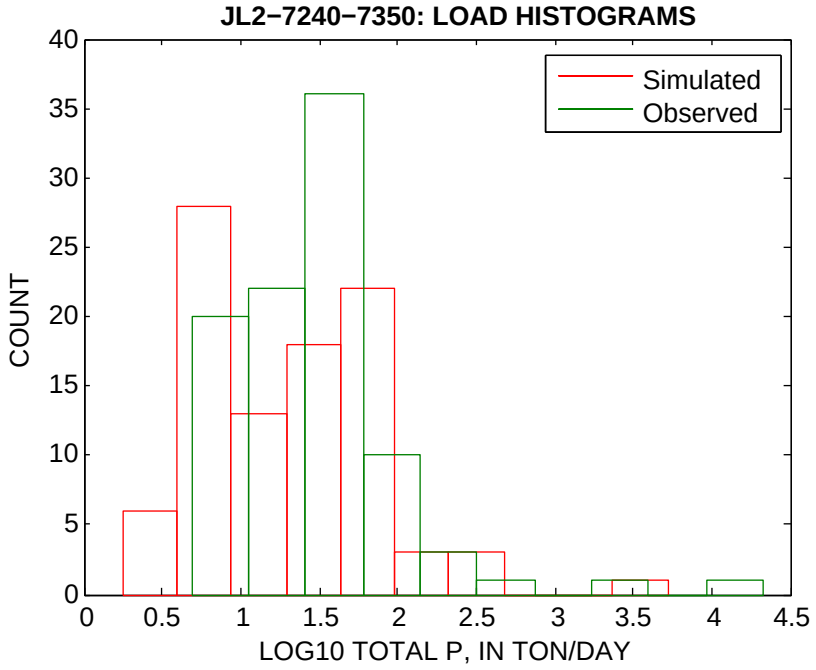


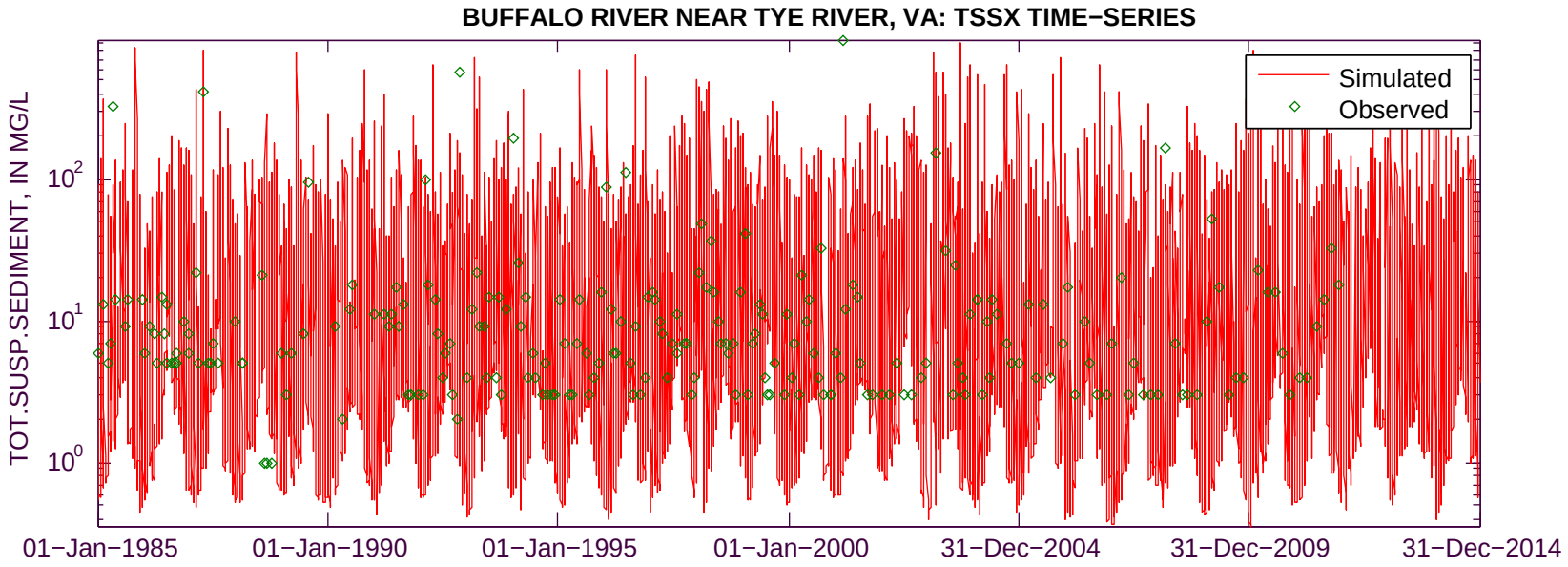
LOAD DATA
LOG10

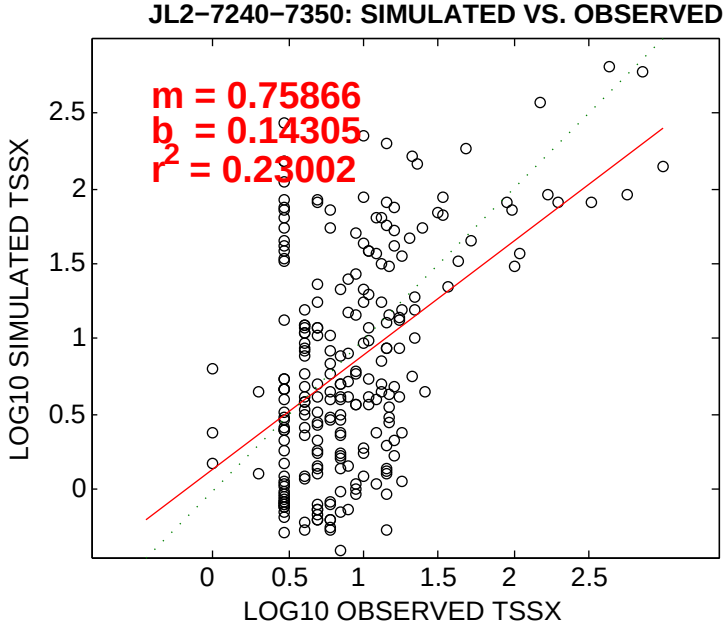


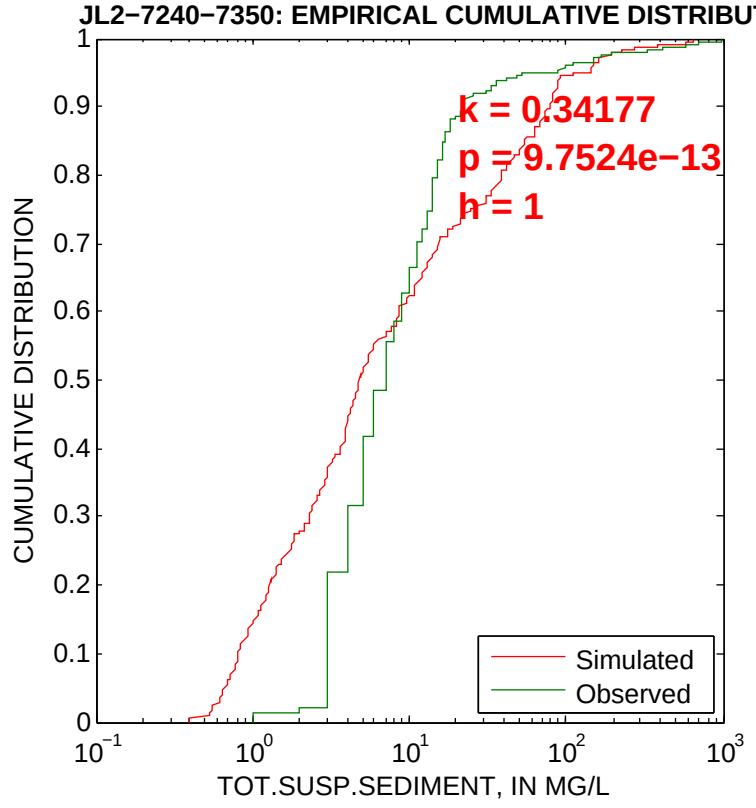












DATA SELECTION

scenario	file
P620171001WQ	TSSX.calib

plot: TSSX - total suspended ...

Dates: 1/1/1985 – 12/31/201

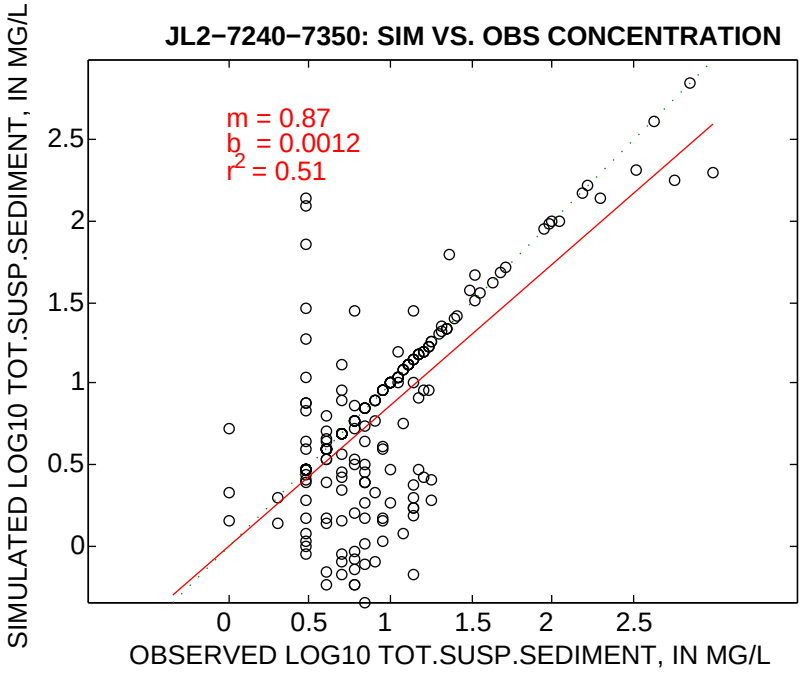
Drive	Directory	Observed
N/A	model	OBS20161101

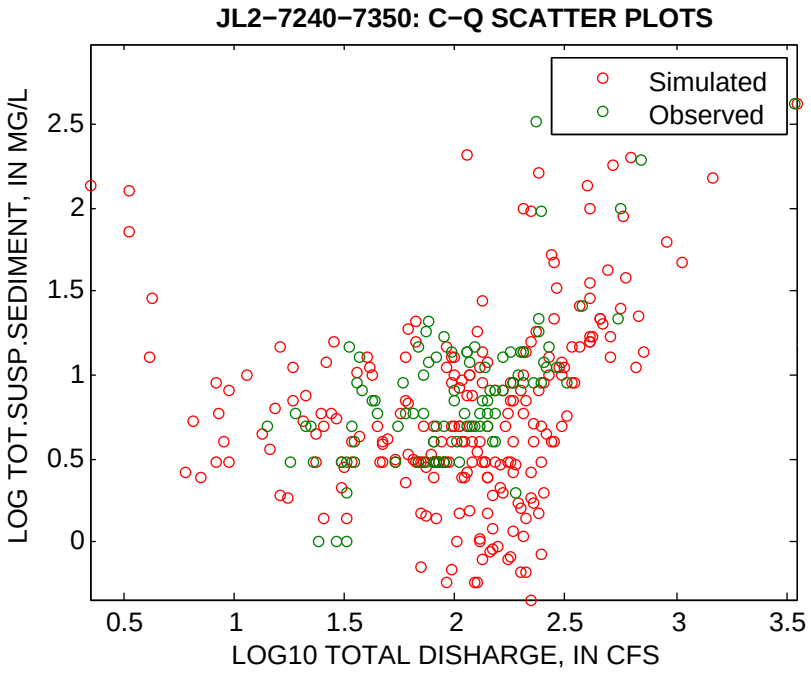
STATISTICS

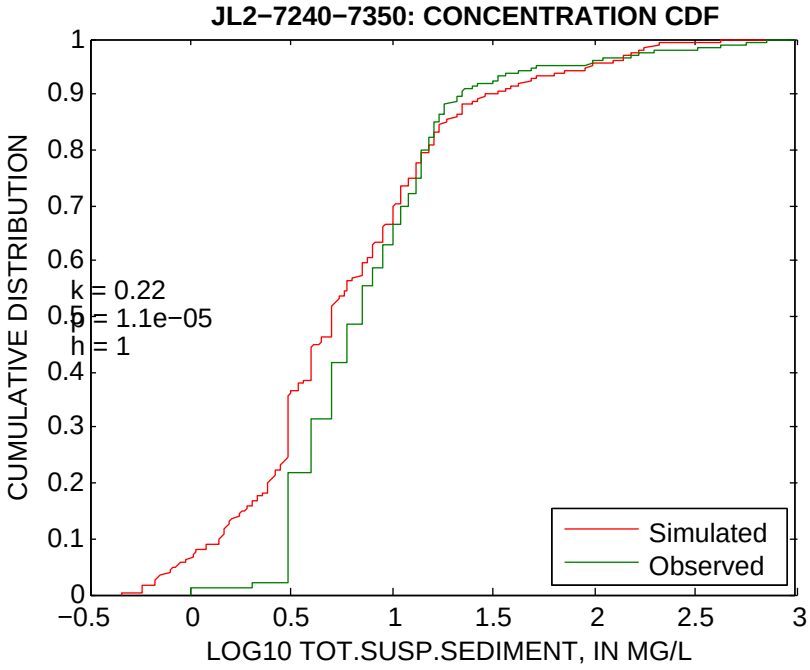
	n	observe	simulate
		237	237
min		1	0.39452
		0	-0.403931
mean		24.9367	29.2663
		0.908689	0.832435
media		7	4.9032
		0.845098	0.69048
max		972	639.65
		2.98767	2.80594
varian		8747.1	5099.27
		0.214703	0.537224
JB		0.001	0.001
		0.001	0.008221
		ra	log
%		17.3622	-8.39168
err.va		6255.25	0.431994
rel.std.err		0.715123	2.01206
mod.eff		0.284877	-1.01206

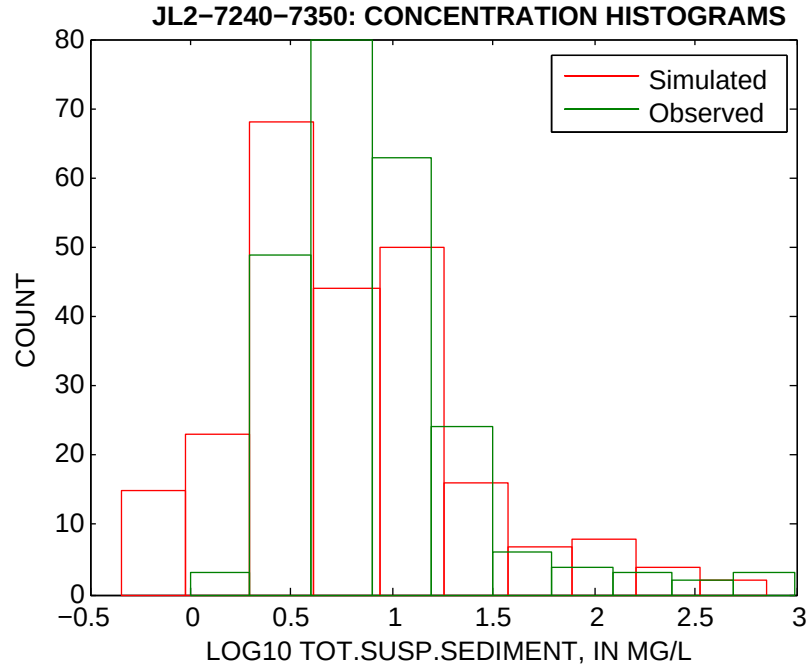
VERSION 2.1

ALL DATA
LOG10

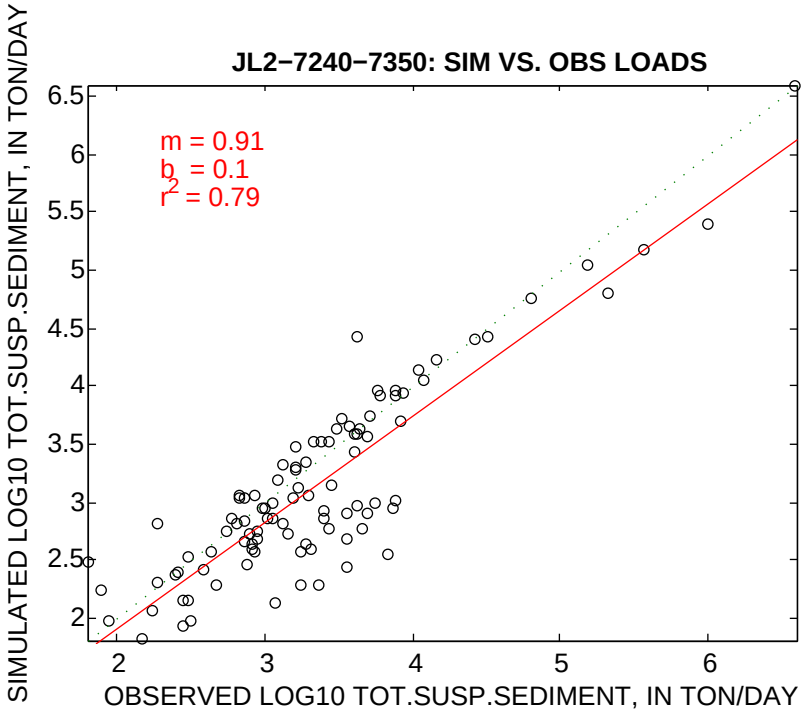


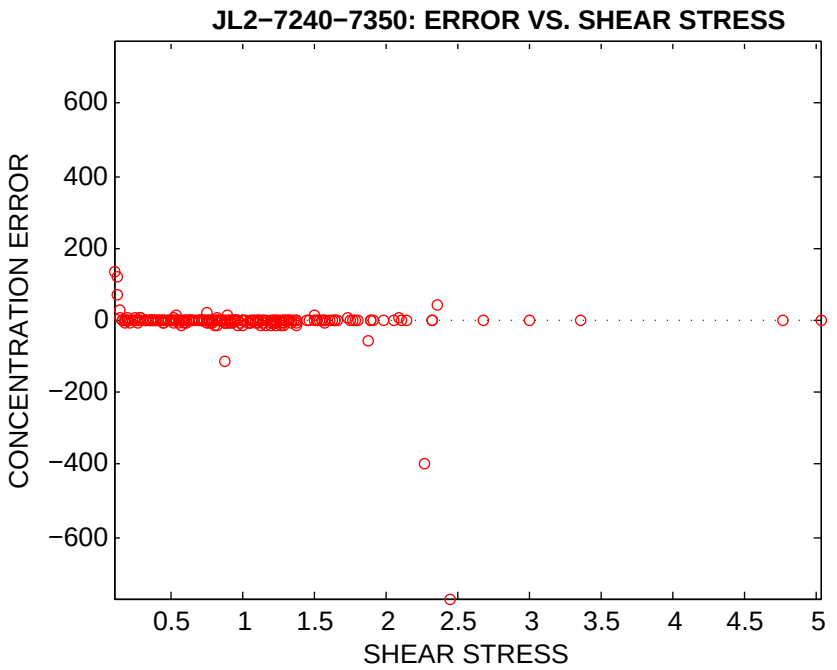


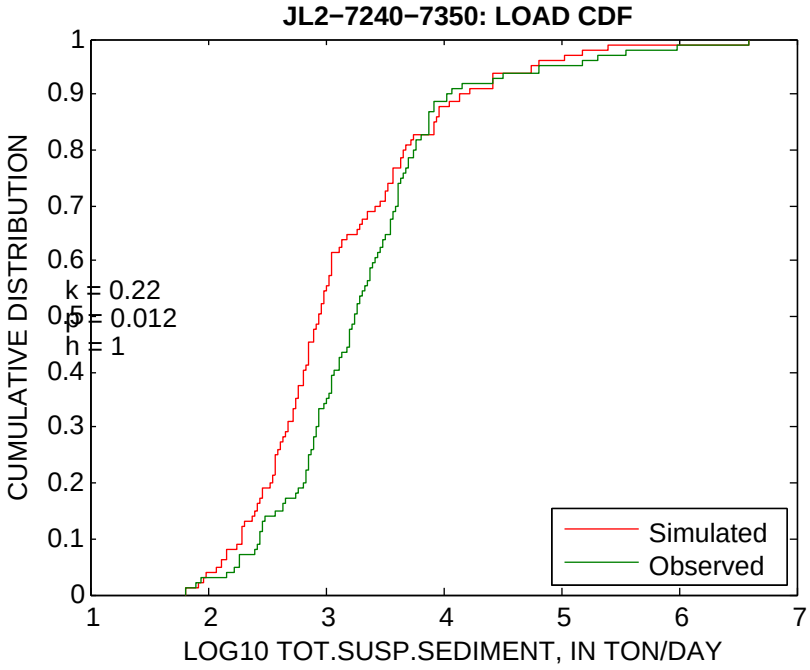


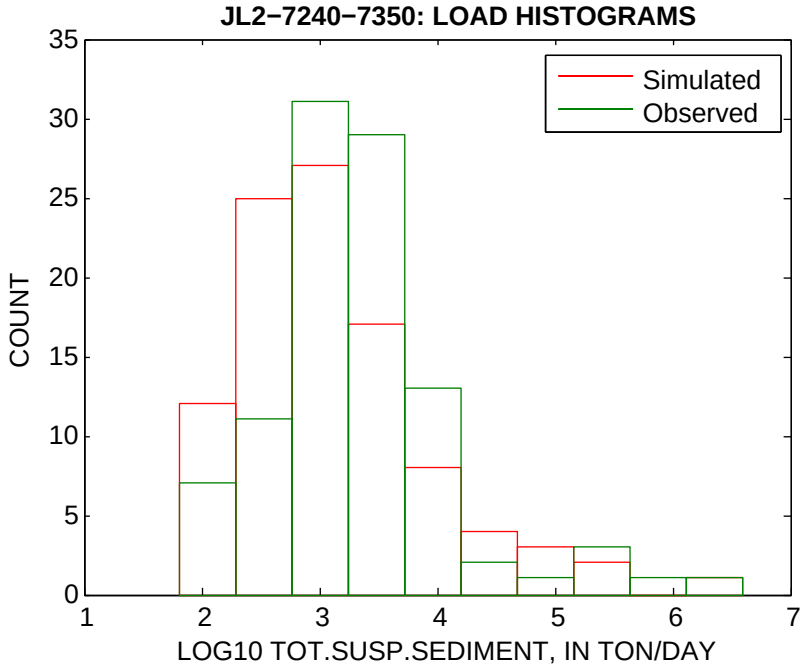


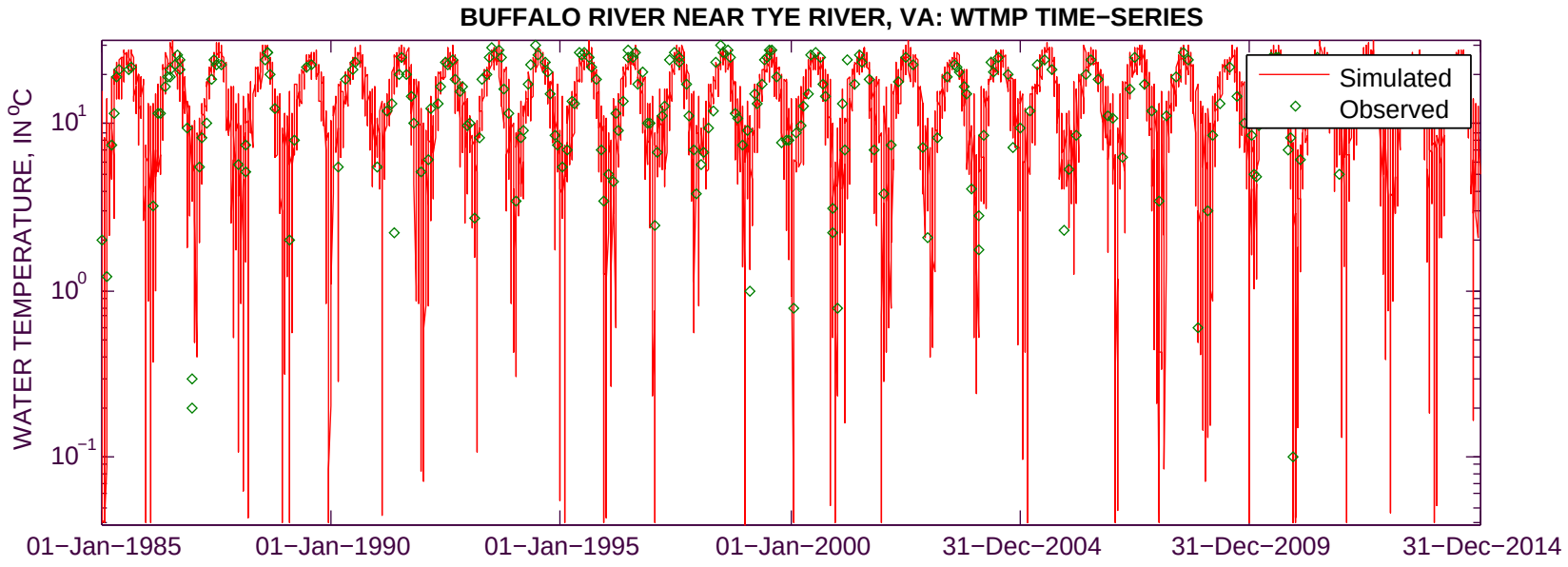
LOAD DATA
LOG10

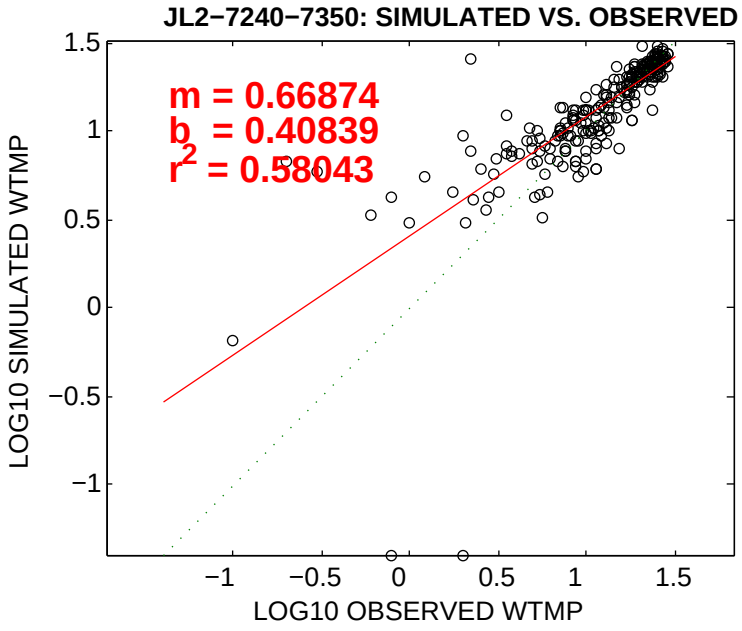


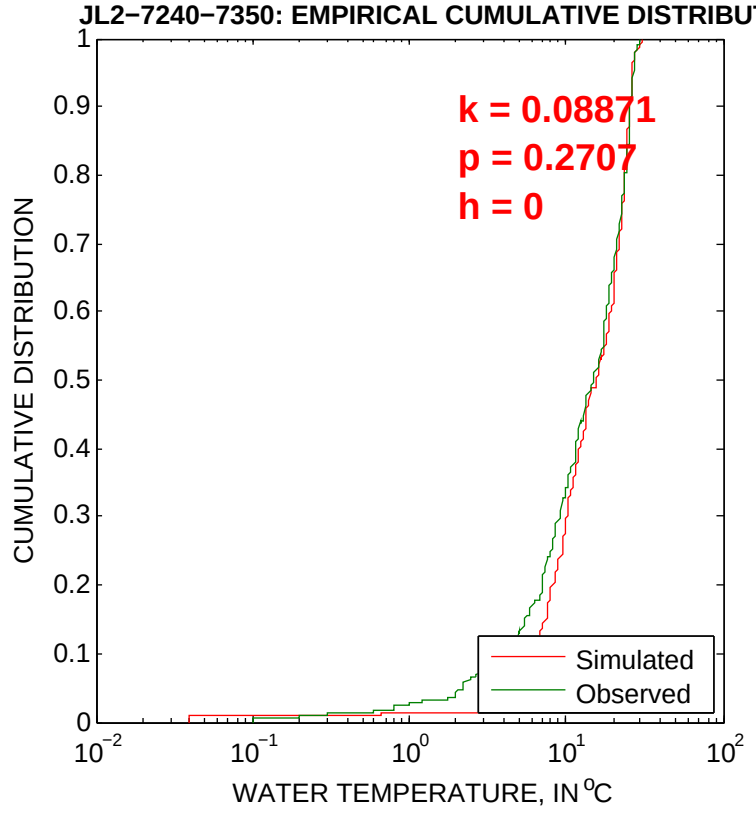












DATA SELECTION

scenario	file
P620171001WQ	WTMP.calib

plot: WTMP - water tempera...

Dates: 1/1/1985 — 12/31/201

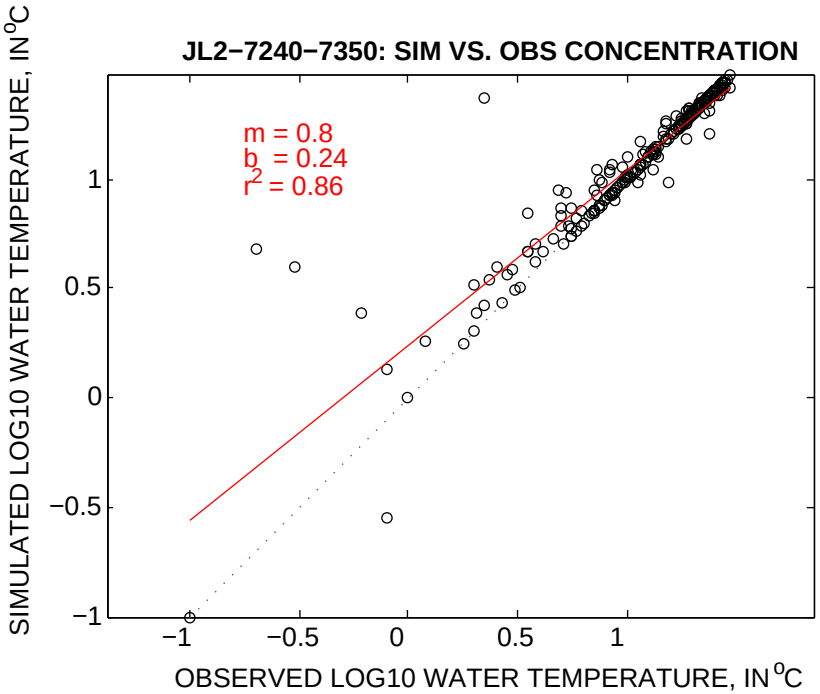
Drive	Directory	Observed
N/A	model	OBS20161101

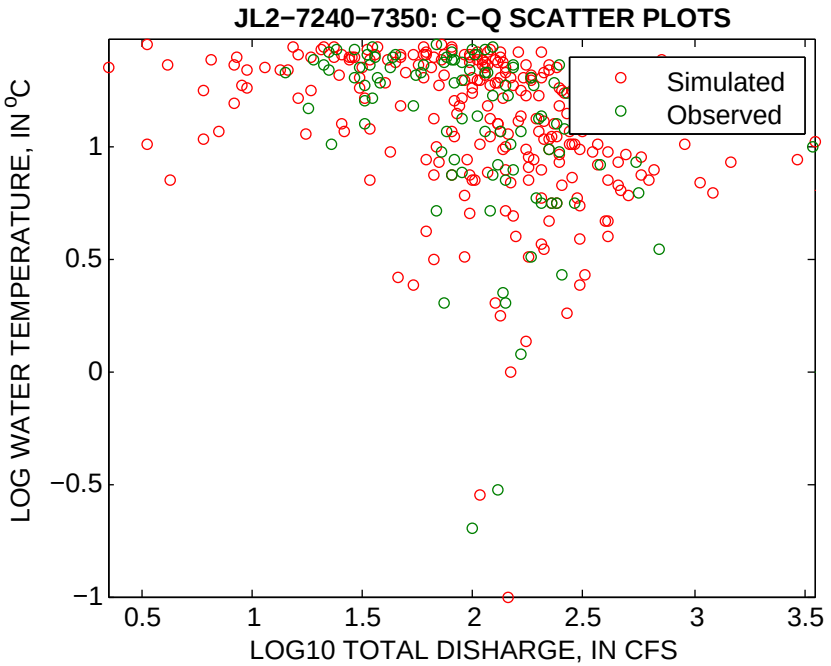
STATISTICS

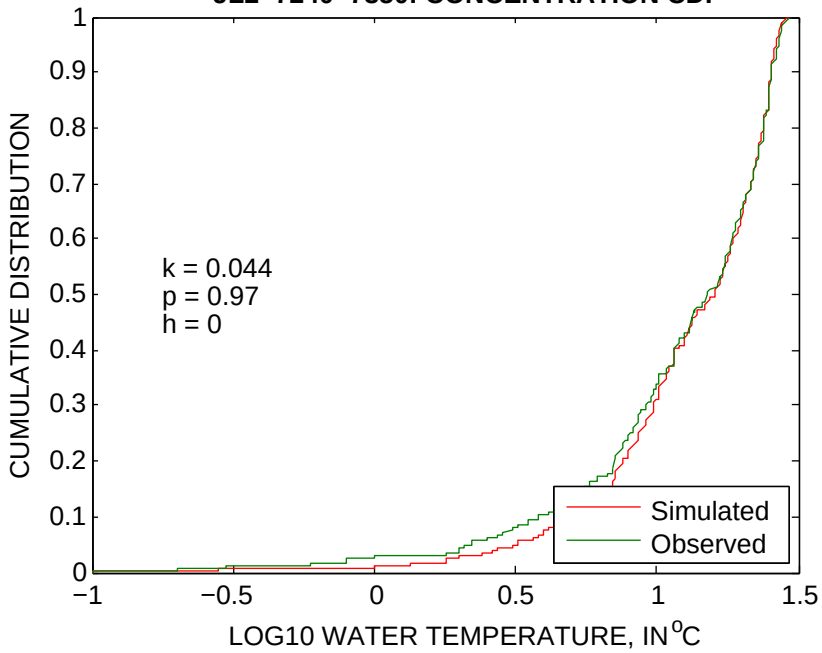
	n	observe	simulate
		248	248
min		0.1	0.040017
		-1	-1.39776
mean		15.0196	15.8281
		1.06589	1.12119
media		15	15.6615
		1.17609	1.19483
max		29.4	30.588
		1.46835	1.48555
varian		66.8016	56.7101
		0.150382	0.115867
JB		0.003924	0.004214
		0.001	0.001
		ra	log
%		5.38278	5.18846
err.va		11.9865	0.0681871
rel.std.err		0.179435	0.453427
mod.eff		0.820565	0.546573

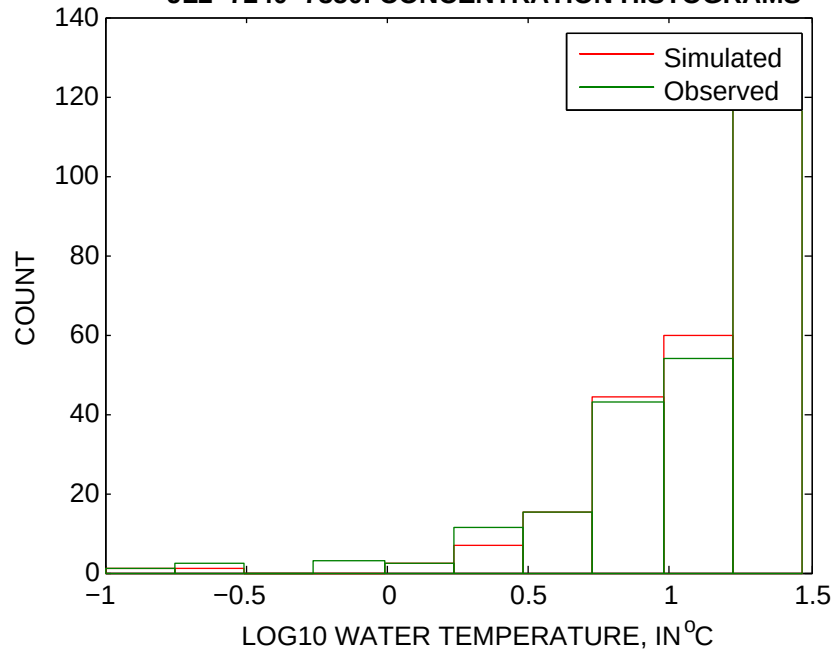
VERSION 2.1

ALL DATA
LOG10

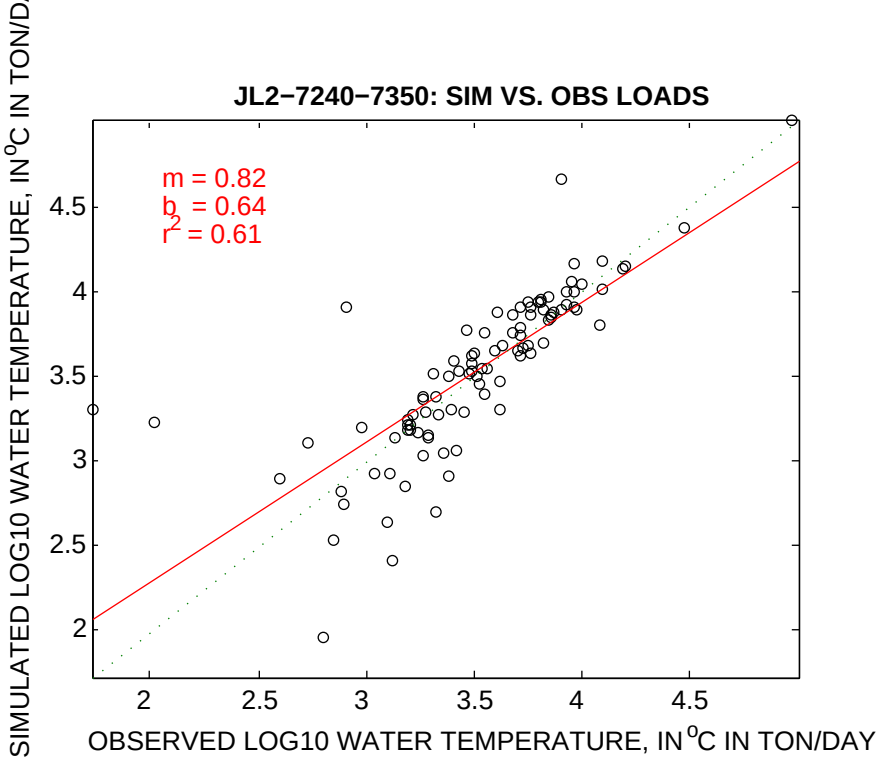


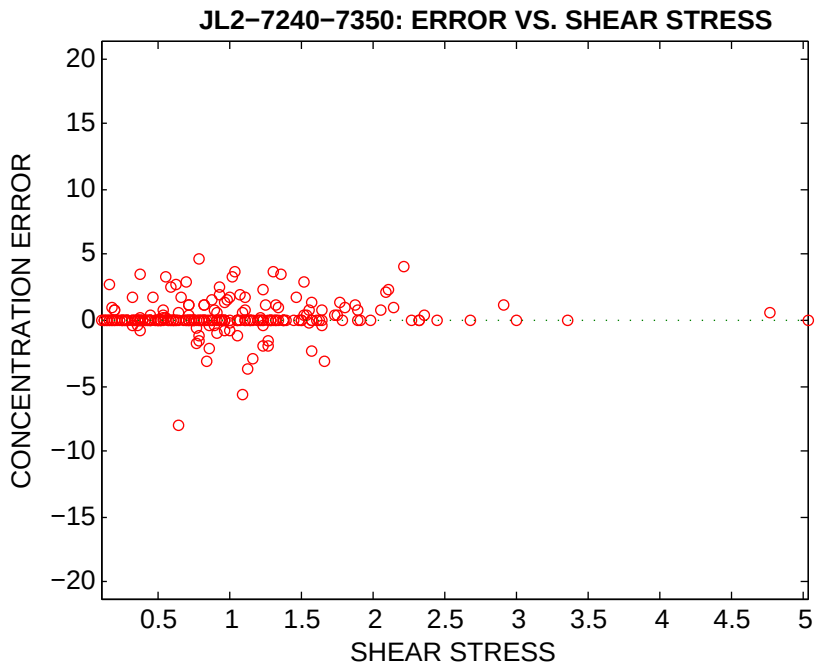


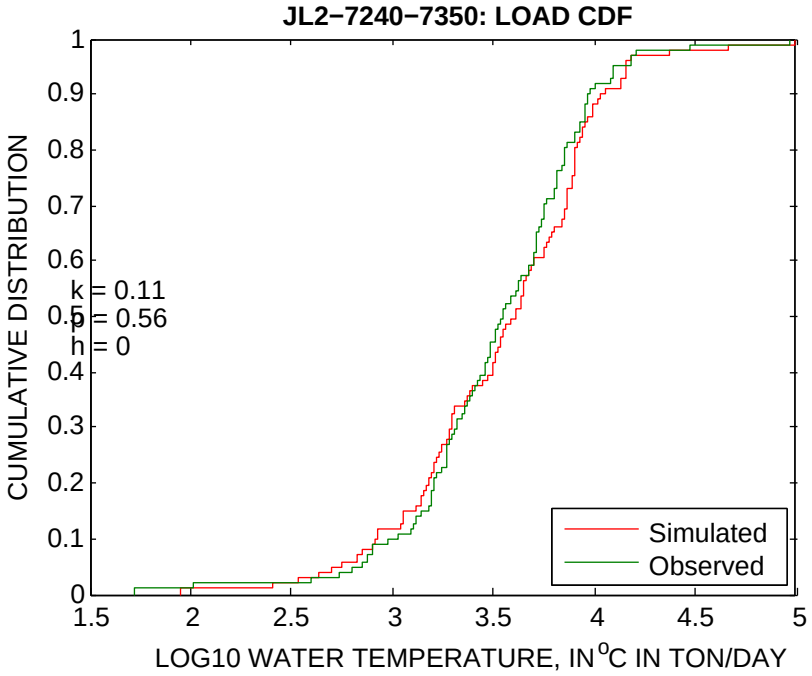


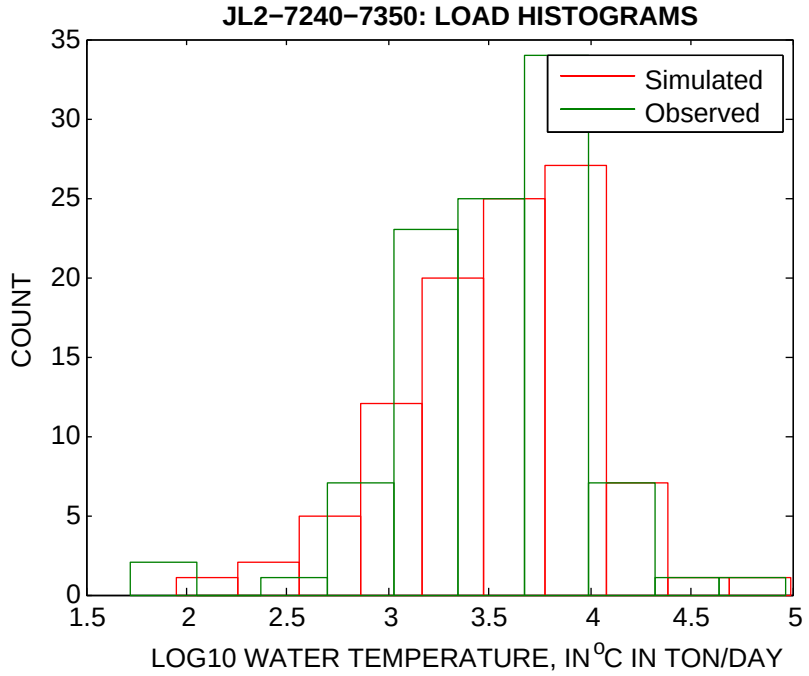


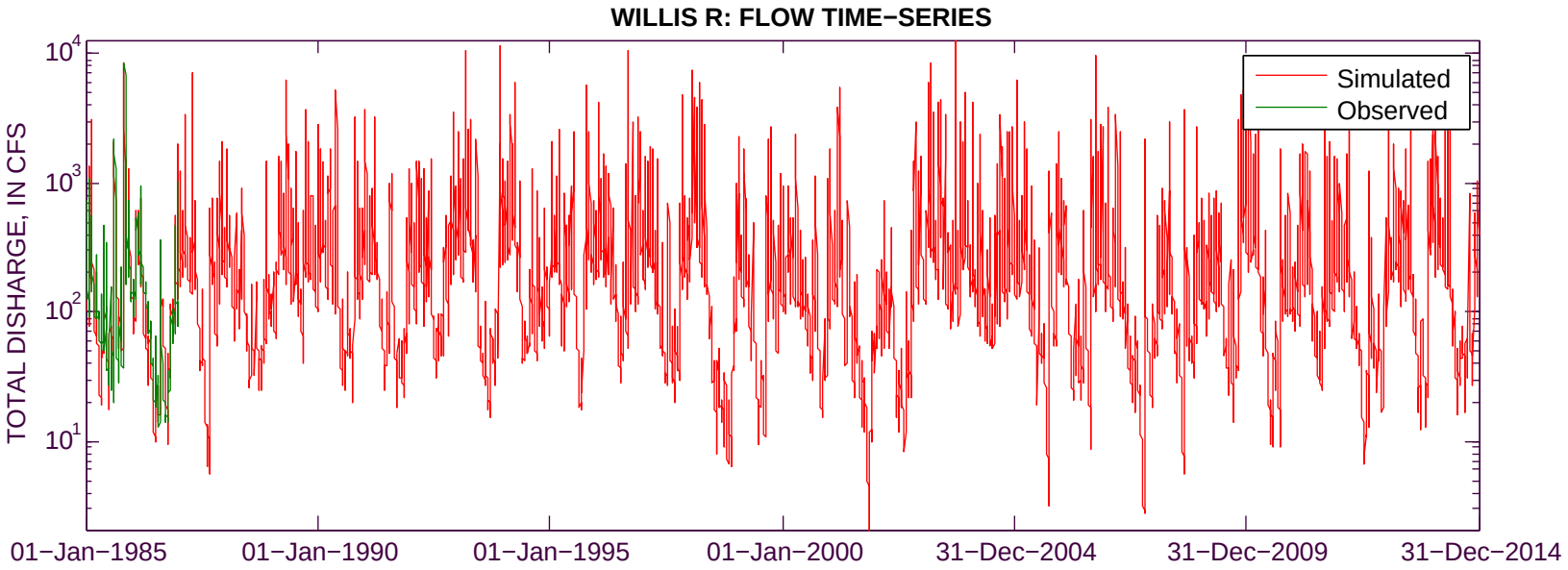
LOAD DATA
LOG10

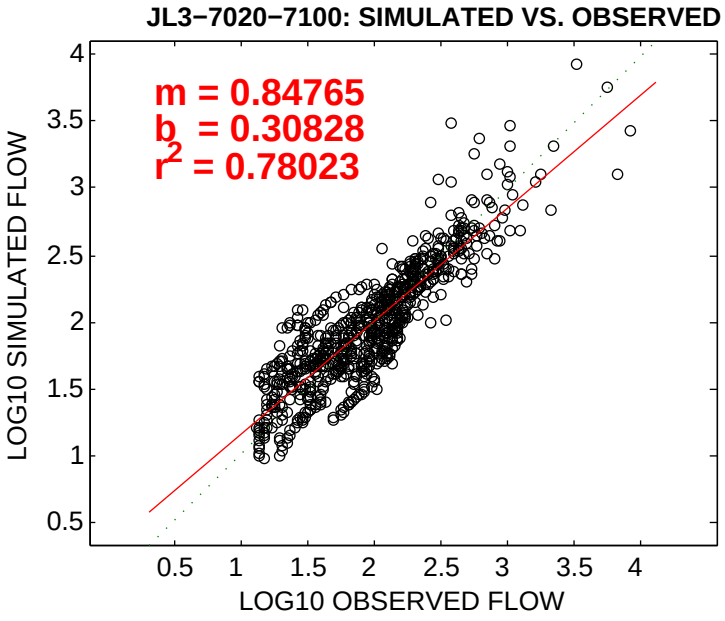


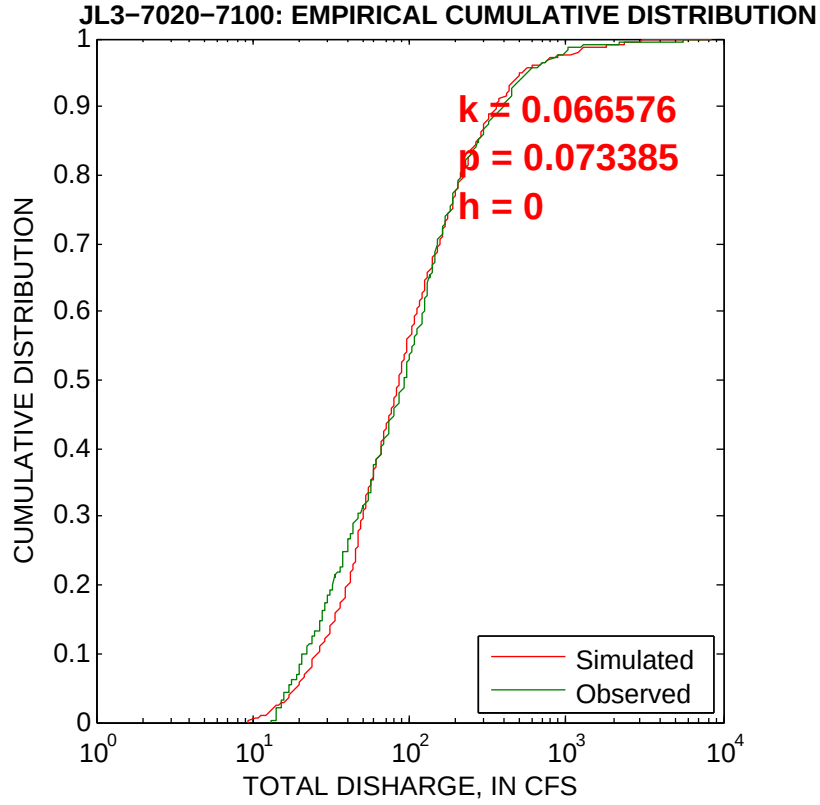












DATA SELECTION

scenario: P620171001WQ | file: FLOW.calib

plot: FLOW - total discharge

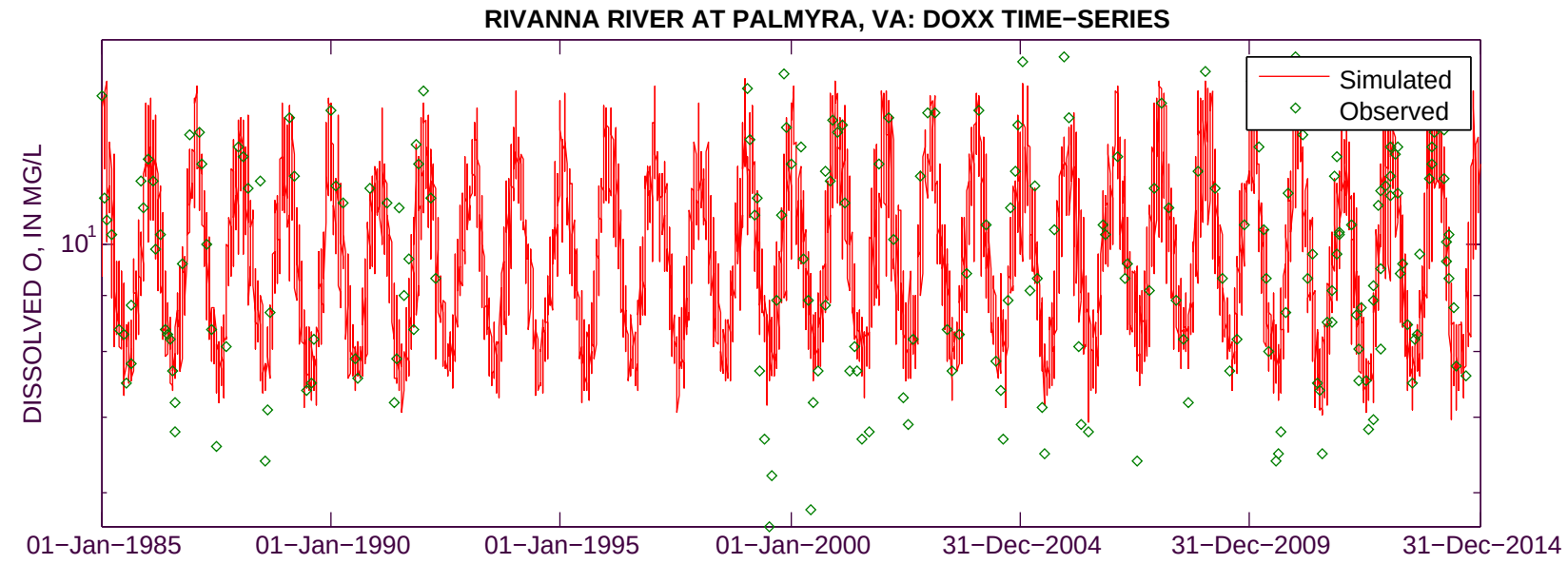
Dates: 1/1/1985 – 12/31/201

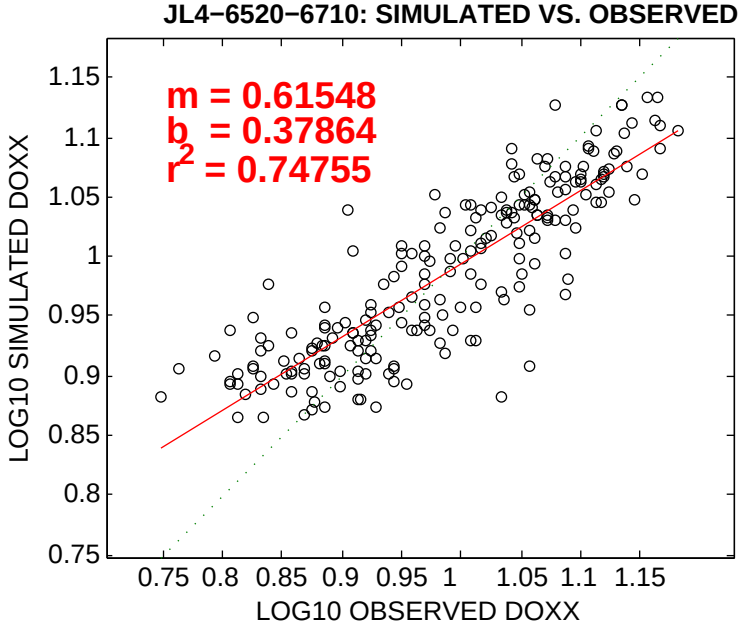
Drive | Directory: model | Observed: OBS20161101

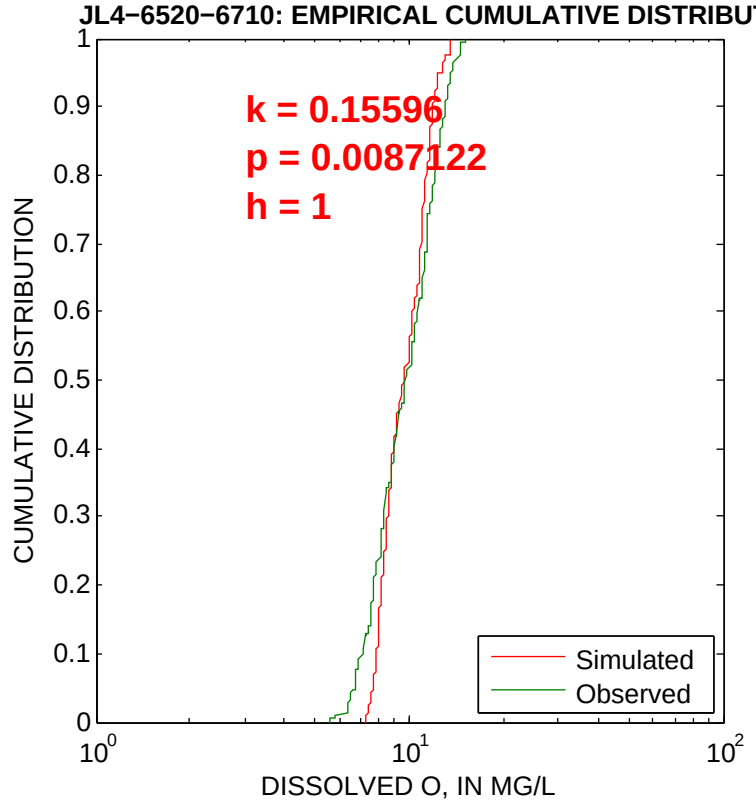
STATISTICS

		observe	simulate
n		736	736
min		13	9.4181
		1.11394	0.973963
mean		192.711	189.409
		1.96367	1.97279
media		94	86.1605
		1.97313	1.93531
max		8470	8340.9
		3.92788	3.92121
varian		255391	218042
		0.225692	0.207841
JB		0.001	0.001
		0.001	0.001
		ra	log
%		-1.71307	0.464414
err.va		157397	0.0509994
rel.std.err		0.616297	0.225969
mod.eff		0.383703	0.774031

VERSION 2.1







DATA SELECTION

scenario	file
P620171001WQ	DOXX.calib

plot: DOXX - dissolved oxygen

Dates: 1/1/1985 – 12/31/201

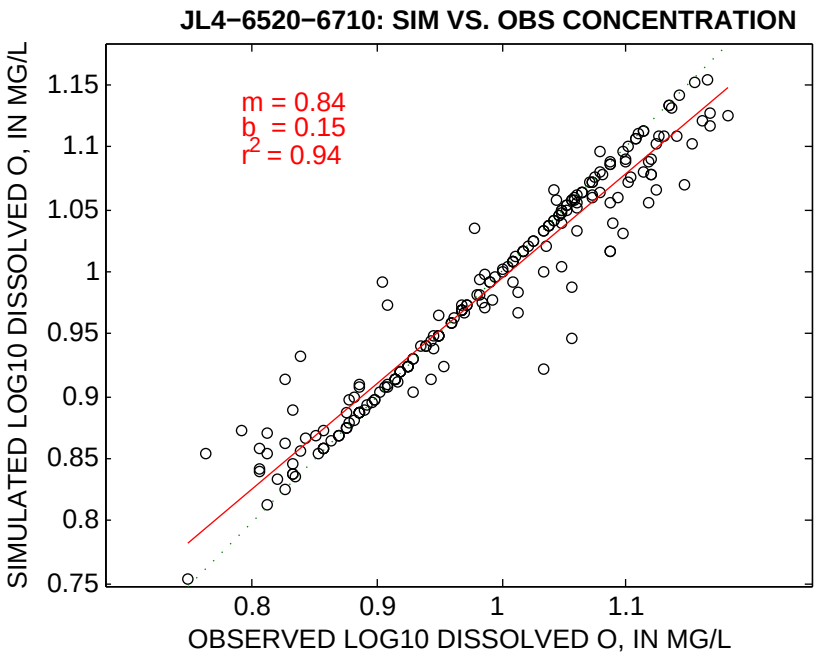
Drive	Directory	Observed
N/A	model	OBS20161101

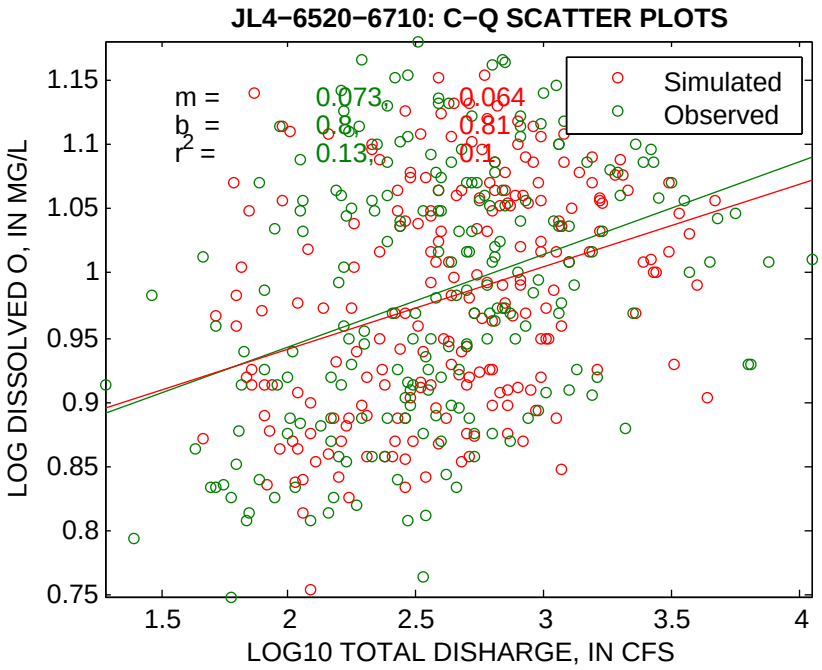
STATISTICS

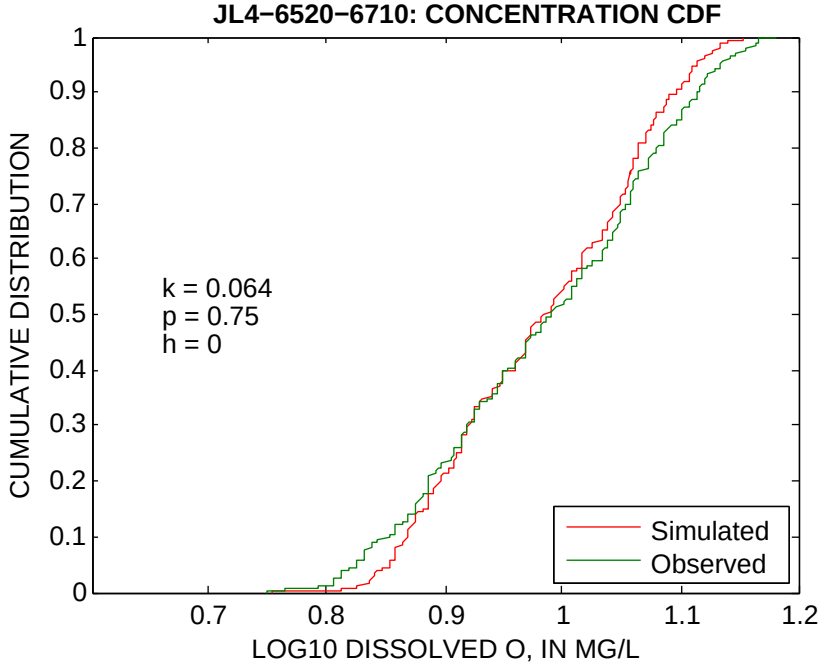
	n	observe	simulate
		218	218
min		5.6	7.3273
		0.748188	0.864944
mean		9.94427	9.80653
		0.986343	0.985712
media		9.8	9.6372
		0.991226	0.98395
max		15.2	13.601
		1.18184	1.13357
varian		5.03462	2.6162
		0.00994243	0.00503821
JB		0.016337	0.007756
		0.018283	0.007441
		ra	log
%		-1.38507	-0.0640306
err.va		1.31602	0.00274236
rel.std.err		0.261394	0.275824
mod.eff		0.738606	0.724176

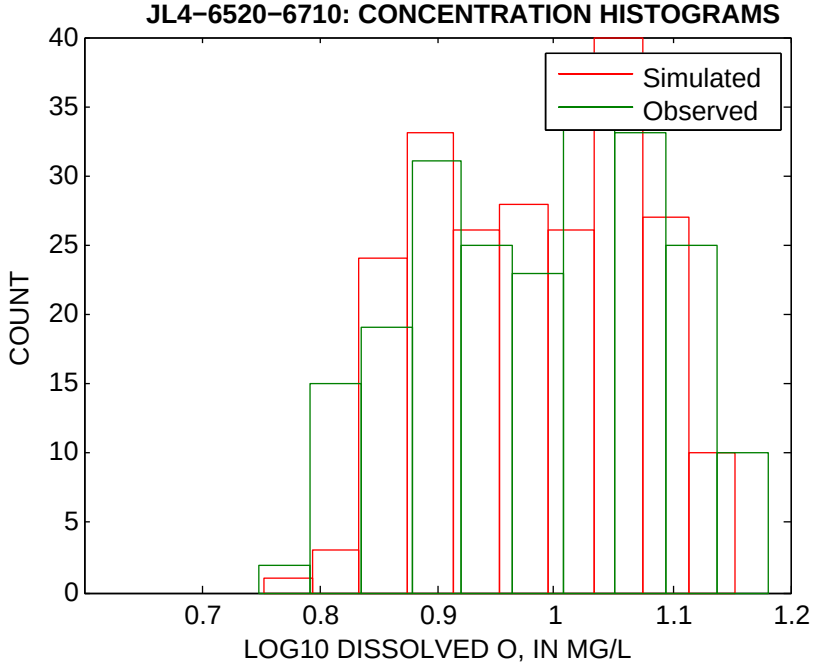
VERSION 2.1

ALL DATA
LOG10

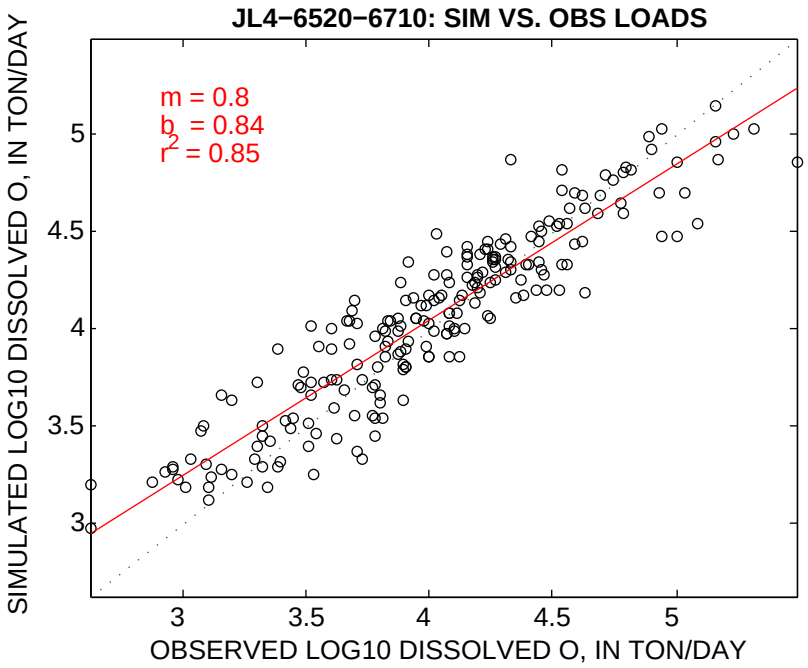


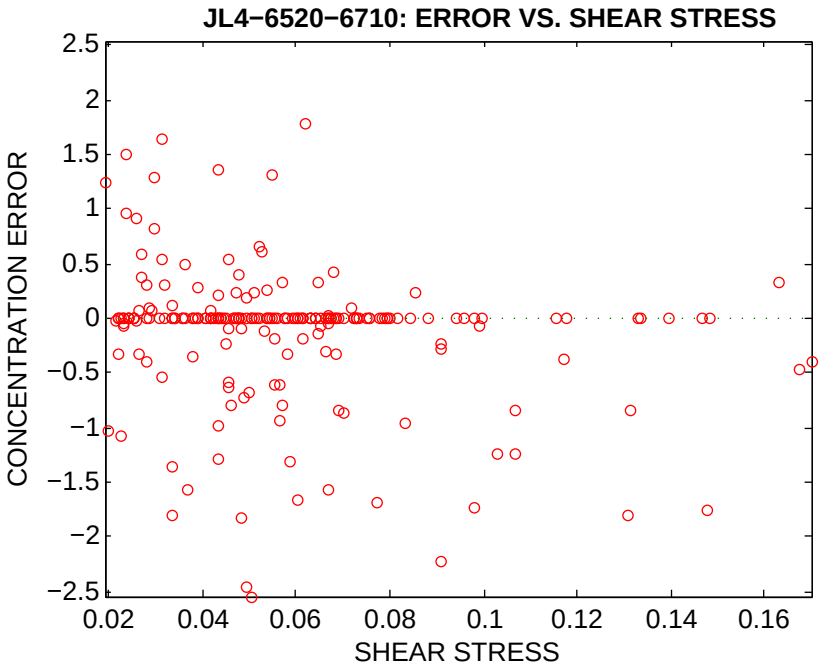


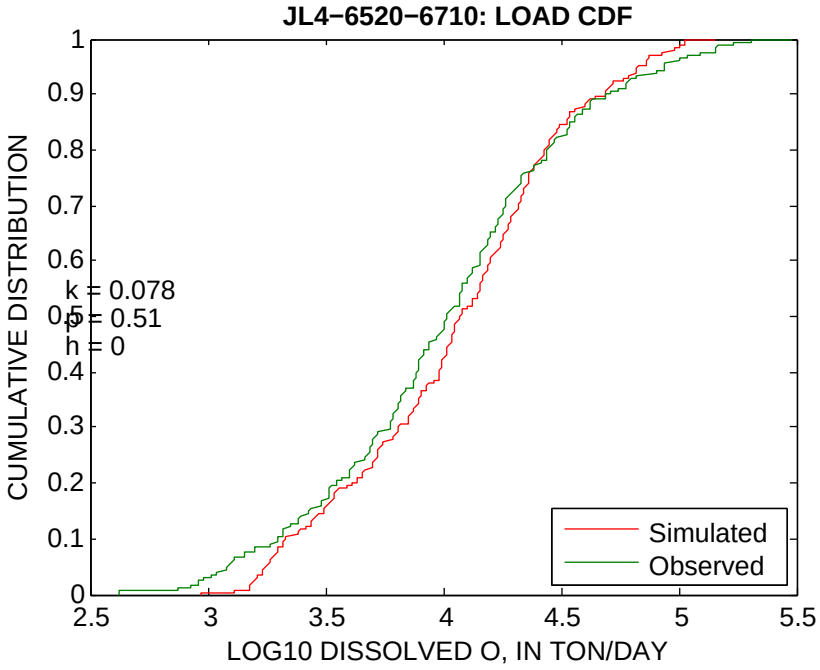


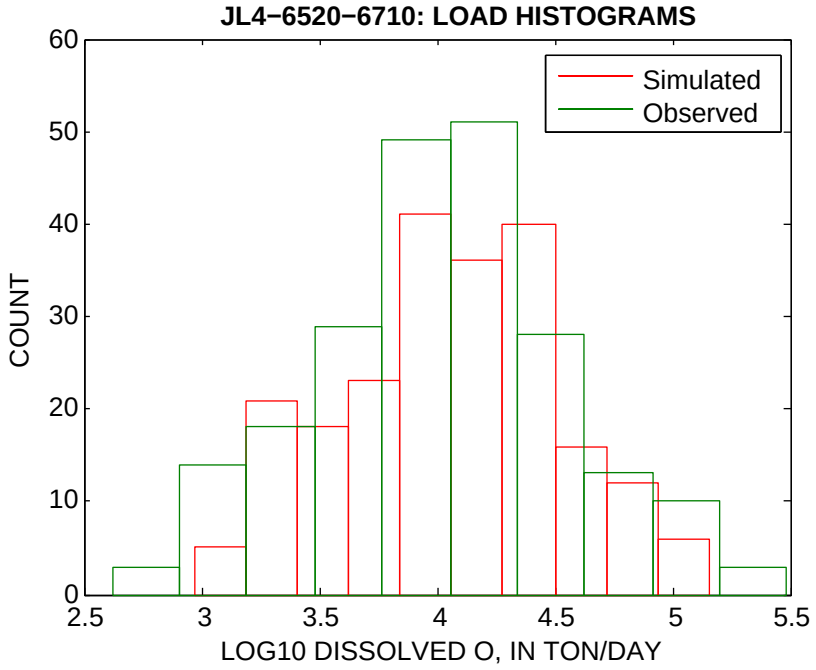


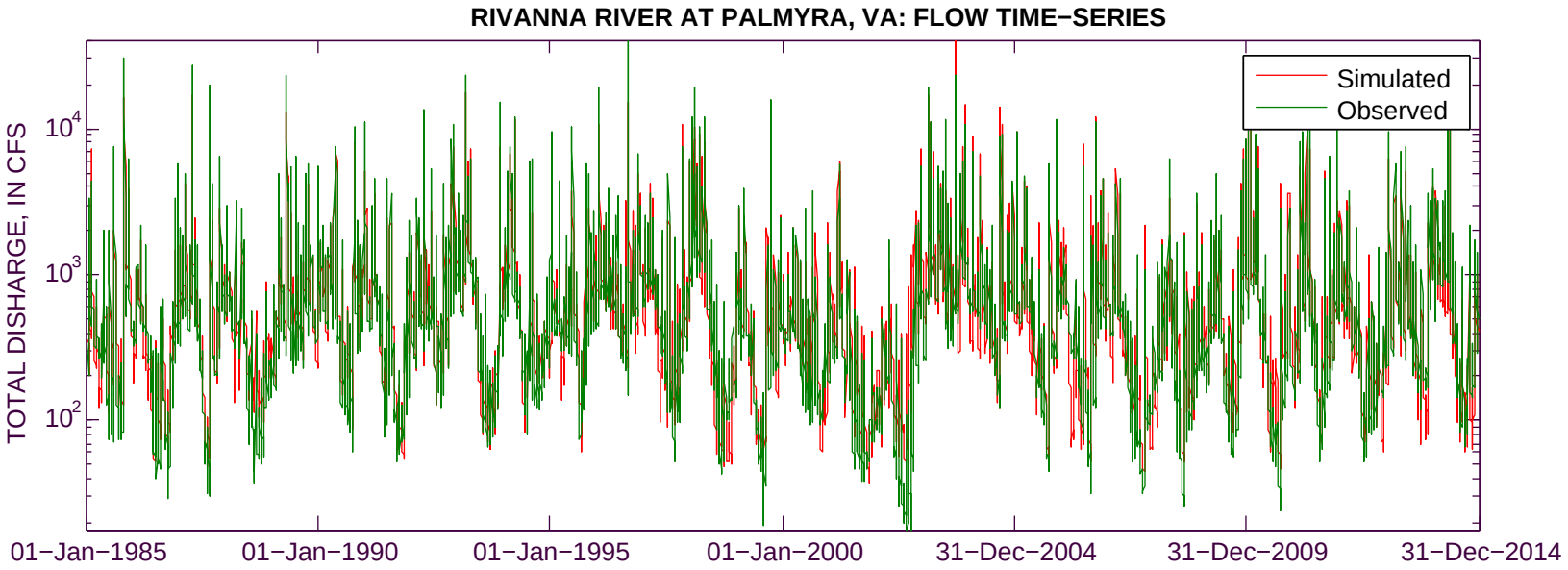
LOAD DATA
LOG10

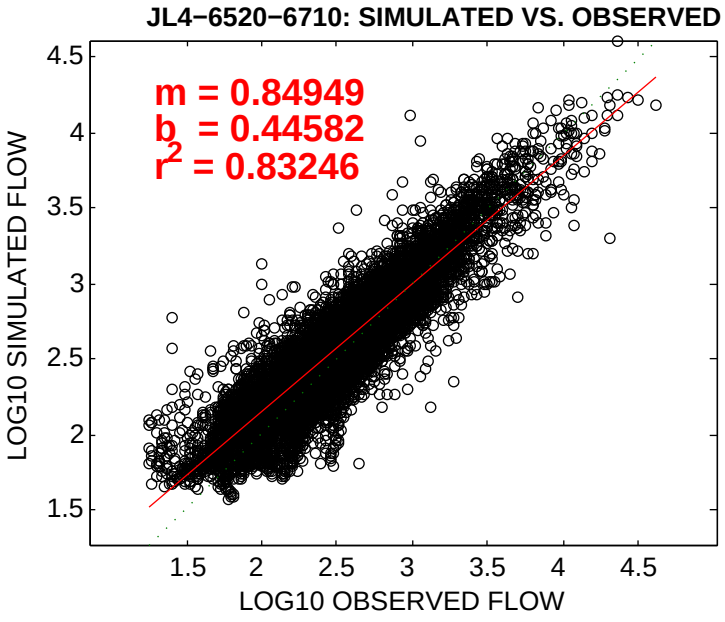


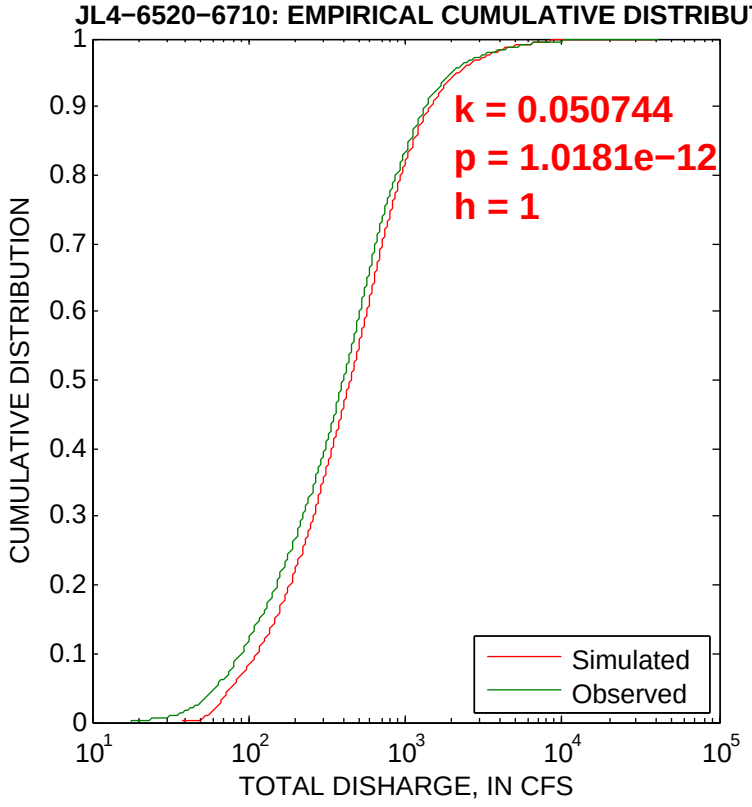












DATA SELECTION

scenario	file
P620171001WQ	FLOW.calib

plot: FLOW - total discharge

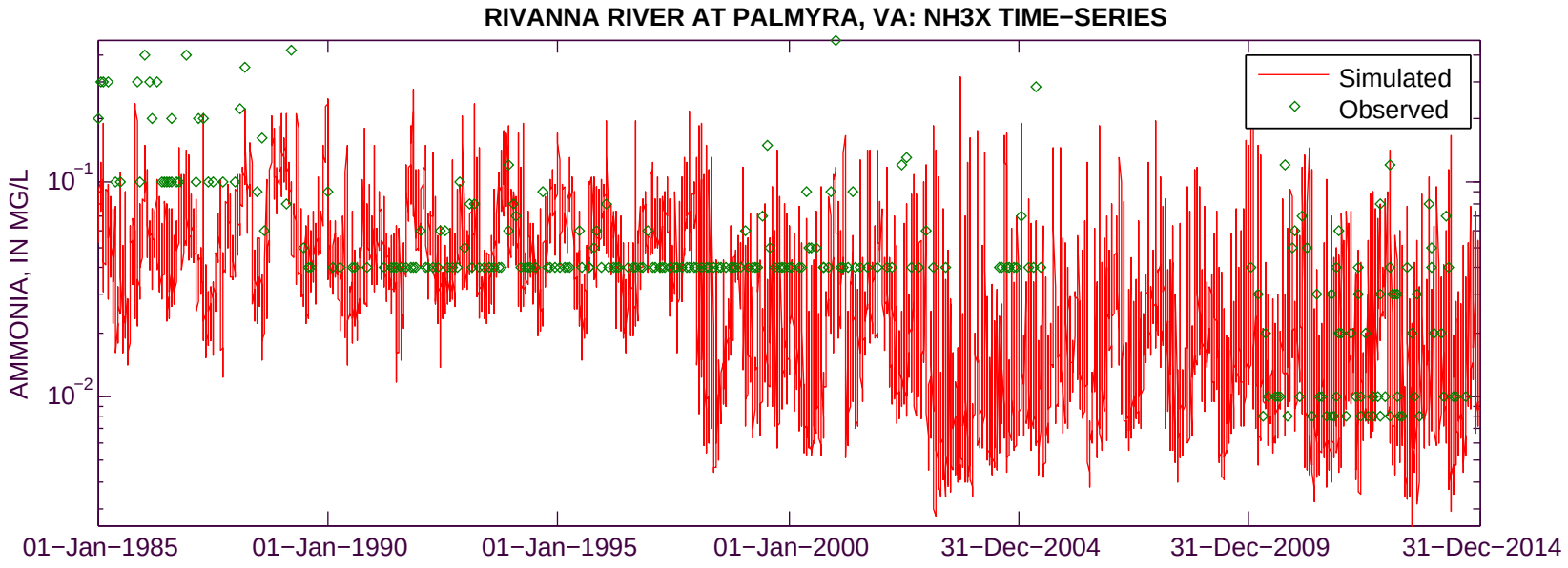
Dates: 1/1/1985 – 12/31/201

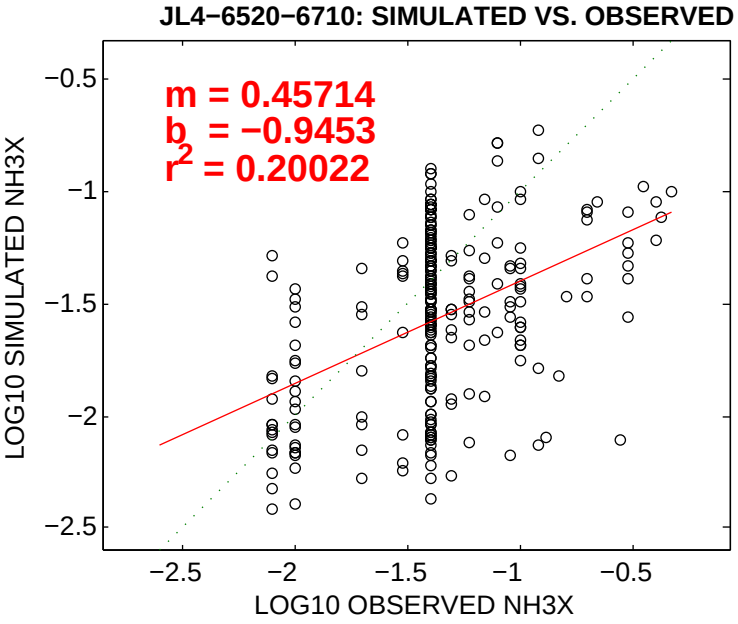
Drive	Directory	Observed
N/A	model	OBS20161101

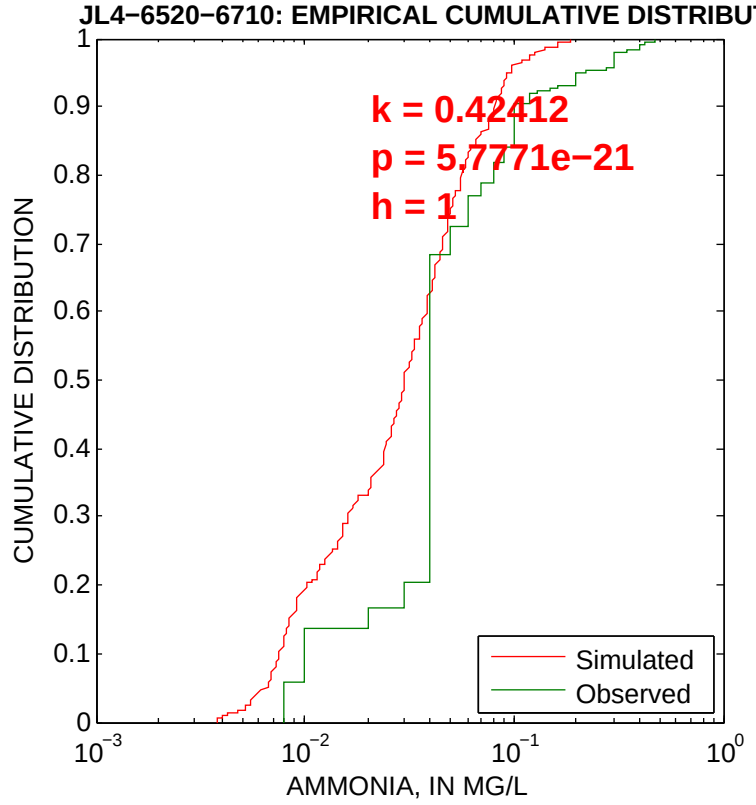
STATISTICS

n	10957	10957
	observe	**simulate**
min	18	37.501
	1.25527	1.57404
mean	696.012	734.625
	2.57887	2.63654
media	404	448.43
	2.60638	2.65169
max	40800	39857
	4.61066	4.6005
varian	1.75533e+0	1.36103e+
	0.21479	0.186193
JB	0.001	0.001
	0.001	0.001
	ra	log
%	5.54784	2.23617
err.va	461531	0.0393861
rel.std.err	0.262931	0.183371
mod.eff	0.737069	0.816629

VERSION 2.1







DATA SELECTION

scenario	file
P620171001WQ	NH3X.calib

plot: NH3X - ammonia

Dates: 1/1/1985 – 12/31/201

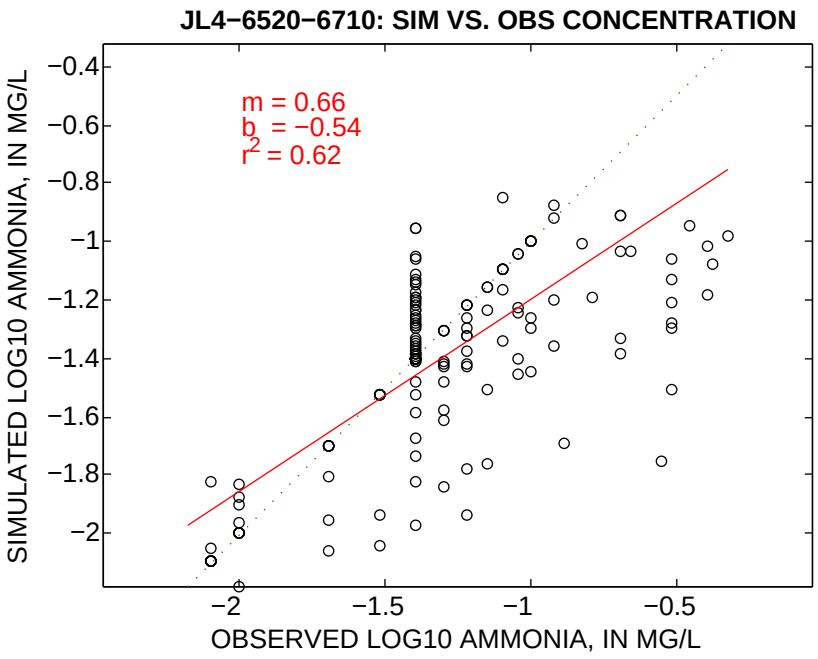
Drive	Directory	Observed
N/A	model	OBS20161101

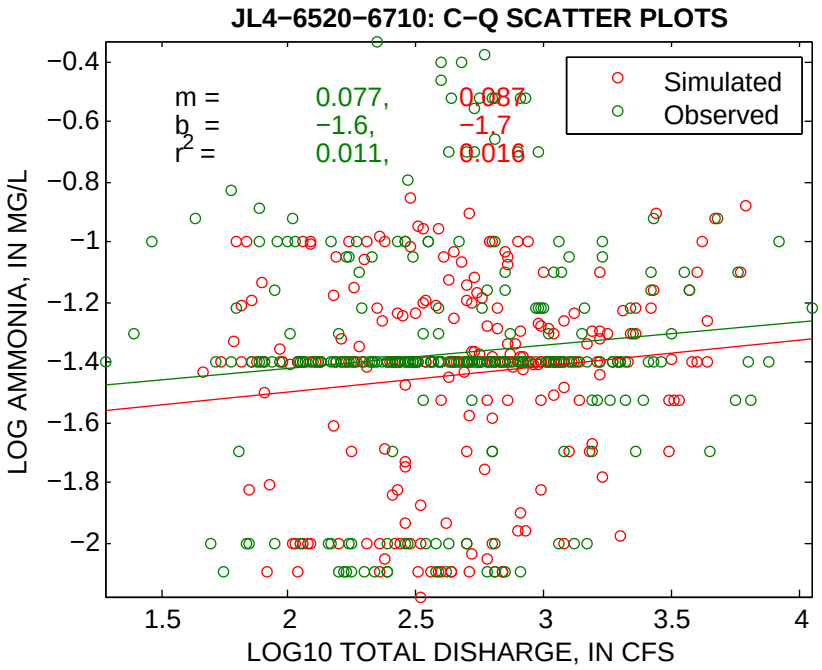
STATISTICS

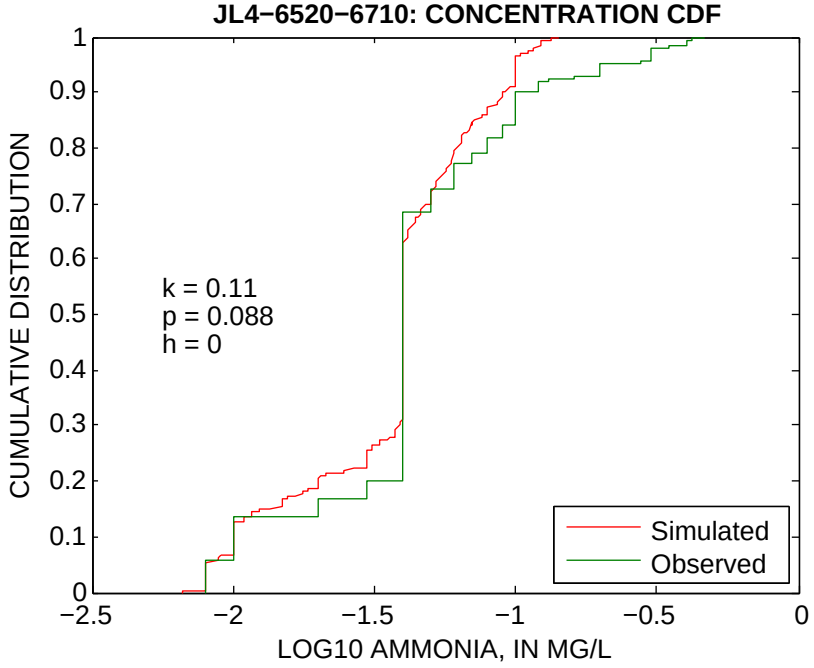
	n	257	257
		observe	simulate
min		0.008	0.0038116
		-2.09691	-2.41889
mean		0.0631907	0.0378297
		-1.36764	-1.5705
media		0.04	0.030004
		-1.39794	-1.52282
max		0.47	0.18557
		-0.327902	-0.731492
varian		0.00531931	0.00097654
		0.137189	0.143188
JB		0.001	0.001
		0.051424	0.018355
		ra	log
%		-40.134	14.8327
err.va		0.00549728	0.19626
rel.std.err		1.03346	1.43059
mod.eff		-0.0334575	-0.430586

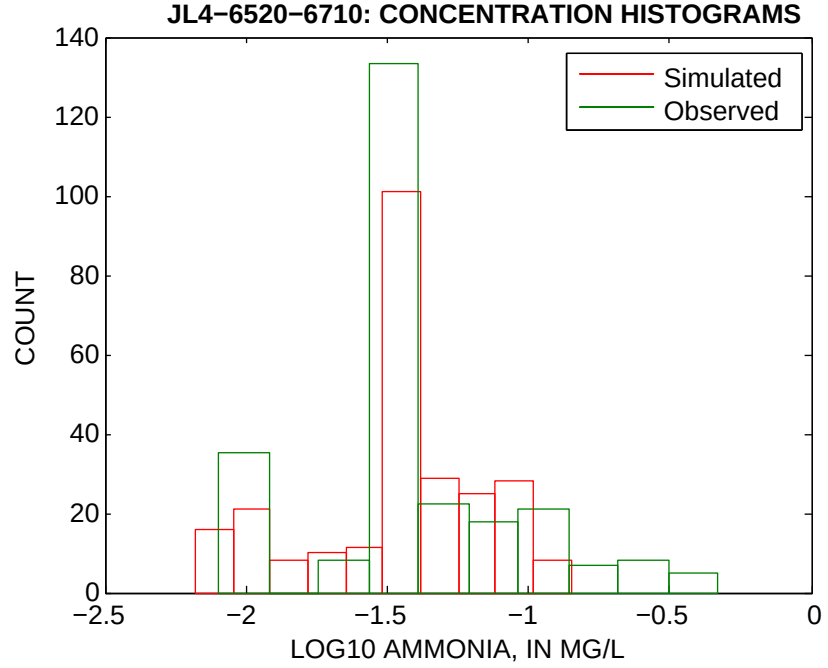
VERSION 2.1

ALL DATA
LOG10

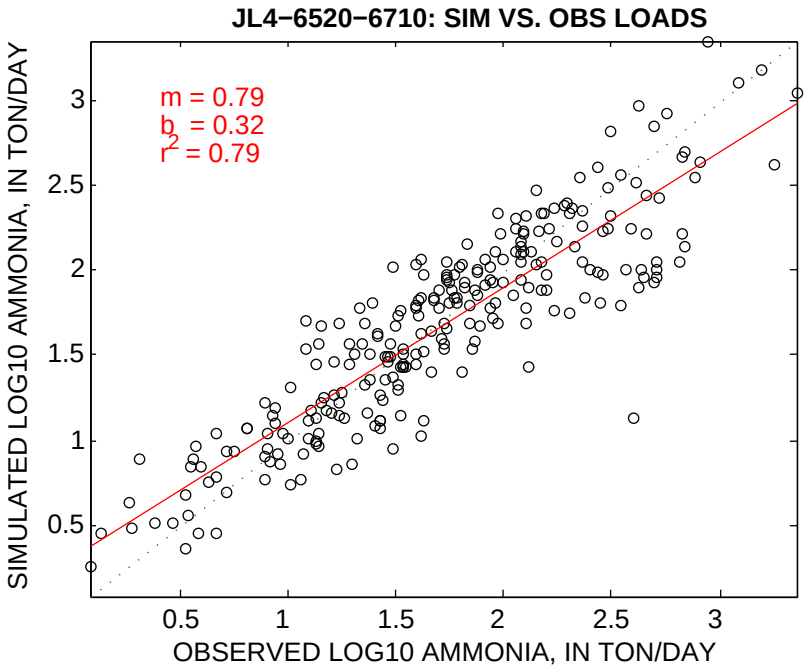


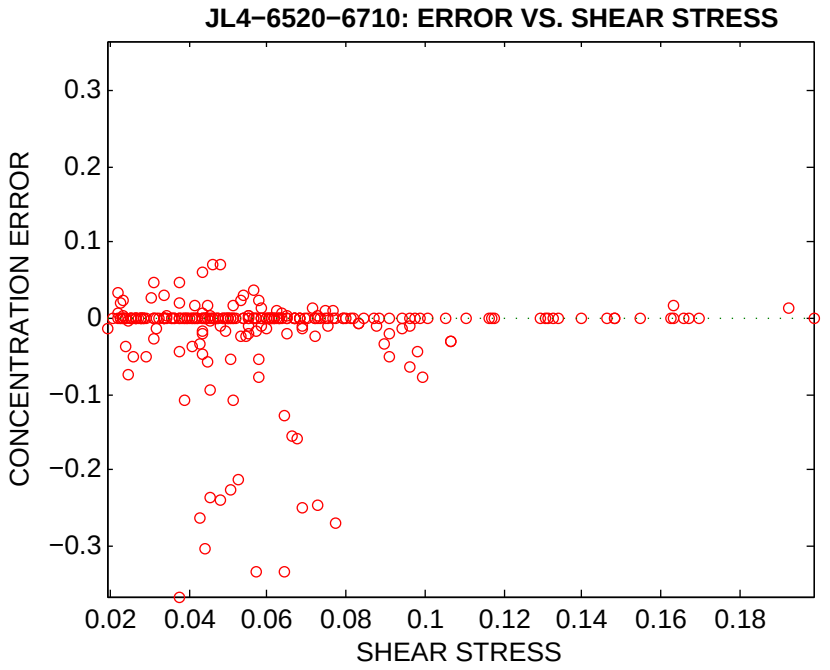


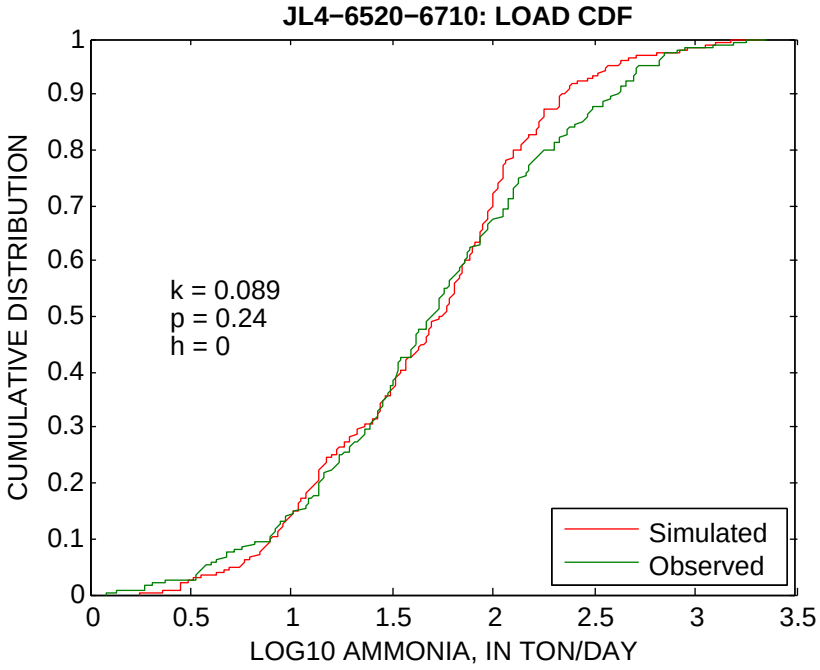


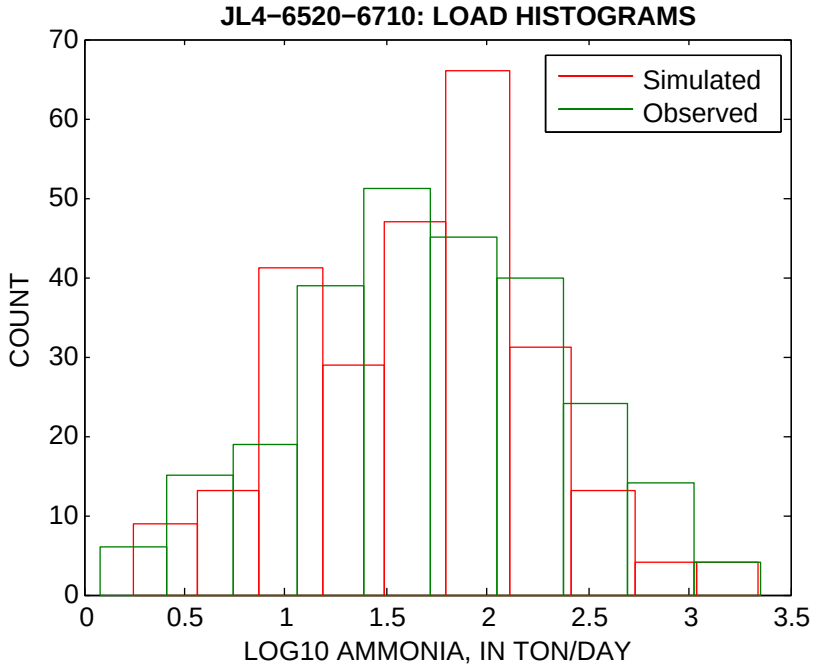


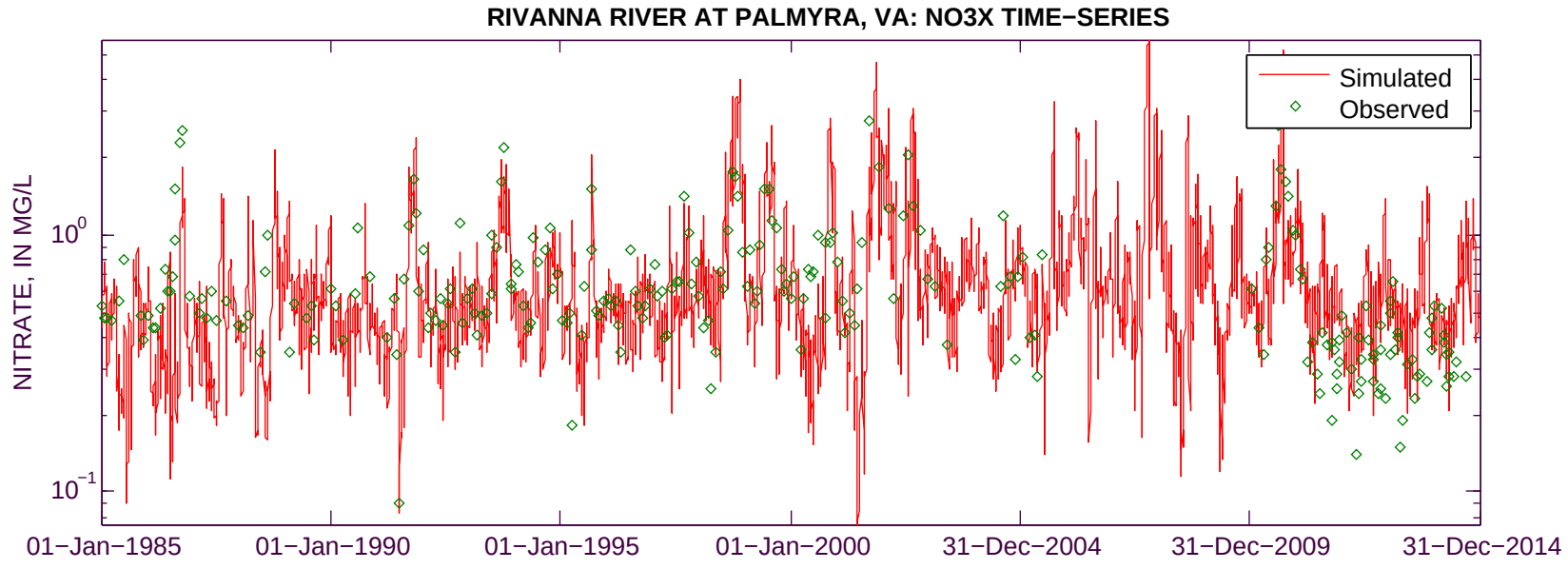
LOAD DATA
LOG10

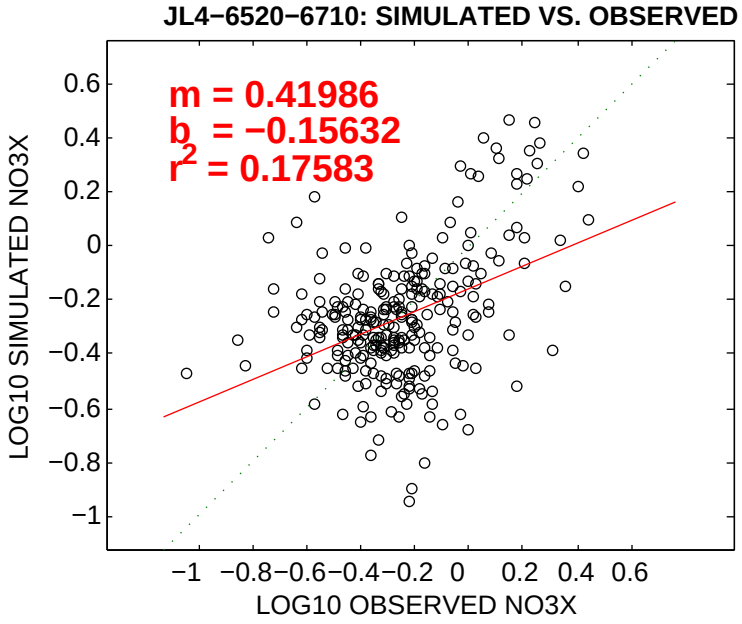


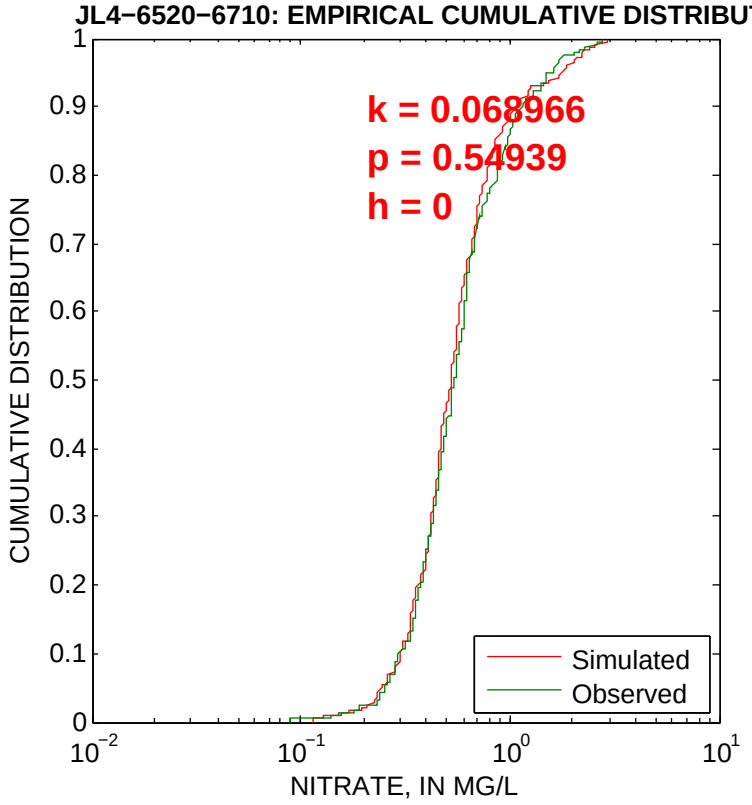












DATA SELECTION

scenario	file
P620171001WQ	NO3X.calib

plot: NO3X - nitrate

Dates: 1/1/1985 – 12/31/201

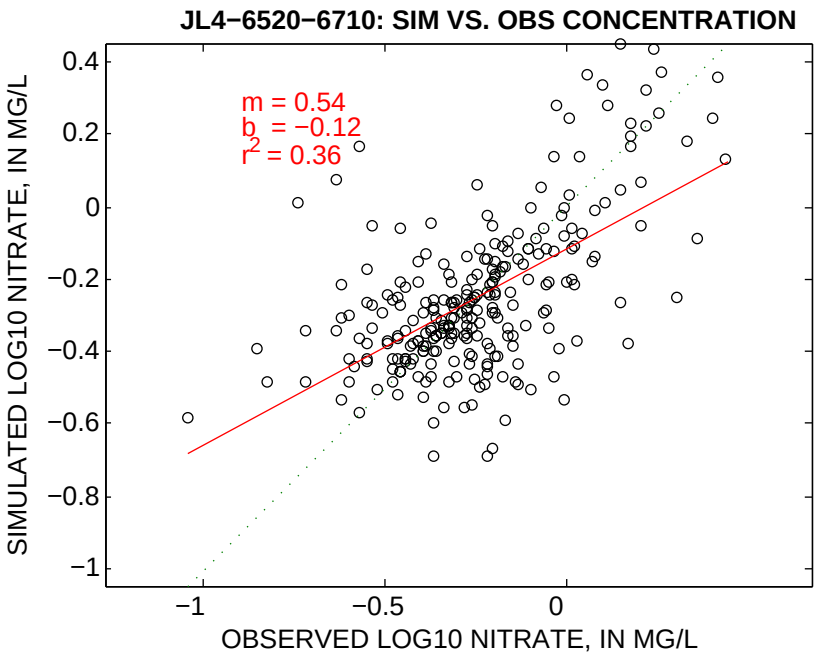
Drive	Directory	Observed
N/A	model	OBS20161101

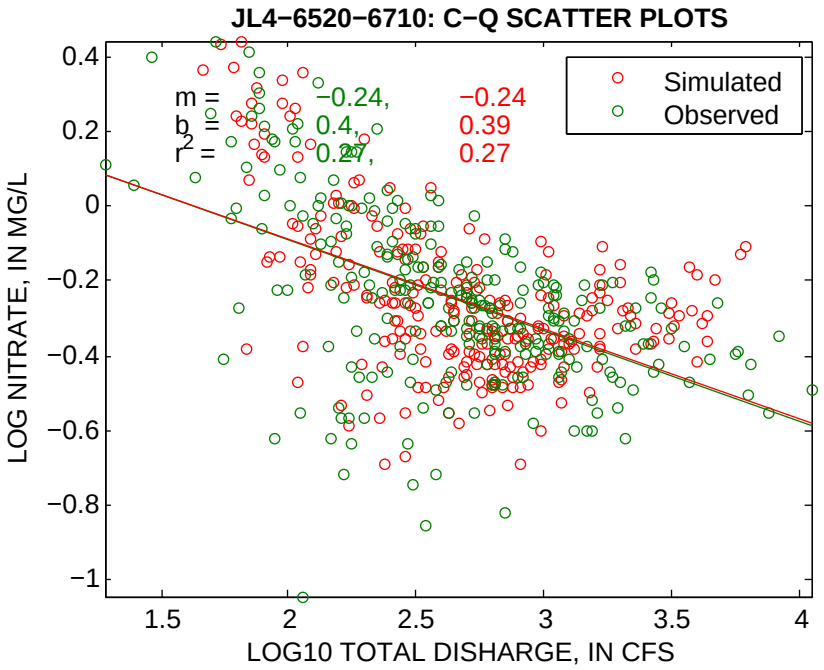
STATISTICS

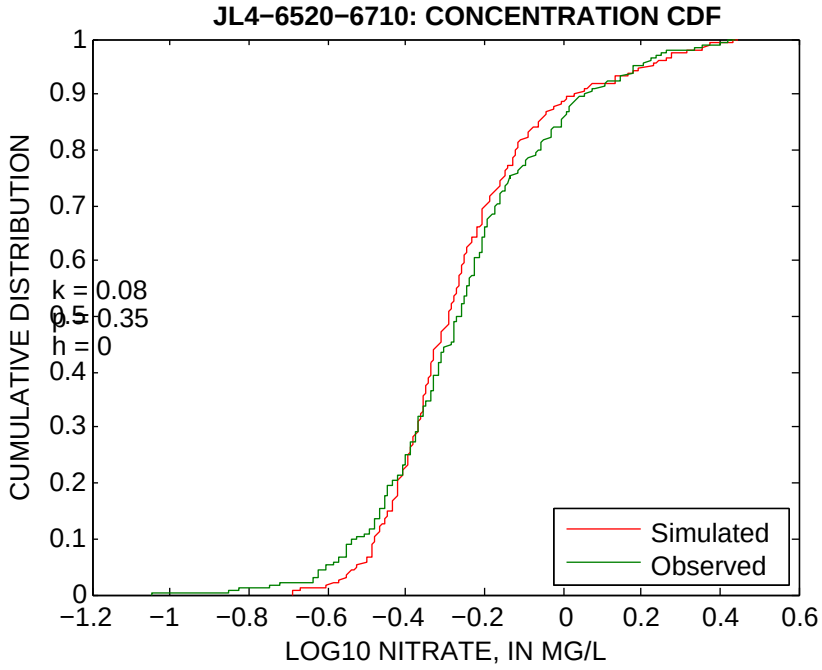
	n	261	261
		observe	simulate
min		0.09	0.11469
		-1.04576	-0.940474
mean		0.658123	0.646169
		-0.249066	-0.260898
media		0.54	0.52576
		-0.267606	-0.279212
max		2.75	2.8983
		0.439333	0.462143
varian		0.179979	0.206122
		0.0550361	0.0551783
JB		0.001	0.001
		0.018881	0.001
		ra	log
%		-1.81626	4.75072
err.va		0.163028	0.0641396
rel.std.err		0.905818	1.16541
mod.eff		0.0941818	-0.16541

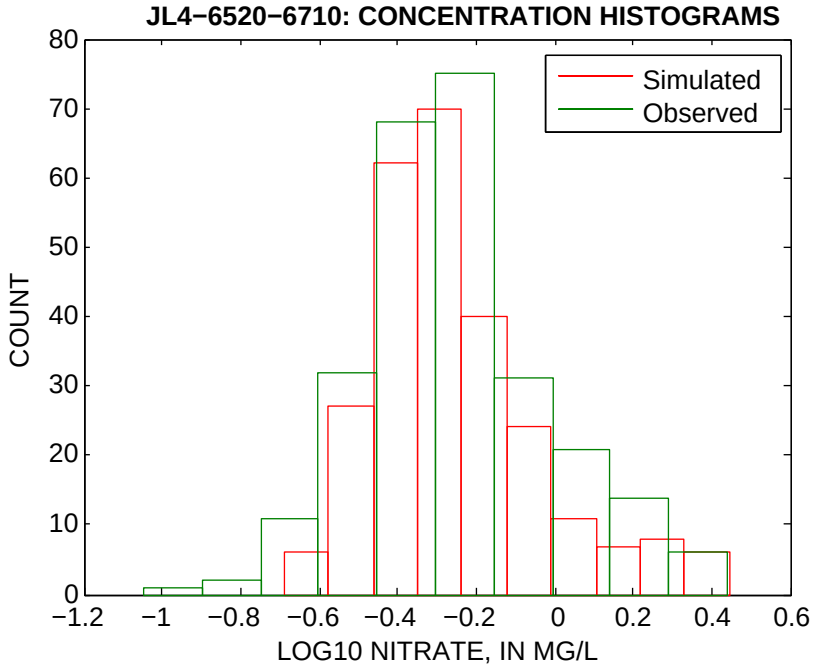
VERSION 2.1

ALL DATA
LOG10

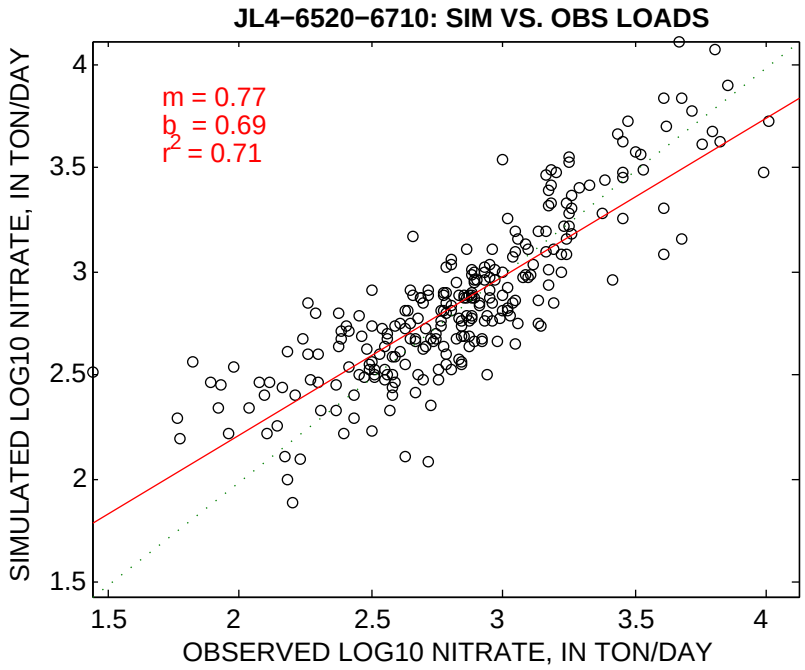


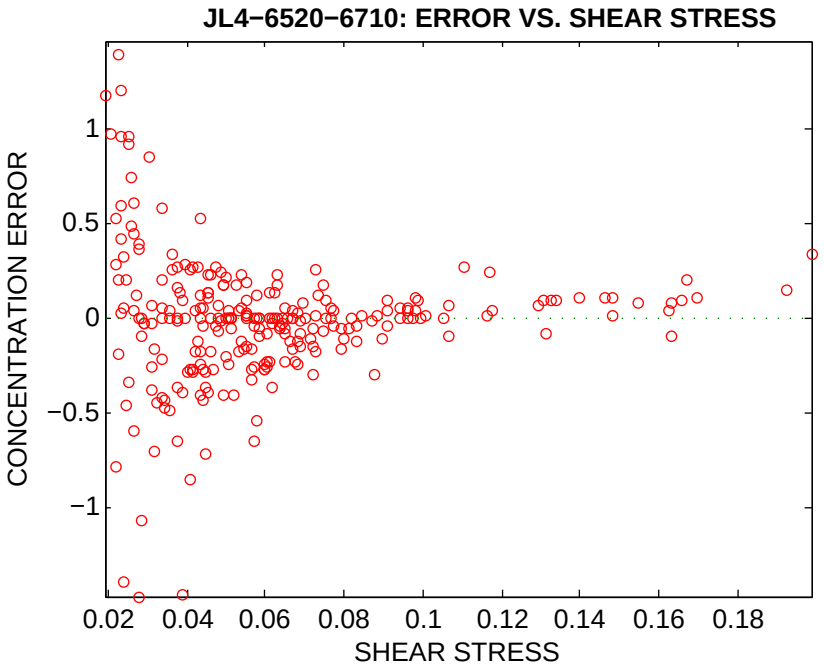


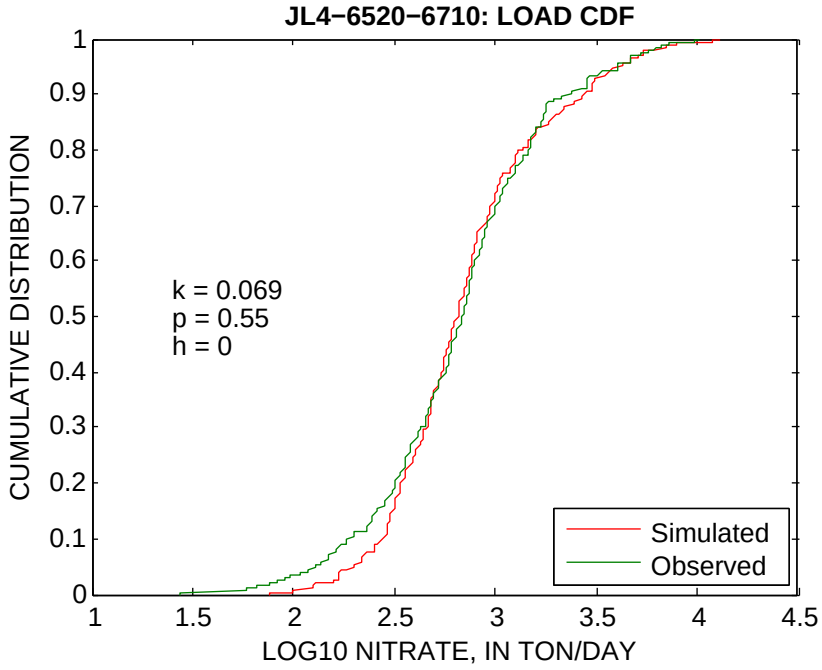


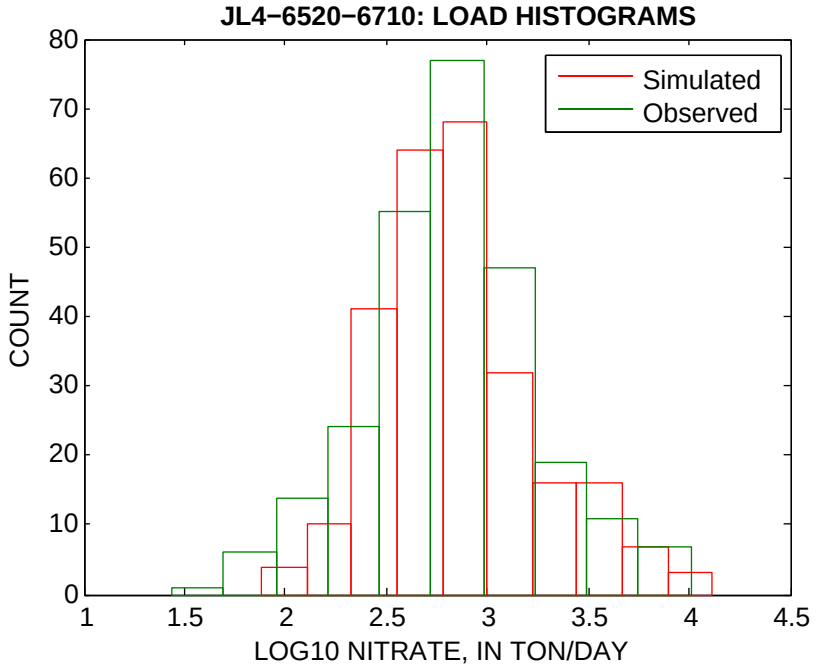


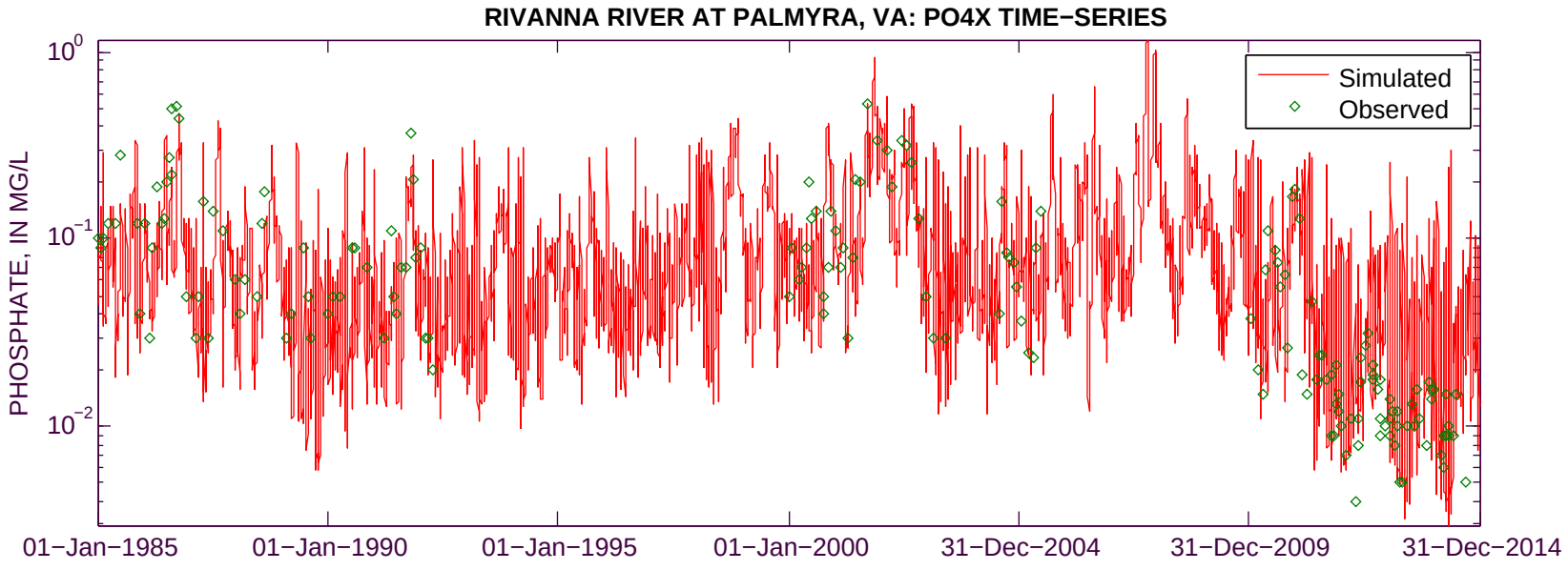
LOAD DATA
LOG10

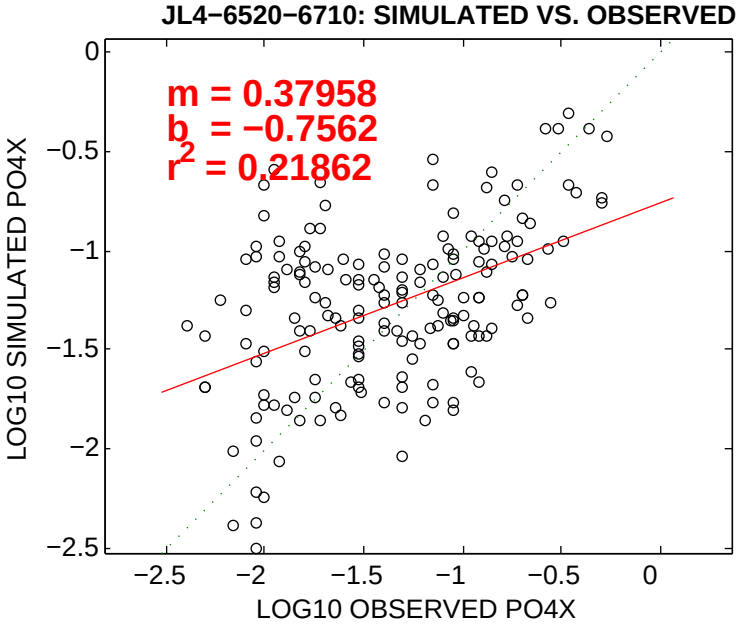


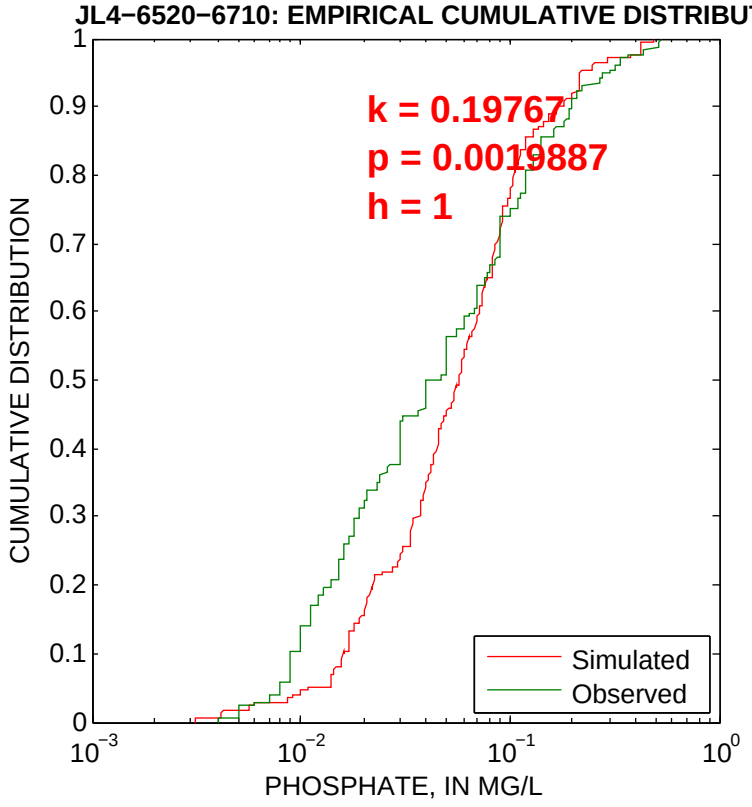












DATA SELECTION

scenario	file
P620171001WQ	PO4X.calib

plot: PO4X - phosphate

Dates: 1/1/1985 – 12/31/201

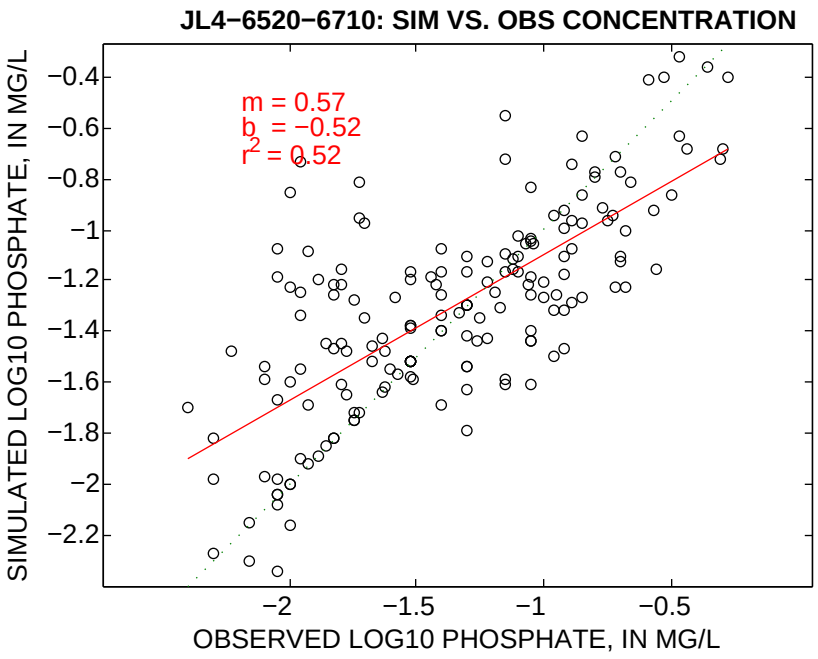
Drive	Directory	Observed
N/A	model	OBS20161101

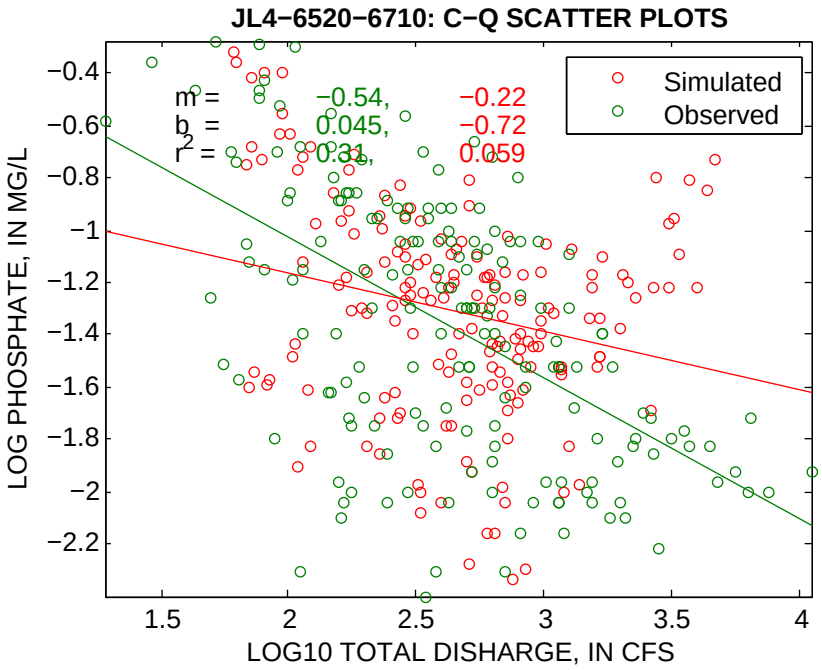
STATISTICS

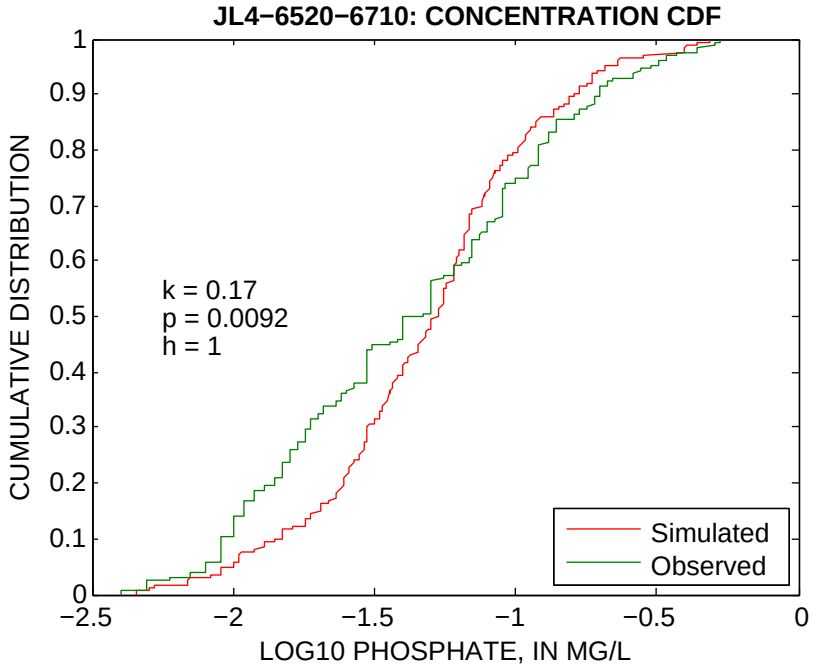
	n	172	172
		observe	simulate
min		0.004	0.0031119
		-2.39794	-2.50697
mean		0.0804709	0.0797459
		-1.36858	-1.27569
media		0.0435	0.0572945
		-1.36292	-1.24189
max		0.53	0.48845
		-0.275724	-0.31118
varian		0.00979466	0.00668147
		0.25235	0.166313
JB		0.001	0.001
		0.044373	0.190474
		ra	log
%		-0.900991	-6.78728
err.va		0.0067154	0.235768
rel.std.err		0.685619	0.934292
mod.eff		0.314381	0.0657084

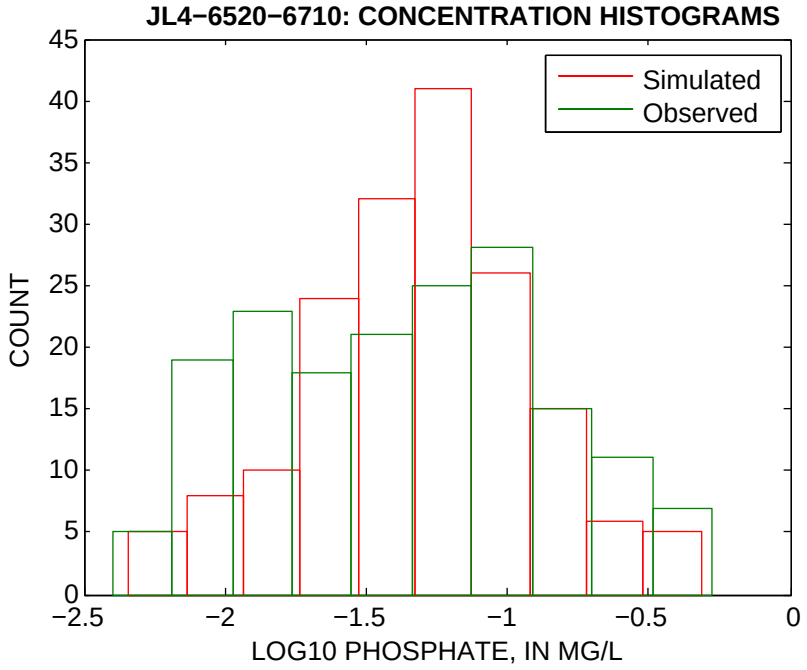
VERSION 2.1

ALL DATA
LOG10

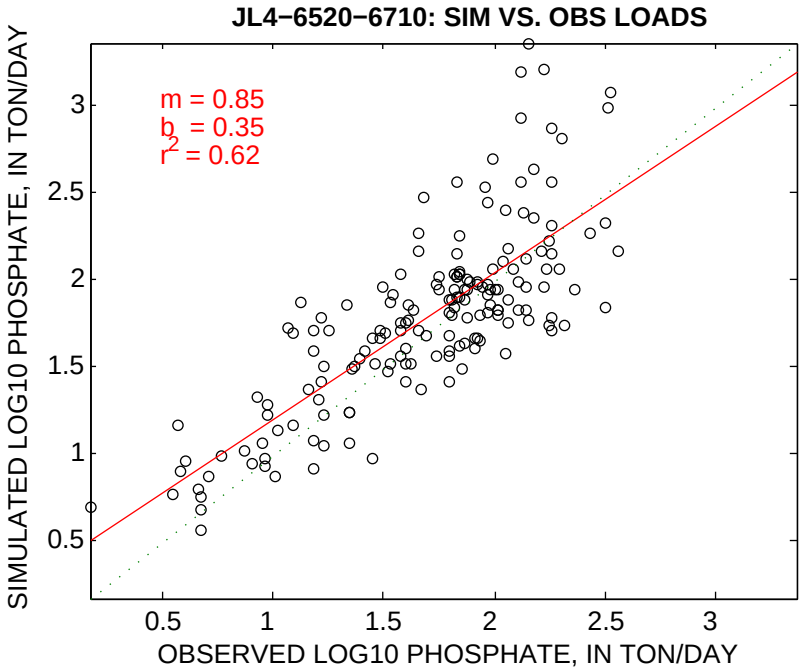


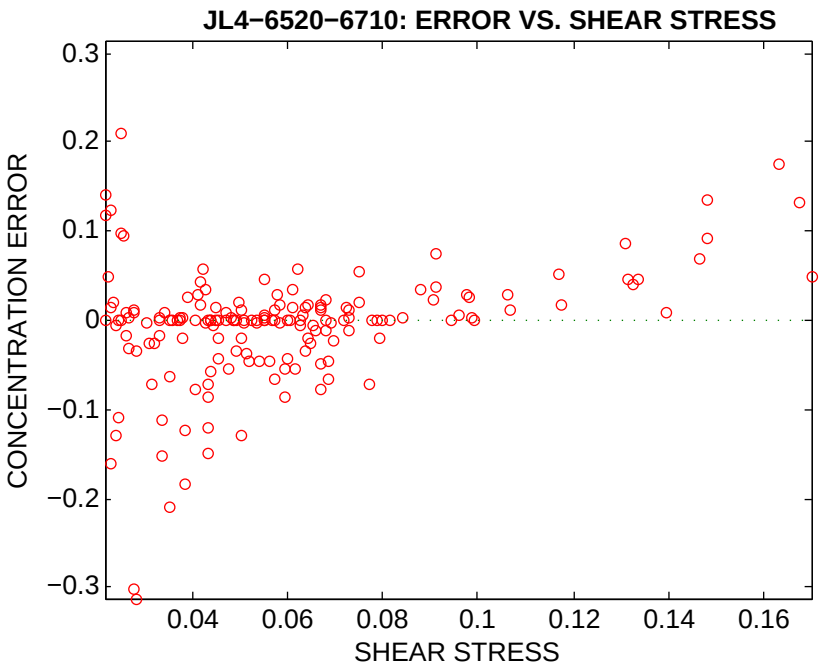


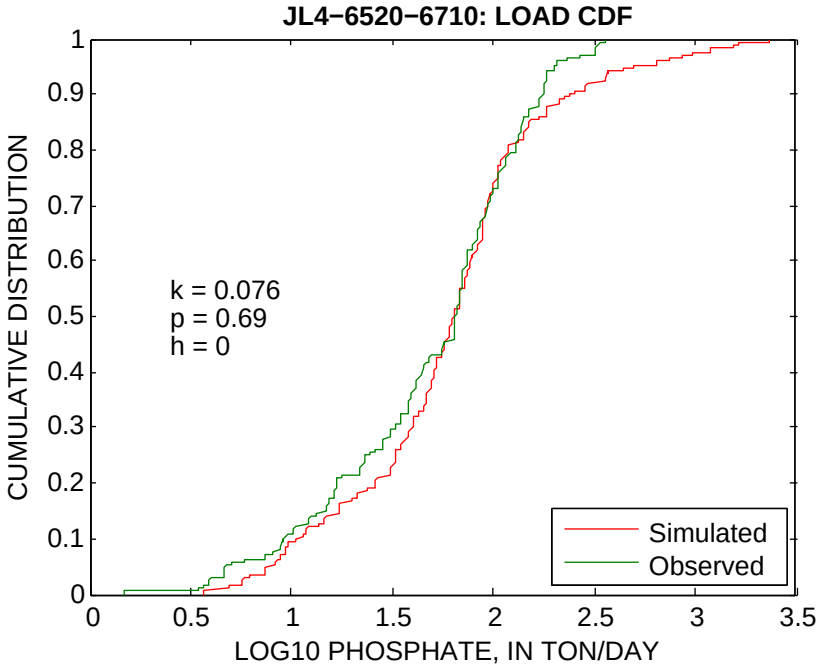


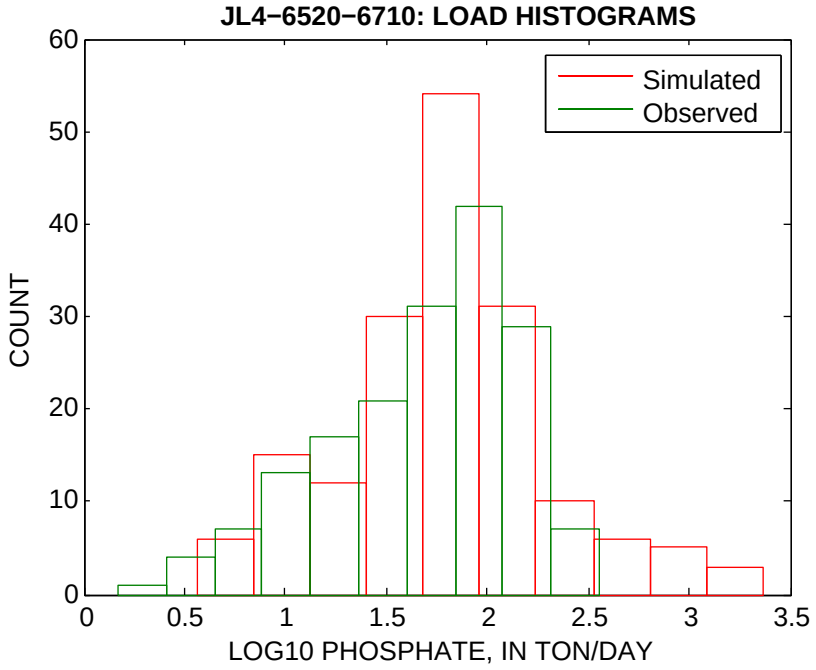


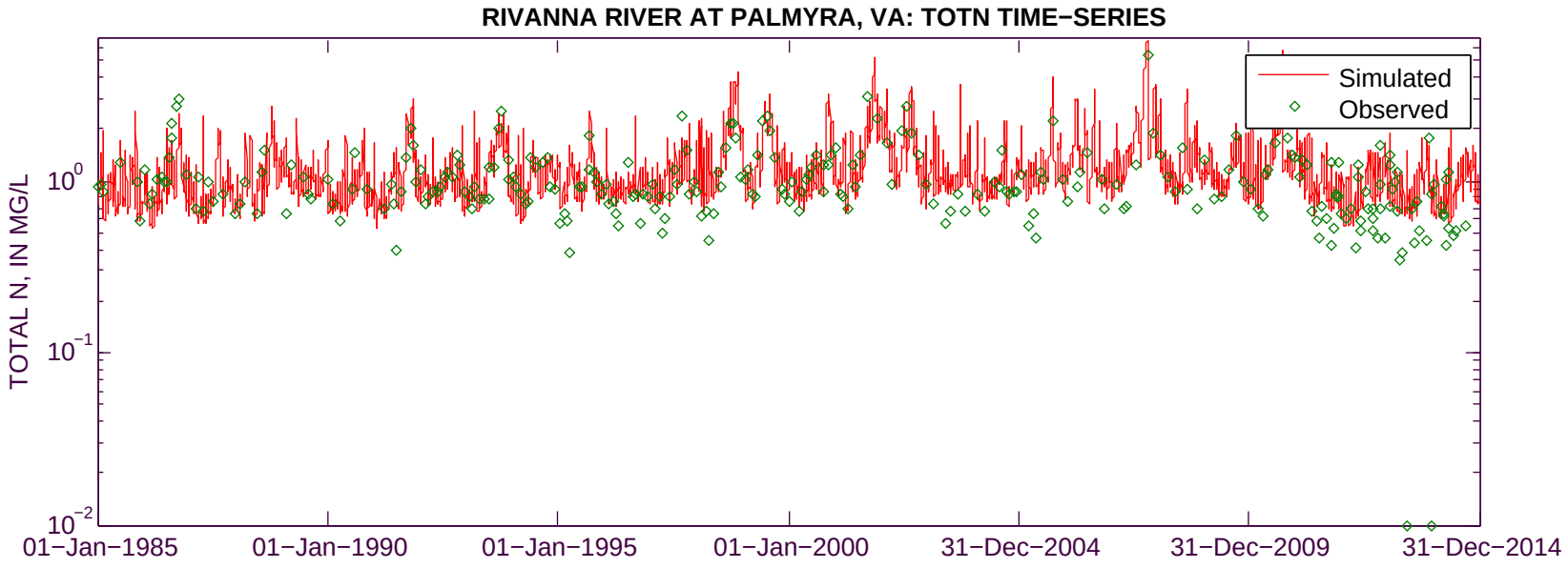
LOAD DATA
LOG10

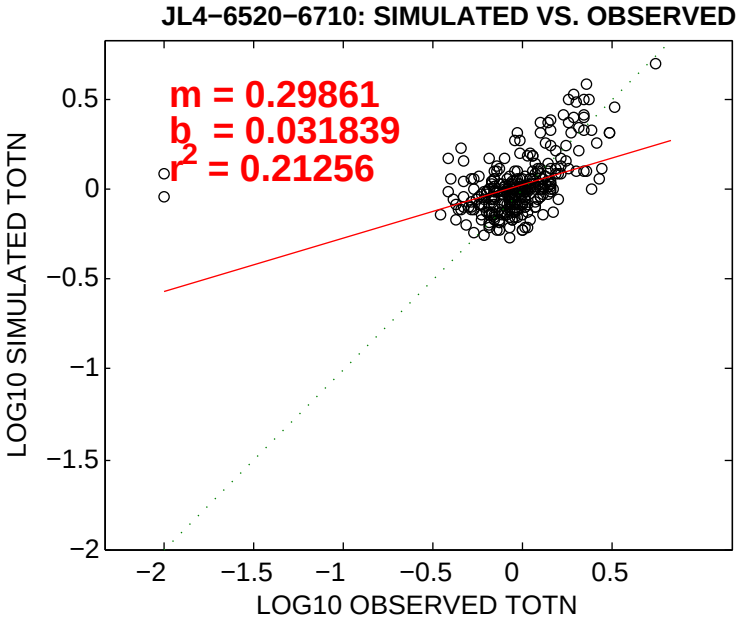


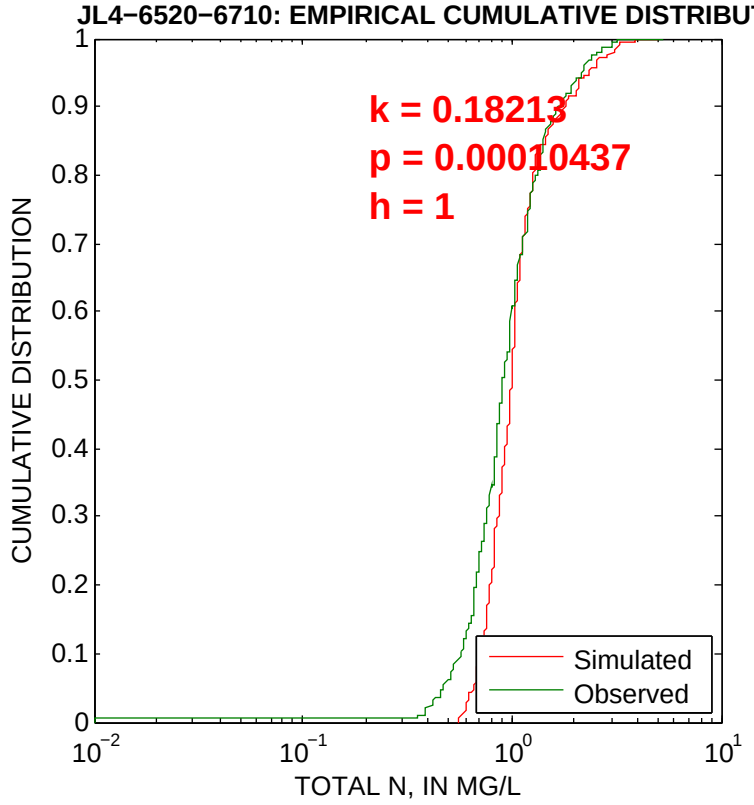












DATA SELECTION

scenario	file
P620171001WQ	TOTN.calib

plot: TOTN - total nitrogen

Dates: 1/1/1985 – 12/31/201

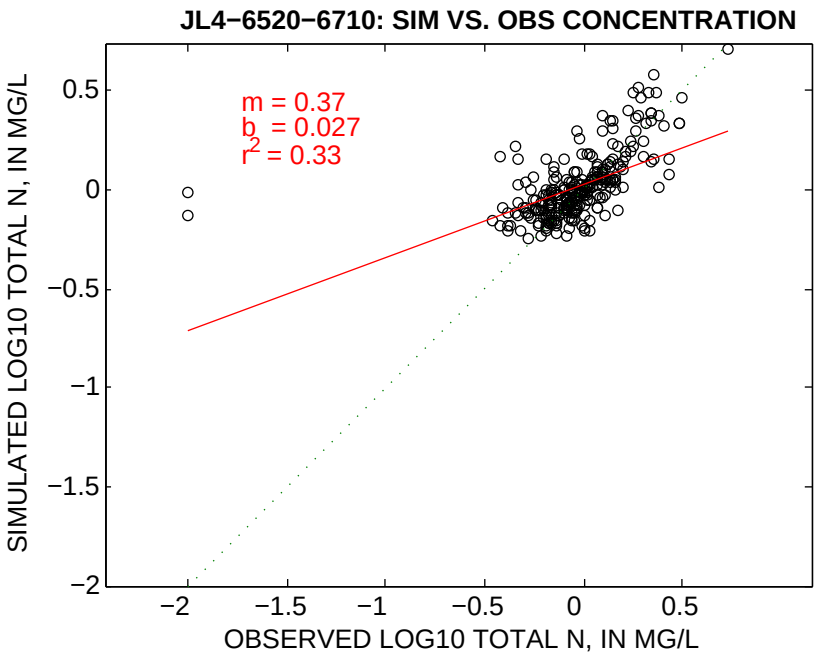
Drive	Directory	Observed
N/A	model	OBS20161101

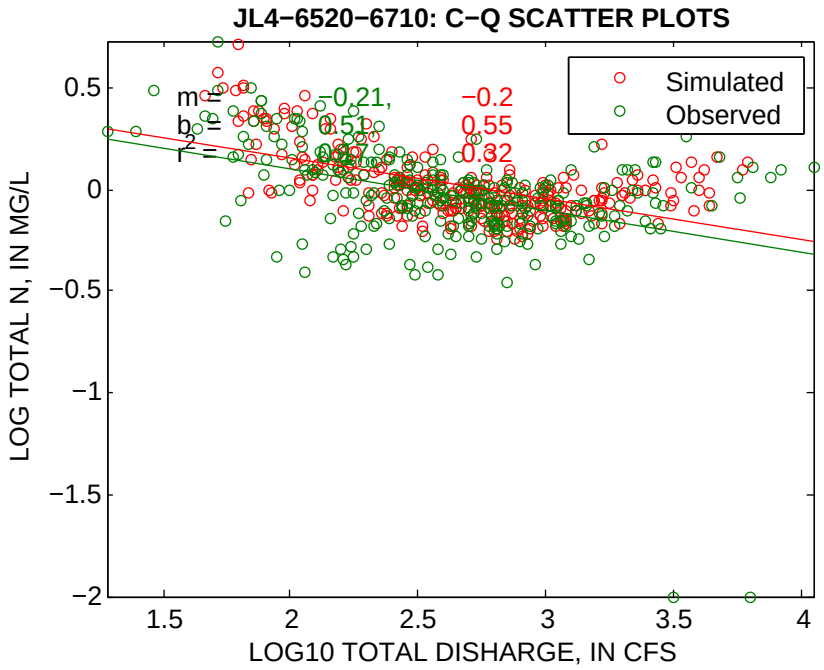
STATISTICS

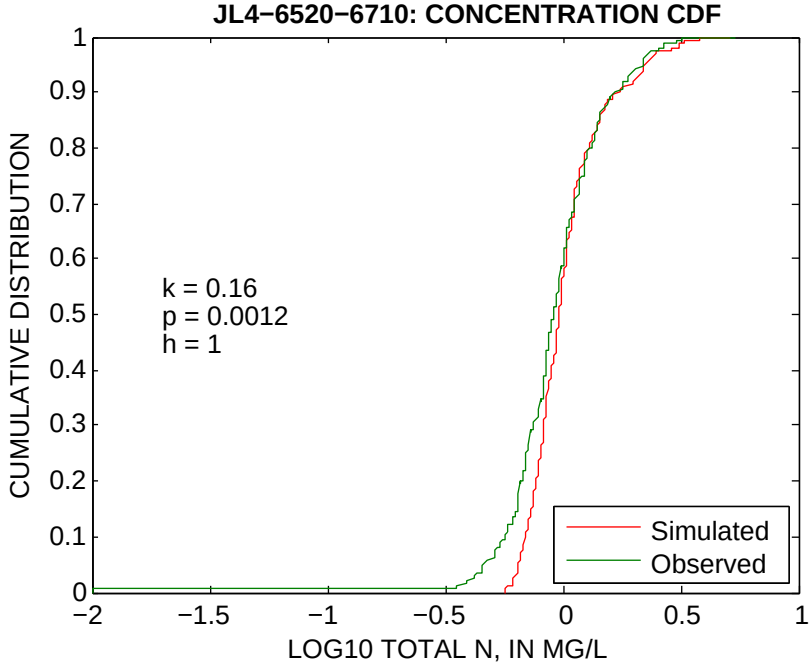
	n	observe	simulate
		291	291
min		0.01	0.54805
		-2	-0.26118
mean		1.04811	1.13934
		-0.0338703	0.0217254
media		0.91	0.99598
		-0.0409586	-0.0017493
max		5.37	4.9691
		0.729974	0.696278
varian		0.311567	0.318029
		0.0615372	0.0258146
JB		0.001	0.001
		0.001	0.001
		ra	log
%		8.70415	-164.143
err.va		0.196152	0.0537025
rel.std.err		0.629566	0.872683
mod.eff		0.370434	0.127317

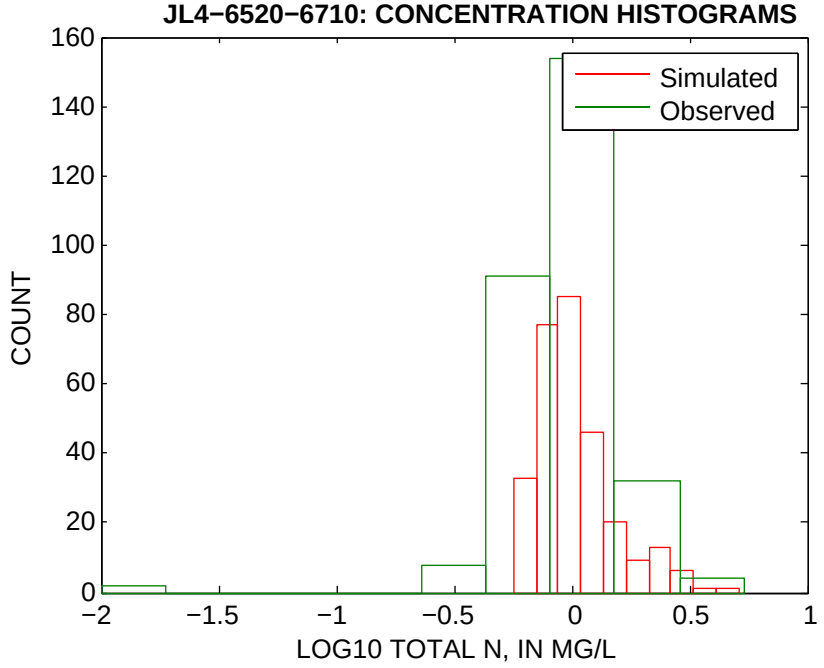
VERSION 2.1

ALL DATA
LOG10

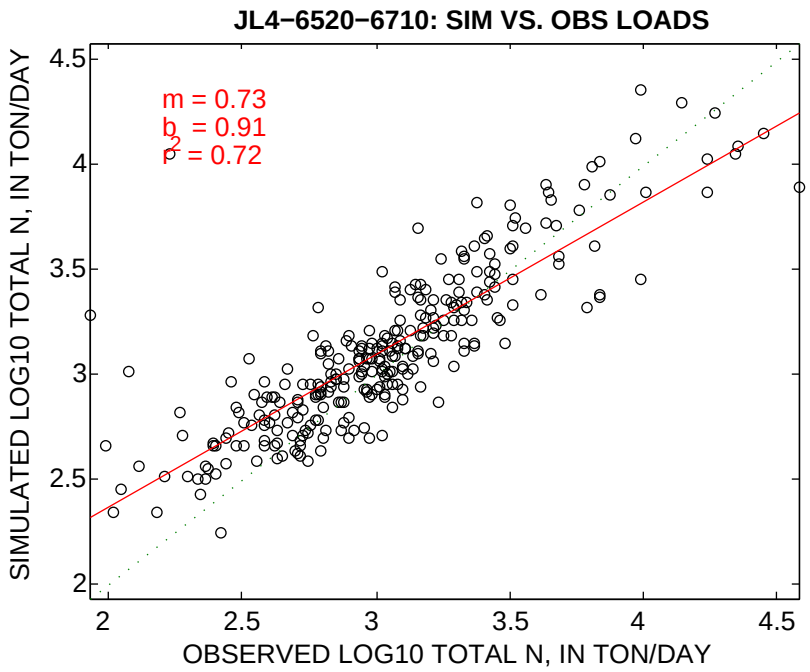


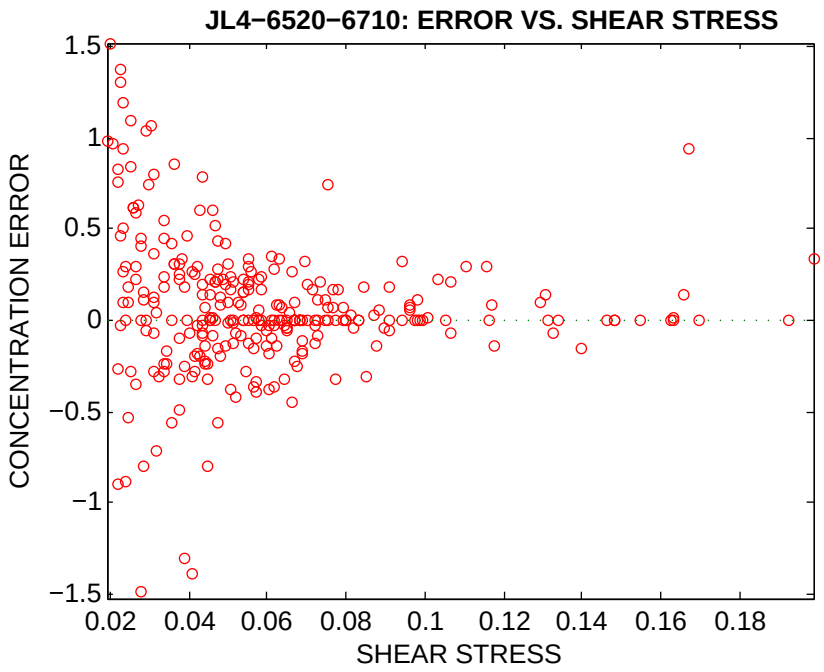


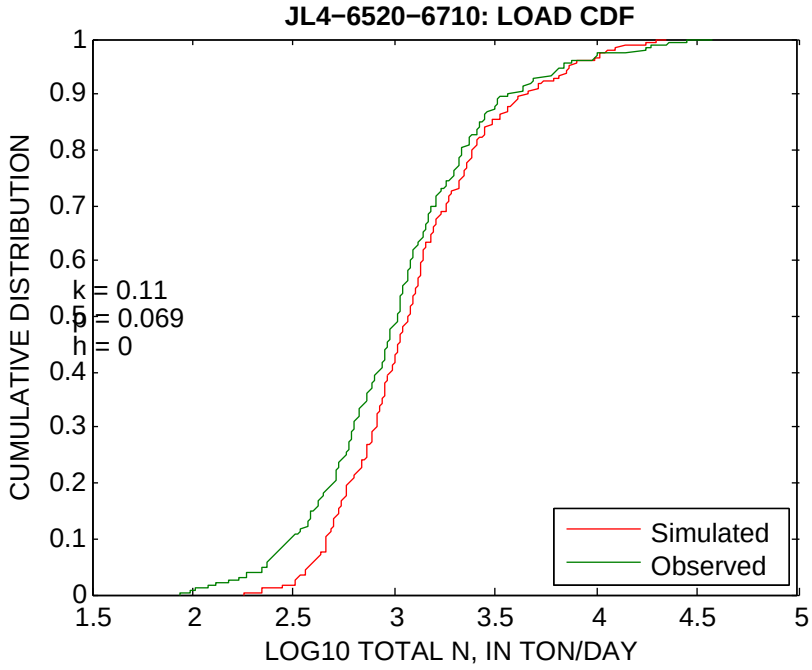


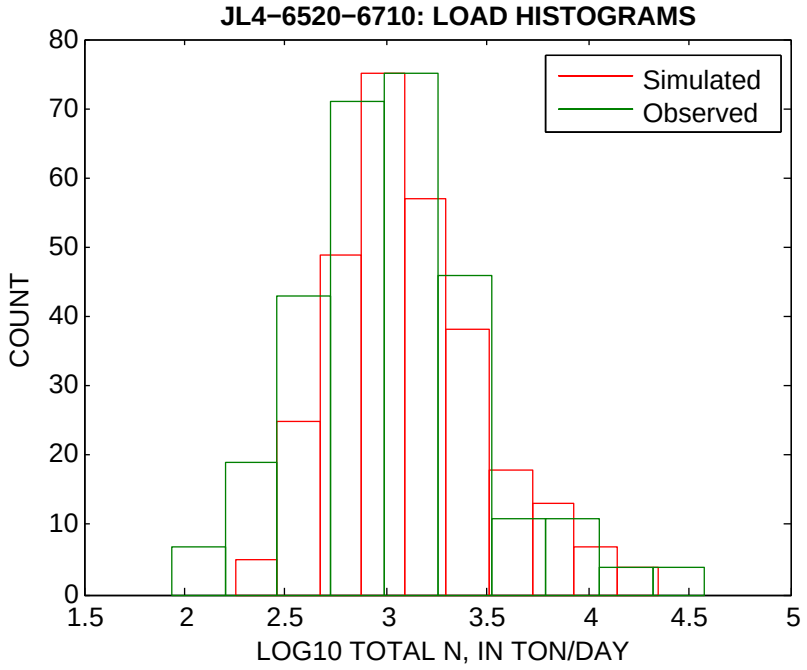


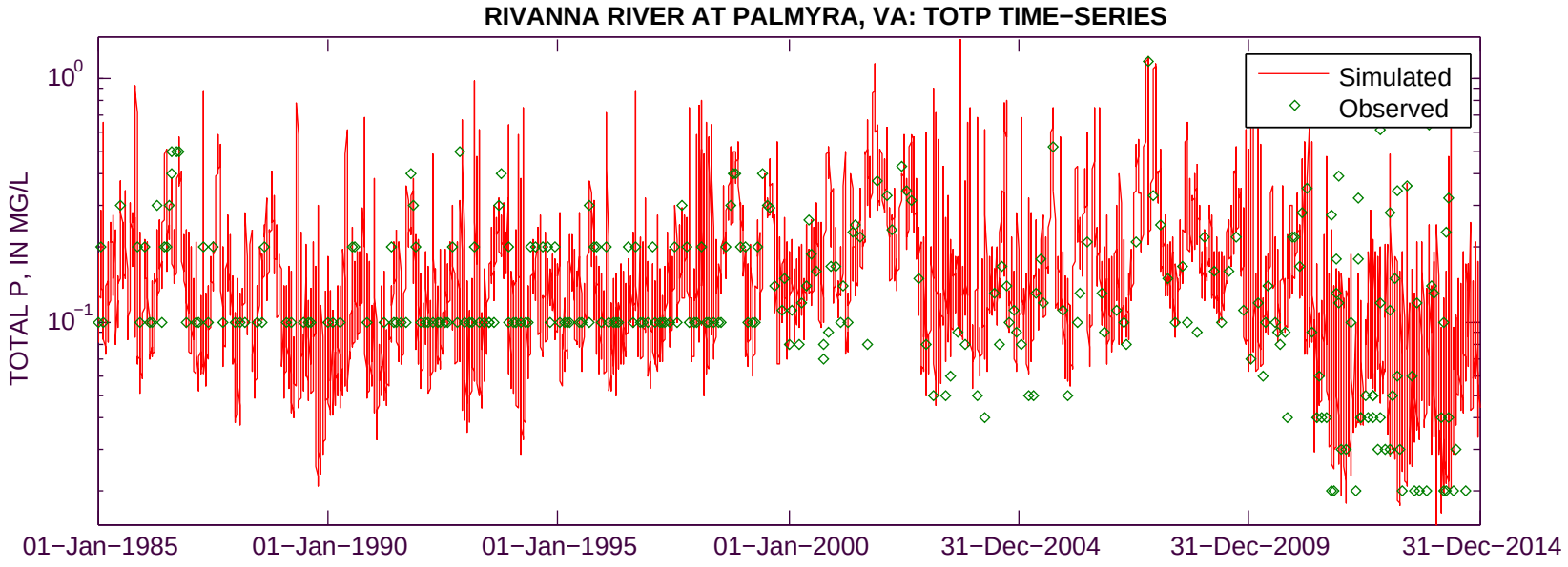
LOAD DATA
LOG10

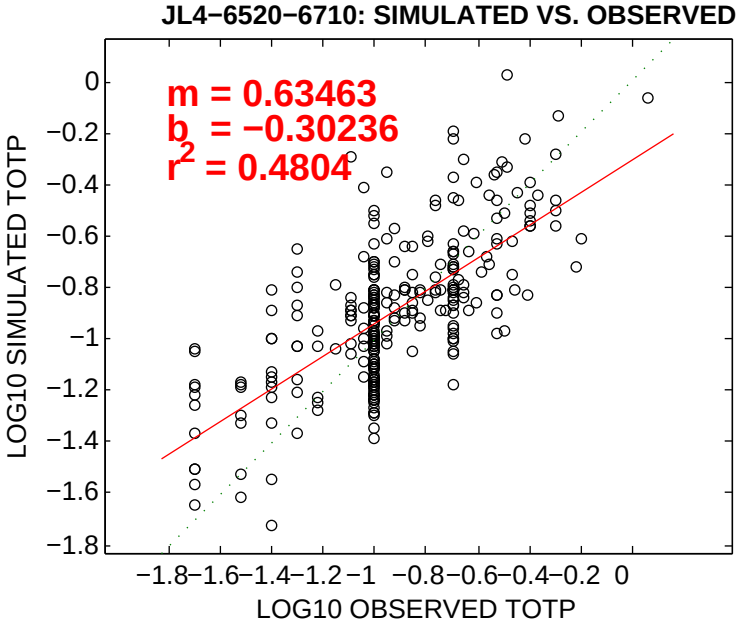


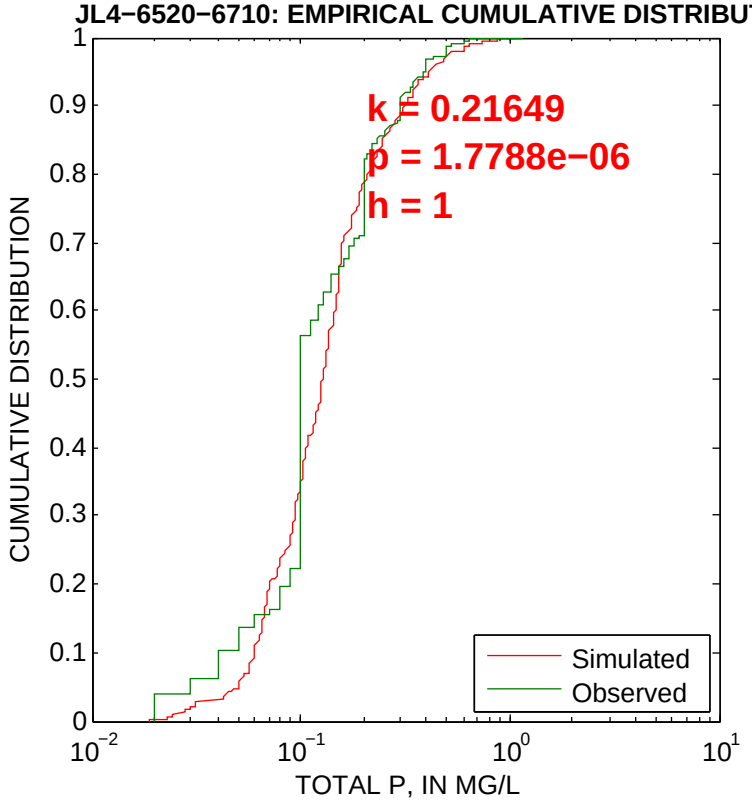












DATA SELECTION

scenario: P620171001WQ | file: TOTP.calib

plot: TOTP - total phosphorus

Dates: 1/1/1985 – 12/31/201

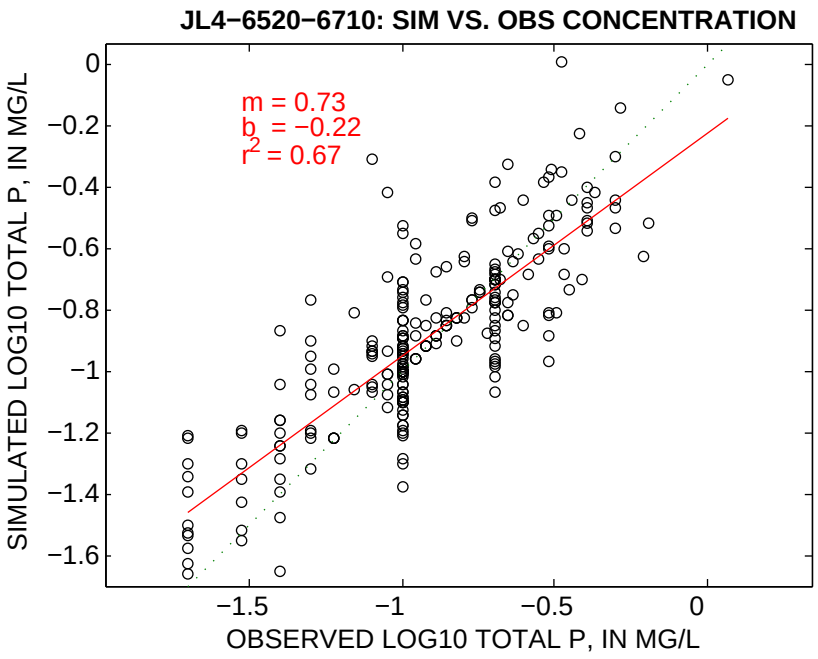
Drive | Directory | Observed: N/A | model | OBS20161101

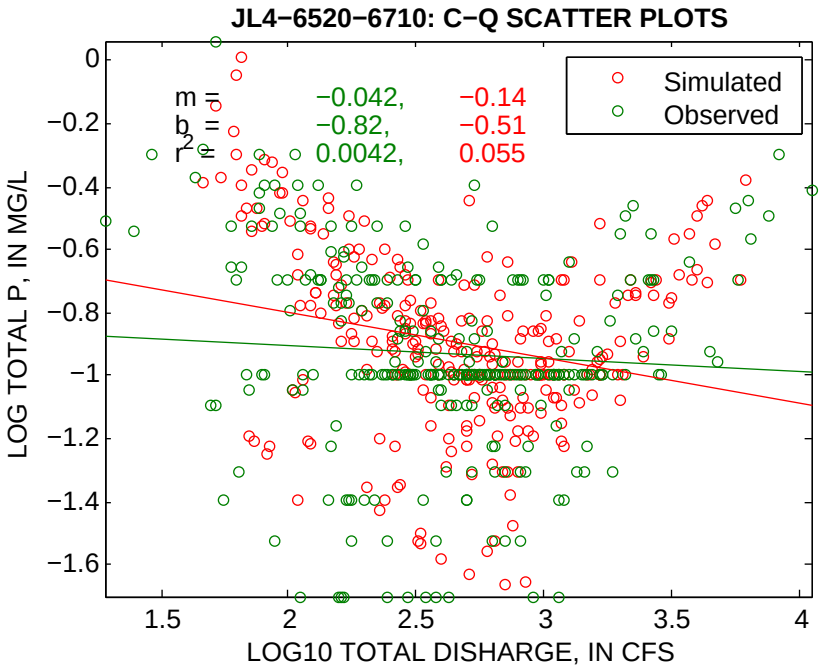
STATISTICS

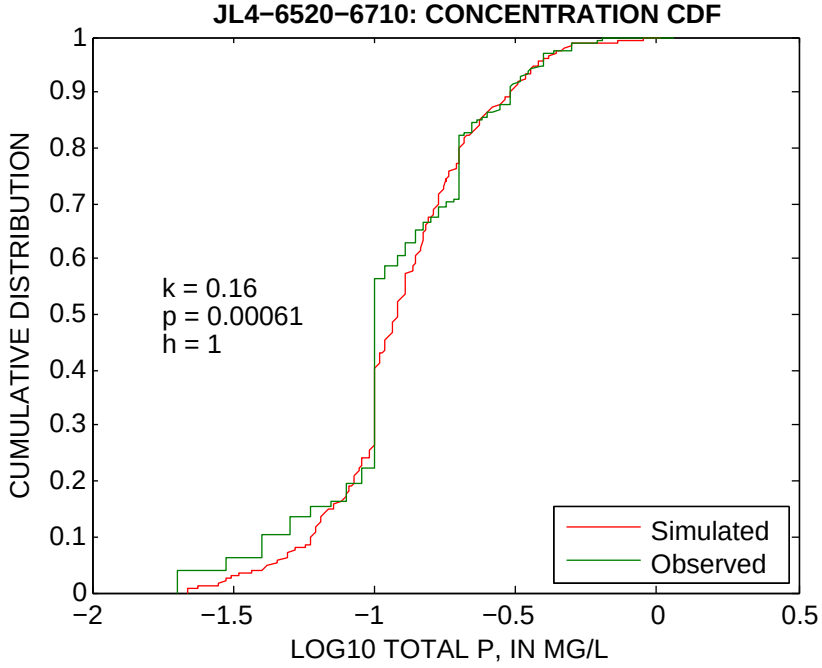
n	291	291
	observe	simulate
min	0.02	0.018966
	-1.69897	-1.72202
mean	0.151581	0.161443
	-0.927594	-0.891035
media	0.1	0.12928
	-1	-0.888469
max	1.16	1.0592
	0.064458	0.024978
varian	0.0149678	0.0171583
	0.0970849	0.0813921
JB	0.001	0.001
	0.067485	0.070932
	ra	log
%	6.50632	-3.94127
err.va	0.011575	0.0565927
rel.std.err	0.773323	0.582919
mod.eff	0.226677	0.417081

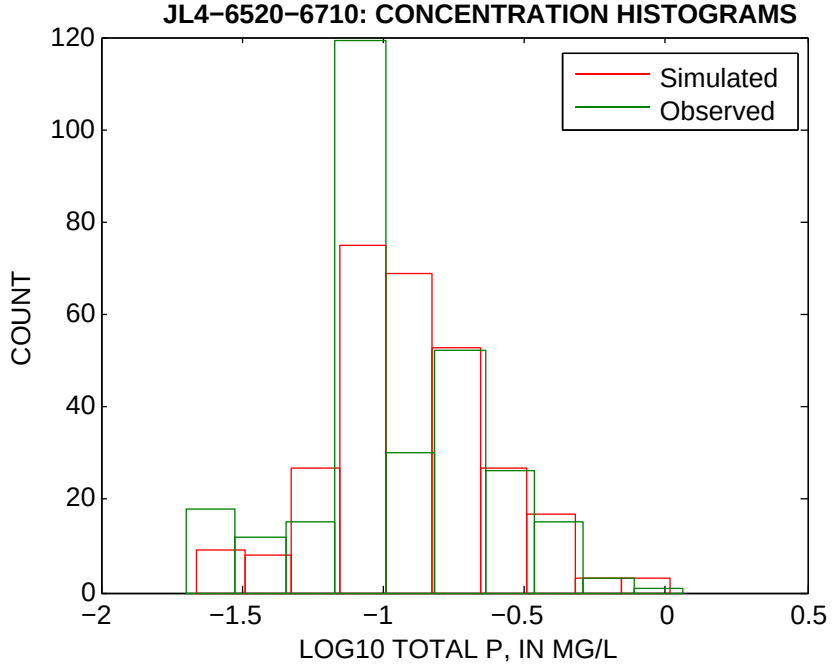
VERSION 2.1

ALL DATA
LOG10

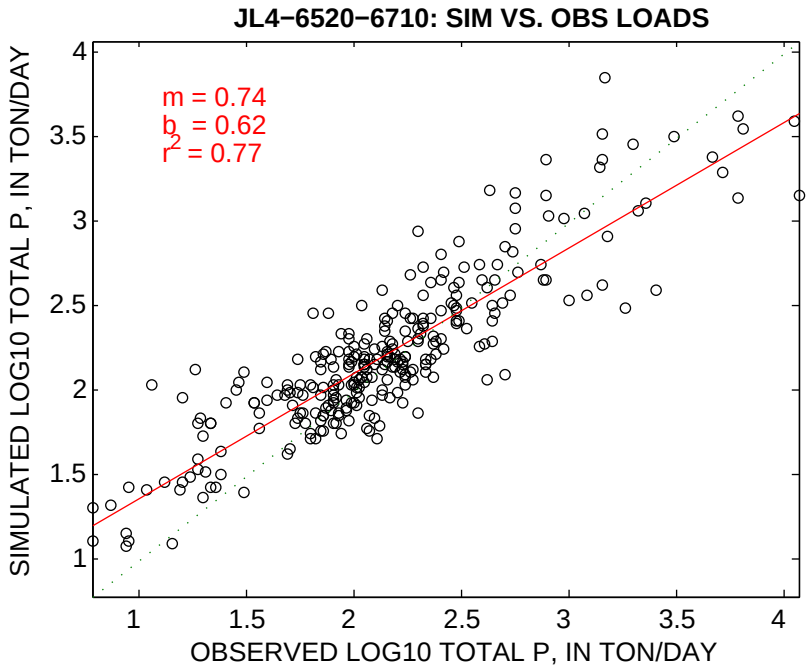


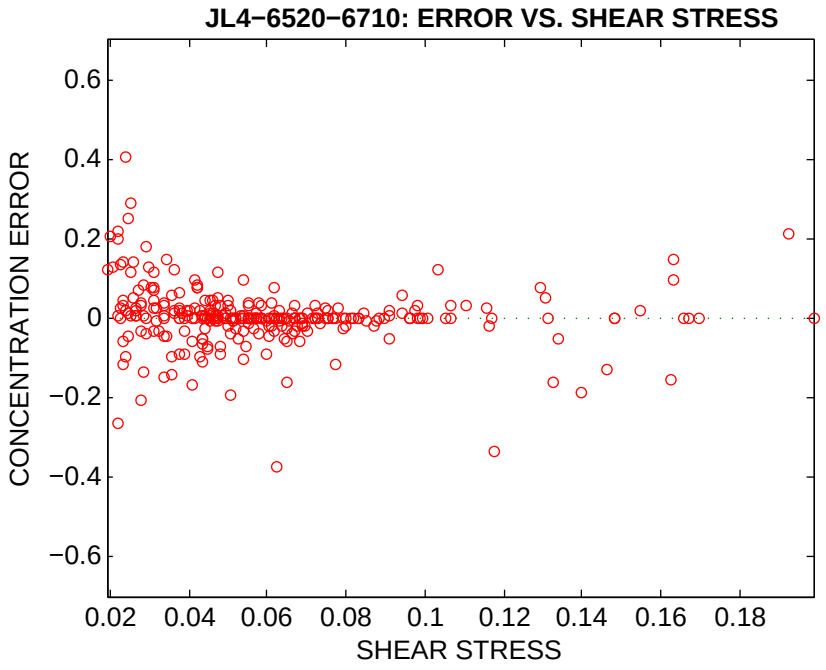


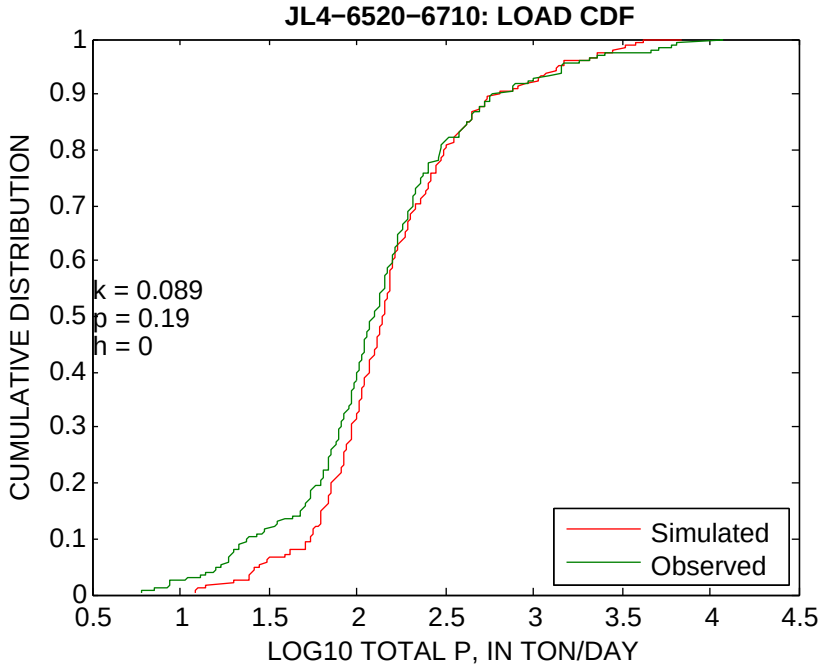


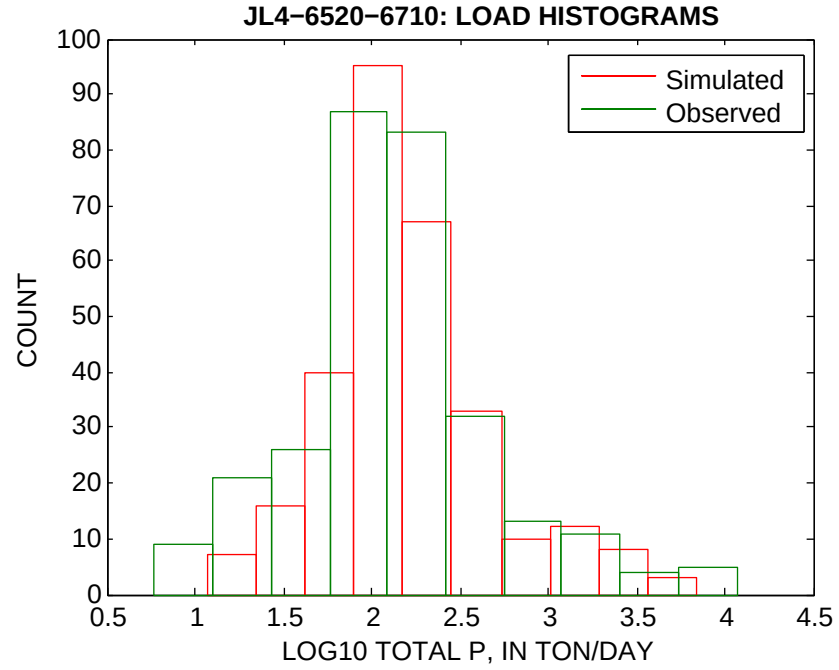


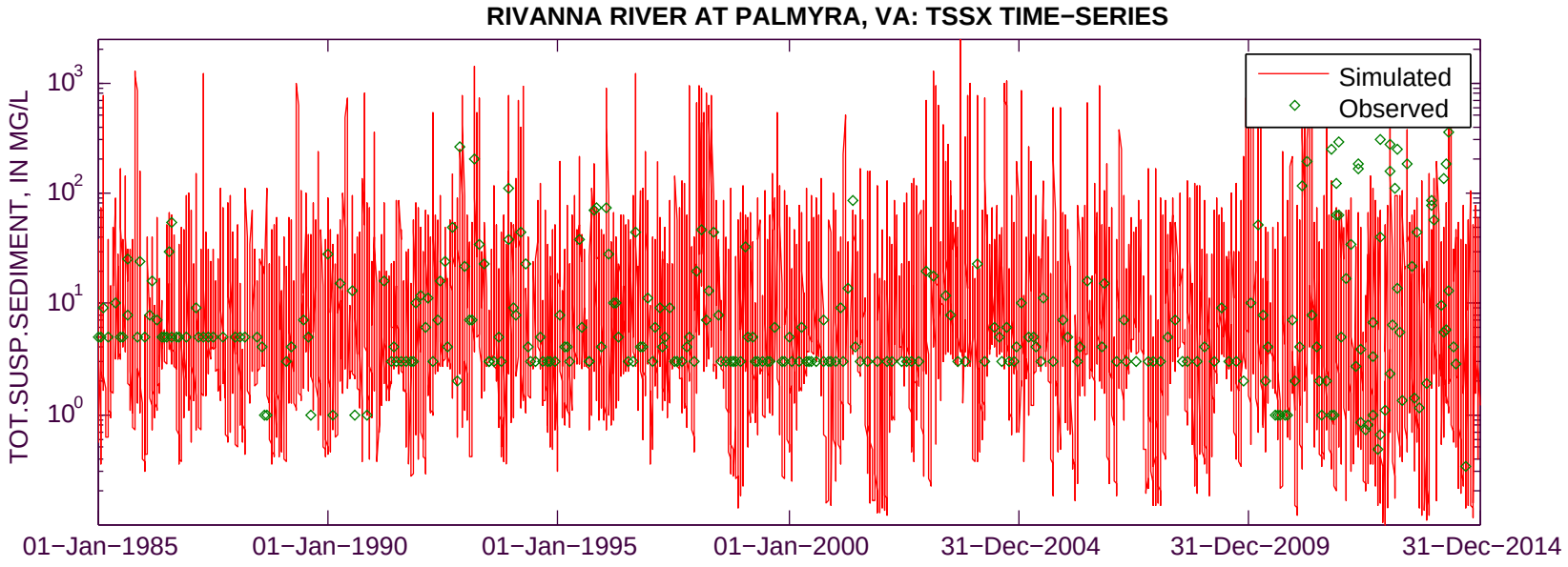
LOAD DATA
LOG10

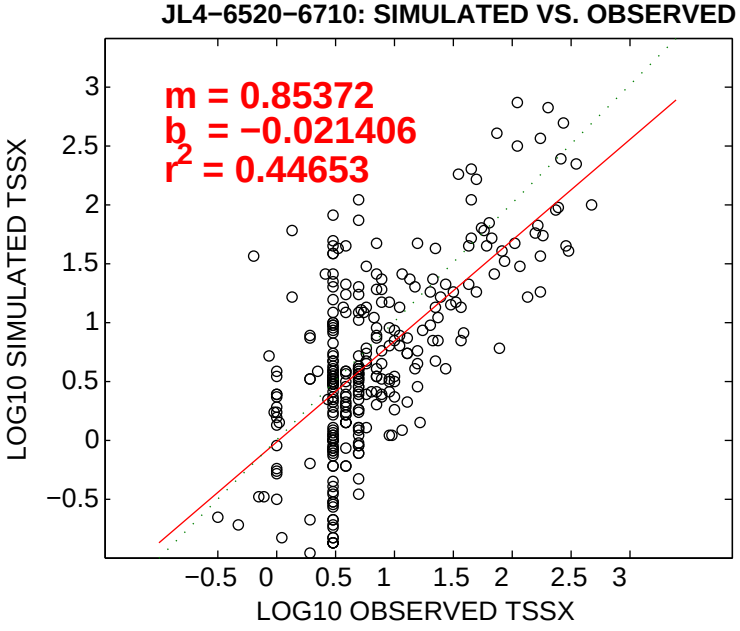


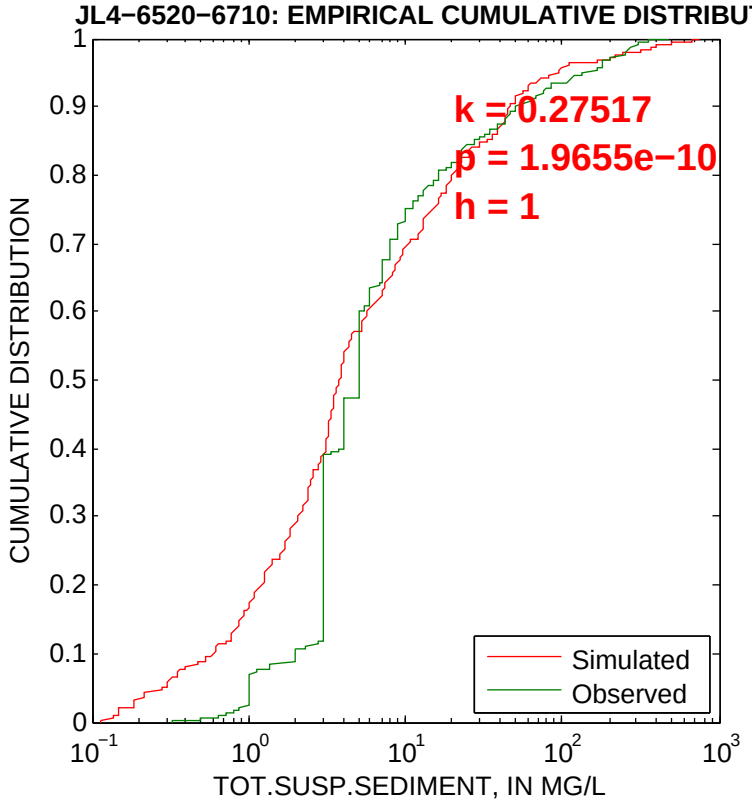












DATA SELECTION

scenario	file
P620171001WQ	TSSX.calib

plot: TSSX - total suspended ...

Dates: 1/1/1985 – 12/31/201

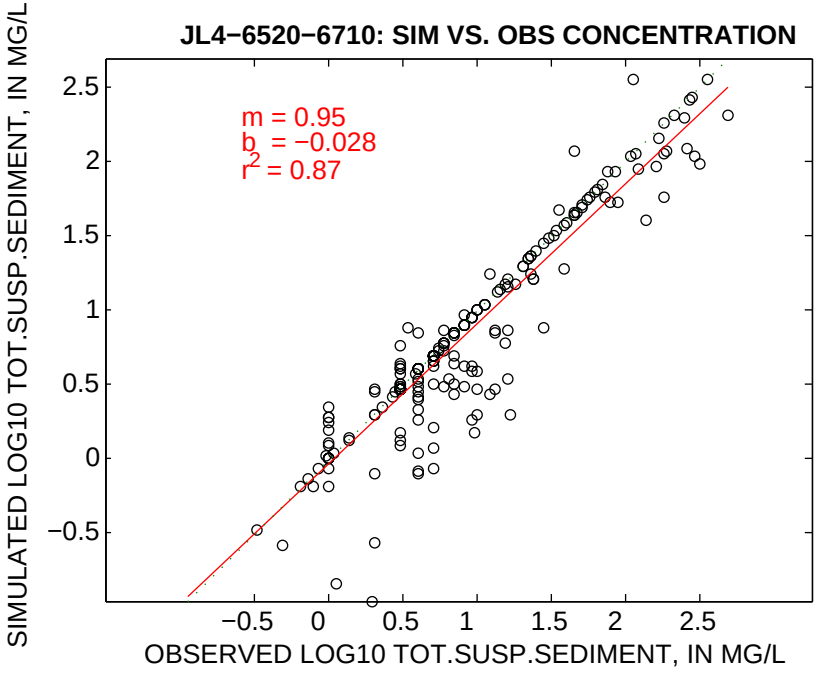
Drive	Directory	Observed
N/A	model	OBS20161101

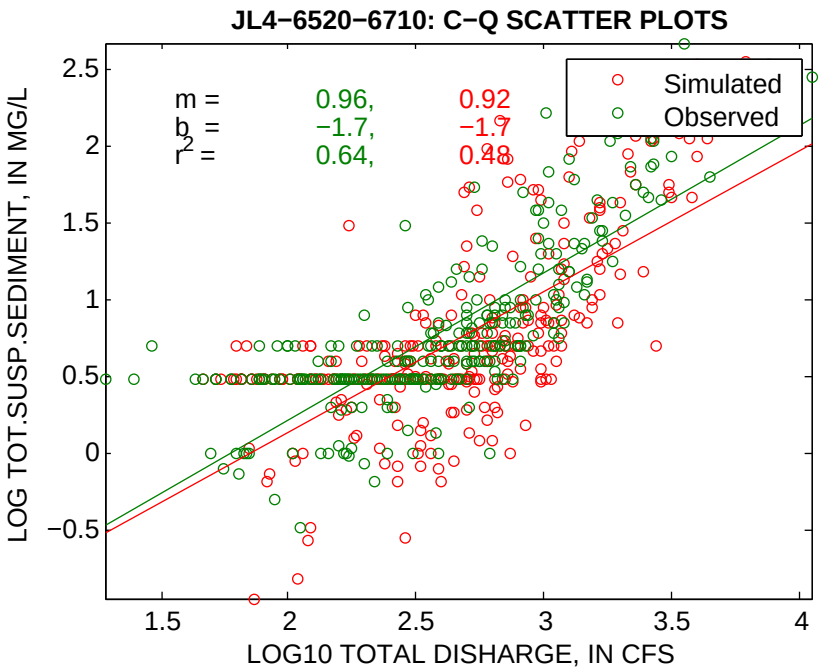
STATISTICS

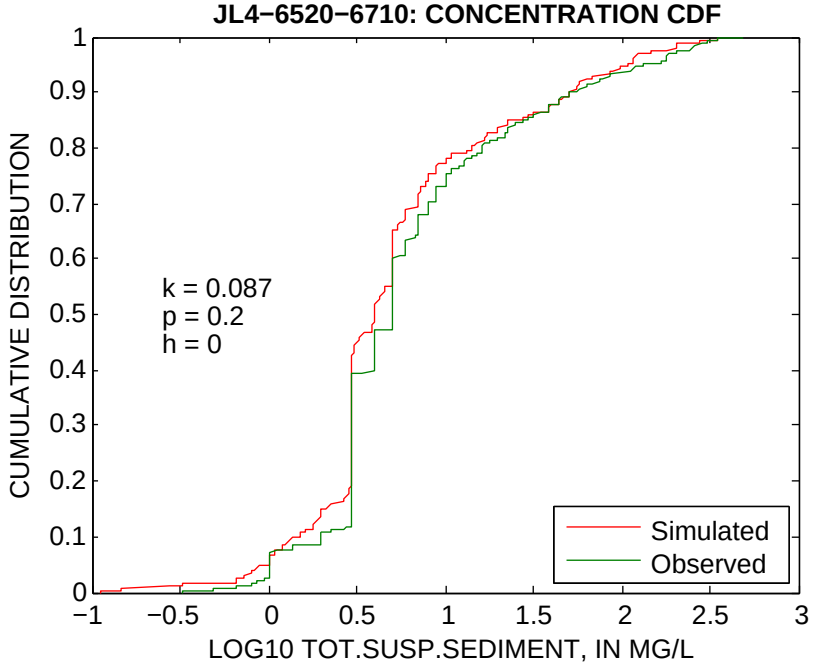
	n	298	298
		observe	simulate
min		0.33	0.11229
		-0.481486	-0.949659
mean		23.5963	24.8672
		0.824622	0.682591
media		5	3.82405
		0.69897	0.582514
max		480	746.14
		2.68124	2.87282
varian		3424.35	6115.29
		0.343376	0.560472
JB		0.001	0.001
		0.001	0.061580
		ra	log
%		5.38598	-17.2238
err.va		4811.25	0.337794
rel.std.err		1.40501	0.983745
mod.eff		-0.40501	0.0162546

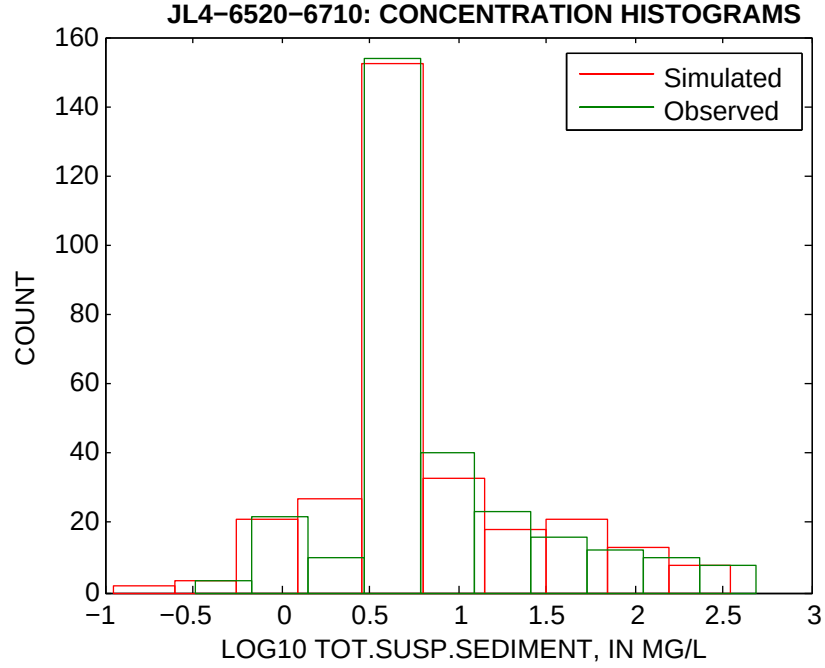
VERSION 2.1

ALL DATA
LOG10

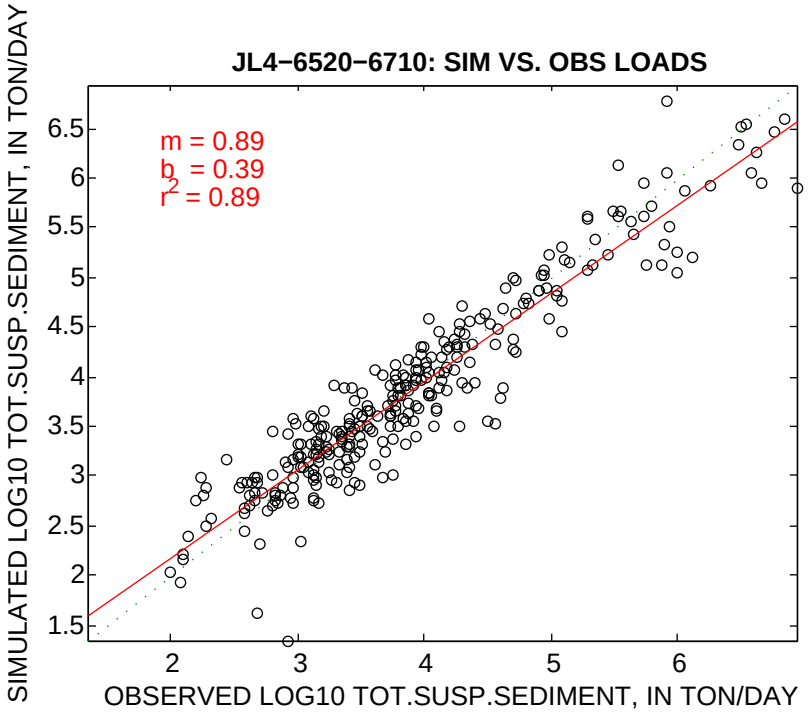


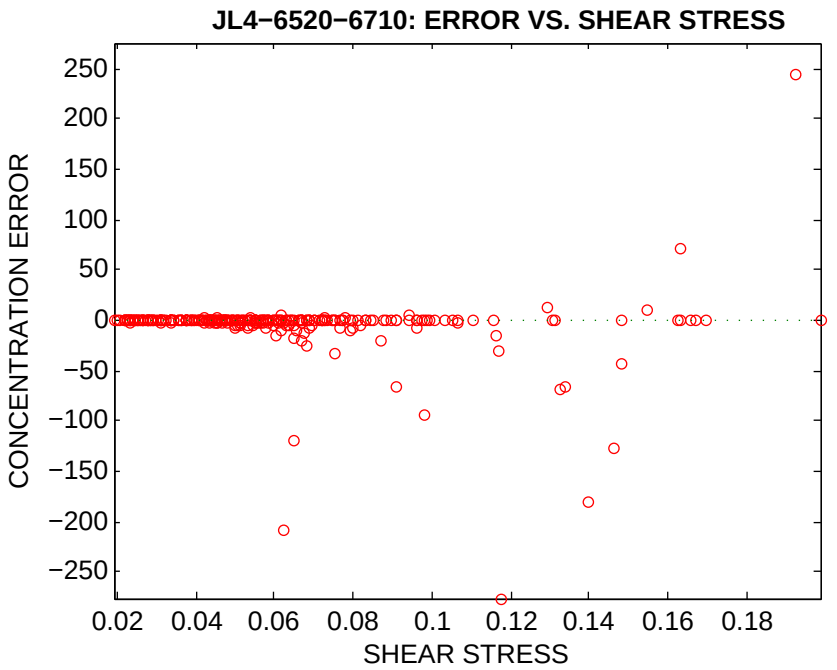


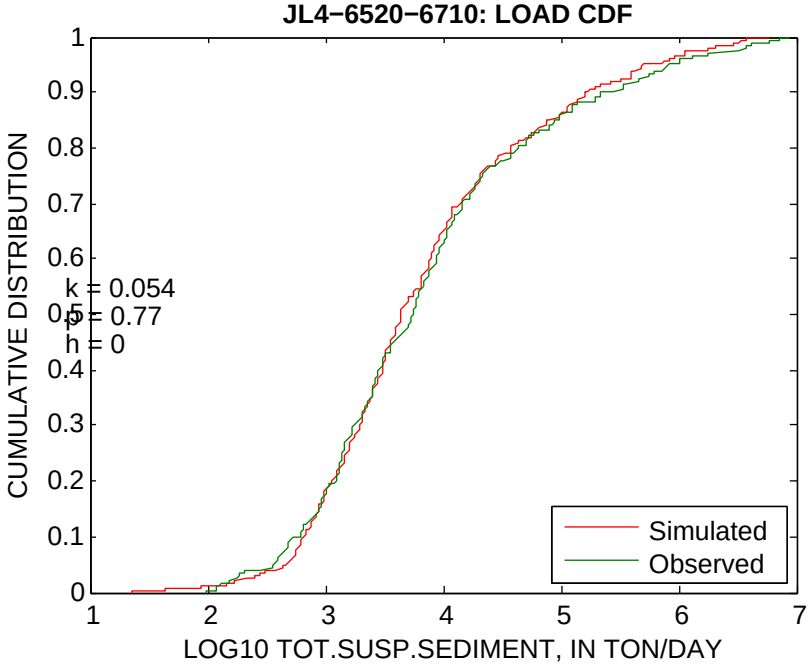


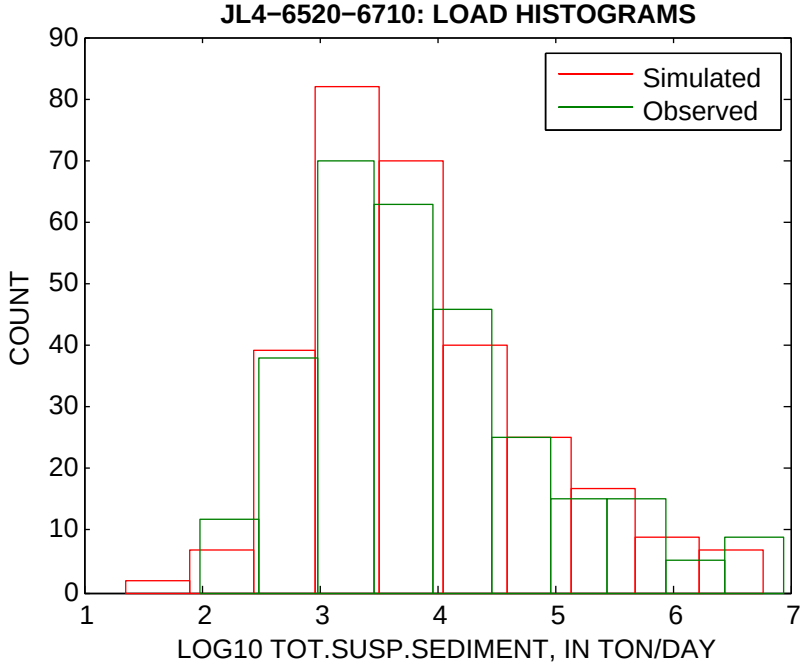


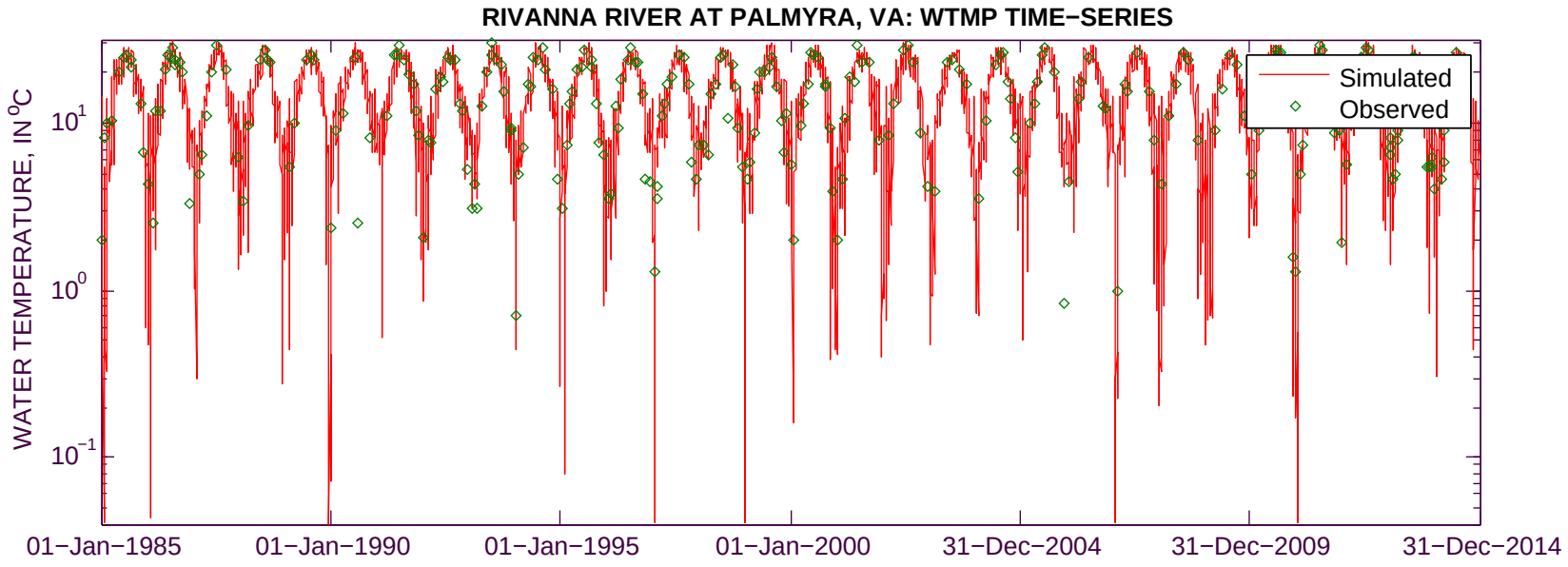
LOAD DATA
LOG10

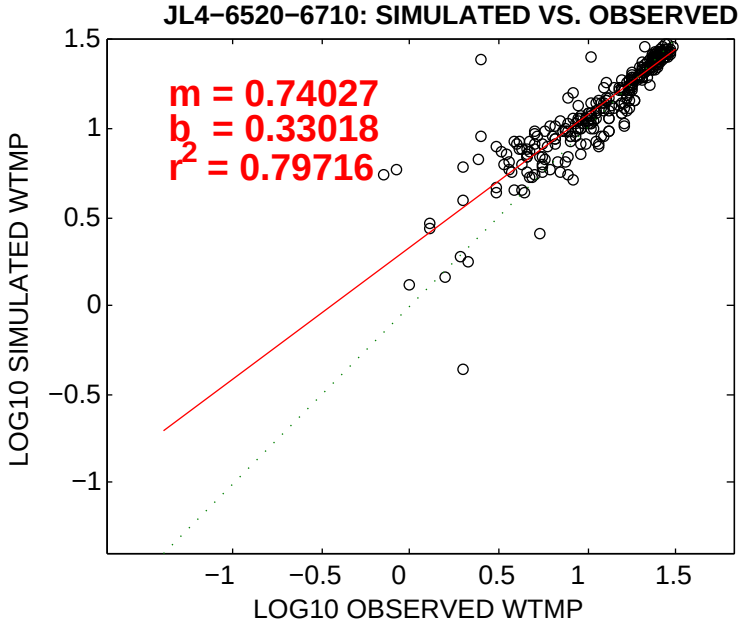


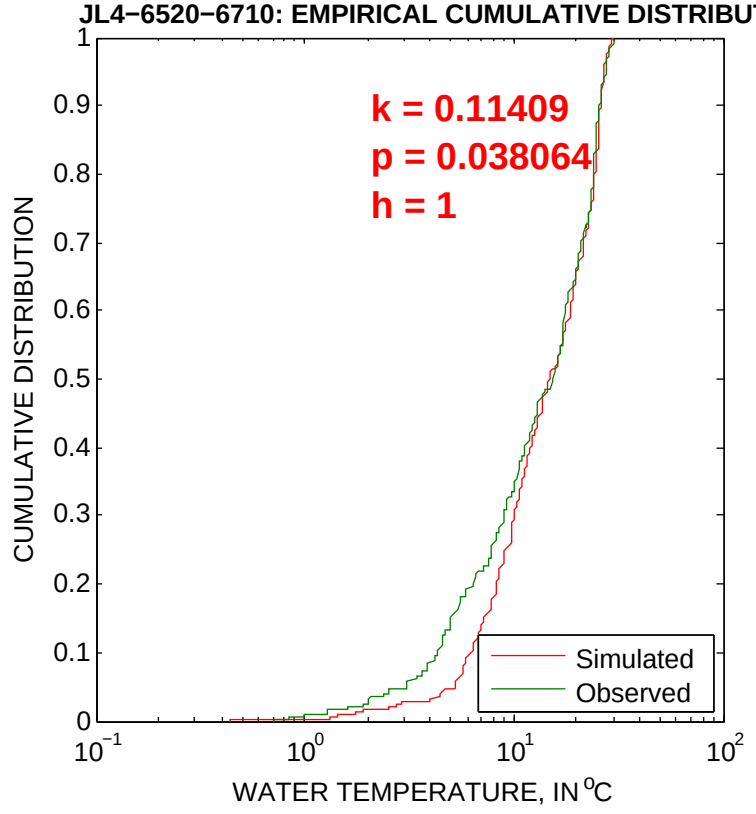












DATA SELECTION

scenario	file
P620171001WQ	WTMP.calib

plot: WTMP - water tempera...

Dates: 1/1/1985 – 12/31/201

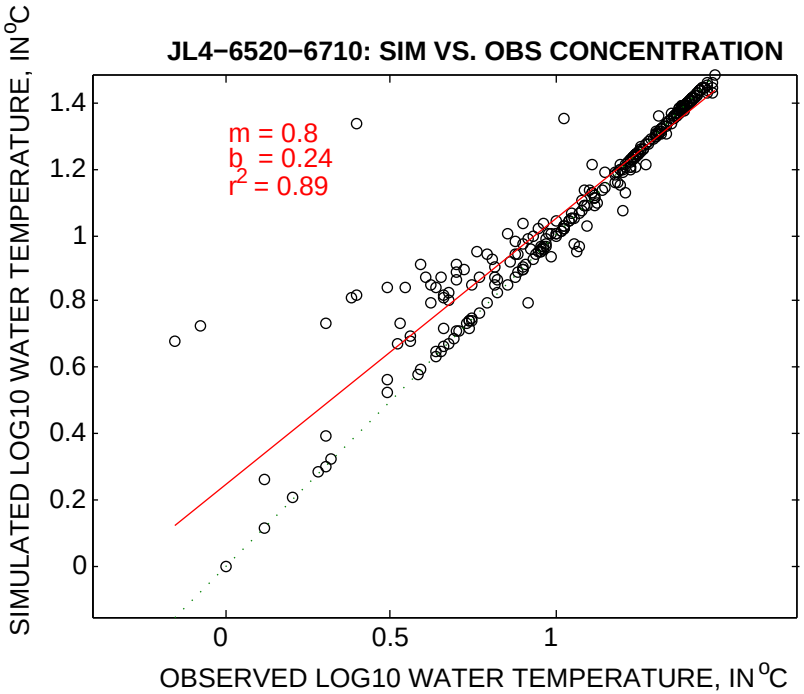
Drive	Directory	Observed
N/A	model	OBS20161101

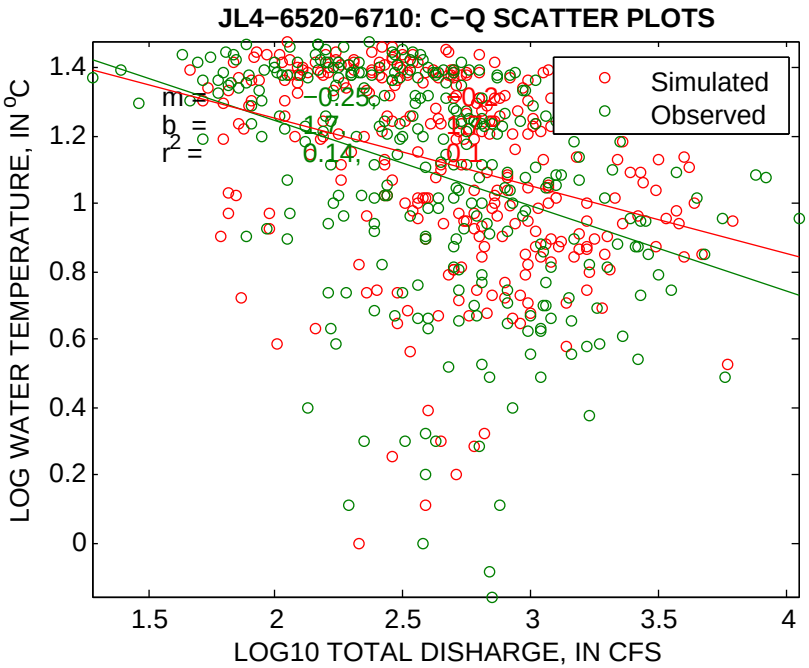
STATISTICS

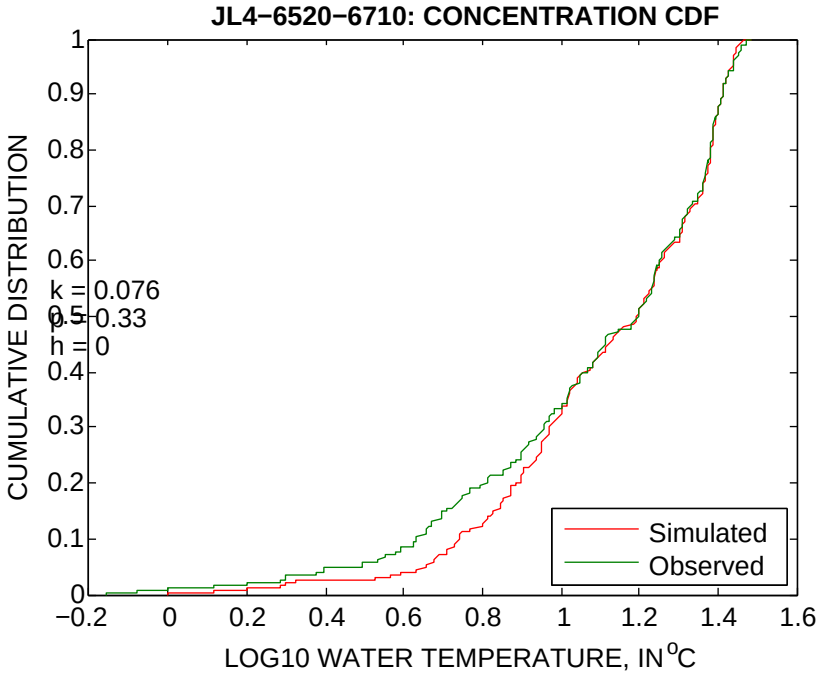
	n	298	298
		observe	simulate
min		0.7	0.43929
		-0.154902	-0.357249
mean		15.0709	15.8308
		1.08301	1.13191
media		15.6	14.998
		1.19312	1.17603
max		30.4	30.282
		1.48287	1.48118
varian		67.6978	58.3489
		0.107799	0.0741057
JB		0.001703	0.001803
		0.001	0.001
		ra	log
%		5.04206	4.51471
err.va		7.60738	0.0247022
rel.std.err		0.112373	0.229151
mod.eff		0.887627	0.770849

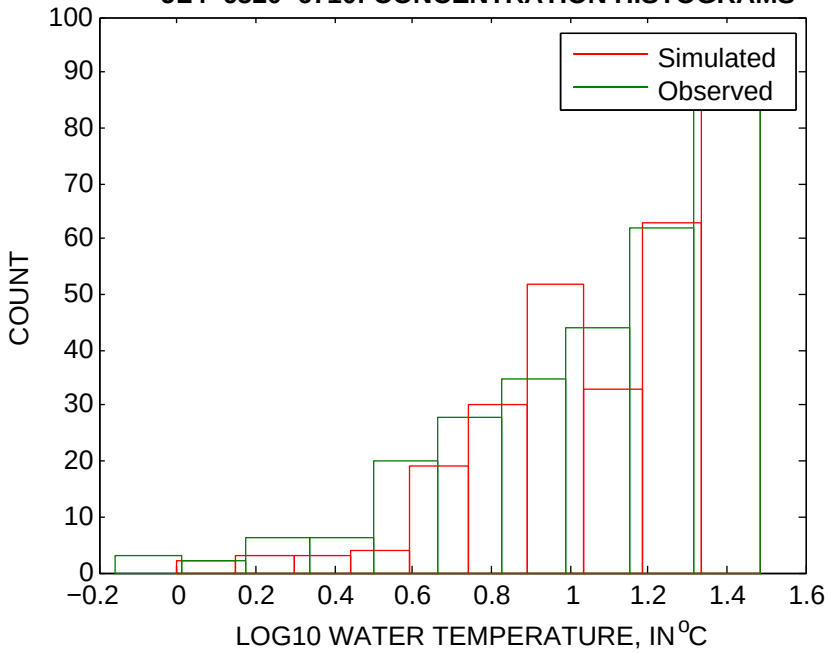
VERSION 2.1

ALL DATA
LOG10

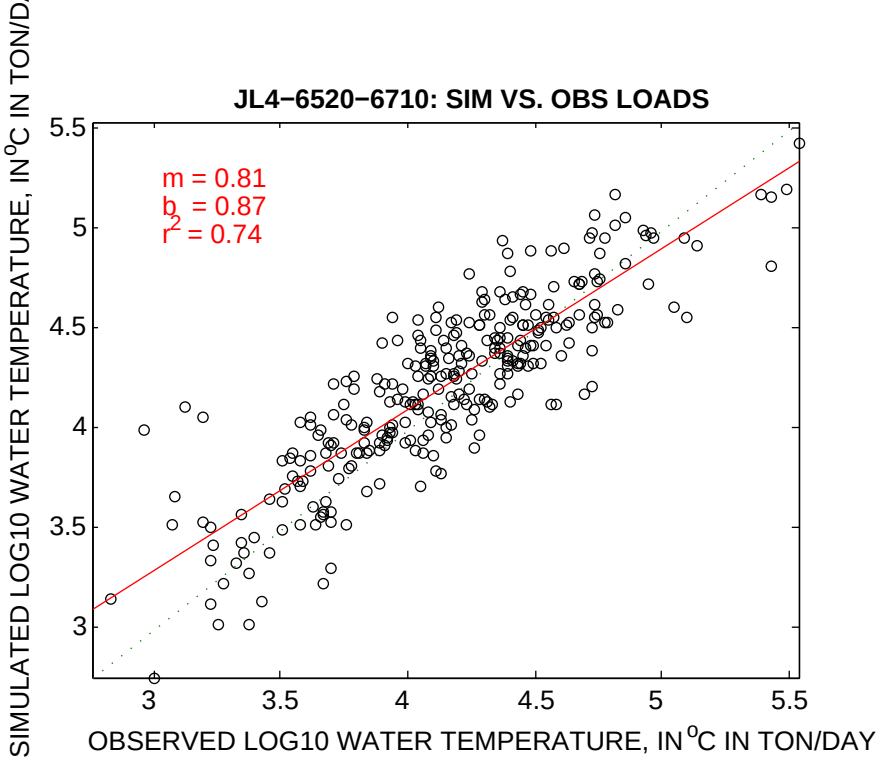


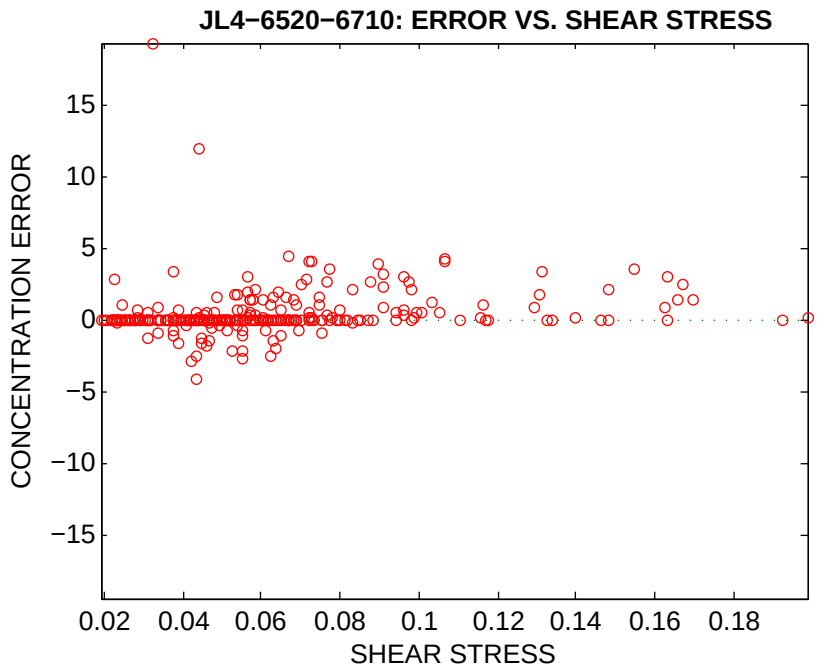


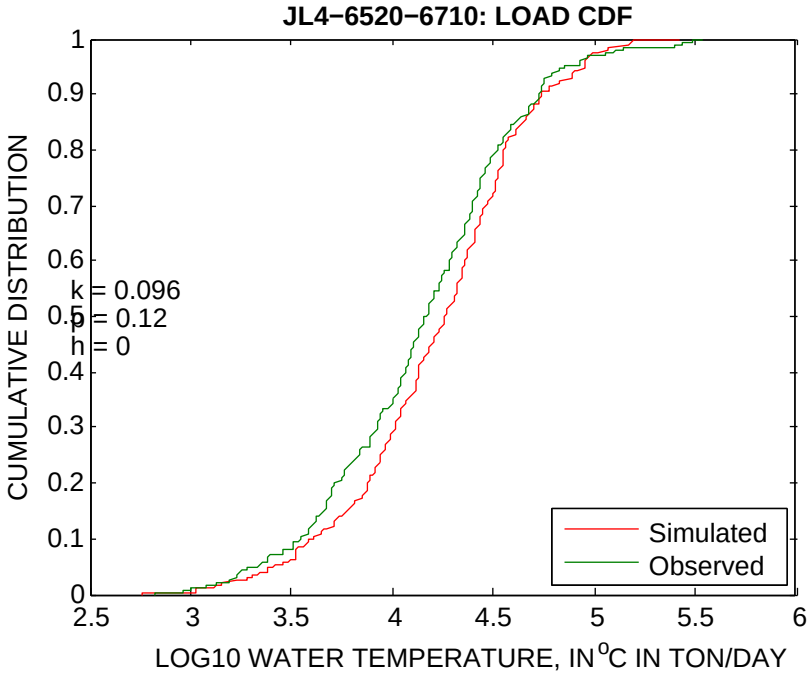


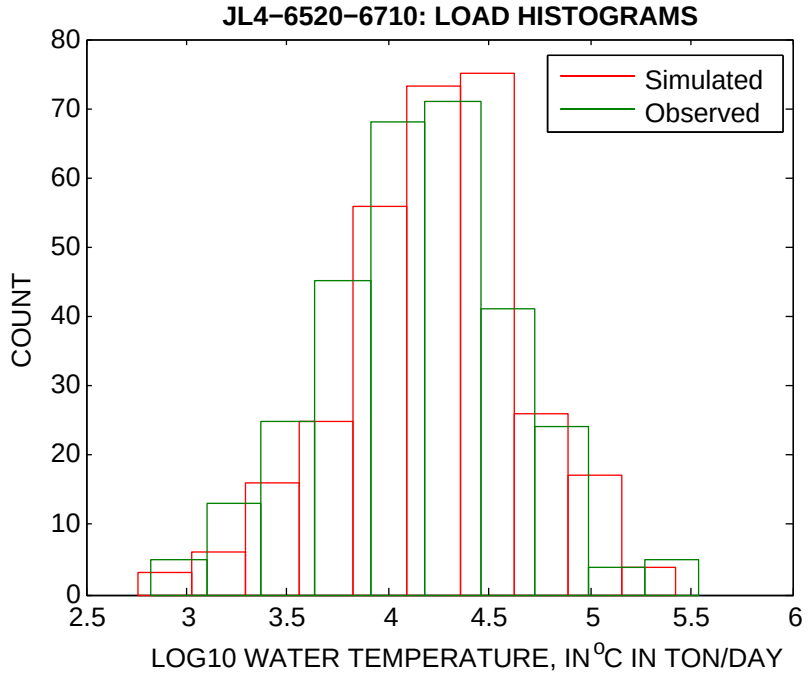


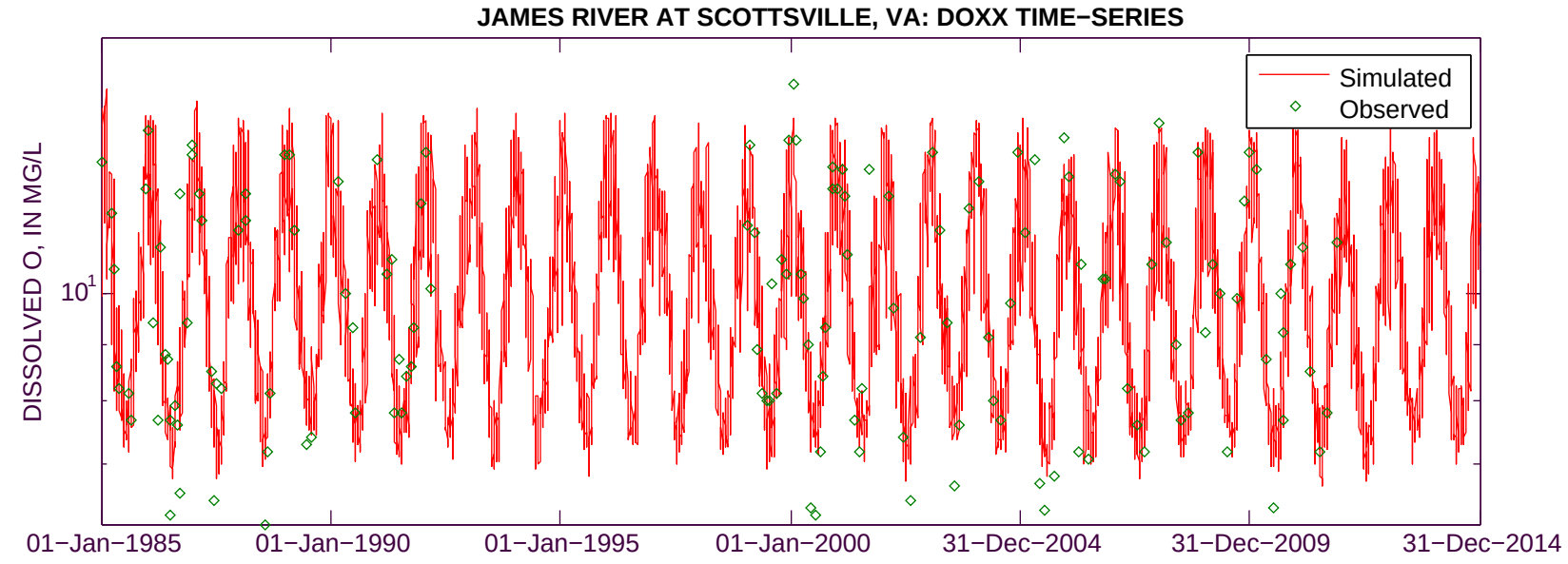
LOAD DATA
LOG10

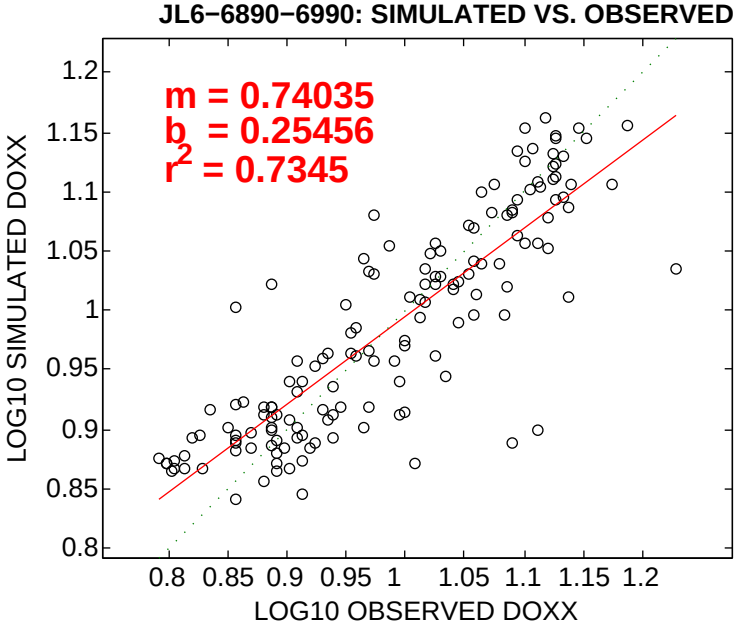


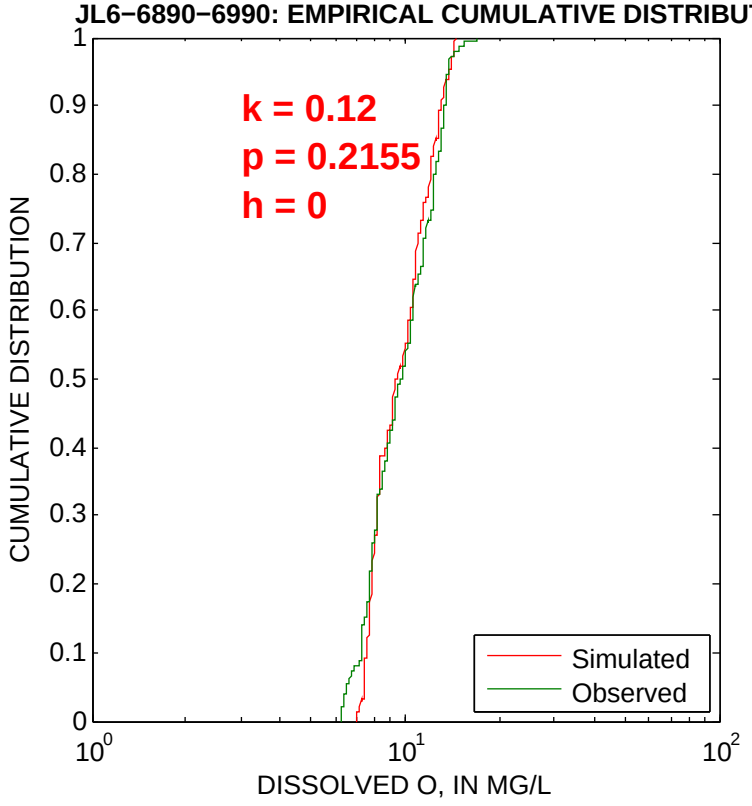












DATA SELECTION

scenario	file
P620171001WQ	DOXX.calib

plot: DOXX - dissolved oxygen

Dates: 1/1/1985 – 12/31/201

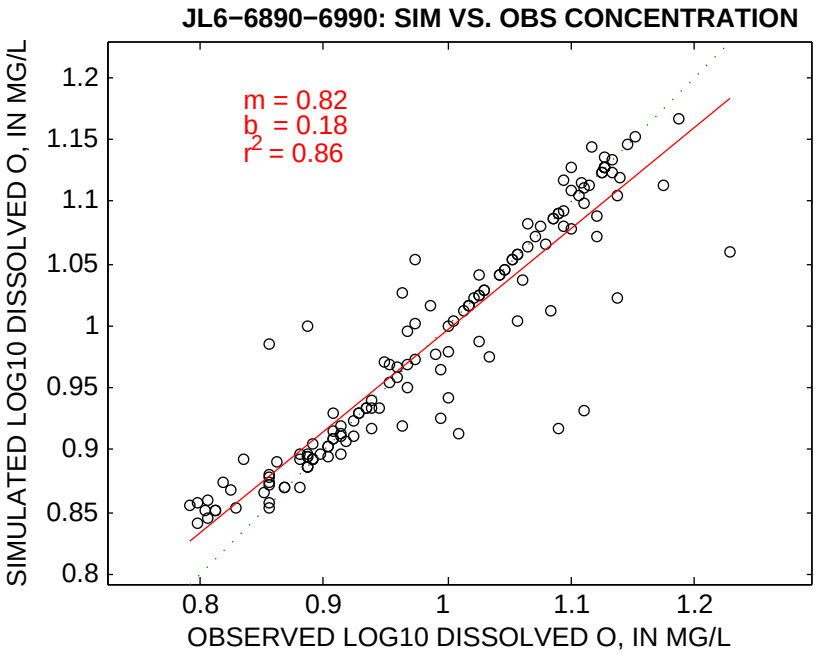
Drive	Directory	Observed
N/A	model	OBS20161101

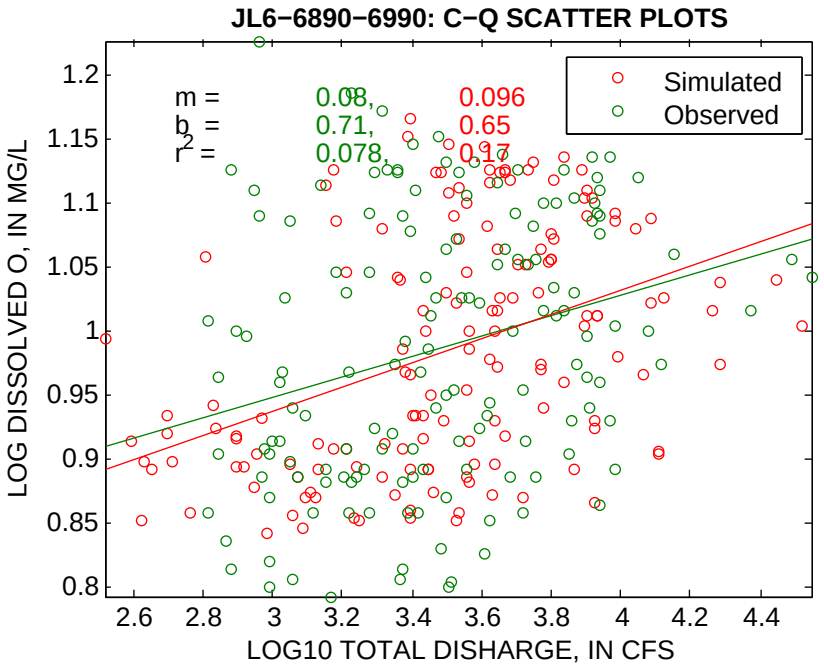
STATISTICS

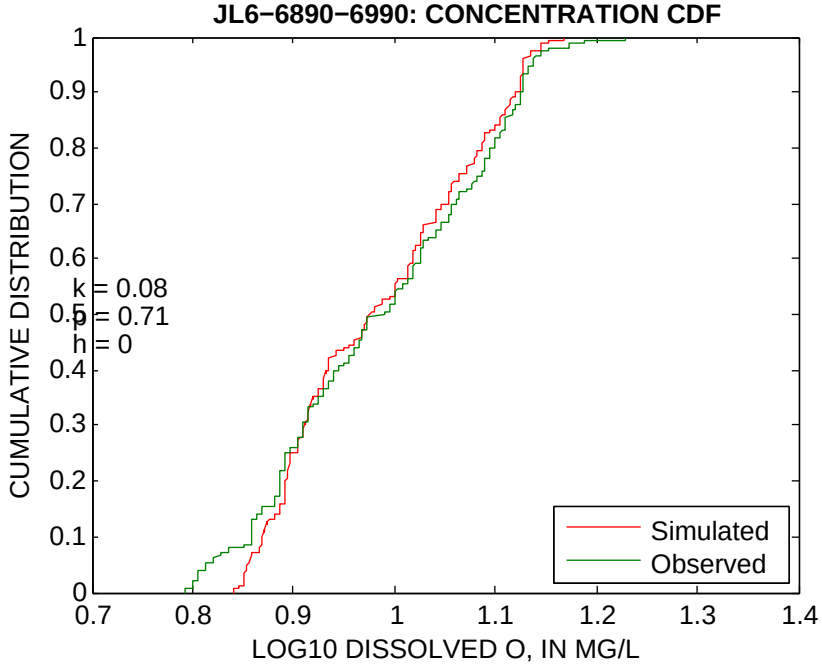
	n	observe	simulate
		150	150
min		6.2	6.9318
		0.792392	0.840846
mean		9.9852	9.87823
		0.986841	0.985169
media		9.75	9.39525
		0.988999	0.9729
max		16.9	14.549
		1.22789	1.16283
varian		5.78618	4.43874
		0.0109866	0.00819868
JB		0.026262	0.01008
		0.027572	0.012103
		ra	log
%		-1.07133	-0.169392
err.va		1.57444	0.00292022
rel.std.err		0.272104	0.265799
mod.eff		0.727896	0.734201

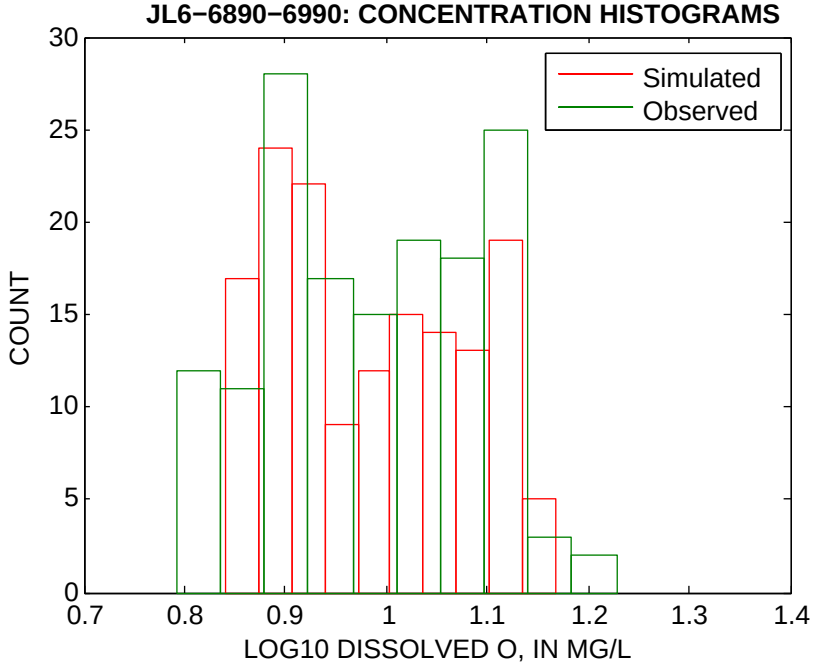
VERSION 2.1

ALL DATA
LOG10

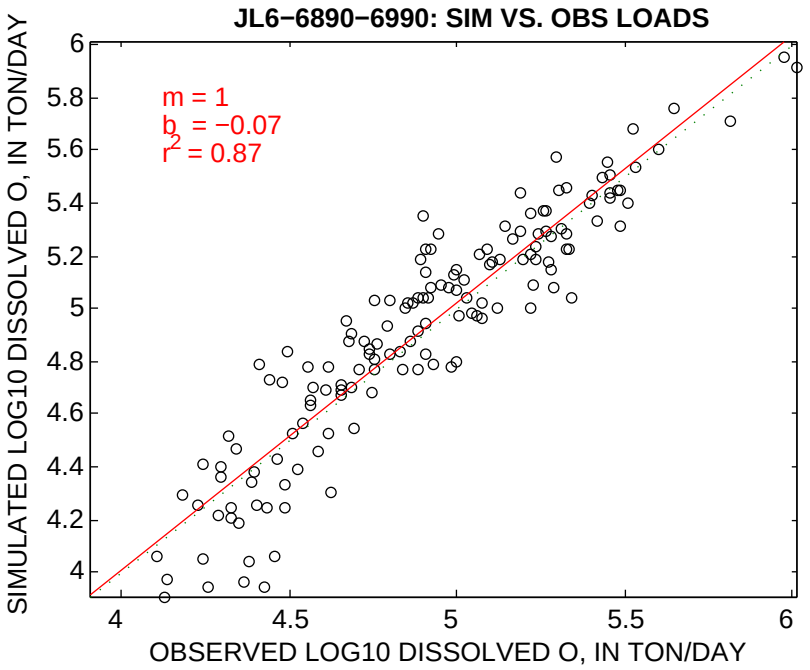


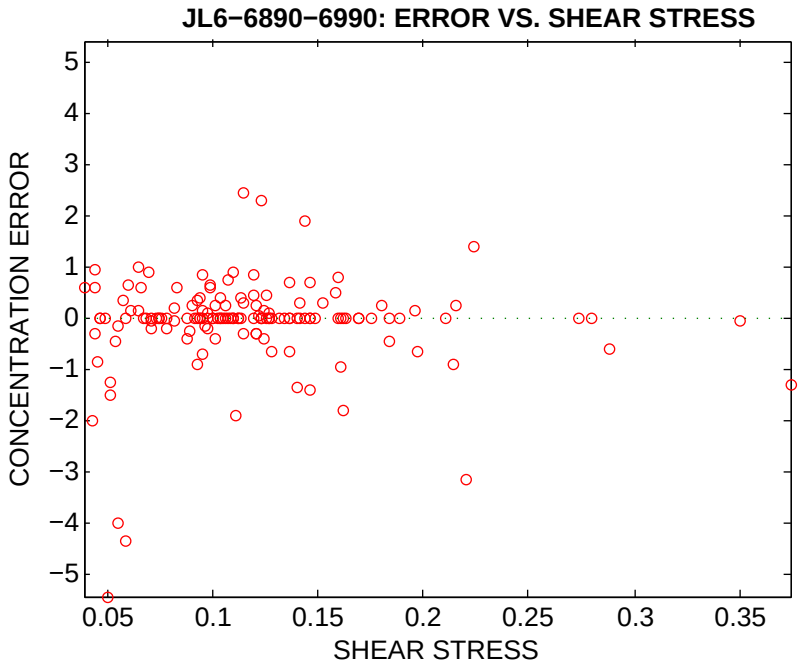


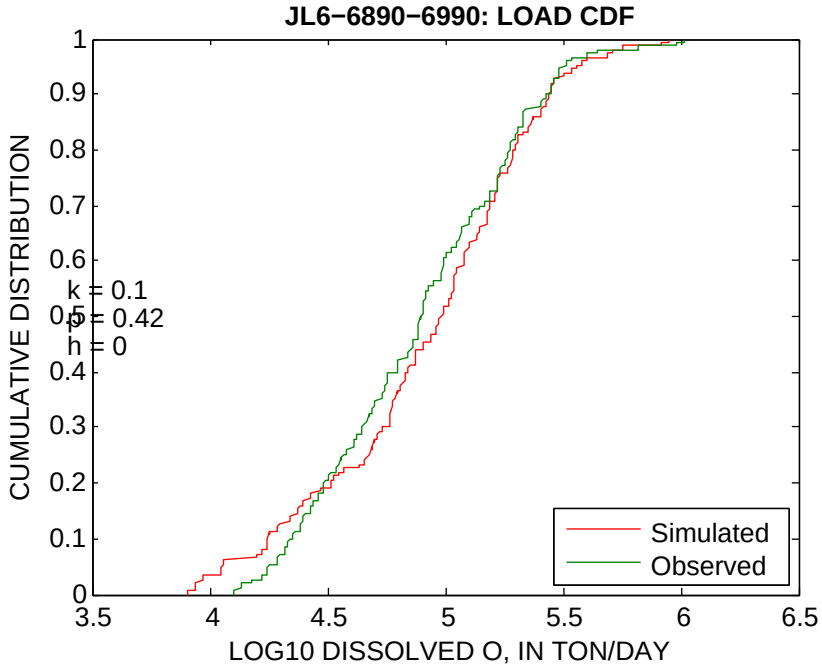


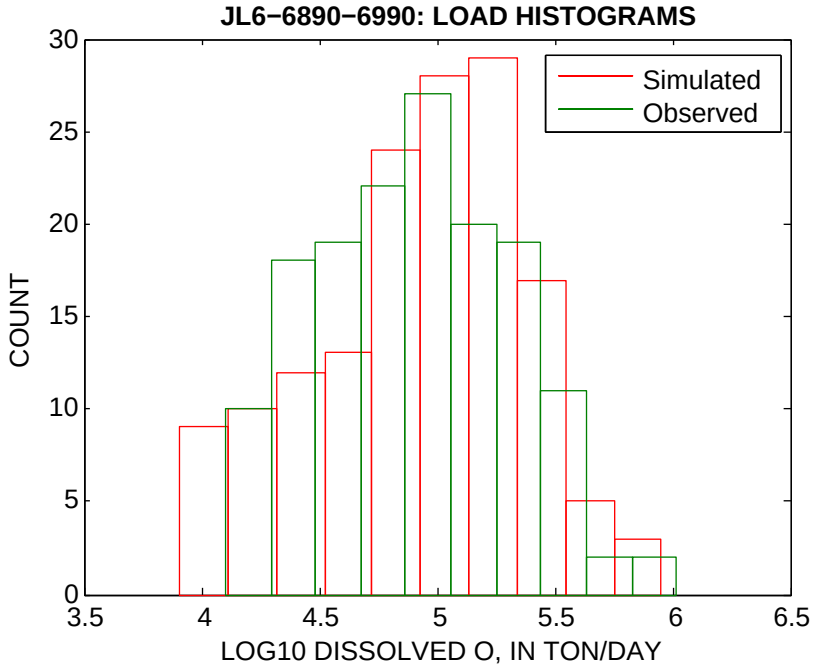


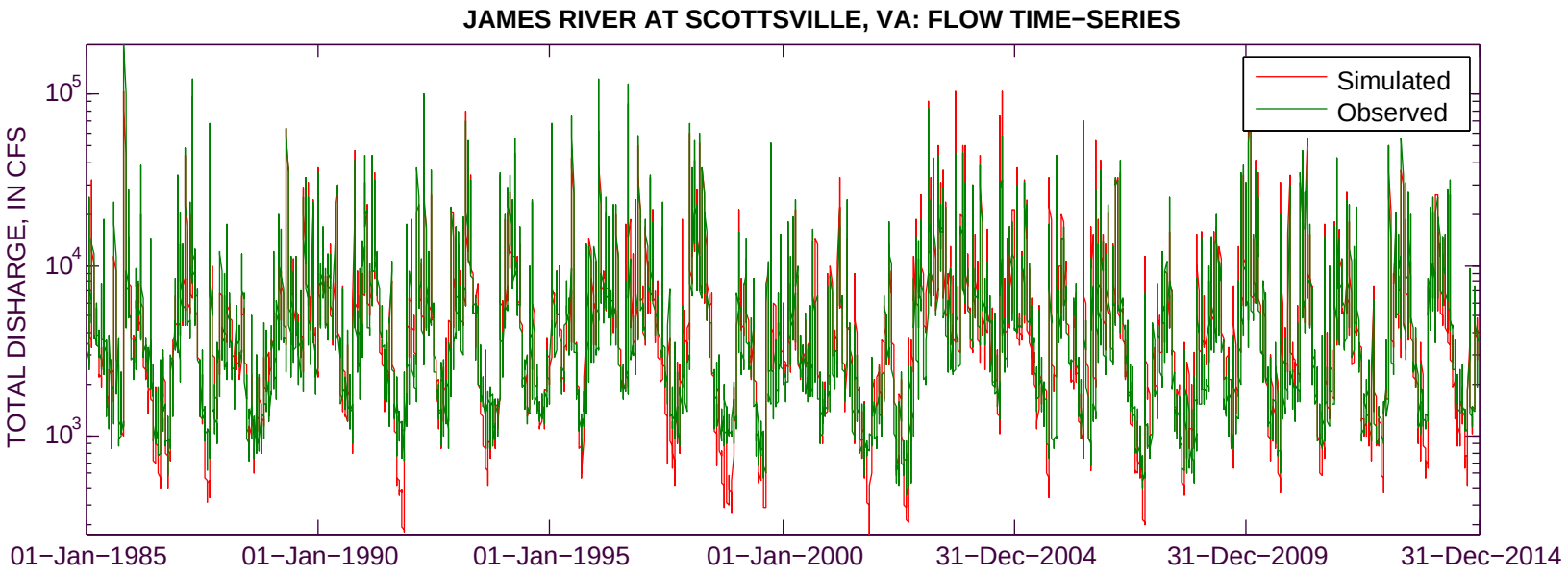
LOAD DATA
LOG10

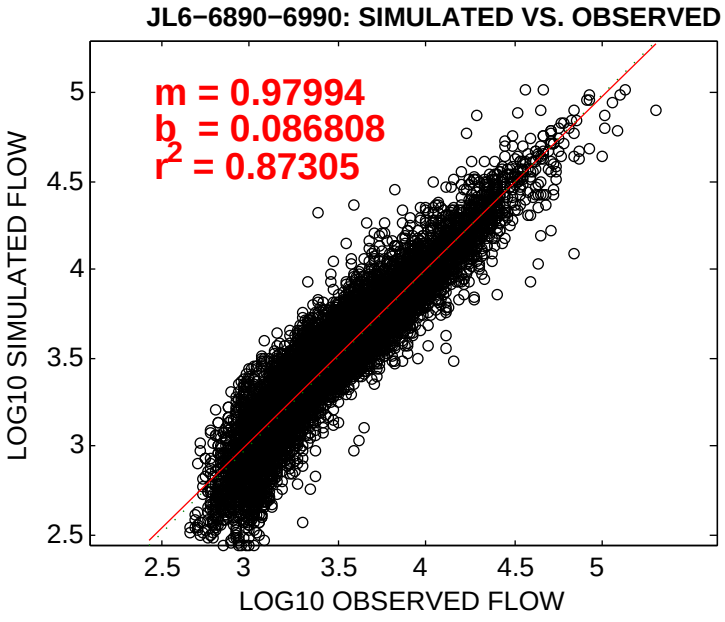


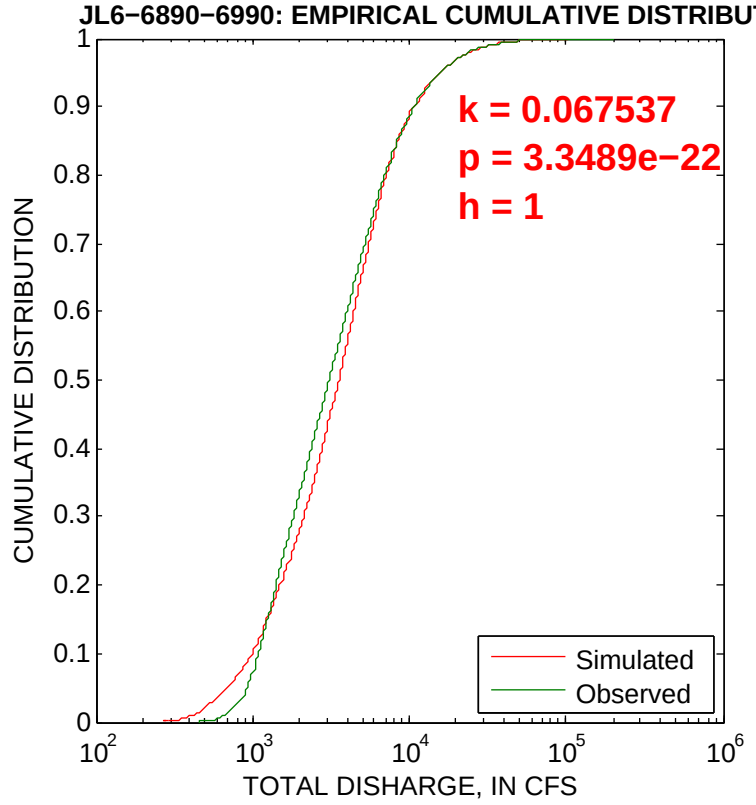












DATA SELECTION

scenario: P620171001WQ | file: FLOW.calib

plot: FLOW - total discharge

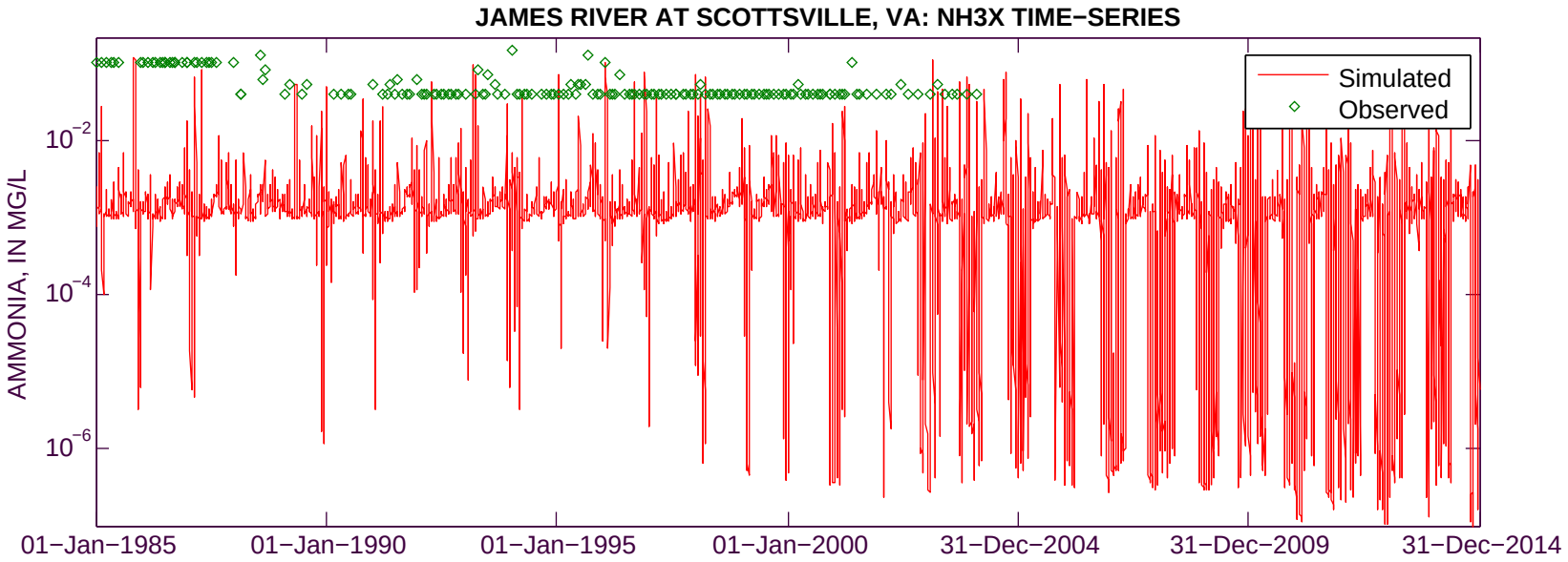
Dates: 1/1/1985 | 12/31/201

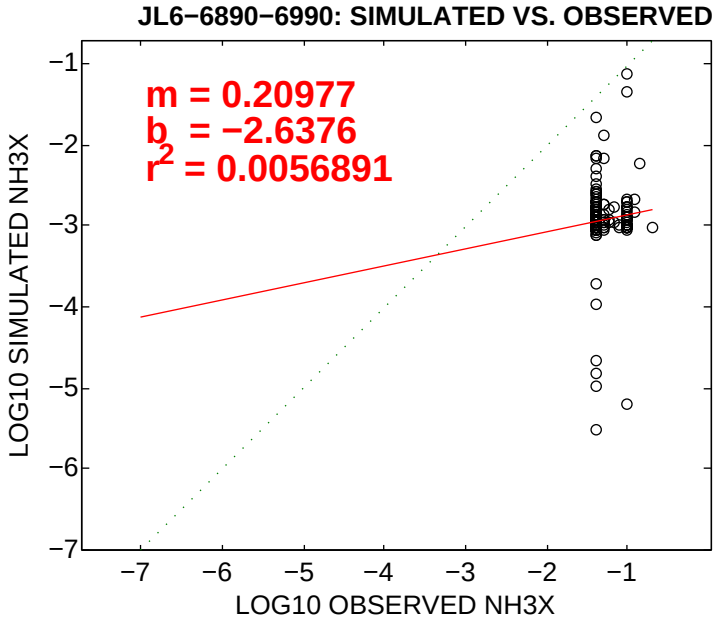
Drive | Directory: model | Observed: OBS20161101

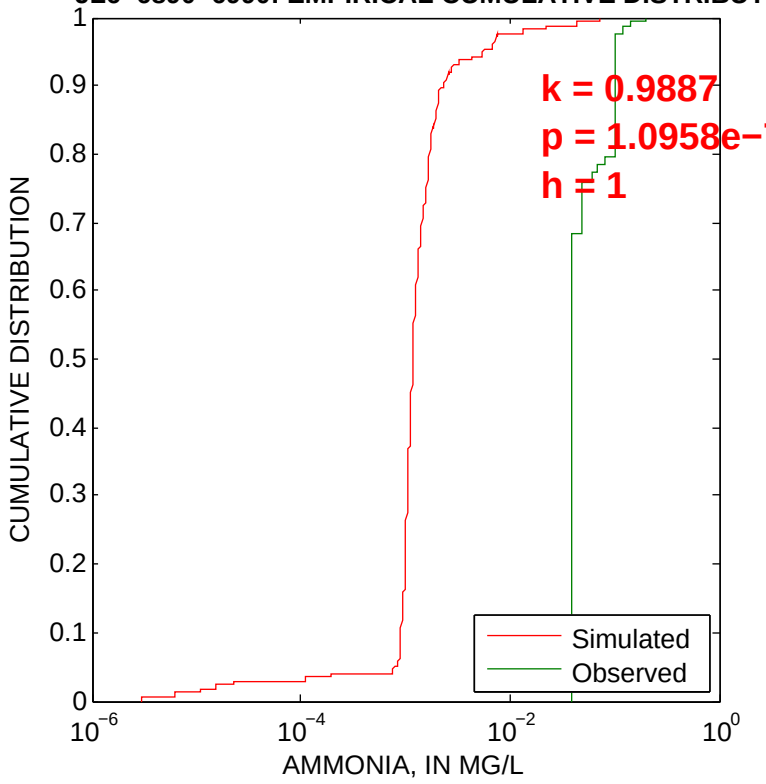
STATISTICS

		observe	simulate
n		10957	10957
min		452	269.33
		2.65514	2.43028
mean		5178.31	5361.86
		3.51781	3.53406
media		3100	3580.3
		3.49136	3.55392
max		199000	104300
		5.29885	5.01828
varian		5.16486e+0	4.65669e+
		0.150406	0.165436
JB		0.001	0.001
		0.001	0.070541
		ra	log
%		3.54457	0.462013
err.va		9.66459e+0	0.0213268
rel.std.err		0.187122	0.141794
mod.eff		0.812878	0.858206

VERSION 2.1







DATA SELECTION

scenario	file
P620171001WQ	NH3X.calib

plot: NH3X - ammonia

Dates: 1/1/1985 – 12/31/201

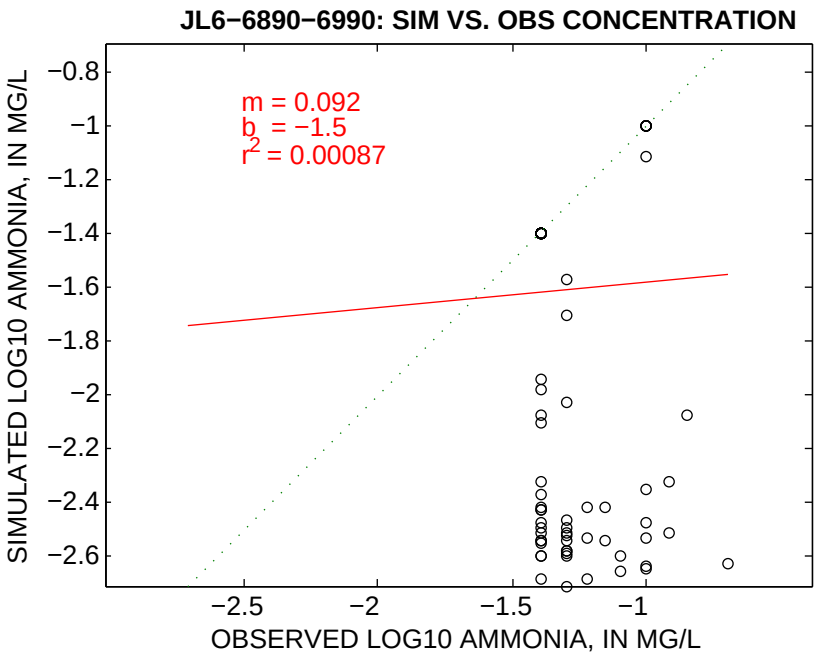
Drive	Directory	Observed
N/A	model	OBS20161101

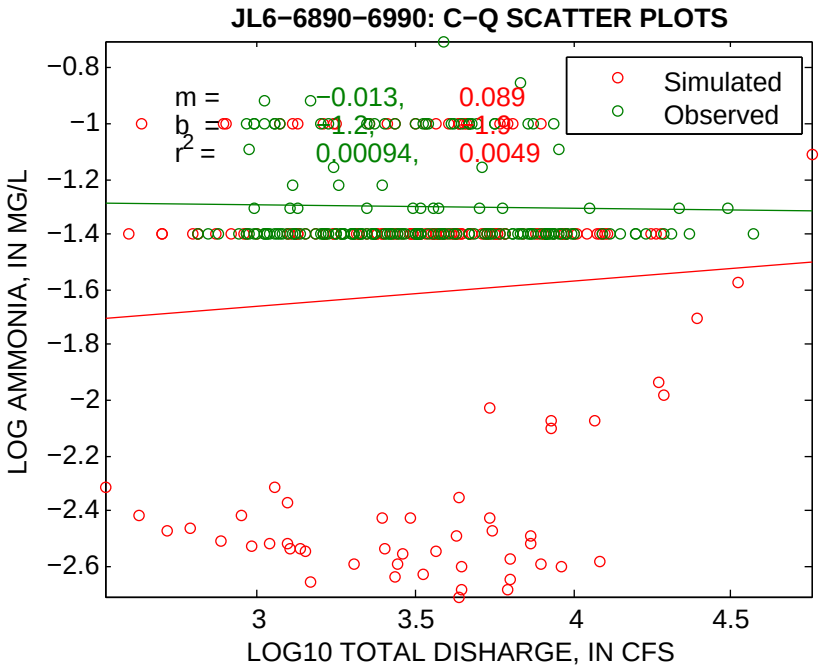
STATISTICS

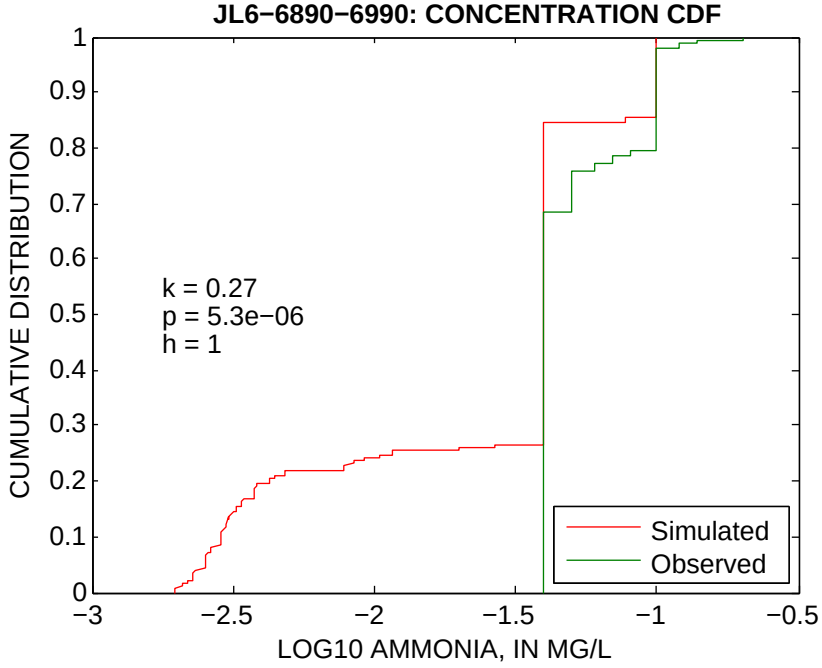
	n	177	177
		observe	simulate
min		0.04	3.061e-06
		-1.39794	-5.51414
mean		0.0550847	0.00231555
		-1.29733	-2.90972
media		0.04	0.0011732
		-1.39794	-2.93063
max		0.2	0.074513
		-0.69897	-1.12777
varian		0.00074331	4.4748e-05
		0.0285805	0.221067
JB		0.001	0.001
		0.001	0.001
		ra	log
%		-95.7964	124.285
err.va		0.00353373	2.85223
rel.std.err		4.75401	99.7966
mod.eff		-3.75401	-98.7966

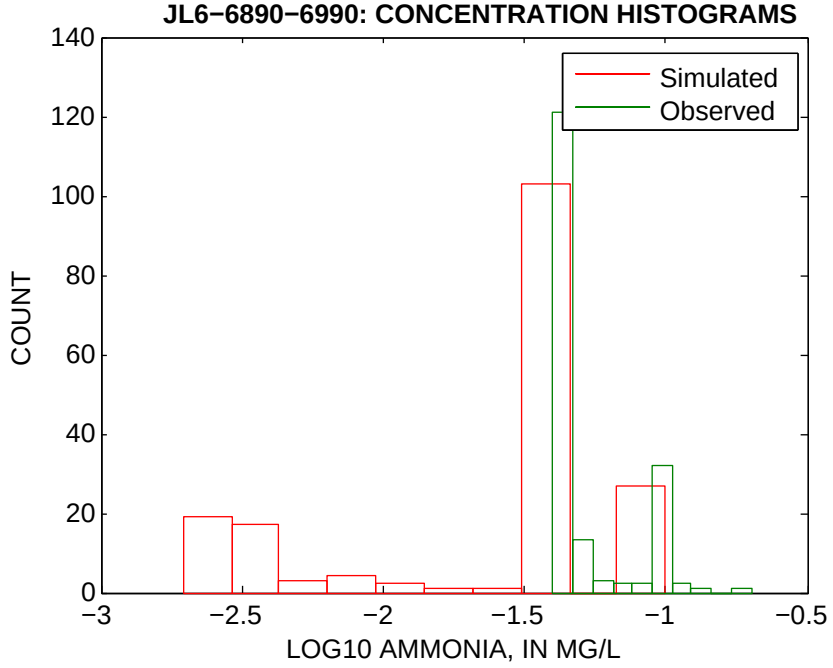
VERSION 3.1

ALL DATA
LOG10

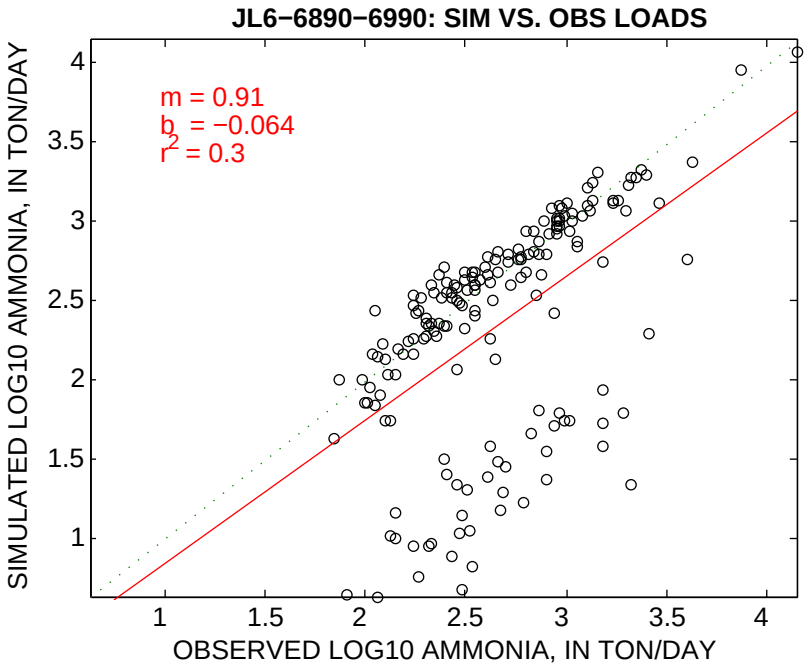


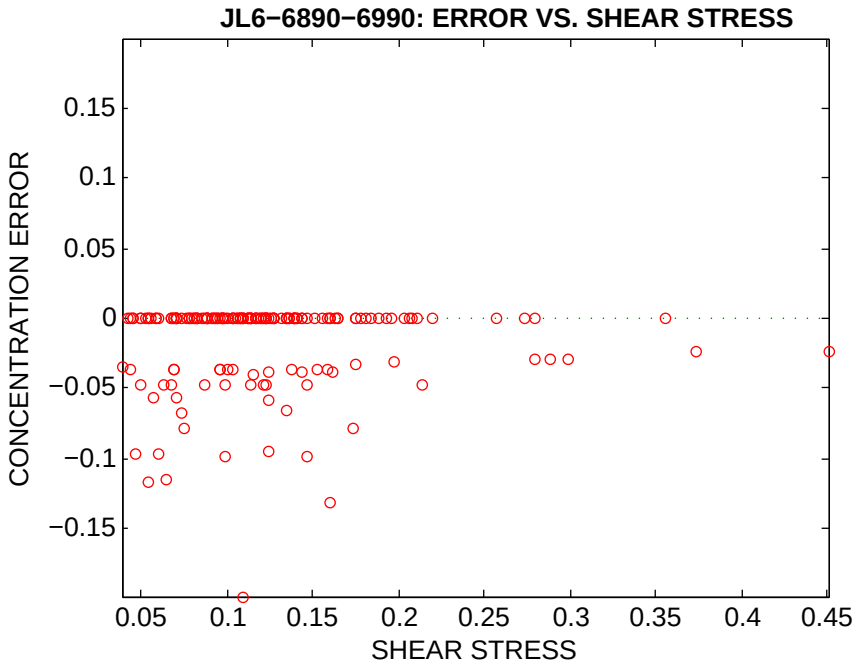


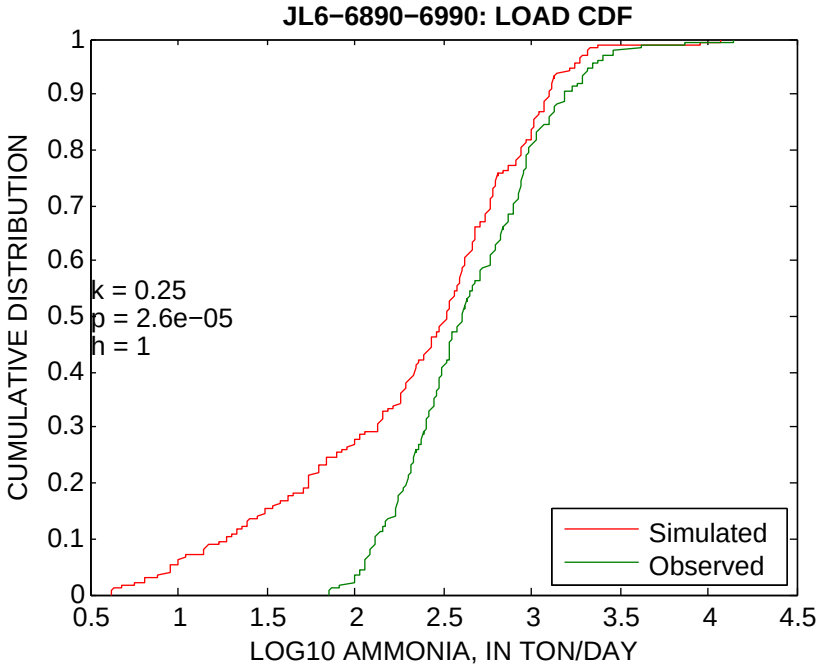


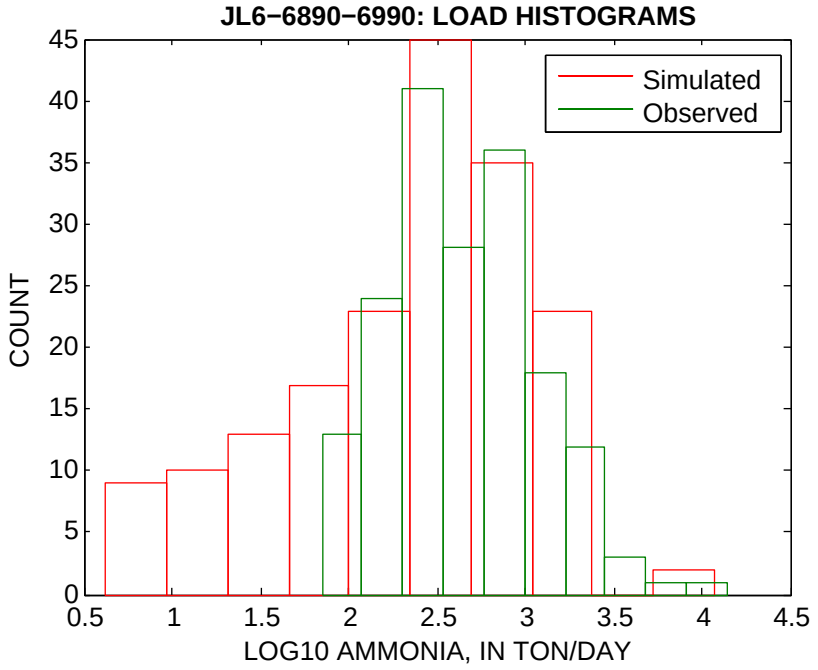


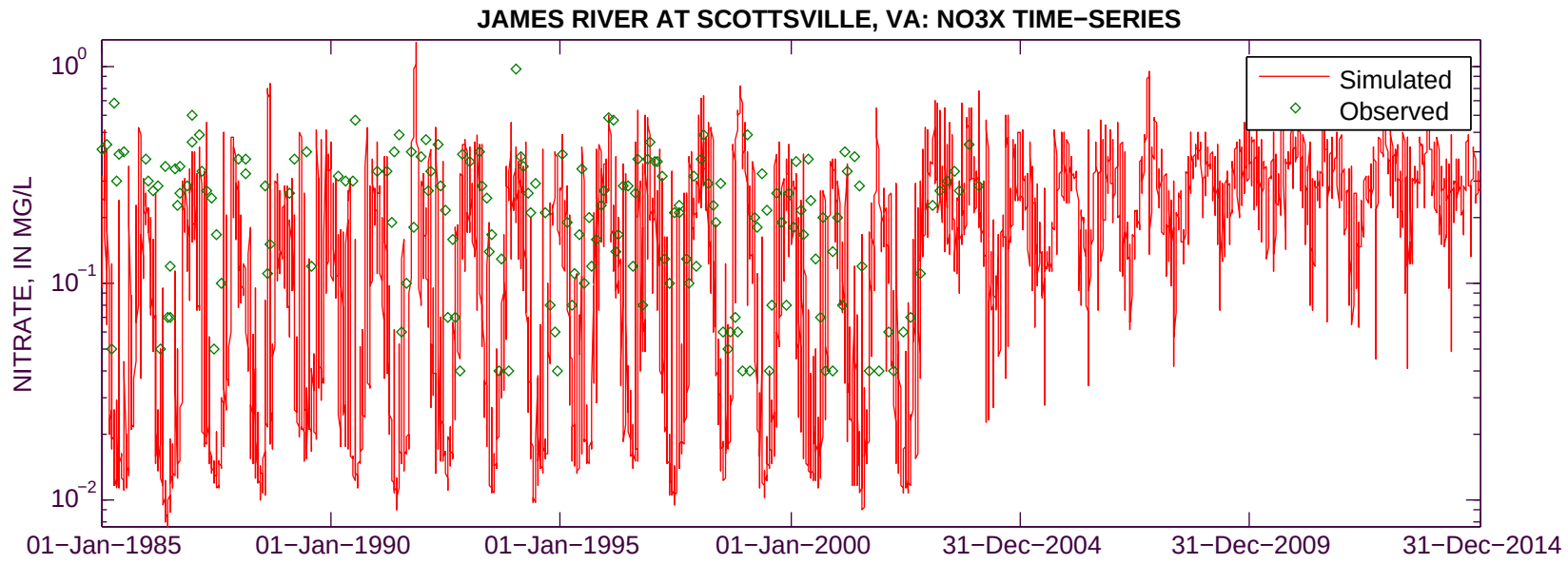
LOAD DATA
LOG10

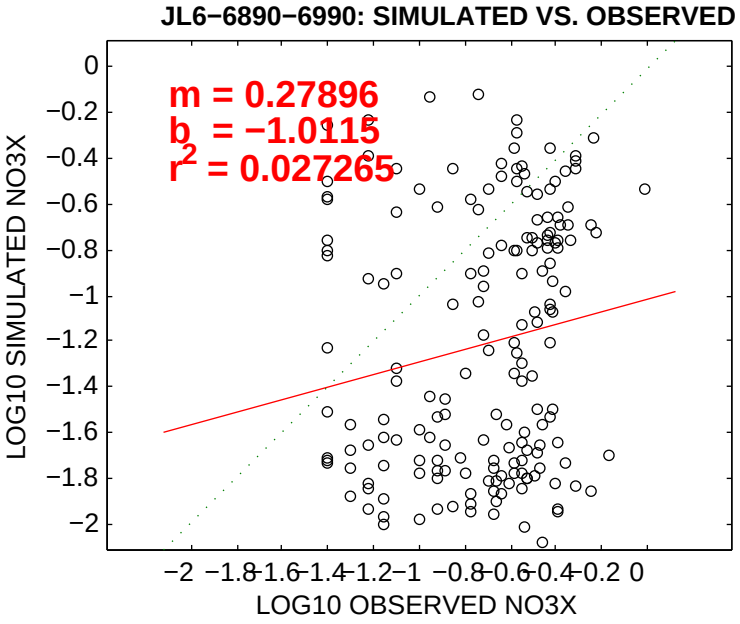


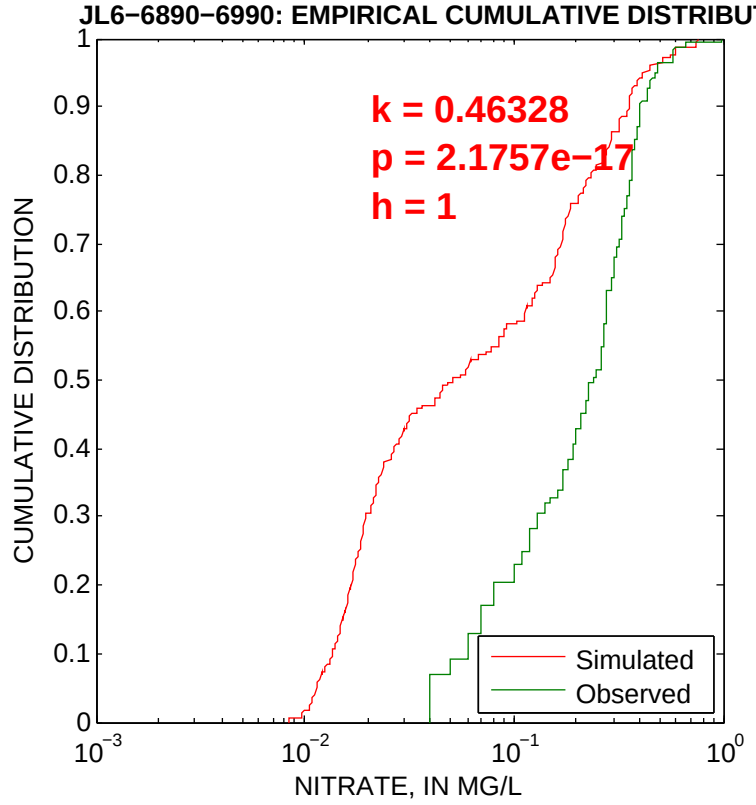












DATA SELECTION

scenario	file
P620171001WQ	NO3X.calib

plot: NO3X - nitrate

Dates: 1/1/1985 – 12/31/201

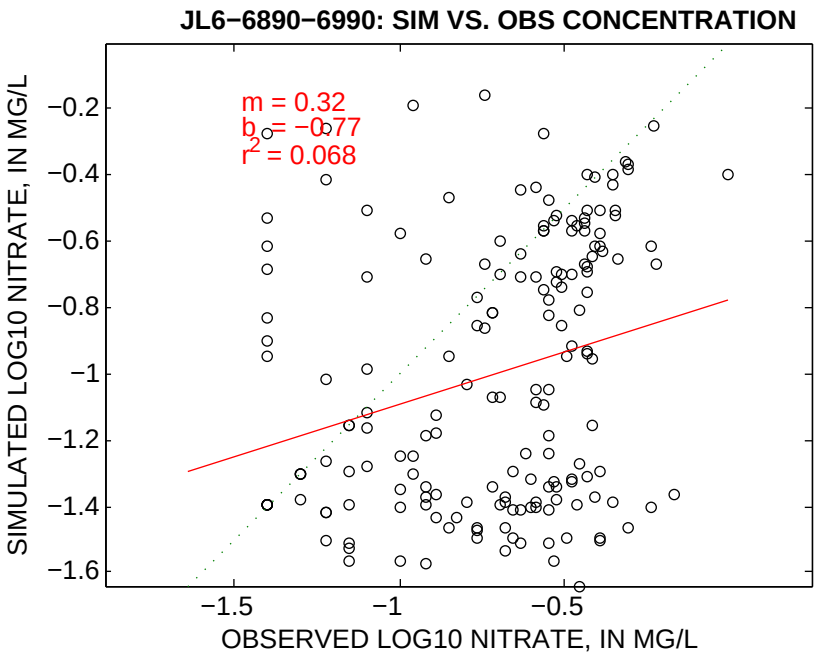
Drive	Directory	Observed
N/A	model	OBS20161101

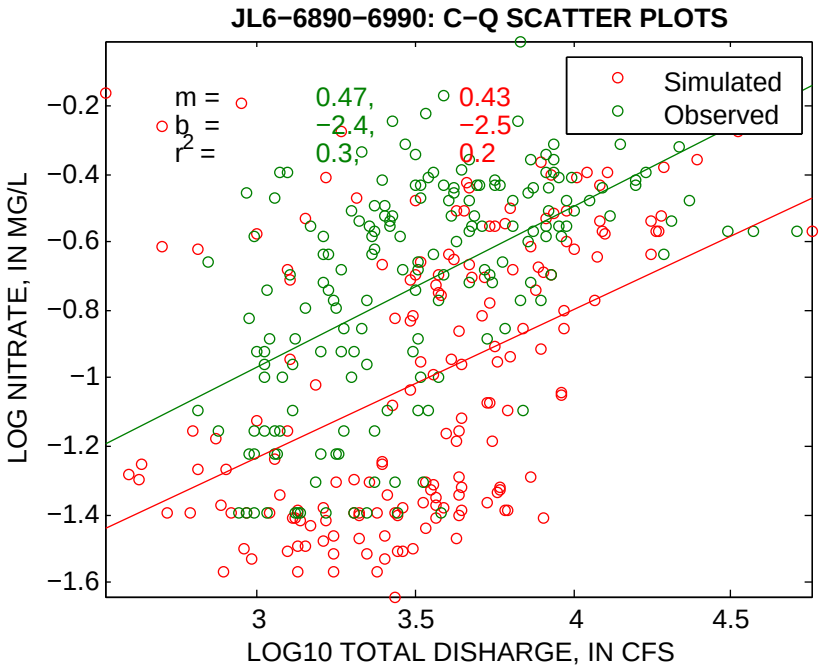
STATISTICS

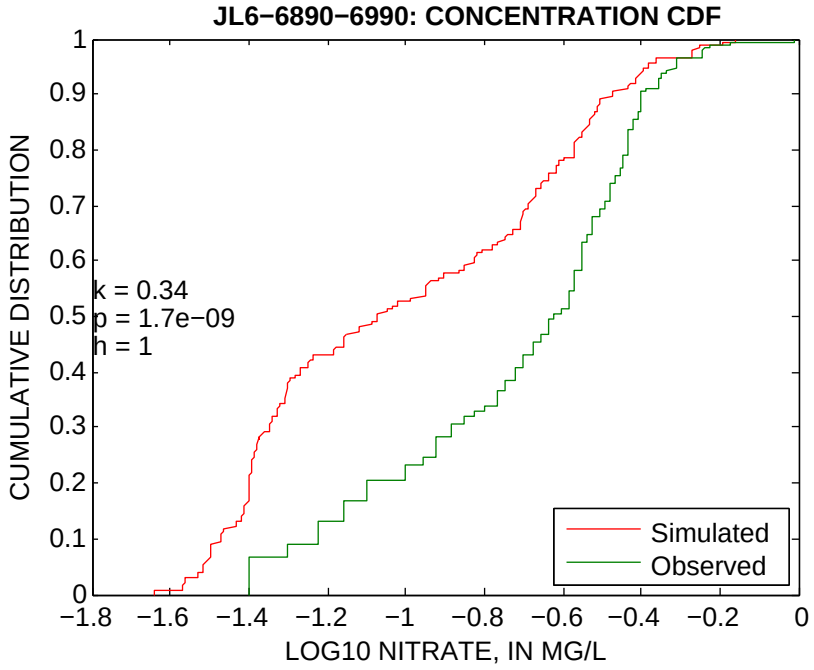
	n	177	177
		observe	simulate
min		0.04	0.0083573
		-1.39794	-2.07793
mean		0.242034	0.129292
		-0.719694	-1.21223
media		0.24	0.051187
		-0.619789	-1.29084
max		0.98	0.76828
		-0.0087739	-0.11448
varian		0.0225958	0.0232212
		0.108498	0.309668
JB		0.001	0.001
		0.006407	0.004808
		ra	log
%		-46.5809	68.4374
err.va		0.0520021	0.601607
rel.std.err		2.3014	5.54489
mod.eff		-1.3014	-4.54489

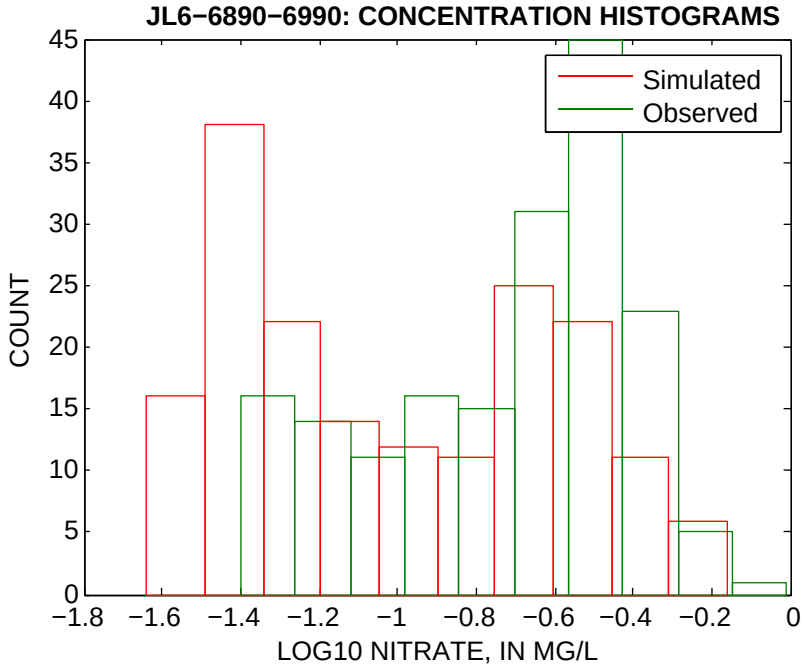
VERSION 2.1

ALL DATA
LOG10

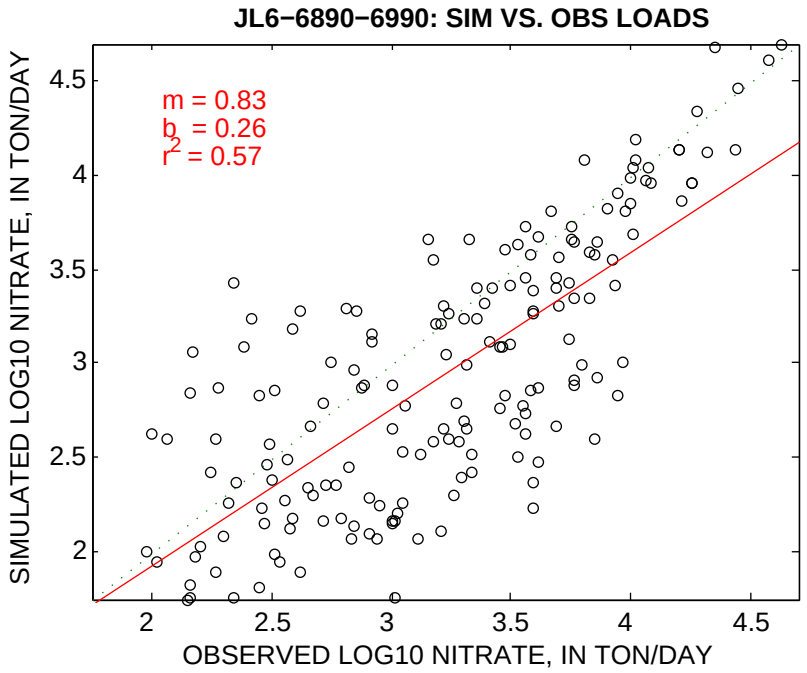


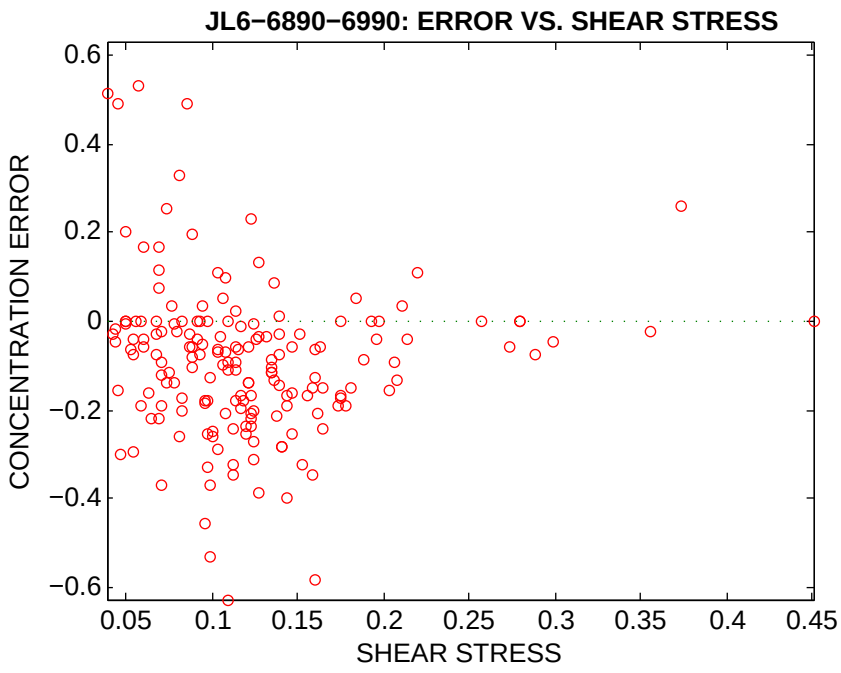


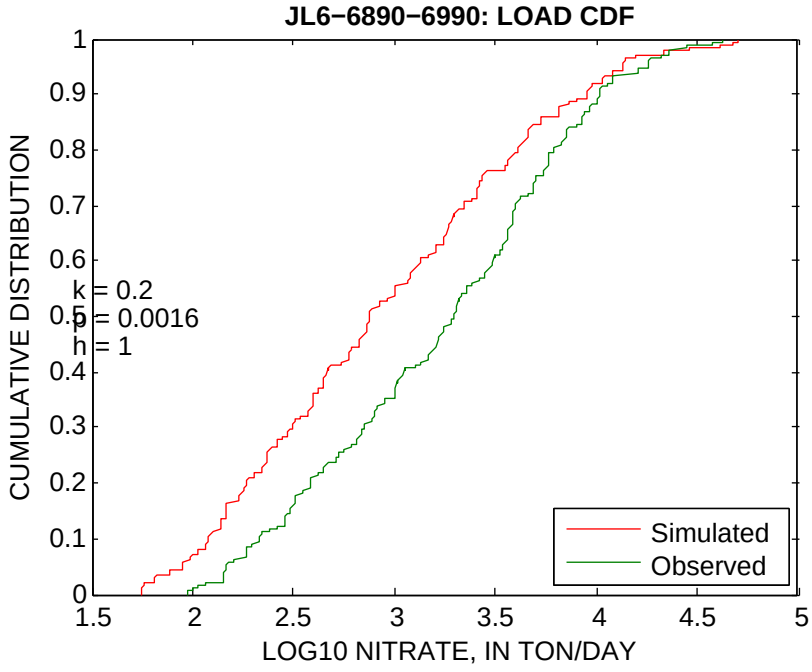


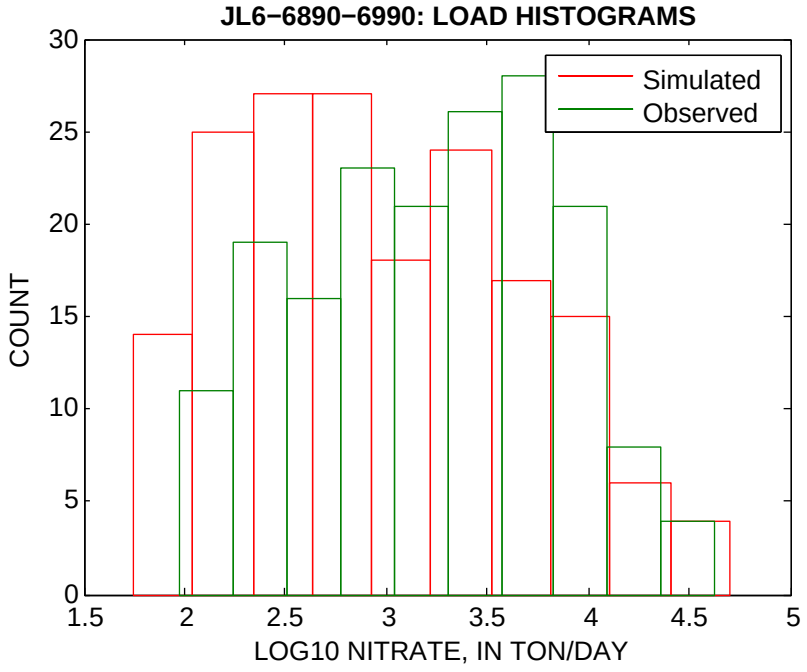


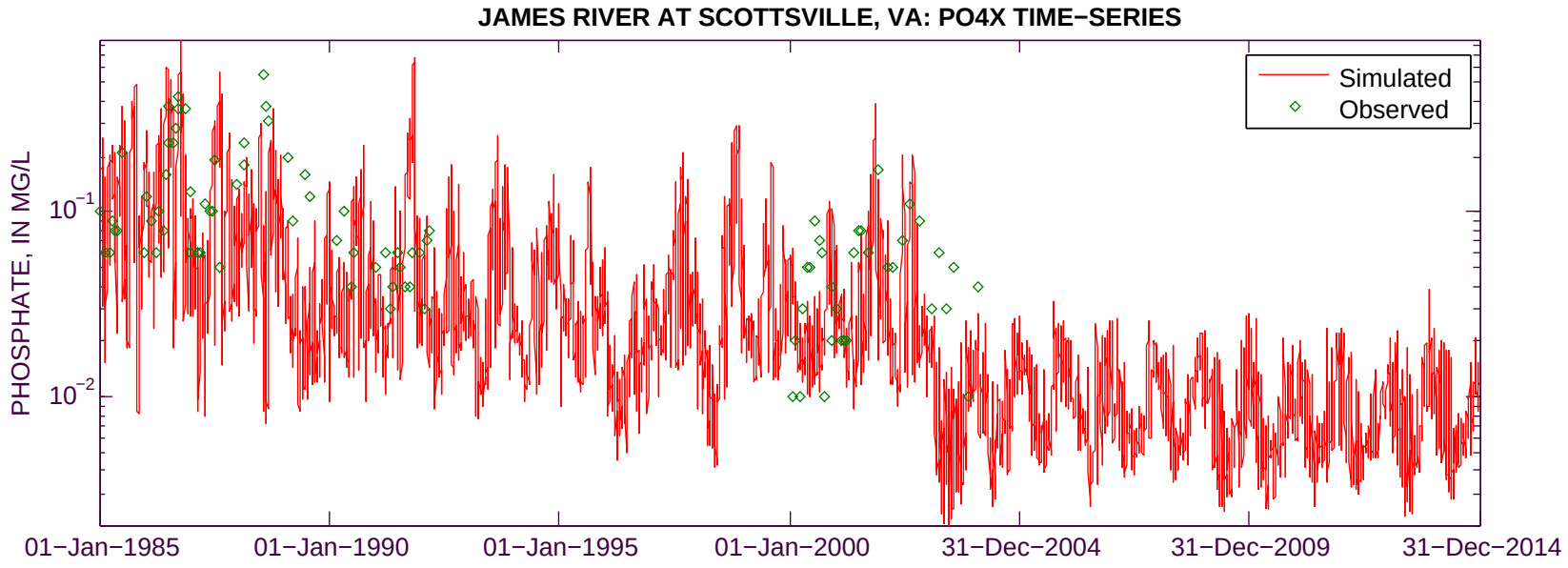
LOAD DATA
LOG10

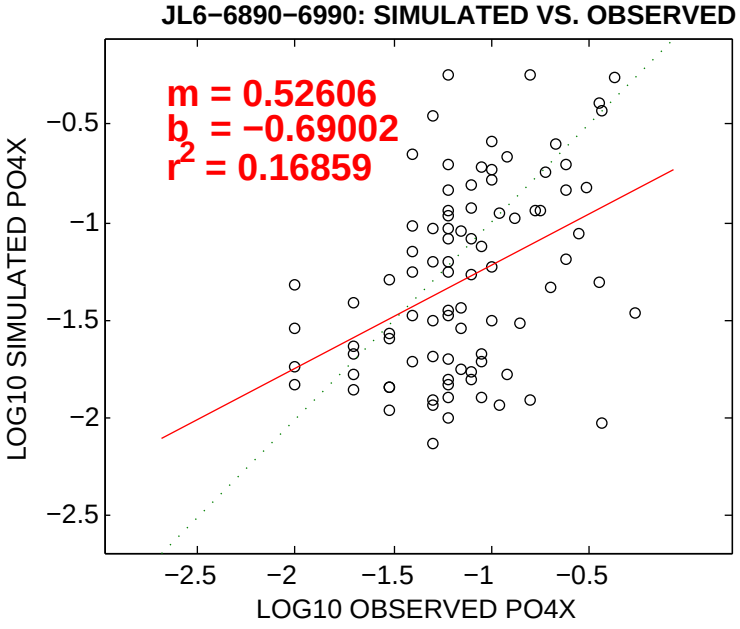


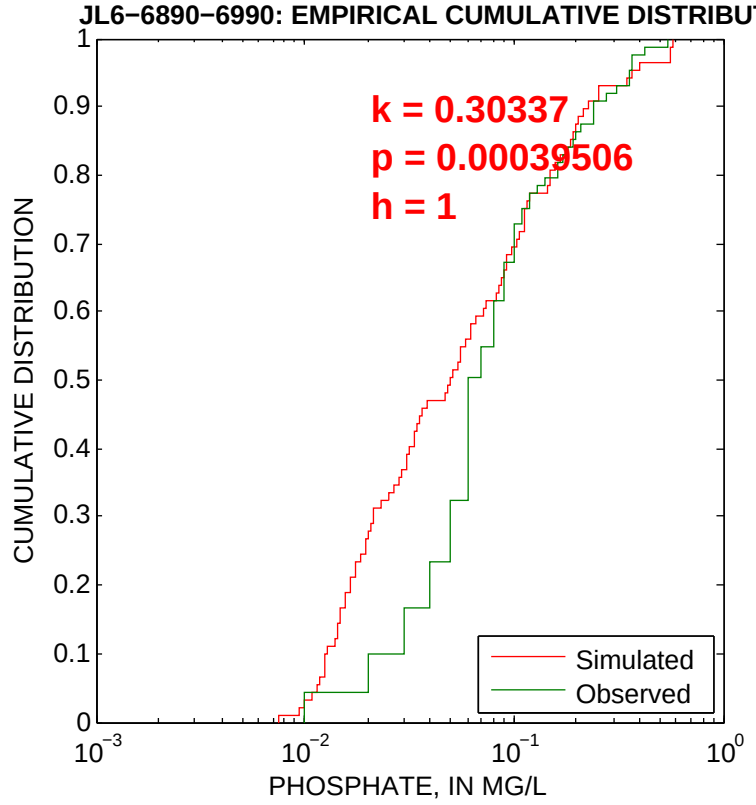












DATA SELECTION

scenario: P620171001WQ; file: PO4X.calib

plot: PO4X - phosphate

Dates: 1/1/1985 – 12/31/201

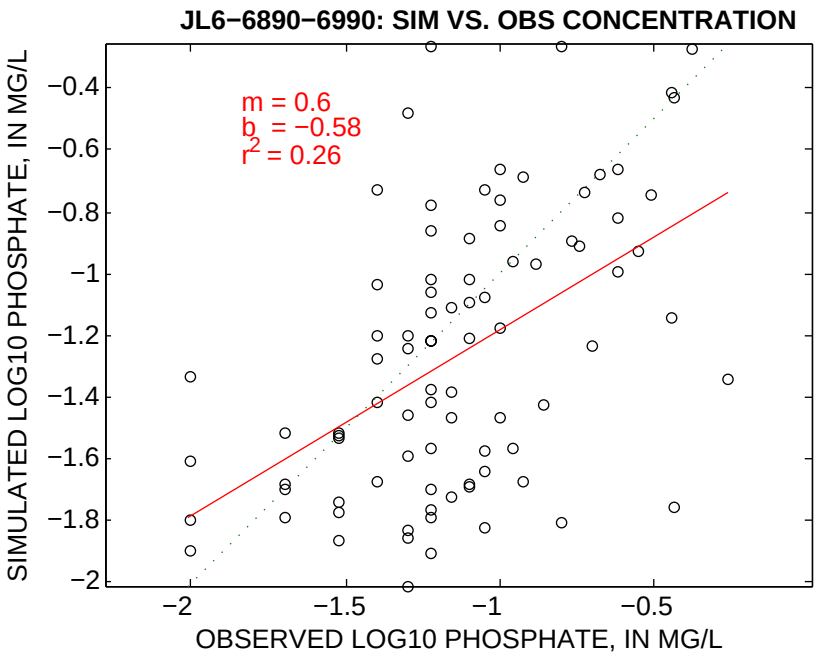
Drive: N/A; Directory: model; Observed: OBS20161101

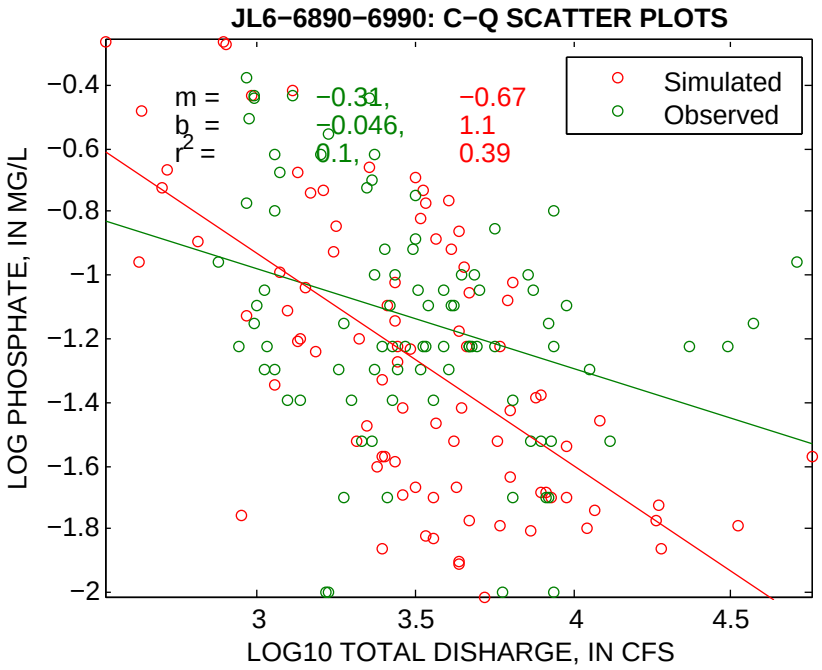
STATISTICS

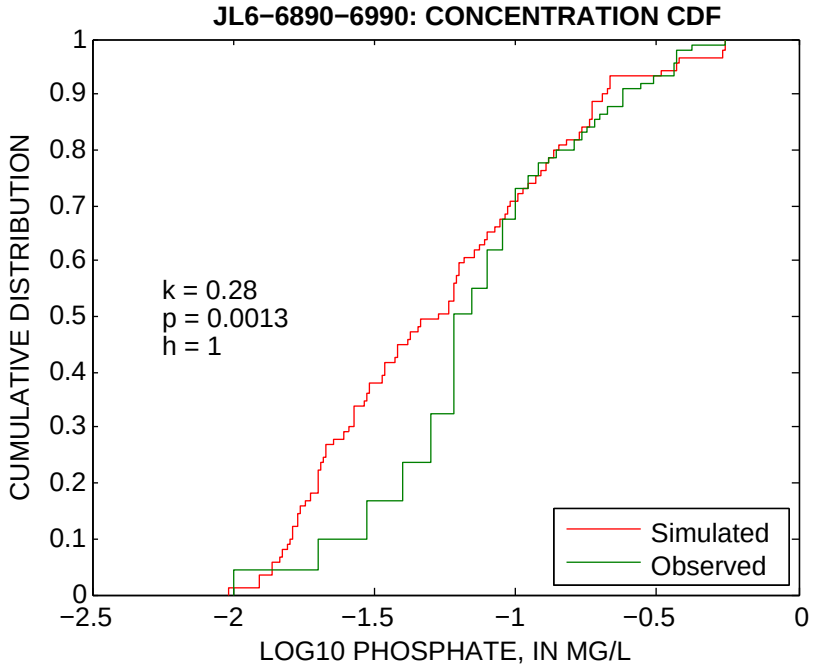
		observe	simulate
n		89	89
min		0.01	0.0074414
		-2	-2.12835
mean		0.105281	0.0956628
		-1.13953	-1.28948
media		0.06	0.050119
		-1.22185	-1.3
max		0.55	0.57006
		-0.259637	-0.244079
varian		0.0106638	0.014765
		0.14291	0.23458
JB		0.001	0.001
		0.5	0.071014
		ra	log
%		-9.1357	13.1589
err.va		0.0160771	0.249873
rel.std.err		1.50763	1.74846
mod.eff		-0.507632	-0.748455

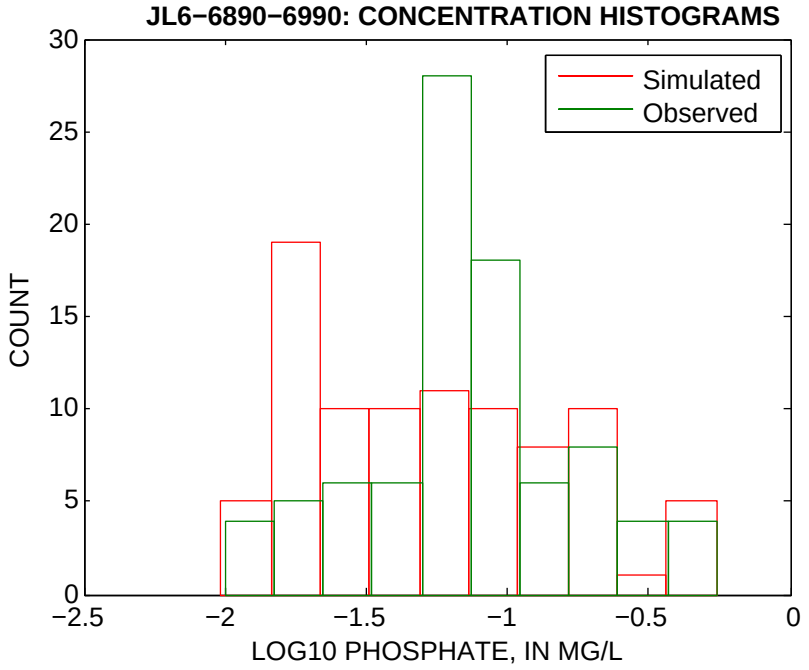
VERSION 2.1

ALL DATA
LOG10

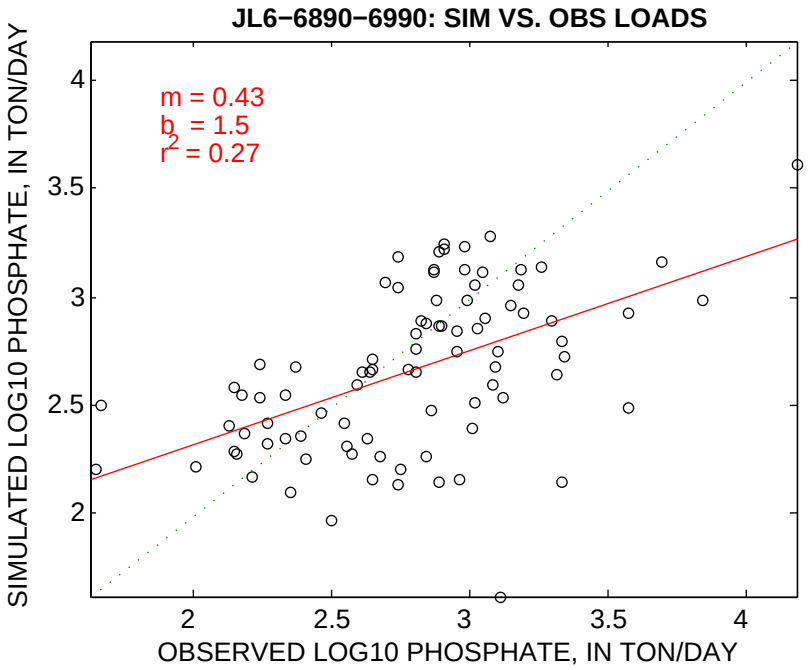


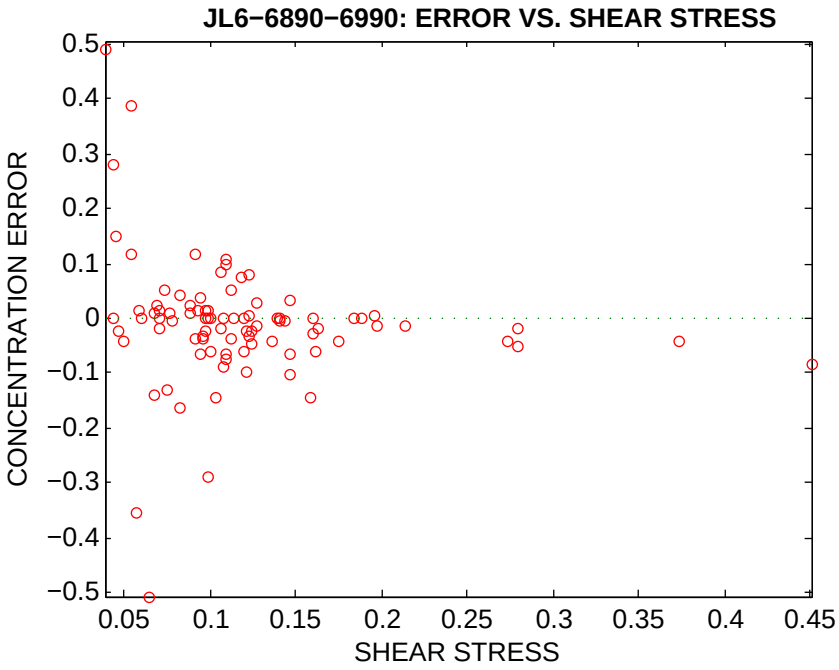


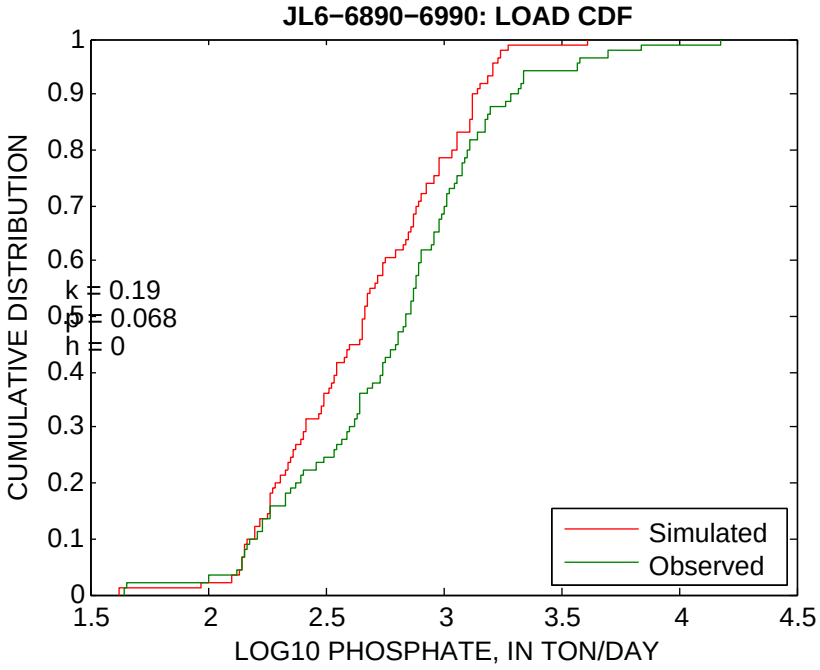


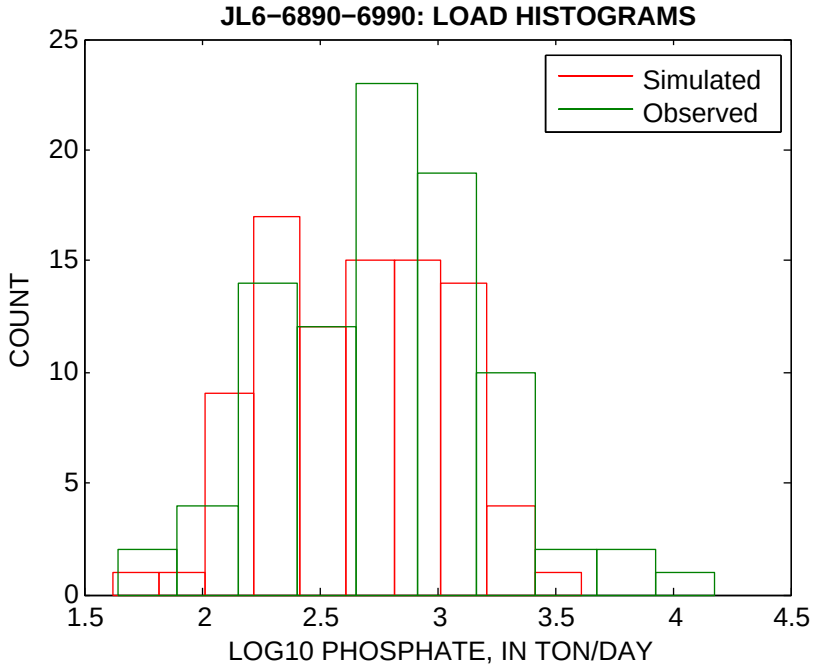


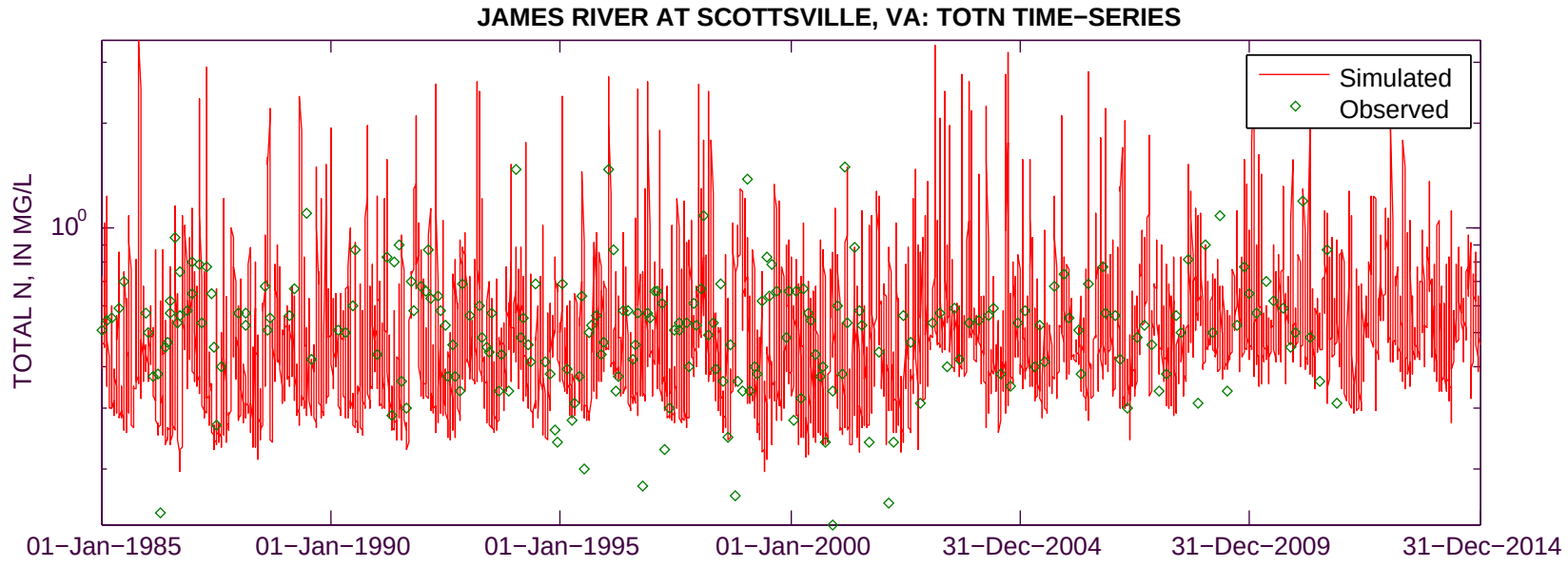
LOAD DATA
LOG10

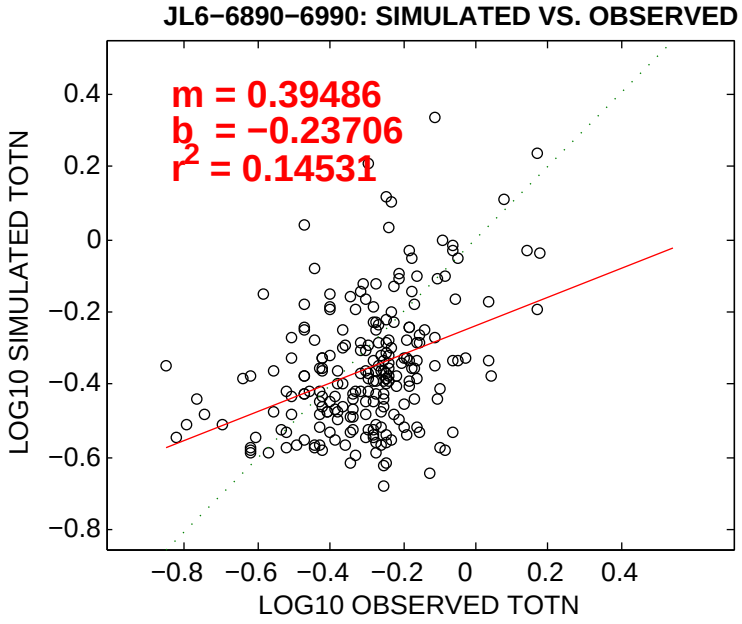


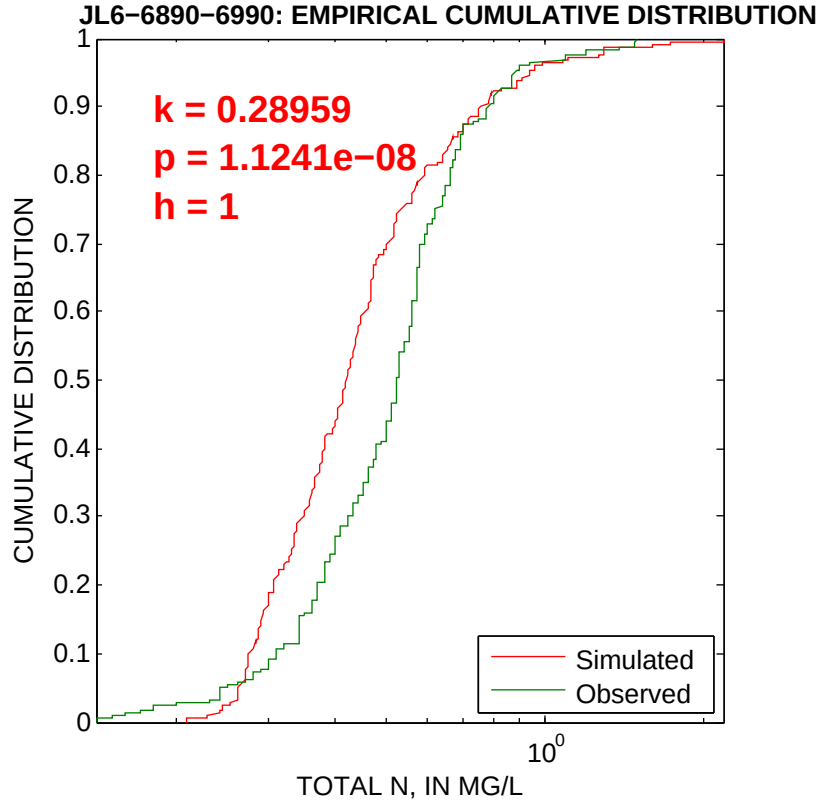












DATA SELECTION

scenario	file
P620171001WQ	TOTN.calib

plot: TOTN - total nitrogen

Dates: 1/1/1985 – 12/31/201

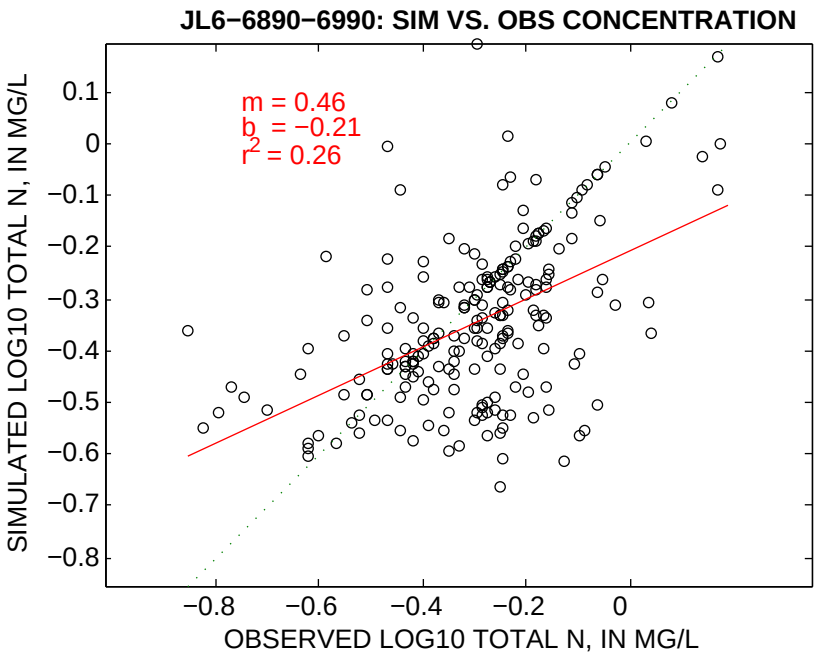
Drive	Directory	Observed
N/A	model	OBS20161101

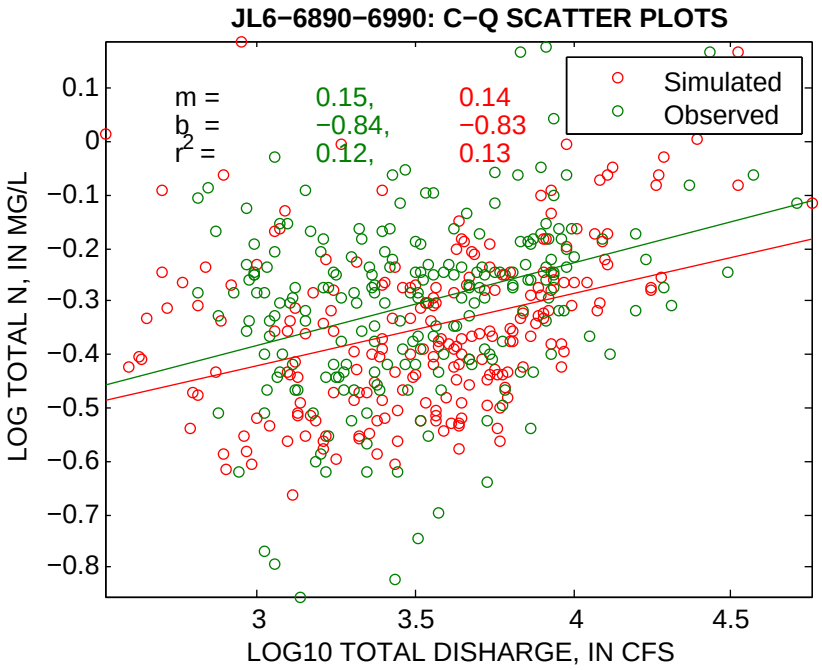
STATISTICS

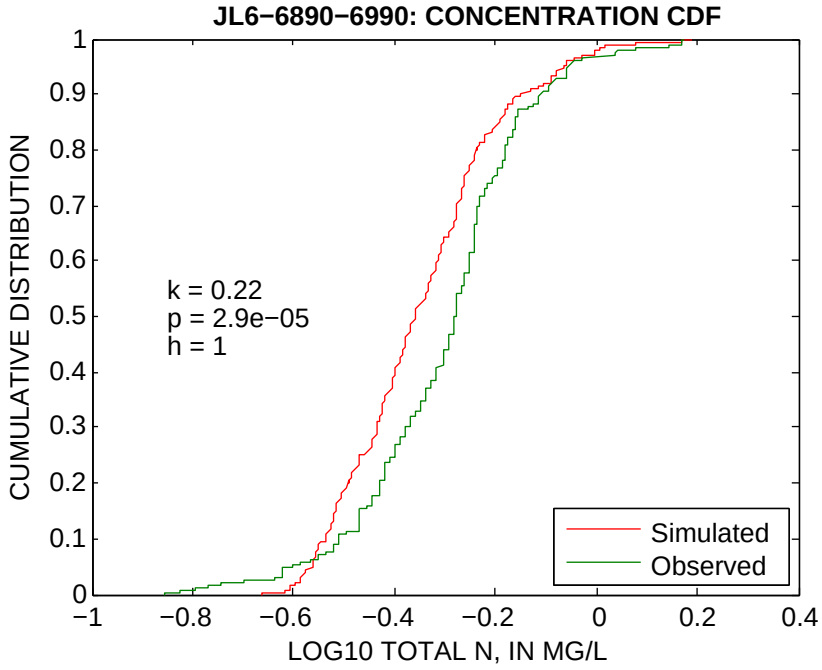
	n	observe	simulate
		221	221
min		0.14	0.2082
		-0.853872	-0.681519
mean		0.540271	0.48472
		-0.2998	-0.355437
media		0.52	0.42044
		-0.283997	-0.376296
max		1.5	2.182
		0.176091	0.338855
varian		0.0476299	0.065967
		0.0289203	0.0310314
JB		0.001	0.001
		0.004895	0.001
		ra	log
%		-10.2822	18.5579
err.va		0.070189	0.0402223
rel.std.err		1.47363	1.39079
mod.eff		-0.473633	-0.390795

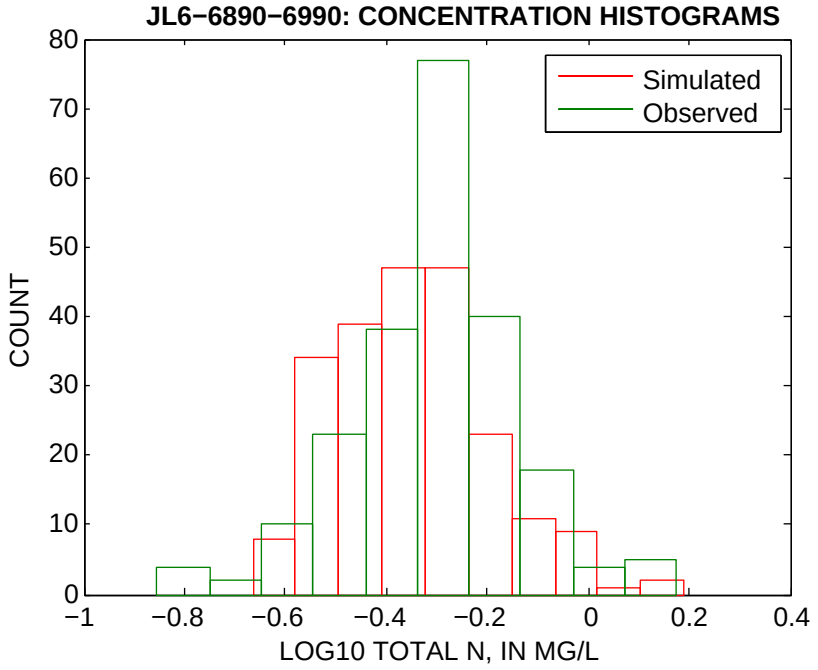
VERSION 2.1

ALL DATA
LOG10

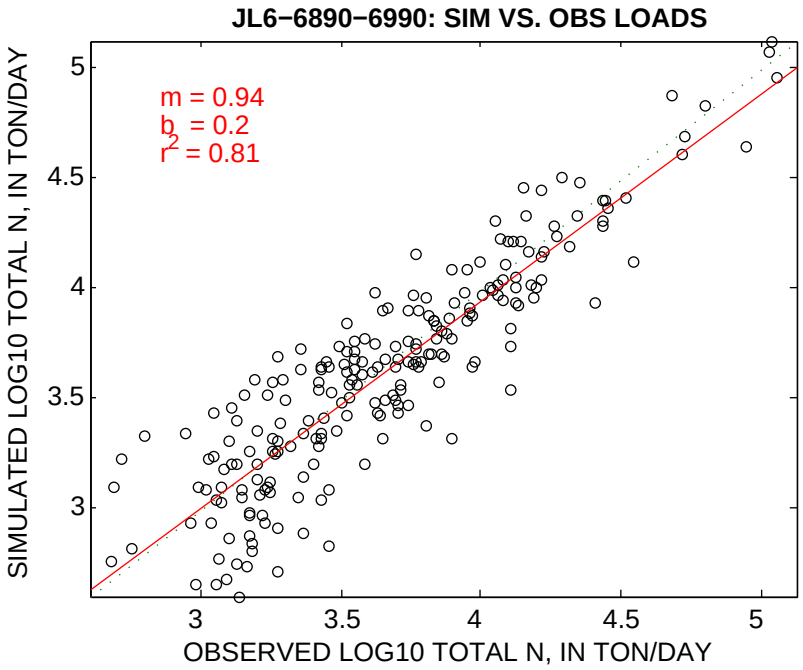


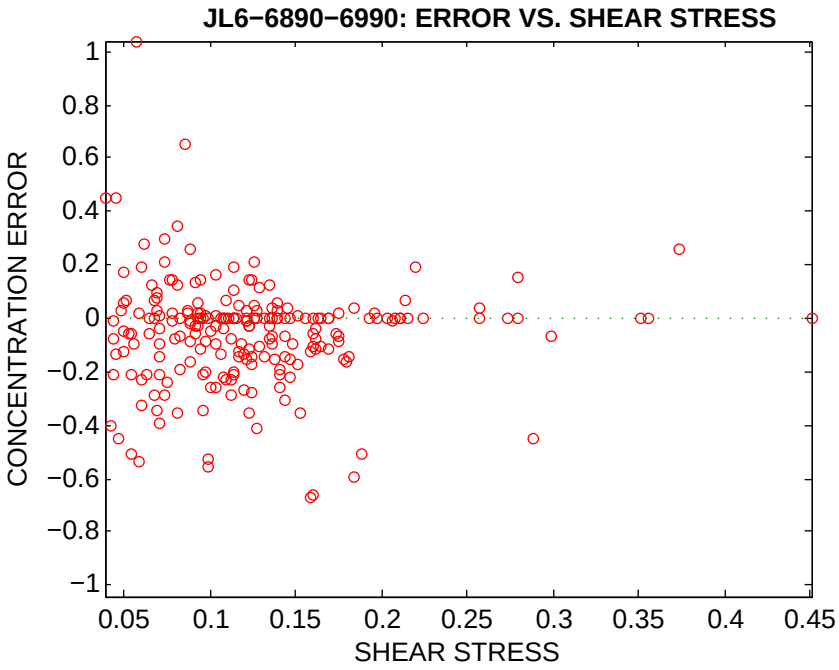


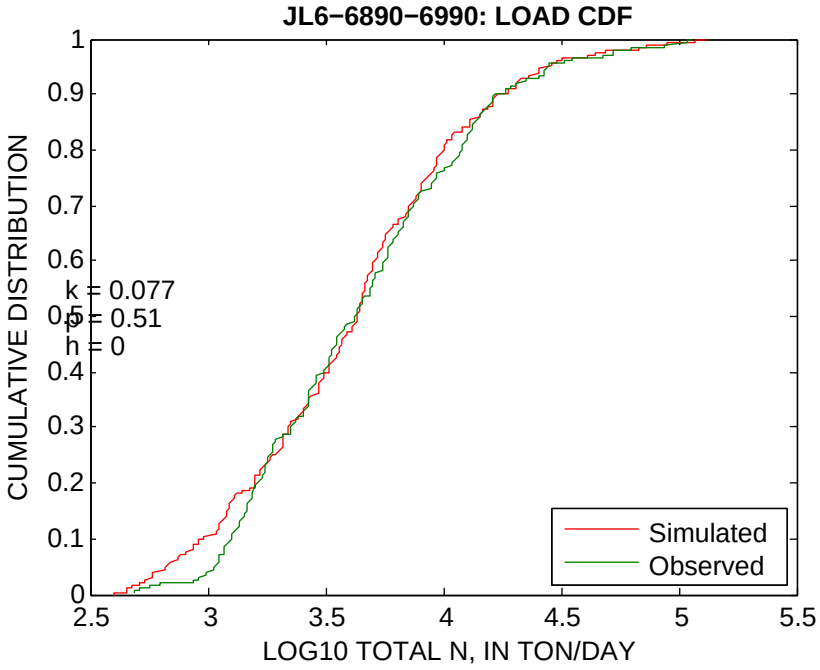


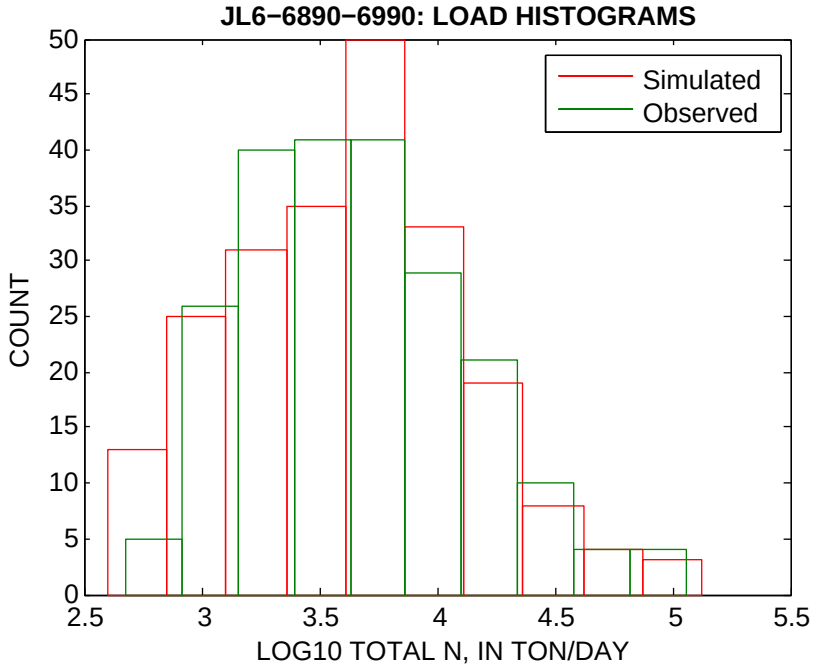


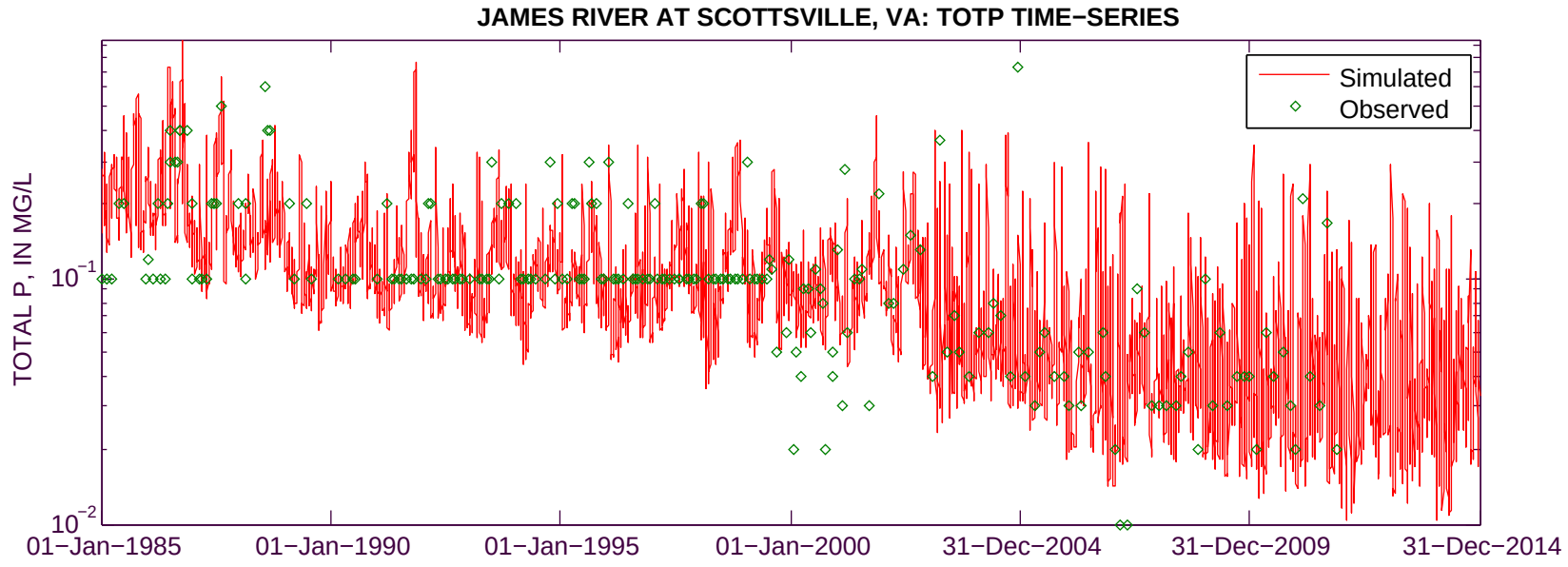
LOAD DATA
LOG10

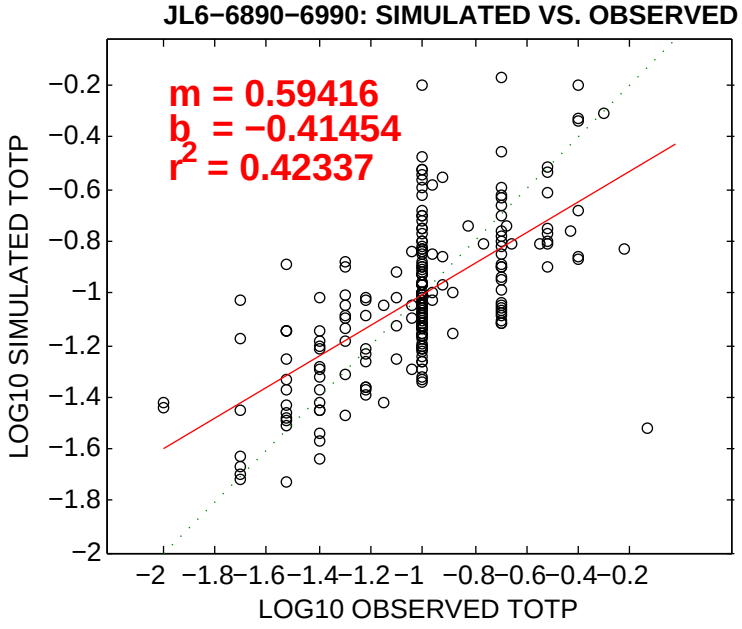


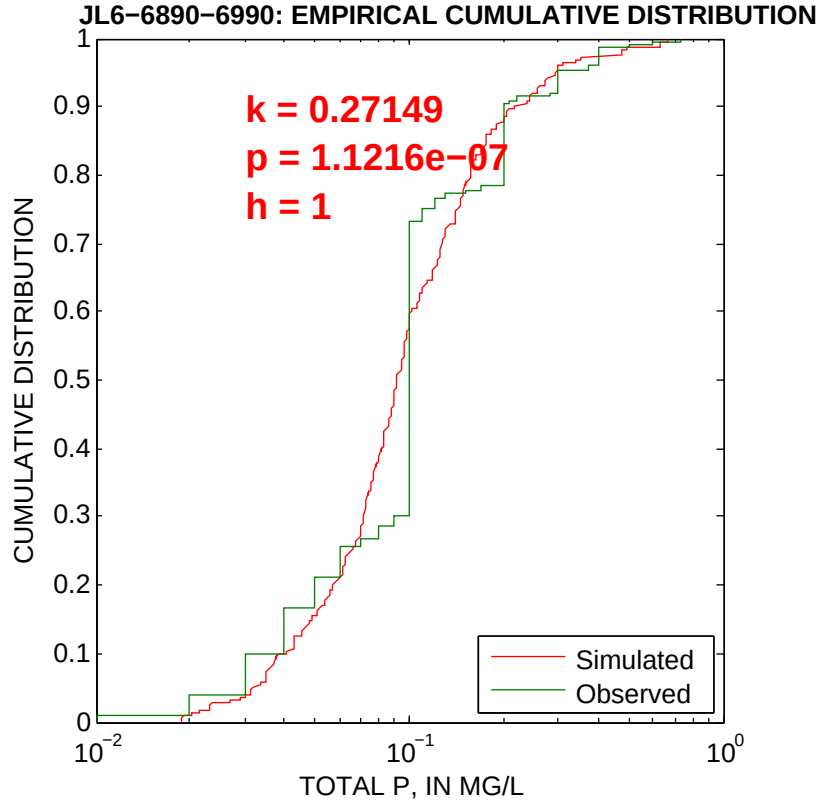












DATA SELECTION

scenario: P620171001WQ | file: TOTP.calib

plot: TOTP - total phosphorus

Dates: 1/1/1985 – 12/31/201

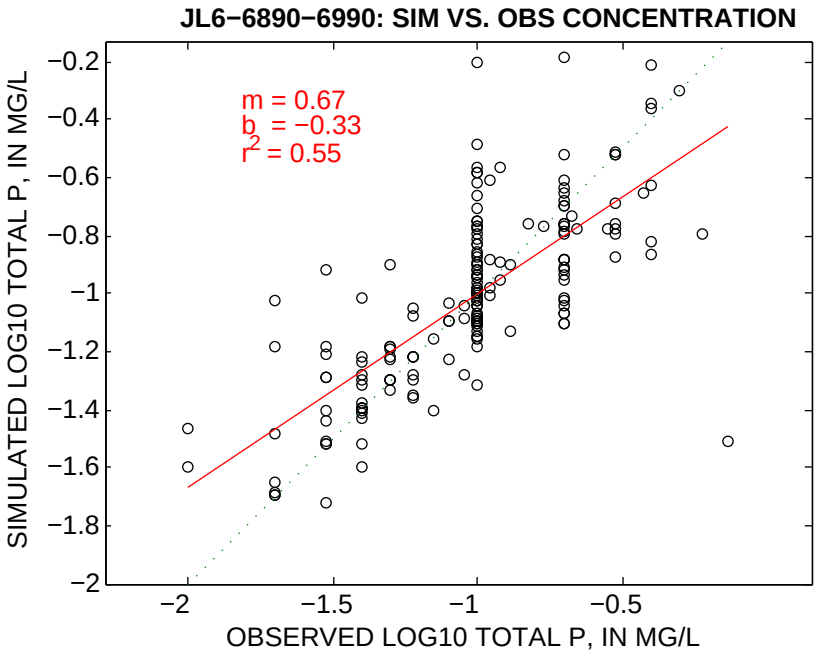
Drive Directory: N/A | model | Observed: OBS20161101

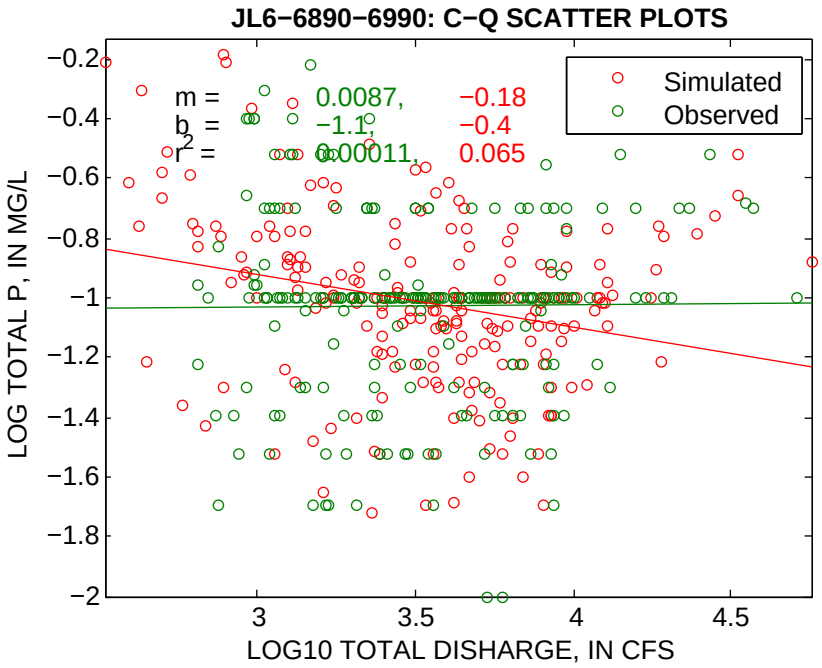
STATISTICS

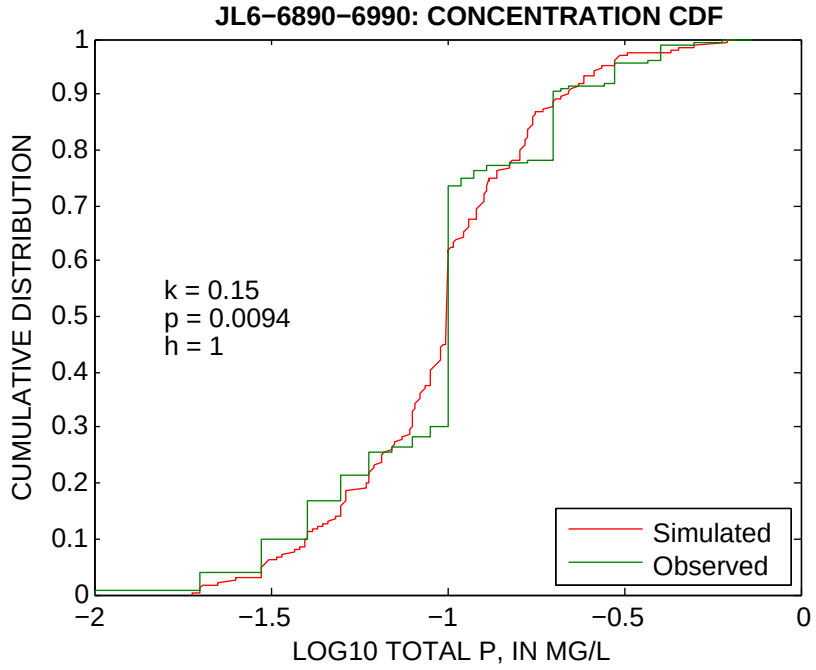
		observe	simulate
n		221	221
min		0.01	0.018615
		-2	-1.73014
mean		0.122443	0.119797
		-1.02332	-1.02255
media		0.1	0.09099
		-1	-1.04101
max		0.73	0.67241
		-0.136677	-0.172366
varian		0.00996218	0.00986242
		0.0994698	0.0829415
JB		0.001	0.001
		0.097784	0.1349
		ra	log
%		-2.16148	-0.0751623
err.va		0.0104257	0.0642103
rel.std.err		1.04653	0.645525
mod.eff		-0.0465263	0.354475

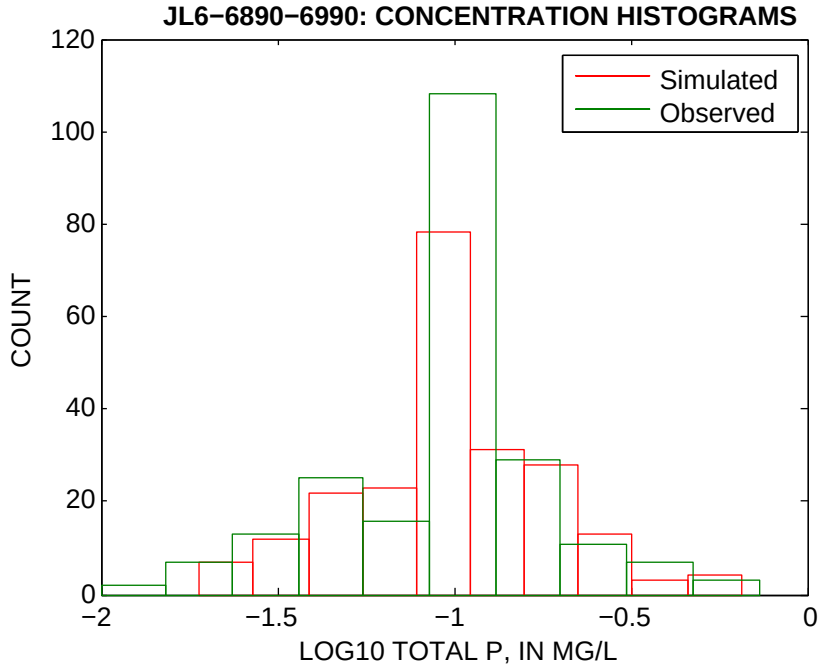
VERSION 2.1

ALL DATA
LOG10

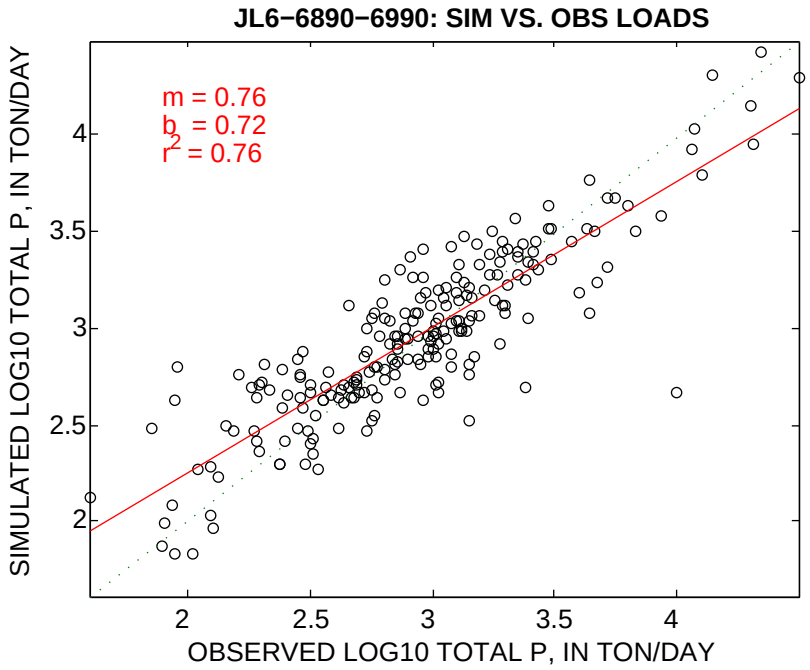


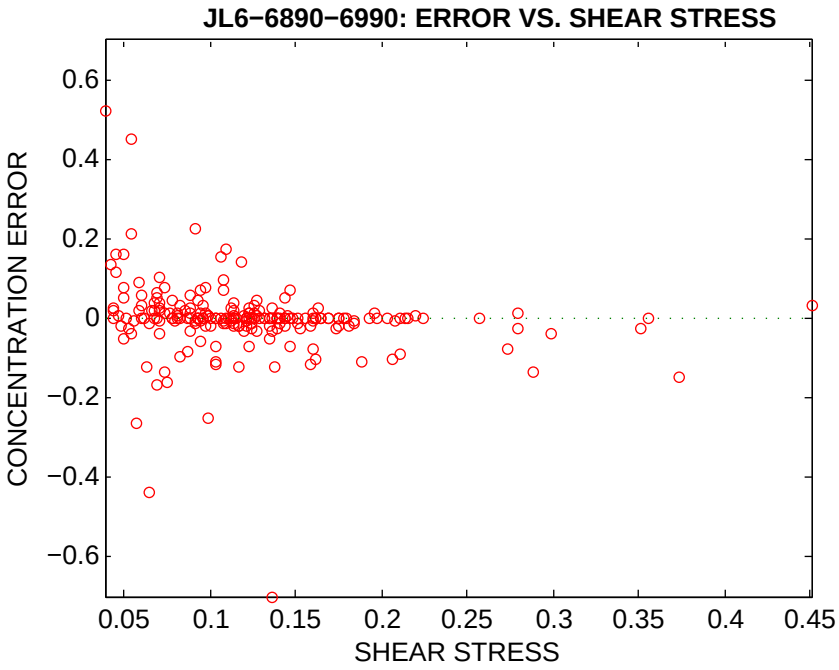


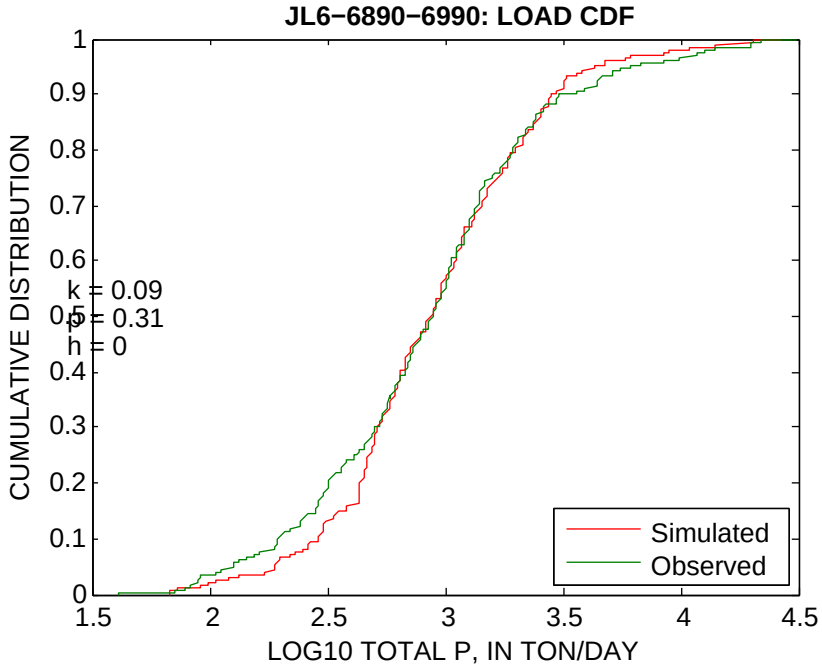


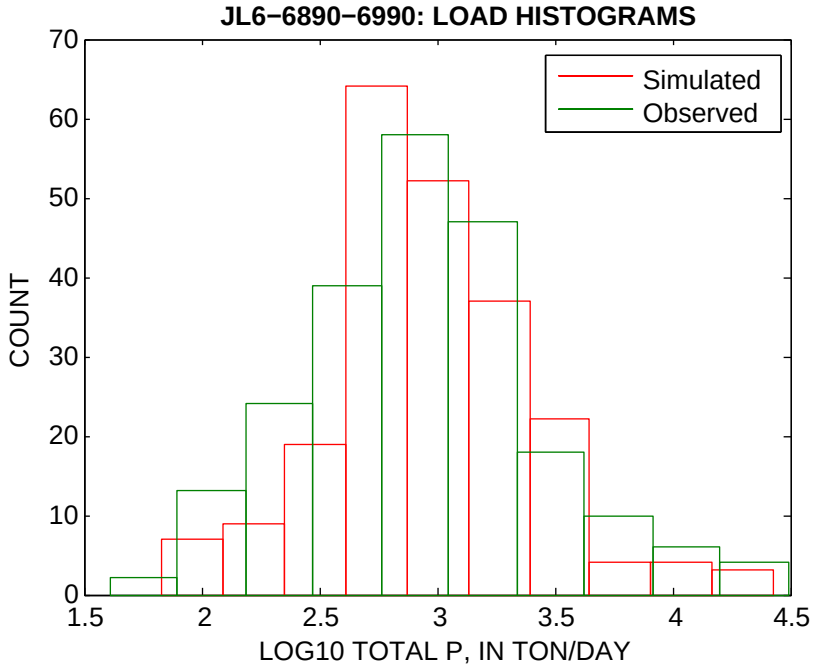


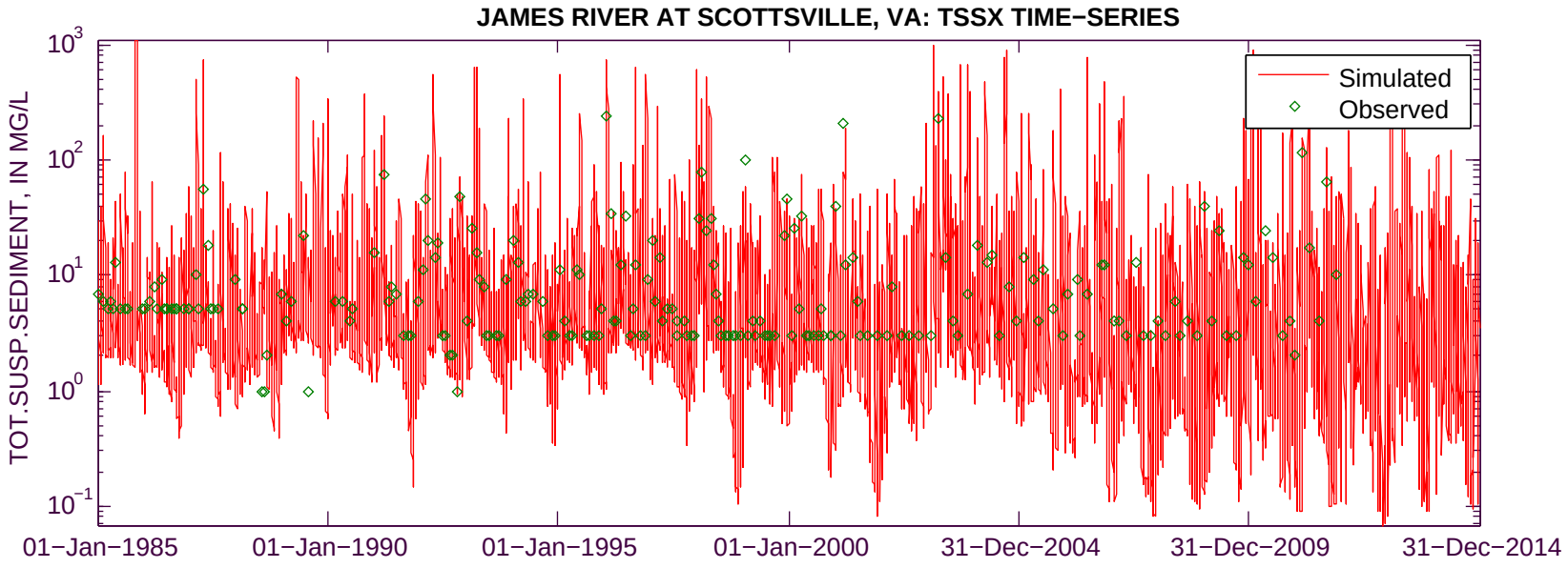
LOAD DATA
LOG10

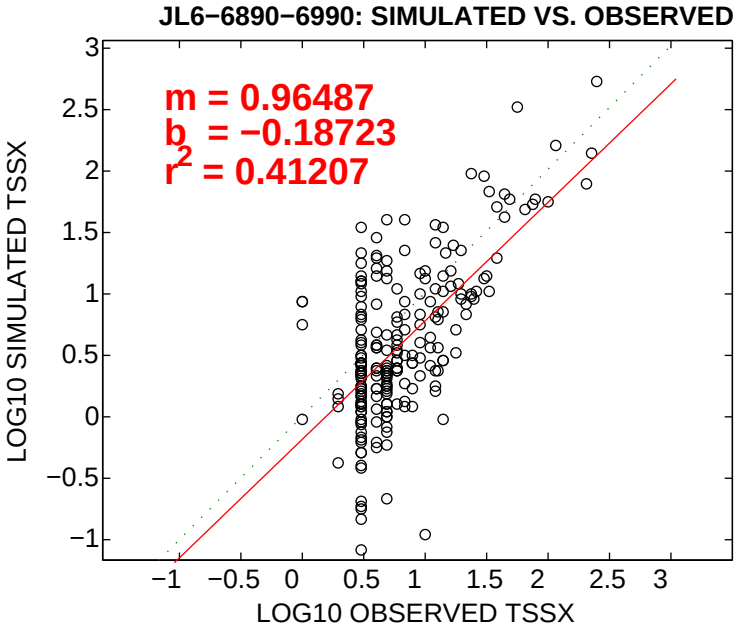


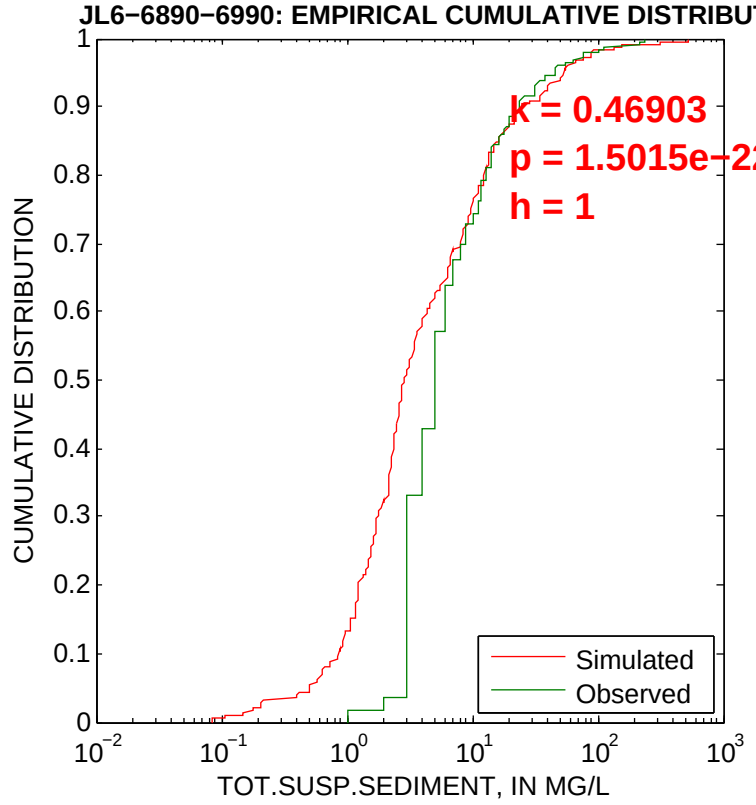












DATA SELECTION

scenario	file
P620171001WQ	TSSX.calib

plot: TSSX - total suspended ...

Dates: 1/1/1985 – 12/31/201

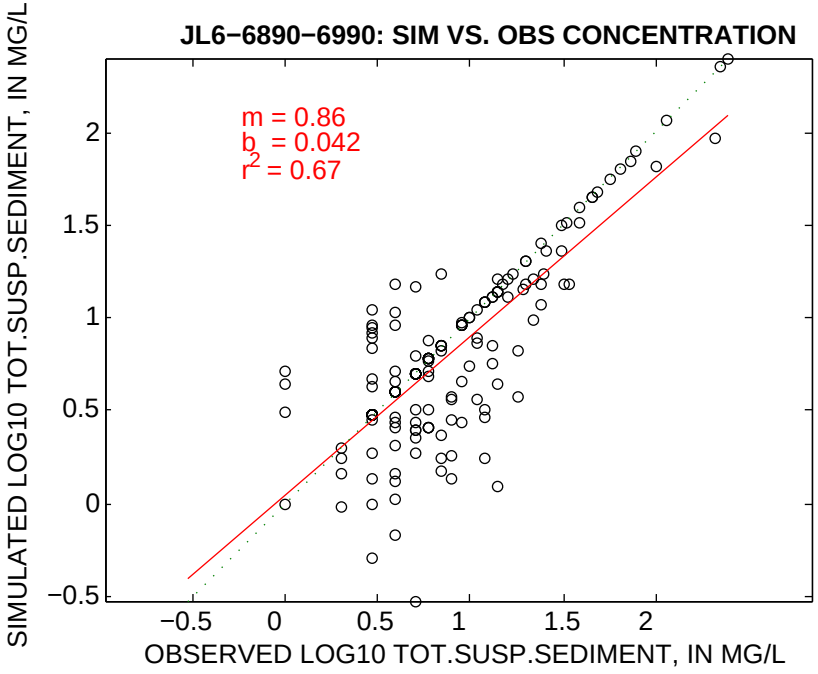
Drive	Directory	Observed
N/A	model	OBS20161101

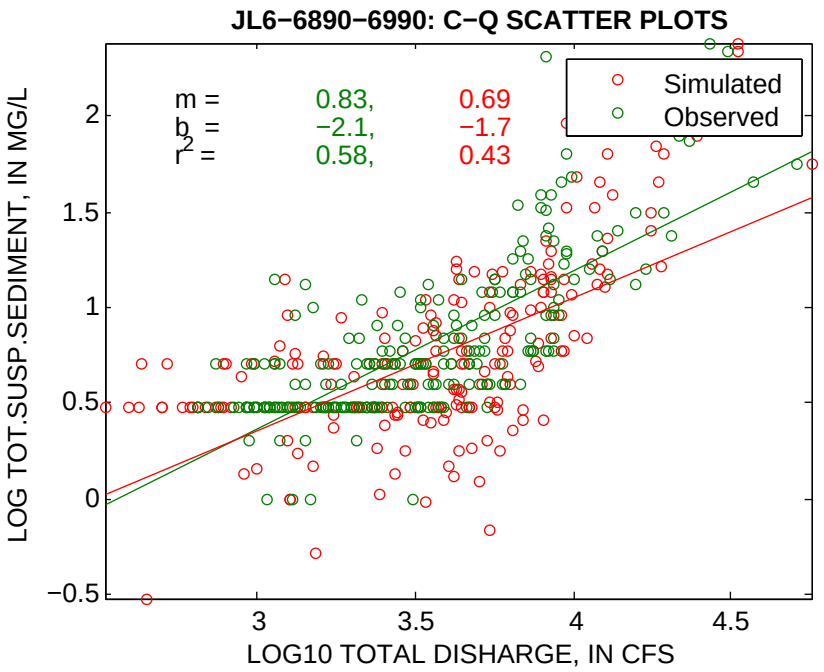
STATISTICS

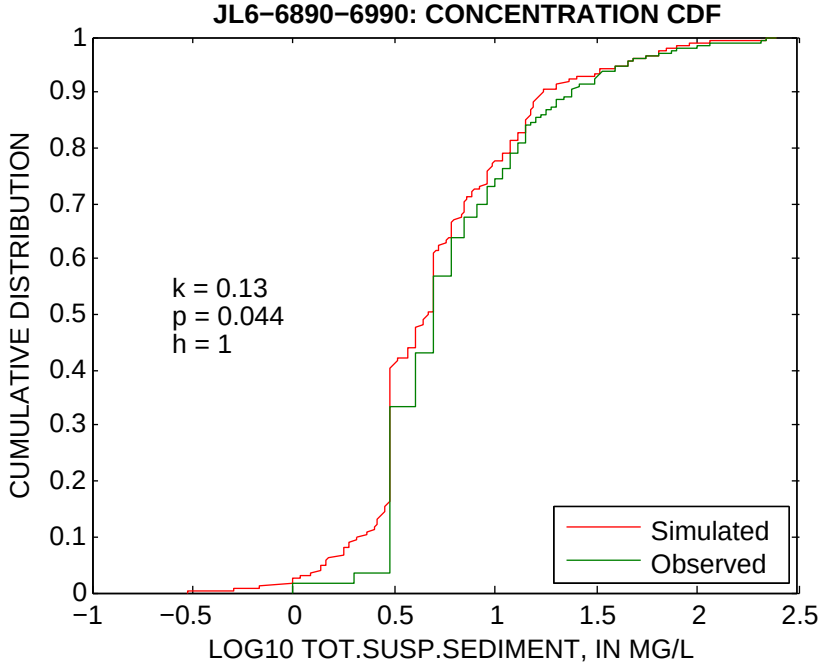
	observe	simulate
n	226	226
min	1 0	0.082877 -1.08157
mean	12.8628 0.808554	13.8729 0.592915
media	5 0.69897	2.86635 0.457304
max	244 2.38739	532.41 2.72625
varian	822.91 0.173079	2013.05 0.391025
JB	0.001 0.001	0.001 0.015185
	ra	log
%	7.85253	-26.6697
err.va	905.356	0.276814
rel.std.err	1.10019	1.59935
mod.eff	-0.100188	-0.599353

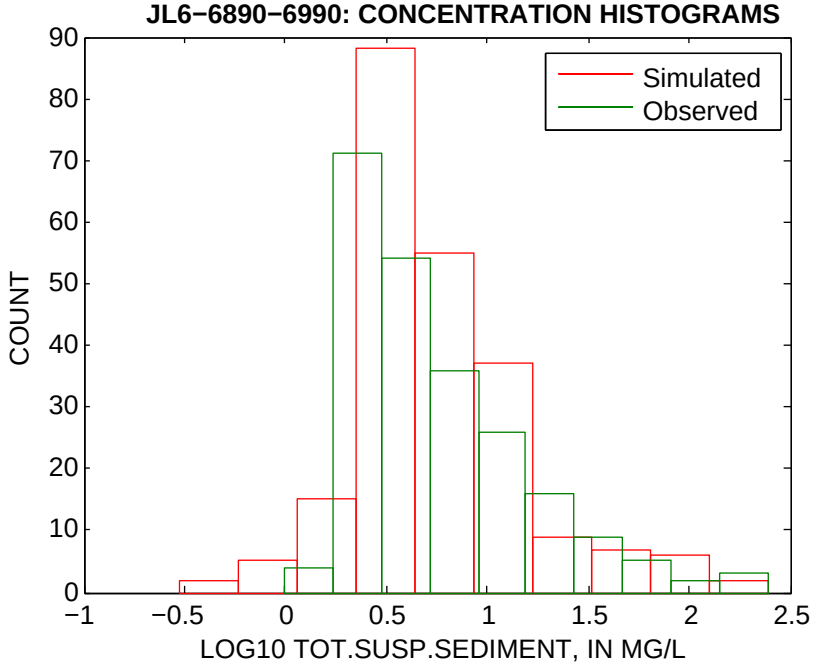
VERSION 2.1

ALL DATA
LOG10

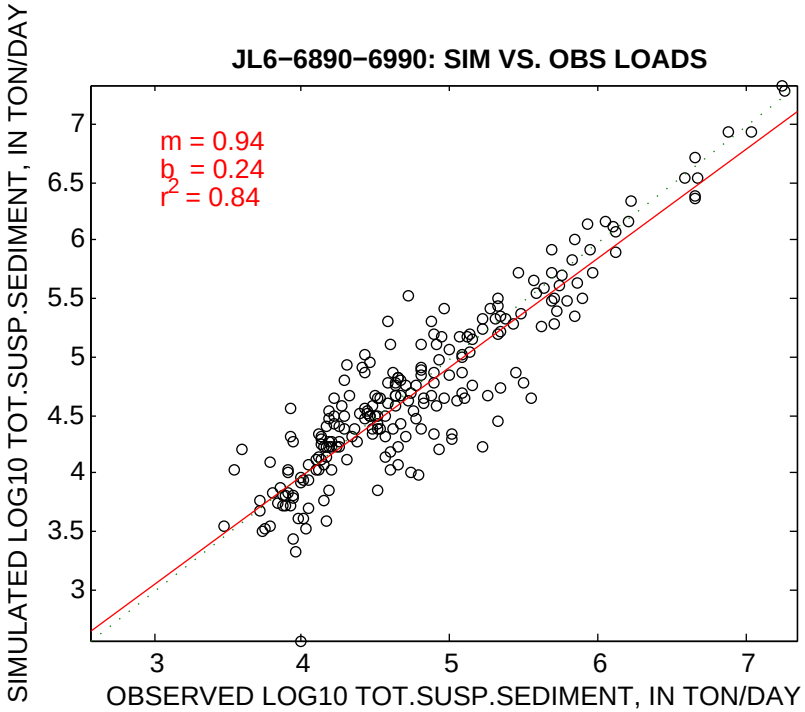


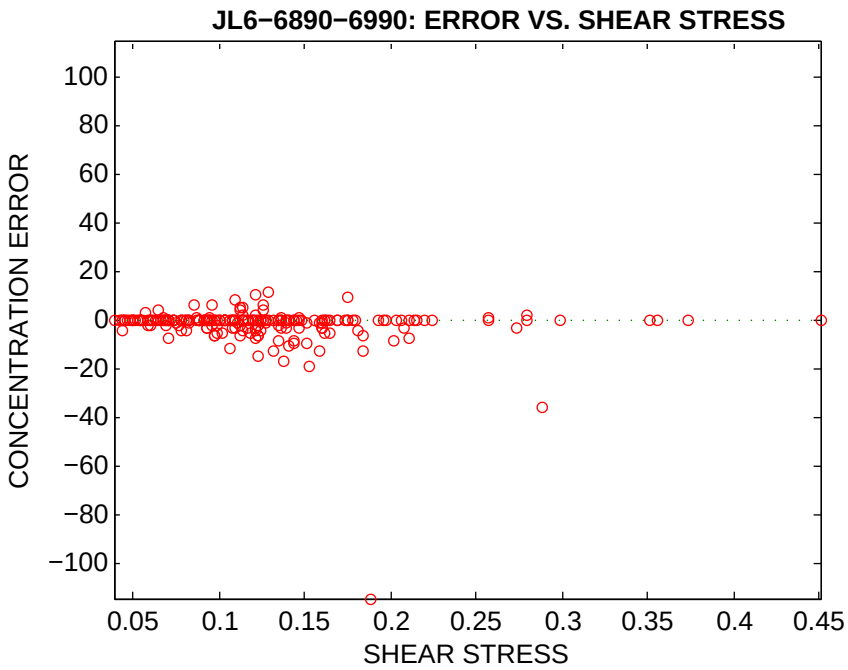


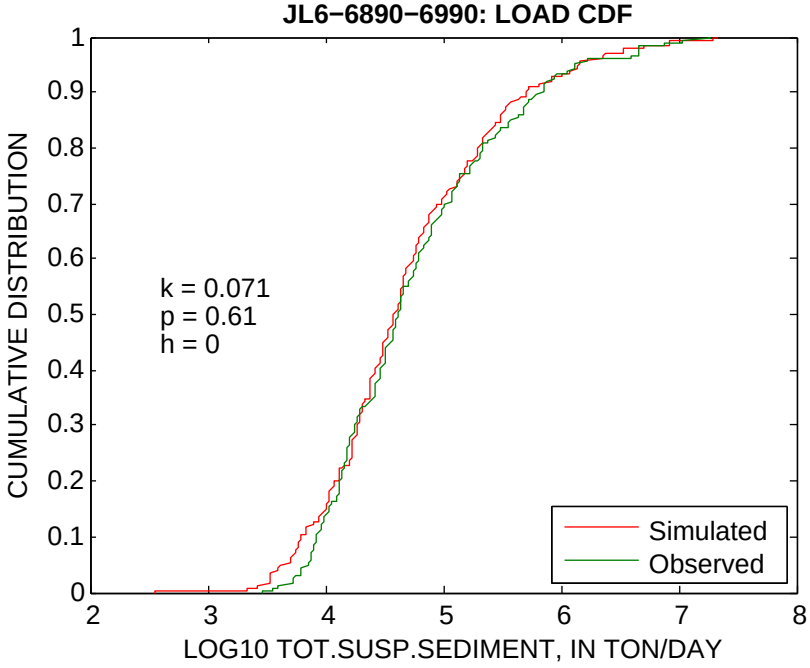


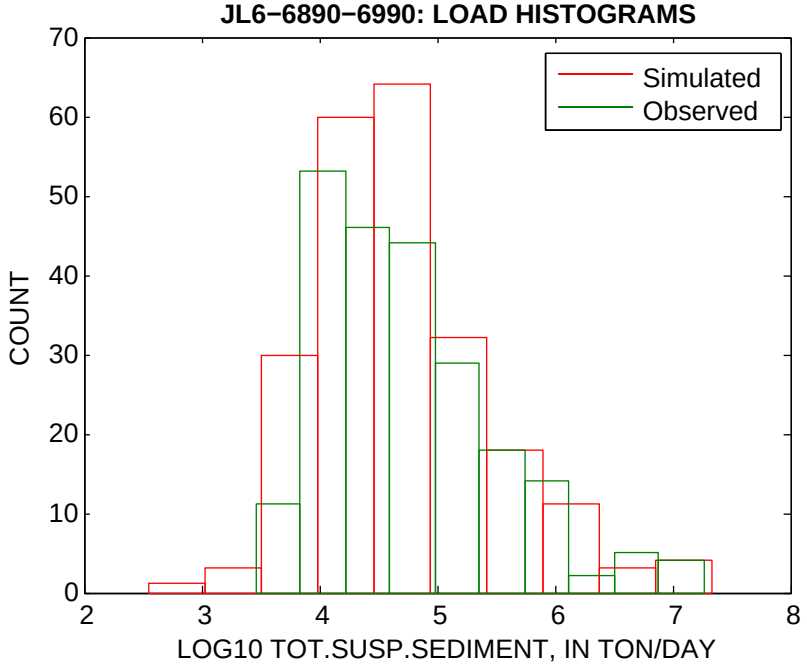


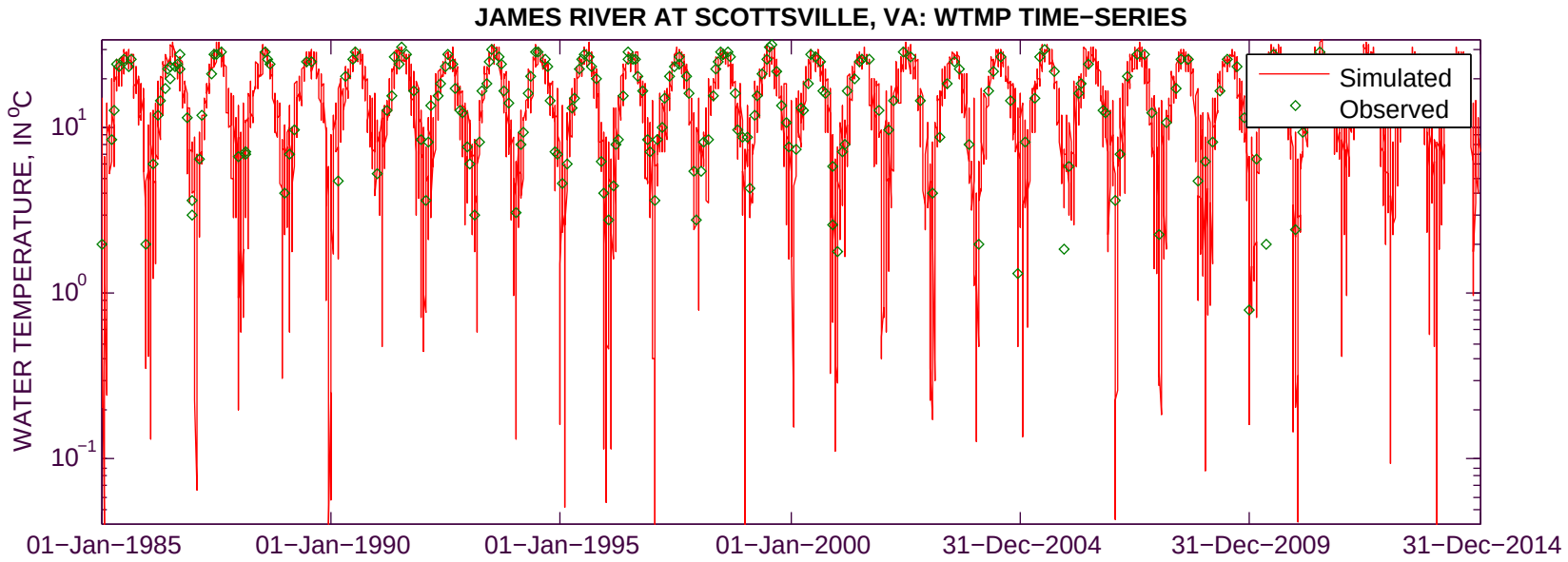
LOAD DATA
LOG10

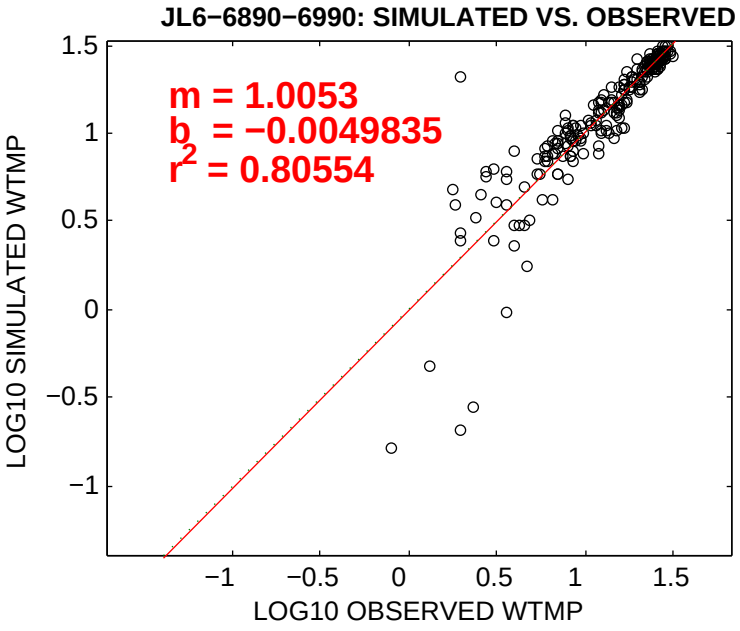


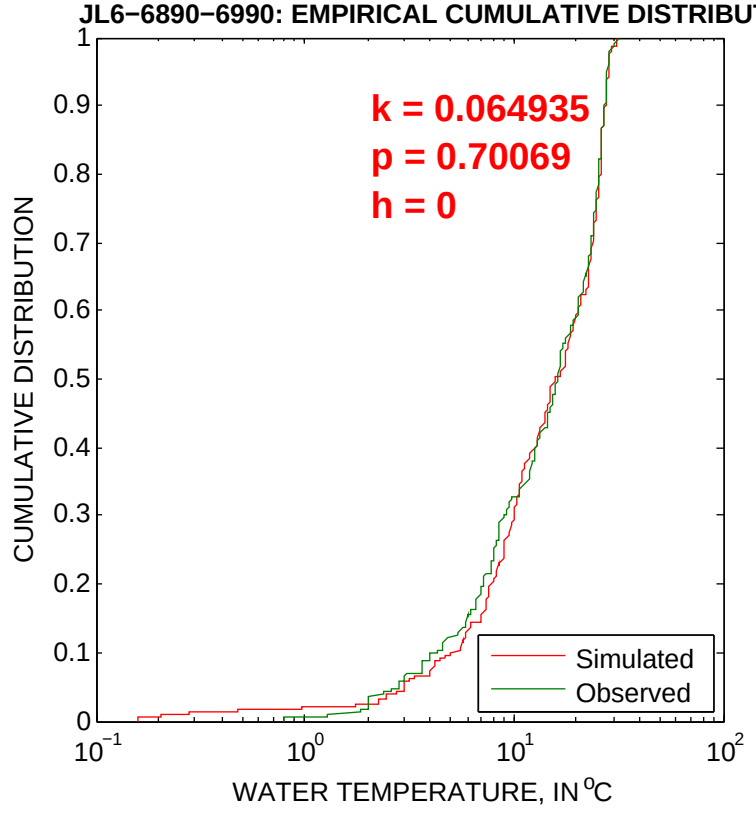












DATA SELECTION

scenario	file
P620171001WQ	WTMP.calib

plot: WTMP - water tempera...

Dates 1/1/1985 12/31/201

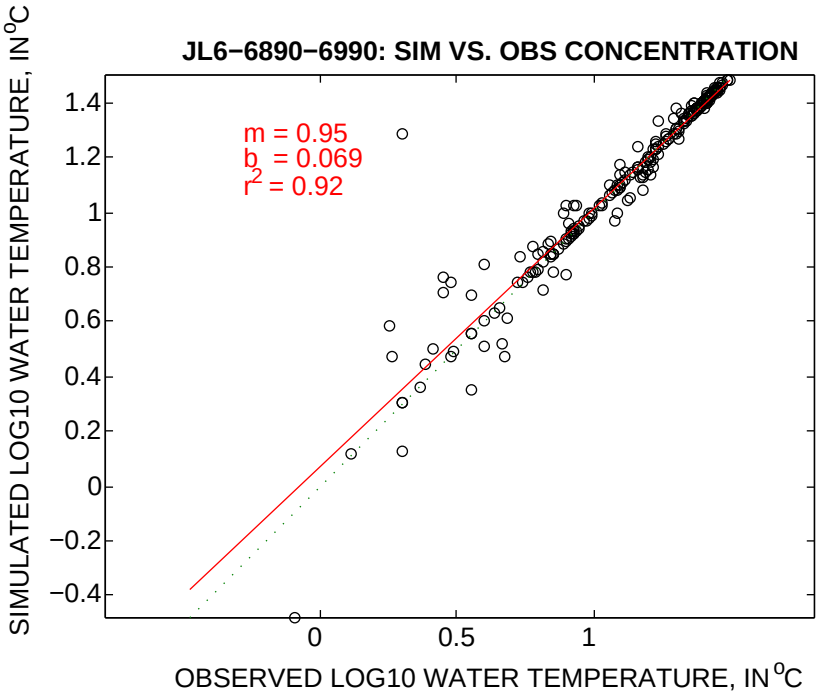
Drive	Directory	Observed
N/A	model	OBS20161101

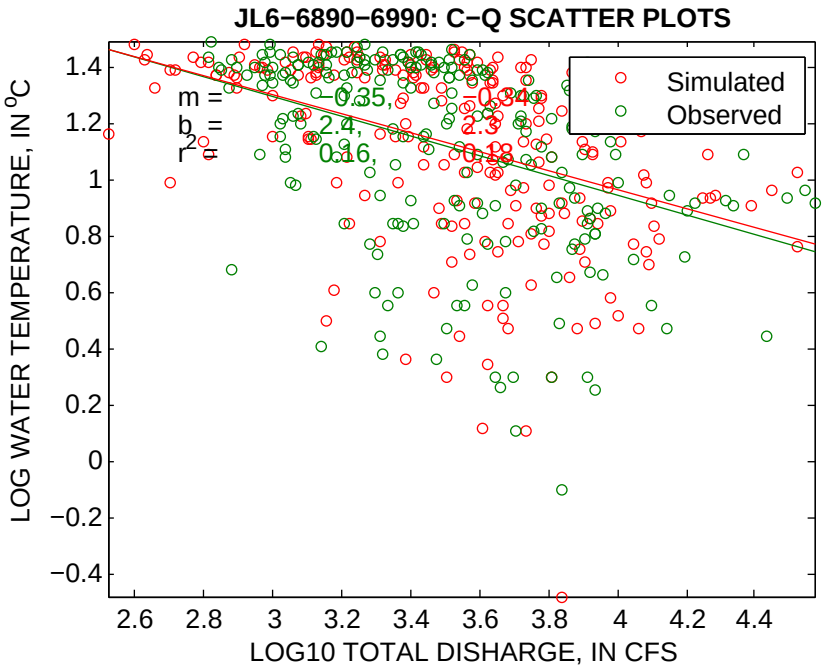
STATISTICS

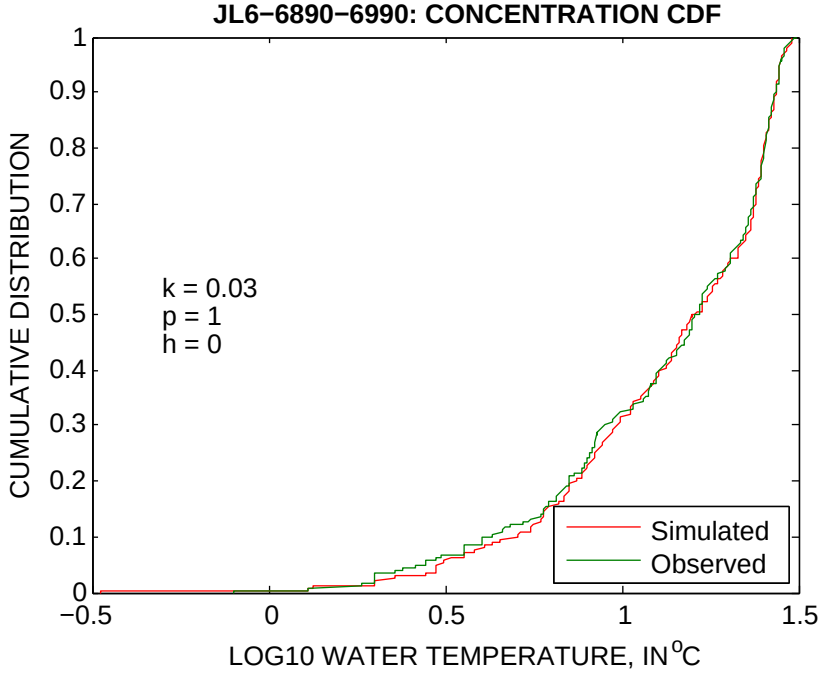
n	231	231
	observe	**simulate**
min	0.8	0.16041
	-0.09691	-0.794769
mean	16.2023	16.4446
	1.11505	1.11602
media	16.1	15.623
	1.20683	1.19376
max	31.5	31.191
	1.49831	1.49403
varian	75.7984	74.4246
	0.107676	0.135102
JB	0.003190	0.003493
	0.001	0.001
	ra	log
%	1.49531	0.0870249
err.va	5.68527	0.0262762
rel.std.err	0.0750052	0.24403
mod.eff	0.924995	0.75597

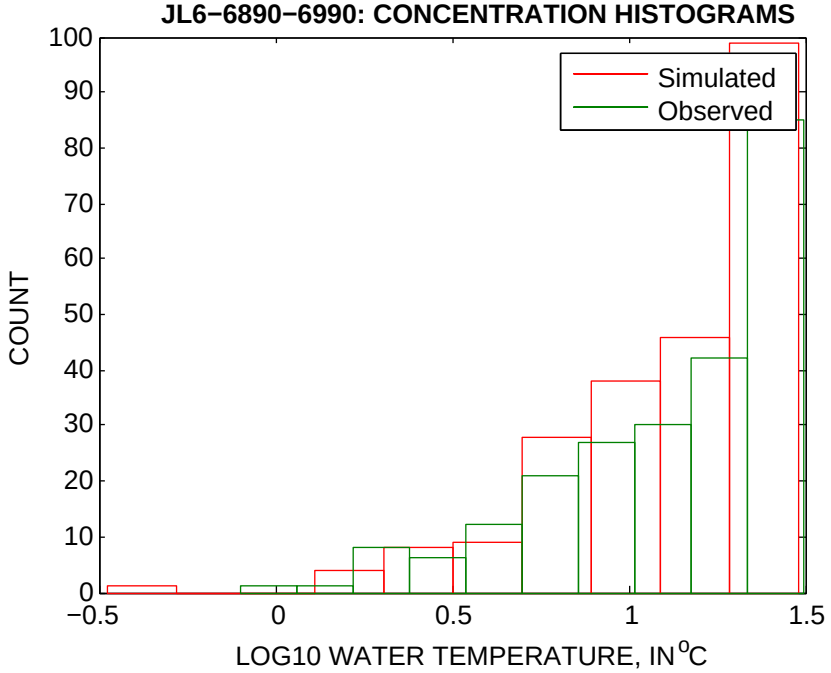
VERSION 2.1

ALL DATA
LOG10

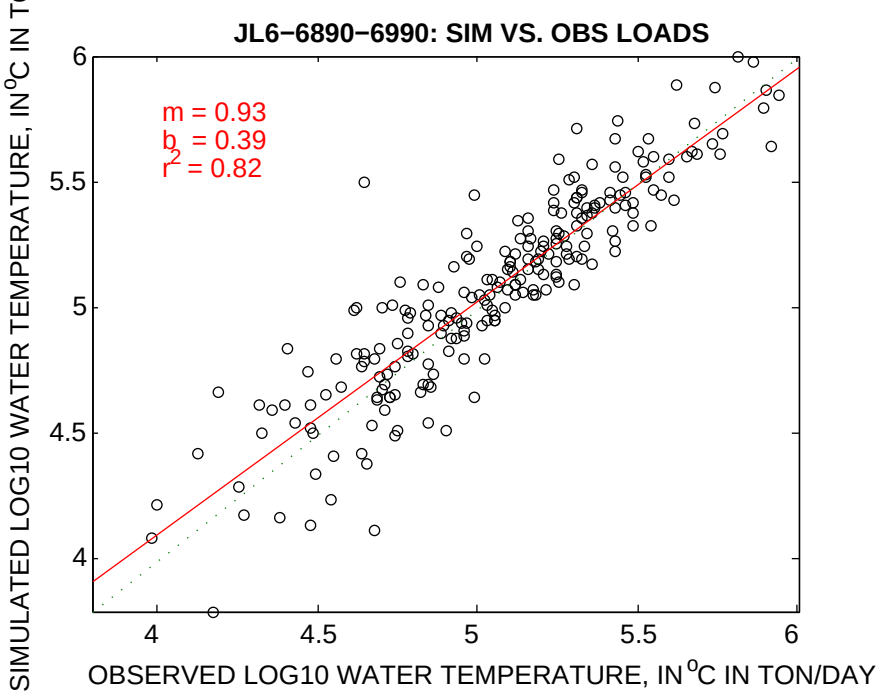




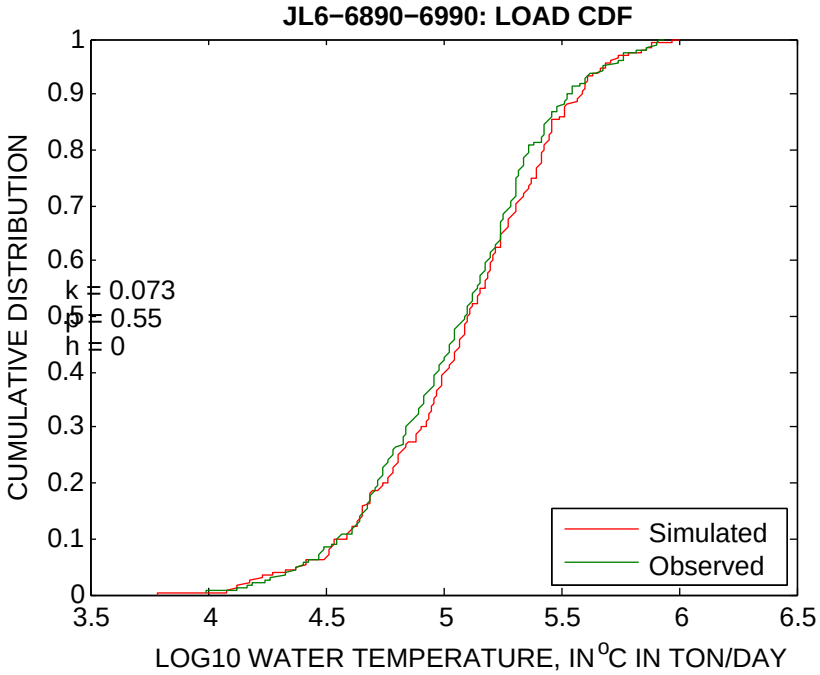


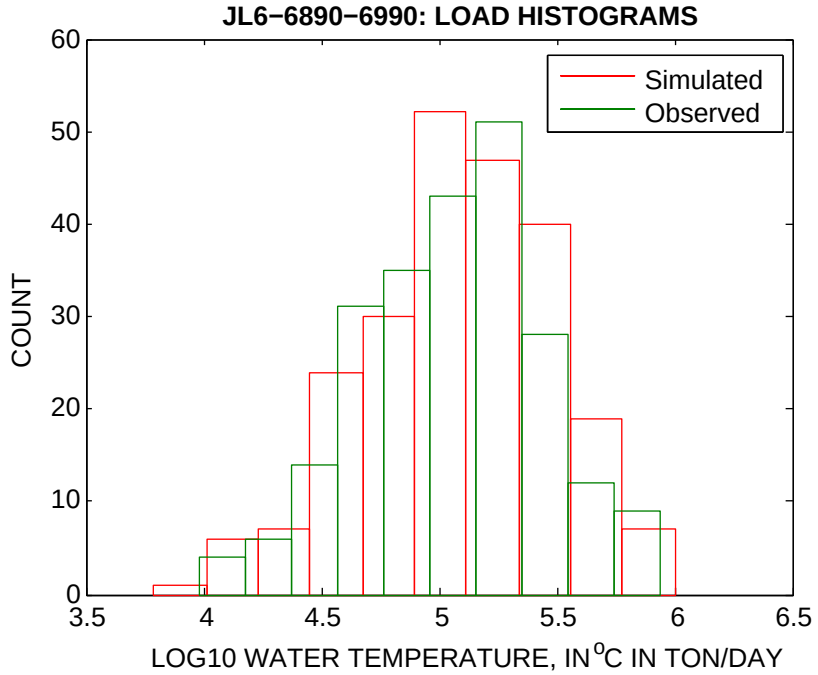


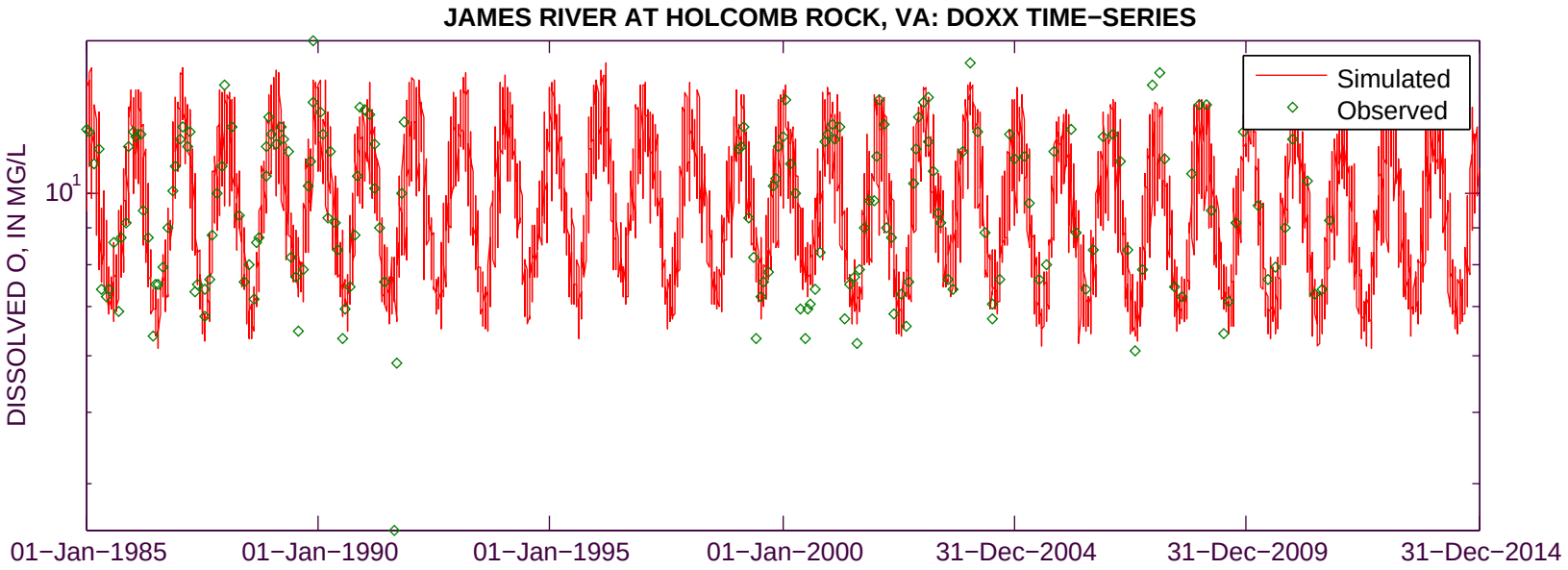
LOAD DATA
LOG10

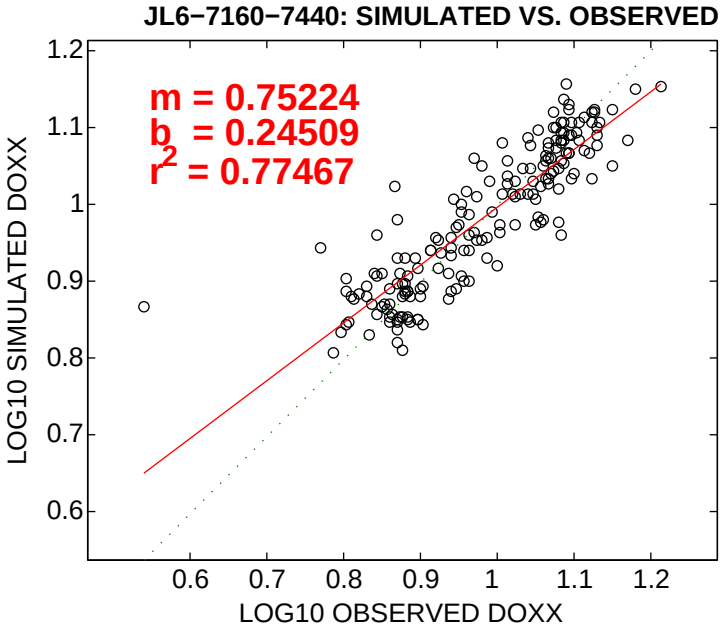


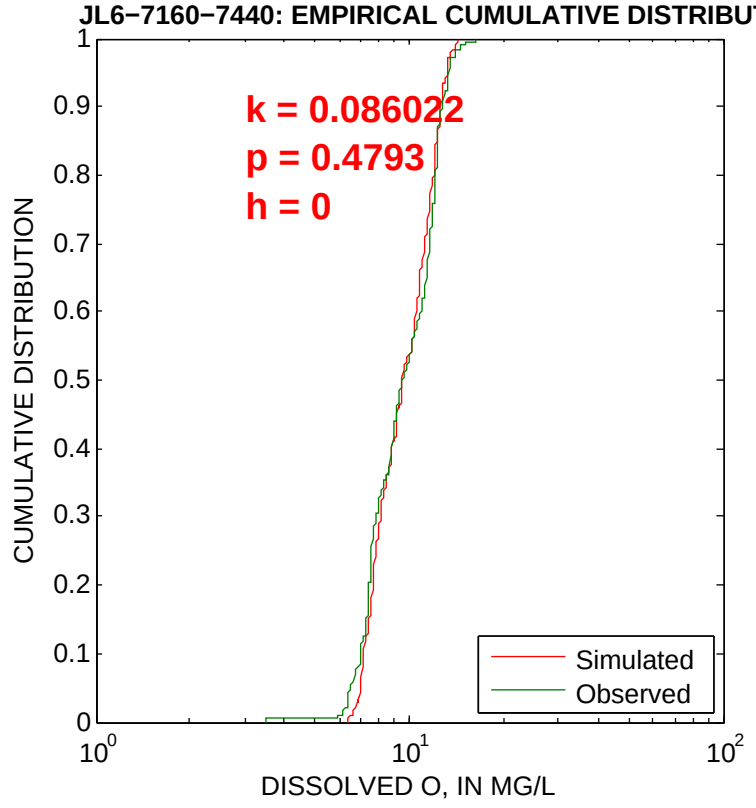












DATA SELECTION

scenario: P620171001WQ | file: DOXX.calib

plot: DOXX - dissolved oxygen

Dates: 1/1/1985 – 12/31/201

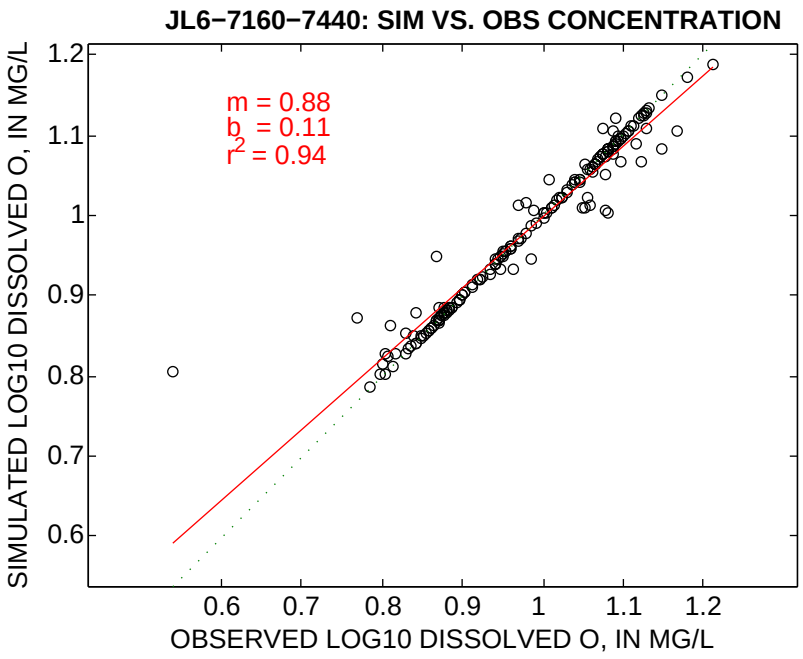
Drive: N/A | Directory: model | Observed: OBS20161101

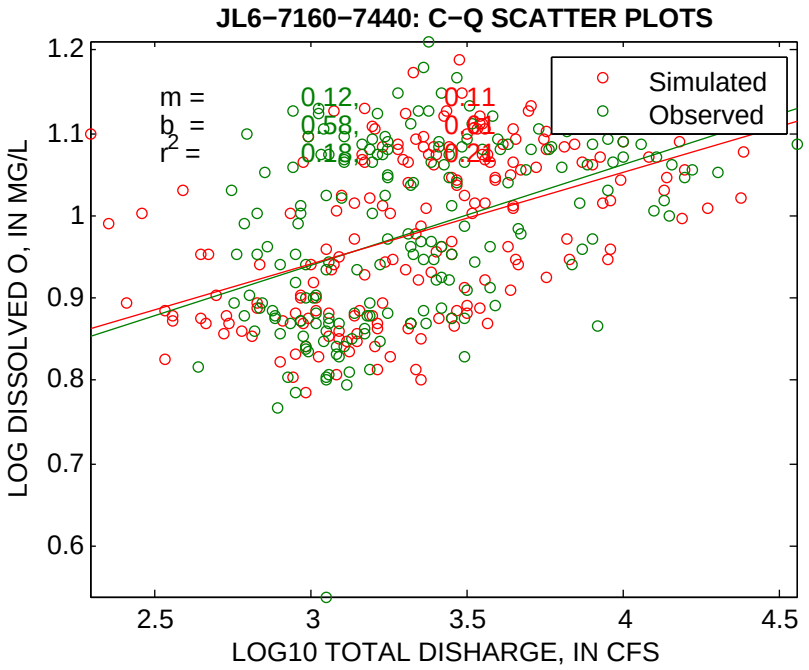
STATISTICS

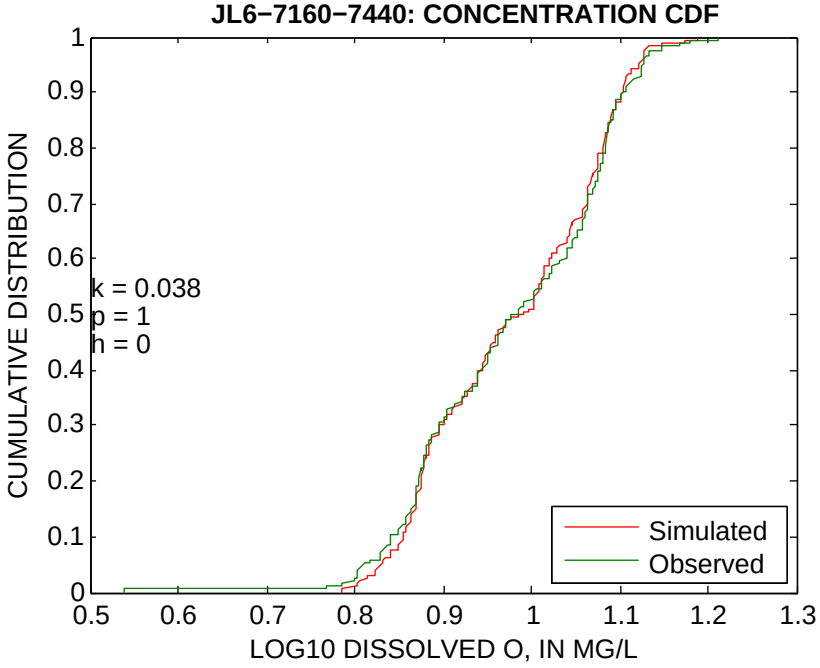
	n	186	186
		observe	simulate
min		3.45863	6.4071
		0.538904	0.806662
mean		9.81924	9.80255
		0.979046	0.98156
media		9.57512	9.5259
		0.981131	0.978906
max		16.3	14.336
		1.21219	1.15643
varian		5.55784	4.31747
		0.0117579	0.00858862
JB		0.036895	0.009677
		0.080455	0.009126
		ra	log
%		-0.169956	0.256776
err.va		1.10594	0.00266344
rel.std.err		0.198988	0.226524
mod.eff		0.801012	0.773476

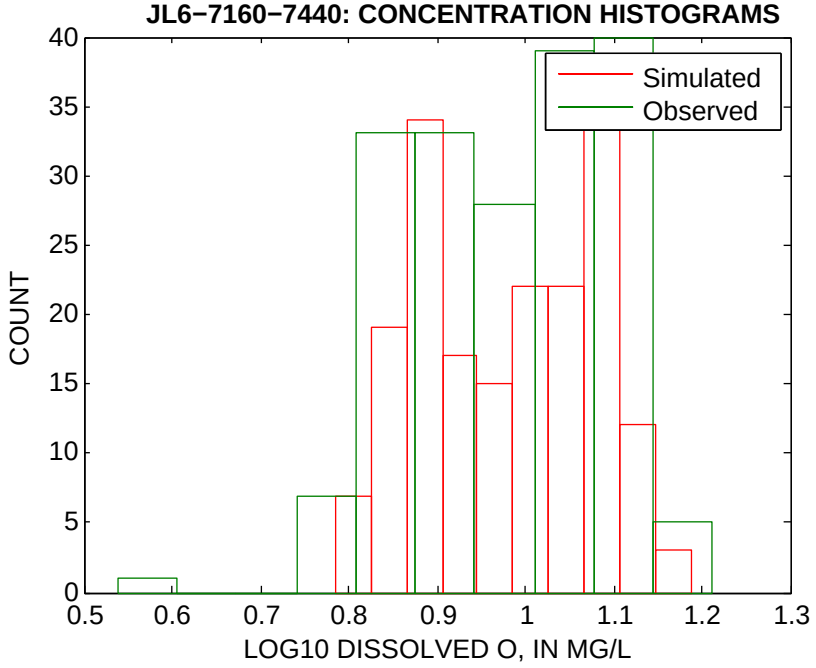
VERSION 2.1

ALL DATA
LOG10

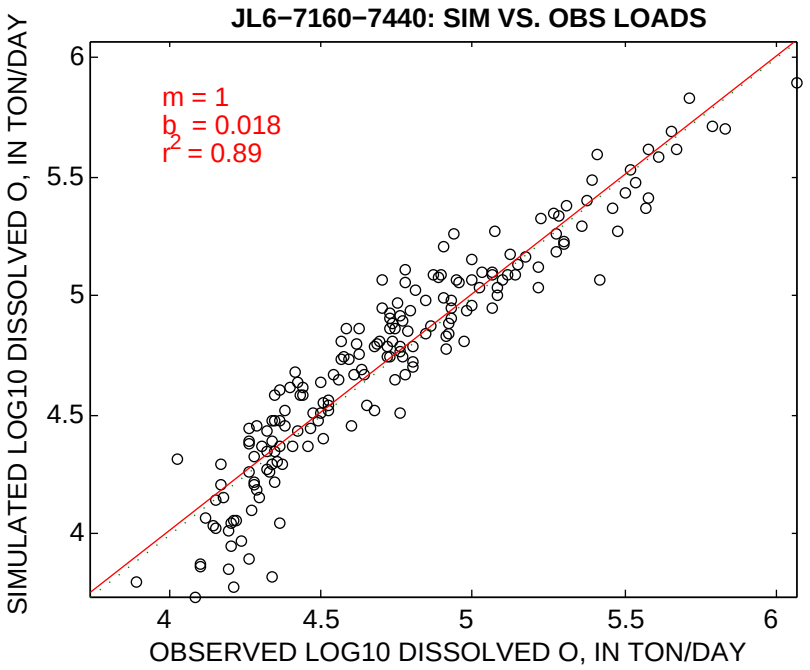




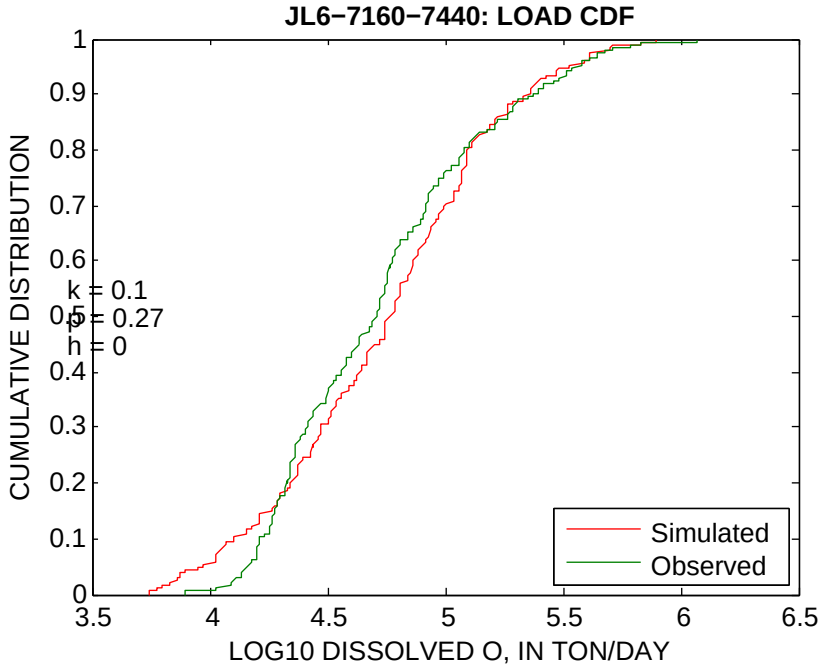


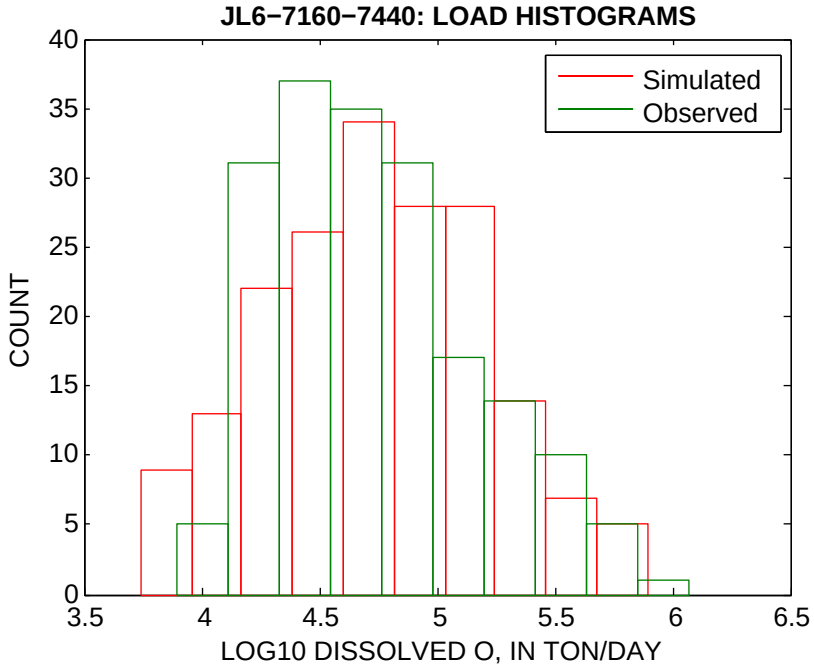


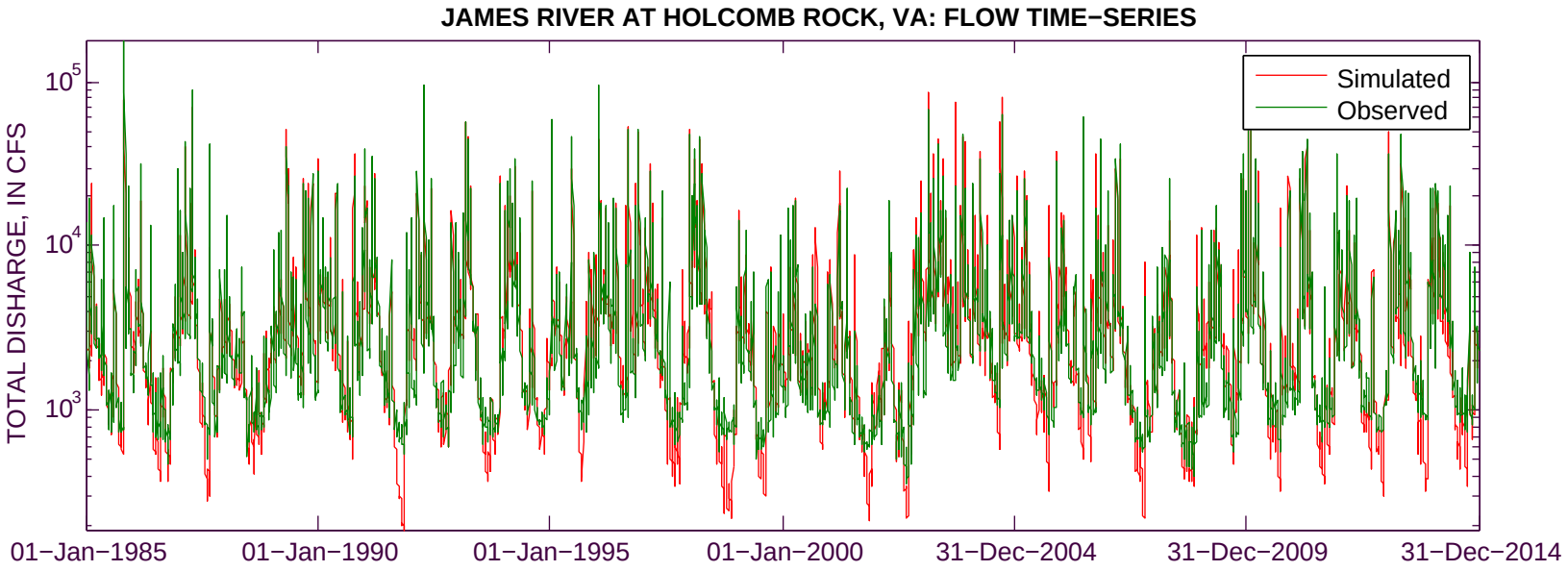
LOAD DATA
LOG10

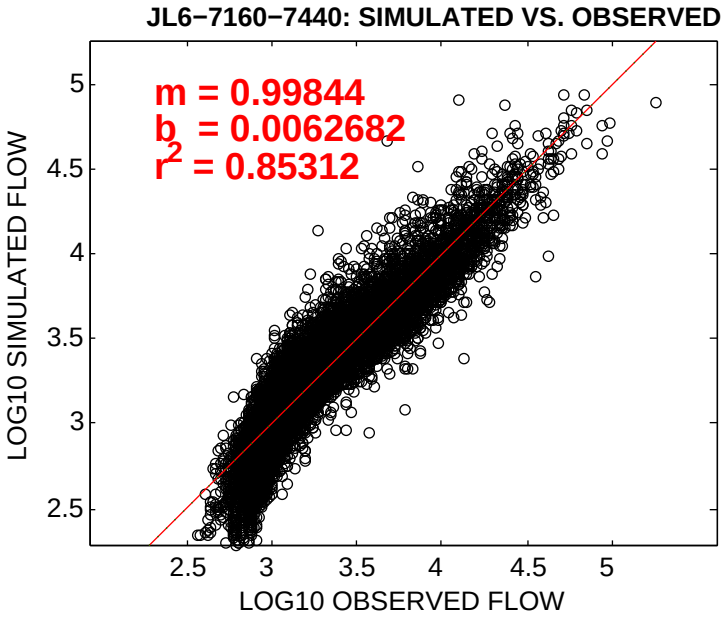


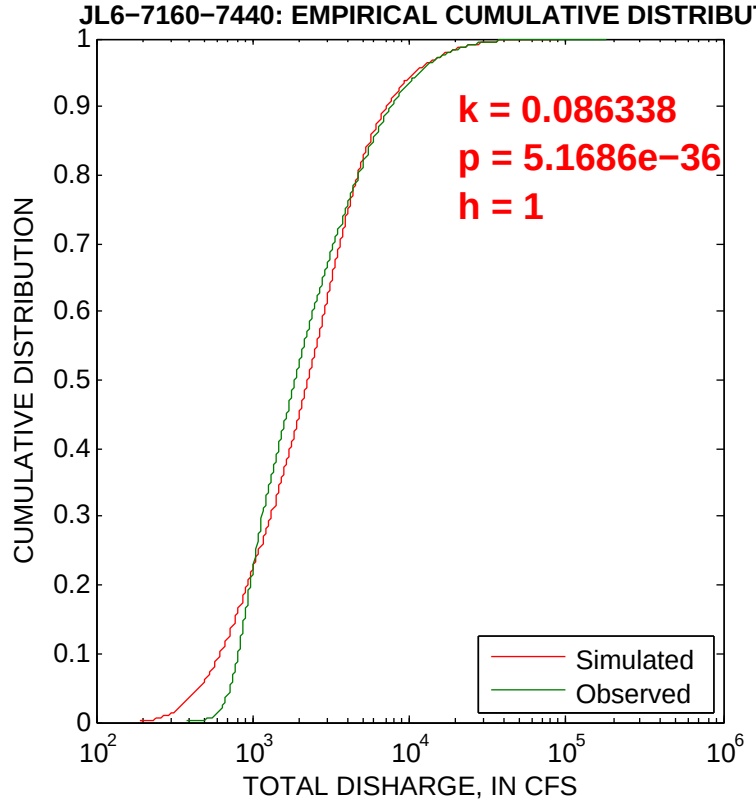












DATA SELECTION

scenario: P620171001WQ | file: FLOW.calib

plot: FLOW - total discharge

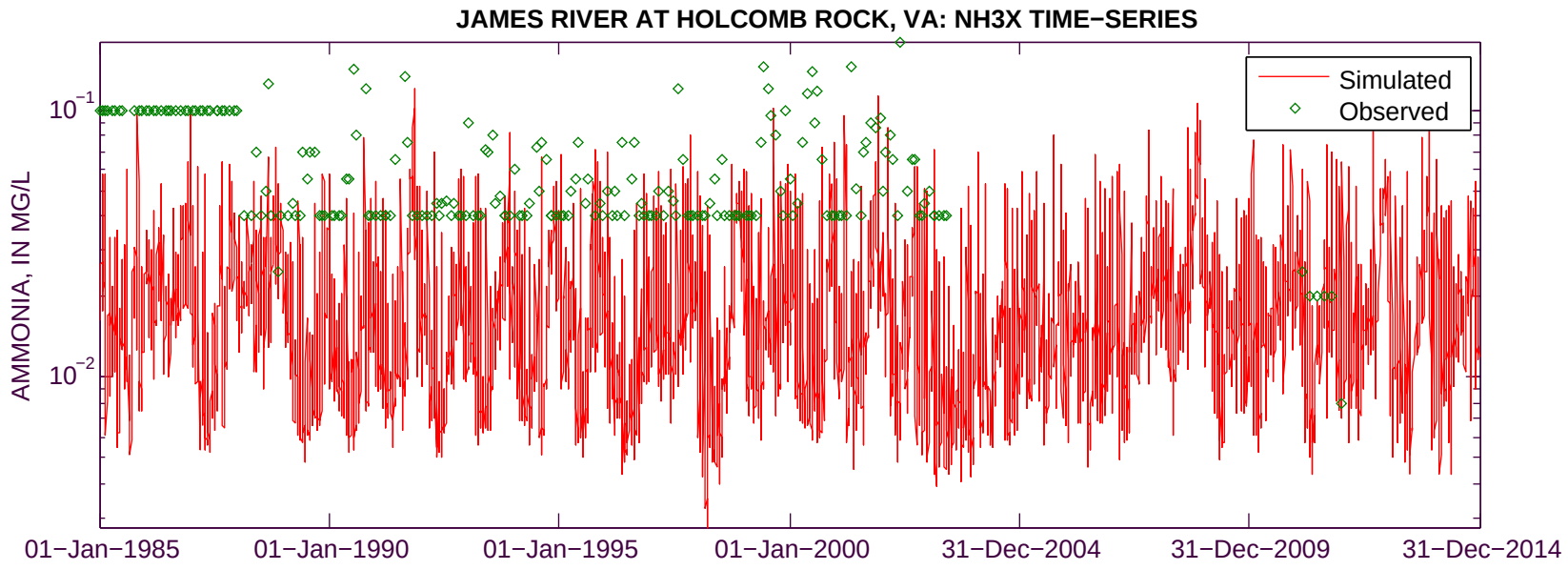
Dates: 1/1/1985 – 12/31/201

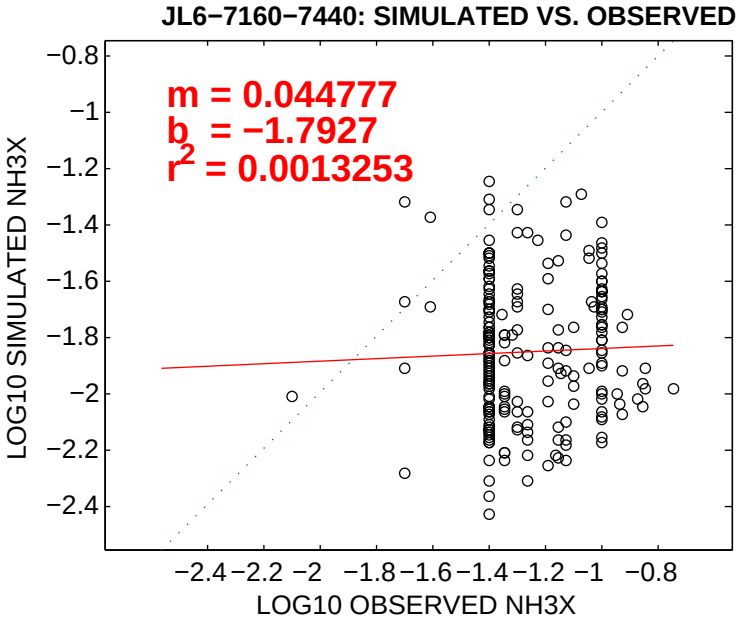
Drive | Directory: N/A | model | Observed: OBS20161101

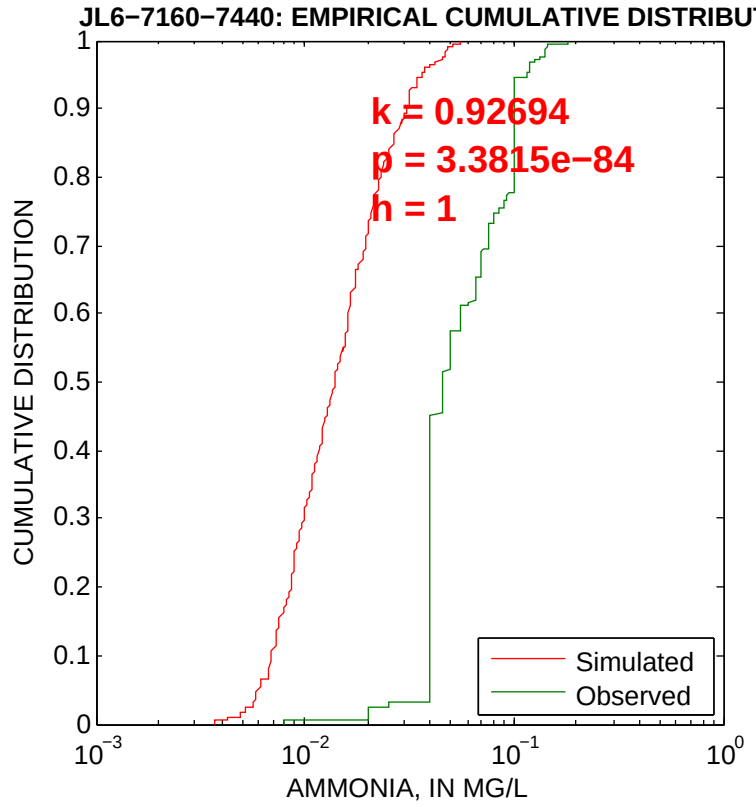
STATISTICS

		observe	simulate
n		10957	10957
min		360	189.92
		2.5563	2.27857
mean		3566.7	3606.33
		3.34252	3.34357
media		1870	2270.9
		3.27184	3.3562
max		180000	87053
		5.25527	4.93978
varian		2.96013e+0	2.59191e+
		0.149239	0.174387
JB		0.001	0.001
		0.001	0.001
		ra	log
%		1.11107	0.031421
err.va		6.74006e+0	0.0256157
rel.std.err		0.227694	0.171642
mod.eff		0.772306	0.828358

VERSION 2.1







DATA SELECTION

scenario	file
P620171001WQ	NH3X.calib

plot: NH3X - ammonia

Dates: 1/1/1985 – 12/31/201

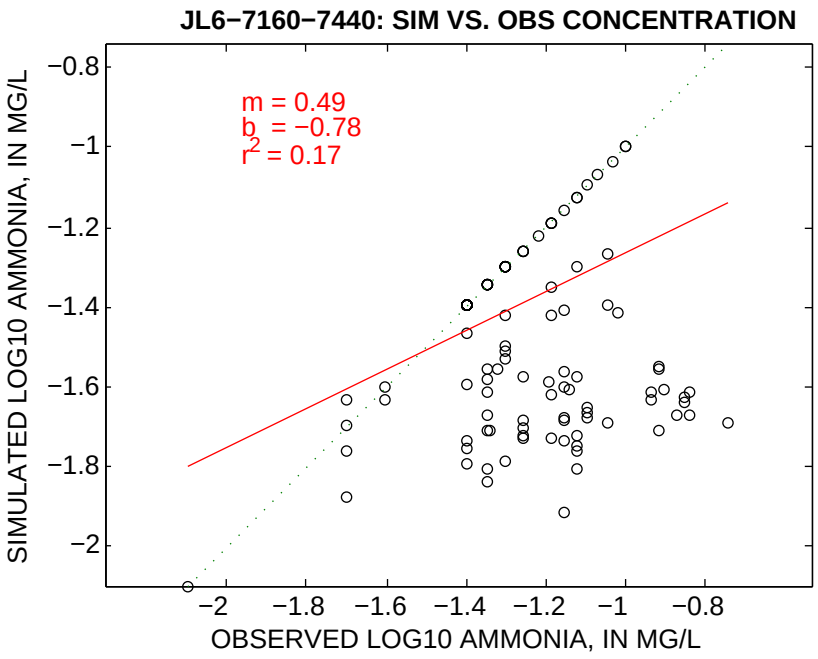
Drive	Directory	Observed
N/A	model	OBS20161101

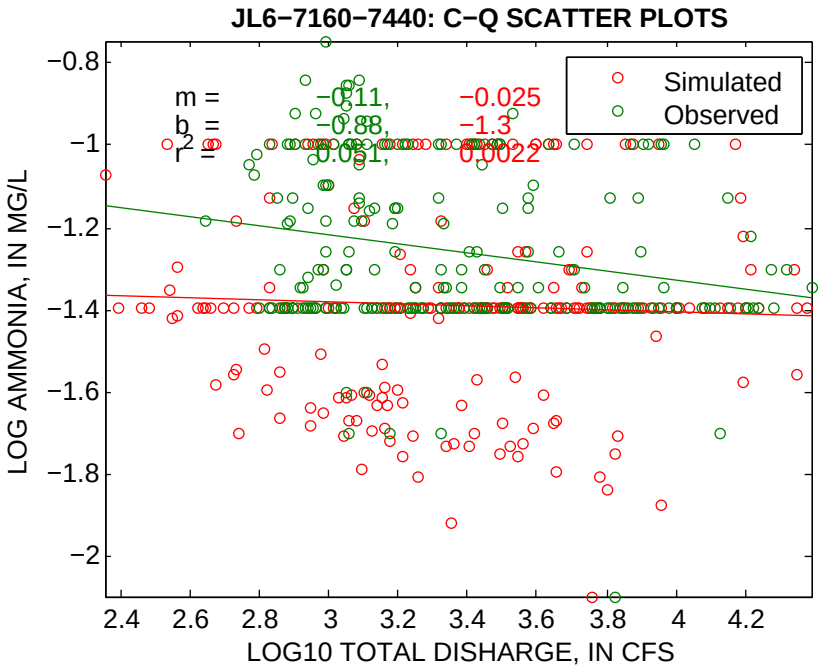
STATISTICS

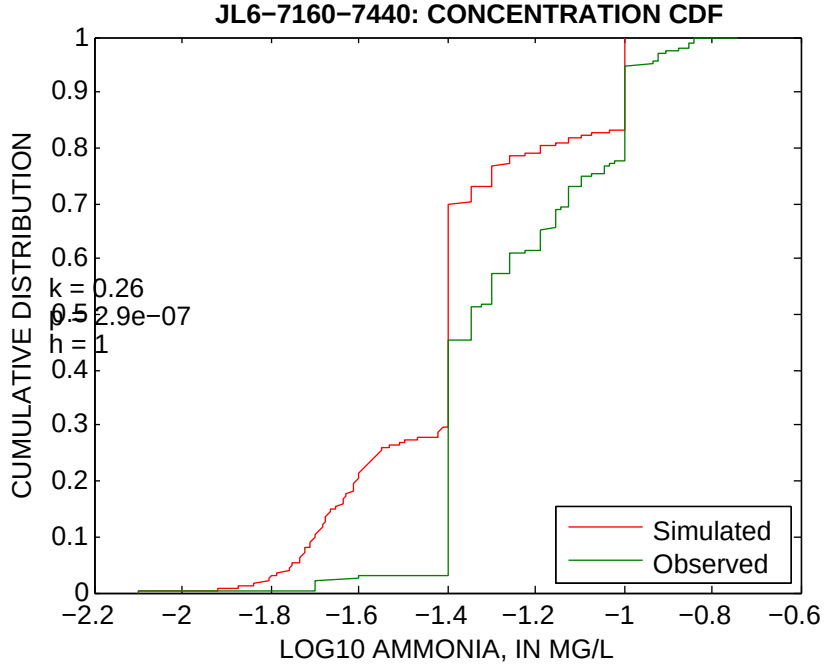
	n	219	219
		observe	simulate
min		0.008	0.003712
		-2.09691	-2.43039
mean		0.0616876	0.0166092
		-1.2551	-1.84886
media		0.0450344	0.013944
		-1.34646	-1.85561
max		0.18	0.056133
		-0.744727	-1.25078
varian		0.00087121	0.00010023
		0.0391686	0.0592563
JB		0.001	0.001
		0.217492	0.083497
		ra	log
%		-73.0752	47.3078
err.va		0.00301444	0.449087
rel.std.err		3.46003	11.4655
mod.eff		-2.46003	-10.4655

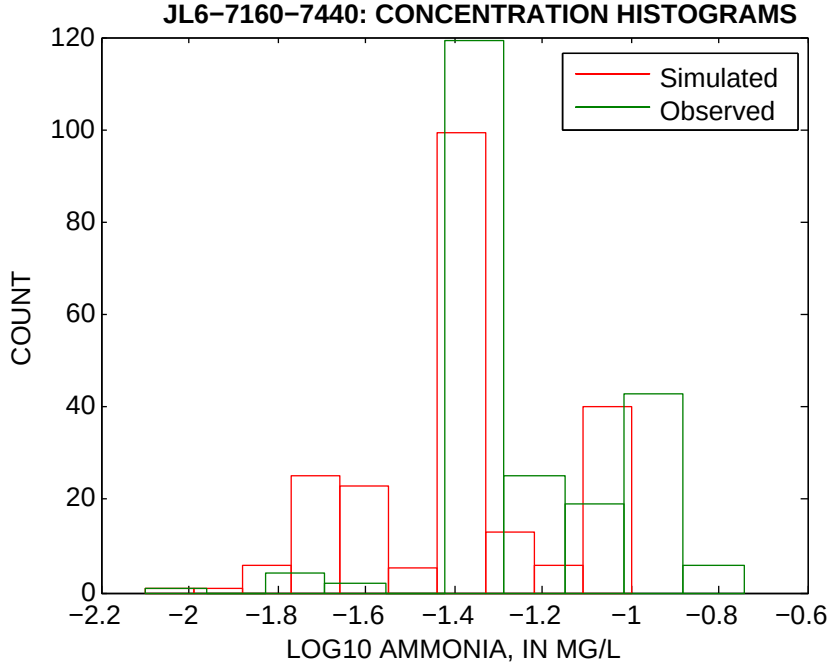
VERSION 2.1

ALL DATA
LOG10

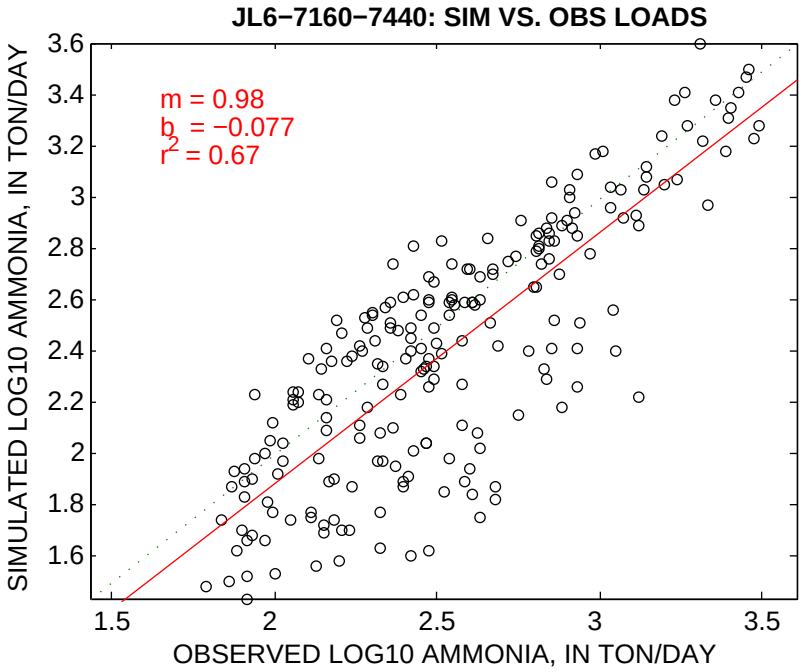


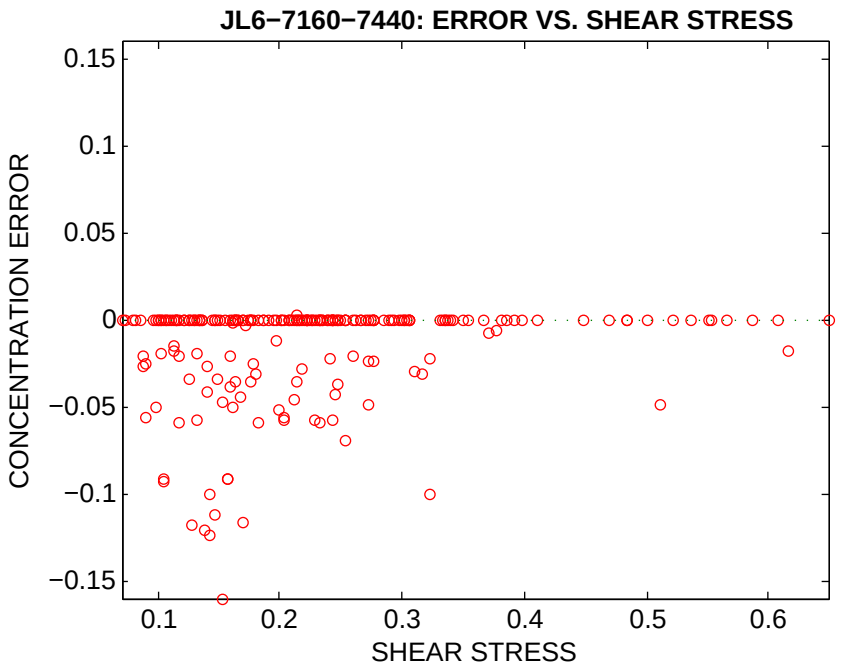


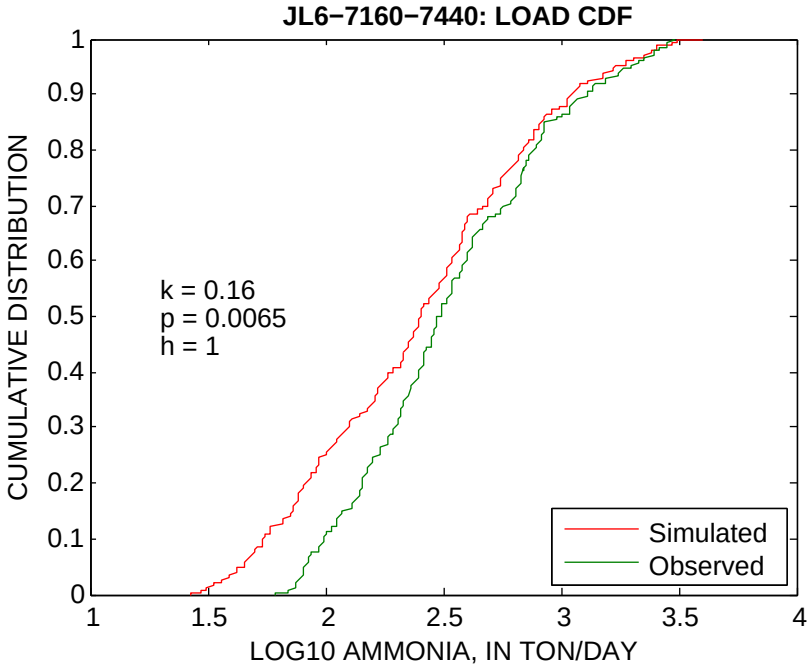


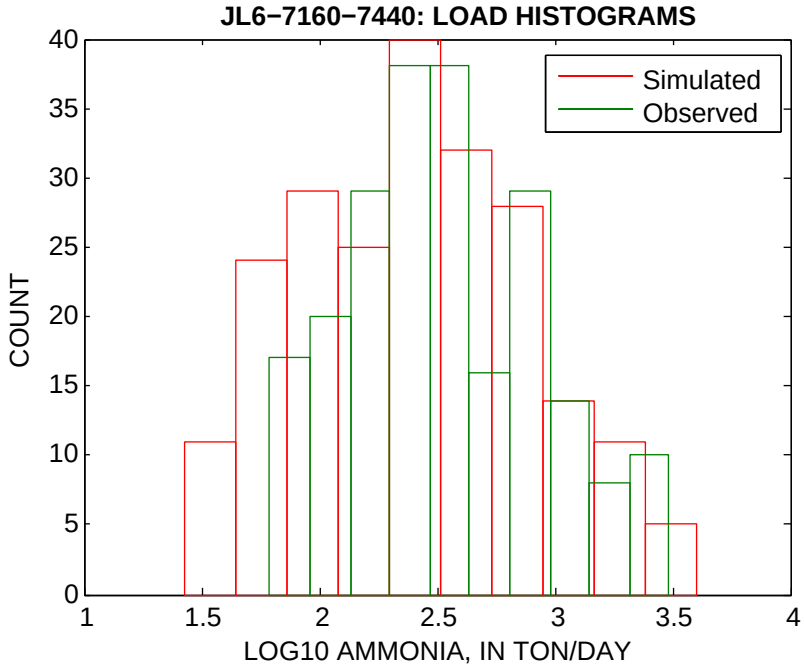


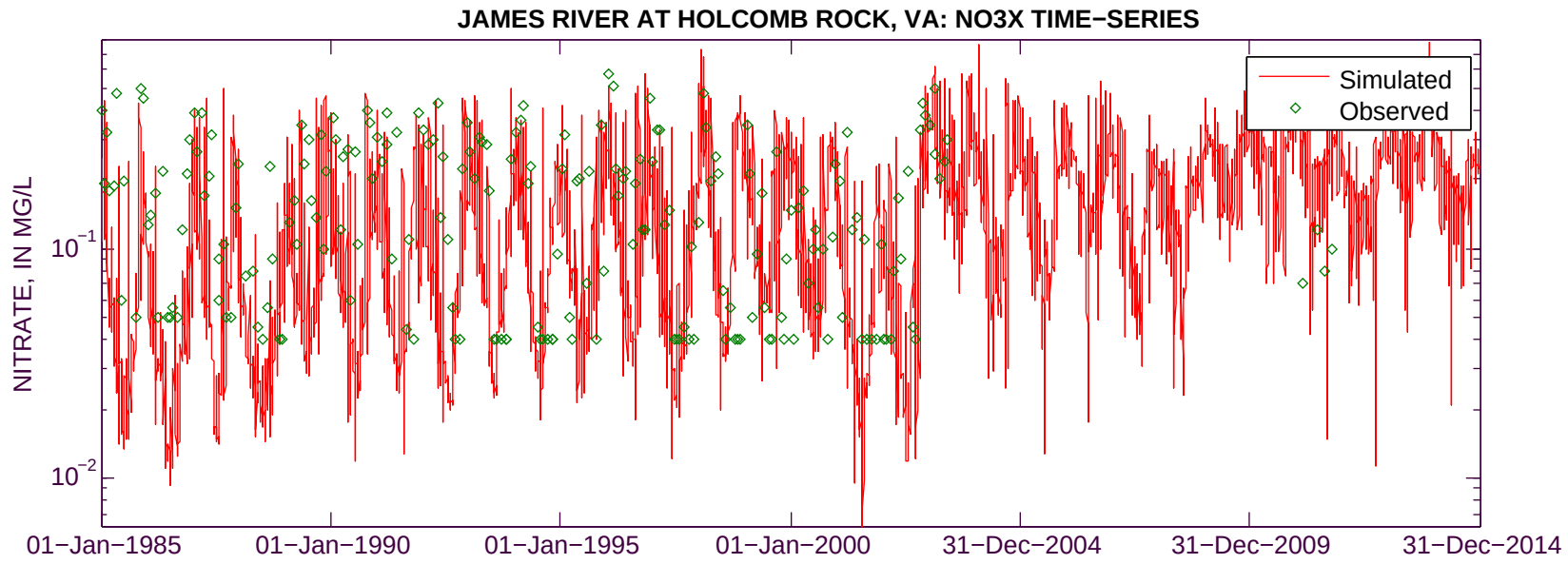
LOAD DATA
LOG10

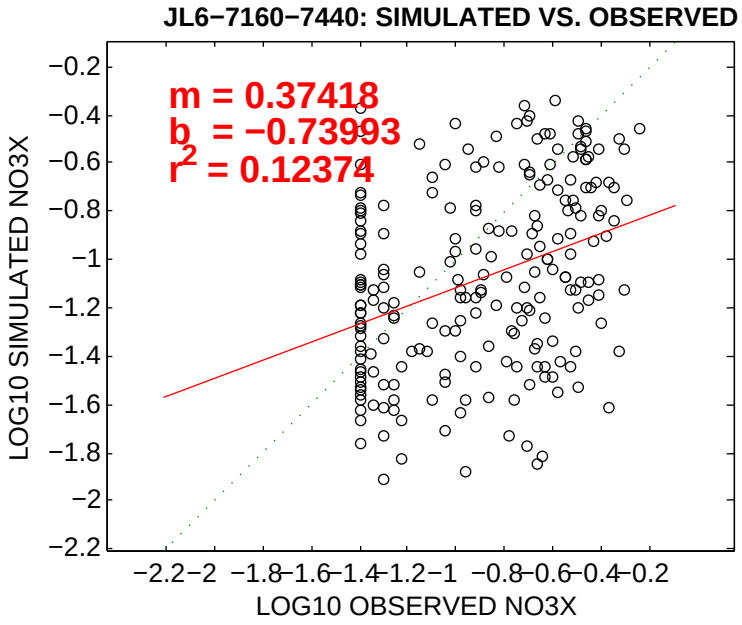


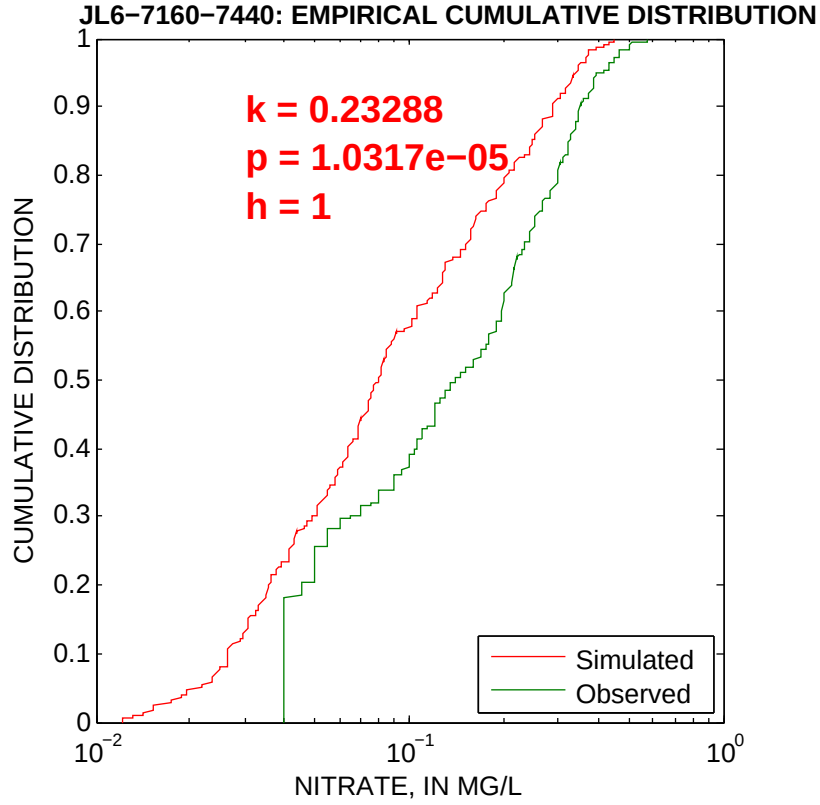












DATA SELECTION

scenario	file
P620171001WQ	NO3X.calib

plot: NO3X - nitrate

Dates: 1/1/1985 – 12/31/201

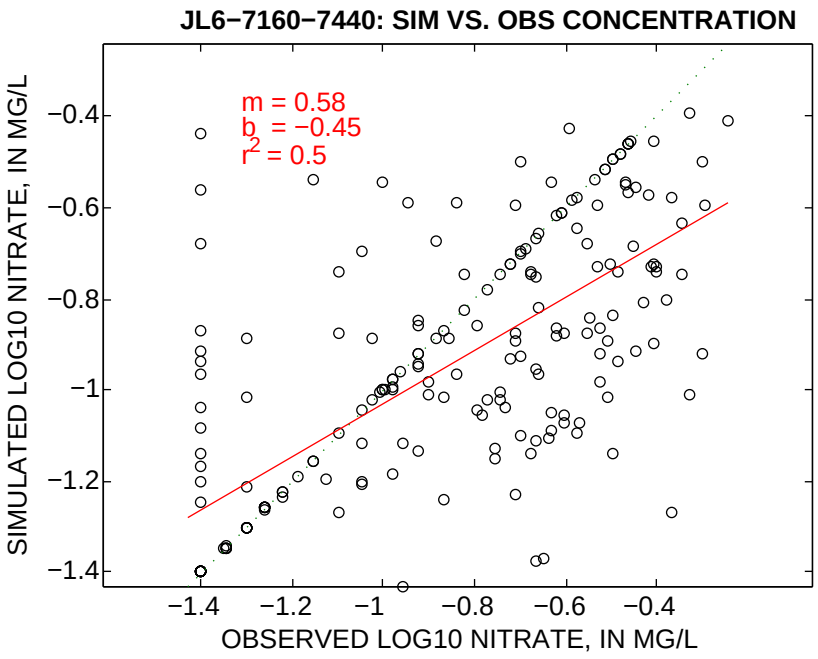
Drive	Directory	Observed
N/A	model	OBS20161101

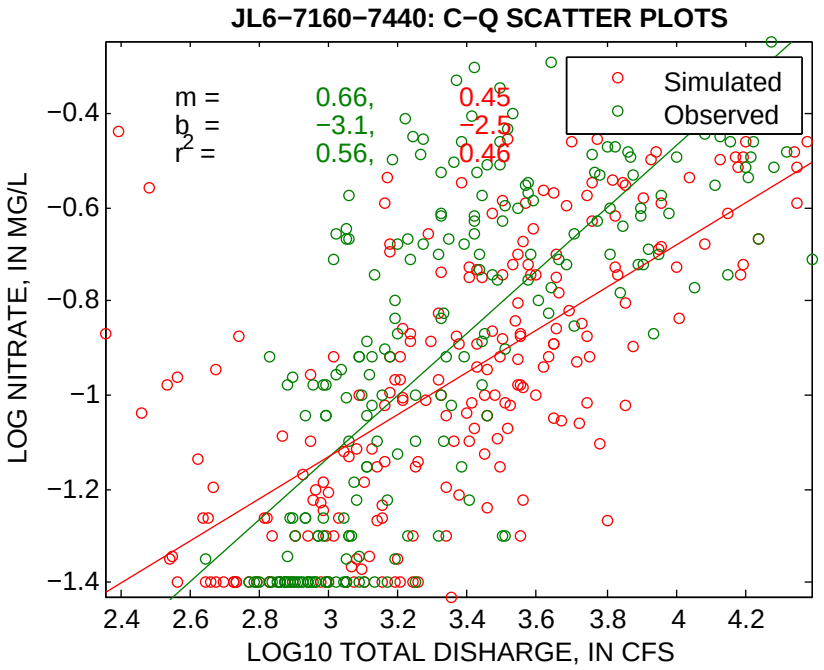
STATISTICS

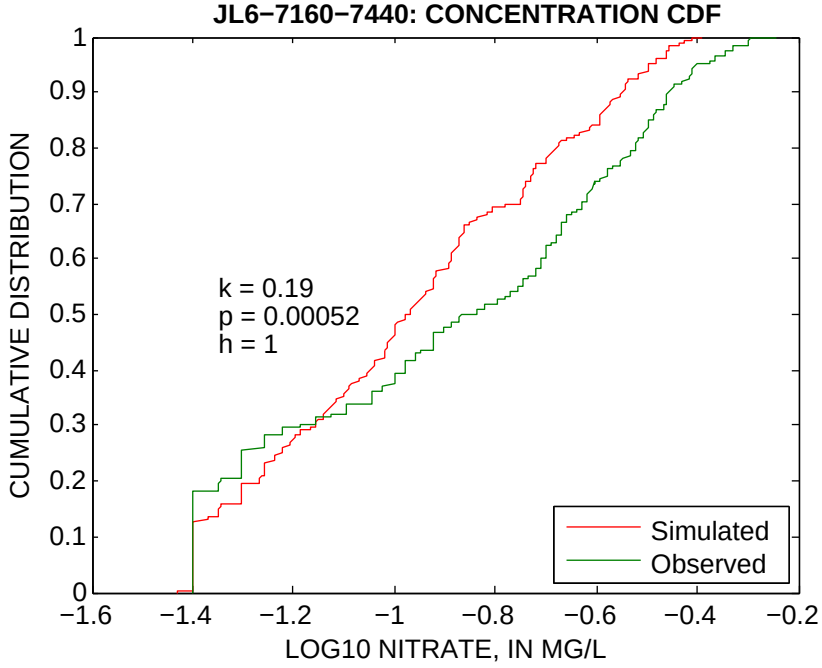
	n	219	219
		observe	simulate
min		0.04	0.012184
		-1.39794	-1.91421
mean		0.174459	0.121461
		-0.892156	-1.07376
media		0.14	0.07908
		-0.853872	-1.10193
max		0.57	0.45079
		-0.244125	-0.346026
varian		0.0162076	0.0106734
		0.129441	0.146458
JB		0.001899	0.001
		0.003266	0.023521
		ra	log
%		-30.3786	20.3559
err.va		0.0205815	0.212162
rel.std.err		1.26987	1.63907
mod.eff		-0.269865	-0.639067

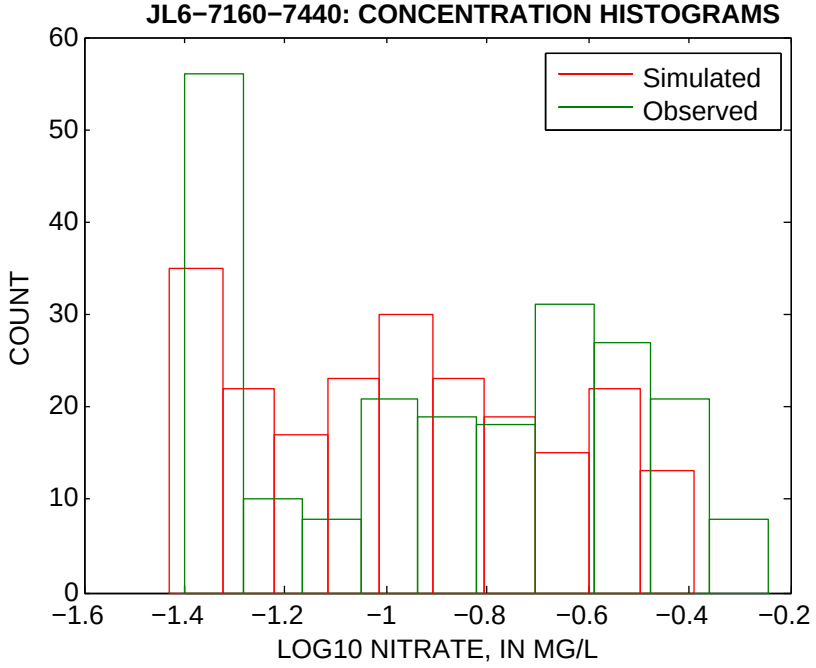
VERSION 2.1

ALL DATA
LOG10

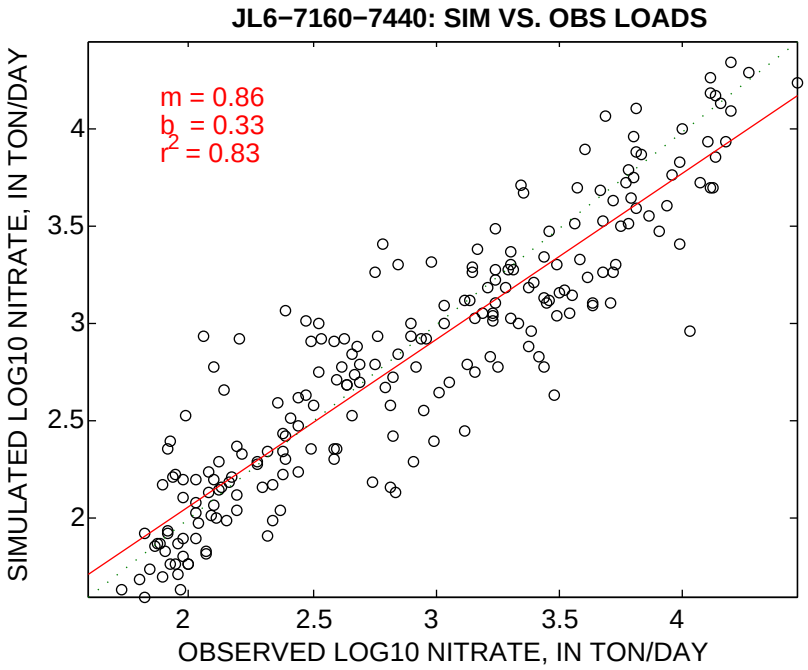




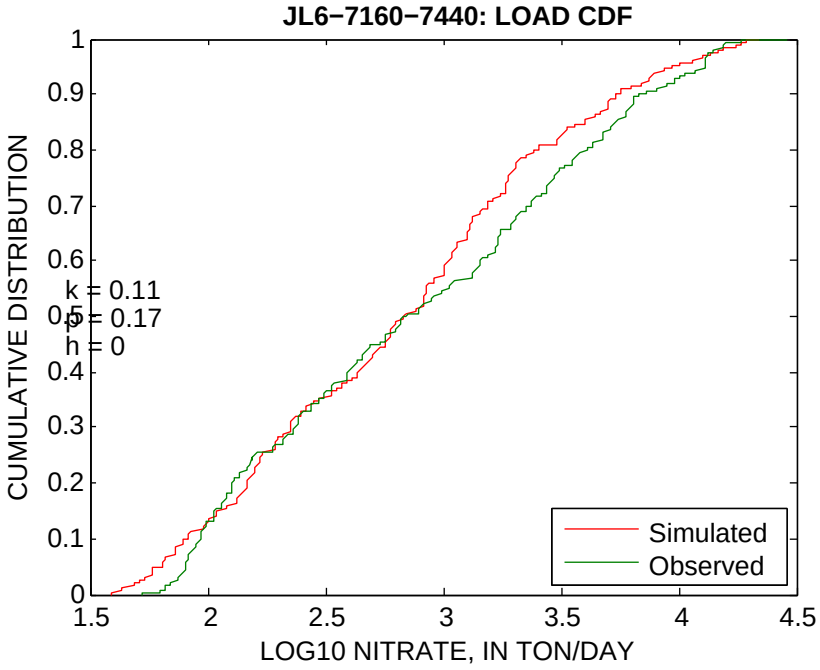


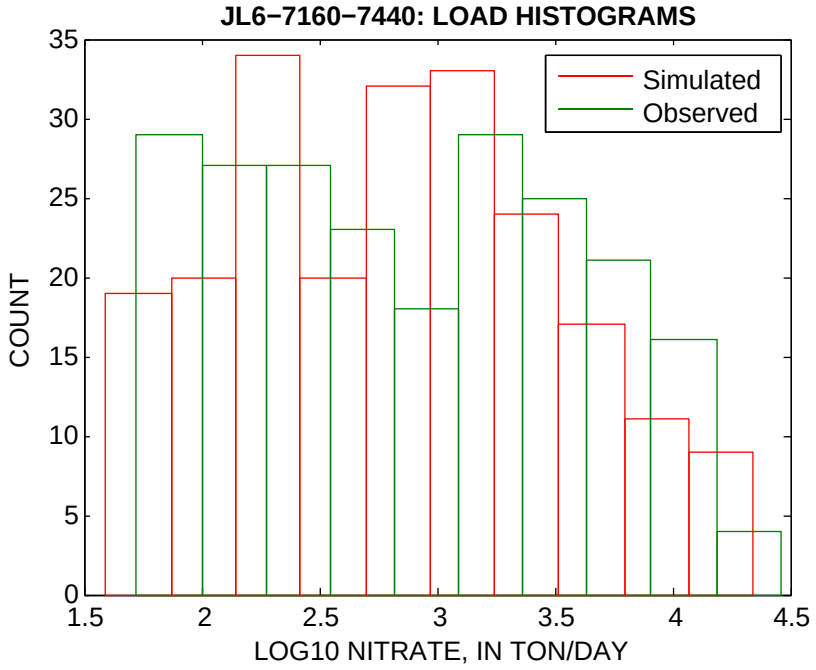


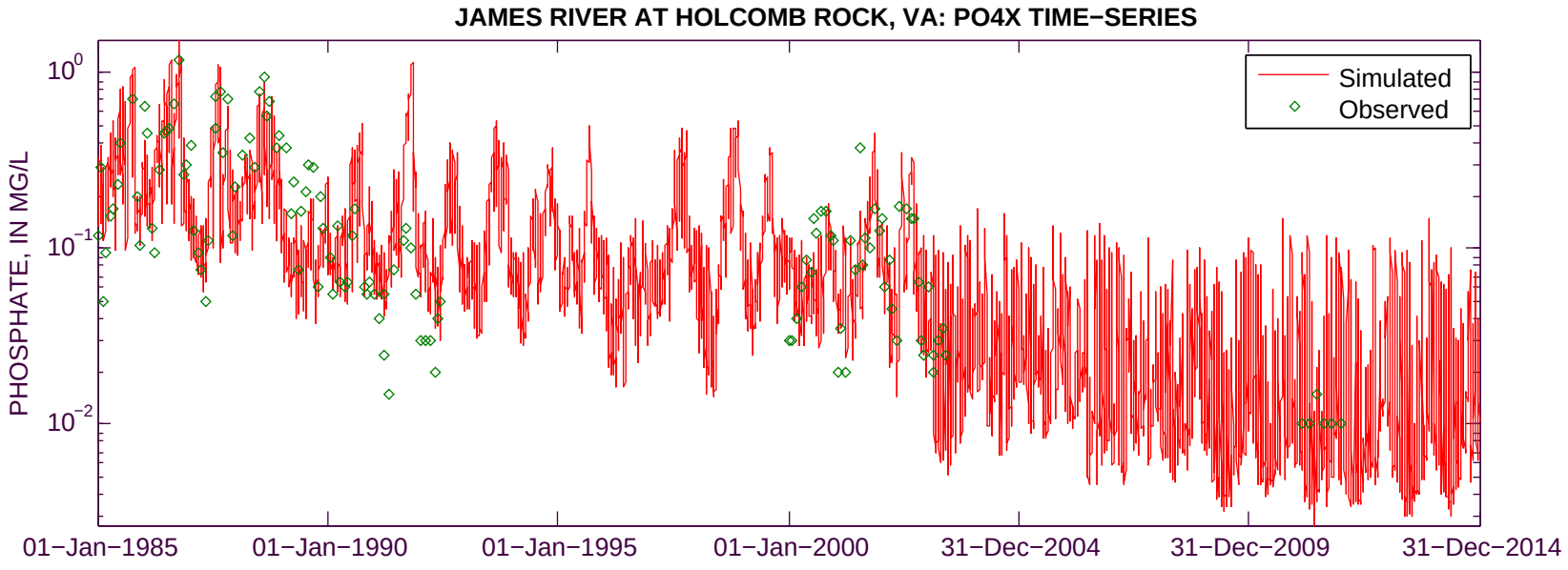
LOAD DATA
LOG10

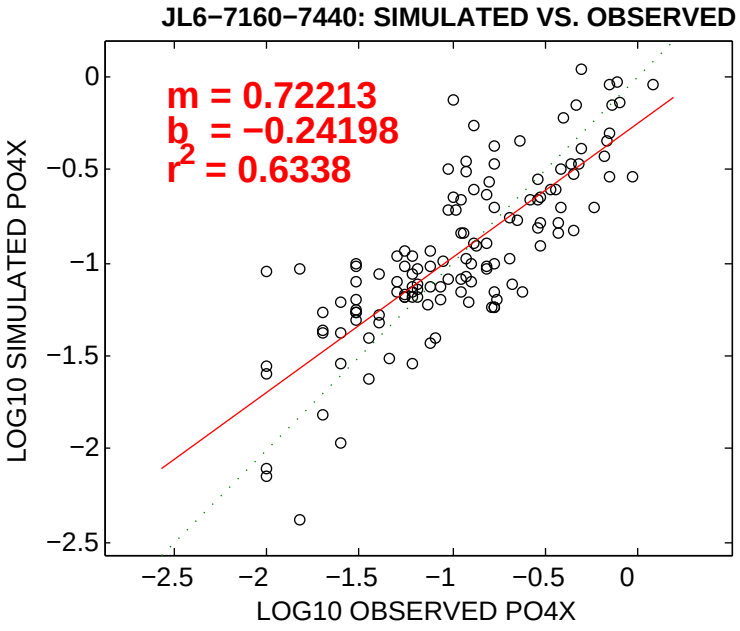


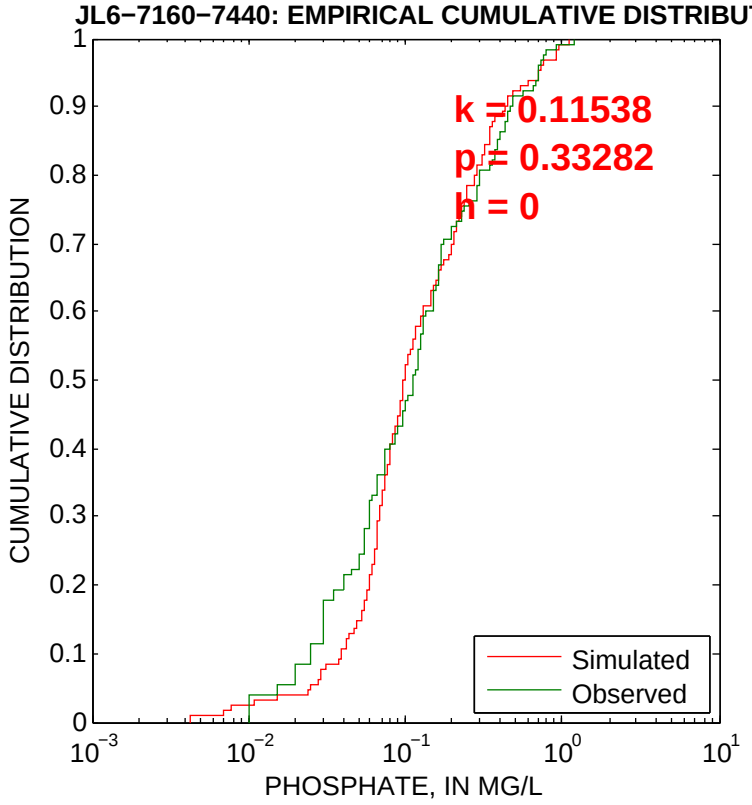












DATA SELECTION

scenario: P620171001WQ | file: PO4X.calib

plot: PO4X - phosphate

Dates: 1/1/1985 – 12/31/201

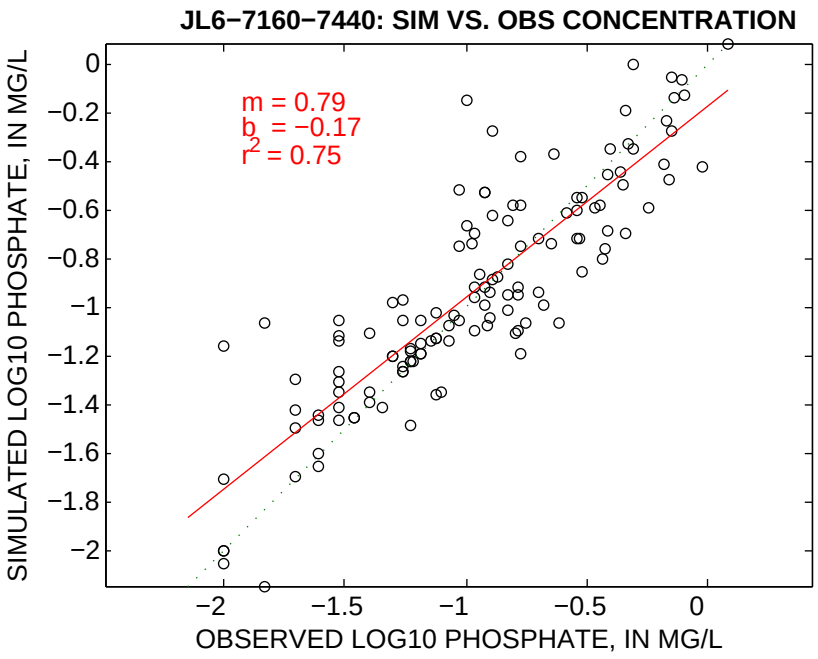
Drive: N/A | Directory: model | Observed: OBS20161101

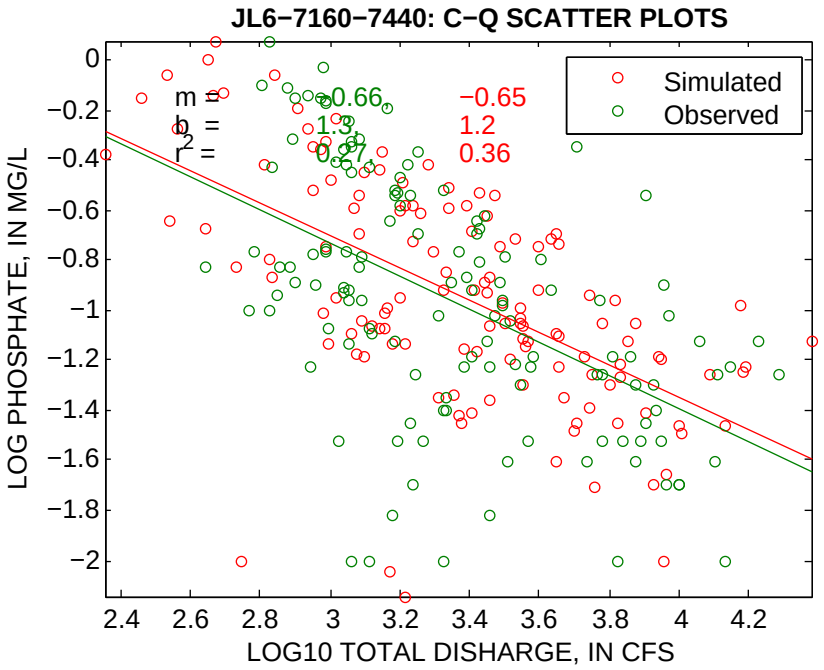
STATISTICS

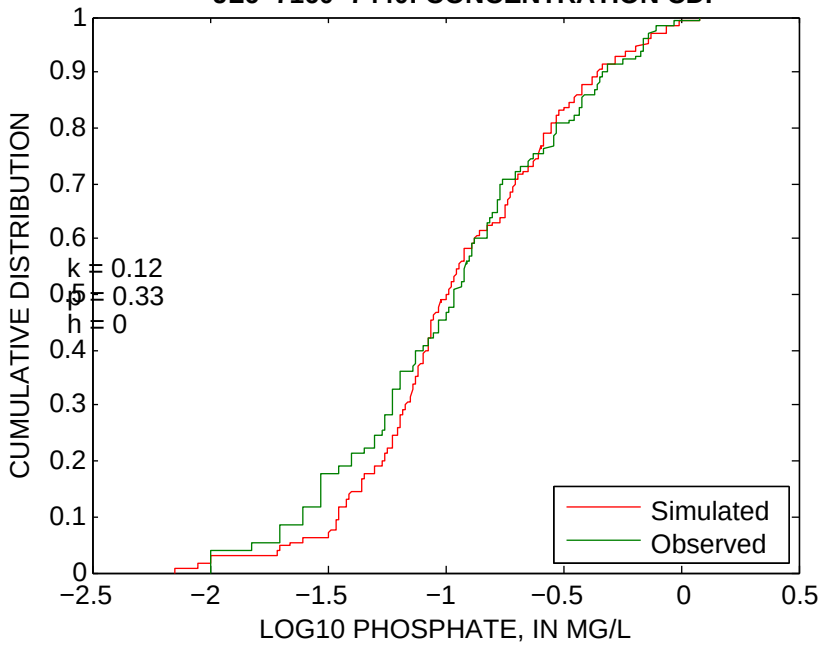
	n	130	130
		observe	simulate
min		0.01	0.0042371
		-2	-2.37293
mean		0.191058	0.186821
		-0.969463	-0.942066
media		0.110043	0.0979245
		-0.958438	-1.00912
max		1.2	1.1166
		0.0791812	0.0478976
varian		0.0472996	0.0443732
		0.238204	0.195989
JB		0.001	0.001
		0.302478	0.198713
		ra	log
%		-2.2178	-2.82598
err.va		0.0239614	0.0909195
rel.std.err		0.506589	0.381688
mod.eff		0.493411	0.618312

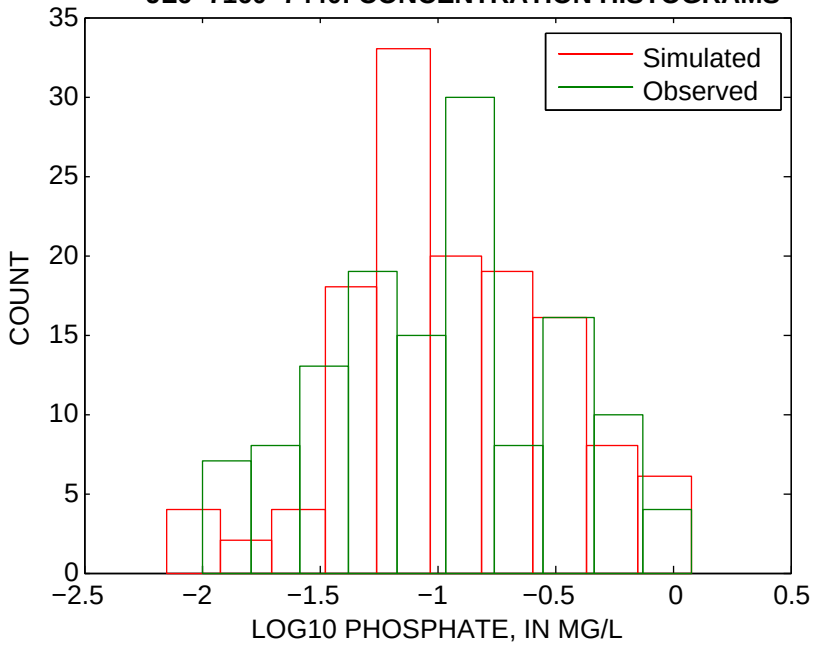
VERSION 2.1

ALL DATA
LOG10

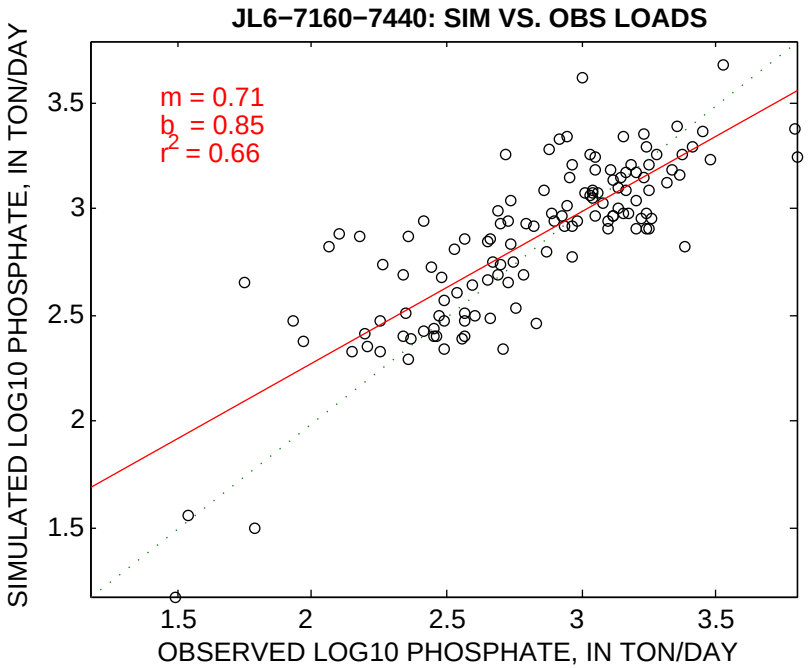


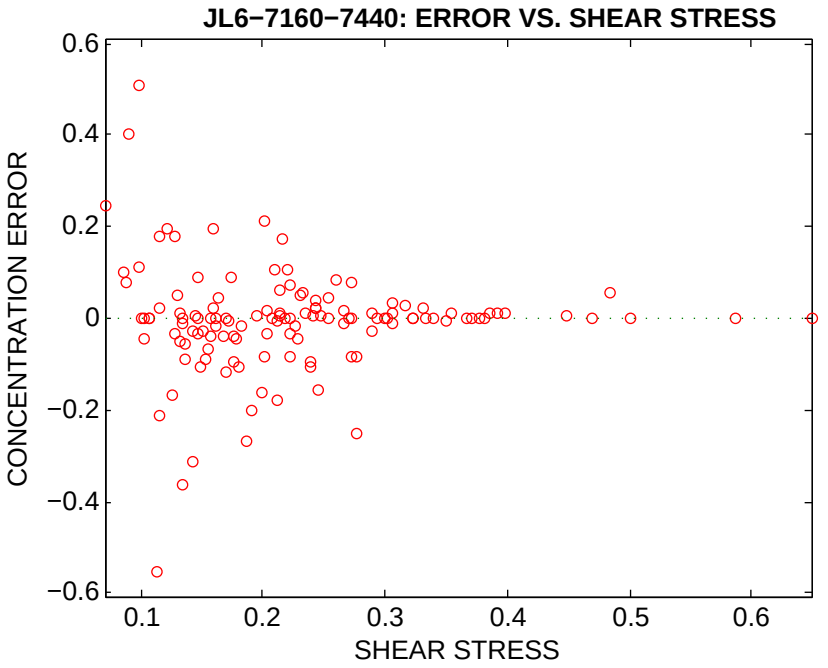


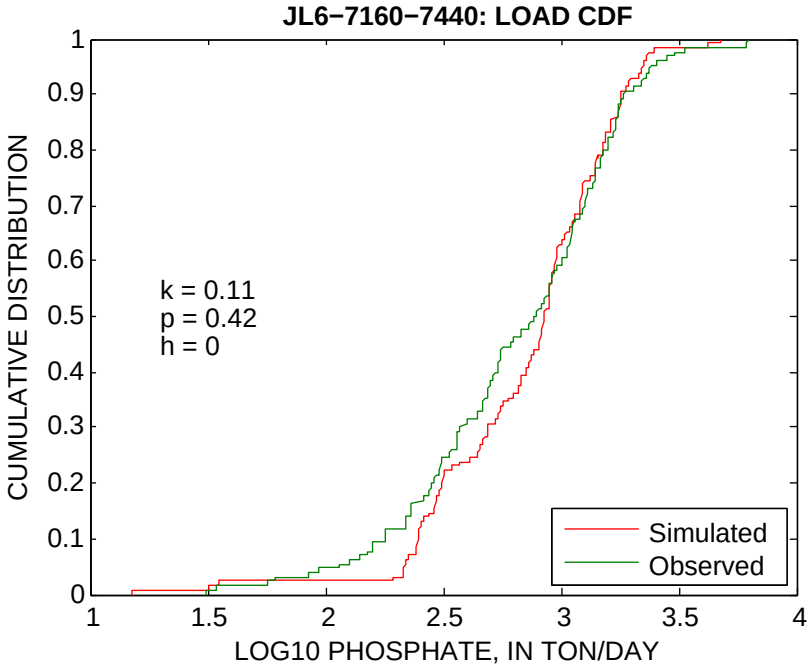


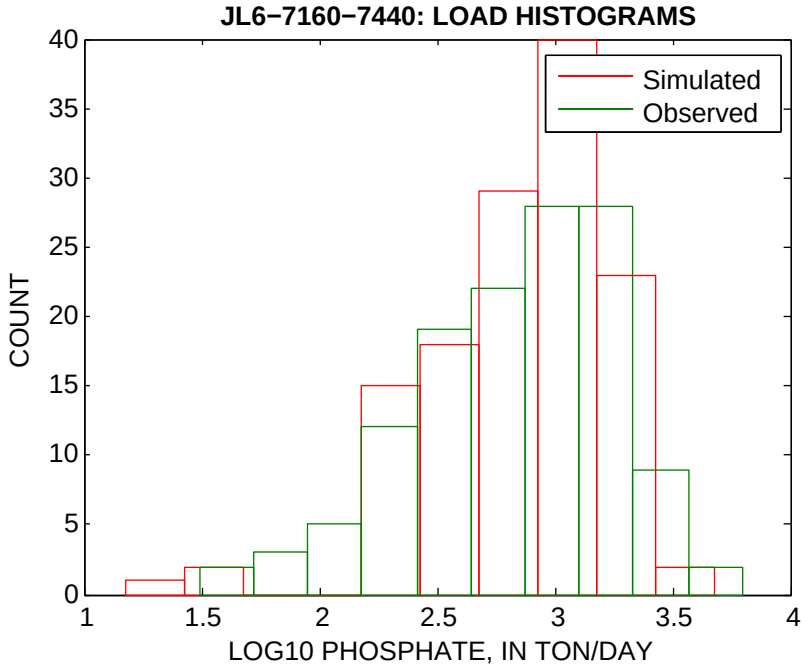


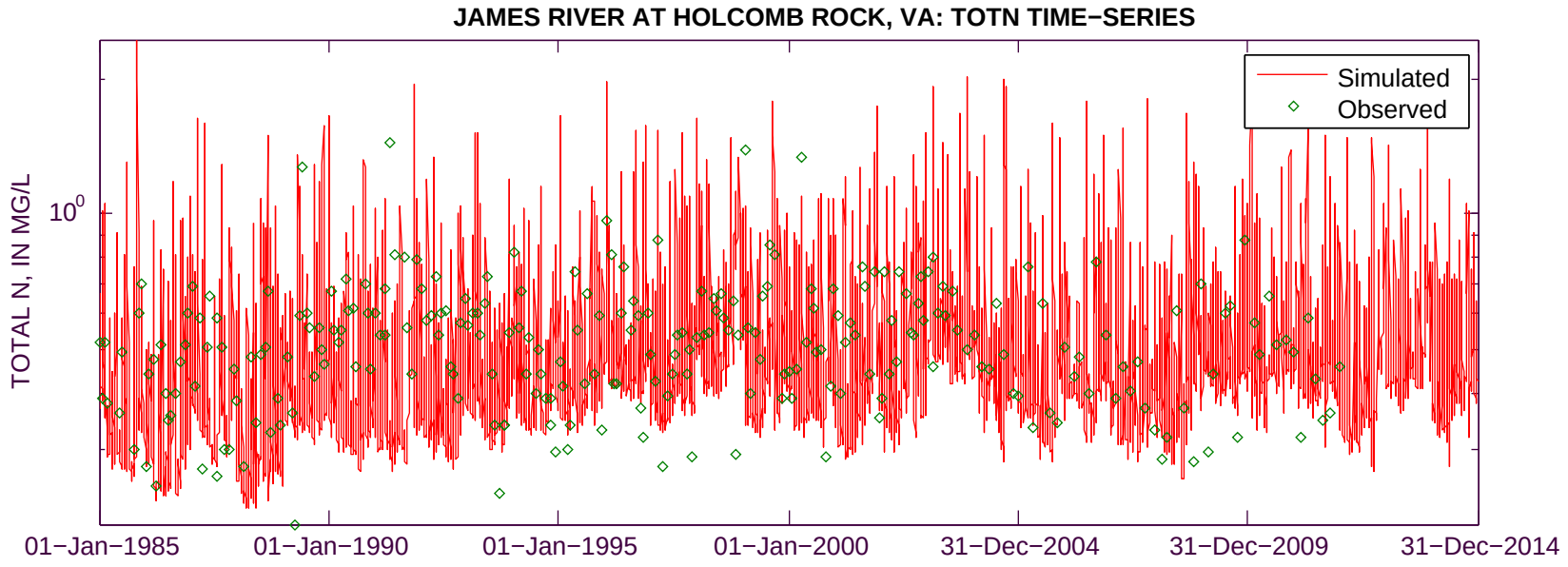
LOAD DATA
LOG10

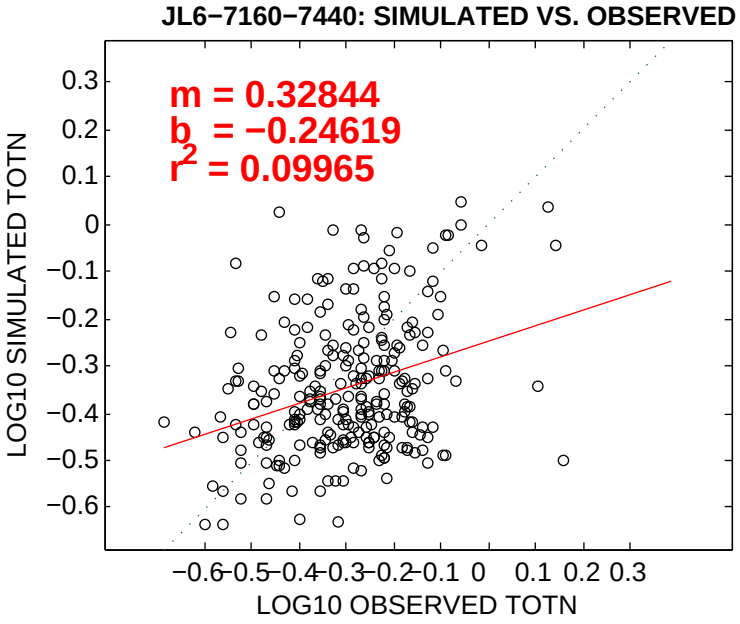


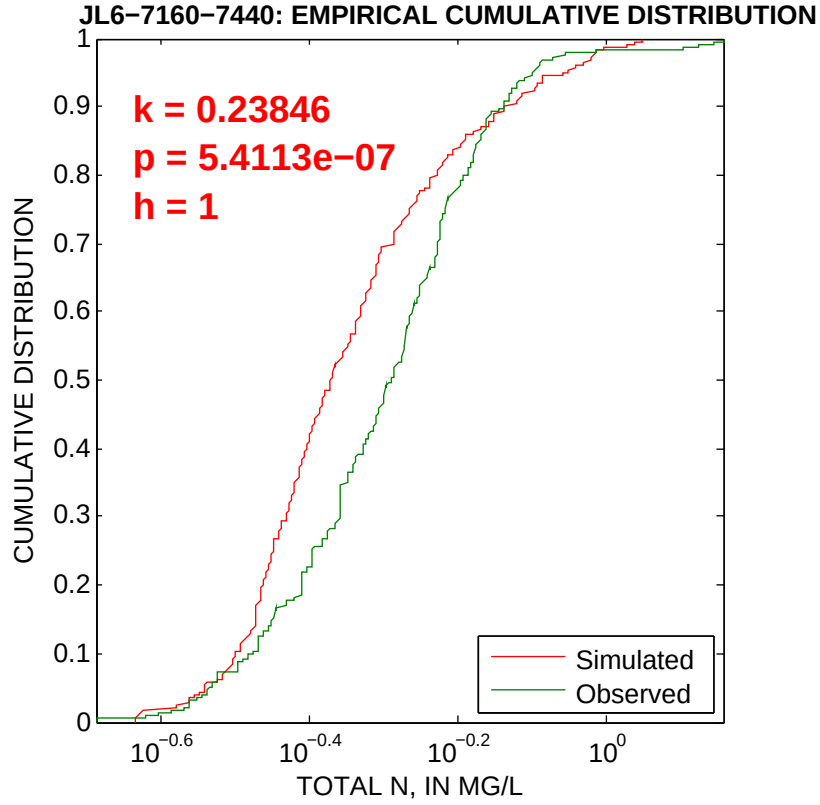












DATA SELECTION

scenario	file
P620171001WQ	TOTN.calib

plot: TOTN - total nitrogen

Dates: 1/1/1985 – 12/31/201

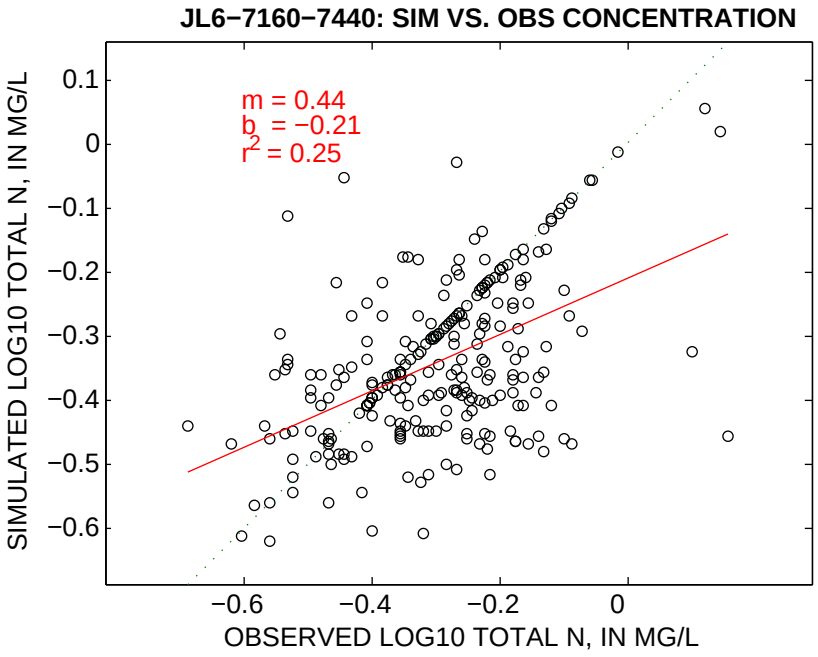
Drive	Directory	Observed
N/A	model	OBS20161101

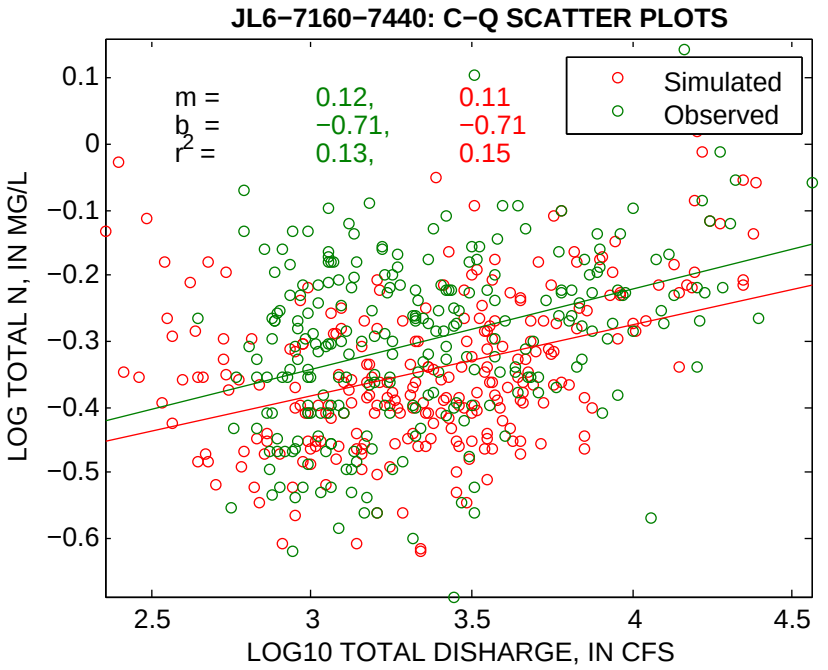
STATISTICS

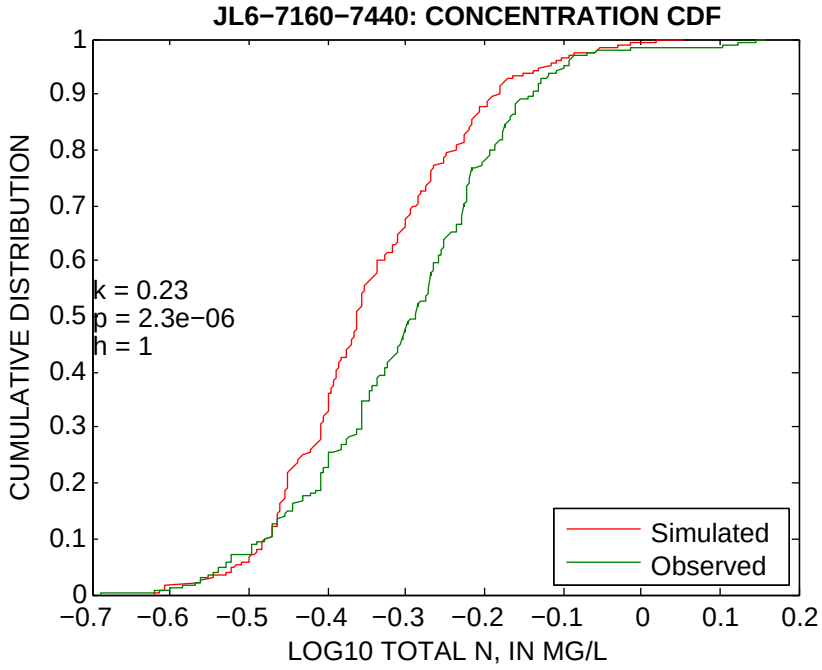
	n	260	260
		observe	simulate
min		0.205	0.23137
		-0.688246	-0.635693
mean		0.527949	0.478801
		-0.299012	-0.344399
media		0.515	0.426435
		-0.288193	-0.370148
max		1.44	1.1186
		0.158362	0.0486748
varian		0.0312038	0.0307325
		0.0185181	0.0200467
JB		0.001	0.001
		0.106261	0.003060
		ra	log
%		-9.30914	15.1792
err.va		0.0439998	0.0284685
rel.std.err		1.41008	1.53733
mod.eff		-0.41008	-0.537332

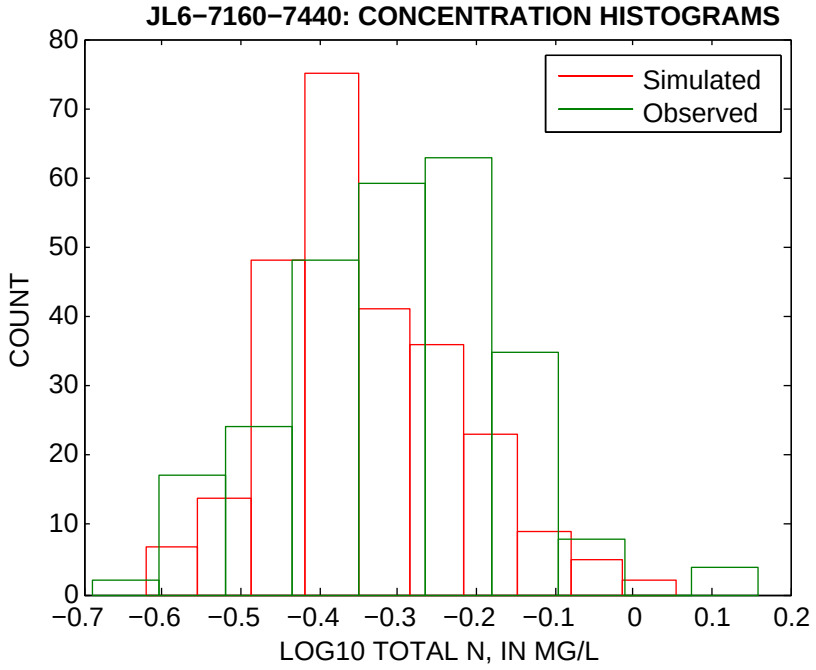
VERSION 2.1

ALL DATA
LOG10

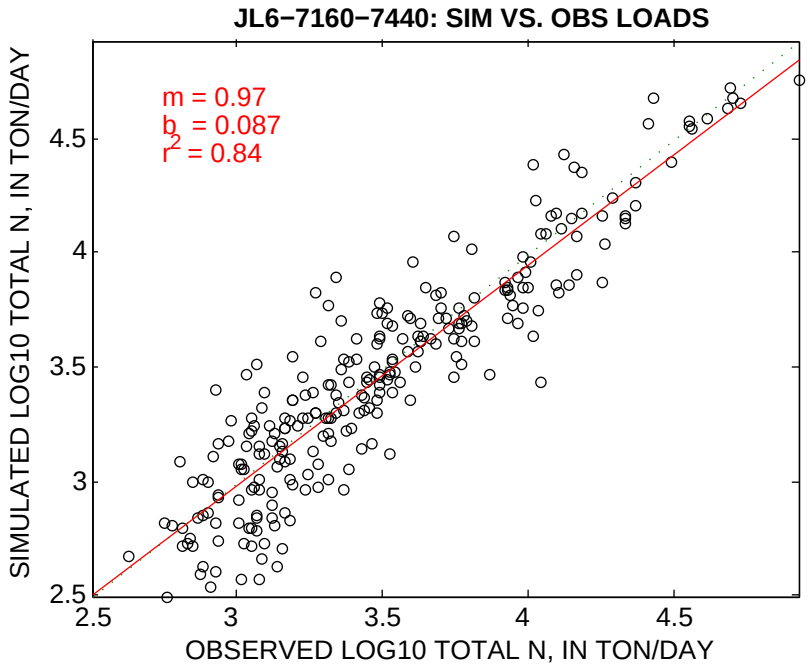




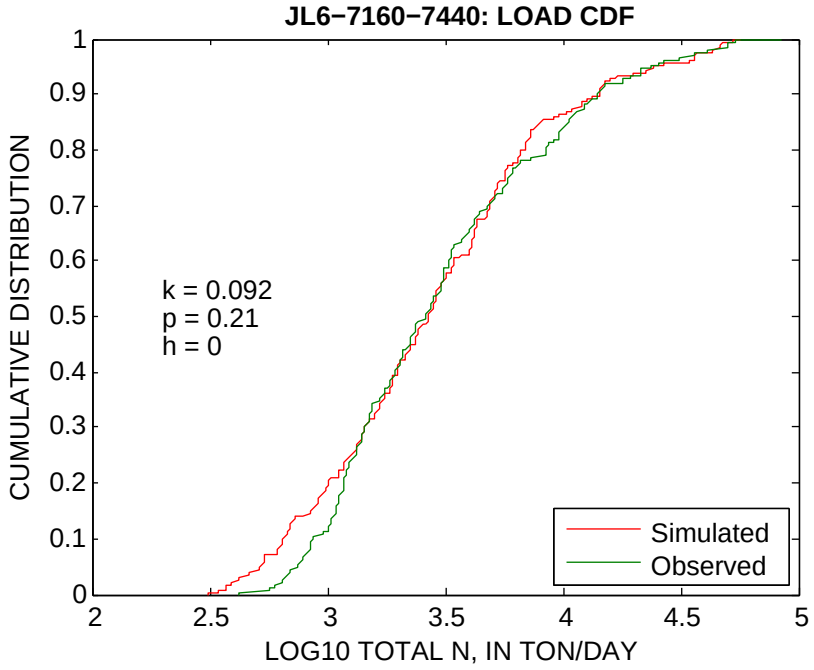


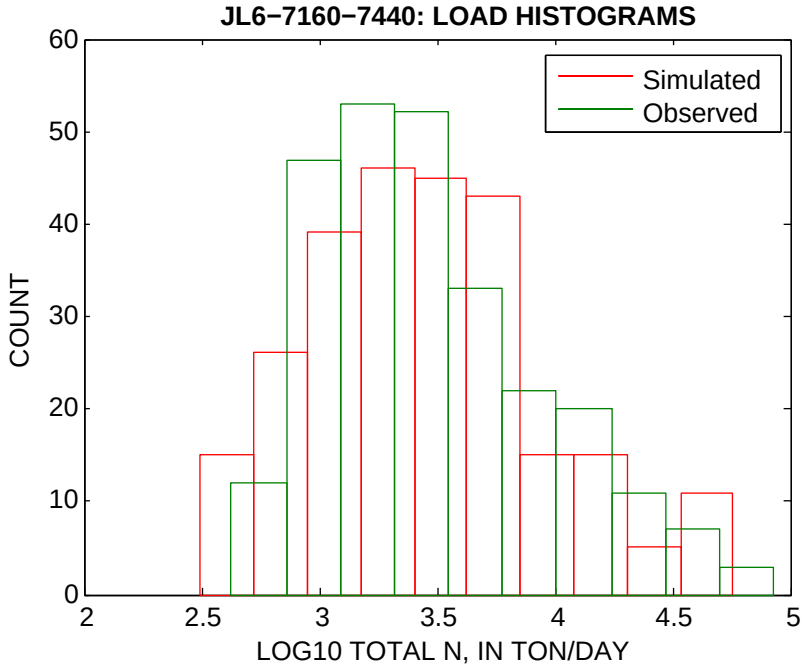


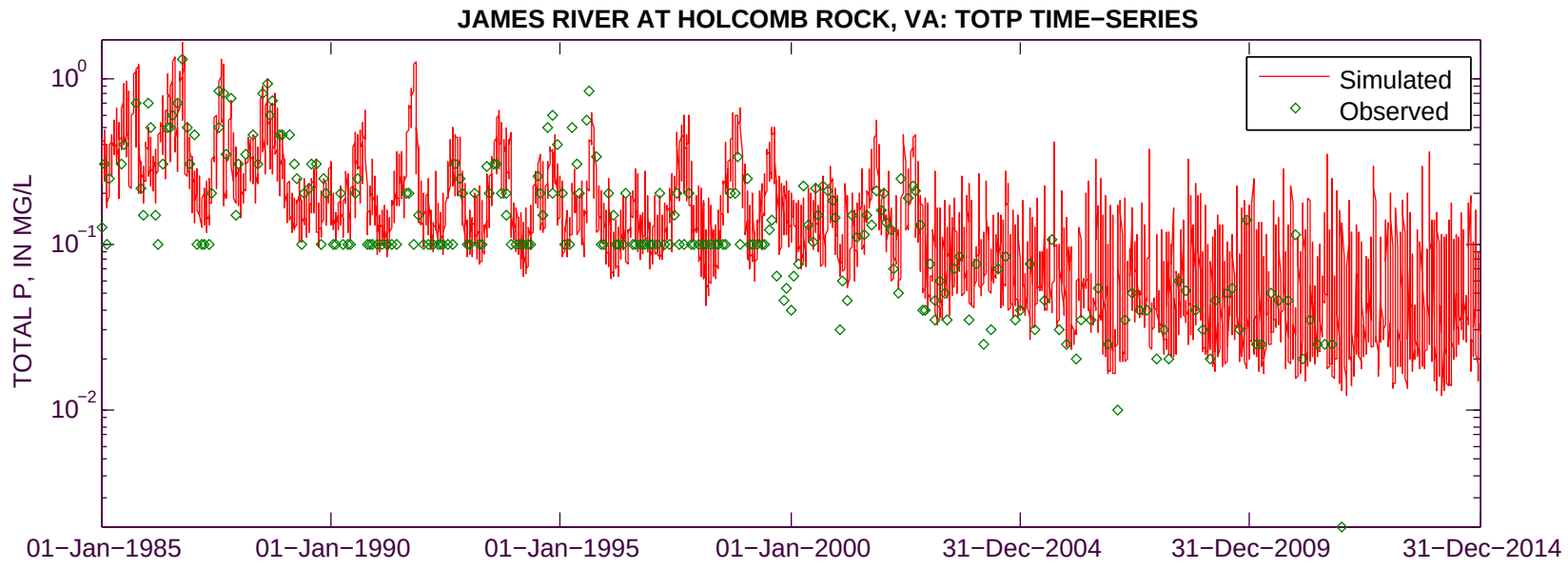
LOAD DATA
LOG10

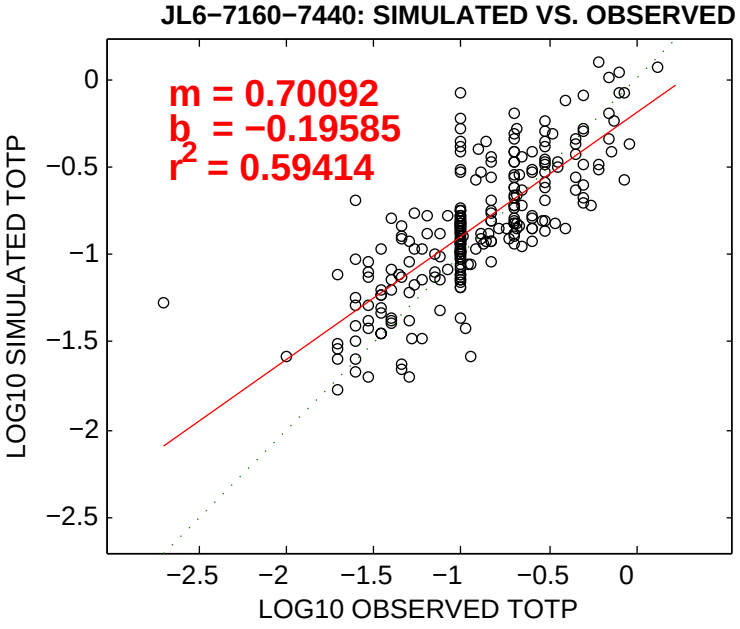


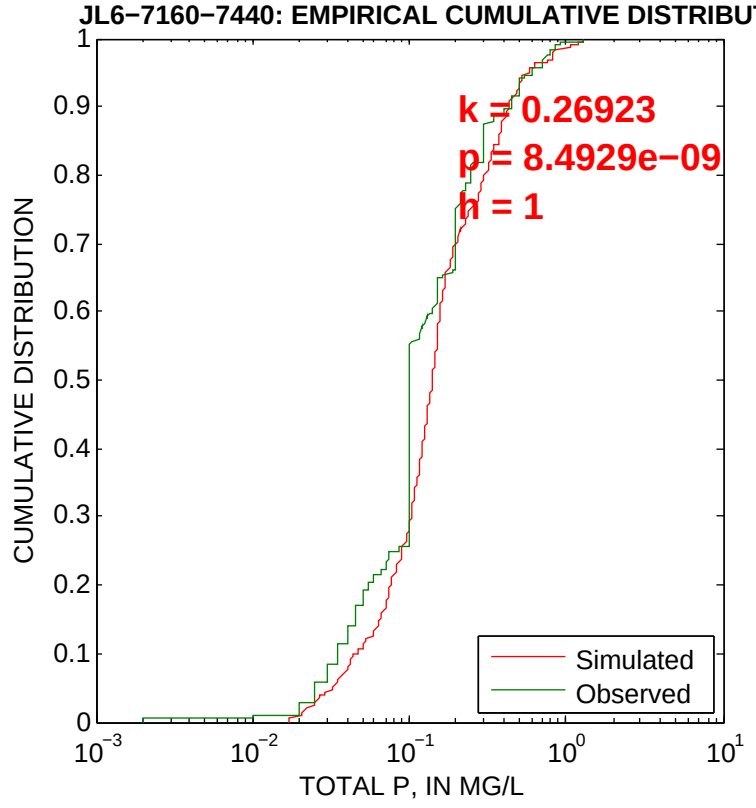












DATA SELECTION

scenario	file
P620171001WQ	TOTP.calib

plot: TOTP - total phosphorus

Dates: 1/1/1985 – 12/31/201

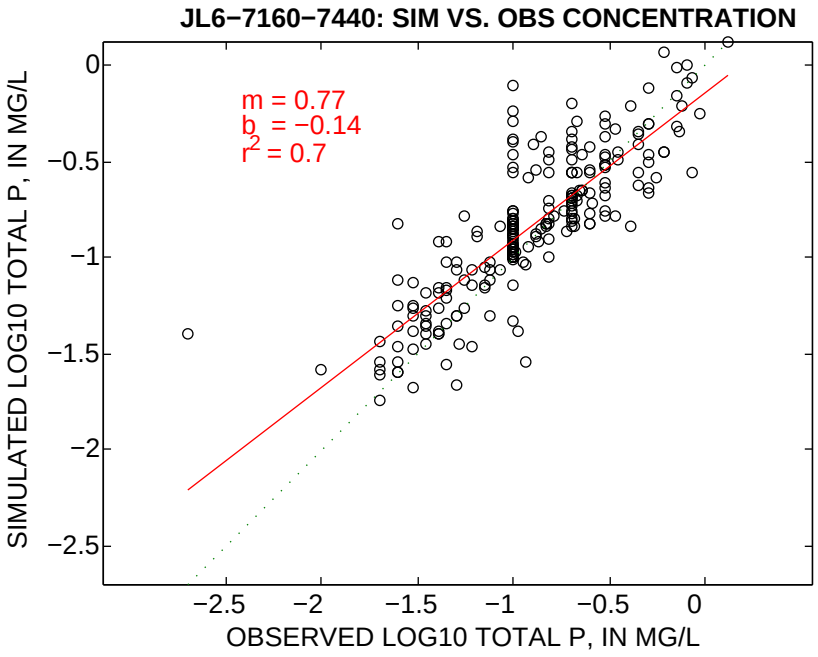
Drive	Directory	Observed
N/A	model	OBS20161101

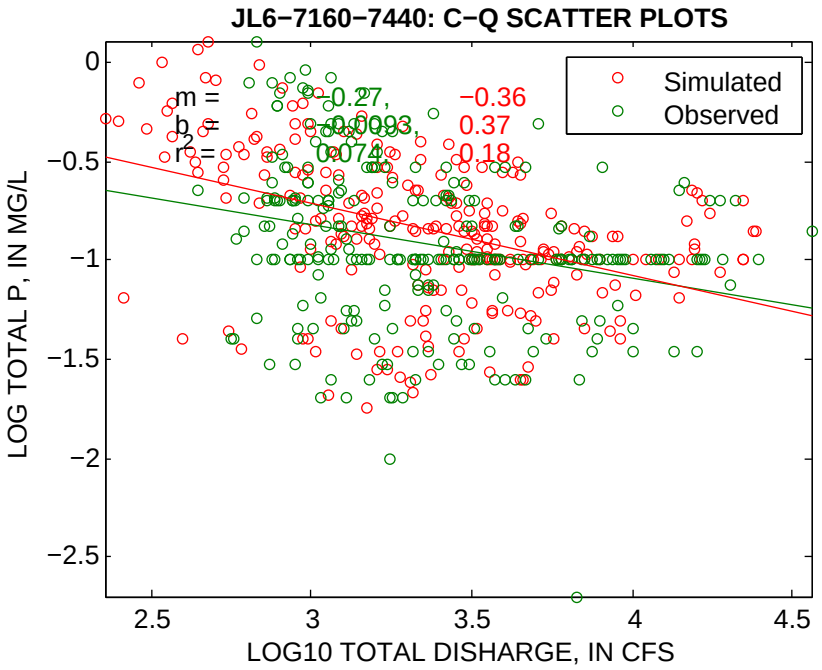
STATISTICS

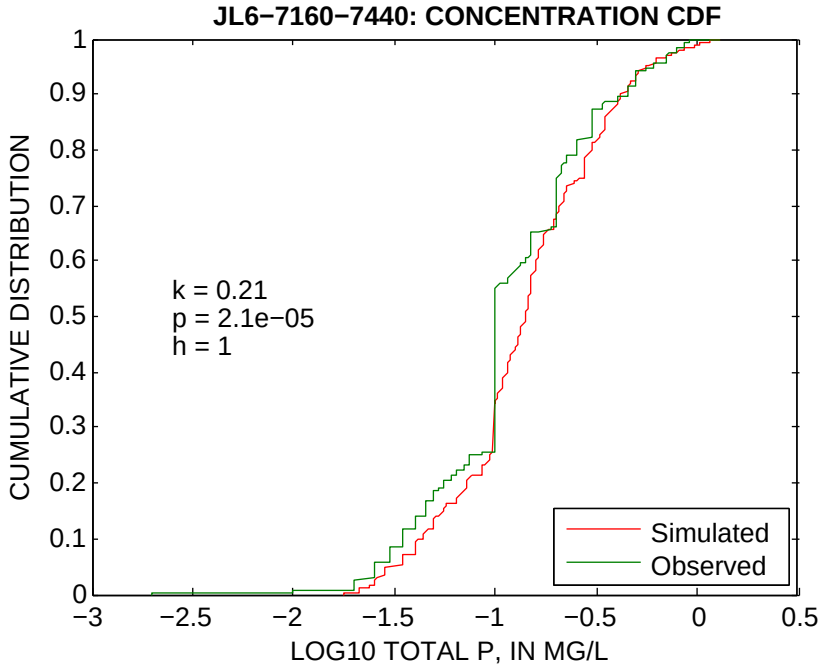
	n	observe	simulate
		260	260
min		0.002	0.017129
		-2.69897	-1.76627
mean		0.180096	0.204282
		-0.921075	-0.84145
media		0.1	0.14094
		-1	-0.850966
max		1.3	1.2727
		0.113943	0.104726
varian		0.0345639	0.0389014
		0.160422	0.132651
JB		0.001	0.001
		0.009275	0.5
		ra	log
%		13.4292	-8.64479
err.va		0.0206331	0.0745513
rel.std.err		0.596956	0.464719
mod.eff		0.403044	0.535281

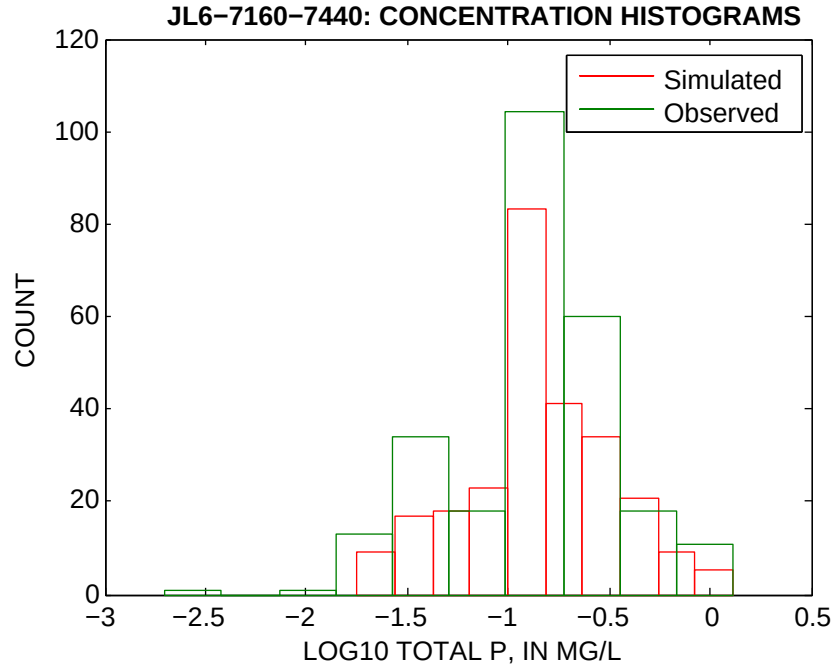
VERSION 2.1

ALL DATA
LOG10

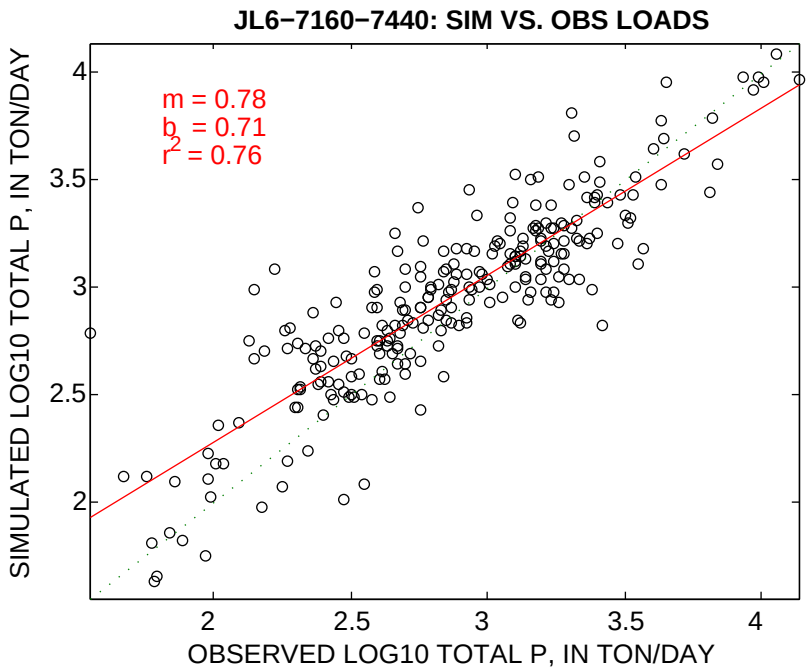




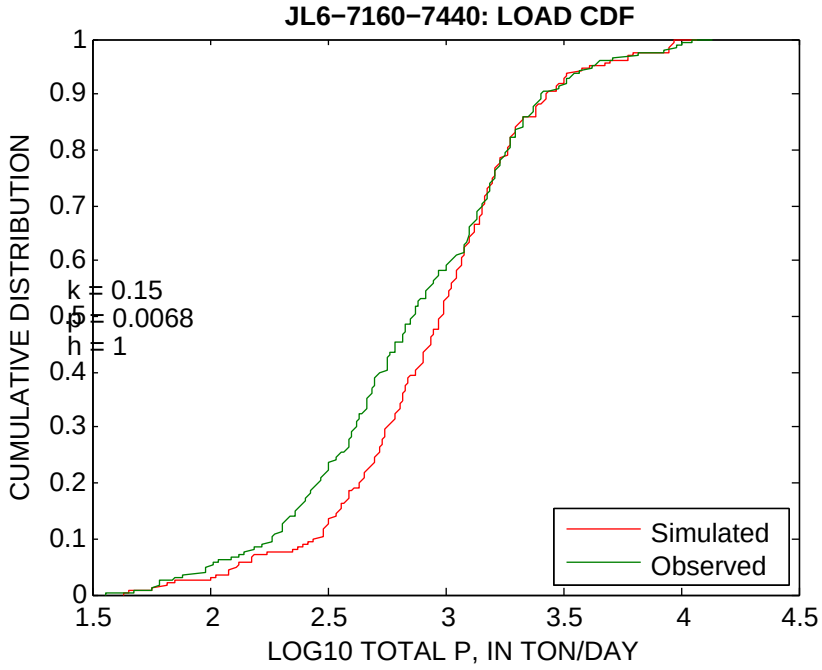


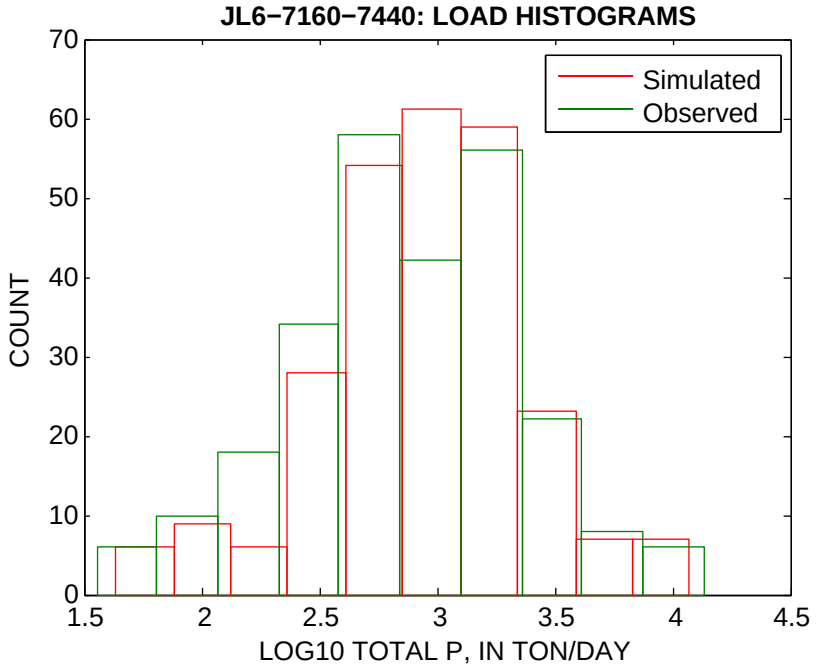


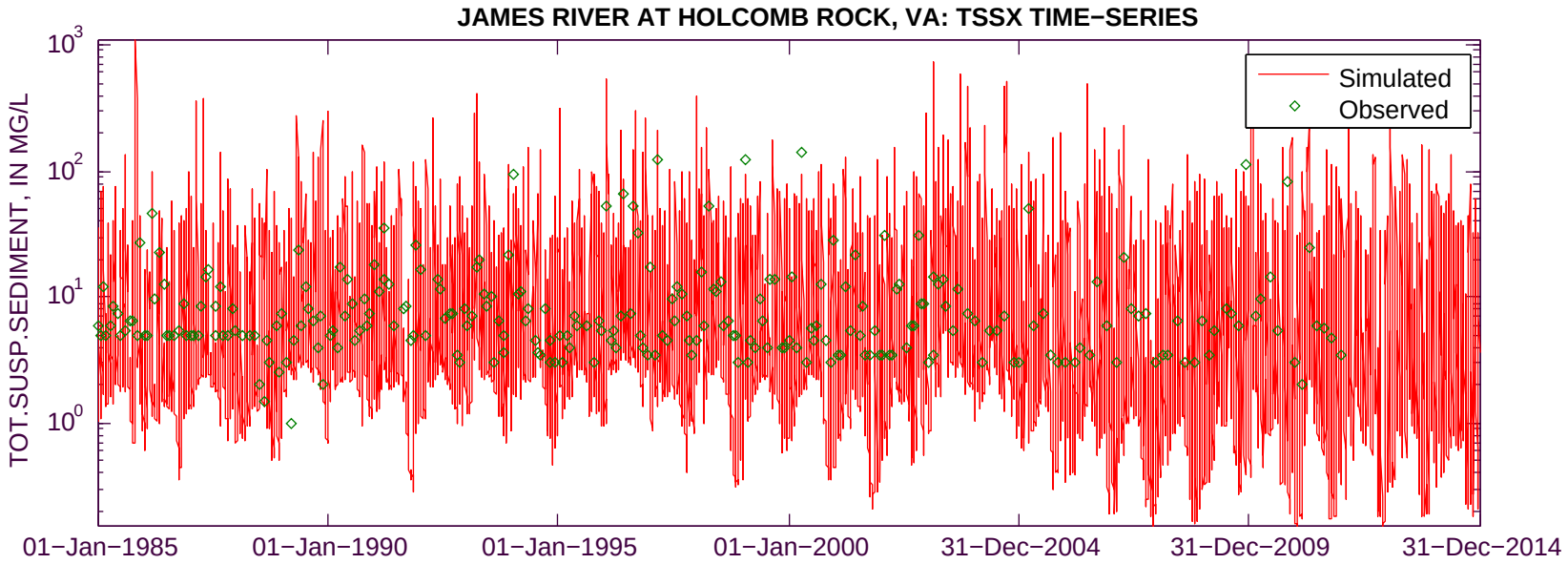
LOAD DATA
LOG10

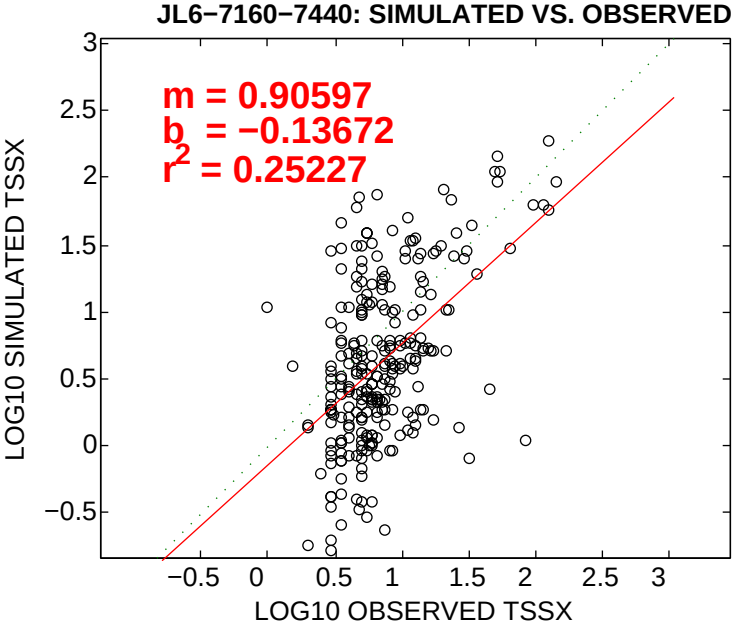


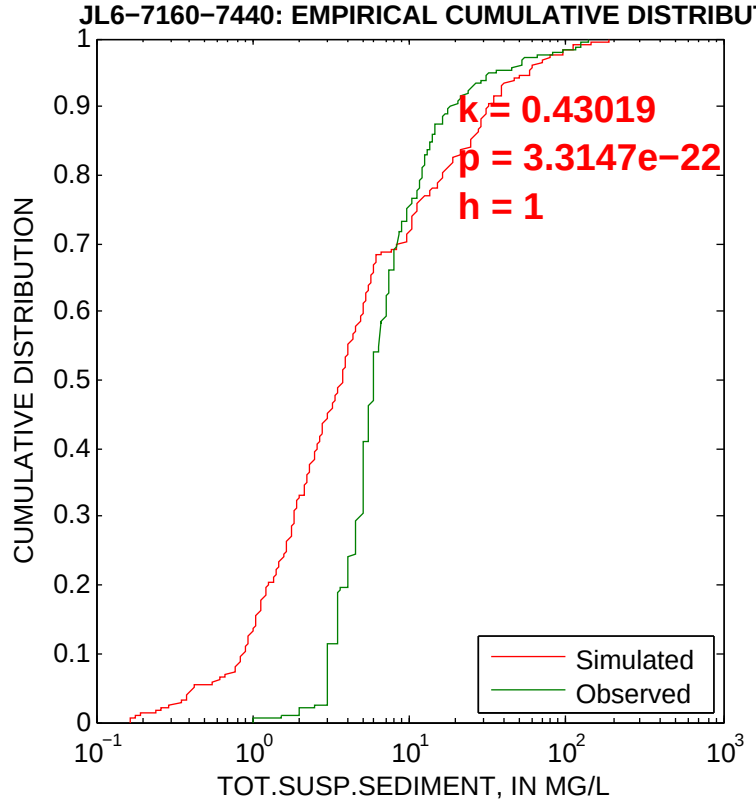












DATA SELECTION

scenario	file
P620171001WQ	TSSX.calib

plot: TSSX - total suspended ...

Dates 1/1/1985 12/31/201

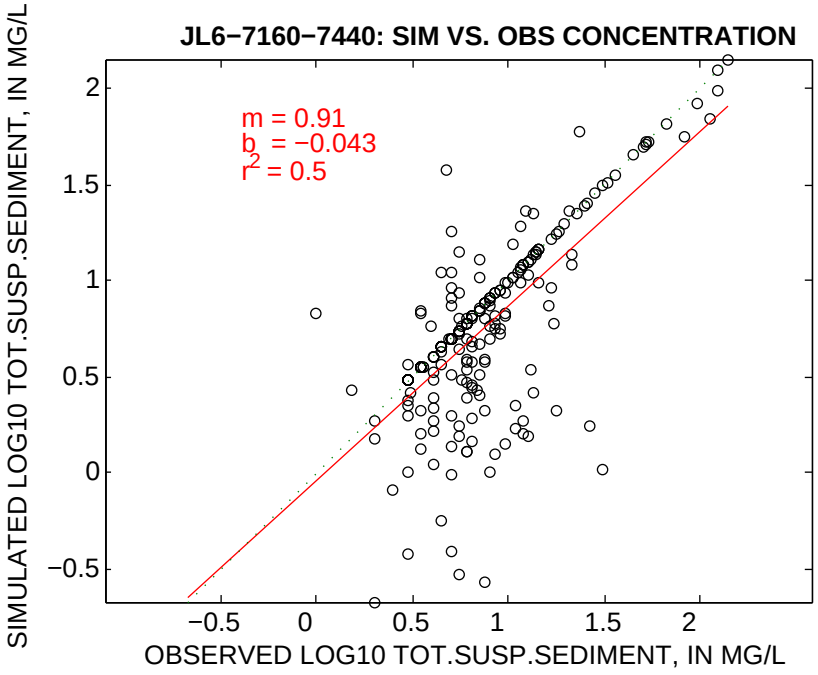
Drive	Directory	Observed
N/A	model	OBS20161101

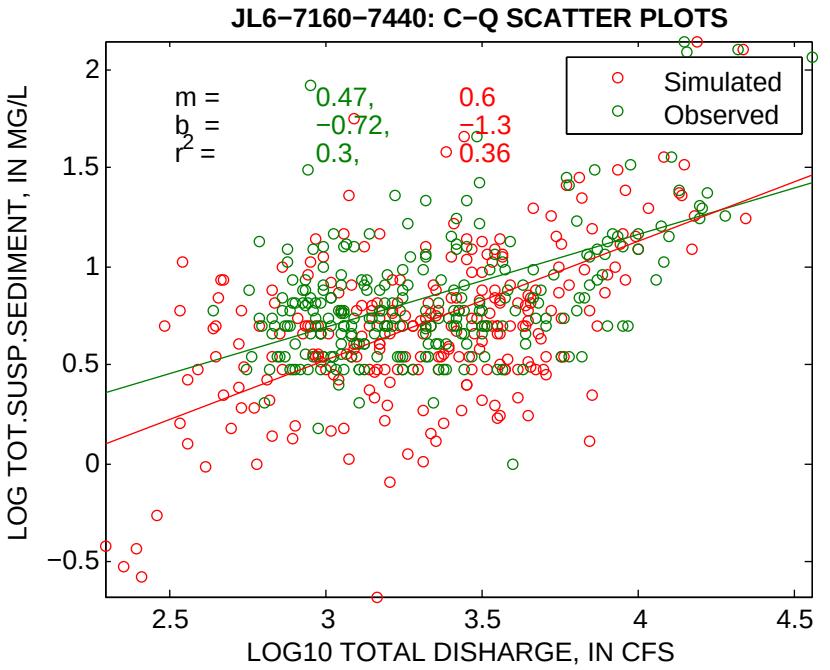
STATISTICS

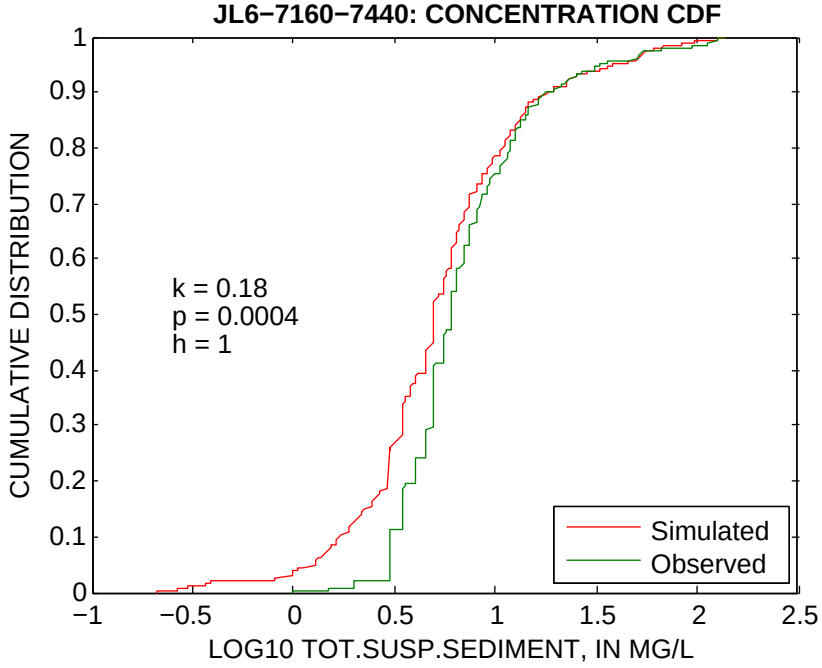
n	265	265
	observe	**simulate**
min	1	0.16855
	0	-0.773271
mean	11.0947	12.1648
	0.849494	0.632896
media	6	3.7114
	0.778151	0.569538
max	139	190.09
	2.14301	2.27896
varian	326.951	520.704
	0.116702	0.379695
JB	0.001	0.001
	0.001	0.046301
	ra	log
%	9.6449	-25.4972
err.va	311.762	0.332034
rel.std.err	0.953544	2.84514
mod.eff	0.0464562	-1.84514

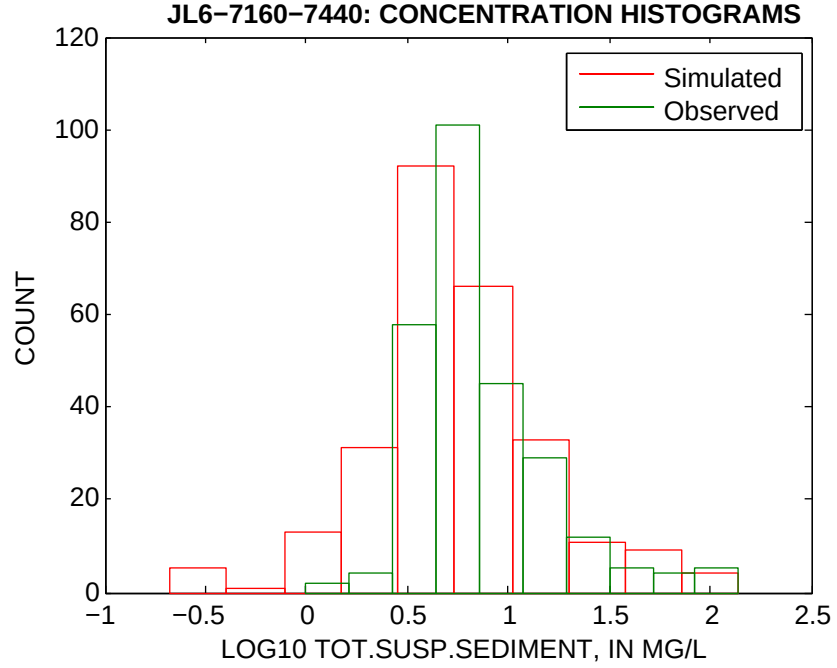
VERSION 2.1

ALL DATA
LOG10

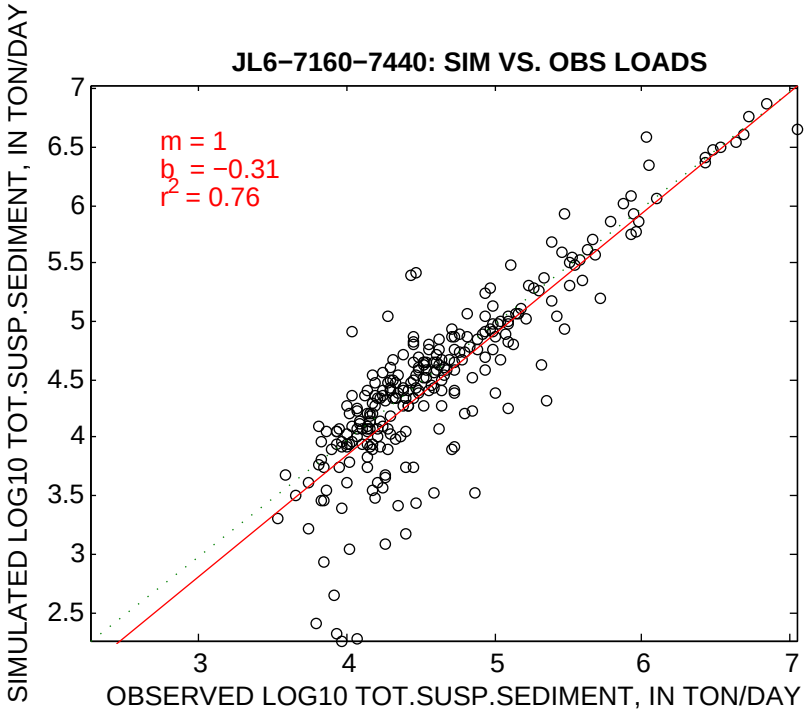




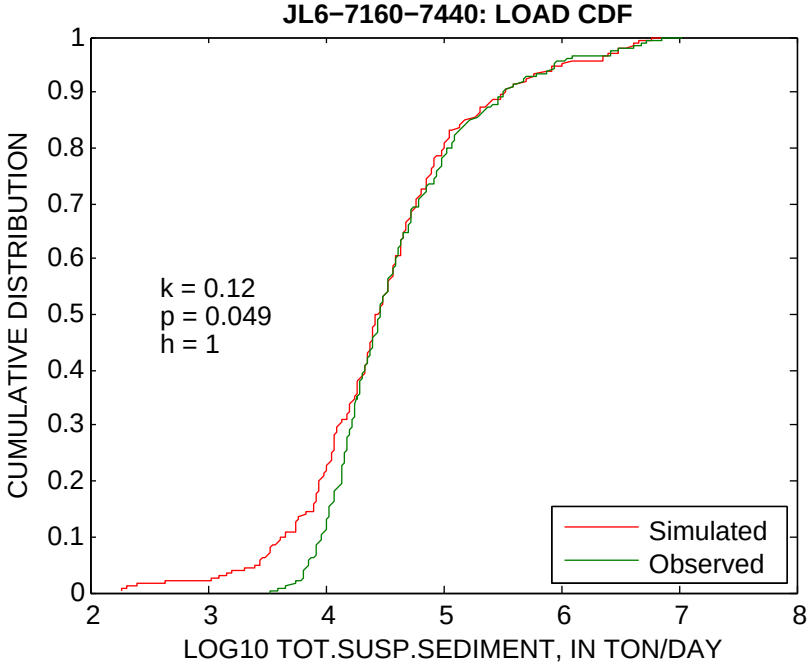


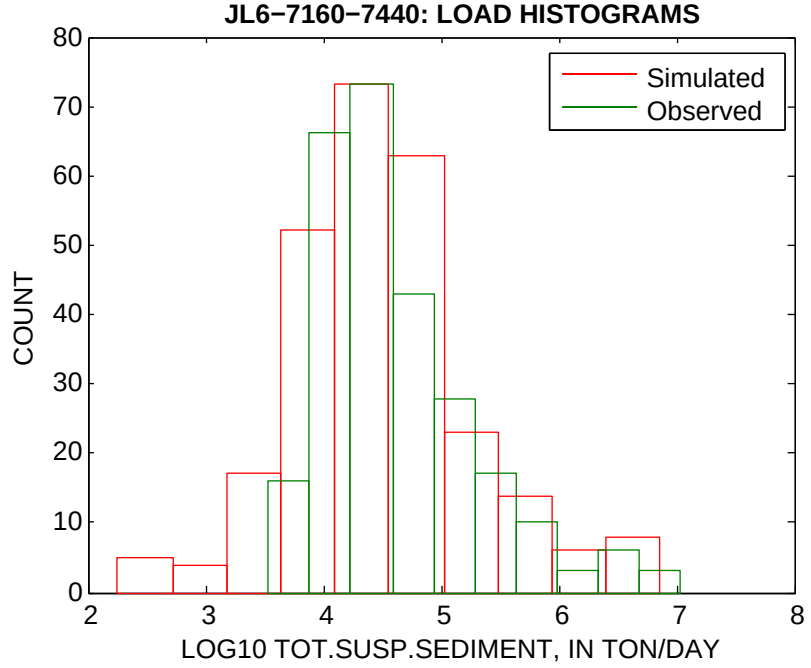


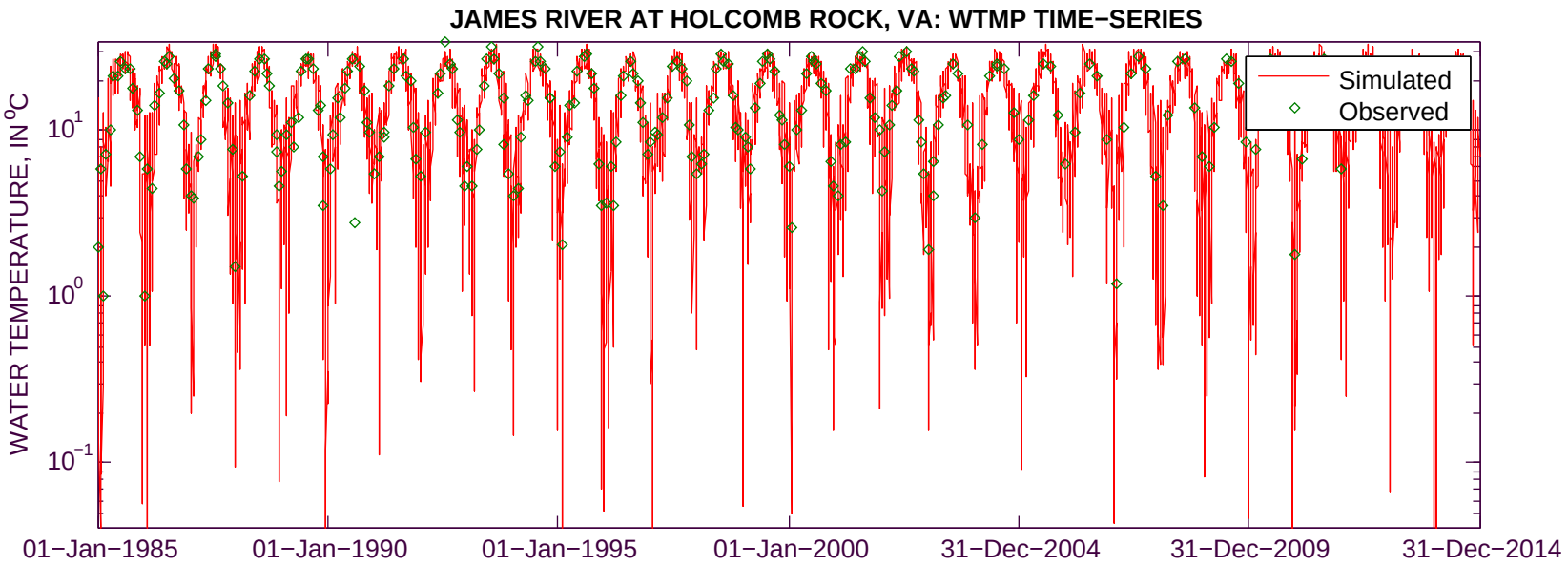
LOAD DATA
LOG10

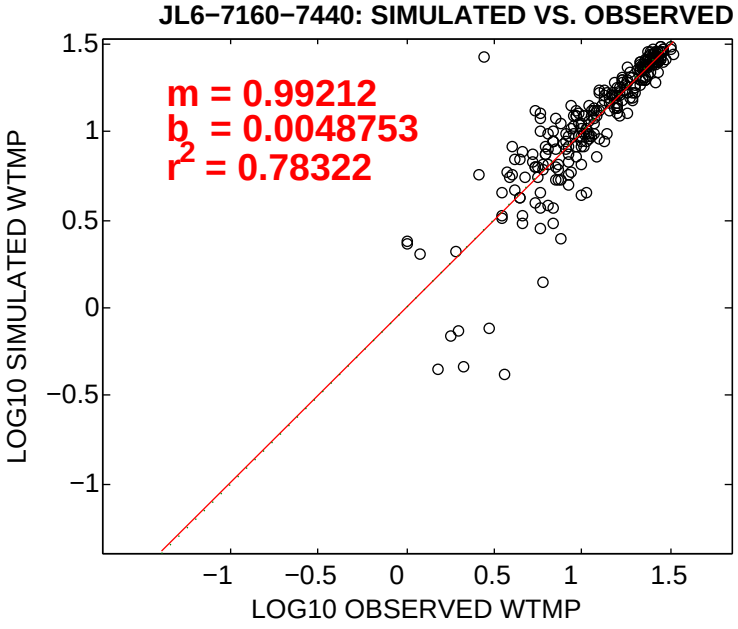


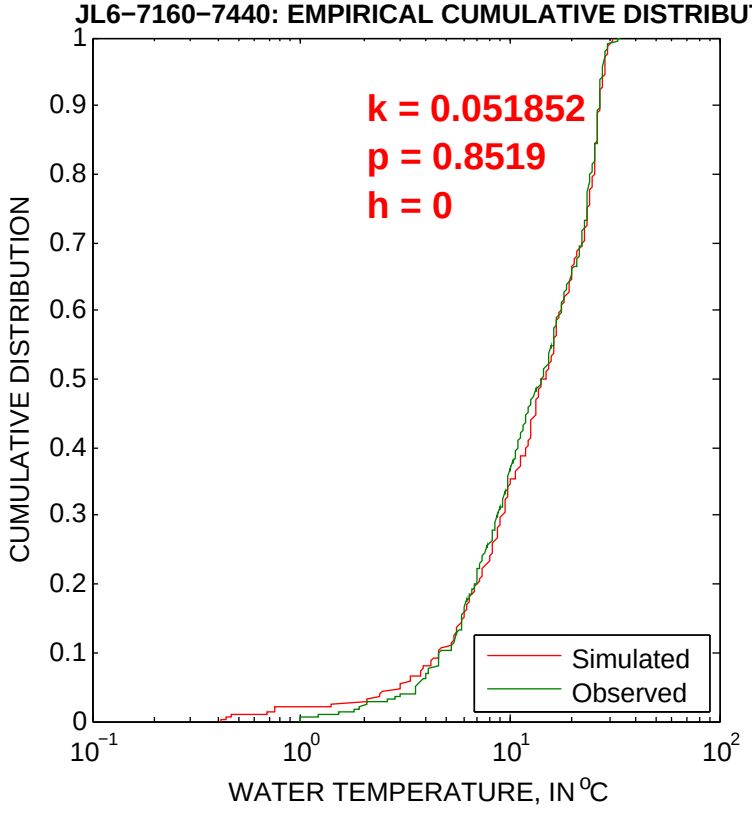












DATA SELECTION

scenario	file
P620171001WQ	WTMP.calib

plot: WTMP - water tempera...

Dates 1/1/1985 12/31/201

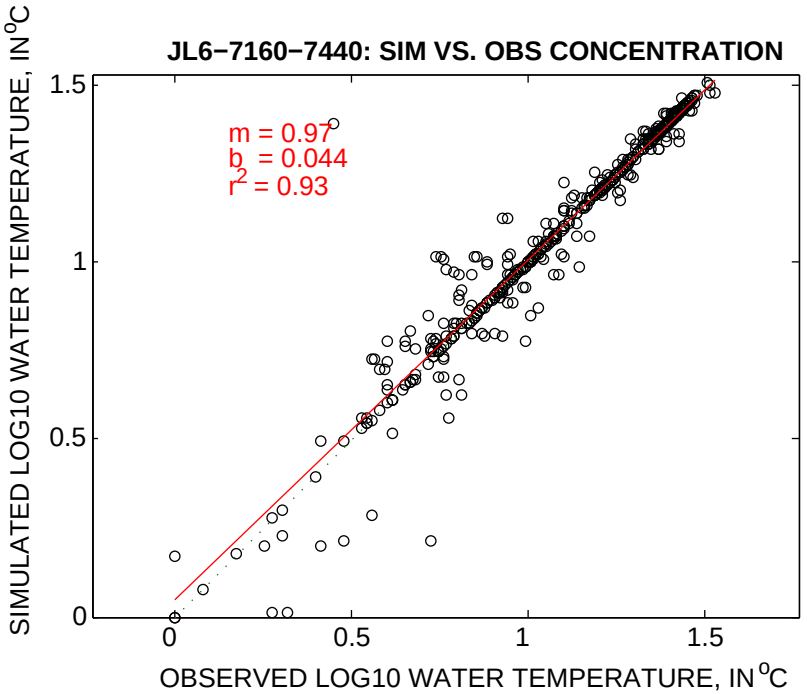
Drive	Directory	Observed
N/A	model	OBS20161101

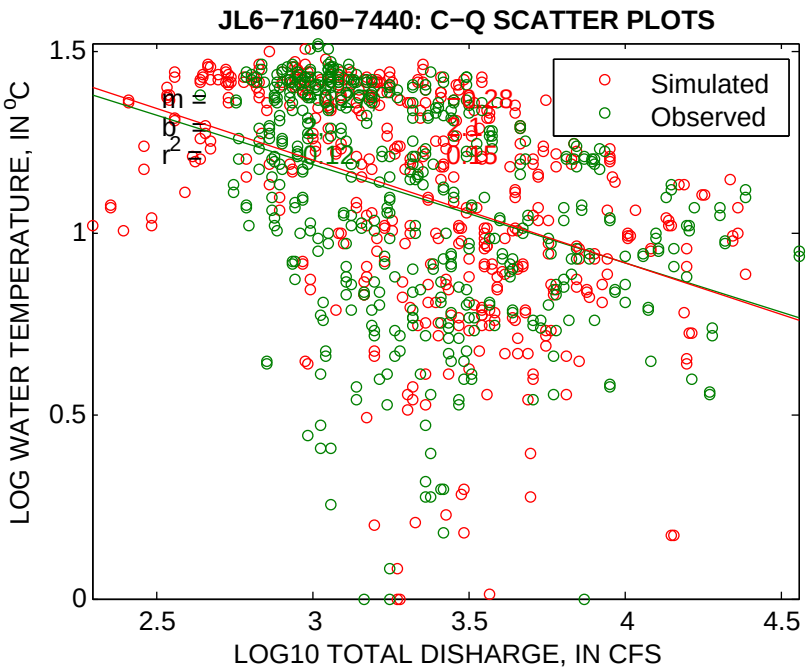
STATISTICS

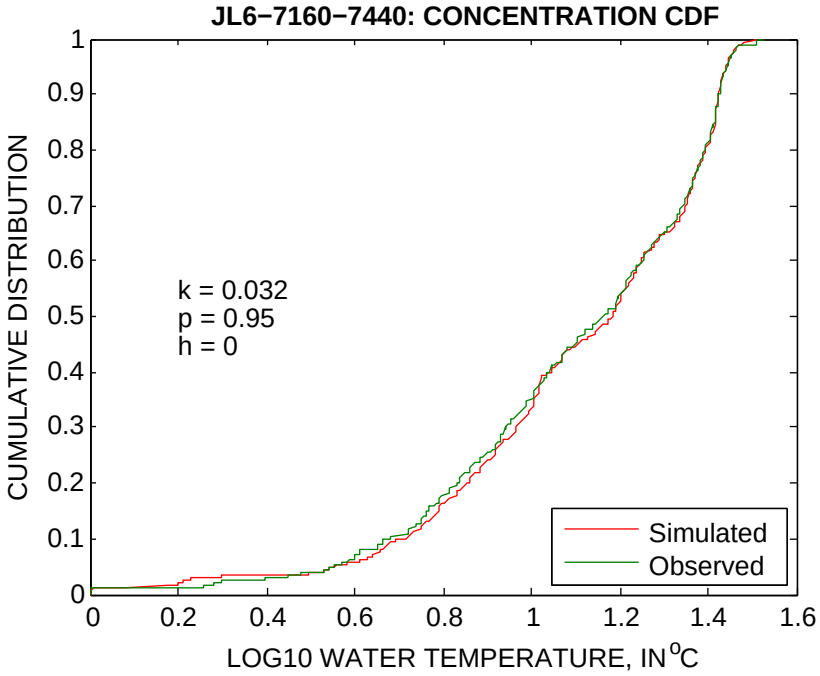
	n	observe	simulate
		270	270
min		1	0.41812
		0	-0.378699
mean		15.2097	15.4228
		1.09274	1.08901
media		14.25	14.5095
		1.15381	1.1616
max		33.7	30.902
		1.52763	1.48999
varian		70.7567	71.176
		0.0964456	0.121207
JB		0.002196	0.002871
		0.001	0.001
		ra	log
%		1.40108	-0.341874
err.va		8.07515	0.0262958
rel.std.err		0.114126	0.272649
mod.eff		0.885874	0.727351

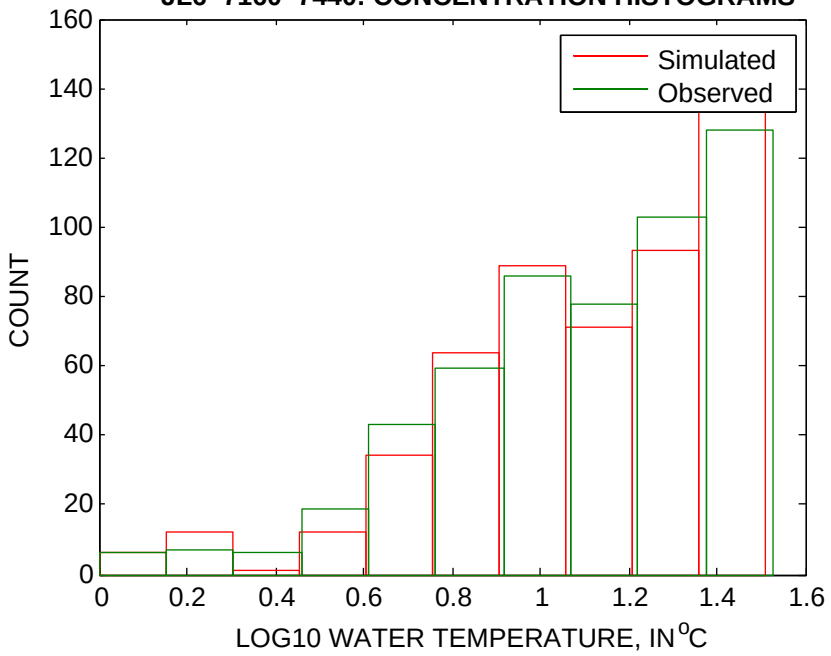
VERSION 2.1

ALL DATA
LOG10

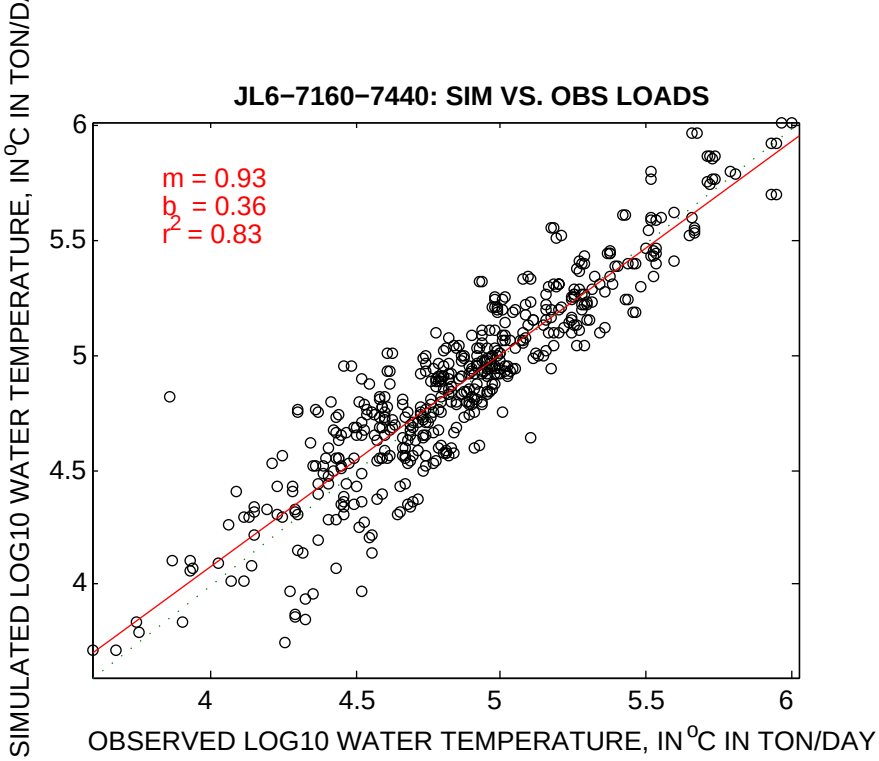


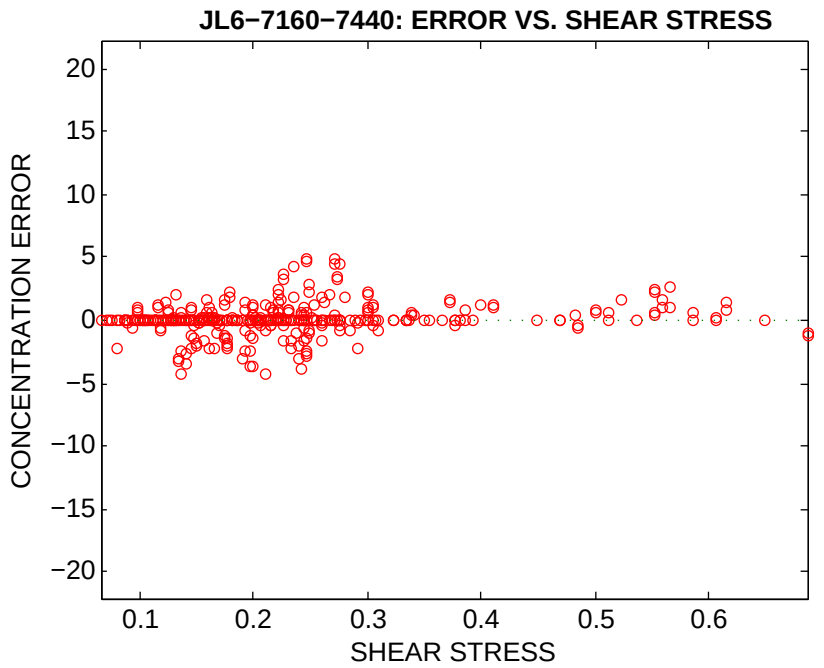


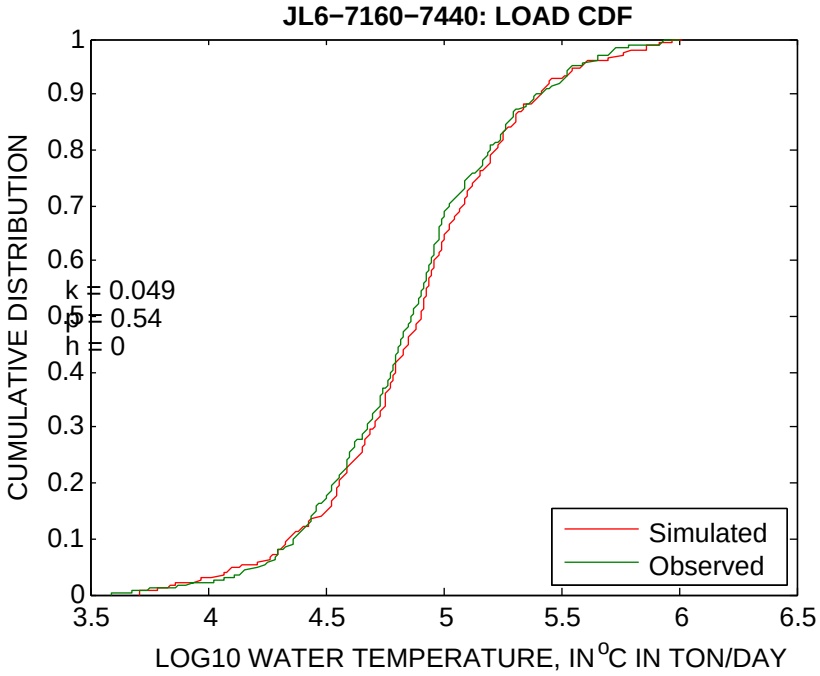


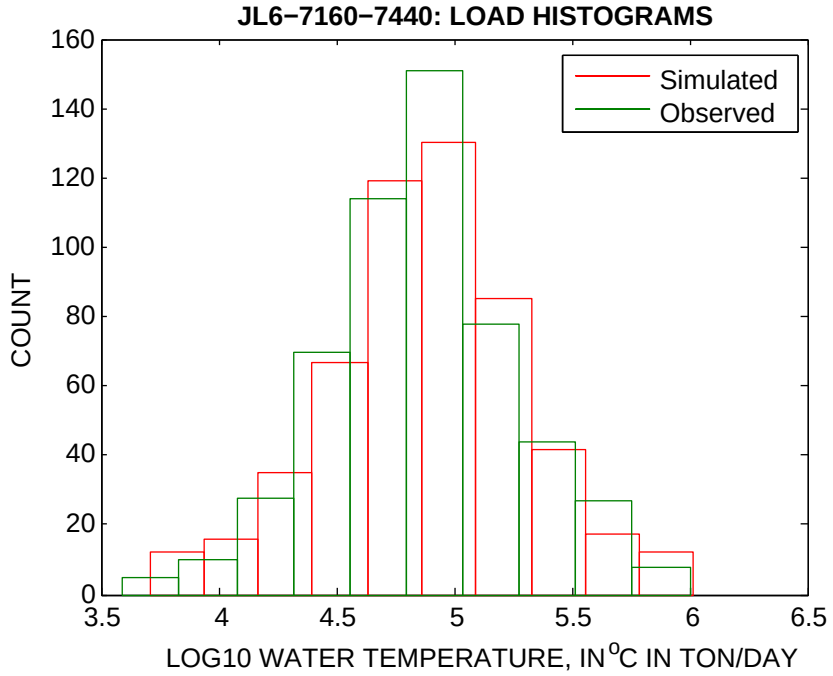


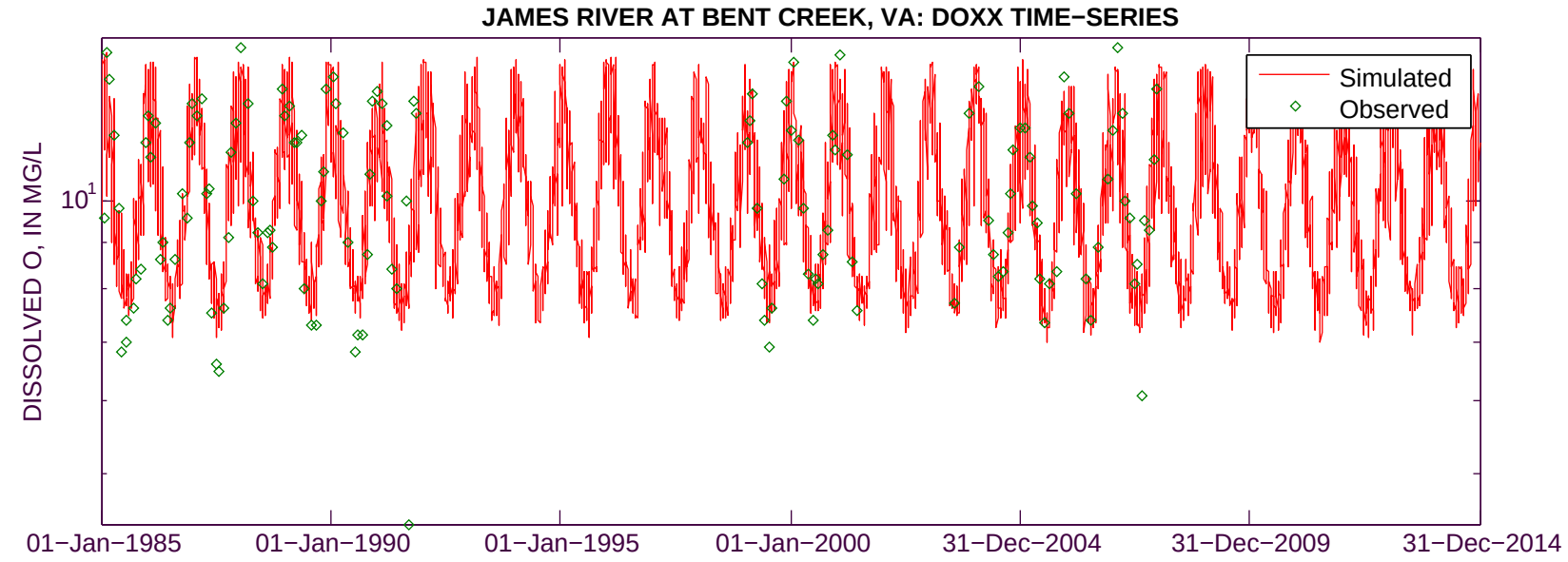
LOAD DATA
LOG10

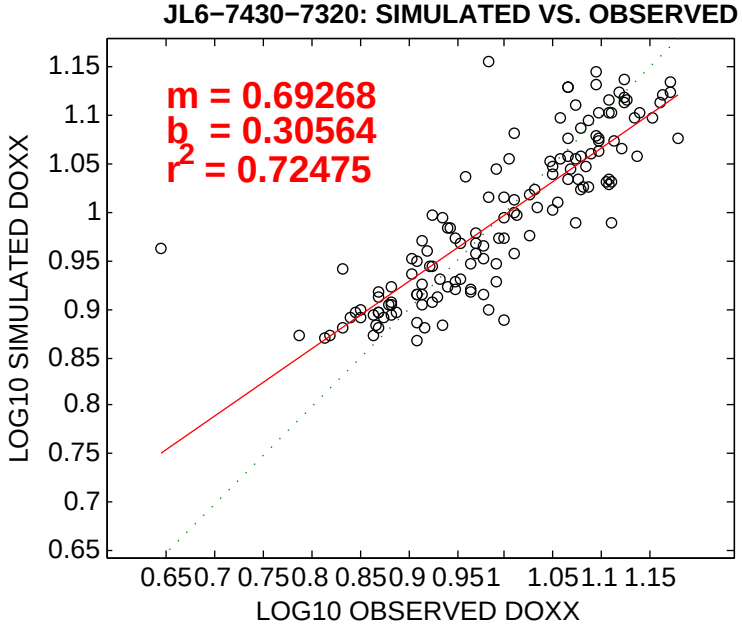


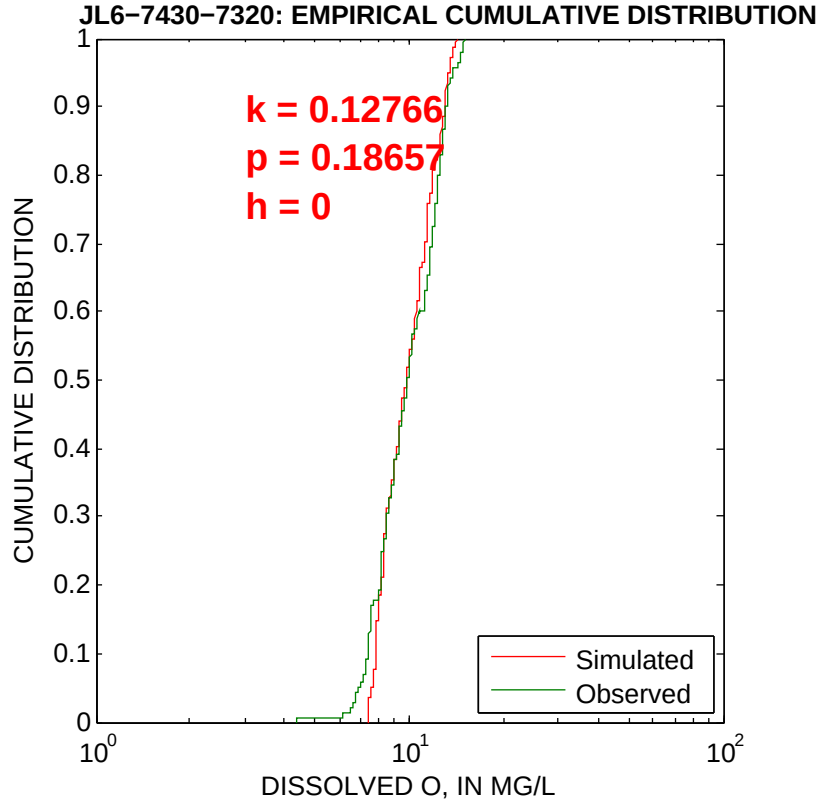












DATA SELECTION

scenario	file
P620171001WQ	DOXX.calib

plot: DOXX - dissolved oxygen

Dates: 1/1/1985 — 12/31/201

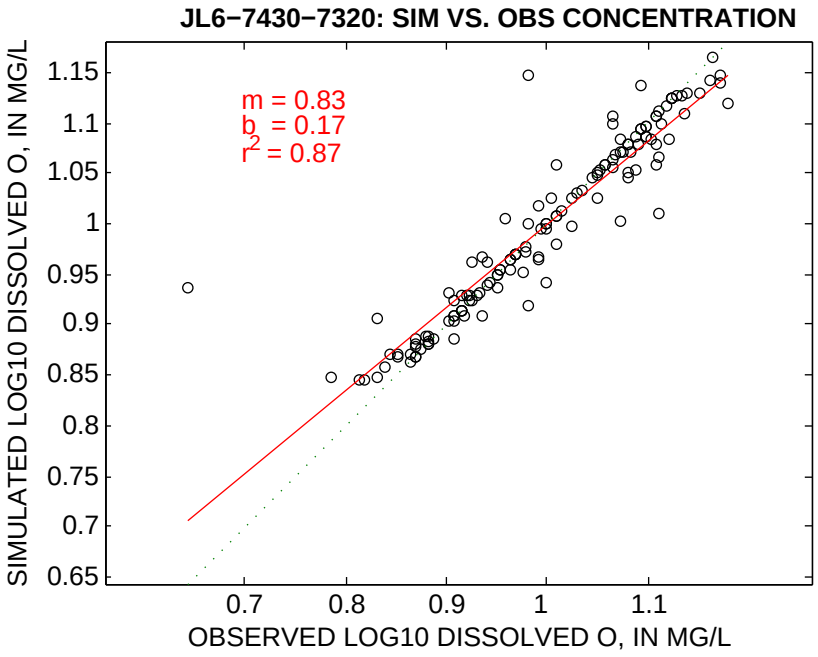
Drive	Directory	Observed
N/A	model	OBS20161101

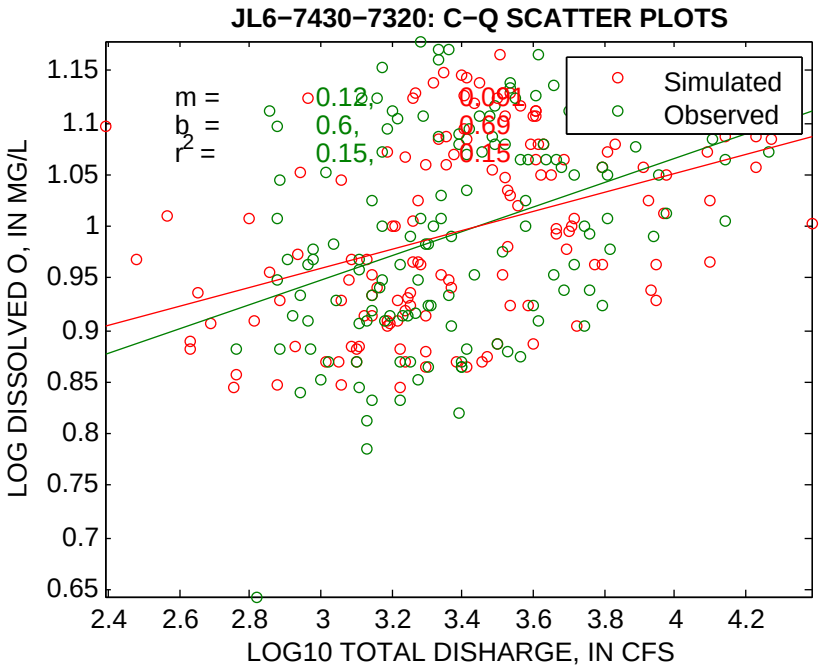
STATISTICS

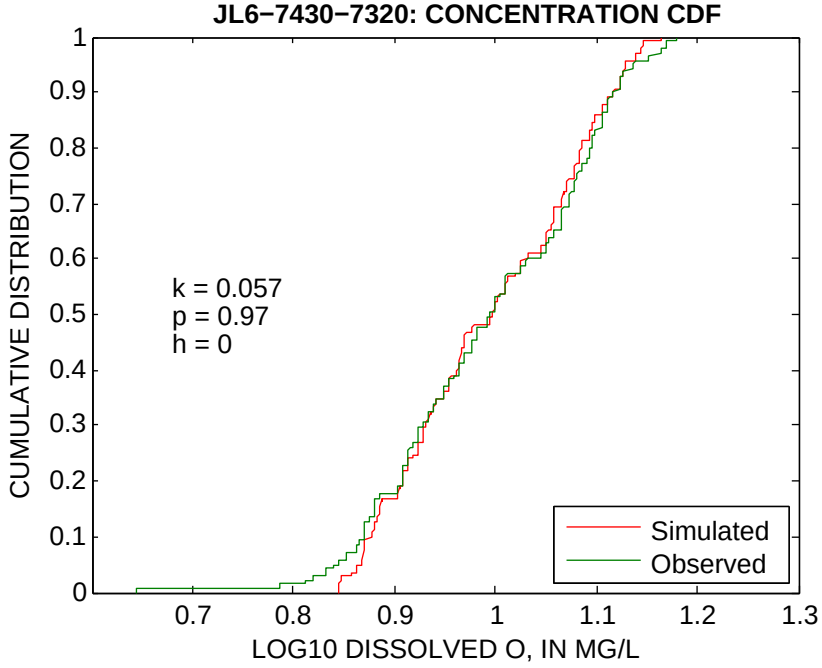
	n	141	141
		observe	simulate
min		4.4	7.3478
		0.643453	0.866157
mean		10.1494	10.062
		0.995174	0.99498
media		9.86	9.7494
		0.993877	0.988978
max		15.1	14.351
		1.17898	1.15688
varian		5.19934	3.68
		0.0101068	0.00669109
JB		☑ 0.055105	0.015382
		☑ 0.185802	0.017250
		ra	log
%		-0.861565	-0.0194512
err.va		1.38081	0.00279628
rel.std.err		1.265575	0.276673
mod.eff		0.734425	0.723327

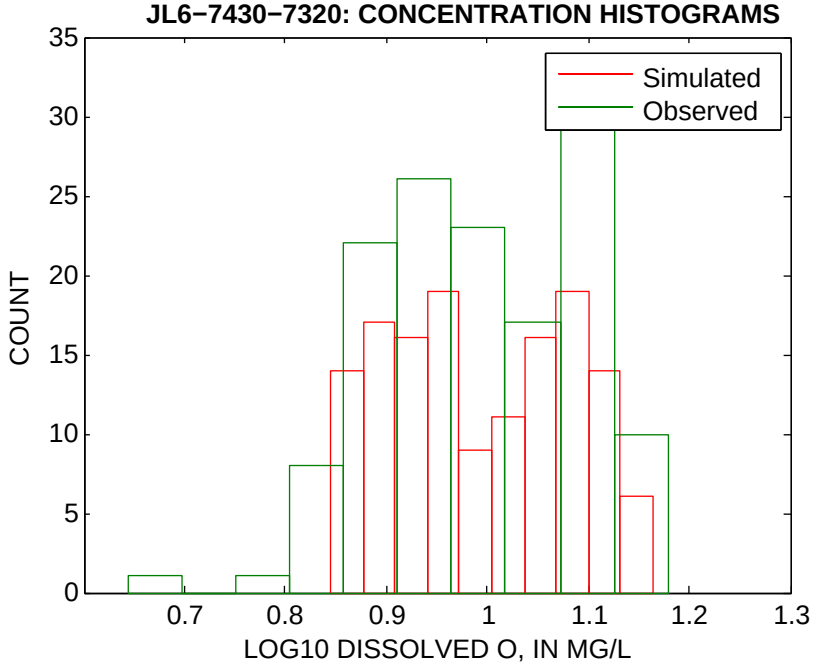
VERSION 2.1

ALL DATA
LOG10

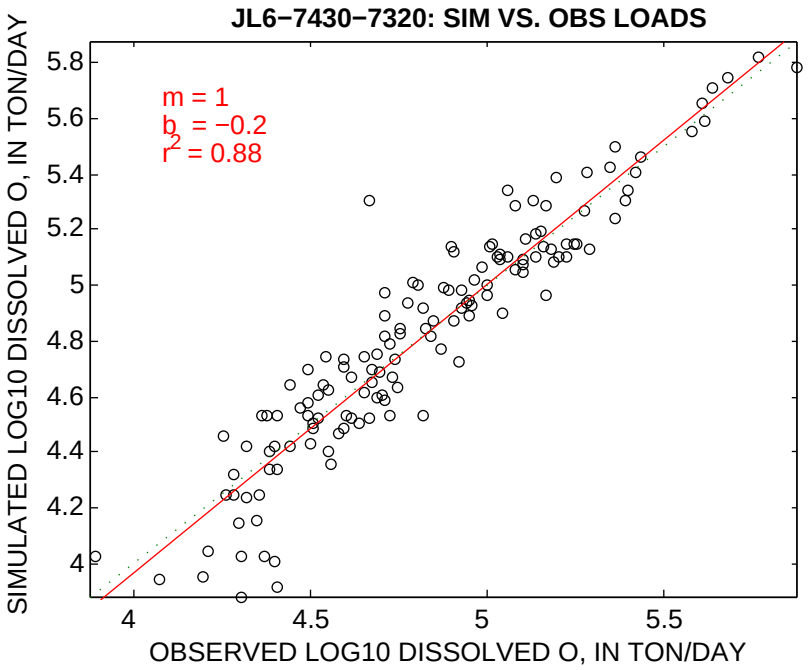


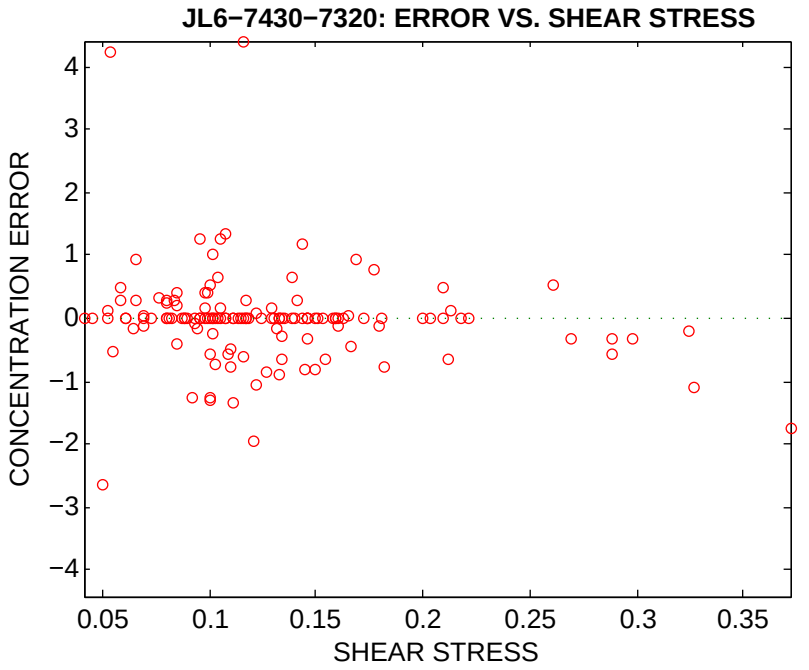


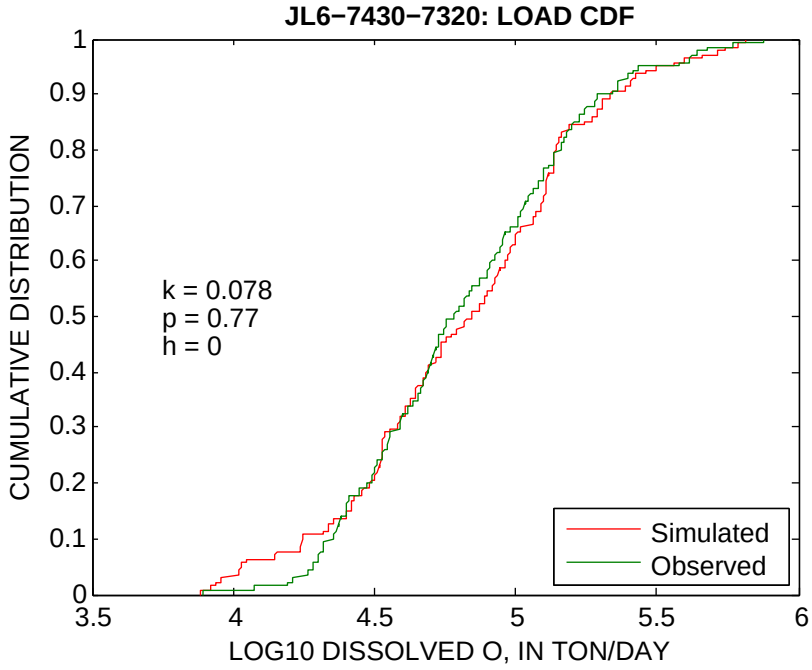


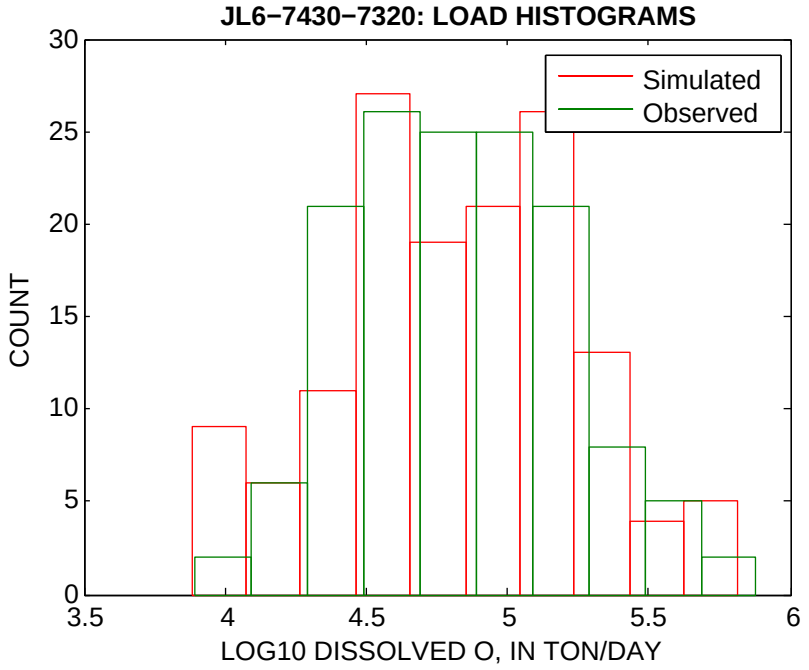


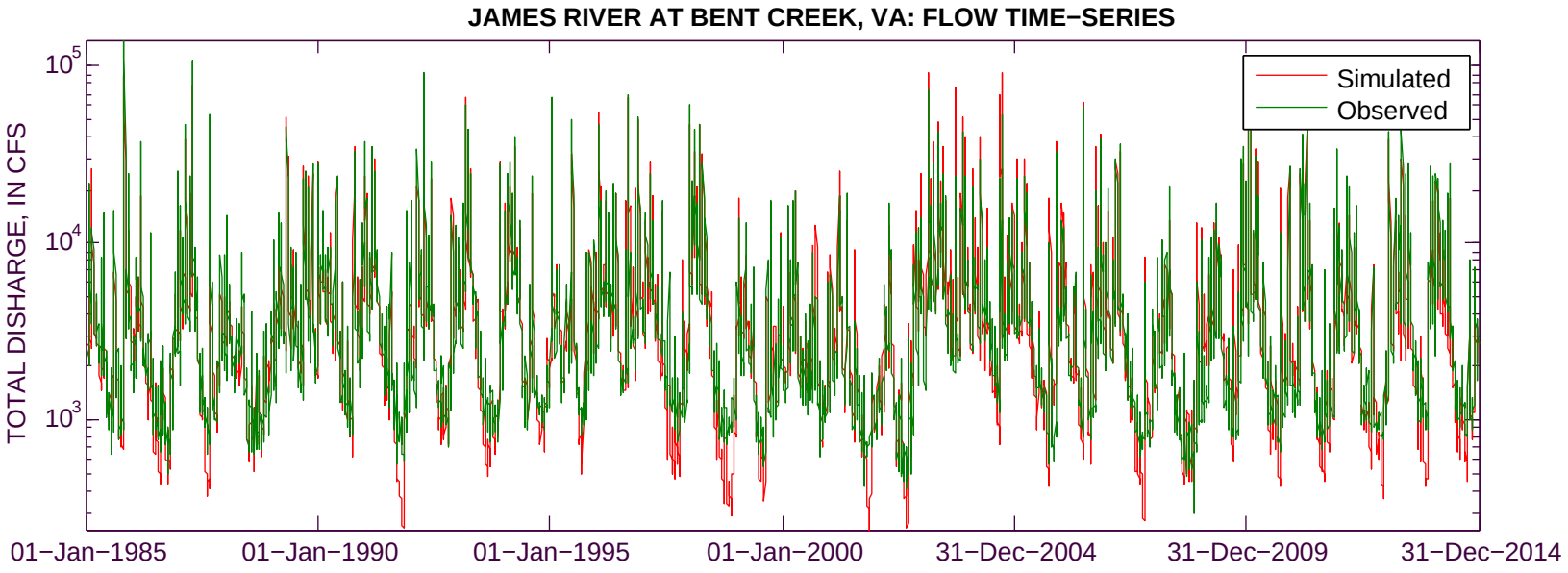
LOAD DATA
LOG10

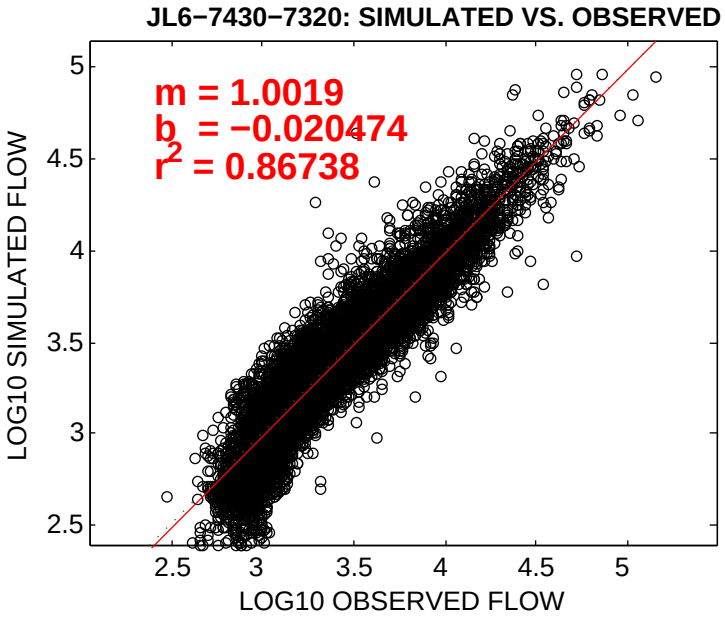


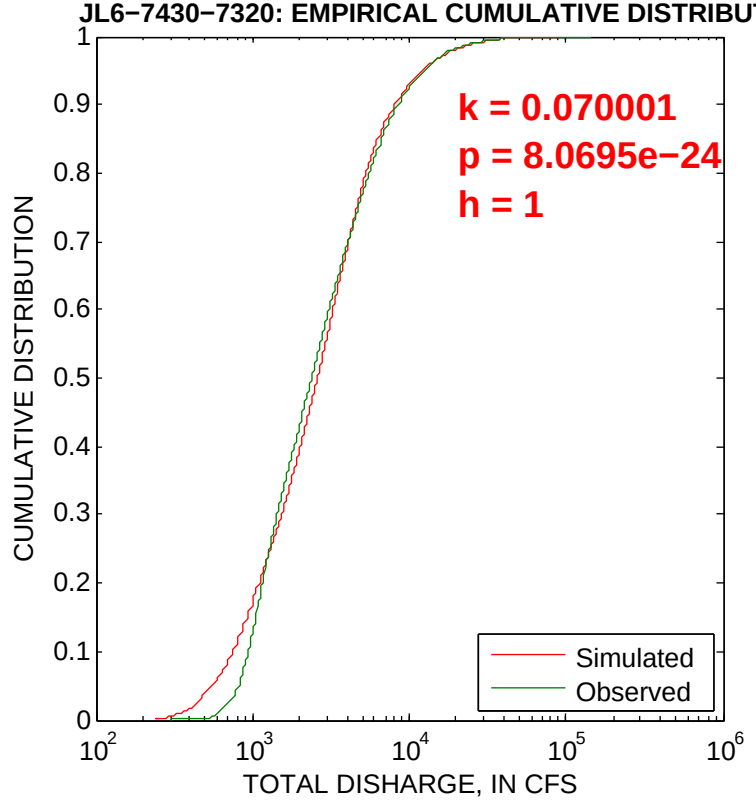












DATA SELECTION

scenario: P620171001WQ | file: FLOW.calib

plot: FLOW - total discharge

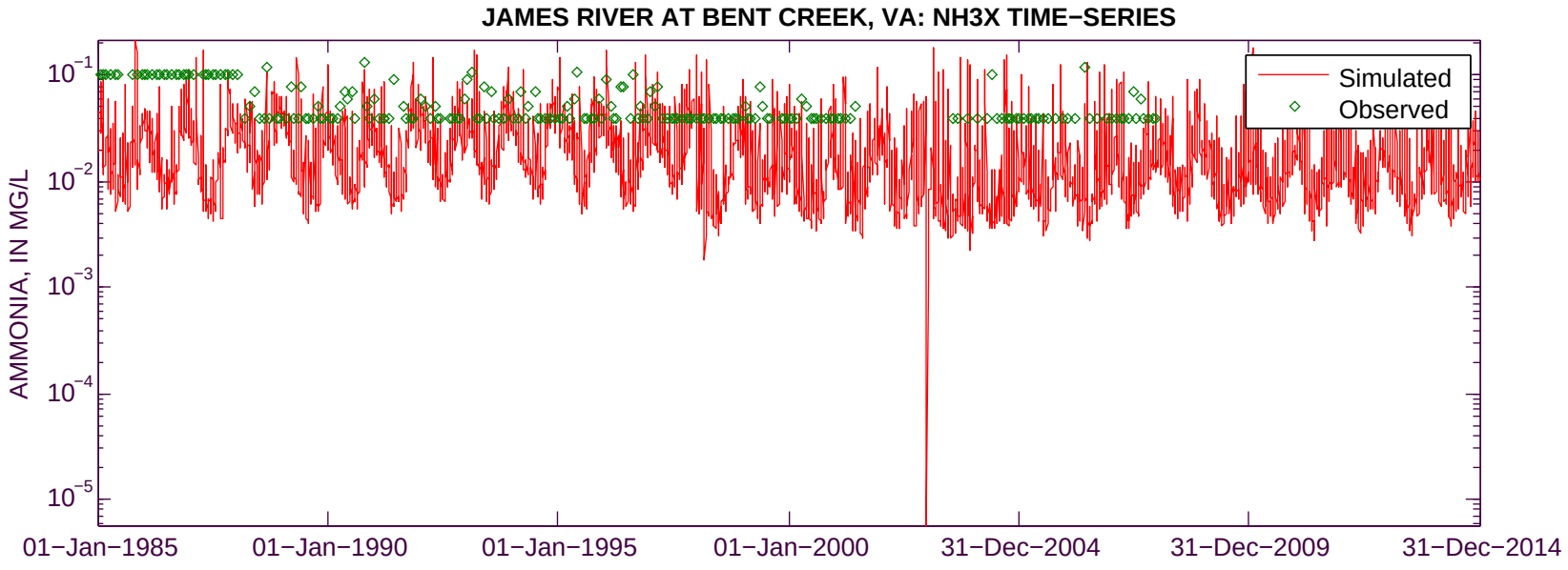
Dates: 1/1/1985 – 12/31/201

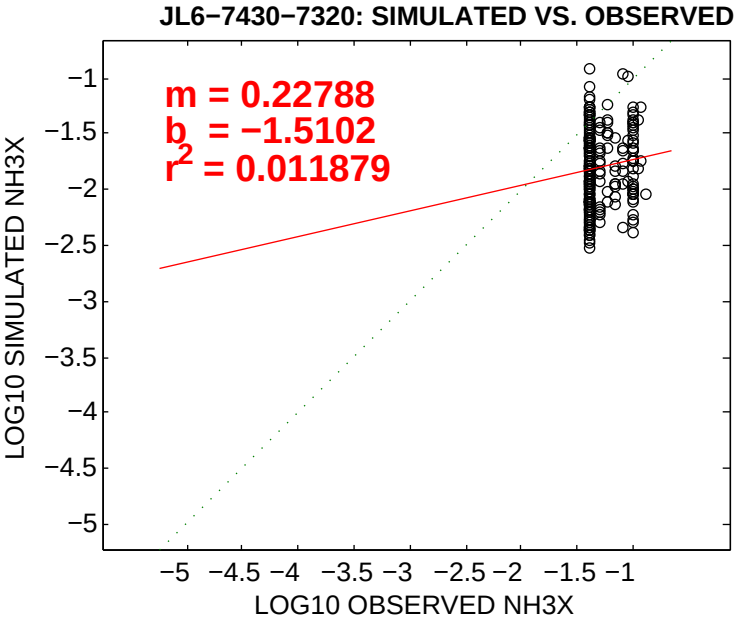
Drive: N/A | Directory: model | Observed: OBS20161101

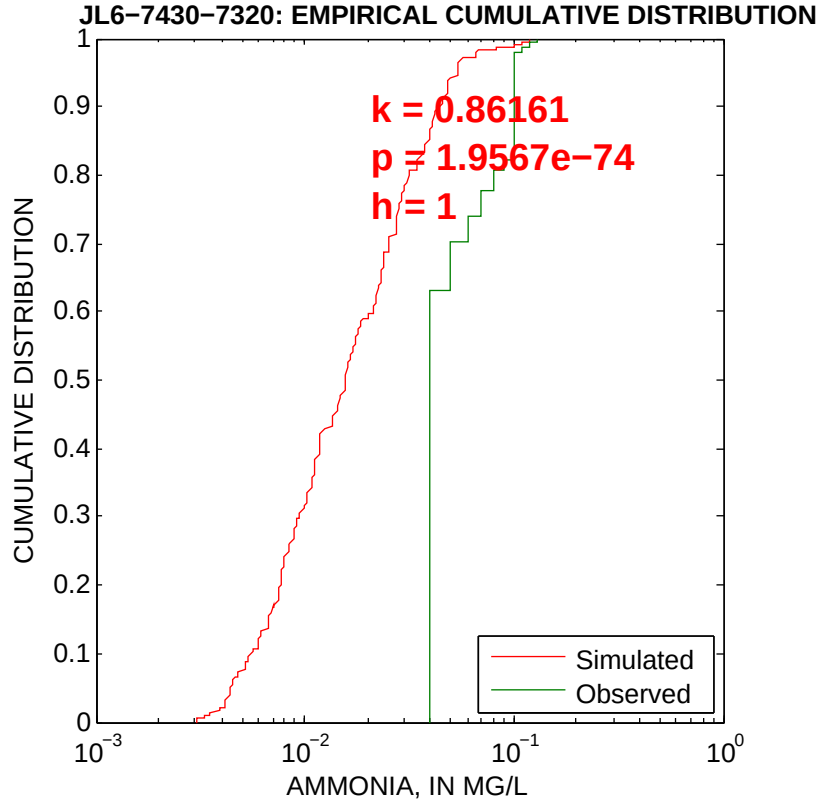
STATISTICS

n	10957	10957
	observe	simulate
min	300	240.62
	2.47712	2.38133
mean	4077.19	4051.64
	3.42003	3.40609
media	2400	2609.9
	3.38021	3.41662
max	142000	92466
	5.15229	4.96598
varian	3.11434e+0	2.96934e+
	0.142374	0.164771
JB	0.001	0.001
	0.001	0.001
	ra	log
%	-0.626701	-0.407579
err.va	5.8326e+06	0.0220467
rel.std.err	0.187282	0.154851
mod.eff	0.812718	0.845149

VERSION 2.1







DATA SELECTION

scenario	file
P620171001WQ	NH3X.calib

plot: NH3X - ammonia

Dates: 1/1/1985 – 12/31/201

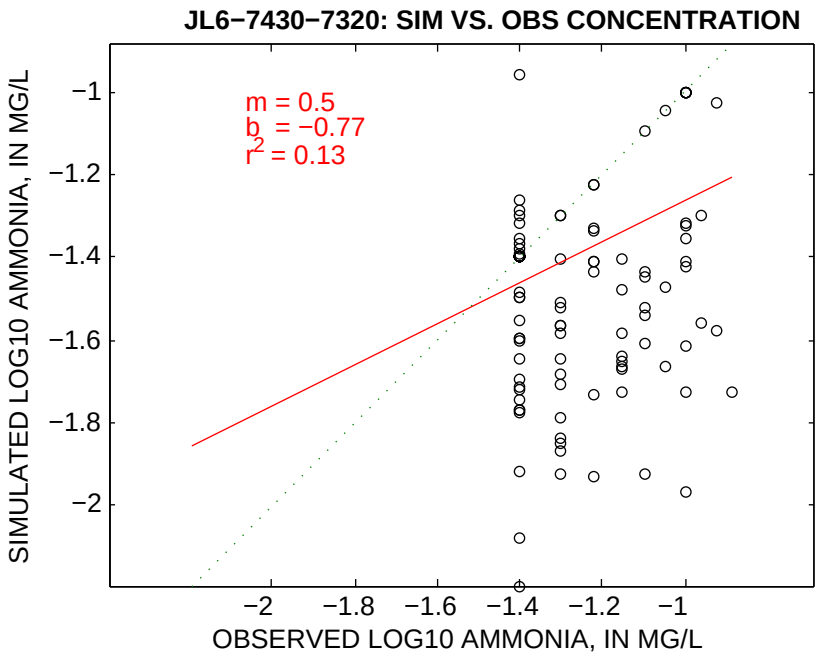
Drive	Directory	Observed
N/A	model	OBS20161101

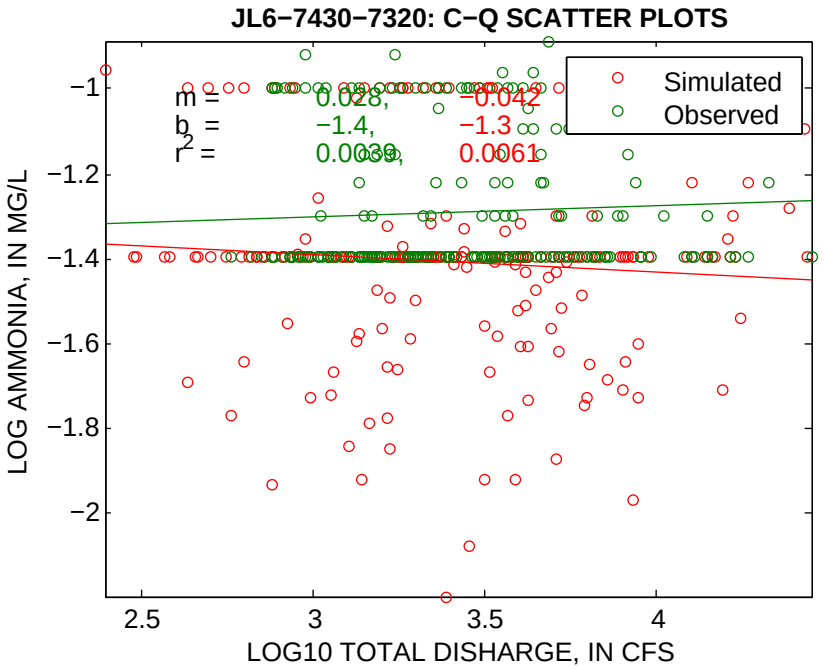
STATISTICS

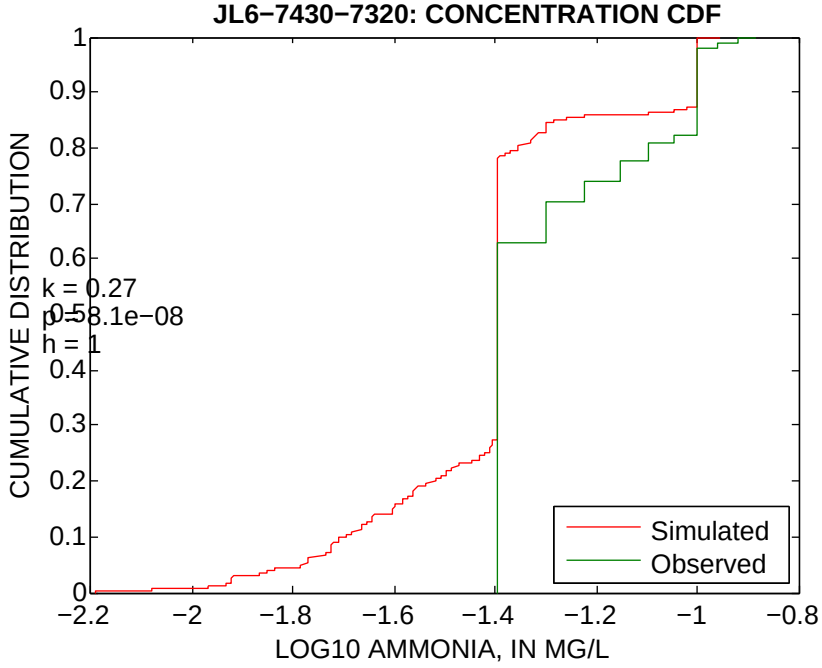
	n	224	224
		observe	simulate
min		0.04	0.0030625
		-1.39794	-2.51392
mean		0.055625	0.0212442
		-1.28849	-1.80385
media		0.04	0.0155335
		-1.39794	-1.80873
max		0.13	0.12025
		-0.886057	-0.919915
varian		0.00059691	0.00032675
		0.0263269	0.115089
JB		0.001	0.001
		0.001	0.061544
		ra	log
%		-61.8082	39.9971
err.va		0.00204032	0.396203
rel.std.err		3.41809	15.0494
mod.eff		-2.41809	-14.0494

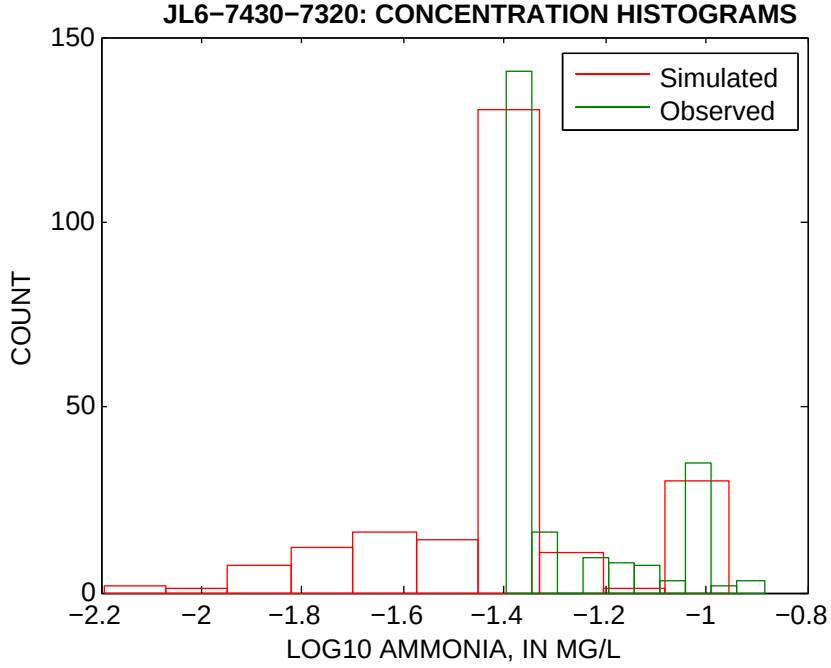
VERSION 2.1

ALL DATA
LOG10

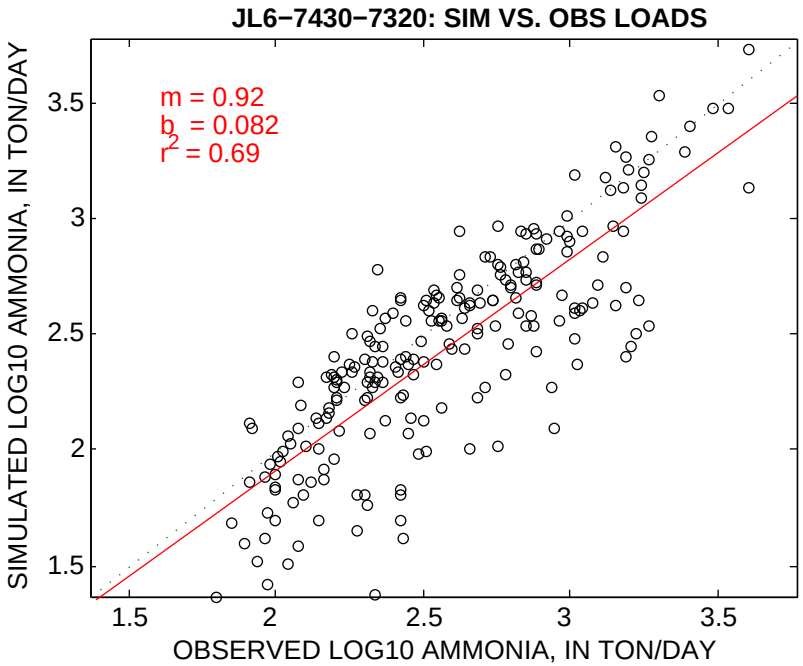


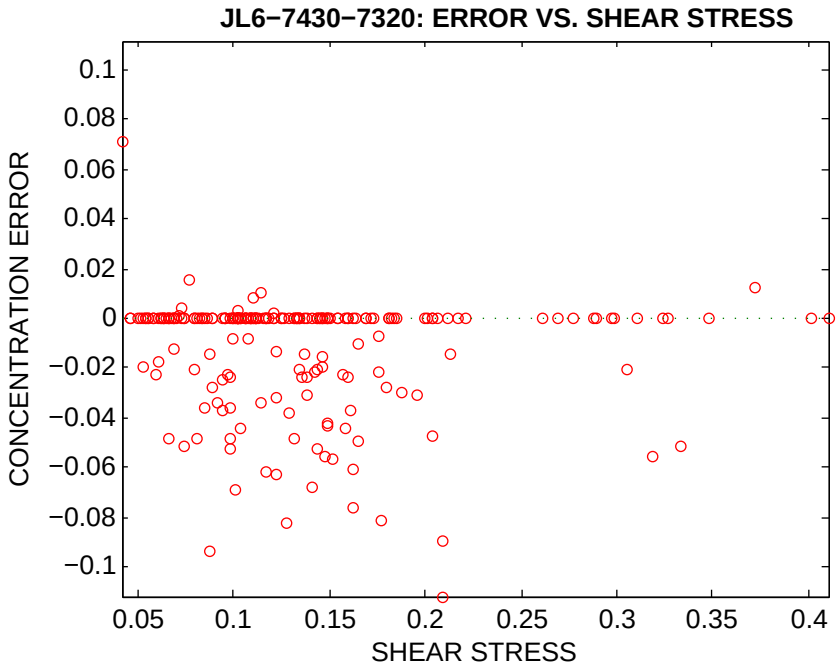


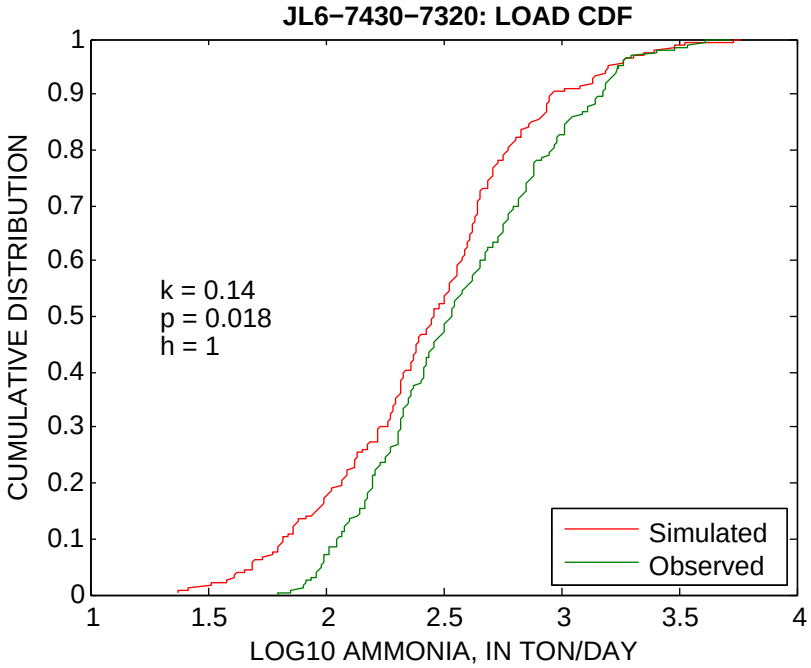


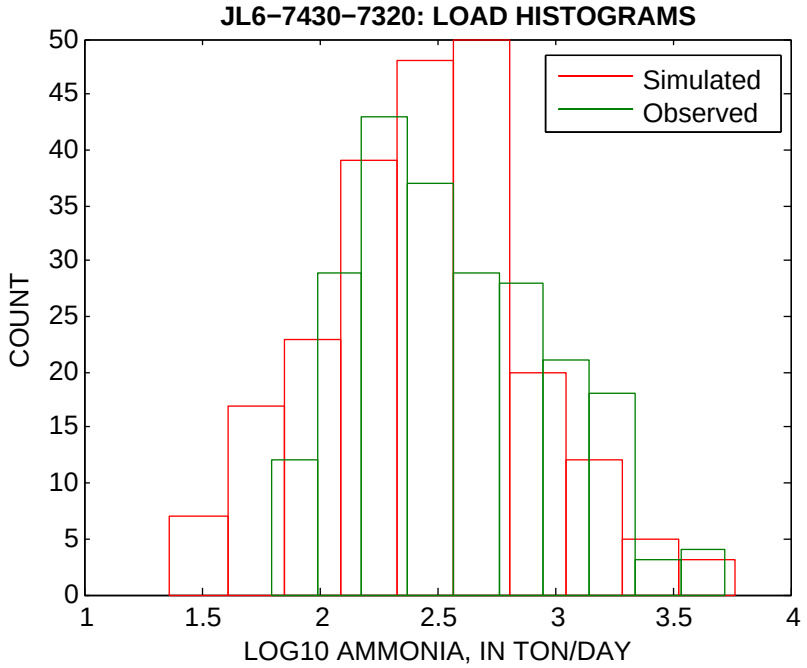


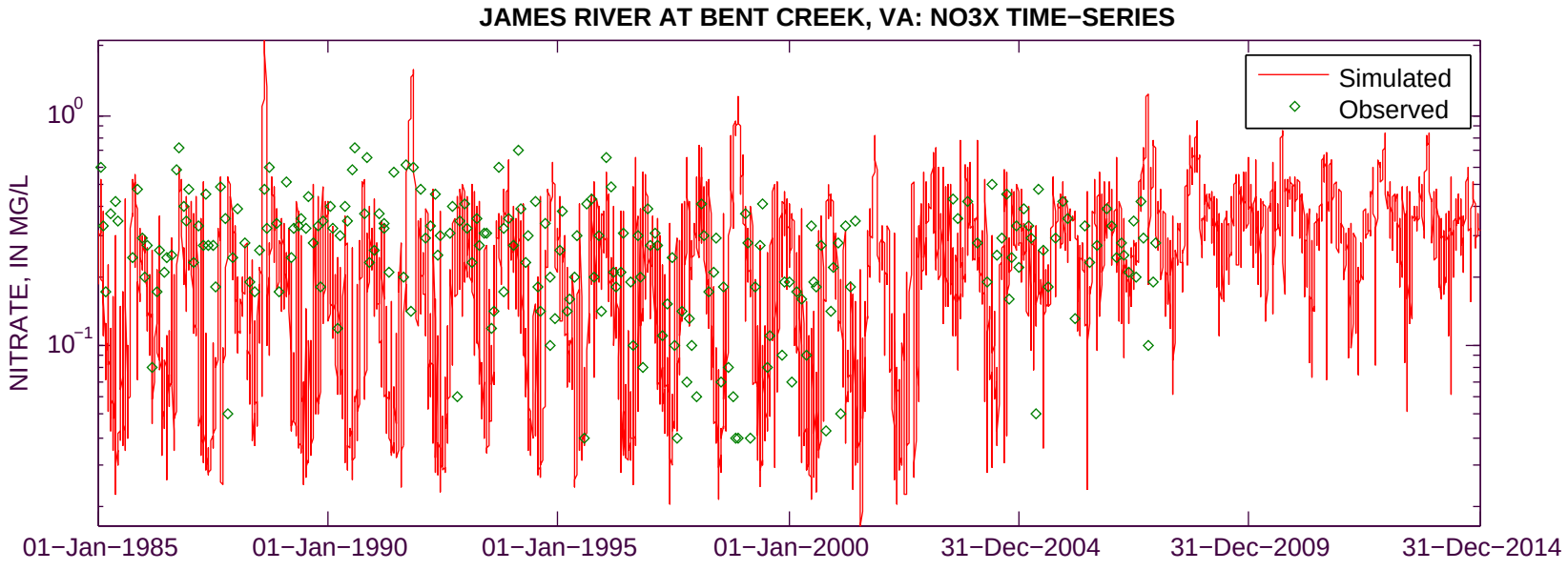
LOAD DATA
LOG10

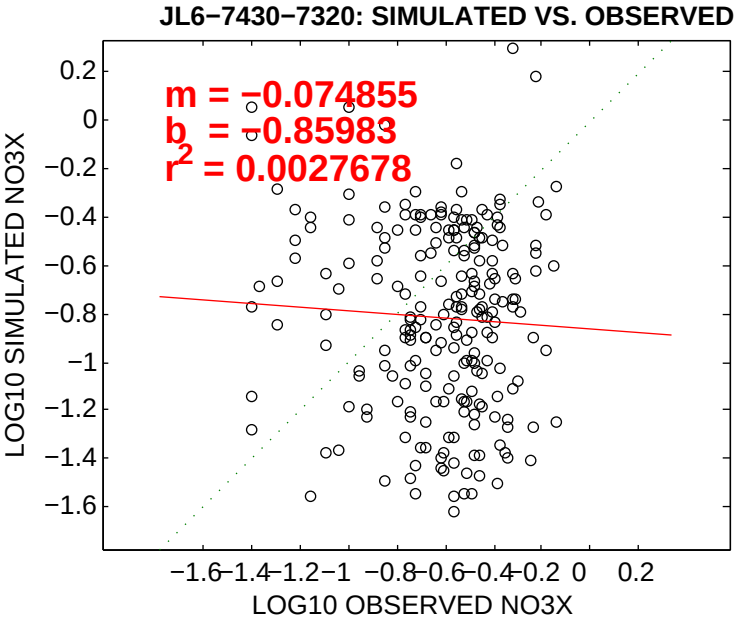


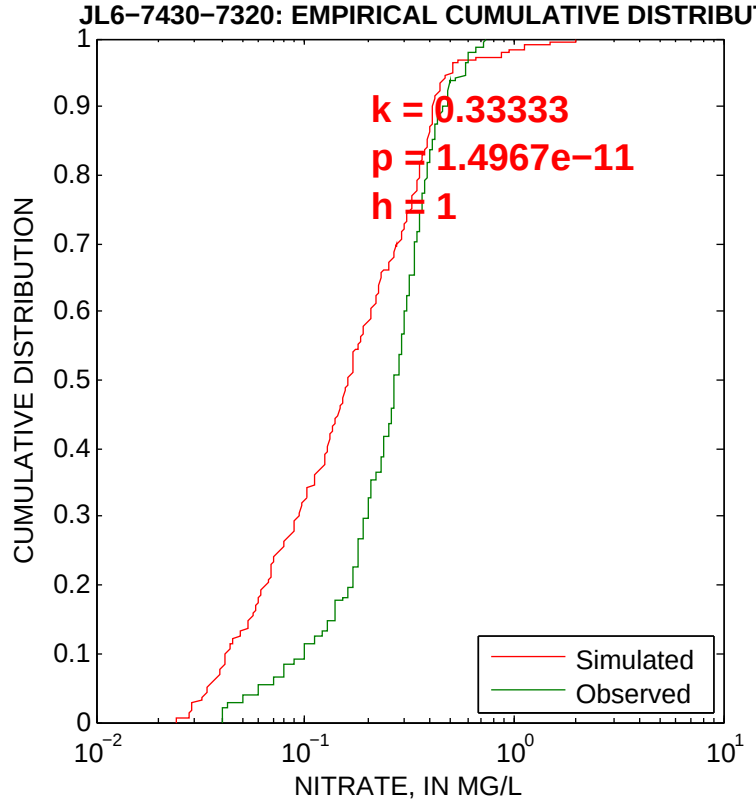












DATA SELECTION

scenario	file
P620171001WQ	NO3X.calib

plot: NO3X - nitrate

Dates: 1/1/1985 – 12/31/201

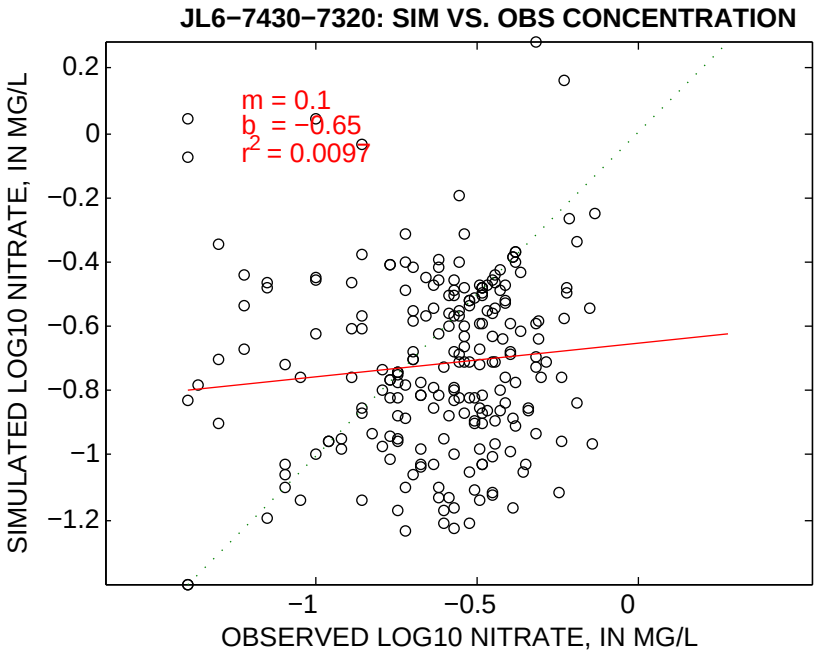
Drive	Directory	Observed
N/A	model	OBS20161101

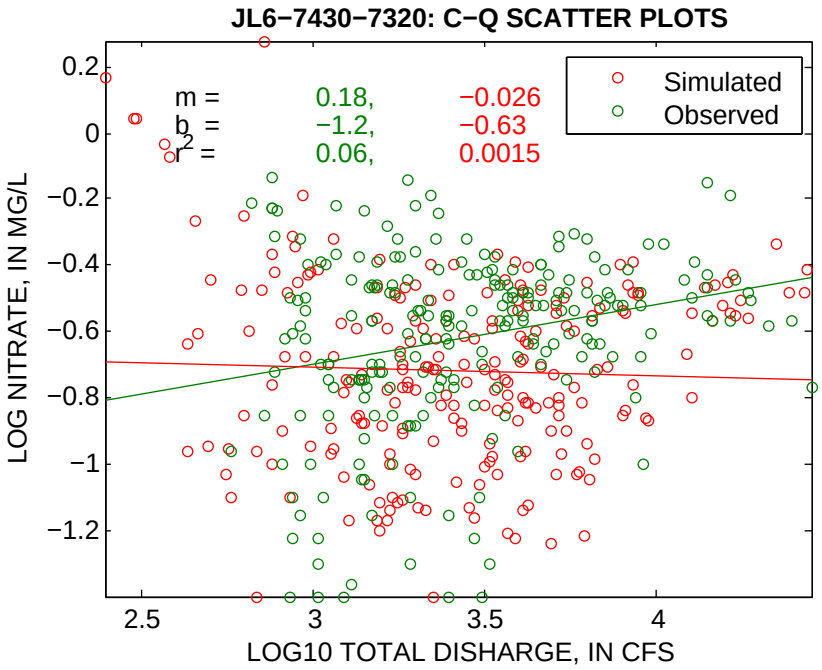
STATISTICS

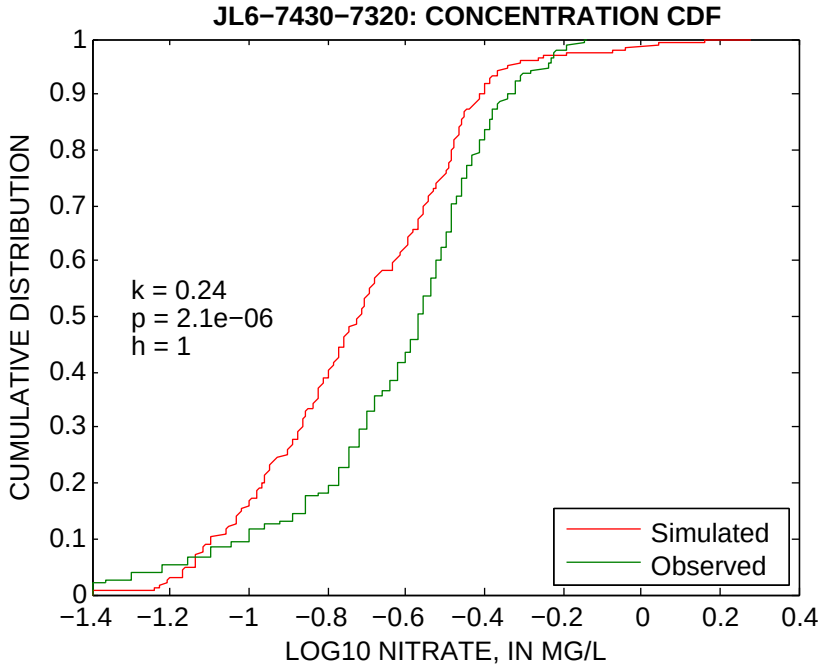
	n	225	225
		observe	simulate
min		0.04	0.024086
		-1.39794	-1.61824
mean		0.280547	0.223581
		-0.620548	-0.813375
media		0.27	0.16232
		-0.568636	-0.789628
max		0.73	1.9962
		-0.136677	0.300204
varian		0.0202281	0.0523923
		0.0722605	0.146288
JB		0.003585	0.001
		0.001	0.22254
		ra	log
%		-20.3052	31.0735
err.va		0.0743036	0.266714
rel.std.err		3.67328	3.69101
mod.eff		-2.67328	-2.69101

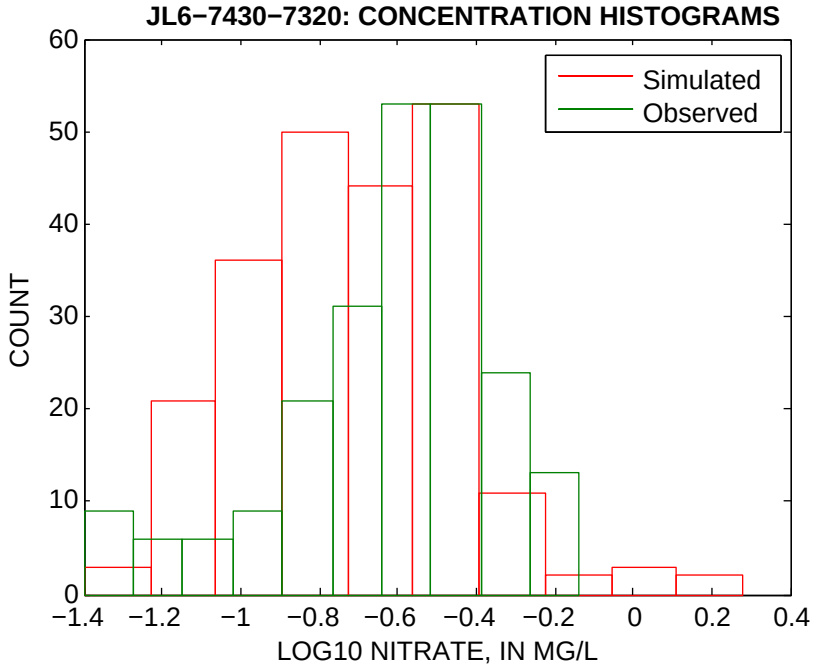
VERSION 2.1

ALL DATA
LOG10

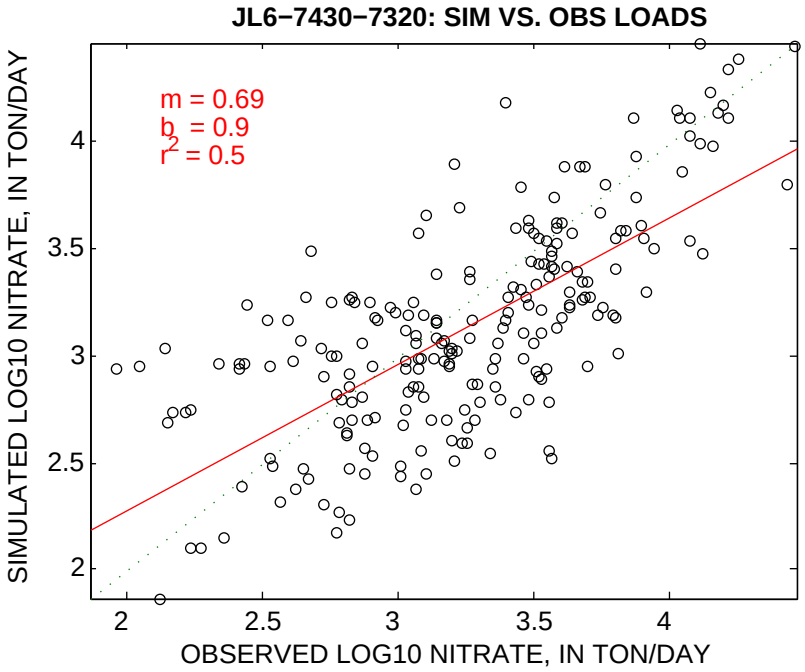




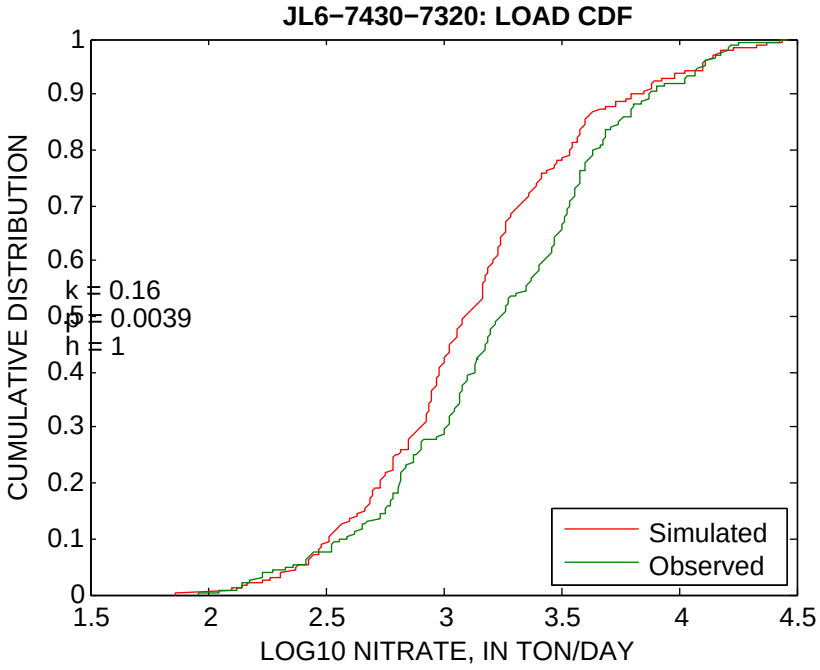


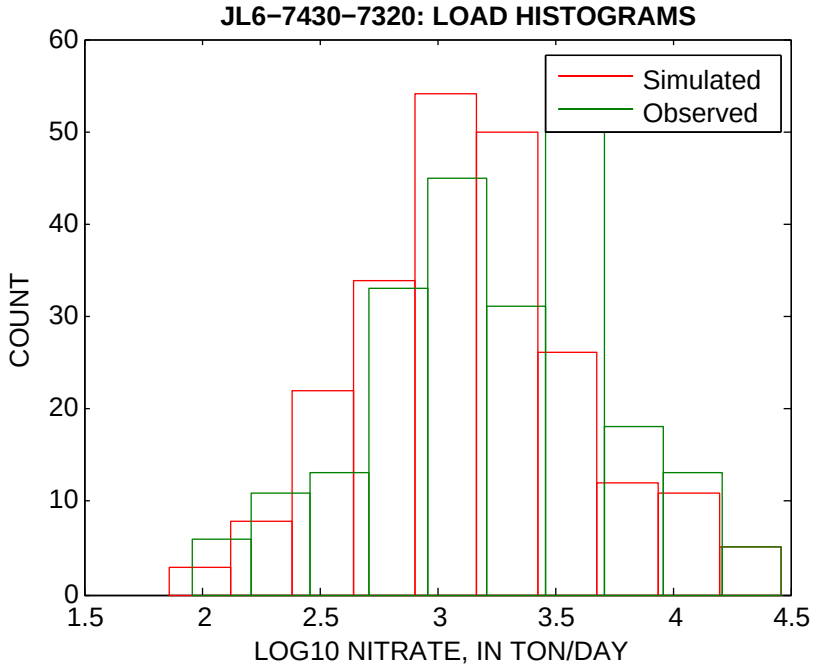


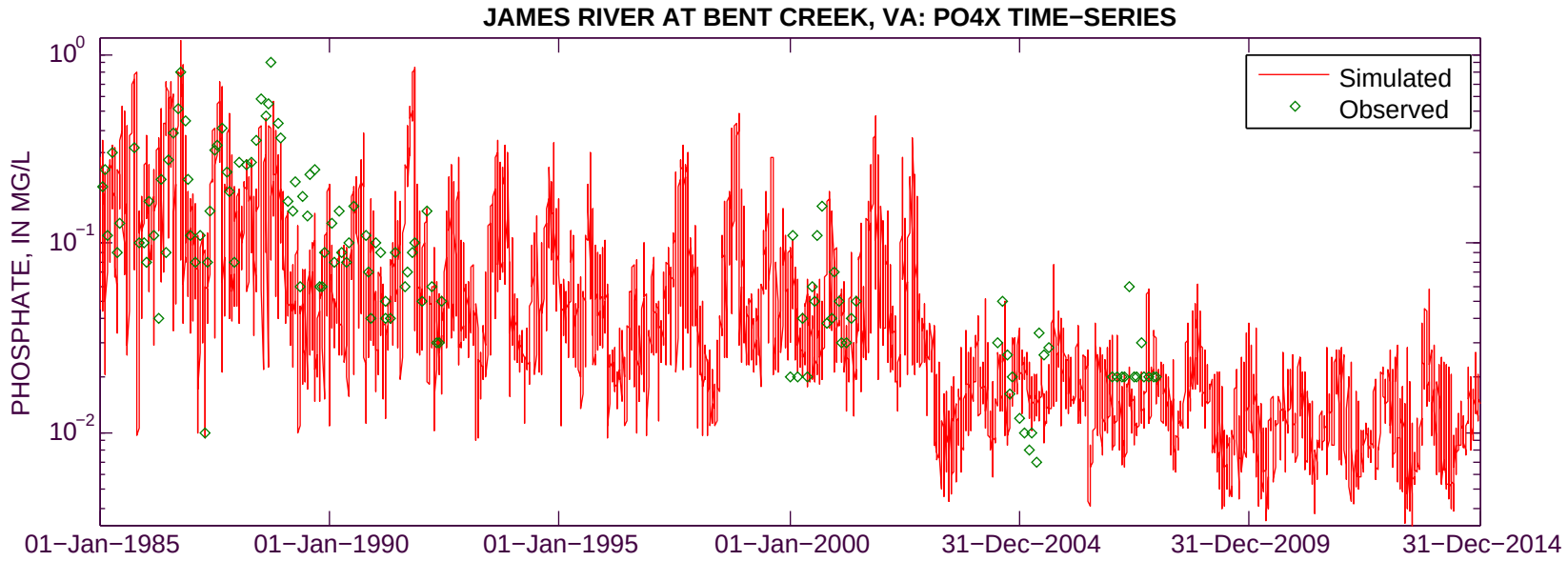
LOAD DATA
LOG10

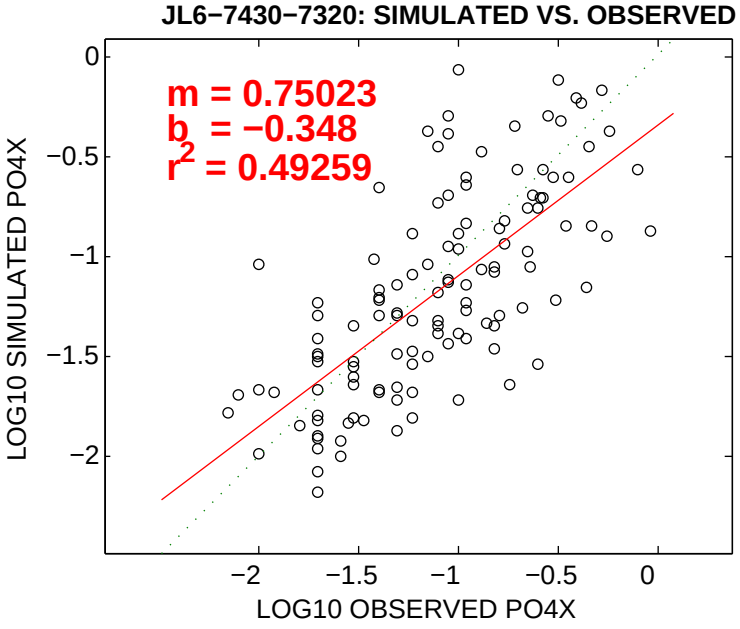


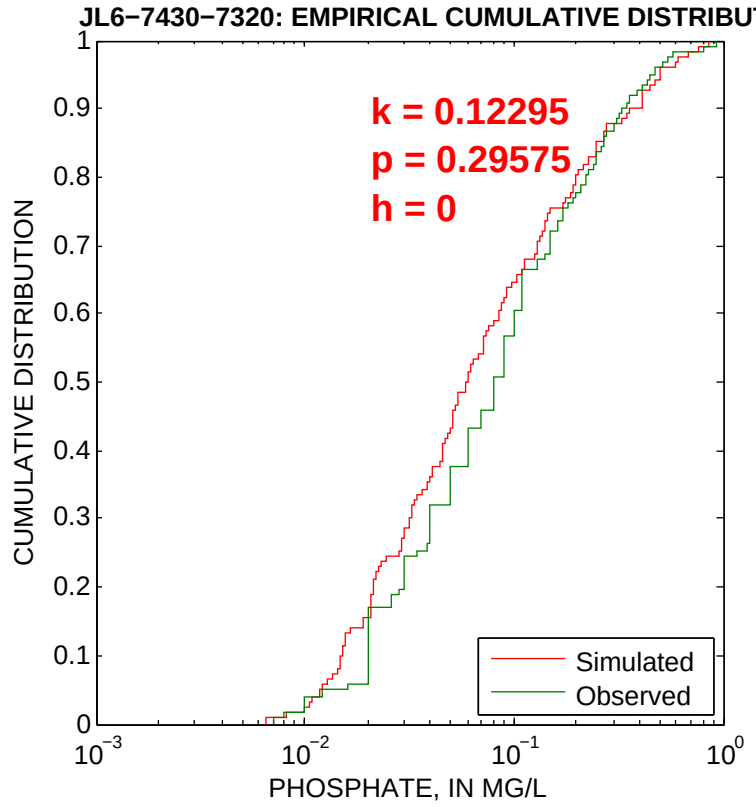












DATA SELECTION

scenario: P620171001WQ | file: PO4X.calib

plot: PO4X - phosphate

Dates: 1/1/1985 – 12/31/201

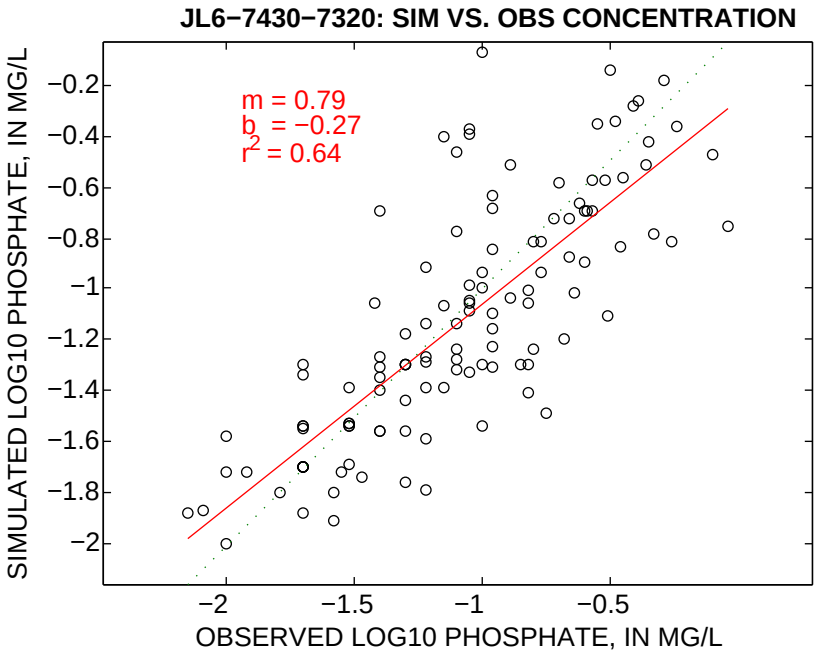
Drive: N/A | Directory: model | Observed: OBS20161101

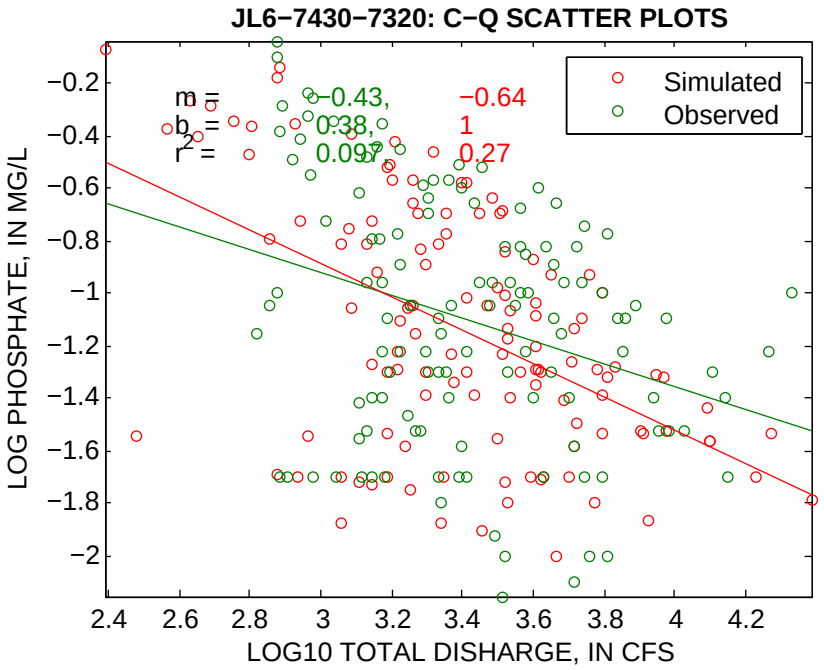
STATISTICS

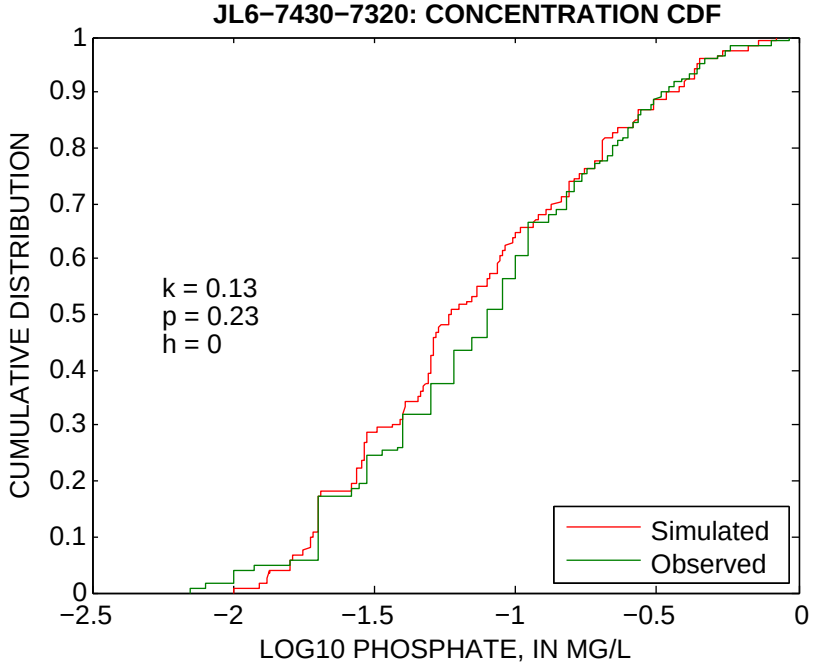
	n	122	122
		observe	simulate
min		0.007	0.0065142
		-2.1549	-2.18614
mean		0.137336	0.130032
		-1.10345	-1.17584
media		0.08	0.059662
		-1.09691	-1.22431
max		0.92	0.85086
		-0.0362122	-0.0701419
varian		0.0250032	0.0277865
		0.223922	0.25586
JB		0.001	0.001
		0.245418	0.073176
		ra	log
%		-5.31863	6.56022
err.va		0.0277544	0.149079
rel.std.err		1.11004	0.665762
mod.eff		-0.110037	0.334238

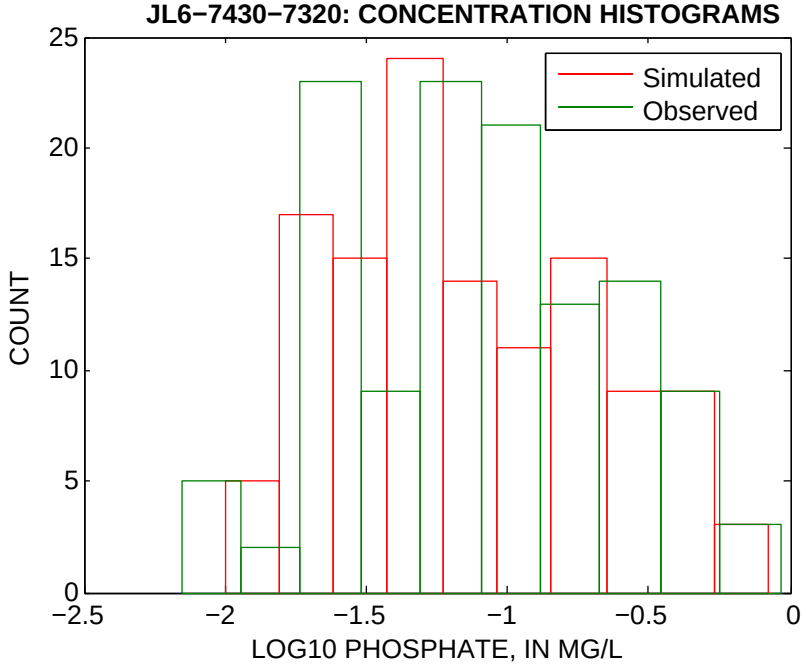
VERSION 2.1

ALL DATA
LOG10

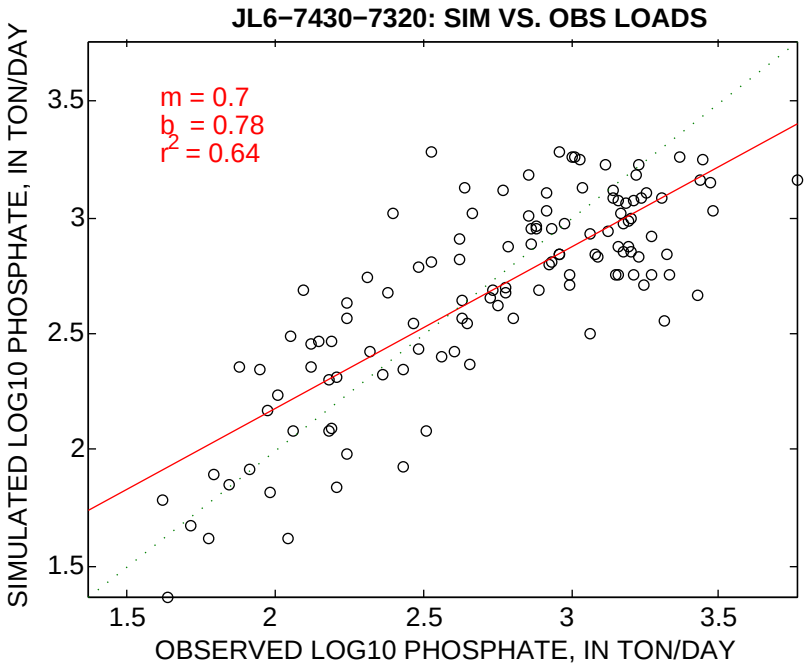


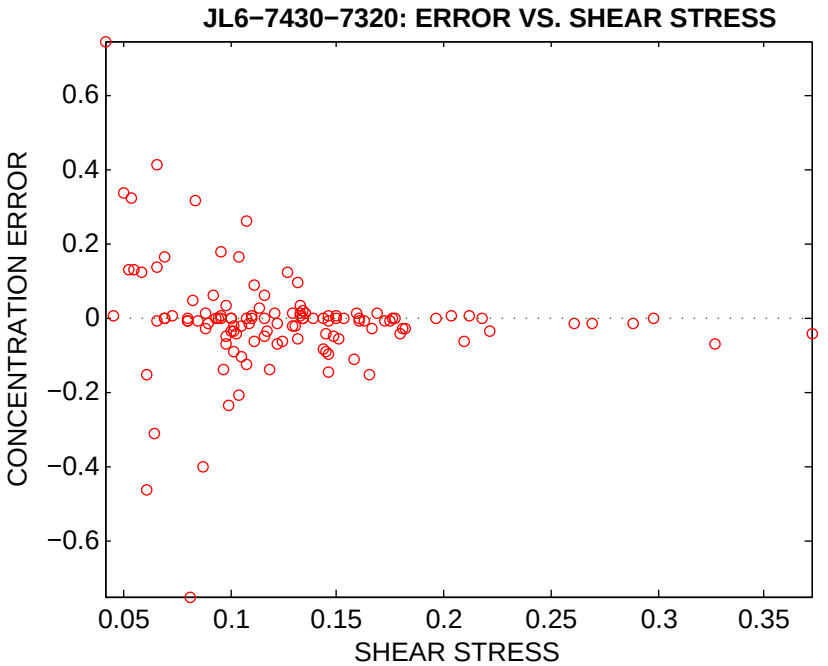


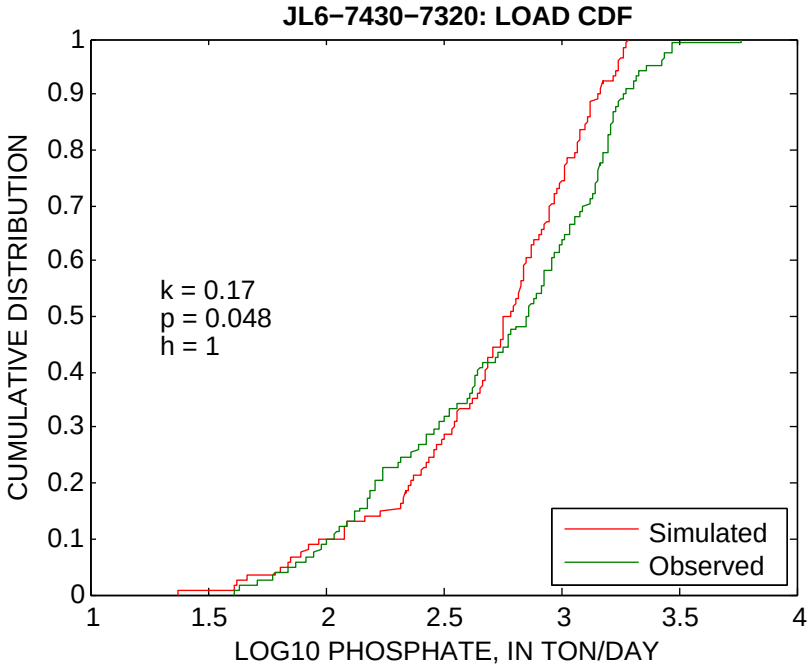


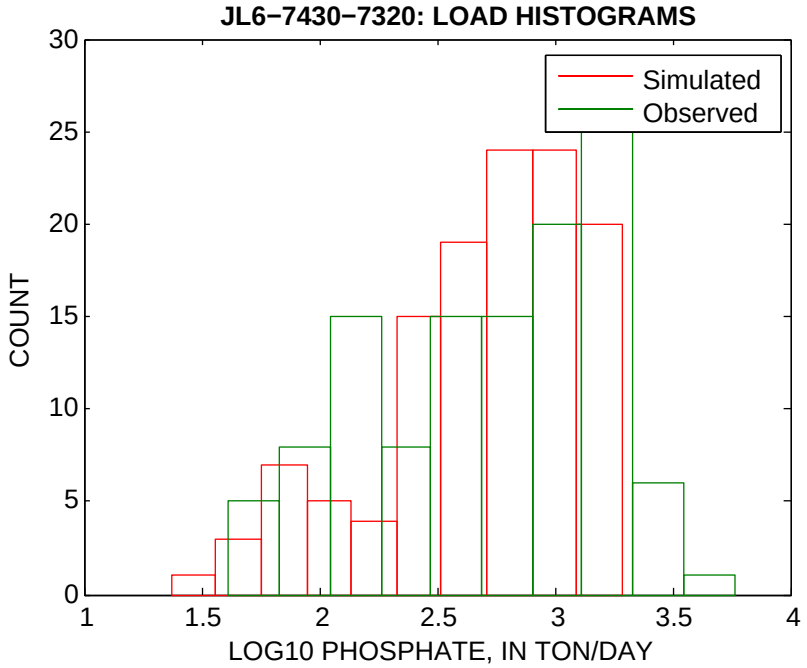


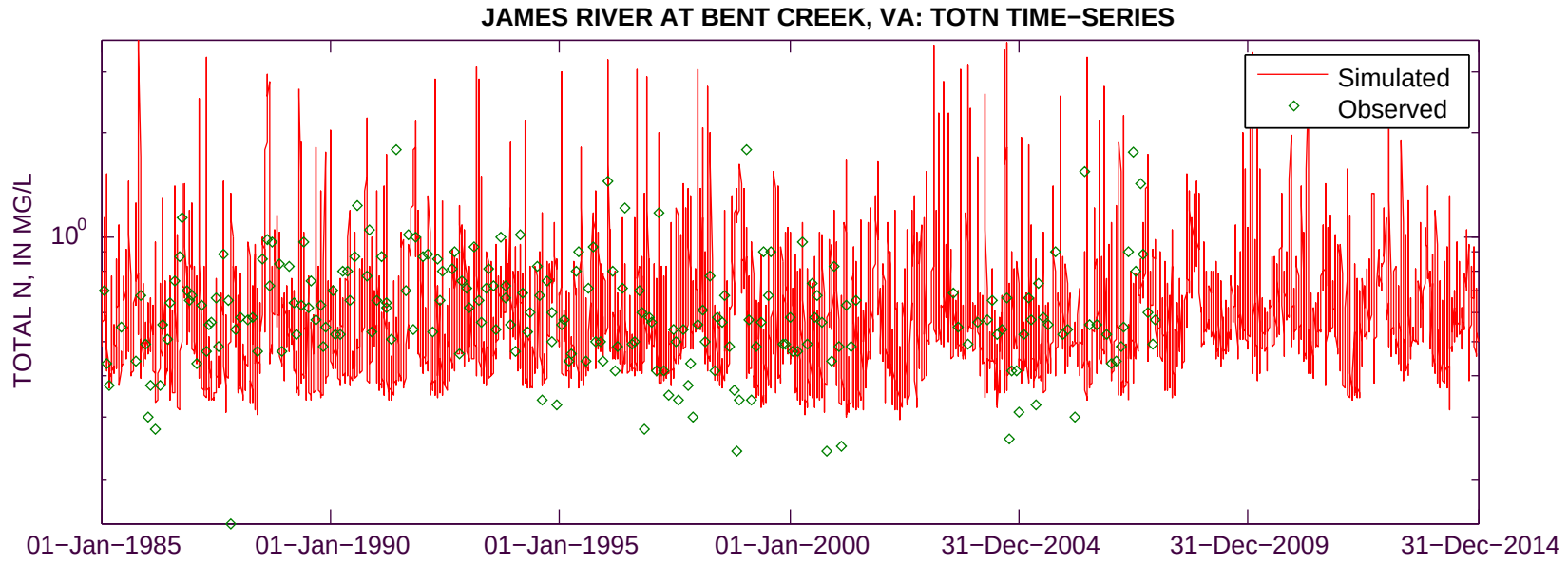
LOAD DATA
LOG10

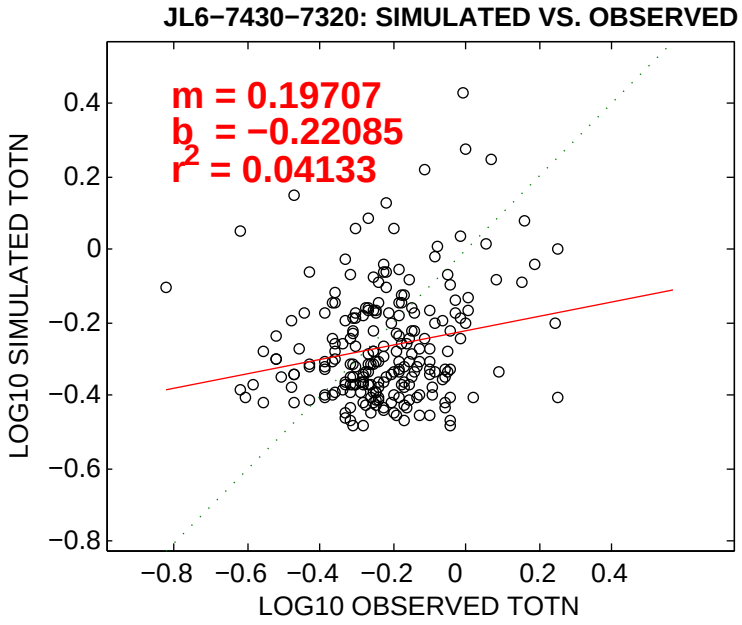


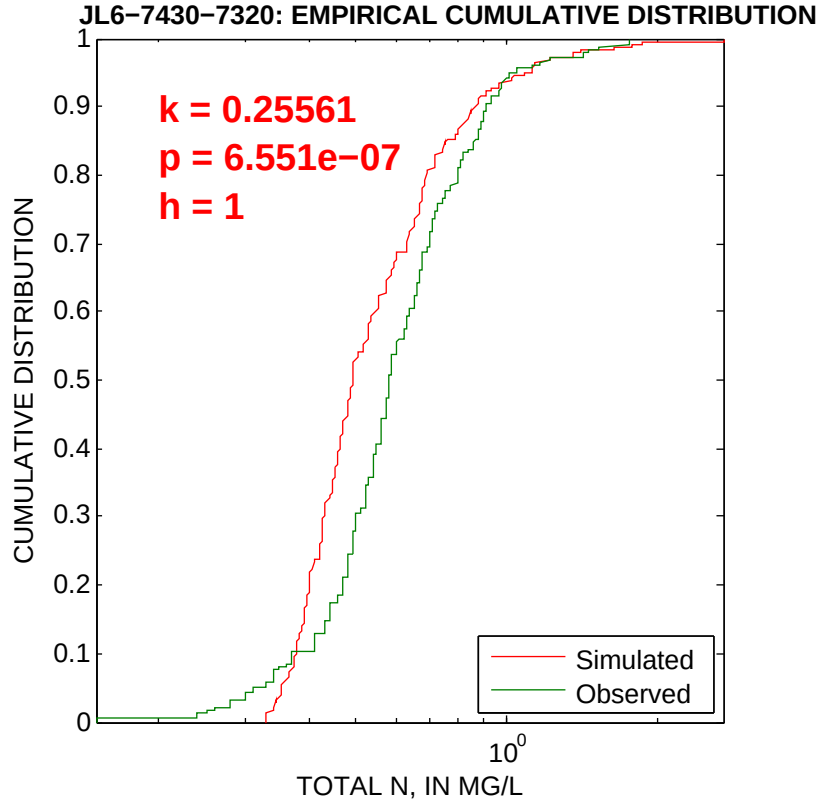












DATA SELECTION

scenario	file
P620171001WQ	TOTN.calib

plot: TOTN - total nitrogen

Dates: 1/1/1985 – 12/31/201

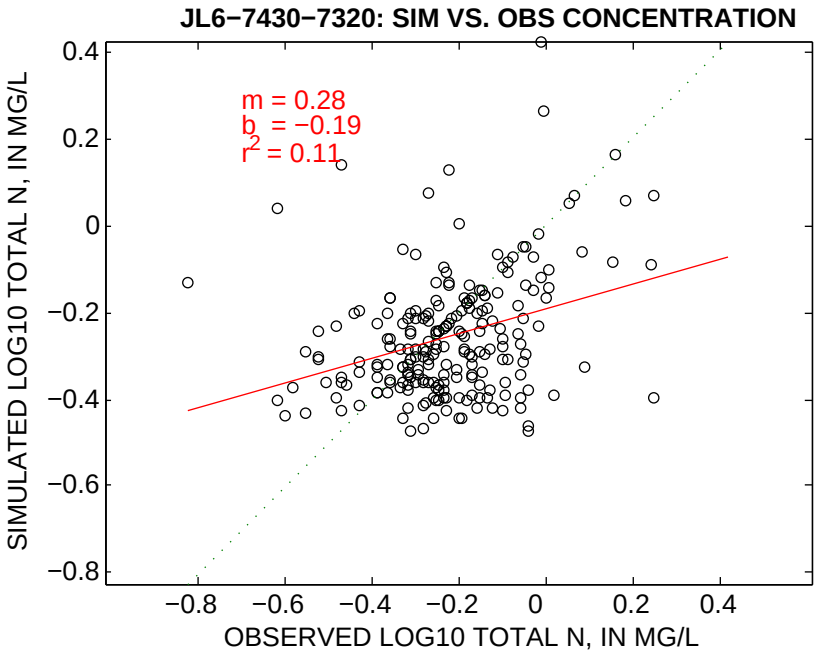
Drive	Directory	Observed
N/A	model	OBS20161101

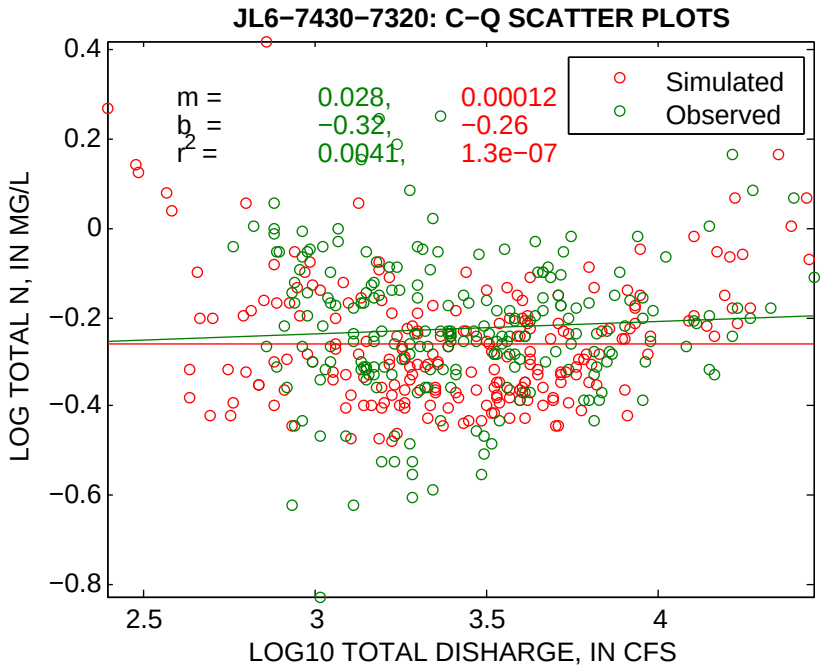
STATISTICS

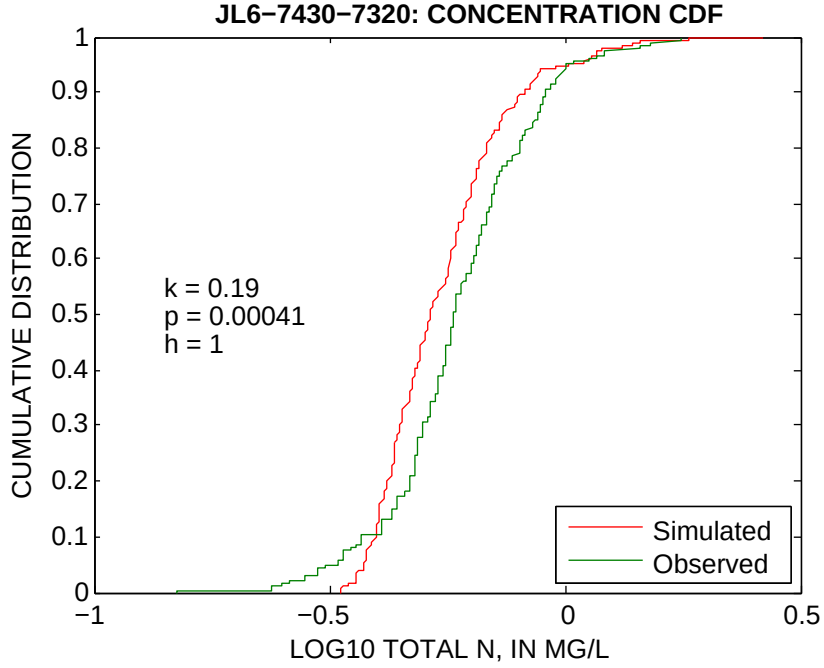
	n	observe	simulate
		223	223
min		0.15	0.32814
		-0.823909	-0.483941
mean		0.637937	0.585193
		-0.224848	-0.265164
media		0.58	0.4903
		-0.236572	-0.309538
max		1.77	2.7104
		0.247973	0.433033
varian		0.0639804	0.0798427
		0.0255324	0.0239928
JB		0.001	0.001
		0.006817	0.001
		ra	log
%		-8.26789	17.9304
err.va		0.10992	0.0410944
rel.std.err		1.71803	1.6095
mod.eff		-0.718029	-0.609501

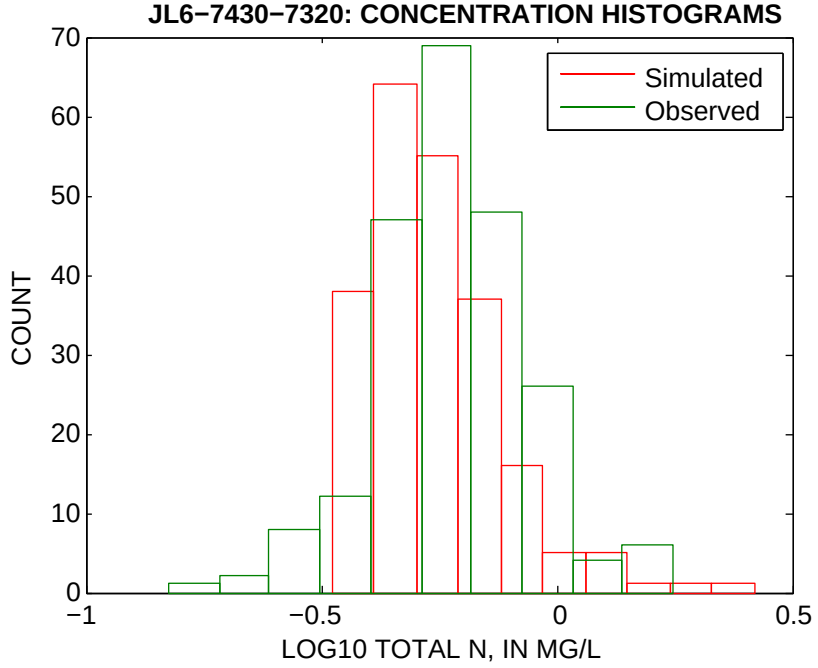
VERSION 2.1

ALL DATA
LOG10

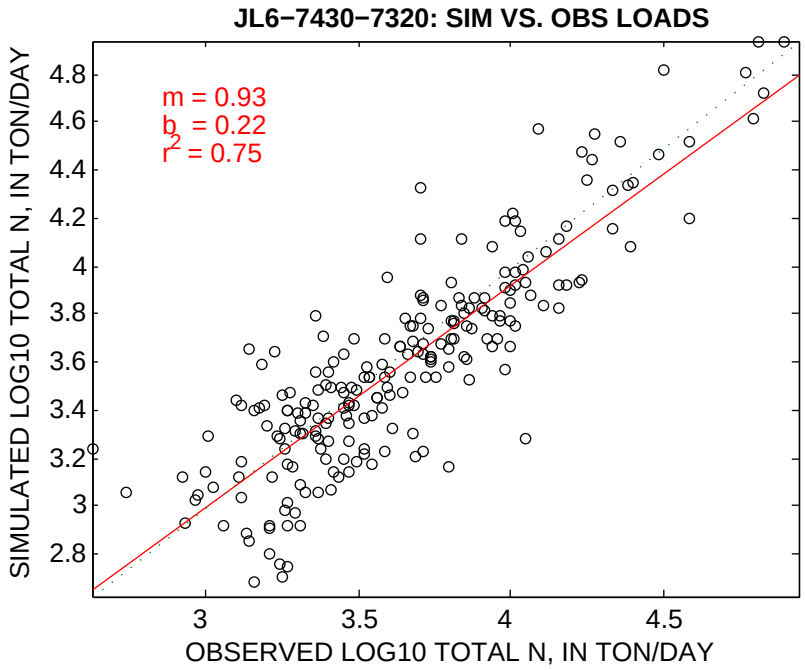




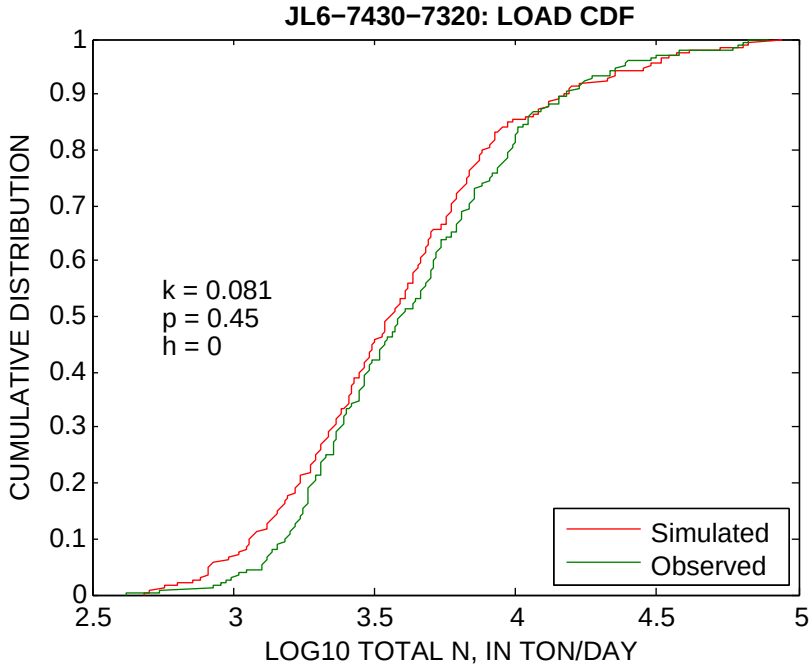


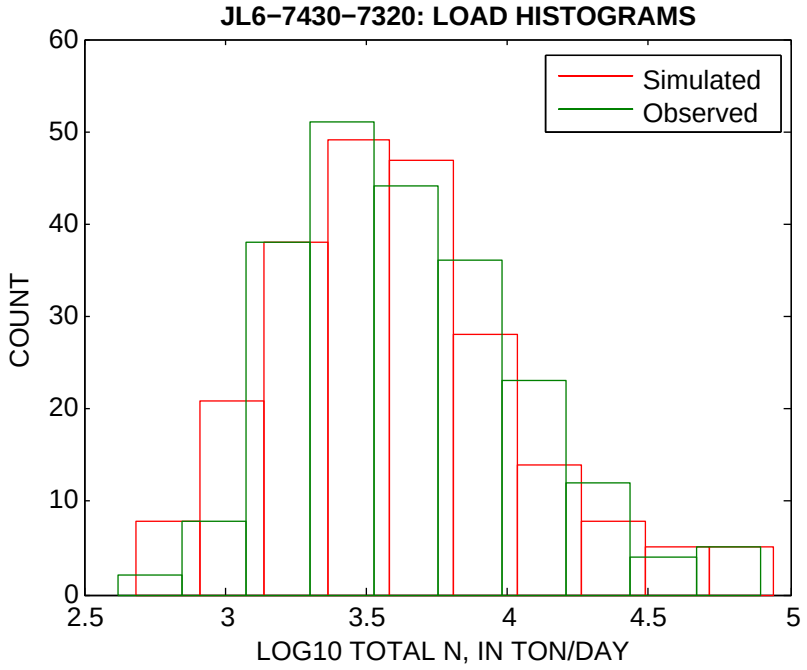


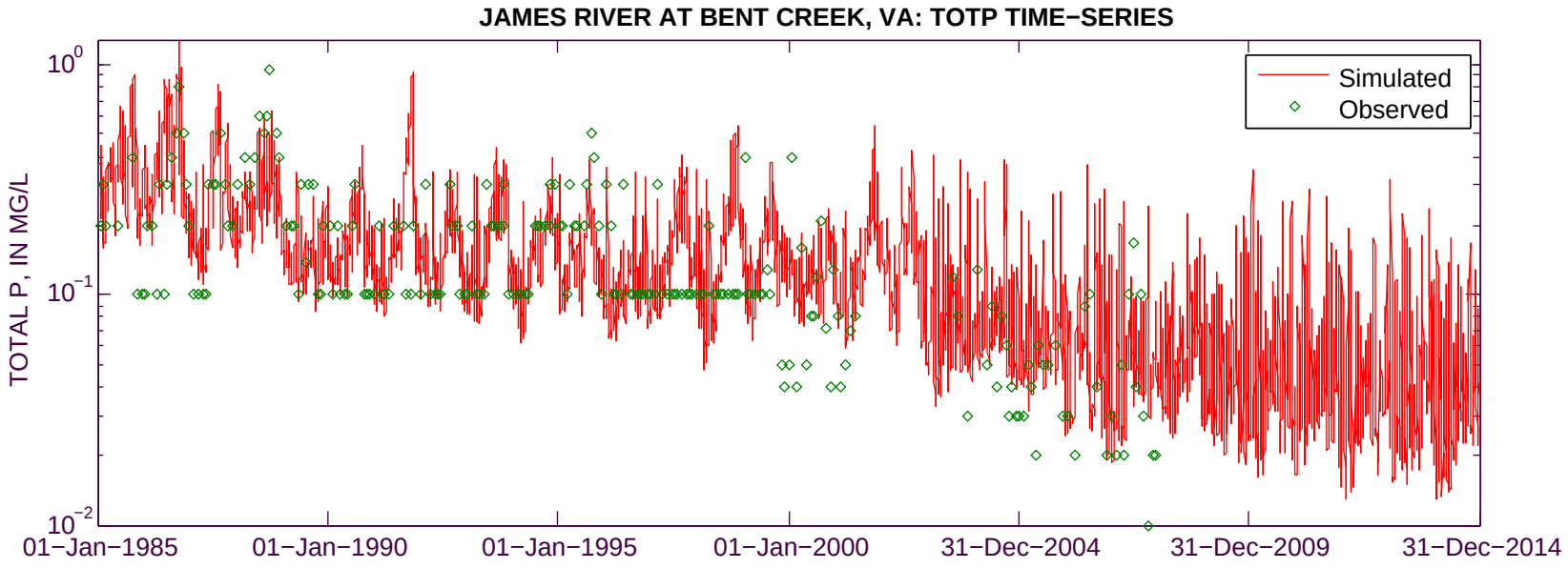
LOAD DATA
LOG10

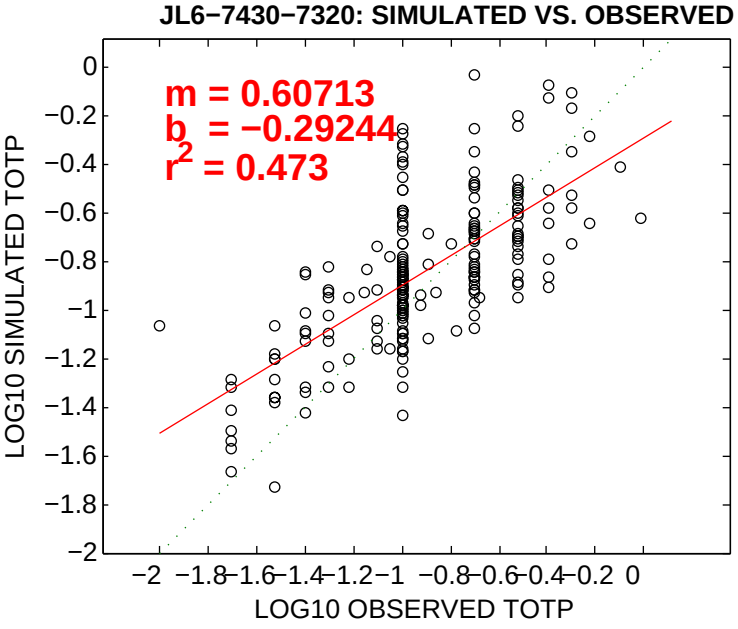


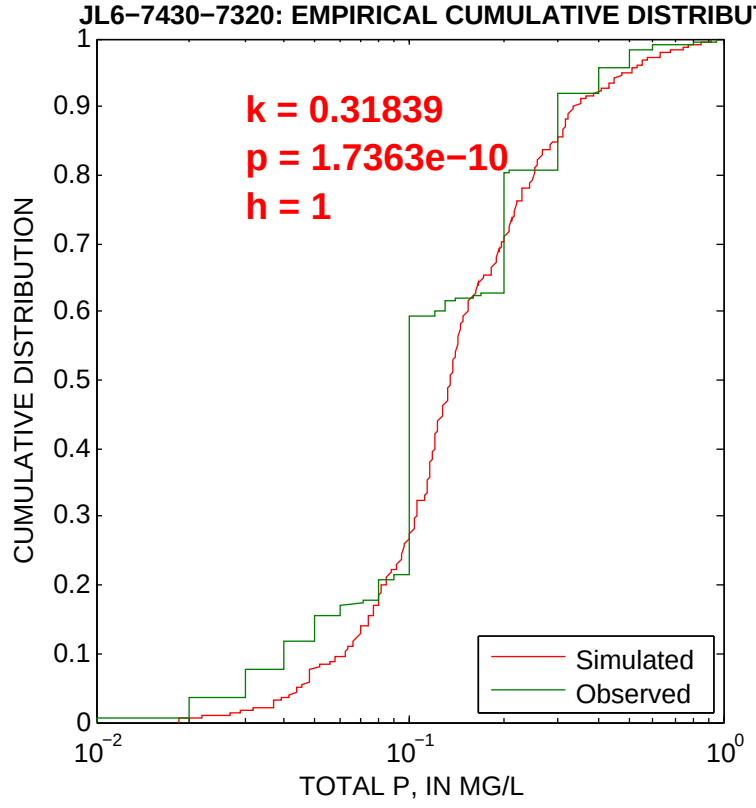












DATA SELECTION

scenario	file
P620171001WQ	TOTP.calib

plot: TOTP - total phosphorus

Dates: 1/1/1985 – 12/31/201

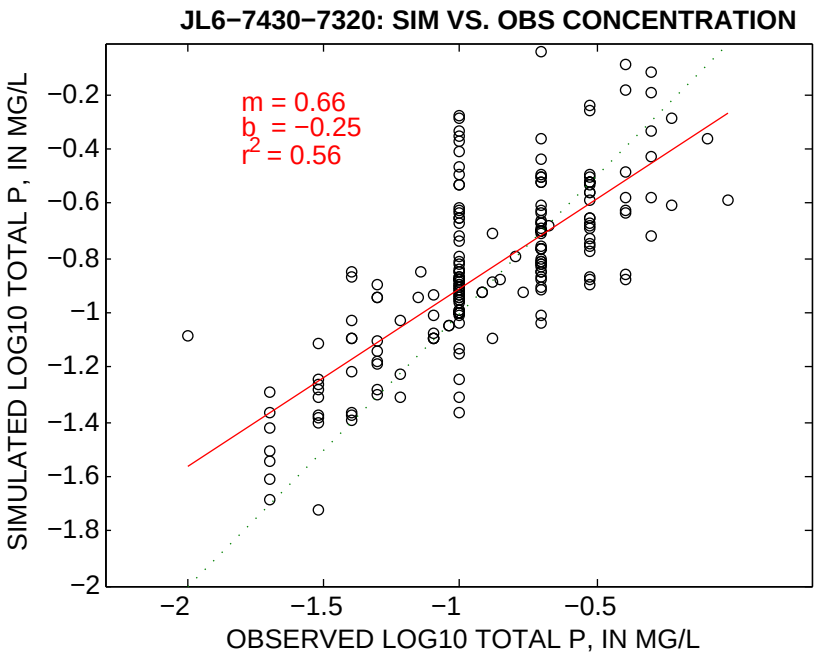
Drive	Directory	Observed
N/A	model	OBS20161101

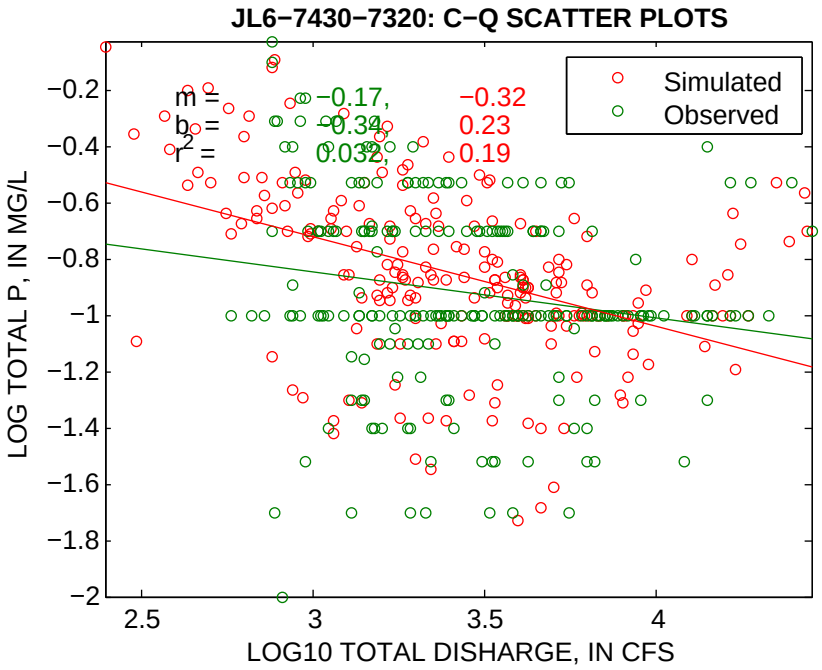
STATISTICS

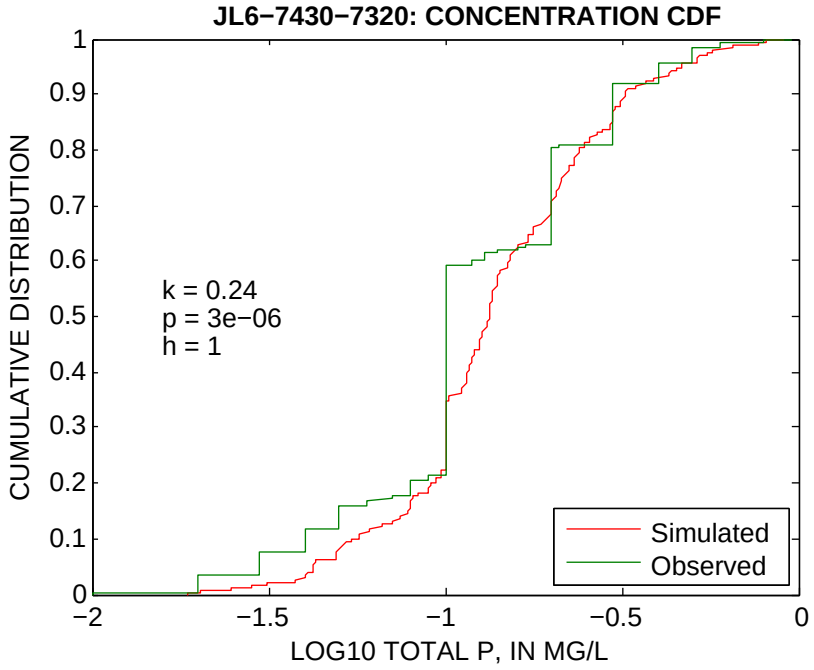
	n	observe	simulate
		223	223
min		0.01	0.018442
		-2	-1.73419
mean		0.163143	0.181775
		-0.914836	-0.847863
media		0.1	0.13575
		-1	-0.86726
max		0.96	0.9231
		-0.0177288	-0.0347512
varian		0.0184559	0.0216693
		0.117466	0.091539
JB		0.001	0.001
		0.272687	0.5
		ra	log
%		11.4202	-7.32068
err.va		0.0204077	0.0708773
rel.std.err		1.10575	0.603384
mod.eff		-0.105753	0.396616

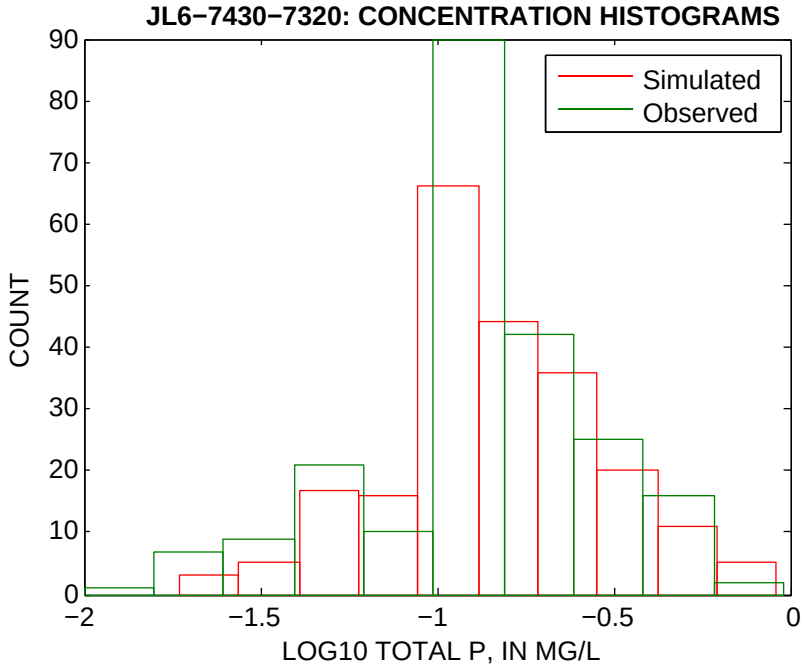
VERSION 2.1

ALL DATA
LOG10

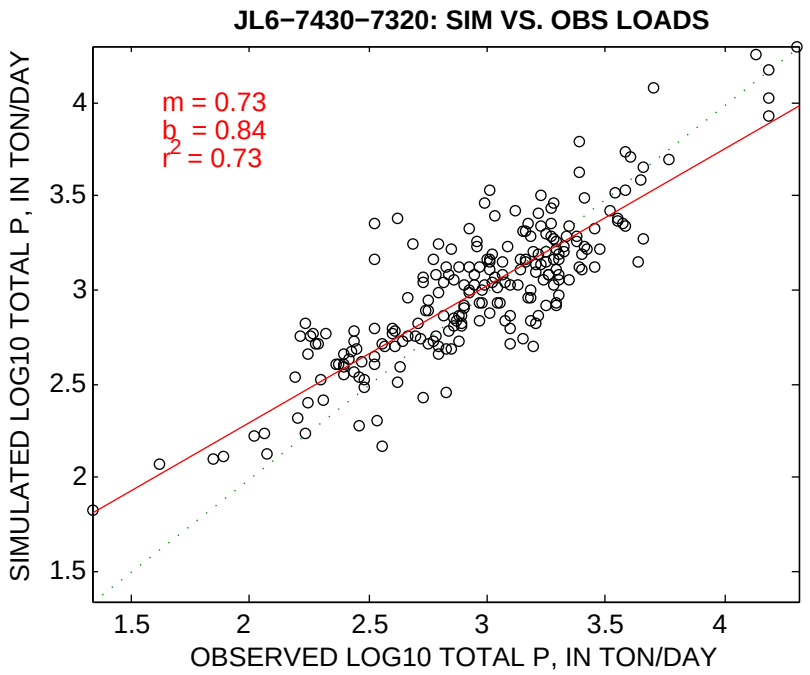




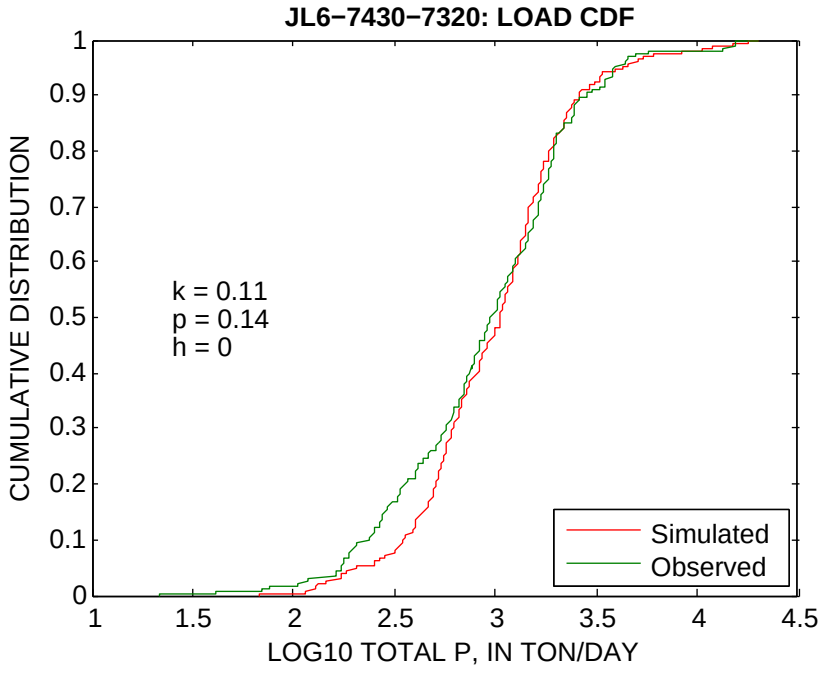


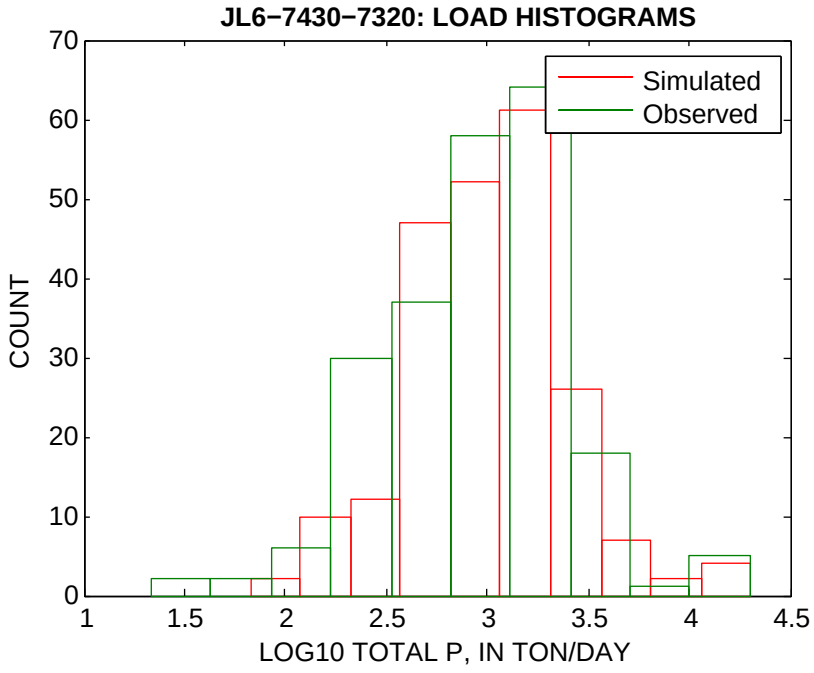


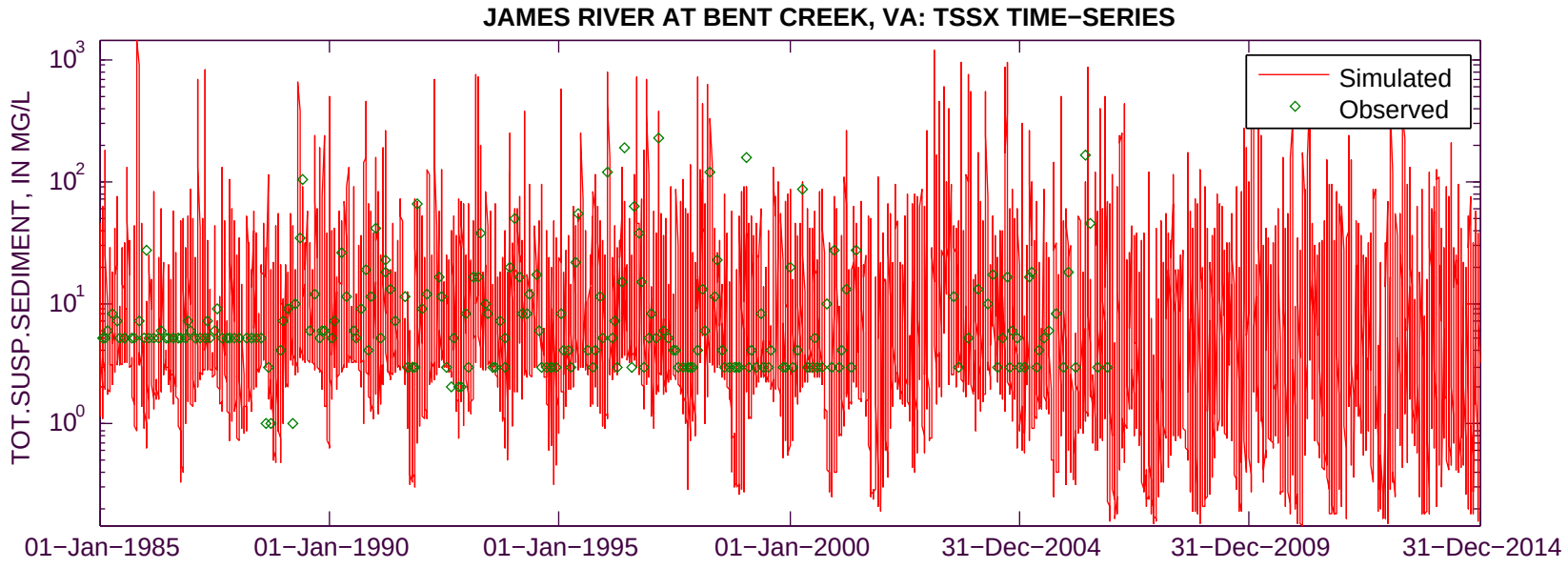
LOAD DATA
LOG10

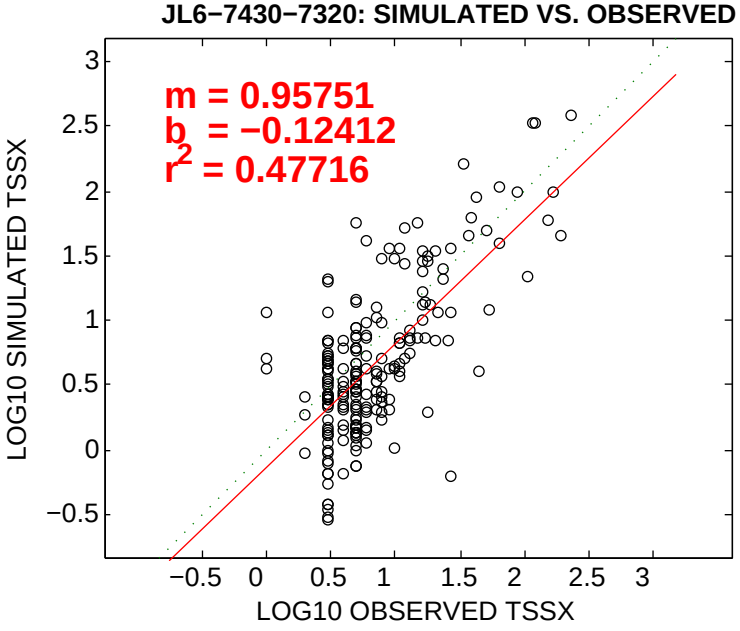


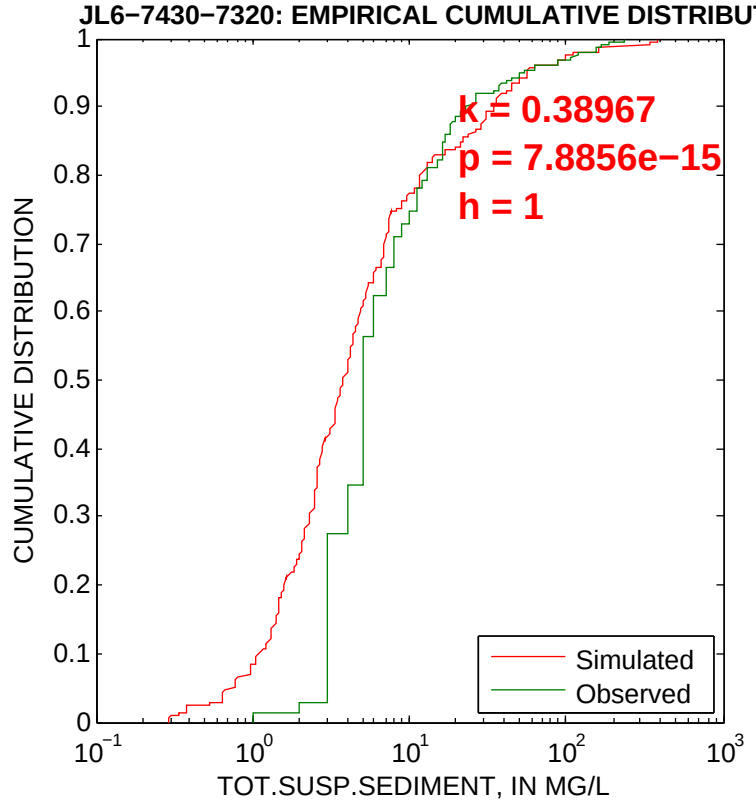












DATA SELECTION

scenario	file
P620171001WQ	TSSX.calib

plot: TSSX - total suspended ...

Dates: 1/1/1985 – 12/31/201

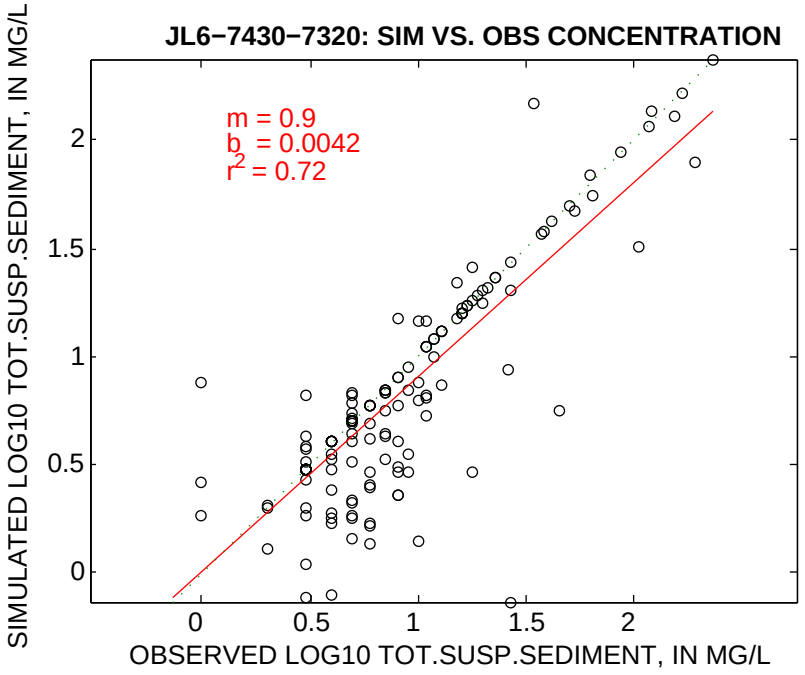
Drive	Directory	Observed
N/A	model	OBS20161101

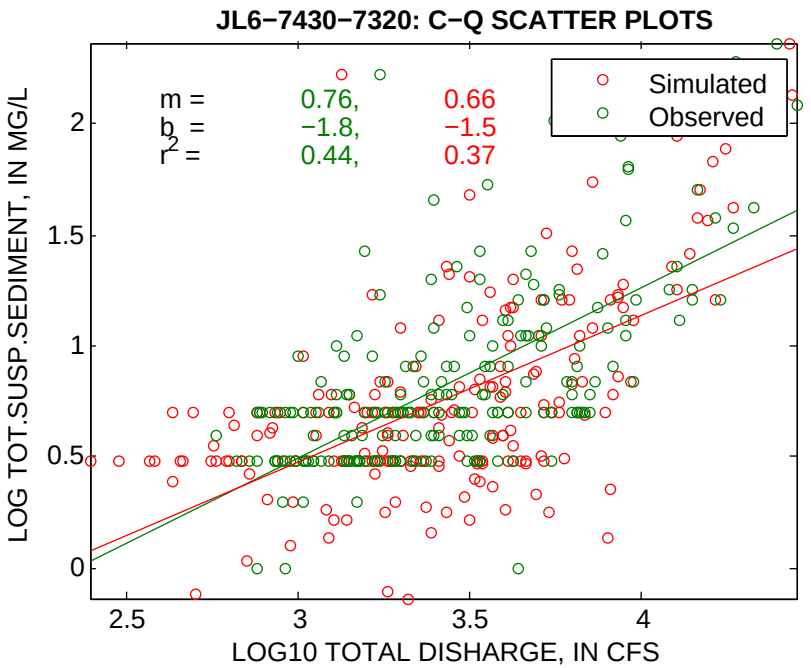
STATISTICS

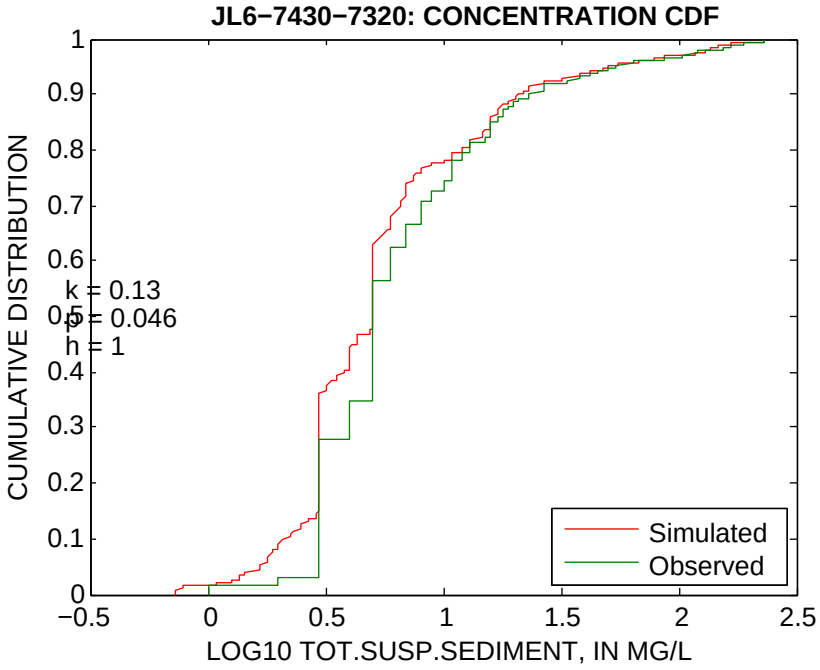
	n	observe	simulate
		213	213
min		1	0.28851
		0	-0.539839
mean		13.9014	15.675
		0.833939	0.674379
media		5	3.8266
		0.69897	0.582813
max		233	381.42
		2.36736	2.5814
varian		869.108	2044.23
		0.176204	0.338563
JB		0.001	0.001
		0.001	0.001026
		ra	log
%		12.7581	-19.1333
err.va		949.409	0.202913
rel.std.err		1.0924	1.15158
mod.eff		-0.092395	-0.151583

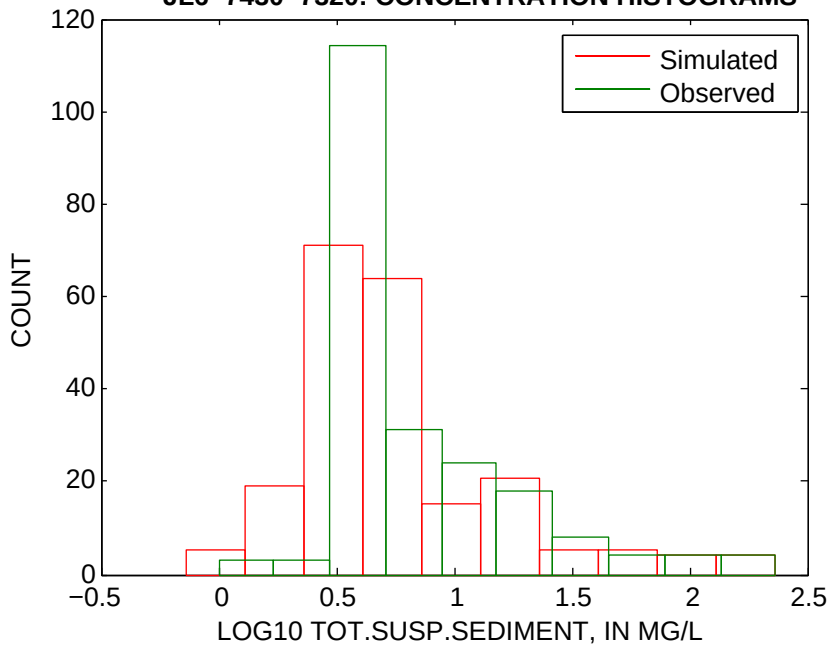
VERSION 2.1

ALL DATA
LOG10

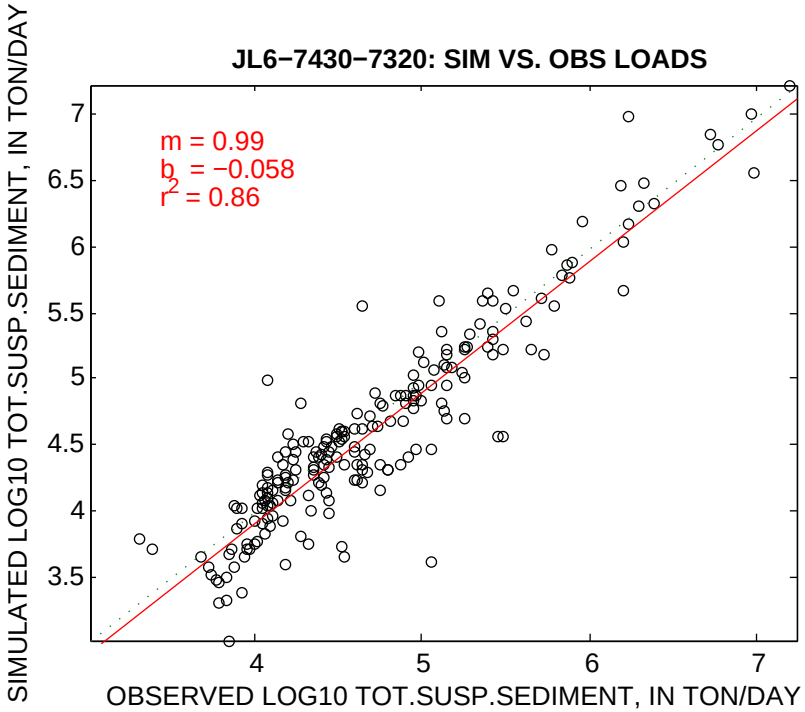


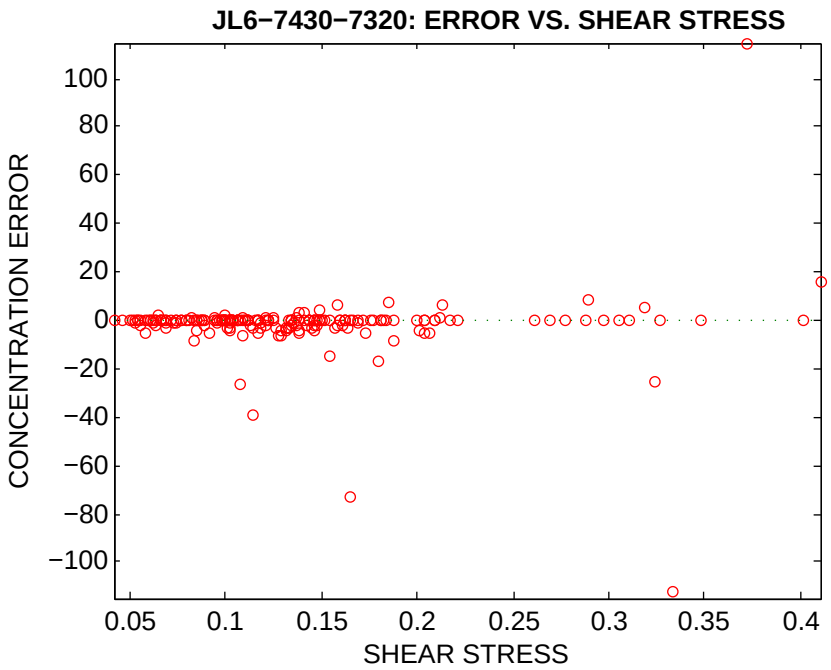


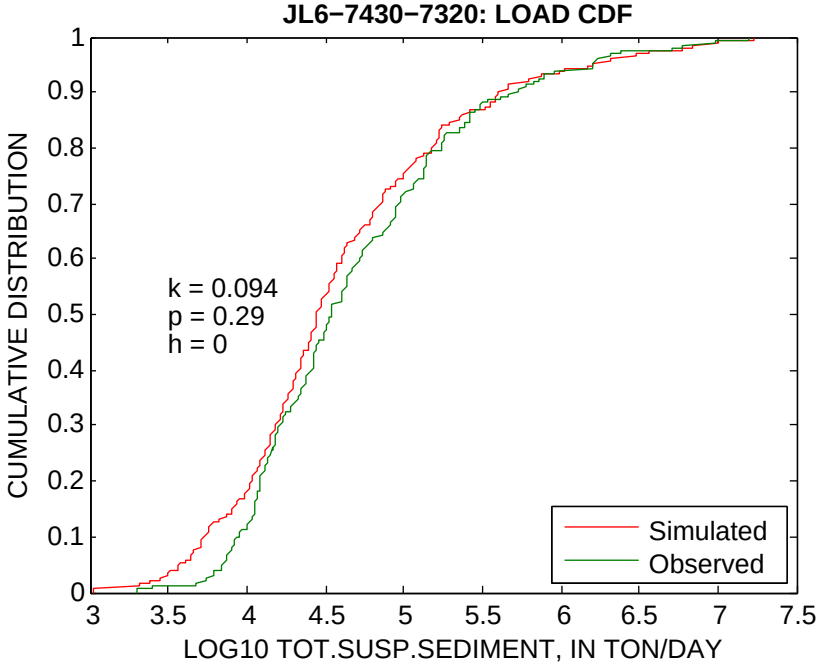


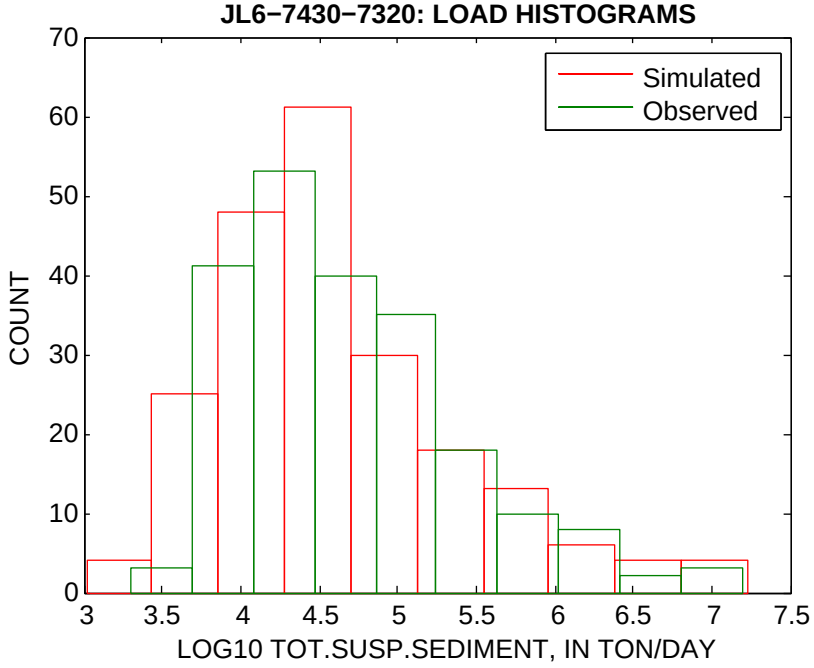


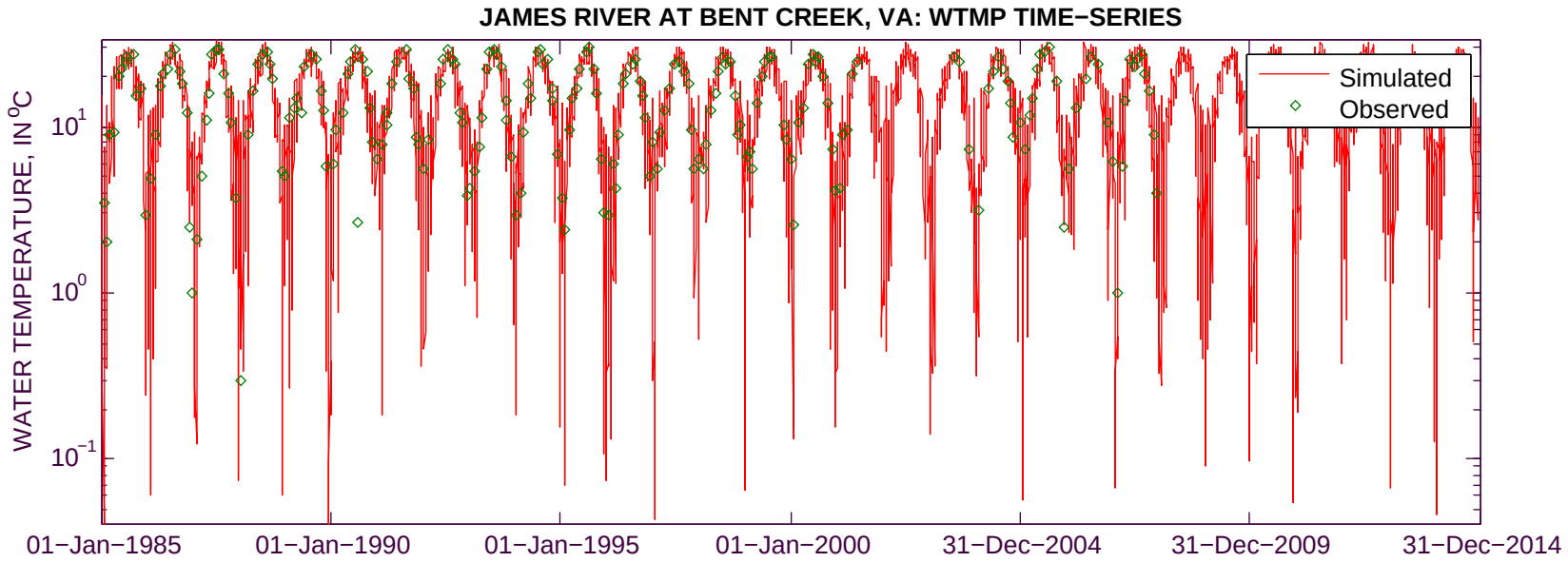
LOAD DATA
LOG10

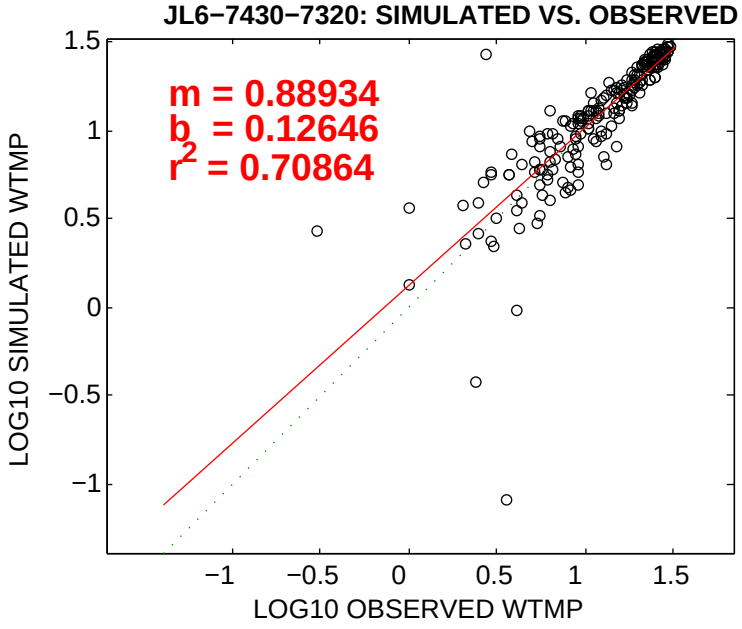


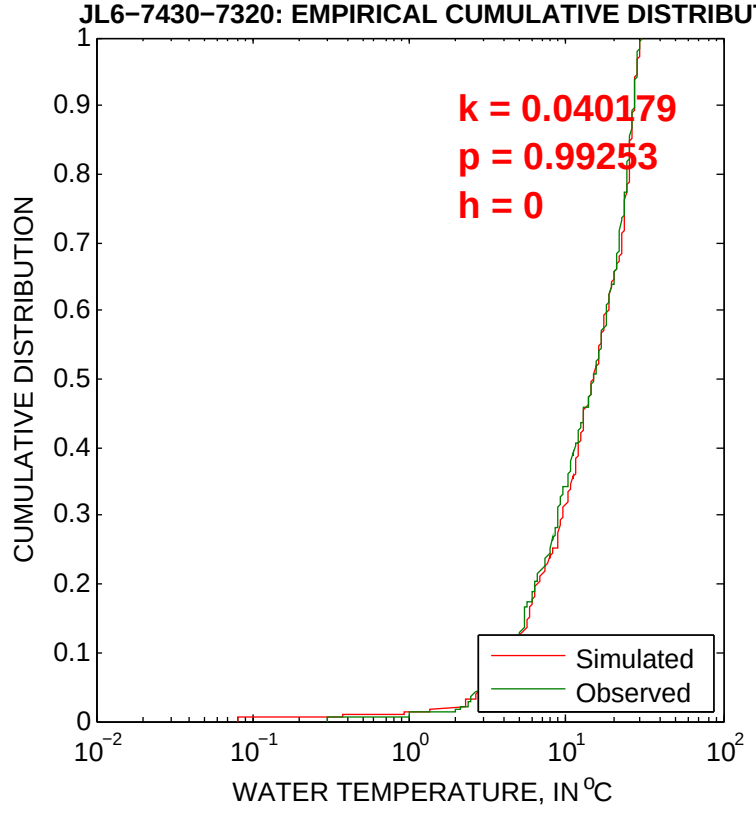












DATA SELECTION

scenario	file
P620171001WQ	WTMP.calib

plot: WTMP - water tempera...

Dates: 1/1/1985 – 12/31/201

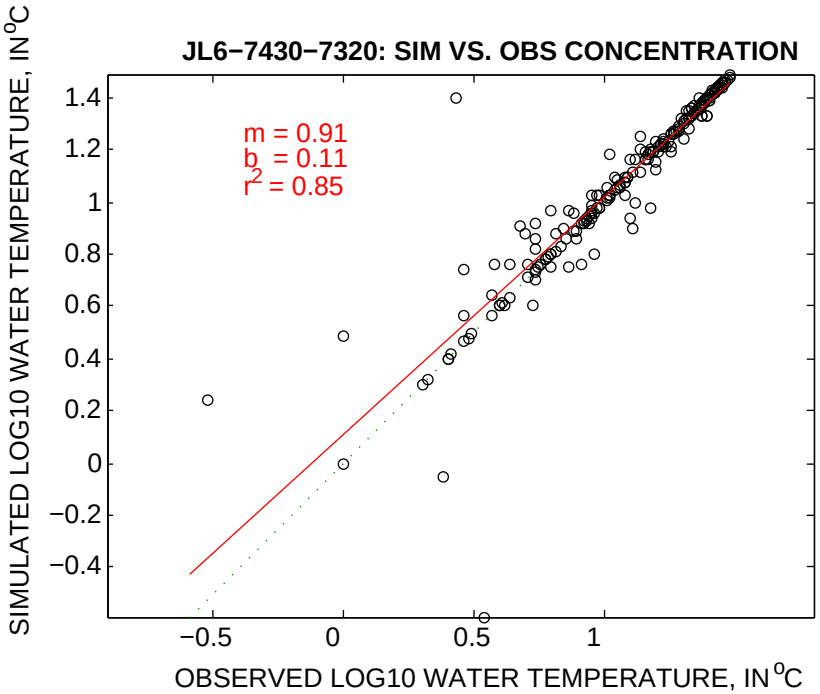
Drive	Directory	Observed
N/A	model	OBS20161101

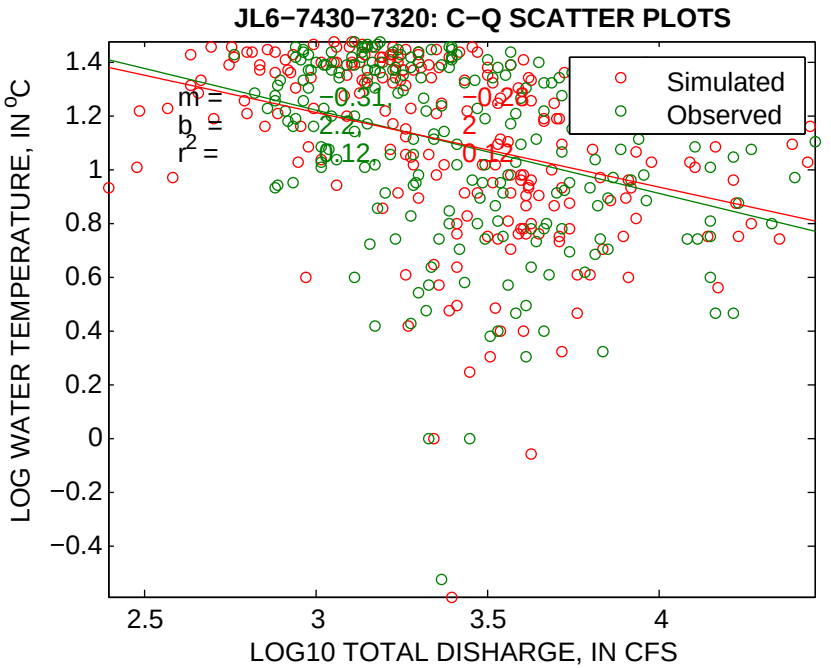
STATISTICS

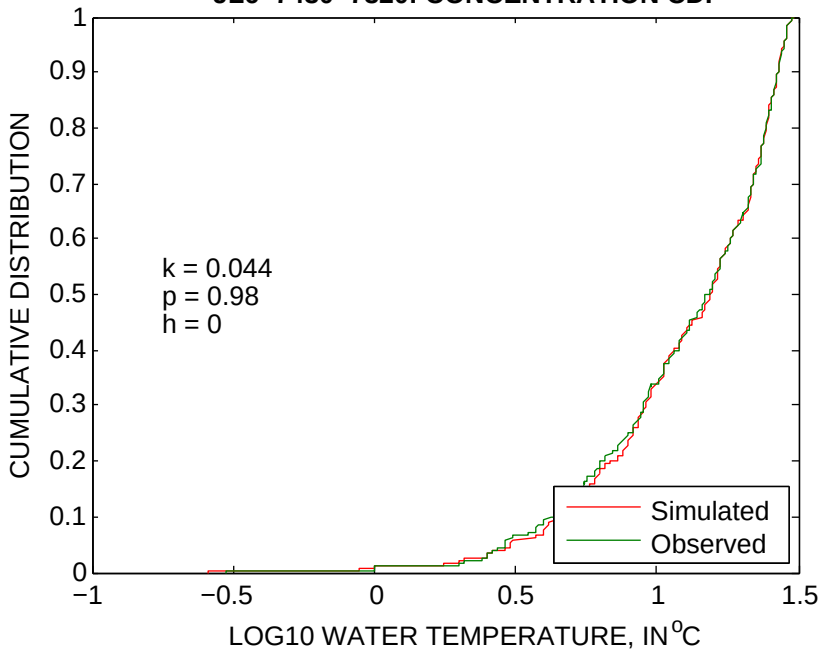
	n	224	224
		observe	simulate
min		0.3	0.079249
		-0.522879	-1.10101
mean		15.3413	15.6061
		1.08894	1.0949
media		14.91	15.04
		1.17348	1.17725
max		30.34	30.215
		1.48202	1.48022
varian		72.045	71.8374
		0.111383	0.124317
JB		0.004096	0.004564
		0.001	0.001
		ra	log
% err.va		1.72596	0.547344
		7.93865	0.0376201
rel.std.err		0.11019	0.337754
mod.eff		0.88981	0.662246

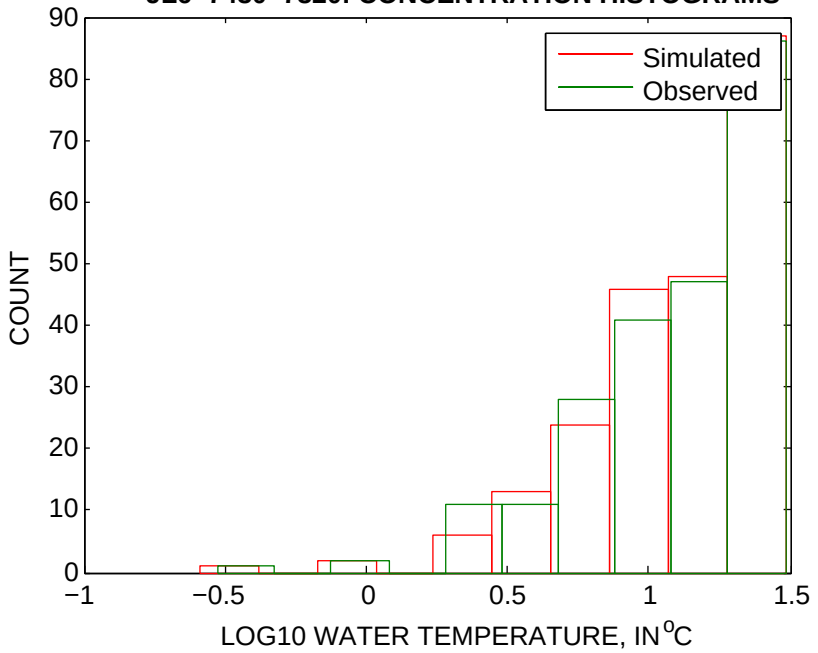
VERSION 2.1

ALL DATA
LOG10

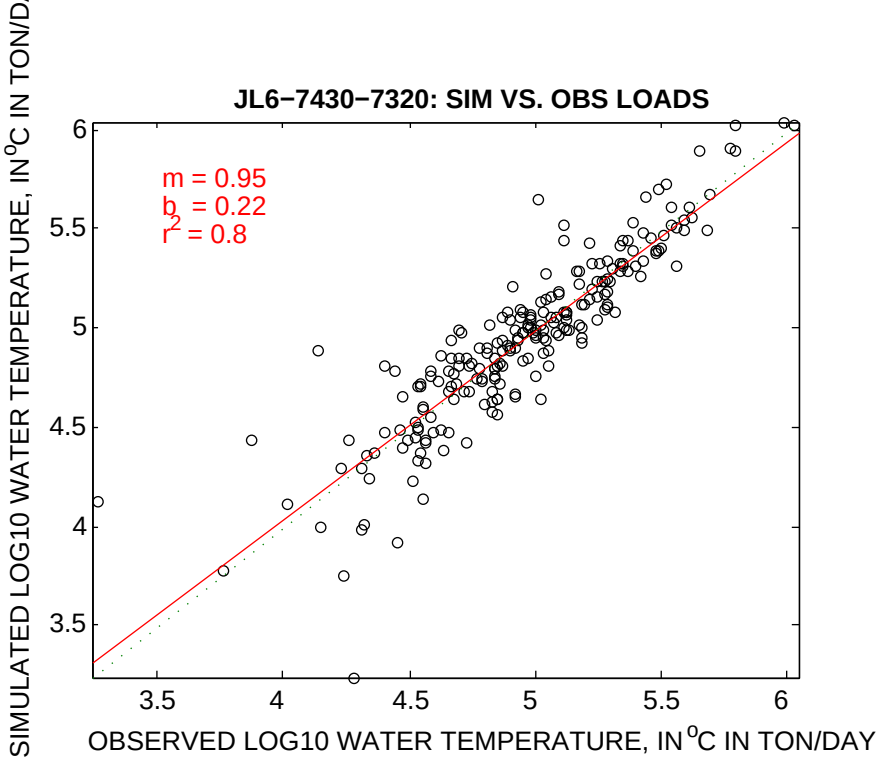




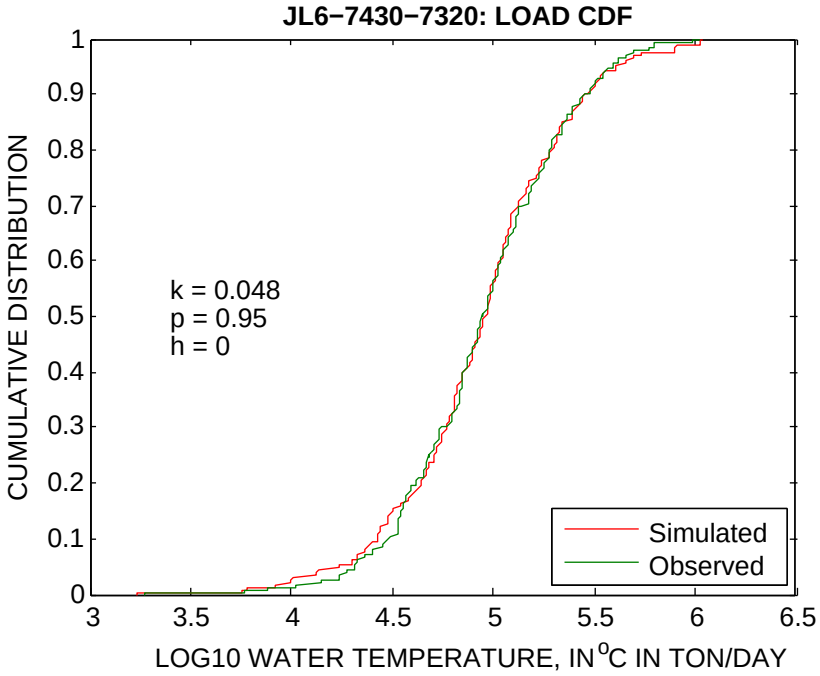


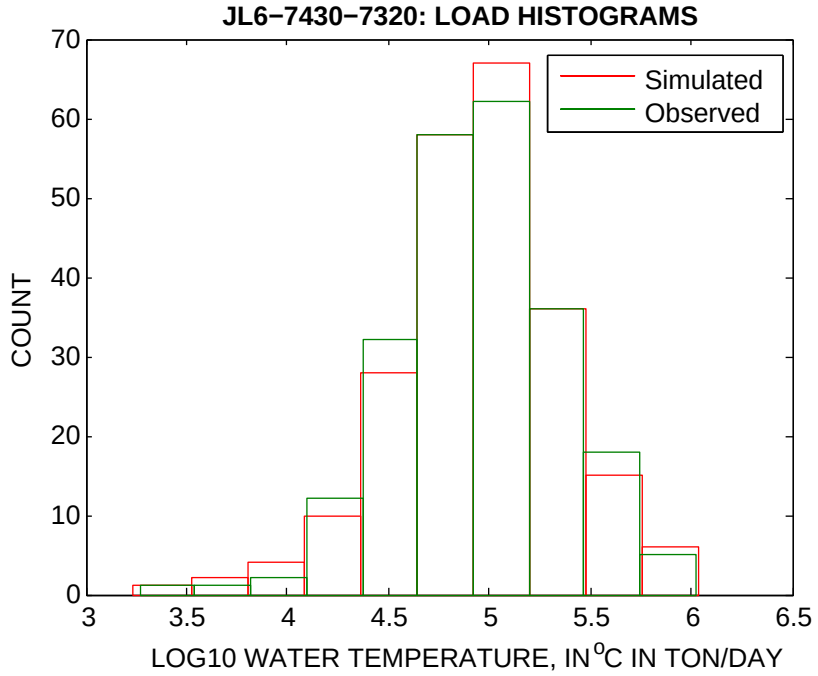


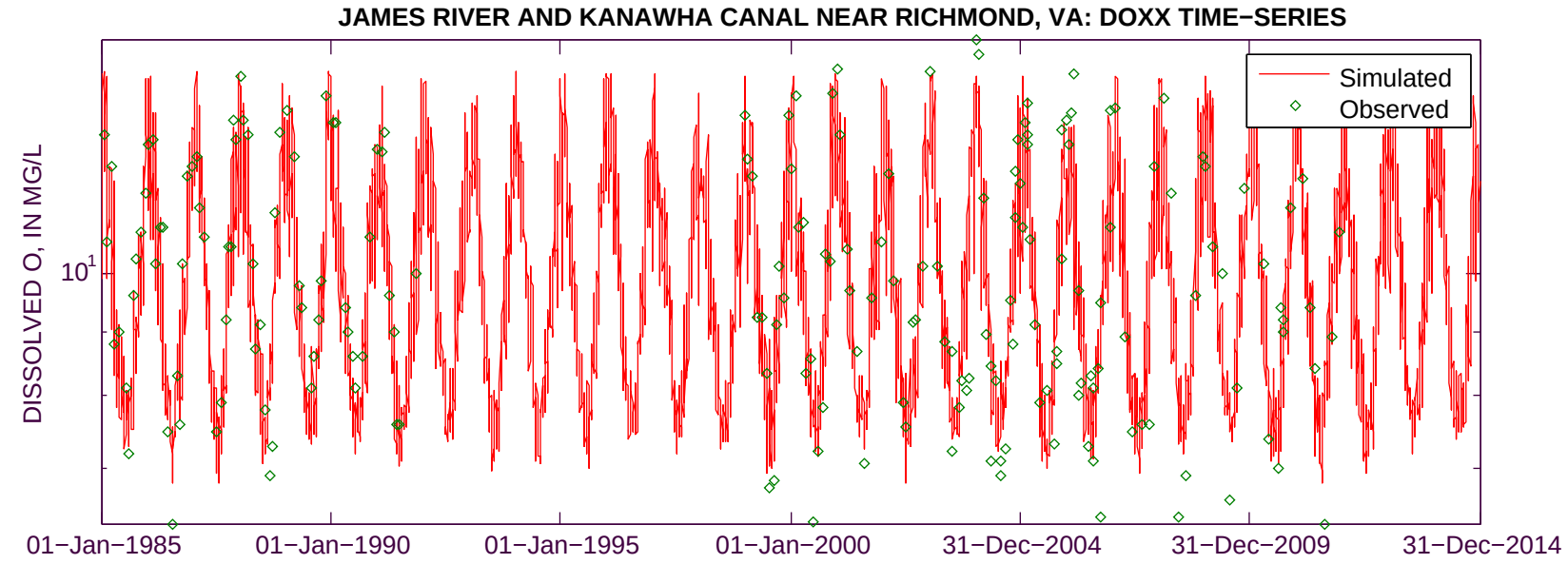
LOAD DATA
LOG10

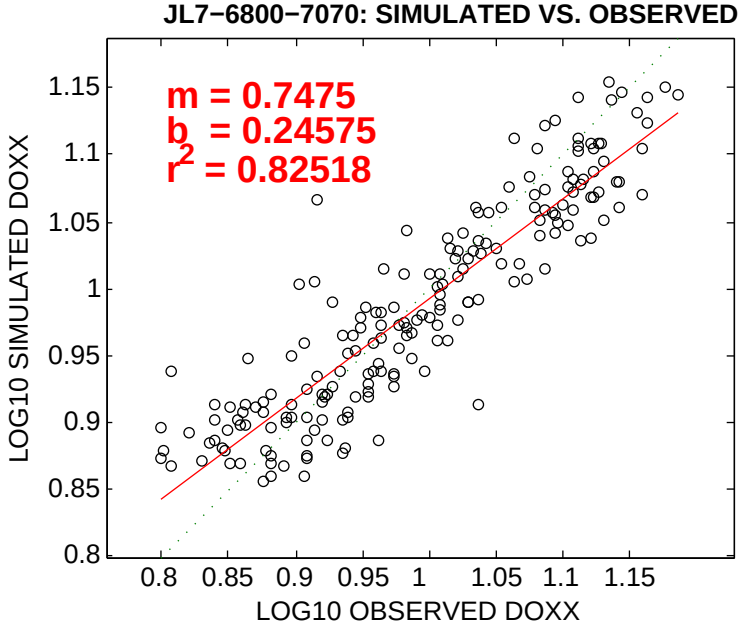


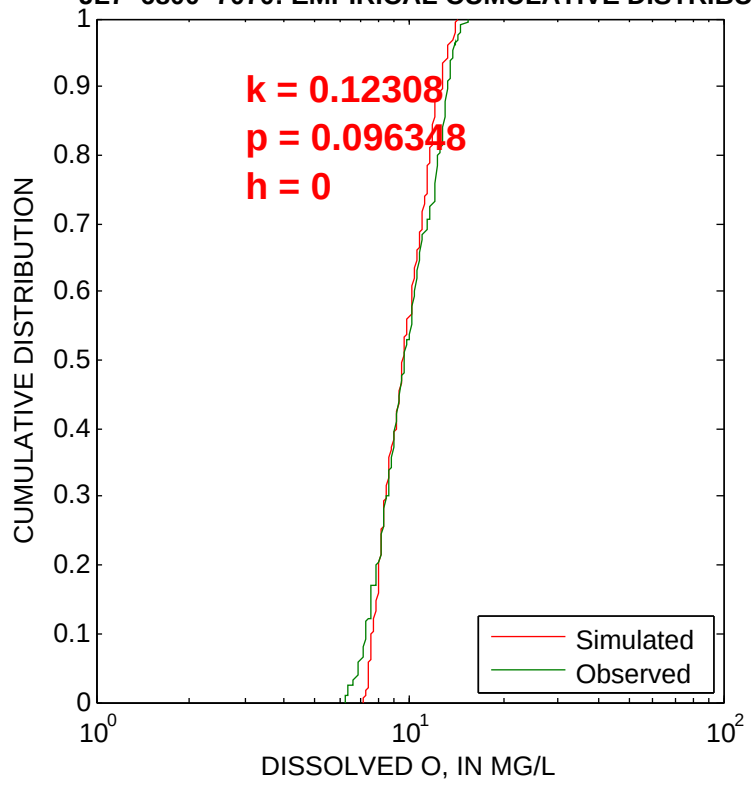












DATA SELECTION

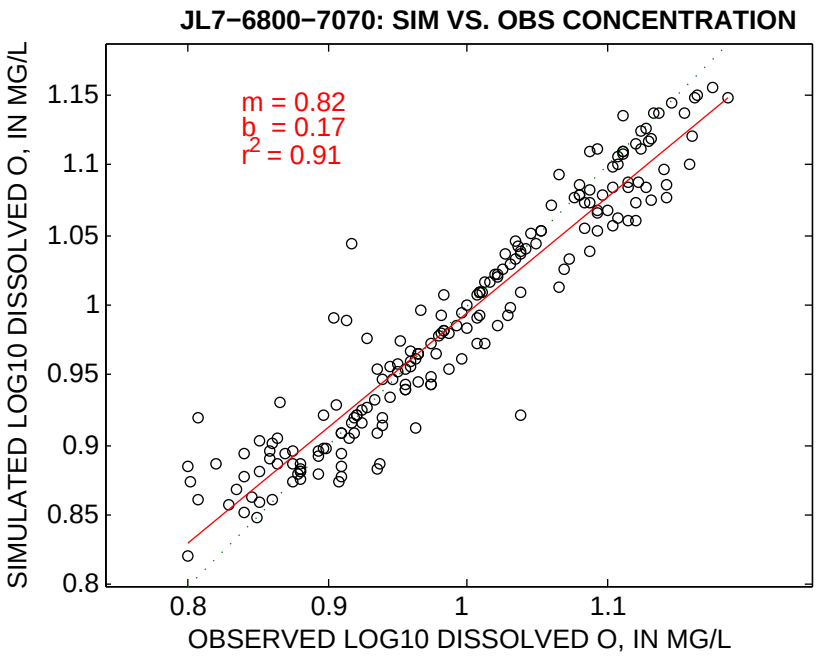
scenario: P620171001WQ
file: DOXX.calib
plot: DOXX - dissolved oxygen
Dates: 1/1/1985 12/31/201
Drive: N/A
Directory: model
Observed: OBS20161101

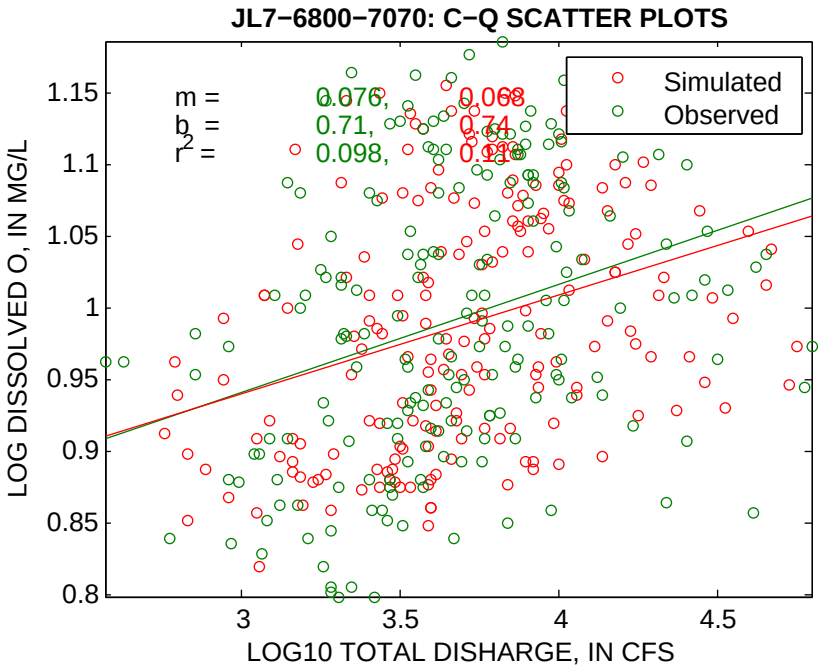
STATISTICS

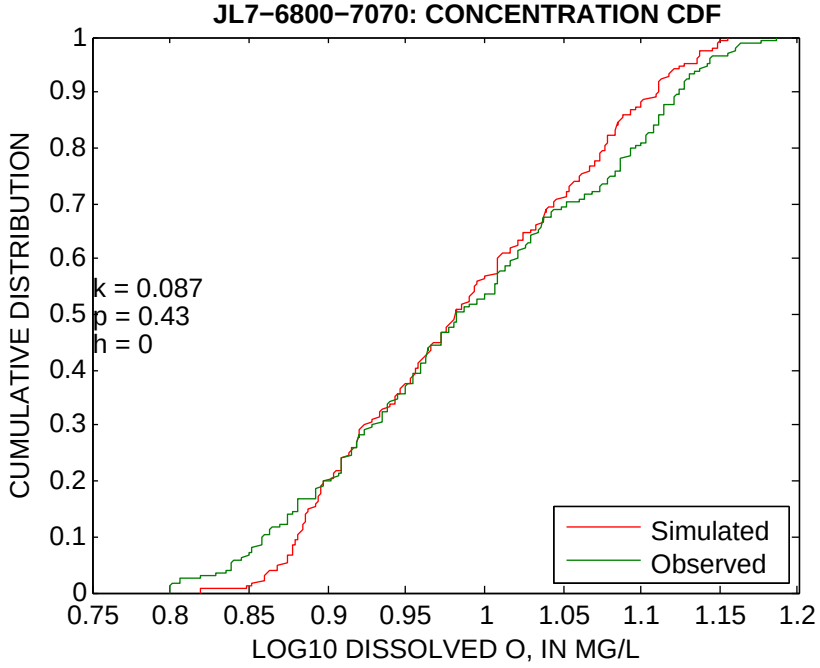
n	195	195
	observe	simulate
min	6.3	7.1689
	0.799341	0.855453
mean	10.0626	9.87679
	0.991843	0.987153
media	9.6	9.5561
	0.982271	0.980281
max	15.35	14.282
	1.18611	1.15479
varian	5.09575	3.45693
	0.00952163	0.00644747
JB	0.011983	0.008797
	0.021113	0.012231
	ra	log
%	-1.84666	-0.47291
err.va	0.915339	0.0017563
rel.std.err	0.179628	0.184453
mod.eff	0.820372	0.815547

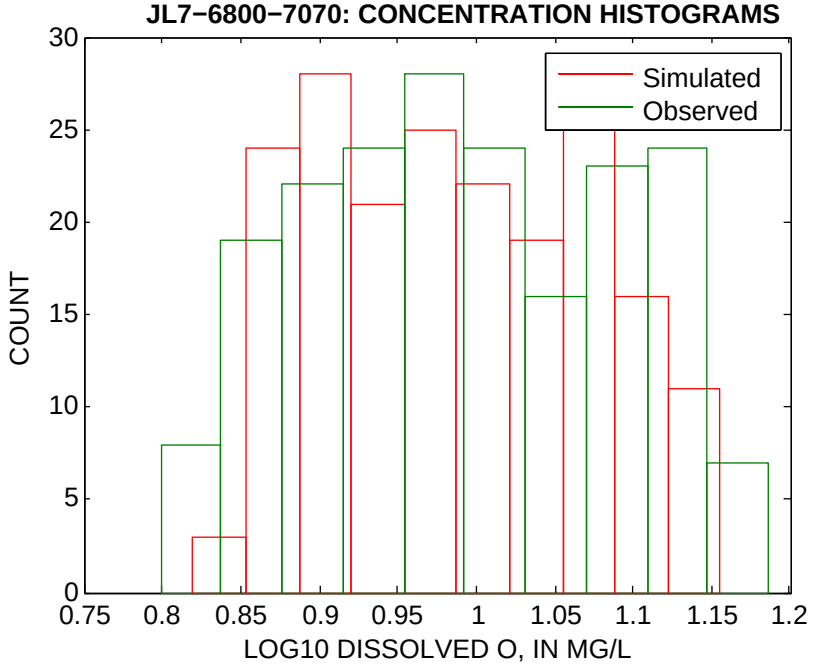
VERSION 2.1

ALL DATA
LOG10

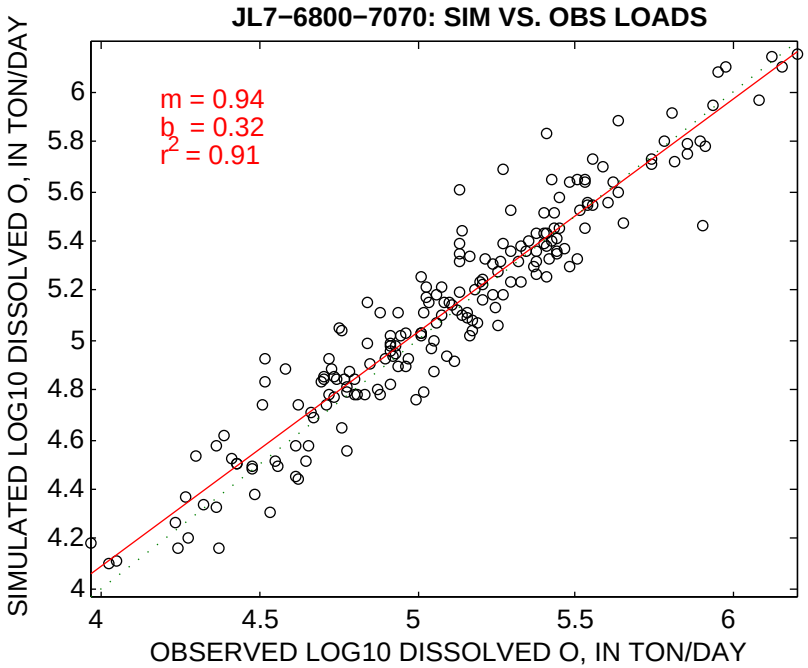




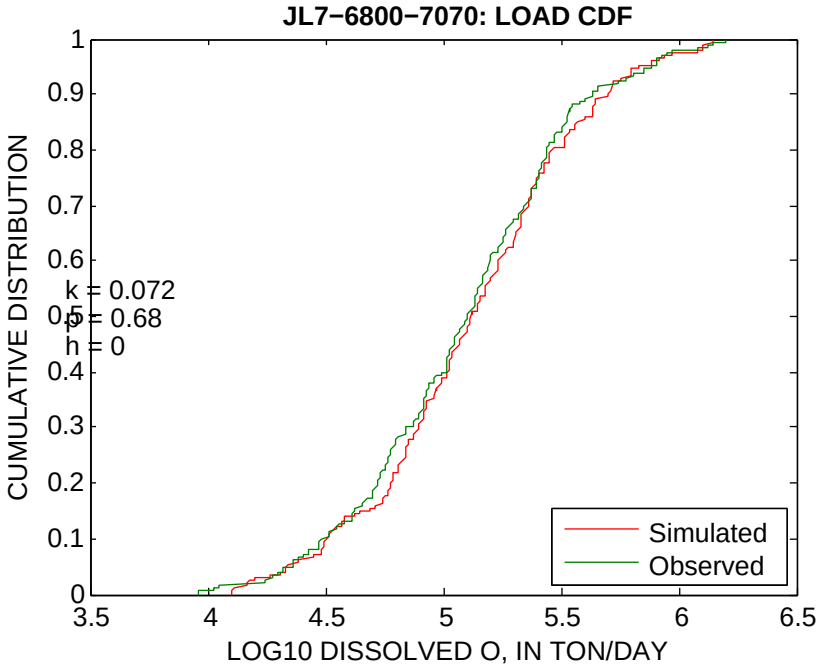


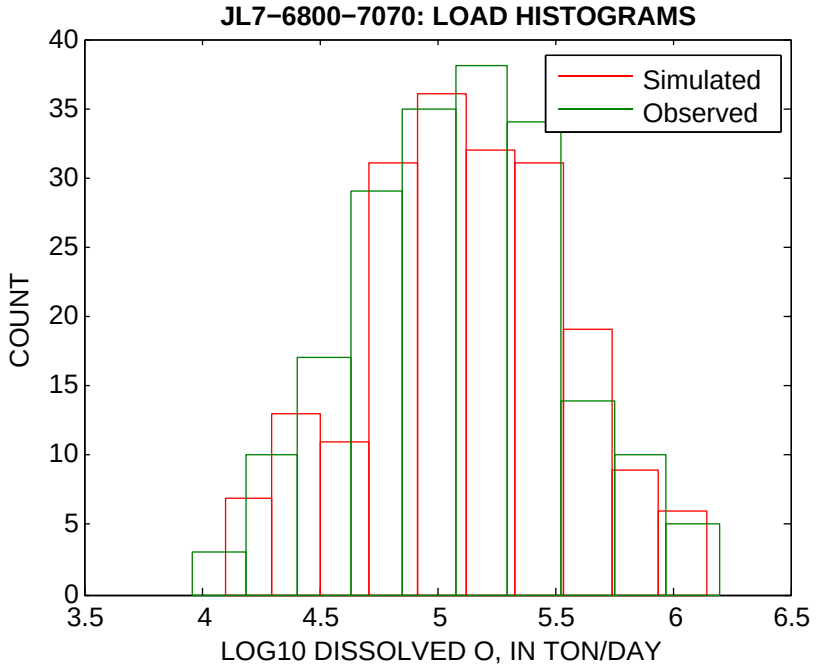


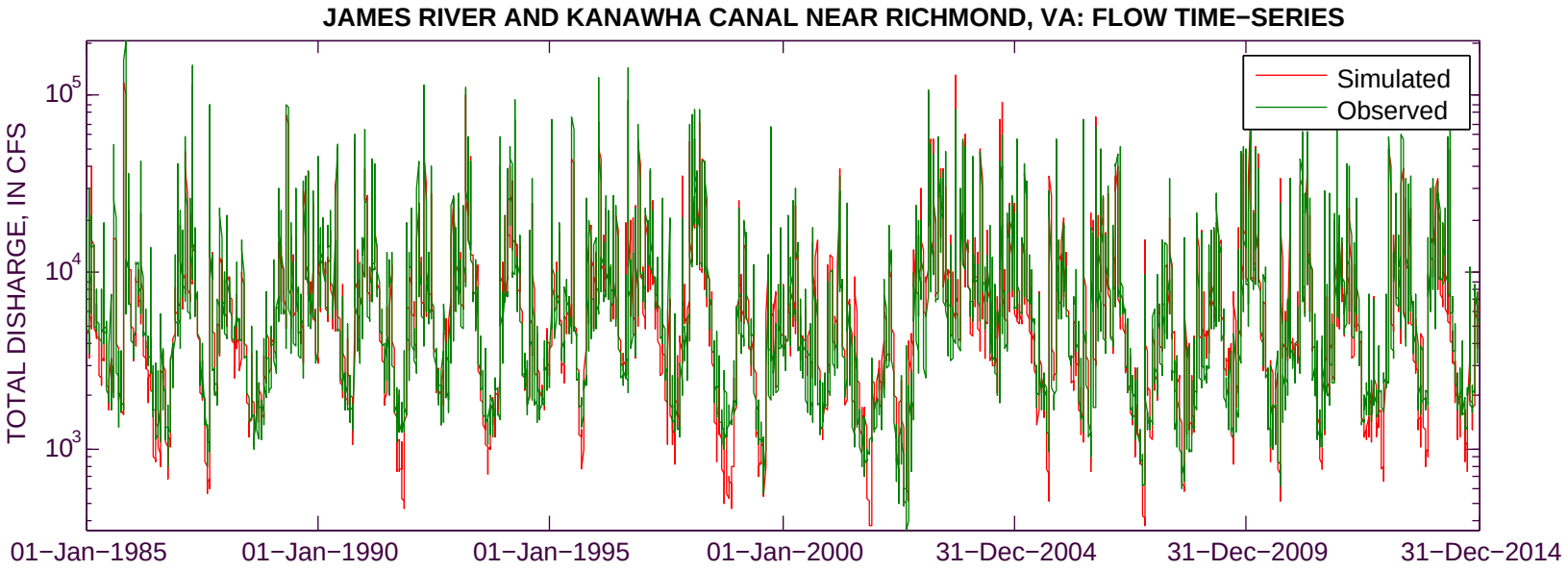
LOAD DATA
LOG10

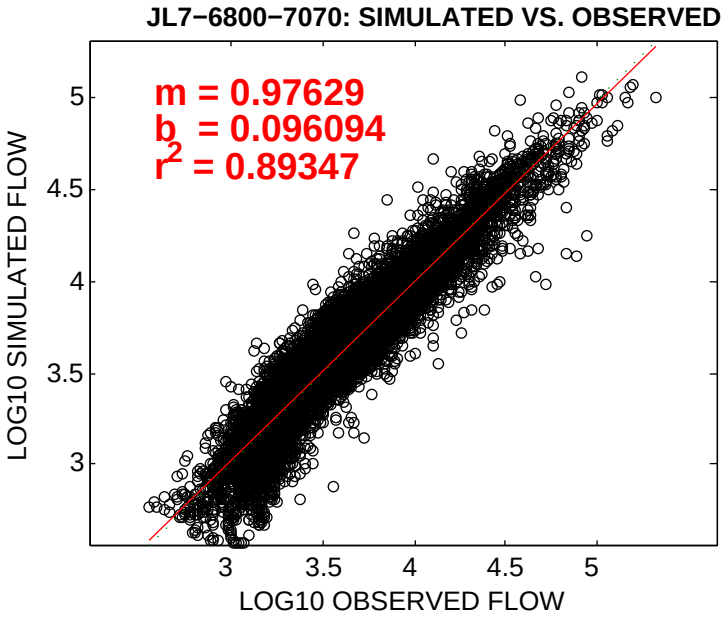


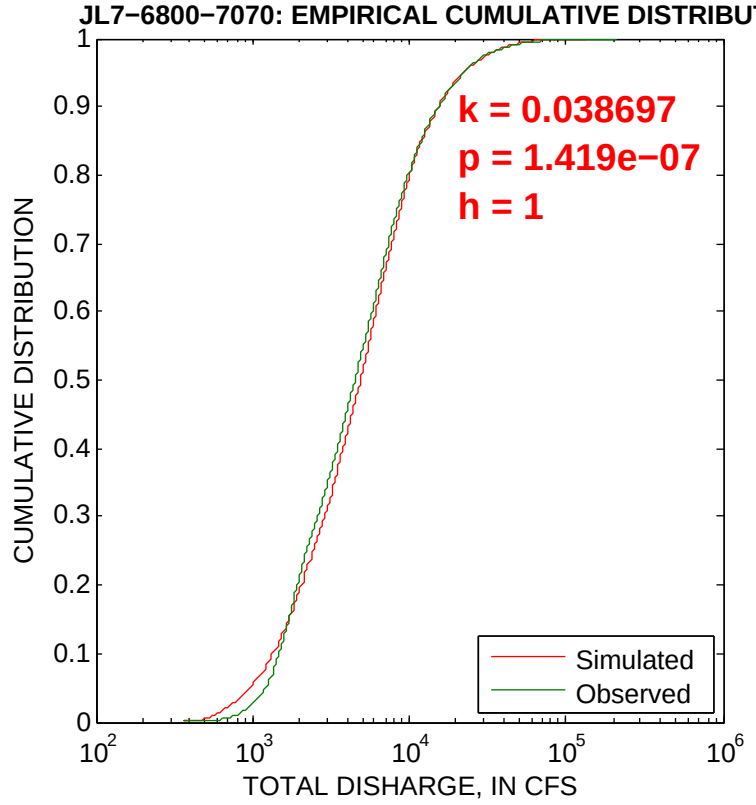












DATA SELECTION

scenario: P620171001WQ | file: FLOW.calib

plot: FLOW - total discharge

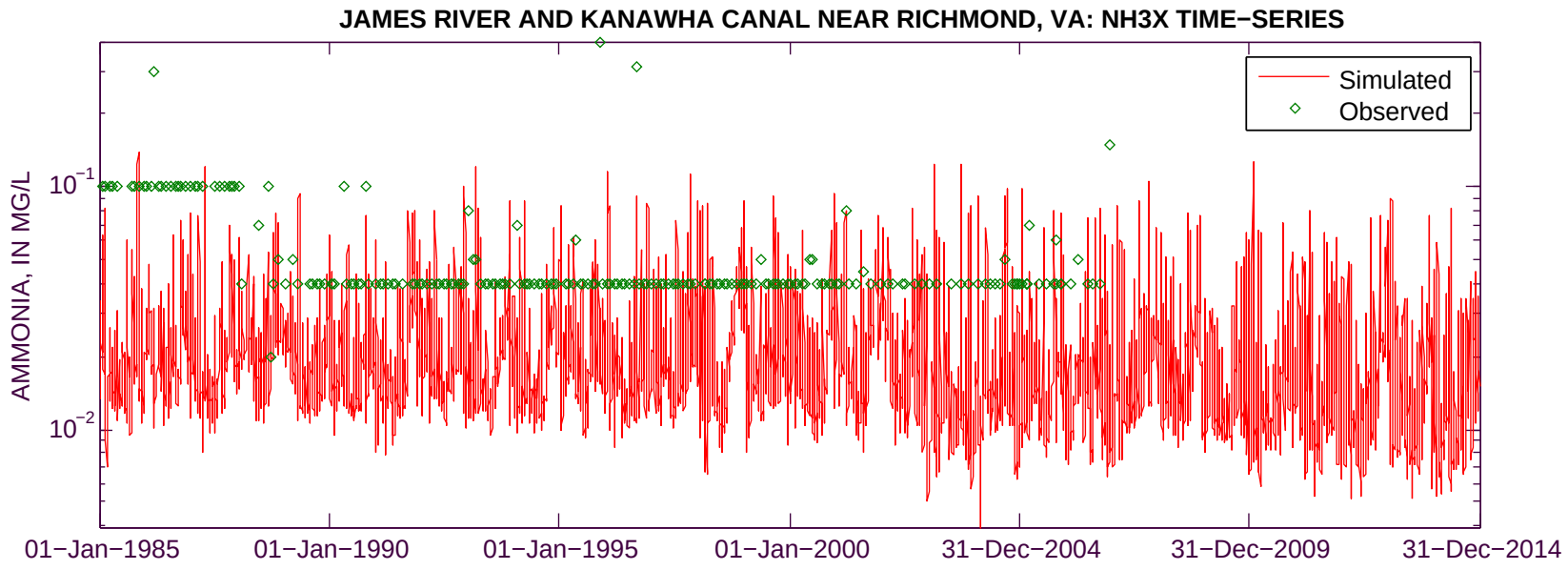
Dates: 1/1/1985 – 12/31/201

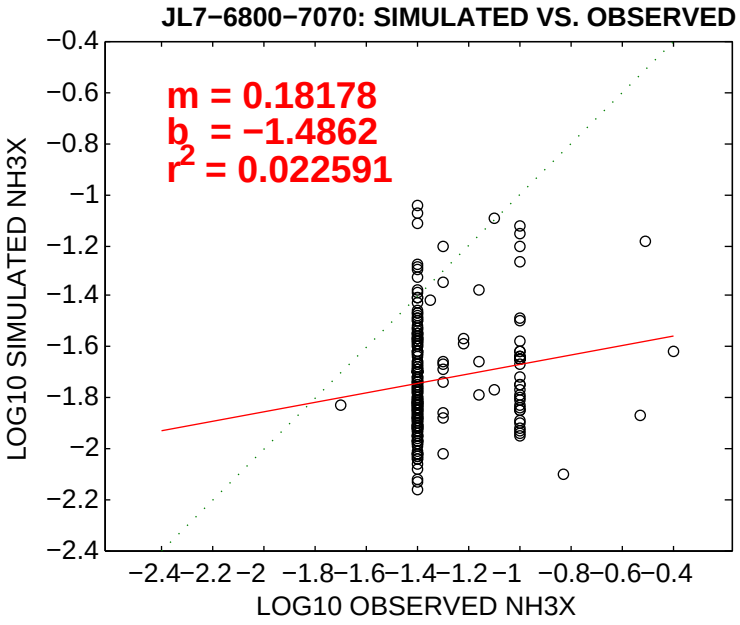
Drive | Directory | Observed: N/A | model | OBS20161101

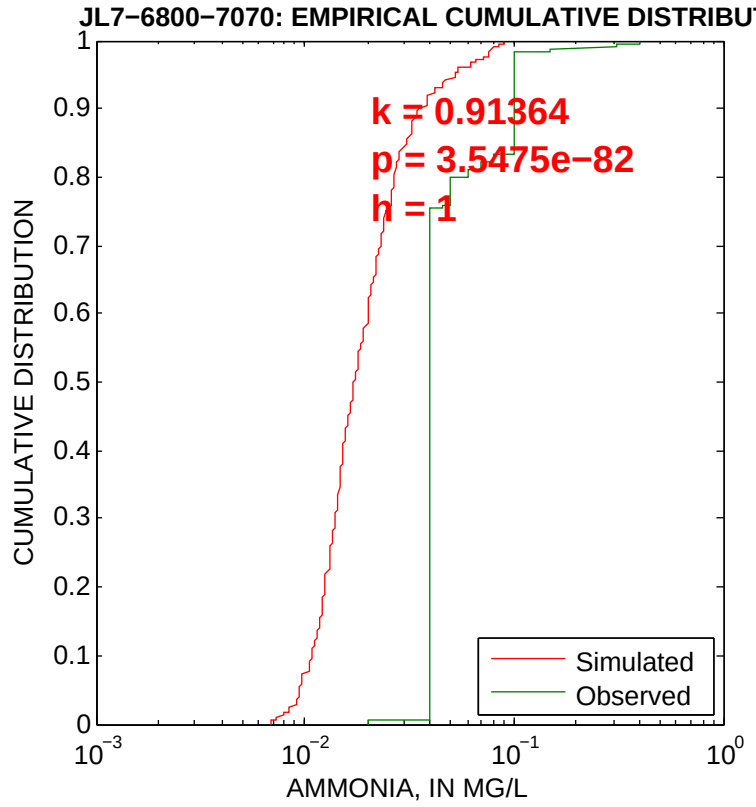
STATISTICS

		observe	simulate
n		10957	10957
min		354.163	370.61
		2.5492	2.56892
mean		7309.64	7415.57
		3.66545	3.67466
media		4521.86	4907.4
		3.65532	3.69085
max		208540	132590
		5.31919	5.12251
varian		9.45355e+0	8.09835e+
		0.157257	0.167761
JB		0.001	0.001
		0.001	0.010647
		ra	log
%		1.44919	0.251112
err.va		1.43124e+0	0.0180444
rel.std.err		0.151397	0.114745
mod.eff		0.848603	0.885255

VERSION 2.1







DATA SELECTION

scenario	file
P620171001WQ	NH3X.calib

plot: NH3X - ammonia

Dates: 1/1/1985 – 12/31/201

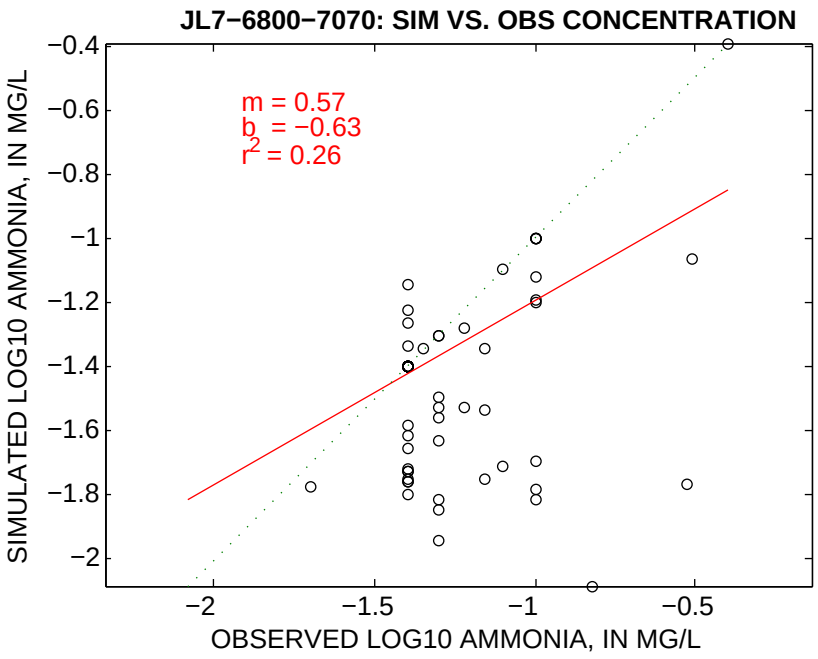
Drive	Directory	Observed
N/A	model	OBS20161101

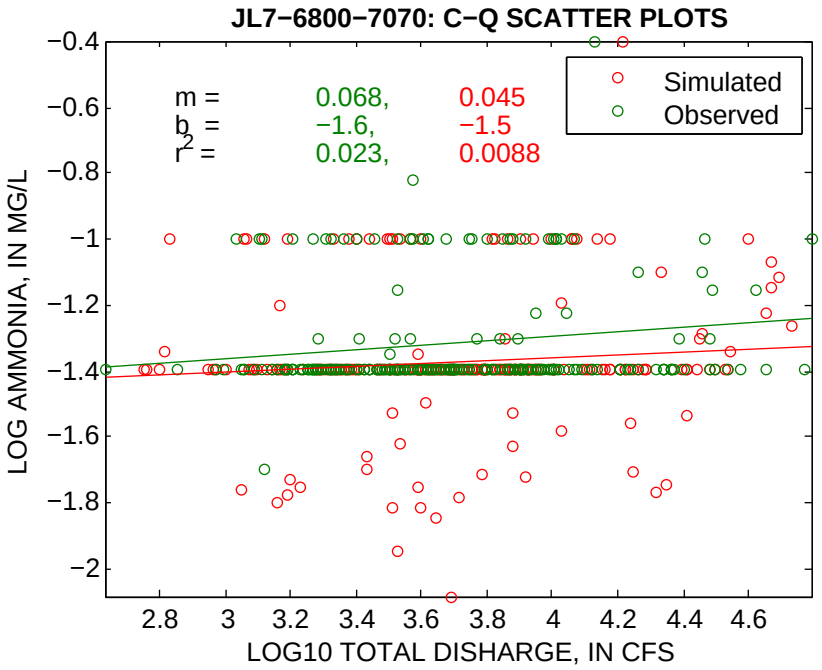
STATISTICS

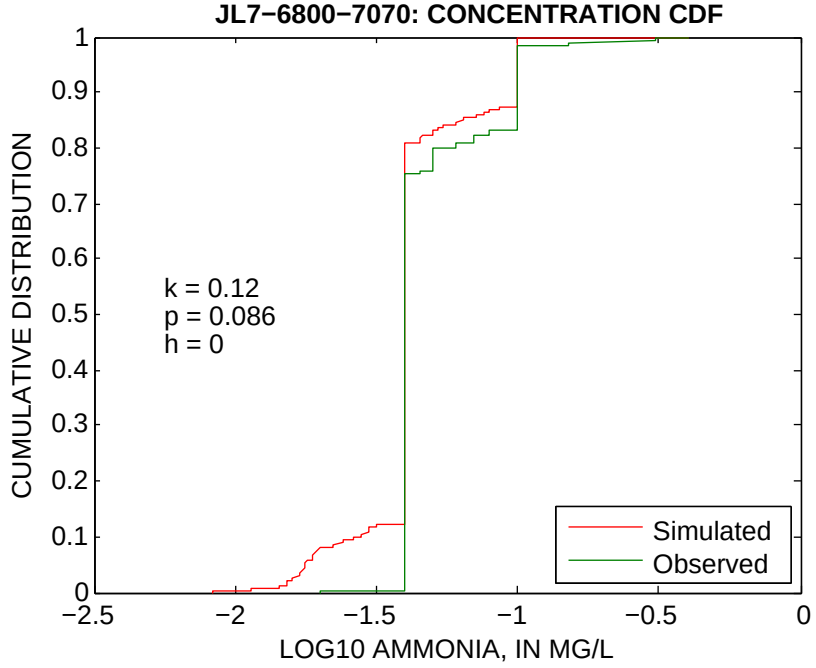
	n	220	220
		observe	simulate
min		0.02	0.0069568
		-1.69897	-2.15759
mean		0.0548415	0.0217594
		-1.31259	-1.72478
media		0.04	0.017298
		-1.39794	-1.76201
max		0.4	0.089673
		-0.39794	-1.04734
varian		0.00164642	0.00020211
		0.0324545	0.0474721
JB		0.001	0.001
		0.001	0.001
		ra	log
%		-60.3231	31.4032
err.va		0.00278626	0.238807
rel.std.err		1.69231	7.35822
mod.eff		-0.692306	-6.35822

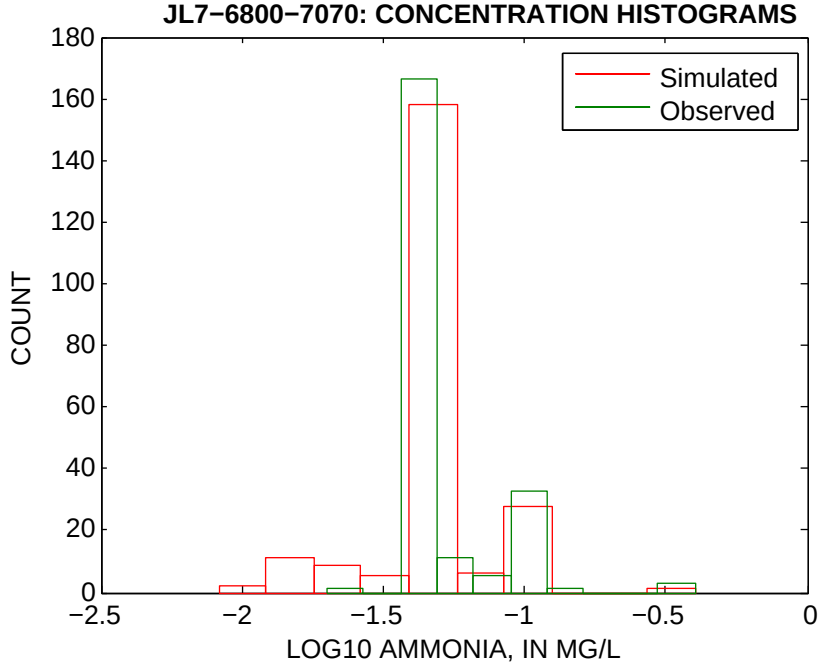
VERSION 2.1

ALL DATA
LOG10

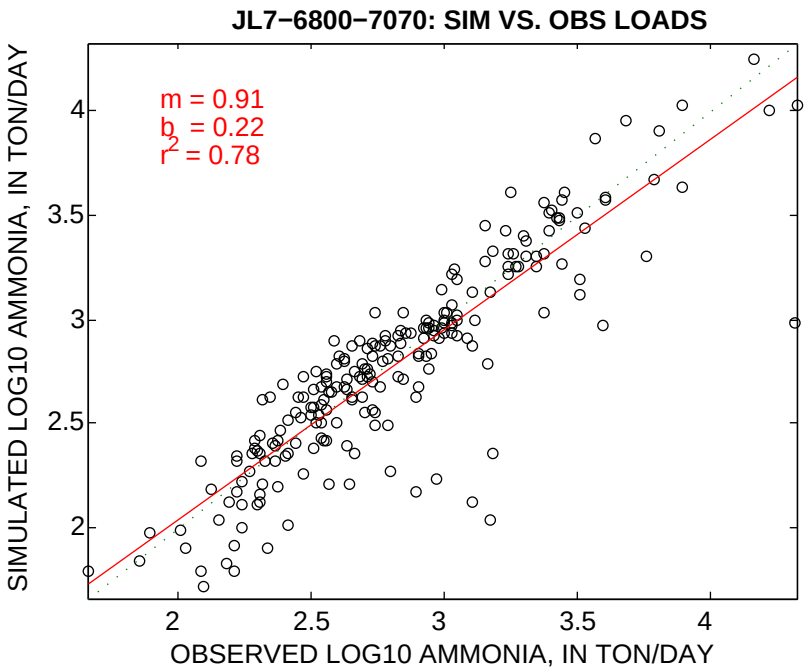




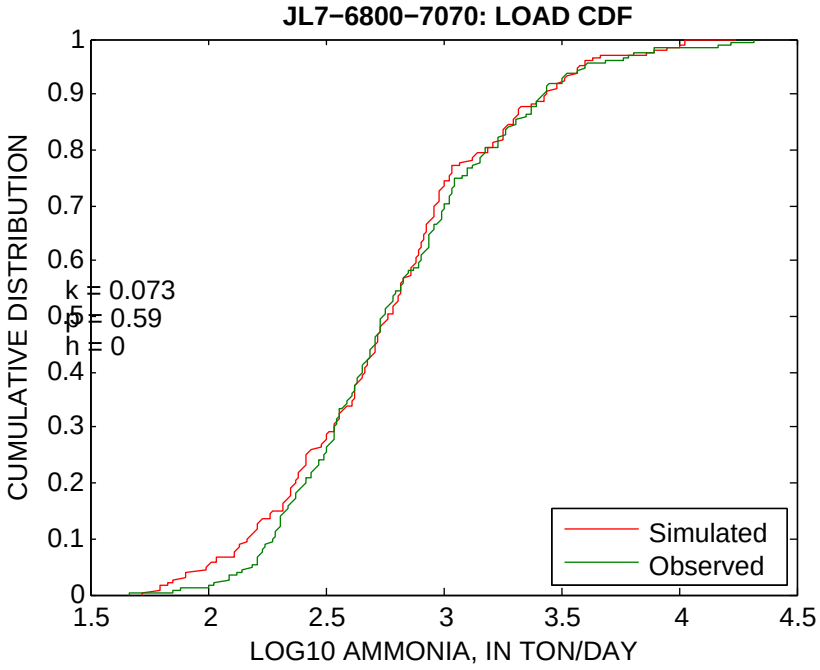


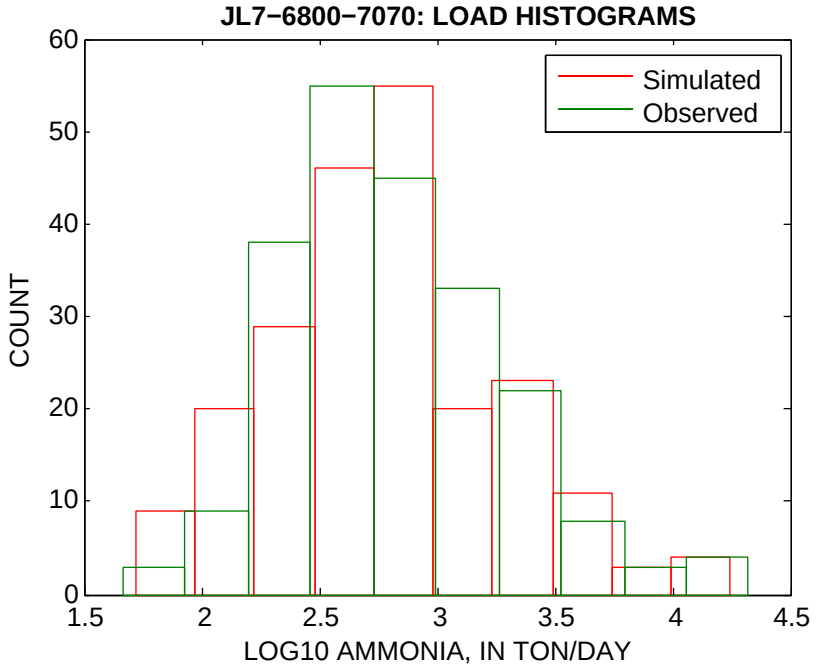


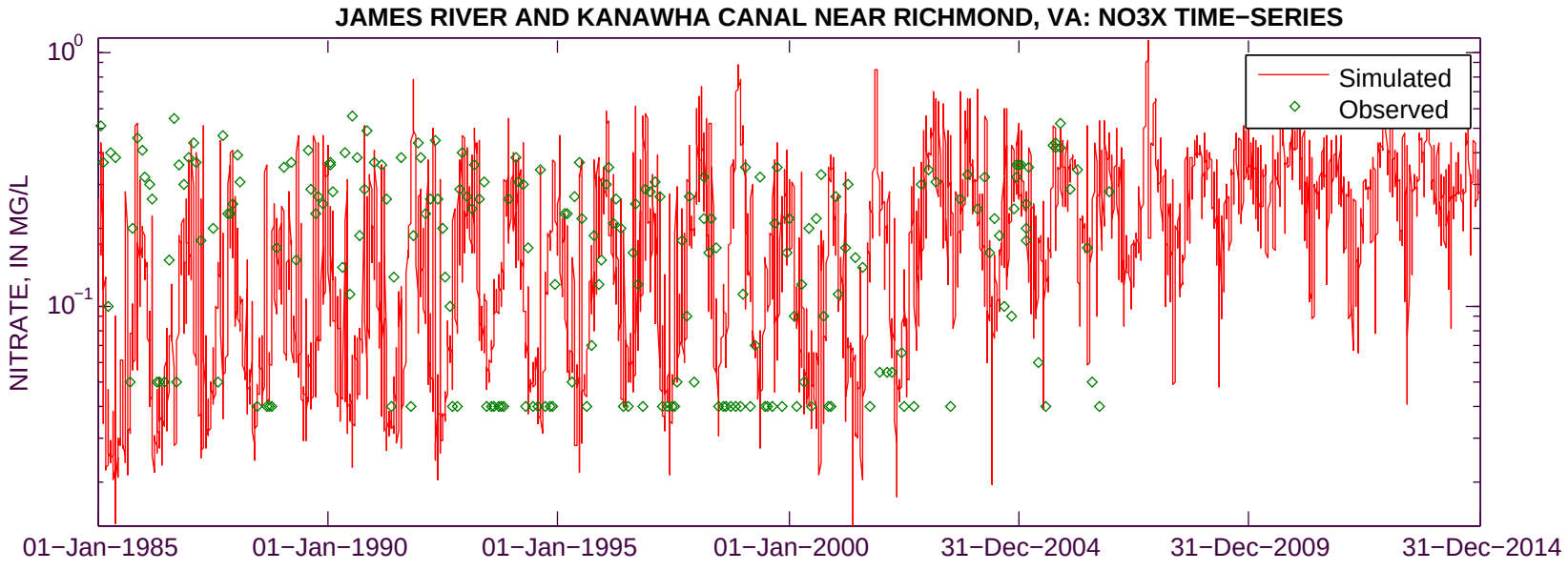
LOAD DATA
LOG10

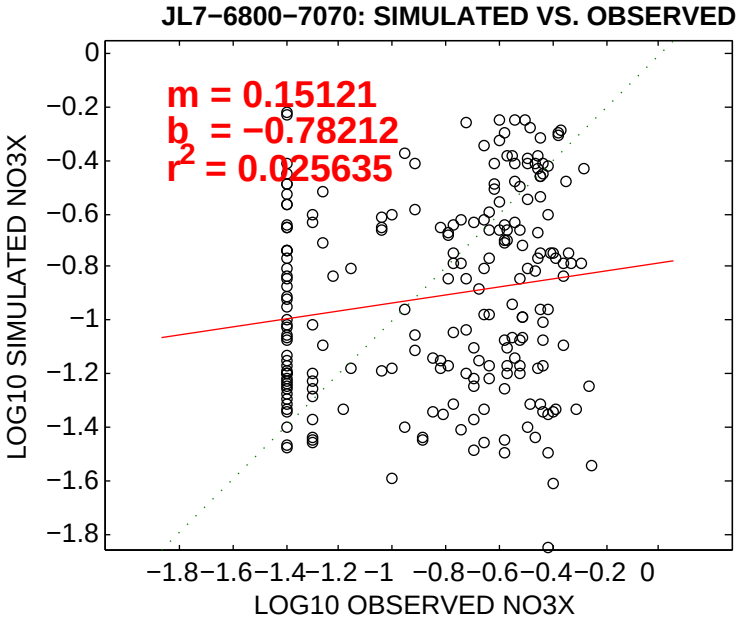


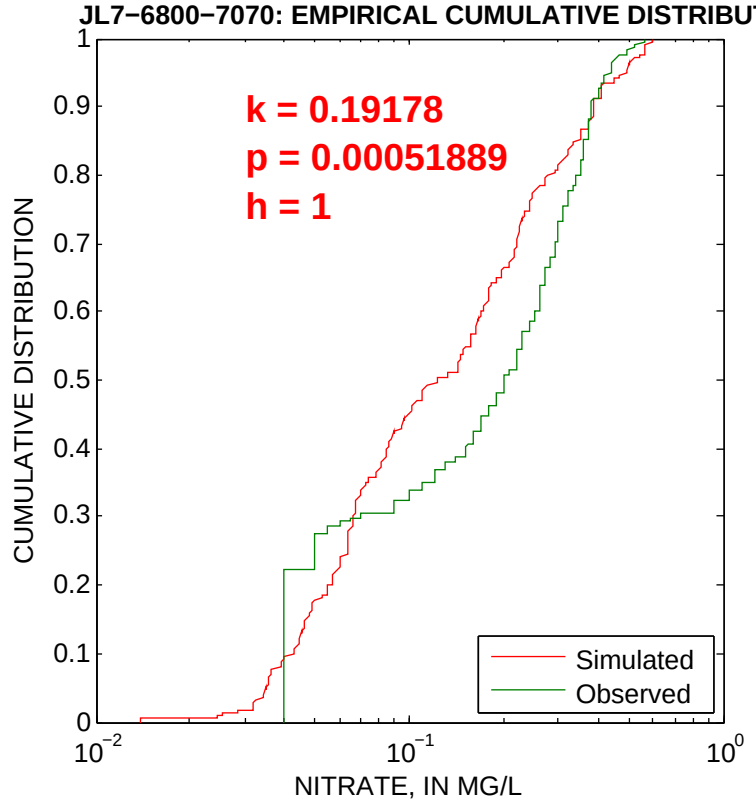












DATA SELECTION

scenario	file
P620171001WQ	NO3X.calib

plot: NO3X - nitrate

Dates: 1/1/1985 – 12/31/201

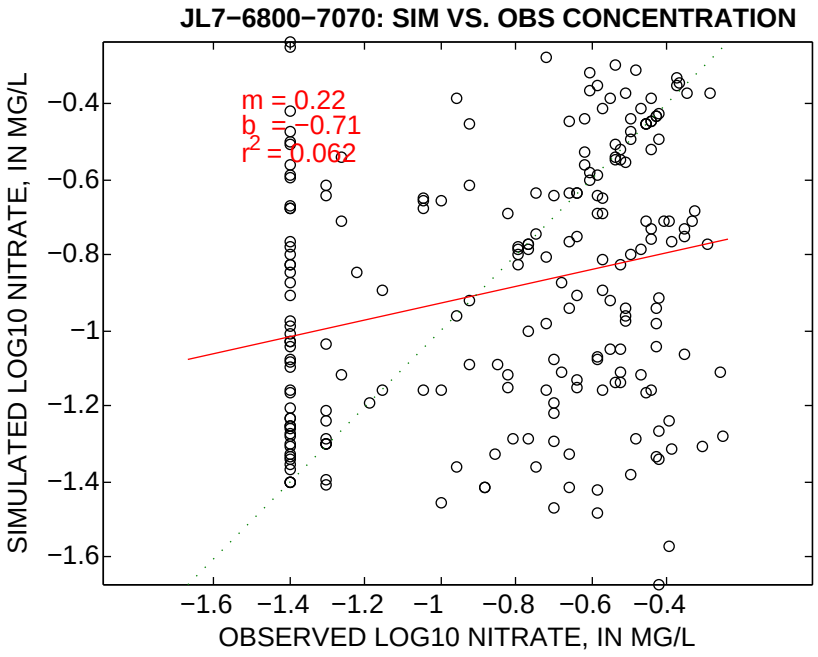
Drive	Directory	Observed
N/A	model	OBS20161101

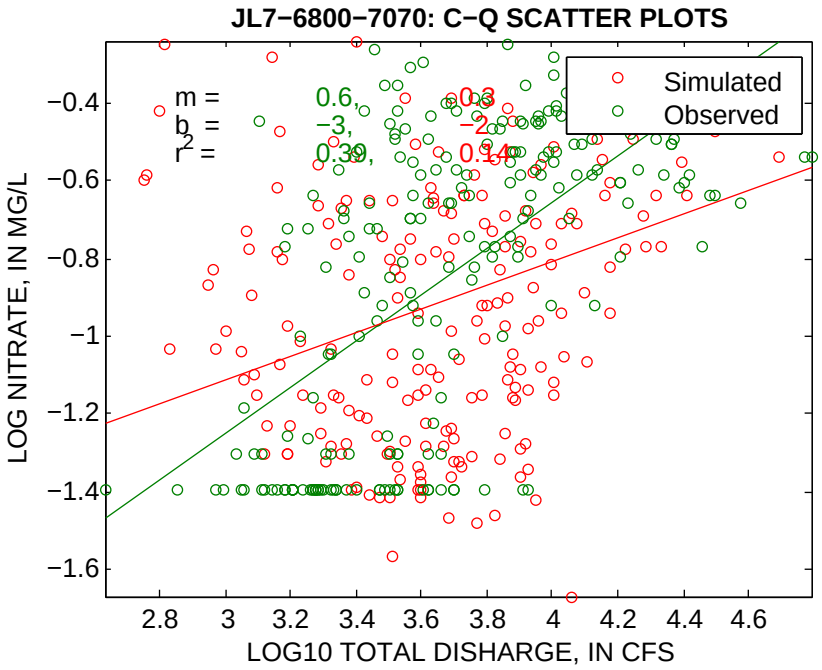
STATISTICS

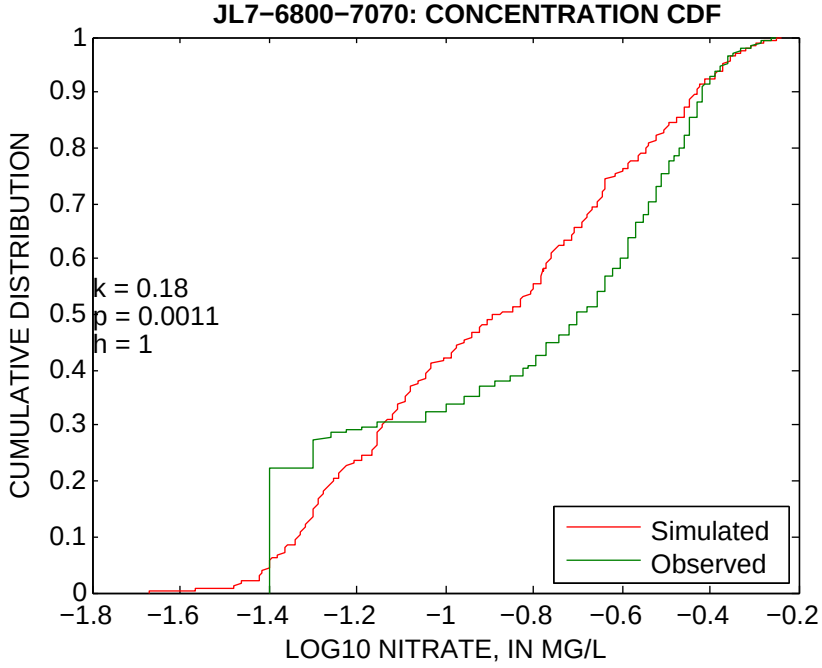
	n	observe	simulate
		219	219
min		0.04	0.014012
		-1.39794	-1.8535
mean		0.204502	0.173059
		-0.831004	-0.907769
media		0.2	0.12256
		-0.69897	-0.911651
max		0.56	0.60194
		-0.251812	-0.220447
varian		0.019217	0.0199128
		0.150652	0.134362
JB		0.008623	0.001
		0.001359	0.015187
		ra	log
%		-15.3753	9.2376
err.va		0.0327703	0.245375
rel.std.err		1.70527	1.62875
mod.eff		-0.705275	-0.62875

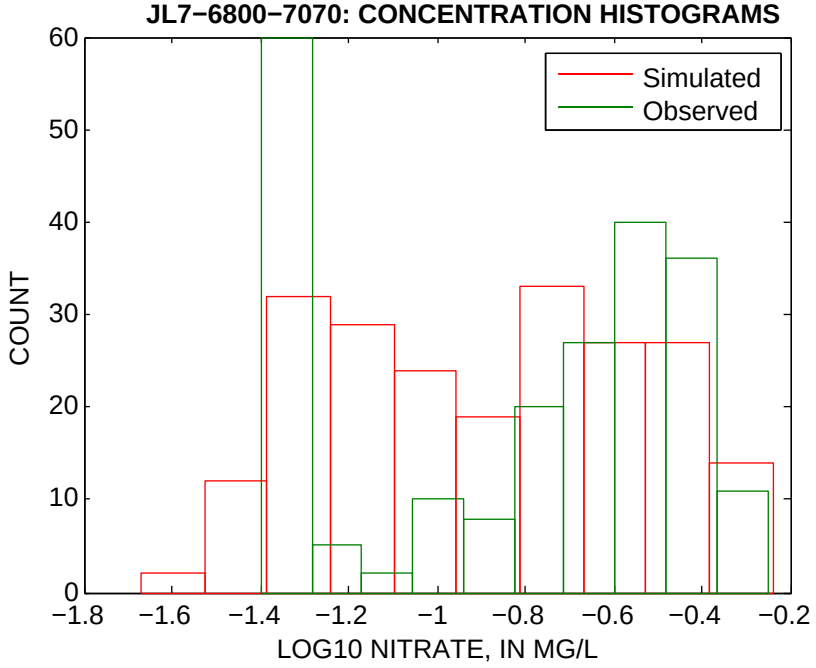
VERSION 2.1

ALL DATA
LOG10

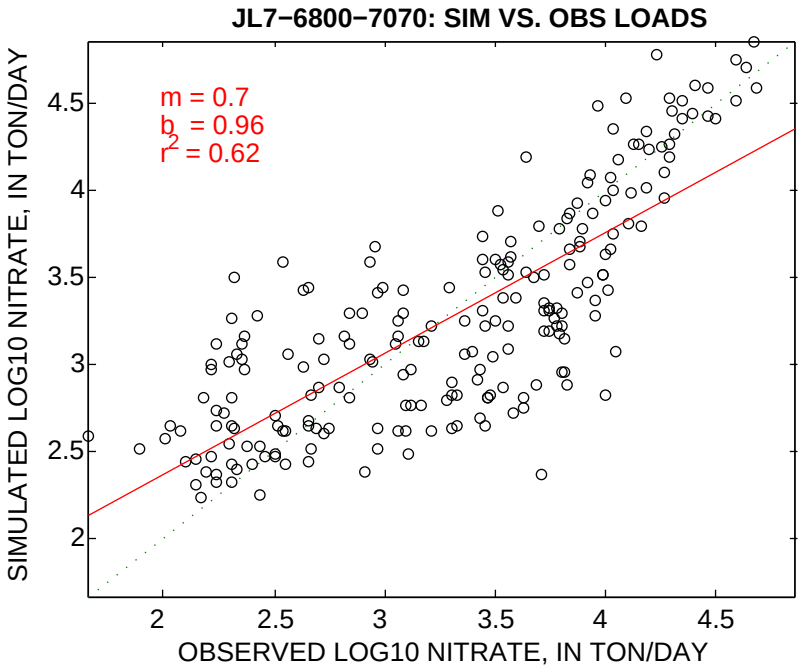




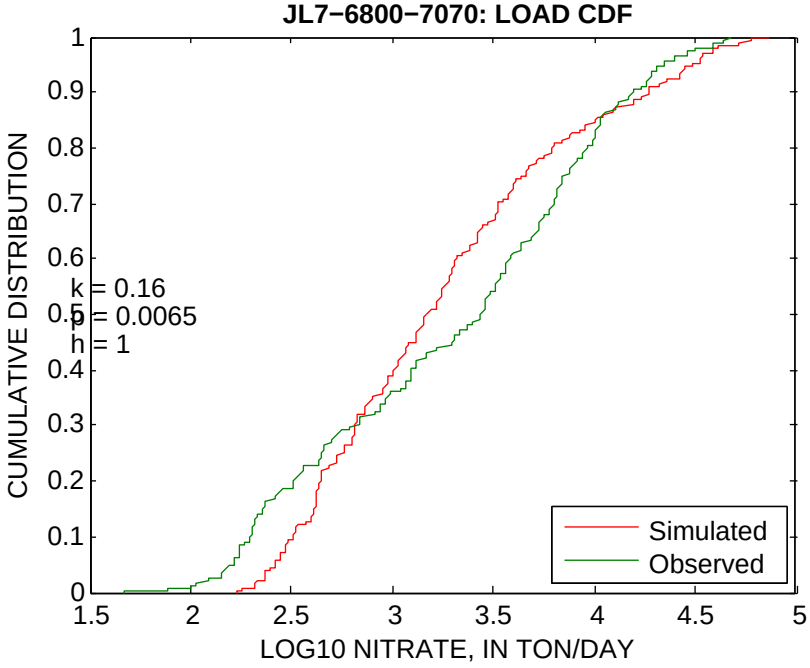


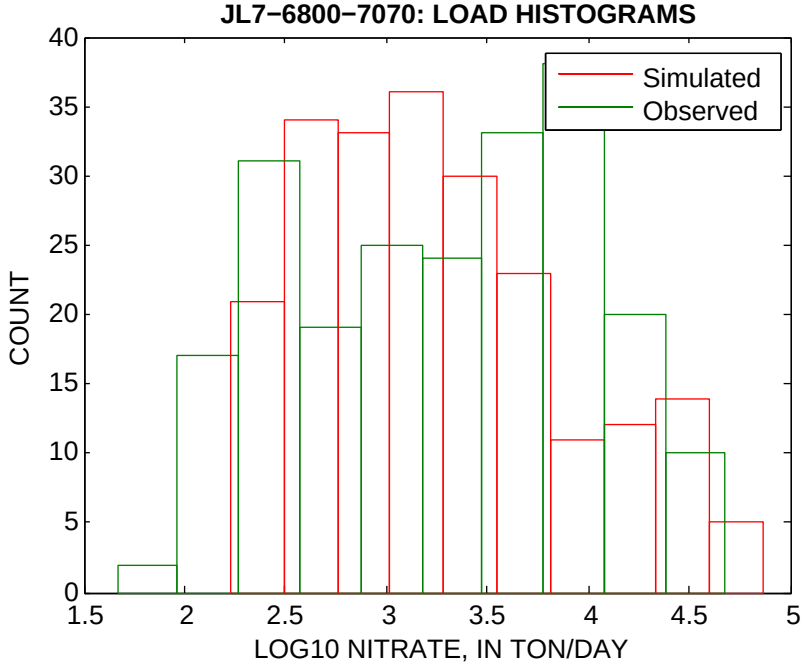


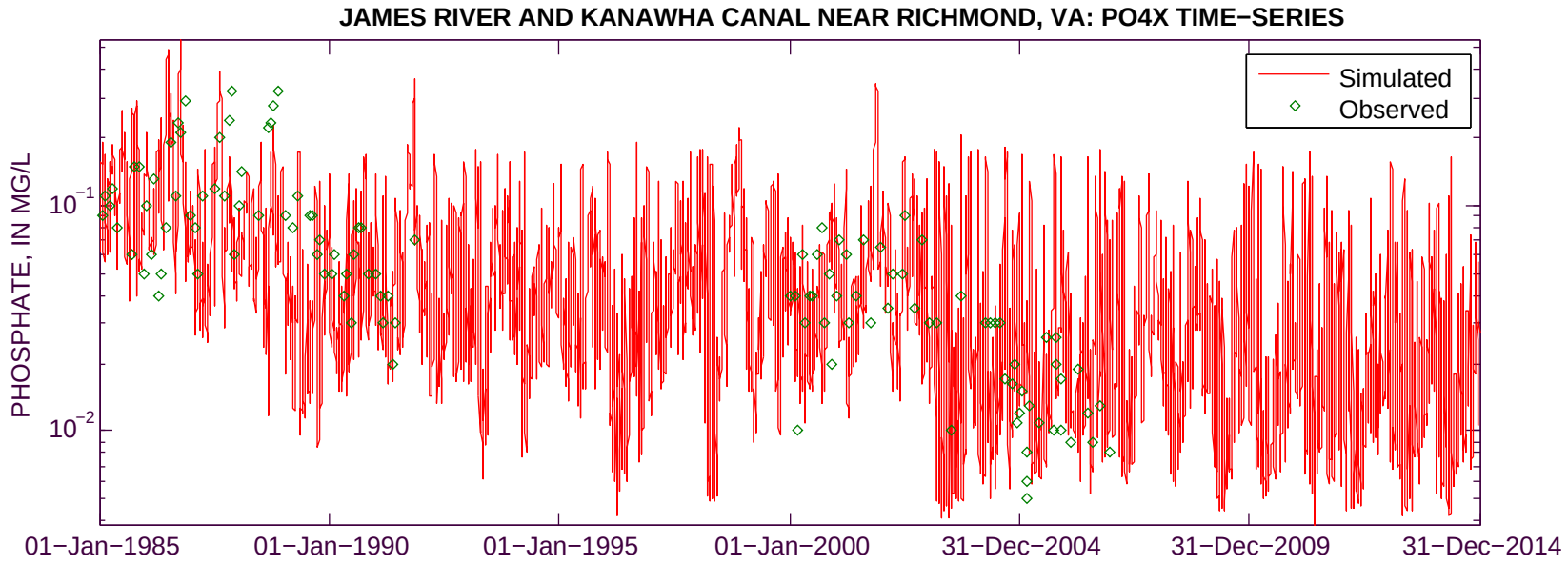
LOAD DATA
LOG10

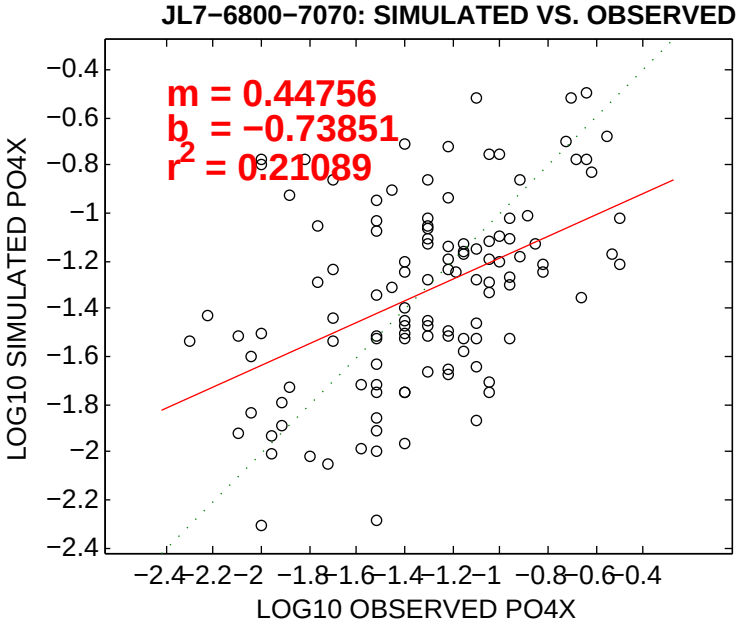


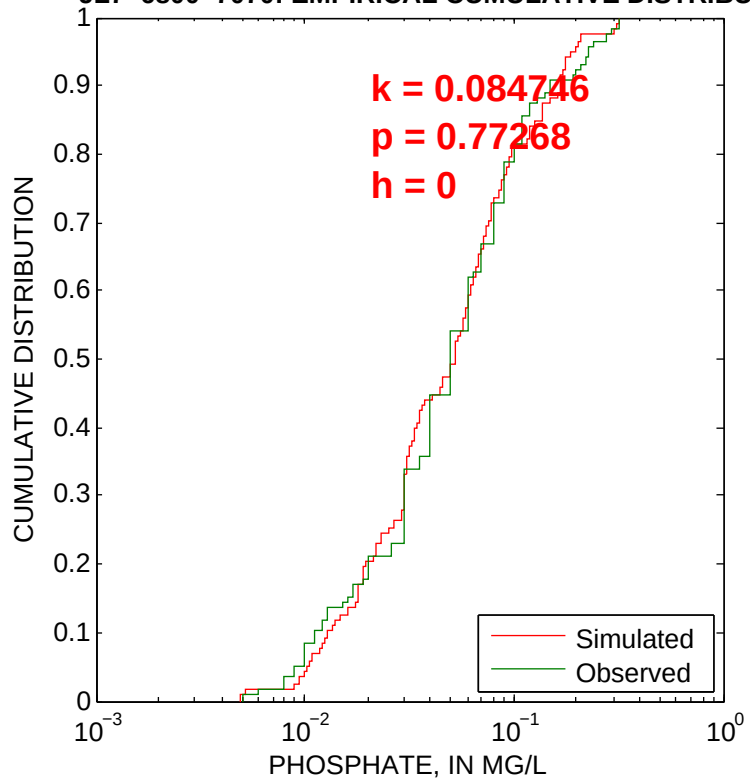












DATA SELECTION

scenario	file
P620171001WQ	PO4X.calib

plot: PO4X - phosphate

Dates: 1/1/1985 – 12/31/201

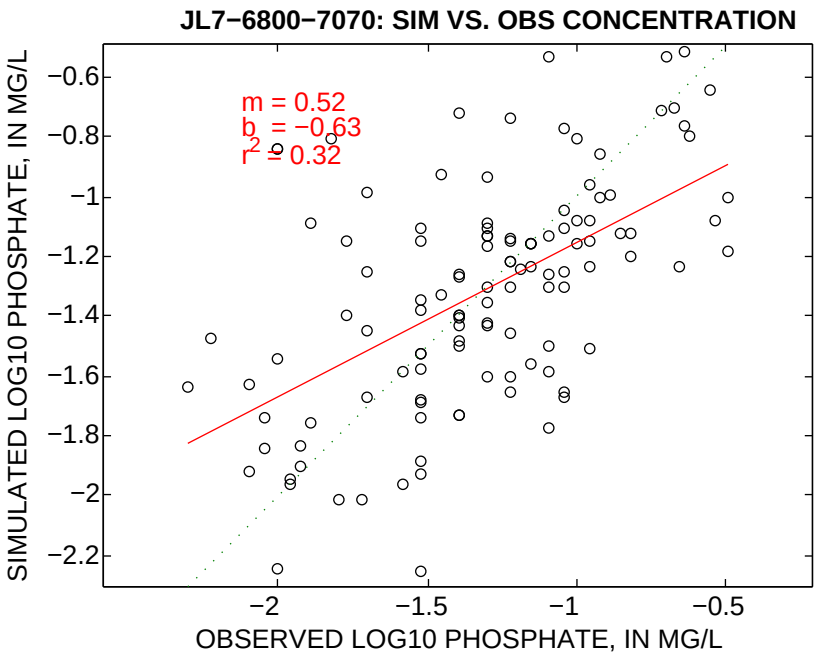
Drive	Directory	Observed
N/A	model	OBS20161101

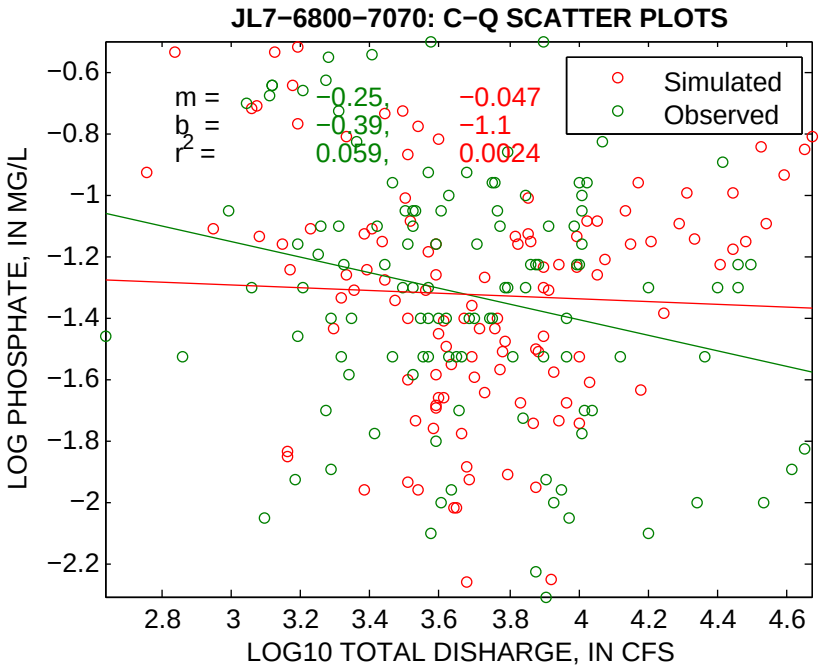
STATISTICS

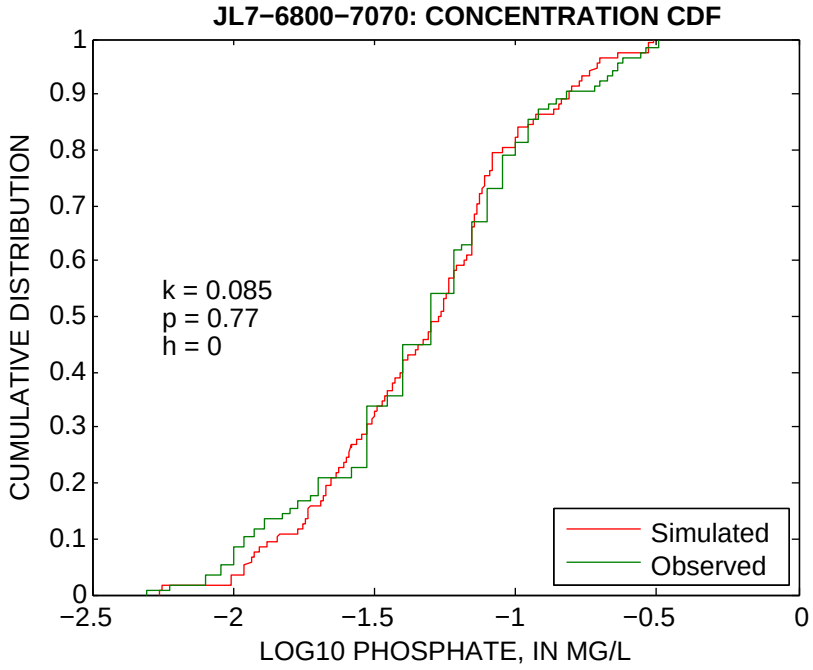
	n	118	118
		observe	simulate
min		0.005	0.0048888
		-2.30103	-2.3108
mean		0.0708299	0.0686672
		-1.32453	-1.33132
media		0.05	0.0519835
		-1.30103	-1.28414
max		0.32	0.32135
		-0.49485	-0.493022
varian		0.00458088	0.00406411
		0.165255	0.156964
JB		0.001	0.001
		0.434342	0.41281
		ra	log
%		-3.05337	0.51231
err.va		0.0049075	0.174343
rel.std.err		1.0713	1.05499
mod.eff		-0.0713011	-0.0549943

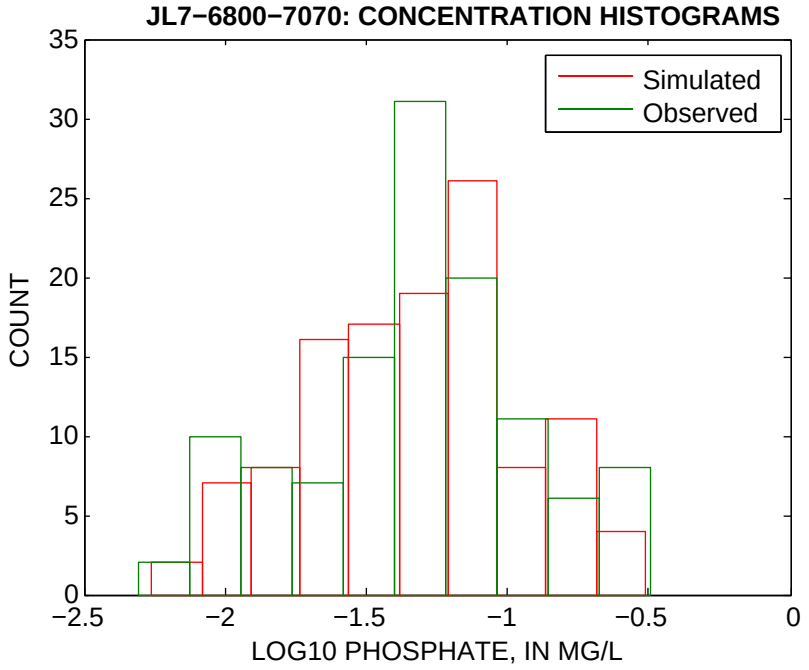
VERSION 2.1

ALL DATA
LOG10

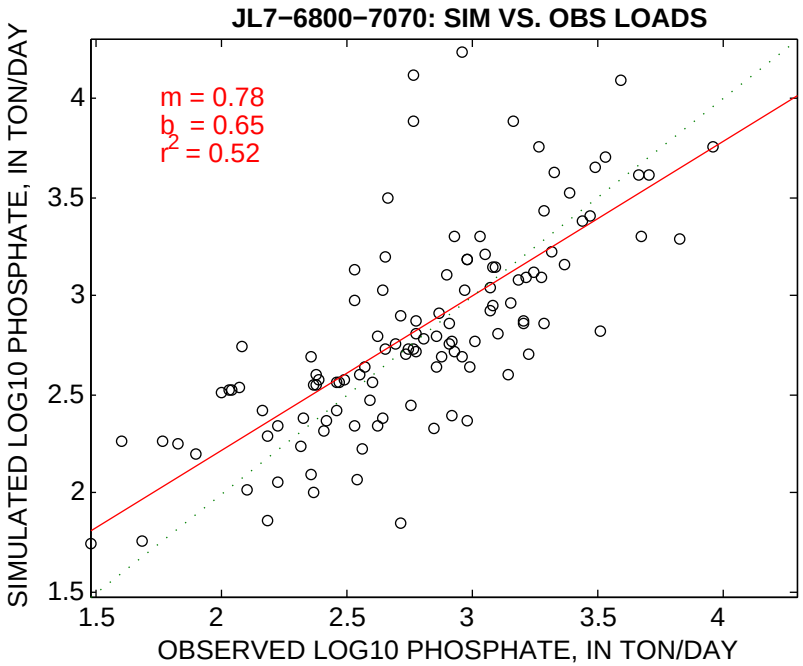


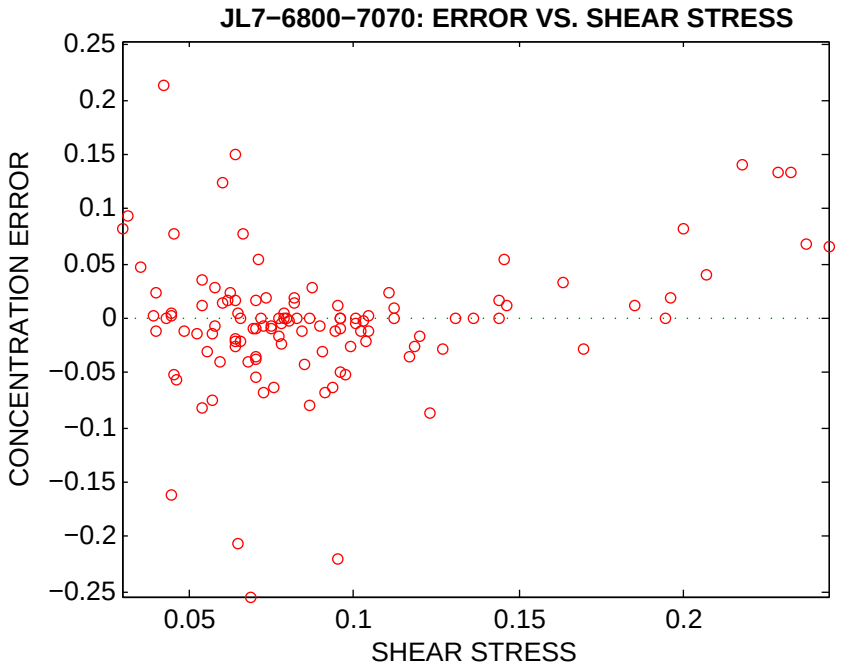


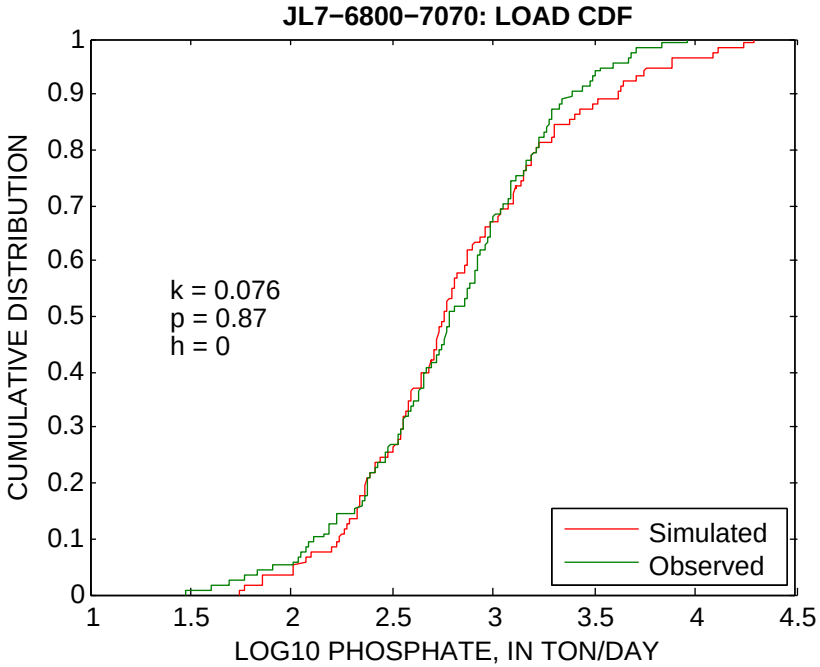


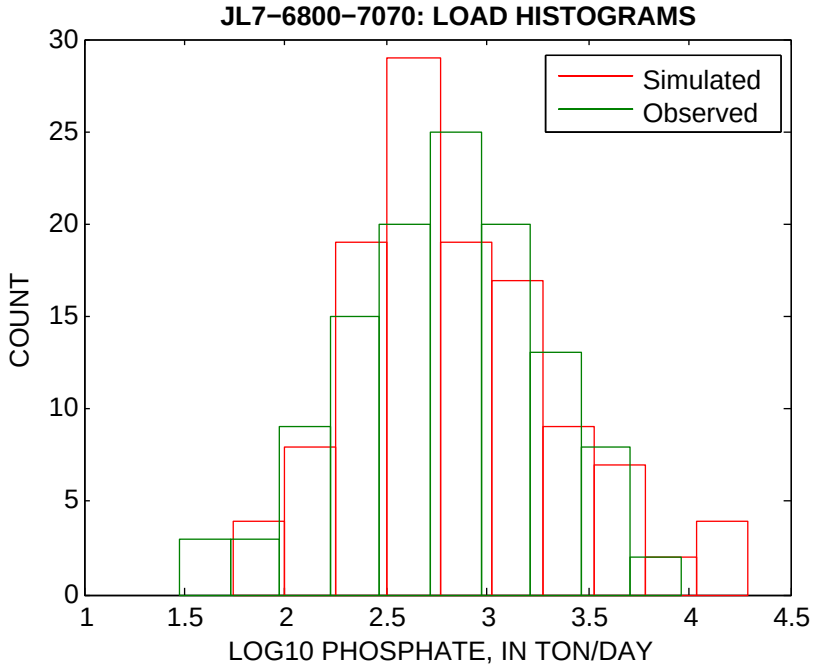


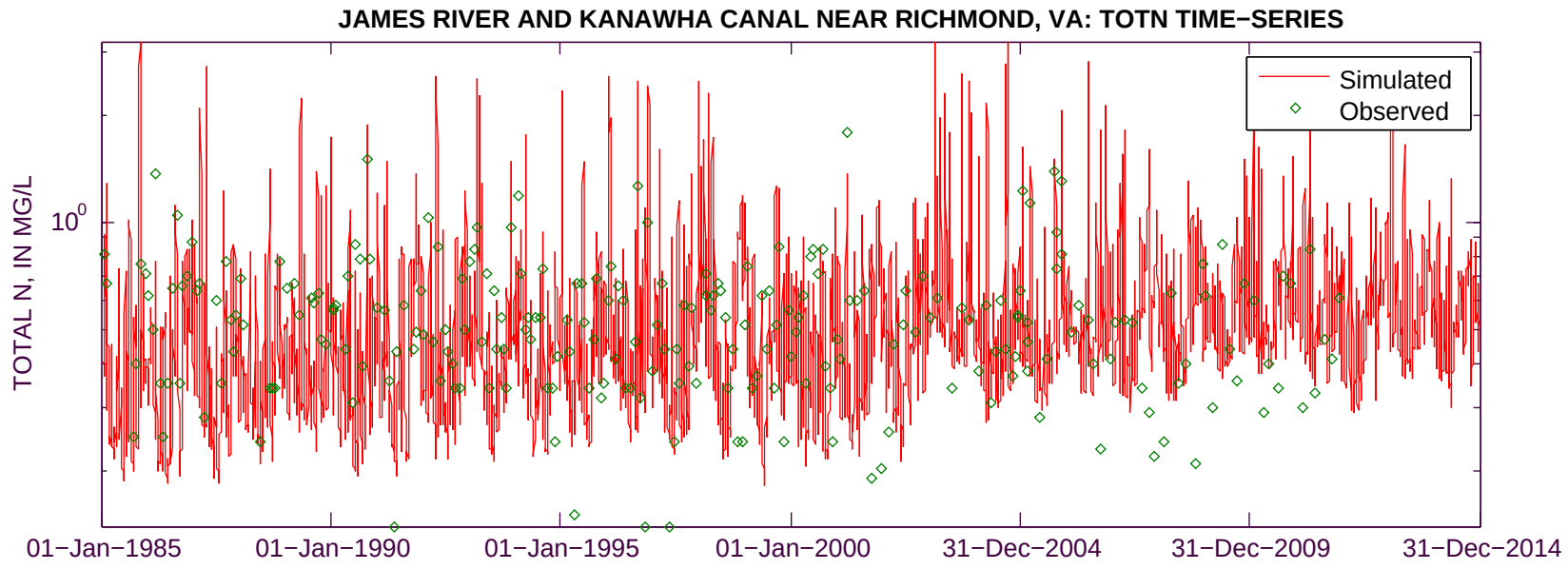
LOAD DATA
LOG10

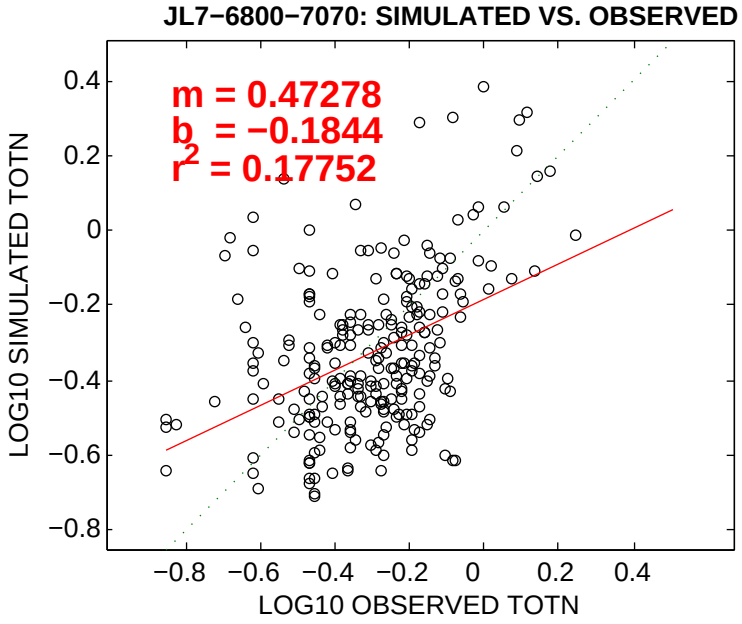


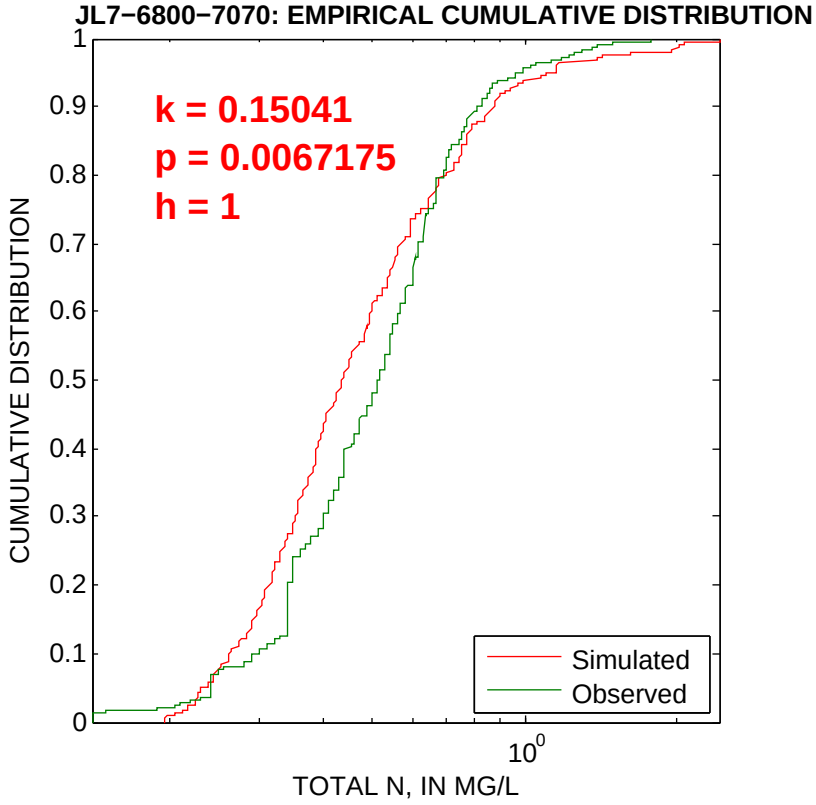












DATA SELECTION

scenario: P620171001WQ | file: TOTN.calib

plot: TOTN - total nitrogen

Dates: 1/1/1985 – 12/31/201

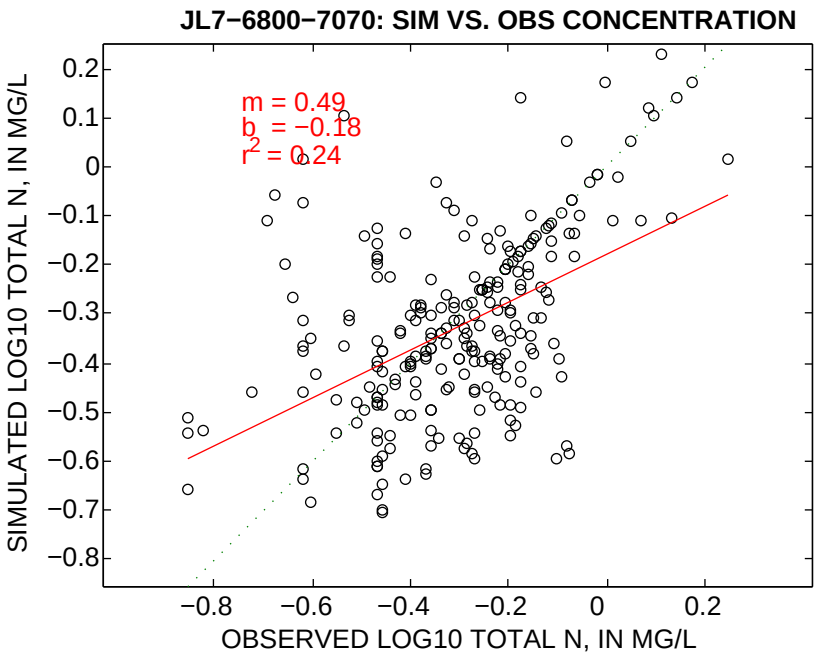
Drive: N/A | Directory: model | Observed: OBS20161101

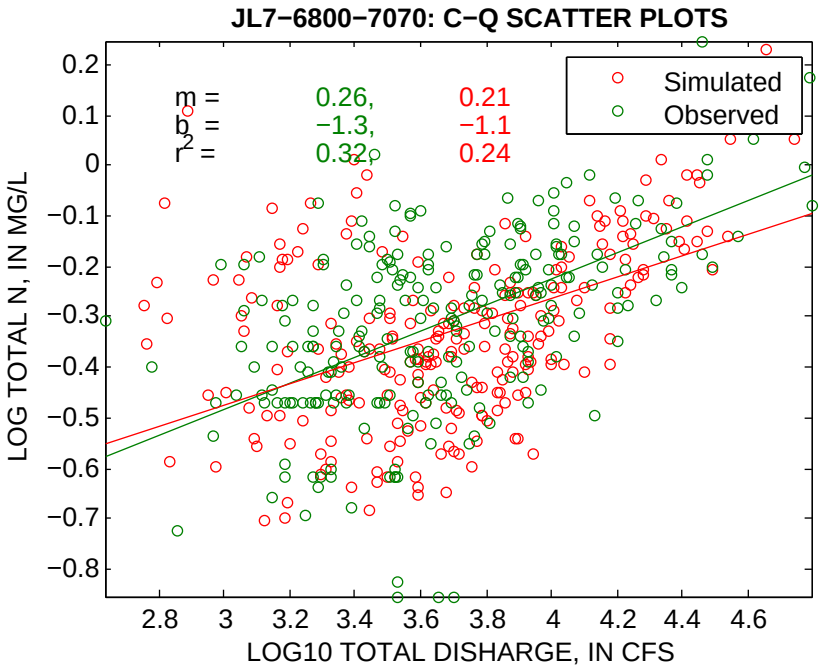
STATISTICS

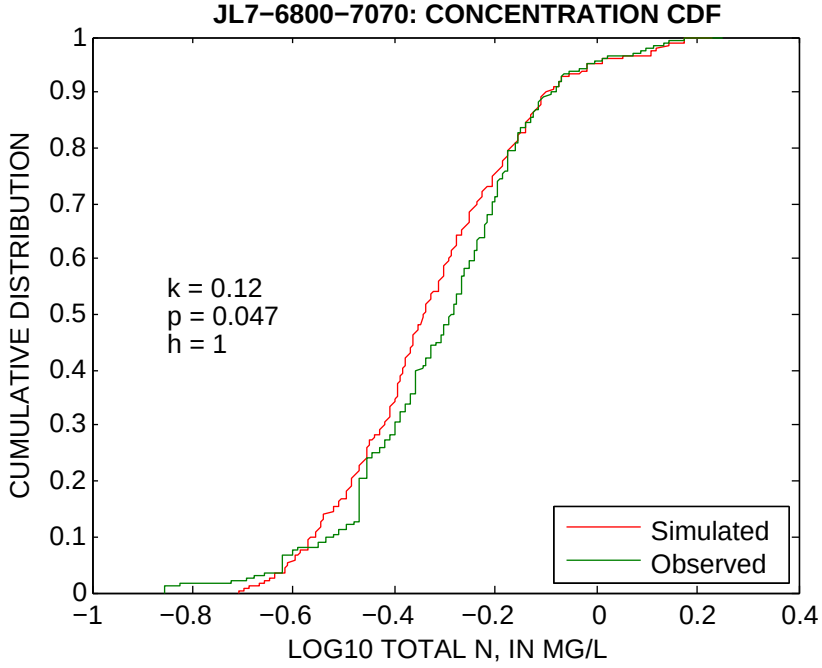
	n	observe	simulate
		246	246
min		0.14	0.19419
		-0.853872	-0.711773
mean		0.543494	0.535278
		-0.303982	-0.328117
media		0.517555	0.437845
		-0.286048	-0.358681
max		1.77	2.4206
		0.247973	0.383923
varian		0.0582705	0.10947
		0.0347664	0.0437764
JB		0.001	0.001
		0.096329	0.001
		ra	log
%		-1.51173	7.93971
err.va		0.0856898	0.0462536
rel.std.err		1.47055	1.33041
mod.eff		-0.47055	-0.330411

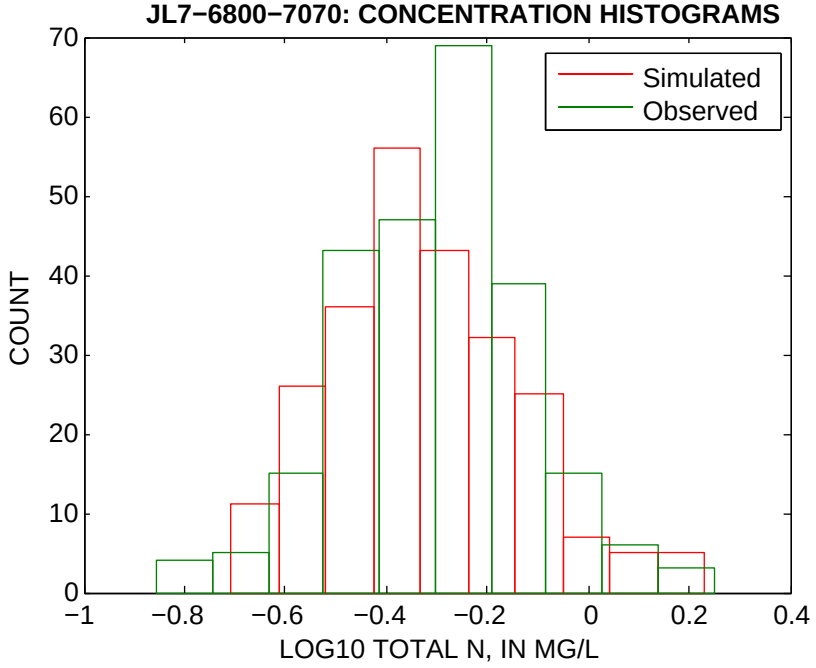
VERSION 2.1

ALL DATA
LOG10

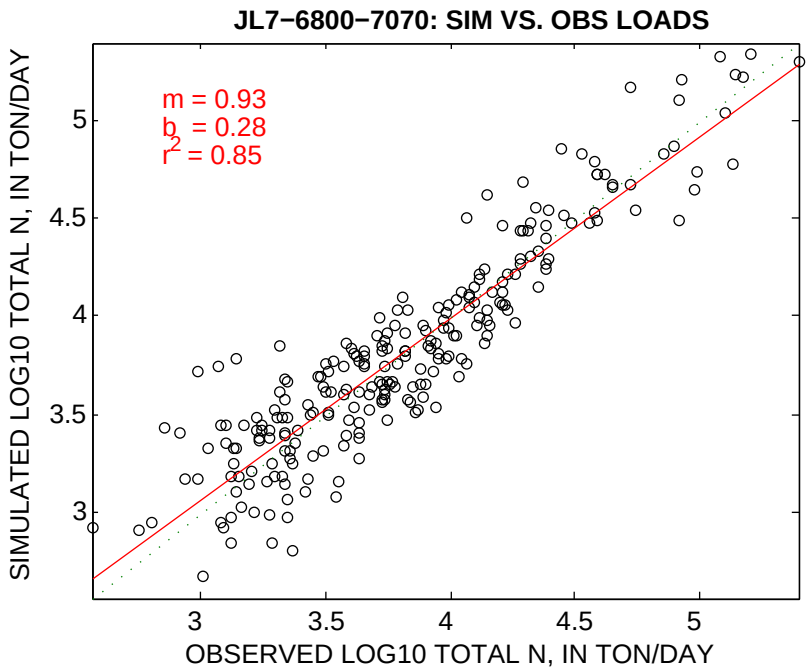




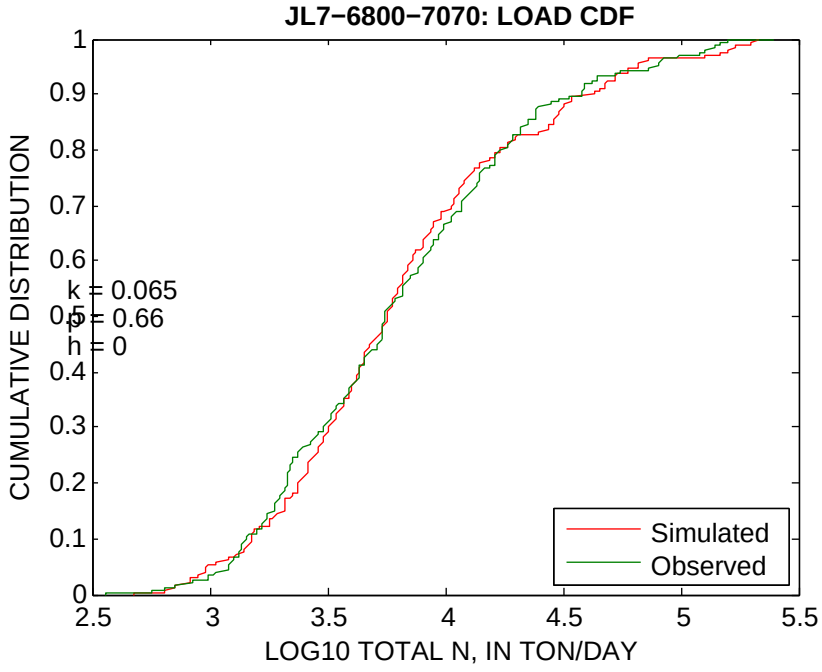


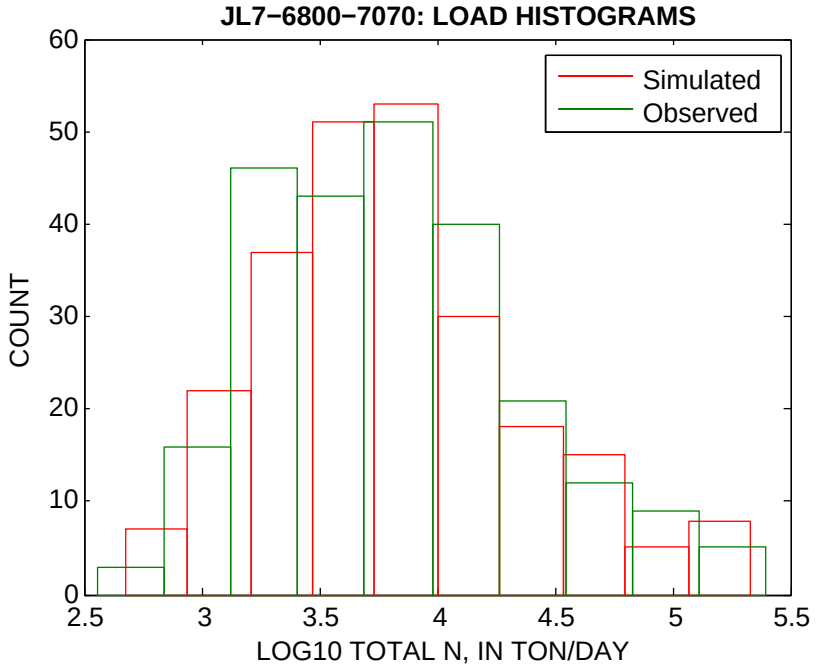


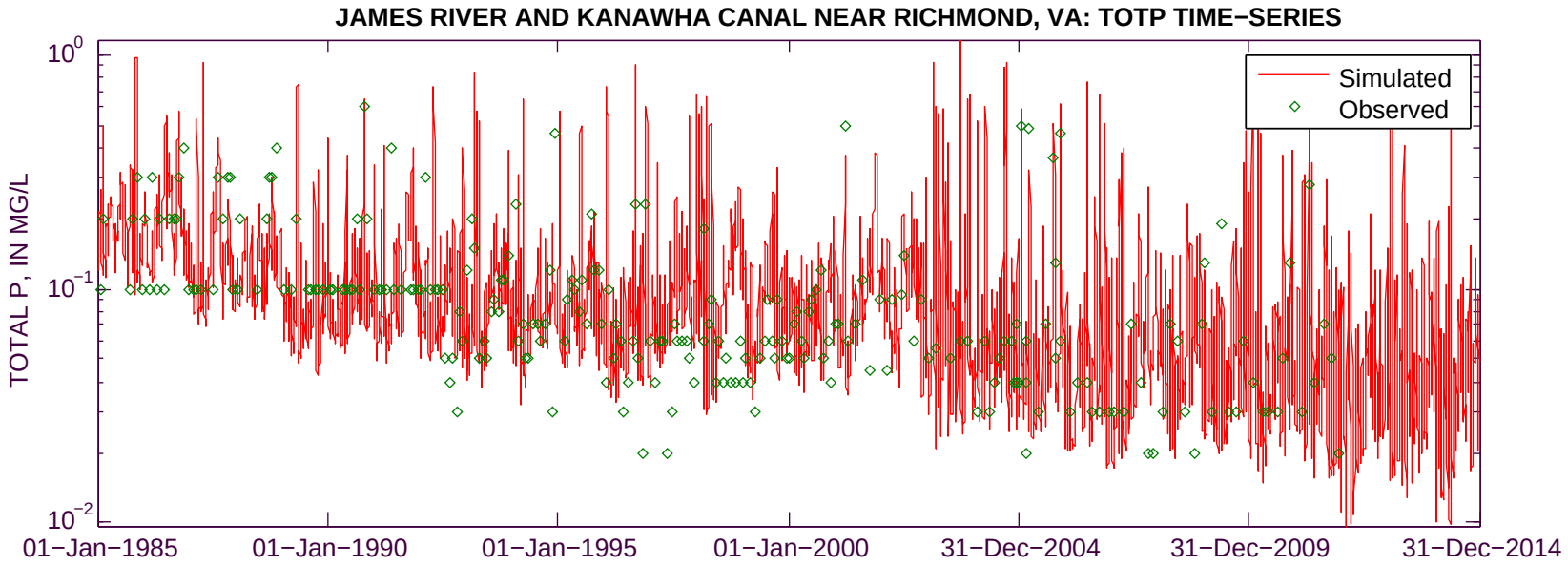
LOAD DATA
LOG10

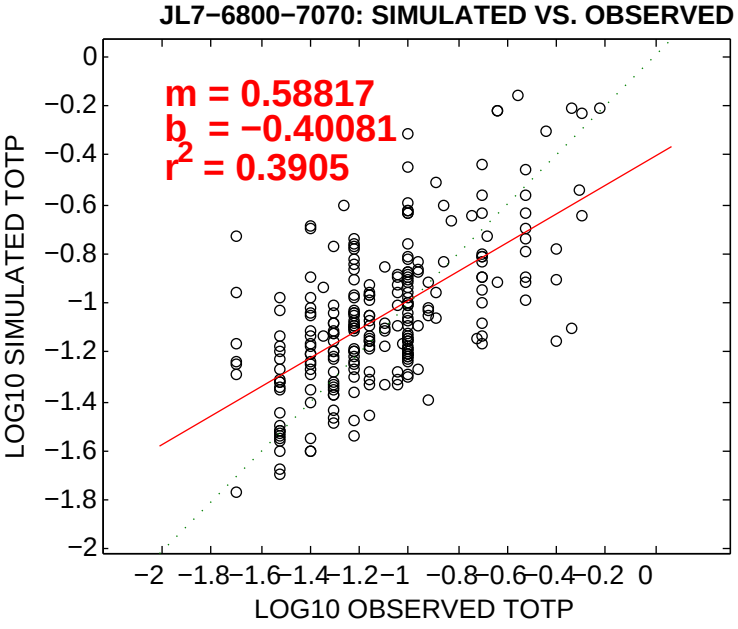


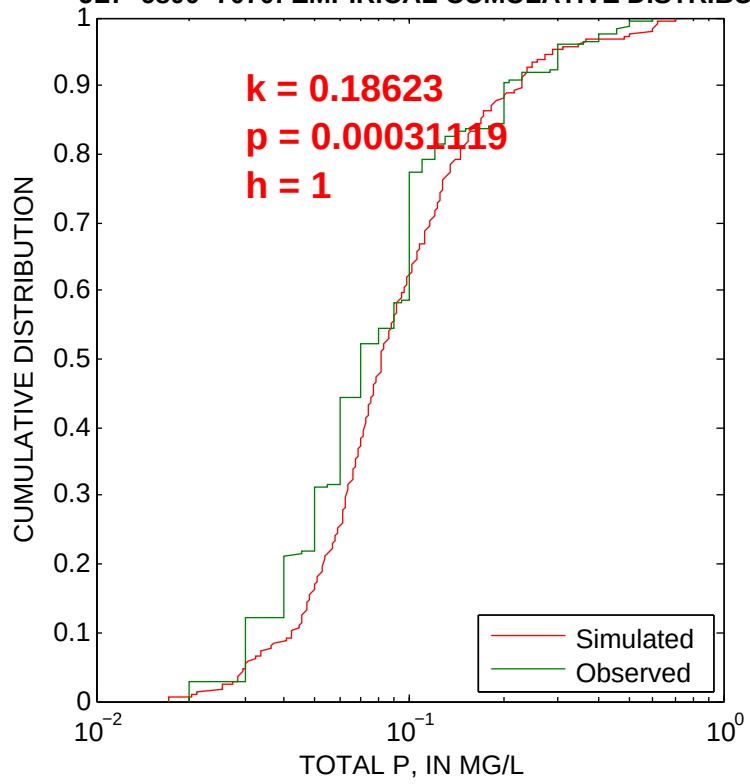












DATA SELECTION

scenario	file
P620171001WQ	TOTP.calib

plot: TOTP - total phosphorus

Dates 1/1/1985 12/31/201

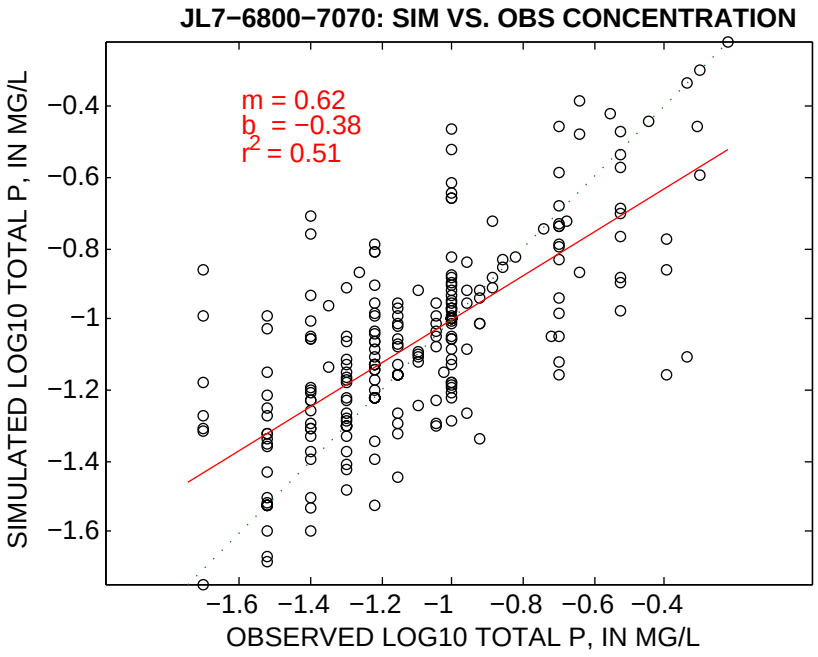
Drive	Directory	Observed
N/A	model	OBS20161101

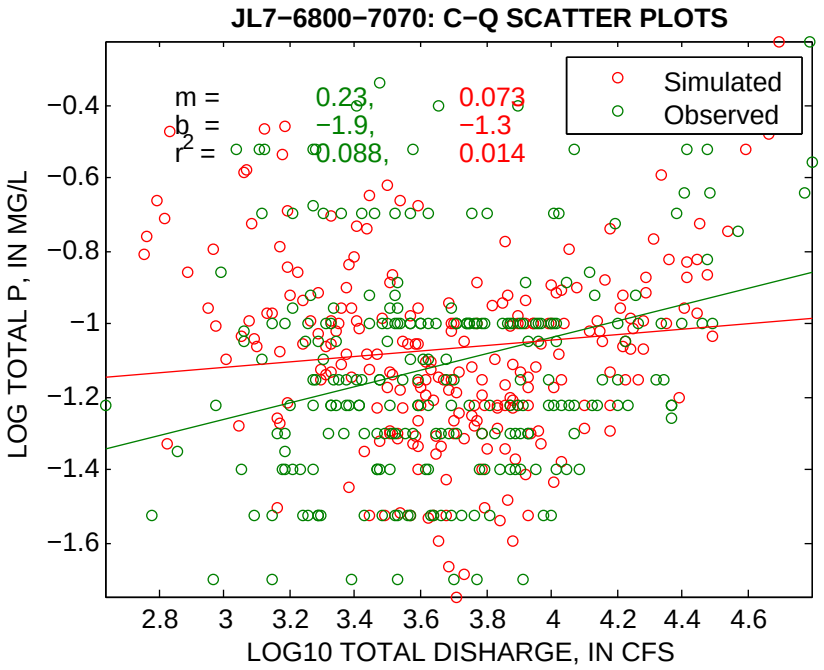
STATISTICS

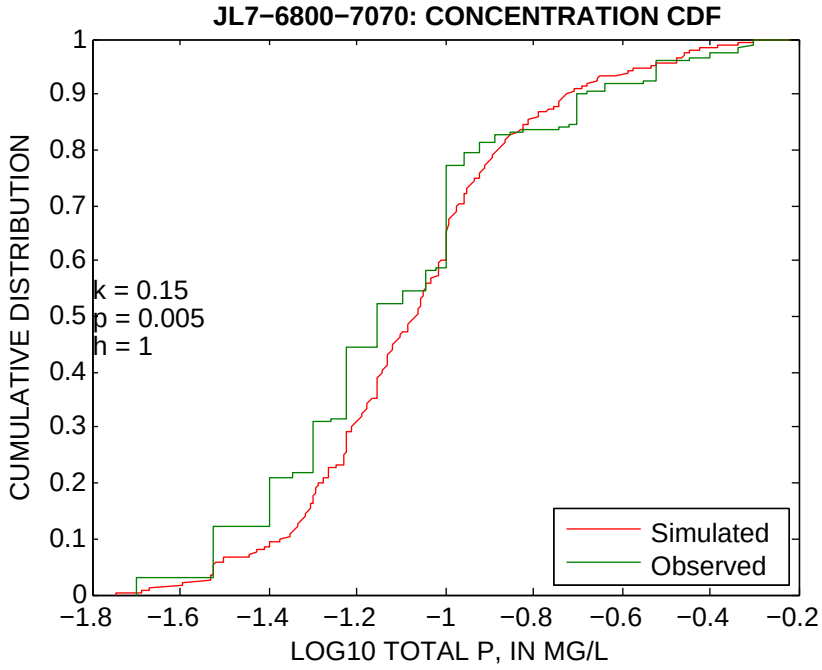
	n	247	247
		observe	simulate
min		0.02	0.017215
		-1.69897	-1.76409
mean		0.104576	0.115303
		-1.10422	-1.05029
media		0.07	0.081815
		-1.1549	-1.08717
max		0.6	0.70365
		-0.221849	-0.152643
varian		0.00938305	0.0116179
		0.0961449	0.0851756
JB		0.001	0.001
		0.008178	0.002675
		ra	log
%		10.2574	-4.88444
err.va		0.00833631	0.0711414
rel.std.err		0.888443	0.73994
mod.eff		0.111557	0.26006

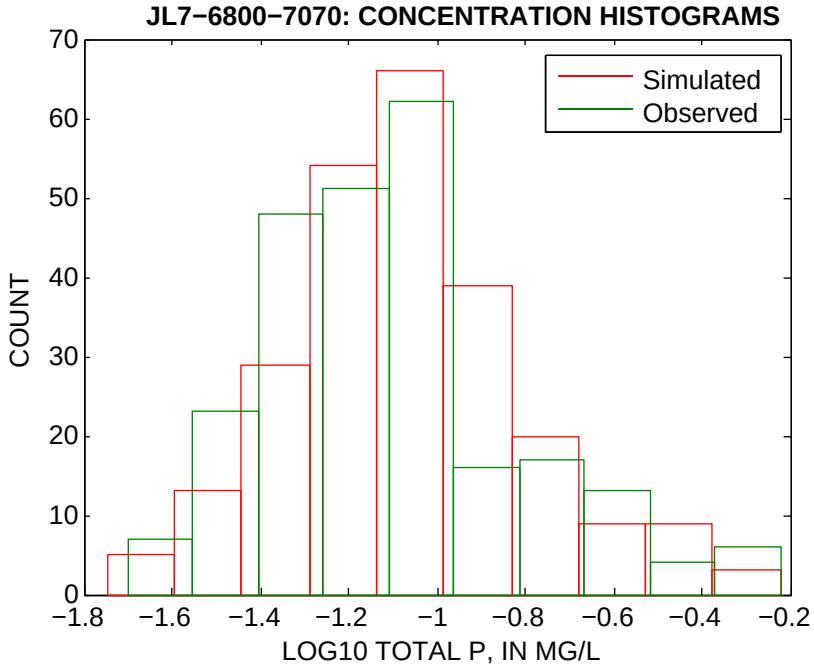
VERSION 2.1

ALL DATA
LOG10

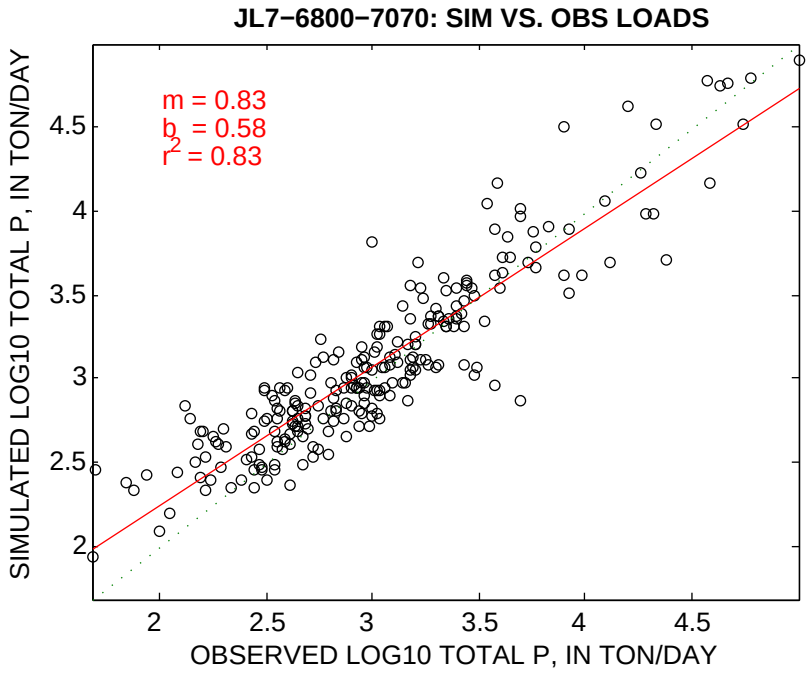


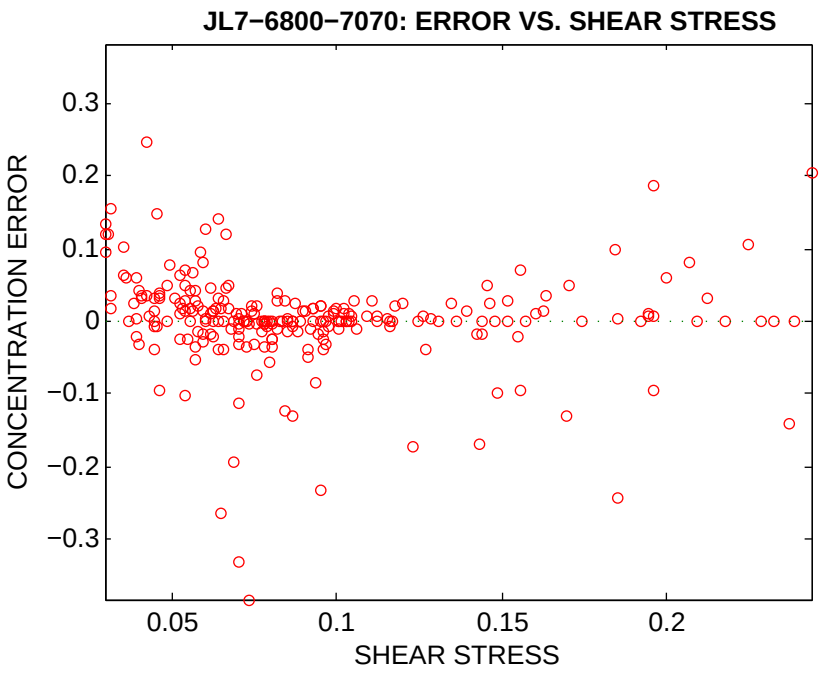


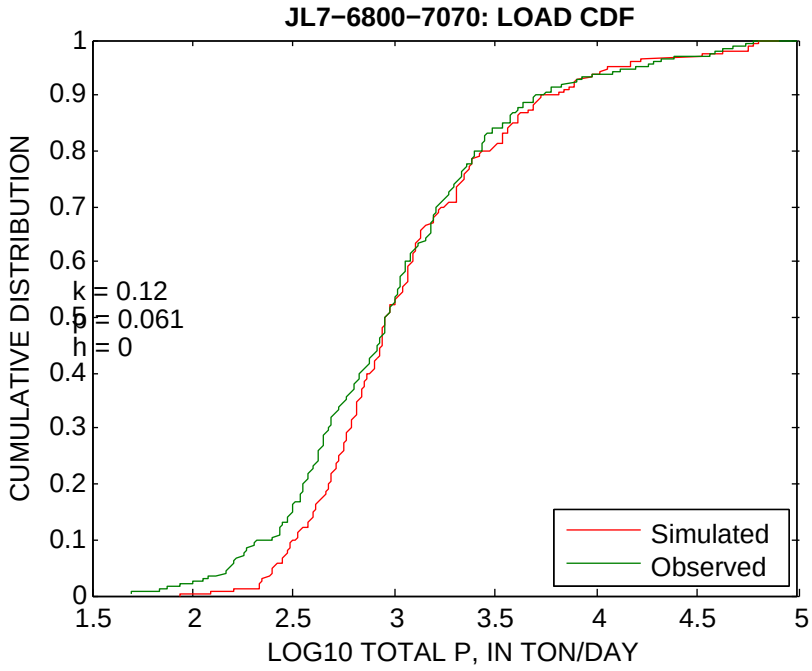


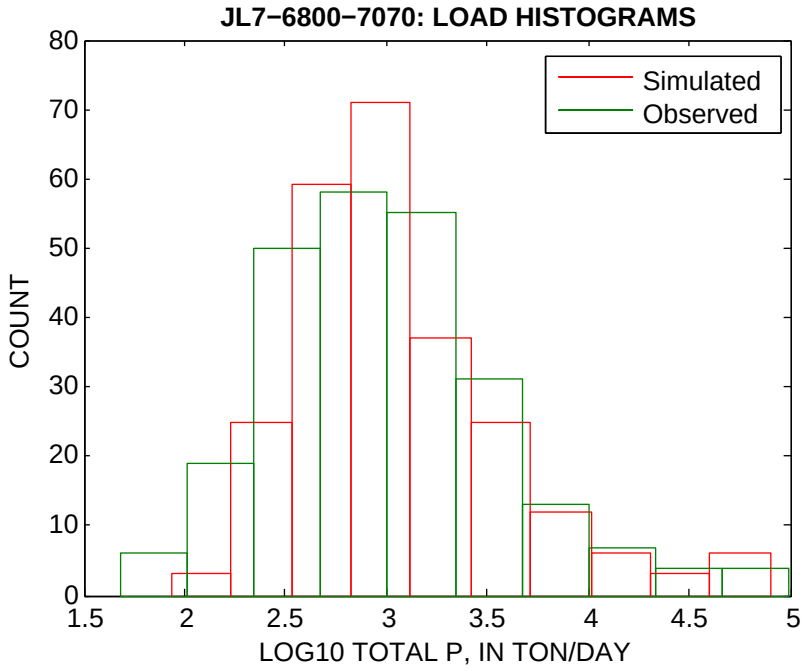


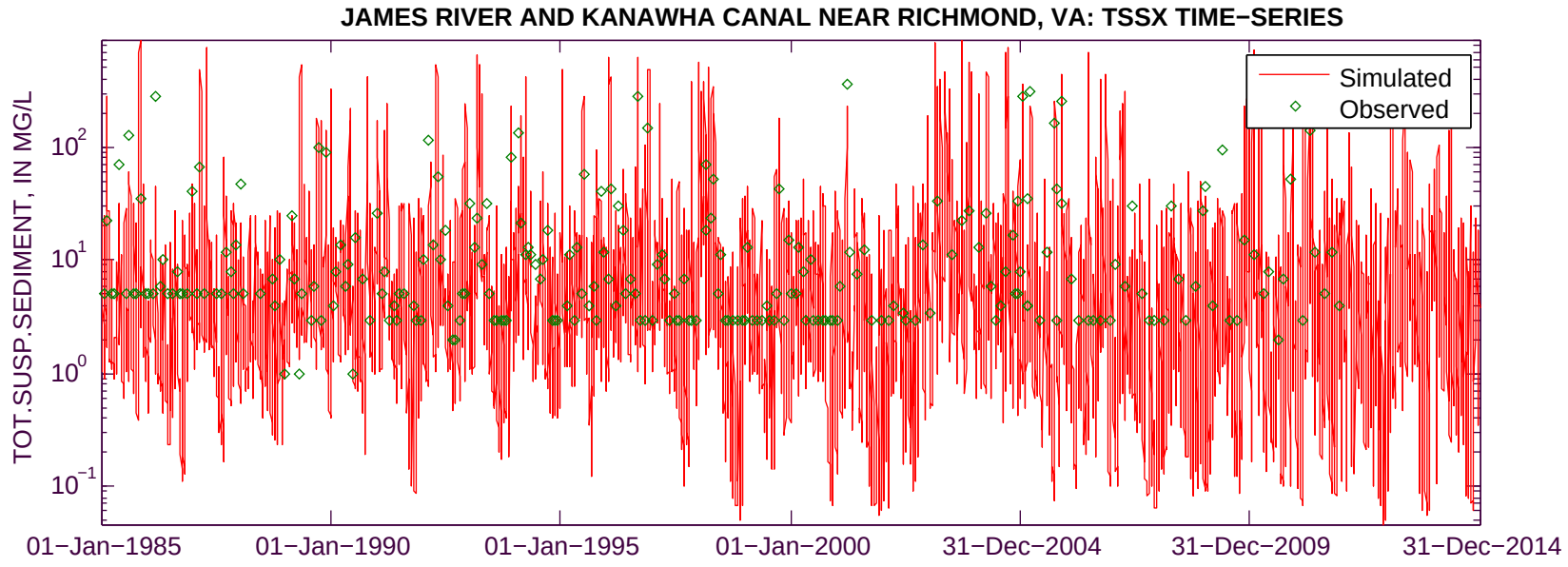
LOAD DATA
LOG10

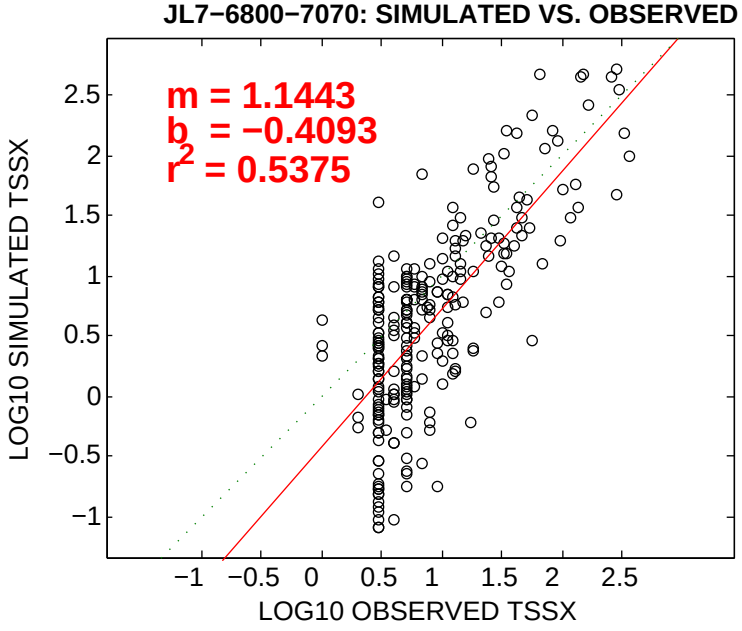


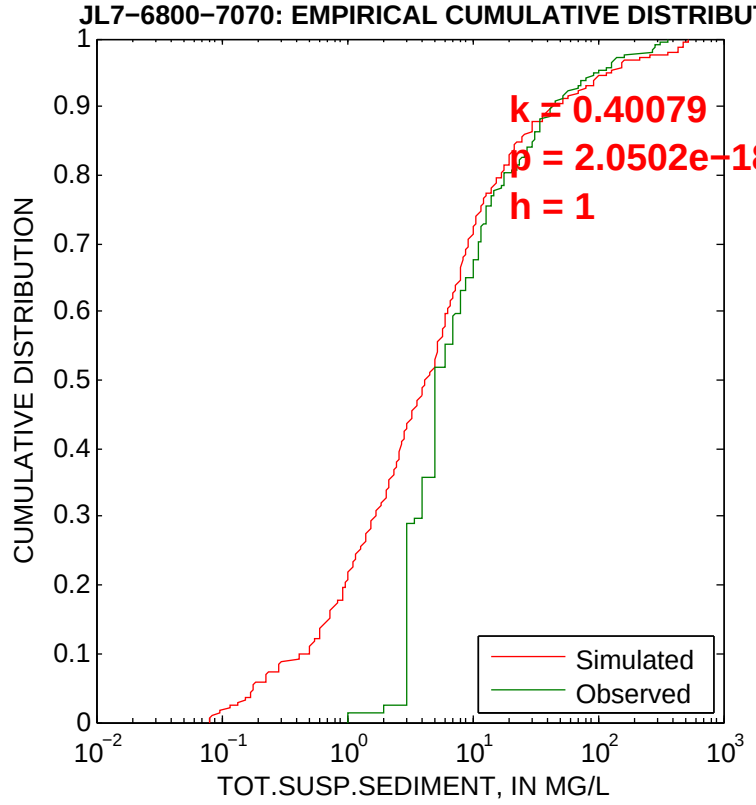












DATA SELECTION

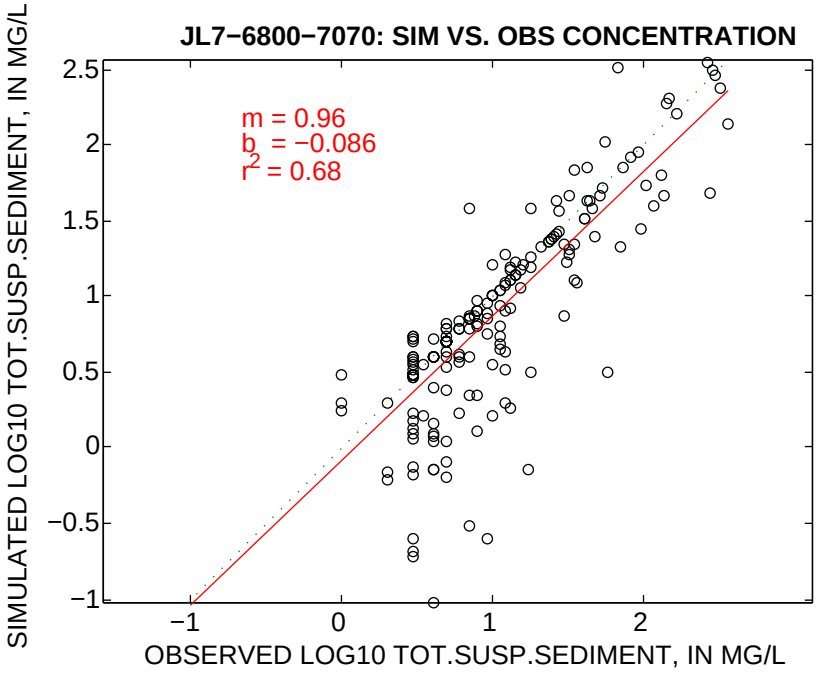
scenario: P620171001WQ
file: TSSX.calib
plot: TSSX - total suspended ...
Dates: 1/1/1985 12/31/201
Drive: N/A
Directory: model
Observed: OBS20161101

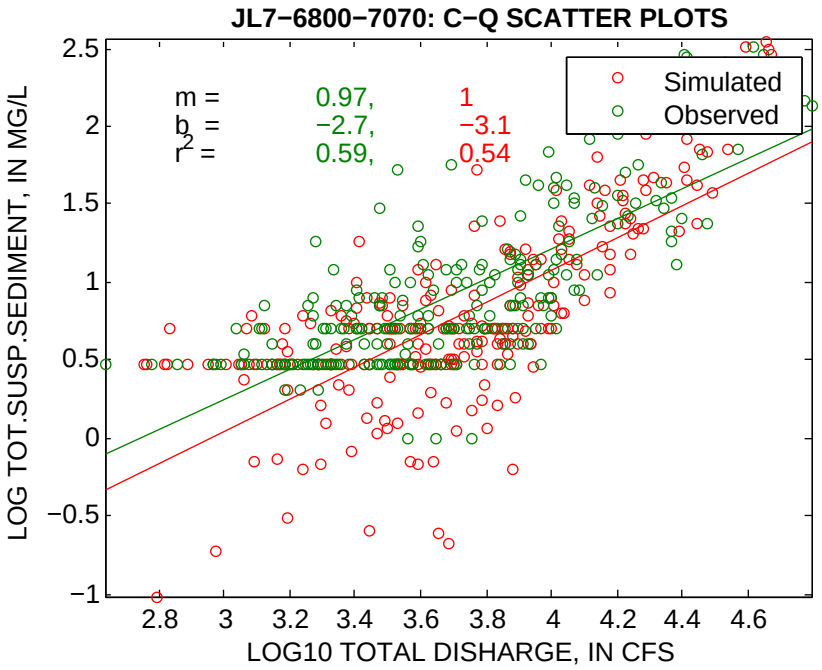
STATISTICS

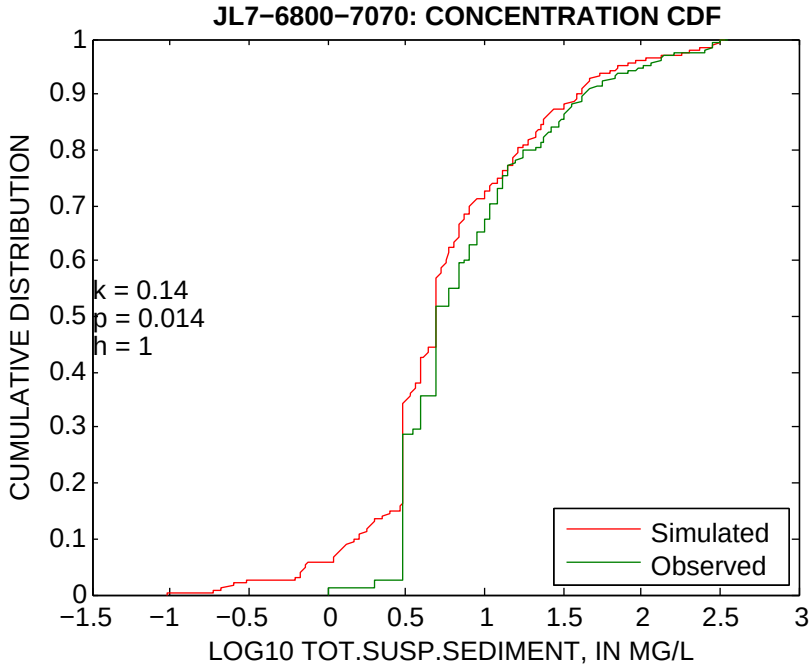
n	252	252
	observe	simulate
min	1	0.082318
	0	-1.08451
mean	21.7574	25.3707
	0.914037	0.636627
media	5	4.3093
	0.69897	0.634248
max	356	524.9
	2.55145	2.72008
varian	2510.19	5672.8
	0.256906	0.625855
JB	0.001	0.001
	0.001	0.229663
	ra	log
%	16.6073	-30.35
err.va	3031.04	0.372072
rel.std.err	1.20749	1.44828
mod.eff	-0.207493	-0.448277

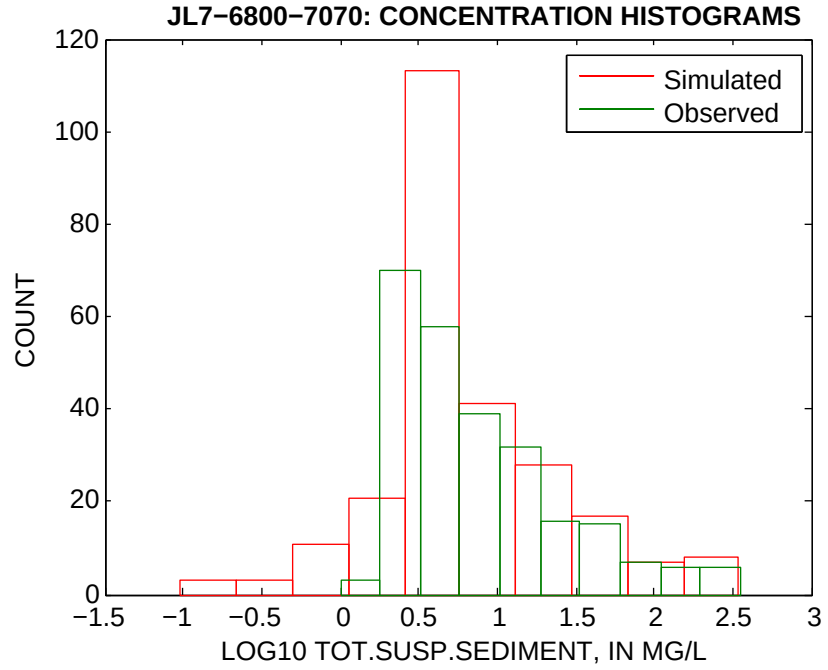
VERSION 2.1

ALL DATA
LOG10

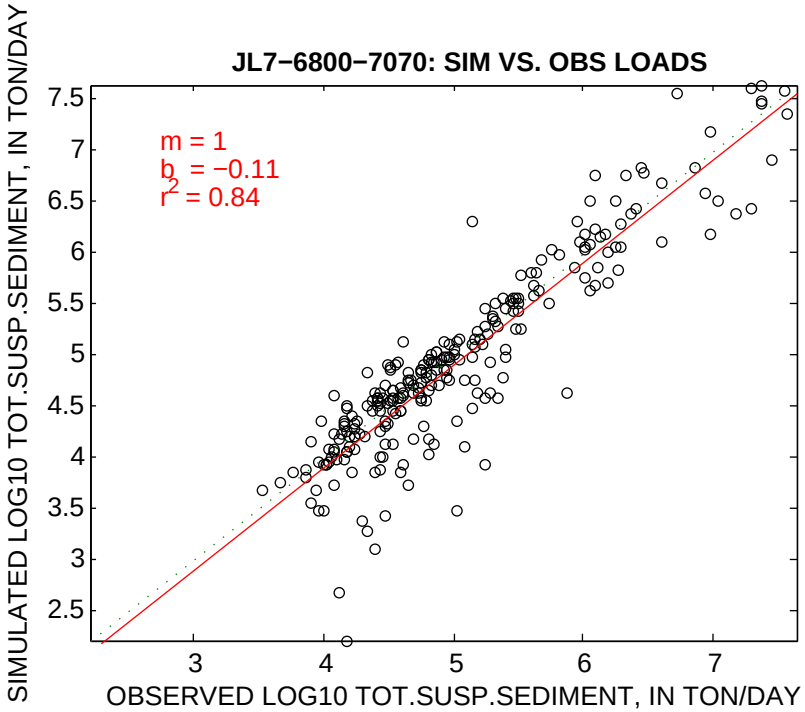


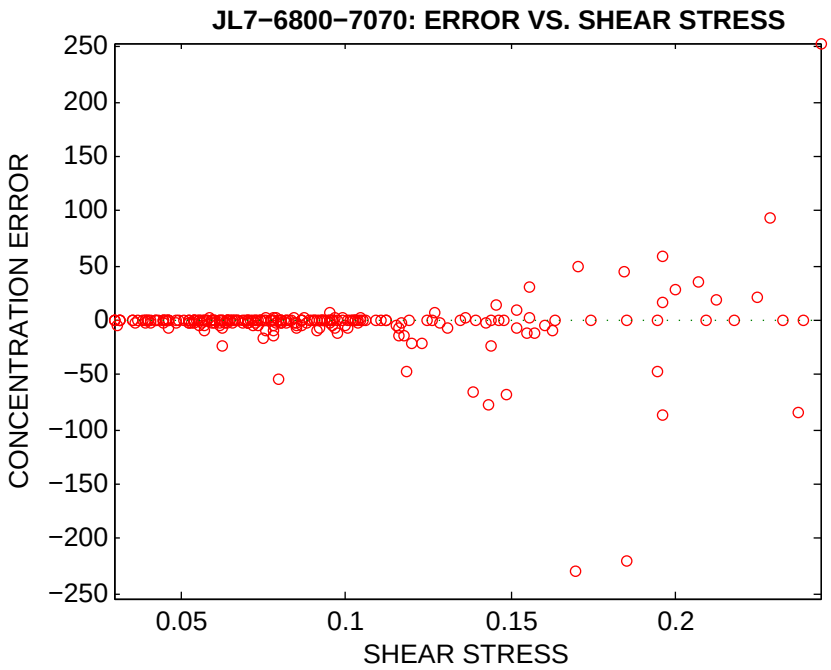


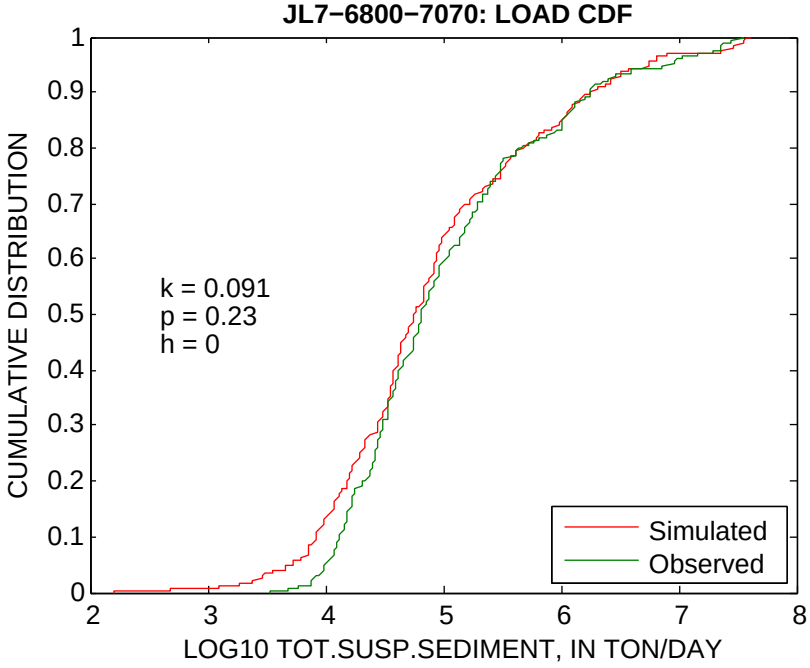


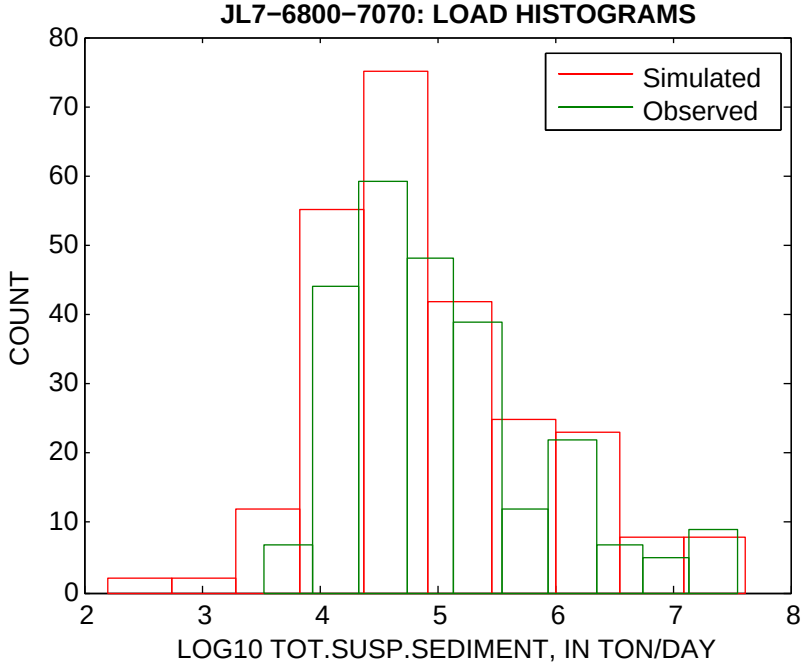


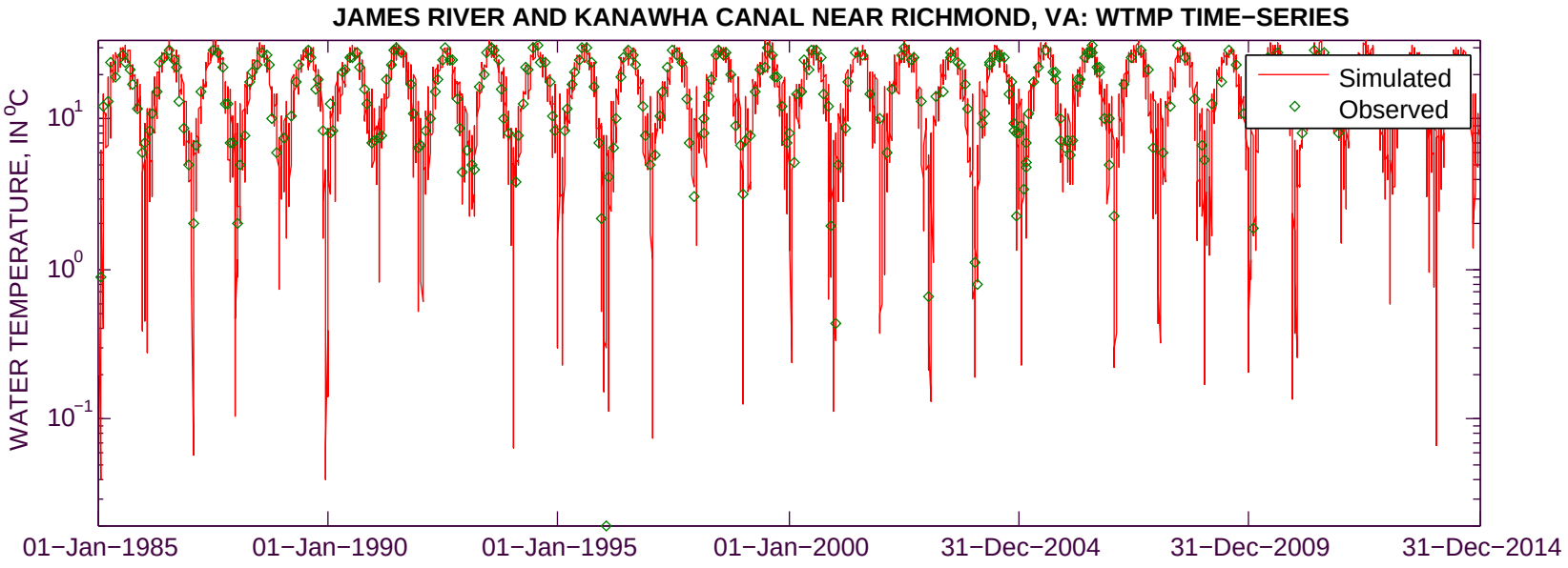
LOAD DATA
LOG10

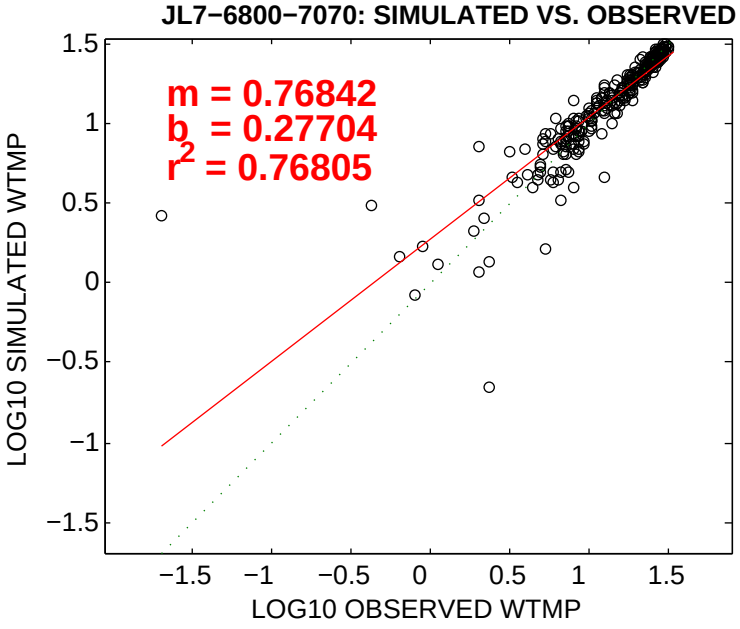


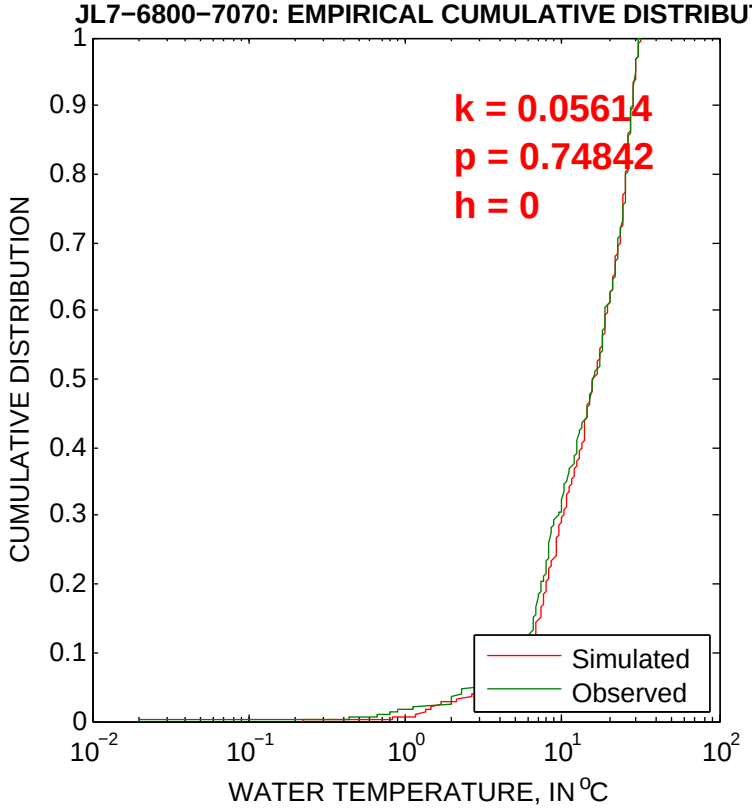












DATA SELECTION

scenario	file
P620171001WQ	WTMP.calib

plot: WTMP - water tempera...

Dates: 1/1/1985 – 12/31/201

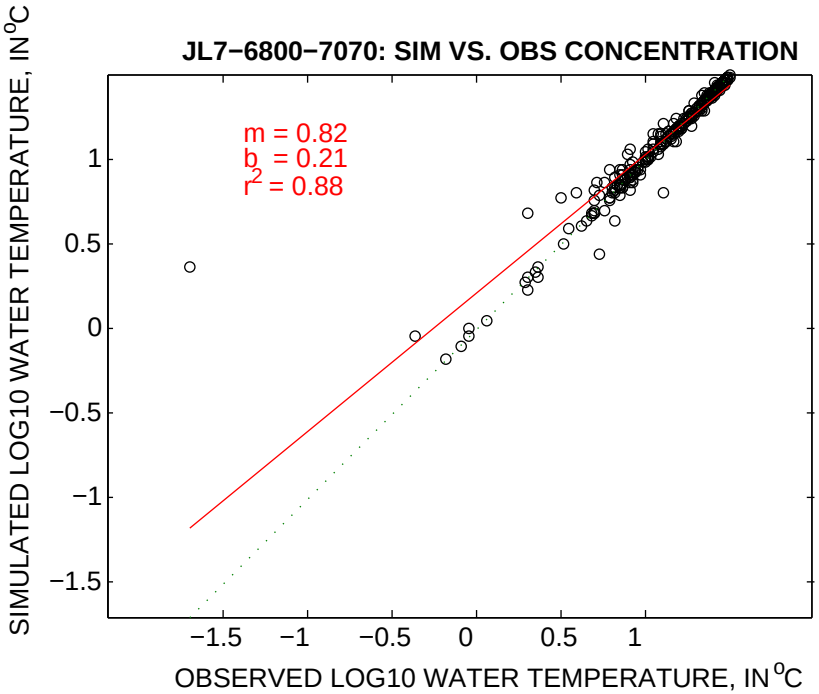
Drive	Directory	Observed
N/A	model	OBS20161101

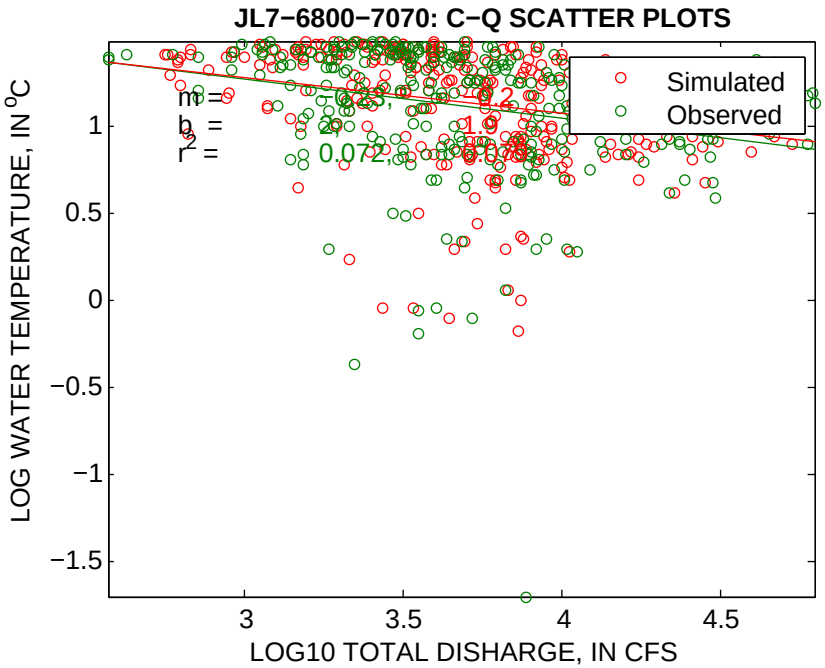
STATISTICS

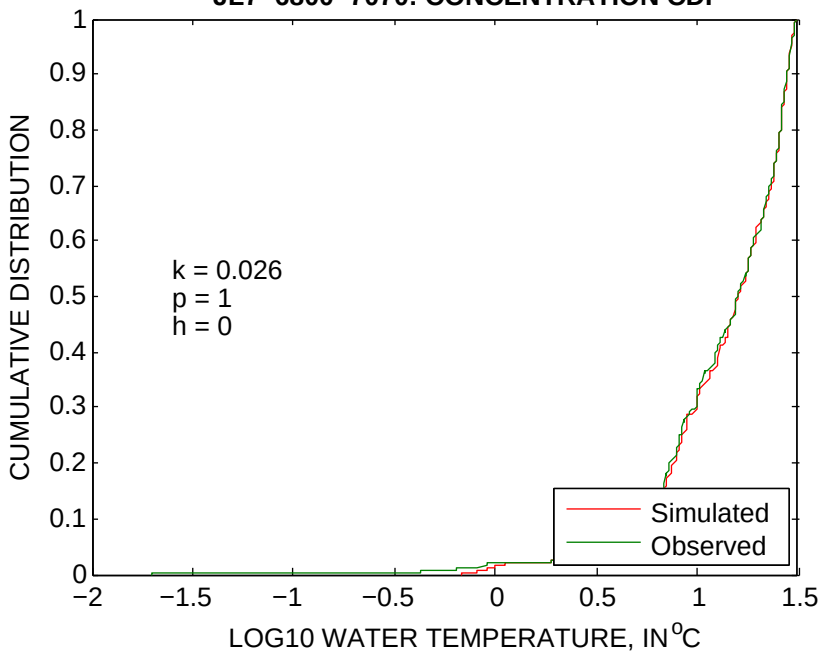
	n	285	285
		observe	simulate
min		0.02	0.22013
		-1.69897	-0.657321
mean		16.3148	16.5559
		1.11348	1.13265
media		16.1	15.876
		1.20683	1.20074
max		31.3	32.22
		1.49554	1.50813
varian		76.0115	72.7665
		0.13436	0.103294
JB		0.001948	0.002845
		0.001	0.001
		ra	log
%		1.47745	1.72214
err.va		3.66023	0.0315339
rel.std.err		0.0481536	0.234697
mod.eff		0.951846	0.765303

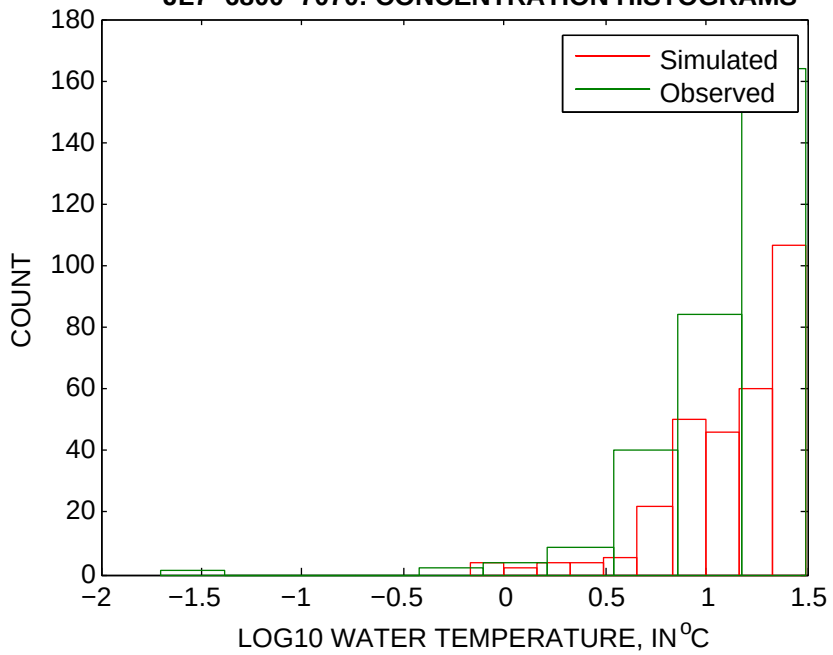
VERSION 2.1

ALL DATA
LOG10

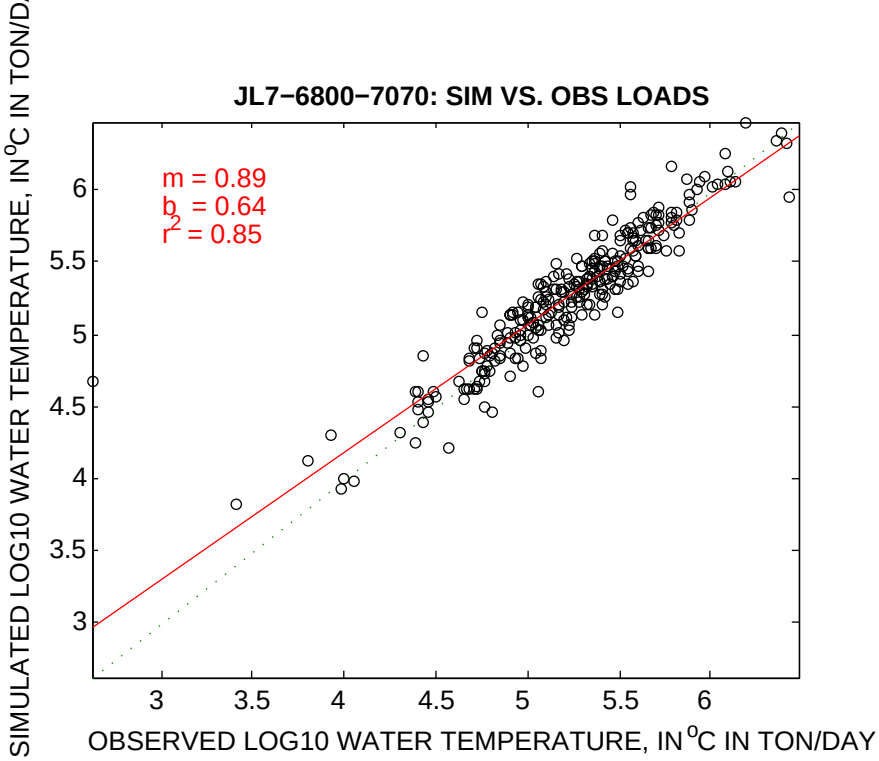


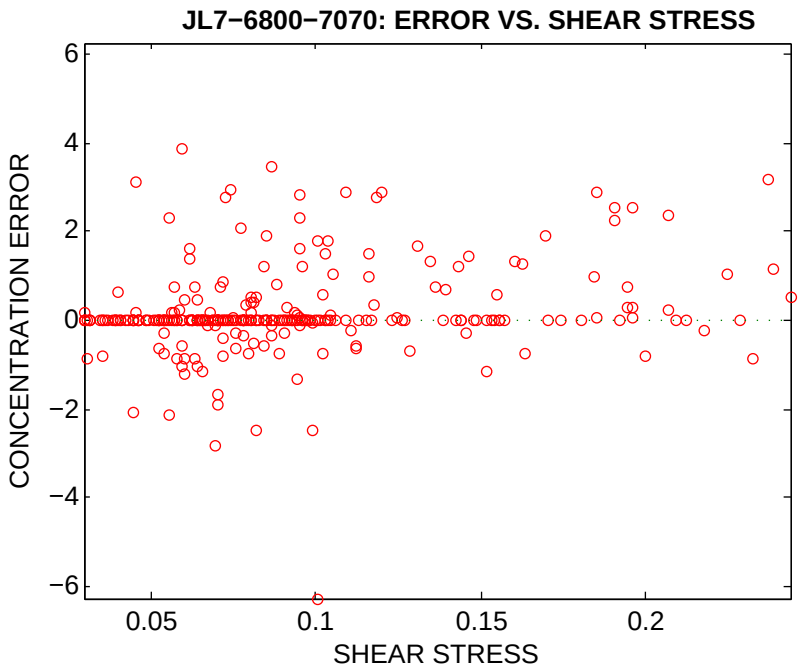


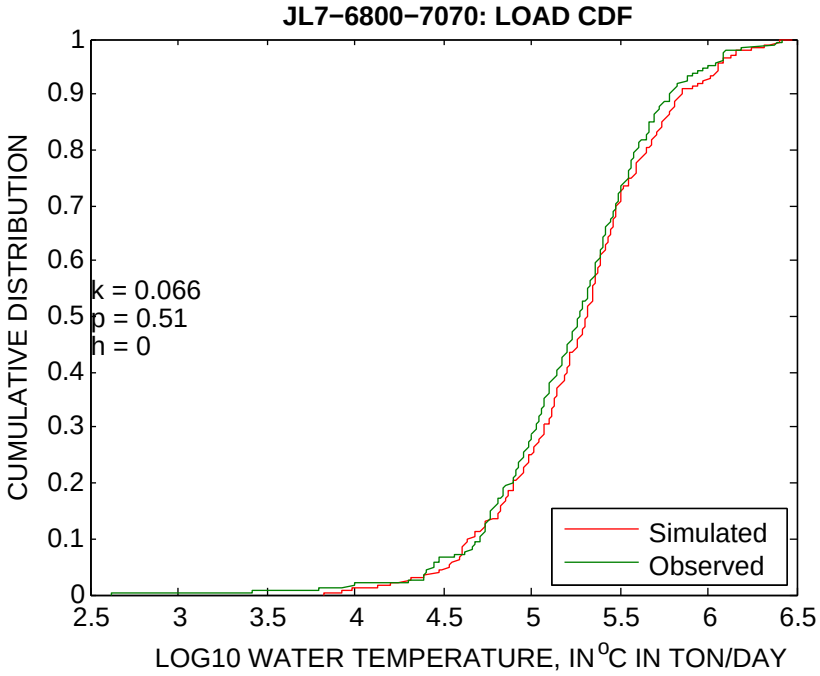


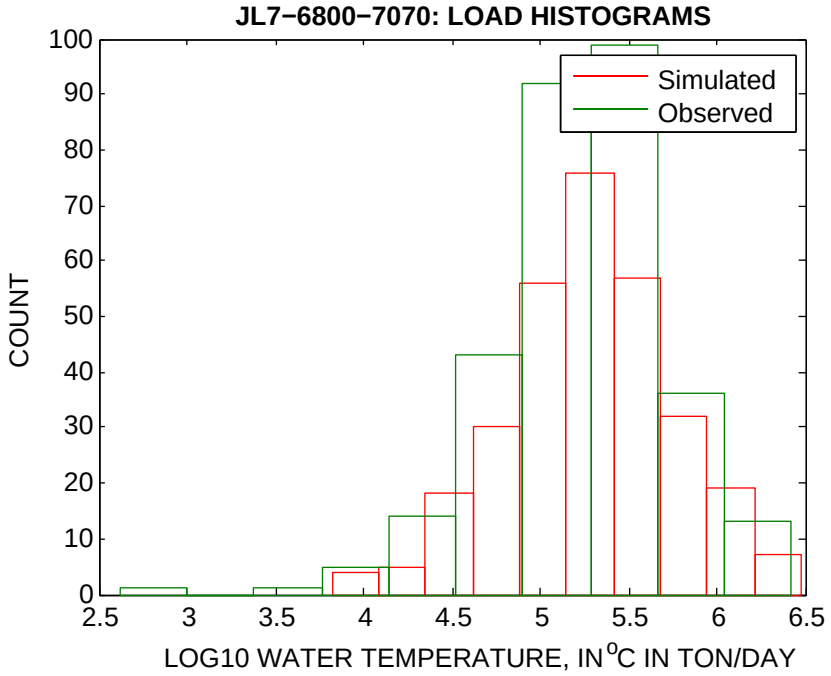


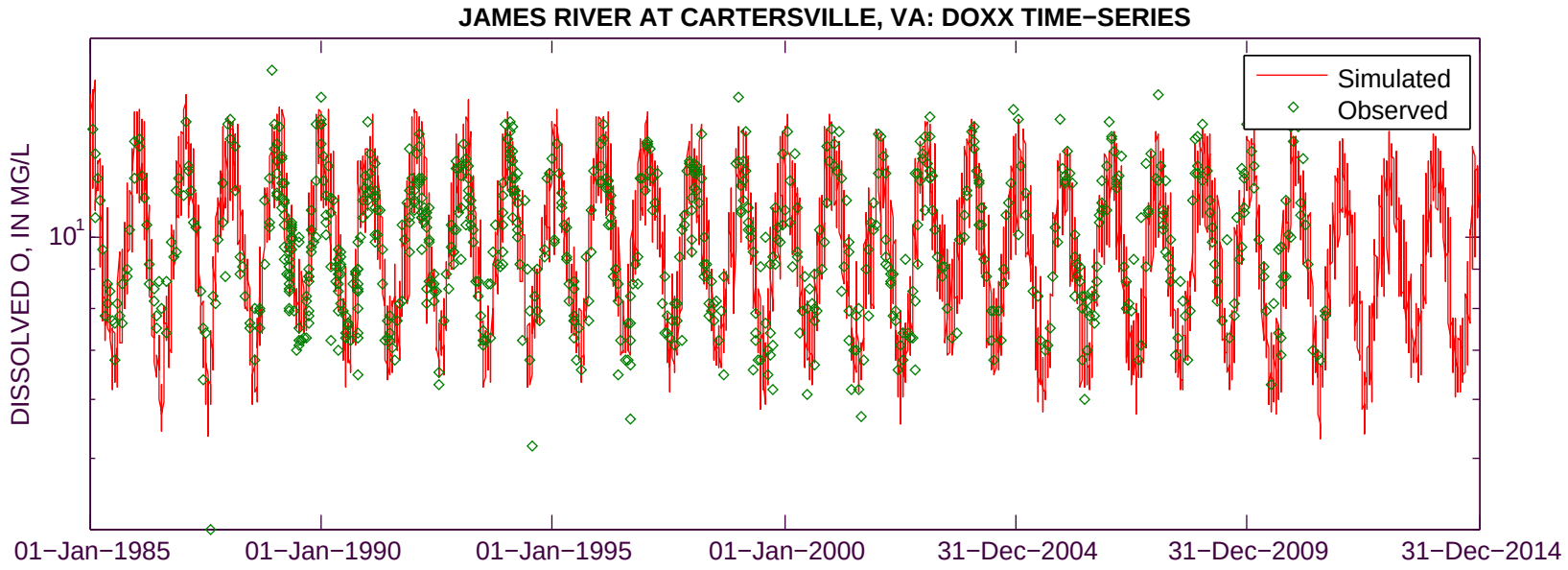
LOAD DATA
LOG10

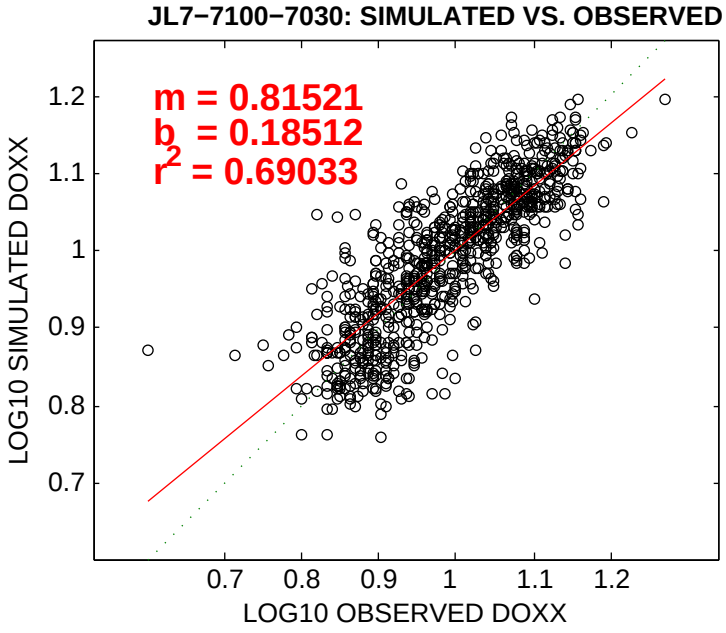


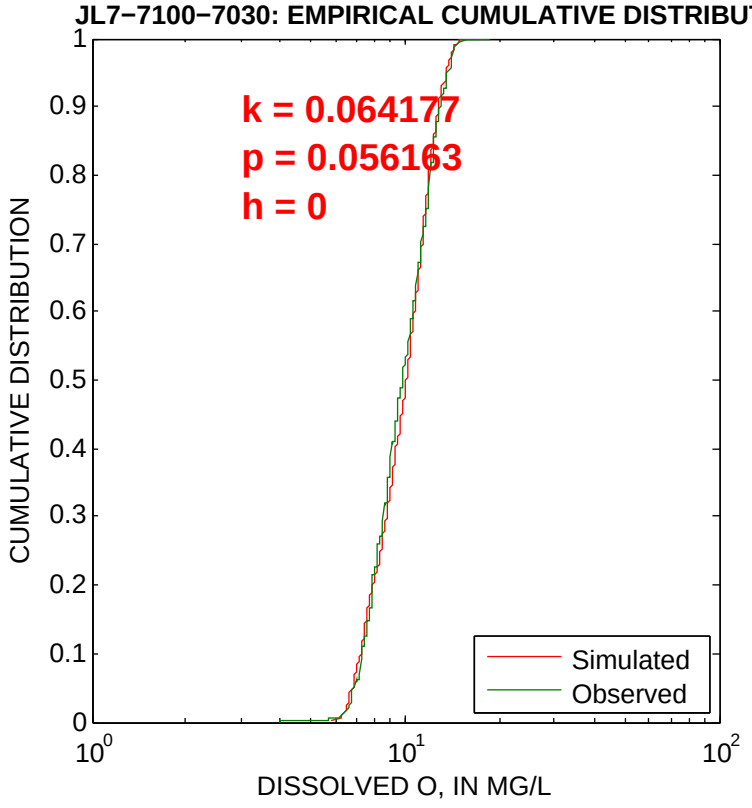












DATA SELECTION

scenario	file
P620171001WQ	DOXX.calib

plot: DOXX - dissolved oxygen

Dates: 1/1/1985 – 12/31/201

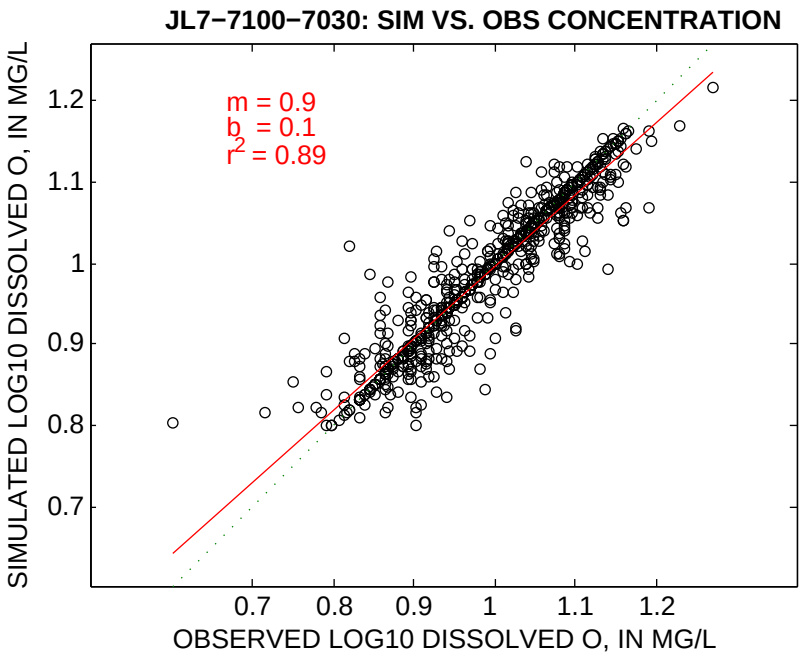
Drive	Directory	Observed
N/A	model	OBS20161101

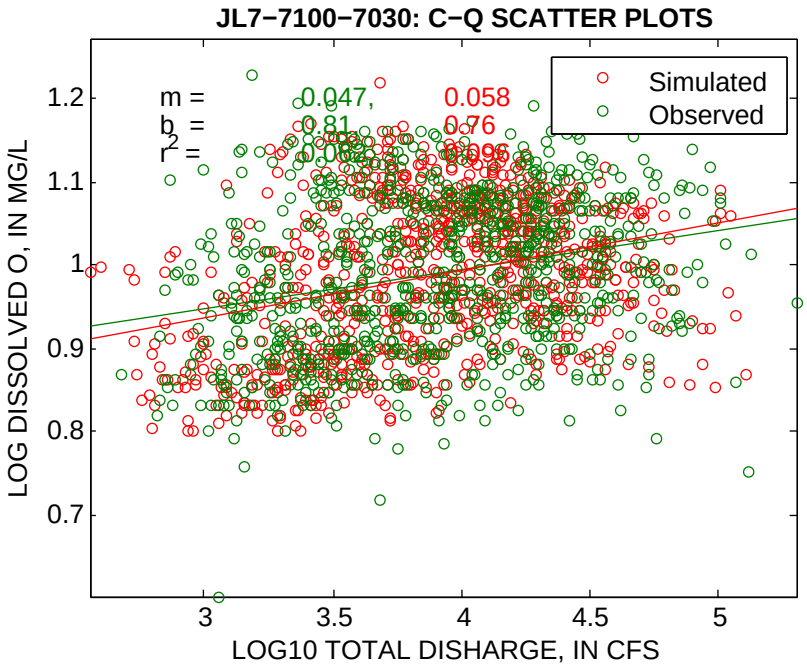
STATISTICS

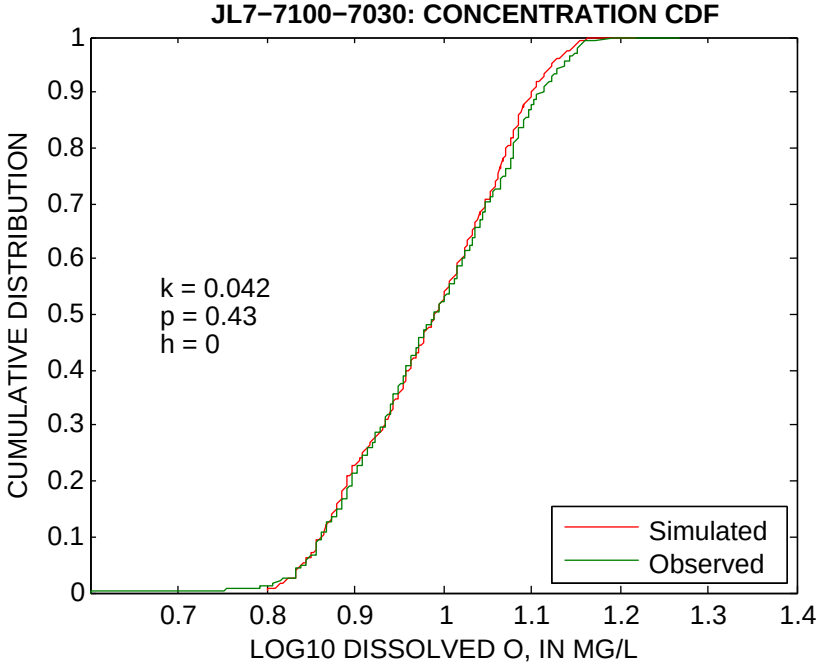
	n	observe	simulate
		857	857
min		4	5.7222
		0.60206	0.757563
mean		9.99617	10.0368
		0.989651	0.991895
media		9.8	10.096
		0.991226	1.00415
max		18.6	15.664
		1.26951	1.1949
varian		4.65135	4.35864
		0.00895147	0.00861746
JB		0.001	0.001
		0.003962	0.001
		ra	log
%		0.406433	0.226762
err.va		1.46049	0.00297928
rel.std.err		1.313992	0.332826
mod.eff		0.686008	0.667174

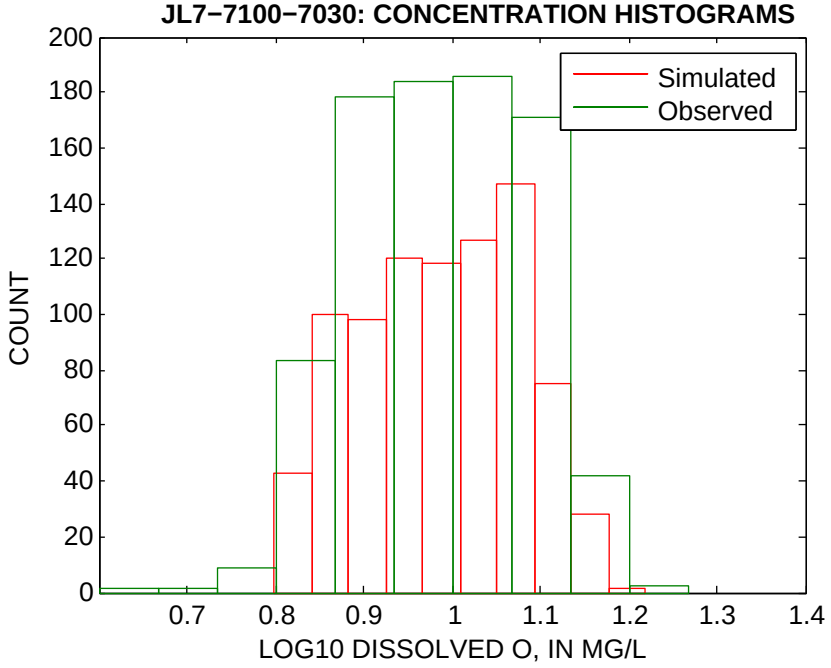
VERSION 2.1

ALL DATA
LOG10

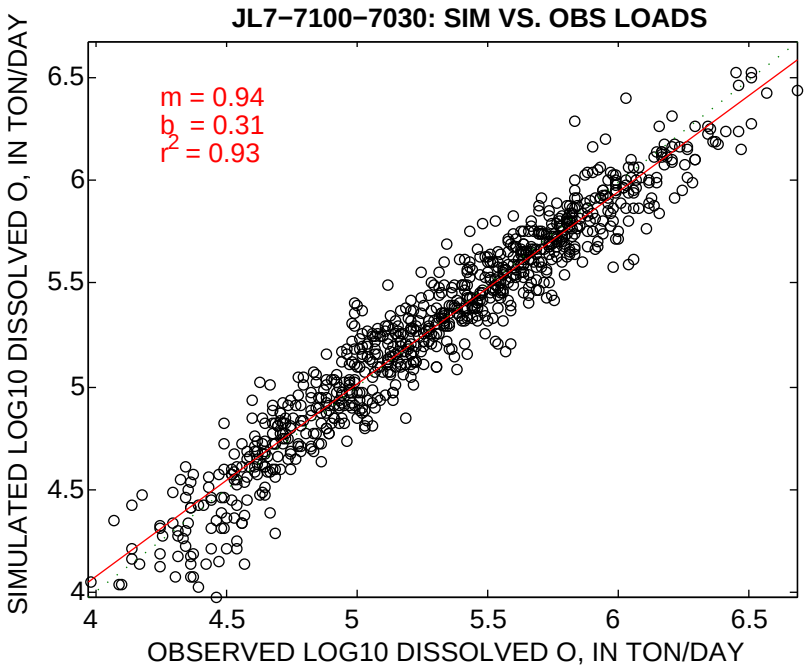


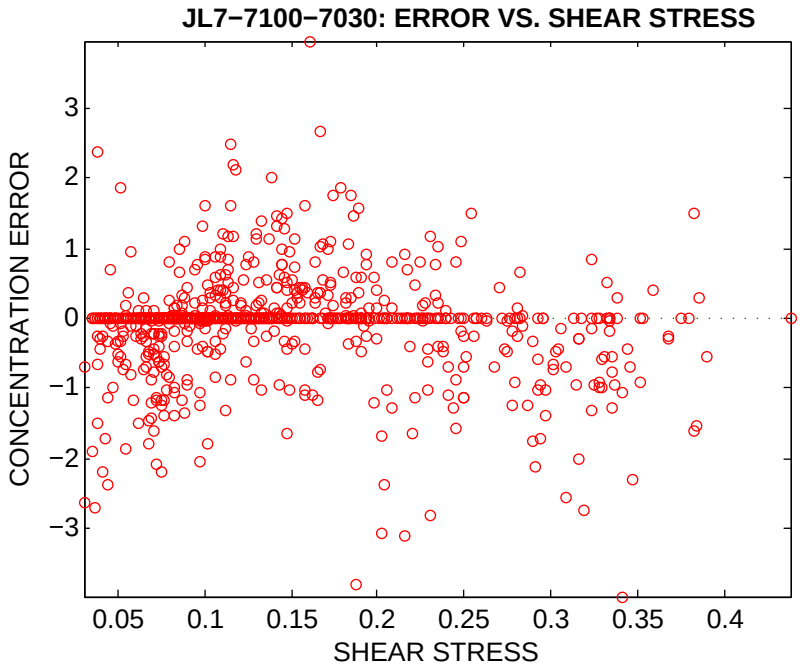


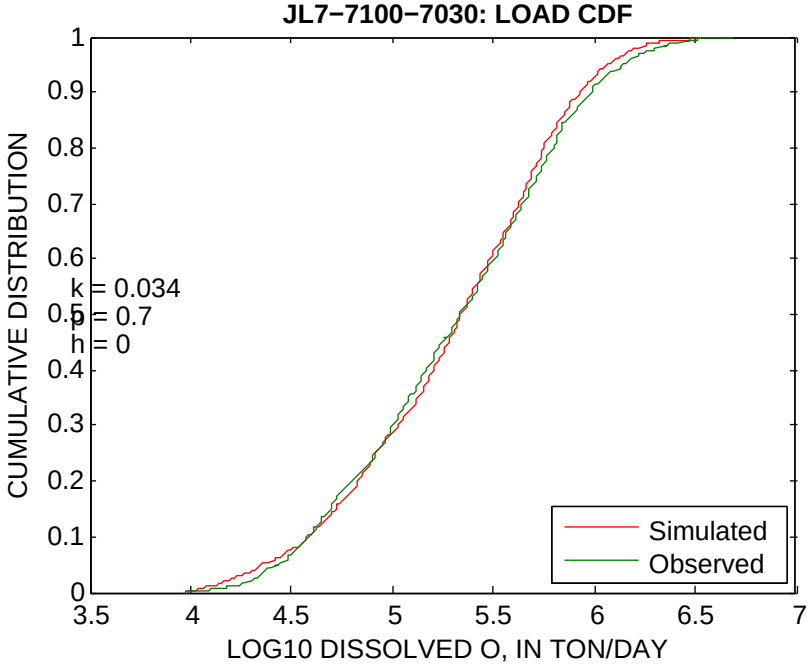


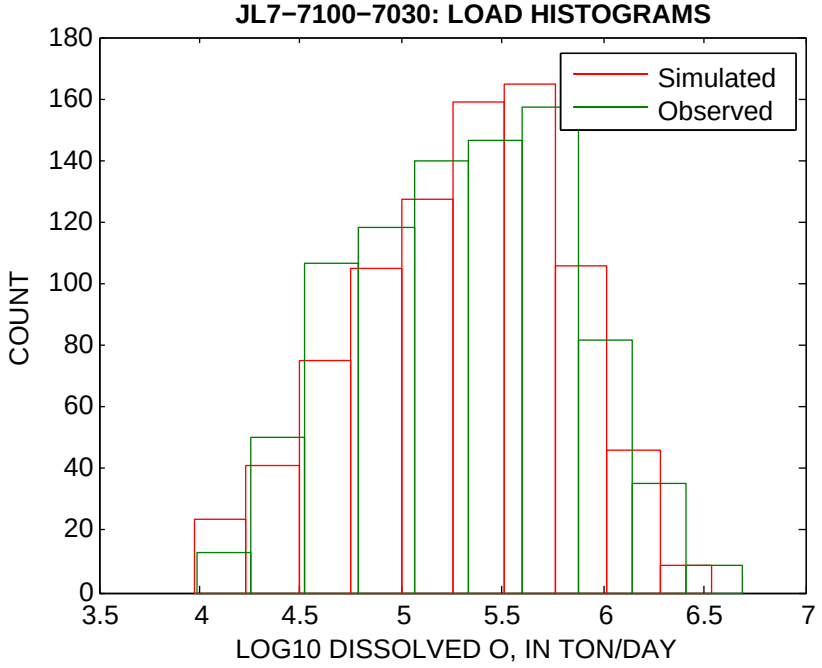


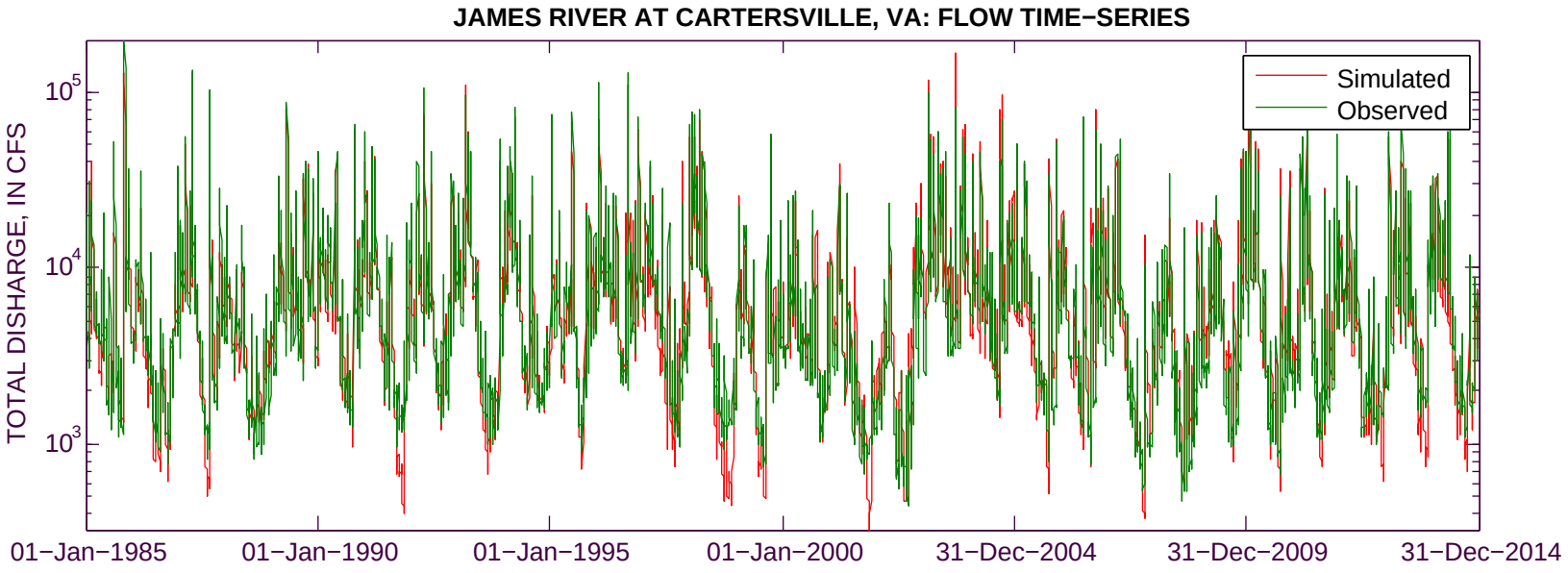
LOAD DATA
LOG10

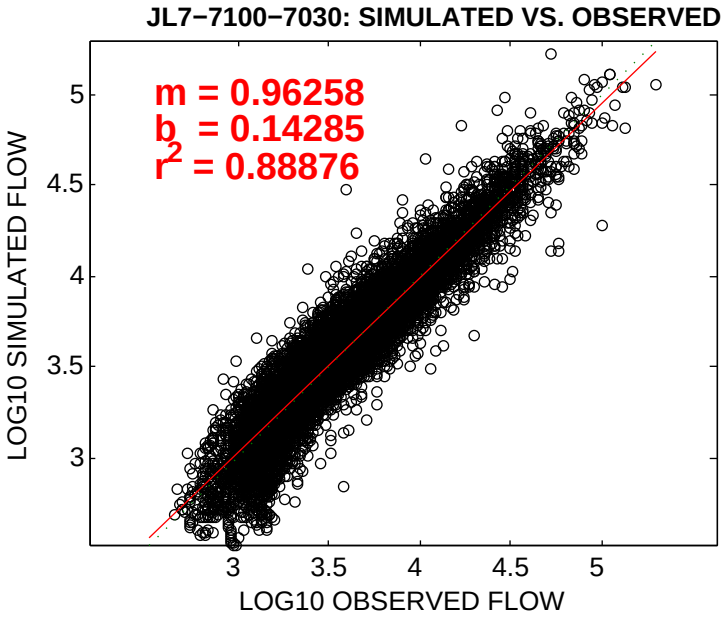


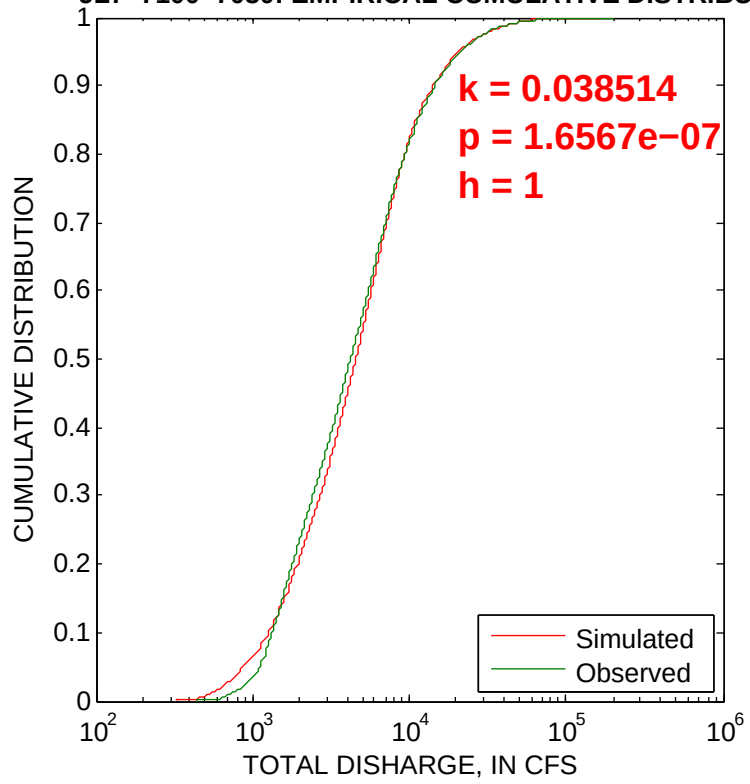












DATA SELECTION

scenario	file
P620171001WQ	FLOW.calib

plot: FLOW - total discharge

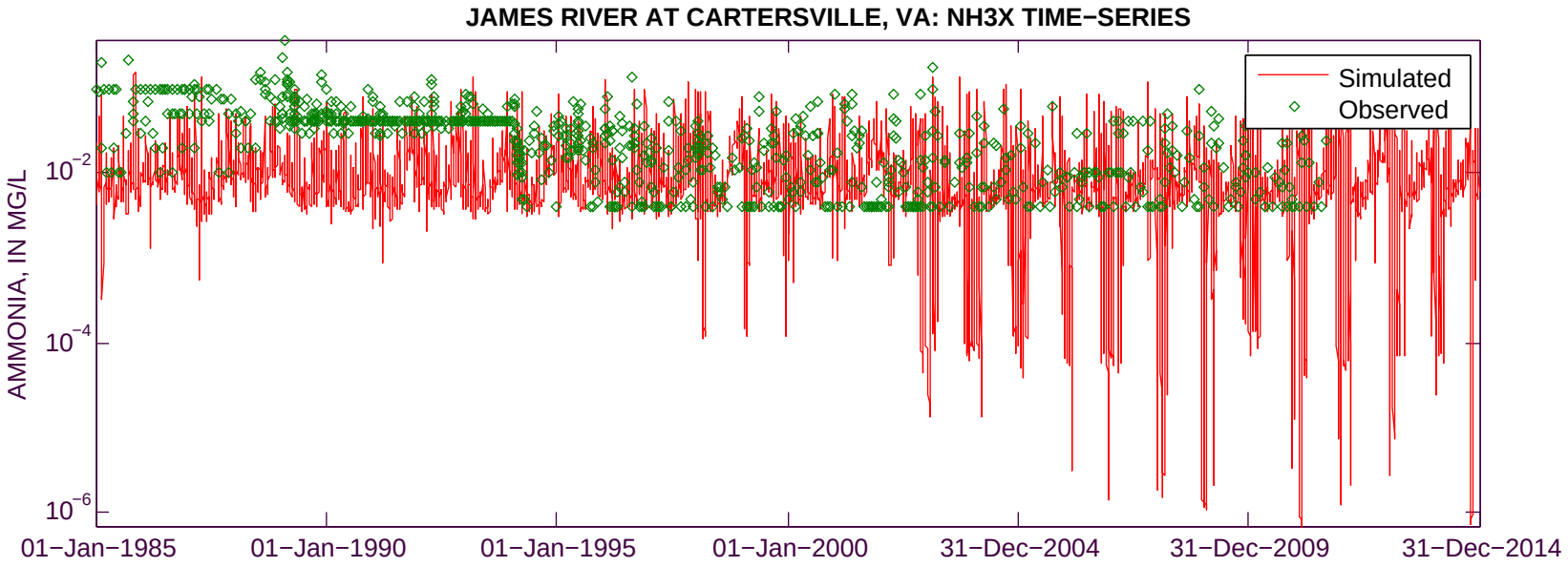
Dates 1/1/1985 12/31/201

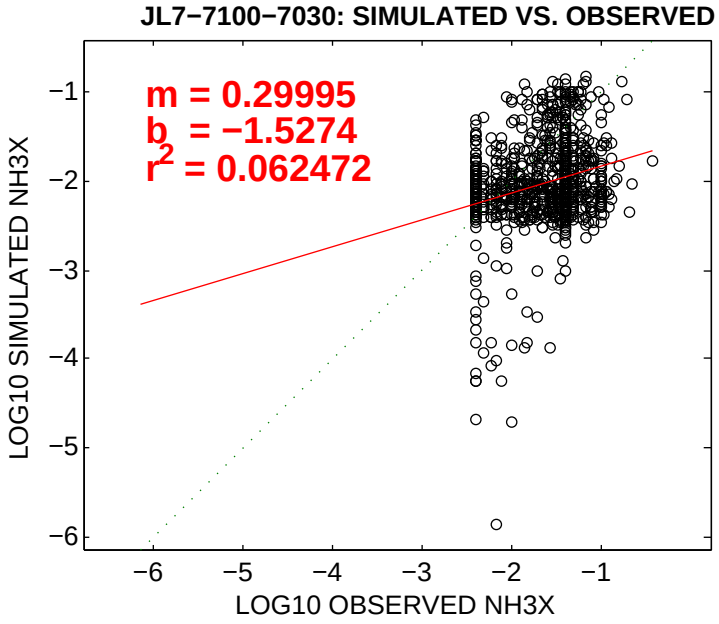
Drive	Directory	Observed
N/A	model	OBS20161101

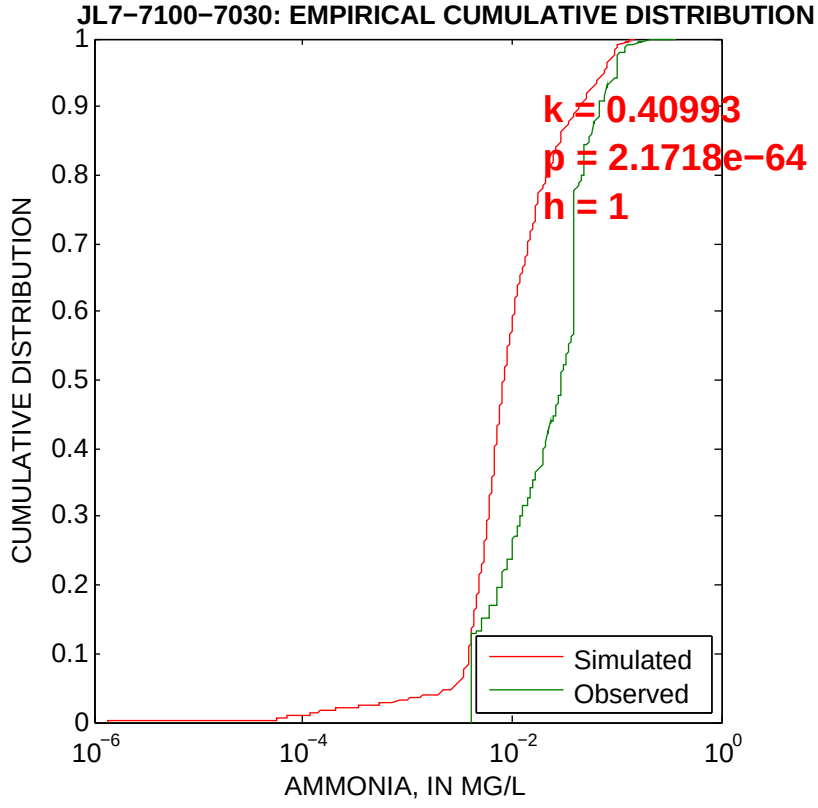
STATISTICS

n	10957	10957
	observe	simulate
min	447	327.54
	2.65031	2.51526
mean	6936	6986.7
	3.63873	3.64542
media	4230	4593.5
	3.62634	3.66214
max	199000	165640
	5.29885	5.21917
varian	8.38194e+0	7.90796e+
	0.161703	0.168581
JB	0.001	0.001
	0.001	0.012199
	ra	log
%	0.731051	0.183859
err.va	1.33533e+0	0.0190238
rel.std.err	0.15931	0.117646
mod.eff	0.84069	0.882354

VERSION 2.1







DATA SELECTION

scenario	file
P620171001WQ	NH3X.calib

plot: NH3X - ammonia

Dates: 1/1/1985 – 12/31/201

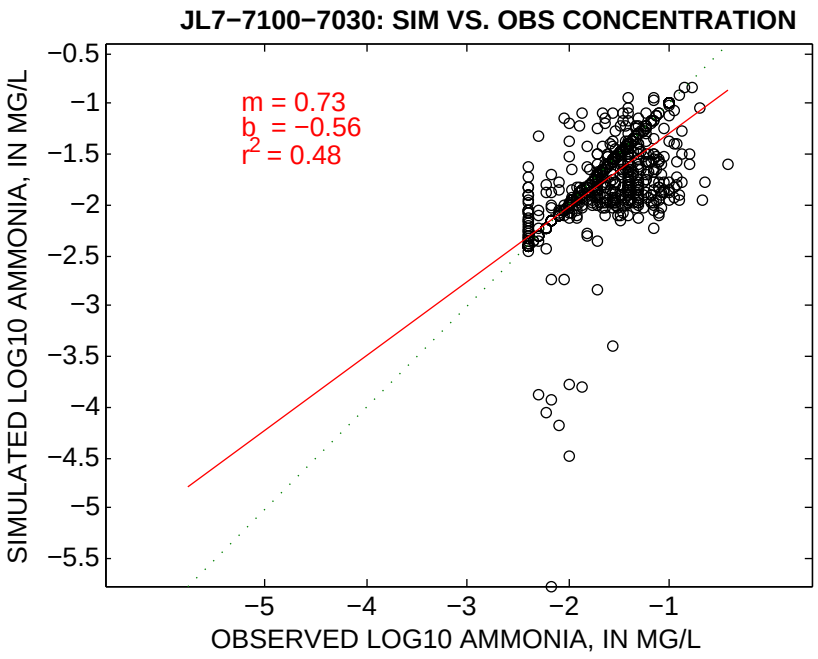
Drive	Directory	Observed
N/A	model	OBS20161101

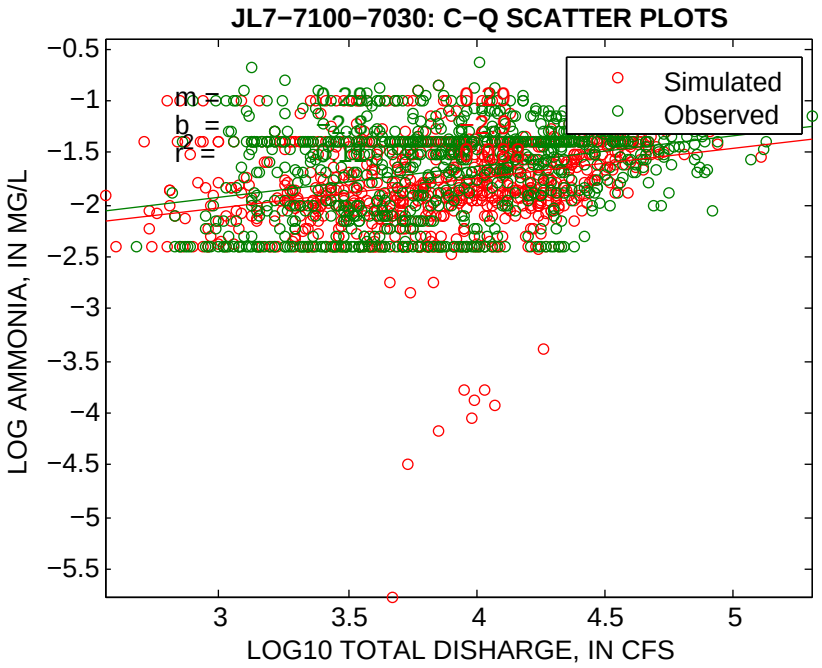
STATISTICS

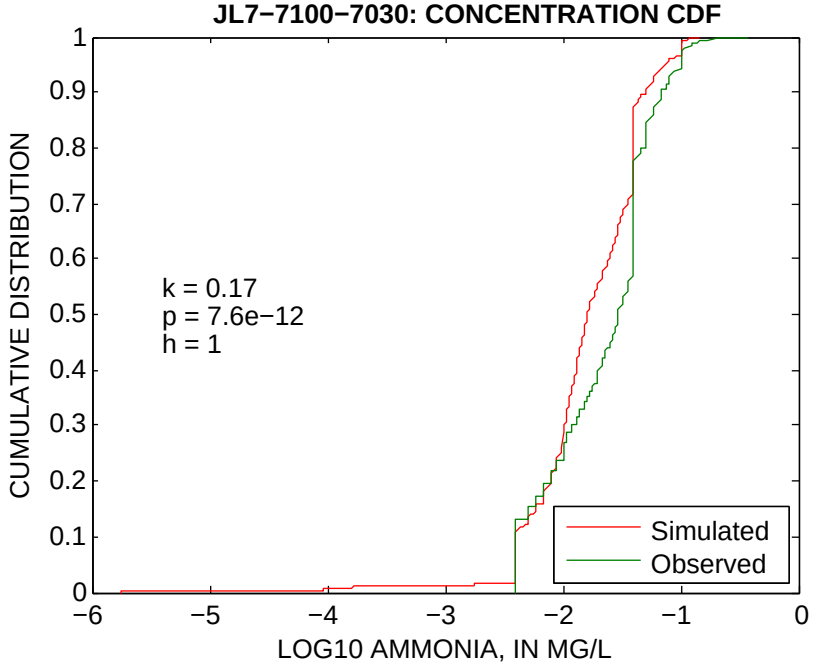
	n		866	866
			observe	simulate
min			0.004	1.4005e-06
			-2.39794	-5.85372
mean			0.0339659	0.0173798
			-1.65495	-2.02382
media			0.03	0.00832965
			-1.52288	-2.07937
max			0.38	0.14963
			-0.420216	-0.824981
varian			0.00101531	0.00053577
			0.189603	0.273058
JB			0.001	0.001
			0.001	0.001
			ra	log
%			-48.8316	22.2888
err.va			0.00162273	0.485139
rel.std.err			1.59826	2.55871
mod.eff			-0.598259	-1.55871

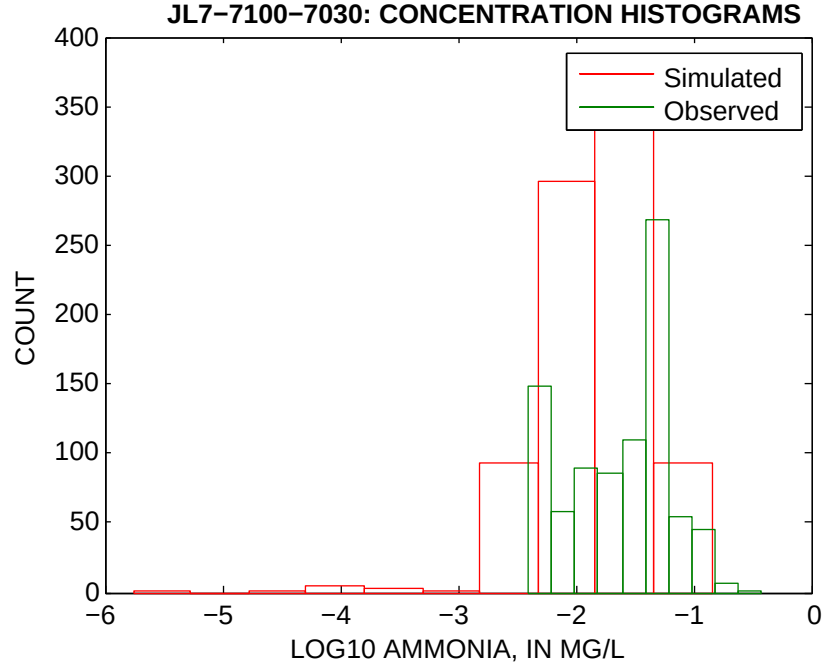
VERSION 2.1

ALL DATA
LOG10

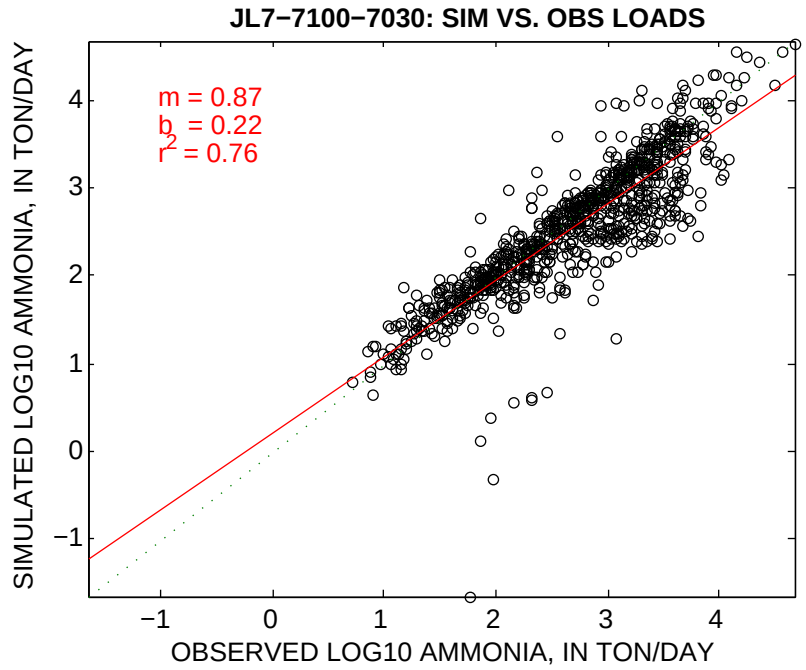


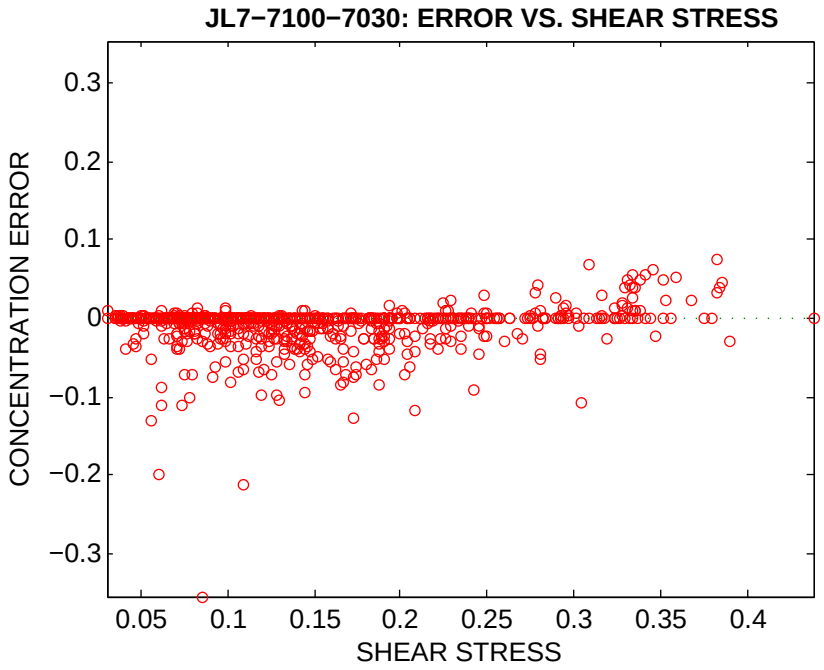


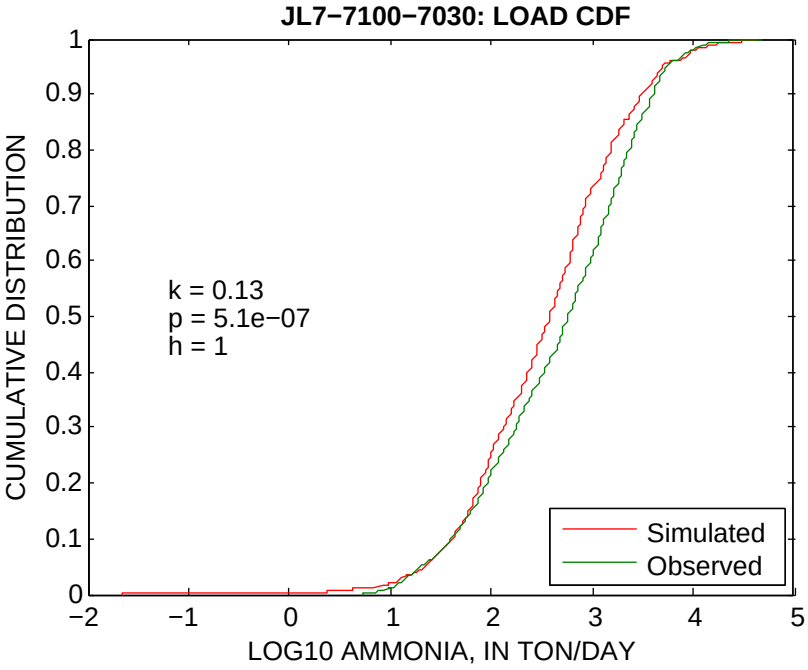


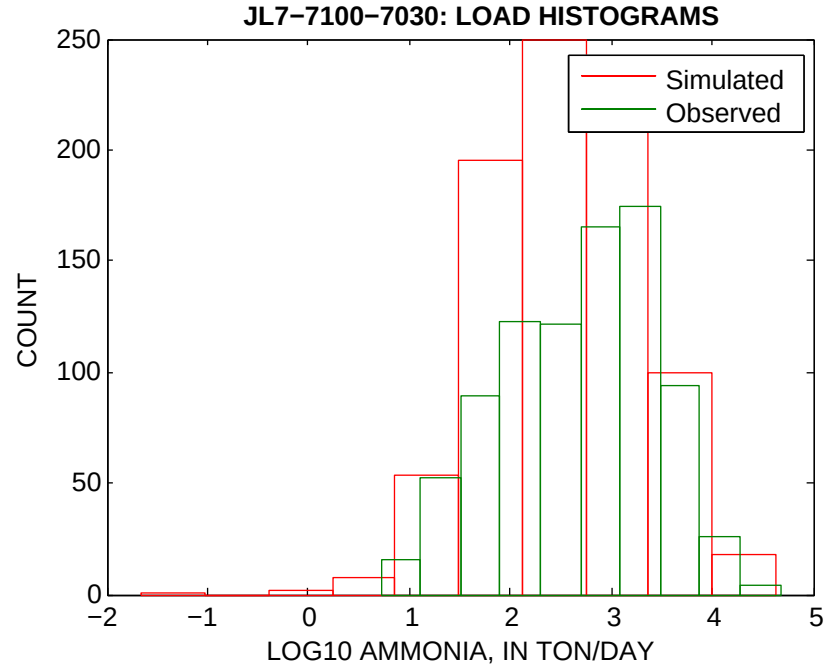


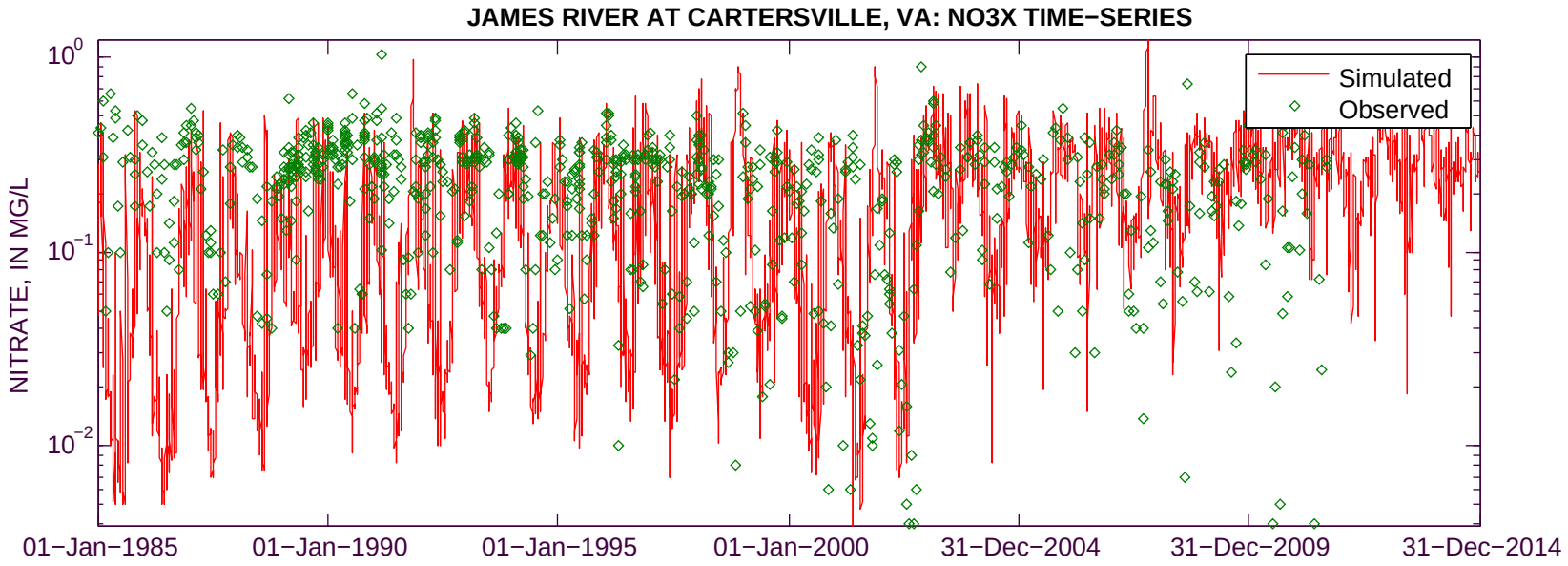
LOAD DATA
LOG10

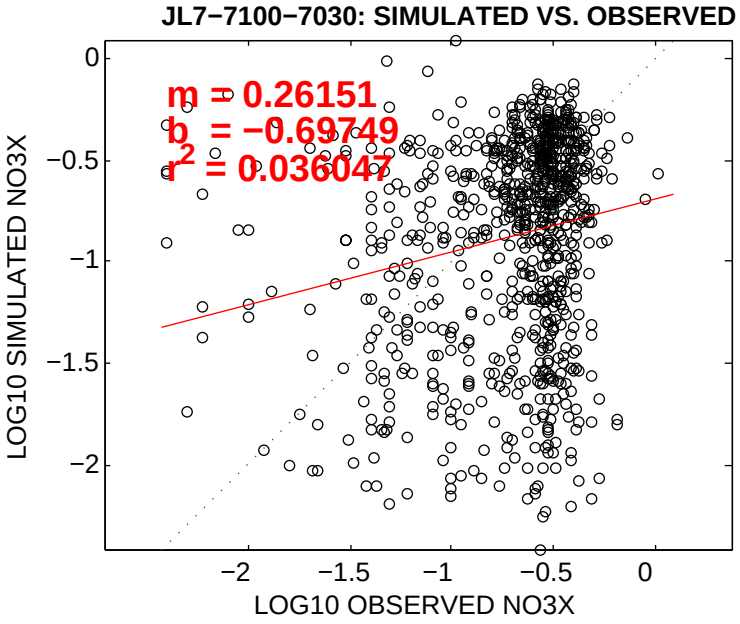


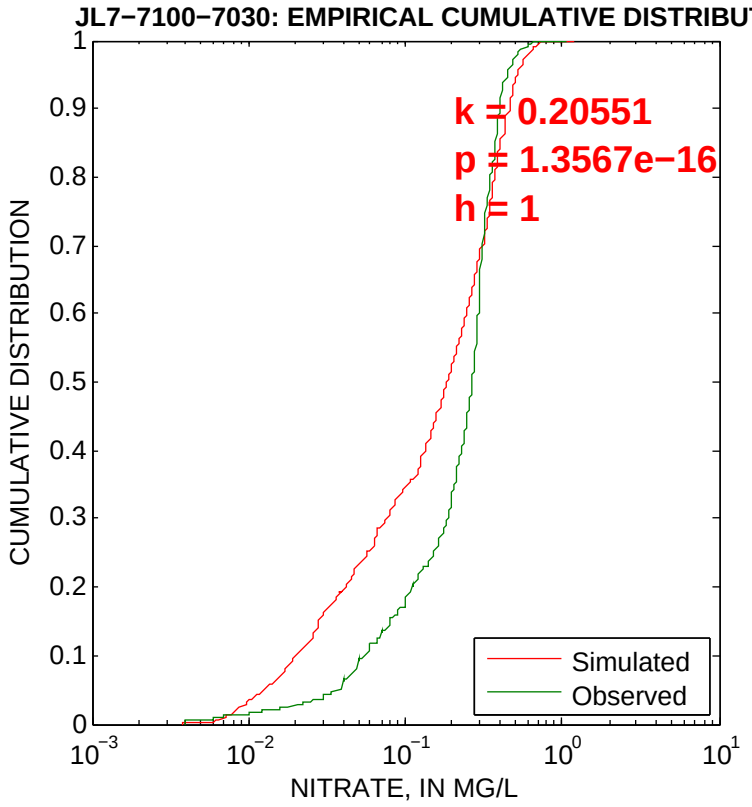












DATA SELECTION

scenario	file
P620171001WQ	NO3X.calib

plot: NO3X - nitrate

Dates: 1/1/1985 – 12/31/201

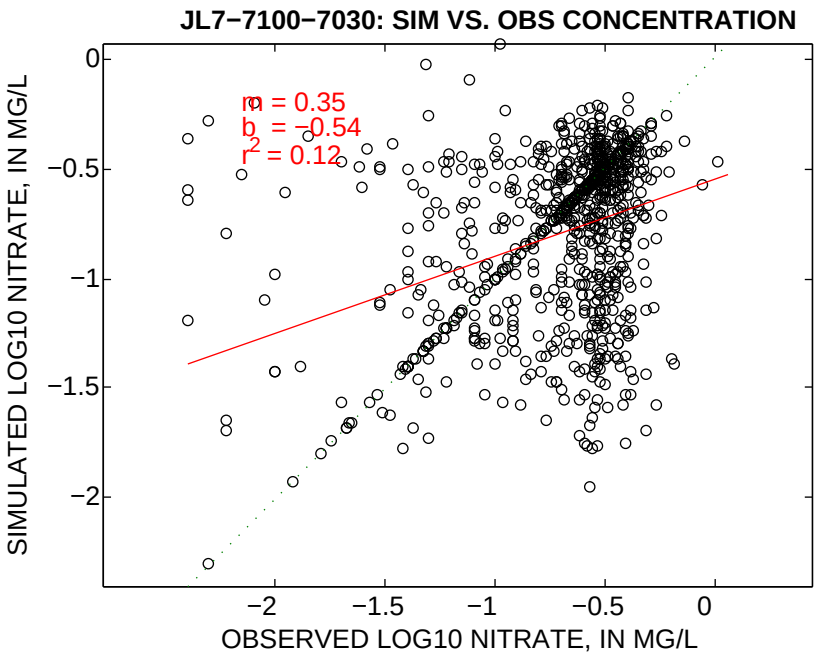
Drive	Directory	Observed
N/A	model	OBS20161101

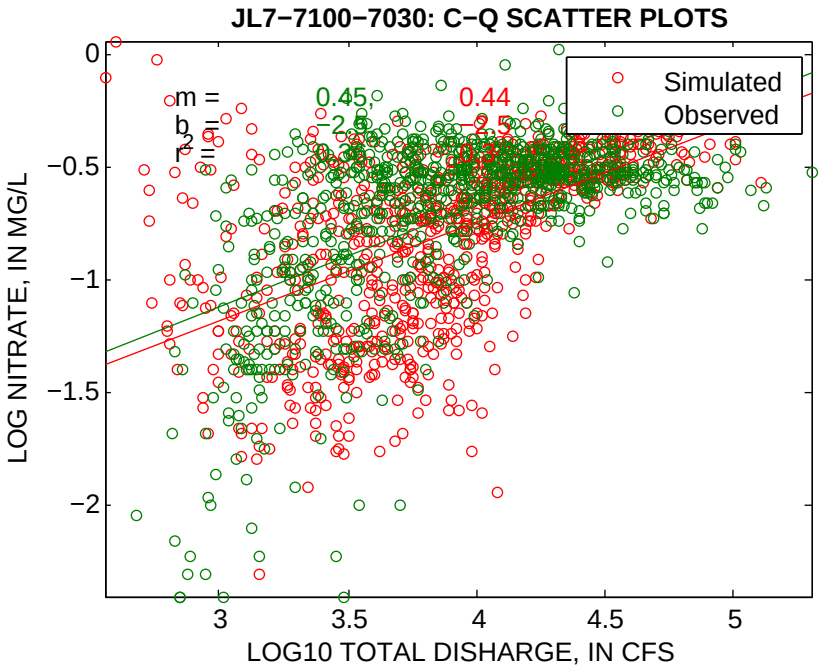
STATISTICS

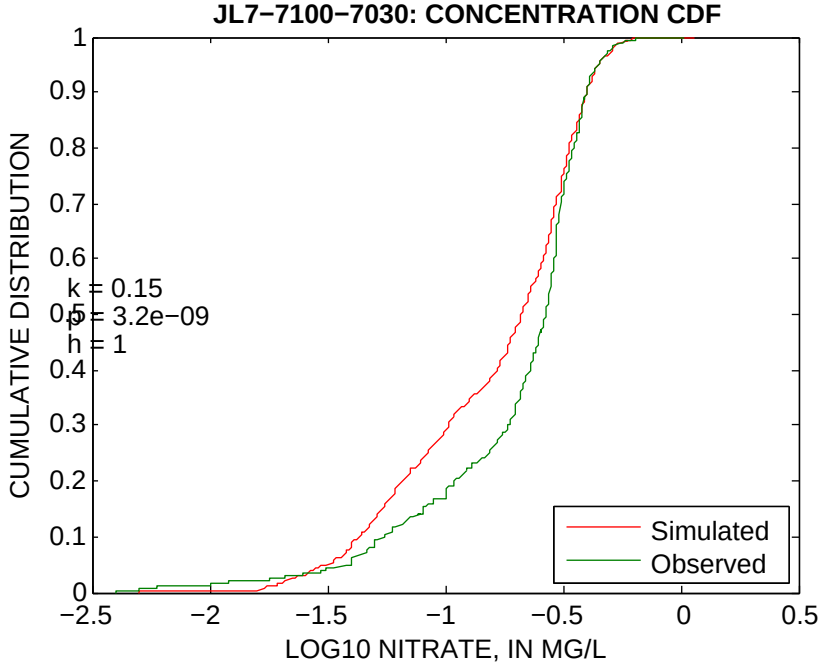
	n	observe	simulate
		871	871
min		0.004	0.0038101
		-2.39794	-2.41906
mean		0.249129	0.216647
		-0.709297	-0.882976
media		0.27	0.18664
		-0.568636	-0.728995
max		1.05	1.2114
		0.0211893	0.0832876
varian		0.0177598	0.0306114
		0.14052	0.266586
JB		0.001	0.001
		0.001	0.001
		ra	log
%		-13.0382	24.4861
err.va		0.0414721	0.363812
rel.std.err		2.33516	2.58903
mod.eff		-1.33516	-1.58903

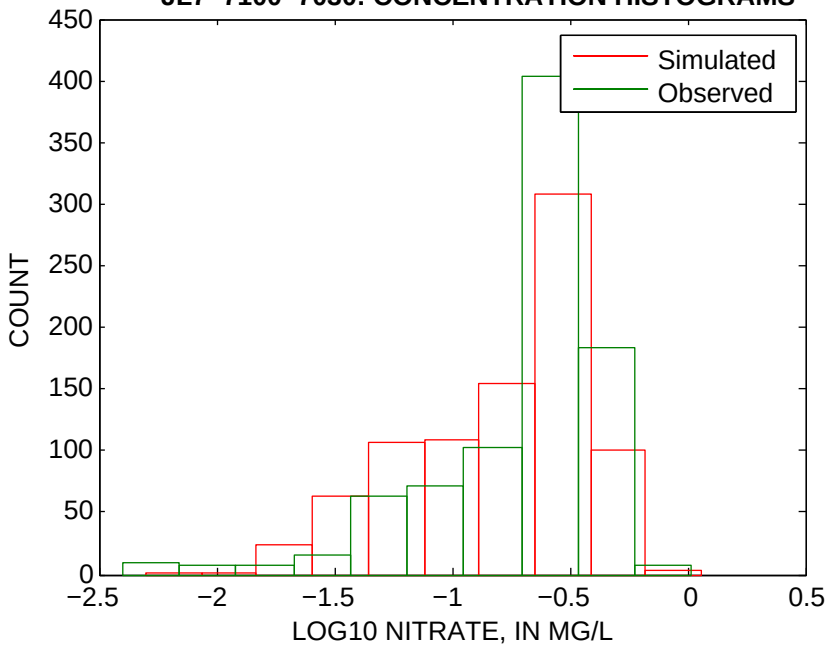
VERSION 2.1

ALL DATA
LOG10

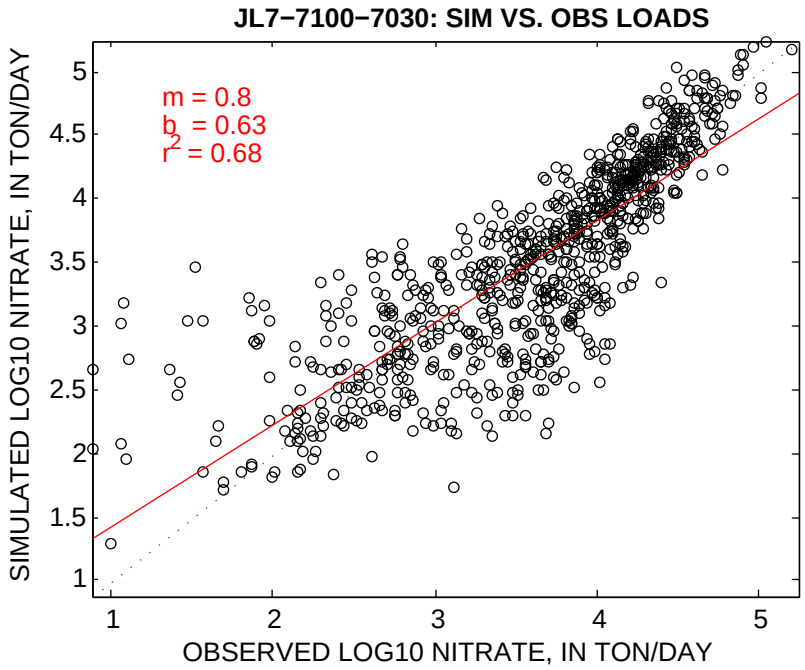


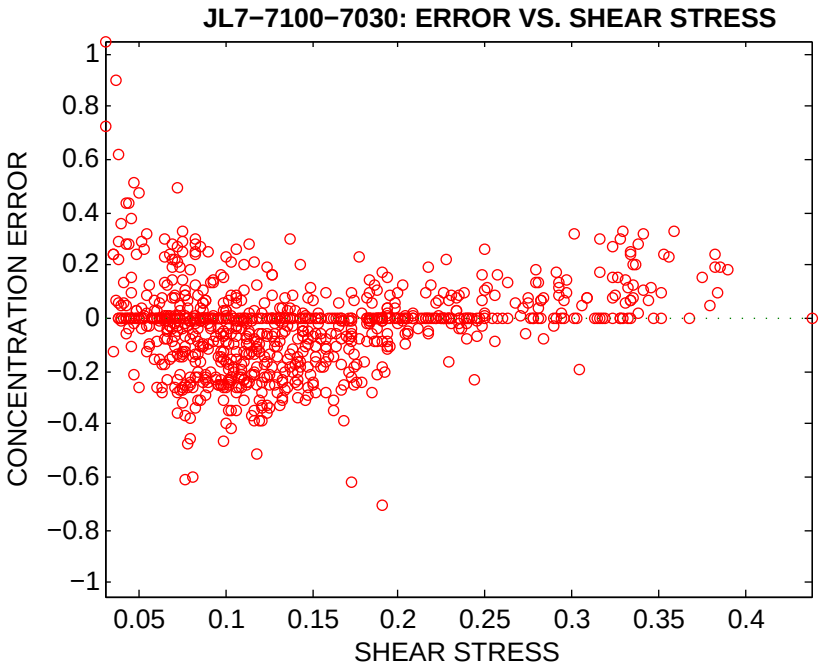


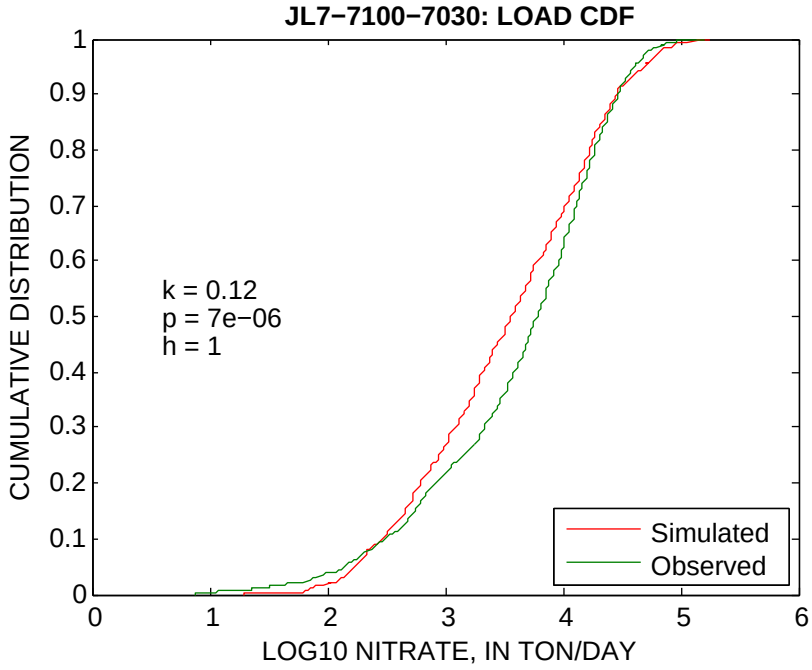


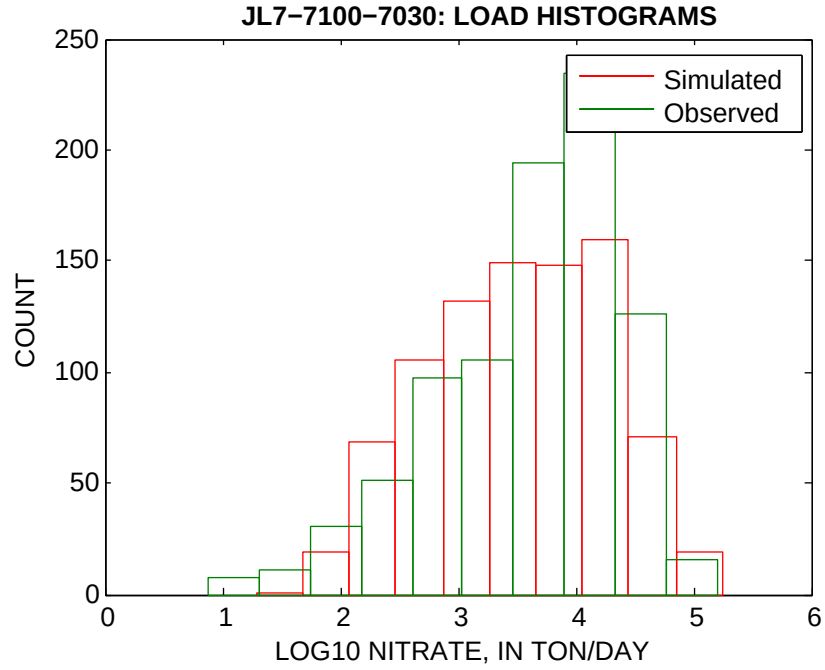


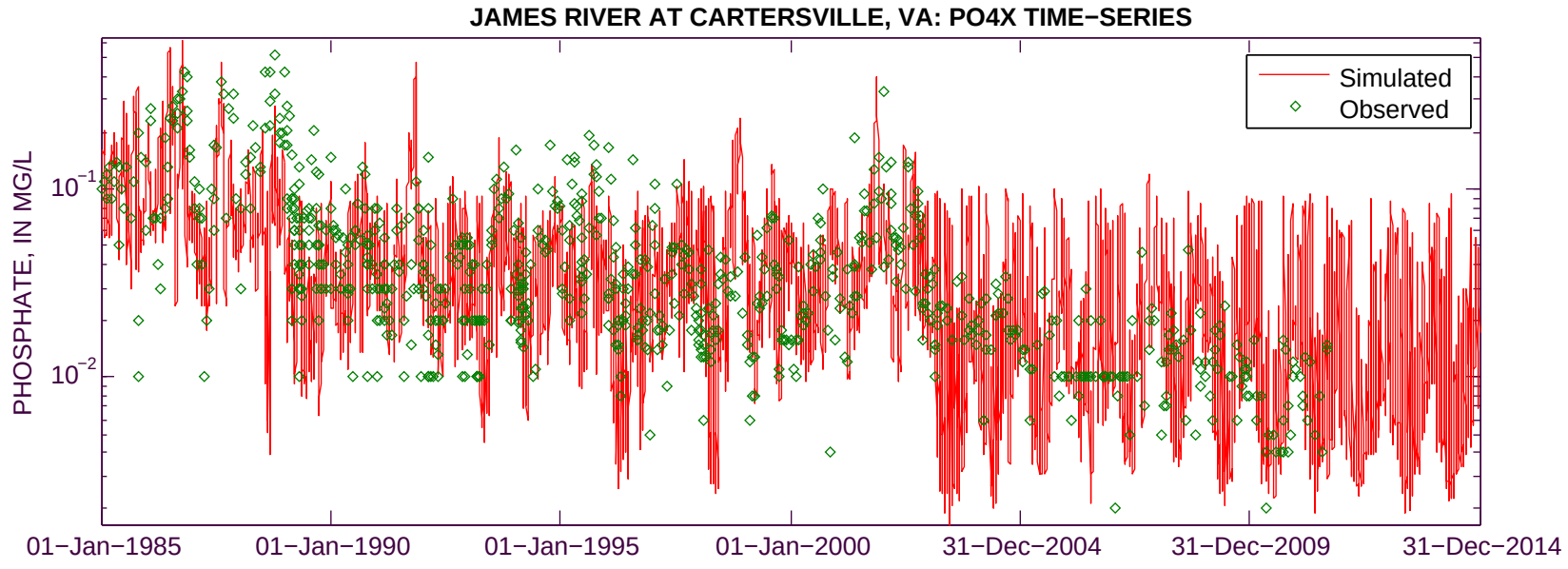
LOAD DATA
LOG10

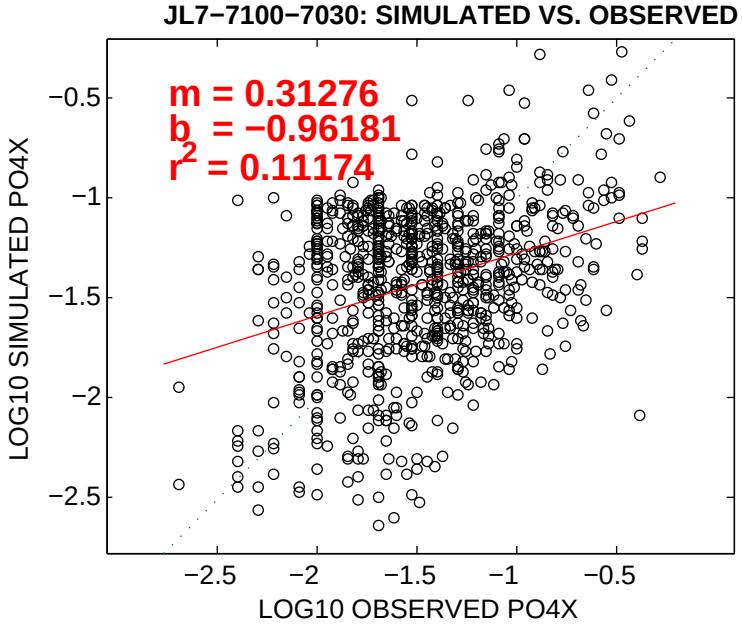


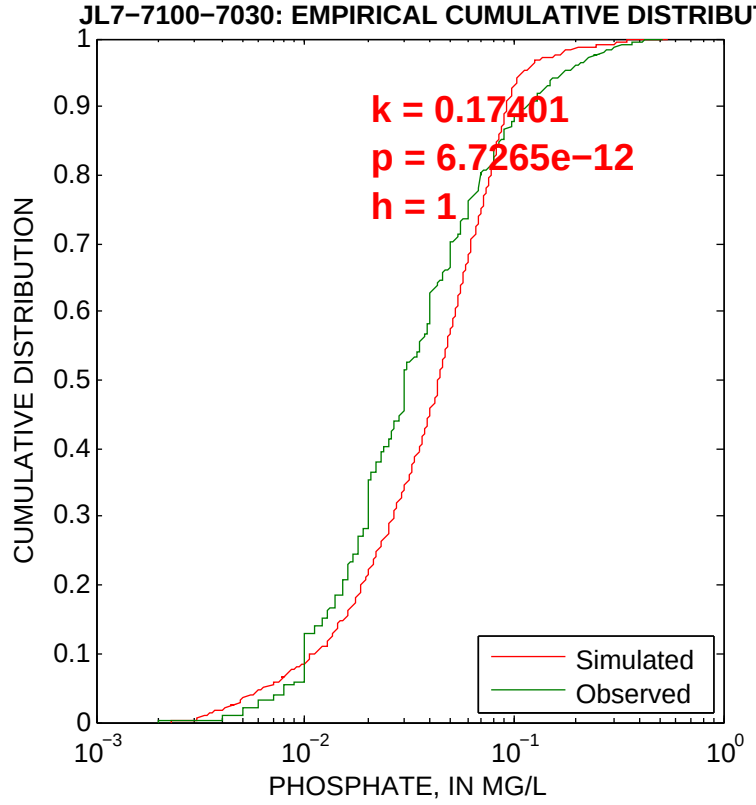












DATA SELECTION

scenario	file
P620171001WQ	PO4X.calib

plot: PO4X - phosphate

Dates: 1/1/1985 — 12/31/201

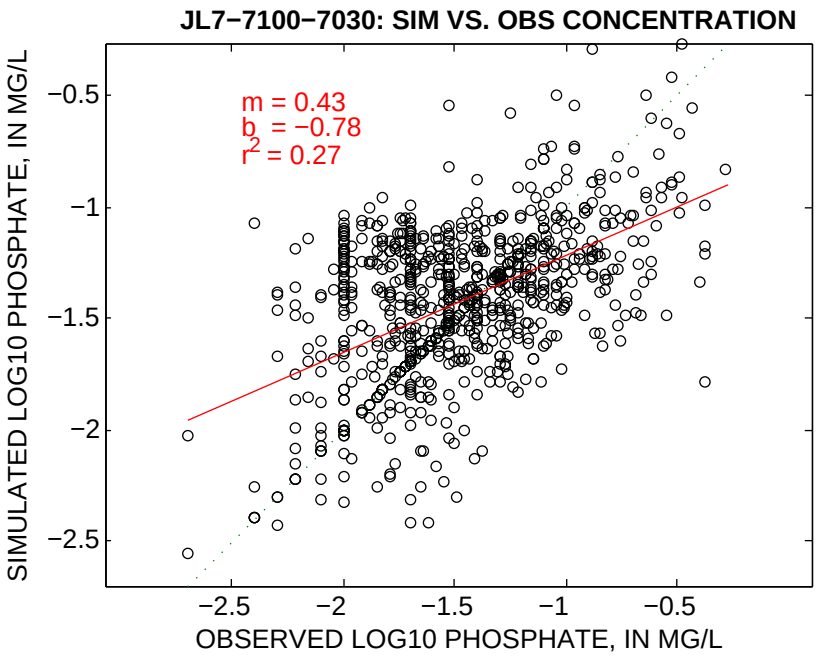
Drive	Directory	Observed
N/A	model	OBS20161101

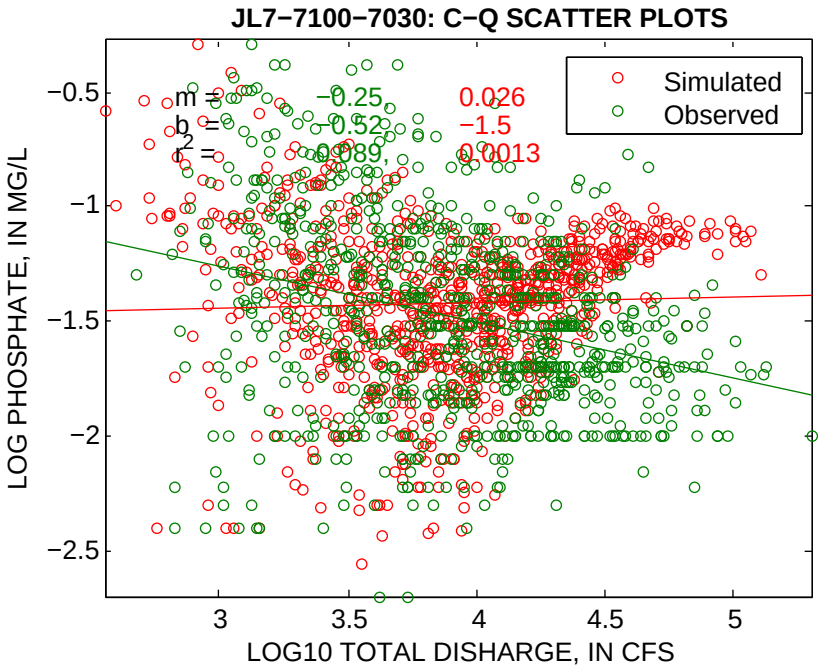
STATISTICS

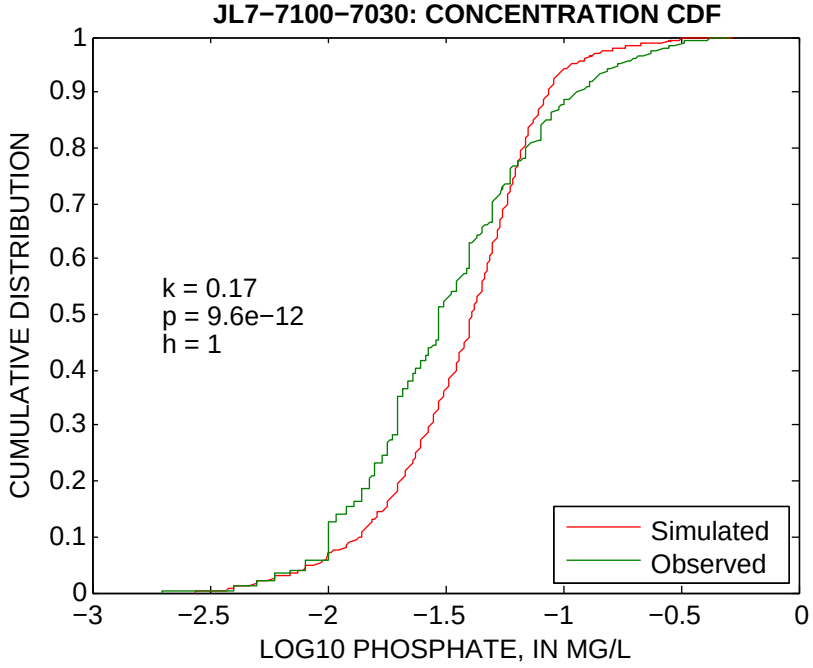
	n	observe	simulate
		862	862
min		0.002	0.0022751
		-2.69897	-2.643
mean		0.0523975	0.0524048
		-1.48255	-1.42549
media		0.03	0.04384
		-1.52288	-1.35813
max		0.515	0.54904
		-0.288193	-0.260396
varian		0.00399007	0.00236153
		0.165626	0.144989
JB		0.001	0.001
		0.011859	0.001
		ra	log
%		0.013992	-3.84905
err.va		0.00420645	0.210274
rel.std.err		1.05423	1.26957
mod.eff		-0.0542303	-0.269572

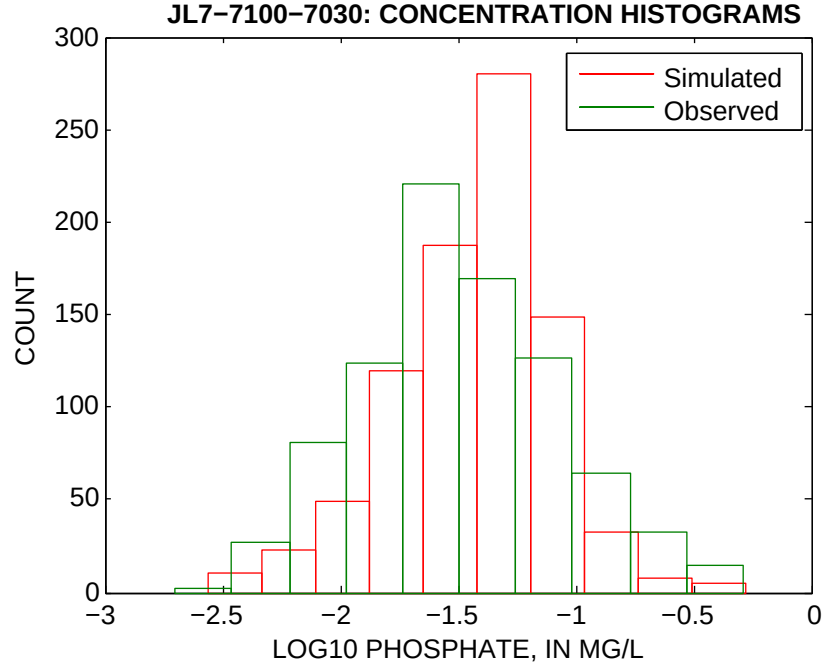
VERSION 2.1

ALL DATA
LOG10

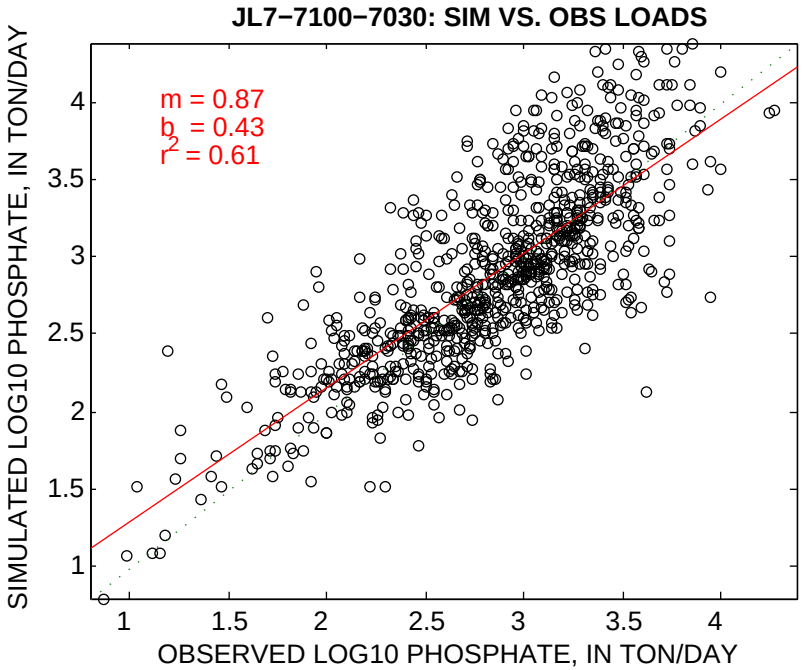


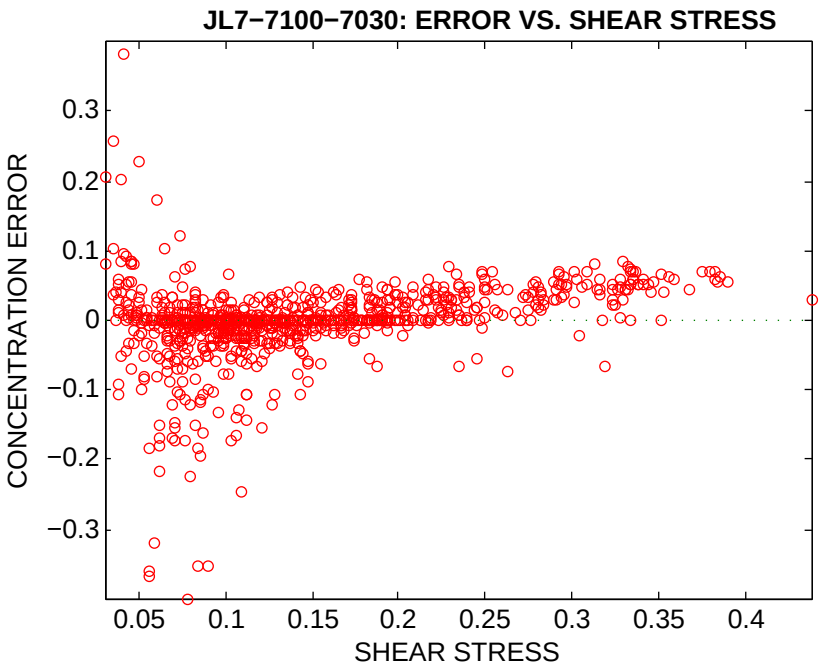


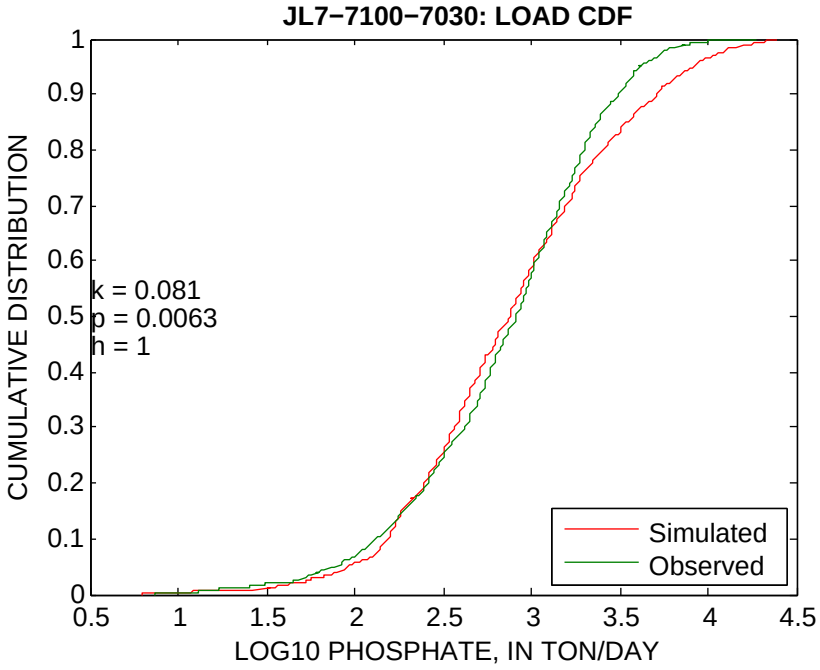


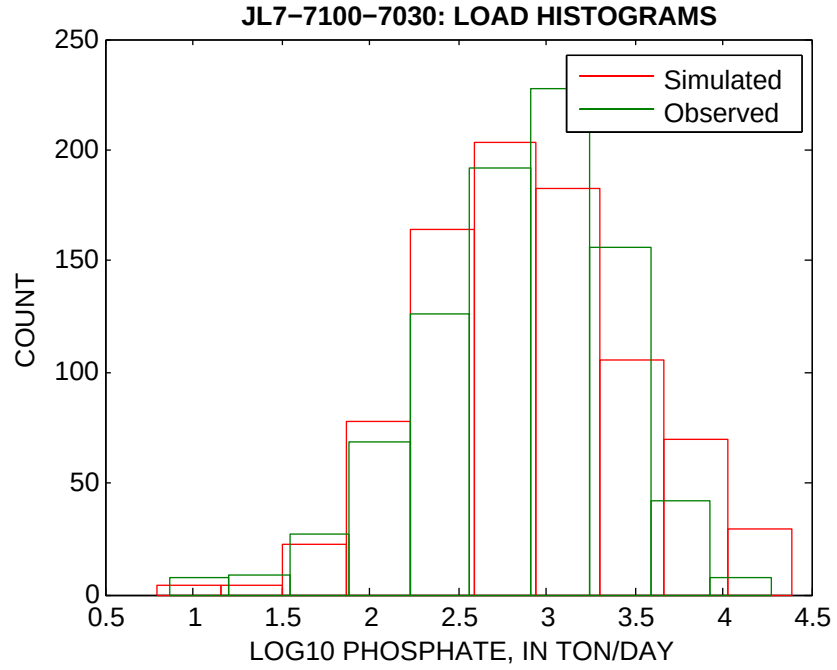


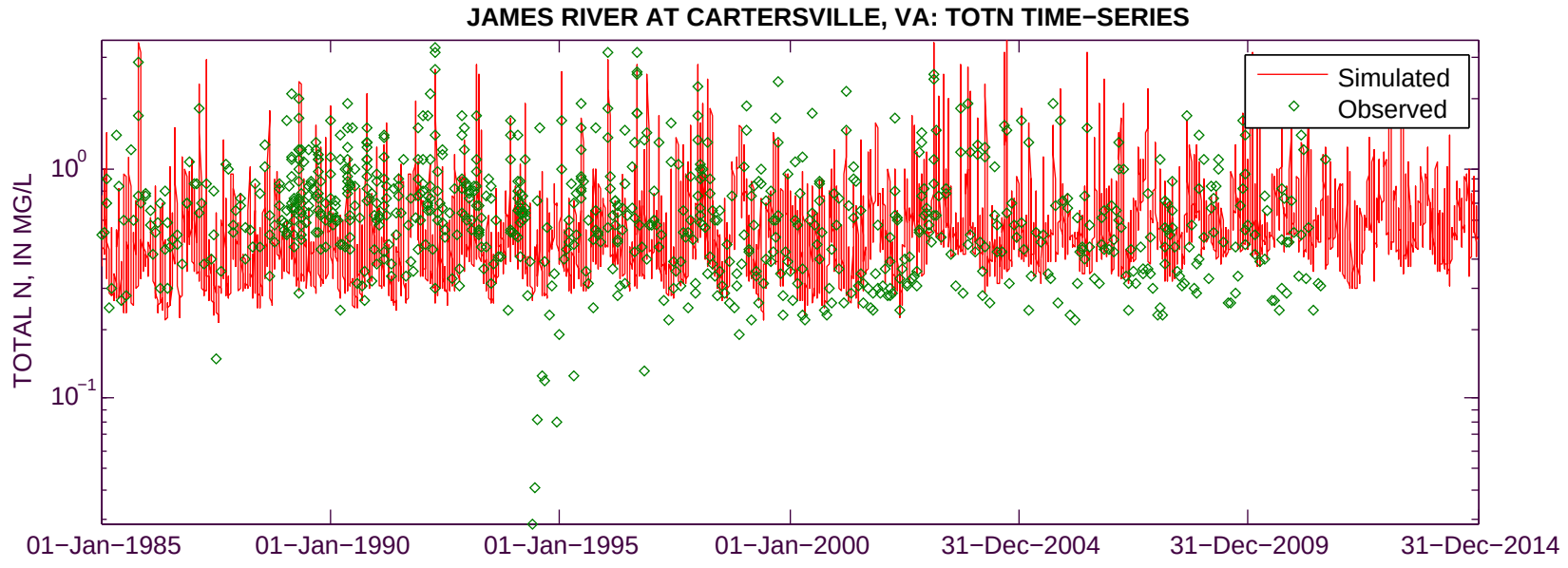
LOAD DATA
LOG10

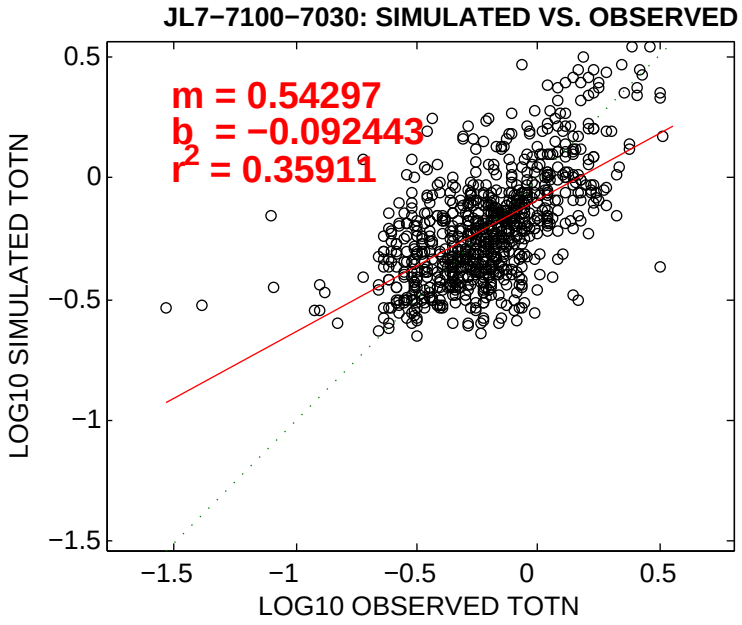


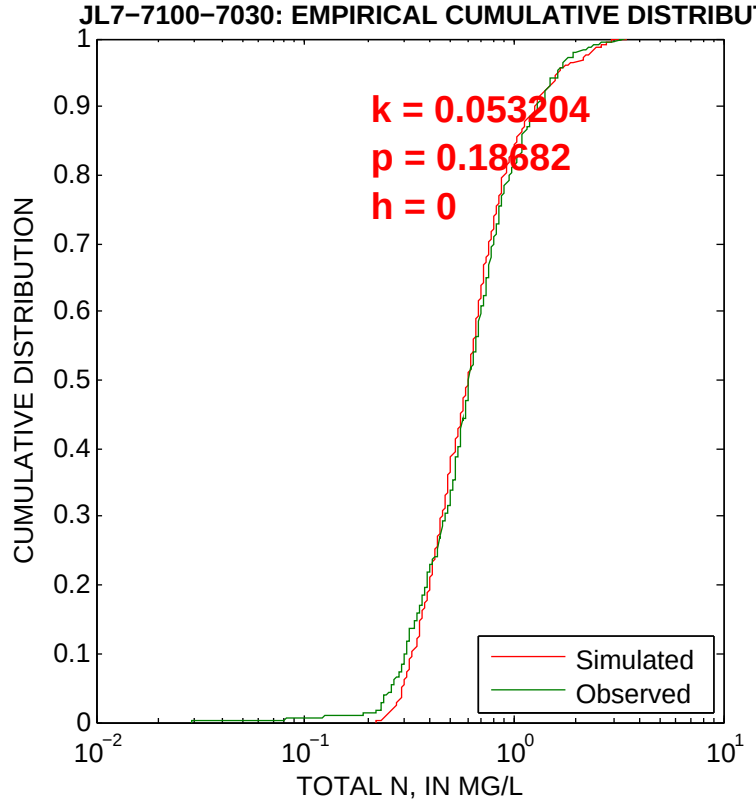












DATA SELECTION

scenario	file
P620171001WQ	TOTN.calib

plot: TOTN - total nitrogen

Dates: 1/1/1985 – 12/31/201

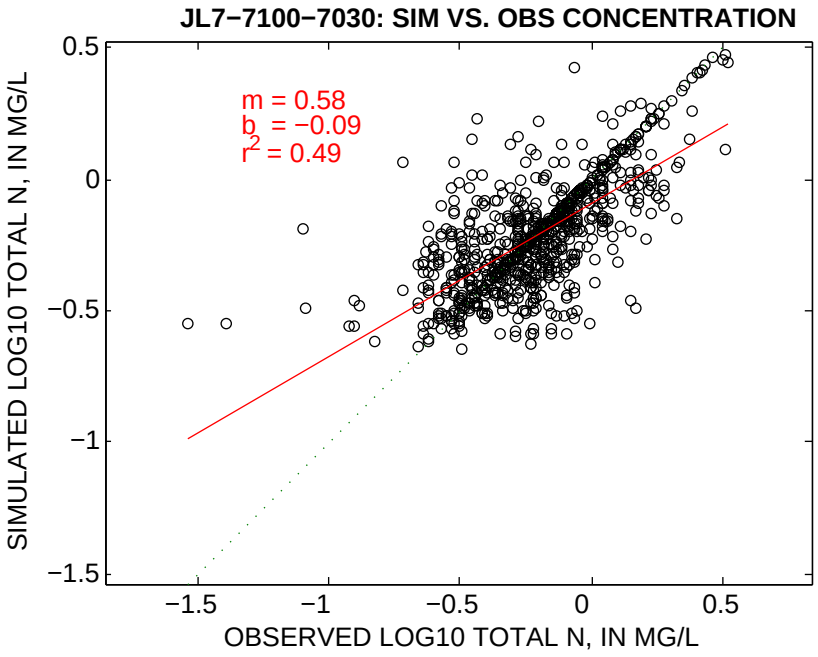
Drive	Directory	Observed
N/A	model	OBS20161101

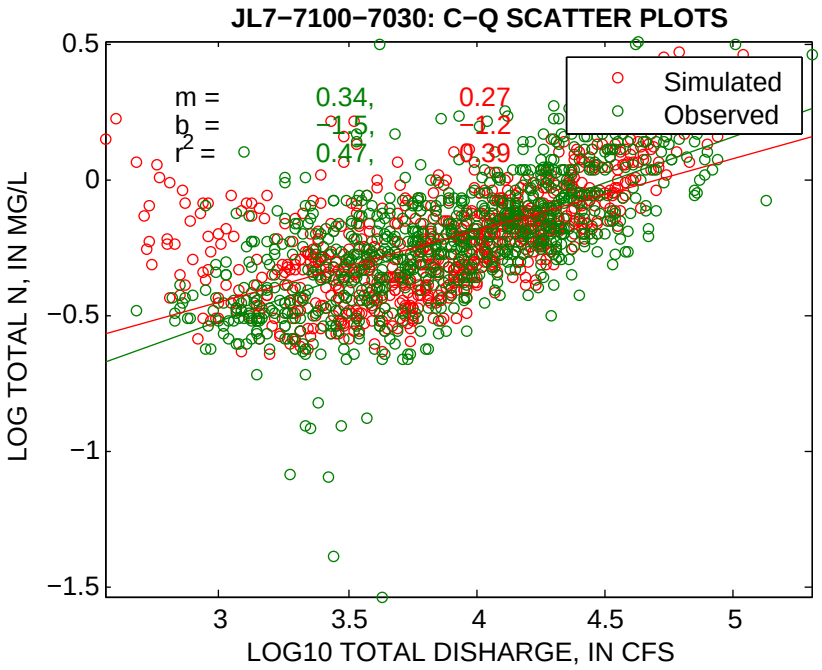
STATISTICS

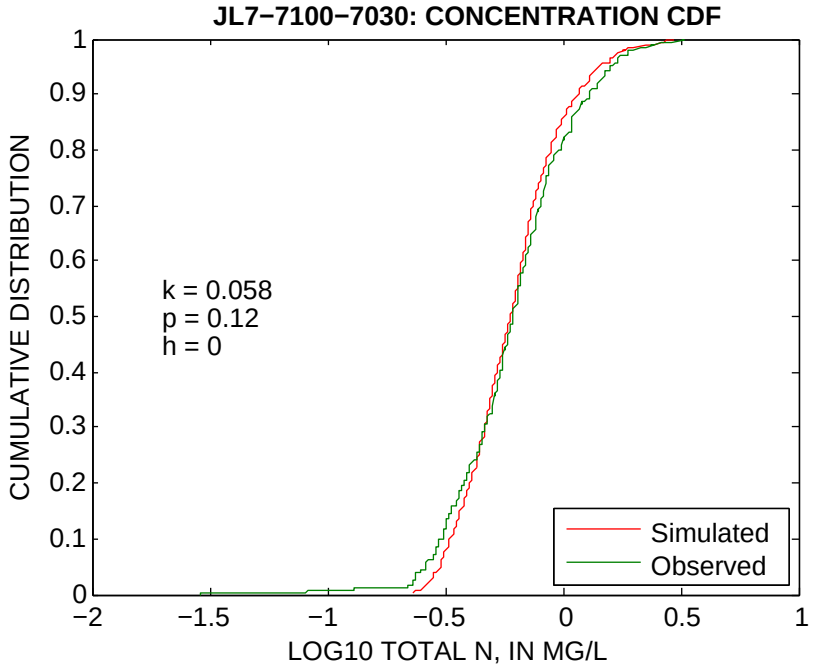
	n	observe	simulate
		827	827
min		0.029	0.22061
		-1.5376	-0.656375
mean		0.726603	0.723598
		-0.2095	-0.206195
media		0.615	0.60303
		-0.211125	-0.219661
max		3.3	3.5151
		0.518514	0.545938
varian		0.207691	0.226327
		0.0621871	0.0510536
JB		0.001	0.001
		0.001	0.001
		ra	log
%		-0.413482	-1.57757
err.va		0.154802	0.0457205
rel.std.err		0.745349	0.735209
mod.eff		0.254651	0.264791

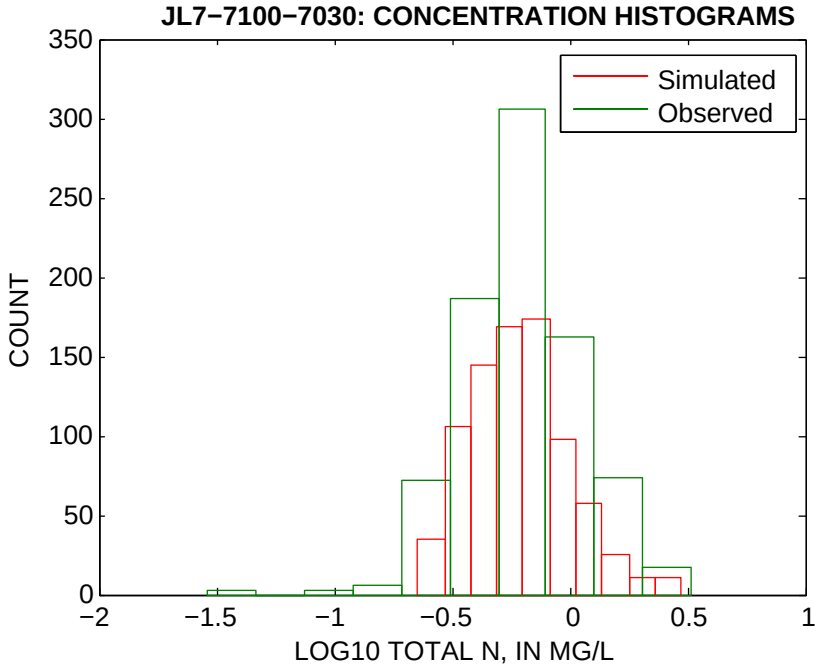
VERSION 2.1

ALL DATA
LOG10

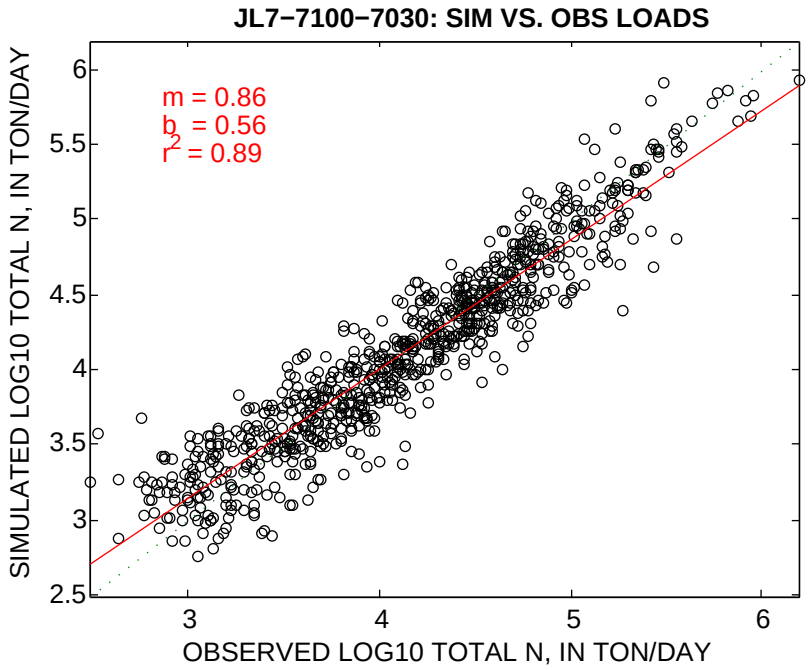


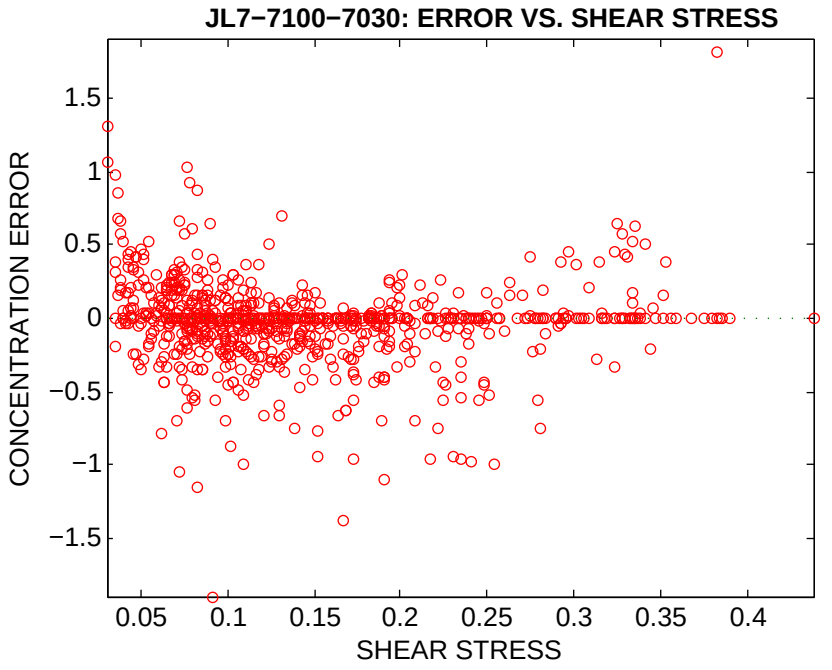


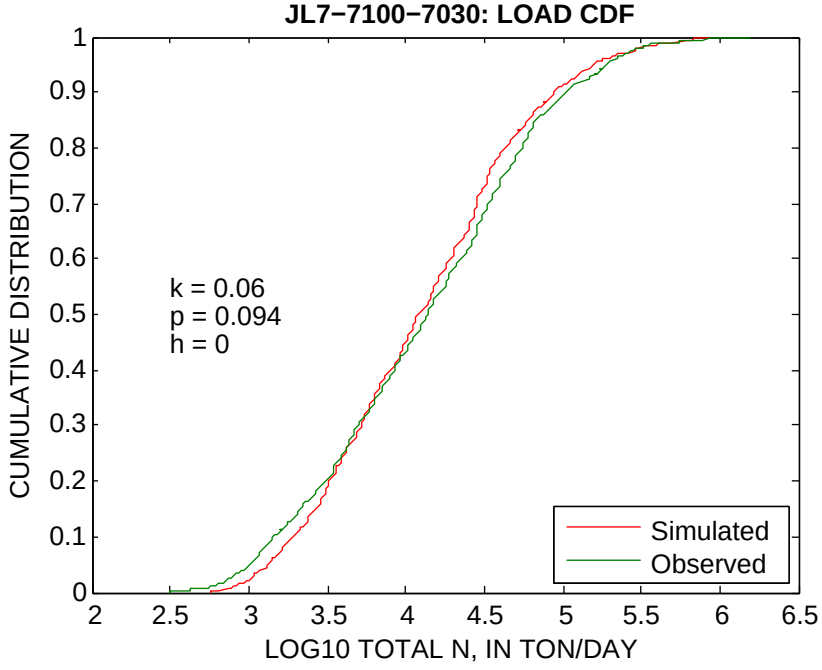


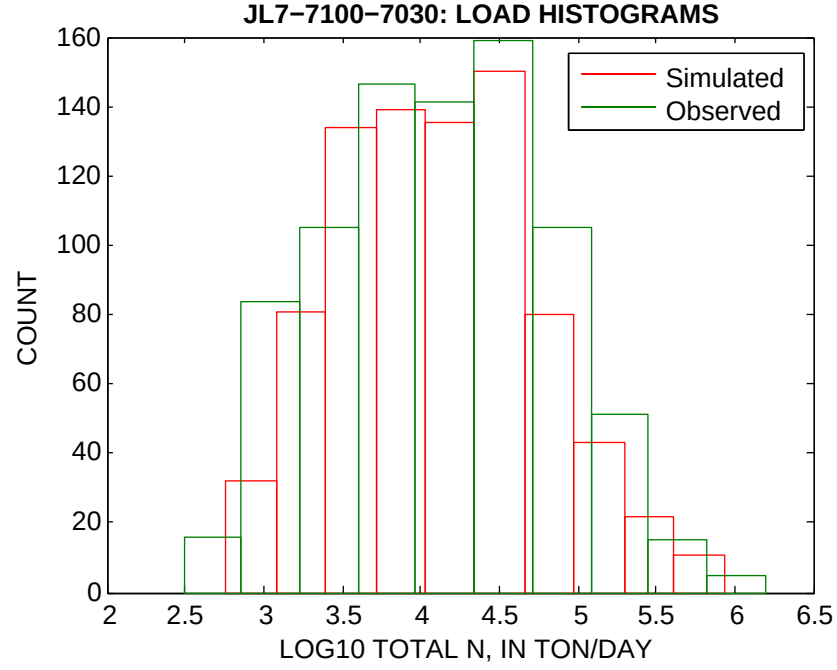


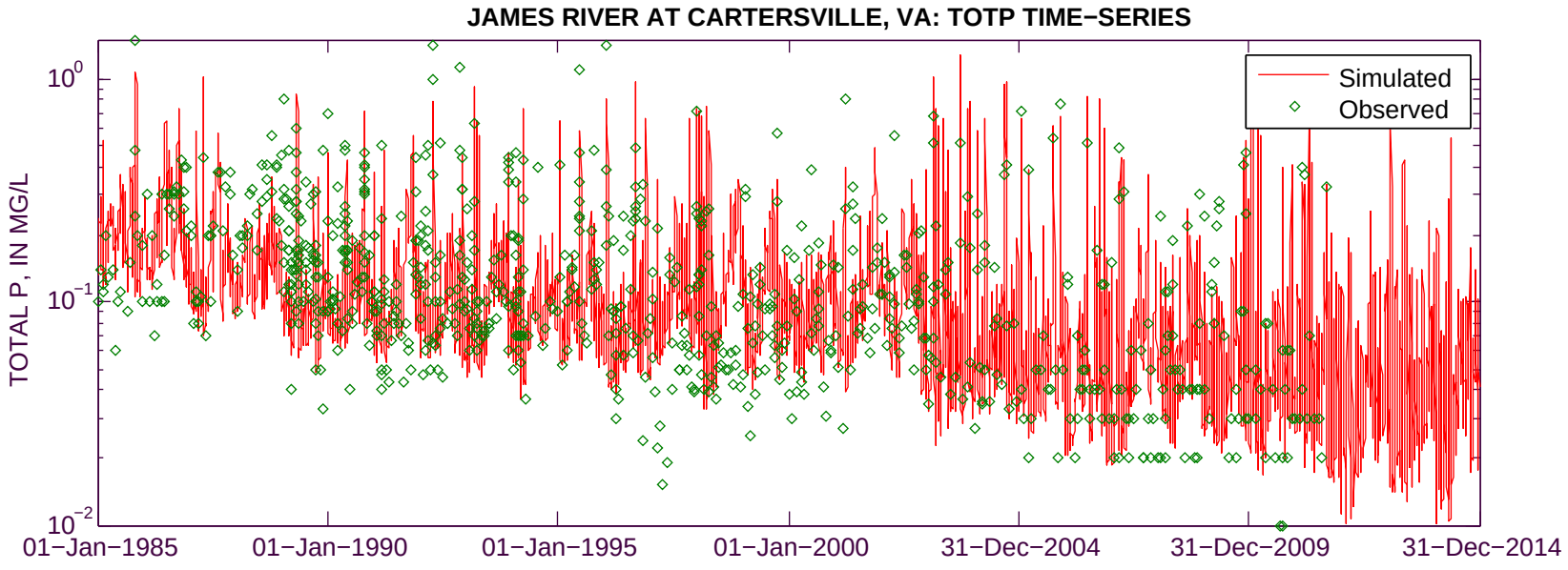
LOAD DATA
LOG10

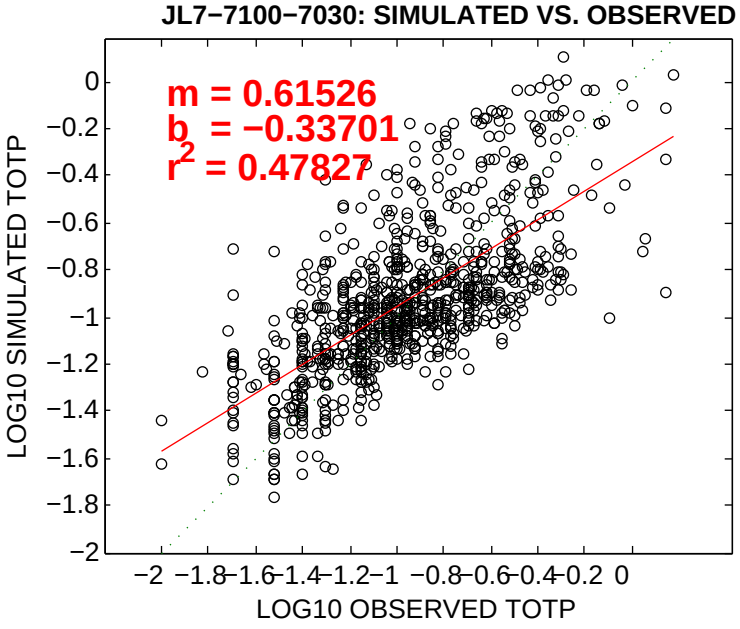


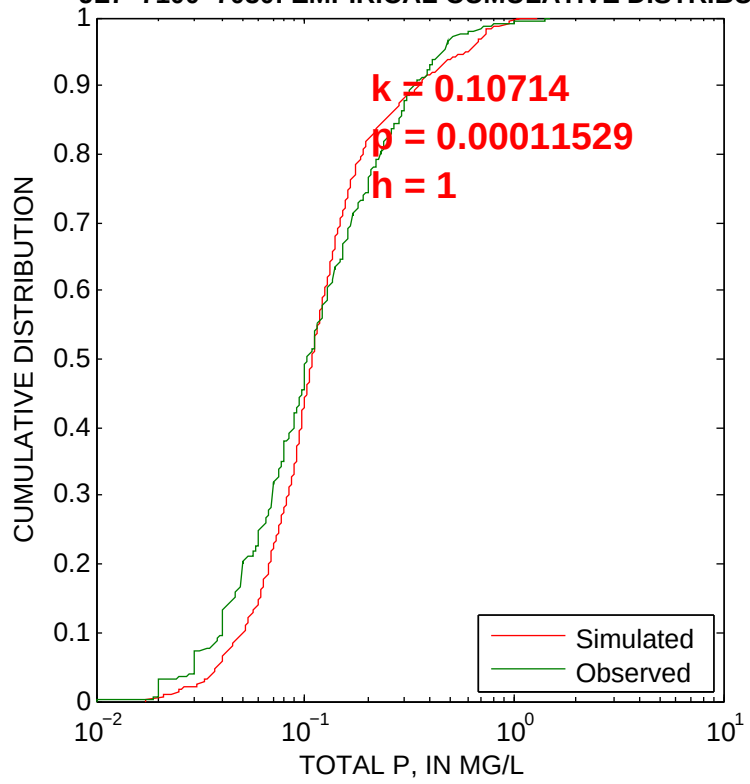












DATA SELECTION

scenario: P620171001WQ | file: TOTP.calib

plot: TOTP - total phosphorus

Dates: 1/1/1985 – 12/31/201

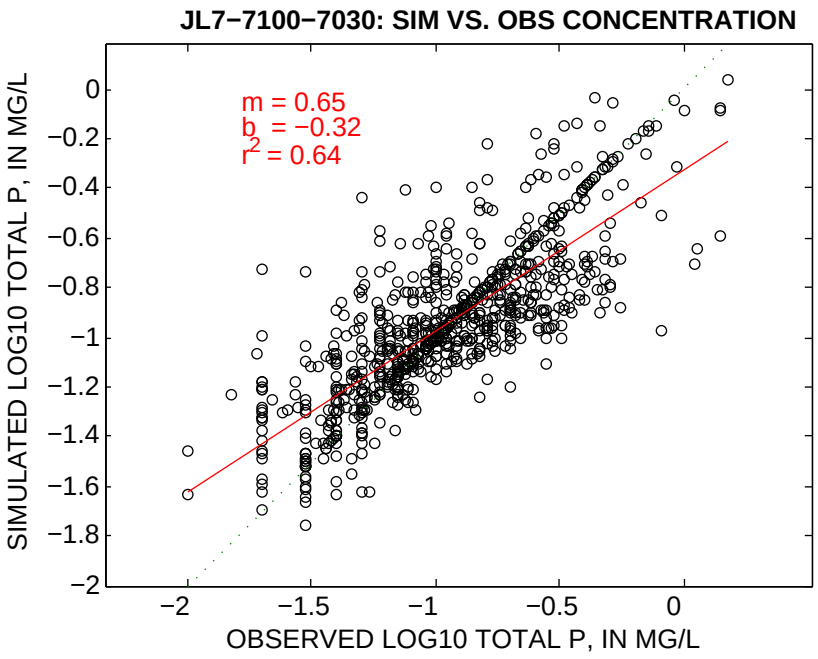
Drive: N/A | Directory: model | Observed: OBS20161101

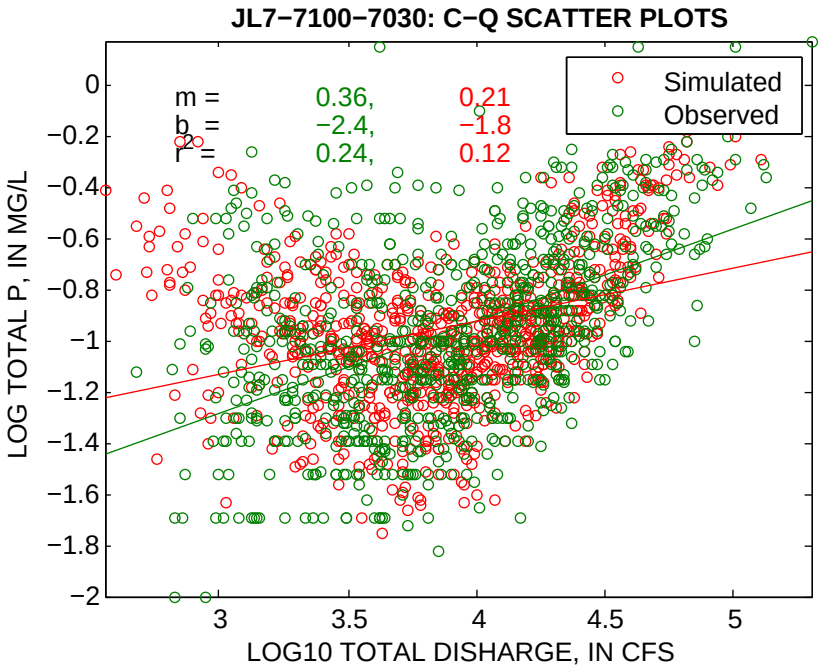
STATISTICS

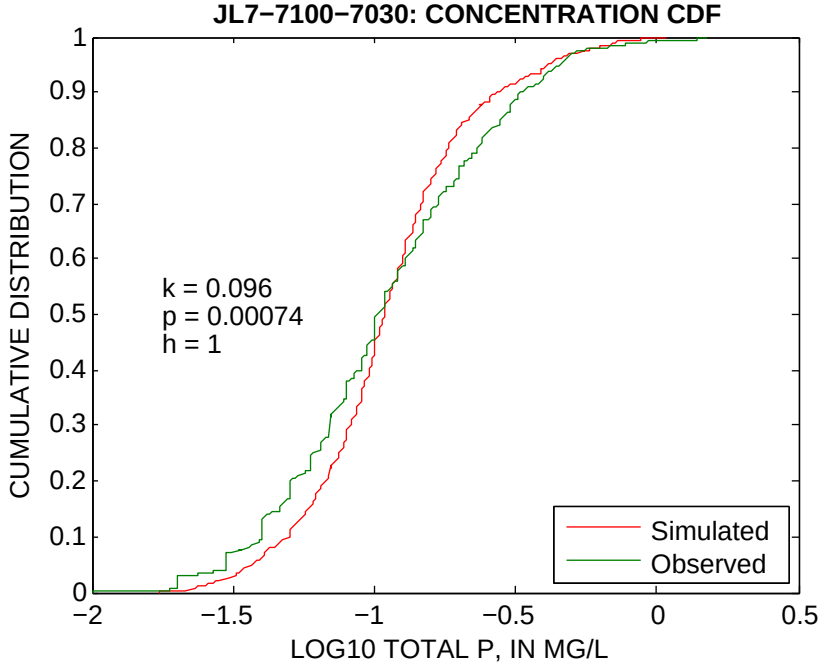
n	840	840
	observe	simulate
min	0.01	0.017164
	-2	-1.76538
mean	0.159807	0.164411
	-0.957213	-0.925946
media	0.102916	0.10926
	-0.987519	-0.961539
max	1.5	1.2772
	0.176091	0.106259
varian	0.028732	0.0297779
	0.134297	0.106295
JB	0.001	0.001
	0.063192	0.001
	ra	log
%	2.88116	-3.26644
err.va	0.0249826	0.0763148
rel.std.err	0.869503	0.568253
mod.eff	0.130497	0.431747

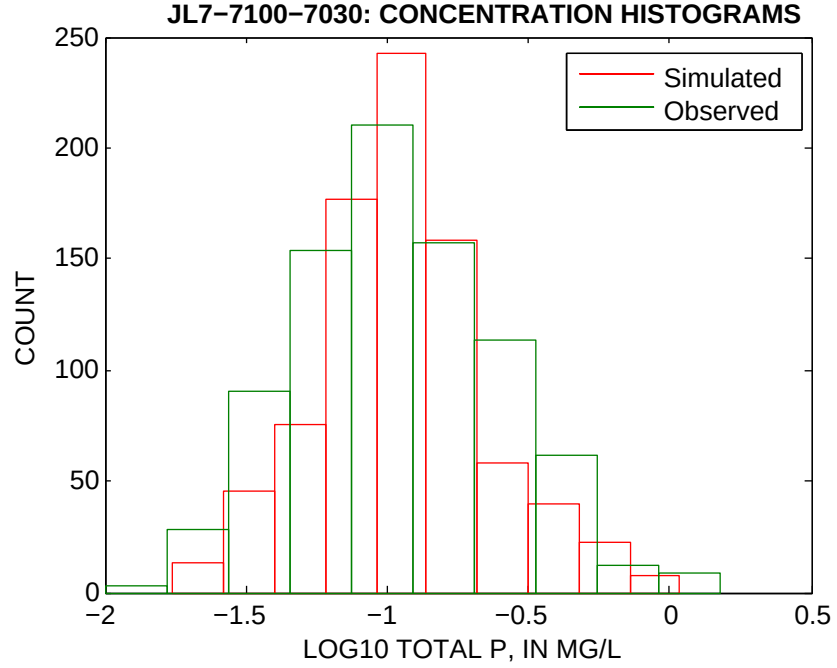
VERSION

ALL DATA
LOG10

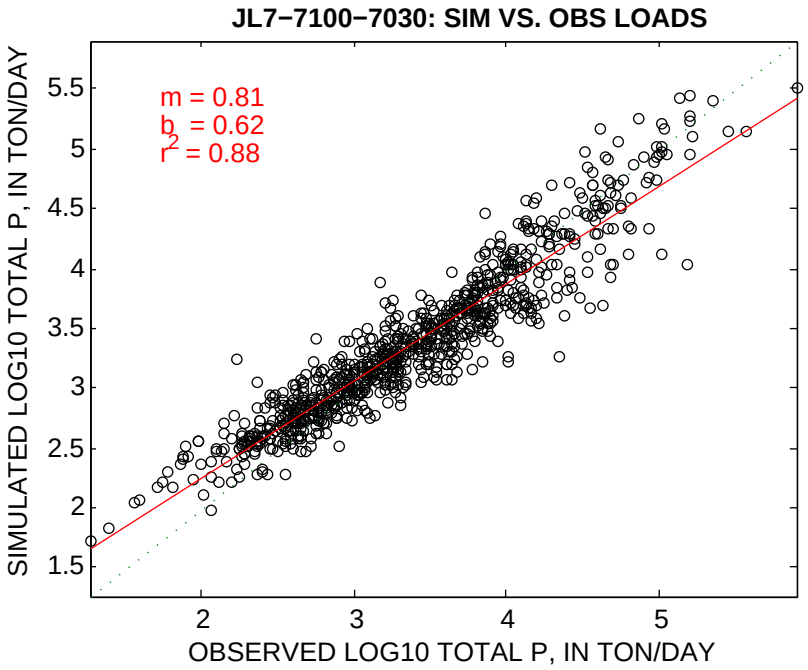




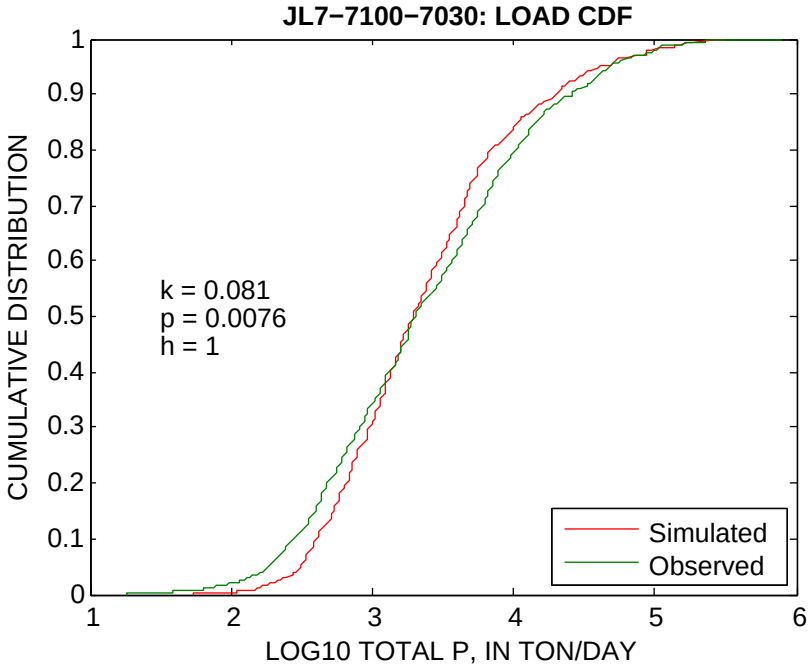


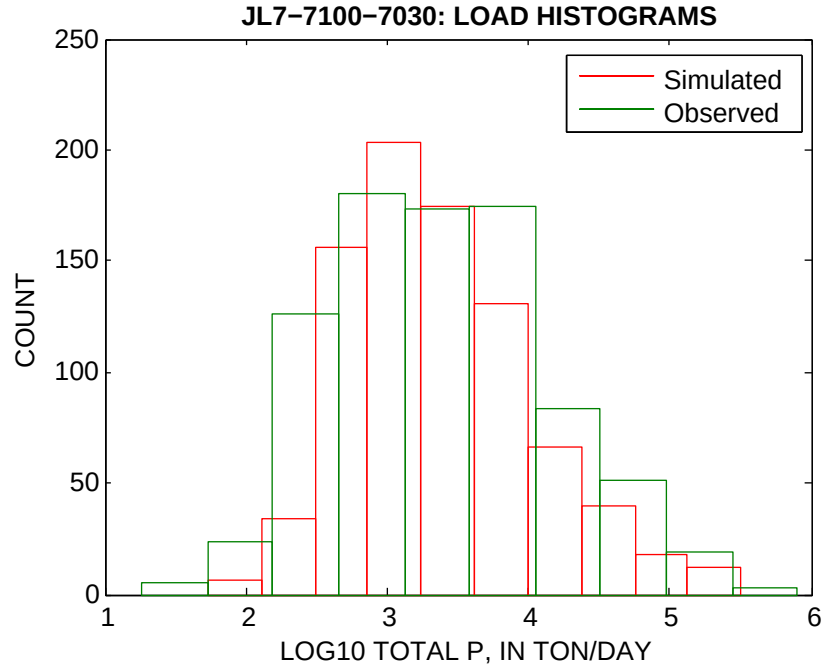


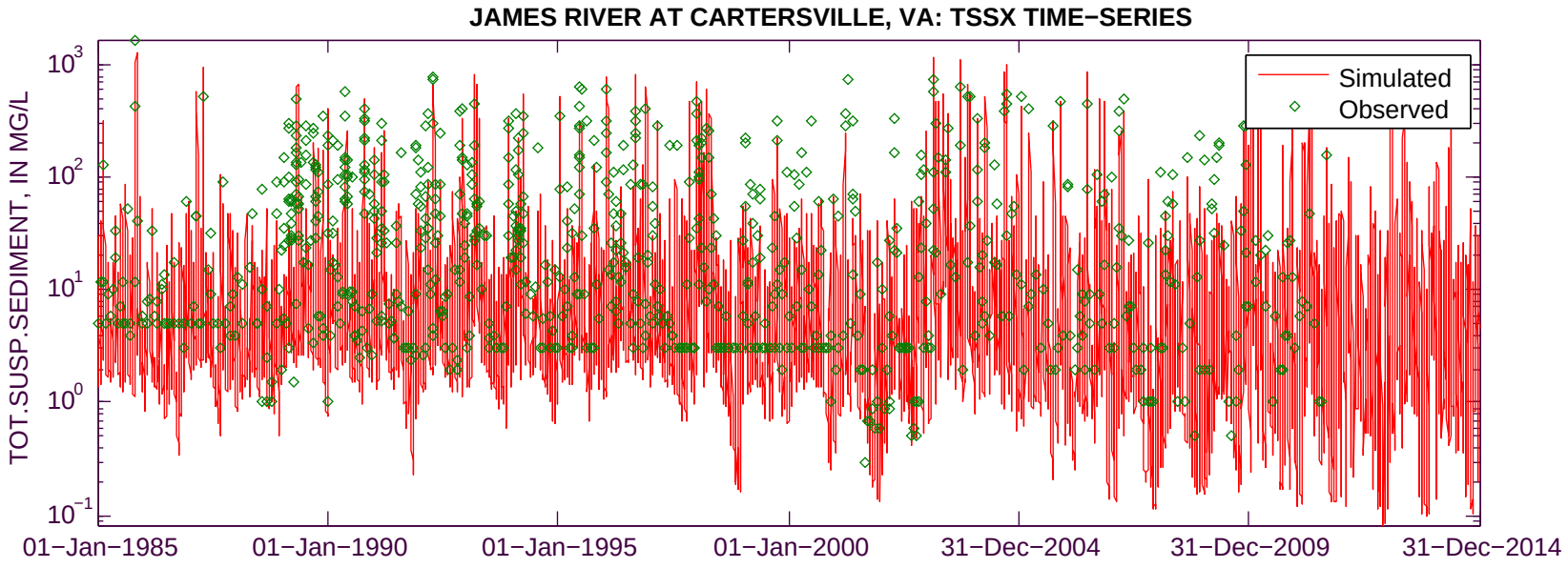
LOAD DATA
LOG10

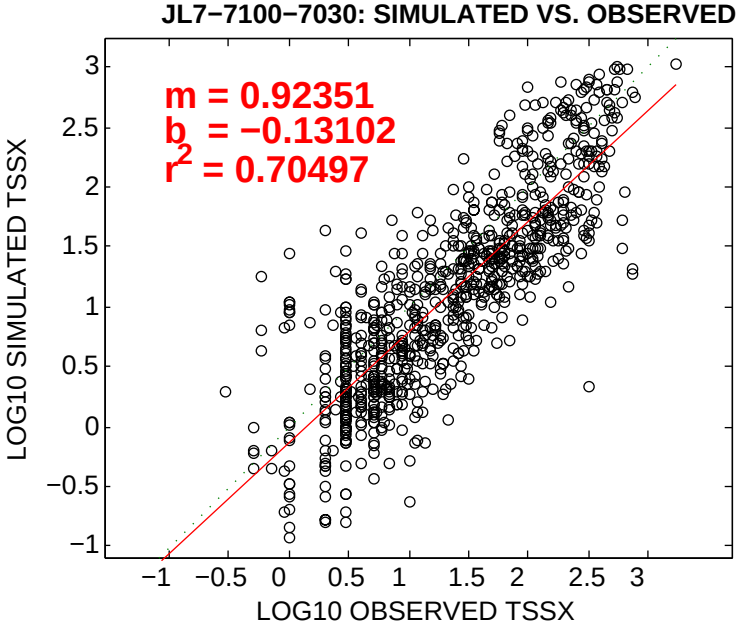


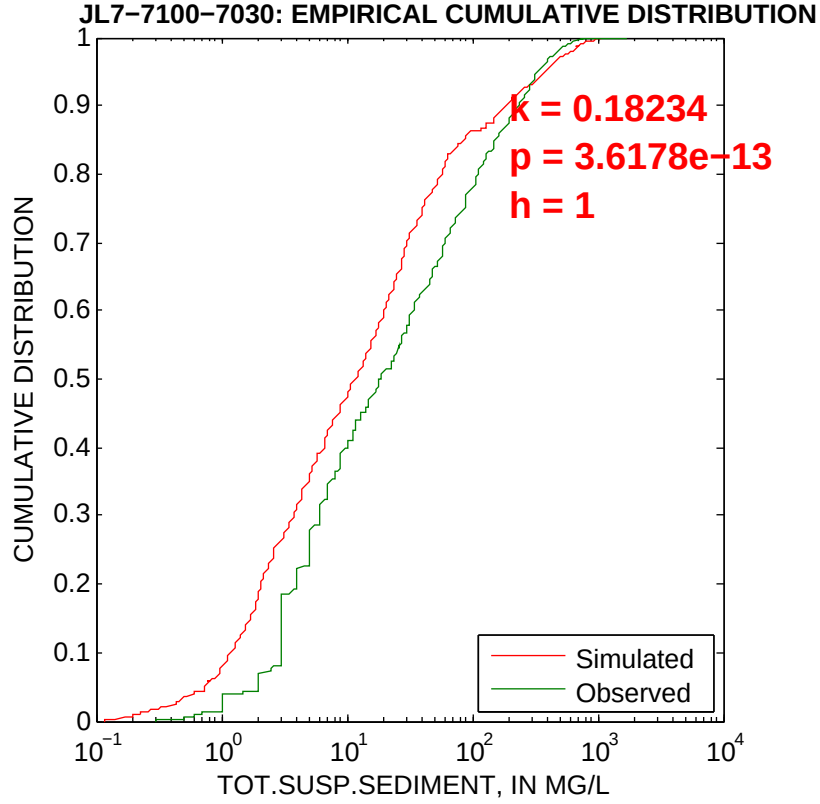












DATA SELECTION

scenario	file
P620171001WQ	TSSX.calib

plot: TSSX - total suspended ...

Dates: 1/1/1985 – 12/31/201

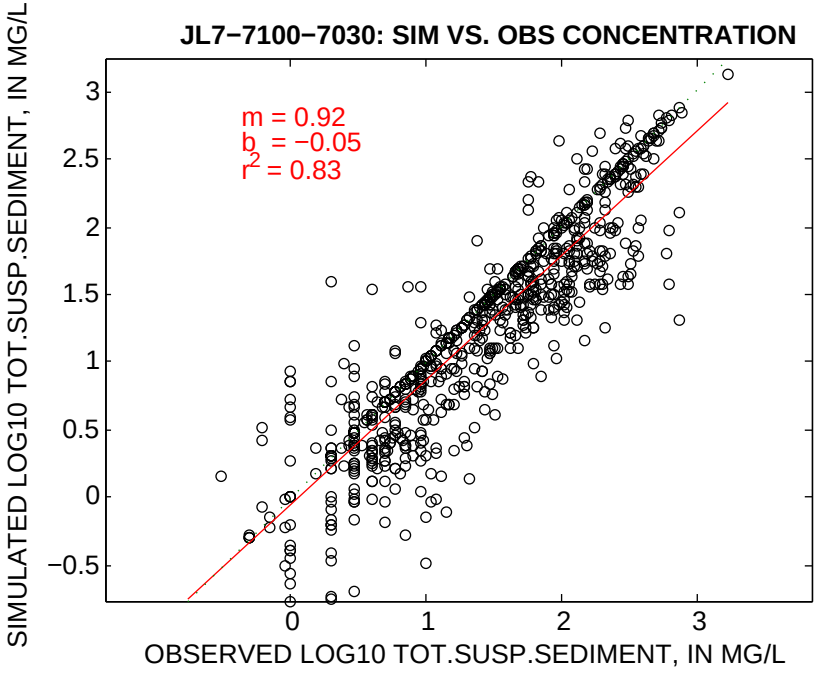
Drive	Directory	Observed
N/A	model	OBS20161101

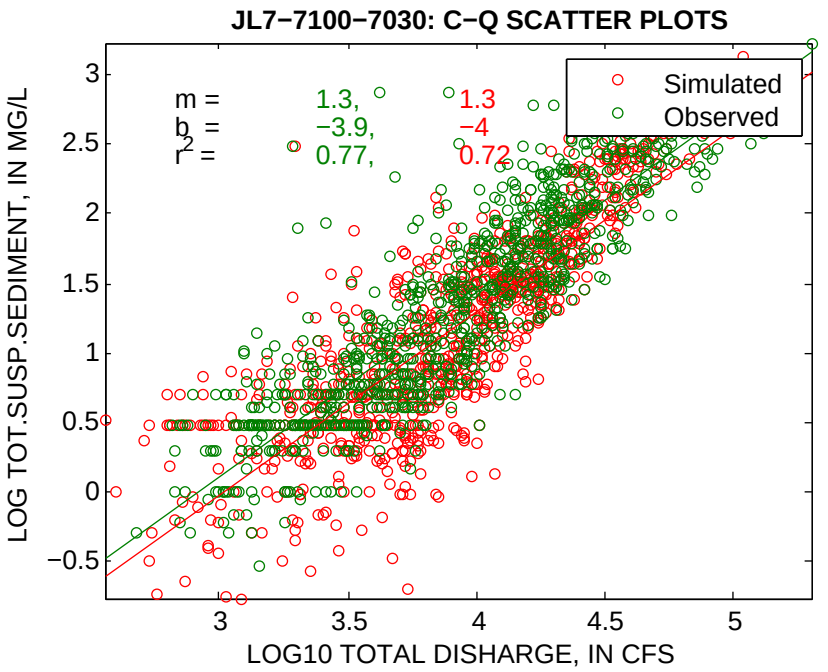
STATISTICS

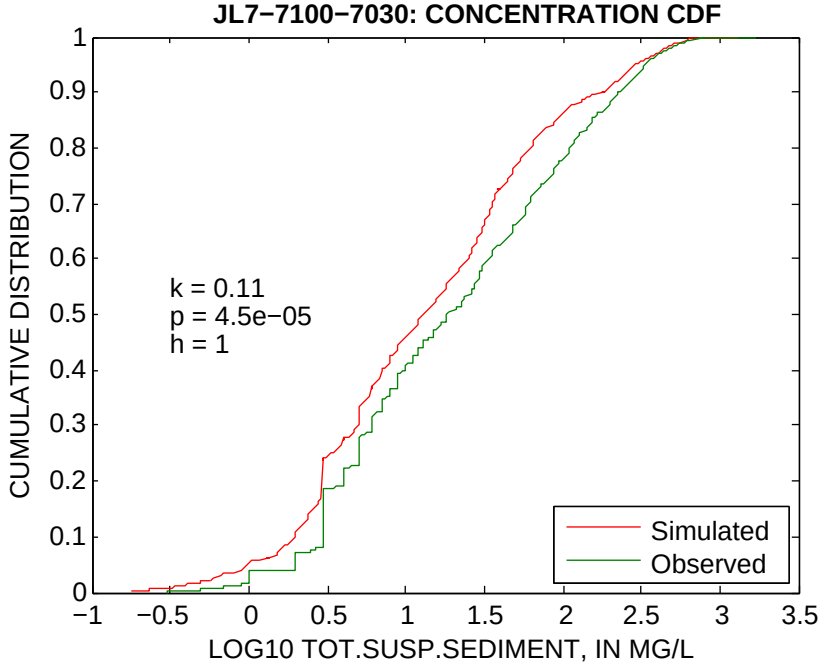
	n	872	872
		observe	simulate
min		0.3	0.11862
		-0.522879	-0.925842
mean		75.3109	64.9909
		1.31643	1.08472
media		19	11.9065
		1.27875	1.07578
max		1700	1083.2
		3.23045	3.03471
varian		17983.6	21989.2
		0.55463	0.670996
JB		0.001	0.001
		0.001	0.002630
		ra	log
%		-13.7032	-17.6015
err.va		12056.8	0.254959
rel.std.err		0.670433	0.459692
mod.eff		0.329567	0.540308

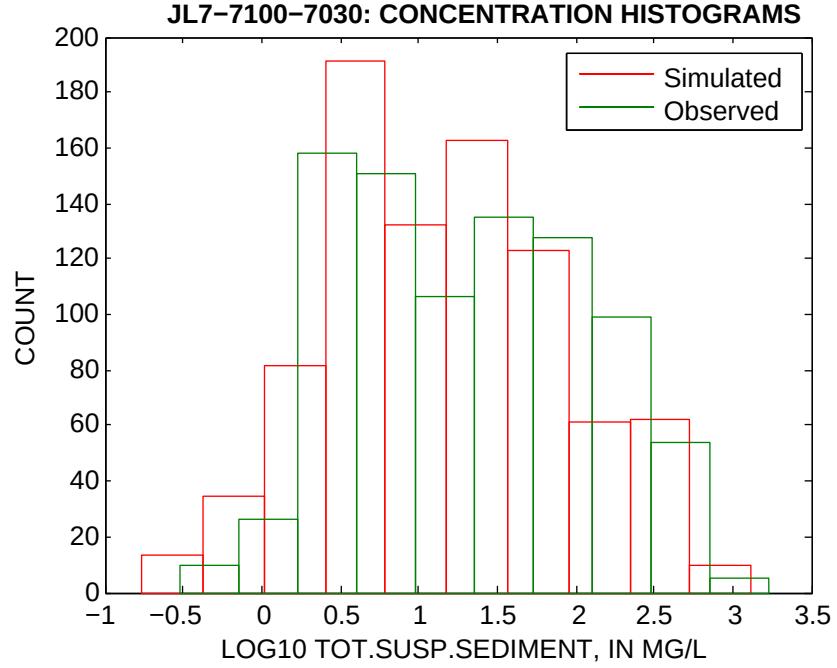
VERSION 2.1

ALL DATA
LOG10

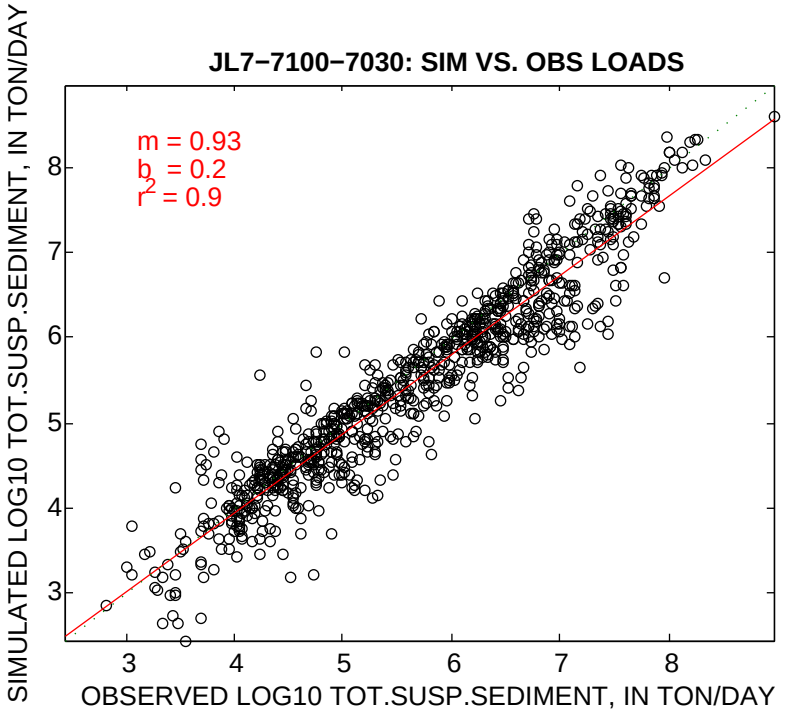


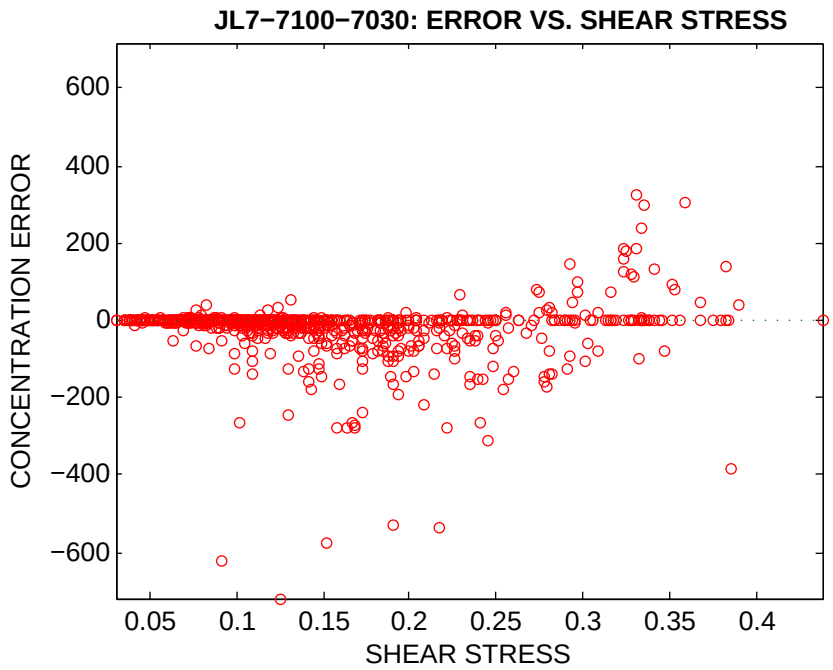


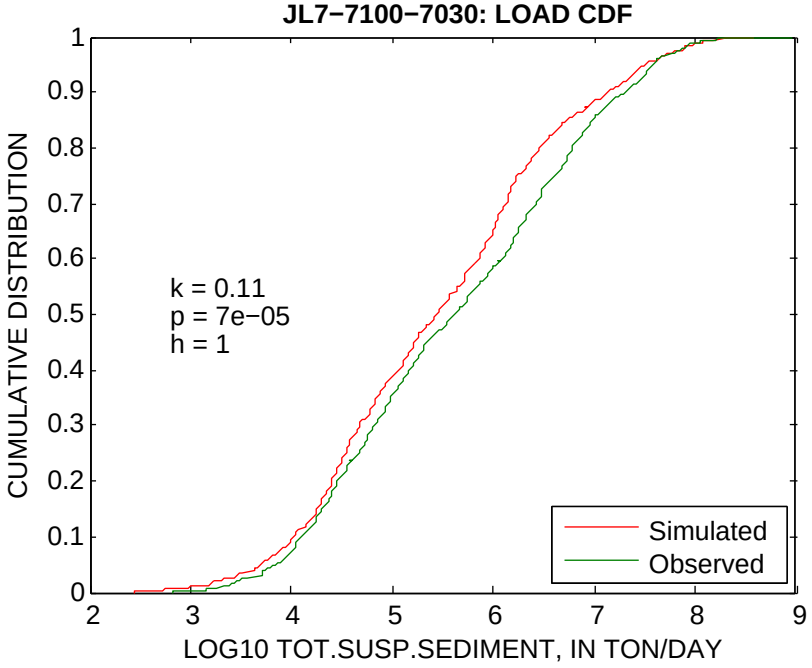


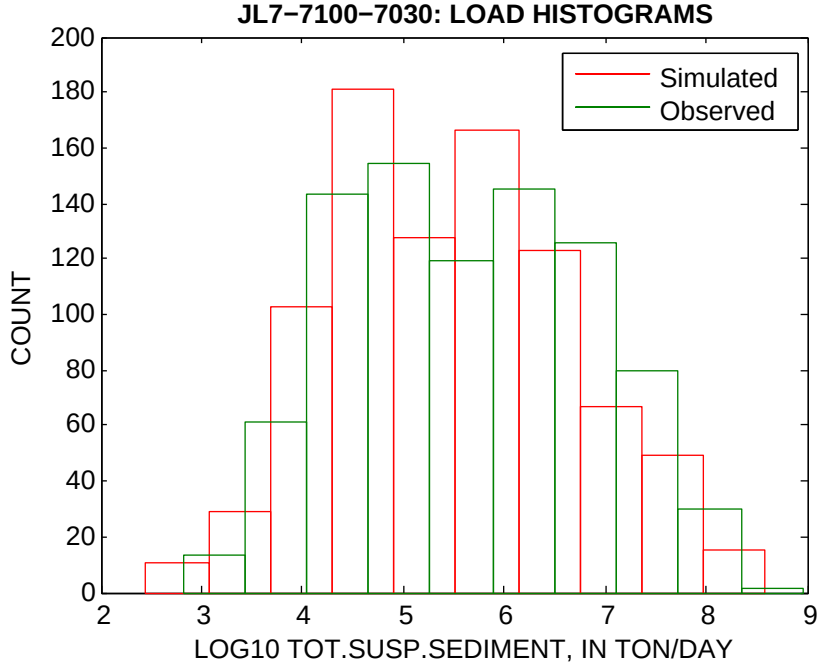


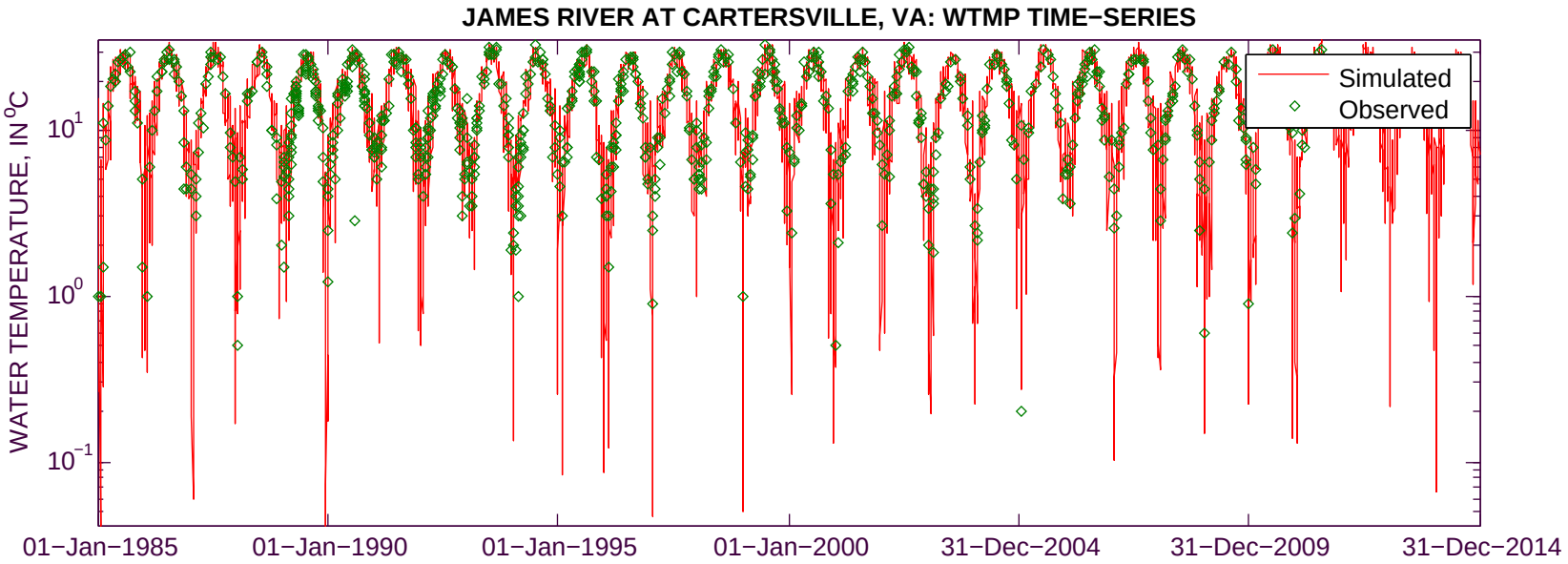
LOAD DATA
LOG10

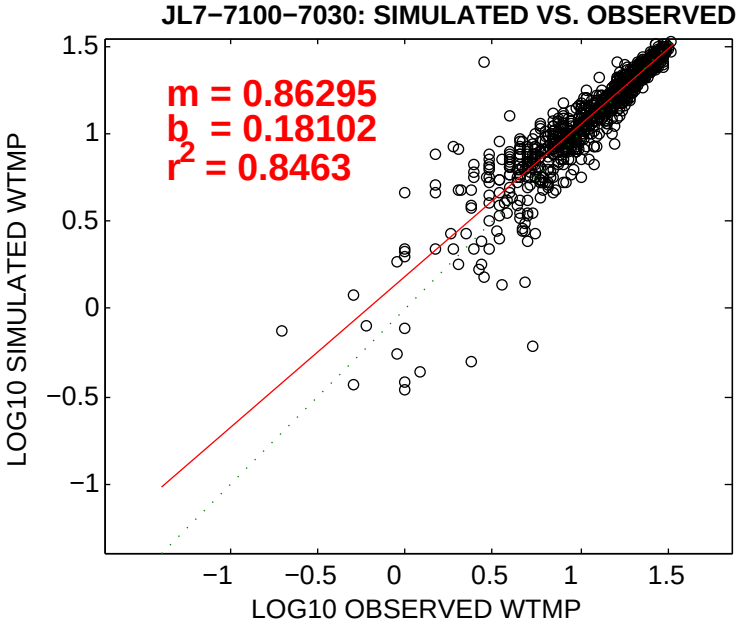


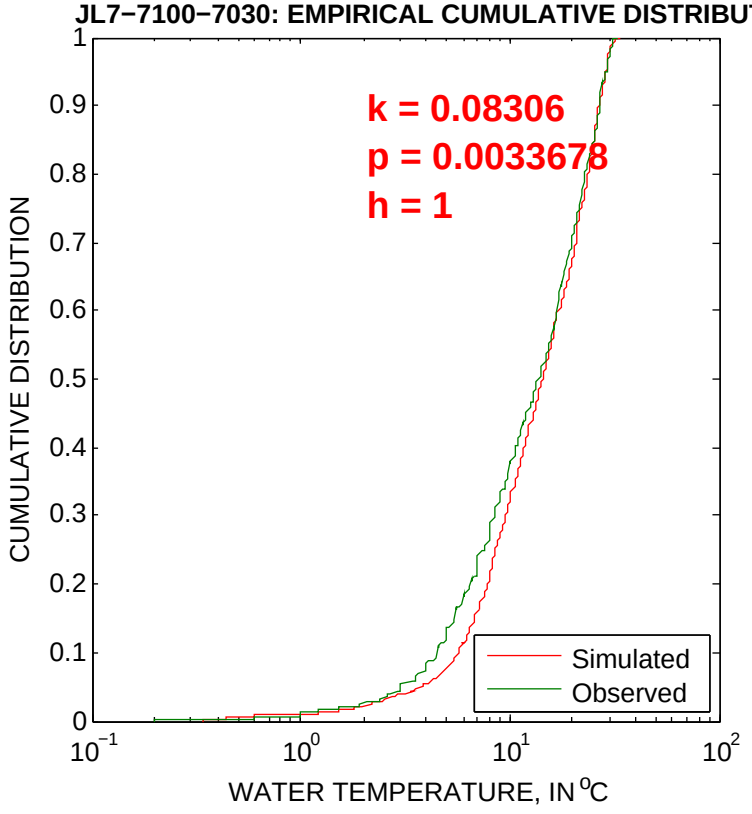












DATA SELECTION

scenario	file
P620171001WQ	WTMP.calib

plot: WTMP - water tempera...

Dates: 1/1/1985 — 12/31/201

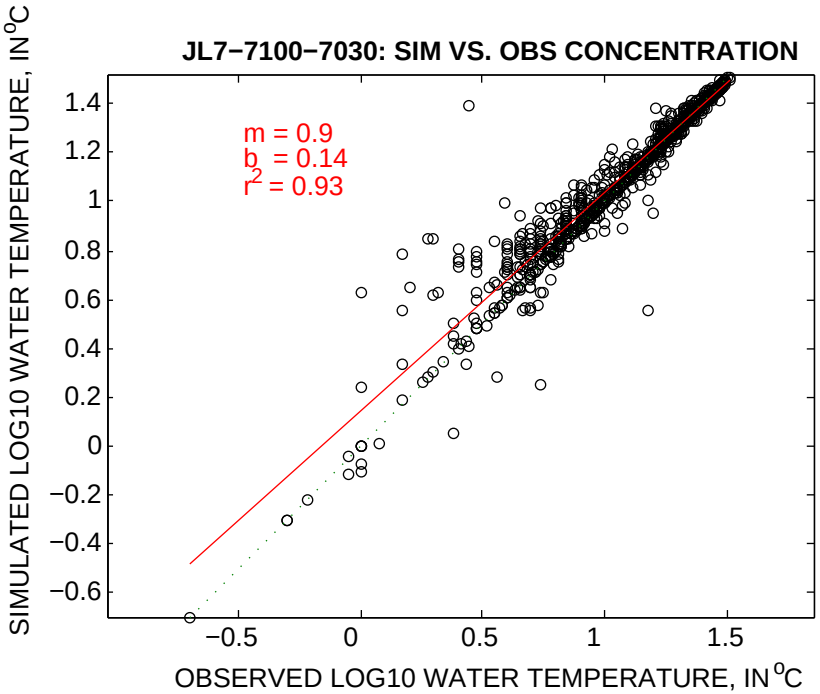
Drive	Directory	Observed
N/A	model	OBS20161101

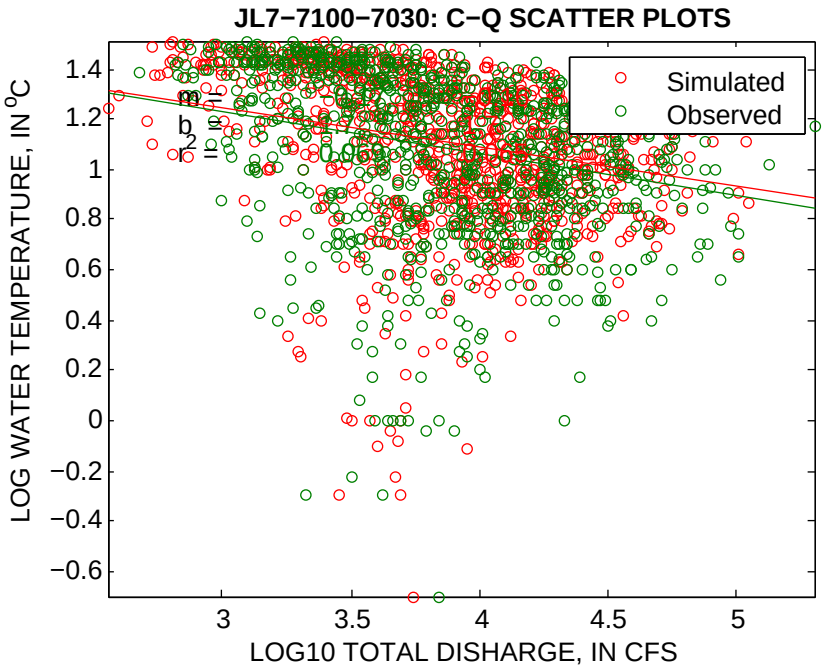
STATISTICS

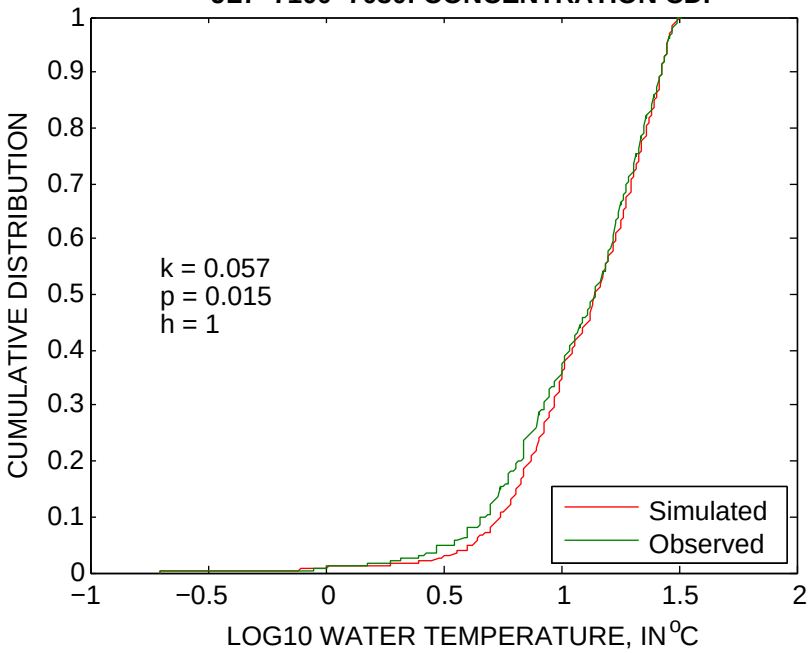
	n	915	915
		observe	simulate
min		0.2	0.34237
		-0.69897	-0.465504
mean		14.682	15.3766
		1.07137	1.10557
media		13.8	14.39
		1.13988	1.15806
max		32.6	33.419
		1.51322	1.52399
varian		69.1607	63.9152
		0.106358	0.0935875
JB		0.001	0.001
		0.001	0.001
		ra	log
%		4.73046	3.1916
err.va		5.598	0.0175523
rel.std.err		0.080942	0.165031
mod.eff		0.919058	0.834969

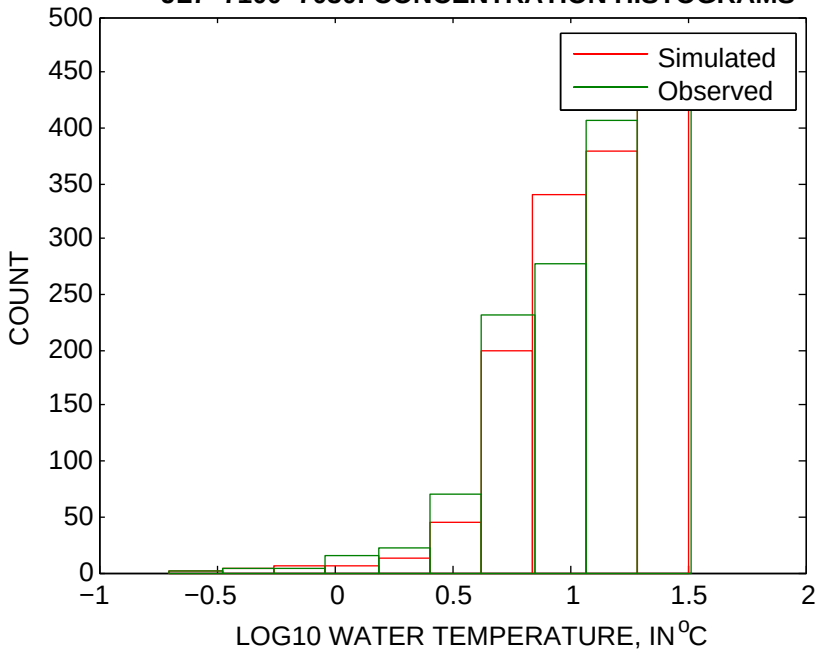
VERSION 2.1

ALL DATA
LOG10

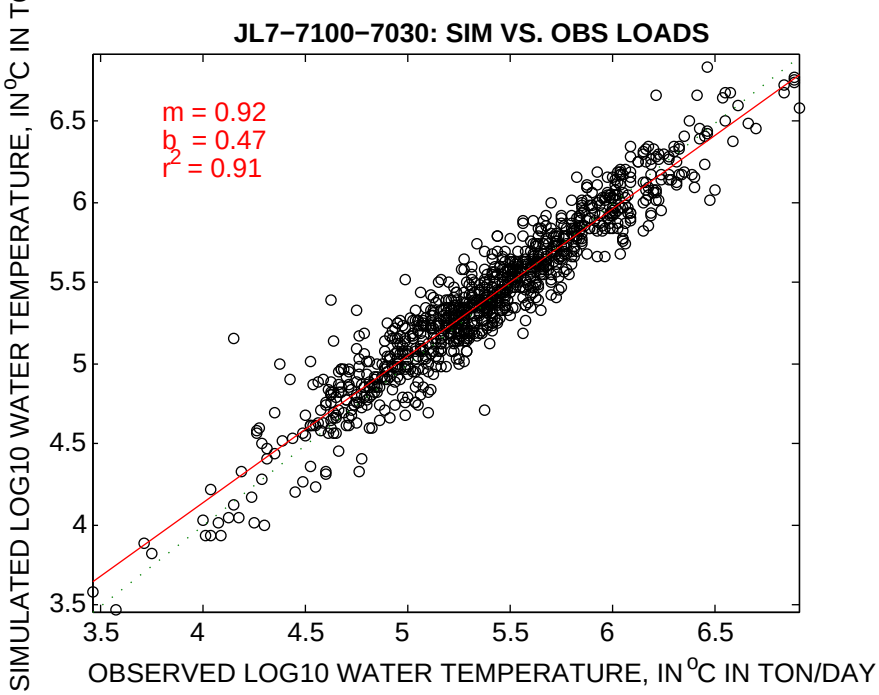


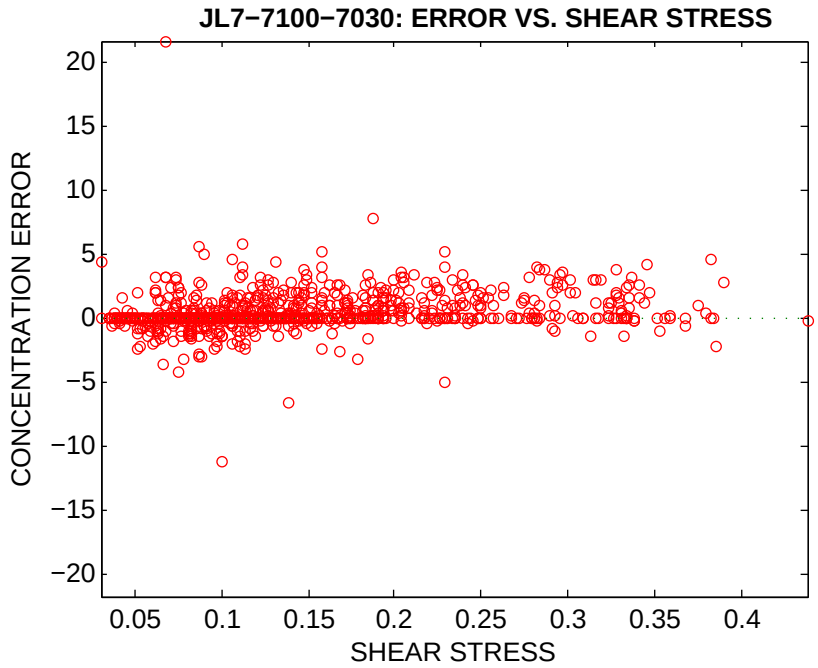


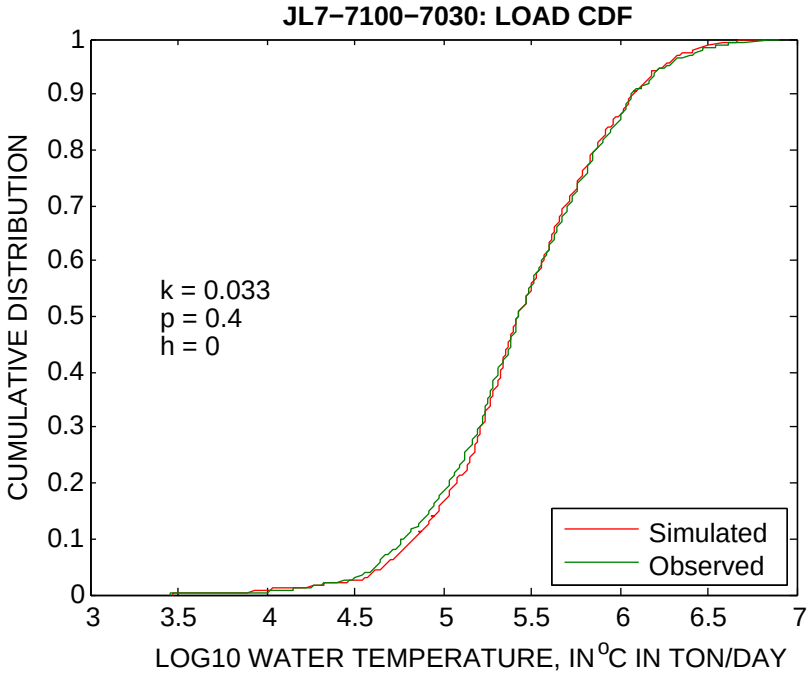


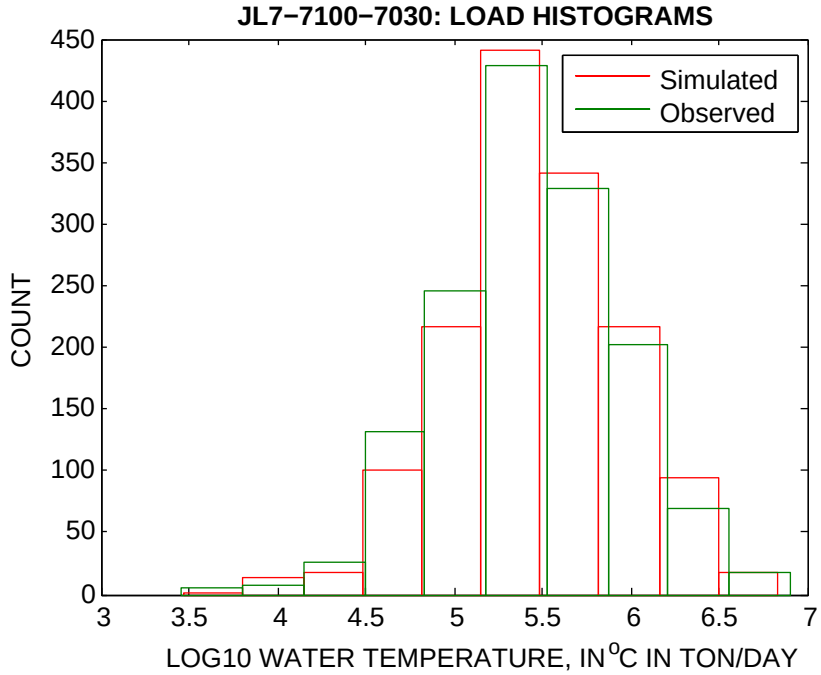


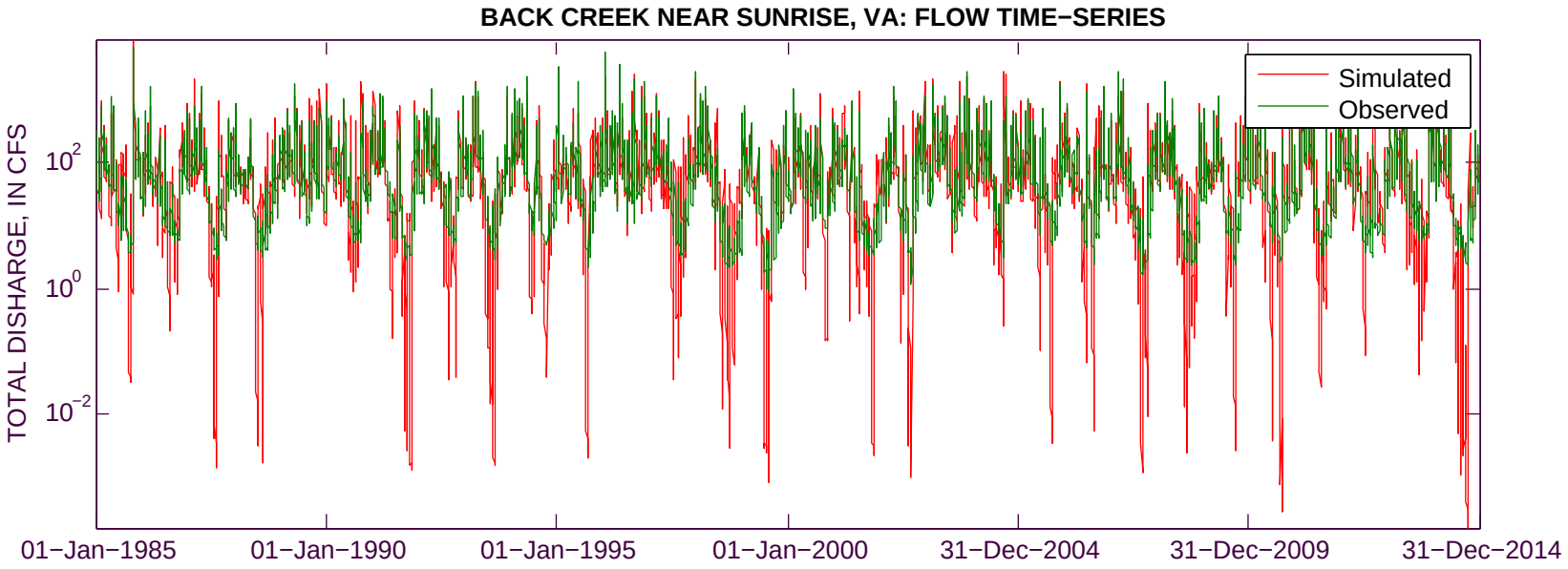
LOAD DATA
LOG10

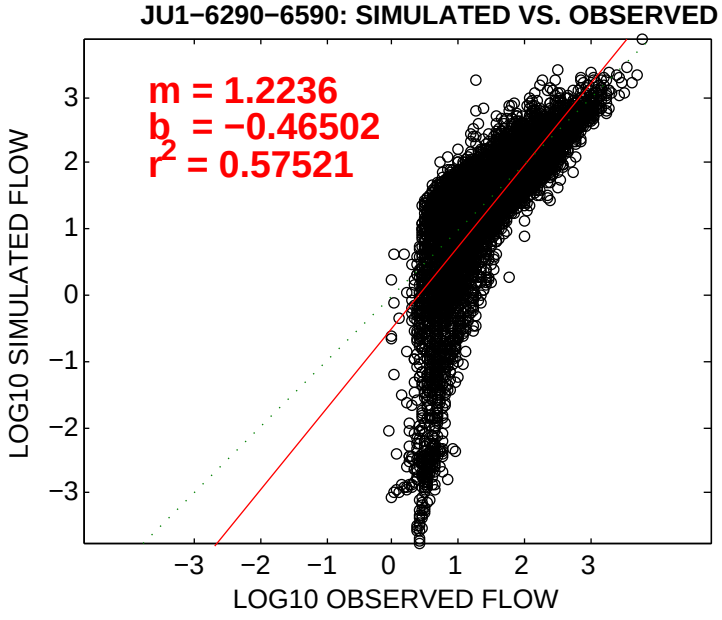


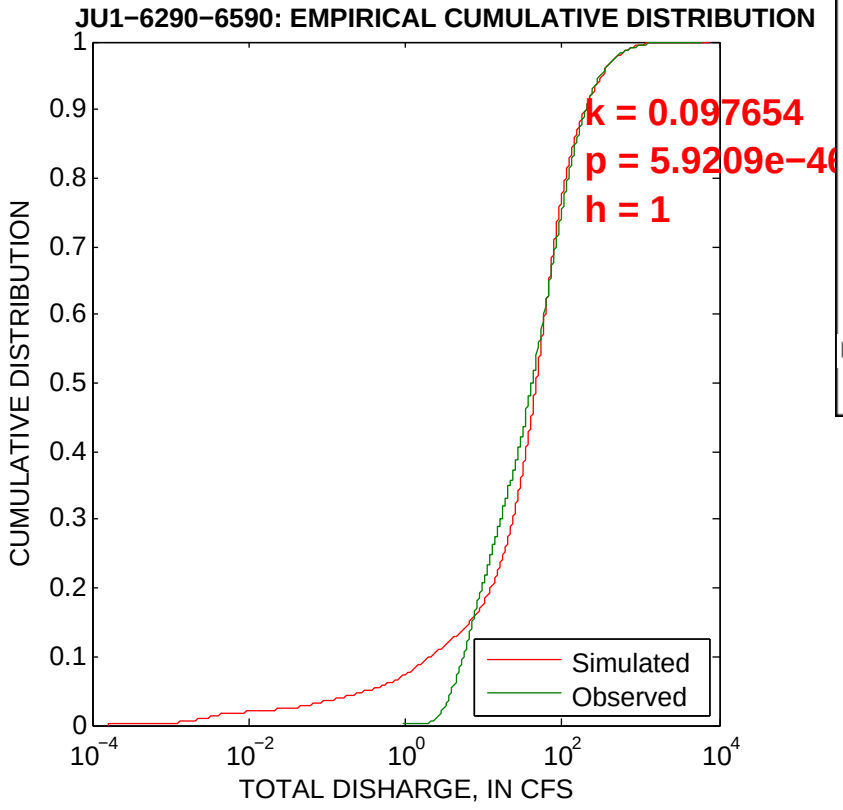












DATA SELECTION

scenario: P620171001WQ | file: FLOW.calib

plot: FLOW - total discharge

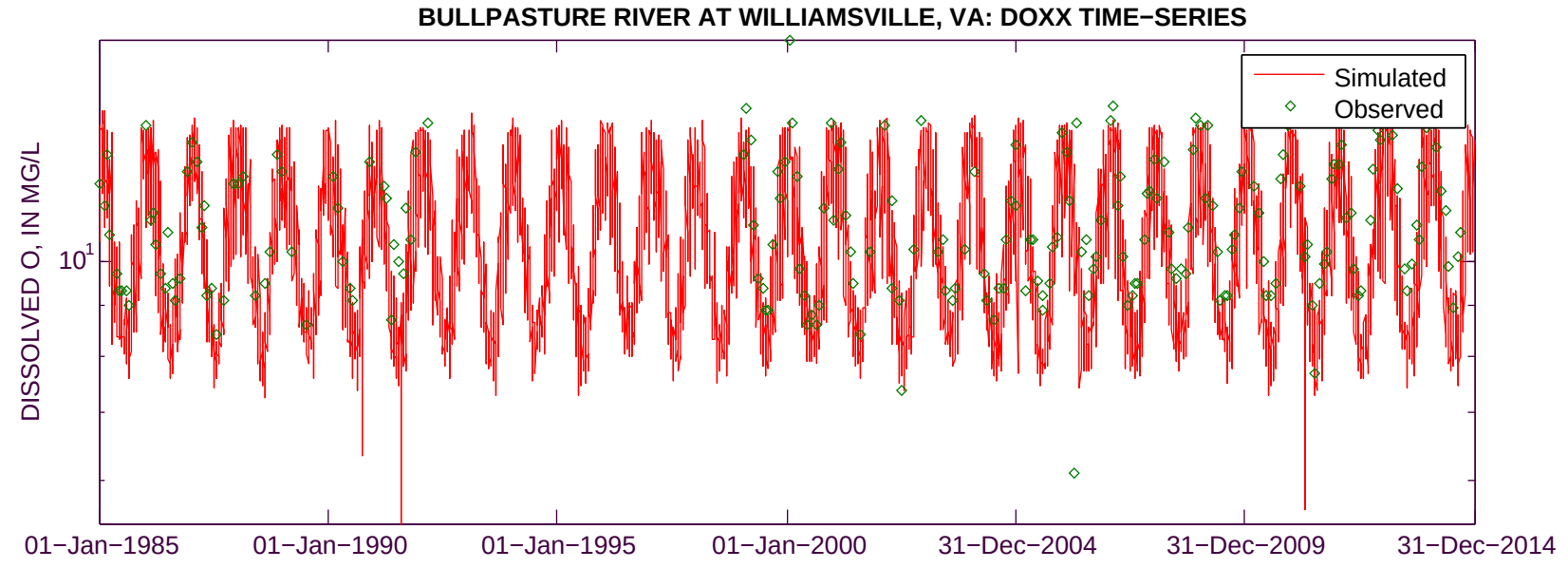
Dates: 1/1/1985 – 12/31/201

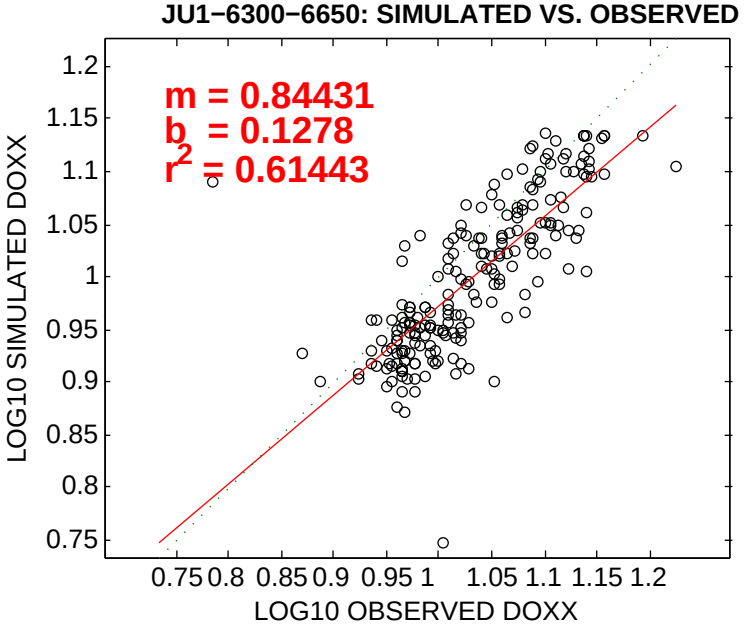
Drive: N/A | Directory: model | Observed: OBS20161101

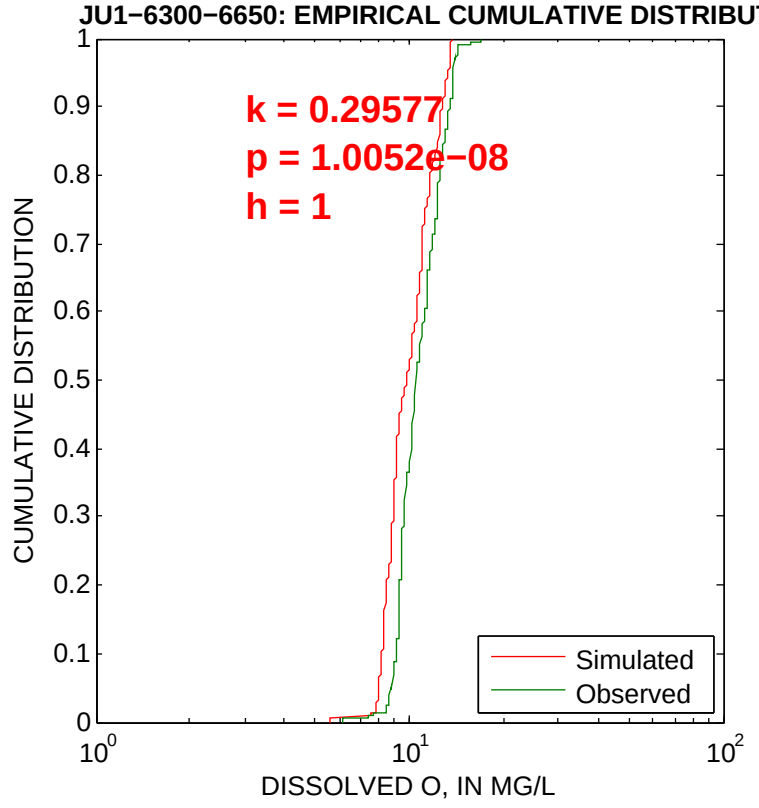
STATISTICS

		observe	simulate
n		10957	10957
min		0.87	0.00016885
		-0.0604807	-3.7725
mean		90.2341	90.0552
		1.56926	1.45512
media		41	46.873
		1.61278	1.67092
max		6280	7835.1
		3.79796	3.89404
varian		34468	30923
		0.351333	0.914464
JB		0.001	0.001
		0.001	0.001
		ra	log
%		-0.198199	-7.27404
err.va		12243.8	0.419054
rel.std.err		0.355222	1.19276
mod.eff		0.644778	-0.192757

VERSION







DATA SELECTION

scenario: P620171001WQ; file: DOXX.calib

plot: DOXX - dissolved oxygen

Dates: 1/1/1985 – 12/31/201

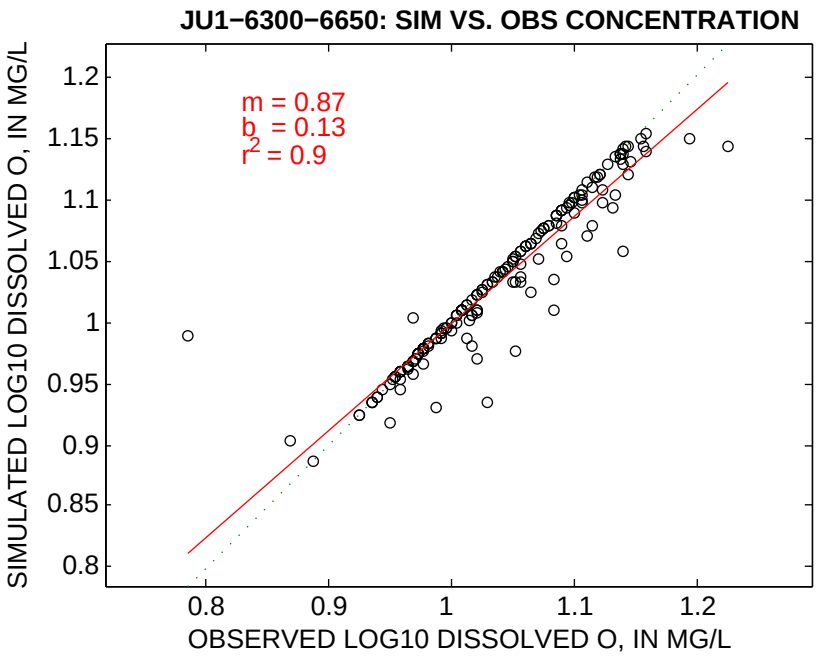
Drive: N/A; Directory: model; Observed: OBS20161101

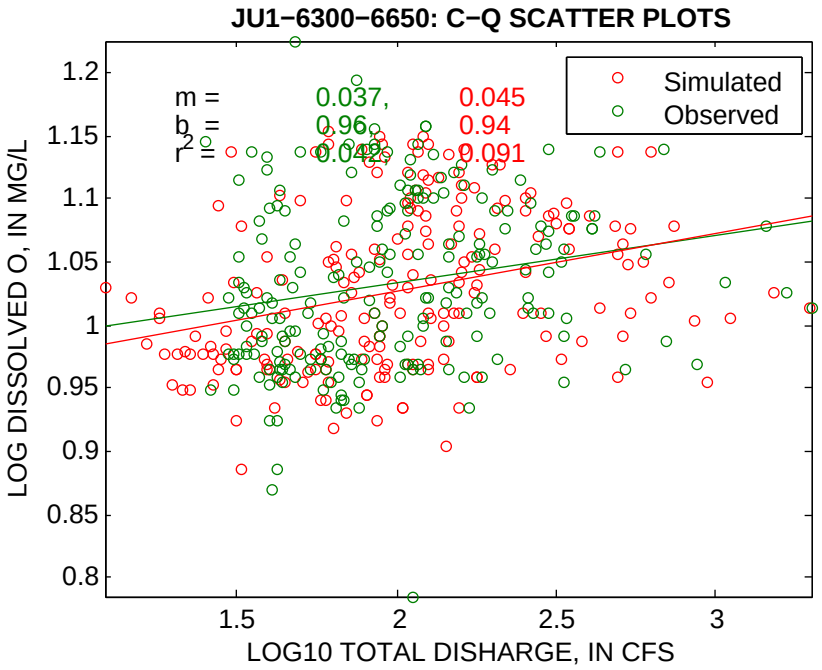
STATISTICS

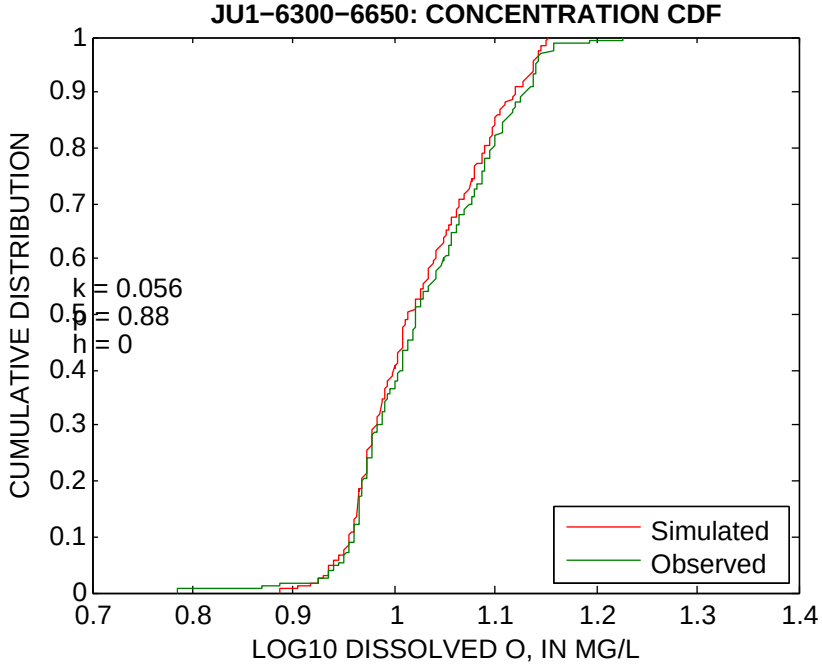
	n	213	213
		observe	simulate
min		6.1	5.6007
		0.78533	0.748242
mean		10.9049	10.1287
		1.03233	0.999413
media		10.5	9.8577
		1.02119	0.993776
max		16.8	13.708
		1.22531	1.13697
varian		2.96333	2.96675
		0.00459571	0.00533197
JB		0.020843	0.009928
		0.5	0.112447
		ra	log
%		-7.11777	-3.18903
err.va		1.7386	0.00325618
rel.std.err		0.586705	0.708526
mod.eff		0.413295	0.291474

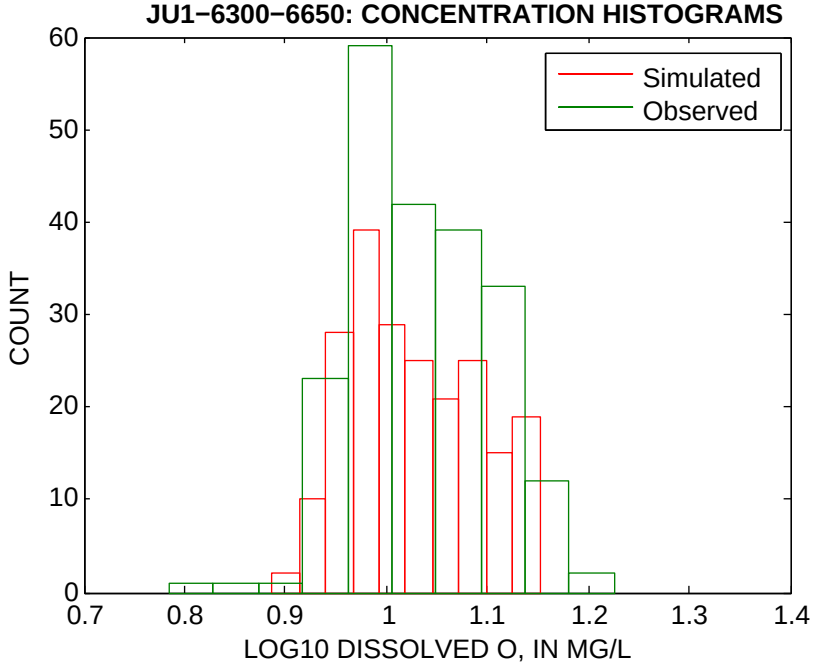
VERSION 2.1

ALL DATA
LOG10

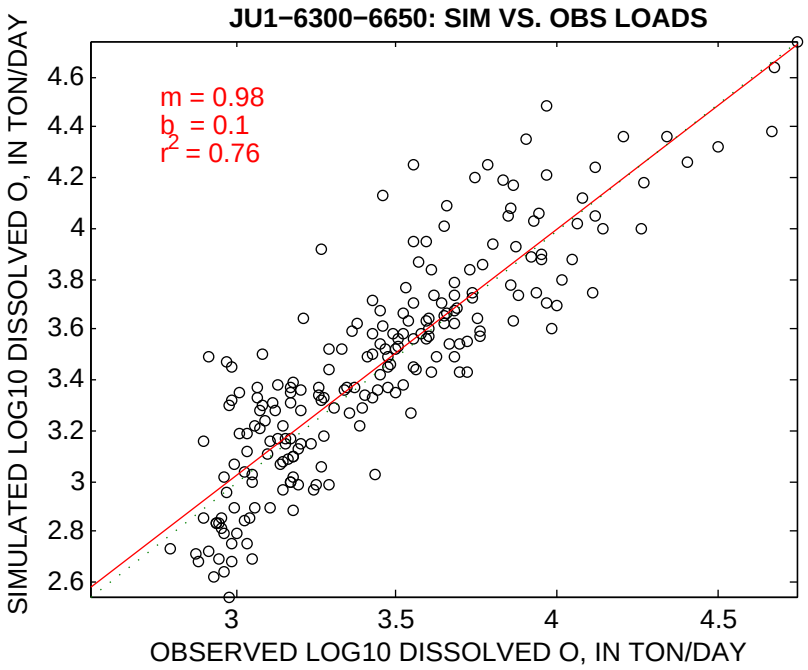


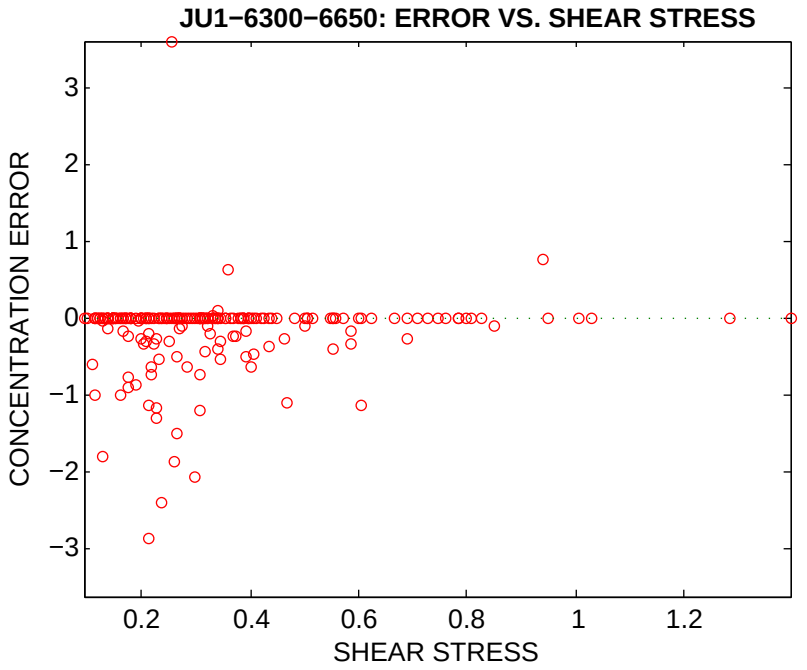


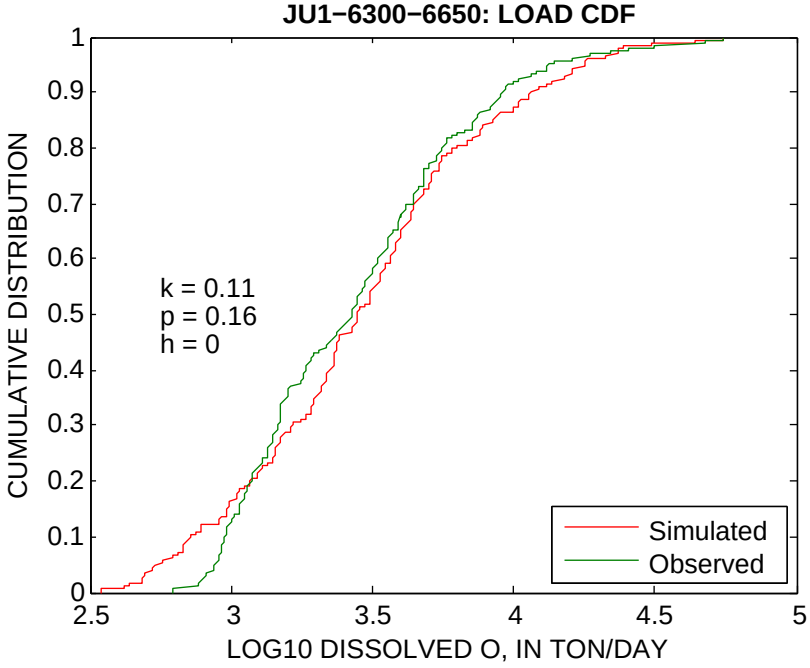


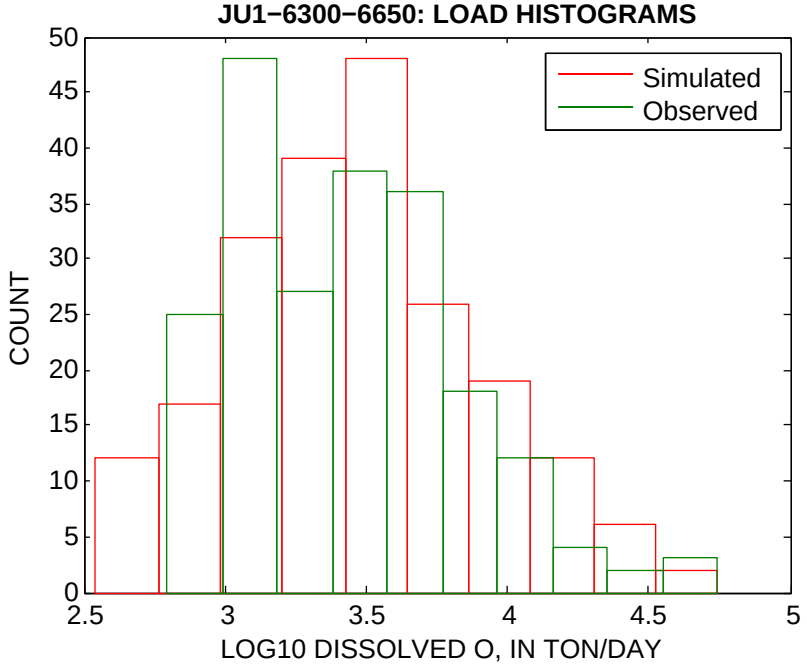


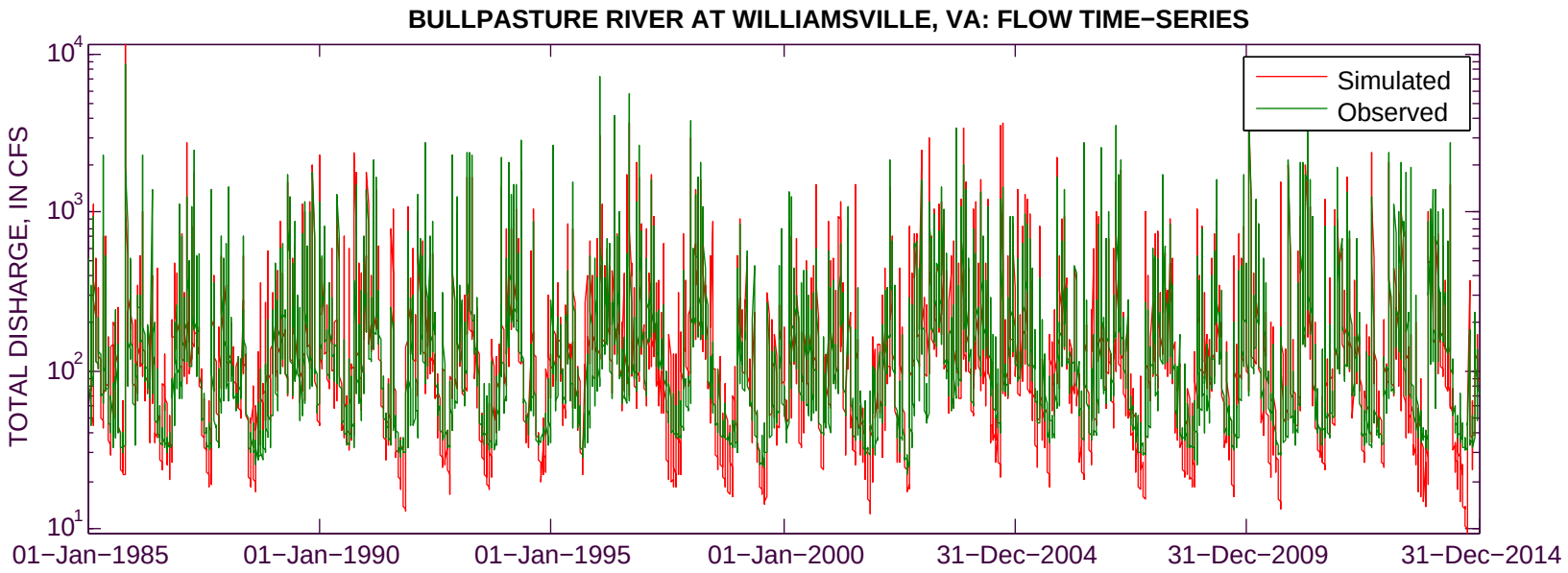
LOAD DATA
LOG10

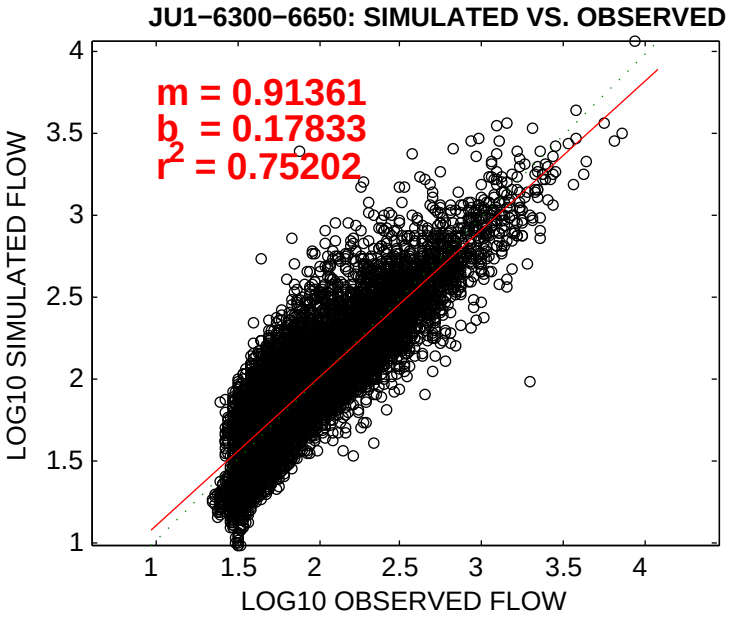


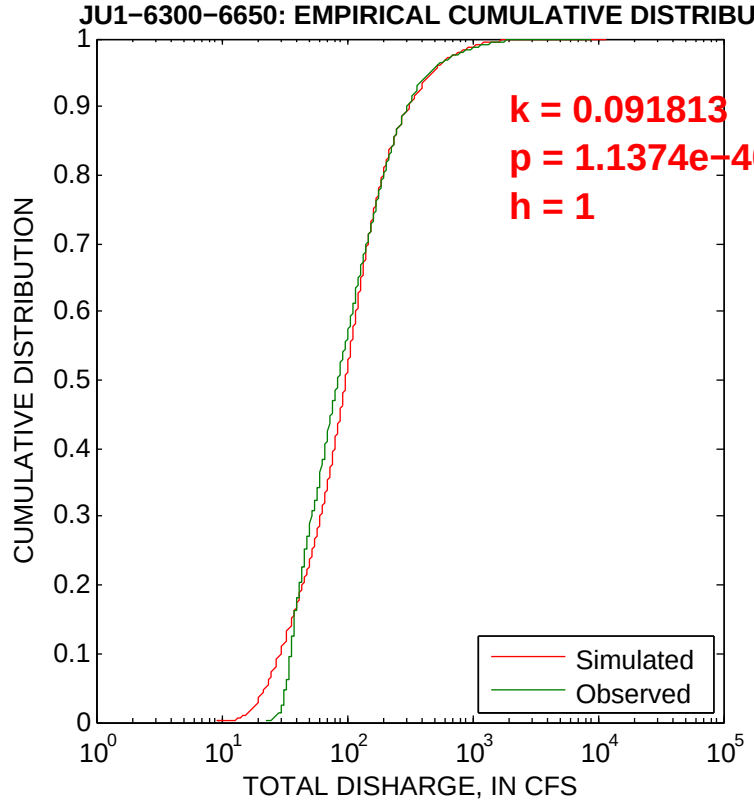












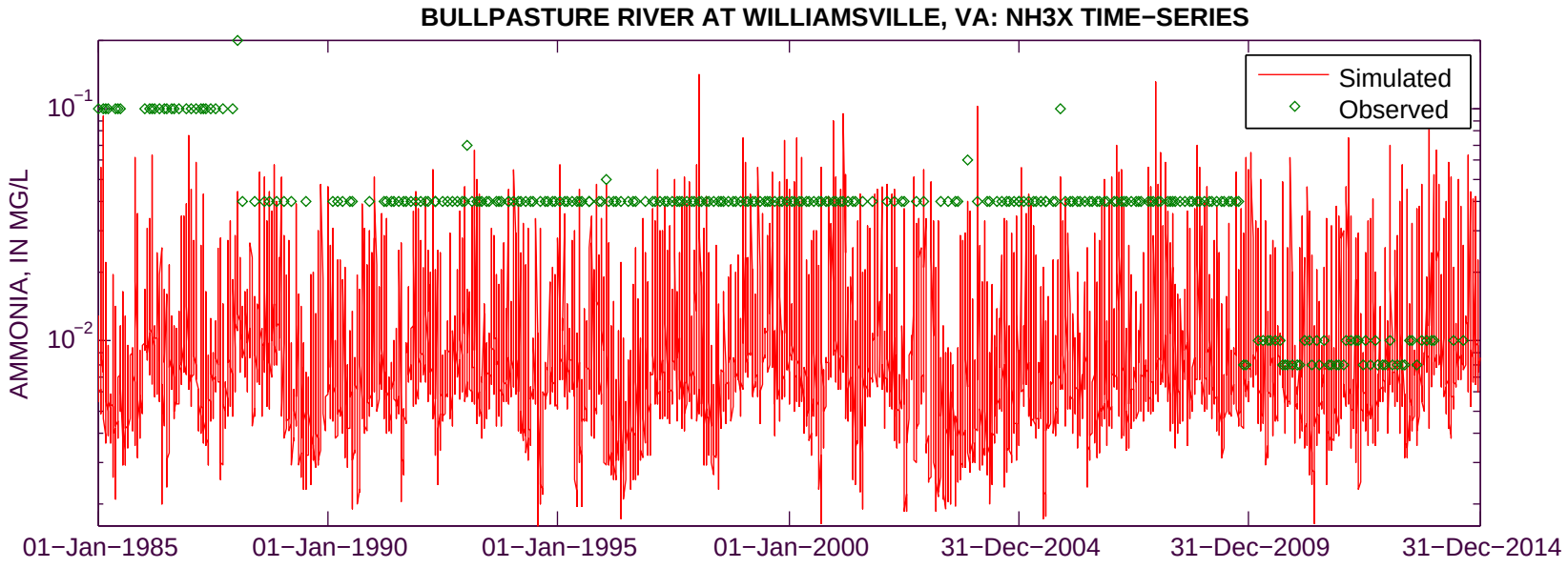
DATA SELECTION

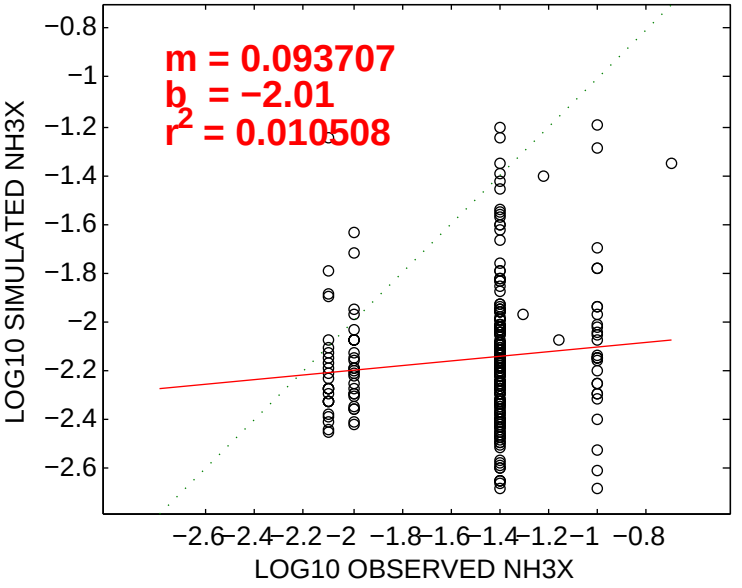
scenario: P620171001WQ
file: FLOW.calib
plot: FLOW - total discharge
Dates: 1/1/1985 12/31/201
Drive: N/A
Directory: model
Observed: OBS20161101

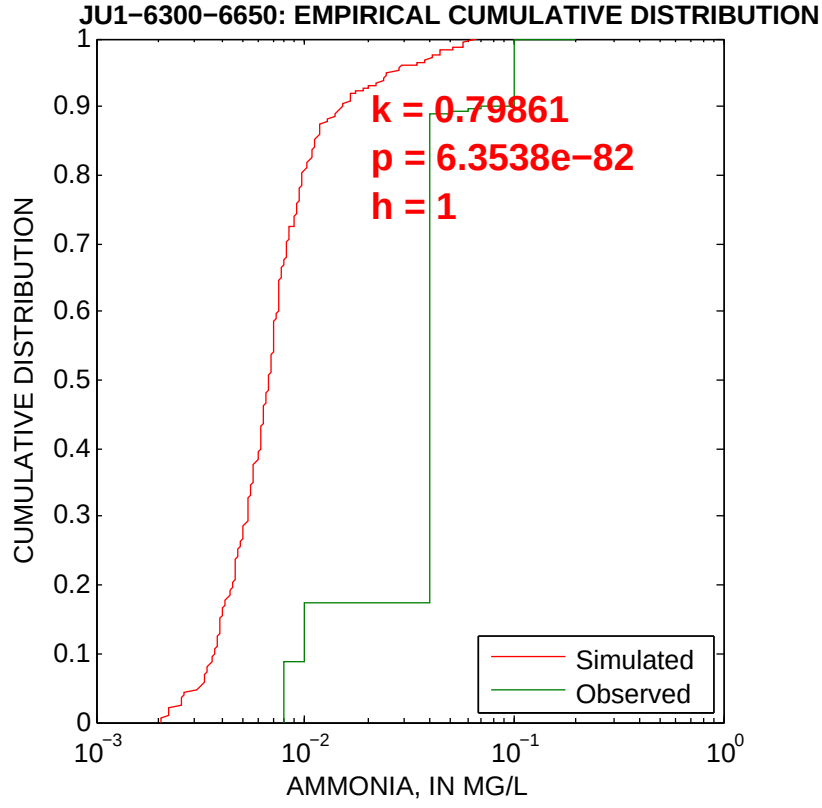
STATISTICS

		observe	simulate
n		10957	10957
min		22	9.4417
		1.34242	0.97505
mean		157.165	158.709
		1.98799	1.99459
media		86	98.85
		1.9345	1.99498
max		8700	11859
		3.93952	4.07405
varian		73337.7	65084.7
		0.141731	0.157312
JB		0.001	0.001
		0.001	0.001
		ra	log
%		0.982826	0.331944
err.va		23484.5	0.0401116
rel.std.err		0.320225	0.283013
mod.eff		0.679775	0.716987

VERSION 2.1







DATA SELECTION

scenario	file
P620171001WQ	NH3X.calib

plot: NH3X - ammonia

Dates: 1/1/1985 – 12/31/201

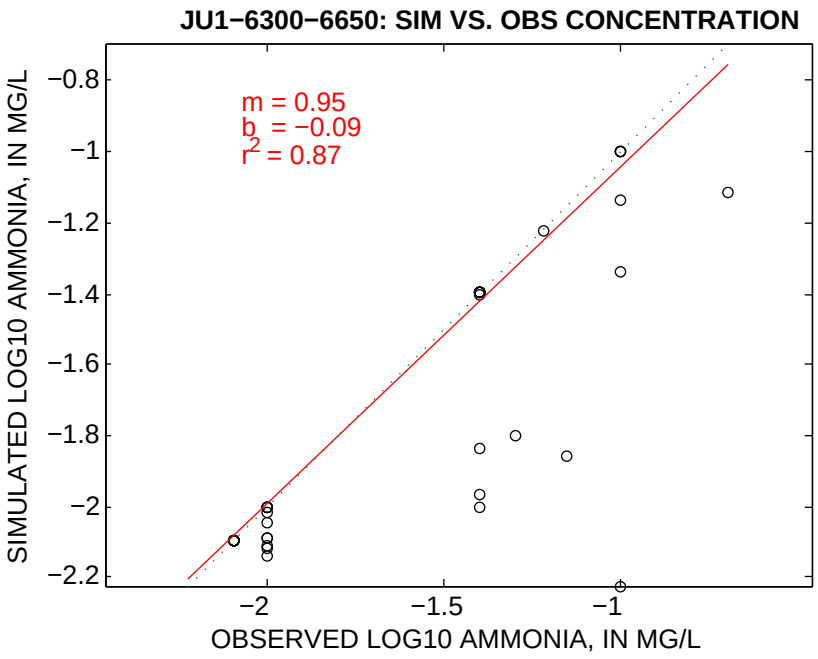
Drive	Directory	Observed
N/A	model	OBS20161101

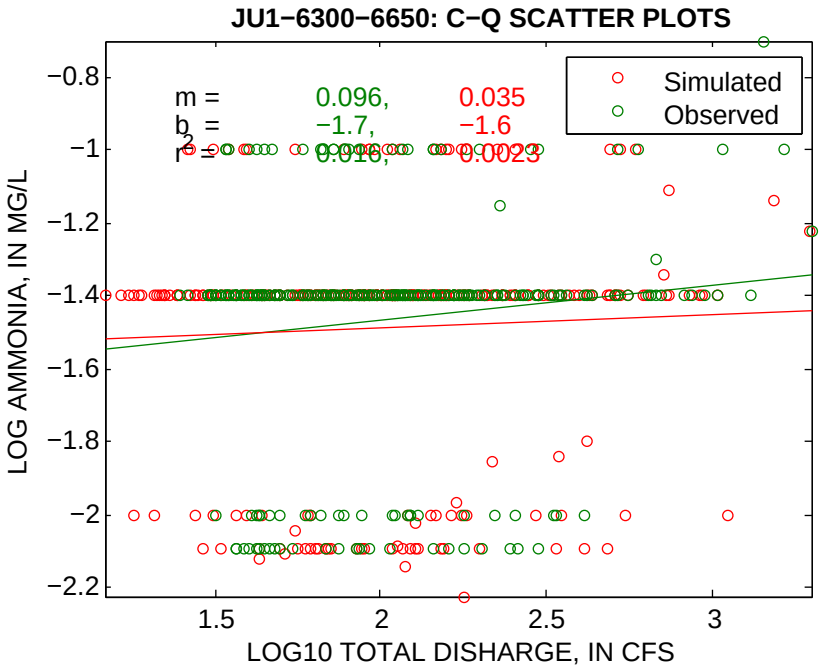
STATISTICS

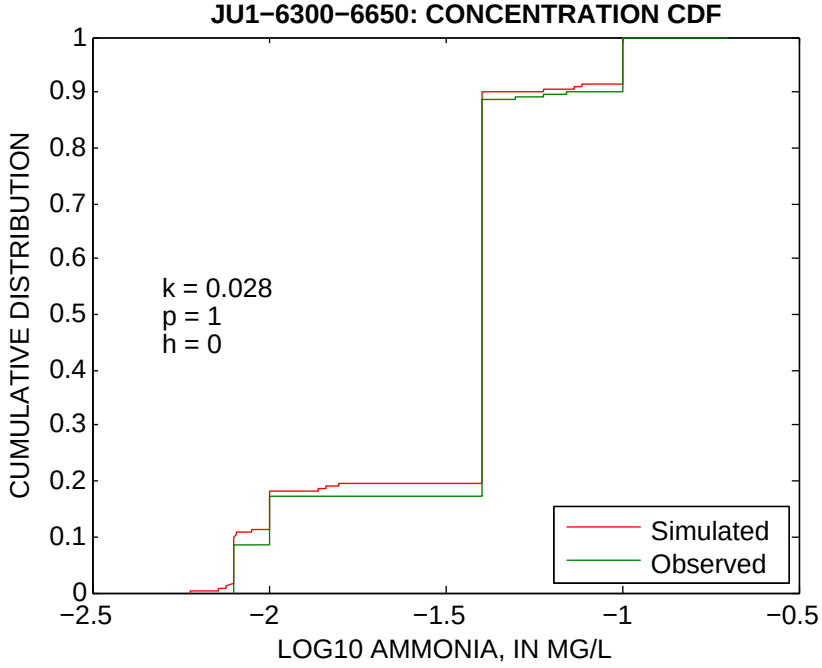
n	288	288
	observe	simulate
min	0.008	0.0020702
	-2.09691	-2.68399
mean	0.0412153	0.00910799
	-1.46797	-2.14753
media	0.04	0.00679395
	-1.39794	-2.16788
max	0.2	0.063301
	-0.69897	-1.19859
varian	0.00061141	8.50298e-0
	0.0867091	0.0724581
JB	0.001	0.001
	0.001	0.001
	ra	log
%	-77.9014	46.2929
err.va	0.00164672	0.606335
rel.std.err	2.69332	6.99275
mod.eff	-1.69332	-5.99275

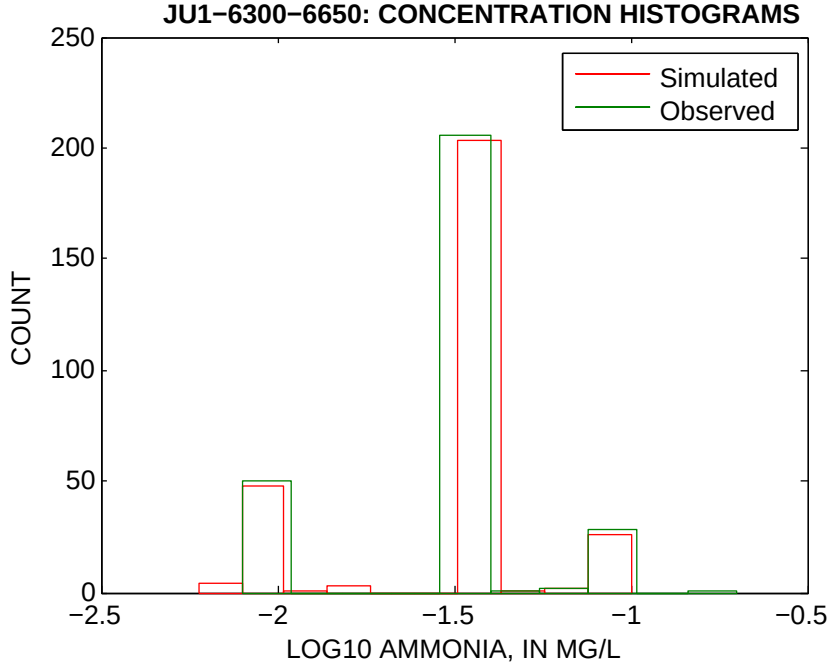
VERSION 2.1

ALL DATA
LOG10

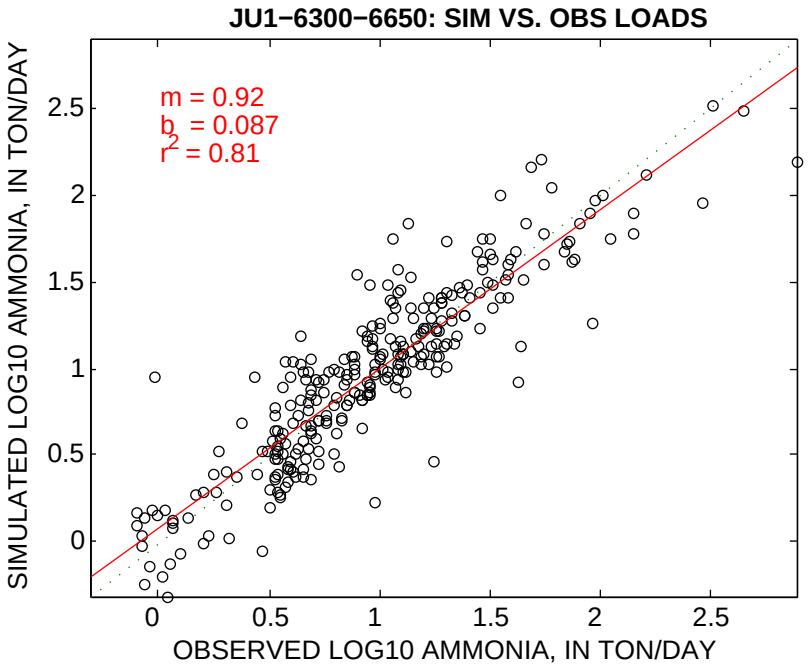


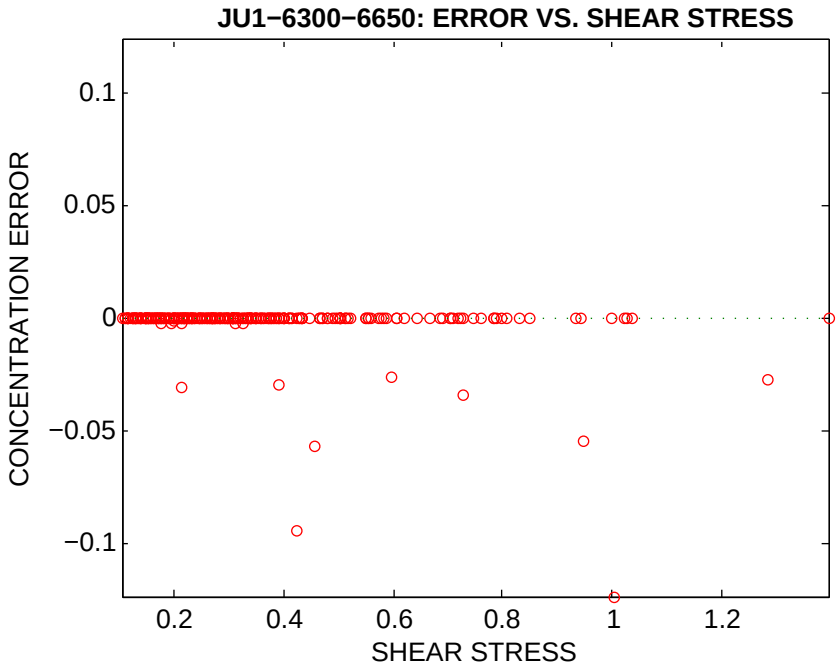


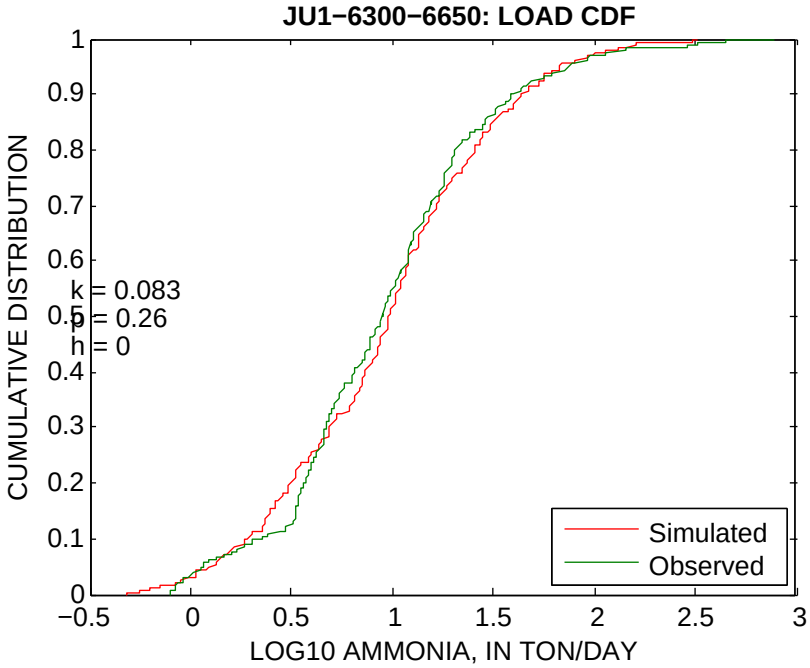


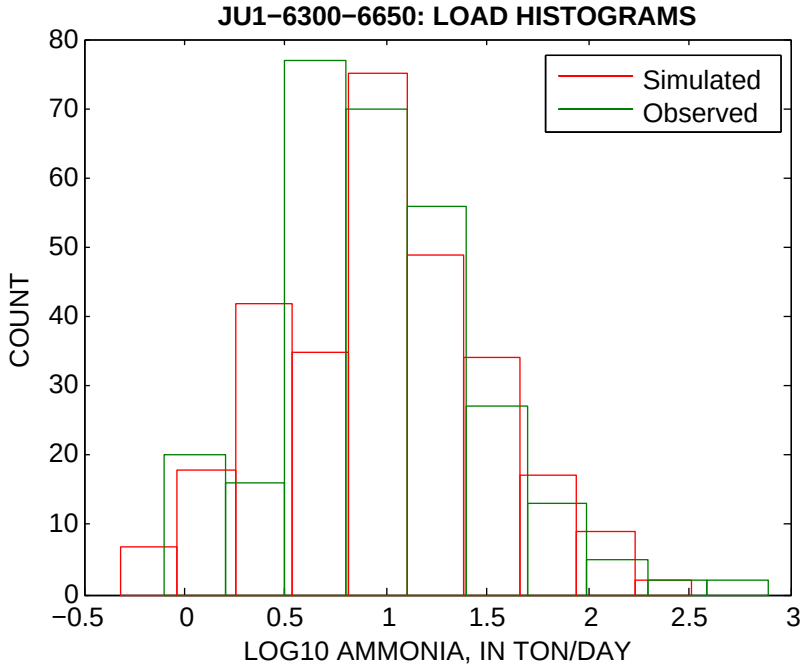


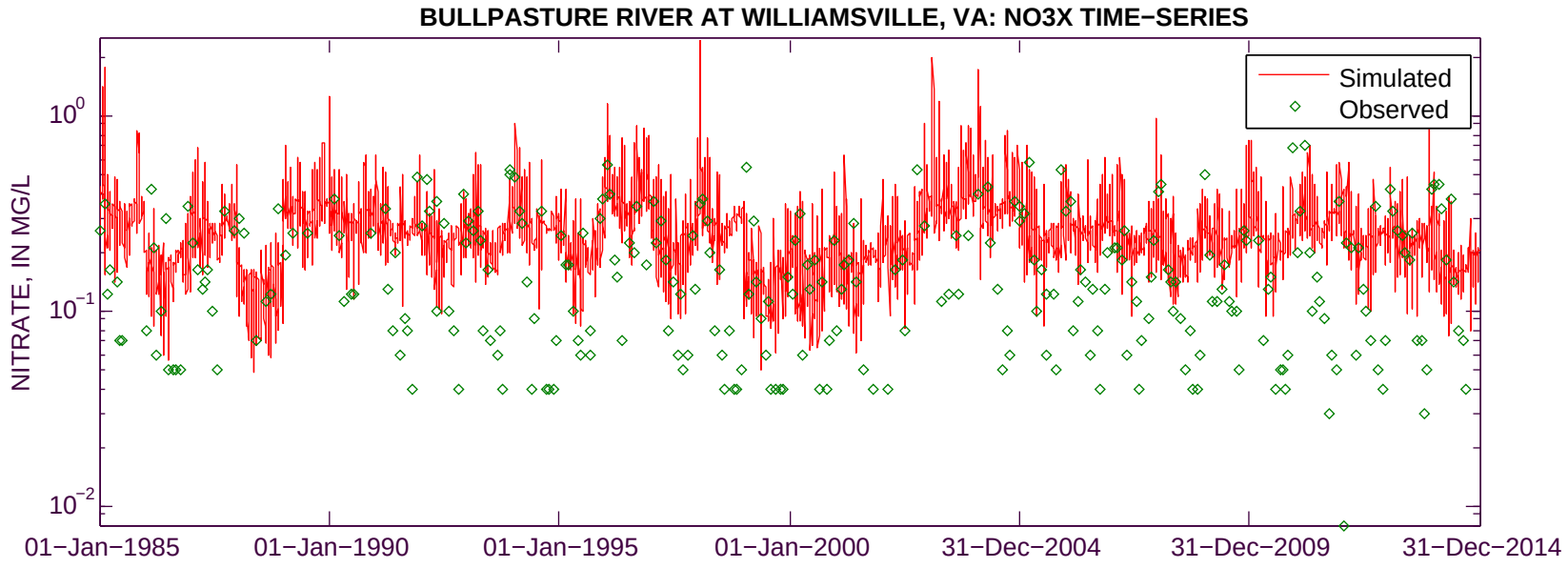
LOAD DATA
LOG10

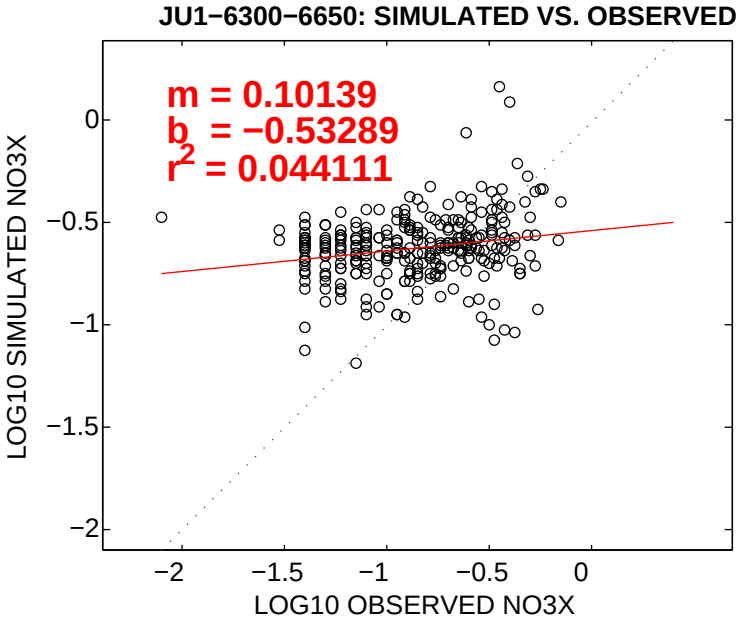


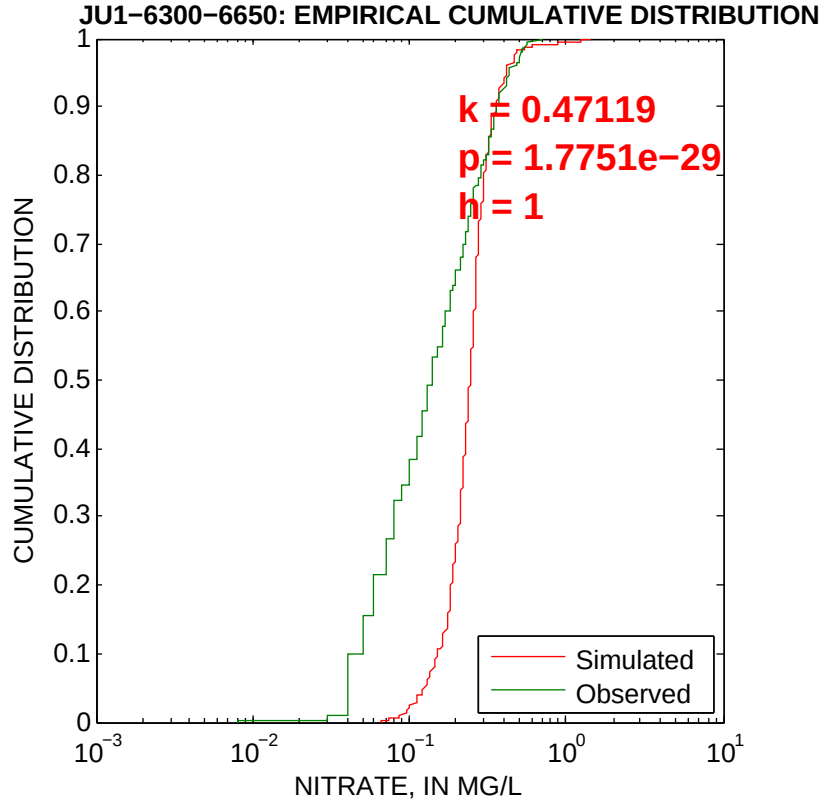












DATA SELECTION

scenario: P620171001WQ | file: NO3X.calib

plot: NO3X - nitrate

Dates: 1/1/1985 – 12/31/201

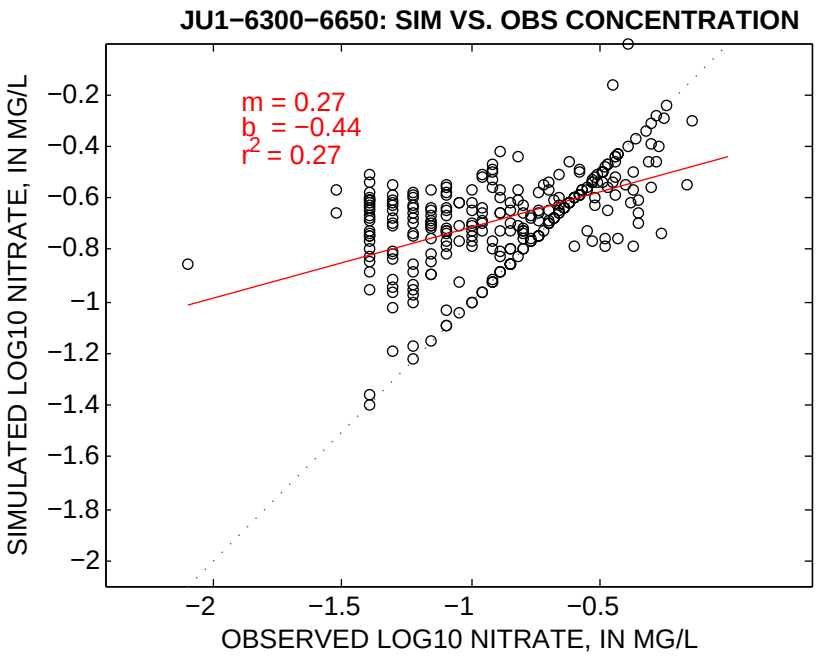
Drive: N/A | Directory: model | Observed: OBS20161101

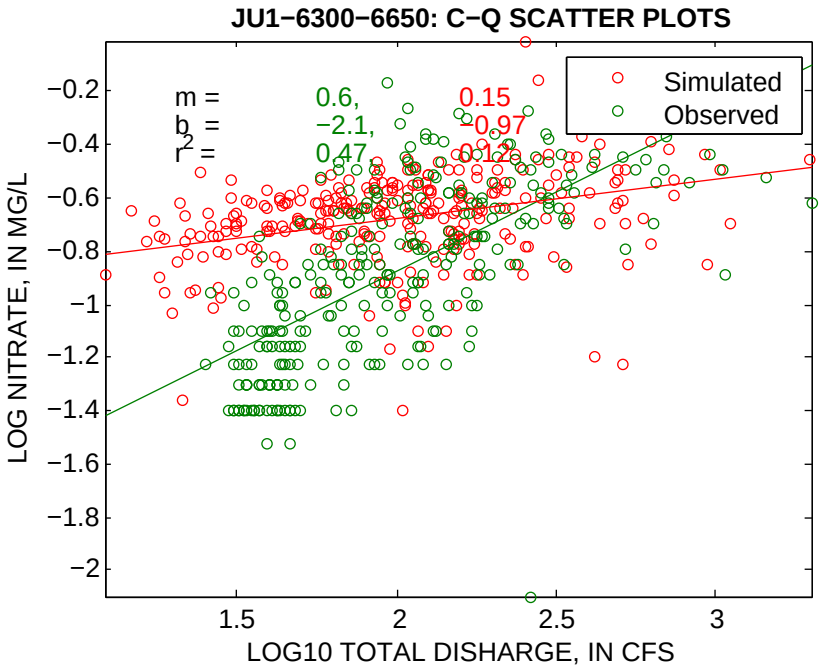
STATISTICS

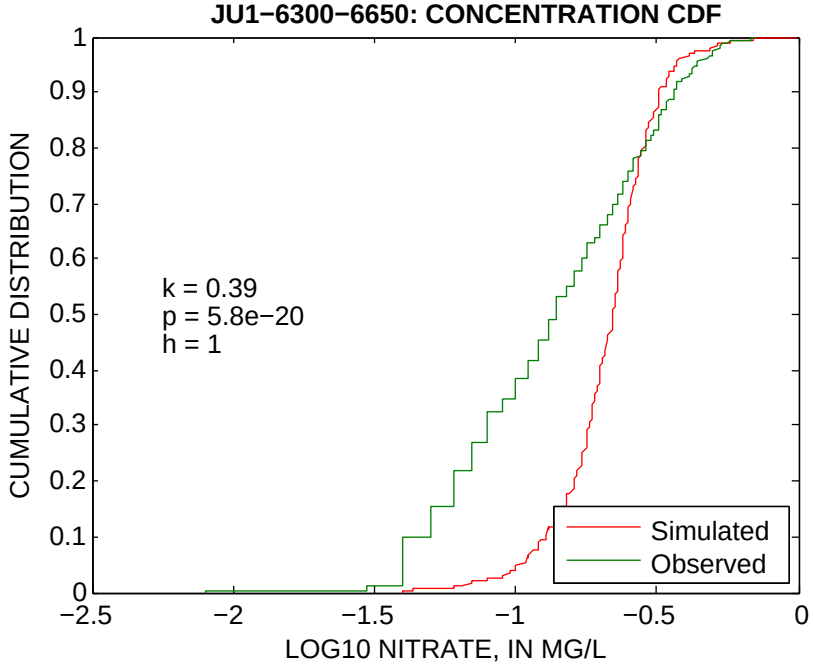
	n	observe	simulate
		295	295
min		0.008	0.06588
		-2.09691	-1.18125
mean		0.17762	0.258082
		-0.872344	-0.621339
media		0.14	0.24296
		-0.853872	-0.614465
max		0.71	1.4681
		-0.148742	0.166756
varian		0.0175415	0.0161346
		0.113828	0.0265257
JB		0.001	0.001
		0.056199	0.001
		ra	log
%		45.2999	-28.7736
err.va		0.0310572	0.18049
rel.std.err		1.77049	1.58564
mod.eff		-0.770493	-0.58564

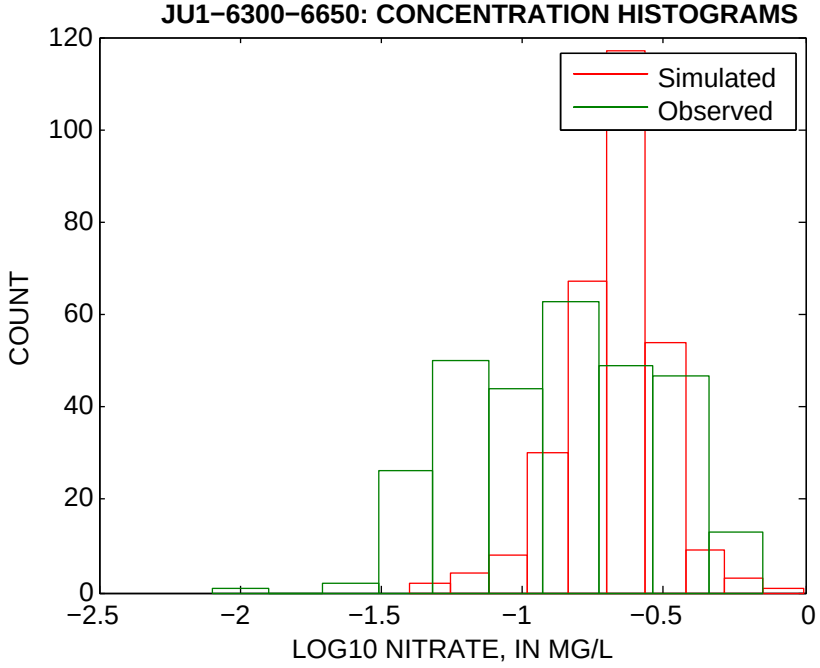
VERSION 2.1

ALL DATA
LOG10

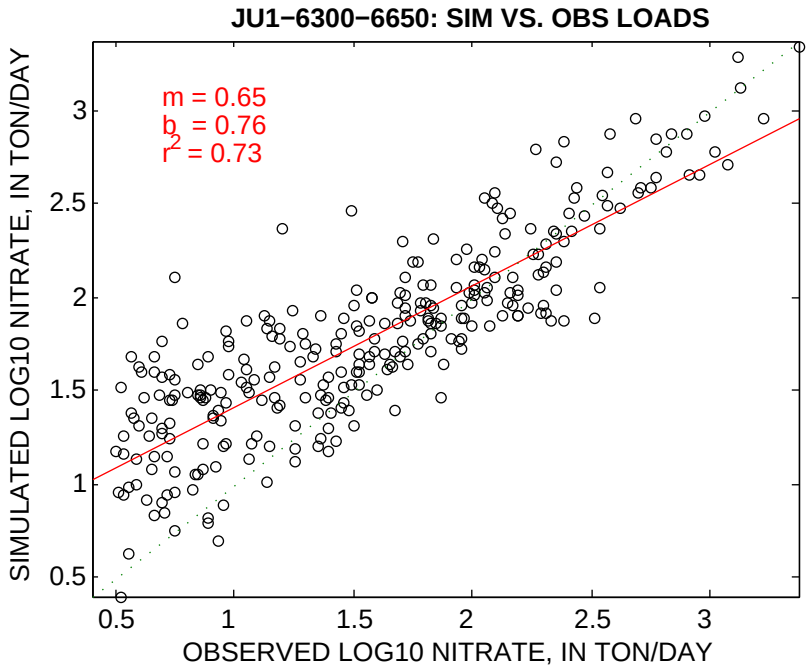


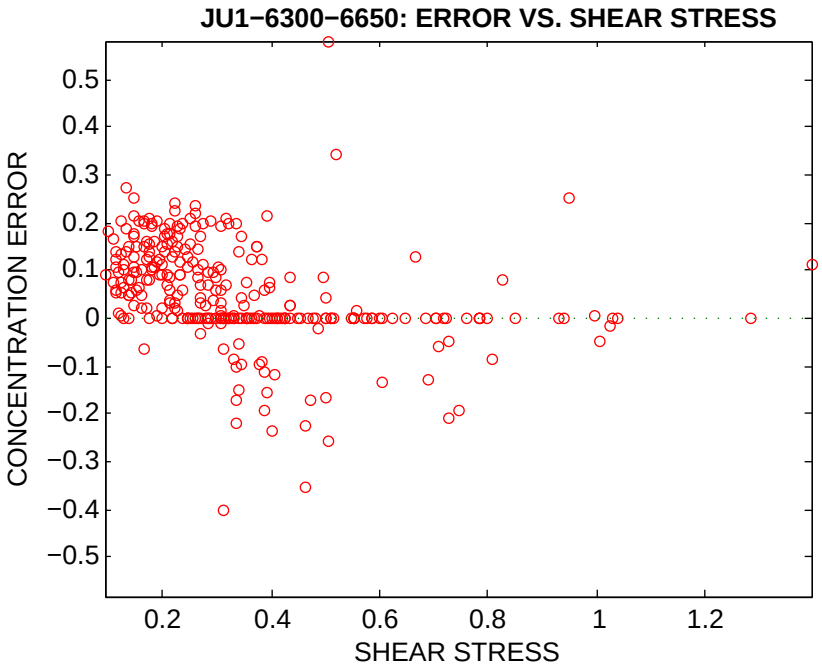


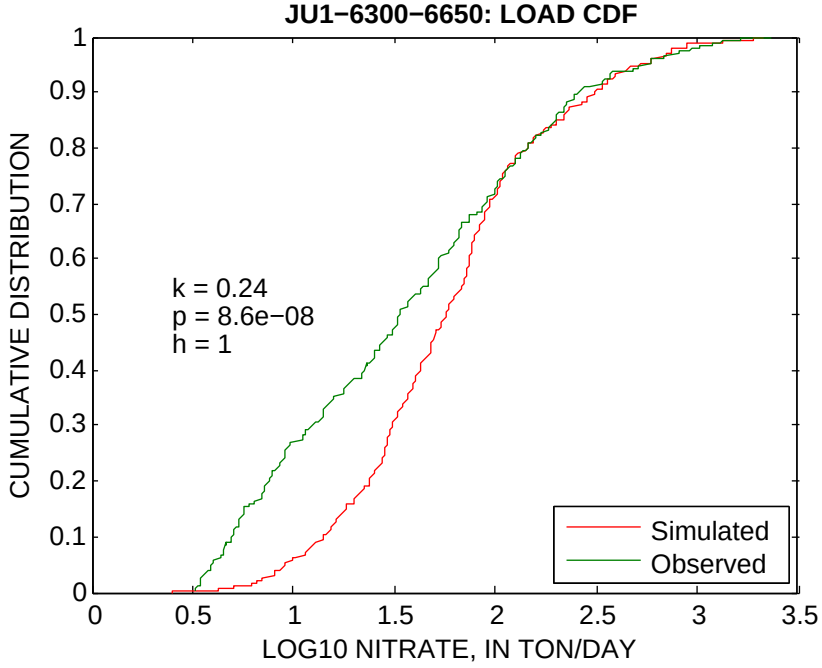


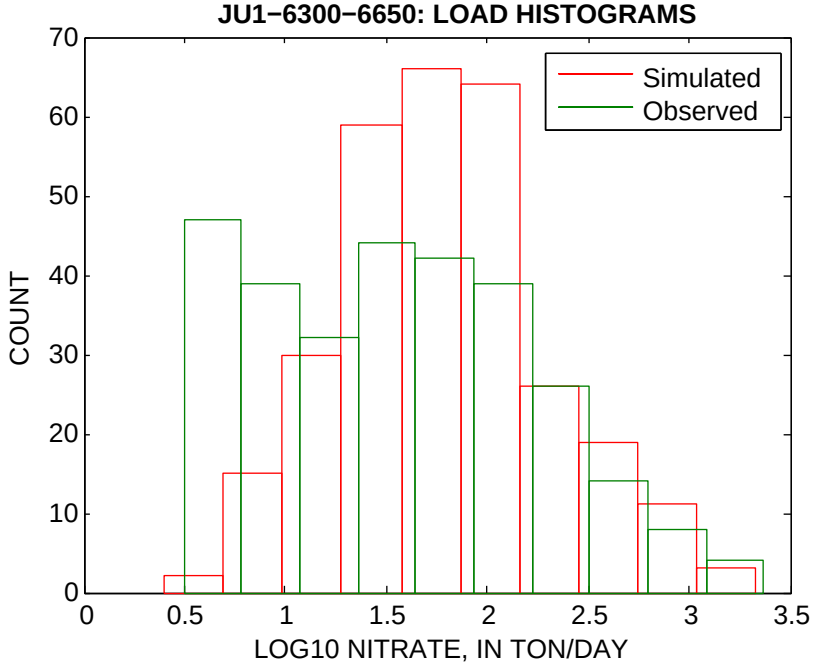


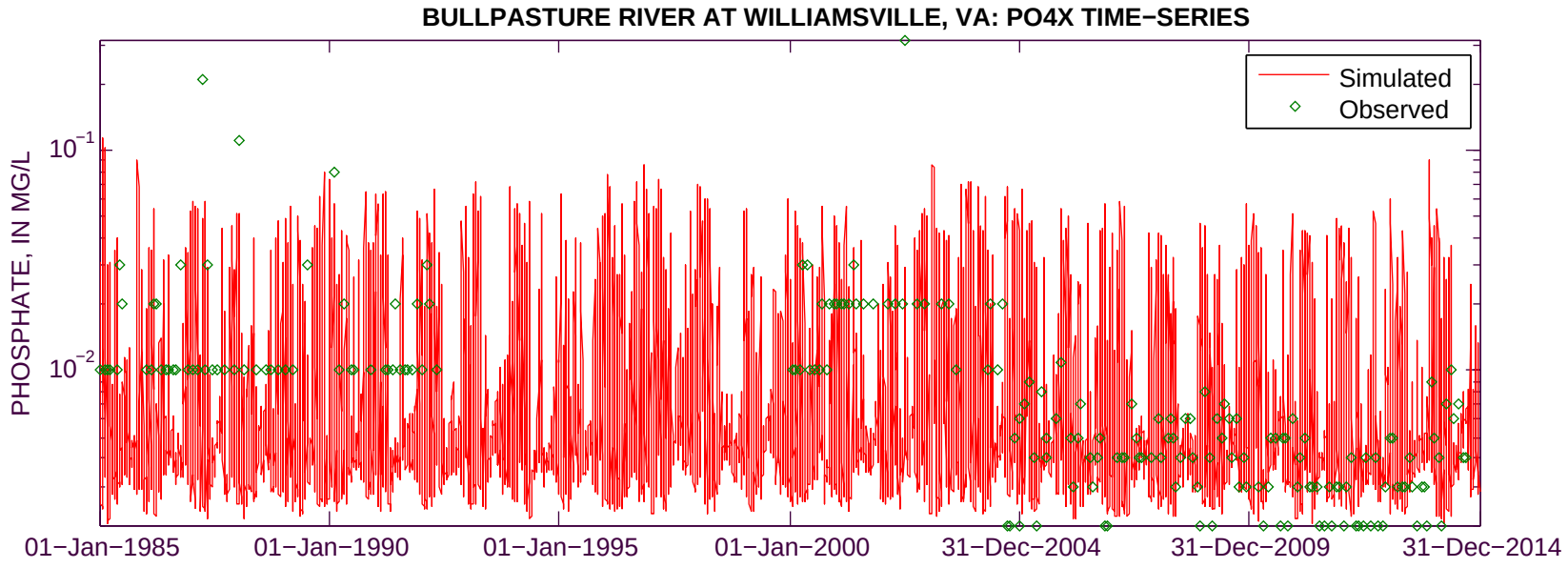
LOAD DATA
LOG10

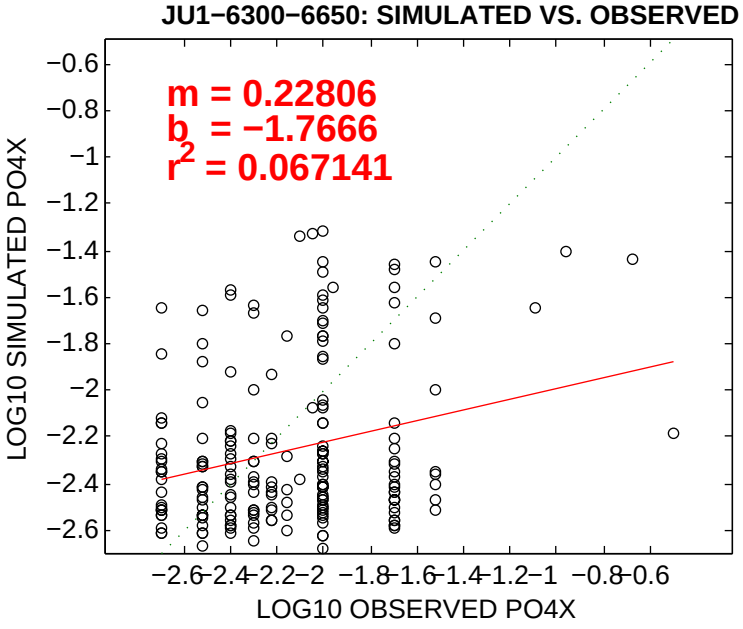


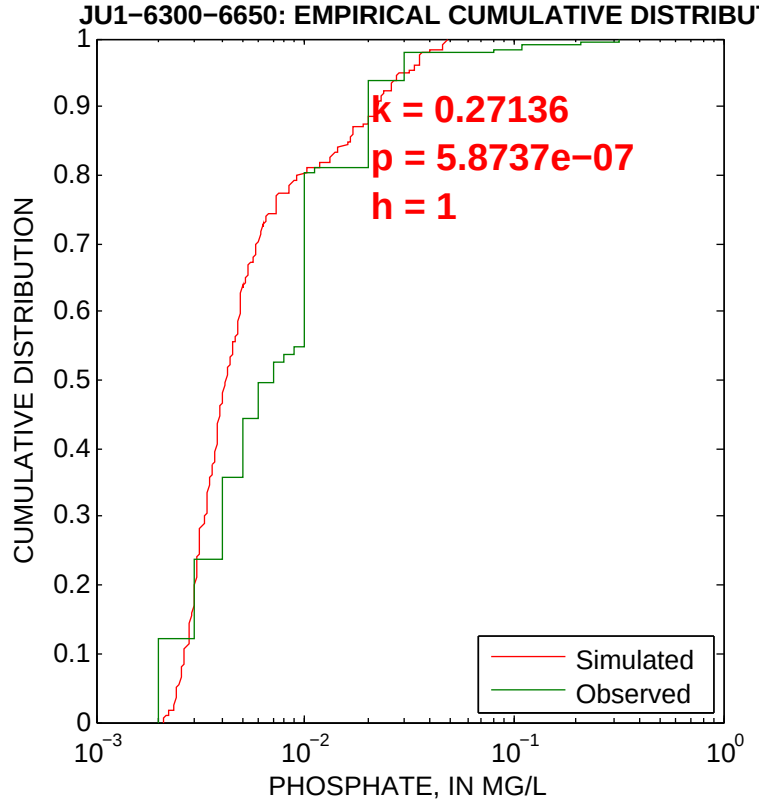












DATA SELECTION

scenario	file
P620171001WQ	PO4X.calib

plot: PO4X - phosphate

Dates: 1/1/1985 – 12/31/201

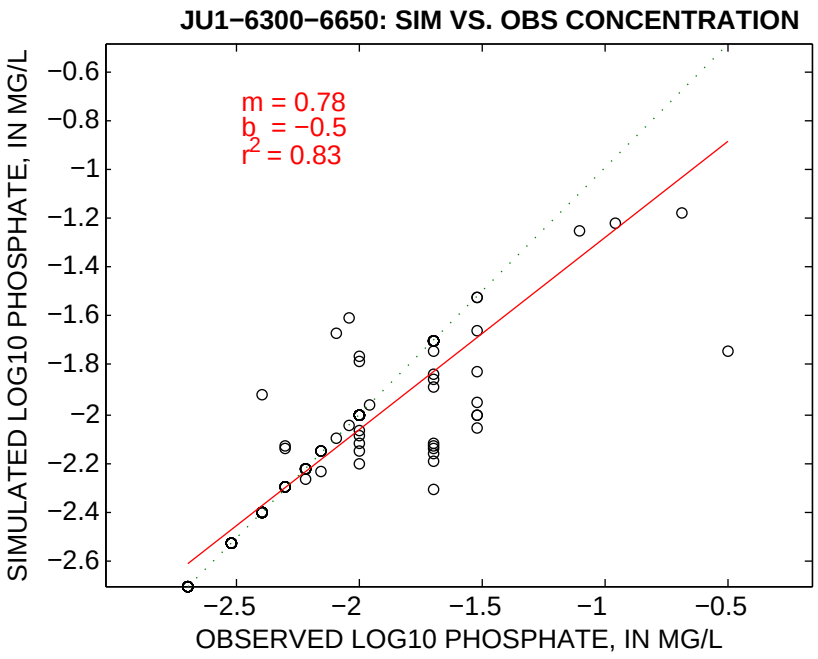
Drive	Directory	Observed
N/A	model	OBS20161101

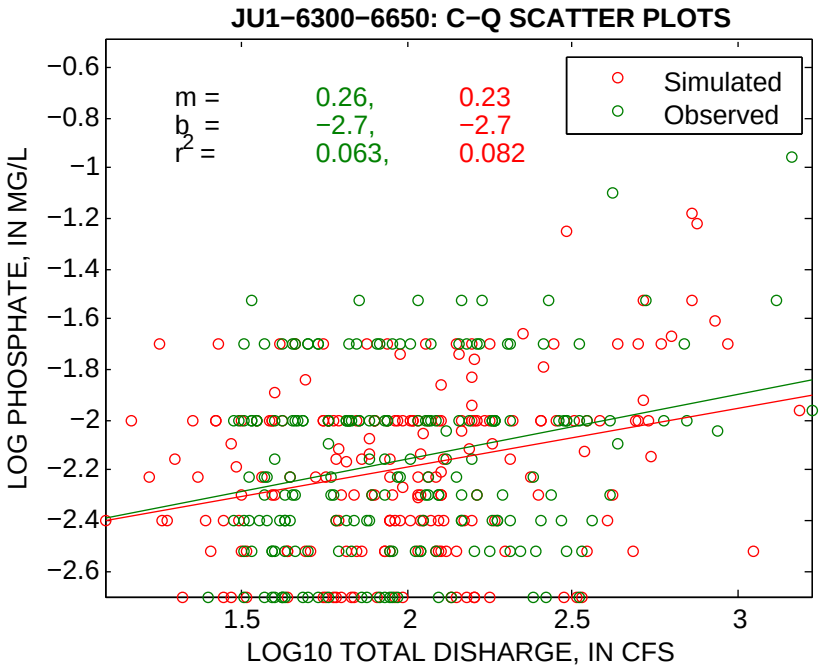
STATISTICS

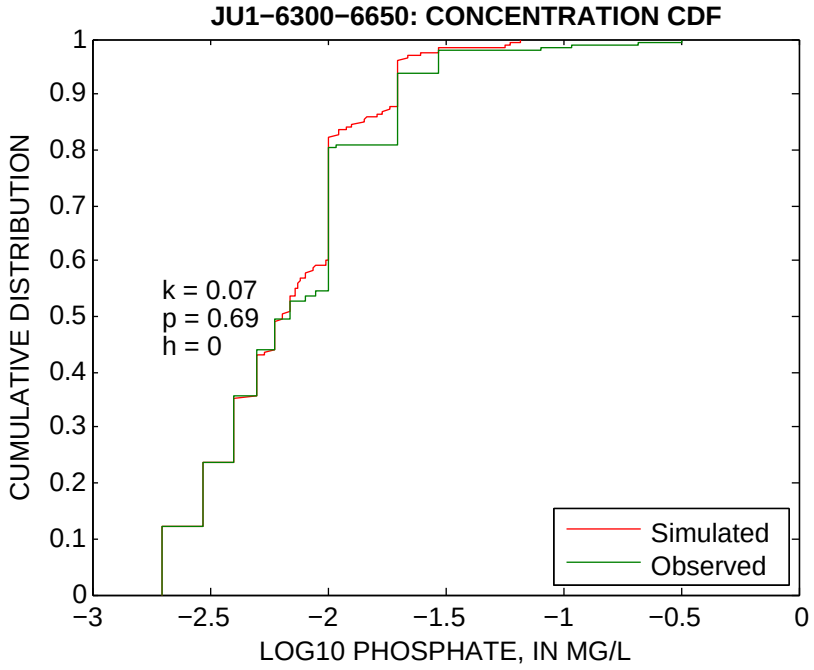
	n	199	199
		observe	simulate
min		0.002	0.0020851
		-2.69897	-2.68087
mean		0.0122663	0.00814127
		-2.15411	-2.25784
media		0.007	0.0042318
		-2.1549	-2.37347
max		0.32	0.048528
		-0.49485	-1.31401
varian		0.00080793	8.66563e-0
		0.148635	0.115138
JB		0.001	0.001
		0.001	0.001
		ra	log
%		-33.6291	4.81545
err.va		0.00079755	0.206793
rel.std.err		0.987157	1.39128
mod.eff		0.0128427	-0.391281

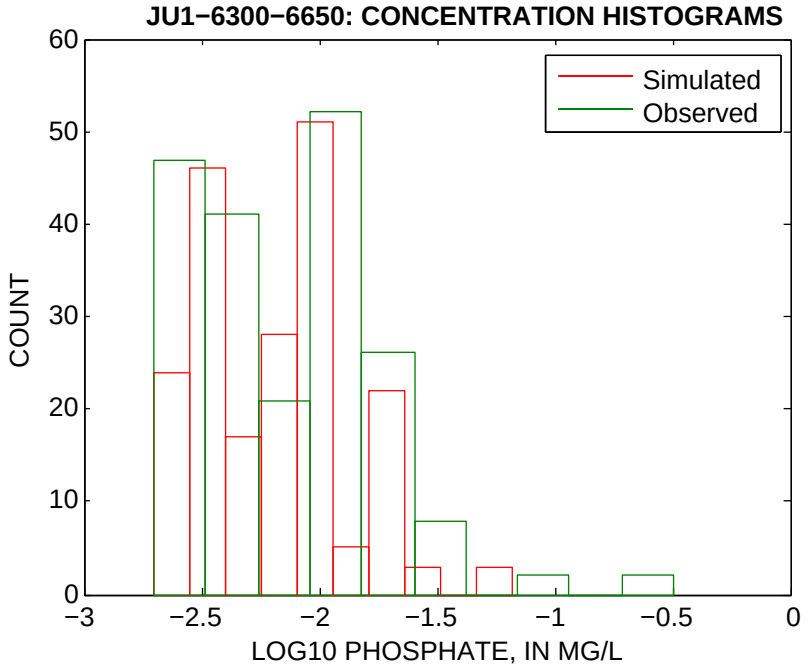
VERSION 2.1

ALL DATA
LOG10

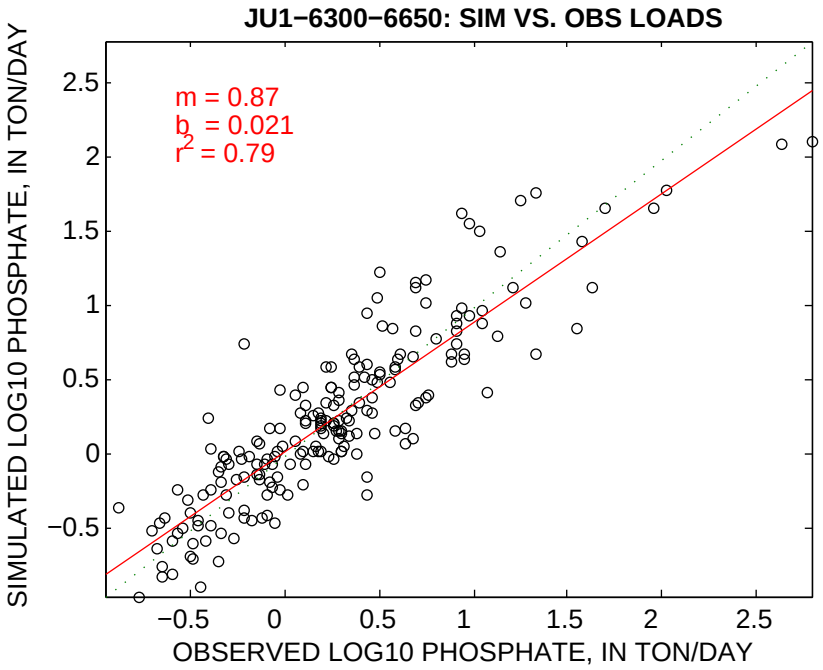




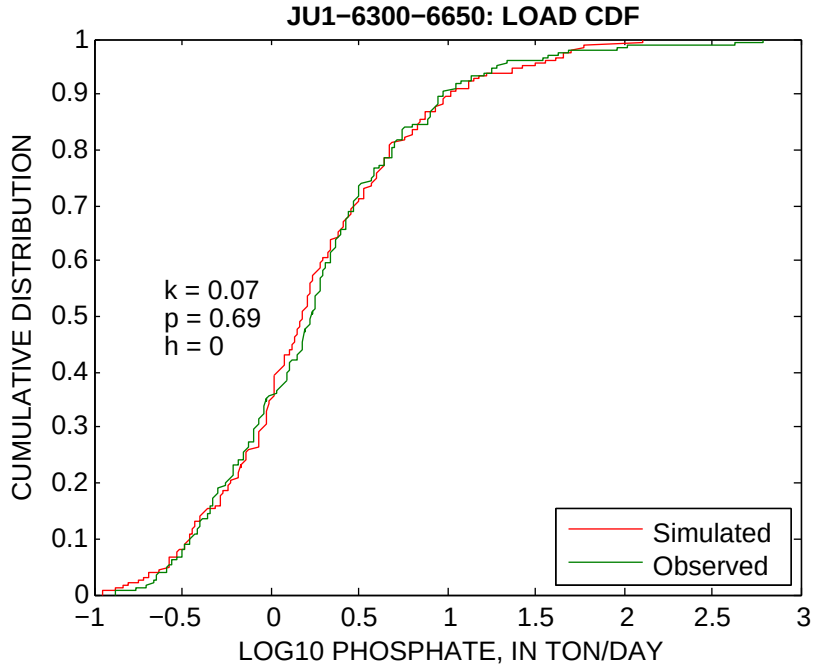


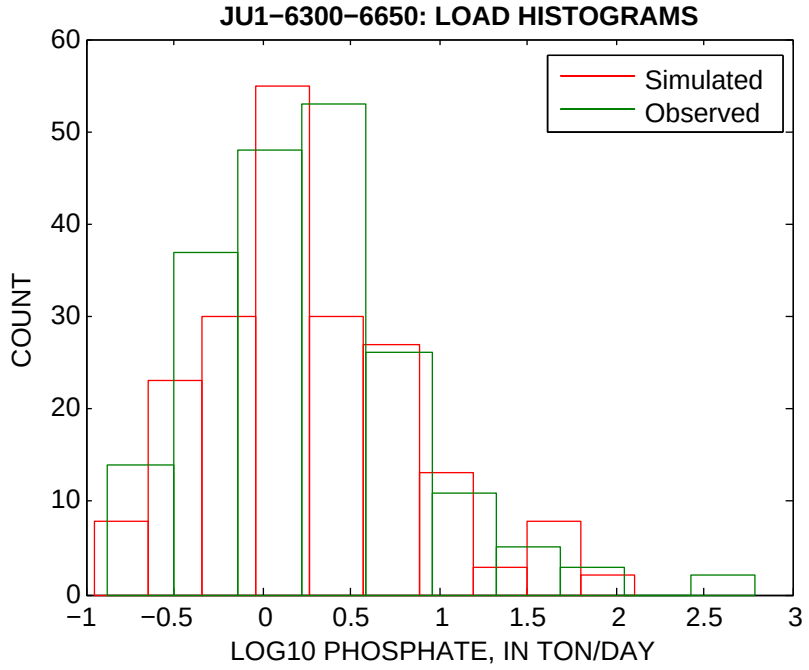


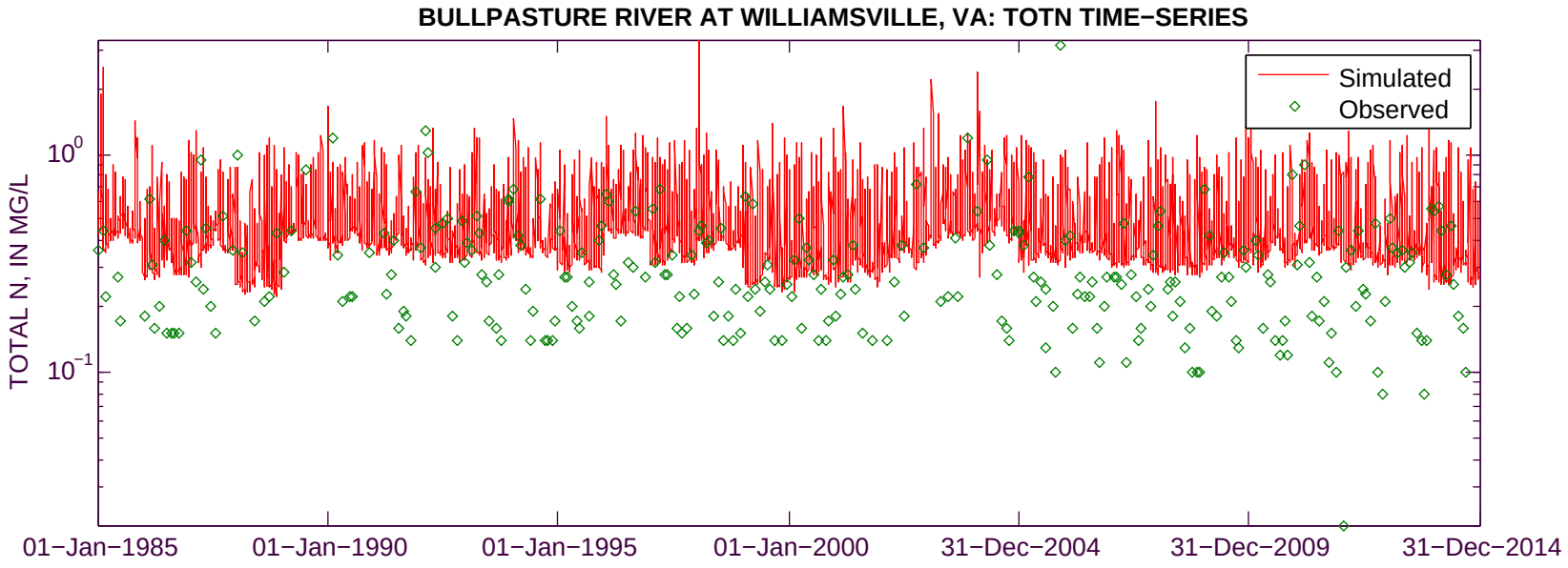
LOAD DATA
LOG10

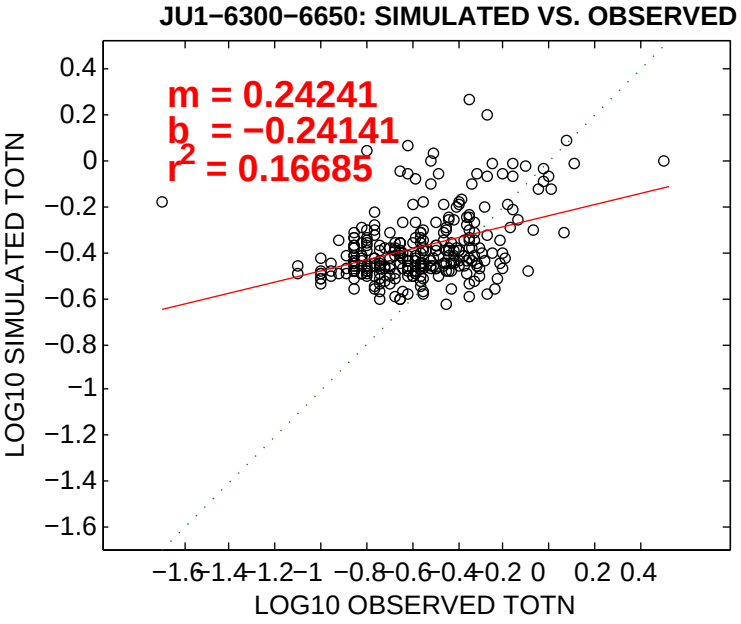


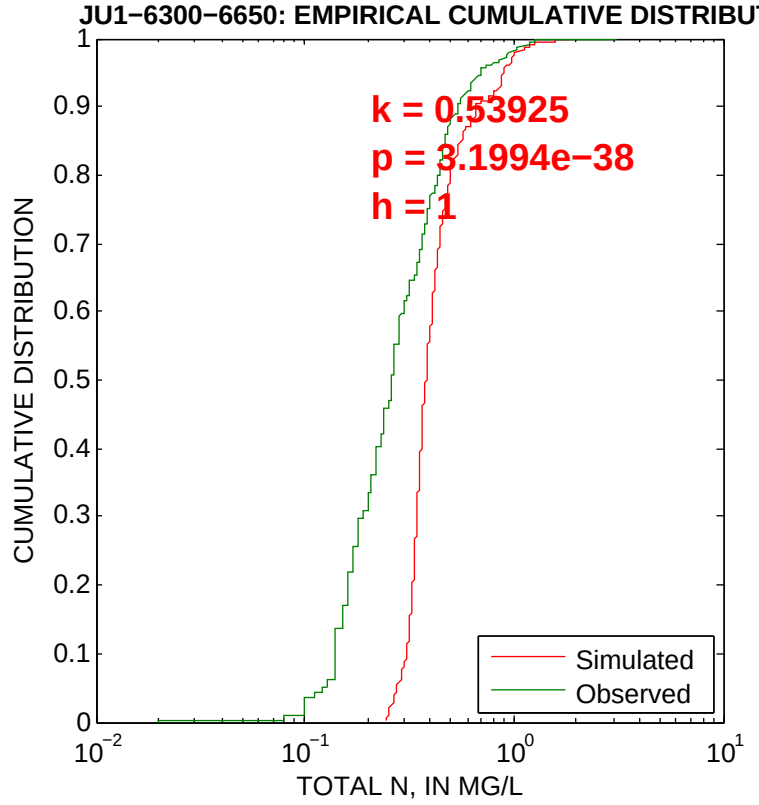












DATA SELECTION

scenario	file
P620171001WQ	TOTN.calib

plot: TOTN - total nitrogen

Dates: 1/1/1985 – 12/31/201

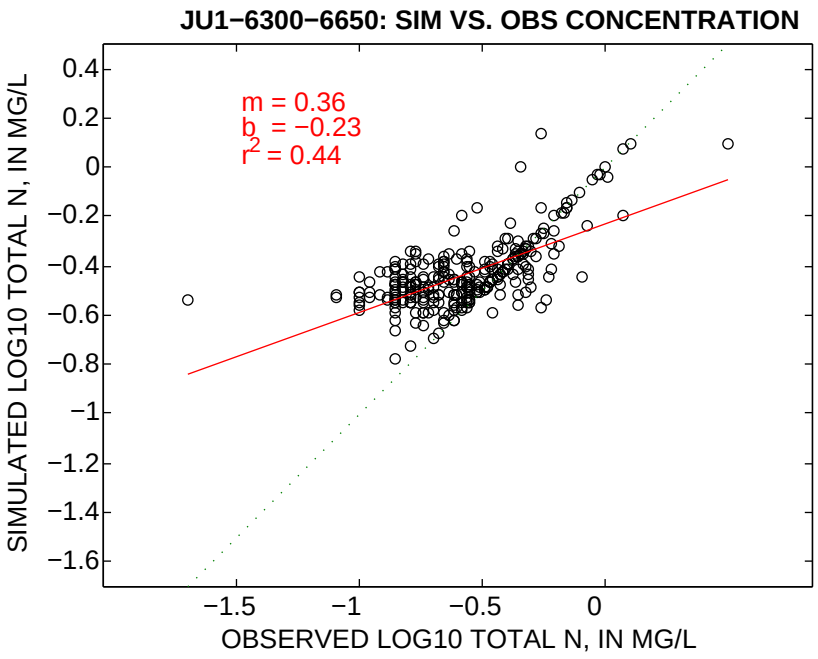
Drive	Directory	Observed
N/A	model	OBS20161101

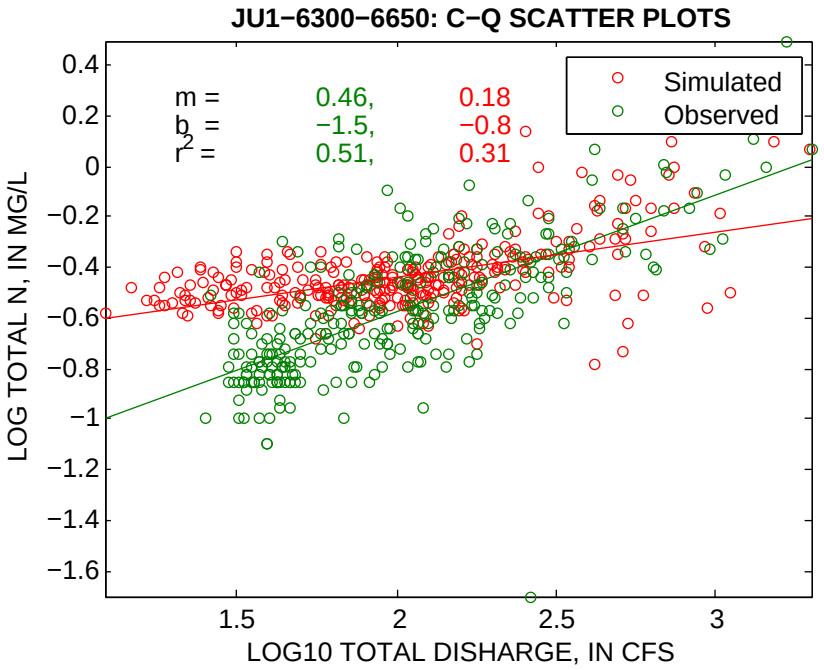
STATISTICS

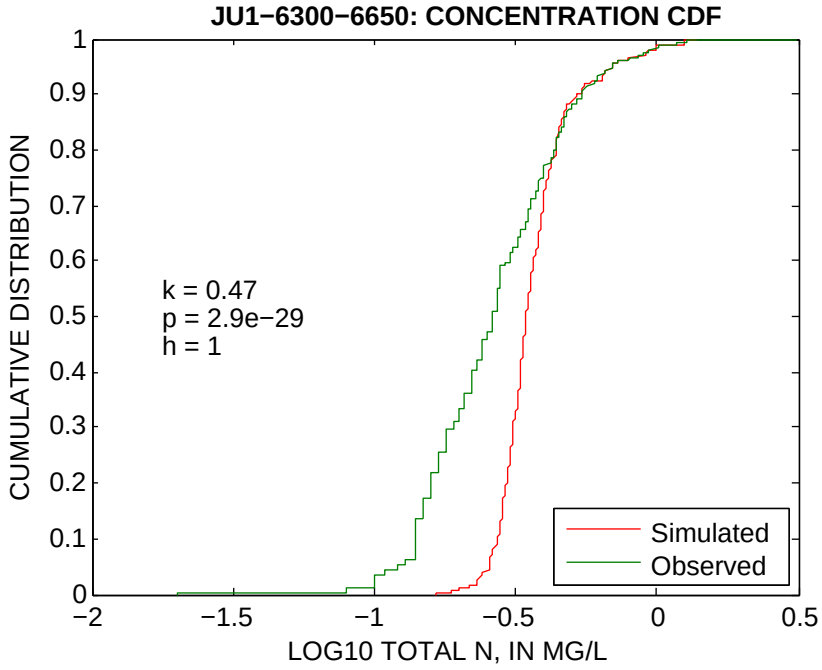
	n	293	293
		observe	simulate
min		0.02	0.23546
		-1.69897	-0.628083
mean		0.321263	0.446949
		-0.571594	-0.379978
media		0.26	0.38056
		-0.585027	-0.419577
max		3.14	1.8689
		0.49693	0.271586
varian		0.0650241	0.0426867
		0.0626823	0.0220766
JB		0.001	0.001
		0.001	0.001
		ra	log
%		39.1226	-33.5232
err.va		0.0781778	0.0912113
rel.std.err		1.20229	1.45514
mod.eff		-0.202289	-0.455137

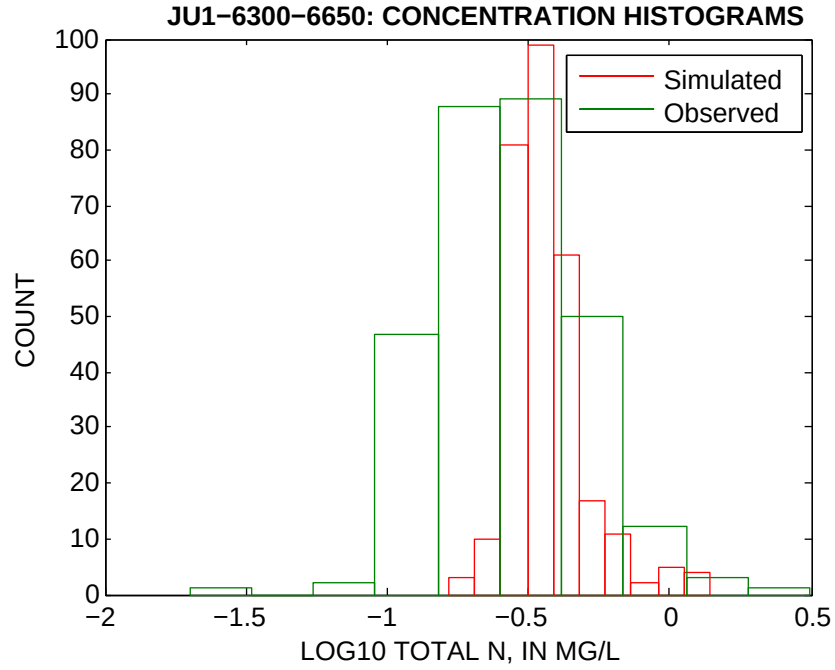
VERSION 2.1

ALL DATA
LOG10

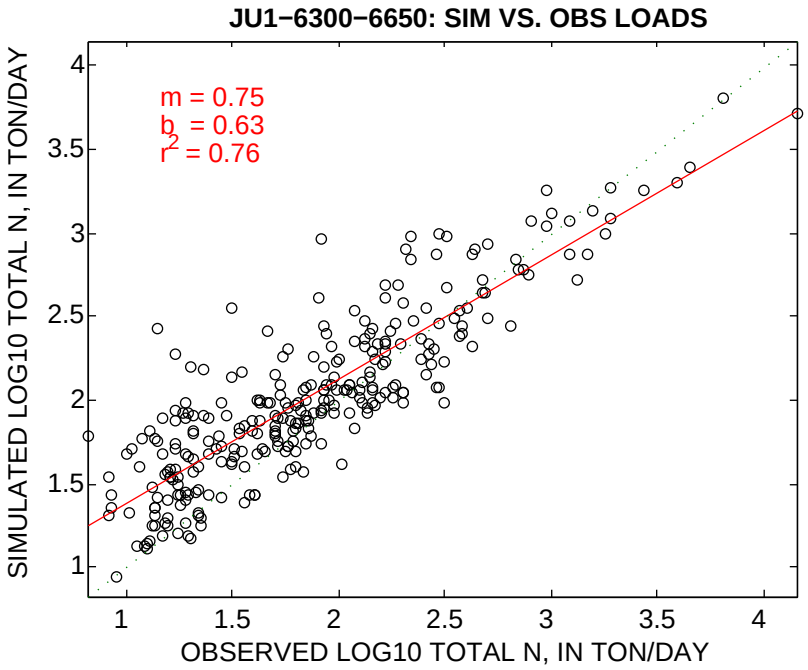


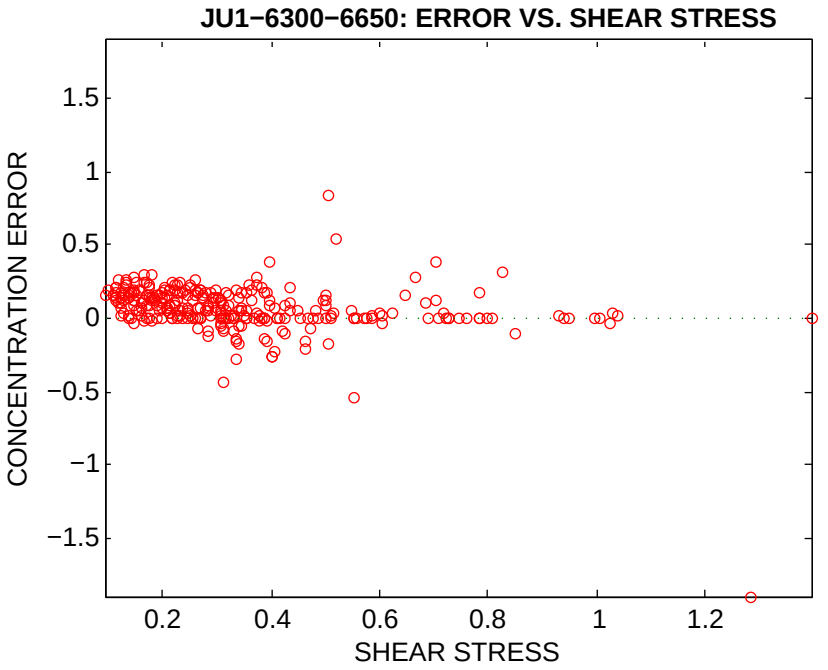


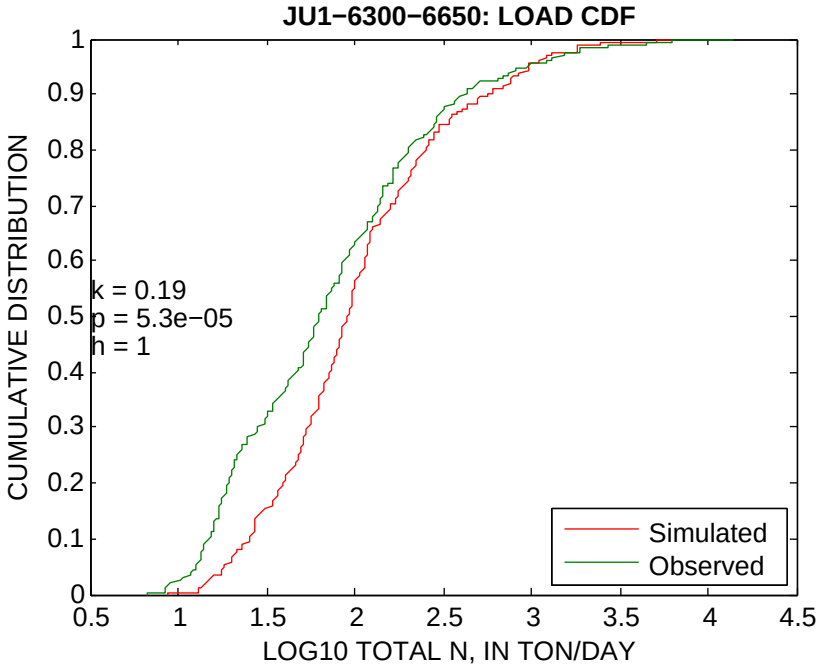


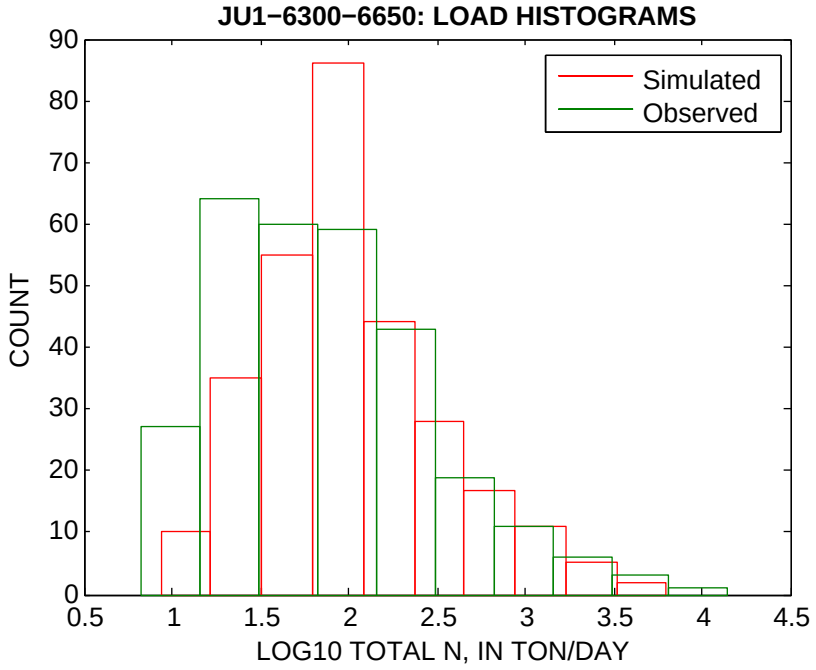


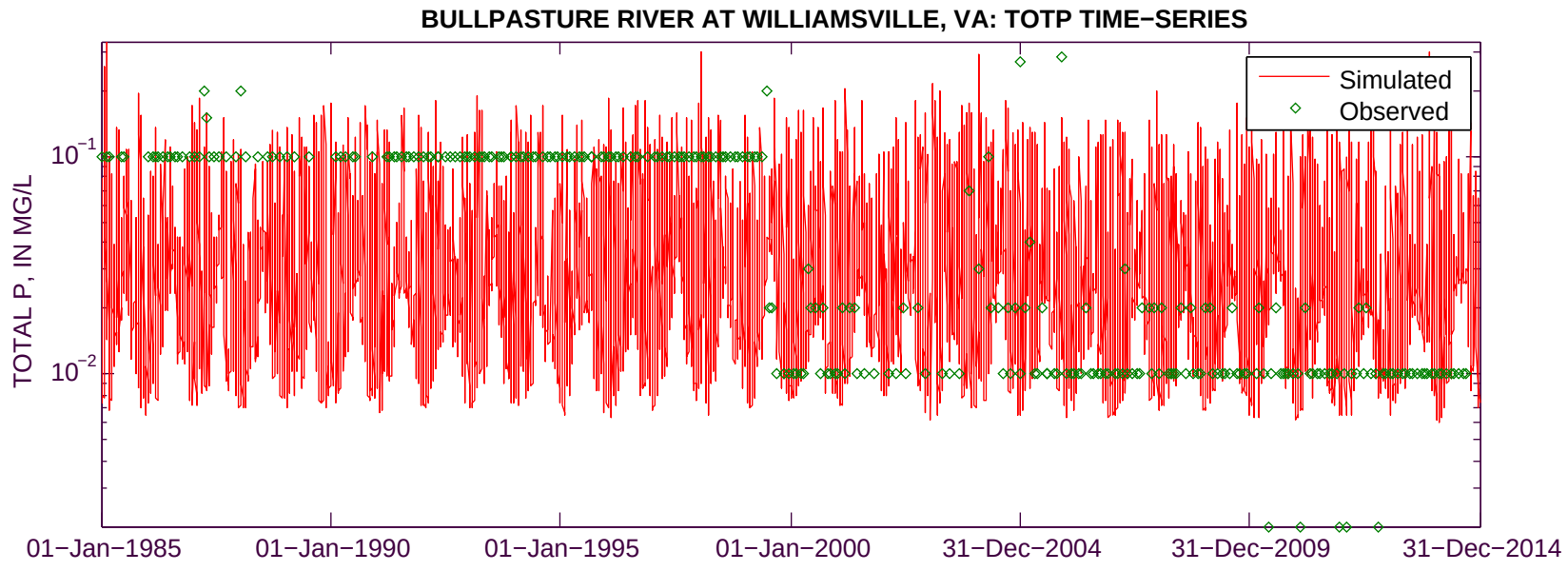
LOAD DATA
LOG10

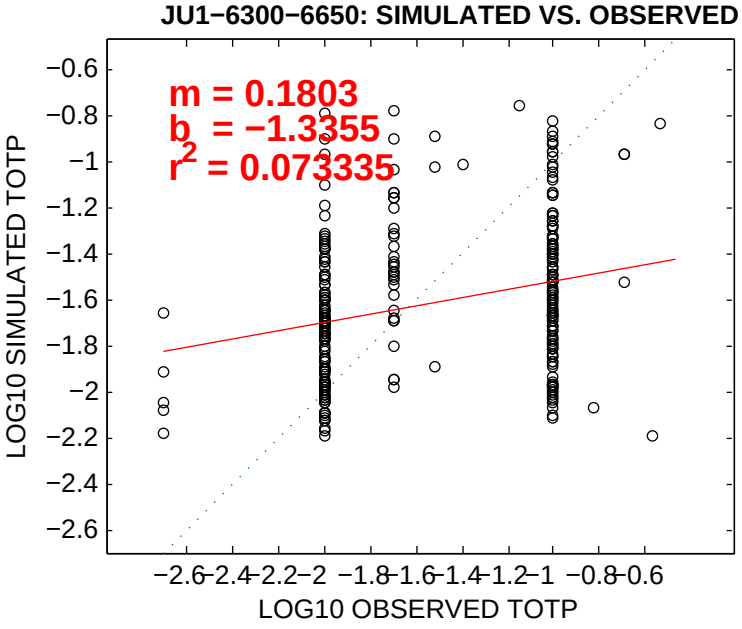


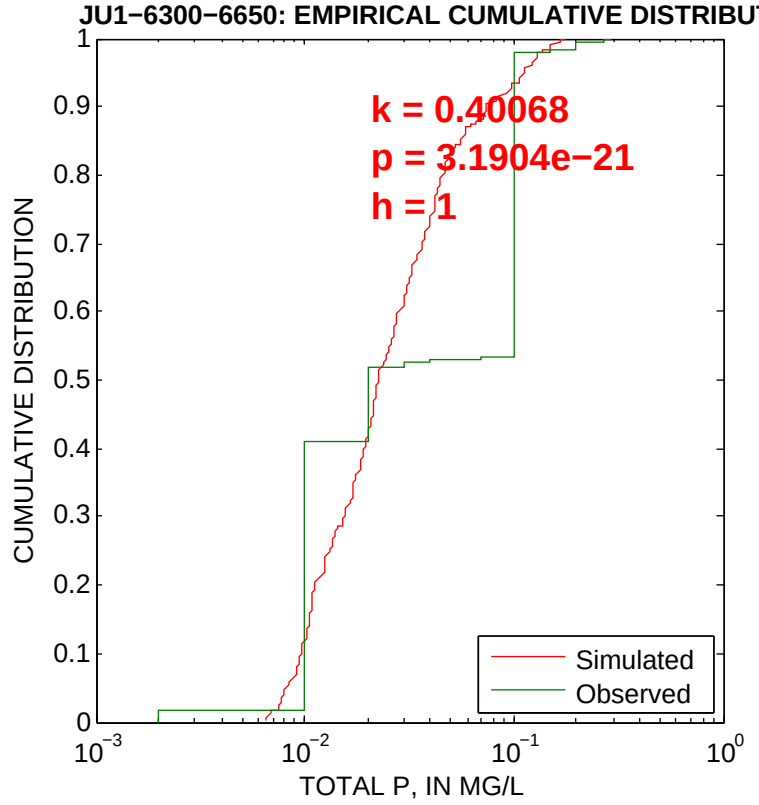












DATA SELECTION

scenario: P620171001WQ | file: TOTP.calib

plot: TOTP - total phosphorus

Dates: 1/1/1985 – 12/31/201

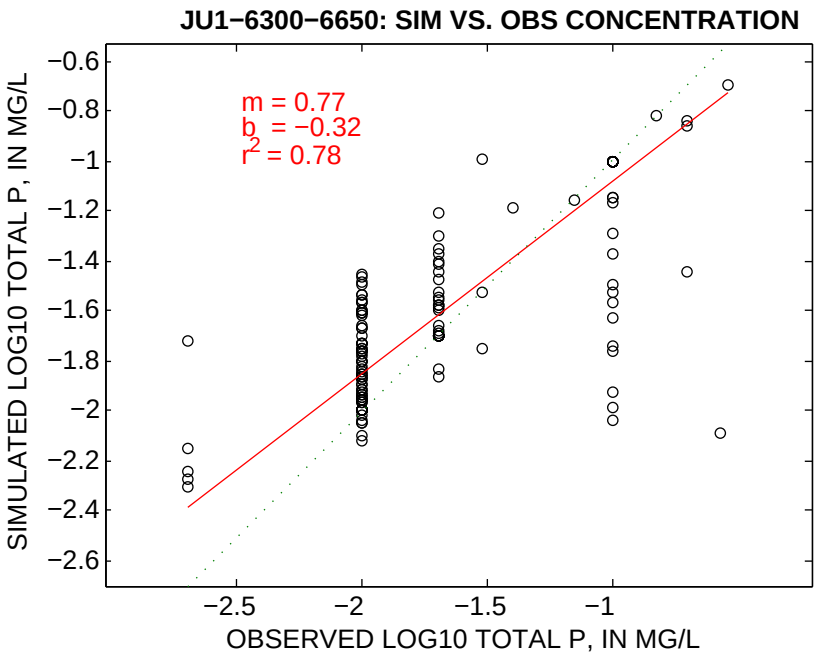
Drive: N/A | Directory: model | Observed: OBS20161101

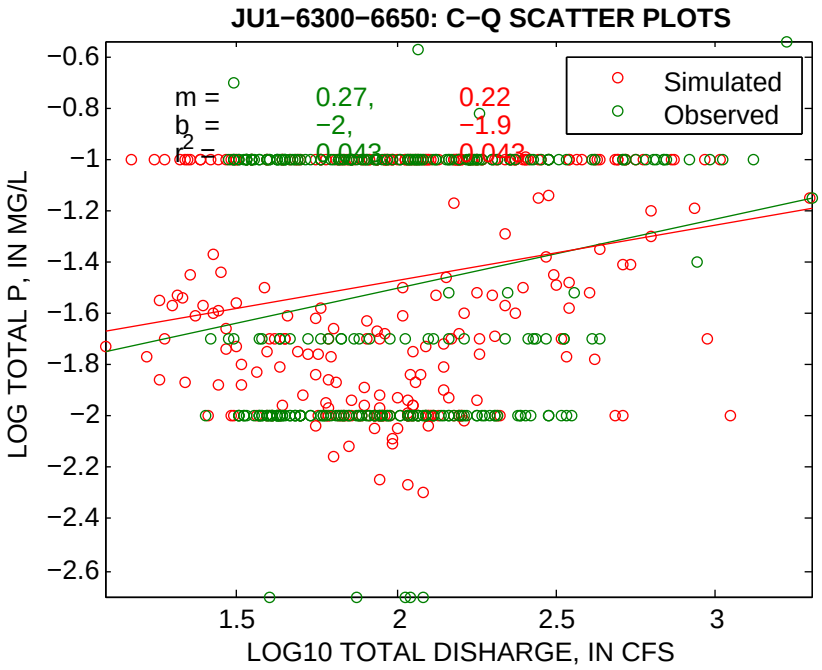
STATISTICS

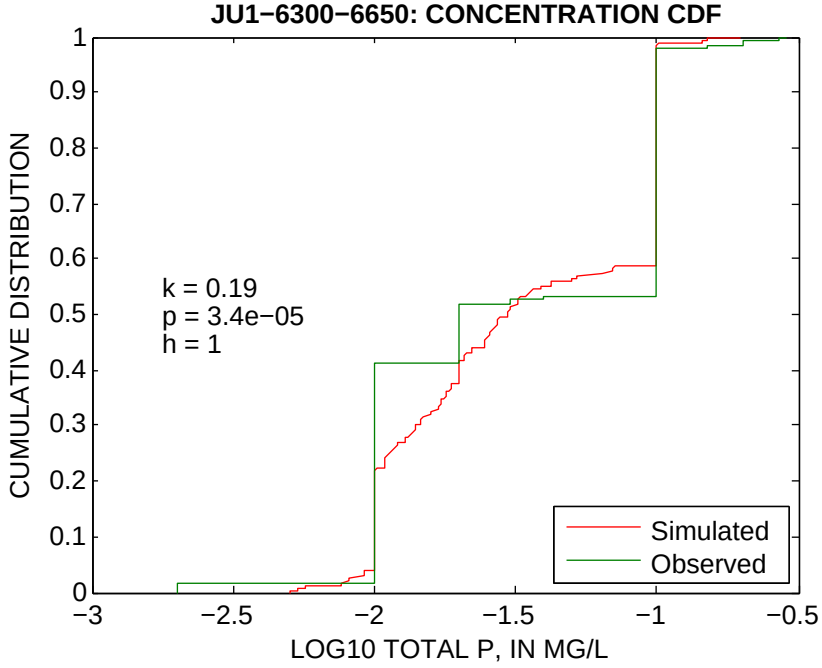
		observe	simulate
n		292	292
min		0.002	0.006408
		-2.69897	-2.19328
mean		0.0557877	0.0342231
		-1.49764	-1.60557
media		0.02	0.0225835
		-1.69897	-1.64621
max		0.29	0.17709
		-0.537602	-0.751806
varian		0.00248742	0.00102614
		0.254193	0.112683
JB		0.001	0.001
		0.001	0.007556
		ra	log
%		-38.6547	7.20647
err.va		0.00328379	0.2869
rel.std.err		1.32016	1.12867
mod.eff		-0.320159	-0.128673

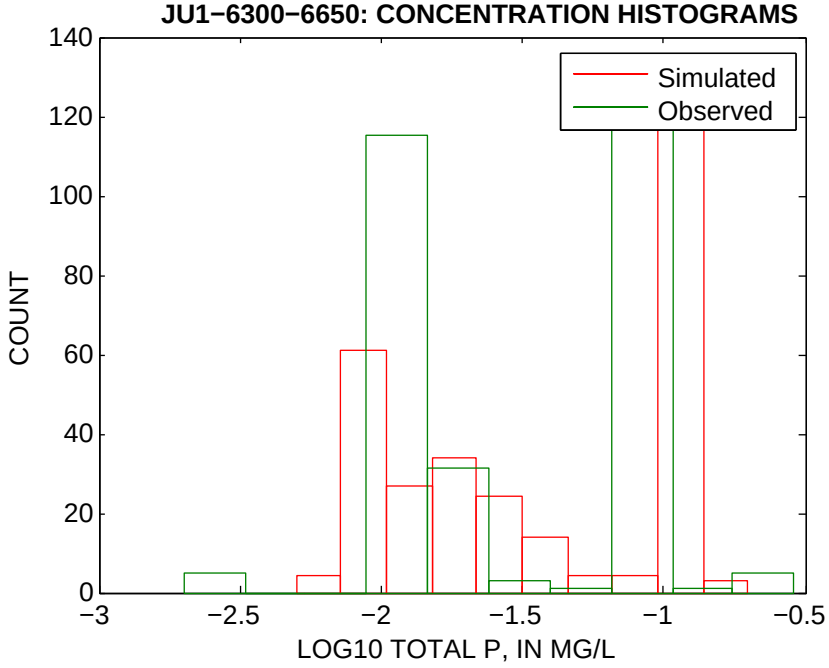
VERSION 2.1

ALL DATA
LOG10

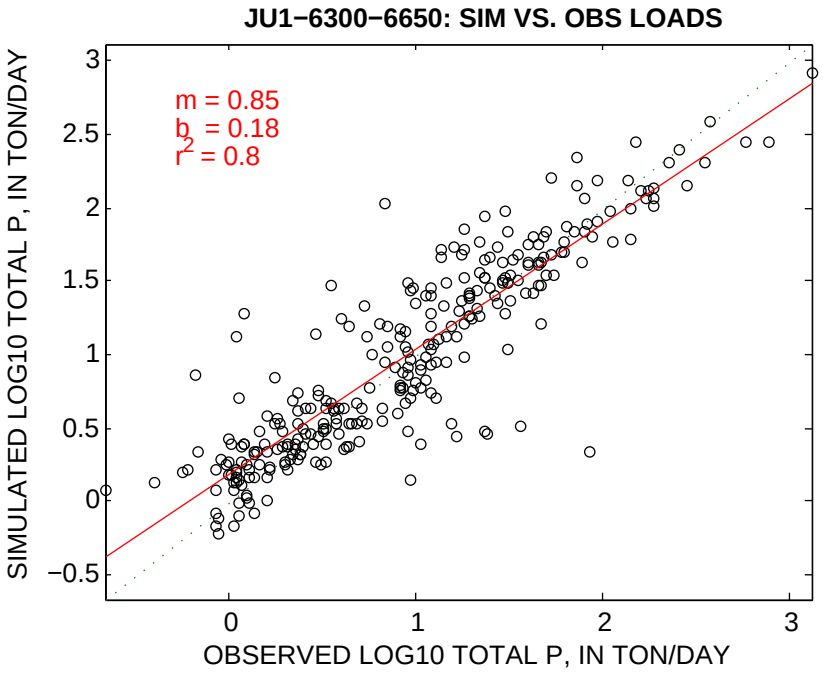


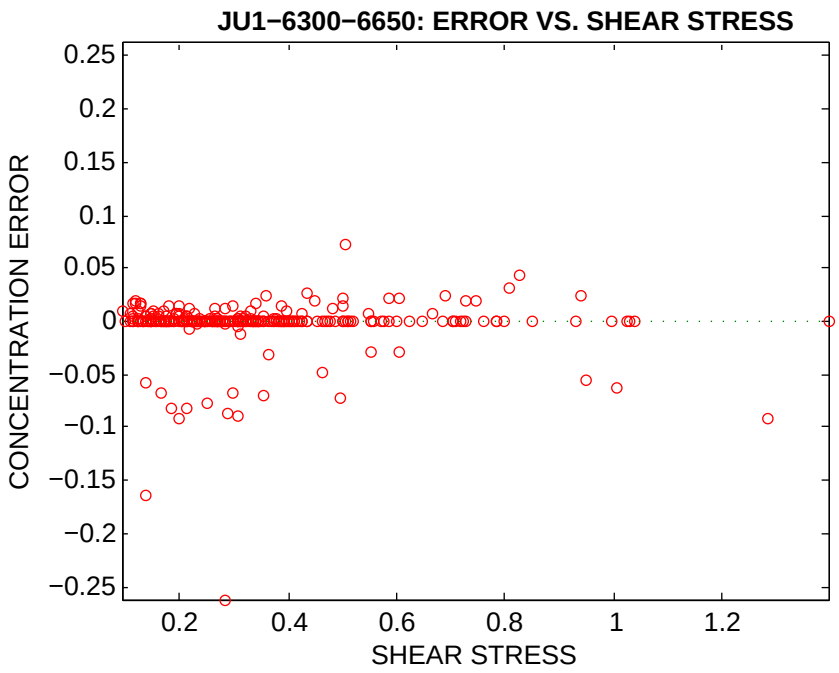


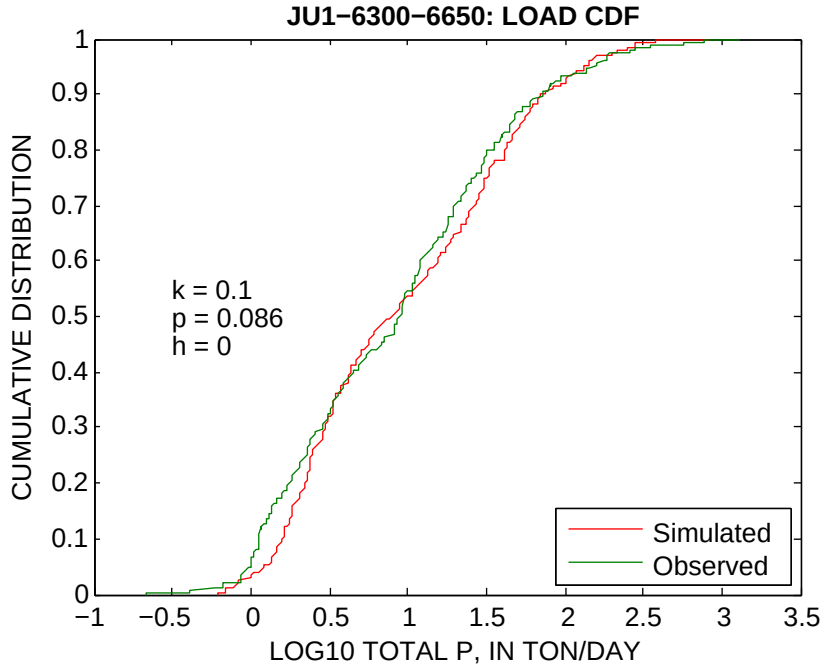


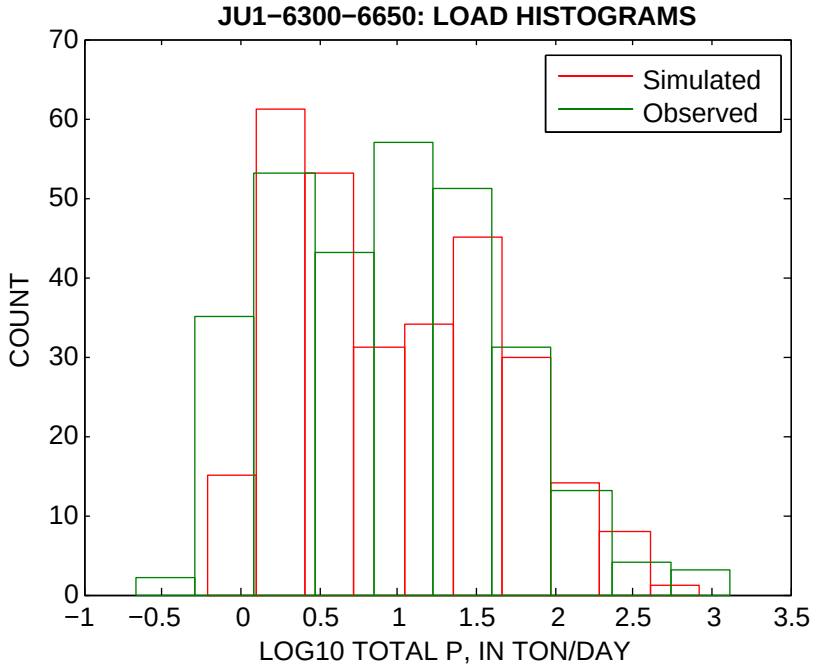


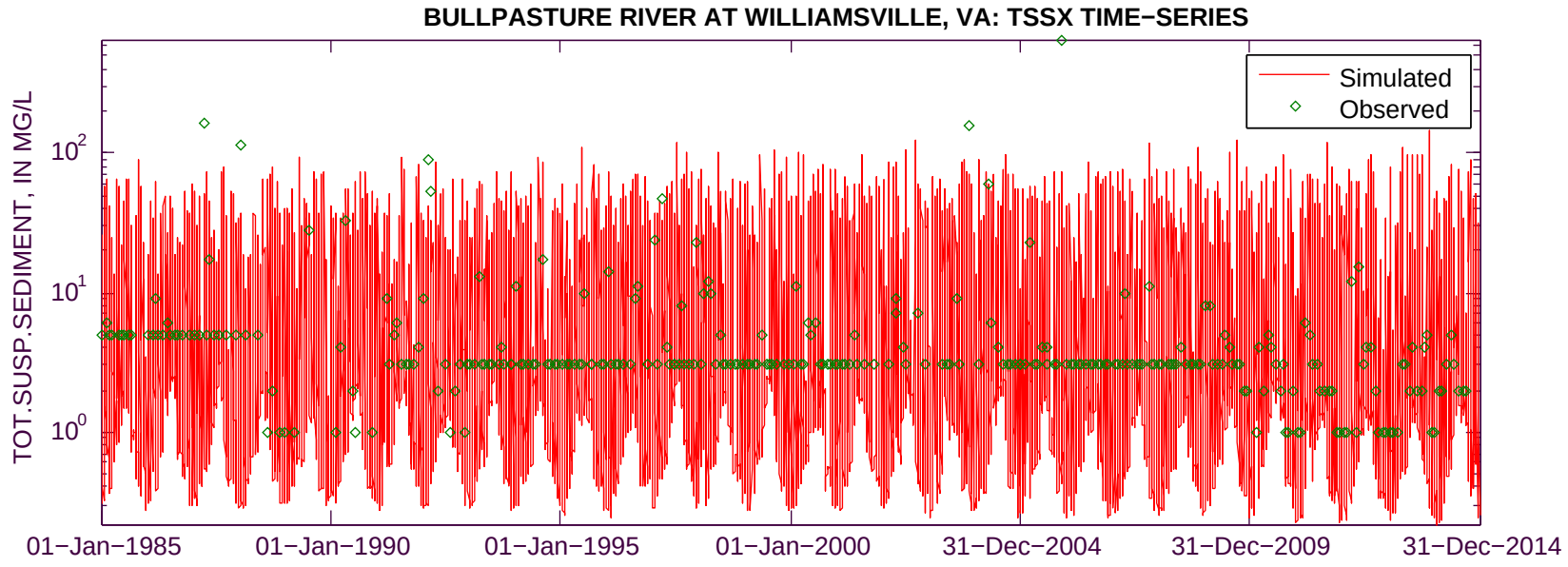
LOAD DATA
LOG10

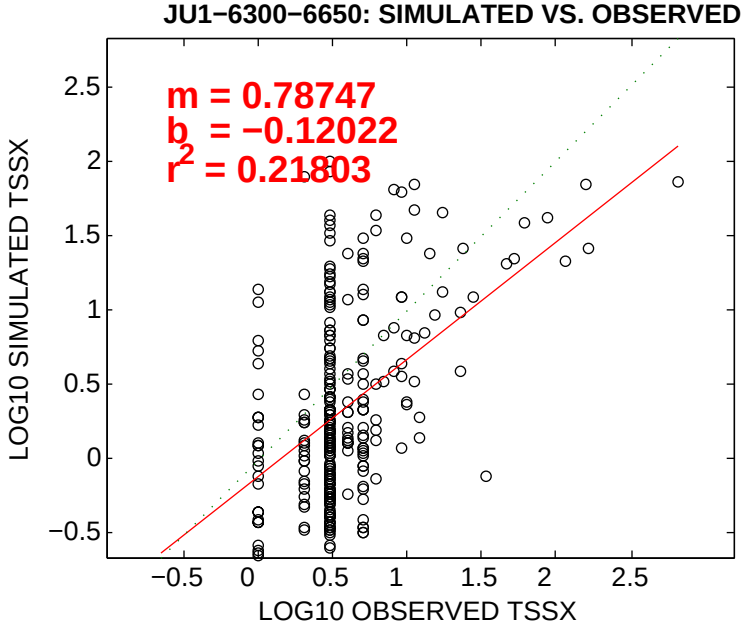


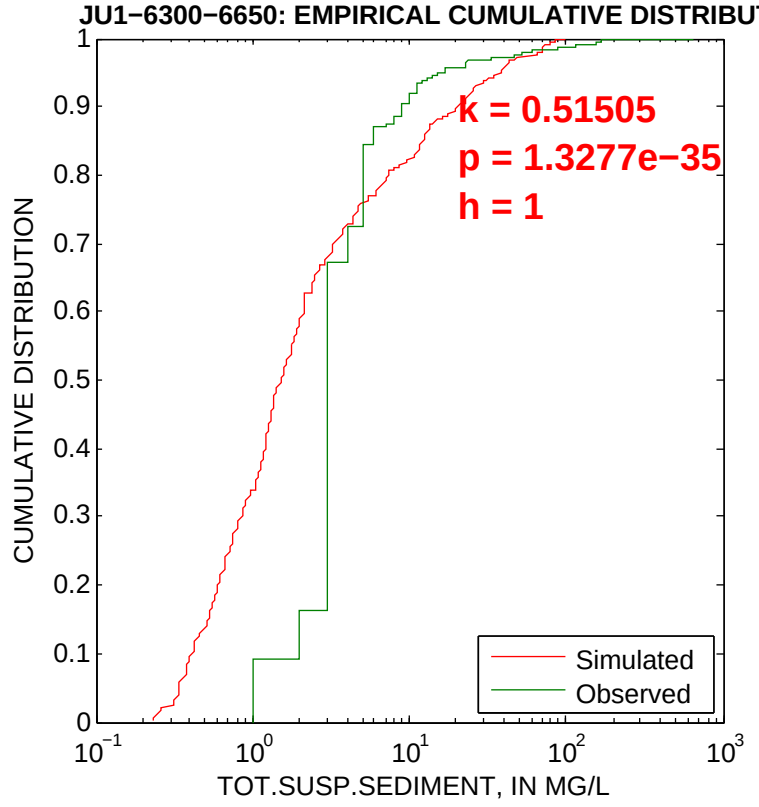












DATA SELECTION

scenario	file
P620171001WQ	TSSX.calib

plot: TSSX - total suspended ...

Dates: 1/1/1985 – 12/31/201

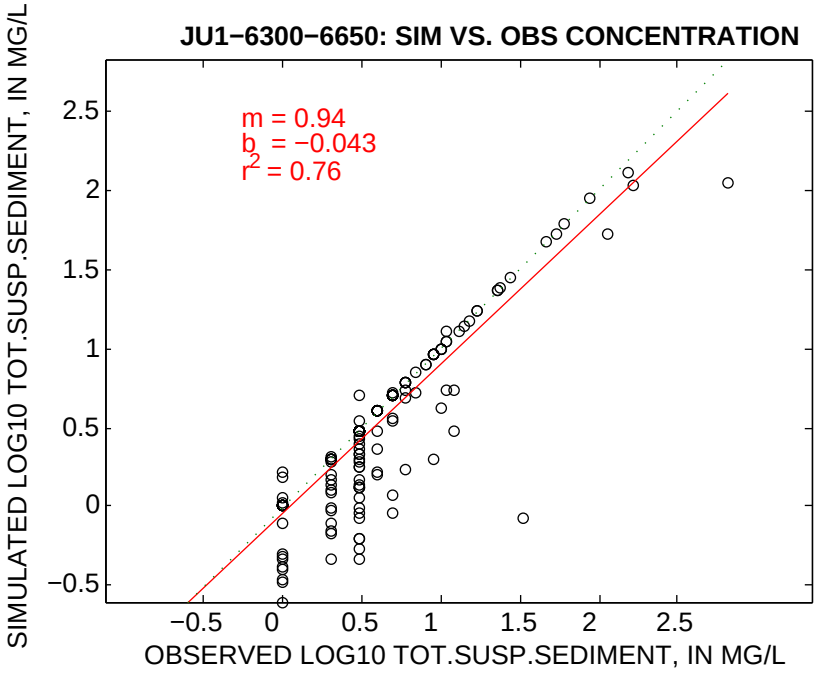
Drive	Directory	Observed
N/A	model	OBS20161101

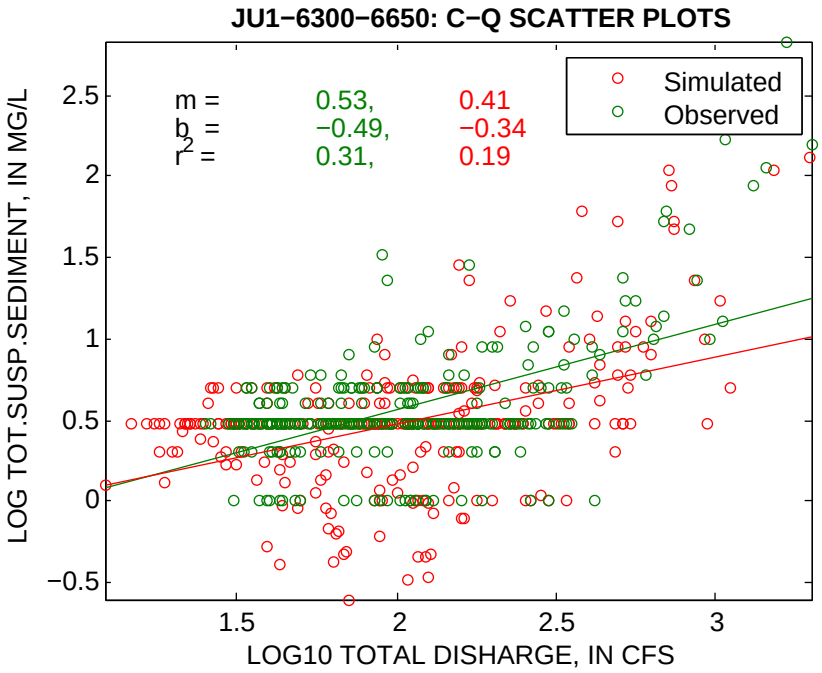
STATISTICS

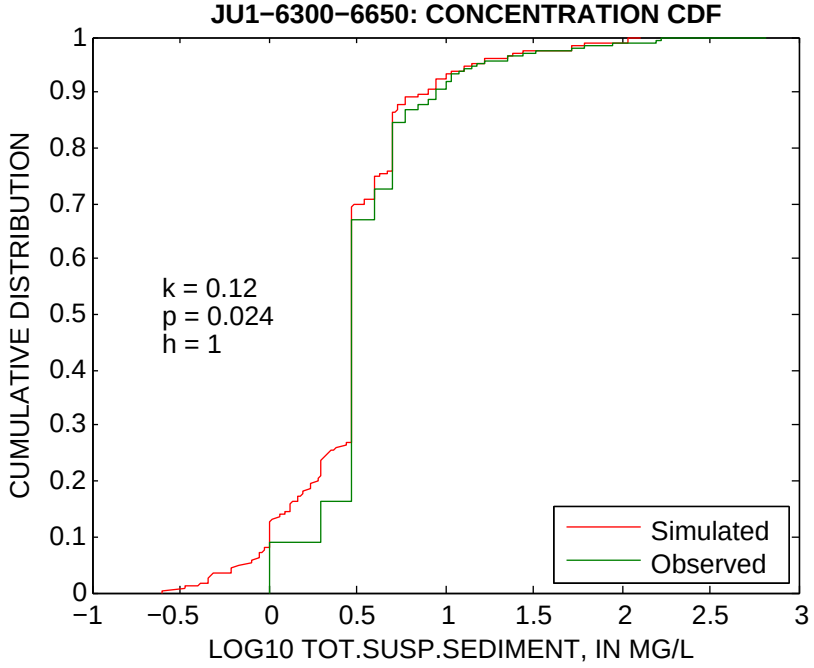
	n	observe	simulate
		299	299
min		1	0.22373
		0	-0.650276
mean		8.57191	6.97568
		0.565949	0.325448
media		3	1.5229
		0.477121	0.182671
max		658	98.274
		2.81823	1.99244
varian		1683.88	208.532
		0.134533	0.382643
JB		0.001	0.001
		0.001	0.001
		ra	log
%		-18.6217	-42.4952
err.va		1452.53	0.363328
rel.std.err		0.86261	2.70067
mod.eff		0.13739	-1.70067

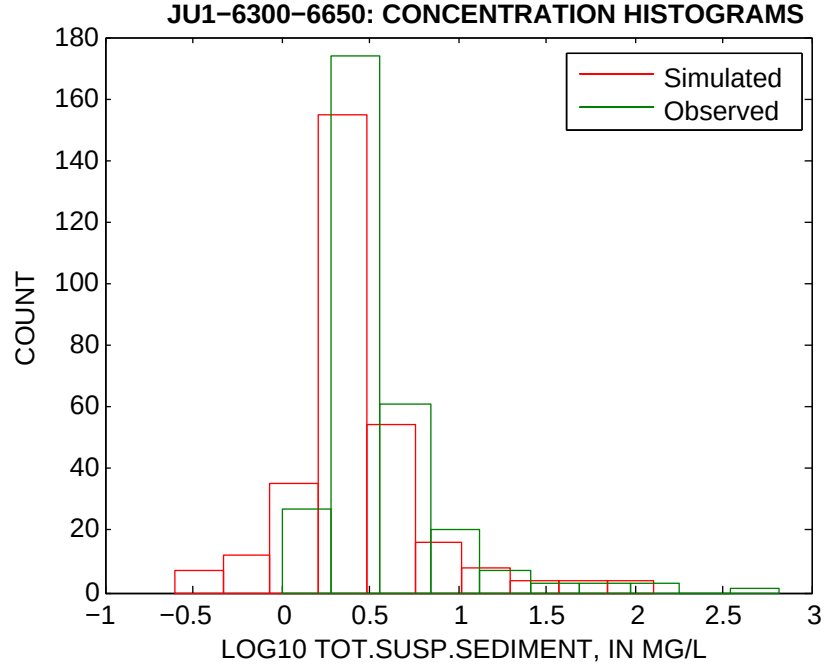
VERSION 2.1

ALL DATA
LOG10

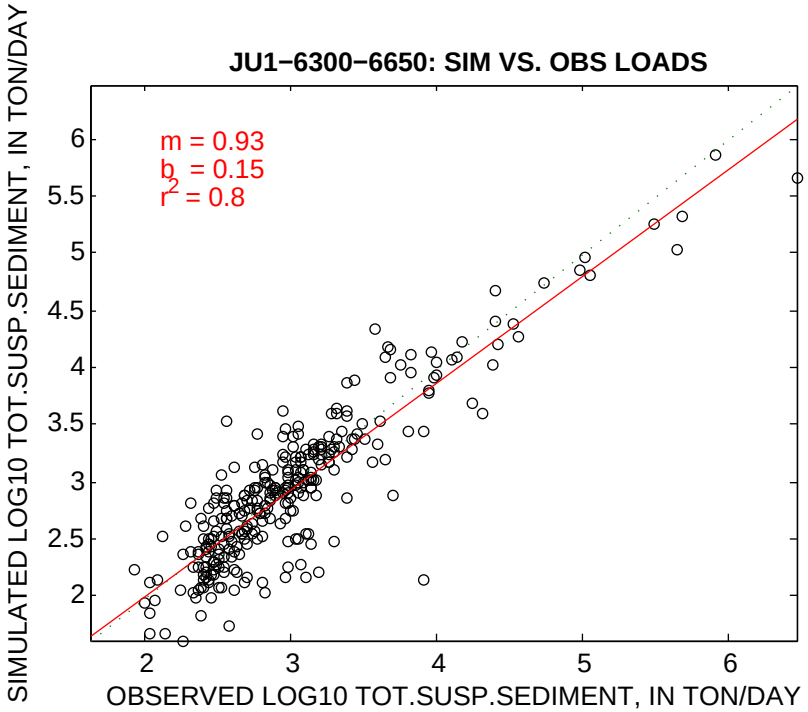


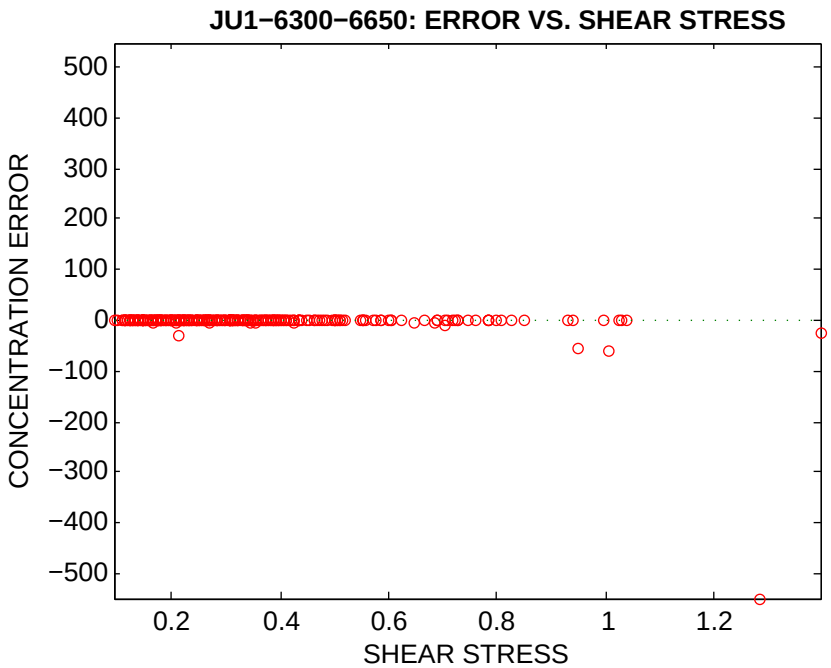


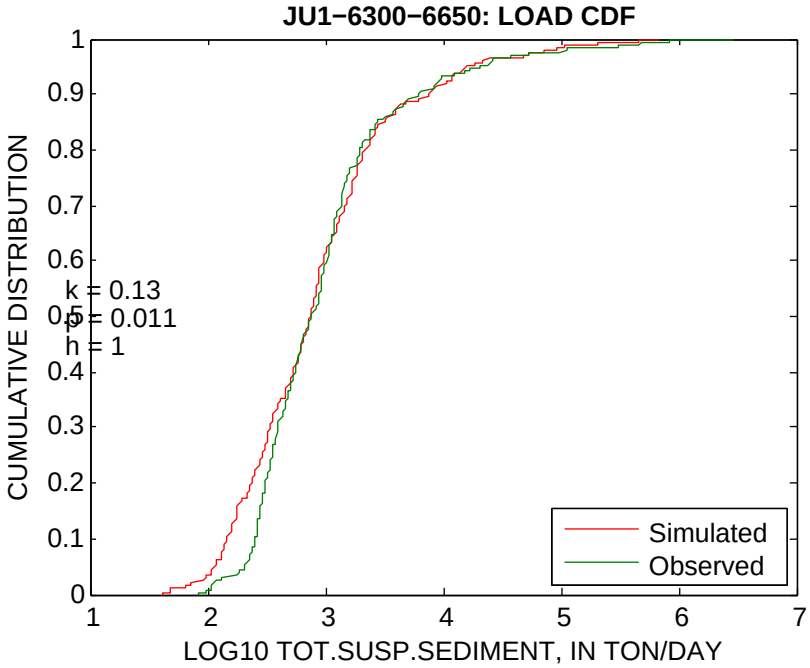


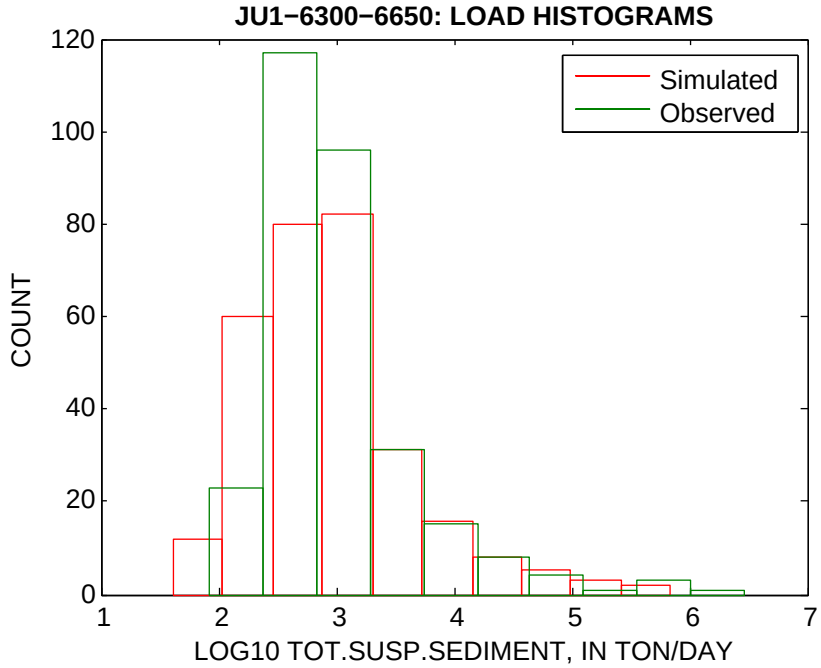


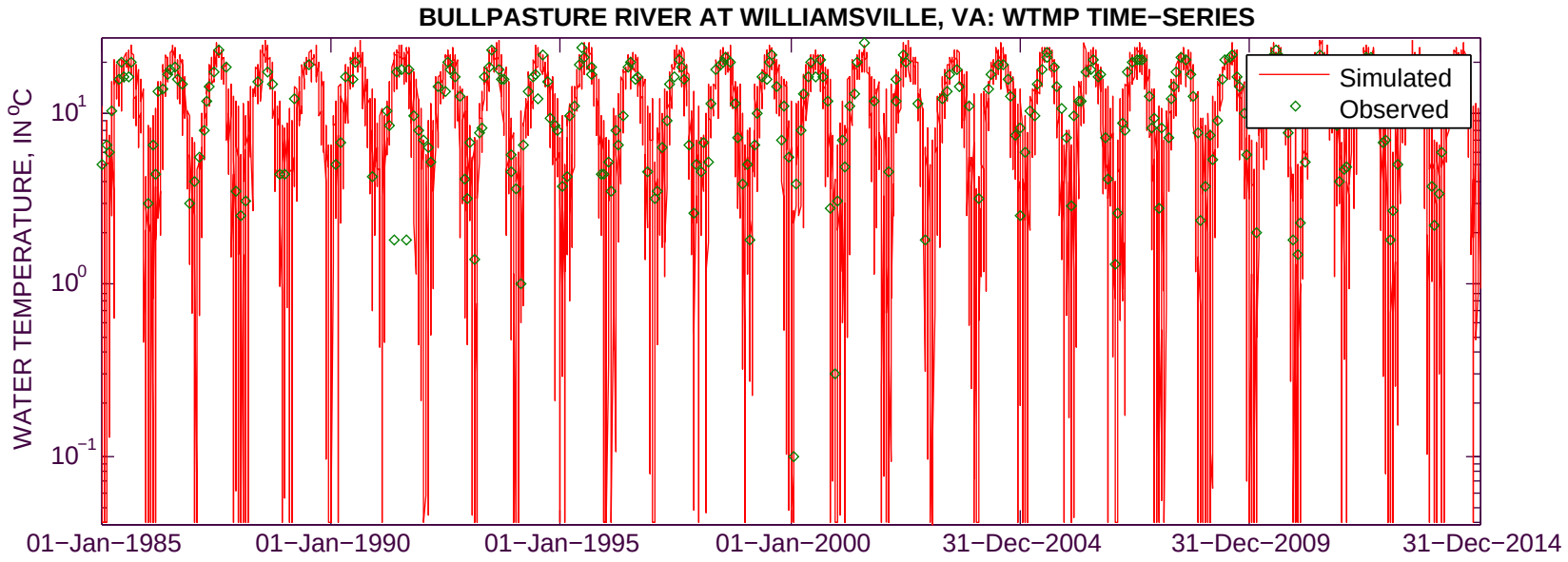
LOAD DATA
LOG10

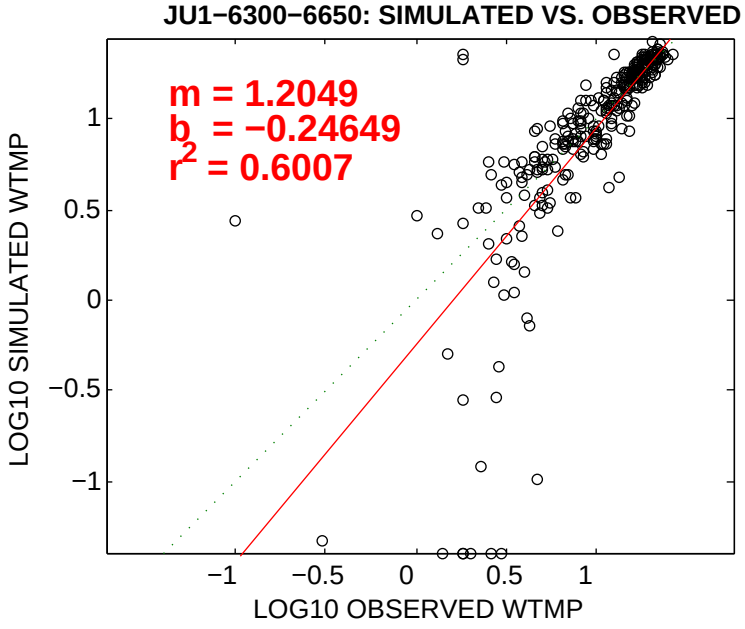


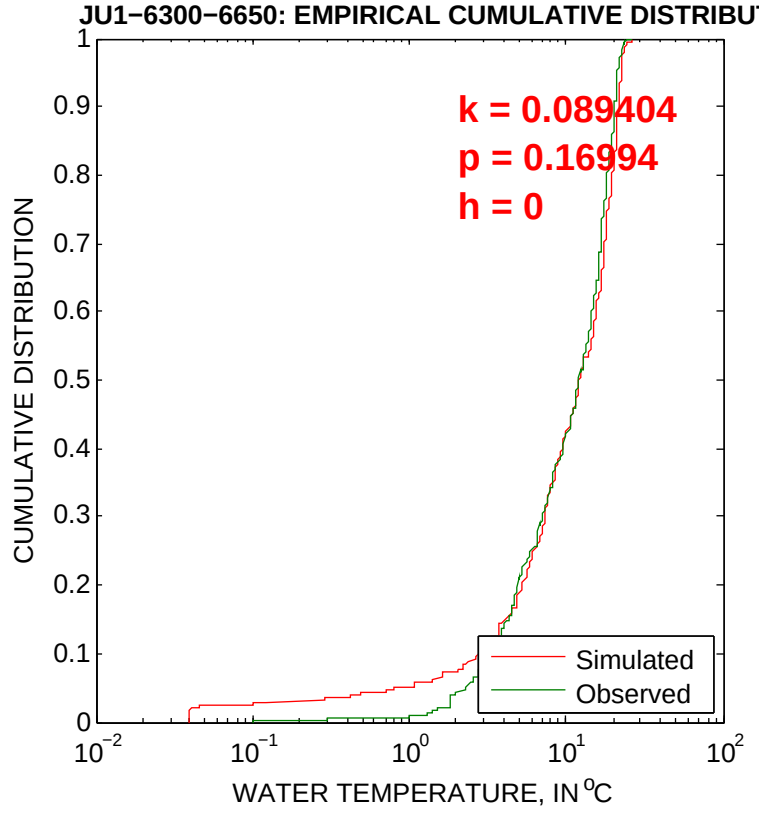












DATA SELECTION

scenario	file
P620171001WQ	WTMP.calib

plot: WTMP - water tempera...

Dates 1/1/1985 12/31/201

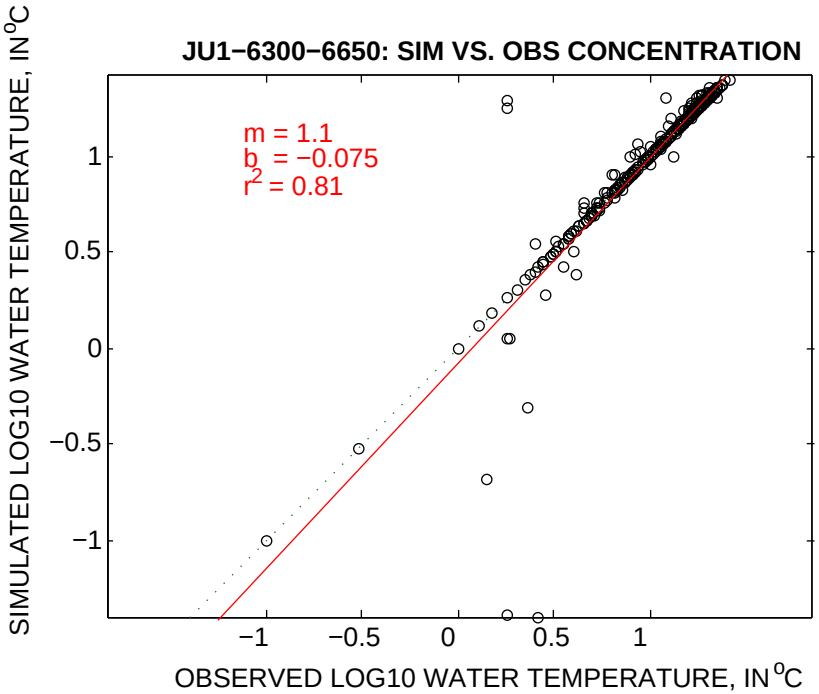
Drive	Directory	Observed
N/A	model	OBS20161101

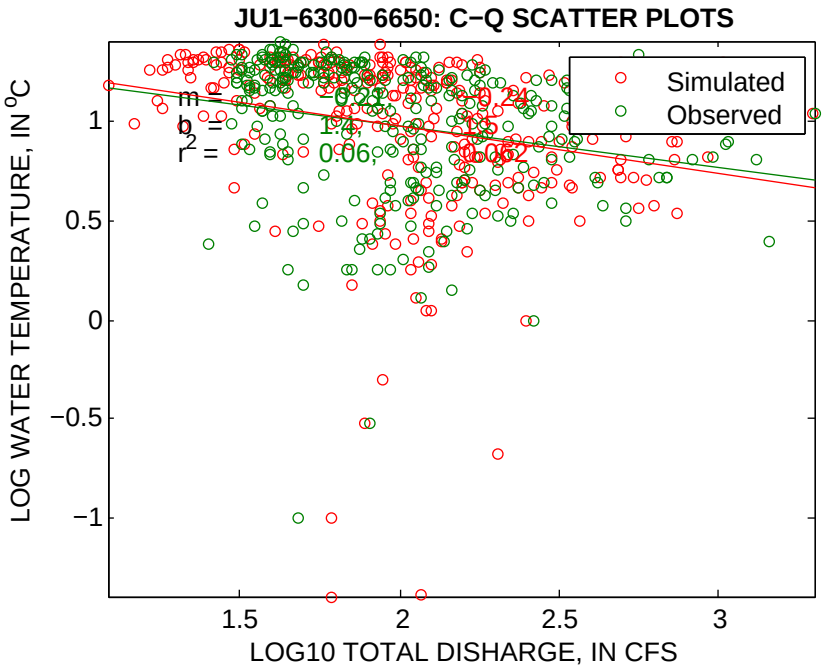
STATISTICS

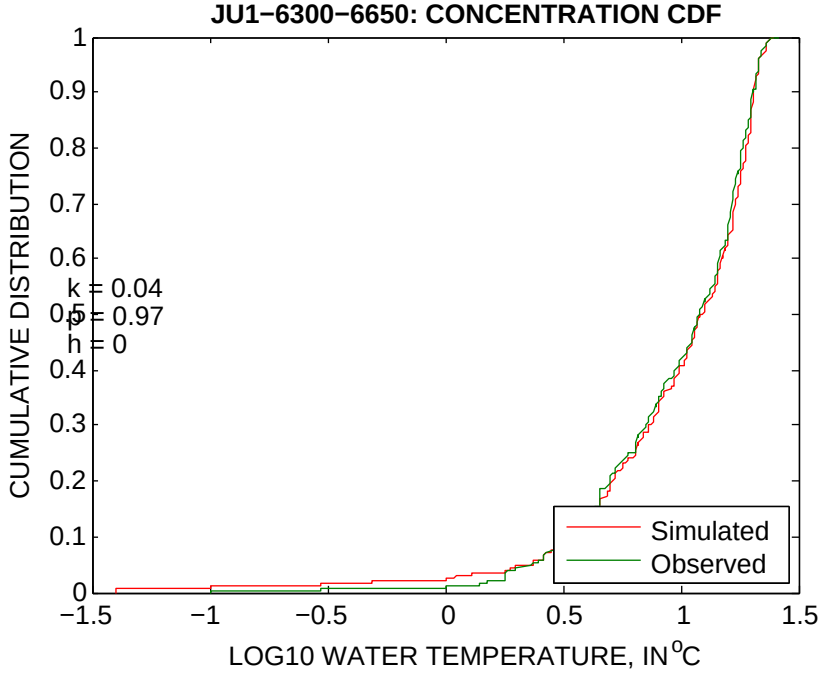
	n	observe	simulate
		302	302
min		0.1	0.040029
		-1	-1.39763
mean		11.9462	12.3834
		0.981505	0.936163
media		12	12.1905
		1.07918	1.08602
max		25.9	26.603
		1.4133	1.42493
varian		41.3257	50.048
		0.114621	0.277038
JB		0.002108	0.002030
		0.001	0.001
		ra	log
%		3.6598	-4.61968
err.va		8.42012	0.117499
rel.std.err		0.20375	1.02511
mod.eff		0.79625	-0.025106

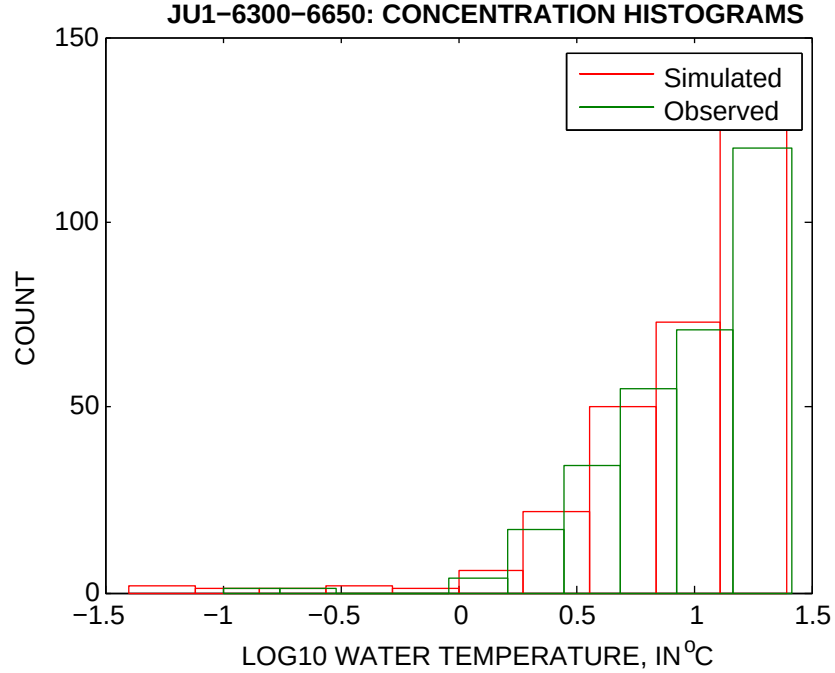
VERSION 2.1

ALL DATA
LOG10

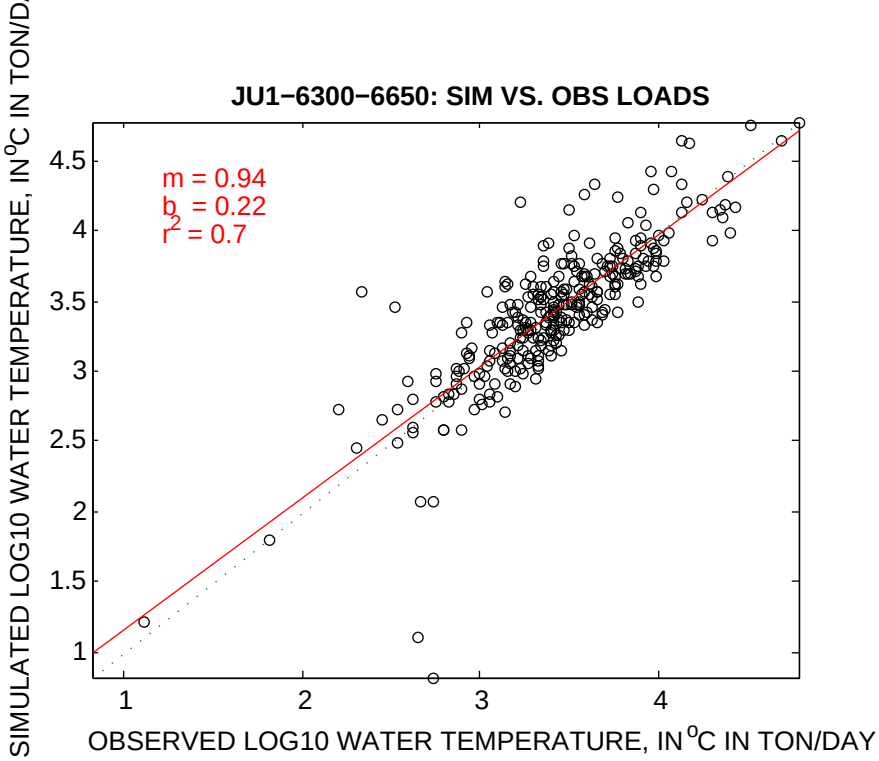


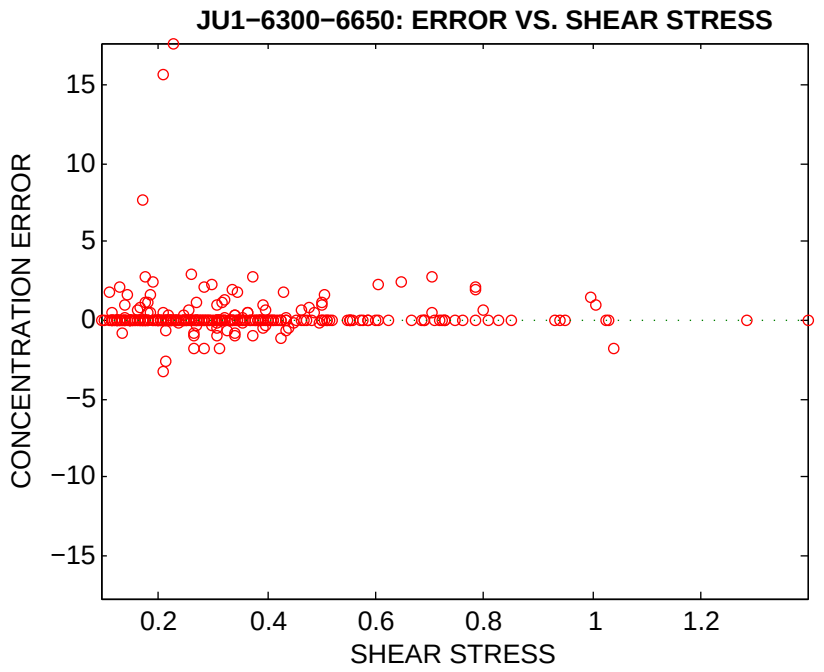


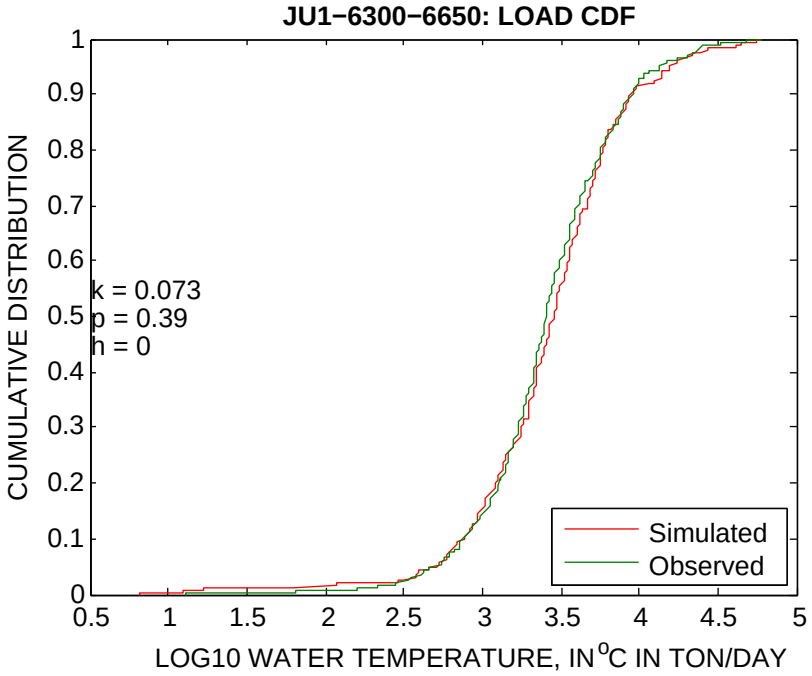


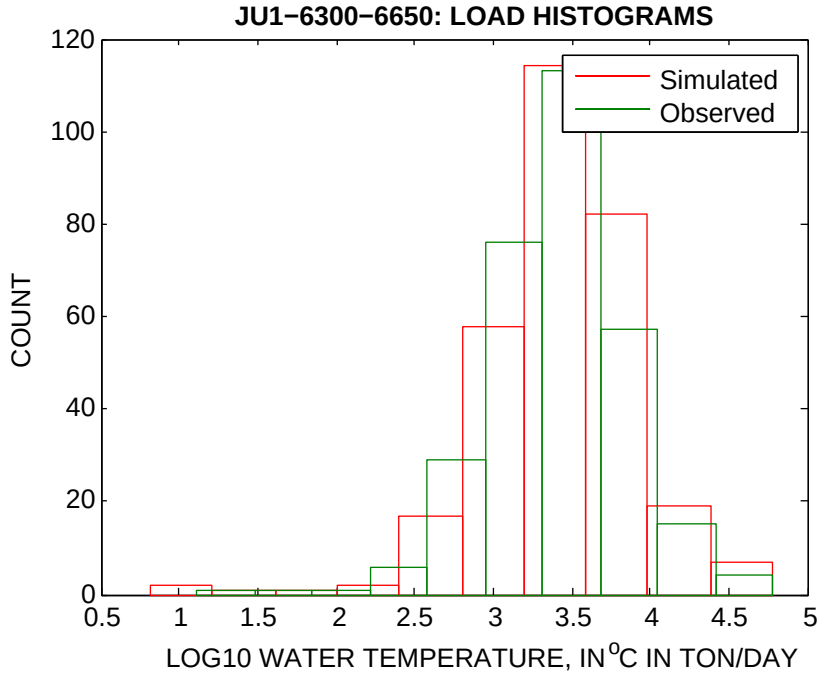


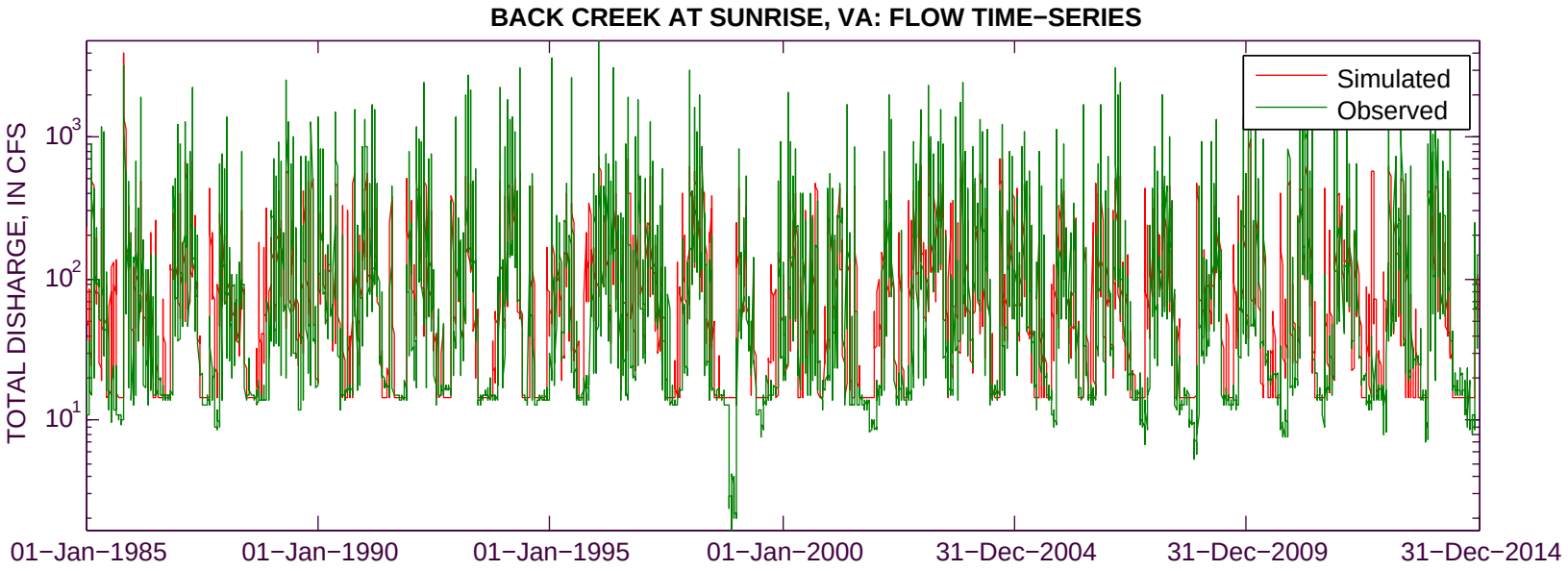
LOAD DATA
LOG10

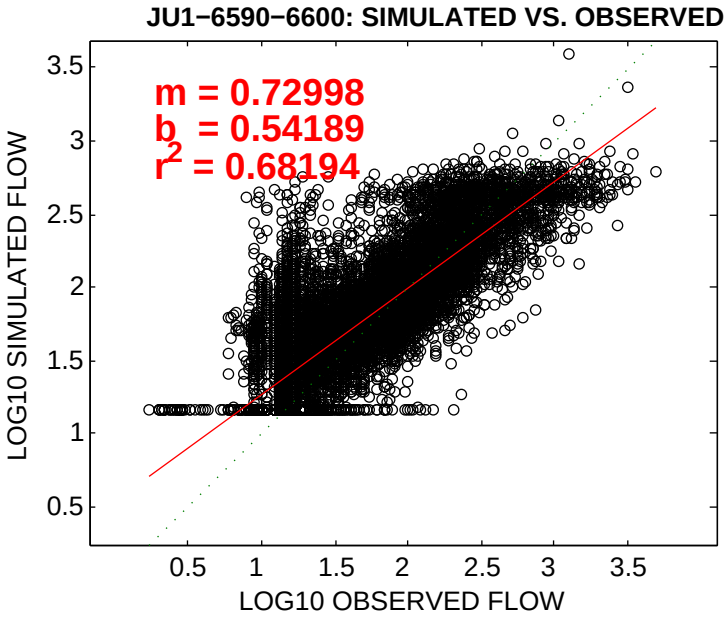


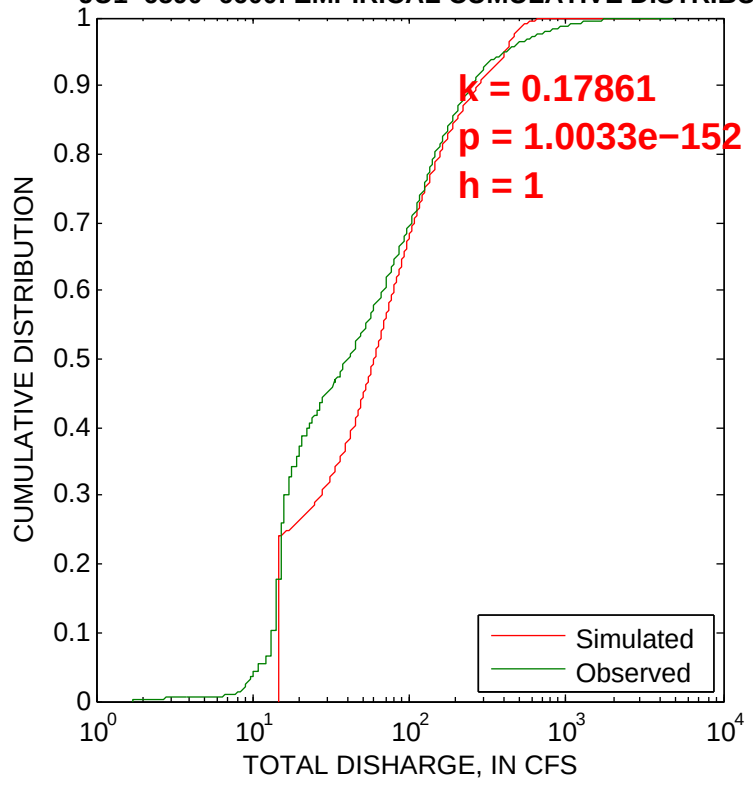












DATA SELECTION

scenario: P620171001WQ | file: FLOW.calib

plot: FLOW - total discharge

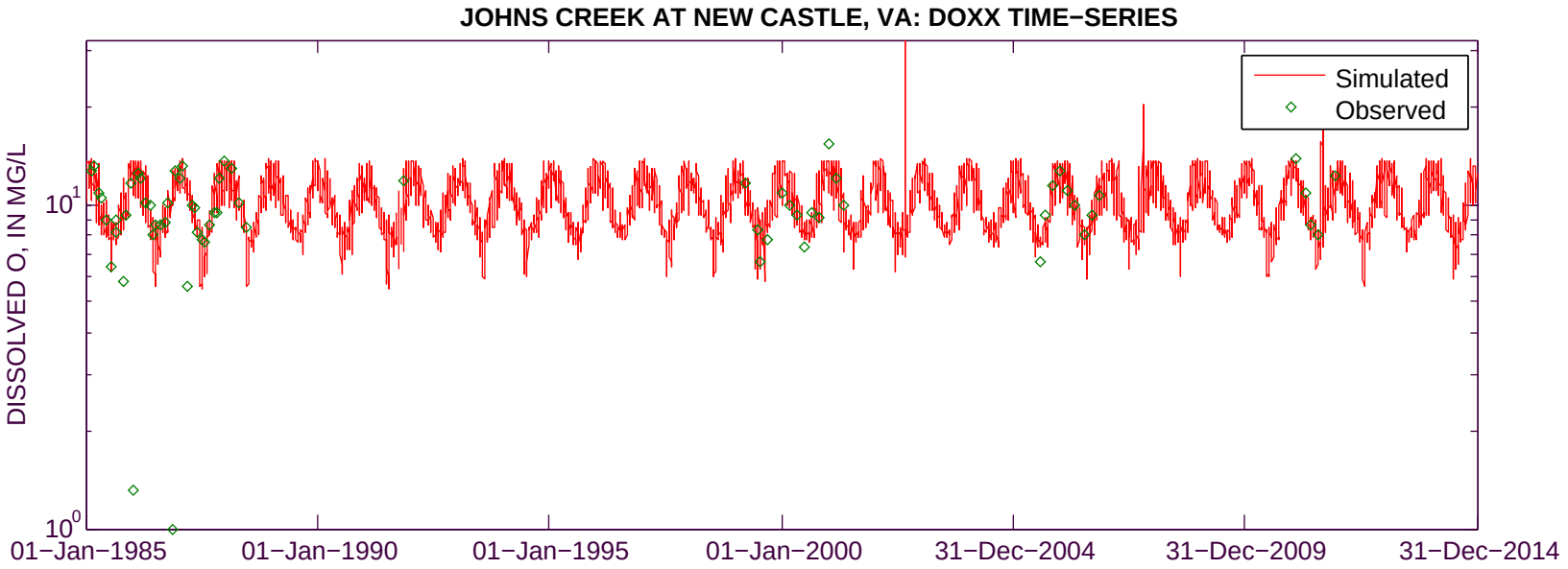
Dates: 1/1/1985 – 12/31/201

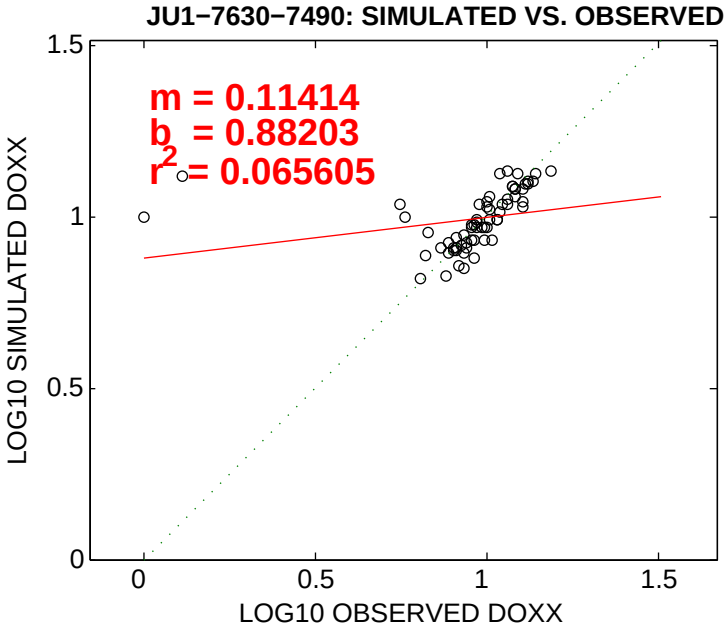
Drive: N/A | Directory: model | Observed: OBS20161101

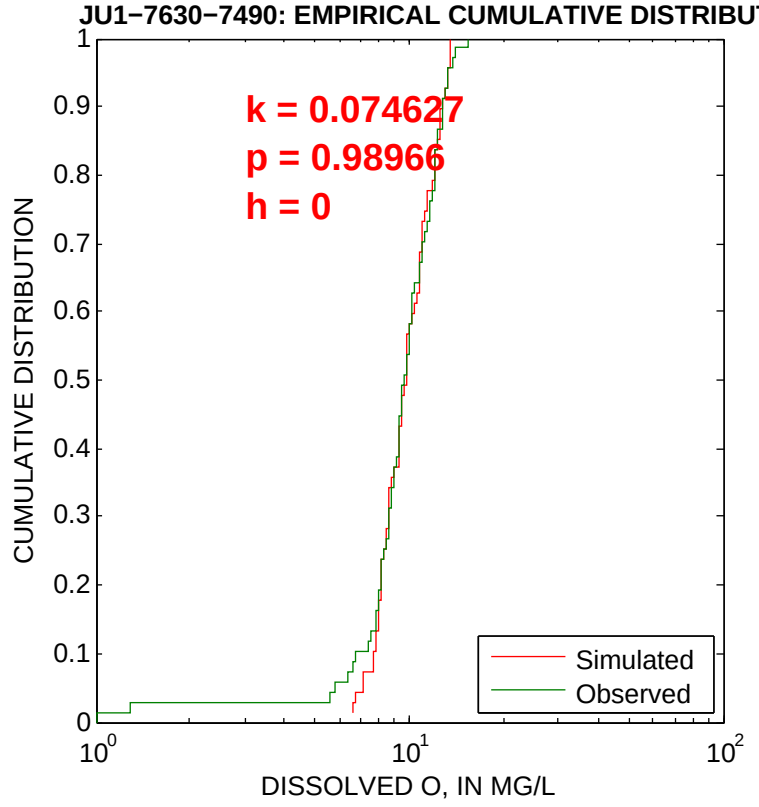
STATISTICS

		observe	simulate
n		10957	10957
min		1.7	14.5
		0.230449	1.16137
mean		113.26	106.02
		1.67921	1.76768
media		40	60.157
		1.60206	1.77929
max		4890	3876.8
		3.68931	3.58847
varian		51628.3	17593.3
		0.288443	0.225391
JB		0.001	0.001
		0.001	0.001
		ra	log
%		-6.39257	5.2686
err.va		29914.6	0.100546
rel.std.err		0.579422	0.348582
mod.eff		0.420578	0.651418

VERSION 2.1







DATA SELECTION

scenario	file
P620171001WQ	DOXX.calib

plot: DOXX - dissolved oxygen

Dates: 1/1/1985 – 12/31/201

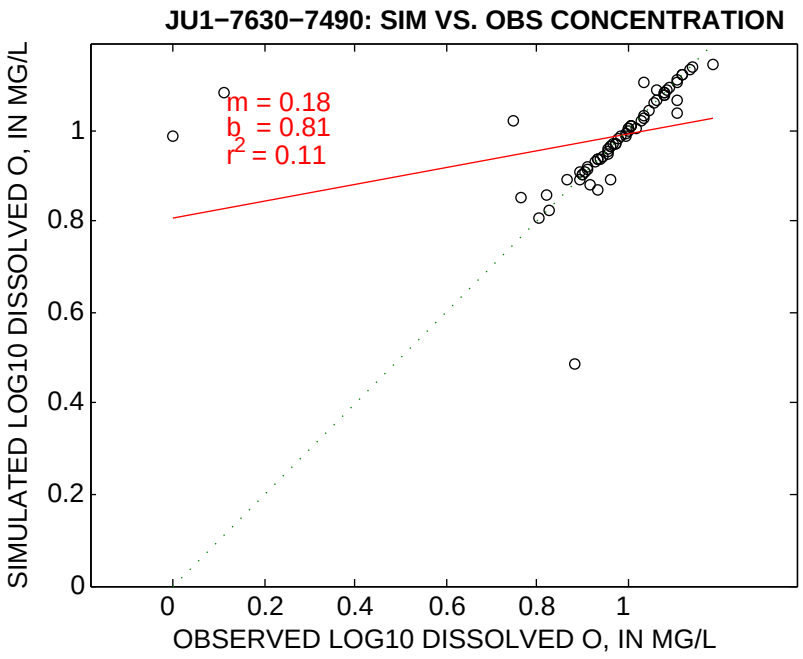
Drive	Directory	Observed
N/A	model	OBS20161101

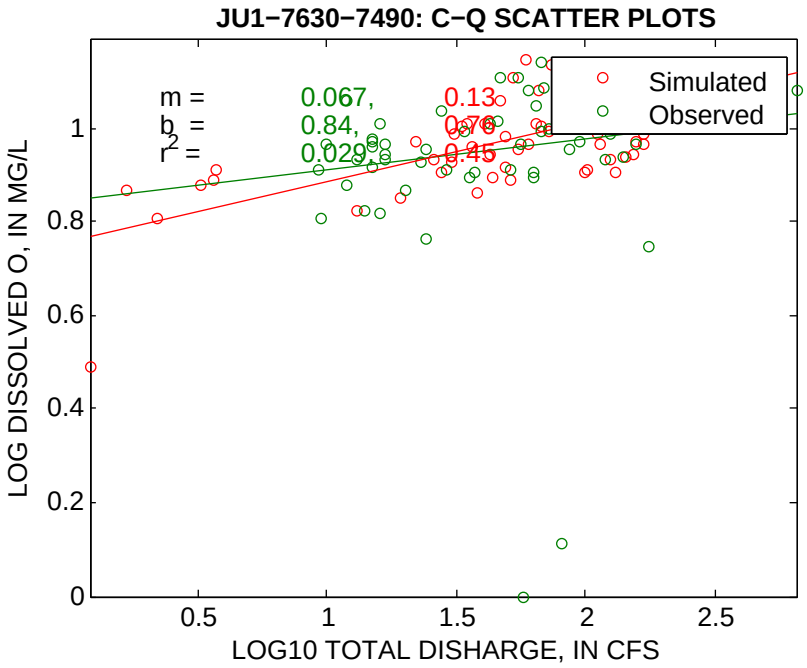
STATISTICS

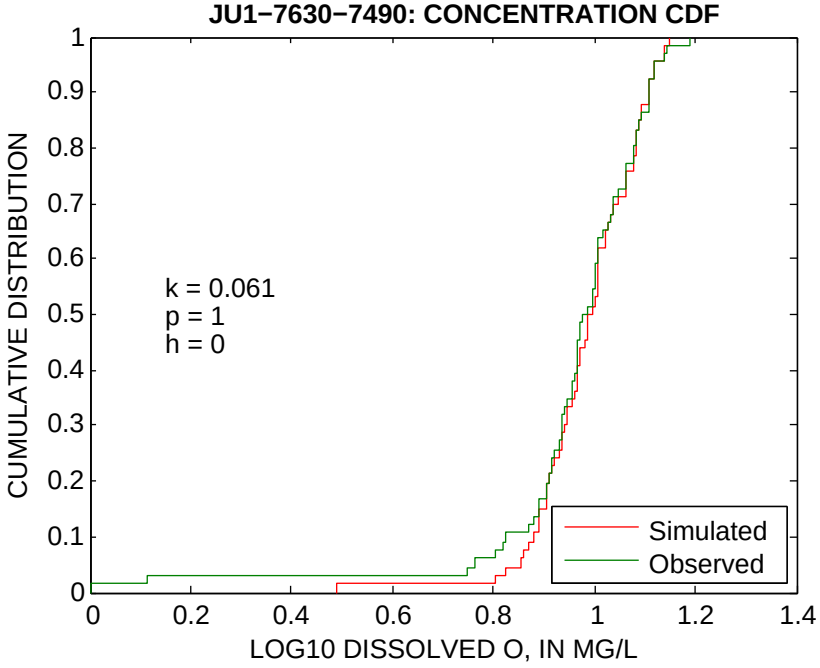
	n	67	66
		observe	simulate
min		1 0	0 0.821533
mean		9.72836 0.960289	9.8376 0.991638
media		9.7 0.982248	9.7323 0.988848
max		15.4 1.18752	13.617 1.13408
varian		6.63085 0.0346667	5.06297 0.00688435
JB		0.004150 0.001	0.001 0.171526
		ra	log
%		1.12292	3.26458
err.va		6.95694	0.0346351
rel.std.err		1.04918	0.999089
mod.eff		-0.0491777	0.00091075

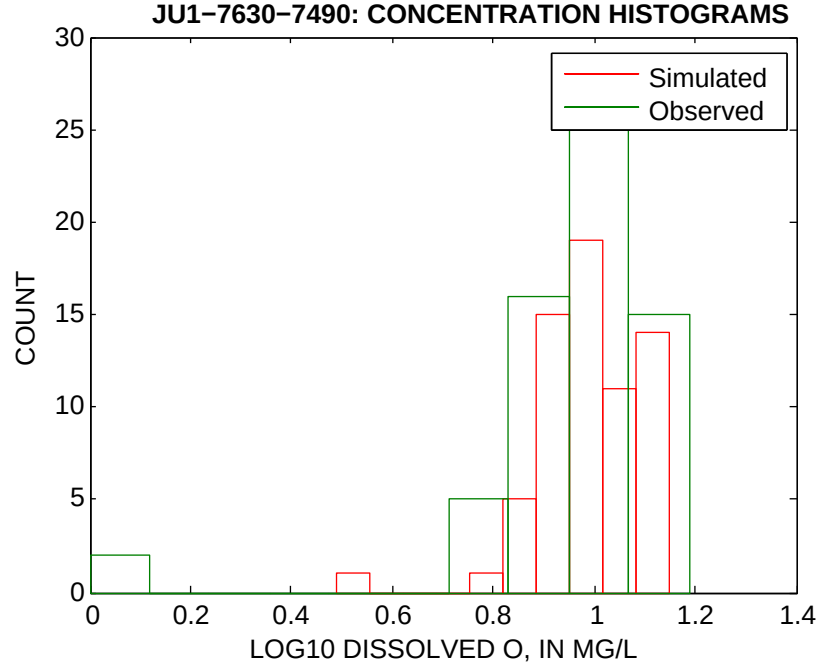
VERSION

ALL DATA
LOG10

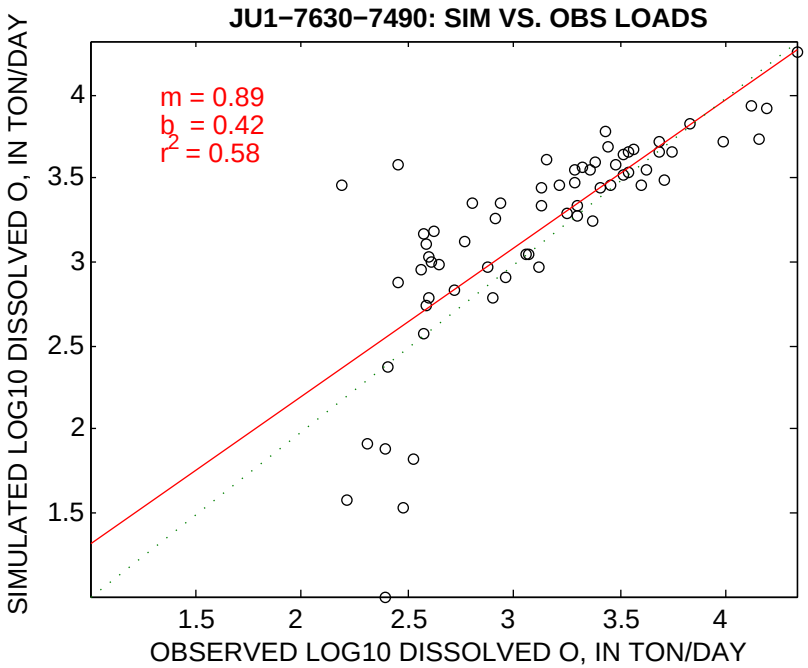


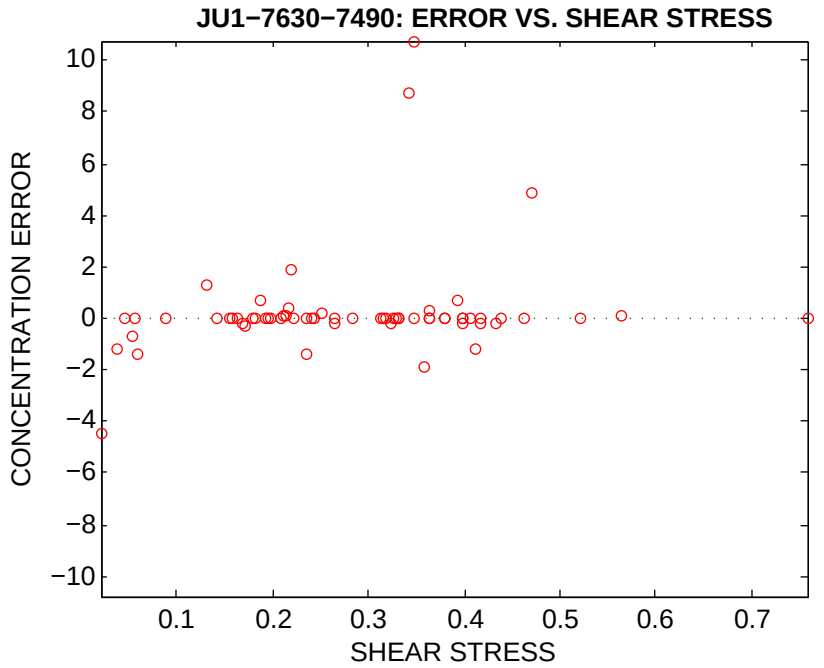


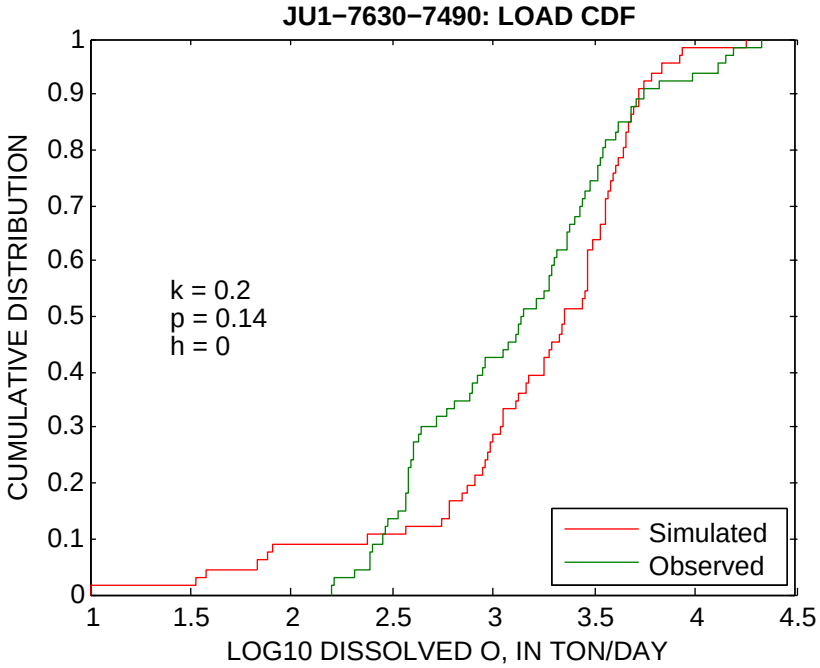


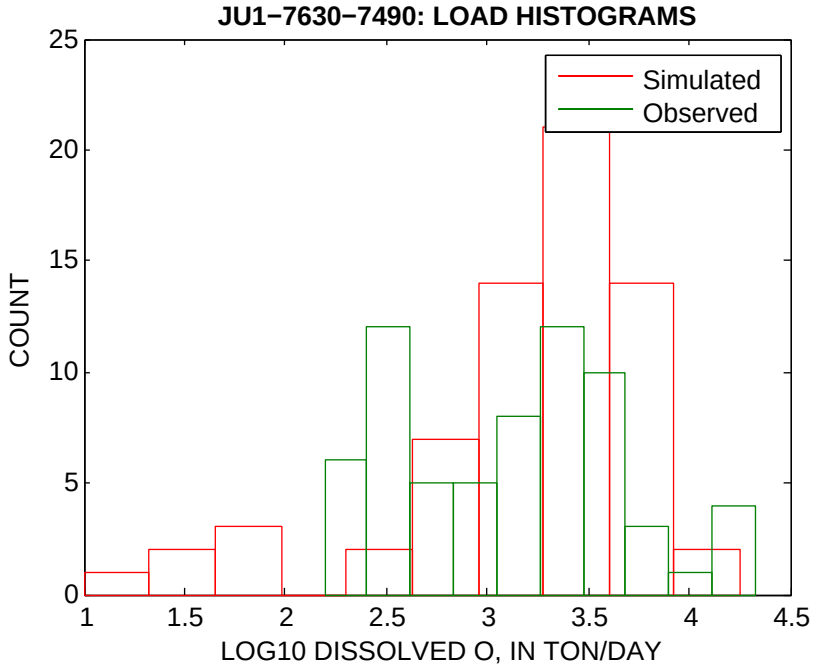


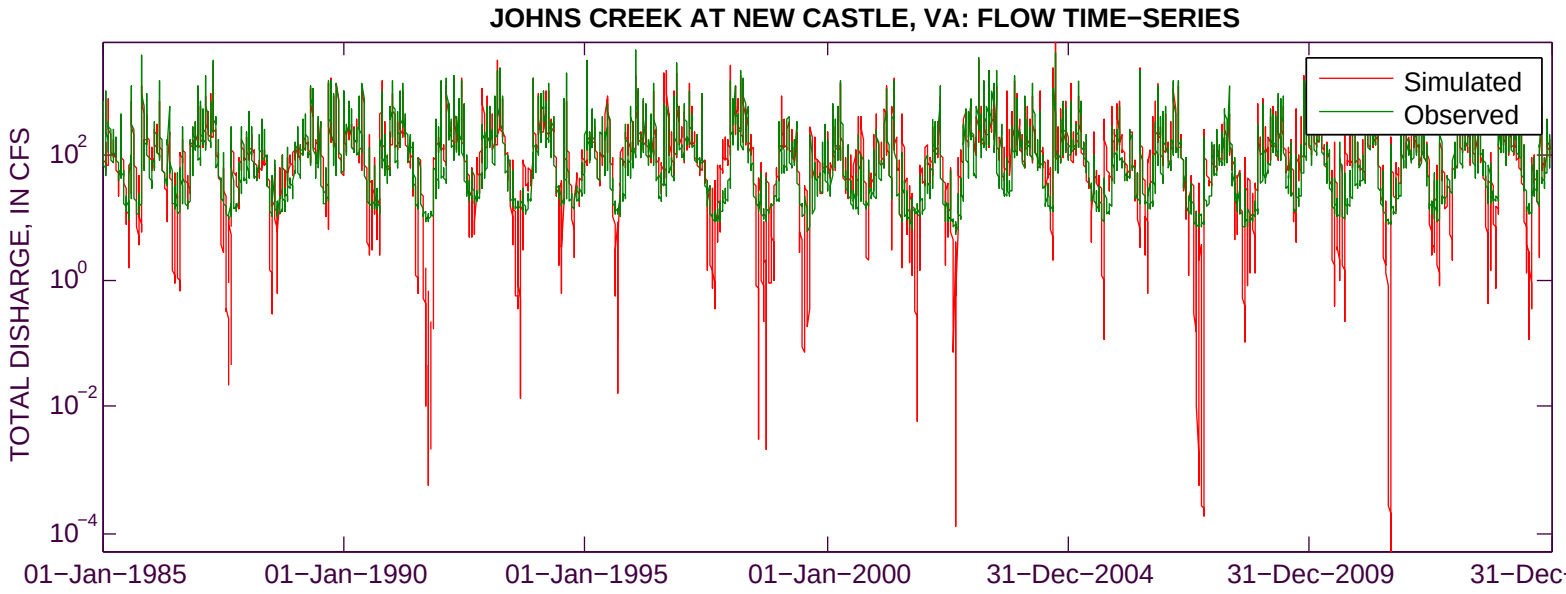
LOAD DATA
LOG10

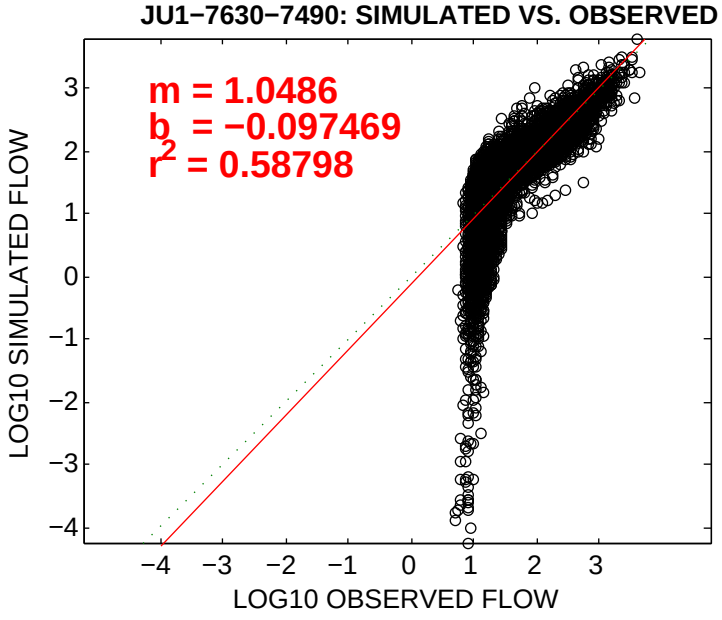


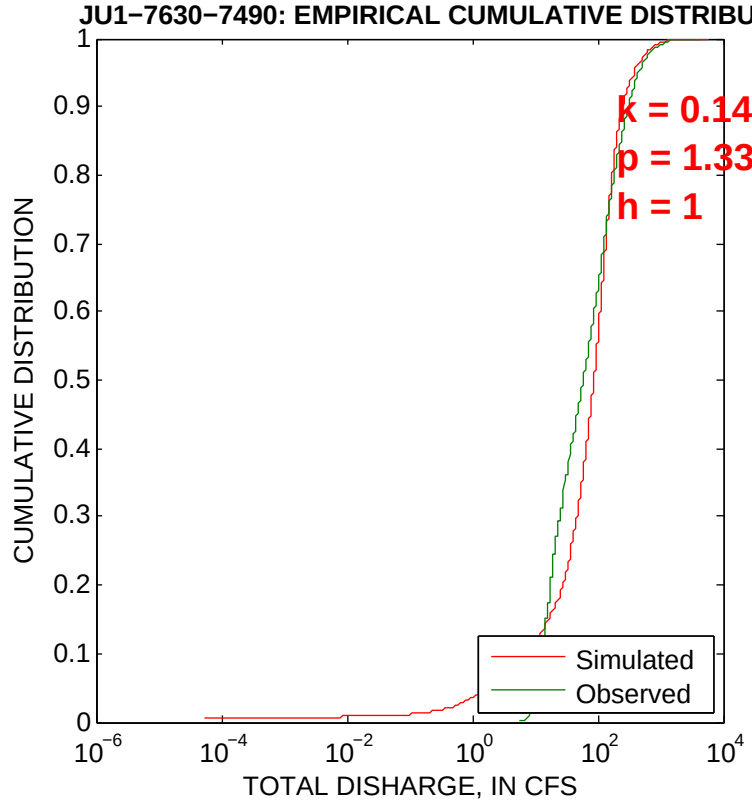












DATA SELECTION

scenario	file
P620171001WQ	FLOW.calib

plot: FLOW - total discharge

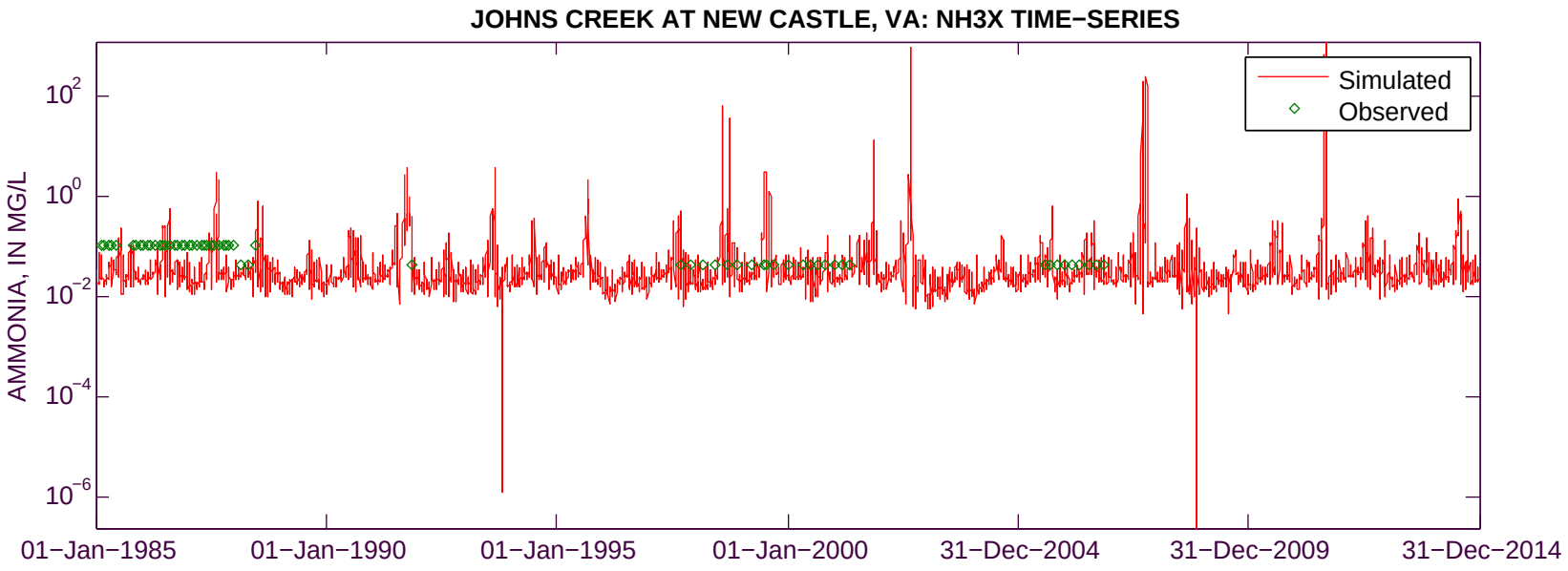
Dates: 1/1/1985 — 12/31/201

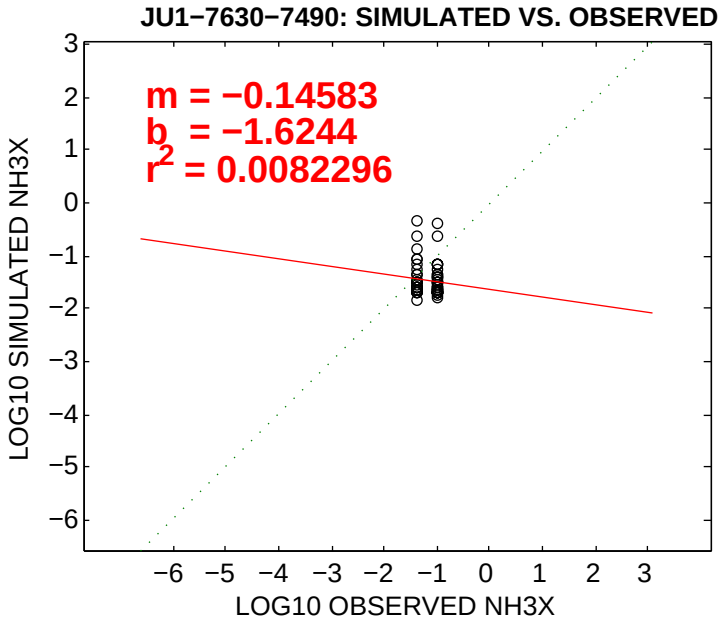
Drive	Directory	Observed
N/A	model	OBS20161101

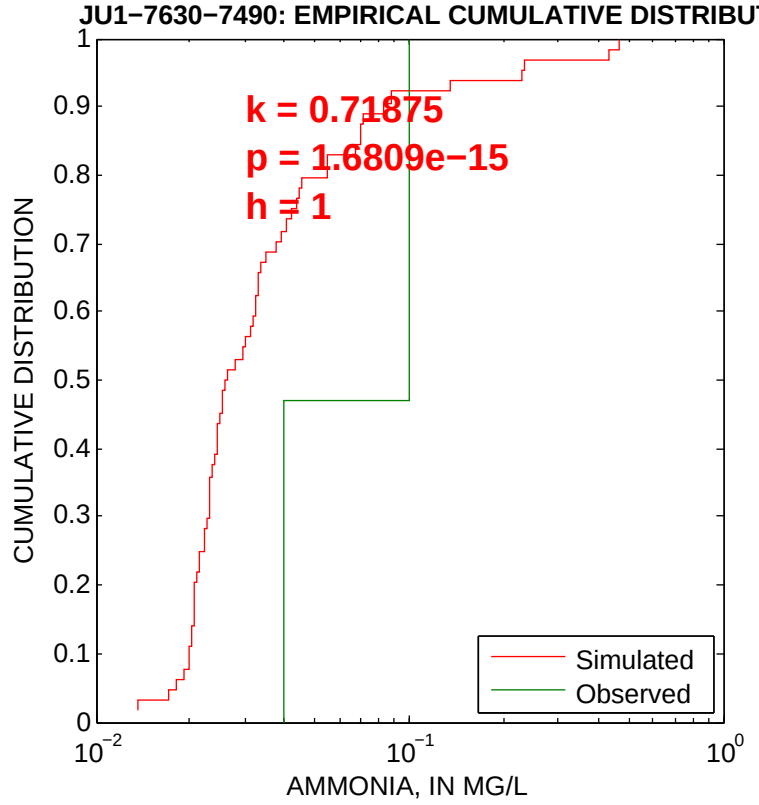
STATISTICS

n	10957	10910
	observe	simulate
min	5.2	0
	0.716003	-4.26952
mean	130.548	129.097
	1.79126	1.78091
media	60	88.123
	1.77815	1.94695
max	4500	6228.9
	3.65321	3.79441
varian	47014.1	36265.6
	0.277291	0.518592
JB	0.001	0.001
	0.001	0.001
	ra	log
%	-1.11146	-0.577402
err.va	12274.8	0.214434
rel.std.err	0.261088	0.773317
mod.eff	0.738912	0.226683

VERSION







DATA SELECTION

scenario	file
P620171001WQ	NH3X.calib

plot: NH3X - ammonia

Dates: 1/1/1985 – 12/31/201

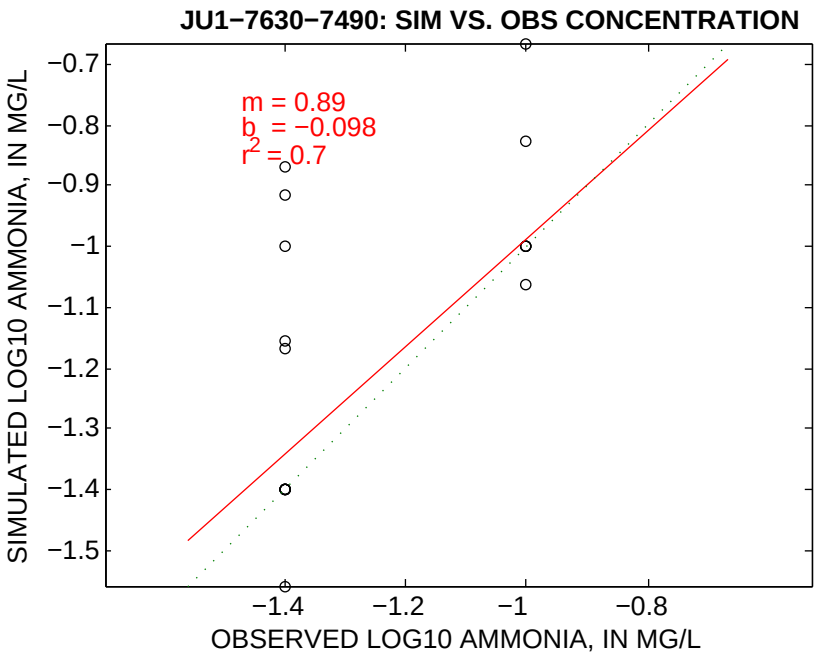
Drive	Directory	Observed
N/A	model	OBS20161101

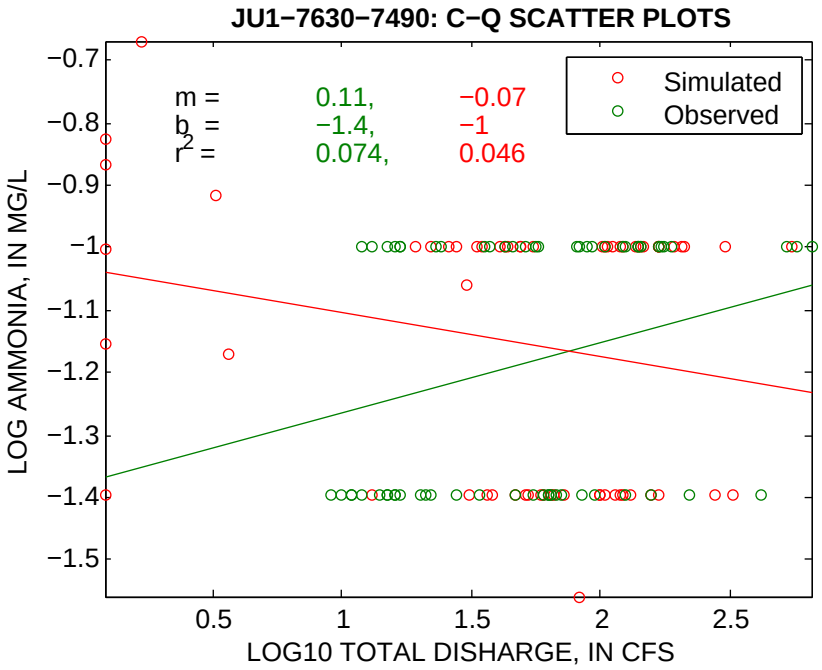
STATISTICS

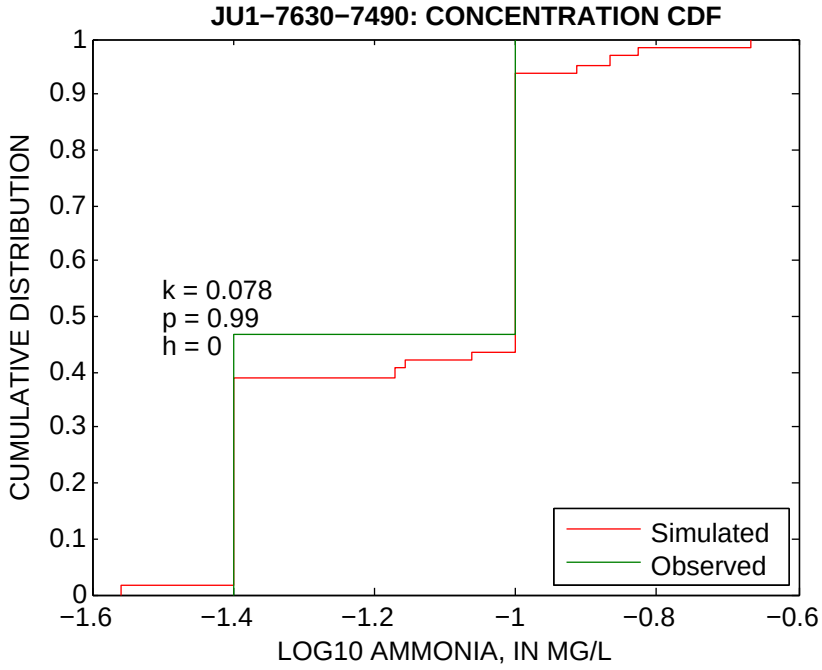
	n	64	63
		observe	simulate
min		0.04	0
		-1.39794	-1.86198
mean		0.071875	0.0530572
		-1.18318	-1.45186
media		0.1	0.026234
		-1	-1.57577
max		0.1	0.46455
		-1	-0.332968
varian		0.00091071	0.0067632
		0.0399742	0.103297
JB		0.013836	0.001
		0.014238	0.001
		ra	log
%		-26.1813	22.7082
err.va		0.00828807	0.228283
rel.std.err		9.10063	5.71075
mod.eff		-8.10063	-4.71075

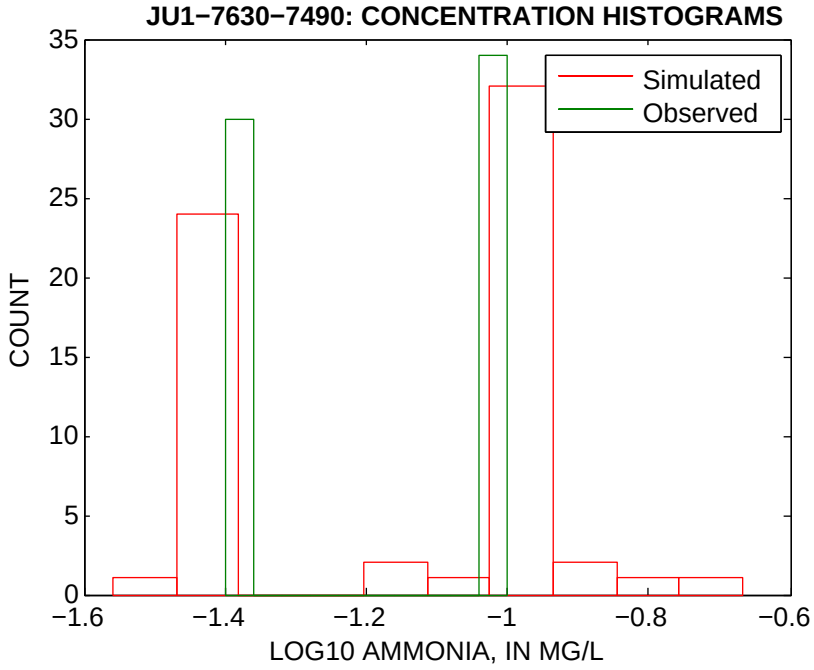
VERSION 2.1

ALL DATA
LOG10

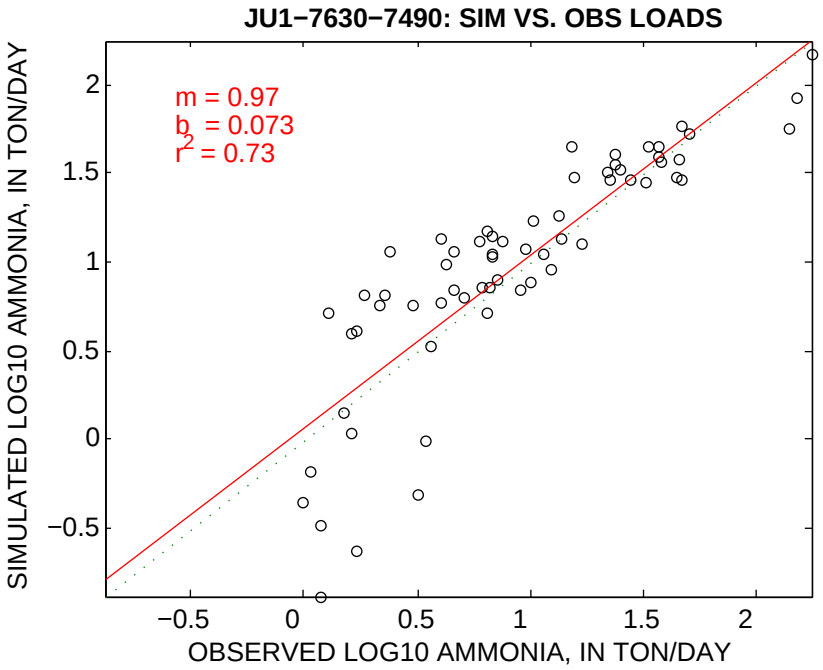


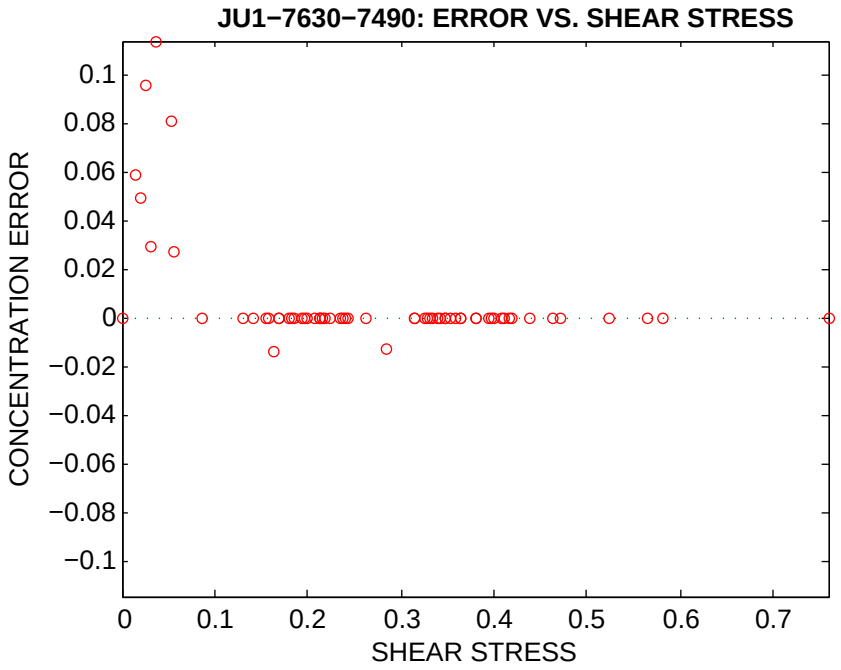


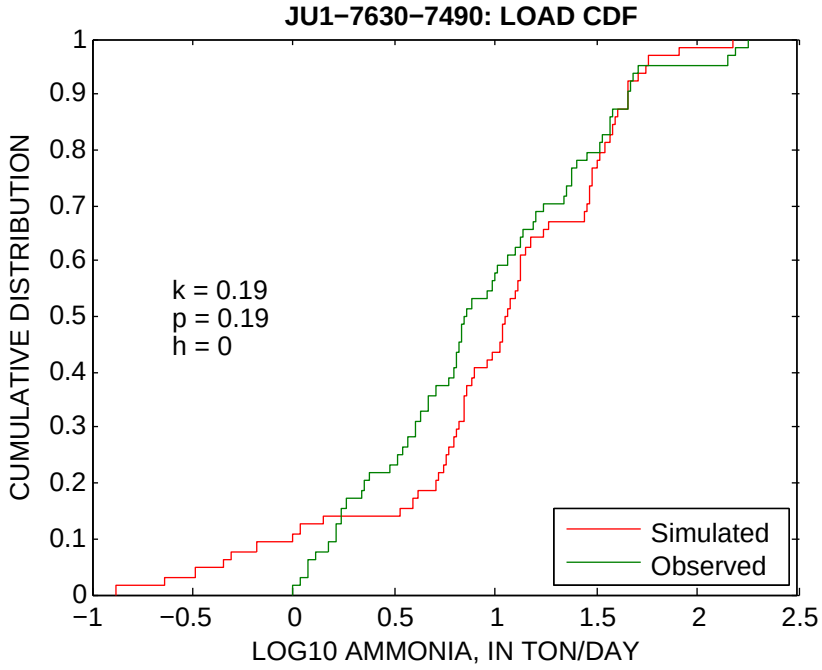


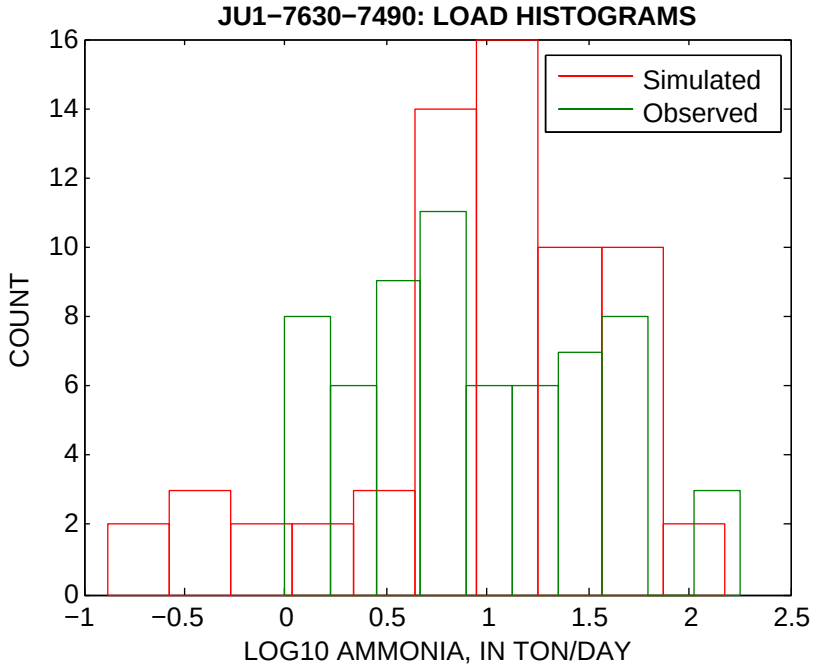


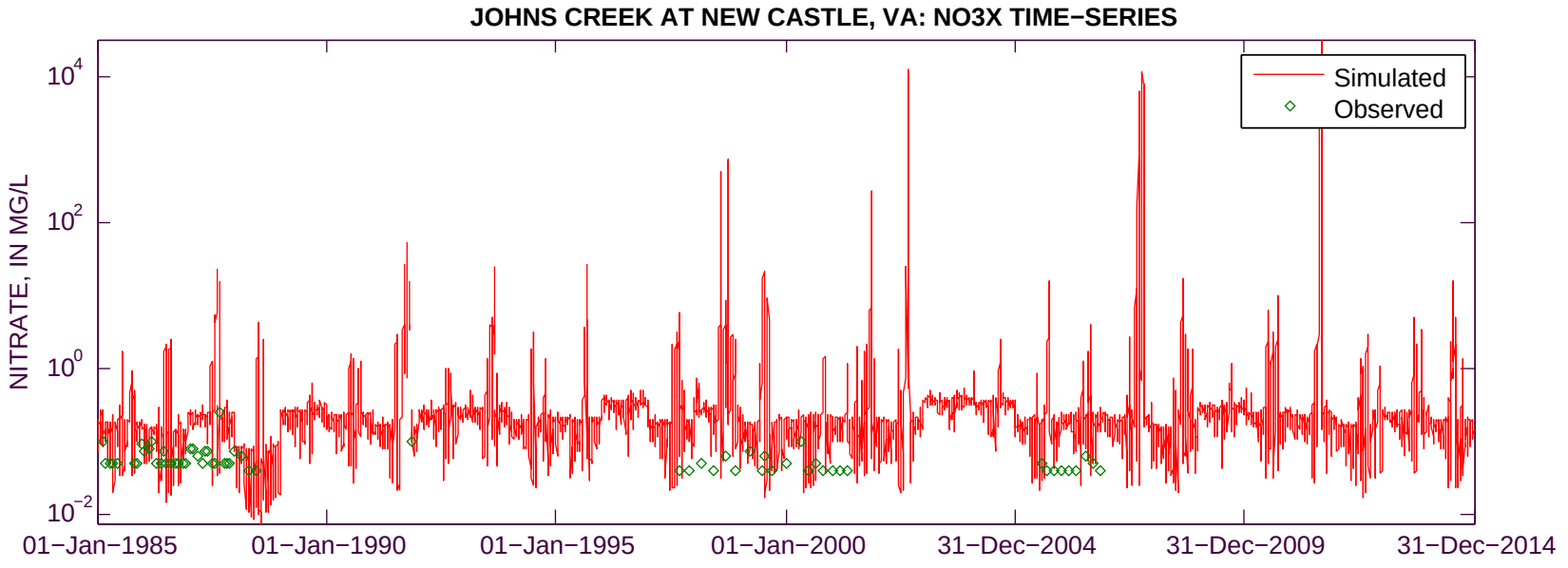
LOAD DATA
LOG10

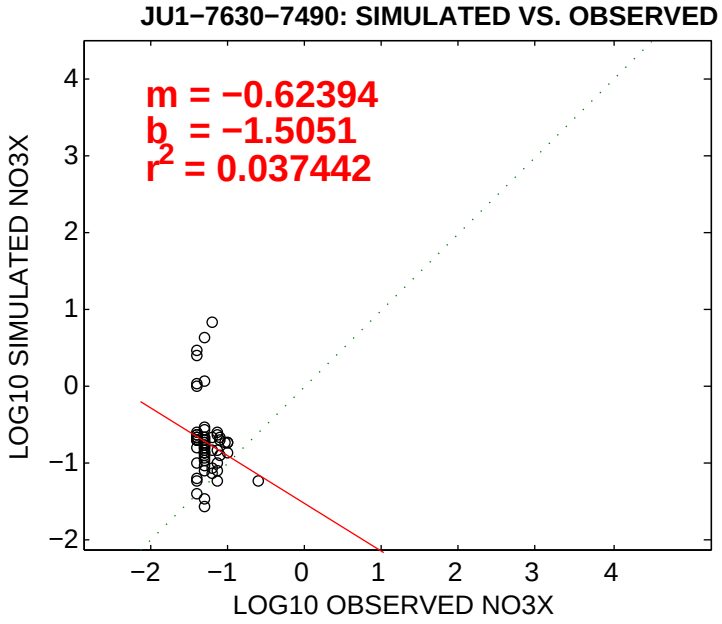


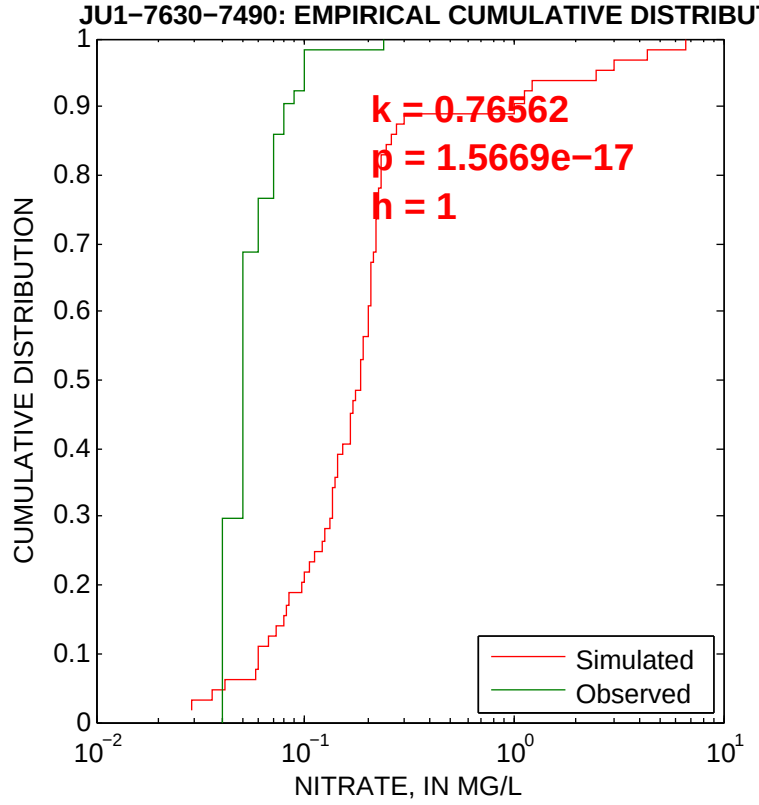












DATA SELECTION

scenario: P620171001WQ | file: NO3X.calib

plot: NO3X - nitrate

Dates: 1/1/1985 – 12/31/201

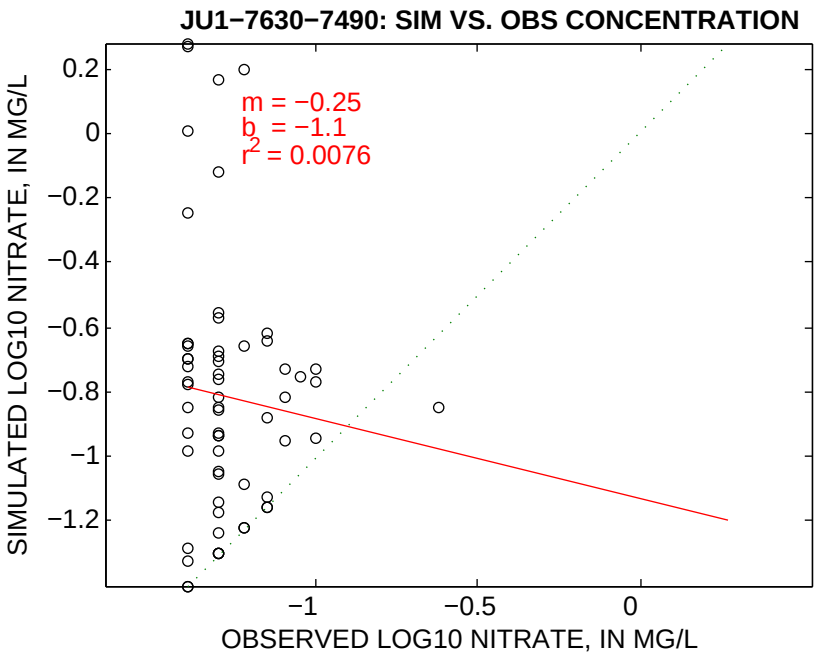
Drive: N/A | Directory: model | Observed: OBS20161101

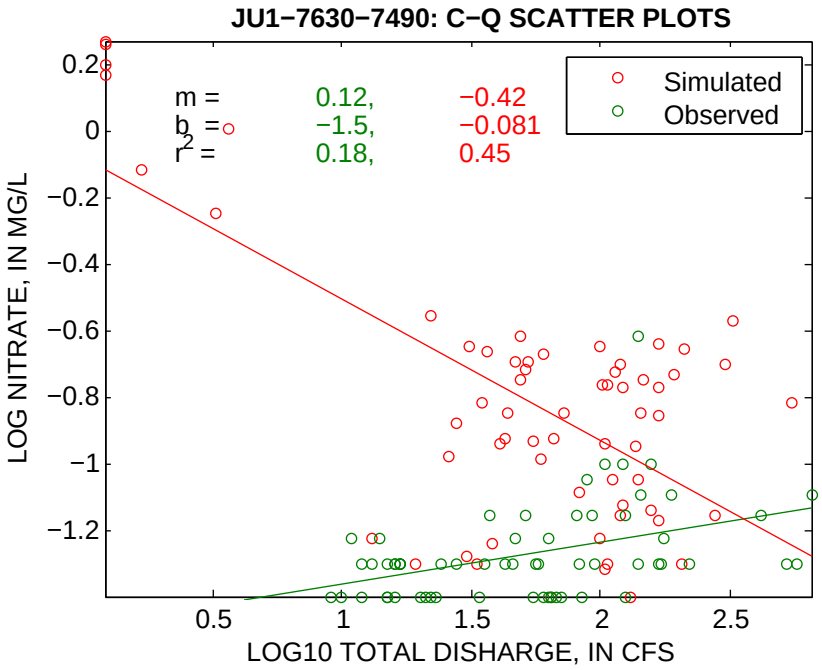
STATISTICS

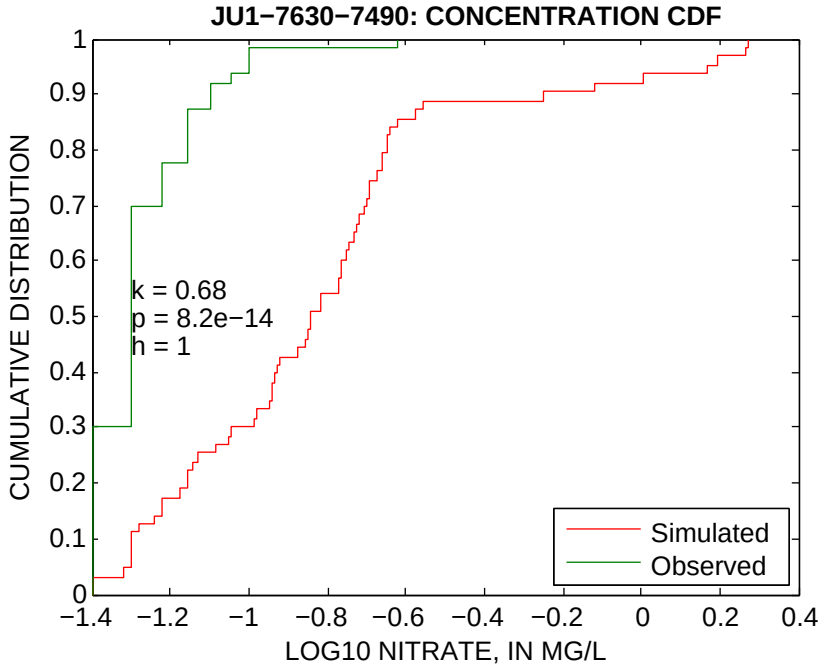
		observe	simulate
n		64	63
min		0.04	0
		-1.39794	-1.54394
mean		0.0578125	0.451852
		-1.27114	-0.711997
media		0.05	0.18439
		-1.30103	-0.732218
max		0.24	6.7156
		-0.619789	0.827085
varian		0.00081418	1.14322
		0.0194792	0.202535
JB		0.001	0.001
		0.001	0.001
		ra	log
% err.va		681.582	-43.9873
		1.30738	0.564001
rel.std.err		1605.75	28.954
mod.eff		-1604.75	-27.954

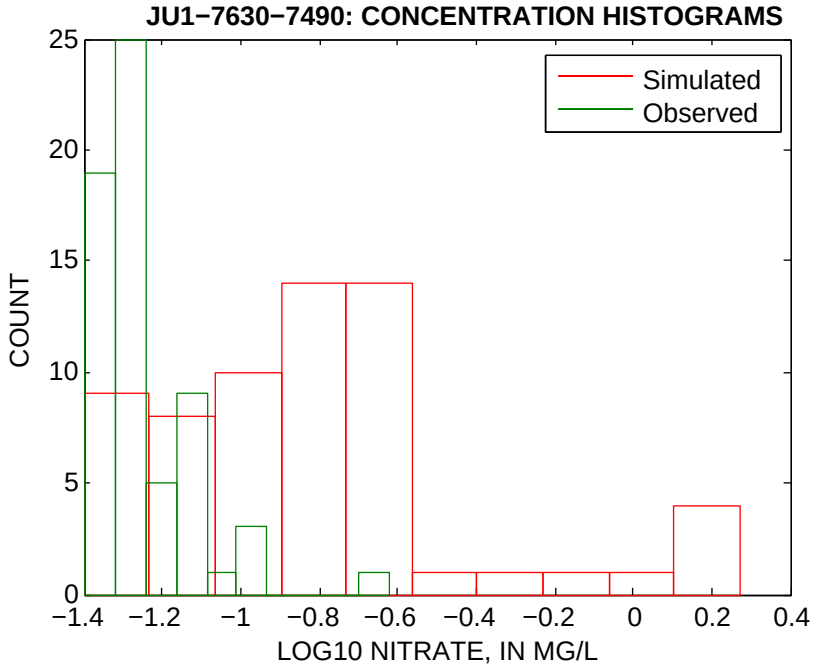
VERSION 2.1

ALL DATA
LOG10

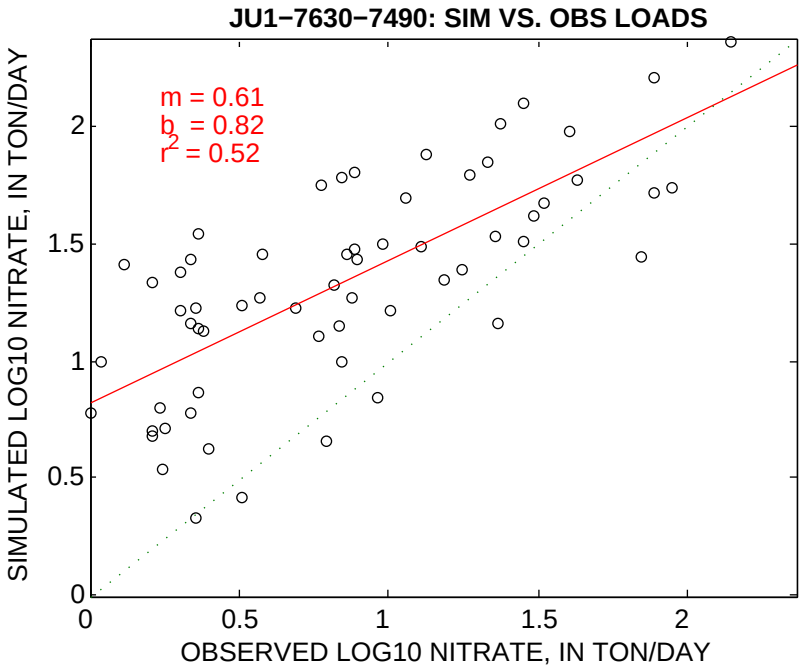


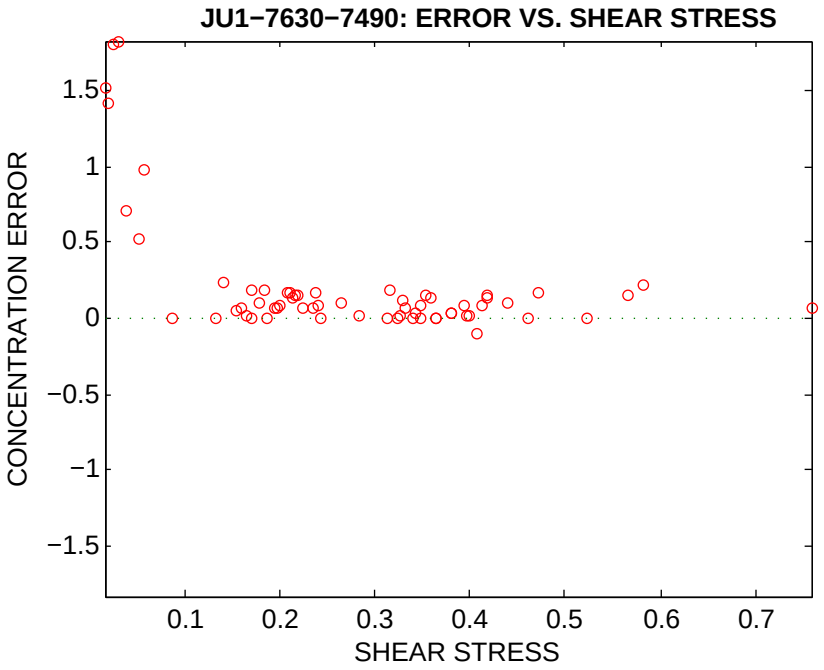


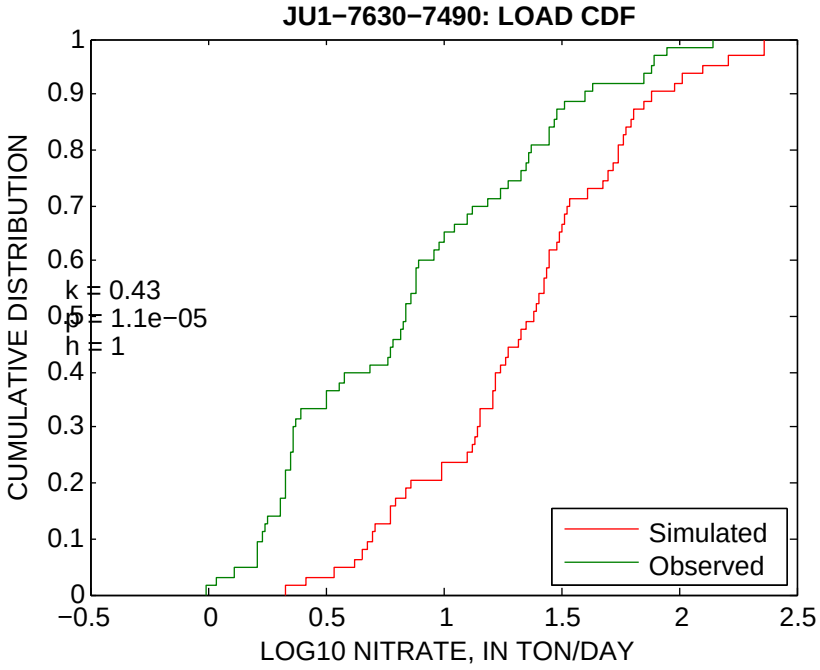


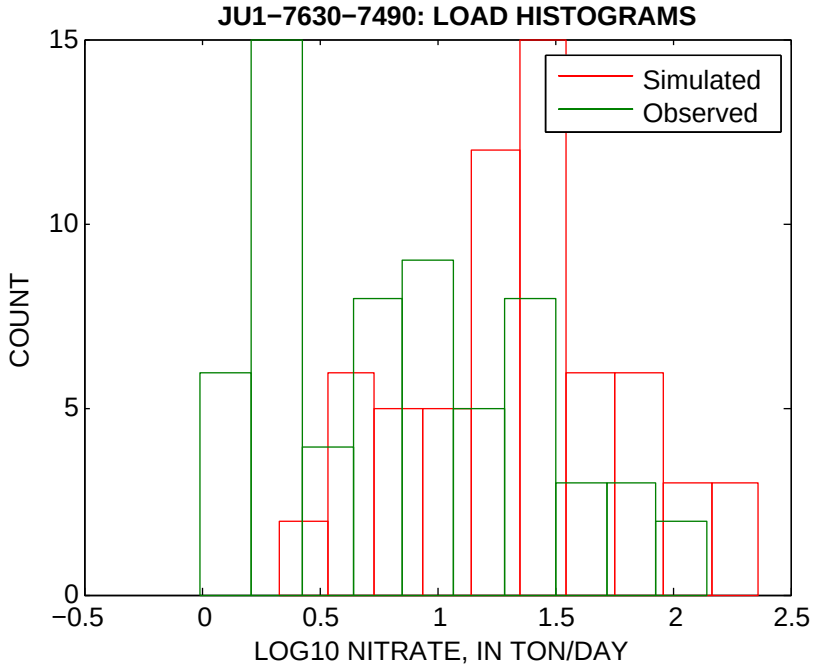


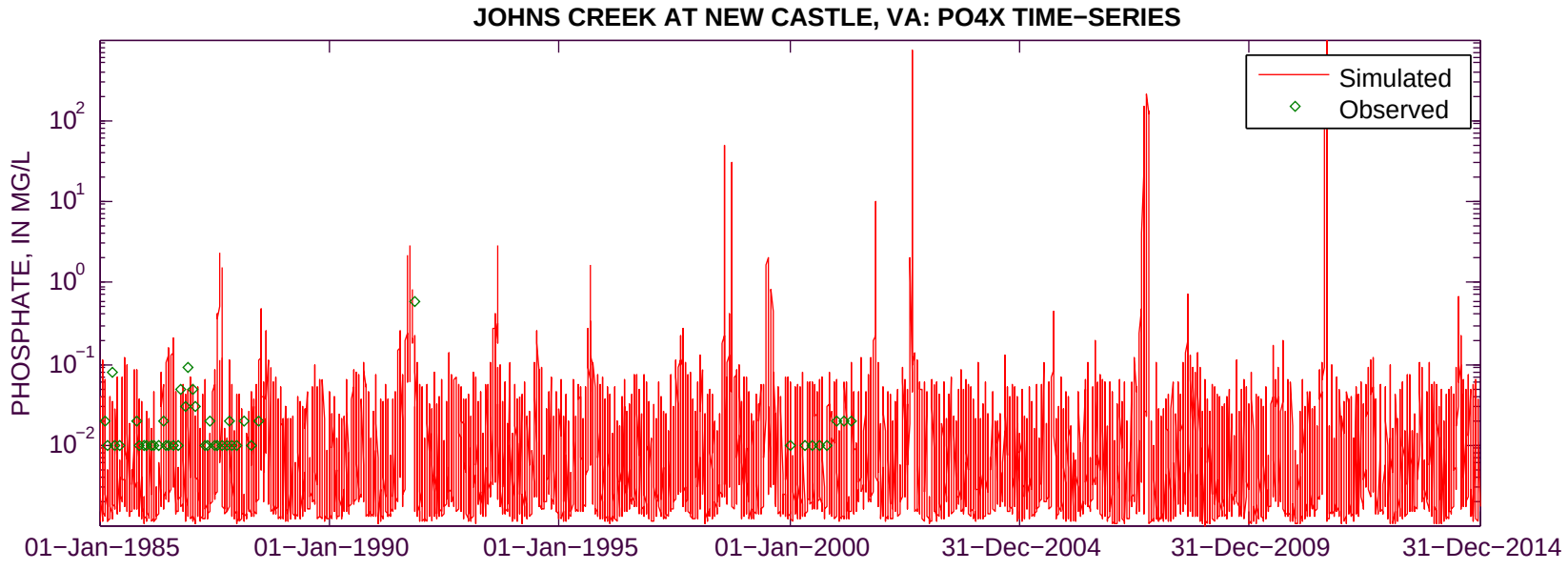
LOAD DATA
LOG10

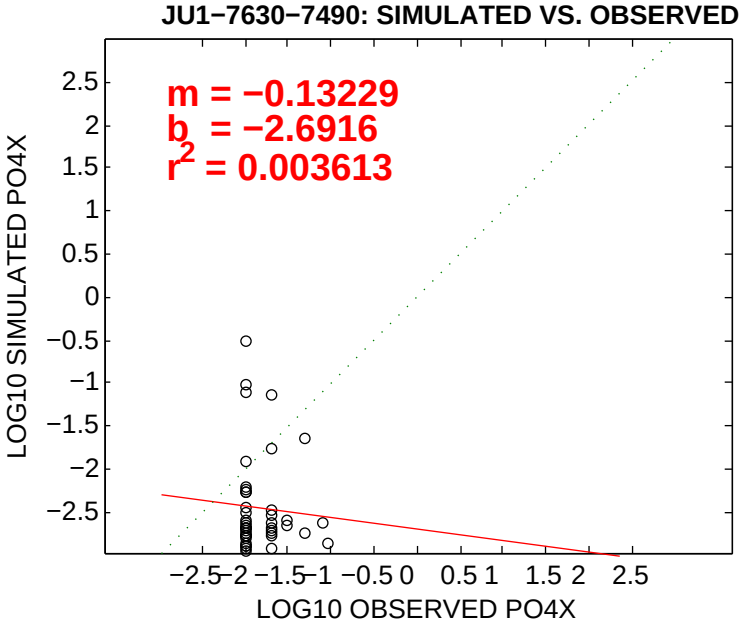


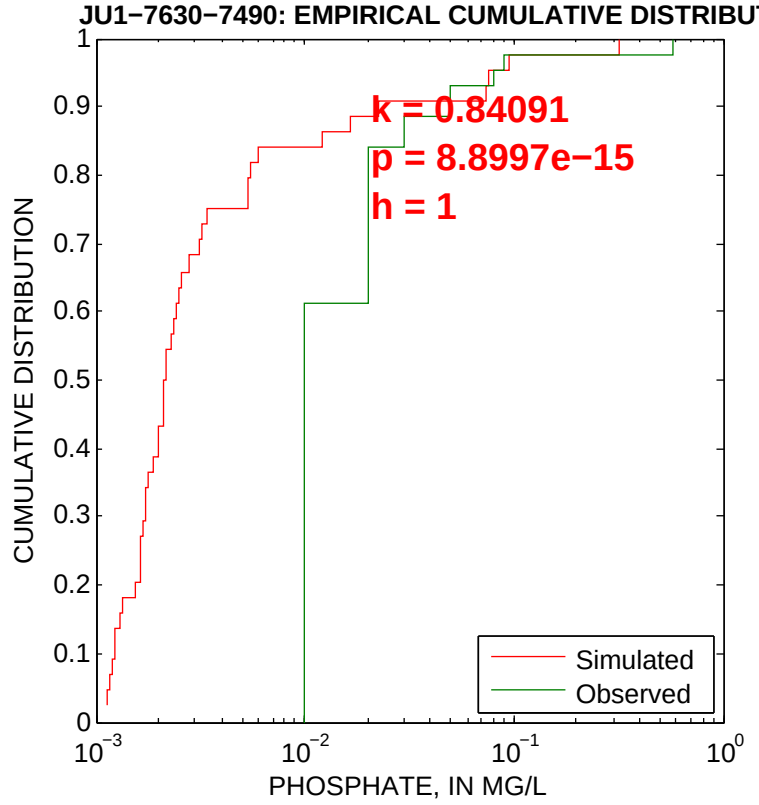












DATA SELECTION

scenario	file
P620171001WQ	PO4X.calib

plot: PO4X - phosphate

Dates: 1/1/1985 – 12/31/201

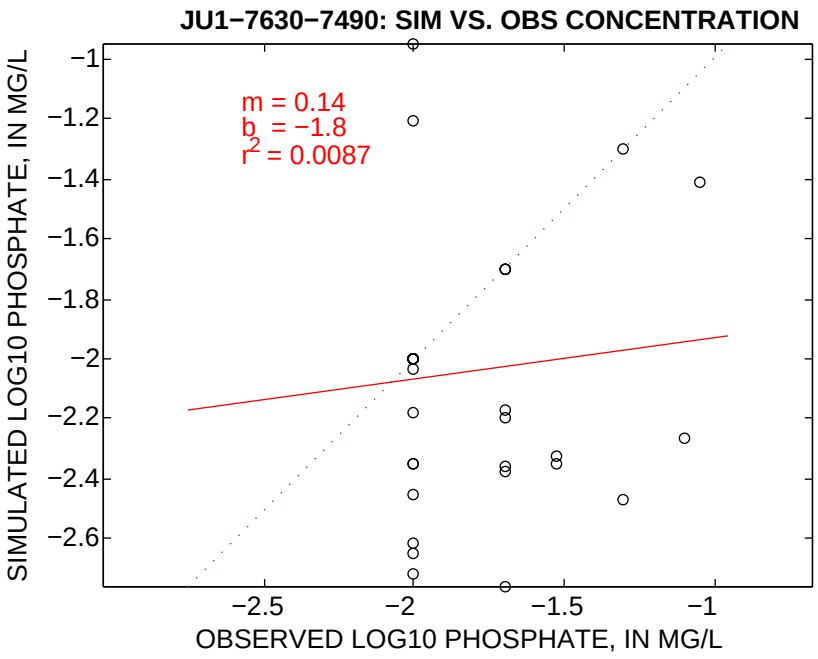
Drive	Directory	Observed
N/A	model	OBS20161101

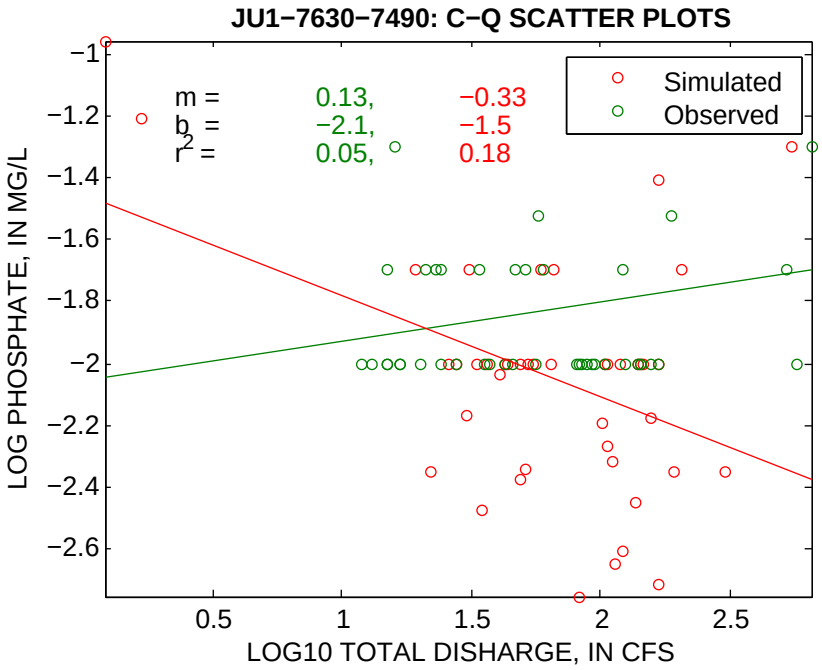
STATISTICS

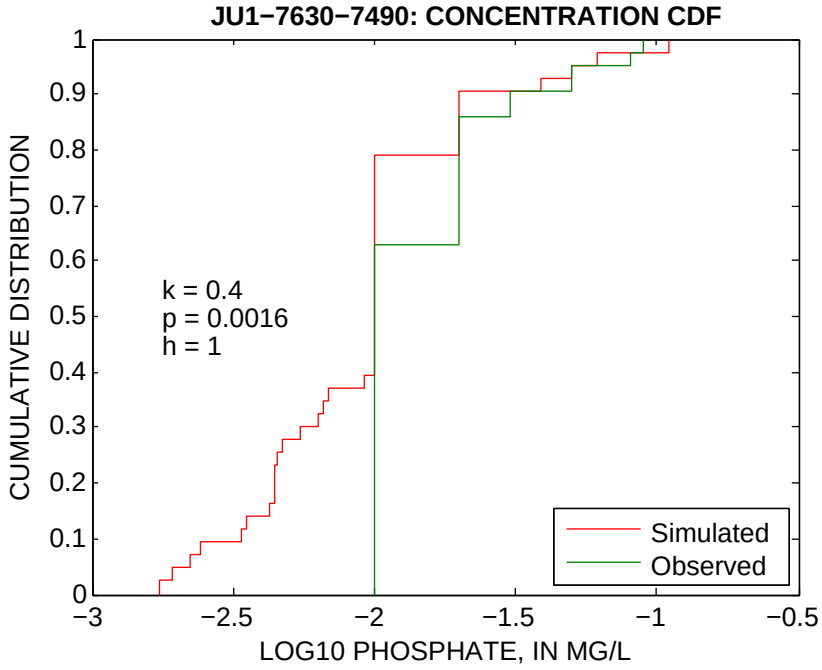
	n	observe	simulate
		44	43
min		0.01 -2	0 -2.9475
mean		0.0311364 -1.8321	0.0158437 -2.44922
media		0.01 -2	0.00213065 -2.66744
max		0.57 -1.04576	0.31634 -0.499846
varian		0.00721496 0.0679172	0.00256662 0.328978
JB		0.001 0.002792	0.001 0.001
		ra	log
%		-49.1152	33.6837
err.va		0.0105945	0.804767
rel.std.err		1.46841	11.8492
mod.eff		-0.46841	-10.8492

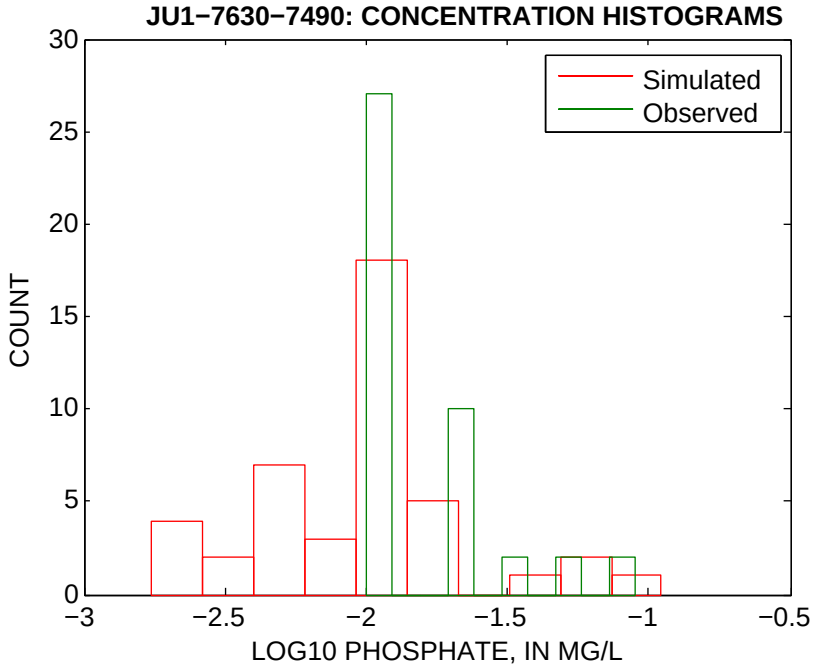
VERSION 2.1

ALL DATA
LOG10

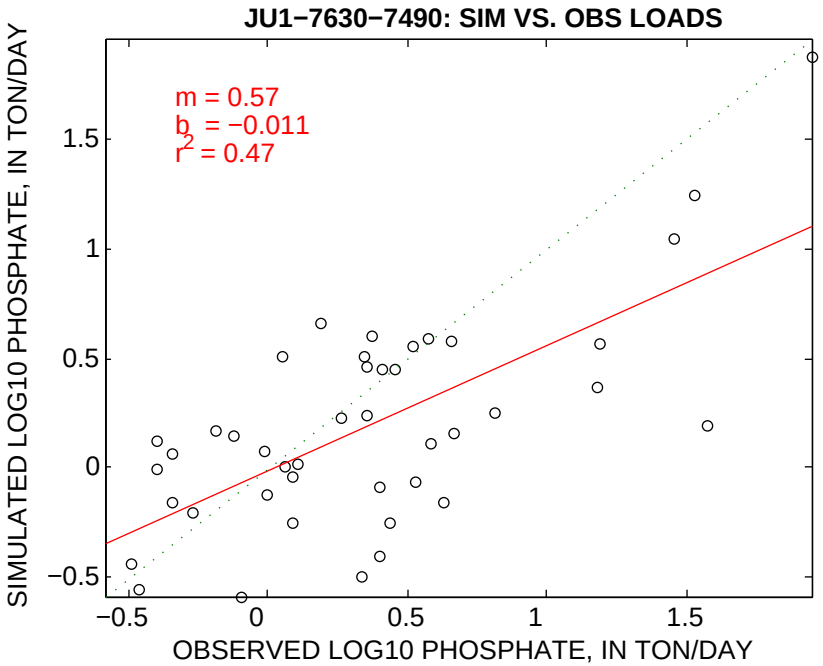


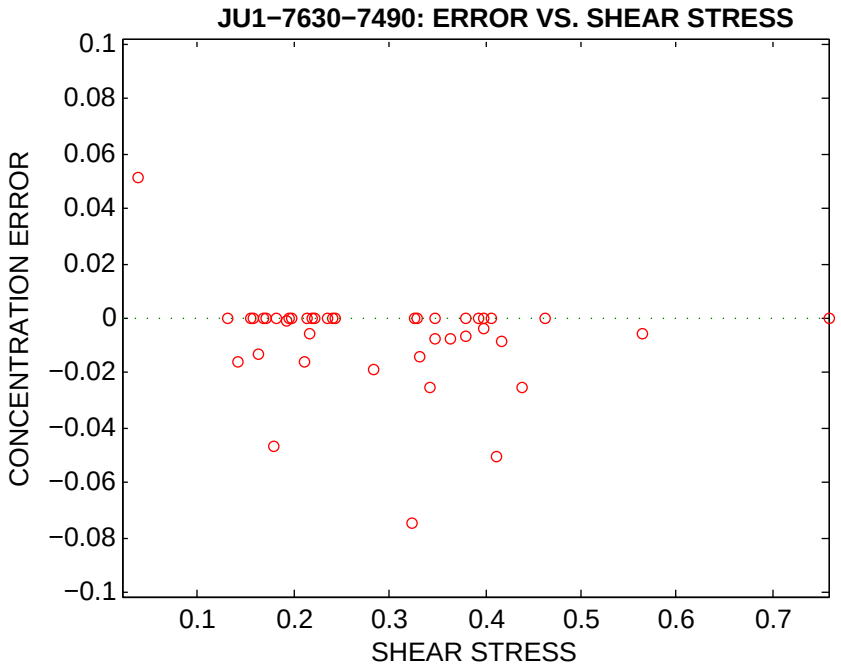


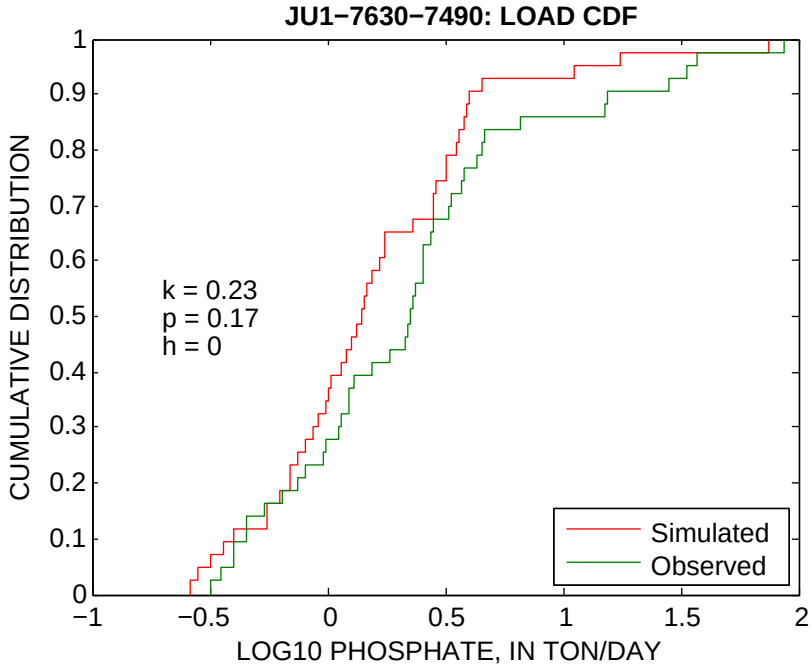


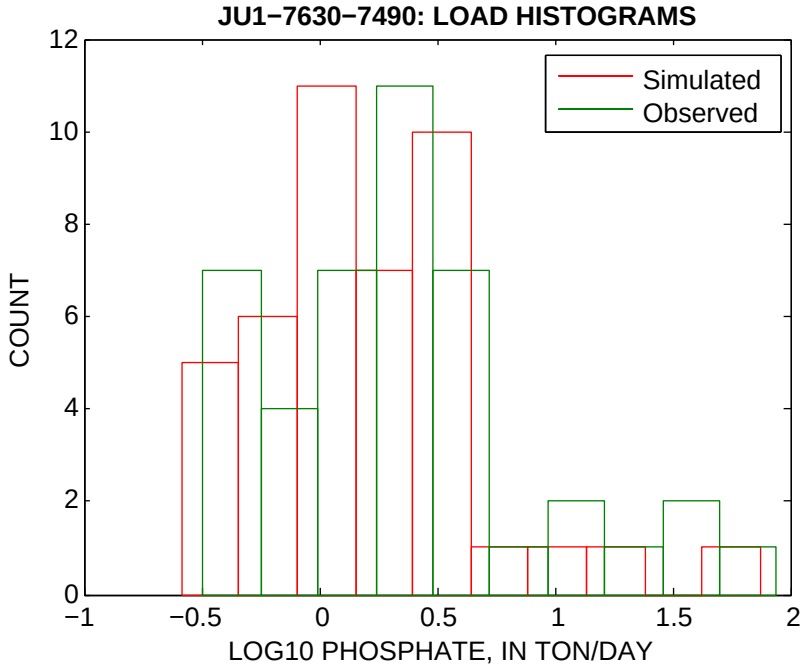


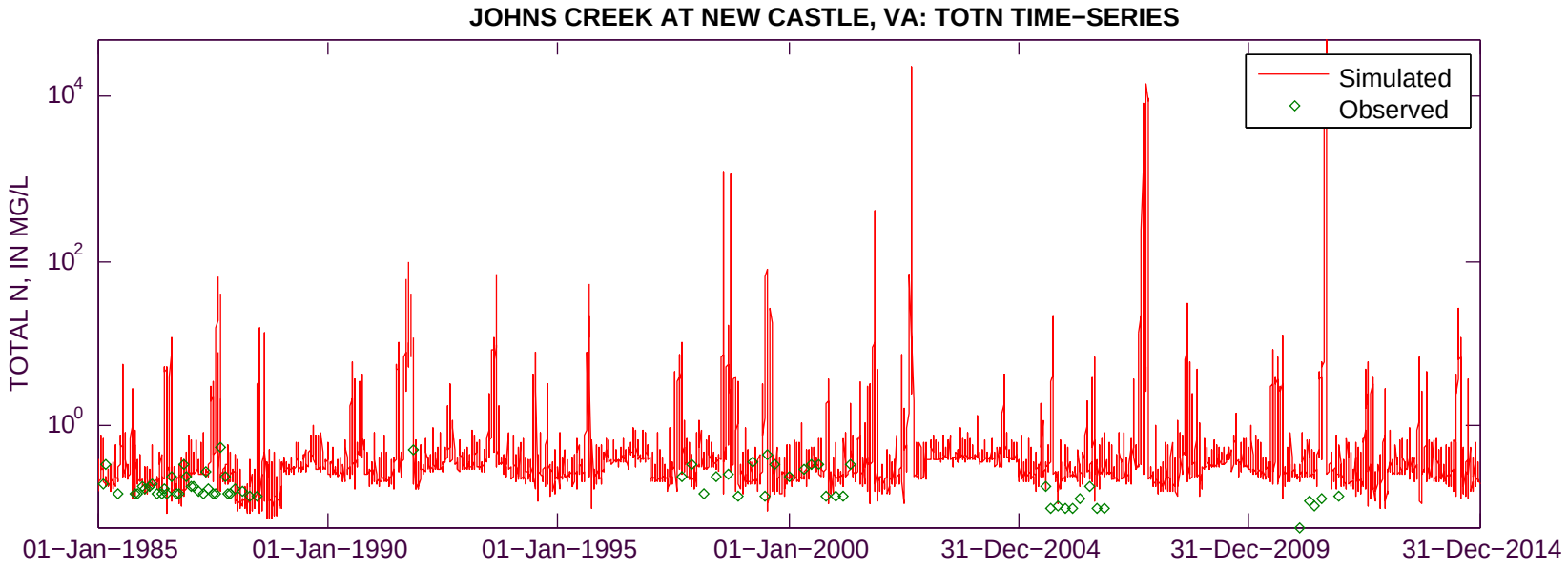
LOAD DATA
LOG10

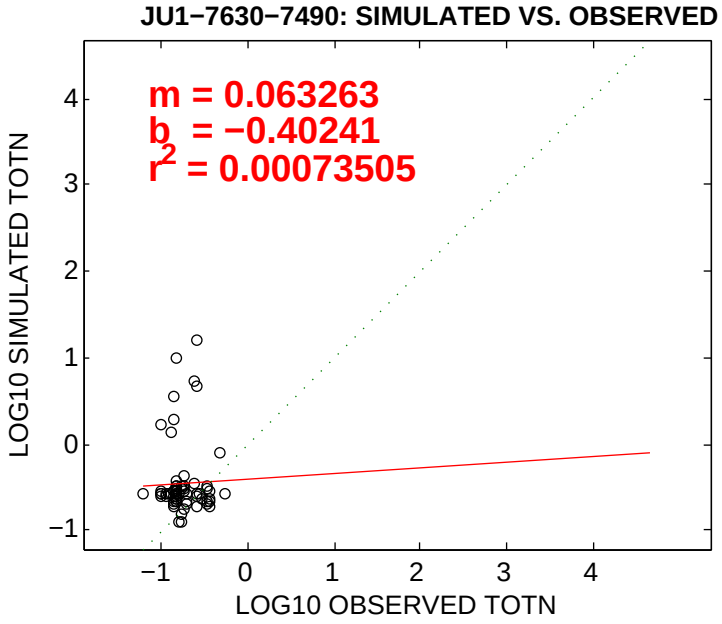


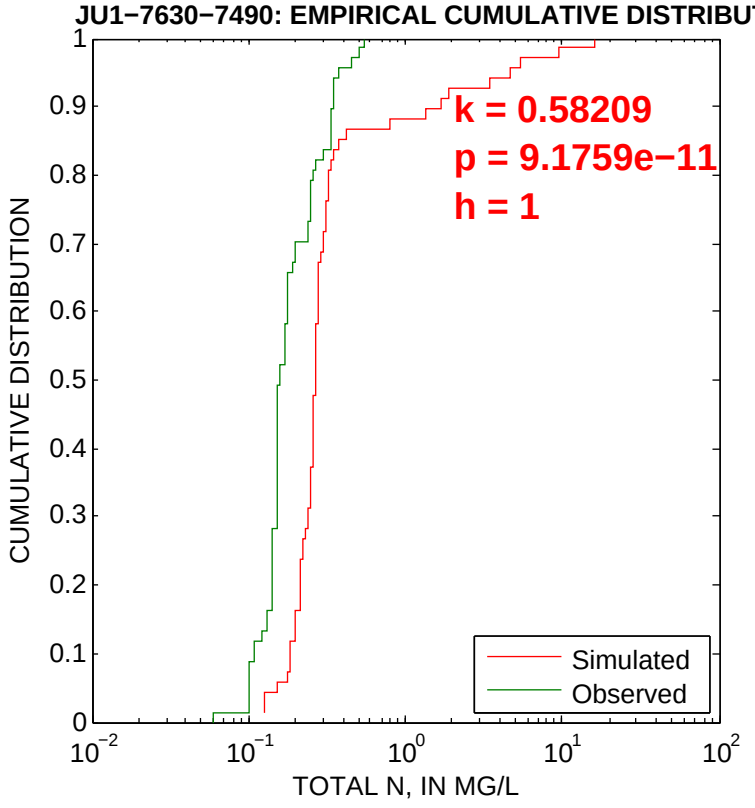












DATA SELECTION

scenario: P620171001WQ | file: TOTN.calib

plot: TOTN - total nitrogen

Dates: 1/1/1985 – 12/31/201

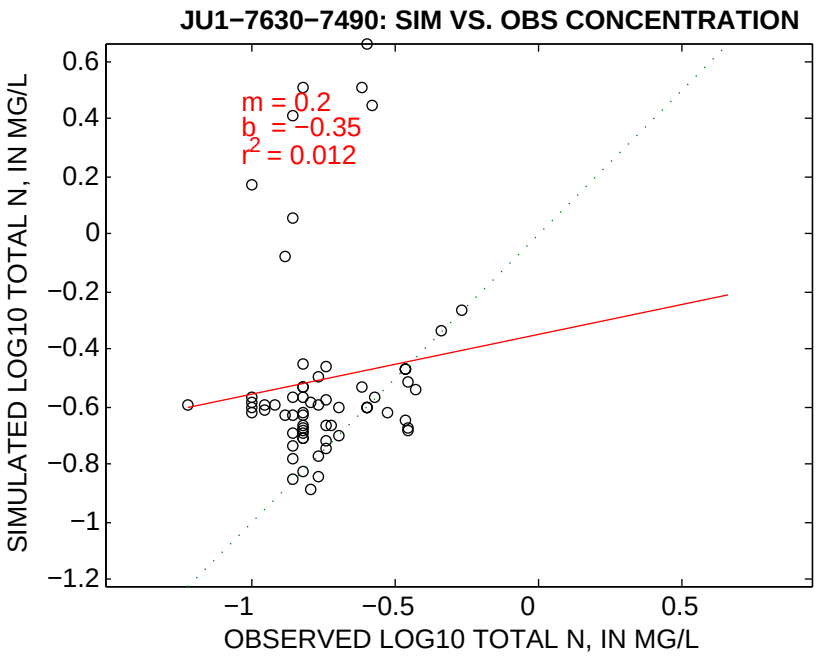
Drive: N/A | Directory: model | Observed: OBS20161101

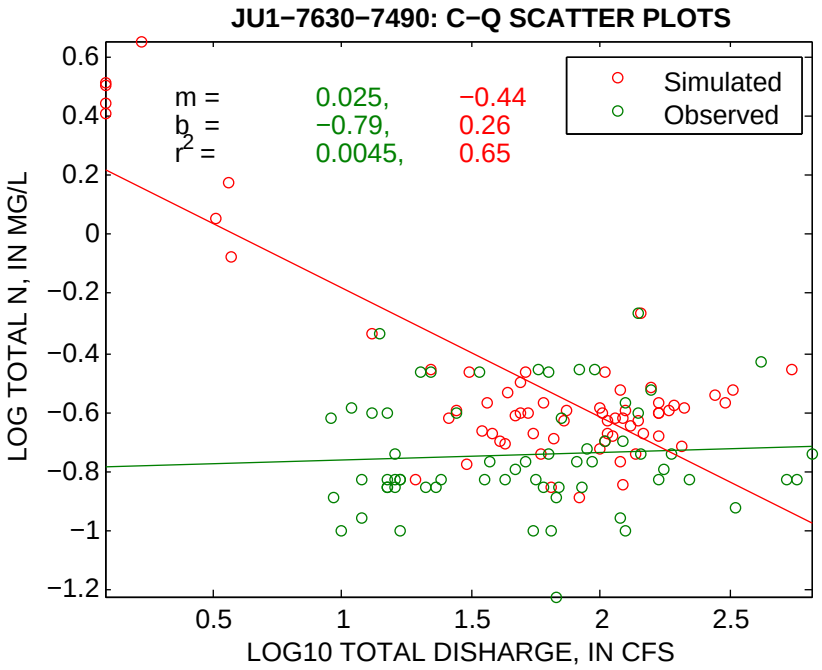
STATISTICS

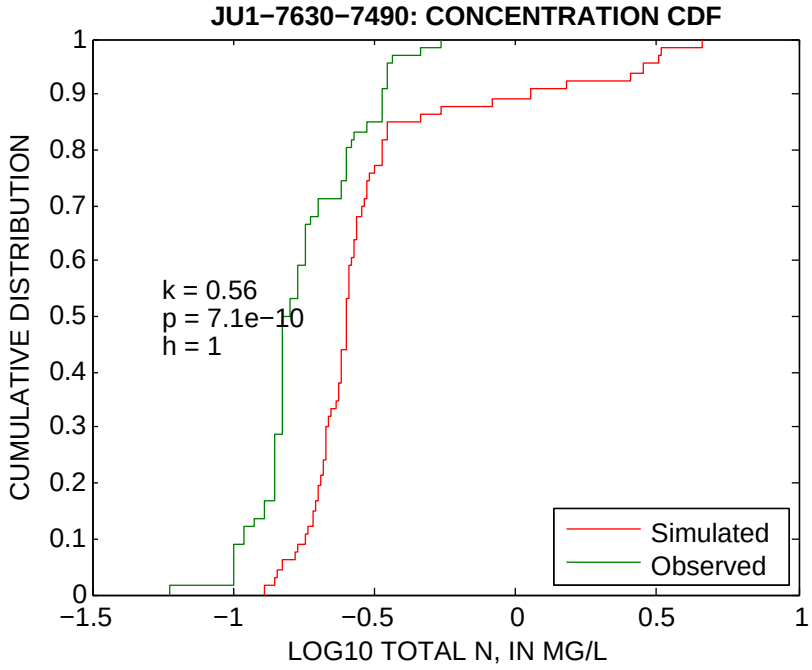
n	67	66
	observe	simulate
min	0.06	0
	-1.22185	-0.905249
mean	0.200896	0.893591
	-0.747172	-0.449675
media	0.16	0.26411
	-0.809894	-0.577919
max	0.54	16.189
	-0.267606	1.20922
varian	0.00991434	5.74855
	0.0334827	0.182308
JB	0.001	0.001
	0.214021	0.001
	ra	log
%	344.804	-39.8164
err.va	6.23319	0.30142
rel.std.err	628.705	9.00227
mod.eff	-627.705	-8.00227

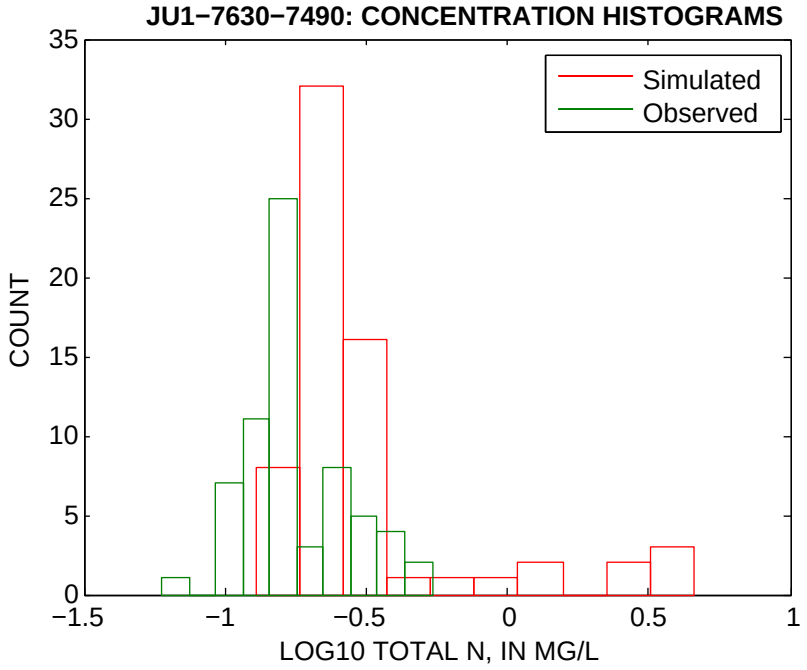
VERSION 2.1

ALL DATA
LOG10

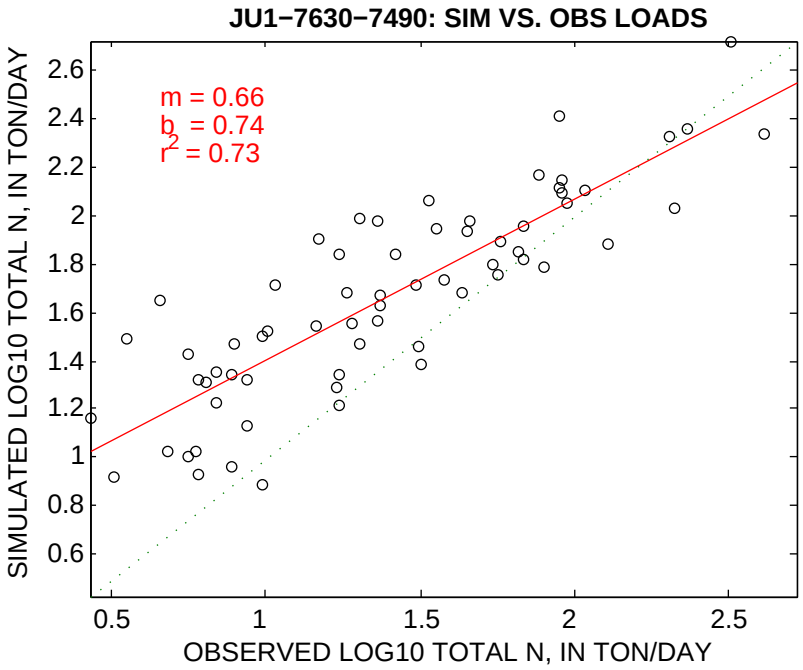


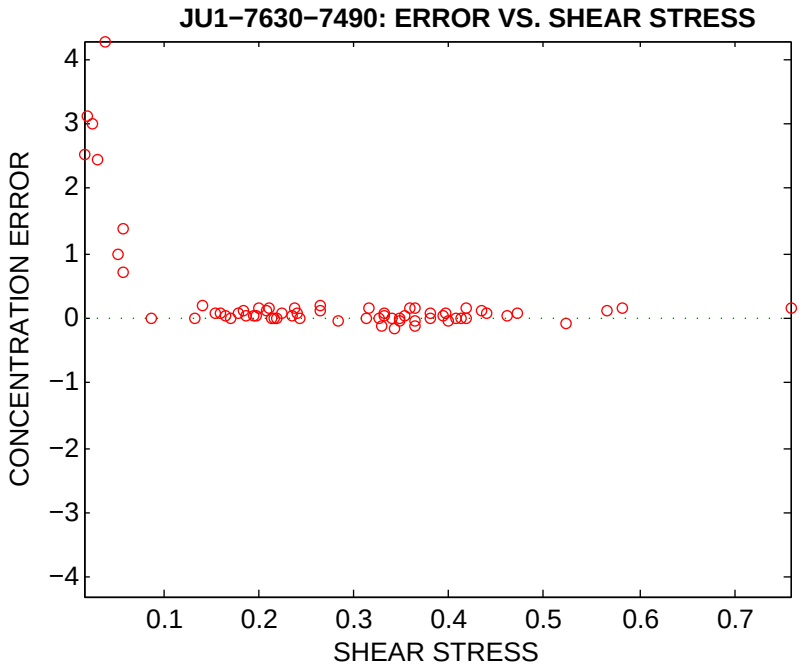


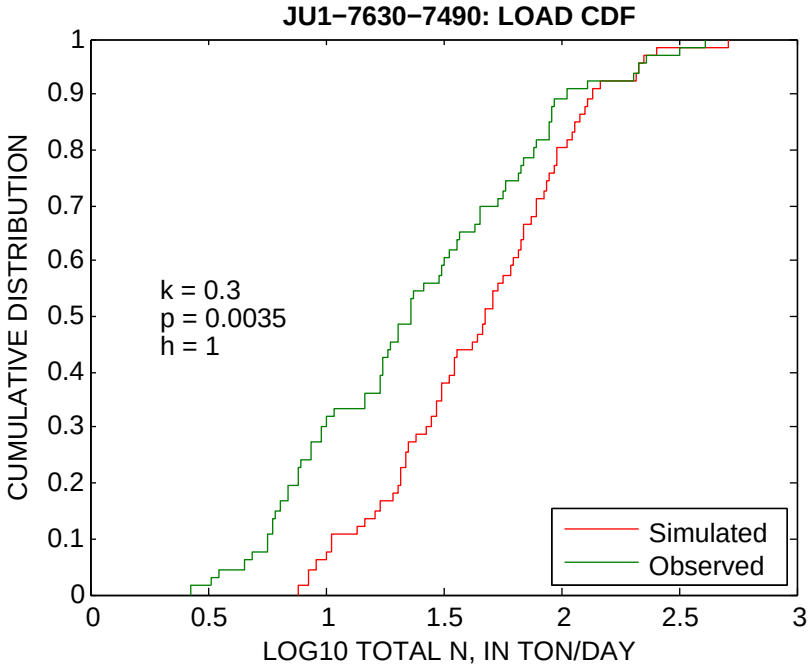


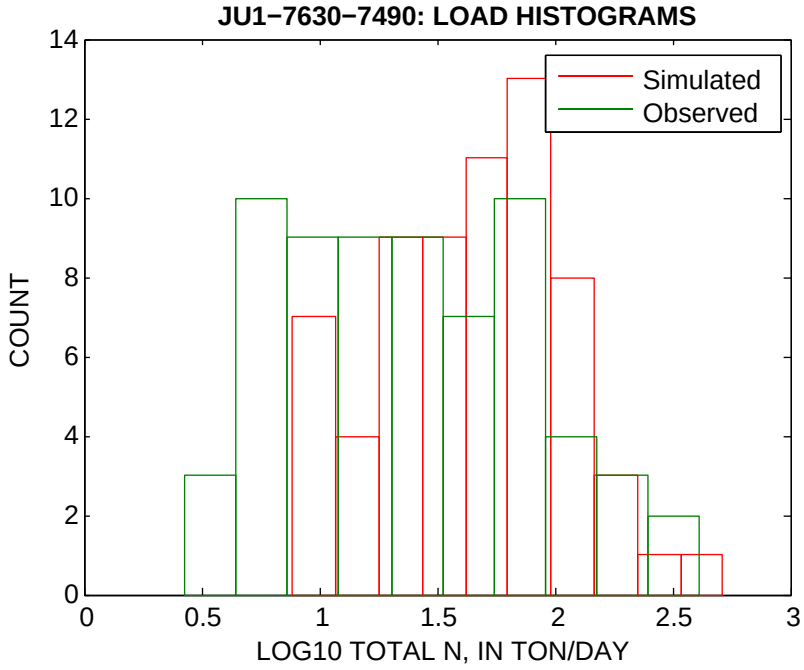


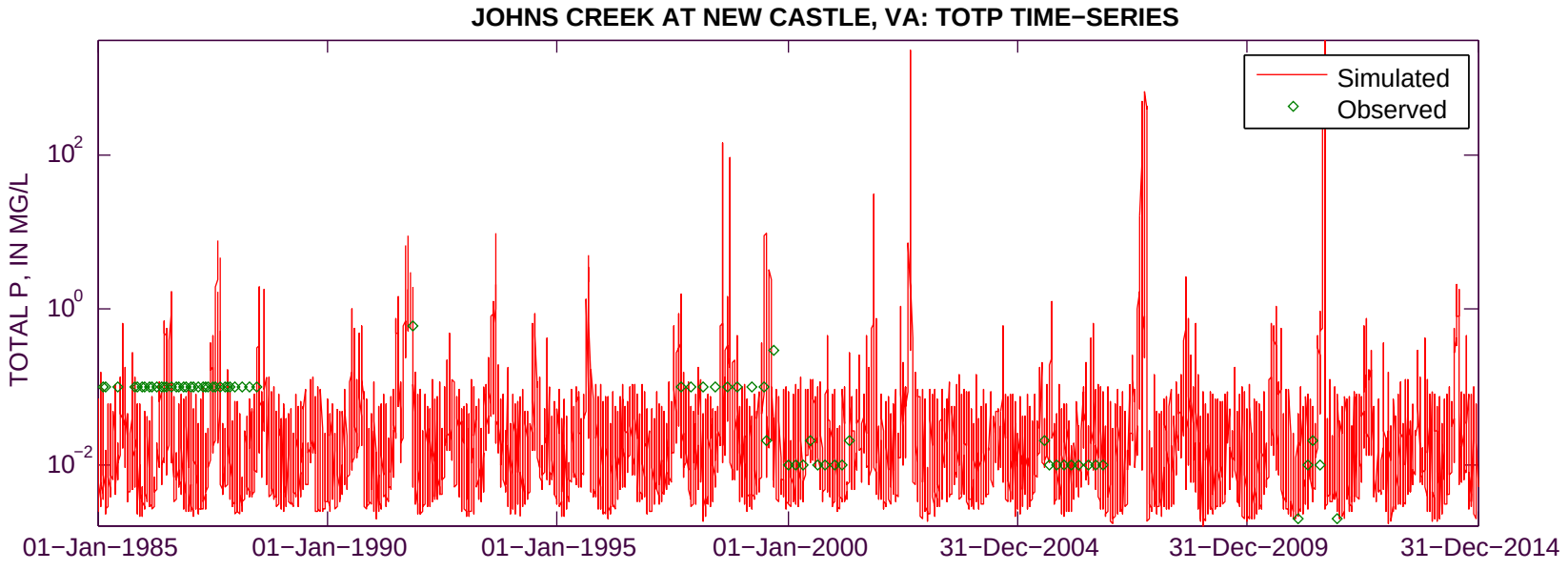
LOAD DATA
LOG10

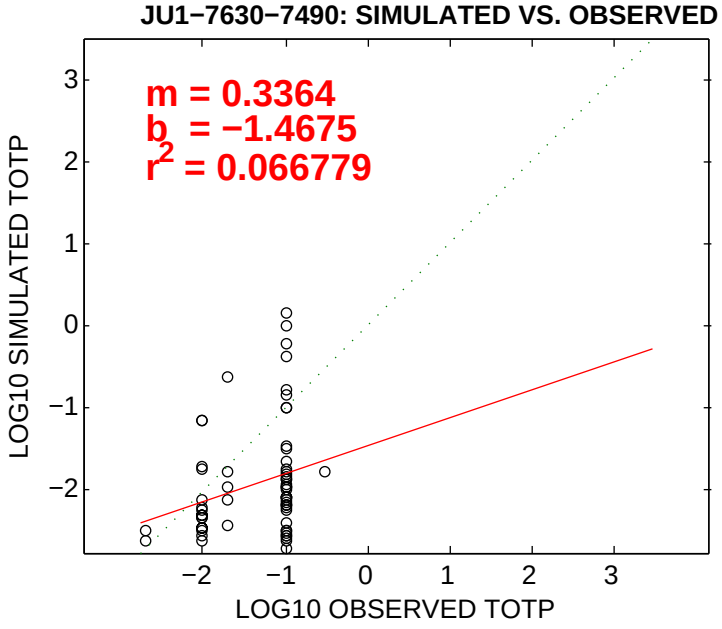


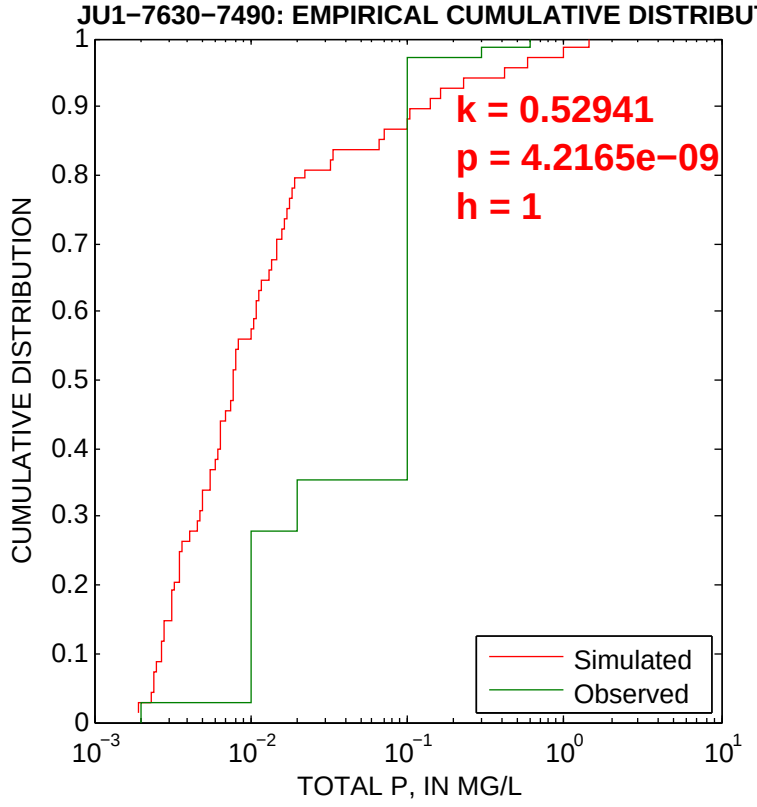












DATA SELECTION

scenario	file
P620171001WQ	TOTP.calib

plot: TOTP - total phosphorus

Dates: 1/1/1985 – 12/31/201

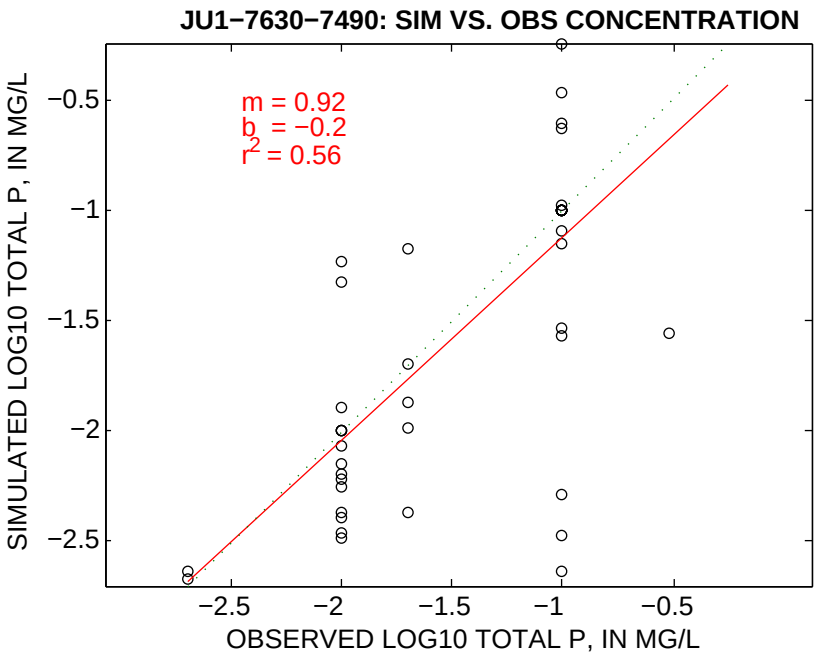
Drive	Directory	Observed
N/A	model	OBS20161101

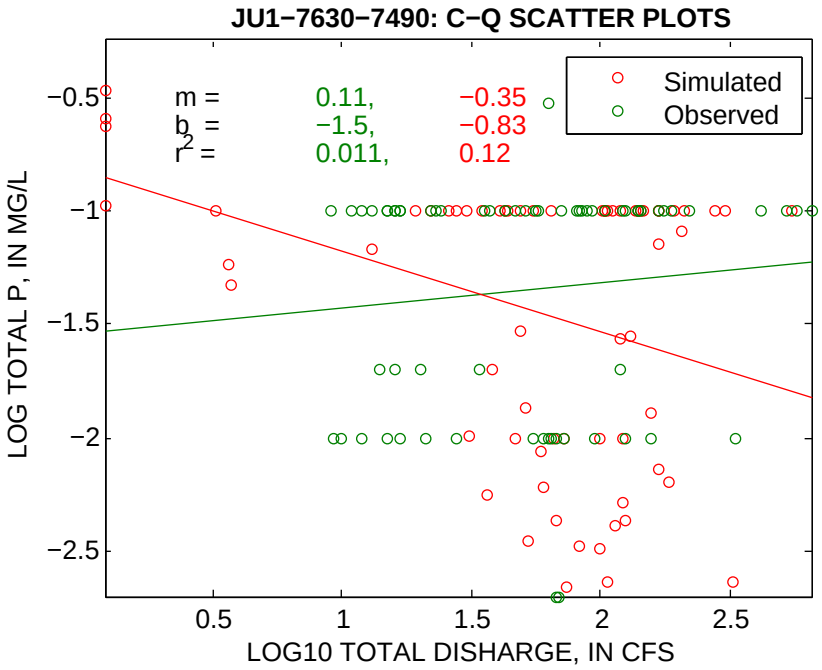
STATISTICS

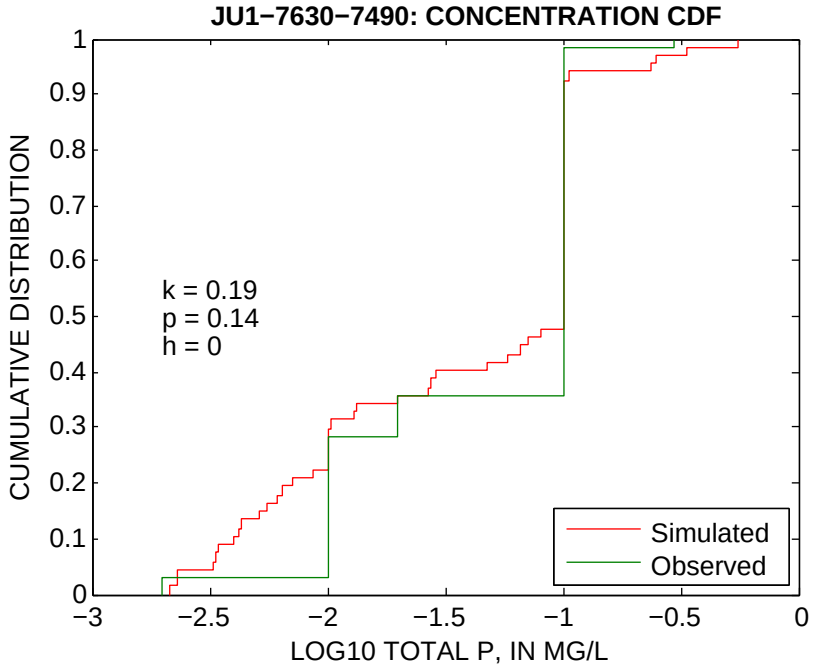
	n	68	67
		observe	simulate
min		0.002	0
		-2.69897	-2.71142
mean		0.0790294	0.0707714
		-1.34949	-1.92145
media		0.1	0.0077113
		-1	-2.1087
max		0.6	1.4624
		-0.522879	0.165066
varian		0.00670155	0.0510022
		0.261514	0.44317
JB		0.001	0.001
		0.019407	0.001563
		ra	log
%		-10.4493	42.384
err.va		0.0559442	0.86084
rel.std.err		8.34795	3.29175
mod.eff		-7.34795	-2.29175

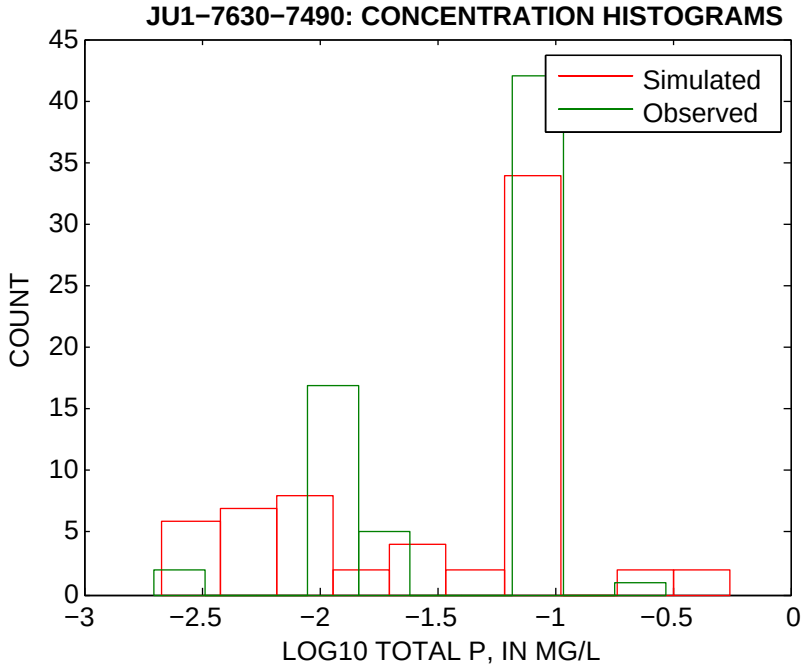
VERSION 2.1

ALL DATA
LOG10

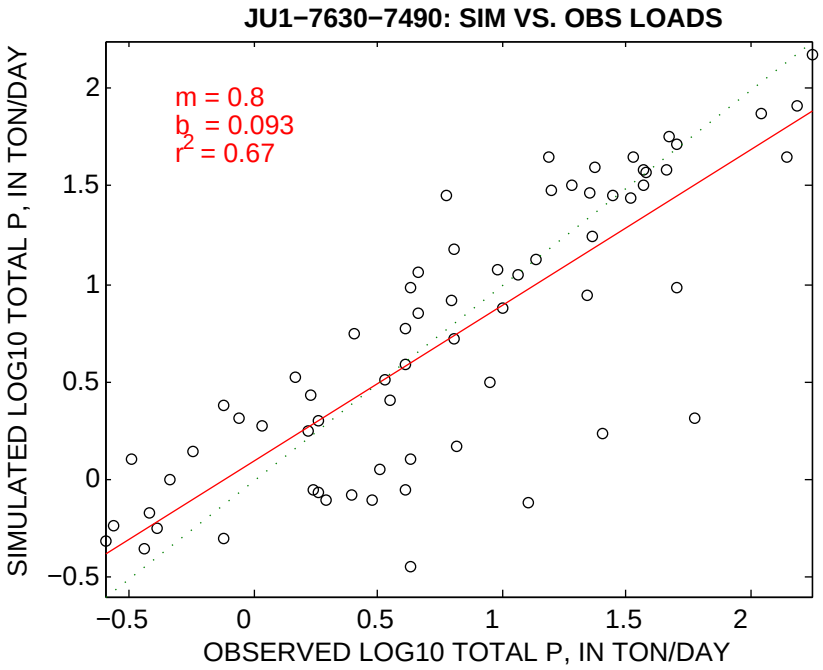


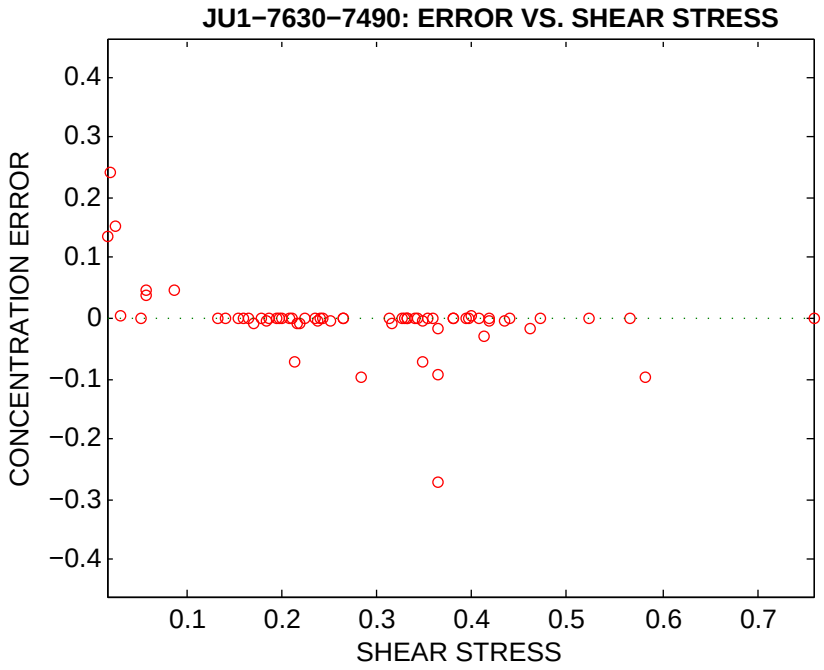


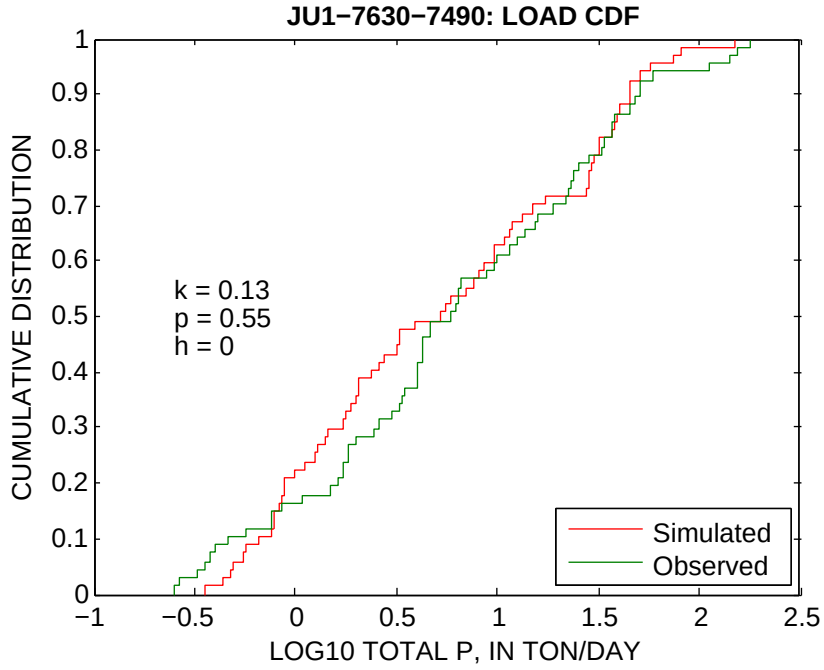


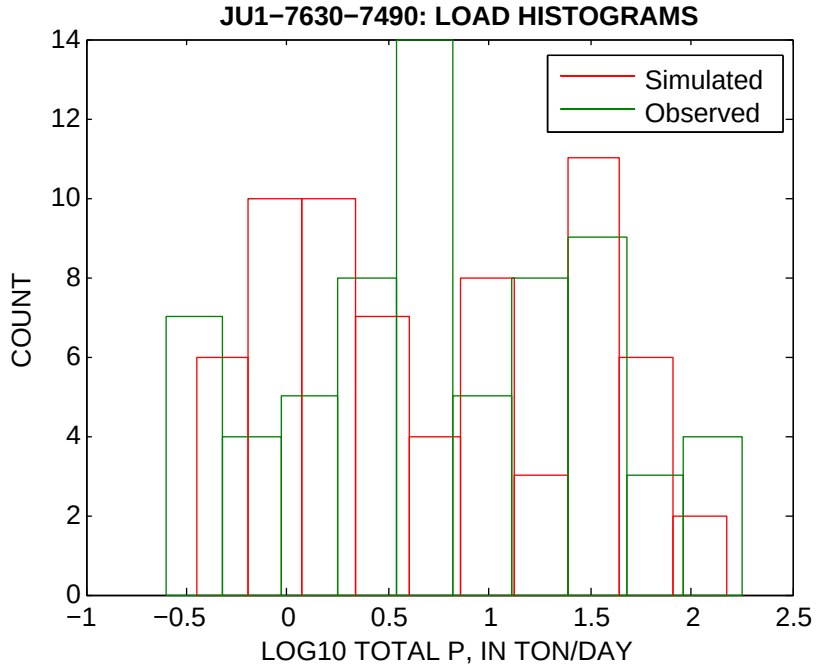


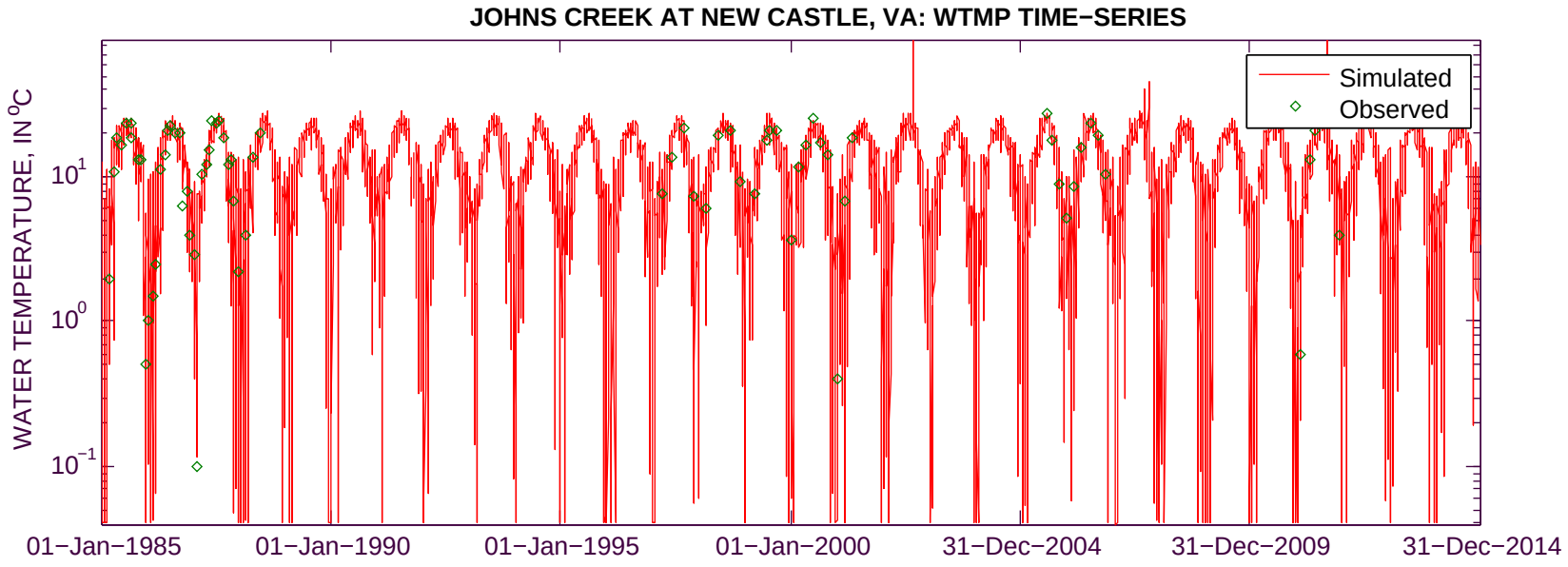
LOAD DATA
LOG10

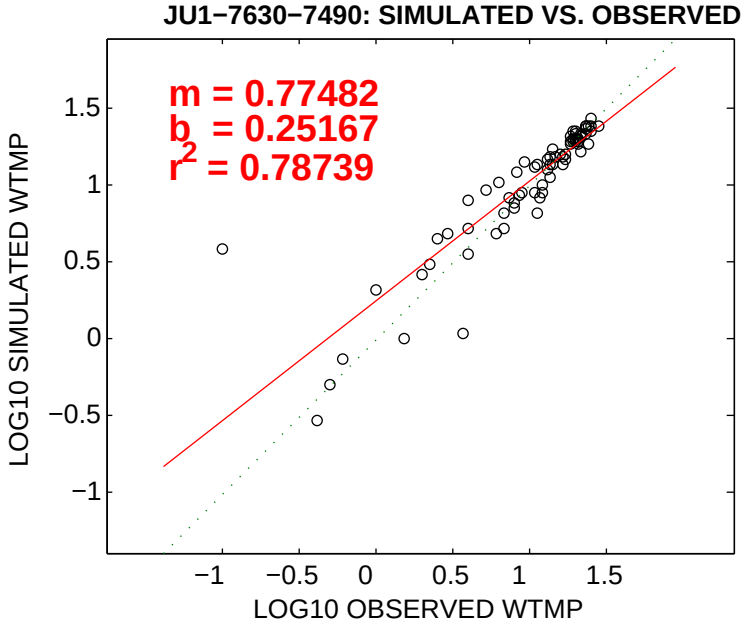


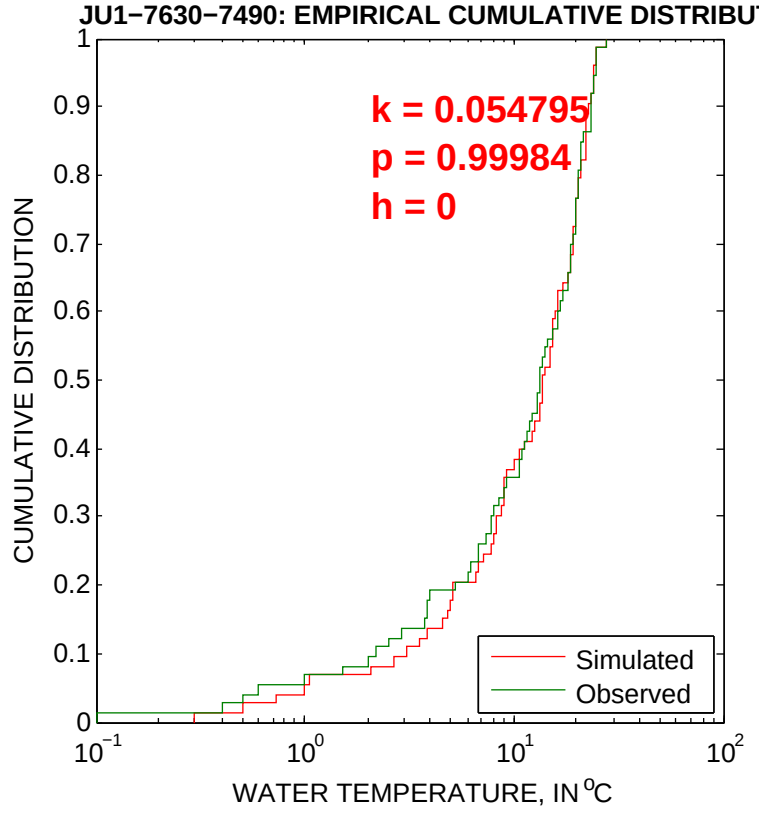












DATA SELECTION

scenario	file
P620171001WQ	WTMP.calib

plot: WTMP - water tempera...

Dates: 1/1/1985 – 12/31/201

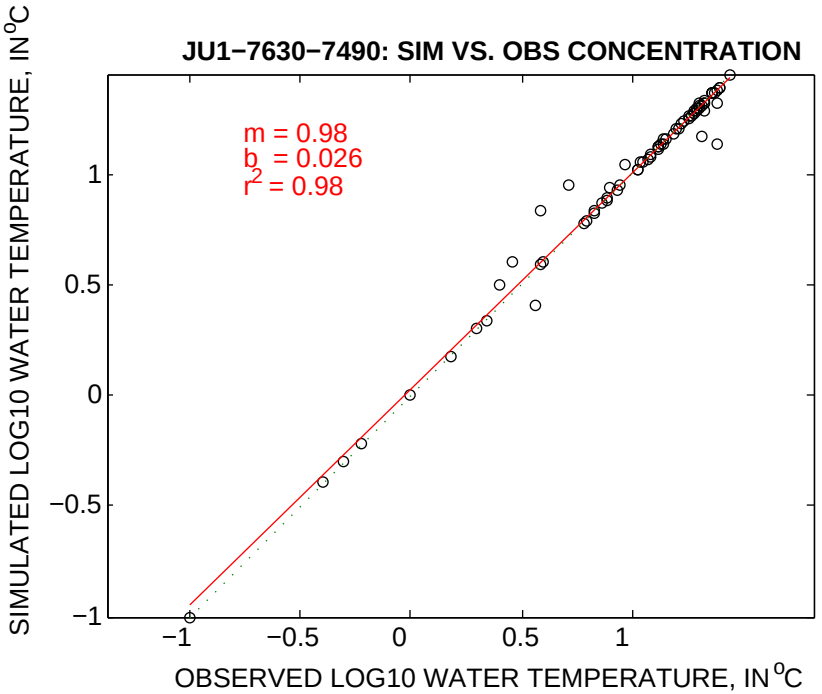
Drive	Directory	Observed
N/A	model	OBS20161101

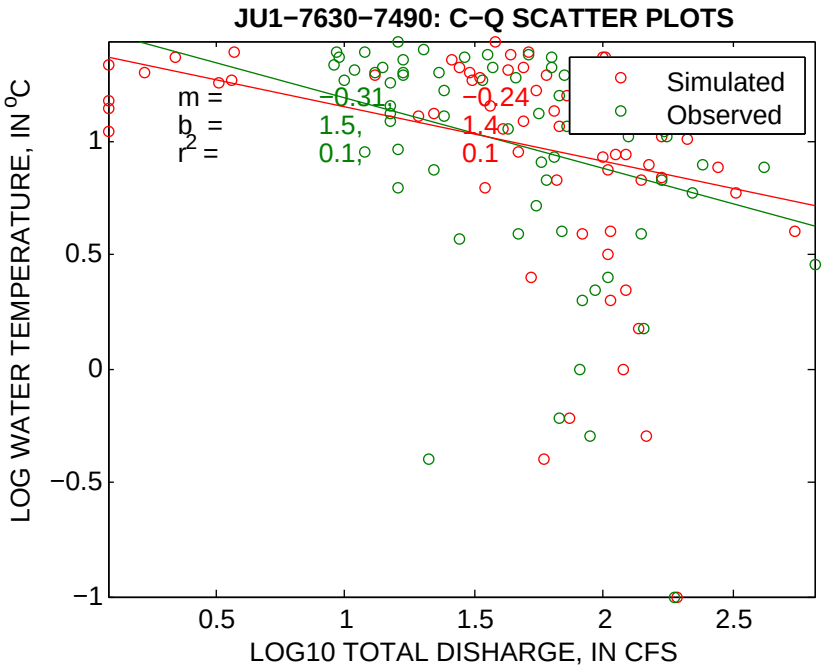
STATISTICS

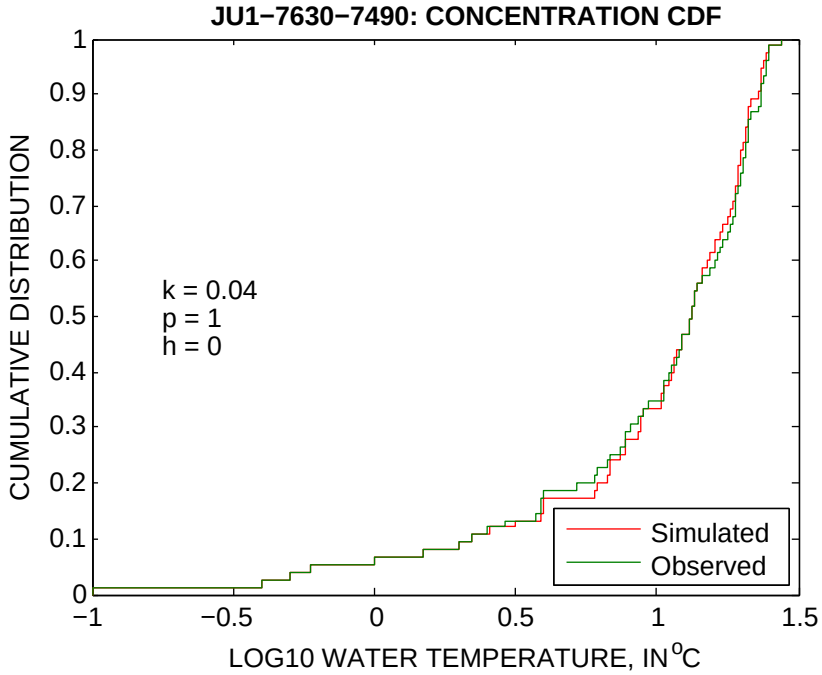
	n	observe	simulate
		73	73
min		0.1	0.29295
		-1	-0.533206
mean		13.2397	13.4618
		0.970176	1.00338
media		13.3	13.886
		1.12385	1.14258
max		27.7	27.622
		1.44248	1.44126
varian		59.3055	55.6795
		0.231593	0.176577
JB		0.067594	0.073748
		0.001	0.001
		ra	log
%		1.67717	3.42213
err.va		4.72157	0.0504035
rel.std.err		0.796143	0.217638
mod.eff		0.920386	0.782362

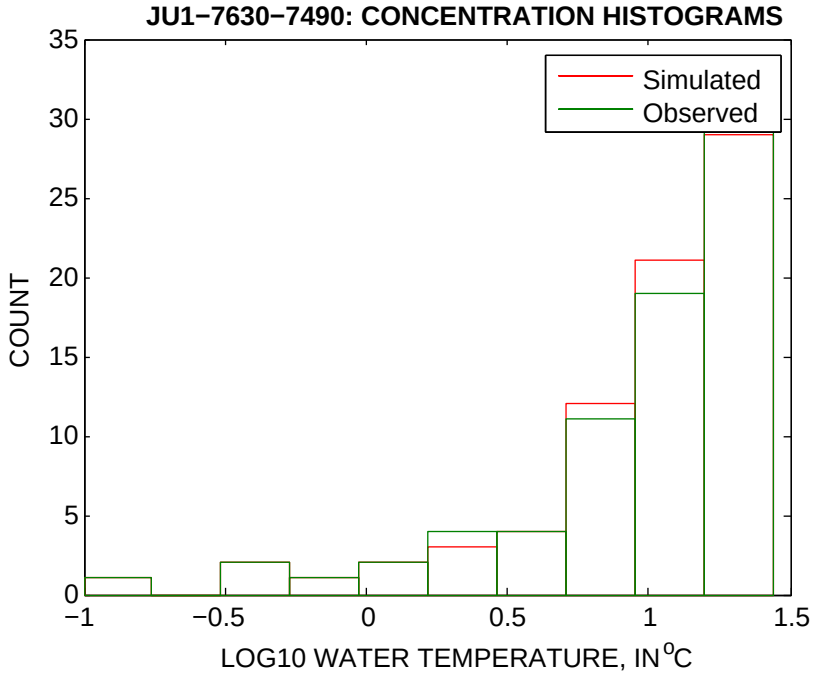
VERSION 2.1

ALL DATA
LOG10

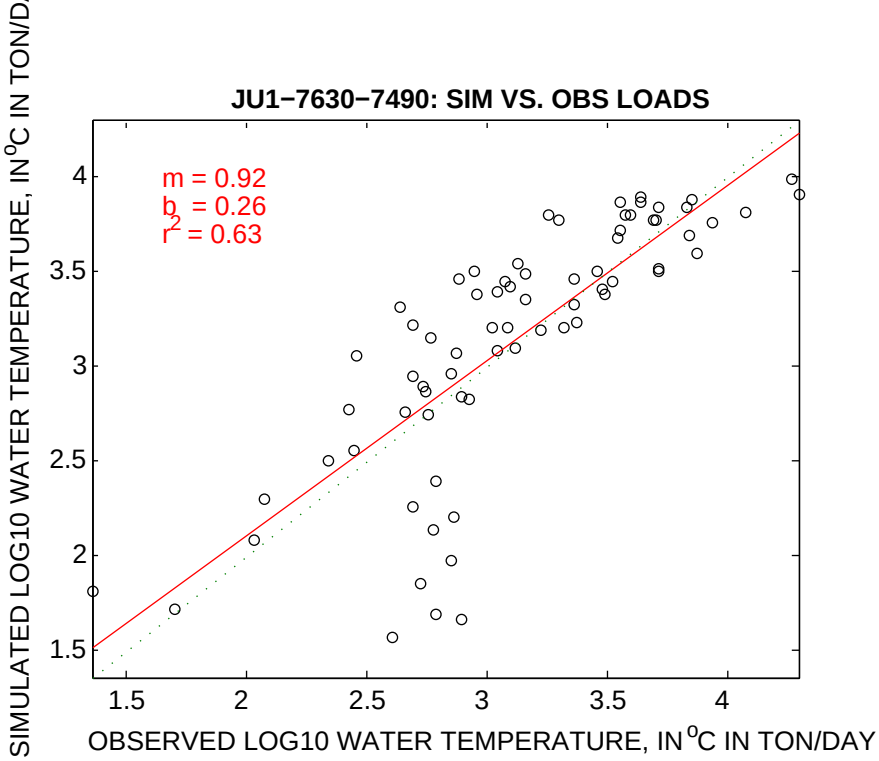


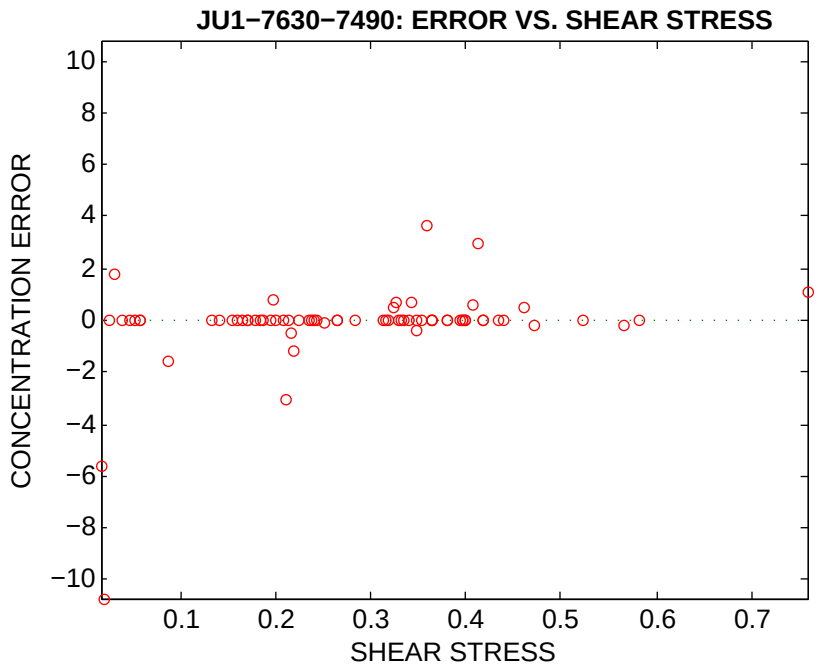


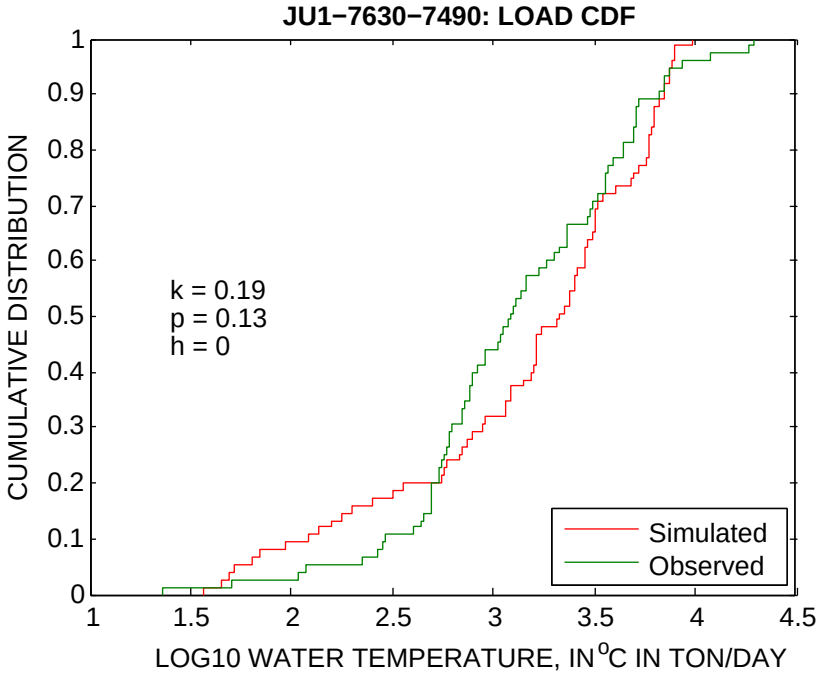


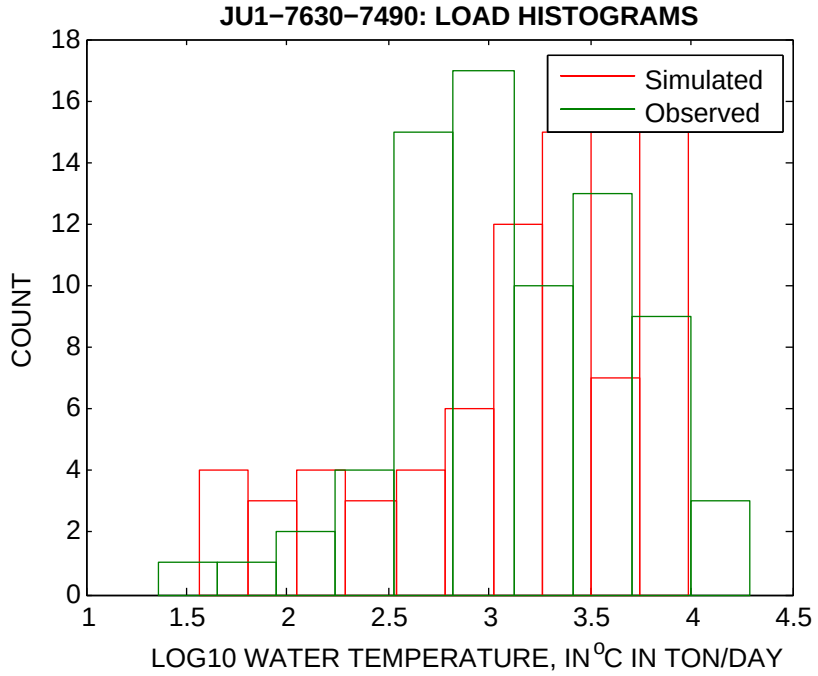


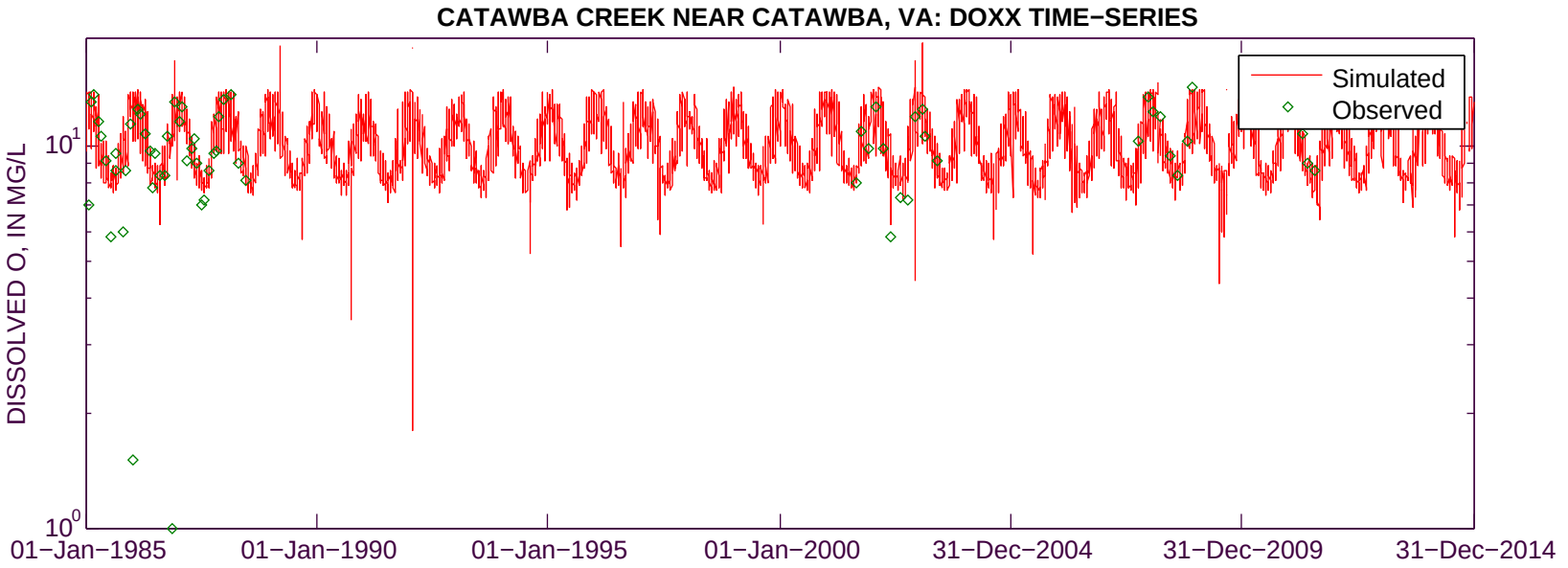
LOAD DATA
LOG10

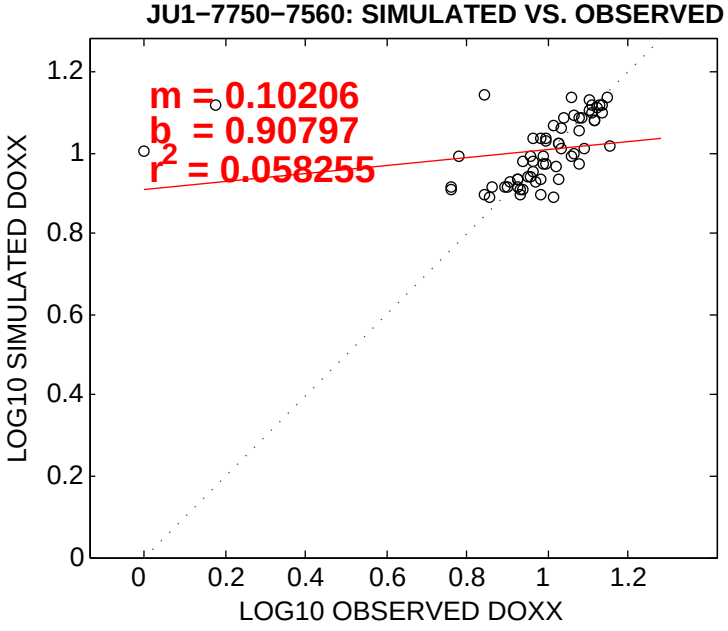


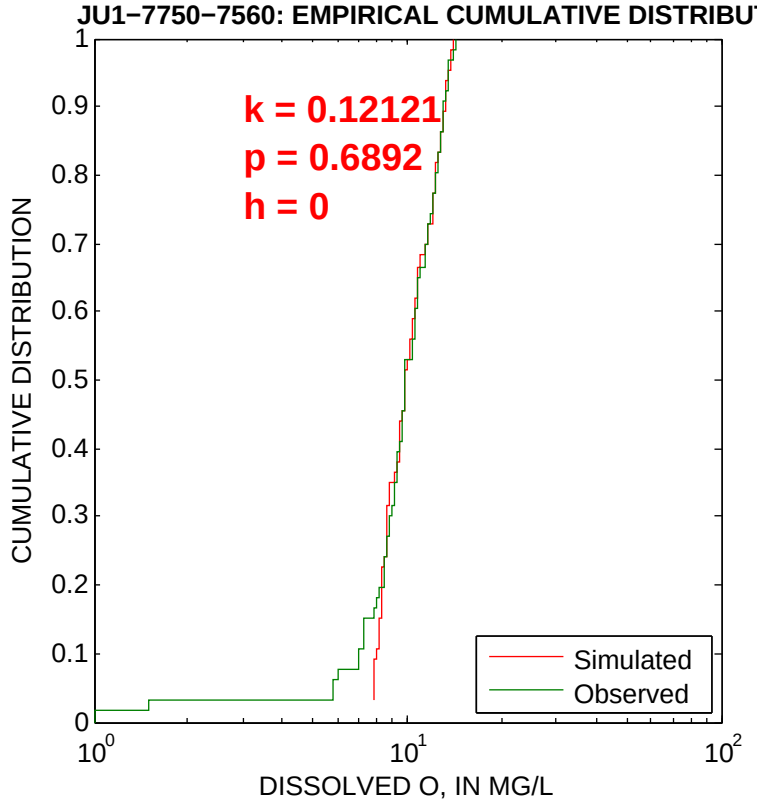












DATA SELECTION

scenario	file
P620171001WQ	DOXX.calib

plot: DOXX - dissolved oxygen

Dates: 1/1/1985 – 12/31/201

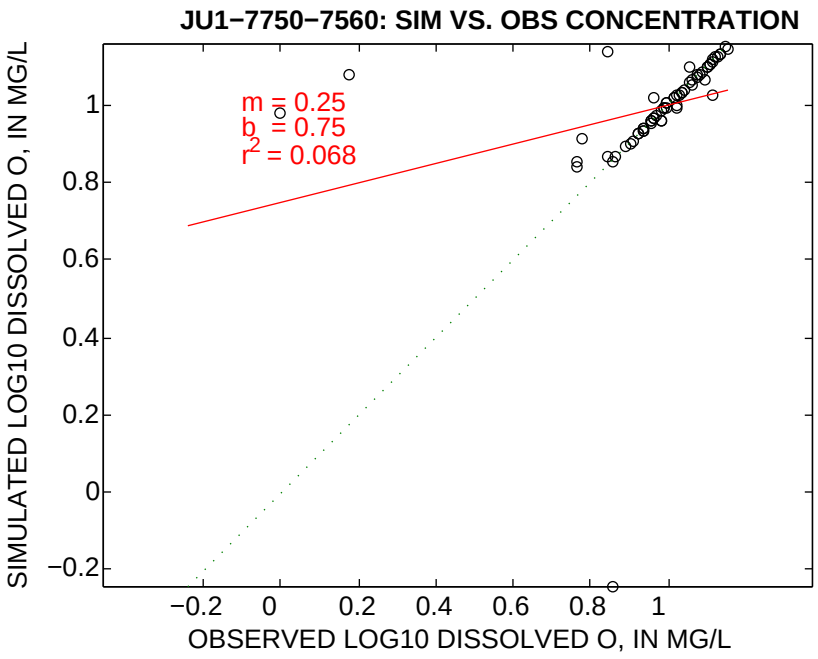
Drive	Directory	Observed
N/A	model	OBS20161101

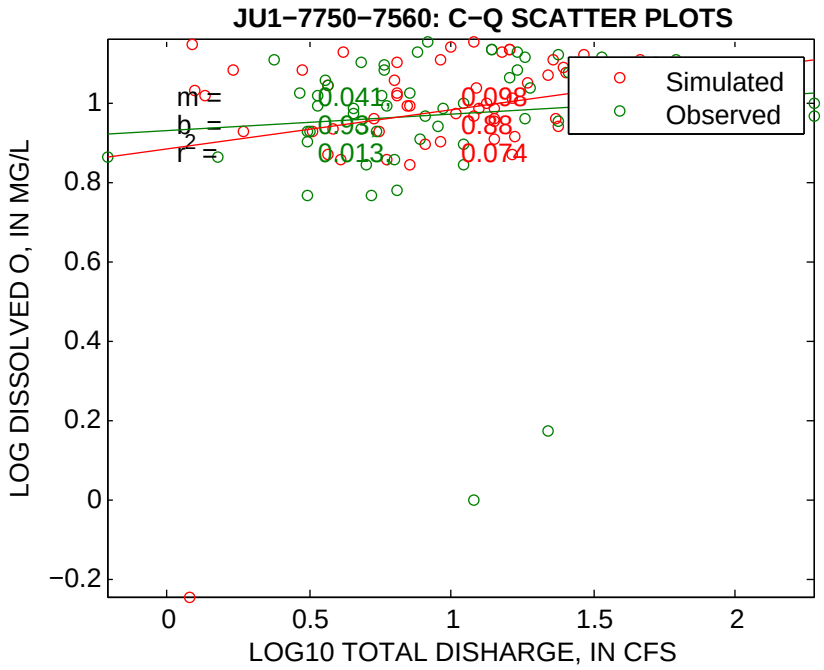
STATISTICS

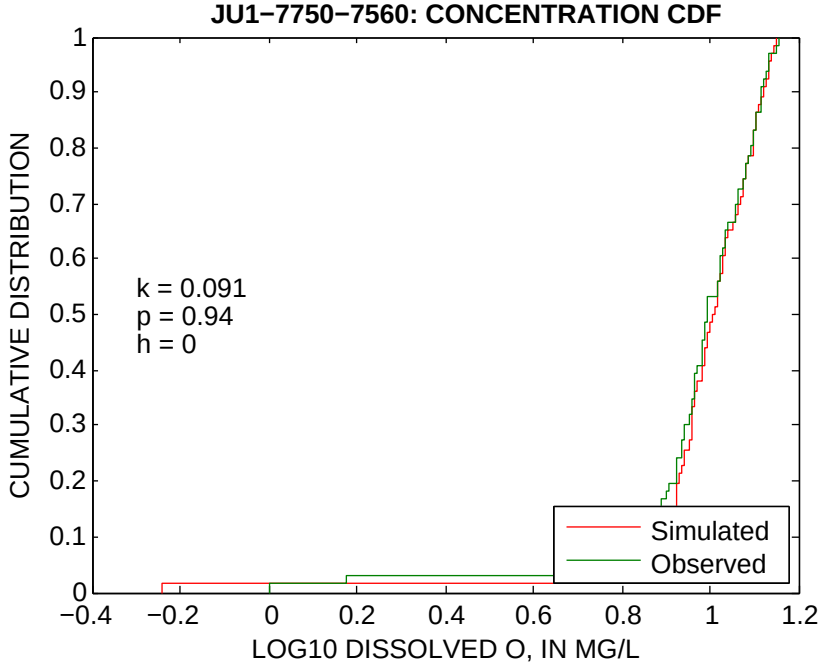
	n	66	64
		observe	simulate
min		1	0
		0	0.891844
mean		9.9447	10.0182
		0.970906	1.00706
media		9.875	9.8234
		0.994536	0.996255
max		14.3	13.918
		1.15534	1.14358
varian		6.98378	6.67392
		0.0347091	0.00620653
JB		0.005036	0.001
		0.001	0.055965
		ra	log
%		0.738889	3.72428
err.va		9.09744	0.0351588
rel.std.err		1.30265	1.01296
mod.eff		-0.302653	-0.0129577

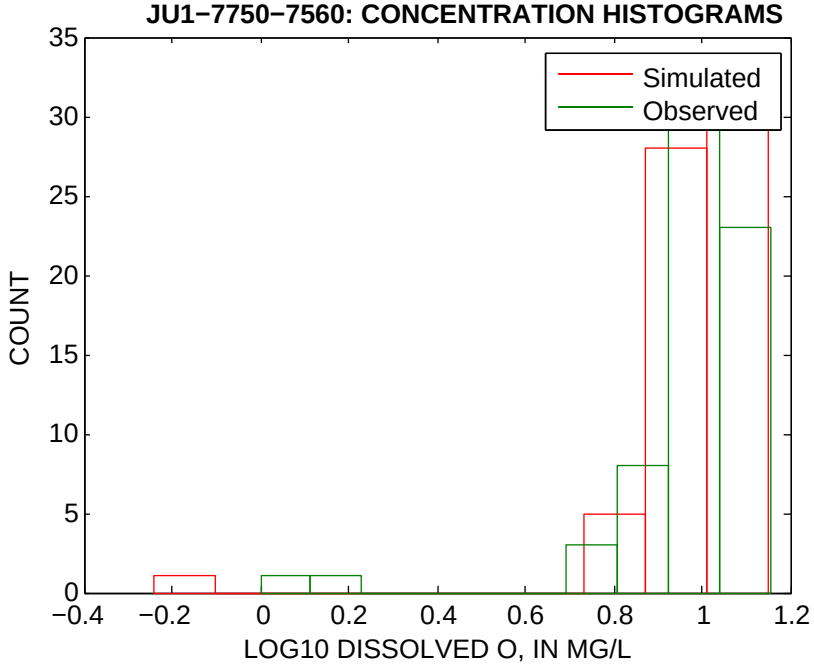
VERSION 2.1

ALL DATA
LOG10

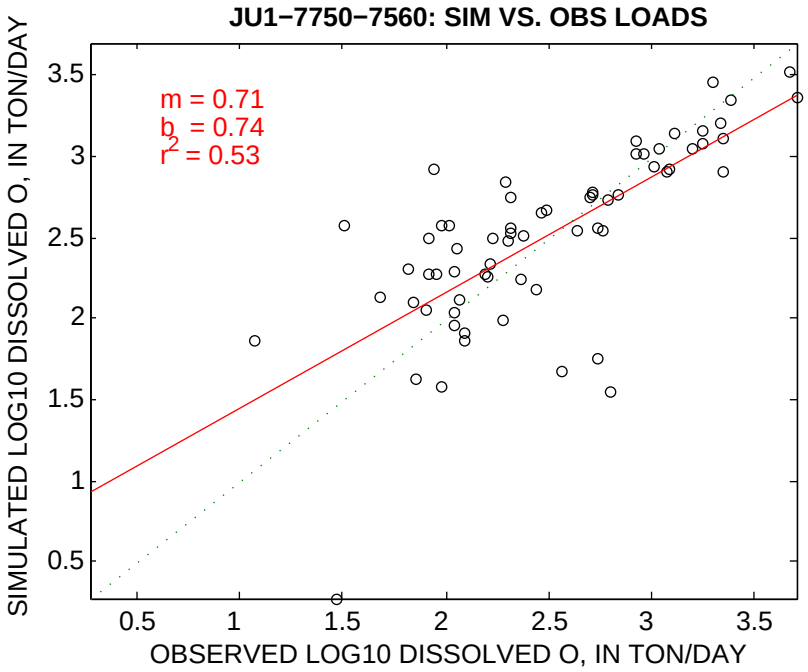


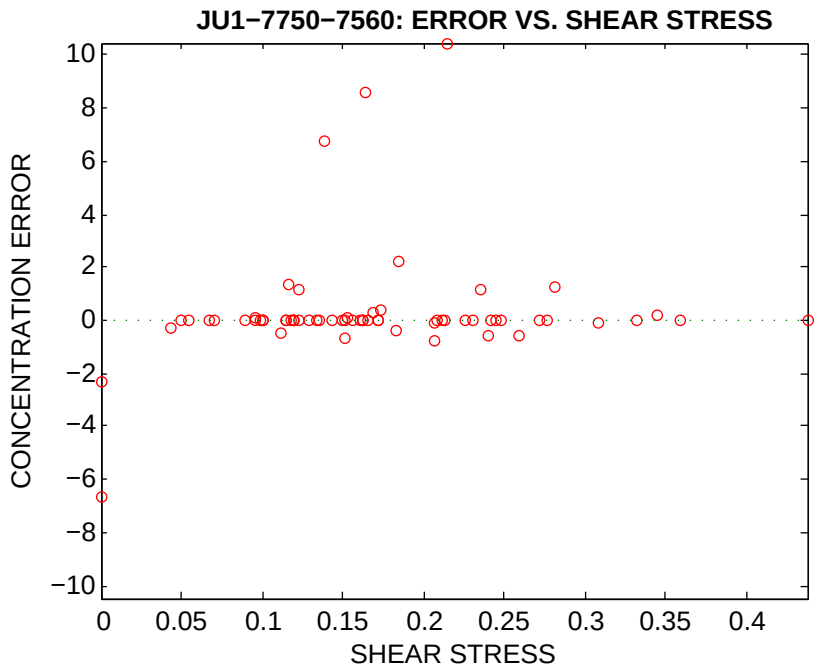


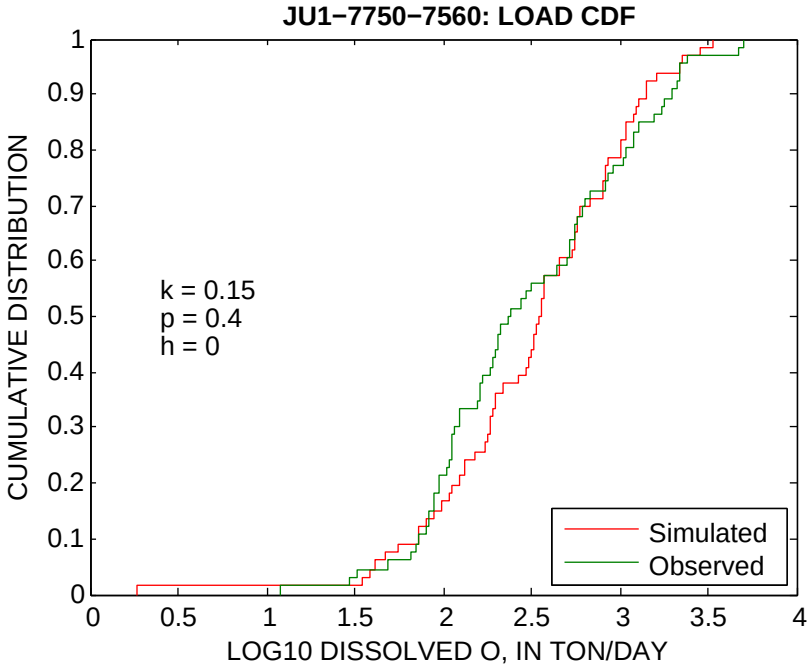


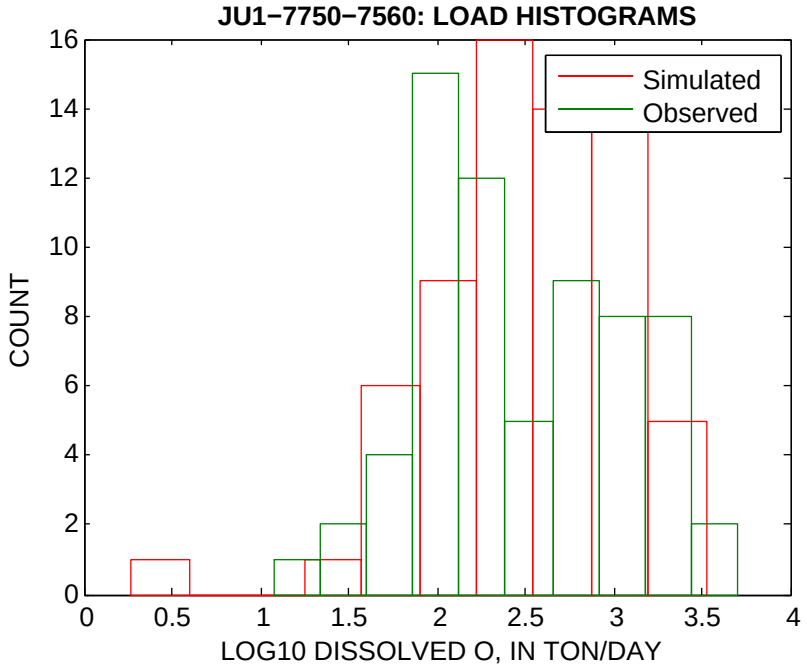


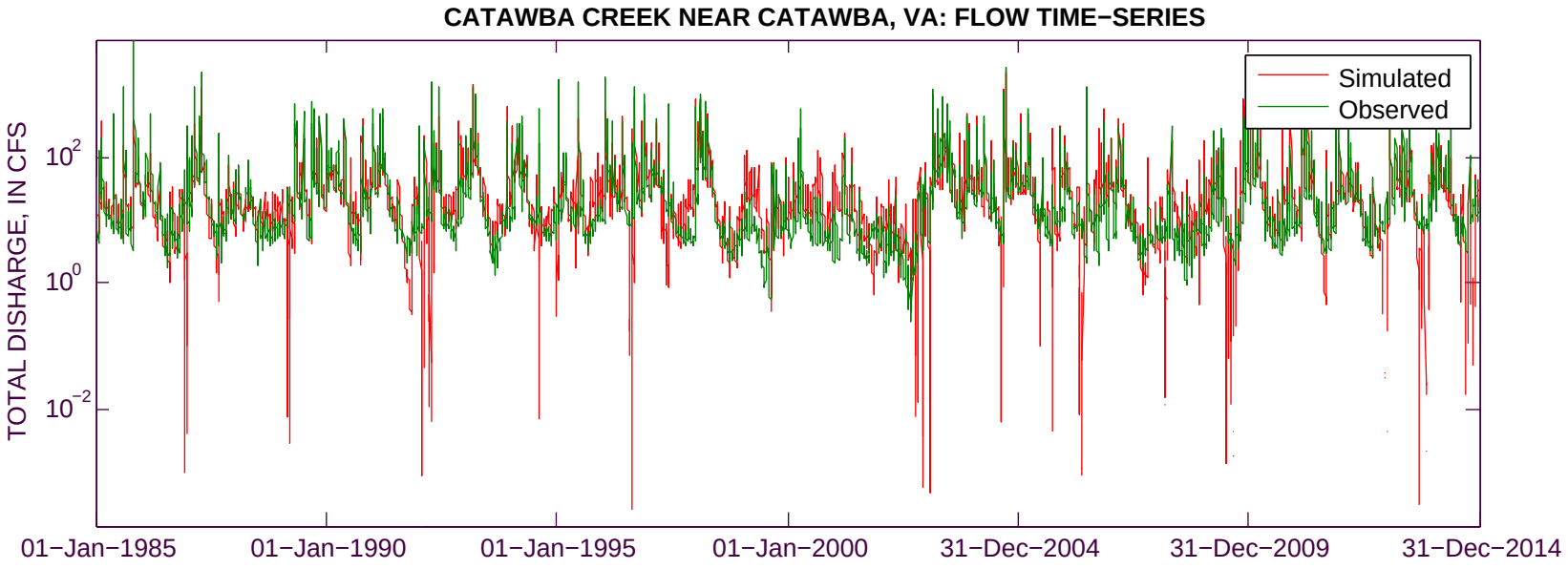
LOAD DATA
LOG10

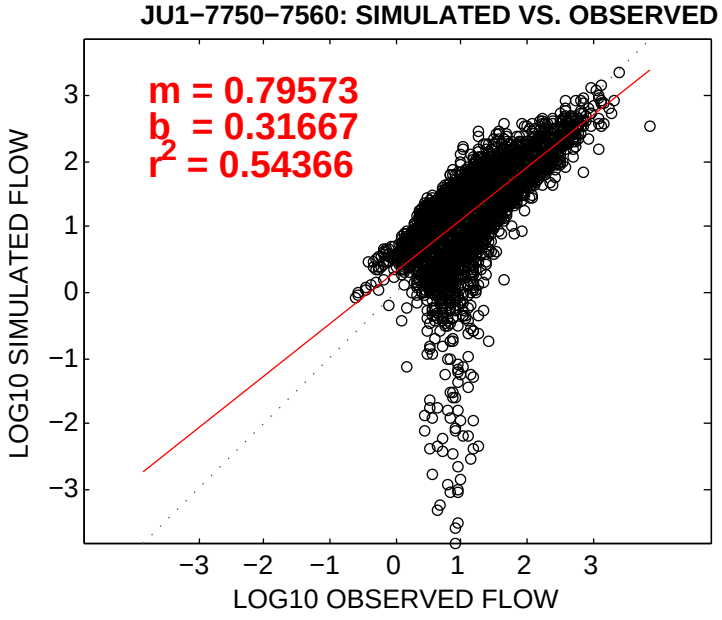


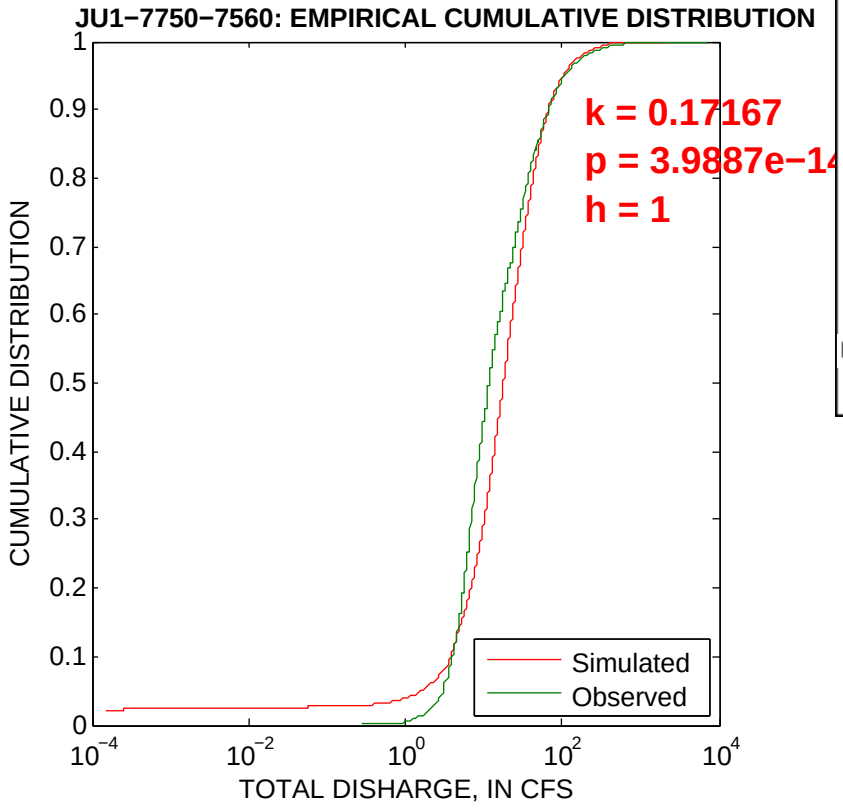












DATA SELECTION

scenario	file
P620171001WQ	FLOW.calib

plot: FLOW - total discharge

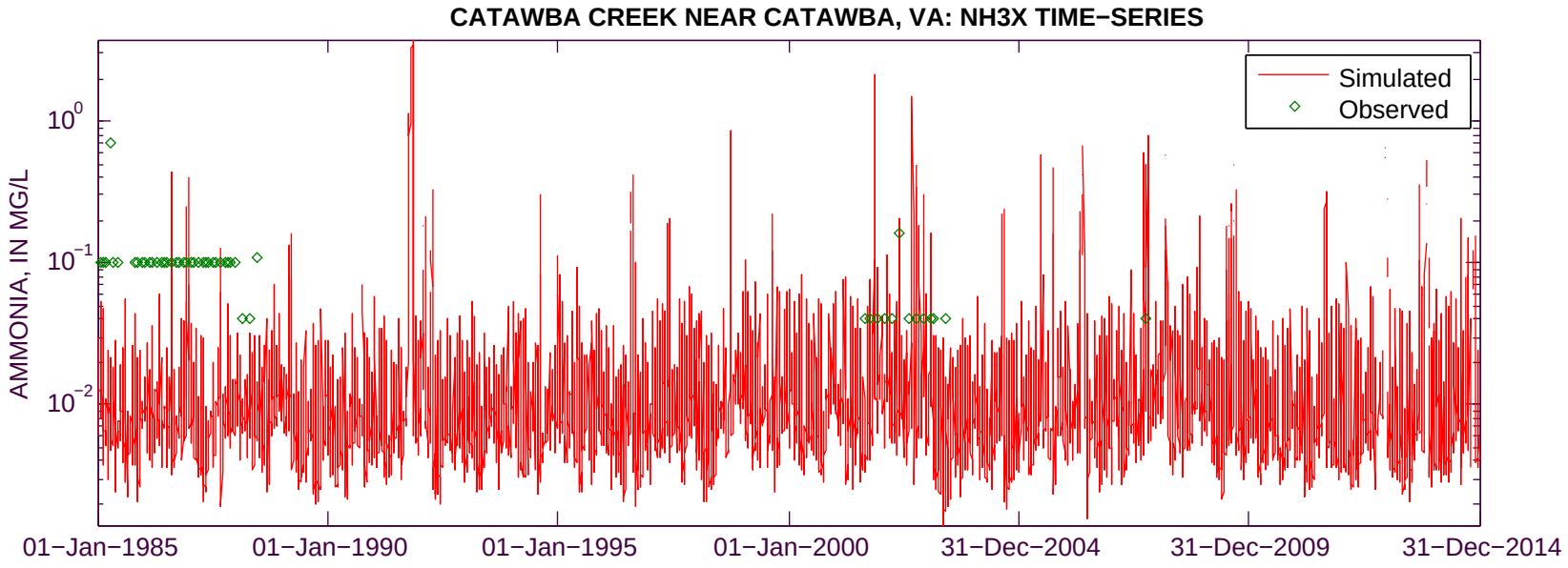
Dates 1/1/1985 12/31/201

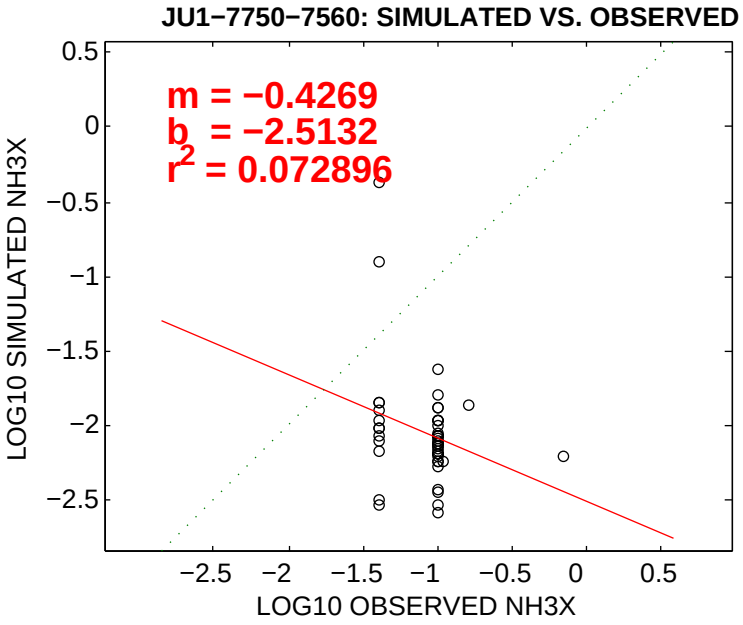
Drive	Directory	Observed
N/A	model	OBS20161101

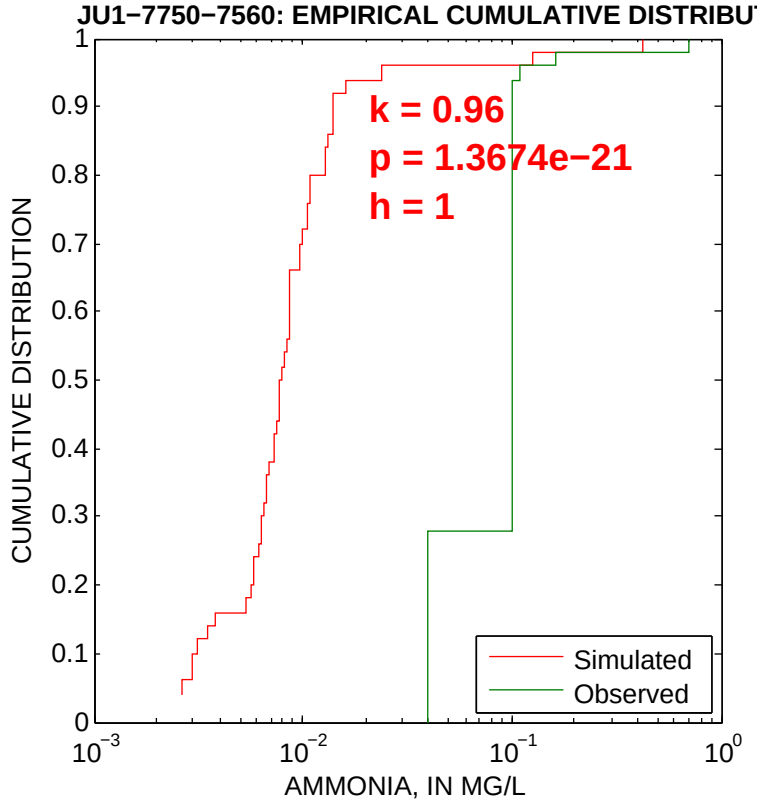
STATISTICS

n	10957	10712
	observe	simulate
min	0.25	0
	-0.60206	-3.83535
mean	33.4747	33.1479
	1.16217	1.24144
media	12	17.914
	1.07918	1.26567
max	7400	2170.1
	3.86923	3.33648
varian	12423.2	3890.52
	0.250294	0.291508
JB	0.001	0.001
	0.001	0.001
	ra	log
%	-0.97636	6.82113
err.va	6809.2	0.149754
rel.std.err	0.548105	0.598314
mod.eff	0.451895	0.401686

VERSION 2.1







DATA SELECTION

scenario	file
P620171001WQ	NH3X.calib

plot: NH3X - ammonia

Dates: 1/1/1985 – 12/31/201

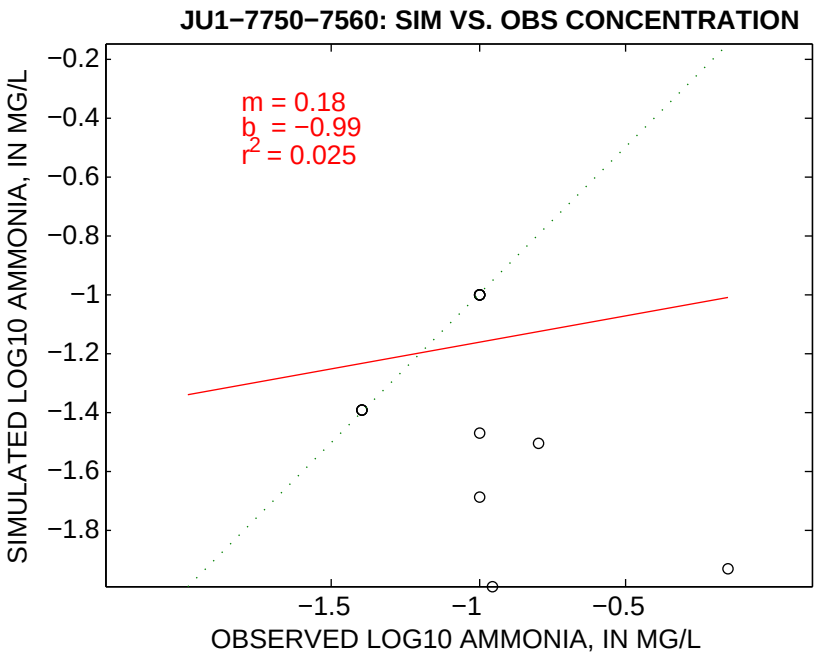
Drive	Directory	Observed
N/A	model	OBS20161101

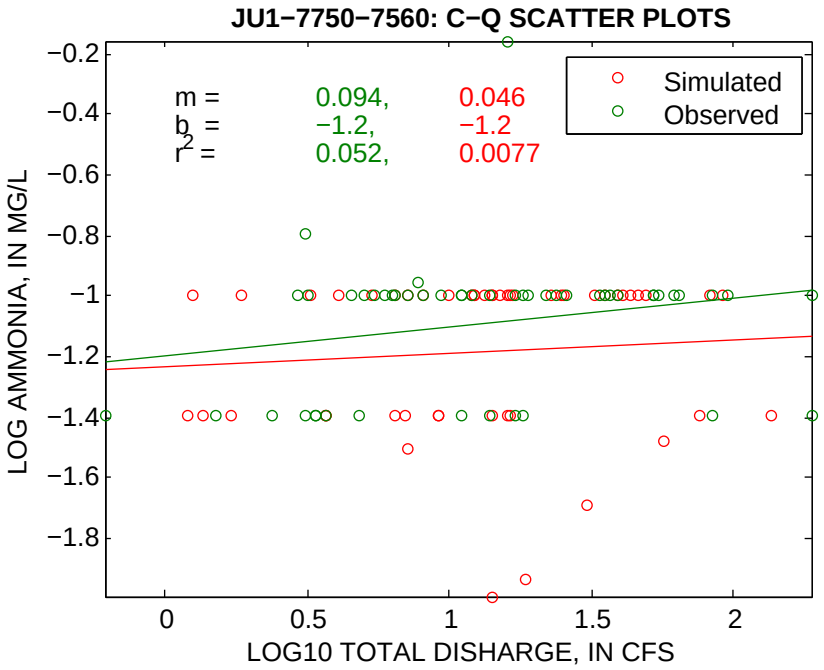
STATISTICS

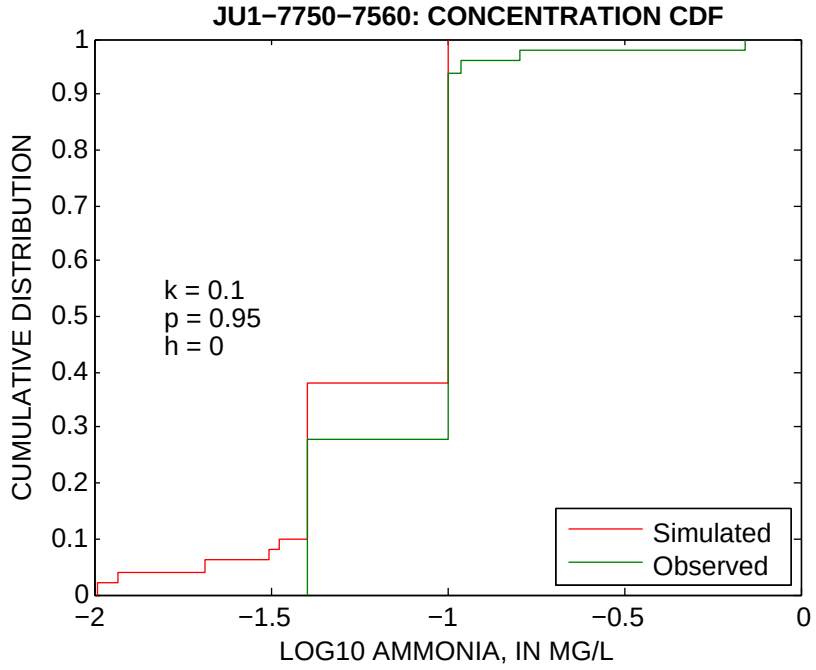
	n	50	48
		observe	simulate
min		0.04	0
		-1.39794	-2.58172
mean		0.0966	0.0188821
		-1.08505	-2.05
media		0.1	0.00781625
		-1	-2.09352
max		0.7	0.42466
		-0.154902	-0.371959
varian		0.00843922	0.00372021
		0.052531	0.131331
JB		0.001	0.001
		0.001	0.001
		ra	log
%		-80.4533	88.9311
err.va		0.0195945	1.17965
rel.std.err		2.32184	22.4563
mod.eff		-1.32184	-21.4563

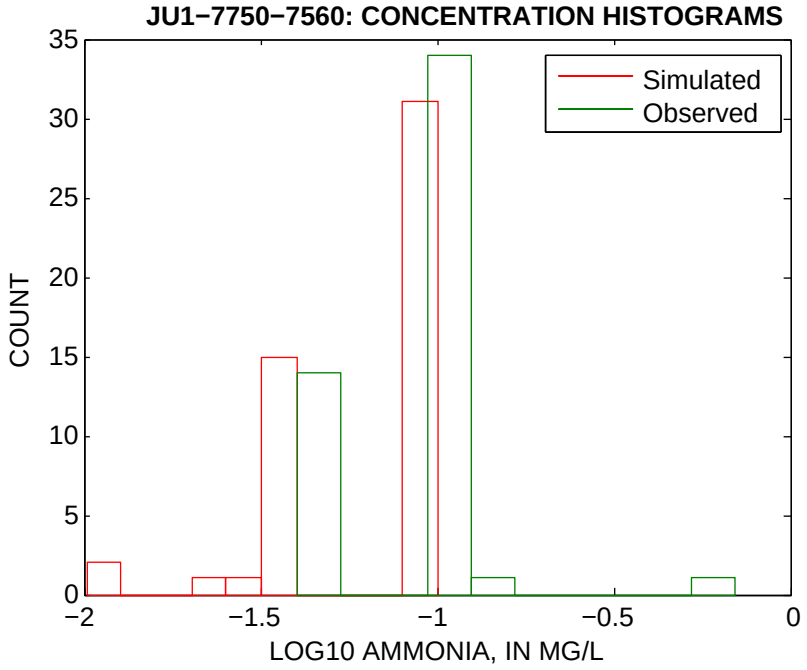
VERSION

ALL DATA
LOG10

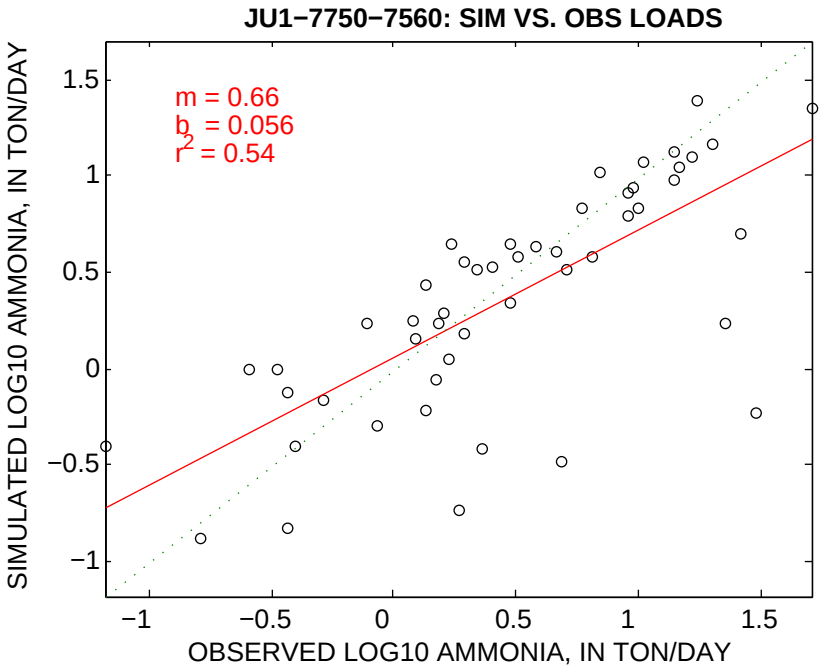




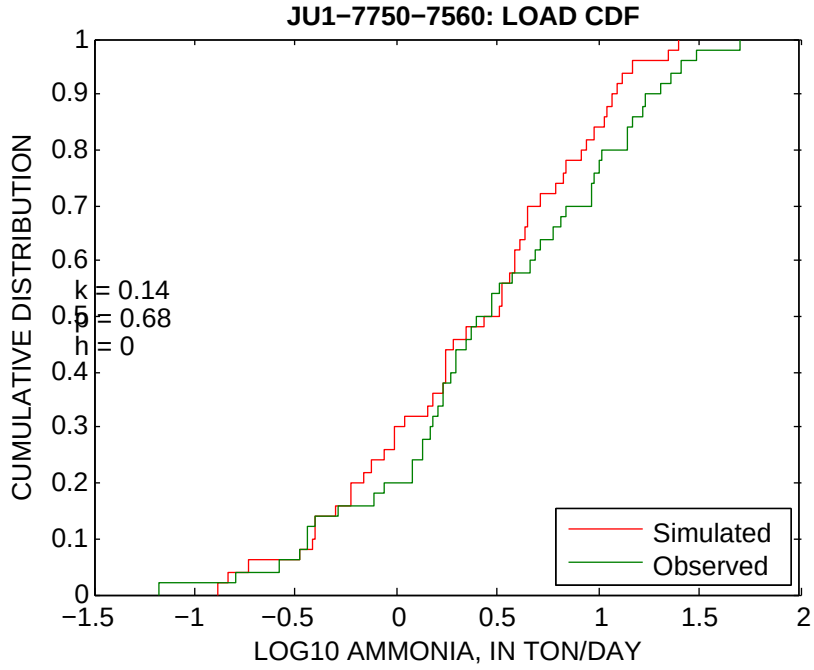


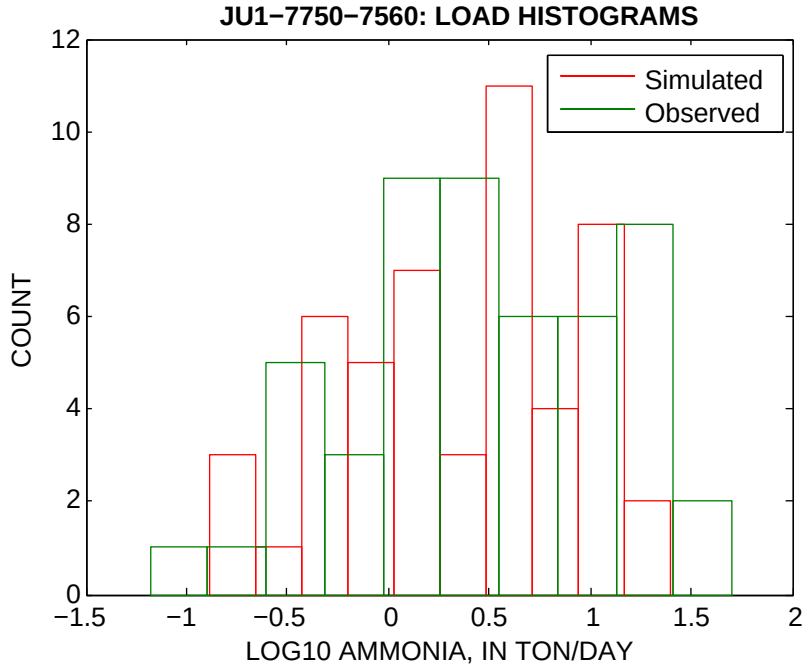


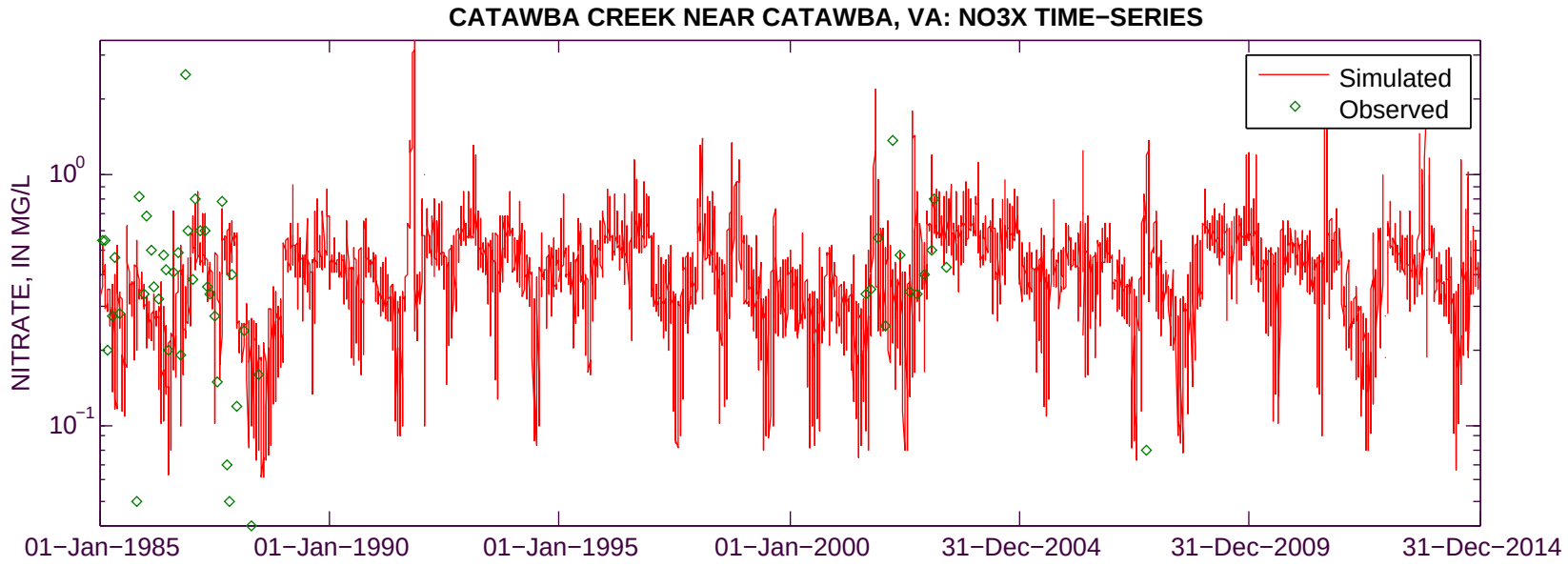
LOAD DATA
LOG10

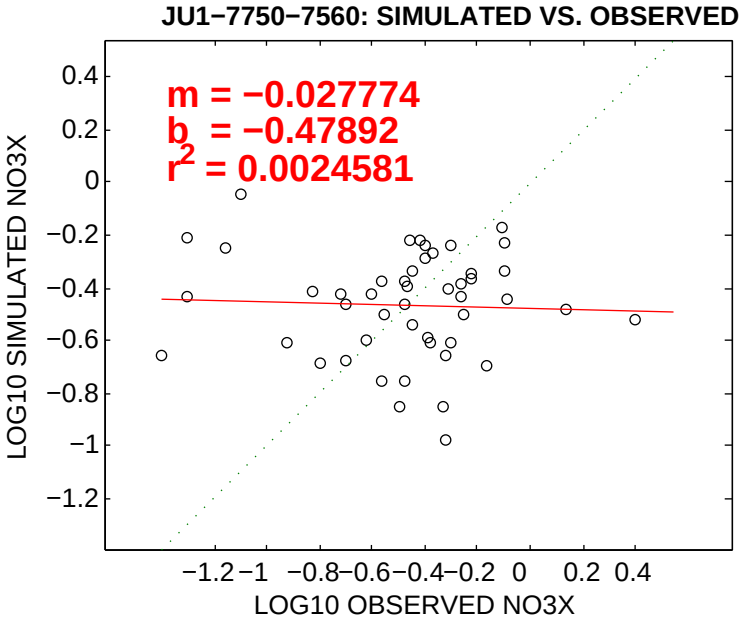


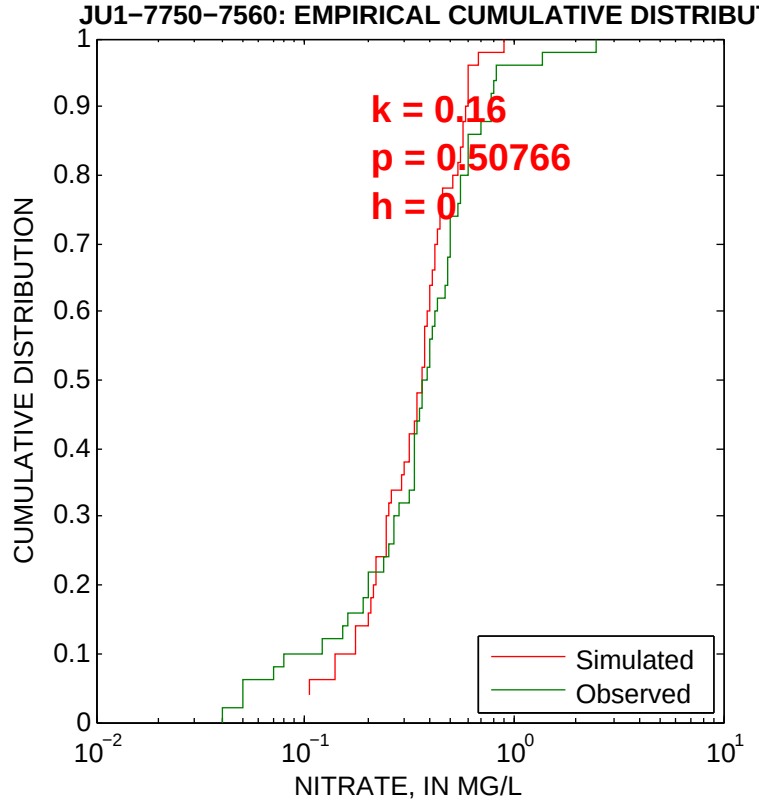












DATA SELECTION

scenario	file
P620171001WQ	NO3X.calib

plot: NO3X - nitrate

Dates: 1/1/1985 – 12/31/201

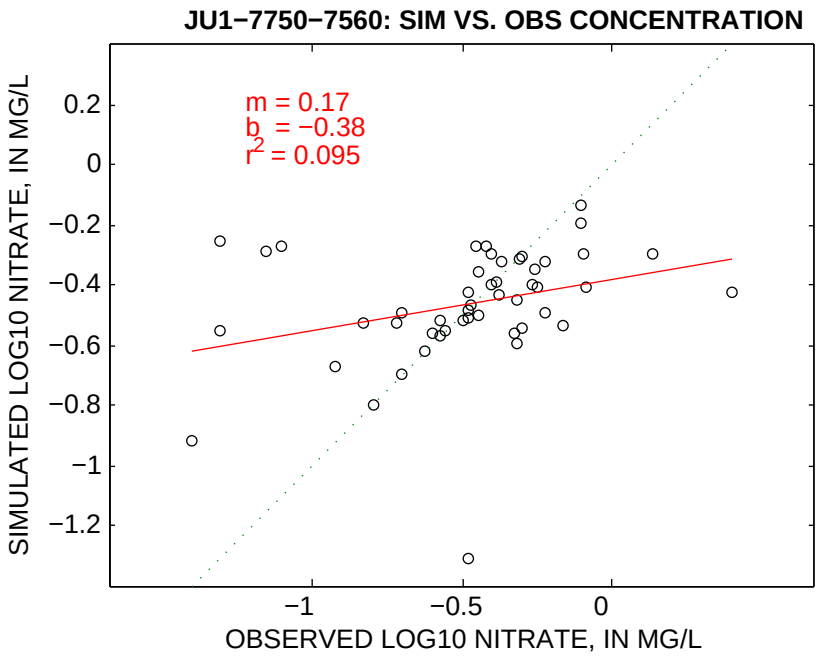
Drive	Directory	Observed
N/A	model	OBS20161101

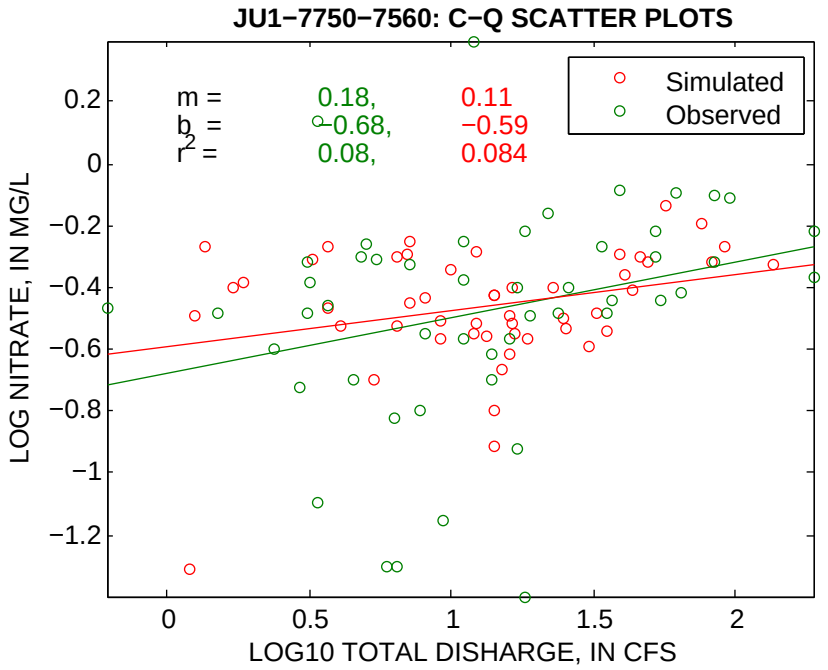
STATISTICS

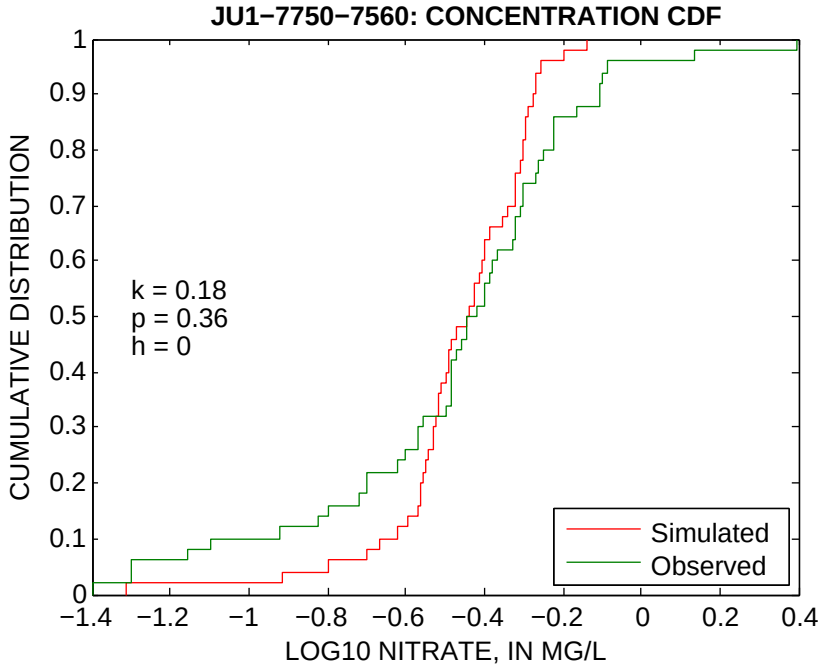
	n	50	48
		observe	simulate
min		0.04	0
		-1.39794	-0.983134
mean		0.4444	0.362193
		-0.480092	-0.465586
media		0.37	0.363795
		-0.431957	-0.4335
max		2.5	0.90493
		0.39794	-0.043385
varian		0.147458	0.0314312
		0.127245	0.0399327
JB		0.001	0.215986
		0.051014	0.394868
		ra	log
%		-18.4984	-3.02149
err.va		0.191544	0.174461
rel.std.err		1.29898	1.37106
mod.eff		-0.298978	-0.371063

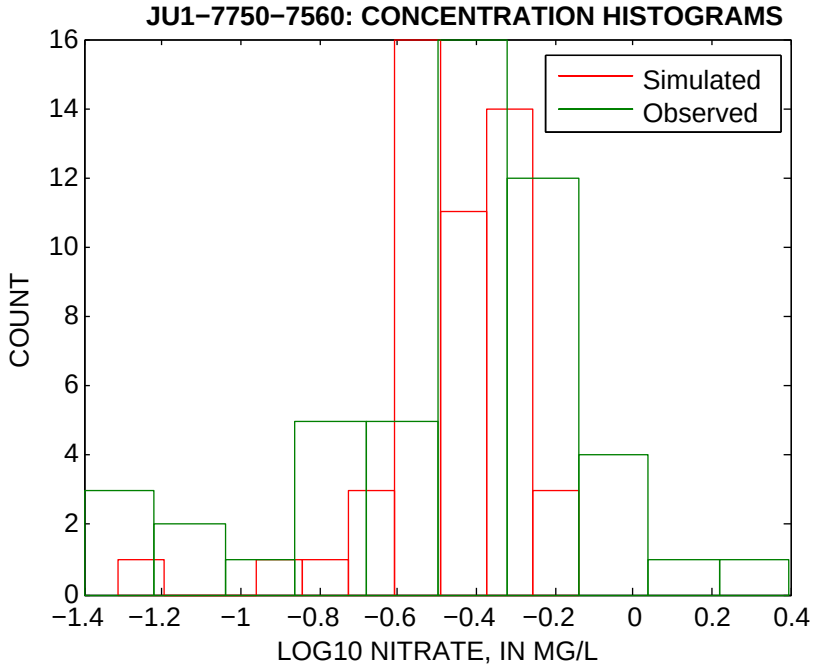
VERSION 2.1

ALL DATA
LOG10

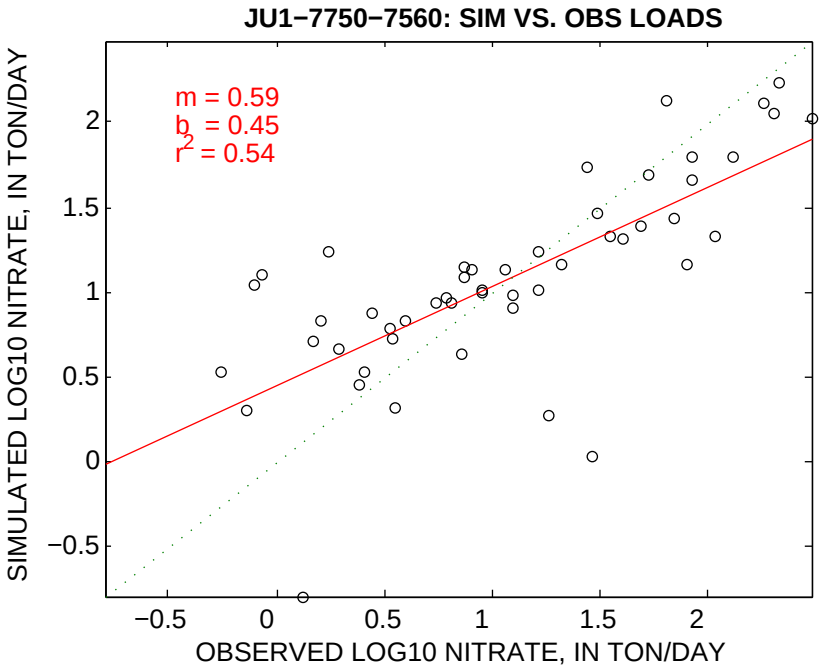


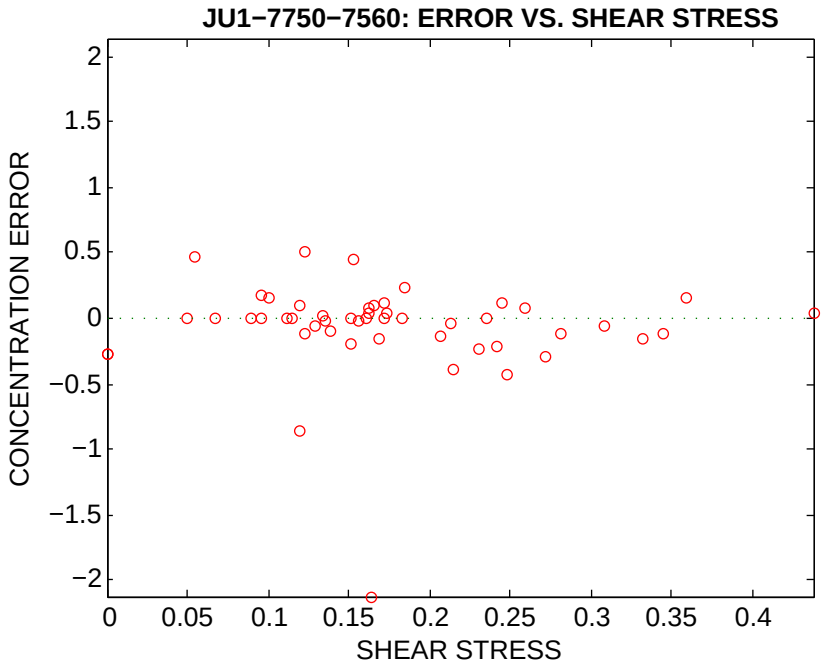


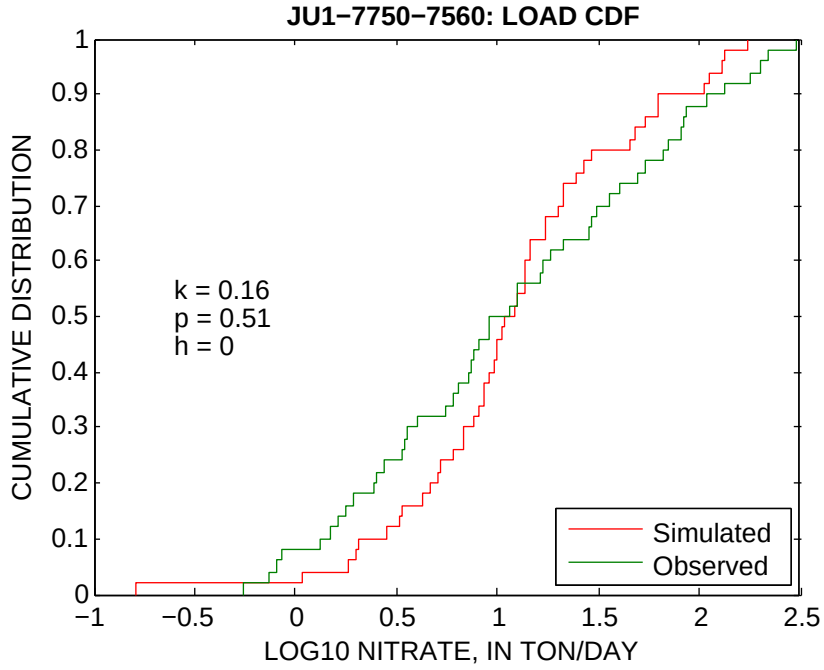


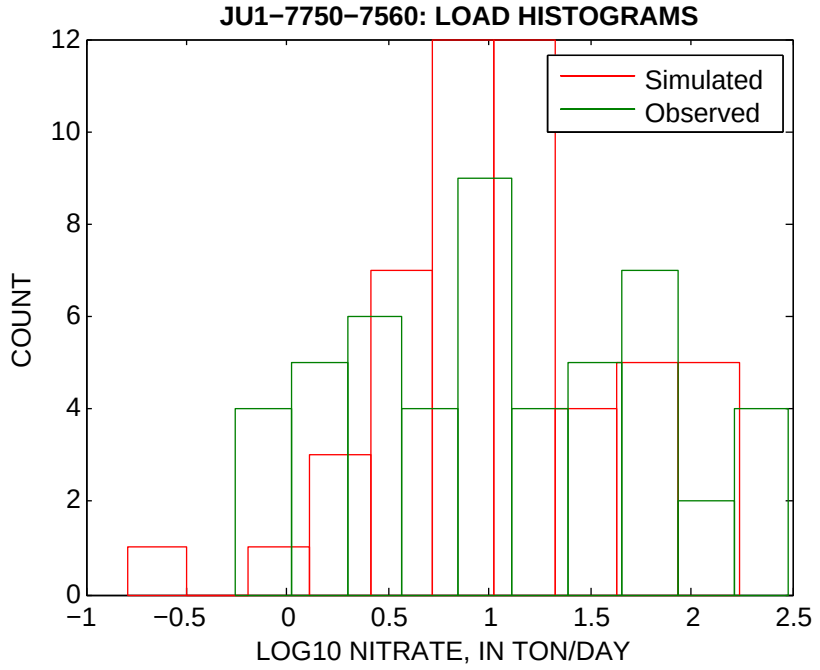


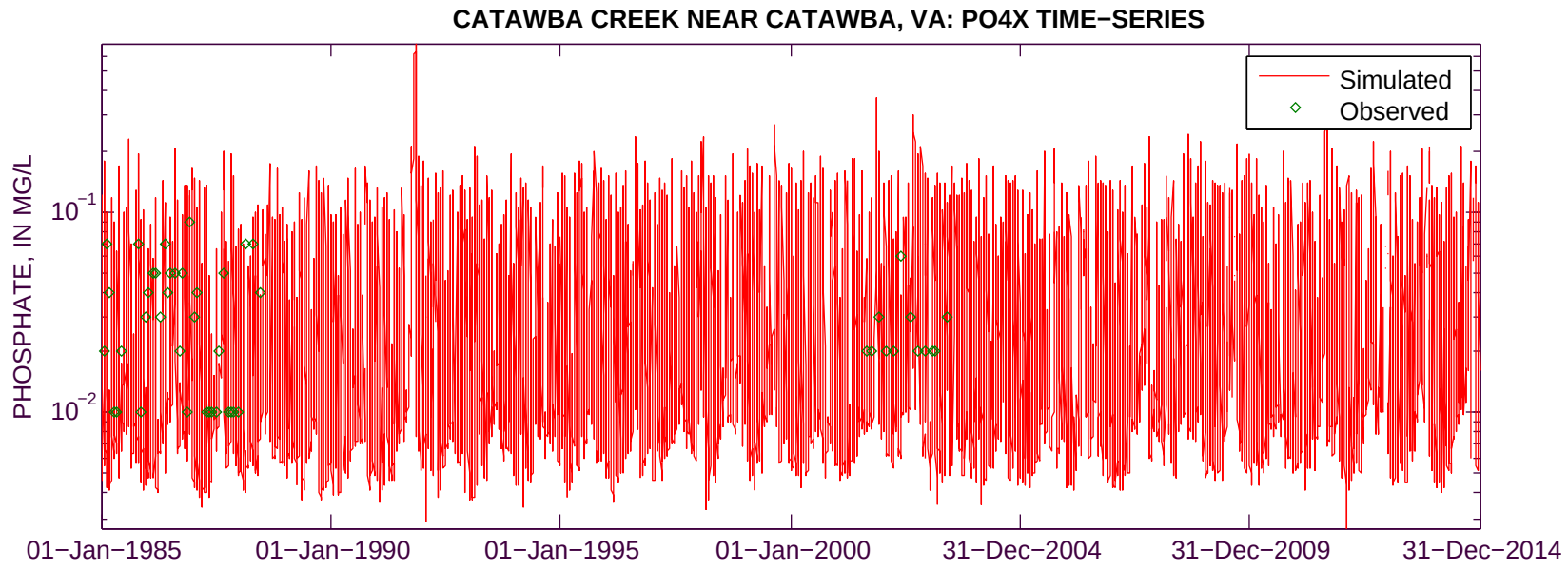
LOAD DATA
LOG10

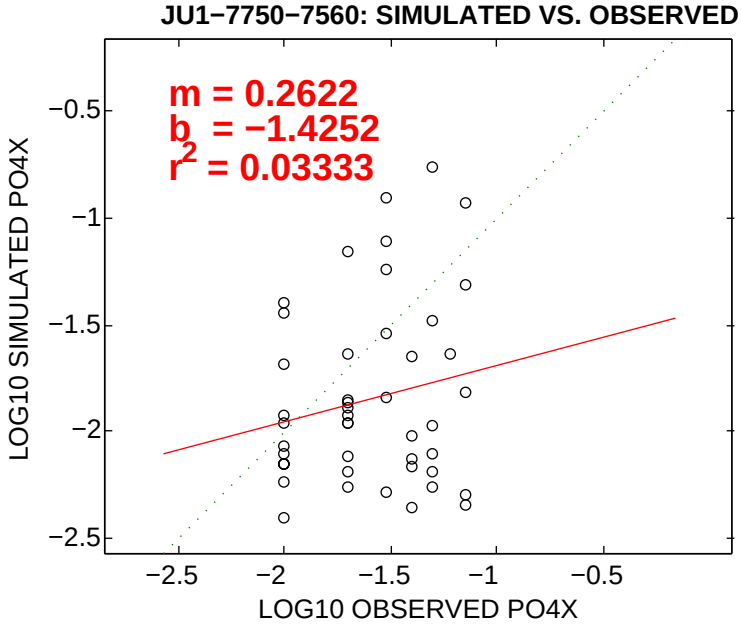


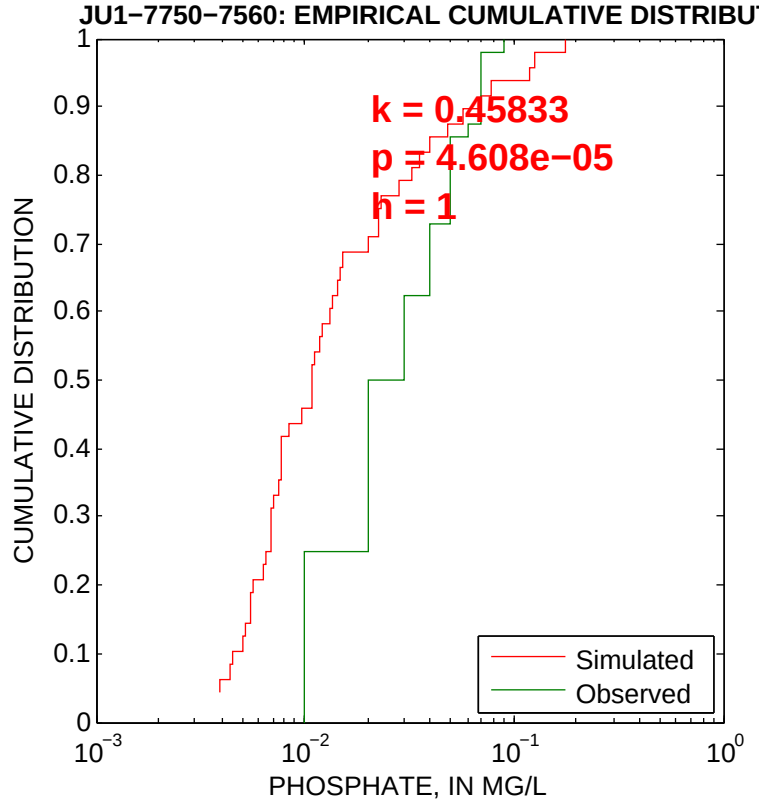












DATA SELECTION

scenario: P620171001WQ | file: PO4X.calib

plot: PO4X - phosphate

Dates: 1/1/1985 – 12/31/201

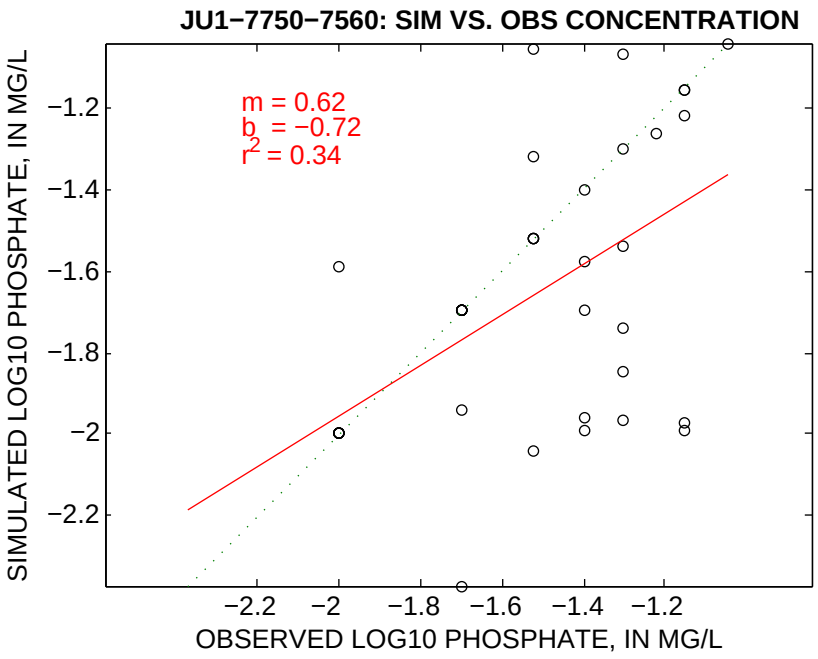
Drive: N/A | Directory: model | Observed: OBS20161101

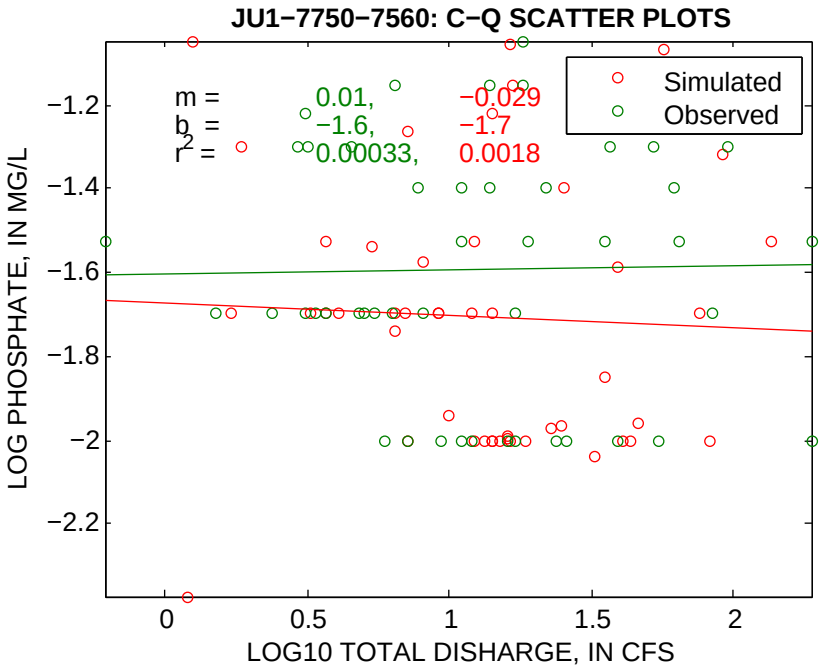
STATISTICS

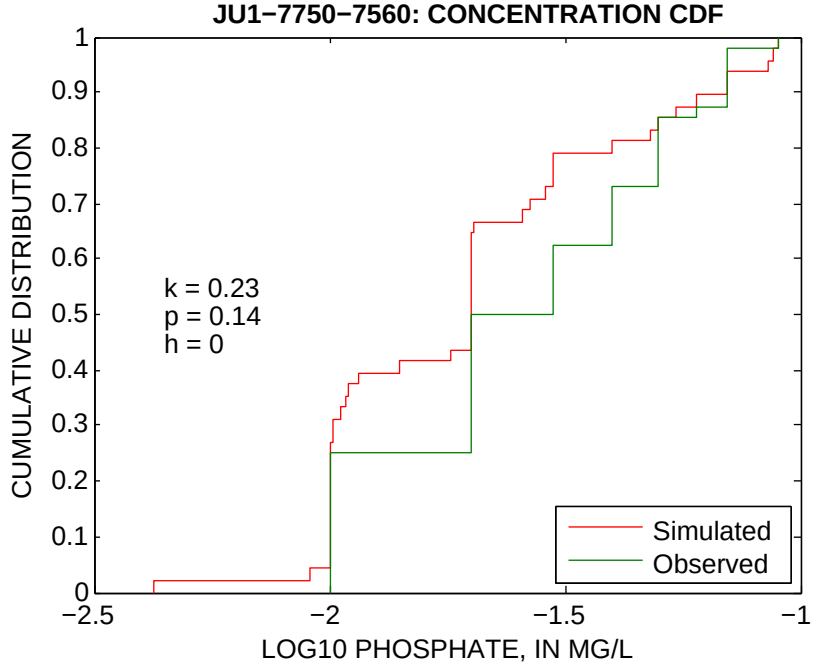
	n	observe	simulate
		48	46
min		0.01	0
		-2	-2.41004
mean		0.0320833	0.0243042
		-1.6004	-1.84484
media		0.025	0.0108595
		-1.61092	-1.95941
max		0.09	0.17594
		-1.1549	-0.754635
varian		0.00045088	0.00124242
		0.0874983	0.180476
JB		0.038811	0.001
		0.098283	0.032417
		ra	log
%		-24.2466	15.274
err.va		0.00149735	0.283172
rel.std.err		3.32089	3.23631
mod.eff		-2.32089	-2.23631

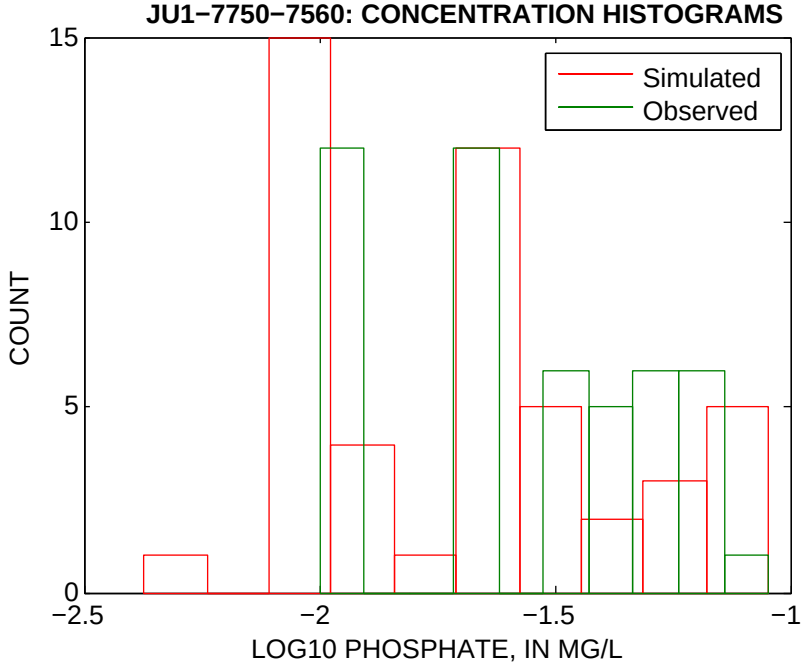
VERSION 2.1

ALL DATA
LOG10

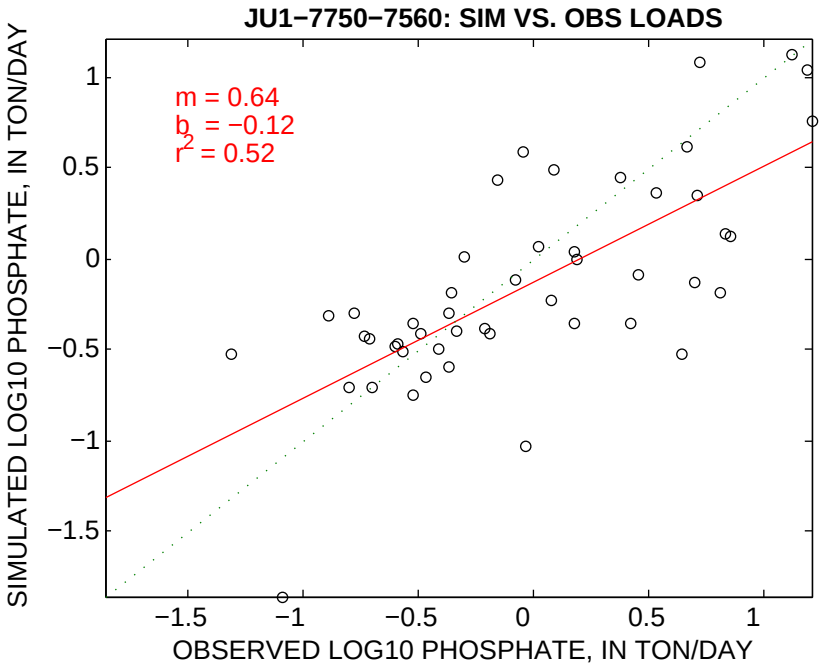


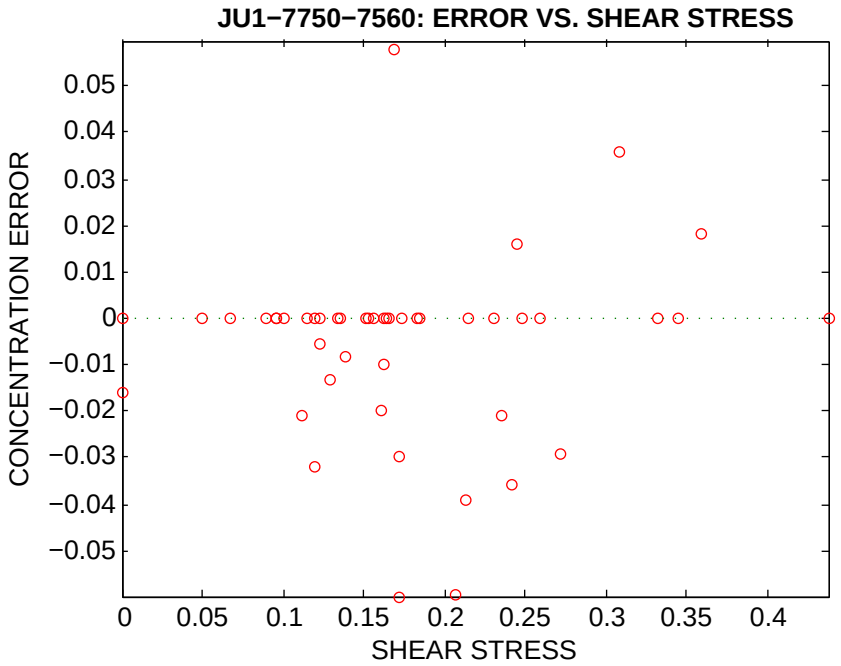


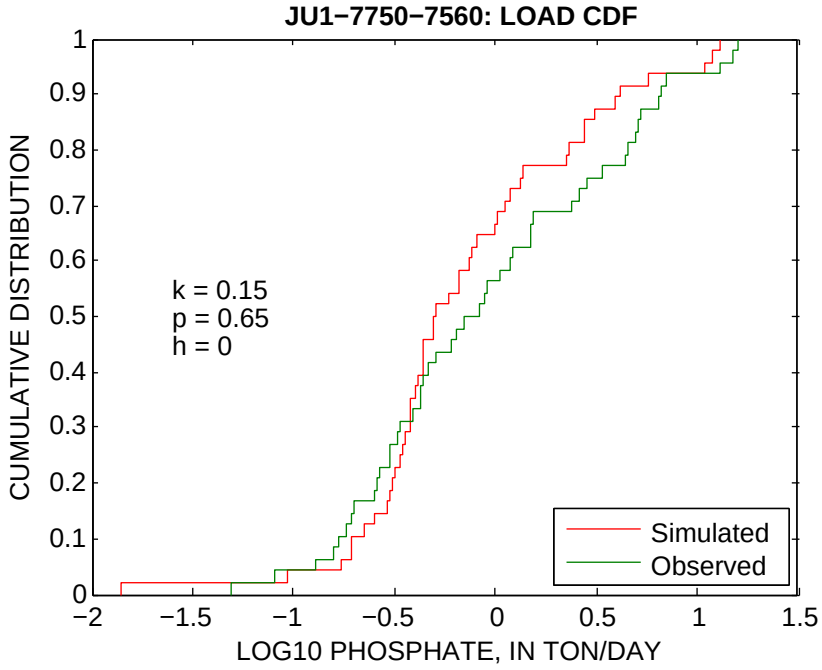


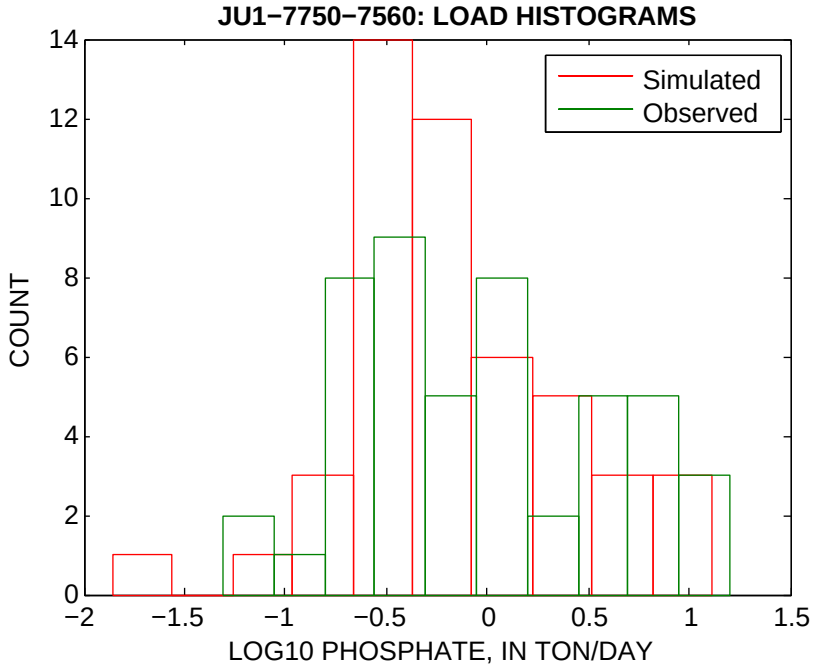


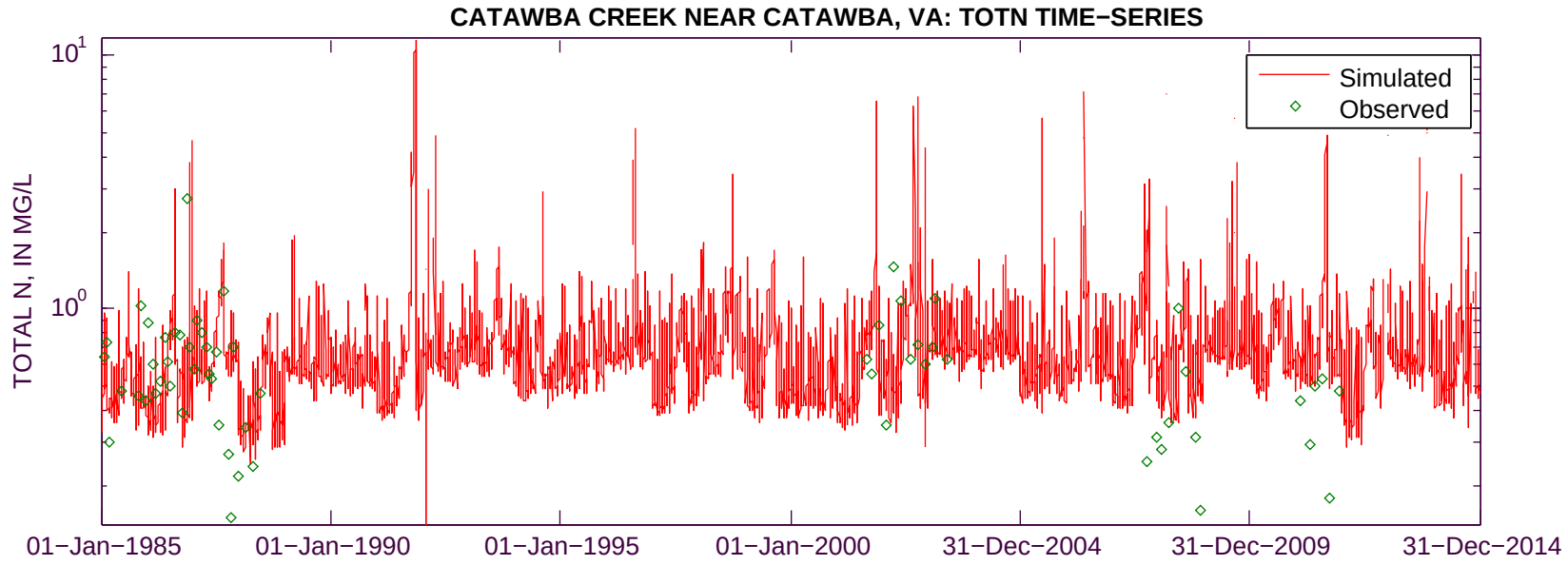
LOAD DATA
LOG10

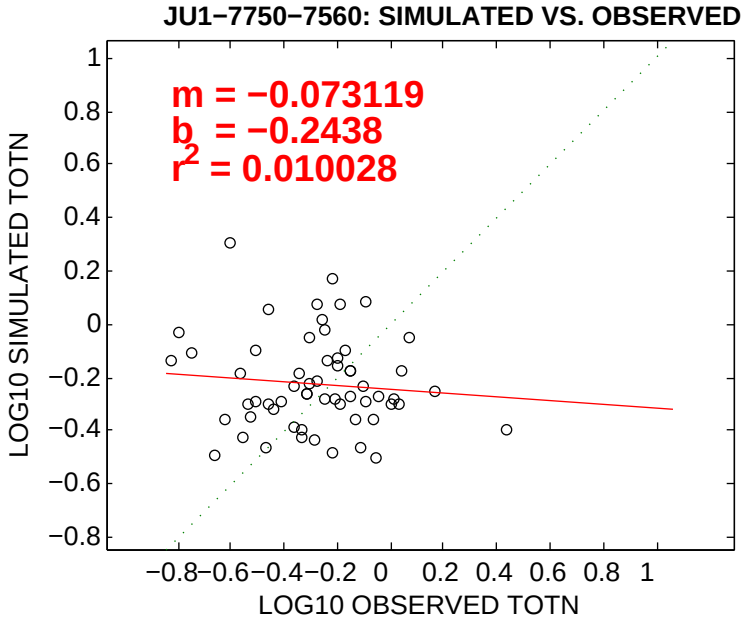


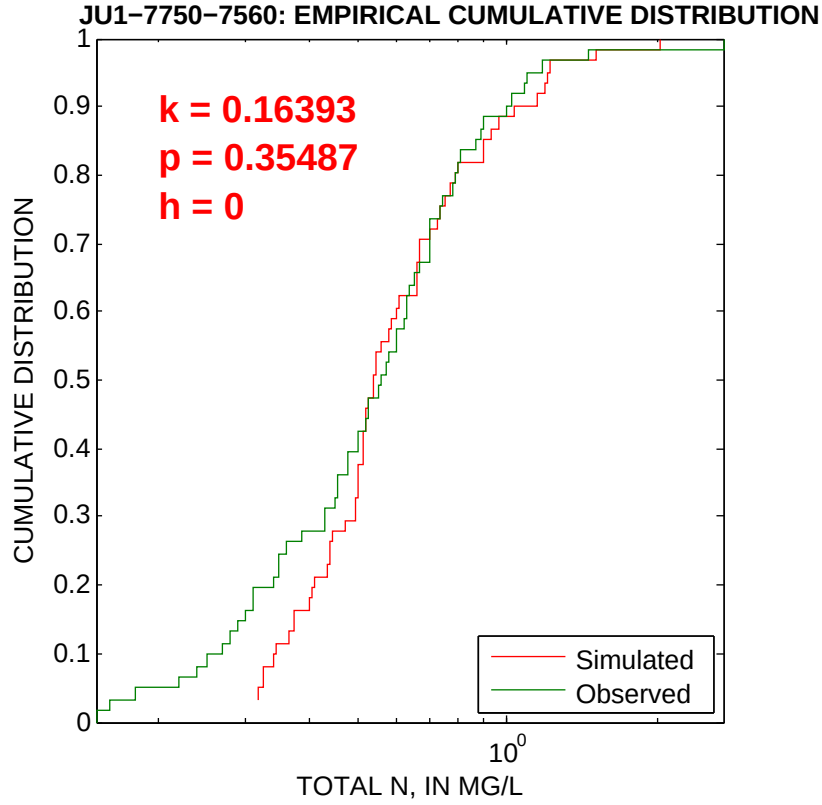












DATA SELECTION

scenario	file
P620171001WQ	TOTN.calib

plot: TOTN - total nitrogen

Dates: 1/1/1985 – 12/31/201

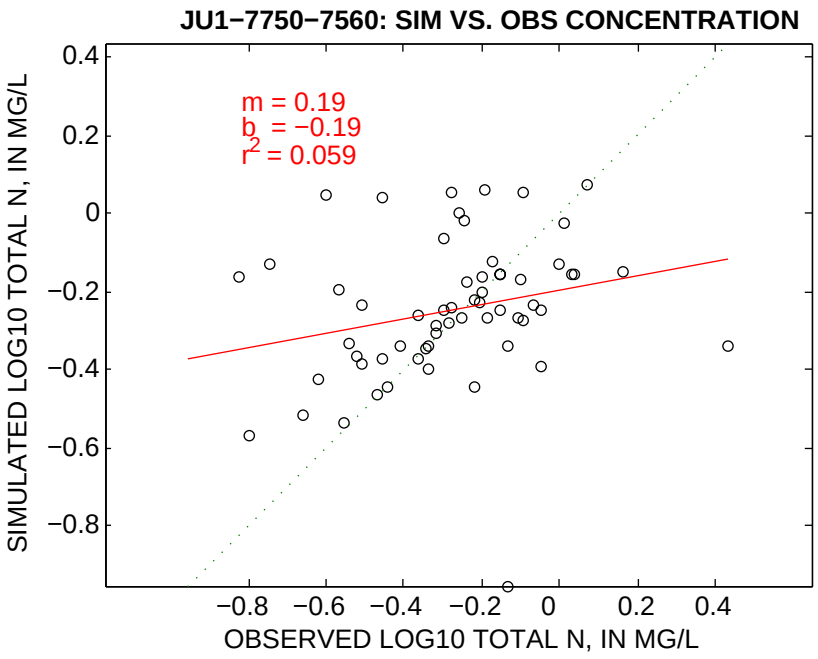
Drive	Directory	Observed
N/A	model	OBS20161101

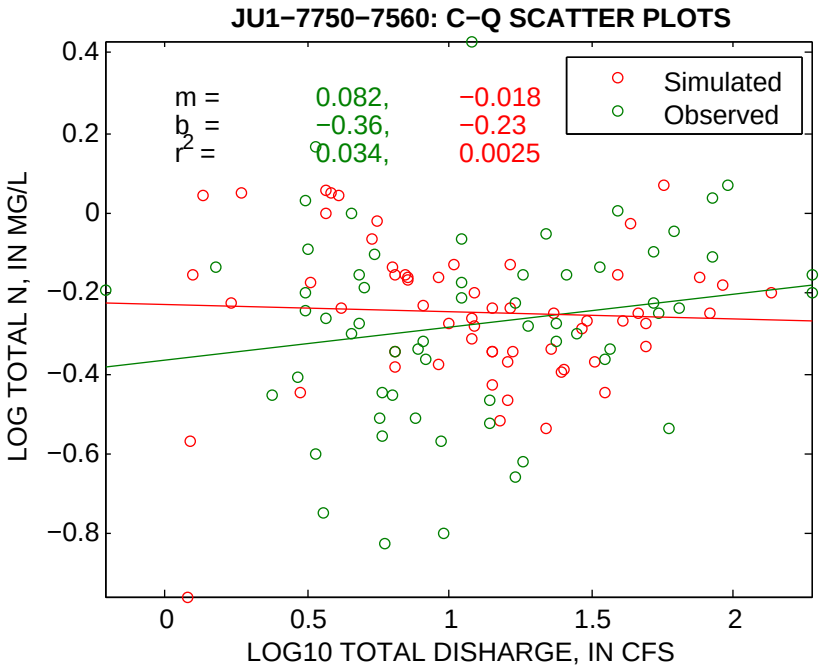
STATISTICS

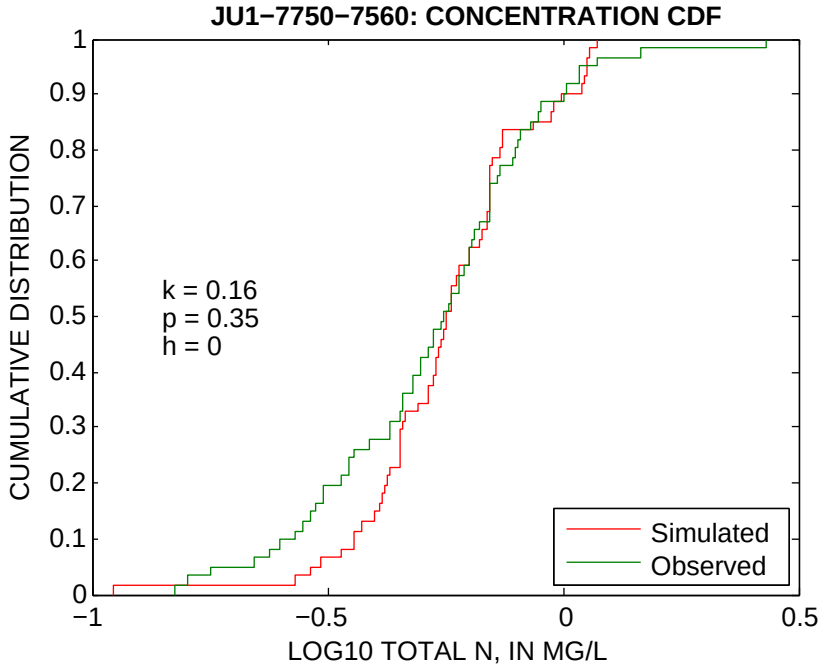
	n	observe	simulate
		61	59
min		0.15	0
		-0.823909	-0.49953
mean		0.613934	0.63084
		-0.279901	-0.223339
media		0.56	0.54067
		-0.259637	-0.262577
max		2.7	2.0202
		0.431364	0.305394
varian		0.146364	0.108439
		0.0568163	0.0302925
JB		0.001	0.001
		0.5	0.042172
		ra	log
%		2.75364	-20.2079
err.va		0.290994	0.0986719
rel.std.err		1.98815	1.73668
mod.eff		-0.988153	-0.736682

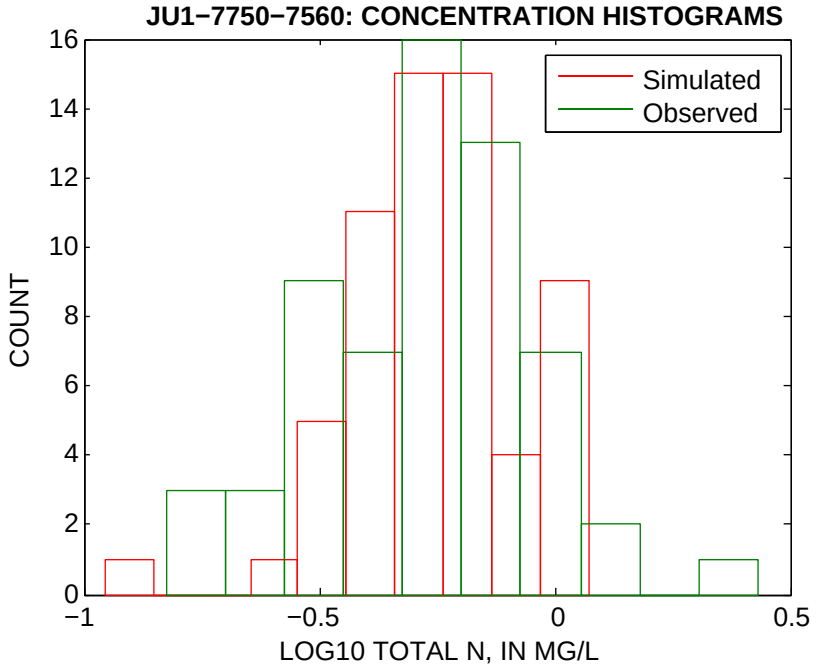
VERSION

ALL DATA
LOG10

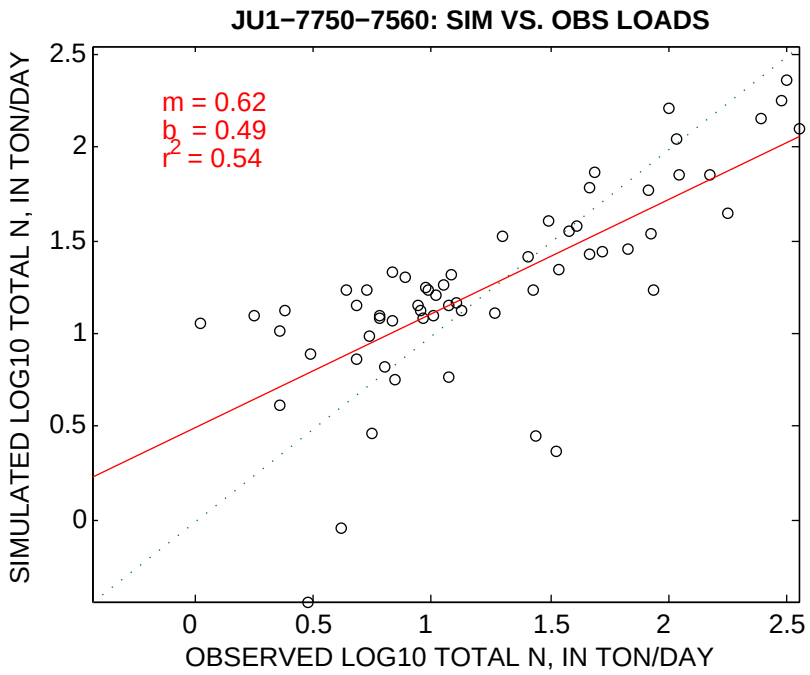


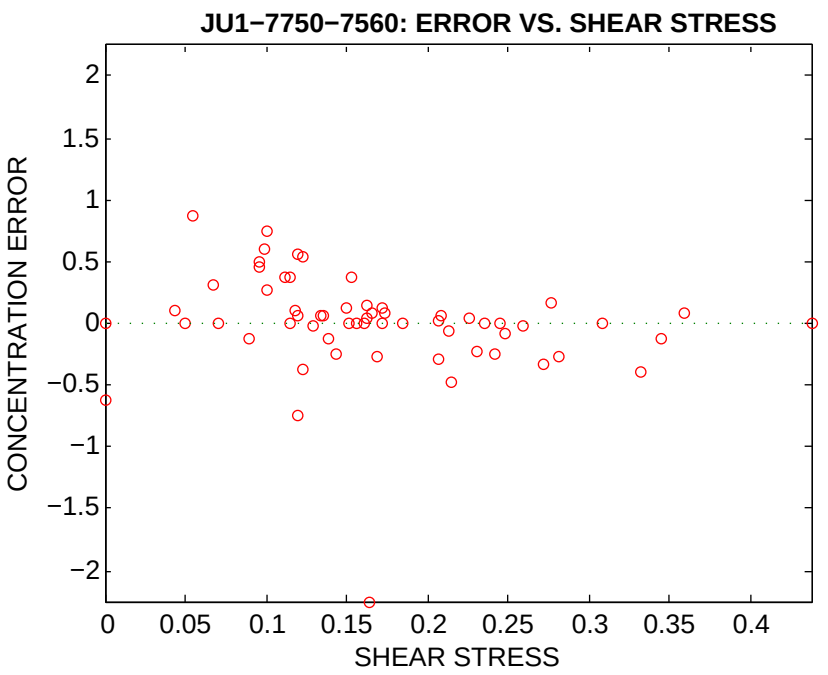


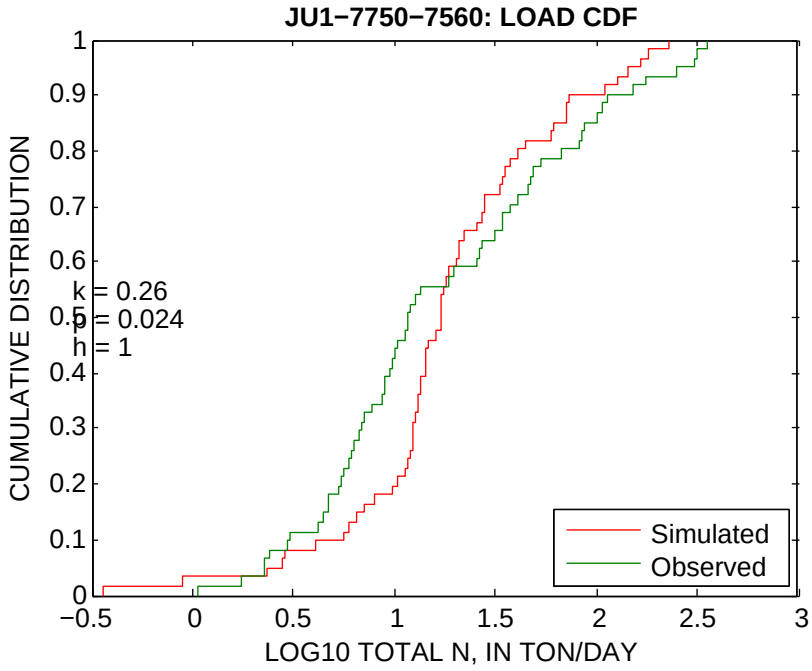


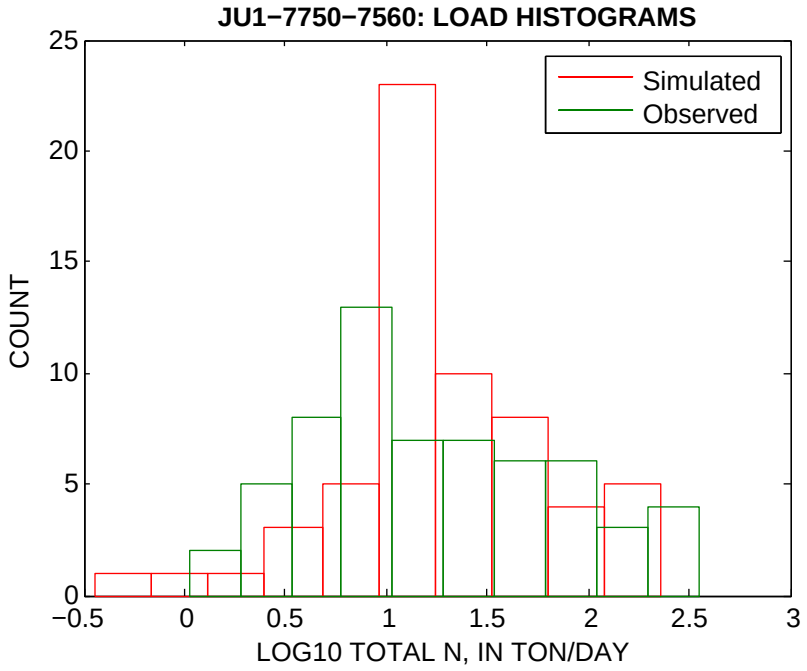


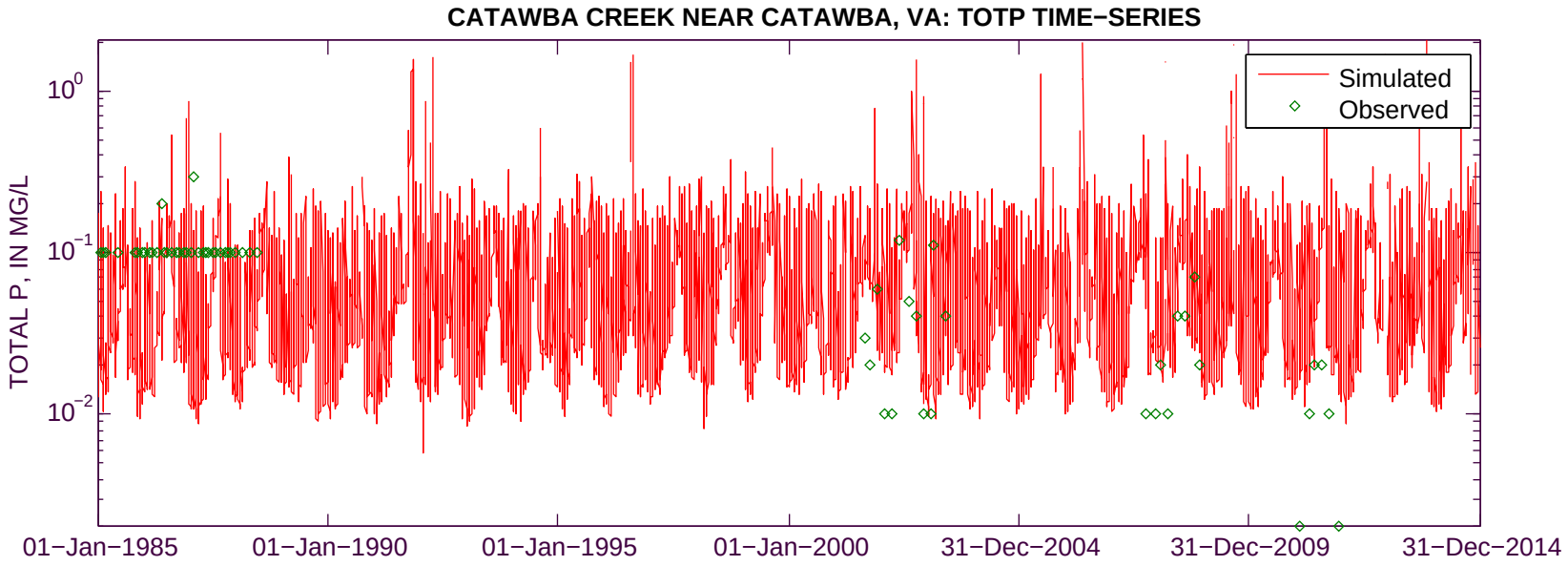
LOAD DATA
LOG10

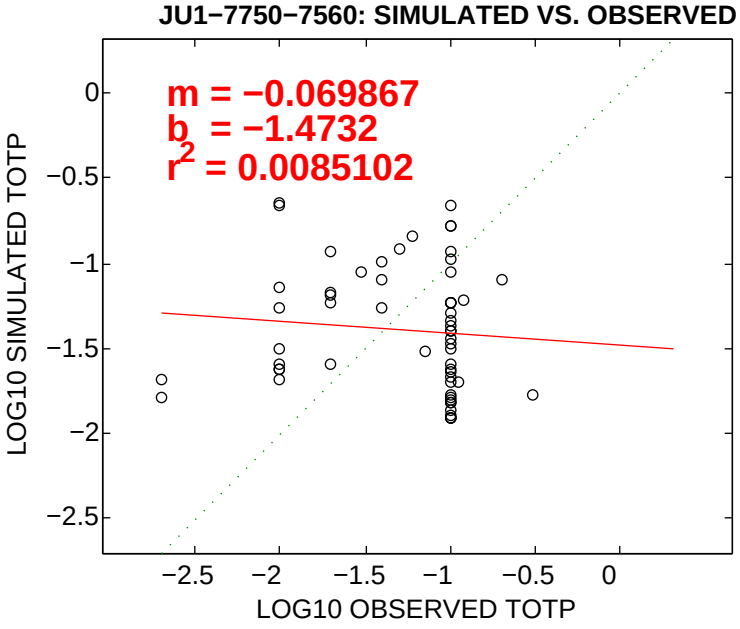


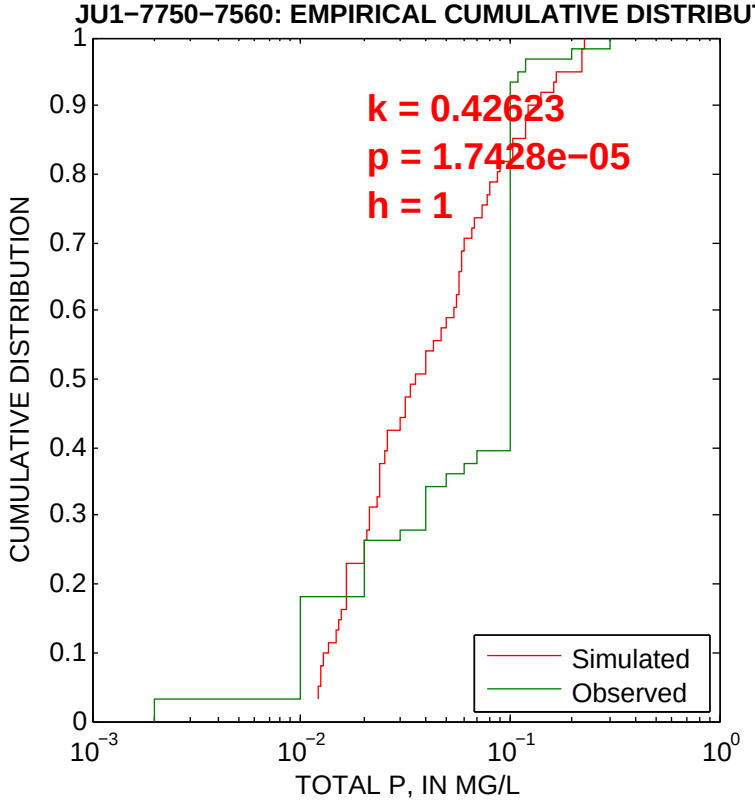












DATA SELECTION

scenario: P620171001WQ | file: TOTP.calib

plot: TOTP - total phosphorus

Dates: 1/1/1985 – 12/31/201

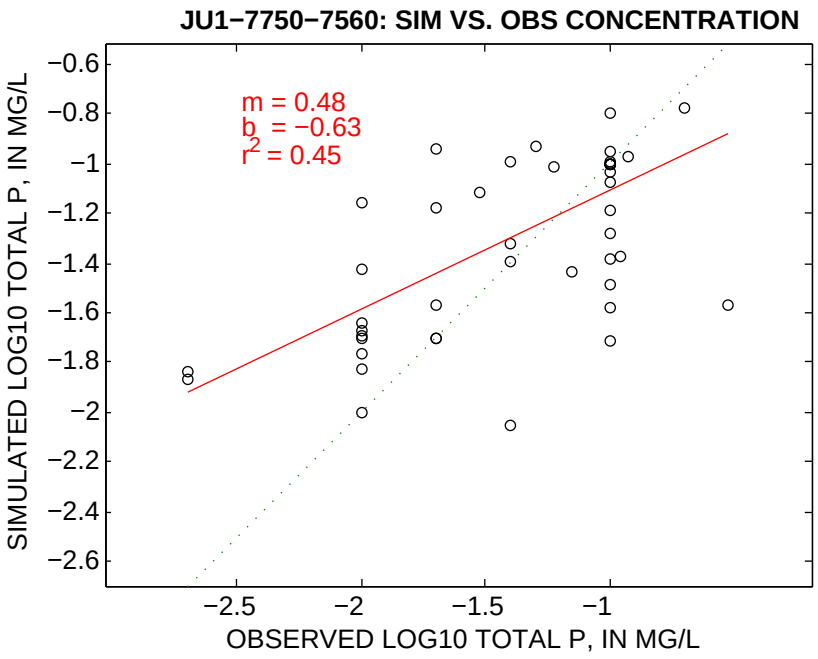
Drive: N/A | Directory: model | Observed: OBS20161101

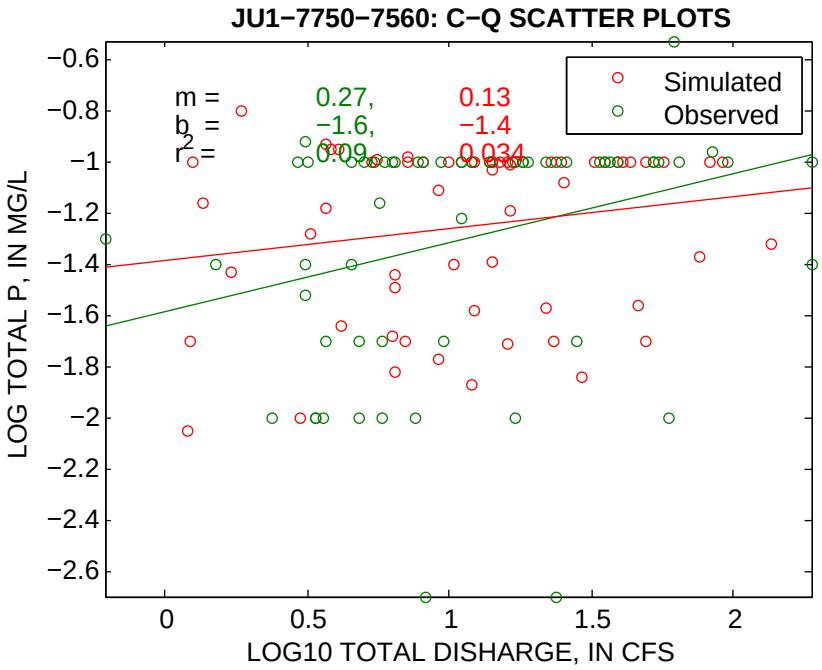
STATISTICS

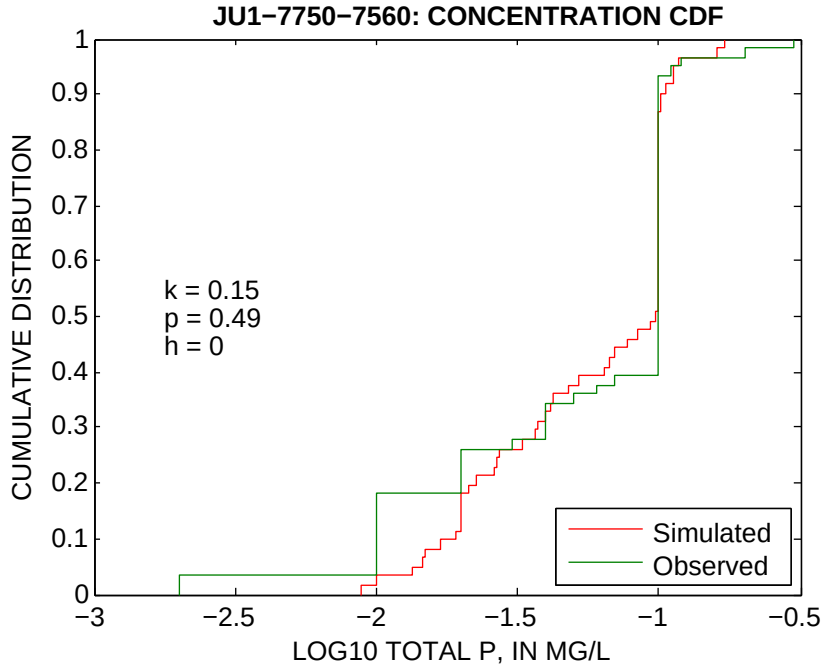
	n	observe	simulate
		61	59
min		0.002	0
		-2.69897	-1.91151
mean		0.0753115	0.0570979
		-1.29472	-1.38272
media		0.1	0.035875
		-1	-1.40372
max		0.3	0.22821
		-0.522879	-0.641665
varian		0.00269545	0.00296549
		0.22982	0.131823
JB		0.001	0.001
		0.007311	0.101554
		ra	log
%		-24.1843	6.79667
err.va		0.00694183	0.401634
rel.std.err		2.57539	1.7476
mod.eff		-1.57539	-0.747602

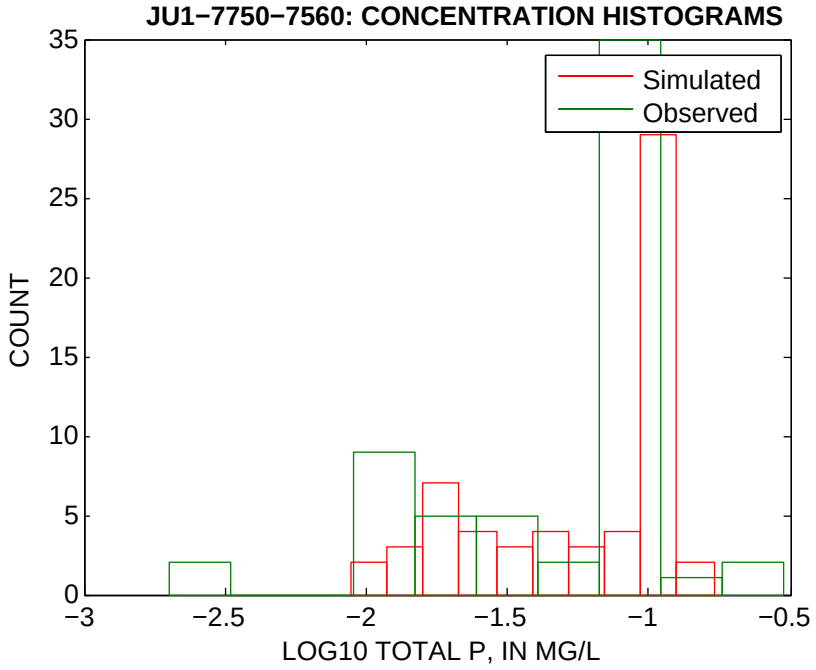
VERSION 2.1

ALL DATA
LOG10

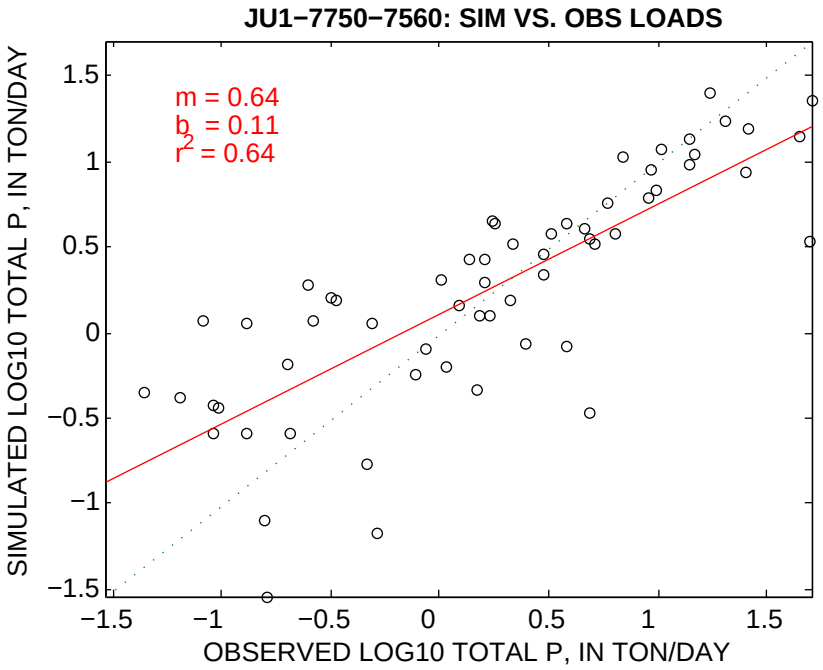


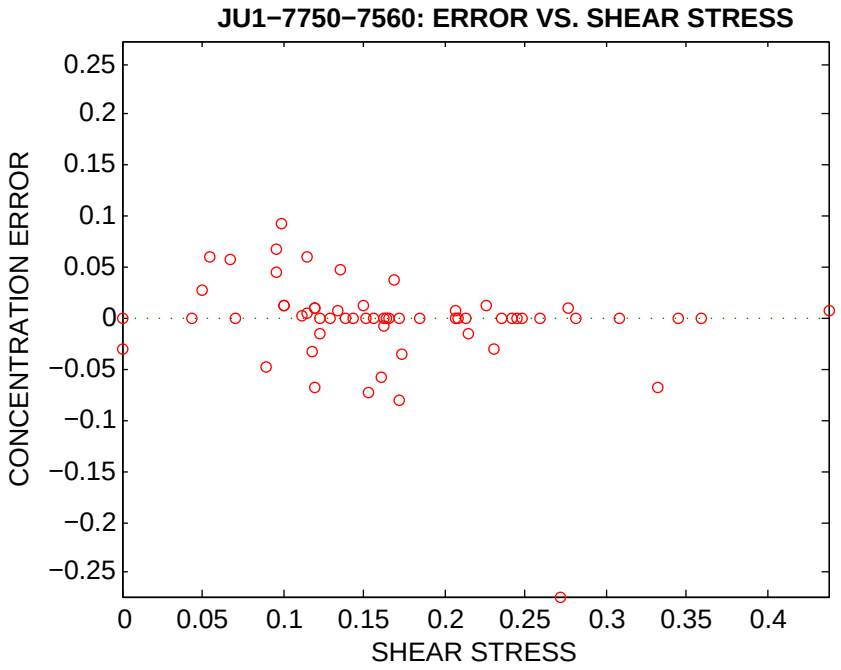


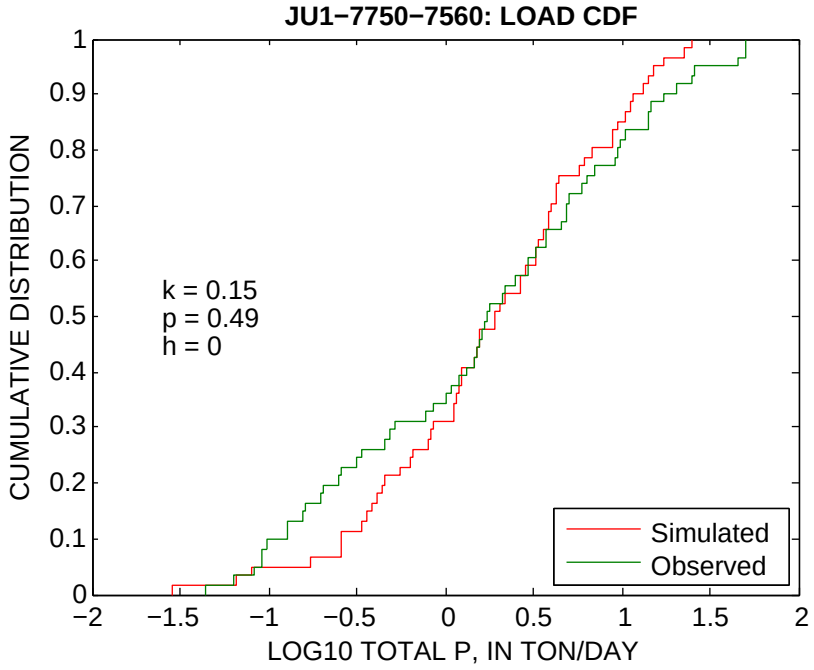


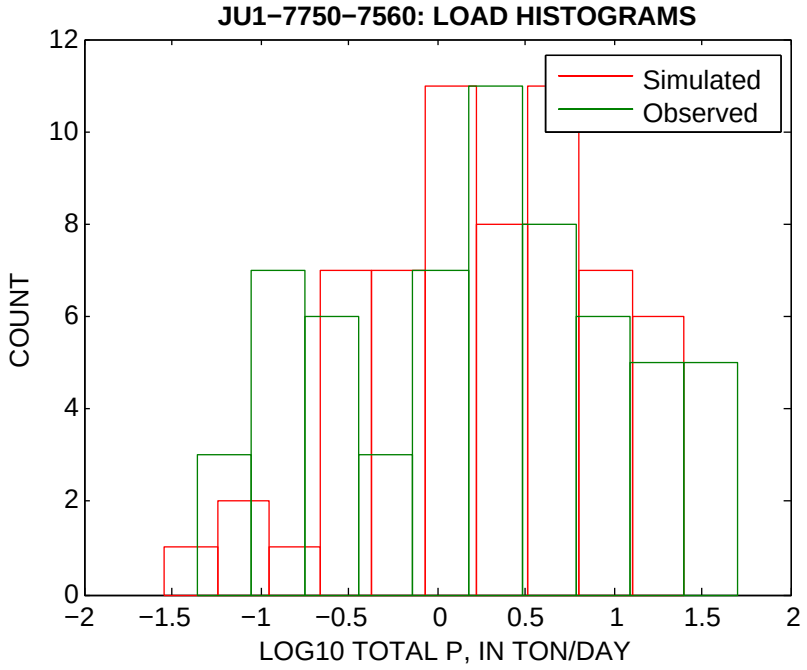


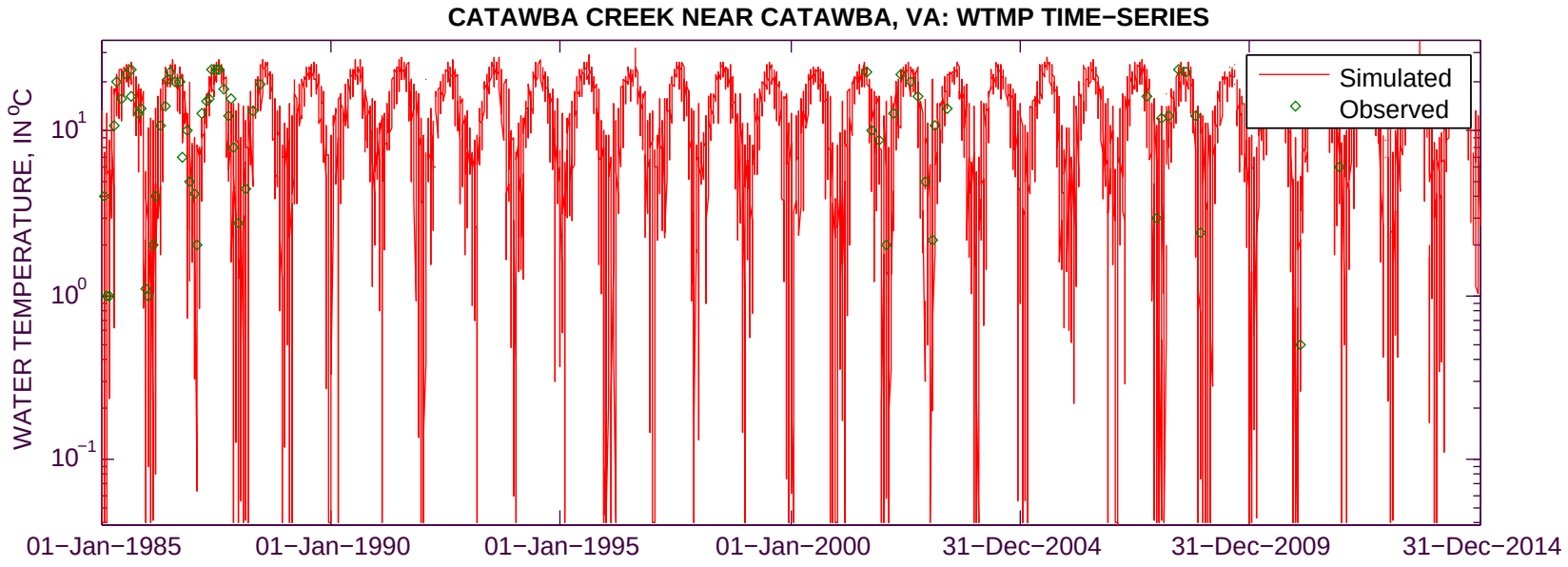
LOAD DATA
LOG10

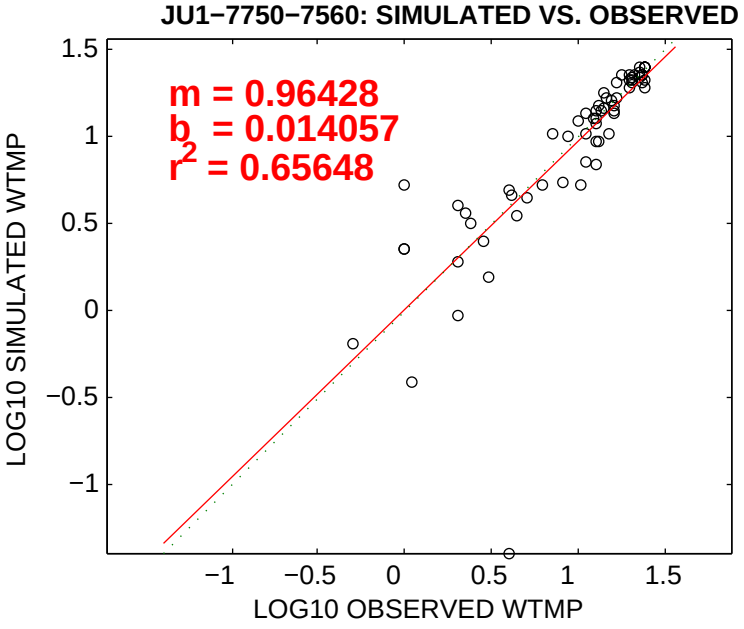


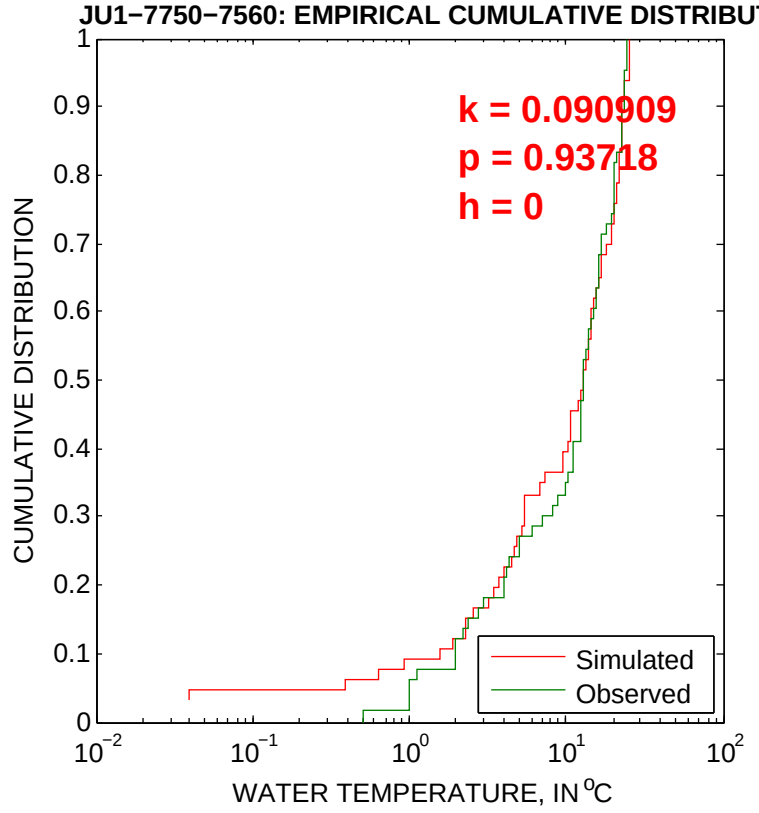












DATA SELECTION

scenario	file
P620171001WQ	WTMP.calib

plot: WTMP - water tempera...

Dates 1/1/1985 12/31/201

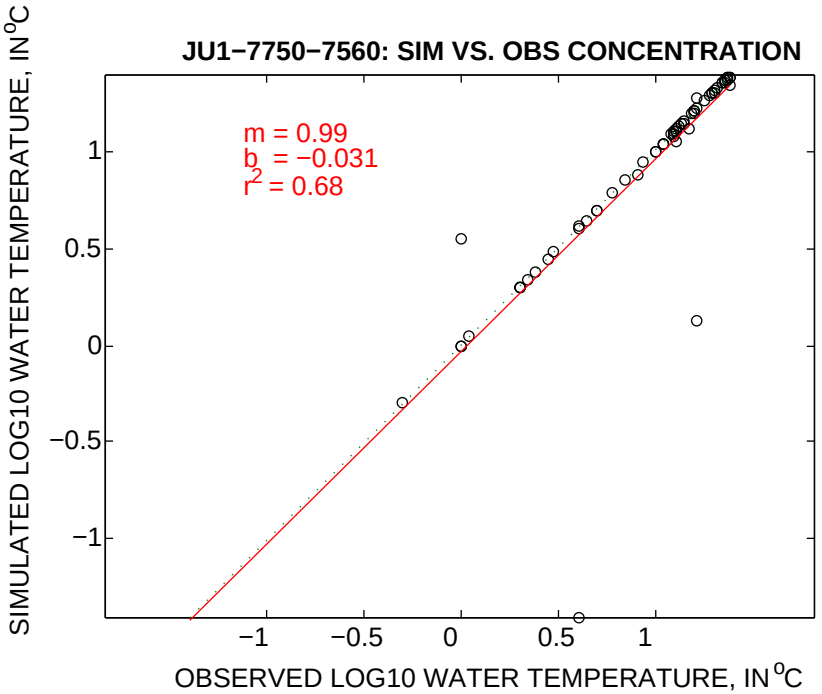
Drive	Directory	Observed
N/A	model	OBS20161101

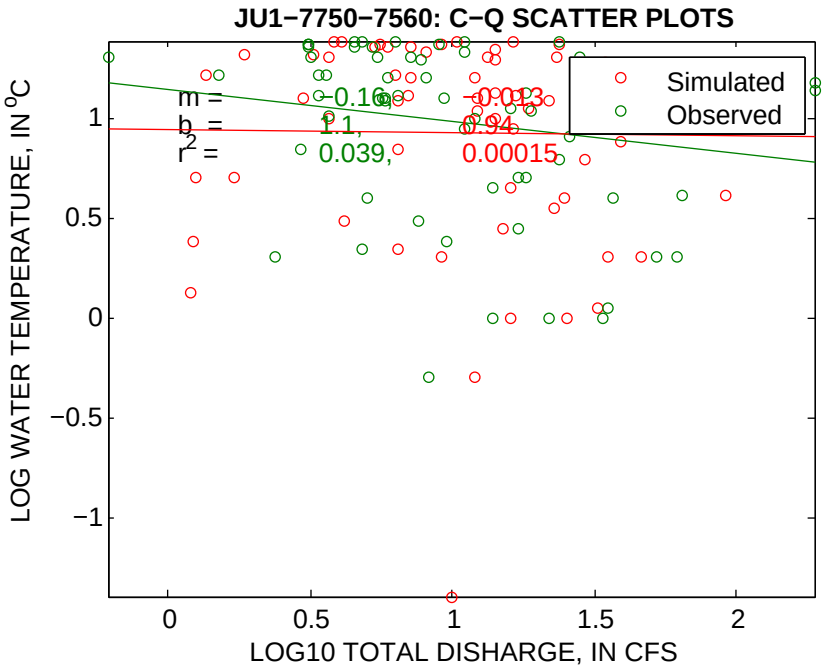
STATISTICS

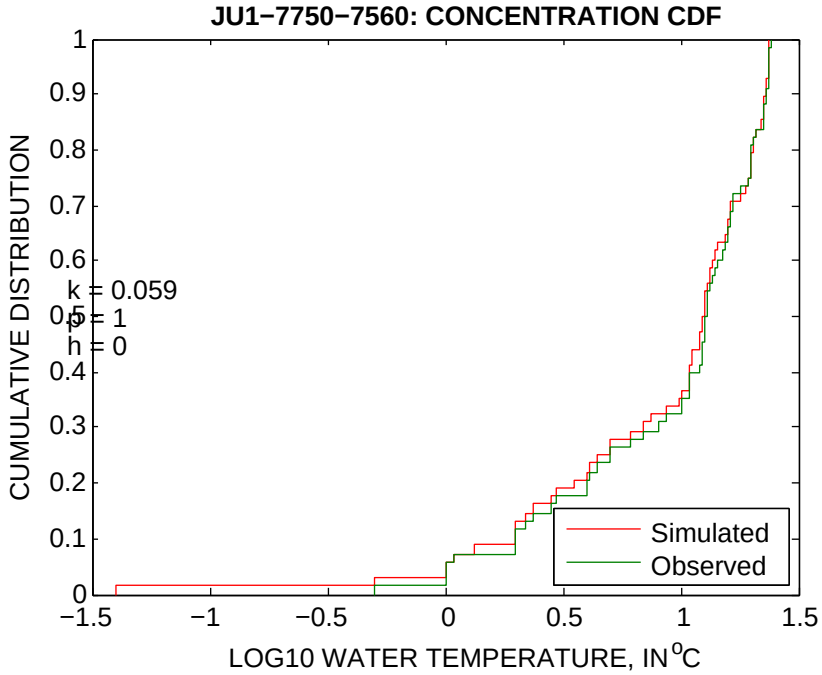
n	66	64
	observe	**simulate**
min	0.5	0
	-0.30103	-1.39734
mean	12.5879	12.3999
	0.957492	0.937352
media	12.9	12.8045
	1.11058	1.12076
max	24.3	25.471
	1.38561	1.40605
varian	57.8568	67.0551
	0.187032	0.264914
JB	0.069674	0.051447
	0.007295	0.001
	ra	log
%	-1.49331	-2.10345
err.va	9.89227	0.0916543
rel.std.err	0.170979	0.490046
mod.eff	0.829021	0.509954

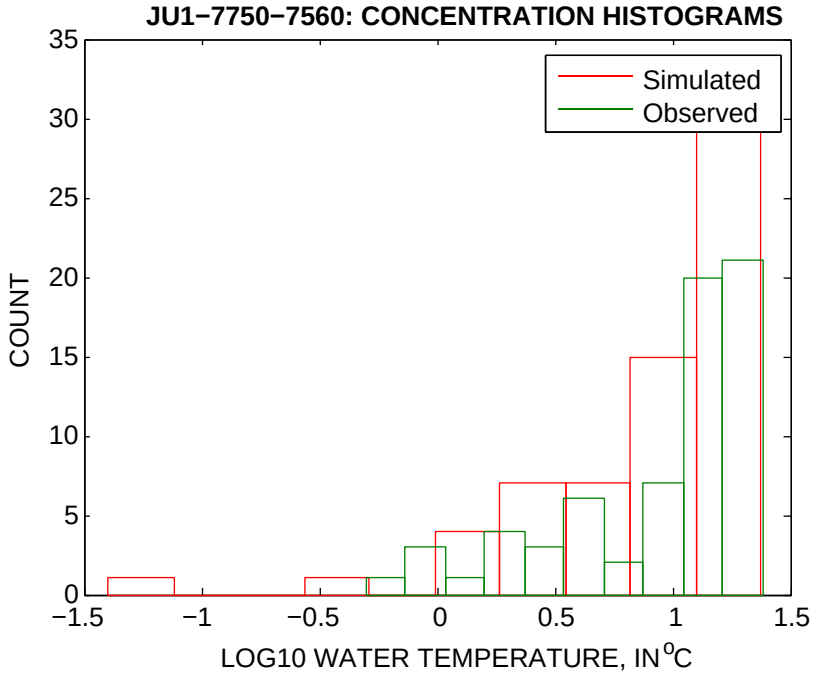
VERSION 2.1

ALL DATA
LOG10

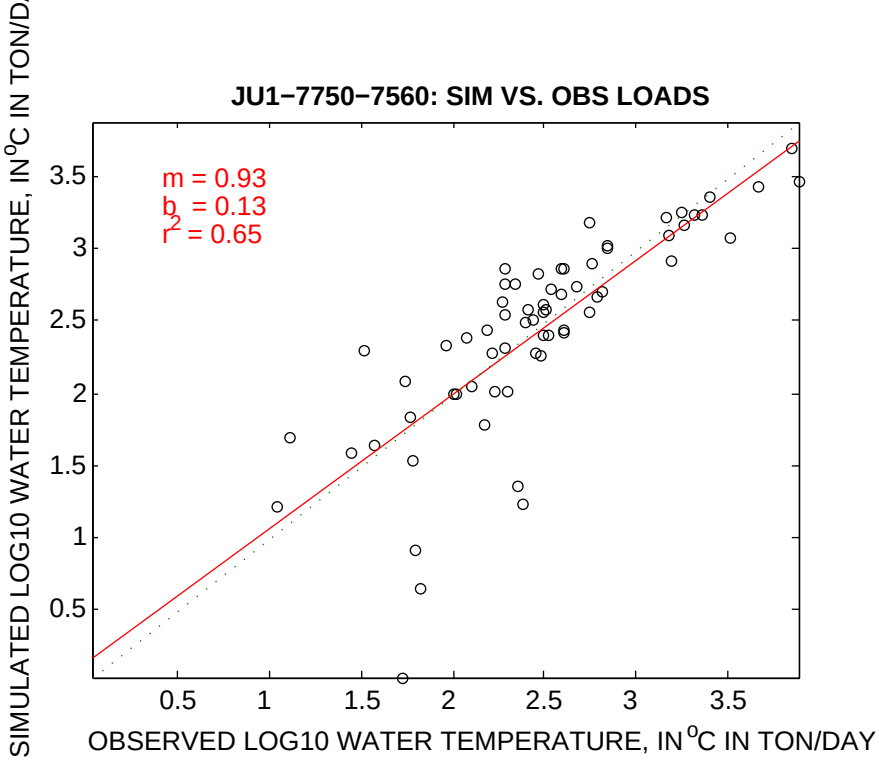




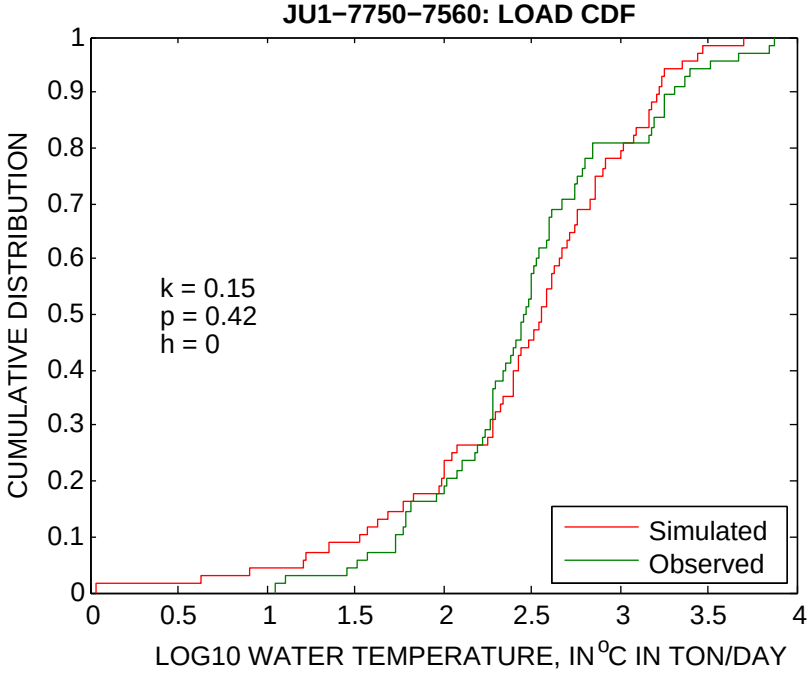


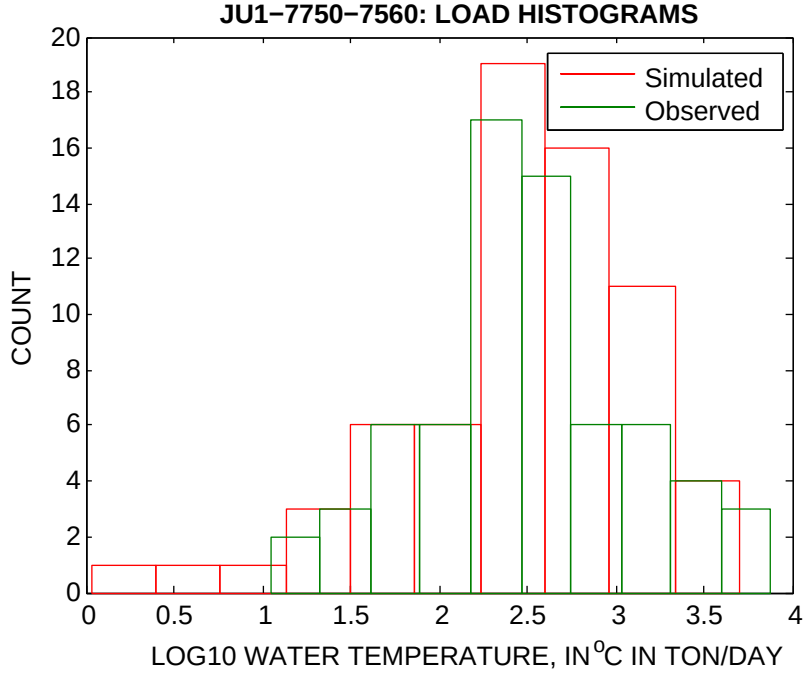


LOAD DATA
LOG10

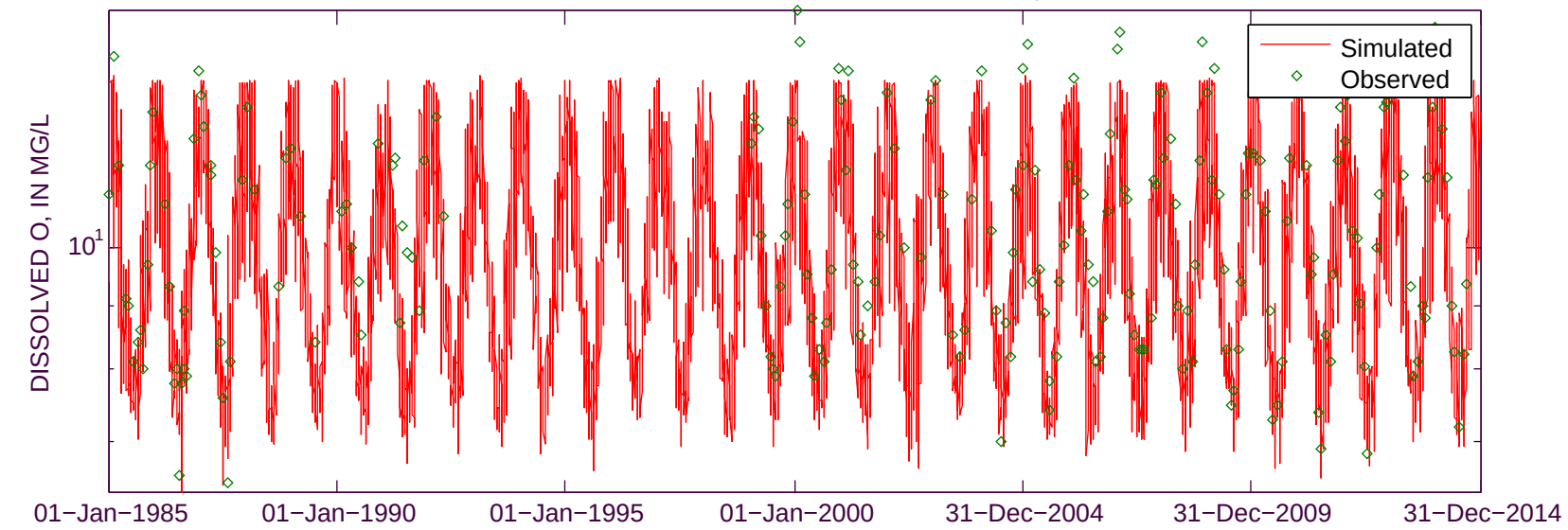




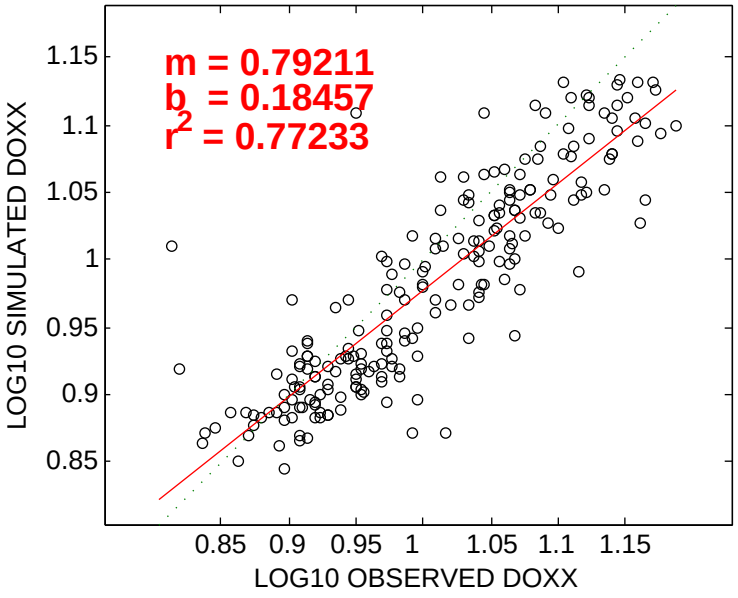




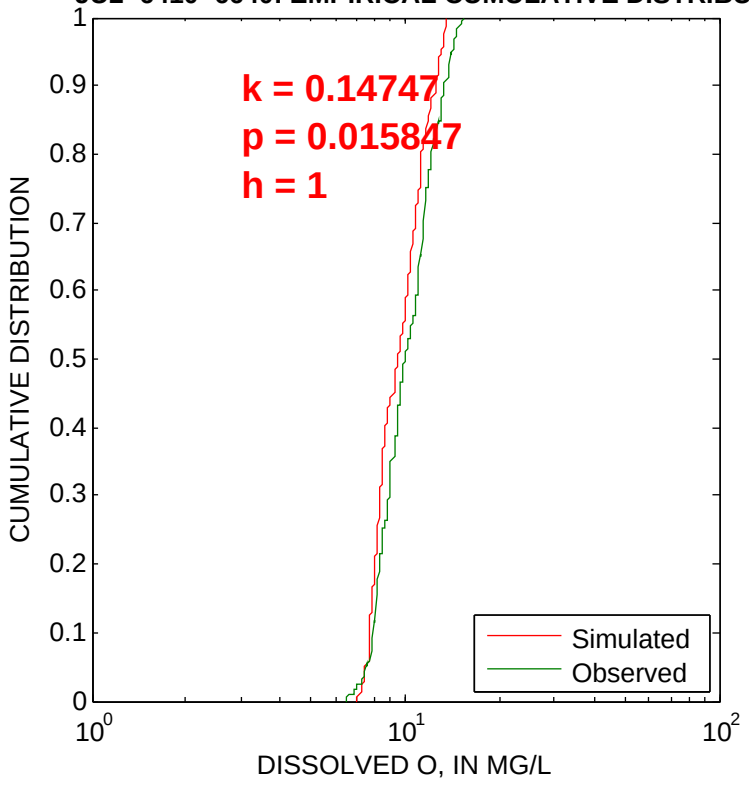
CALFPASTURE RIVER ABOVE MILL CREEK AT GOSHEN, VA: DOXX TIME-SERIES



JU2-6410-6640: SIMULATED VS. OBSERVED



JU2-6410-6640: EMPIRICAL CUMULATIVE DISTRIBUTION



DATA SELECTION

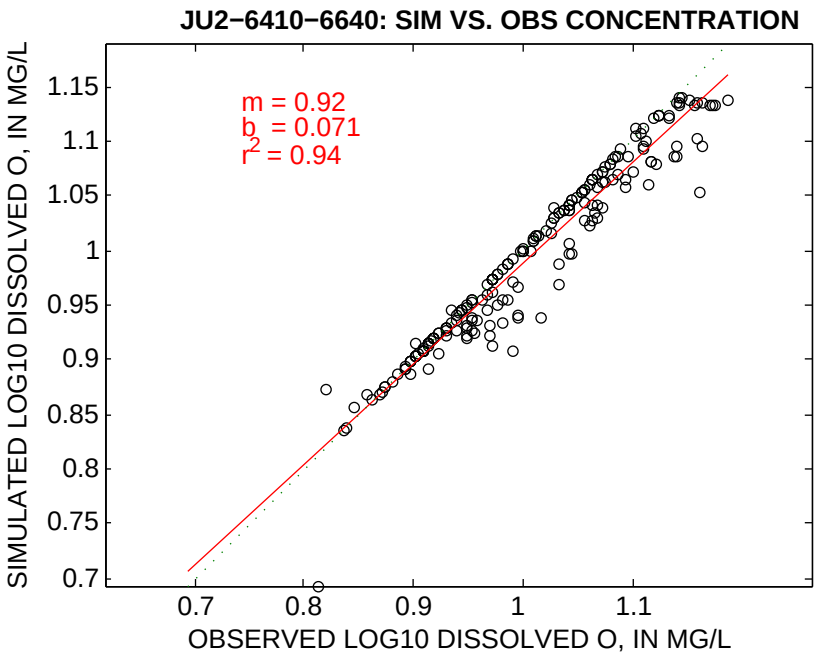
scenario: P620171001WQ
file: DOXX.calib
plot: DOXX - dissolved oxygen
Dates: 1/1/1985 – 12/31/201
Drive: N/A
Directory: model
Observed: OBS20161101

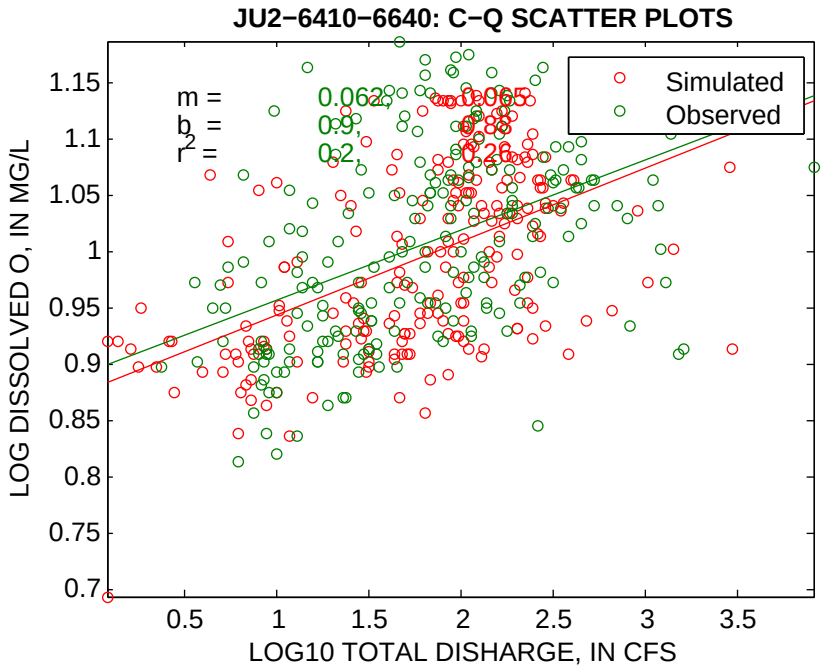
STATISTICS

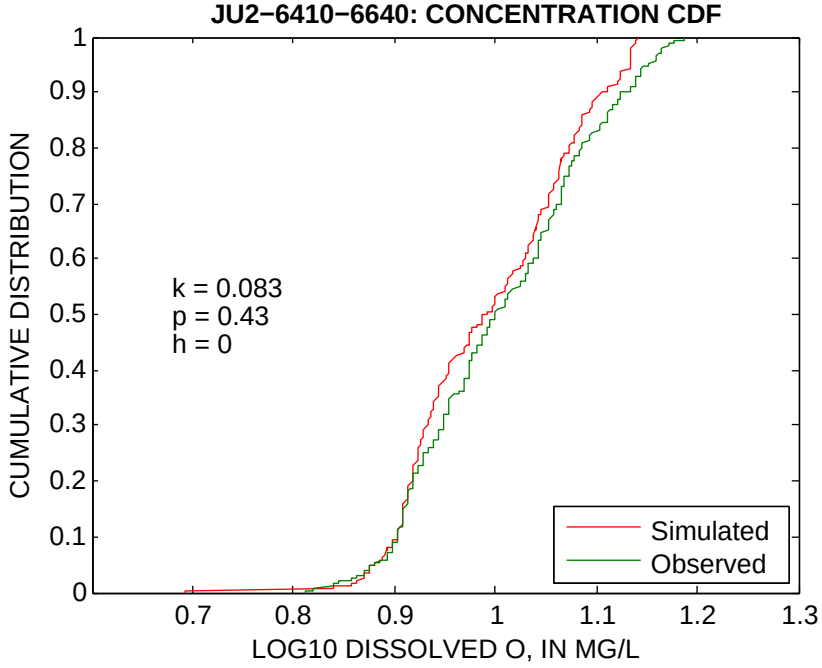
	n	217	217
		observe	simulate
min		6.5	7.0053
		0.812913	0.845427
mean		10.3404	9.73724
		1.00594	0.981391
media		10	9.4863
		1	0.977097
max		15.4	13.579
		1.18752	1.13287
varian		4.31208	3.17581
		0.00747572	0.00607331
JB		0.010887	0.004747
		0.024923	0.006461
		ra	log
%		-5.83322	-2.44059
err.va		1.33369	0.00231136
rel.std.err		0.309292	0.309182
mod.eff		0.690708	0.690818

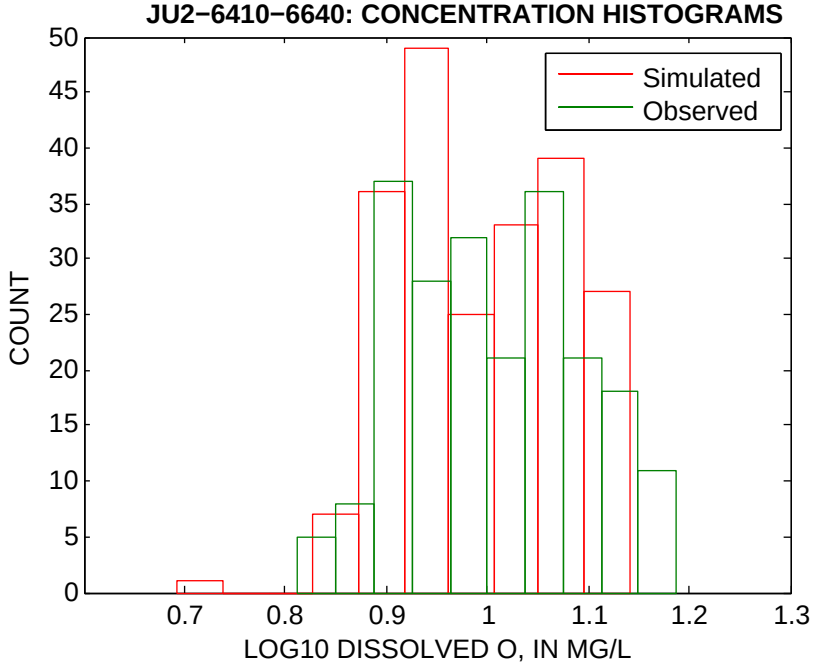
VERSION 2.1

ALL DATA
LOG10

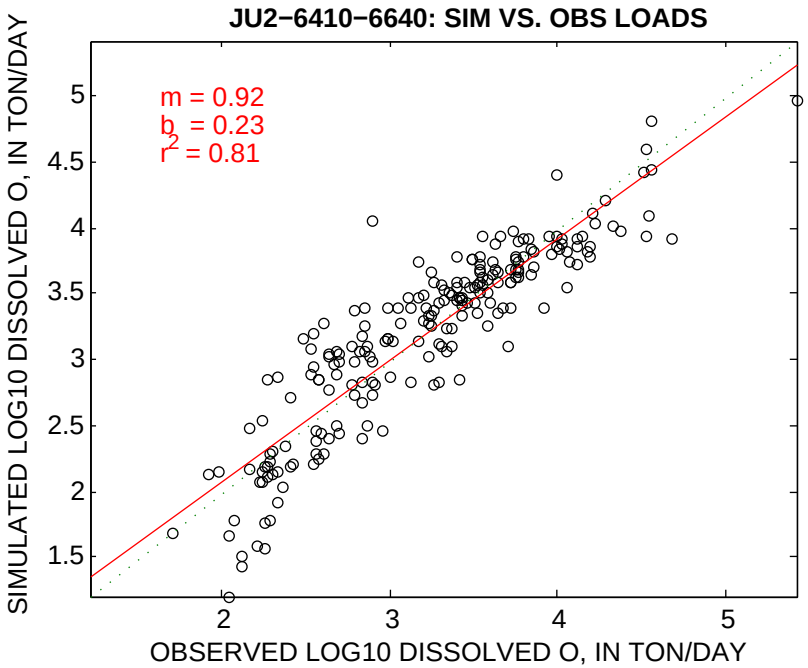


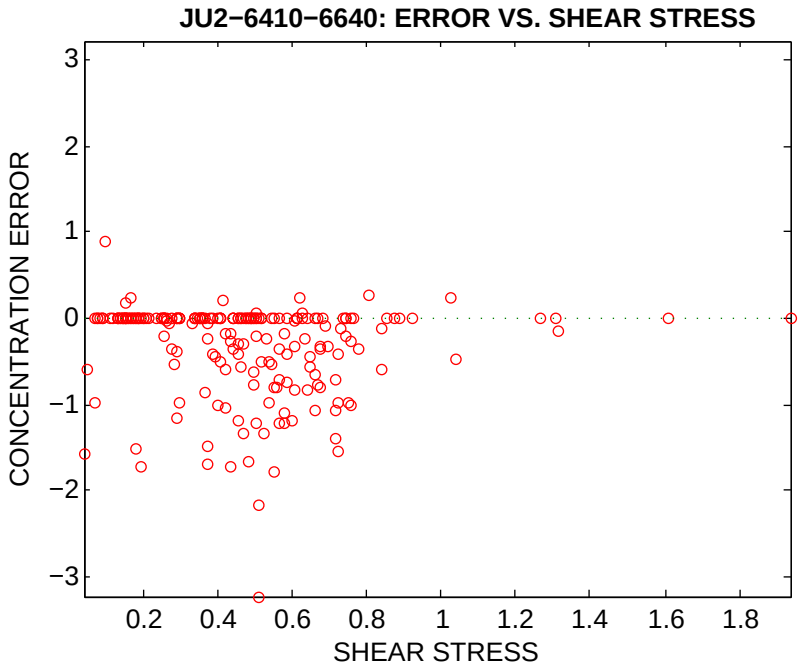


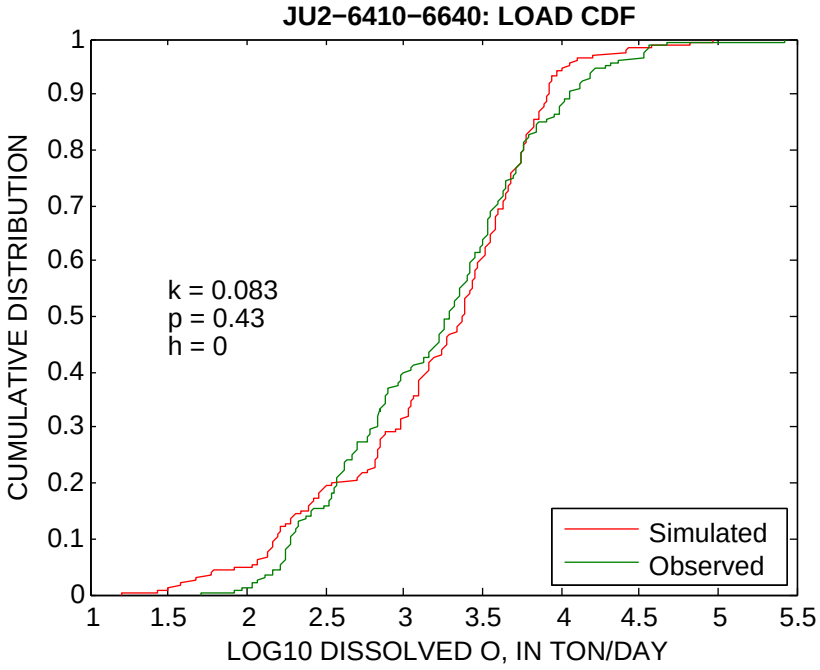


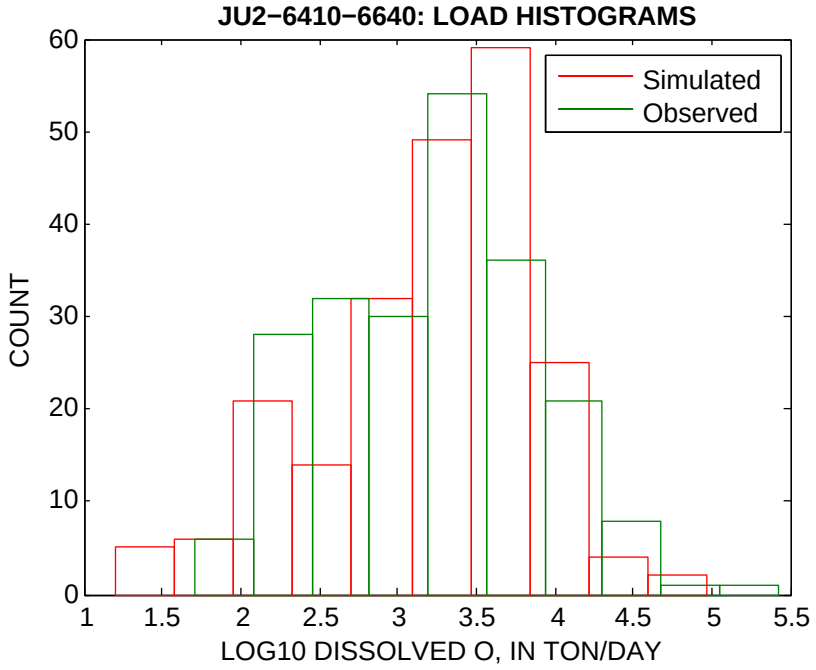


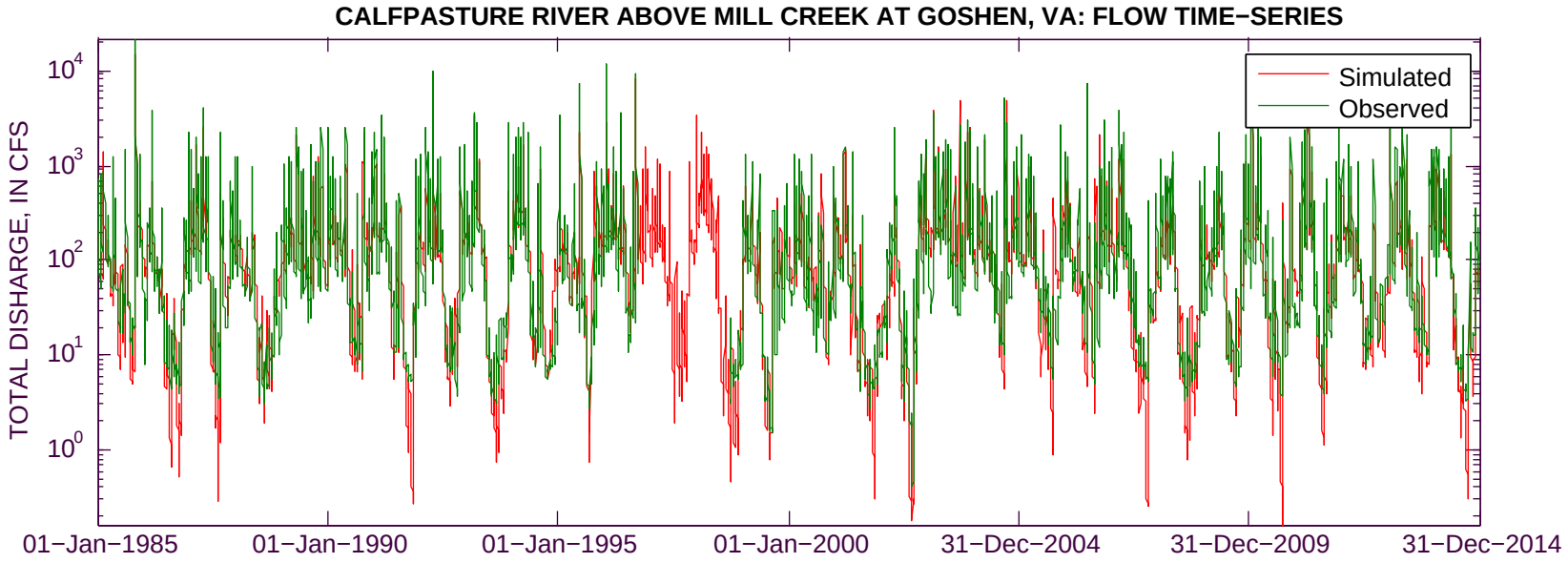
LOAD DATA
LOG10

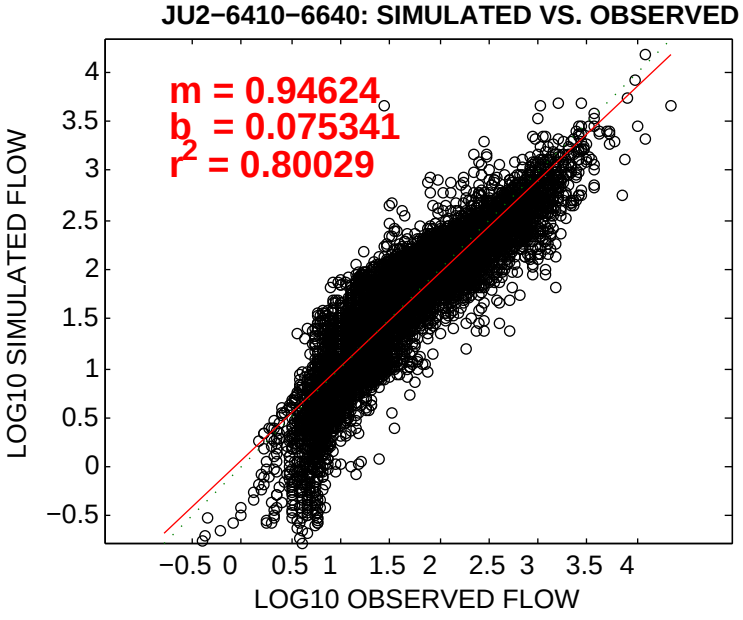


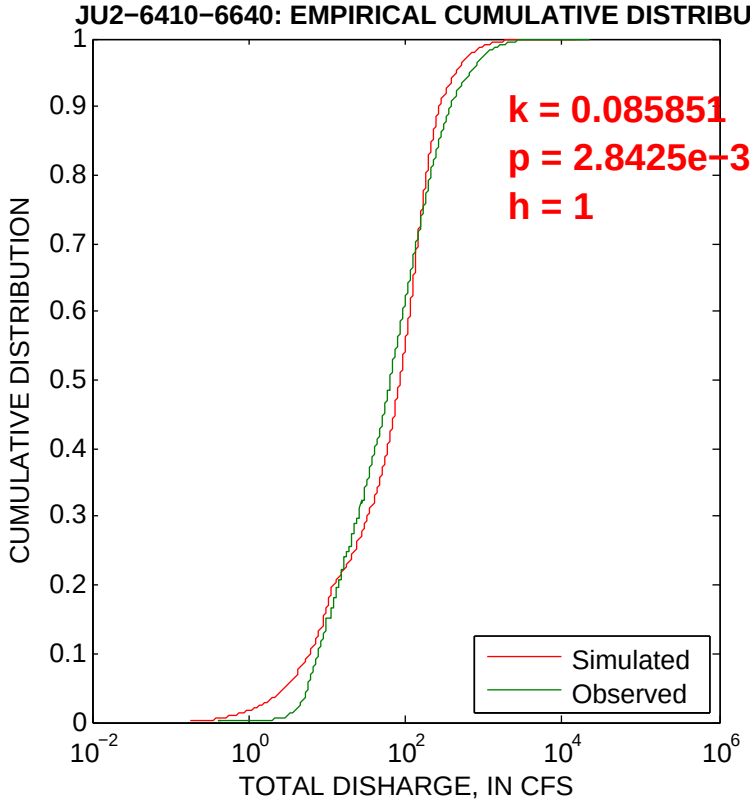












DATA SELECTION

scenario	file
P620171001WQ	FLOW.calib

plot: FLOW - total discharge

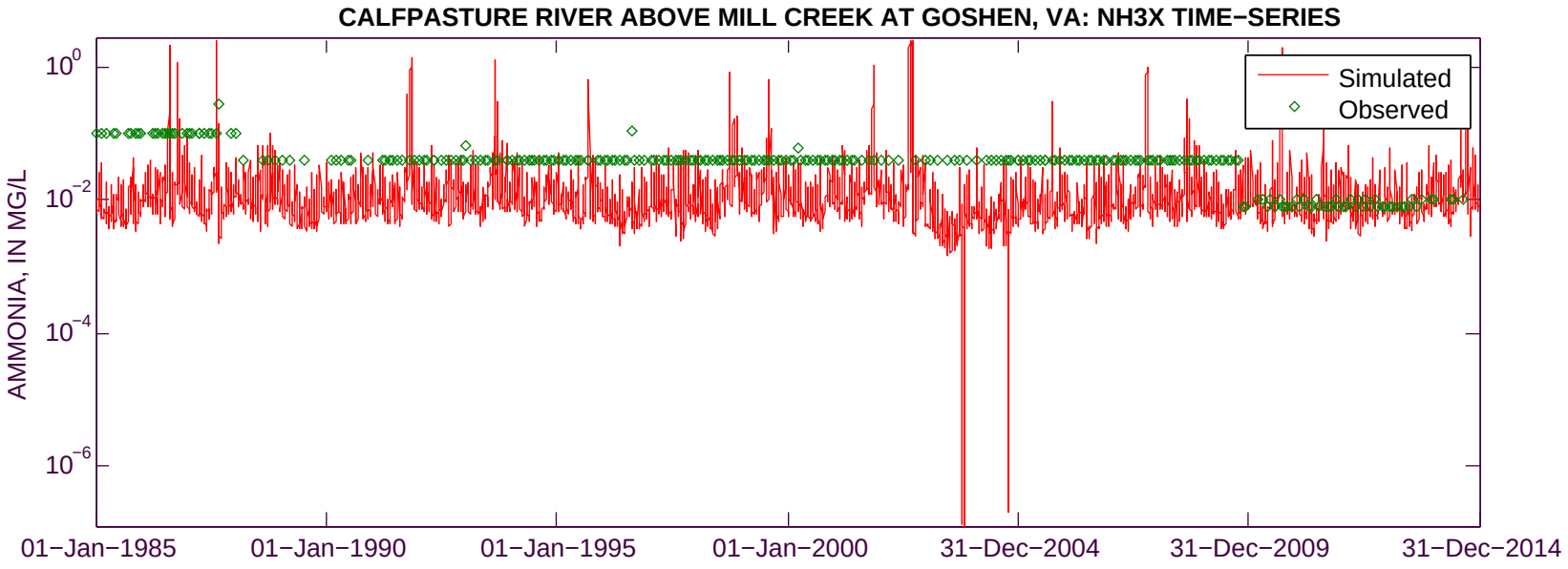
Dates: 1/1/1985 – 12/31/201

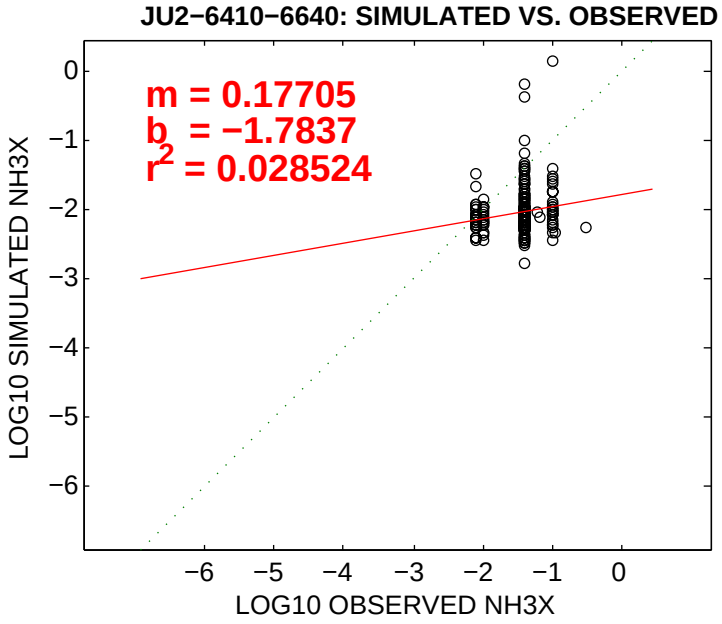
Drive	Directory	Observed
N/A	model	OBS20161101

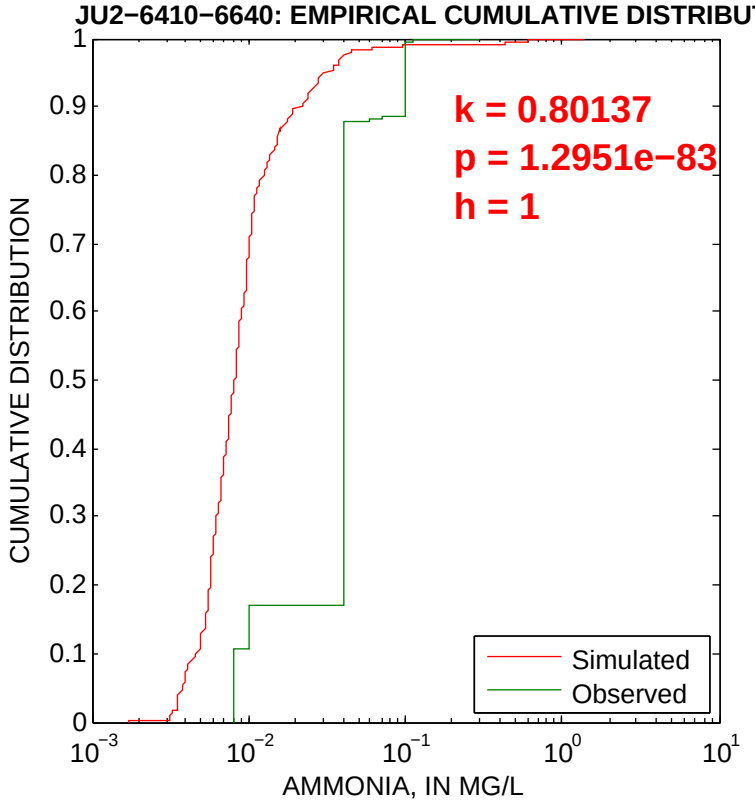
STATISTICS

		observe	simulate
n		10227	10227
min		0.41	0.164
		-0.387216	-0.785156
mean		175.12	141.002
		1.77584	1.75572
media		65	85.67
		1.81291	1.93283
max		21900	15189
		4.34044	4.18153
varian		218880	88088.8
		0.41335	0.462462
JB		0.001	0.001
		0.001	0.001
		ra	log
%		-19.483	-1.13339
err.va		100067	0.0939594
rel.std.err		0.45718	0.227312
mod.eff		0.54282	0.772688

VERSION







DATA SELECTION

scenario: P620171001WQ | file: NH3X.calib

plot: NH3X - ammonia

Dates: 1/1/1985 – 12/31/201

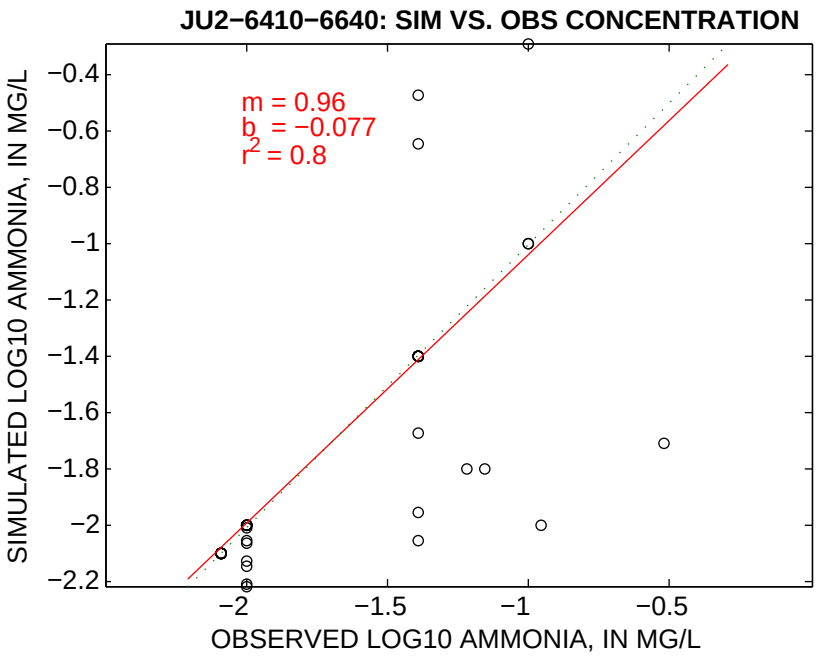
Drive: N/A | Directory: model | Observed: OBS20161101

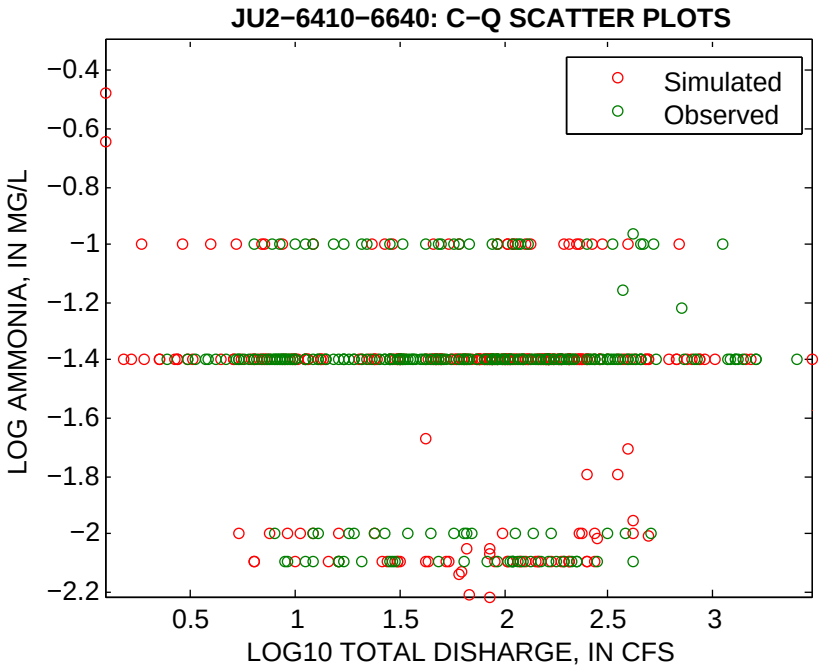
STATISTICS

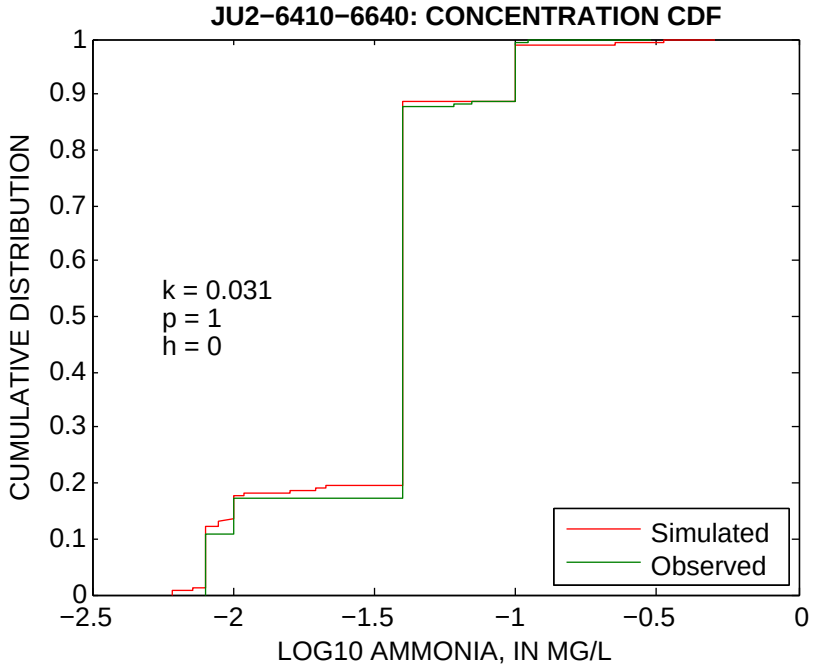
n	292	292
	observe	simulate
min	0.008	0.001715
	-2.09691	-2.76574
mean	0.0423219	0.0189234
	-1.46314	-2.04279
media	0.04	0.0081995
	-1.39794	-2.08621
max	0.3	1.4006
	-0.522879	0.146314
varian	0.00079955	0.00853386
	0.0919211	0.101018
JB	0.001	0.001
	0.001	0.001
	ra	log
%	-55.2871	39.617
err.va	0.00930375	0.49754
rel.std.err	11.6362	5.41268
mod.eff	-10.6362	-4.41268

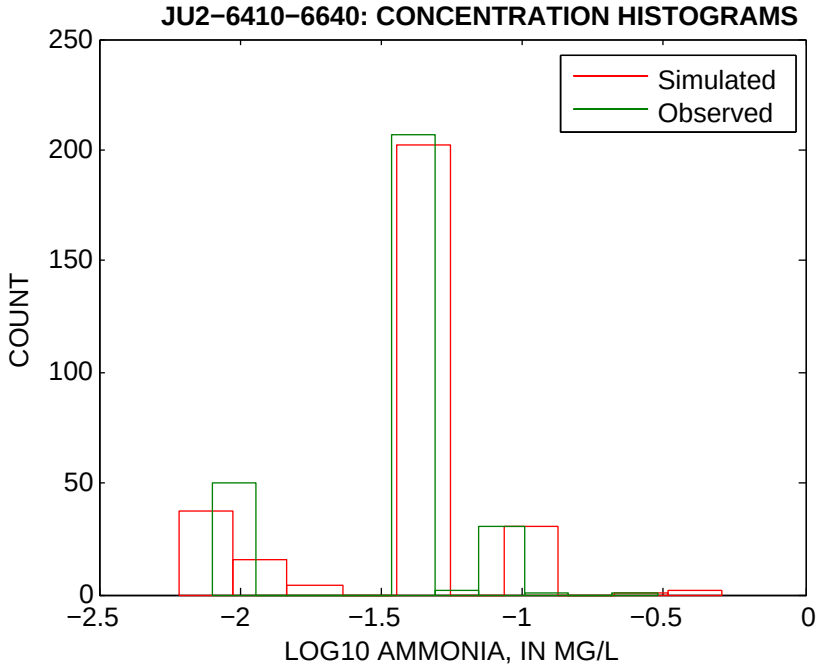
VERSION 2.1

ALL DATA
LOG10

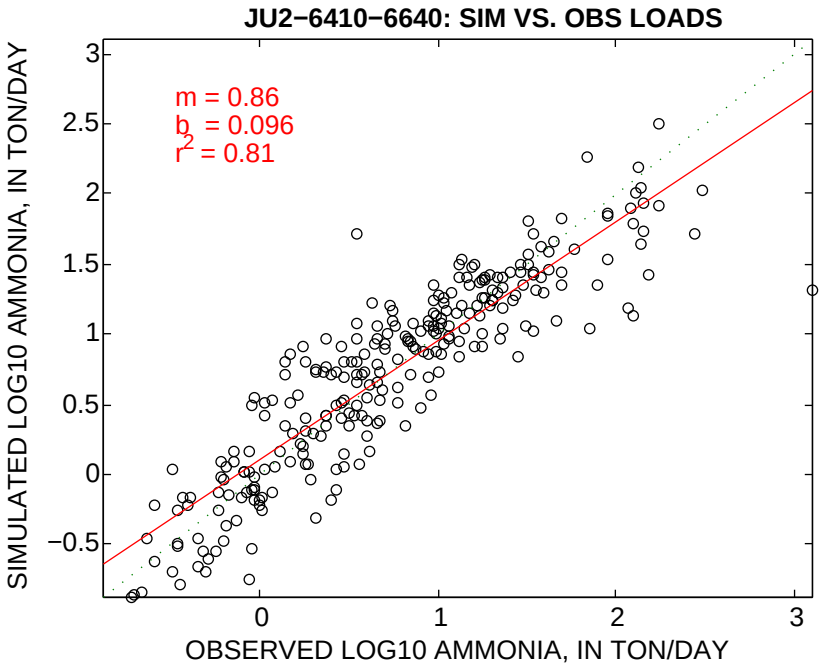




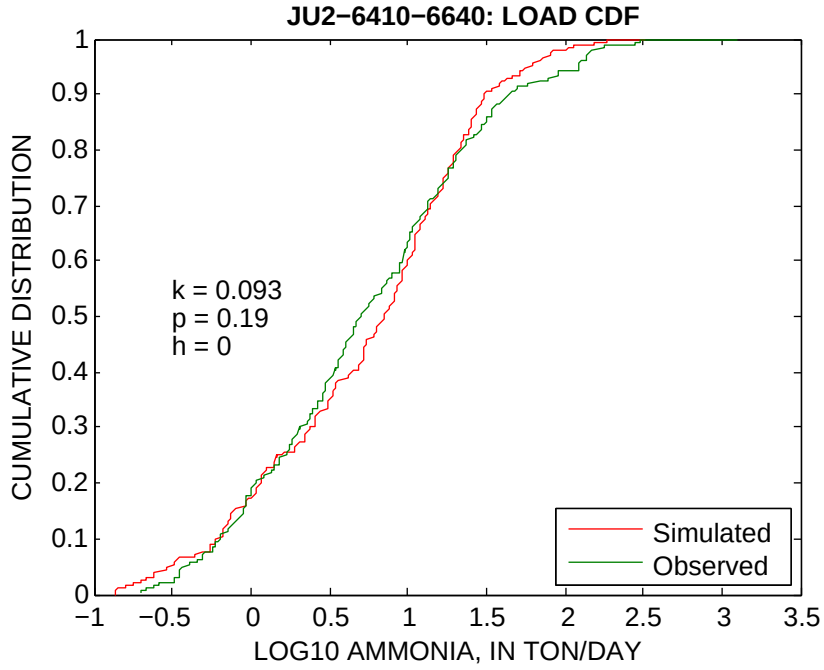


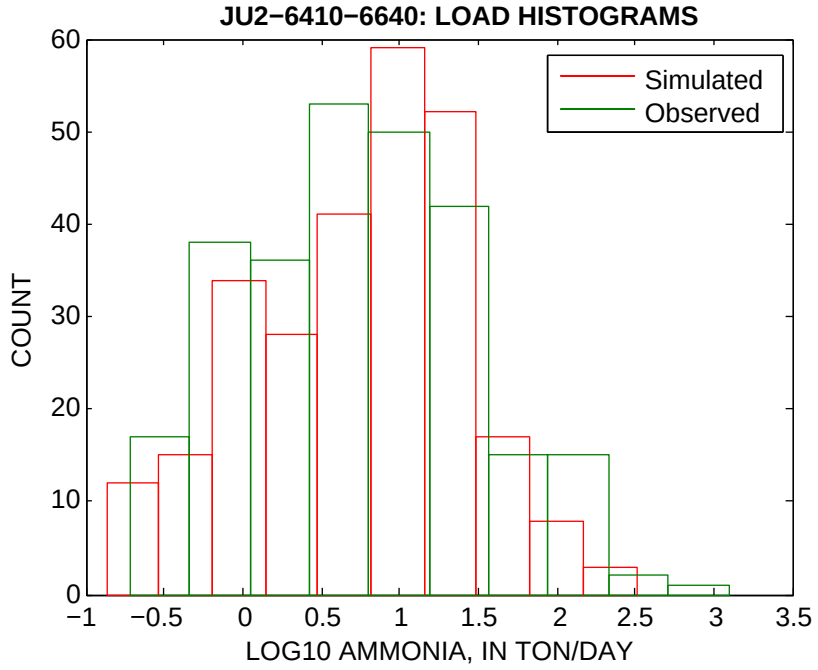


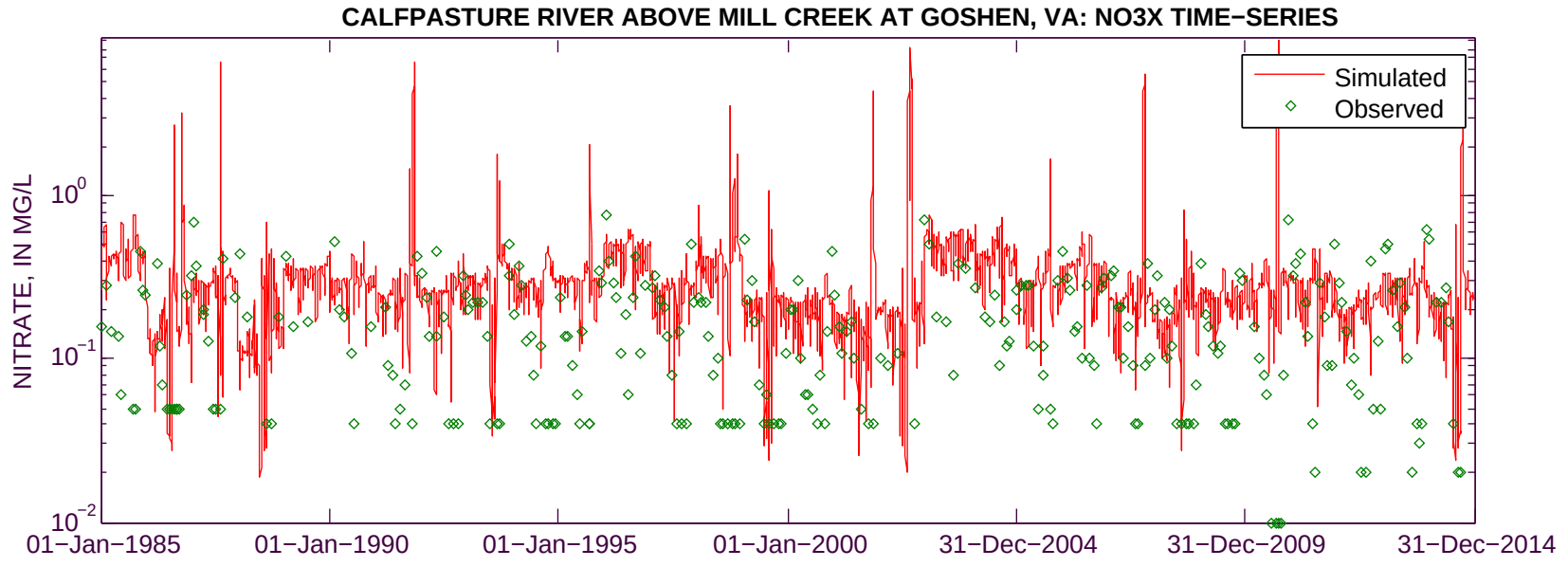
LOAD DATA
LOG10

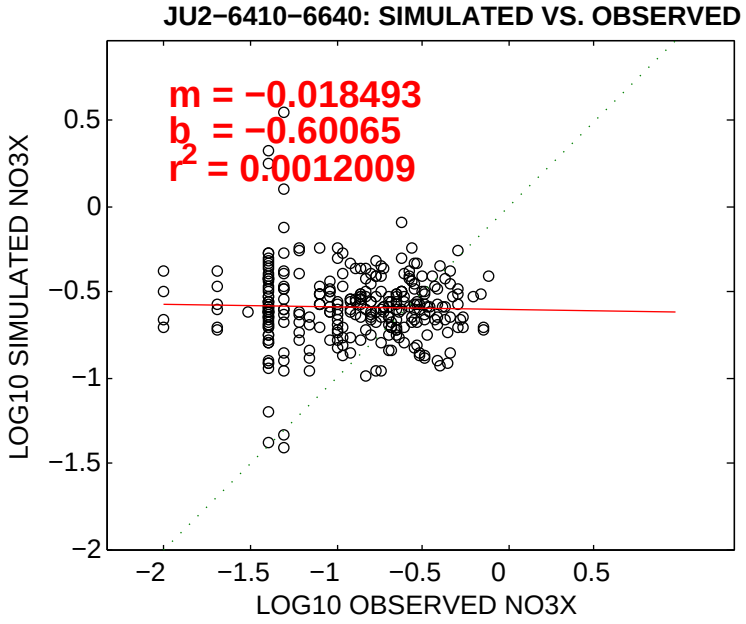


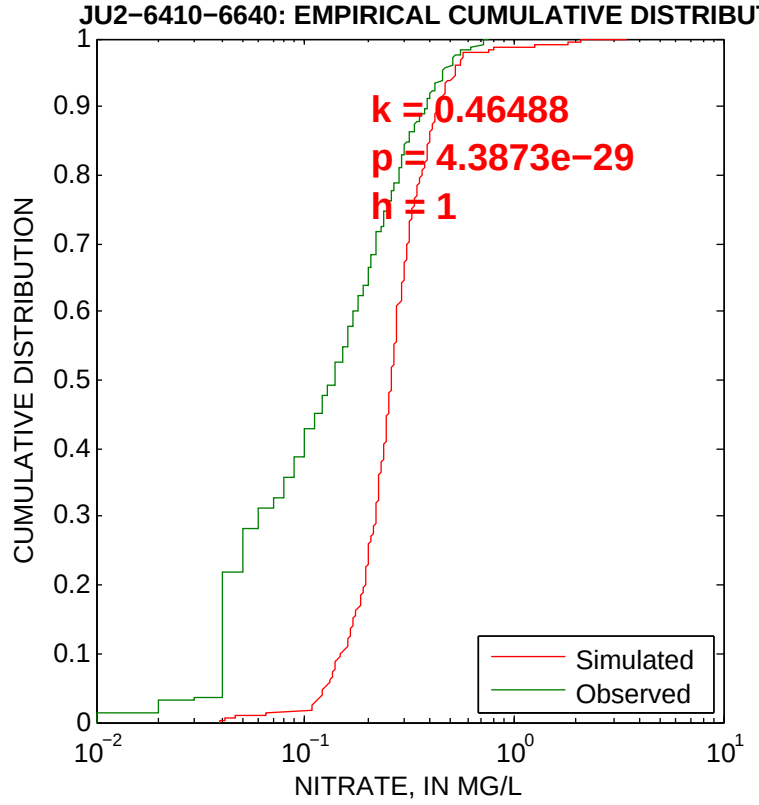












DATA SELECTION

scenario	file
P620171001WQ	NO3X.calib

plot: NO3X - nitrate

Dates: 1/1/1985 – 12/31/201

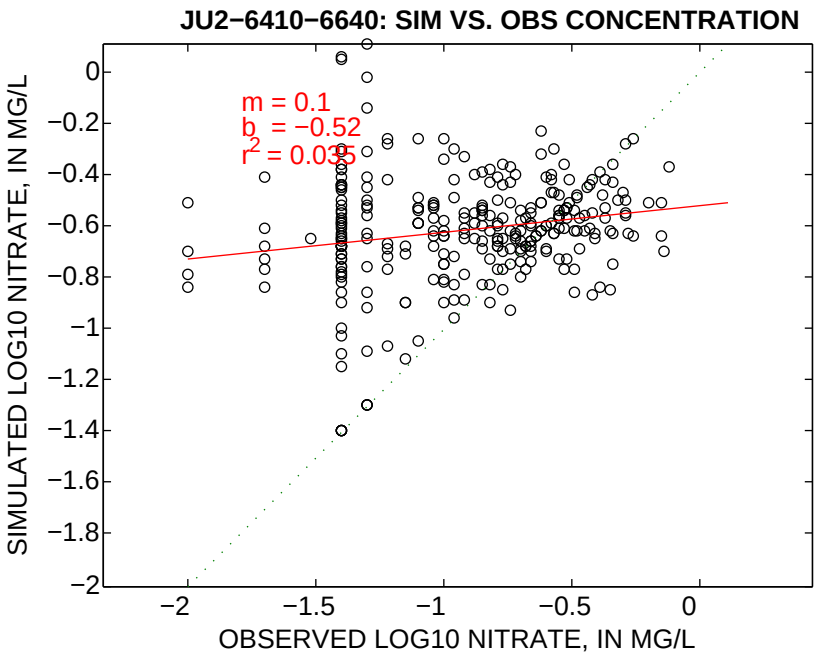
Drive	Directory	Observed
N/A	model	OBS20161101

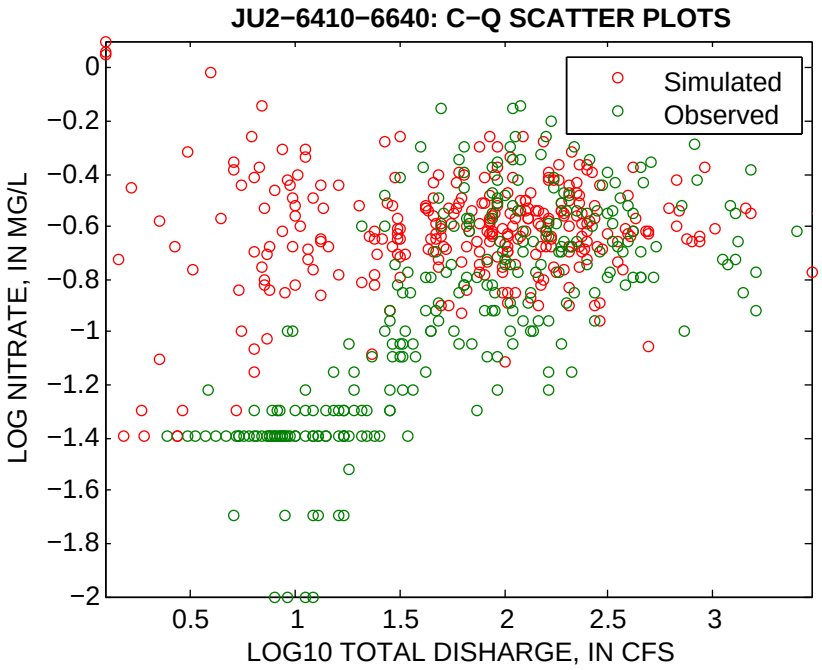
STATISTICS

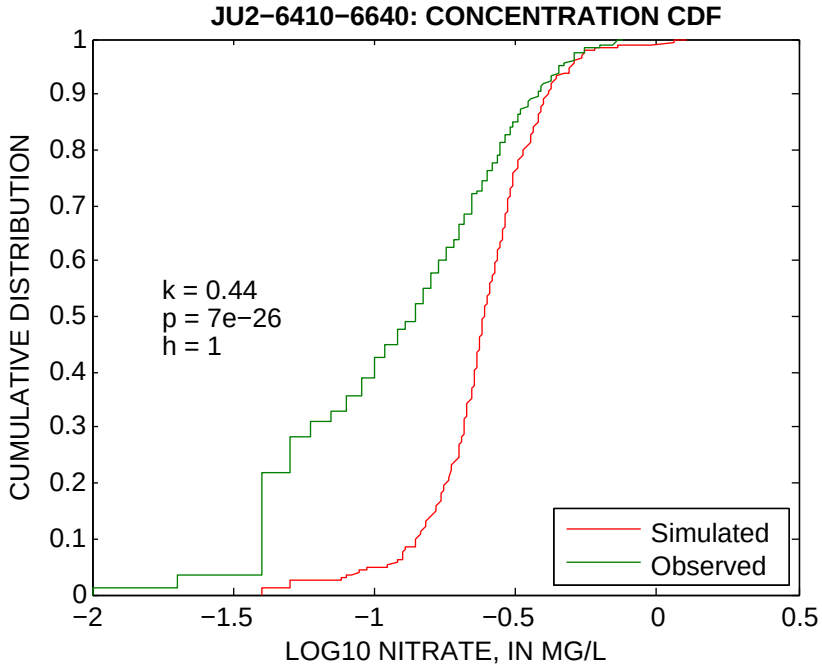
	n	299	299
		observe	simulate
min		0.01	0.039418
		-2	-1.40431
mean		0.173211	0.300988
		-0.921981	-0.5836
media		0.14	0.25948
		-0.853872	-0.585896
max		0.76	3.5118
		-0.119186	0.54553
varian		0.0210038	0.0687172
		0.157145	0.044752
JB		0.001	0.001
		0.019280	0.001
		ra	log
%		73.7698	-36.7015
err.va		0.113006	0.322595
rel.std.err		5.38028	2.05285
mod.eff		-4.38028	-1.05285

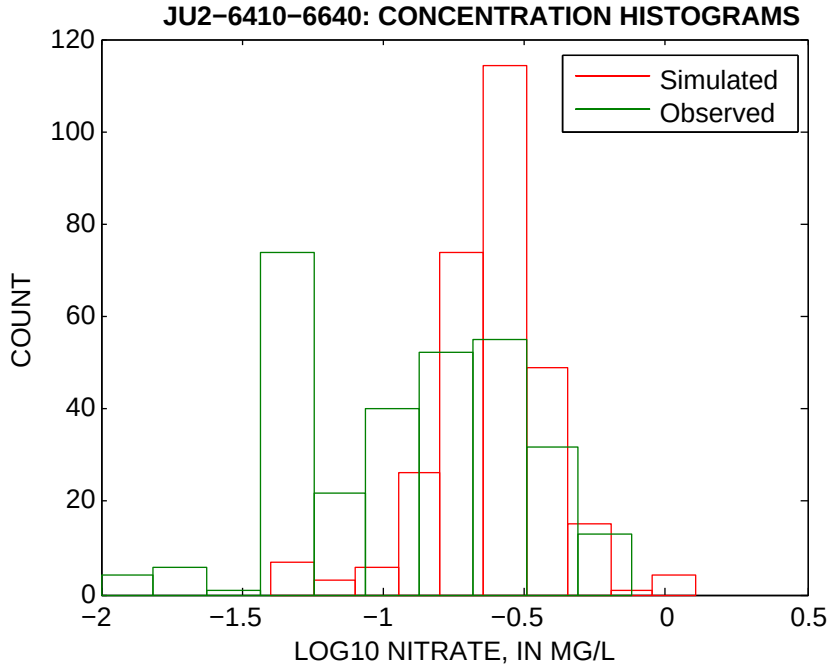
VERSION

ALL DATA
LOG10

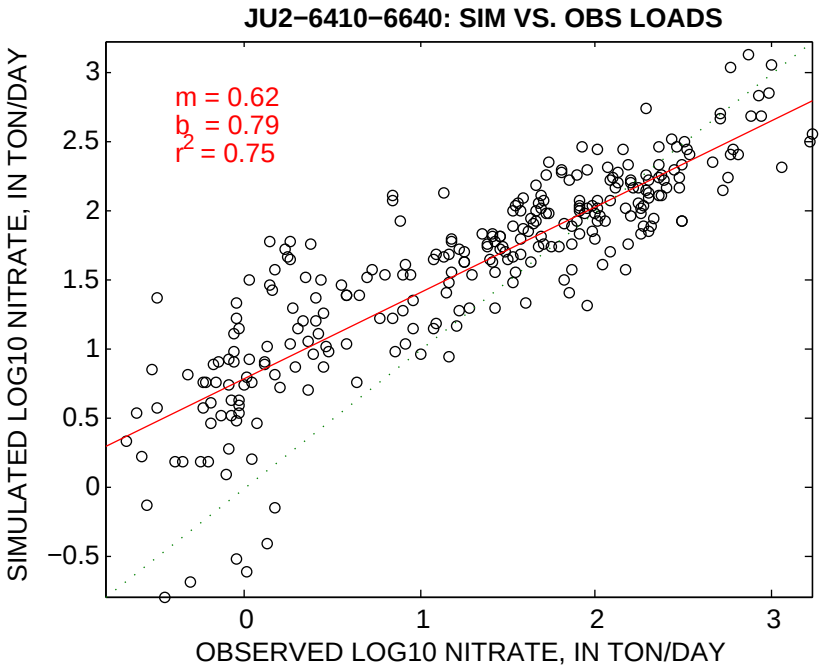




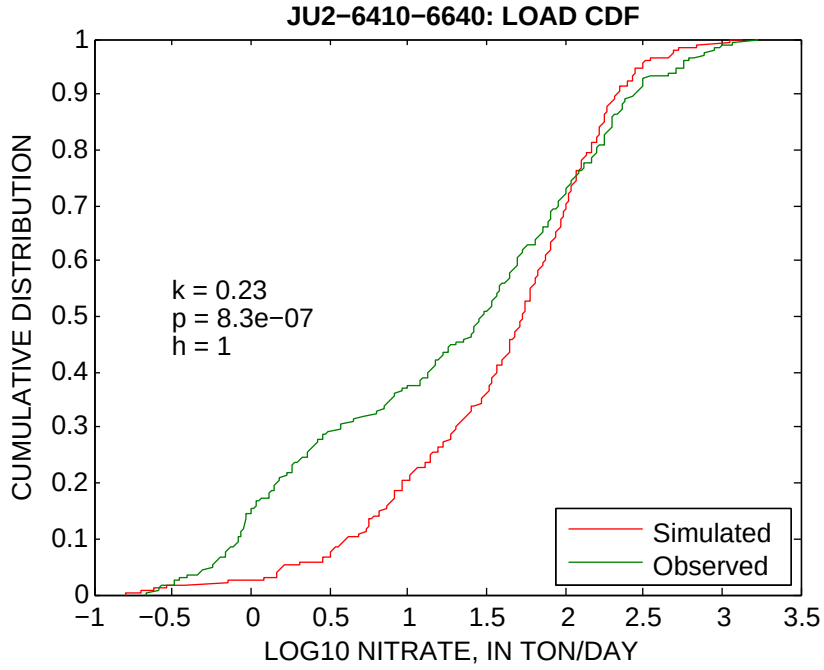


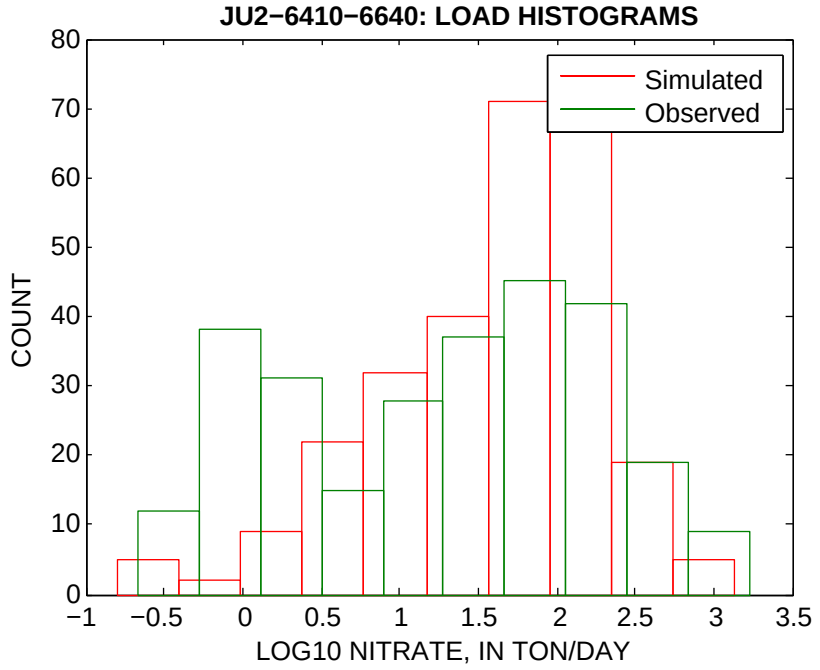


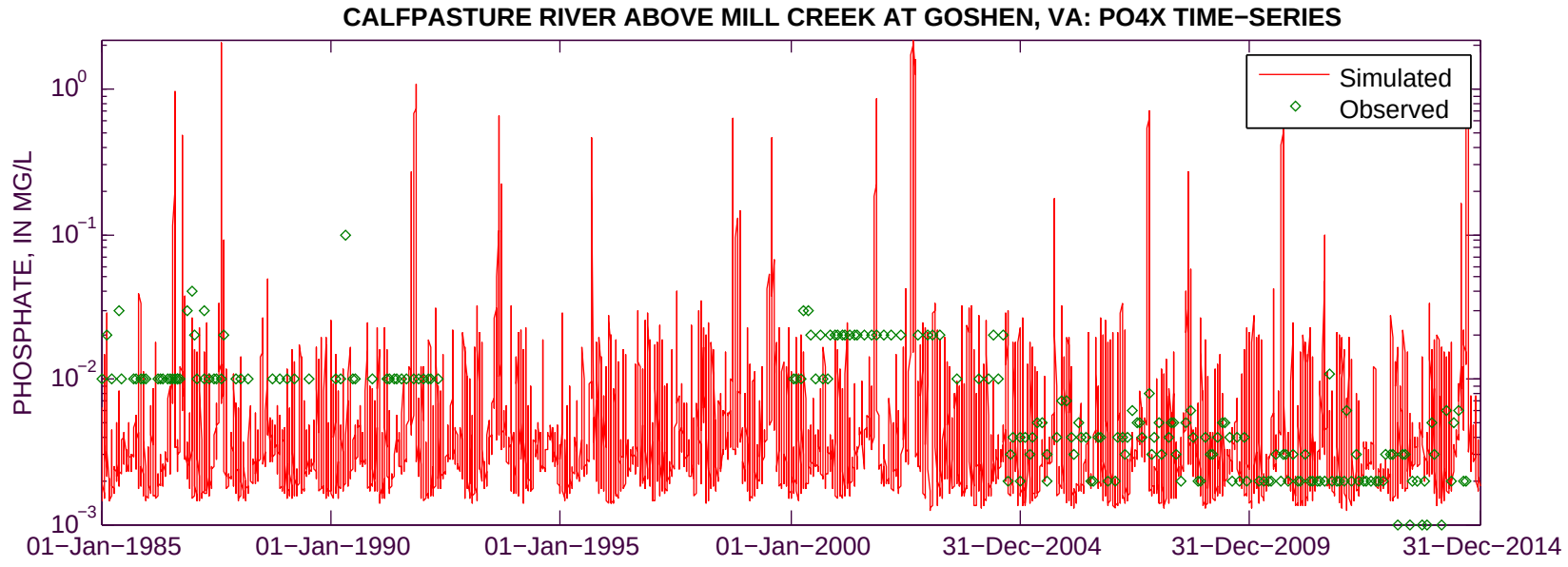
LOAD DATA
LOG10

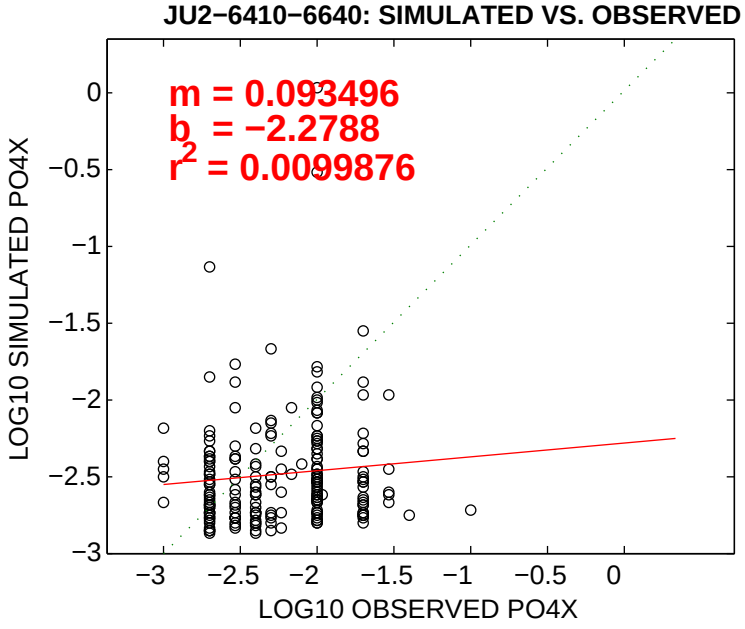


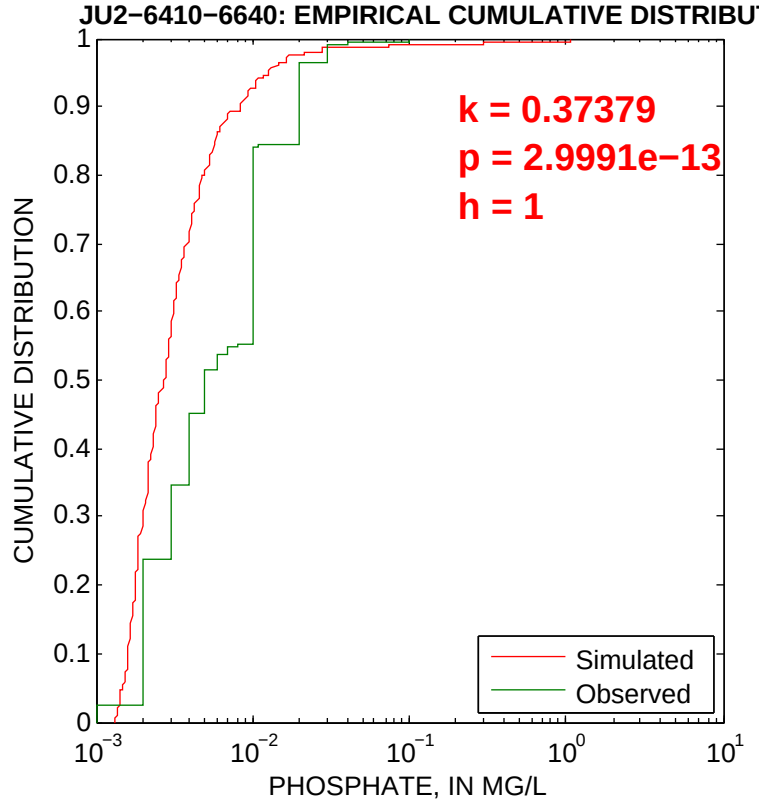












DATA SELECTION

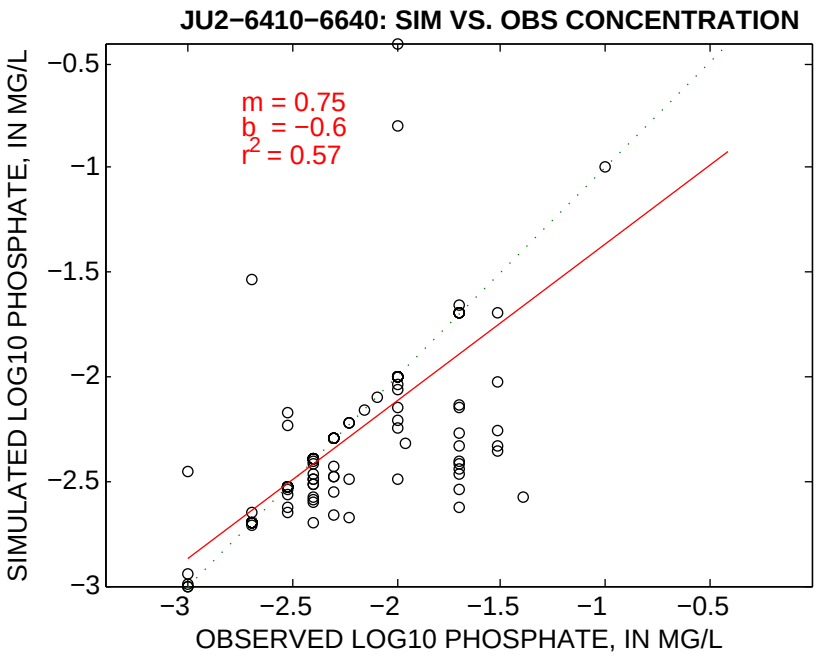
scenario: P620171001WQ
file: PO4X.calib
plot: PO4X - phosphate
Dates: 1/1/1985 12/31/201
Drive: N/A
Directory: model
Observed: OBS20161101

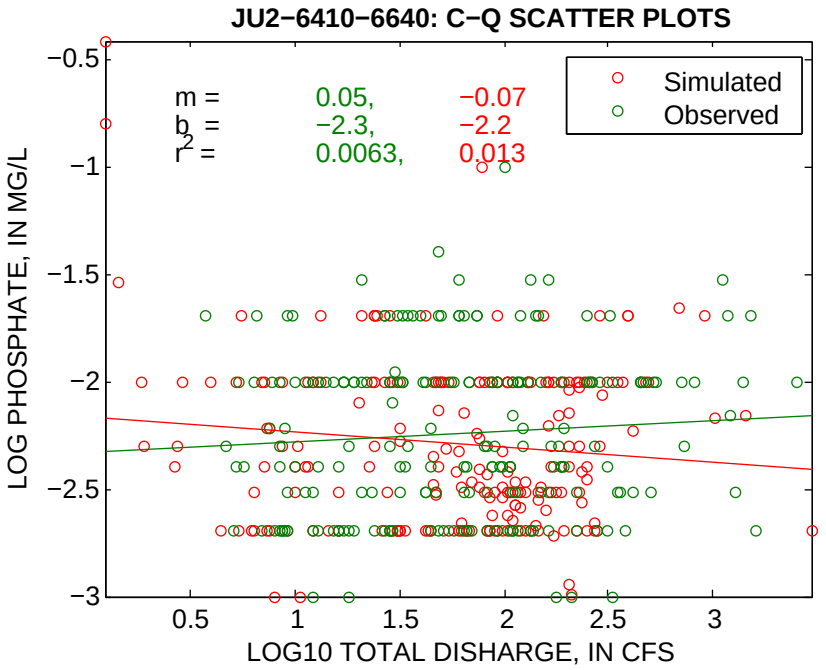
STATISTICS

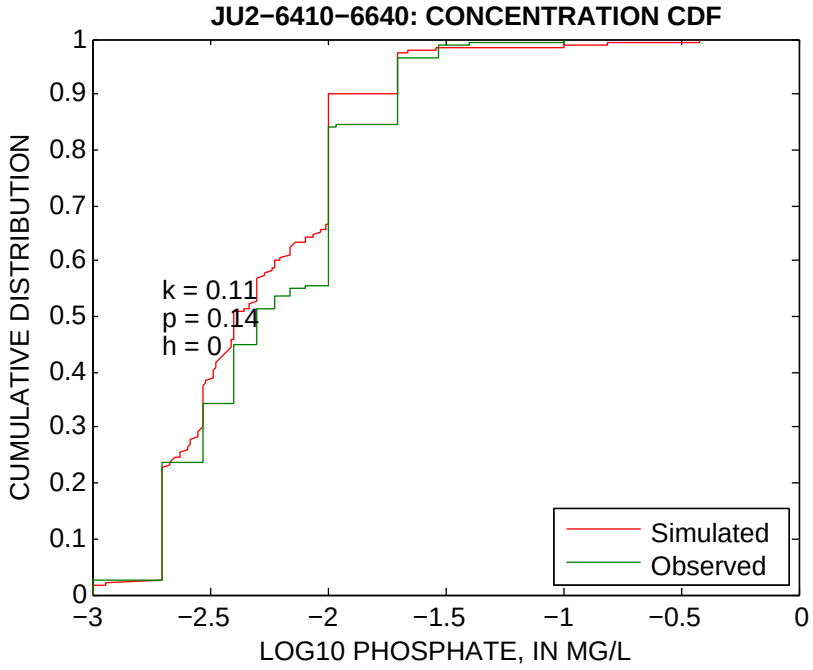
n	206	206
	observe	simulate
min	0.001	0.0013434
	-3	-2.87179
mean	0.00851942	0.0107702
	-2.24217	-2.48843
media	0.005	0.00273185
	-2.30103	-2.56359
max	0.1	1.0666
	-1	0.0280016
varian	9.05728e-0	0.00592954
	0.147139	0.128782
JB	0.001	0.001
	0.061782	0.001
	ra	log
%	26.4189	10.9829
err.va	0.00600674	0.309345
rel.std.err	66.3195	2.1024
mod.eff	-65.3195	-1.1024

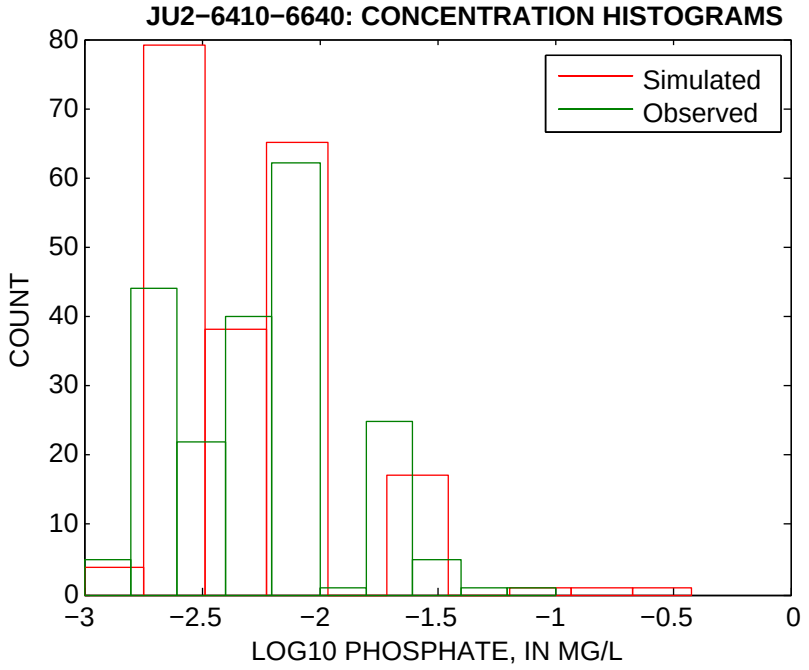
VERSION 2.1

ALL DATA
LOG10

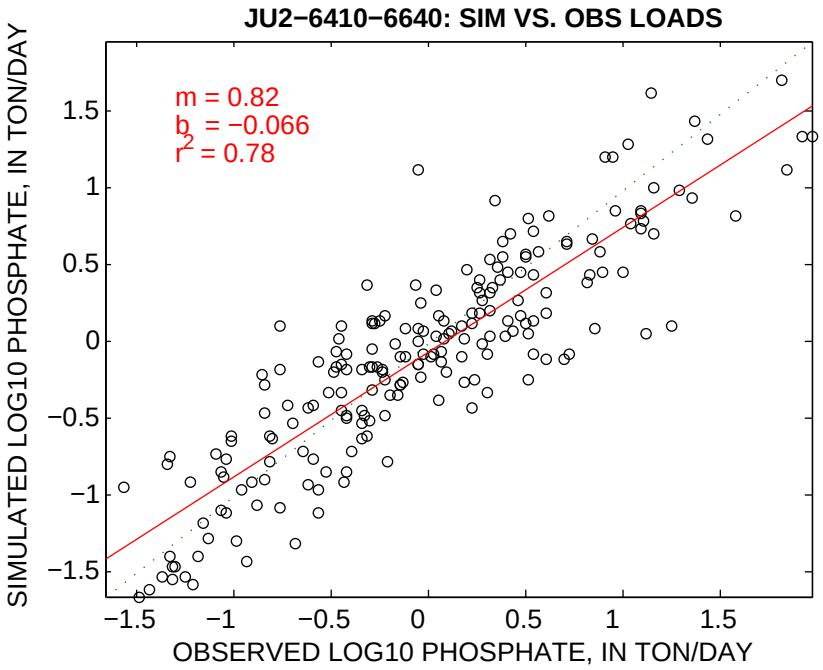




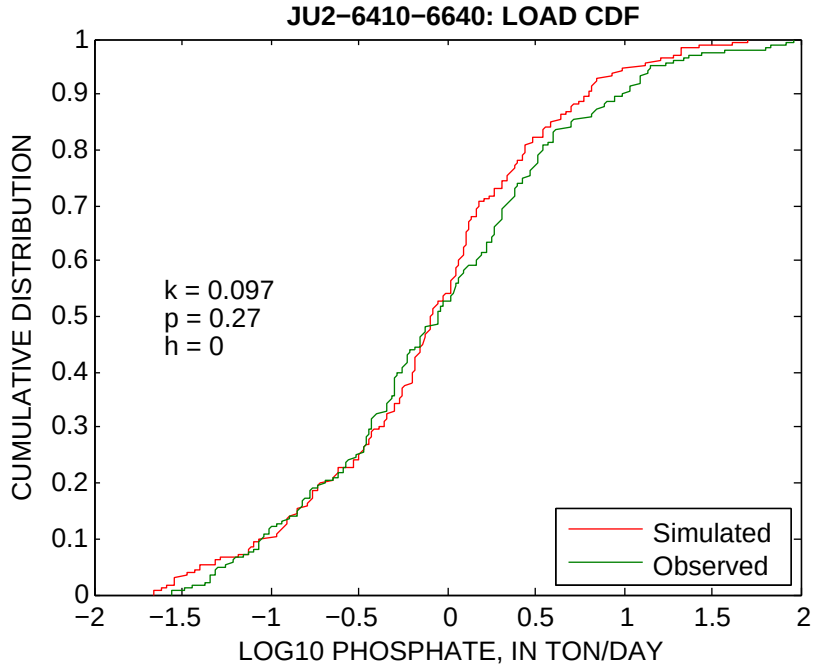


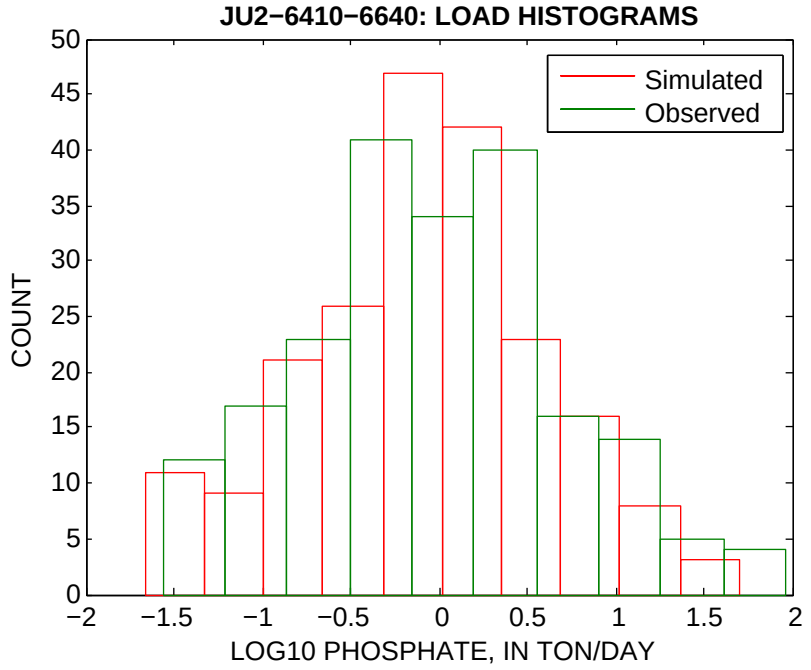


LOAD DATA
LOG10

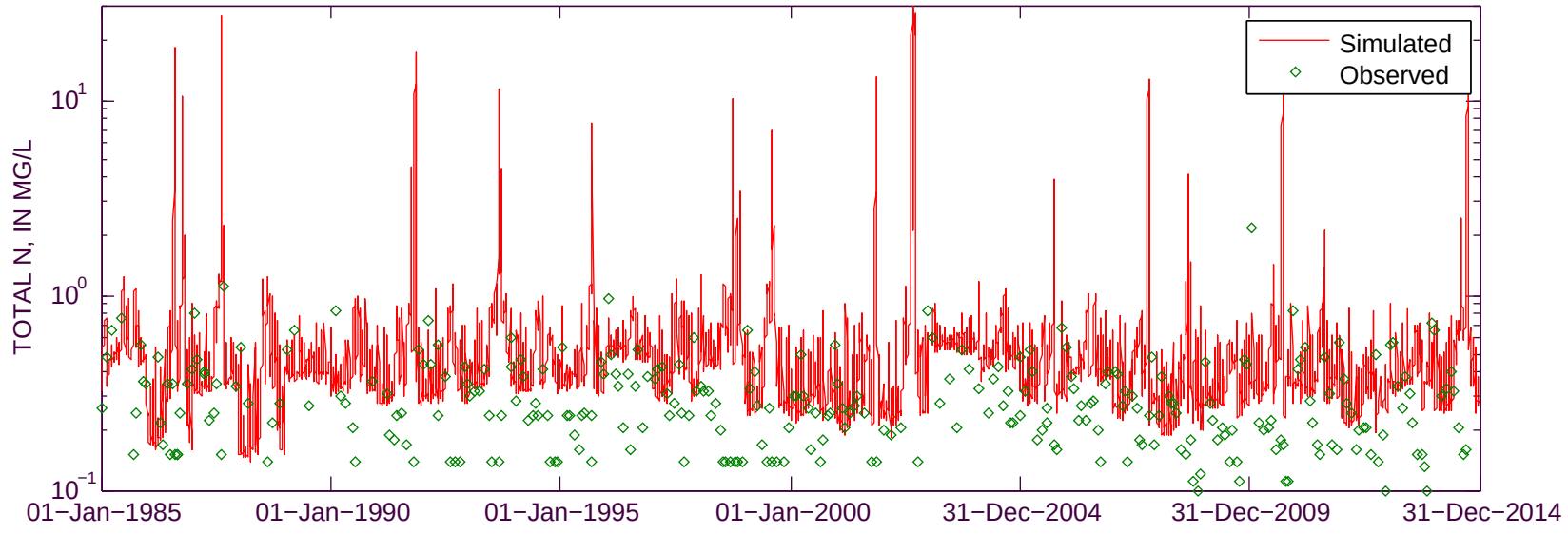




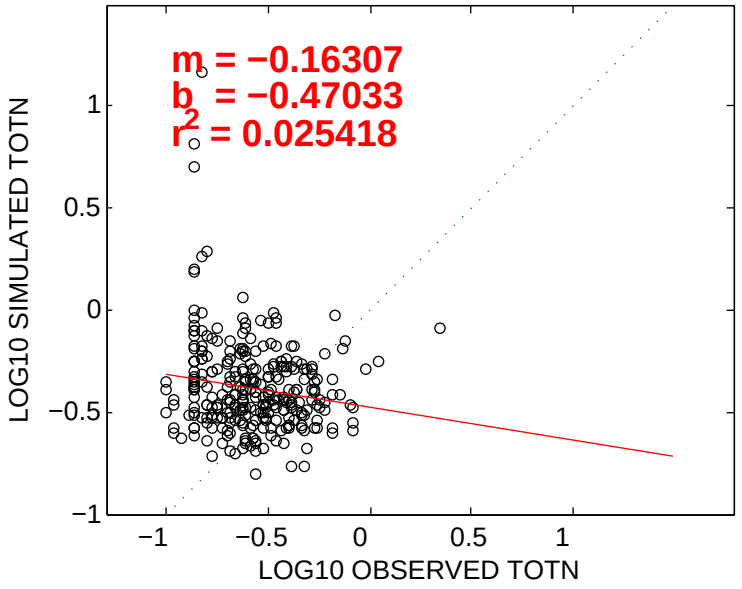




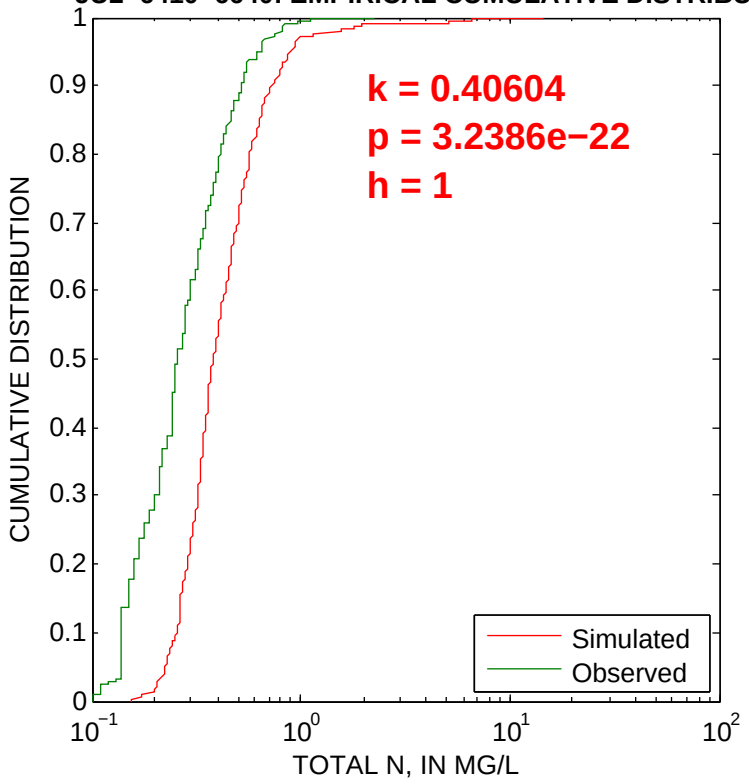
CALFPASTURE RIVER ABOVE MILL CREEK AT GOSHEN, VA: TOTN TIME-SERIES



JU2-6410-6640: SIMULATED VS. OBSERVED



JU2-6410-6640: EMPIRICAL CUMULATIVE DISTRIBUTION



DATA SELECTION

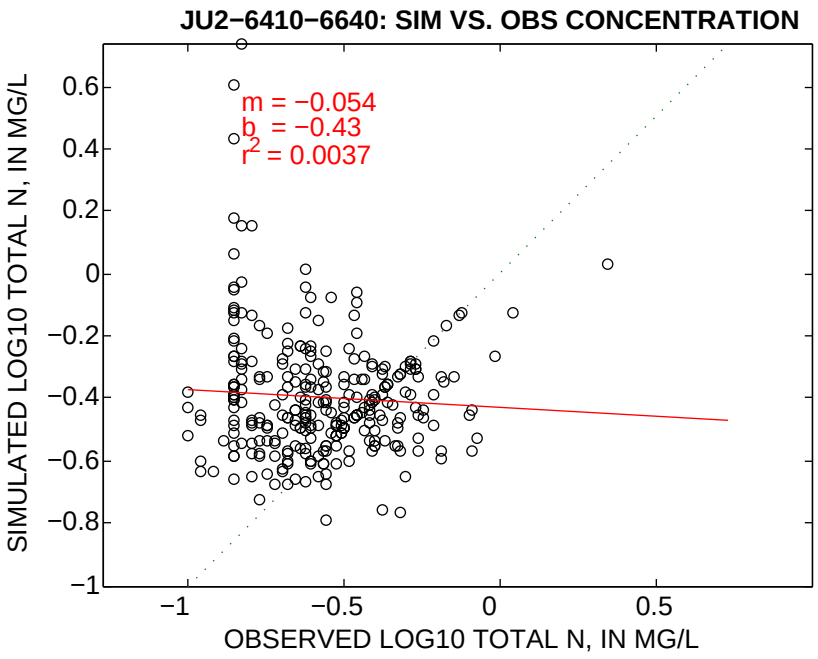
scenario: P620171001WQ
file: TOTN.calib
plot: TOTN - total nitrogen
Dates: 1/1/1985 – 12/31/201
Drive: N/A
Directory: model
Observed: OBS20161101

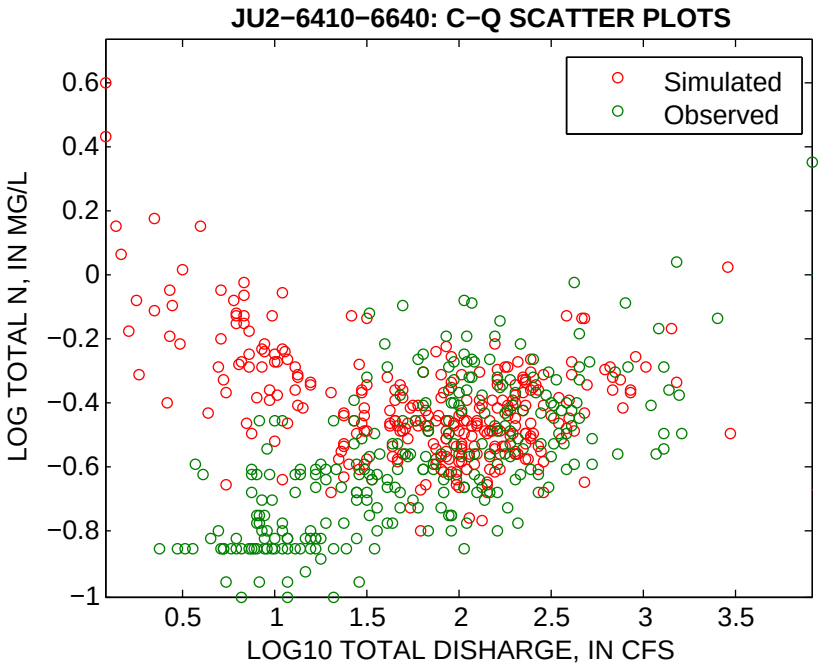
STATISTICS

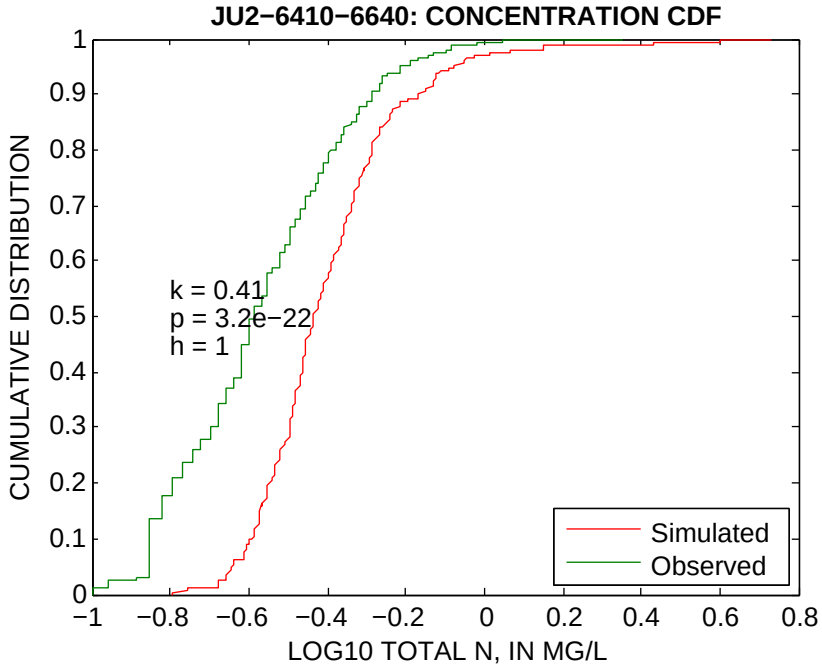
	n	observe	simulate
		298	298
min		0.1	0.15561
		-1	-0.807962
mean		0.30849	0.532283
		-0.57006	-0.377373
media		0.26	0.38533
		-0.585027	-0.414168
max		2.24	14.688
		0.350248	1.16696
varian		0.0385334	0.927311
		0.0474869	0.0496791
JB		0.001	0.001
		0.008941	0.001
		ra	log
%		72.5446	-33.8012
err.va		1.04813	0.149907
rel.std.err		27.2005	3.1568
mod.eff		-26.2005	-2.1568

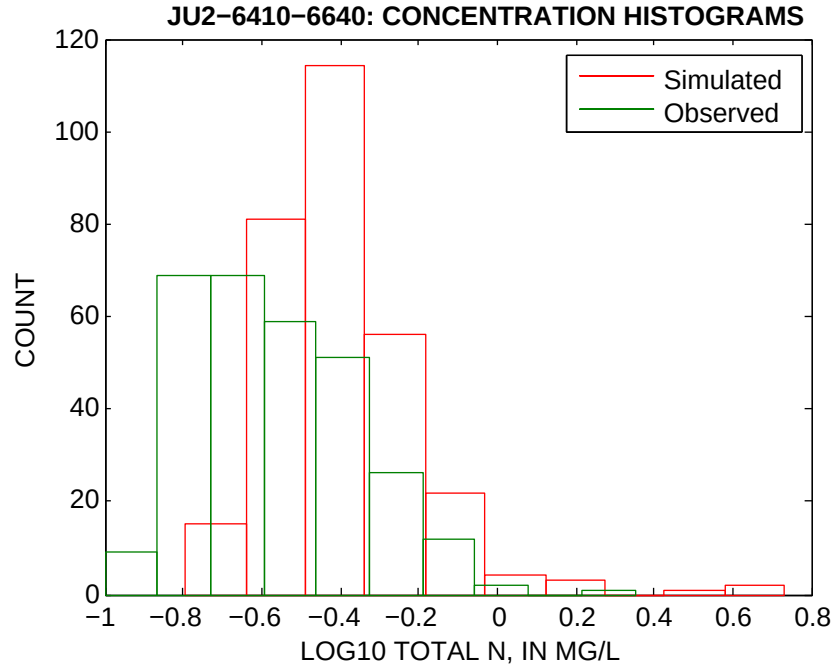
VERSION 3.1

ALL DATA
LOG10

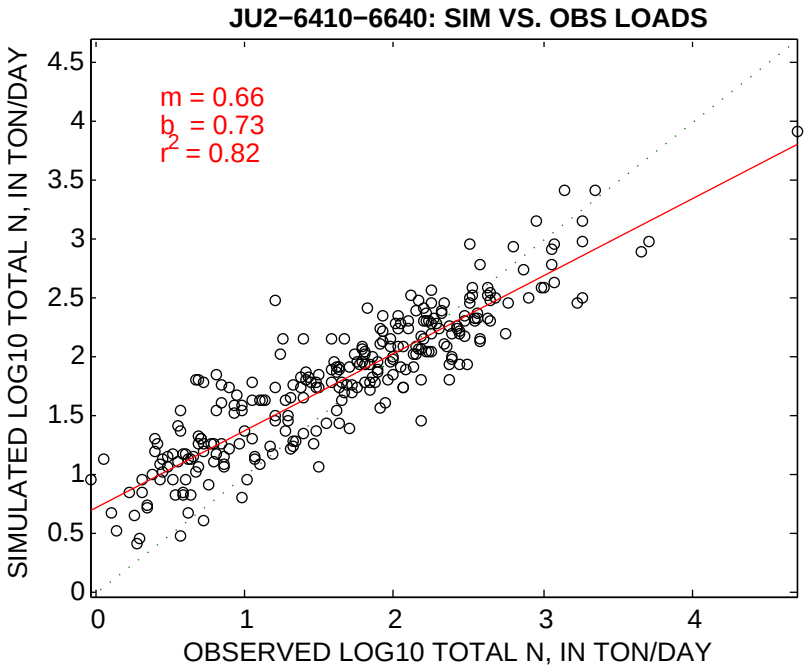


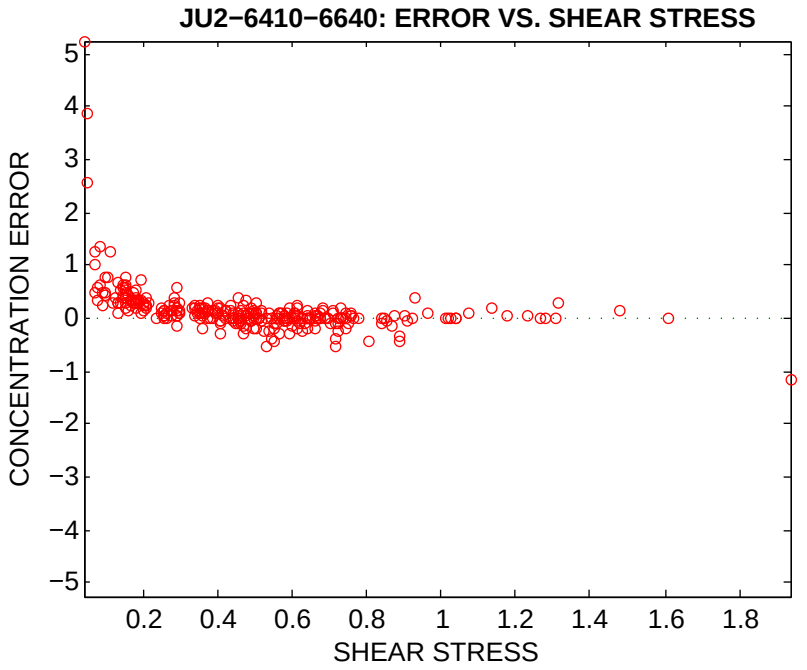


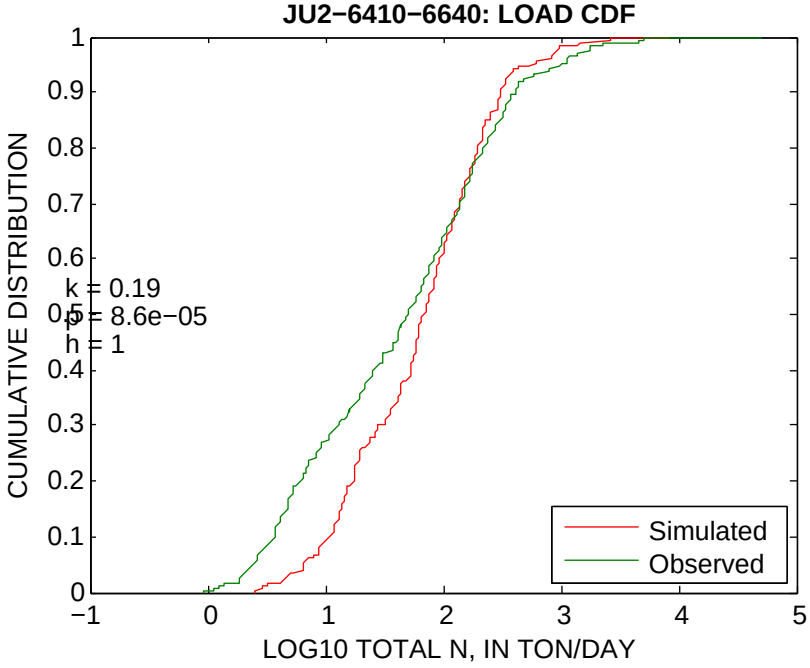


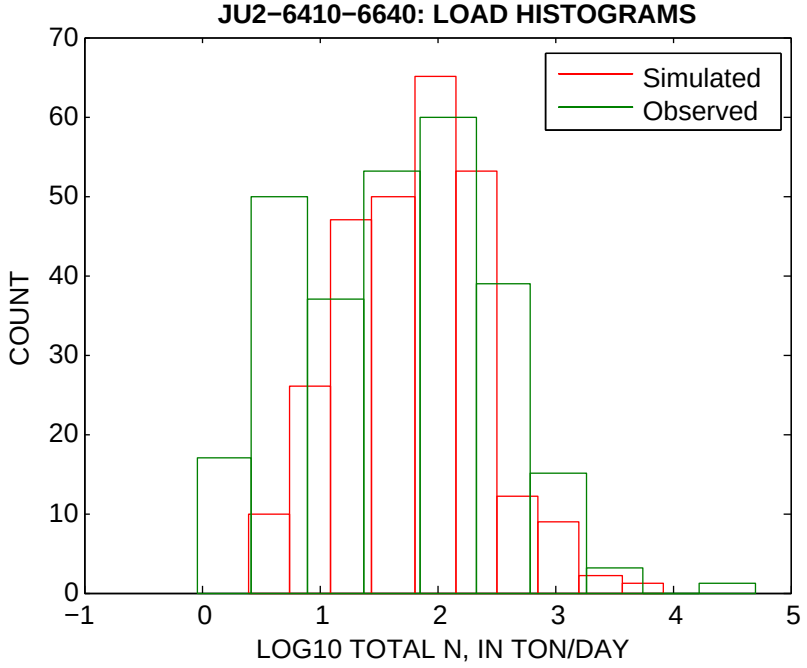


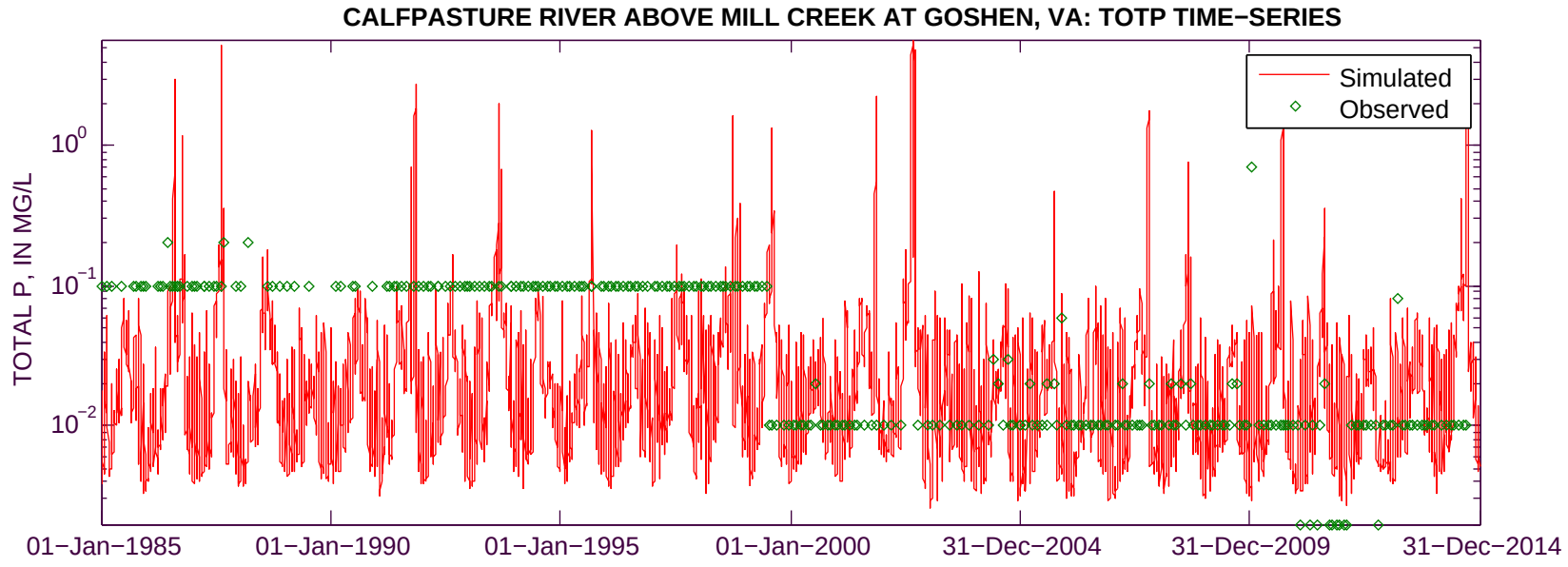
LOAD DATA
LOG10

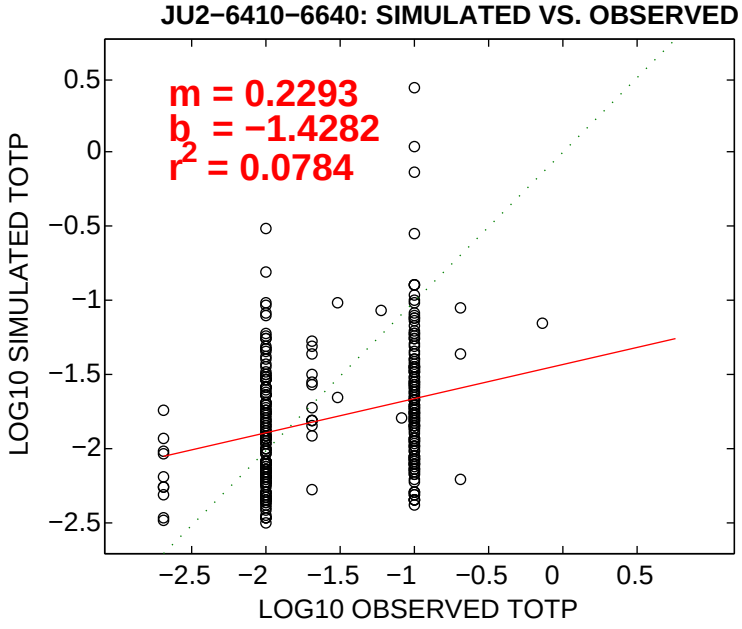


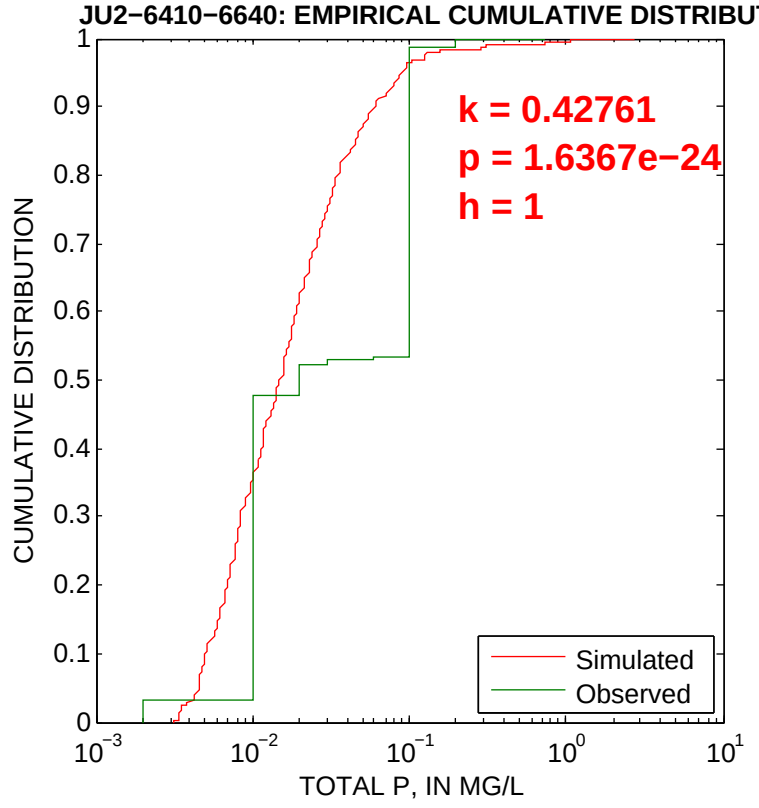












DATA SELECTION

scenario: P620171001WQ | file: TOTP.calib

plot: TOTP - total phosphorus

Dates: 1/1/1985 – 12/31/201

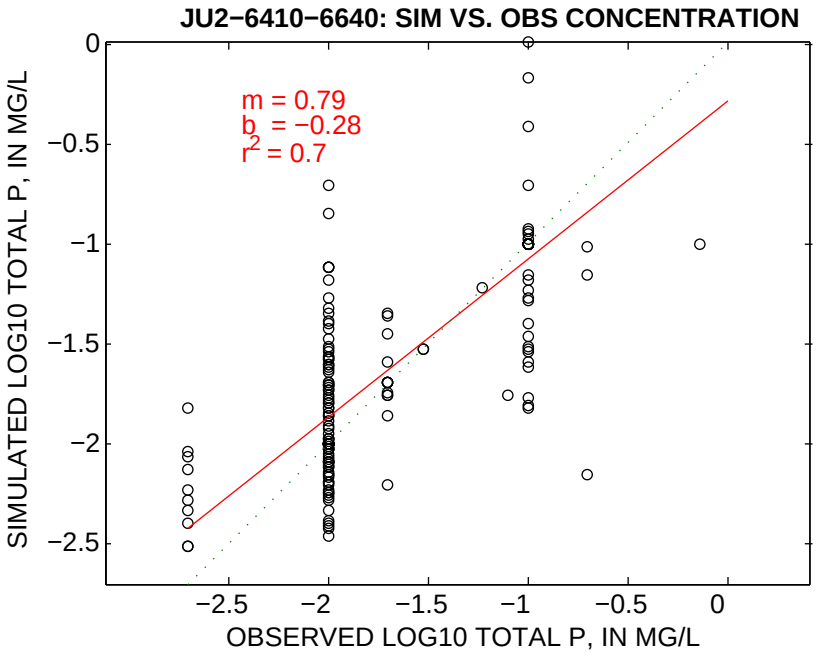
Drive: N/A | Directory: model | Observed: OBS20161101

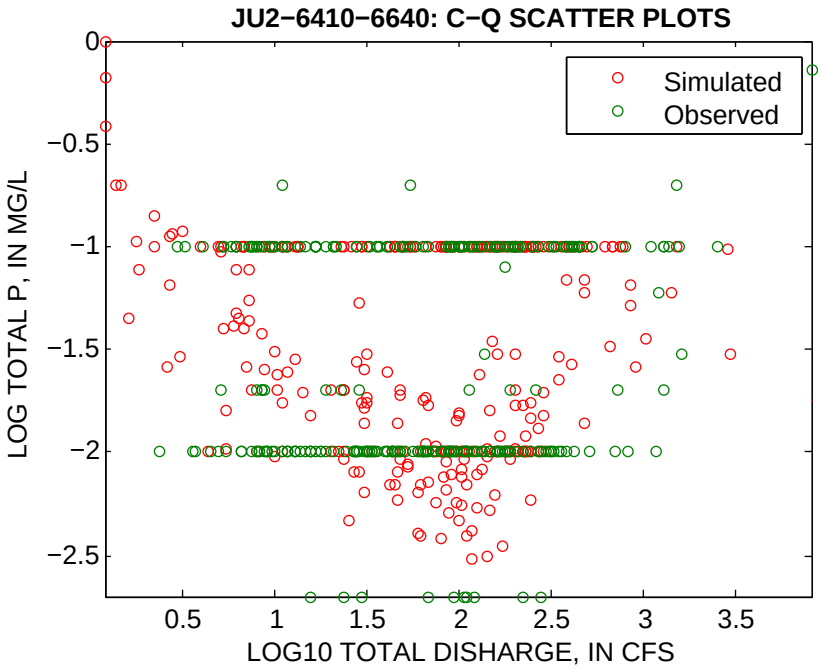
STATISTICS

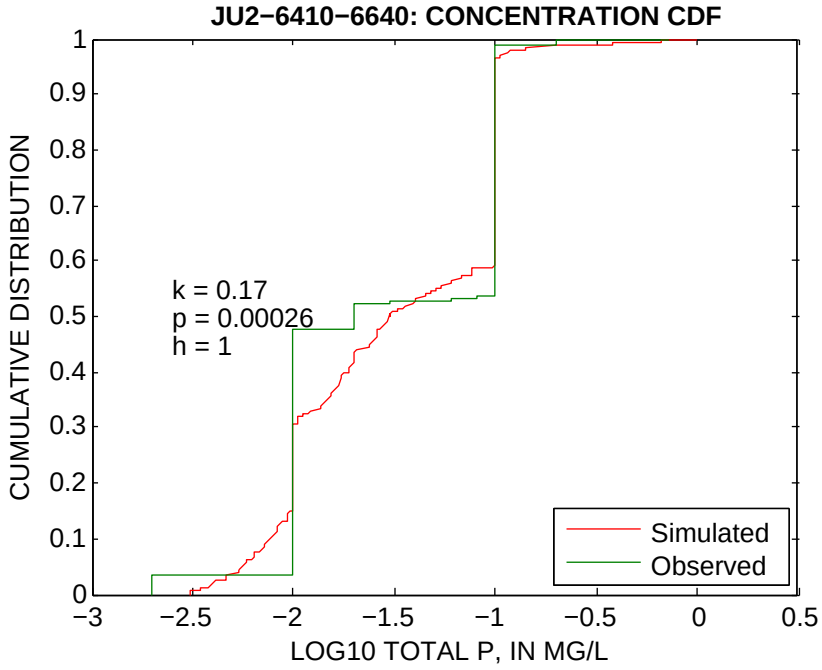
		observe	simulate
n		297	297
min		0.002	0.0031619
		-2.69897	-2.50005
mean		0.0556229	0.0405142
		-1.53091	-1.77928
media		0.02	0.015287
		-1.69897	-1.81568
max		0.72	2.7486
		-0.142668	0.439112
varian		0.00368159	0.0314215
		0.287549	0.192834
JB		0.001	0.001
		0.001426	0.001
		ra	log
%		-27.1627	16.2235
err.va		0.0333539	0.41041
rel.std.err		9.05966	1.42727
mod.eff		-8.05966	-0.427271

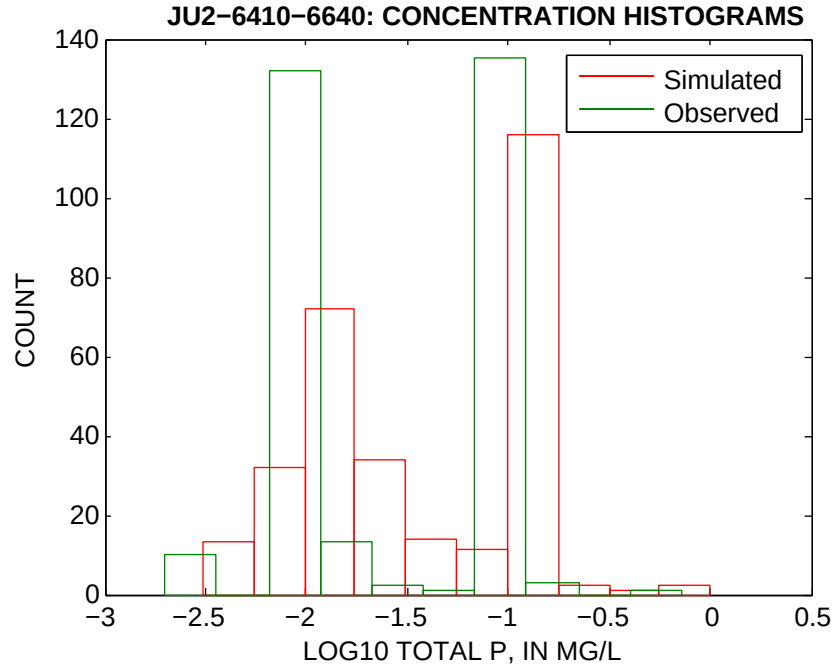
VERSION 2.1

ALL DATA
LOG10

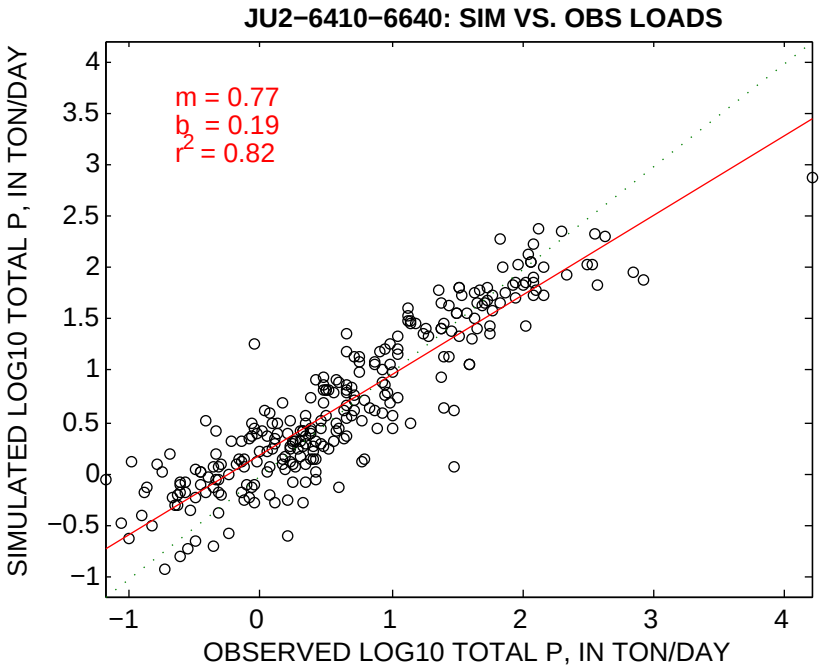


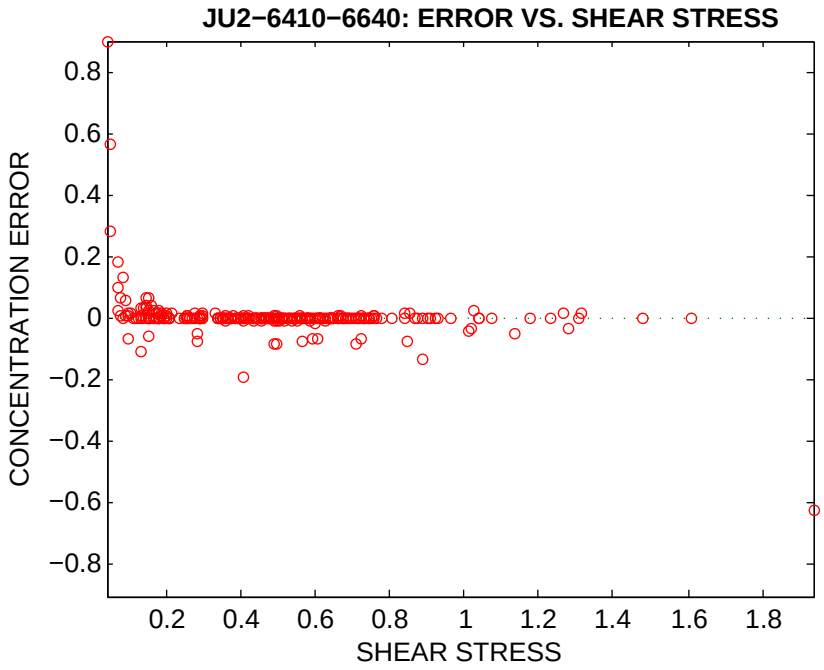


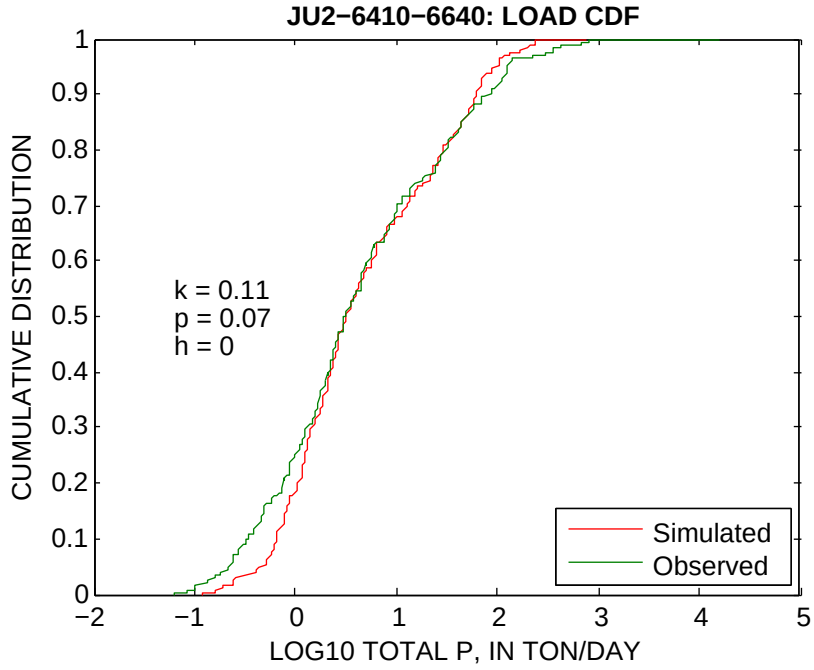


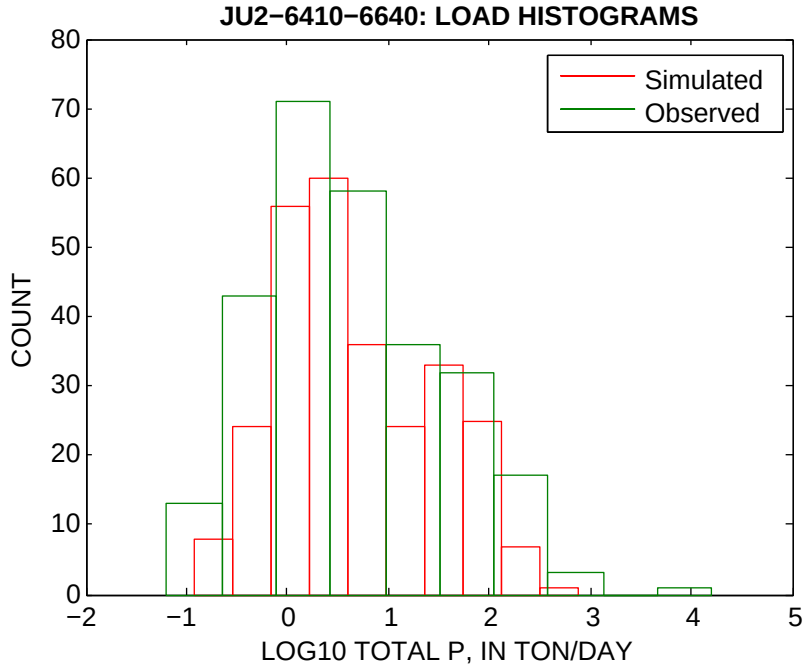


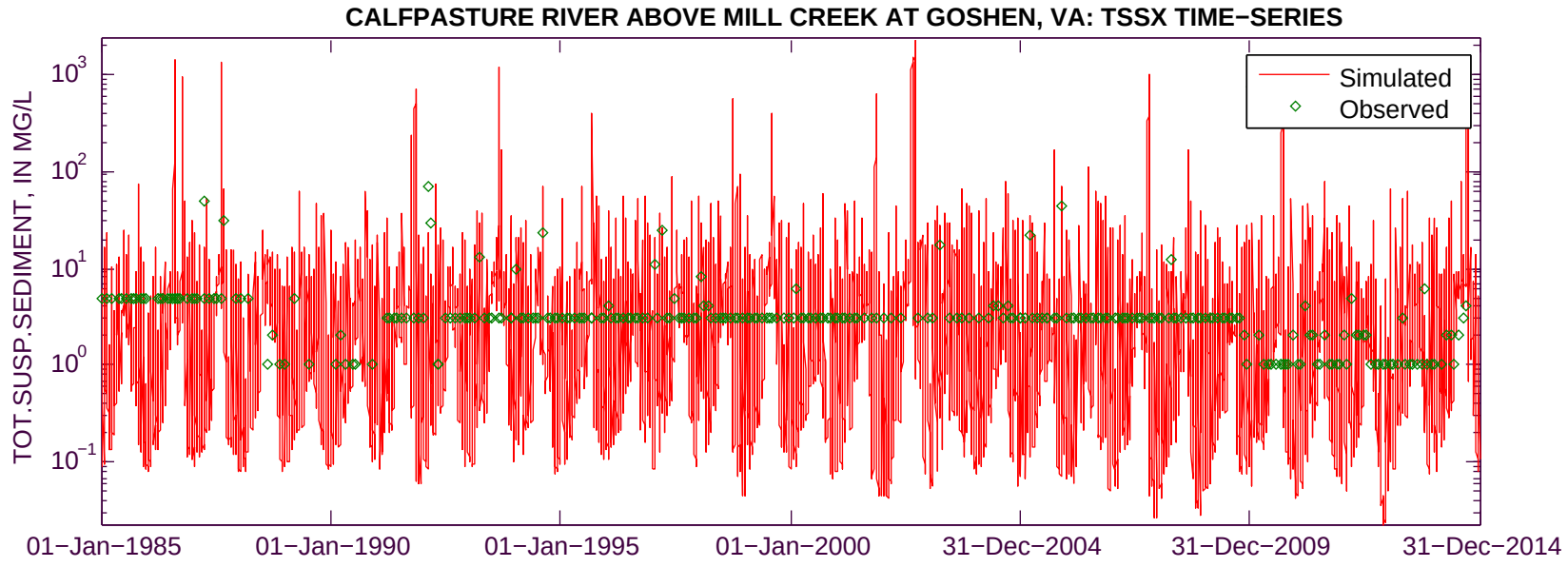
LOAD DATA
LOG10

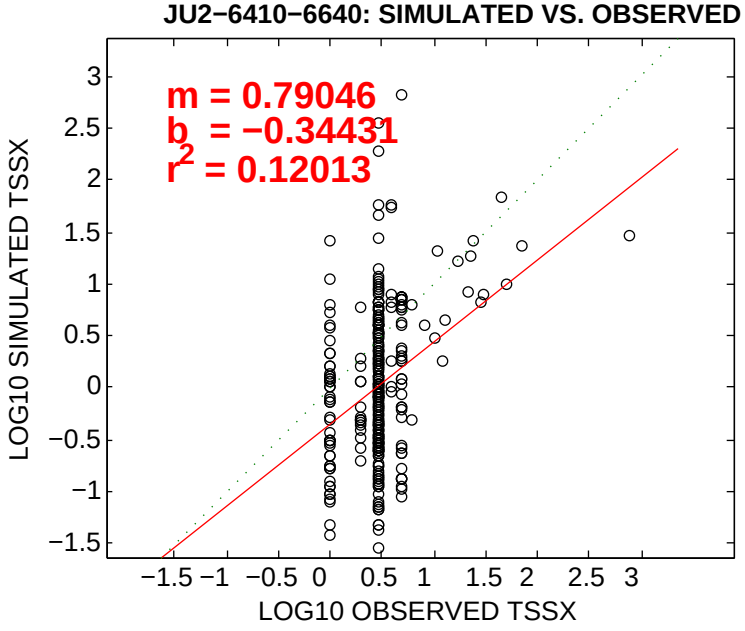


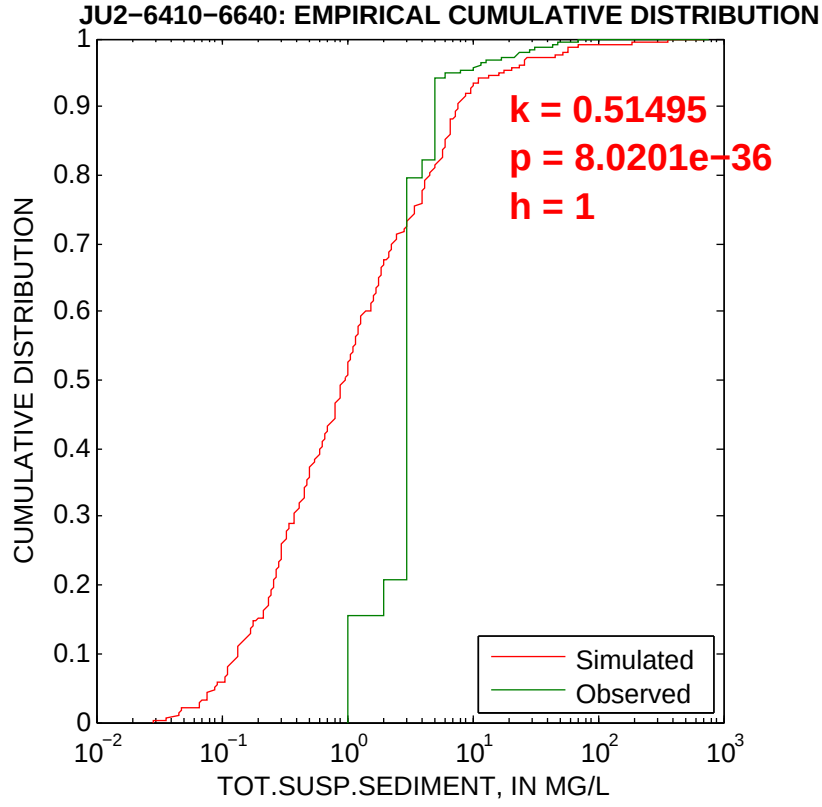












DATA SELECTION

scenario: P620171001WQ | file: TSSX.calib

plot: TSSX - total suspended ...

Dates: 1/1/1985 – 12/31/201

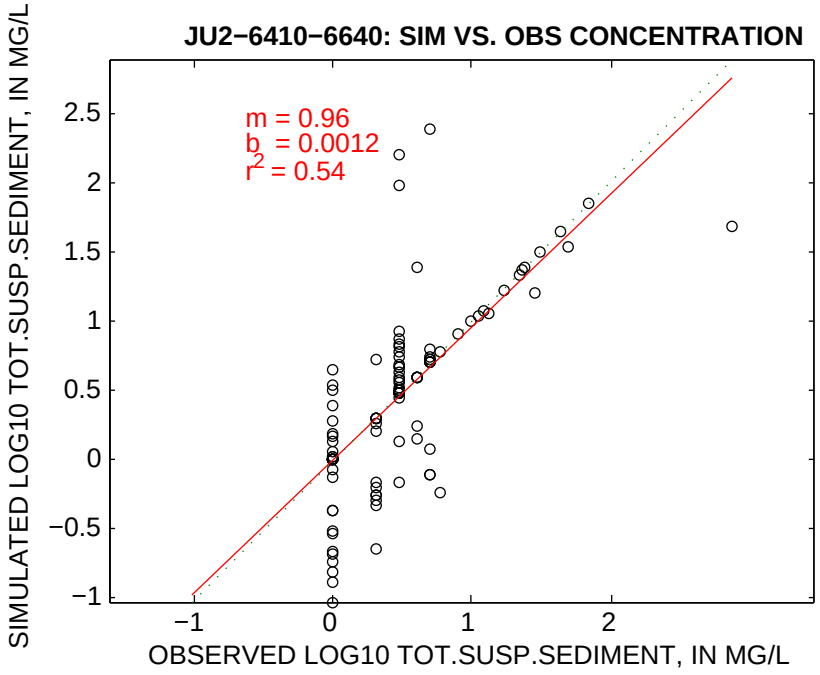
Drive: N/A | Directory: model | Observed: OBS20161101

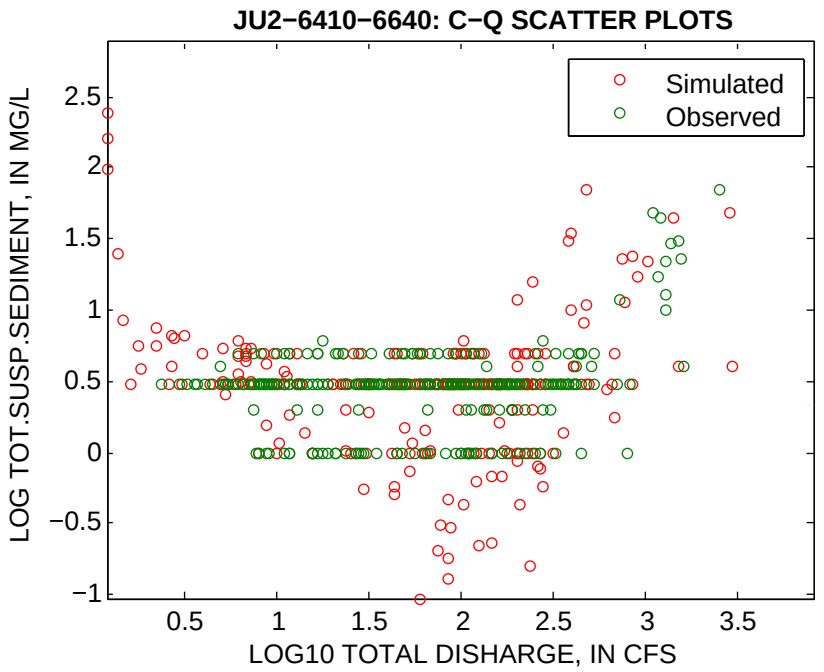
STATISTICS

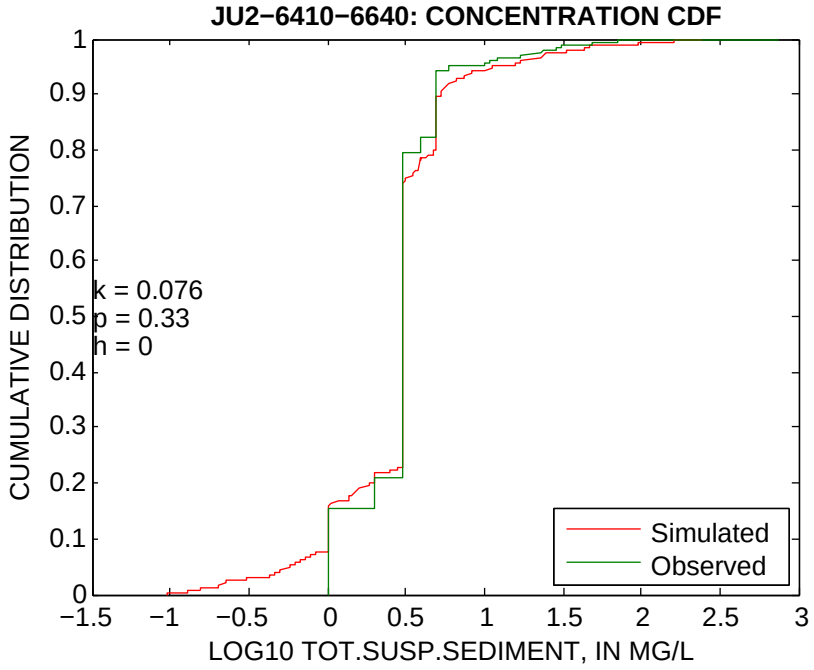
	n	observe	simulate
		301	301
min		1	0.028824
		0	-1.54025
mean		6.49834	7.60573
		0.473402	0.0299006
media		3	0.96911
		0.477121	-0.0136269
max		756	687.41
		2.87852	2.83722
varian		1917.67	2145.47
		0.100868	0.524625
JB		0.001	0.001
		0.001	0.002724
		ra	log
%		17.0411	-93.6839
err.va		3912.9	0.663378
rel.std.err		2.04045	6.57671
mod.eff		-1.04045	-5.57671

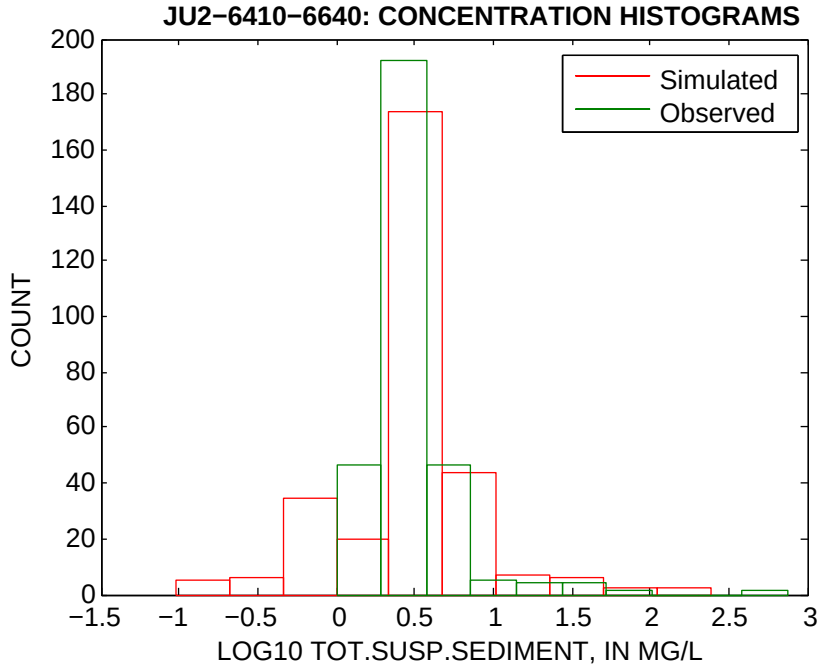
VERSION 2.1

ALL DATA
LOG10

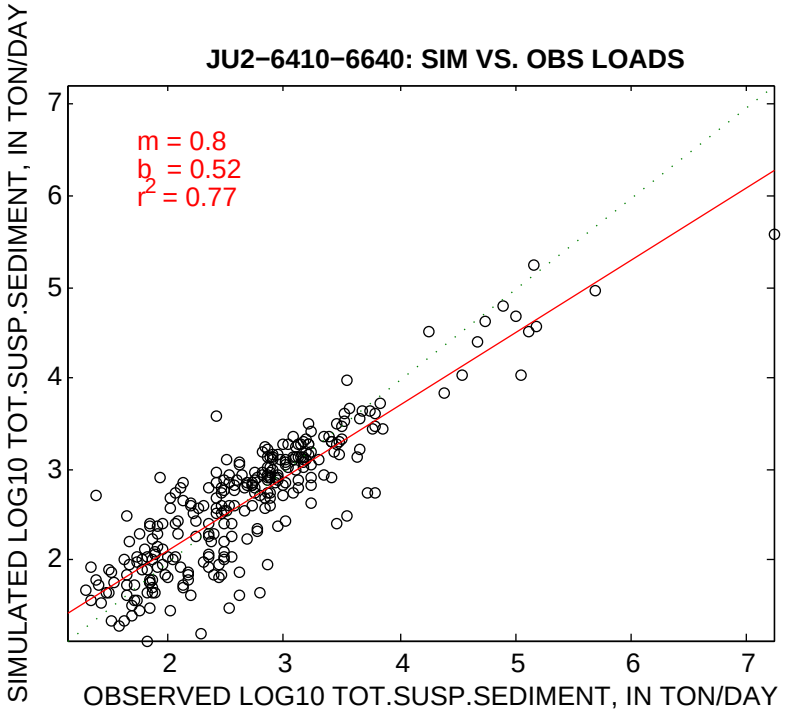




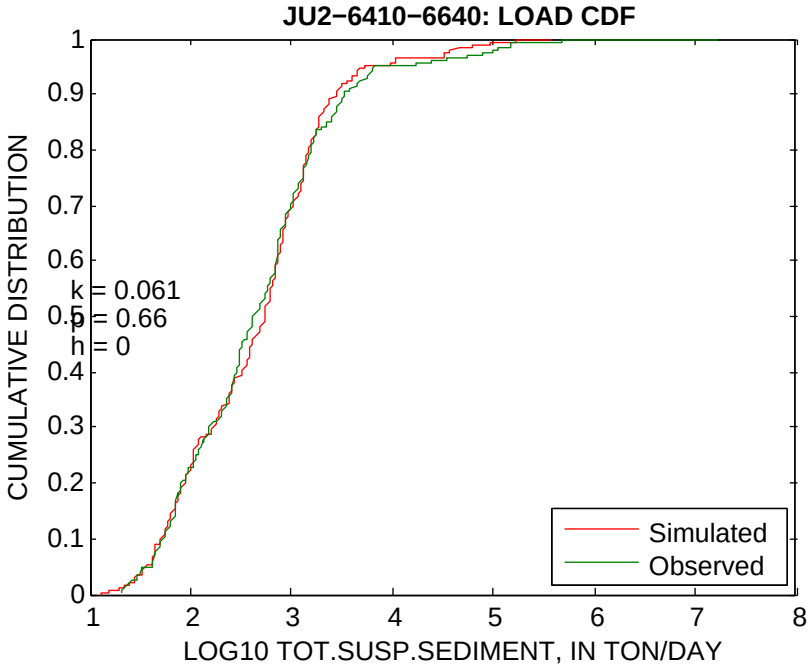


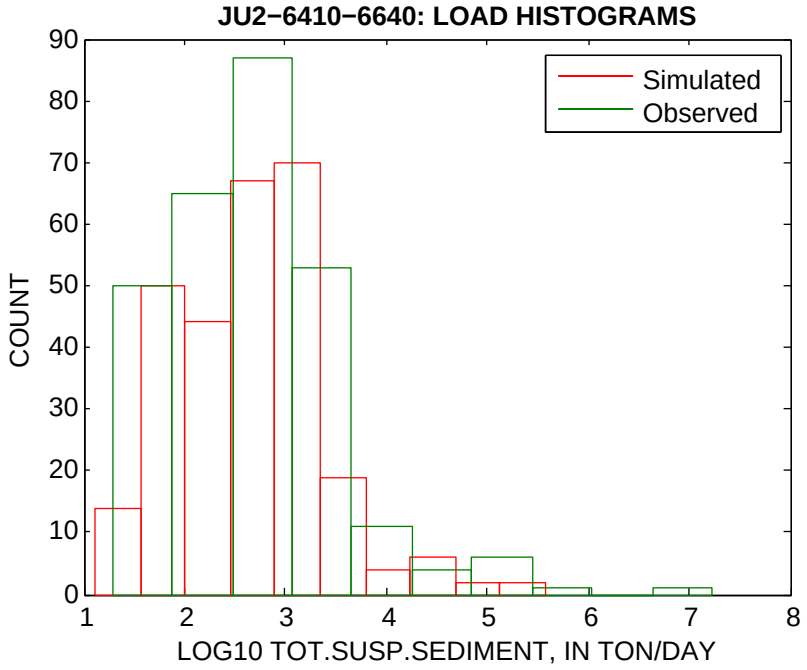


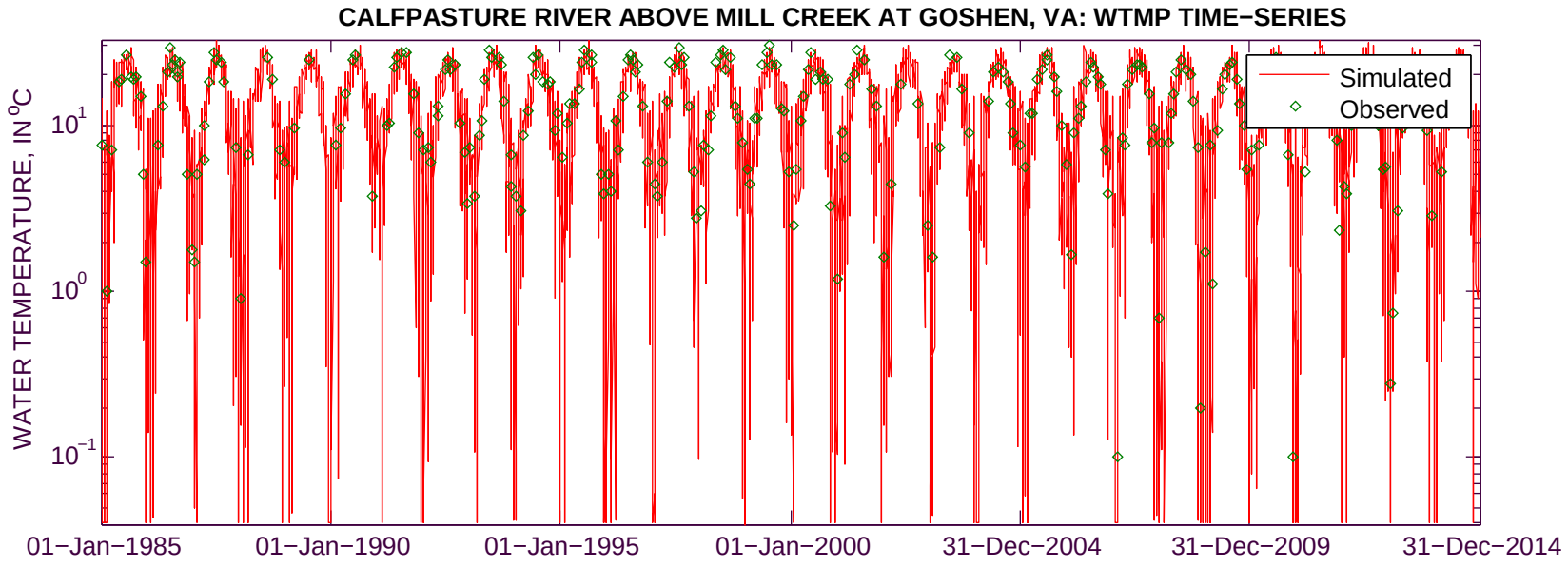
LOAD DATA
LOG10

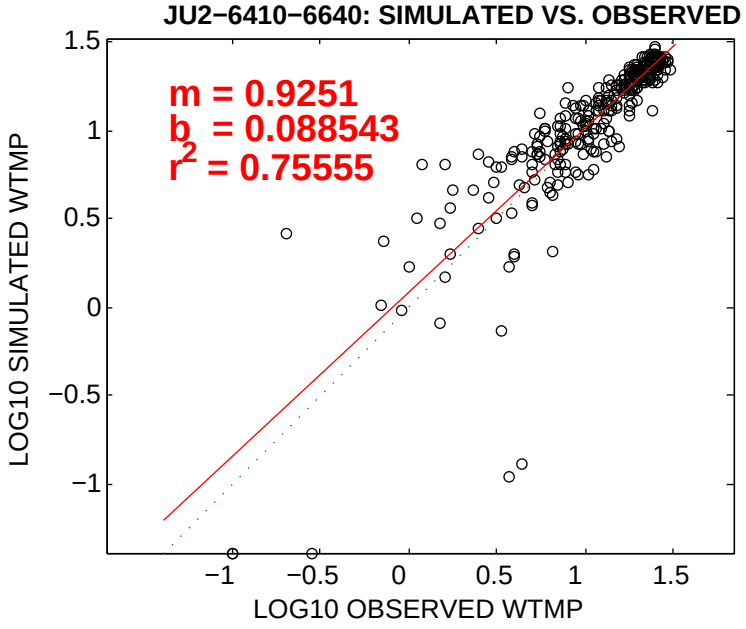


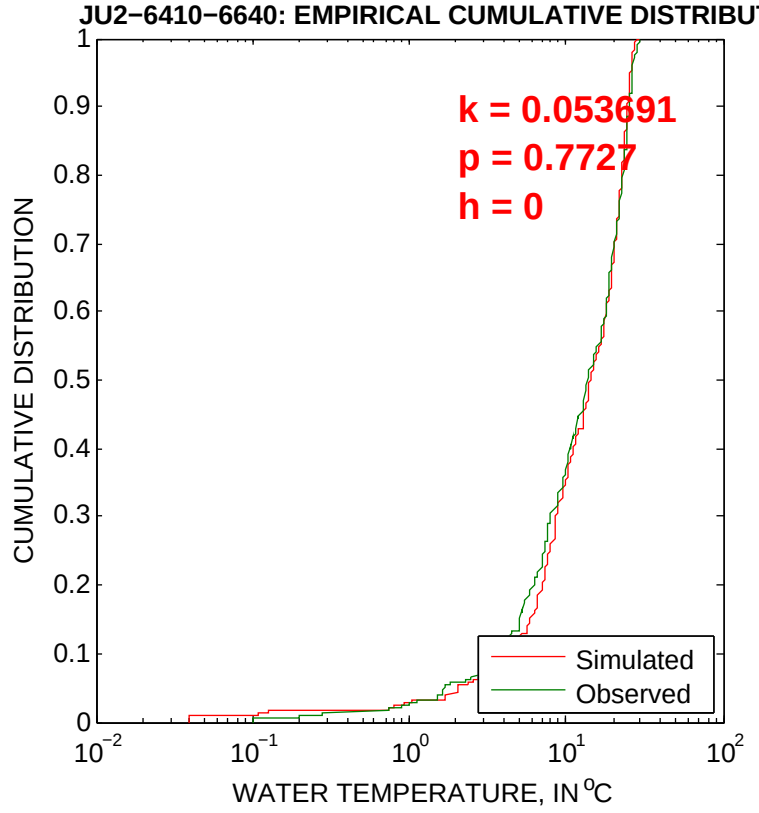












DATA SELECTION

scenario	file
P620171001WQ	WTMP.calib

plot: WTMP - water tempera...

Dates: 1/1/1985 – 12/31/201

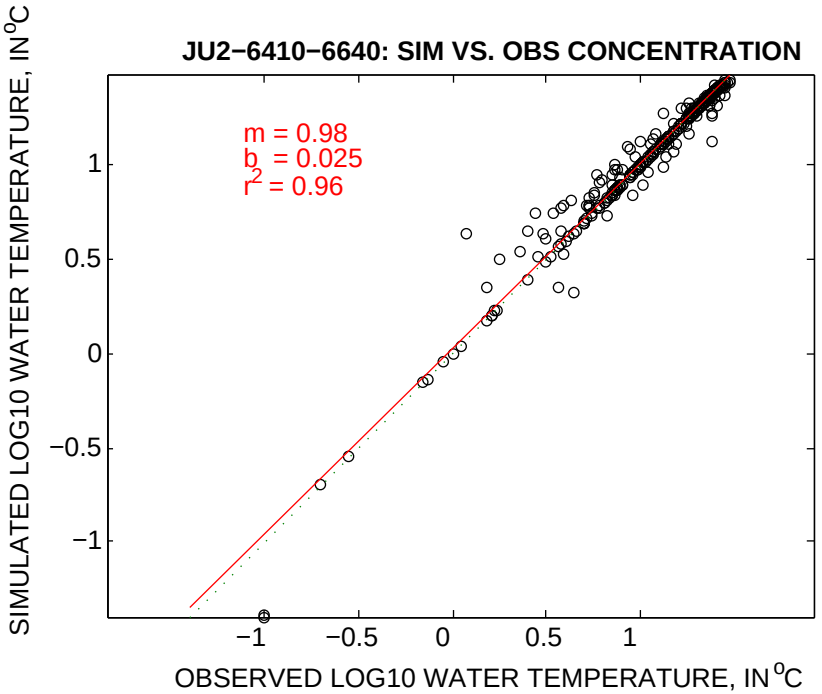
Drive	Directory	Observed
N/A	model	OBS20161101

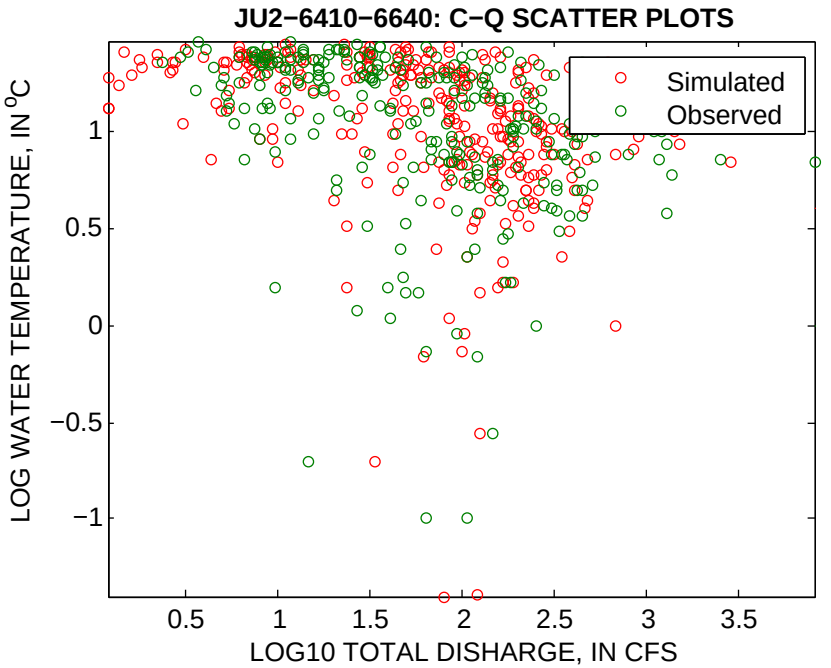
STATISTICS

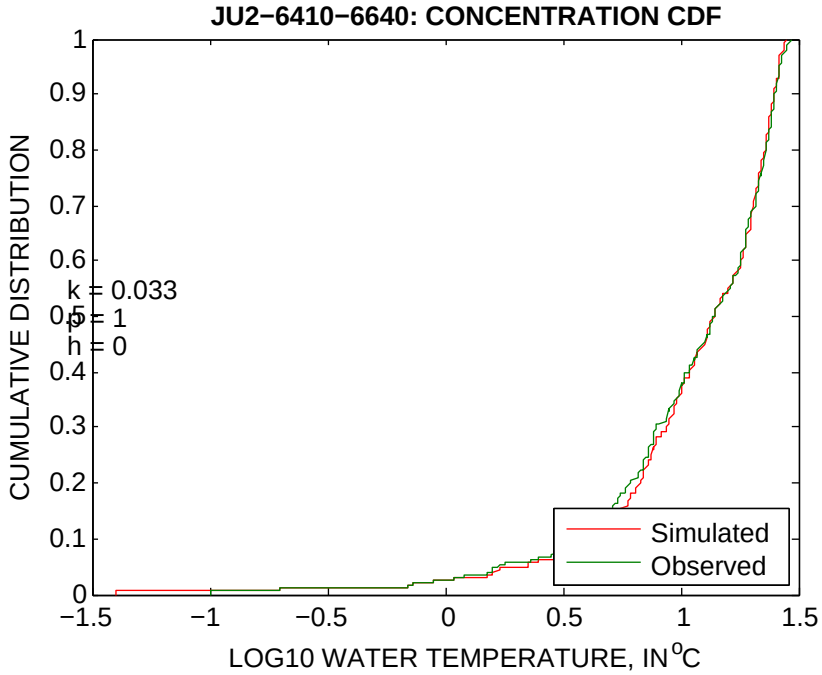
	n	298	298
		observe	simulate
min		0.1	0.04003
		-1	-1.39761
mean		14.3893	14.609
		1.03874	1.04948
media		13.85	14.2065
		1.14142	1.15248
max		29.9	29.389
		1.47567	1.46818
varian		66.7375	60.1978
		0.161804	0.183275
JB		0.001875	0.002202
		0.001	0.001
		ra	log
%		1.52685	1.03406
err.va		8.54482	0.0458247
rel.std.err		0.128036	0.283211
mod.eff		0.871964	0.716789

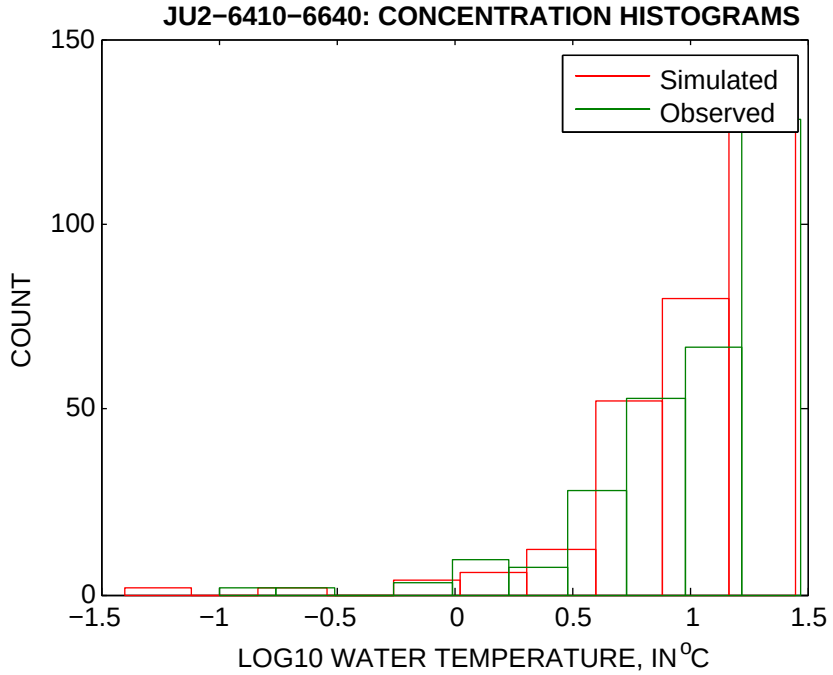
VERSION 2.1

ALL DATA
LOG10

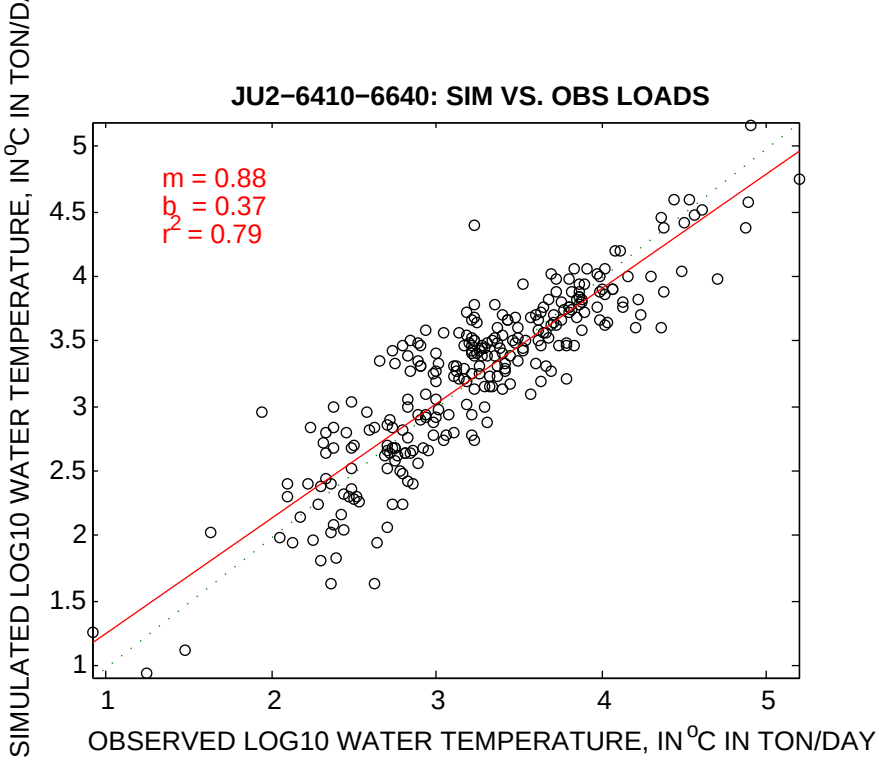


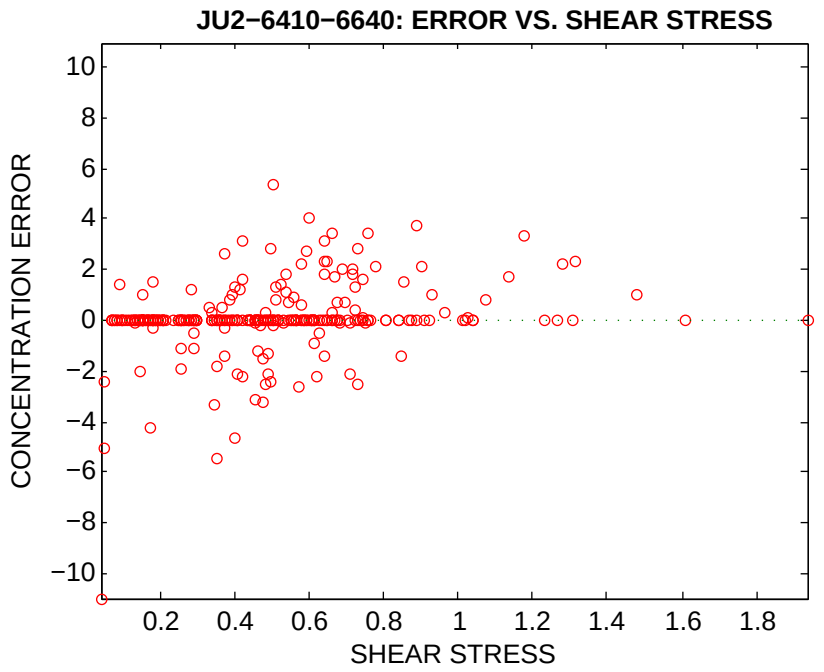


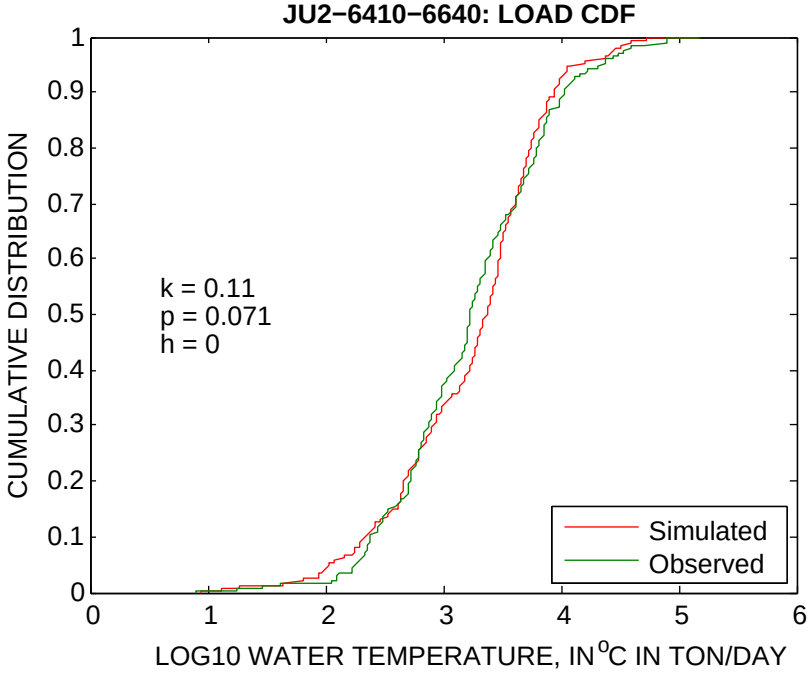


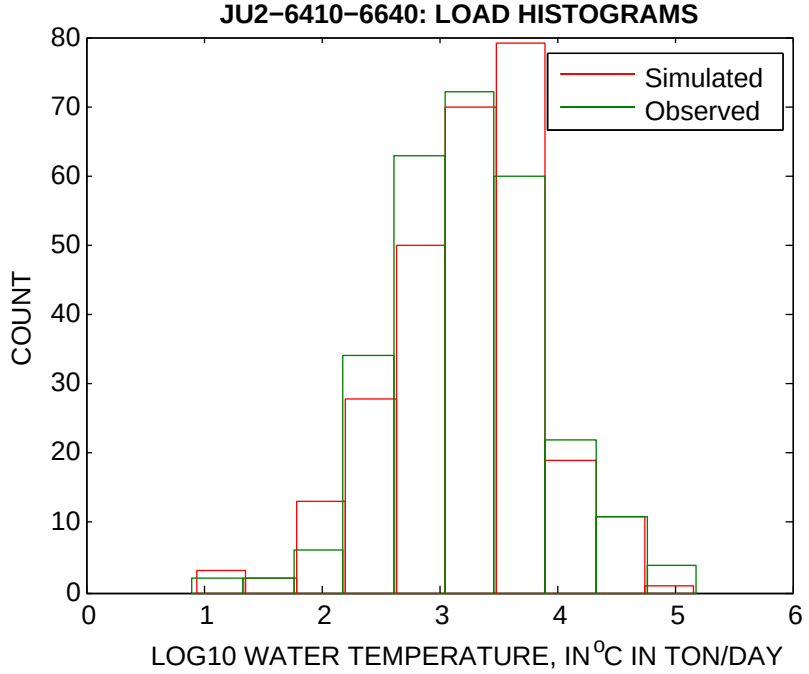


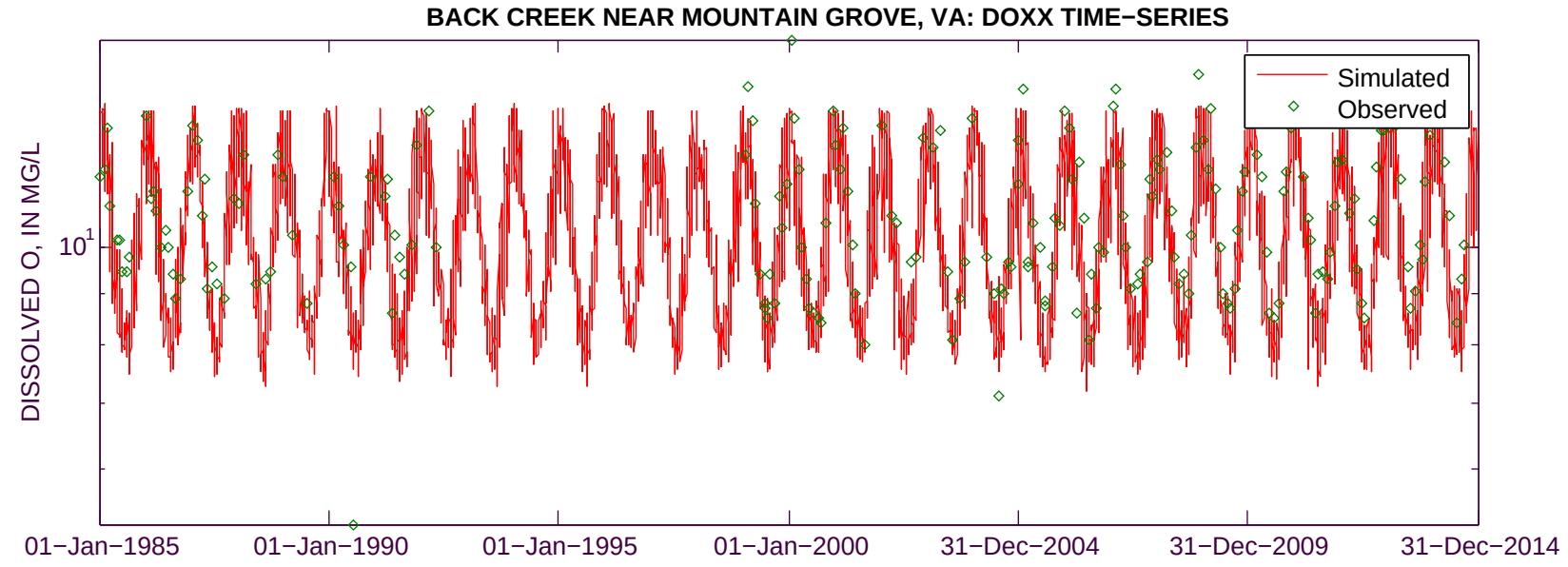
LOAD DATA
LOG10

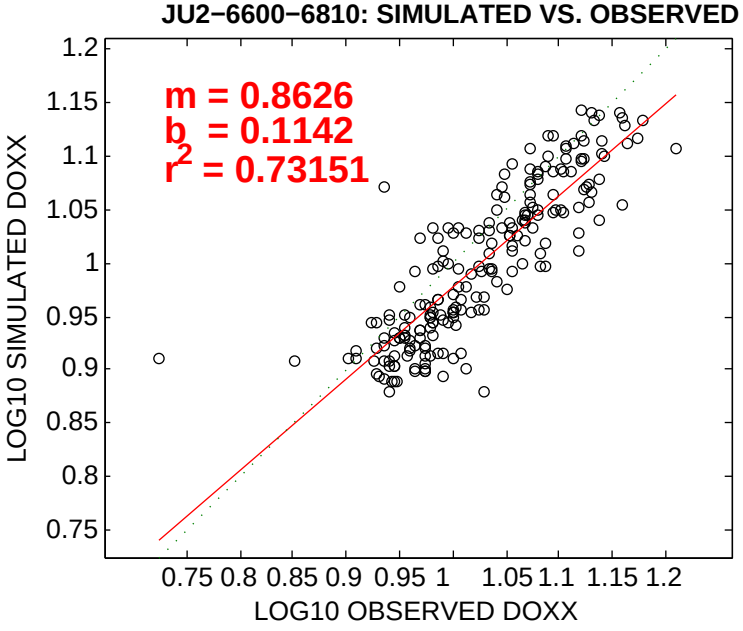


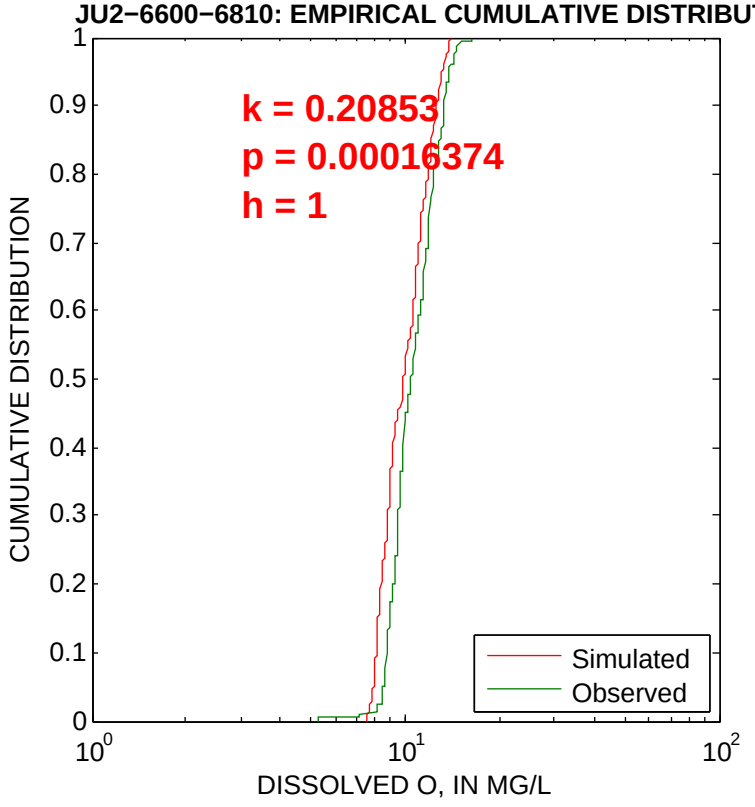












DATA SELECTION

scenario: P620171001WQ | file: DOXX.calib

plot: DOXX - dissolved oxygen

Dates: 1/1/1985 – 12/31/201

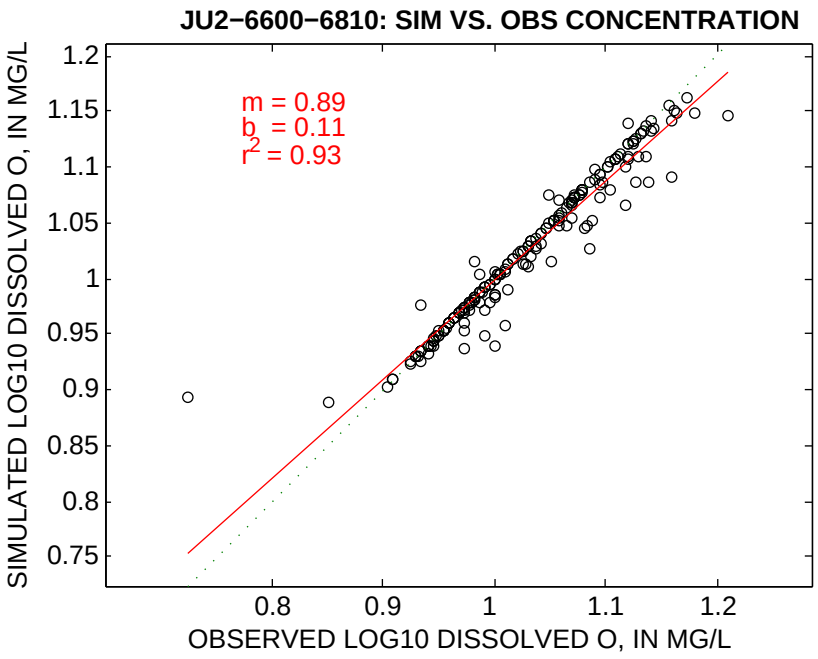
Drive: N/A | Directory: model | Observed: OBS20161101

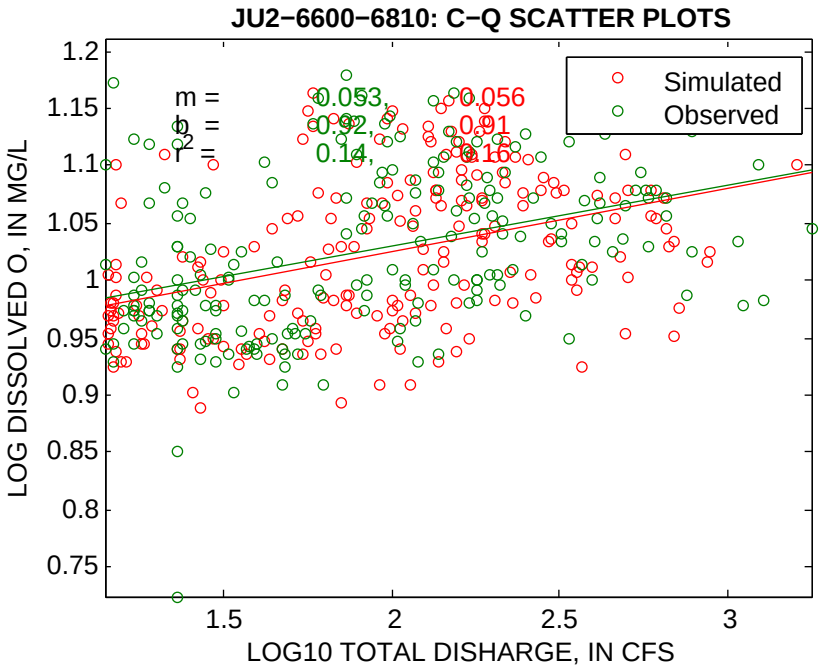
STATISTICS

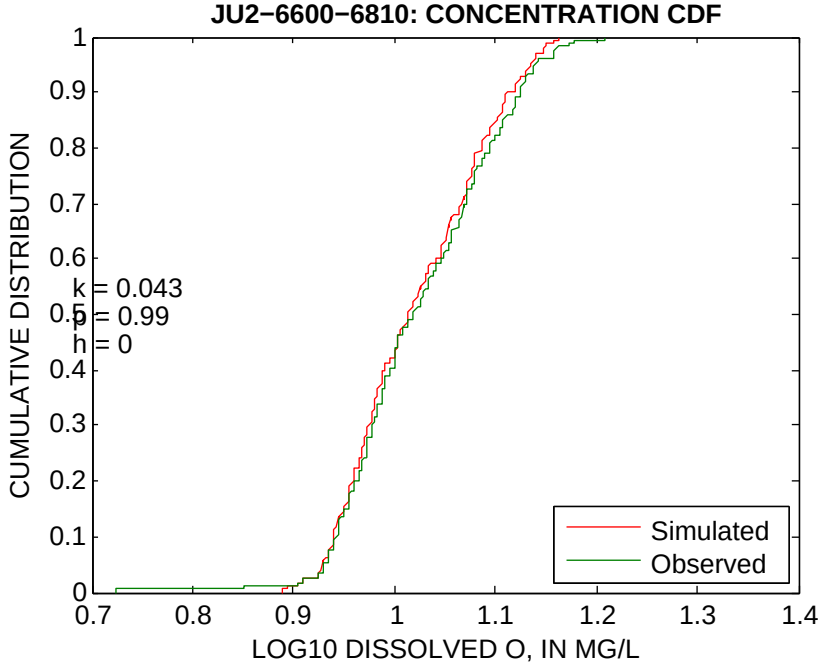
n	211	211
	observe	simulate
min	5.3	7.574
	0.724276	0.879325
mean	10.7653	10.1256
	1.0261	0.99932
media	10.4	9.9018
	1.01703	0.995714
max	16.2	13.91
	1.20952	1.14333
varian	3.19471	2.95376
	0.00518778	0.00527694
JB	0.042392	0.006270
	0.475518	0.007542
	ra	log
%	-5.94239	-2.61028
err.va	1.23163	0.00223552
rel.std.err	0.385522	0.430921
mod.eff	0.614478	0.569079

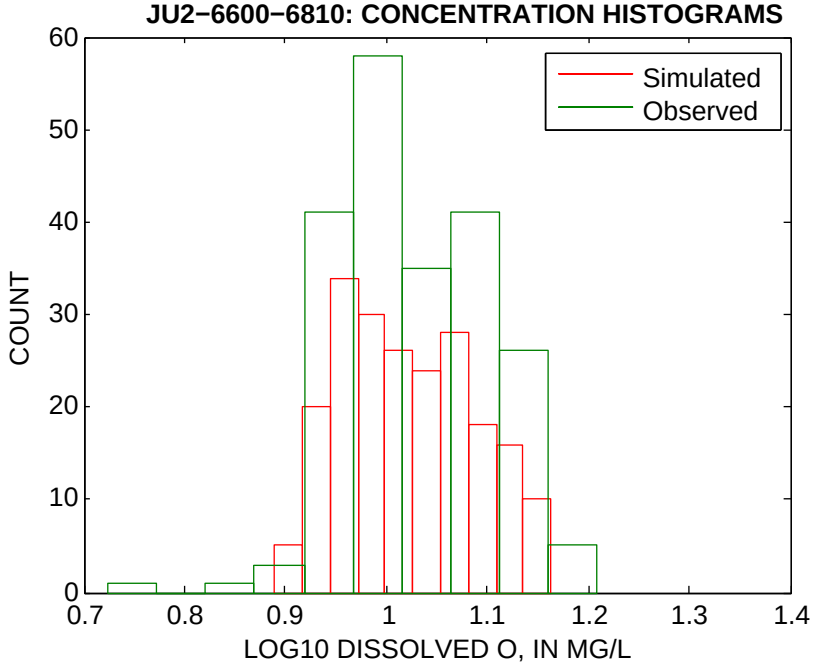
VERSION 2.1

ALL DATA
LOG10

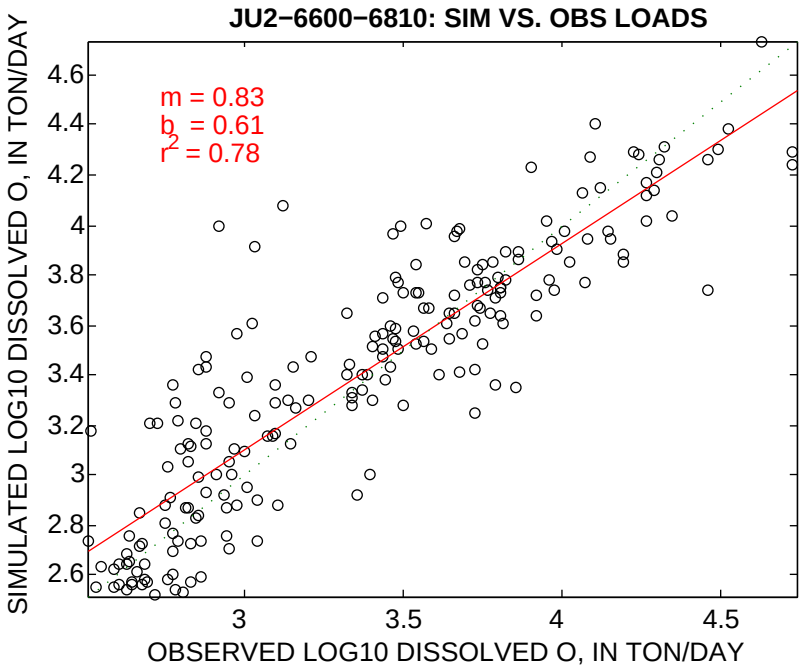


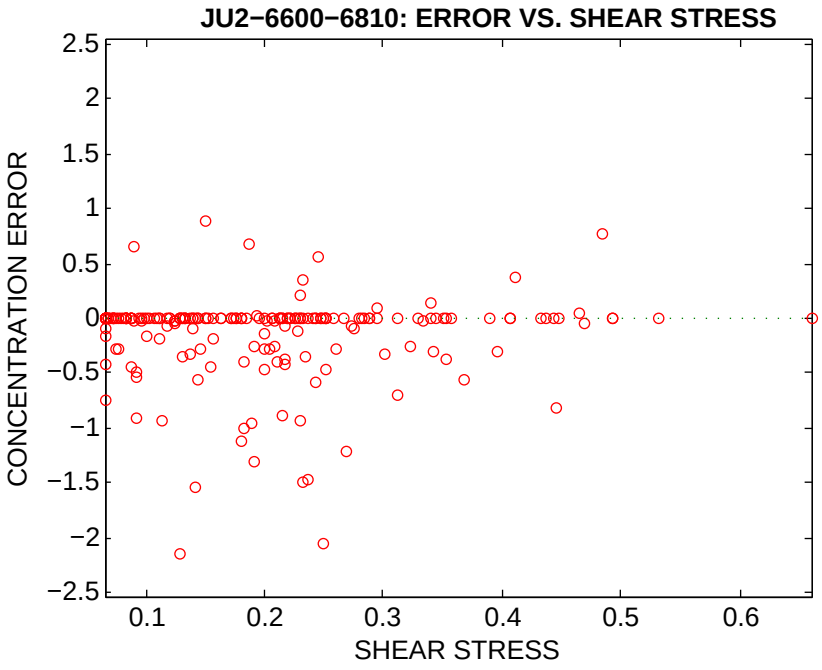


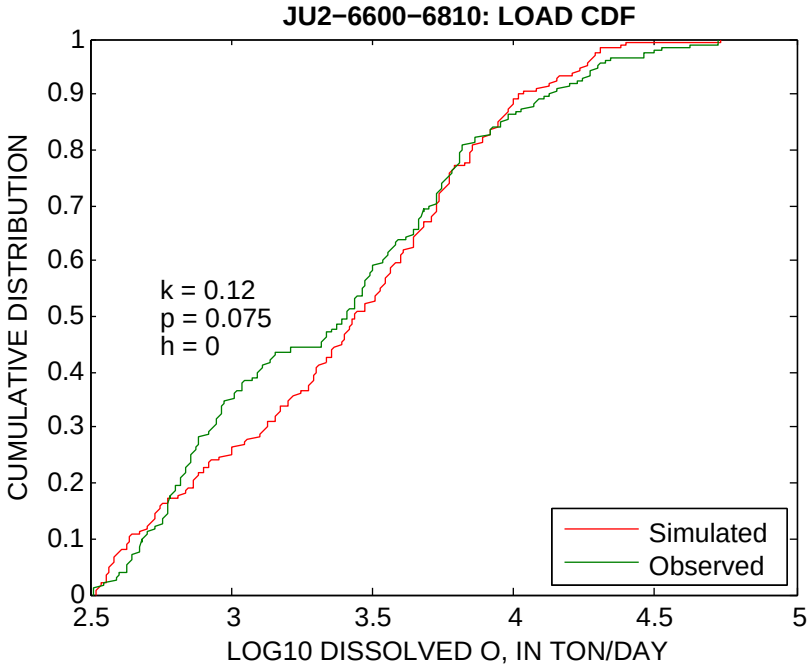


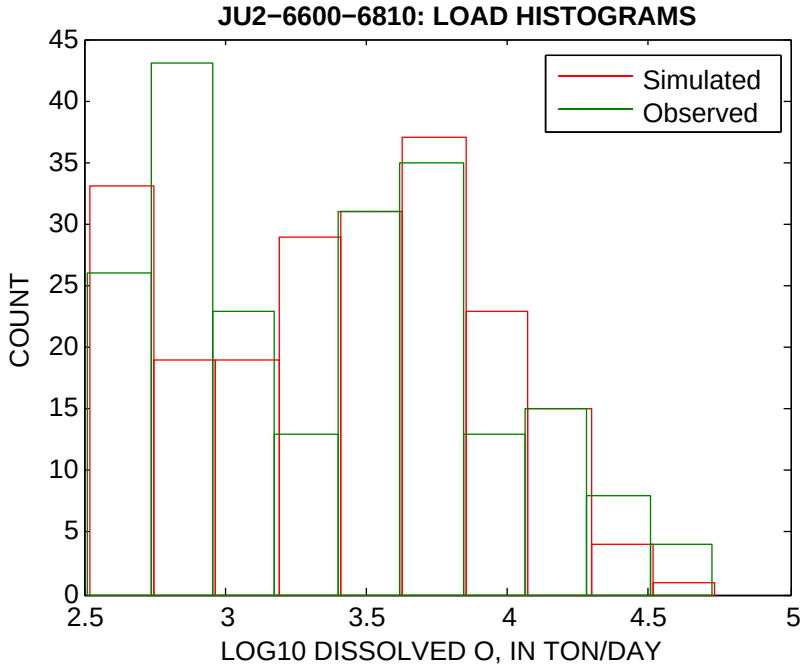


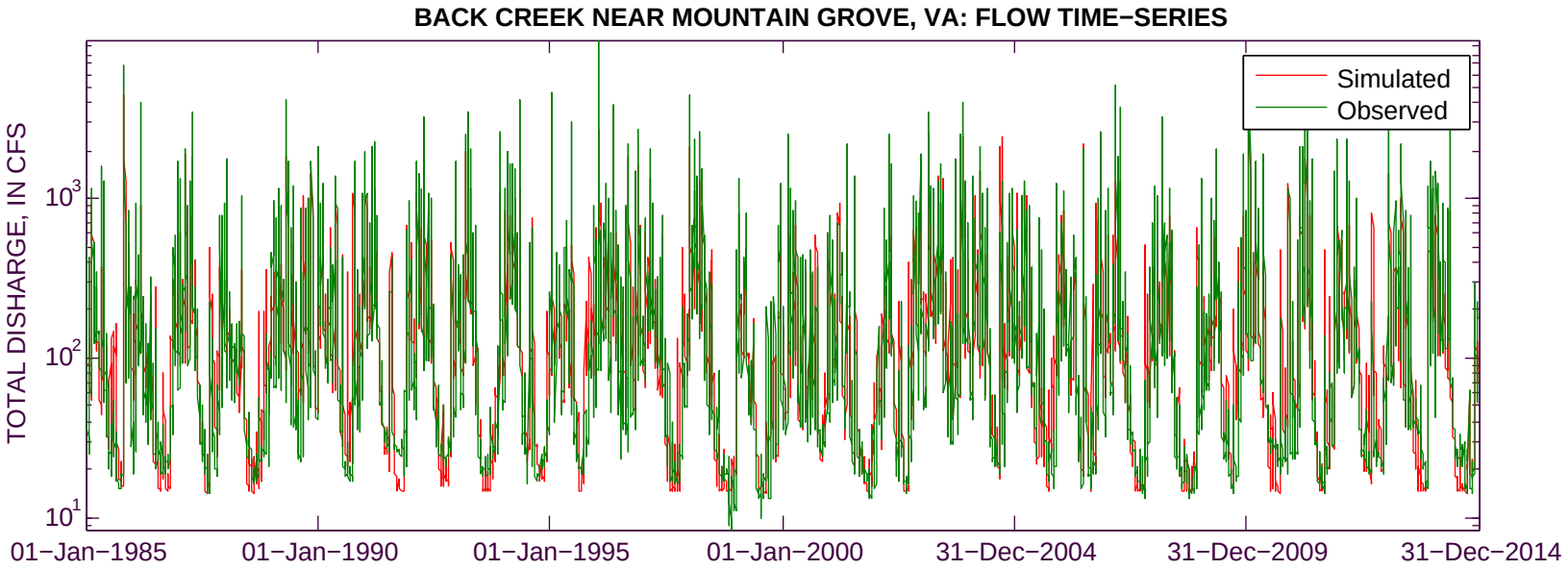
LOAD DATA
LOG10

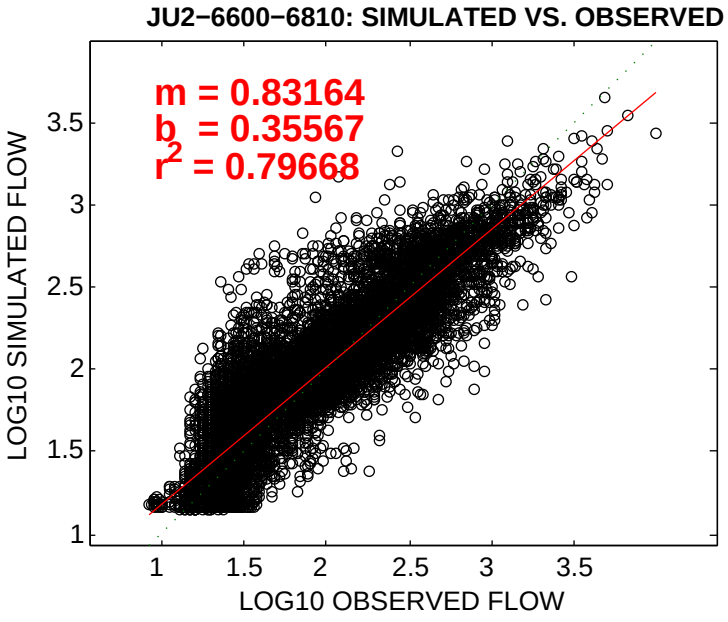


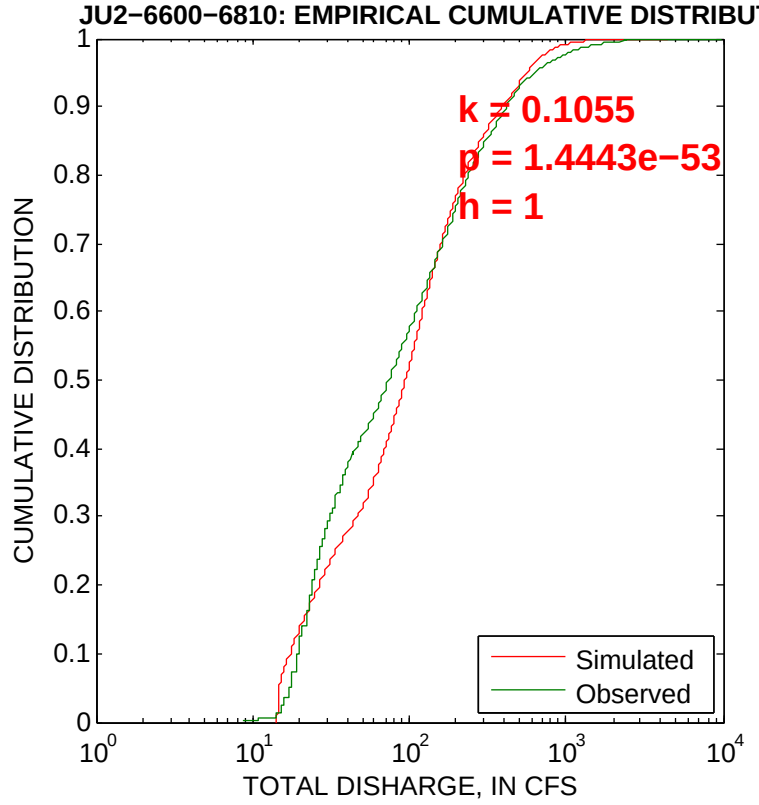












DATA SELECTION

scenario: P620171001WQ | file: FLOW.calib

plot: FLOW - total discharge

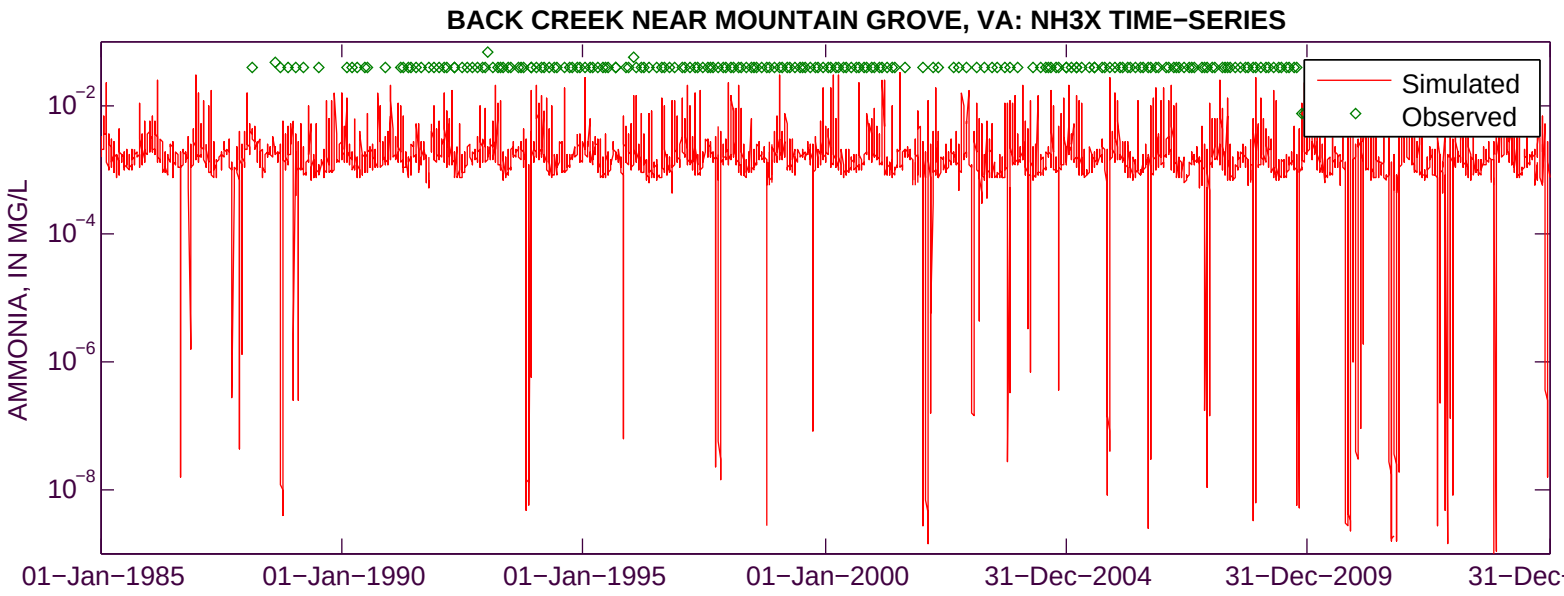
Dates: 1/1/1985 – 12/31/201

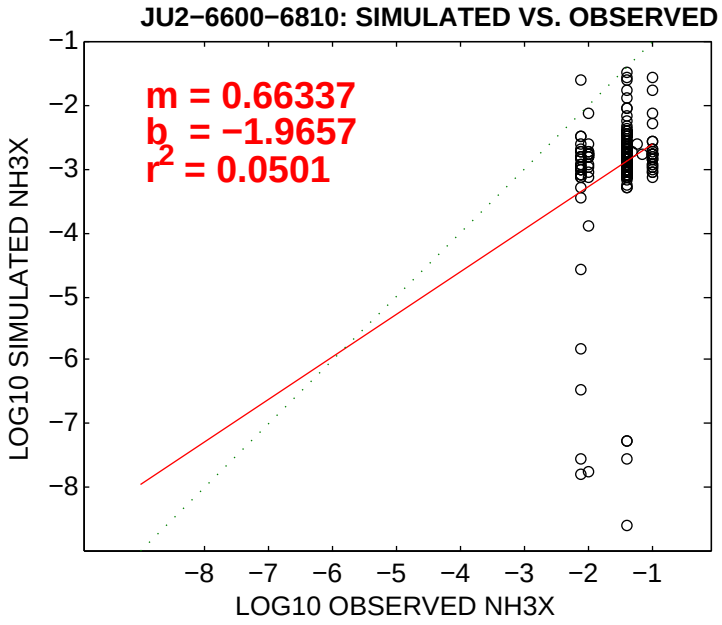
Drive: N/A | Directory: model | Observed: OBS20161101

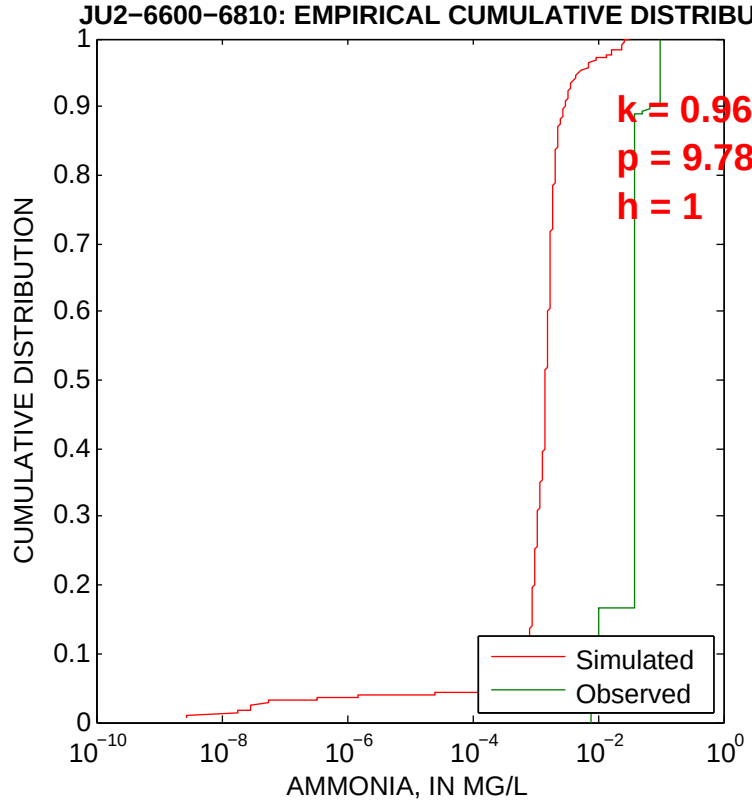
STATISTICS

	observe	simulate
n	10957	10957
min	8.4	14.146
	0.924279	1.15063
mean	177.95	160.306
	1.90842	1.94279
media	74	94.959
	1.86923	1.97754
max	9940	4485.4
	3.99739	3.6518
varian	112013	45511.1
	0.269333	0.233816
JB	0.001	0.001
	0.001	0.001
	ra	log
%	-9.91538	1.80095
err.va	42069.6	0.0563549
rel.std.err	0.375578	0.209239
mod.eff	0.624422	0.790761

VERSION 2.1







DATA SELECTION

scenario	file
P620171001WQ	NH3X.calib

plot: NH3X - ammonia

Dates: 1/1/1985 – 12/31/201

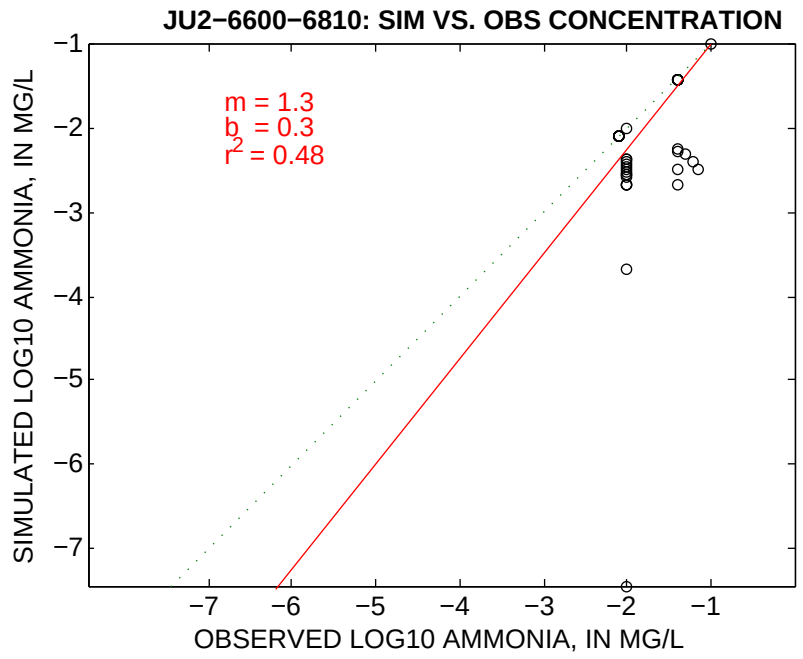
Drive: N/A | Directory: model | Observed: OBS20161101

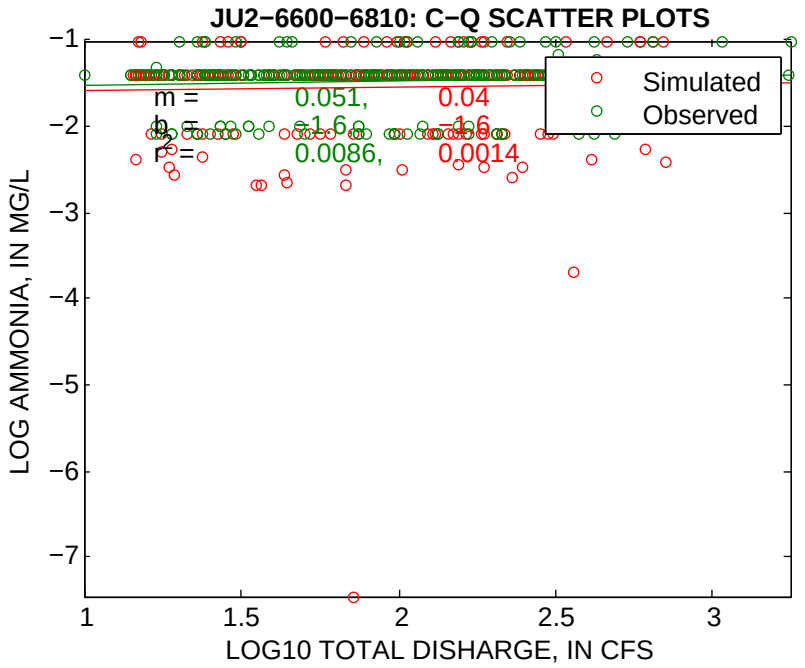
STATISTICS

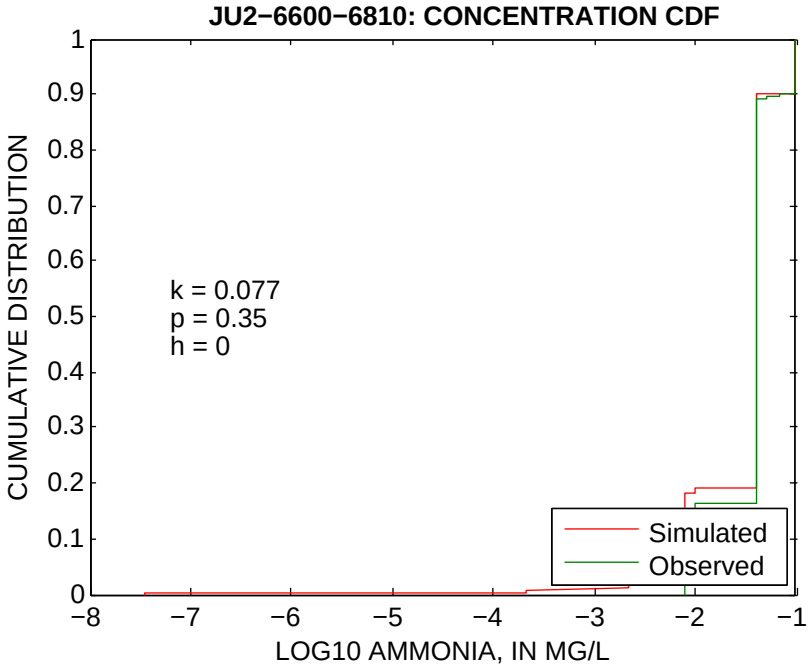
n	284	282
	observe	simulate
min	0.008	0
	-2.09691	-8.56769
mean	0.0409507	0.00224783
	-1.46725	-2.93899
media	0.04	0.00150265
	-1.39794	-2.82158
max	0.1	0.031625
	-1	-1.49997
varian	0.00052283	1.4451e-05
	0.0854006	0.75012
JB	0.001	0.001
	0.001	0.001
	ra	log
%	-94.5109	100.306
err.va	0.00202397	2.89595
rel.std.err	3.87112	33.9102
mod.eff	-2.87112	-32.9102

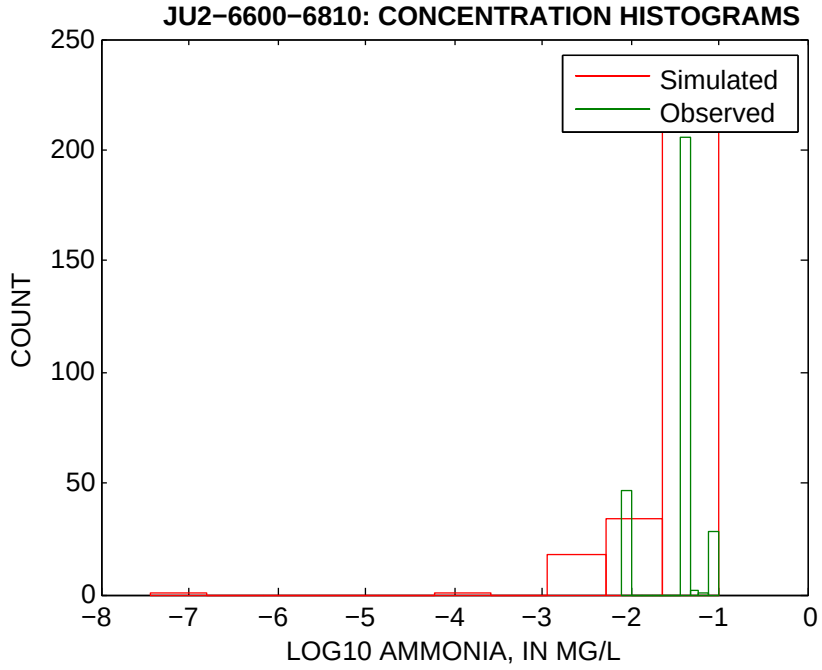
VERSION

ALL DATA
LOG10

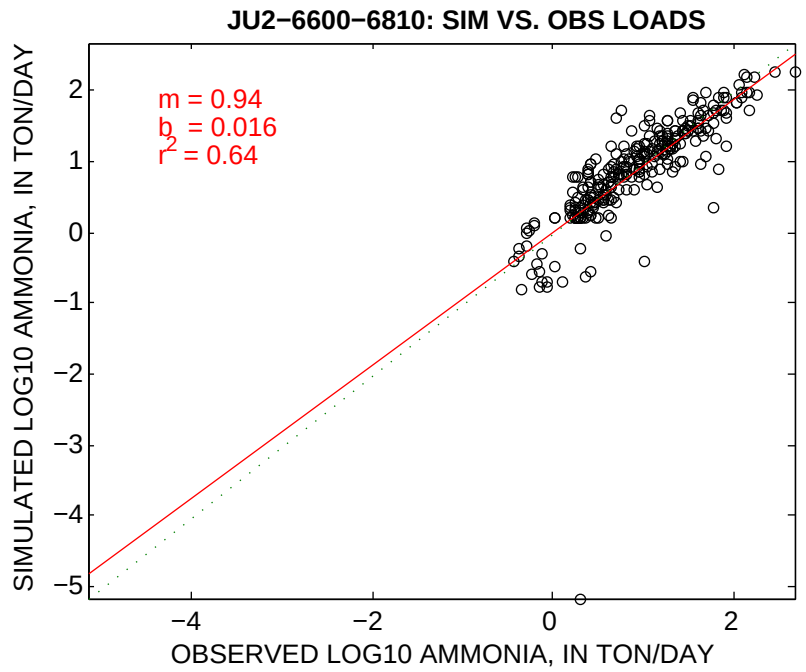


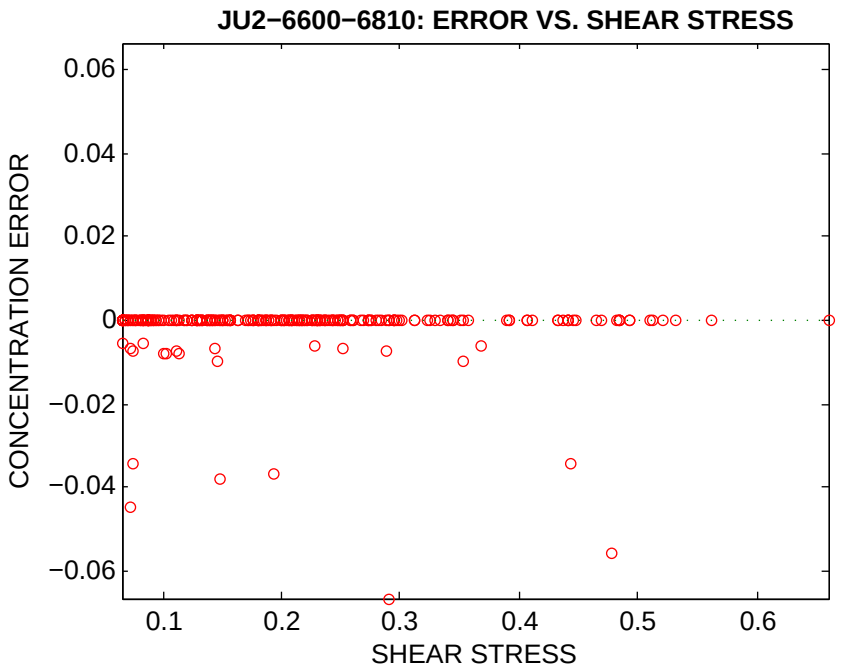


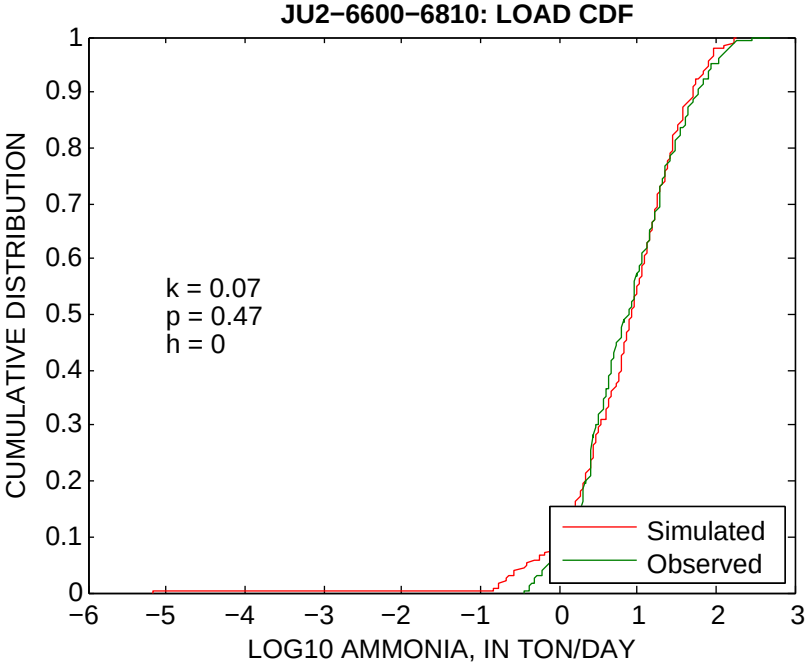


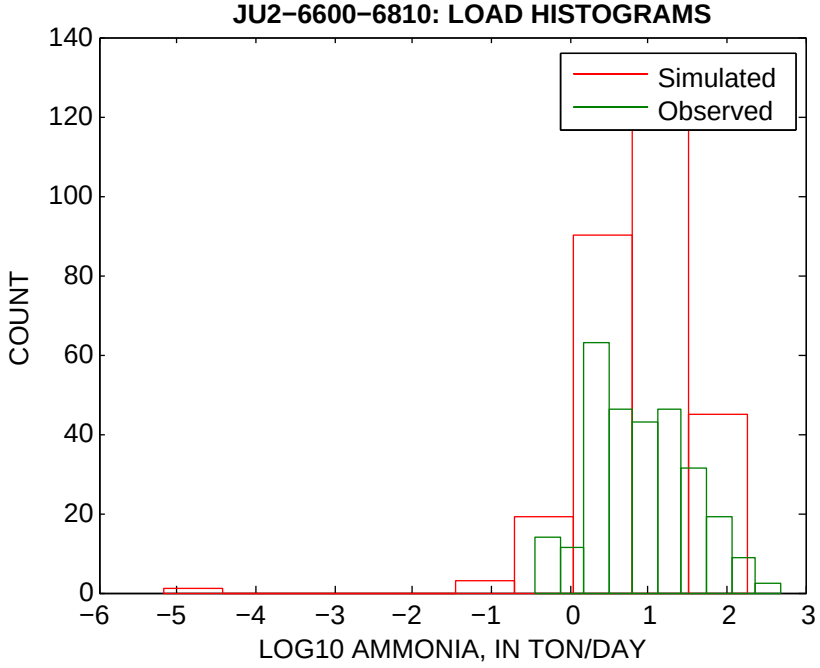


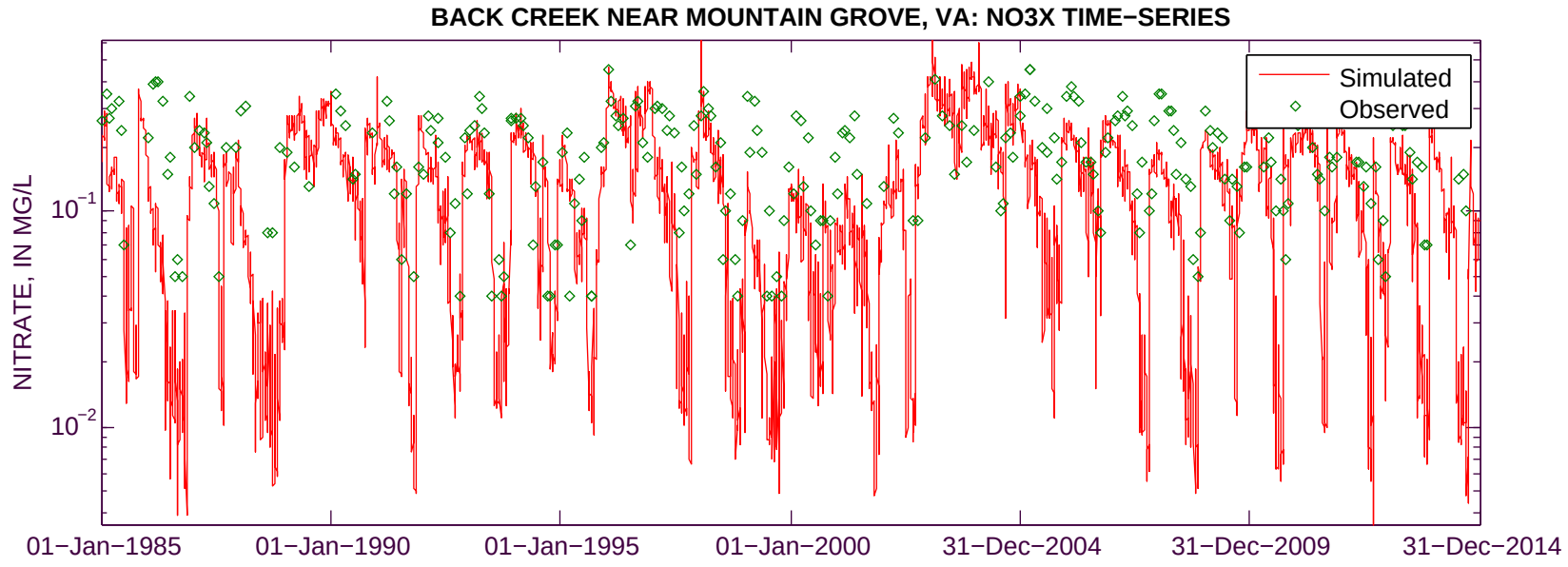
LOAD DATA
LOG10

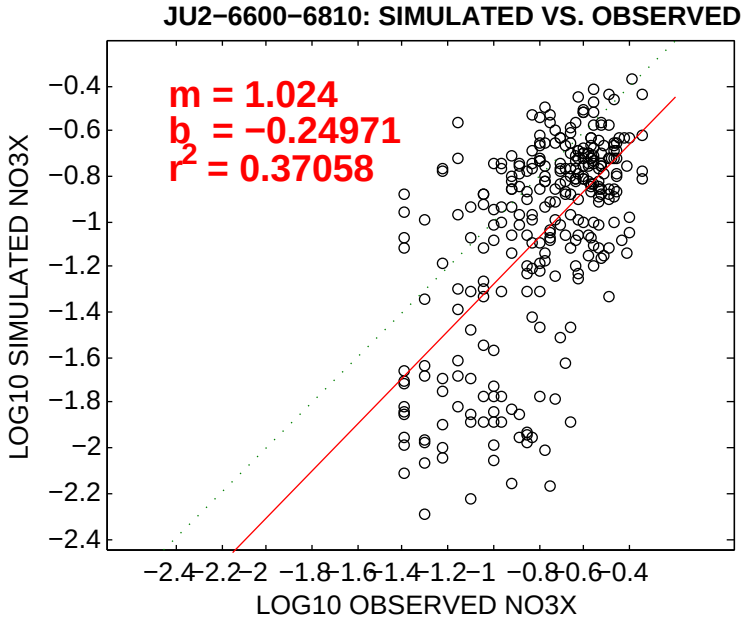


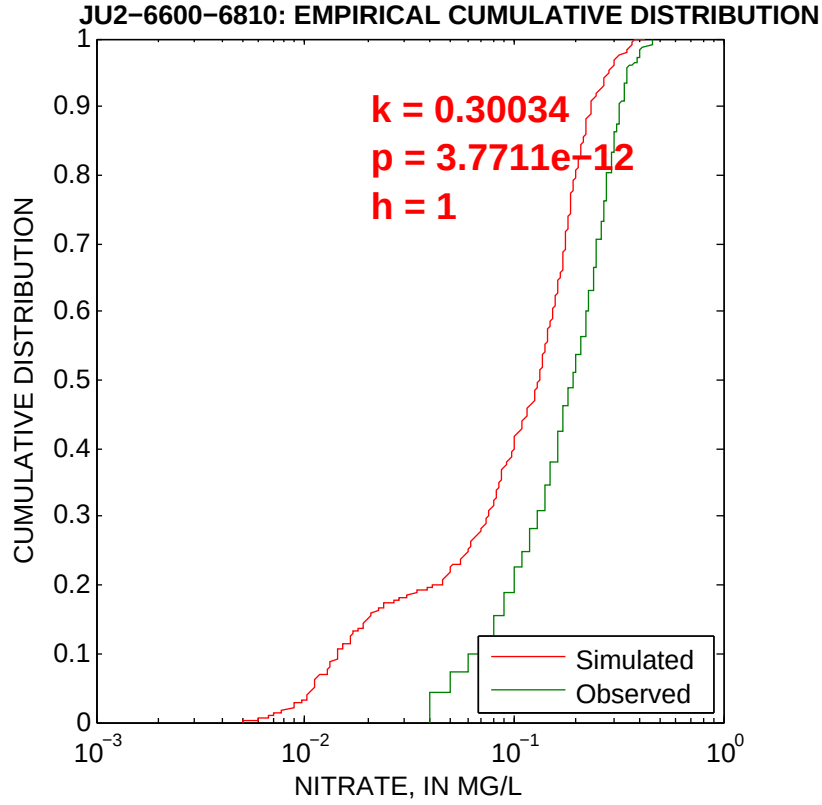












DATA SELECTION

scenario	file
P620171001WQ	NO3X.calib

plot: NO3X - nitrate

Dates: 1/1/1985 – 12/31/201

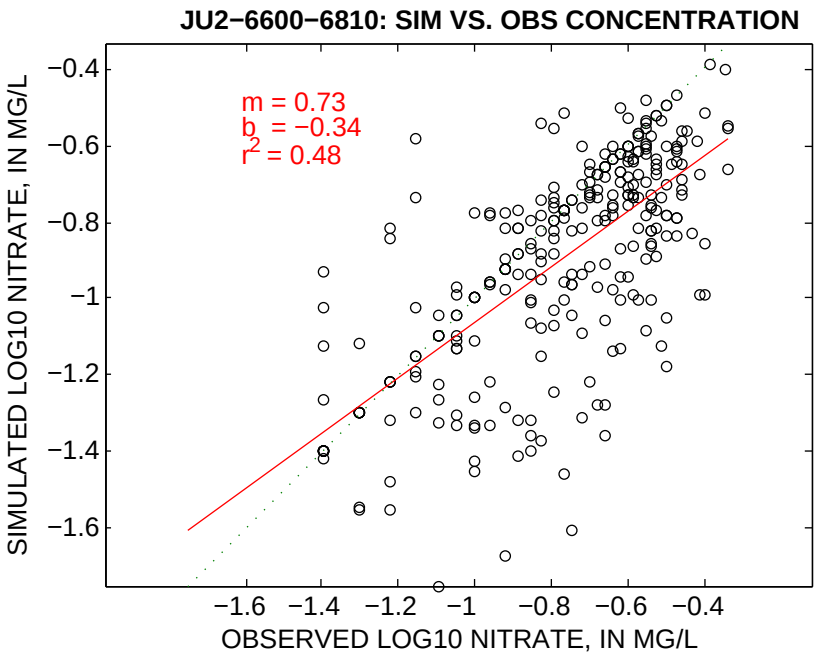
Drive	Directory	Observed
N/A	model	OBS20161101

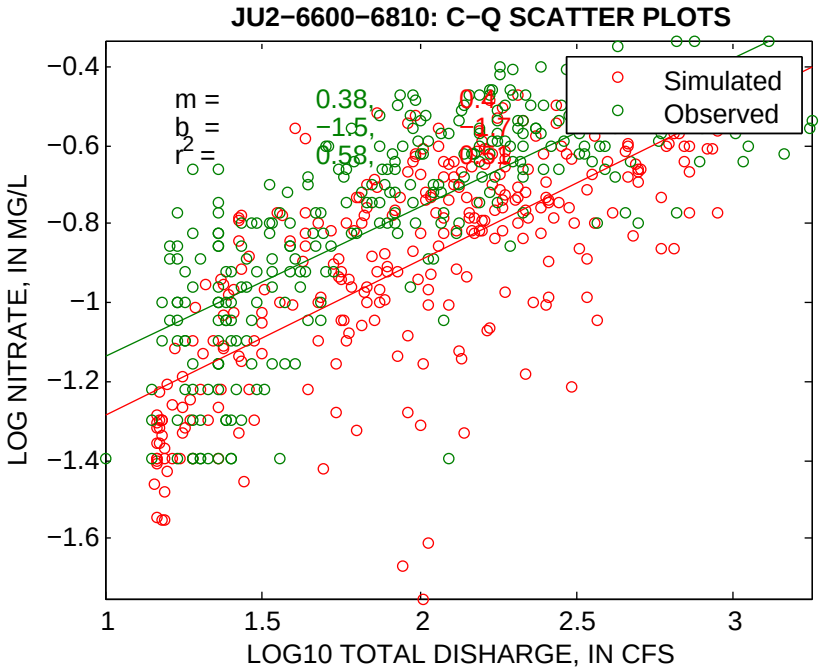
STATISTICS

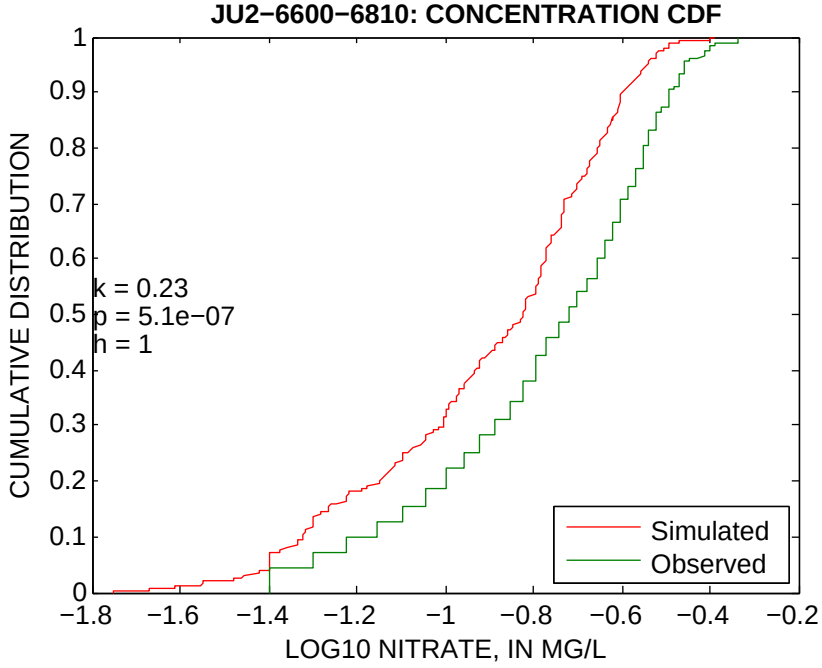
	n	293	293
		observe	simulate
min		0.04	0.0051272
		-1.39794	-2.29012
mean		0.19587	0.130006
		-0.776735	-1.04505
media		0.19	0.13262
		-0.721246	-0.877391
max		0.46	0.4288
		-0.337242	-0.367745
varian		0.00970378	0.00754558
		0.0700672	0.198239
JB		0.017884	0.007964
		0.001	0.001
		ra	log
%		-33.6265	34.5439
err.va		0.0123768	0.197054
rel.std.err		1.27546	2.81236
mod.eff		-0.27546	-1.81236

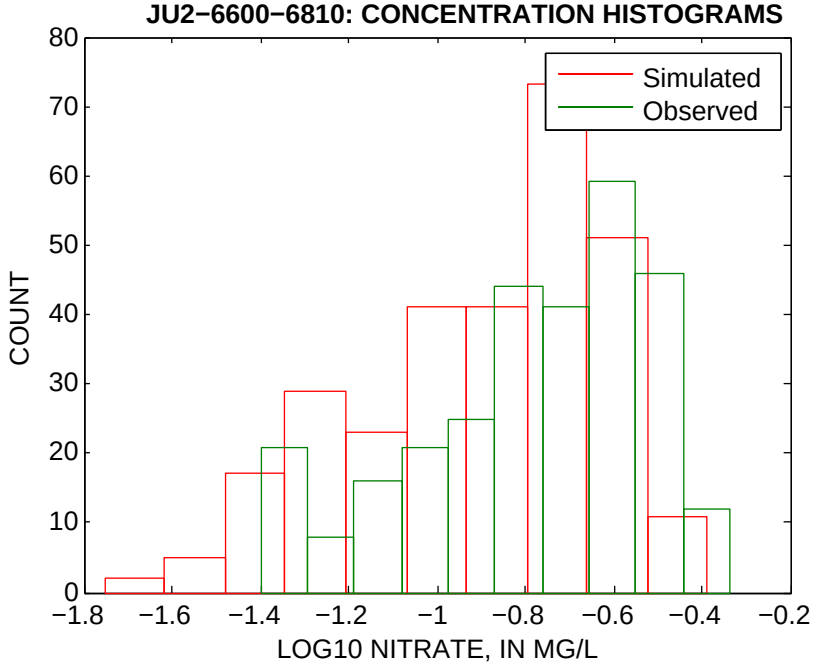
VERSION 2.1

ALL DATA
LOG10

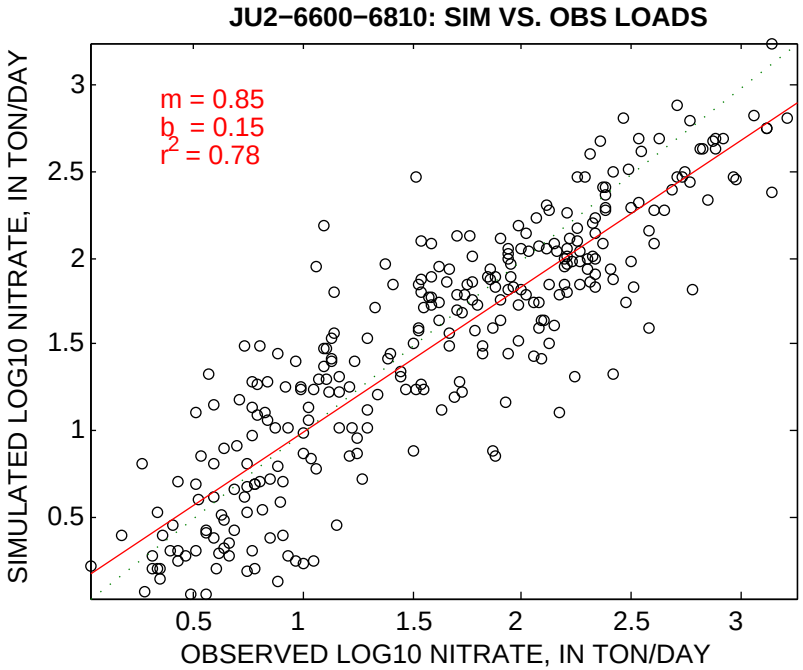


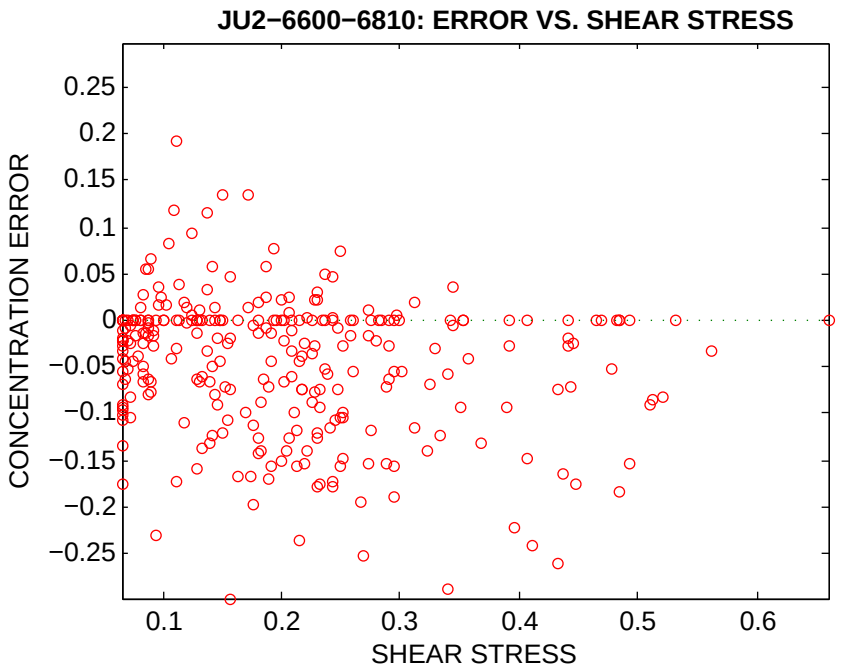


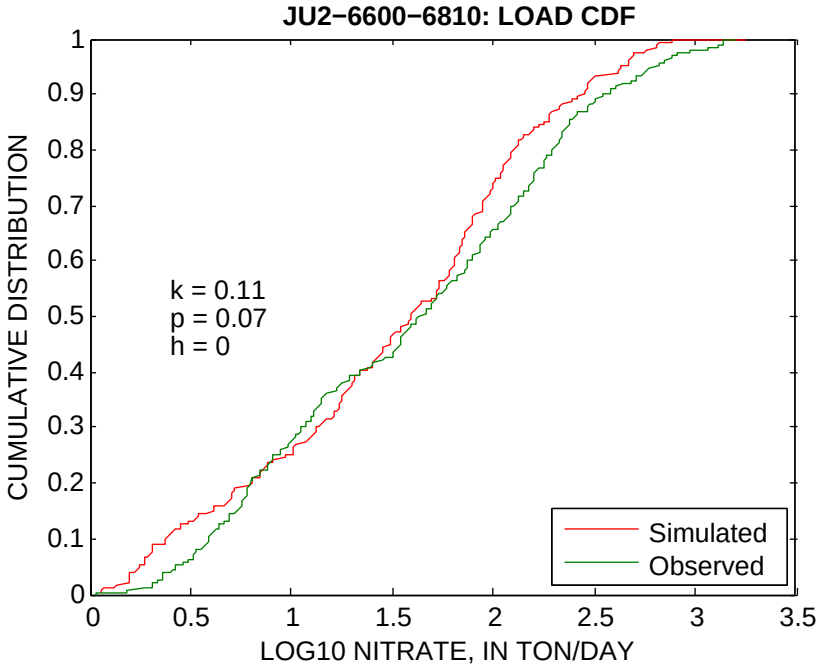


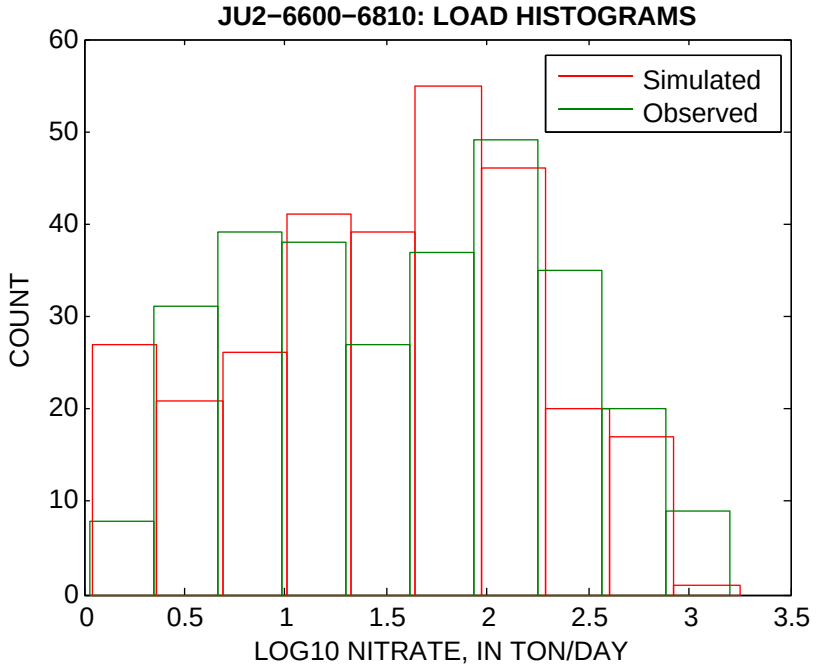


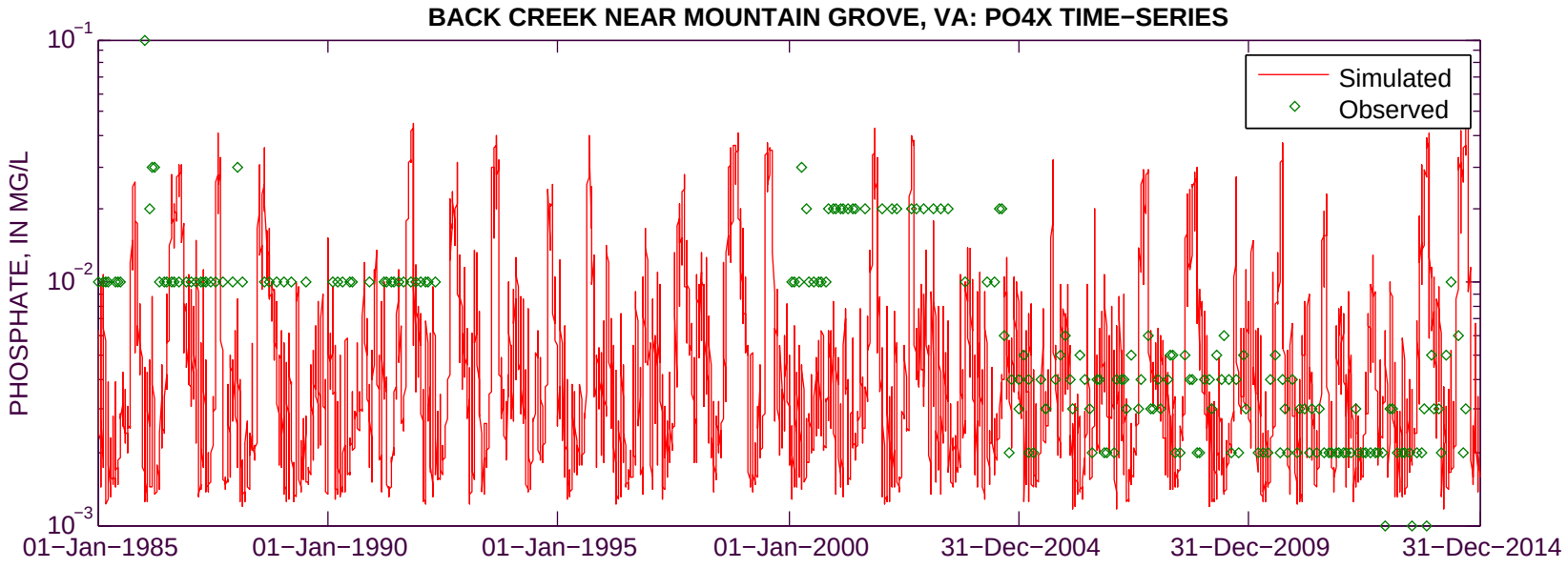
LOAD DATA
LOG10

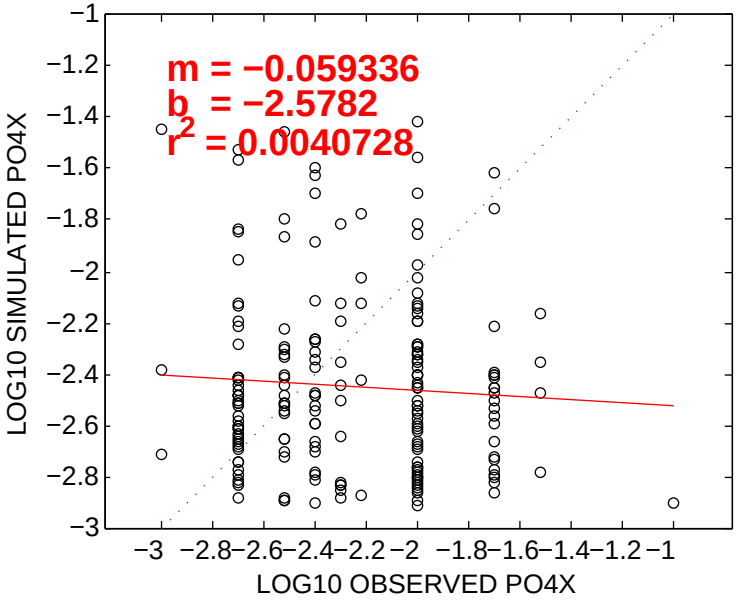


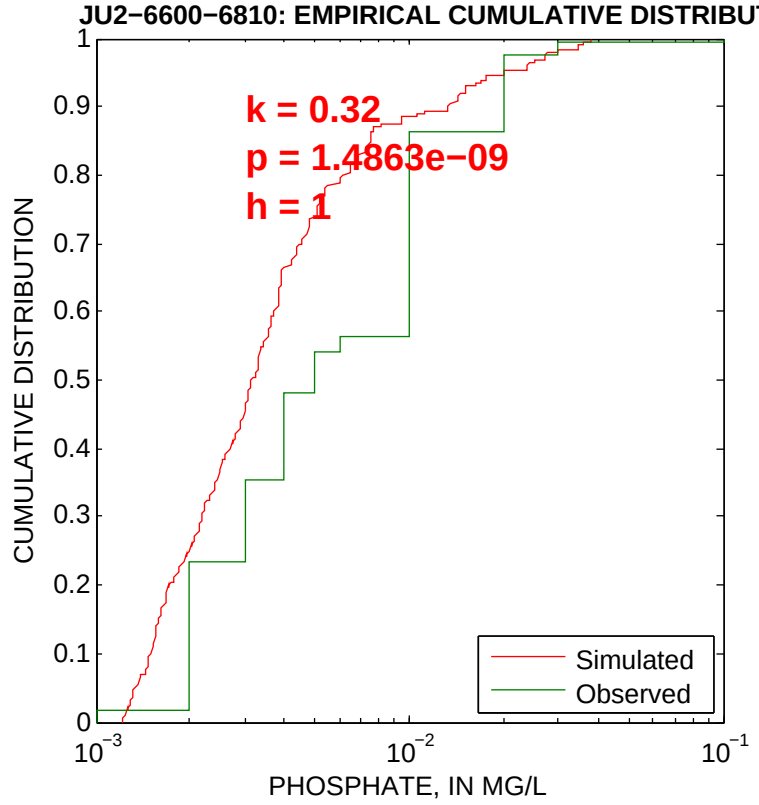












DATA SELECTION

scenario	file
P620171001WQ	PO4X.calib

plot: PO4X - phosphate

Dates: 1/1/1985 – 12/31/201

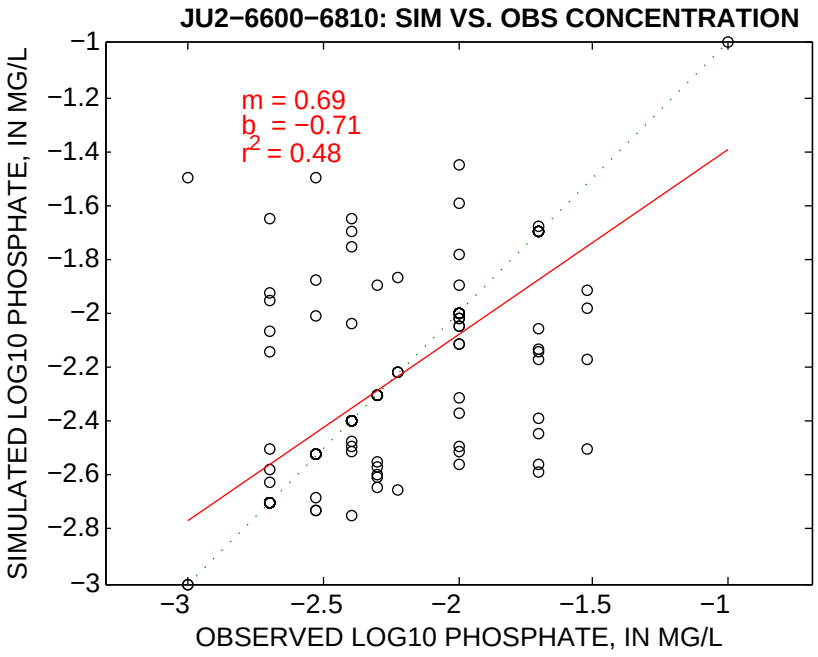
Drive	Directory	Observed
N/A	model	OBS20161101

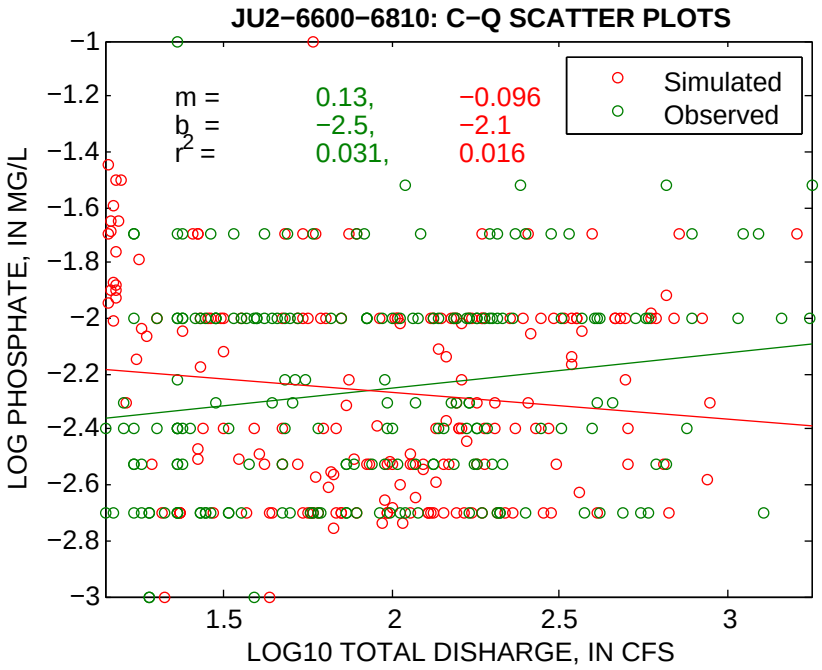
STATISTICS

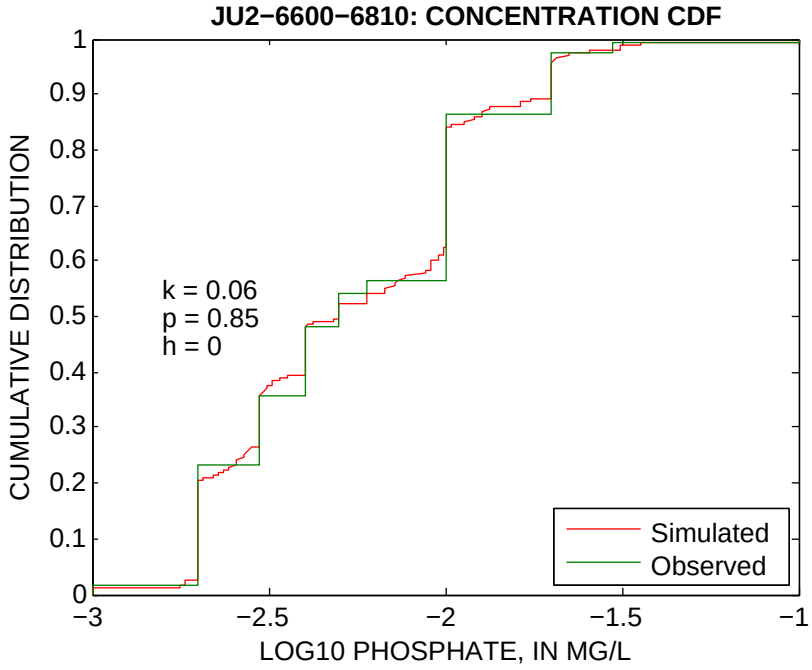
	n	observe	simulate
		200	200
min		0.001	0.0012181
		-3	-2.91432
mean		0.008065	0.00531724
		-2.25721	-2.44425
media		0.005	0.0031519
		-2.30103	-2.50143
max		0.1	0.038169
		-1	-1.41829
varian		8.37495e-0	4.15626e-0
		0.135794	0.11739
JB		0.001	0.001
		0.048700	0.001
		ra	log
%		-34.0702	8.28596
err.va		0.00014153	0.304456
rel.std.err		1.69003	2.24204
mod.eff		-0.690026	-1.24204

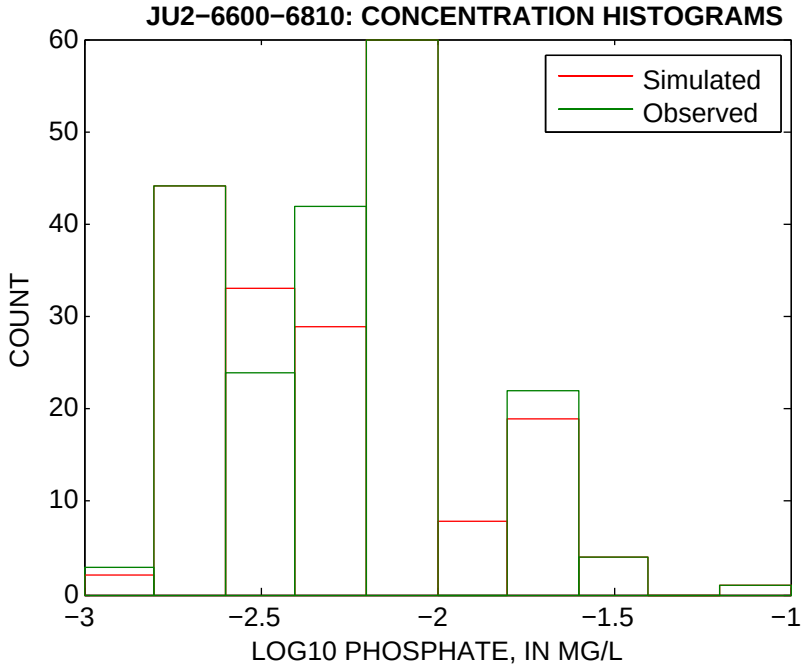
VERSION 2.1

ALL DATA
LOG10

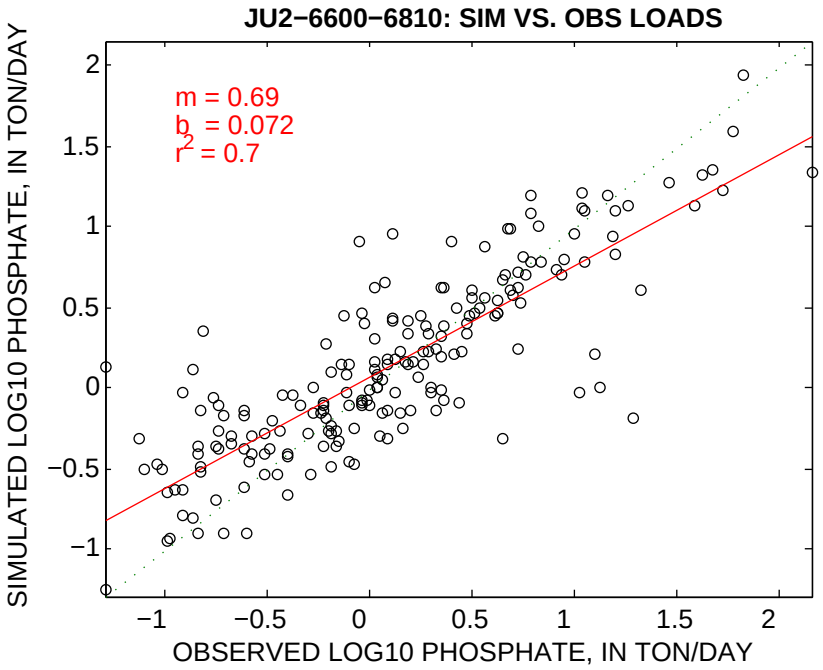


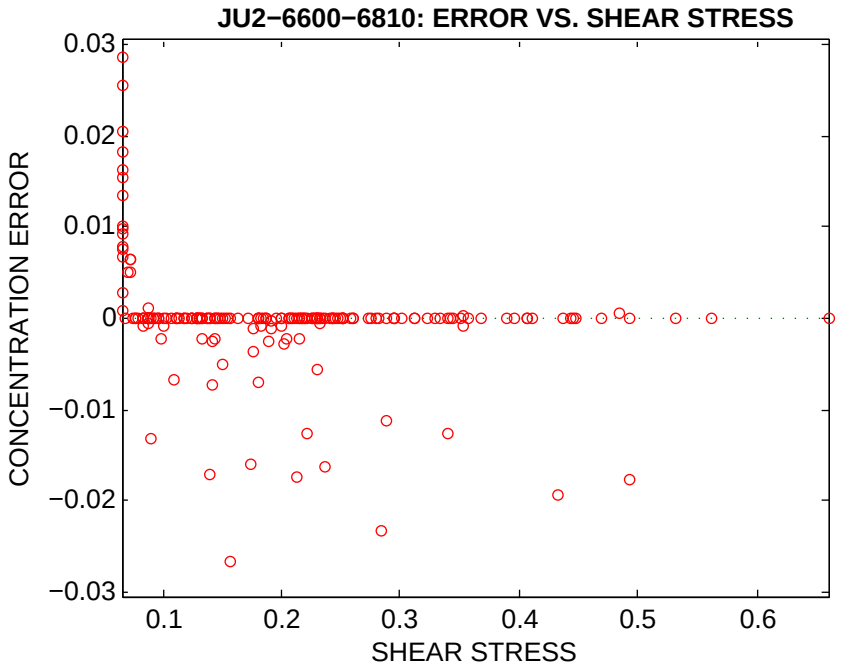


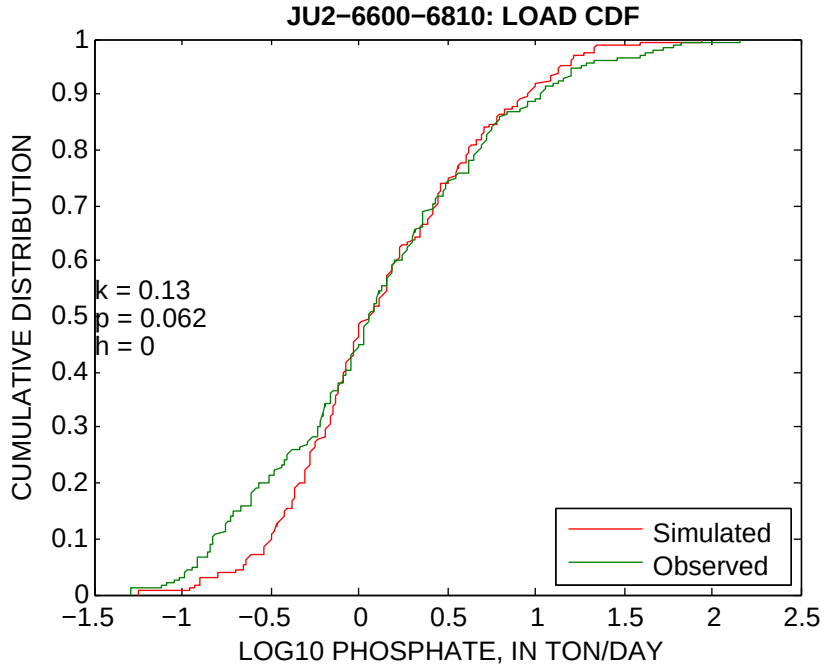


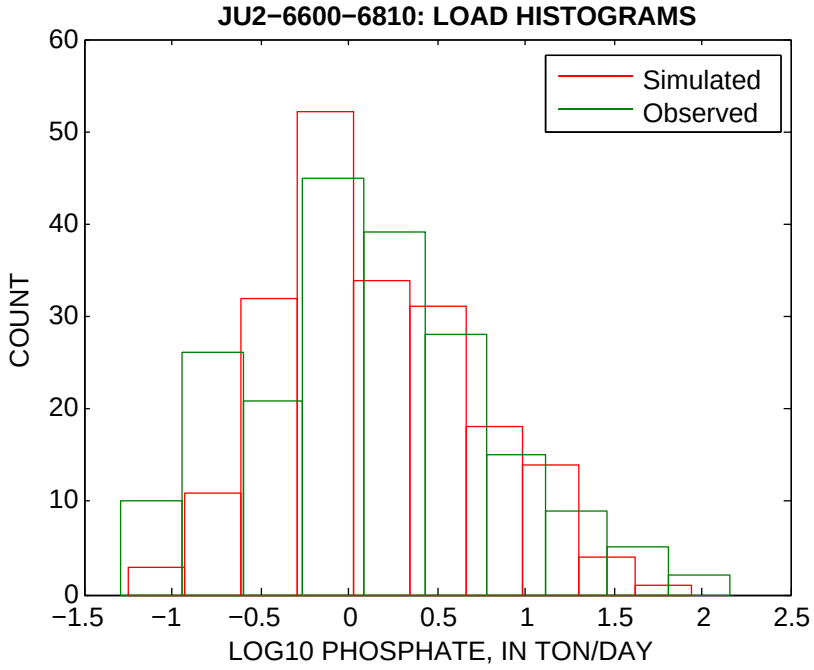


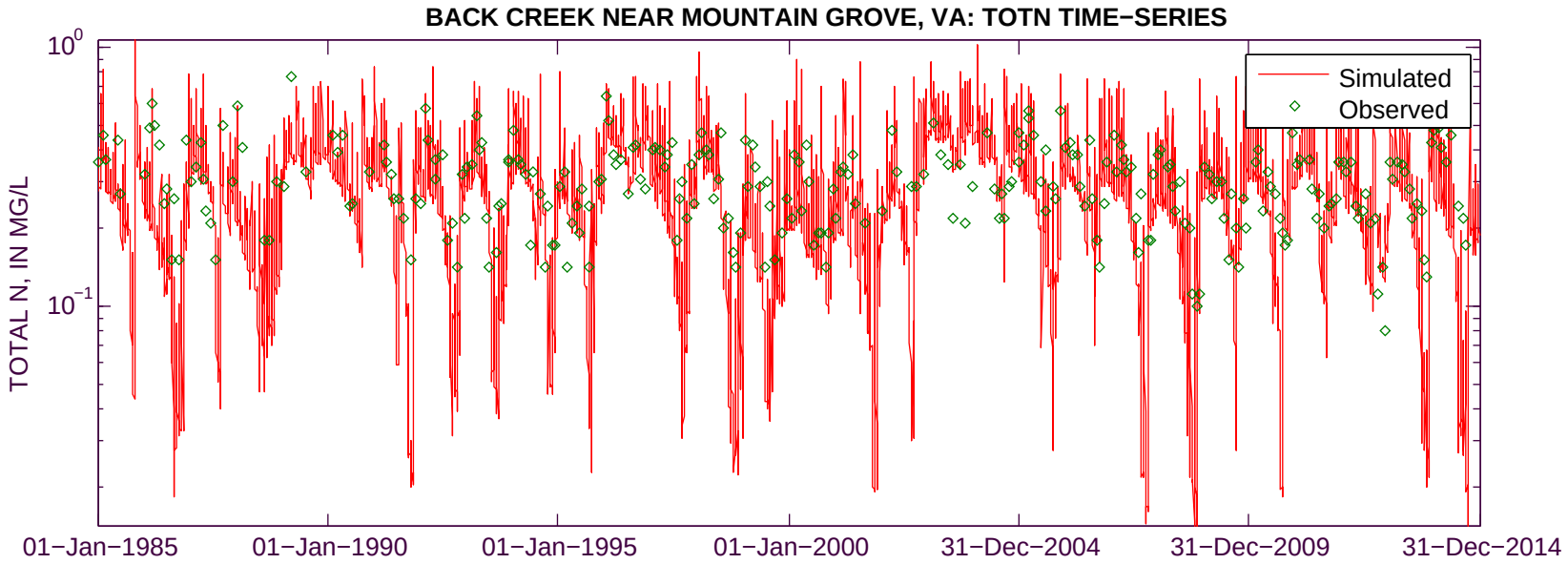
LOAD DATA
LOG10

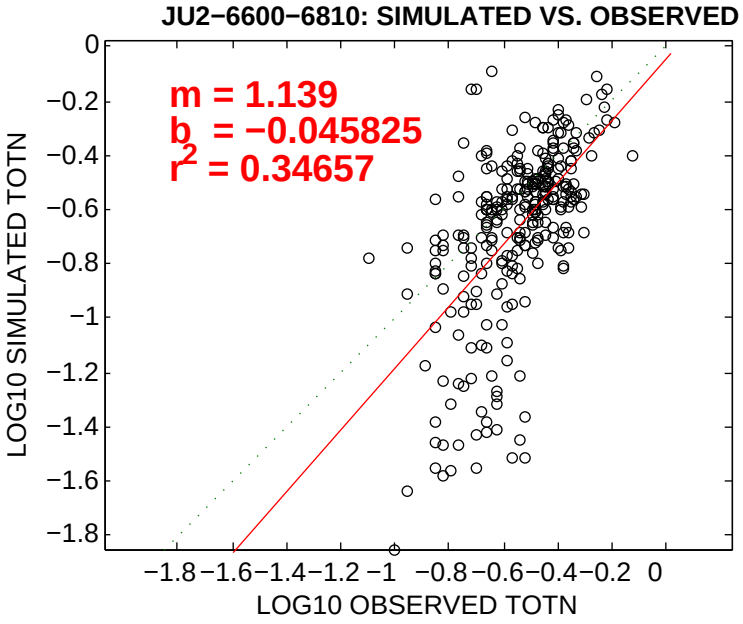


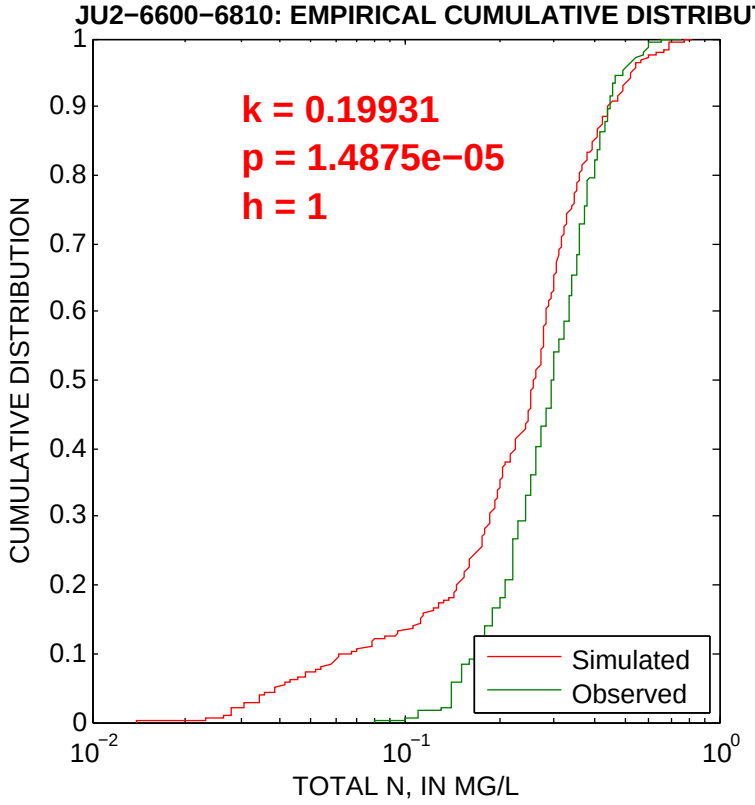












DATA SELECTION

scenario: P620171001WQ; file: TOTN.calib

plot: TOTN - total nitrogen

Dates: 1/1/1985 – 12/31/201

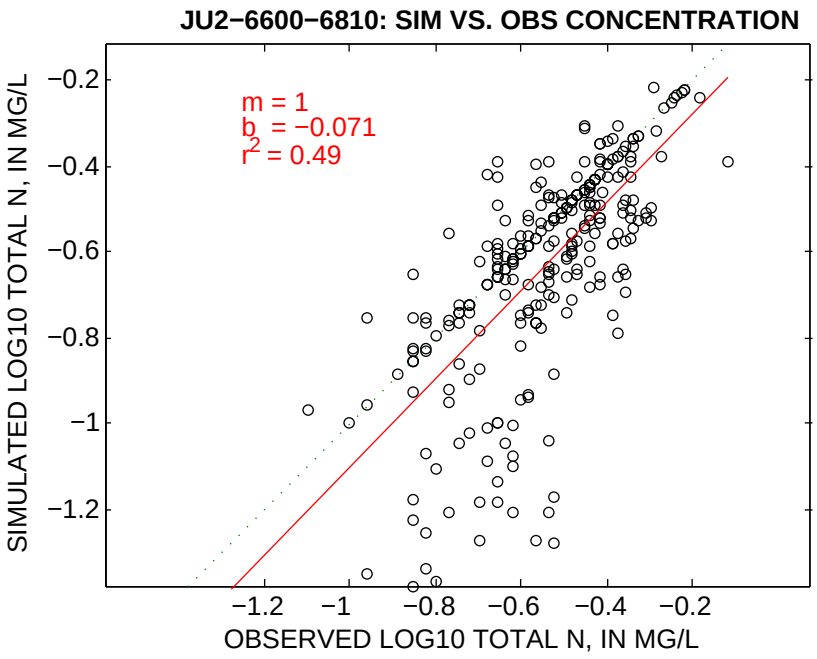
Drive: N/A; Directory: model; Observed: OBS20161101

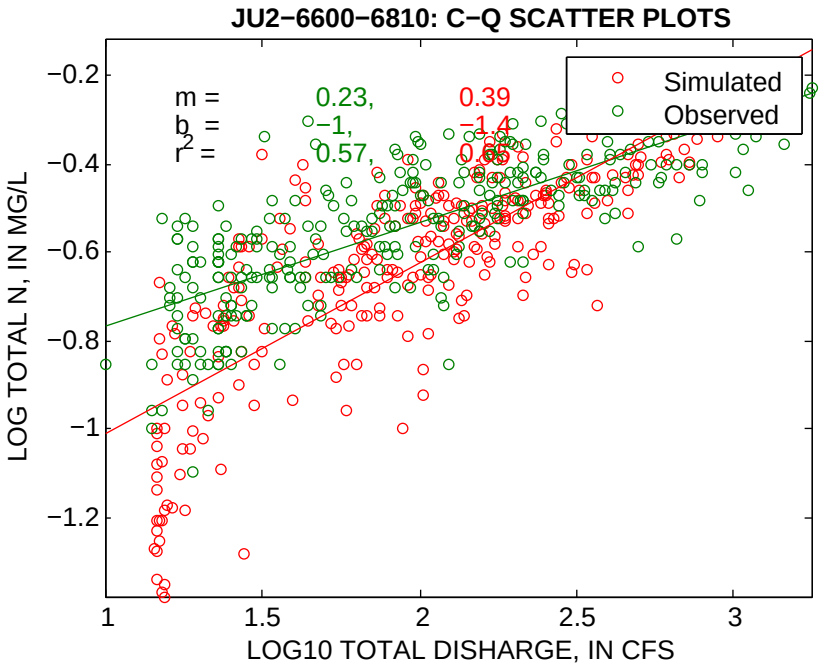
STATISTICS

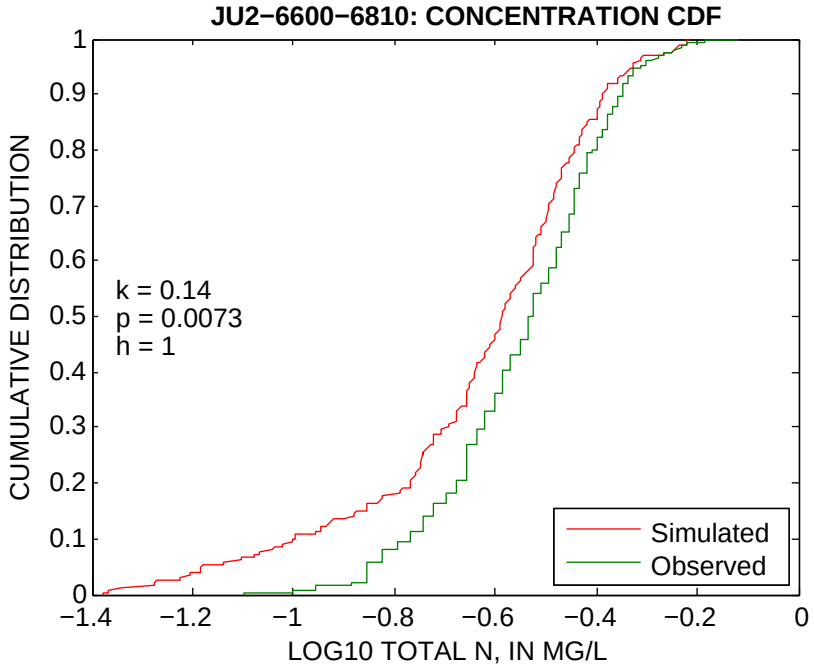
		observe	simulate
n		291	291
min		0.08	0.01402
		-1.09691	-1.85325
mean		0.304742	0.264005
		-0.545541	-0.667201
media		0.3	0.25804
		-0.522879	-0.588313
max		0.76	0.81879
		-0.119186	-0.0868275
varian		0.0121326	0.0212748
		0.0270341	0.101199
JB		0.001319	0.001
		0.026084	0.001
		ra	log
%		-13.3678	22.3007
err.va		0.0163403	0.0815006
rel.std.err		1.34681	3.01473
mod.eff		-0.346805	-2.01473

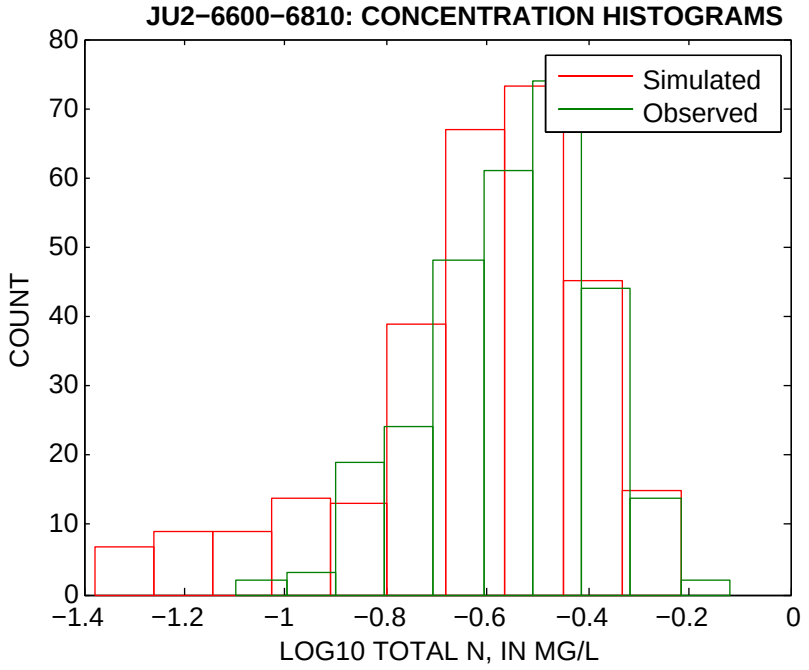
VERSION 2.1

ALL DATA
LOG10

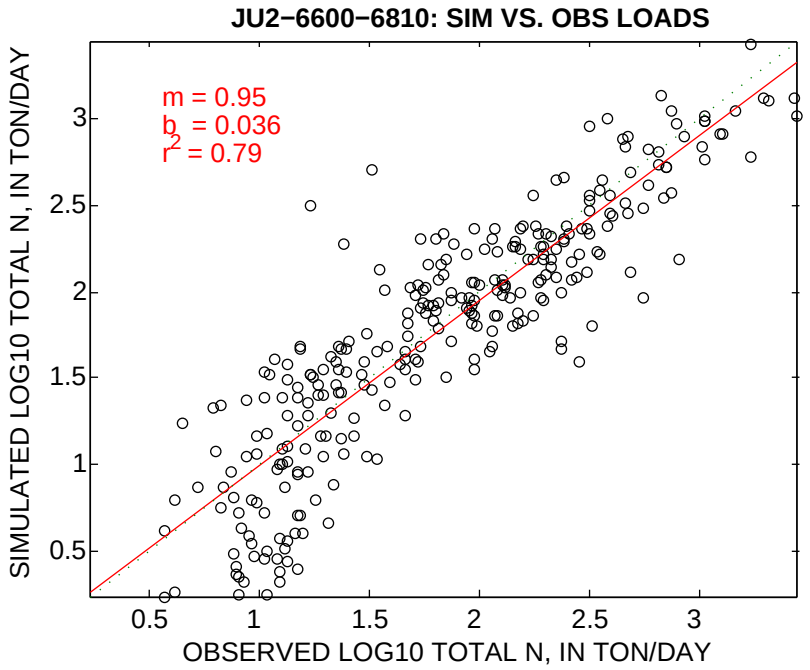




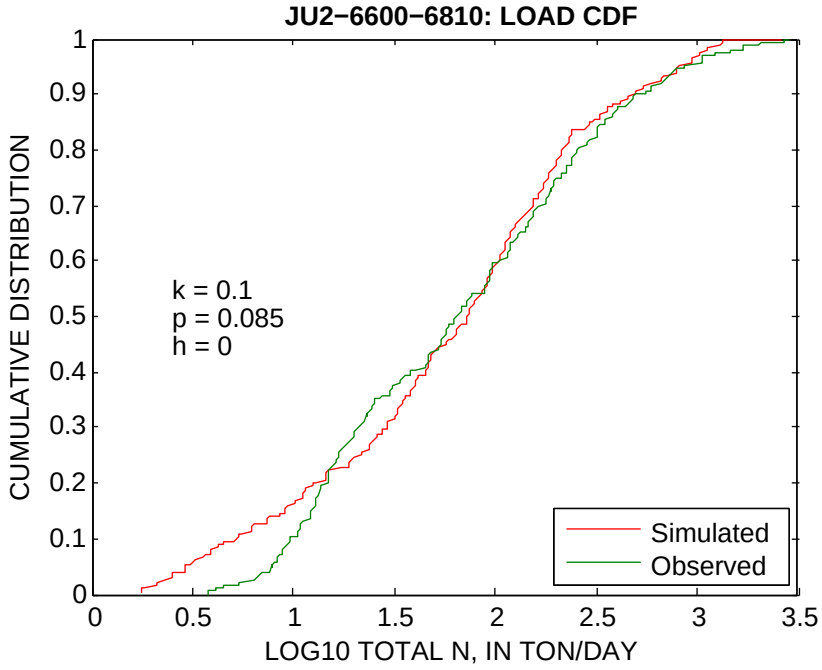


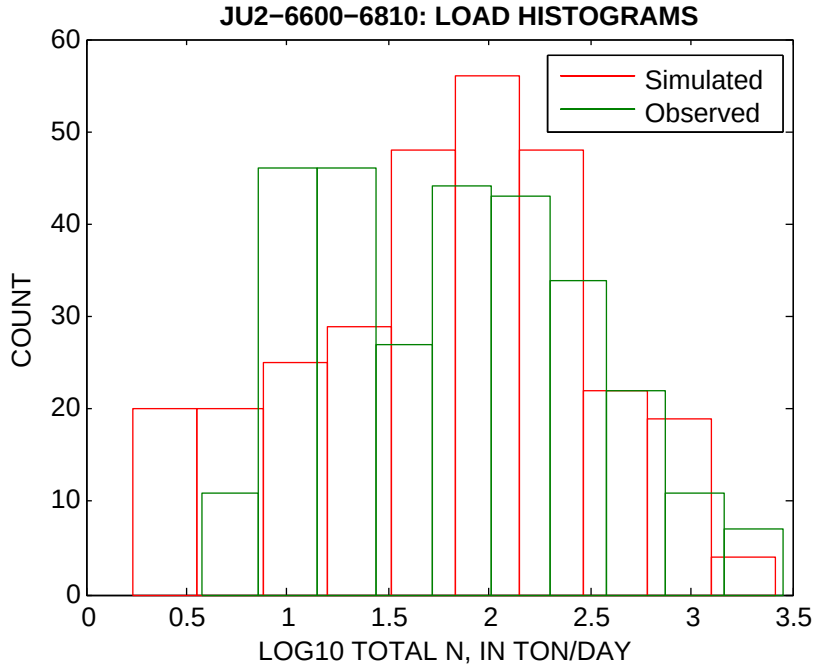


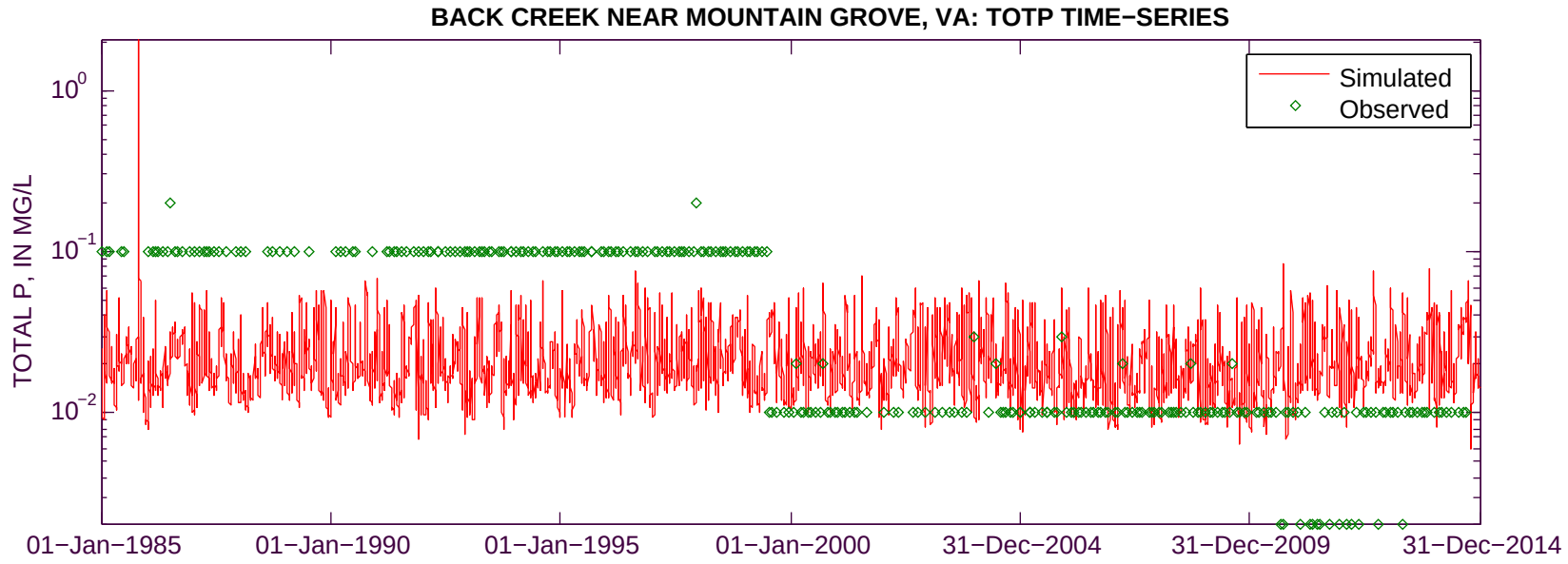
LOAD DATA
LOG10

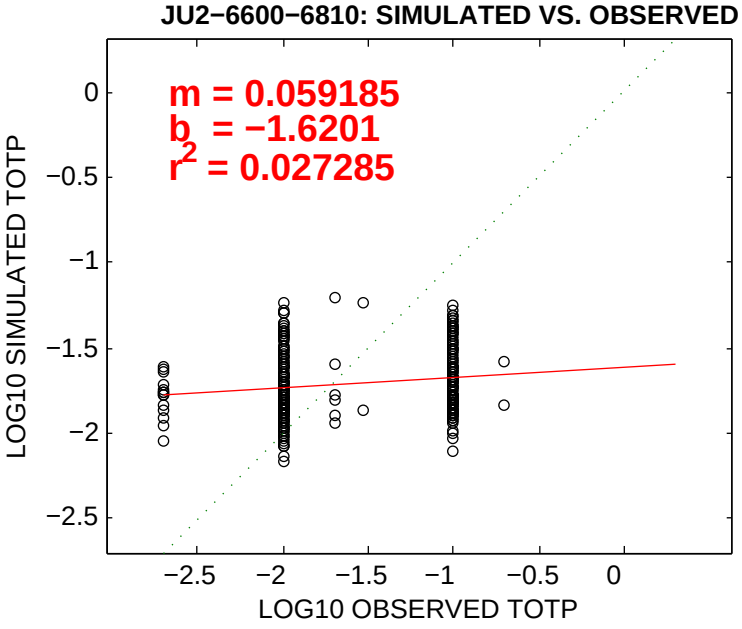


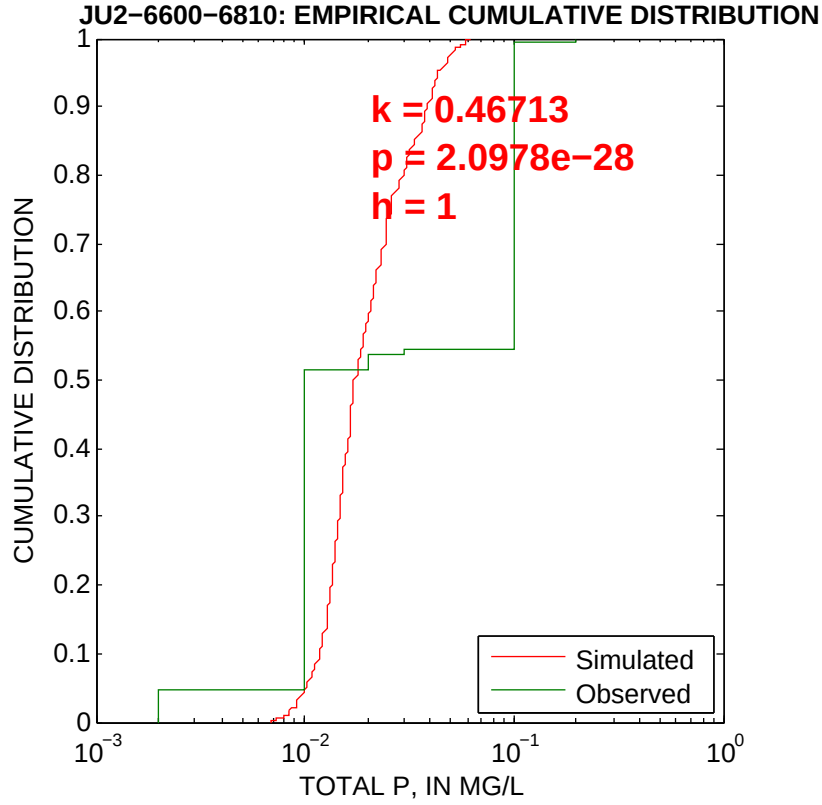












DATA SELECTION

scenario	file
P620171001WQ	TOTP.calib

plot: TOTP - total phosphorus

Dates: 1/1/1985 – 12/31/201

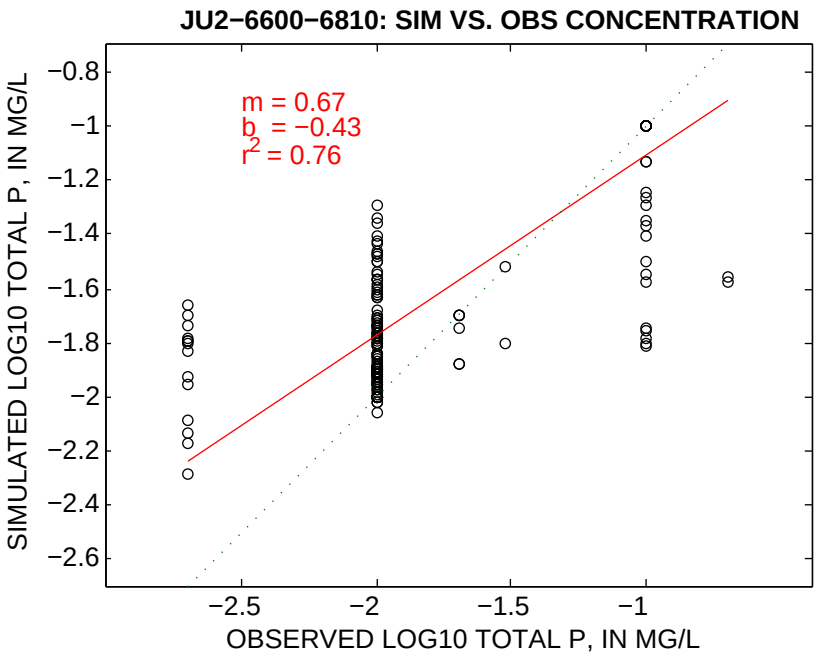
Drive	Directory	Observed
N/A	model	OBS20161101

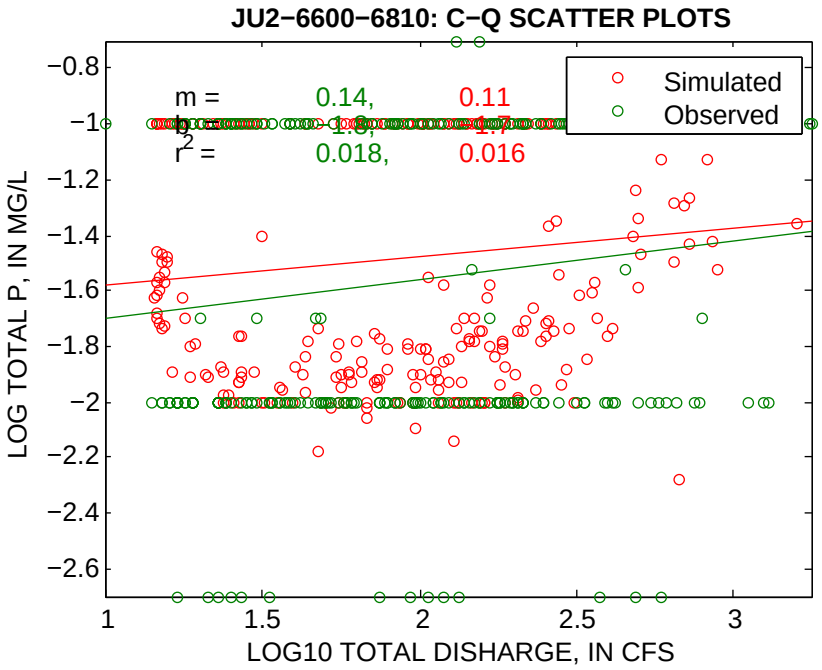
STATISTICS

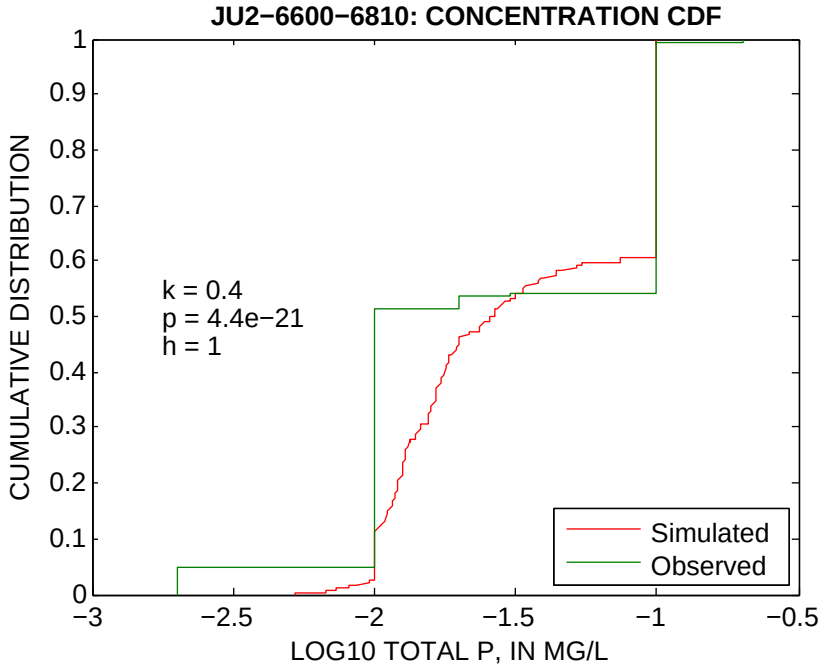
	n	observe	simulate
		289	289
min		0.002	0.0069031
		-2.69897	-2.16096
mean		0.0517578	0.021589
		-1.56548	-1.71274
media		0.01	0.017371
		-2	-1.76018
max		0.2	0.062796
		-0.69897	-1.20207
varian		0.00216515	0.00011942
		0.300897	0.0386291
JB		0.001	0.001
		0.001232	0.007842
		ra	log
%		-58.2883	9.40655
err.va		0.00307719	0.325669
rel.std.err		1.42124	1.08233
mod.eff		-0.421235	-0.0823277

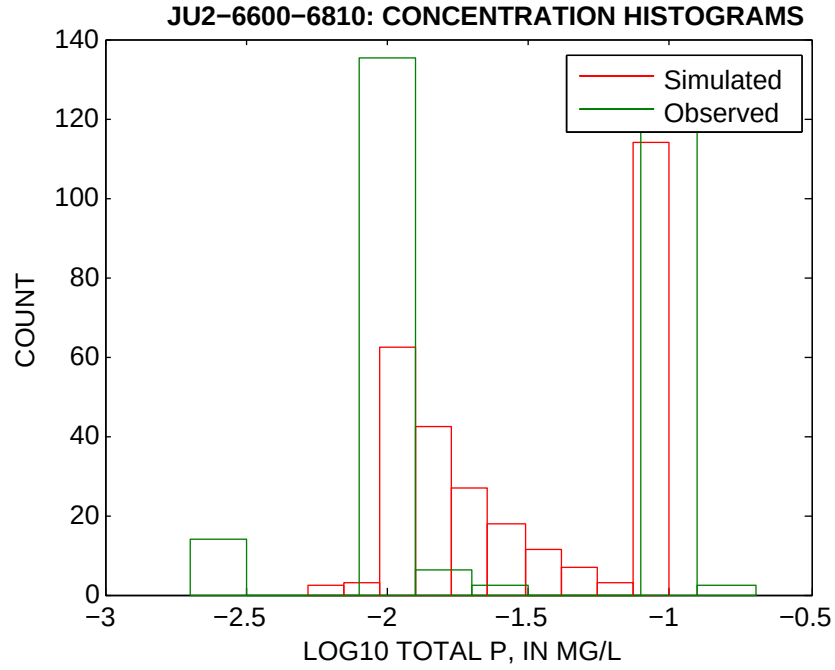
VERSION 2.1

ALL DATA
LOG10

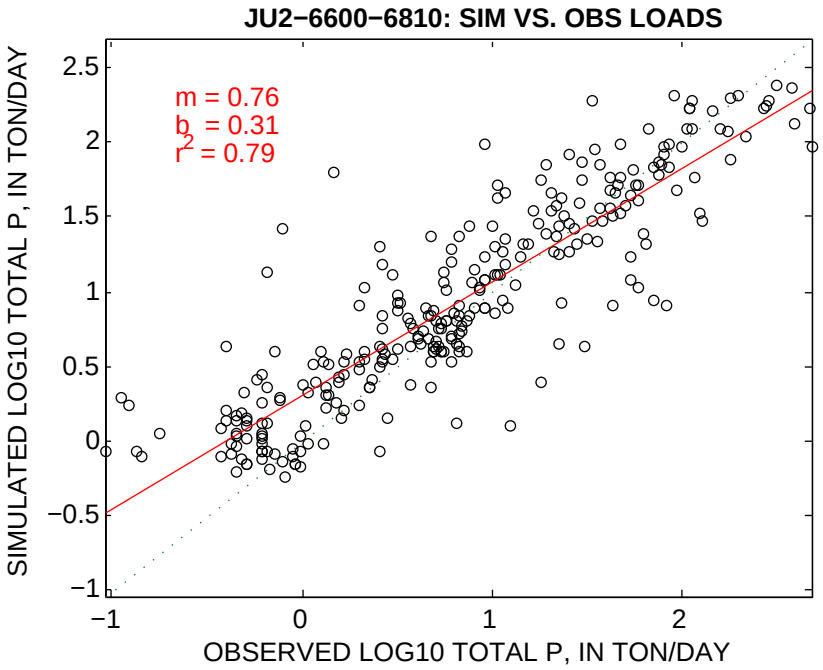


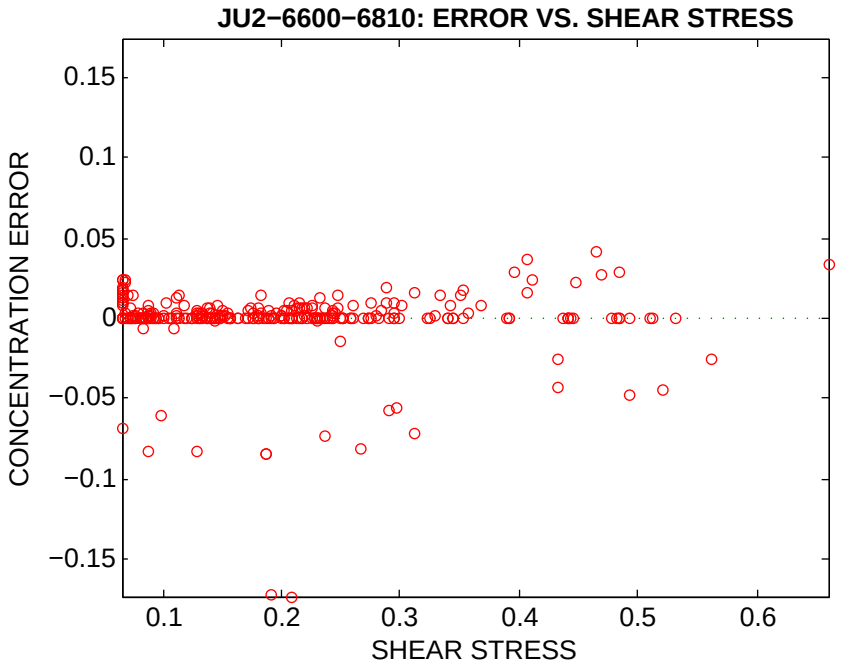


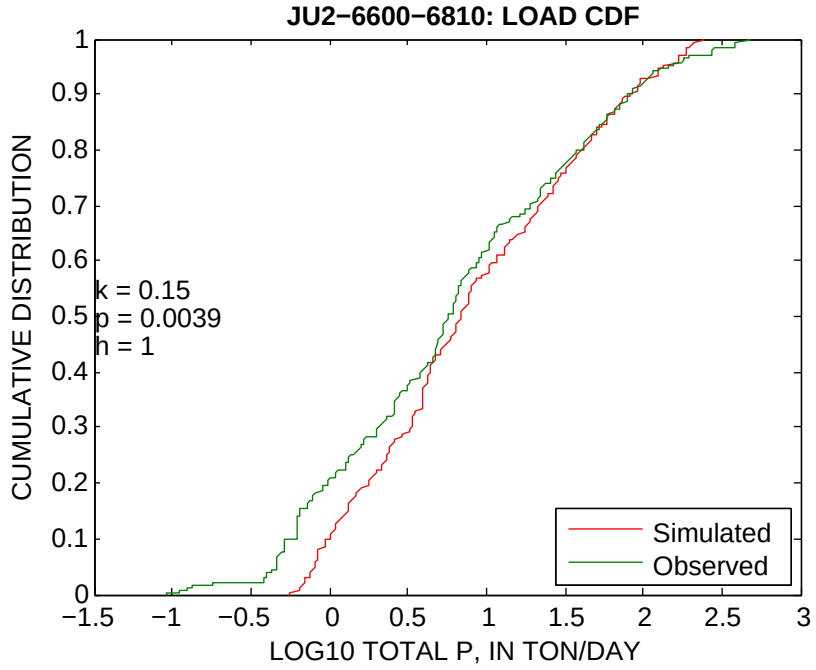


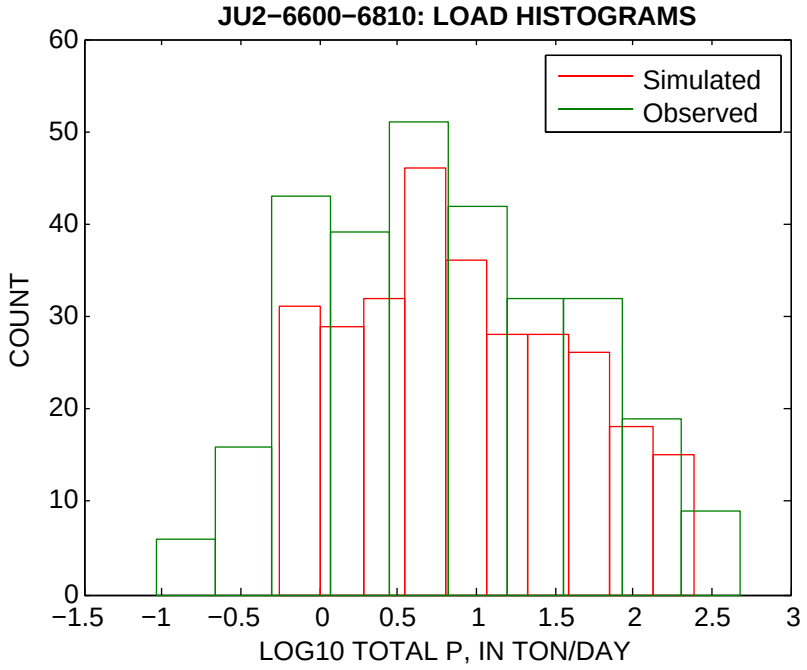


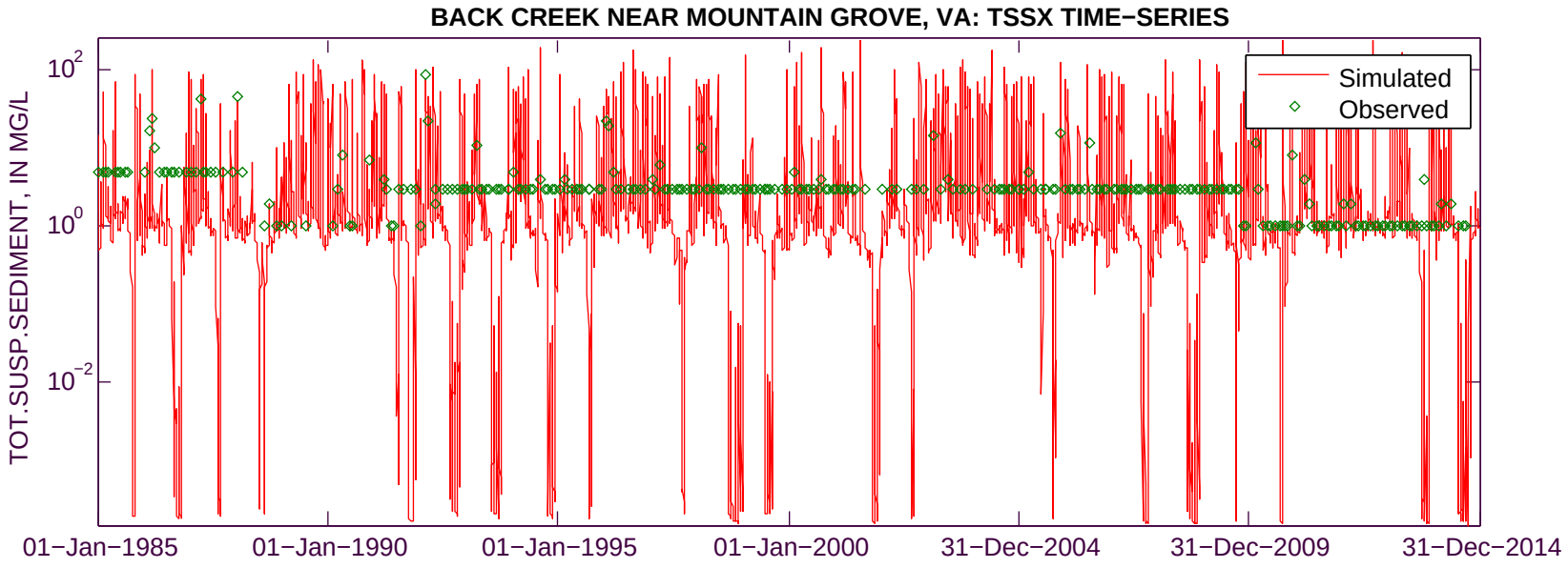
LOAD DATA
LOG10

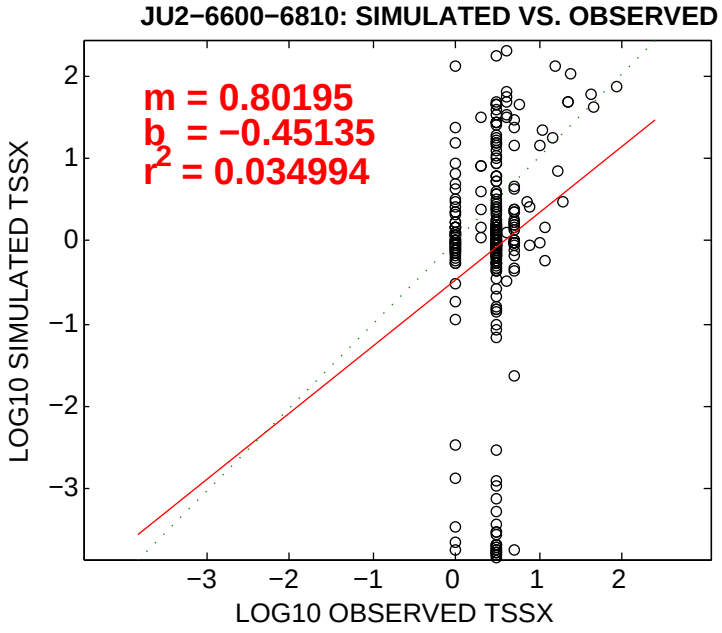


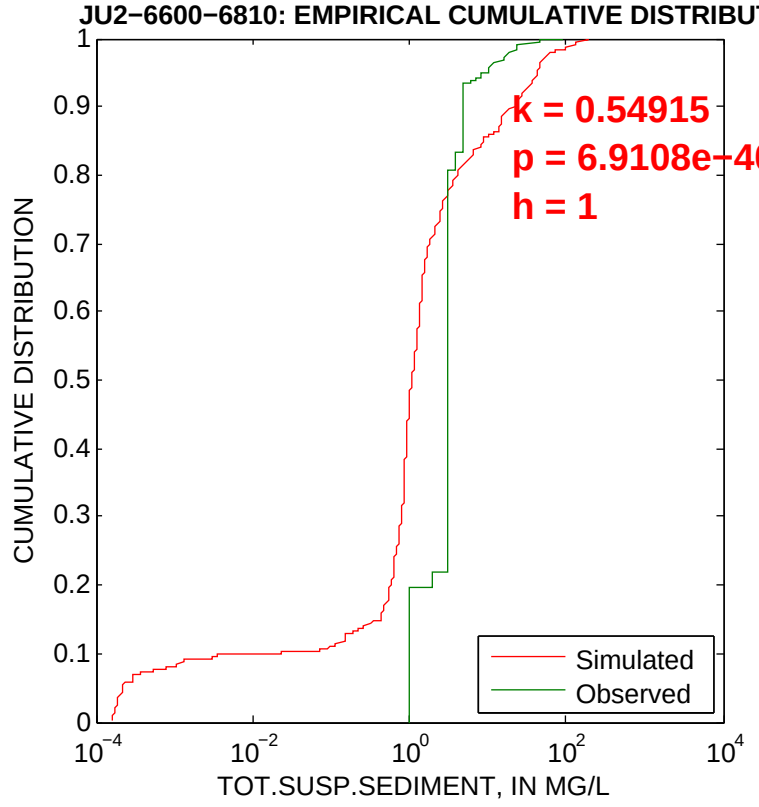












DATA SELECTION

scenario	file
P620171001WQ	TSSX.calib

plot: TSSX - total suspended ...

Dates: 1/1/1985 – 12/31/201

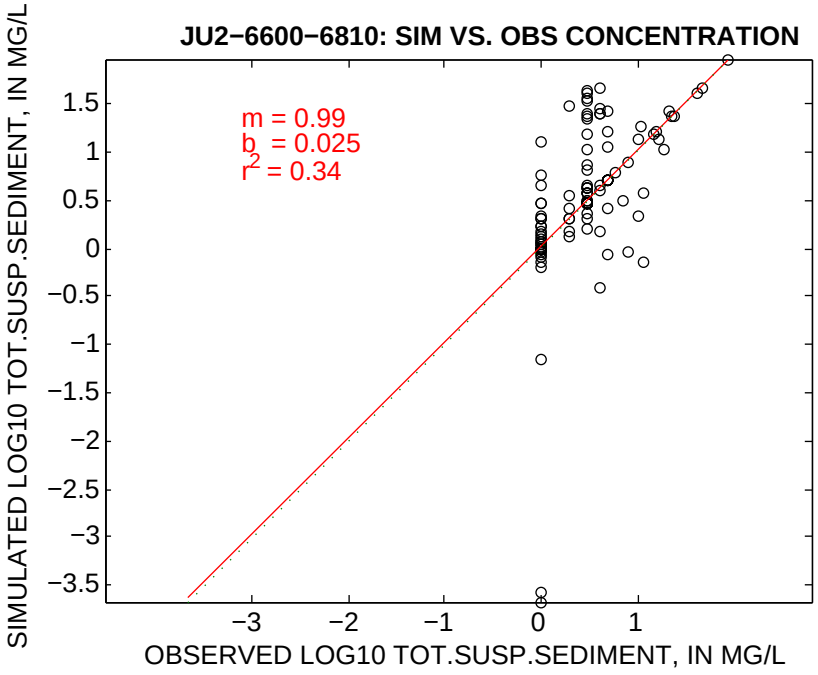
Drive	Directory	Observed
N/A	model	OBS20161101

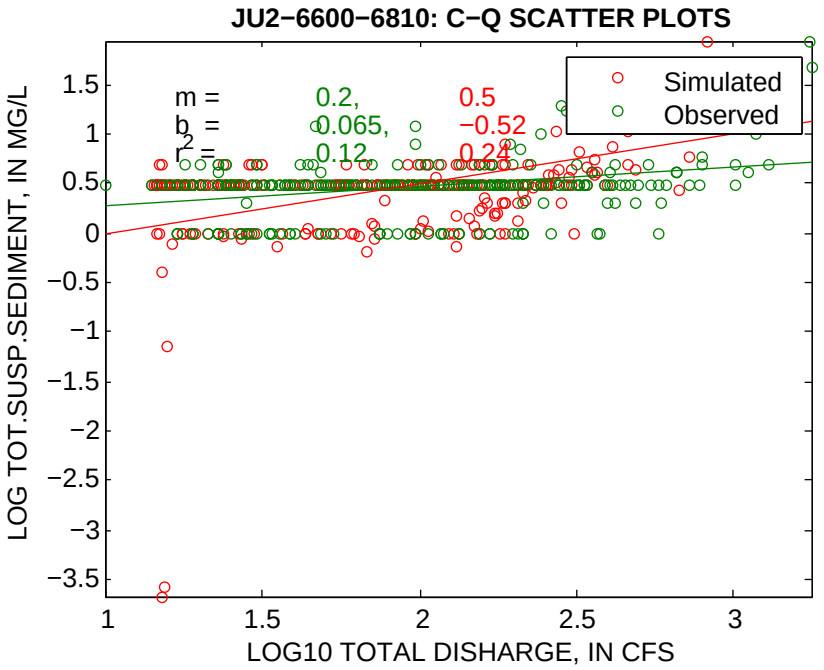
STATISTICS

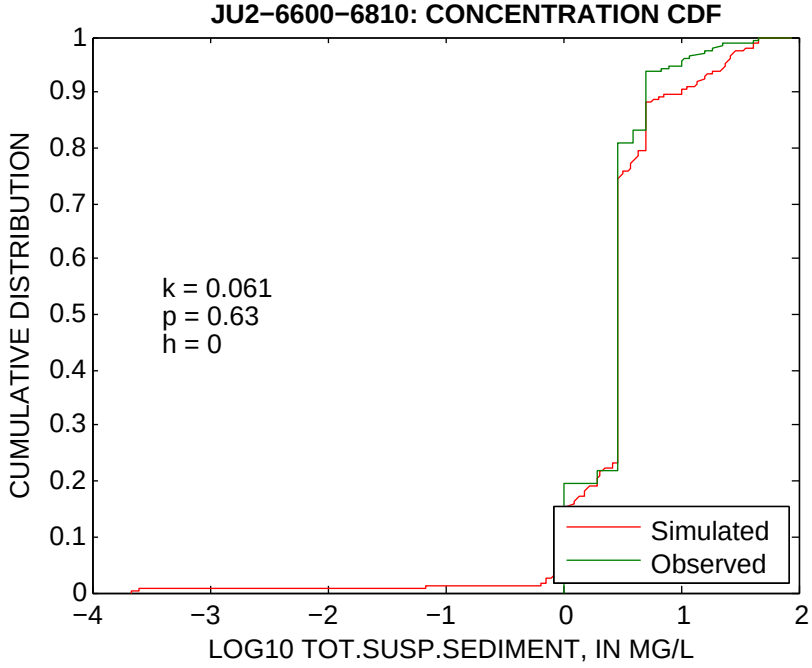
	n	observe	simulate
		295	295
min		1	0.00015045
		0	-3.82261
mean		3.9661	7.68345
		0.451788	-0.0890364
media		3	1.0782
		0.477121	0.0326993
max		88	195.98
		1.94448	2.29221
varian		44.6927	484.977
		0.0900693	1.65528
JB		0.001	0.001
		0.001	0.001
		ra	log
%		93.7279	-119.708
err.va		443.007	1.89438
rel.std.err		9.91228	21.0324
mod.eff		-8.91228	-20.0324

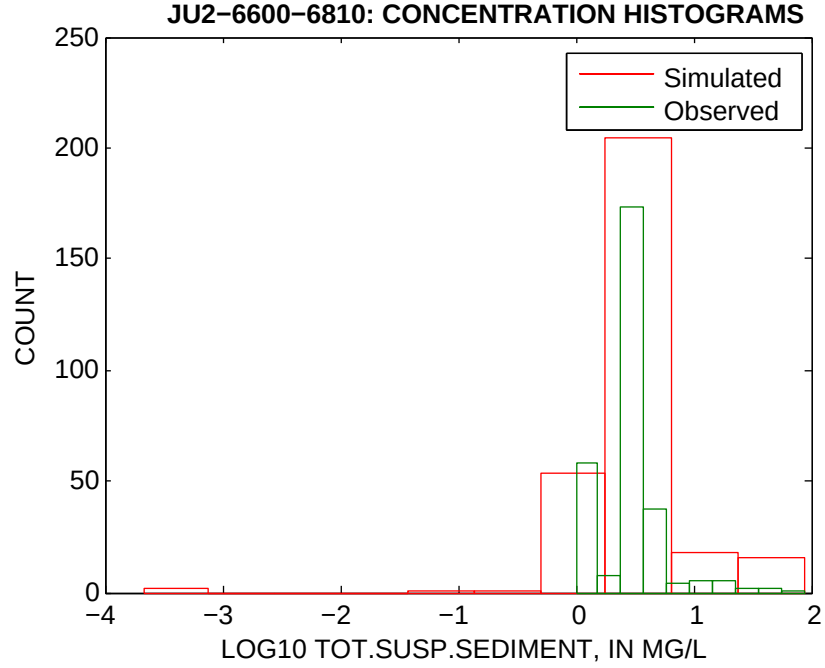
VERSION 2.1

ALL DATA
LOG10

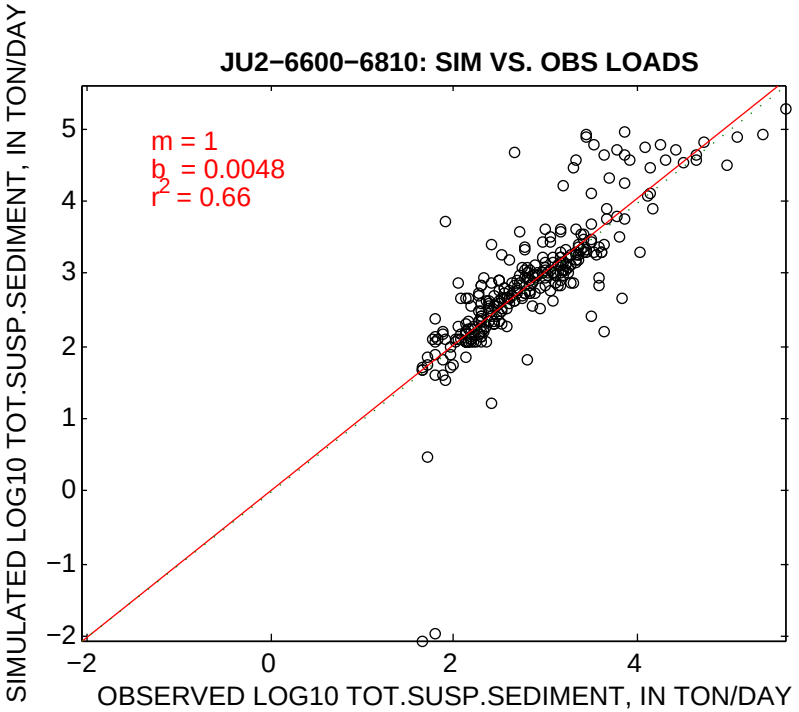


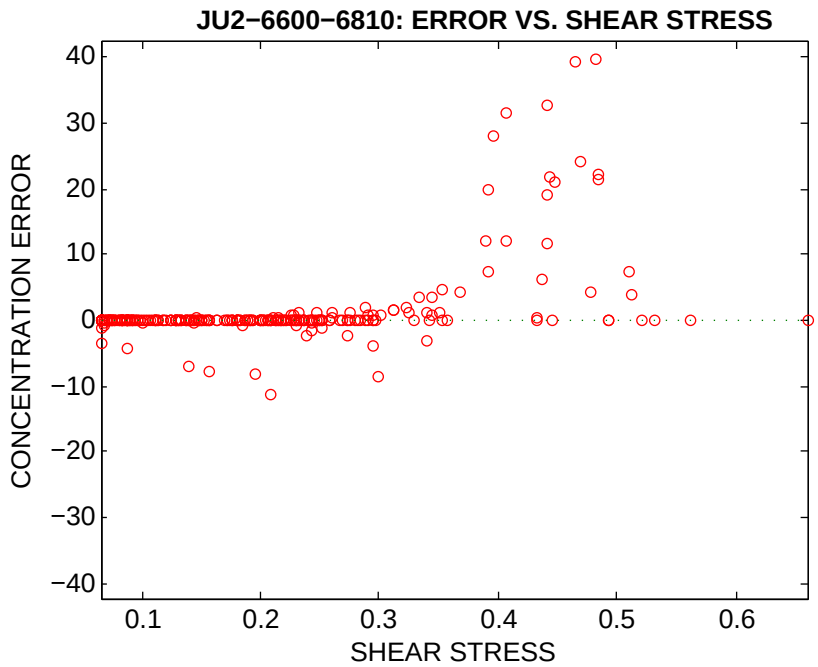


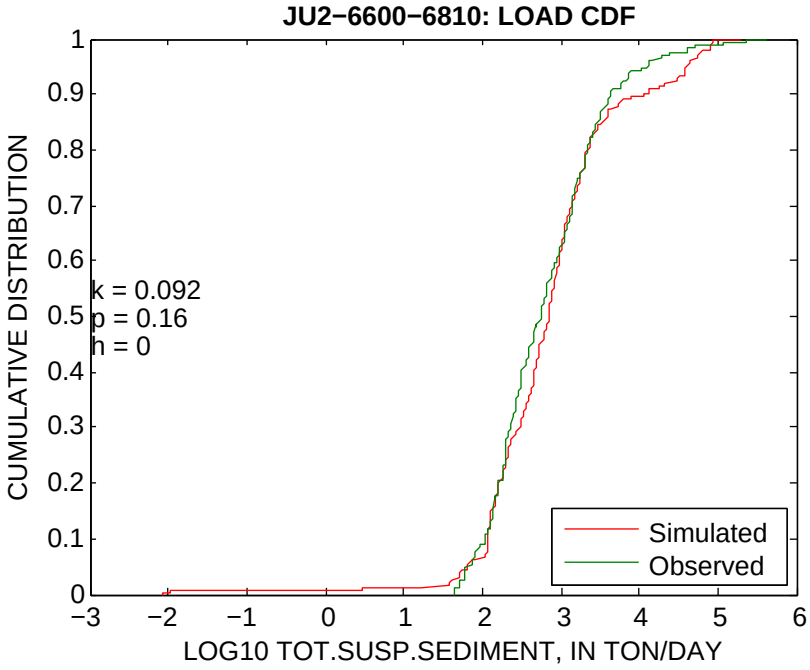


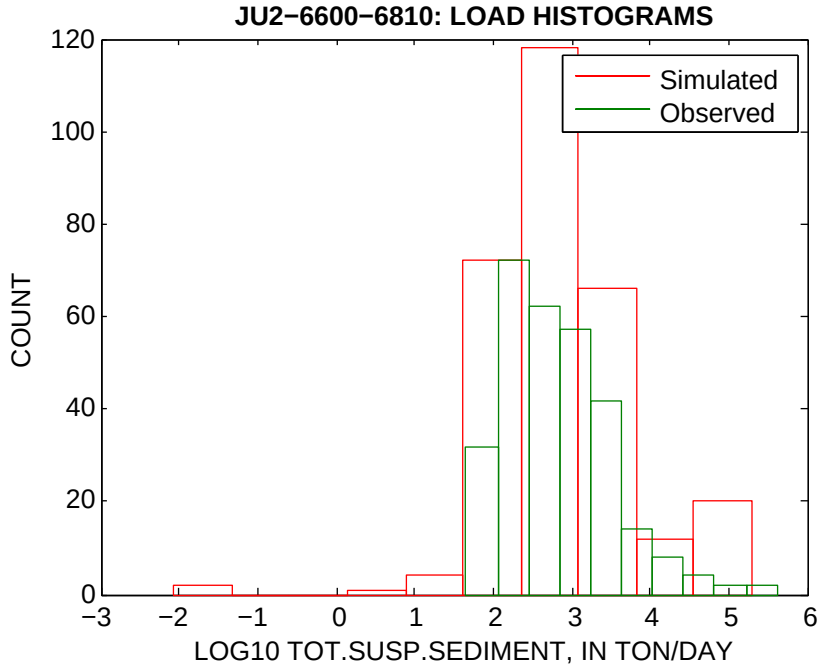


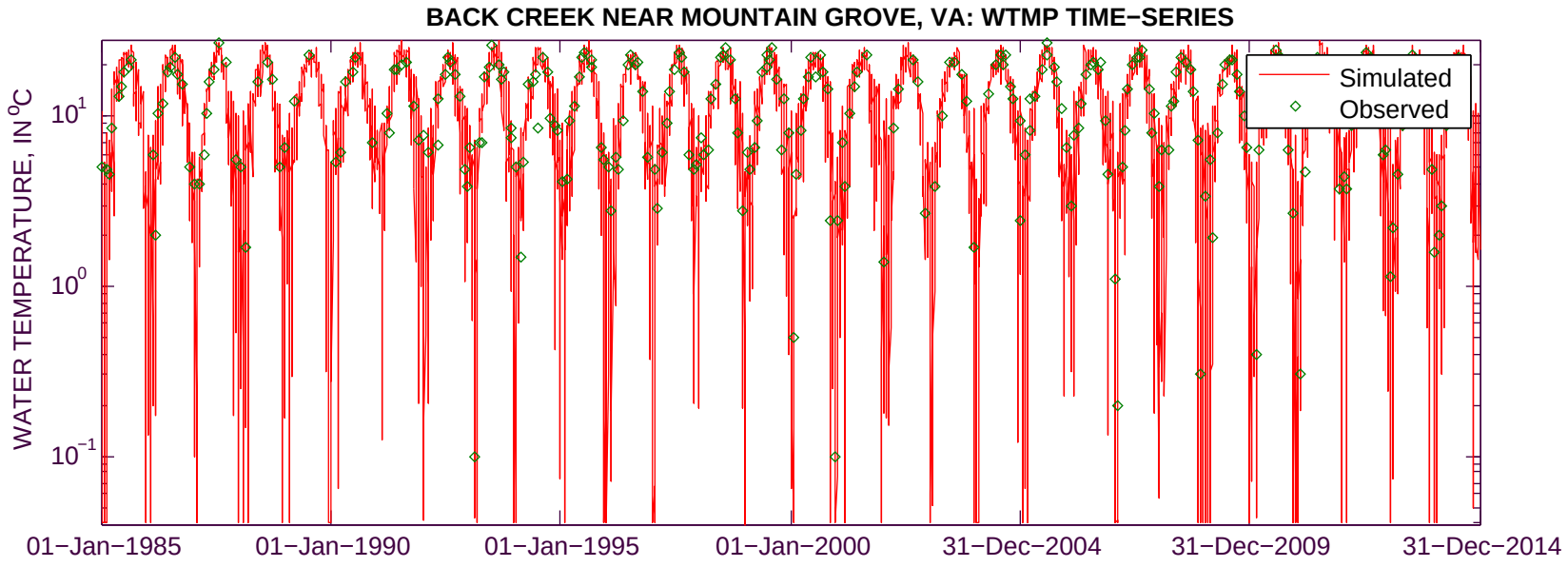
LOAD DATA
LOG10

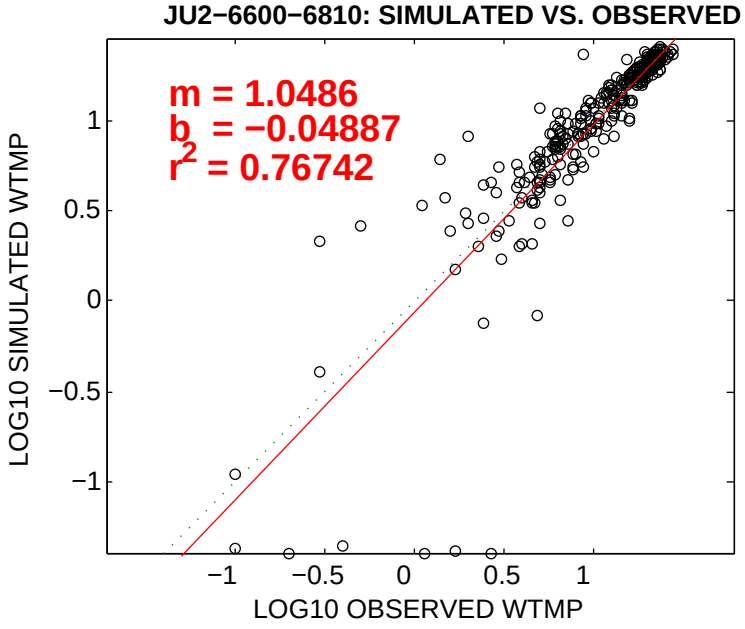


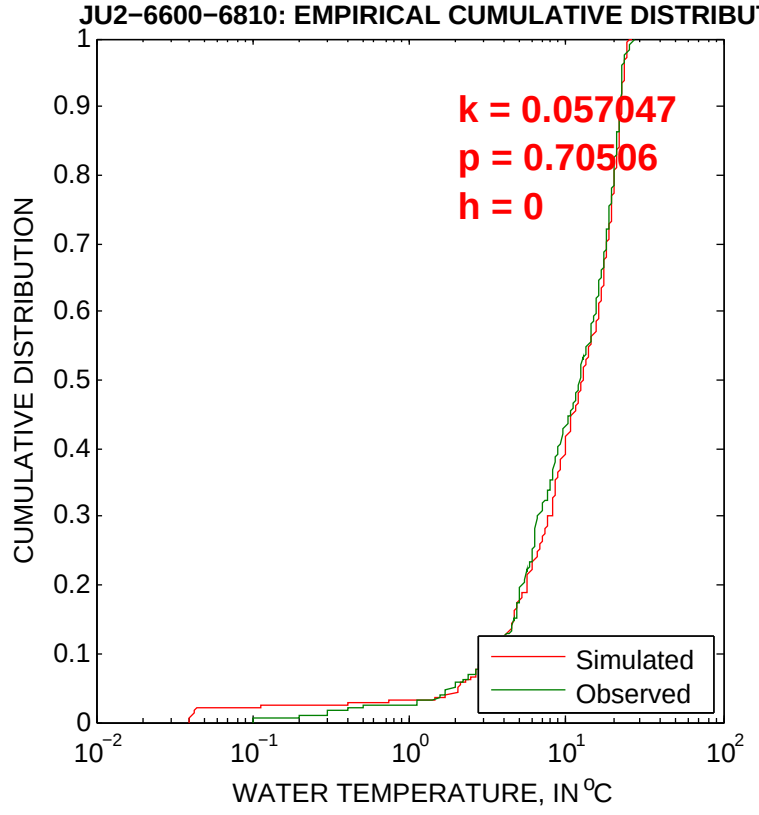












DATA SELECTION

scenario	file
P620171001WQ	WTMP.calib

plot: WTMP - water tempera...

Dates 1/1/1985 12/31/201

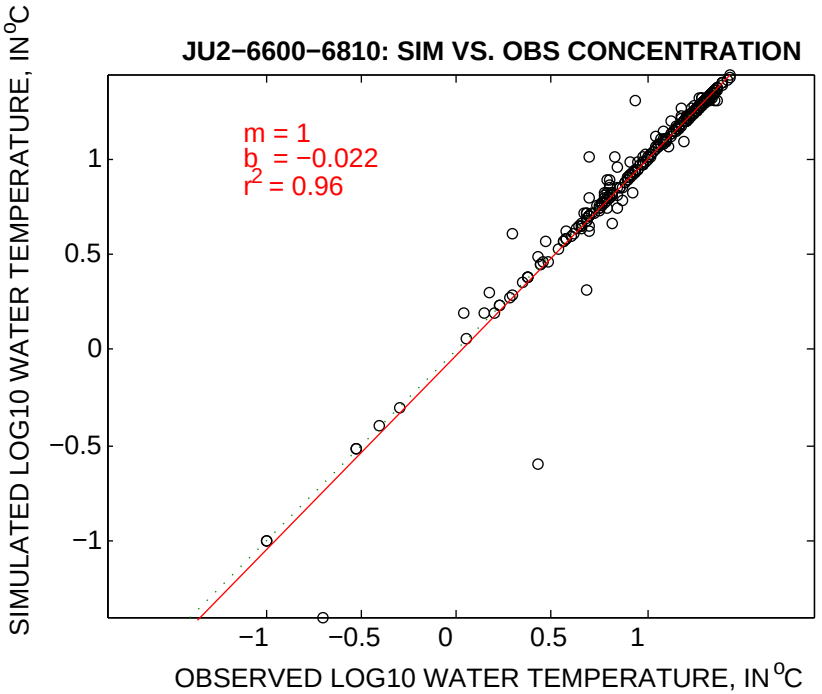
Drive	Directory	Observed
N/A	model	OBS20161101

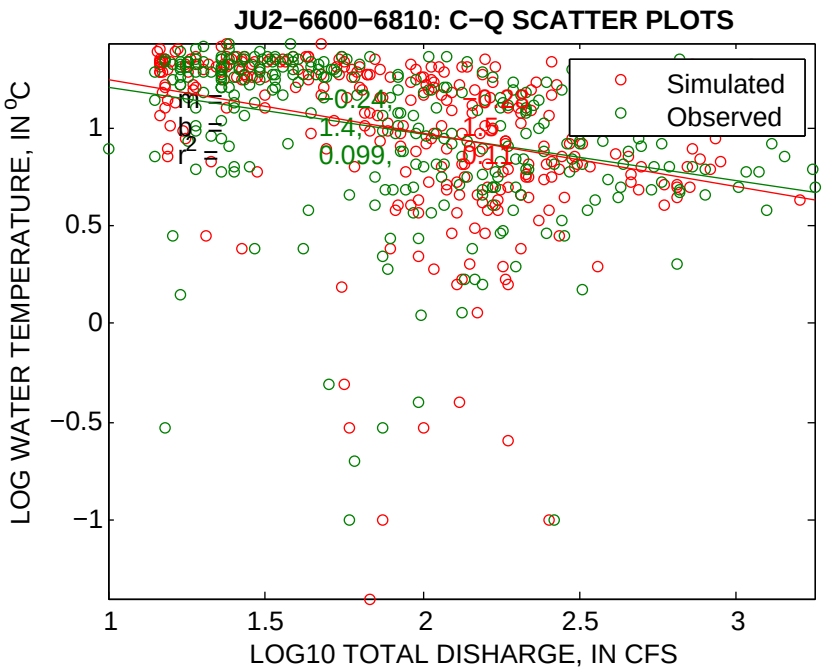
STATISTICS

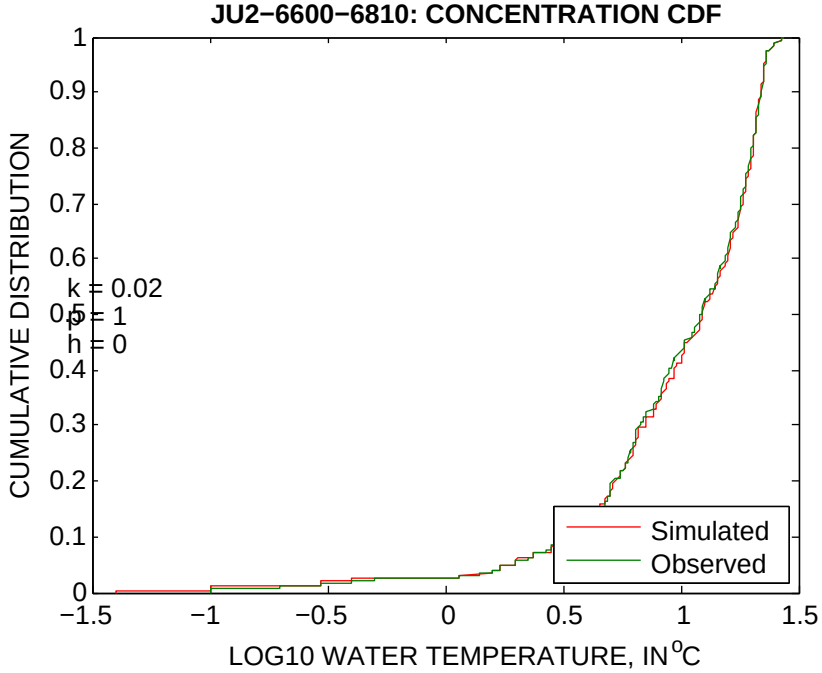
	n	298	298
		observe	**simulate**
min		0.1	0.040029
		-1	-1.39763
mean		12.5055	12.9314
		0.979859	0.978613
media		12.25	12.702
		1.08813	1.10387
max		27.3	25.89
		1.43616	1.41313
varian		50.9332	51.6795
		0.157431	0.225571
JB		0.001794	0.001862
		0.001	0.001
		ra	log
%		3.40528	-0.127111
err.va		4.80969	0.0528378
rel.std.err		.0944313	0.335624
mod.eff		0.905569	0.664376

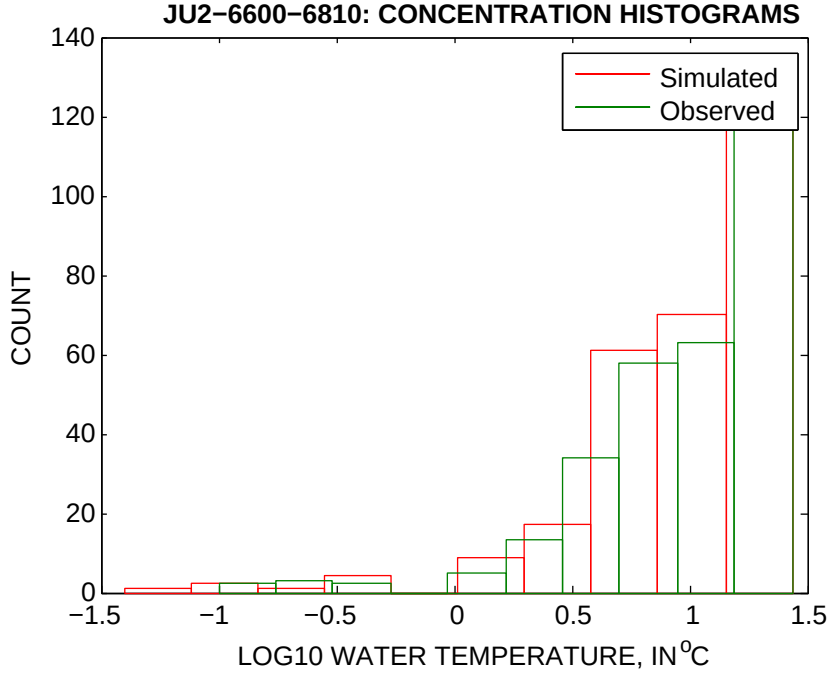
VERSION 2.1

ALL DATA
LOG10

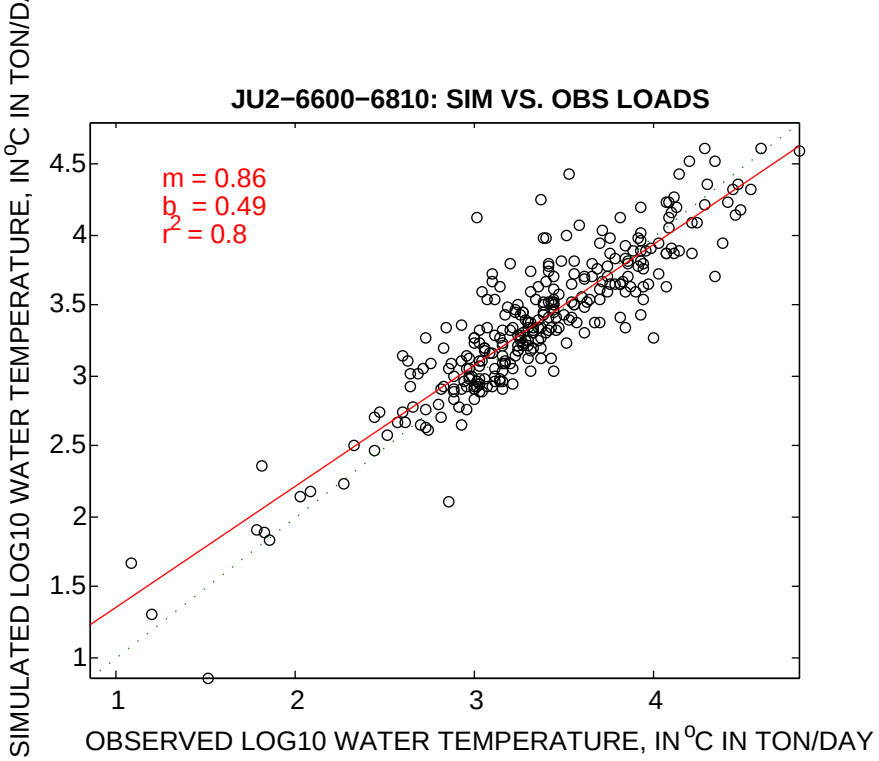


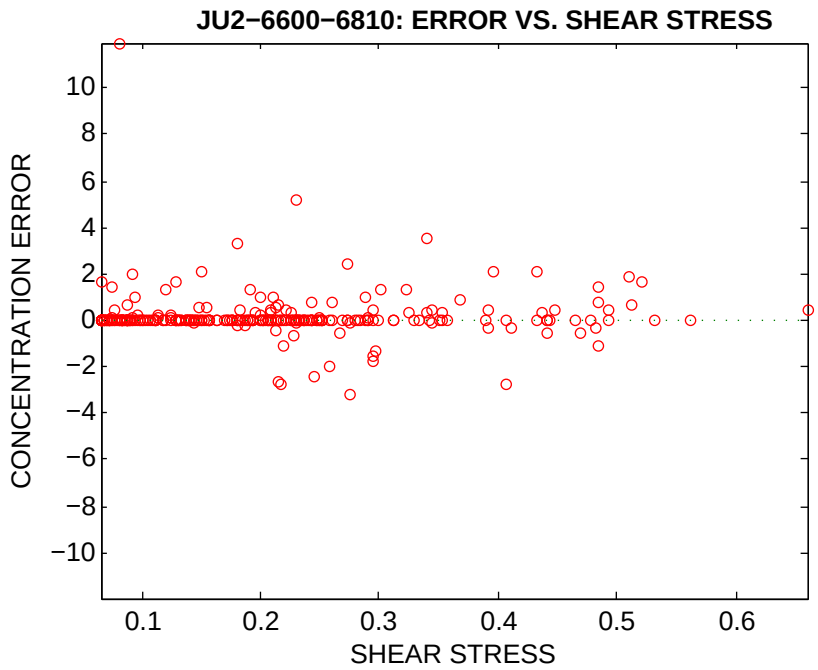


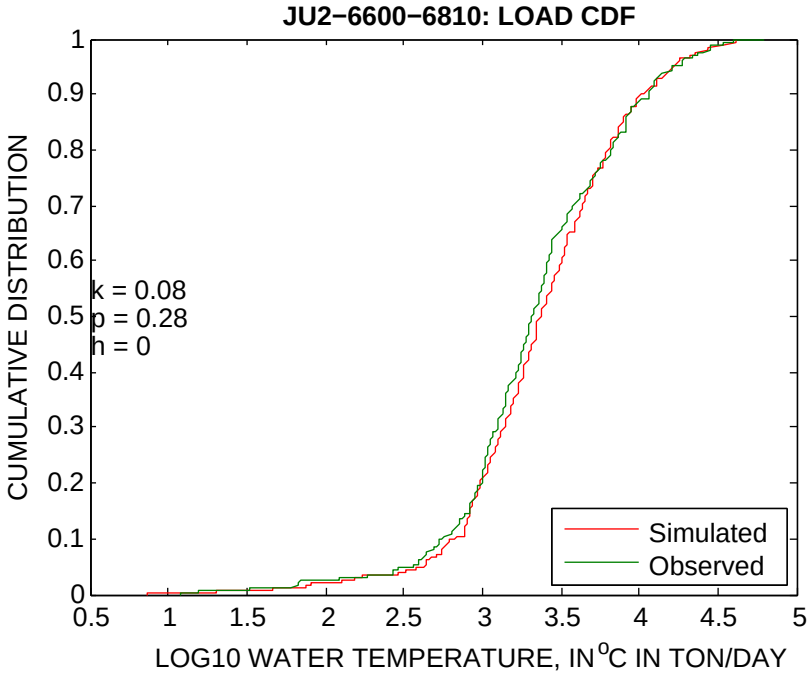


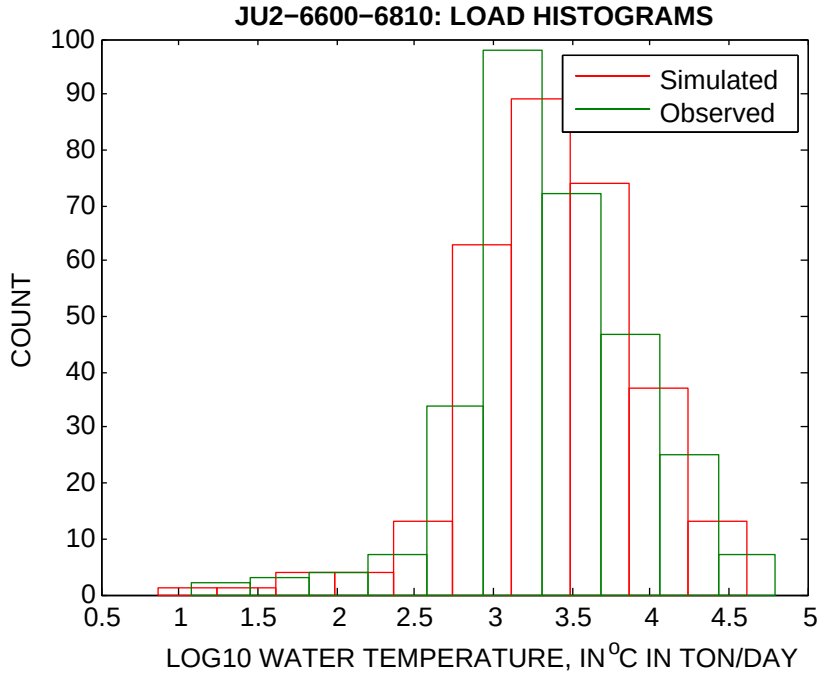


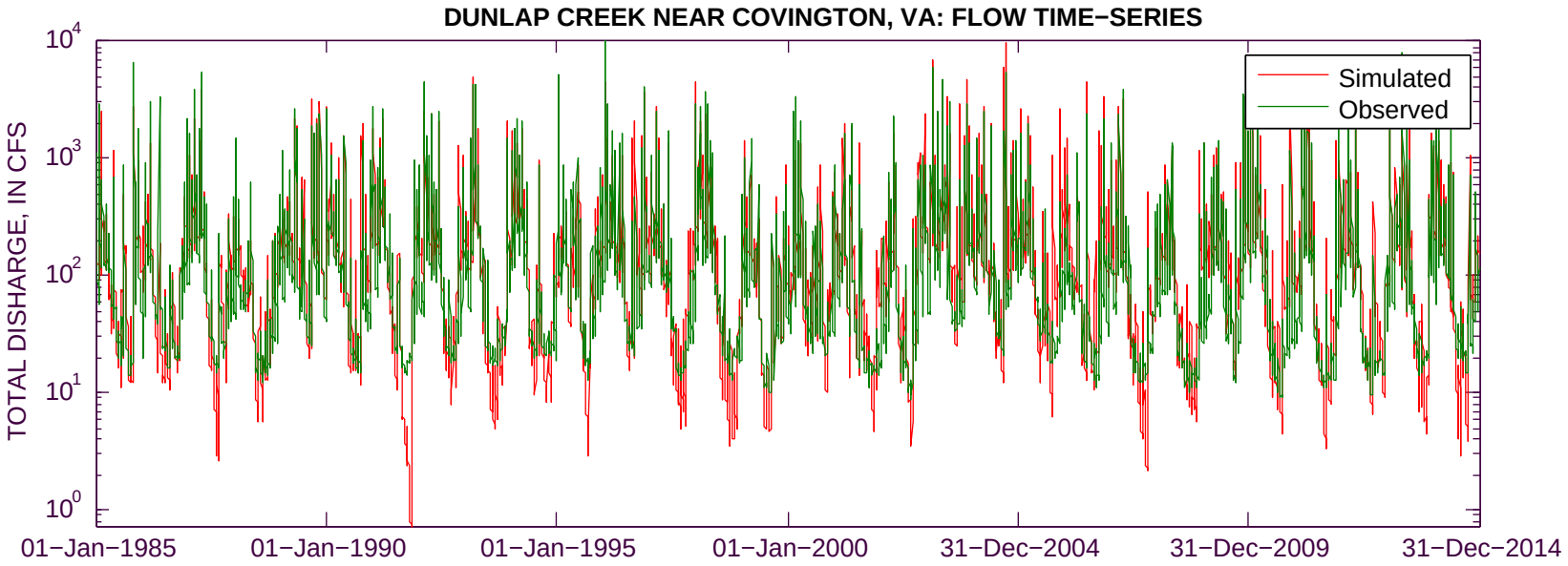
LOAD DATA
LOG10

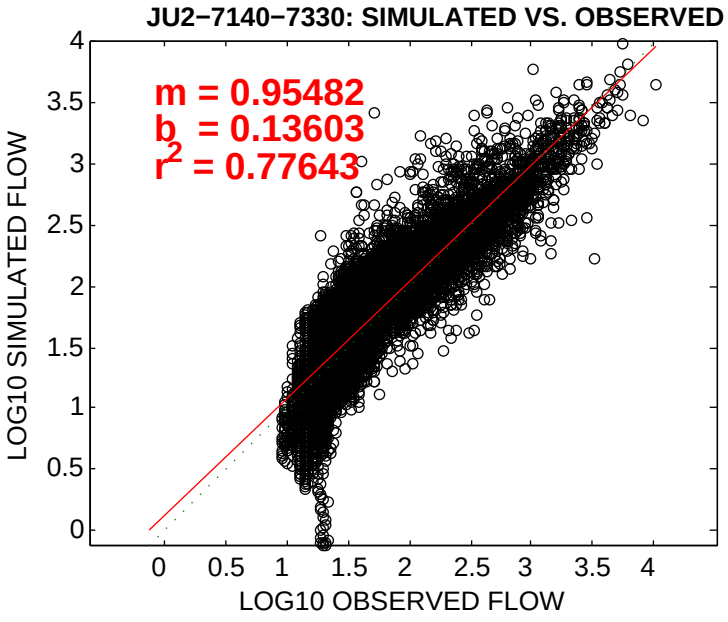


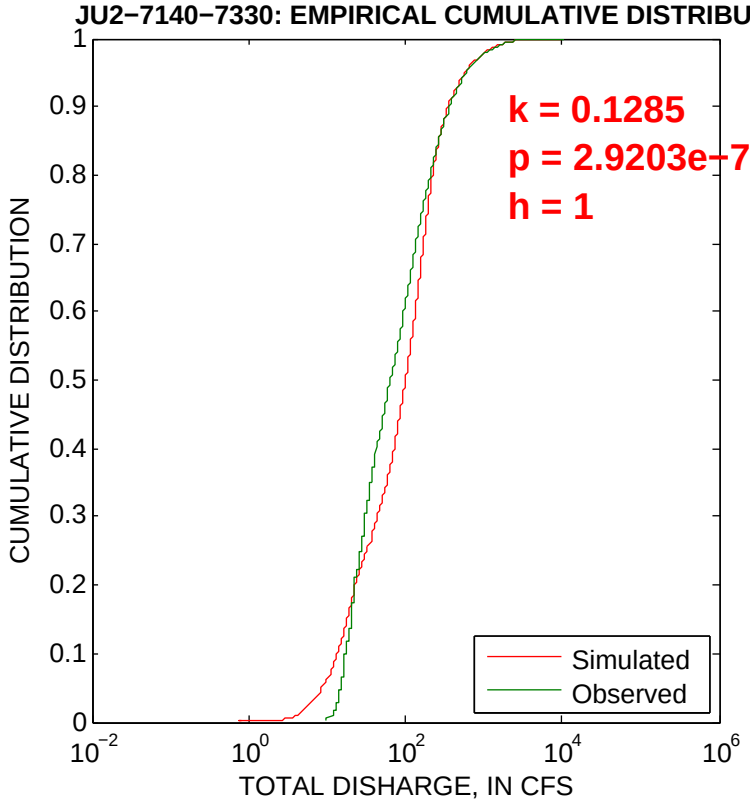












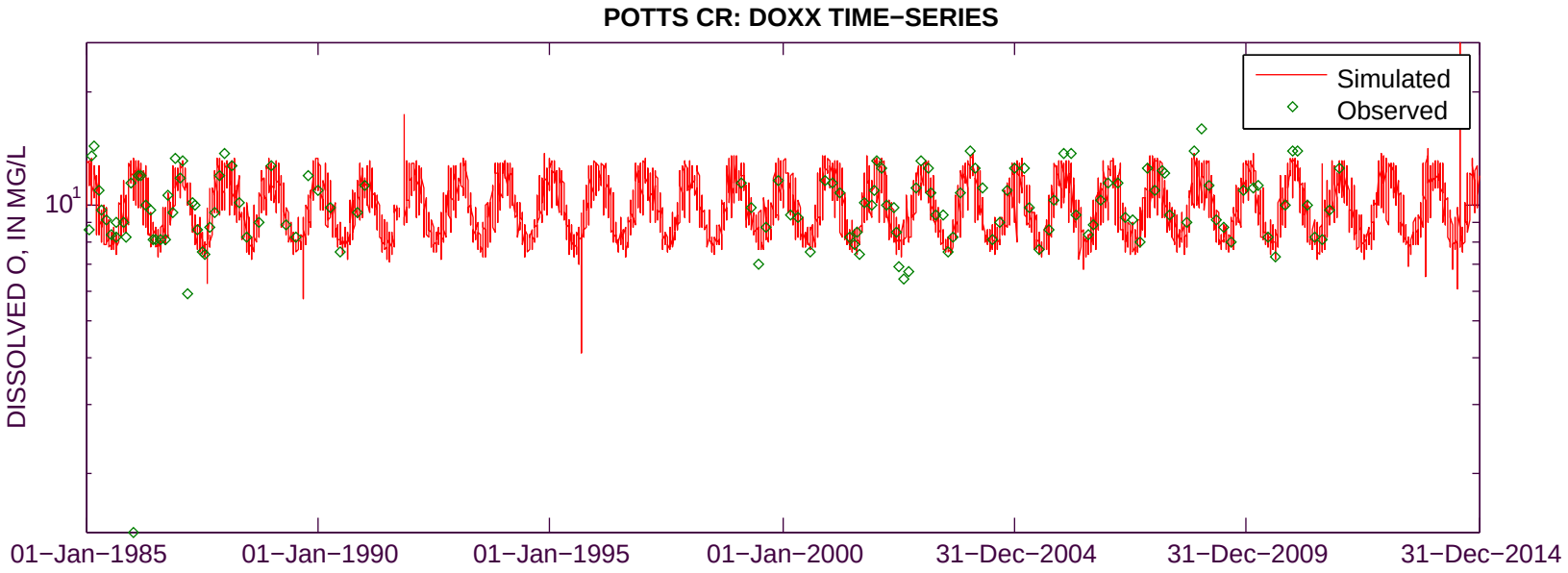
DATA SELECTION

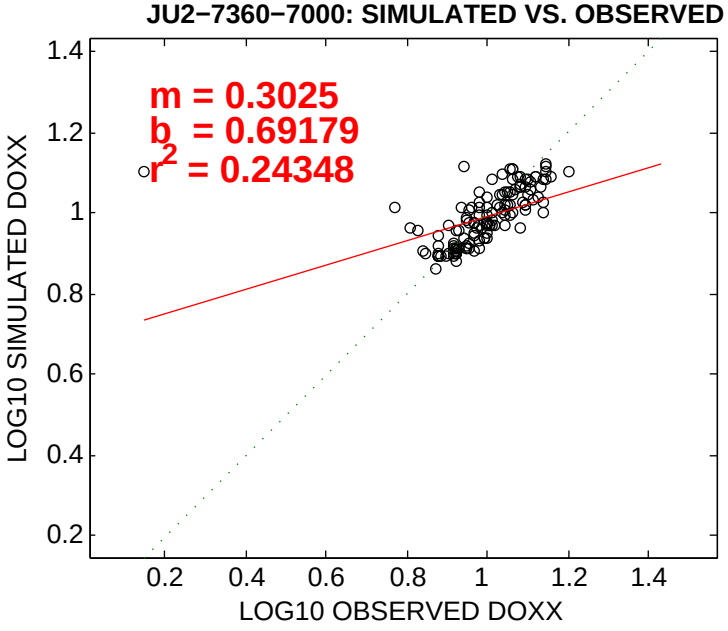
scenario: P620171001WQ
file: FLOW.calib
plot: FLOW - total discharge
Dates: 1/1/1985 12/31/201
Drive: N/A
Directory: model
Observed: OBS20161101

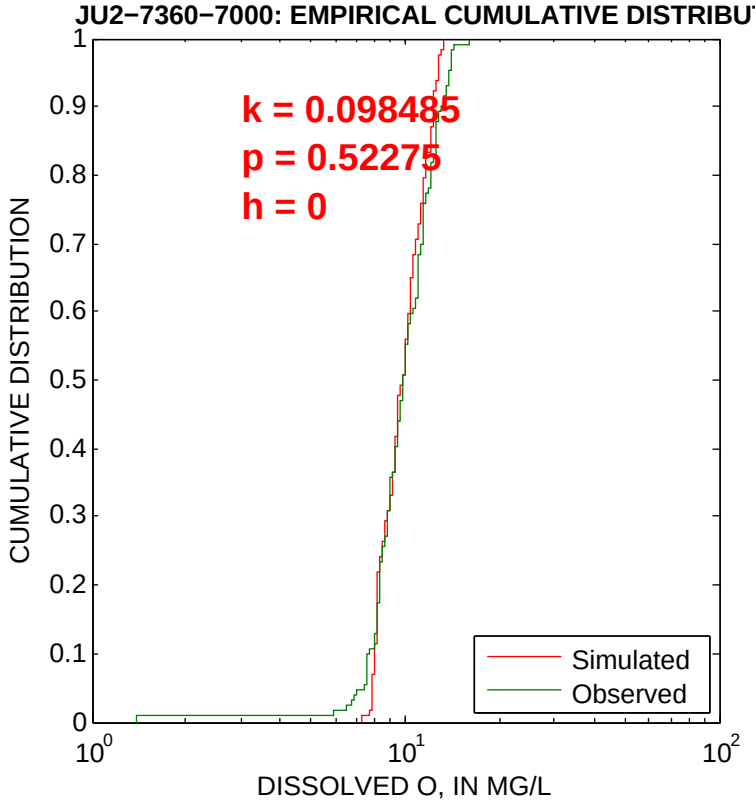
STATISTICS

	n	observe	simulate
		10957	10957
min		8.9	0.73819
		0.94939	-0.131832
mean		168.881	179.953
		1.86589	1.91762
media		65	101.69
		1.81291	2.00728
max		10400	9609.2
		4.01703	3.98269
varian		135772	114124
		0.268975	0.31583
JB		0.001	0.001
		0.001	0.001
		ra	log
%		6.5566	2.77246
err.va		44176	0.0738369
rel.std.err		0.325368	0.274512
mod.eff		0.674632	0.725488

VERSION 2.1







DATA SELECTION

scenario	file
P620171001WQ	DOXX.calib

plot: DOXX - dissolved oxygen

Dates: 1/1/1985 – 12/31/201

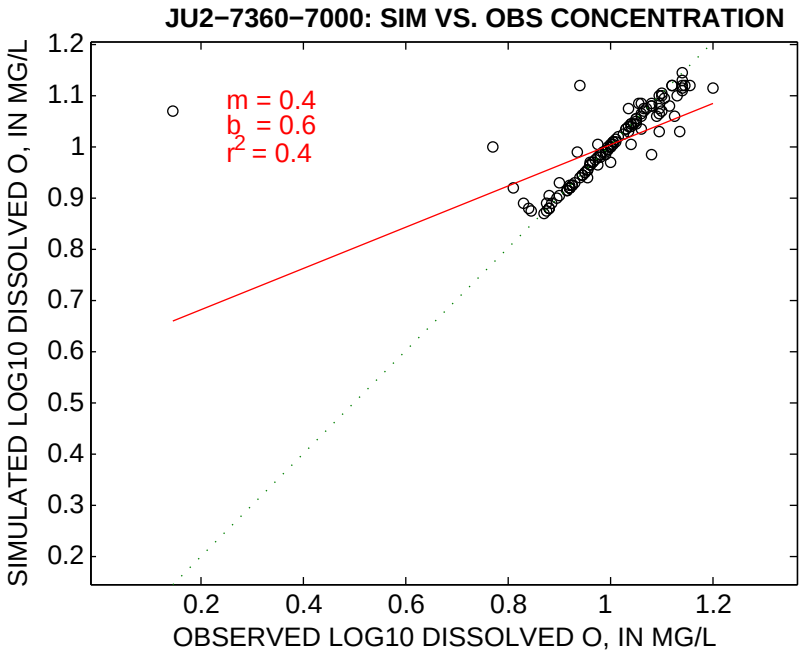
Drive	Directory	Observed
N/A	model	OBS20161101

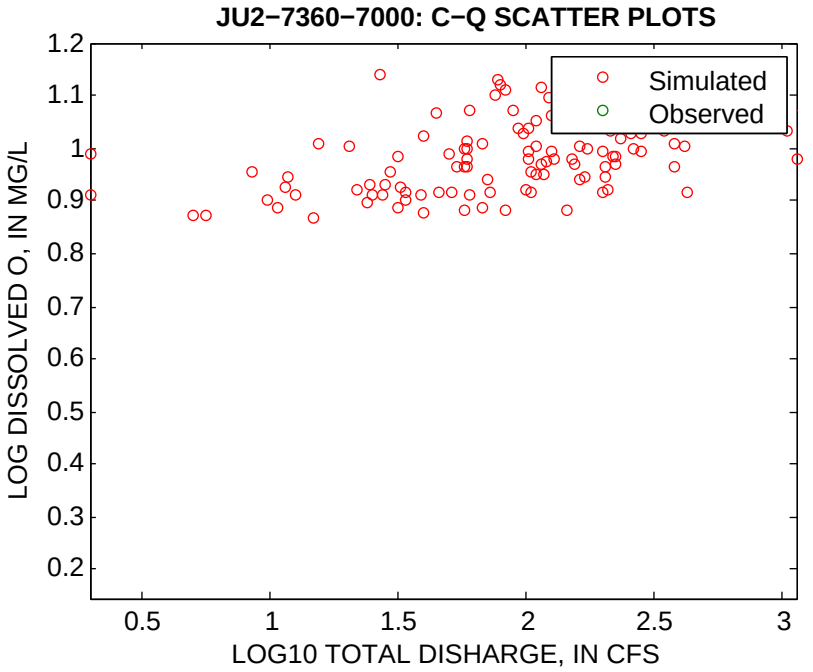
STATISTICS

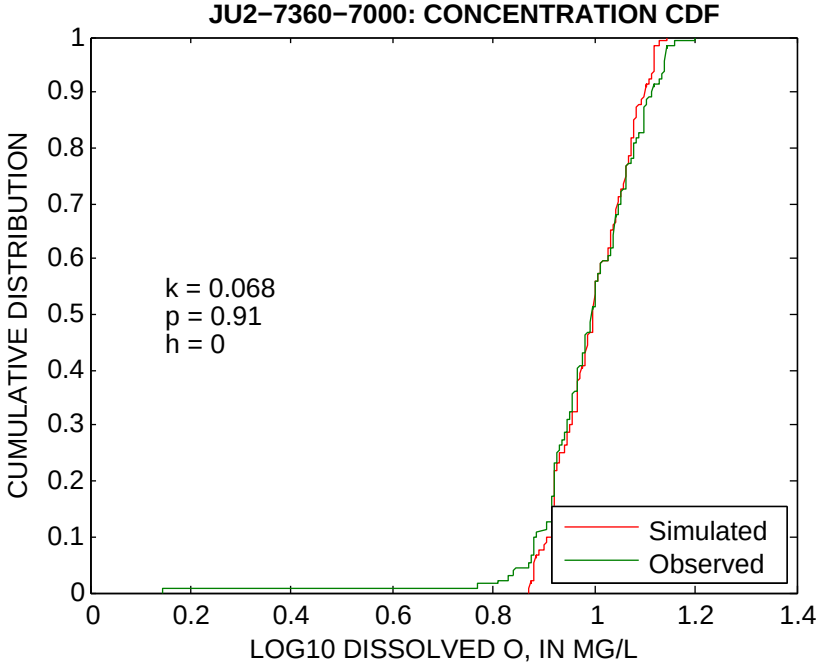
	n	observe	simulate
		132	132
min		1.4	7.2756
		0.146128	0.861869
mean		10.1099	9.94541
		0.992789	0.99211
media		9.9	9.79635
		0.995635	0.991054
max		15.9	13.229
		1.2014	1.12153
varian		4.57976	2.55918
		0.0127835	0.00480432
JB		0.037669	0.022808
		0.001	0.026761
		ra	log
%		-1.62722	-0.0684458
err.va		2.55234	0.00985429
rel.std.err		0.557308	0.77086
mod.eff		0.442692	0.22914

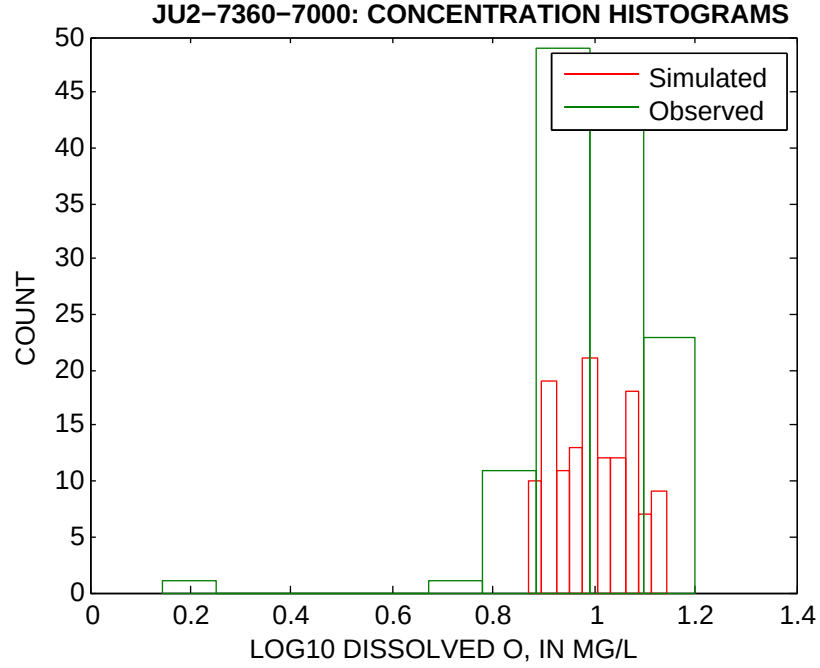
VERSION

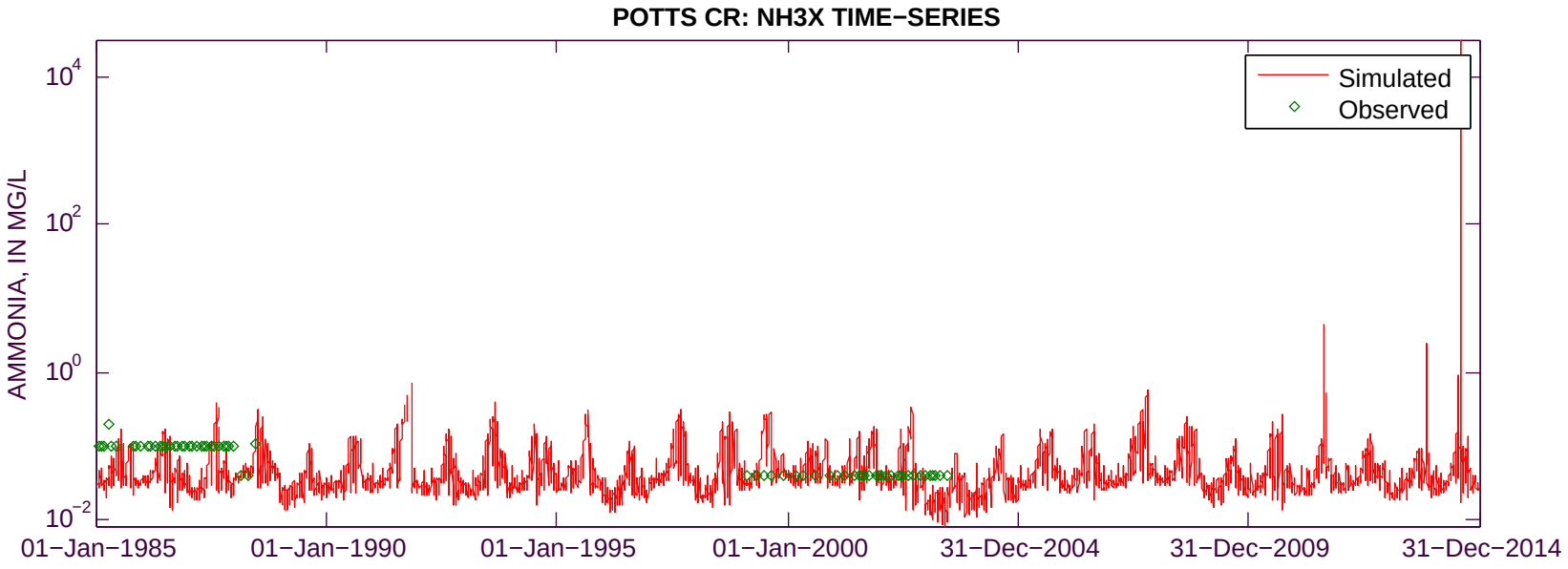
ALL DATA
LOG10

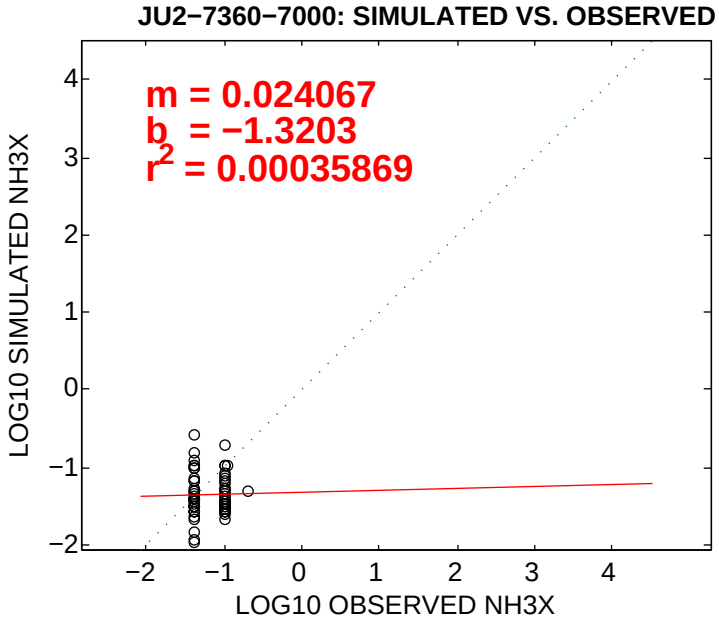


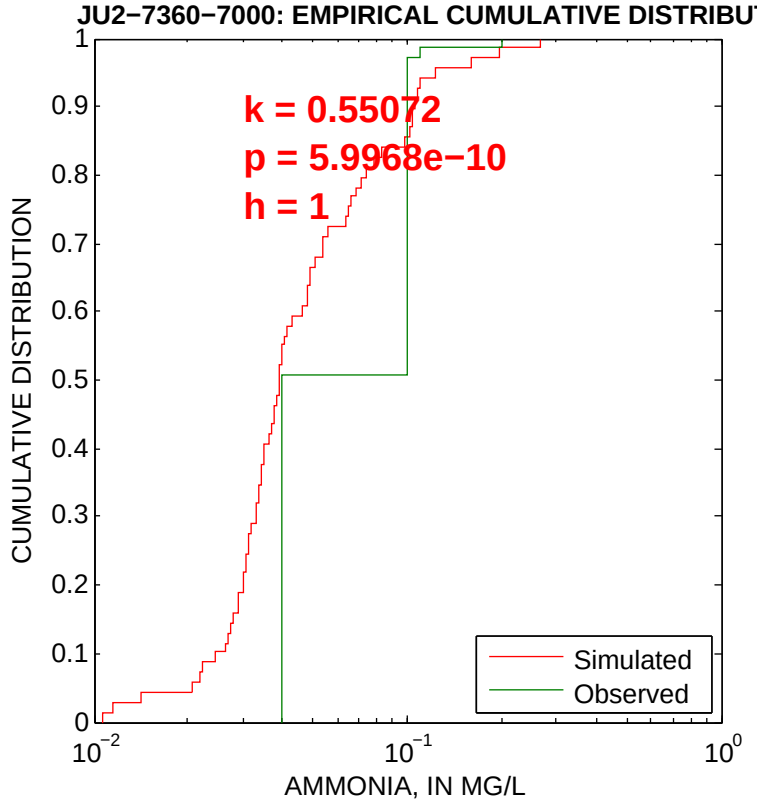












DATA SELECTION

scenario: P620171001WQ | file: NH3X.calib

plot: NH3X - ammonia

Dates: 1/1/1985 – 12/31/201

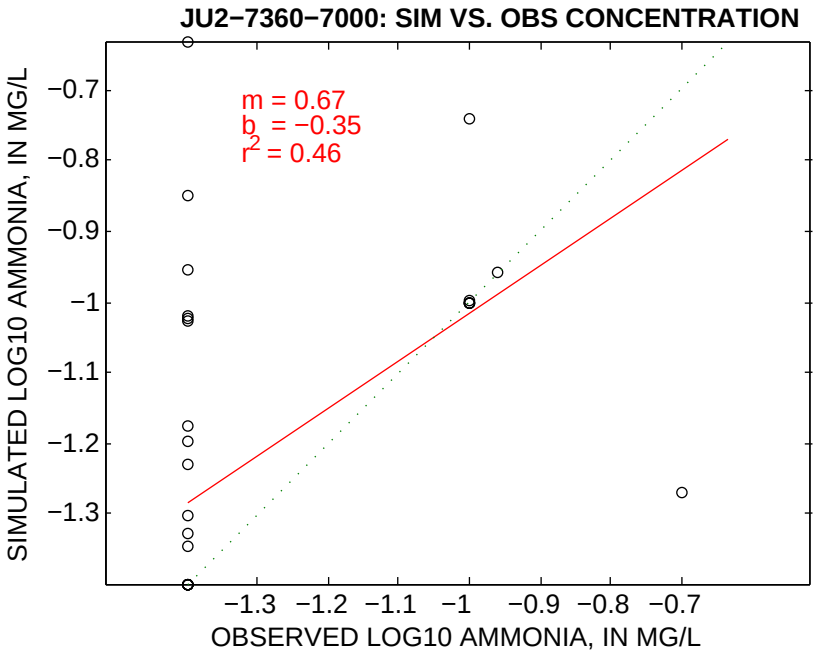
Drive: N/A | Directory: model | Observed: OBS20161101

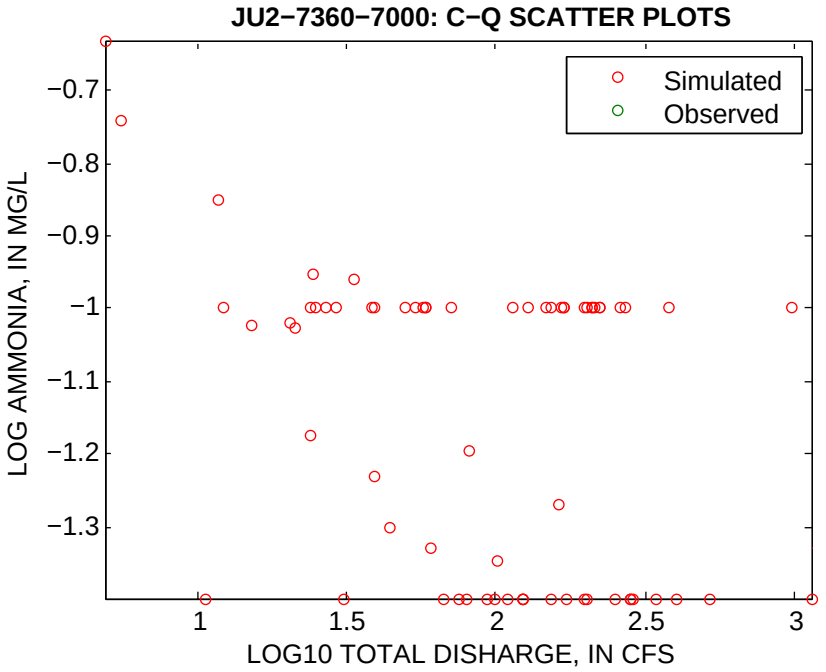
STATISTICS

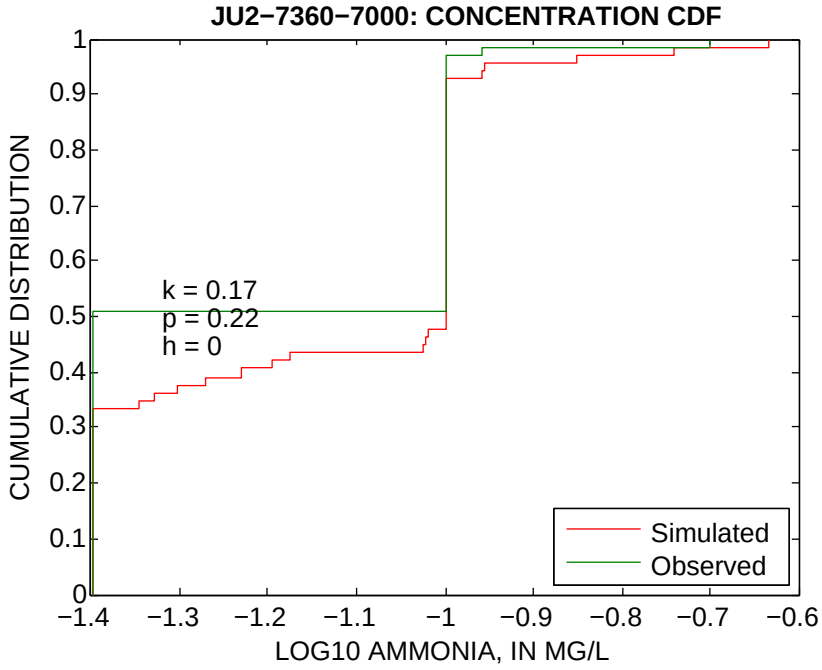
		observe	simulate
n		69	69
min		0.04	0.010679
		-1.39794	-1.97147
mean		0.0711594	0.0549018
		-1.19689	-1.34907
media		0.04	0.039233
		-1.39794	-1.40635
max		0.2	0.26809
		-0.69897	-0.571719
varian		0.00115746	0.0018544
		0.0435286	0.0702911
JB		0.027888	0.001
		0.022823	0.079451
		ra	log
%		-22.8468	12.7144
err.va		0.00344271	0.135223
rel.std.err		2.97437	3.10654
mod.eff		-1.97437	-2.10654

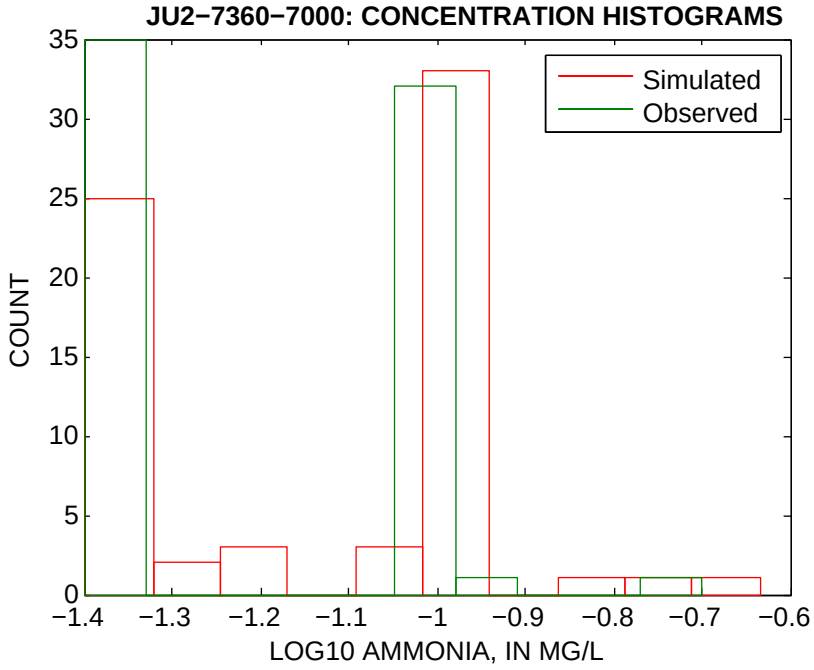
VERSION 2.1

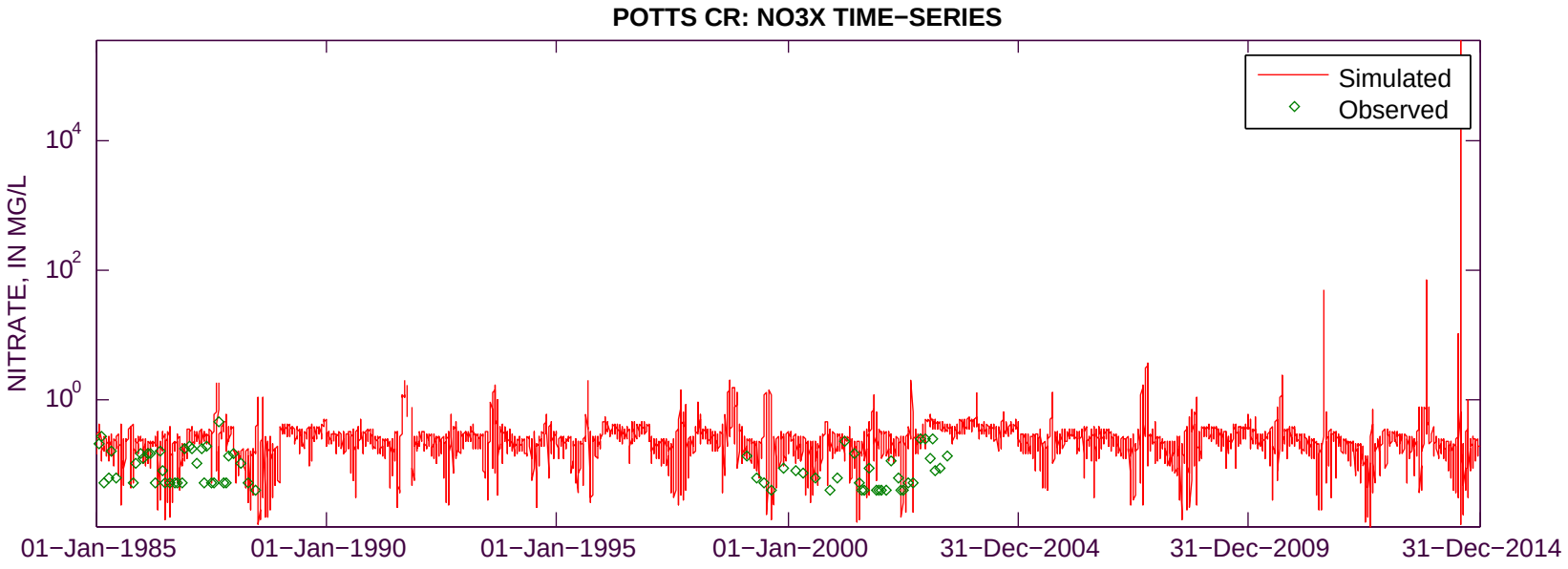
ALL DATA
LOG10

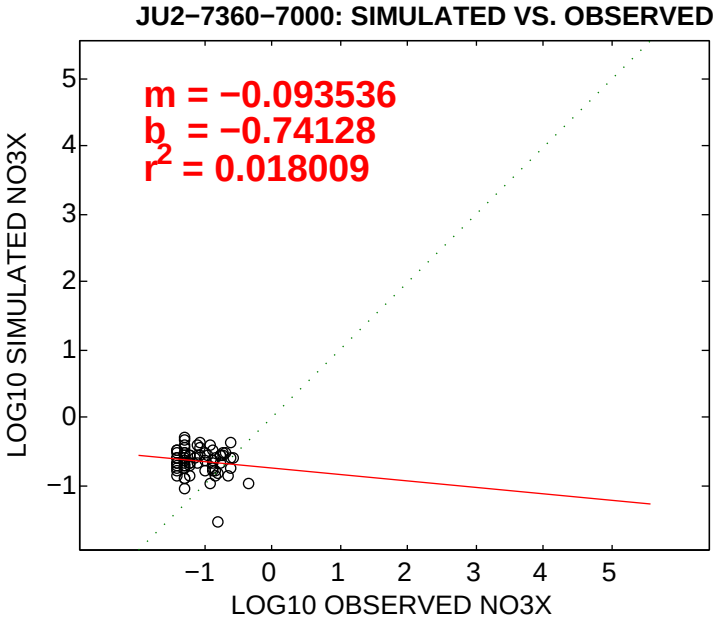


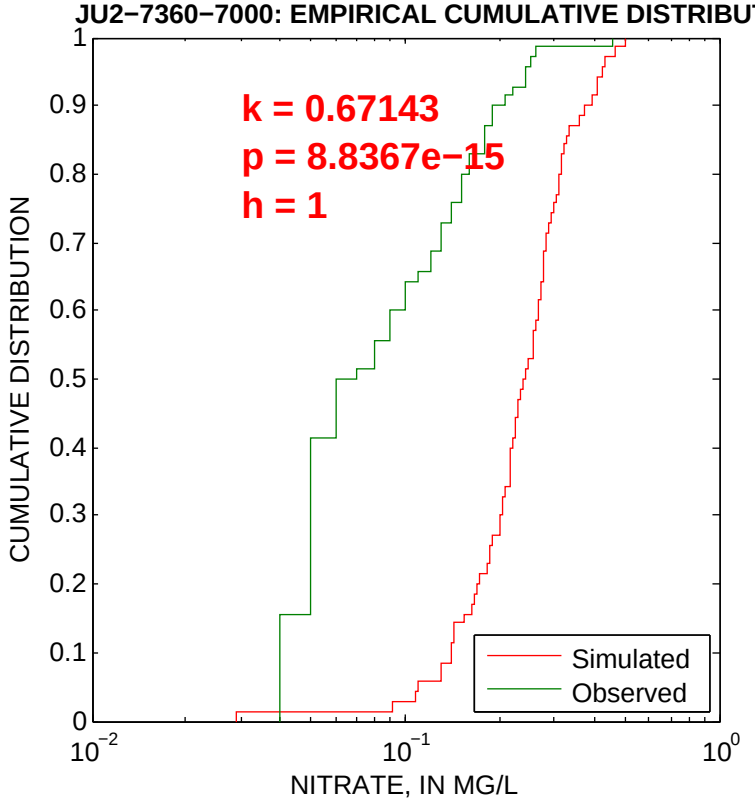












DATA SELECTION

scenario	file
P620171001WQ	NO3X.calib

plot: NO3X - nitrate

Dates: 1/1/1985 – 12/31/201

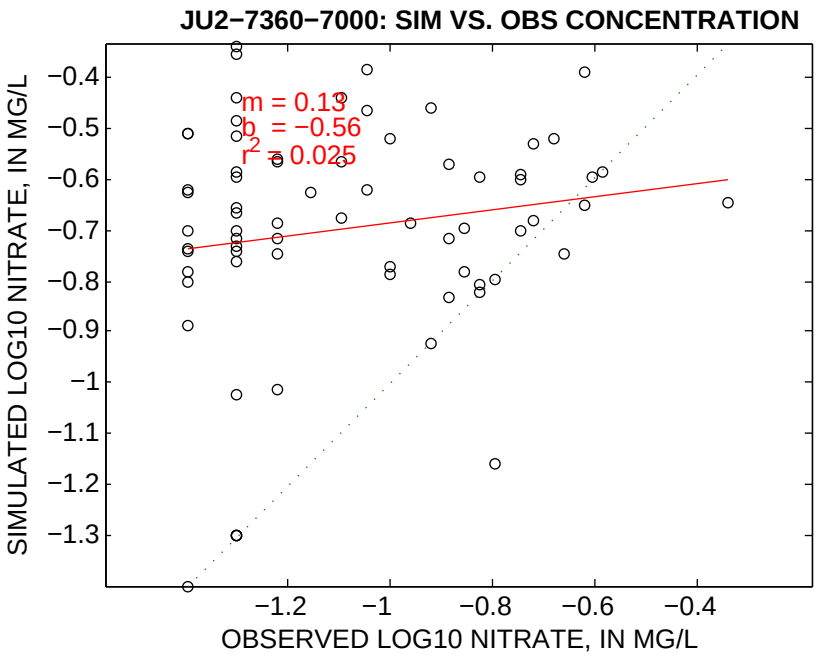
Drive	Directory	Observed
N/A	model	OBS20161101

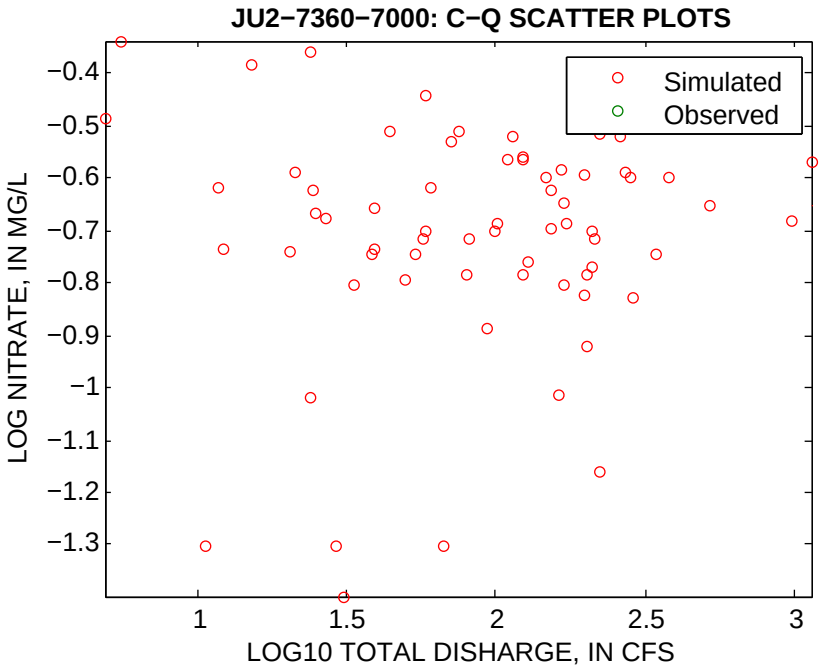
STATISTICS

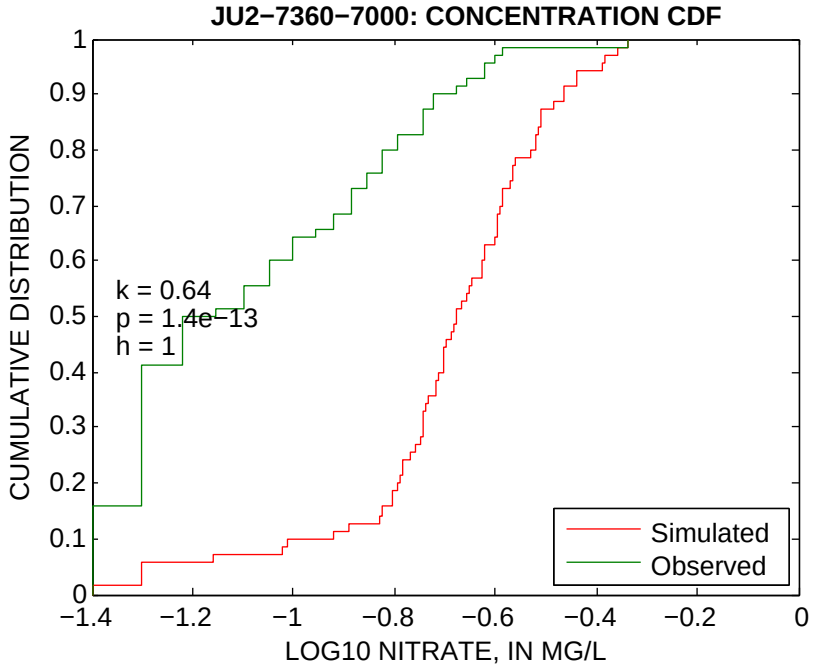
	n	70	70
		observe	simulate
min		0.04	0.028877
		-1.39794	-1.53945
mean		0.102429	0.248032
		-1.08165	-0.640105
media		0.065	0.239755
		-1.18838	-0.62029
max		0.46	0.50357
		-0.337242	-0.29794
varian		0.00574619	0.00840903
		0.0748307	0.0363534
JB		0.001	0.154233
		0.044132	0.001
		ra	log
%		142.151	-40.8214
err.va		0.037567	0.32297
rel.std.err		6.53772	4.31601
mod.eff		-5.53772	-3.31601

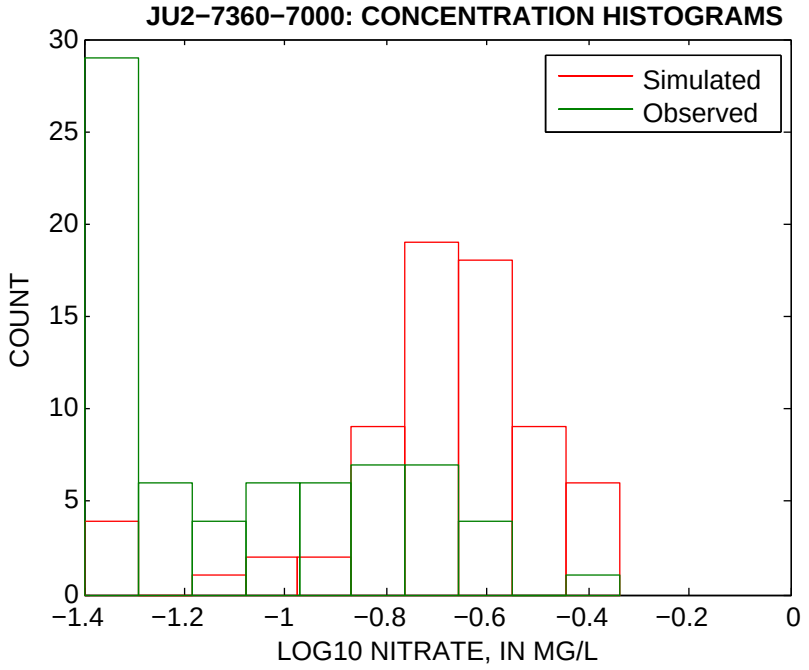
VERSION

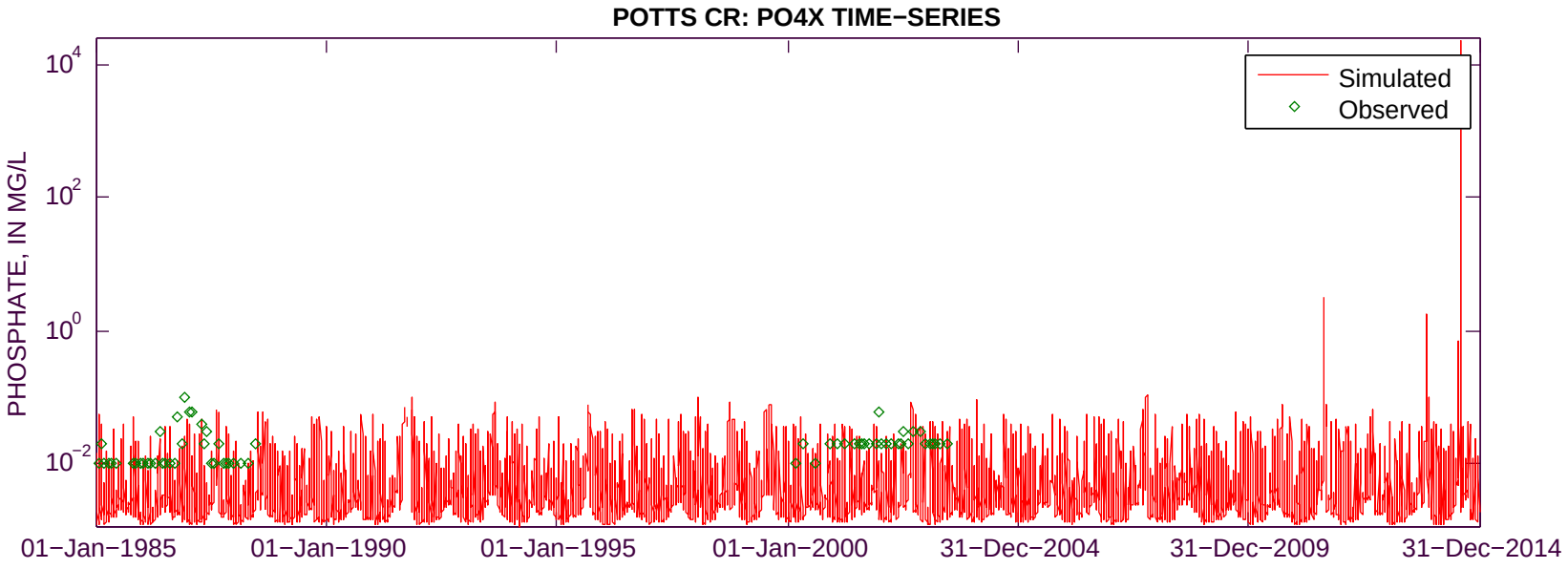
ALL DATA
LOG10

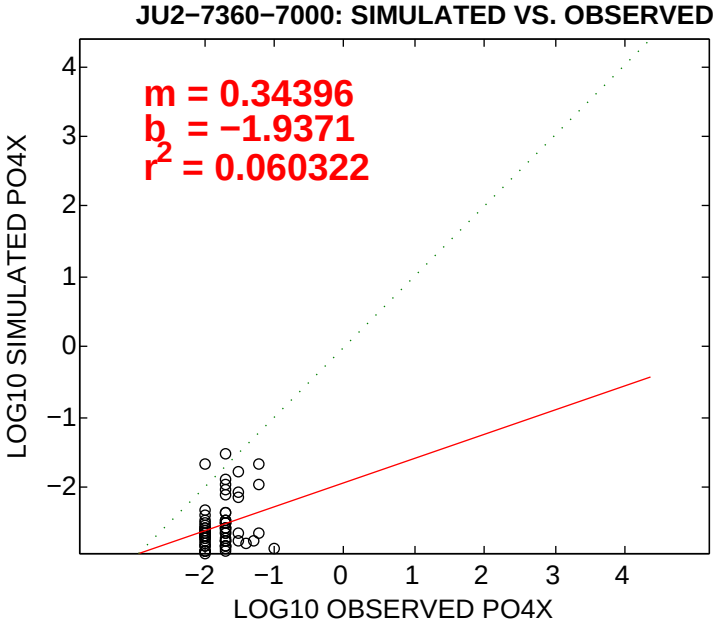


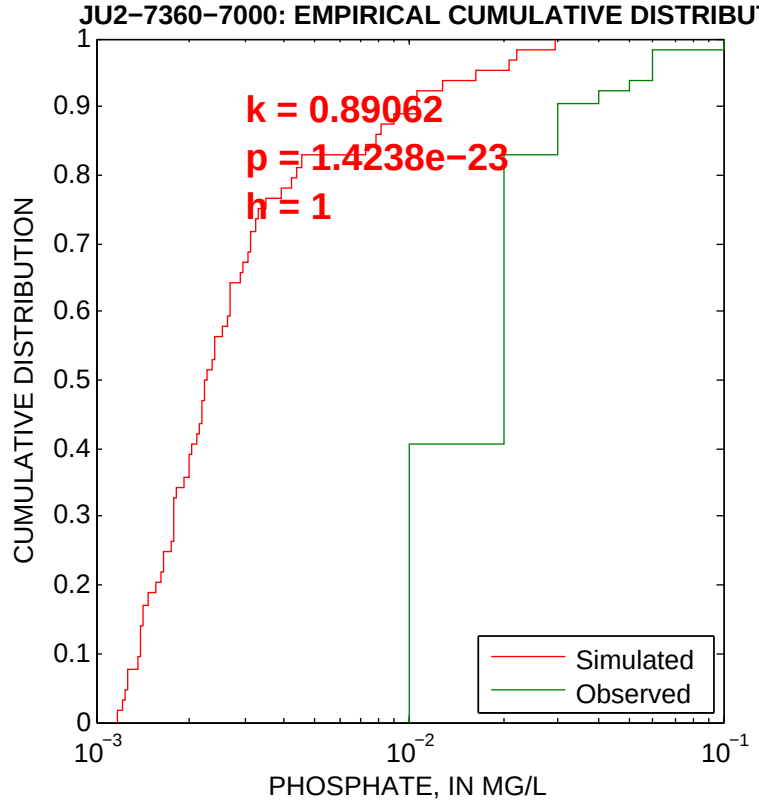












DATA SELECTION

scenario	file
P620171001WQ	PO4X.calib

plot: PO4X - phosphate

Dates: 1/1/1985 – 12/31/201

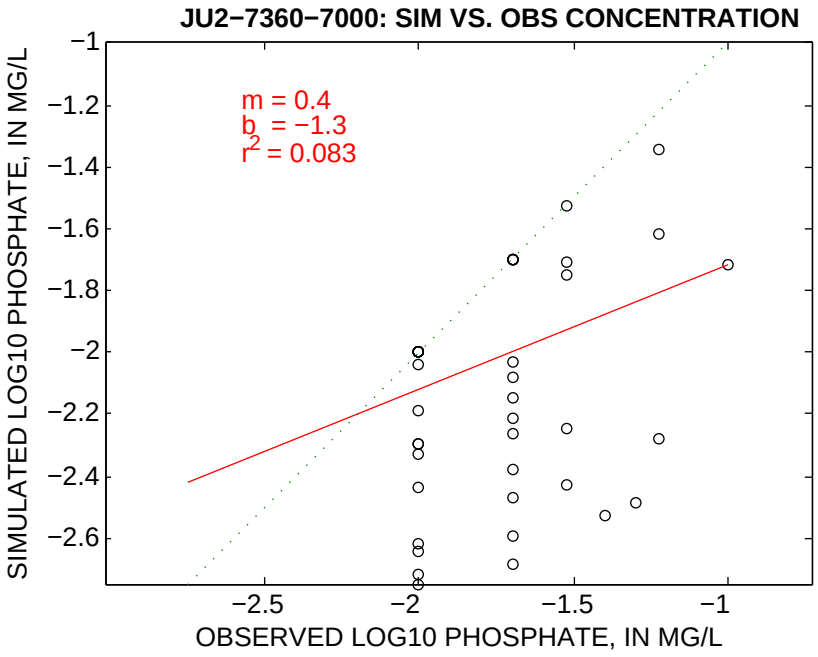
Drive	Directory	Observed
N/A	model	OBS20161101

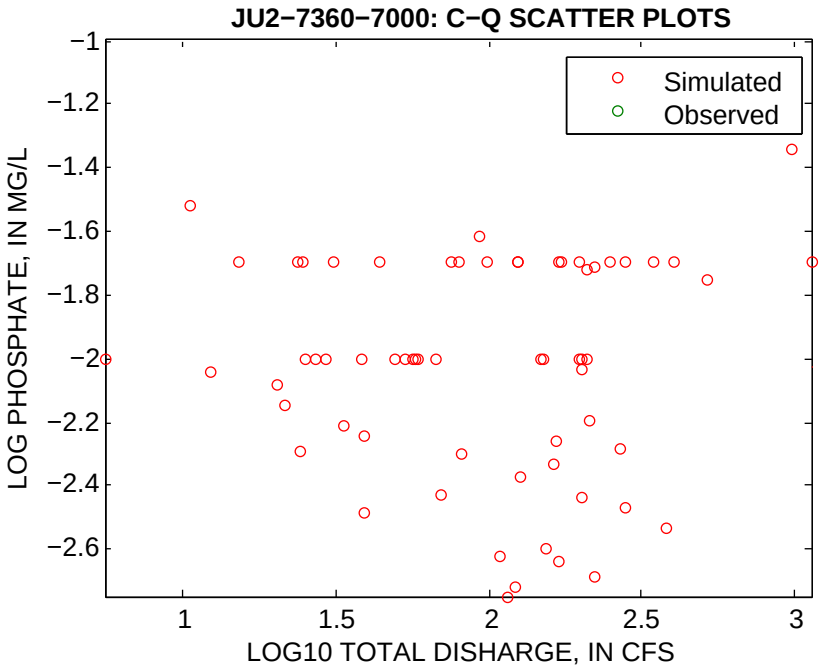
STATISTICS

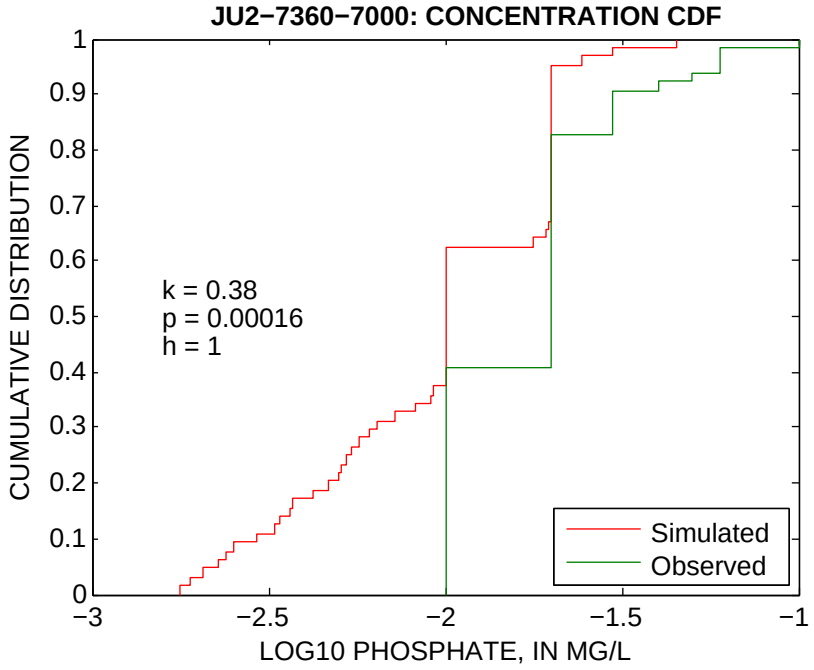
	n	64	64
		observe	simulate
min		0.01	0.0011711
		-2	-2.93141
mean		0.020625	0.00426686
		-1.7633	-2.54359
media		0.02	0.0022529
		-1.69897	-2.64726
max		0.1	0.028995
		-1	-1.53768
varian		0.00024722	2.87361e-0
		0.0582026	0.114156
JB		0.001	0.001
		0.016024	0.002939
		ra	log
%		-79.3122	44.252
err.va		0.00051766	0.750844
rel.std.err		2.09393	12.9005
mod.eff		-1.09393	-11.9005

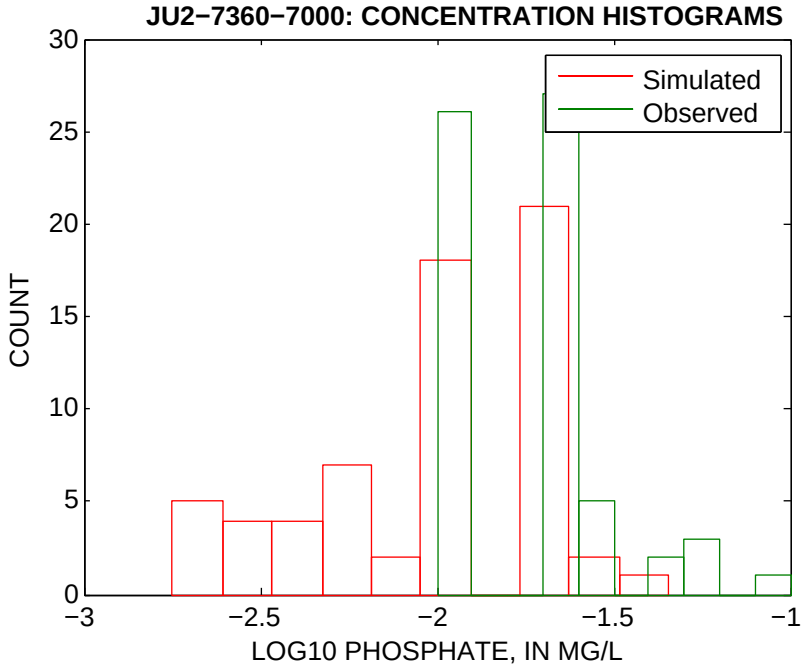
VERSION 2.1

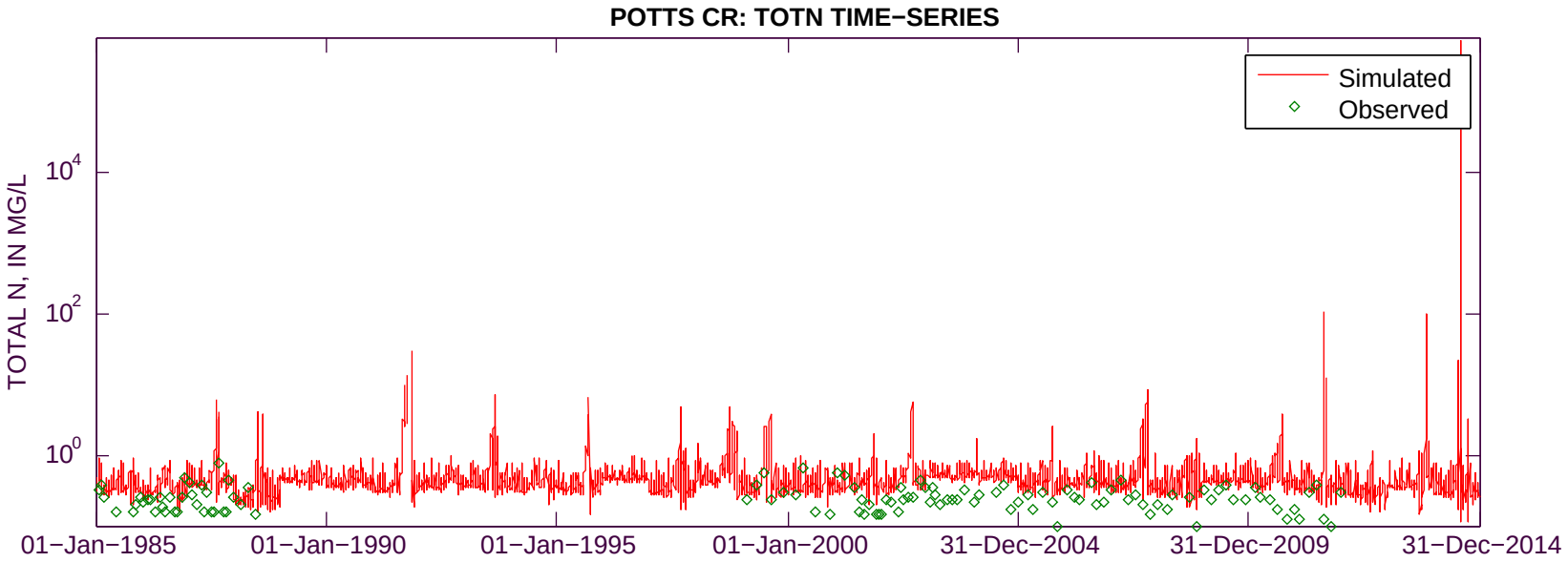
ALL DATA
LOG10

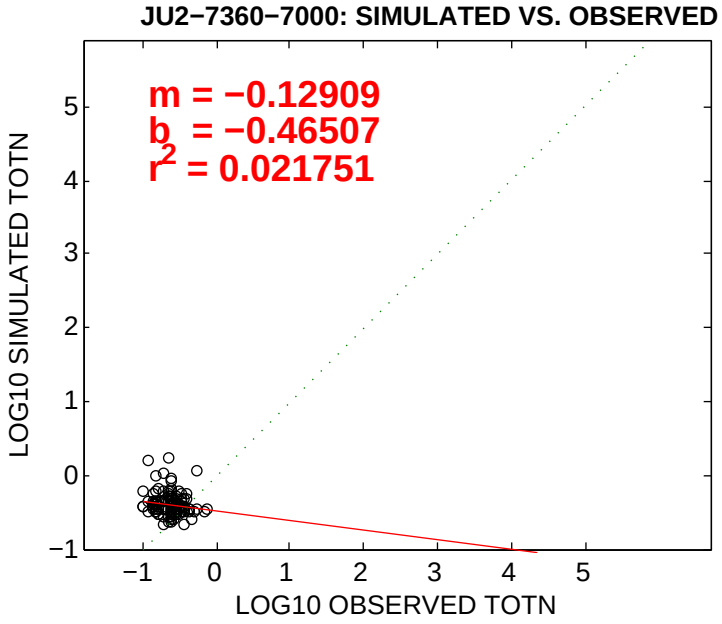


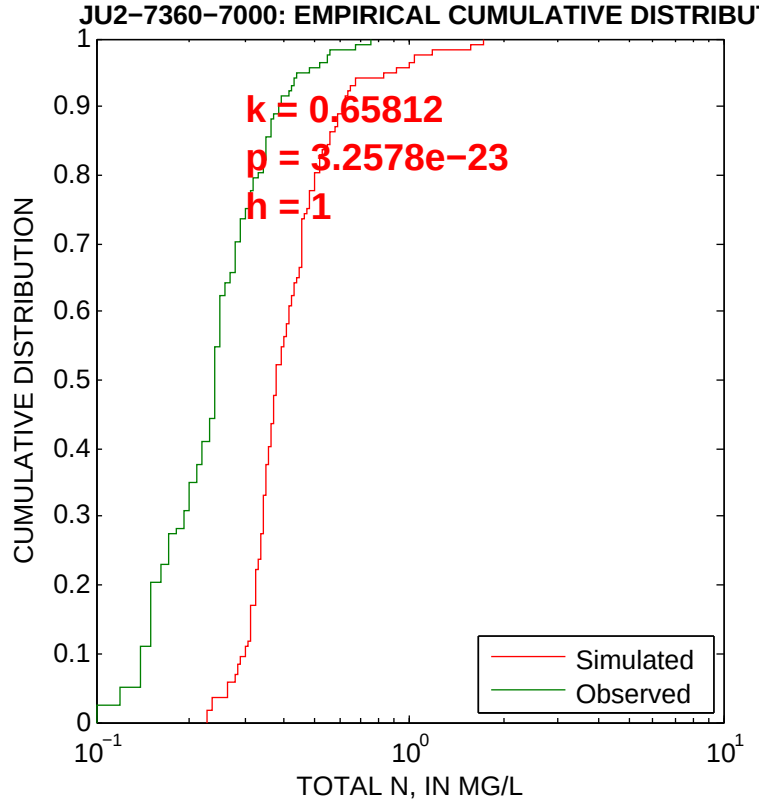












DATA SELECTION

scenario: P620171001WQ | file: TOTN.calib

plot: TOTN - total nitrogen

Dates: 1/1/1985 – 12/31/201

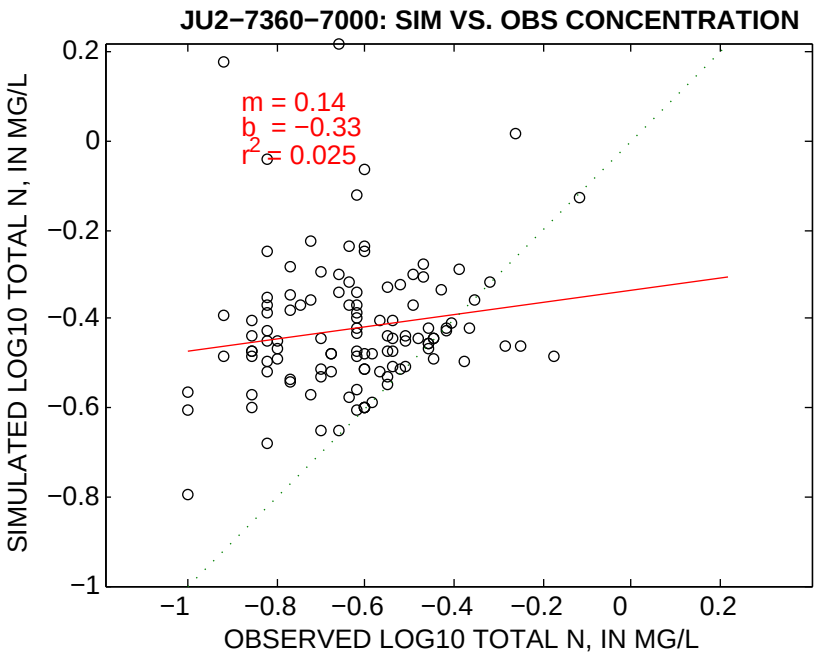
Drive | Directory: N/A | model | Observed: OBS20161101

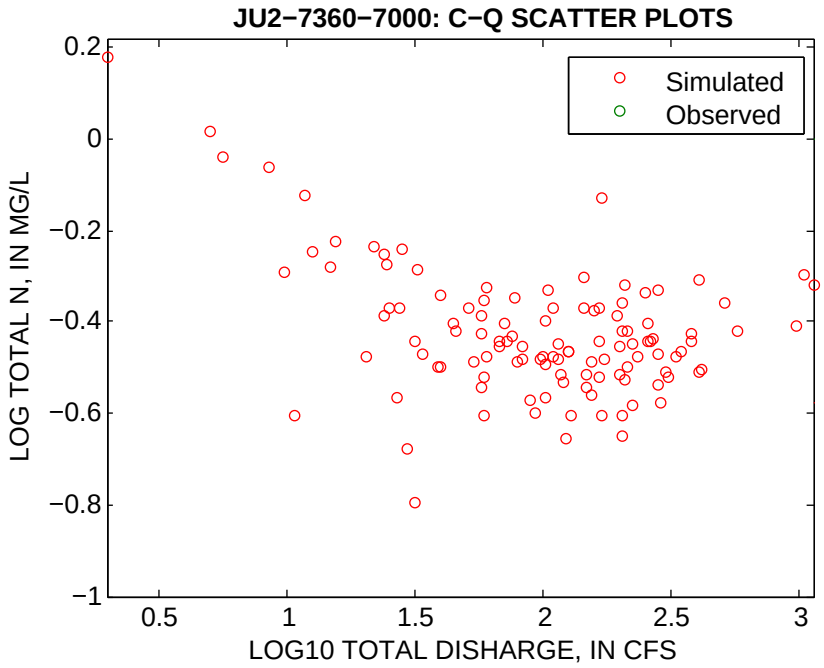
STATISTICS

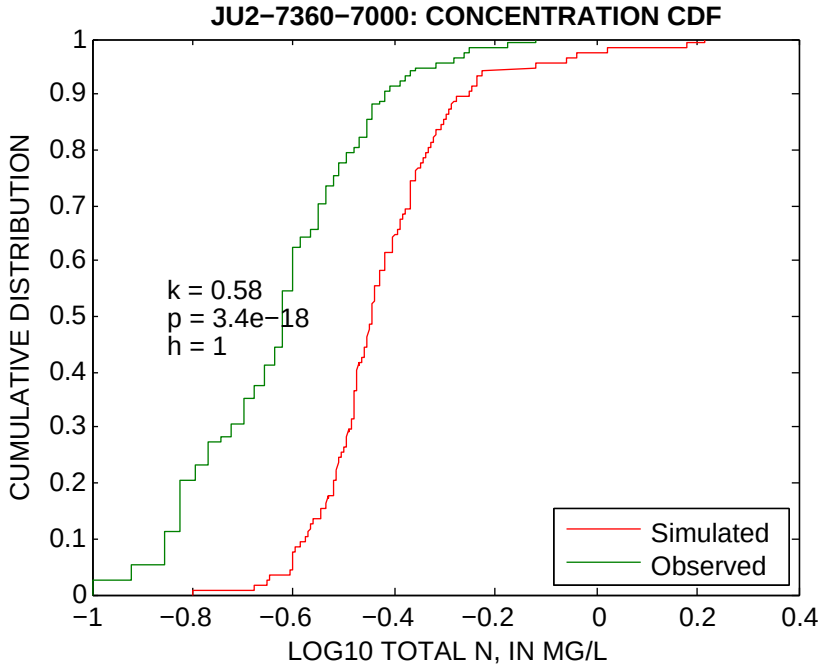
		observe	simulate
n		117	117
min		0.1	0.22547
		-1	-0.646911
mean		0.256154	0.445521
		-0.627745	-0.384034
media		0.24	0.37616
		-0.619789	-0.424627
max		0.76	1.7392
		-0.119186	0.24035
varian		0.0127566	0.0502938
		0.0308311	0.0236207
JB		0.001	0.001
		0.5	0.001
		ra	log
%		73.9272	-38.8233
err.va		0.104173	0.122319
rel.std.err		8.16619	3.96739
mod.eff		-7.16619	-2.96739

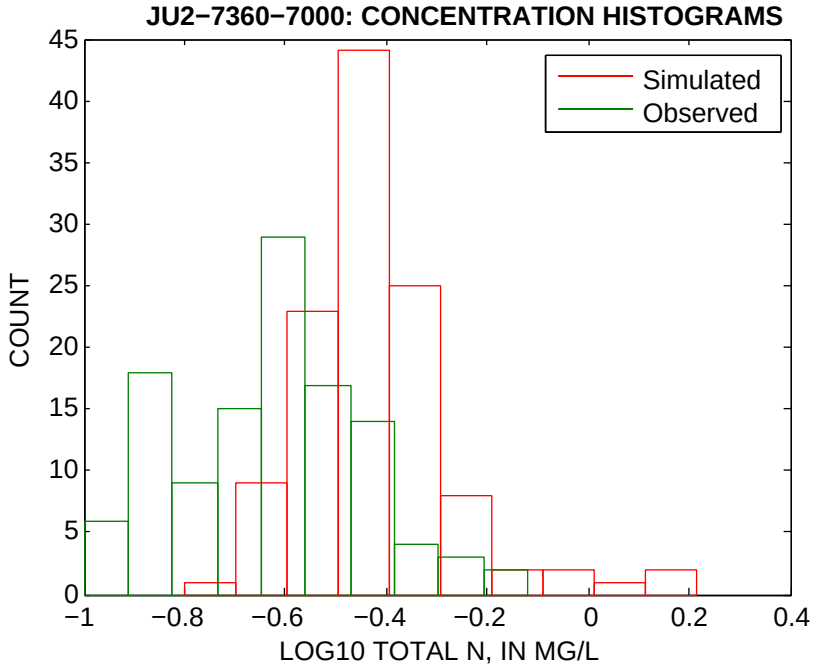
VERSION 2.1

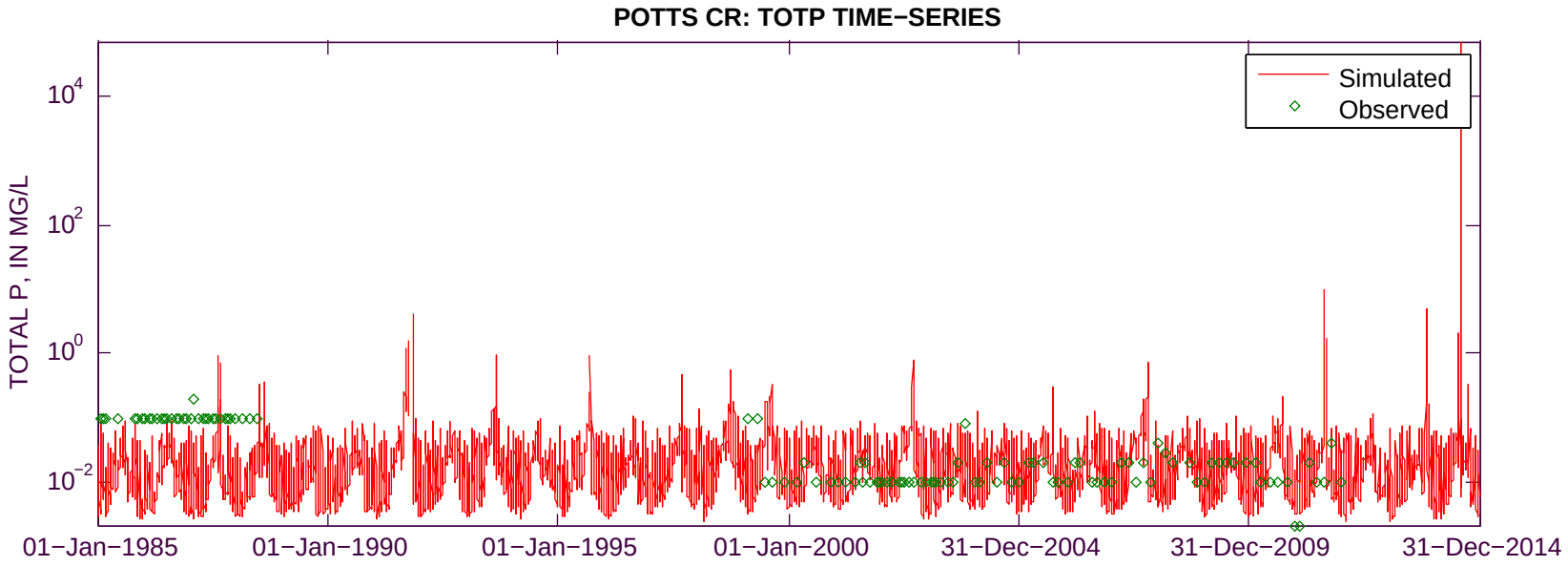
ALL DATA
LOG10

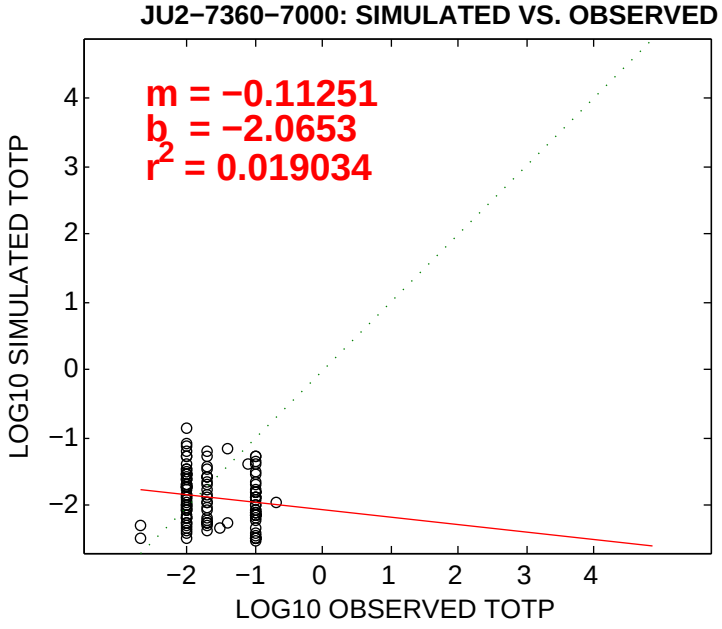


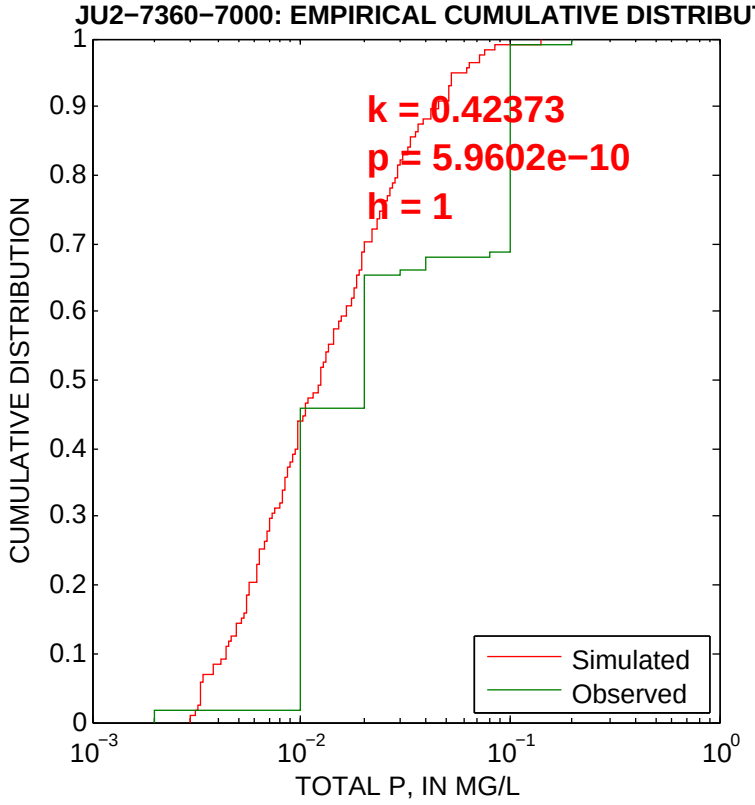












DATA SELECTION

scenario	file
P620171001WQ	TOTP.calib

plot: TOTP - total phosphorus

Dates: 1/1/1985 – 12/31/201

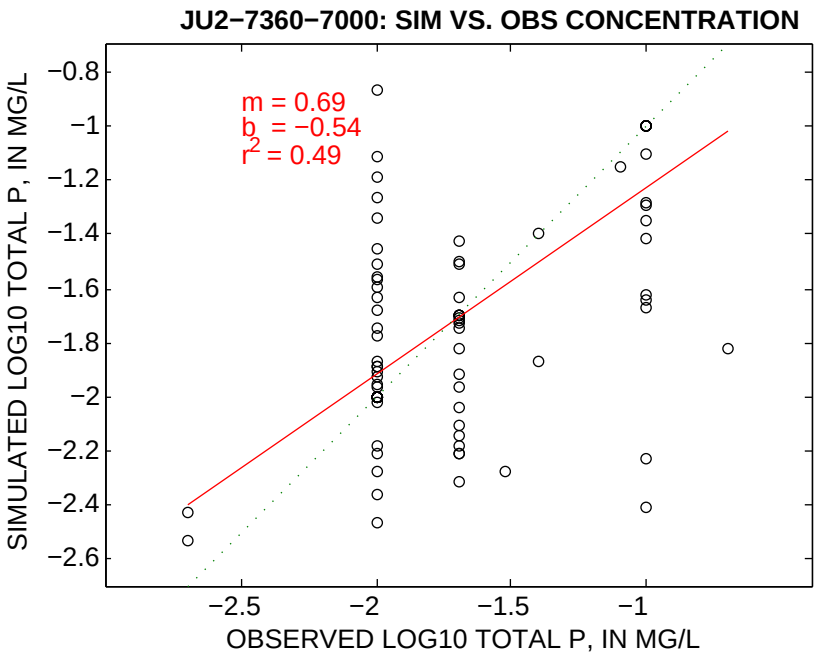
Drive	Directory	Observed
N/A	model	OBS20161101

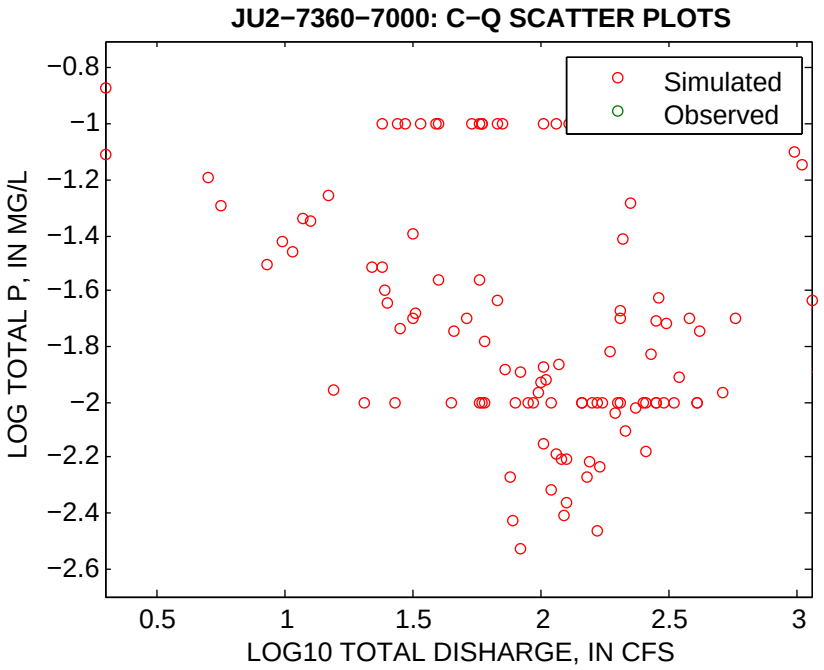
STATISTICS

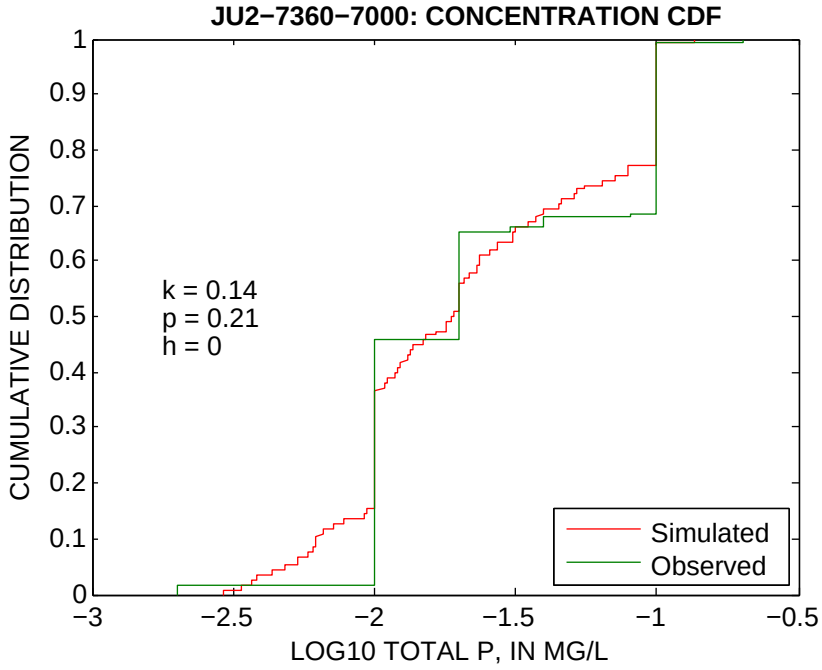
	n	118	118
		observe	simulate
min		0.002	0.0029957
		-2.69897	-2.5235
mean		0.0421525	0.0193441
		-1.61516	-1.88357
media		0.02	0.012414
		-1.69897	-1.9061
max		0.2	0.14048
		-0.69897	-0.852386
varian		0.00183967	0.00040714
		0.21407	0.14237
JB		0.003947	0.001
		0.021503	0.097418
		ra	log
%		-54.1094	16.618
err.va		0.00302691	0.477269
rel.std.err		1.64536	2.2295
mod.eff		-0.645356	-1.2295

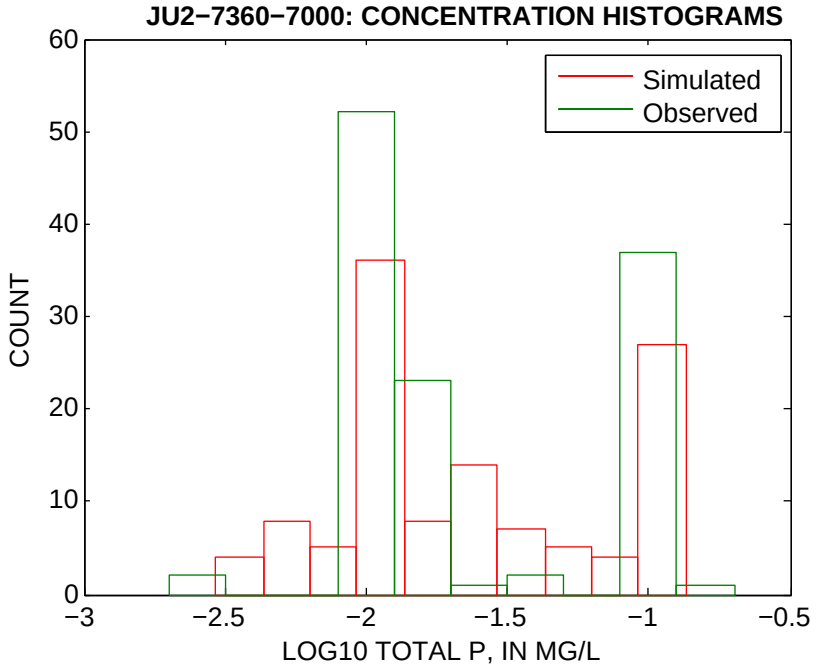
VERSION 2.1

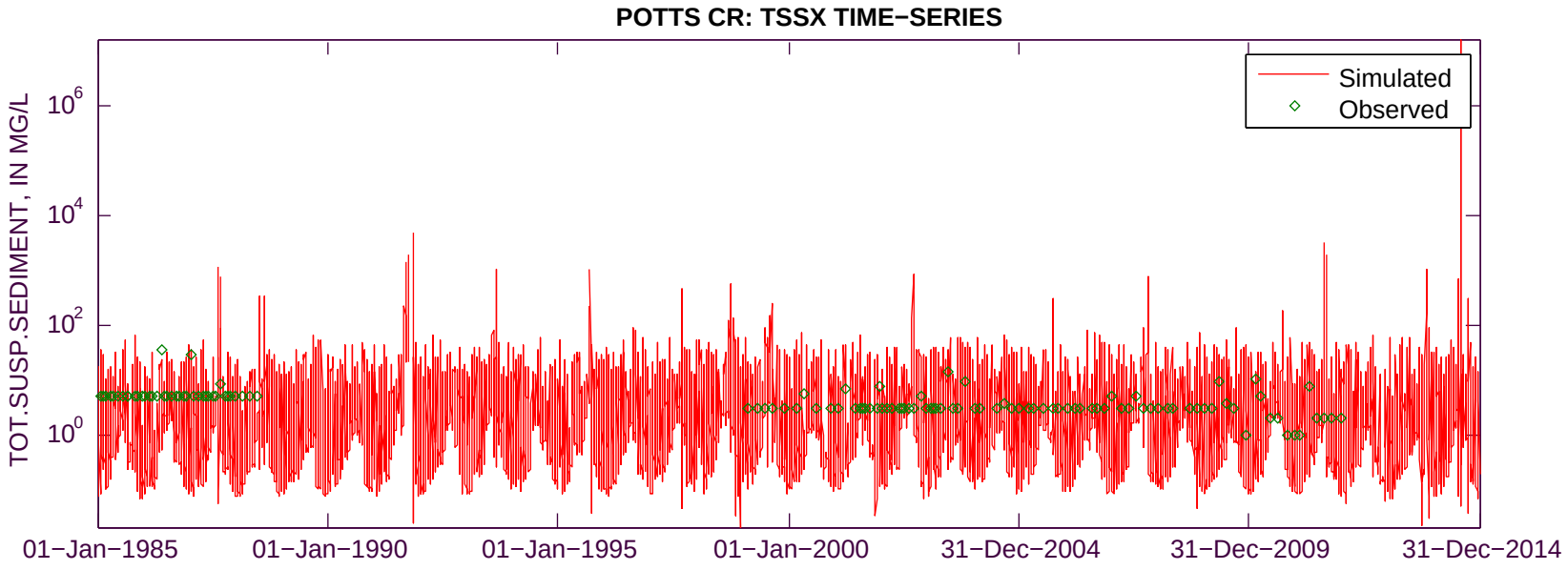
ALL DATA
LOG10

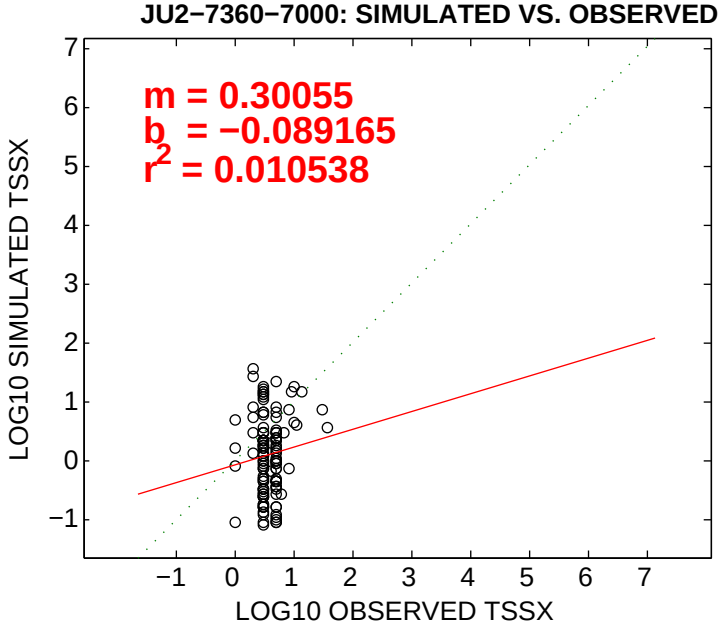


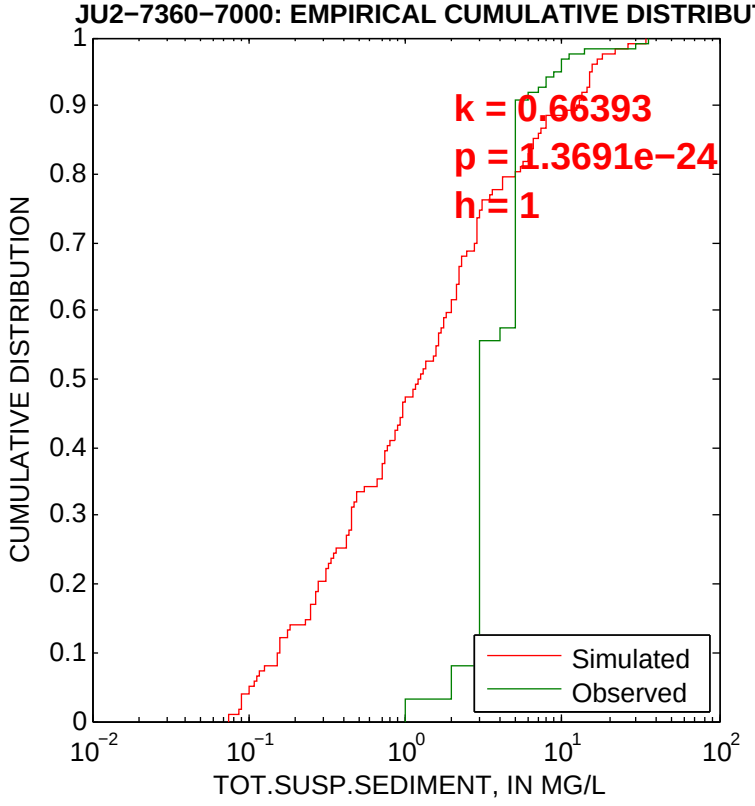












DATA SELECTION

scenario	file
P620171001WQ	TSSX.calib

plot: TSSX - total suspended ...

Dates 1/1/1985 12/31/201

Drive Directory Observed

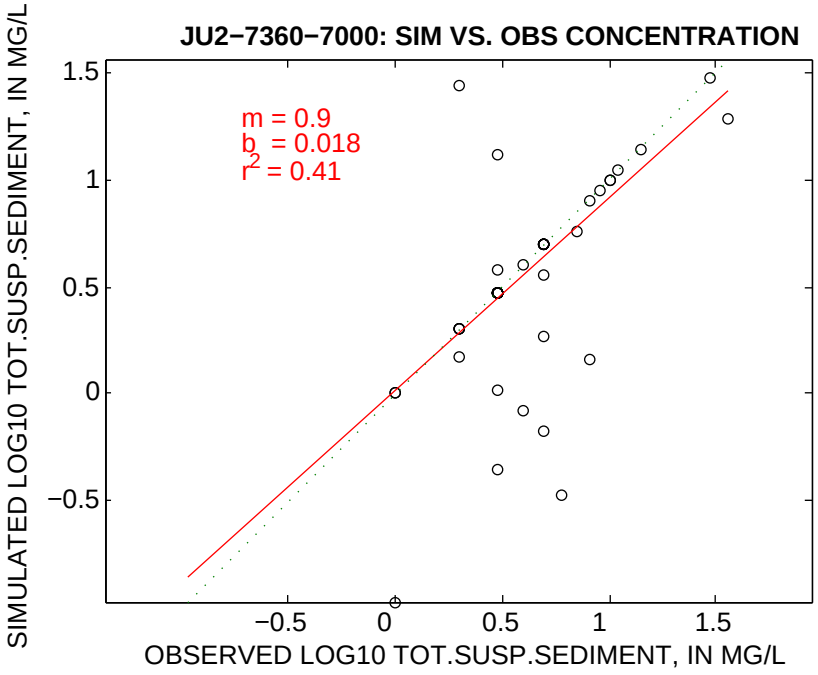
N/A model OBS20161101

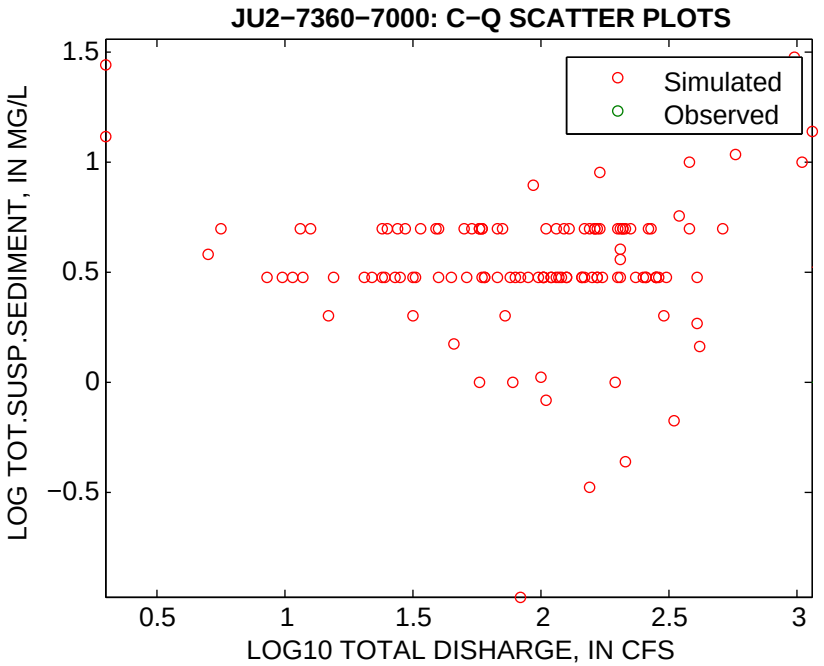
STATISTICS

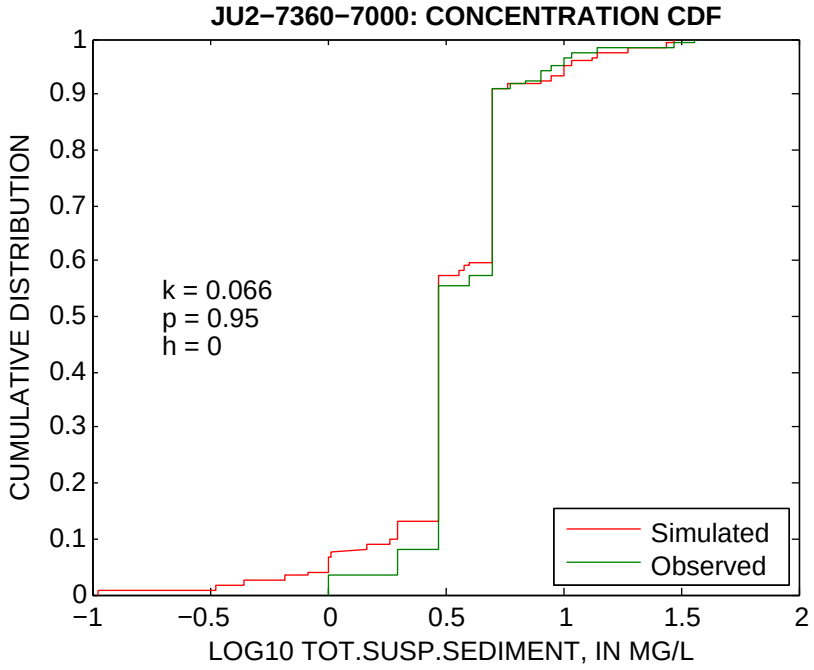
	n	122	122
		observe	simulate
min		1	0.075625
		0	-1.12133
mean		4.52459	3.48596
		0.581522	0.0856091
media		3	1.245
		0.477121	0.0950782
max		36	34.562
		1.5563	1.5386
varian		17.4911	32.3469
		0.0504956	0.432811
JB		0.001	0.001
		0.001	0.11578
		ra	log
%		-22.9552	-85.2785
err.va		47.2057	0.700917
rel.std.err		2.69884	13.8807
mod.eff		-1.69884	-12.8807

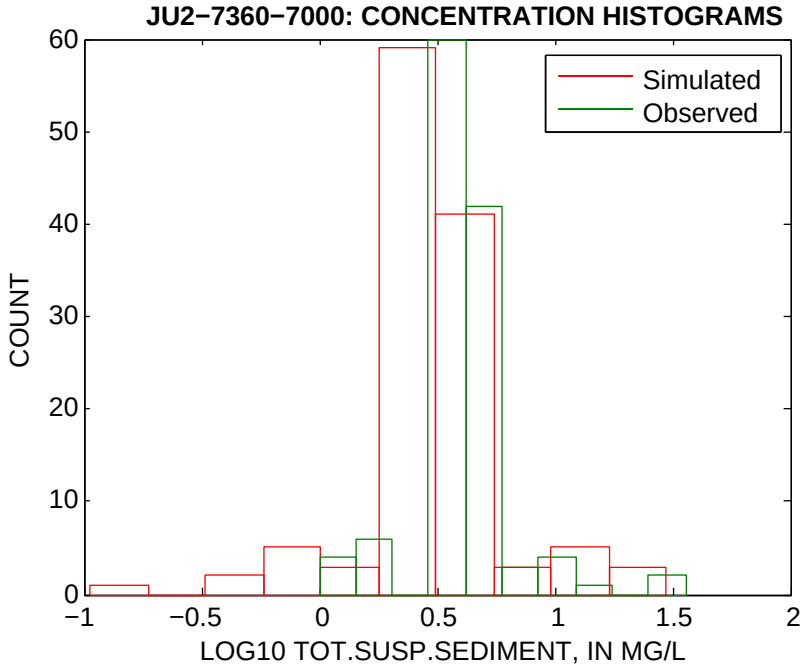
VERSION 2.1

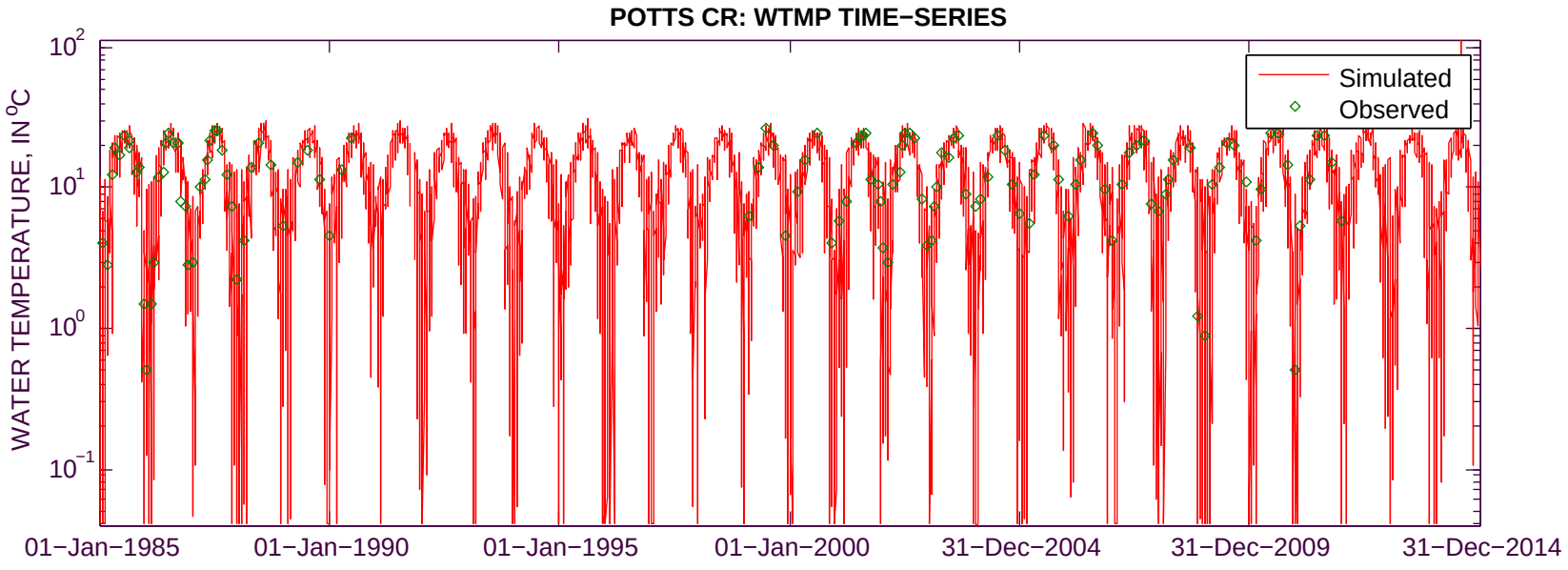
ALL DATA
LOG10

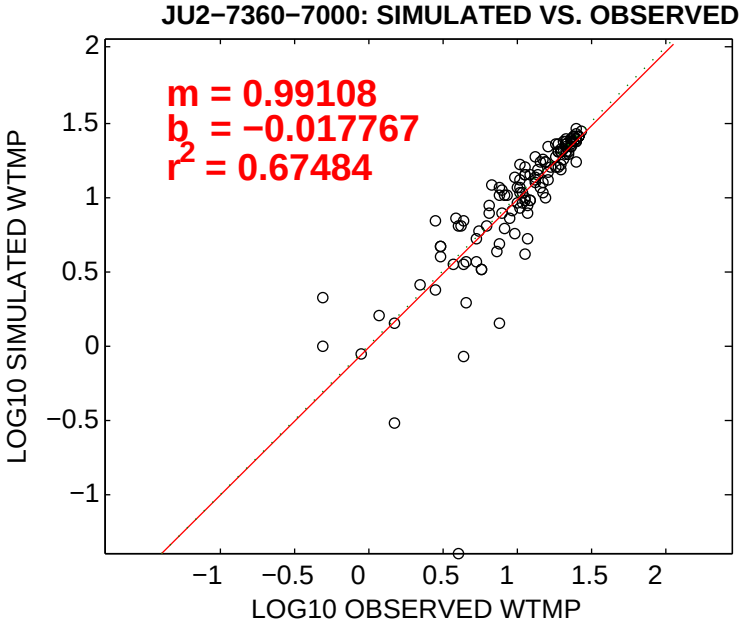


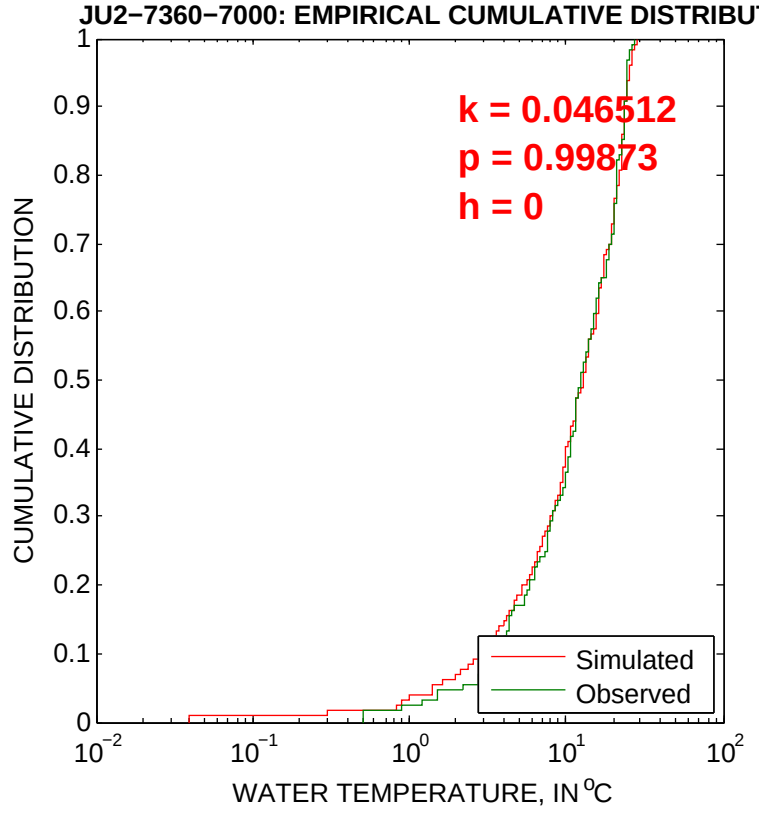












DATA SELECTION

scenario	file
P620171001WQ	WTMP.calib

plot: WTMP - water tempera...

Dates: 1/1/1985 – 12/31/201

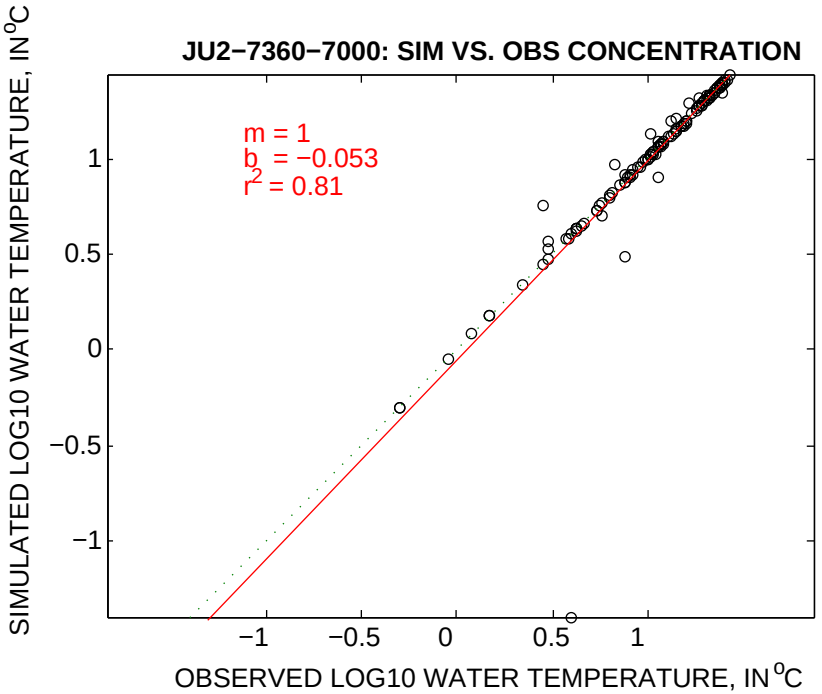
Drive	Directory	Observed
N/A	model	OBS20161101

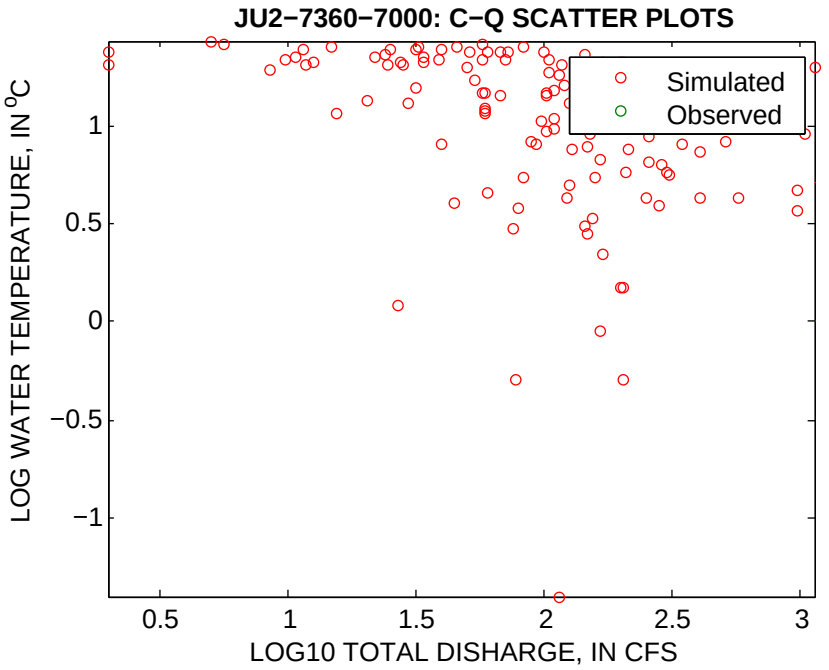
STATISTICS

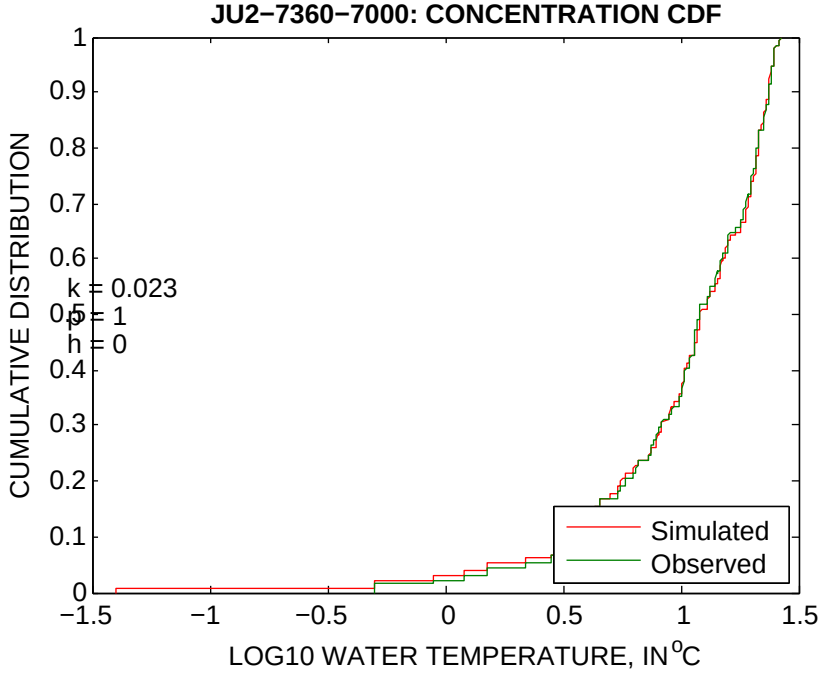
	n	129	129
		observe	simulate
min		0.5	0.040027
		-0.30103	-1.39765
mean		13.3823	13.3413
		1.02169	0.994809
media		12.2	12.824
		1.08636	1.10802
max		27	28.705
		1.43136	1.45796
varian		55.4757	60.9628
		0.128347	0.186811
JB		0.024252	0.025441
		0.001	0.001
		ra	log
%		-0.306253	-2.63084
err.va		6.91916	0.0614819
rel.std.err		0.124724	0.479029
mod.eff		0.875276	0.520971

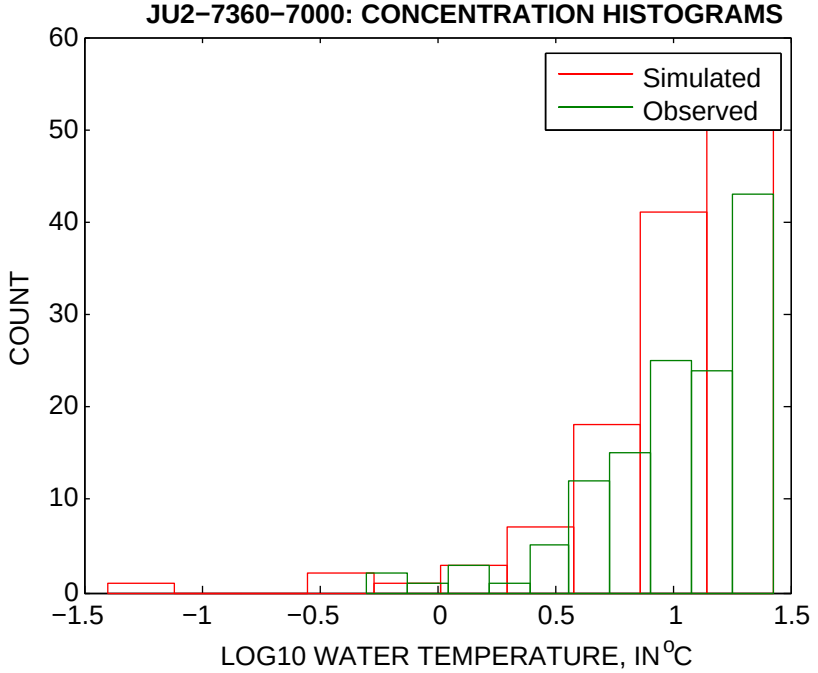
VERSION

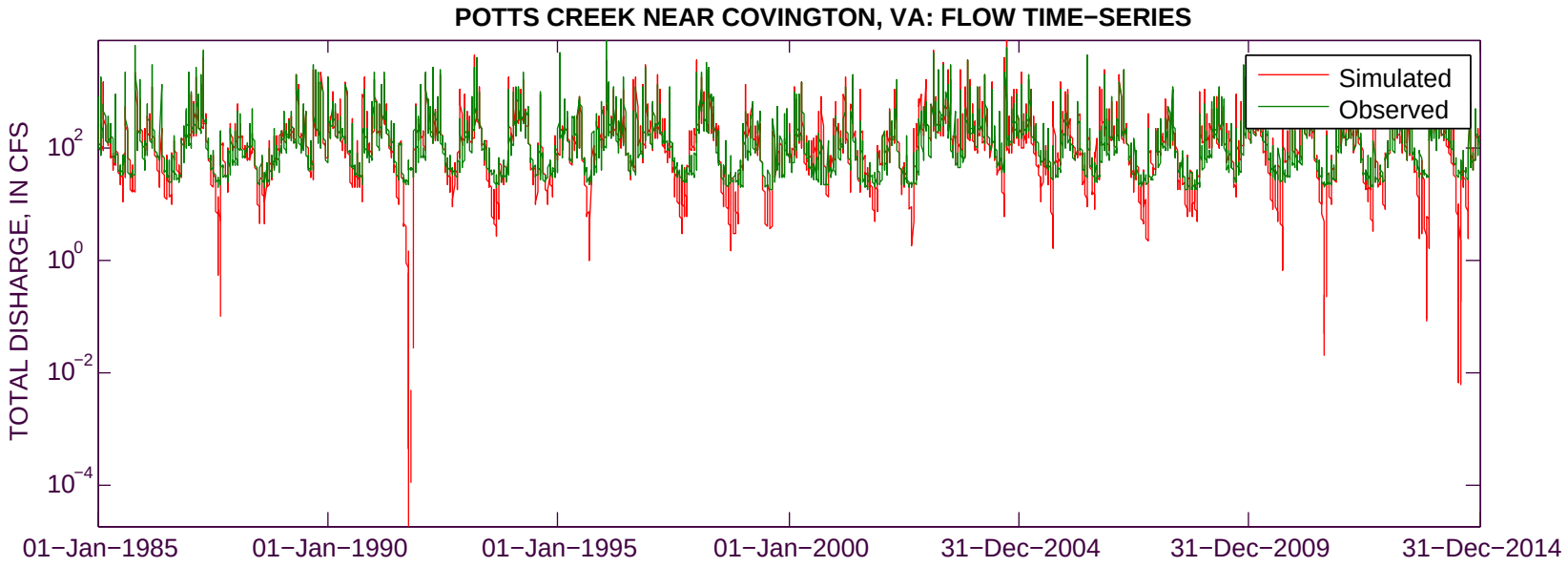
ALL DATA
LOG10

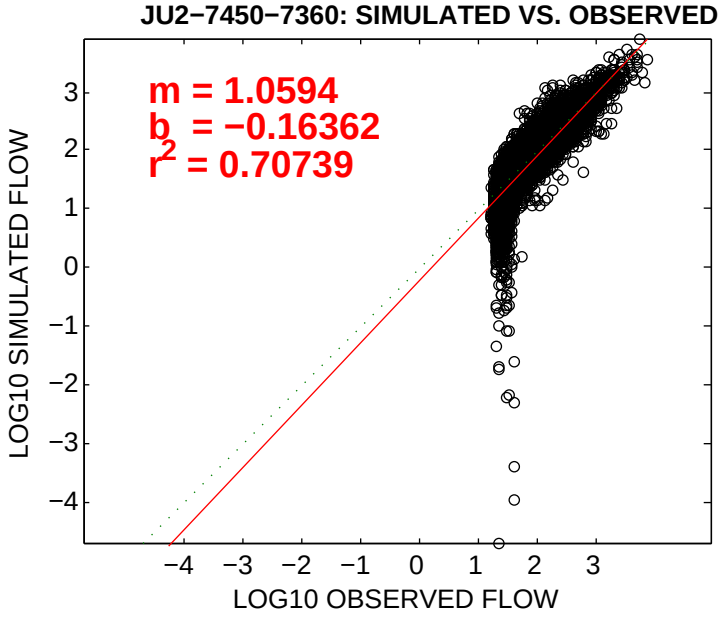


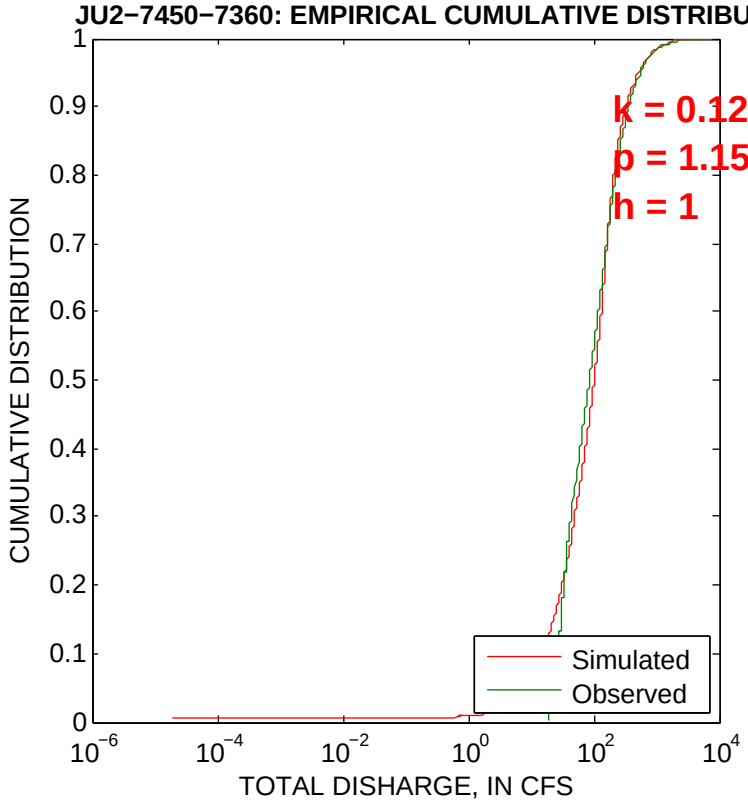












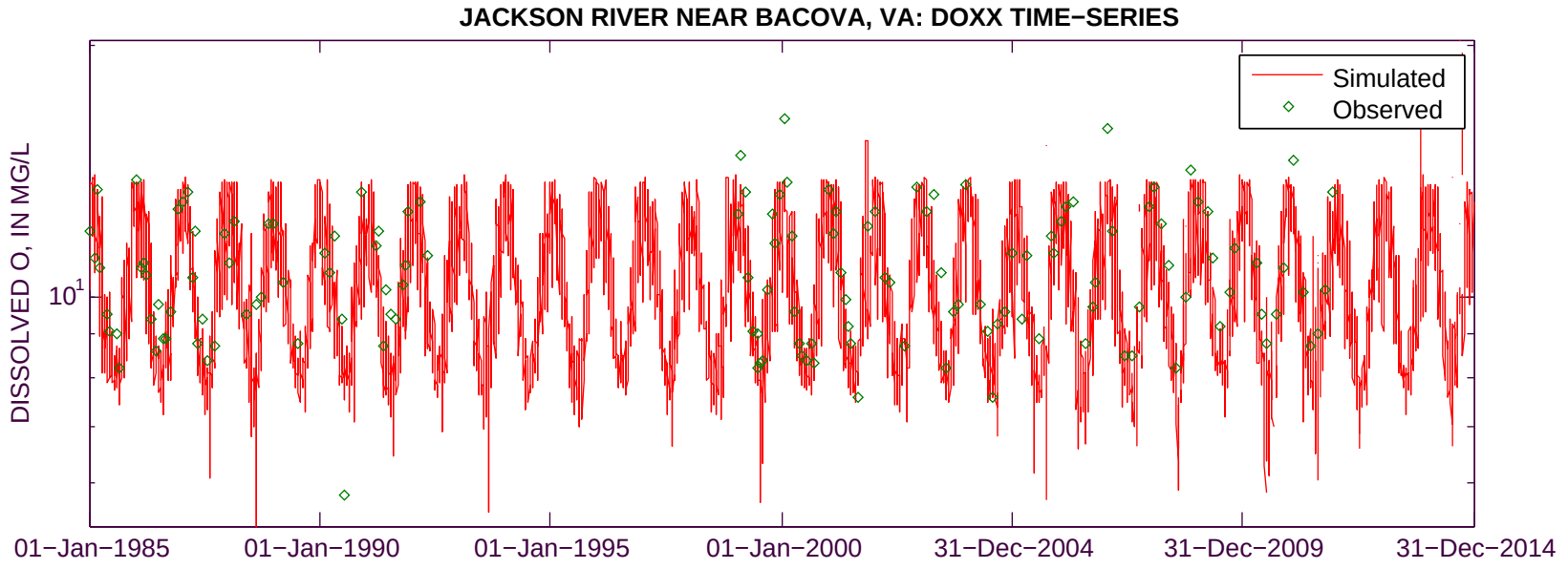
DATA SELECTION

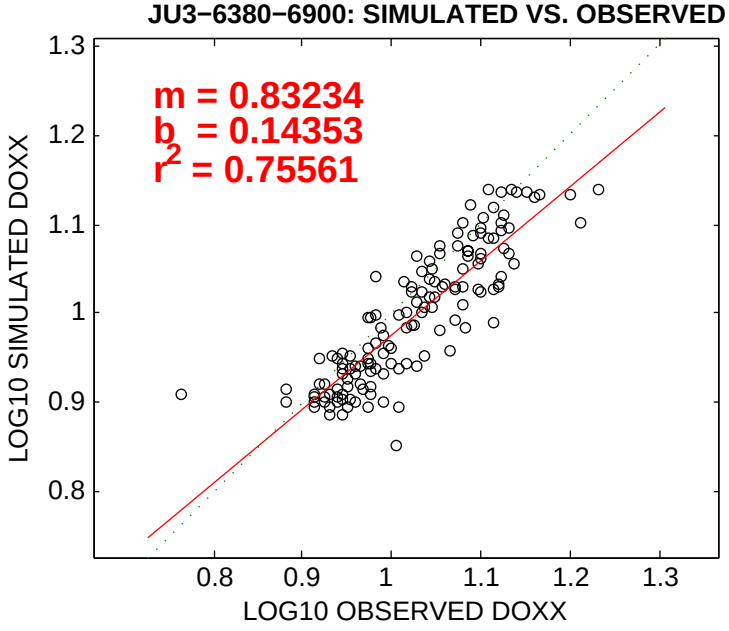
scenario: P620171001WQ
file: FLOW.calib
plot: FLOW - total discharge
Dates: 1/1/1985 12/31/201
Drive: N/A
Directory: model
Observed: OBS20161101

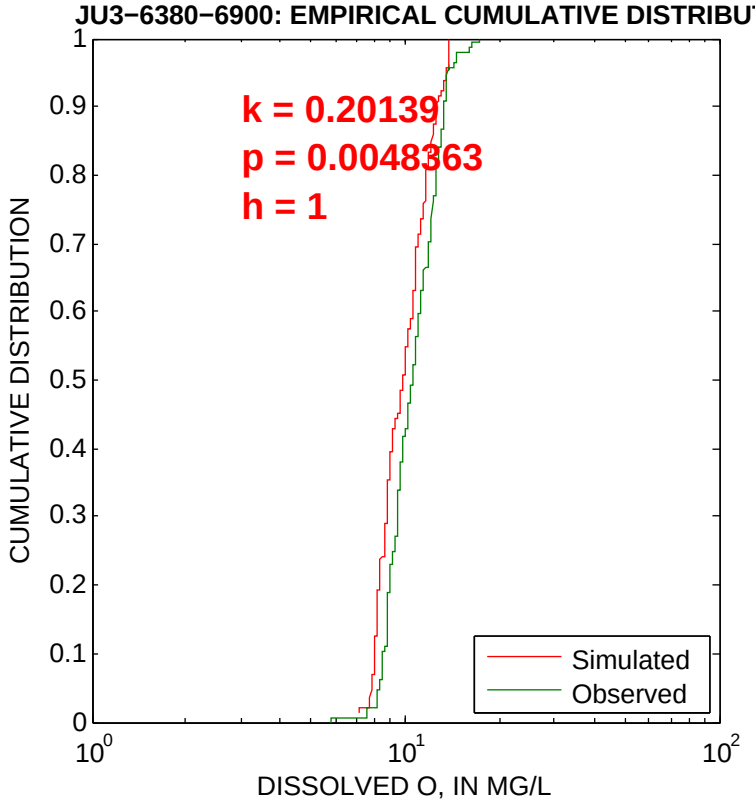
STATISTICS

		observe	simulate
n		10957	10906
min		17	0
		1.23045	-4.69579
mean		173.197	167.171
		1.97473	1.92835
media		87	104.05
		1.94448	2.02017
max		7430	8132.9
		3.87099	3.91025
varian		97255.4	75668.2
		0.197241	0.312922
JB		0.001	0.001
		0.001	0.001
		ra	log
%		-3.47927	-2.34892
err.va		25162.6	0.0944123
rel.std.err		0.258727	0.478664
mod.eff		0.741273	0.521336

VERSION







DATA SELECTION

scenario	file
P620171001WQ	DOXX.calib

plot: DOXX - dissolved oxygen

Dates: 1/1/1985 – 12/31/201

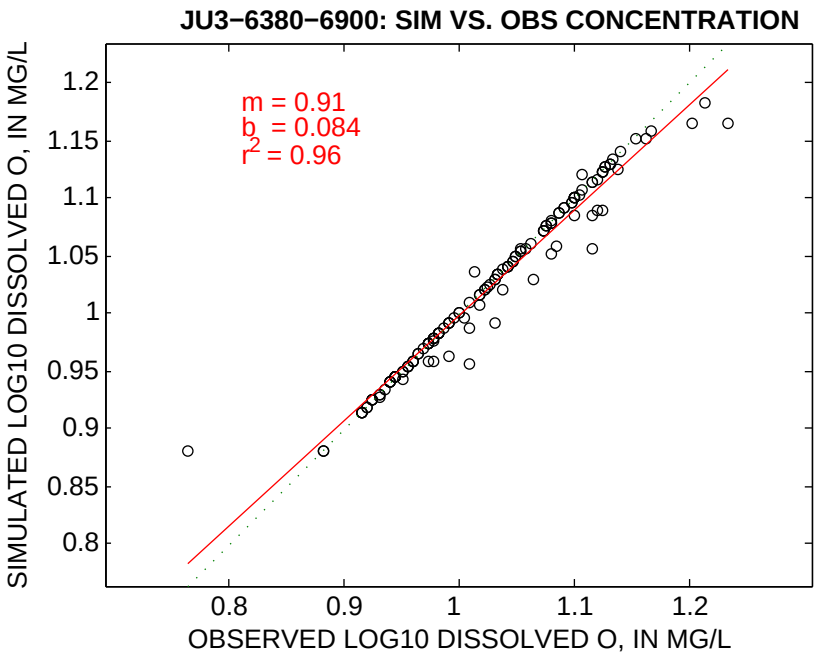
Drive	Directory	Observed
N/A	model	OBS20161101

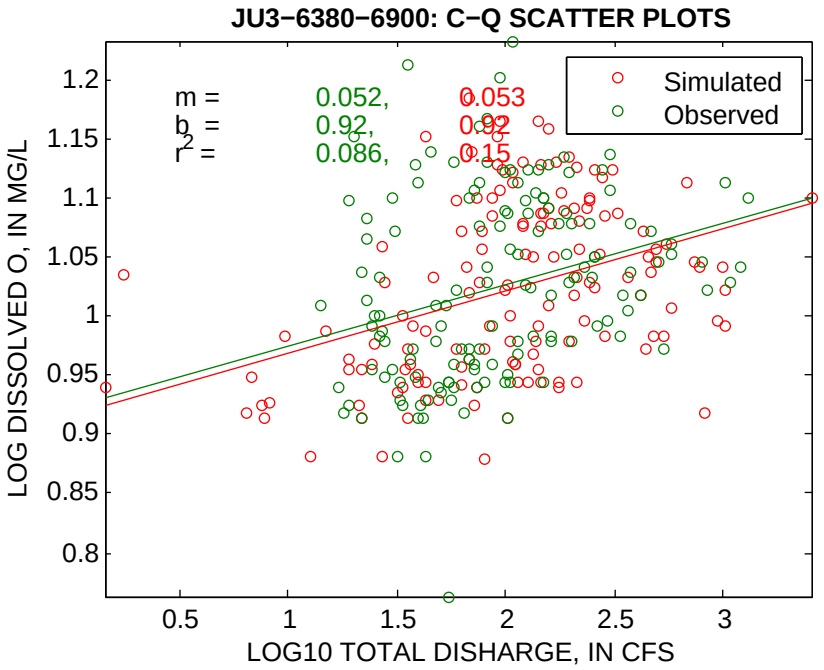
STATISTICS

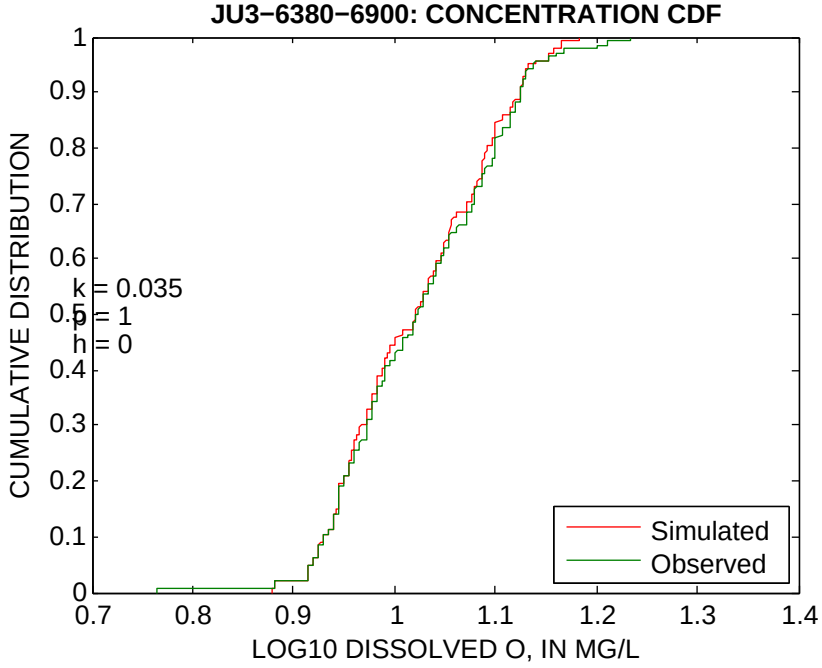
	n	144	142
		observe	simulate
min		5.8	0
		0.763428	0.851613
mean		10.7568	9.9364
		1.02511	0.996775
media		10.5	9.79295
		1.02243	0.994727
max		17.1	13.776
		1.233	1.13912
varian		3.81791	4.50892
		0.00616066	0.00564846
JB		0.034589	0.001
		0.5	0.021477
		ra	log
%		-7.62688	-2.76453
err.va		2.74816	0.0023624
rel.std.err		0.719807	0.383465
mod.eff		0.280193	0.616535

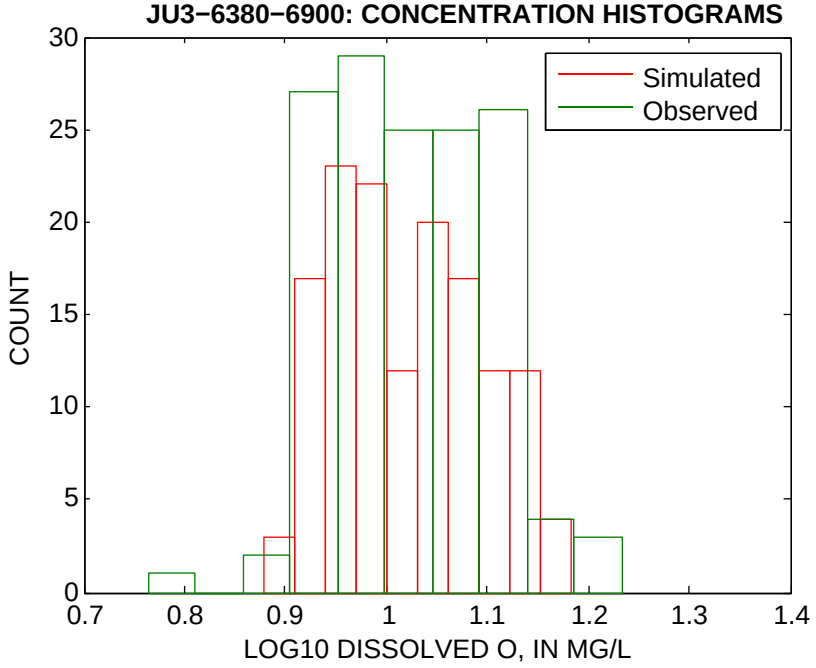
VERSION 2.1

ALL DATA
LOG10

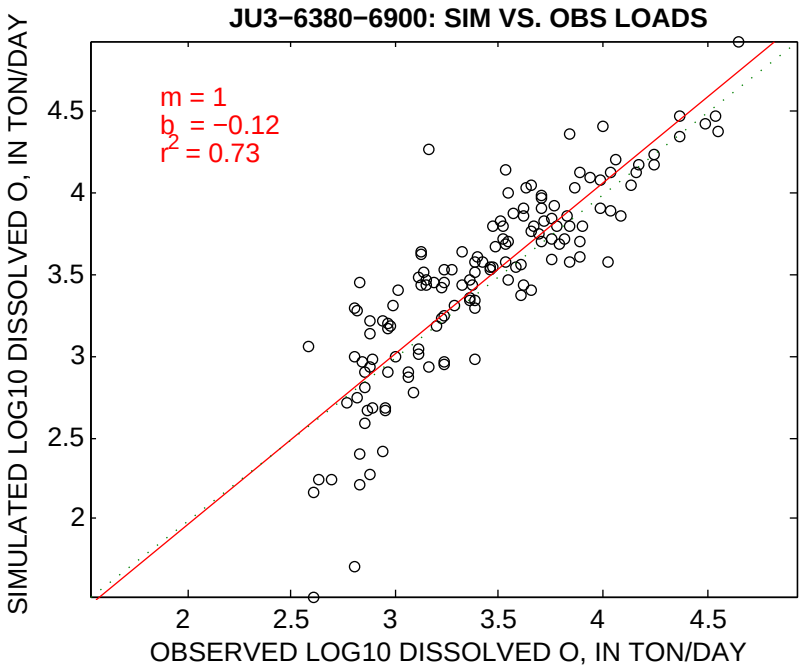


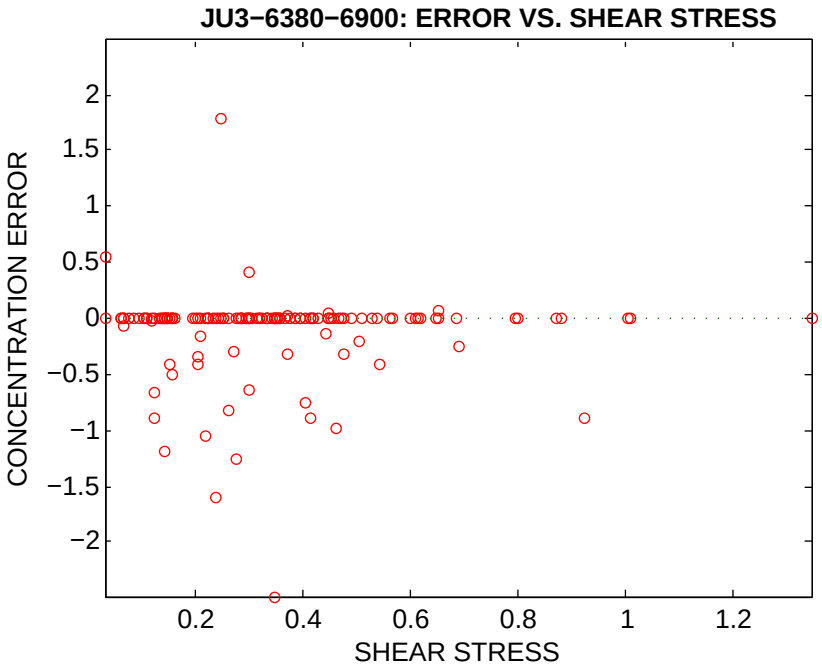


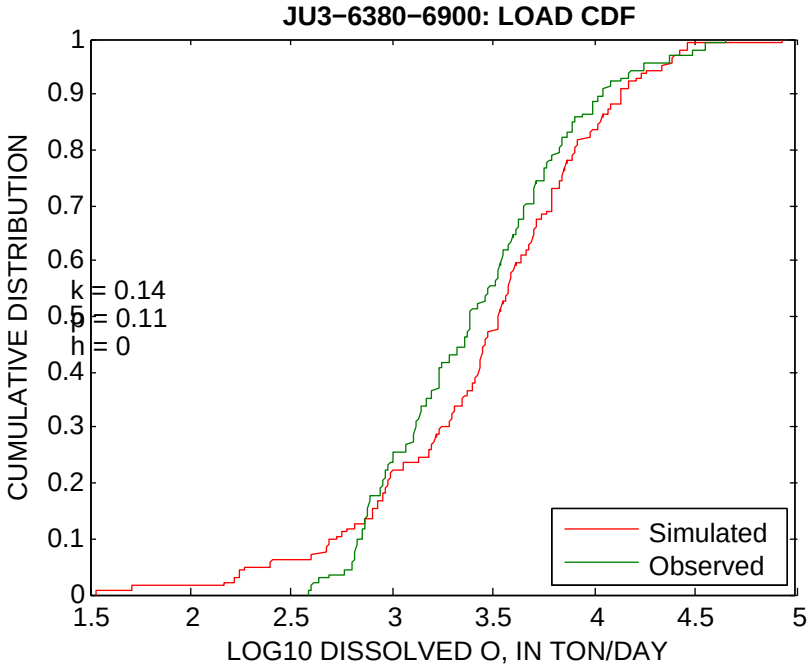


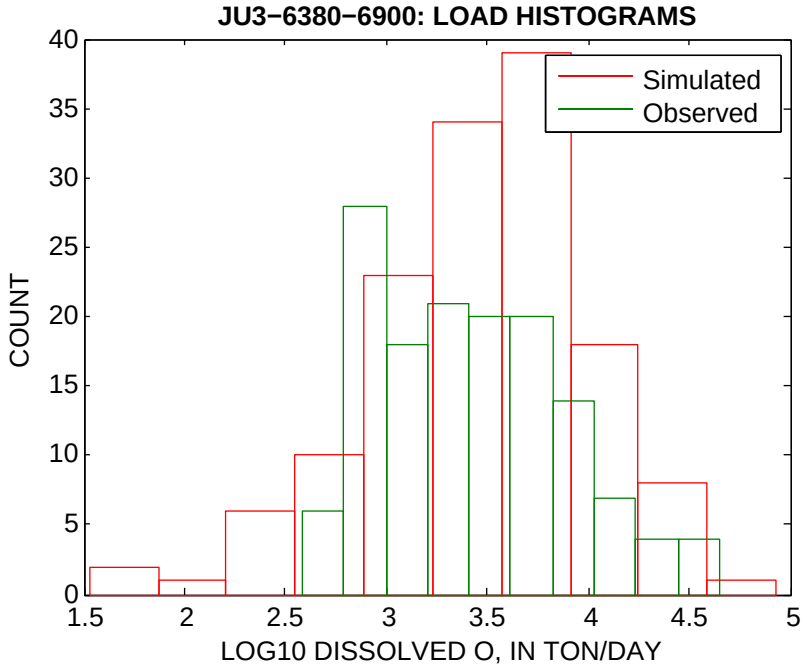


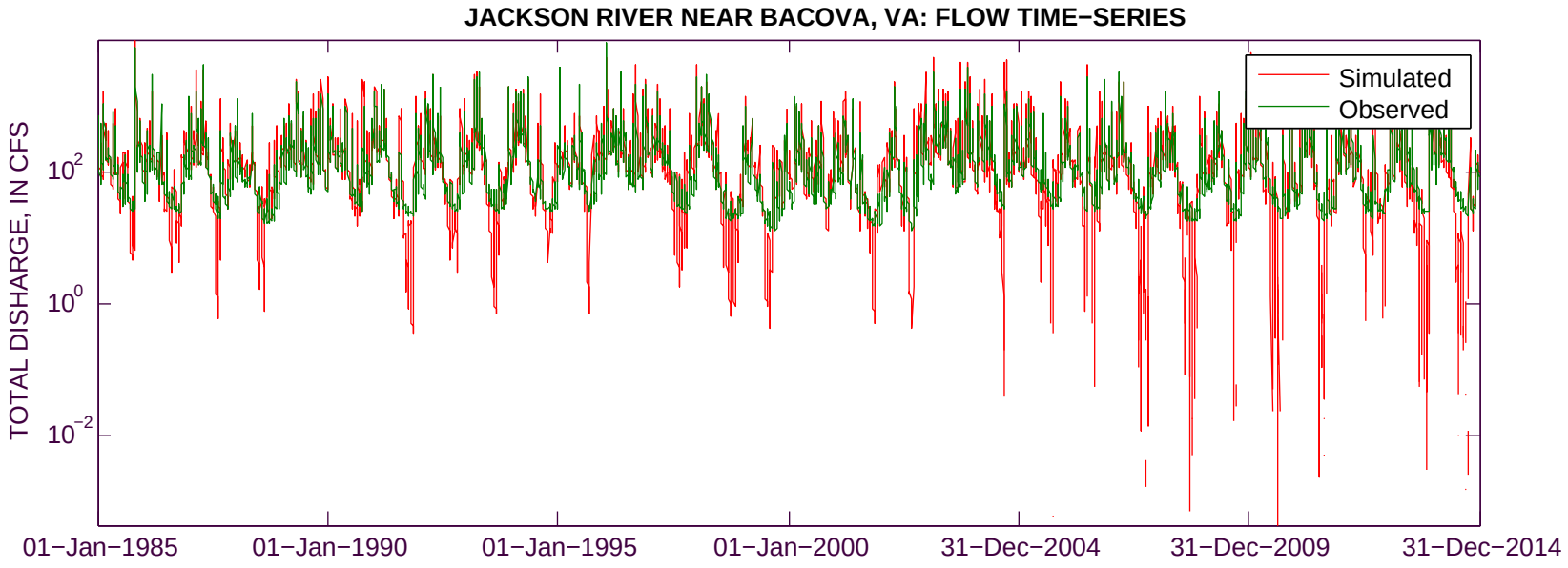
LOAD DATA
LOG10

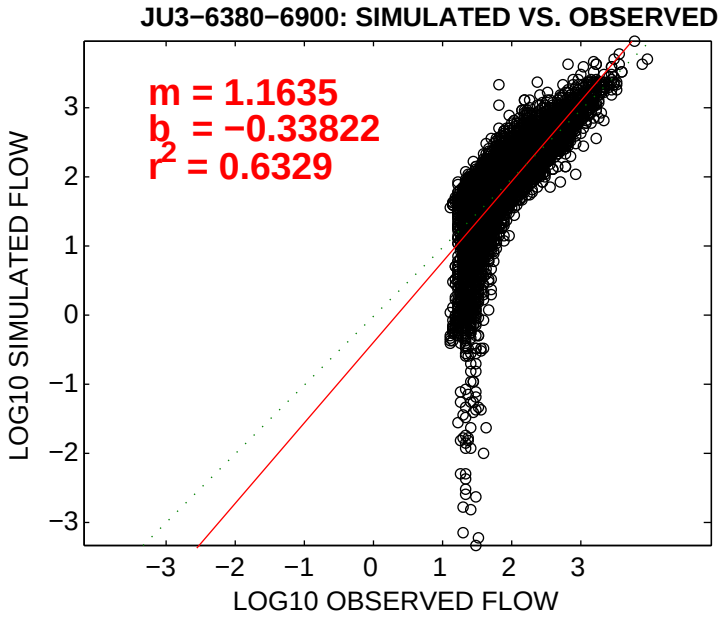


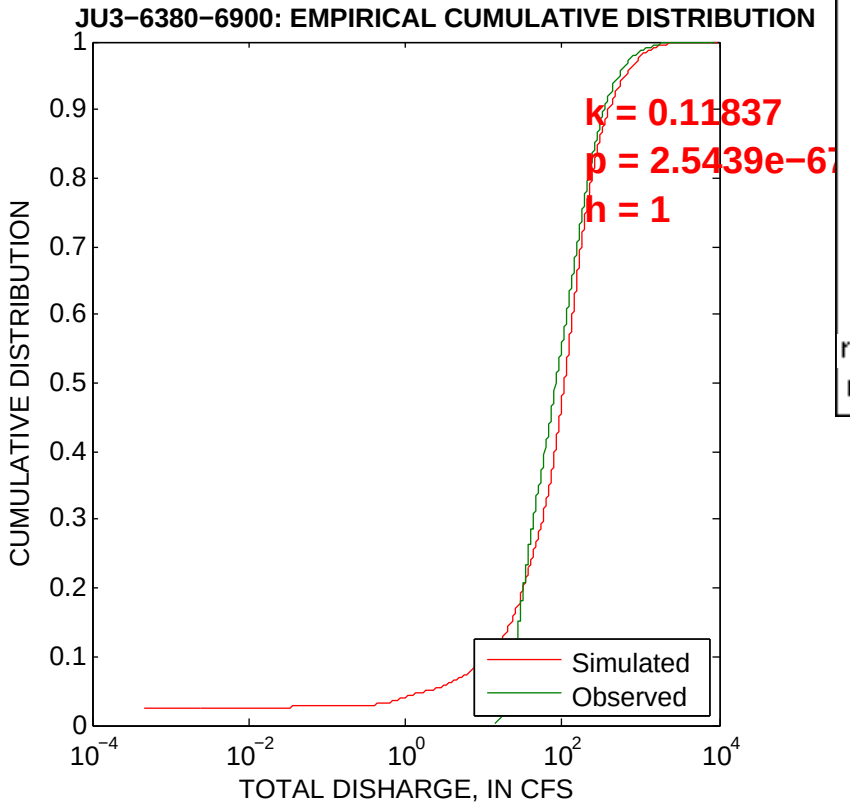












DATA SELECTION

scenario	file
P620171001WQ	FLOW.calib

plot: FLOW - total discharge

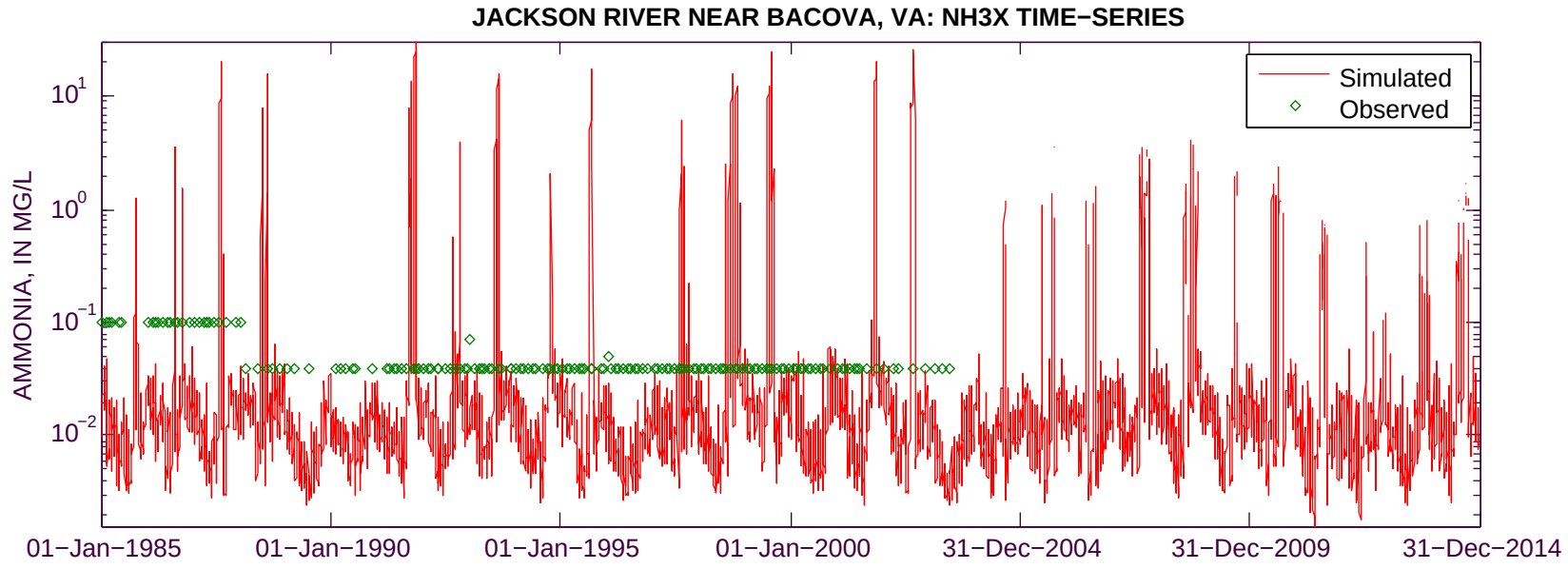
Dates: 1/1/1985 – 12/31/201

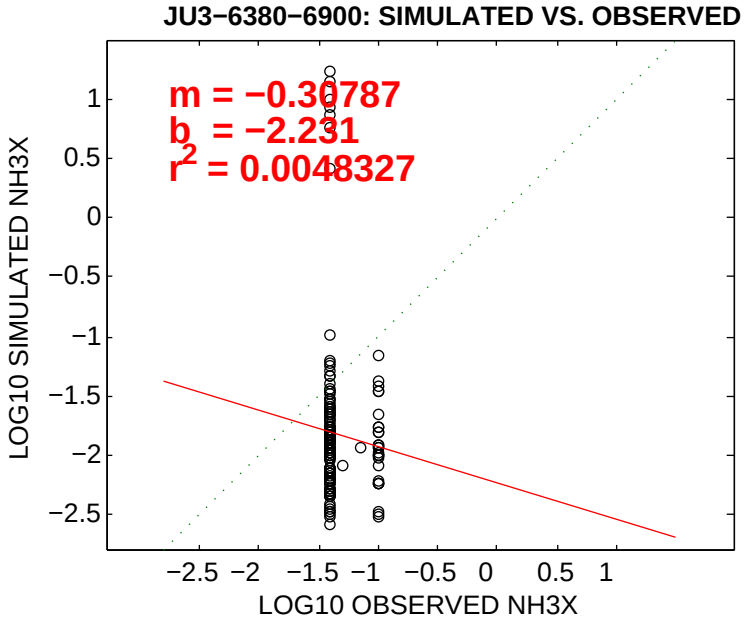
Drive	Directory	Observed
N/A	model	OBS20161101

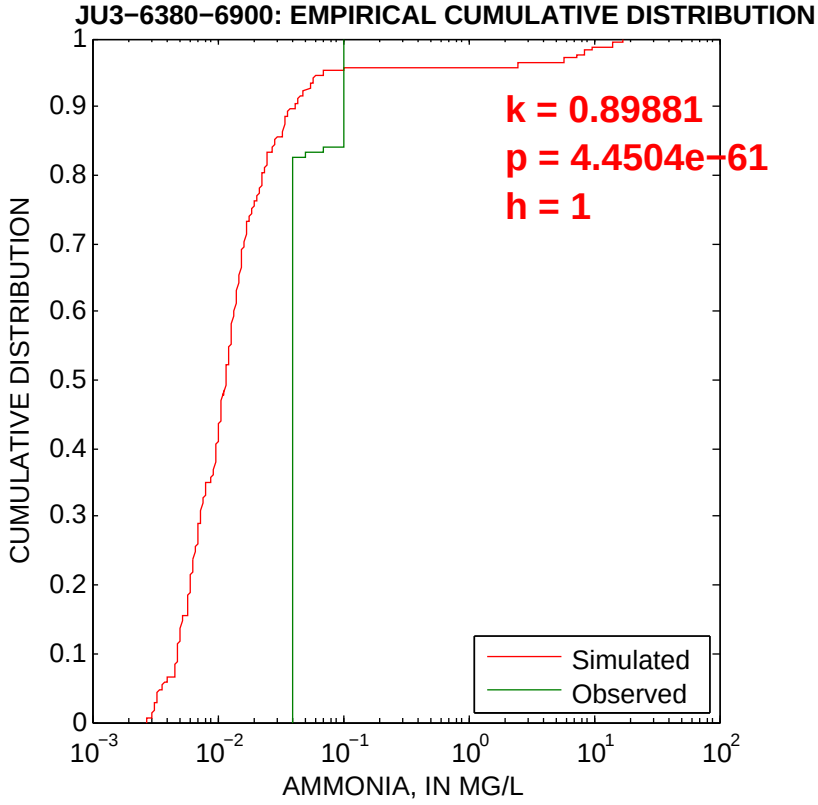
STATISTICS

n	10957	10694
	observe	simulate
min	13	0
	1.11394	-3.34172
mean	162.006	189.242
	1.96491	1.94789
media	84	107.05
	1.93952	2.04305
max	8820	9810.4
	3.94547	3.99169
varian	76290.8	107752
	0.194949	0.416958
JB	0.001	0.001
	0.001	0.001
	ra	log
%	16.812	-0.866282
err.va	29426.4	0.158565
rel.std.err	0.385713	0.813367
mod.eff	0.614287	0.186633

VERSION







DATA SELECTION

scenario	file
P620171001WQ	NH3X.calib

plot: NH3X - ammonia

Dates: 1/1/1985 – 12/31/201

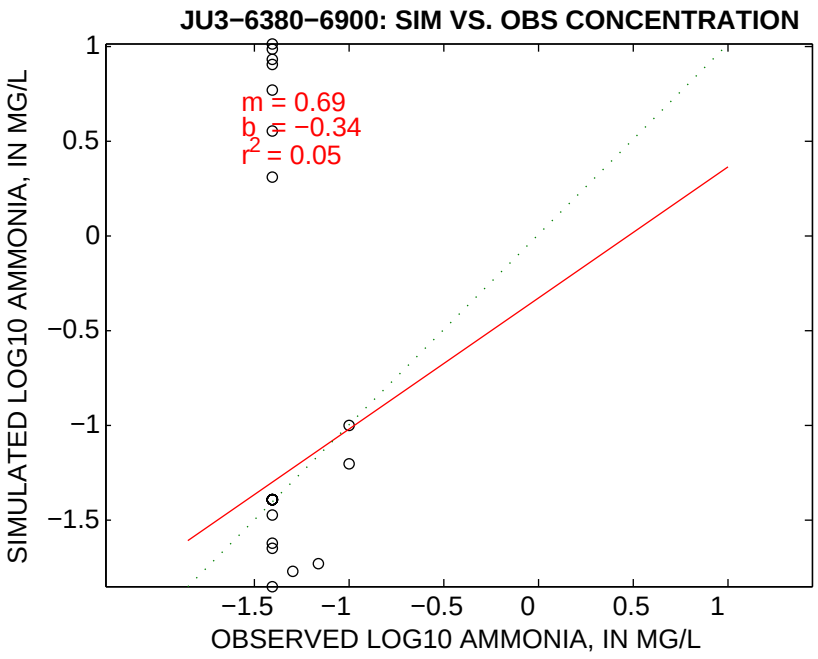
Drive	Directory	Observed
N/A	model	OBS20161101

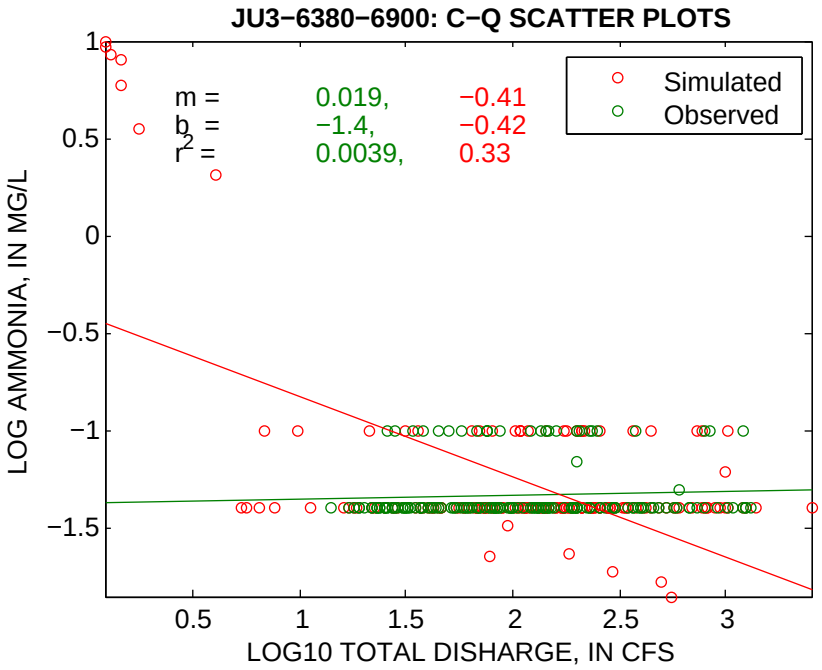
STATISTICS

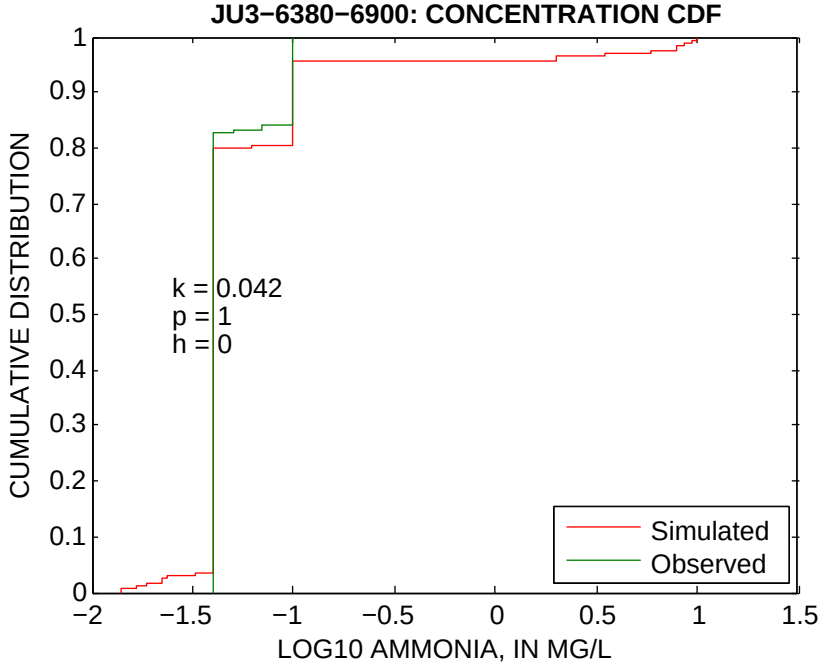
	n	168	168
		observe	simulate
min		0.04	0.0026877
		-1.39794	-2.57062
mean		0.049881	0.403128
		-1.33196	-1.82093
media		0.04	0.011589
		-1.39794	-1.93595
max		0.1	17.158
		-1	1.23447
varian		0.00048980	4.3595
		0.0216333	0.424299
JB		0.001	0.001
		0.001	0.001
		ra	log
%		708.179	36.7103
err.va		4.49321	0.699773
rel.std.err		9173.44	32.3471
mod.eff		-9172.44	-31.3471

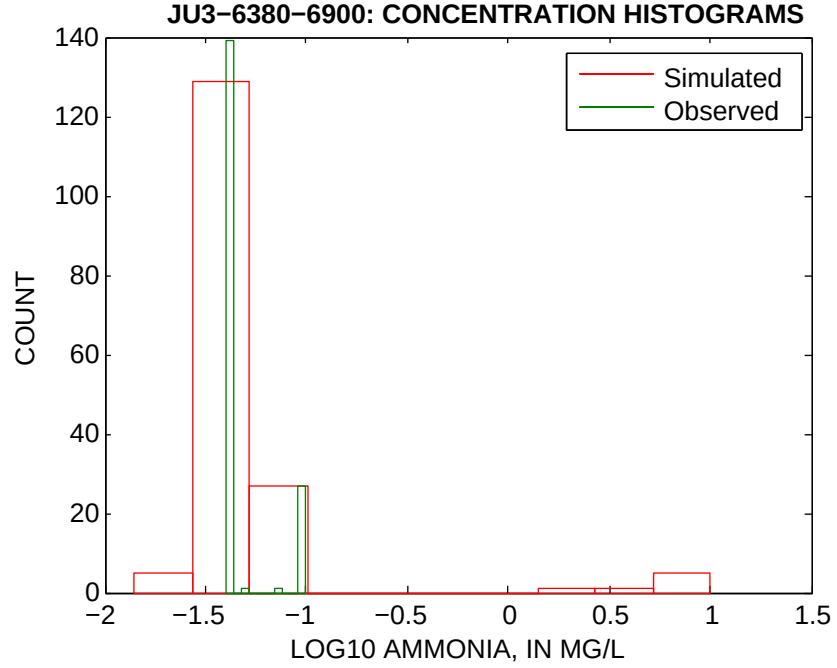
VERSION 2.1

ALL DATA
LOG10

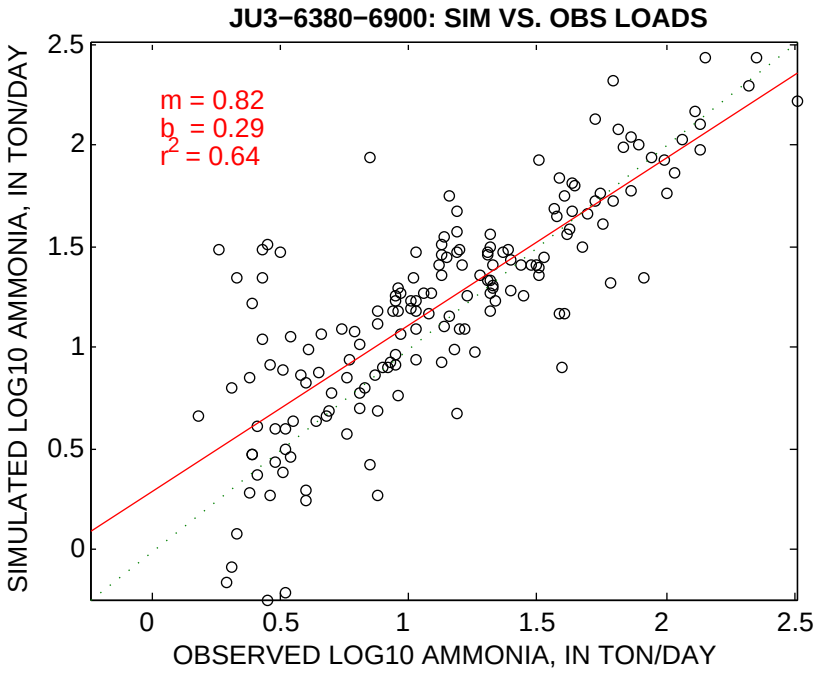


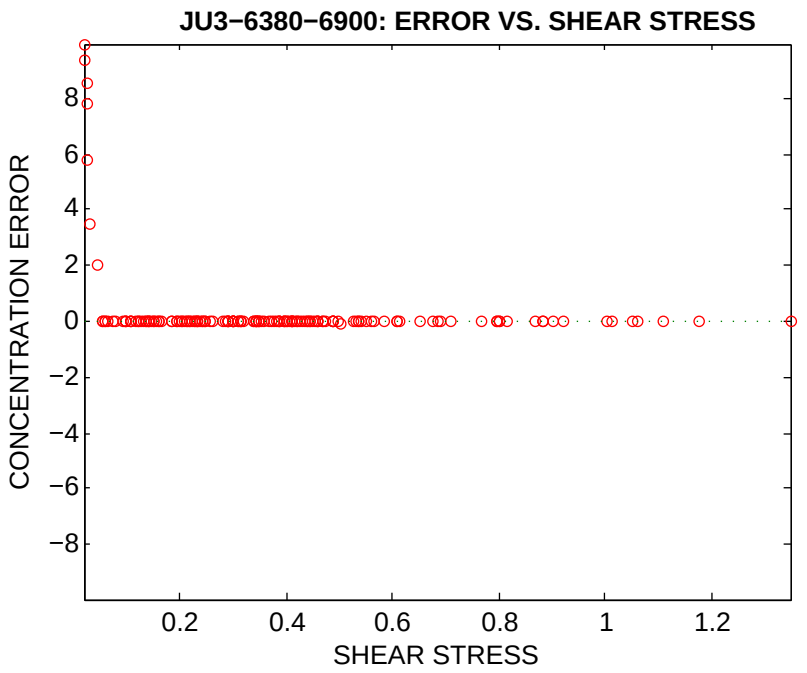


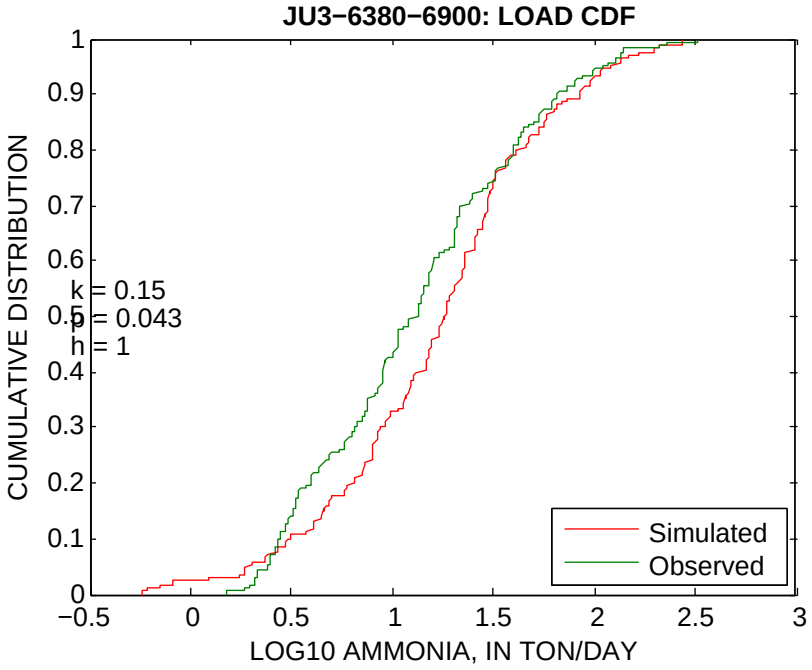


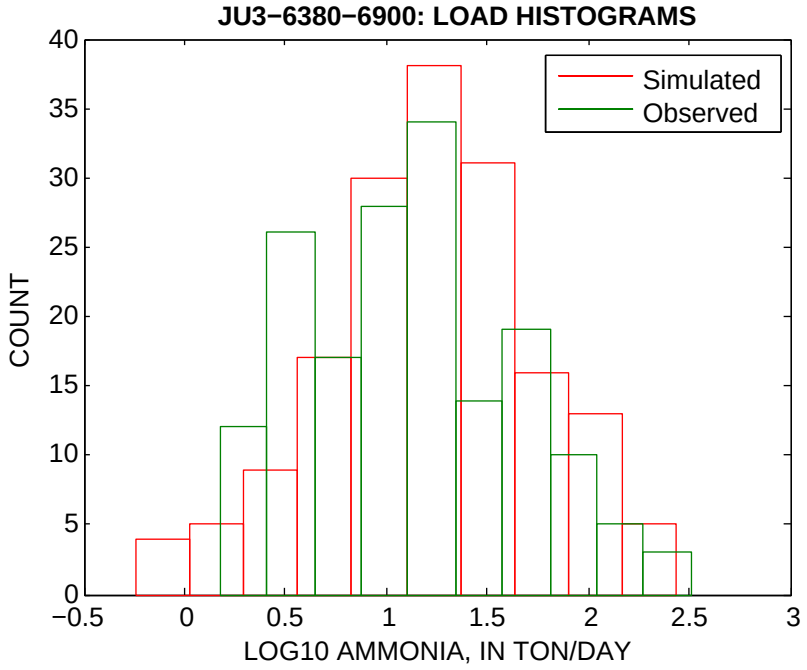


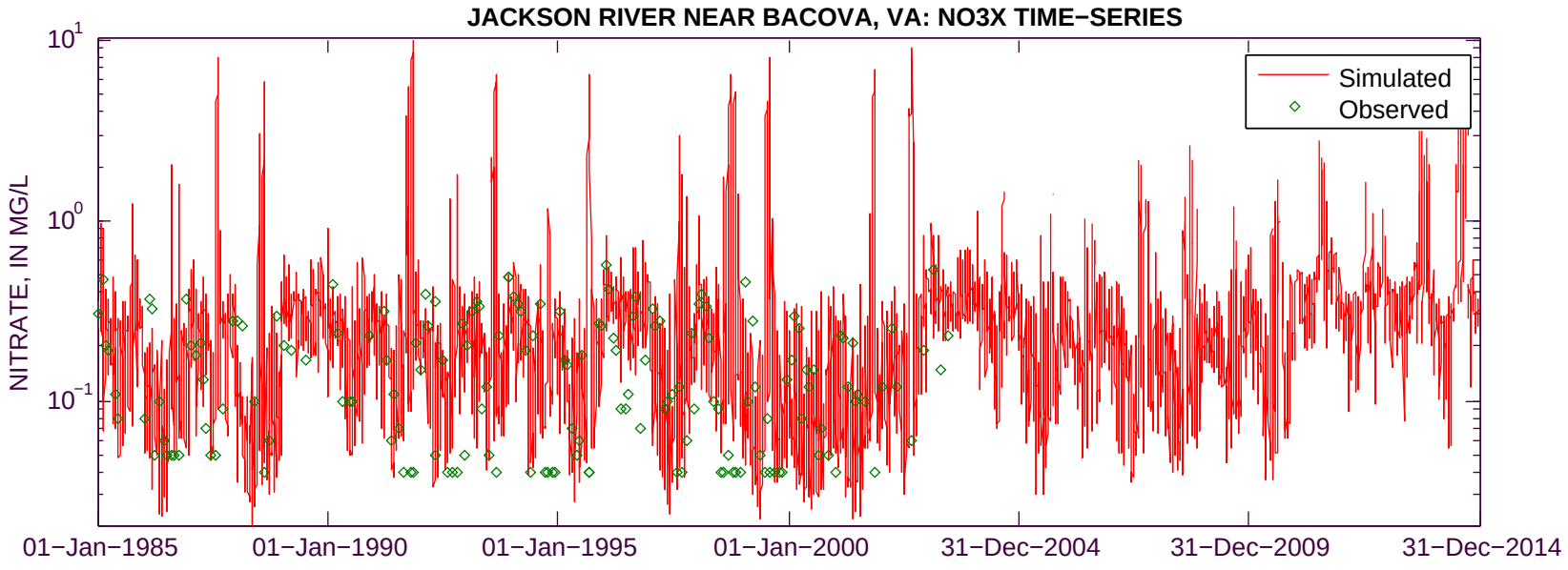
LOAD DATA
LOG10

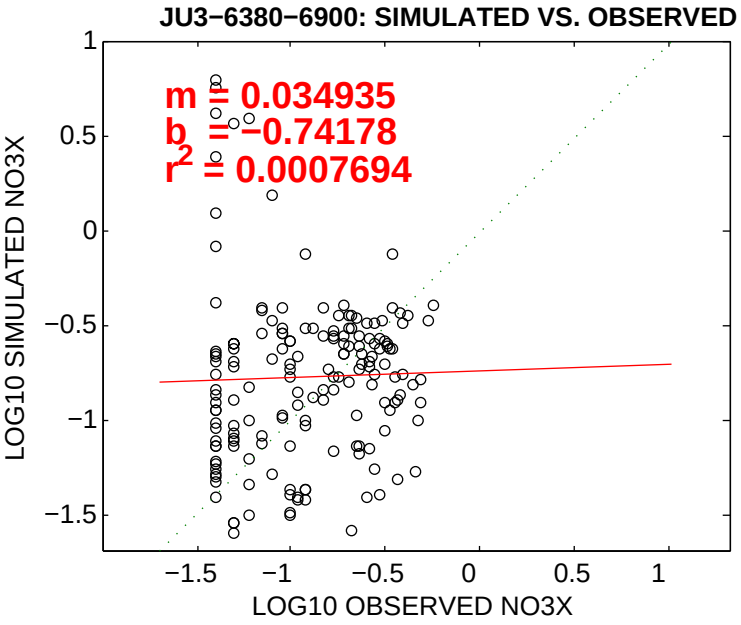


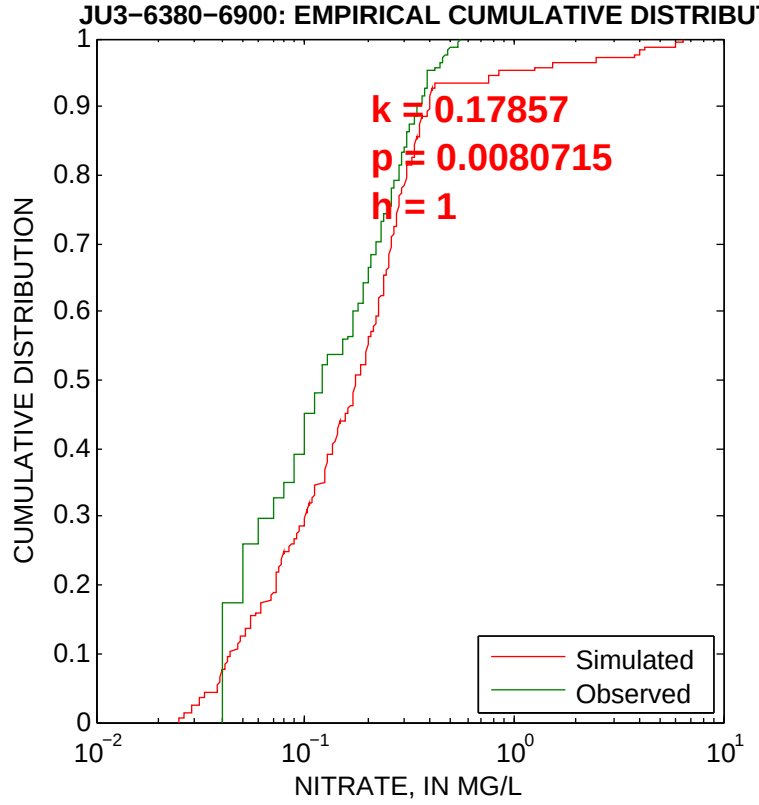












DATA SELECTION

scenario	file
P620171001WQ	NO3X.calib

plot: NO3X - nitrate

Dates: 1/1/1985 – 12/31/201

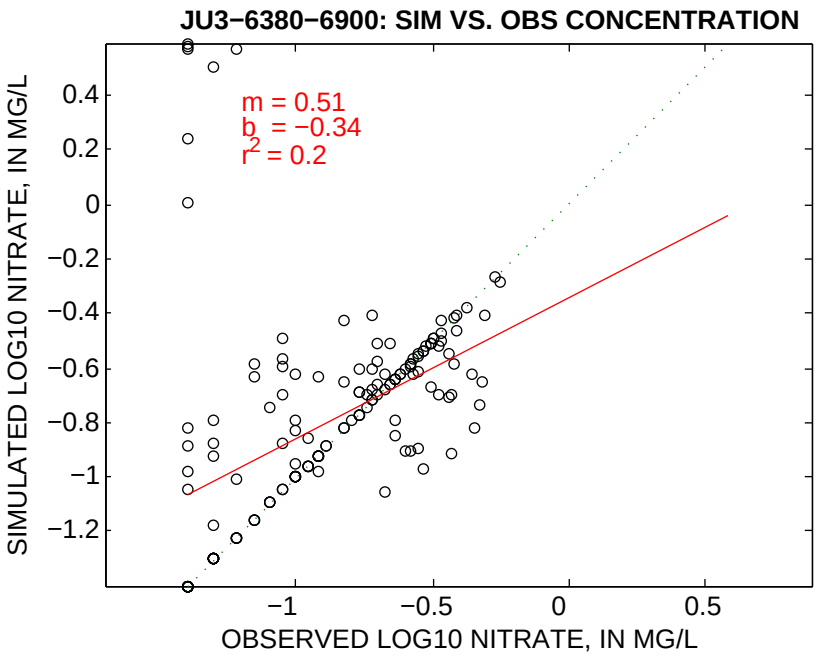
Drive	Directory	Observed
N/A	model	OBS20161101

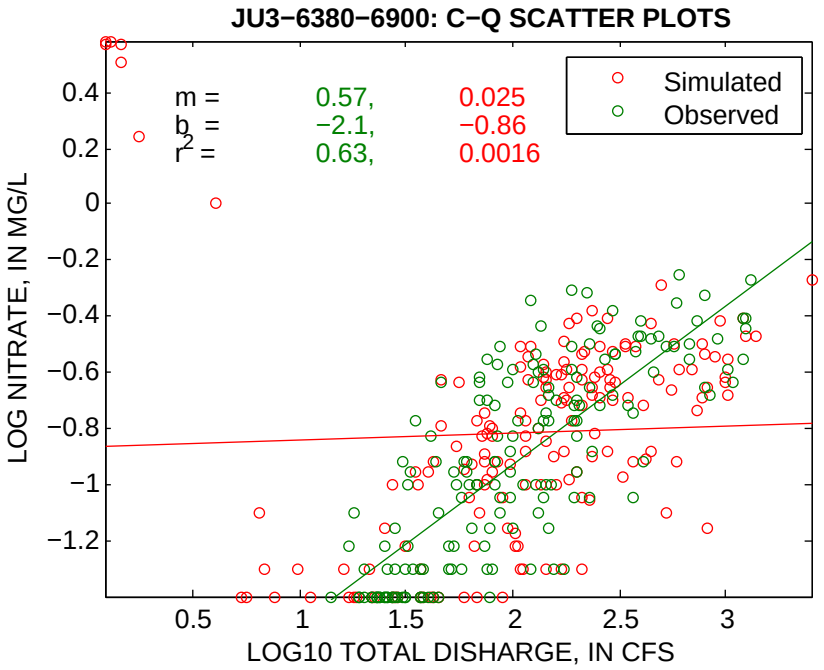
STATISTICS

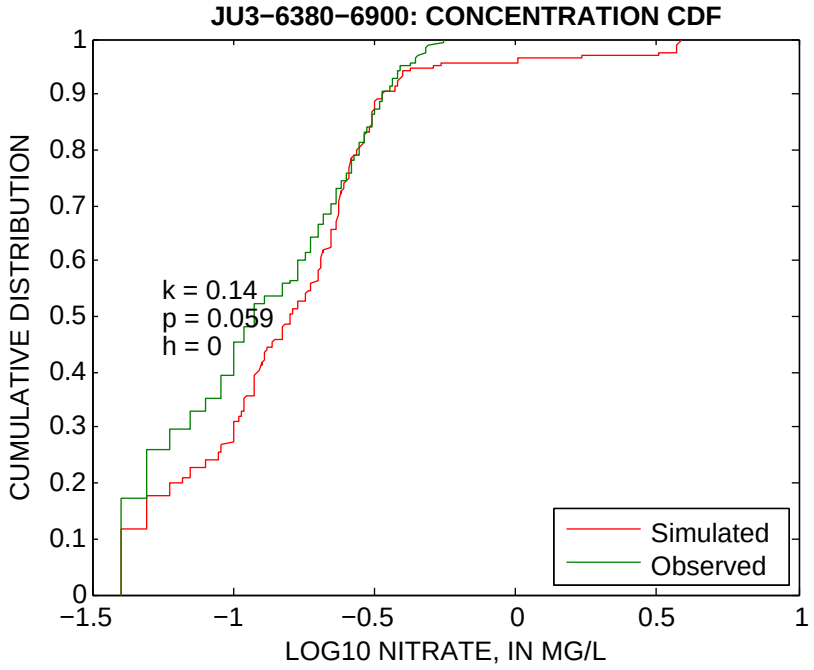
	n	168	168
		observe	simulate
min		0.04	0.025253
		-1.39794	-1.59769
mean		0.165536	0.35676
		-0.912525	-0.773655
media		0.12	0.176095
		-0.920819	-0.75426
max		0.56	6.4065
		-0.251812	0.806621
varian		0.015577	0.724498
		0.122426	0.194202
JB		0.001411	0.001
		0.009695	0.001
		ra	log
%		115.519	-15.2182
err.va		0.810669	0.327474
rel.std.err		52.0428	2.67486
mod.eff		-51.0428	-1.67486

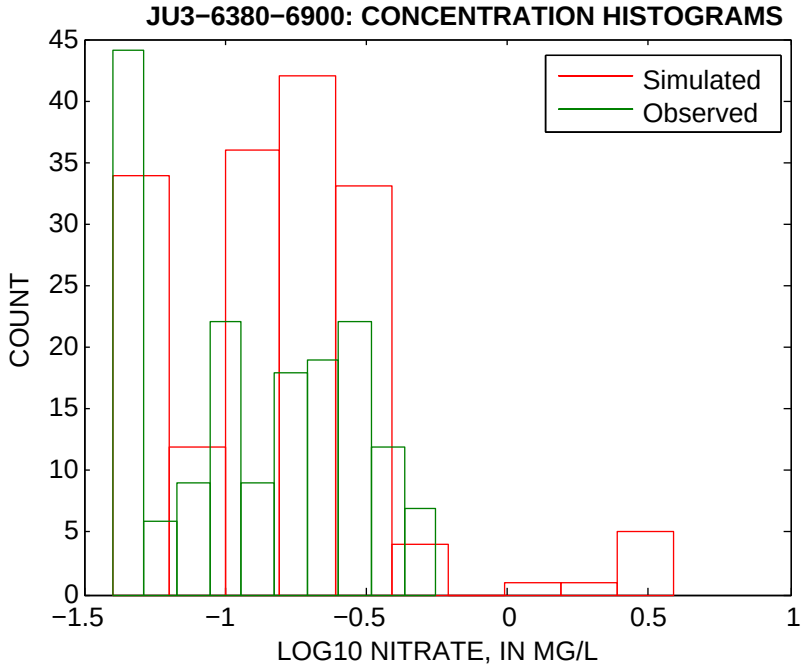
VERSION 2.1

ALL DATA
LOG10

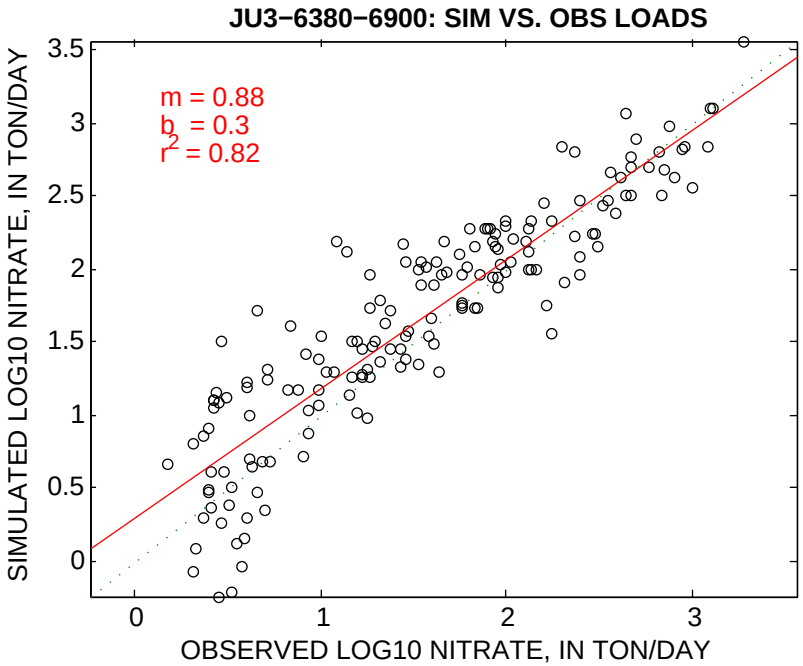




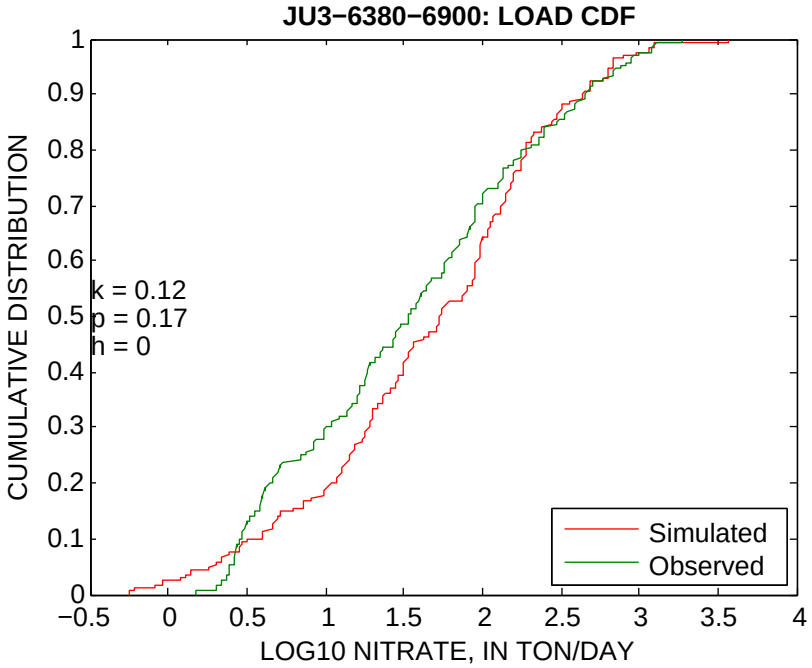


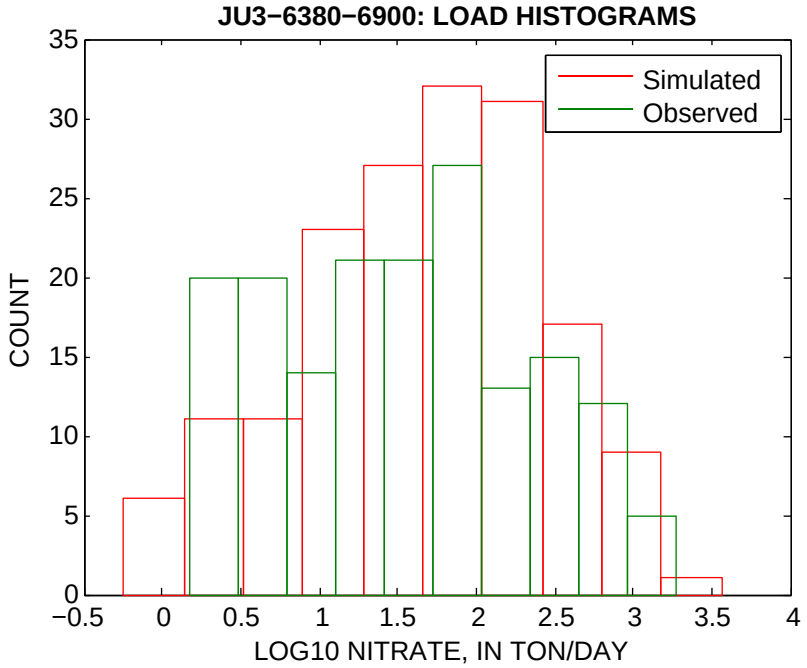


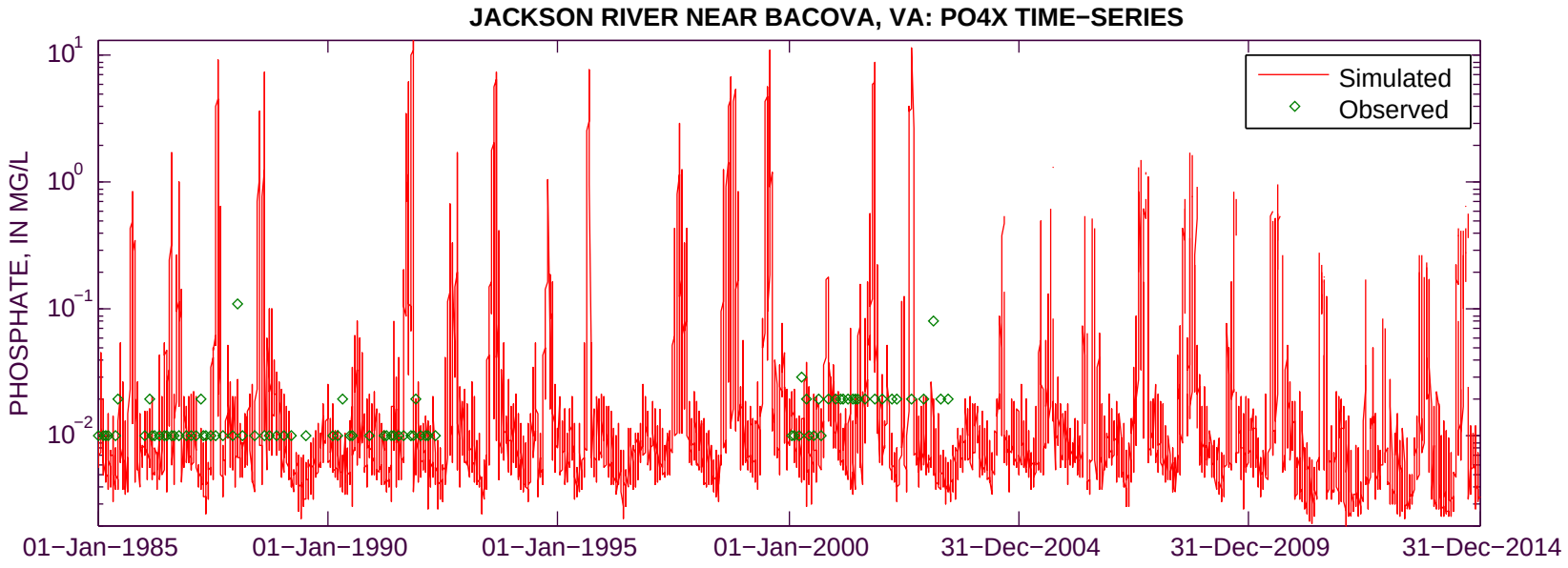
LOAD DATA
LOG10

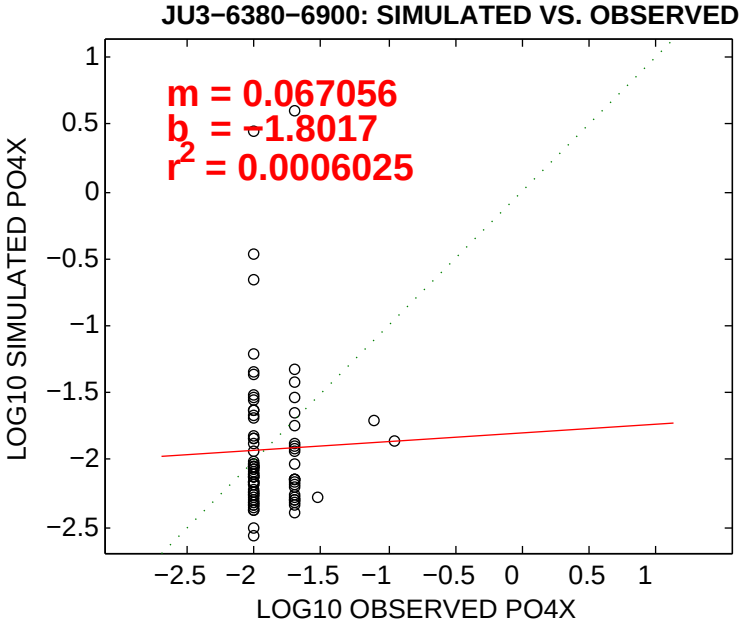


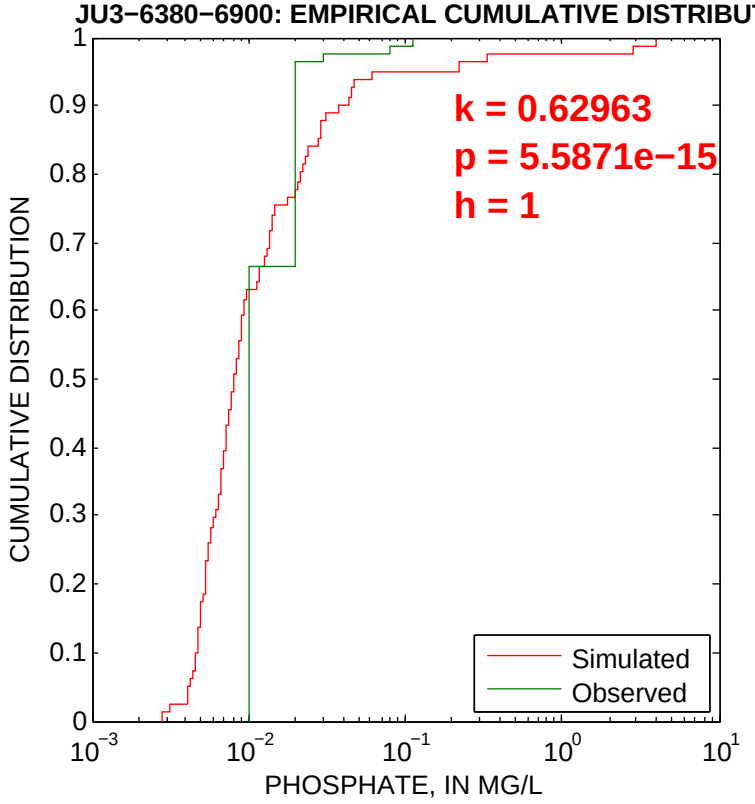












DATA SELECTION

scenario: P620171001WQ | file: PO4X.calib

plot: PO4X - phosphate

Dates: 1/1/1985 – 12/31/201

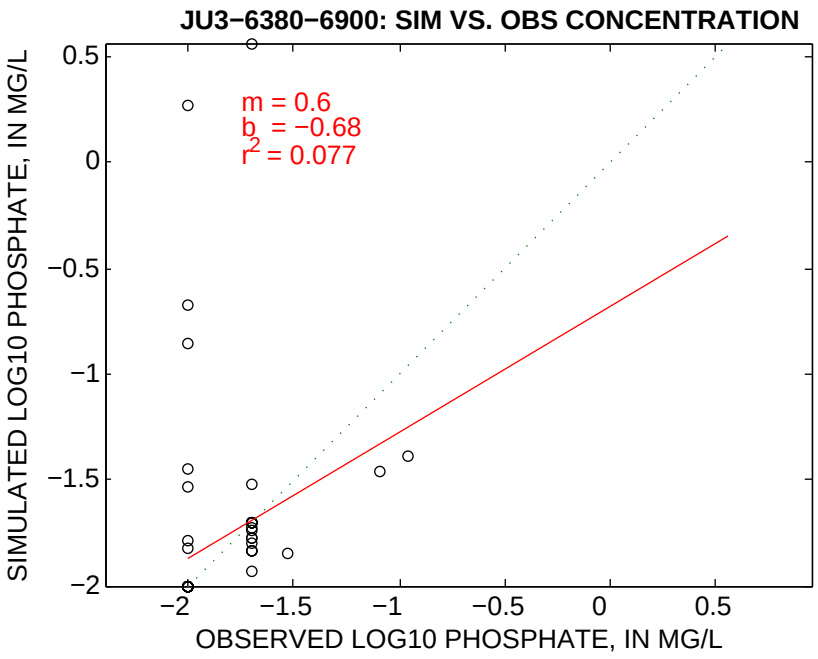
Drive: N/A | Directory: model | Observed: OBS20161101

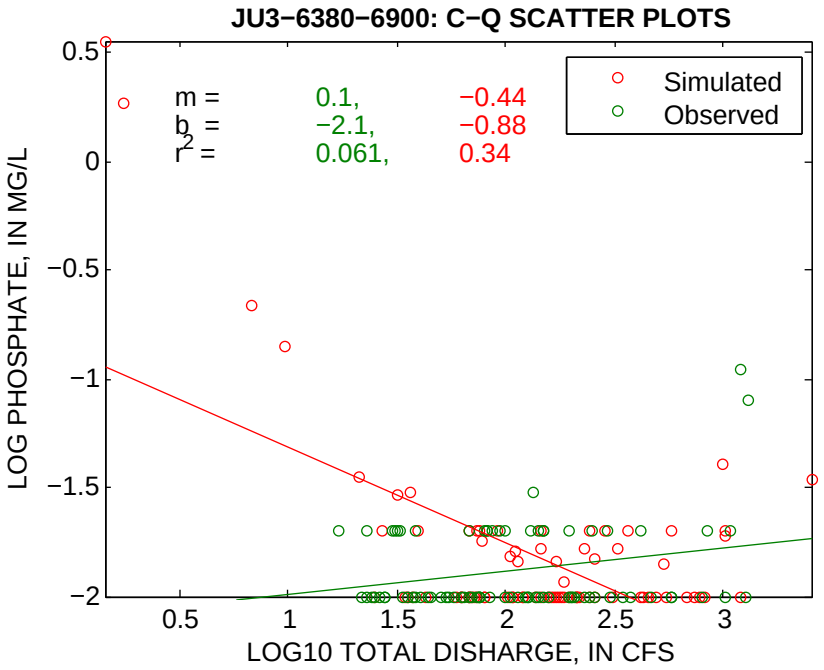
STATISTICS

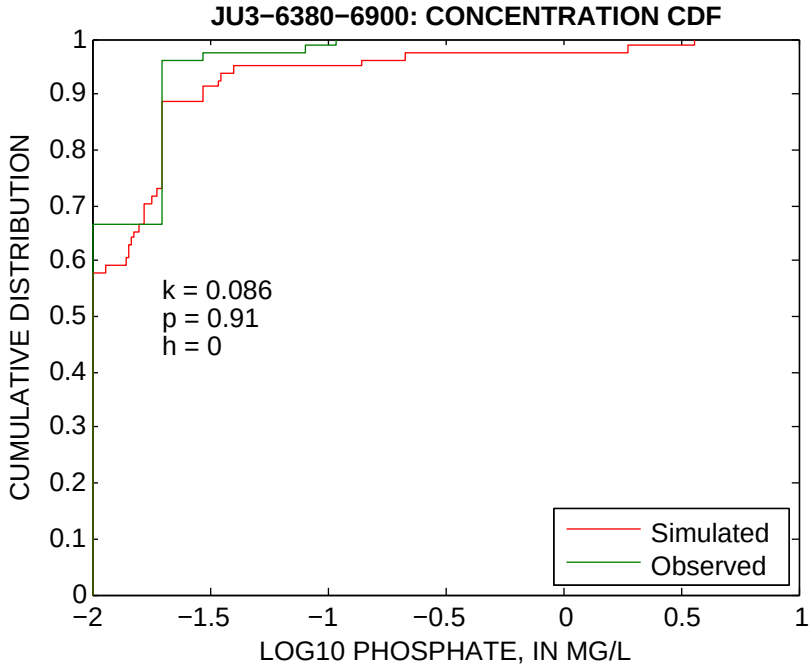
		observe	simulate
n		81	81
min		0.01	0.0027653
		-2	-2.55826
mean		0.0153086	0.102063
		-1.88091	-1.92784
media		0.01	0.0080048
		-2	-2.09665
max		0.11	3.9179
		-0.958607	0.593053
varian		0.00019271	0.28397
		0.0394223	0.294211
JB		0.001	0.001
		0.001	0.001
		ra	log
%		566.701	2.49526
err.va		0.291756	0.330577
rel.std.err		1513.92	8.38552
mod.eff		-1512.92	-7.38552

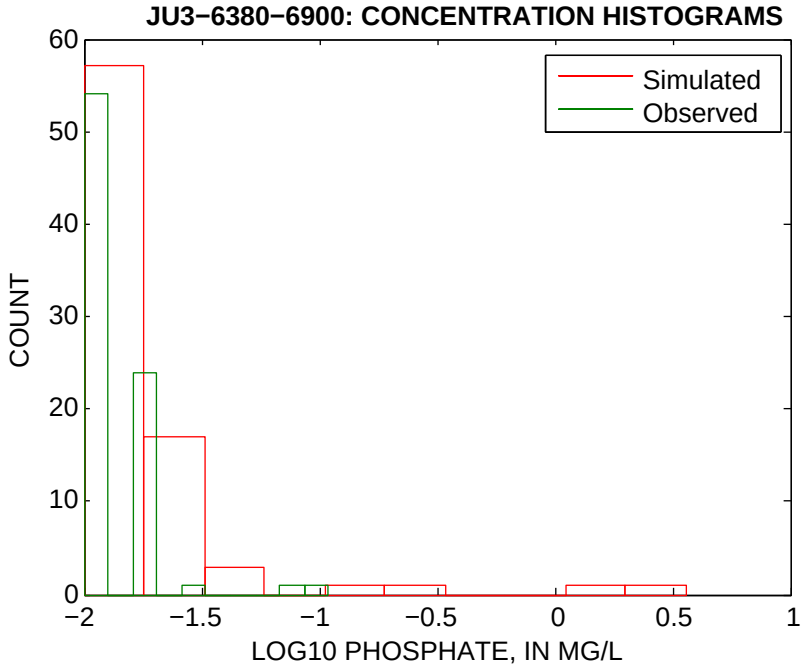
VERSION 2.1

ALL DATA
LOG10

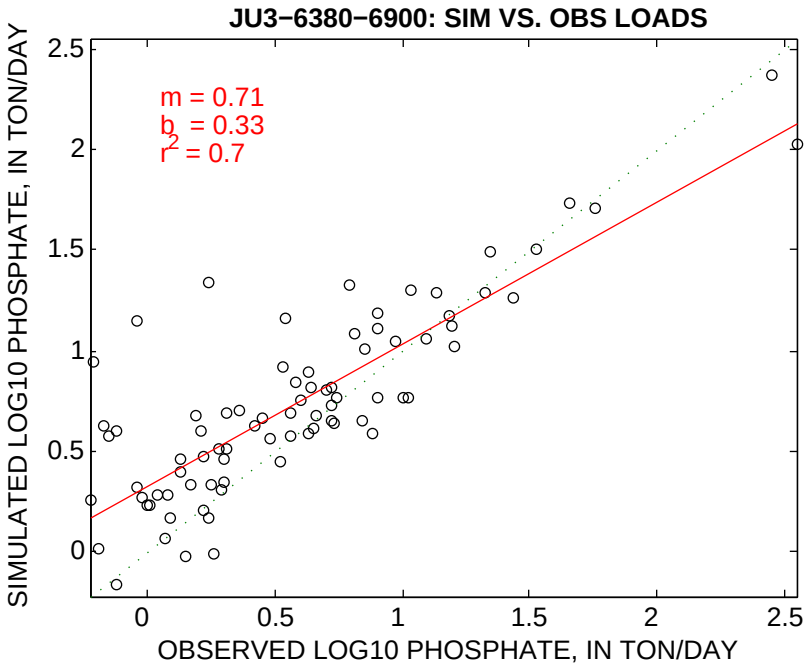


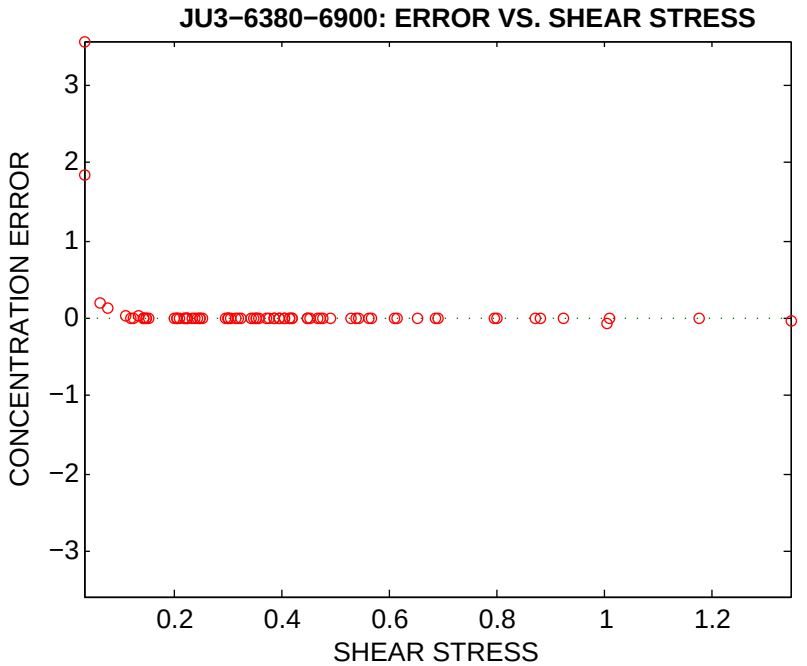


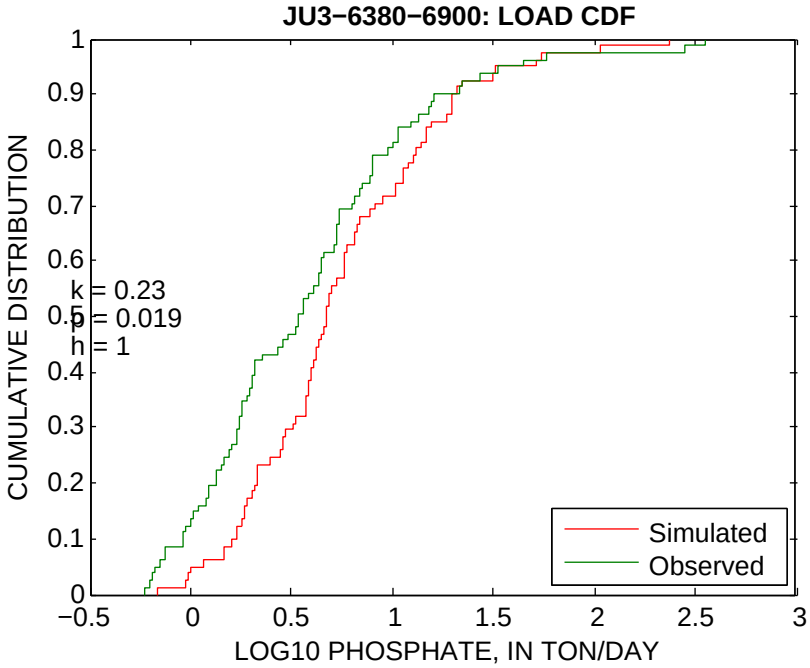


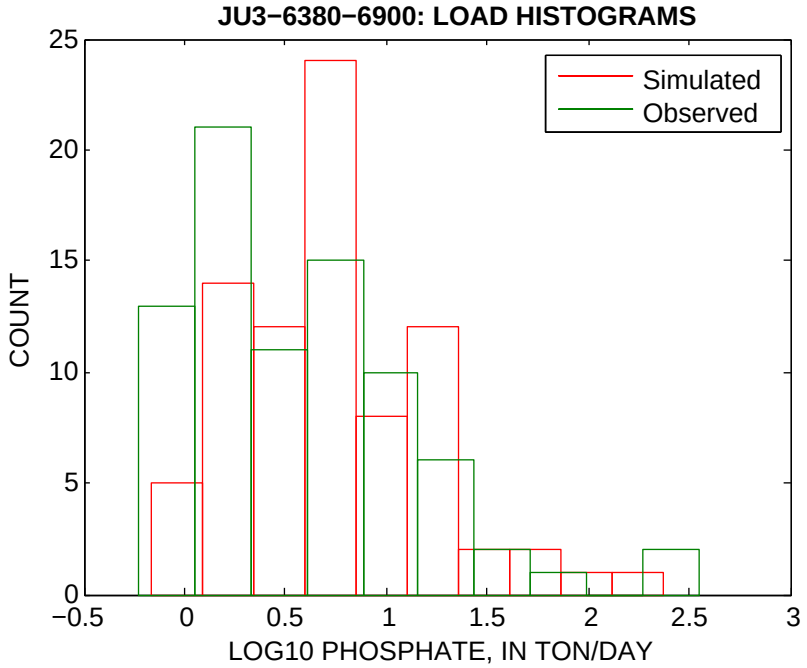


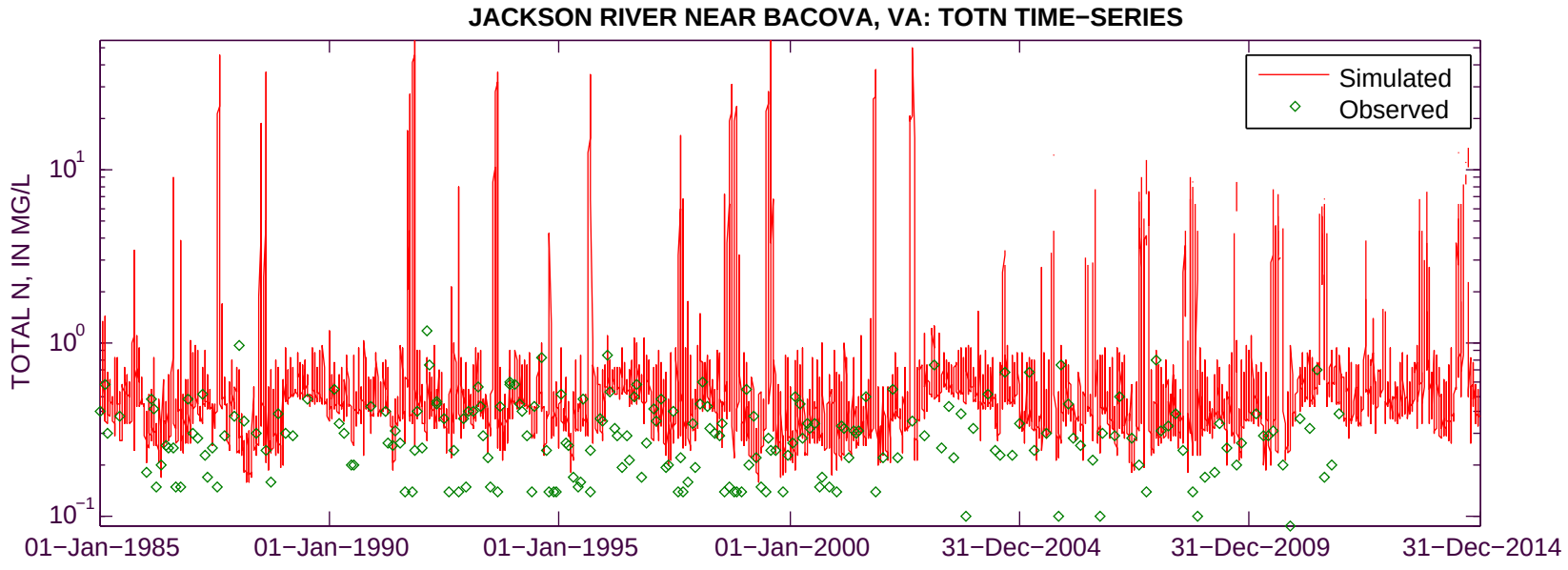
LOAD DATA
LOG10

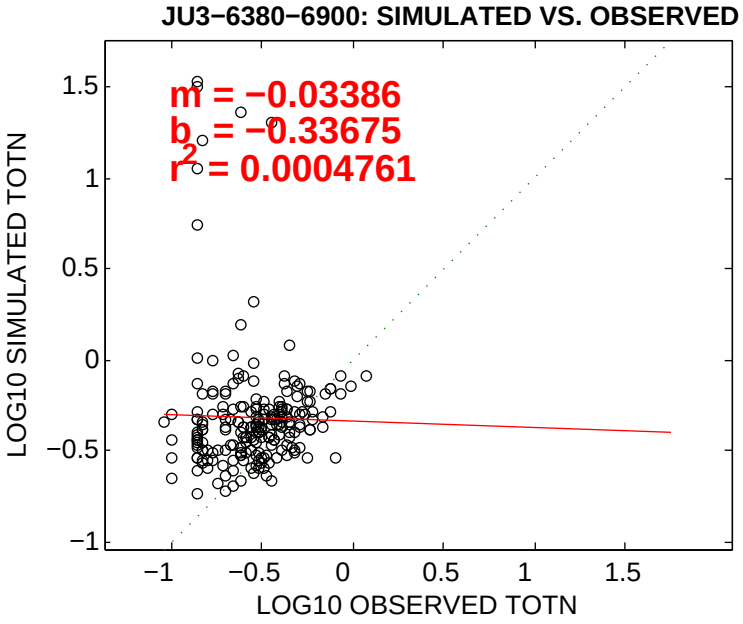


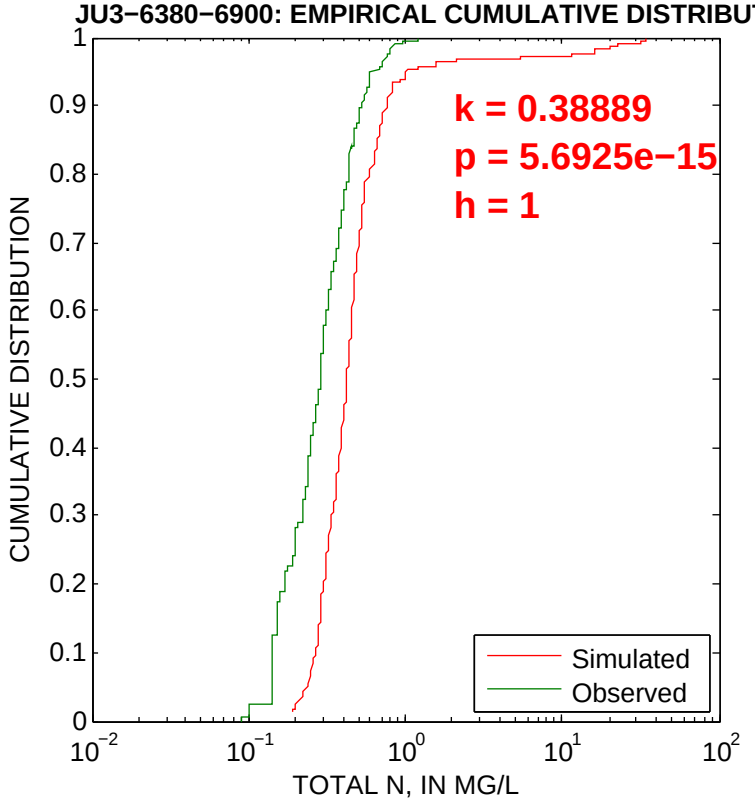












DATA SELECTION

scenario	file
P620171001WQ	TOTN.calib

plot: TOTN - total nitrogen

Dates: 1/1/1985 – 12/31/201

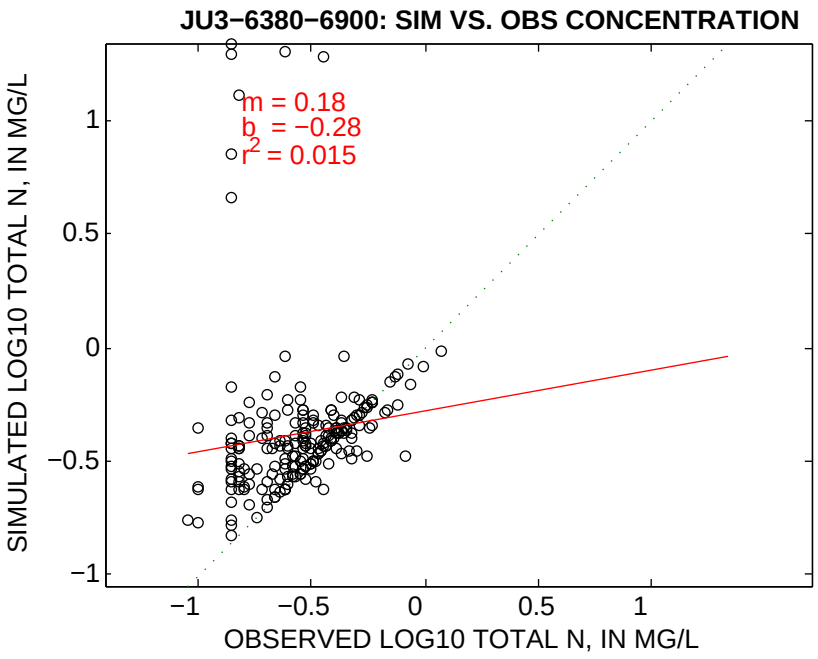
Drive	Directory	Observed
N/A	model	OBS20161101

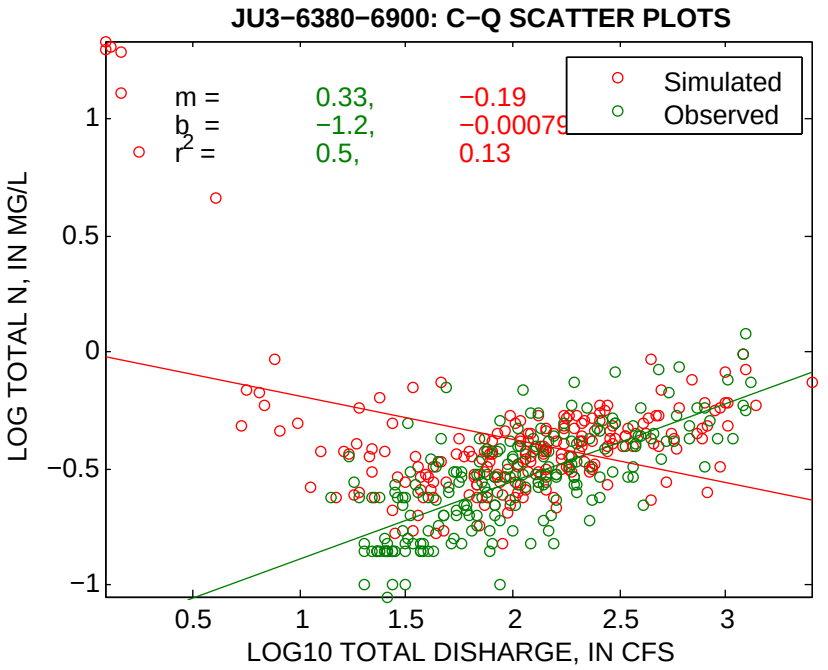
STATISTICS

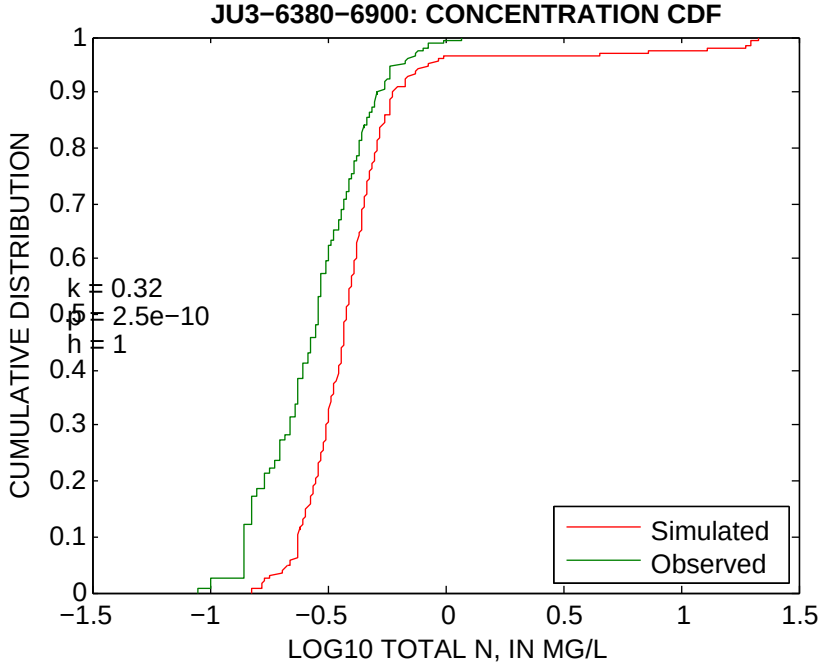
	n	216	214
		observe	simulate
min		0.09	0
		-1.04576	-0.734239
mean		0.318287	1.09991
		-0.549296	-0.318152
media		0.29	0.425765
		-0.537602	-0.369247
max		1.19	34.138
		0.075547	1.53324
varian		0.0290068	15.4793
		0.0465443	0.112084
JB		0.001	0.001
		0.399885	0.001
		ra	log
%		245.572	-42.0801
err.va		16.273	0.215459
rel.std.err		561.007	4.62912
mod.eff		-560.007	-3.62912

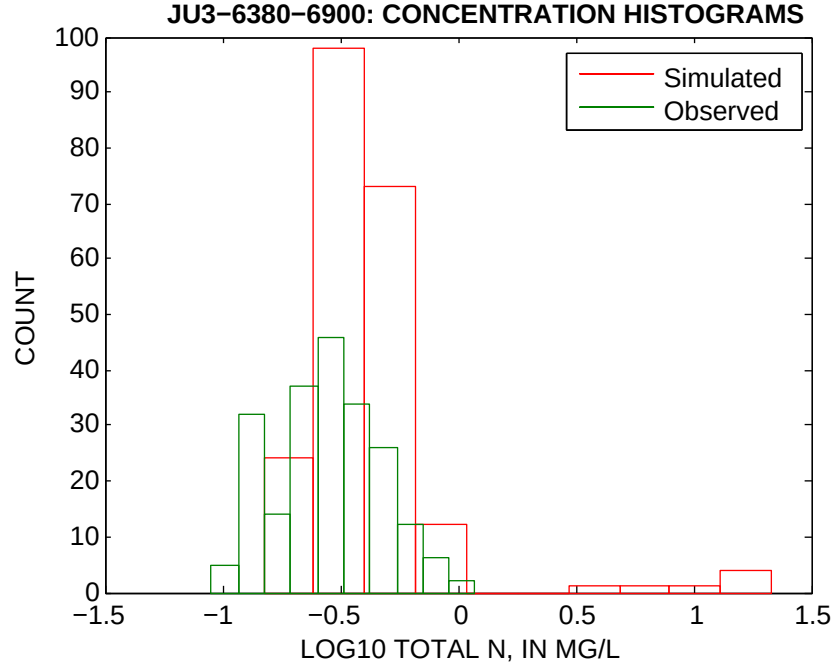
VERSION 2.1

ALL DATA
LOG10

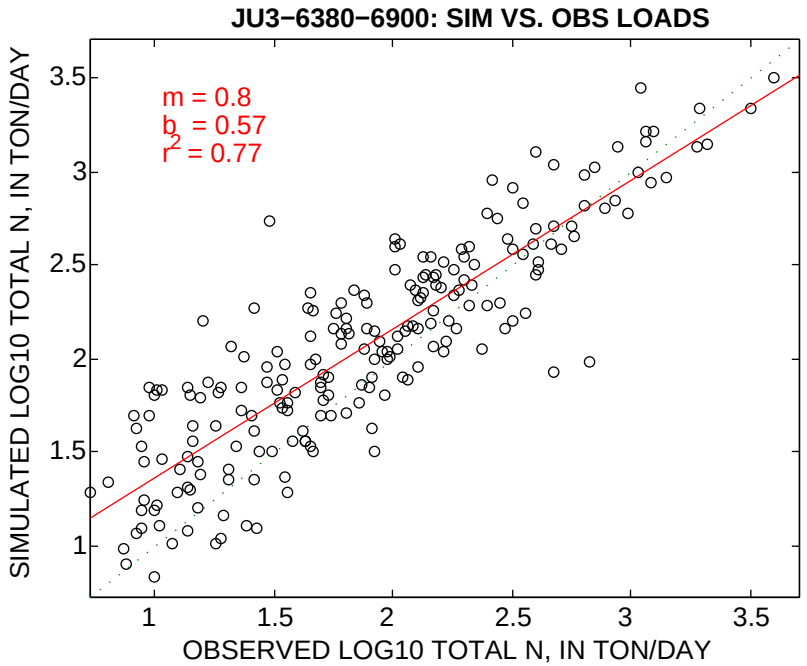


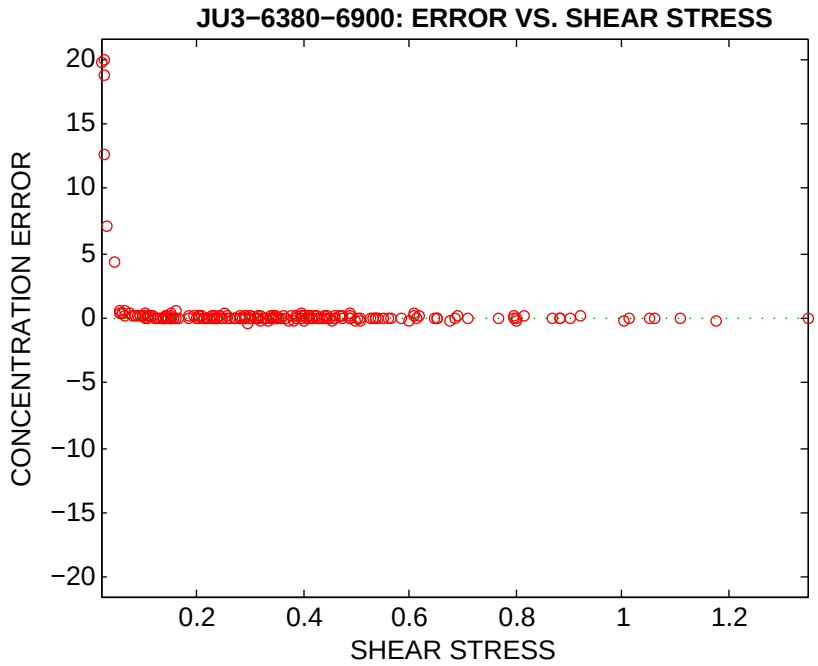


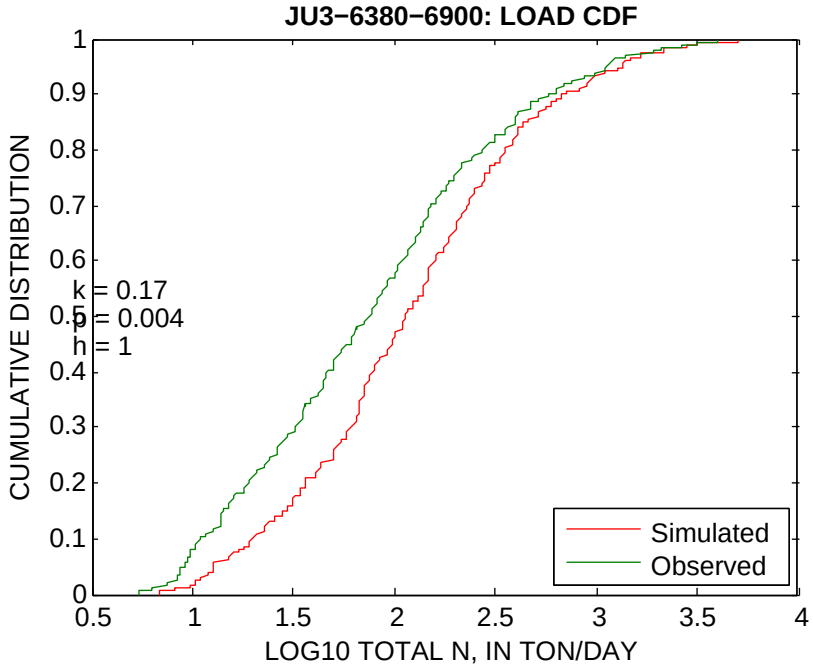


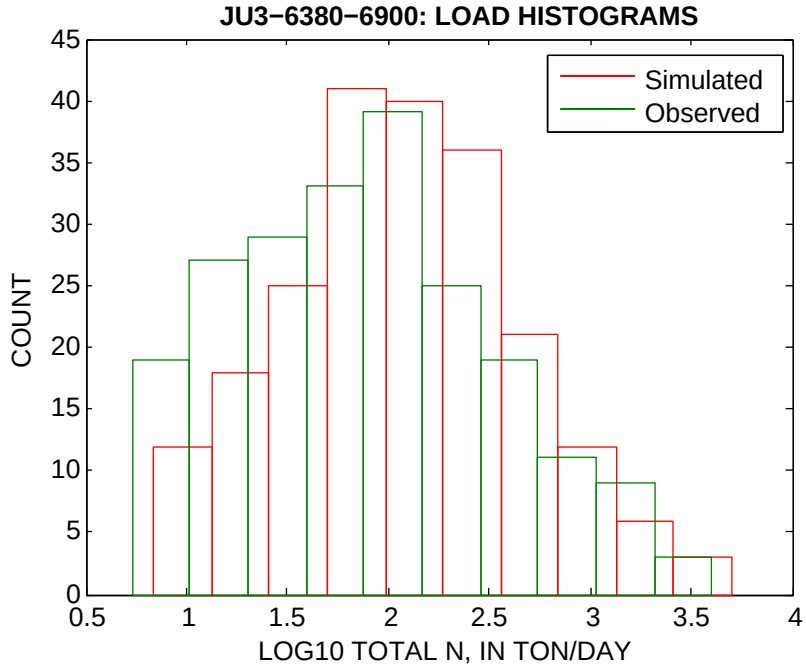


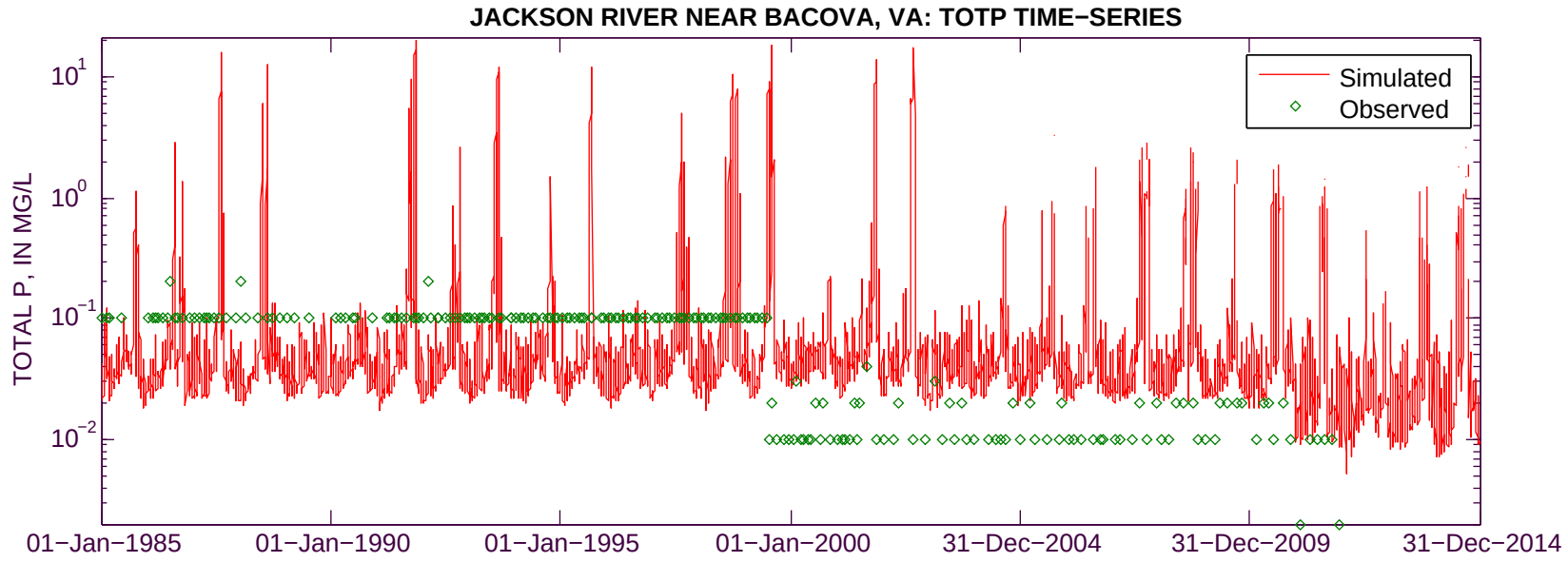
LOAD DATA
LOG10

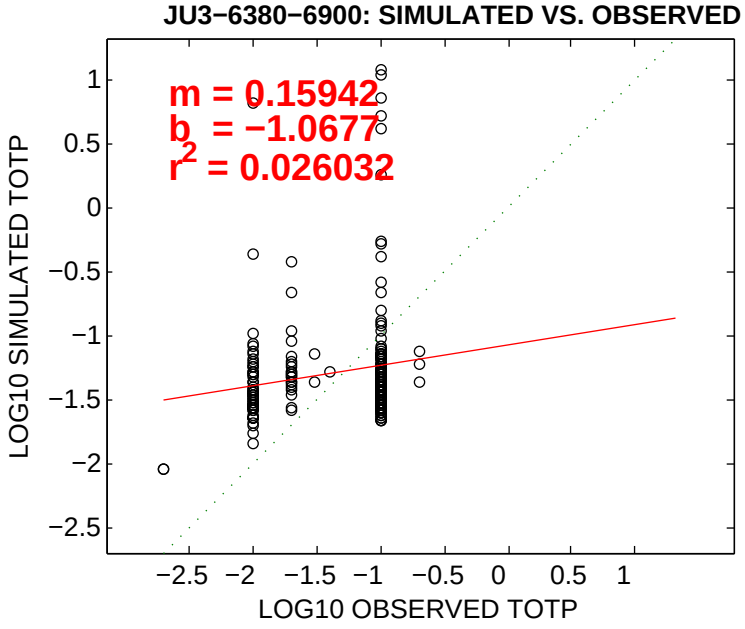


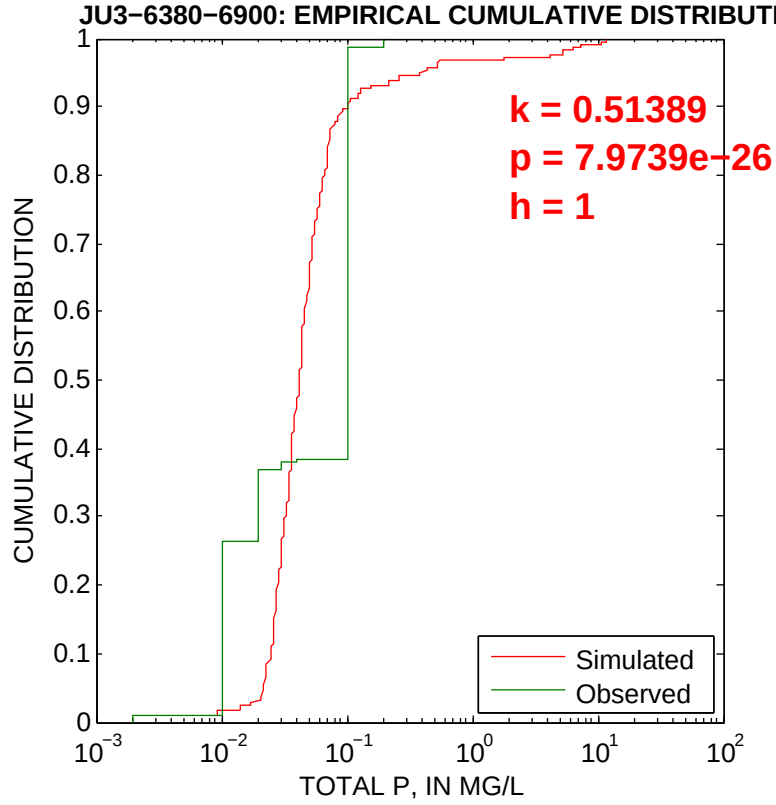












DATA SELECTION

scenario	file
P620171001WQ	TOTP.calib

plot: TOTP - total phosphorus

Dates: 1/1/1985 – 12/31/201

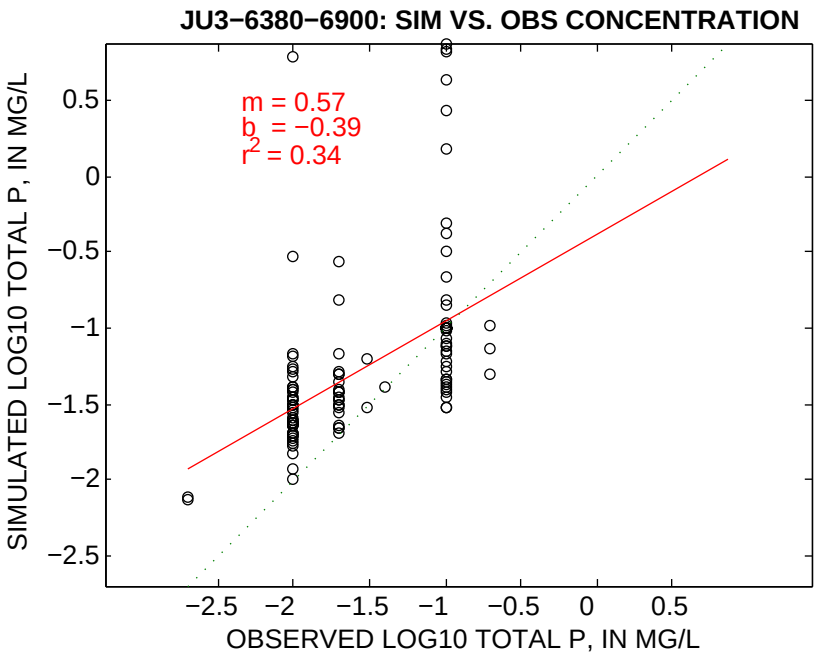
Drive	Directory	Observed
N/A	model	OBS20161101

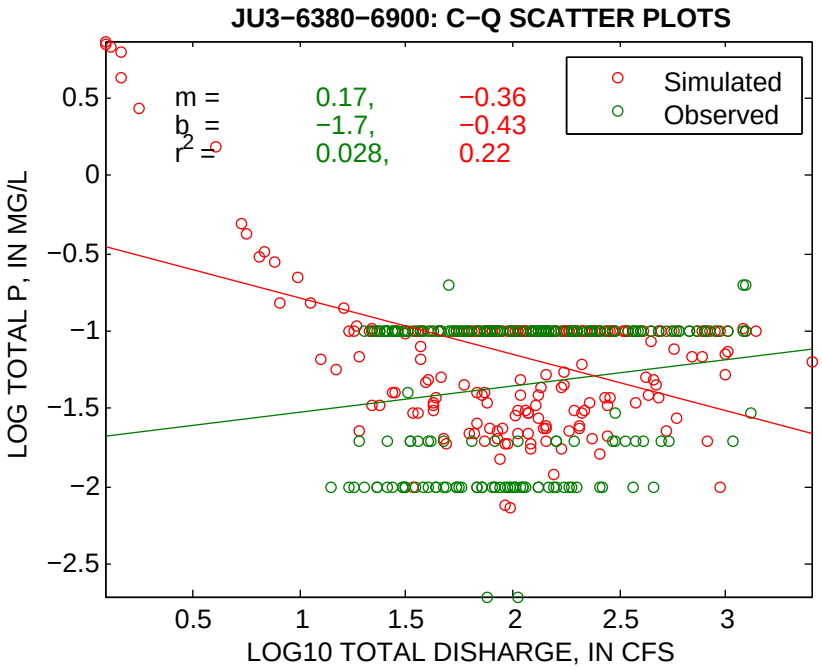
STATISTICS

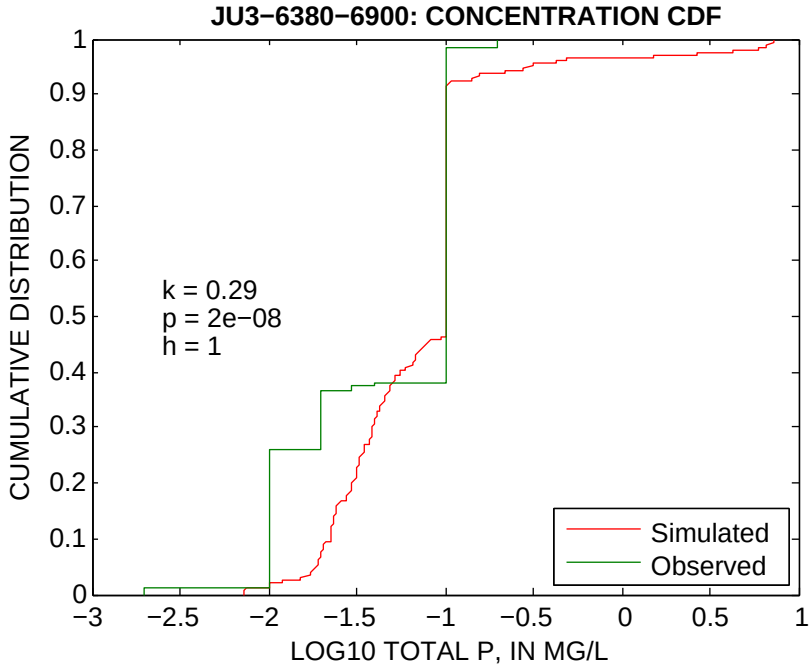
	n	216	214
		observe	simulate
min		0.002	0
		-2.69897	-2.03914
mean		0.0681204	0.277844
		-1.3426	-1.28173
media		0.1	0.0427055
		-1	-1.36851
max		0.2	11.873
		-0.69897	1.07456
varian		0.00202691	1.81946
		0.217749	0.212577
JB		0.022380	0.001
		0.001	0.001
		ra	log
%		307.872	-4.53386
err.va		1.8566	0.364622
rel.std.err		915.976	1.67451
mod.eff		-914.976	-0.674509

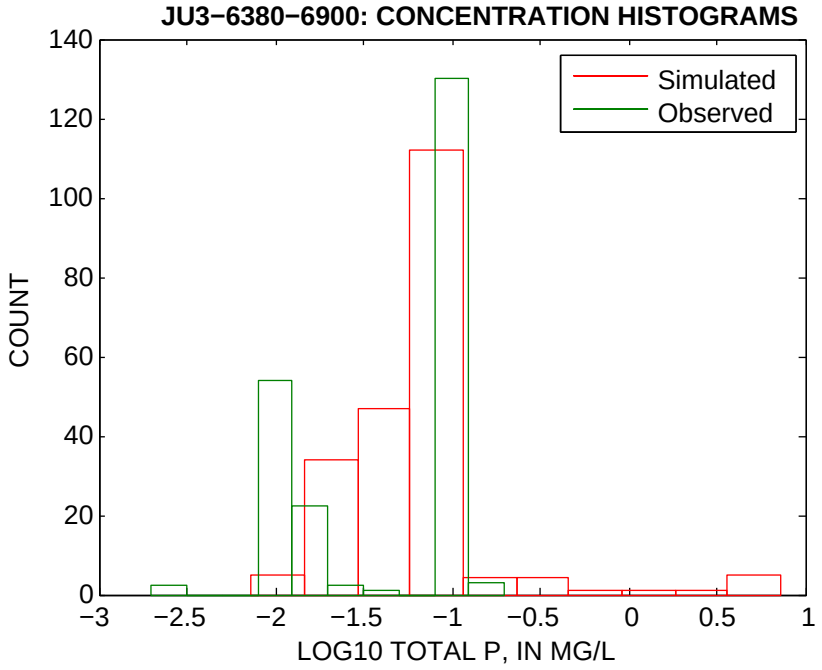
VERSION 2.1

ALL DATA
LOG10

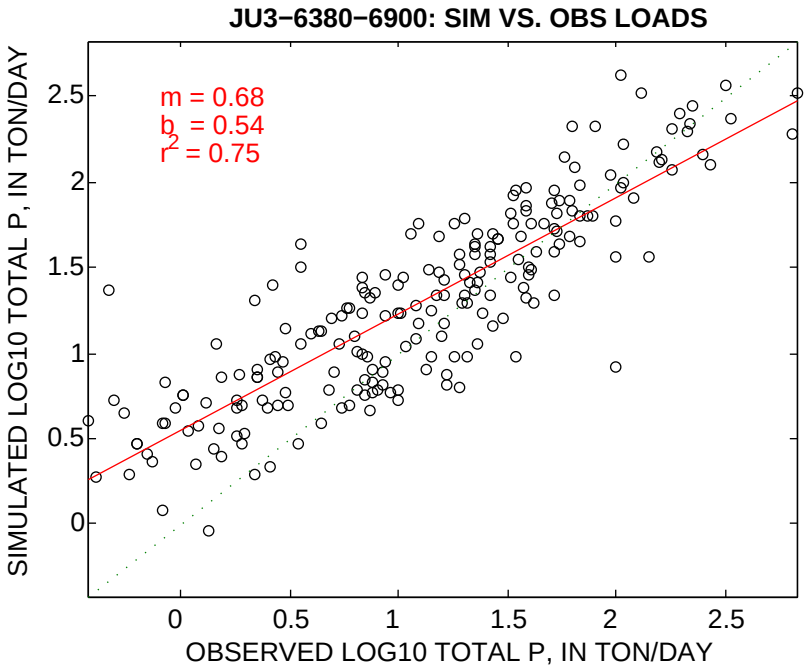


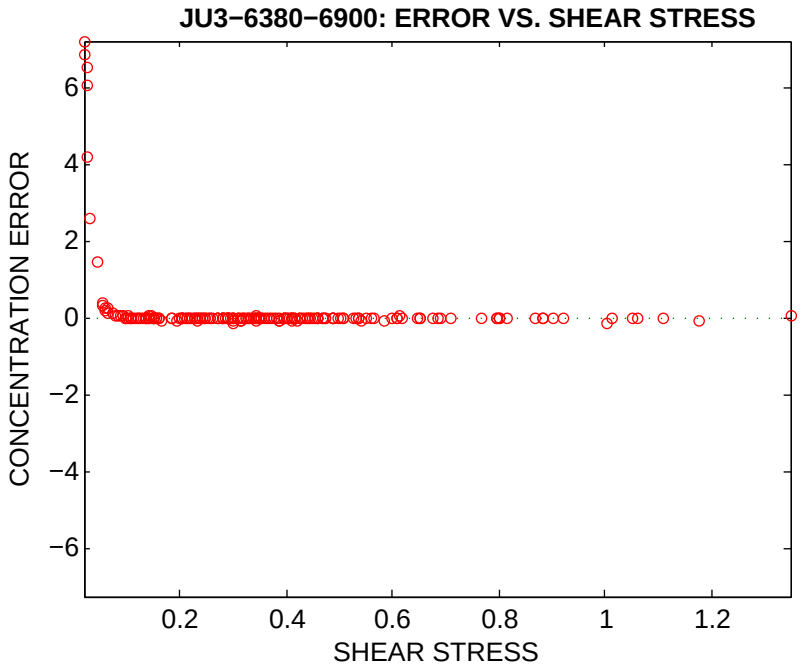


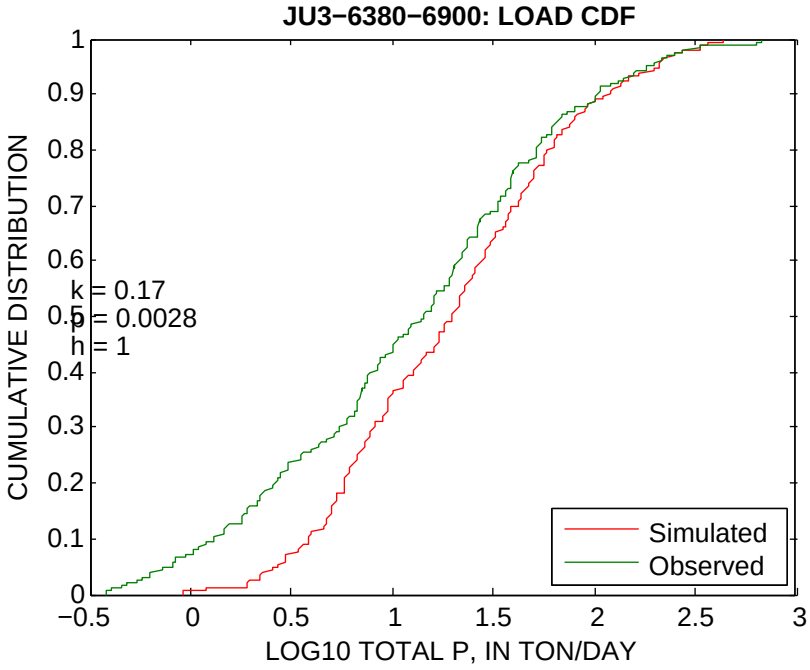


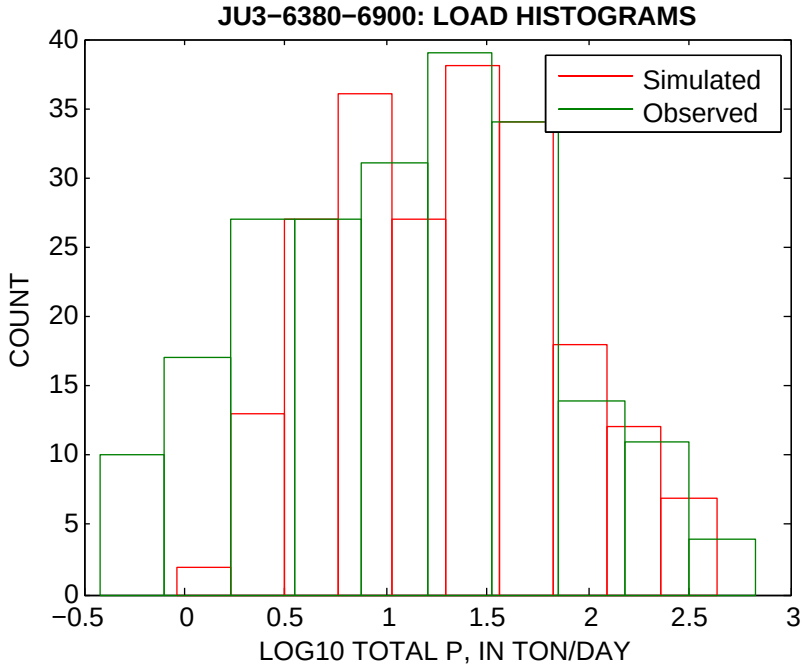


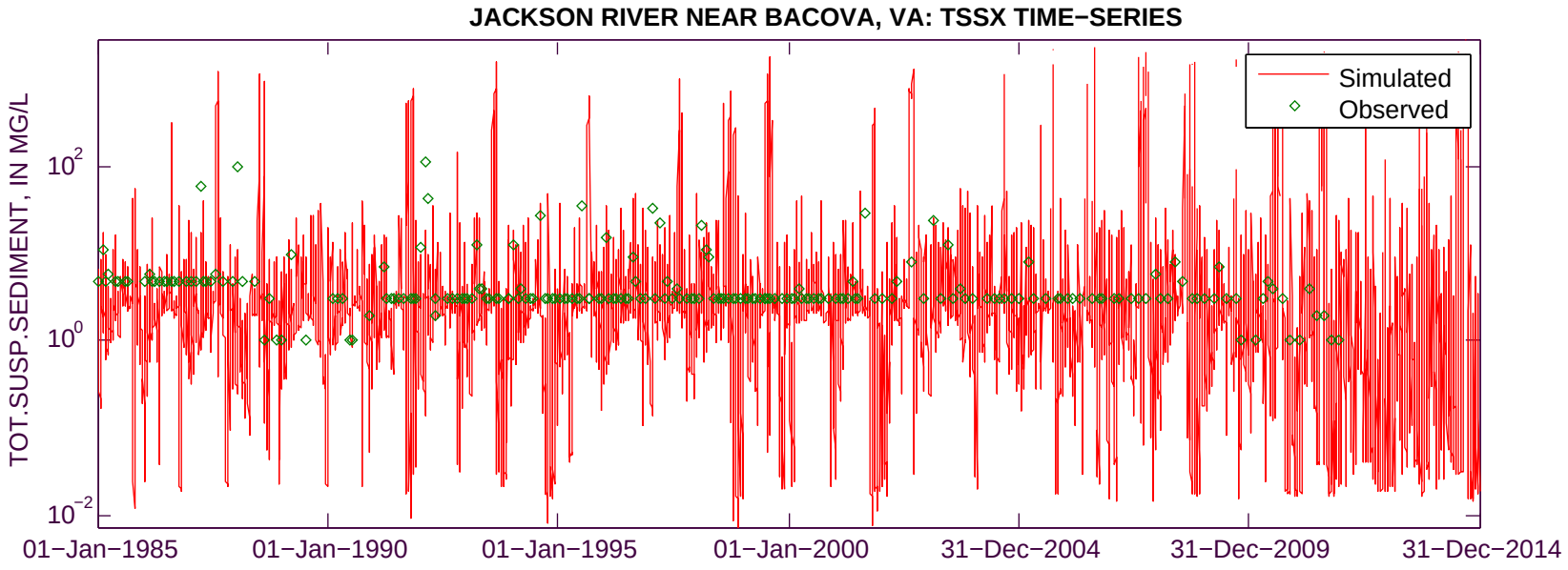
LOAD DATA
LOG10

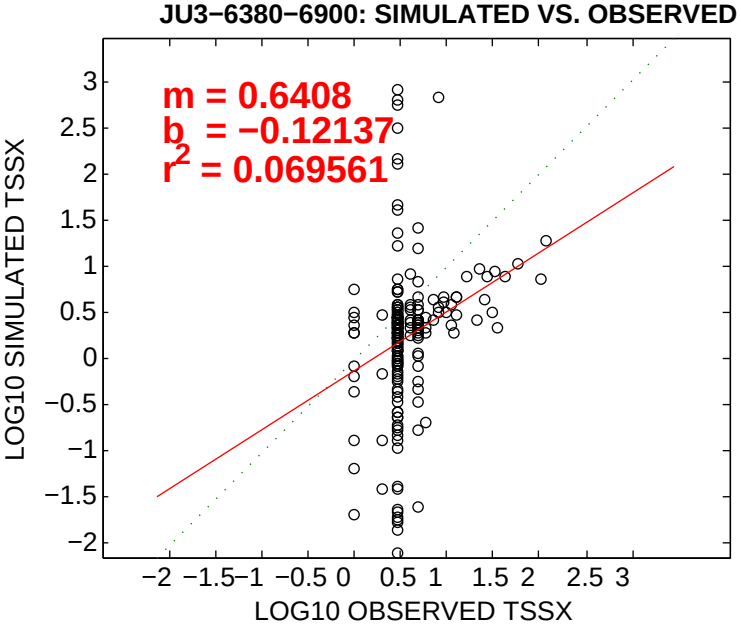


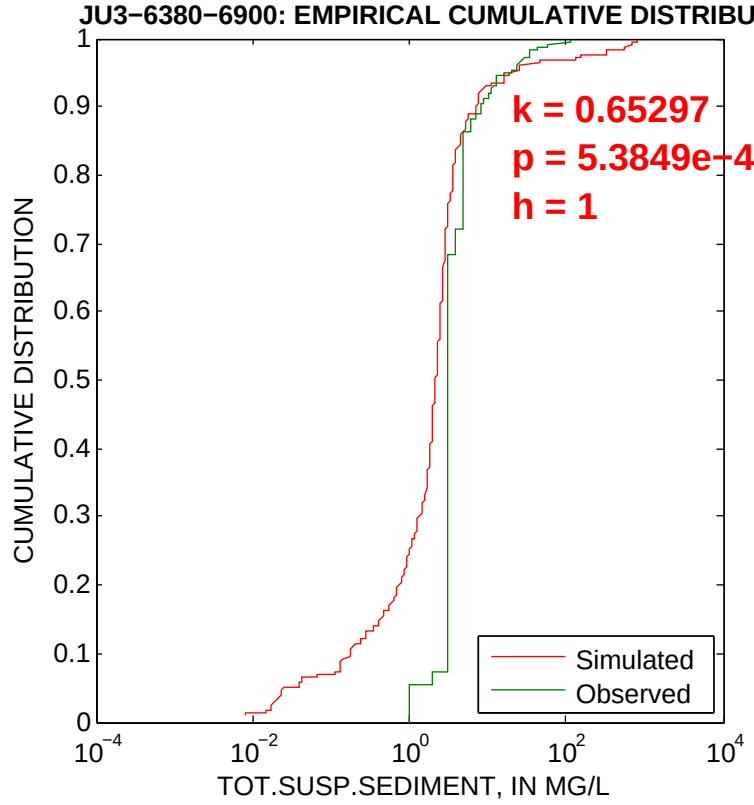












DATA SELECTION

scenario	file
P620171001WQ	TSSX.calib

plot: TSSX - total suspended ...

Dates: 1/1/1985 – 12/31/201

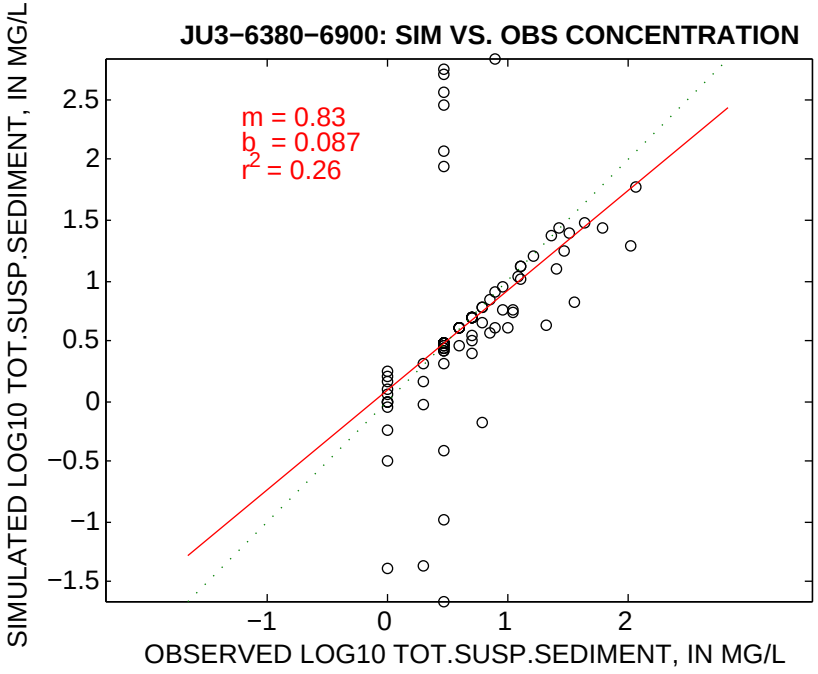
Drive	Directory	Observed
N/A	model	OBS20161101

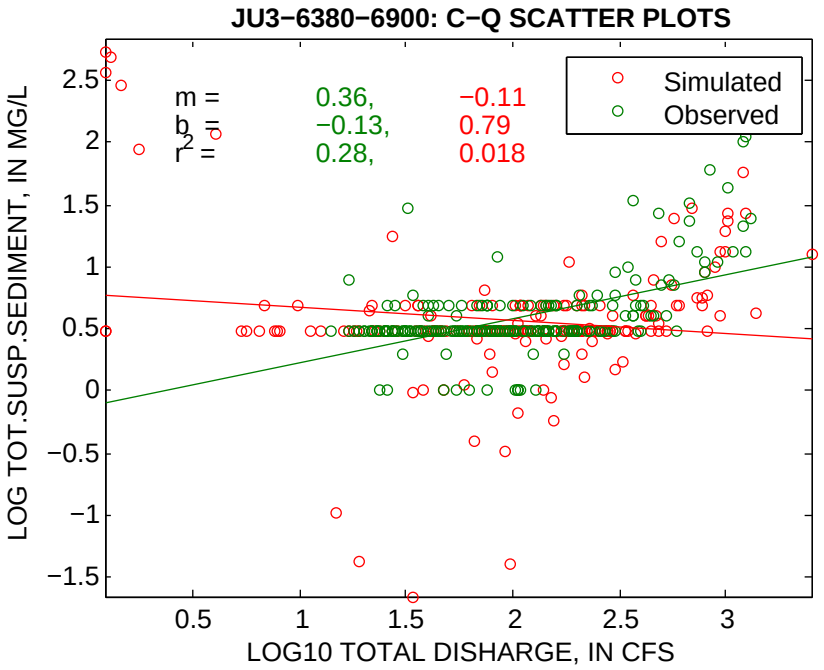
STATISTICS

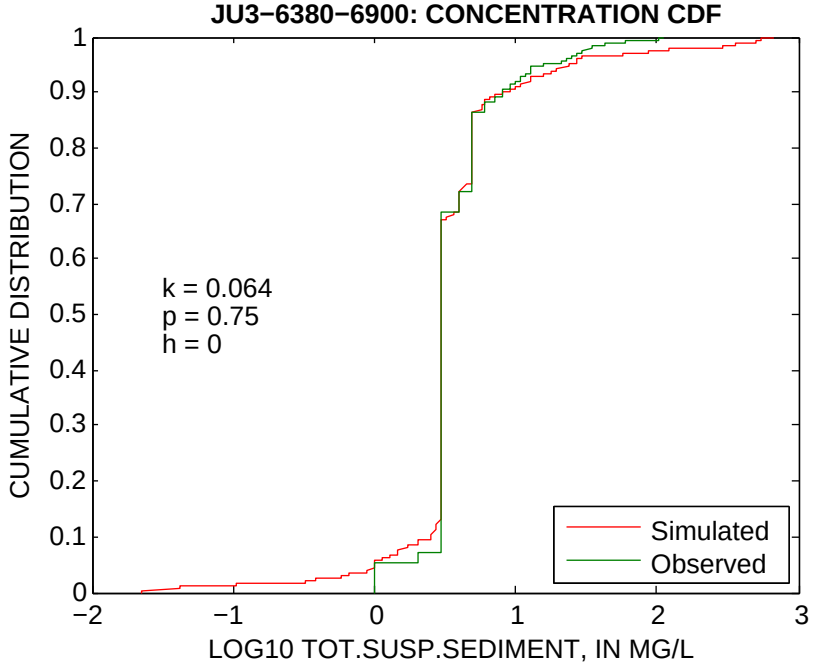
	n	observe	simulate
		219	217
min		1 0	0 -2.09845
mean		5.94064 0.582153	18.1086 0.25168
media		3 0.477121	2.1869 0.345785
max		114 2.0569	823.4 2.91561
varian		140.552 0.0977421	8942.43 0.576988
JB		0.001 0.001	0.001 0.001
		ra	log
%		204.825	-56.7674
err.va		9257.48	0.659181
rel.std.err		65.8654	6.74408
mod.eff		-64.8654	-5.74408

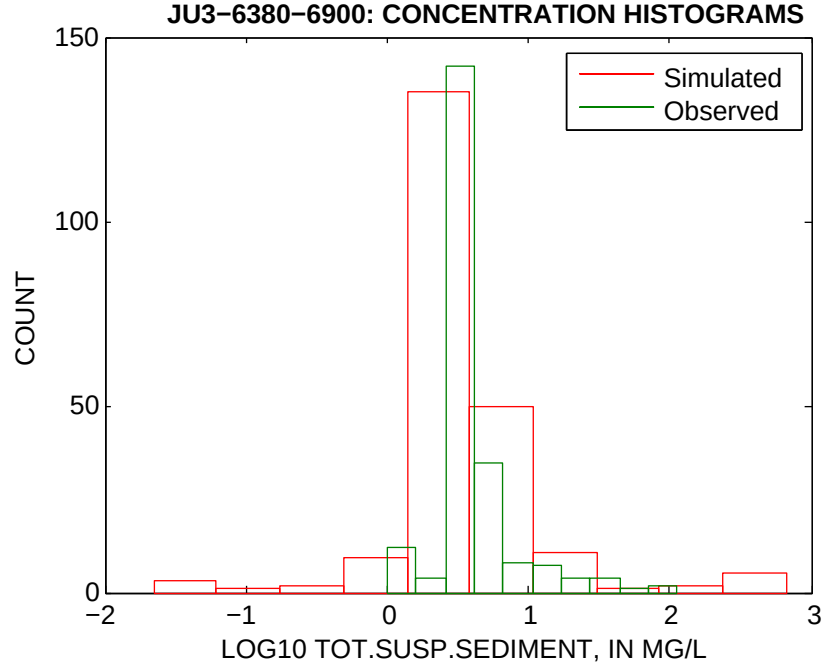
VERSION 2.1

ALL DATA
LOG10

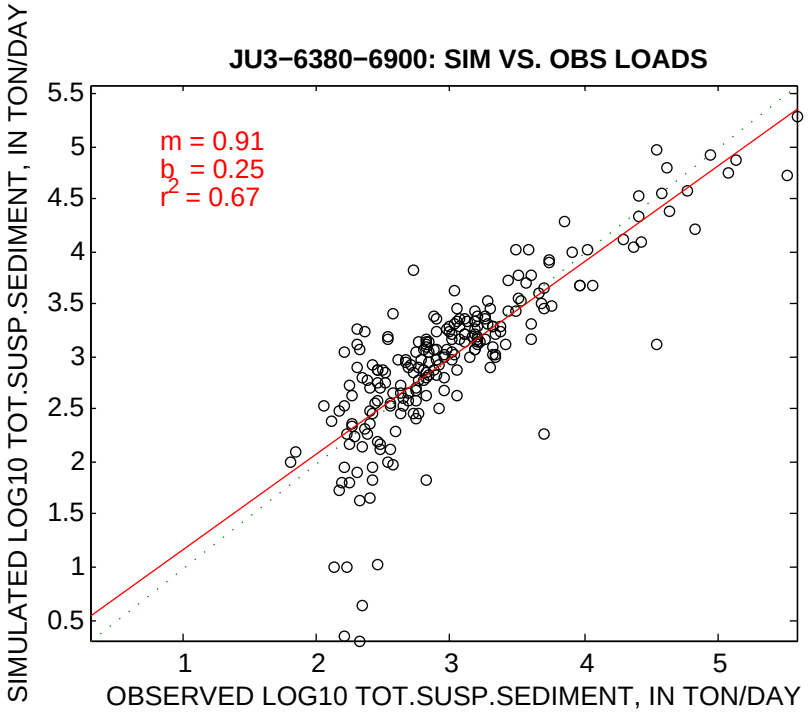


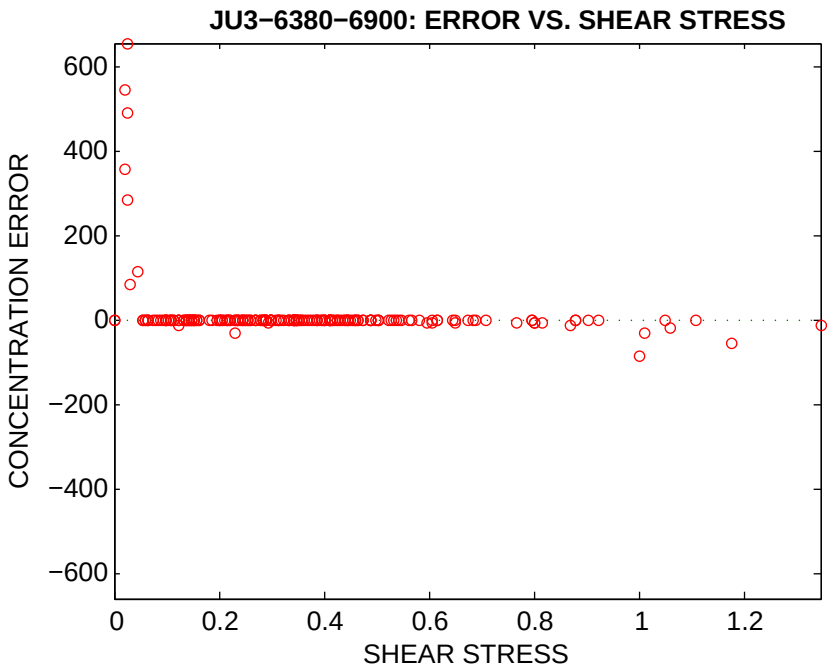


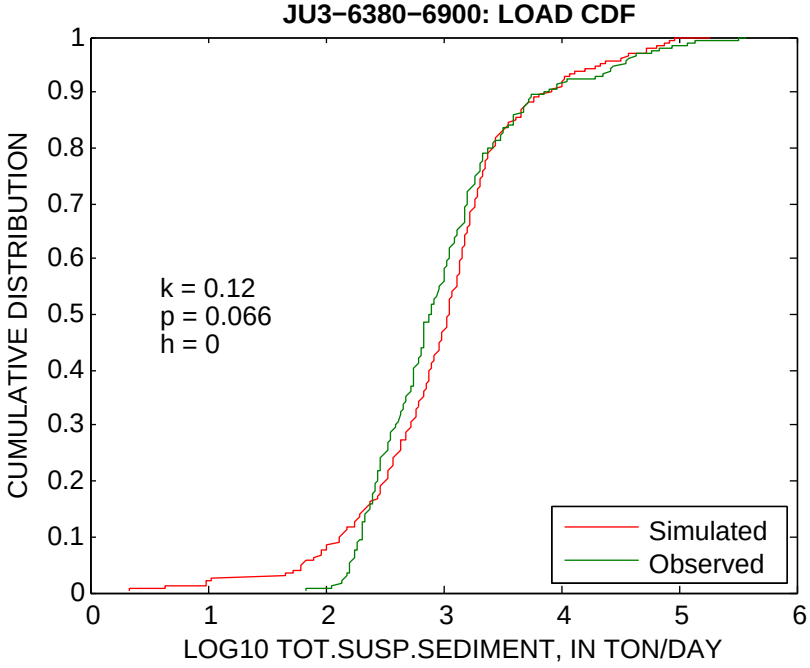


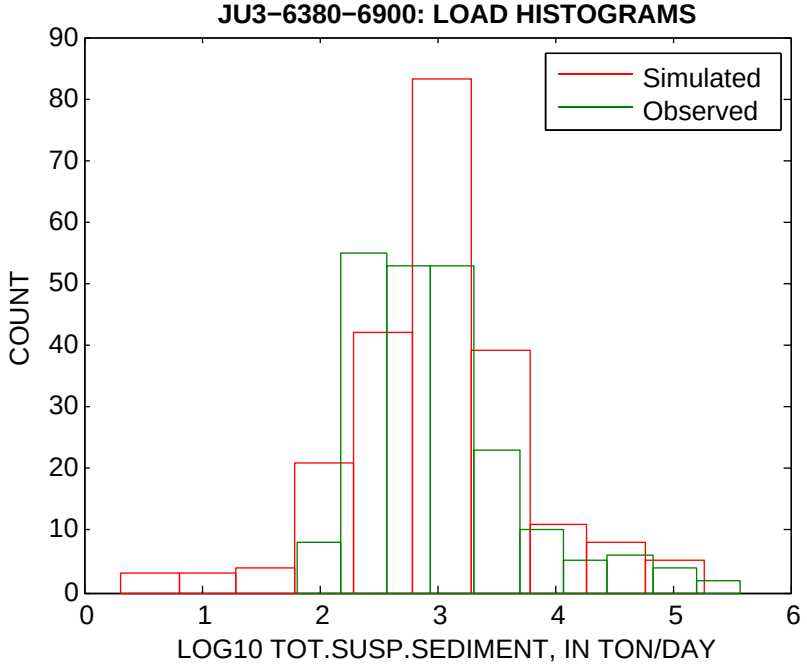


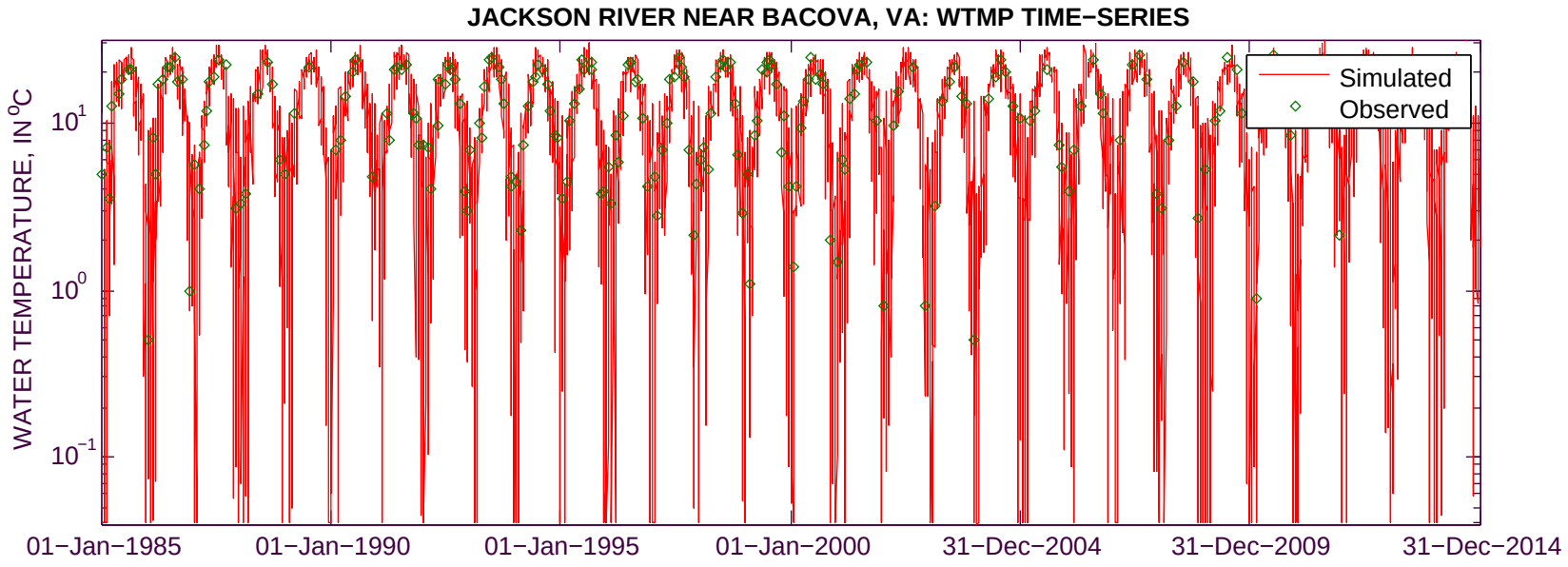
LOAD DATA
LOG10

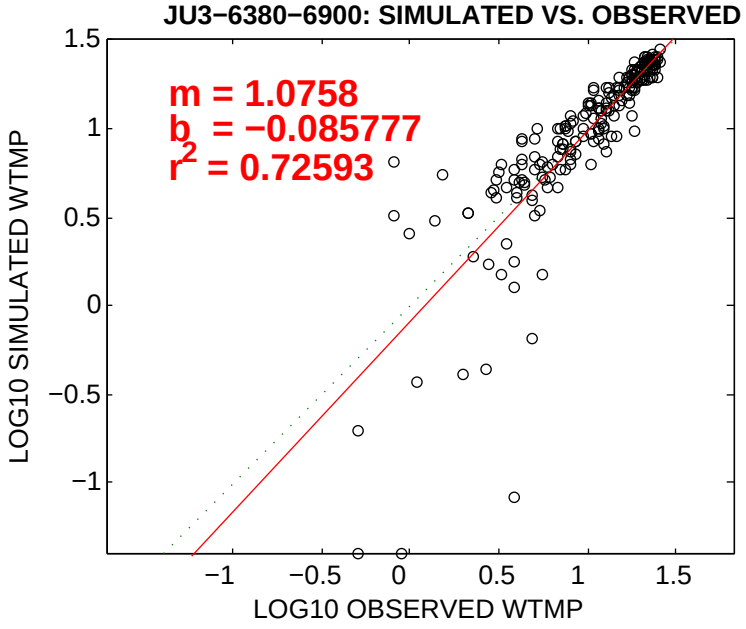


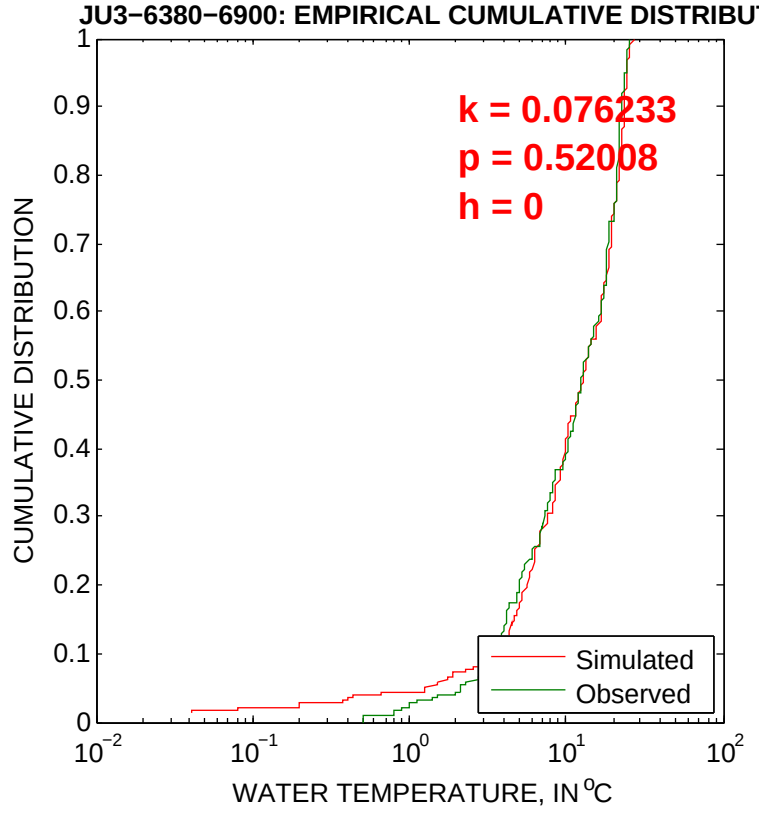












DATA SELECTION

scenario	file
P620171001WQ	WTMP.calib

plot: WTMP - water tempera...

Dates: 1/1/1985 – 12/31/201

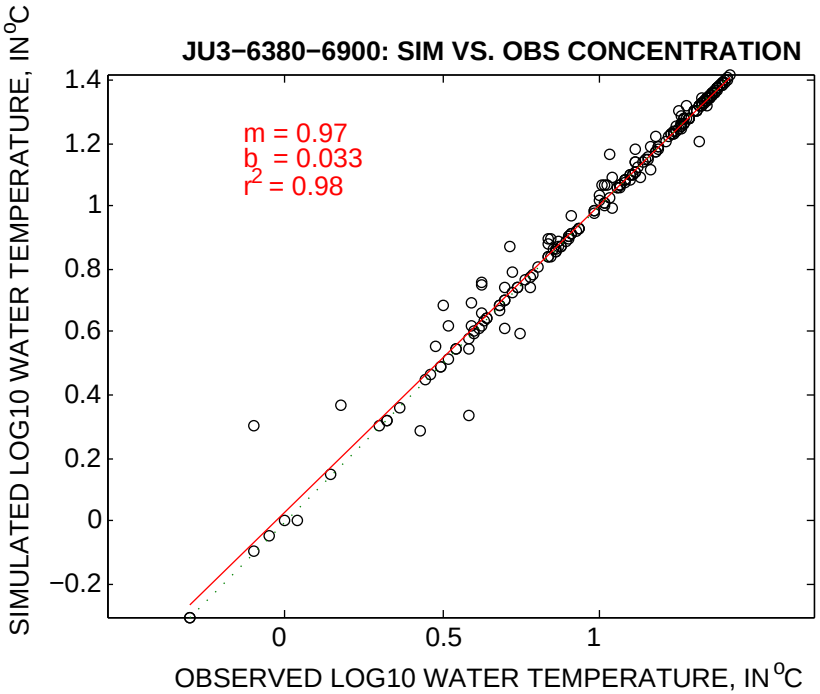
Drive	Directory	Observed
N/A	model	OBS20161101

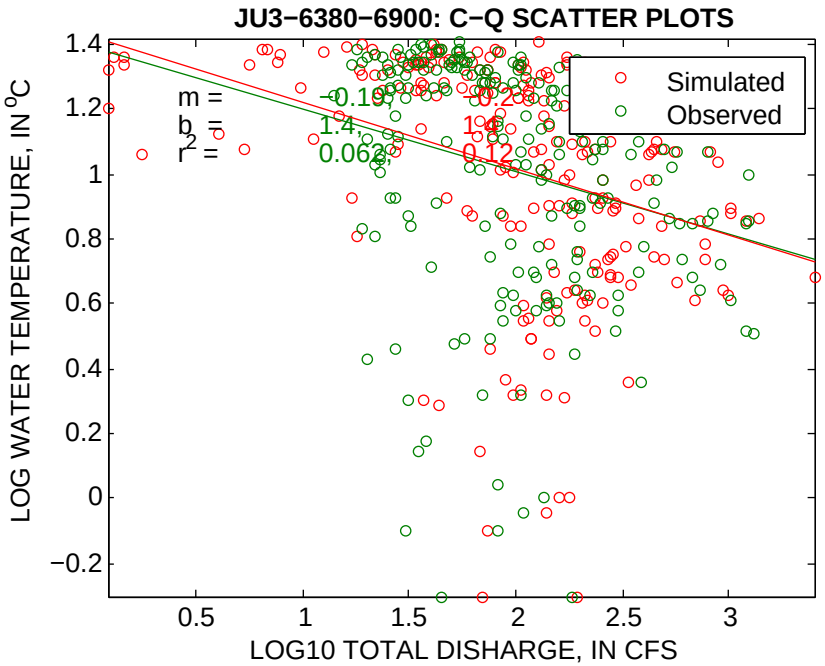
STATISTICS

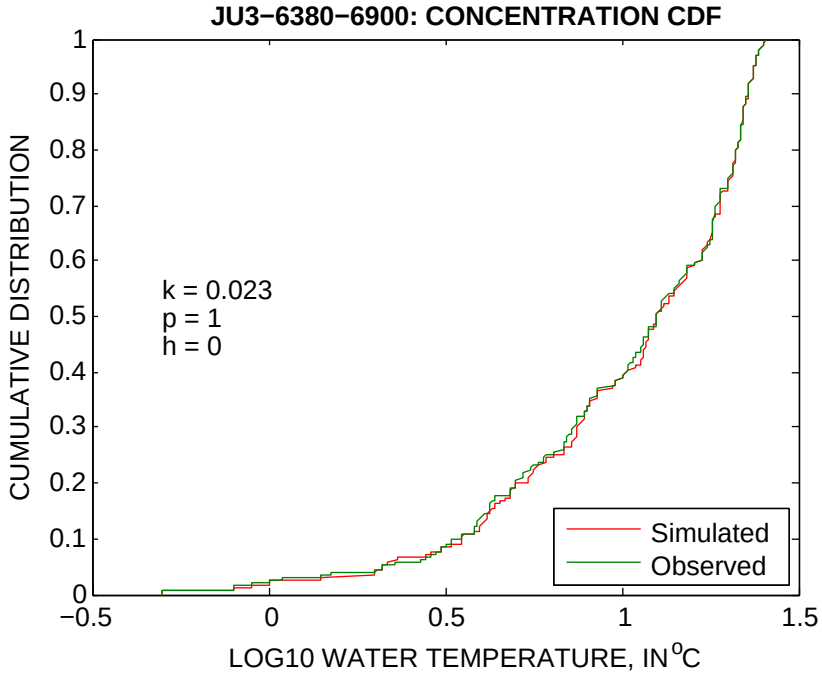
	observe	simulate
n	223	221
min	0.5 -0.30103	0 -1.39715
mean	13.084 1.00523	13.3021 0.995628
media	12.6 1.10037	12.791 1.109
max	25.8 1.41162	27.786 1.44383
varian	54.9556 0.1302	58.9389 0.207572
JB	0.003526 0.001	0.004833 0.001
	ra	log
%	1.66667	-0.954758
err.va	8.96417	0.0577303
rel.std.err	0.163117	0.443395
mod.eff	0.836883	0.556605

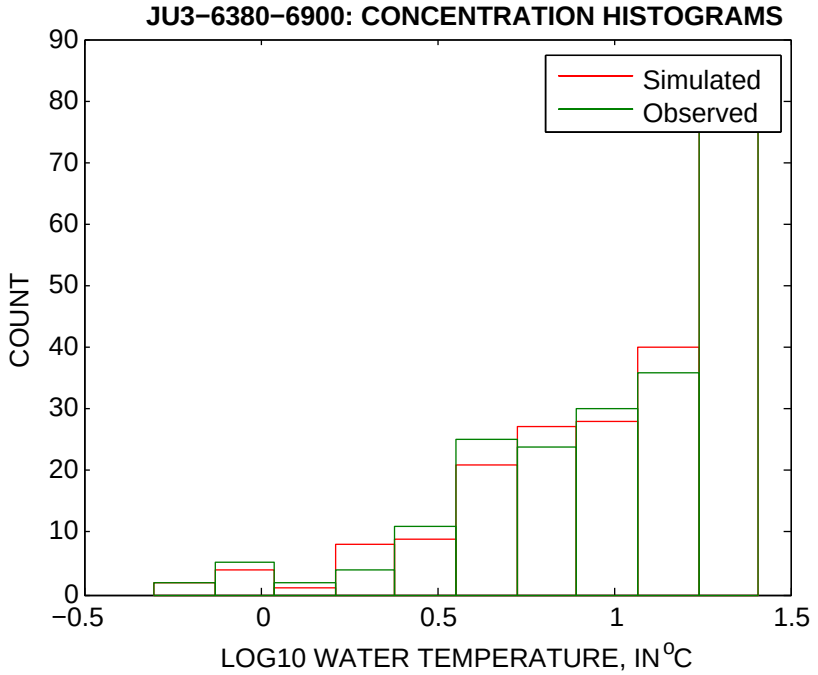
VERSION 2.1

ALL DATA
LOG10

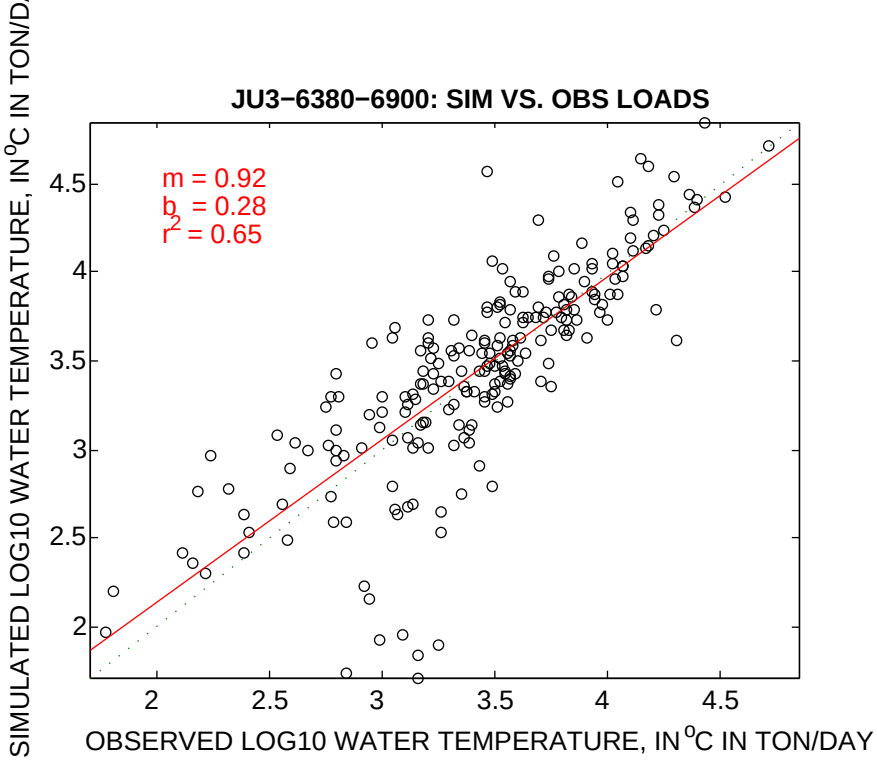


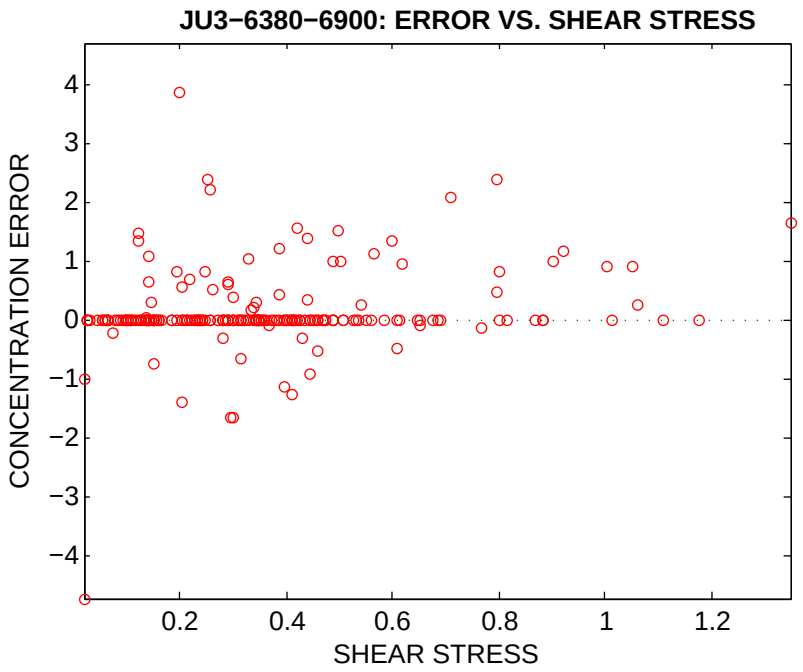


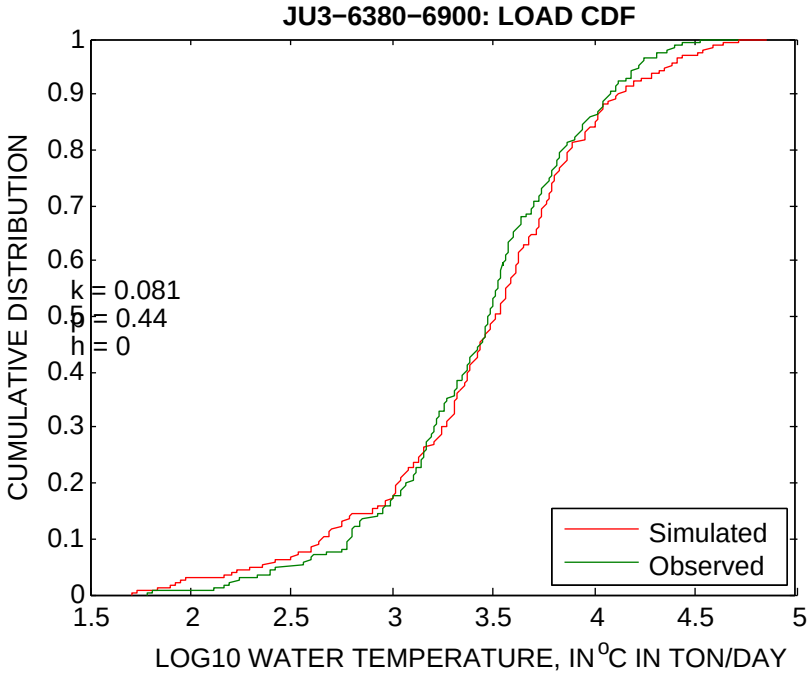


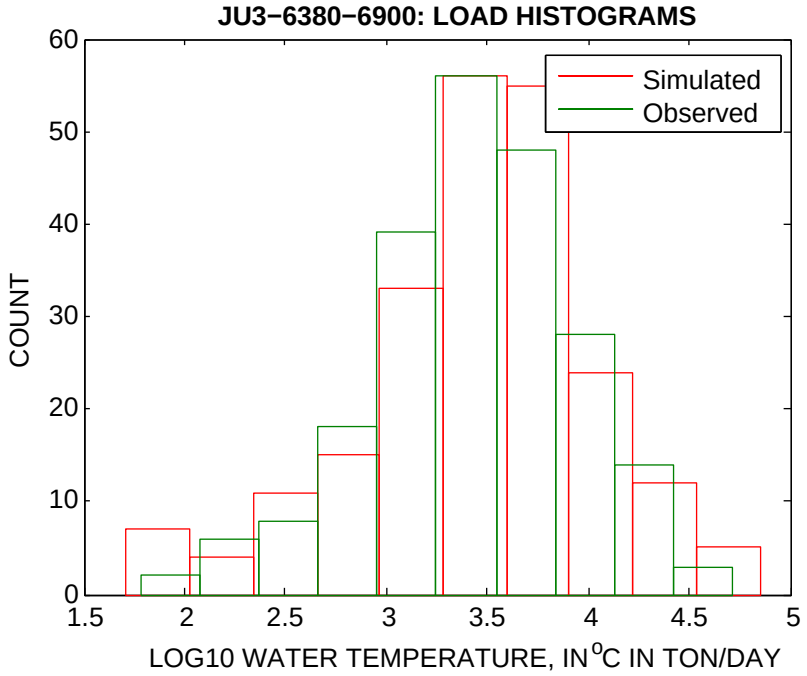


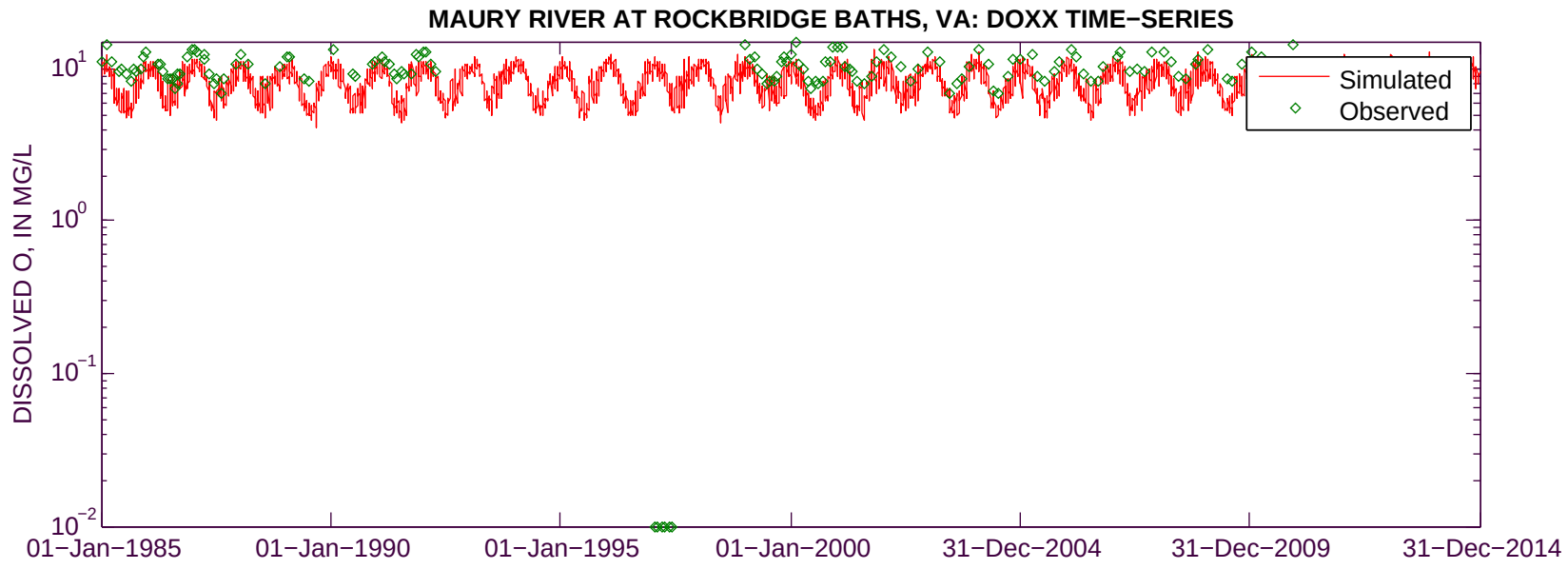
LOAD DATA
LOG10

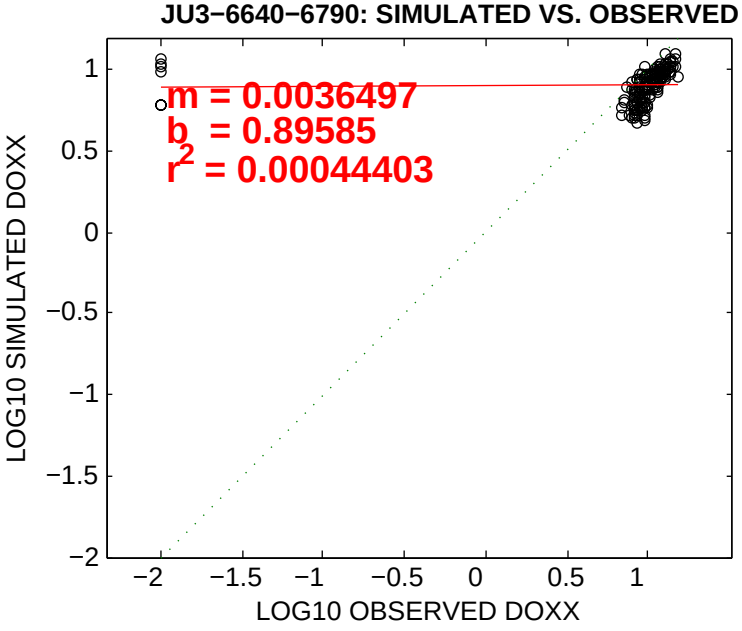


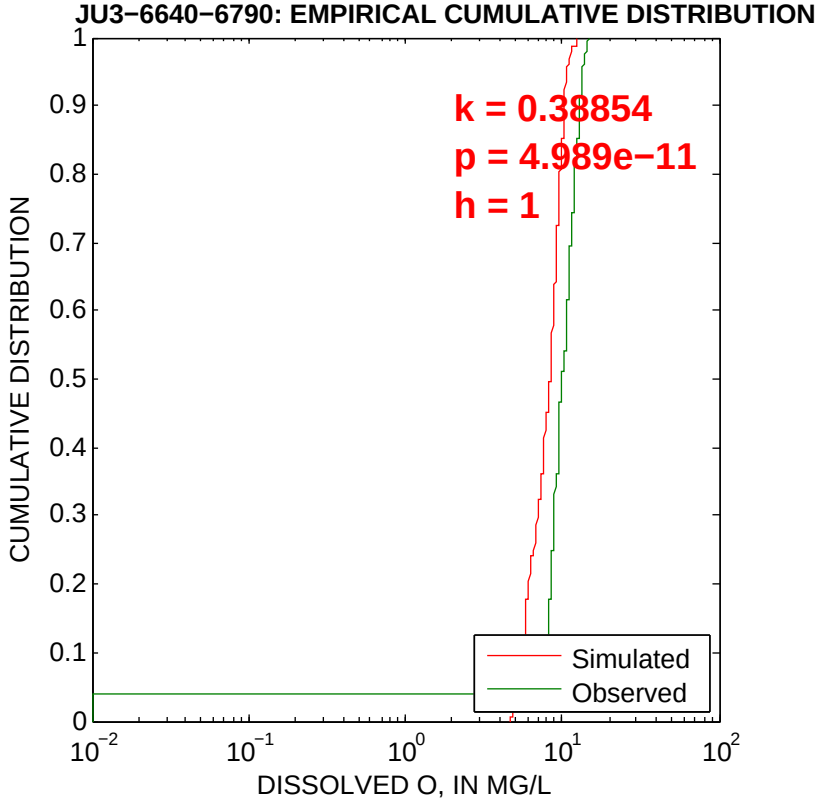












DATA SELECTION

scenario: P620171001WQ | file: DOXX.calib

plot: DOXX - dissolved oxygen

Dates: 1/1/1985 – 12/31/201

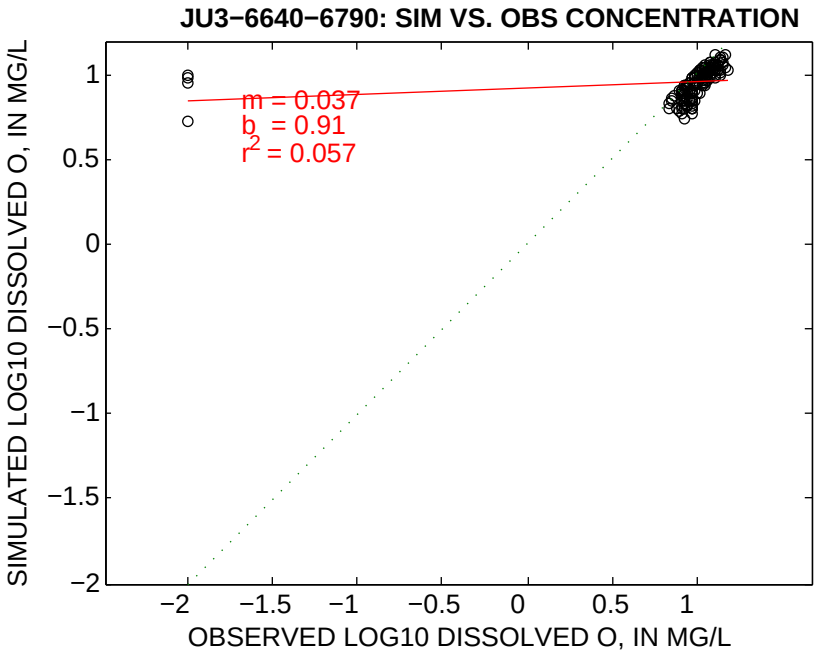
Drive: N/A | Directory: model | Observed: OBS20161101

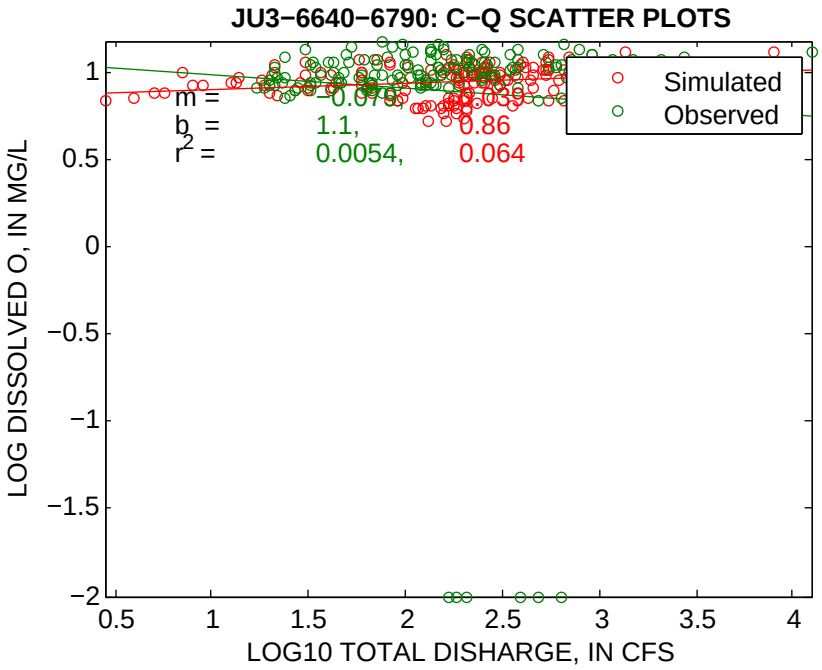
STATISTICS

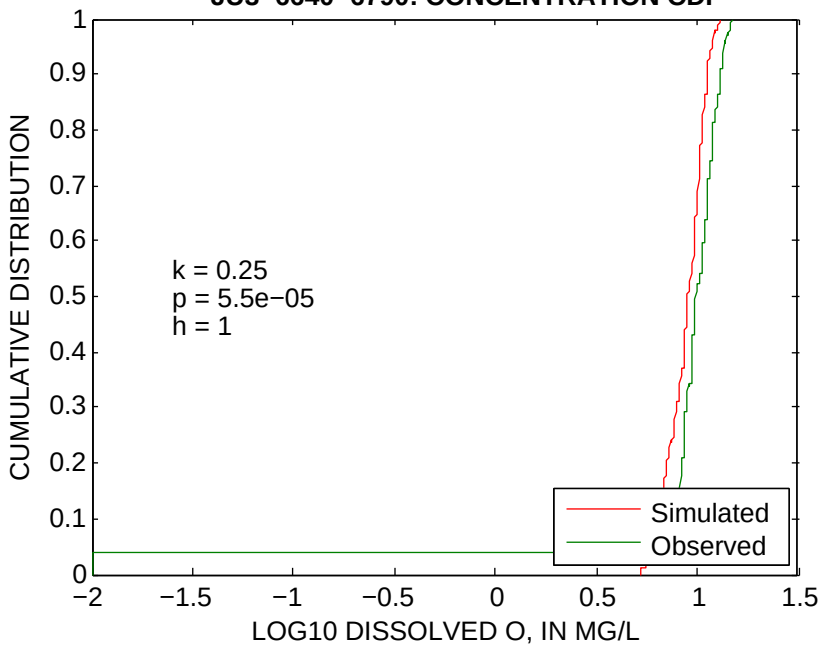
n	157	157
	observe	simulate
min	0.01	4.6452
	-2	0.667004
mean	9.98478	8.136
	0.894086	0.899108
media	9.9	8.3964
	0.995635	0.924093
max	15.2	12.5
	1.18184	1.09691
varian	7.44626	3.26835
	0.340963	0.0102285
JB	0.001	0.070256
	0.001	0.021297
	ra	log
%	-18.5159	0.561736
err.va	9.6698	0.348728
rel.std.err	1.29861	1.02277
mod.eff	-0.298612	-0.022774

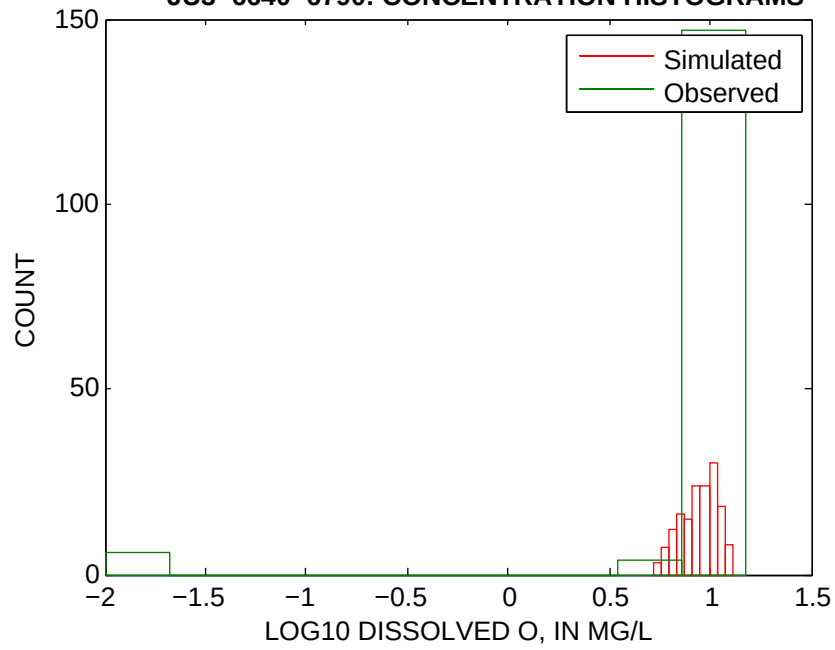
VERSION 2.1

ALL DATA
LOG10

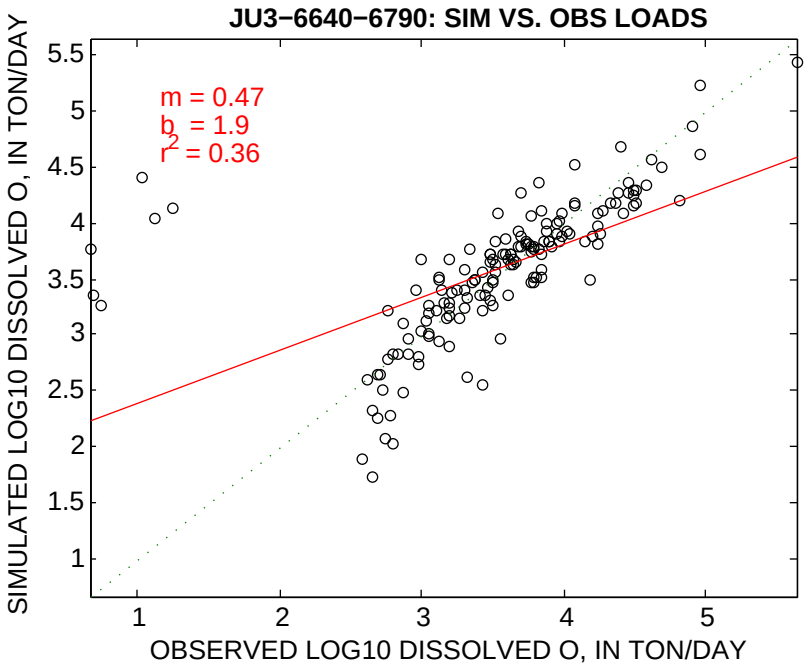


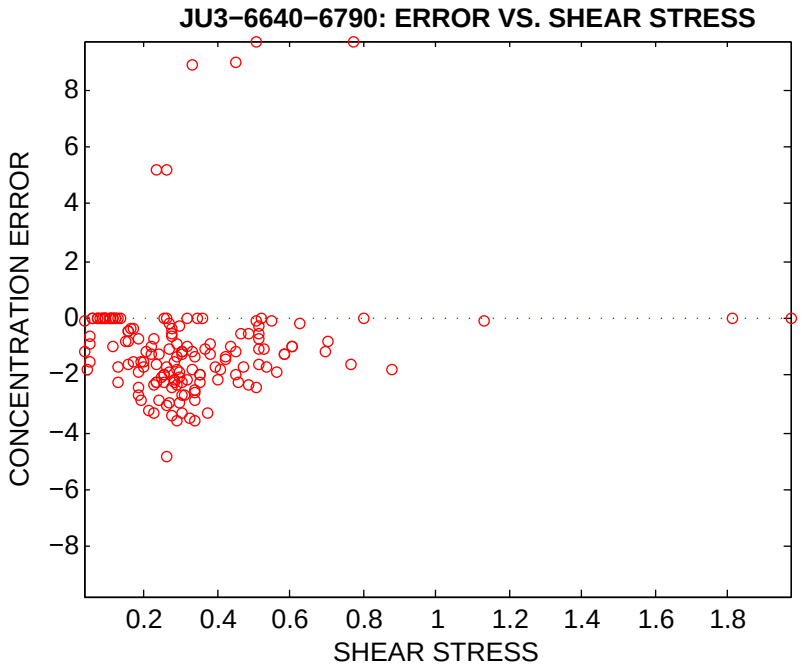


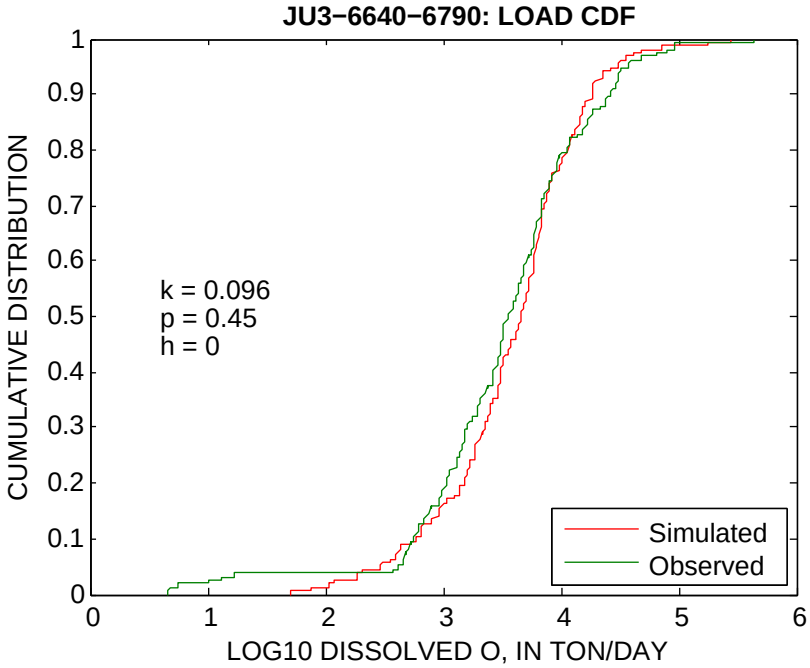


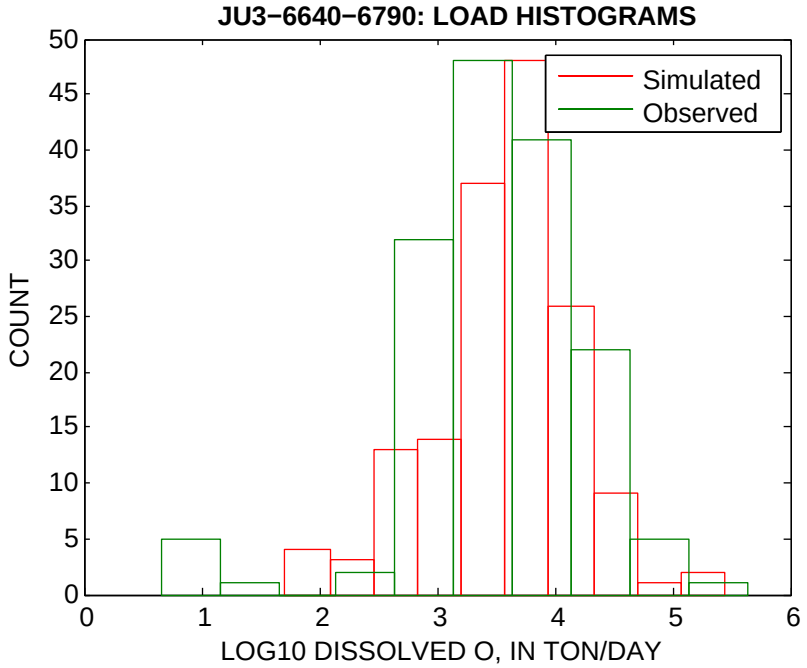


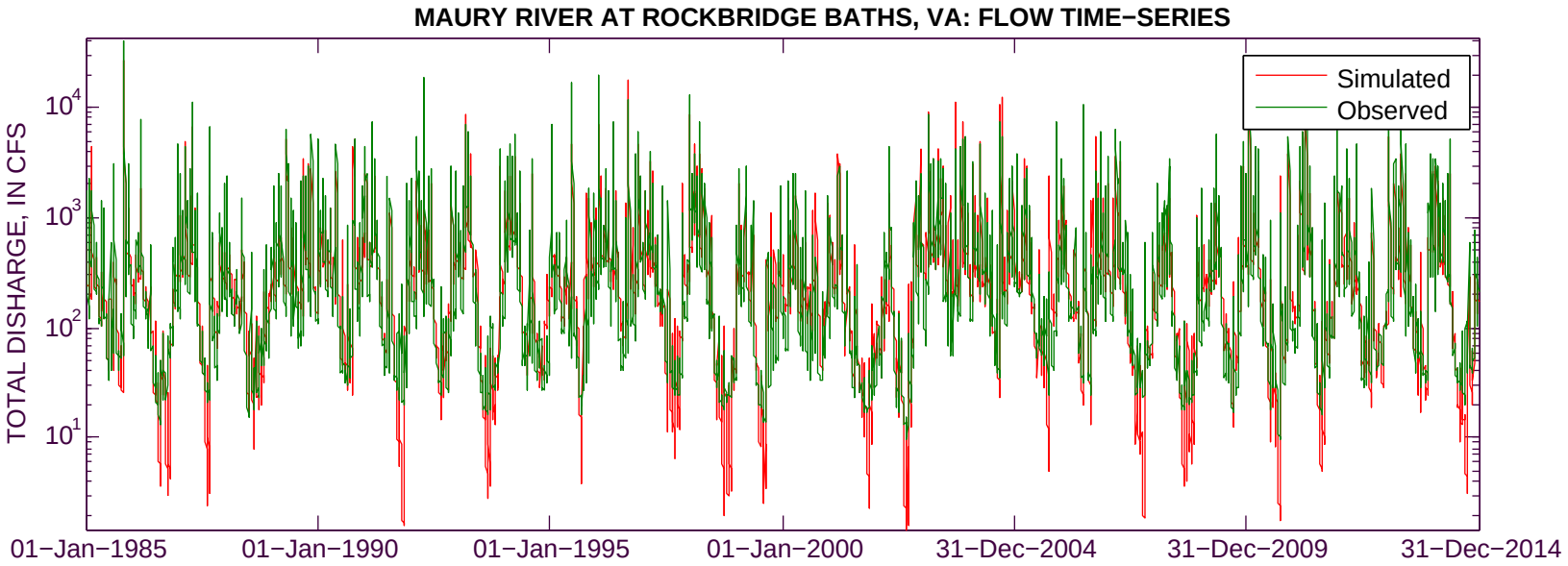
LOAD DATA
LOG10

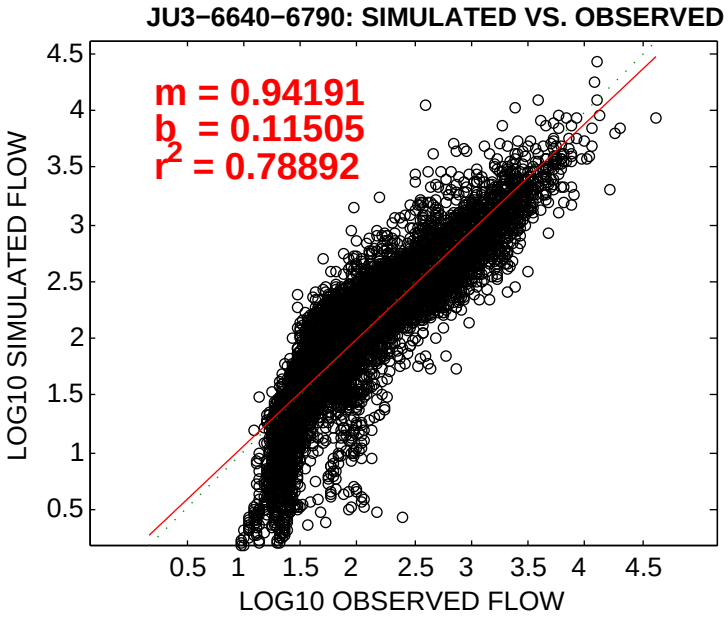


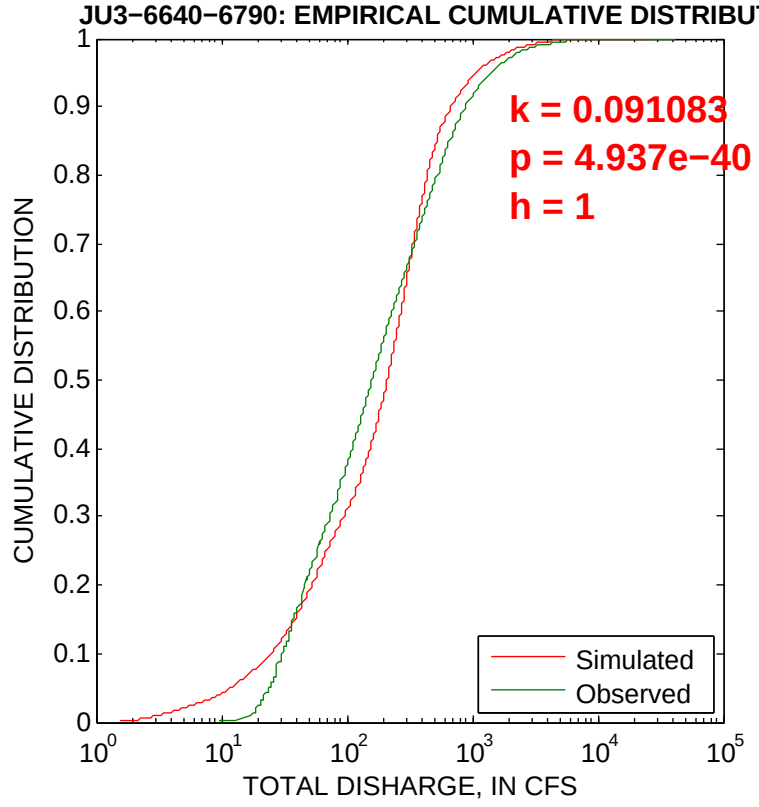












DATA SELECTION

scenario: P620171001WQ | file: FLOW.calib

plot: FLOW - total discharge

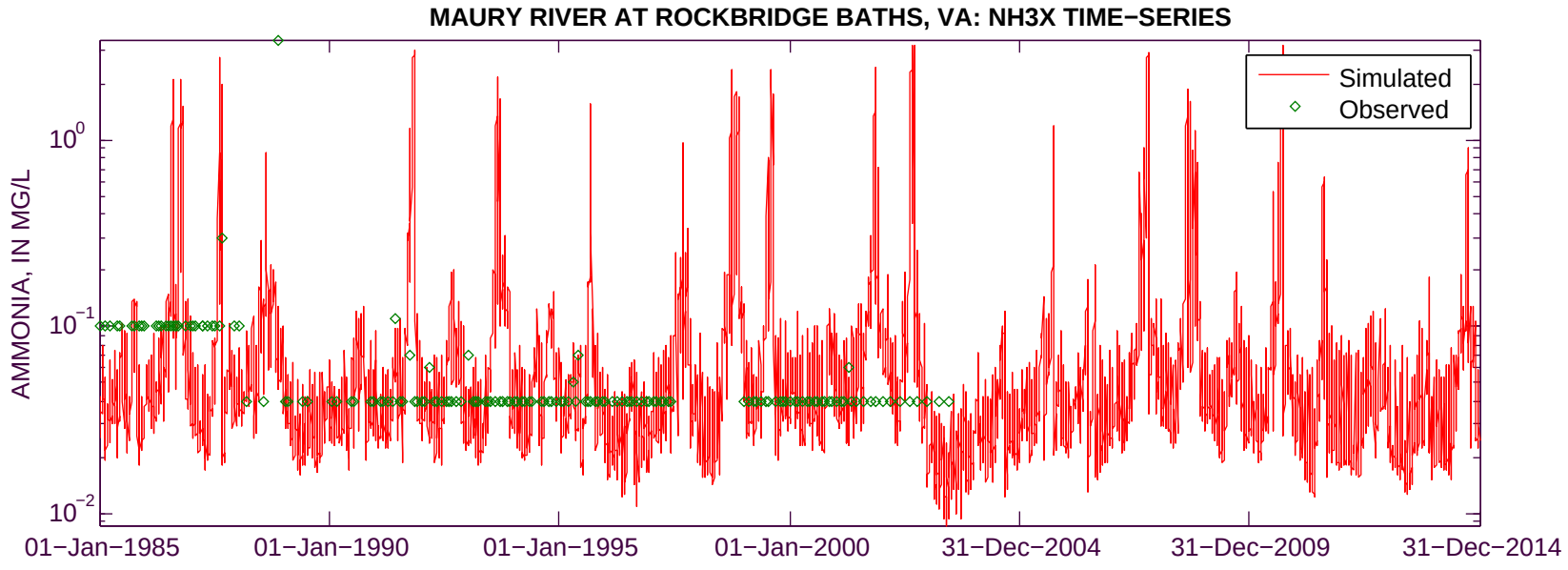
Dates: 1/1/1985 – 12/31/201

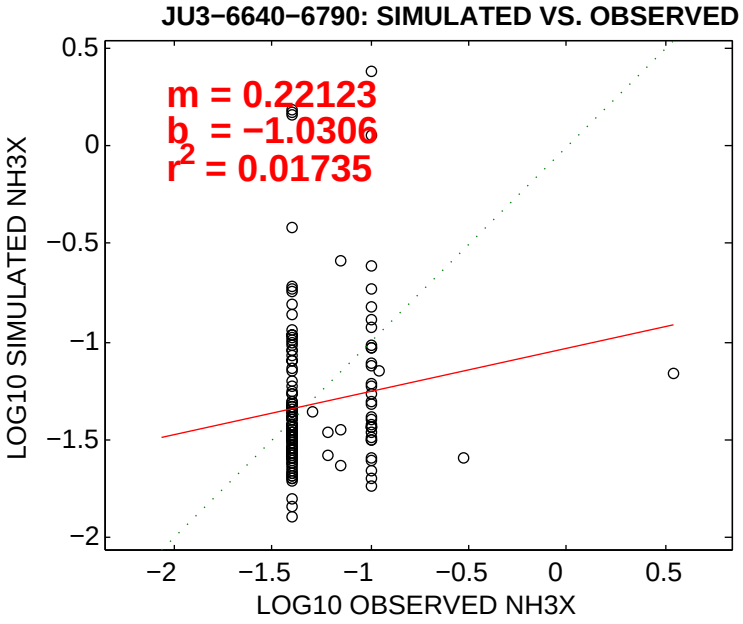
Drive: N/A | Directory: model | Observed: OBS20161101

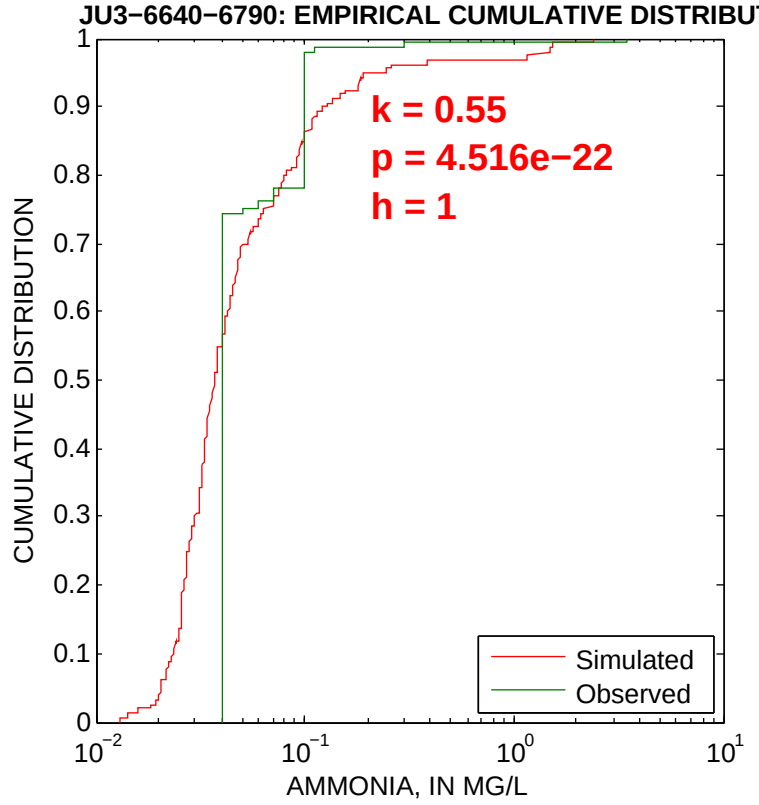
STATISTICS

n	10957	10957
	observe	simulate
min	9.6	1.4801
	0.982271	0.170291
mean	399.25	350.55
	2.22212	2.2081
media	160	212.06
	2.20412	2.32646
max	41500	26784
	4.61805	4.42788
varian	793793	452604
	0.311952	0.350811
JB	0.001	0.001
	0.001	0.001
	ra	log
%	-12.1978	-0.631284
err.va	349377	0.0752981
rel.std.err	0.440136	0.241377
mod.eff	0.559864	0.758623

VERSION 2.1







DATA SELECTION

scenario	file
P620171001WQ	NH3X.calib

plot: NH3X - ammonia

Dates: 1/1/1985 – 12/31/201

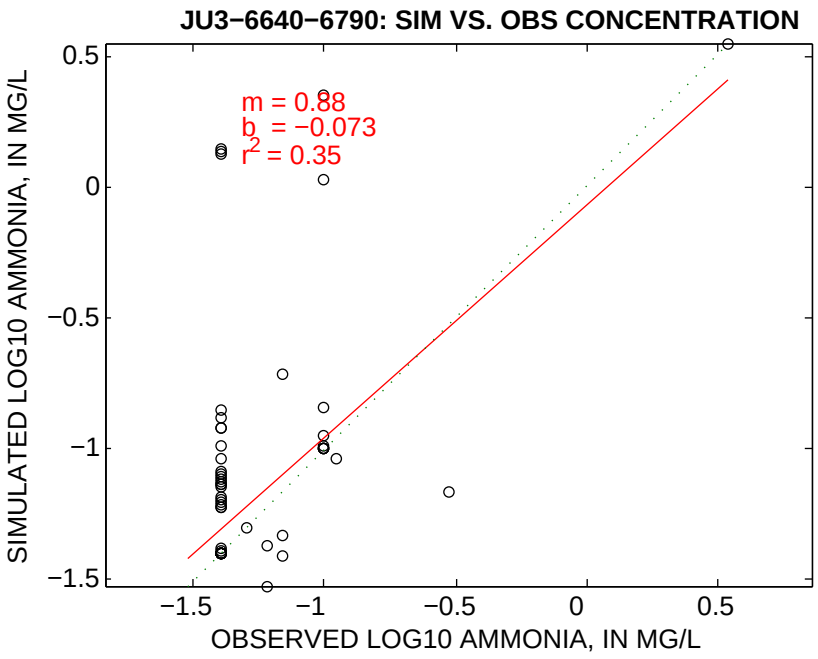
Drive: N/A | Directory: model | Observed: OBS20161101

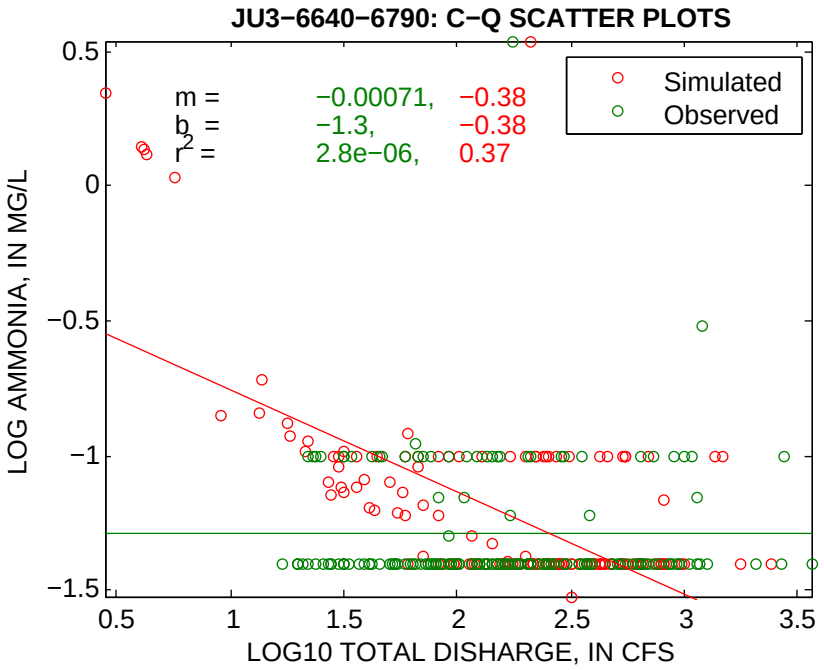
STATISTICS

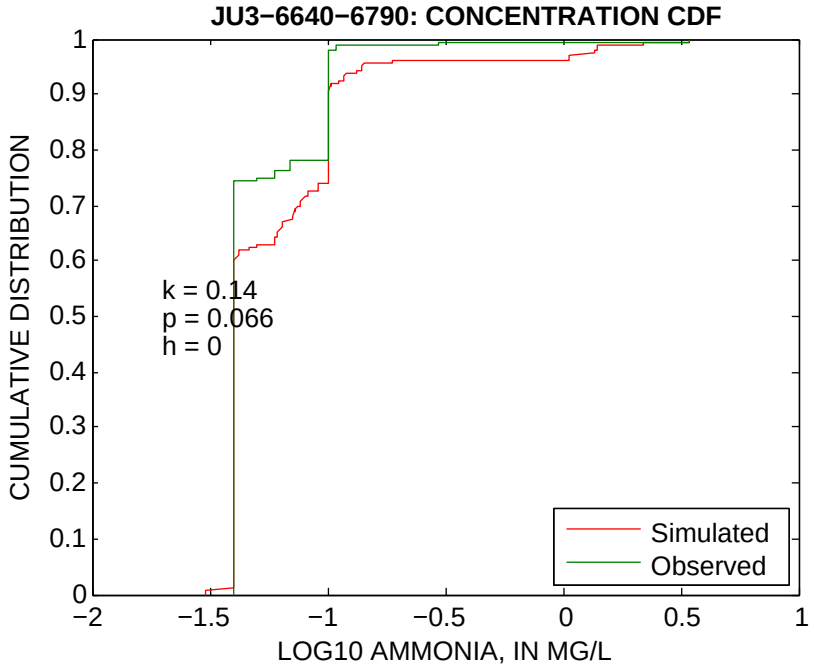
	n	observe	simulate
		160	160
min		0.04	0.01304
		-1.39794	-1.88472
mean		0.076375	0.103102
		-1.29066	-1.31619
media		0.04	0.037035
		-1.39794	-1.43139
max		3.47	2.3879
		0.540329	0.378016
varian		0.0738648	0.0809403
		0.0515105	0.145315
JB		0.001	0.001
		0.001	0.001
		ra	log
%		34.995	1.97797
err.va		0.155627	0.17469
rel.std.err		2.10692	3.39134
mod.eff		-1.10692	-2.39134

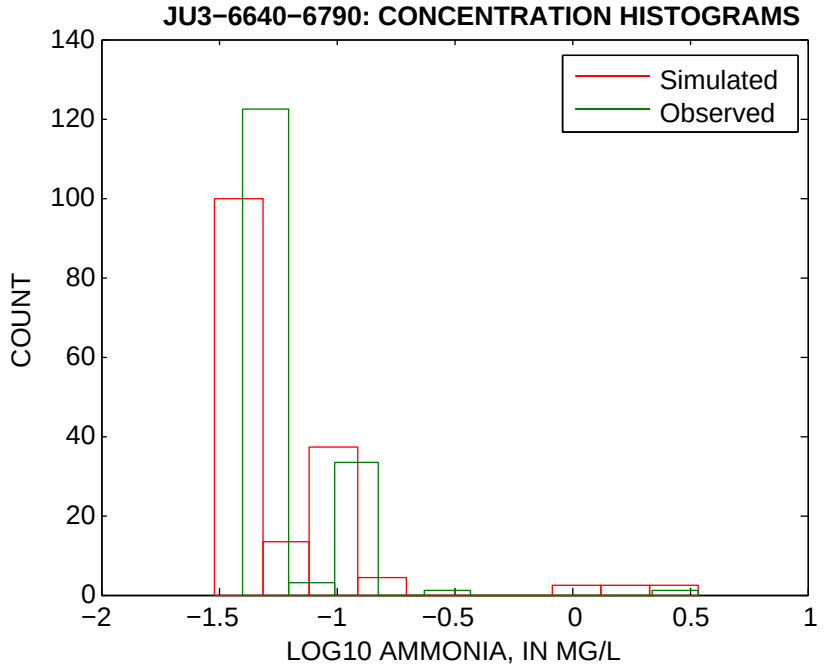
VERSION 2.1

ALL DATA
LOG10

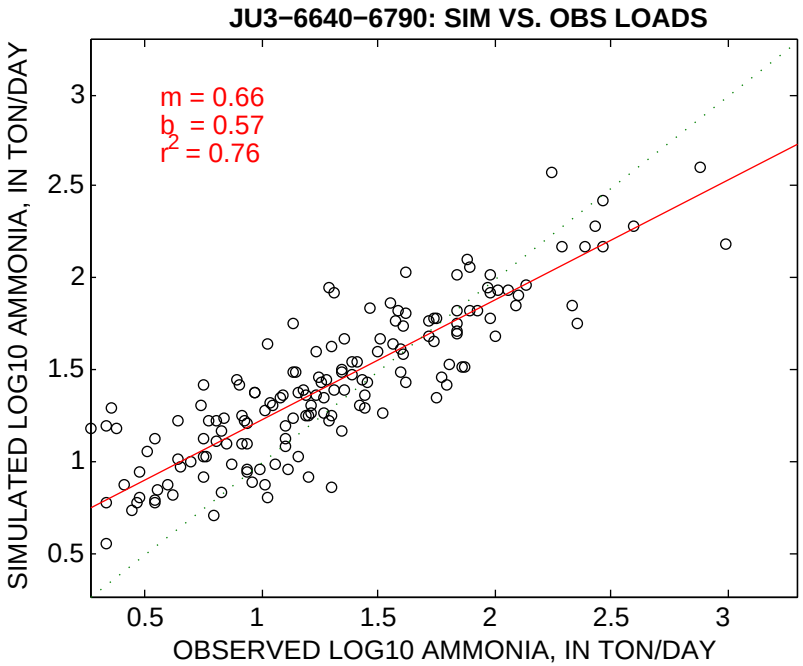


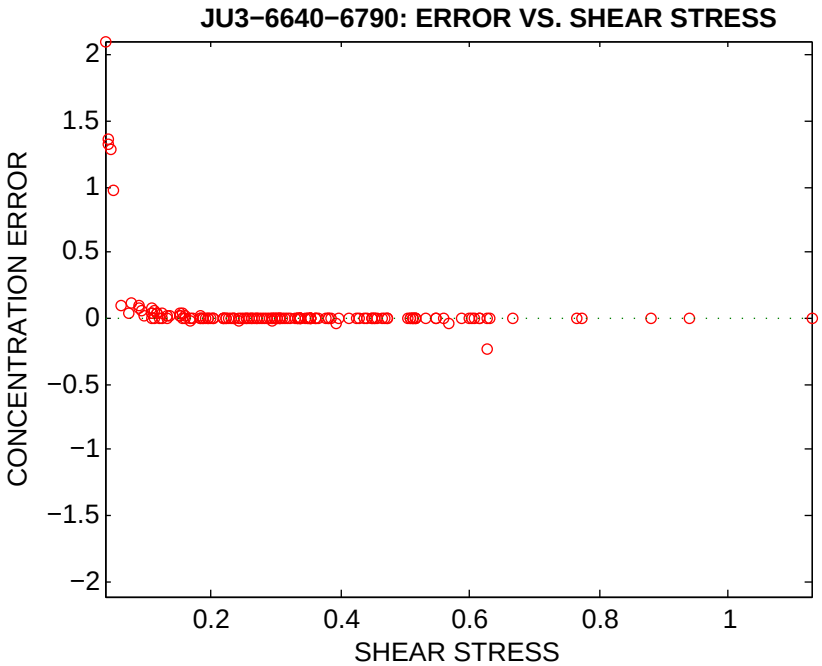


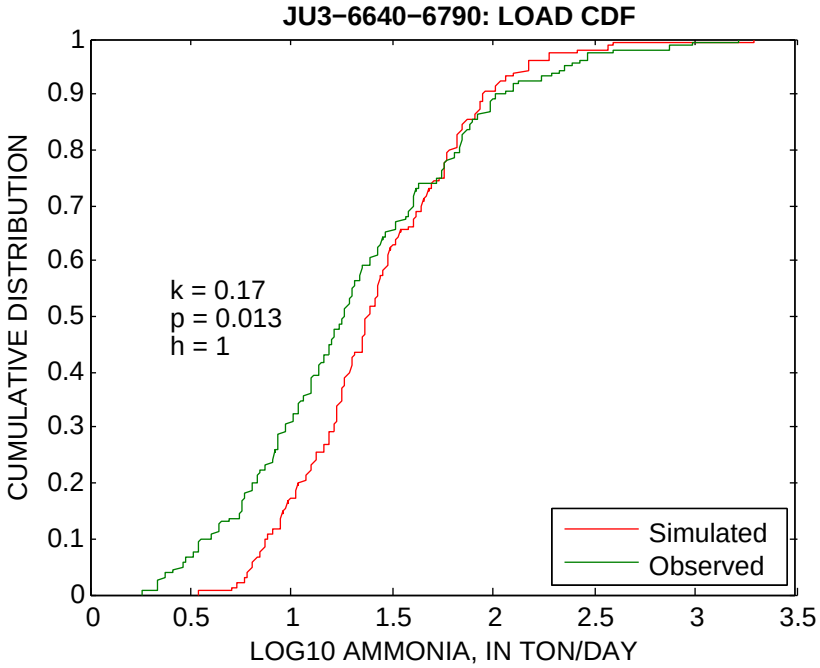


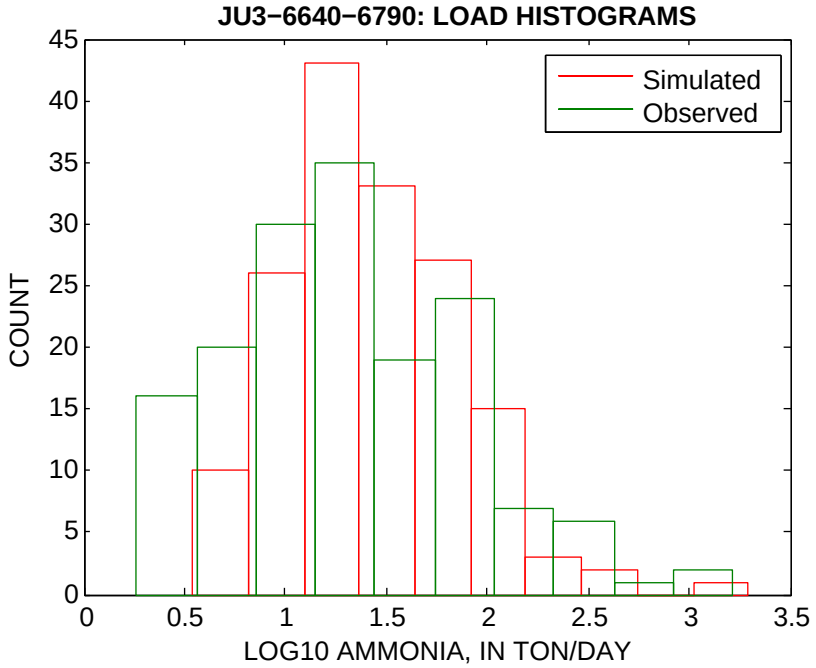


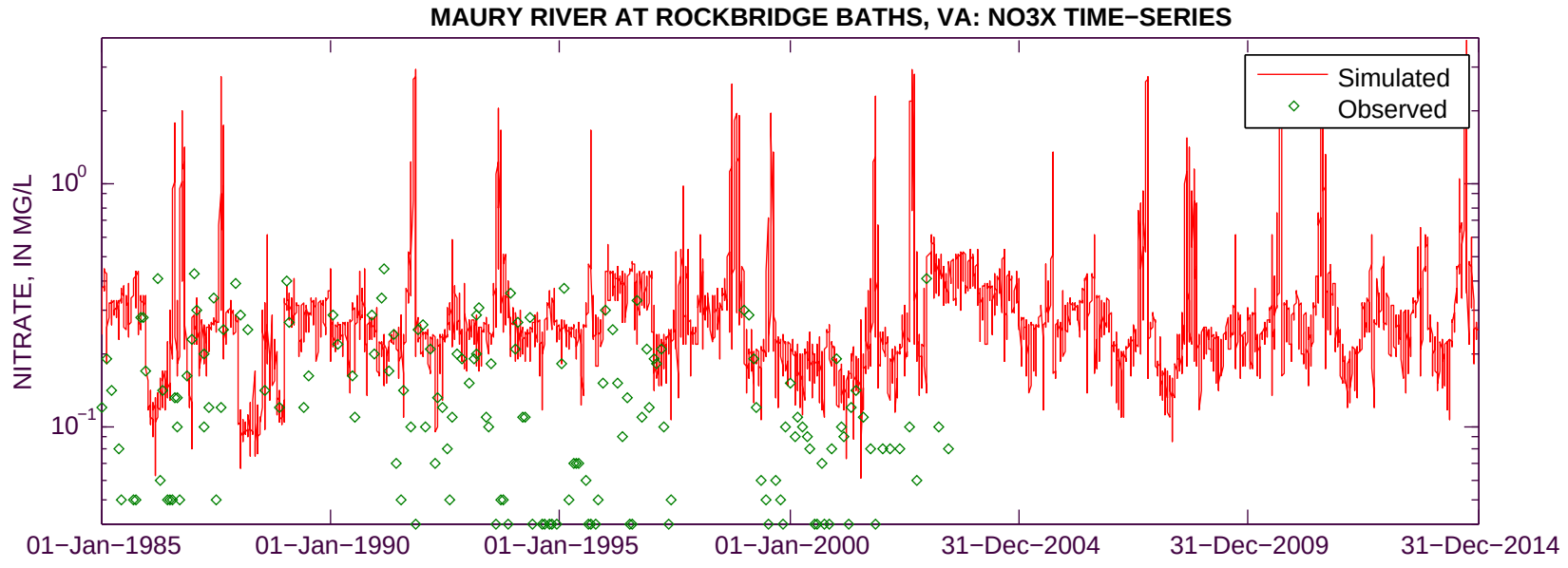
LOAD DATA
LOG10

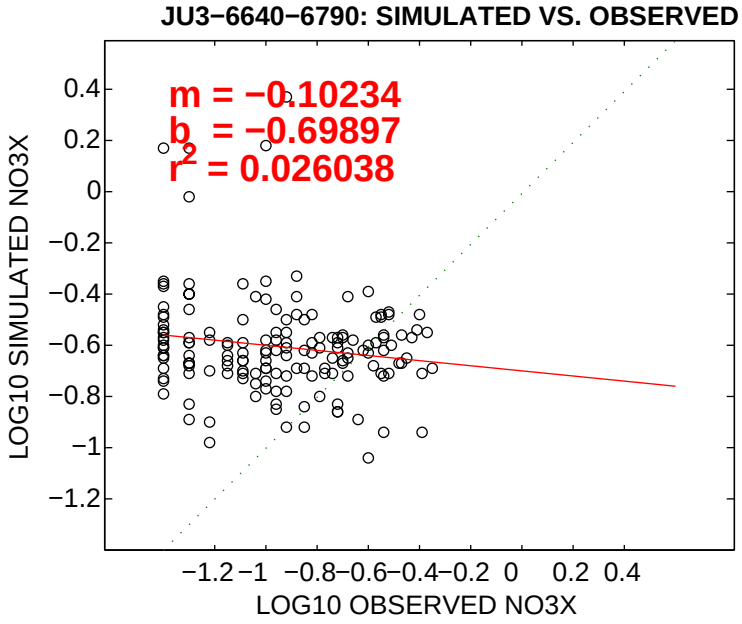


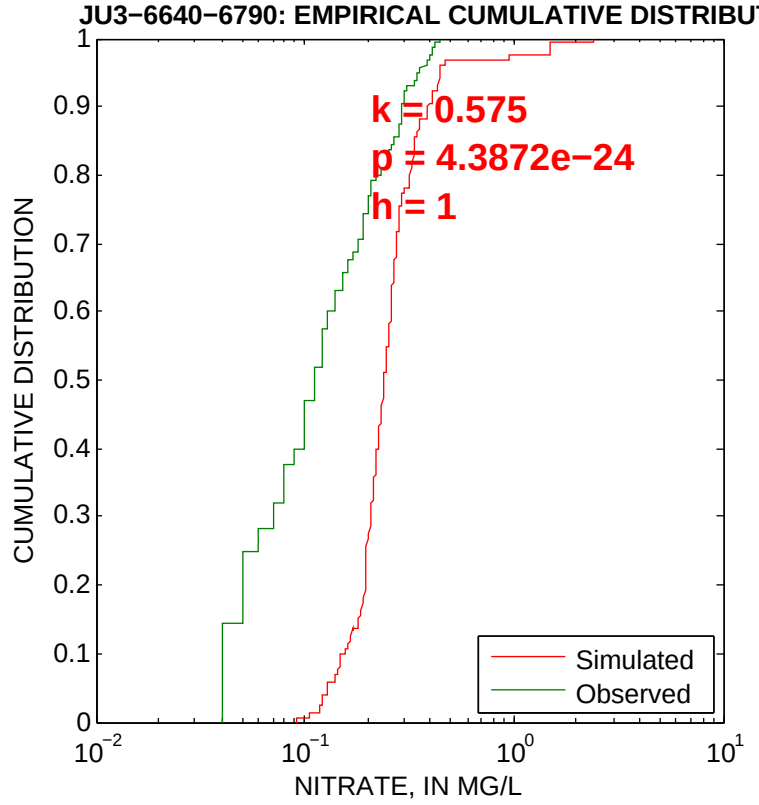












DATA SELECTION

scenario	file
P620171001WQ	NO3X.calib

plot: NO3X - nitrate

Dates: 1/1/1985 – 12/31/201

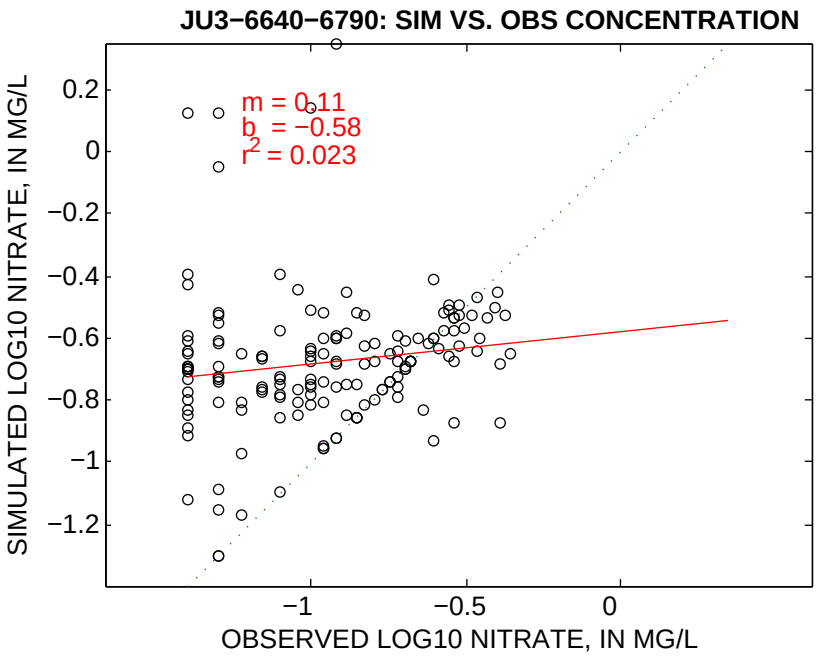
Drive	Directory	Observed
N/A	model	OBS20161101

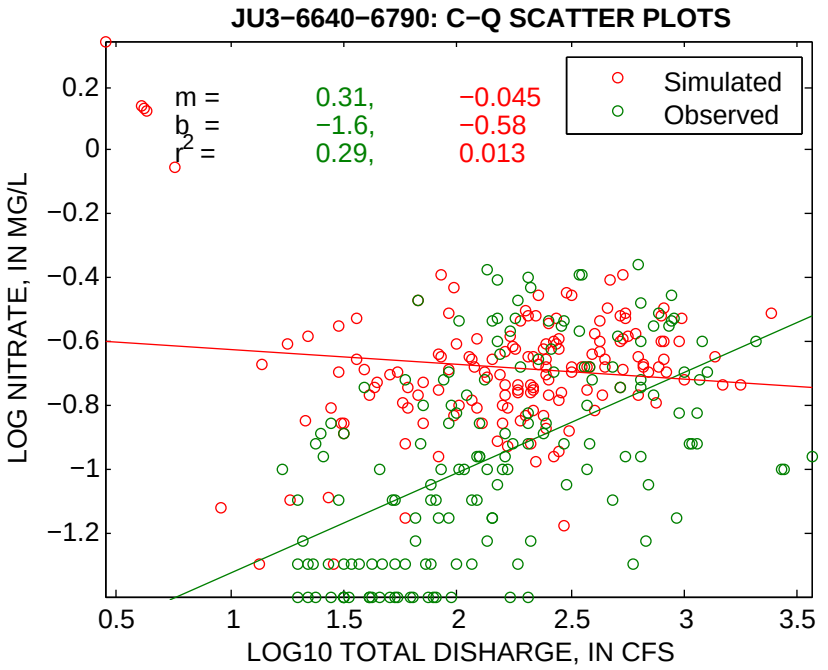
STATISTICS

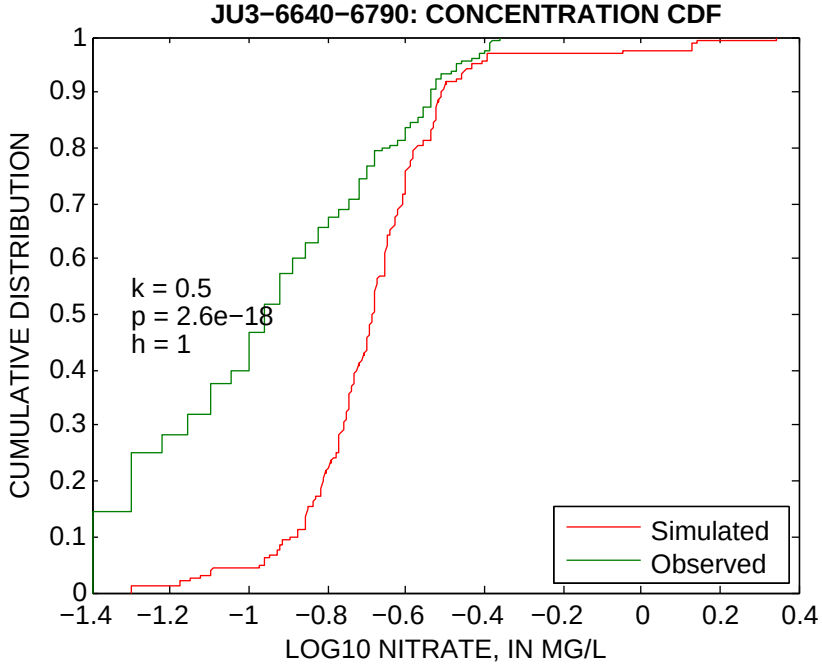
	n	observe	simulate
		160	160
min		0.04	0.092231
		-1.39794	-1.03512
mean		0.142375	0.289258
		-0.953223	-0.601418
media		0.11	0.239015
		-0.958607	-0.621575
max		0.44	2.3825
		-0.356547	0.377033
varian		0.010139	0.0651919
		0.0957285	0.0385087
JB		0.001	0.001
		0.020373	0.001
		ra	log
%		103.166	-36.907
err.va		0.103351	0.278377
rel.std.err		10.1934	2.90799
mod.eff		-9.1934	-1.90799

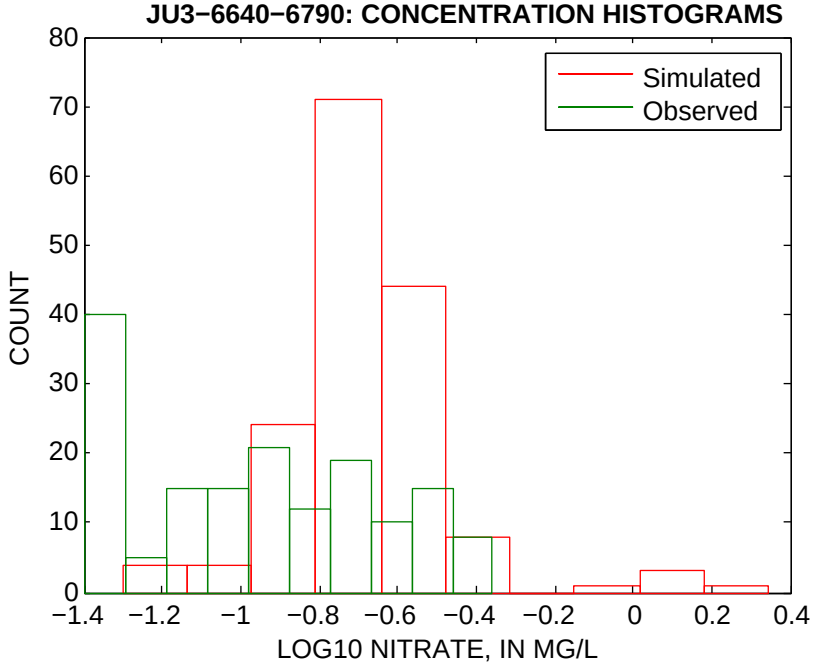
VERSION

ALL DATA
LOG10

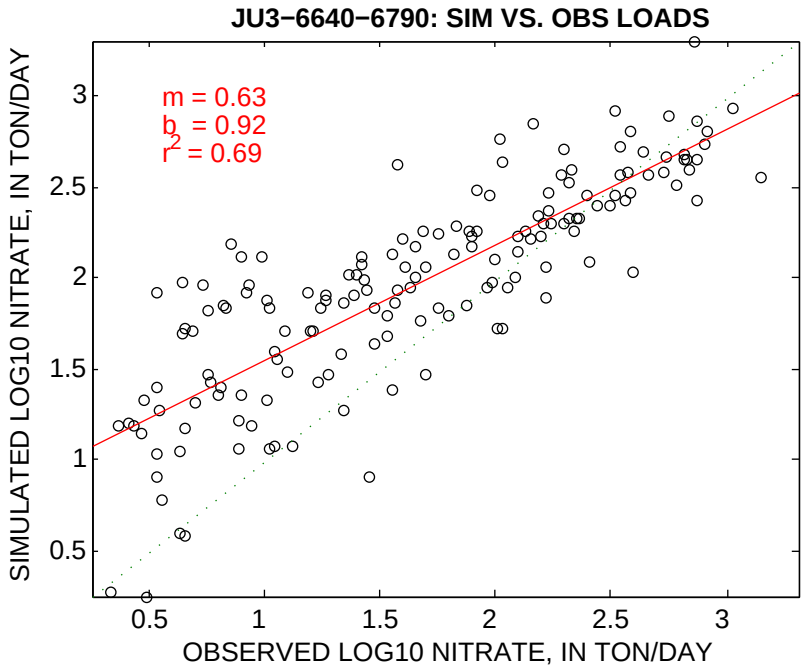


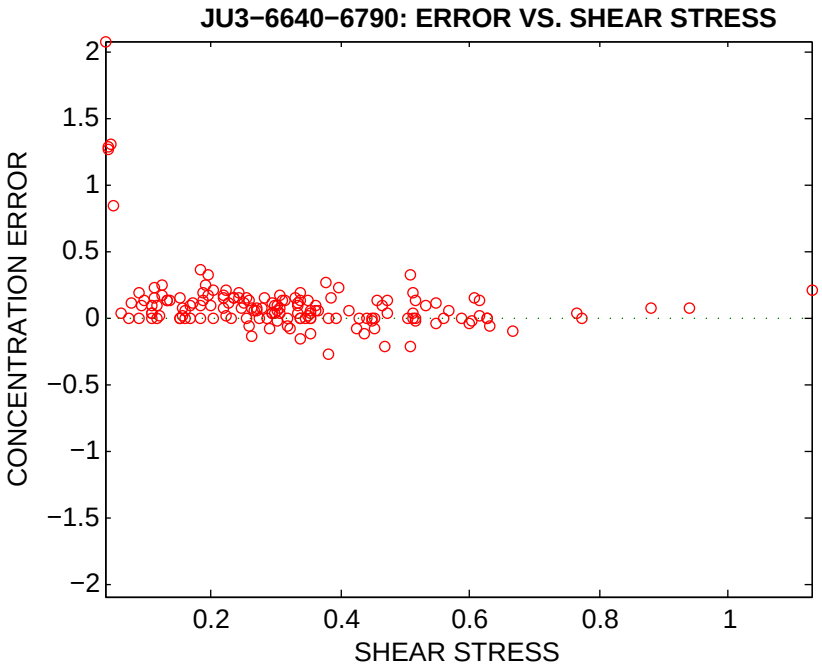


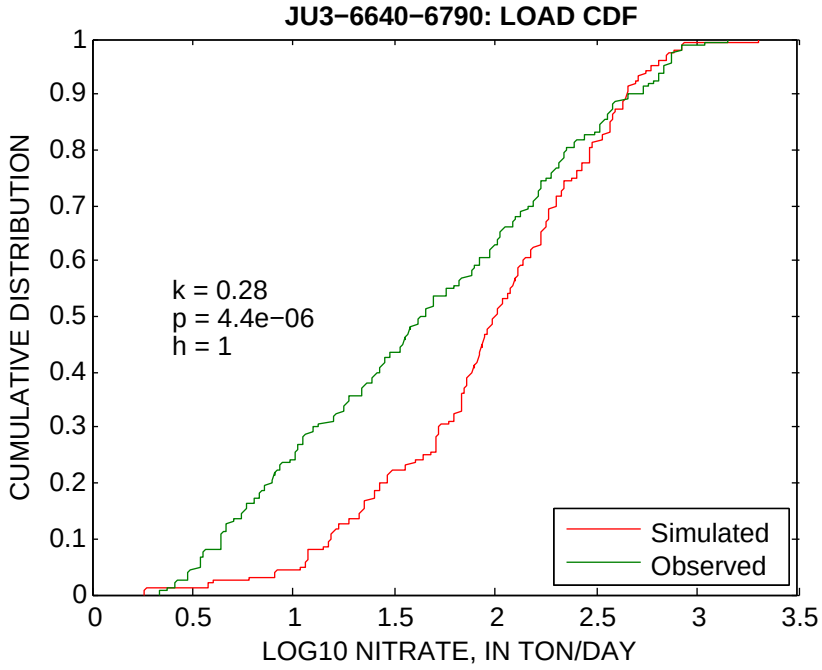


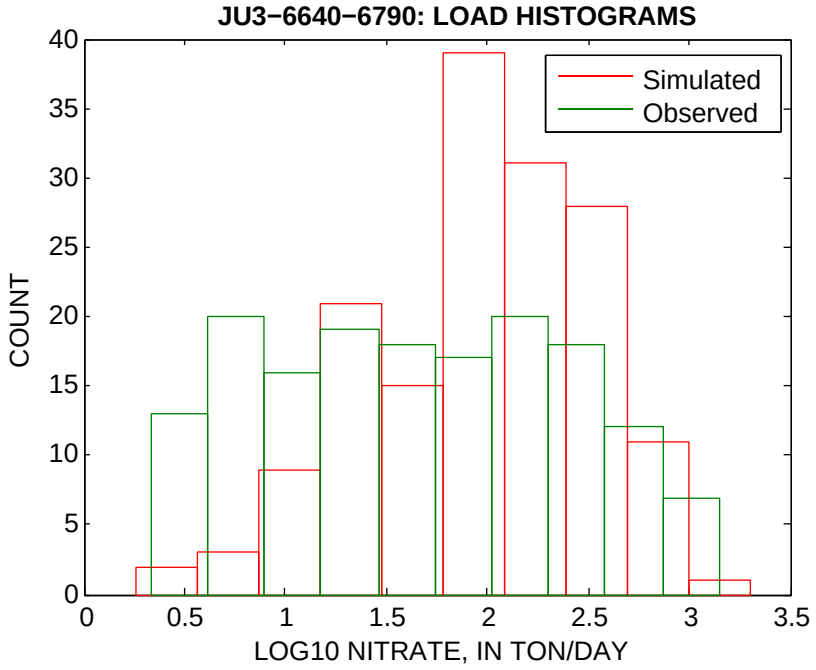


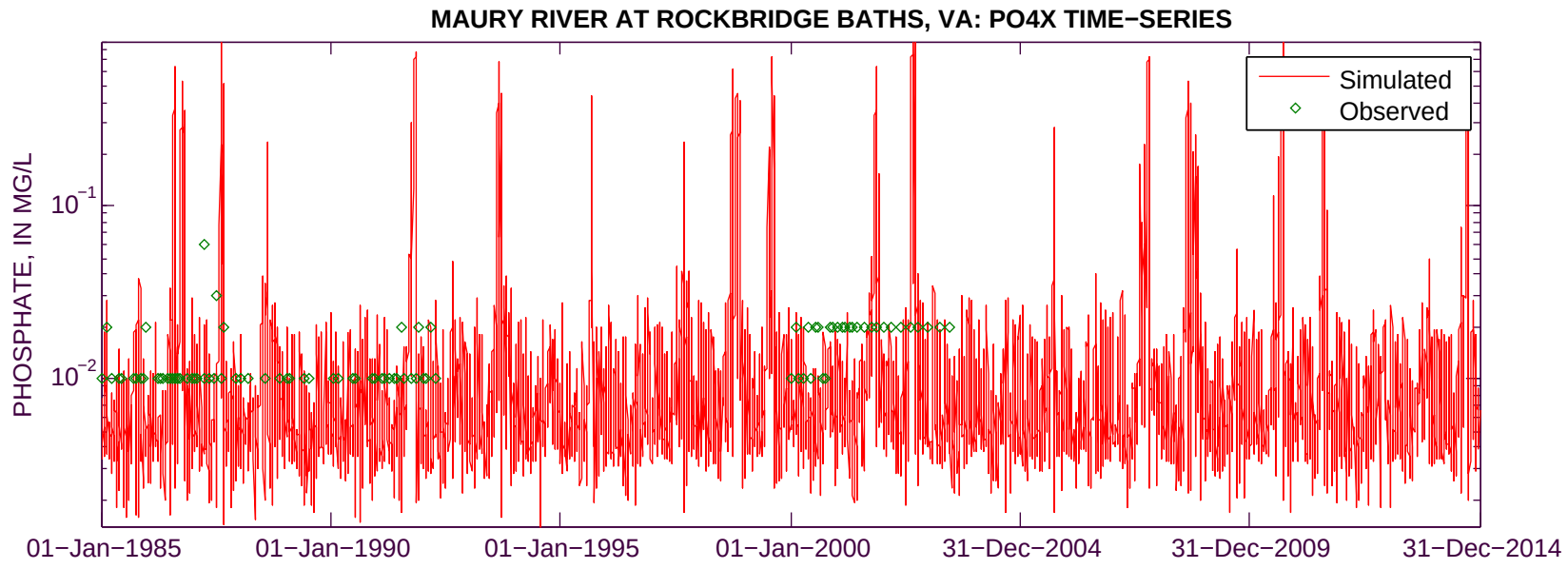
LOAD DATA
LOG10

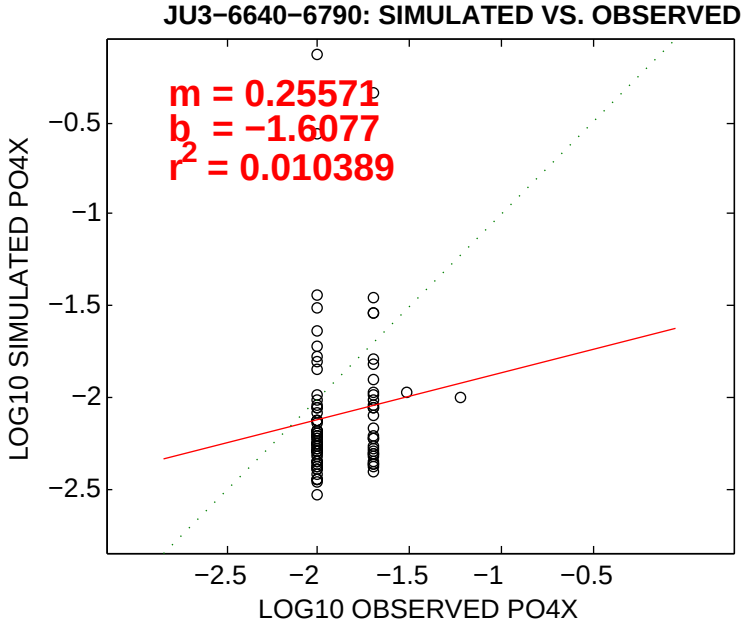


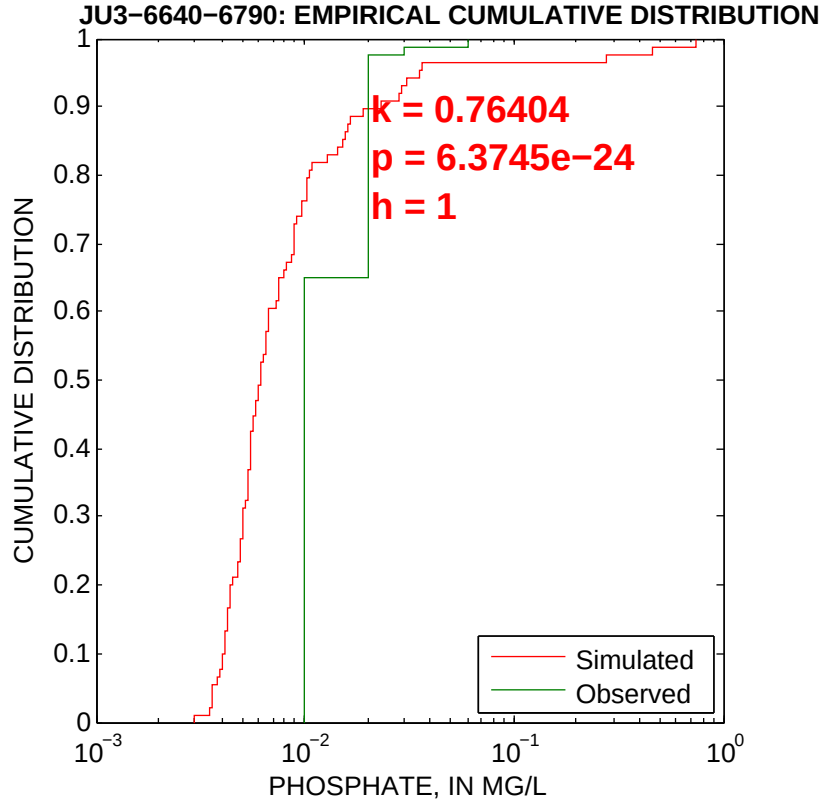












DATA SELECTION

scenario: P620171001WQ | file: PO4X.calib

plot: PO4X - phosphate

Dates: 1/1/1985 – 12/31/201

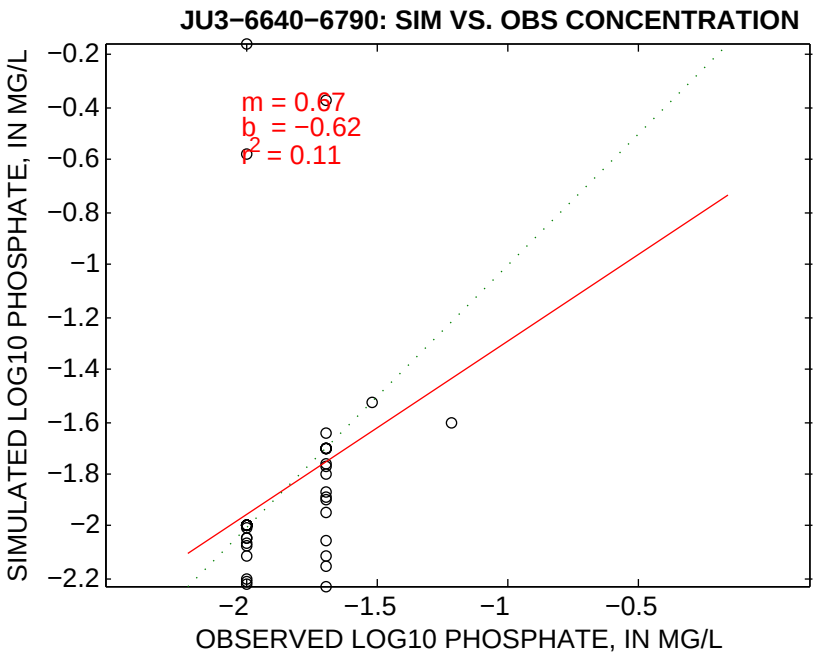
Drive: N/A | Directory: model | Observed: OBS20161101

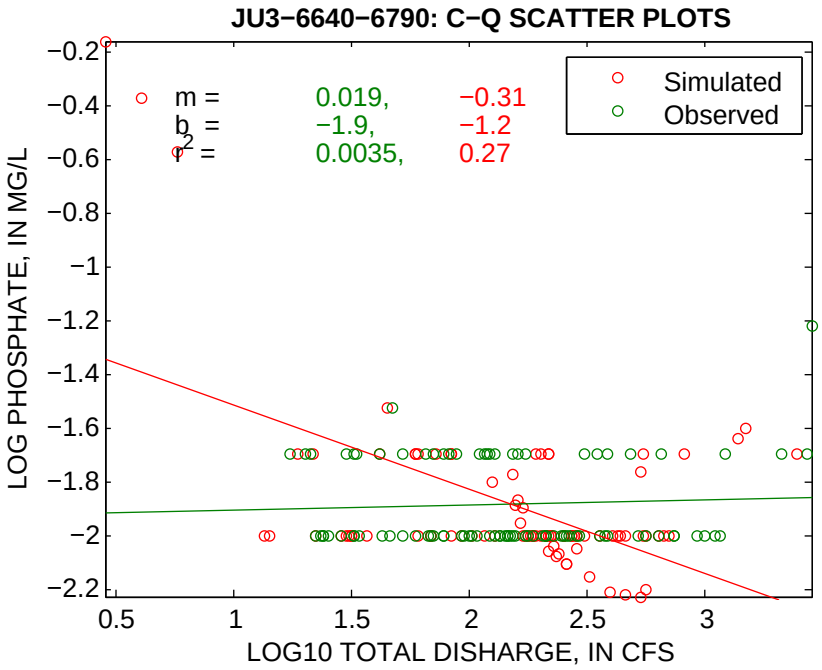
STATISTICS

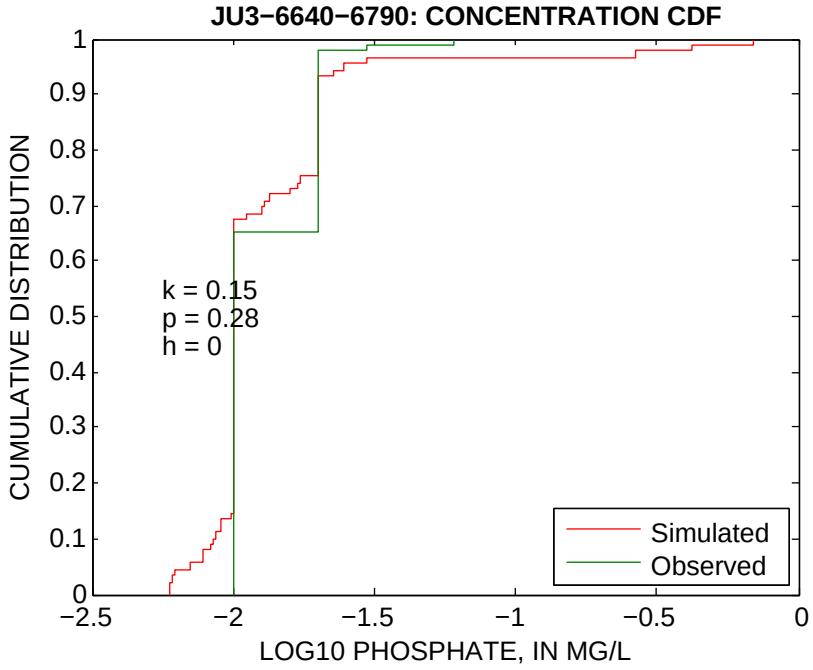
		observe	simulate
n		89	89
min		0.01	0.0029558
		-2	-2.52932
mean		0.0140449	0.0250507
		-1.88781	-2.09043
media		0.01	0.0060911
		-2	-2.2153
max		0.06	0.75102
		-1.22185	-0.124348
varian		4.93616e-0	0.00922302
		0.0266007	0.167423
JB		0.001	0.001
		0.001608	0.001
		ra	log
%		78.3607	10.7334
err.va		0.00941402	0.221943
rel.std.err		190.716	8.34353
mod.eff		-189.716	-7.34353

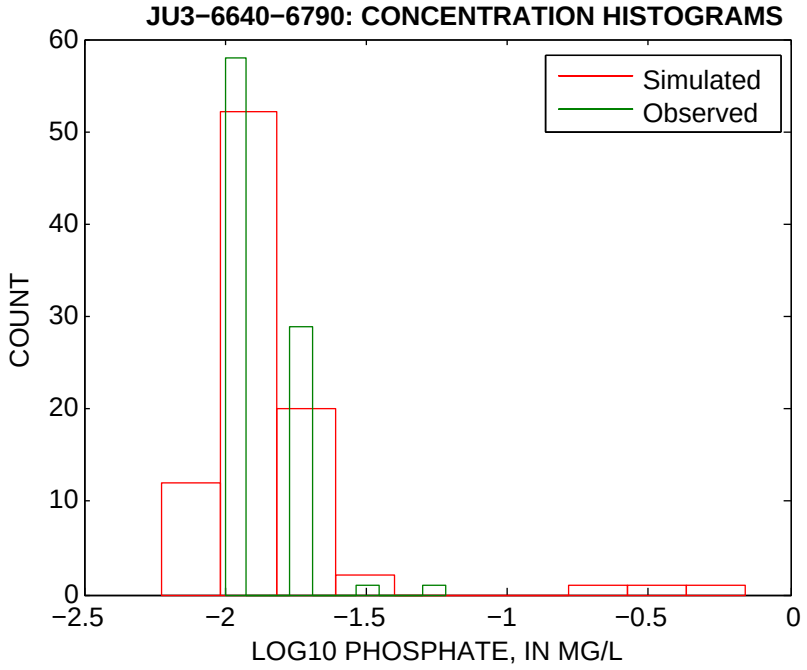
VERSION 2.1

ALL DATA
LOG10

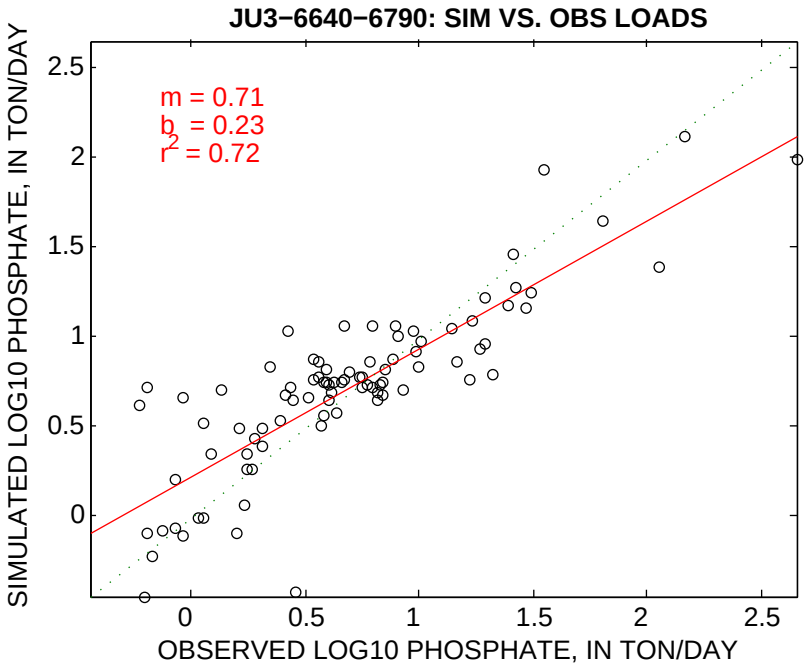


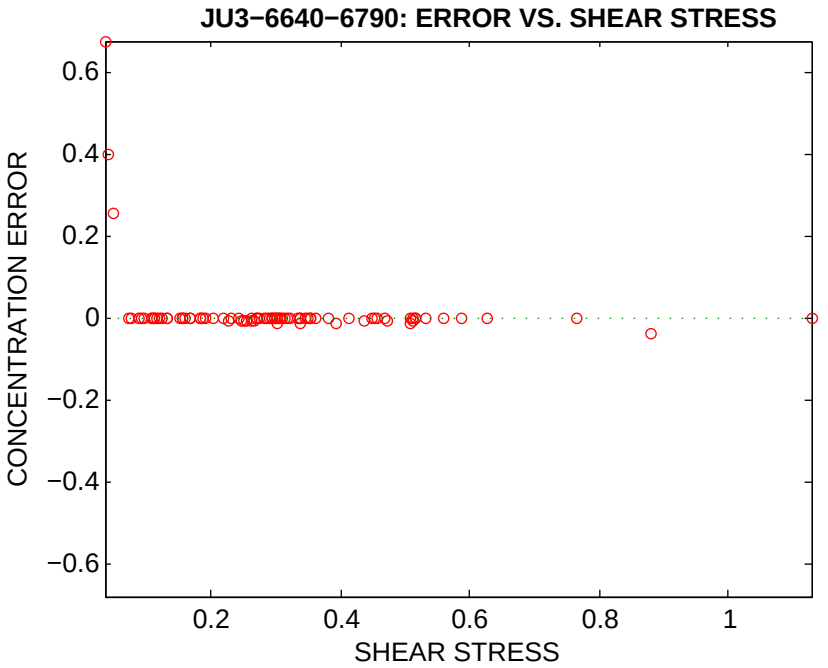


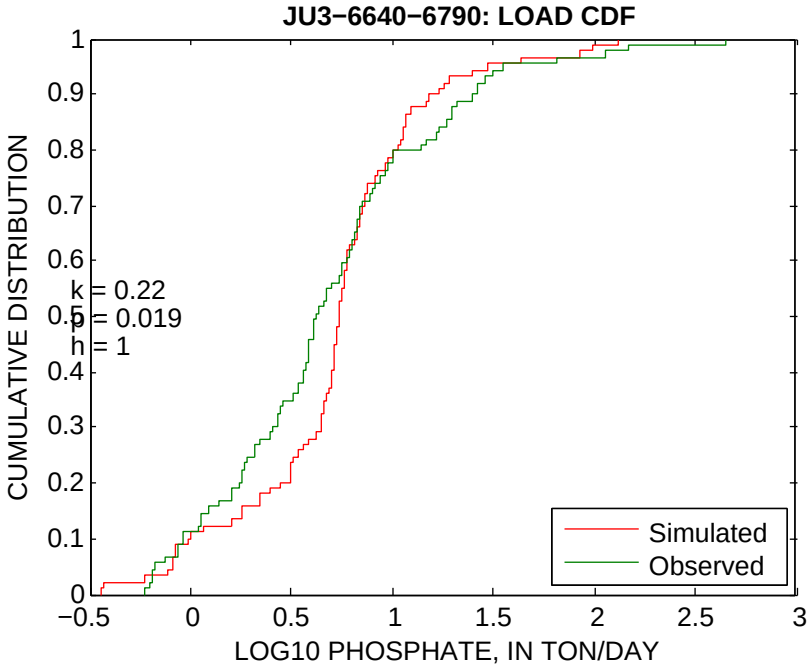


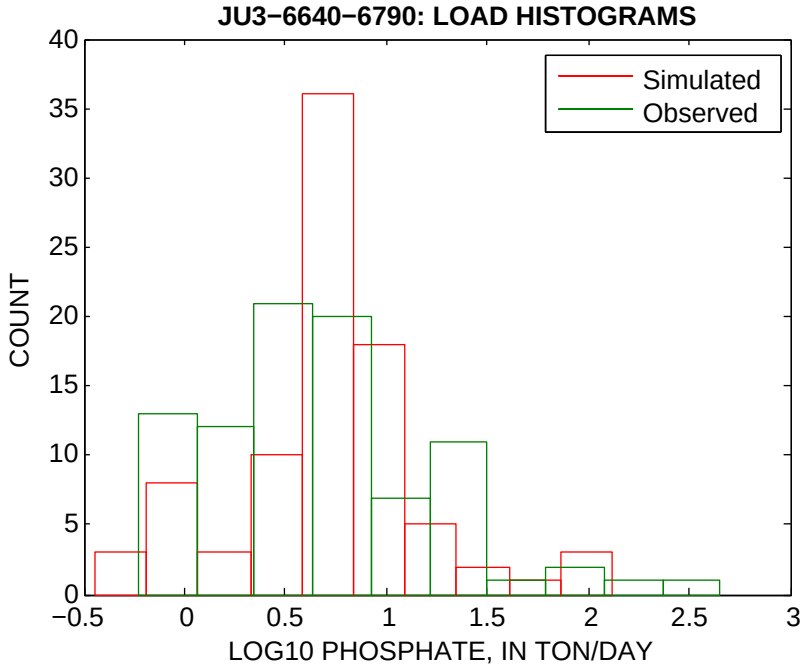


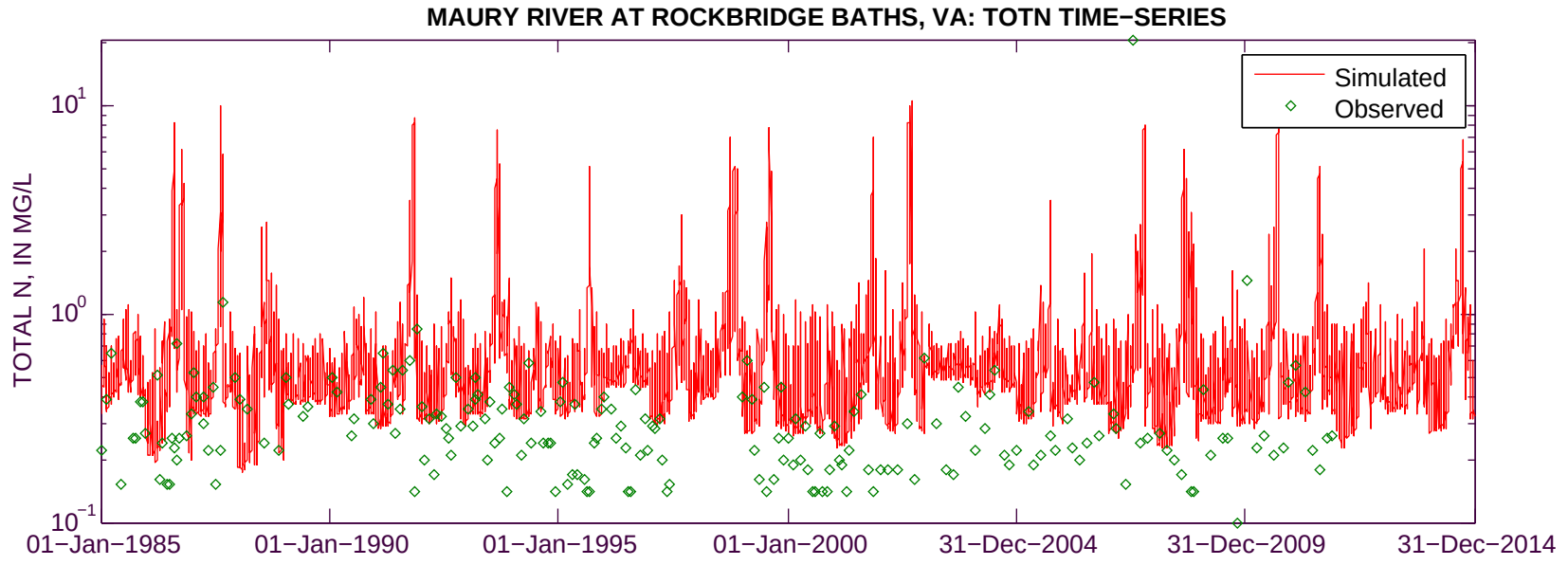
LOAD DATA
LOG10

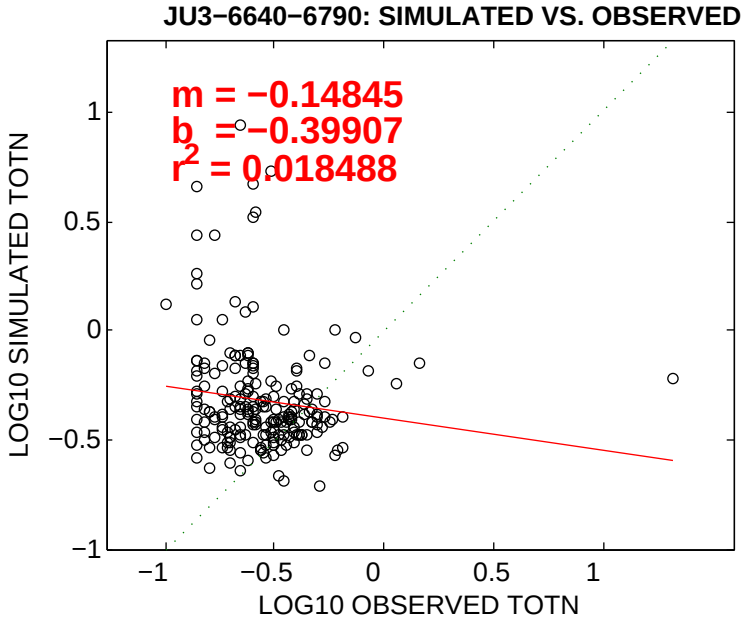


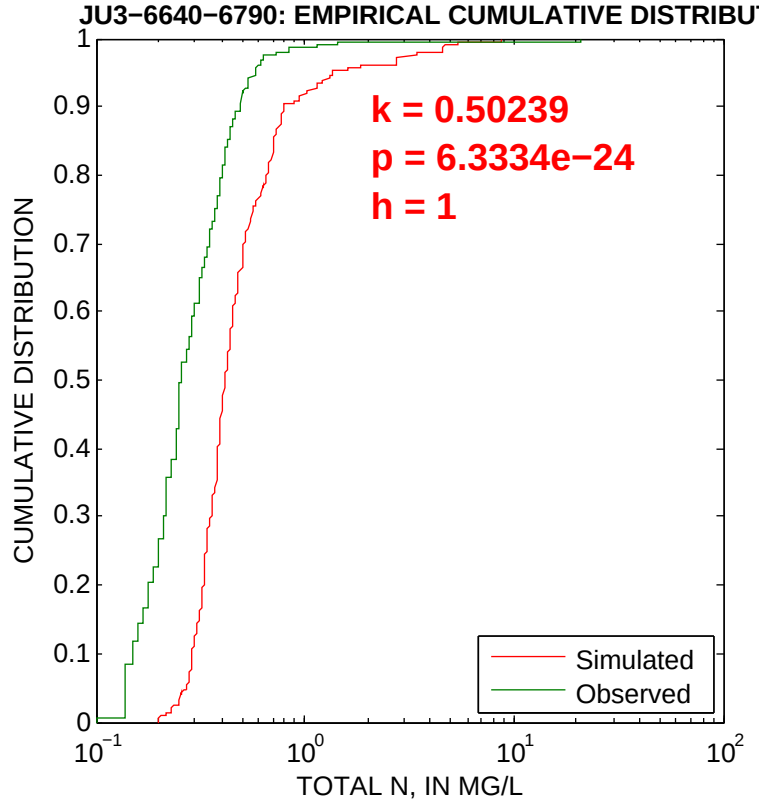












DATA SELECTION

scenario	file
P620171001WQ	TOTN.calib

plot: TOTN - total nitrogen

Dates: 1/1/1985 – 12/31/201

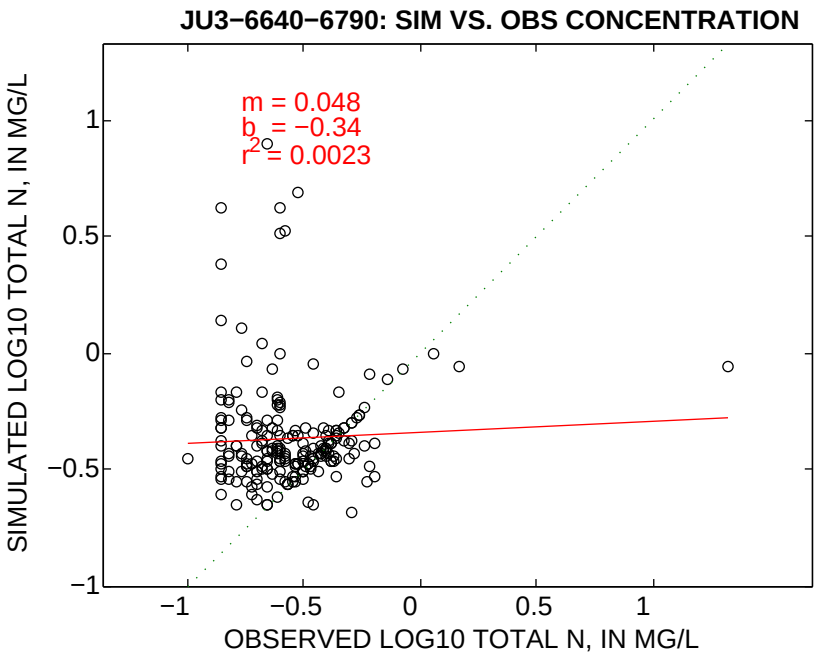
Drive	Directory	Observed
N/A	model	OBS20161101

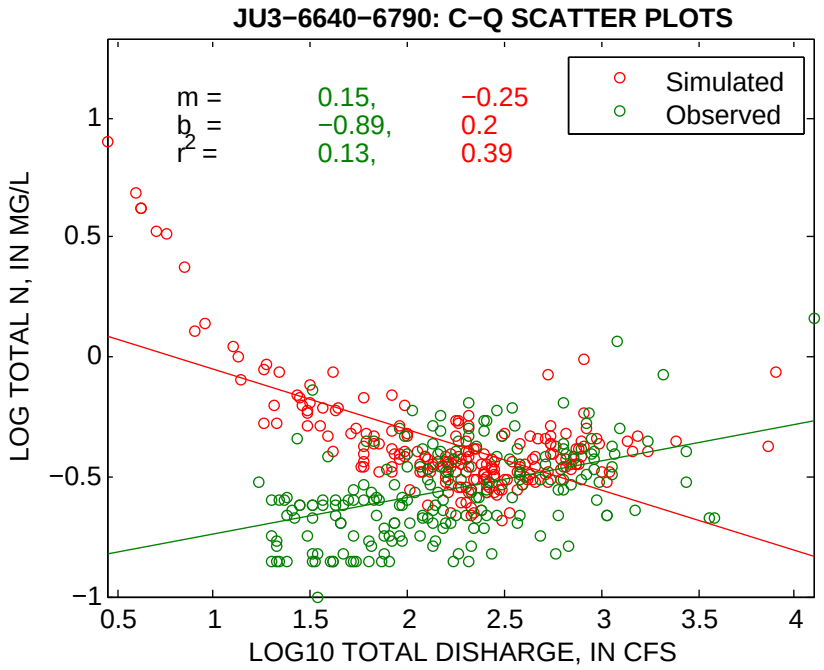
STATISTICS

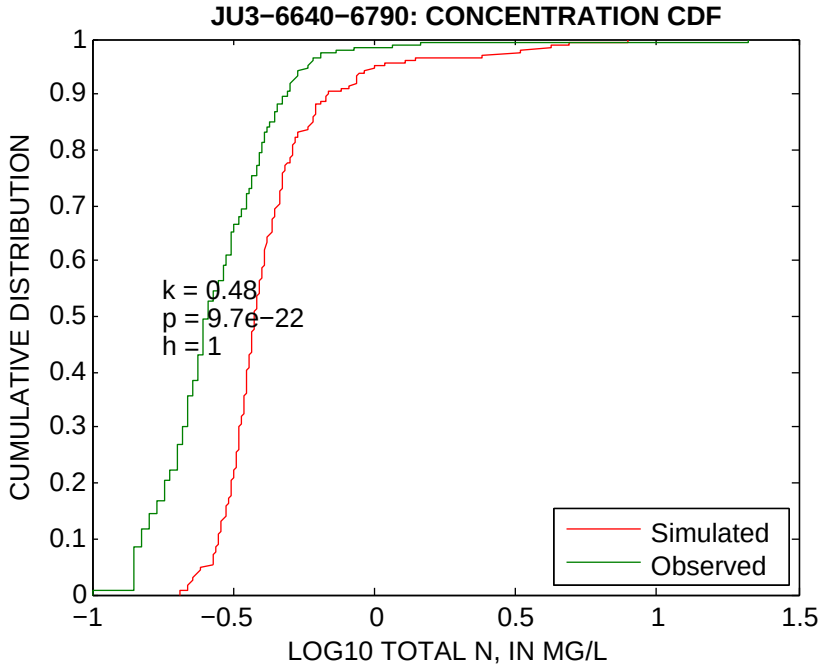
	n	observe	simulate
		209	209
min		0.1	0.19741
		-1	-0.704631
mean		0.400957	0.634918
		-0.556592	-0.31644
media		0.26	0.41794
		-0.585027	-0.378886
max		21	8.6065
		1.32222	0.934827
varian		2.07591	0.762166
		0.0535167	0.0637946
JB		0.001	0.001
		0.001	0.001
		ra	log
%		58.3507	-43.1468
err.va		2.92958	0.191151
rel.std.err		1.41123	3.5718
mod.eff		-0.411229	-2.5718

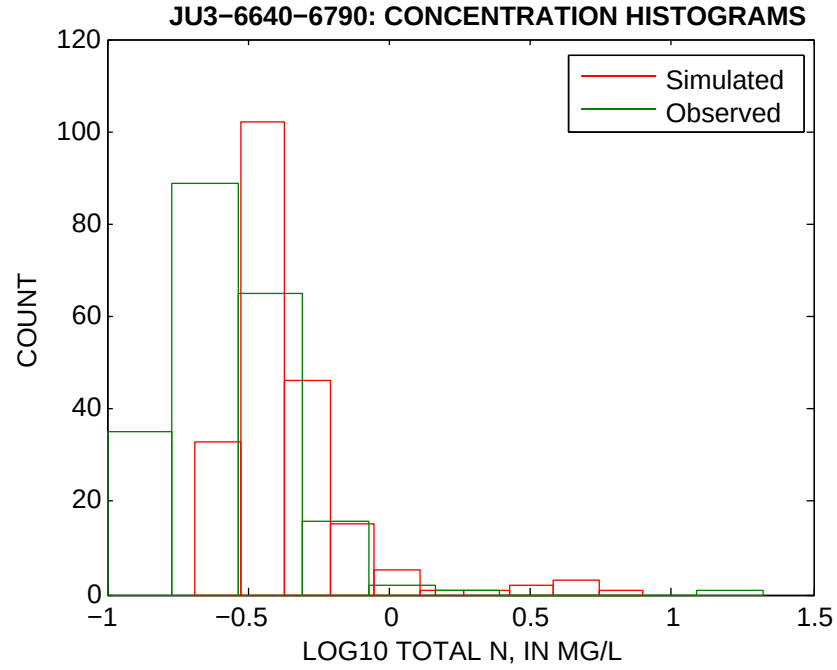
VERSION 2.1

ALL DATA
LOG10

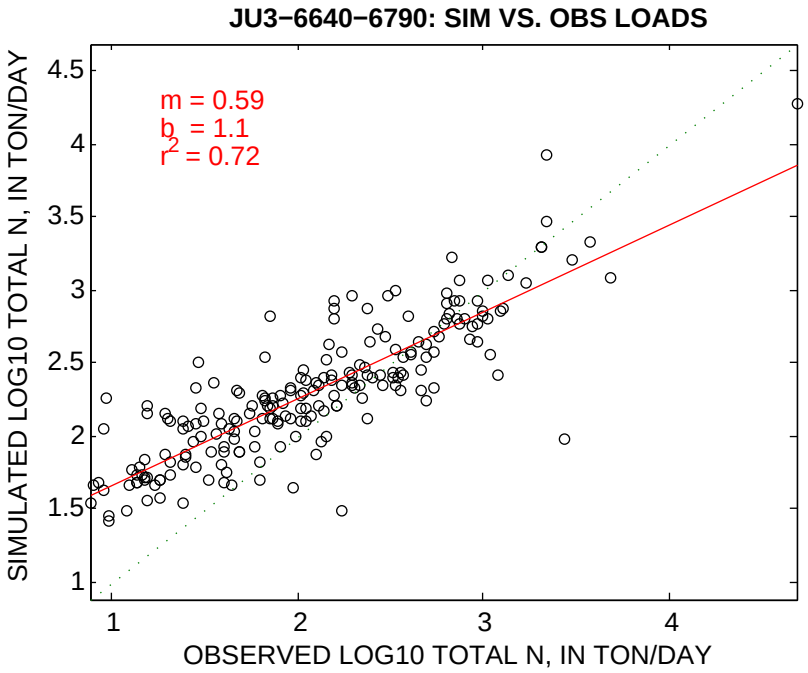


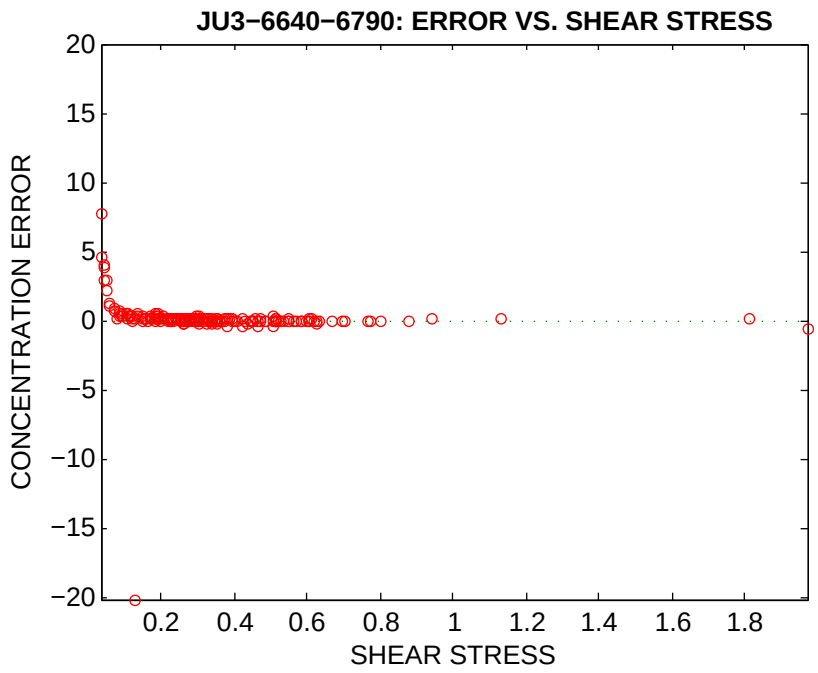


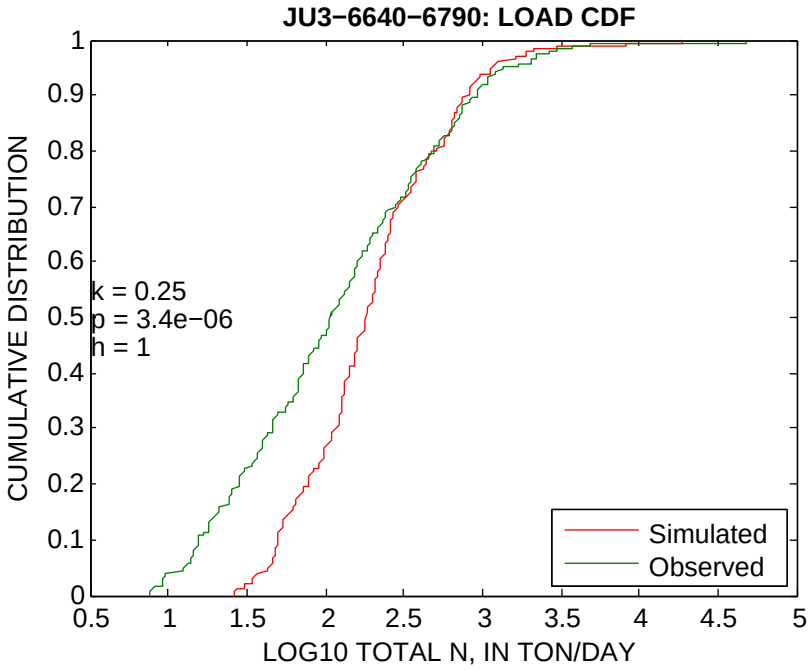


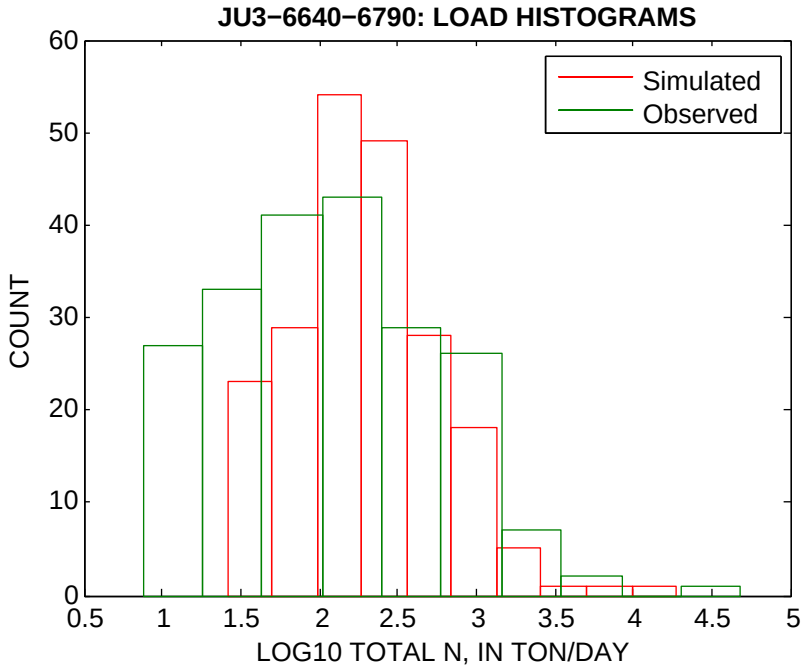


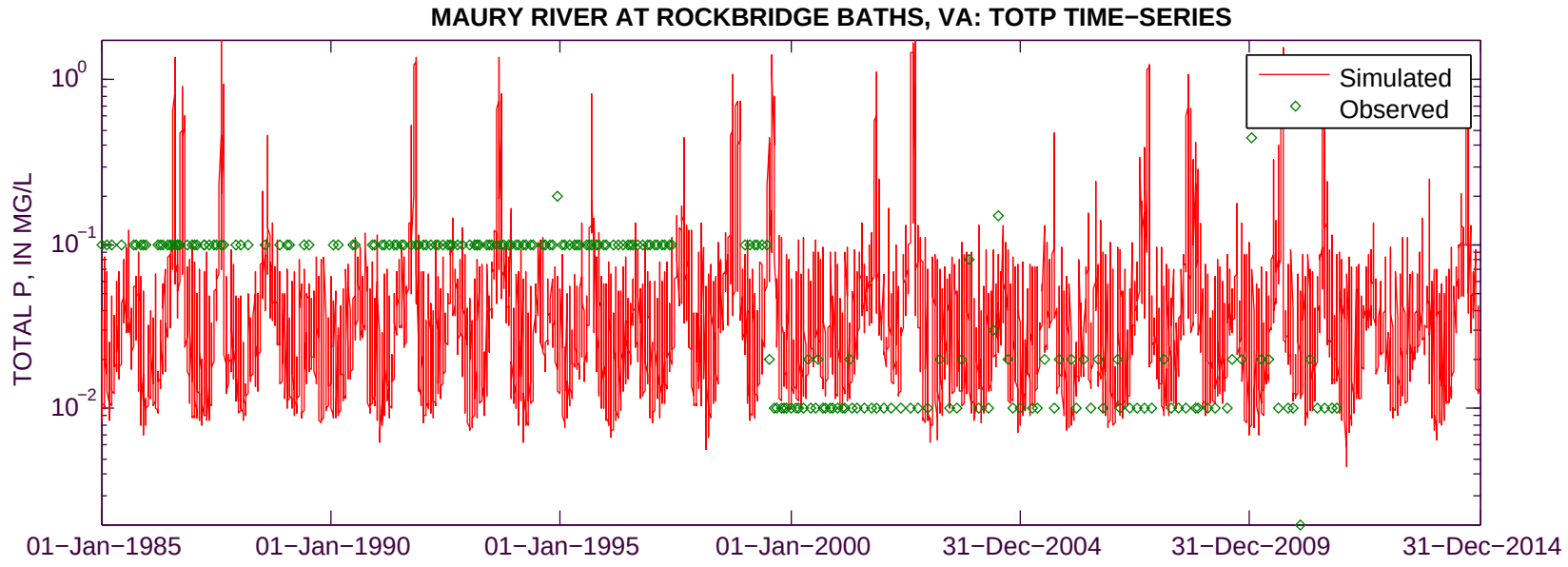
LOAD DATA
LOG10

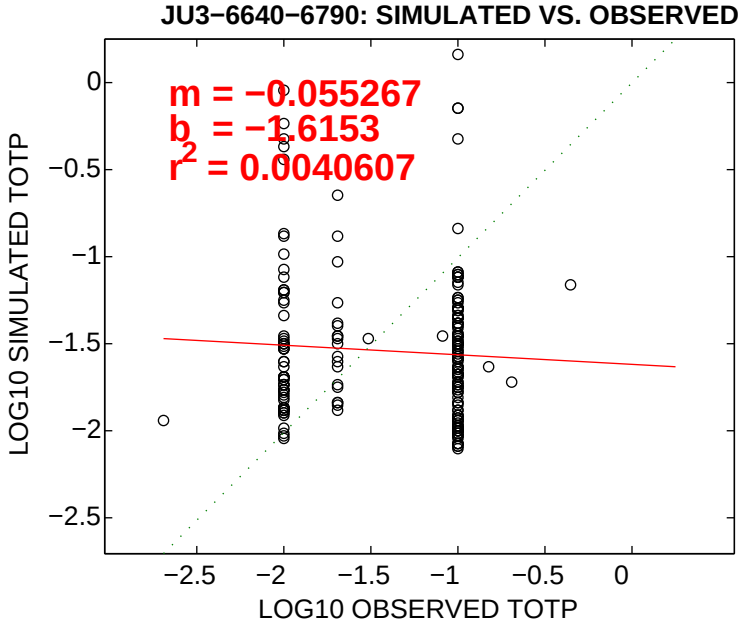


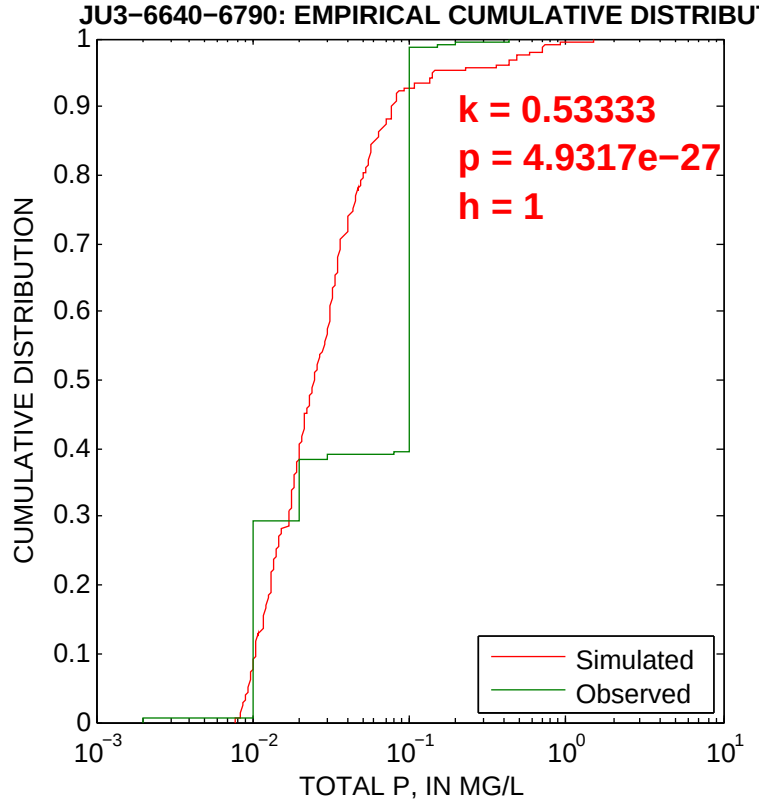












DATA SELECTION

scenario: P620171001WQ | file: TOTP.calib

plot: TOTP - total phosphorus

Dates: 1/1/1985 – 12/31/201

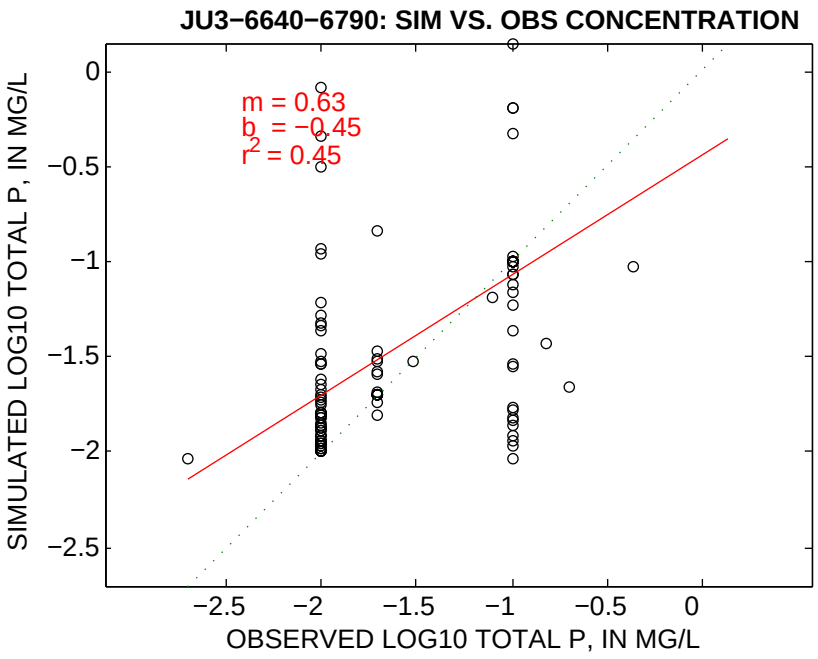
Drive: N/A | Directory: model | Observed: OBS20161101

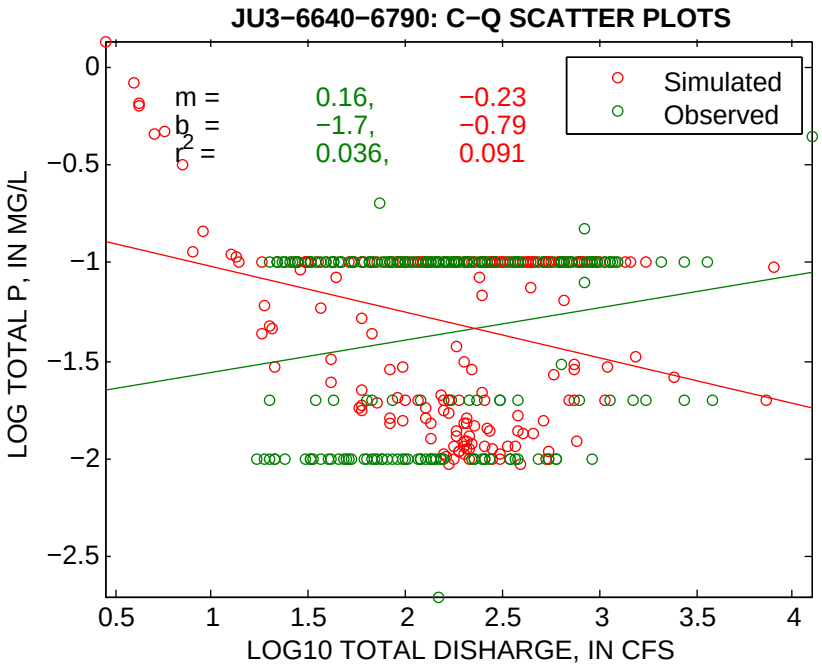
STATISTICS

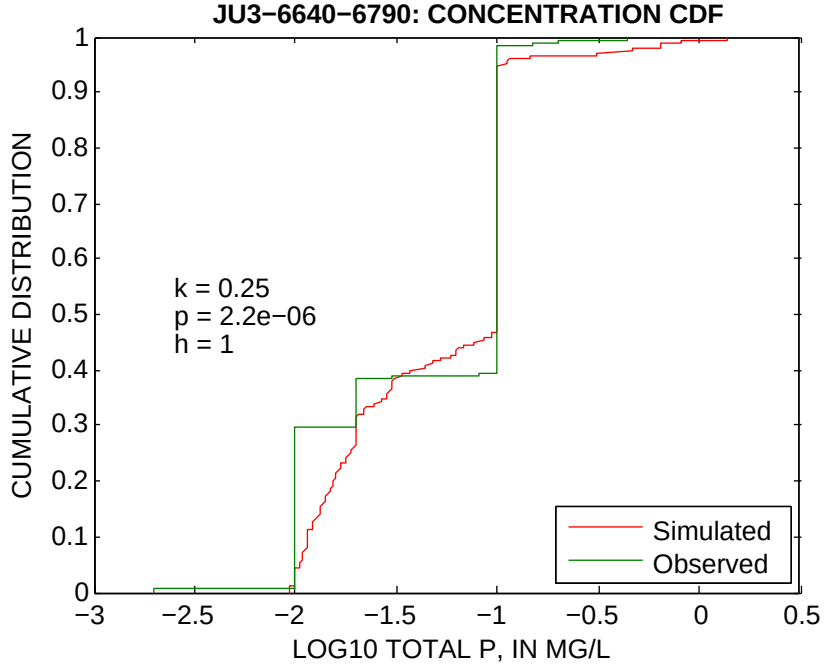
	n	210	210
		observe	simulate
min		0.002	0.0078959
		-2.69897	-2.1026
mean		0.0680571	0.0607234
		-1.35942	-1.54019
media		0.1	0.024968
		-1	-1.60262
max		0.44	1.4889
		-0.356547	0.172866
varian		0.00260493	0.0231215
		0.224205	0.168651
JB		0.001	0.001
		0.001089	0.001
		ra	log
%		-10.7759	13.2973
err.va		0.0263215	0.450472
rel.std.err		10.1045	2.00919
mod.eff		-9.10447	-1.00919

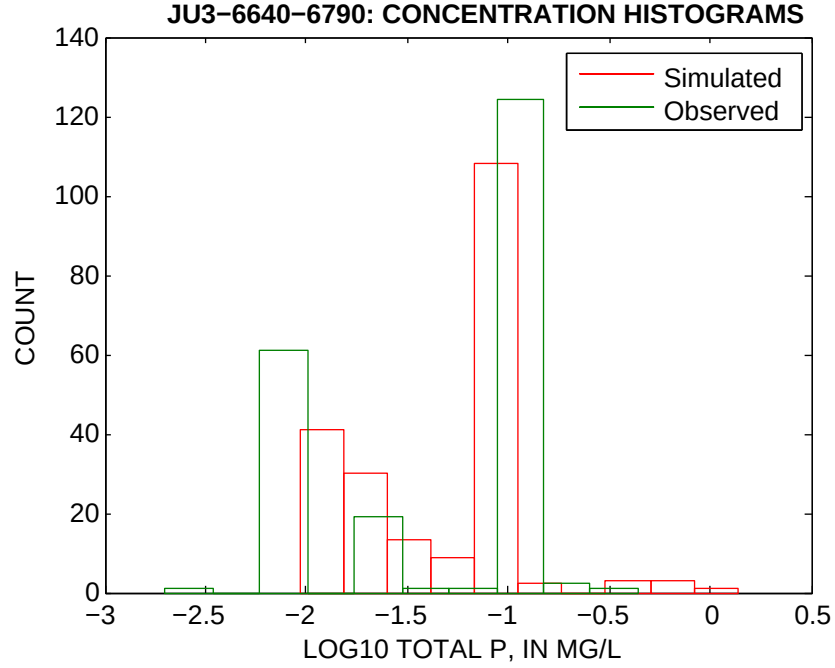
VERSION 2.1

ALL DATA
LOG10

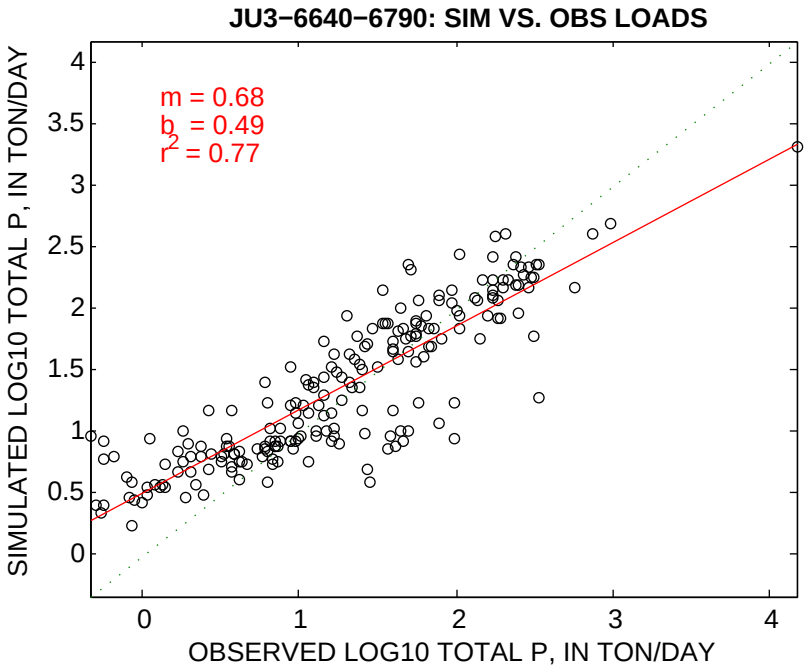




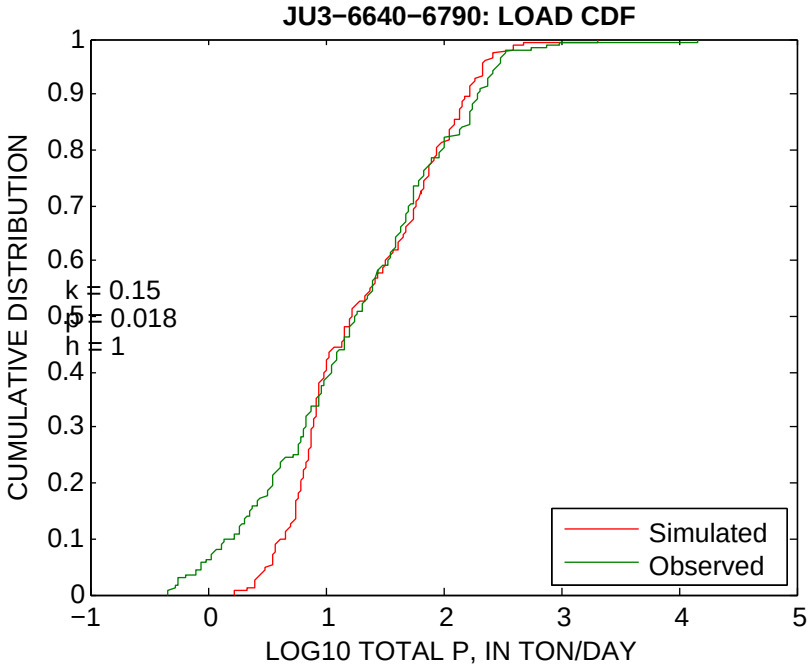


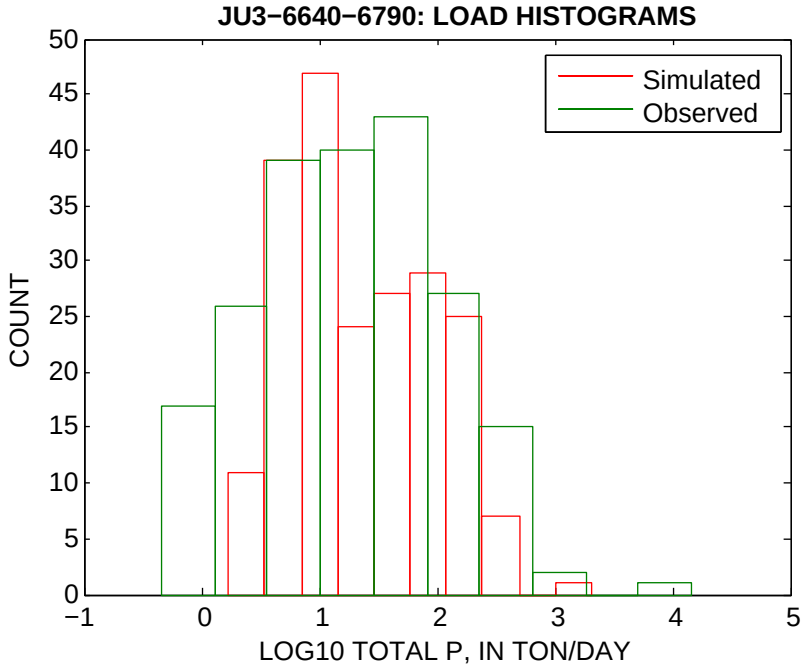


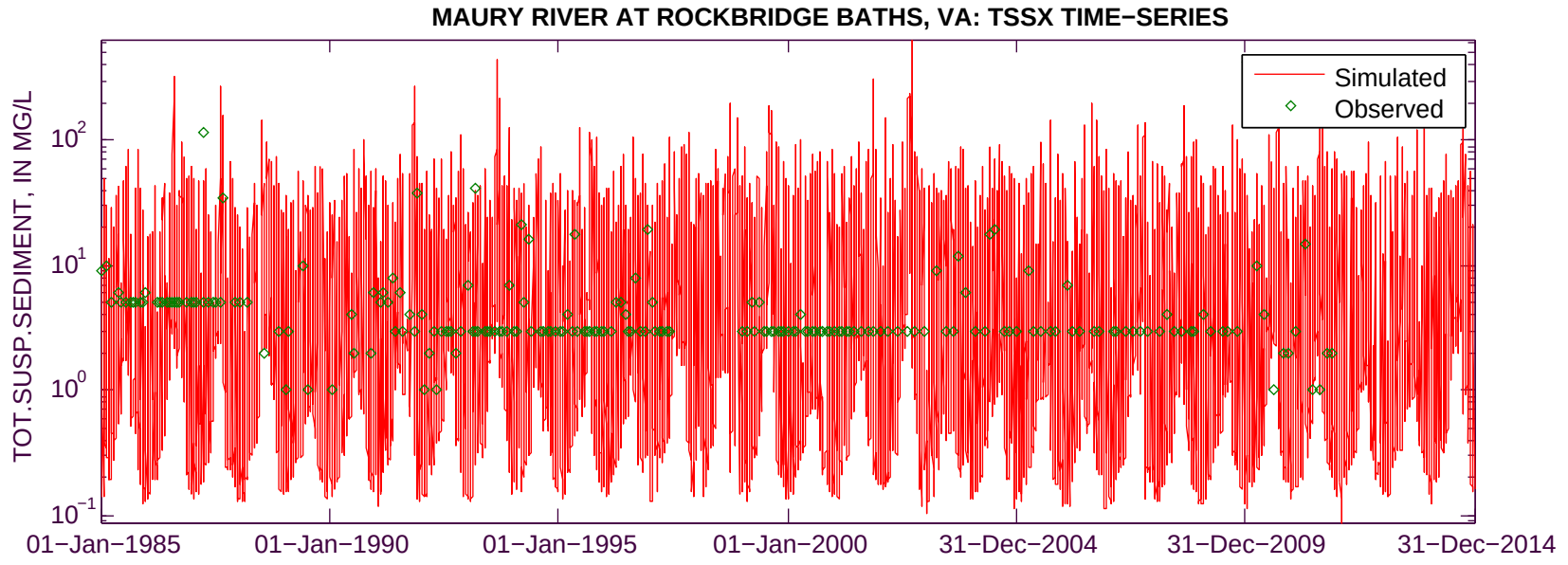
LOAD DATA
LOG10

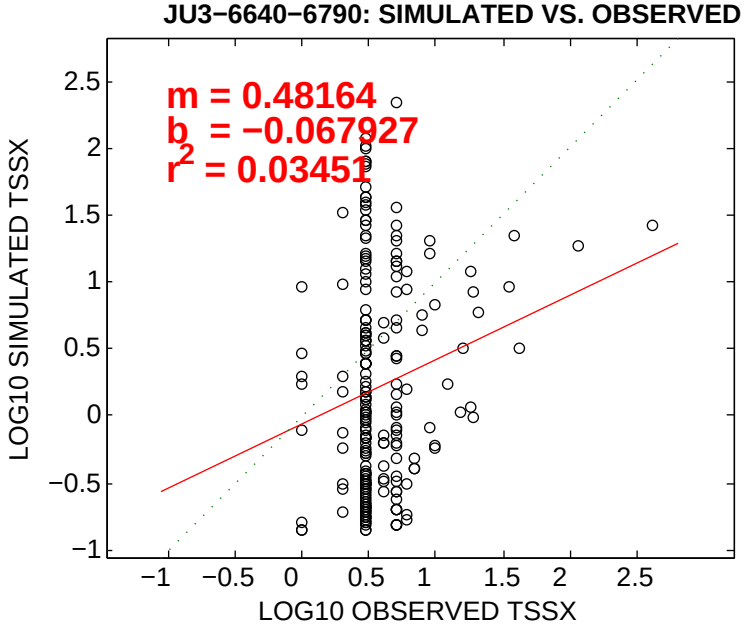


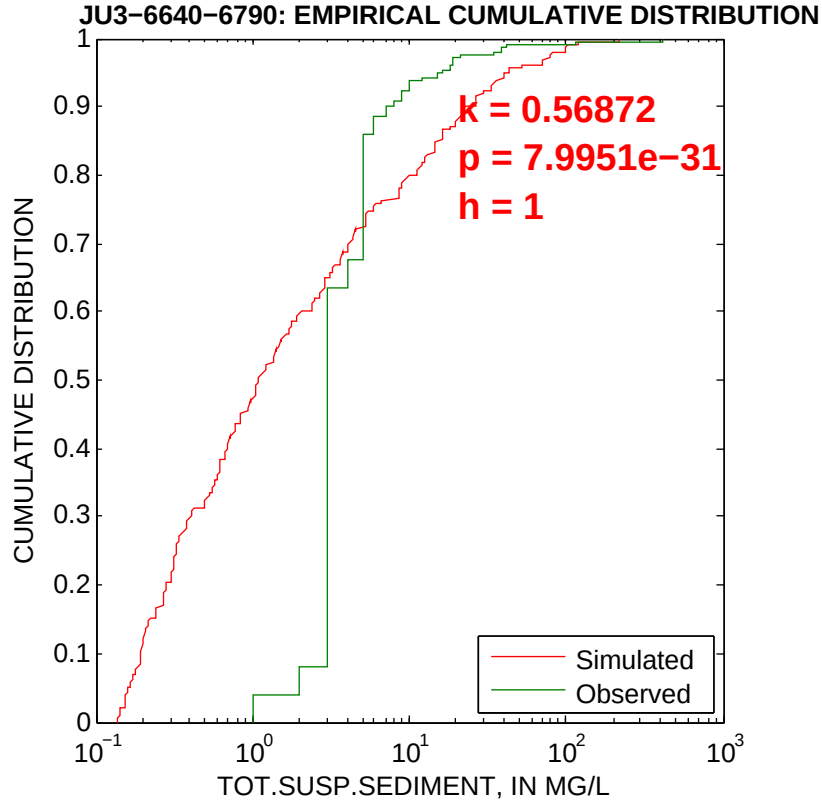












DATA SELECTION

scenario: P620171001WQ | file: TSSX.calib

plot: TSSX - total suspended ...

Dates: 1/1/1985 | 12/31/201

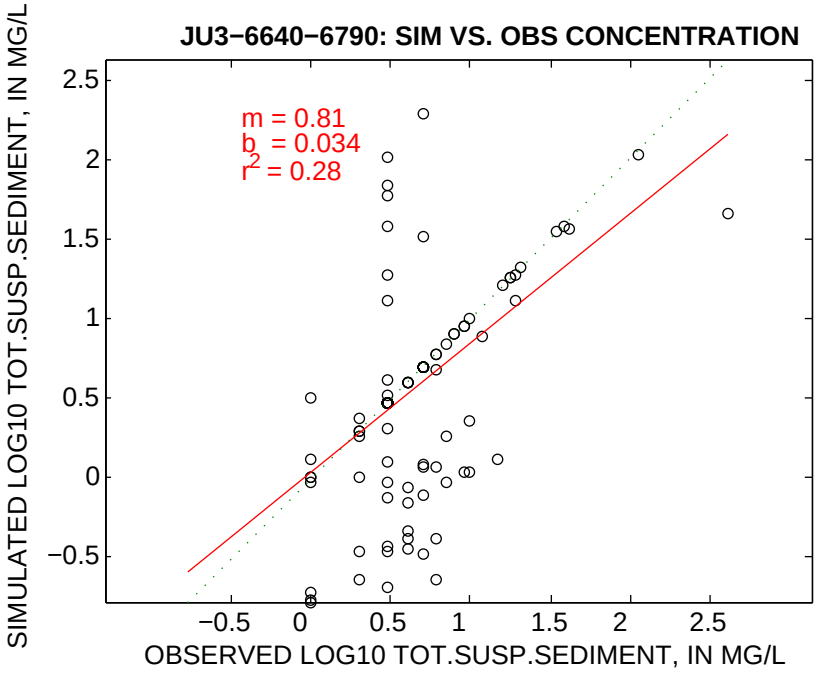
Drive | Directory: N/A | model | Observed: OBS20161101

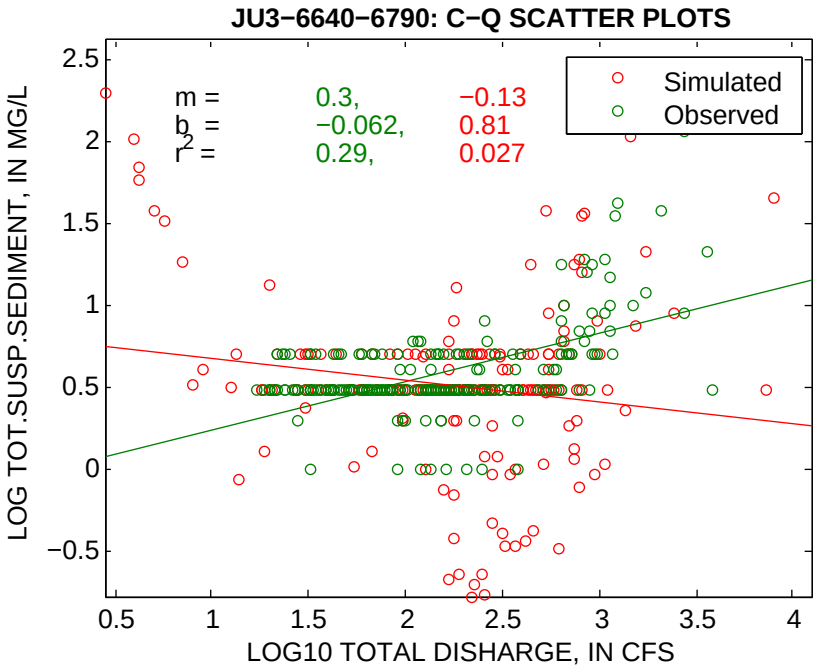
STATISTICS

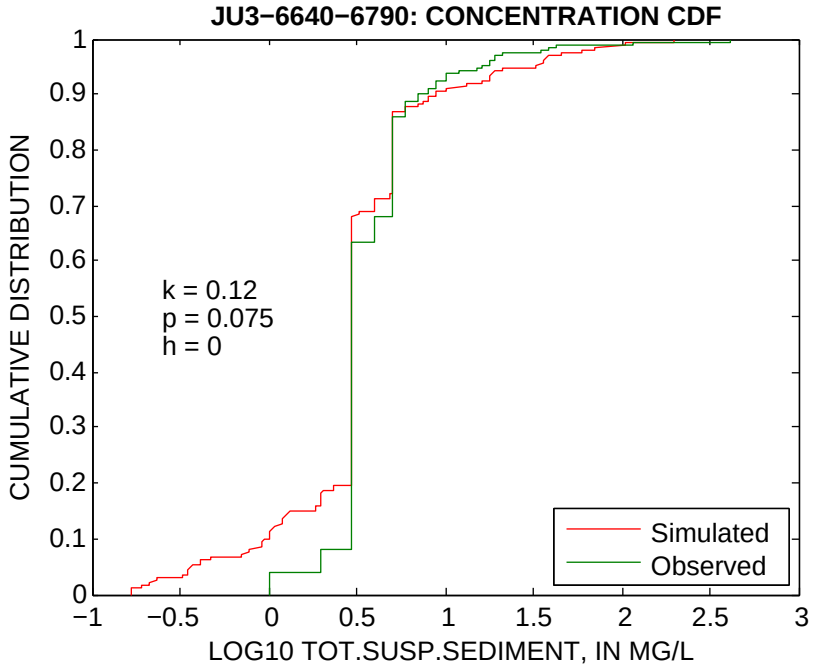
n	211	211
	observe	simulate
min	1	0.13762
	0	-0.861318
mean	7.17536	9.15194
	0.590798	0.216628
media	3	1.0799
	0.477121	0.0333835
max	413	218.43
	2.61595	2.33931
varian	871.545	534.357
	0.0930499	0.625498
JB	0.001	0.001
	0.001	0.005077
	ra	log
%	27.5468	-63.333
err.va	1335.69	0.769584
rel.std.err	1.53255	8.27066
mod.eff	-0.532554	-7.27066

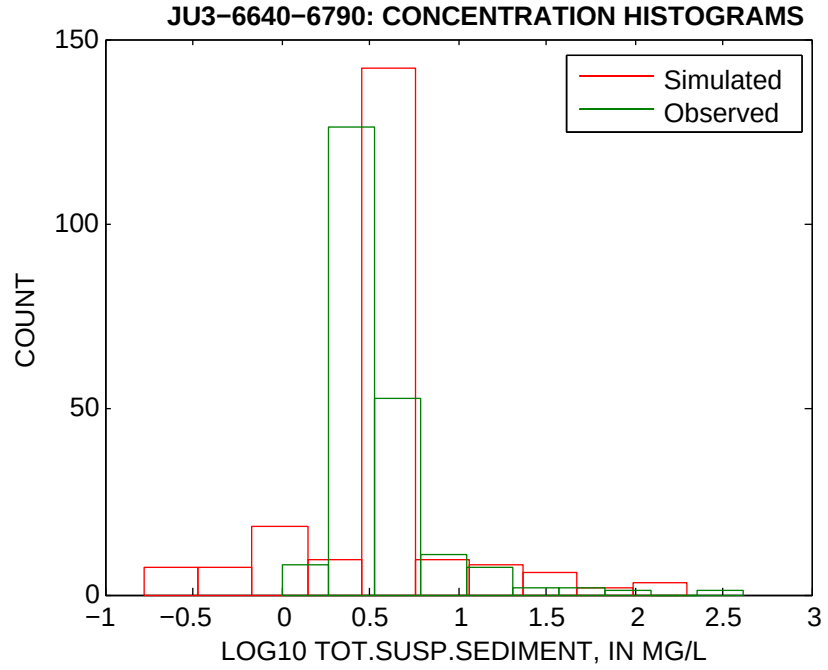
VERSION 2.1

ALL DATA
LOG10

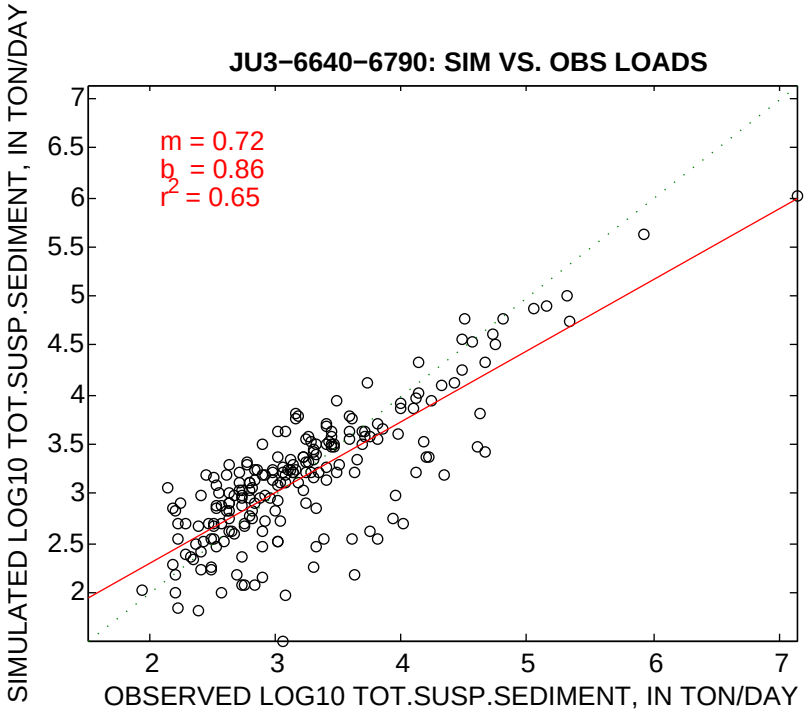




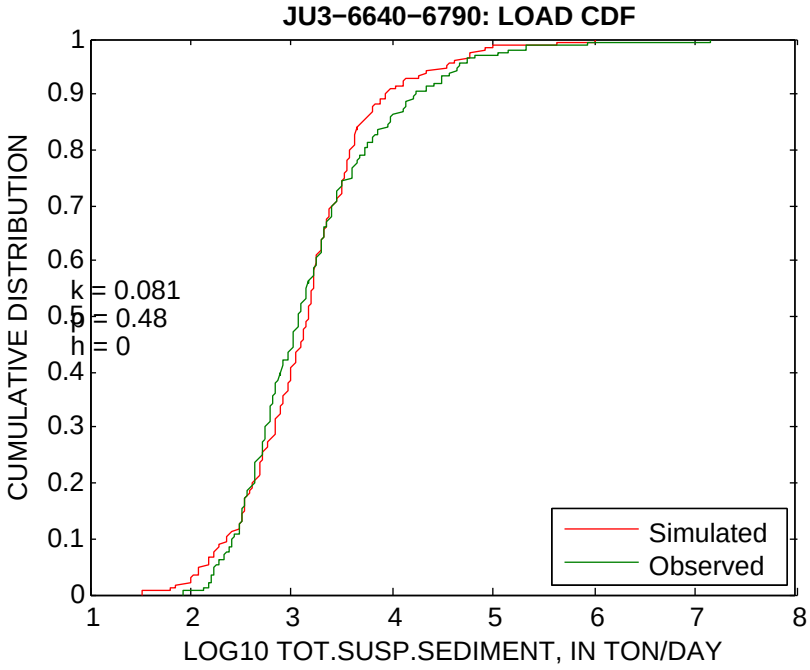


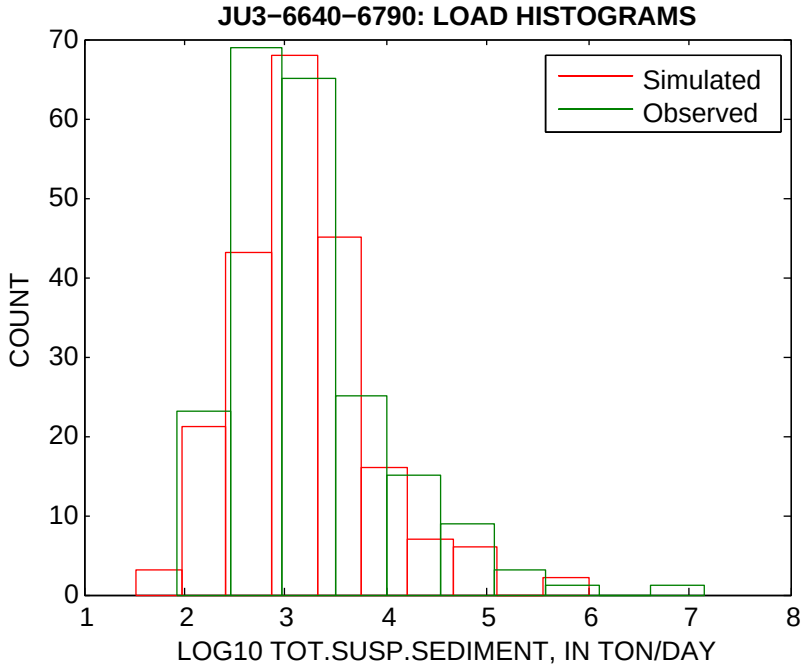


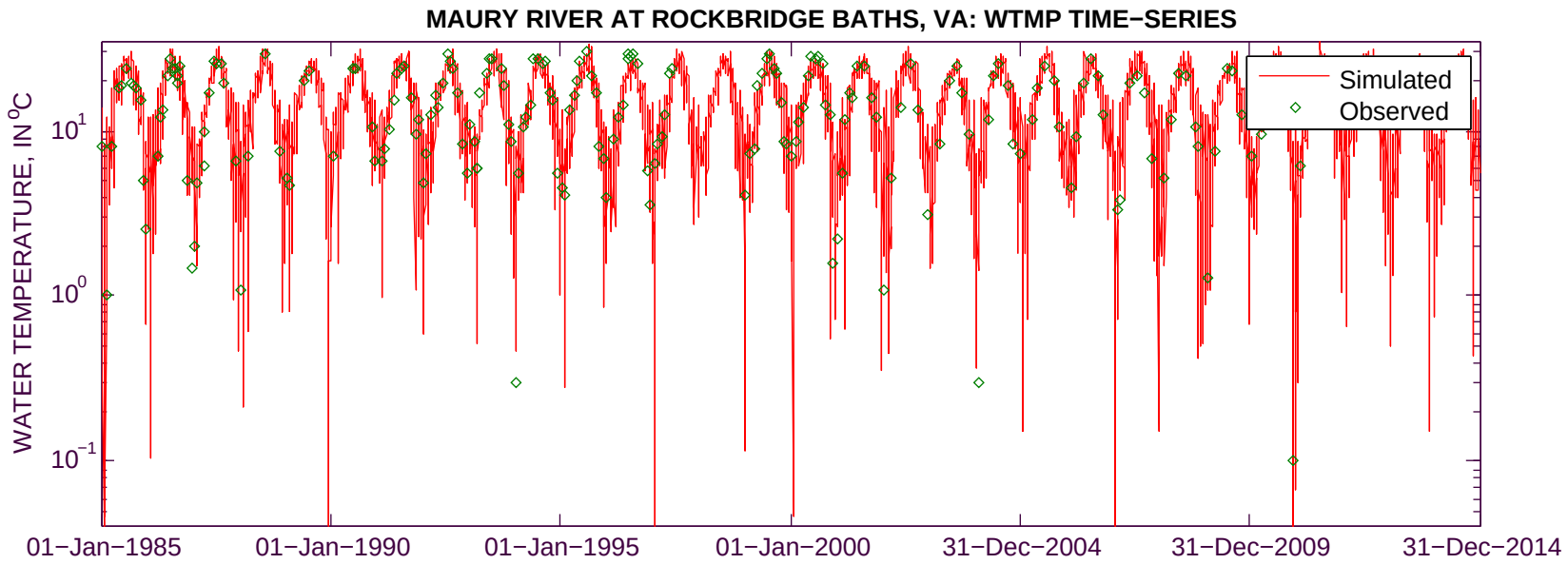
LOAD DATA
LOG10

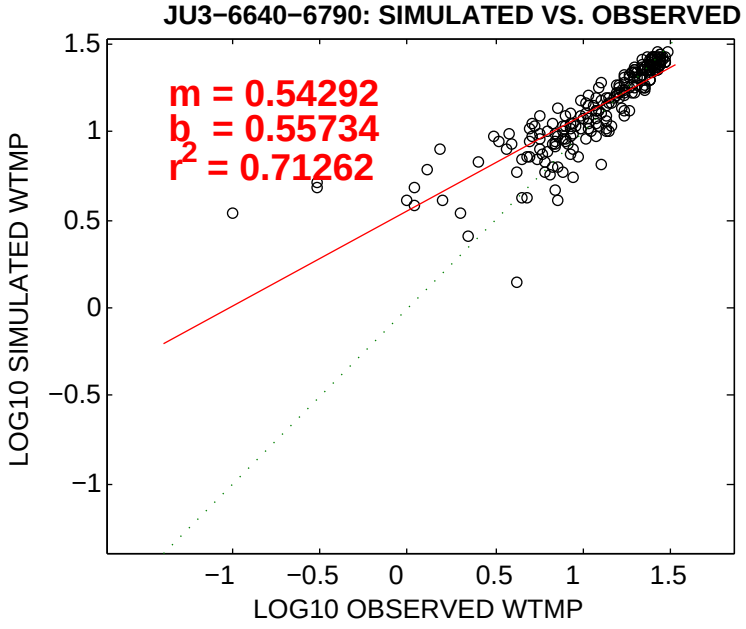


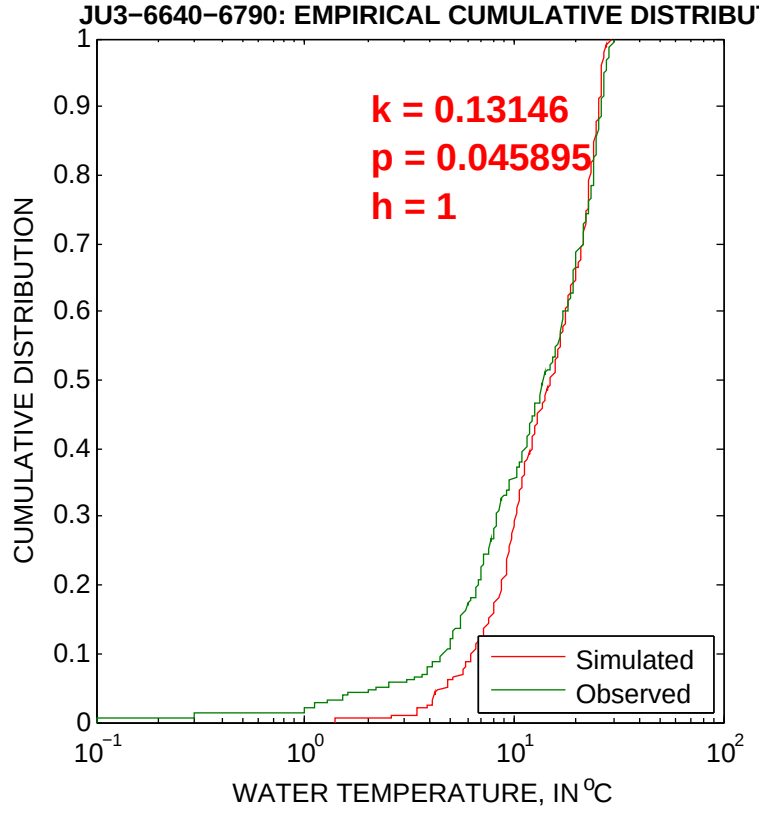












DATA SELECTION

scenario	file
P620171001WQ	WTMP.calib

plot: WTMP - water tempera...

Dates: 1/1/1985 — 12/31/201

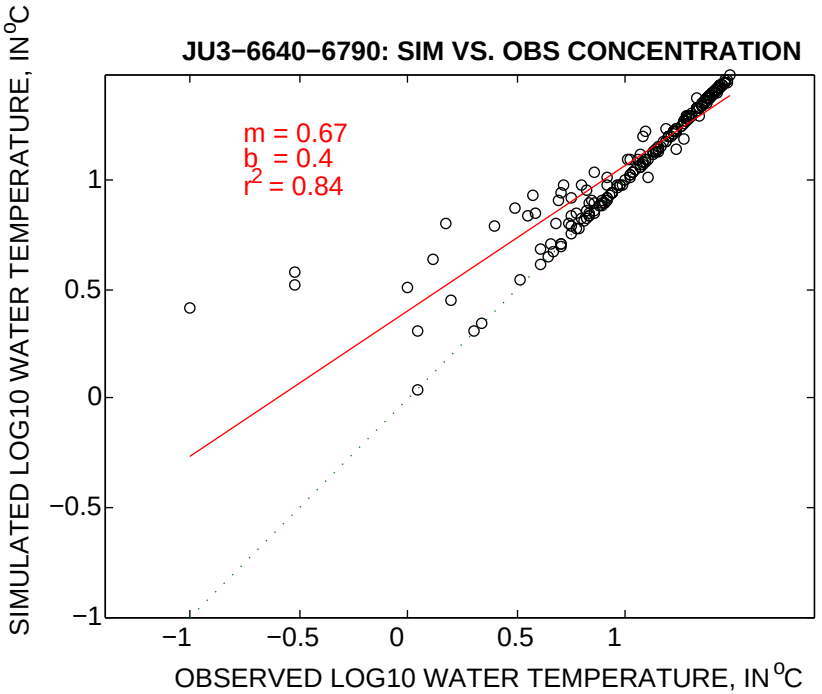
Drive	Directory	Observed
N/A	model	OBS20161101

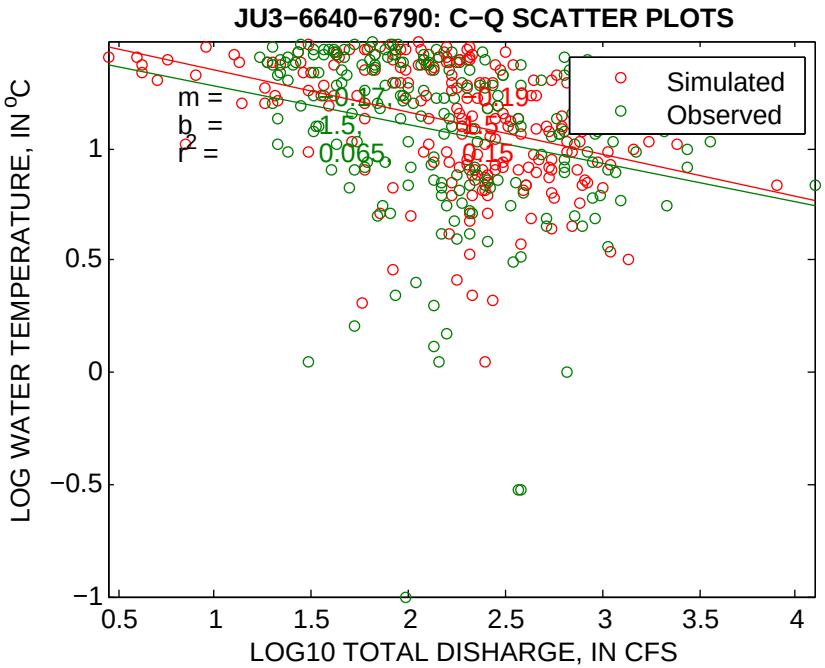
STATISTICS

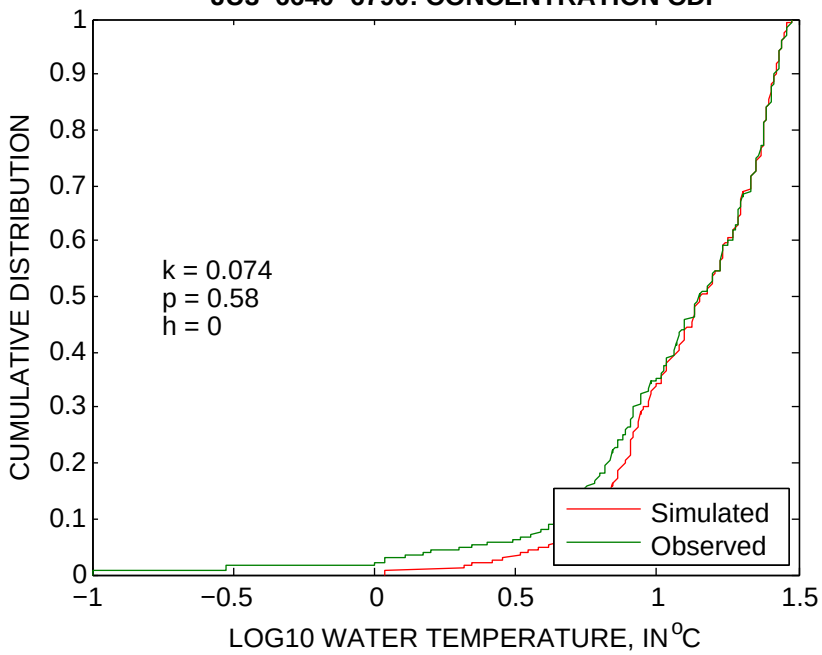
	n	observe	simulate
		213	213
min		0.1	1.3911
		-1	0.143358
mean		14.8583	15.5894
		1.06326	1.13462
media		14.1	14.973
		1.14922	1.17531
max		30.2	28.969
		1.48001	1.46193
varian		68.5016	51.9949
		0.143631	0.0594111
JB		0.006076	0.006162
		0.001	0.001
		ra	log
%		4.92055	6.71061
err.va		8.48203	0.0521956
rel.std.err		0.123822	0.3634
mod.eff		0.876178	0.6366

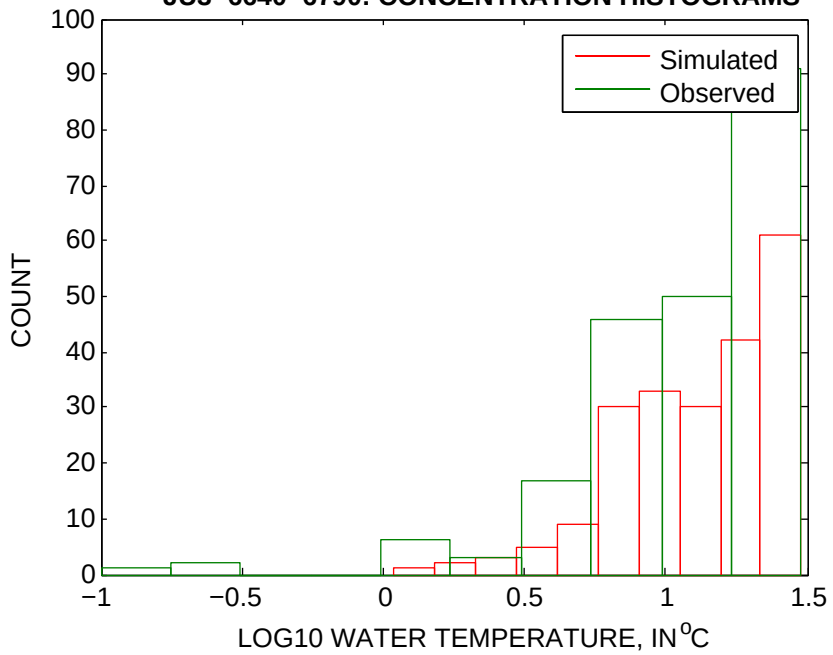
VERSION 2.1

ALL DATA
LOG10

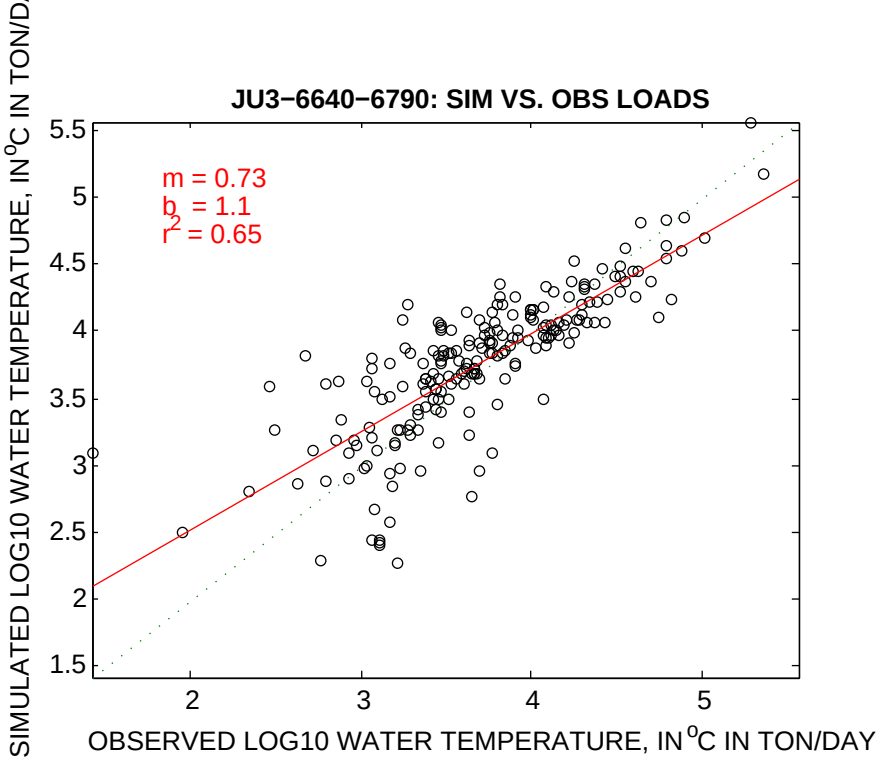


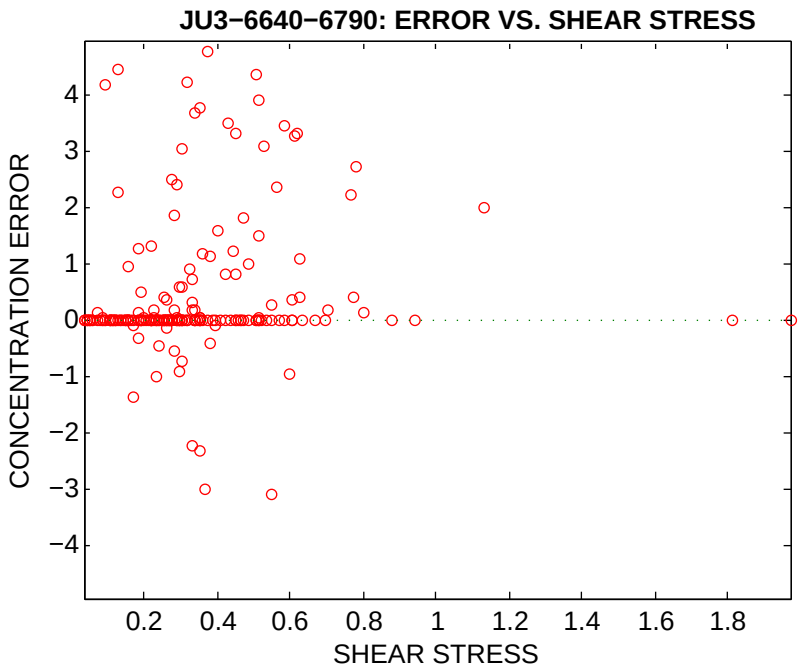


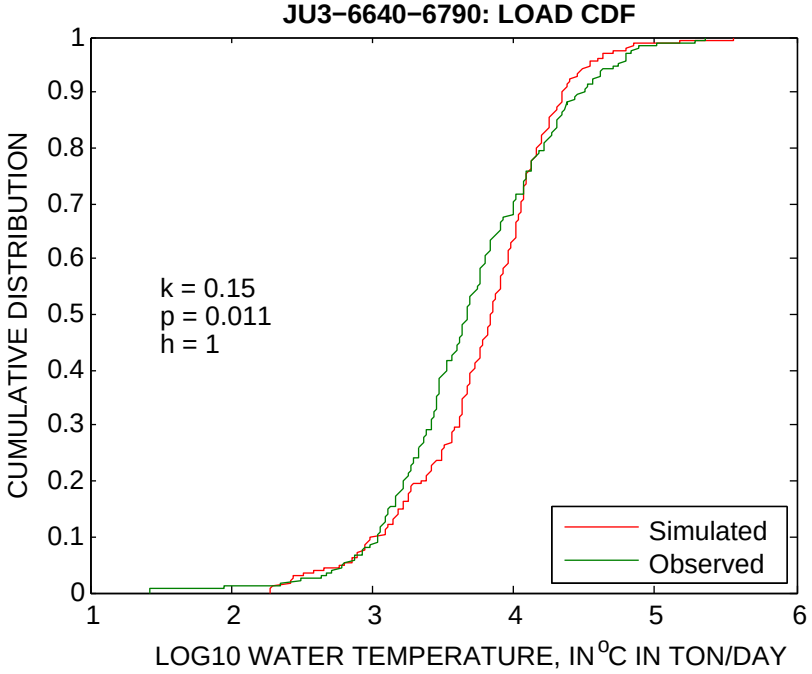


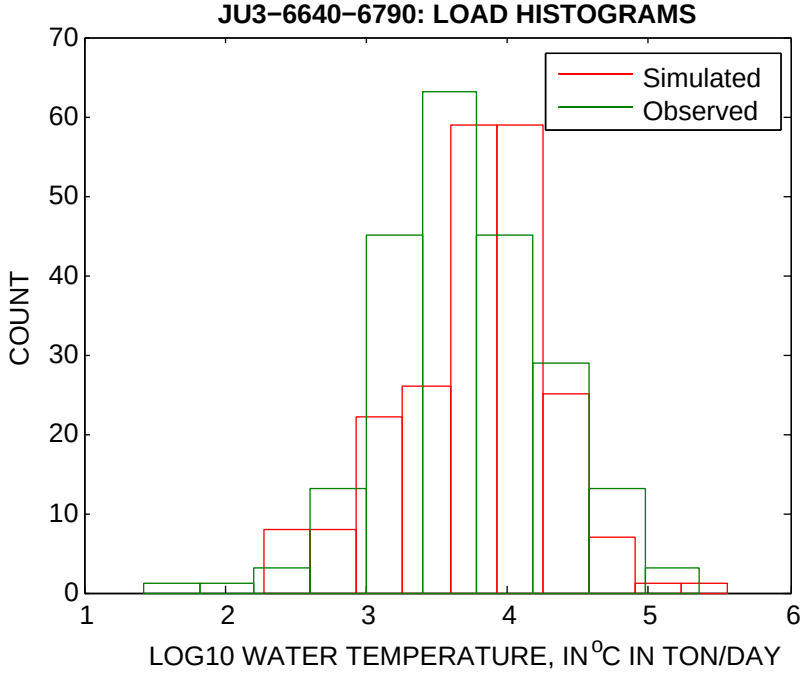


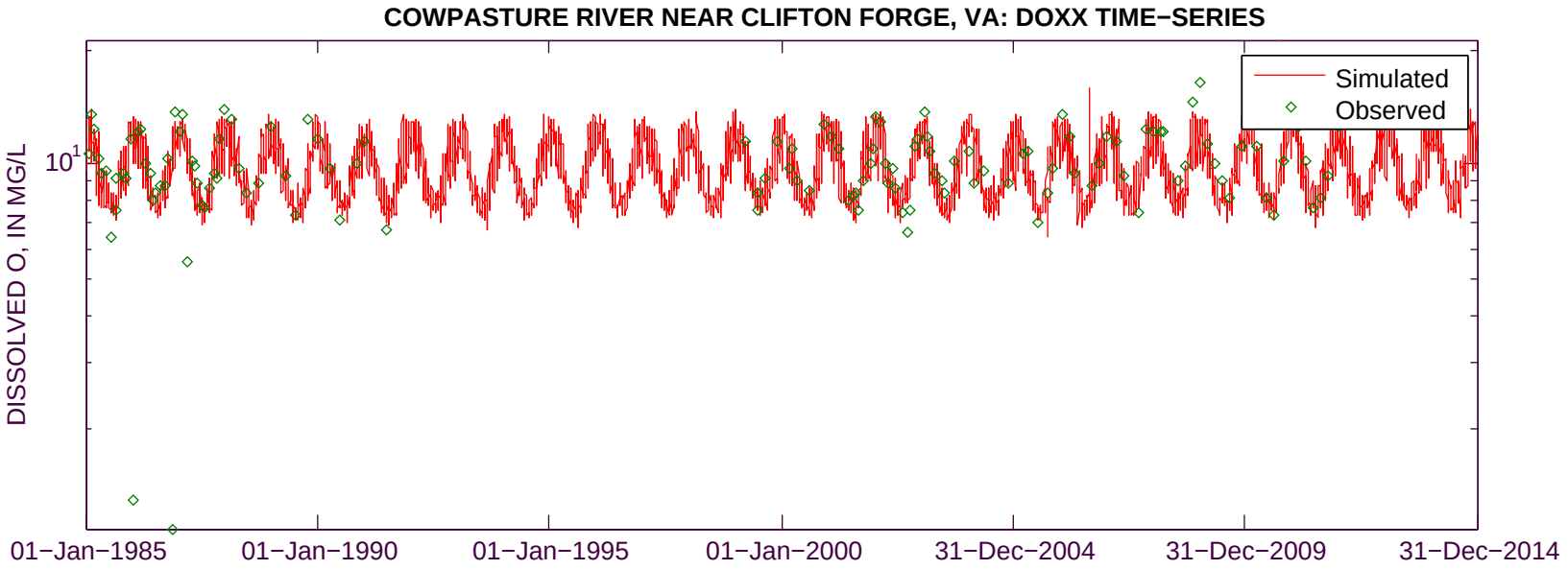
LOAD DATA
LOG10

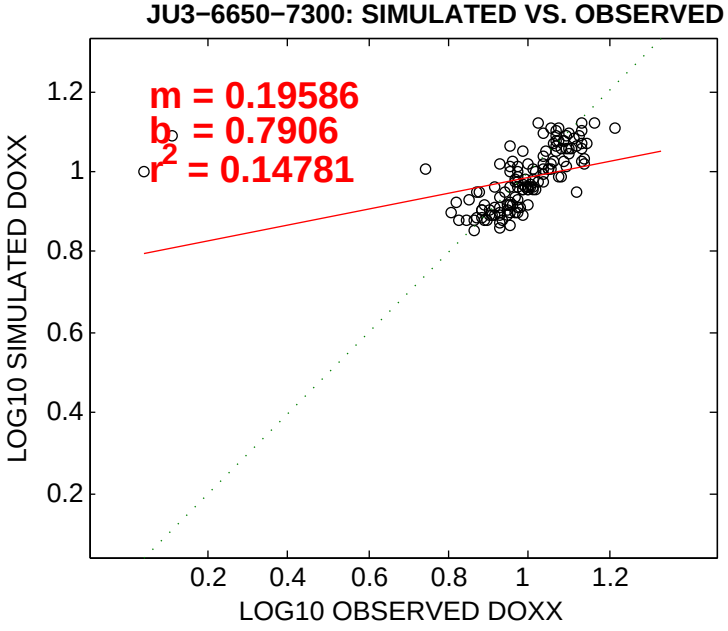


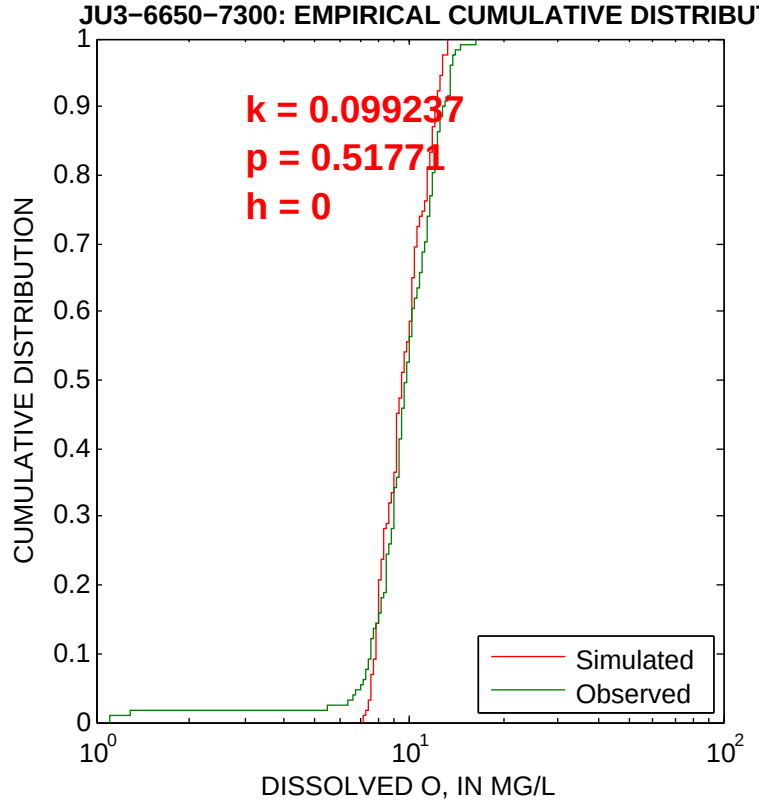












DATA SELECTION

scenario	file
P620171001WQ	DOXX.calib

plot: DOXX - dissolved oxygen

Dates 1/1/1985 12/31/201

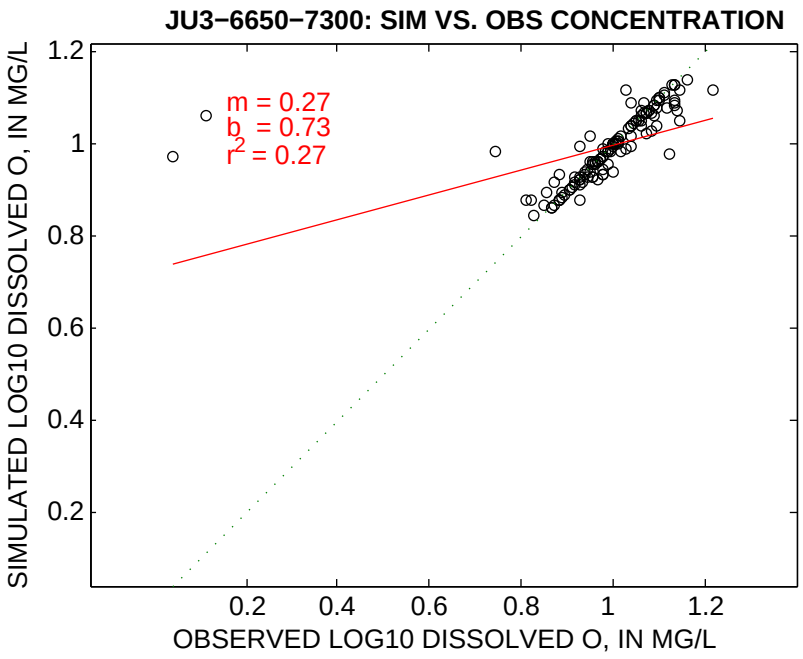
Drive	Directory	Observed
N/A	model	OBS20161101

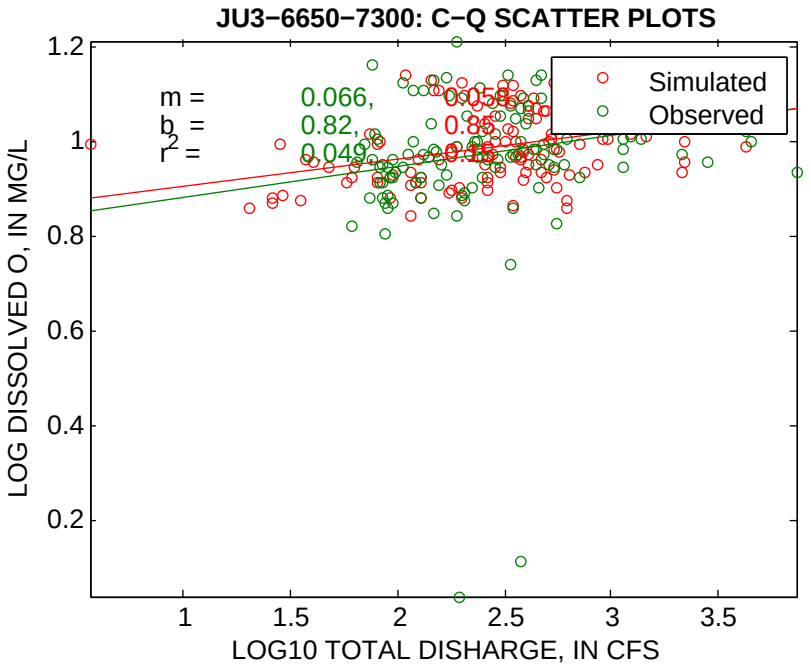
STATISTICS

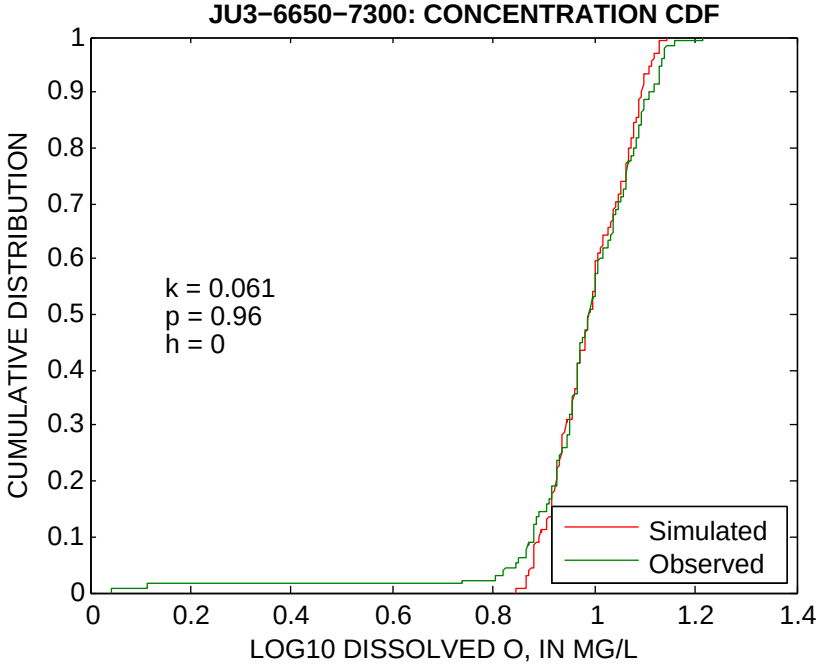
n	131	131
	observe	simulate
min	1.1	7.1573
	0.0413927	0.854749
mean	9.98939	9.7531
	0.982816	0.983095
media	9.78	9.488
	0.990339	0.977175
max	16.4	13.245
	1.21484	1.12205
varian	5.21382	2.71211
	0.0202734	0.00526137
JB	0.001074	0.024125
	0.001	0.031353
	ra	log
%	-2.3654	0.0283046
err.va	3.22946	0.0175934
rel.std.err	0.619403	0.867807
mod.eff	0.380597	0.132193

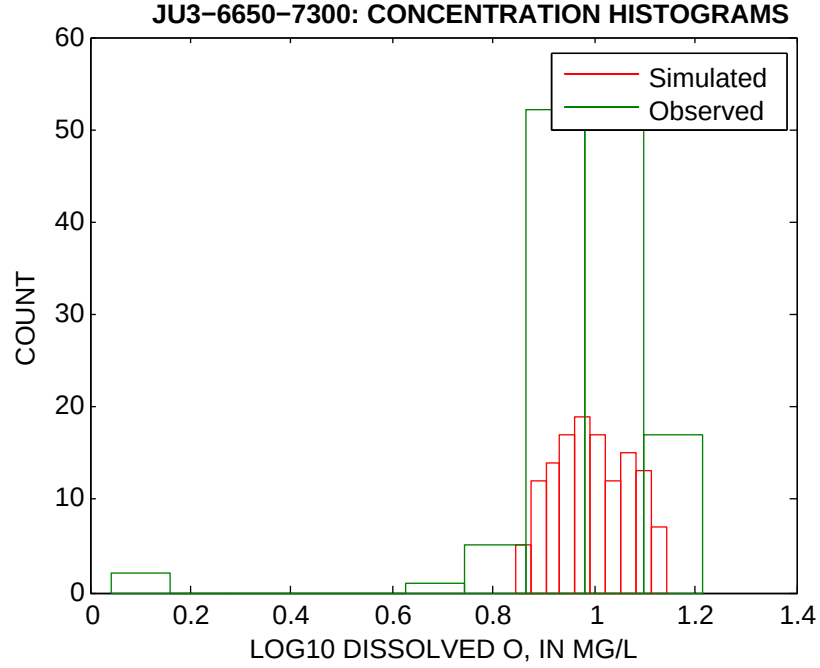
VERSION 2.1

ALL DATA
LOG10

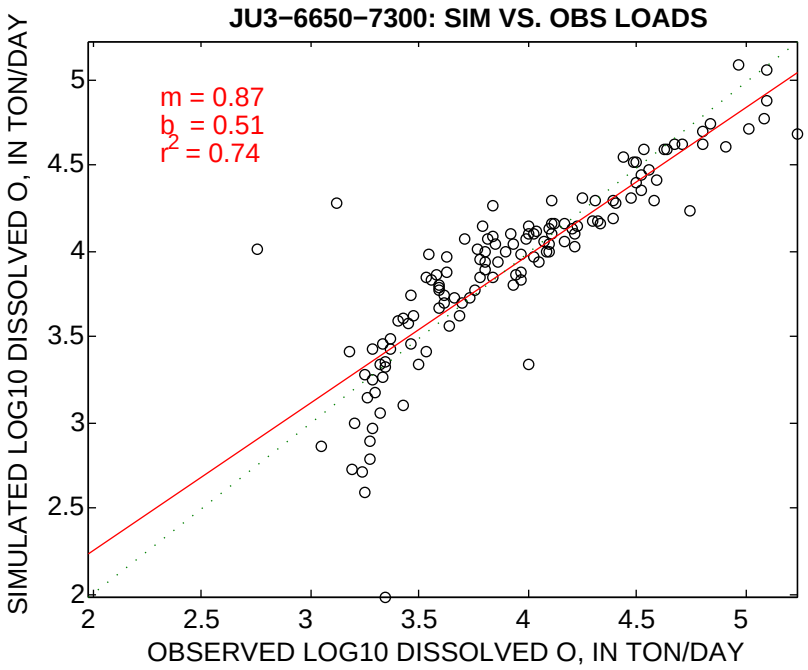


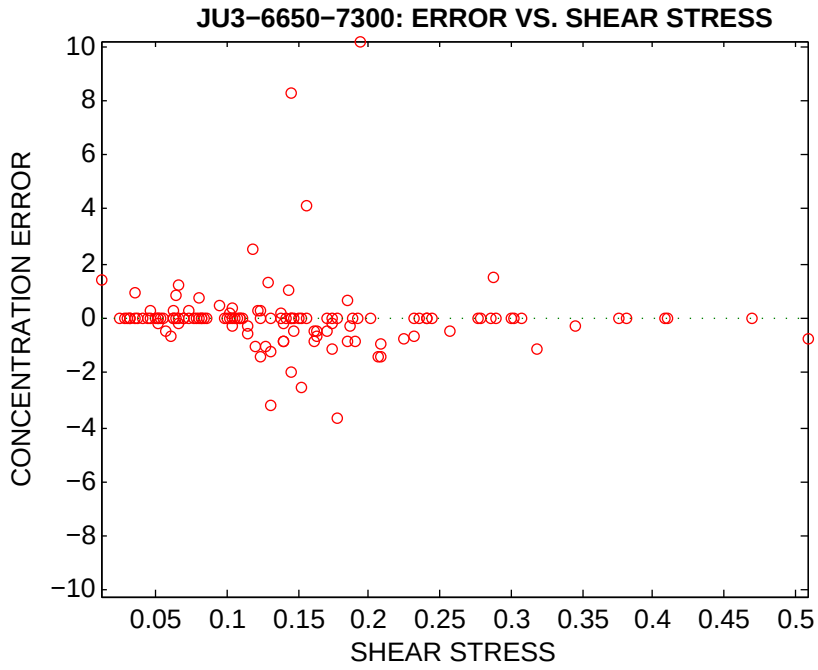


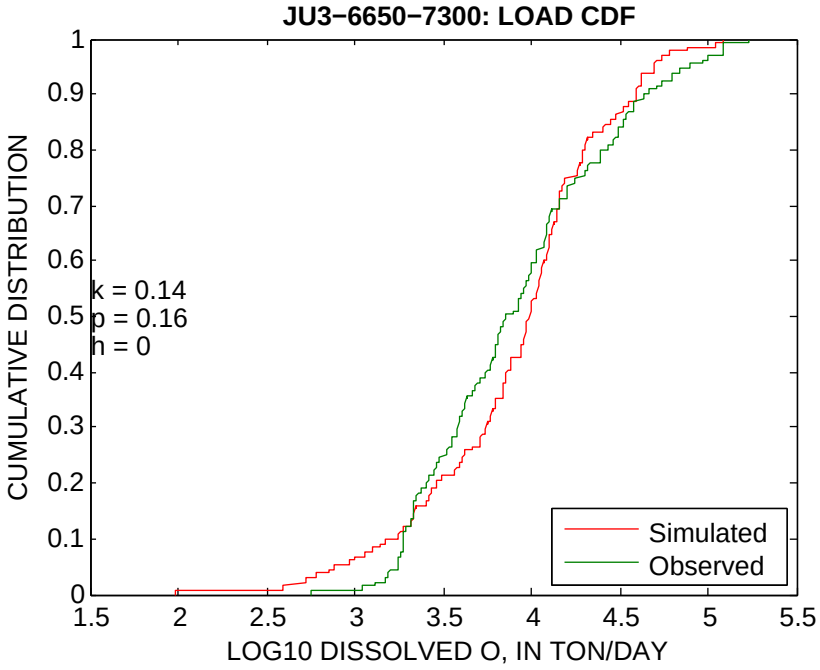


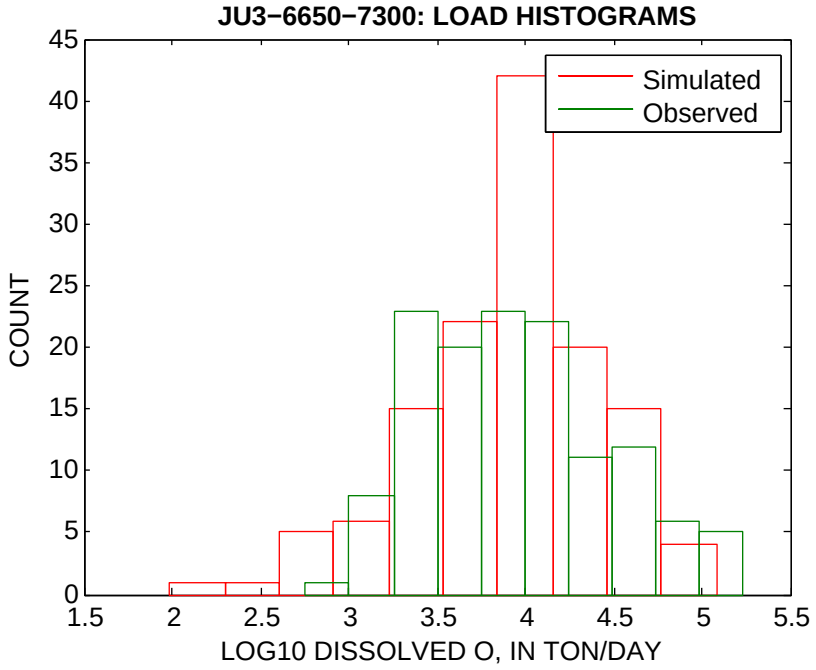


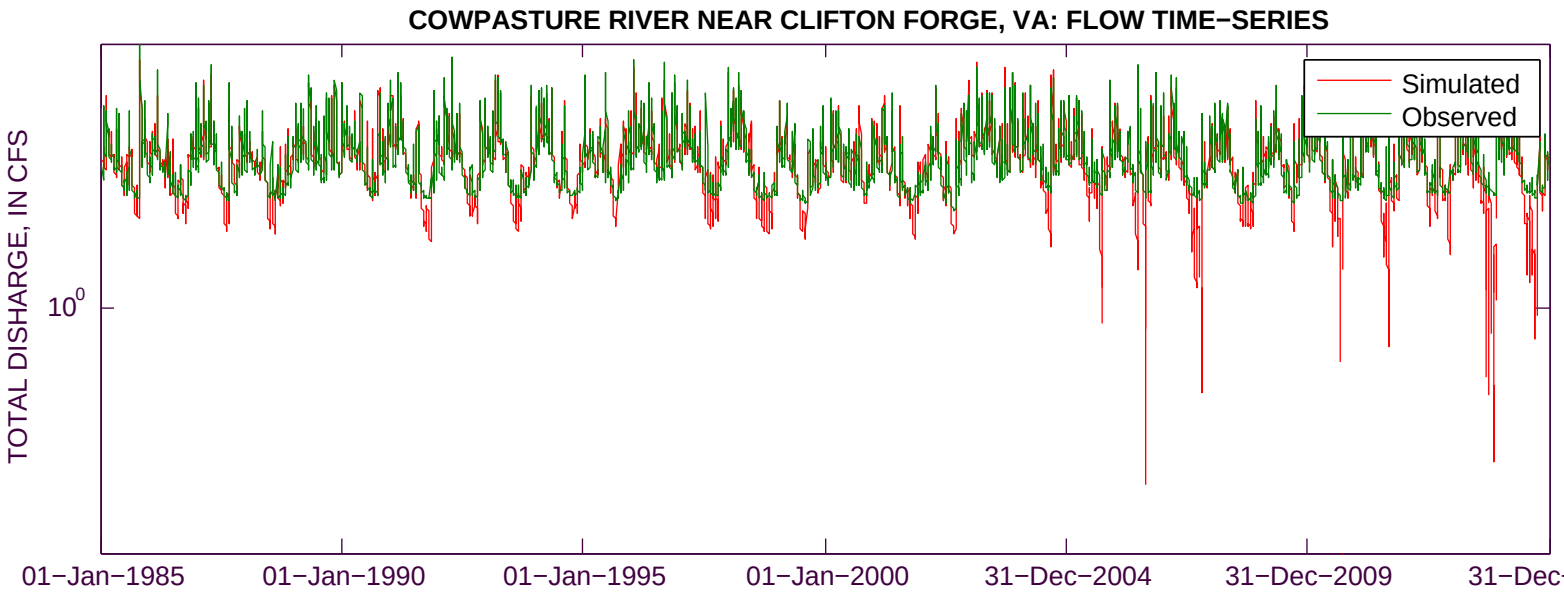
LOAD DATA
LOG10

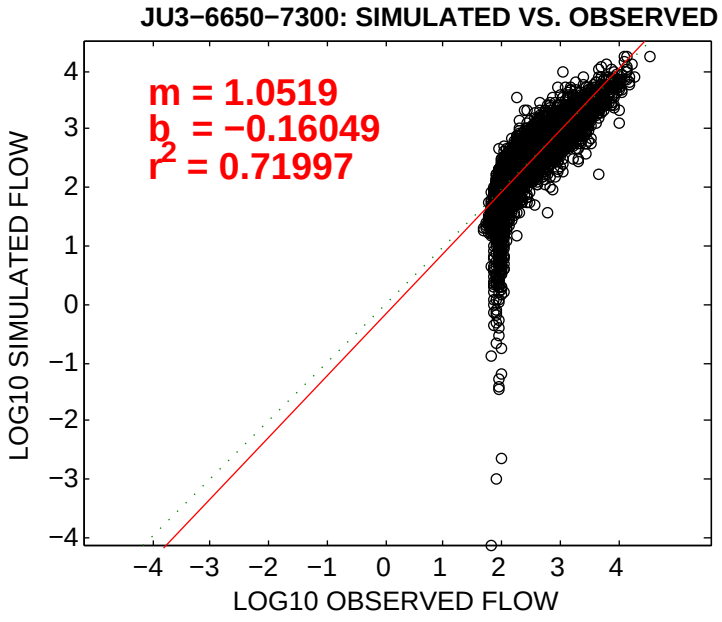


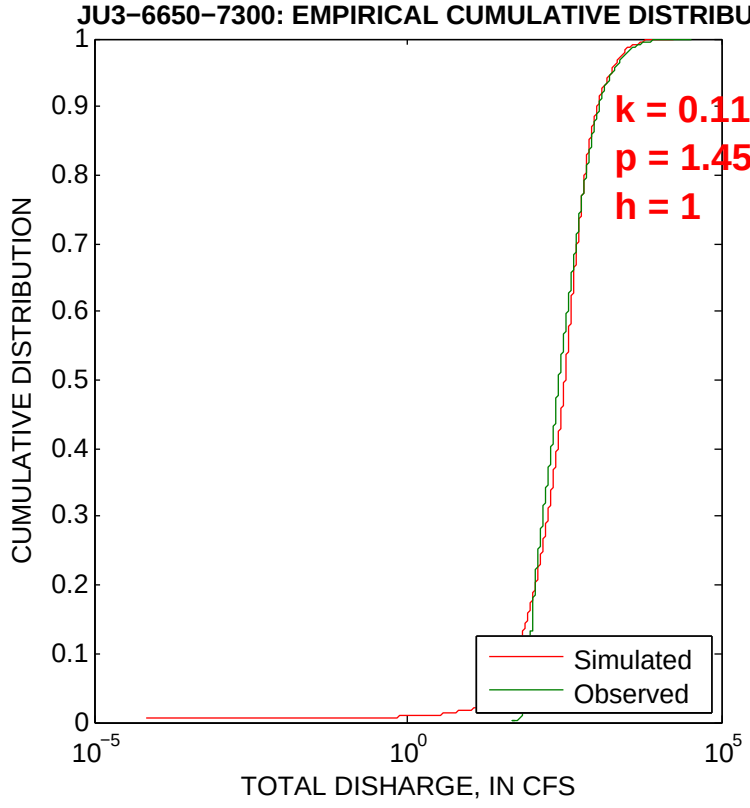












DATA SELECTION

scenario: P620171001WQ | file: FLOW.calib

plot: FLOW - total discharge

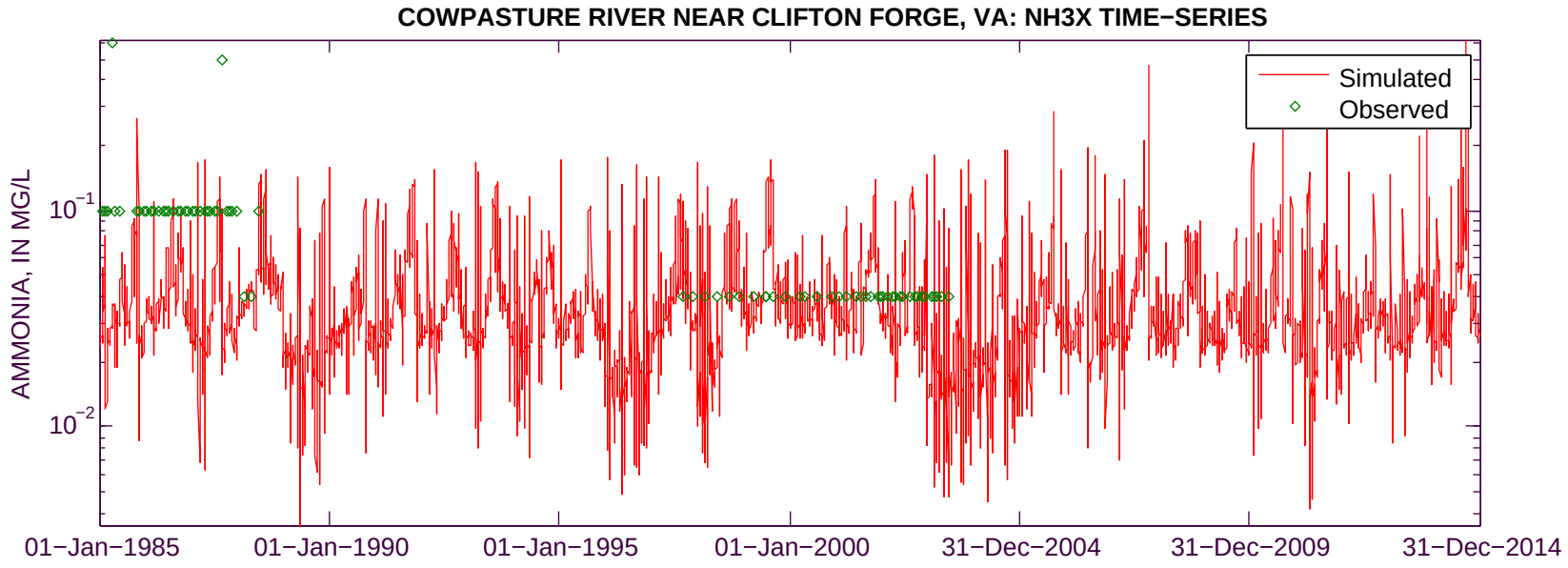
Dates: 1/1/1985 – 12/31/201

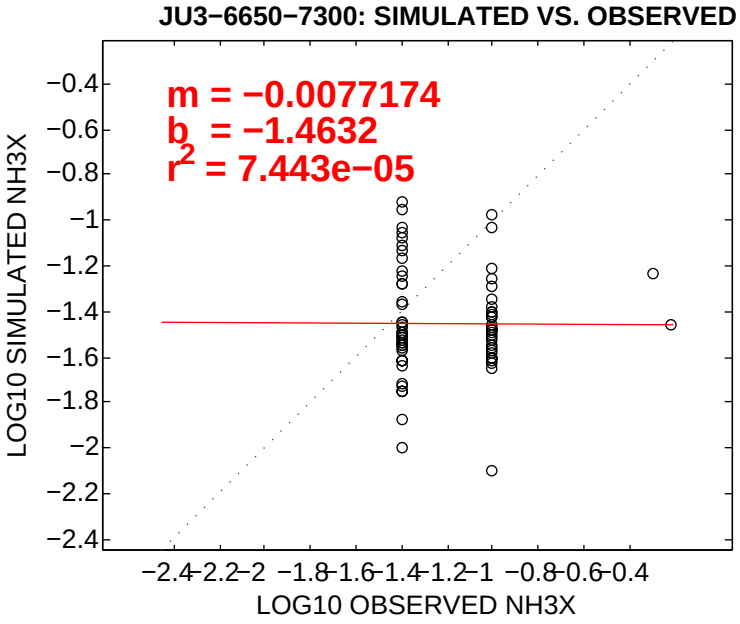
Drive | Directory | Observed: N/A | model | OBS20161101

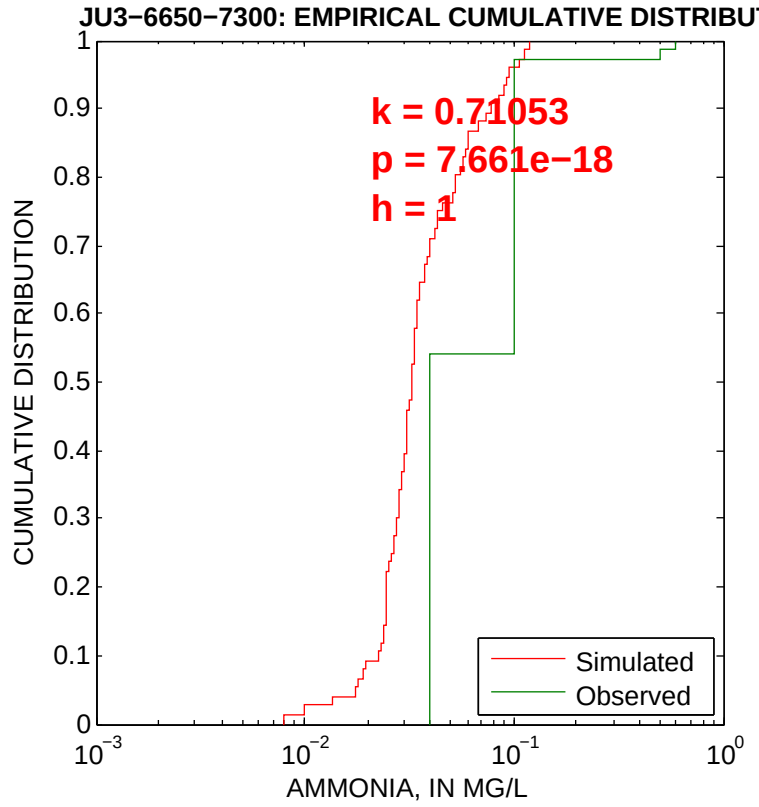
STATISTICS

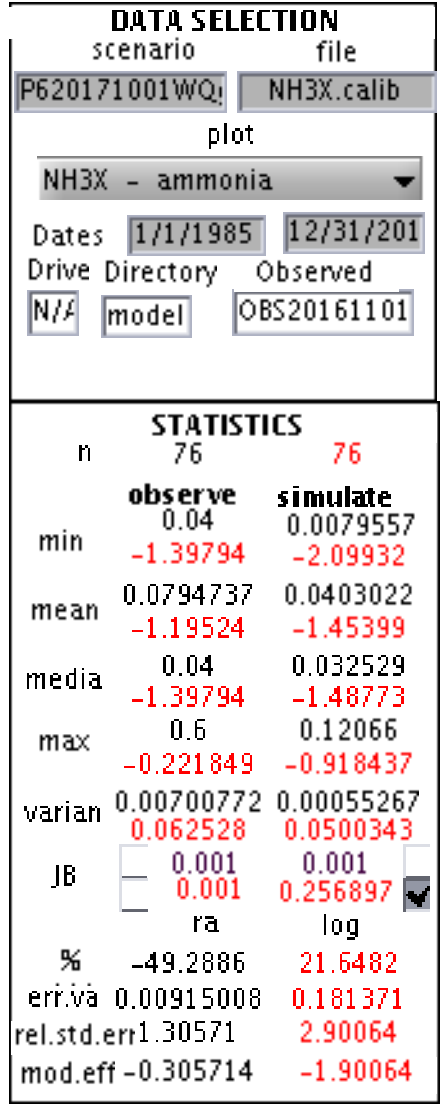
		observe	simulate
n		10957	10892
min		46	0
		1.66276	-4.15327
mean		559.545	537.611
		2.4783	2.44652
media		263	326.08
		2.42325	2.51689
max		33900	17775
		4.5302	4.24981
varian		1.12755e+0	757125
		0.192604	0.296025
JB		0.001	0.001
		0.001	0.001
		ra	log
%		-3.91998	-1.28253
err.va		285430	0.0844266
rel.std.err		0.253142	0.438344
mod.eff		0.746858	0.561656

VERSION


COWPASTURE RIVER NEAR CLIFTON FORGE, VA: NH3X TIME-SERIES
Simulated
Observed
AMMONIA, IN MG/L
10^{-1}
10^{-2}
01-Jan-1985
01-Jan-1990
01-Jan-1995
01-Jan-2000
31-Dec-2004
31-Dec-2009
31-Dec-2014

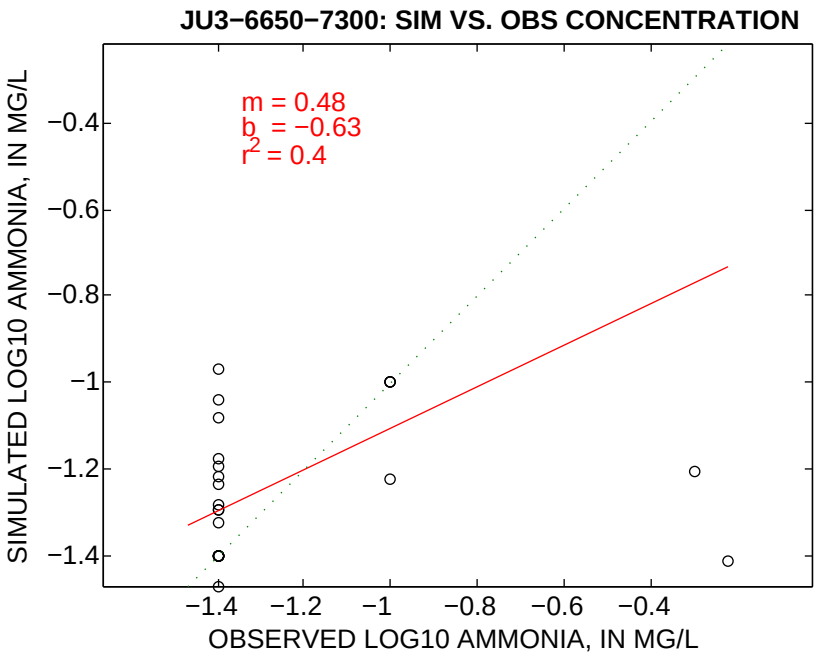

JU3-6650-7300: SIMULATED VS. OBSERVED
m = -0.0077174
b = -1.4632
r^2 = 7.443e-05
LOG10 SIMULATED NH3X
LOG10 OBSERVED NH3X

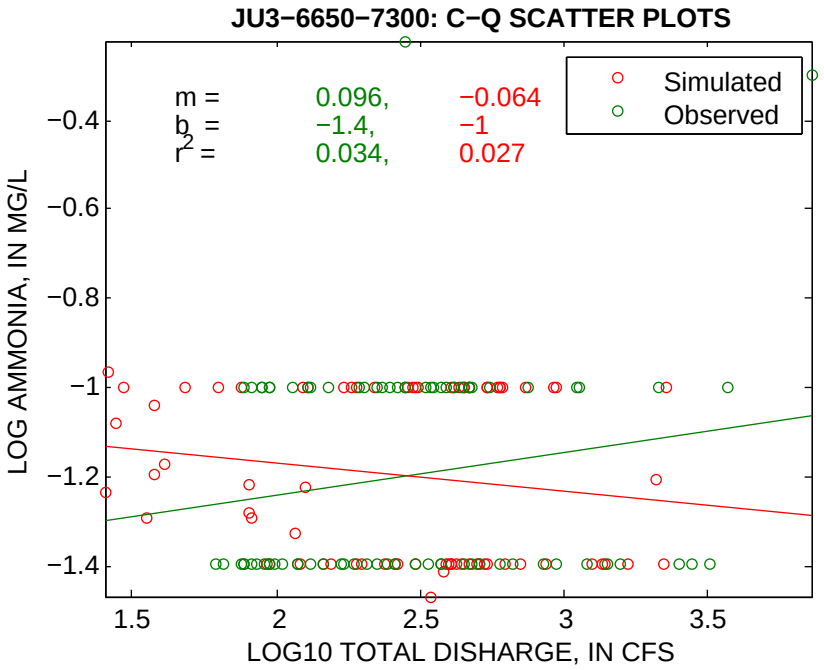

JU3-6650-7300: EMPIRICAL CUMULATIVE DISTRIBUTION
k = 0.71053
p = 7.661e-18
h = 1
Simulated
Observed
CUMULATIVE DISTRIBUTION
AMMONIA, IN MG/L

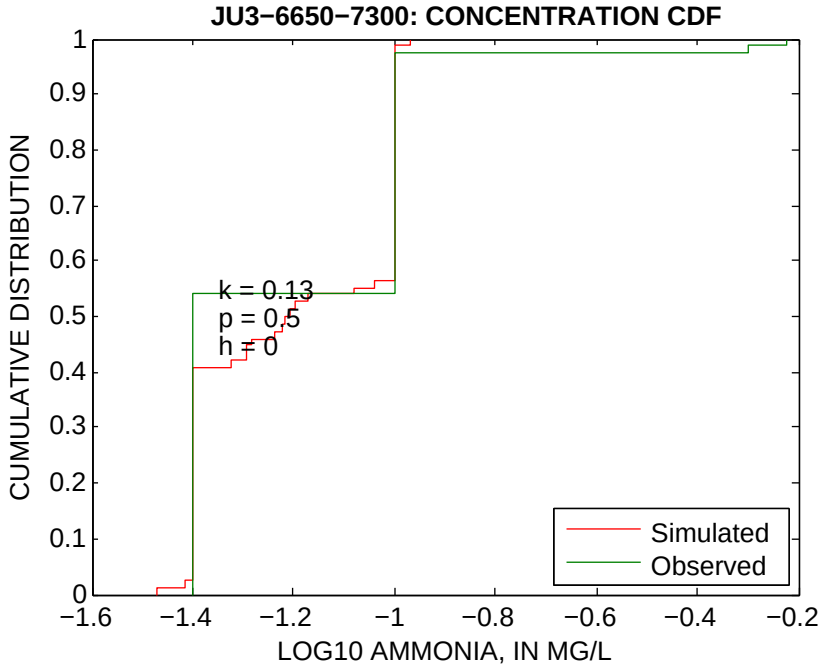

DATA SELECTION
scenario
file
P620171001WQ
NH3X.calib
plot
NH3X - ammonia
Dates
1/1/1985
12/31/201
Drive
Directory
Observed
N/A
model
OBS20161101
STATISTICS
n
76
76
observe
simulate
min
0.04
-1.39794
0.0079557
-2.09932
mean
0.0794737
-1.19524
0.0403022
-1.45399
media
0.04
-1.39794
0.032529
-1.48773
max
0.6
-0.221849
0.12066
-0.918437
varian
0.00700772
0.062528
0.00055267
0.0500343
JB
0.001
0.001
0.001
0.256897
ra
log
%
-49.2886
21.6482
err.va
0.00915008
0.181371
rel.std.err
1.30571
2.90064
mod.eff
-0.305714
-1.90064

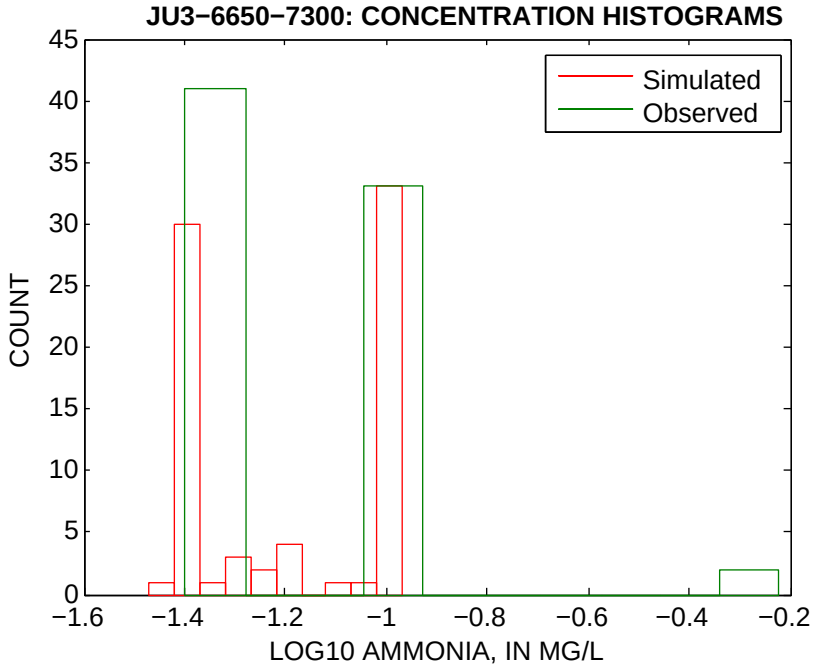
VERSION

ALL DATA
LOG10

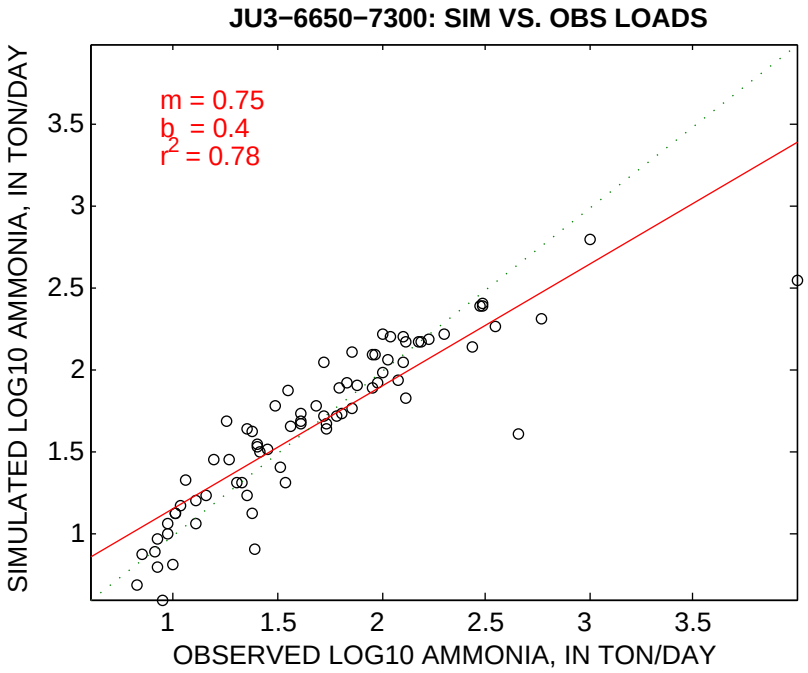


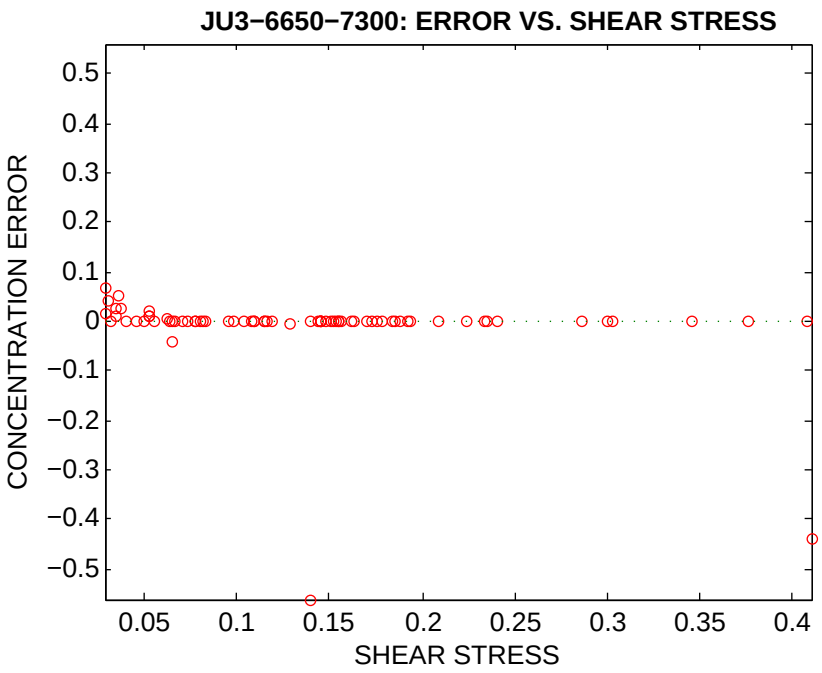


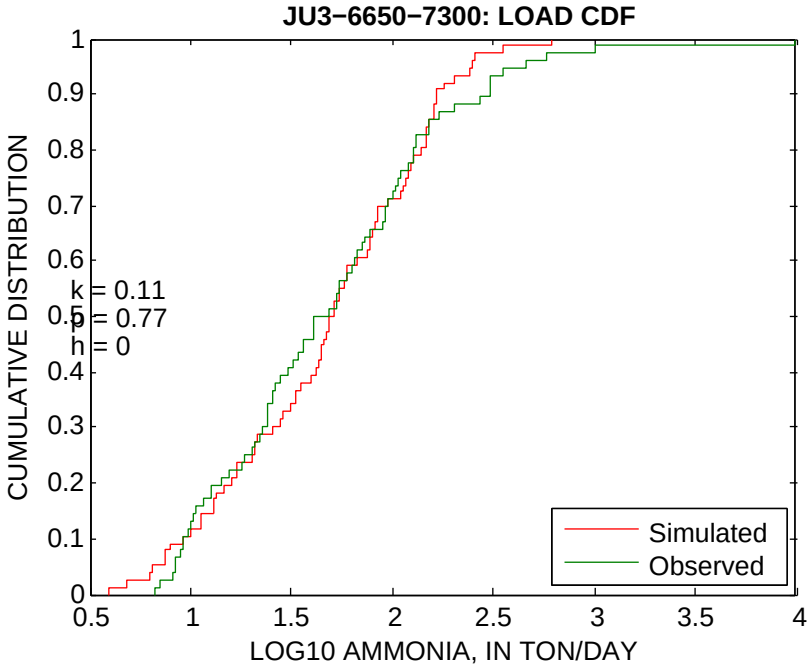


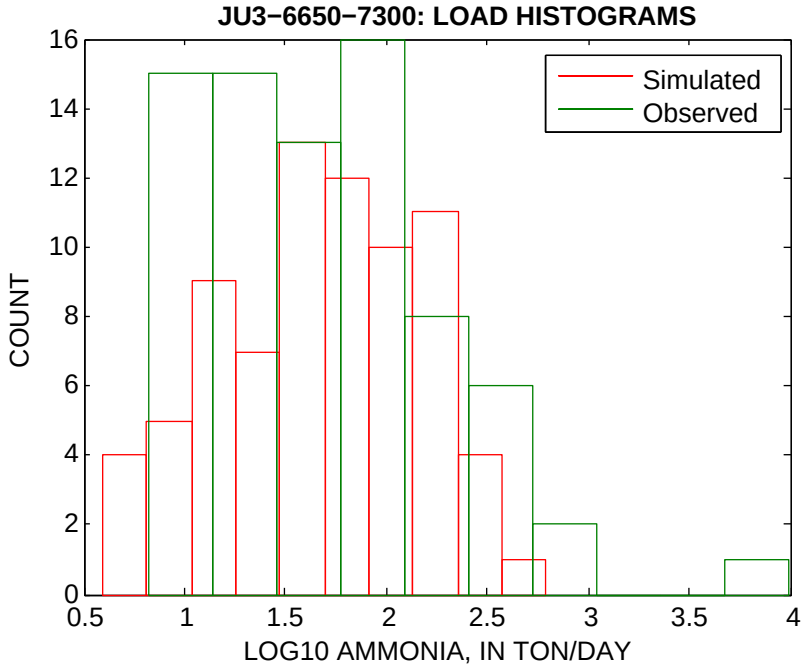


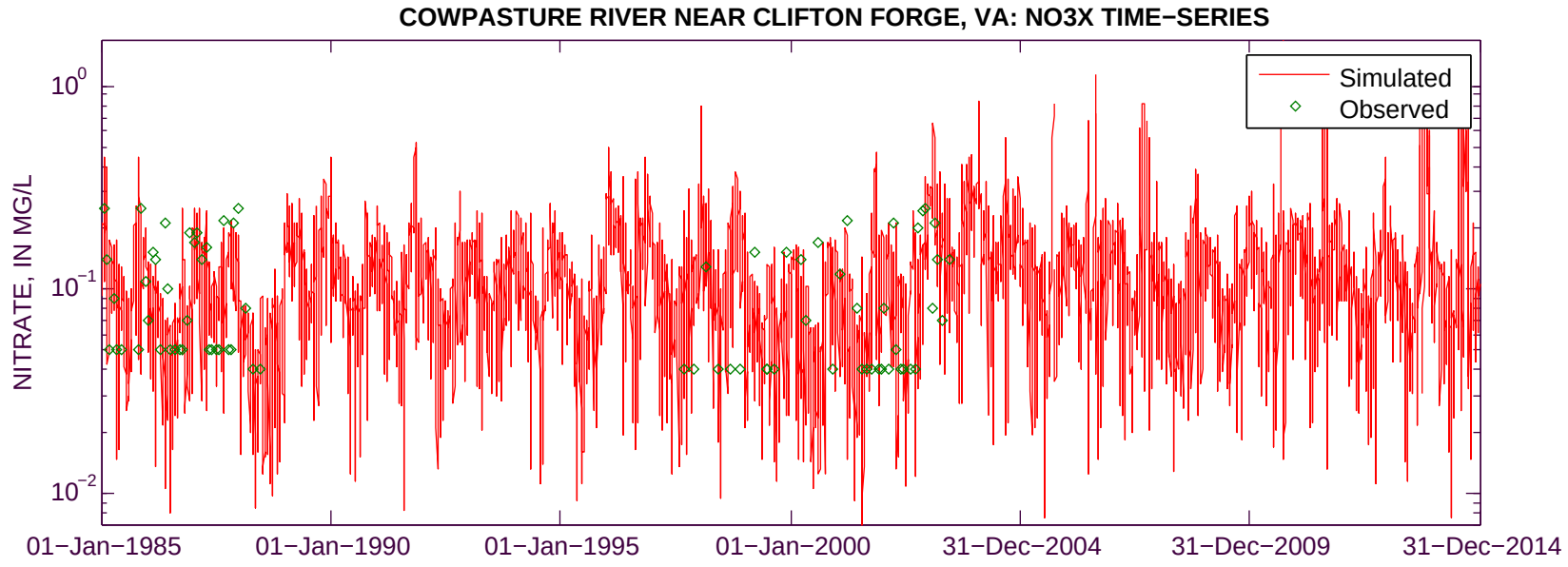
LOAD DATA
LOG10

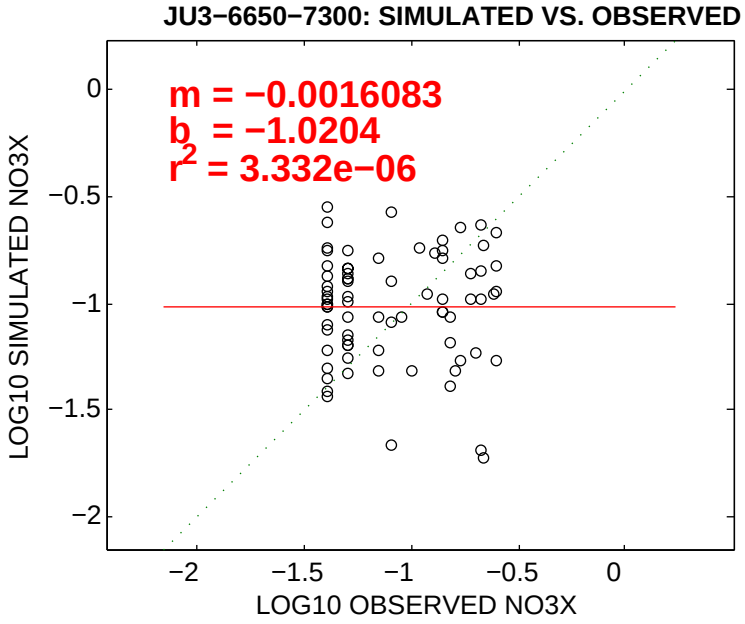


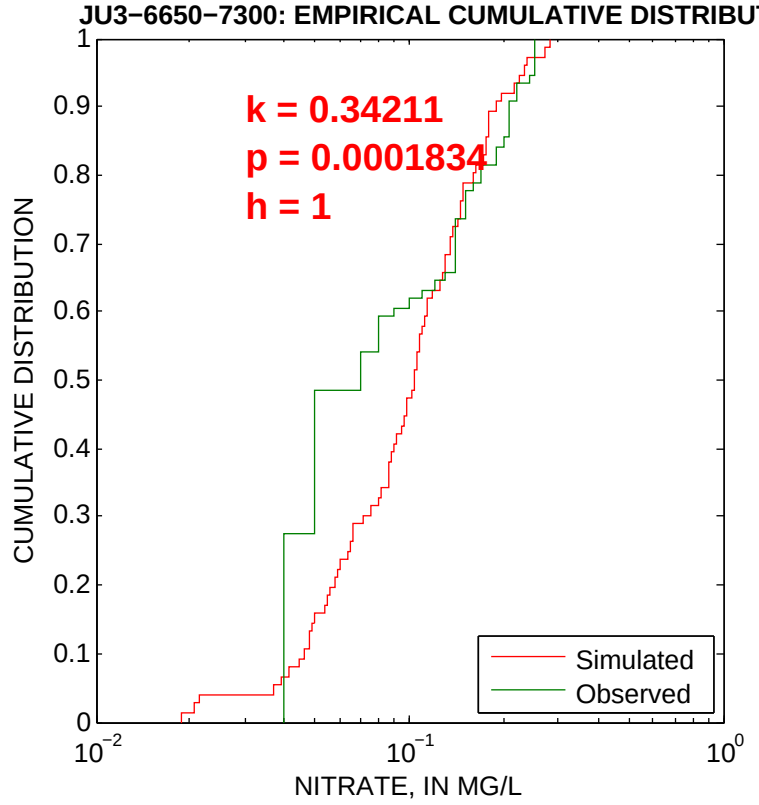












DATA SELECTION

scenario	file
P620171001WQ	NO3X.calib

plot: NO3X - nitrate

Dates 1/1/1985 12/31/201

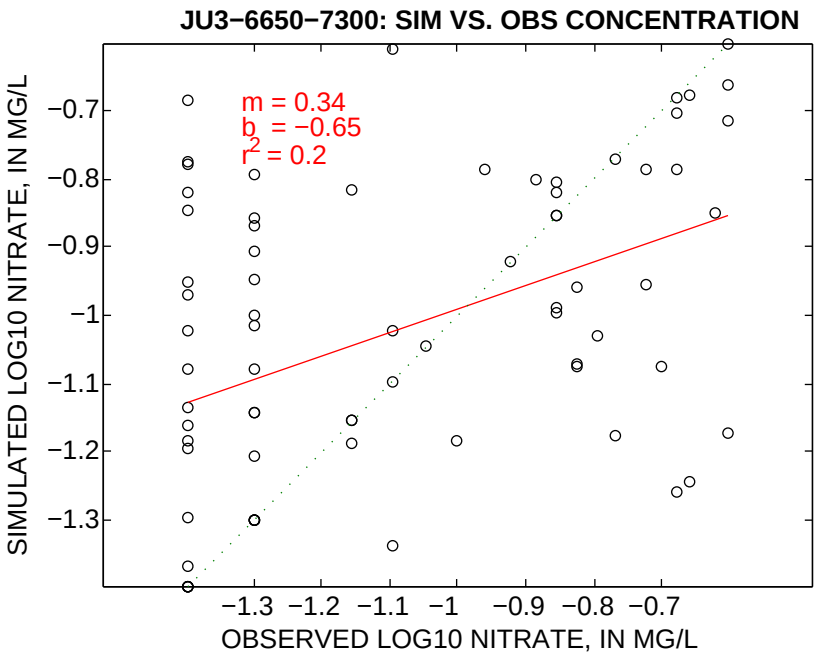
Drive	Directory	Observed
N/A	model	OBS20161101

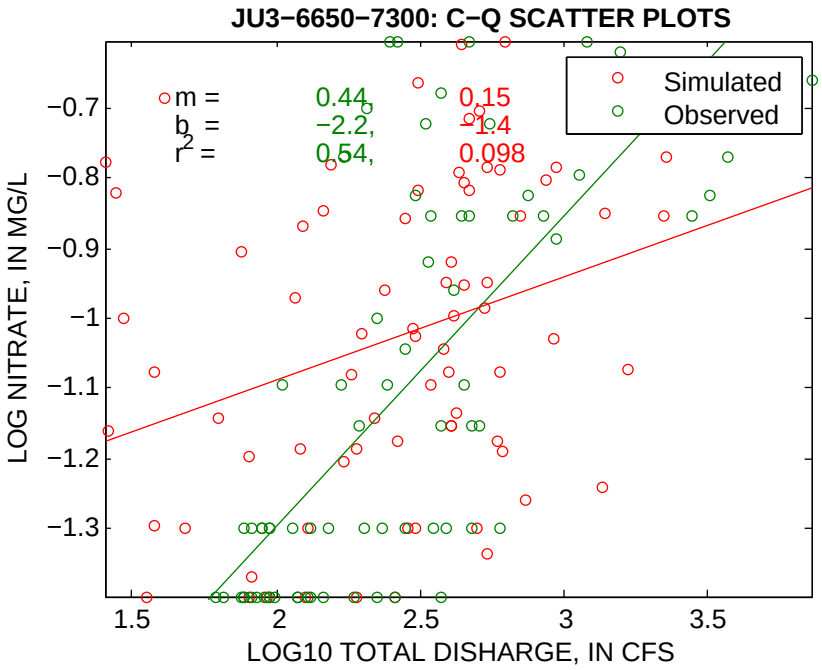
STATISTICS

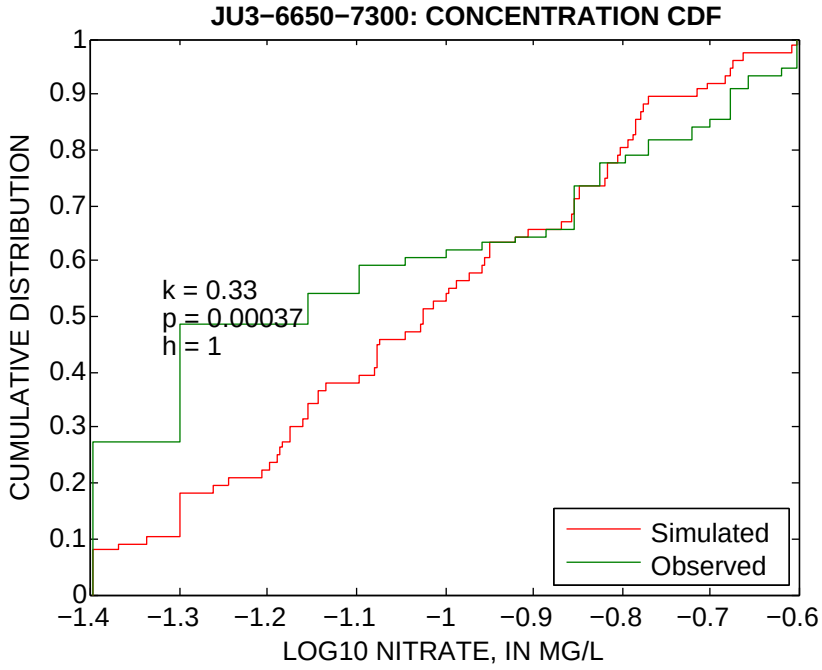
	n	76	76
		observe	simulate
min		0.04	0.018797
		-1.39794	-1.72591
mean		0.101053	0.111627
		-1.09365	-1.0186
media		0.07	0.103615
		-1.1549	-0.984581
max		0.25	0.28257
		-0.60206	-0.548874
varian		0.00487621	0.00350031
		0.0841105	0.0652953
JB		0.0142	0.026794
		0.021514	0.069970
		ra	log
%		10.4638	-6.86217
err.va		0.00793888	0.155384
rel.std.err		1.62808	1.84738
mod.eff		-0.628085	-0.847375

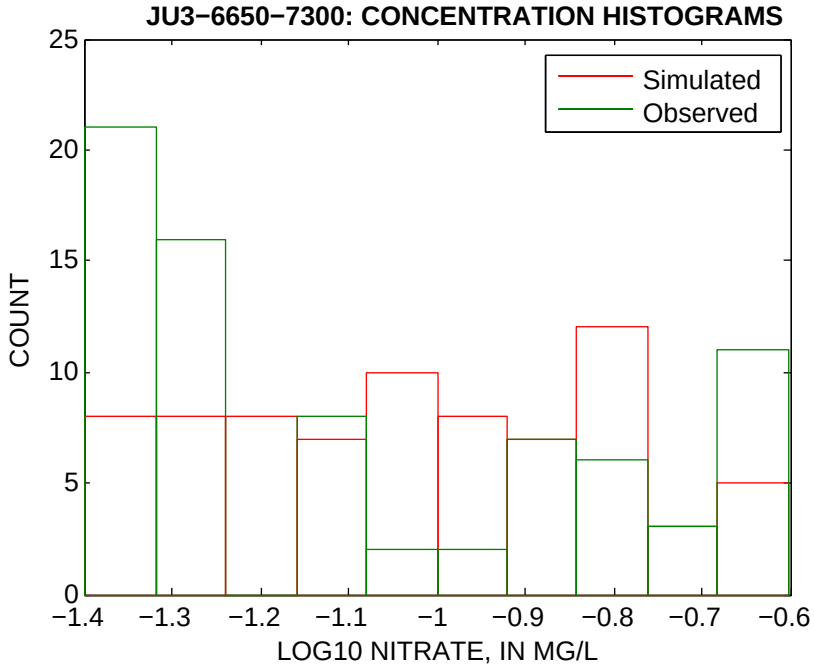
VERSION 2.1

ALL DATA
LOG10

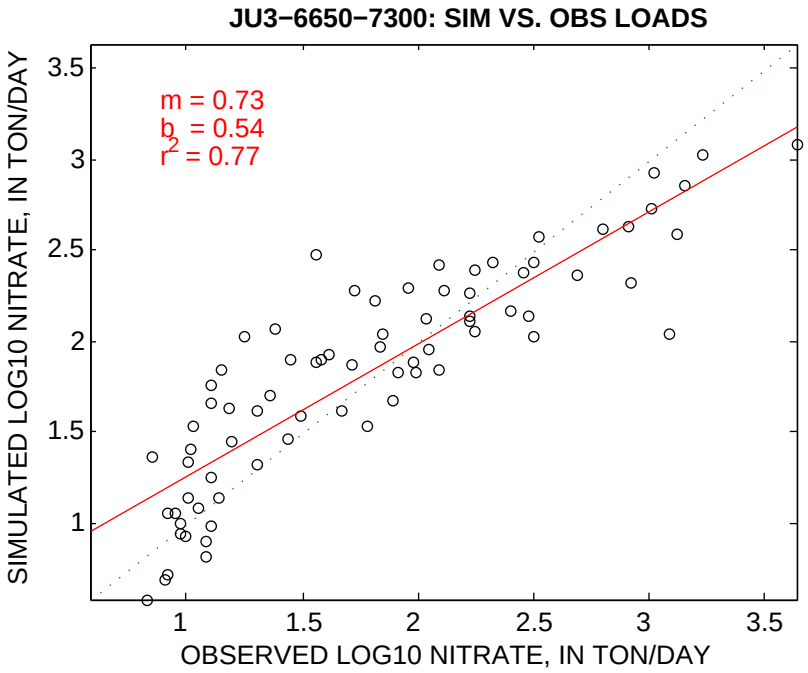


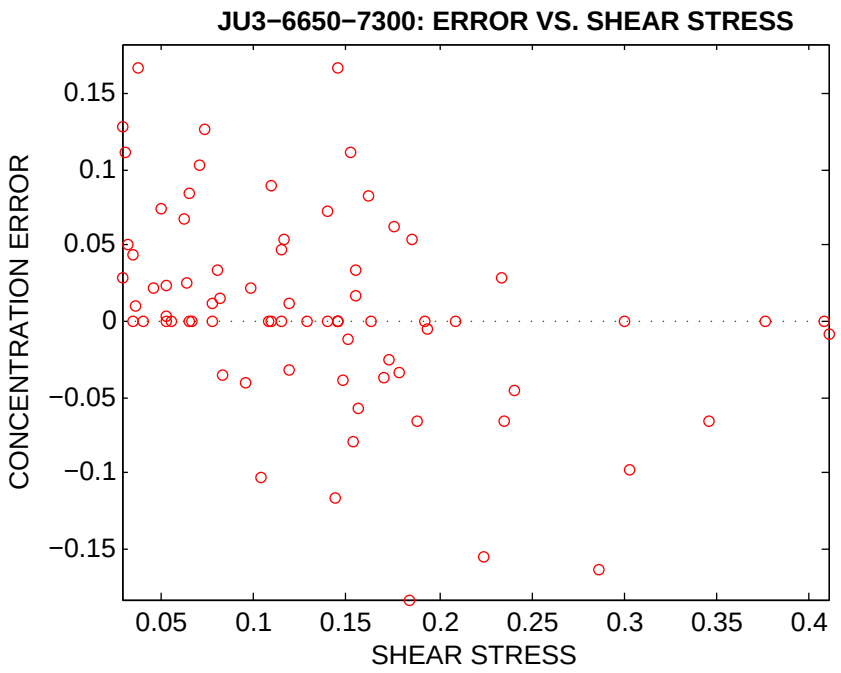


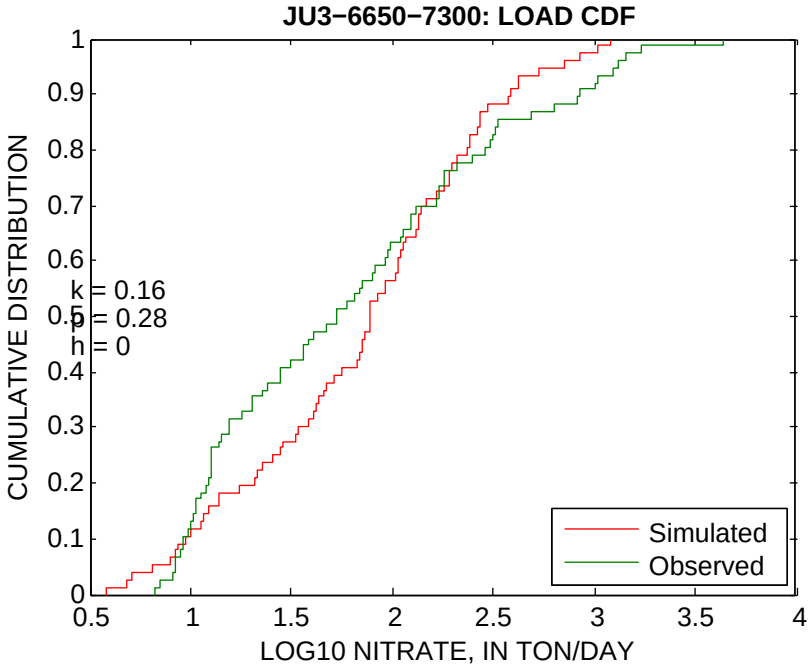


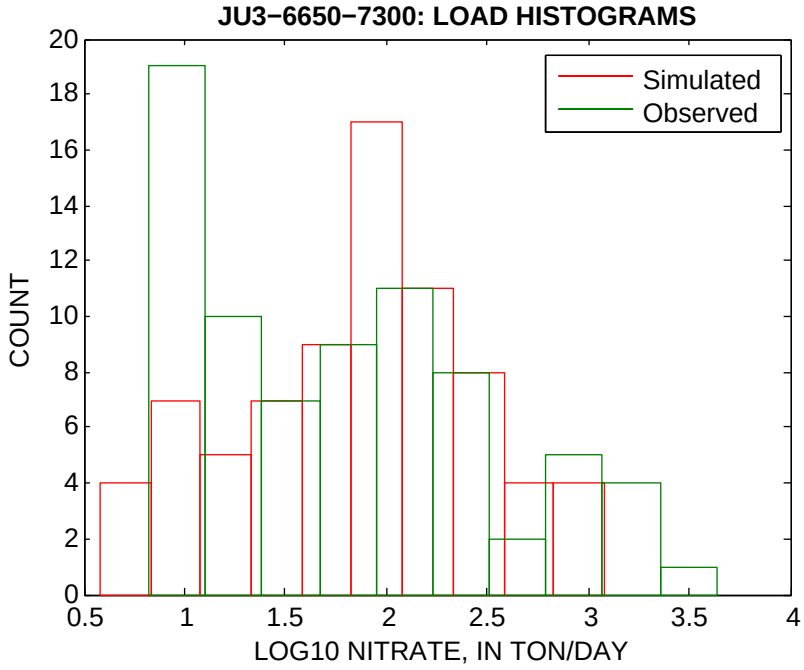


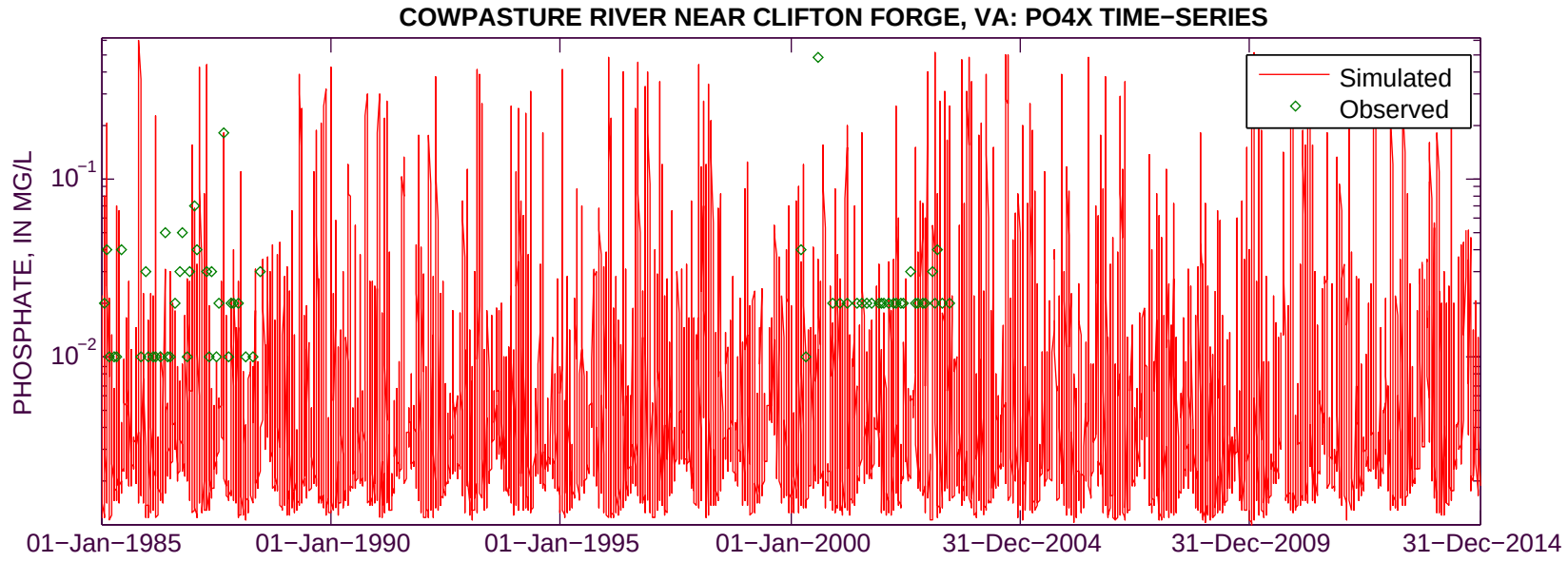
LOAD DATA
LOG10

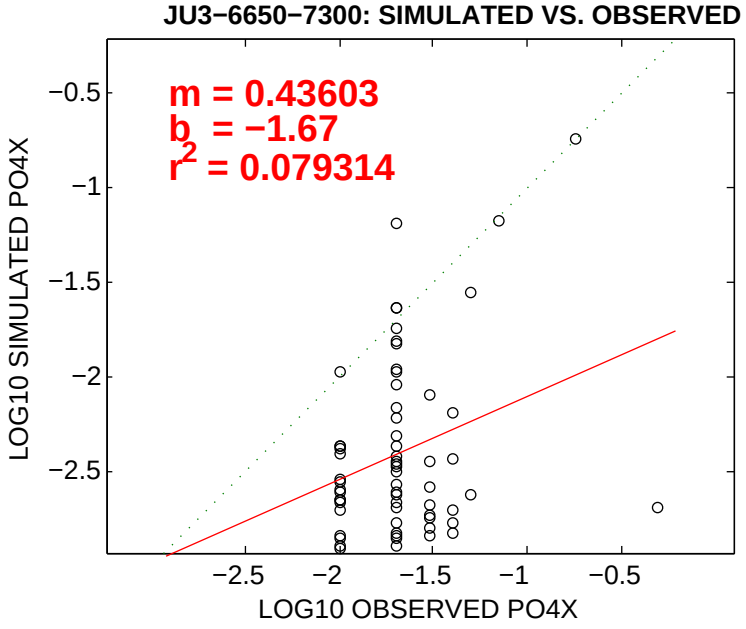


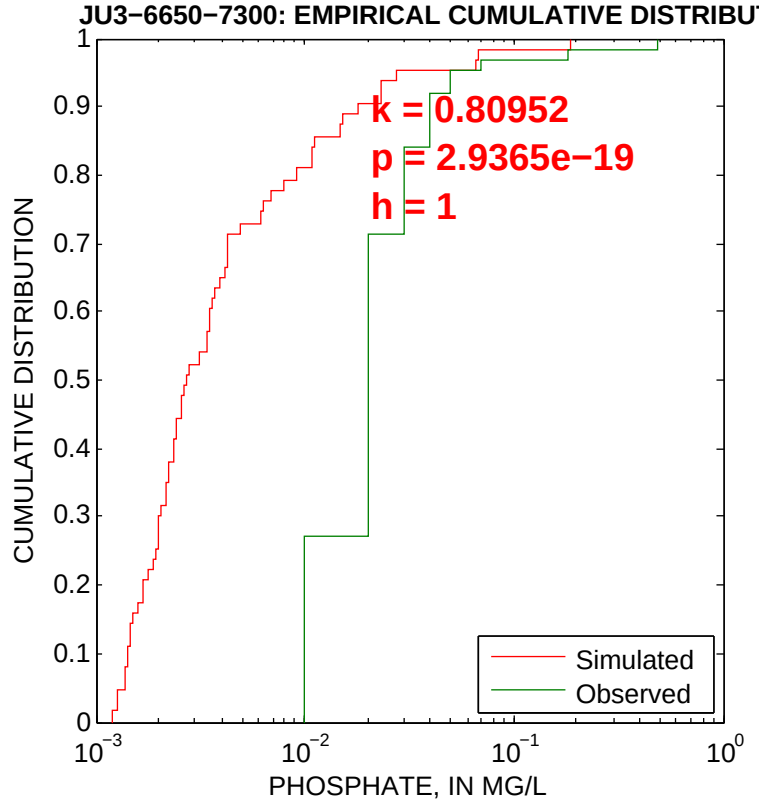












DATA SELECTION

scenario: P620171001WQ | file: PO4X.calib

plot: PO4X - phosphate

Dates: 1/1/1985 – 12/31/201

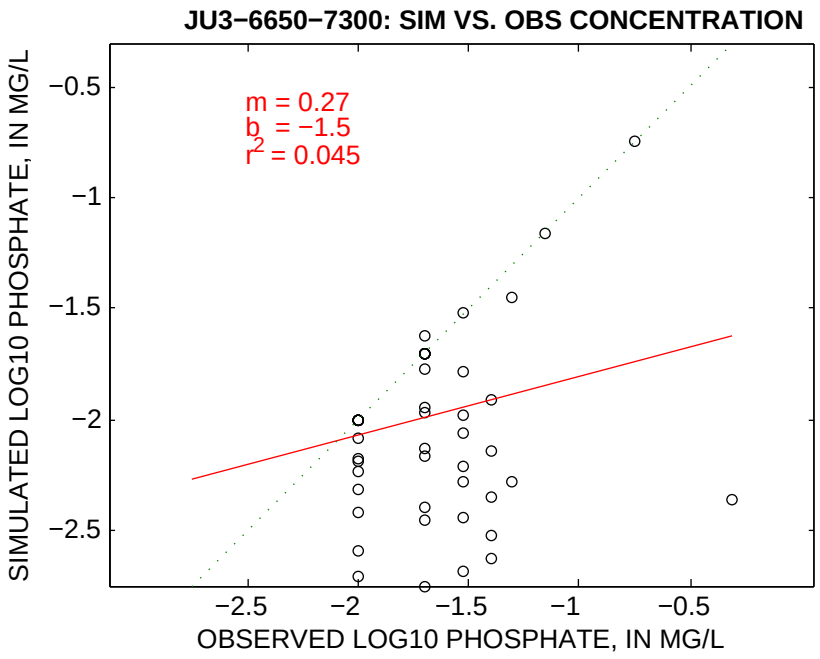
Drive: N/A | Directory: model | Observed: OBS20161101

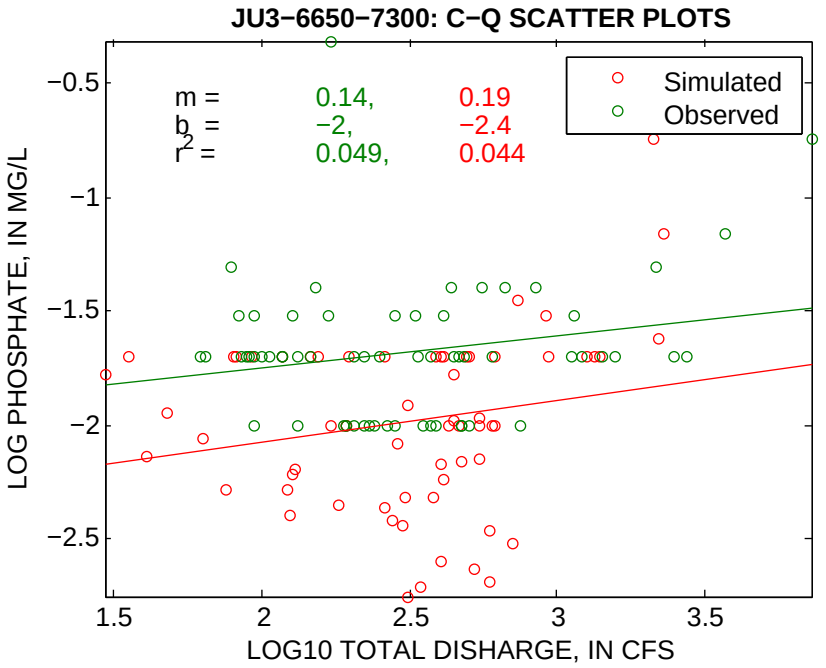
STATISTICS

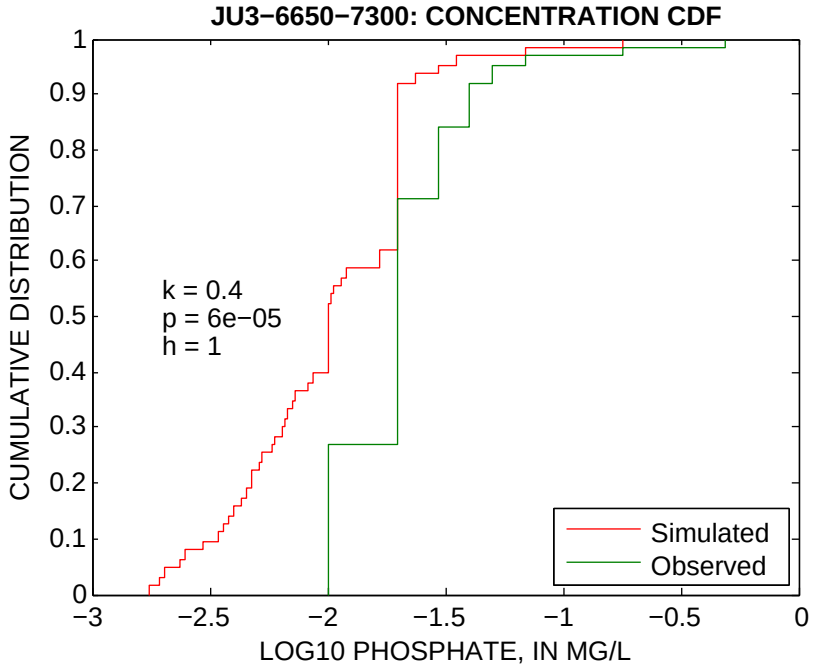
	n	63	63
		observe	simulate
min		0.01	0.001216
		-2	-2.91507
mean		0.0319048	0.00988473
		-1.67548	-2.40052
media		0.02	0.002738
		-1.69897	-2.56257
max		0.49	0.18472
		-0.309804	-0.733486
varian		0.00397373	0.00065005
		0.0912905	0.21883
JB		0.001	0.001
		0.001	0.001035
		ra	log
%		-69.018	43.2731
err.va		0.00423349	0.764661
rel.std.err		1.06537	8.37613
mod.eff		-0.0653693	-7.37613

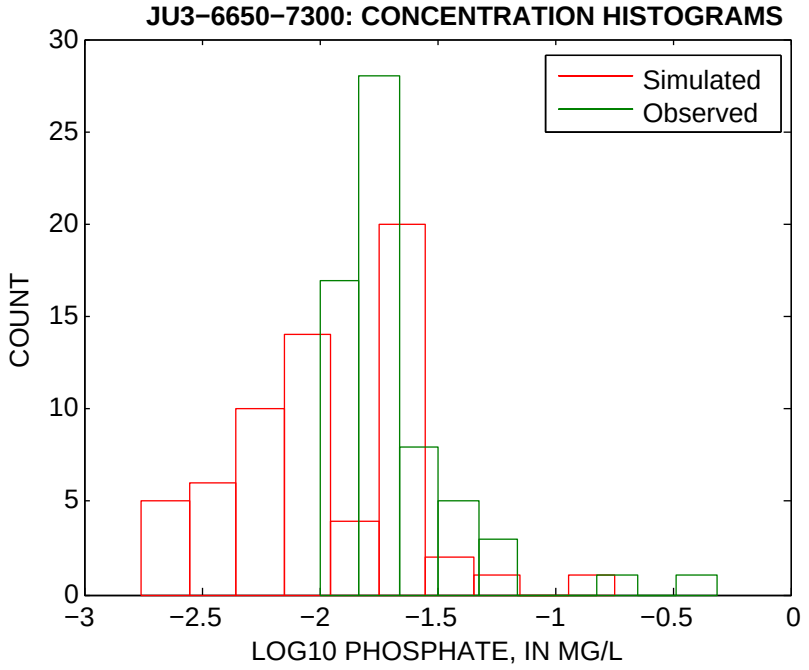
VERSION 2.1

ALL DATA
LOG10

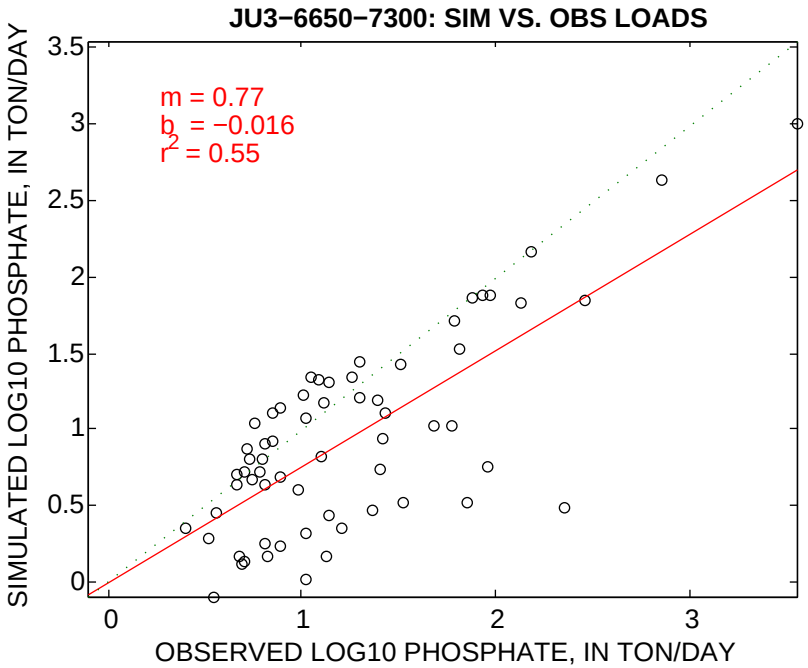




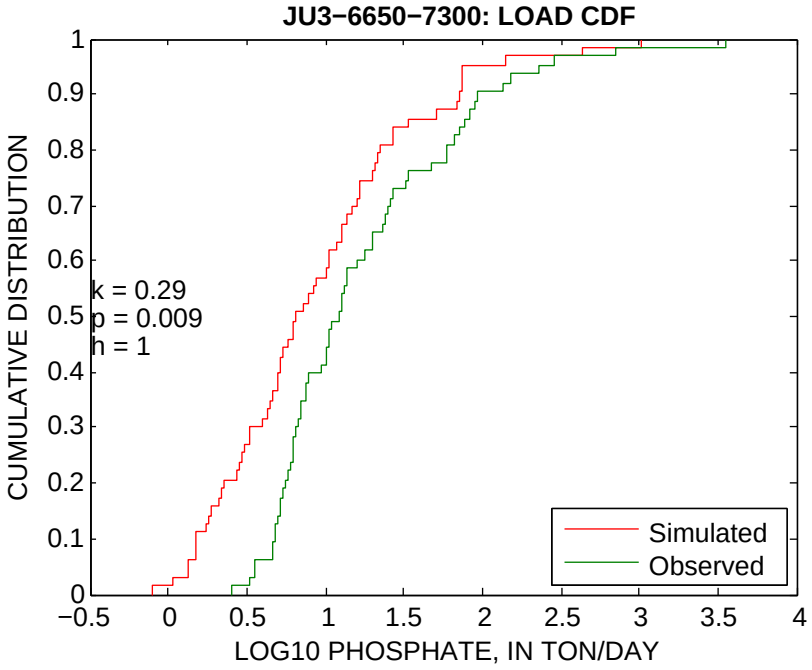


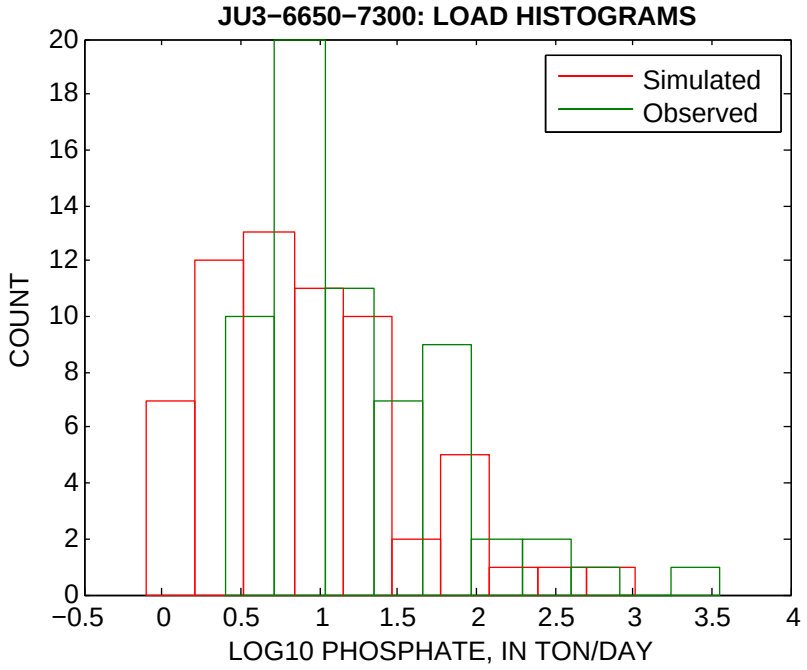


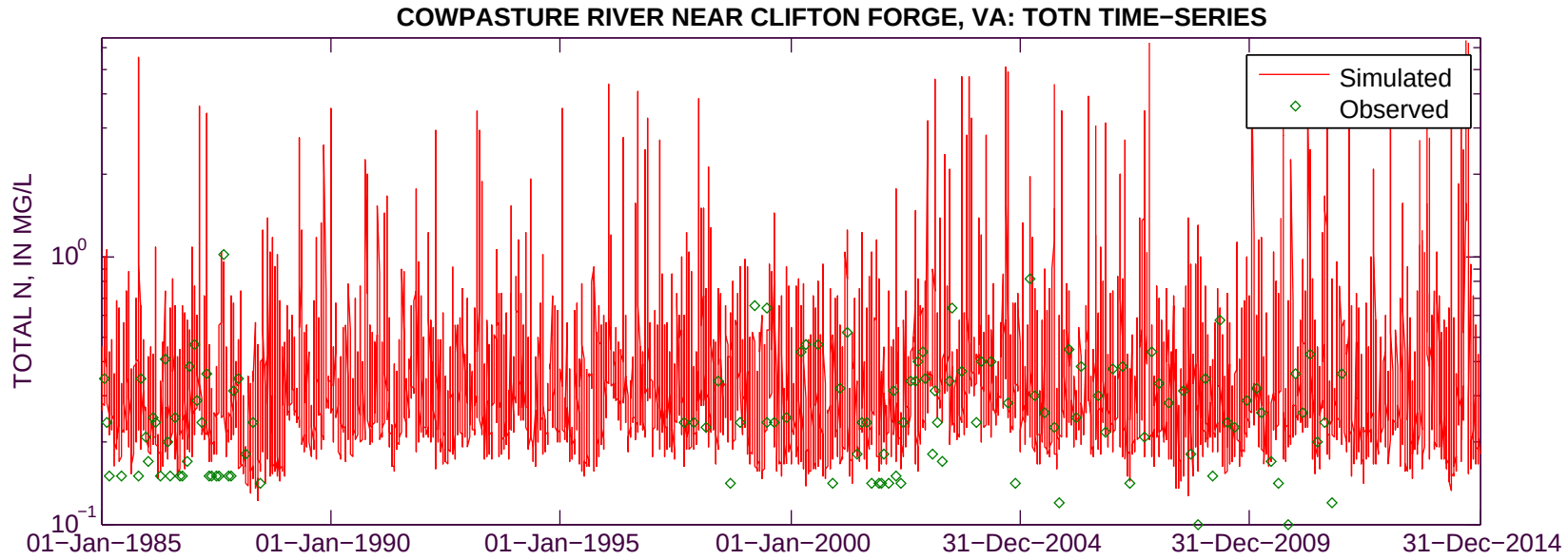
LOAD DATA
LOG10

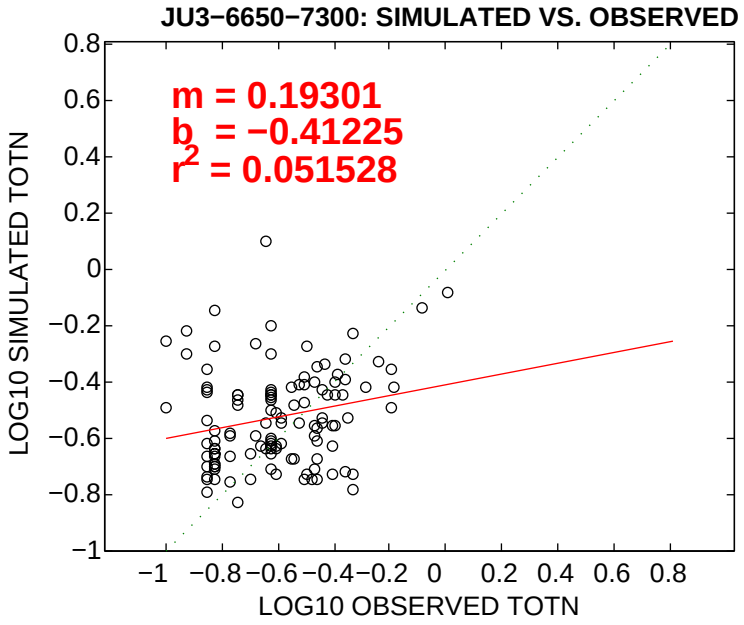


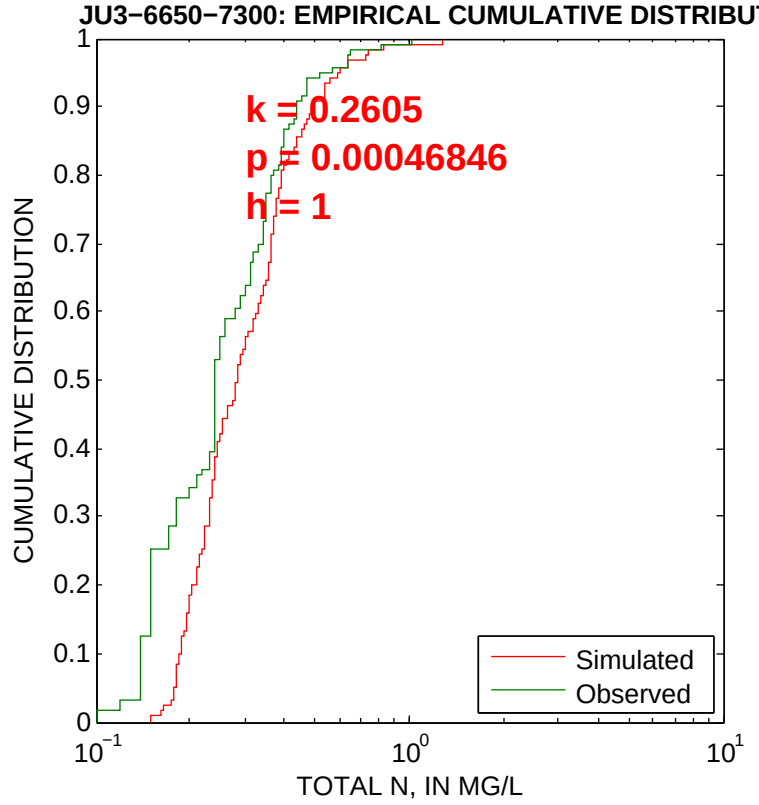












DATA SELECTION

scenario: P620171001WQ | file: TOTN.calib

plot: TOTN - total nitrogen

Dates: 1/1/1985 – 12/31/201

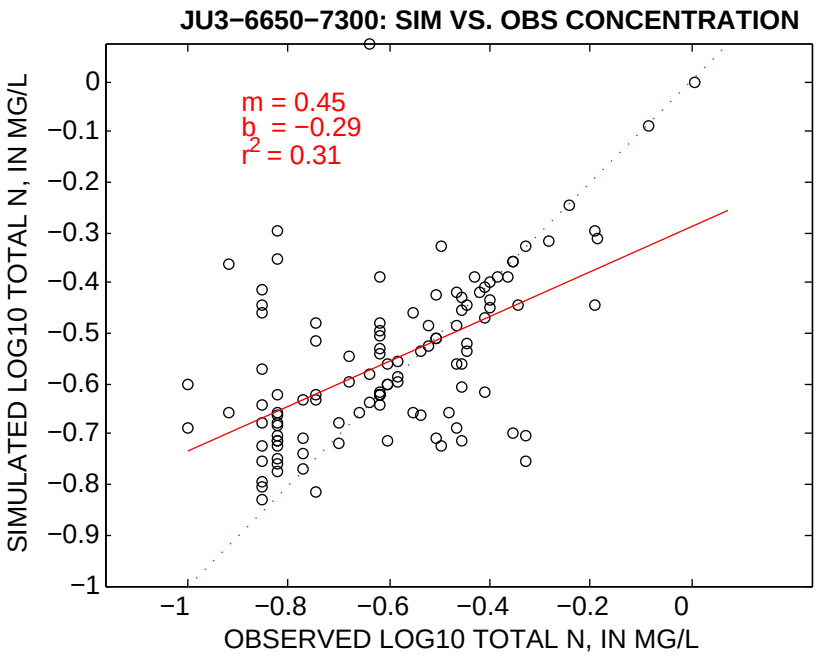
Drive | Directory: N/A | model | Observed: OBS20161101

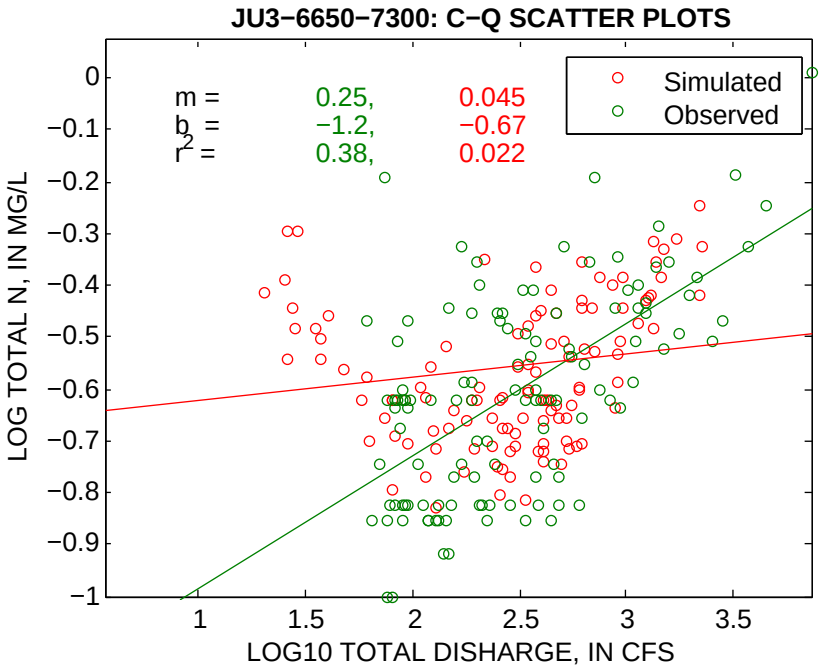
STATISTICS

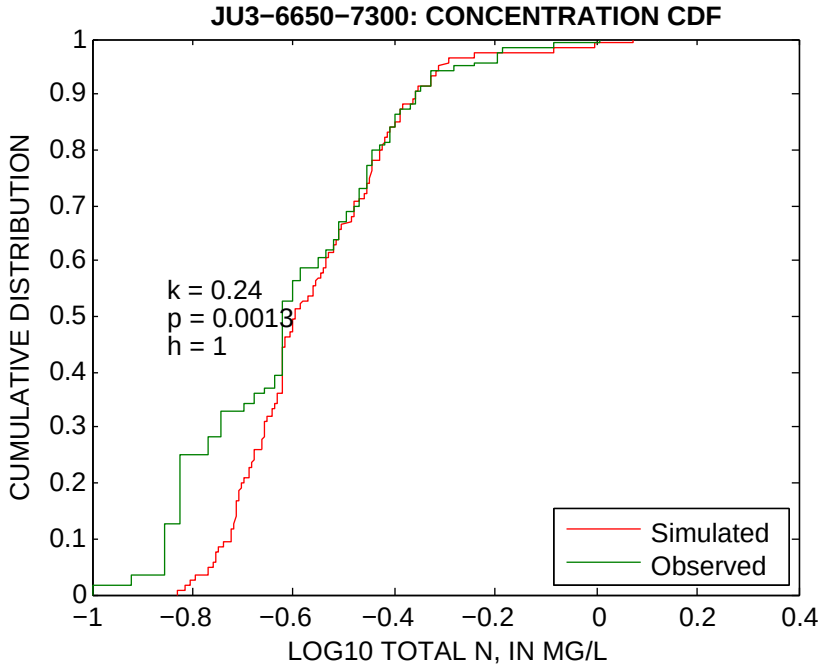
		observe	simulate
n		119	119
min		0.1	0.14982
		-1	-0.82443
mean		0.279832	0.322763
		-0.601888	-0.528418
media		0.24	0.28274
		-0.619789	-0.548613
max		1.02	1.2729
		0.00860017	0.104794
varian		0.0215593	0.0245922
		0.0407643	0.02947
JB		0.001	0.001
		0.187771	0.008344
		ra	log
%		15.3418	-12.2066
err.va		0.0345367	0.0599423
rel.std.err		1.60194	1.47046
mod.eff		-0.60194	-0.470462

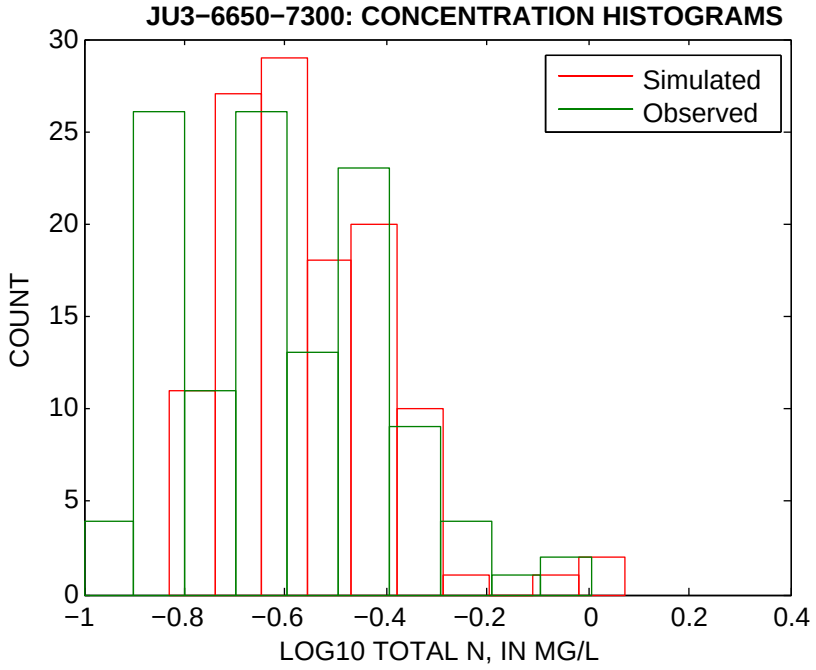
VERSION 2.1

ALL DATA
LOG10

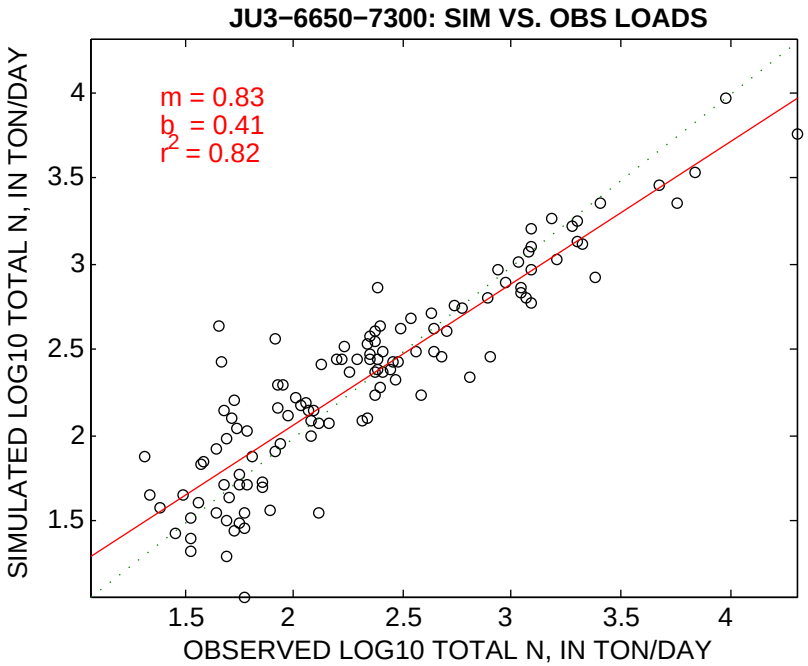


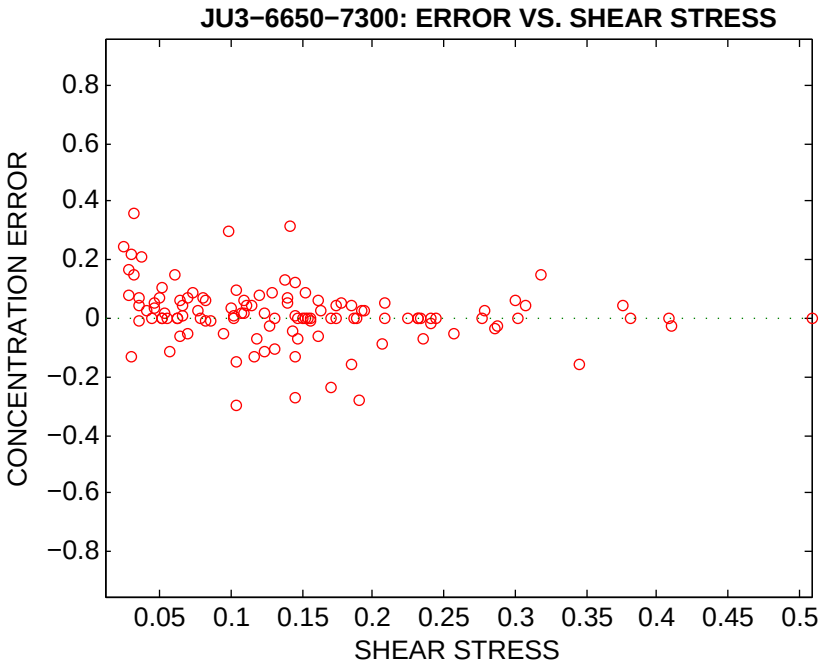


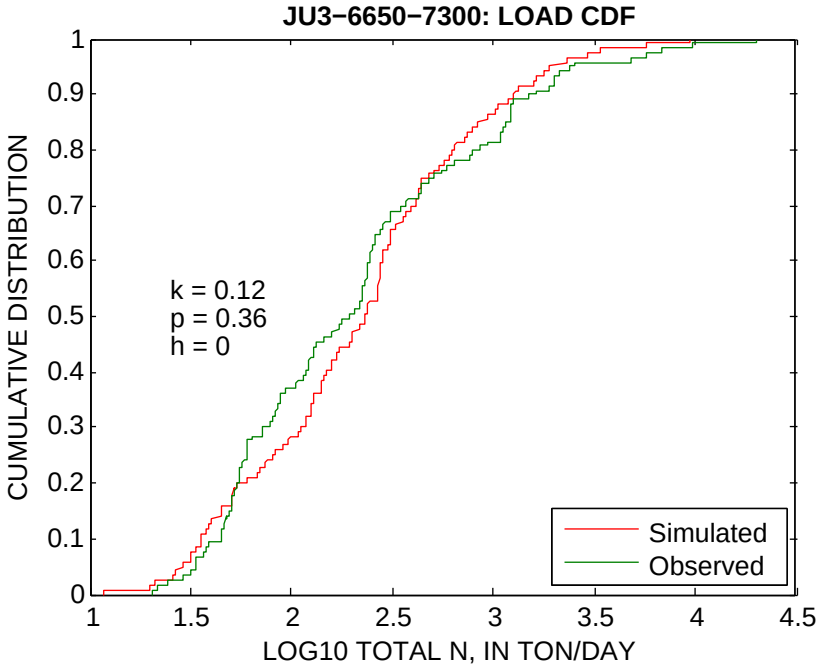


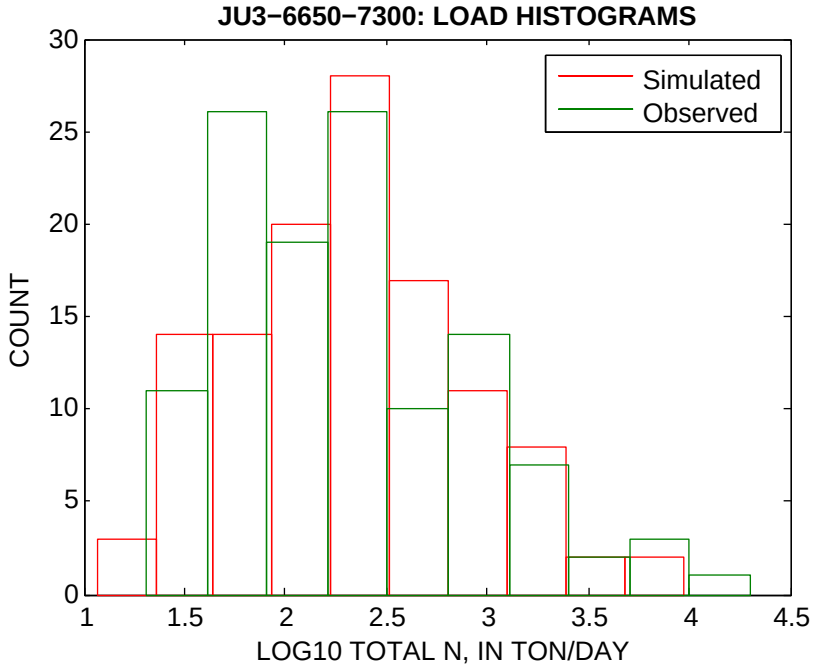


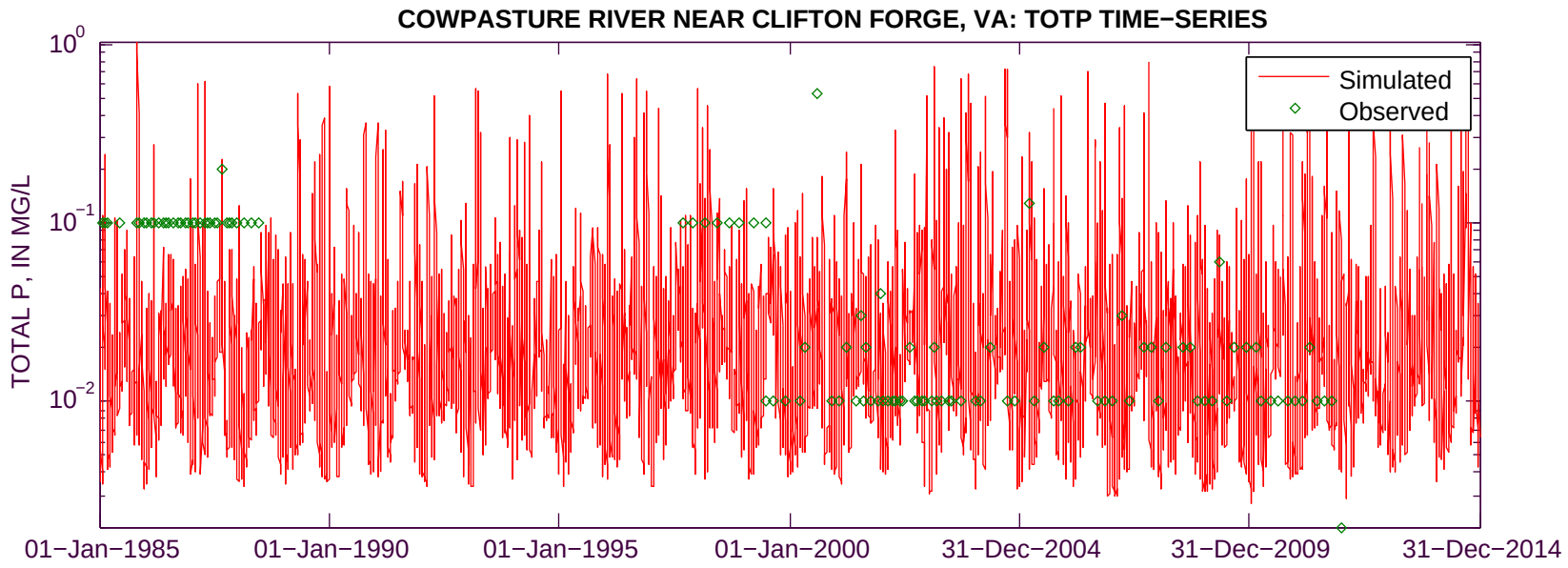
LOAD DATA
LOG10

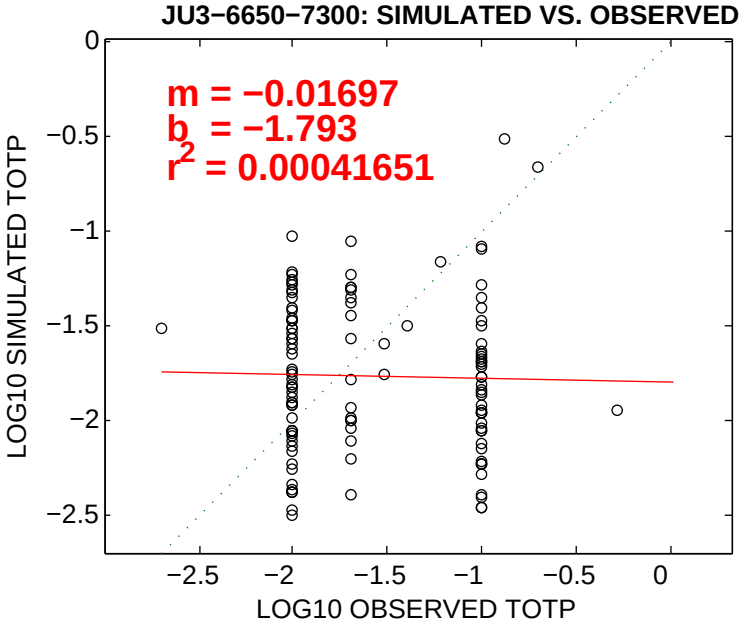


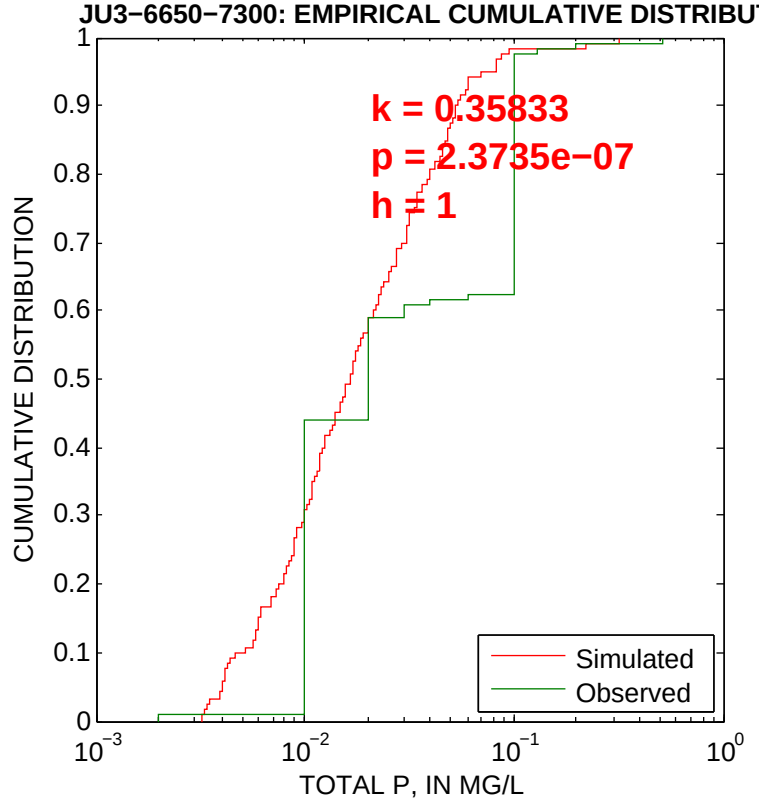












DATA SELECTION

scenario: P620171001WQ | file: TOTP.calib

plot: TOTP - total phosphorus

Dates: 1/1/1985 – 12/31/201

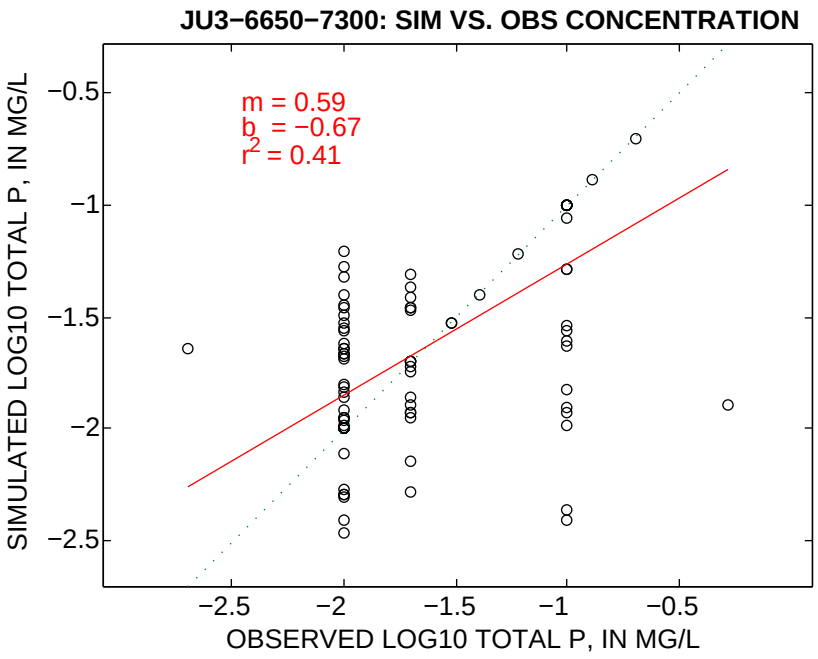
Drive | Directory | Observed: N/A | model | OBS20161101

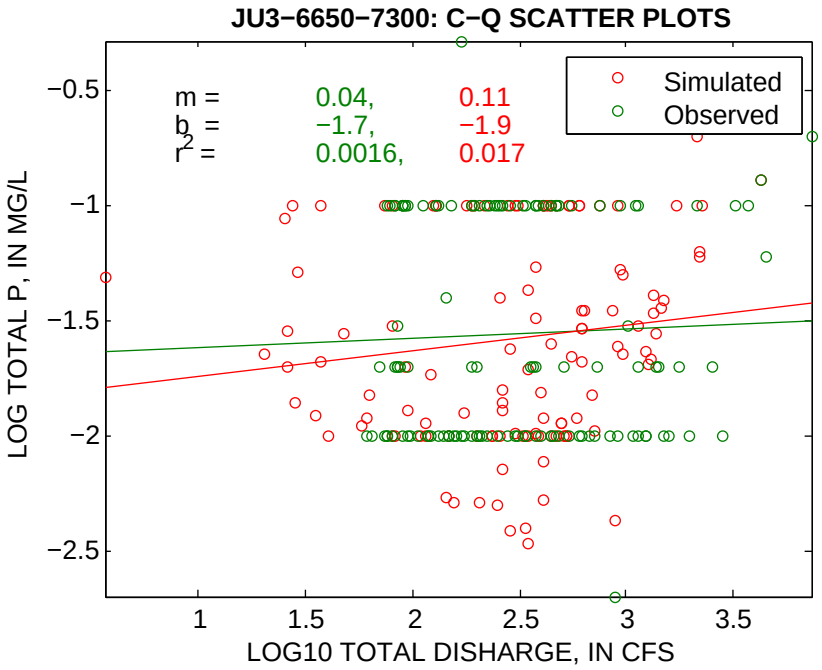
STATISTICS

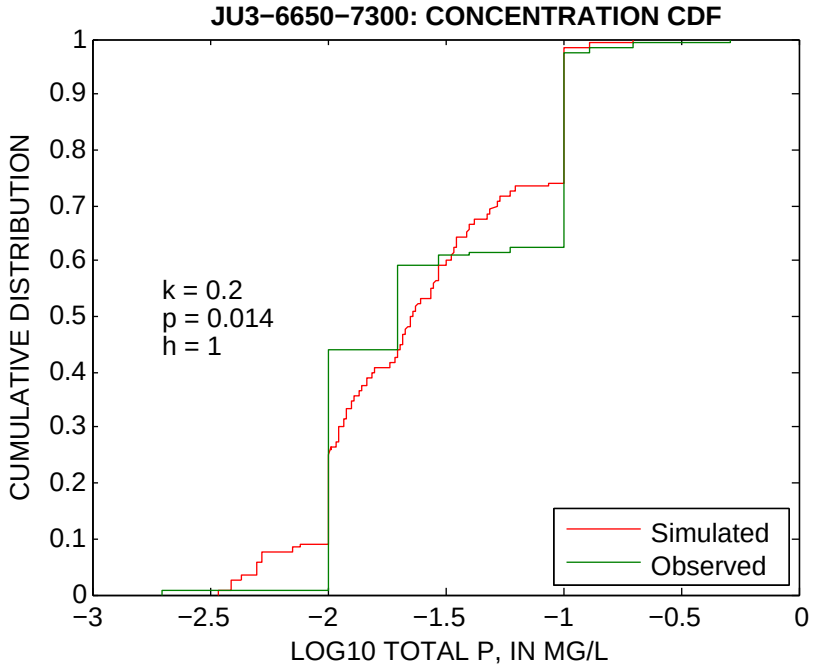
	n	120	120
		observe	simulate
min		0.002	0.0031813
		-2.69897	-2.4974
mean		0.0507667	0.0273032
		-1.55679	-1.76661
media		0.02	0.016519
		-1.69897	-1.78203
max		0.52	0.31484
		-0.283997	-0.50191
varian		0.00384398	0.00142559
		0.234027	0.161811
JB		0.001	0.001
		0.0154	0.25677
		ra	log
%		-46.2182	13.4778
err.va		0.00523558	0.448175
rel.std.err		1.36202	1.91506
mod.eff		-0.362021	-0.915062

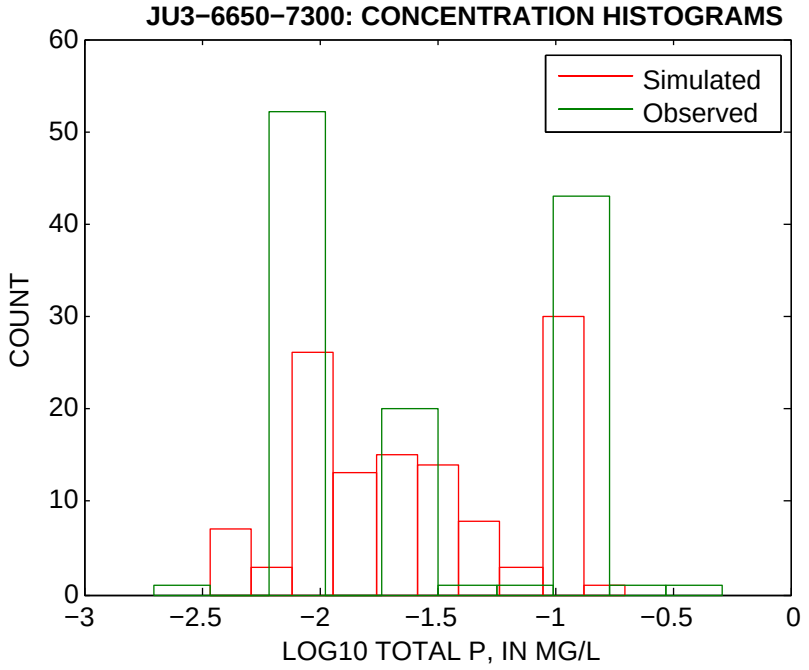
VERSION 2.1

ALL DATA
LOG10

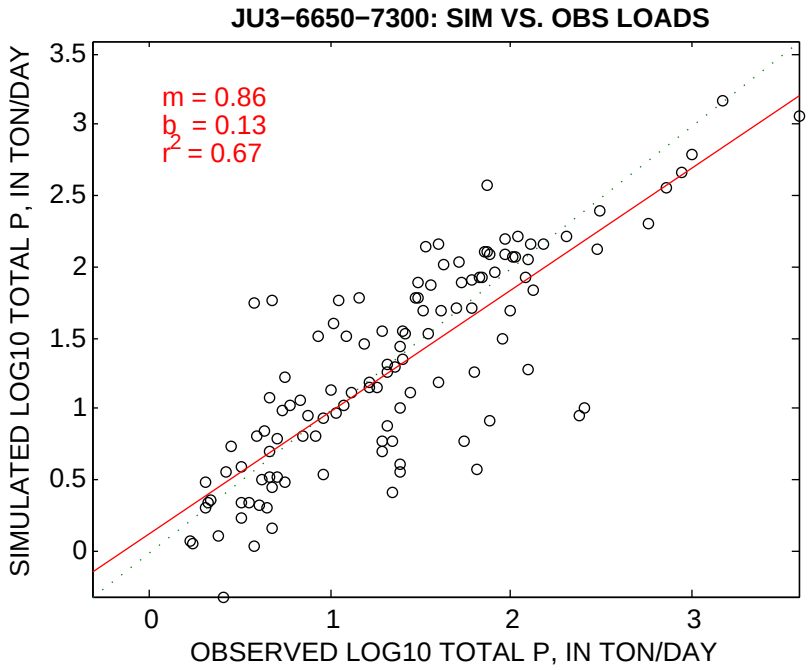




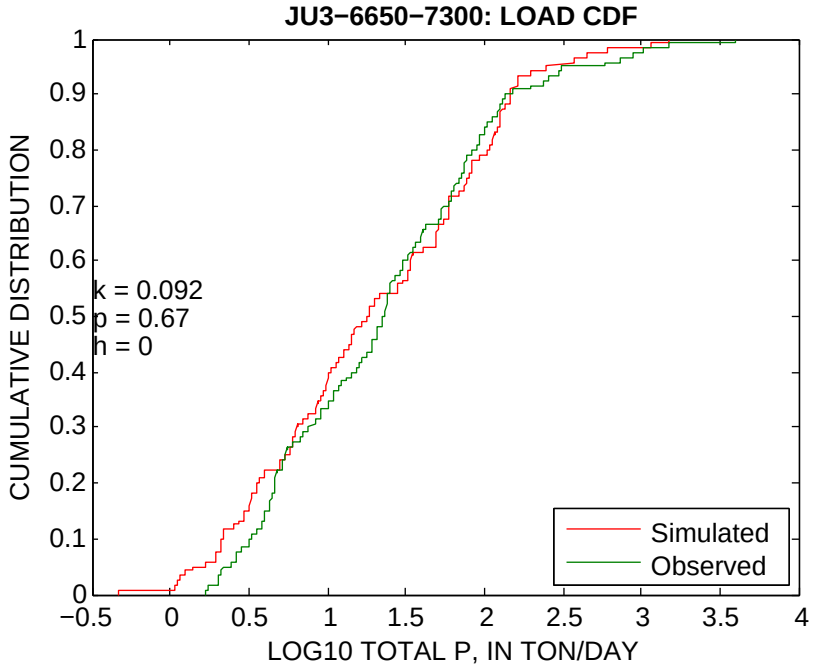


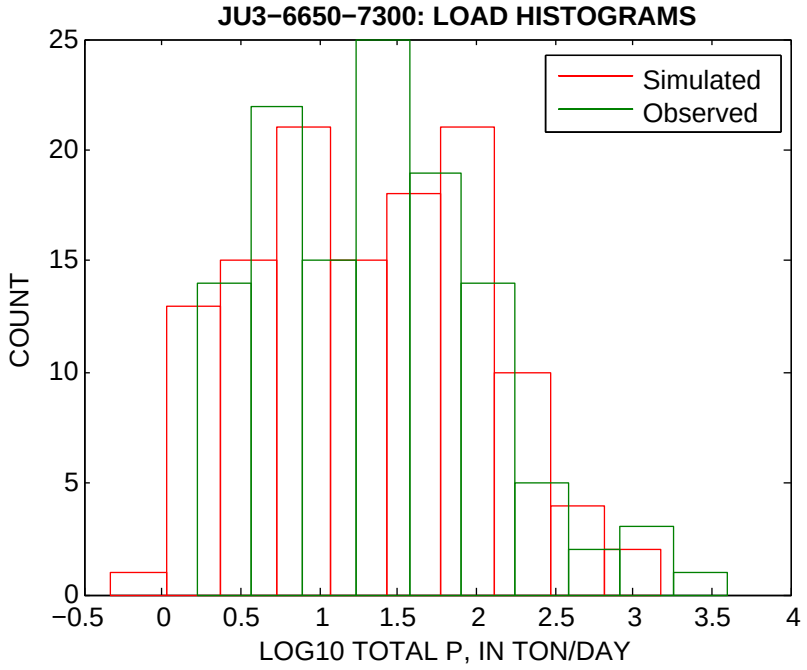


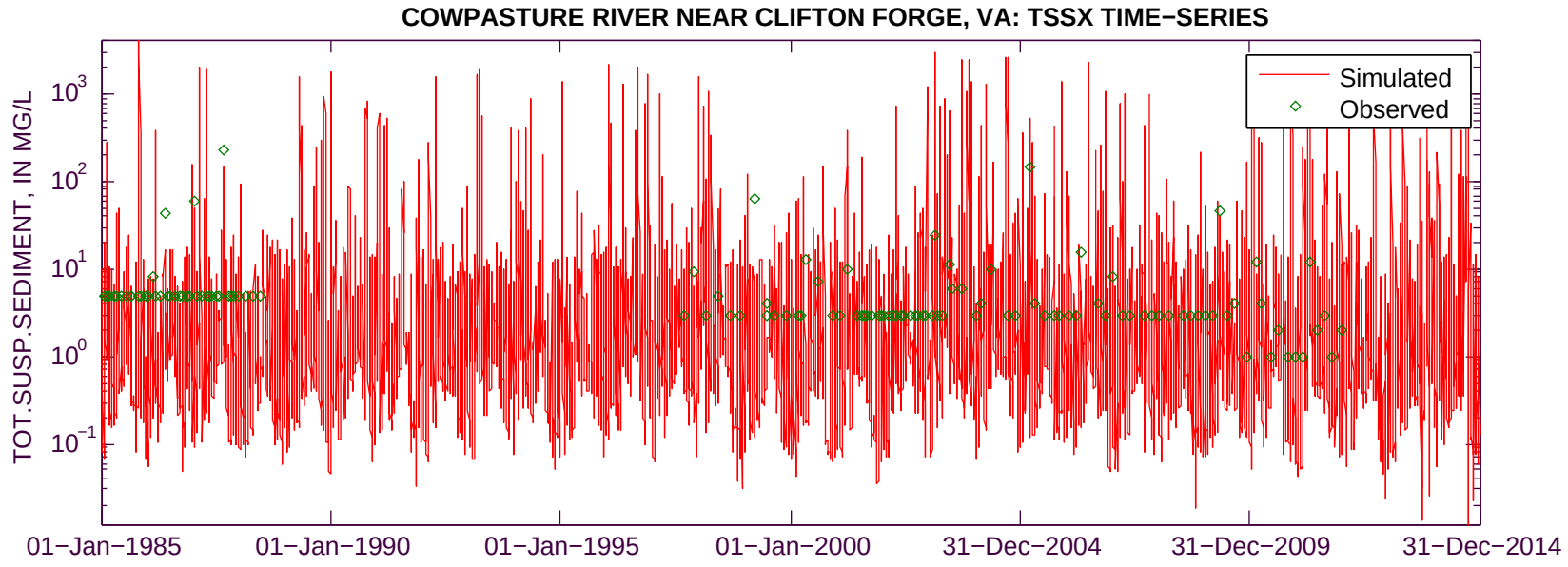
LOAD DATA
LOG10

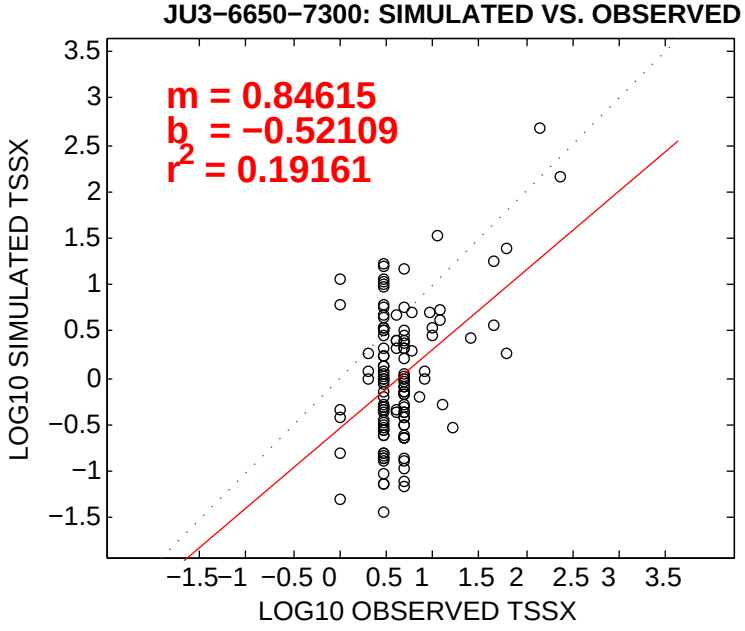


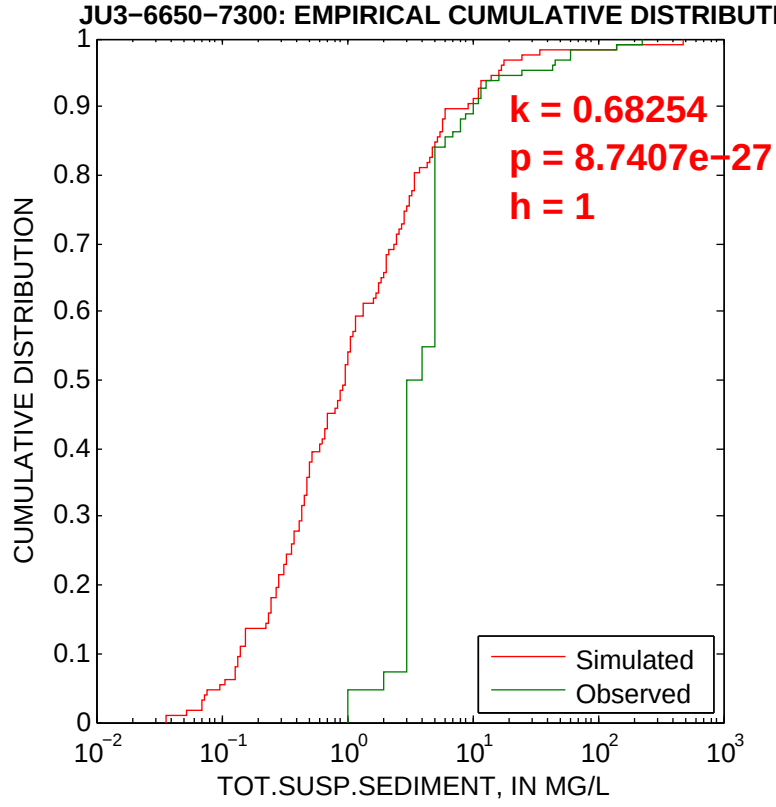












DATA SELECTION

scenario	file
P620171001WQ	TSSX.calib

plot: TSSX - total suspended ...

Dates 1/1/1985 12/31/201

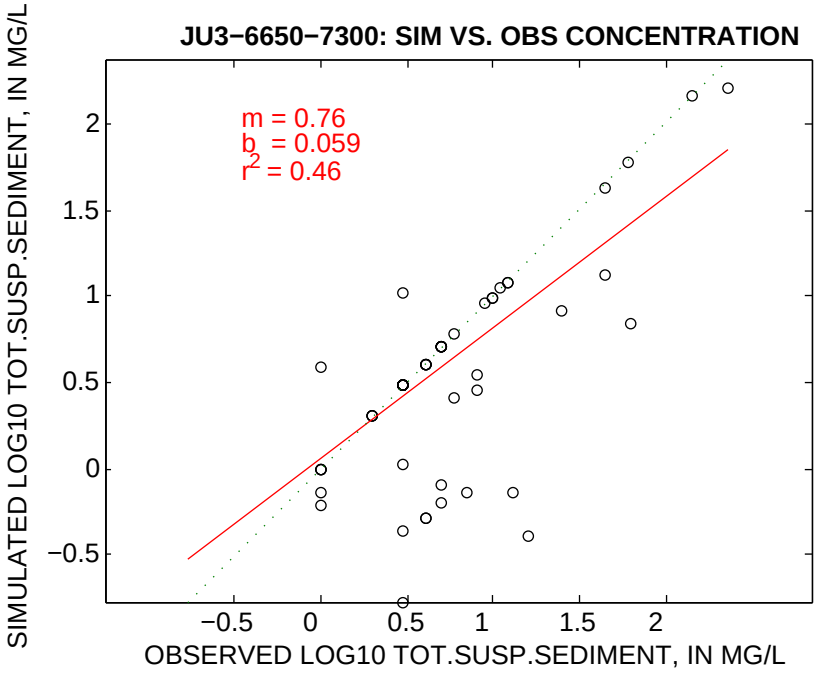
Drive	Directory	Observed
N/A	model	OBS20161101

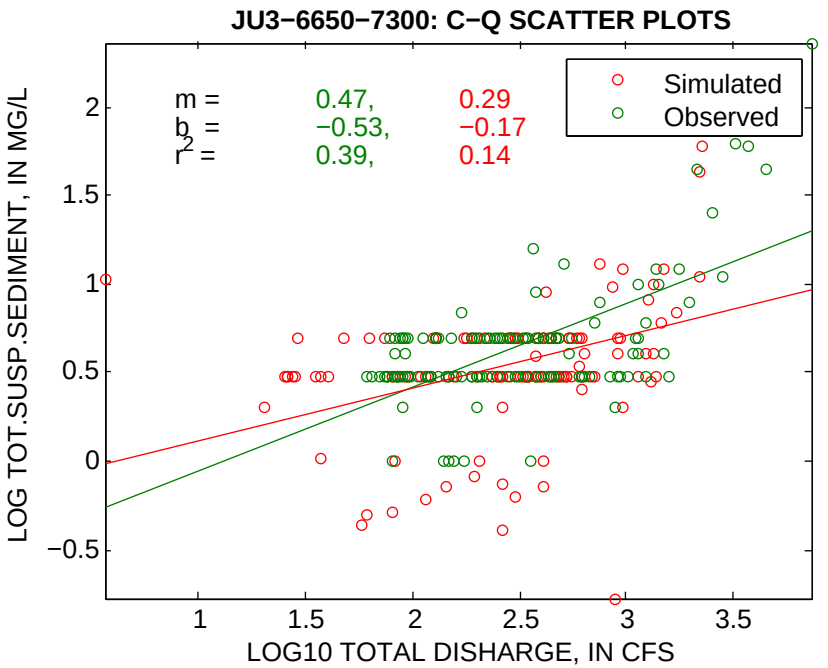
STATISTICS

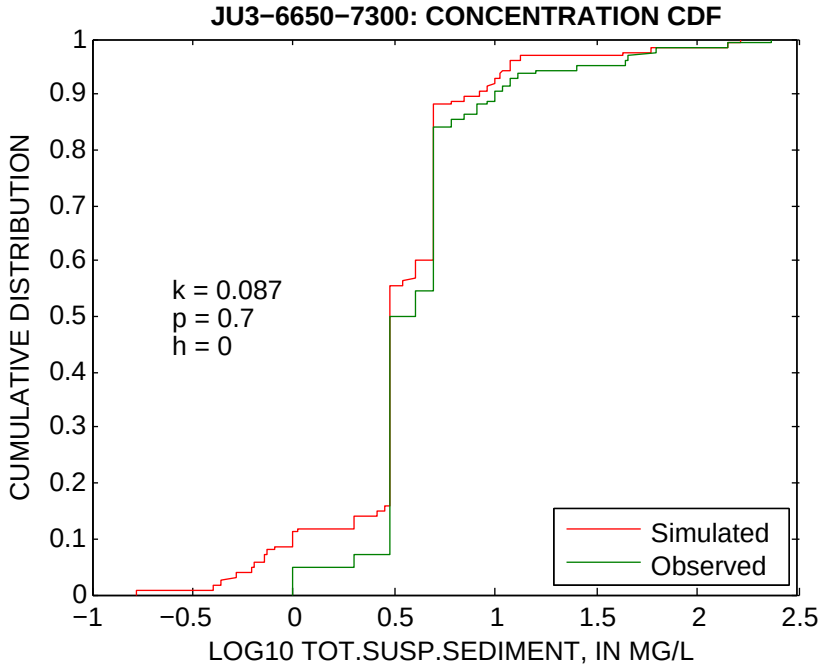
	n	126	126
		observe	simulate
min		1	0.035874
		0	-1.44522
mean		8.88889	7.68773
		0.647649	0.0269185
media		3.5	0.9674
		0.539591	-0.0143953
max		230	482.17
		2.36173	2.6832
varian		626.5	2000.28
		0.132185	0.493928
JB		0.001	0.001
		0.001	0.007983
		ra	log
%		-13.513	-95.8437
err.va		1064.05	0.790804
rel.std.err		1.69841	5.98254
mod.eff		-0.698411	-4.98254

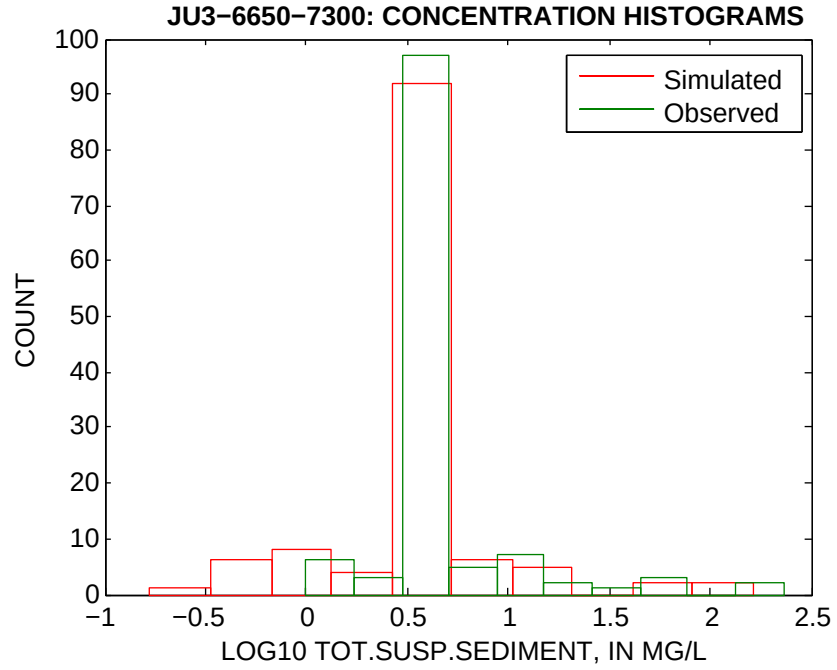
VERSION 2.1

ALL DATA
LOG10

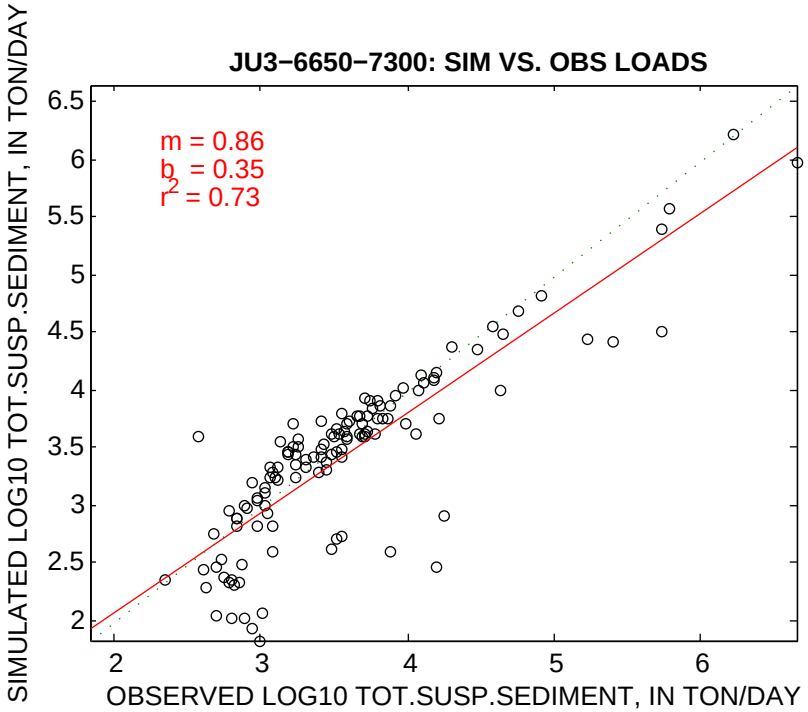




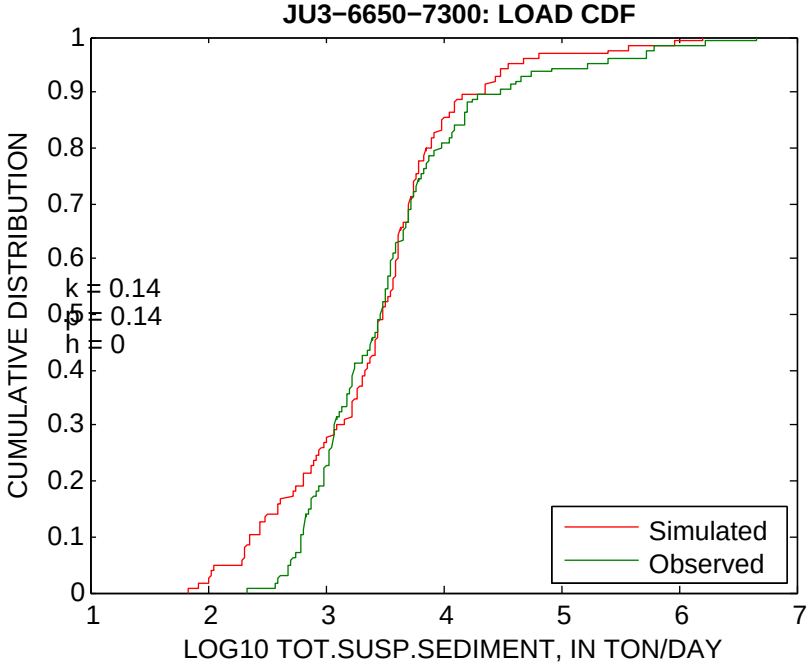


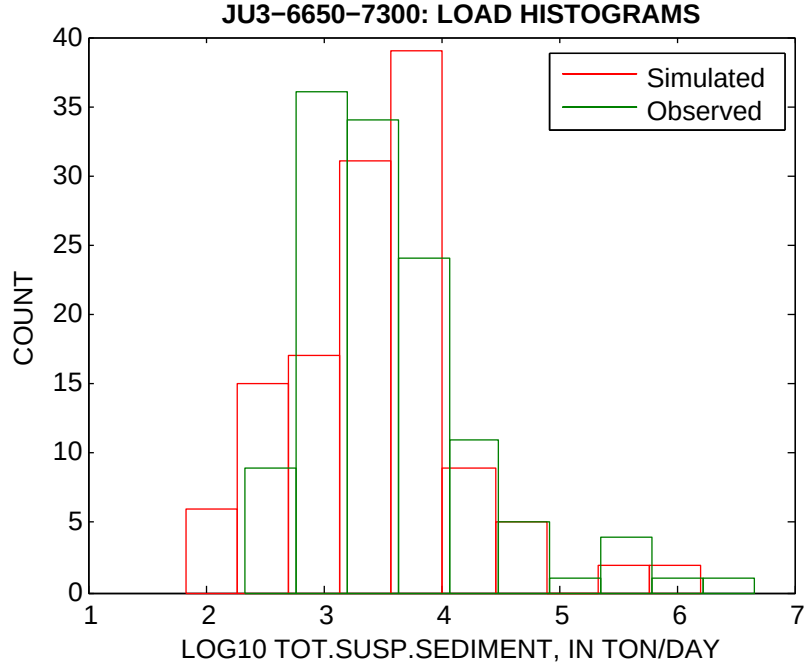


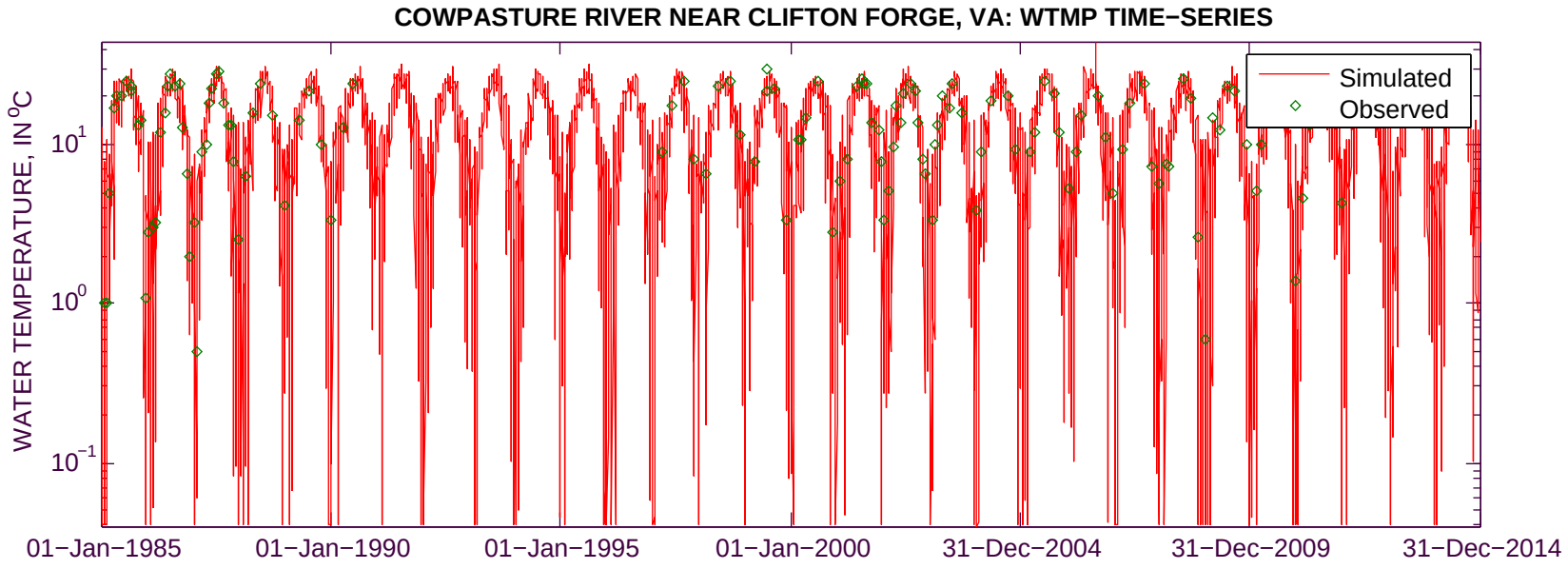
LOAD DATA
LOG10

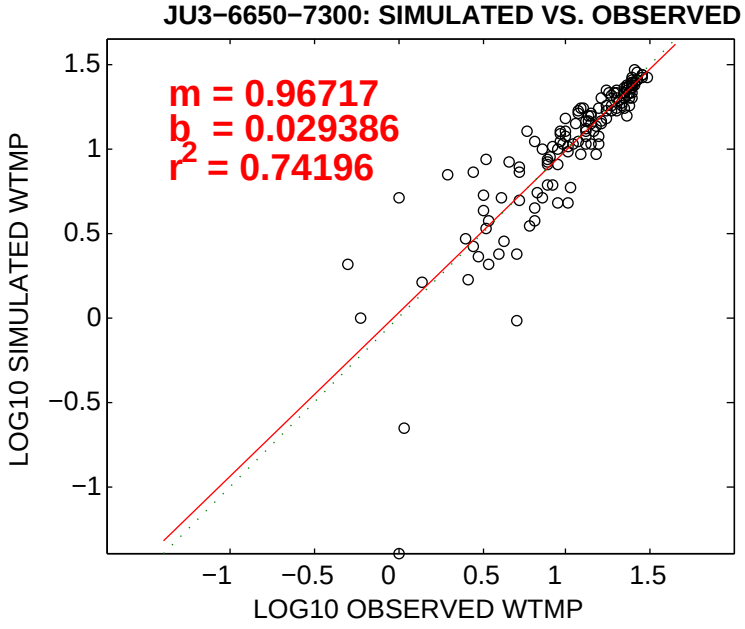


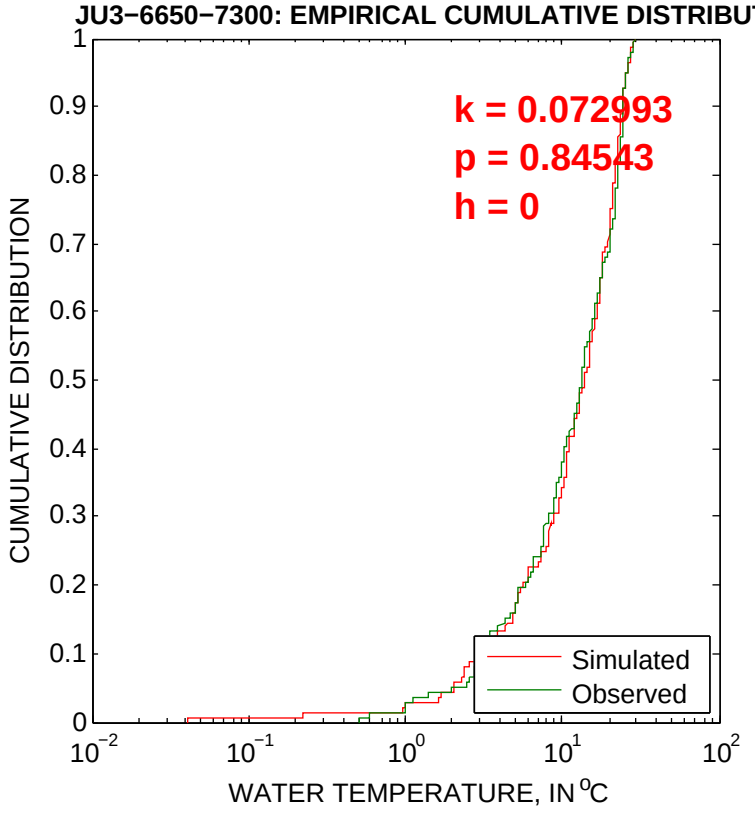












DATA SELECTION

scenario	file
P620171001WQ	WTMP.calib

plot: WTMP - water tempera...

Dates 1/1/1985 12/31/201

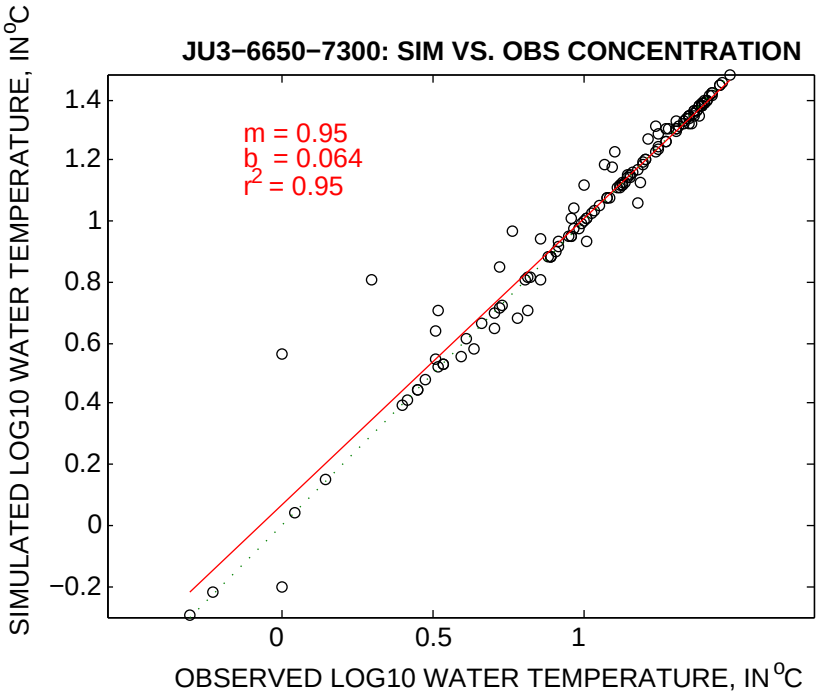
Drive	Directory	Observed
N/A	model	OBS20161101

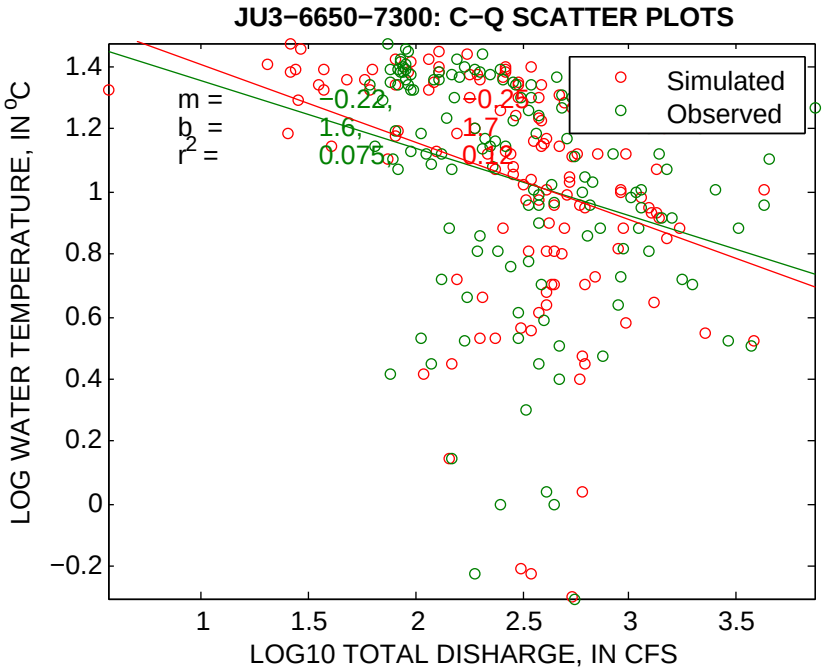
STATISTICS

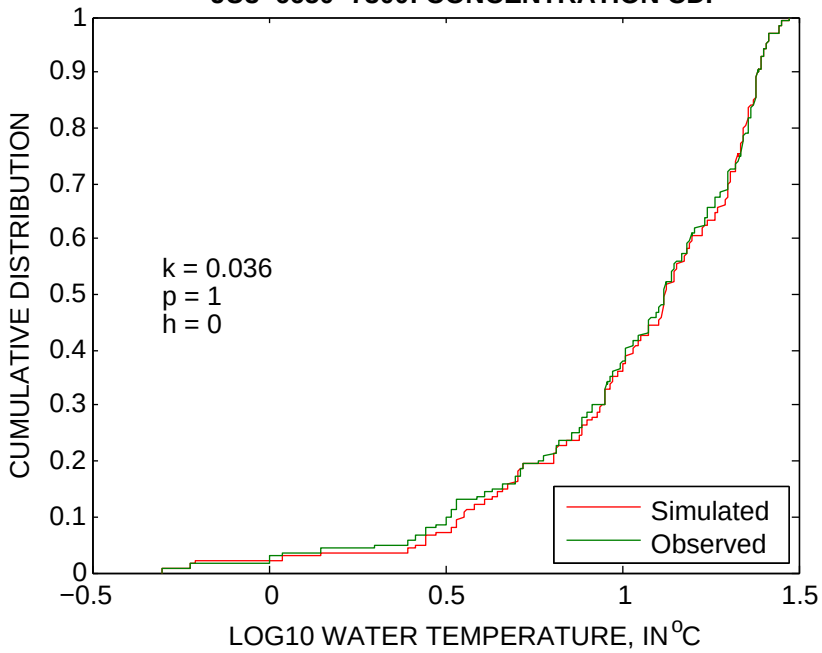
	n	137	137
		observe	simulate
min		0.5	0.040488
		-0.30103	-1.39267
mean		13.9127	13.9767
		1.02987	1.02544
media		13.22	13.96
		1.12123	1.14489
max		30	30.008
		1.47712	1.47724
varian		64.5044	60.7205
		0.138208	0.174243
JB		0.020696	0.032038
		0.001	0.001
		ra	log
%		0.460042	-0.429968
err.va		7.13497	0.0451305
rel.std.err		0.110612	0.326541
mod.eff		0.889388	0.673459

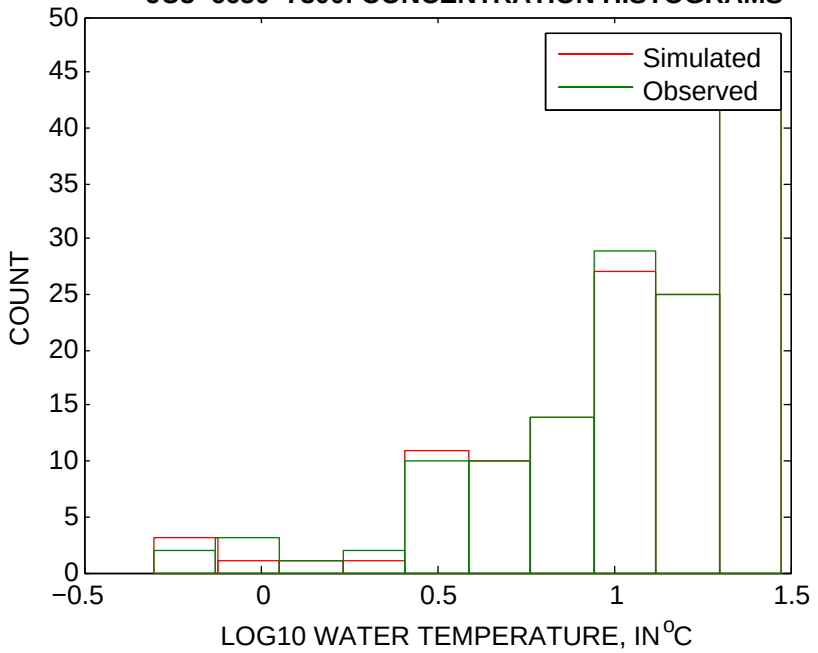
VERSION 2.1

ALL DATA
LOG10

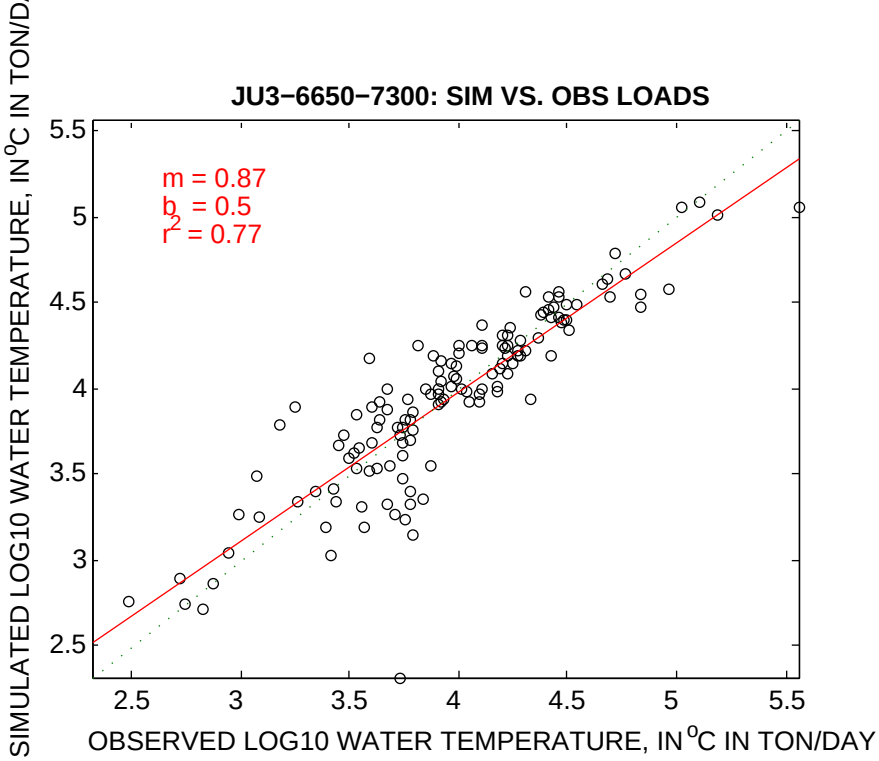


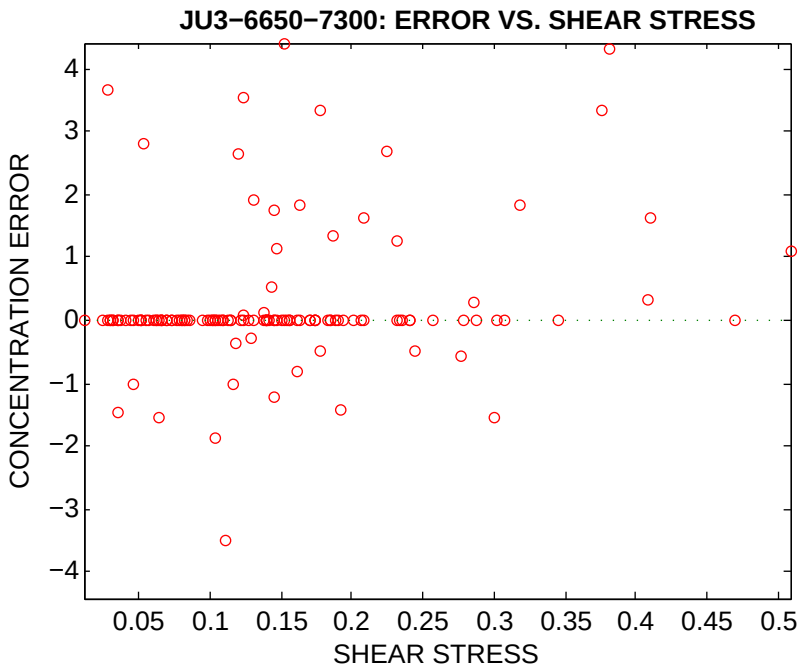


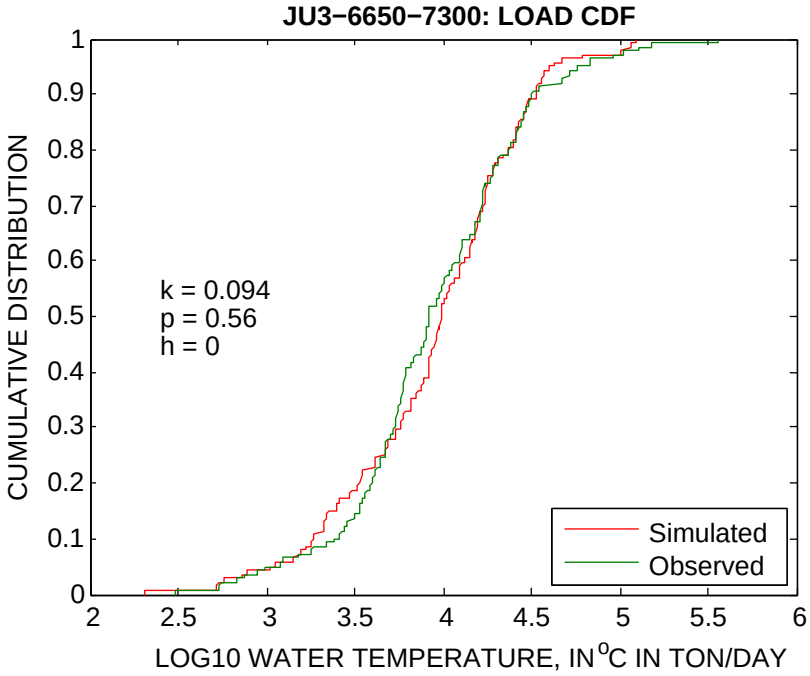


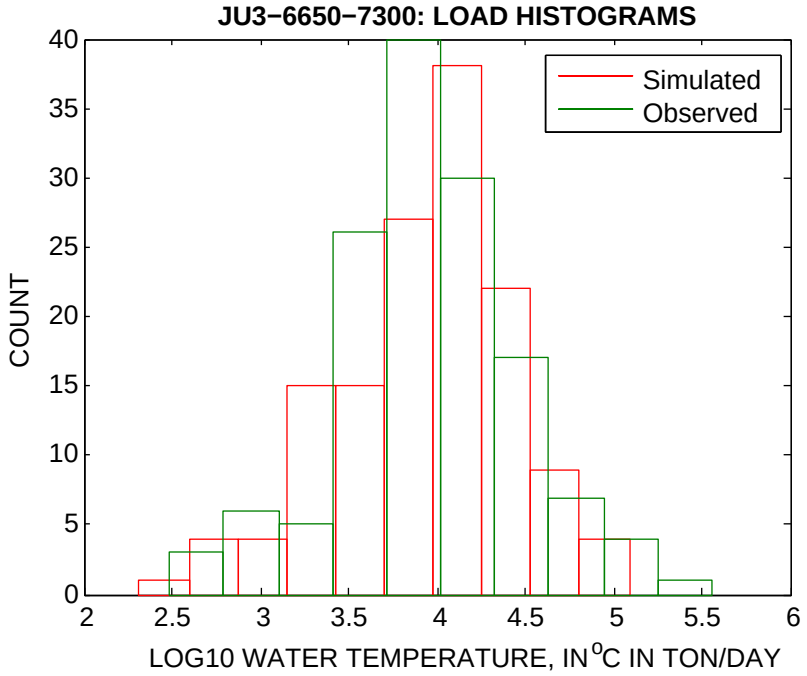


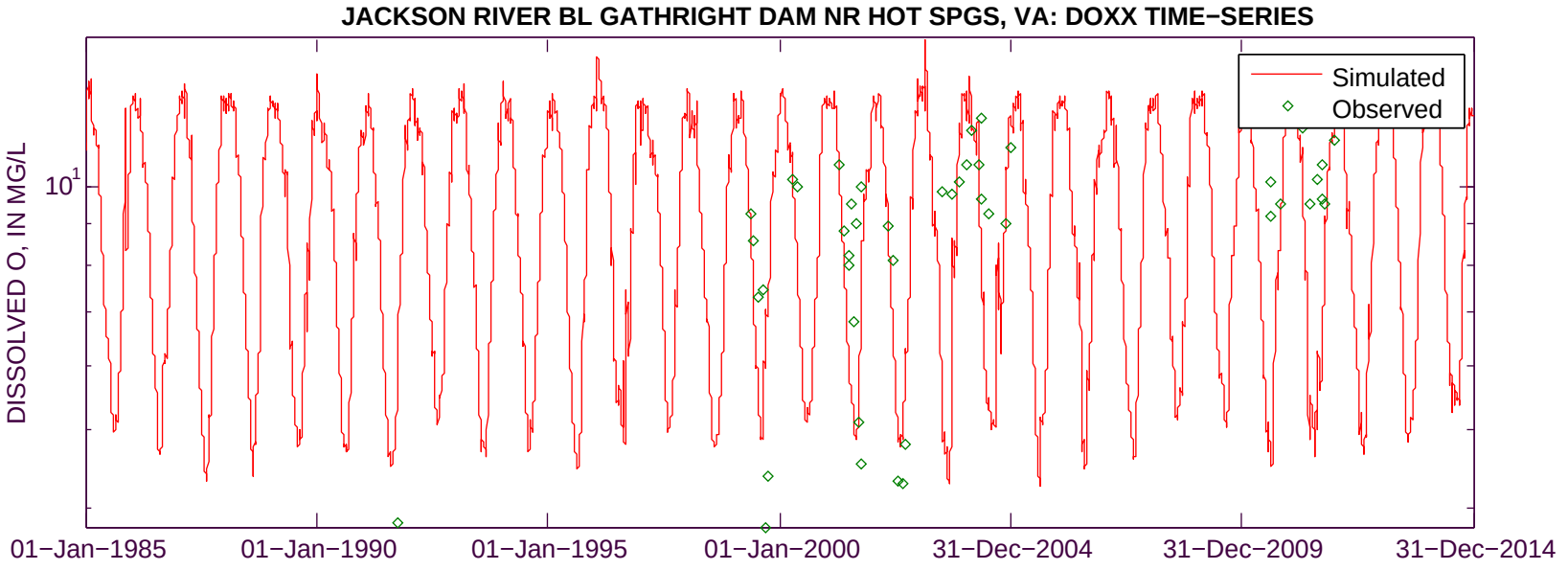
LOAD DATA
LOG10

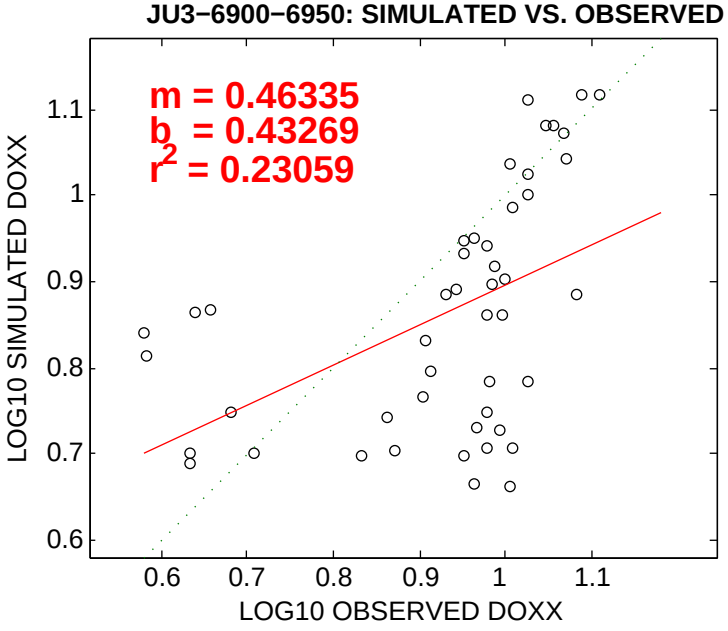


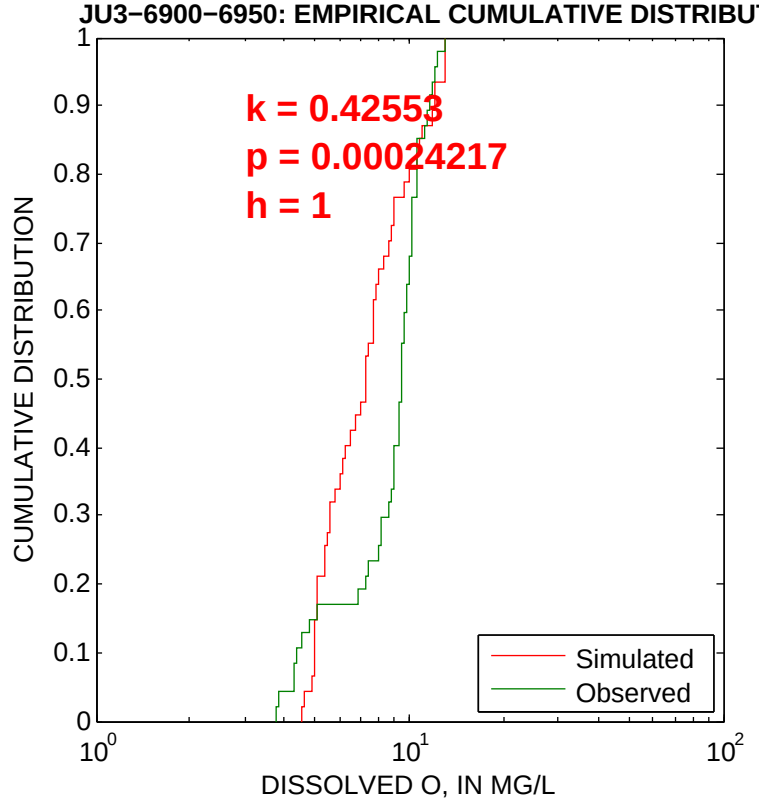












DATA SELECTION

scenario: P620171001WQ; file: DOXX.calib

plot: DOXX - dissolved oxygen

Dates: 1/1/1985 – 12/31/201

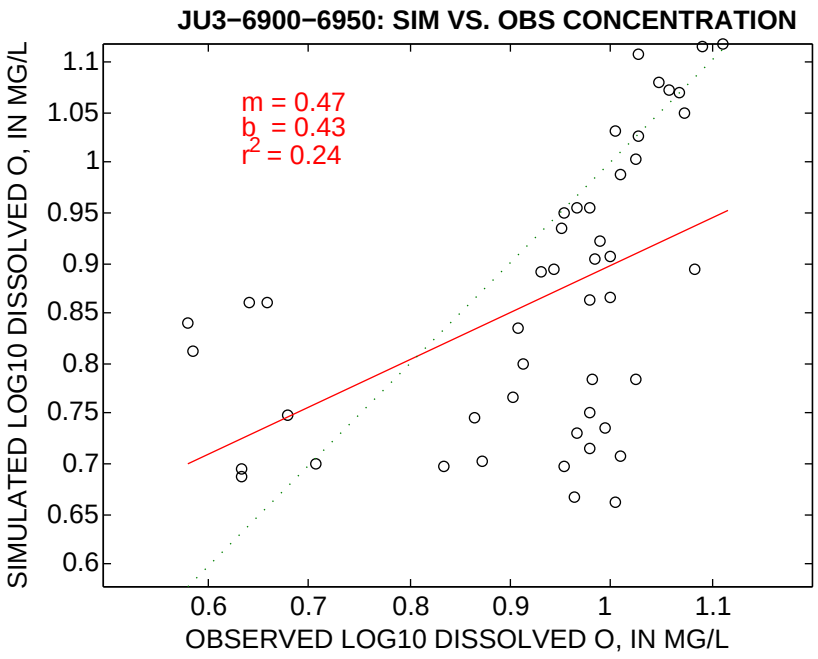
Drive: N/A; Directory: model; Observed: OBS20161101

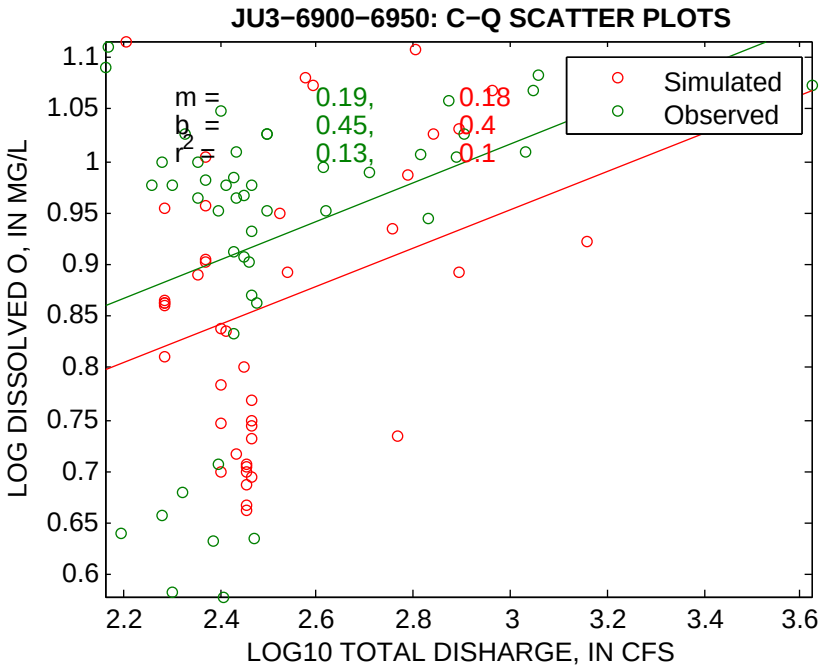
STATISTICS

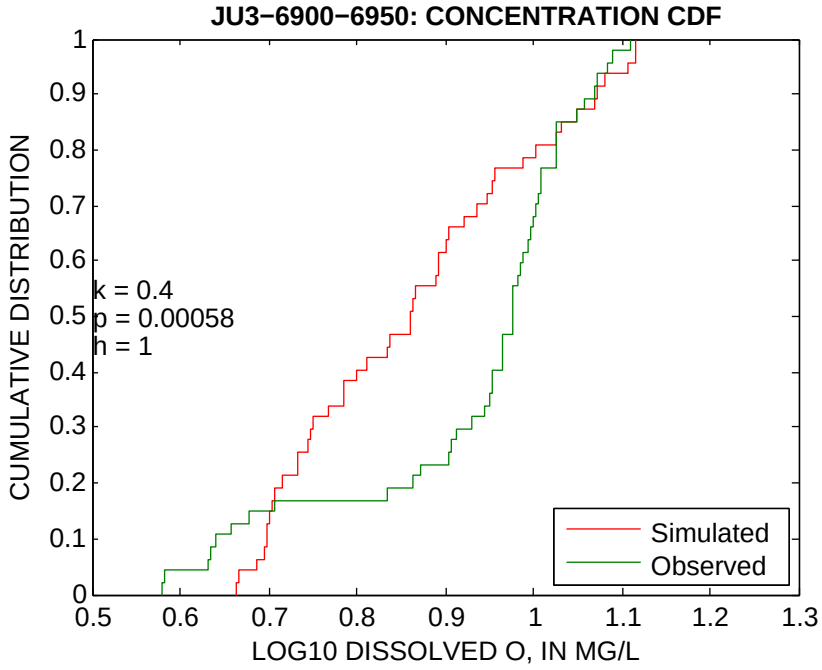
	n	47	47
		observe	simulate
min		3.79667	4.5718
		0.579403	0.660087
mean		8.85011	7.6625
		0.92657	0.862011
media		9.5	7.2857
		0.977724	0.862471
max		12.9	13.133
		1.11059	1.11836
varian		5.79302	6.56281
		0.0207882	0.0193547
JB		0.051447	0.050576
		0.009798	0.105658
		ra	log
%		-13.4191	-6.9675
err.va		6.66773	0.0251369
rel.std.err		1.15099	1.20919
mod.eff		-0.150993	-0.209192

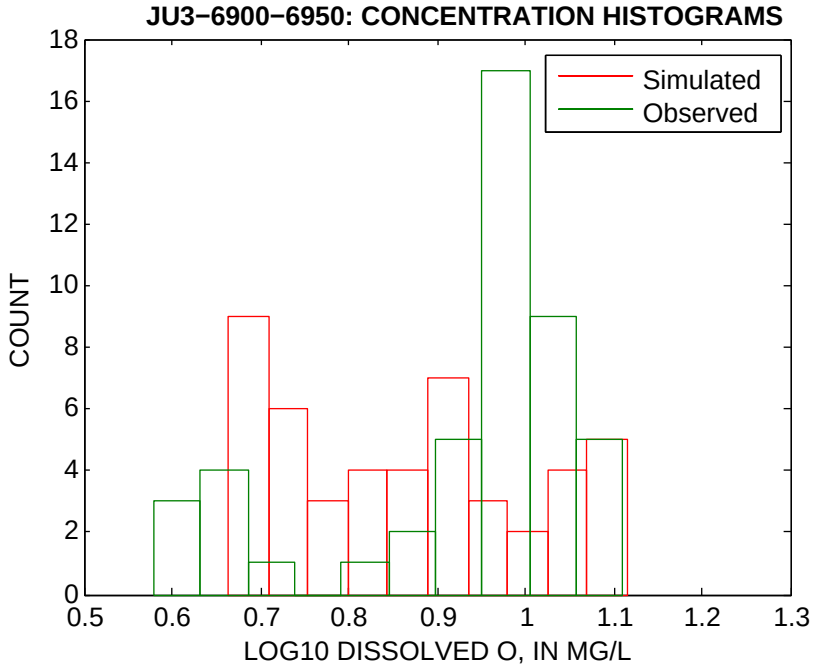
VERSION 2.1

ALL DATA
LOG10

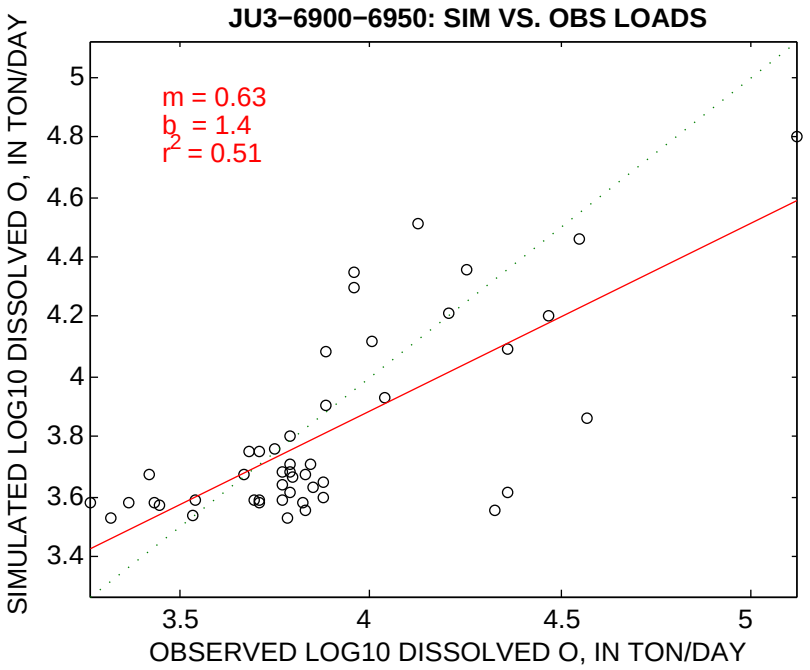


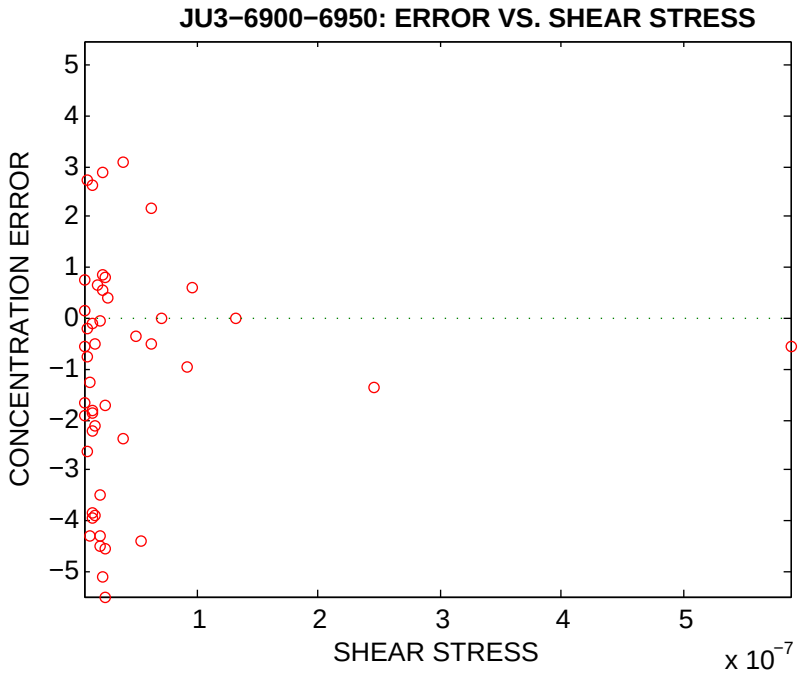


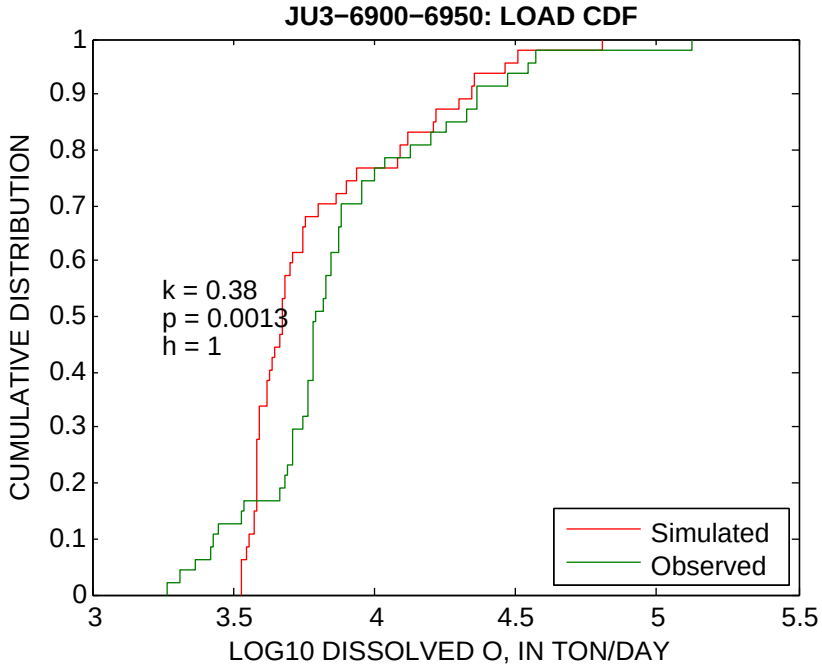


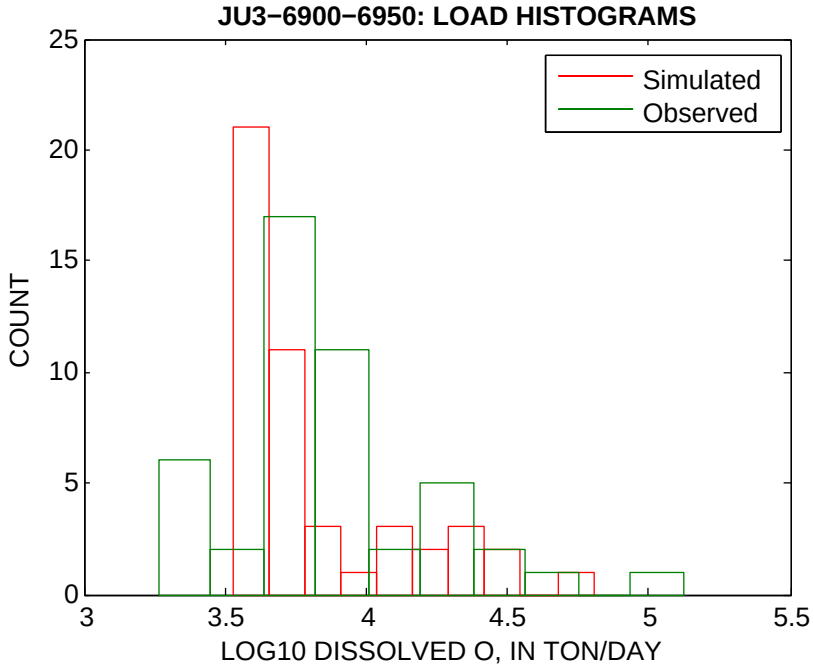


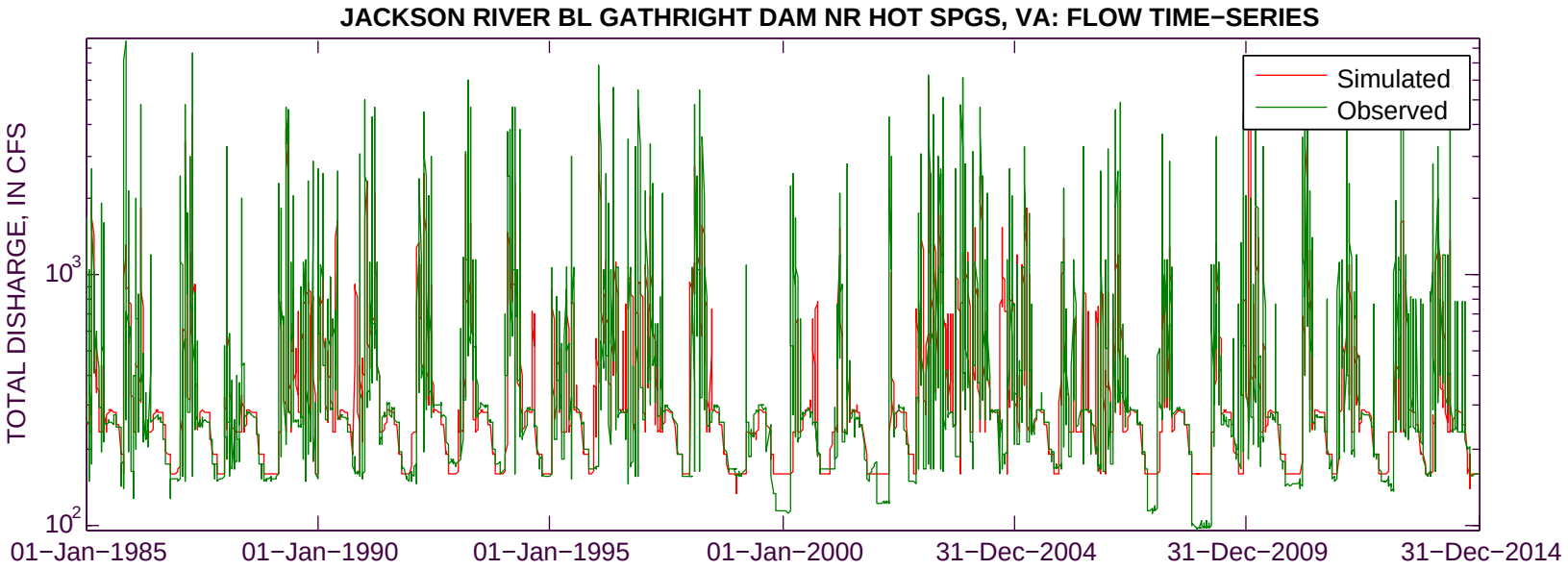
LOAD DATA
LOG10

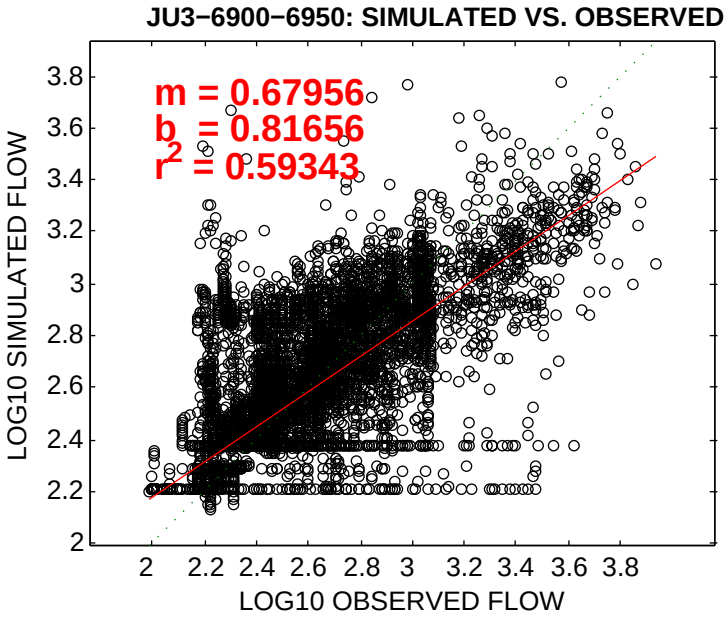


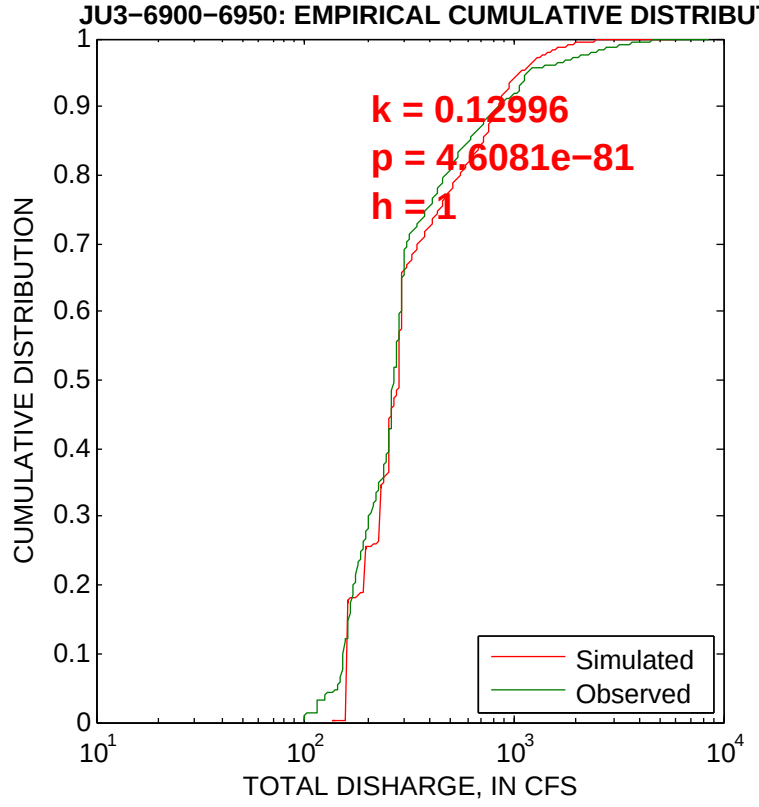












DATA SELECTION

scenario: P620171001WQ | file: FLOW.calib

plot: FLOW - total discharge

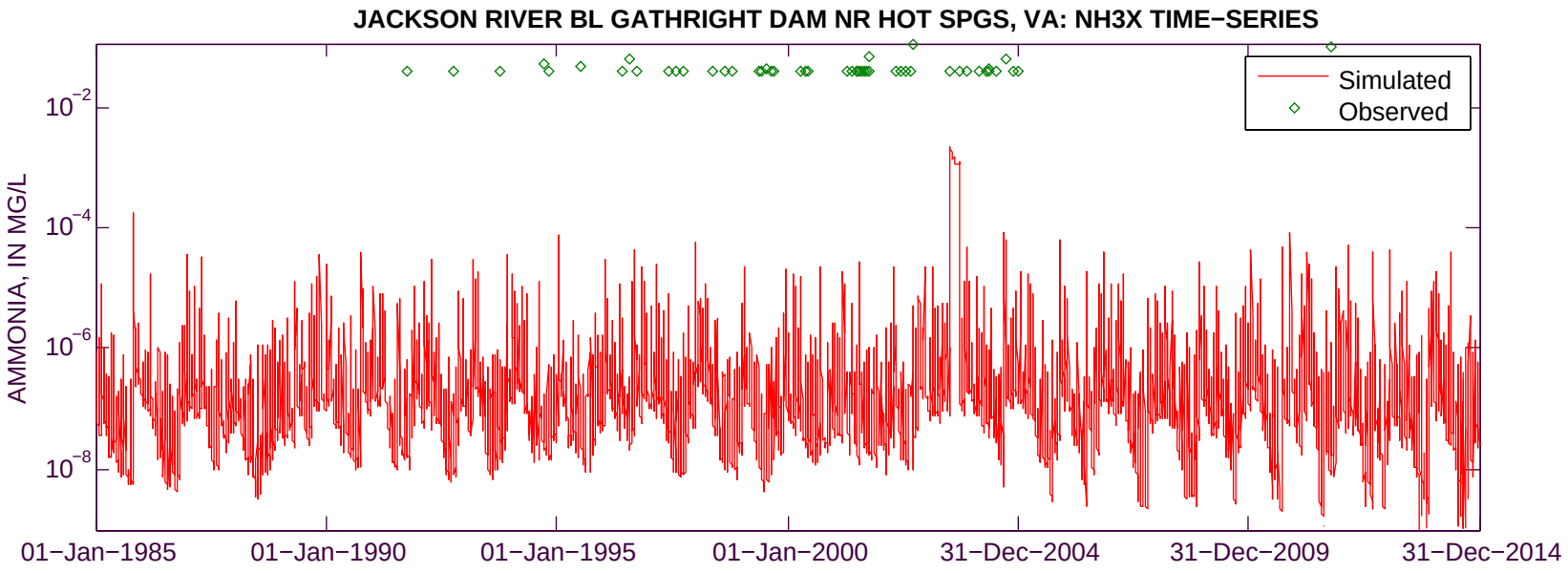
Dates: 1/1/1985 – 12/31/201

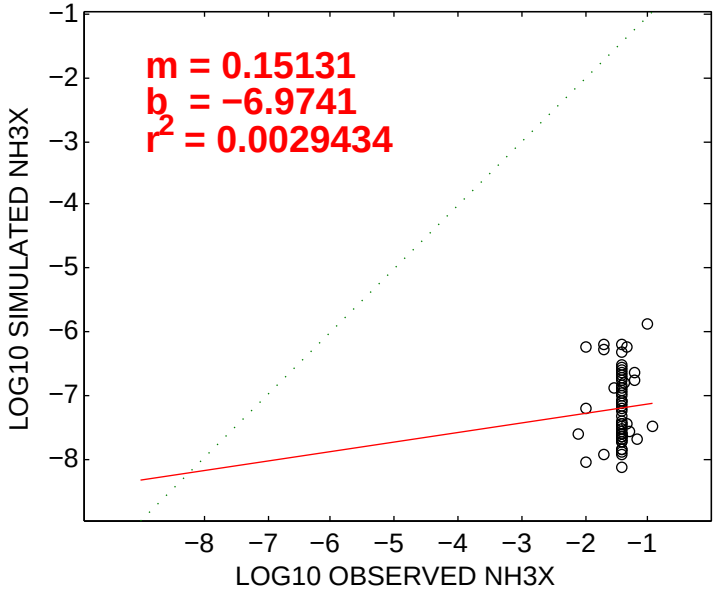
Drive: N/A | Directory: model | Observed: OBS20161101

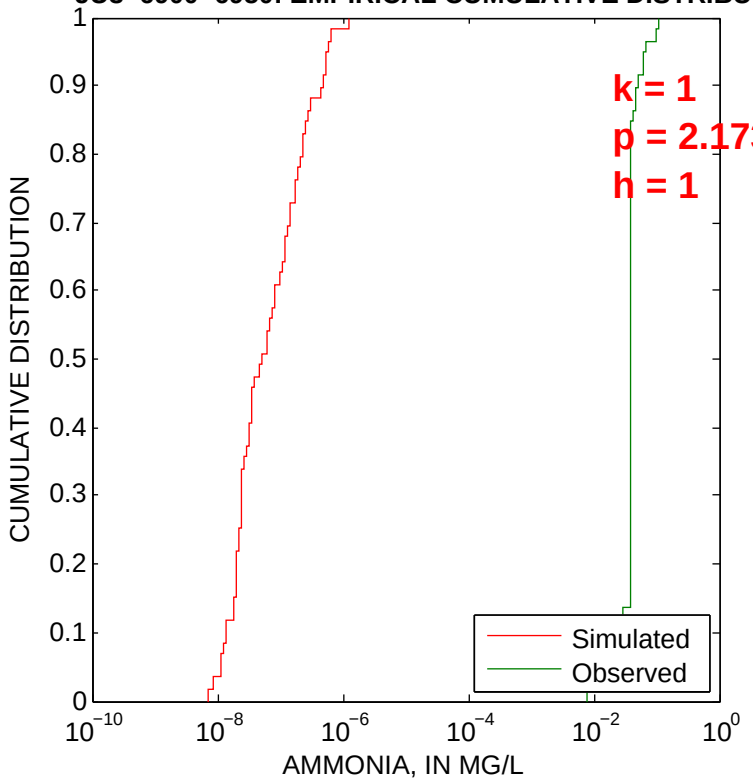
STATISTICS

n	10957	10957
	observe	simulate
min	97	134.8
	1.98677	2.12969
mean	432.429	405.158
	2.48515	2.50538
media	267	286
	2.42651	2.45637
max	8670	5926.6
	3.93802	3.77281
varian	345158	139404
	0.0926561	0.0721052
JB	0.001	0.001
	0.001	0.001
	ra	log
%	-6.30642	0.814128
err.va	185329	0.0392391
rel.std.err	0.536939	0.423491
mod.eff	0.463061	0.576509

VERSION 2.1







DATA SELECTION

scenario	file
P620171001WQ	NH3X.calib

plot: NH3X - ammonia

Dates: 1/1/1985 – 12/31/201

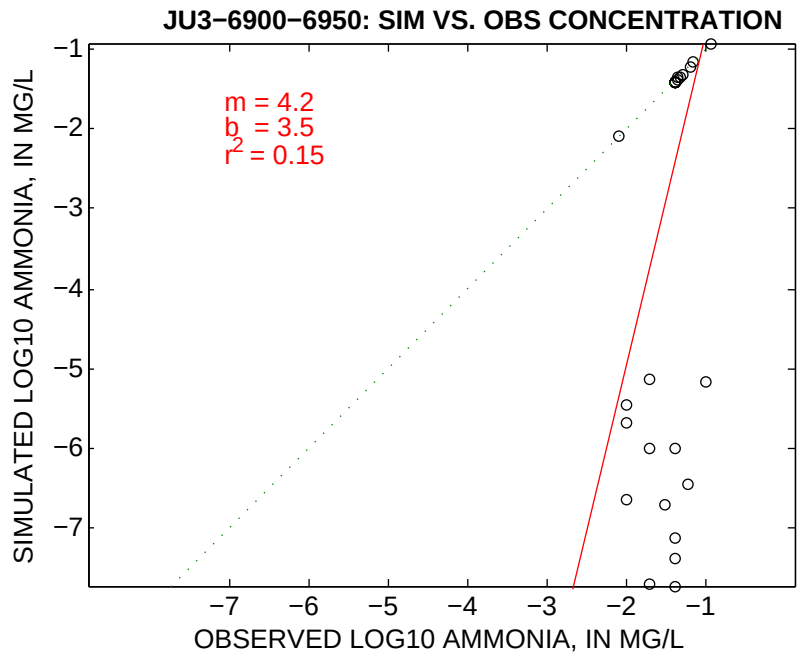
Drive	Directory	Observed
N/A	model	OBS20161101

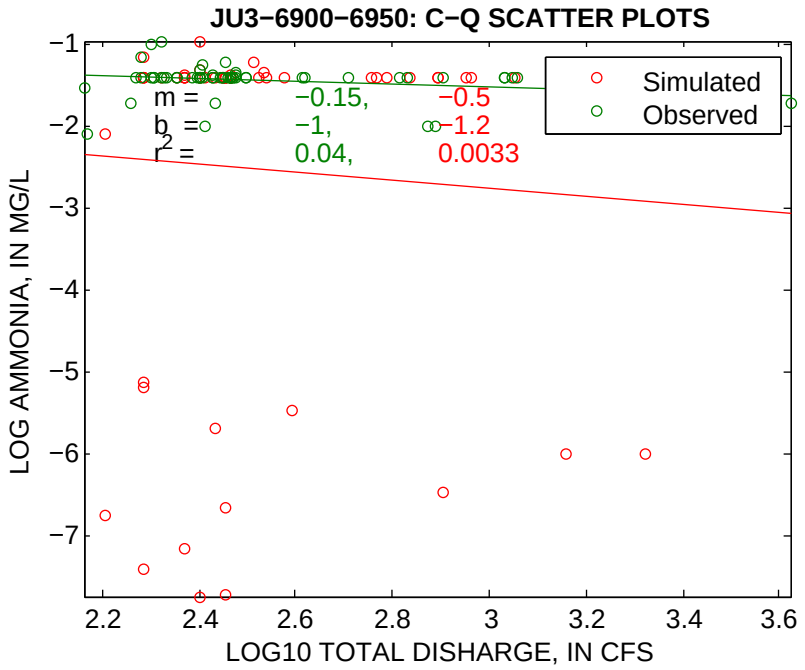
STATISTICS

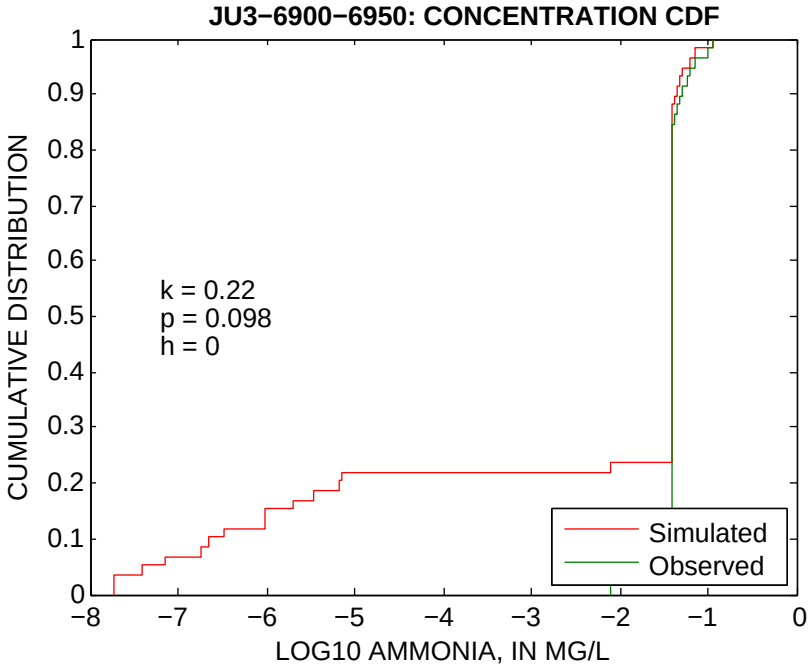
	n	59	59
		observe	simulate
min		0.008	7.5104e-09
		-2.09691	-8.12434
mean		0.0407006	1.47708e-0
		-1.42859	-7.19029
media		0.04	5.4161e-08
		-1.39794	-7.26631
max		0.115	1.2773e-06
		-0.939302	-5.89371
varian		0.00028008	4.94763e-1
		0.040075	0.311728
JB		0.001	0.001
		0.001	0.099698
		ra	log
%		-99.9996	403.315
err.va		0.00196517	34.1093
rel.std.err		7.01629	851.137
mod.eff		-6.01629	-850.137

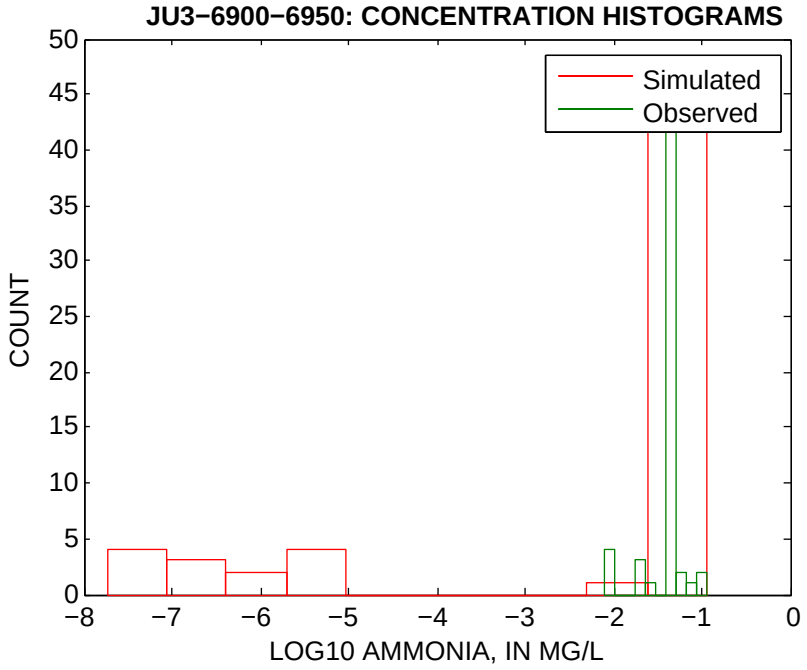
VERSION 2.1

ALL DATA
LOG10

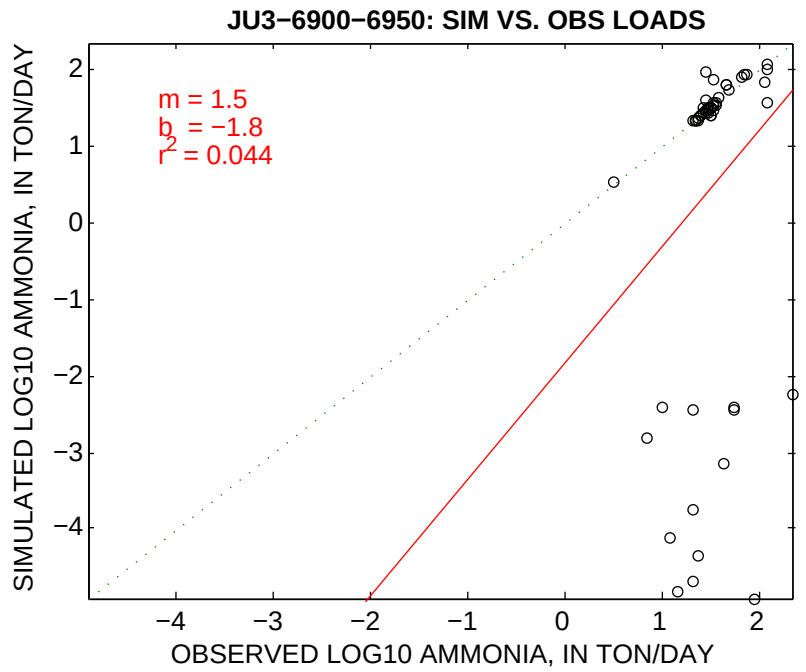




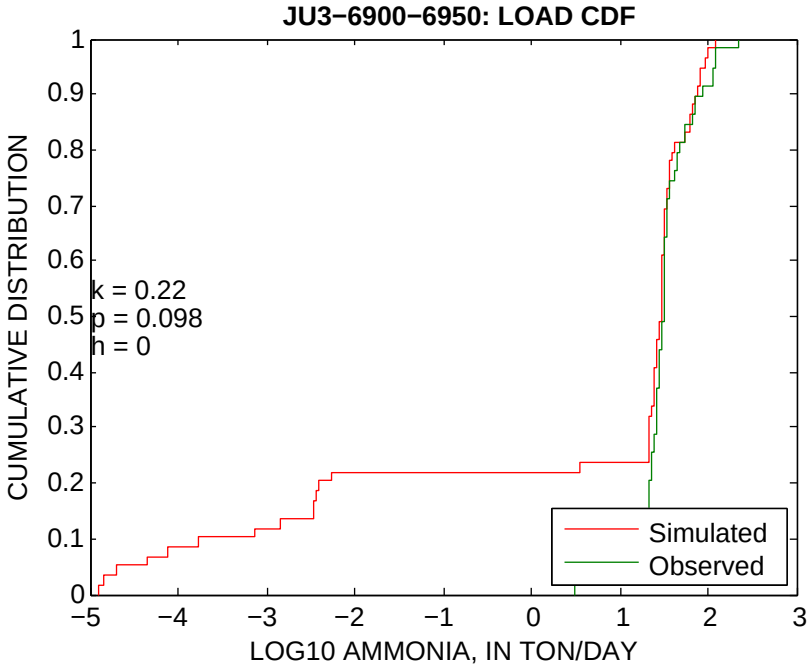


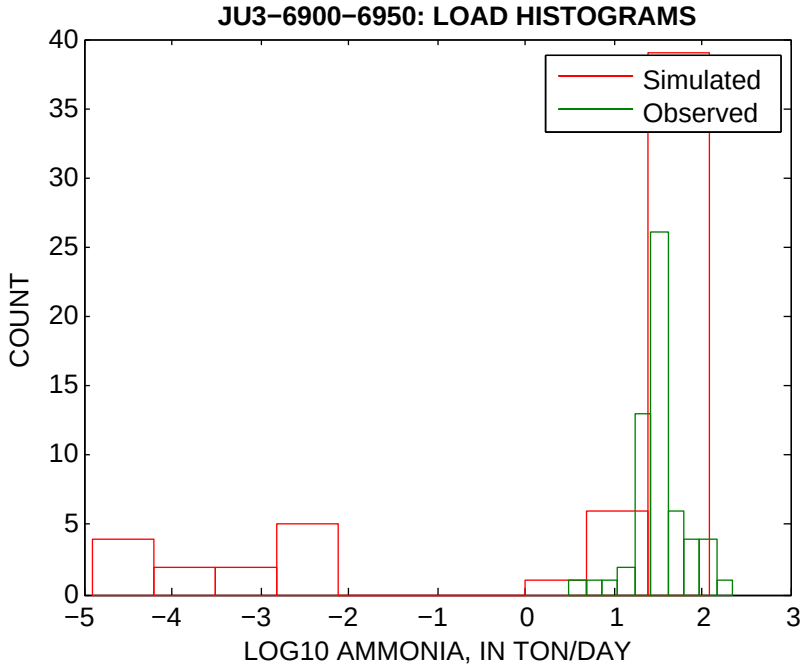


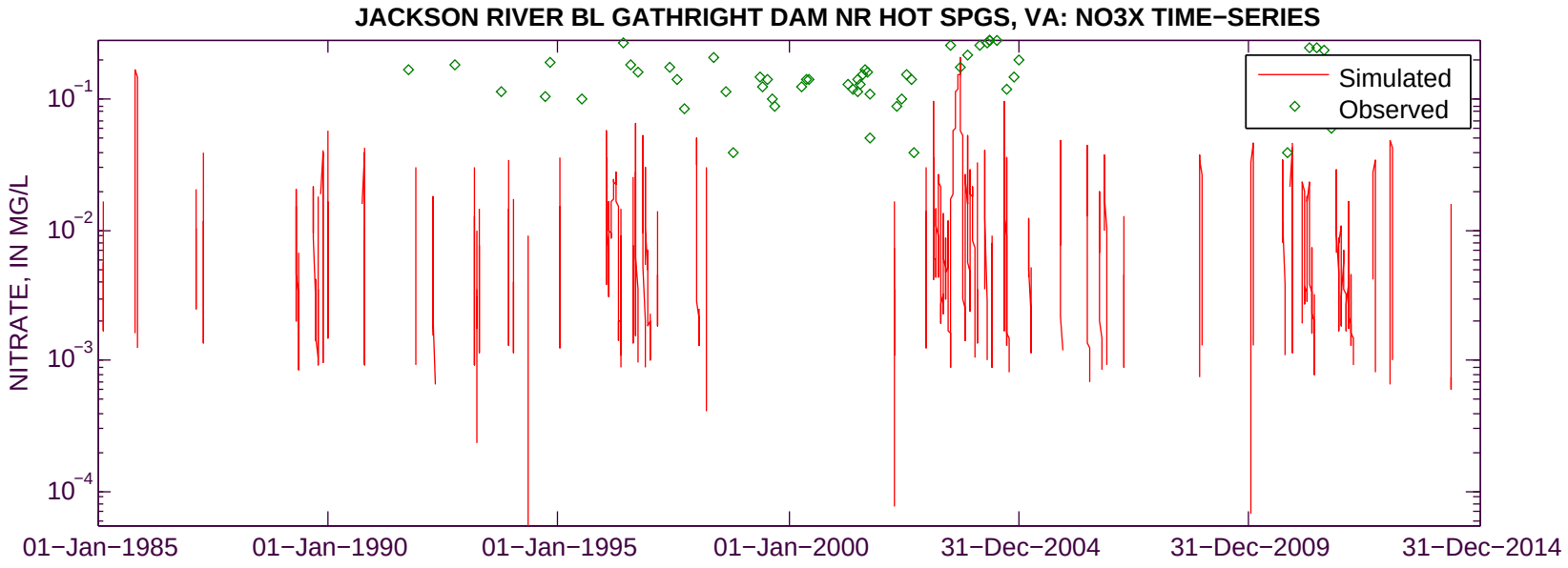
LOAD DATA
LOG10

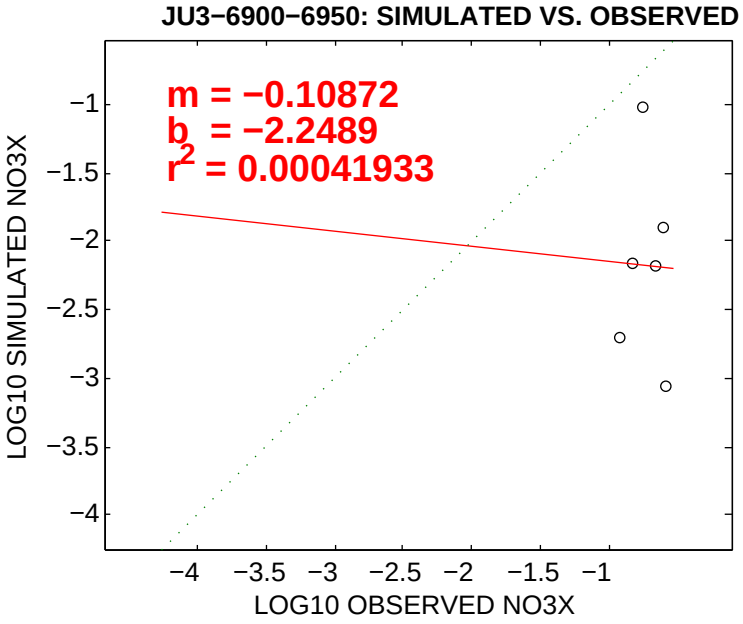


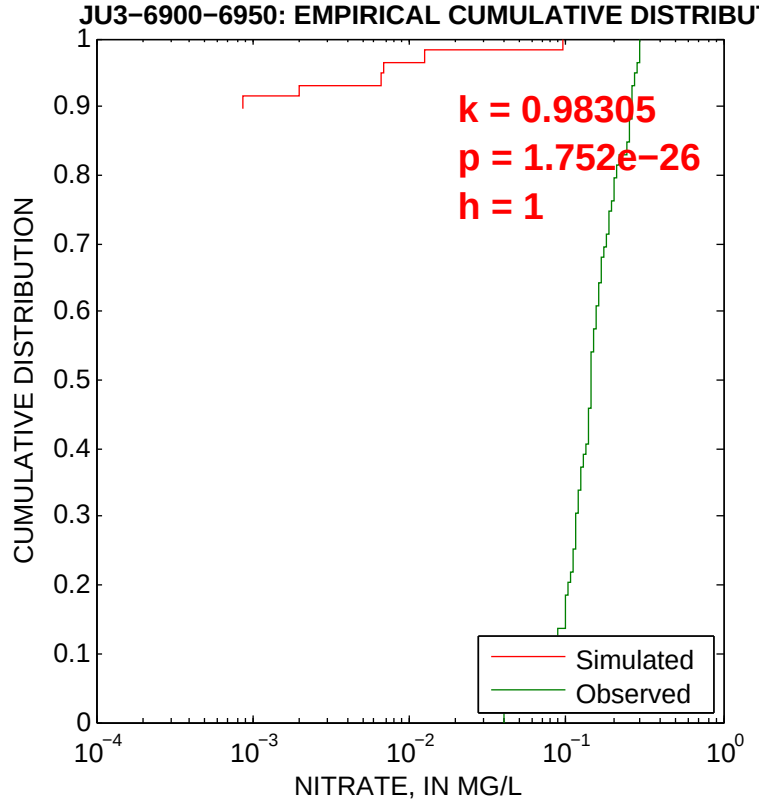












DATA SELECTION

scenario	file
P620171001WQ	NO3X.calib

plot: NO3X - nitrate

Dates: 1/1/1985 – 12/31/201

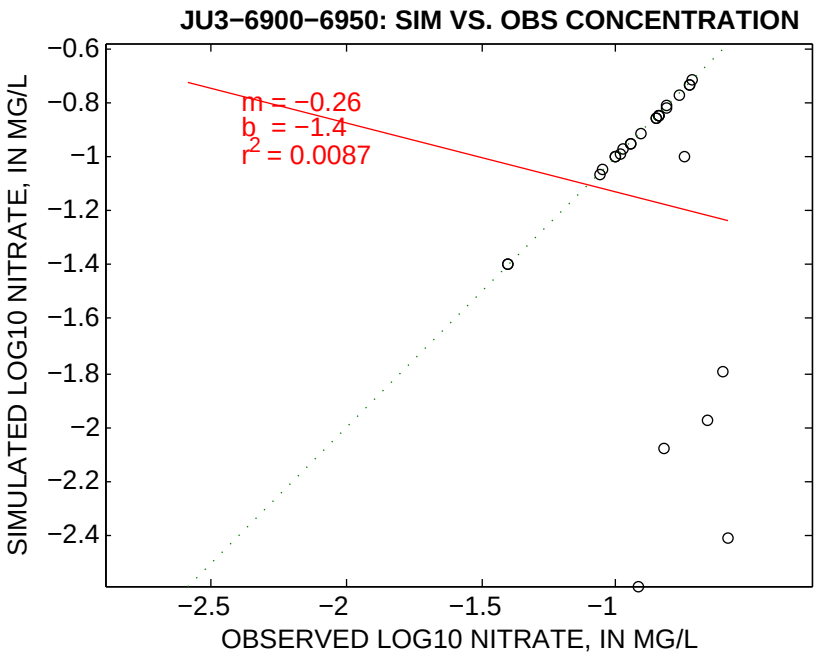
Drive	Directory	Observed
N/A	model	OBS20161101

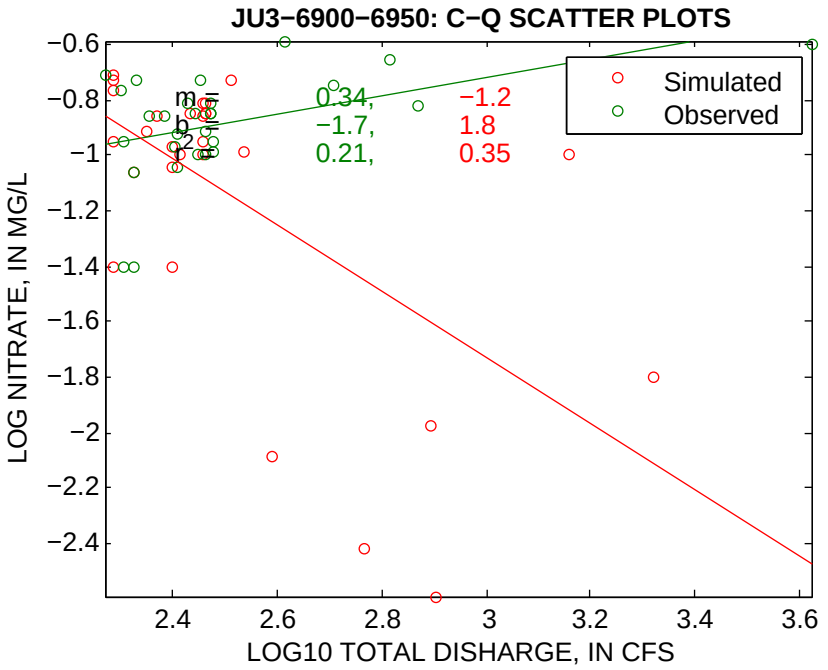
STATISTICS

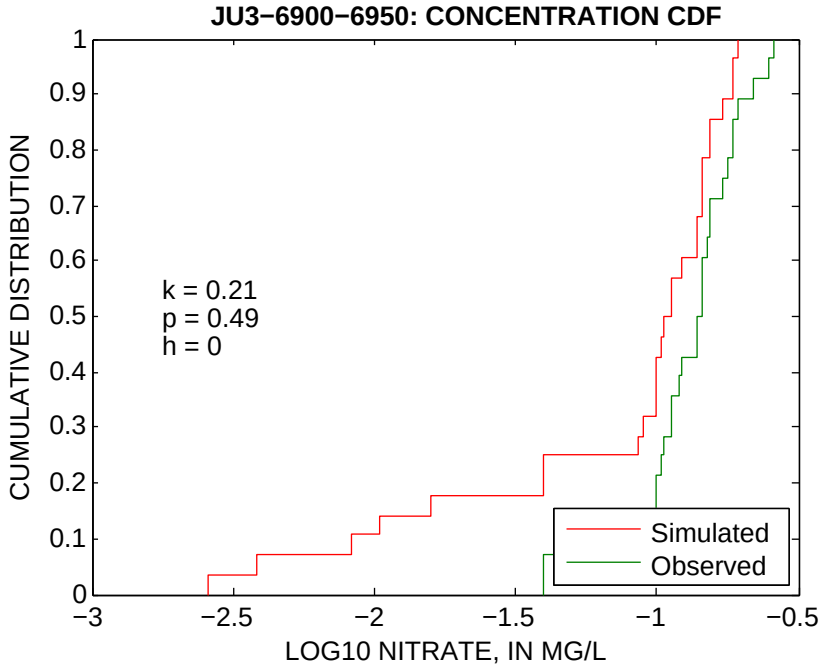
	n	59	6
		observe	simulate
min		0.04	0
		-0.920819	-3.05602
mean		0.154972	0.00211673
		-0.722353	-2.17033
media		0.143333	0
		-0.701152	-2.17253
max		0.29	0.095933
		-0.585027	-1.01803
varian		0.00422812	0.00015851
		0.0175455	0.494572
JB		0.204719	0.001
		0.5	0.5
		ra	log
%		-98.6341	200.452
err.va		0.0280154	3.03189
rel.std.err		6.62597	172.801
mod.eff		-5.62597	-171.801

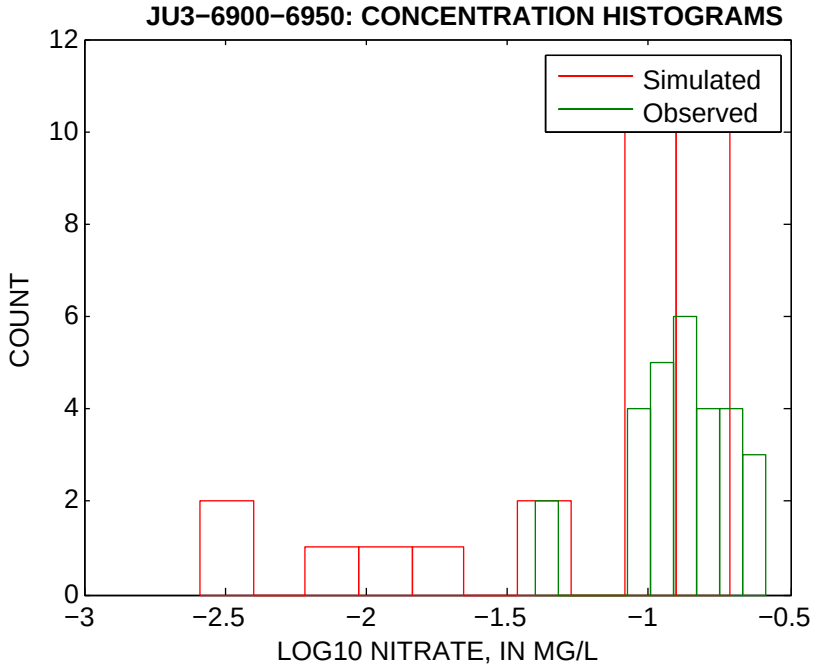
VERSION

ALL DATA
LOG10

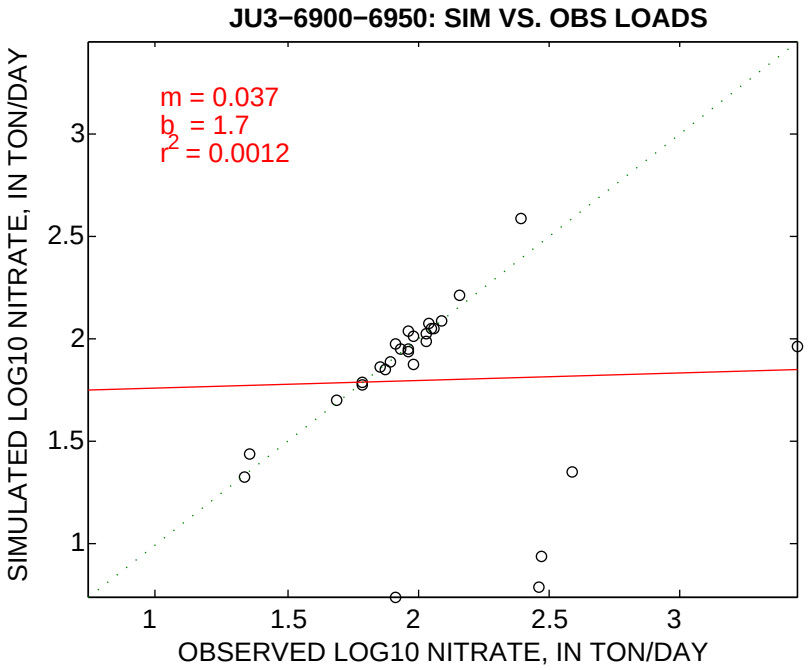




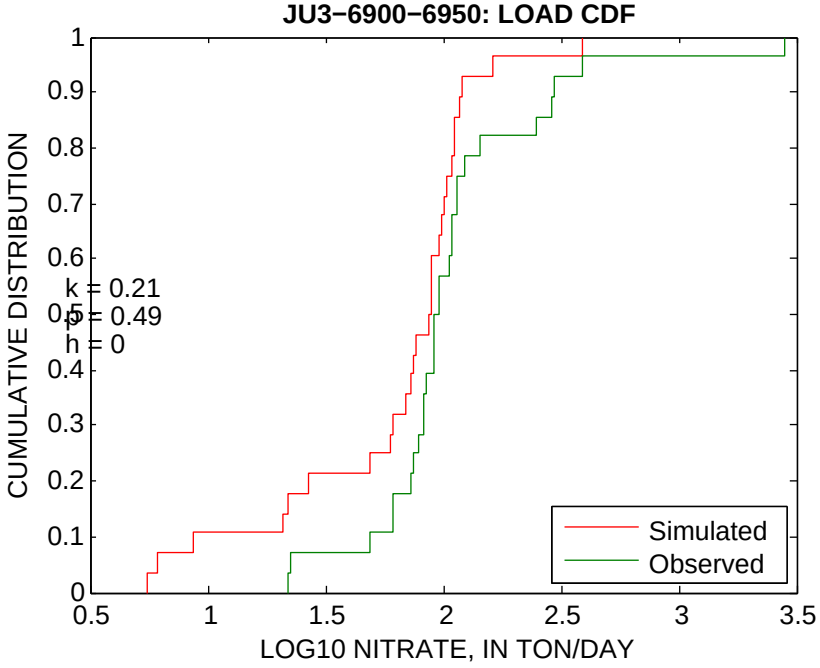


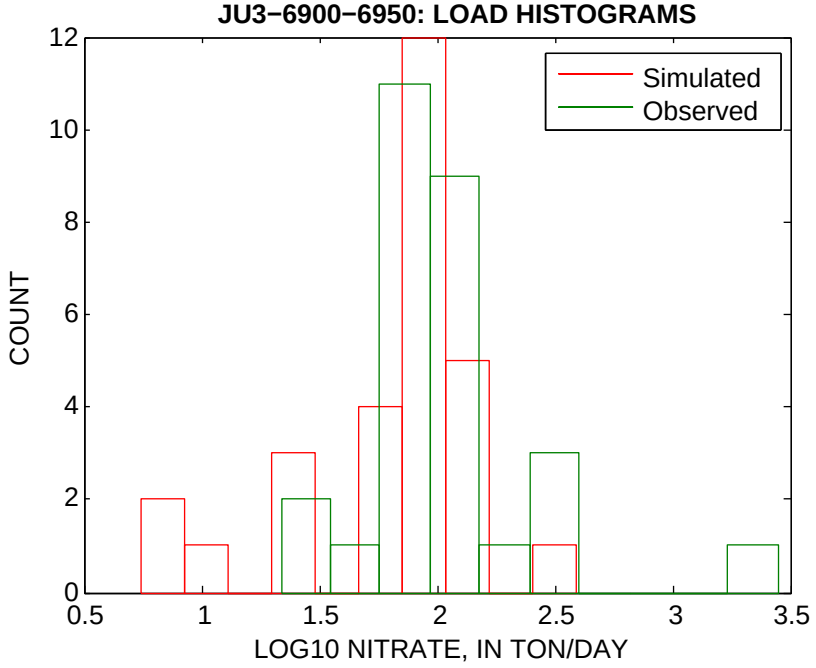


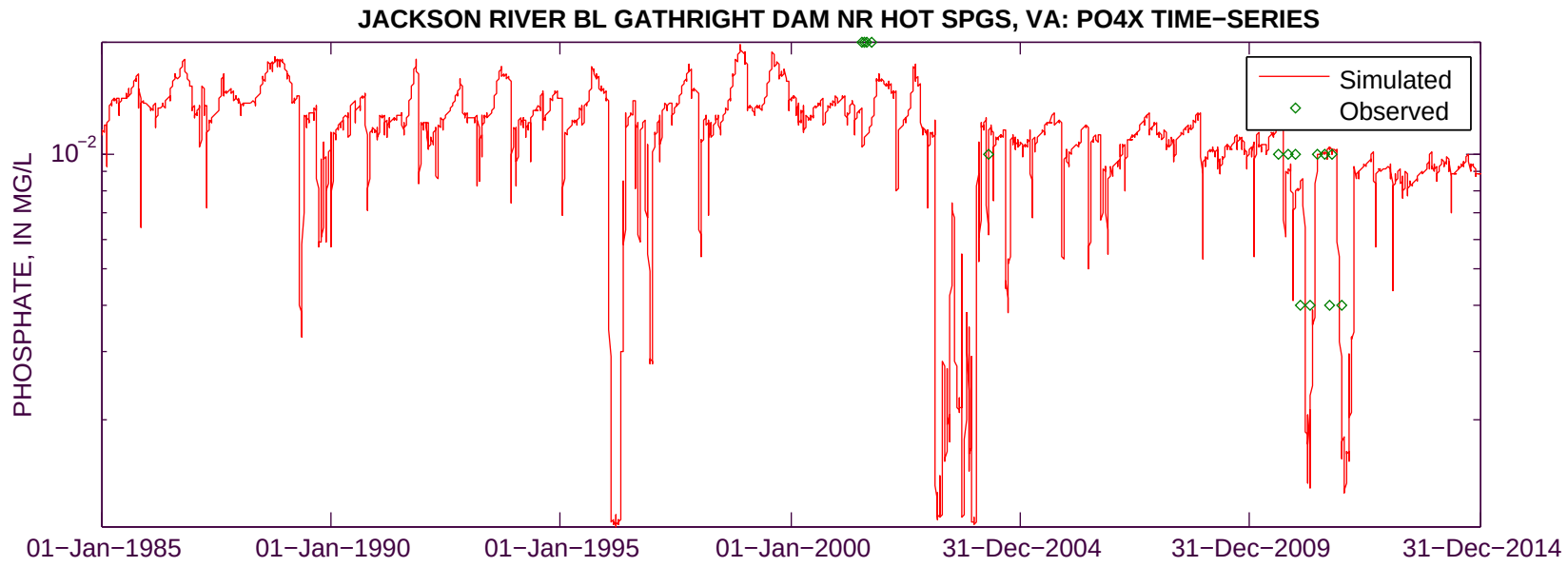
LOAD DATA
LOG10

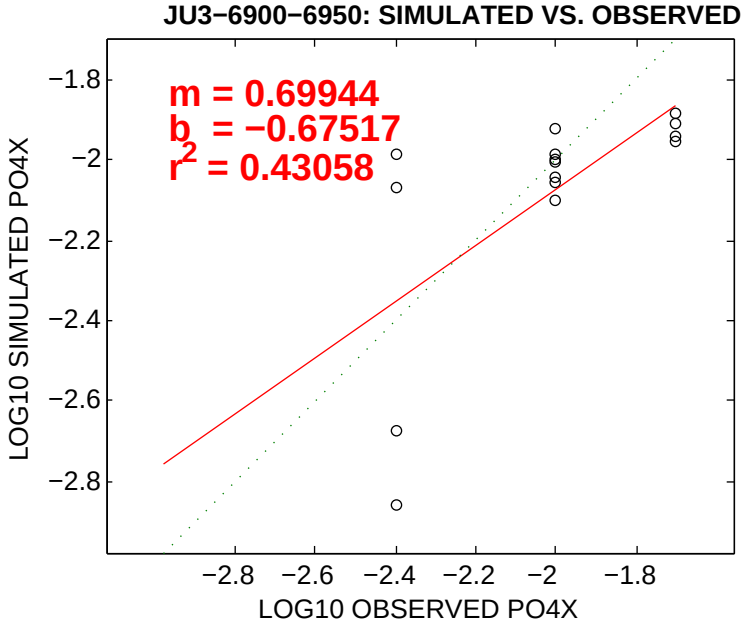


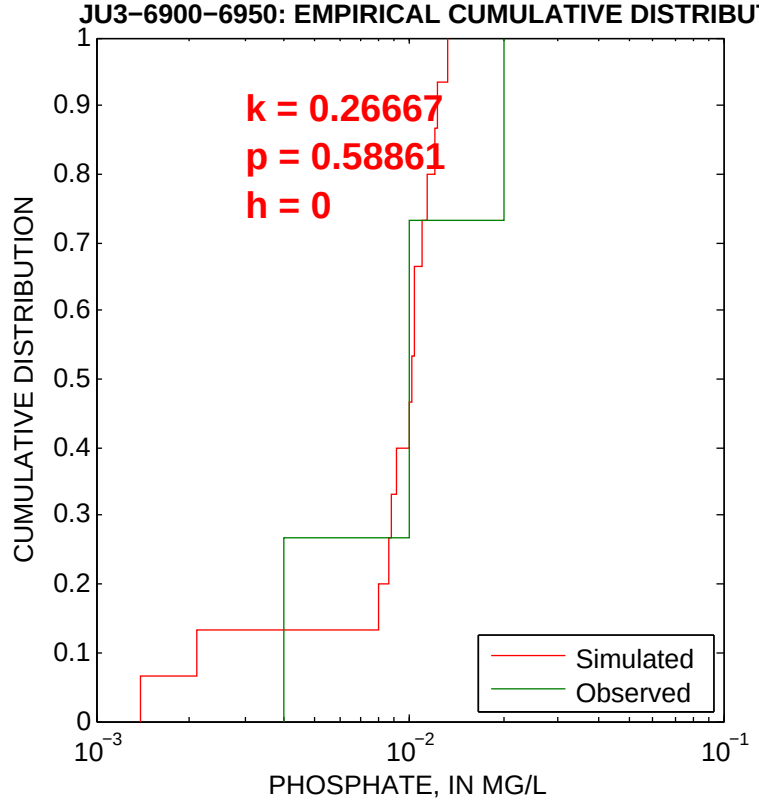












DATA SELECTION

scenario: P620171001WQ | file: PO4X.calib

plot: PO4X - phosphate

Dates: 1/1/1985 – 12/31/201

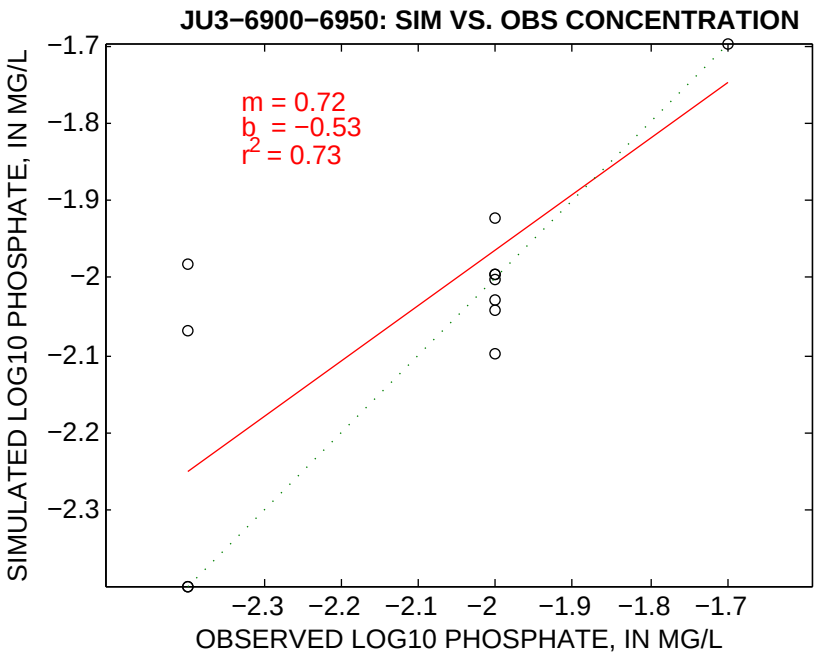
Drive Directory: N/A | model | Observed: OBS20161101

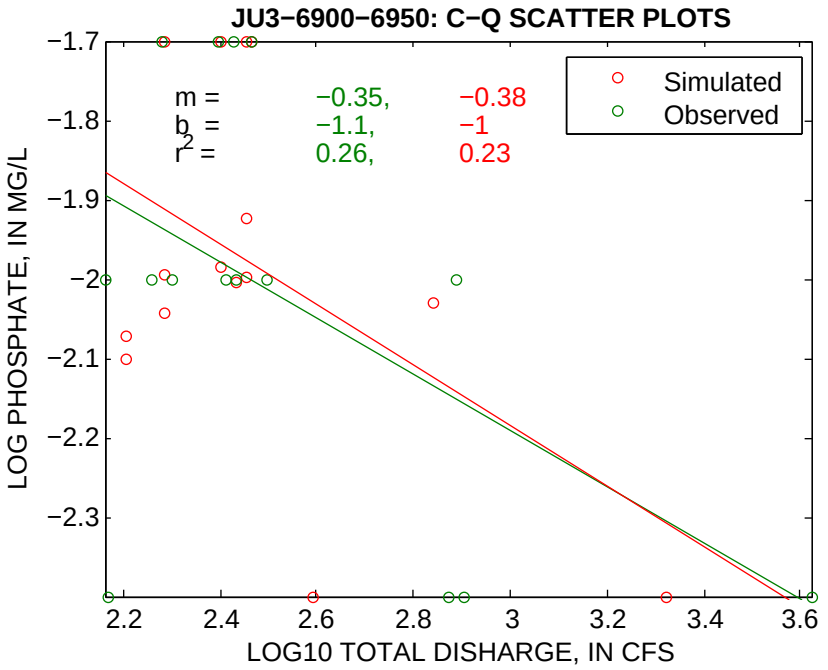
STATISTICS

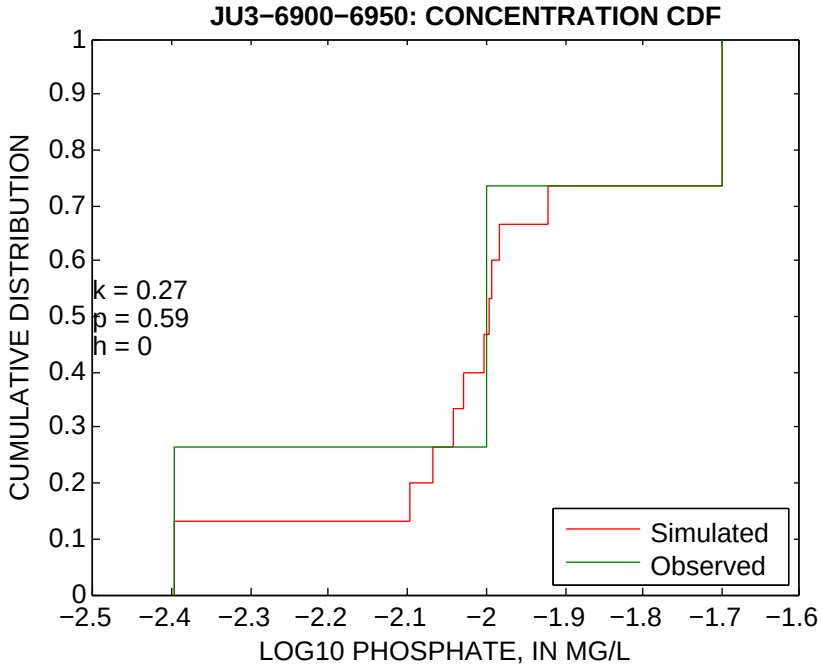
	n	15	15
		observe	simulate
min		0.004	0.0013864
		-2.39794	-2.85811
mean		0.0110667	0.00923167
		-2.02584	-2.09212
media		0.01	0.010095
		-2	-1.99589
max		0.02	0.013155
		-1.69897	-1.88091
varian		3.76381e-0	1.13593e-0
		0.0704203	0.0800098
JB		0.239637	0.022135
		0.396554	0.002643
		ra	log
%		-16.5813	3.27149
err.va		2.43663e-0	0.0566269
rel.std.err		1.647383	0.804128
mod.eff		0.352617	0.195872

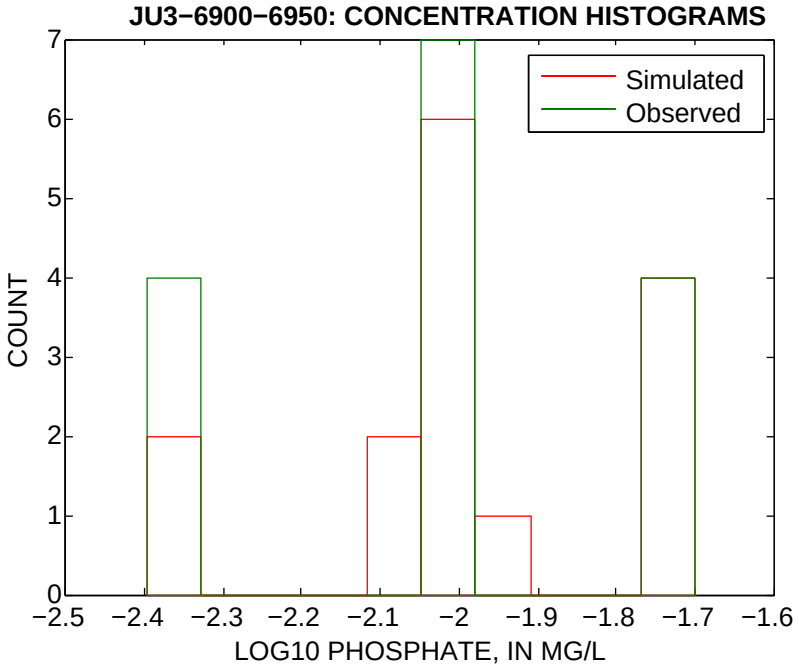
VERSION 2.1

ALL DATA
LOG10

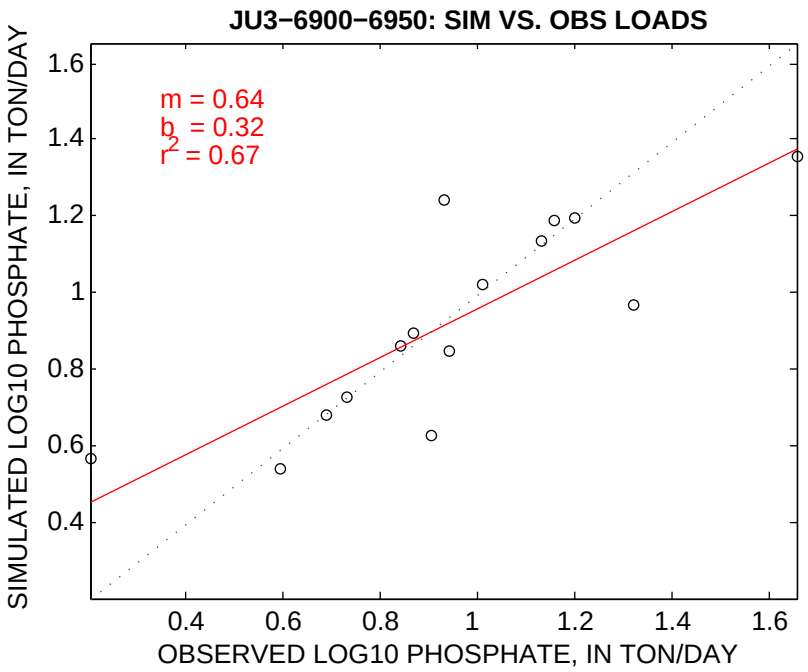


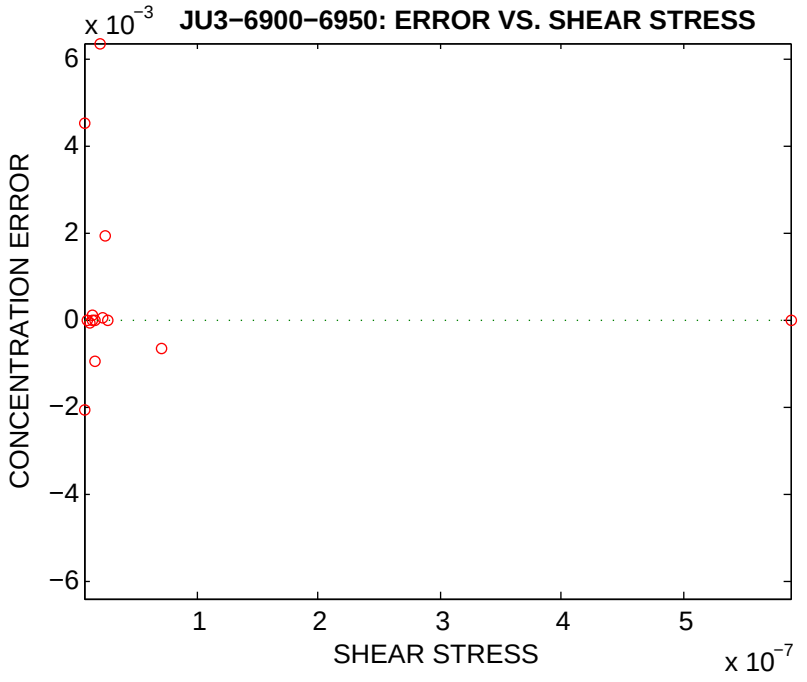


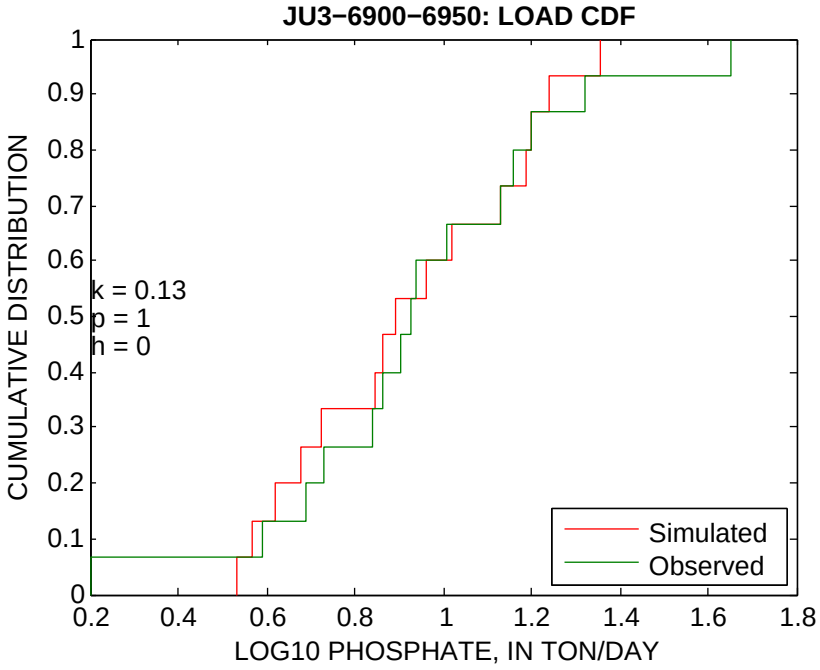


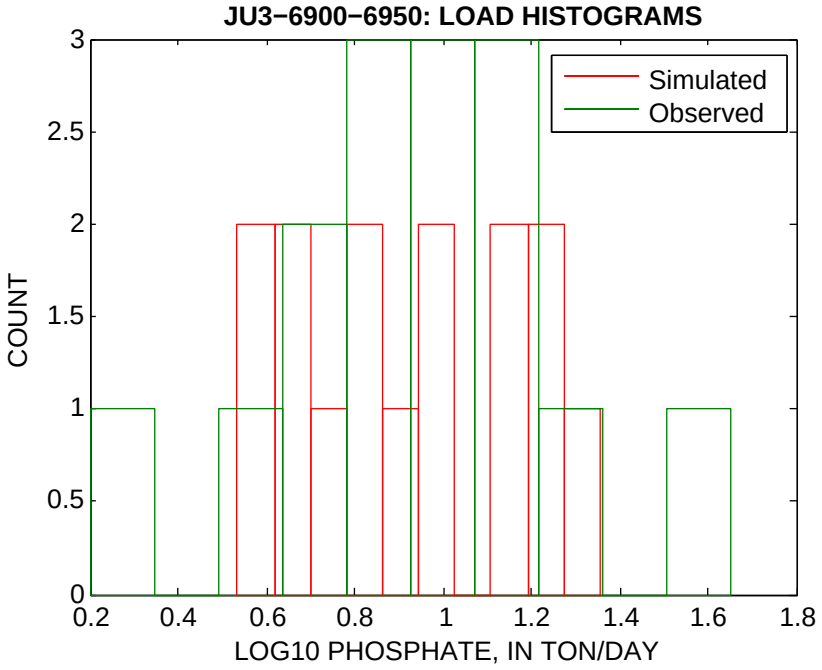


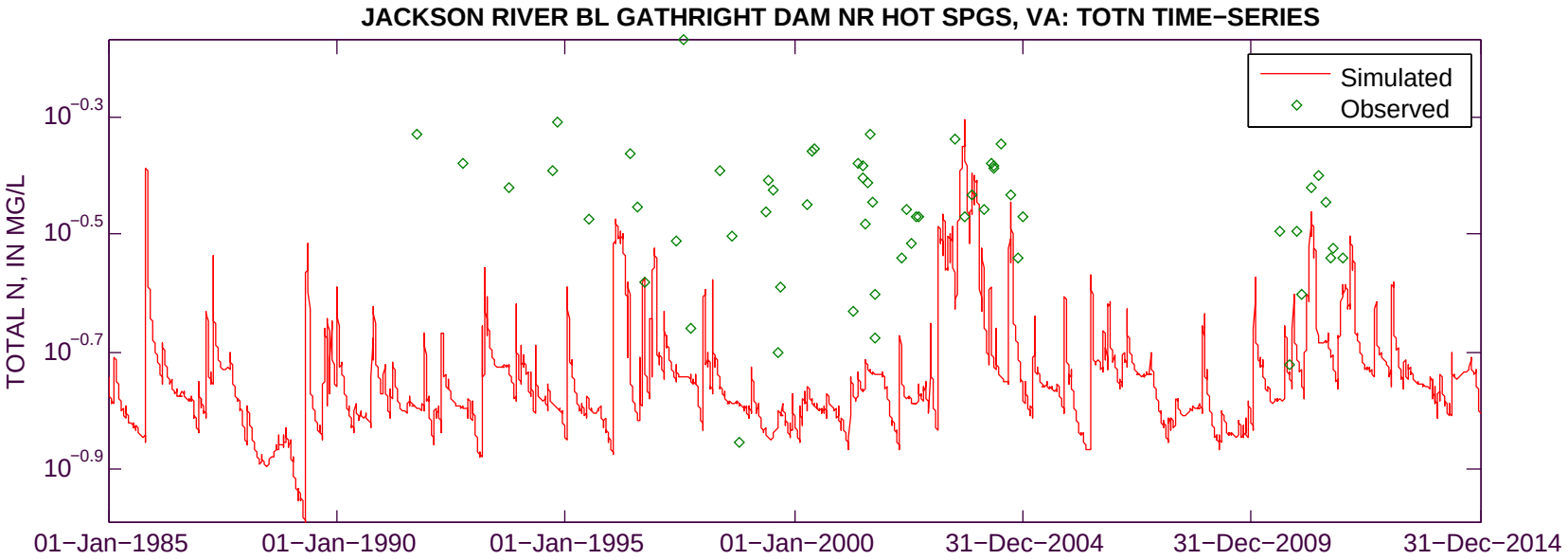
LOAD DATA
LOG10

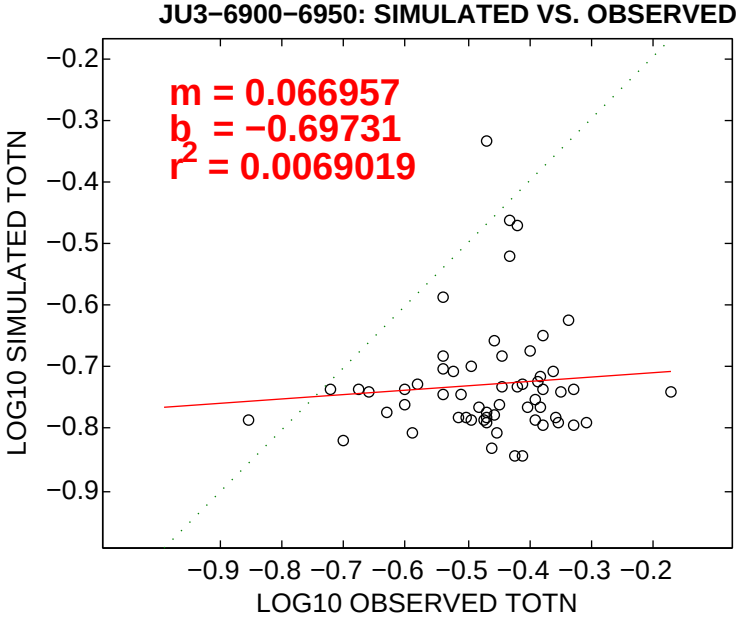


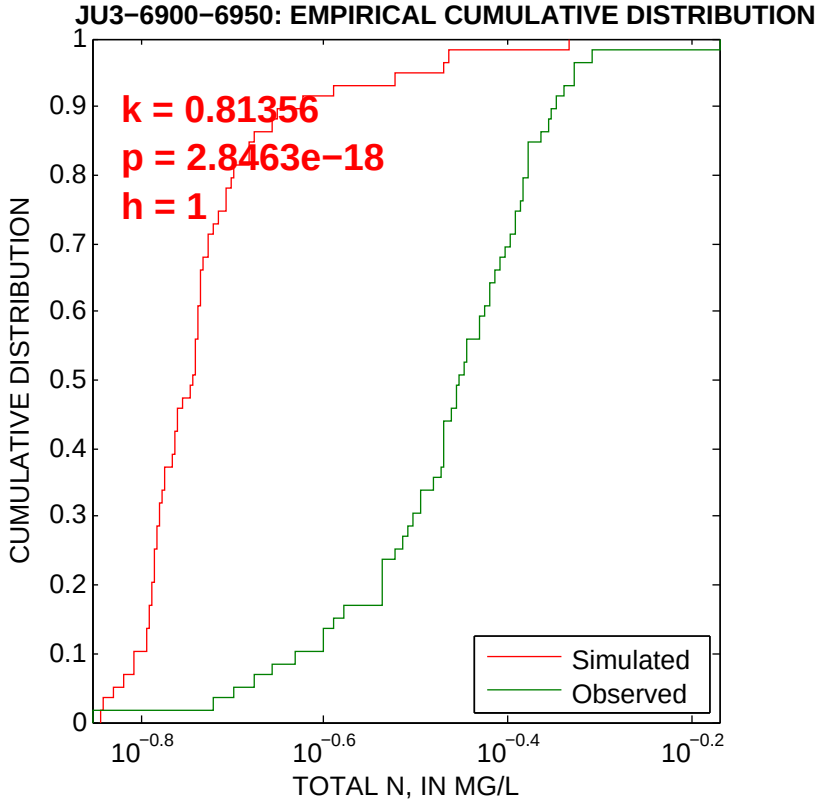












DATA SELECTION

scenario: P620171001WQ | file: TOTN.calib

plot: TOTN - total nitrogen

Dates: 1/1/1985 – 12/31/201

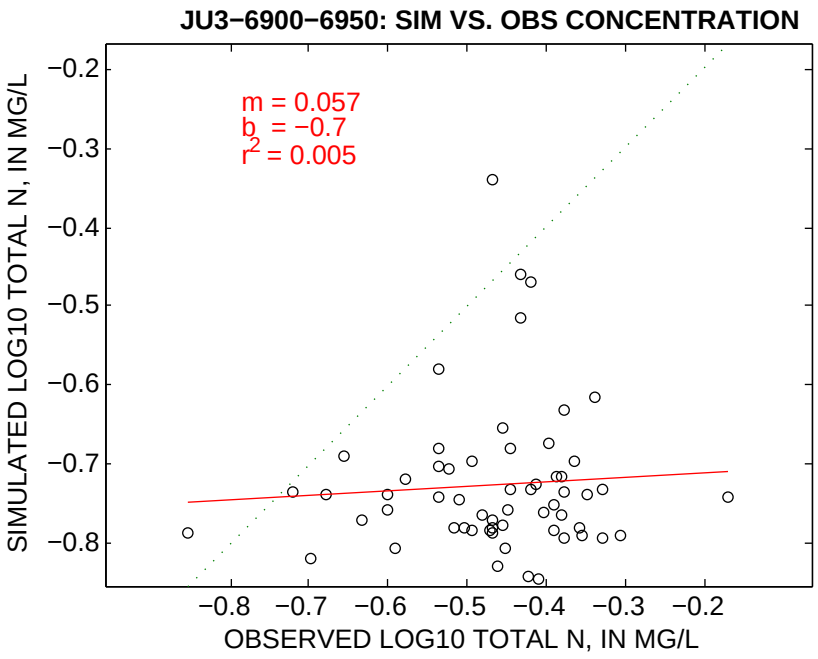
Drive | Directory | Observed: N/A | model | OBS20161101

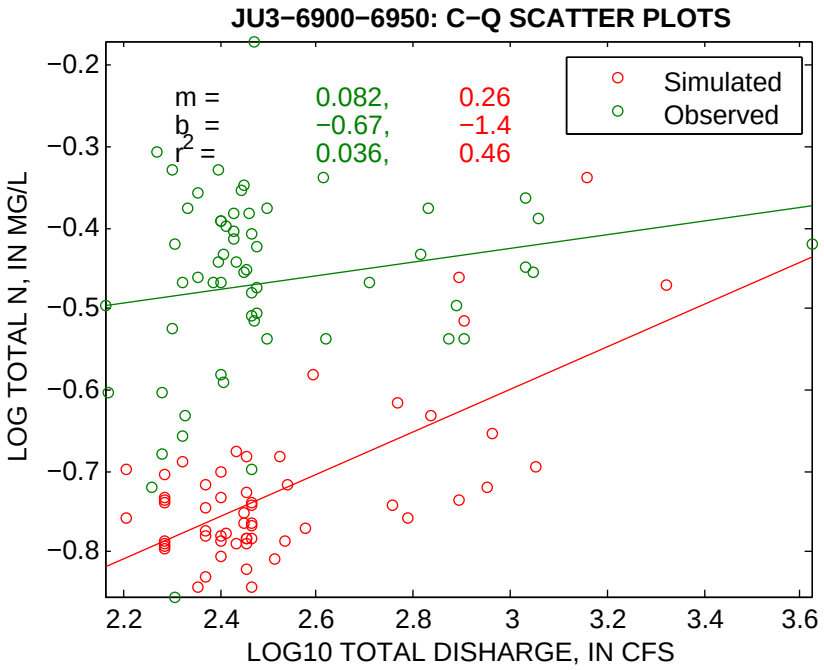
STATISTICS

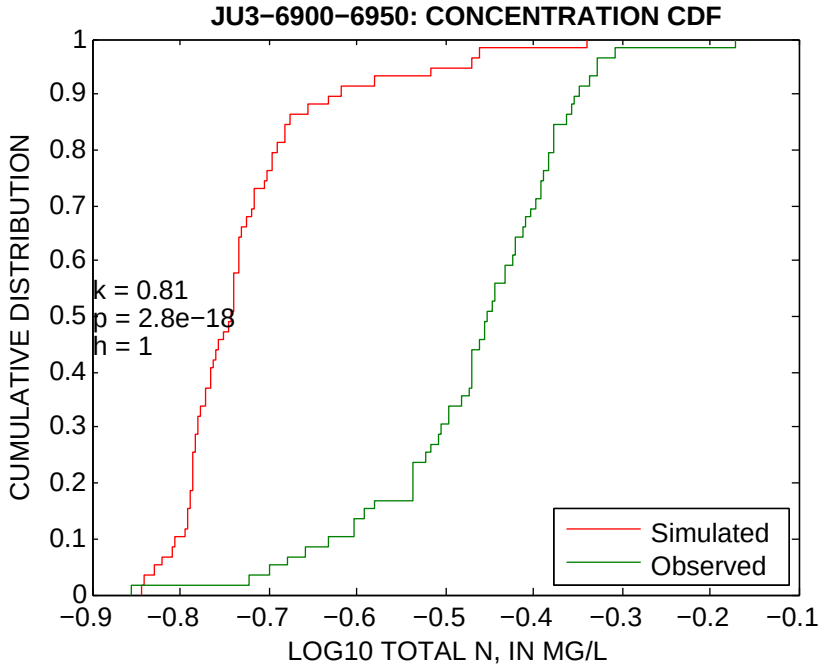
		observe	simulate
n		59	59
min		0.14	0.14296
		-0.853872	-0.844785
mean		0.353277	0.191885
		-0.46606	-0.728511
media		0.353333	0.18036
		-0.451816	-0.74386
max		0.676667	0.46374
		-0.169625	-0.333725
varian		0.00773582	0.00285776
		0.0133361	0.00866257
JB		0.012657	0.001
		0.011547	0.001
		ra	log
%		-45.6842	56.3128
err.va		0.0367051	0.0902812
rel.std.err		4.74483	6.76966
mod.eff		-3.74483	-5.76966

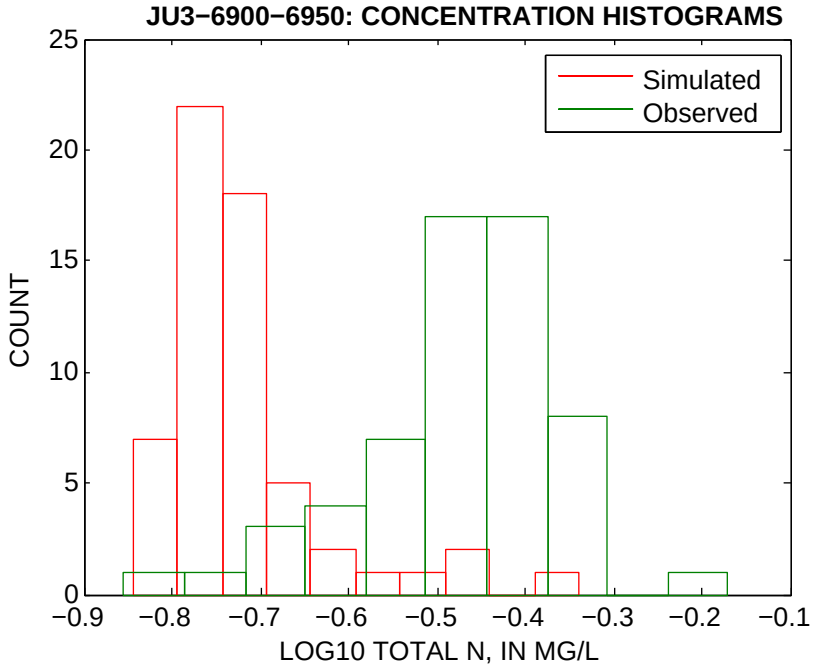
VERSION 2.1

ALL DATA
LOG10

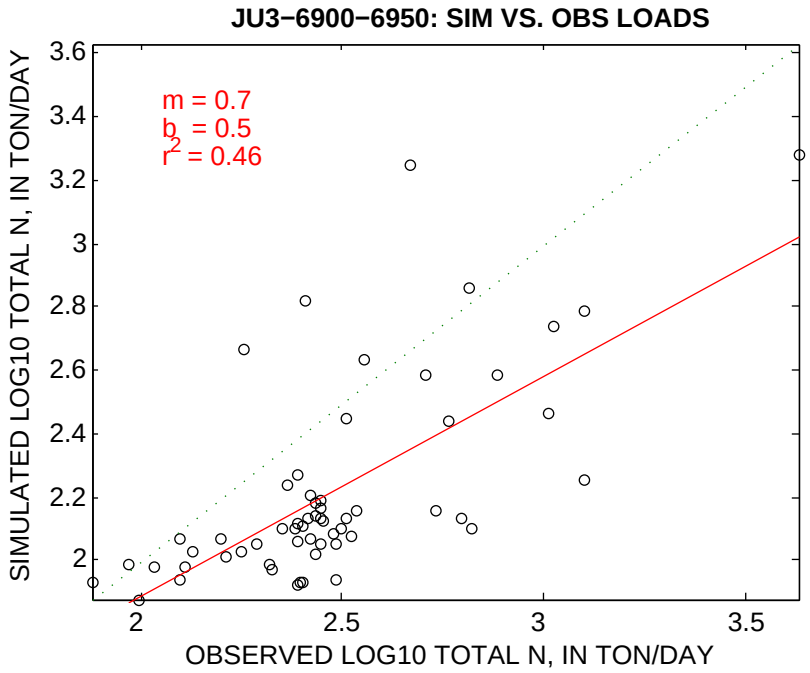


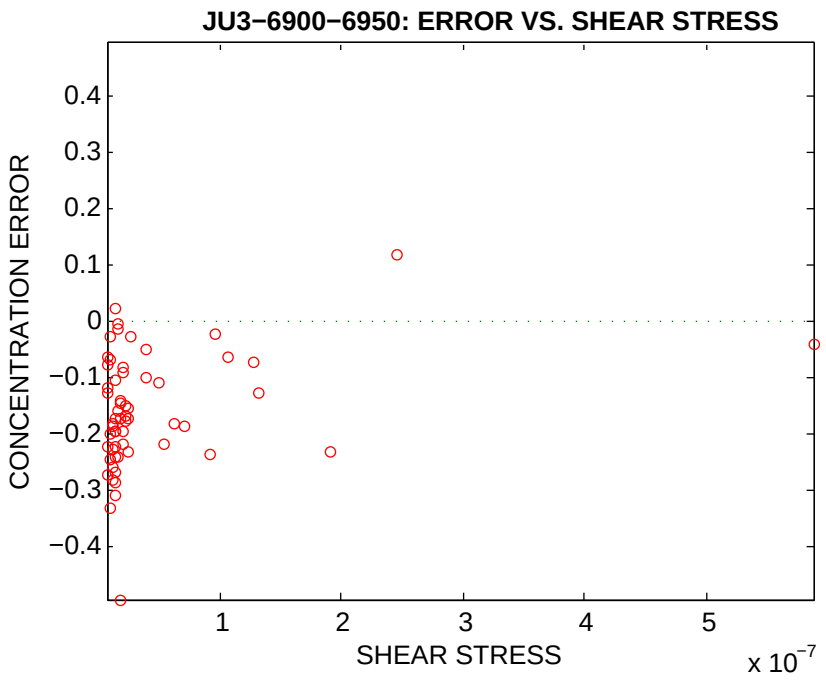


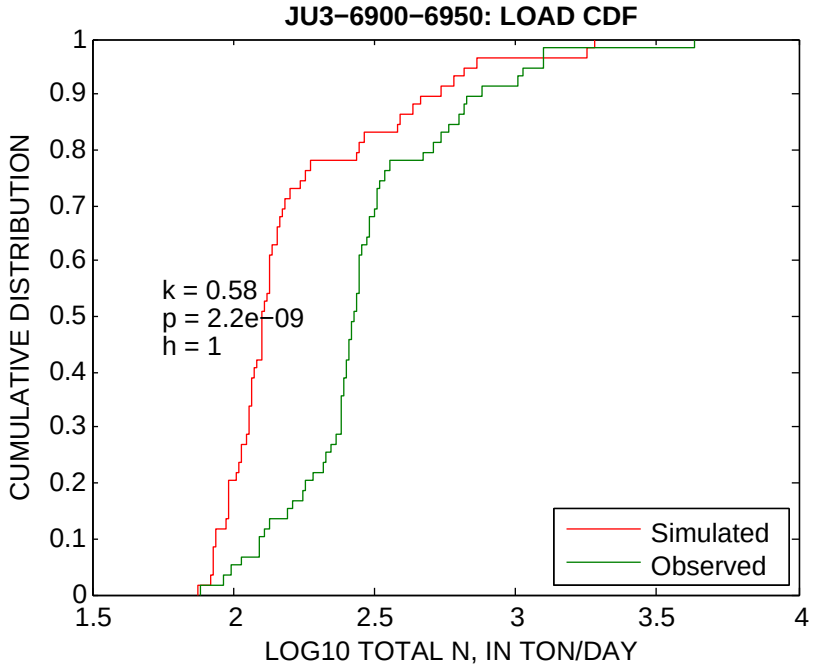


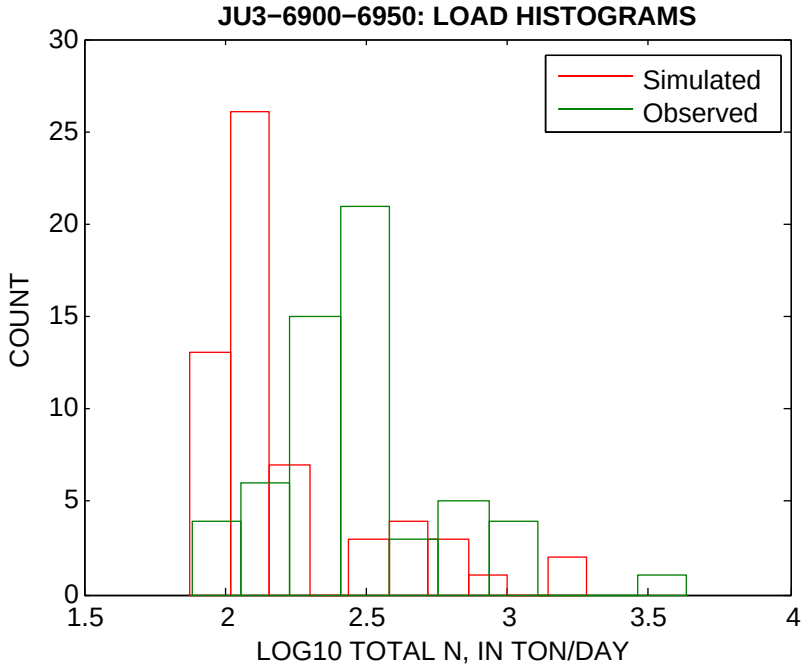


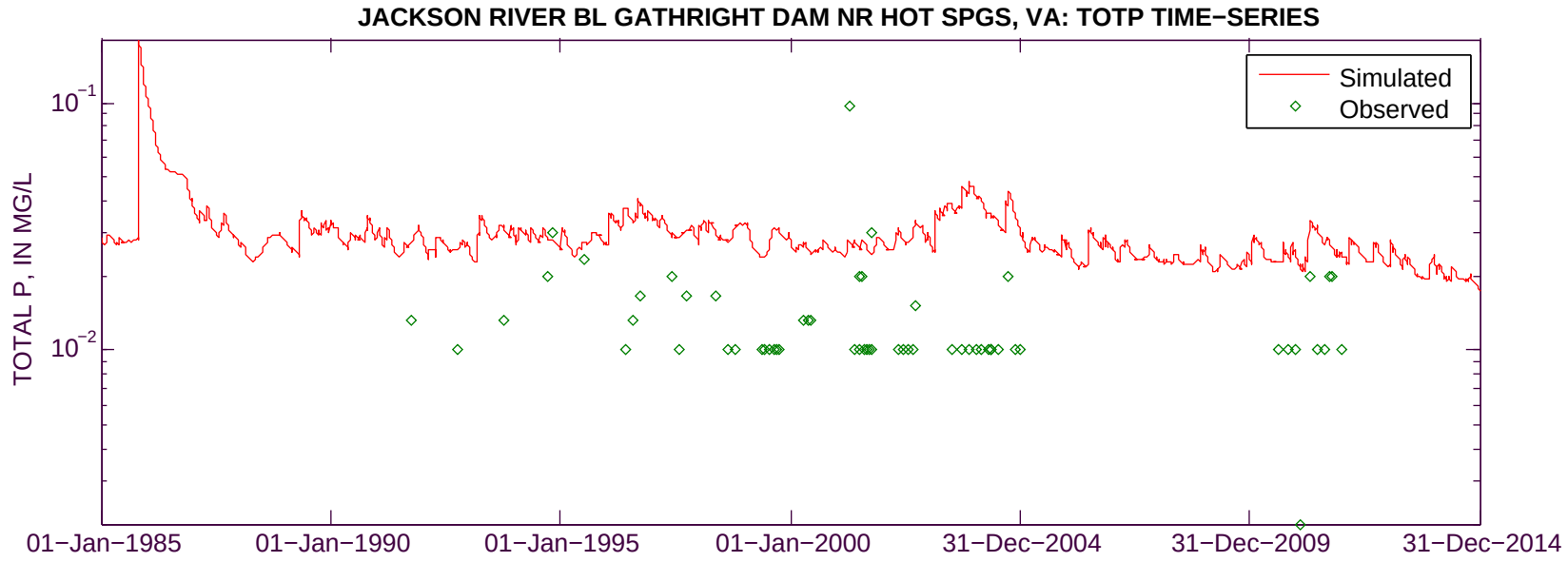
LOAD DATA
LOG10

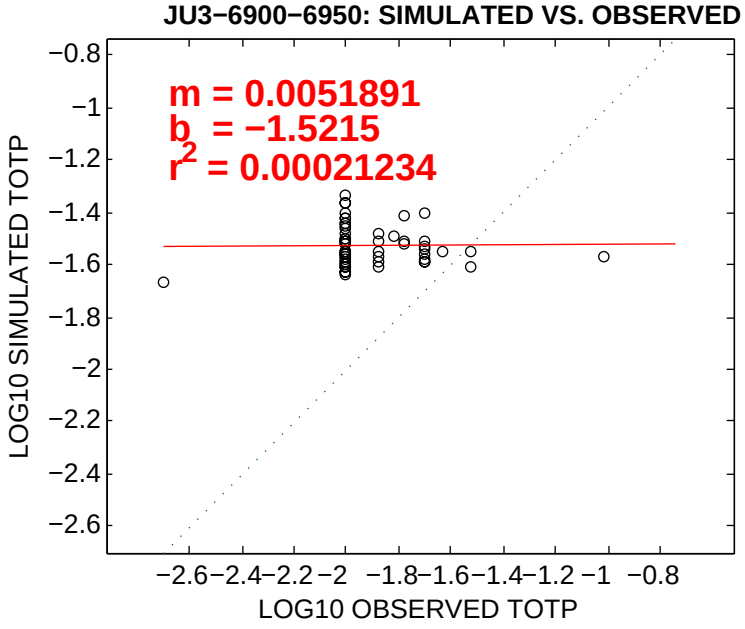


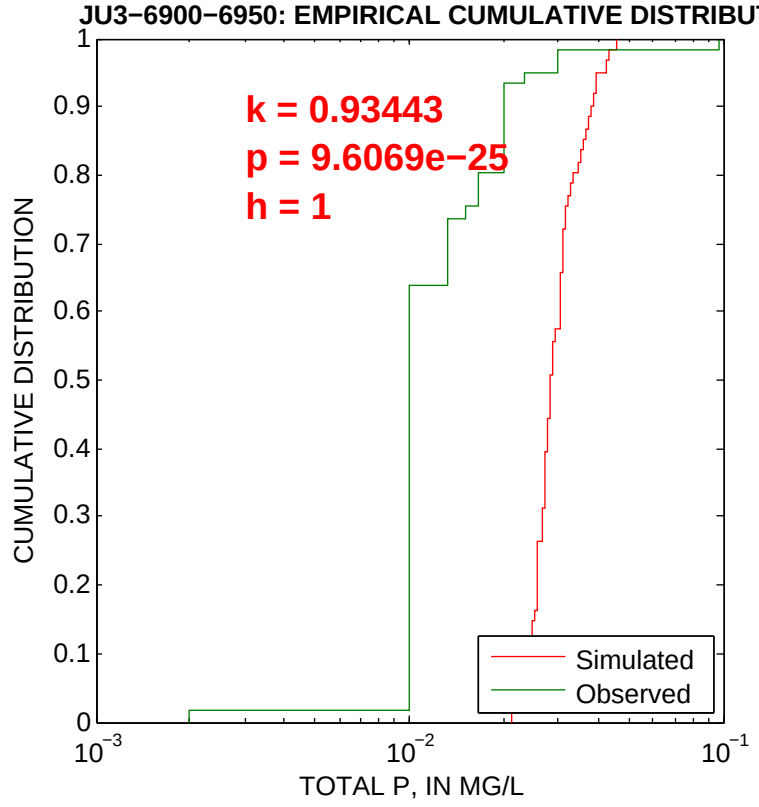












DATA SELECTION

scenario	file
P620171001WQ	TOTP.calib

plot: TOTP - total phosphorus

Dates	1/1/1985	12/31/201

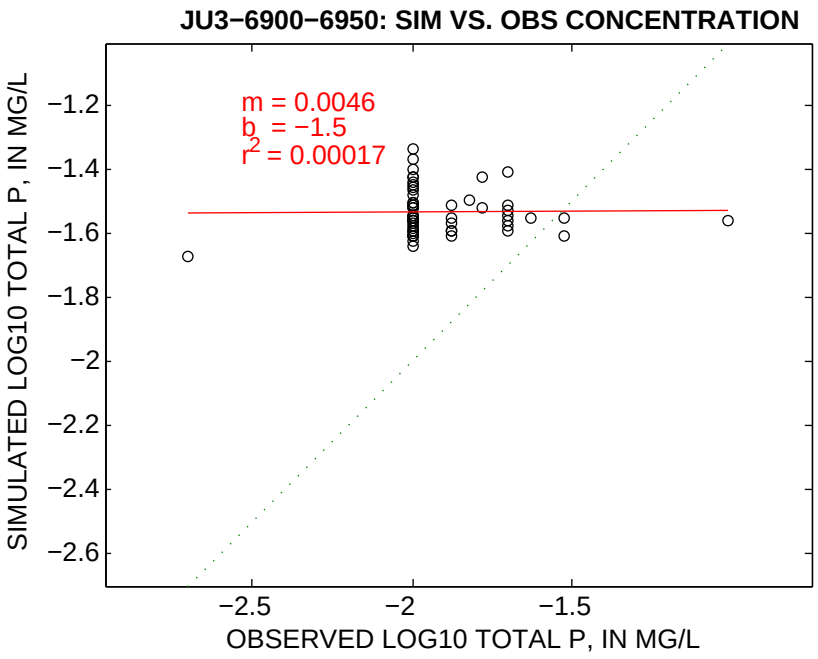
Drive	Directory	Observed
N/A	model	OBS20161101

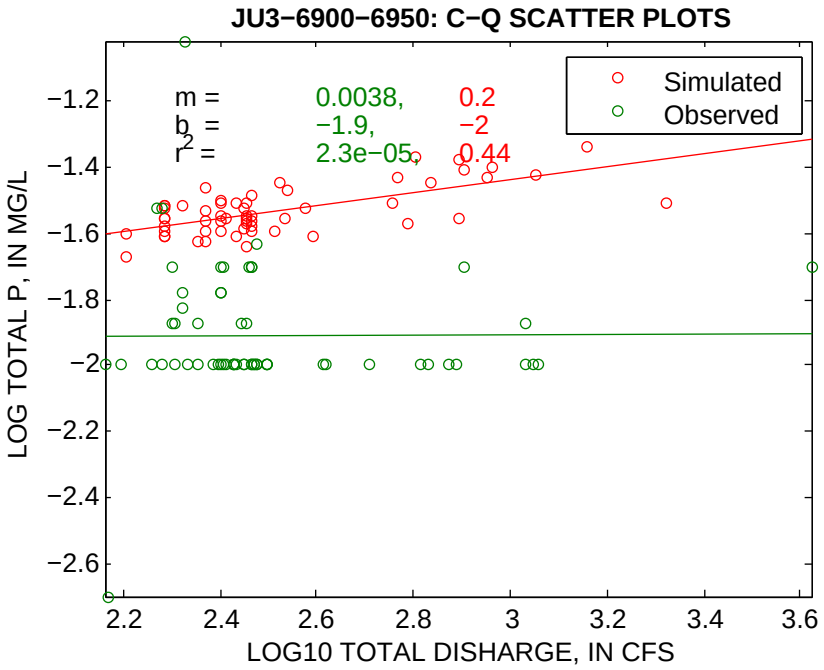
STATISTICS

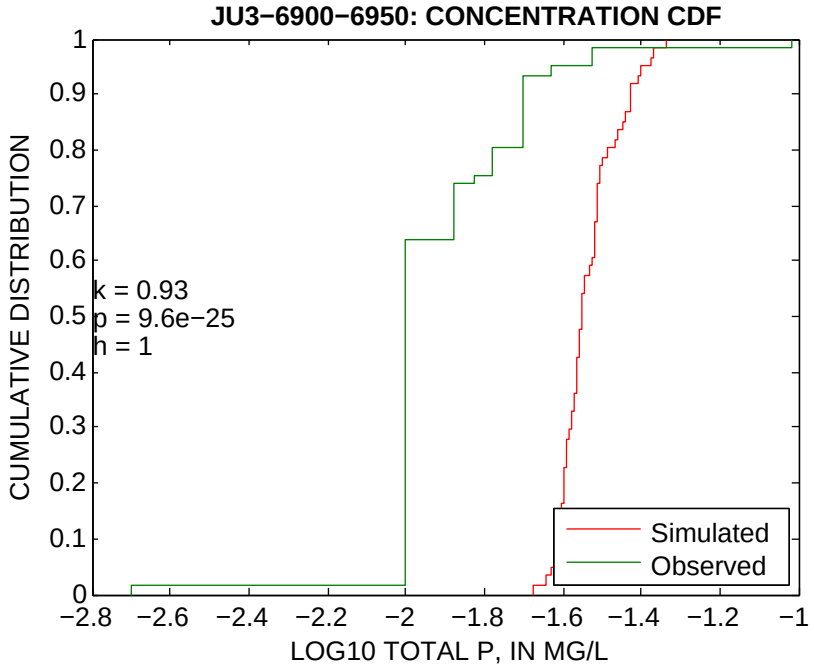
	n	61	61
		observe	simulate
min		0.002	0.021289
		-2.69897	-1.67184
mean		0.0142131	0.0298474
		-1.90807	-1.5314
media		0.01	0.028001
		-2	-1.55283
max		0.0966667	0.04606
		-1.01472	-1.33668
varian		0.00014158	2.87013e-0
		0.0421953	0.00535058
JB		0.001	0.008336
		0.001	0.046463
		ra	log
%		109.999	-19.7409
err.va		0.00043016	0.191352
rel.std.err		3.0382	4.53491
mod.eff		-2.0382	-3.53491

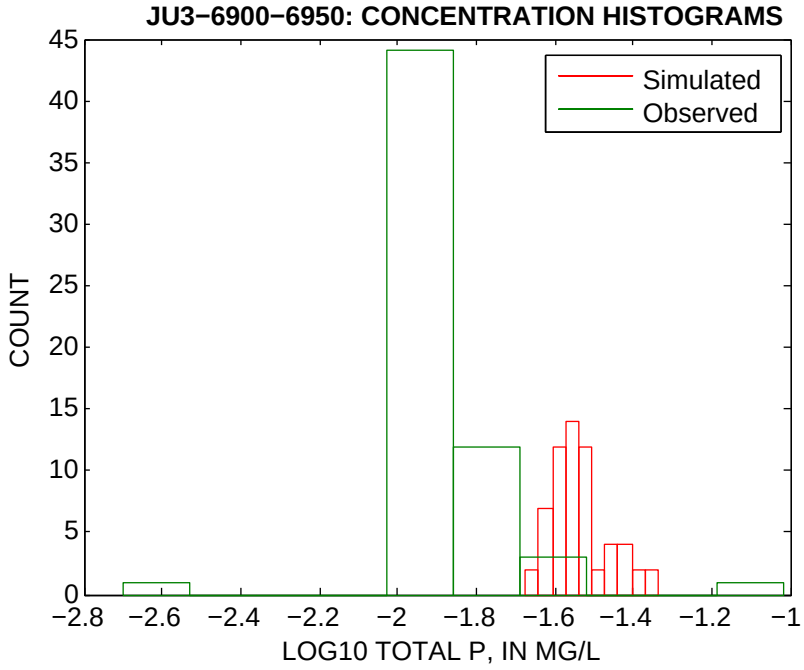
VERSION 2.1

ALL DATA
LOG10

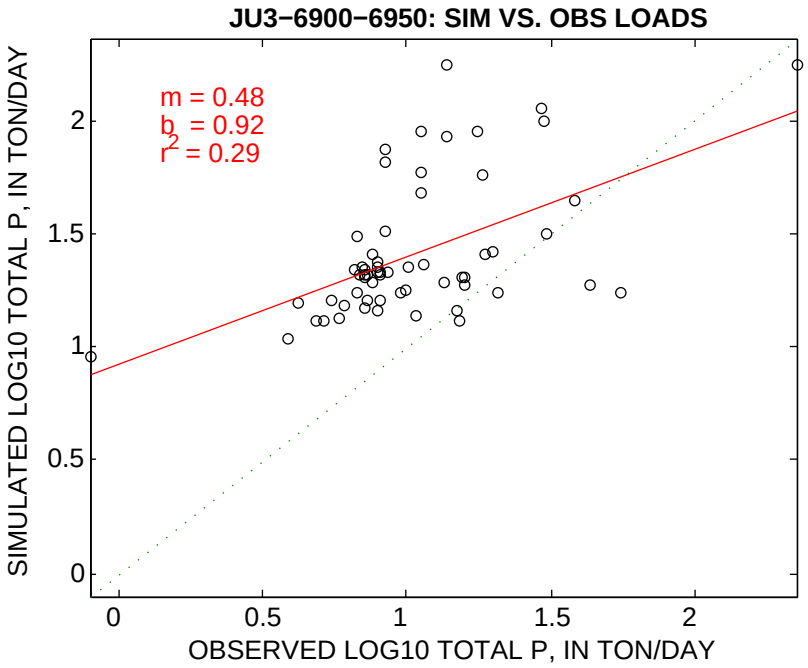


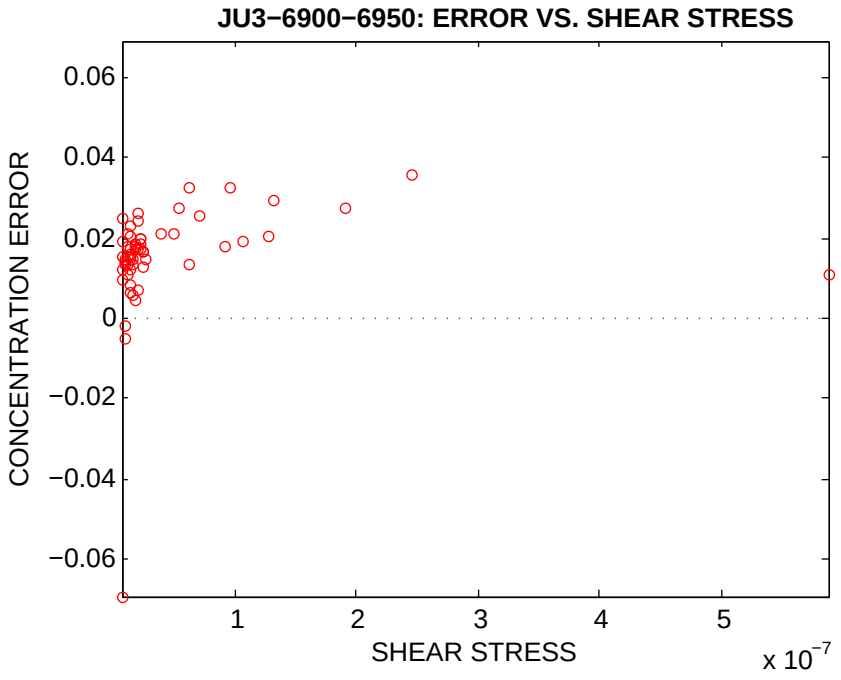


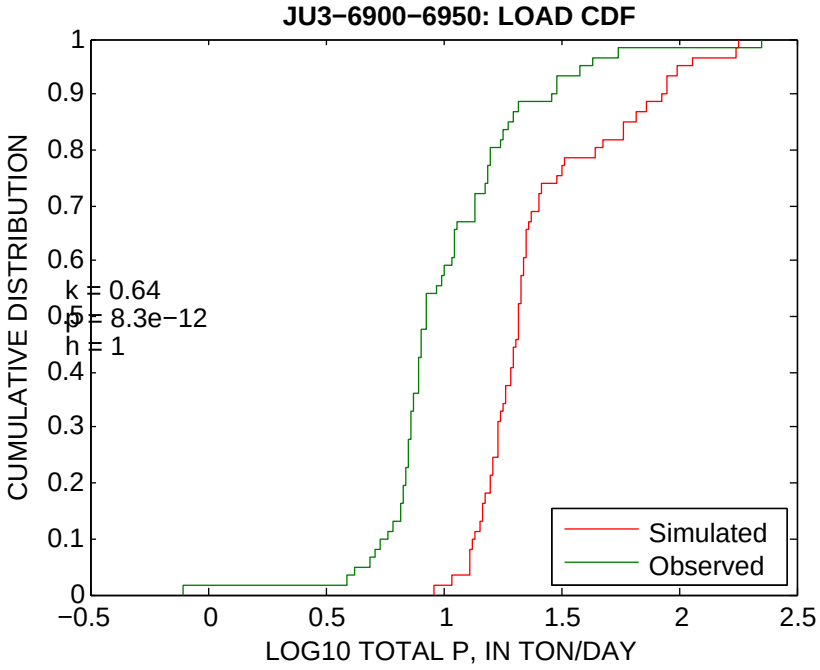


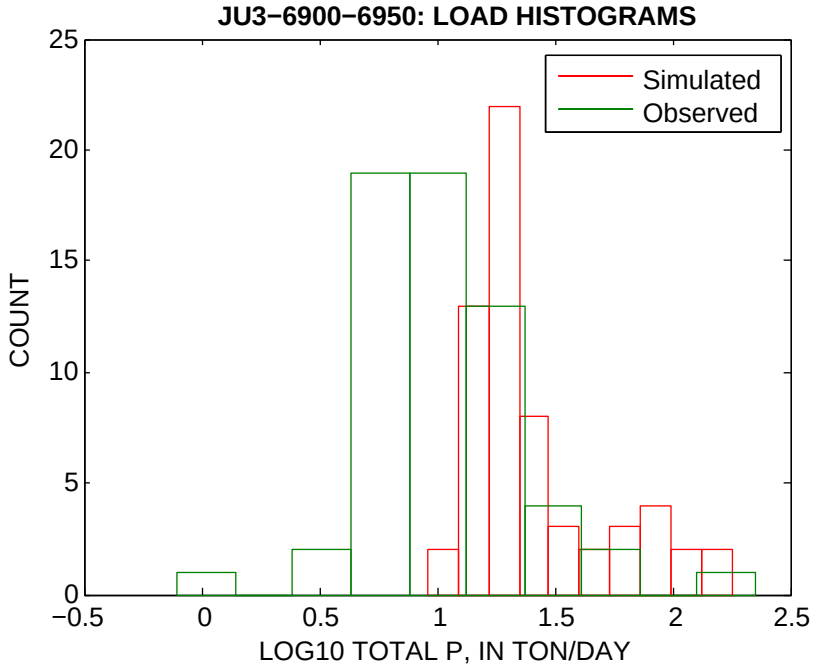


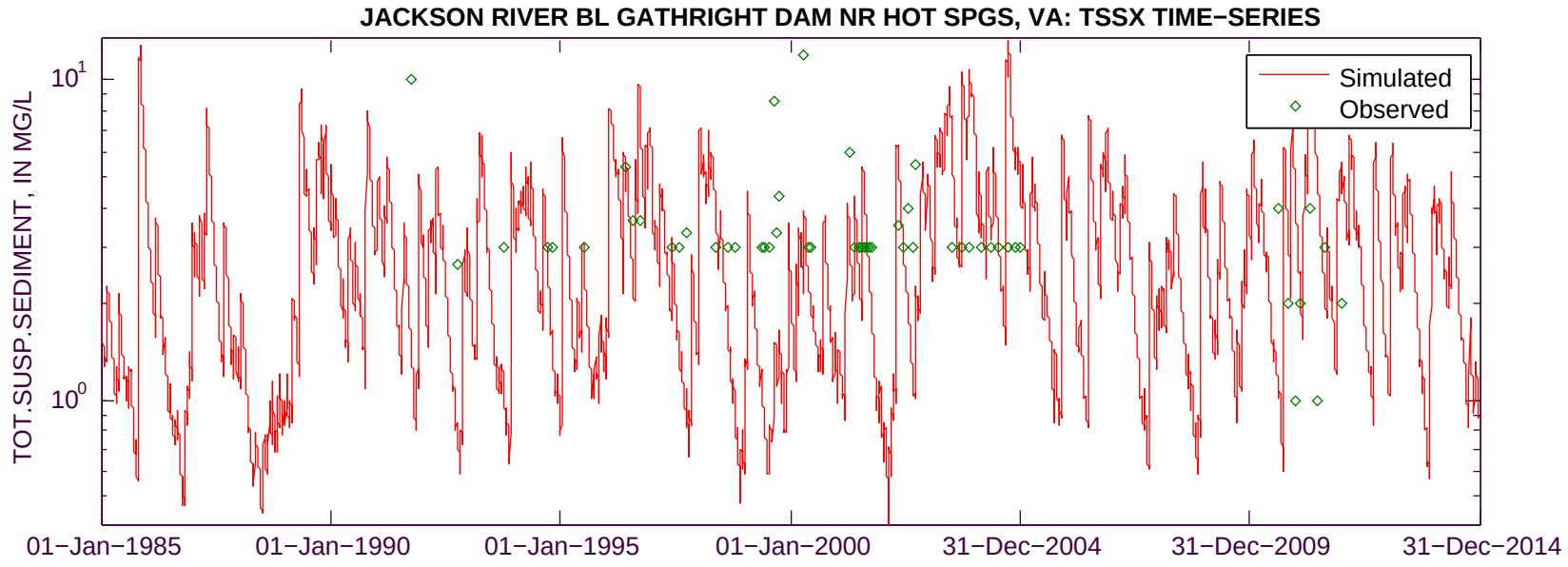
LOAD DATA
LOG10

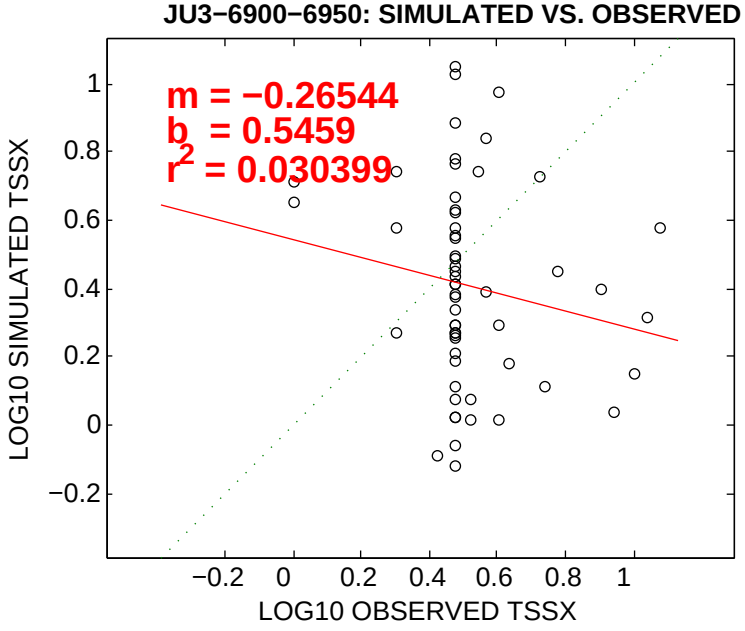


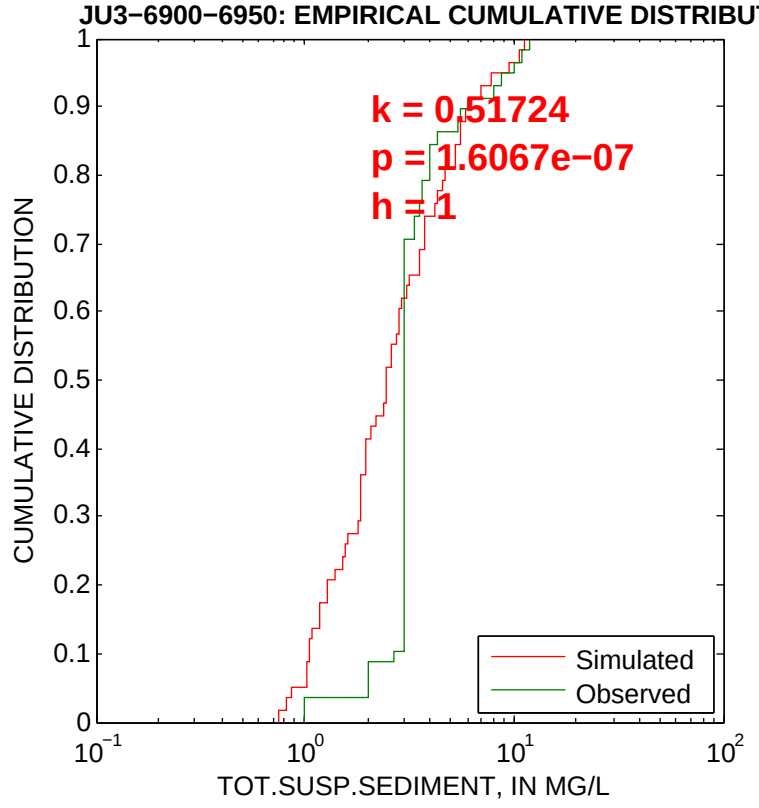












DATA SELECTION

scenario: P620171001WQ | file: TSSX.calib

plot: TSSX - total suspended ...

Dates: 1/1/1985 – 12/31/201

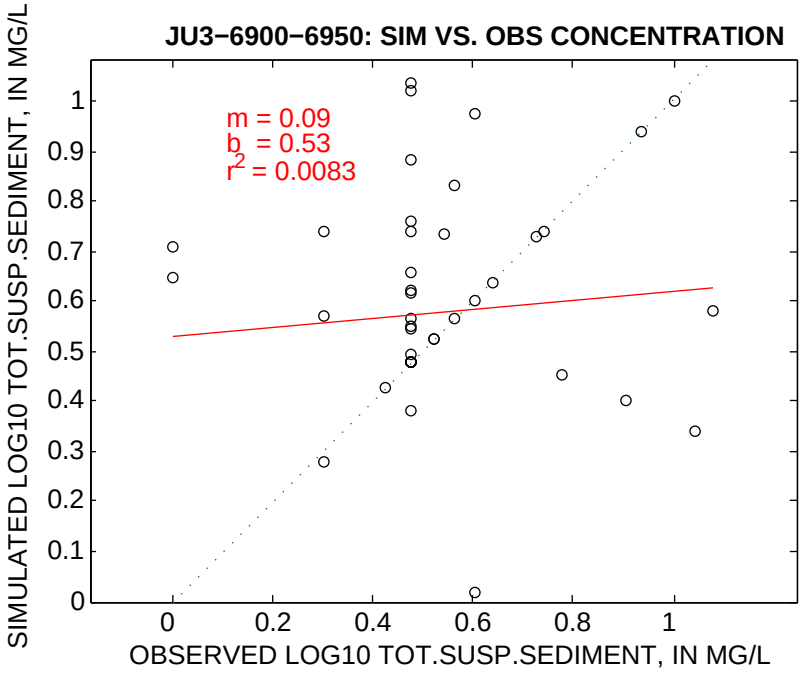
Drive: N/A | Directory: model | Observed: OBS20161101

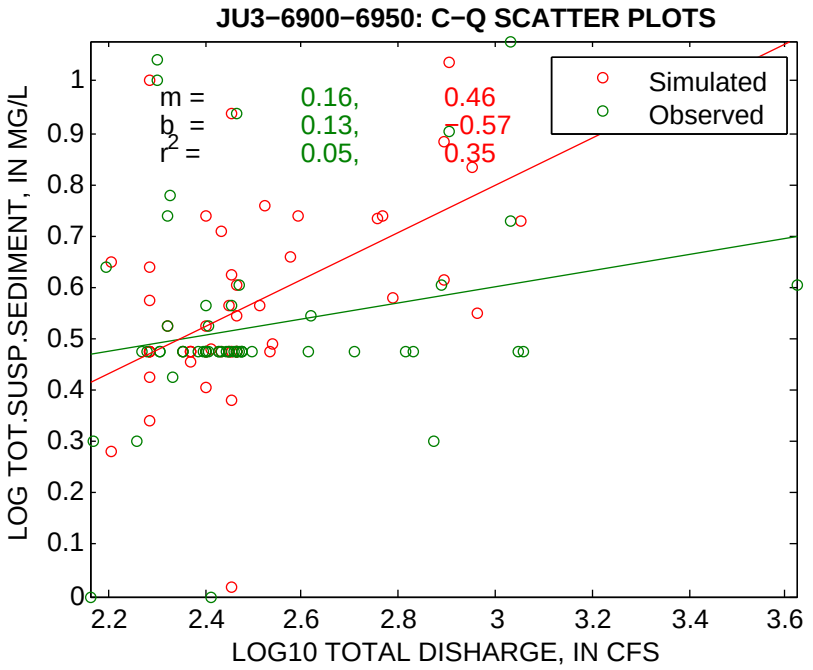
STATISTICS

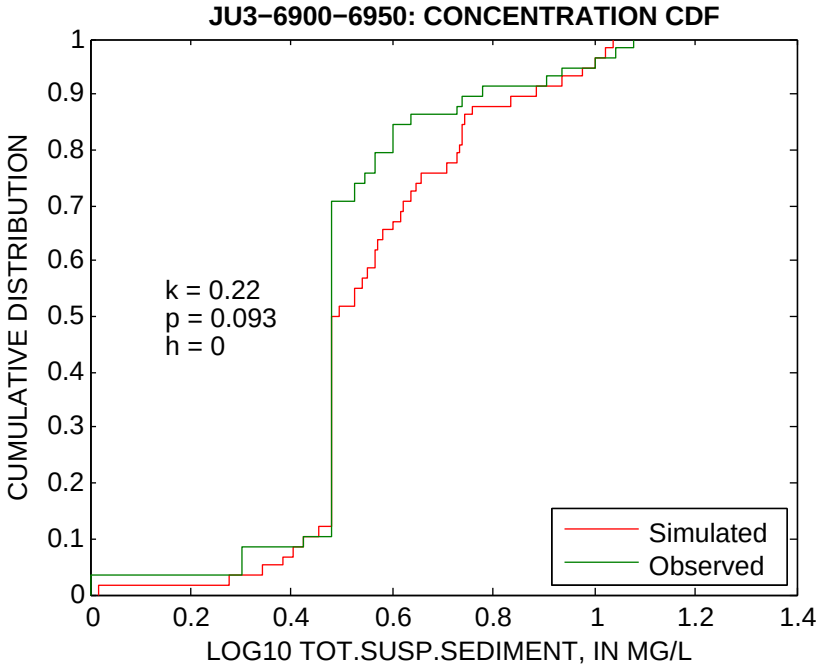
		observe	simulate
n		58	58
min		1	0.75652
		0	-0.12118
mean		3.72414	3.20266
		0.524081	0.406789
media		3	2.46065
		0.477121	0.391037
max		12	11.135
		1.07918	1.04669
varian		4.53758	5.60545
		0.0366592	0.0849668
JB		0.001	0.001
		0.002722	0.340171
		ra	log
%		-14.0025	-22.3806
err.va		11.7615	0.155087
rel.std.err		2.59201	4.23049
mod.eff		-1.59201	-3.23049

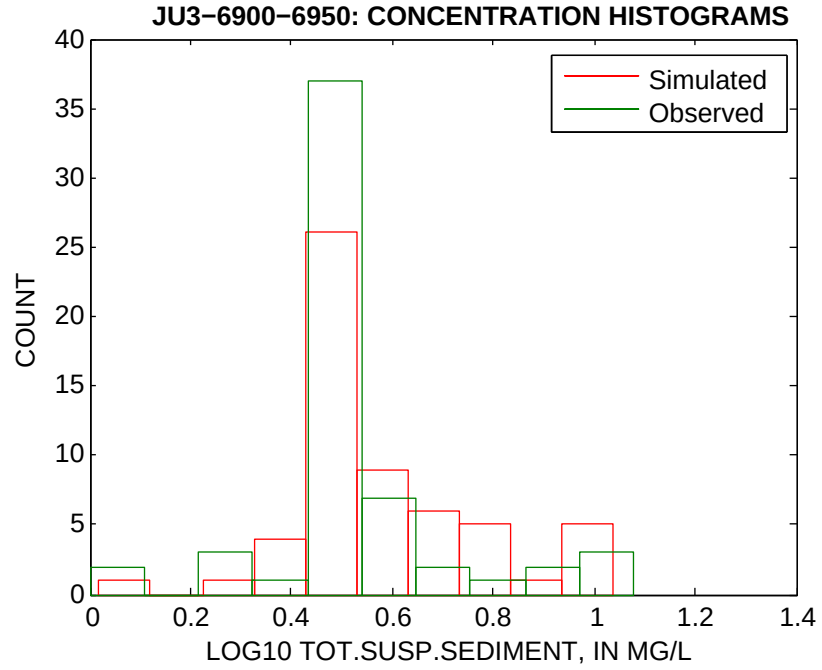
VERSION 2.1

ALL DATA
LOG10

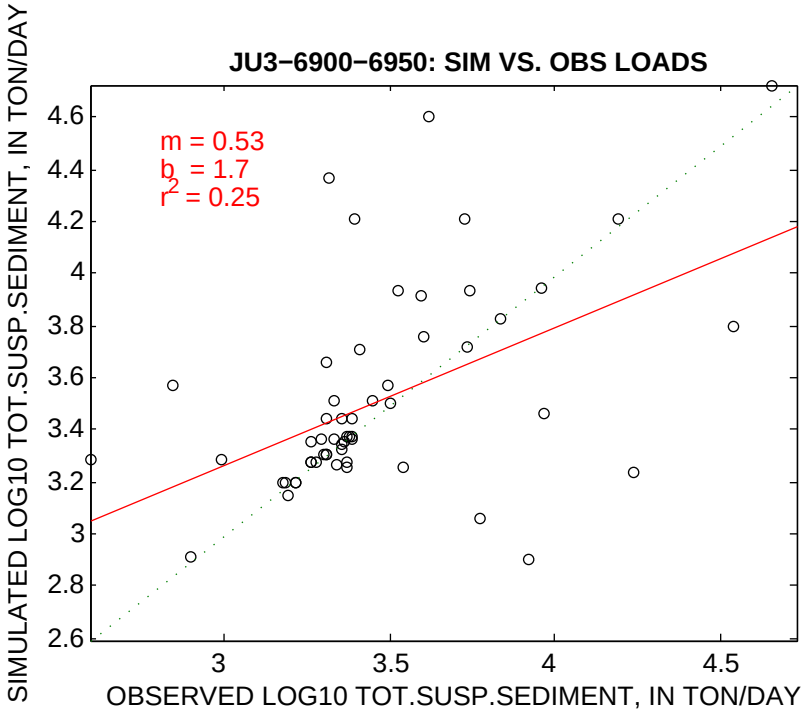


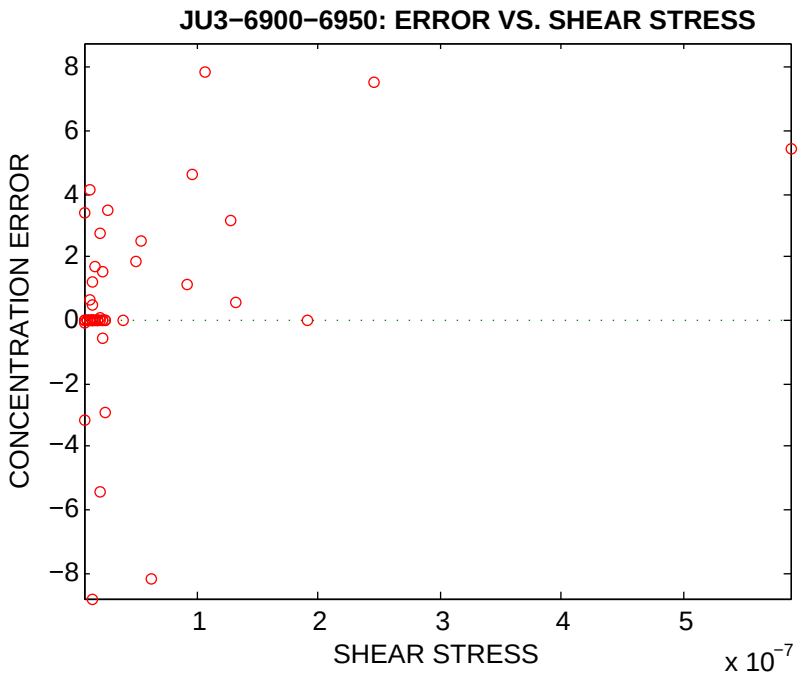


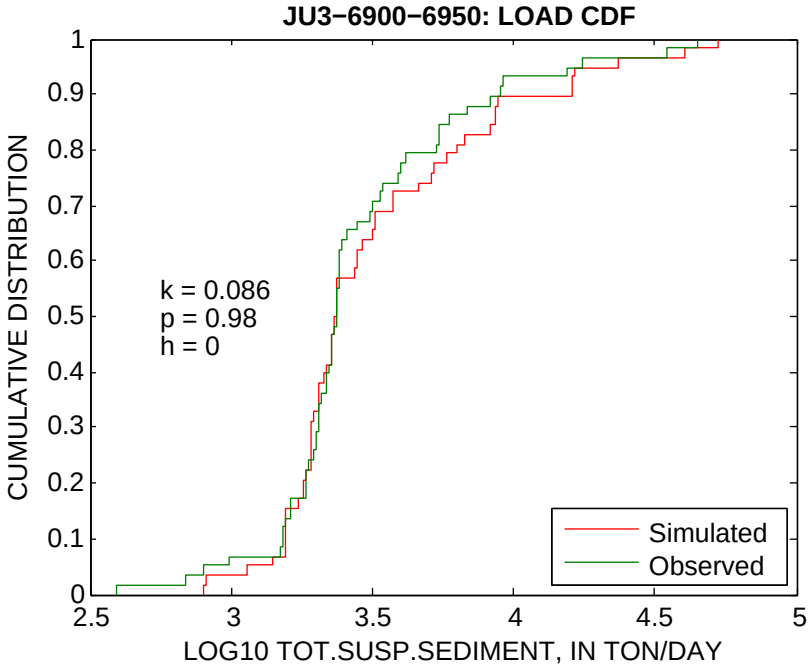


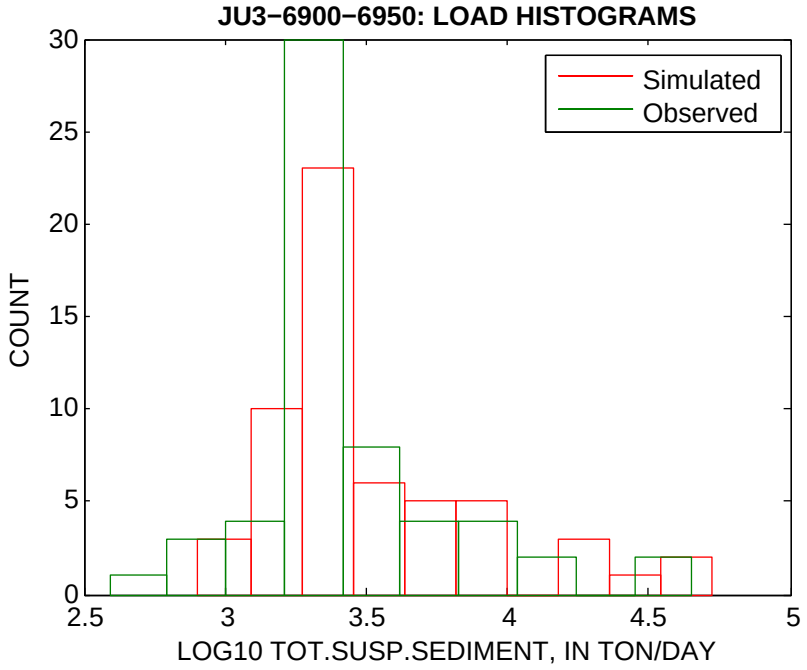


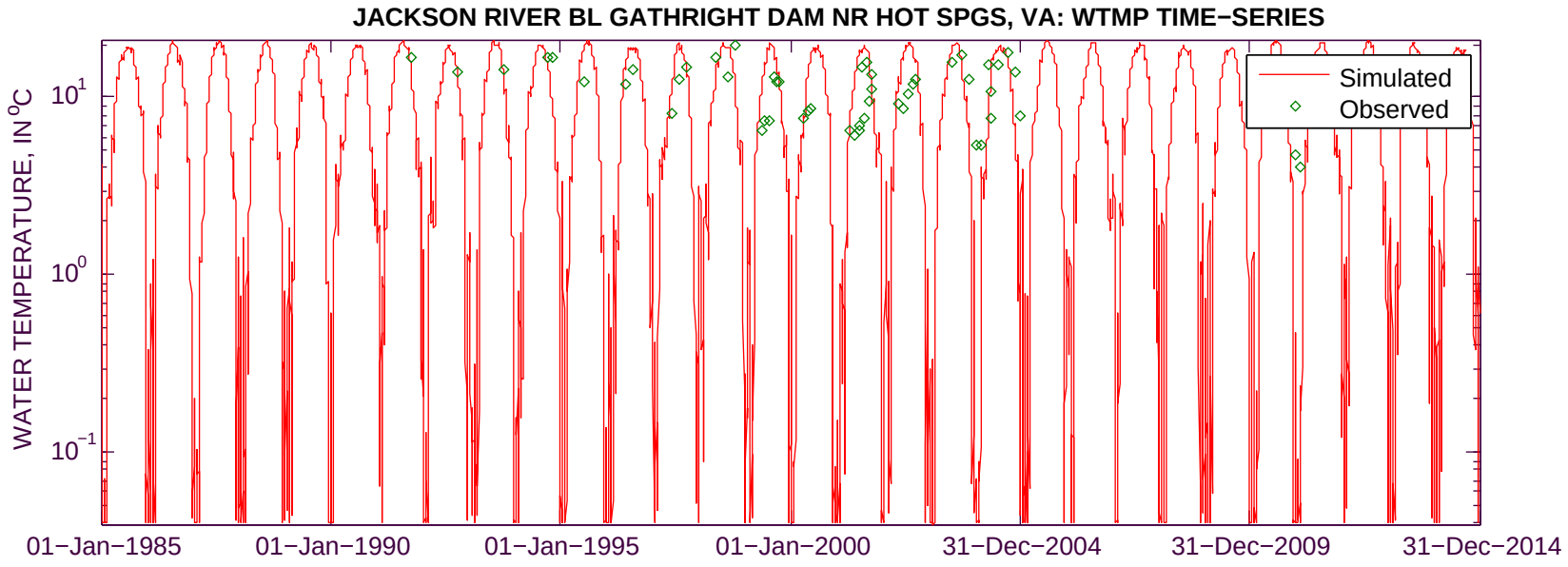
LOAD DATA
LOG10

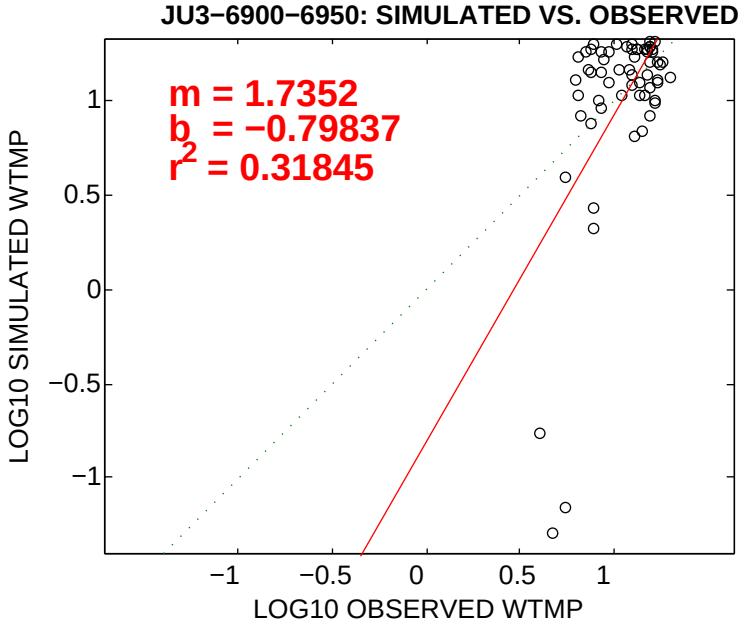


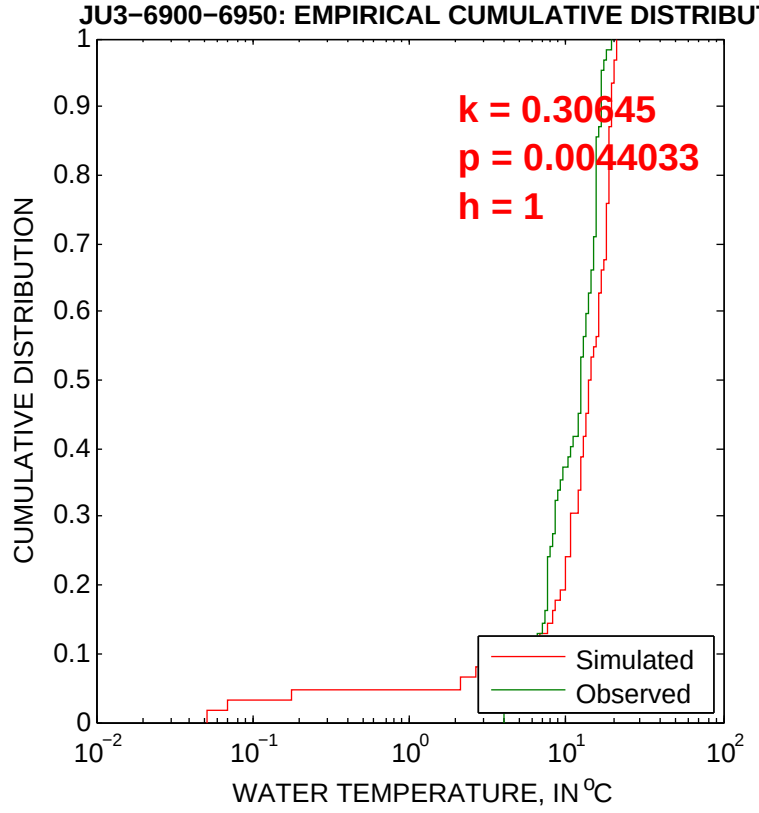












DATA SELECTION

scenario	file
P620171001WQ	WTMP.calib

plot: WTMP - water tempera...

Dates: 1/1/1985 – 12/31/201

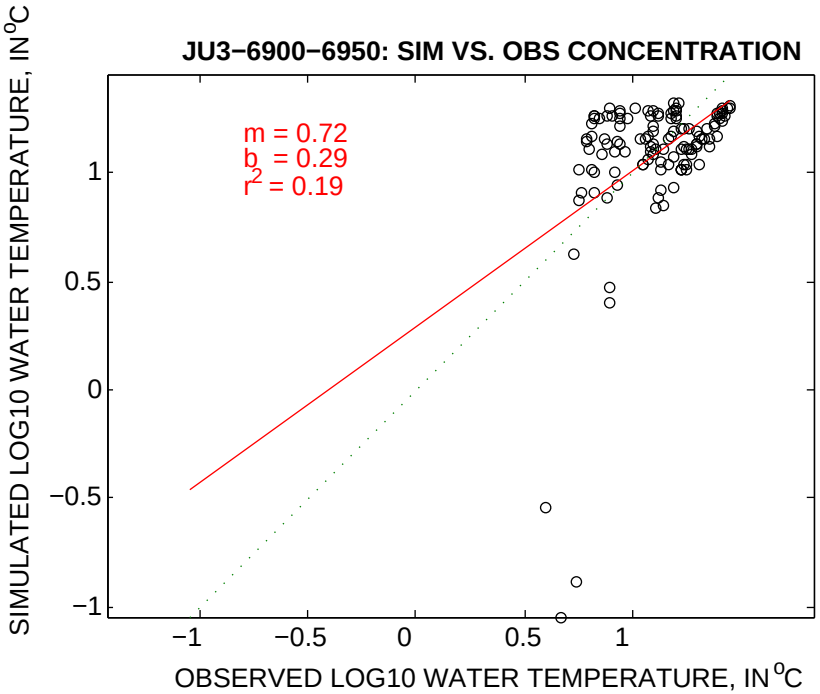
Drive	Directory	Observed
N/A	model	OBS20161101

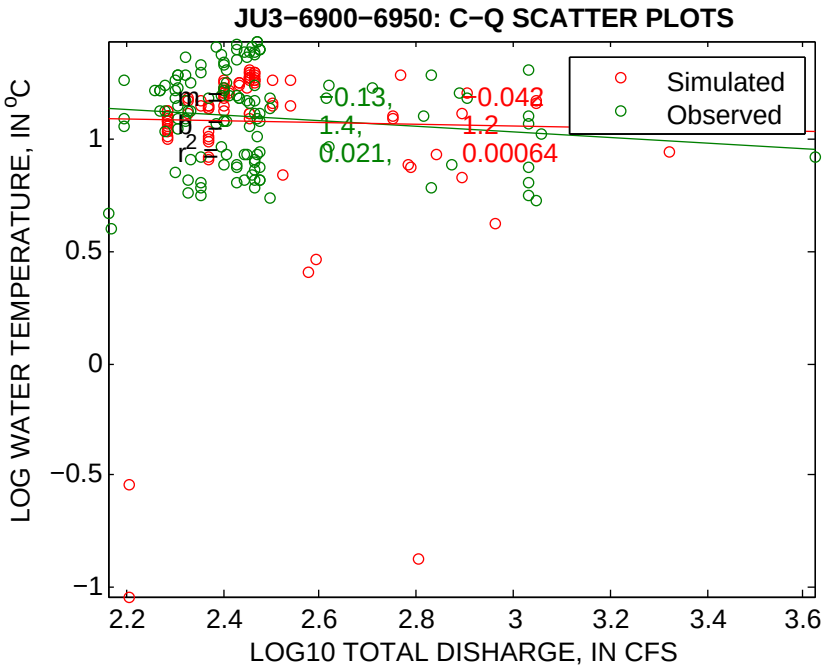
STATISTICS

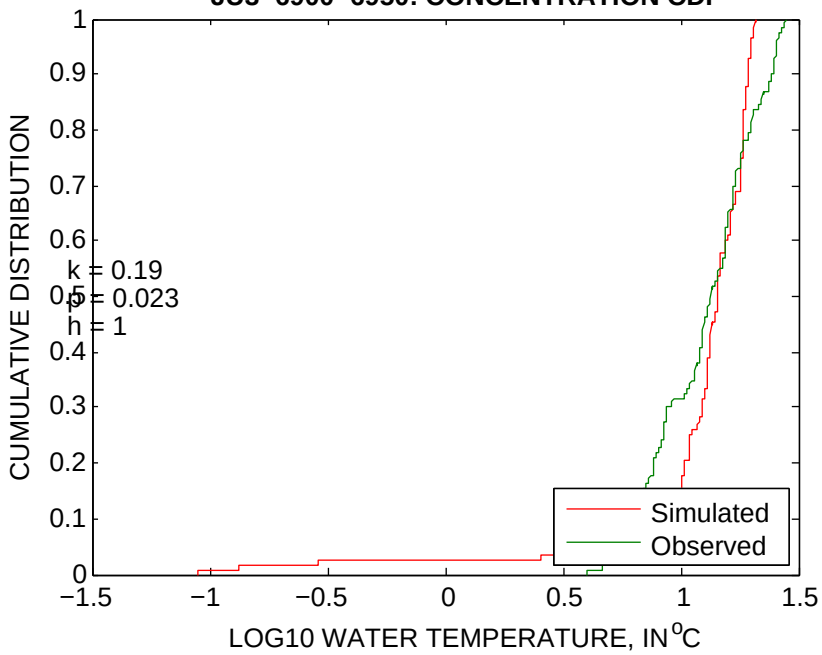
	n	62	62
		observe	simulate
min		4	0.051382
		0.60206	-1.28919
mean		11.826	13.5823
		1.04383	1.01283
media		12.45	14.276
		1.09517	1.15458
max		19.6	20.997
		1.29226	1.32216
varian		16.1394	30.671
		0.0280788	0.26547
JB		0.073307	0.027369
		0.048029	0.001
		ra	log
%		14.8511	-2.96933
err.va		31.7539	0.197083
rel.std.err		1.96747	7.01892
mod.eff		-0.967474	-6.01892

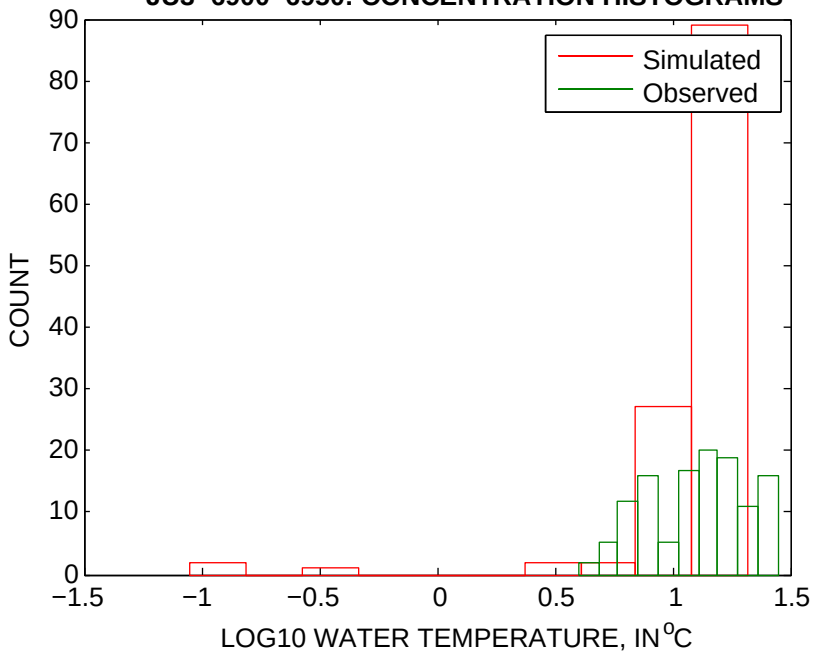
VERSION 2.1

ALL DATA
LOG10

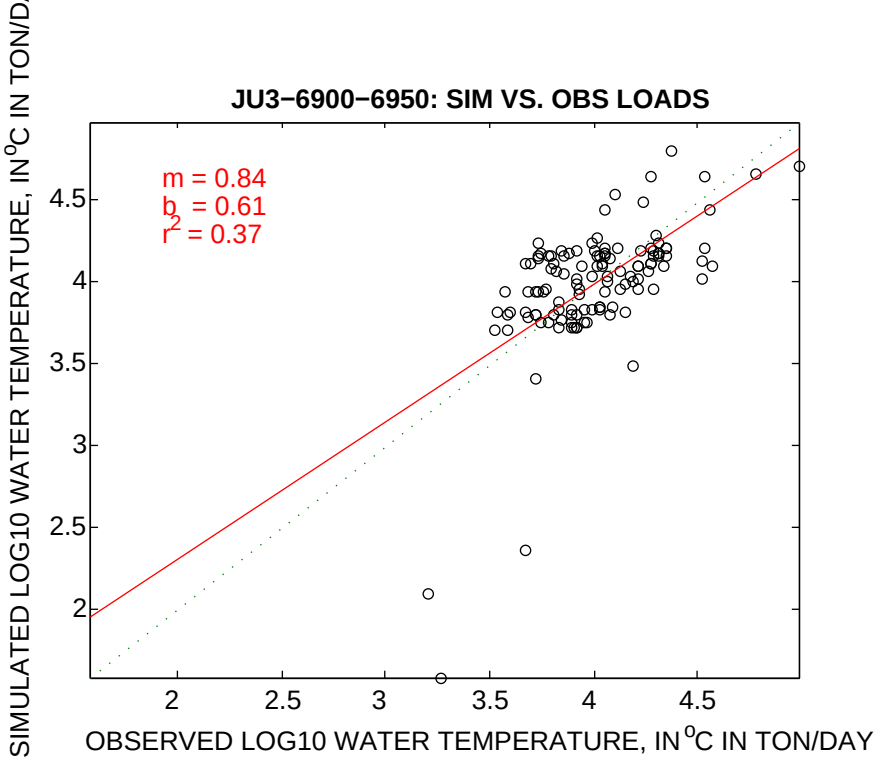


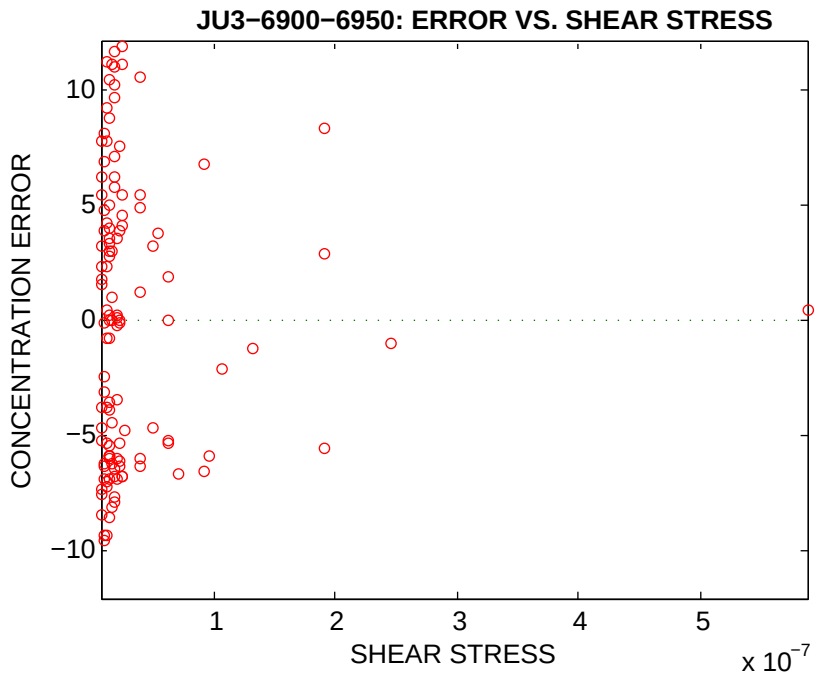


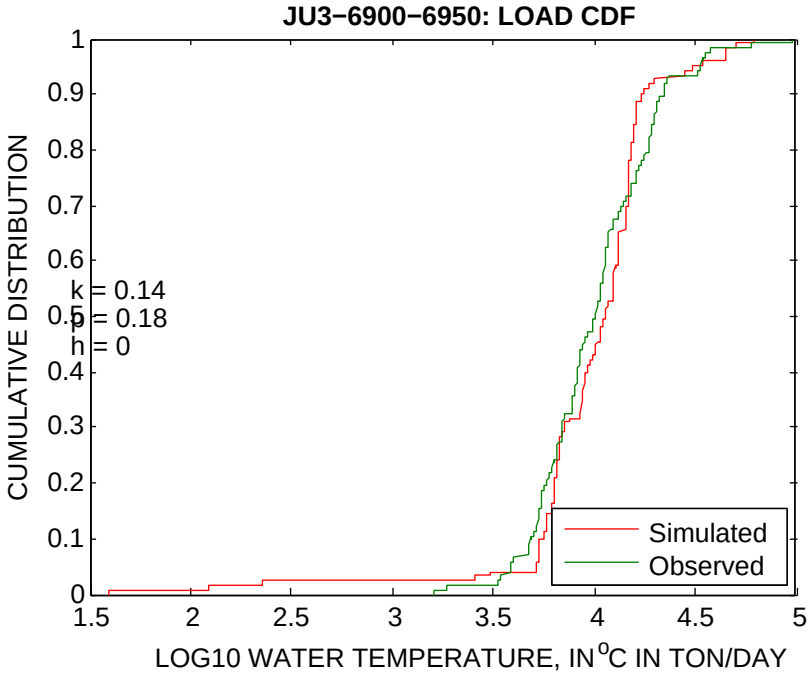


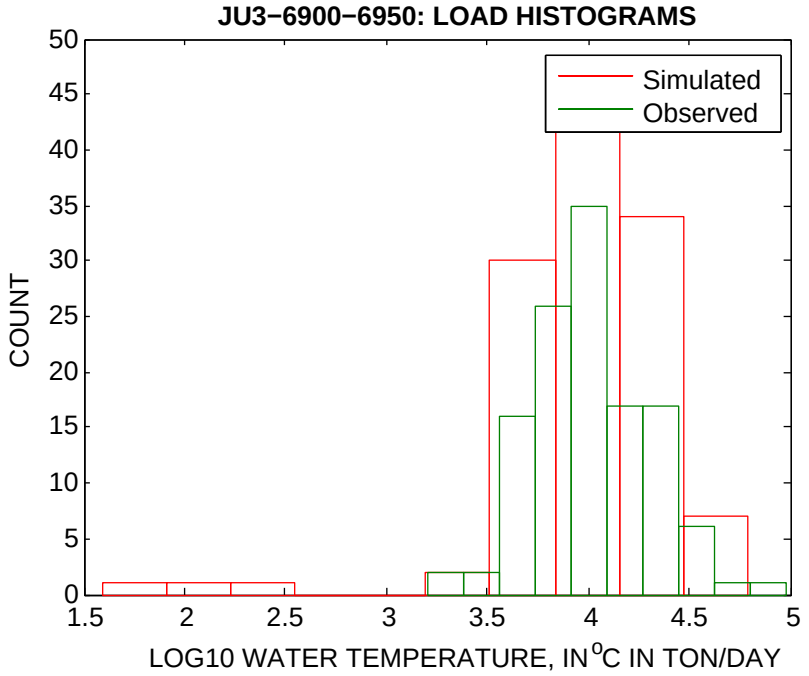


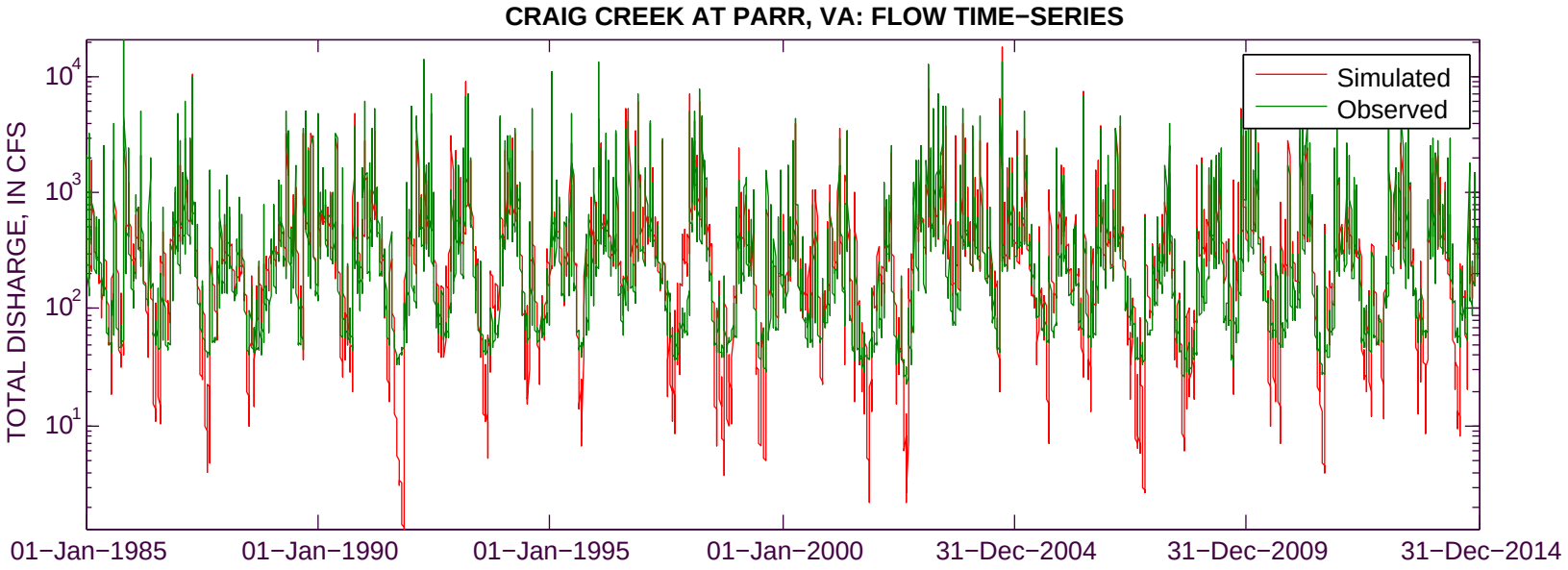
LOAD DATA
LOG10

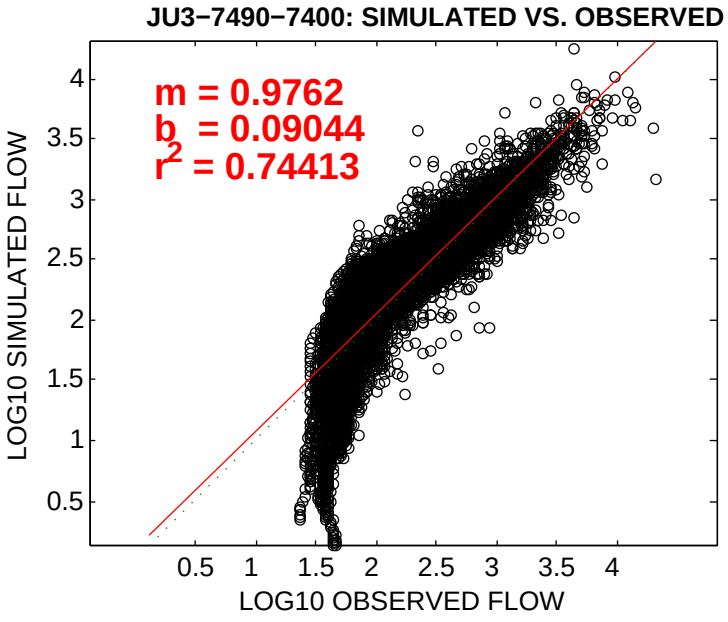


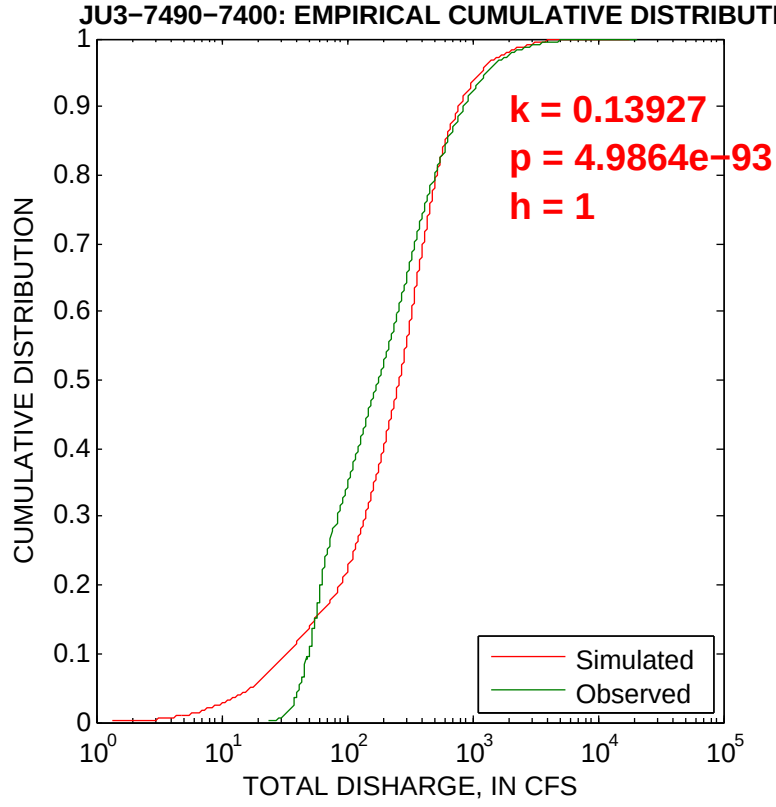












DATA SELECTION

scenario	file
P620171001WQ	FLOW.calib

plot: FLOW - total discharge

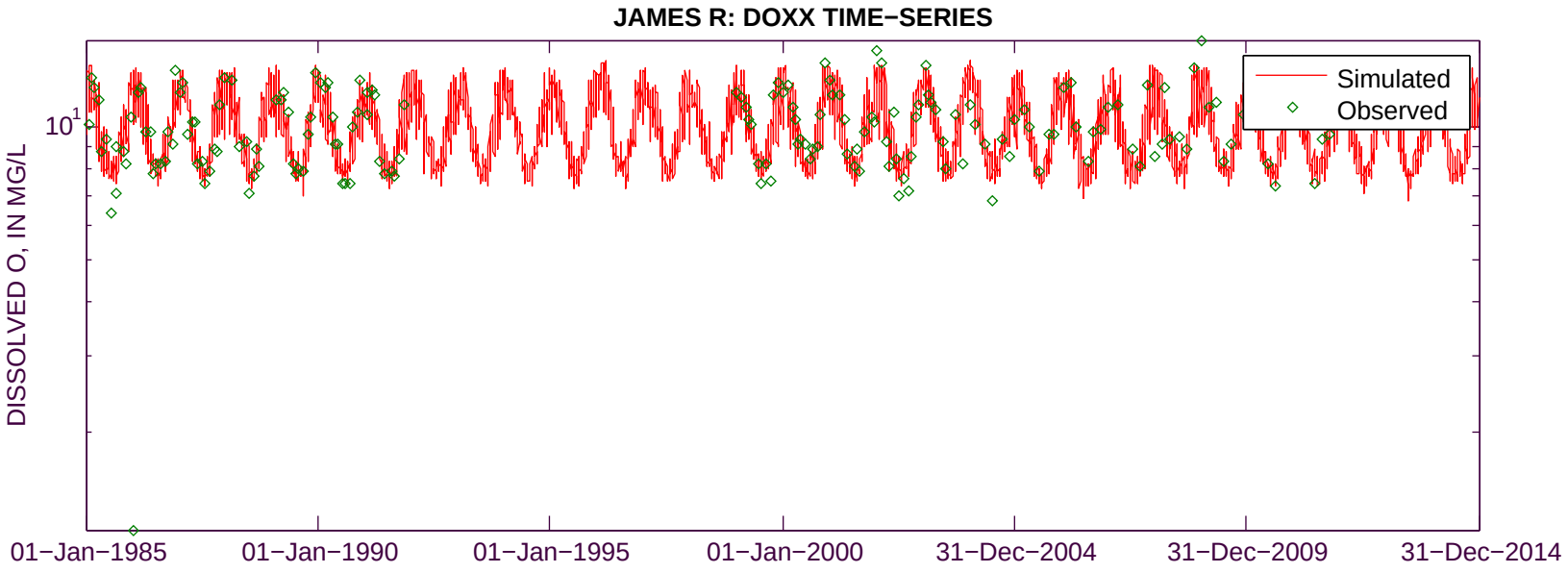
Dates: 1/1/1985 – 12/31/201

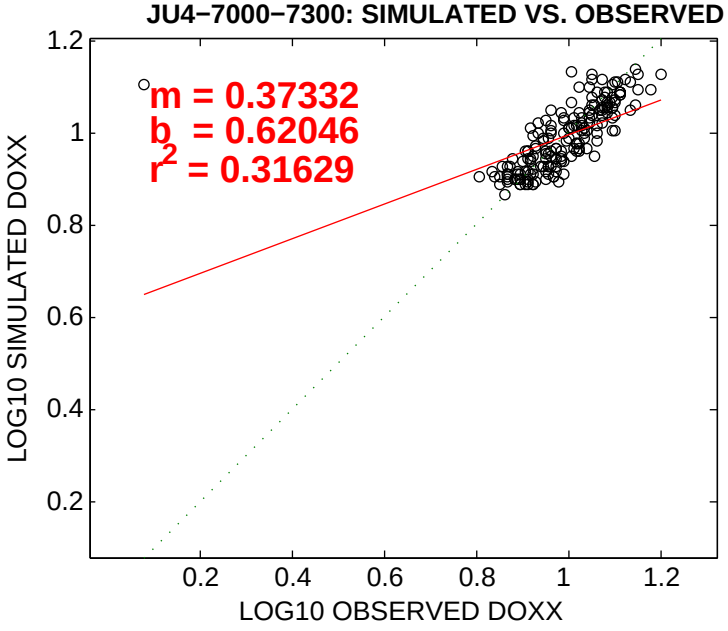
Drive	Directory	Observed
N/A	model	OBS20161101

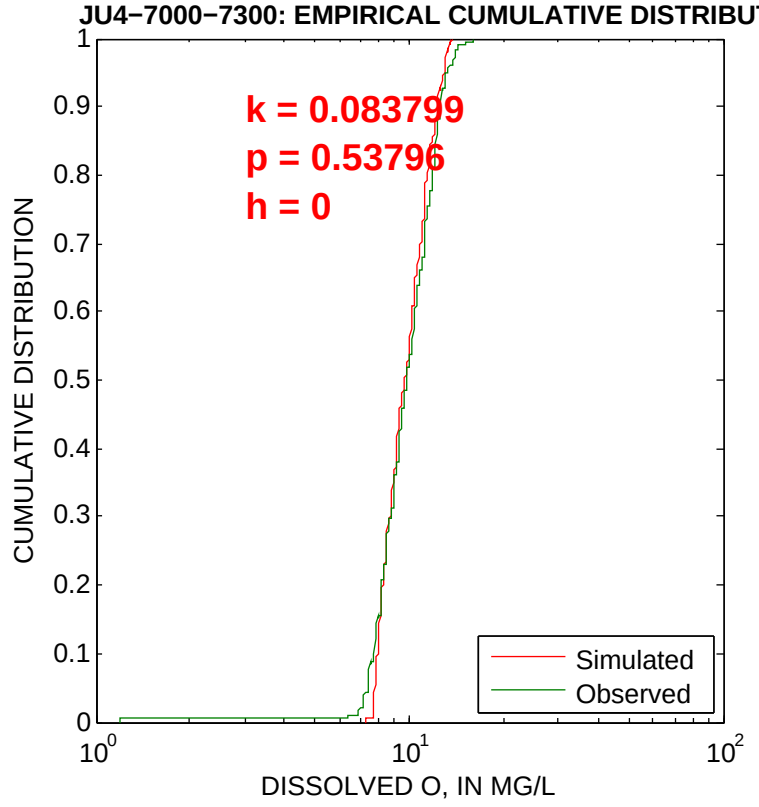
STATISTICS

	n	observe	simulate
		10957	10957
min		23	1.3182
		1.36173	0.119981
mean		386.659	393.891
		2.2842	2.32027
media		182	264.86
		2.26007	2.42302
max		21000	17585
		4.32222	4.24514
varian		532978	329536
		0.233703	0.299289
JB		0.001	0.001
		0.001	0.001
		ra	log
%		1.87028	1.57901
err.va		188113	0.0780128
rel.std.err		0.352947	0.333811
mod.eff		0.647053	0.666189

VERSION 2.1







DATA SELECTION

scenario	file
P620171001WQ	DOXX.calib

plot: DOXX - dissolved oxygen

Dates: 1/1/1985 – 12/31/201

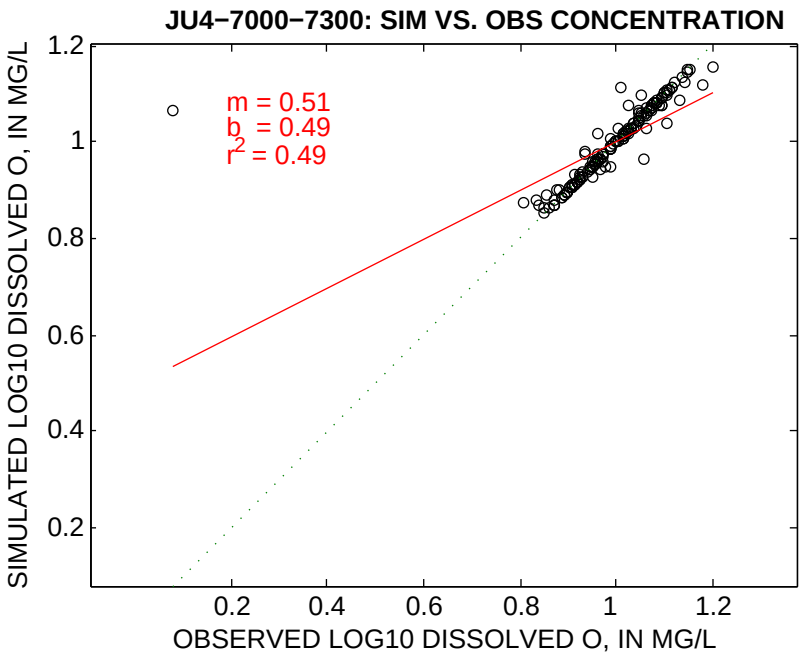
Drive	Directory	Observed
N/A	model	OBS20161101

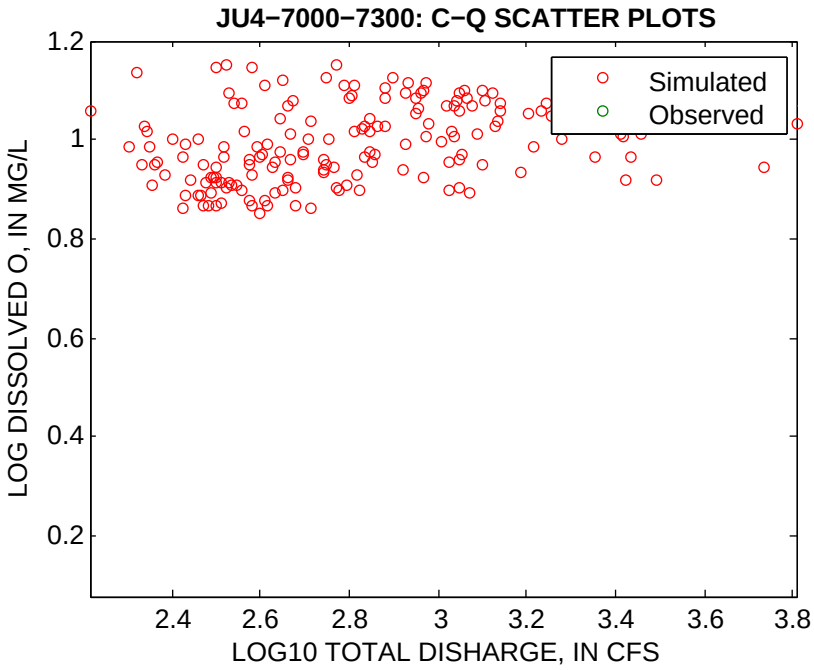
STATISTICS

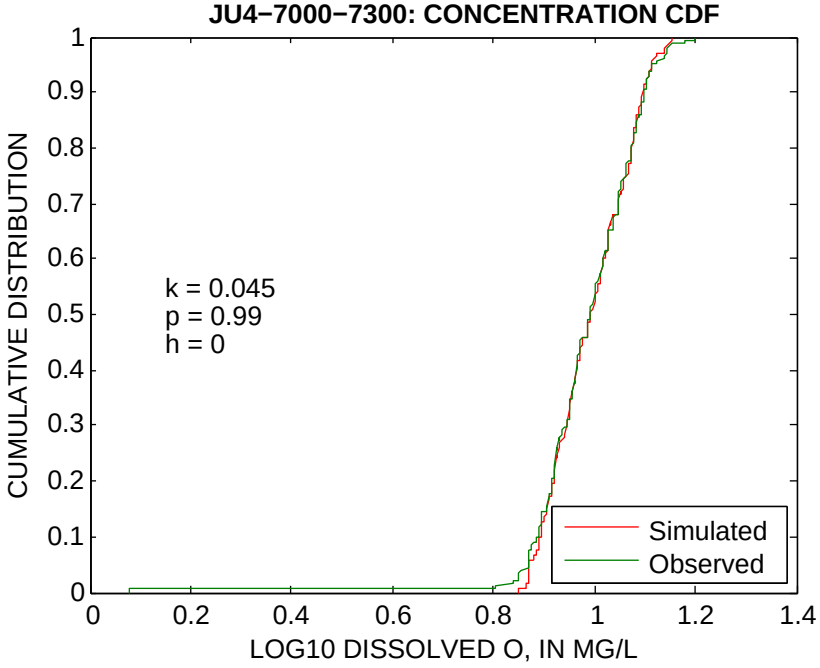
	n	179	179
		observe	simulate
min		1.2	7.2981
		0.0791812	0.86321
mean		10.0028	9.89982
		0.989491	0.989861
media		9.8	9.6672
		0.991226	0.985301
max		15.9	13.653
		1.2014	1.13523
varian		4.04827	2.67719
		0.0113182	0.00498727
JB		0.015921	0.010927
		0.001	0.013997
		ra	log
%		-1.02949	0.037422
err.va		1.83932	0.0078549
rel.std.err		0.454346	0.694004
mod.eff		0.545654	0.305996

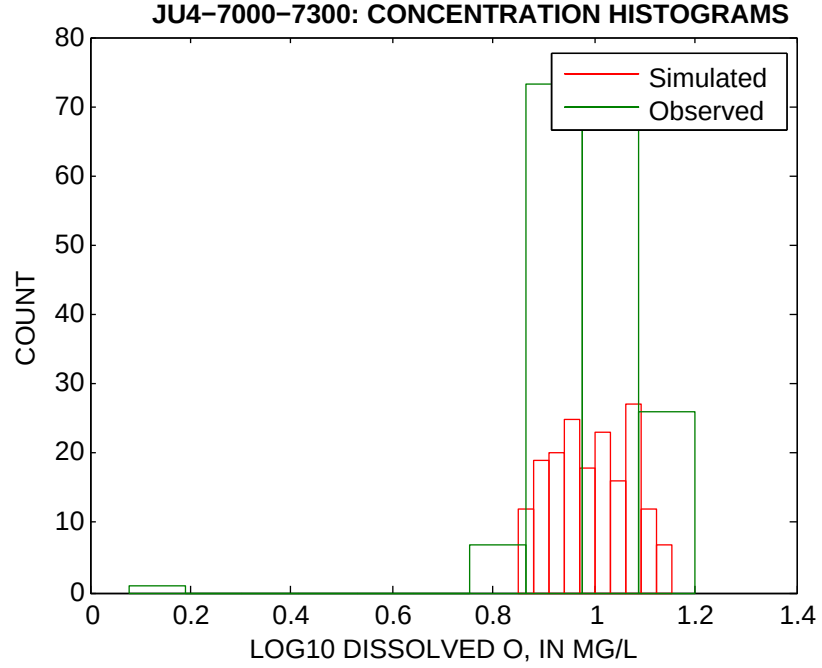
VERSION

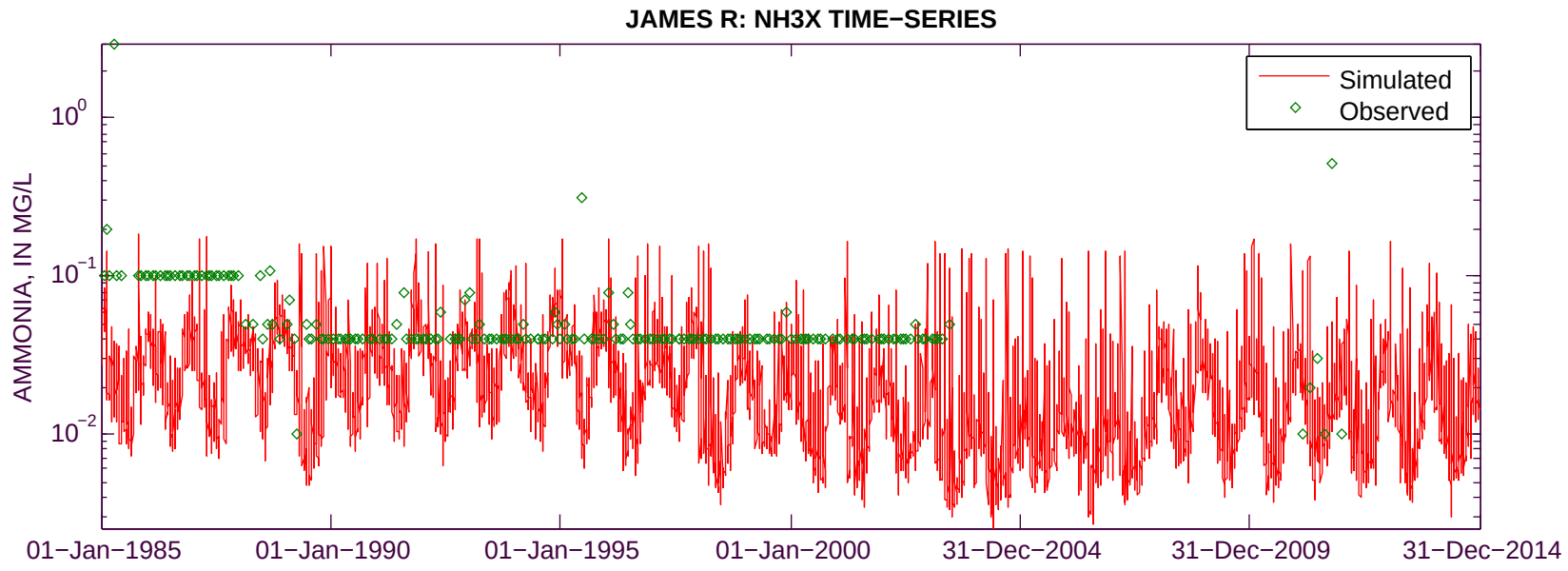
ALL DATA
LOG10

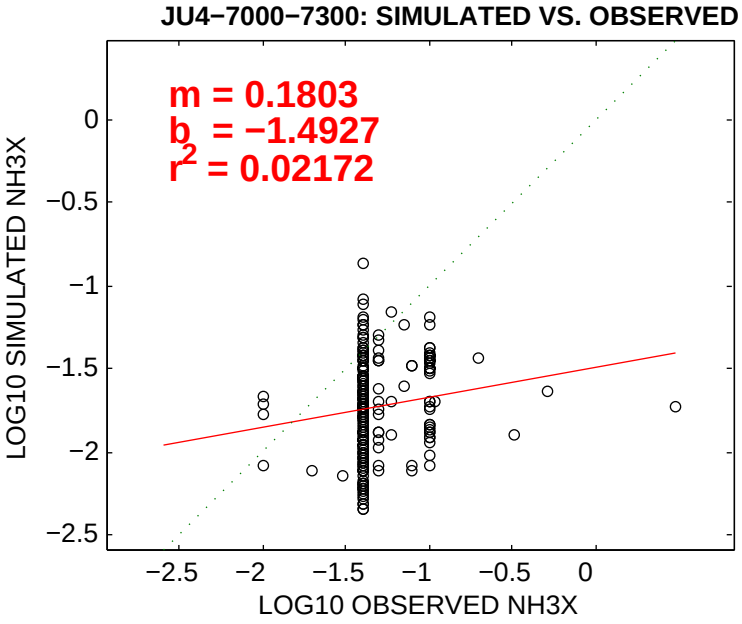


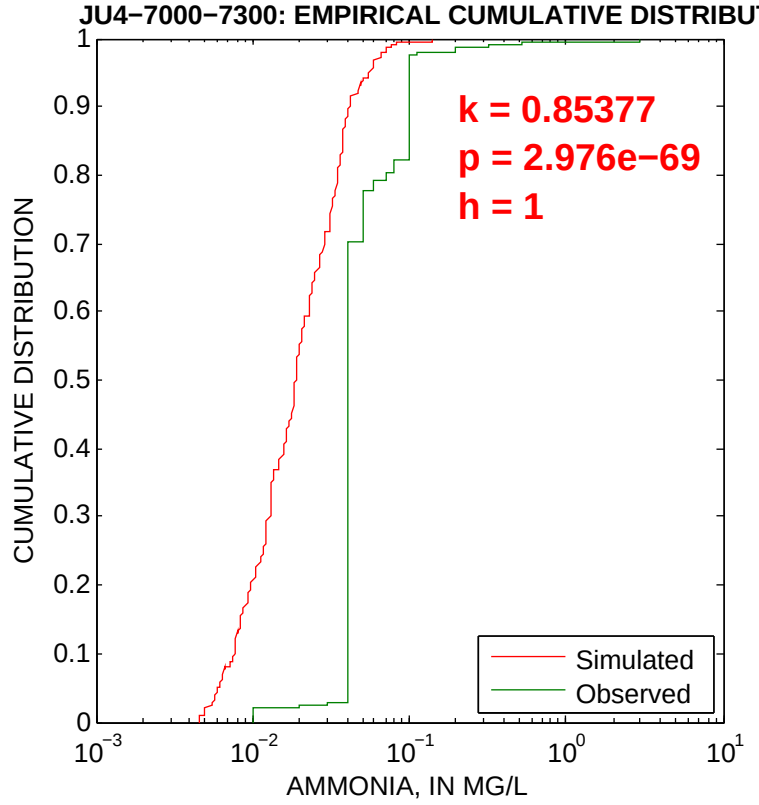












DATA SELECTION

scenario: P620171001WQ | file: NH3X.calib

plot: NH3X - ammonia

Dates: 1/1/1985 – 12/31/201

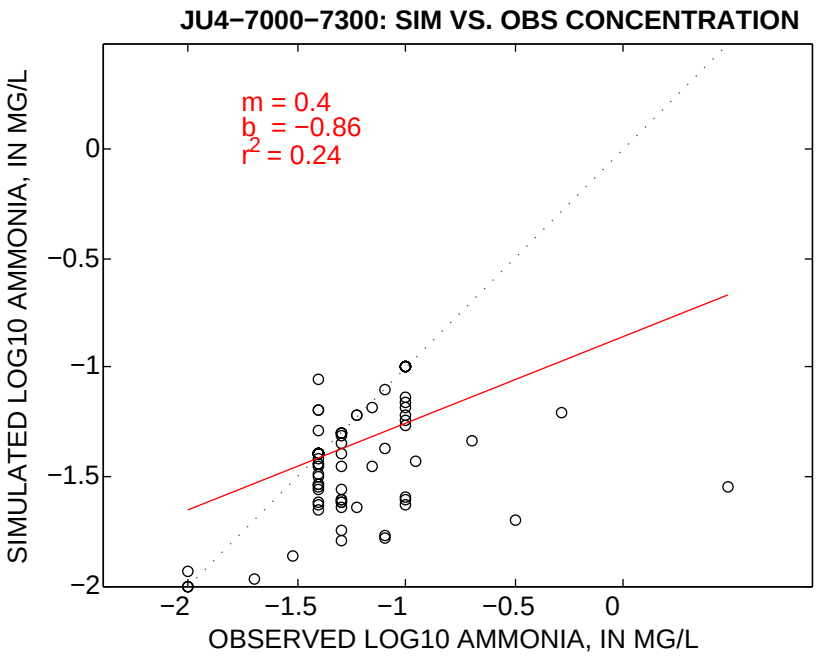
Drive | Directory | Observed: N/A | model | OBS20161101

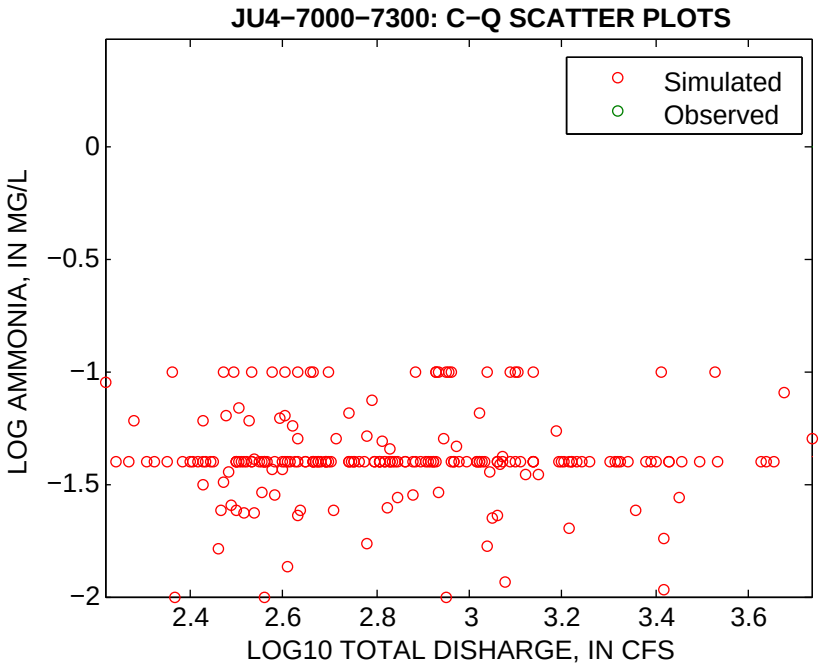
STATISTICS

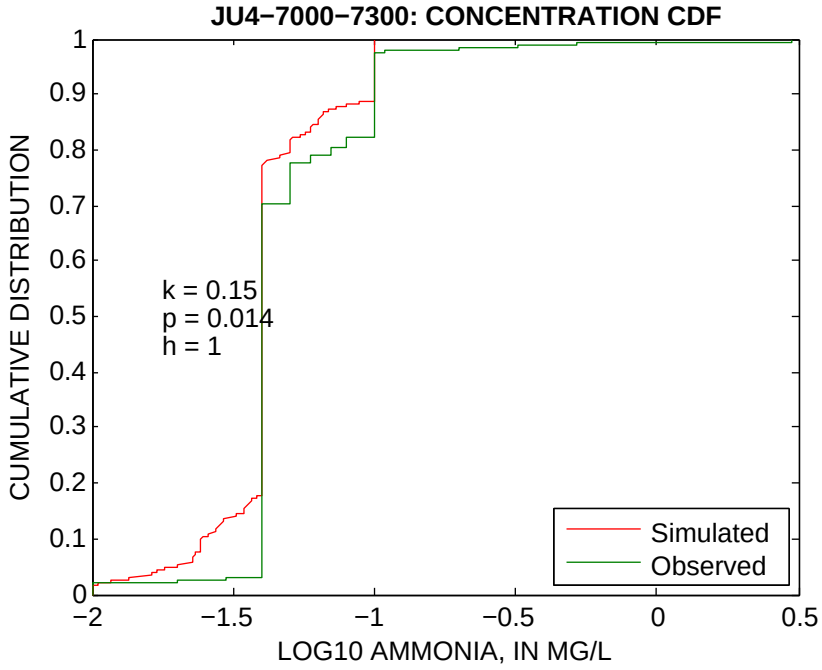
n	212	212
	observe	simulate
min	0.01 -2	0.0045207 -2.34479
mean	0.0693396 -1.30786	0.0233539 -1.72848
media	0.04 -1.39794	0.018973 -1.72187
max	3 0.477121	0.13803 -0.860027
varian	0.0429019 0.0570586	0.00028821 0.0854002
JB	0.001 0.001	0.001 0.21
	ra	log
%	-66.3196	32.1614
err.va	0.0453529	0.299647
rel.std.err	1.05713	5.25157
mod.eff	-0.05713	-4.25157

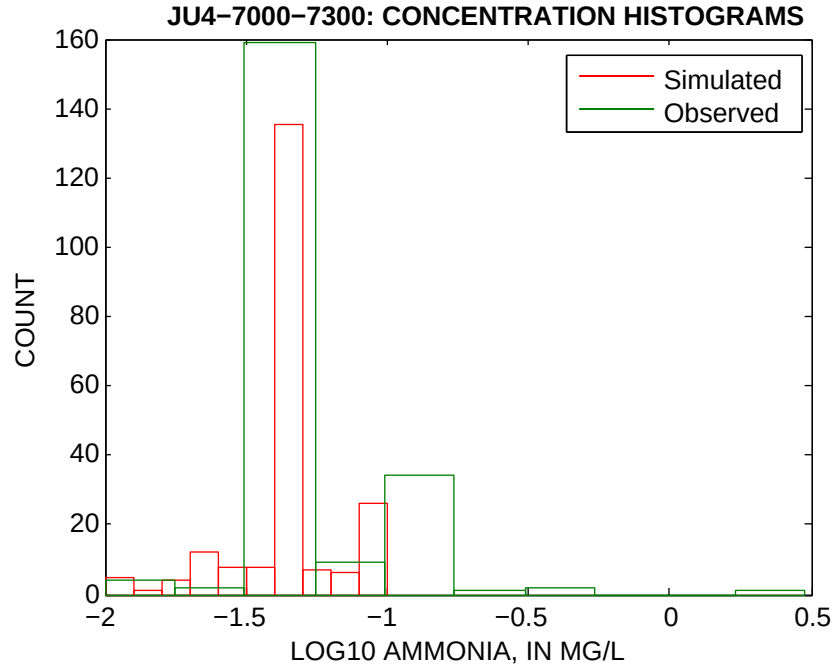
VERSION 2.1

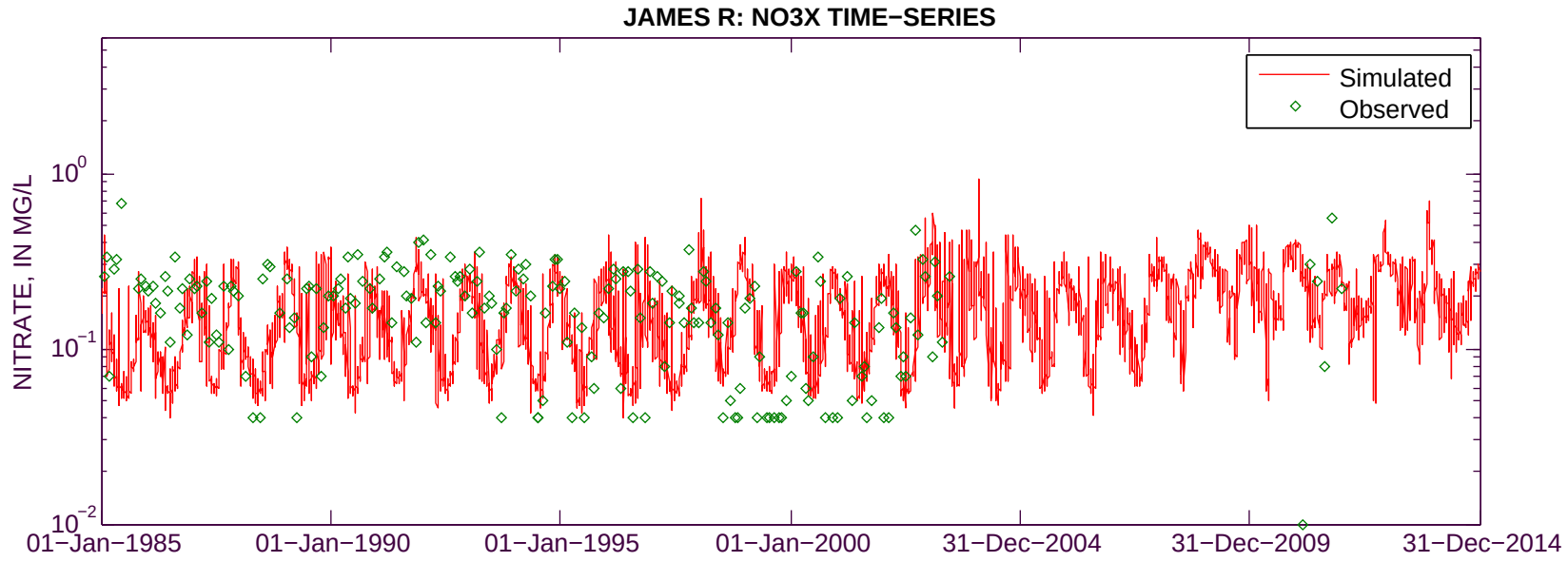
ALL DATA
LOG10

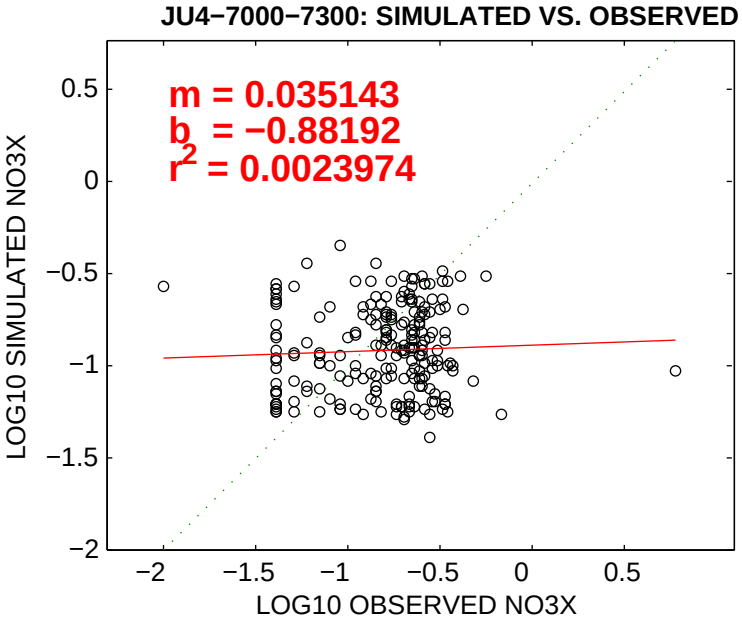


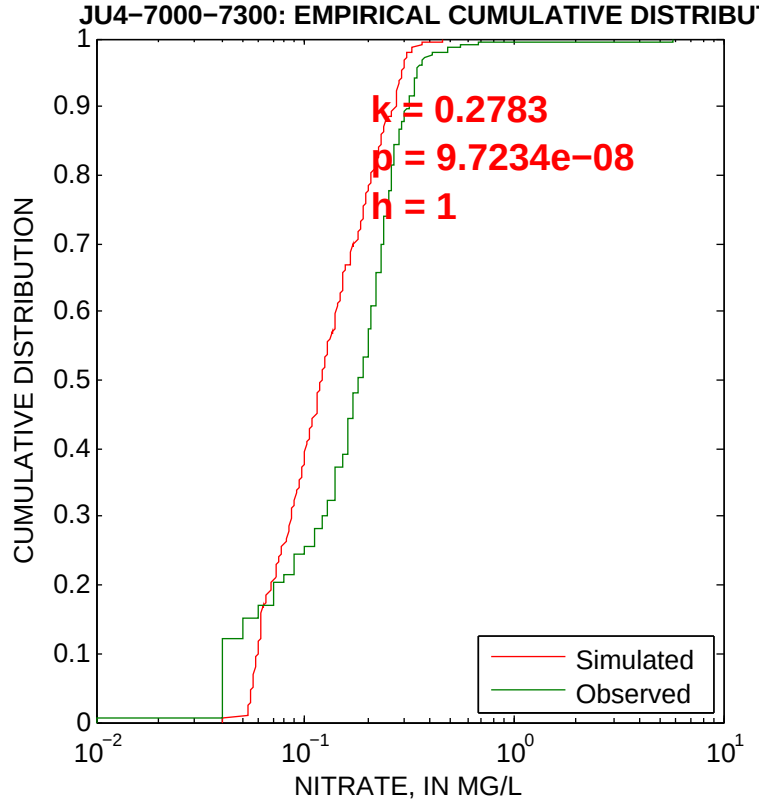












DATA SELECTION

scenario	file
P620171001WQ	NO3X.calib

plot: NO3X - nitrate

Dates: 1/1/1985 – 12/31/201

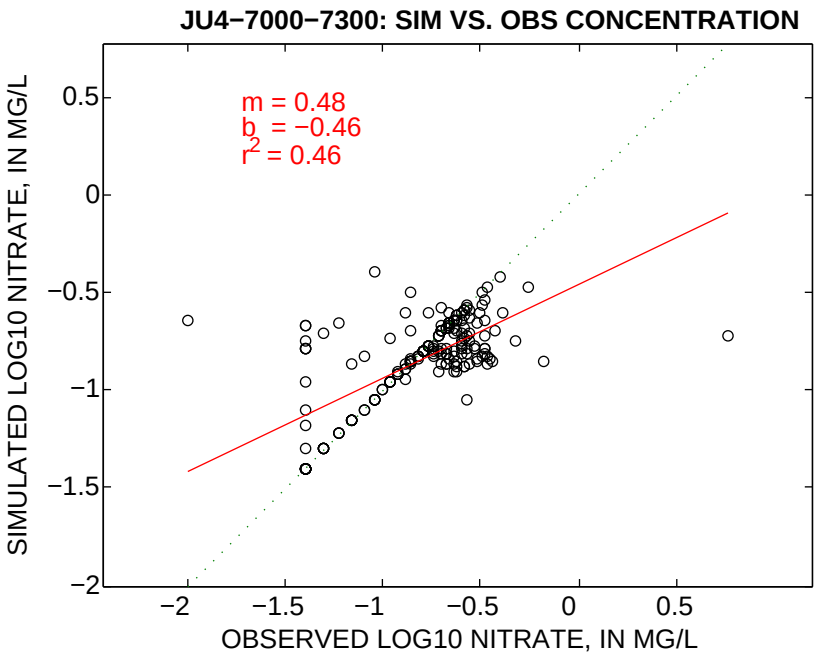
Drive	Directory	Observed
N/A	model	OBS20161101

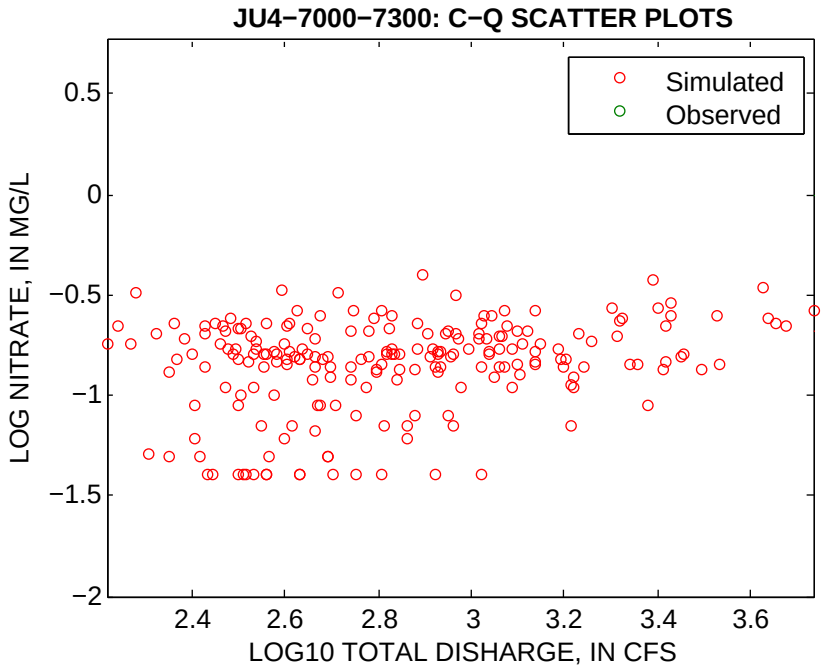
STATISTICS

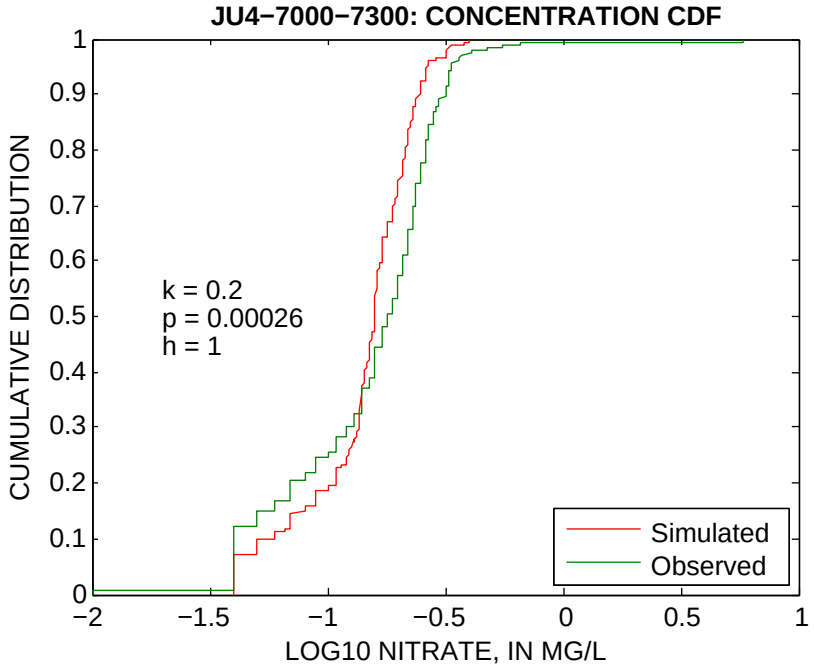
	n	observe	simulate
		212	212
min		0.01	0.04032
		-2	-1.39448
mean		0.208797	0.141963
		-0.821141	-0.910775
media		0.18	0.119835
		-0.744727	-0.921417
max		5.825	0.45333
		0.765296	-0.343586
varian		0.160869	0.00614603
		0.106709	0.0549701
JB		0.001	0.001
		0.001	0.015014
		ra	log
%		-32.0091	10.9158
err.va		0.17319	0.162251
rel.std.err		1.07659	1.5205
mod.eff		-0.0765878	-0.520504

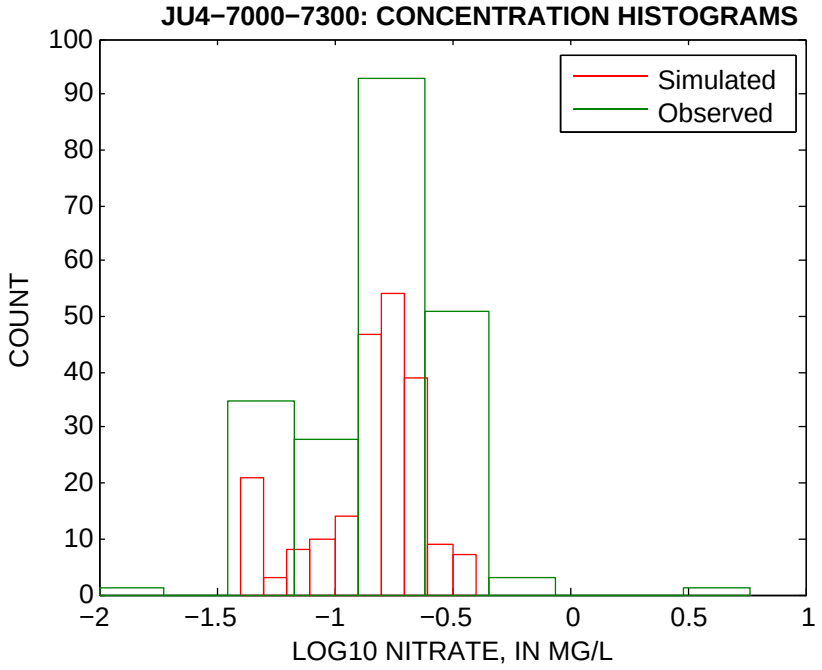
VERSION 2.1

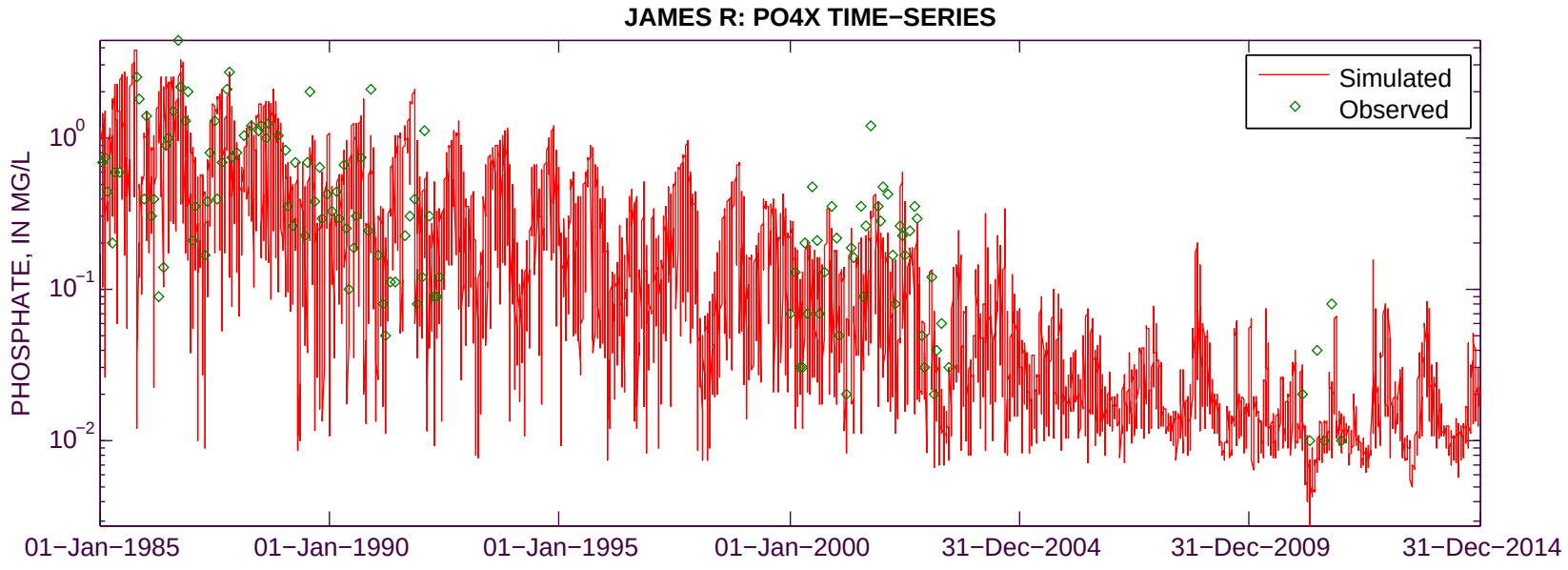
ALL DATA
LOG10

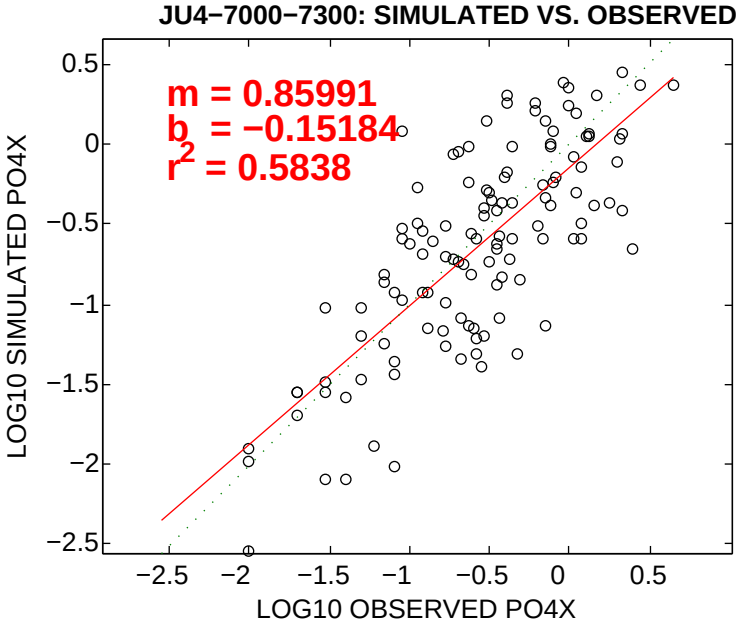


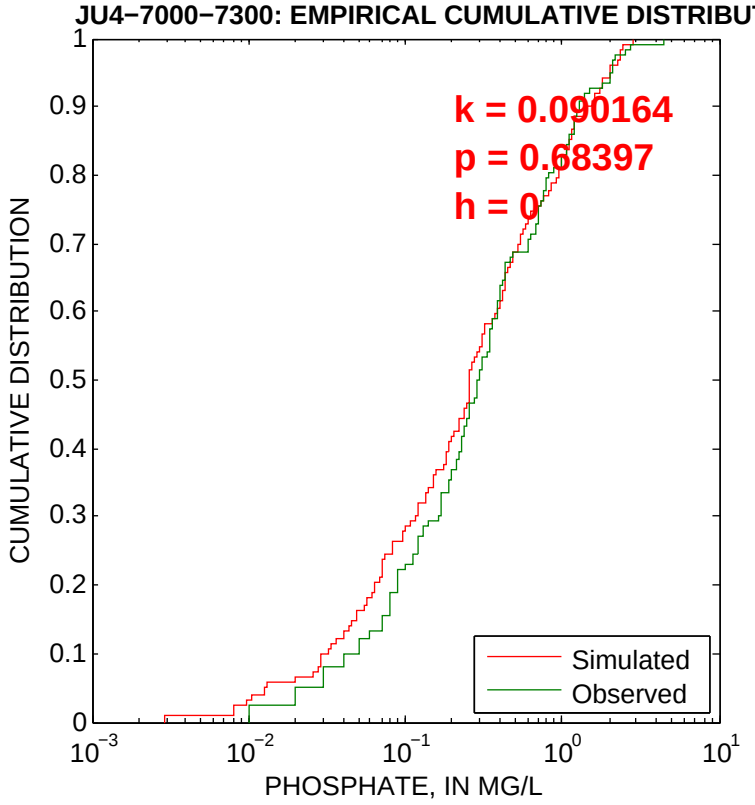












DATA SELECTION

scenario	file
P620171001WQ	PO4X.calib

plot: PO4X - phosphate

Dates: 1/1/1985 – 12/31/201

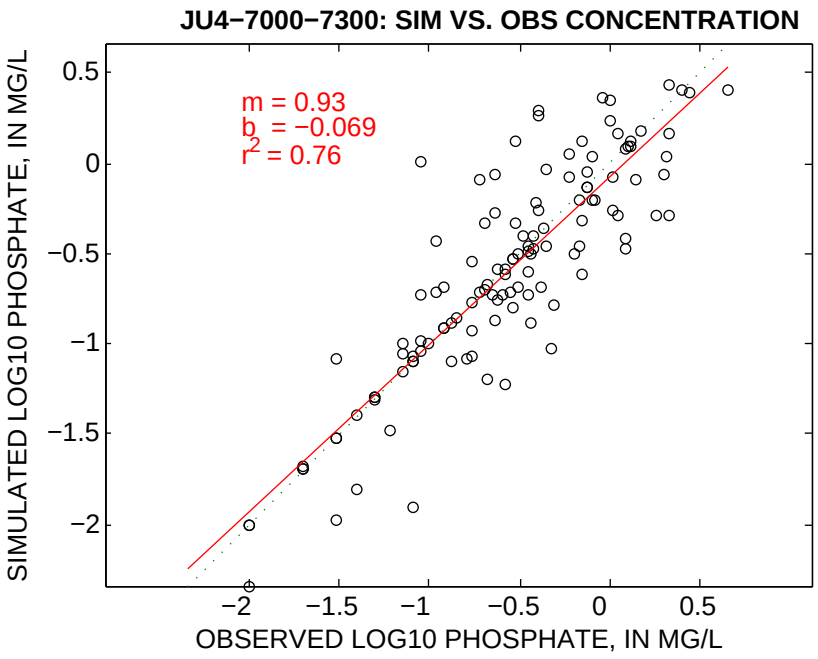
Drive	Directory	Observed
N/A	model	OBS20161101

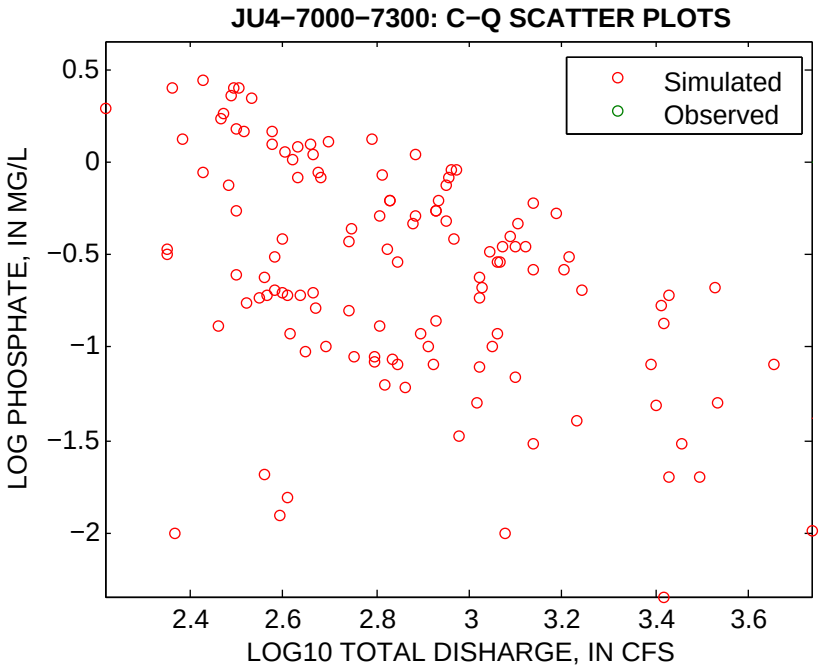
STATISTICS

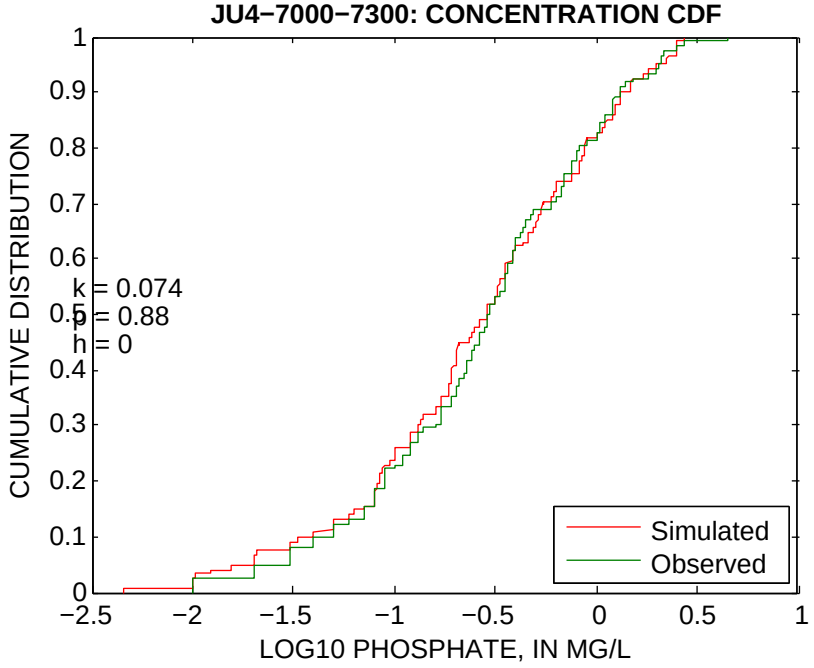
	n	122	122
		observe	simulate
min		0.01	0.0028746
		-2	-2.54142
mean		0.542918	0.516549
		-0.569344	-0.641423
media		0.295	0.25776
		-0.53024	-0.588786
max		4.5	2.8549
		0.653213	0.455591
varian		0.462121	0.390271
		0.320018	0.405337
JB		0.001	0.001
		0.138026	0.058576
		ra	log
%		-4.85694	12.66
err.va		0.346975	0.180221
rel.std.err		0.750831	0.563159
mod.eff		0.249169	0.436841

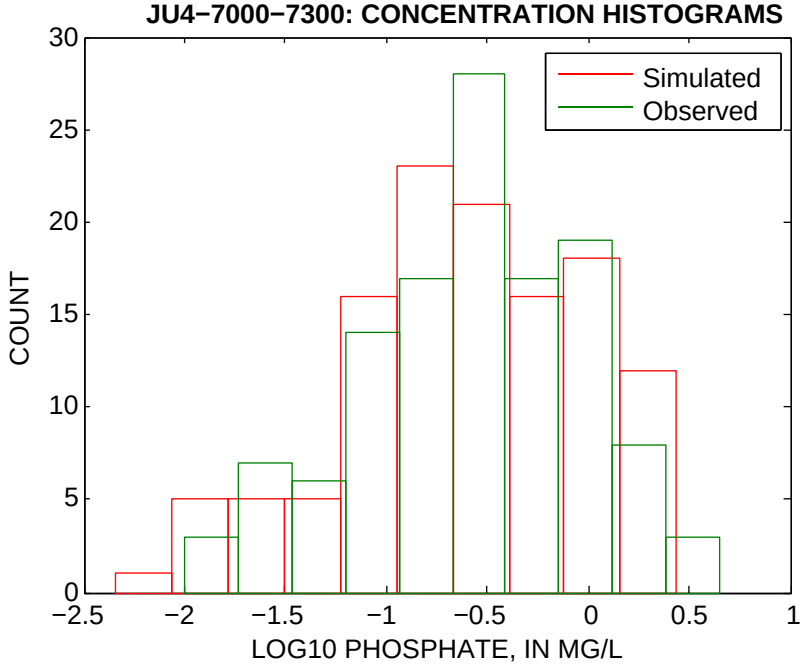
VERSION 2.1

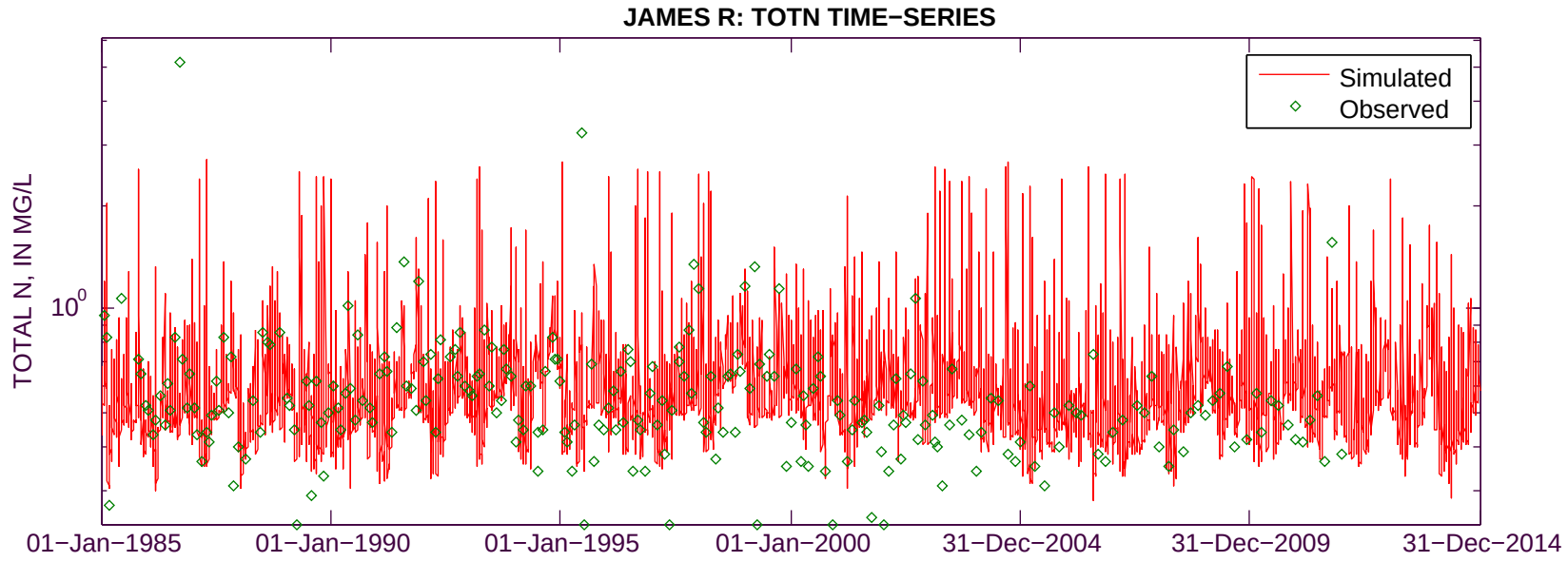
ALL DATA
LOG10

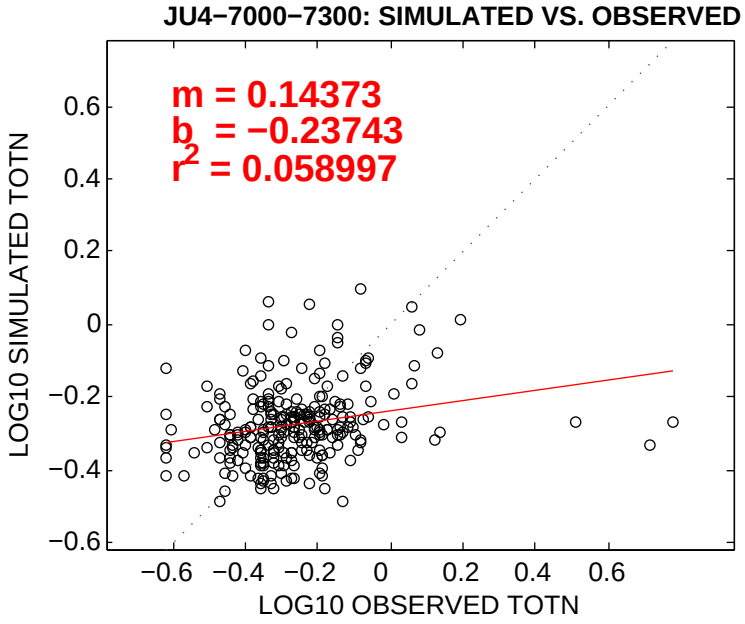


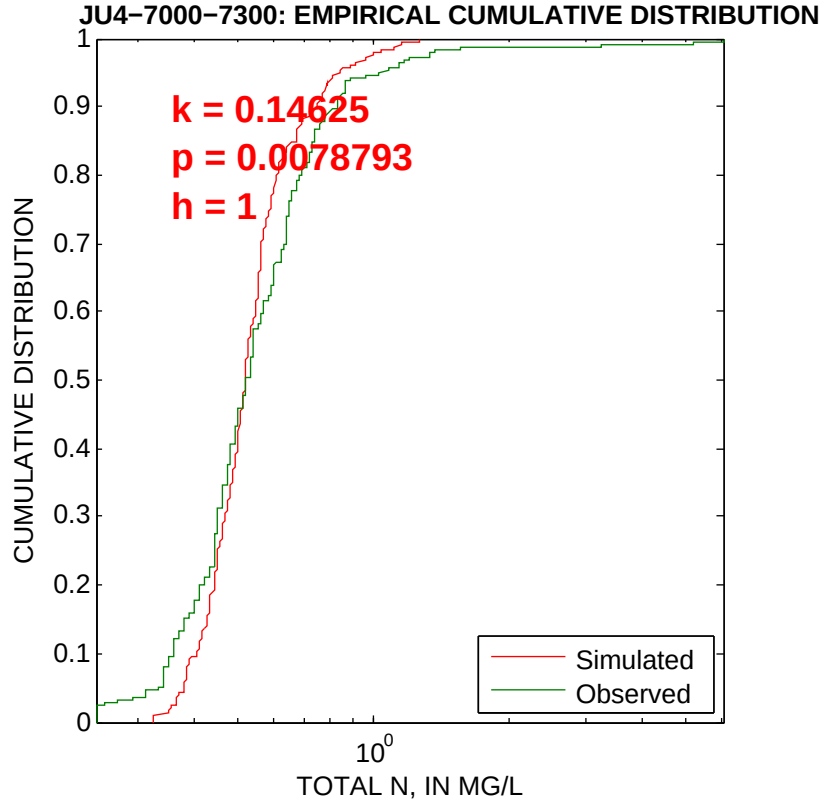












DATA SELECTION

scenario	file
P620171001WQ	TOTN.calib

plot: TOTN - total nitrogen

Dates: 1/1/1985 – 12/31/201

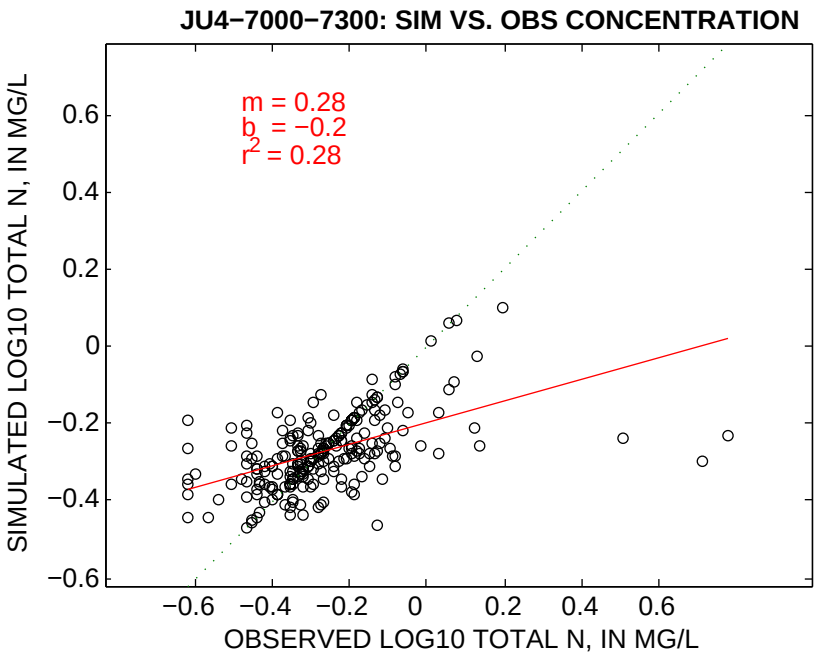
Drive	Directory	Observed
N/A	model	OBS20161101

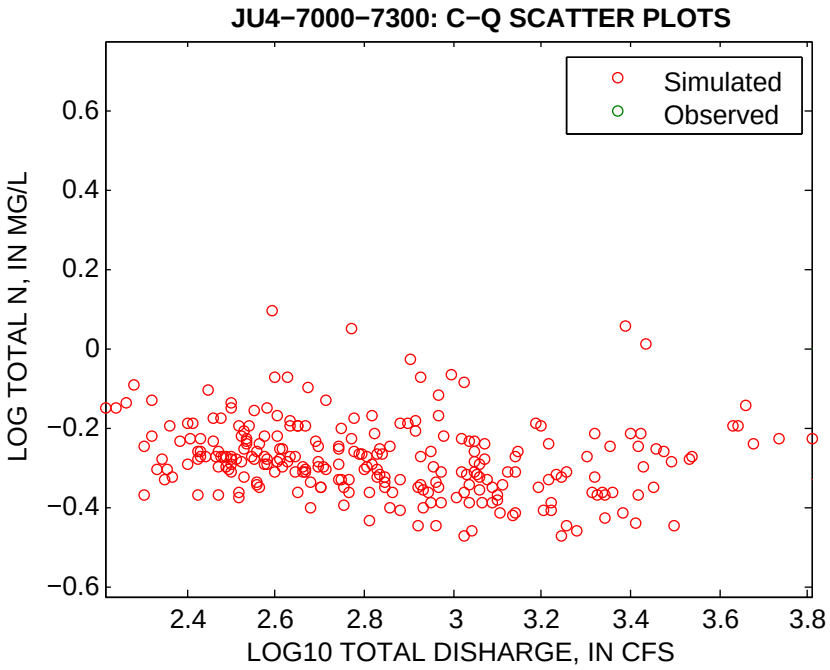
STATISTICS

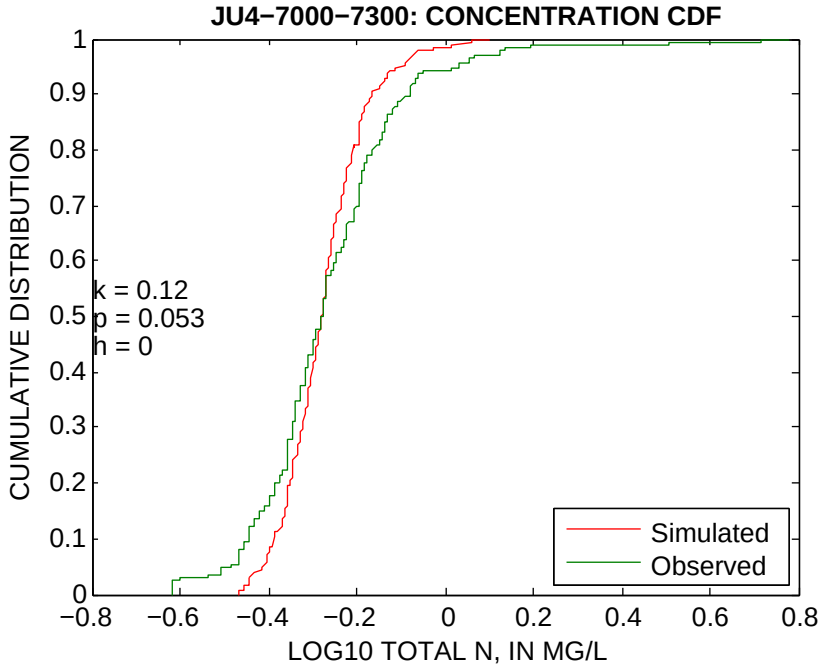
	n	observe	simulate
		253	253
min		0.24	0.32418
		-0.619789	-0.489214
mean		0.612273	0.54716
		-0.263856	-0.275356
media		0.52	0.51675
		-0.283997	-0.28672
max		6.025	1.2624
		0.779957	0.101197
varian		0.269809	0.0224778
		0.0311362	0.0109022
JB		0.001	0.001
		0.001	0.001
		ra	log
% err.va		-10.6346	4.35864
		0.279414	0.033221
rel.std.err		1.0356	1.06696
mod.eff		-0.0355972	-0.0669569

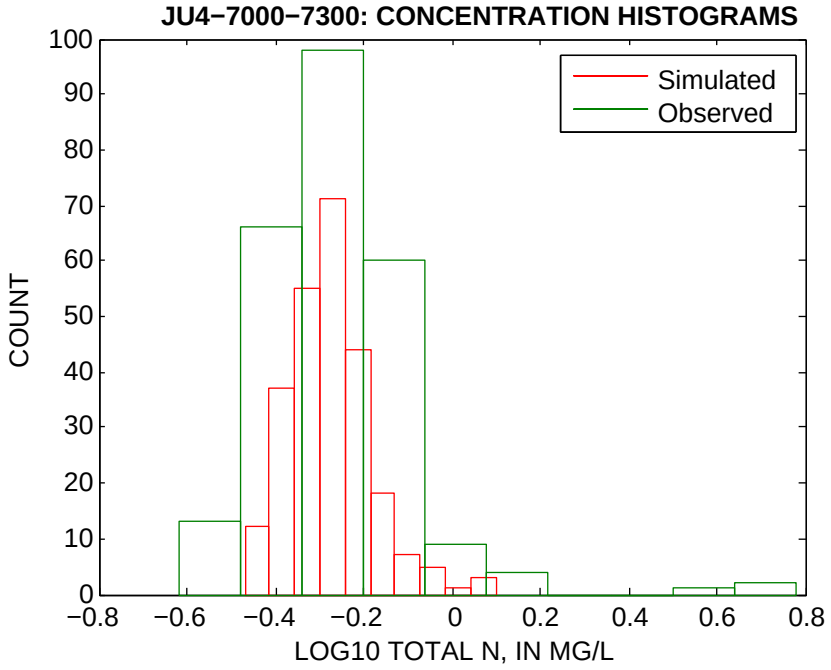
VERSION 2.1

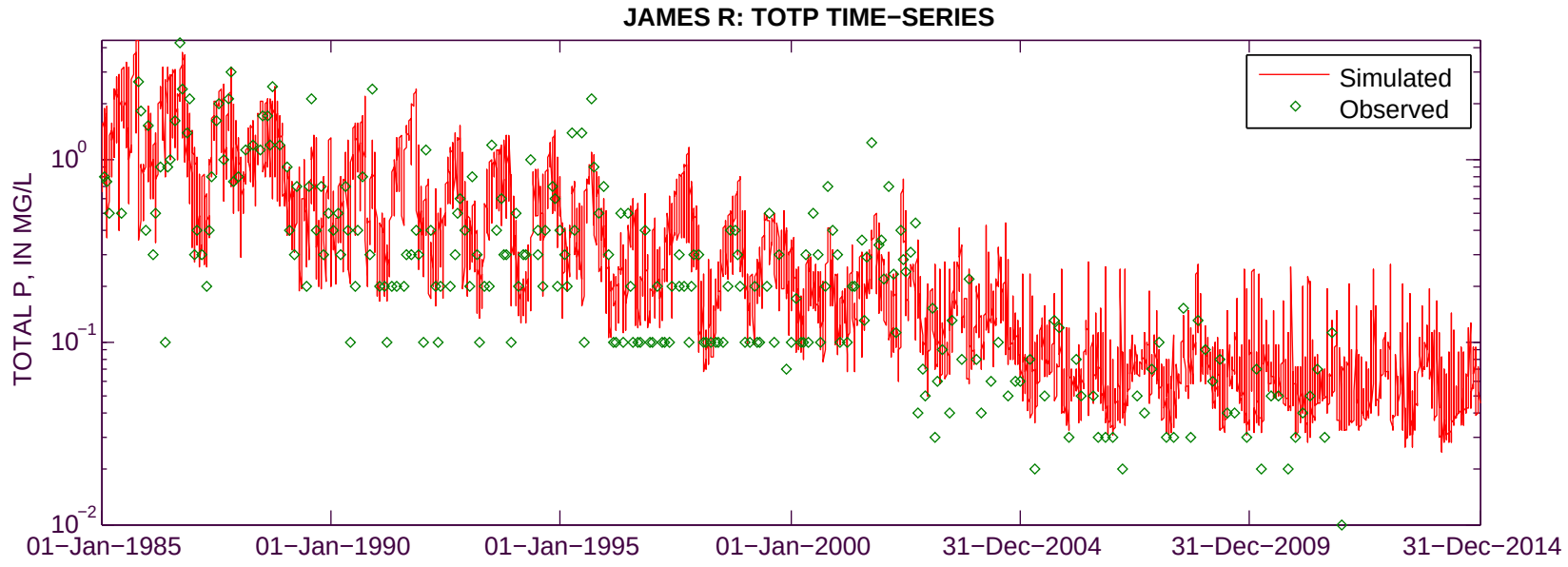
ALL DATA
LOG10

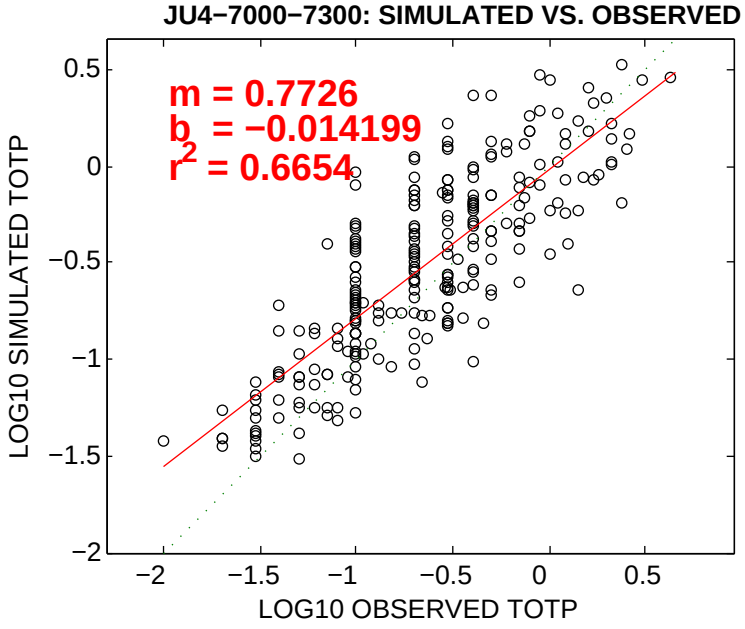


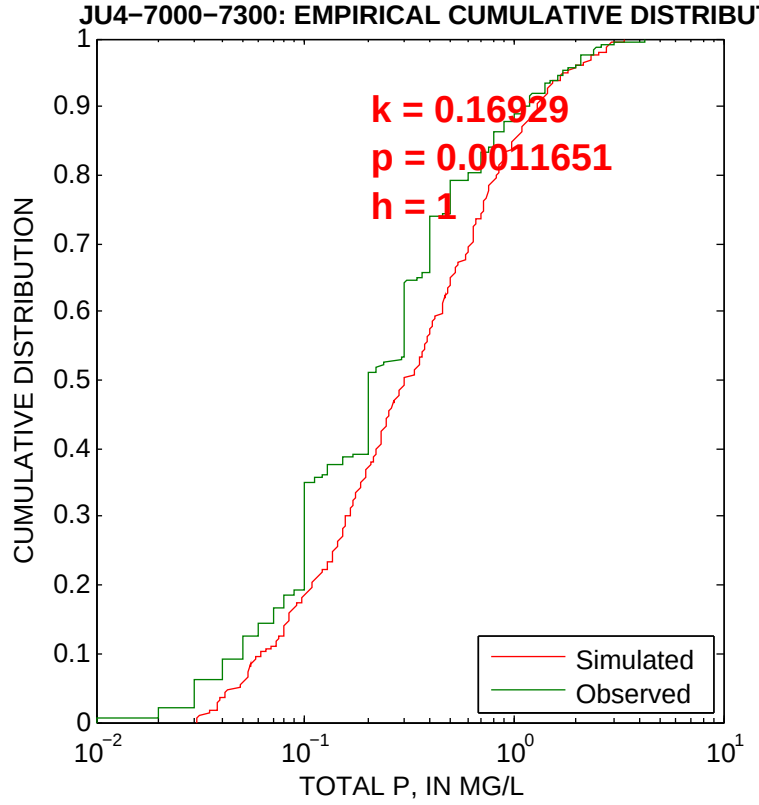












DATA SELECTION

scenario: P620171001WQ | file: TOTP.calib

plot: TOTP - total phosphorus

Dates: 1/1/1985 – 12/31/201

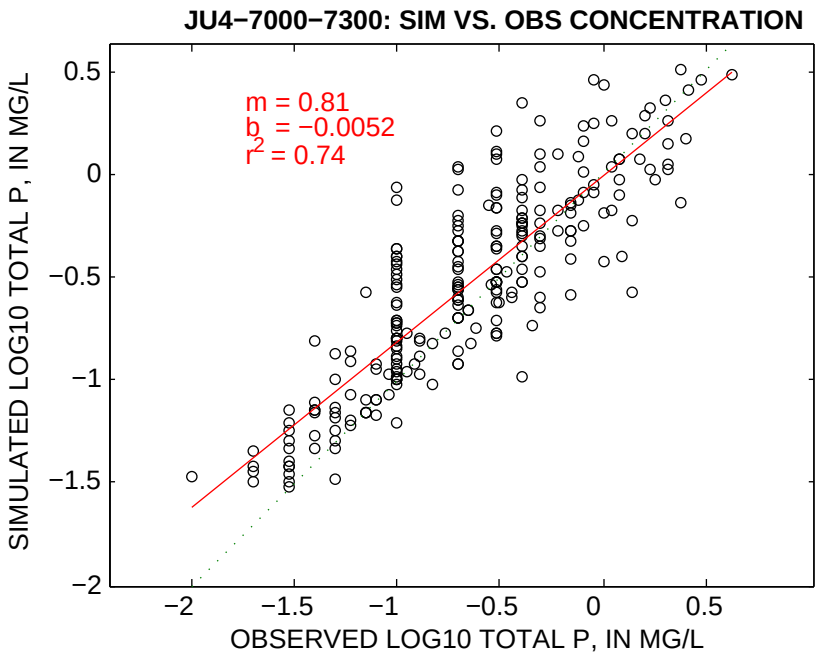
Drive: N/A | Directory: model | Observed: OBS20161101

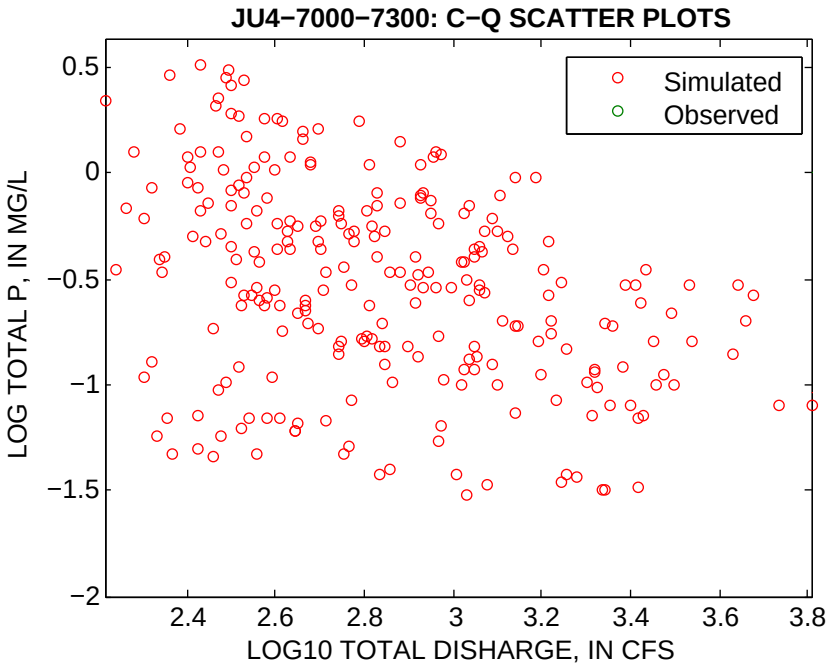
STATISTICS

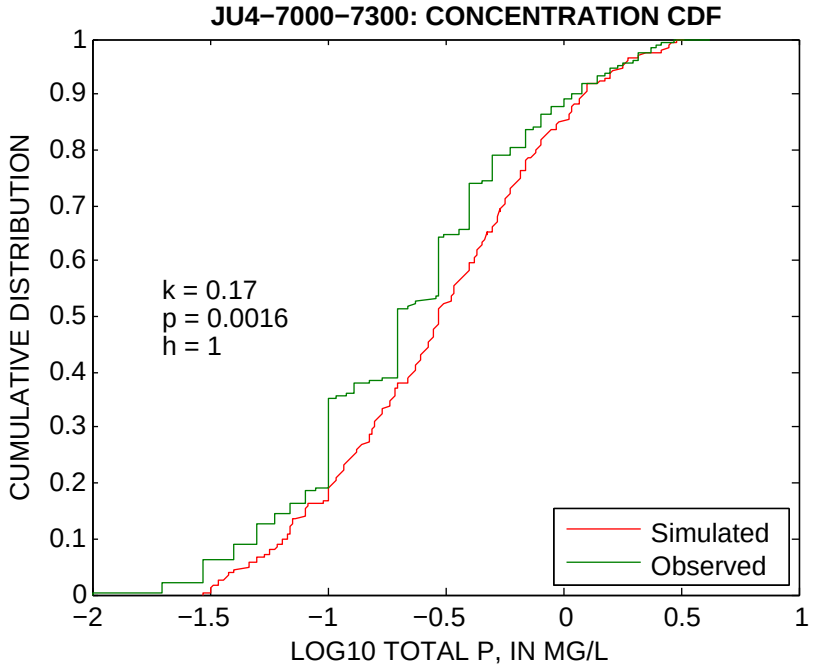
		observe	simulate
n		254	254
min		0.01	0.030154
		-2	-1.52066
mean		0.433858	0.534226
		-0.650441	-0.516731
media		0.2	0.30127
		-0.69897	-0.521047
max		4.25	3.3785
		0.628389	0.528724
varian		0.339815	0.360375
		0.258376	0.231784
JB		0.001	0.001
	☑	0.257967	0.040627
		ra	log
%		23.1337	-20.5568
err.va		0.221419	0.108865
rel.std.err		0.651587	0.421345
mod.eff		0.348413	0.578655

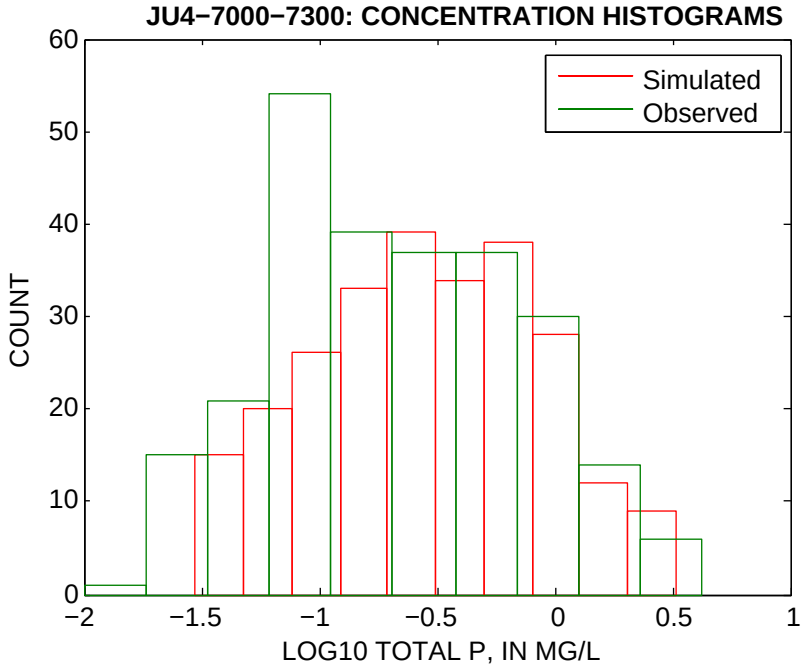
VERSION 2.1

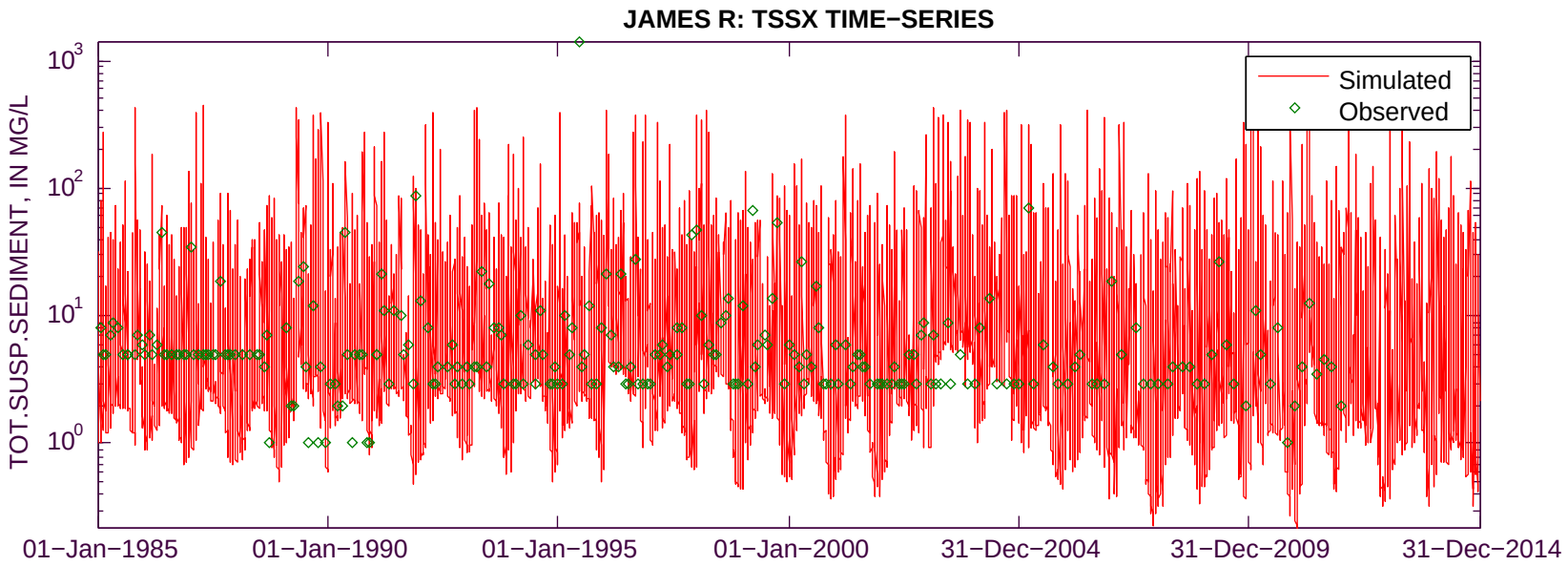
ALL DATA
LOG10

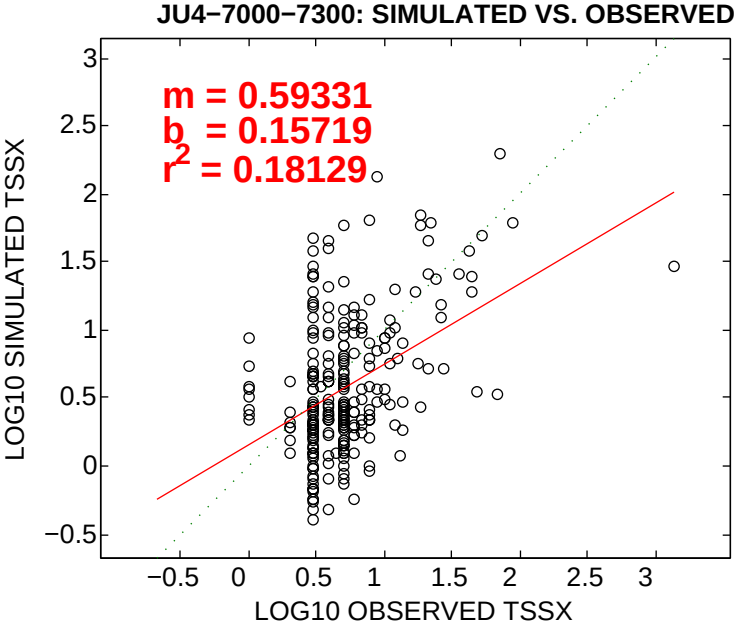


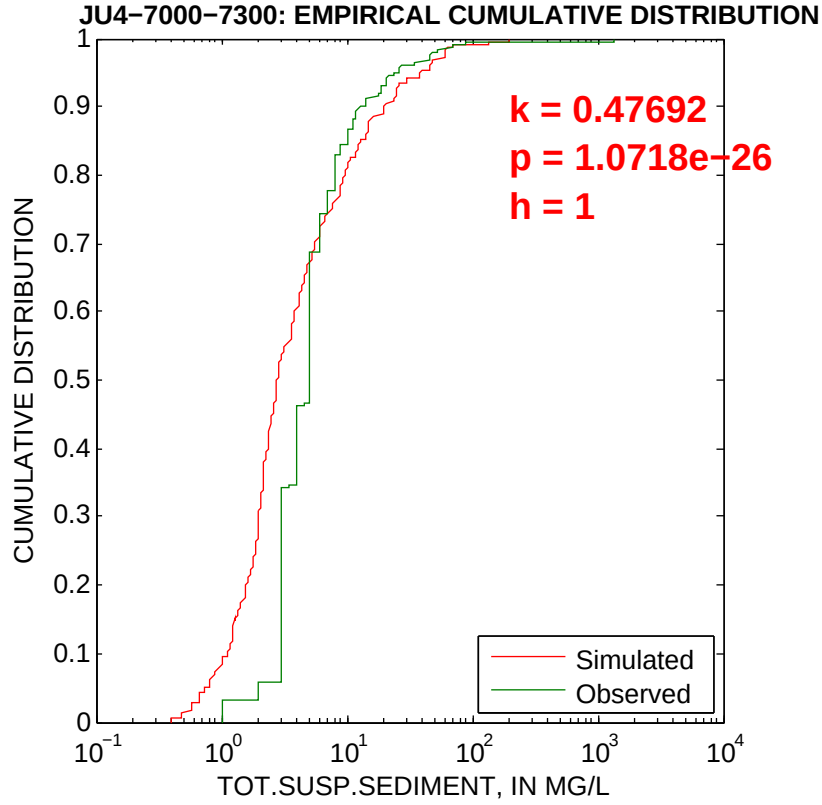












DATA SELECTION

scenario	file
P620171001WQ	TSSX.calib

plot: TSSX - total suspended ...

Dates: 1/1/1985 – 12/31/201

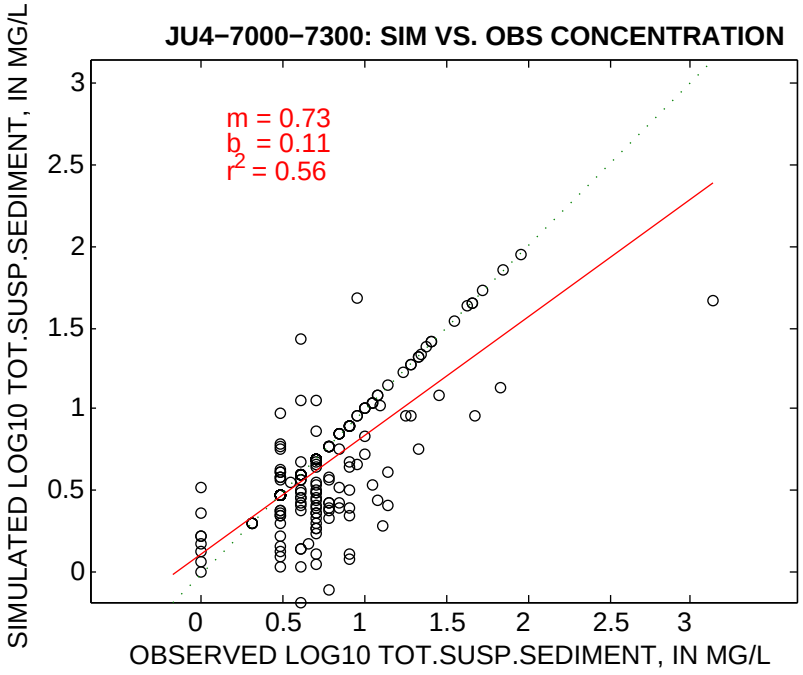
Drive	Directory	Observed
N/A	model	OBS20161101

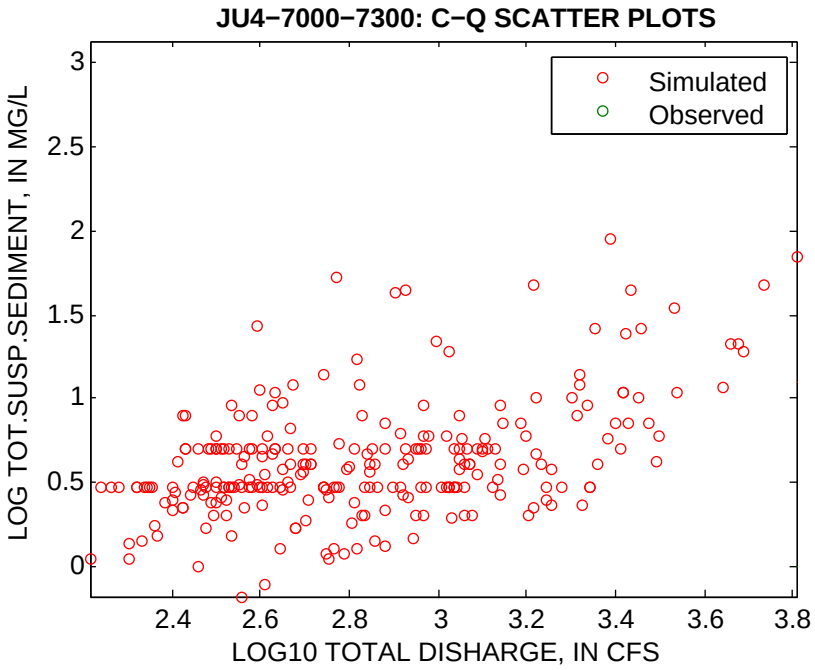
STATISTICS

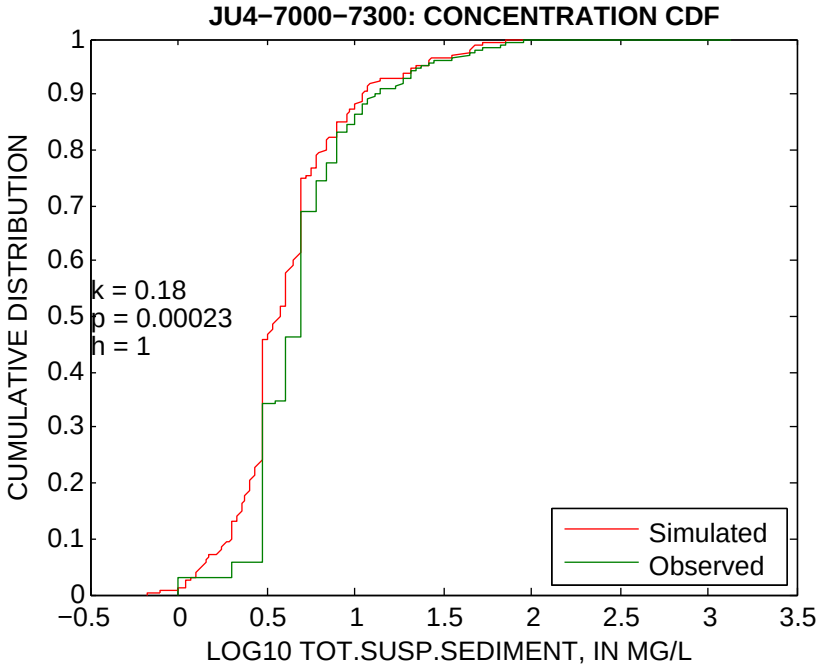
	observe	simulate
n	260	260
min	1 0	0.40292 -0.394781
mean	12.675 0.716021	8.79043 0.582014
media	5 0.69897	2.8186 0.450016
max	1364 3.13481	199.98 2.30099
varian	7188.37 0.127606	349.155 0.247789
JB	0.001 0.001	0.001 0.001
	ra	log
%	-30.6475	-18.7155
err.va	7134.31	0.242001
rel.std.err	0.99248	1.89646
mod.eff	0.00752016	-0.89646

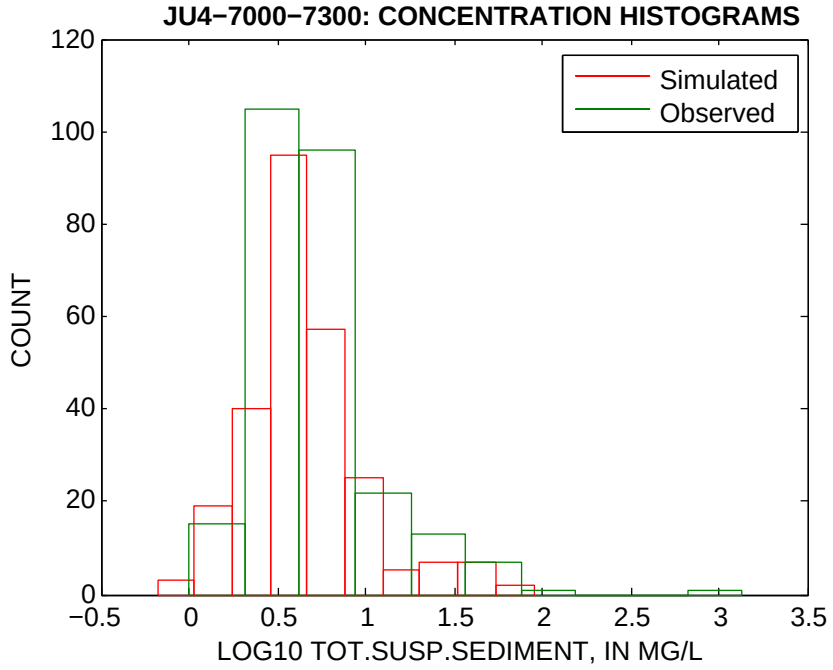
VERSION 2.1

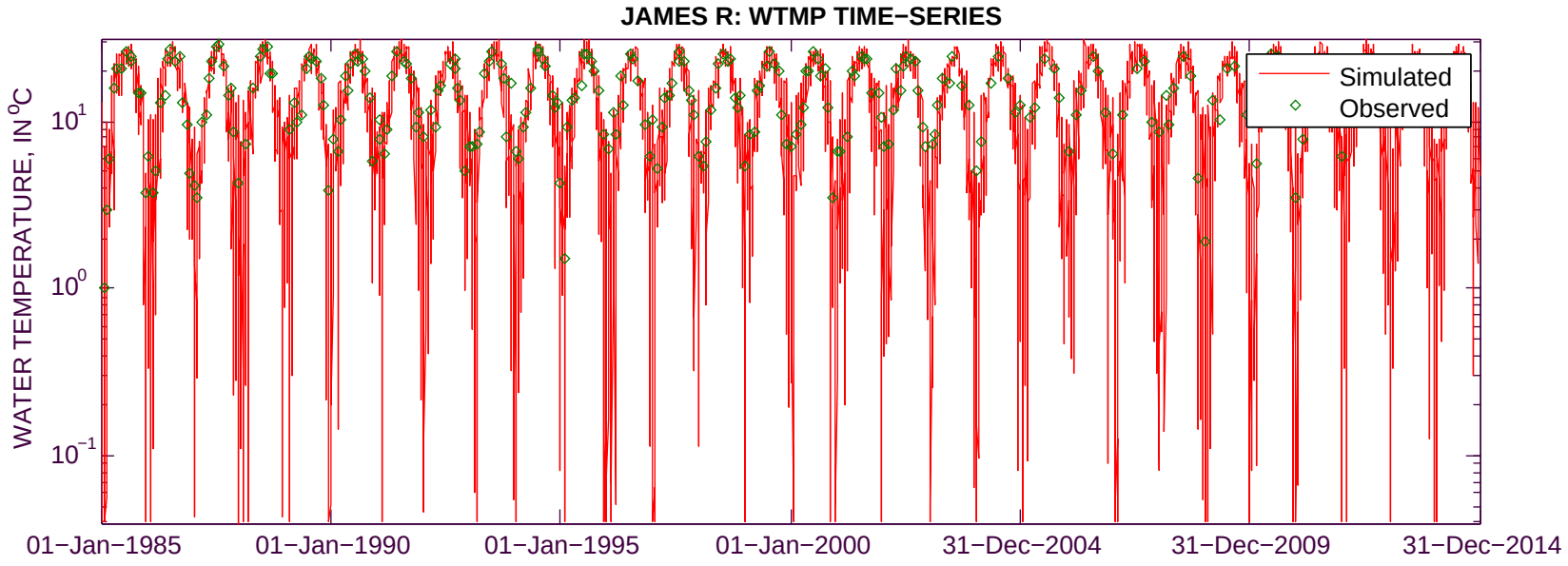
ALL DATA
LOG10

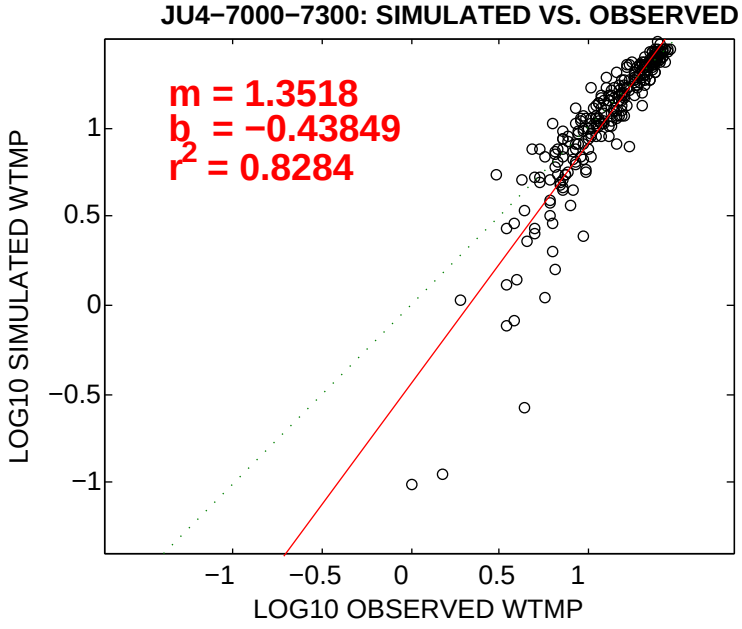


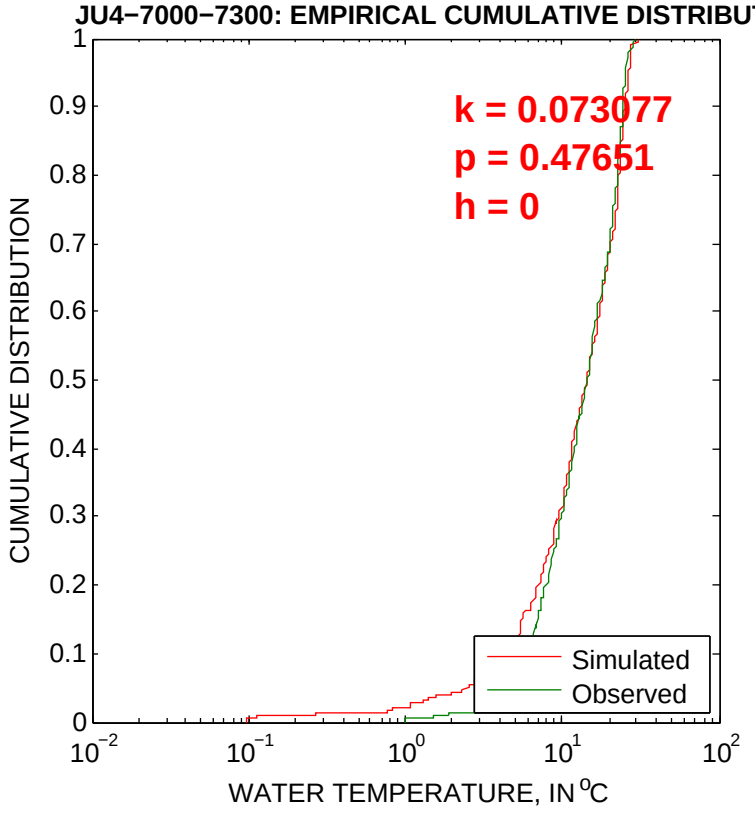












DATA SELECTION

scenario	file
P620171001WQ	WTMP.calib

plot: WTMP - water tempera...

Dates: 1/1/1985 – 12/31/201

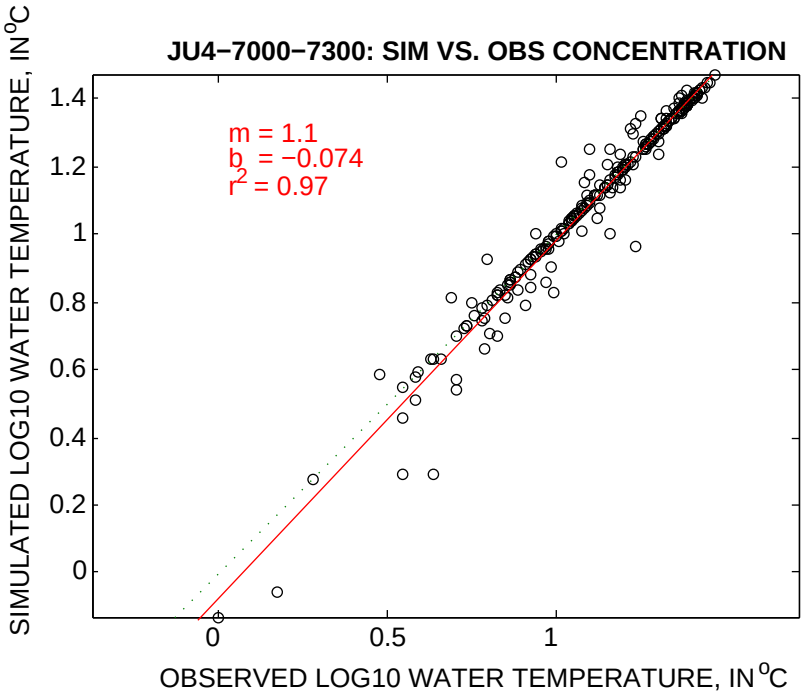
Drive	Directory	Observed
N/A	model	OBS20161101

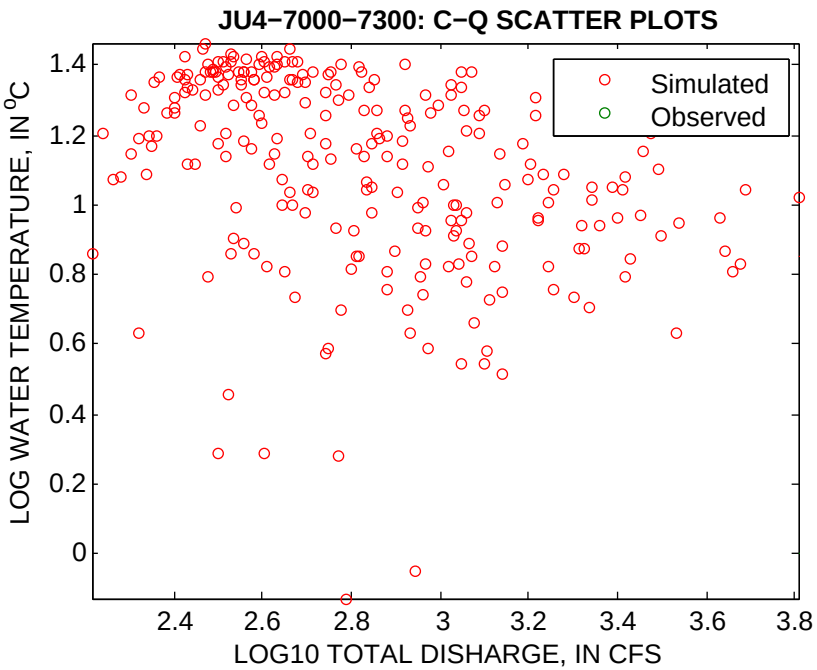
STATISTICS

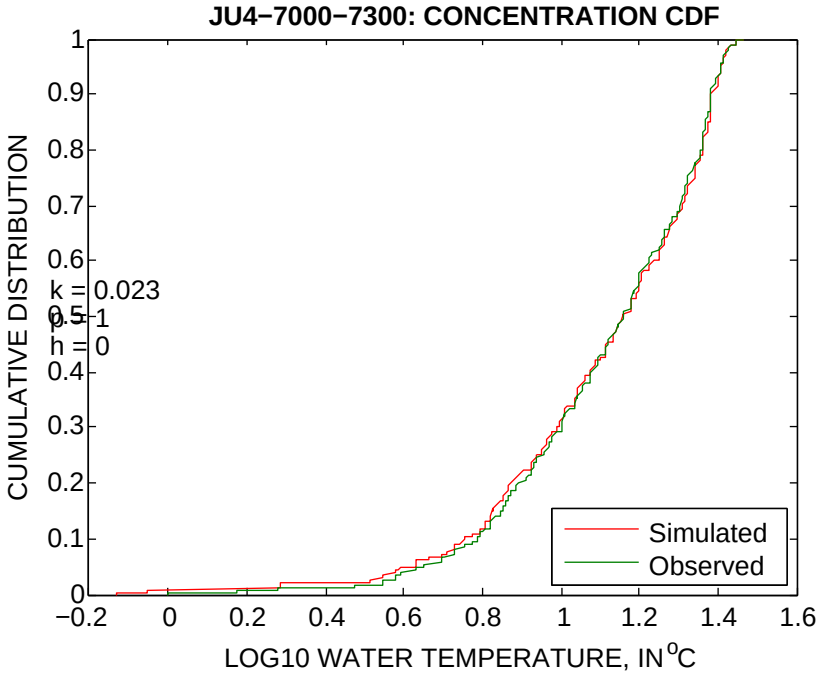
n	260	260
	observe	**simulate**
min	1	0.098081
	0	-1.00842
mean	14.9542	14.7797
	1.11357	1.06678
media	14.45	14.4115
	1.15987	1.15871
max	29.2	30.107
	1.46538	1.47867
varian	48.83	61.0953
	0.0641382	0.141473
JB	0.004471	0.005258
	0.001	0.001
	ra	log
%	-1.16712	-4.2016
err.va	6.03209	0.0344106
rel.std.err	0.123532	0.536507
mod.eff	0.876468	0.463493

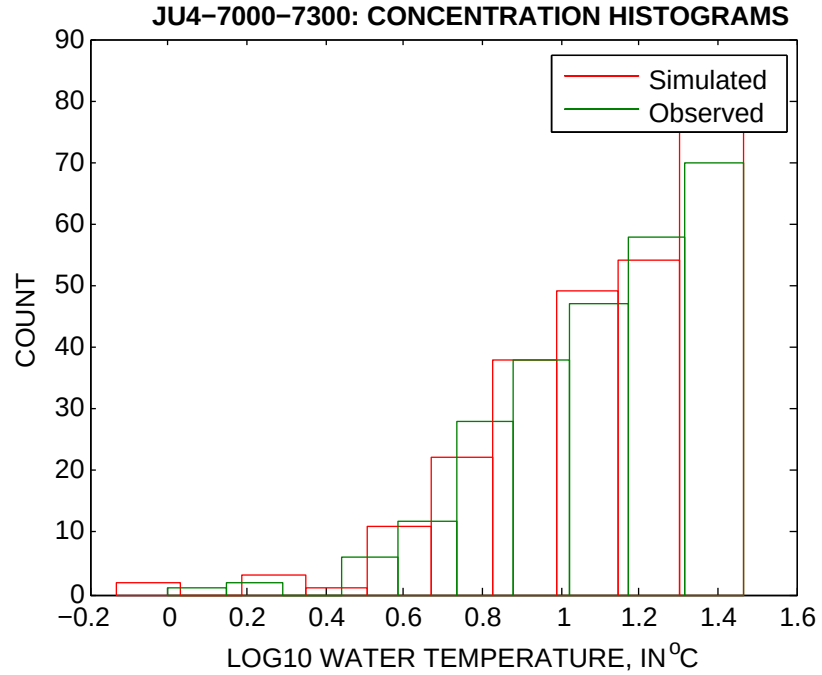
VERSION 2.1

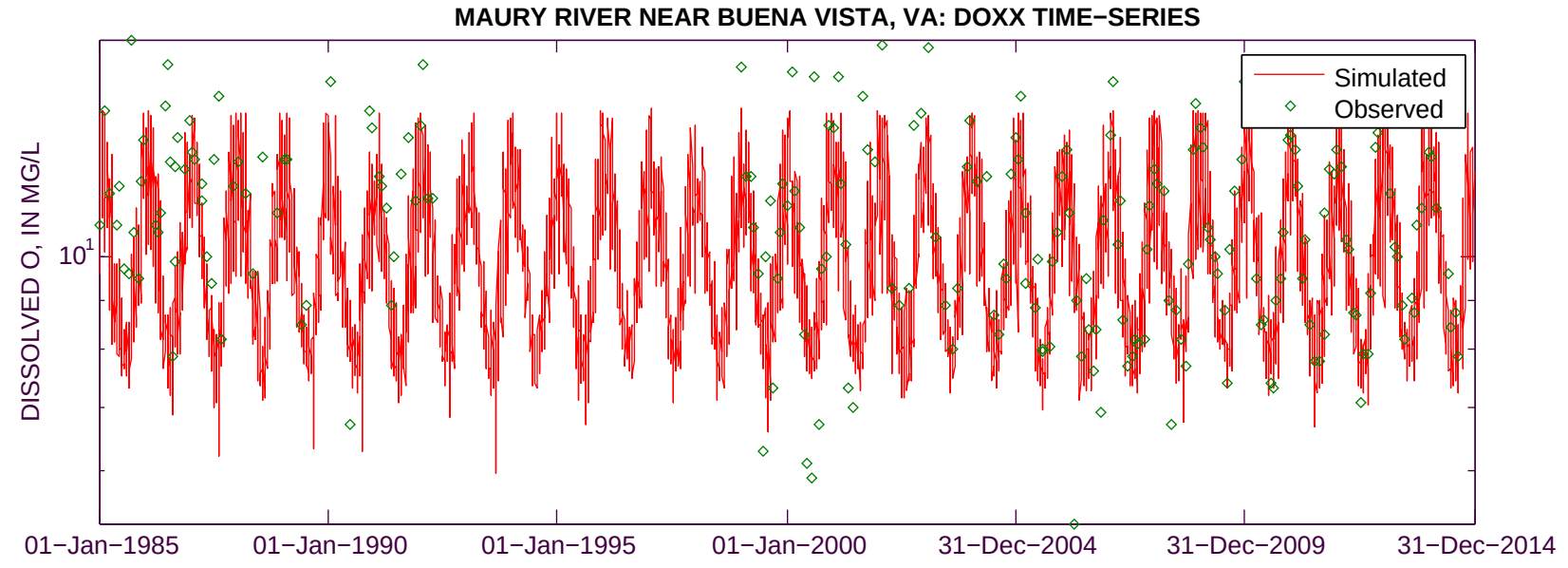
ALL DATA
LOG10

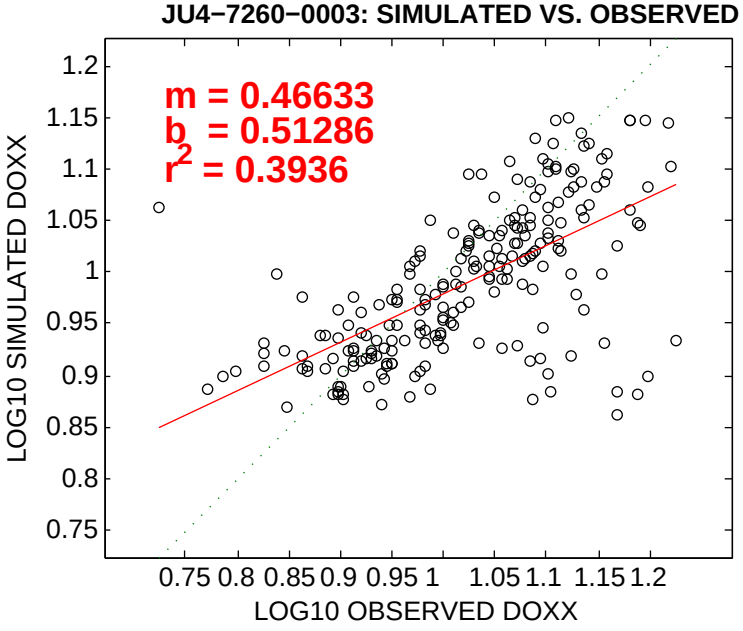


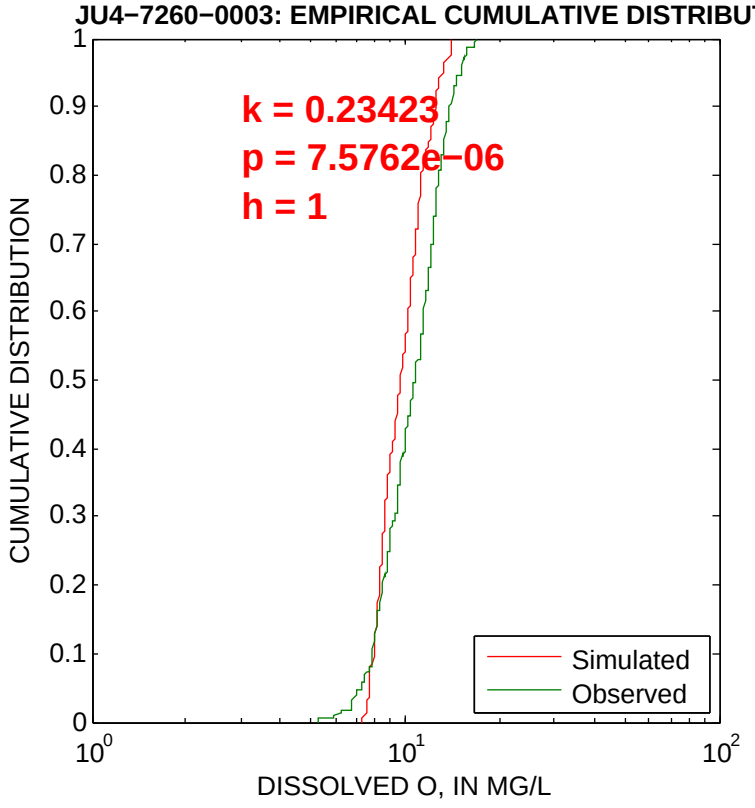












DATA SELECTION

scenario	file
P620171001WQ	DOXX.calib

plot: DOXX - dissolved oxygen

Dates: 1/1/1985 – 12/31/201

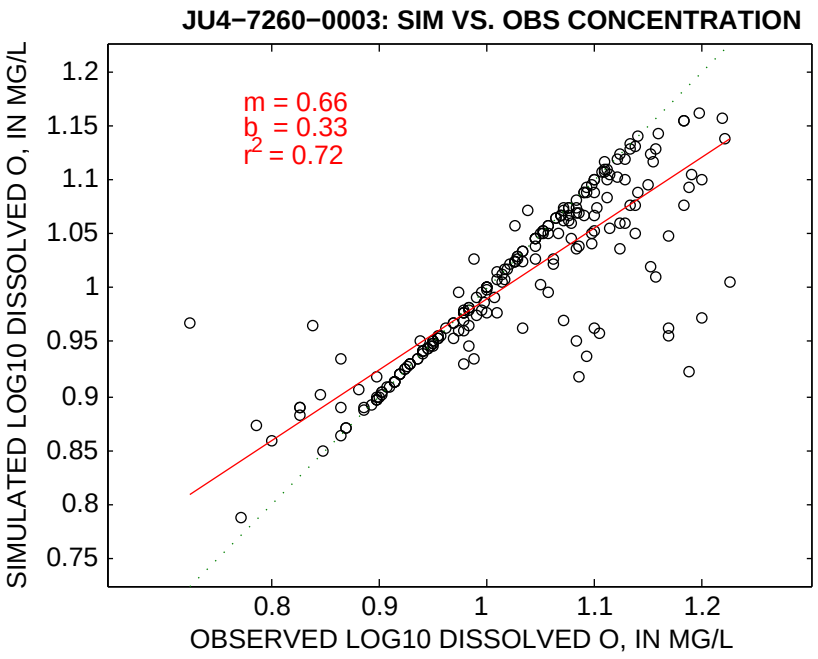
Drive	Directory	Observed
N/A	model	OBS20161101

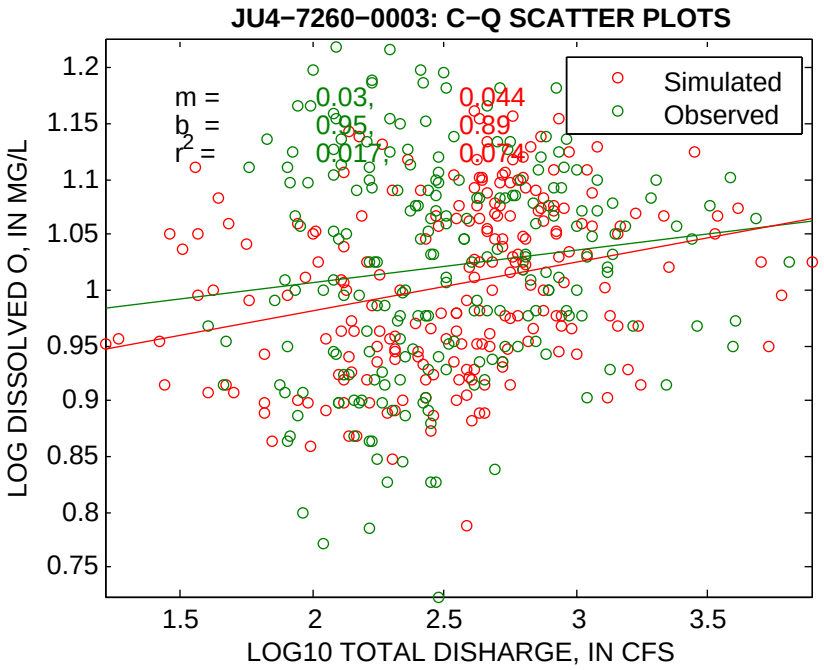
STATISTICS

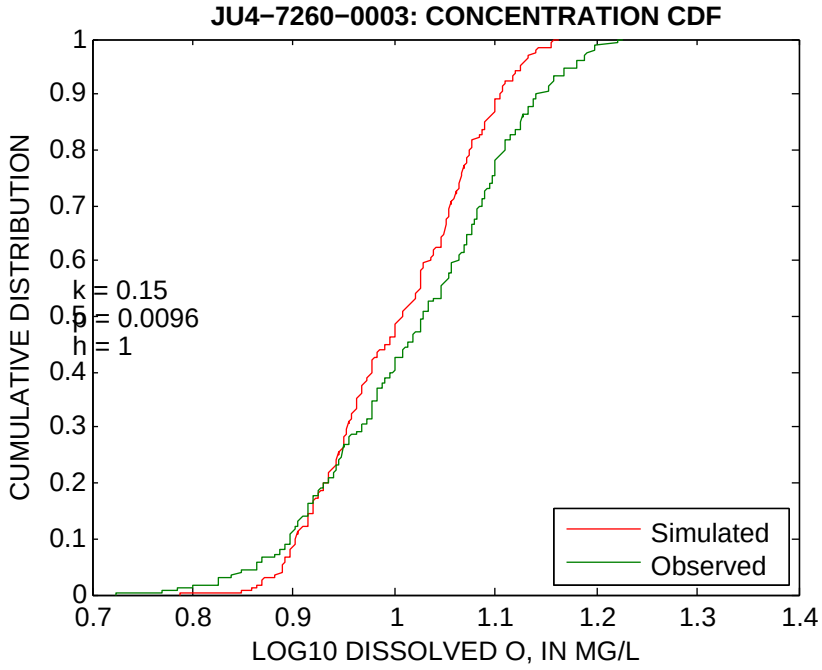
	n	222	222
		observe	simulate
min		5.3	7.2661
		0.724276	0.861301
mean		10.7992	9.90668
		1.02252	0.989696
media		10.7	9.6644
		1.02938	0.985175
max		16.8	14.094
		1.22531	1.14903
varian		5.70666	2.92904
		0.00969797	0.00535819
JB		0.074762	0.005473
		0.090306	0.012359
		ra	log
%		-8.26498	-3.20998
err.va		4.26956	0.00709344
rel.std.err		0.748172	0.731436
mod.eff		0.251828	0.268564

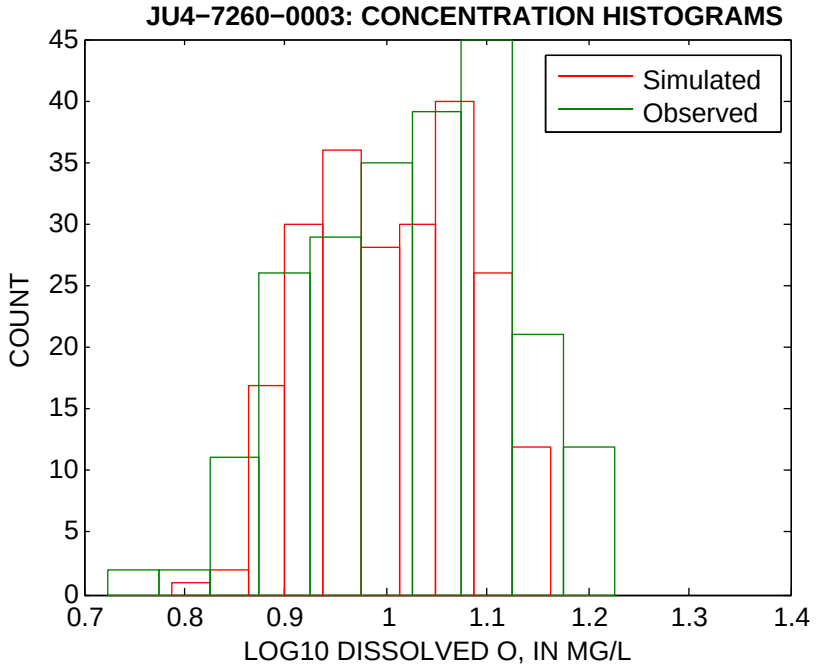
VERSION 2.1

ALL DATA
LOG10

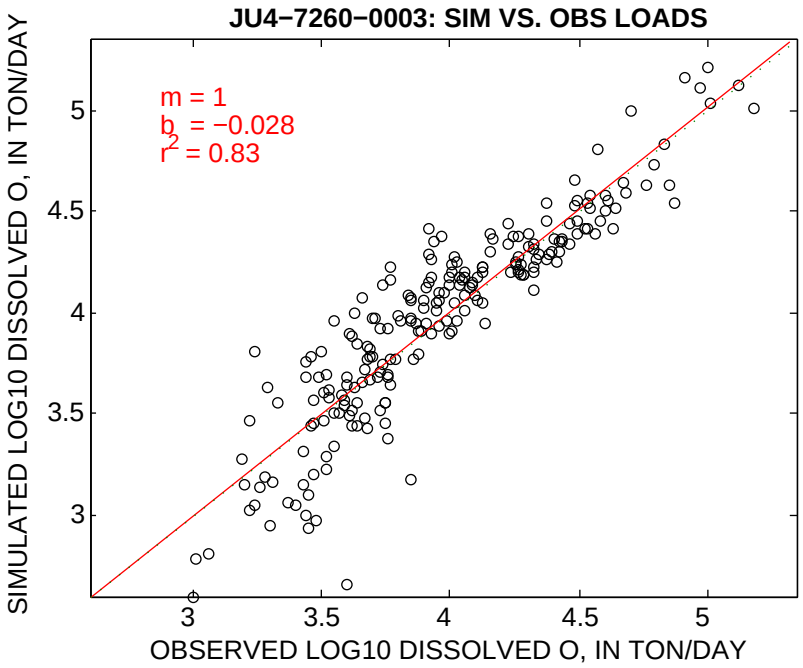




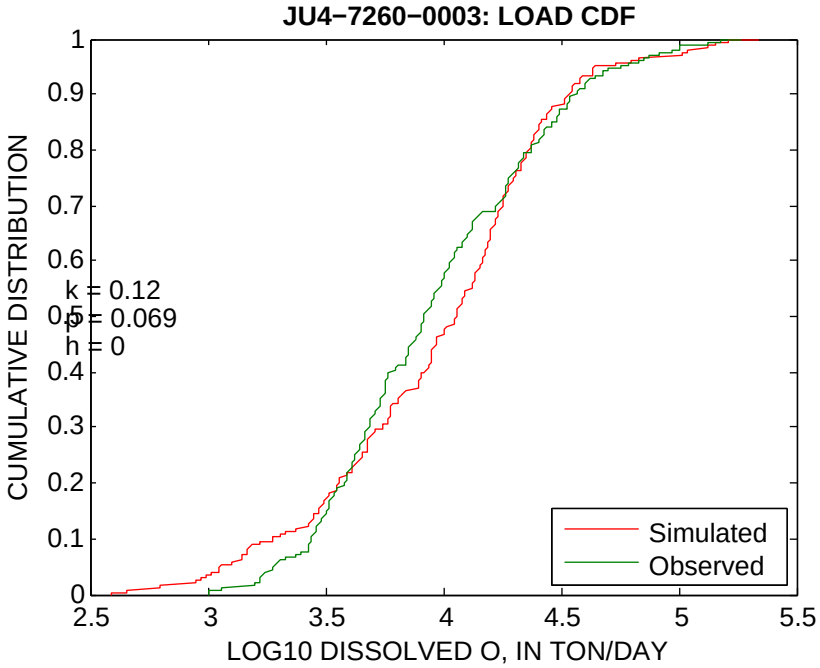


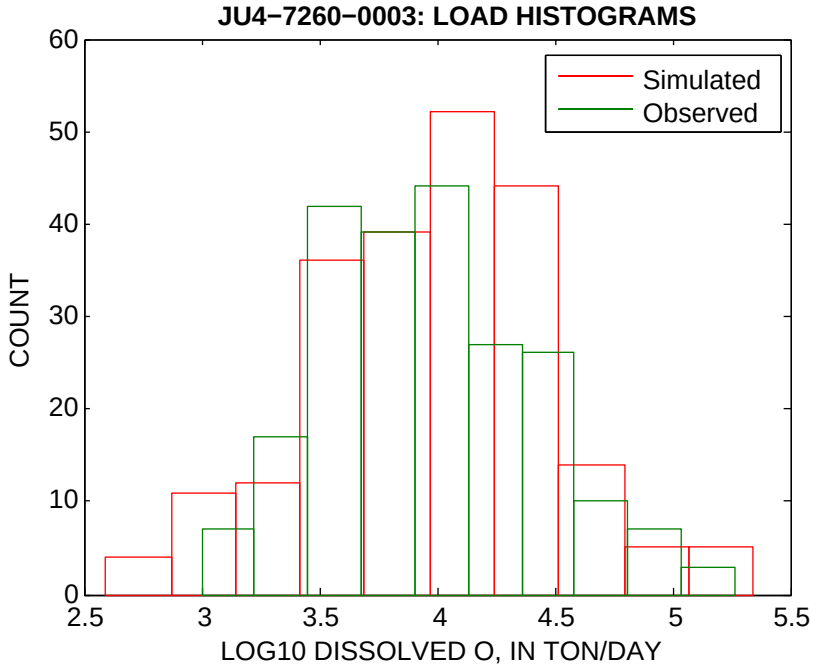


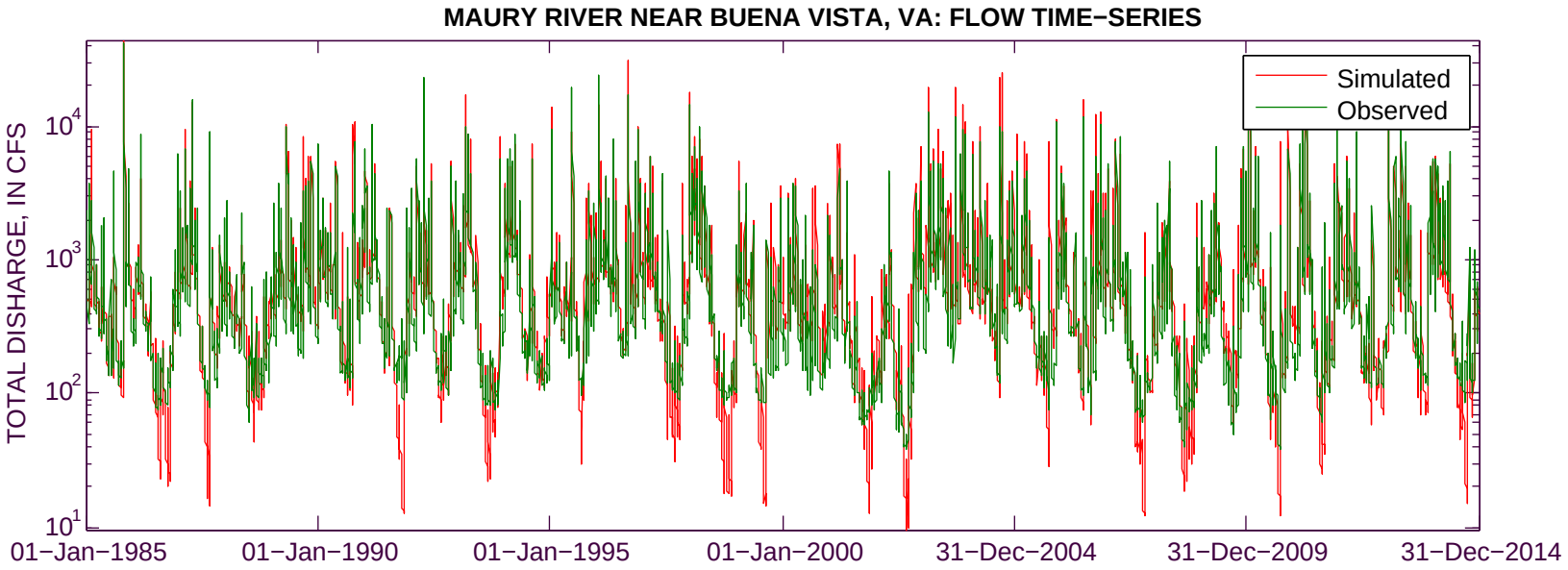
LOAD DATA
LOG10

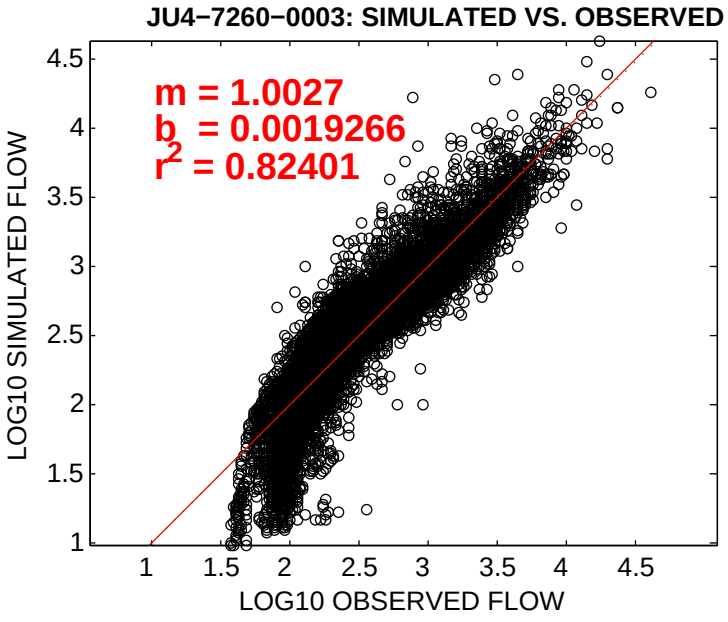


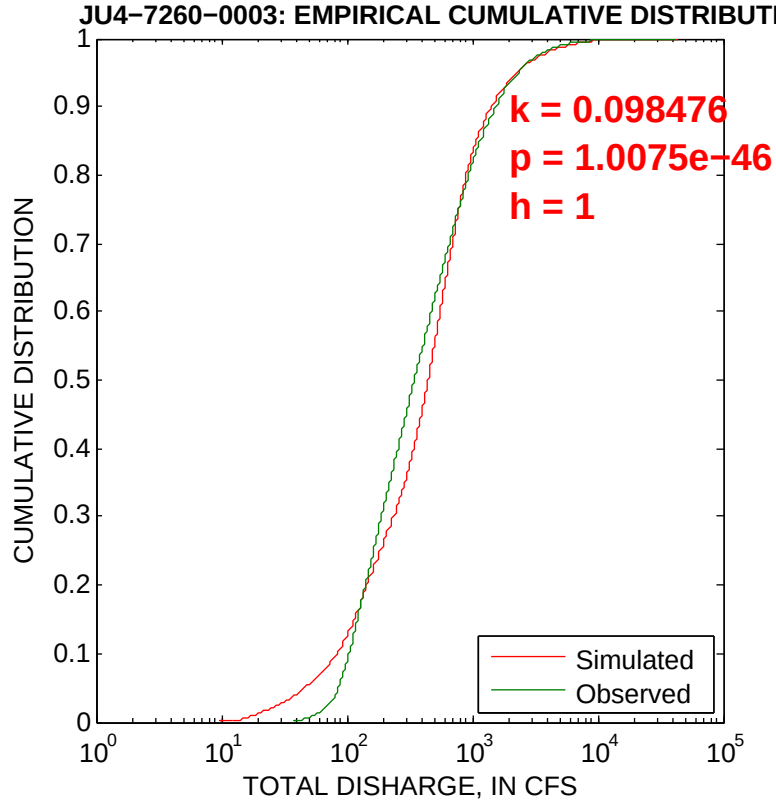












DATA SELECTION

scenario: P620171001WQ; file: FLOW.calib

plot: FLOW - total discharge

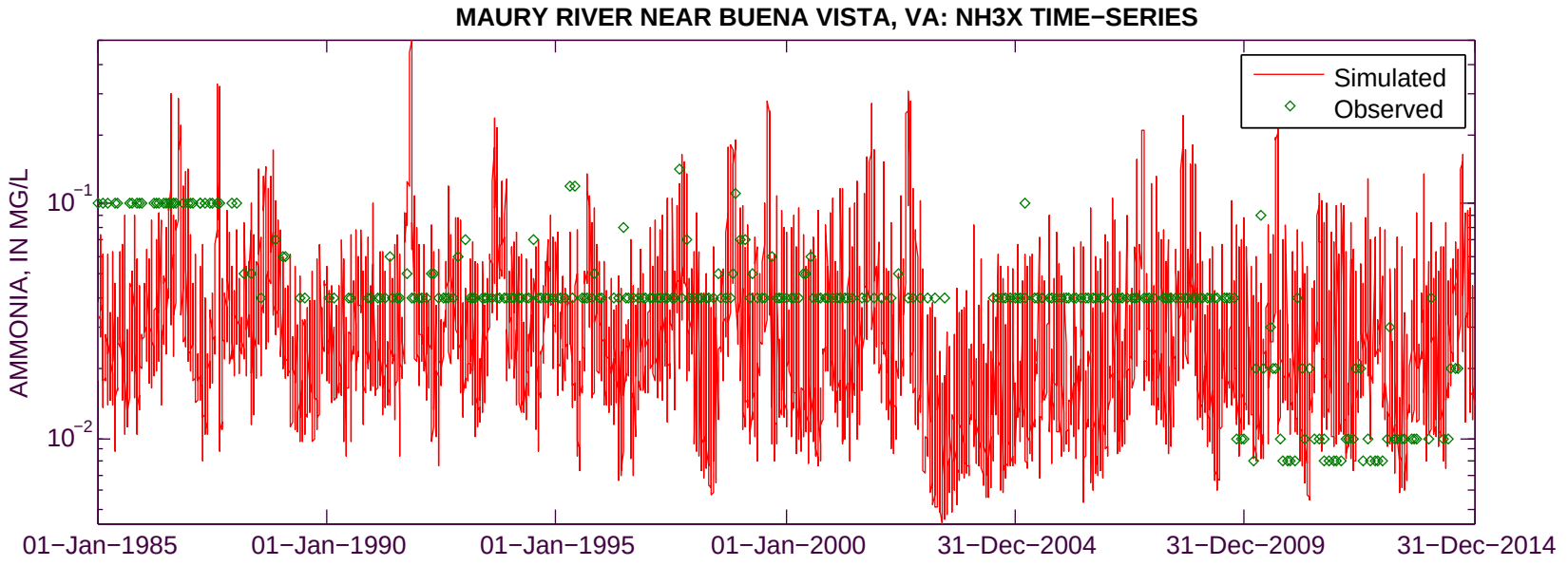
Dates: 1/1/1985 – 12/31/201

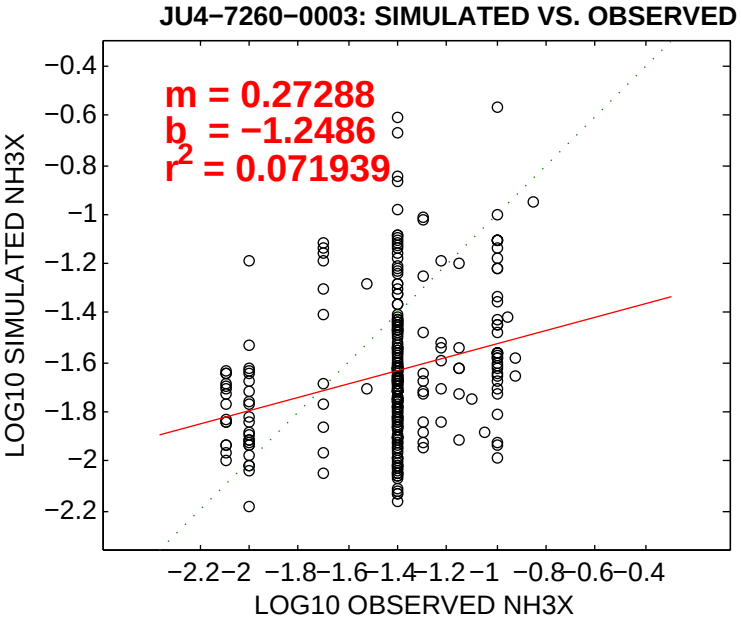
Drive: N/A; Directory: model; Observed: OBS20161101

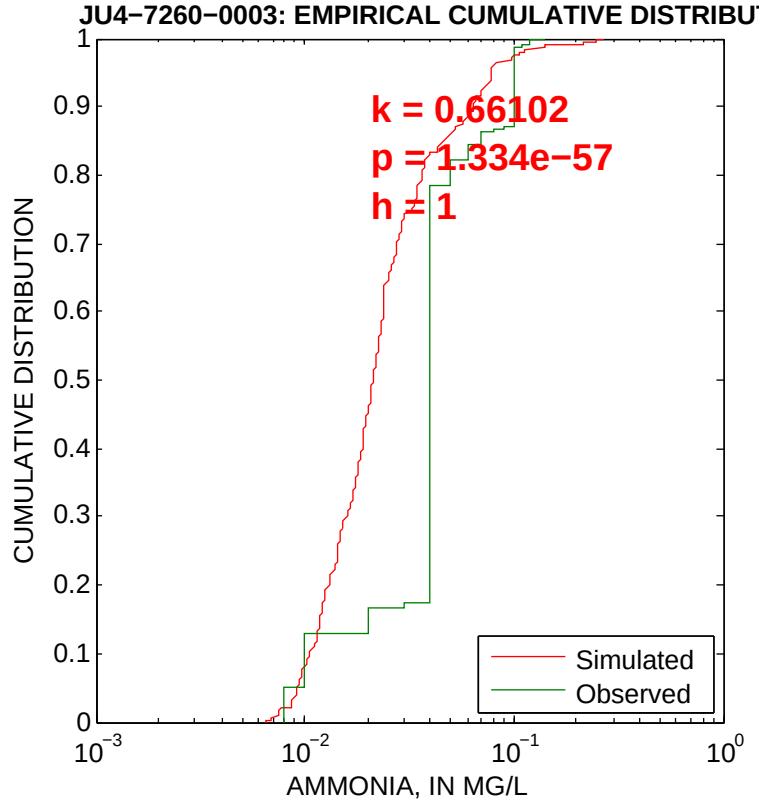
STATISTICS

		observe	simulate
n		10957	10957
min		38	9.5861
		1.57978	0.981642
mean		706.157	740.93
		2.57971	2.58864
media		347	448.44
		2.54033	2.6517
max		41200	44271
		4.6149	4.64612
varian		1.51948e+0	1.7979e+0
		0.207083	0.252677
JB		0.001	0.001
		0.001	0.001
		ra	log
%		4.92416	0.346205
err.va		636415	0.0445493
rel.std.err		0.418837	0.215128
mod.eff		0.581163	0.784872

VERSION 2.1







DATA SELECTION

scenario	file
P620171001WQ	NH3X.calib

plot: NH3X - ammonia

Dates: 1/1/1985 – 12/31/201

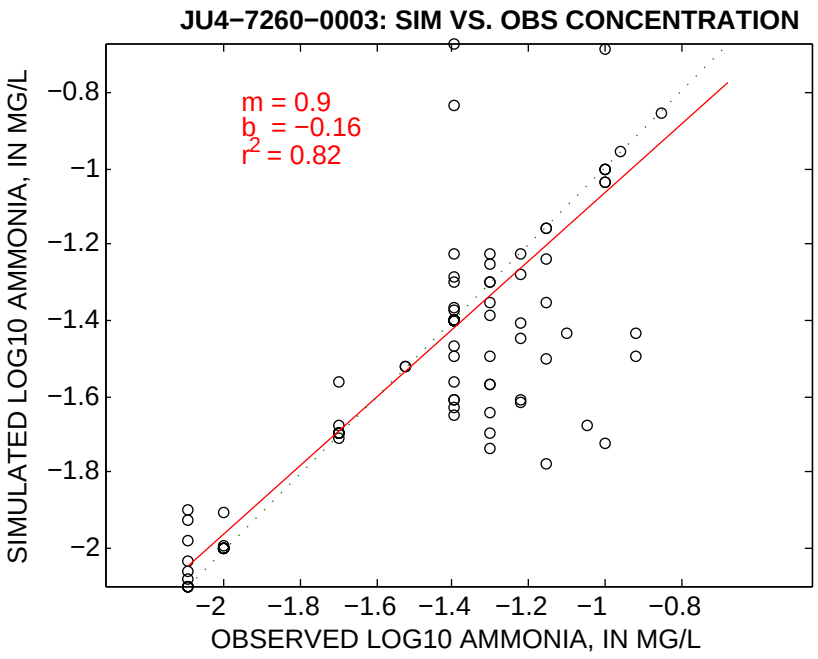
Drive	Directory	Observed
N/A	model	OBS20161101

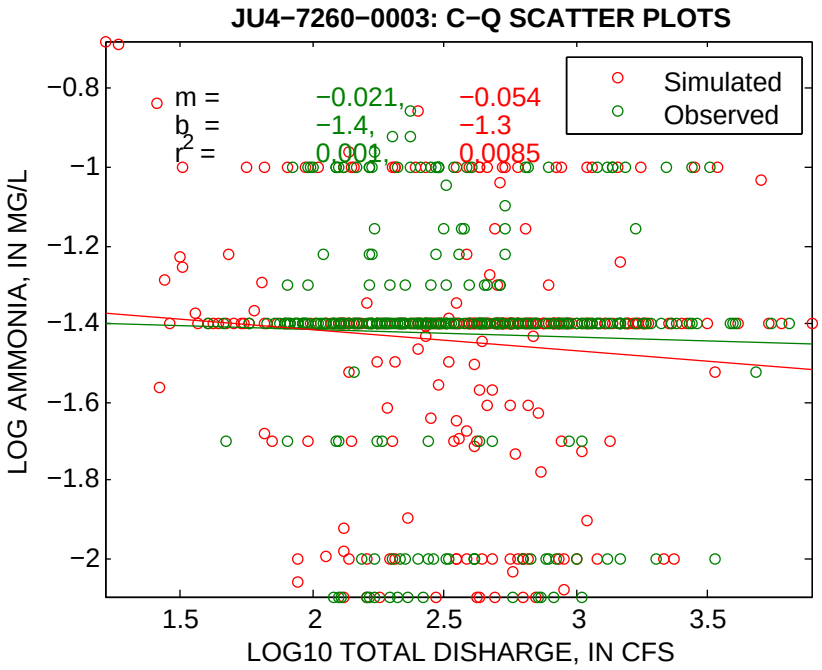
STATISTICS

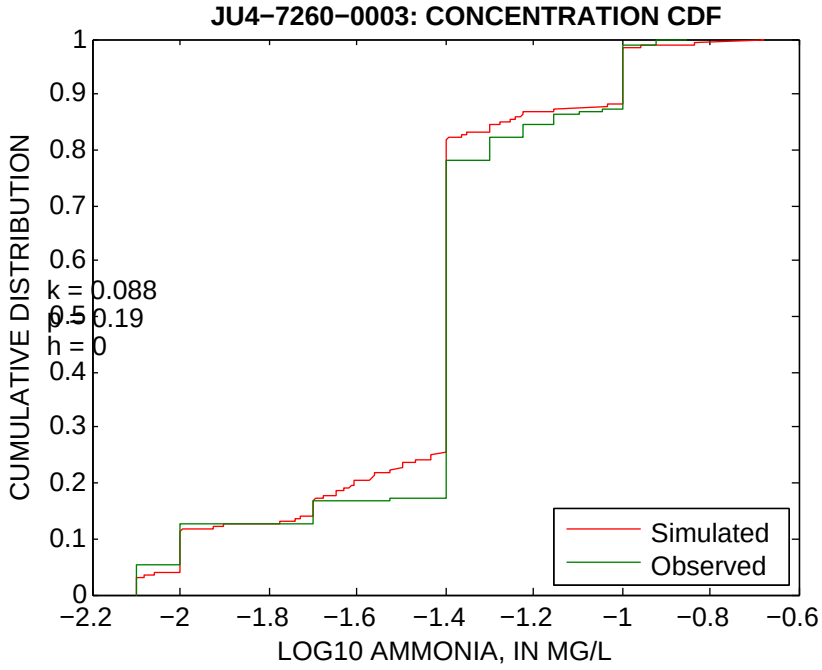
		observe	simulate
n		295	295
min		0.008	0.0065561
		-2.09691	-2.18335
mean		0.0449831	0.0301039
		-1.42538	-1.63754
media		0.04	0.02124
		-1.39794	-1.67285
max		0.14	0.26953
		-0.853872	-0.569393
varian		0.00066848	0.00094416
		0.0805017	0.0833241
JB		0.001	0.001
		0.001	0.001
		ra	log
%		-33.0773	14.8844
err.va		0.00150256	0.165057
rel.std.err		2.2477	2.05035
mod.eff		-1.2477	-1.05035

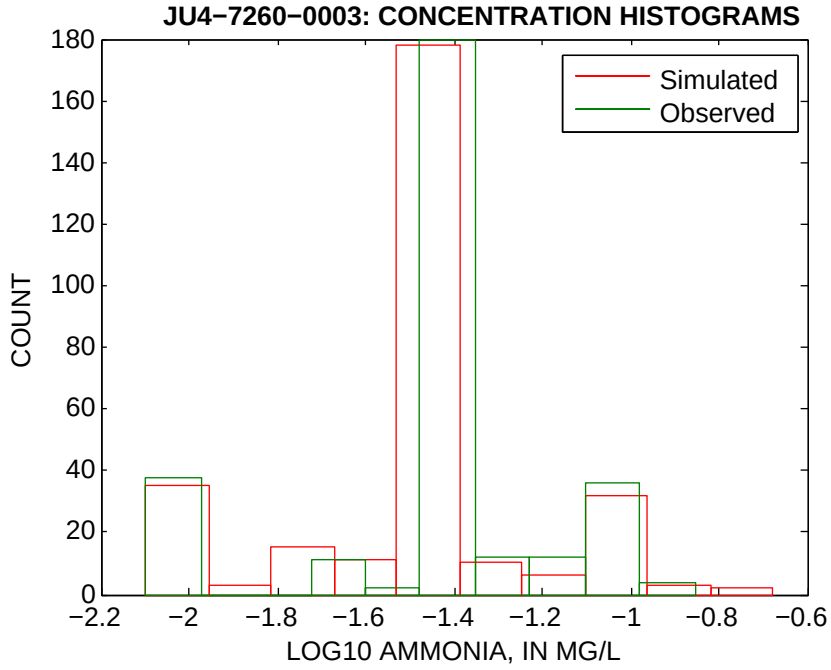
VERSION 2.1

ALL DATA
LOG10

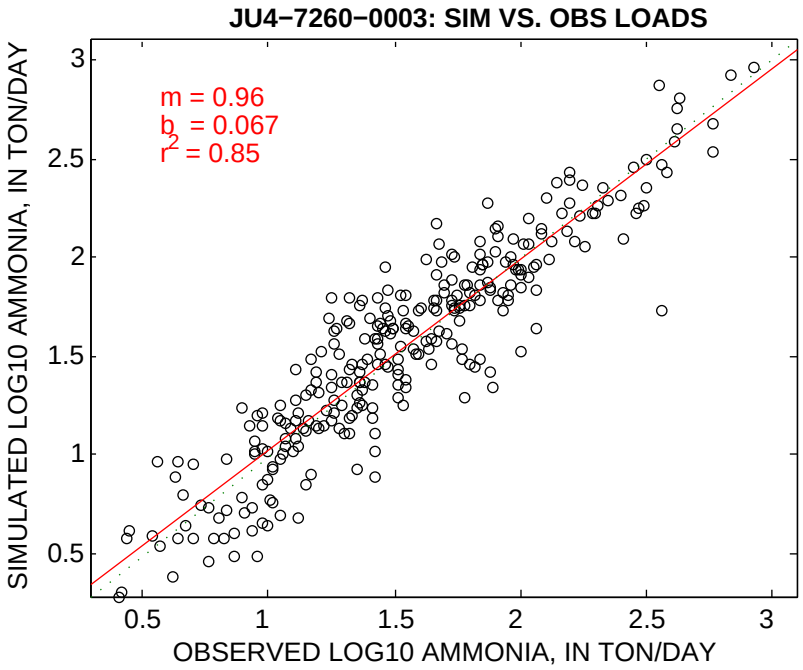


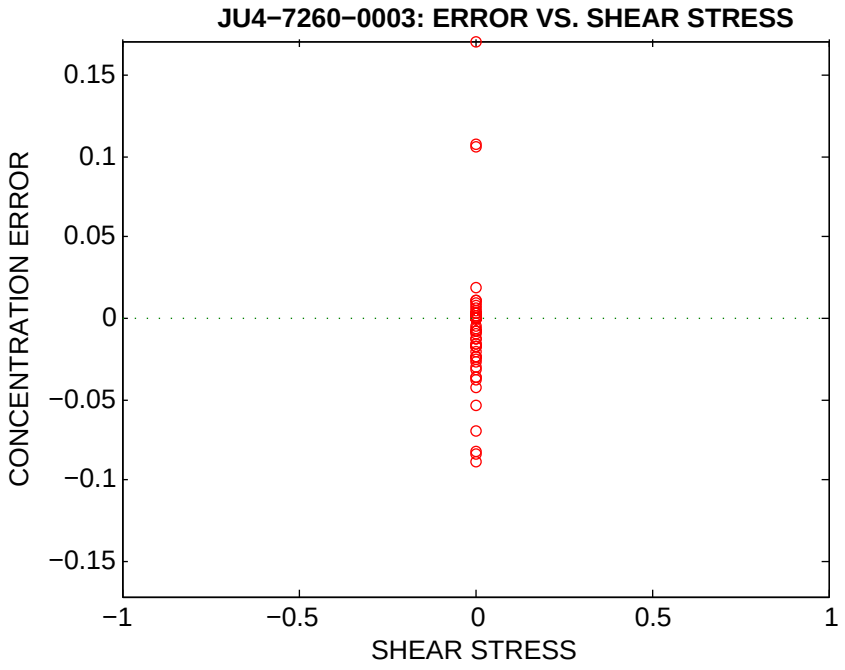


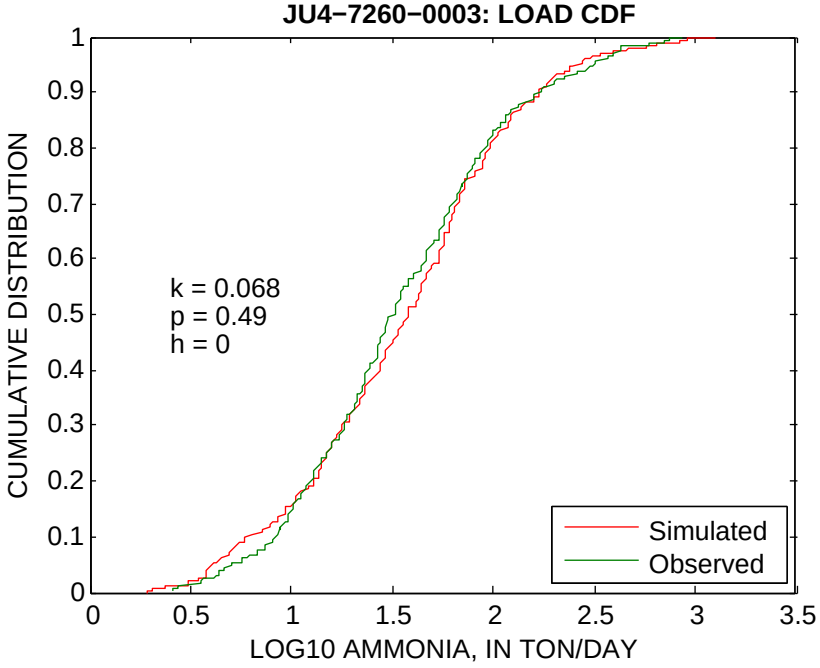


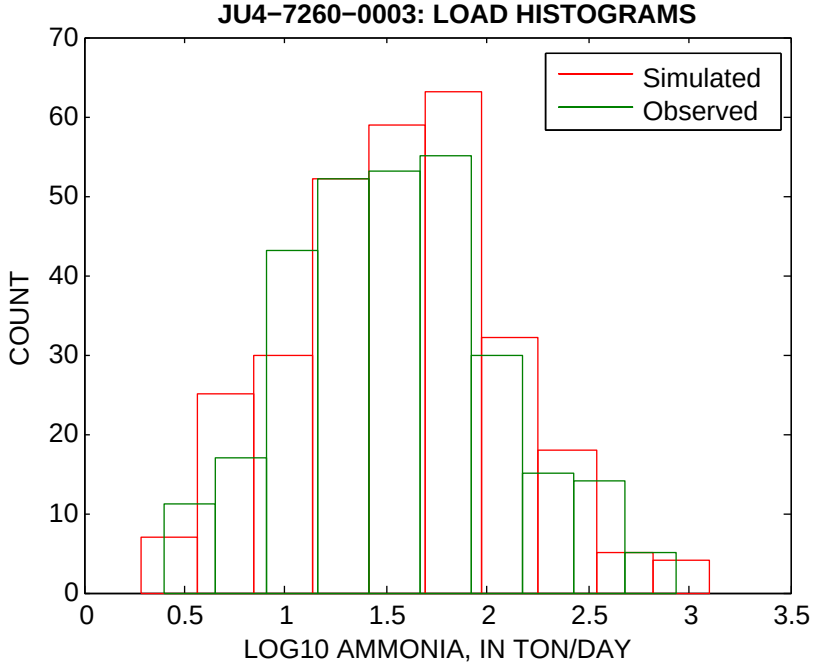


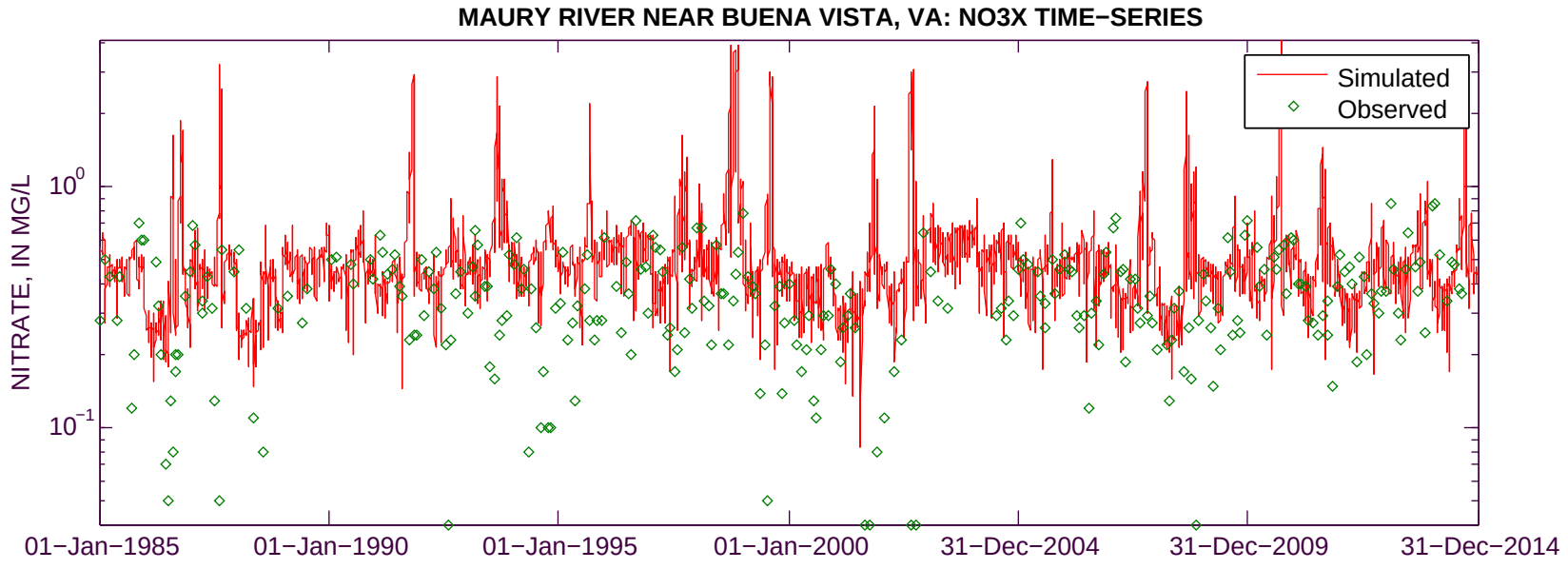
LOAD DATA
LOG10

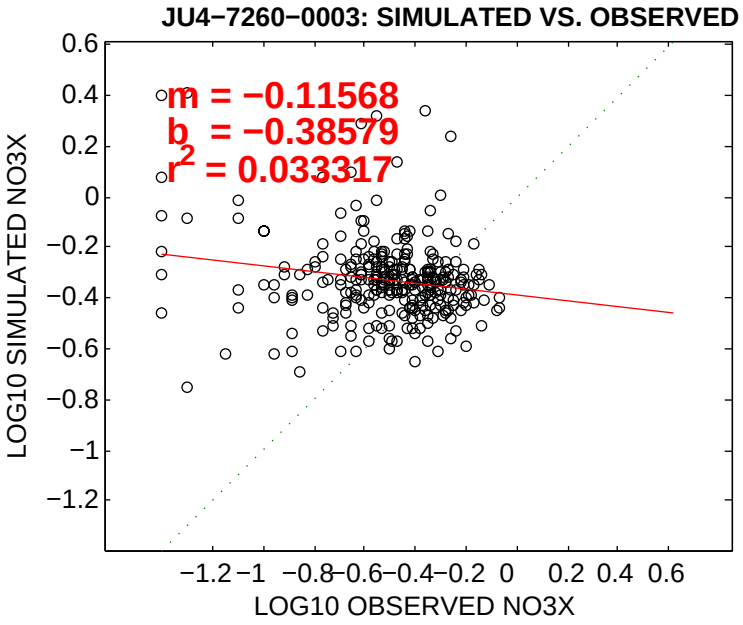


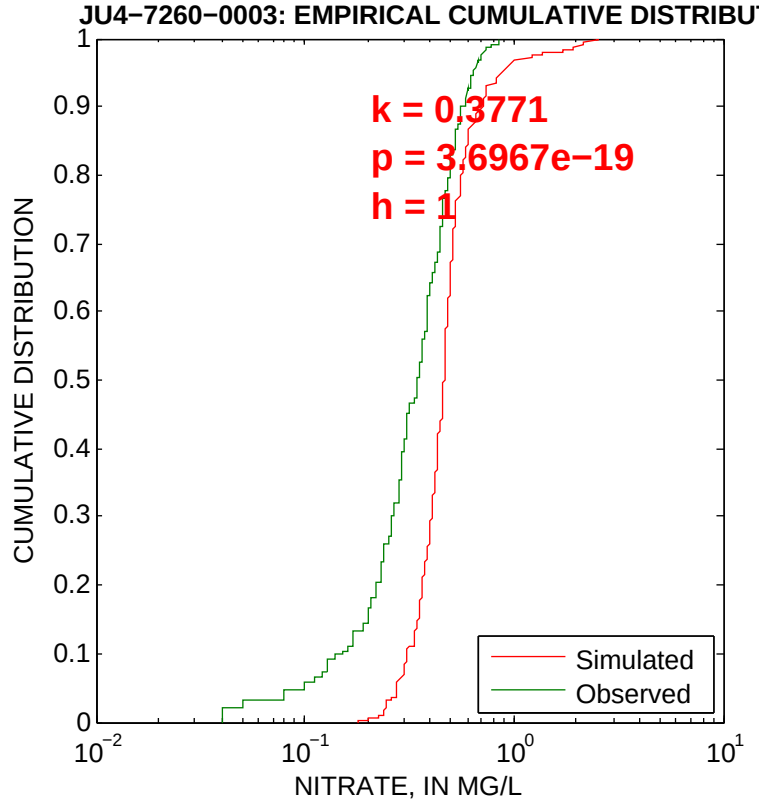












DATA SELECTION

scenario	file
P620171001WQ	NO3X.calib

plot: NO3X - nitrate

Dates: 1/1/1985 – 12/31/201

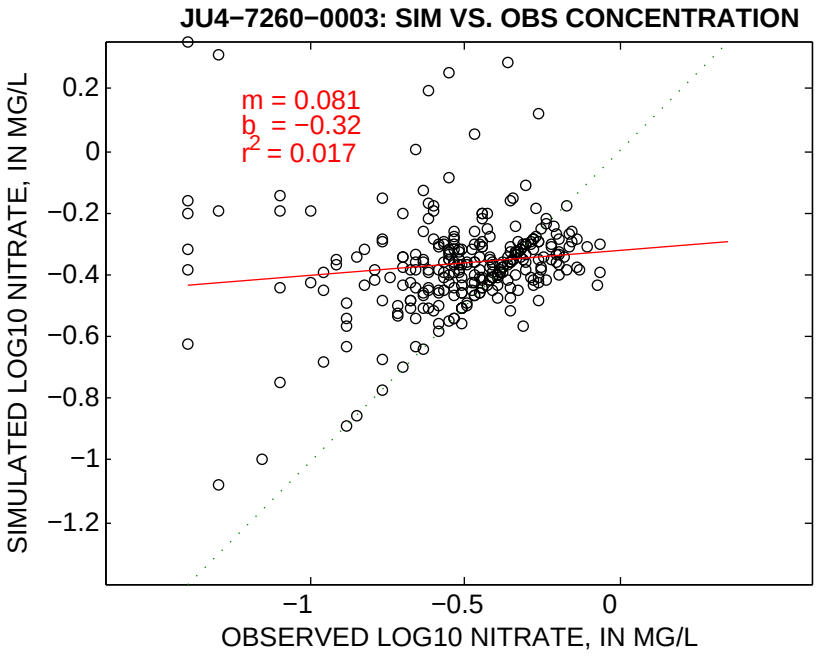
Drive	Directory	Observed
N/A	model	OBS20161101

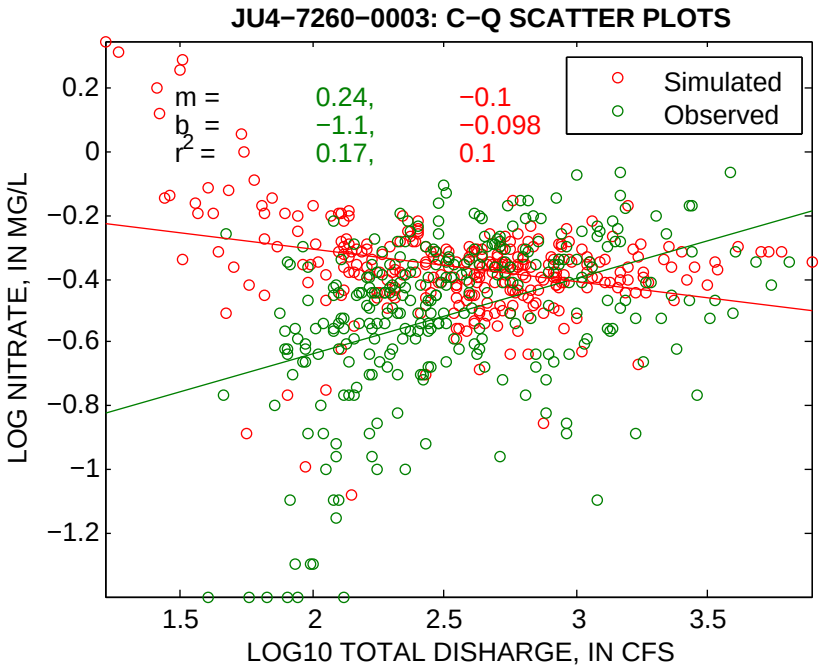
STATISTICS

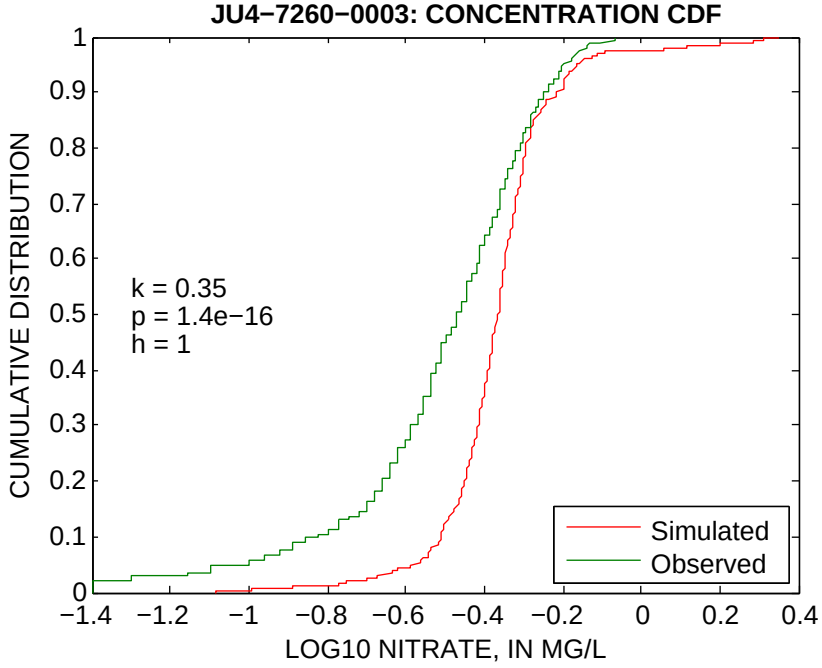
	n	297	297
		observe	simulate
min		0.04	0.17825
		-1.39794	-0.74897
mean		0.355791	0.513194
		-0.508382	-0.326982
media		0.34	0.46292
		-0.468521	-0.334494
max		0.86	2.5757
		-0.0655015	0.410895
varian		0.0267576	0.0844786
		0.0651283	0.0261595
JB		0.023122	0.001
		0.001	0.001
		ra	log
%		44.2401	-35.6819
err.va		0.153083	0.139373
rel.std.err		5.72112	2.13998
mod.eff		-4.72112	-1.13998

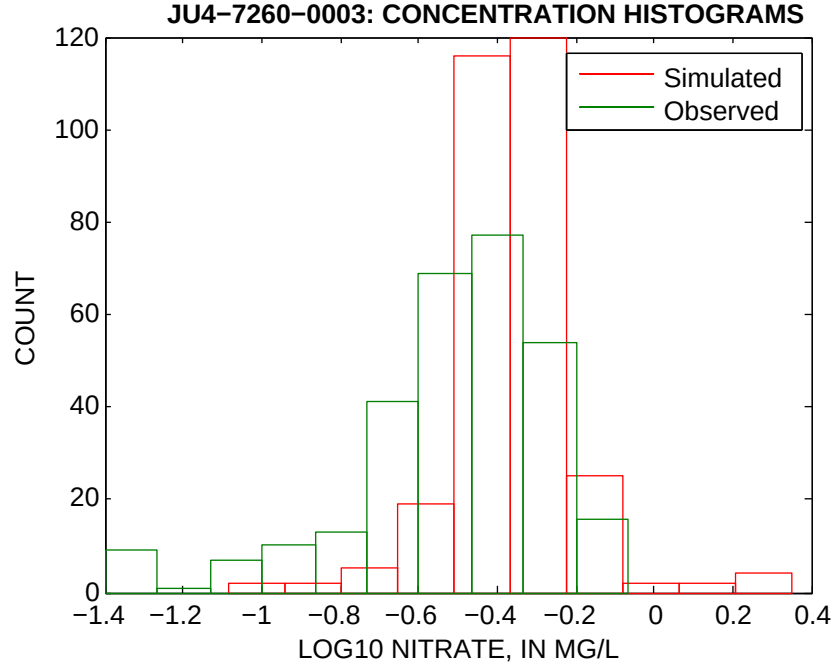
VERSION 2.1

ALL DATA
LOG10

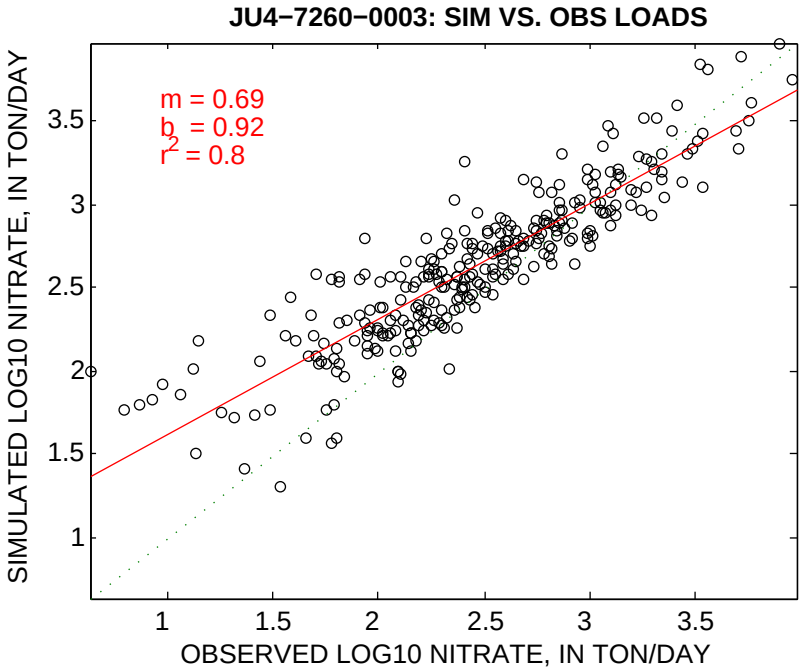


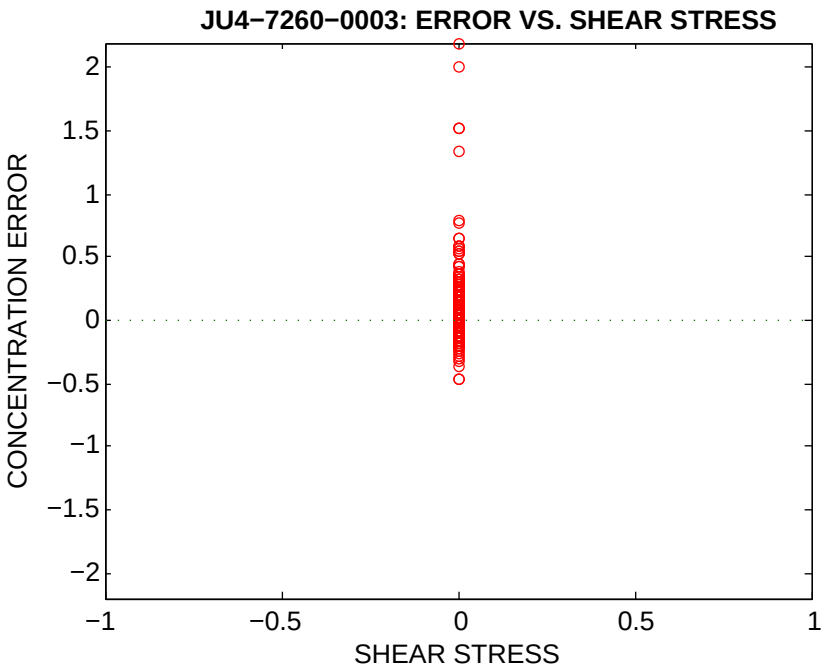


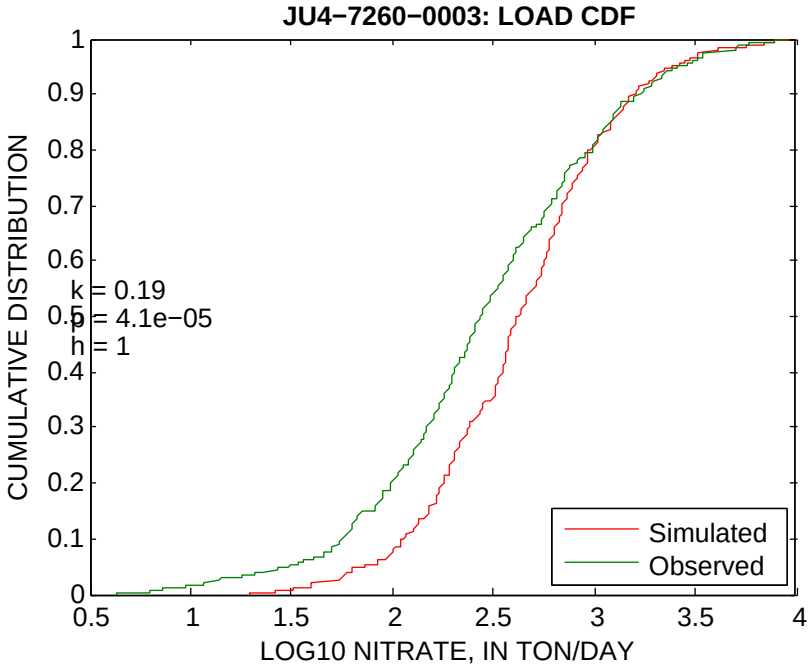


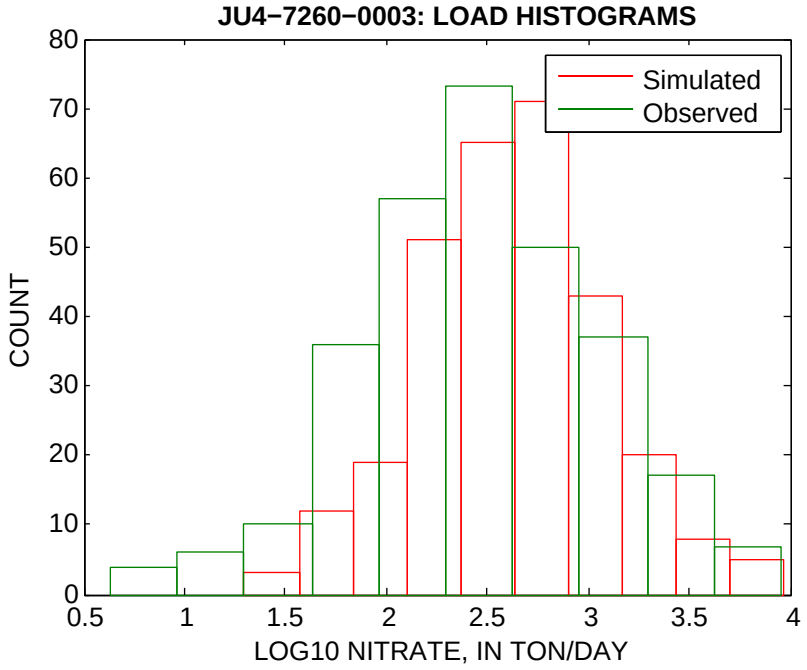


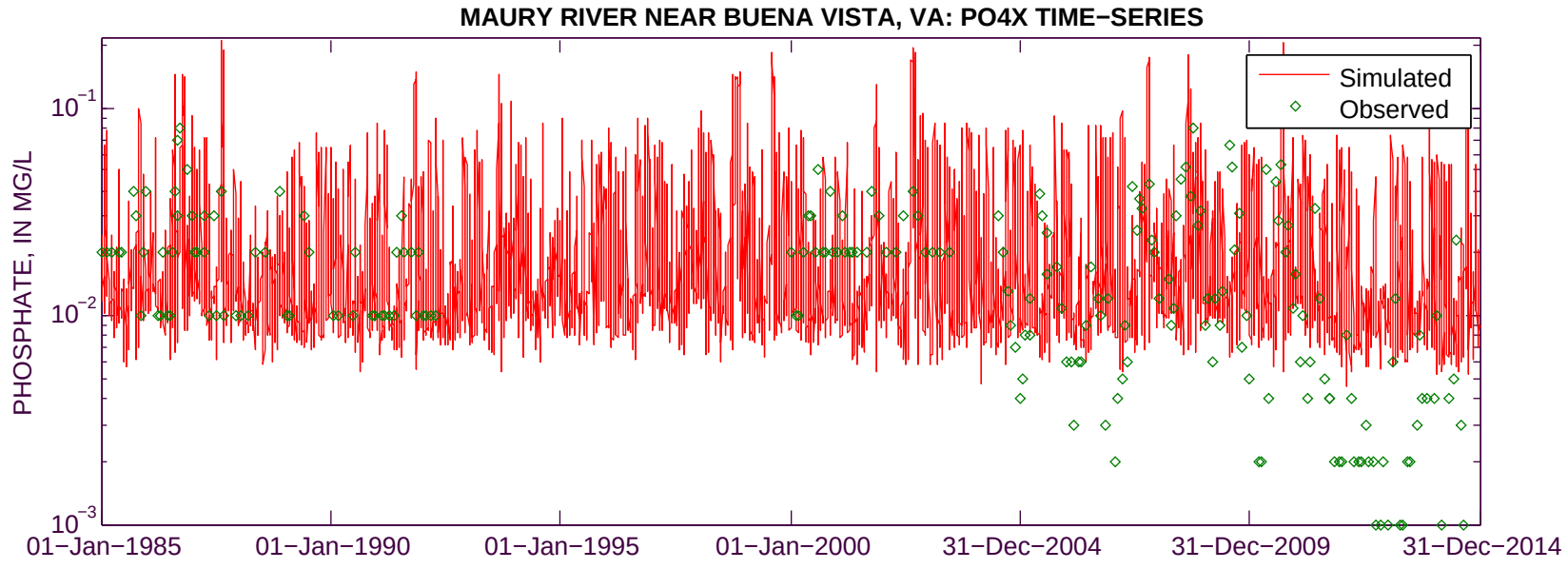
LOAD DATA
LOG10

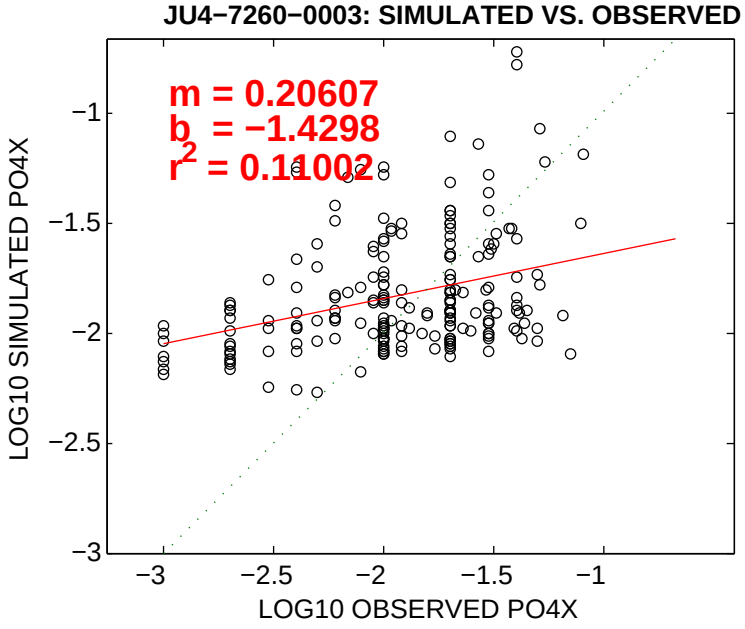


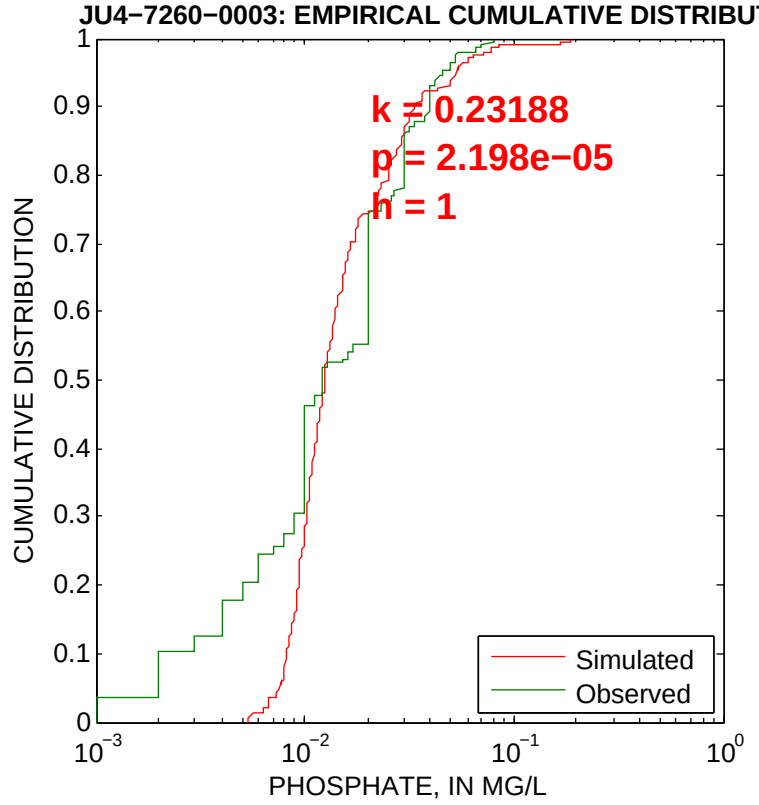












DATA SELECTION

scenario	file
P620171001WQ	PO4X.calib

plot: PO4X - phosphate

Dates: 1/1/1985 – 12/31/201

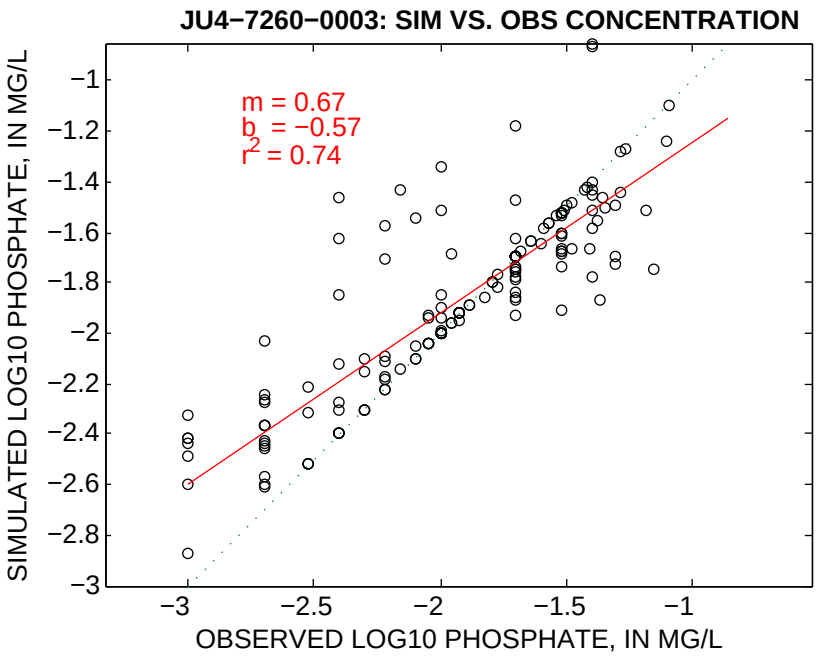
Drive	Directory	Observed
N/A	model	OBS20161101

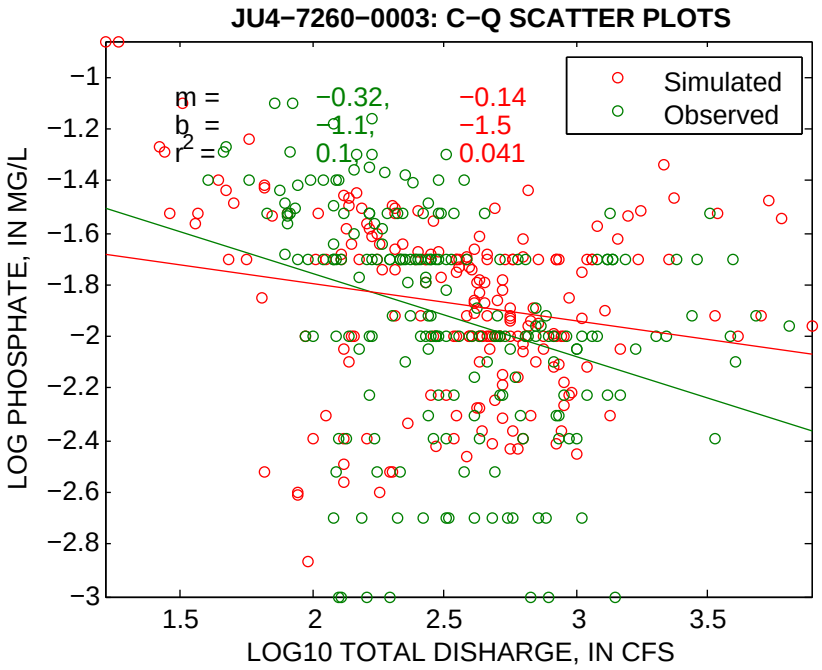
STATISTICS

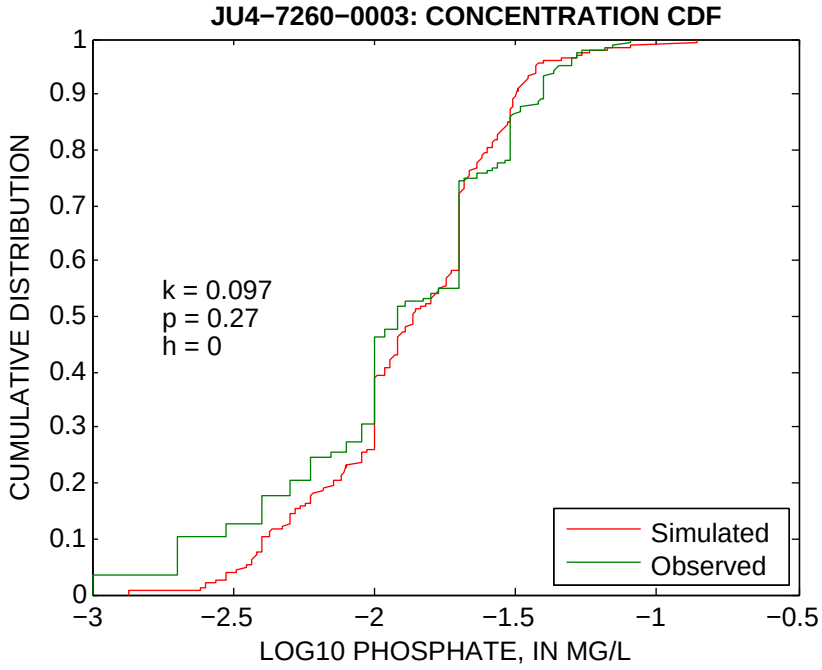
	n	observe	simulate
		207	207
min		0.001	0.0053752
		-3	-2.26961
mean		0.0176812	0.0191529
		-1.92508	-1.82655
media		0.012	0.012478
		-1.92082	-1.90386
max		0.08	0.18575
		-1.09691	-0.731071
varian		0.00022048	0.00042430
		0.185629	0.0716452
JB		0.001	0.001
		0.007854	0.001
		ra	log
%		8.32374	-5.11856
err.va		0.00048051	0.190526
rel.std.err		2.17941	1.02638
mod.eff		-1.17941	-0.0263824

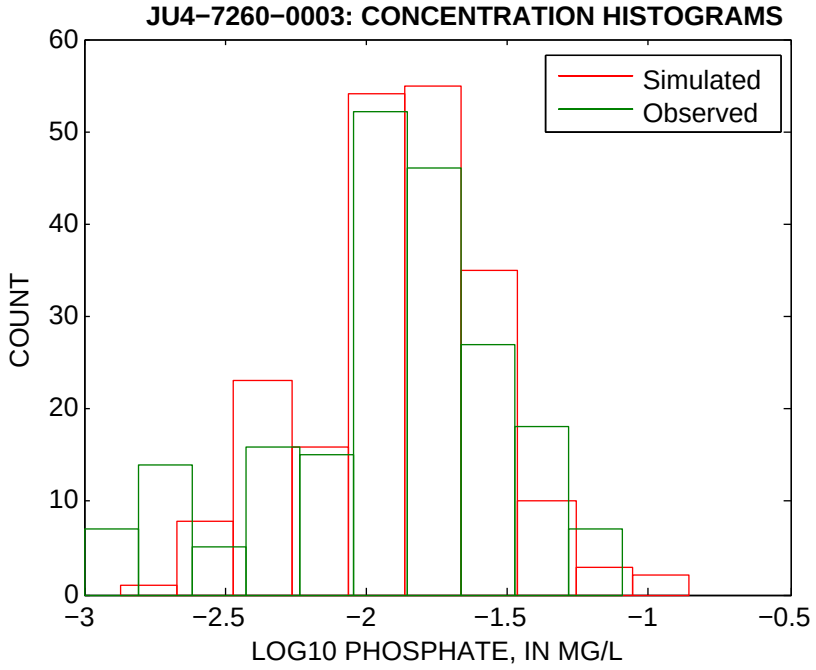
VERSION 2.1

ALL DATA
LOG10

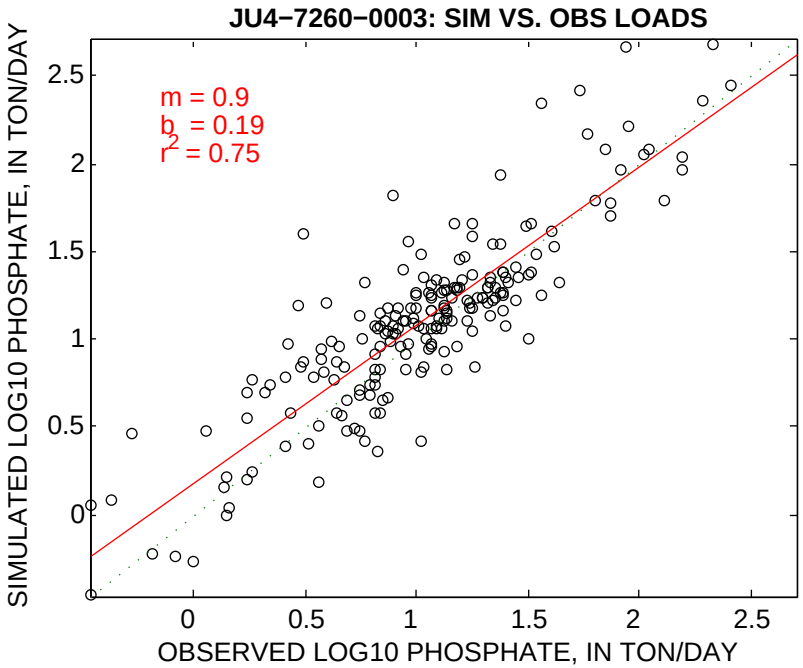




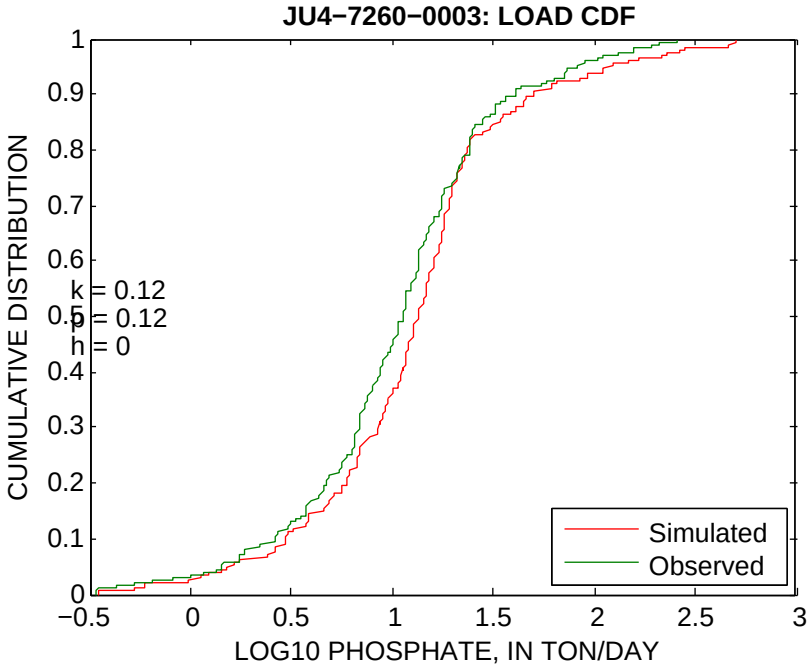


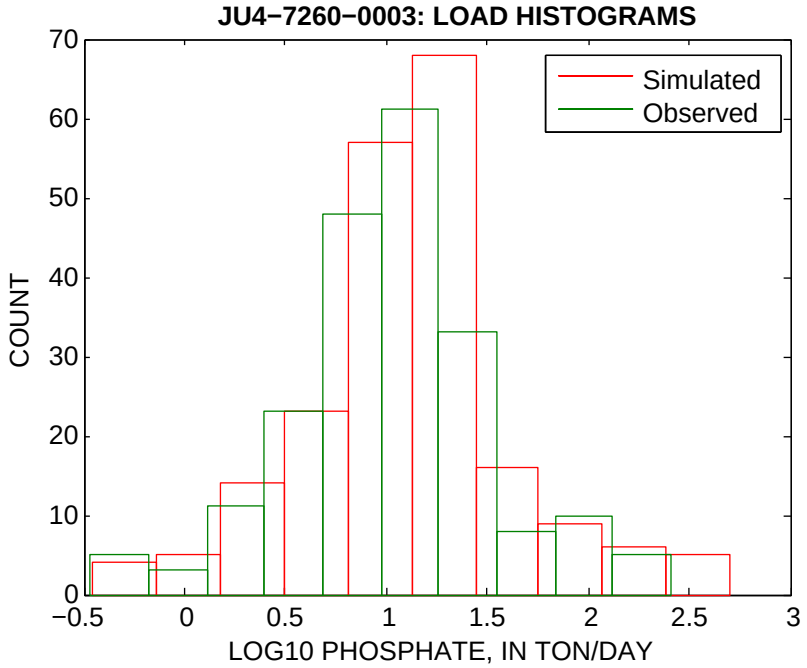


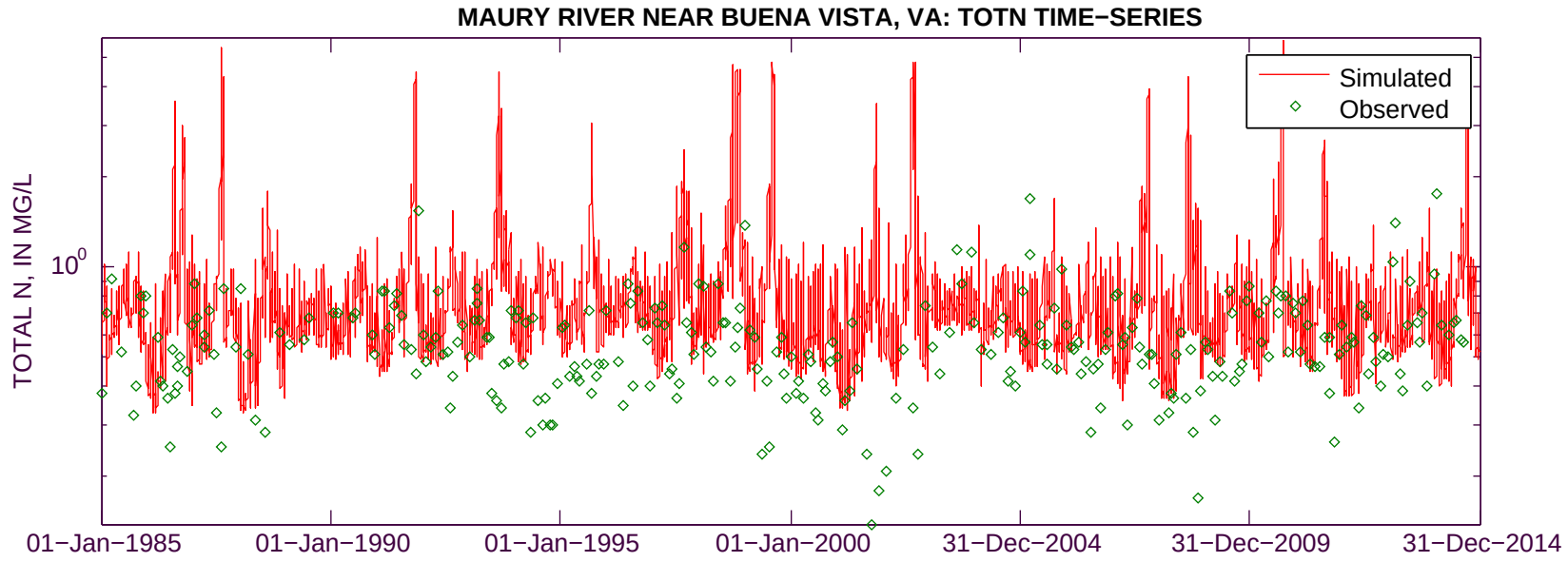
LOAD DATA
LOG10

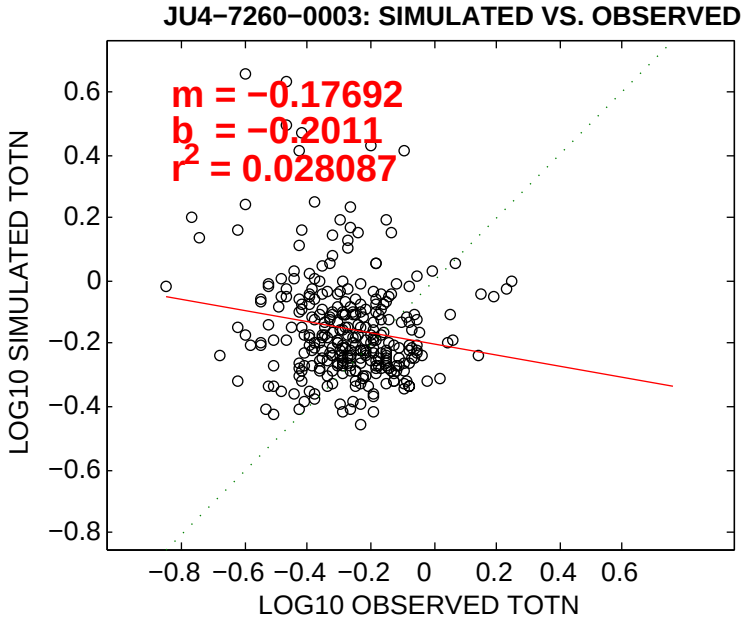


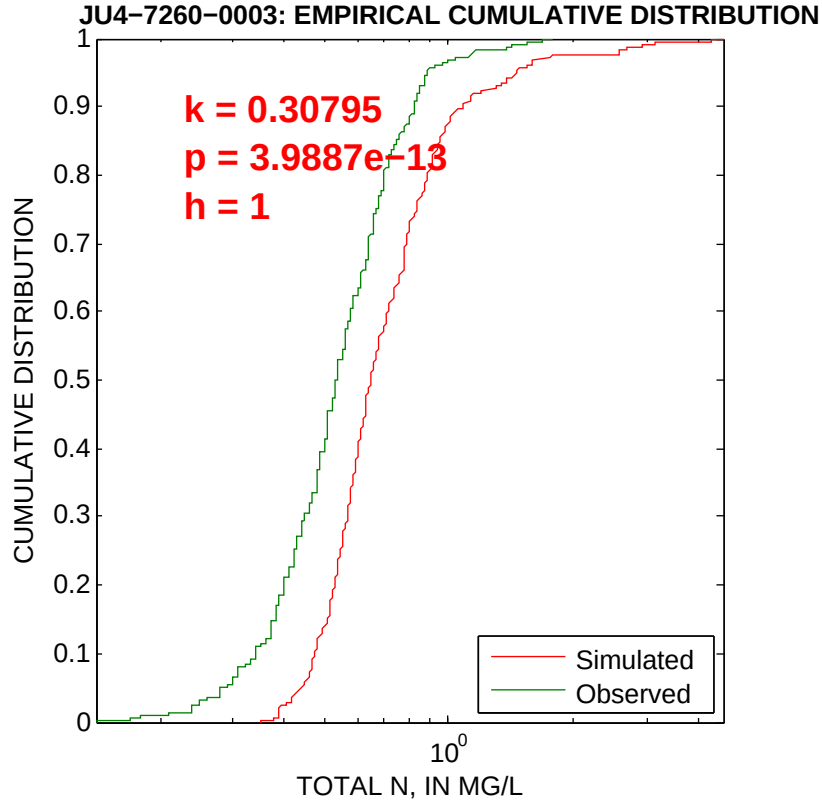












DATA SELECTION

scenario	file
P620171001WQ	TOTN.calib

plot: TOTN - total nitrogen

Dates: 1/1/1985 – 12/31/201

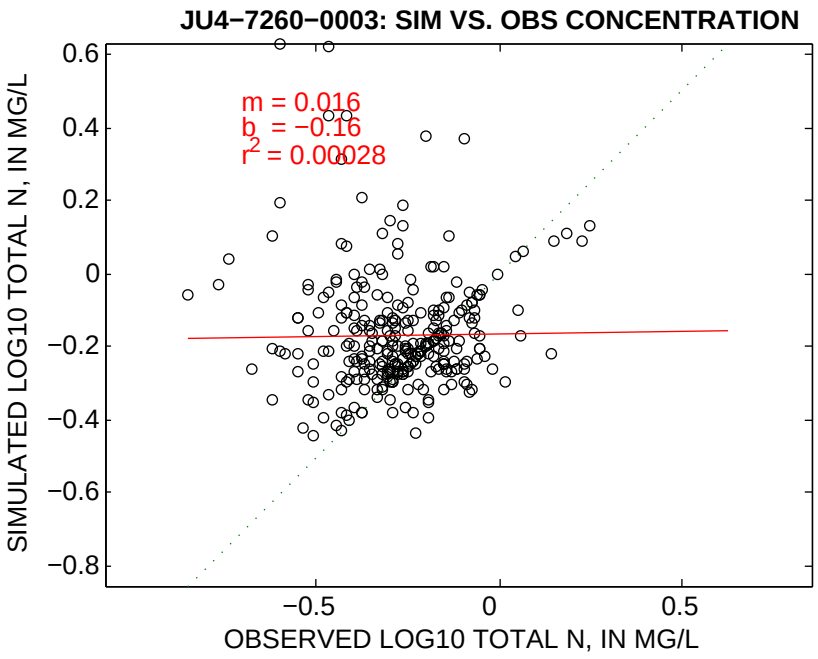
Drive	Directory	Observed
N/A	model	OBS20161101

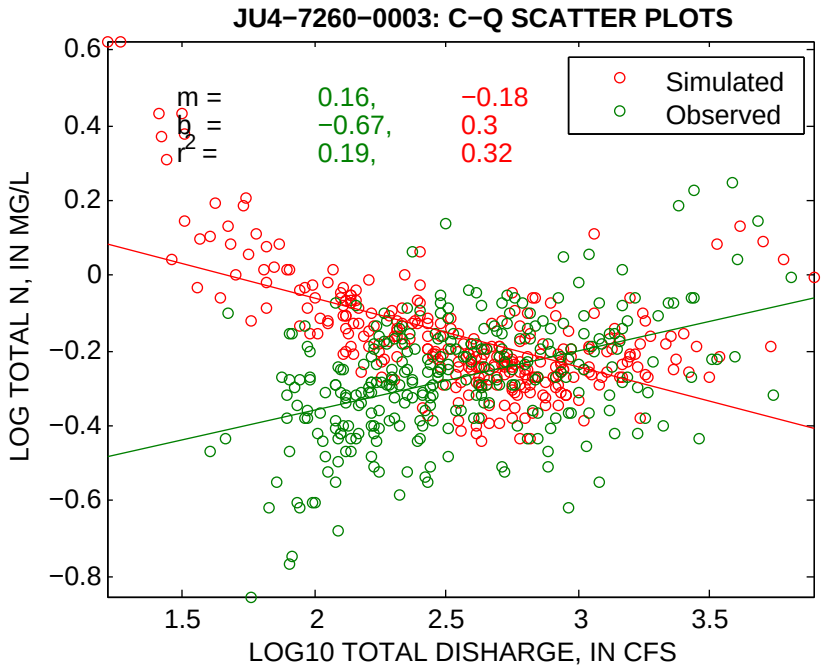
STATISTICS

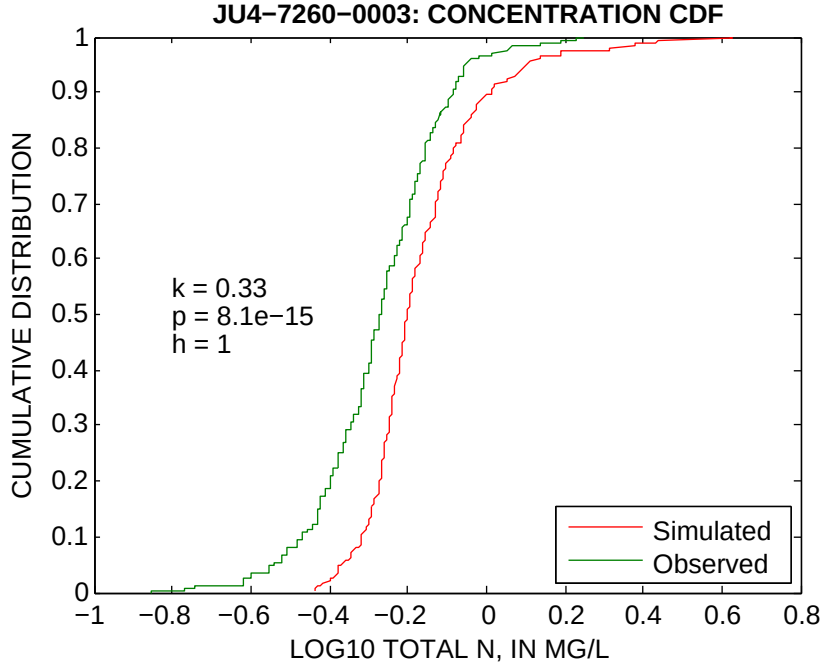
	n	302	302
		observe	simulate
min		0.14	0.35036
		-0.853872	-0.455485
mean		0.569768	0.774309
		-0.273503	-0.152712
media		0.535	0.649135
		-0.271665	-0.187667
max		1.77	4.5961
		0.247973	0.662389
varian		0.0490588	0.225217
		0.0254836	0.0283977
JB		0.001	0.001
		0.004725	0.001
		ra	log
%		35.8989	-44.1647
err.va		0.343788	0.0775374
rel.std.err		7.00769	3.04264
mod.eff		-6.00769	-2.04264

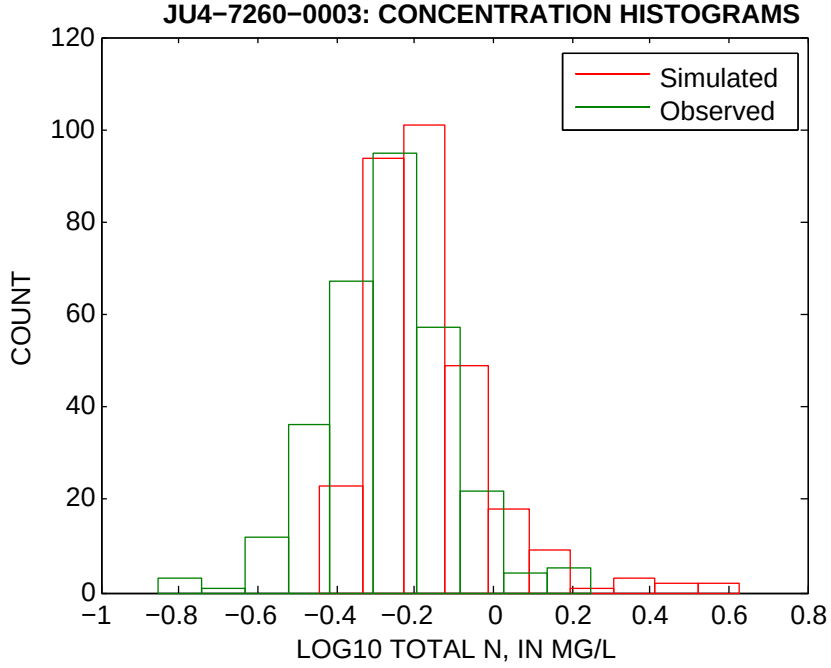
VERSION 2.1

ALL DATA
LOG10

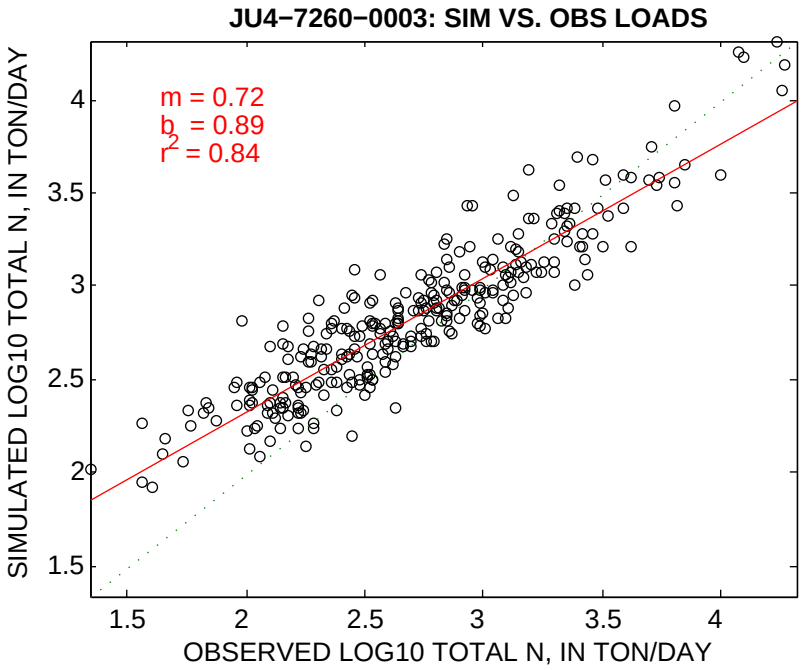


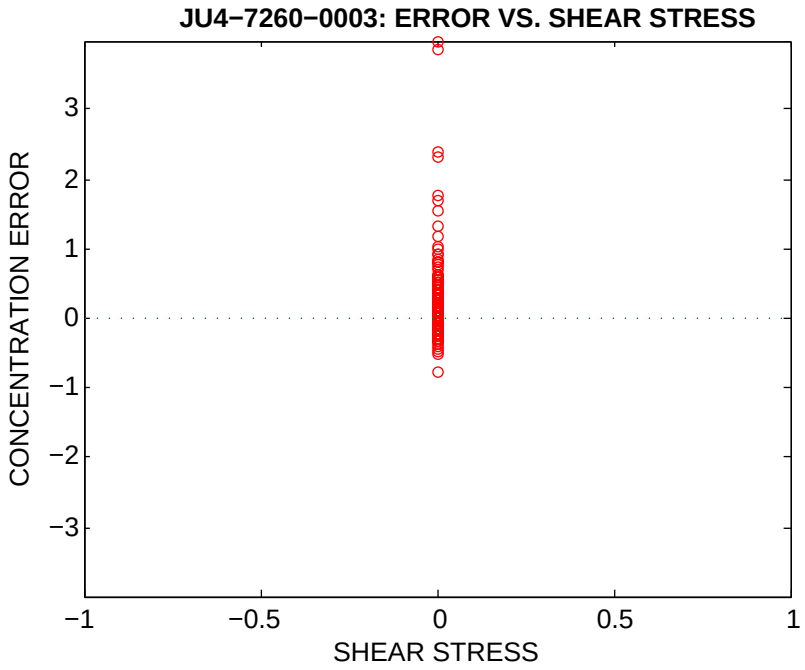


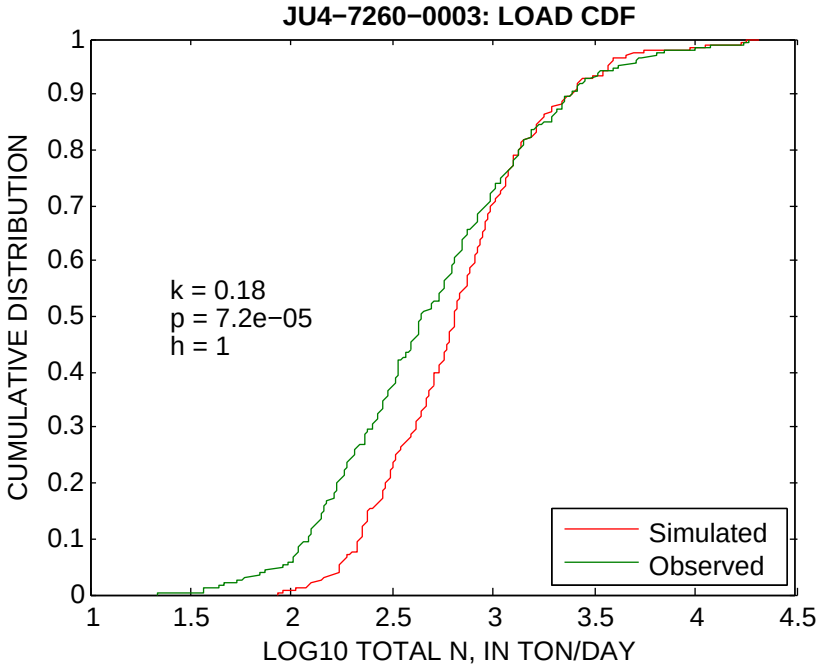


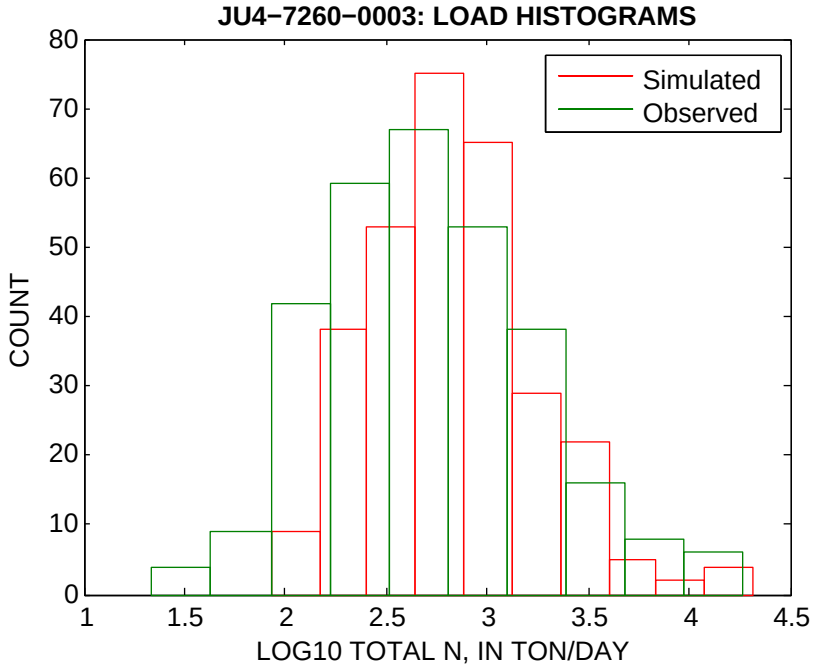


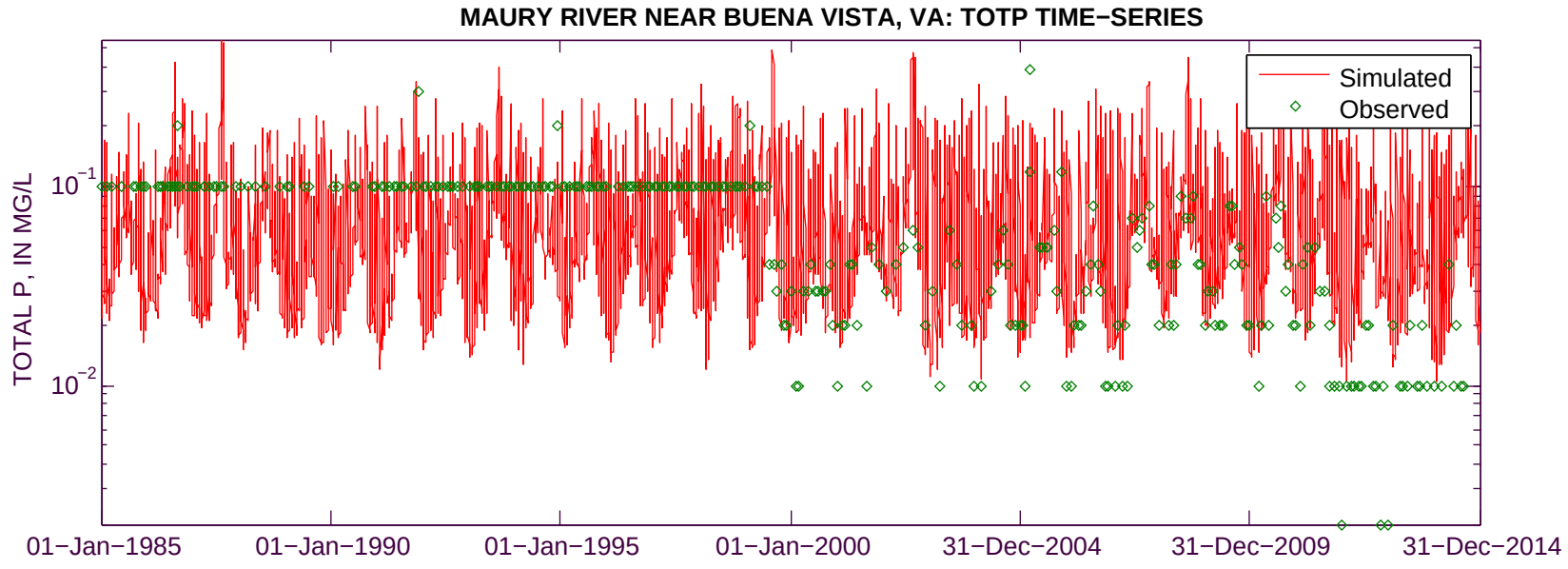
LOAD DATA
LOG10

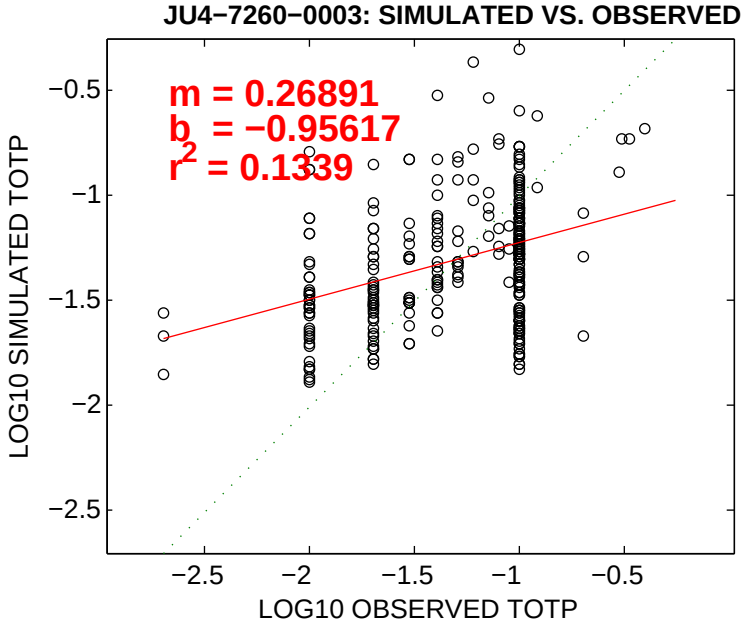


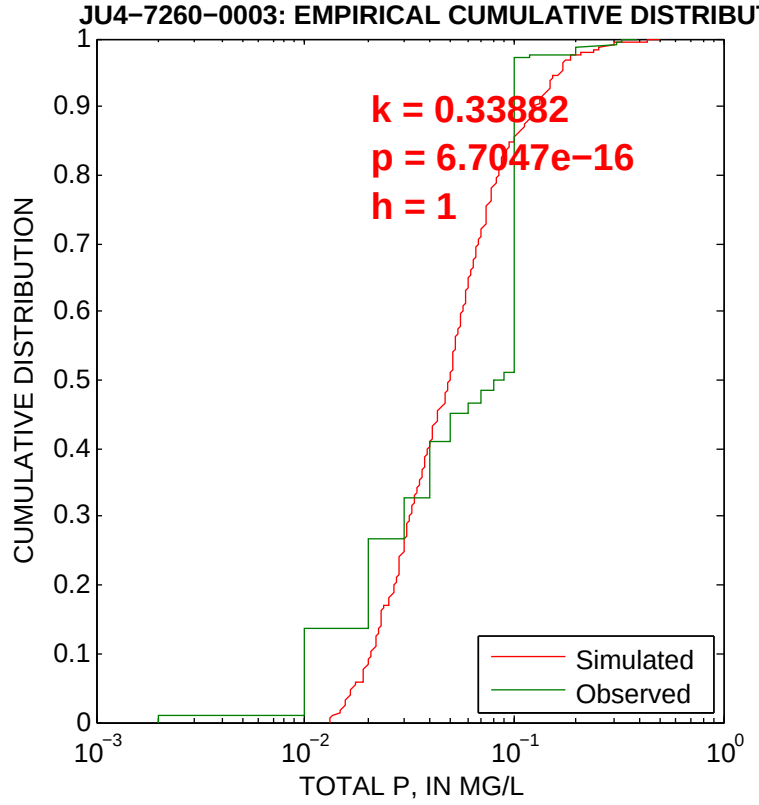












DATA SELECTION

scenario	file
P620171001WQ	TOTP.calib

plot: TOTP - total phosphorus

Dates: 1/1/1985 – 12/31/201

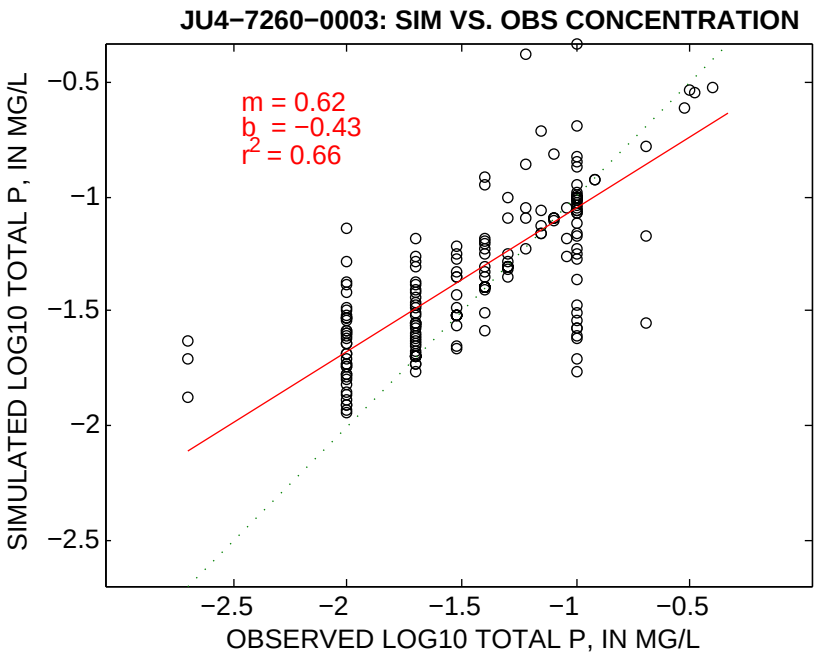
Drive	Directory	Observed
N/A	model	OBS20161101

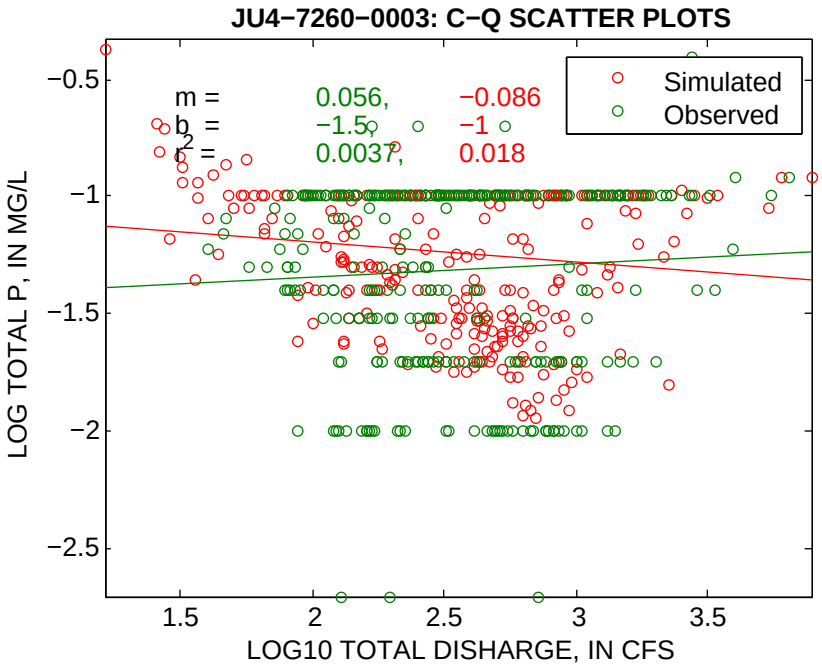
STATISTICS

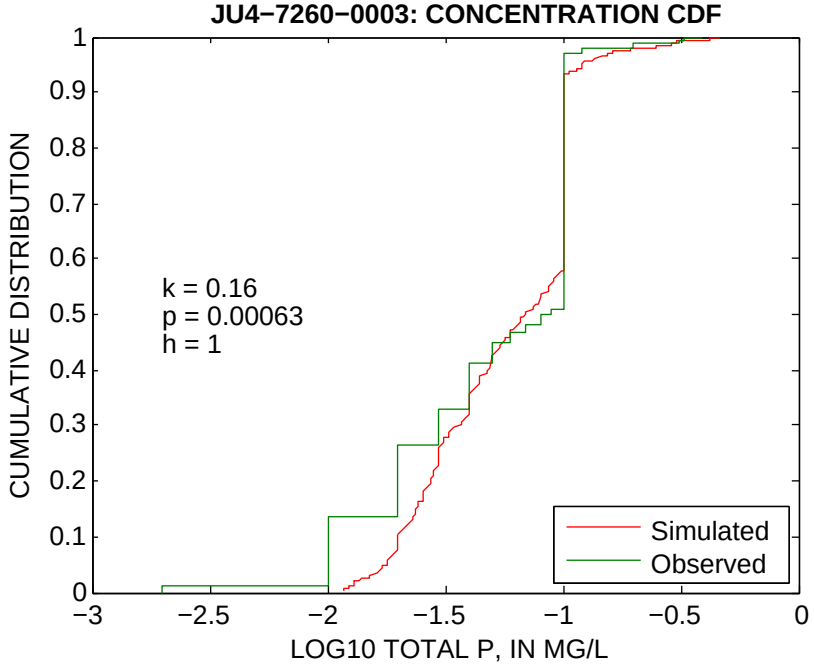
	n	observe	simulate
		304	304
min		0.002	0.013062
		-2.69897	-1.88399
mean		0.0685395	0.0634928
		-1.30993	-1.30843
media		0.085	0.0499035
		-1.07133	-1.30187
max		0.39	0.49797
		-0.408935	-0.302797
varian		0.00255189	0.00322376
		0.163512	0.0883075
JB		0.001	0.001
		0.001	0.015577
		ra	log
%		-7.36309	-0.114651
err.va		0.00417065	0.16388
rel.std.err		1.63434	1.00225
mod.eff		-0.634337	-0.00225015

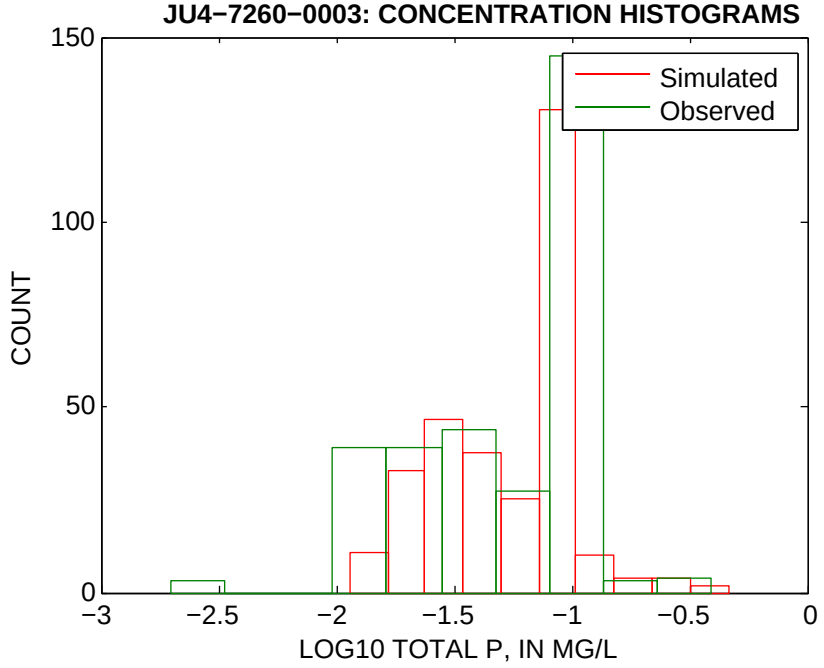
VERSION 2.1

ALL DATA
LOG10

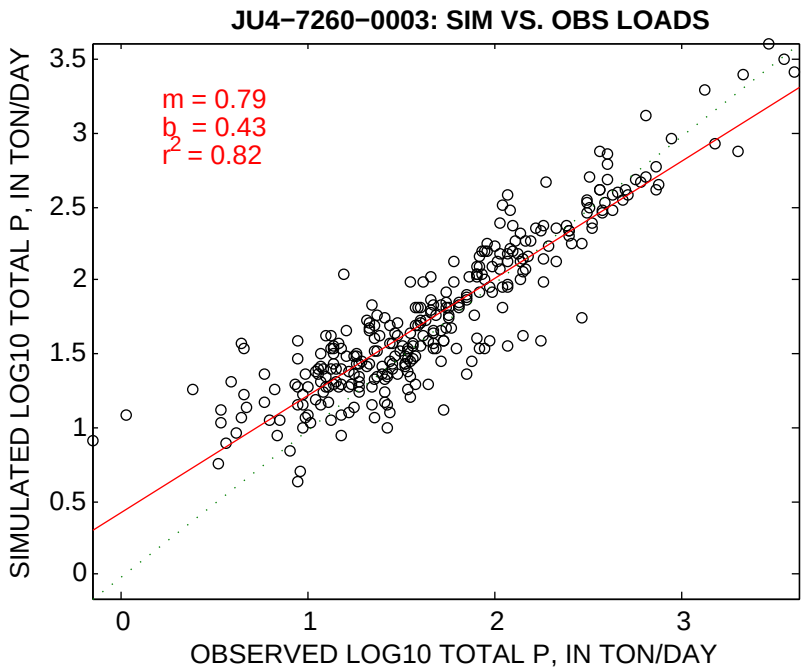


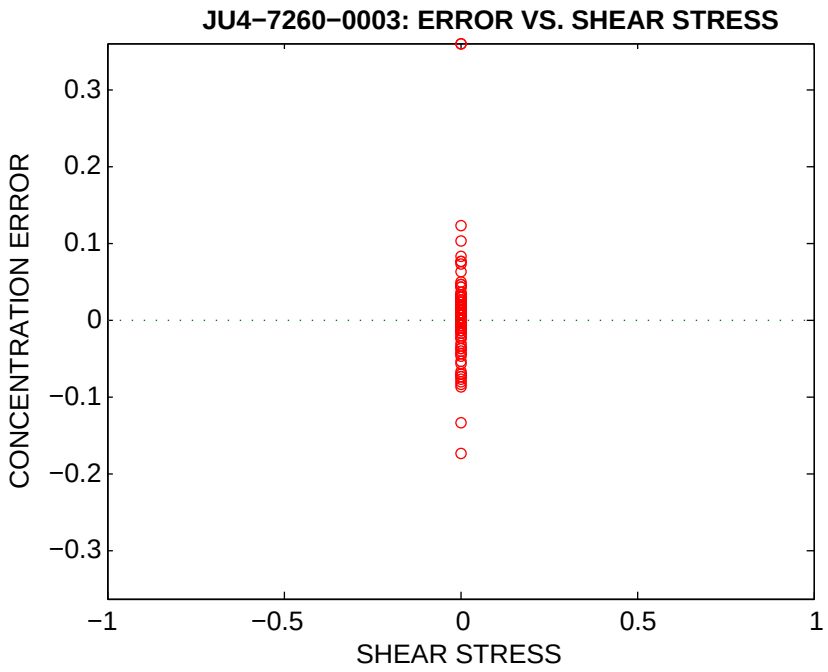


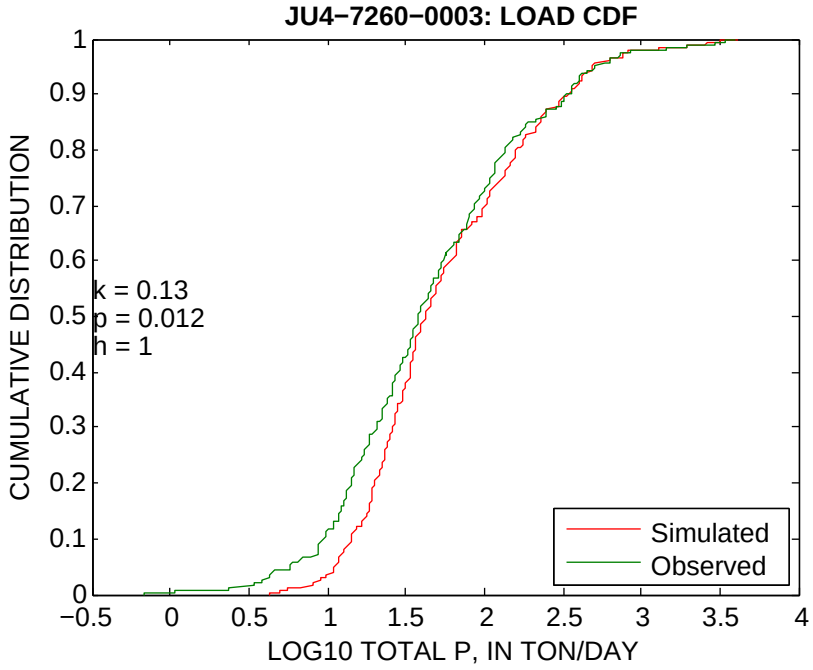


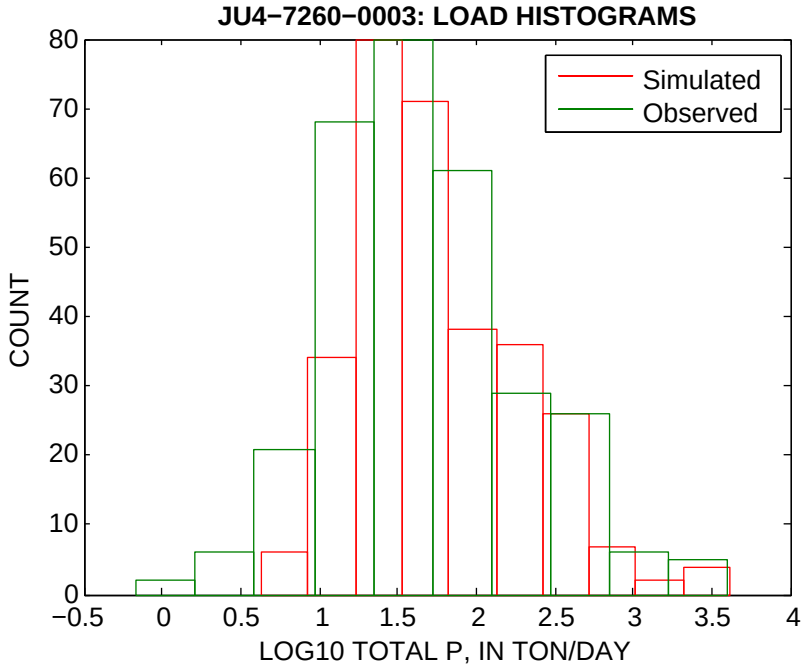


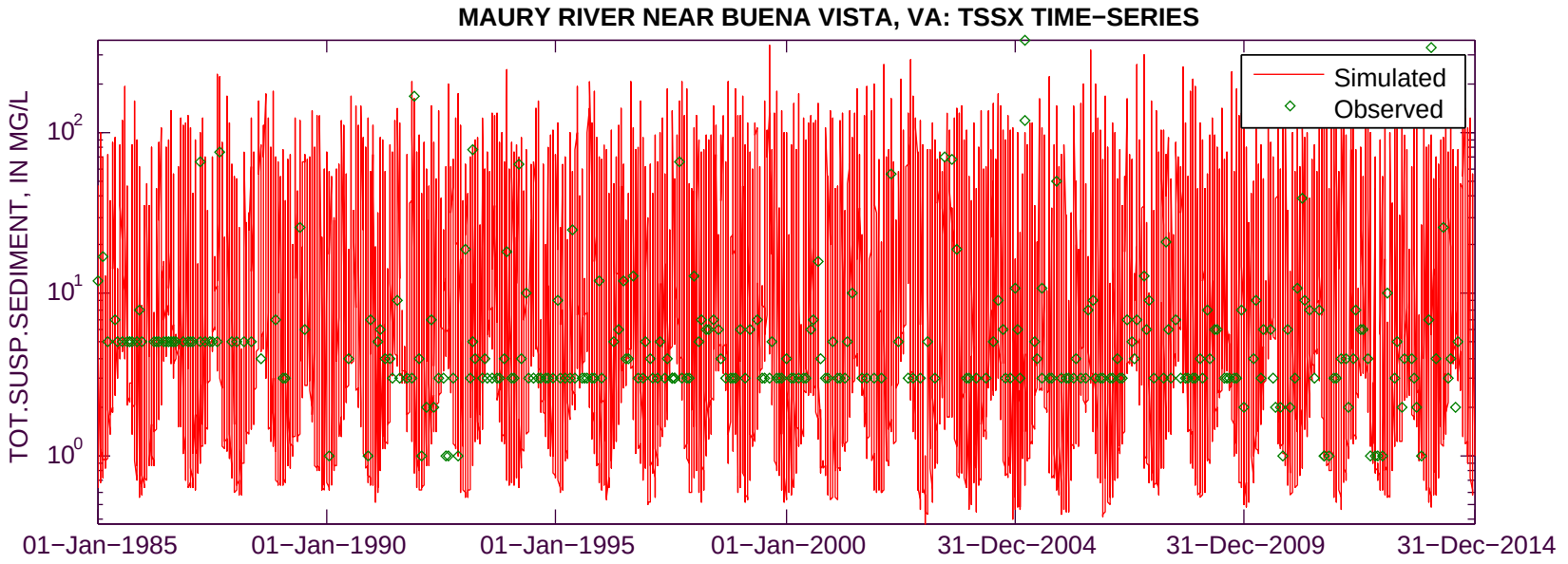
LOAD DATA
LOG10

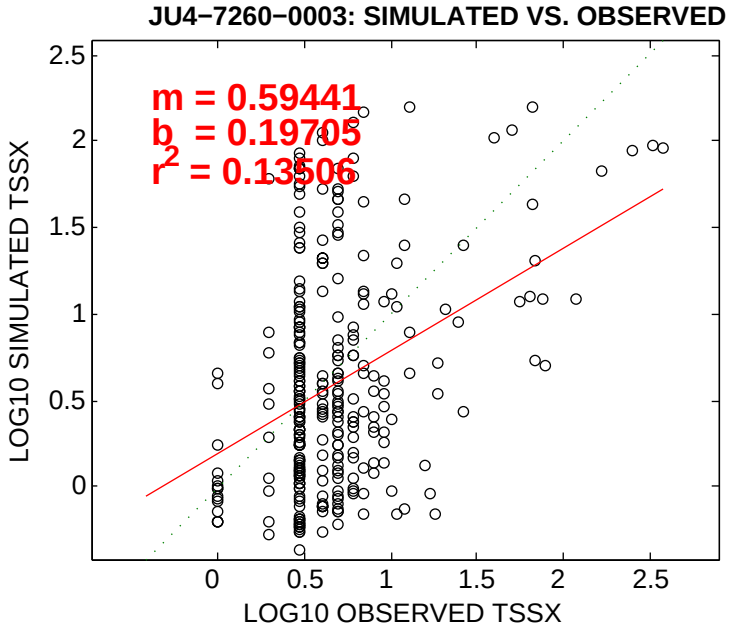


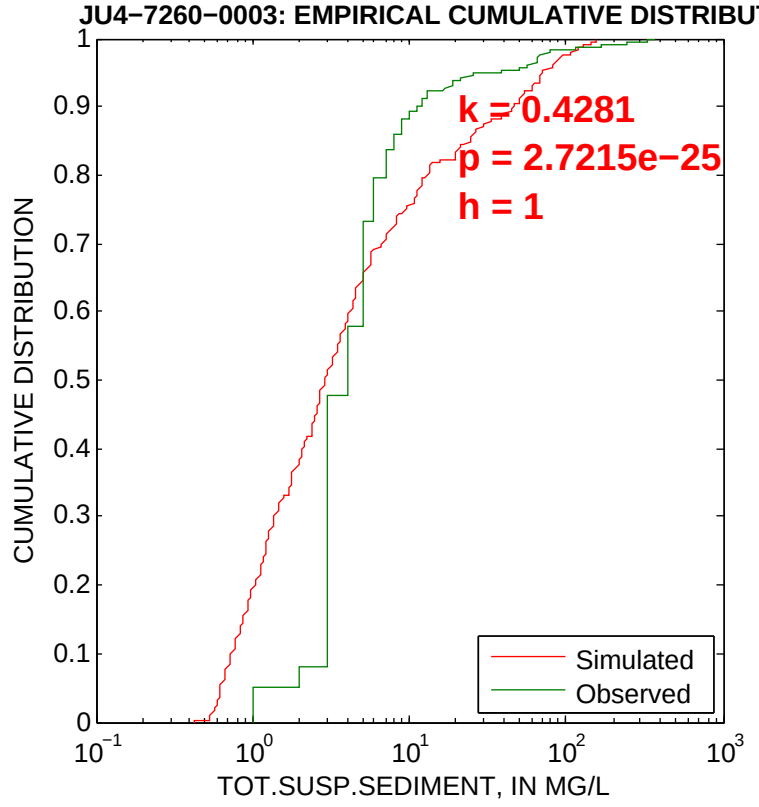












DATA SELECTION

scenario	file
P620171001WQ	TSSX.calib

plot: TSSX - total suspended ...

Dates: 1/1/1985 – 12/31/201

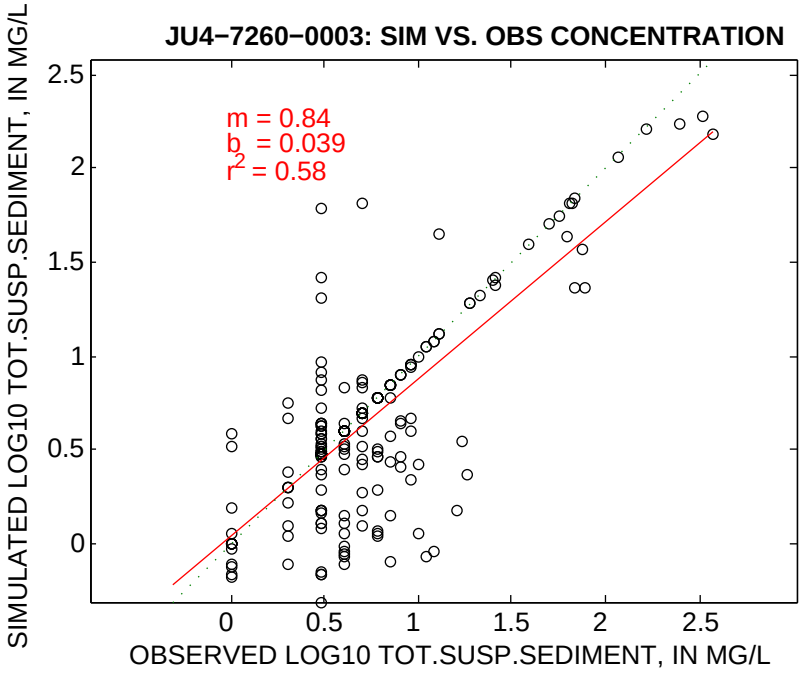
Drive	Directory	Observed
N/A	model	OBS20161101

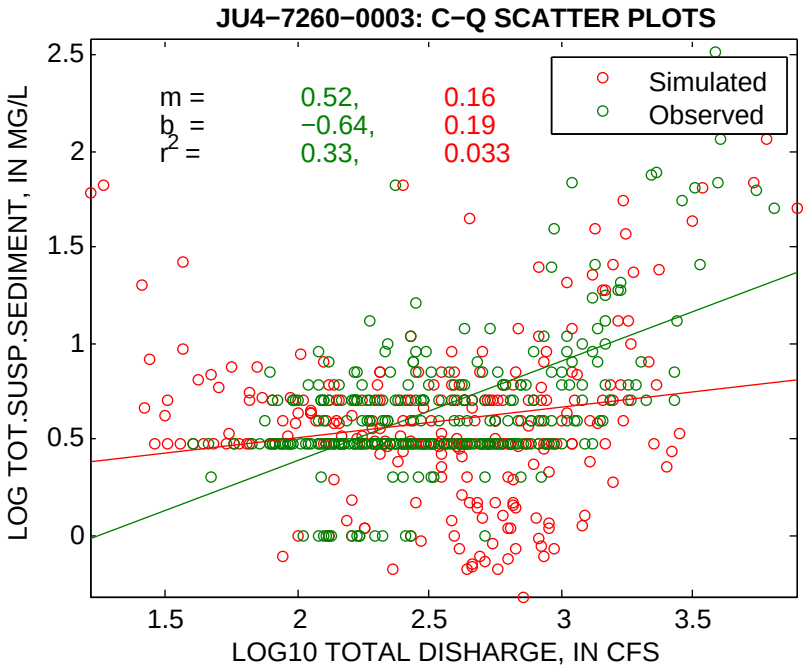
STATISTICS

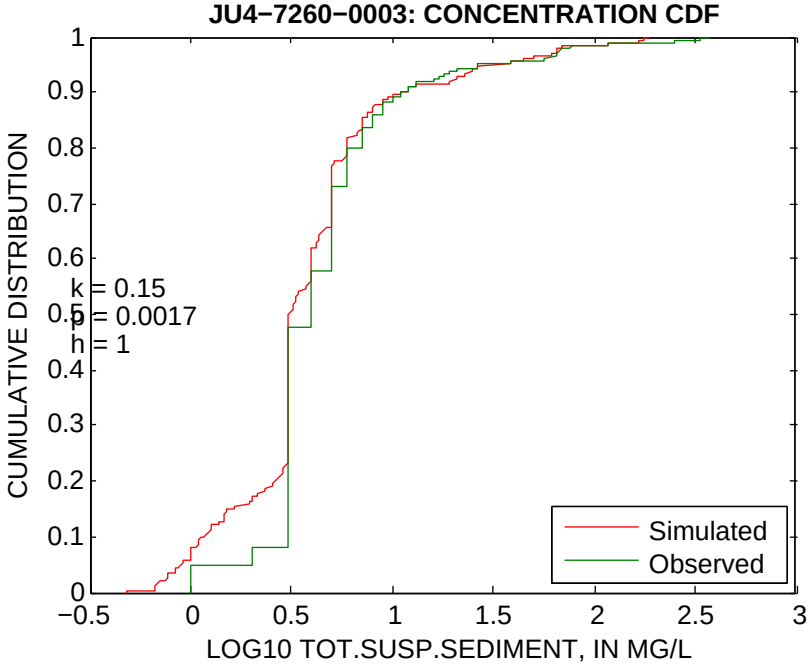
	n	observe	simulate
		306	306
min		1	0.43
		0	-0.366532
mean		10.6863	13.3646
		0.670418	0.595548
media		4	2.90265
		0.60206	0.462782
max		376	156.21
		2.57519	2.19371
varian		1211.09	697.279
		0.153828	0.402423
JB		0.001	0.001
		0.001	0.001
		ra	log
%		25.0633	-11.1676
err.va		1250.82	0.379002
rel.std.err		1.0328	2.46381
mod.eff		-0.0327978	-1.46381

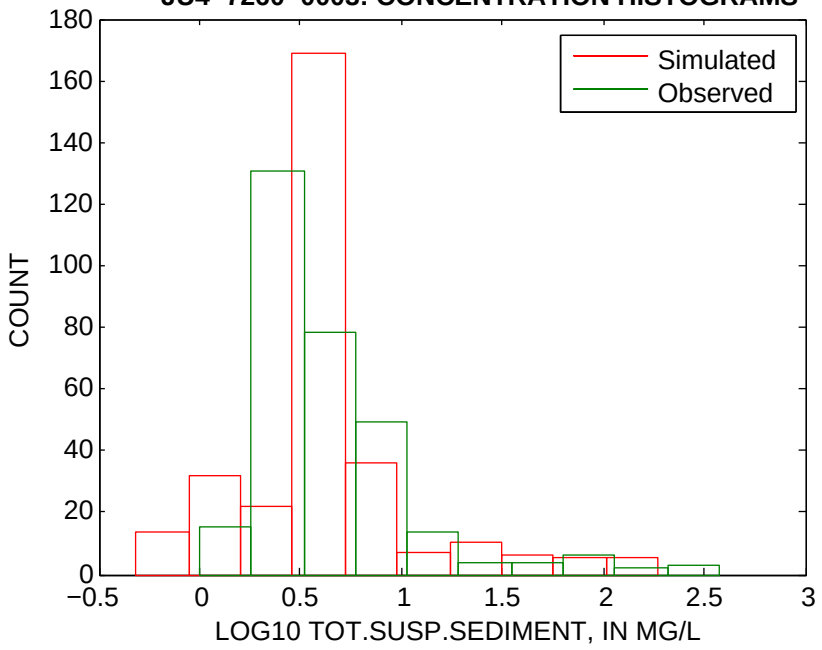
VERSION 2.1

ALL DATA
LOG10

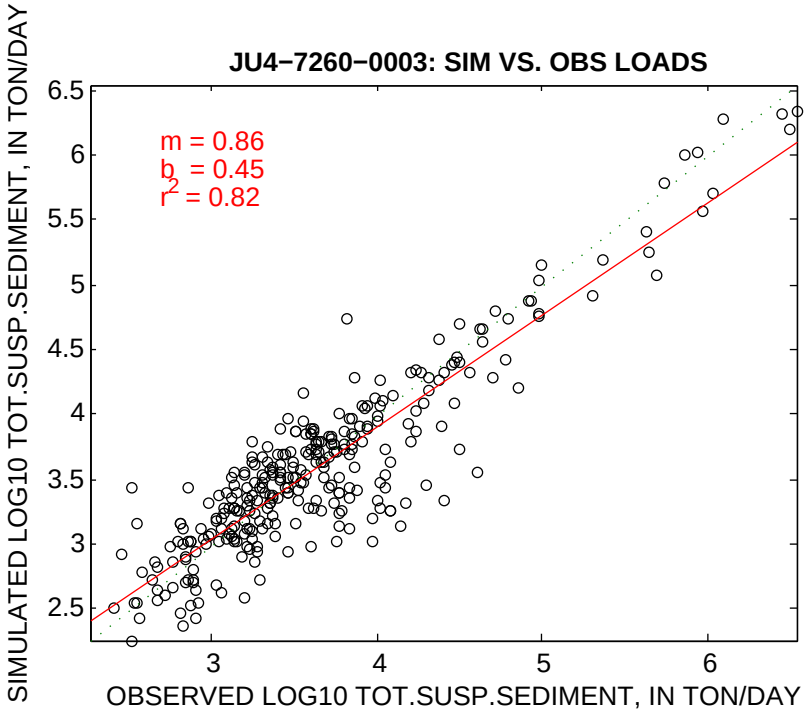


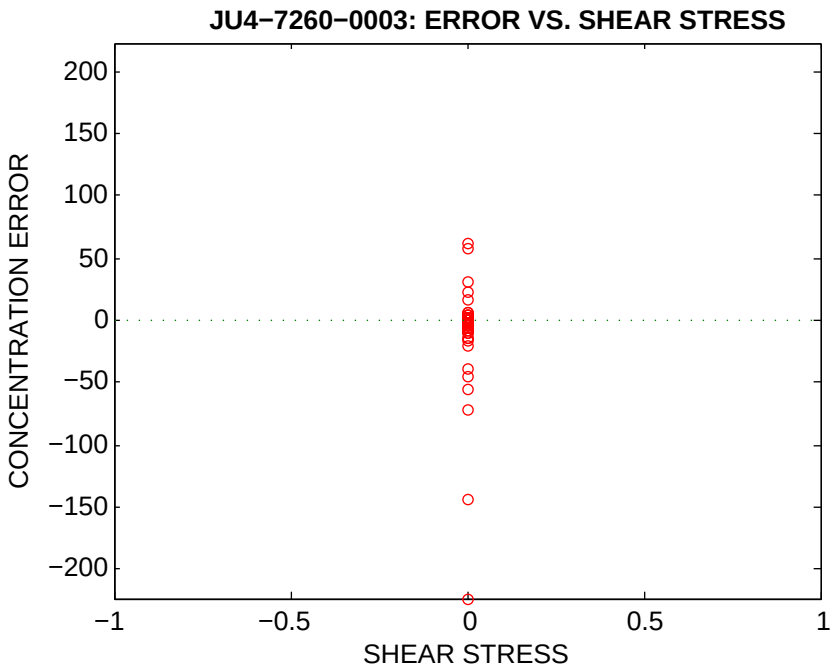


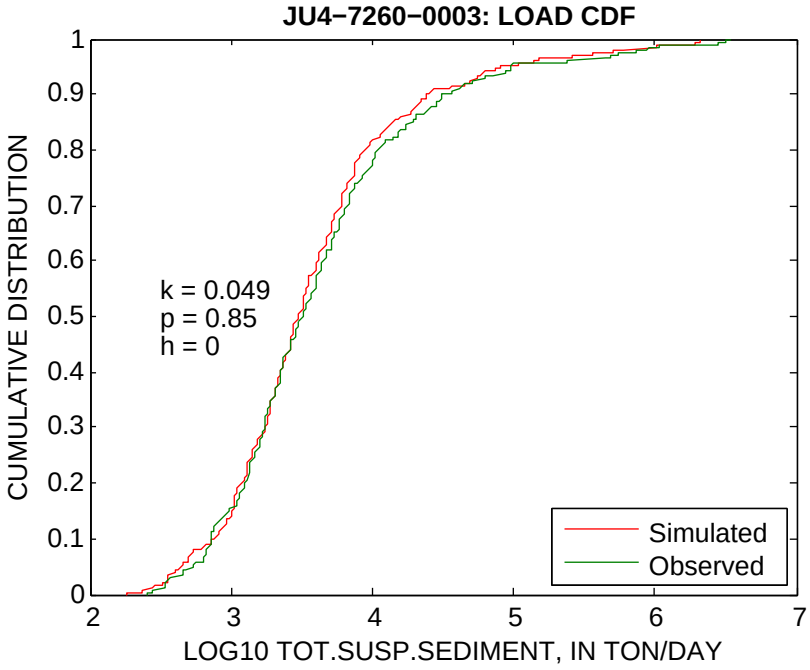


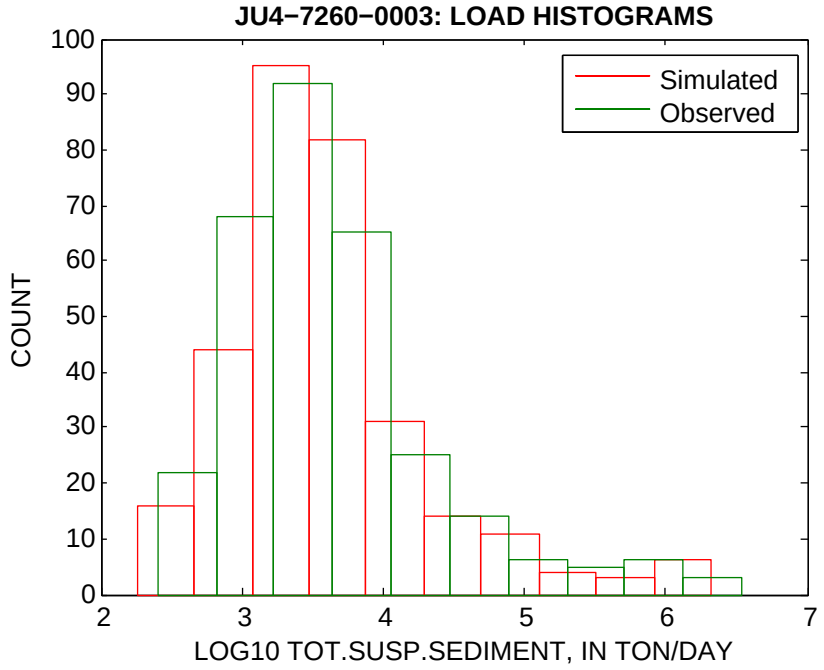


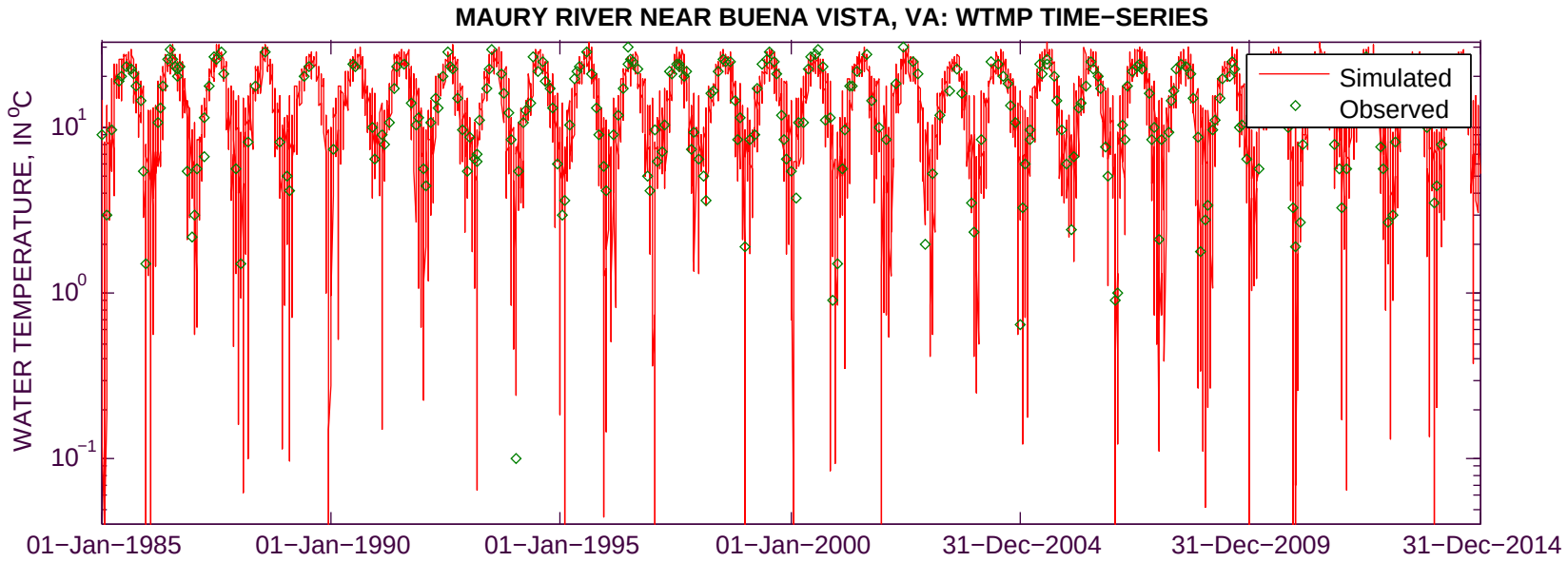
LOAD DATA
LOG10

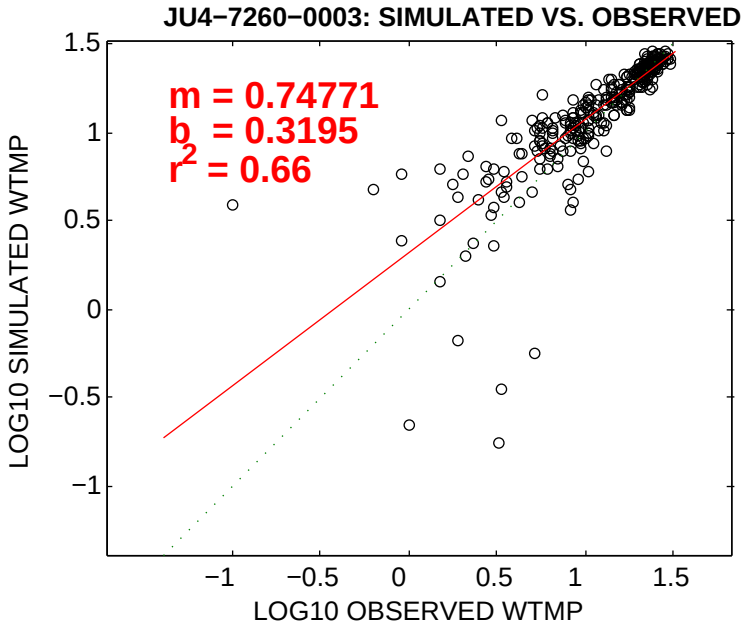


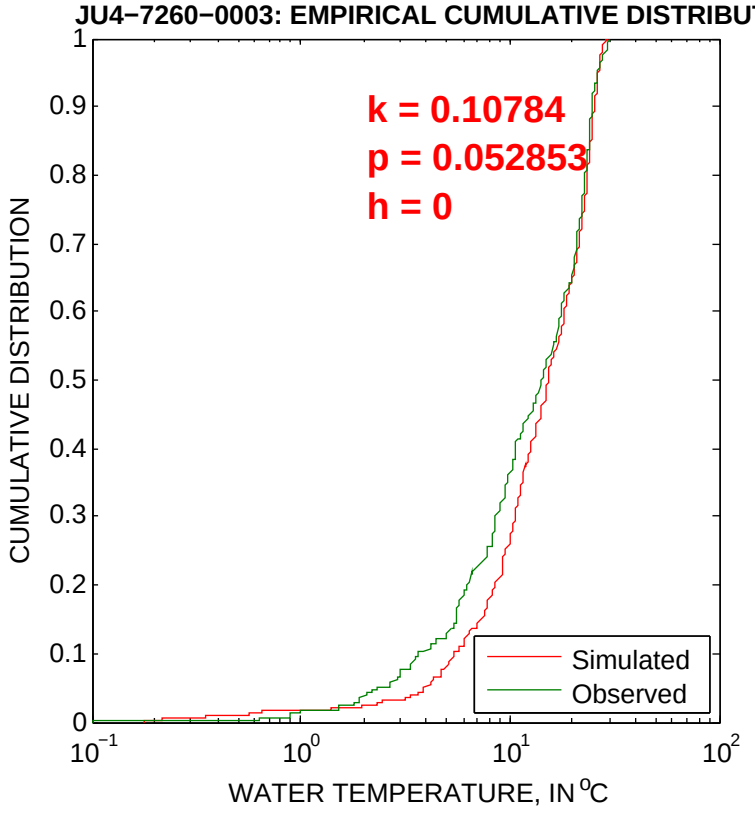












DATA SELECTION

scenario	file
P620171001WQ	WTMP.calib

plot: WTMP - water tempera...

Dates: 1/1/1985 – 12/31/201

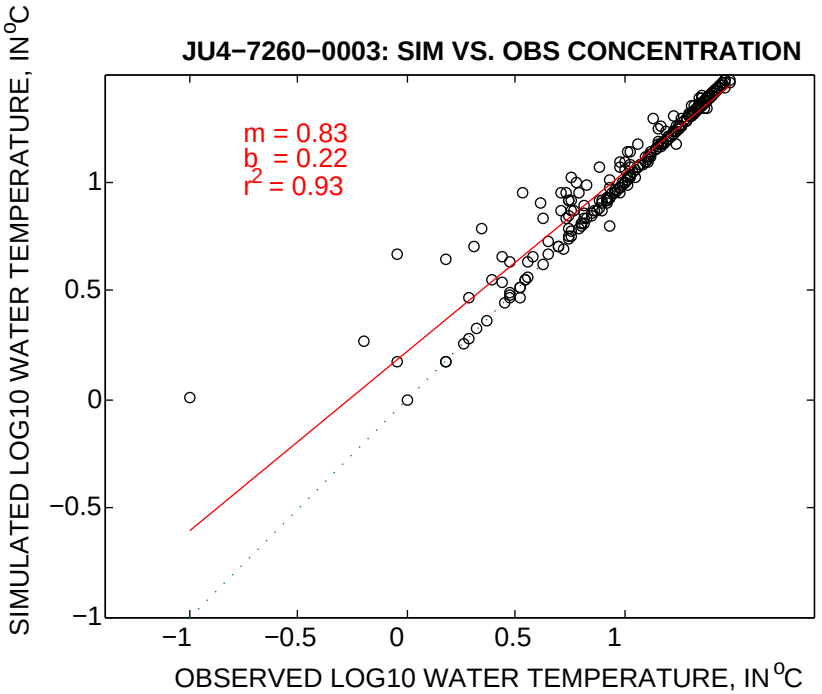
Drive	Directory	Observed
N/A	model	OBS20161101

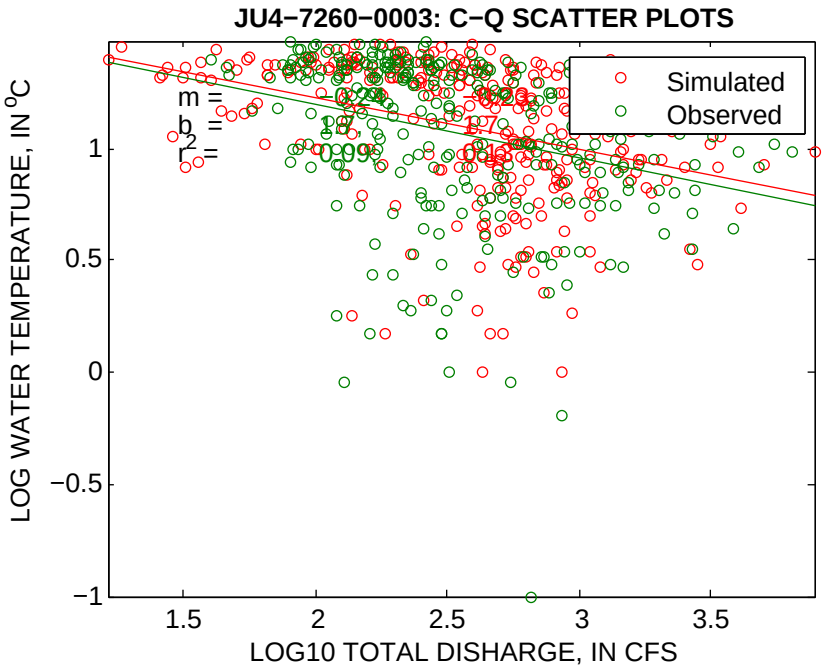
STATISTICS

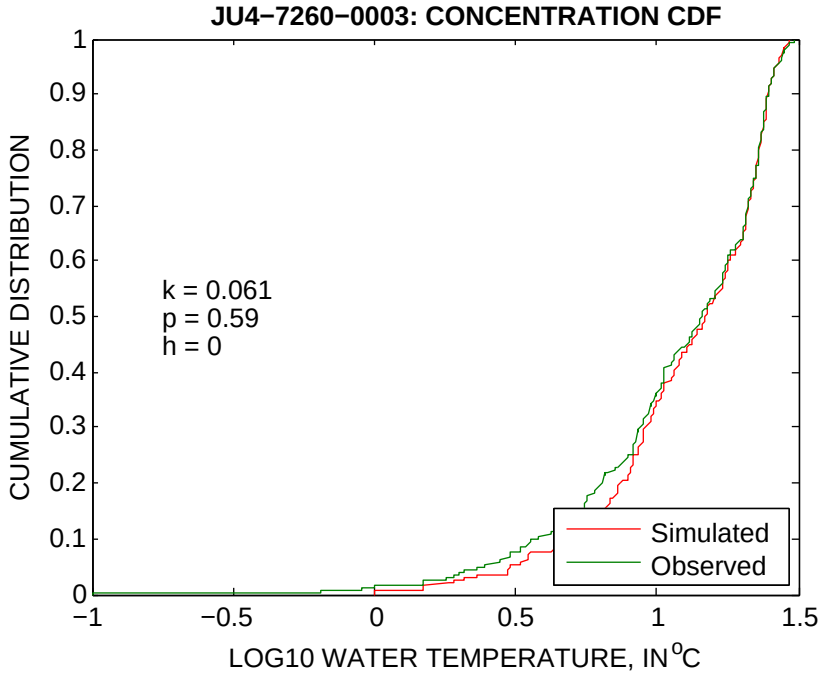
n	306	306
	observe	**simulate**
min	0.1	0.17644
	-1	-0.753403
mean	14.6018	15.6279
	1.06295	1.11427
media	14.335	15.2435
	1.15639	1.18308
max	30.5	28.985
	1.4843	1.46217
varian	64.3646	55.8014
	0.1238	0.104867
JB	0.001818	0.003407
	0.001	0.001
	ra	log
%	7.02681	4.82887
err.va	8.2494	0.0461777
rel.std.err	0.128167	0.373002
mod.eff	0.871833	0.626998

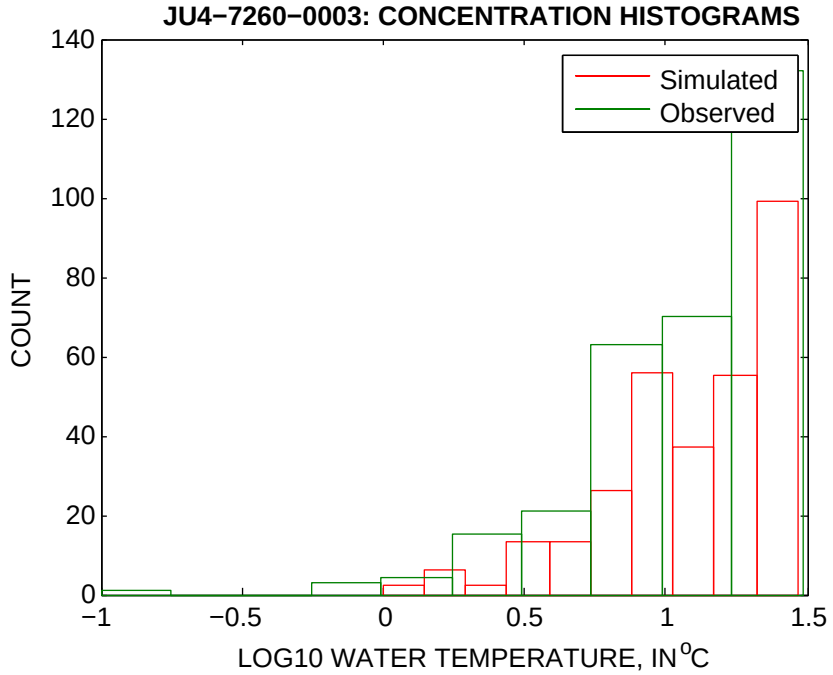
VERSION 2.1

ALL DATA
LOG10

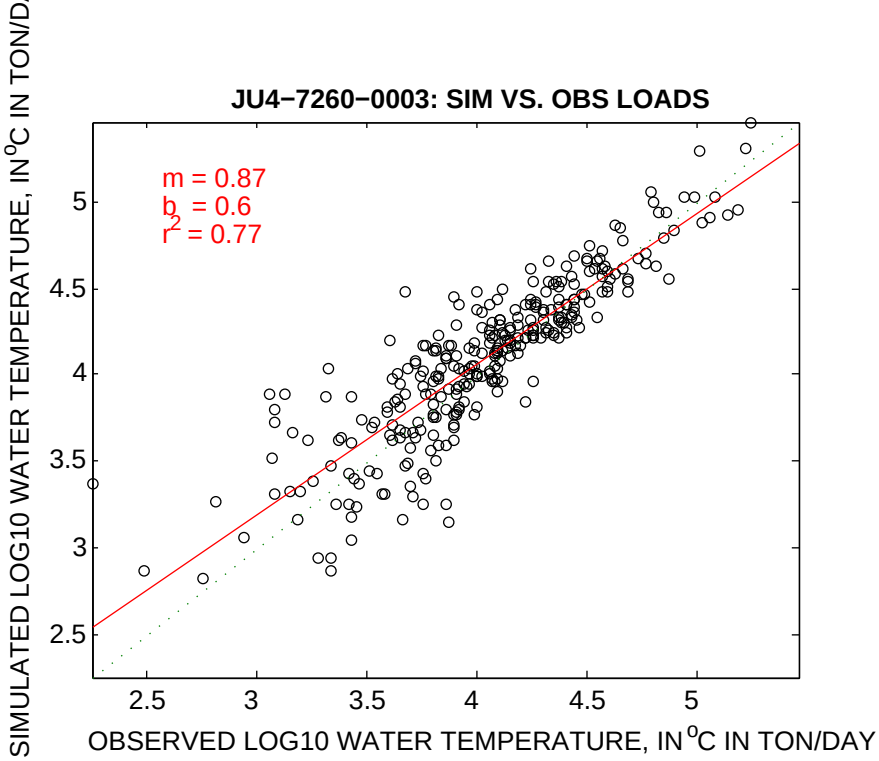


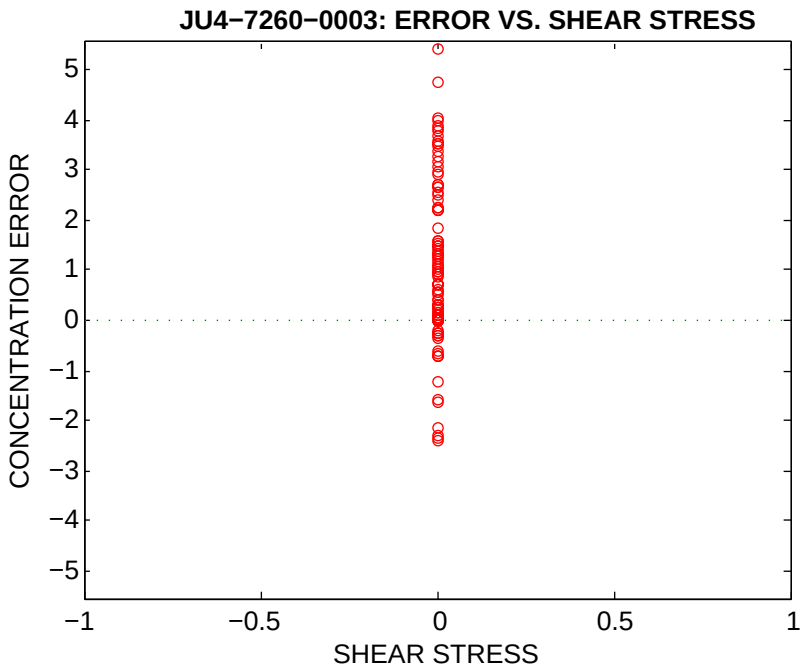


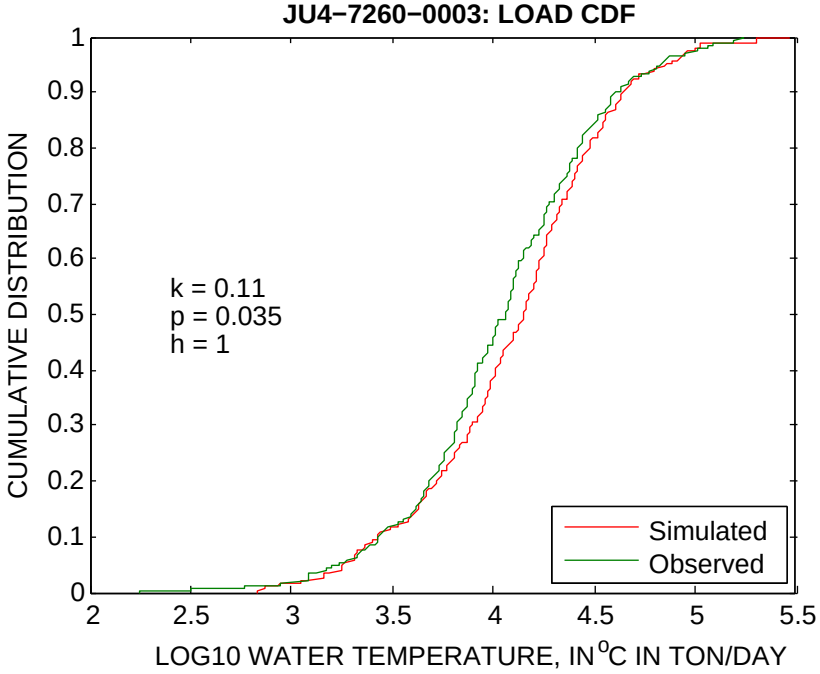


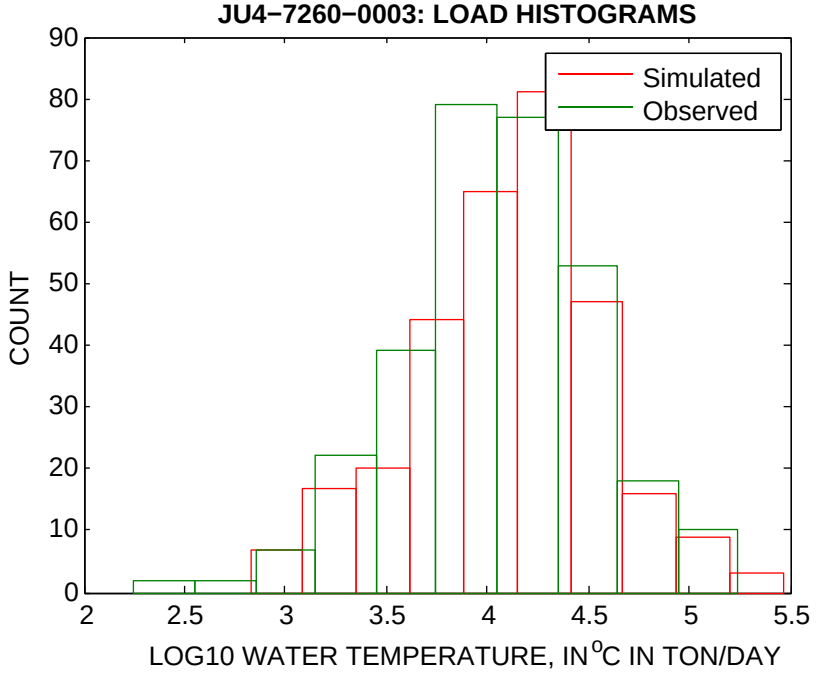


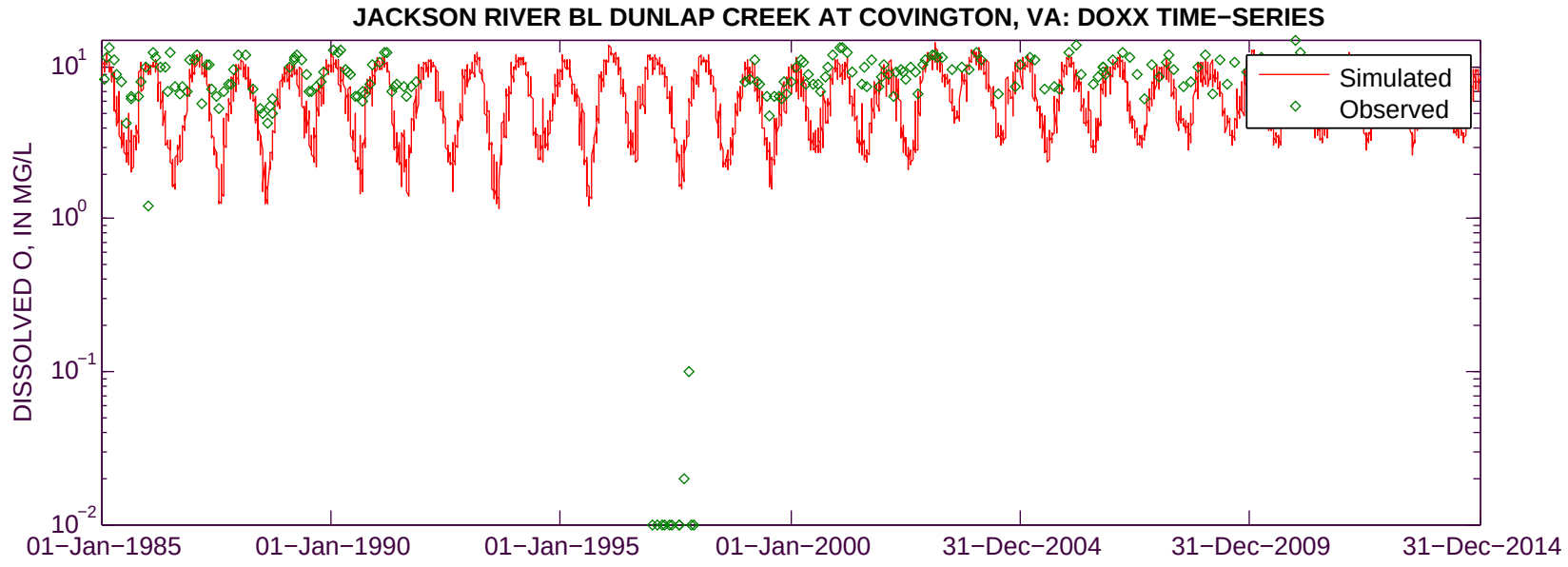
LOAD DATA
LOG10

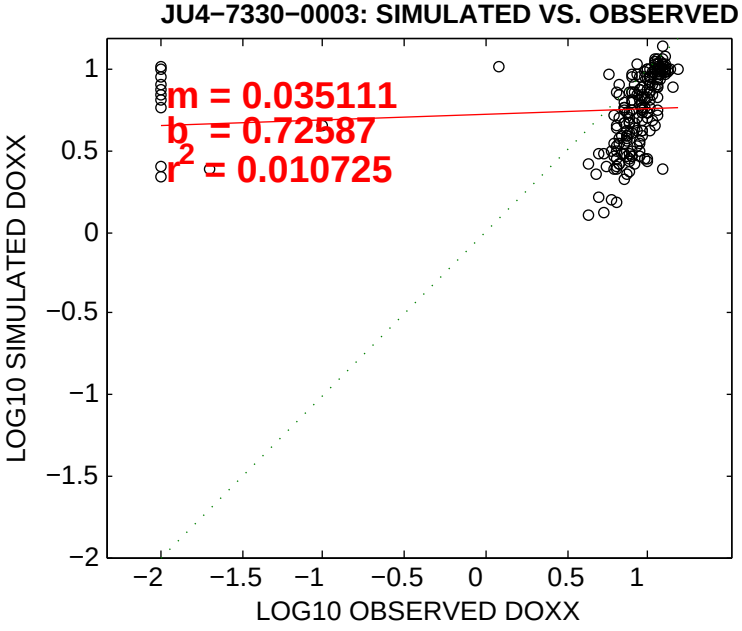


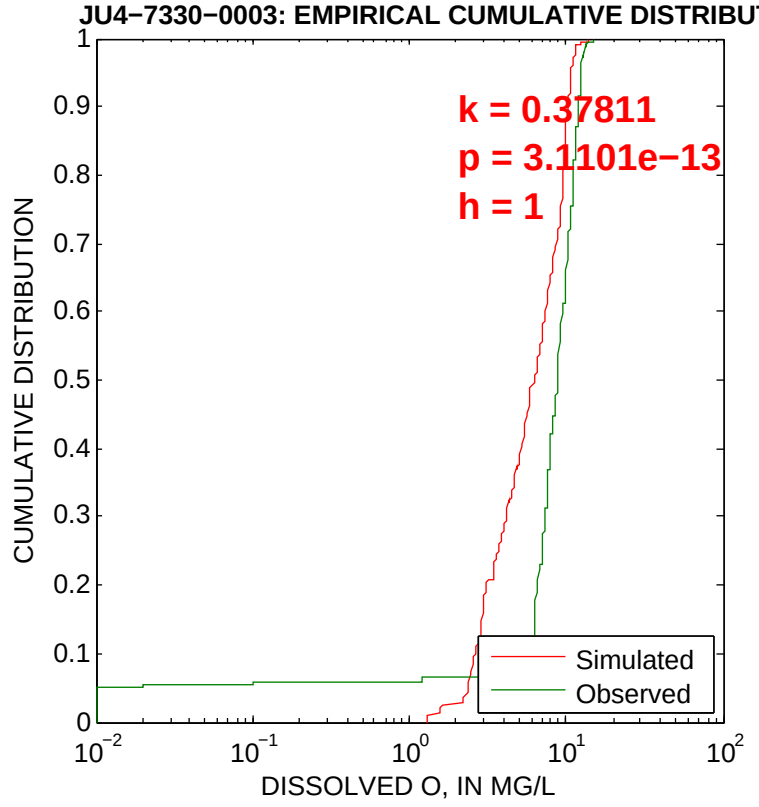












DATA SELECTION

scenario	file
P620171001WQ	DOXX.calib

plot: DOXX - dissolved oxygen

Dates: 1/1/1985 – 12/31/201

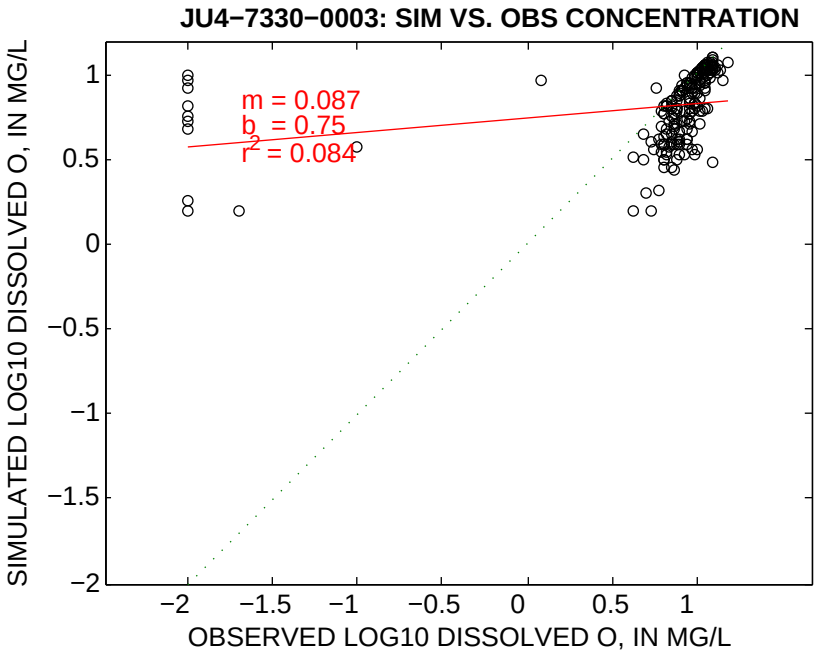
Drive	Directory	Observed
N/A	model	OBS20161101

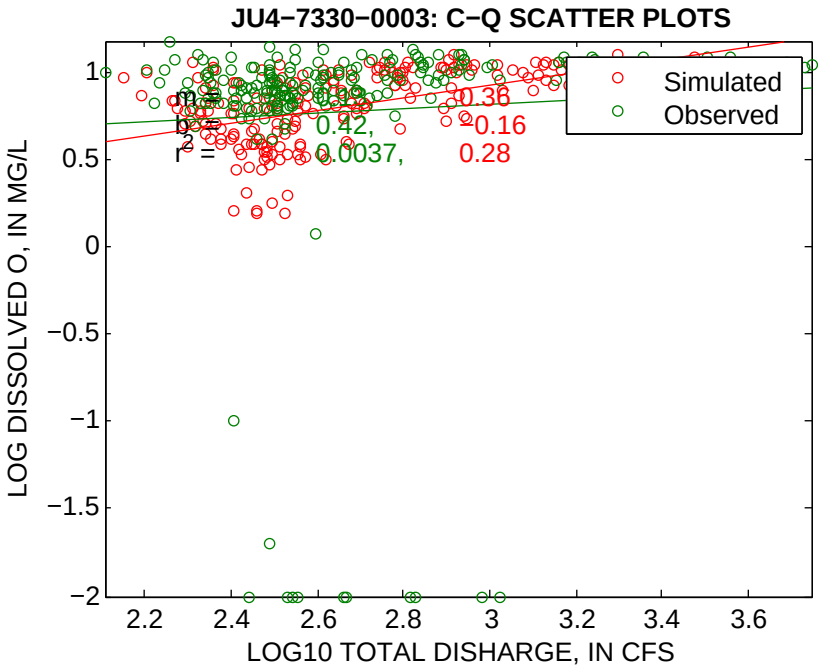
STATISTICS

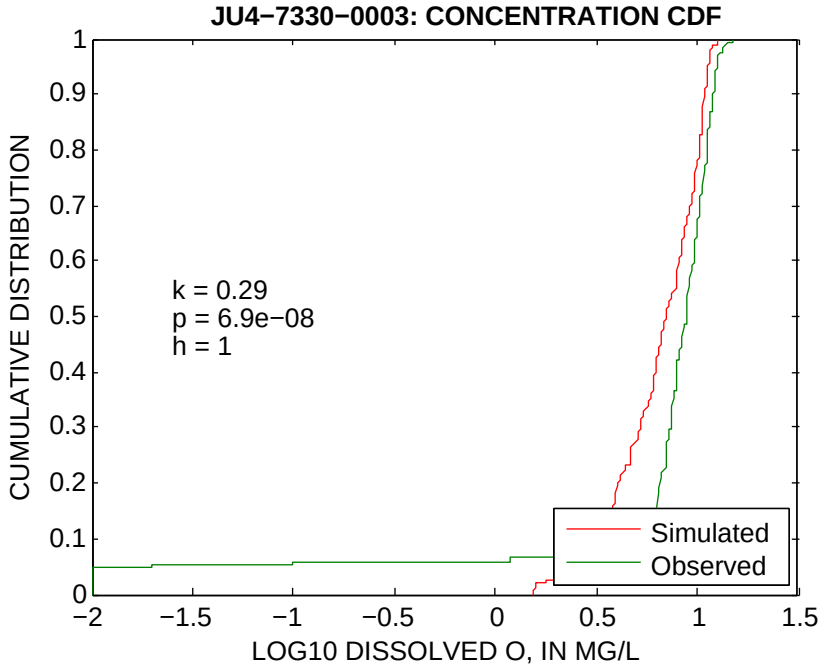
	n	201	201
		observe	simulate
min		0.01	1.2818
		-2	0.10782
mean		8.5302	6.4347
		0.772436	0.752992
media		8.82	6.2906
		0.945469	0.798692
max		15.2	13.66
		1.18184	1.13545
varian		9.5276	8.83684
		0.472743	0.0543376
JB		0.001	0.007879
		0.001	0.007175
		ra	log
%		-24.5657	-2.51713
err.va		13.7357	0.494264
rel.std.err		1.44168	1.04552
mod.eff		-0.441677	-0.0455233

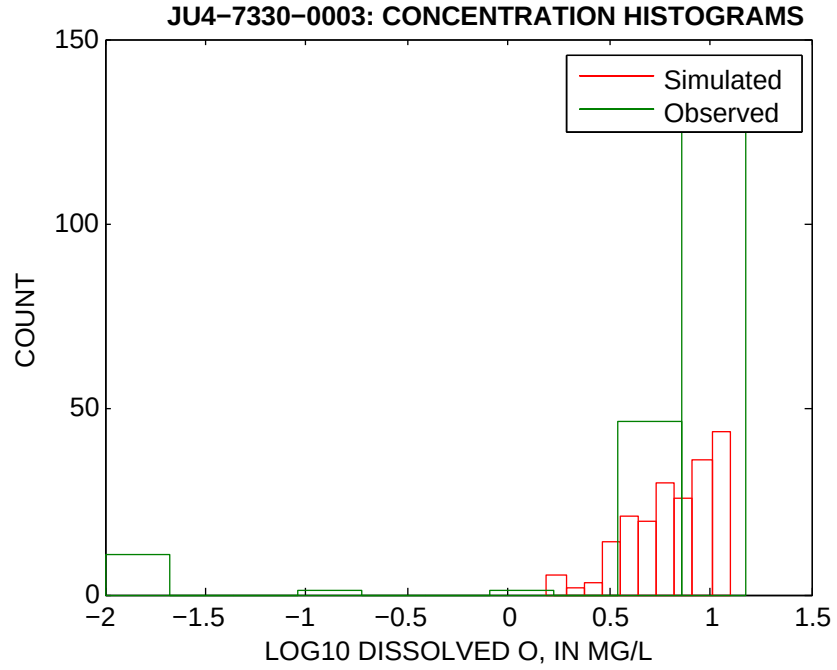
VERSION 2.1

ALL DATA
LOG10

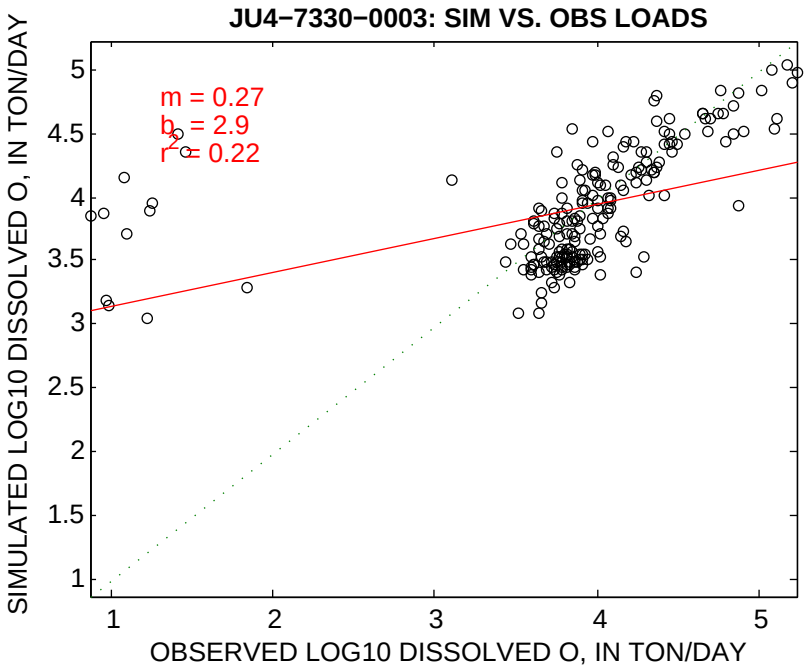




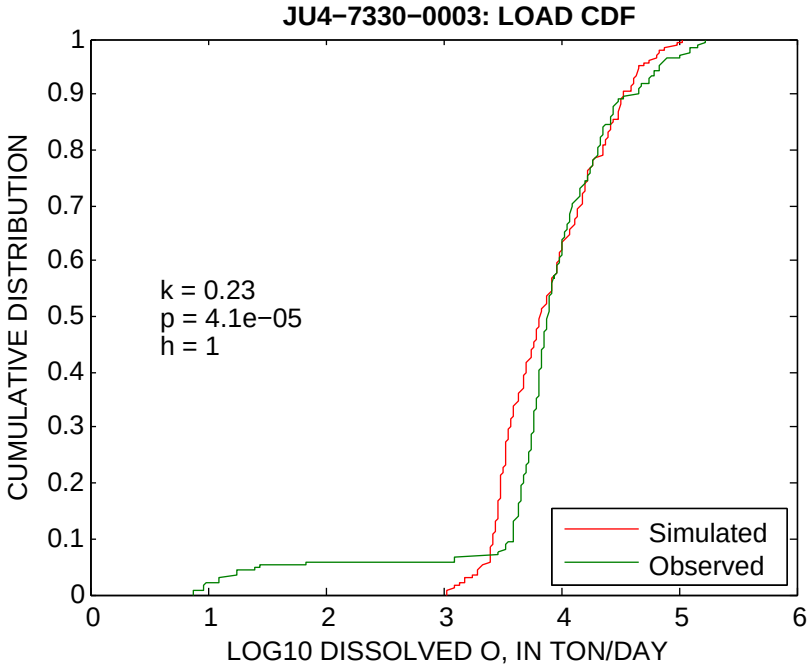


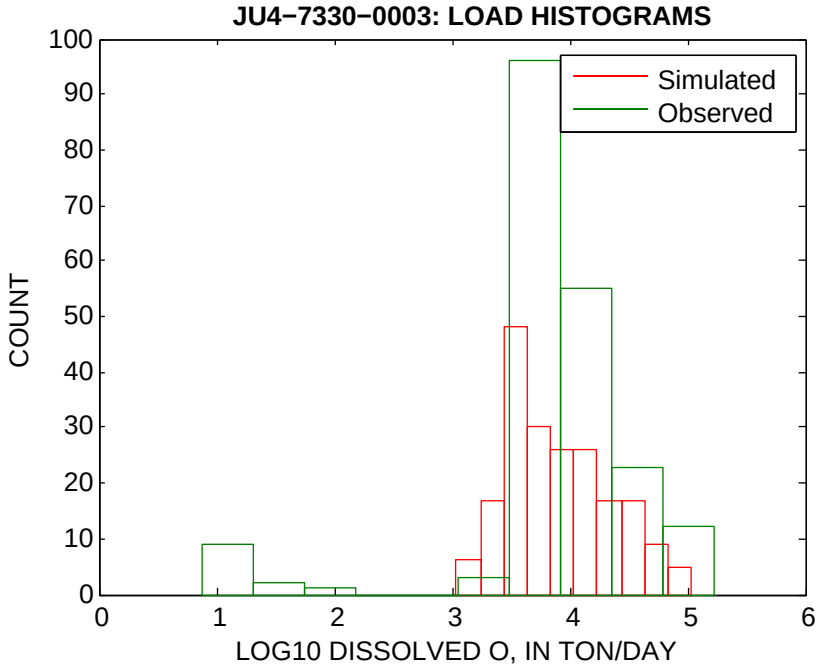


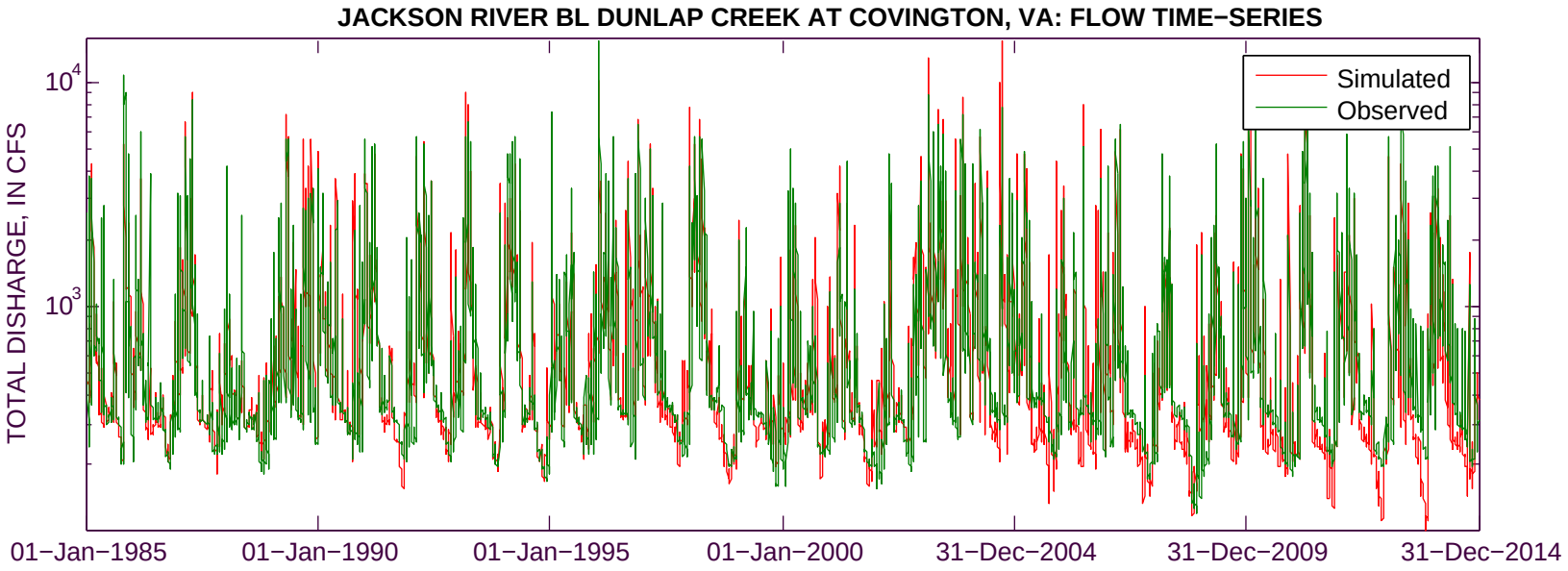
LOAD DATA
LOG10

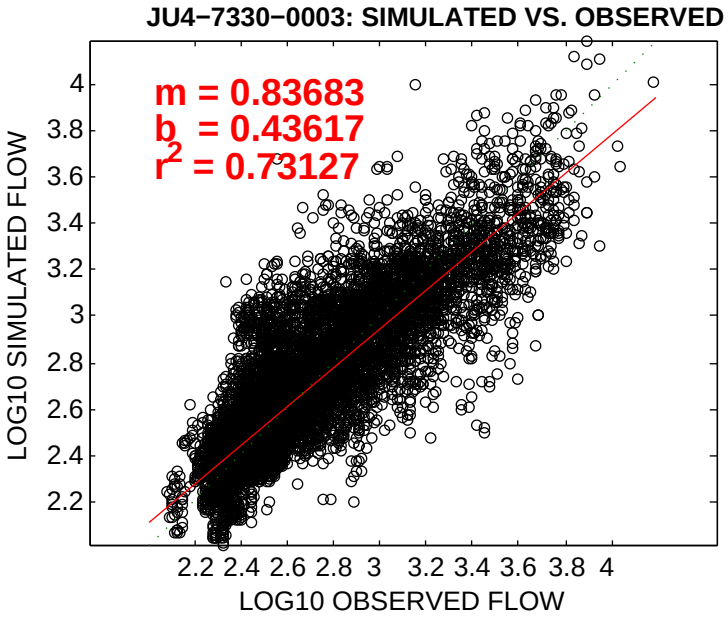


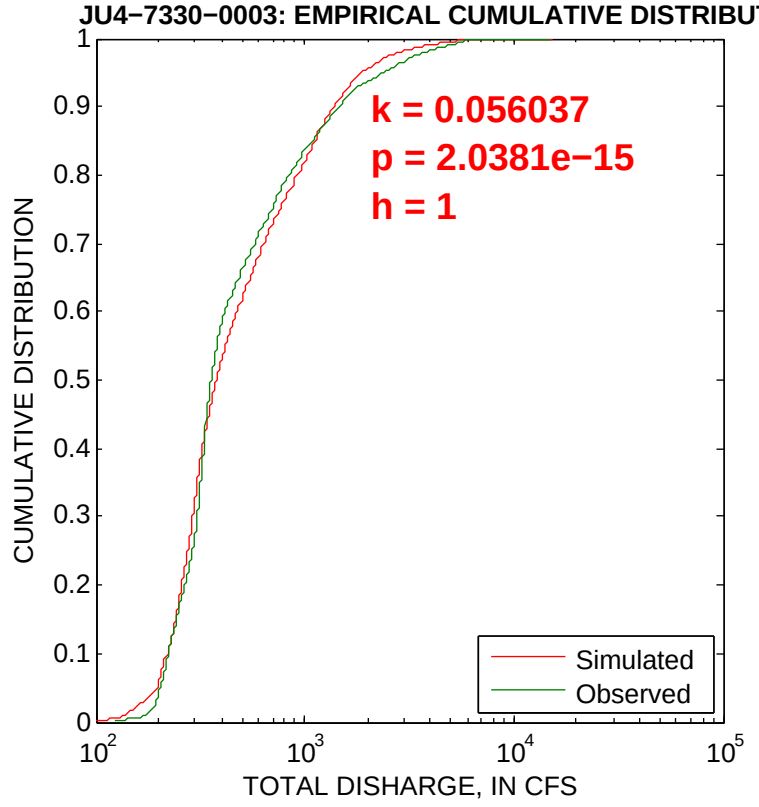












DATA SELECTION

scenario: P620171001WQ | file: FLOW.calib

plot: FLOW - total discharge

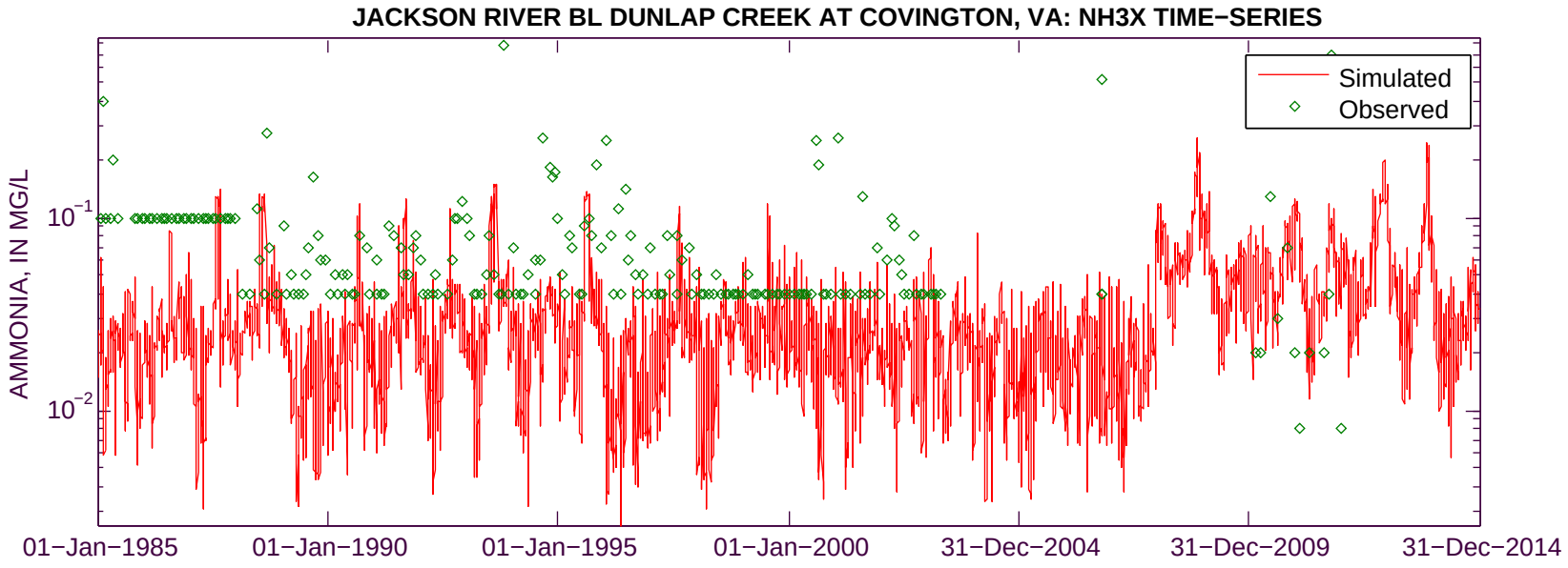
Dates: 1/1/1985 – 12/31/201

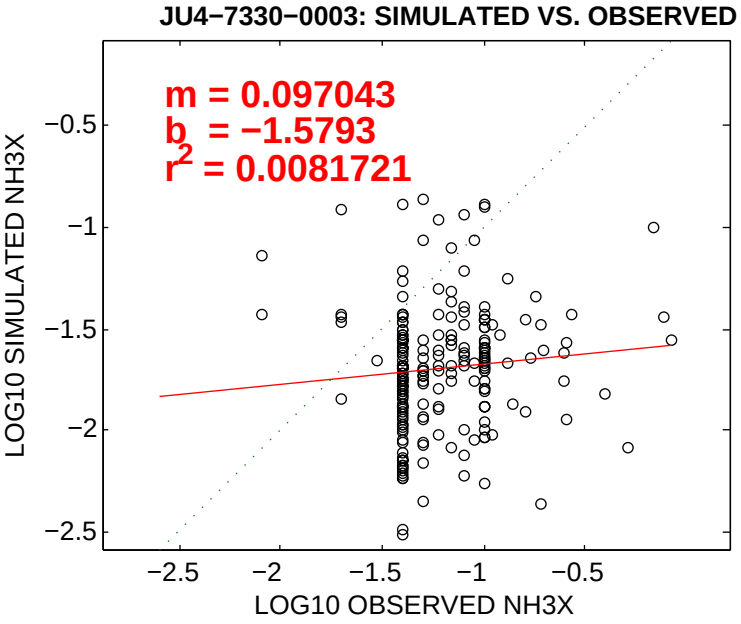
Drive: N/A | Directory: model | Observed: OBS20161101

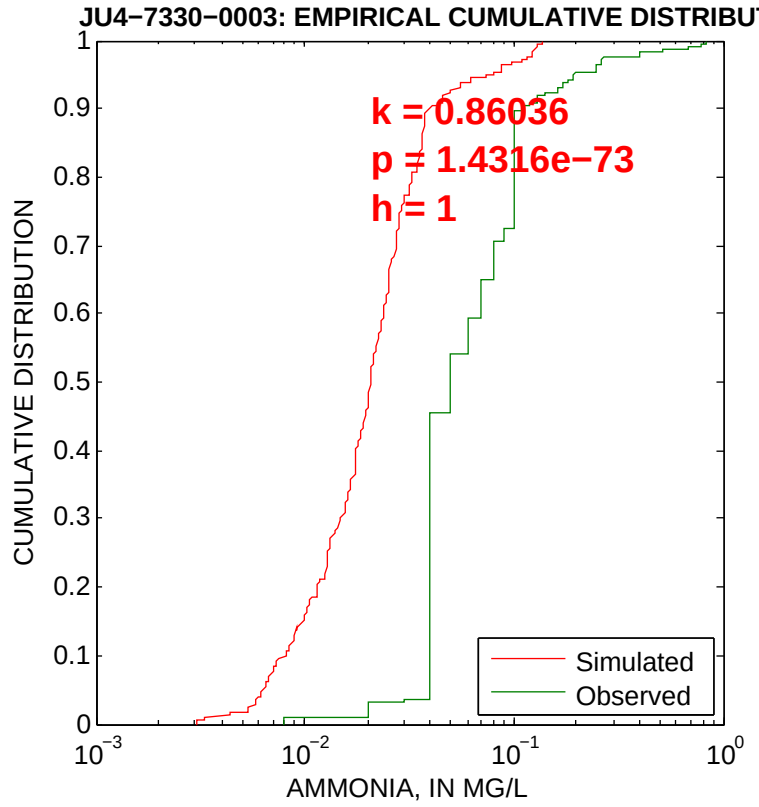
STATISTICS

		observe	simulate
n		10957	10957
min		121	101.85
		2.08279	2.00796
mean		694.415	662.325
		2.67445	2.67424
media		358	379.69
		2.55388	2.57943
max		15100	15449
		4.17898	4.1889
varian		812855	609333
		0.108355	0.103765
JB		0.001	0.001
		0.001	0.001
		ra	log
%		-4.62116	-0.0076309
err.va		309988	0.0307698
rel.std.err		0.381358	0.283972
mod.eff		0.618642	0.716028

VERSION 2.1







DATA SELECTION

scenario	file
P620171001WQ	NH3X.calib

plot: NH3X - ammonia

Dates: 1/1/1985 – 12/31/201

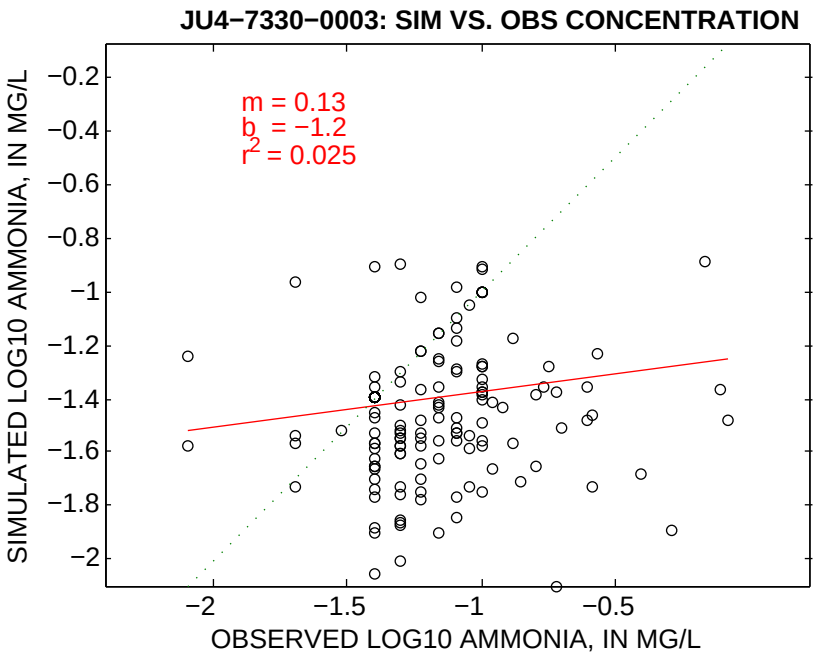
Drive	Directory	Observed
N/A	model	OBS20161101

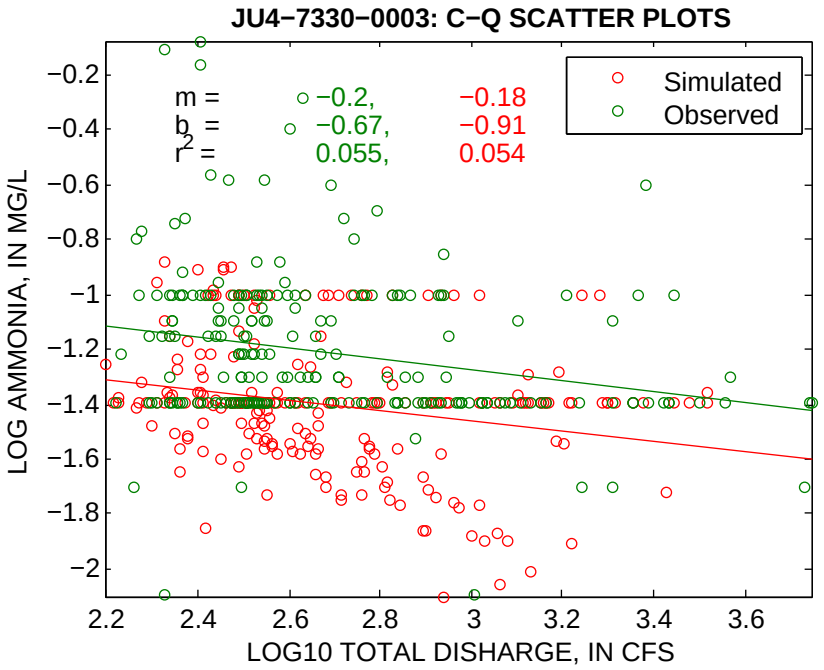
STATISTICS

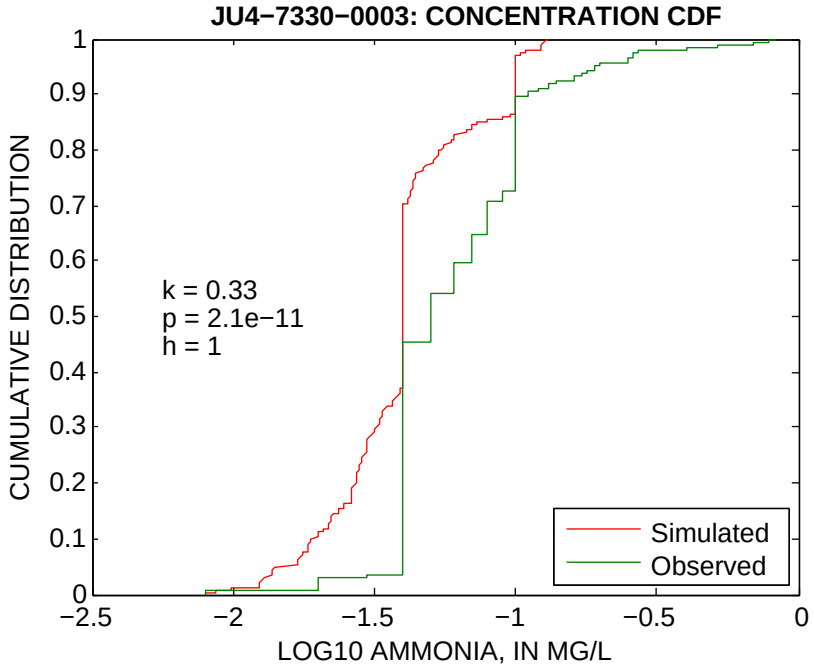
	n	222	222
		observe	simulate
min		0.008	0.0030341
		-2.09691	-2.51797
mean		0.0814685	0.0259566
		-1.20984	-1.69671
media		0.05	0.020636
		-1.30103	-1.68538
max		0.84	0.13779
		-0.0757207	-0.860782
varian		0.00992665	0.00052927
		0.0786697	0.0906577
JB		0.001	0.001
		0.001	0.071389
		ra	log
%		-68.139	40.2427
err.va		0.0131049	0.392176
rel.std.err		1.32018	4.9851
mod.eff		-0.320178	-3.9851

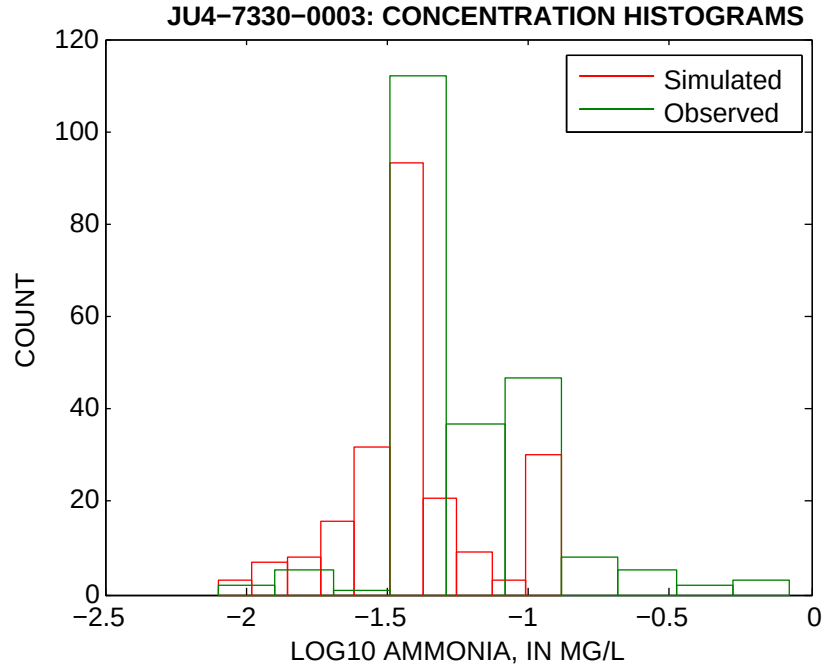
VERSION

ALL DATA
LOG10

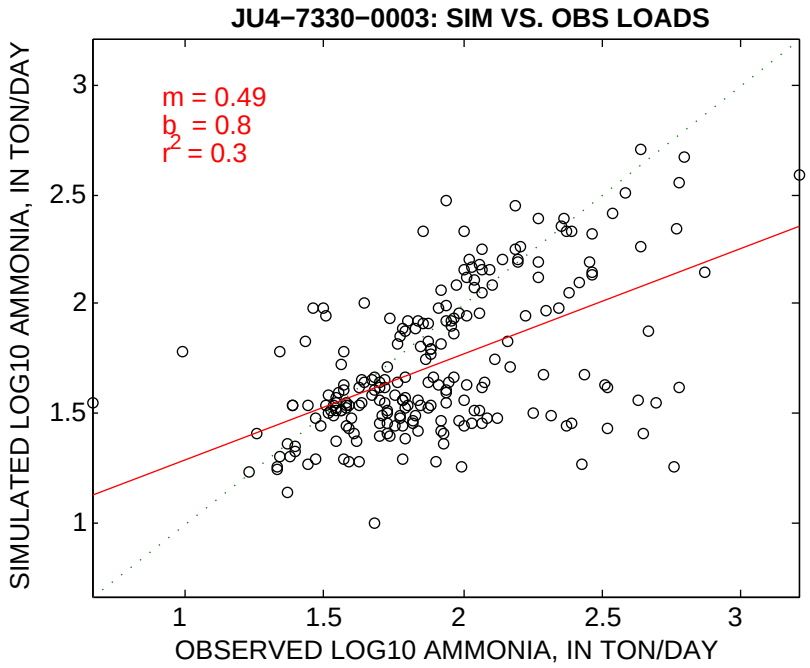


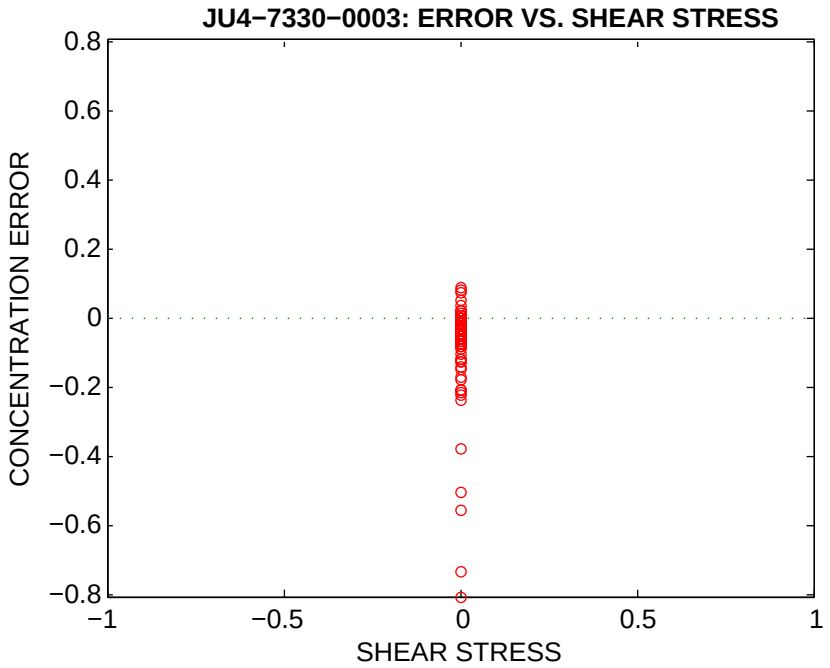


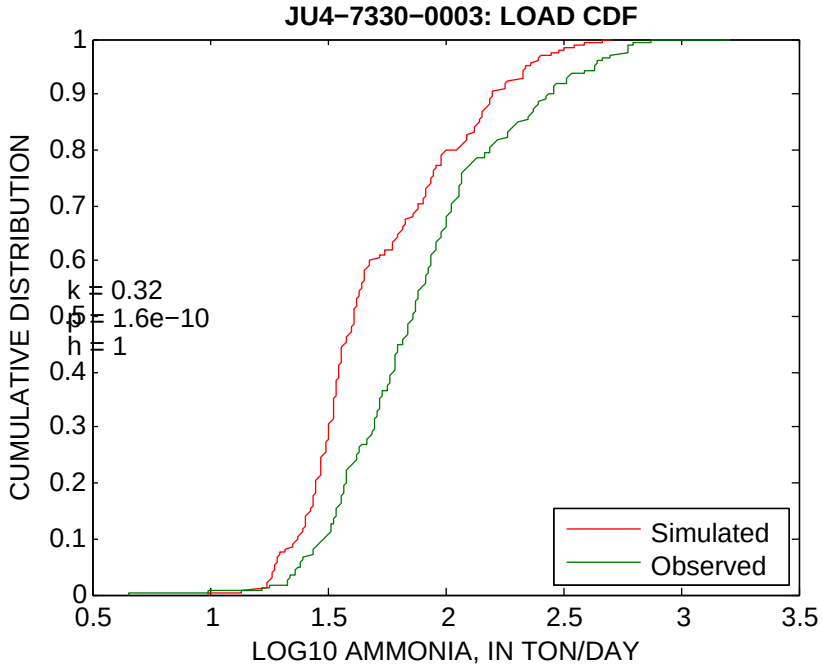


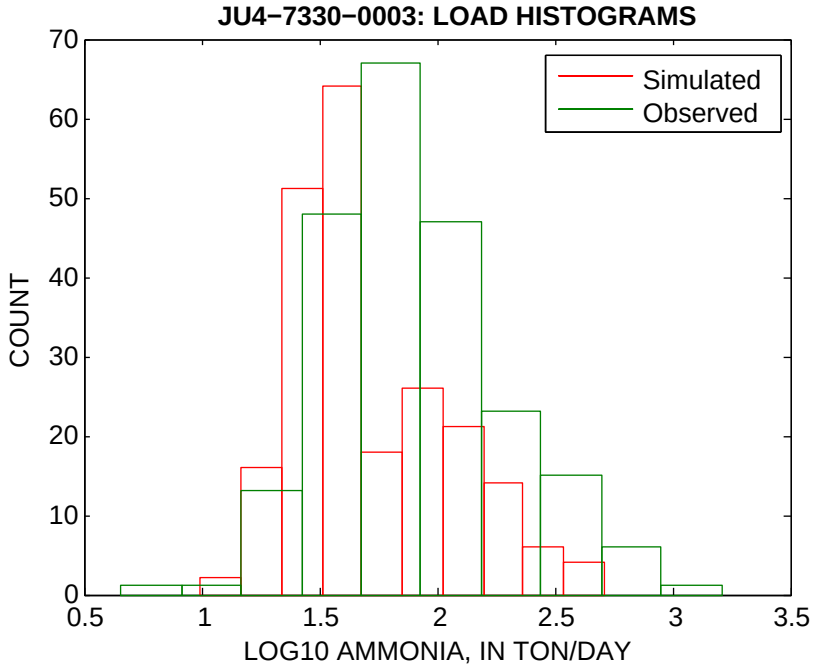


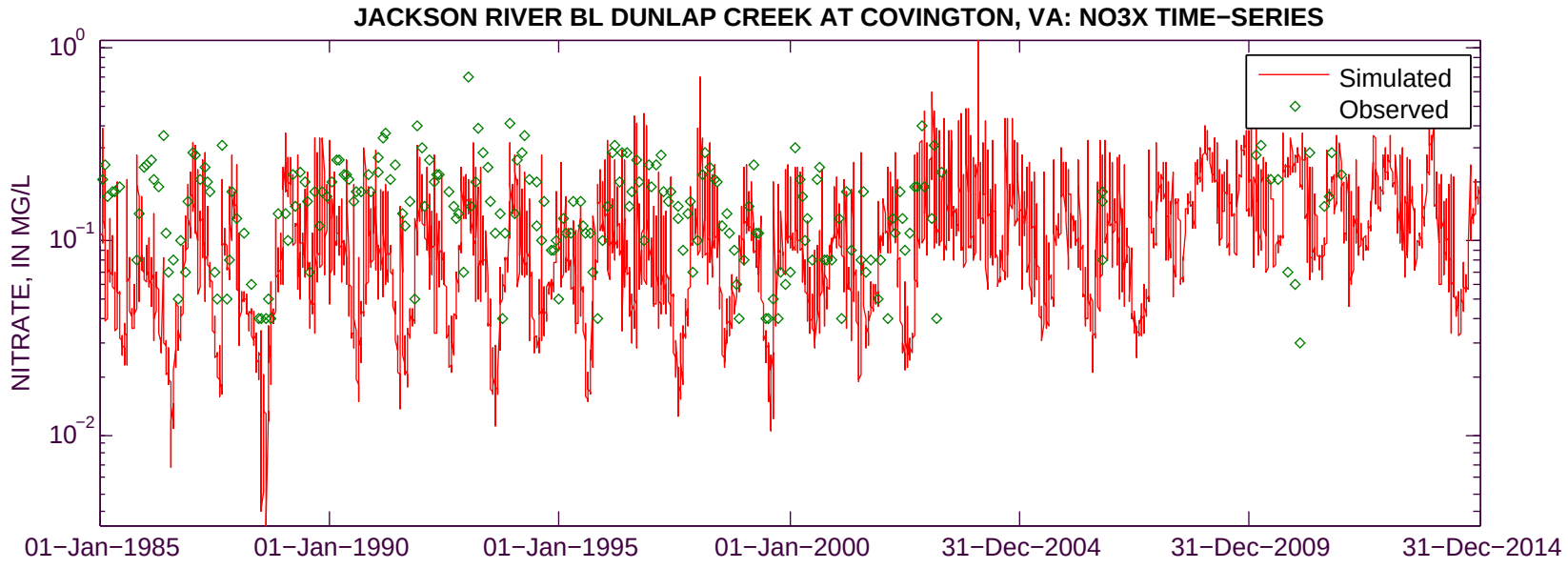
LOAD DATA
LOG10

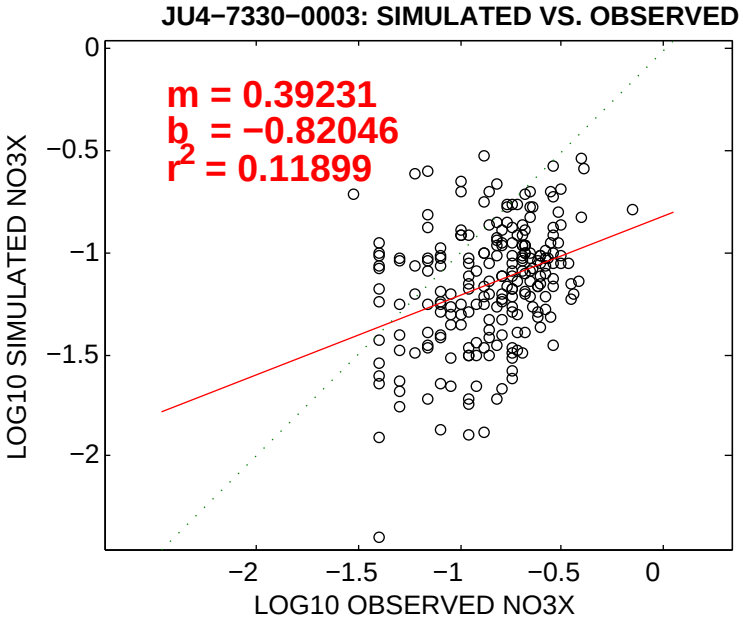


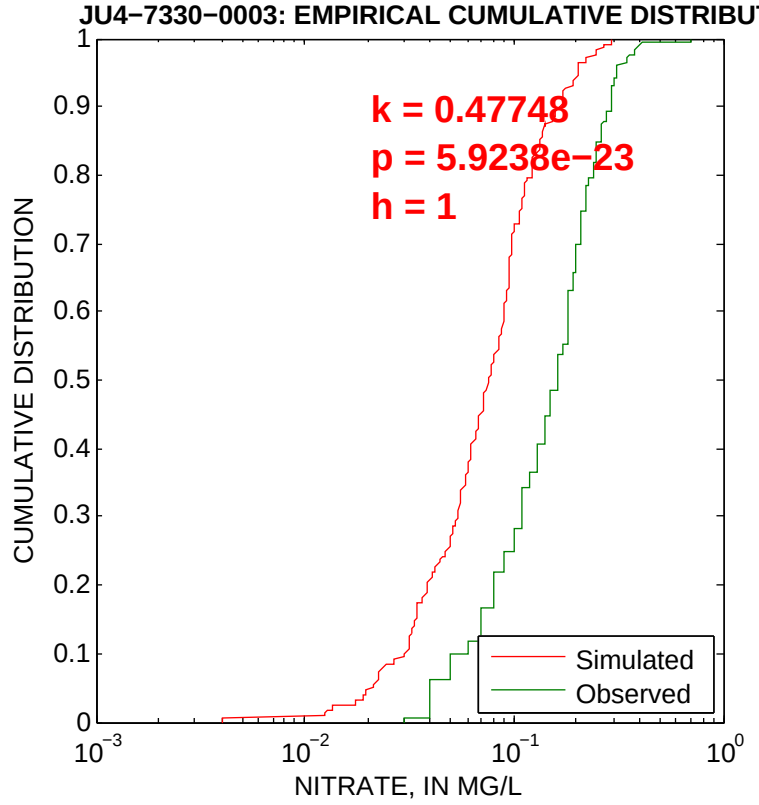












DATA SELECTION

scenario	file
P620171001WQ	NO3X.calib

plot: NO3X - nitrate

Dates: 1/1/1985 – 12/31/201

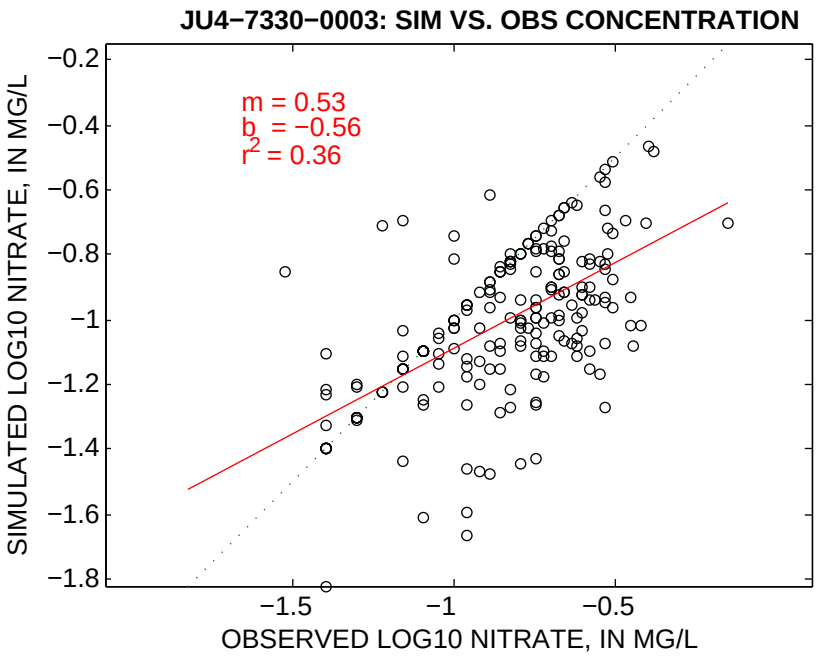
Drive	Directory	Observed
N/A	model	OBS20161101

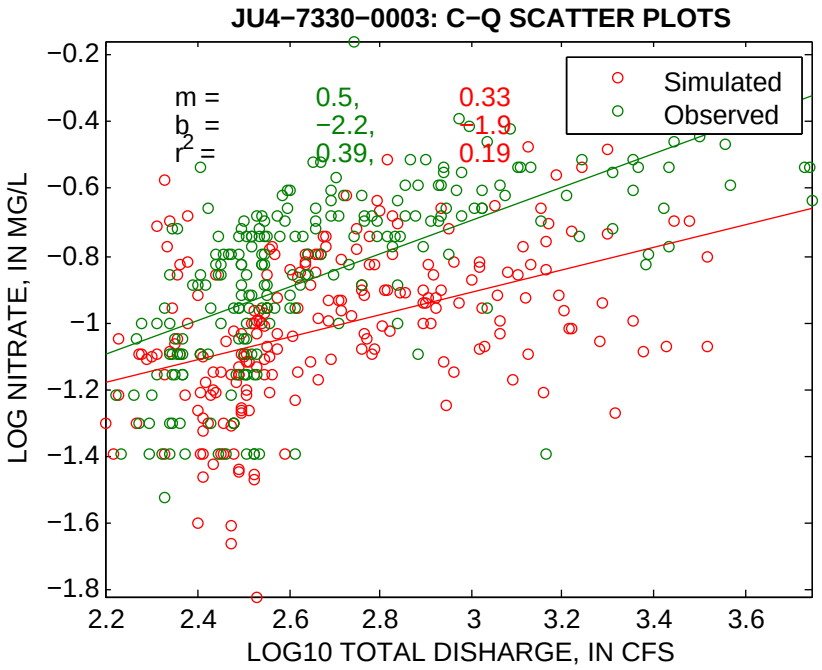
STATISTICS

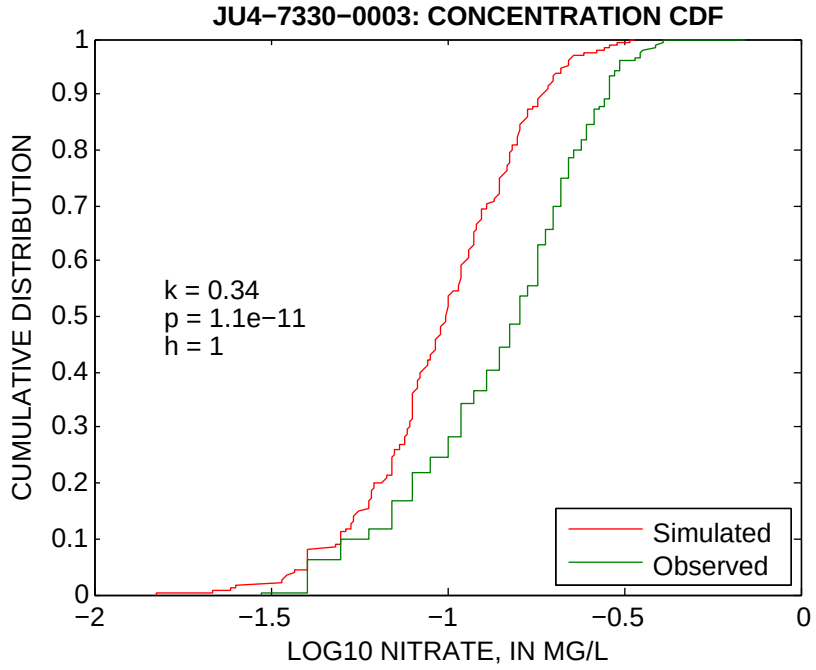
	n	observe	simulate
		222	222
min		0.03	0.0040155
		-1.52288	-2.39626
mean		0.165631	0.0862575
		-0.851247	-1.15441
media		0.16	0.0763915
		-0.79588	-1.11696
max		0.7	0.29618
		-0.154902	-0.528444
varian		0.00834327	0.00305032
		0.0681652	0.0881686
JB		0.001	0.001
		0.015636	0.003038
		ra	log
%		-47.9217	35.6144
err.va		0.0146311	0.195176
rel.std.err		1.75364	2.86328
mod.eff		-0.753641	-1.86328

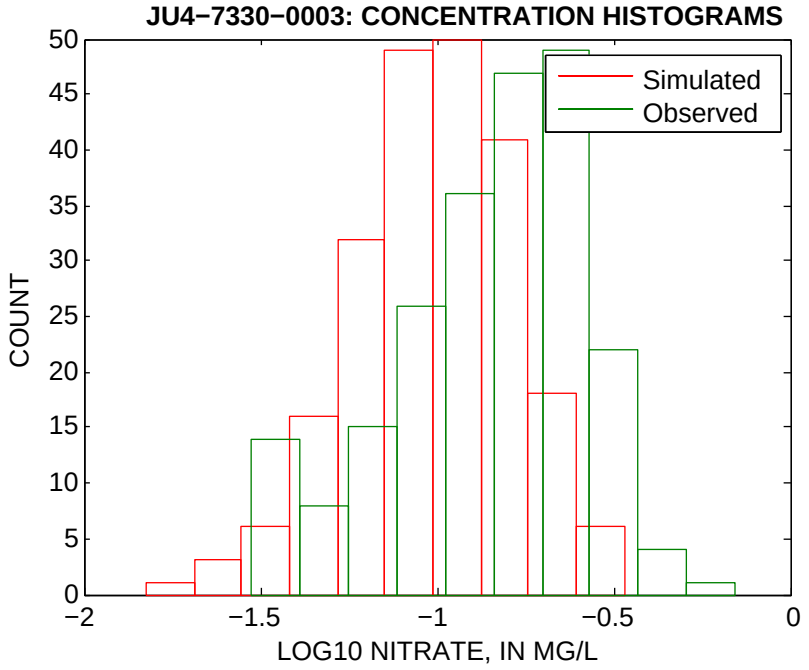
VERSION 2.1

ALL DATA
LOG10

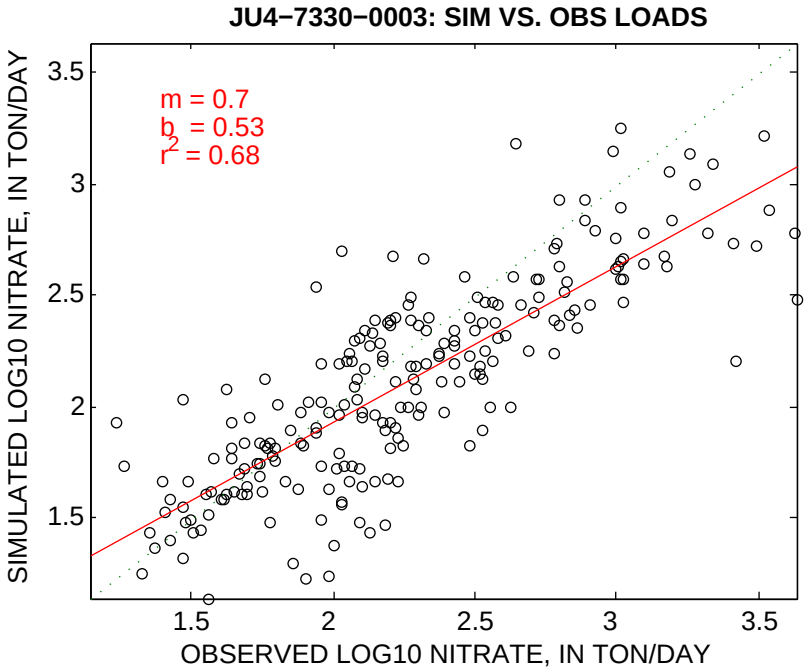


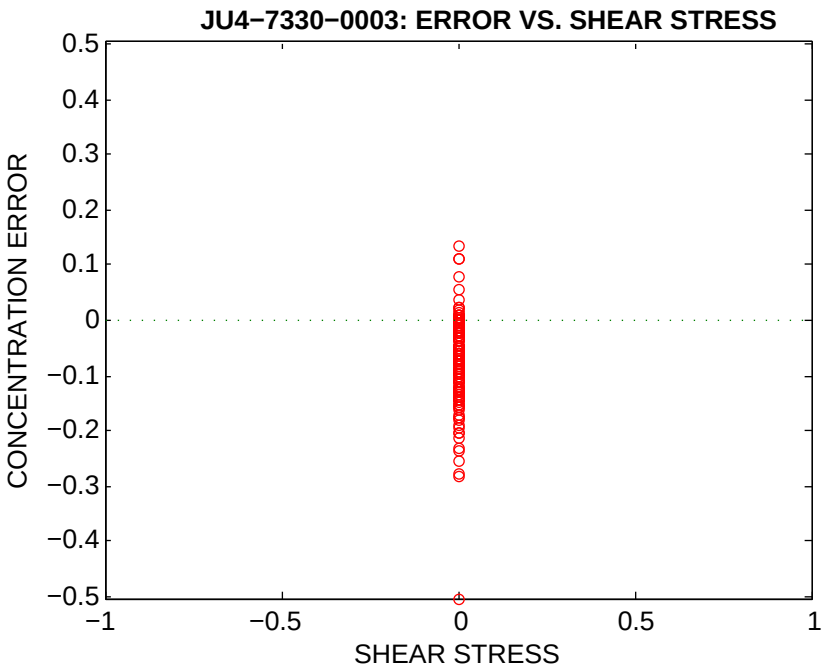


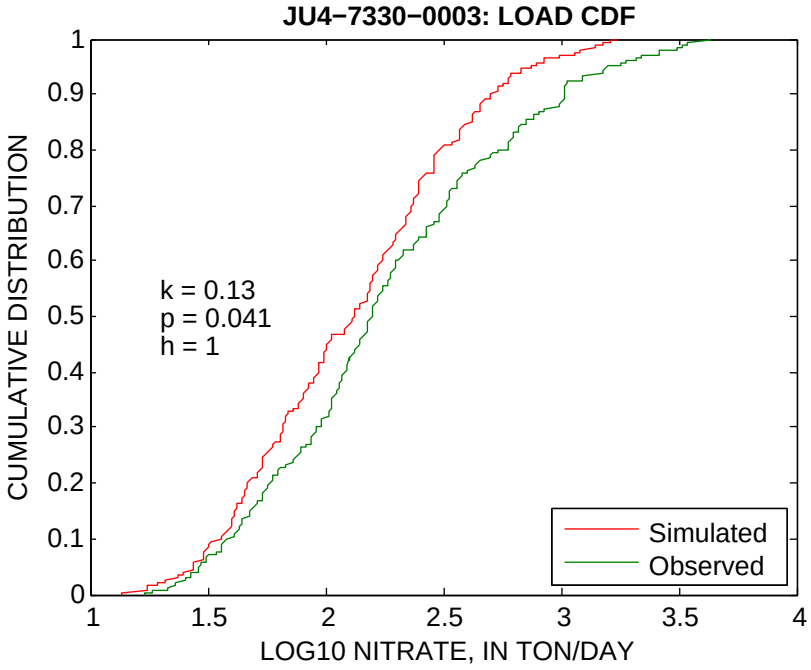


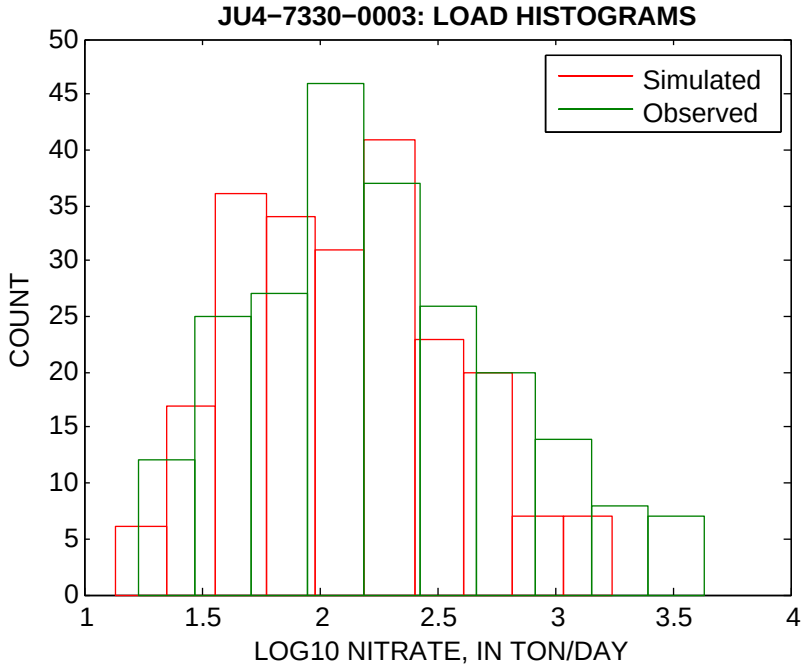


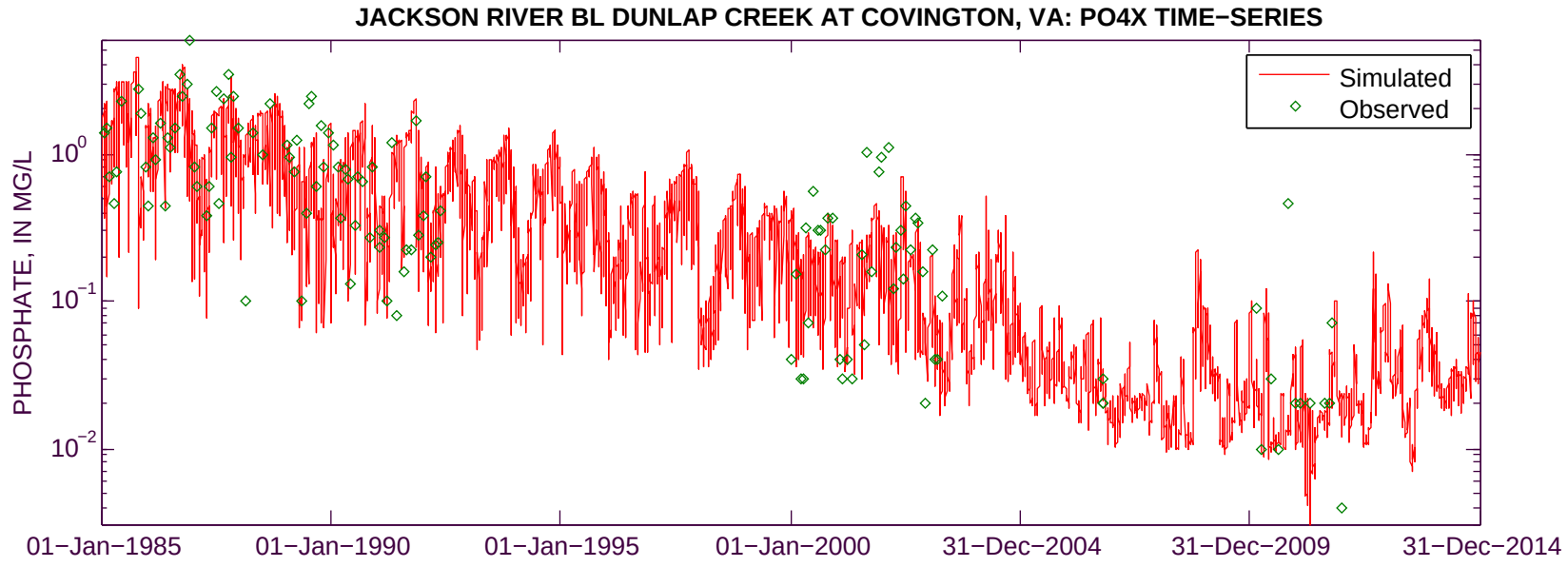
LOAD DATA
LOG10

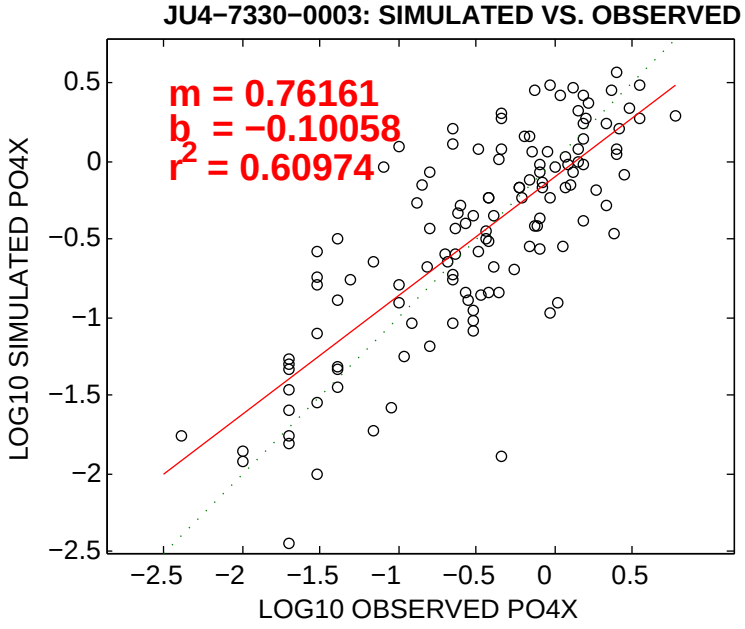


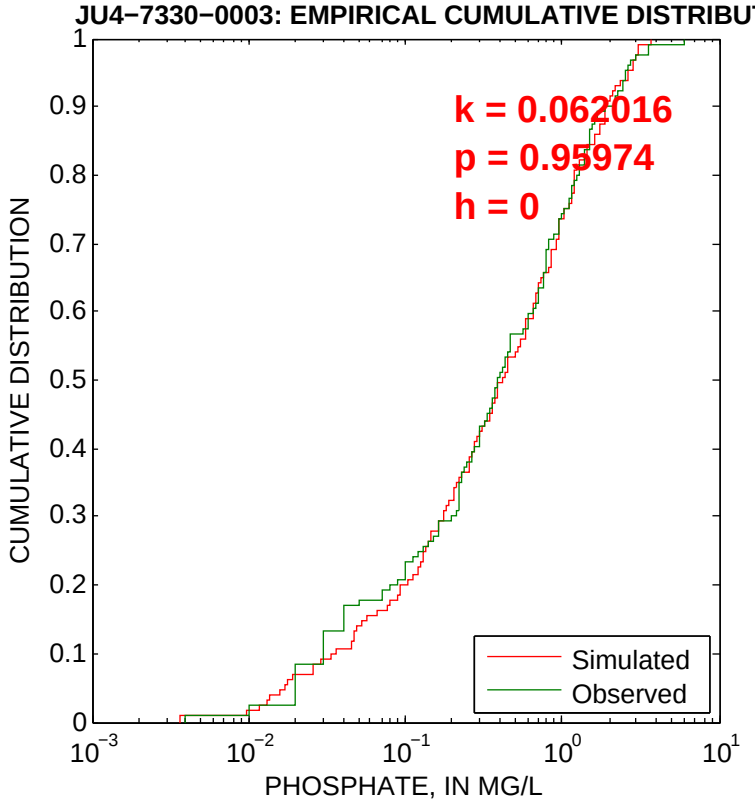












DATA SELECTION

scenario	file
P620171001WQ	PO4X.calib

plot: PO4X - phosphate

Dates: 1/1/1985 – 12/31/201

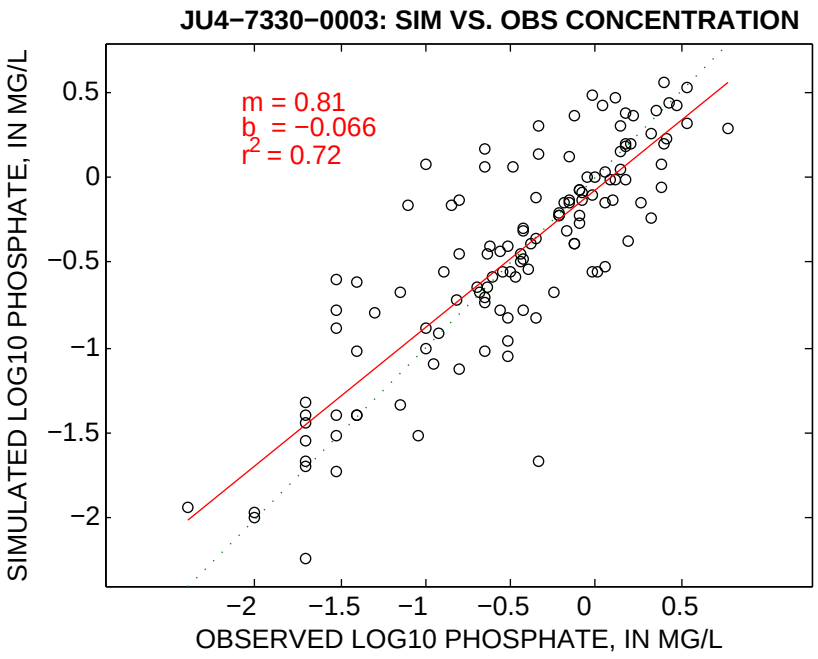
Drive	Directory	Observed
N/A	model	OBS20161101

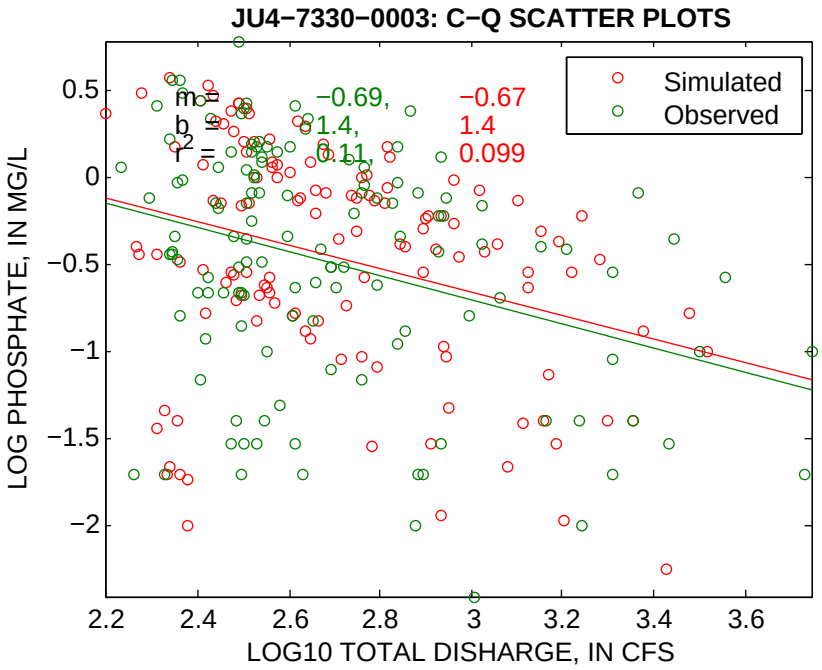
STATISTICS

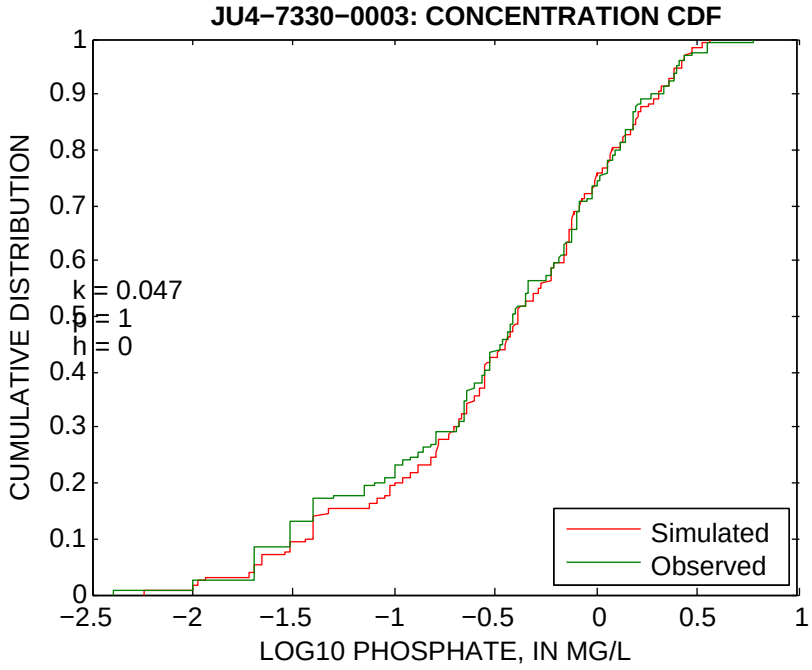
	n	129	129
		observe	simulate
min		0.004	0.0036187
		-2.39794	-2.44145
mean		0.747705	0.736247
		-0.495147	-0.477688
media		0.38	0.42133
		-0.420216	-0.375378
max		6	3.7242
		0.778151	0.571033
varian		0.83579	0.661089
		0.450101	0.428182
JB		0.001	0.001
		0.024002	0.017000
		ra	log
%		-1.53248	-3.52607
err.va		0.592362	0.192991
rel.std.err		0.708745	0.428773
mod.eff		0.291255	0.571227

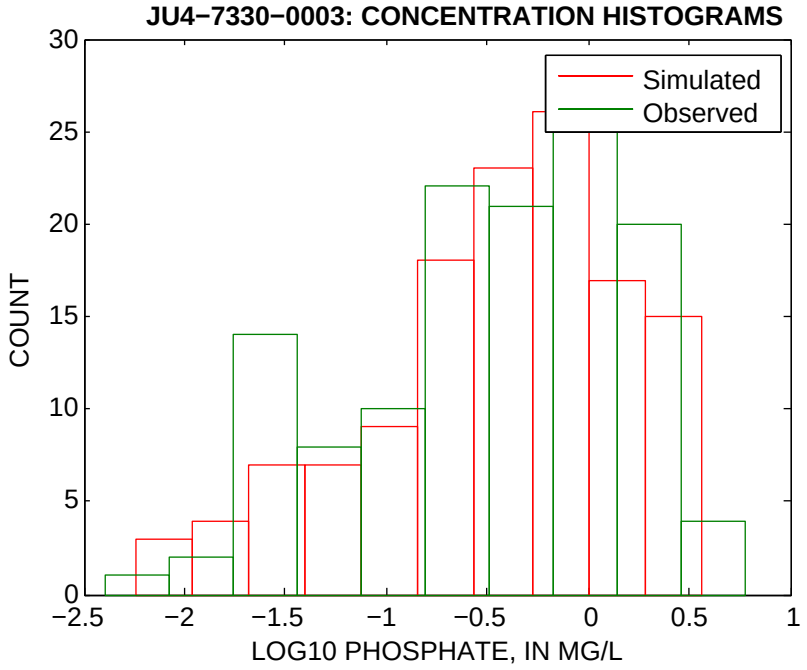
VERSION 2.1

ALL DATA
LOG10

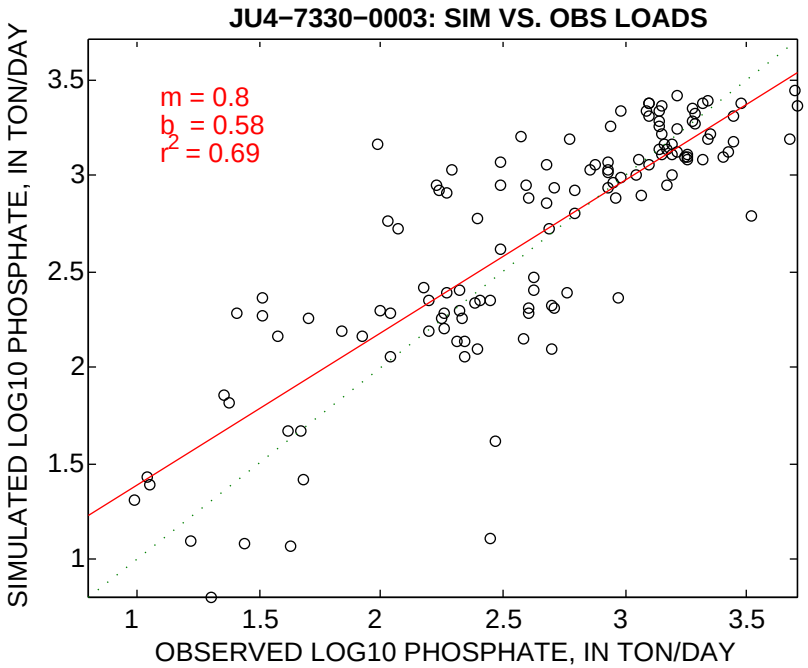




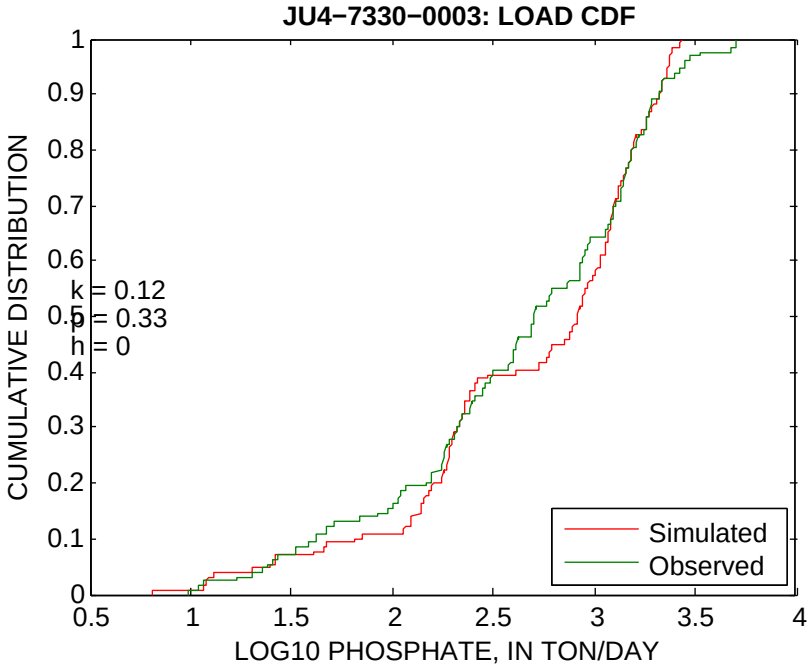


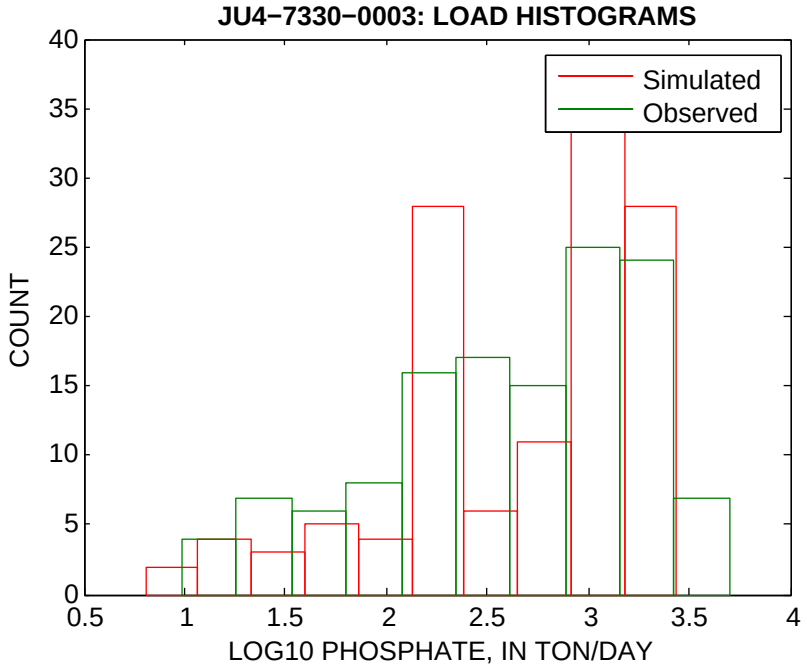


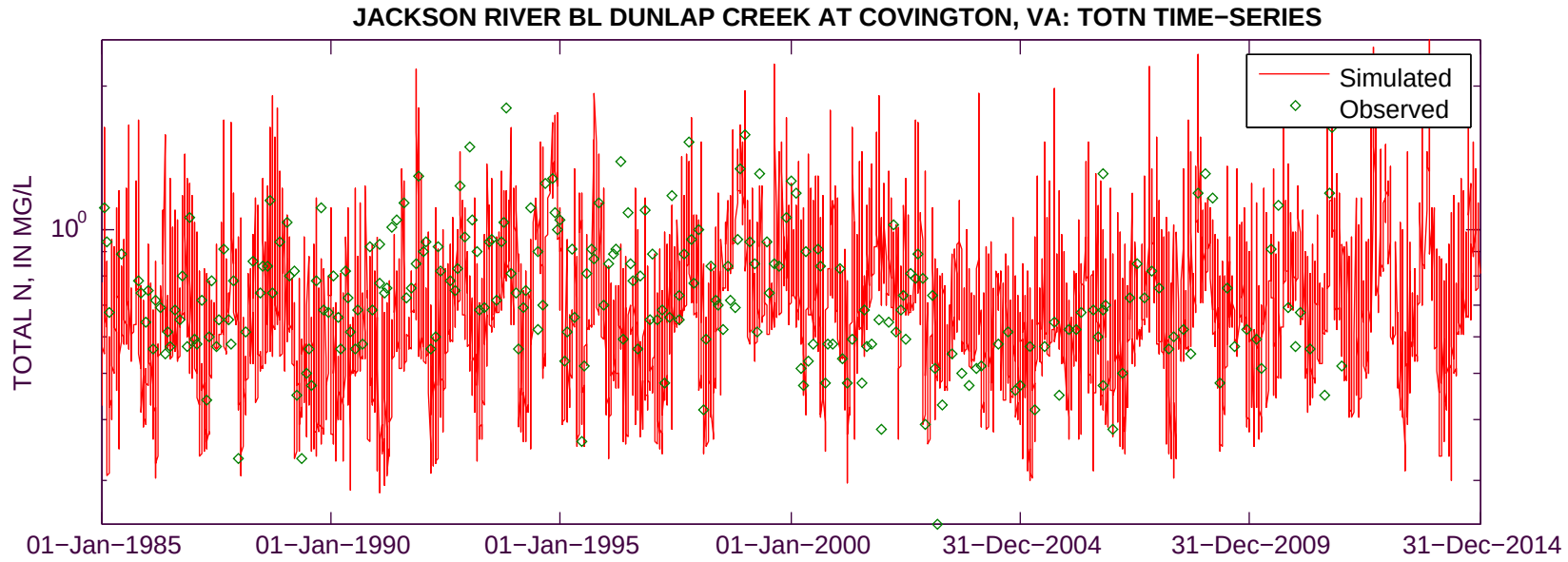
LOAD DATA
LOG10

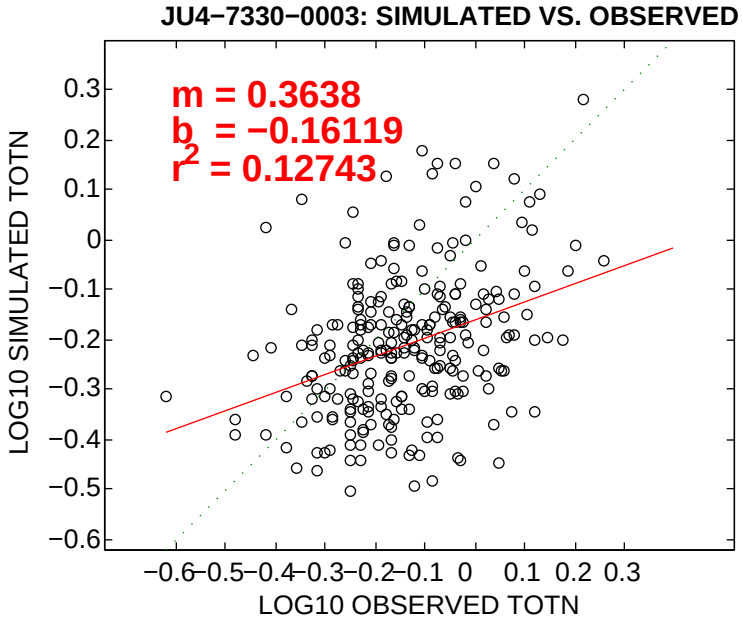


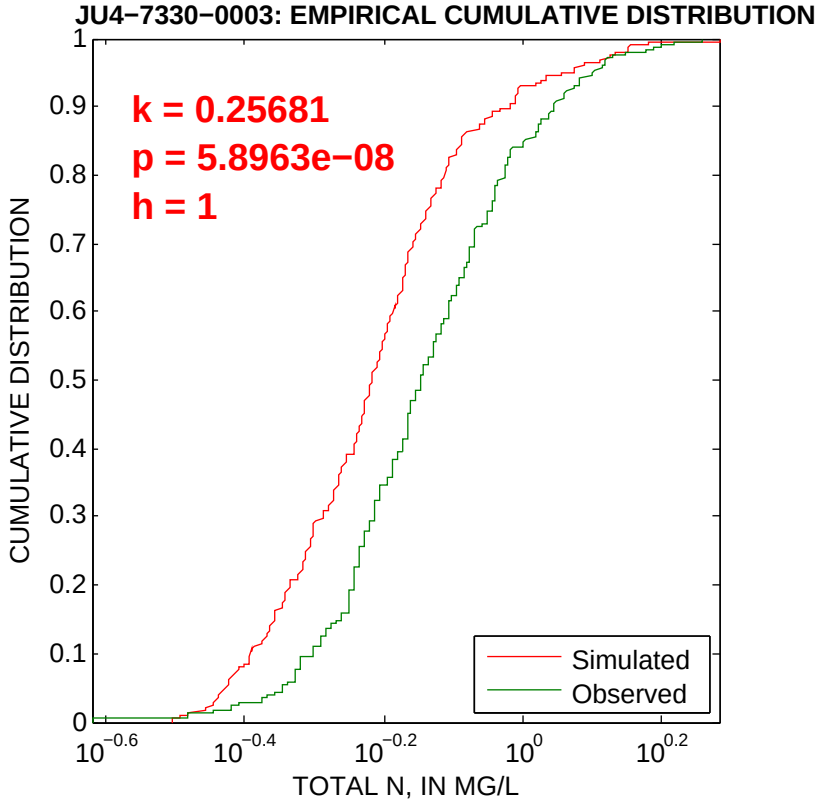












DATA SELECTION

scenario: P620171001WQ | file: TOTN.calib

plot: TOTN - total nitrogen

Dates: 1/1/1985 – 12/31/201

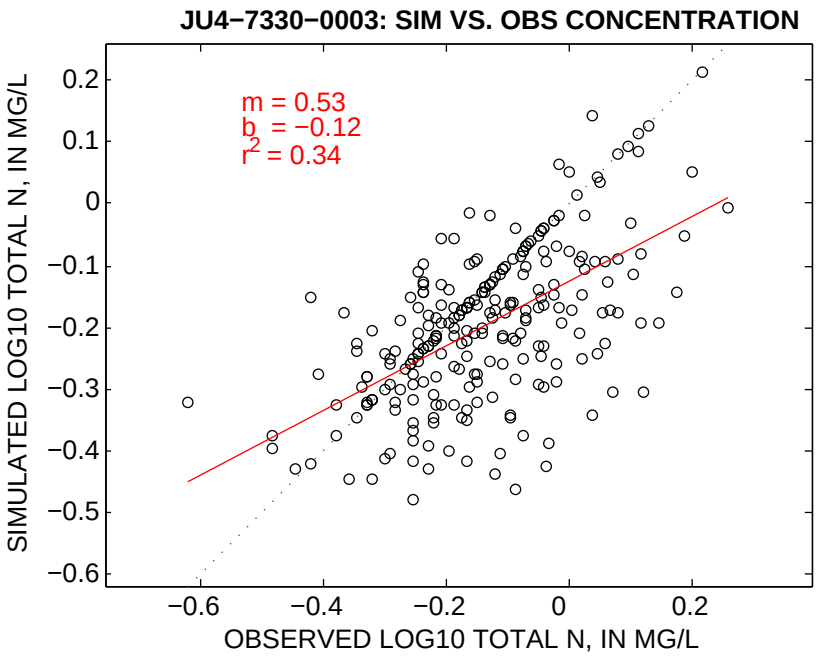
Drive: N/A | Directory: model | Observed: OBS20161101

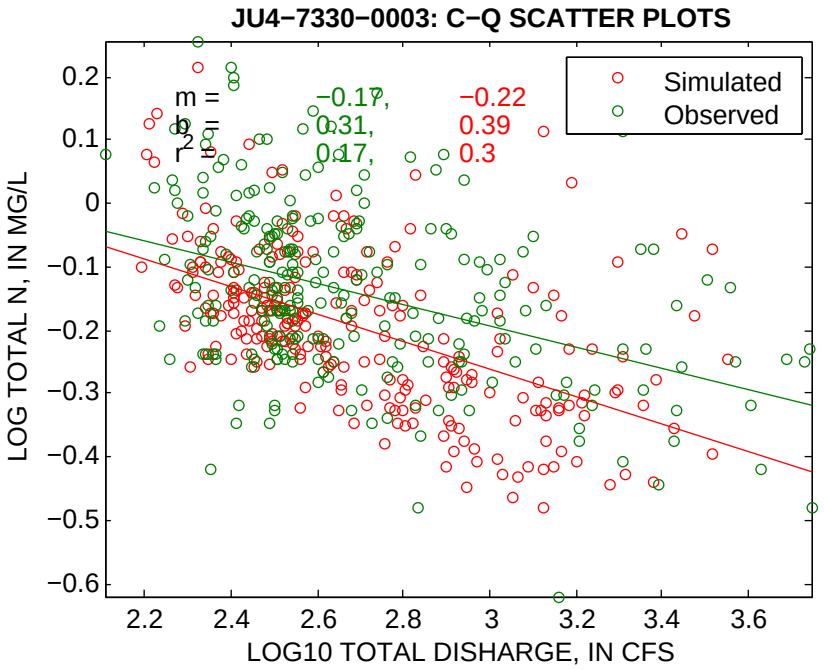
STATISTICS

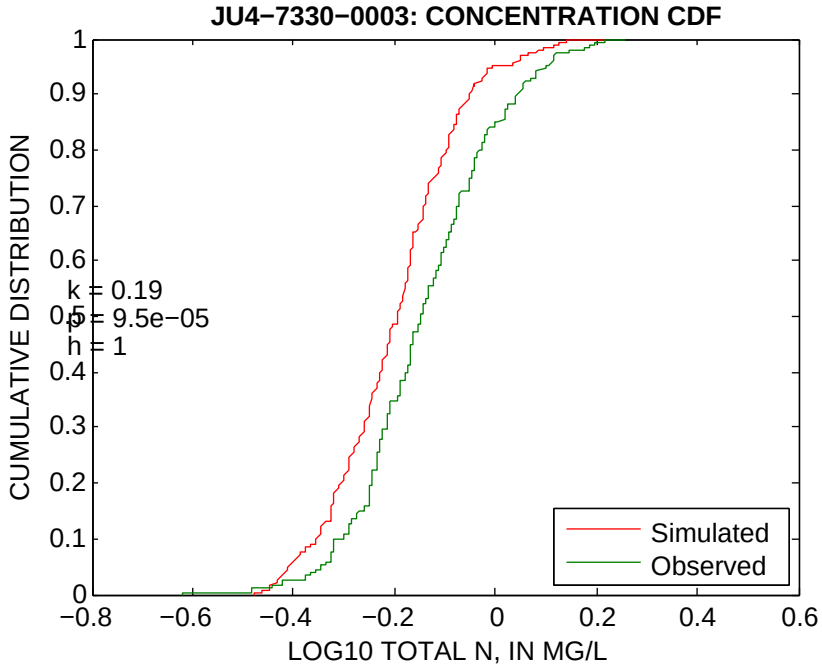
n	257	257
	observe	simulate
min	0.24	0.31405
	-0.619789	-0.503001
mean	0.763969	0.648961
	-0.13877	-0.211671
media	0.71	0.60488
	-0.148742	-0.218331
max	1.81	1.9094
	0.257679	0.280897
varian	0.0633162	0.055812
	0.0188747	0.0196035
JB	0.001	0.001
	0.5	0.004922
	ra	log
%	-15.054	52.5338
err.va	0.0883543	0.0300804
rel.std.err	1.39545	1.59369
mod.eff	-0.395446	-0.593687

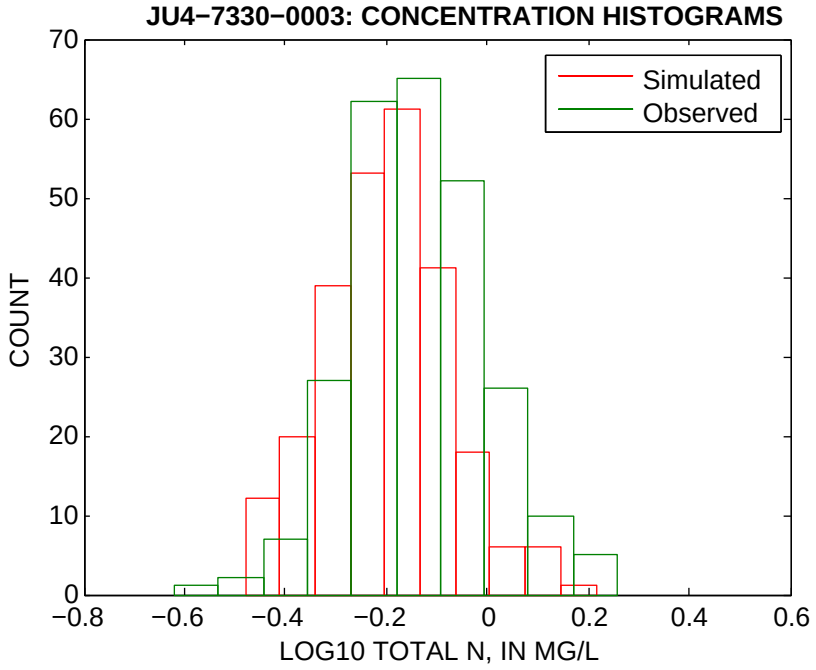
VERSION 2.1

ALL DATA
LOG10

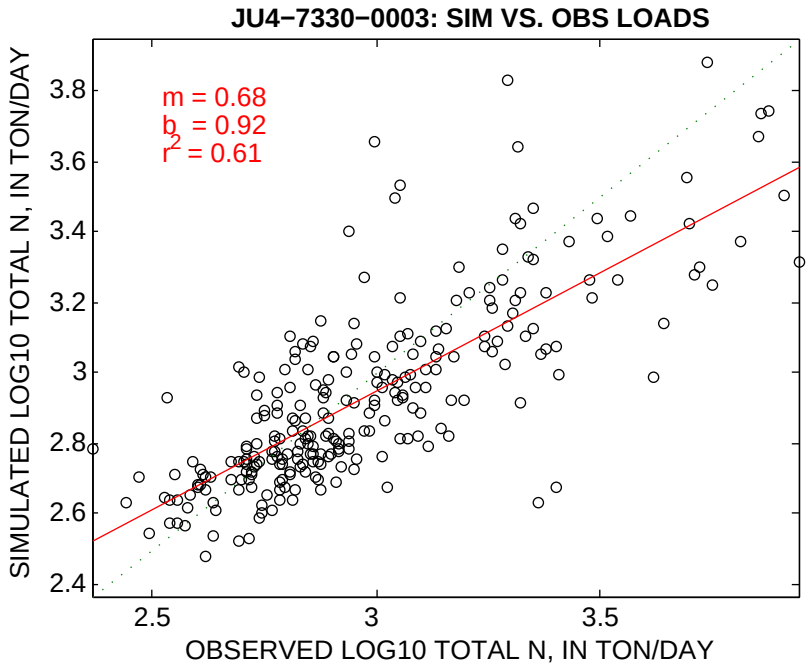


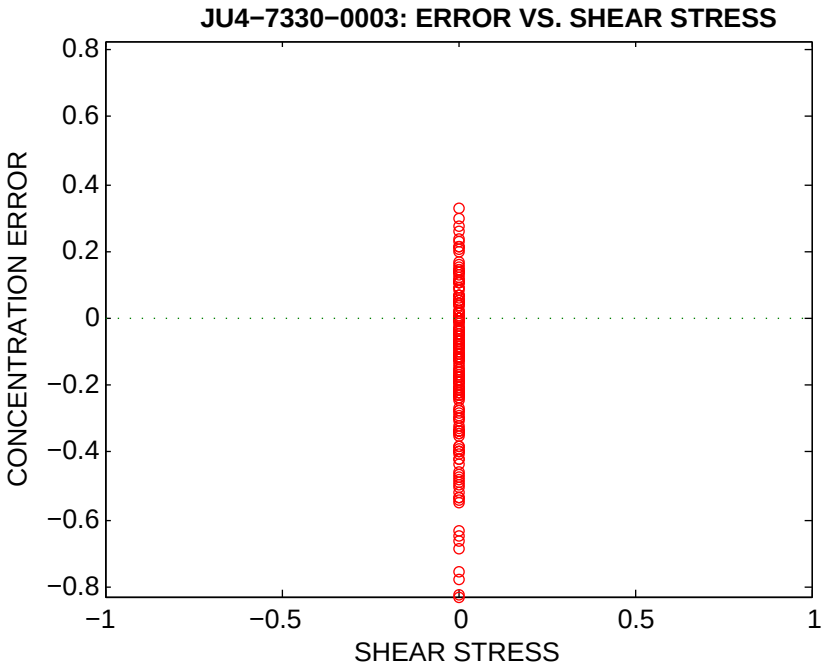


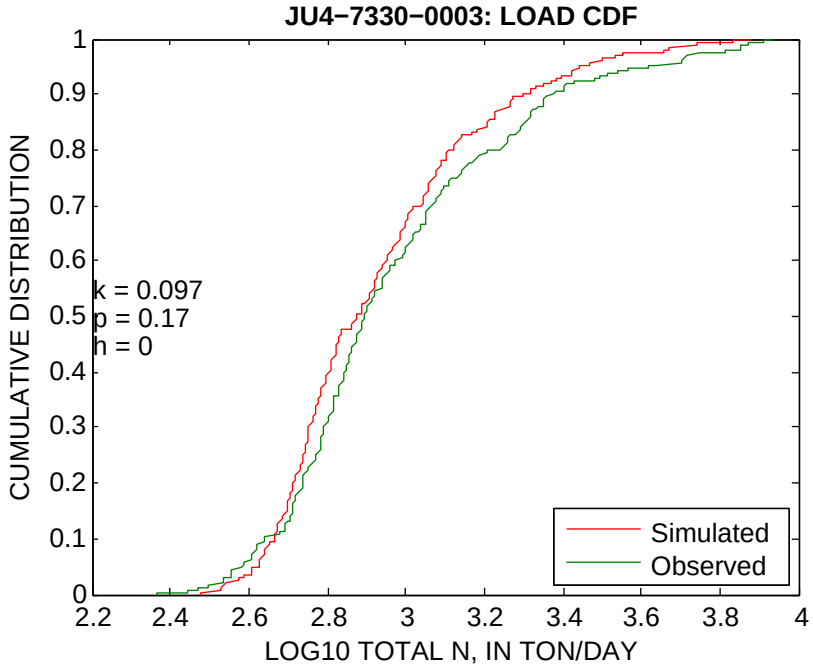


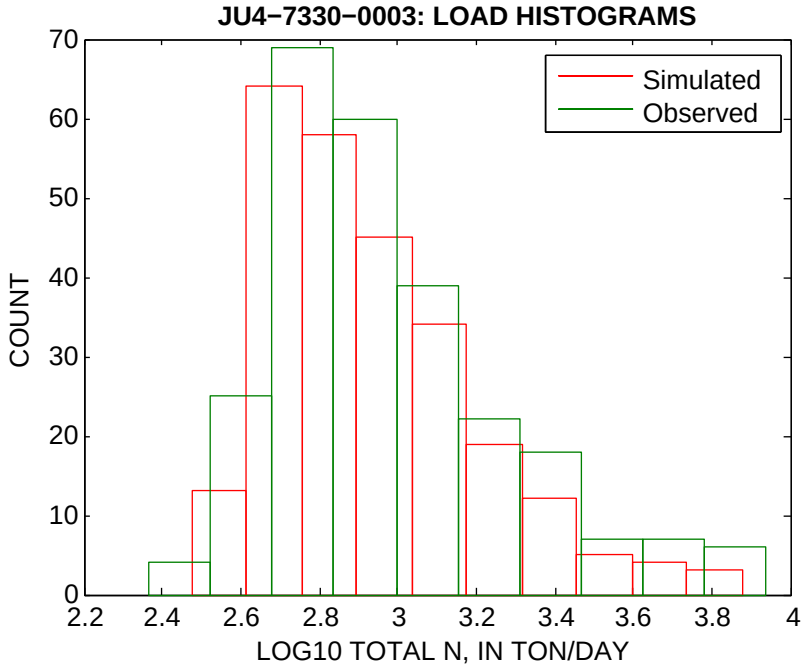


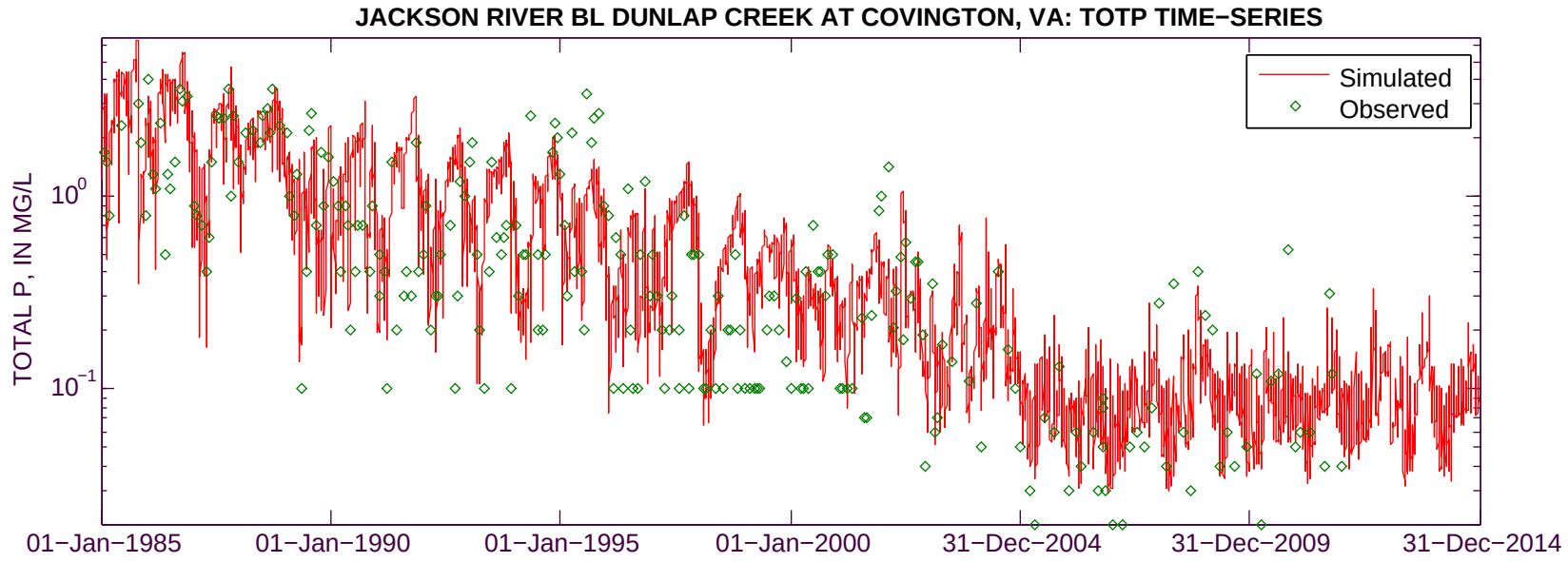
LOAD DATA
LOG10

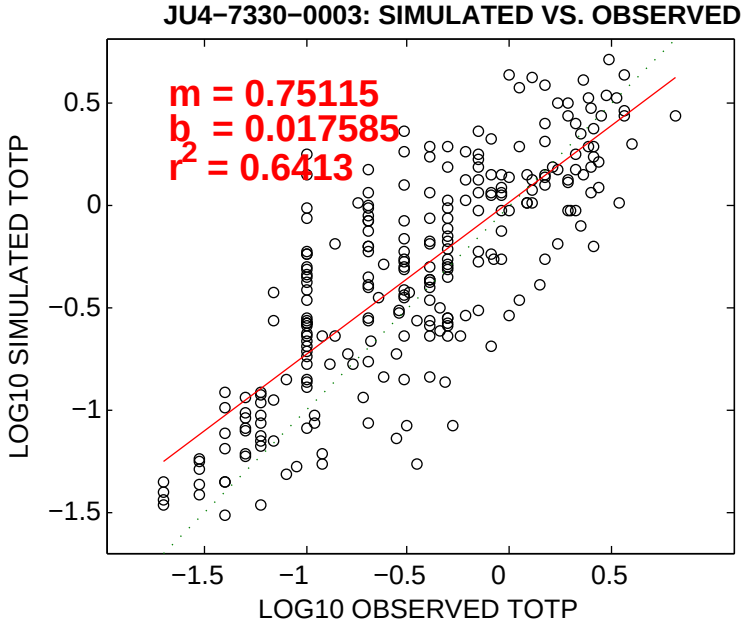


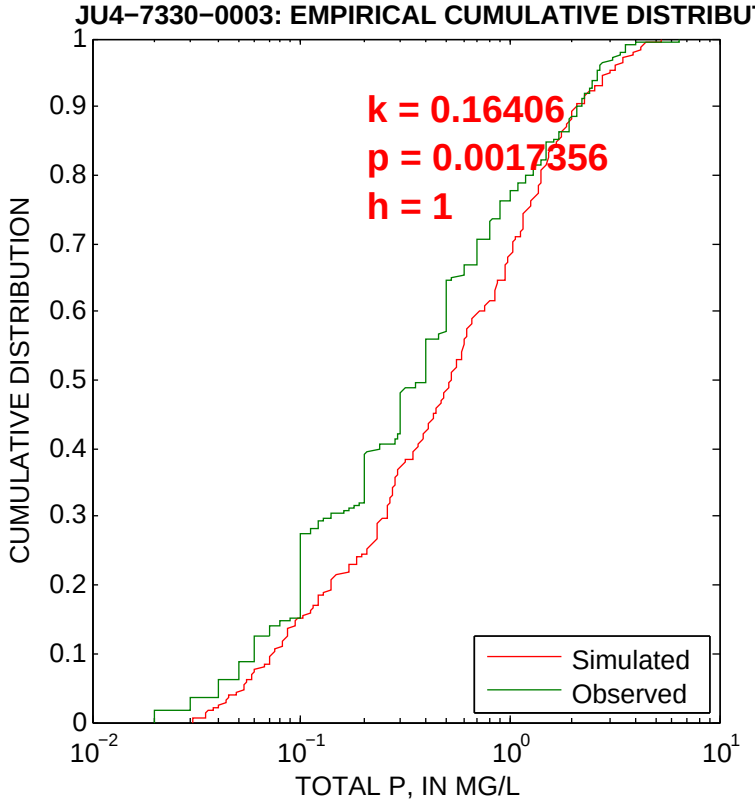












DATA SELECTION

scenario	file
P620171001WQ	TOTP.calib

plot: TOTP - total phosphorus

Dates: 1/1/1985 – 12/31/201

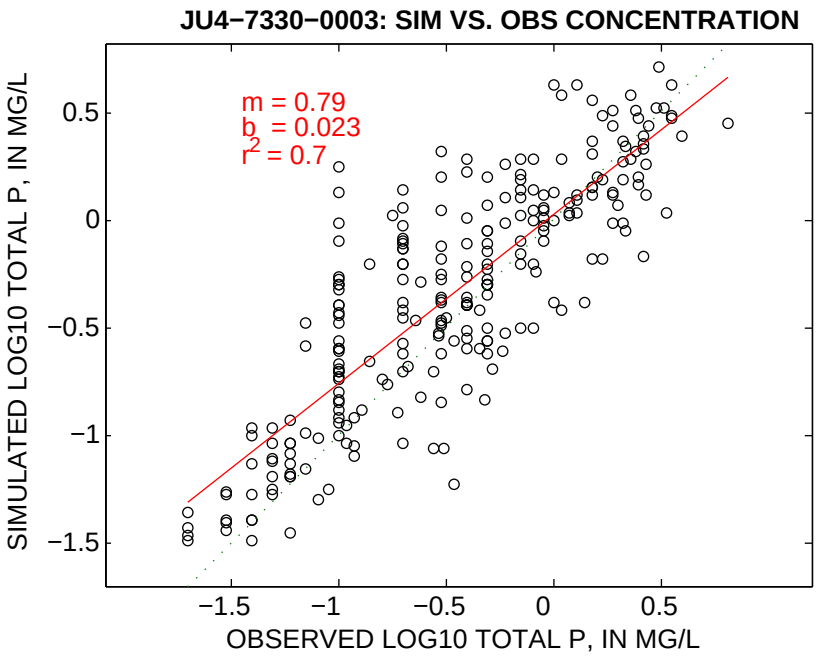
Drive	Directory	Observed
N/A	model	OBS20161101

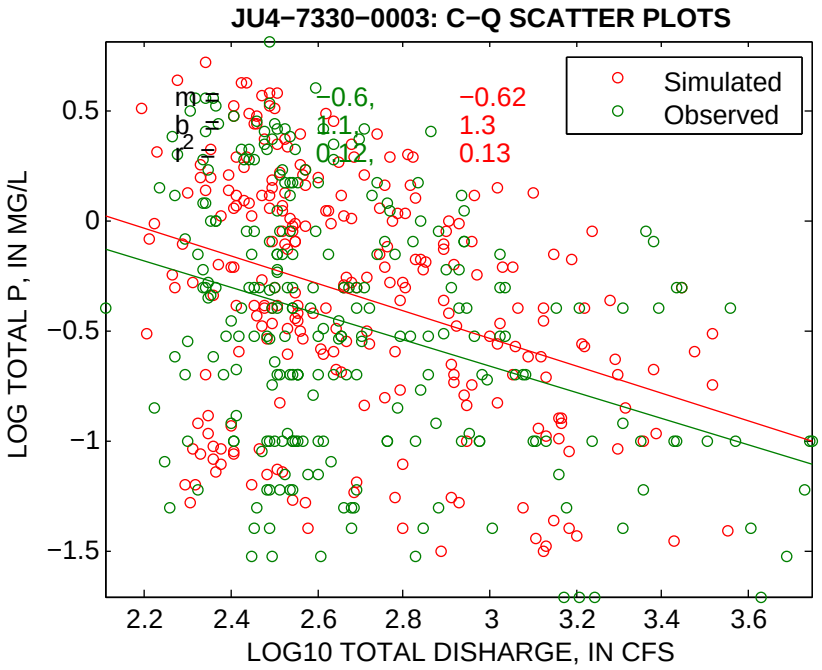
STATISTICS

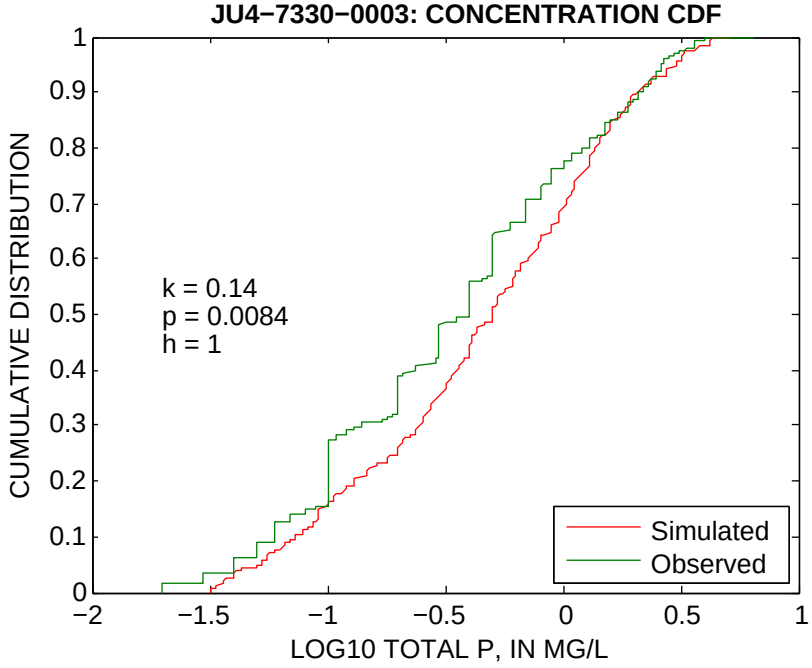
	n	256	256
		observe	simulate
min		0.02	0.030608
		-1.69897	-1.51417
mean		0.728633	0.873143
		-0.468981	-0.334689
media		0.4	0.52161
		-0.39794	-0.282658
max		6.5	5.263
		0.812913	0.721233
varian		0.856562	0.92351
		0.326845	0.287563
JB		0.001	0.001
		0.025186	0.015146
		ra	log
%		19.8331	-28.6349
err.va		0.564399	0.141496
rel.std.err		0.658912	0.432915
mod.eff		0.341088	0.567085

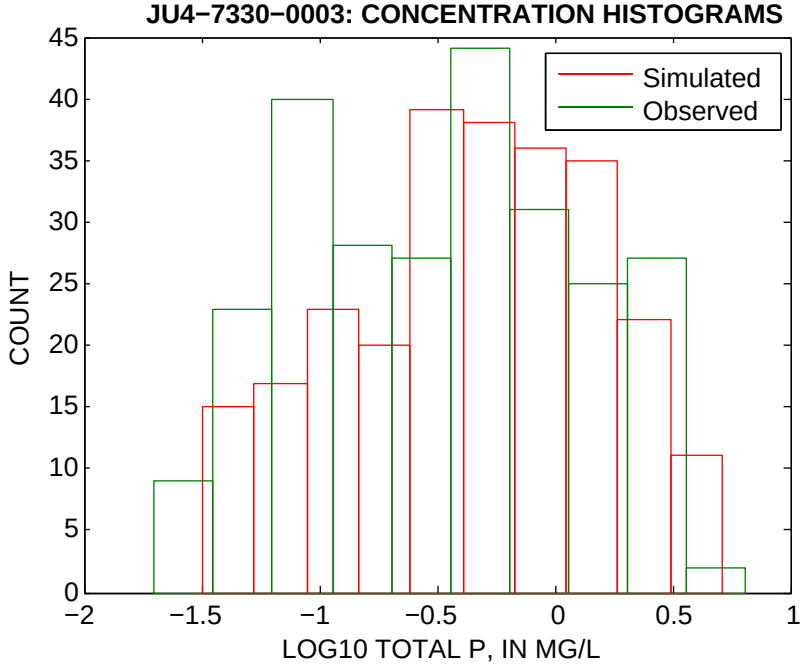
VERSION 2.1

ALL DATA
LOG10

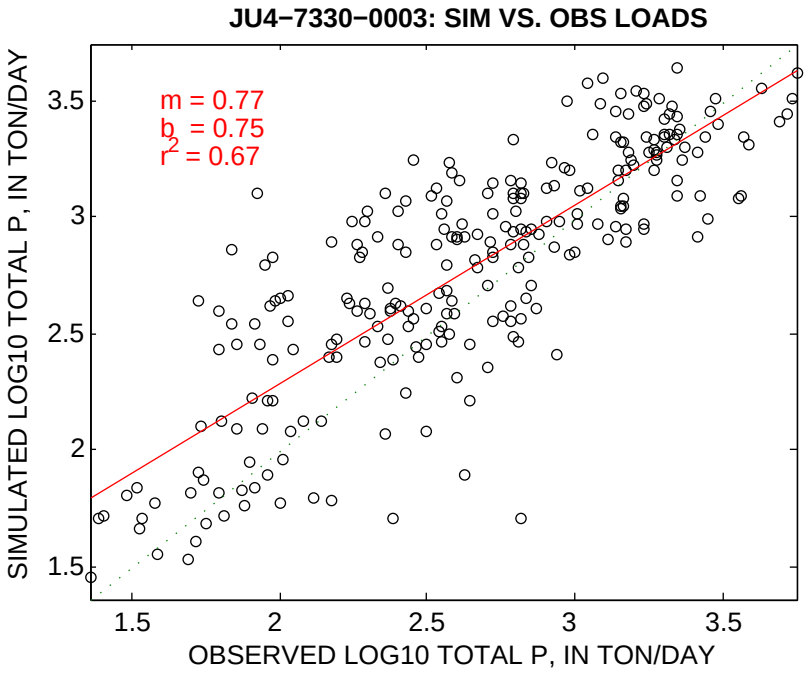


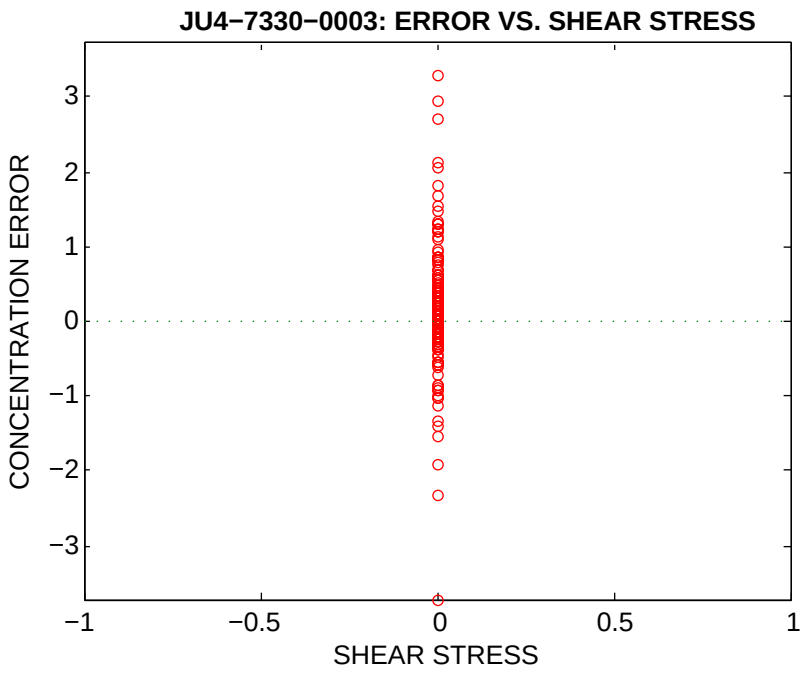


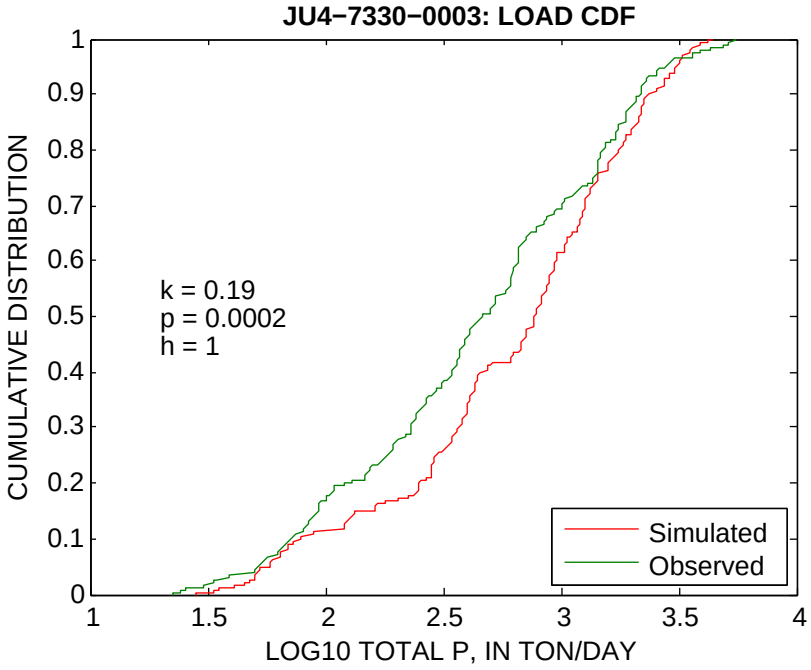


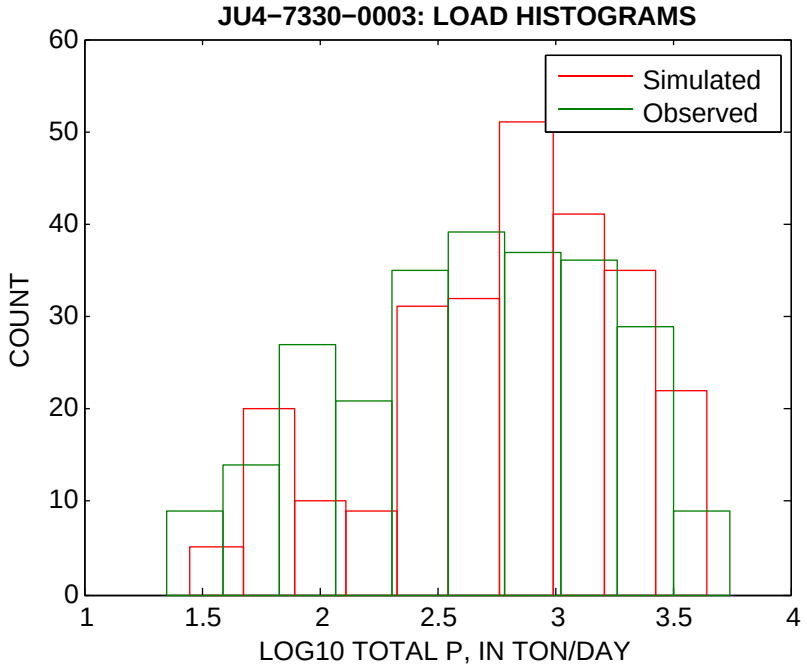


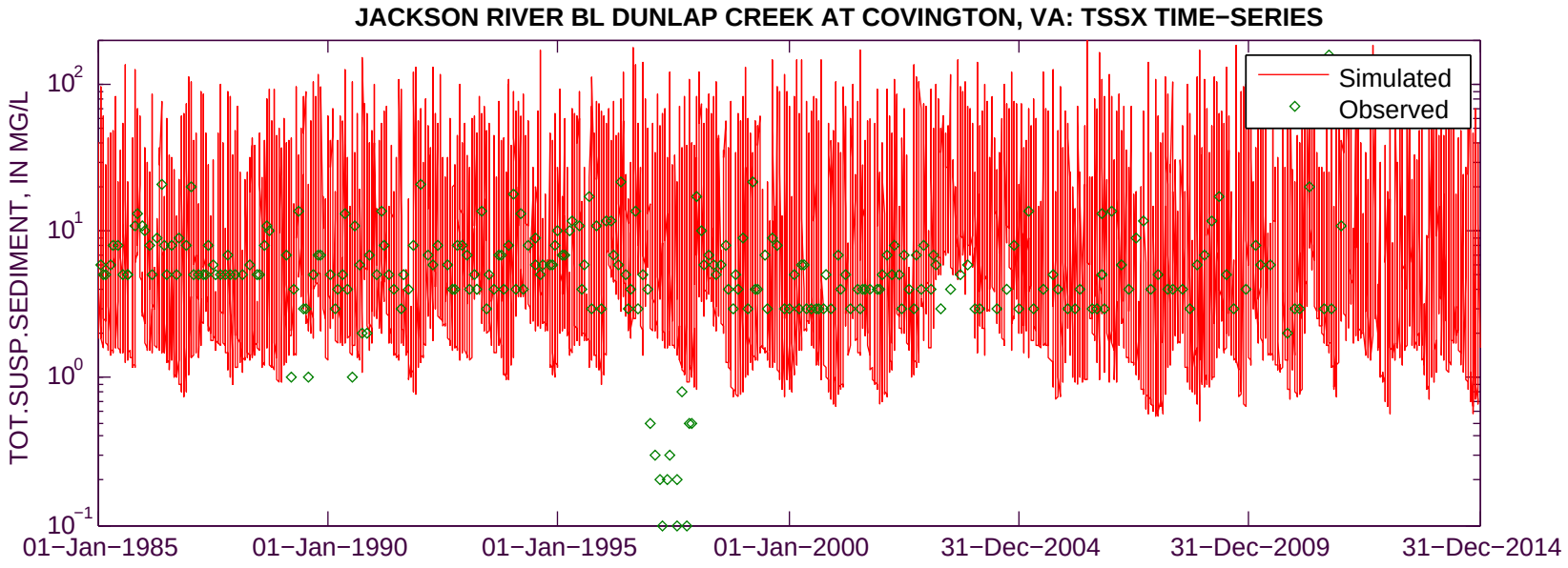
LOAD DATA
LOG10

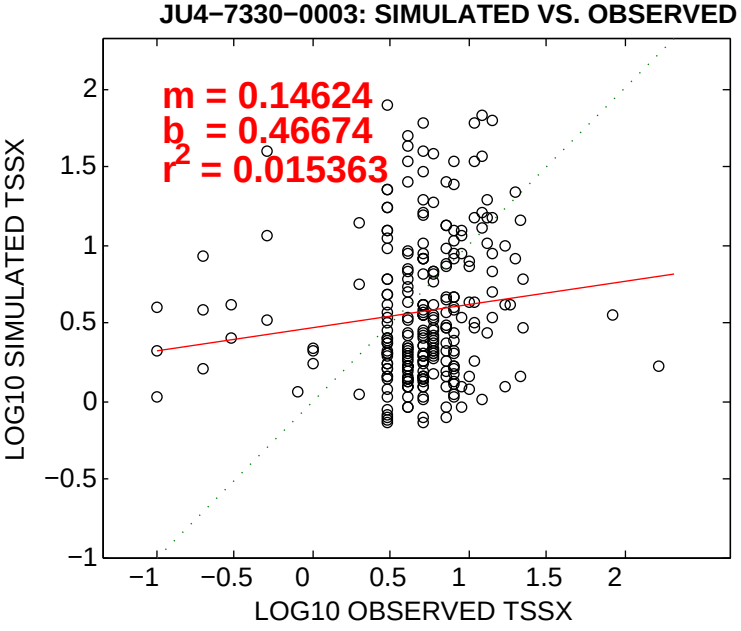


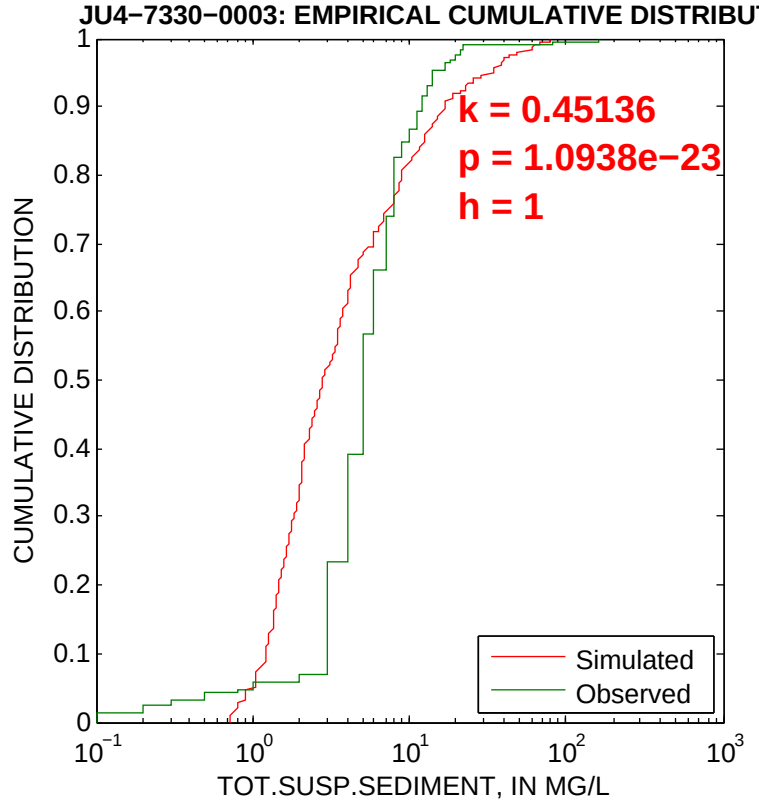












DATA SELECTION

scenario	file
P620171001WQ	TSSX.calib

plot: TSSX - total suspended ...

Dates: 1/1/1985 – 12/31/201

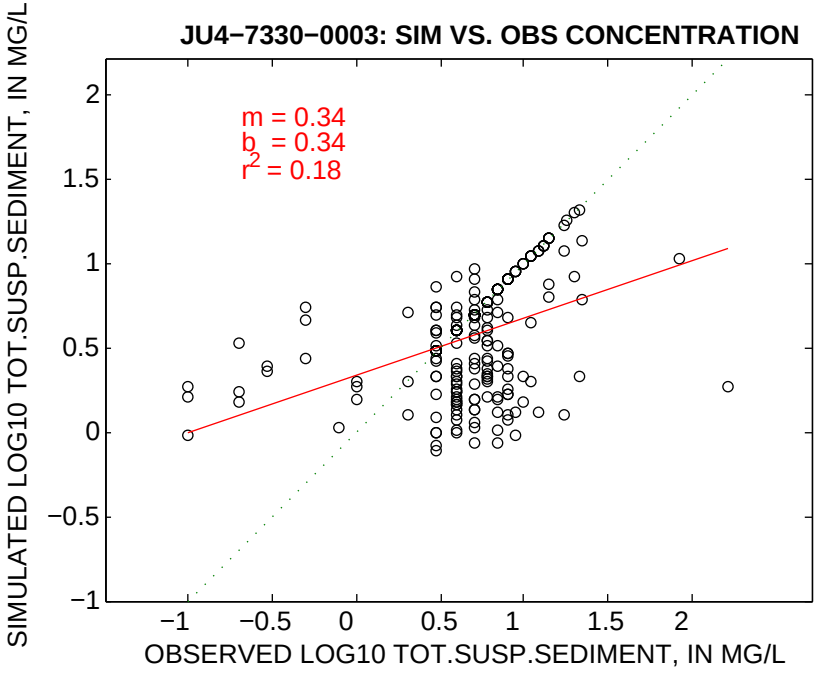
Drive	Directory	Observed
N/A	model	OBS20161101

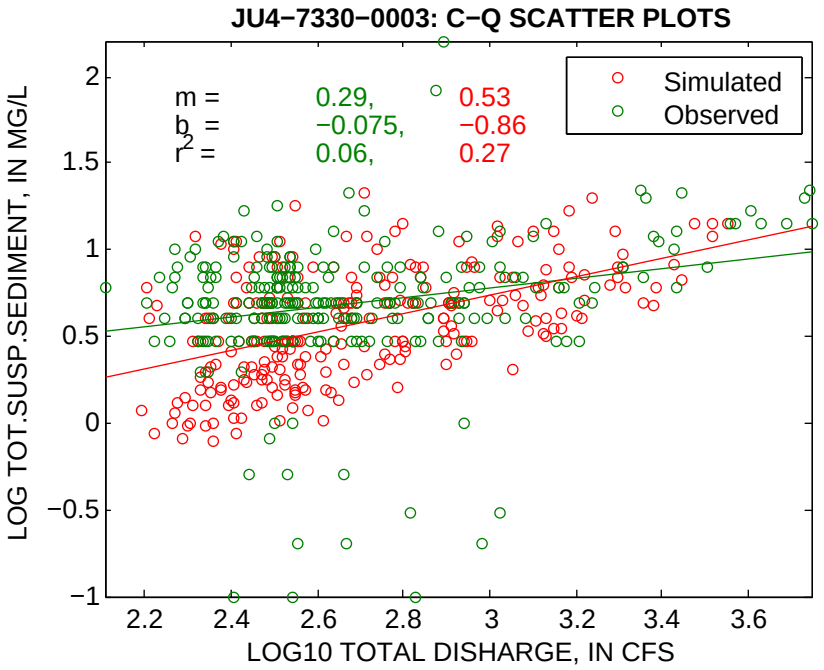
STATISTICS

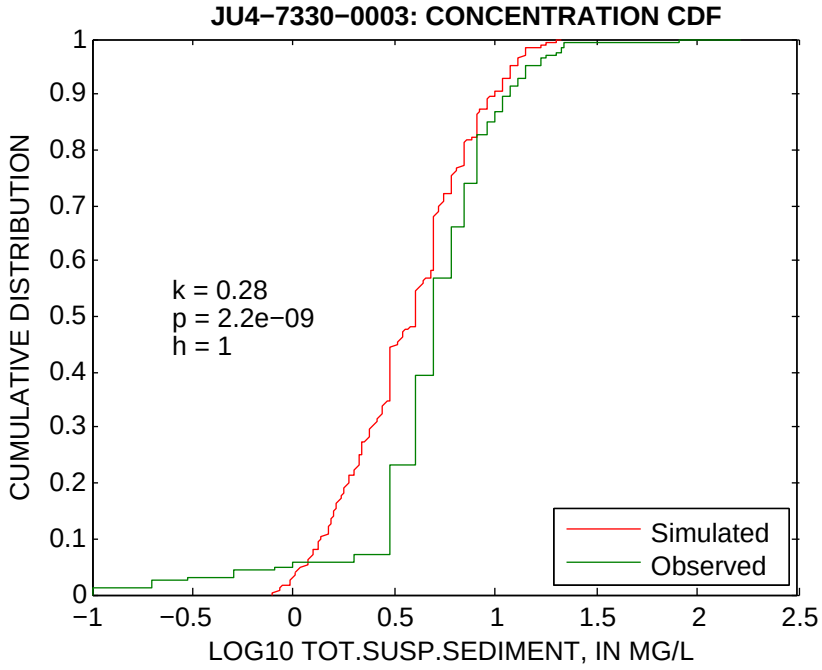
	n	observe	simulate
		257	257
min		0.1	0.71284
		-1	-0.147008
mean		7.01868	7.26501
		0.689215	0.56753
media		5	2.8293
		0.69897	0.451679
max		162	77.74
		2.20952	1.89064
varian		132.74	135.652
		0.150487	0.209501
JB		0.001	0.001
		0.001	0.001
		ra	log
%		3.5097	-17.6556
err.va		264.216	0.330837
rel.std.err		1.99048	2.19845
mod.eff		-0.990482	-1.19845

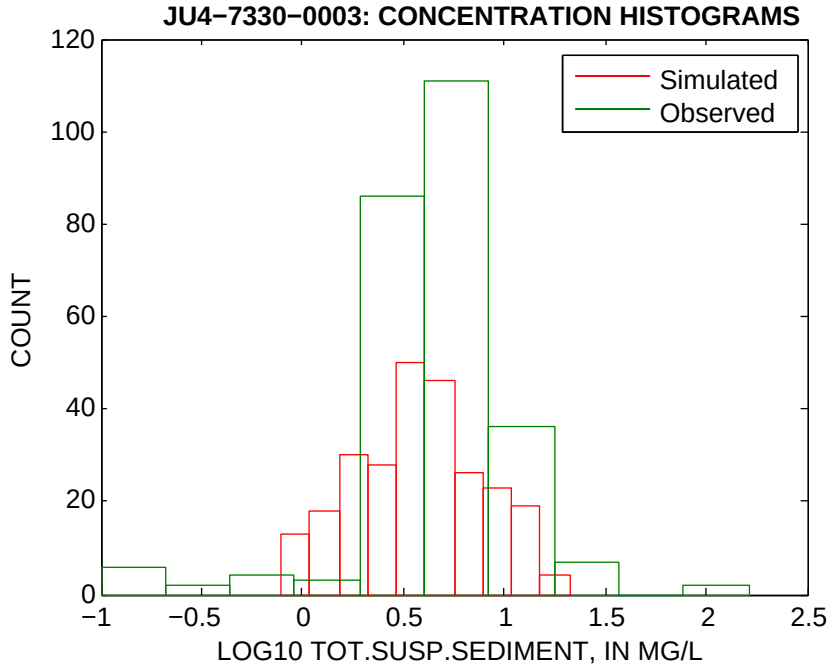
VERSION

ALL DATA
LOG10

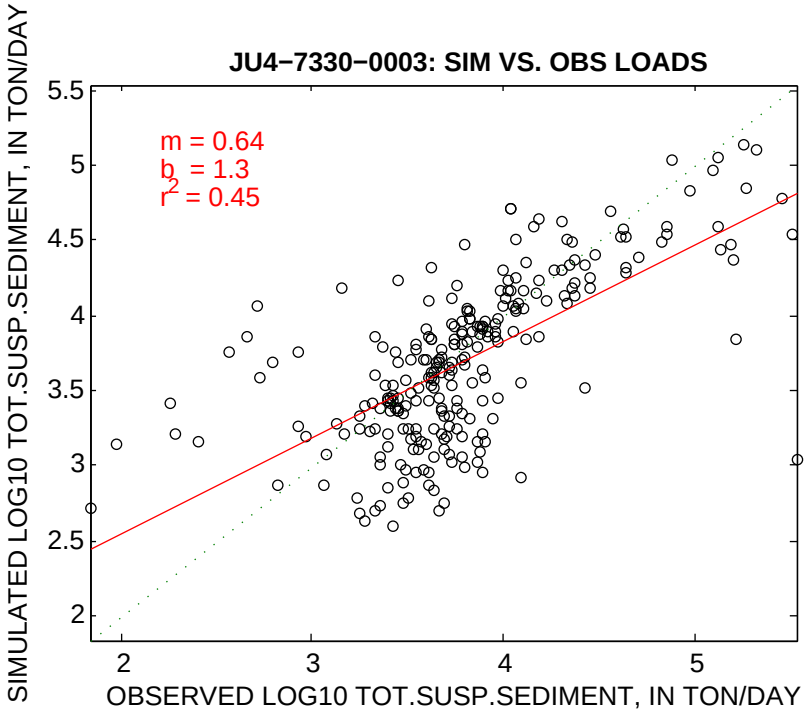


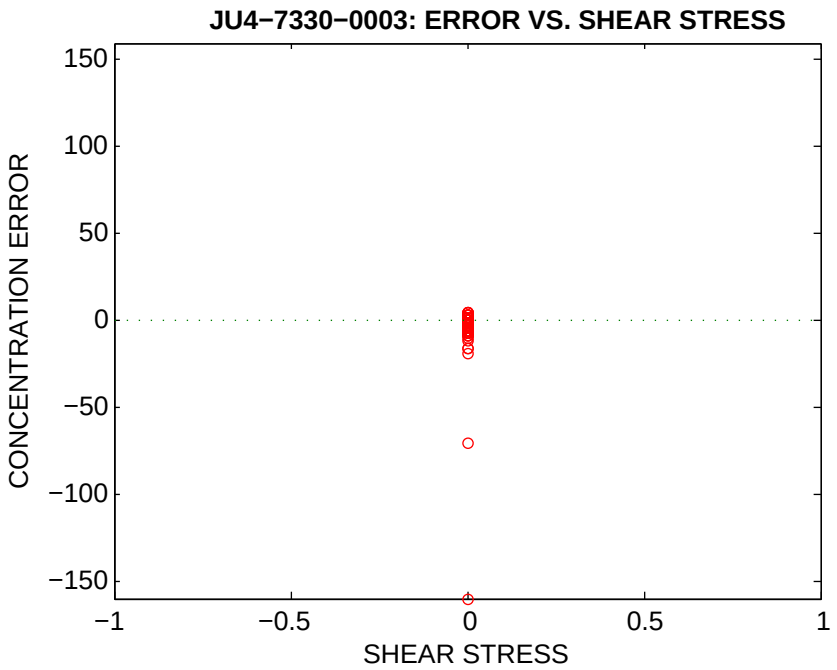


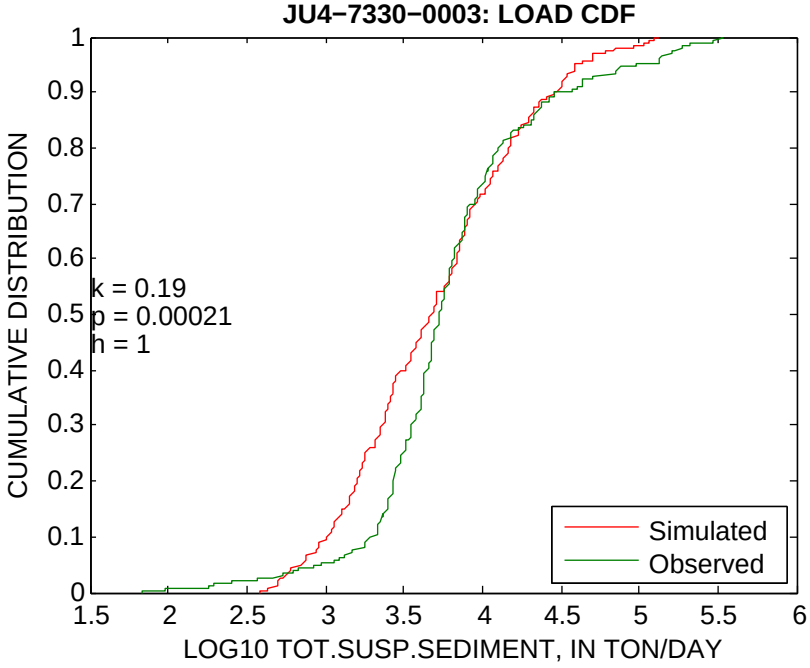


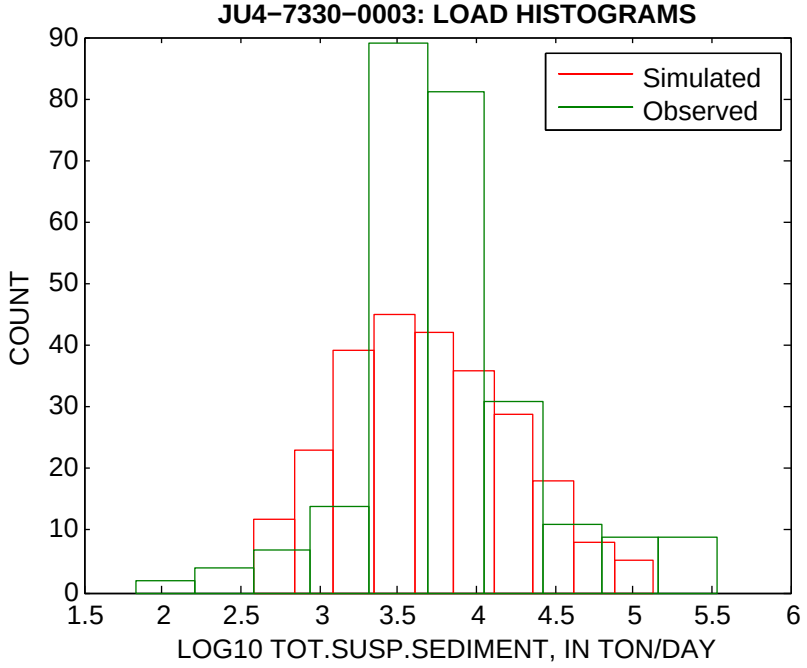


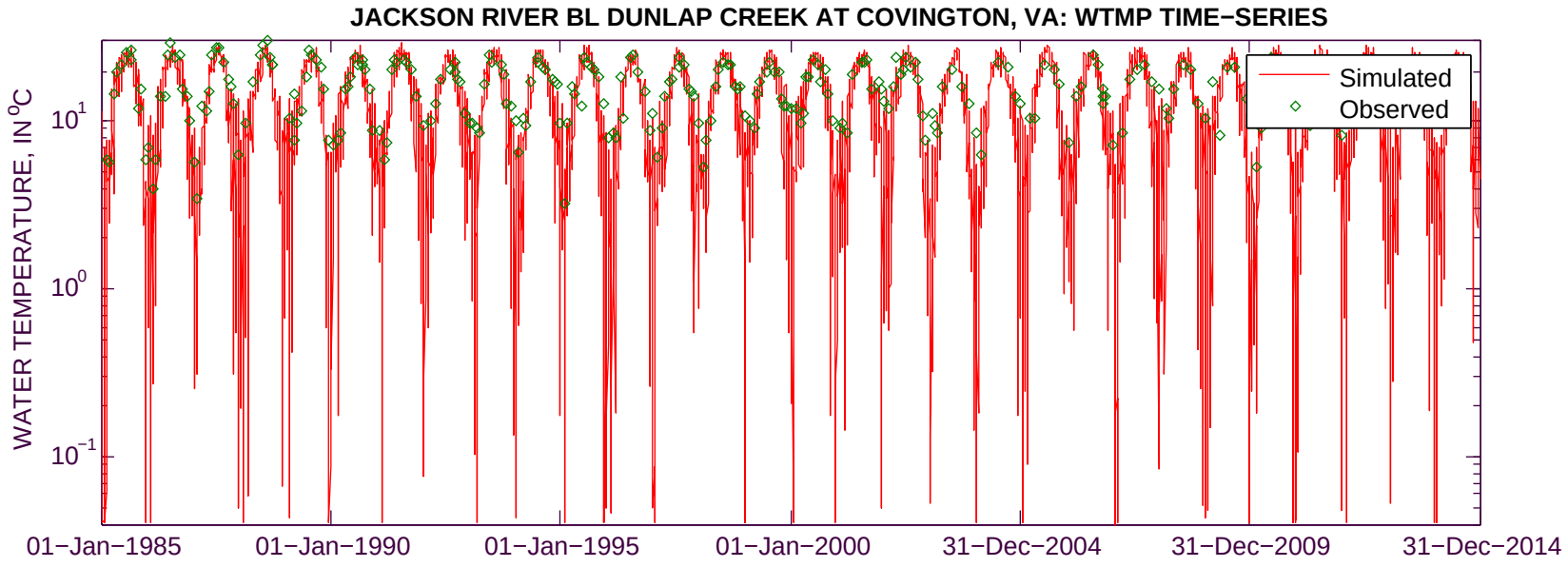
LOAD DATA
LOG10

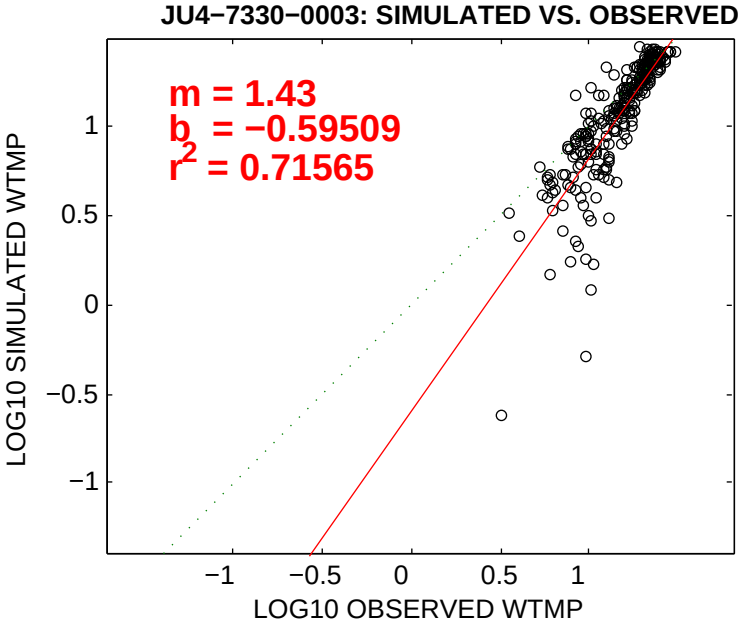


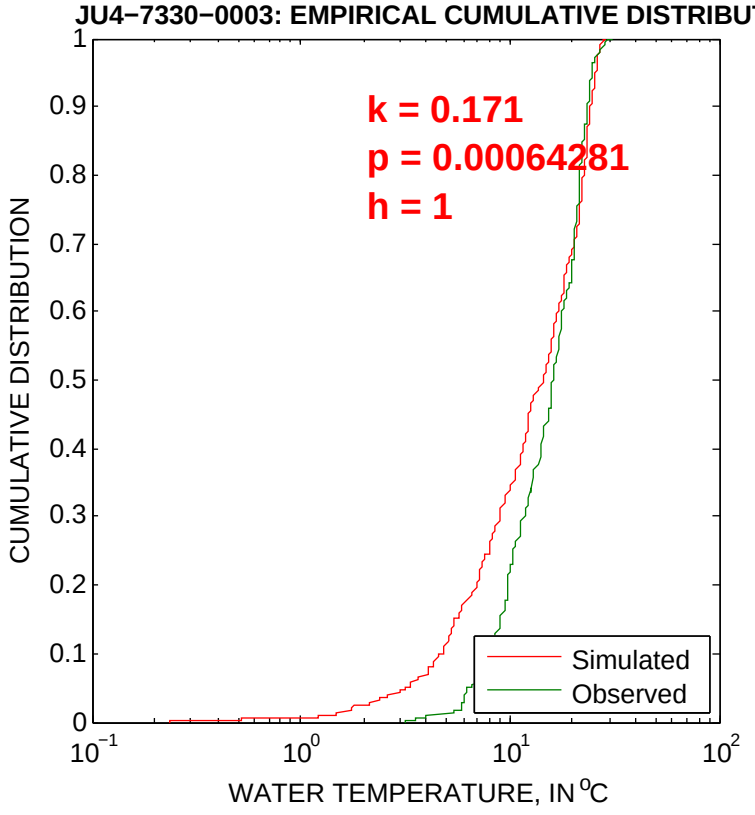












DATA SELECTION

scenario	file
P620171001WQ	WTMP.calib

plot: WTMP - water tempera...

Dates: 1/1/1985 – 12/31/201

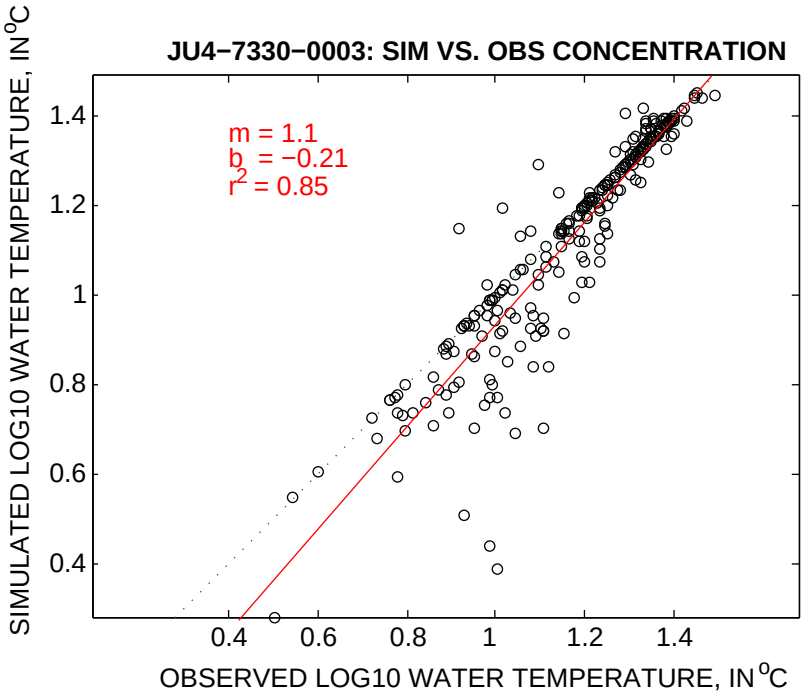
Drive	Directory	Observed
N/A	model	OBS20161101

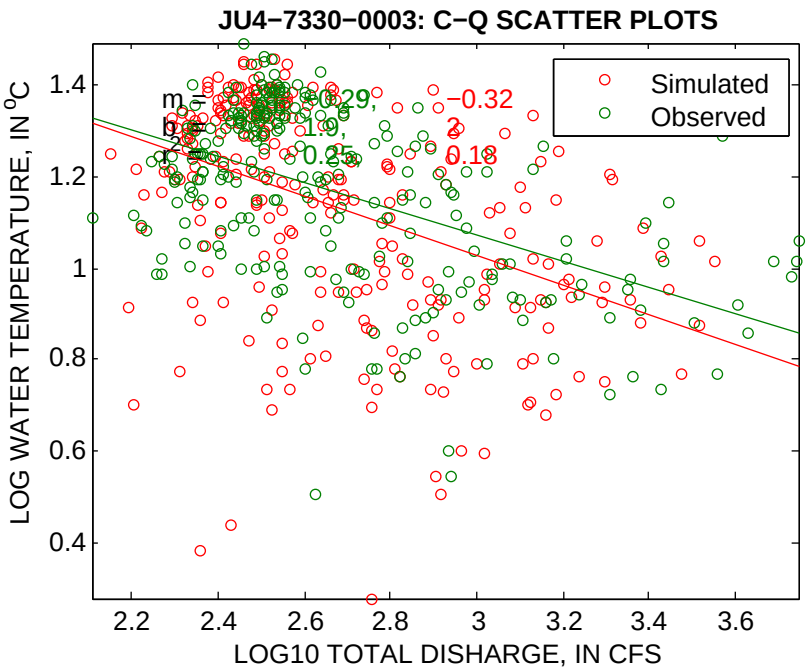
STATISTICS

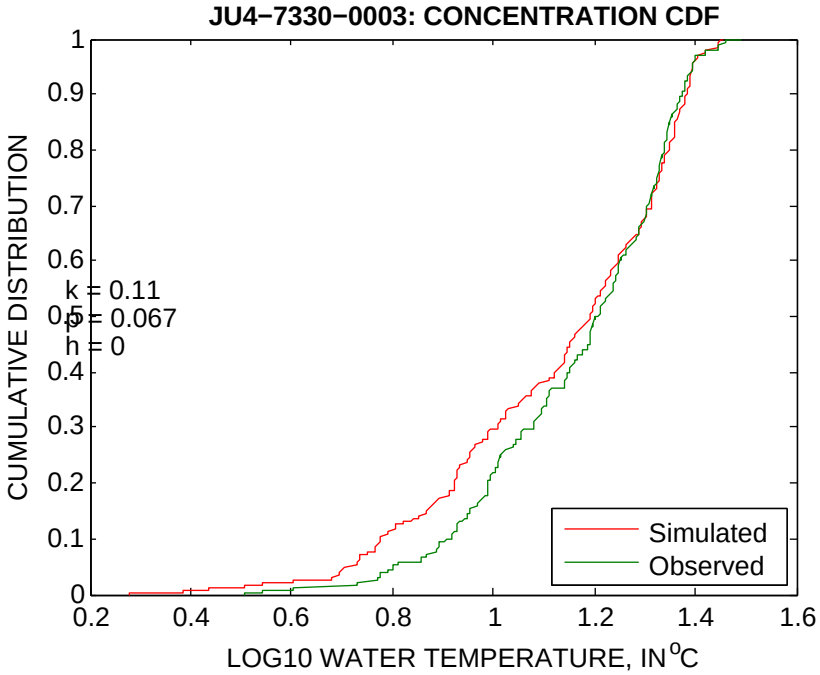
	n	observe	simulate
		269	269
min		3.2	0.23833
		0.50515	-0.622821
mean		15.982	14.4754
		1.16712	1.07391
media		16.1	14.346
		1.20683	1.15673
max		31	28.474
		1.49136	1.45445
varian		36.079	56.6973
		0.0356502	0.101868
JB		0.011602	0.003085
		0.001	0.001
		ra	log
%		-9.4267	-7.98638
err.va		12.4039	0.0442785
rel.std.err		0.343799	1.24203
mod.eff		0.656201	-0.242028

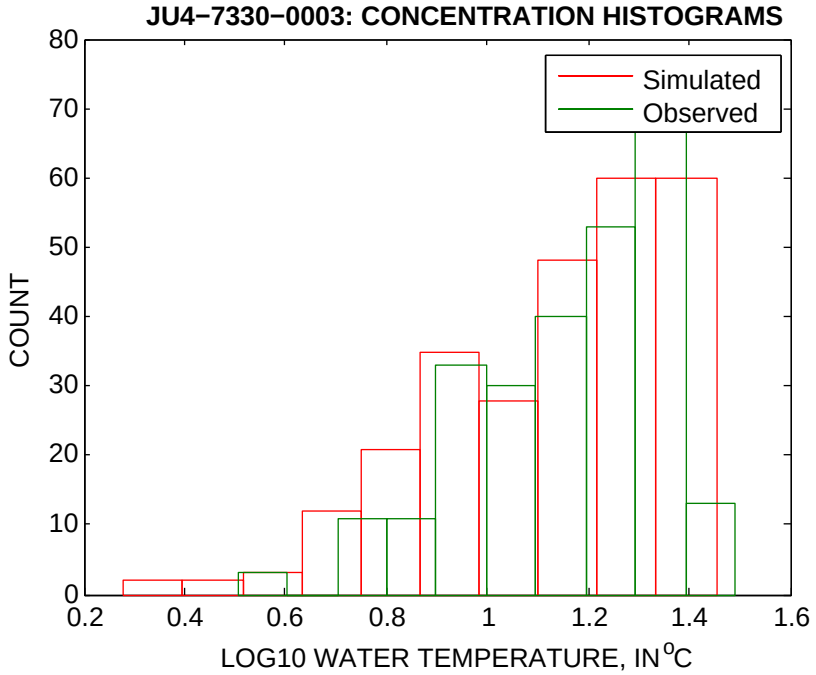
VERSION 2.1

ALL DATA
LOG10

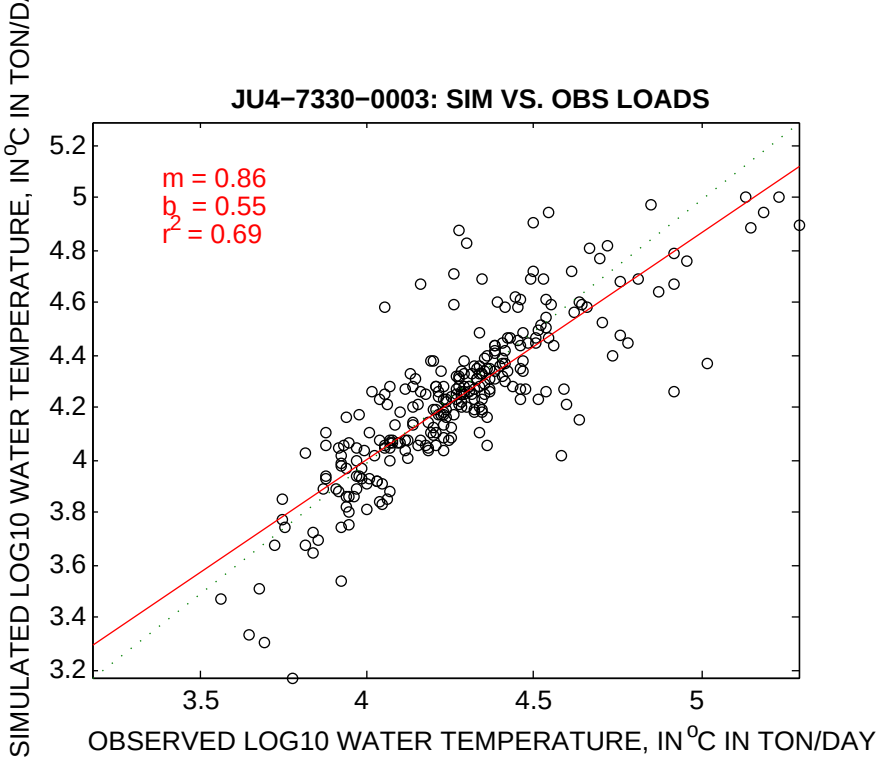


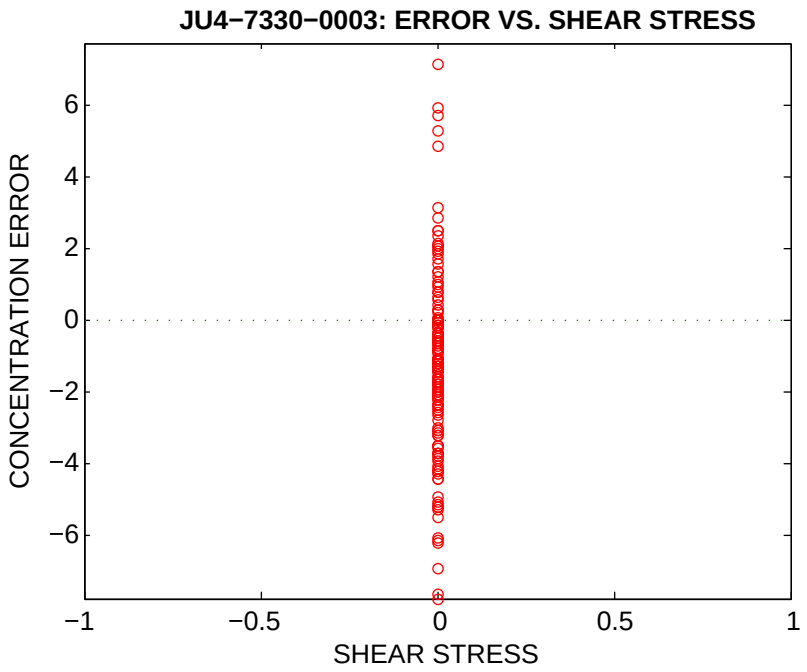


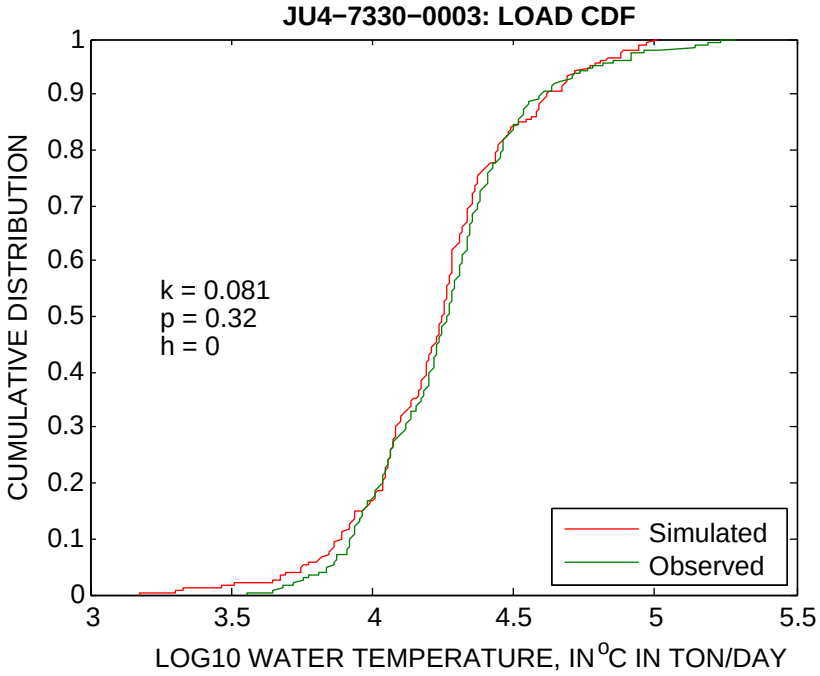


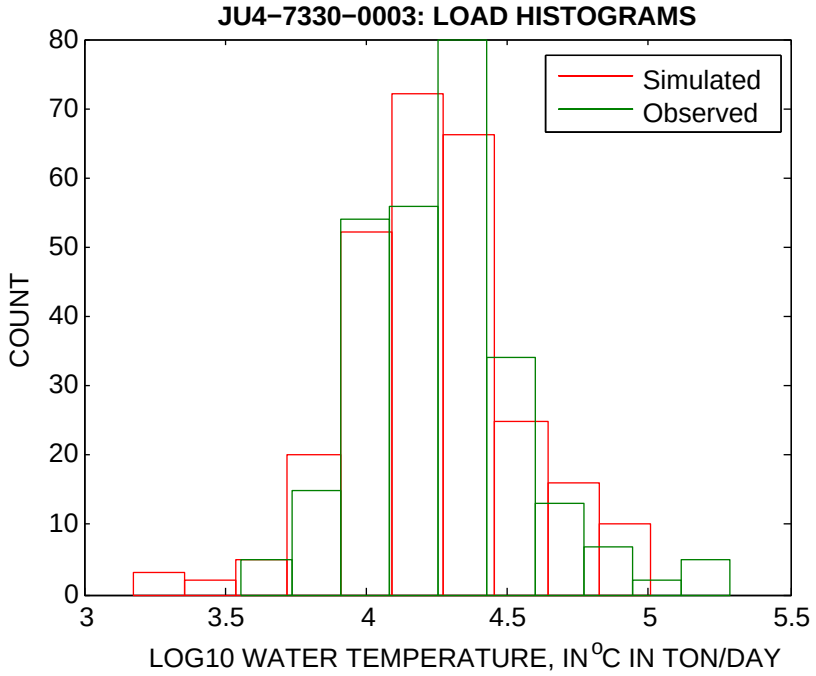


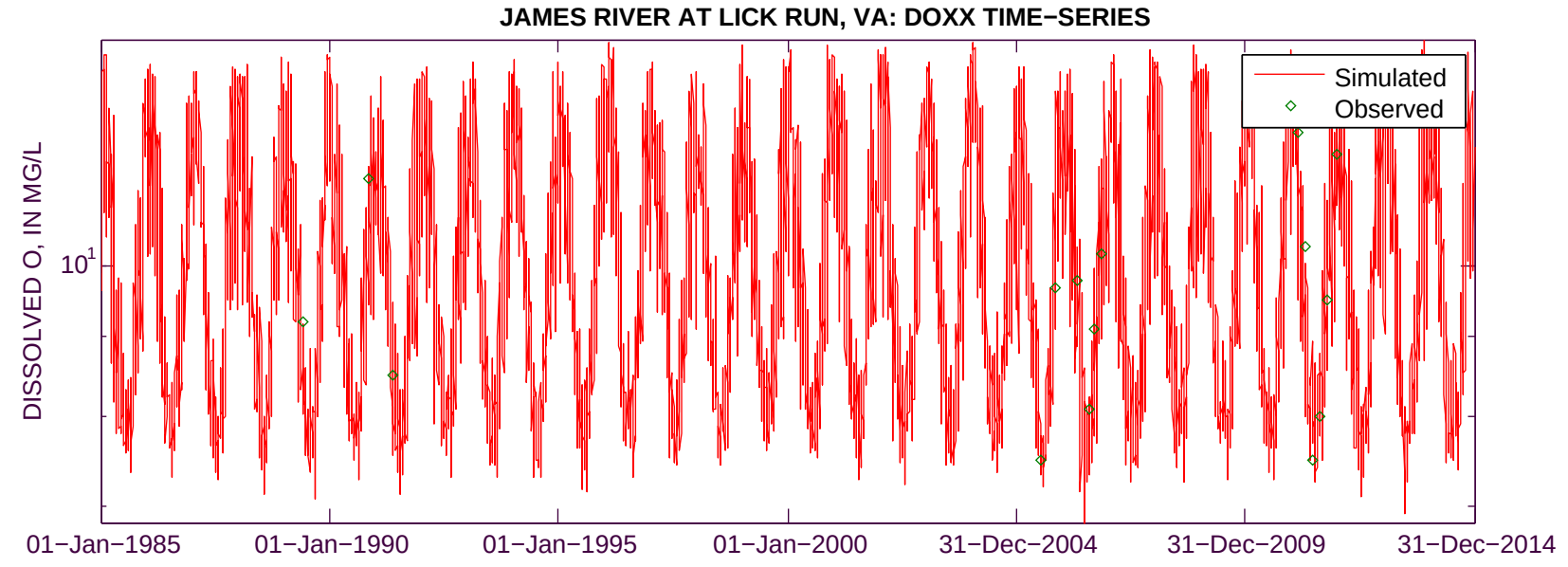
LOAD DATA
LOG10

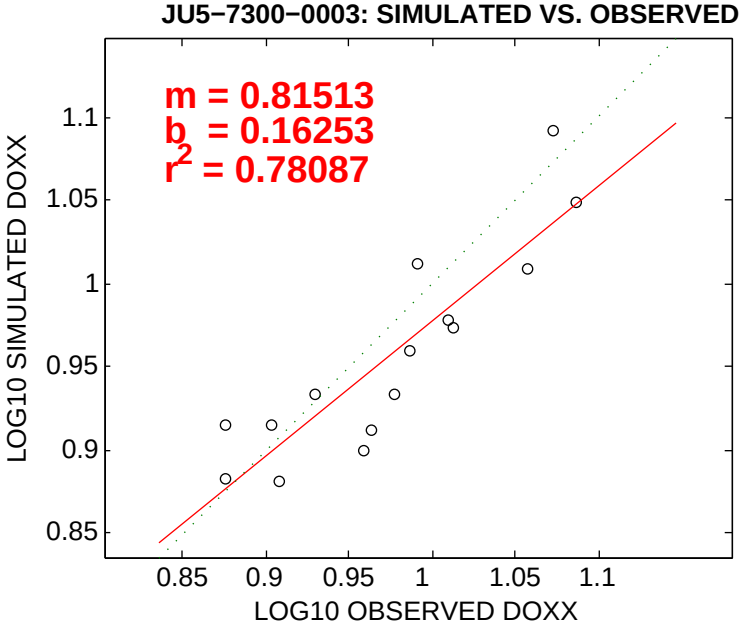


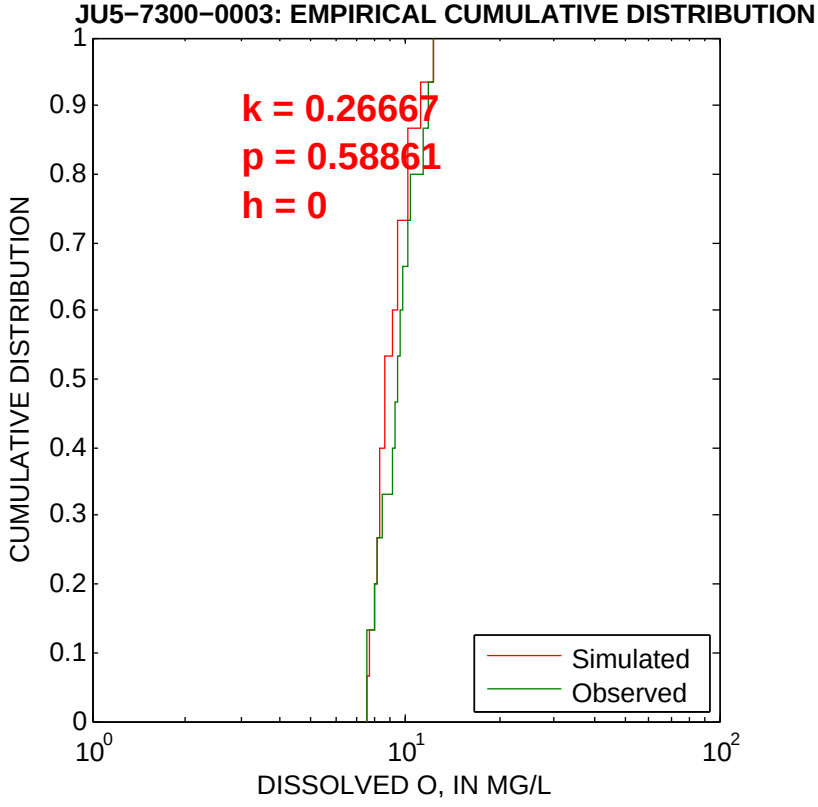












DATA SELECTION

scenario	file
P620171001WQ	DOXX.calib

plot: DOXX - dissolved oxygen

Dates: 1/1/1985 – 12/31/201

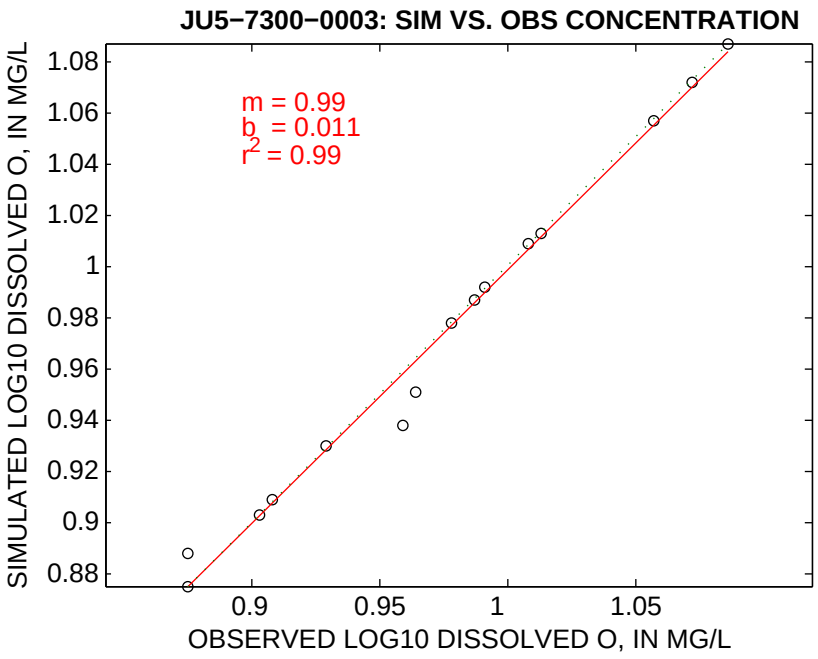
Drive	Directory	Observed
N/A	model	OBS20161101

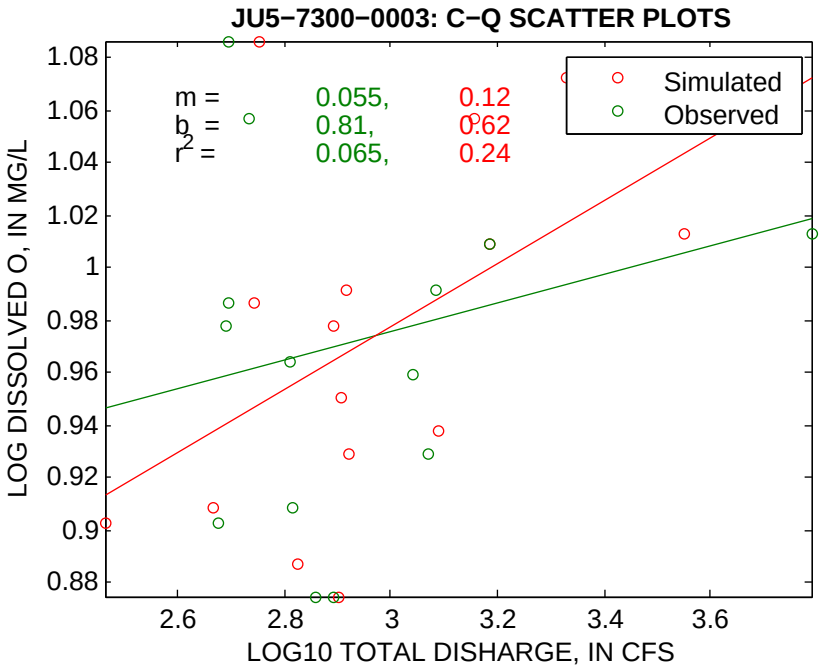
STATISTICS

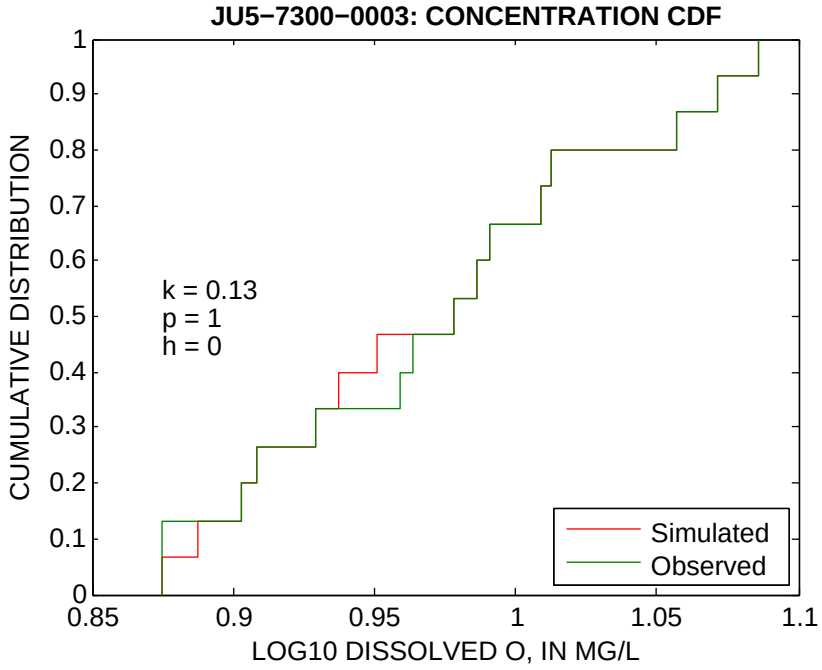
	n	15	15
		observe	simulate
min		7.5	7.6103
		0.875061	0.881402
mean		9.52	9.13156
		0.97375	0.956264
media		9.5	8.5875
		0.977724	0.933867
max		12.2	12.352
		1.08636	1.09174
varian		2.20743	1.88565
		0.00453363	0.00385758
JB	✓	0.5	0.084680 ✓
	✓	0.5	0.187761 ✓
		ra	log
%		-4.08025	-1.79576
err.va		0.626889	0.00132785
rel.std.err		0.283991	0.29289
mod.eff		0.716009	0.70711

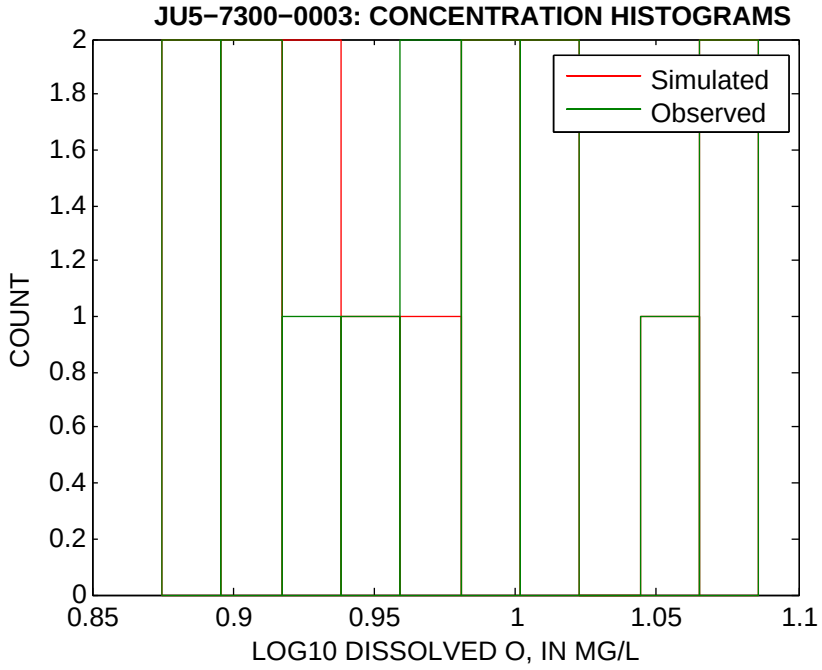
VERSION 2.1

ALL DATA
LOG10

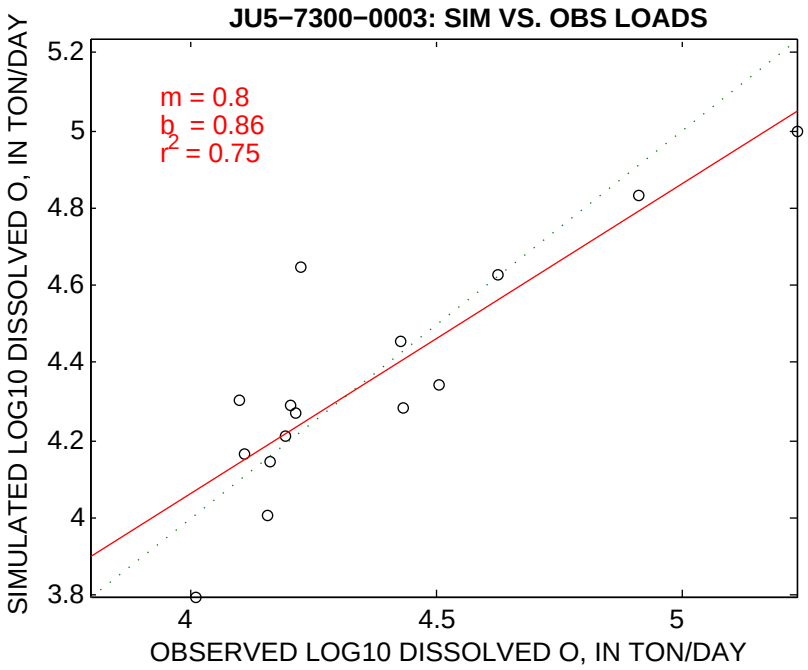




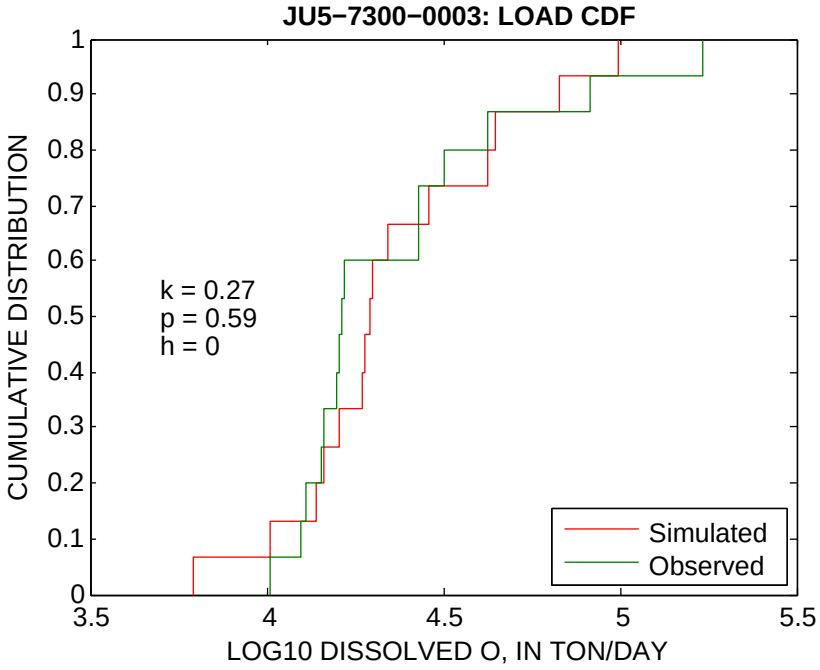


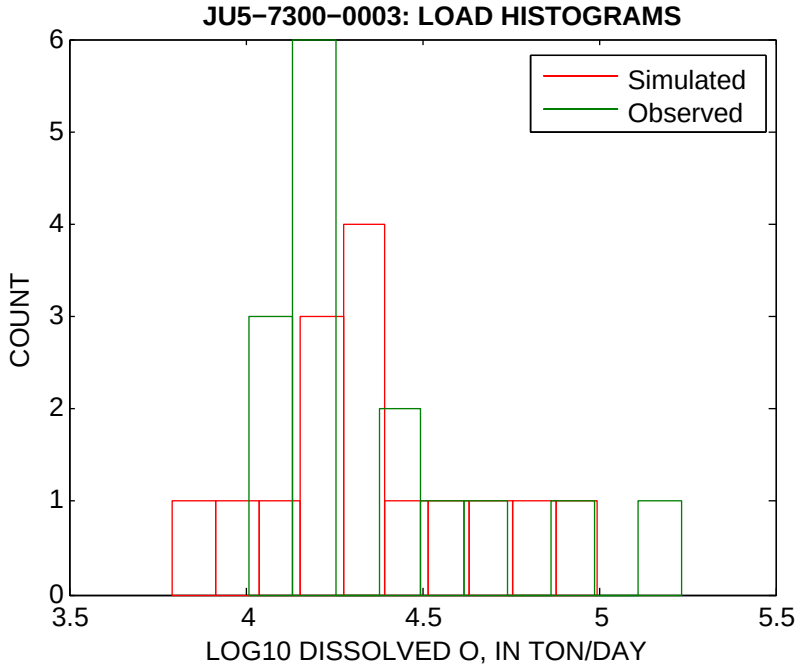


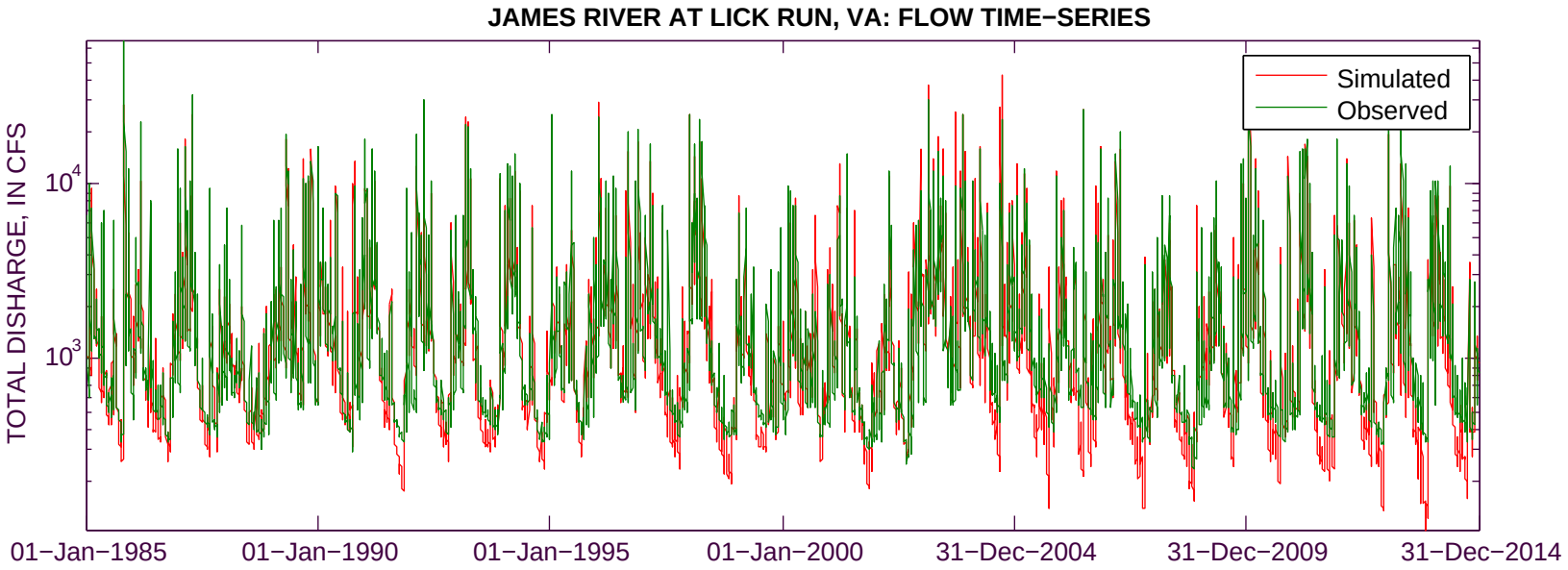
LOAD DATA
LOG10

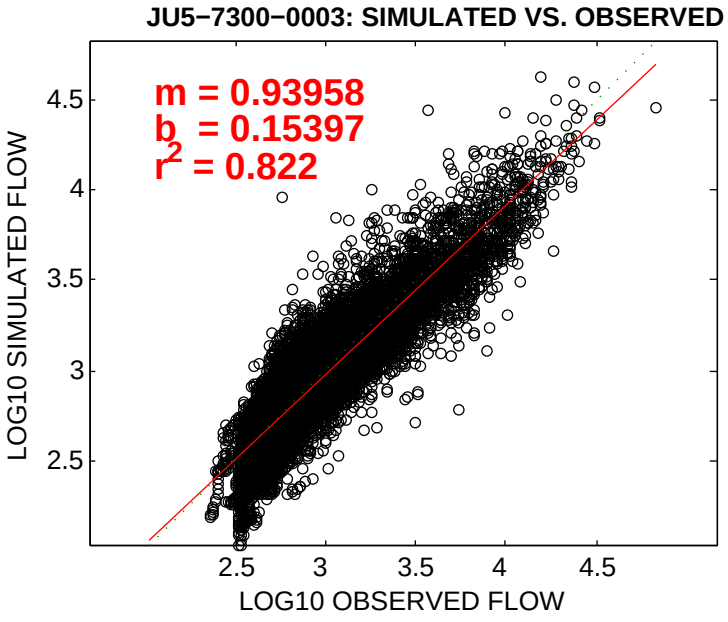


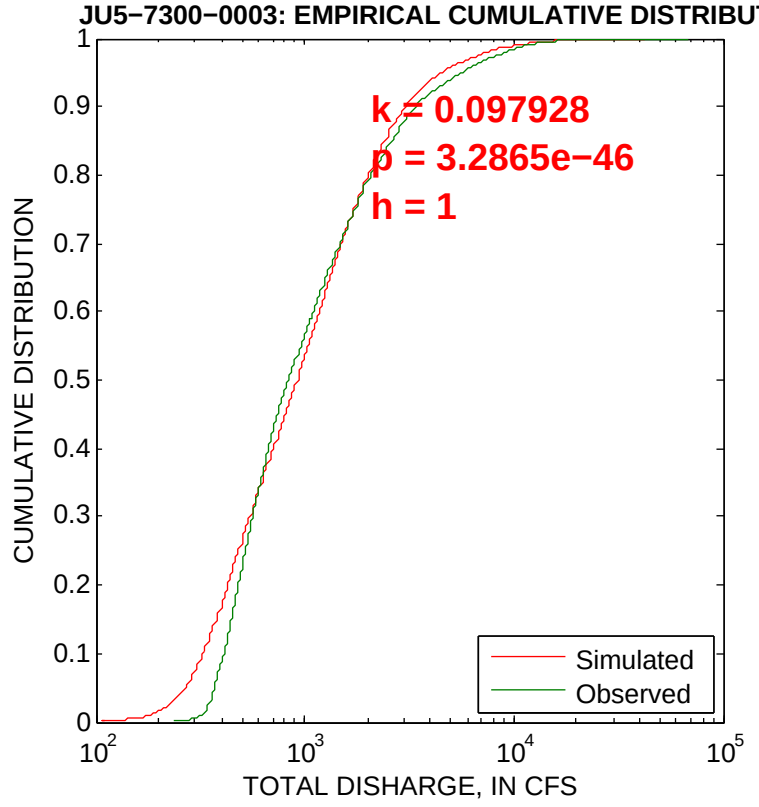












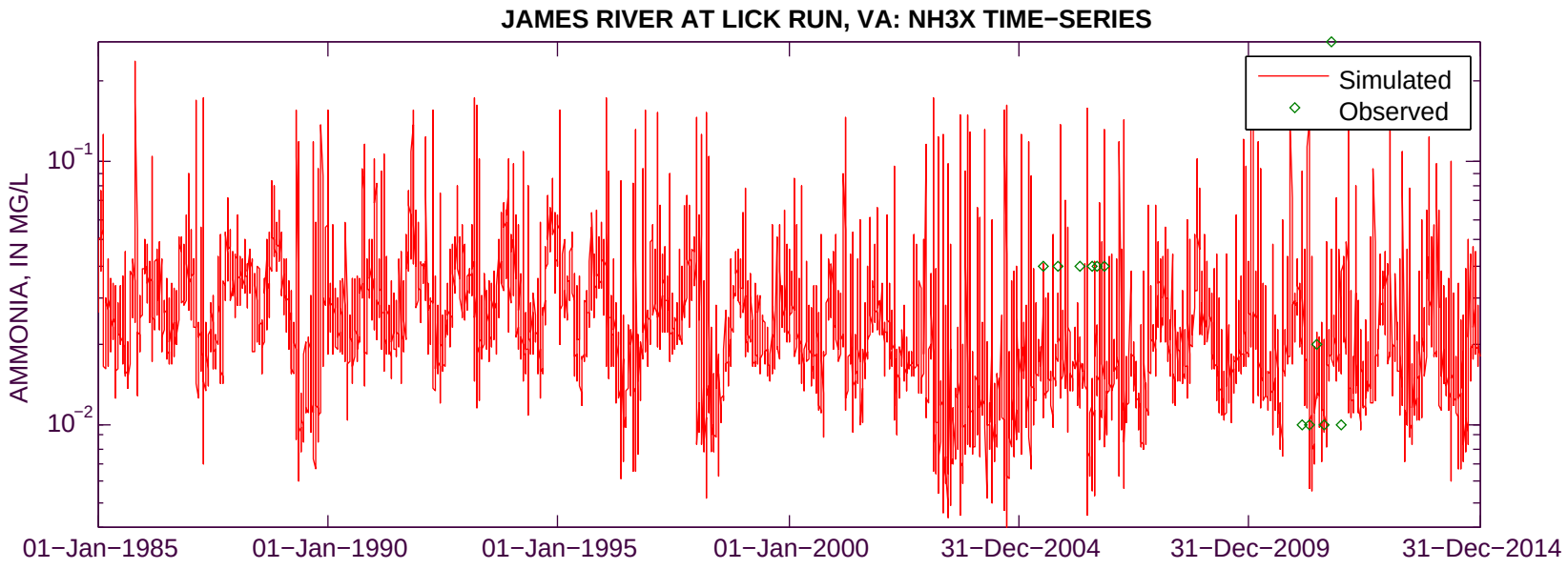
DATA SELECTION

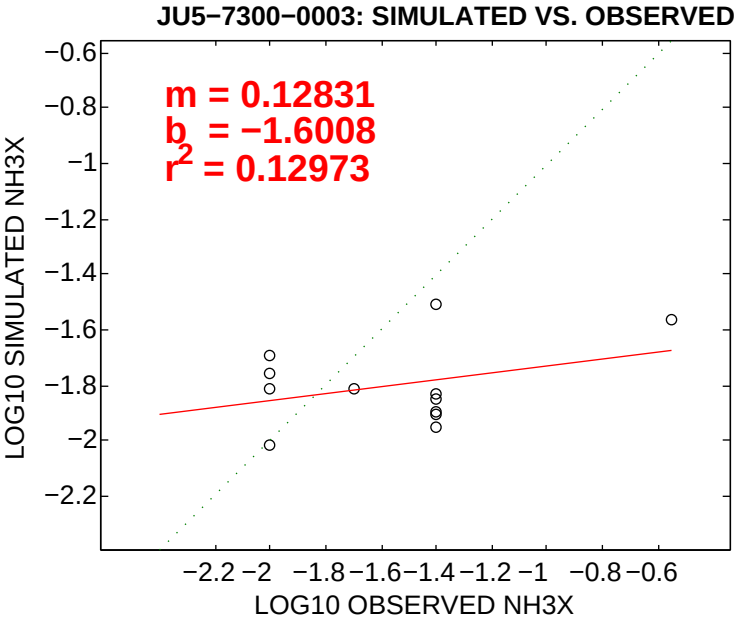
scenario: P620171001WQ
file: FLOW.calib
plot: FLOW - total discharge
Dates: 1/1/1985 12/31/201
Drive: N/A
Directory: model
Observed: OBS20161101

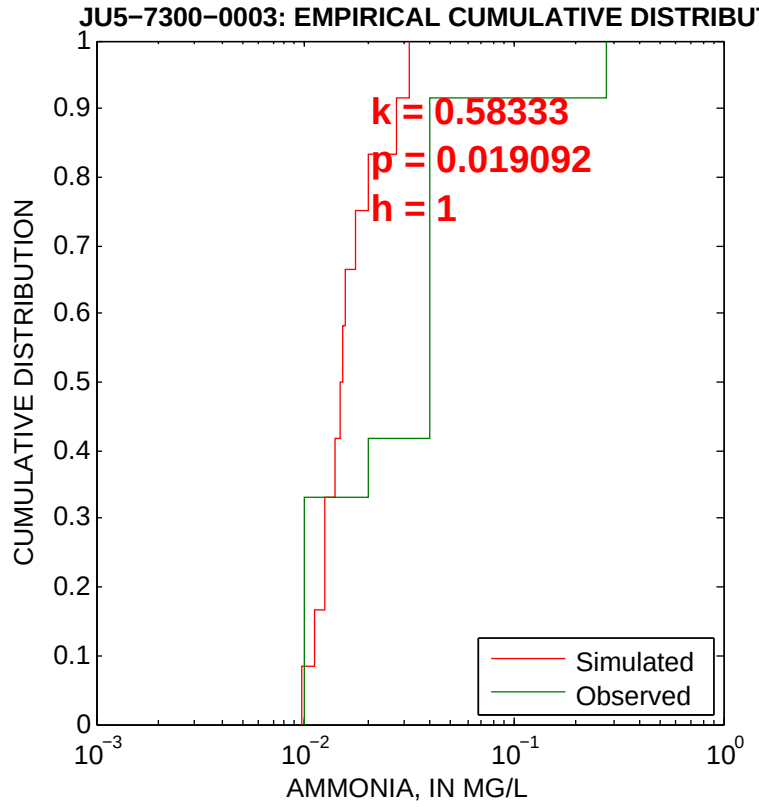
STATISTICS

		observe	simulate
n		10957	10957
min		232	105.92
		2.36549	2.02498
mean		1645.27	1517.35
		3.01323	2.98515
media		835	921.67
		2.92169	2.96458
max		67500	41799
		4.8293	4.62117
varian		5.84309e+0	4.46226e+
		0.138762	0.149027
JB		0.001	0.001
		0.001	0.001
		ra	log
%		-7.77485	-0.93212
err.va		1.51282e+0	0.0278219
rel.std.err		0.258907	0.200501
mod.eff		0.741093	0.799499

VERSION 2.1







DATA SELECTION

scenario	file
P620171001WQ	NH3X.calib

plot: NH3X - ammonia

Dates: 1/1/1985 – 12/31/201

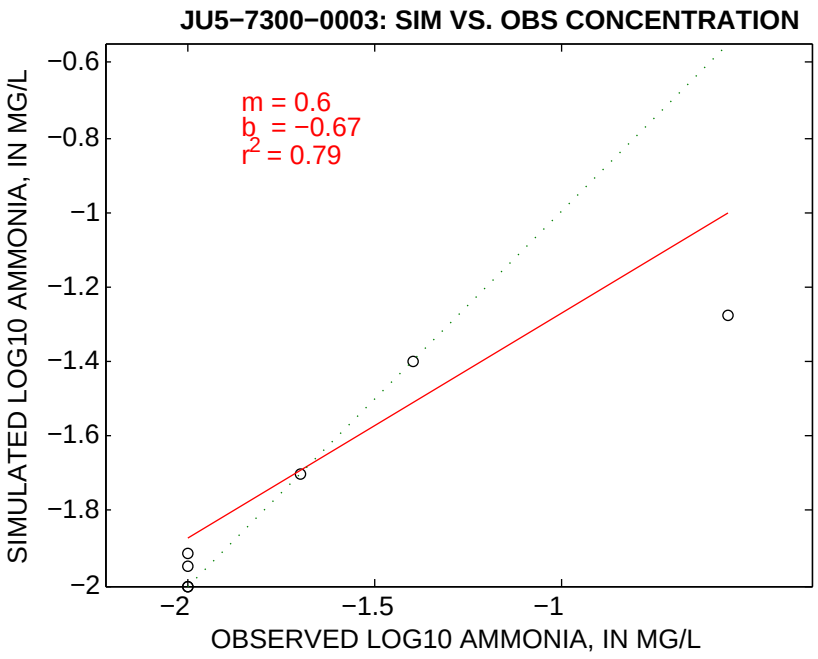
Drive: N/A | Directory: model | Observed: OBS20161101

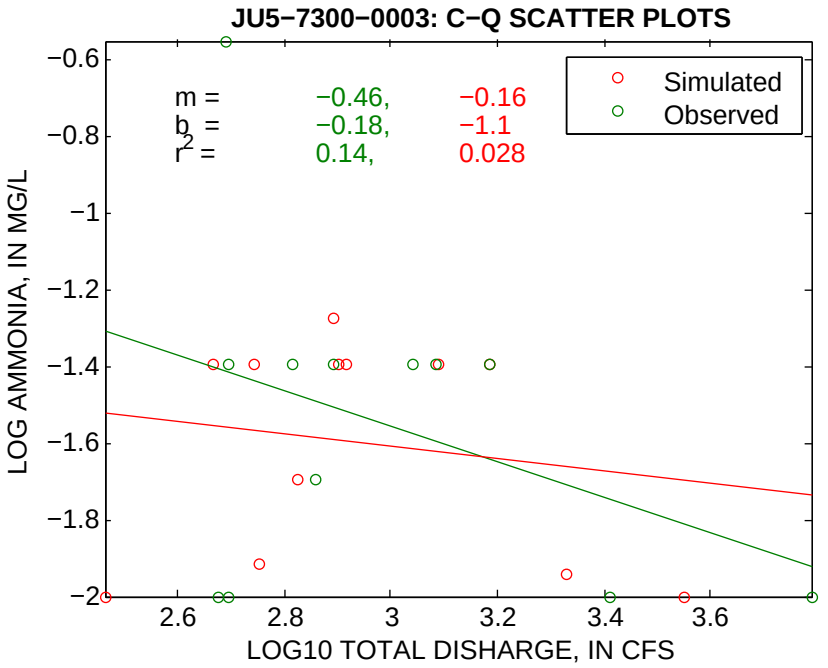
STATISTICS

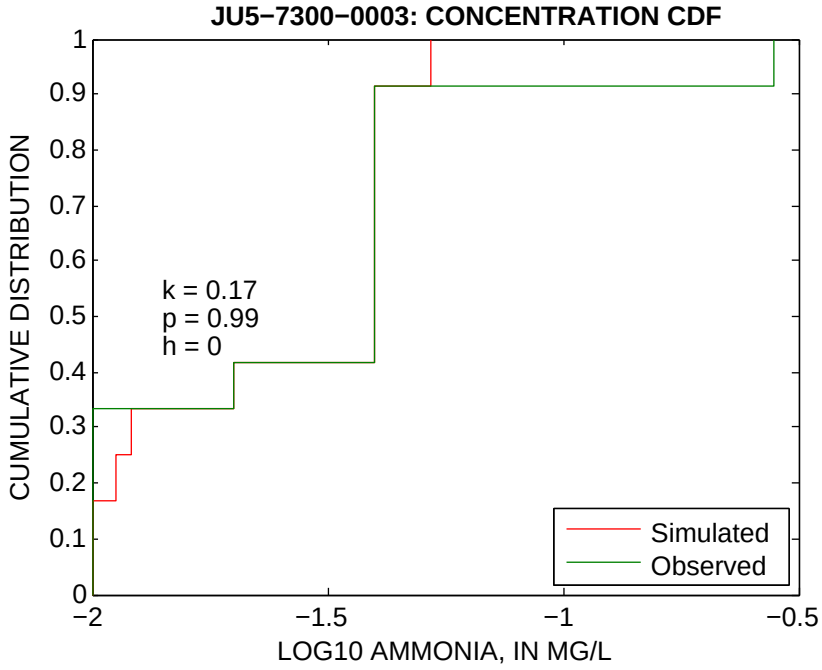
	n	12	12
		observe	simulate
min		0.01	0.0096096
		-2	-2.01729
mean		0.0483333	0.0168046
		-1.55329	-1.80015
media		0.04	0.014945
		-1.39794	-1.82561
max		0.28	0.031212
		-0.552842	-1.50568
varian		0.00552424	4.22336e-0
		0.178647	0.0226717
JB		0.001	0.049656
		0.122769	0.32649
		ra	log
%		-65.2318	15.8927
err.va		0.00616446	0.221953
rel.std.err		1.11589	1.24241
mod.eff		-0.115893	-0.24241

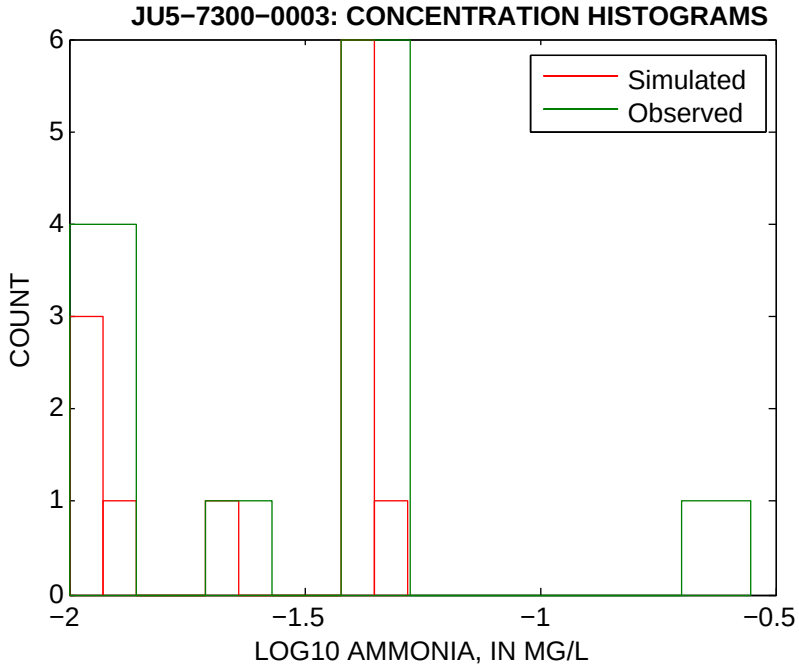
VERSION 2.1

ALL DATA
LOG10

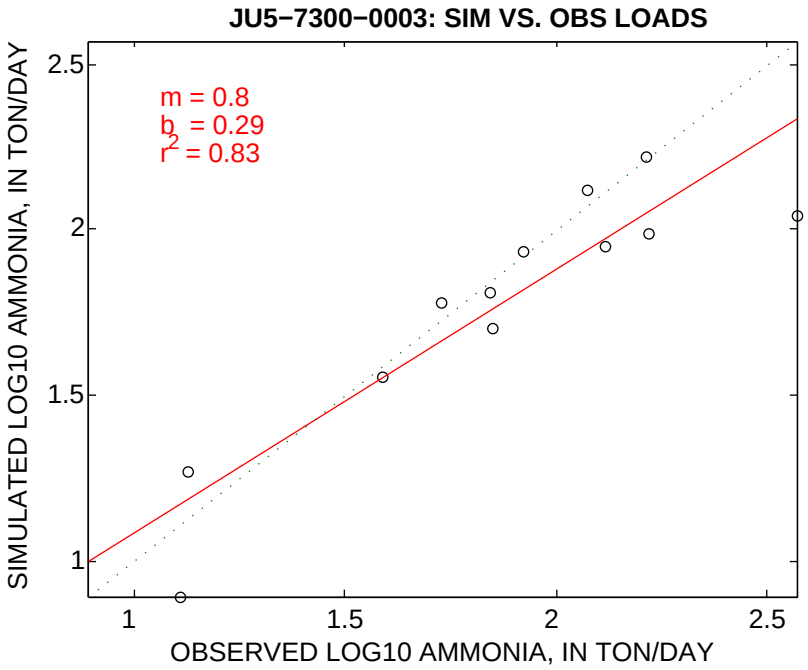


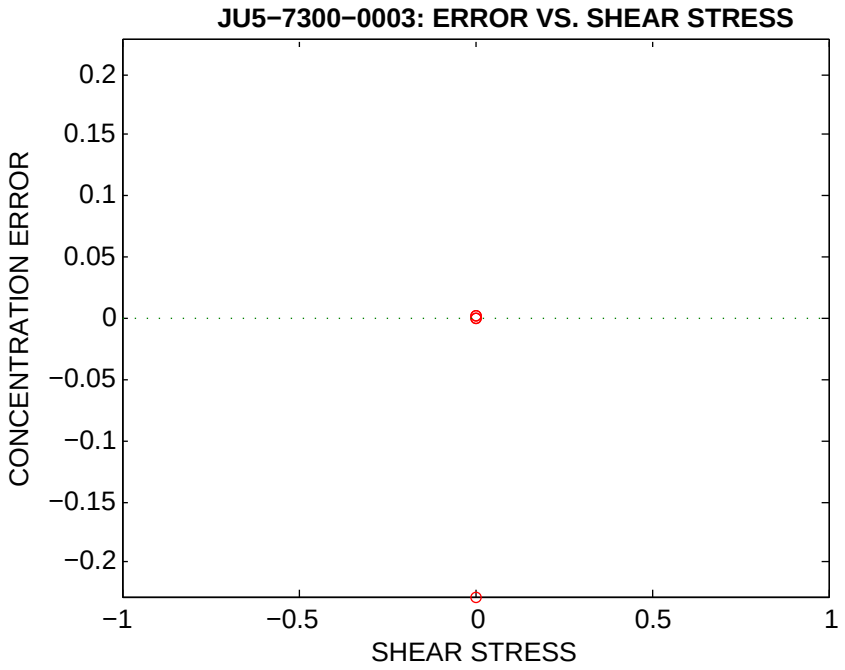


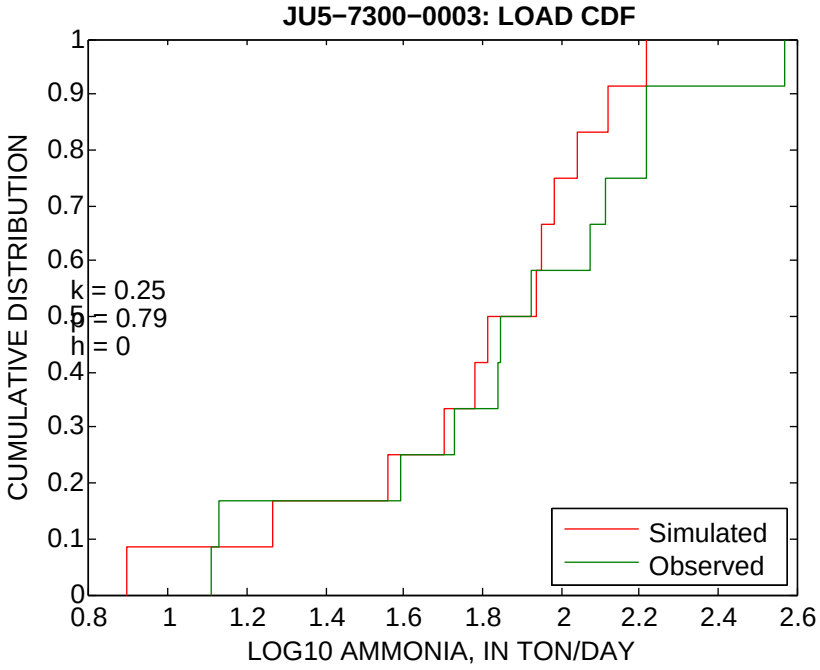


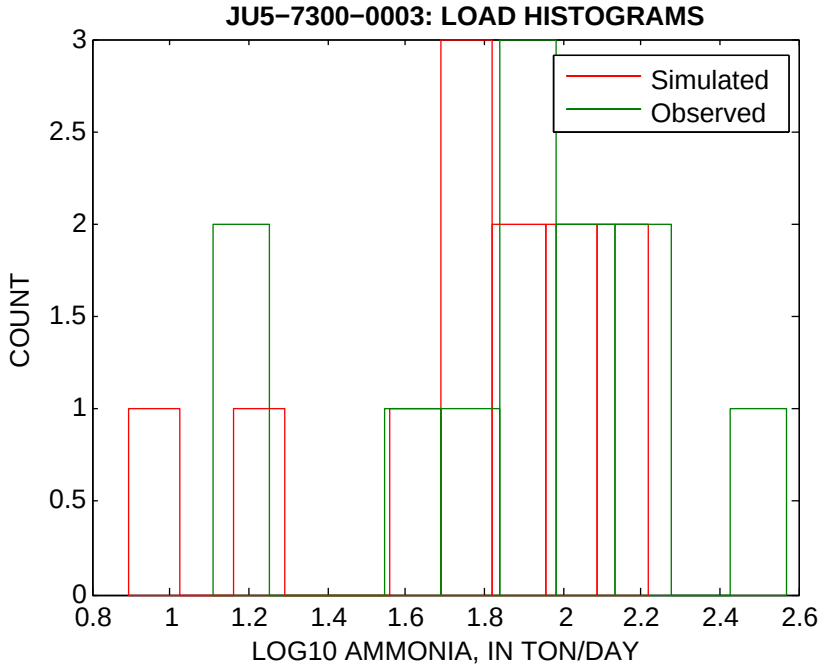


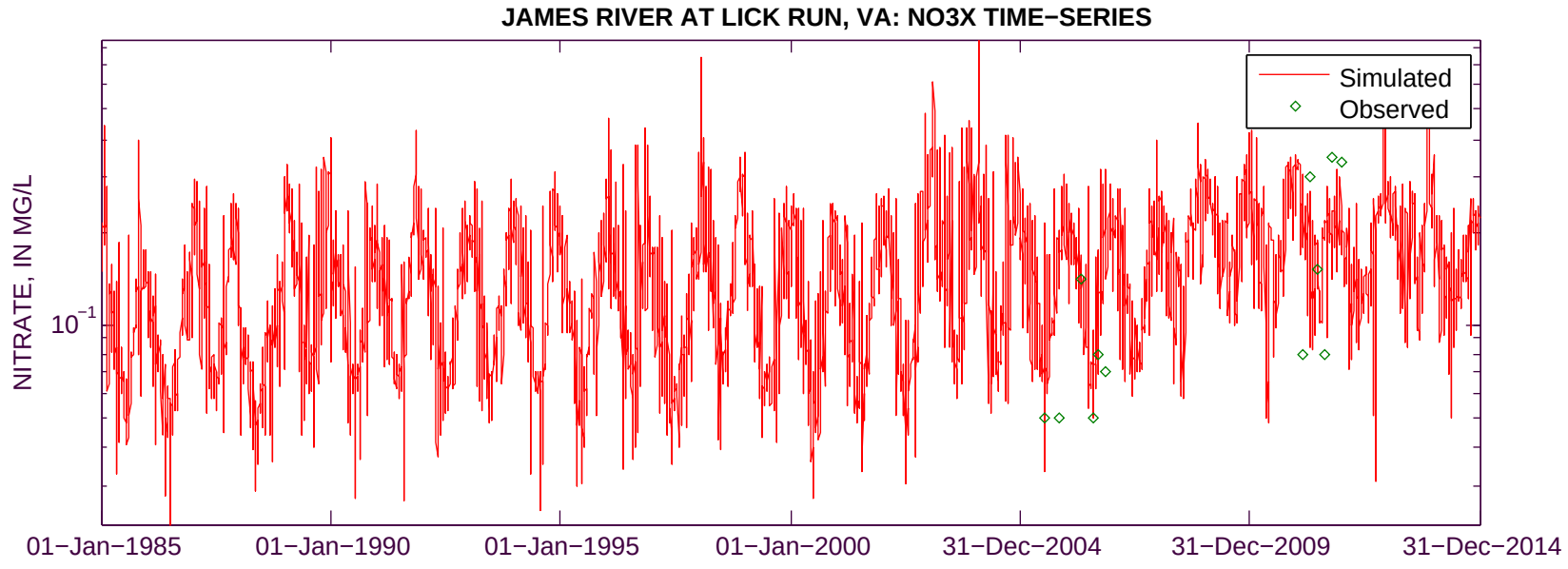
LOAD DATA
LOG10

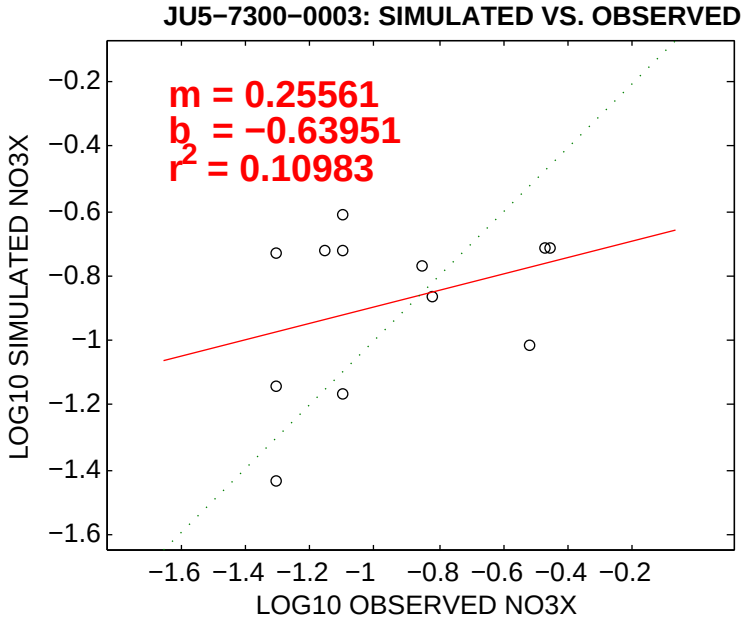


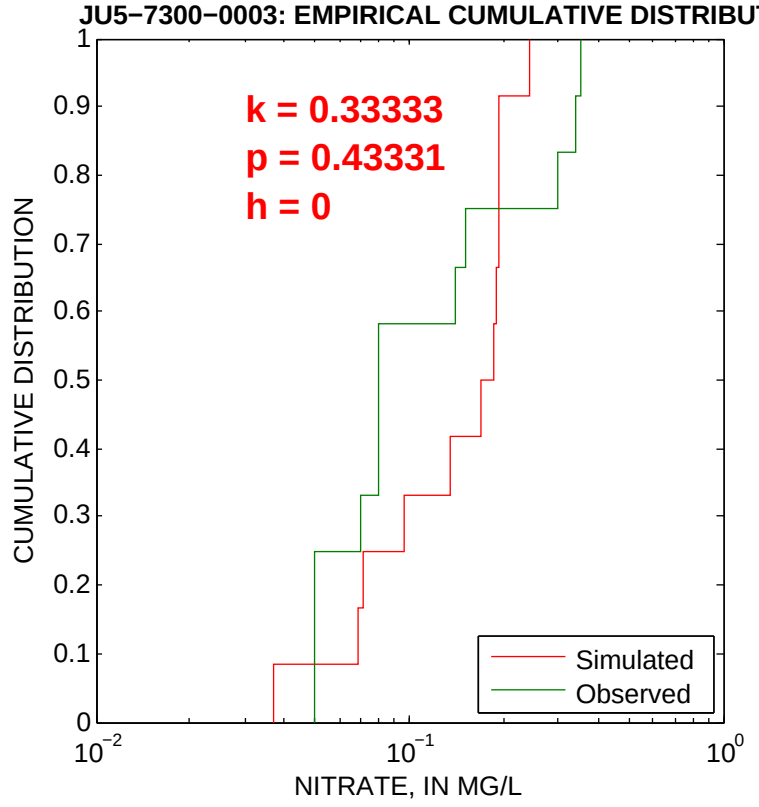












DATA SELECTION

scenario	file
P620171001WQ	NO3X.calib

plot: NO3X - nitrate

Dates: 1/1/1985 – 12/31/201

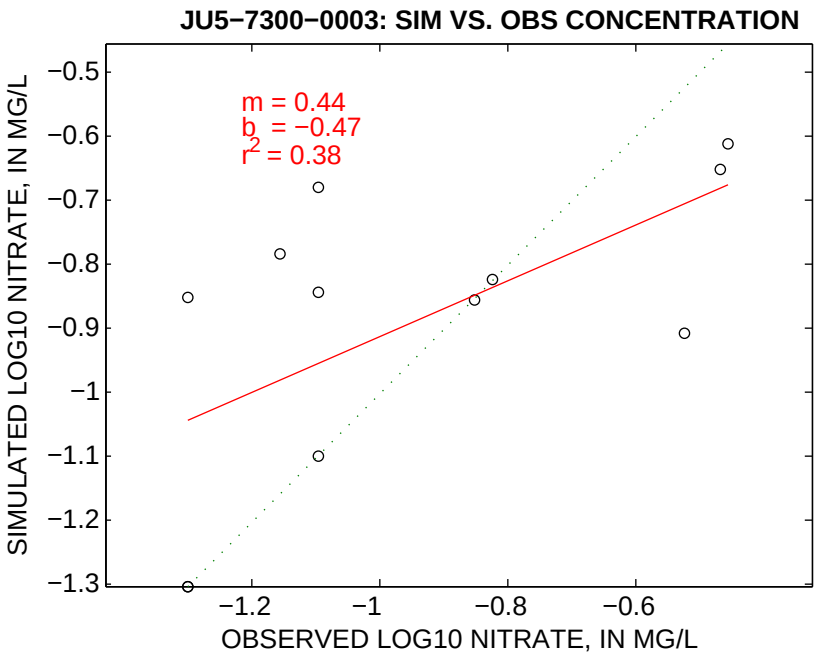
Drive	Directory	Observed
N/A	model	OBS20161101

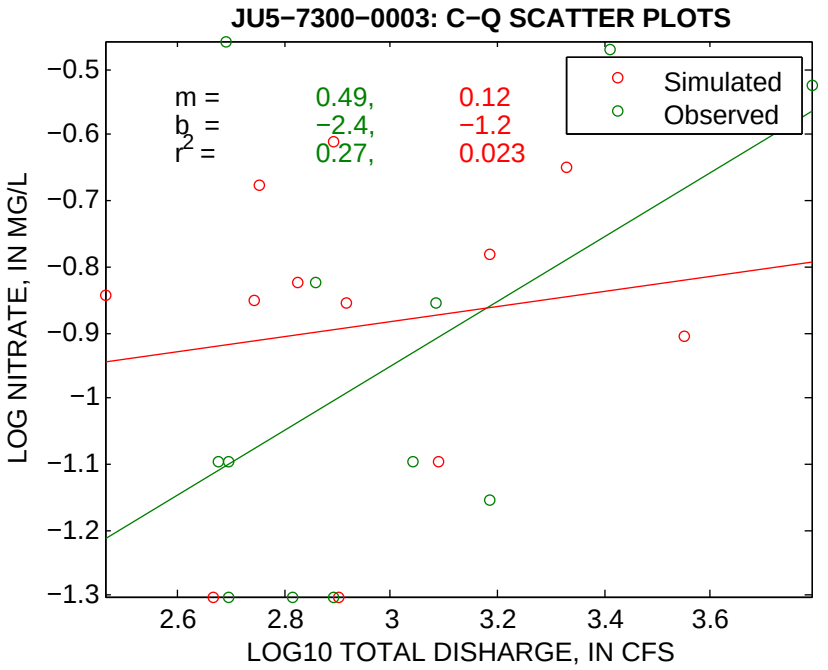
STATISTICS

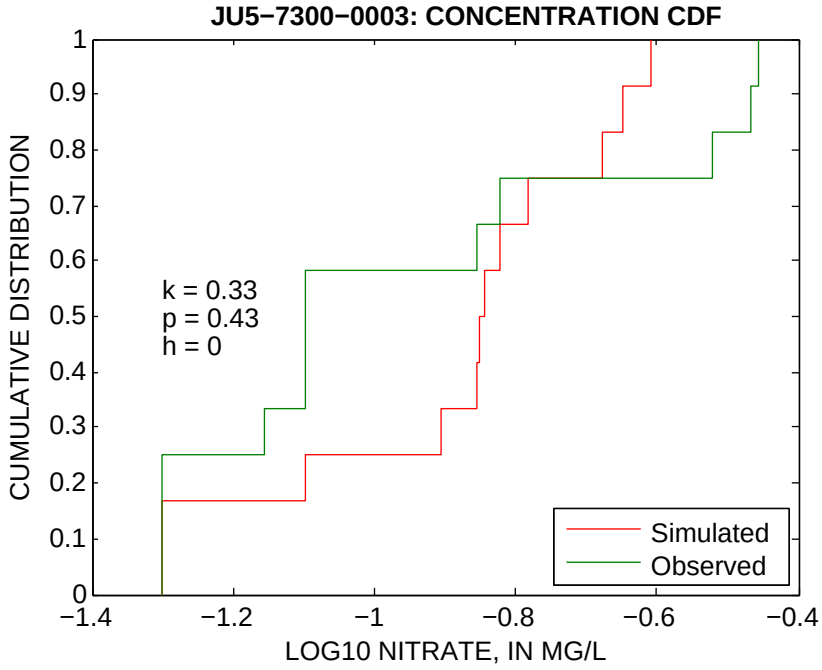
	n	12	12
		observe	simulate
min		0.05	0.036642
		-1.30103	-1.43602
mean		0.145	0.148053
		-0.956153	-0.883914
media		0.08	0.17842
		-1.09691	-0.749093
max		0.35	0.24351
		-0.455932	-0.613483
varian		0.0135909	0.0041895
		0.105404	0.0627052
JB		✓ 0.078766	0.334882 ✓
		✓ 0.187614	0.084318 ✓
		ra	log
%		2.10552	-7.55519
err.va		0.0147057	0.119916
rel.std.err		1.08203	1.13769
mod.eff		-0.082025	-0.137686

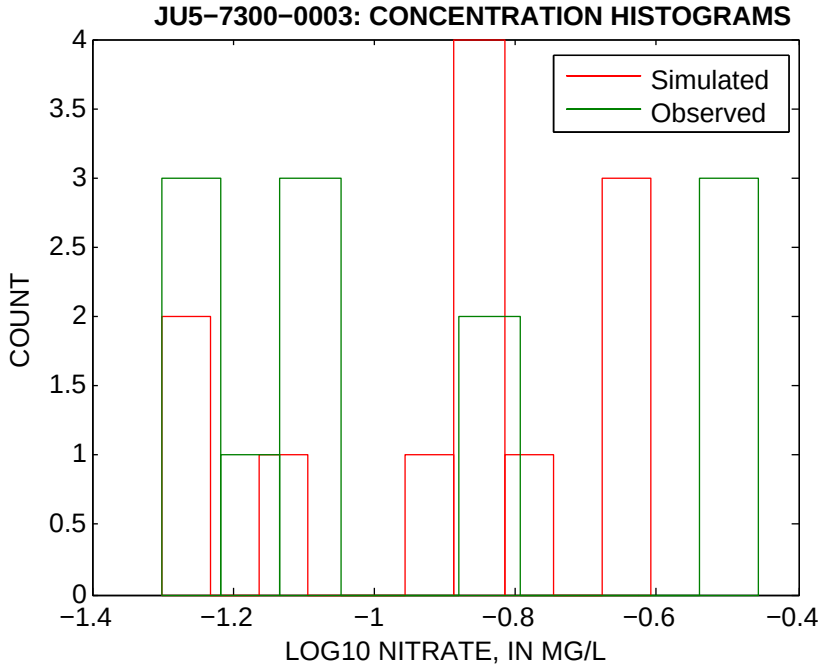
VERSION 2.1

ALL DATA
LOG10

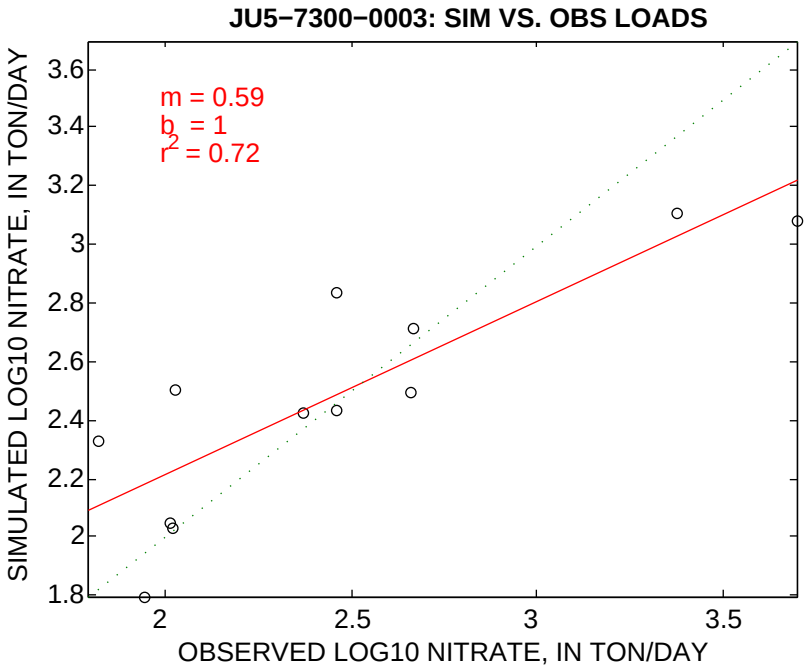


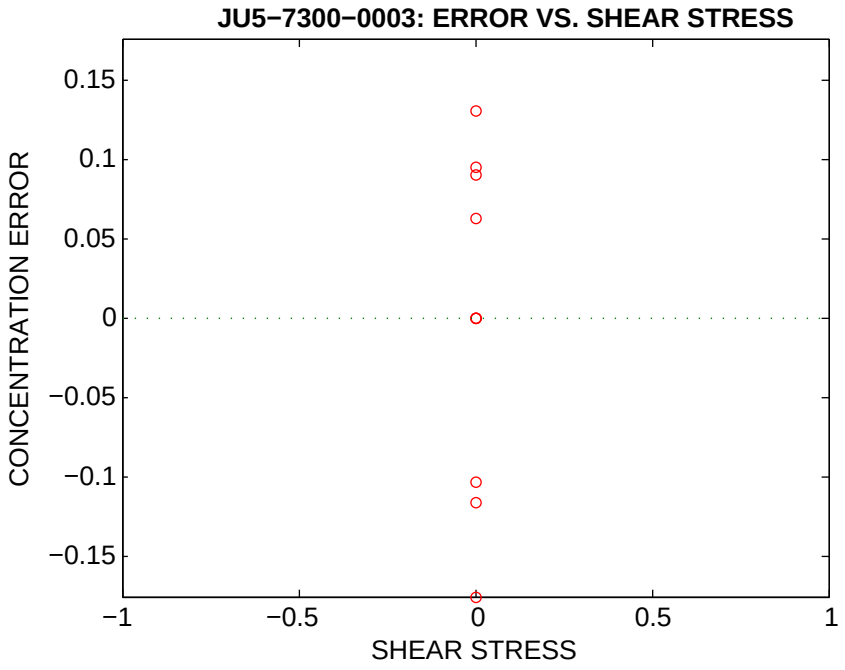


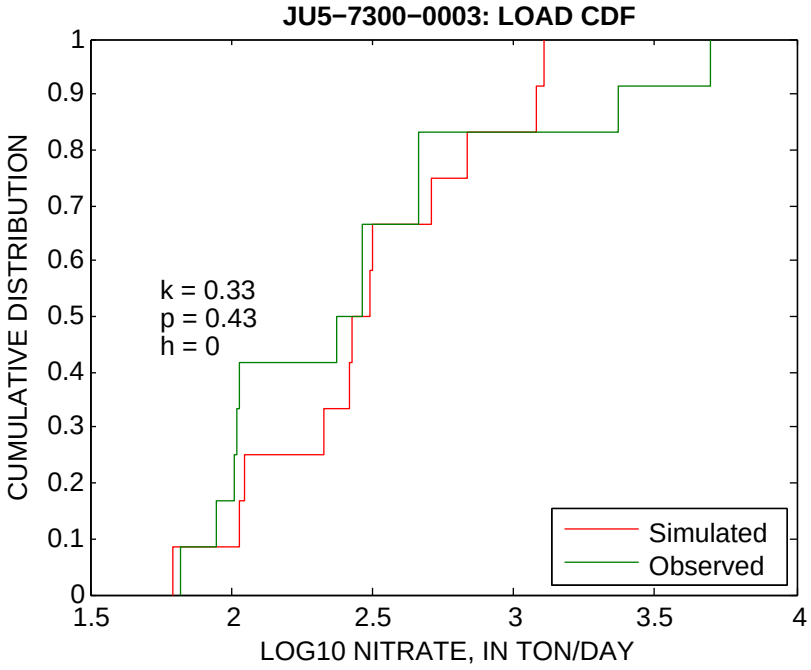


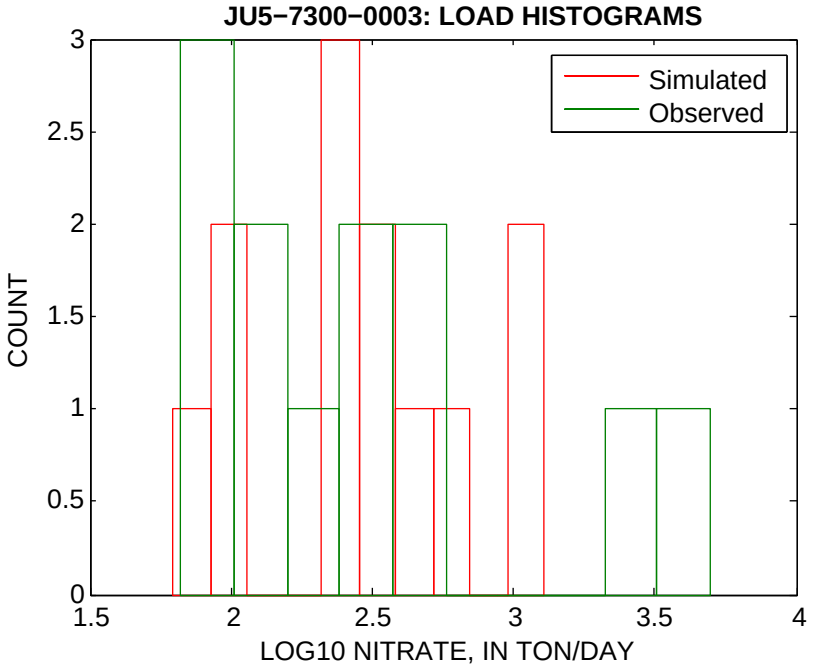


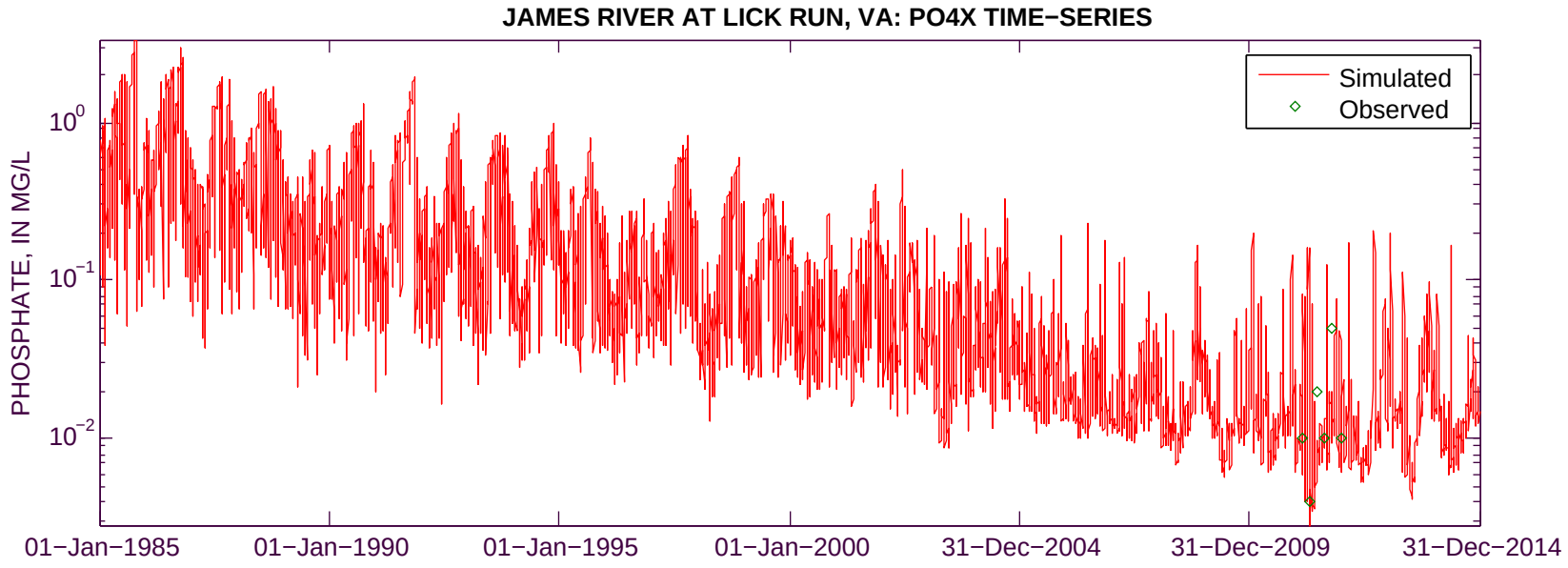
LOAD DATA
LOG10

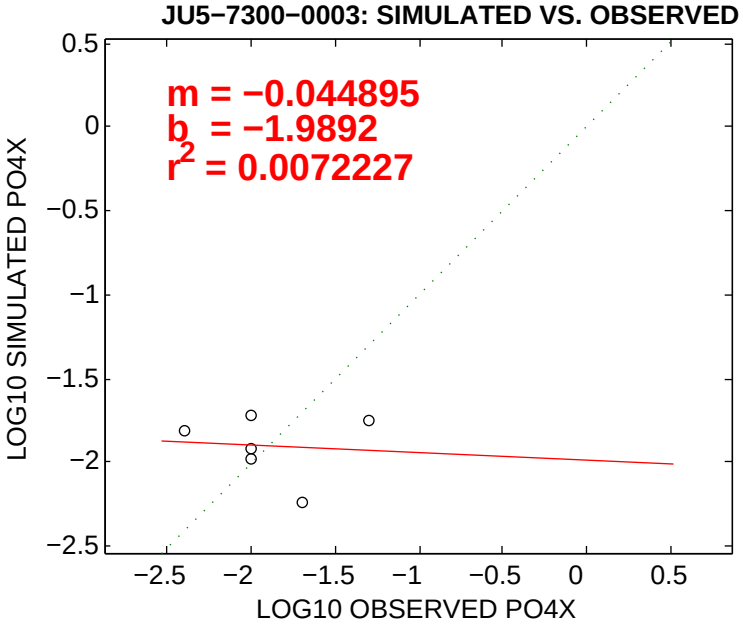


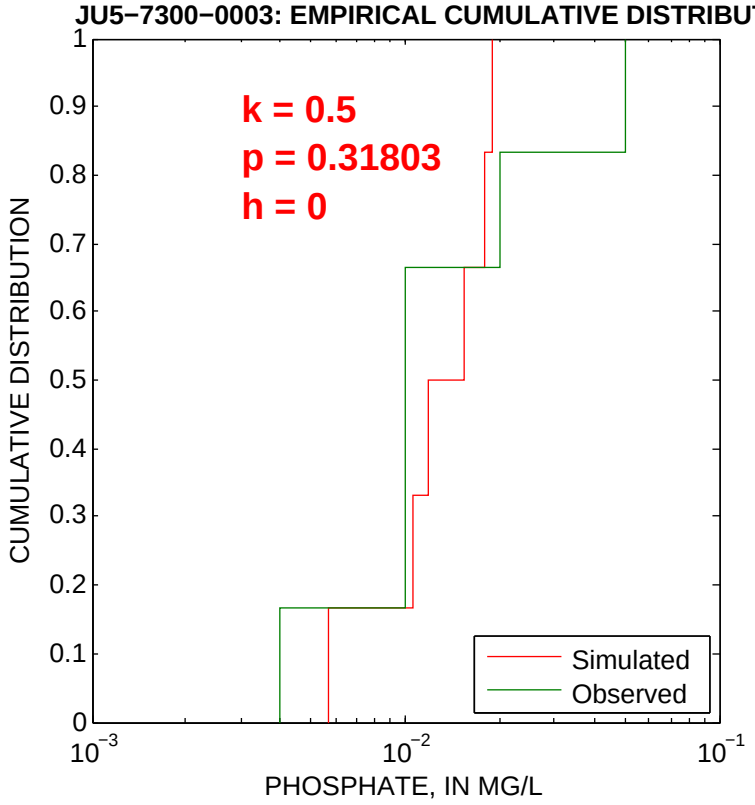












DATA SELECTION

scenario: P620171001WQ | file: PO4X.calib

plot: PO4X - phosphate

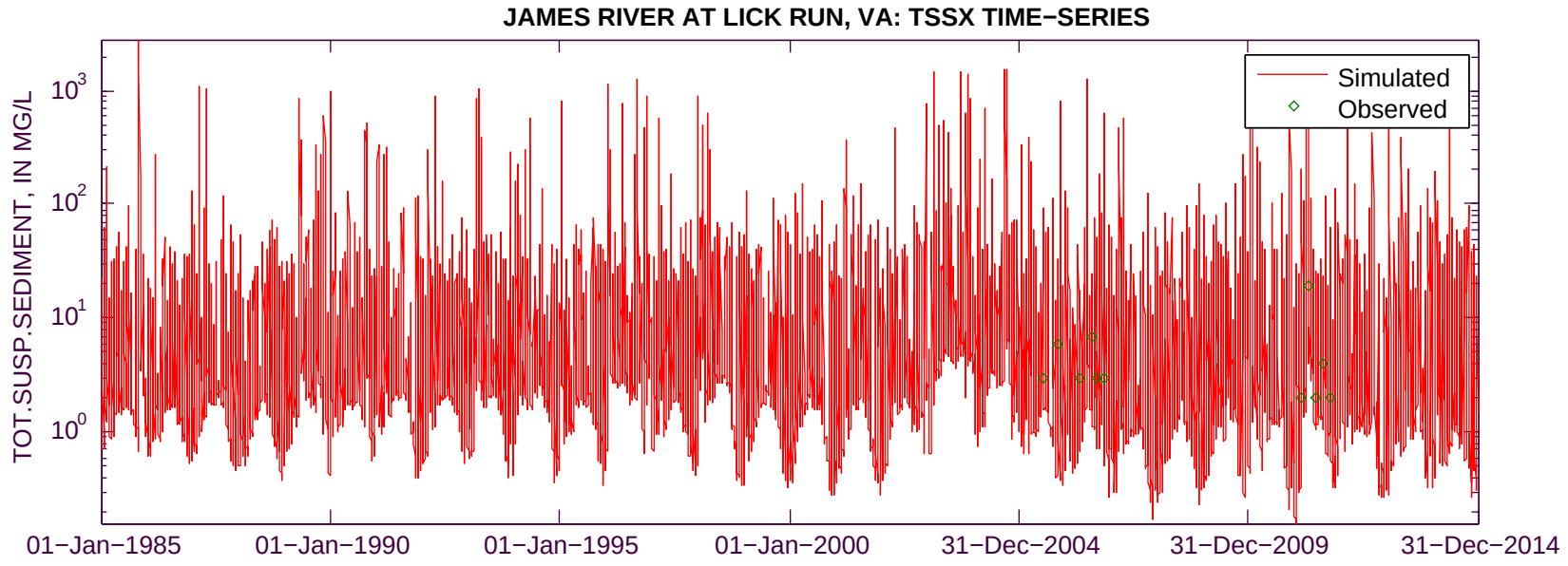
Dates: 1/1/1985 – 12/31/201

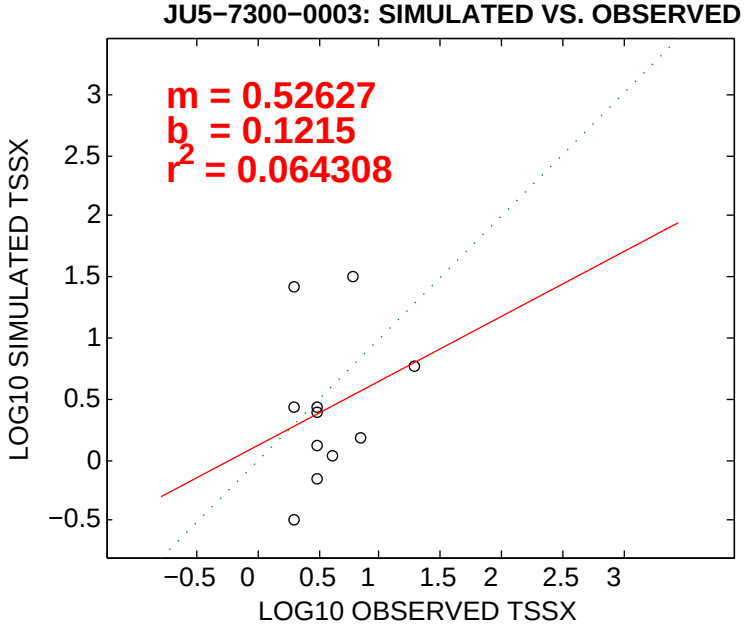
Drive: N/A | Directory: model | Observed: OBS20161101

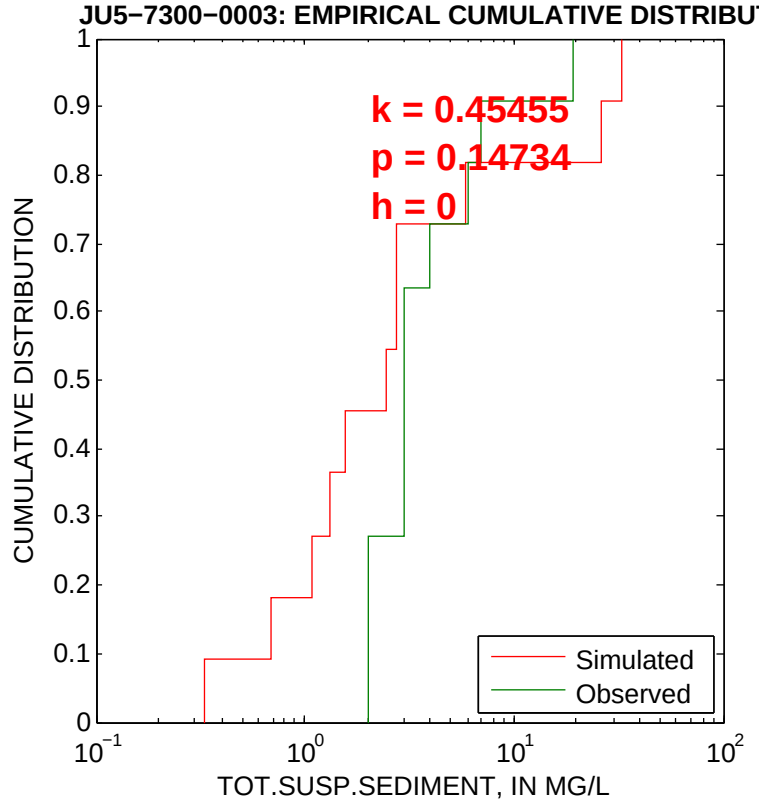
STATISTICS

	n	6	6
		observe	simulate
min		0.004	0.0056761
		-2.39794	-2.24595
mean		0.0173333	0.0134267
		-1.89966	-1.90387
media		0.01	0.0137405
		-2	-1.86577
max		0.05	0.018871
		-1.30103	-1.72421
varian		0.00028266	2.50185e-0
		0.135424	0.037791
JB		0.018836	0.5
		0.5	0.194397
		ra	log
%		-22.5384	0.221691
err.va		0.00028956	0.185396
rel.std.err		1.0244	1.369
mod.eff		-0.0244006	-0.369003

VERSION 2.1







DATA SELECTION

scenario	file
P620171001WQ	TSSX.calib

plot: TSSX - total suspended ...

Dates 1/1/1985 12/31/201

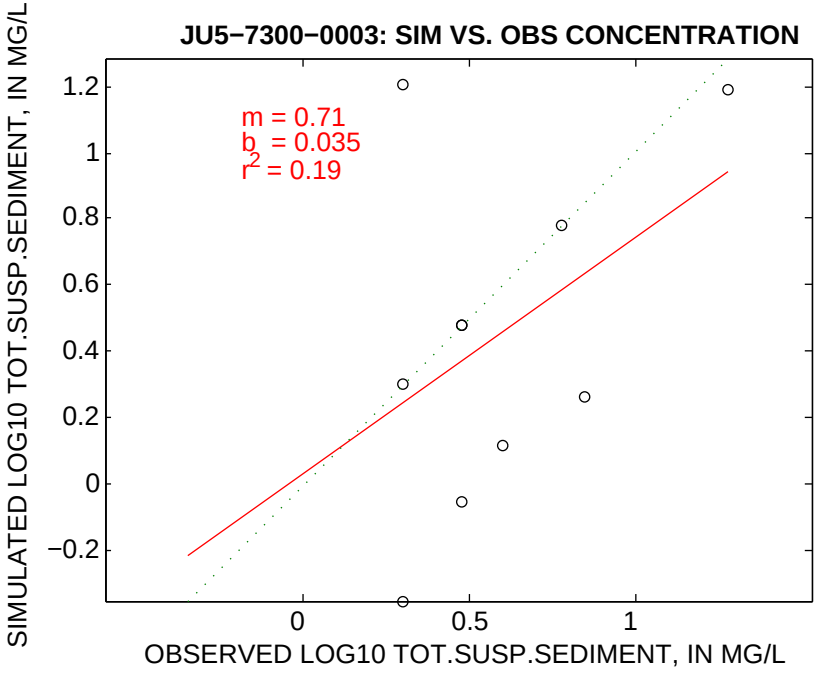
Drive	Directory	Observed
N/A	model	OBS20161101

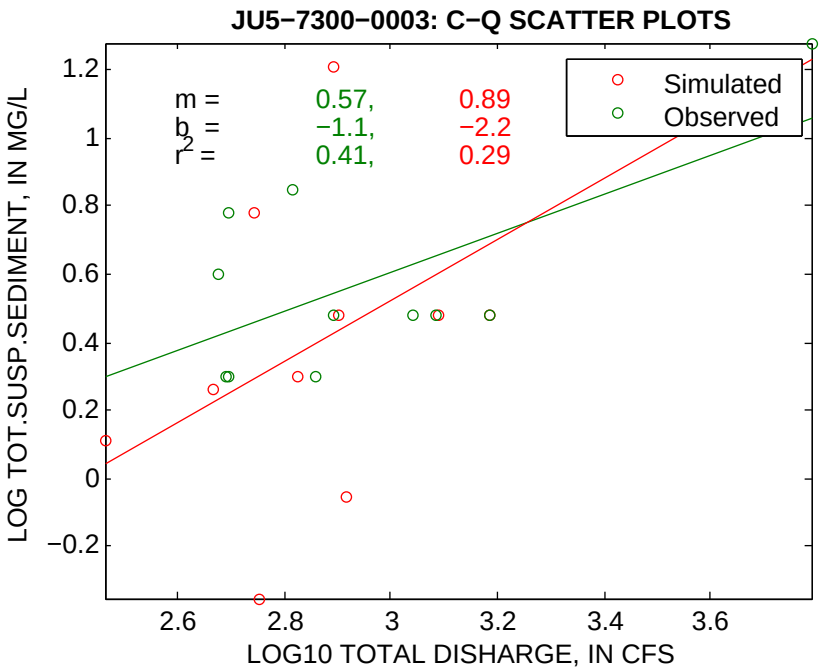
STATISTICS

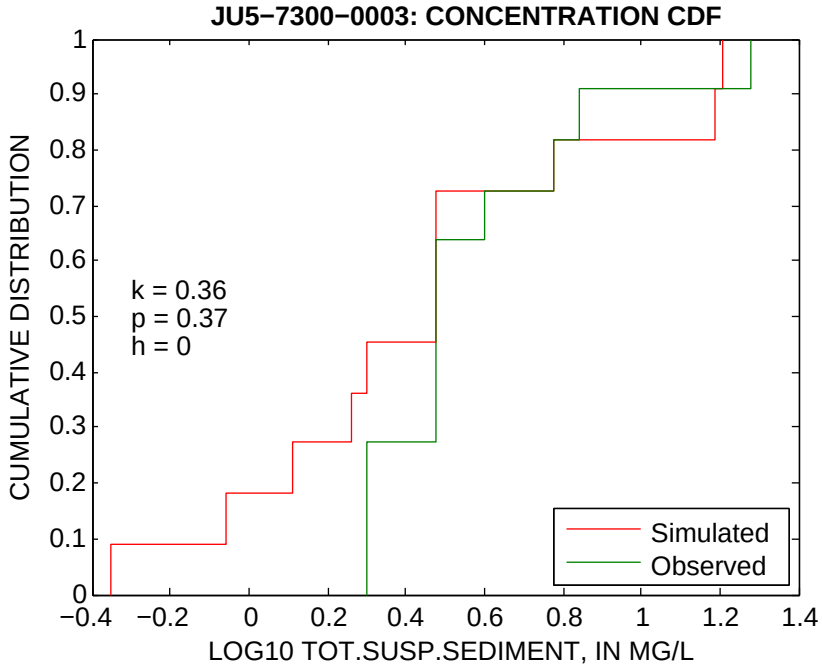
	n	11	11
		observe	simulate
min		2	0.32888
		0.30103	-0.482963
mean		4.90909	7.04608
		0.574149	0.423659
media		3	2.4209
		0.477121	0.383977
max		19	32.775
		1.27875	1.51554
varian		24.4909	126.209
		0.0873716	0.37629
JB		0.001	0.014057
		0.035429	0.499227
		ra	log
%		43.5312	-26.2109
err.va		150.928	0.396611
rel.std.err		6.16262	4.53936
mod.eff		-5.16262	-3.53936

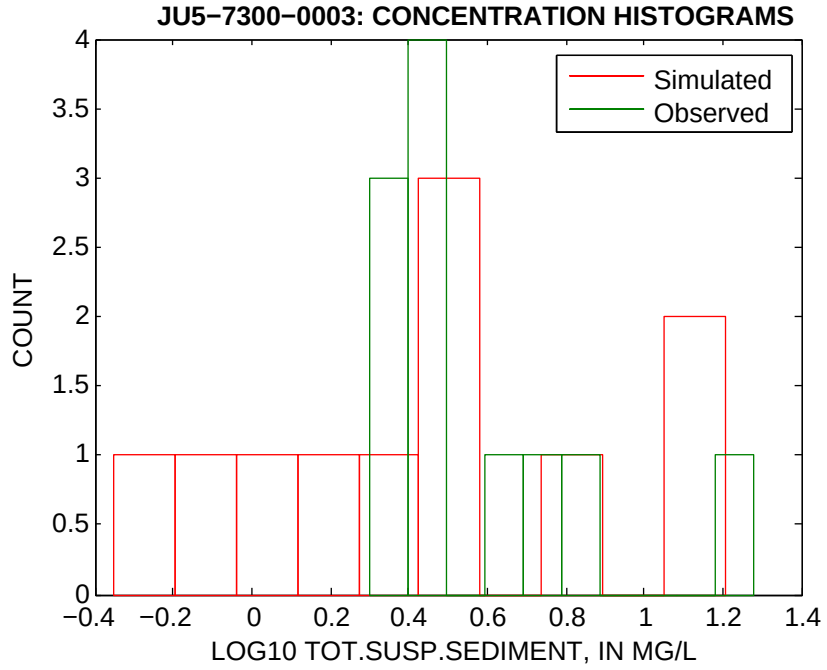
VERSION

ALL DATA
LOG10

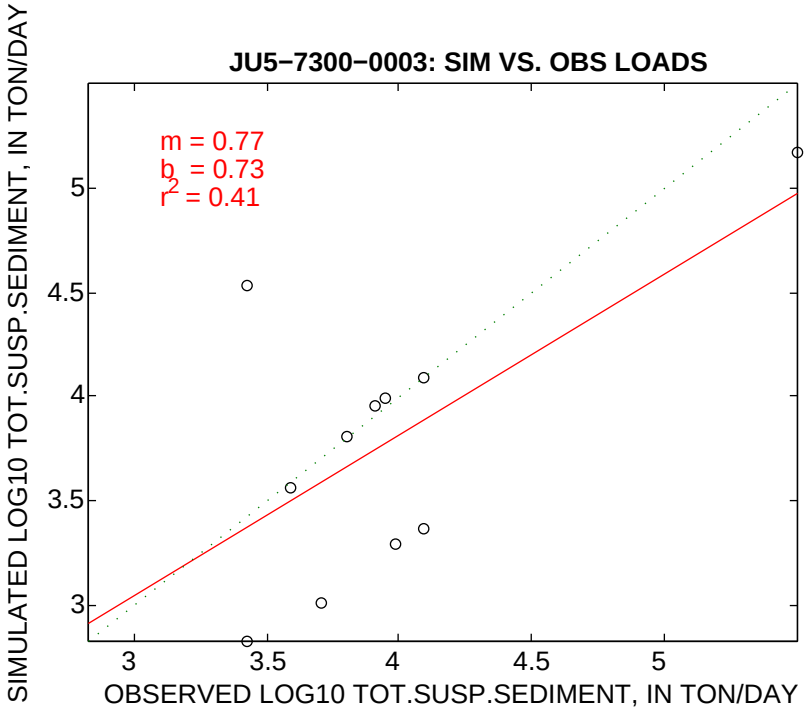


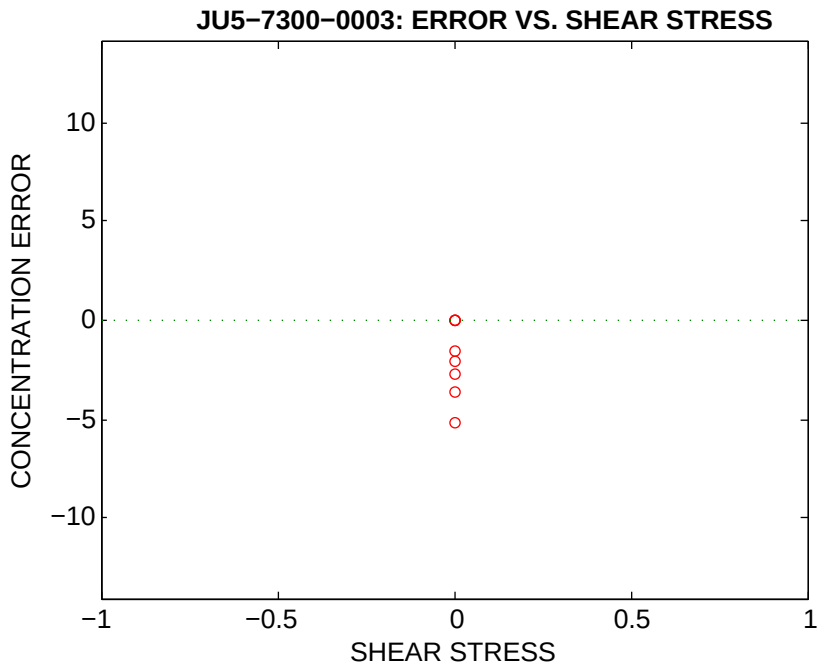


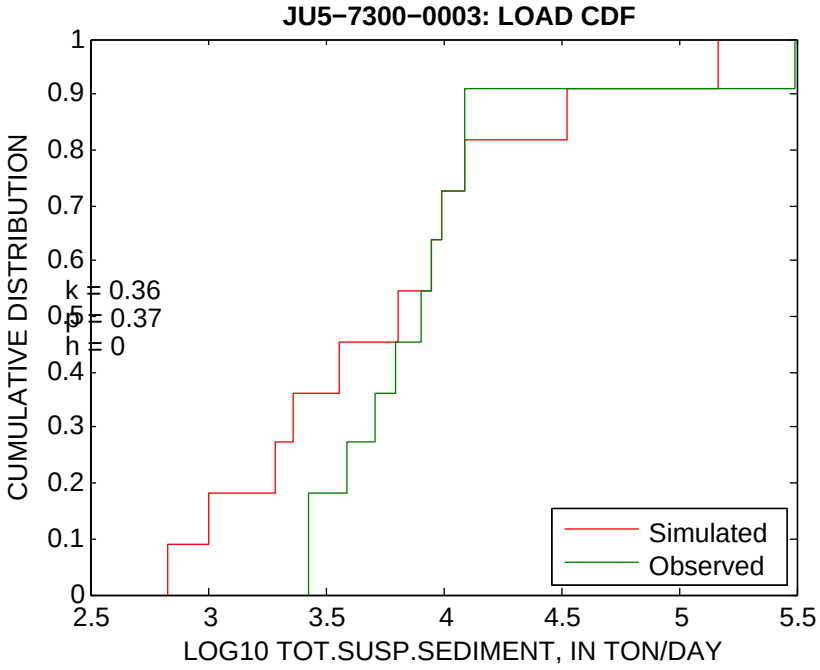


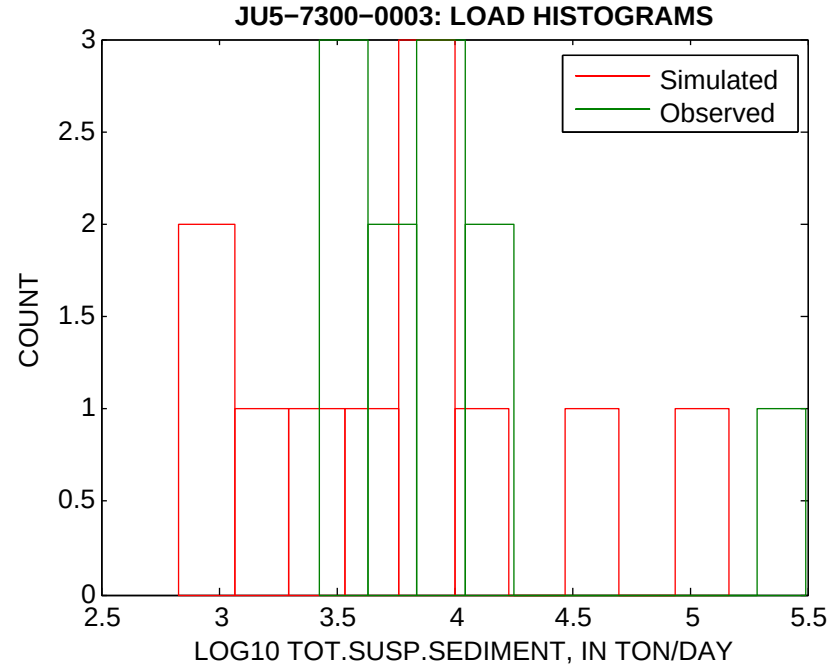


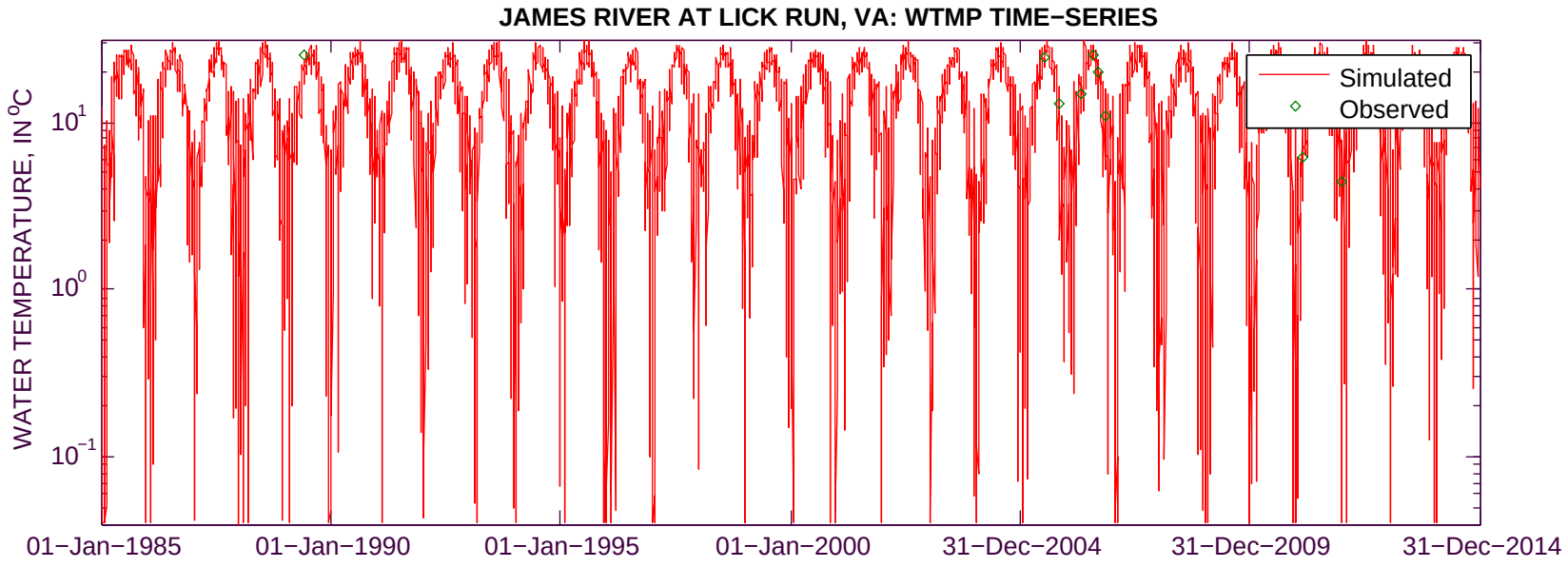
LOAD DATA
LOG10

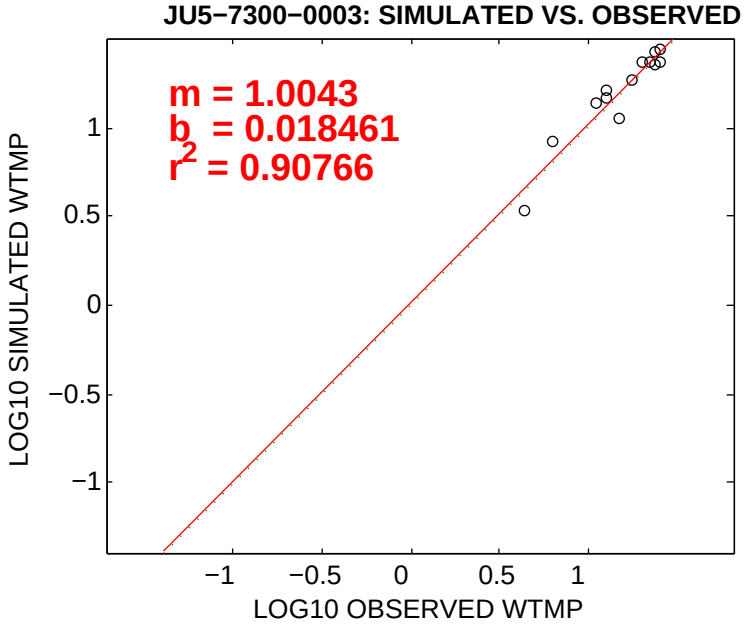


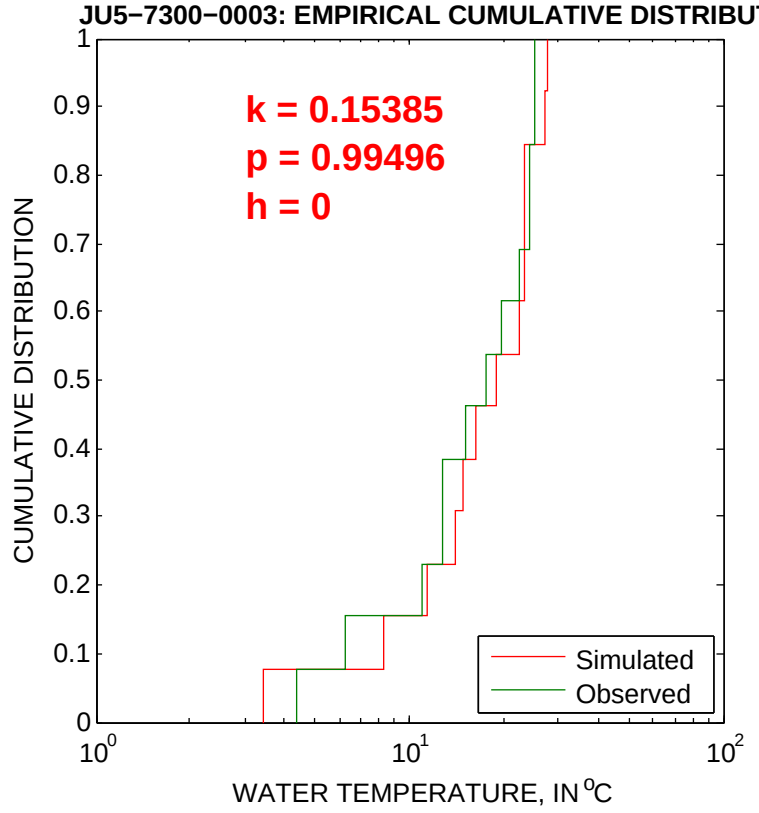












DATA SELECTION

scenario	file
P620171001WQ	WTMP.calib

plot: WTMP - water tempera...

Dates: 1/1/1985 – 12/31/201

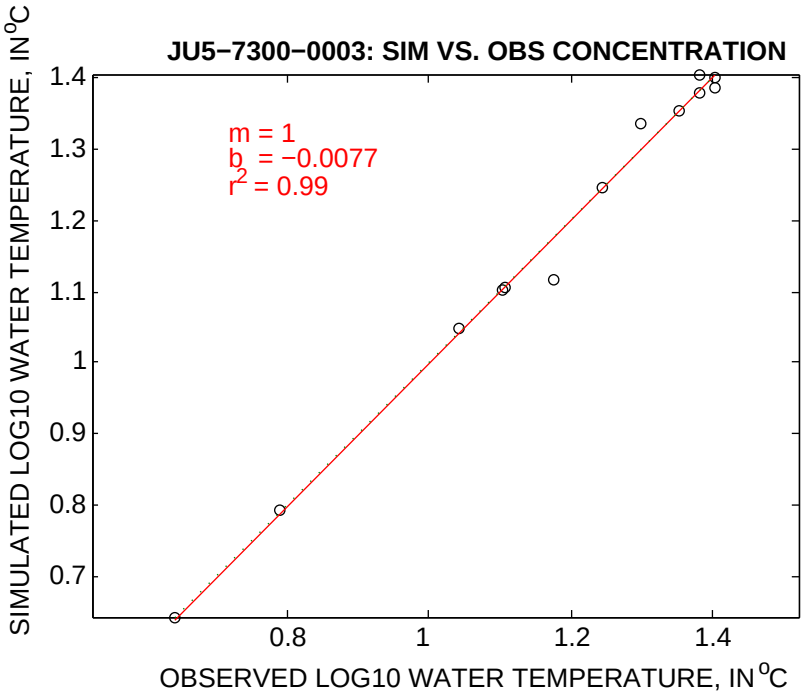
Drive	Directory	Observed
N/A	model	OBS20161101

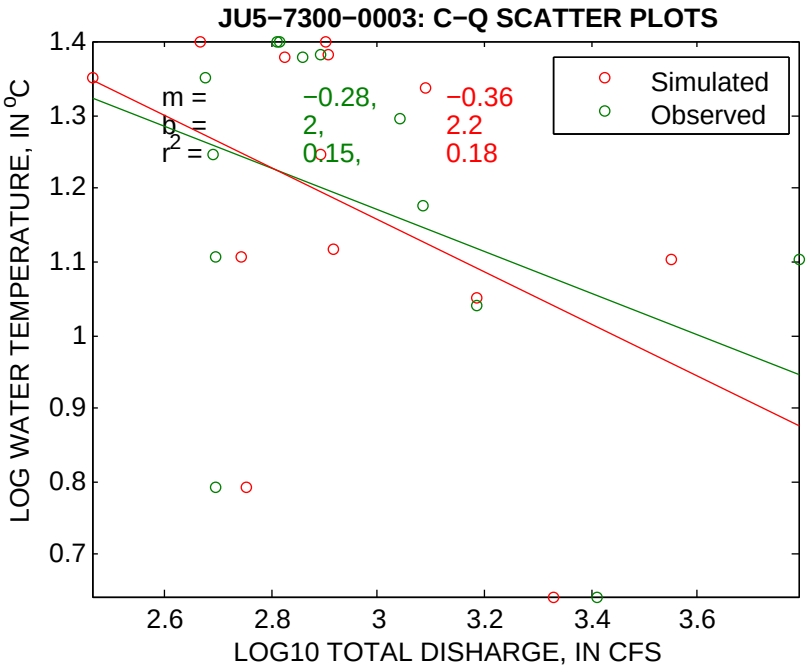
STATISTICS

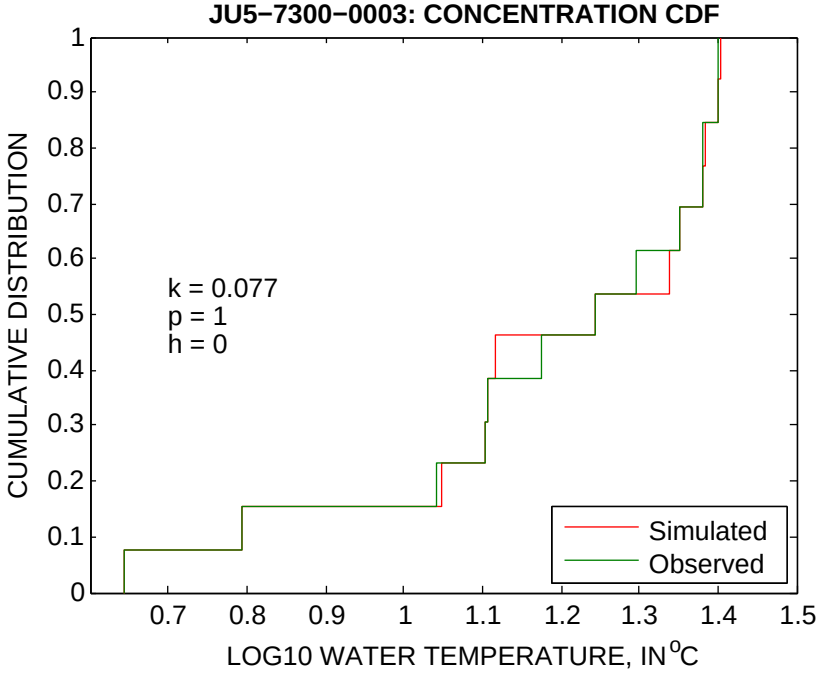
	n	13	13
		observe	simulate
min		4.4	3.4214
		0.643453	0.534204
mean		16.9615	17.9791
		1.17875	1.20233
media		17.6	18.827
		1.24551	1.27478
max		25.2	27.646
		1.4014	1.44163
varian		51.9876	54.9549
		0.0579096	0.0643564
JB		0.331293	0.459699
		0.071492	0.013420
		ra	log
%		5.99927	2.00039
err.va		6.41705	0.00654615
rel.std.err		0.123434	0.113041
mod.eff		0.876566	0.886959

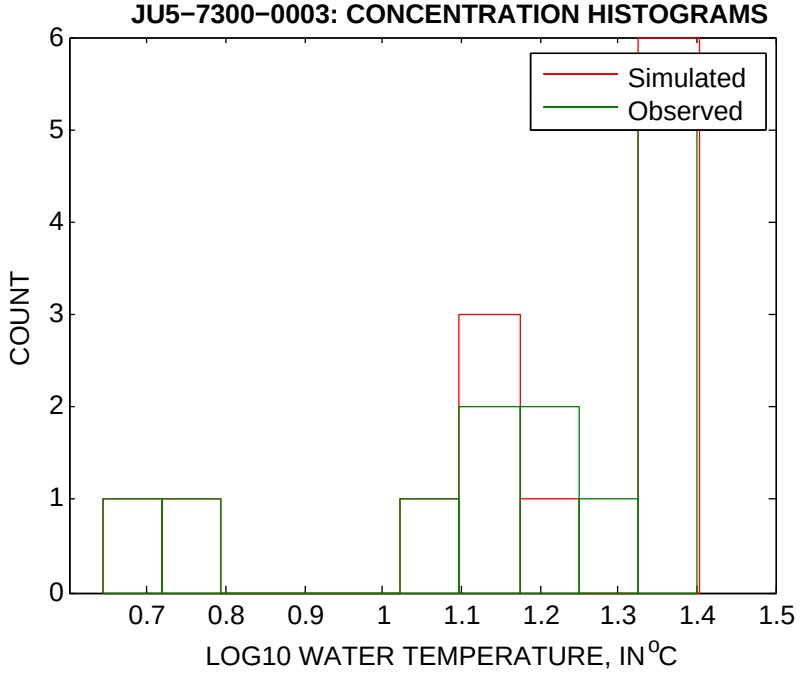
VERSION 2.1

ALL DATA
LOG10

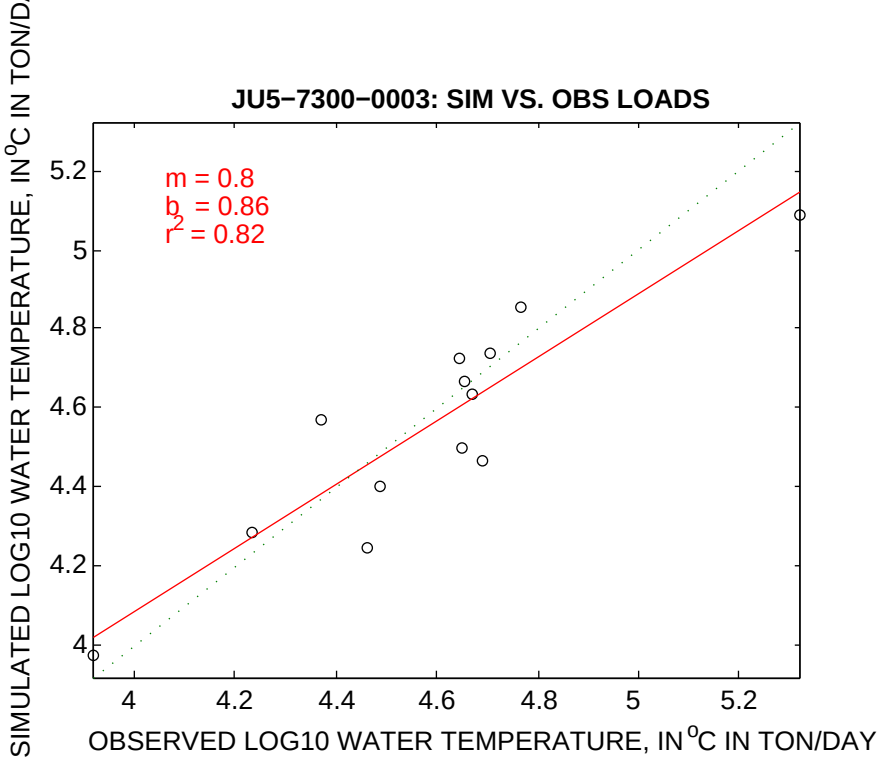


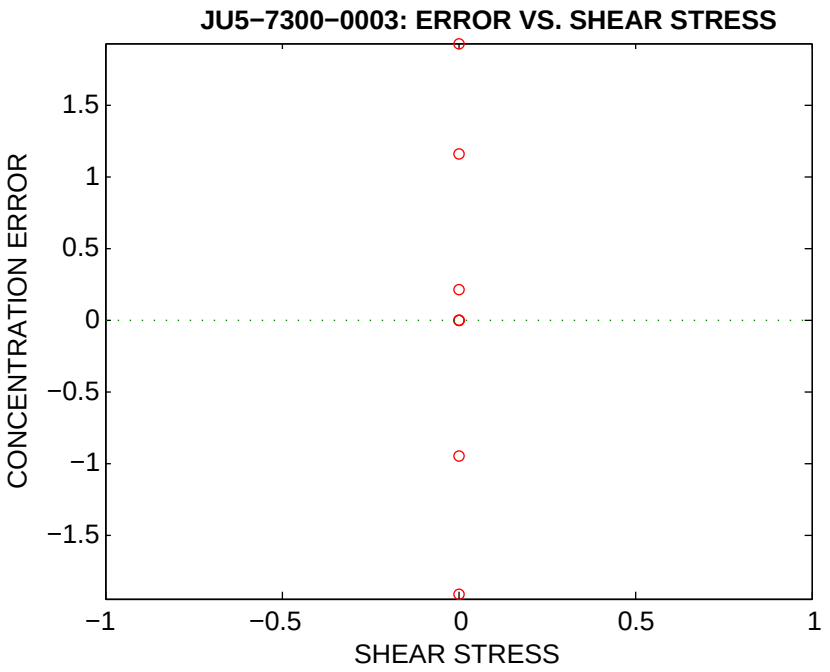


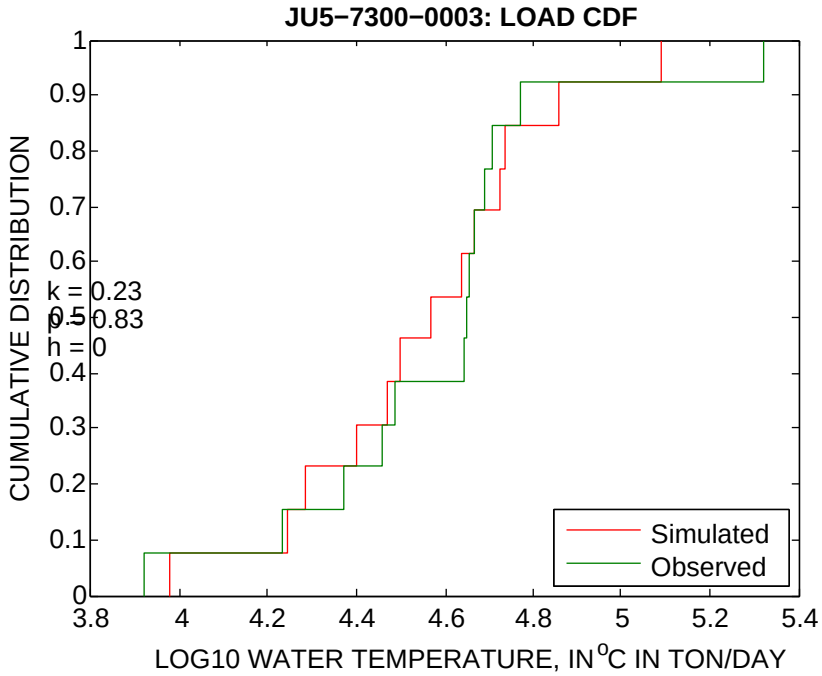


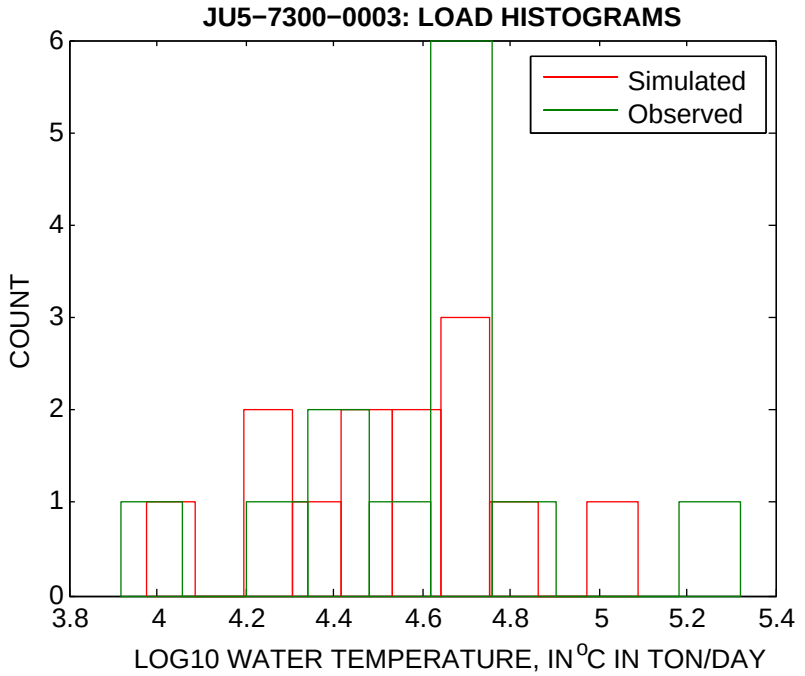


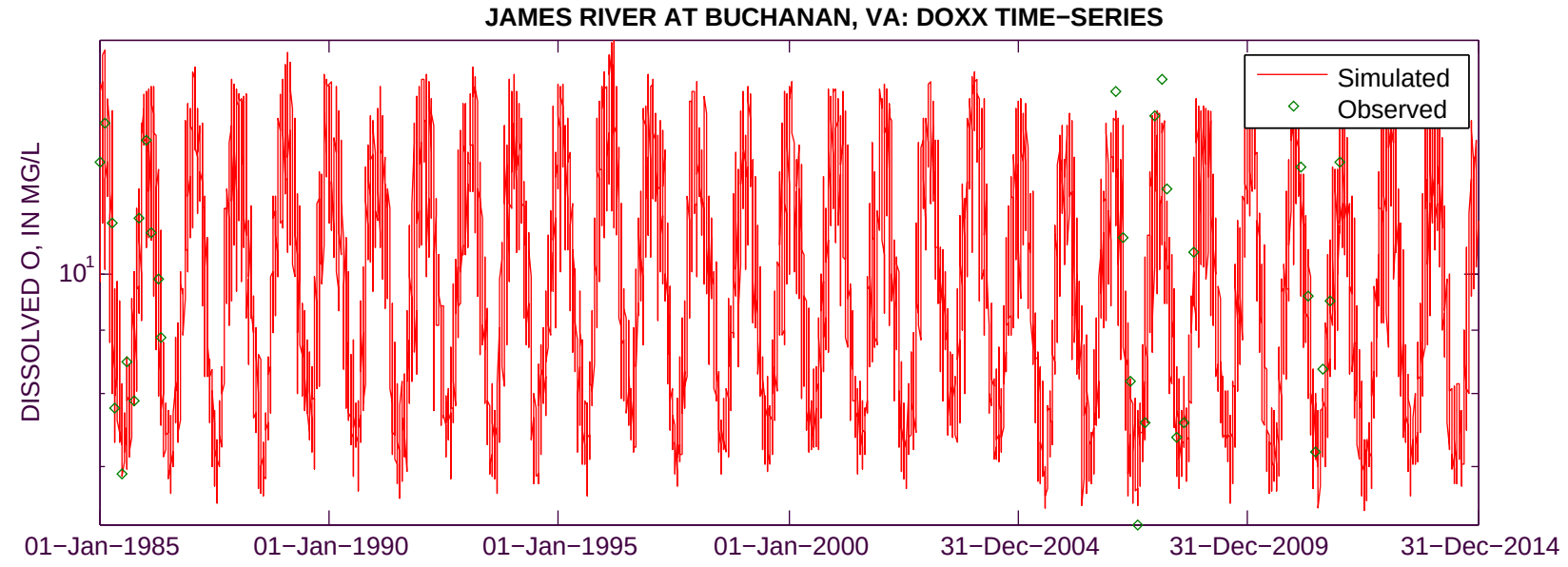
LOAD DATA
LOG10

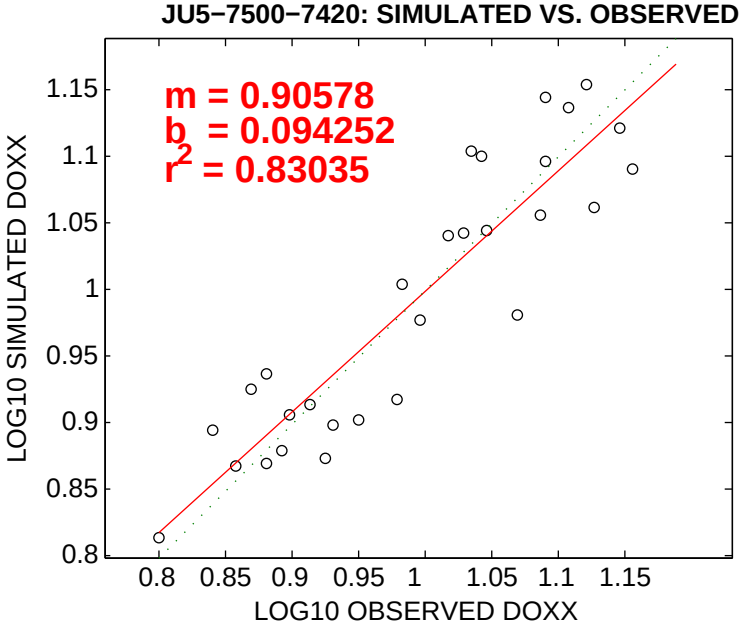


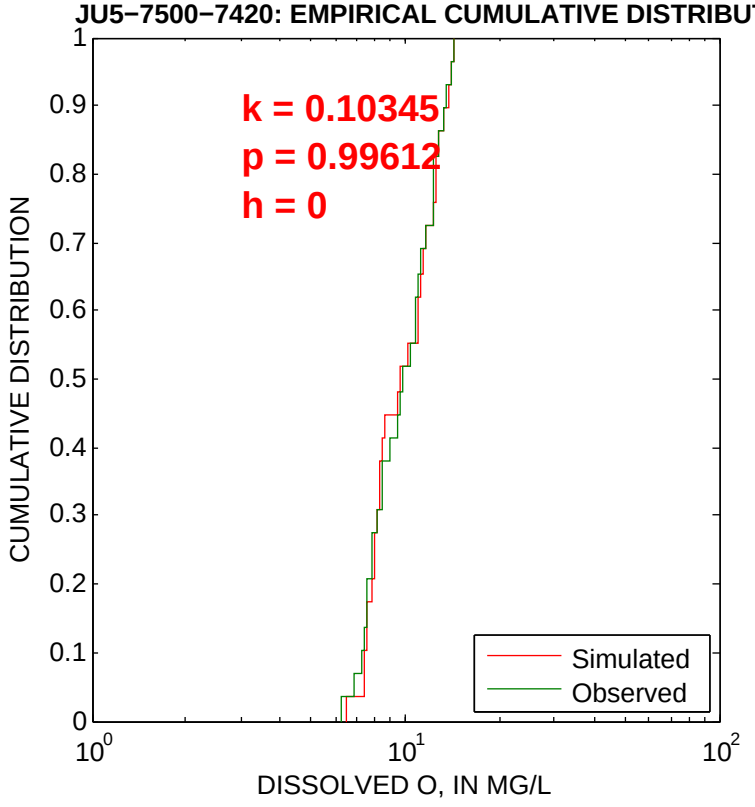












DATA SELECTION

scenario	file
P620171001WQ	DOXX.calib

plot: DOXX - dissolved oxygen

Dates: 1/1/1985 – 12/31/201

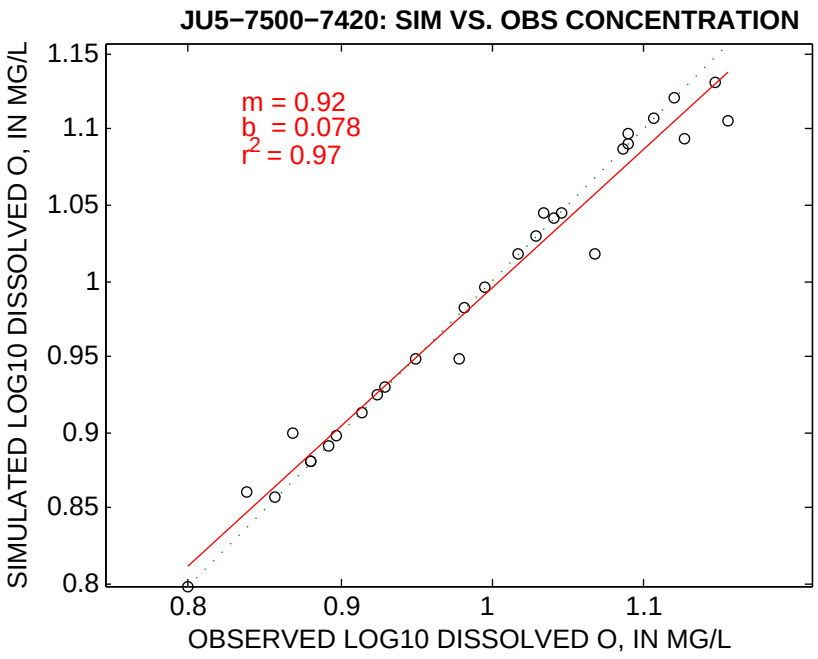
Drive	Directory	Observed
N/A	model	OBS20161101

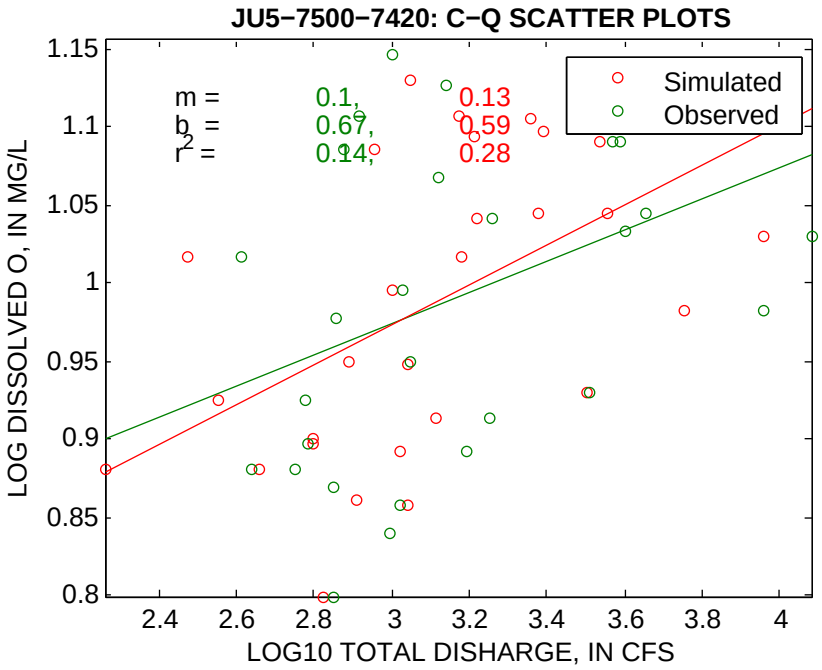
STATISTICS

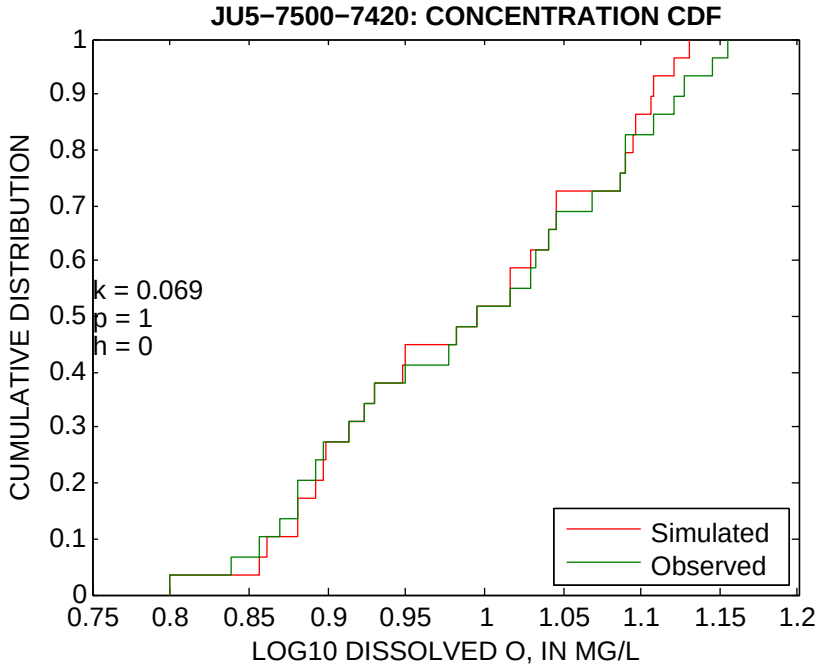
	n	29	29
		observe	simulate
min		6.3	6.5271
		0.799341	0.81472
mean		10.0655	10.0852
		0.991238	0.992095
media		9.9	9.592
		0.995635	0.981909
max		14.3	14.281
		1.15534	1.15476
varian		5.50591	5.63228
		0.010554	0.010428
JB		0.1856	0.114805
		0.204573	0.126407
		ra	log
%		0.195923	0.0865007
err.va		1.14173	0.00186356
rel.std.err		0.207364	0.176573
mod.eff		0.792636	0.823427

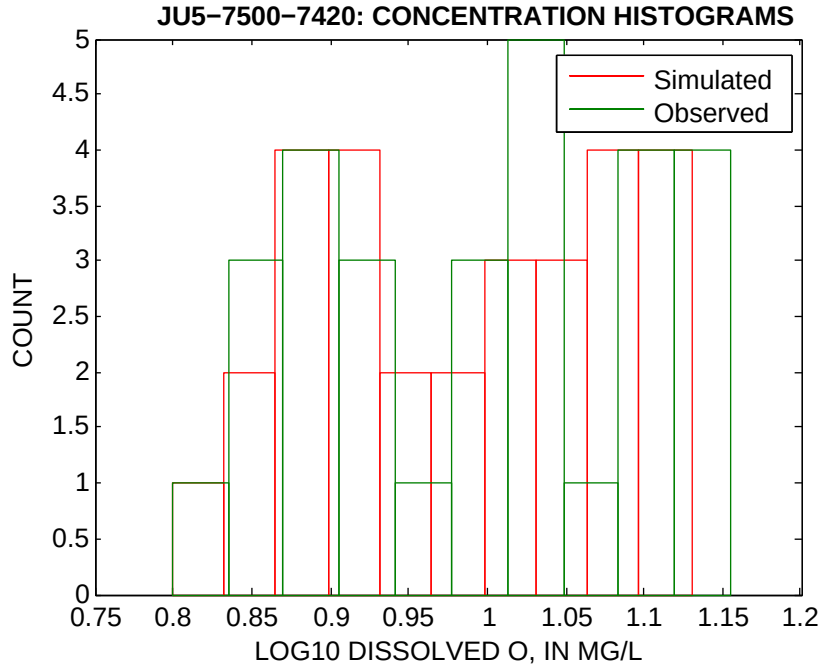
VERSION 2.1

ALL DATA
LOG10

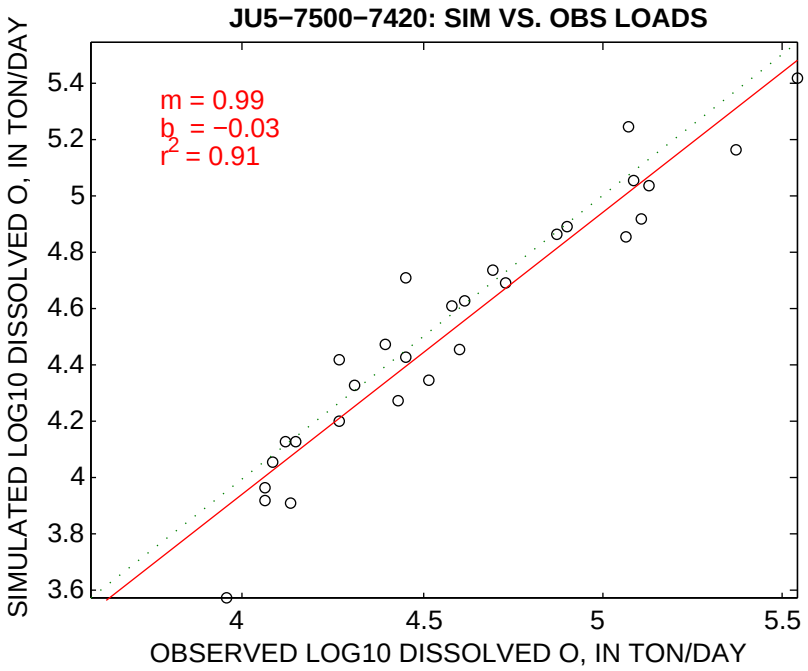




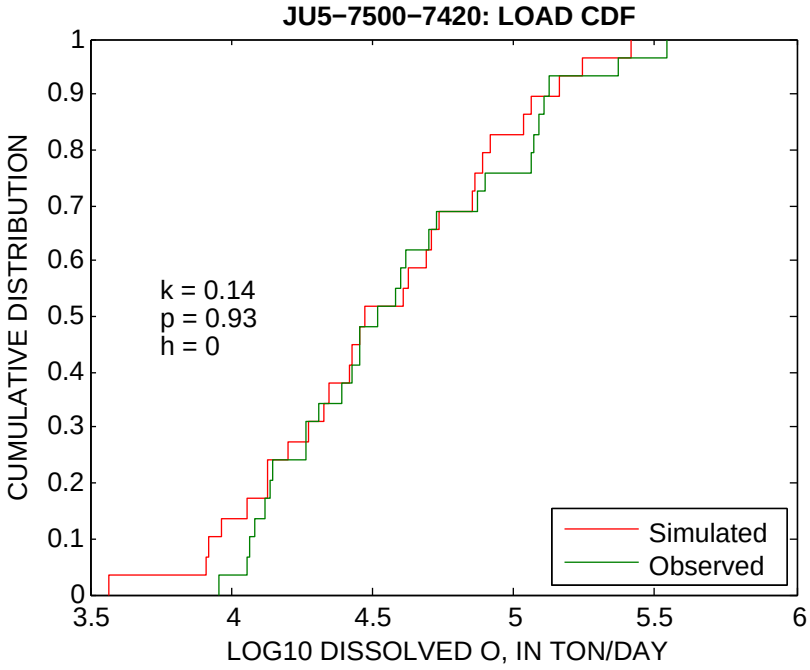


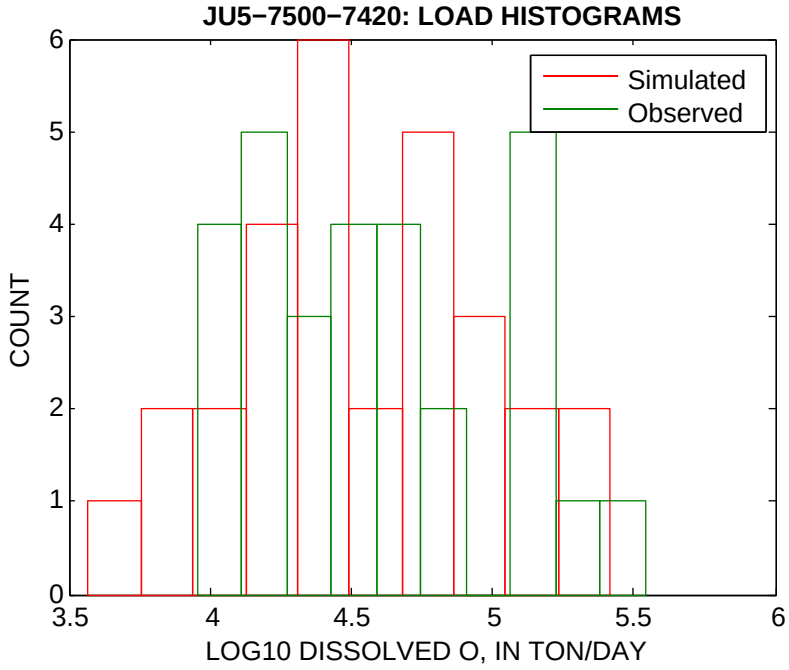


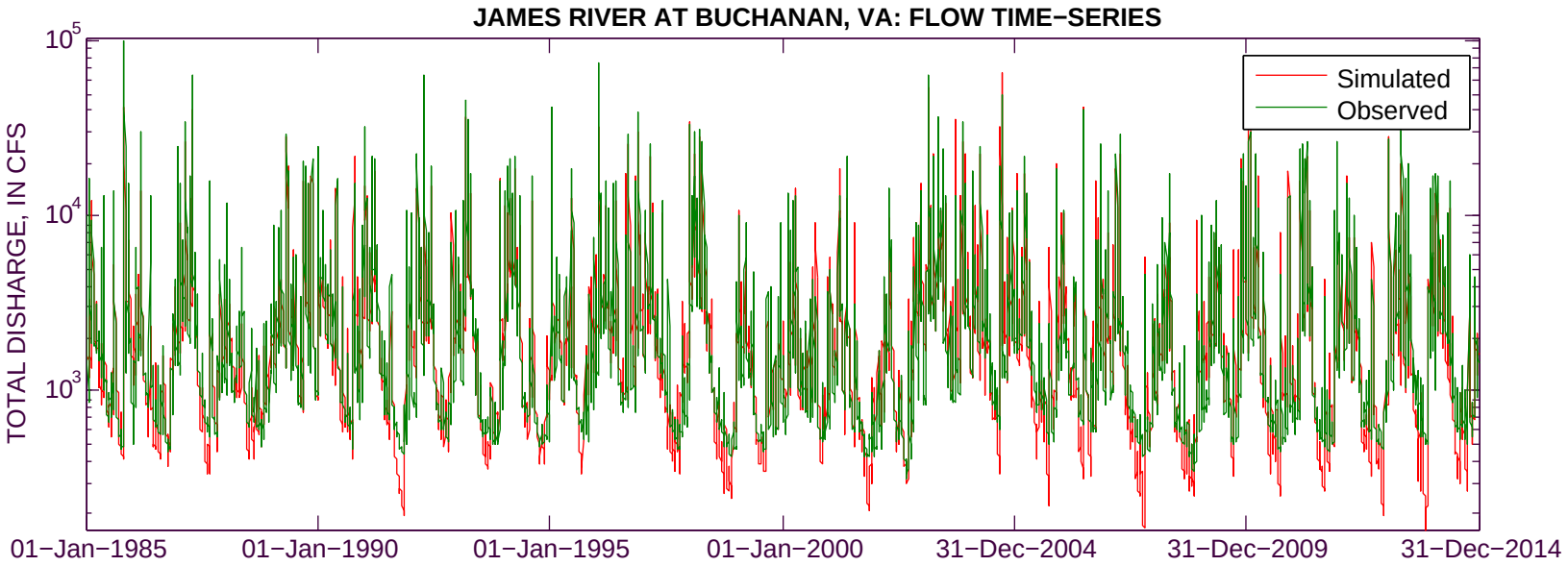
LOAD DATA
LOG10

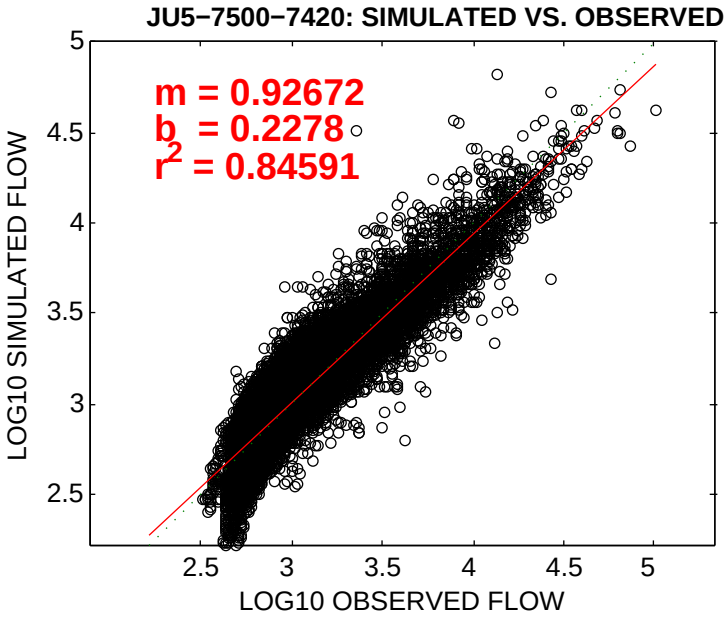


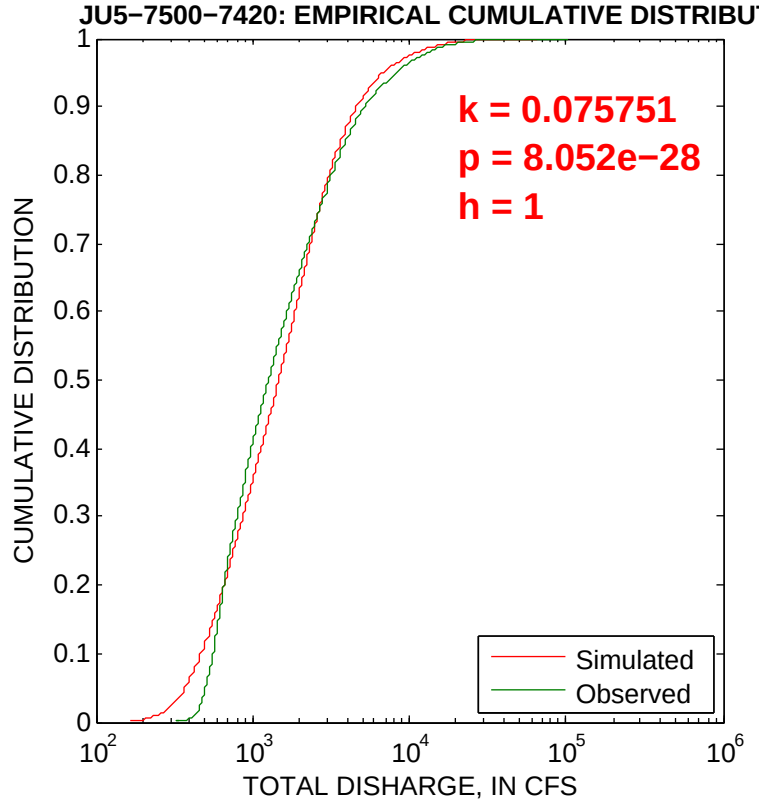


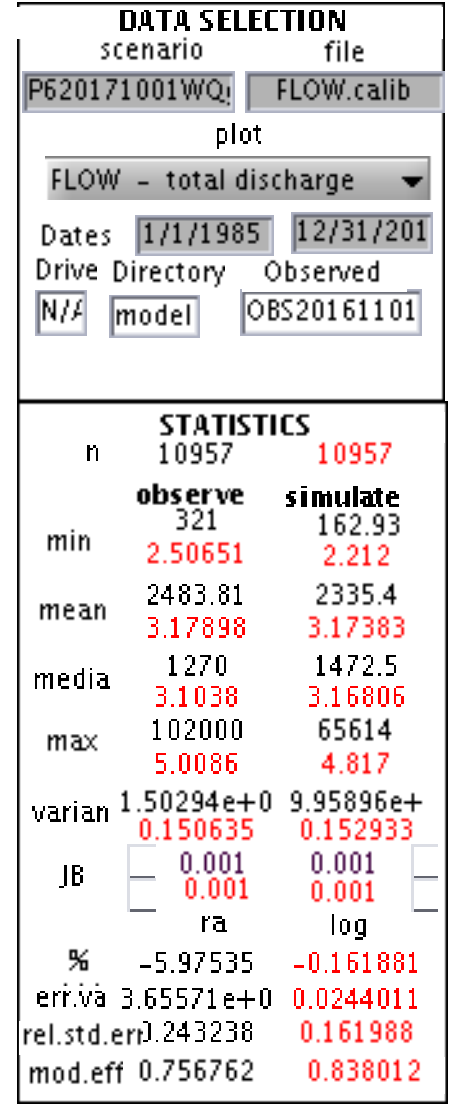




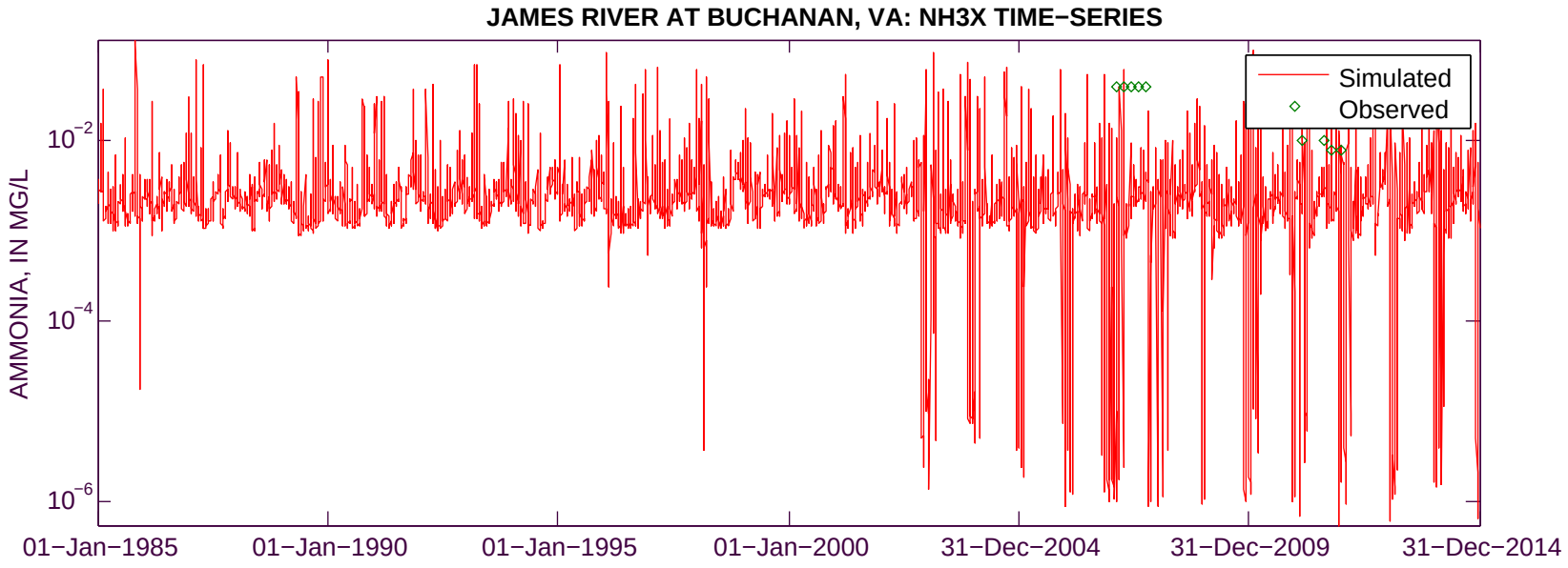

JAMES RIVER AT BUCHANAN, VA: FLOW TIME−SERIES
TOTAL DISHARGE, IN CFS
Simulated
Observed
01−Jan−1985
01−Jan−1990
01−Jan−1995
01−Jan−2000
31−Dec−2004
31−Dec−2009
31−Dec−2014

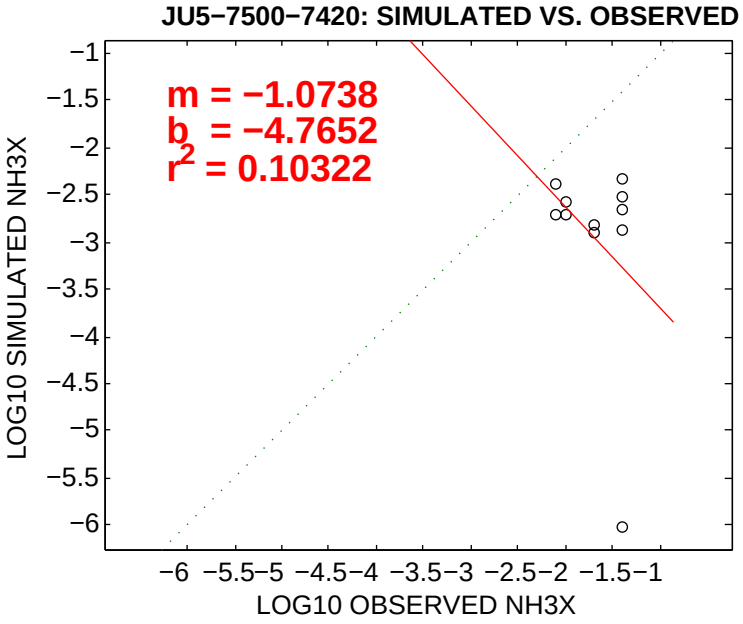

JU5−7500−7420: SIMULATED VS. OBSERVED
m = 0.92672
b = 0.2278
r2 = 0.84591
LOG10 SIMULATED FLOW
LOG10 OBSERVED FLOW

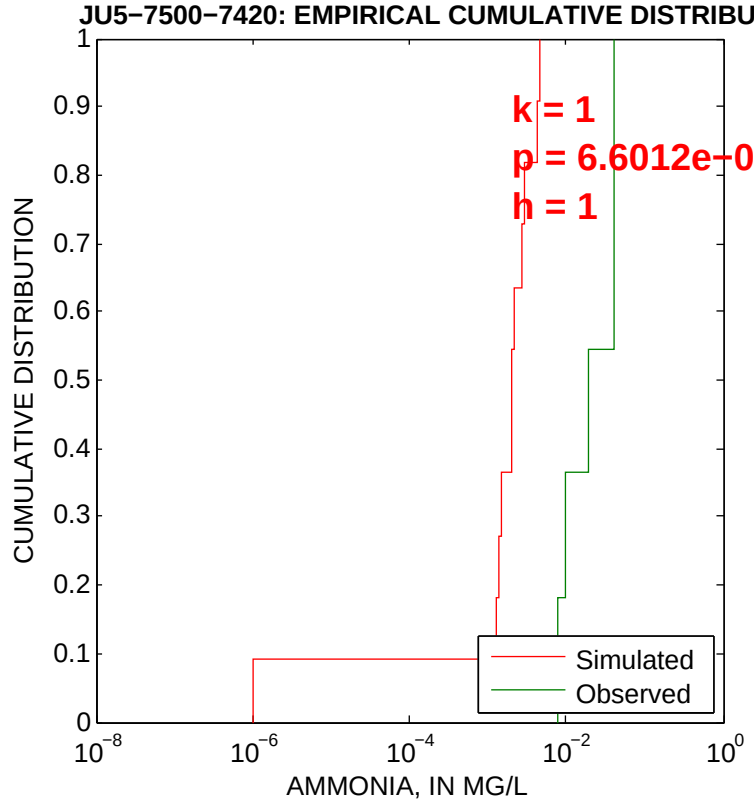

JU5−7500−7420: EMPIRICAL CUMULATIVE DISTRIBUTION
k = 0.075751
p = 8.052e−28
h = 1
CUMULATIVE DISTRIBUTION
TOTAL DISHARGE, IN CFS
Simulated
Observed


DATA SELECTION
scenario
file
P620171001WQ
FLOW.calib
plot
FLOW - total discharge
Dates
1/1/1985
12/31/201
Drive
Directory
Observed
N/A
model
OBS20161101
STATISTICS
n 10957 10957
observe simulate
min 321 162.93
2.50651 2.212
mean 2483.81 2335.4
3.17898 3.17383
media 1270 1472.5
3.1038 3.16806
max 102000 65614
5.0086 4.817
varian 1.50294e+0 9.95896e+
0.150635 0.152933
JB 0.001 0.001
0.001 0.001
ra log
% -5.97535 -0.161881
err.va 3.65571e+0 0.0244011
rel.std.err 0.243238 0.161988
mod.eff 0.756762 0.838012

VERSION







DATA SELECTION

scenario	file
P620171001WQ	NH3X.calib

plot: NH3X - ammonia

Dates: 1/1/1985 – 12/31/201

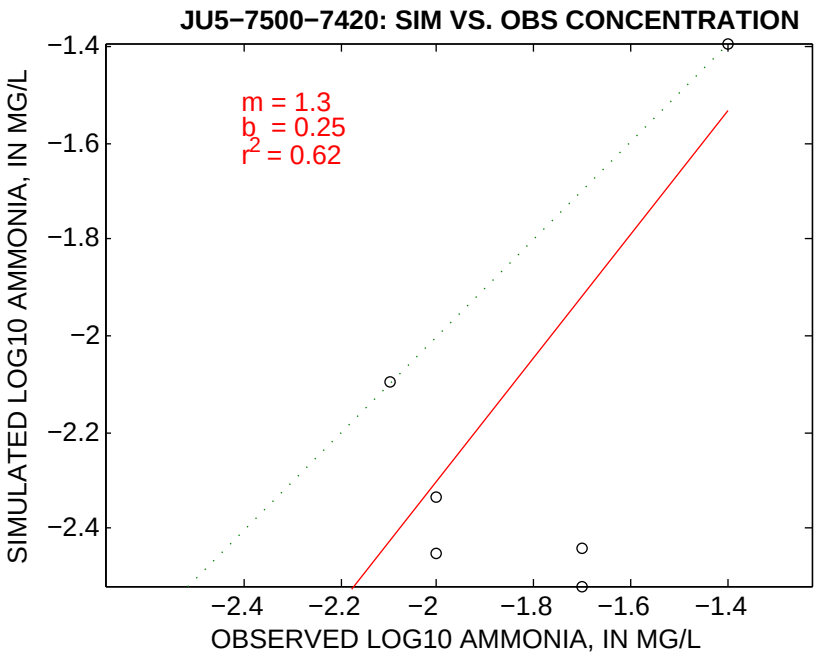
Drive	Directory	Observed
N/A	model	OBS20161101

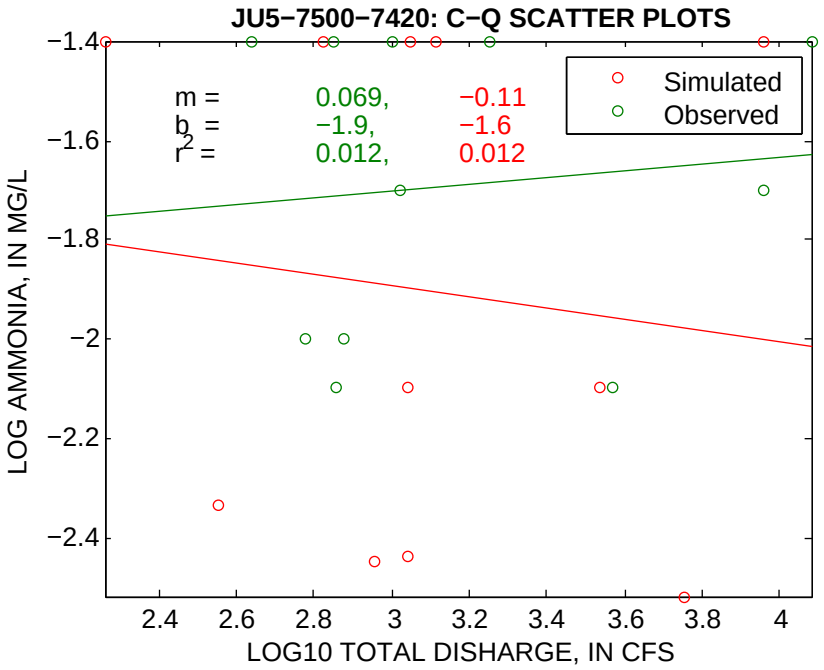
STATISTICS

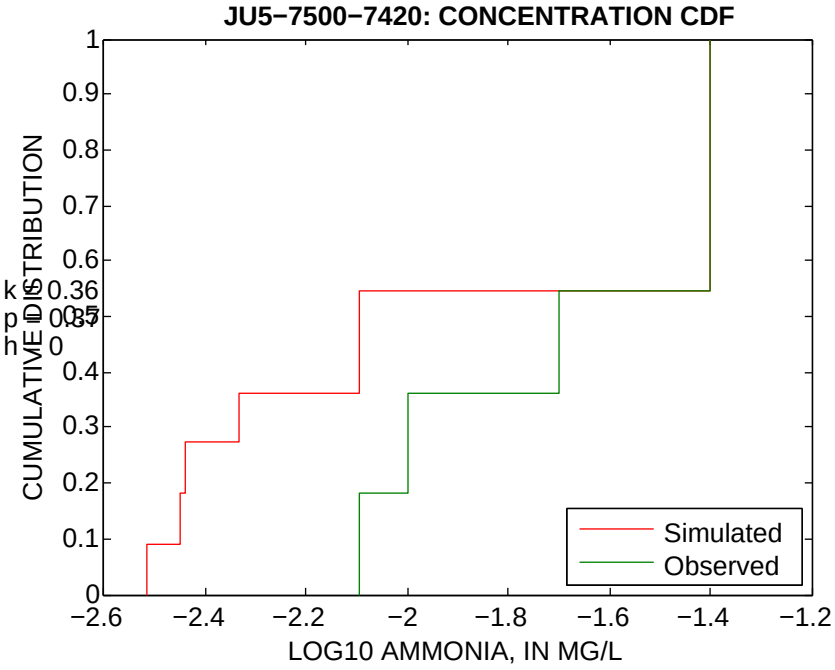
n	11	11
	observe	**simulate**
min	0.008	9.8215e-07
	-2.09691	-6.00782
mean	0.0250909	0.0022527
	-1.68922	-2.95121
media	0.02	0.0020075
	-1.69897	-2.69734
max	0.04	0.004601
	-1.39794	-2.33715
varian	0.00022029	1.75528e-0
	0.0950001	1.06129
JB	0.122625	0.5
	0.143552	0.001
	ra	log
%	-91.0219	74.708
err.va	0.00080116	3.11219
rel.std.err	3.63684	32.7599
mod.eff	-2.63684	-31.7599

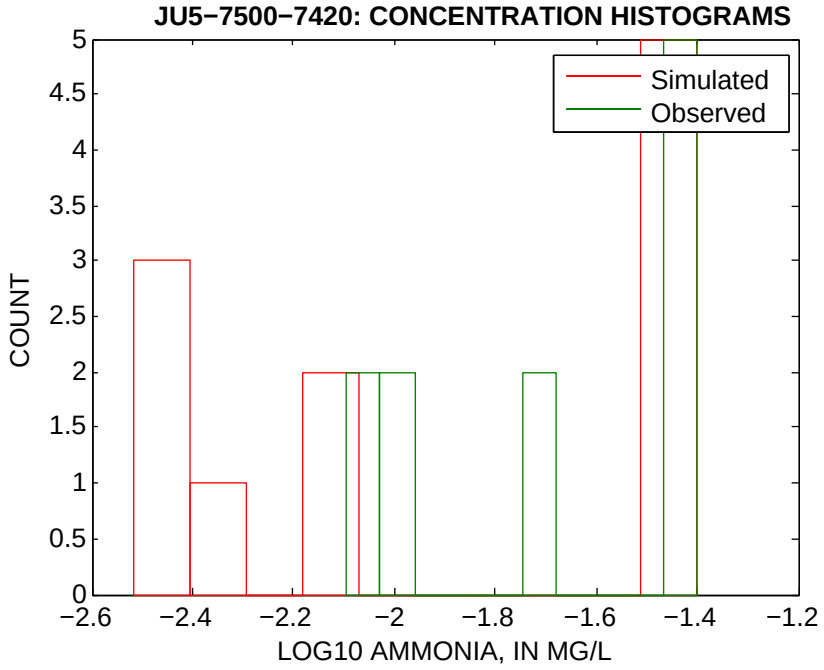
VERSION 3.1

ALL DATA
LOG10

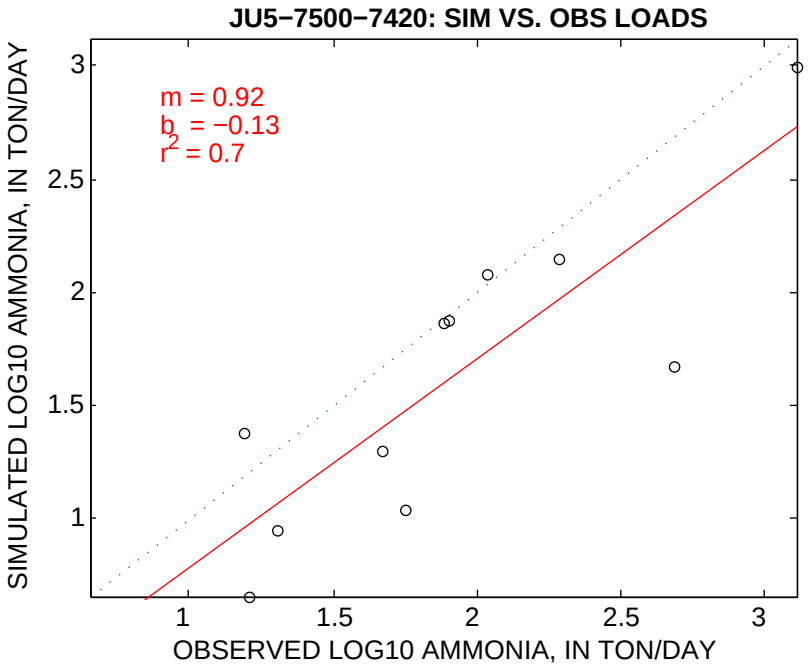




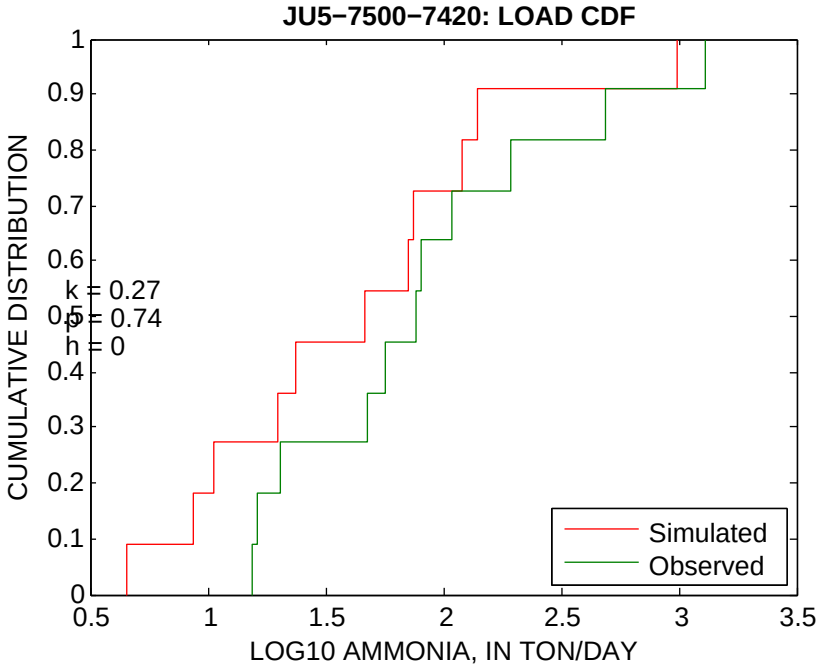


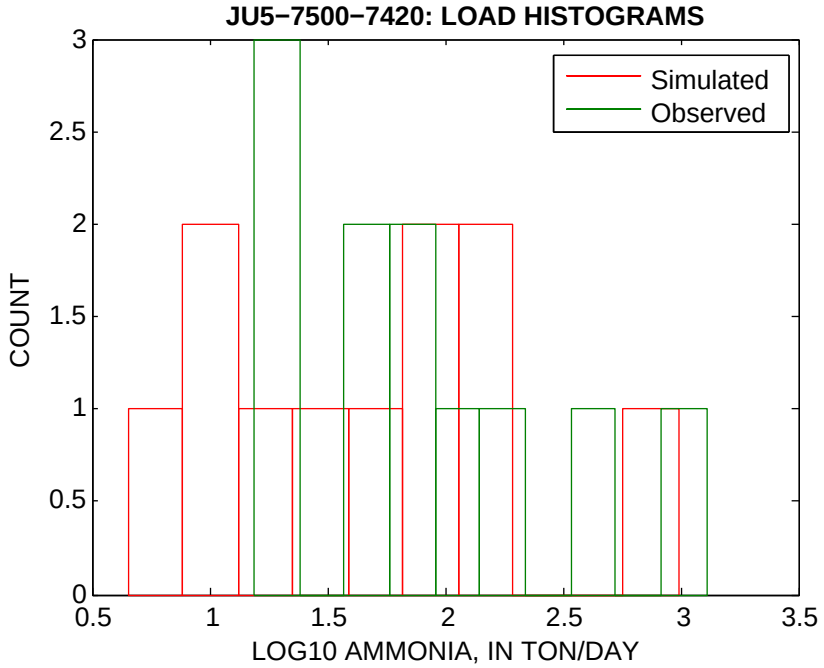


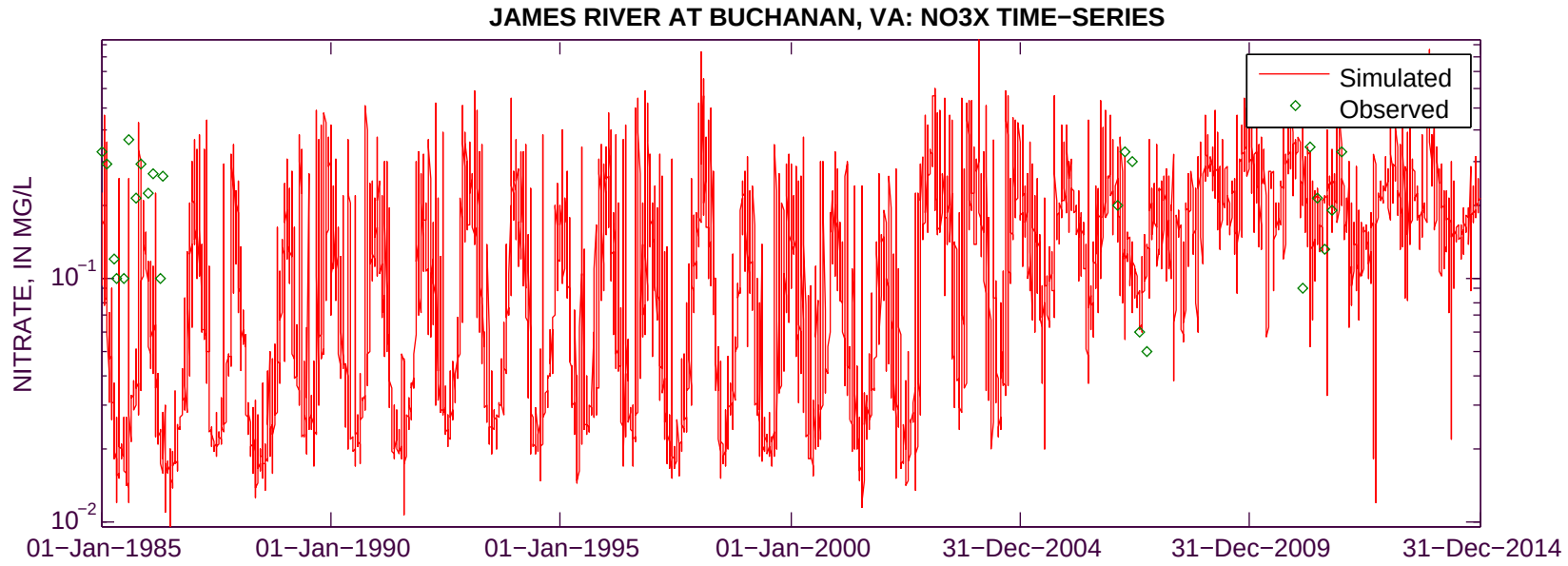
LOAD DATA
LOG10

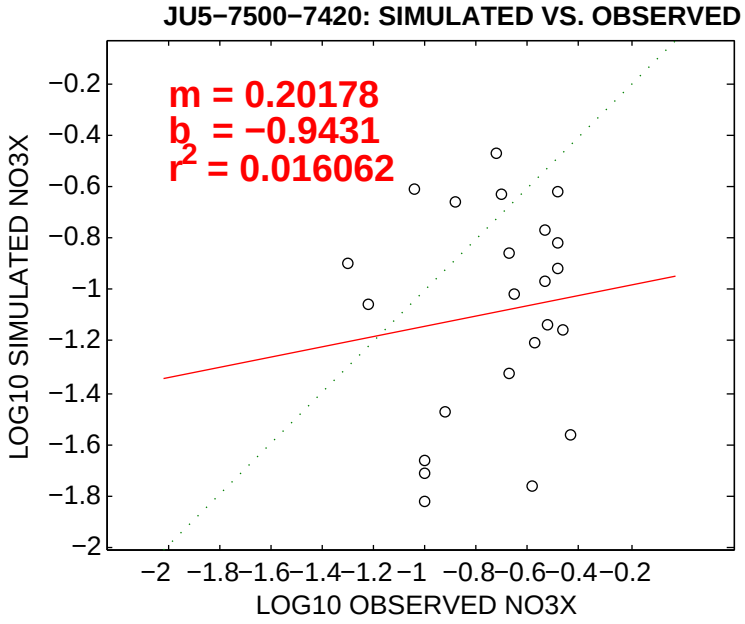


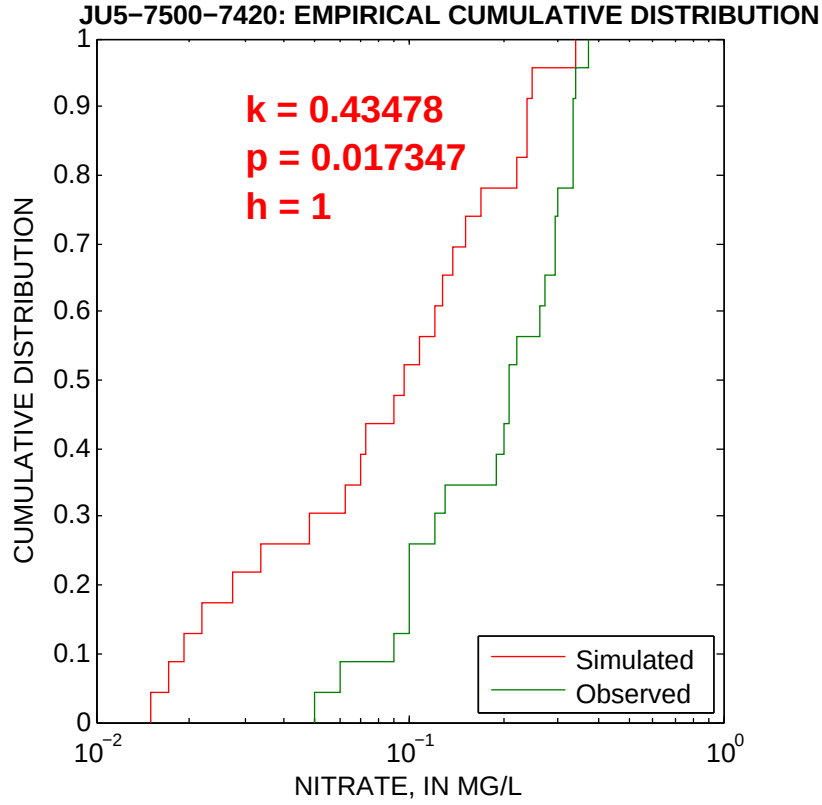












DATA SELECTION

scenario	file
P620171001WQ	NO3X.calib

plot: NO3X - nitrate

Dates: 1/1/1985 – 12/31/201

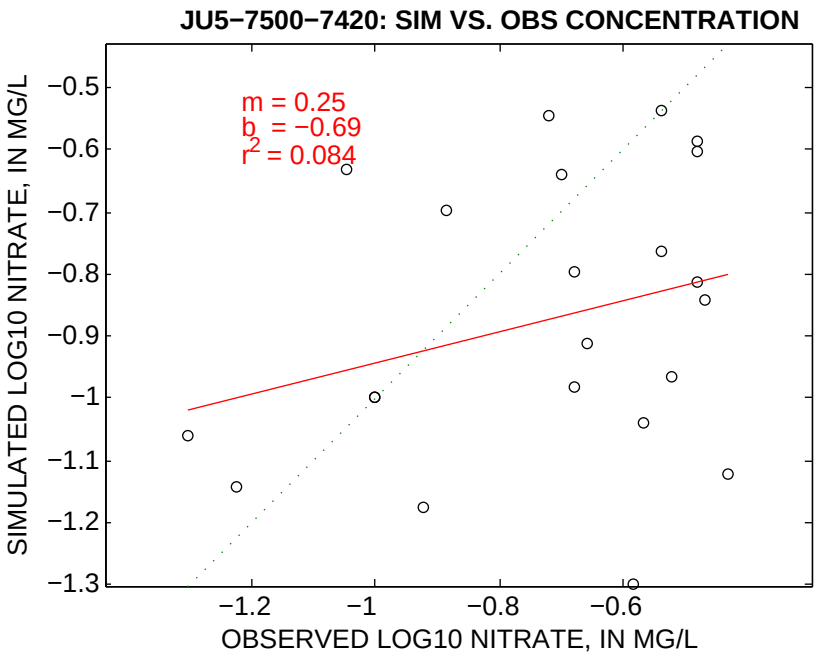
Drive	Directory	Observed
N/A	model	OBS20161101

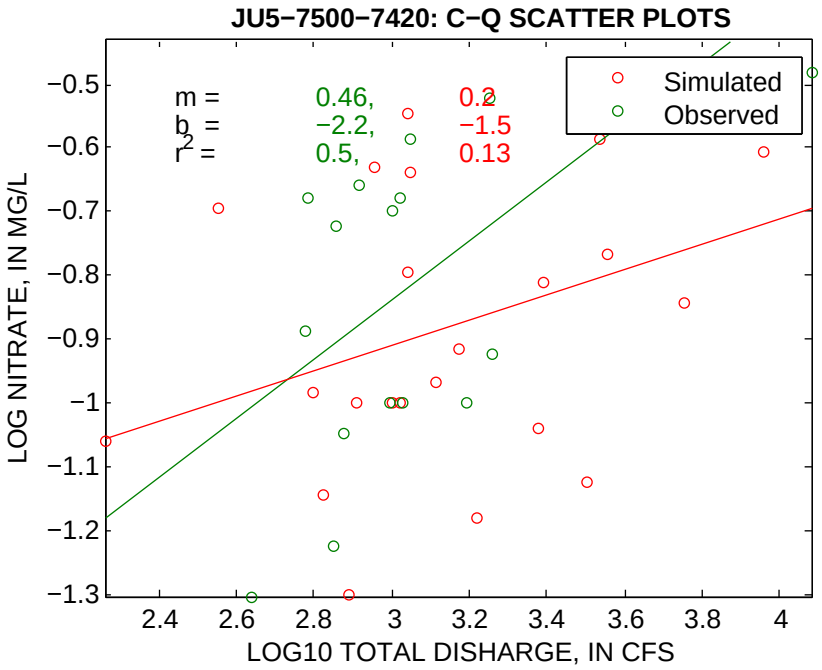
STATISTICS

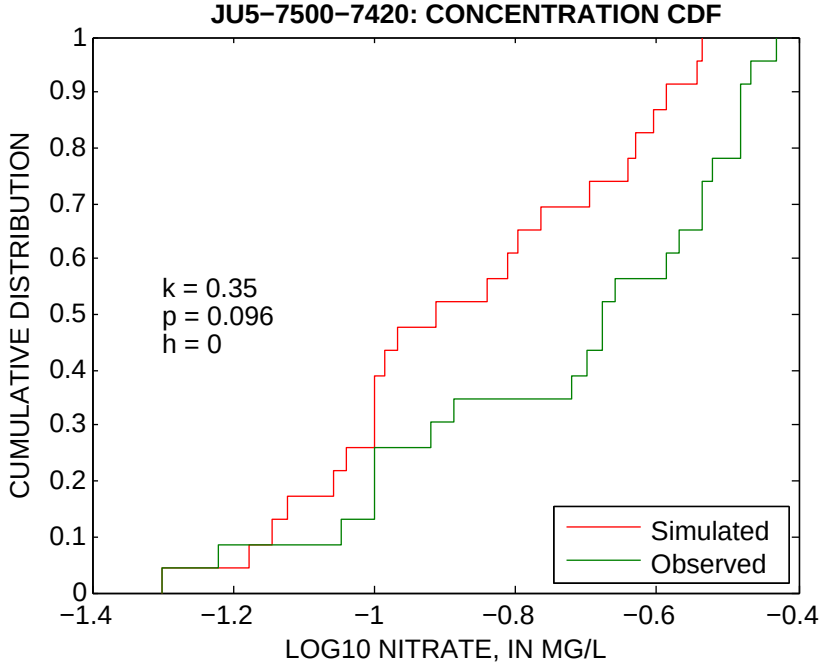
	n	23	23
		observe	simulate
min		0.05	0.01511
		-1.30103	-1.82074
mean		0.212609	0.116034
		-0.735017	-1.09141
media		0.21	0.095816
		-0.677781	-1.01856
max		0.37	0.33648
		-0.431798	-0.473041
varian		0.0102929	0.00805533
		0.0665854	0.168794
JB		0.167729	0.10149
		0.107115	0.210631
		ra	log
%		-45.4236	48.4881
err.va		0.0278285	0.3413
rel.std.err		2.70367	5.12574
mod.eff		-1.70367	-4.12574

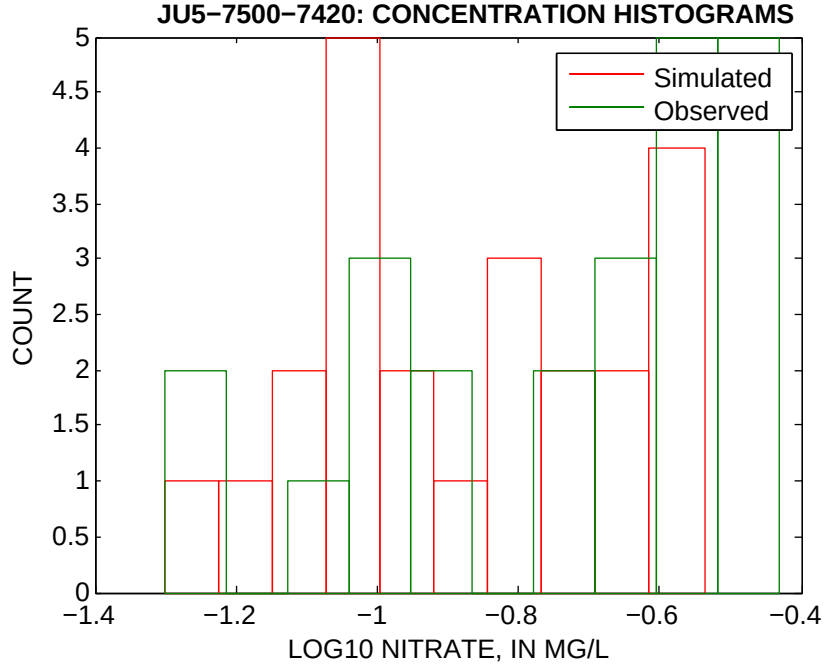
VERSION 2.1

ALL DATA
LOG10

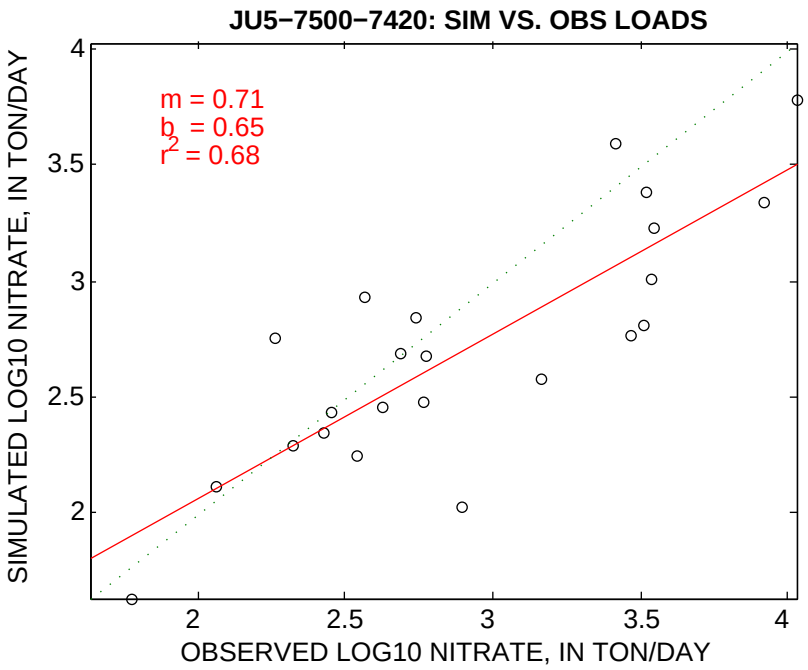


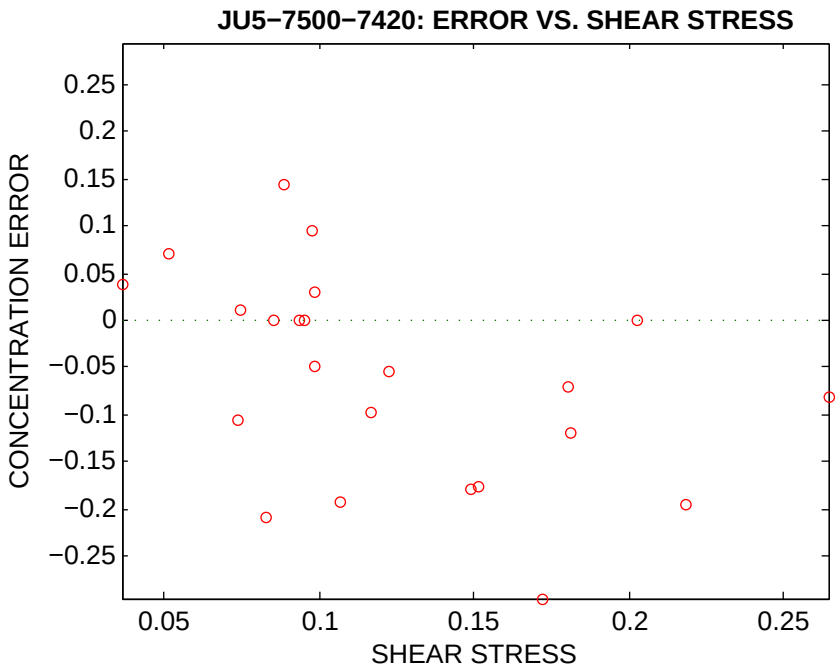


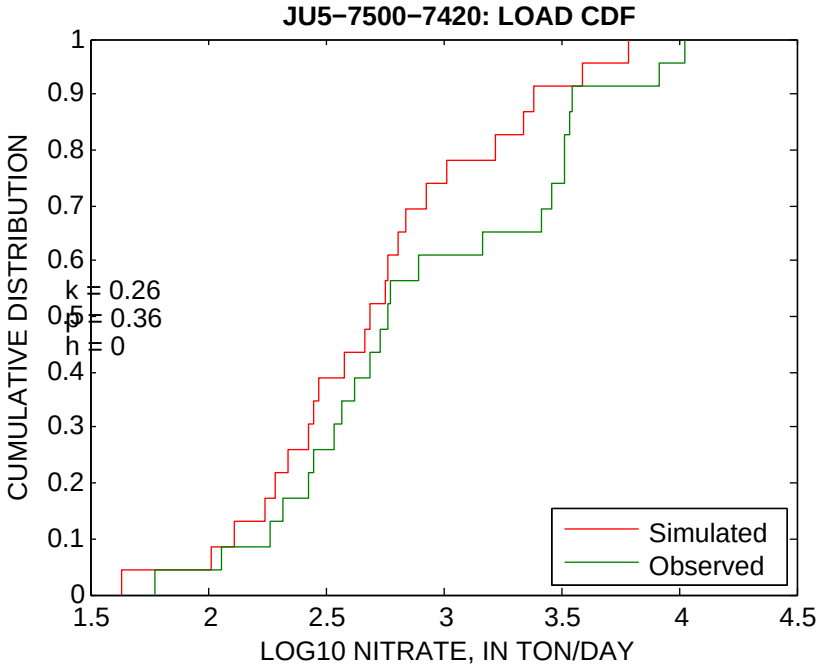


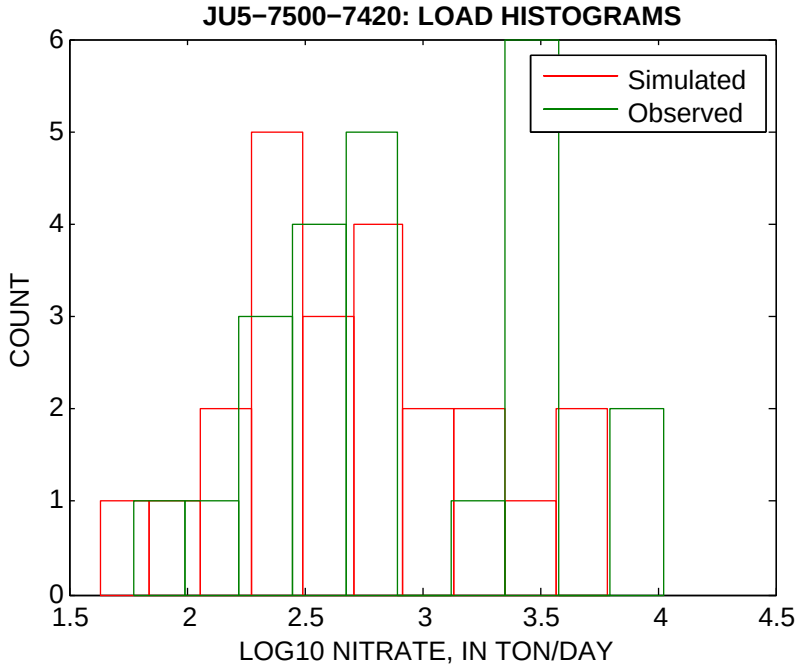


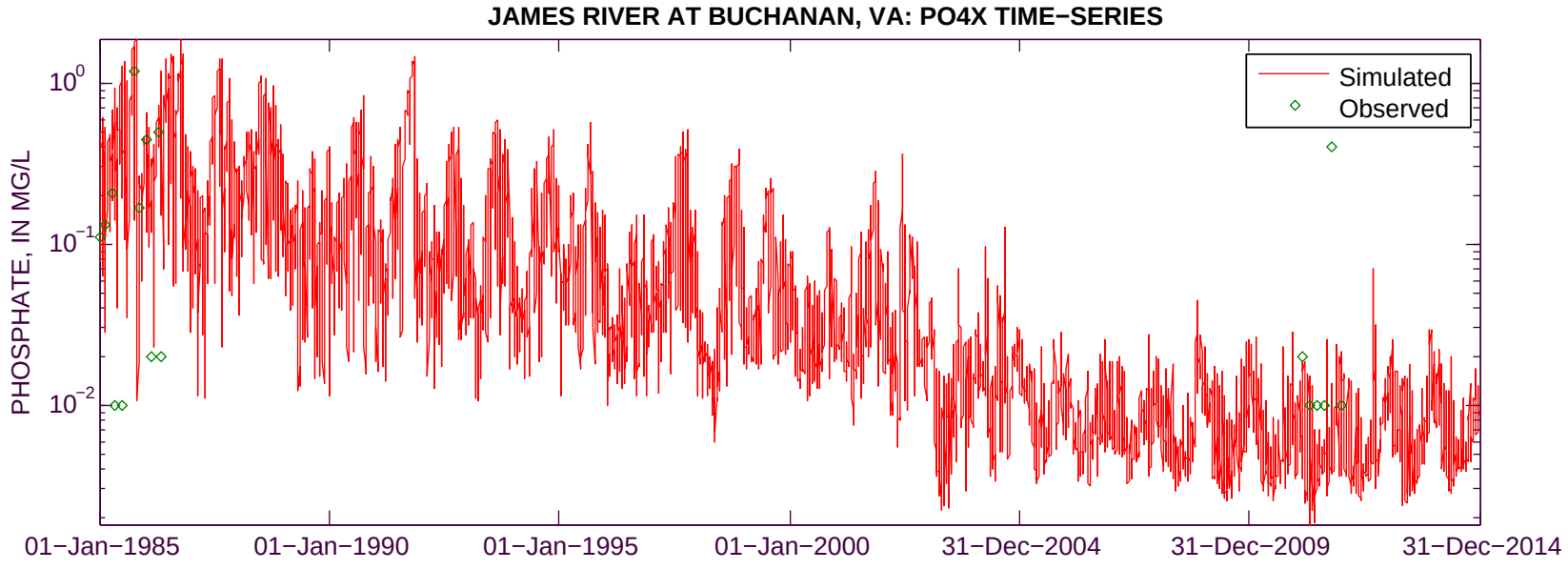
LOAD DATA
LOG10

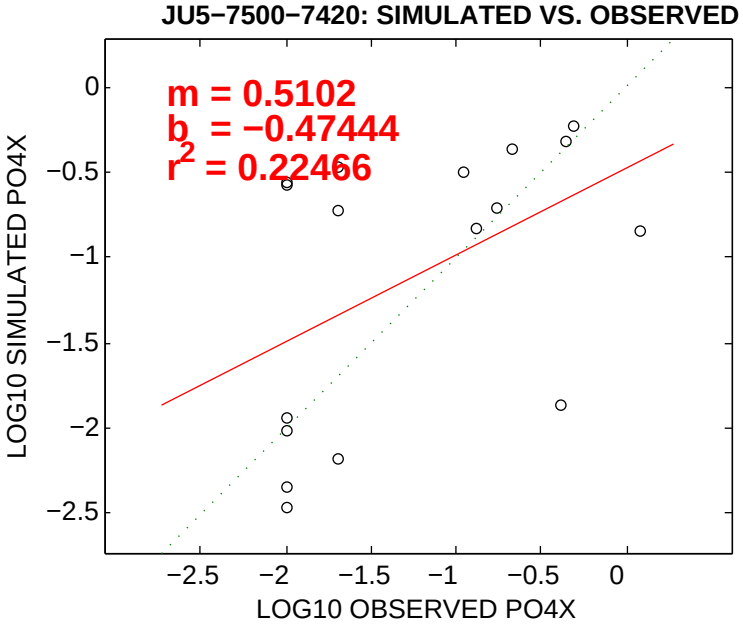


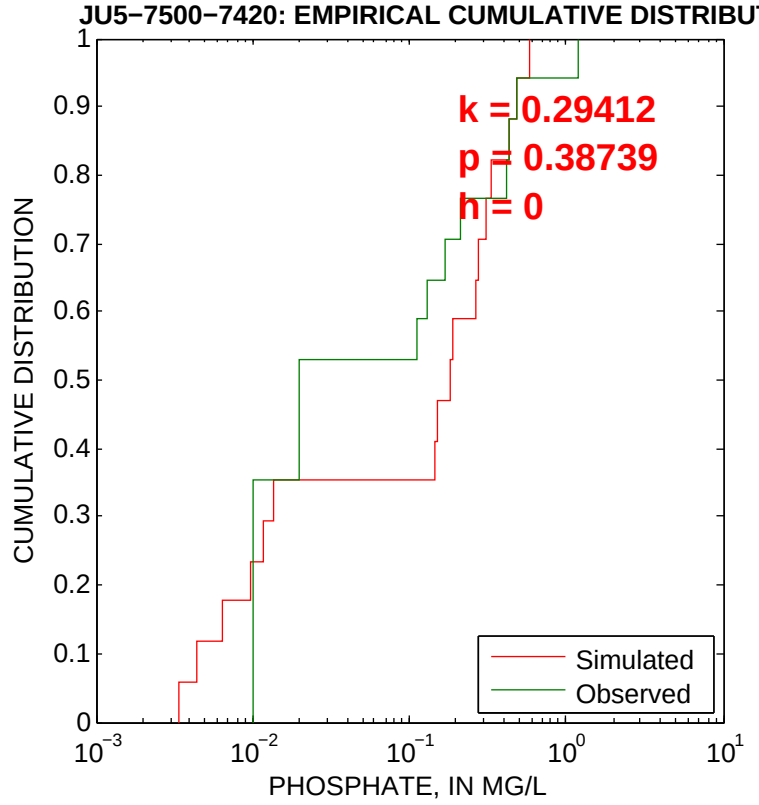












DATA SELECTION

scenario	file
P620171001WQ	PO4X.calib

plot: PO4X - phosphate

Dates: 1/1/1985 – 12/31/201

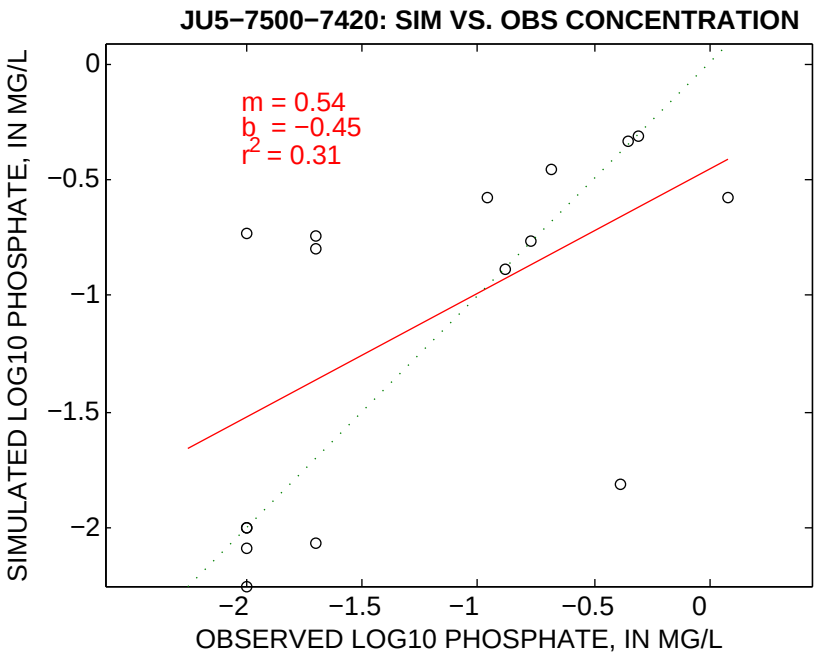
Drive	Directory	Observed
N/A	model	OBS20161101

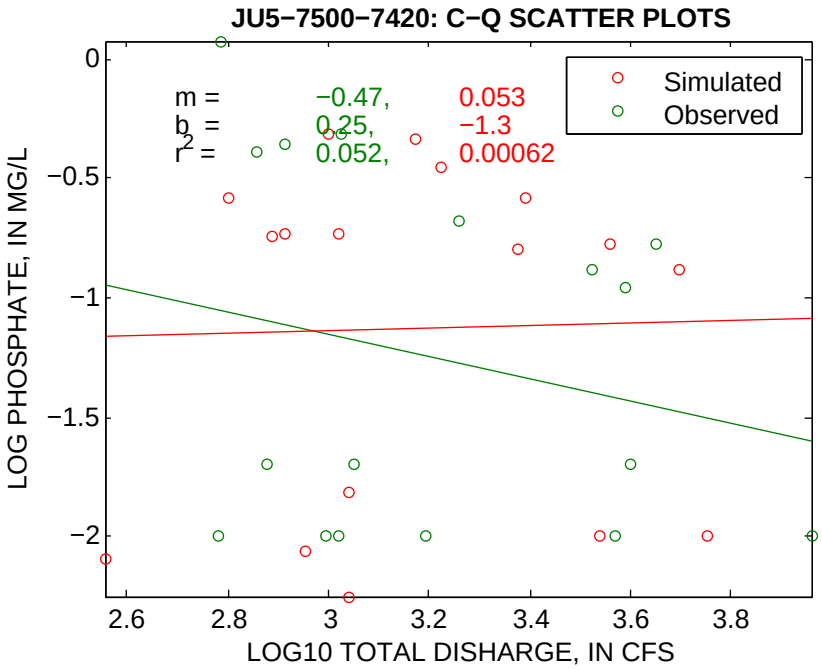
STATISTICS

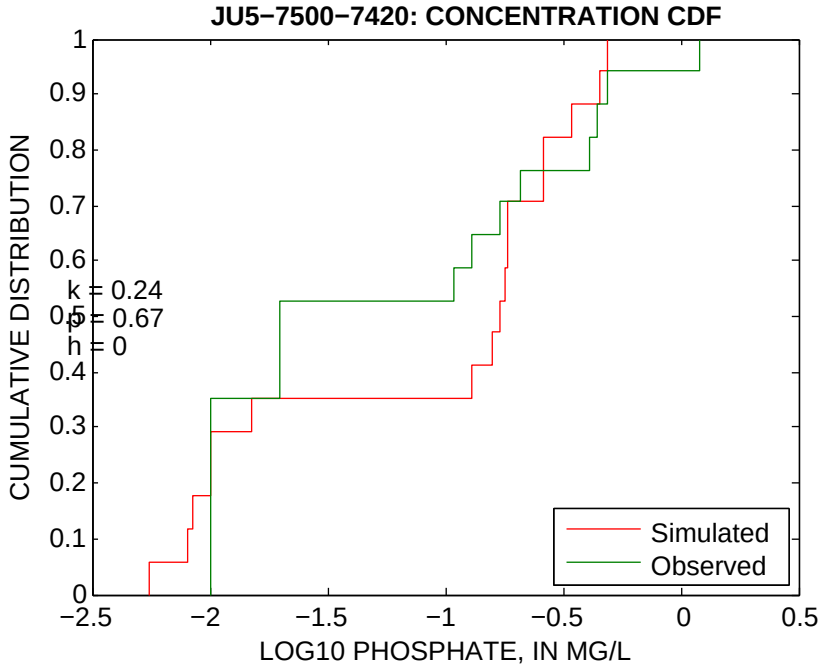
	n	17	17
		observe	simulate
min		0.01	0.0034035
		-2	-2.46807
mean		0.192941	0.200263
		-1.25666	-1.11559
media		0.02	0.18534
		-1.69897	-0.732031
max		1.2	0.58093
		0.0791812	-0.235876
varian		0.0945471	0.0340224
		0.559246	0.647976
JB		0.001	0.287524
		0.133008	0.093472
		ra	log
%		3.79481	-11.226
err.va		0.102444	0.657715
rel.std.err		1.08352	1.17607
mod.eff		-0.0835219	-0.176074

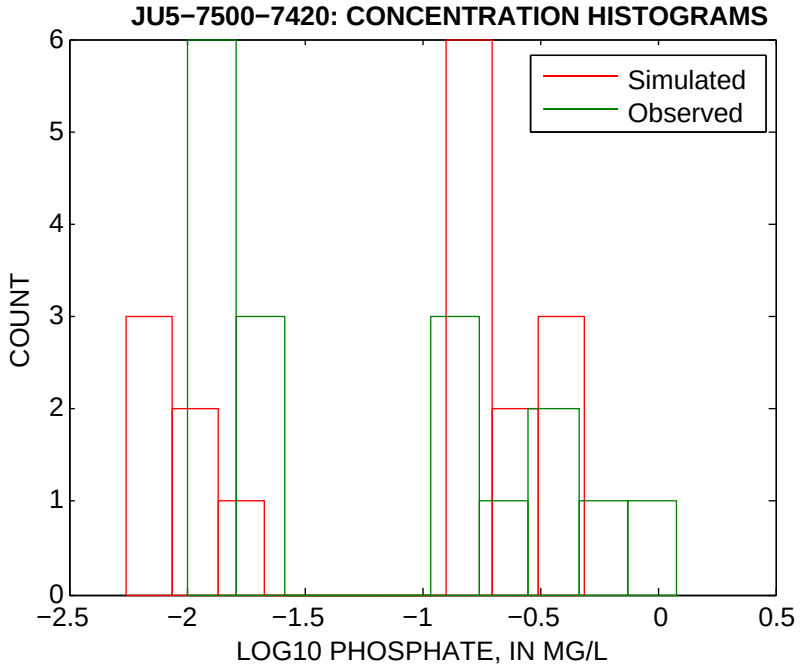
VERSION 3.1

ALL DATA
LOG10

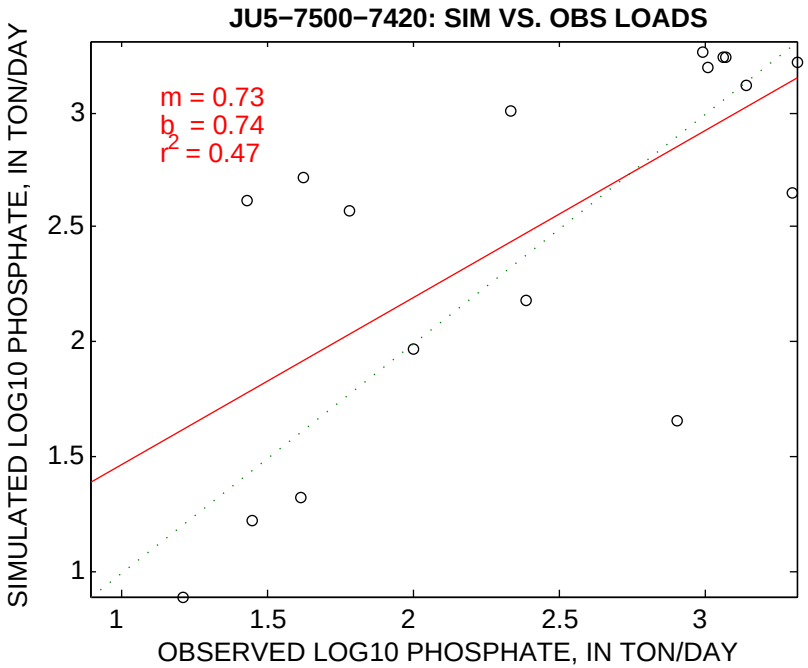




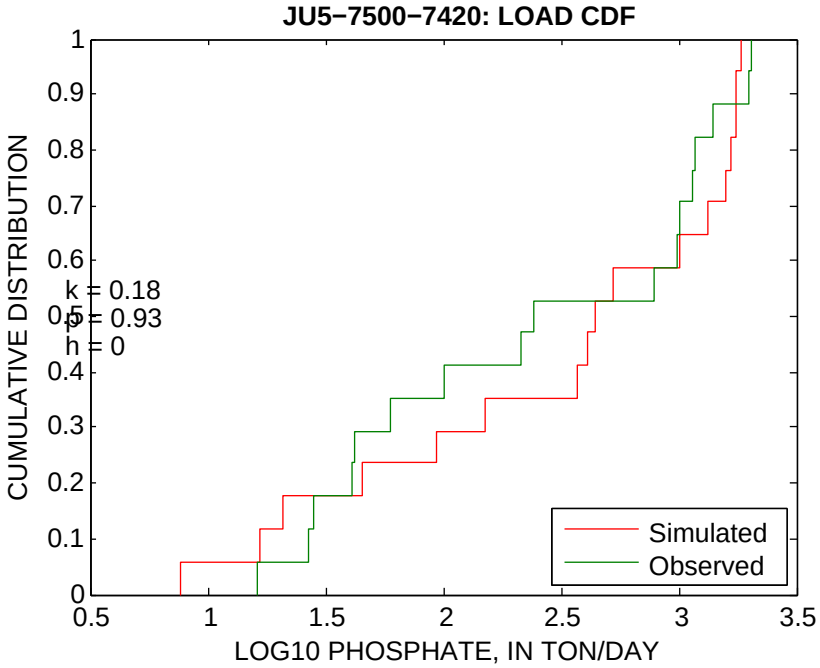


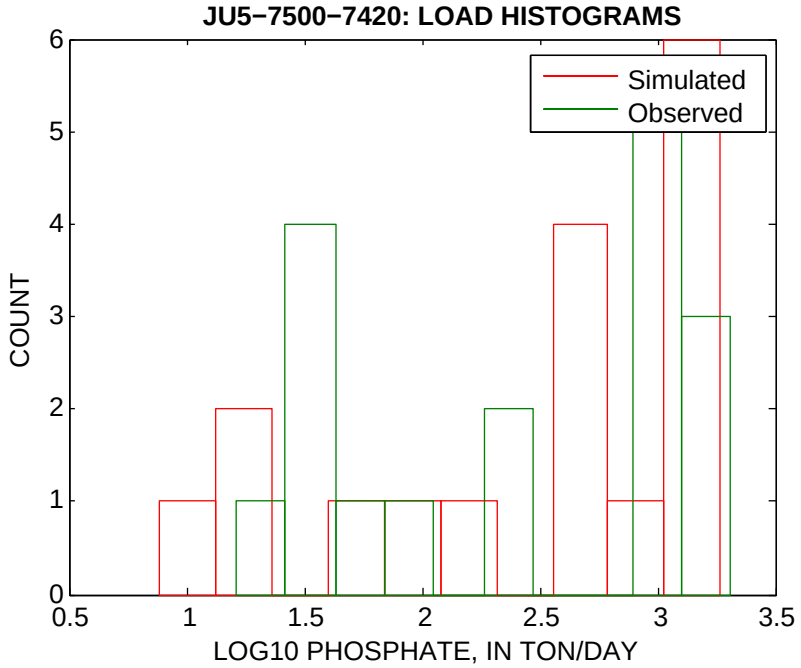


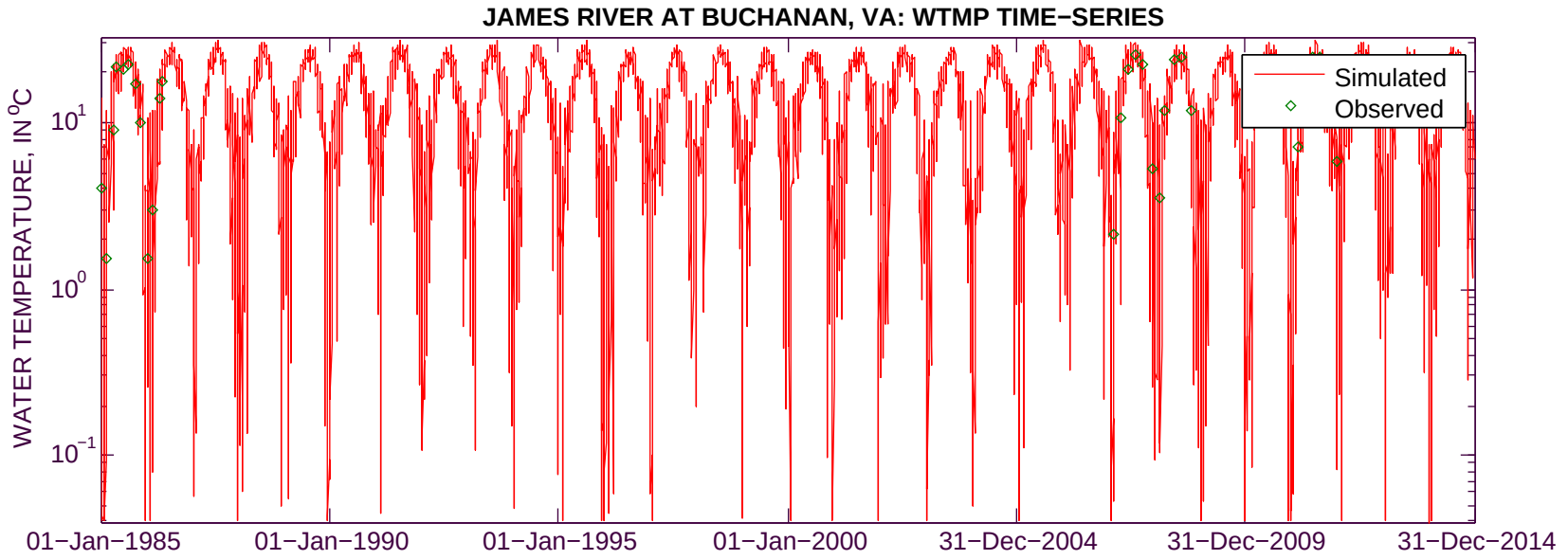
LOAD DATA
LOG10

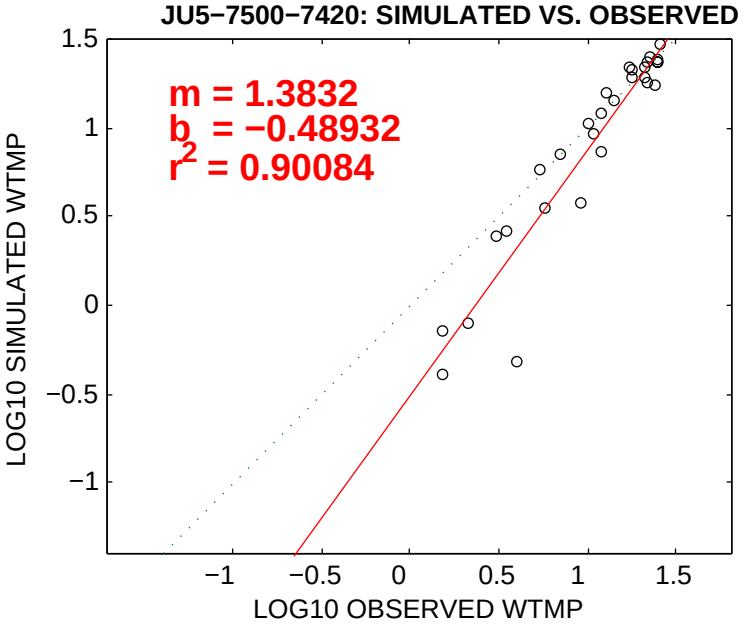


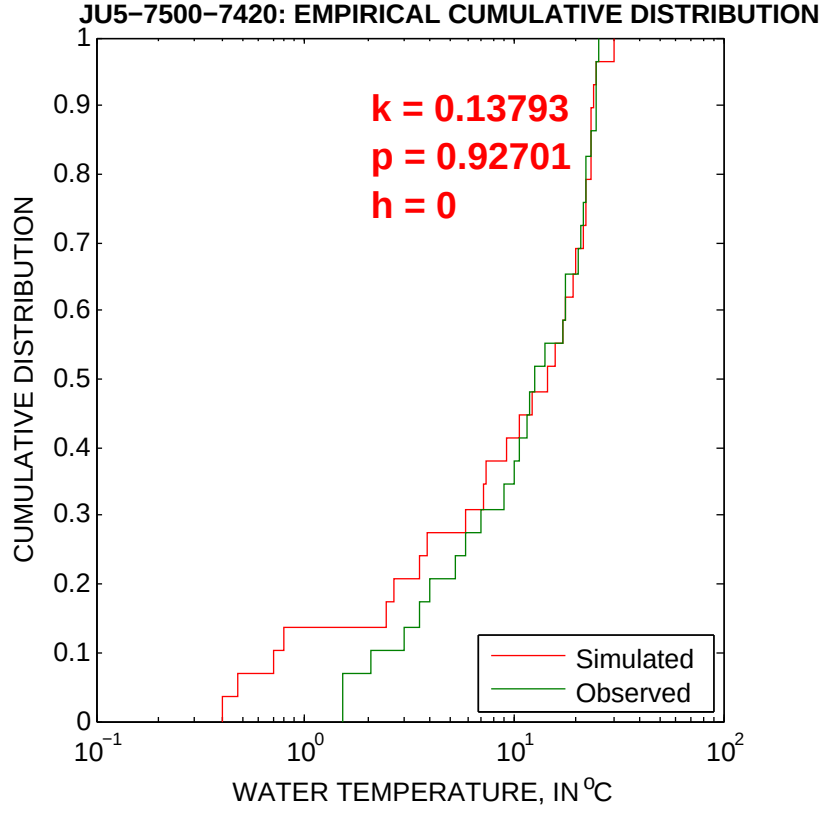












DATA SELECTION

scenario	file
P620171001WQ	WTMP.calib

plot: WTMP - water tempera...

Dates: 1/1/1985 – 12/31/201

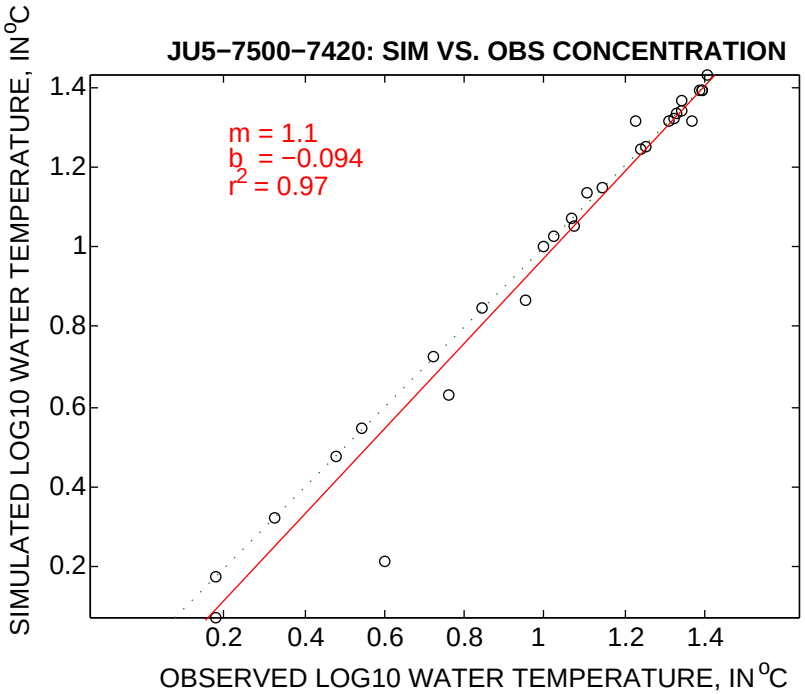
Drive	Directory	Observed
N/A	model	OBS20161101

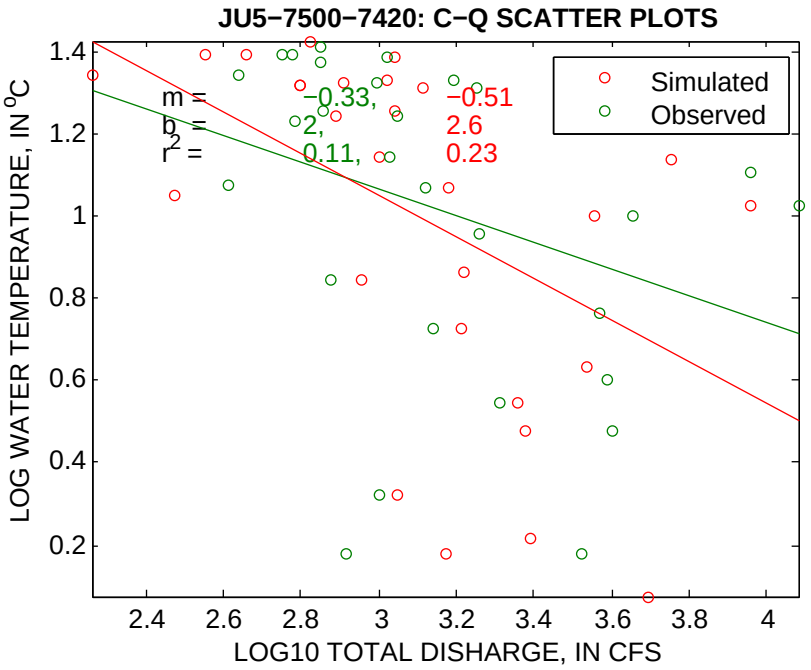
STATISTICS

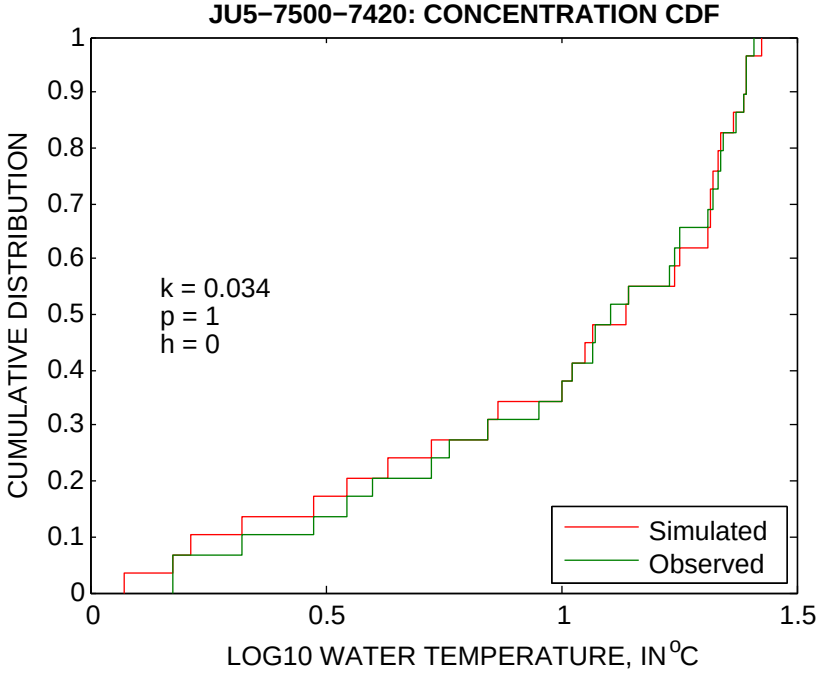
	n	29	29
		observe	simulate
min		1.5	0.40522
		0.176091	-0.392309
mean		13.6586	13.3539
		1.01162	0.909911
media		12.7	14.505
		1.1038	1.16152
max		25.6	30.072
		1.40824	1.47816
varian		68.4189	85.8036
		0.147917	0.314135
JB		✓ 0.113598	0.123923 ✓
		✓ 0.057247	0.029505
		ra	log
%		-2.2308	-10.0542
err.va		7.77037	0.0635802
rel.std.err		0.11357	0.429836
mod.eff		0.88643	0.570164

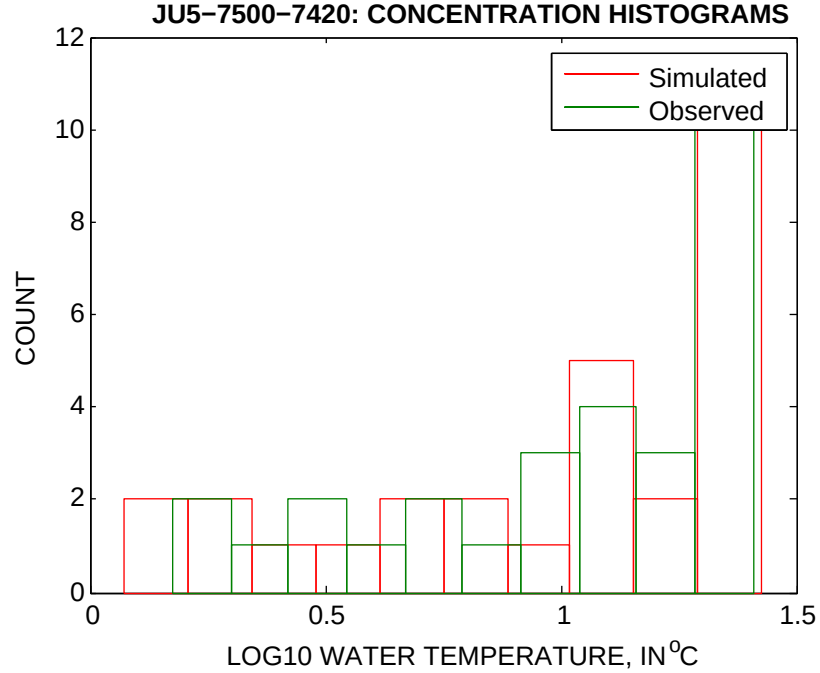
VERSION 2.1

ALL DATA
LOG10

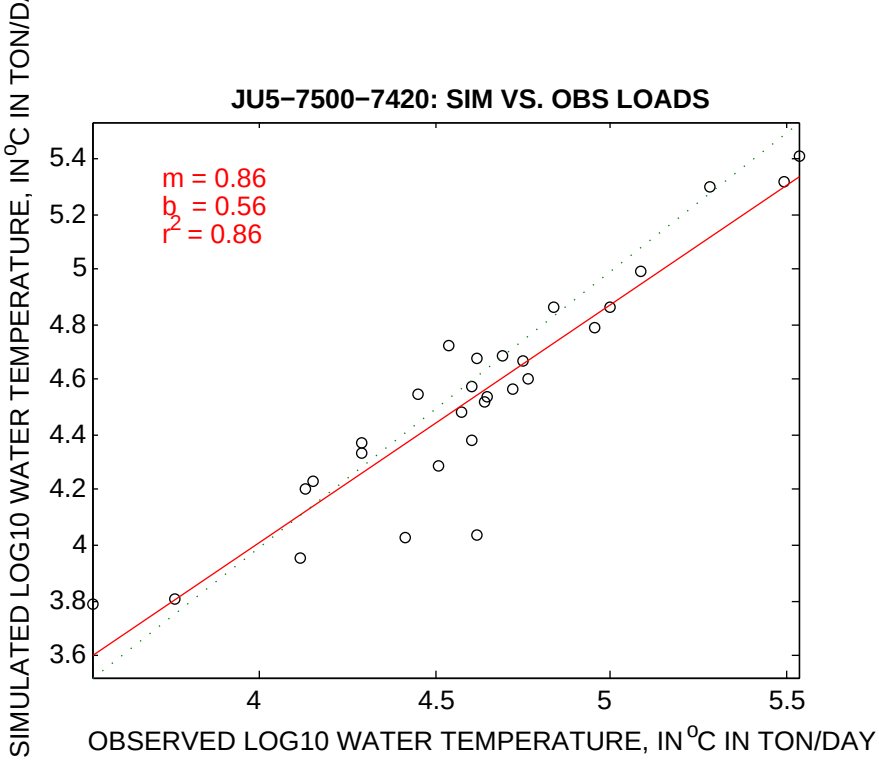




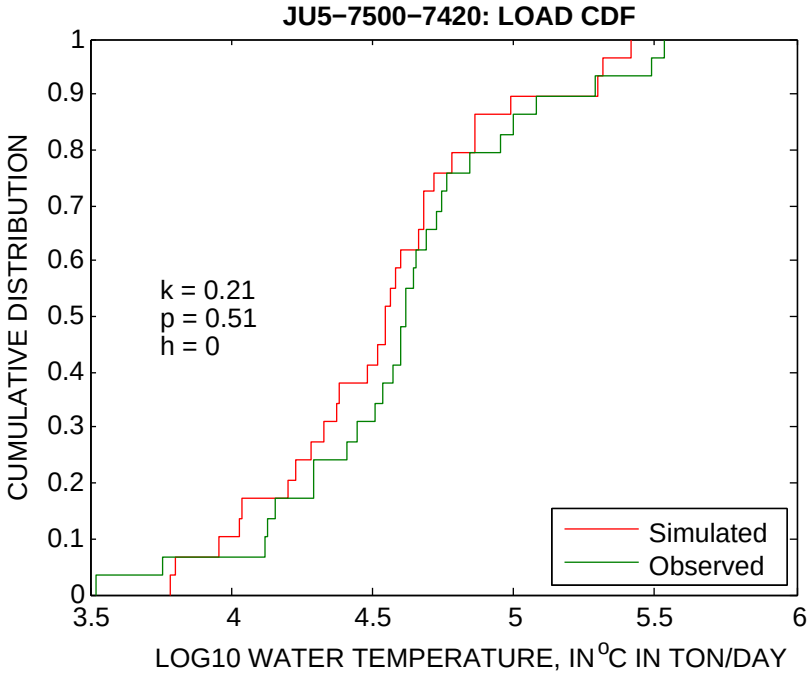


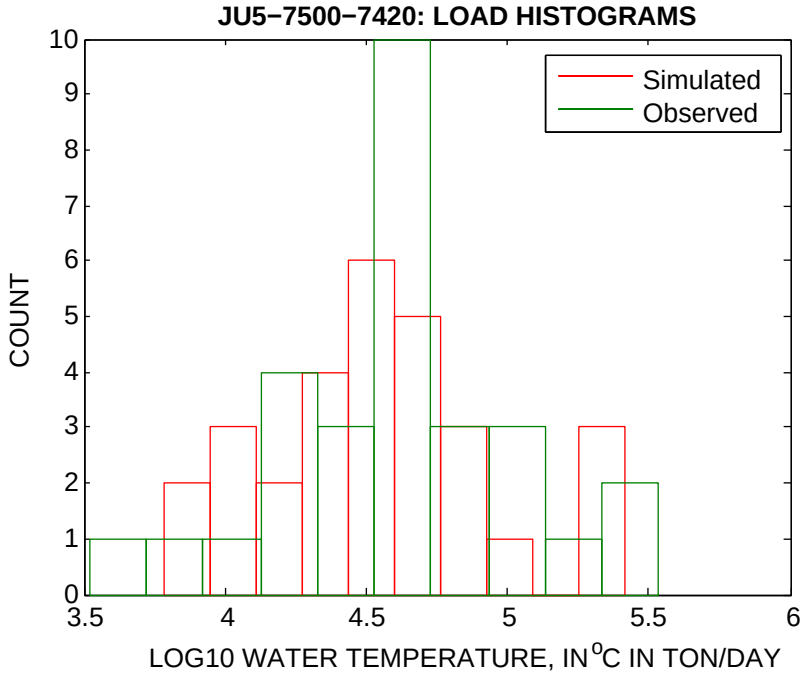


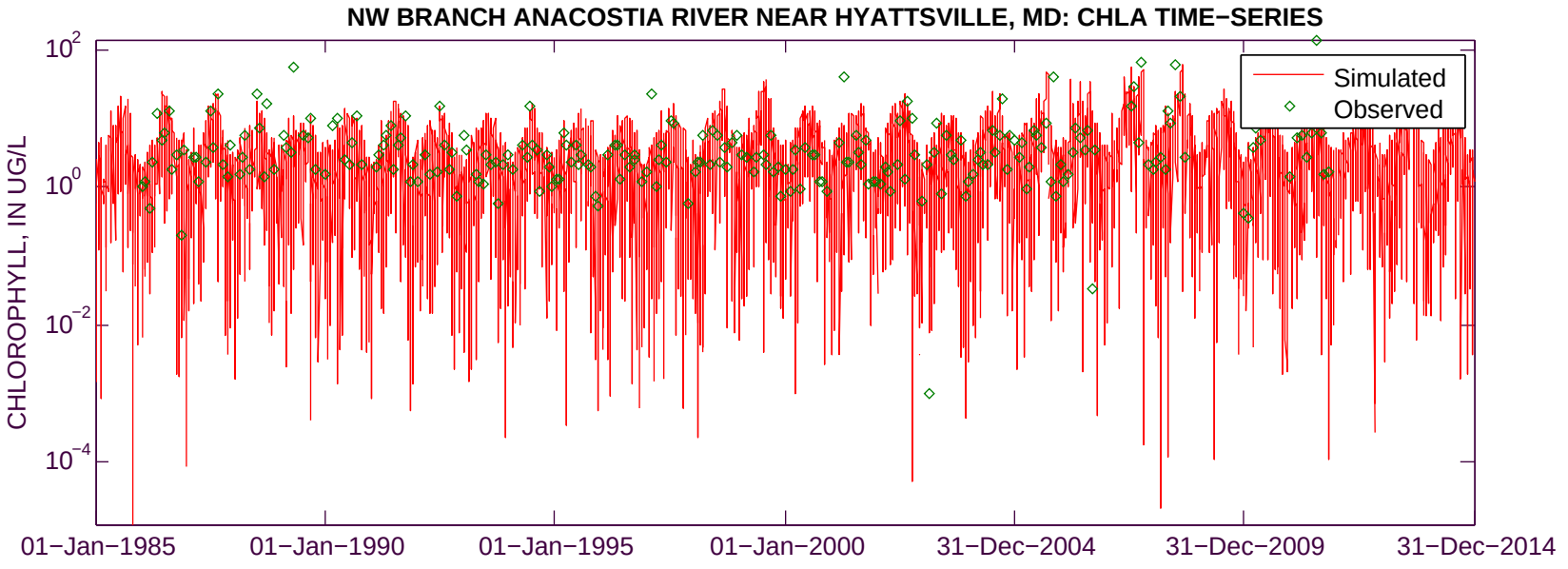
LOAD DATA
LOG10

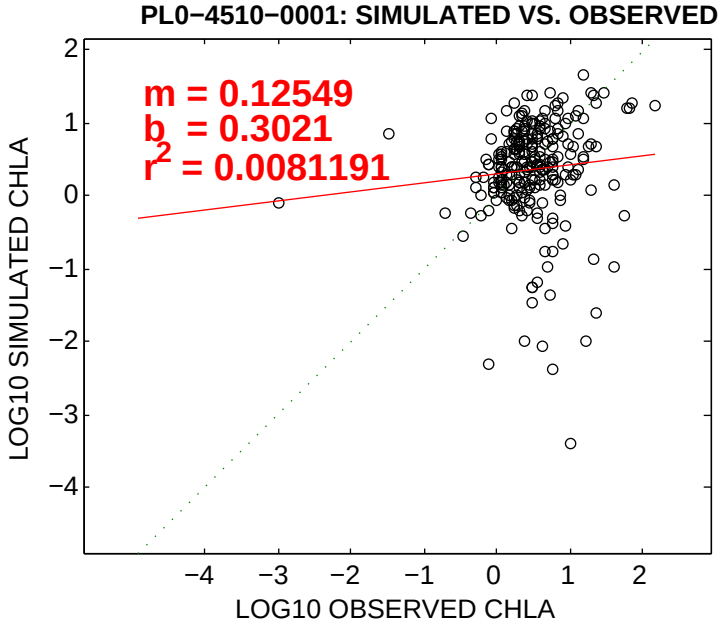


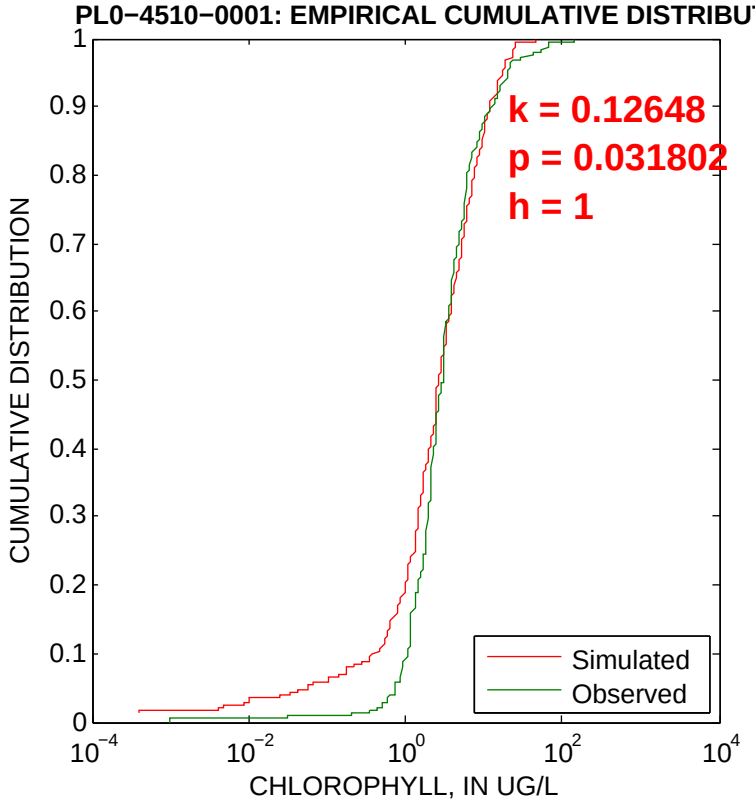












DATA SELECTION

scenario	file
P620171001WQ	CHLA.calib

plot: CHLA - chlorophyll A

Dates: 1/1/1985 – 12/31/201

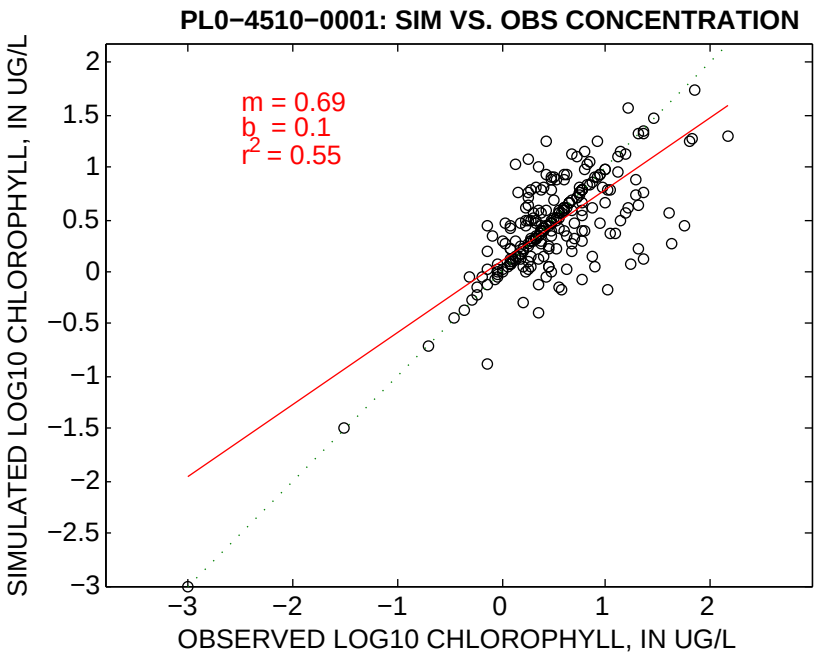
Drive	Directory	Observed
N/A	model	OBS20161101

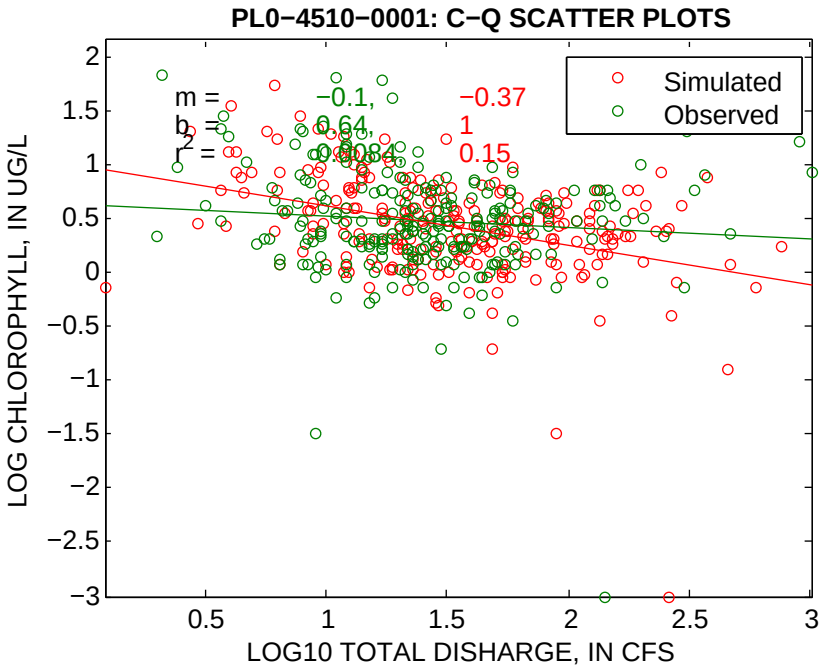
STATISTICS

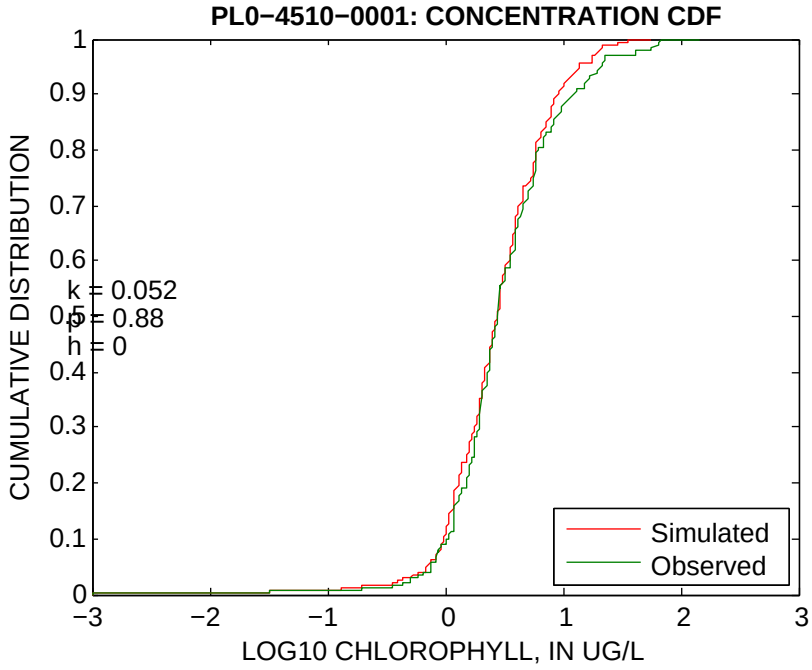
	n	observe	simulate
		253	250
min		0.001	0
		-3	-3.3942
mean		6.26476	4.91983
		0.494958	0.364211
media		2.99	2.6898
		0.468285	0.443908
max		146.317	45.949
		2.16529	1.66228
varian		166.603	35.6114
		0.254157	0.492933
JB		0.001	0.001
		0.001	0.001
		ra	log
%		-21.4682	-26.4157
err.va		157.822	0.700467
rel.std.err		0.947298	2.75604
mod.eff		0.0527019	-1.75604

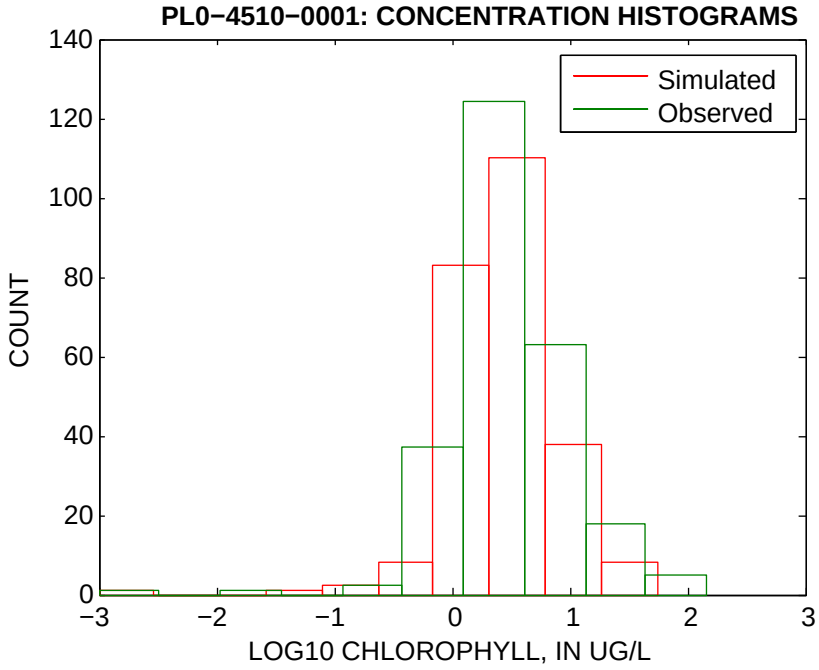
VERSION 2.1

ALL DATA
LOG10

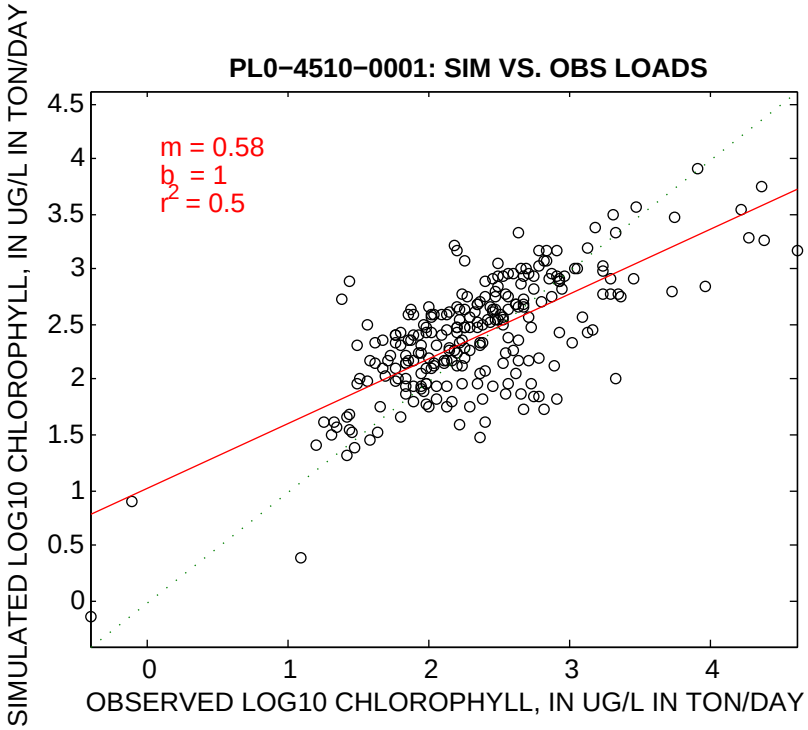


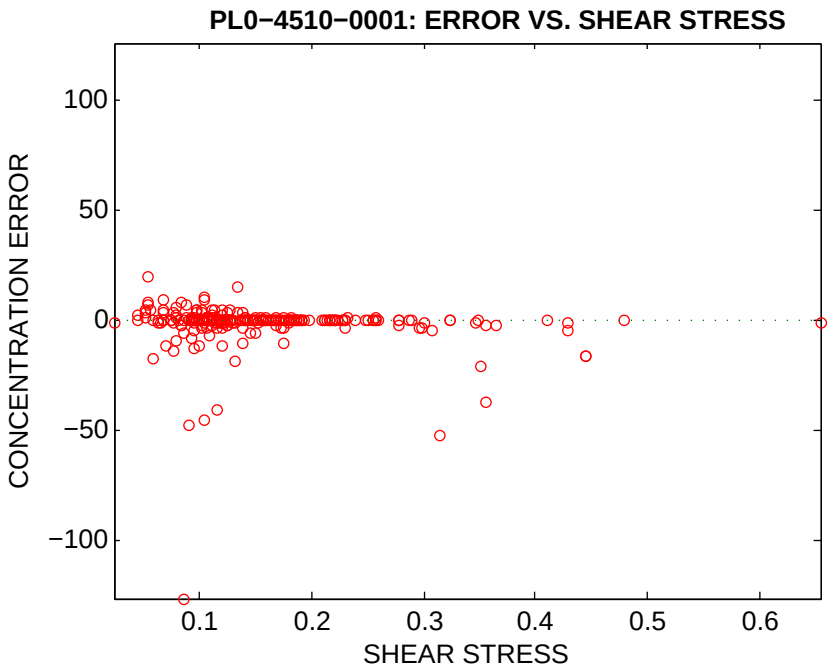


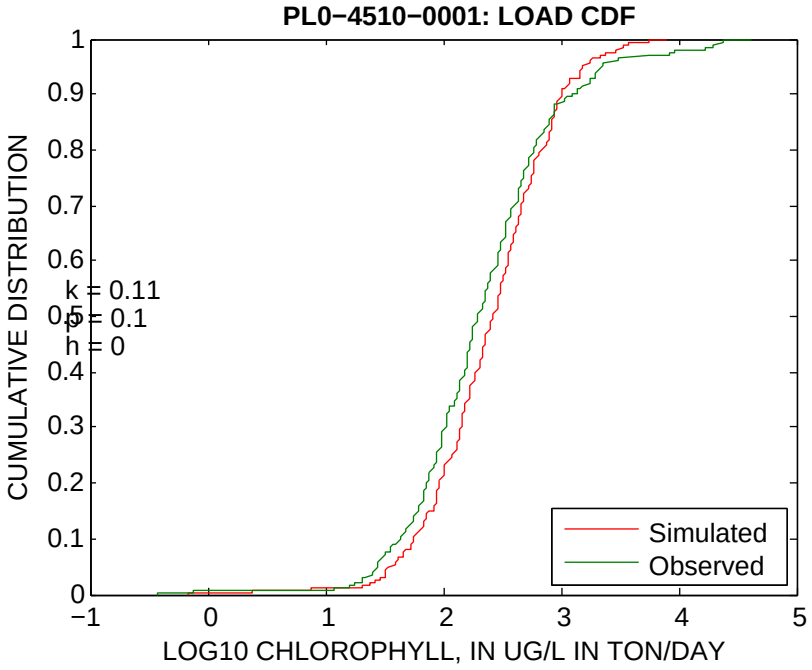


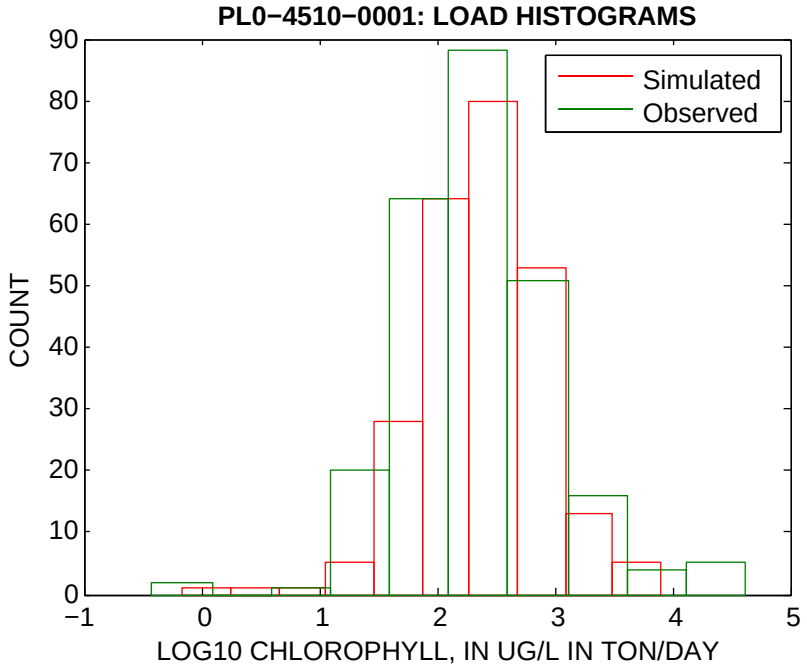


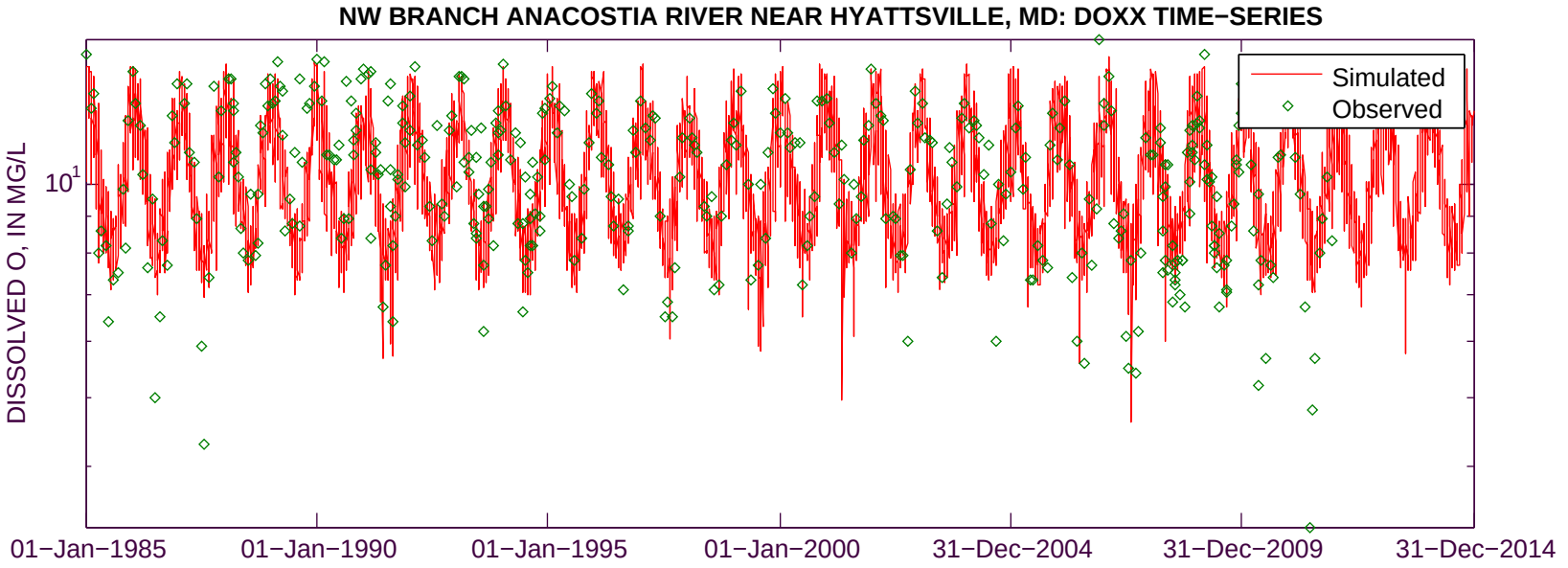
LOAD DATA
LOG10

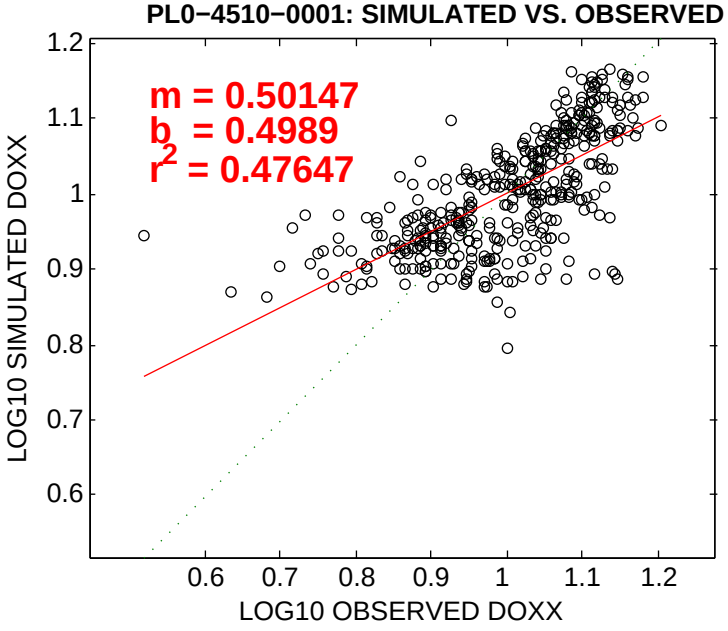


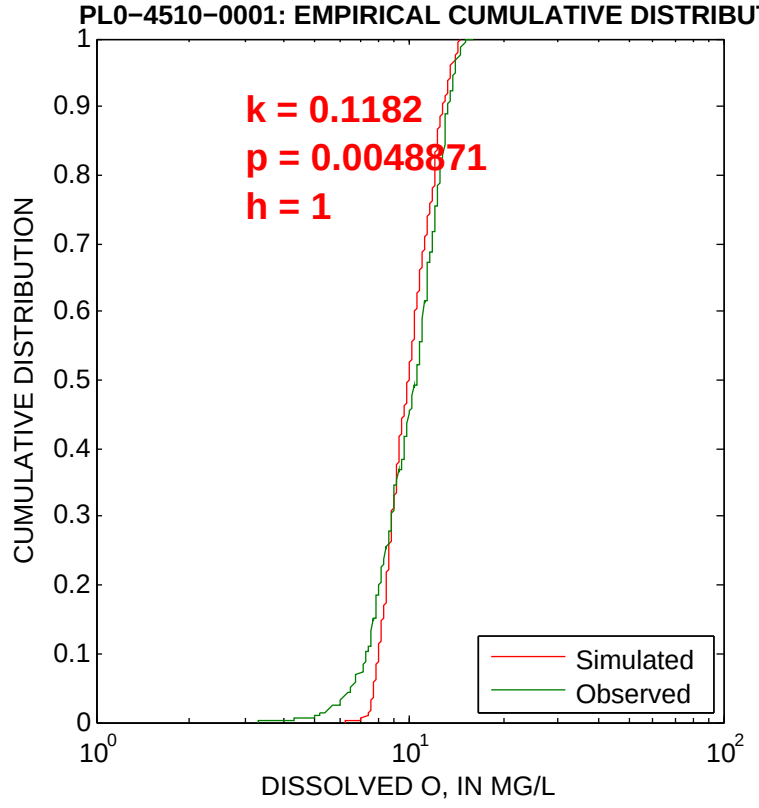












DATA SELECTION

scenario	file
P620171001WQ	DOXX.calib

plot: DOXX - dissolved oxygen

Dates: 1/1/1985 – 12/31/201

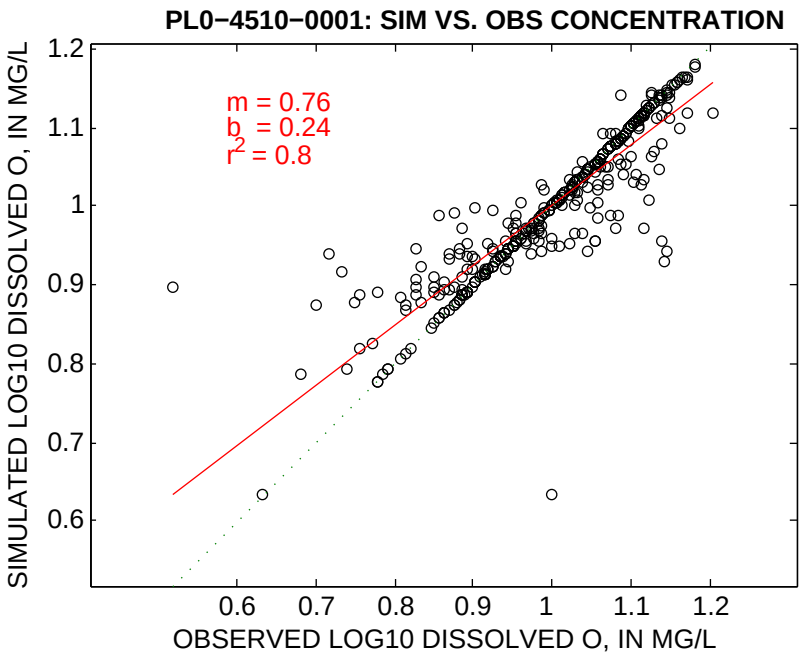
Drive	Directory	Observed
N/A	model	OBS20161101

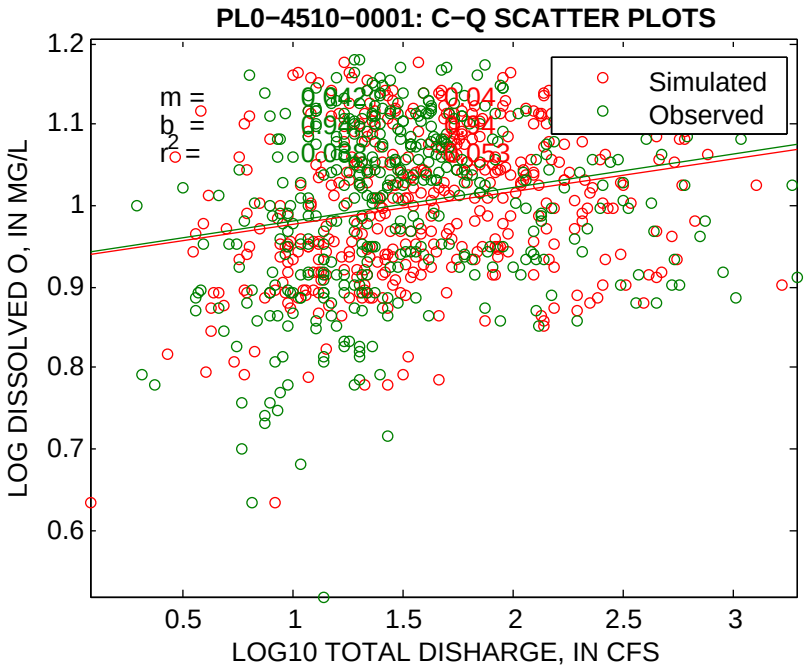
STATISTICS

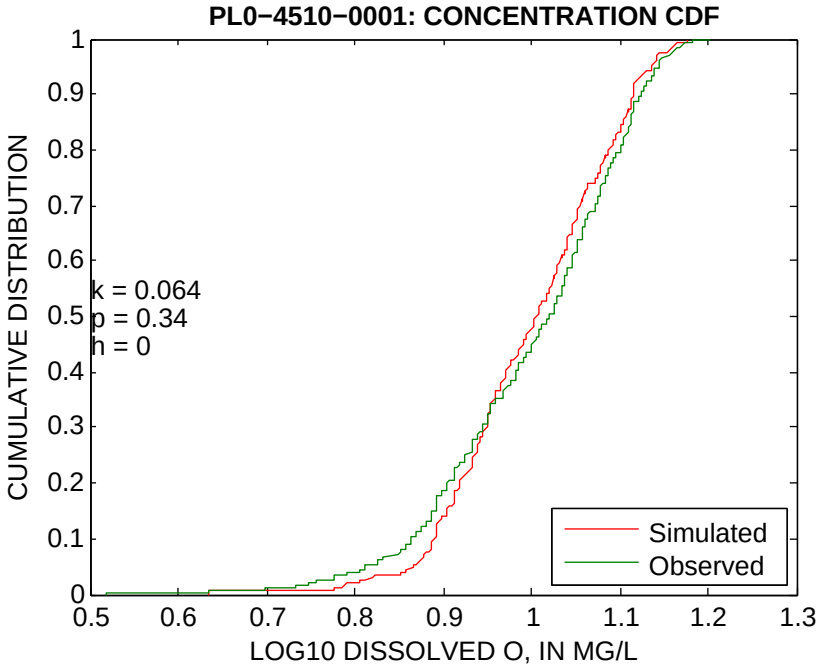
	n	423	423
		observe	simulate
min		3.3	6.2214
		0.518514	0.793888
mean		10.3149	10.183
		1.00122	1.00097
media		10.5	9.9429
		1.02119	0.997513
max		16	14.575
		1.20412	1.16361
varian		5.49181	3.36967
		0.0113048	0.00596638
JB		0.016708	0.001
		0.001	0.002542
		ra	log
%		-1.27895	-0.0241071
err.va		2.64785	0.00593327
rel.std.err		0.482144	0.524846
mod.eff		0.517856	0.475154

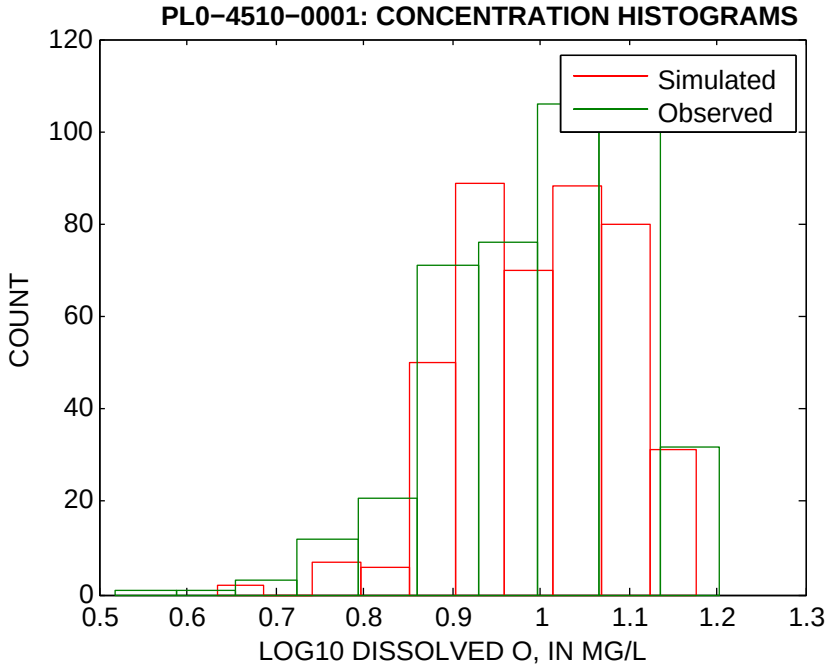
VERSION 2.1

ALL DATA
LOG10

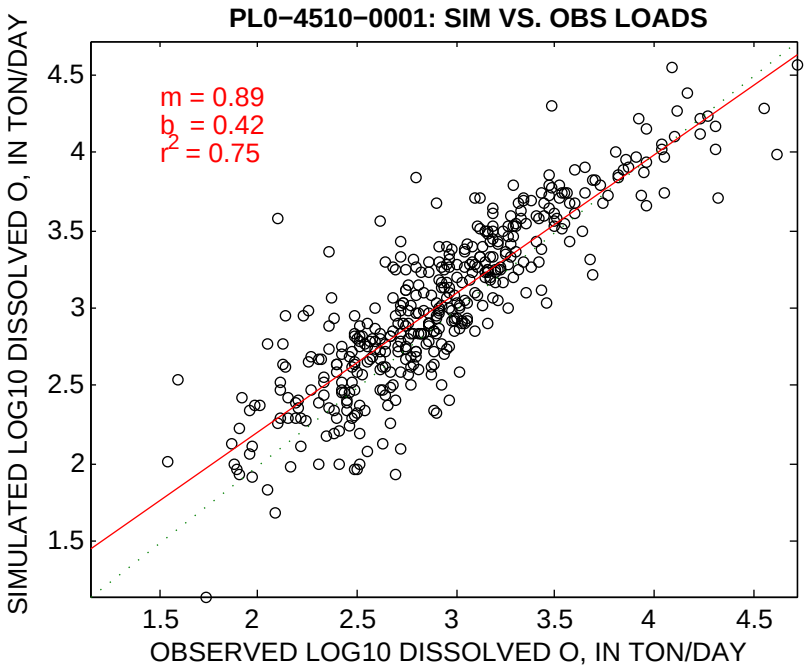


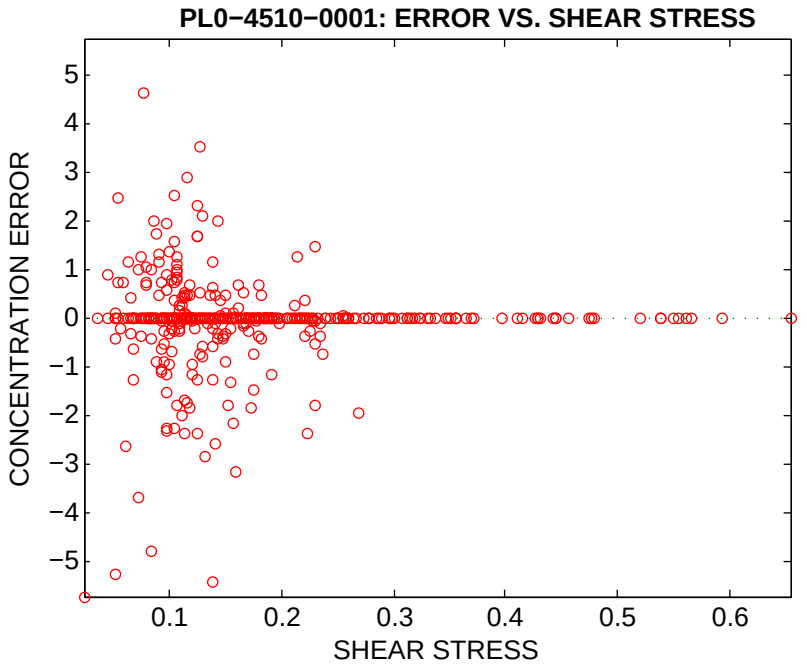


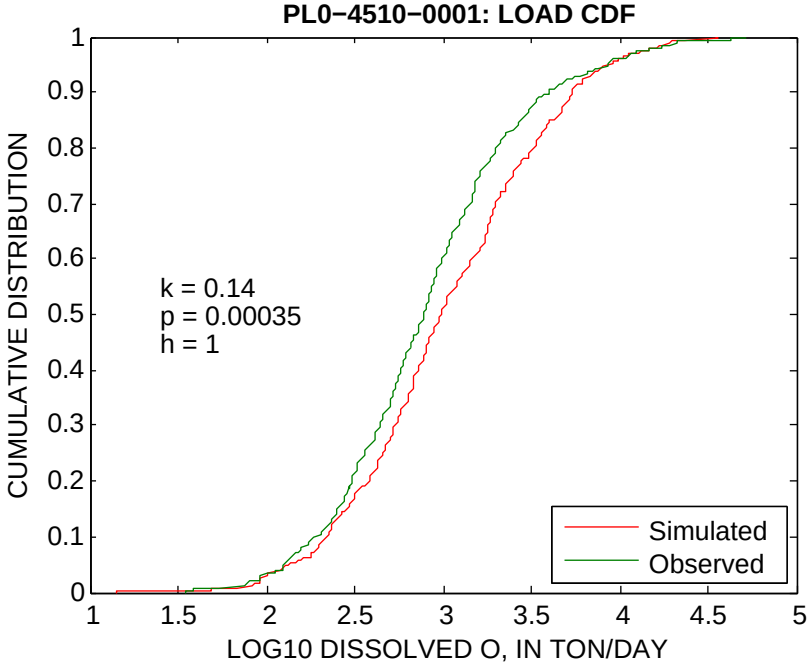


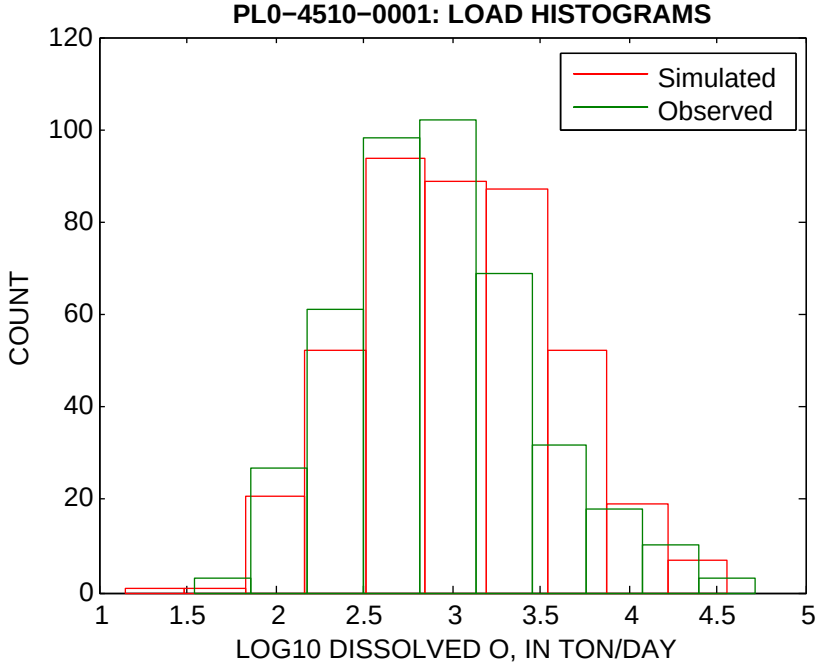


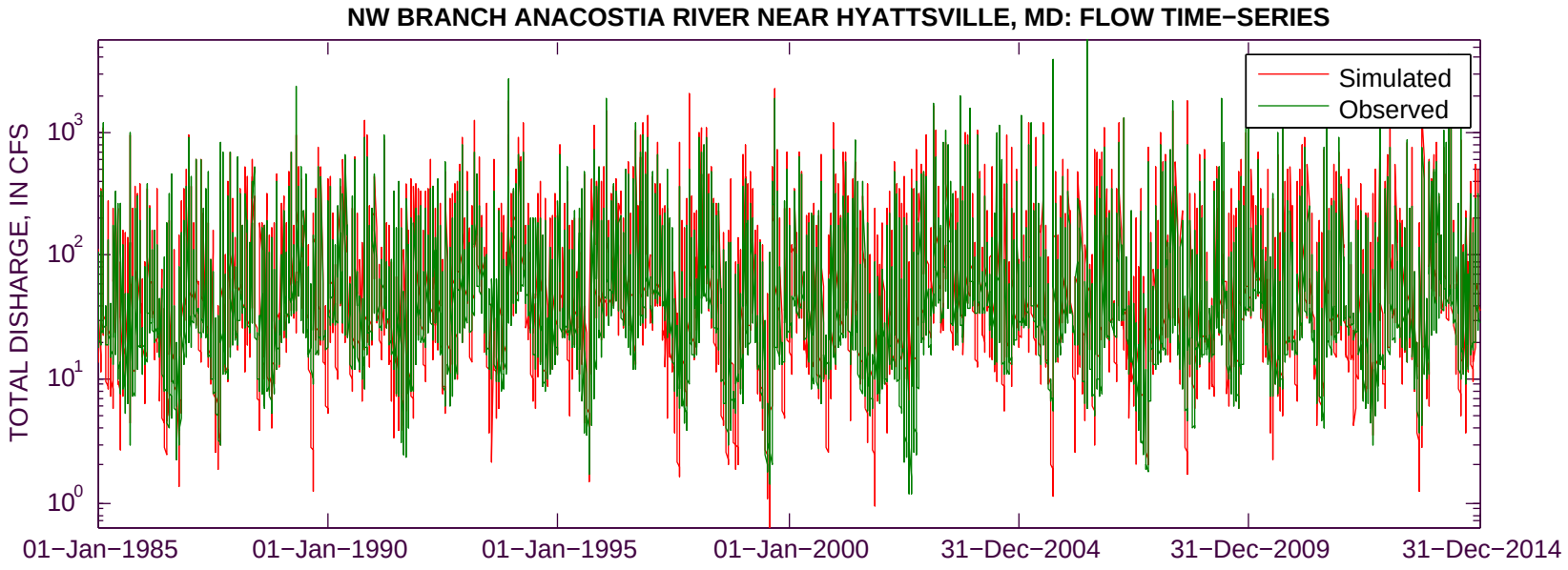
LOAD DATA
LOG10

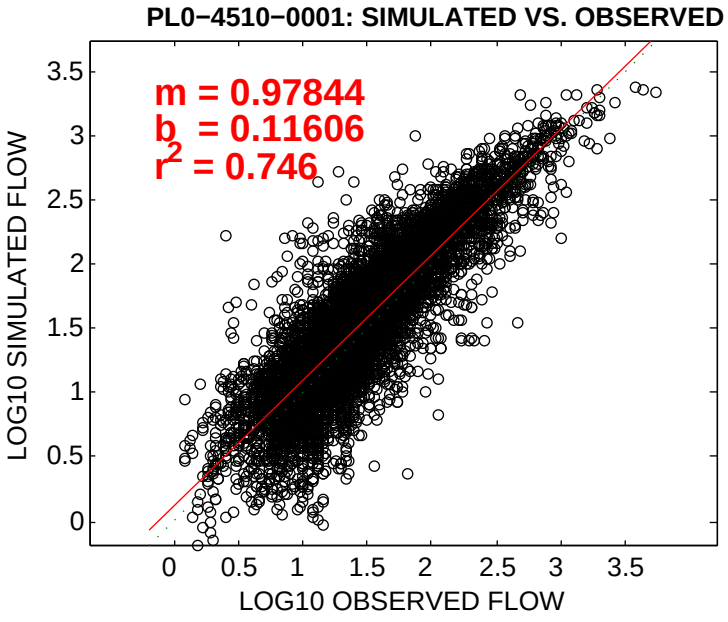


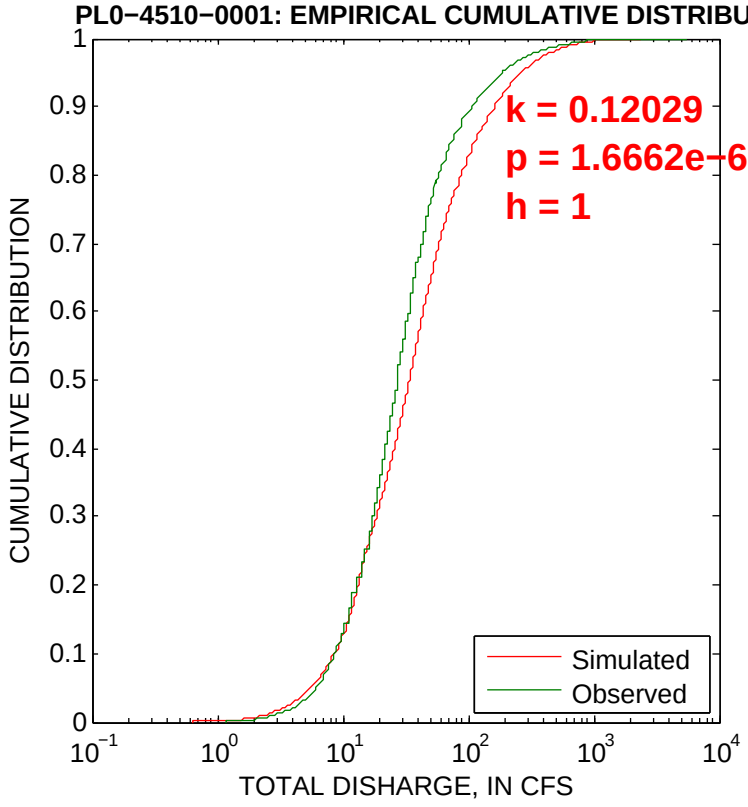












DATA SELECTION

scenario: P620171001WQ | file: FLOW.calib

plot: FLOW - total discharge

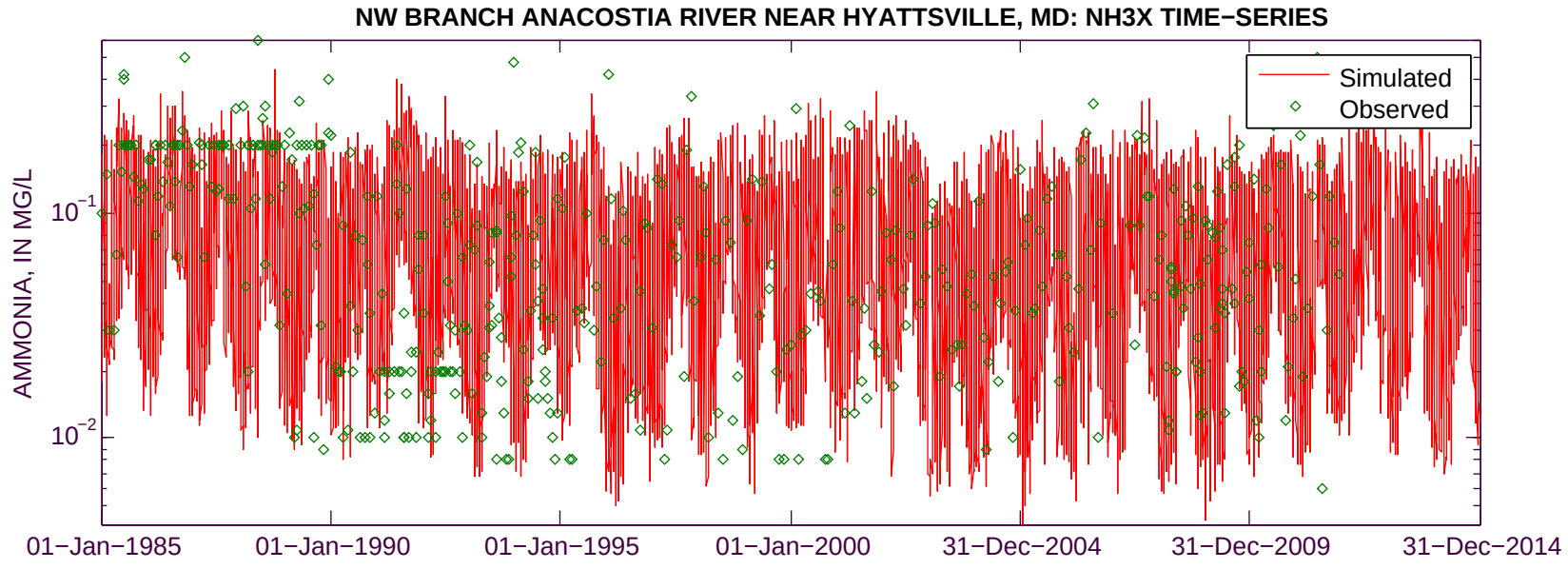
Dates: 1/1/1985 – 12/31/201

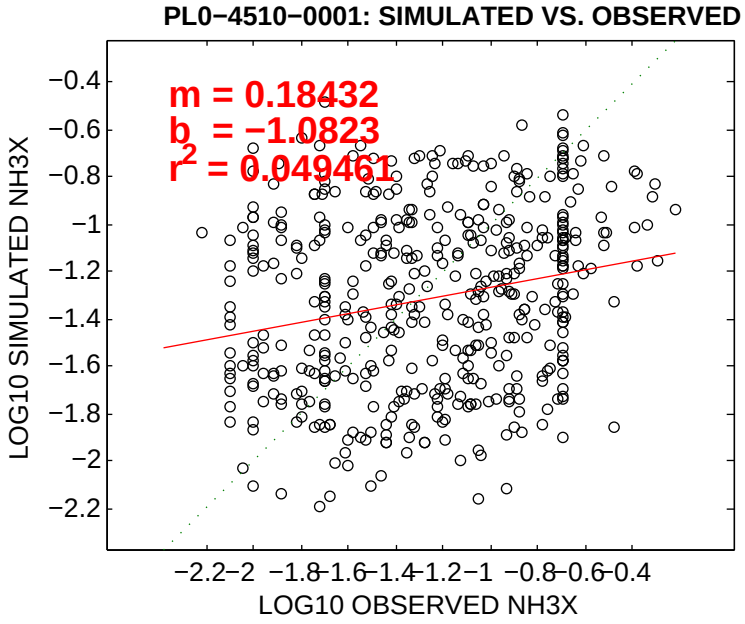
Drive: N/A | Directory: model | Observed: OBS20161101

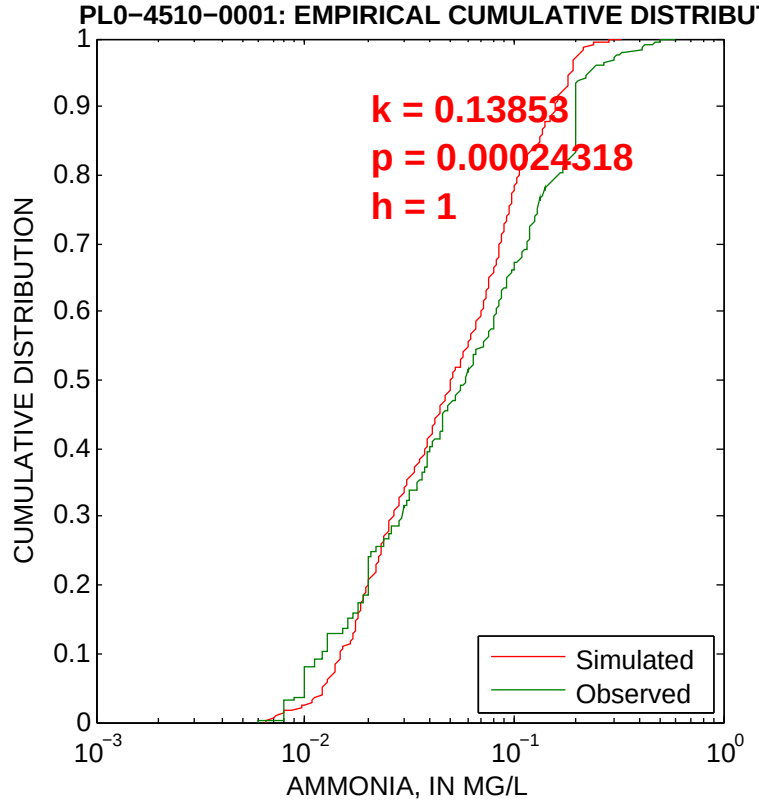
STATISTICS

		observe	simulate
n		10957	10957
min		1.2	0.63841
		0.0791812	-0.1949
mean		57.0825	73.8948
		1.46249	1.54701
media		27	34.319
		1.43136	1.53553
max		5480	2392.2
		3.73878	3.3788
varian		19700.5	19561
		0.19909	0.255492
JB		0.001	0.001
		0.001	0.001
		ra	log
%		29.4526	5.77928
err.va		6677.37	0.0721326
rel.std.err		0.338945	0.362312
mod.eff		0.661055	0.637688

VERSION 2.1







DATA SELECTION

scenario	file
P620171001WQ	NH3X.calib

plot: NH3X - ammonia

Dates: 1/1/1985 – 12/31/201

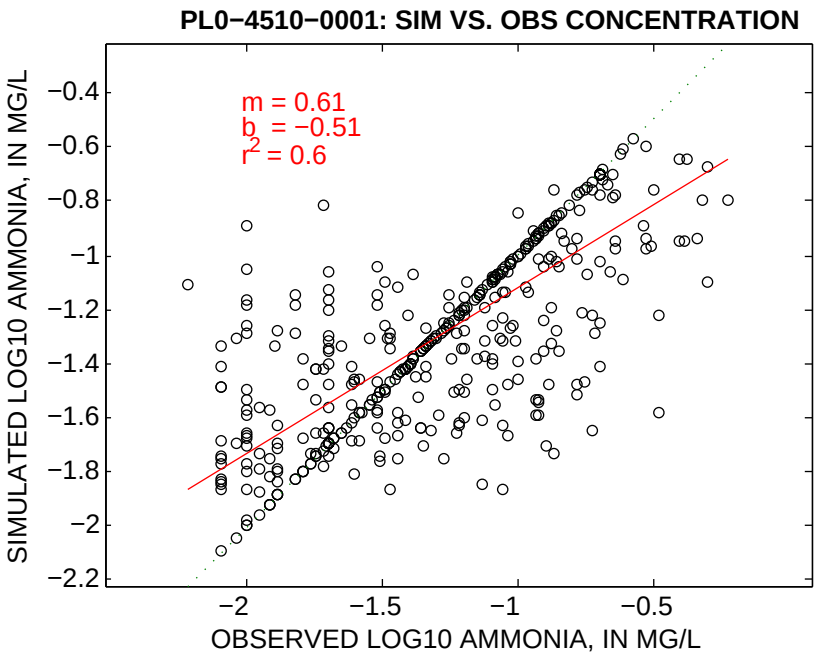
Drive	Directory	Observed
N/A	model	OBS20161101

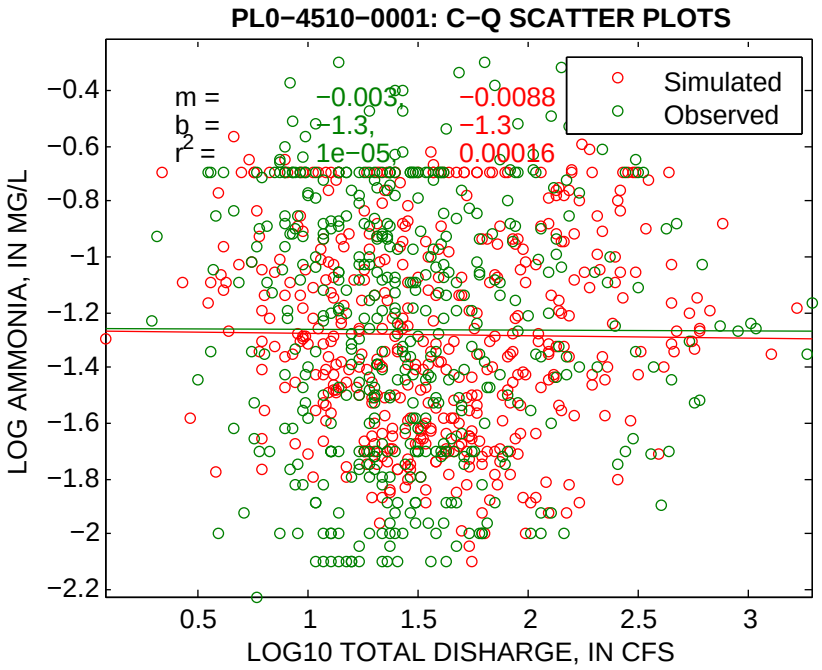
STATISTICS

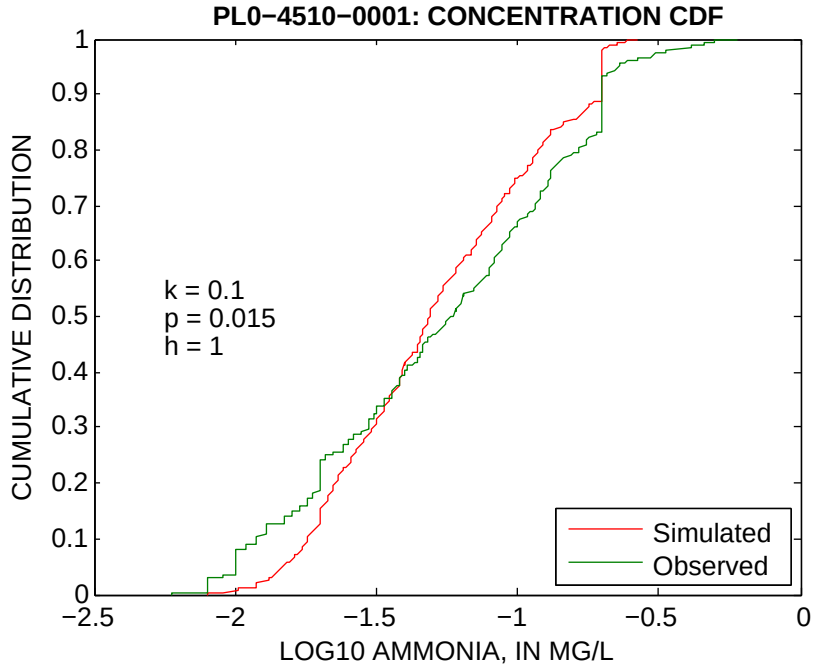
	observe	simulate
n	462	462
min	0.006 -2.22185	0.0064416 -2.19101
mean	0.0903675 -1.25862	0.0687783 -1.31428
media	0.059 -1.22915	0.0504045 -1.29753
max	0.6 -0.221849	0.33137 -0.479687
varian	0.00809783 0.208284	0.00321804 0.143067
JB	0.001 0.001461	0.001 0.001988
	ra	log
%	-23.8904	4.4222
err.va	0.00950608	0.277674
rel.std.err	1.1739	1.33315
mod.eff	-0.173904	-0.333147

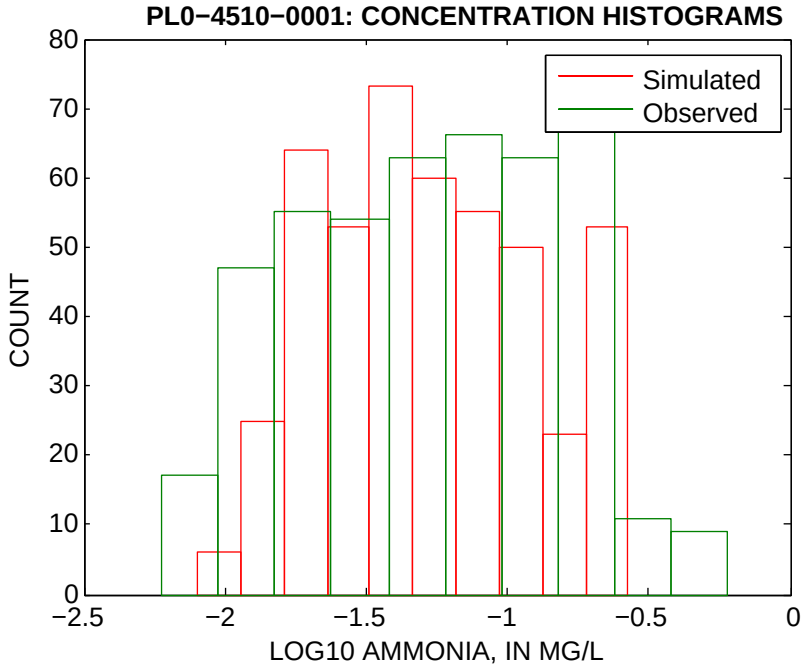
VERSION 2.1

ALL DATA
LOG10

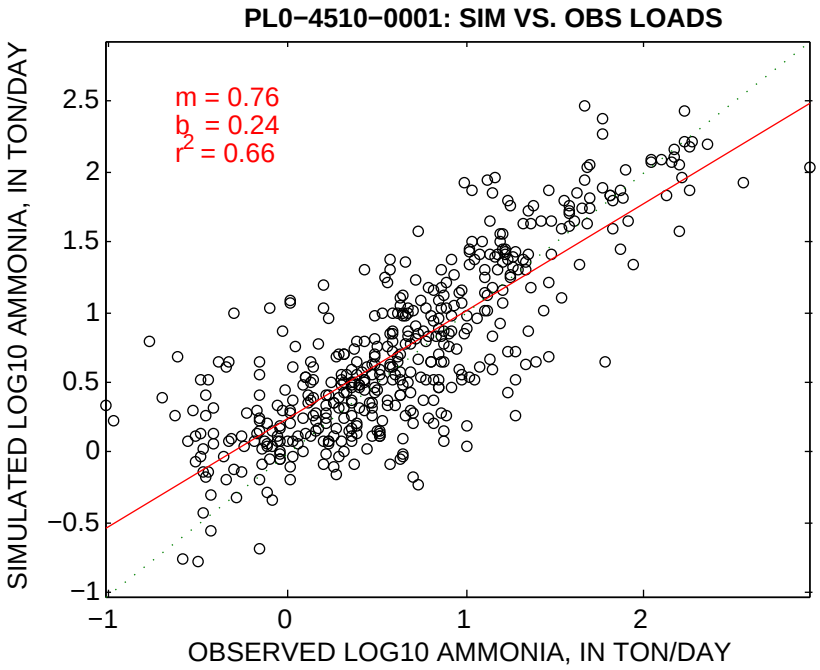


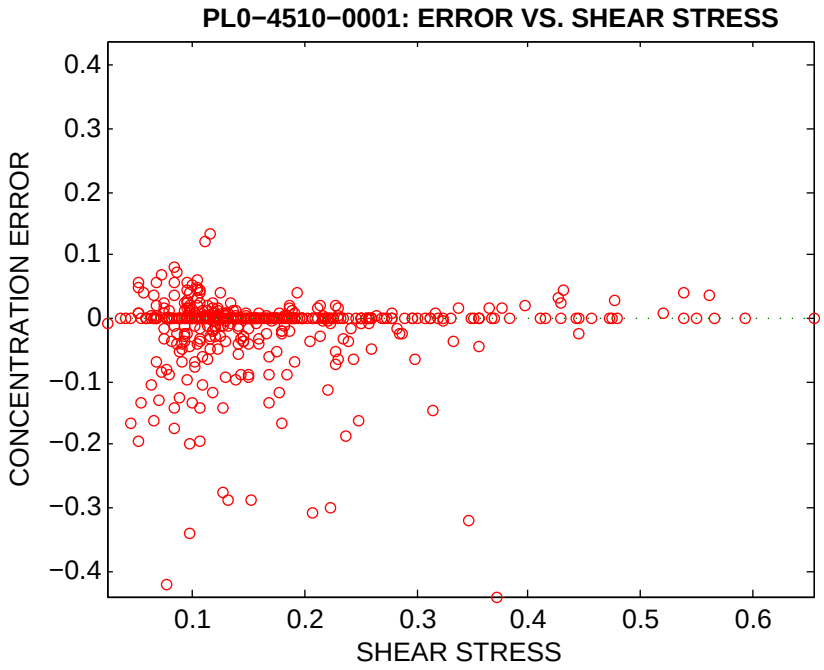


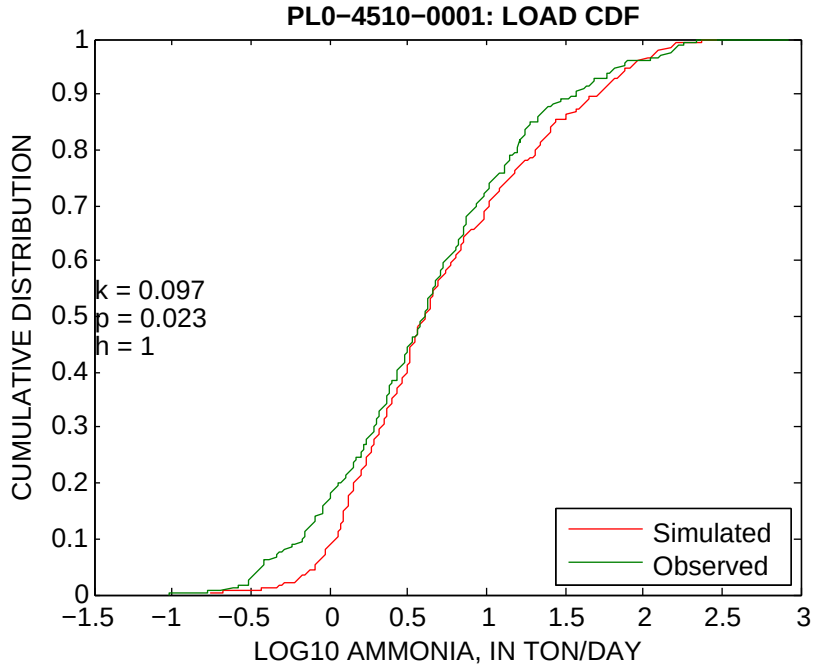


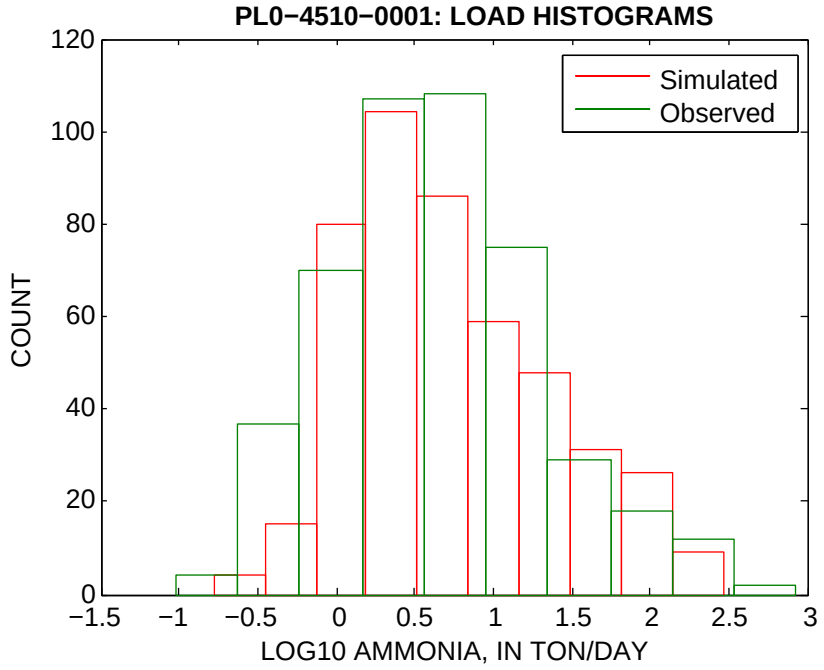


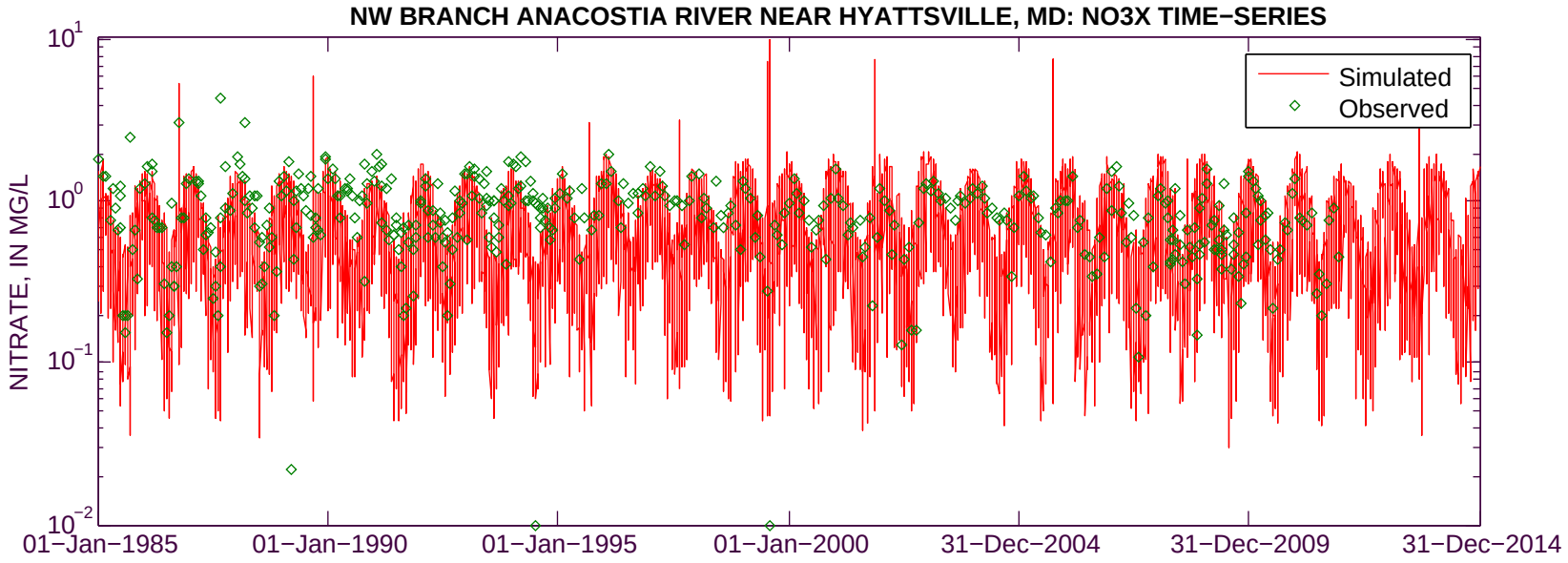
LOAD DATA
LOG10

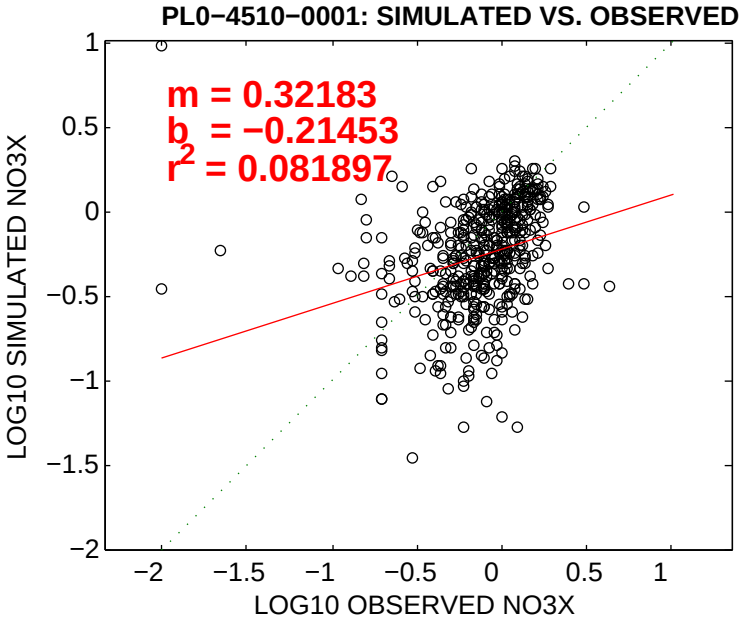


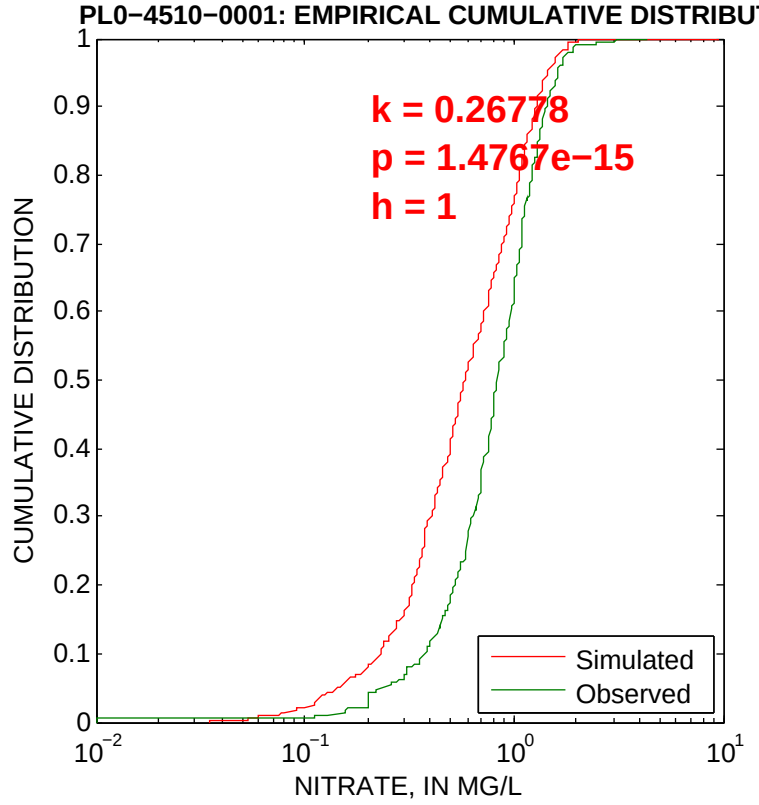












DATA SELECTION

scenario: P620171001WQ | file: NO3X.calib

plot: NO3X - nitrate

Dates: 1/1/1985 – 12/31/201

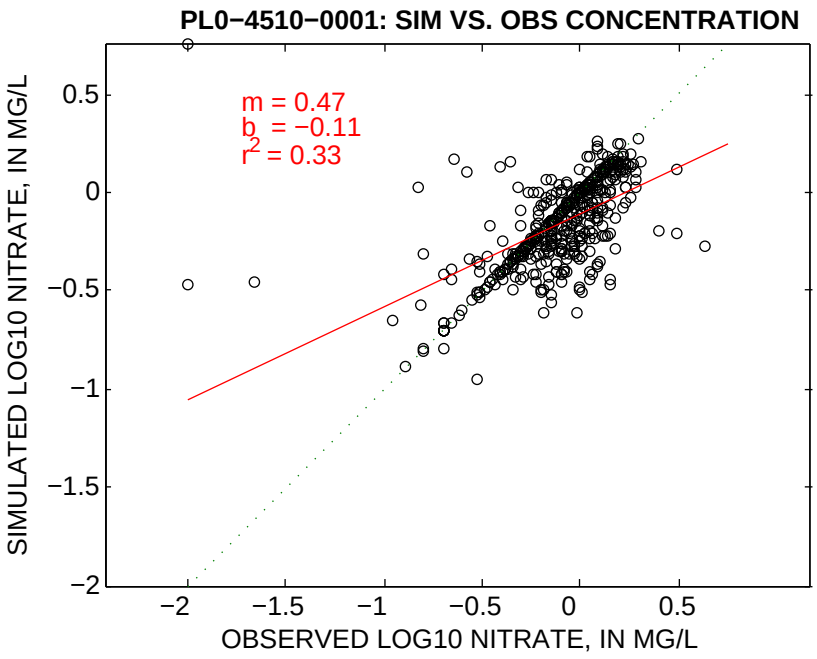
Drive: N/A | Directory: model | Observed: OBS20161101

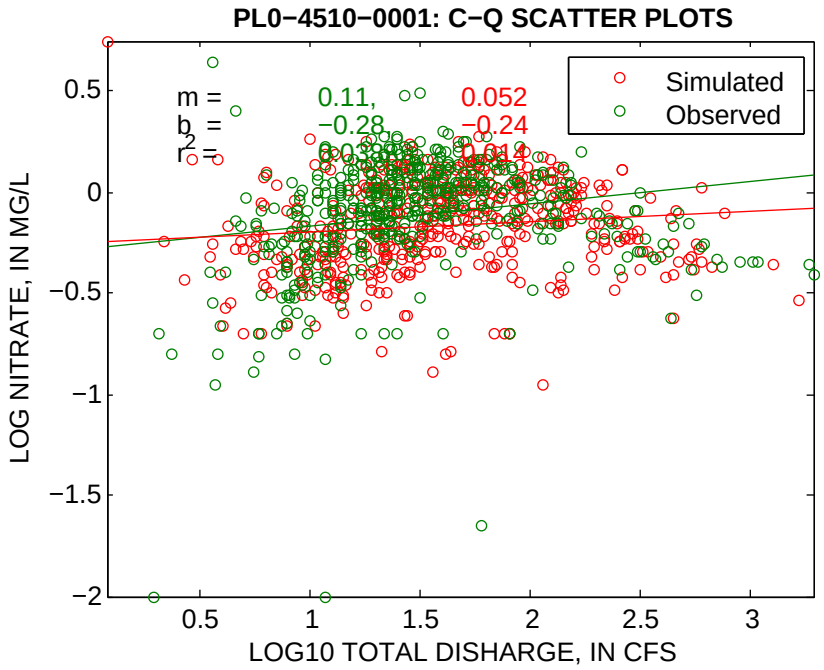
STATISTICS

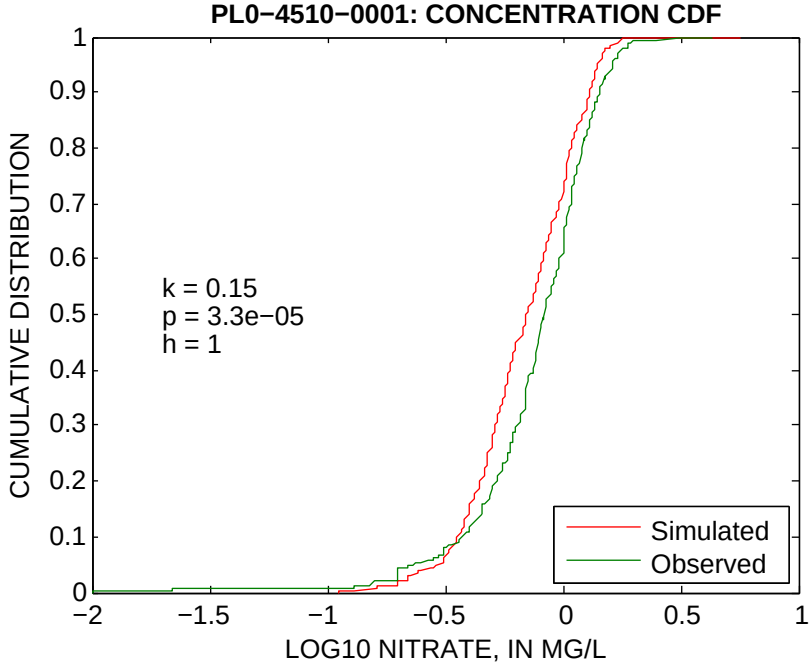
		observe	simulate
n		478	478
min		0.01	0.035028
		-2	-1.45558
mean		0.894186	0.705818
		-0.114502	-0.251376
media		0.84	0.58518
		-0.0757207	-0.232711
max		4.35	9.6686
		0.638489	0.985364
varian		0.208707	0.336696
		0.0761062	0.0962544
JB		0.001	0.001
		0.001	0.001
		ra	log
%		-21.0659	119.539
err.va		0.46286	0.142147
rel.std.err		2.21775	1.86775
mod.eff		-1.21775	-0.867745

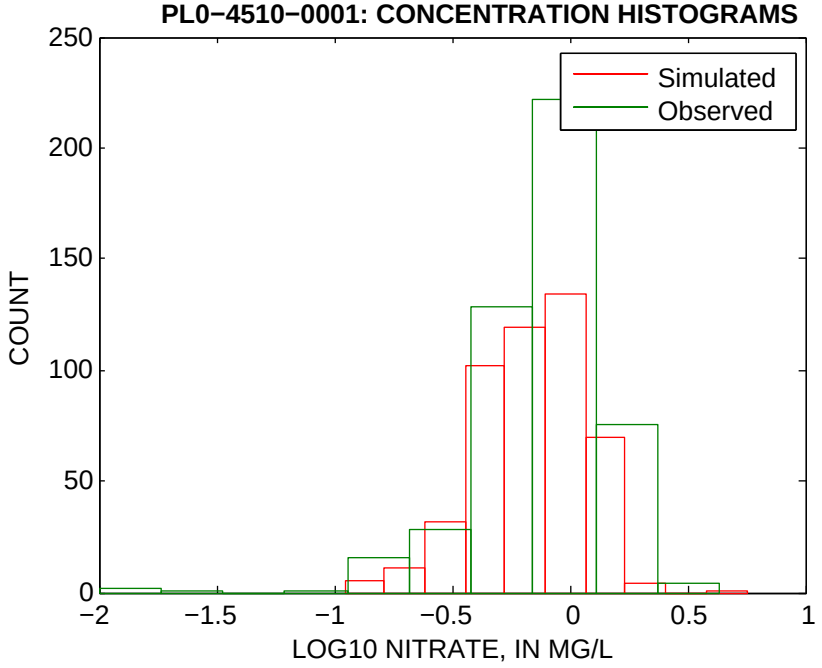
VERSION 2.1

ALL DATA
LOG10

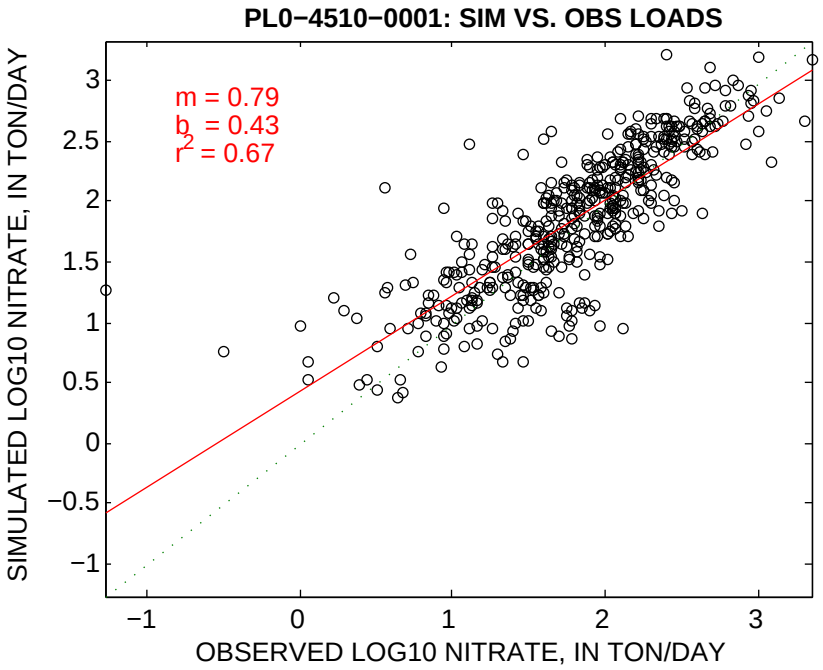


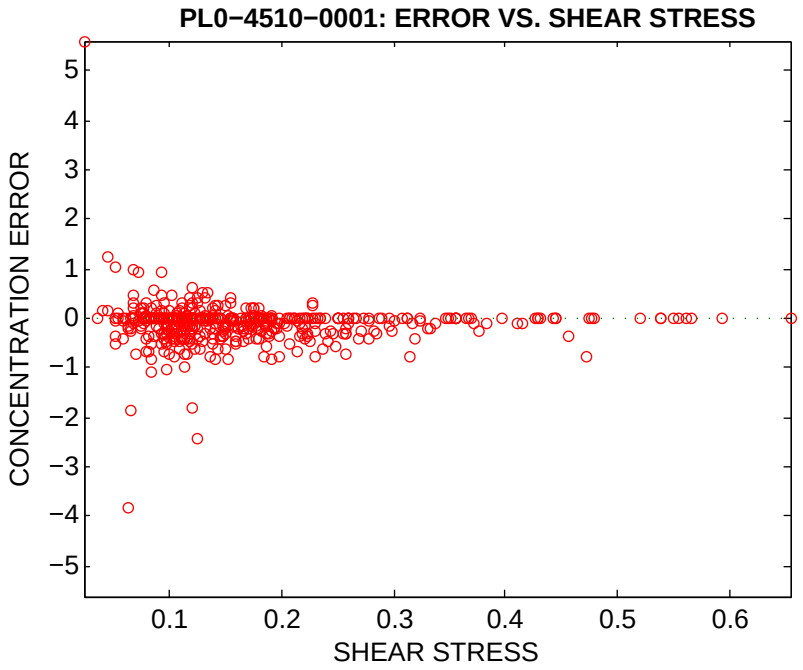


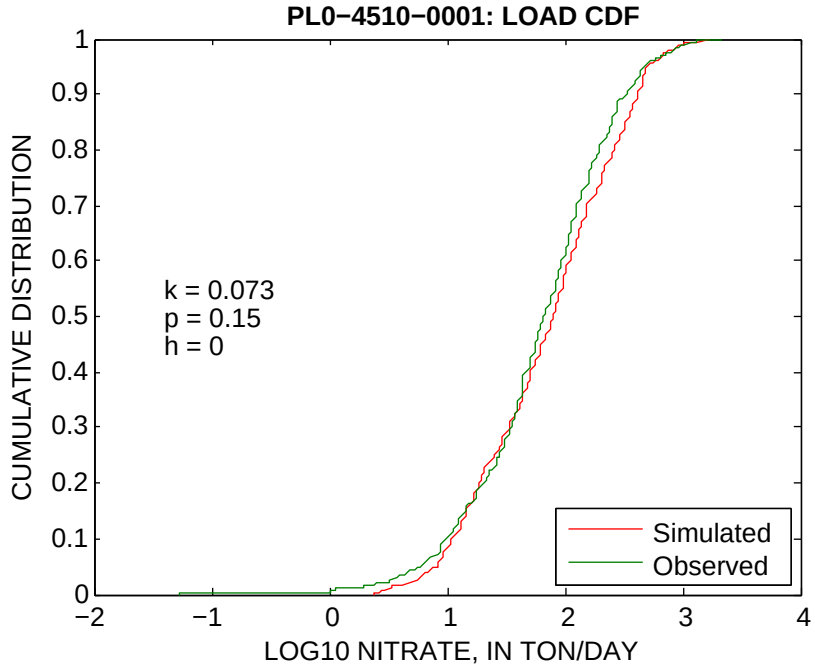


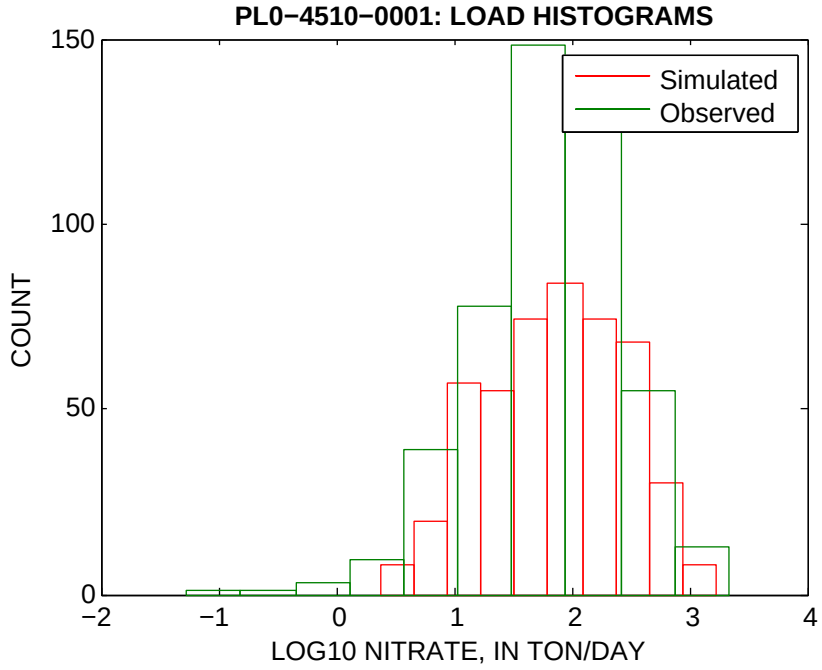


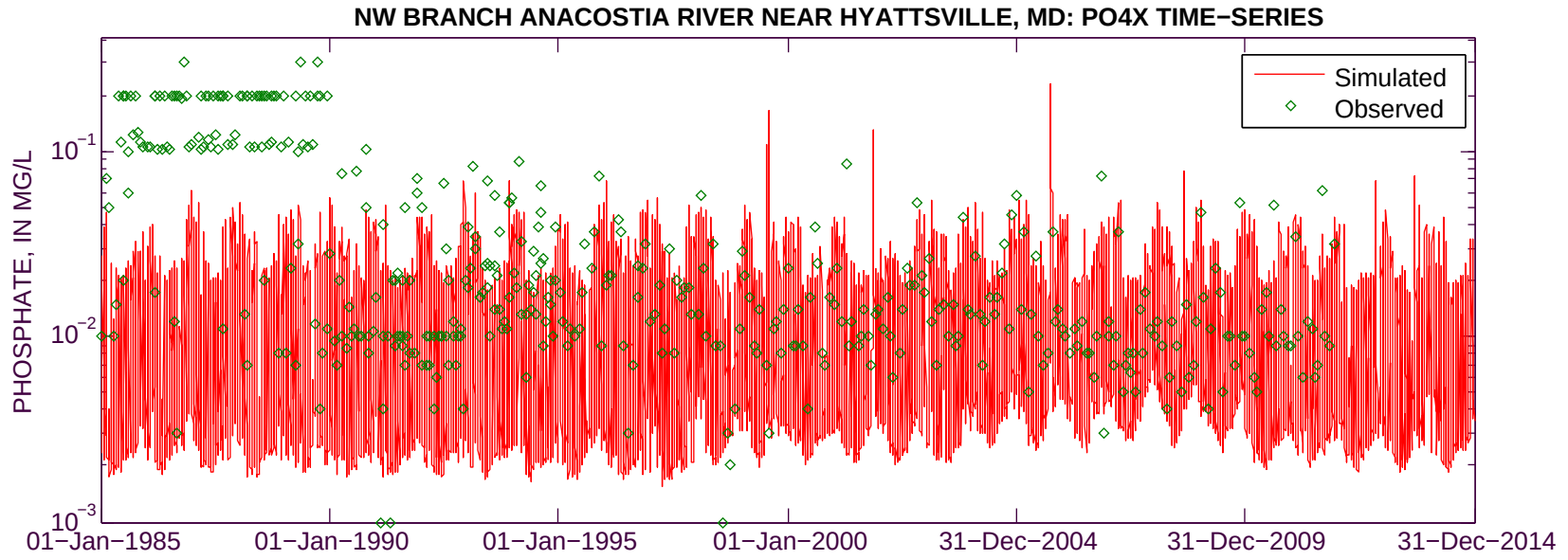
LOAD DATA
LOG10

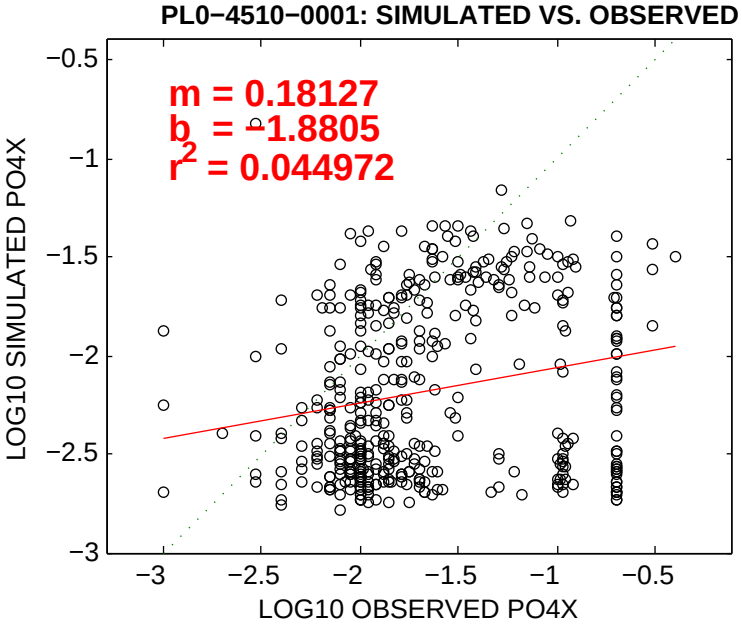


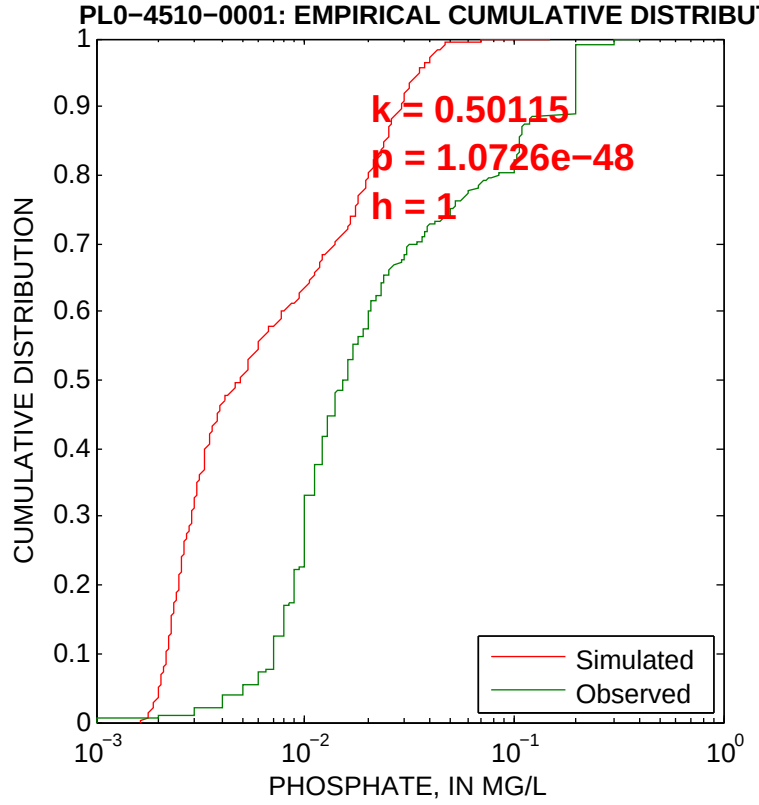












DATA SELECTION

scenario: P620171001WQ; file: PO4X.calib

plot: PO4X - phosphate

Dates: 1/1/1985 – 12/31/201

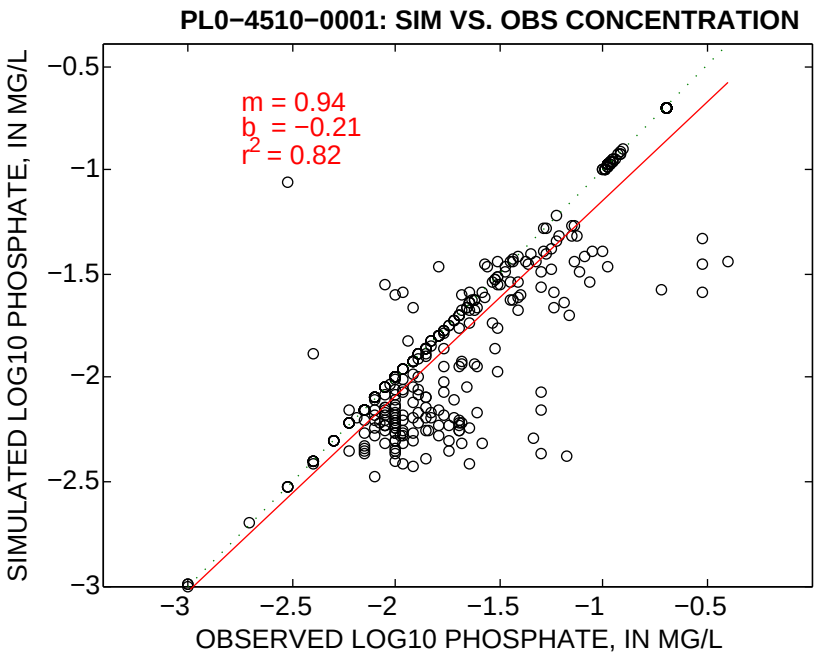
Drive: N/A; Directory: model; Observed: OBS20161101

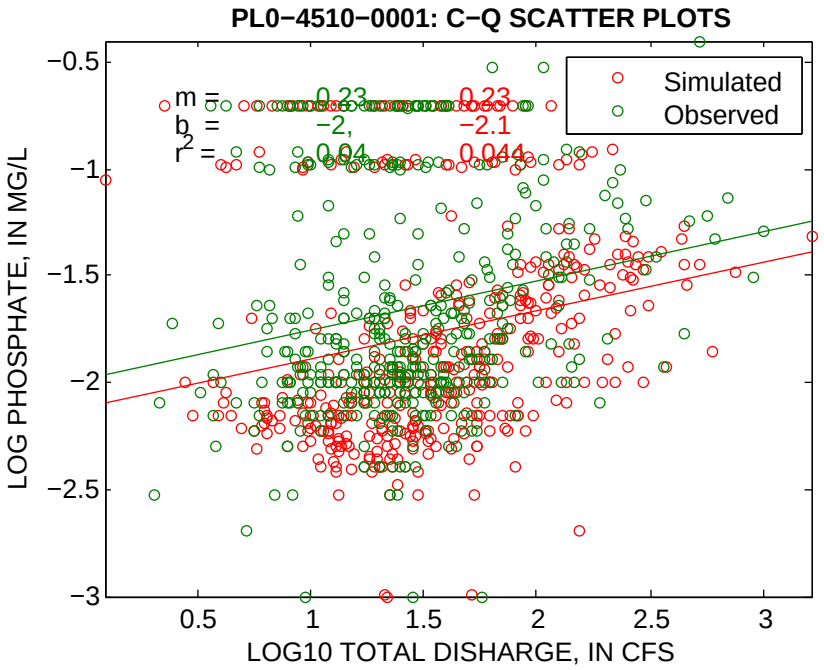
STATISTICS

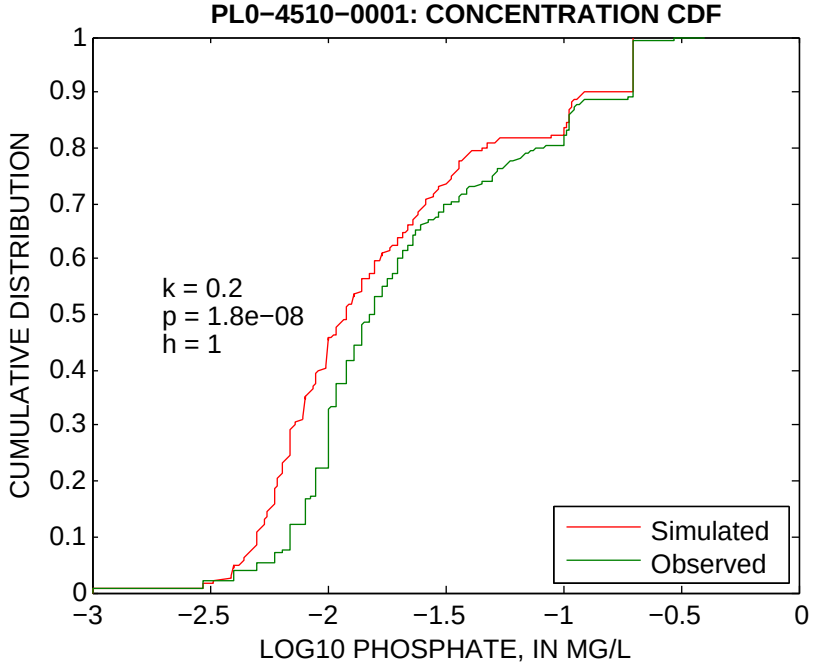
		observe	simulate
n		435	435
min		0.001	0.0016588
		-3	-2.78021
mean		0.0472563	0.0112291
		-1.65509	-2.1805
media		0.016	0.0048678
		-1.79588	-2.31267
max		0.4	0.14992
		-0.39794	-0.82414
varian		0.0043323	0.00017485
		0.263689	0.192668
JB		0.001	0.001
		0.001	0.001
		ra	log
%		-76.2378	31.7448
err.va		0.00565445	0.637446
rel.std.err		1.30518	2.41741
mod.eff		-0.305183	-1.41741

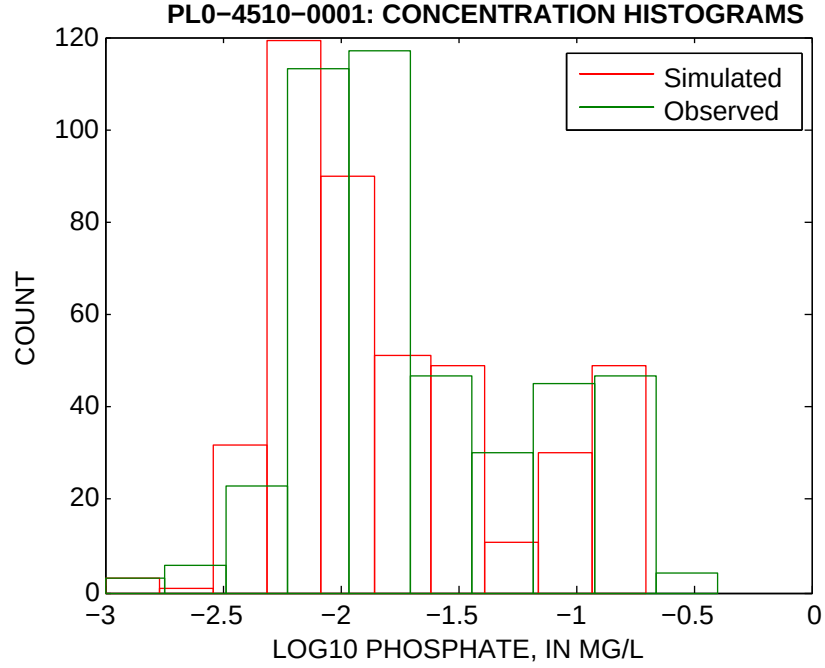
VERSION 2.1

ALL DATA
LOG10

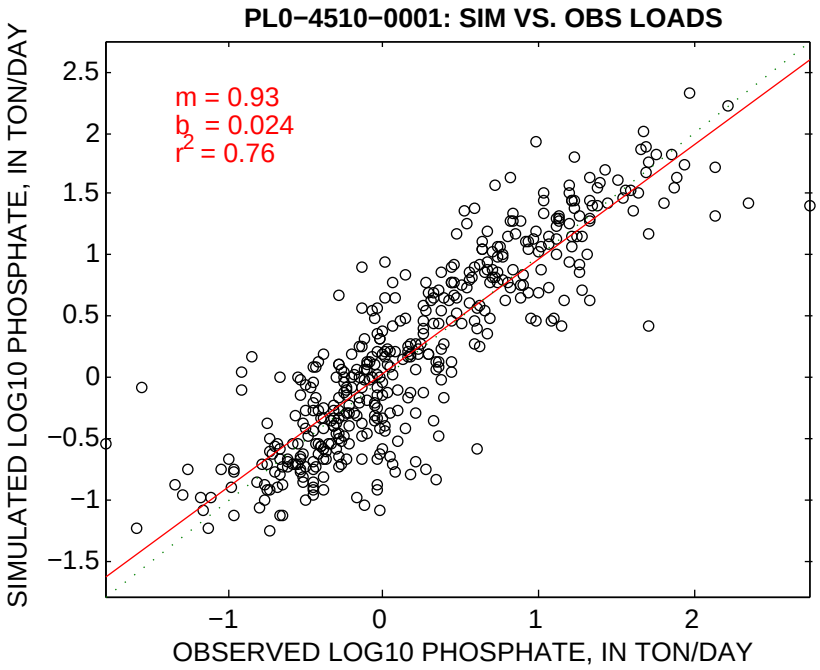




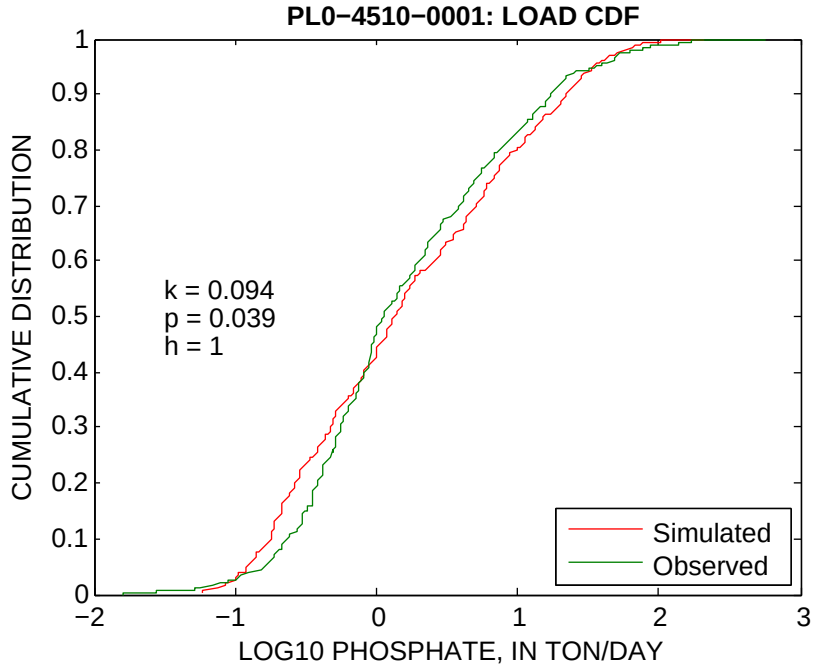


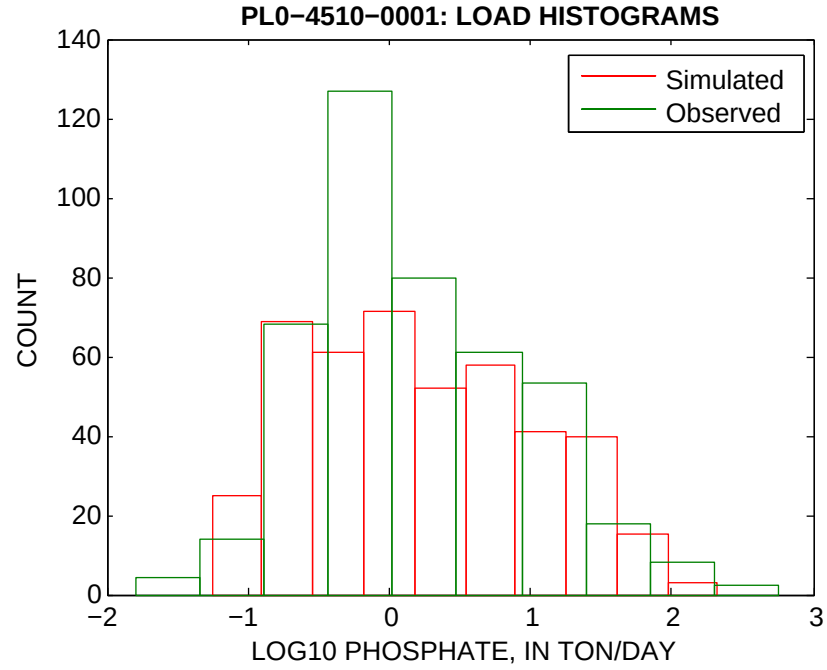


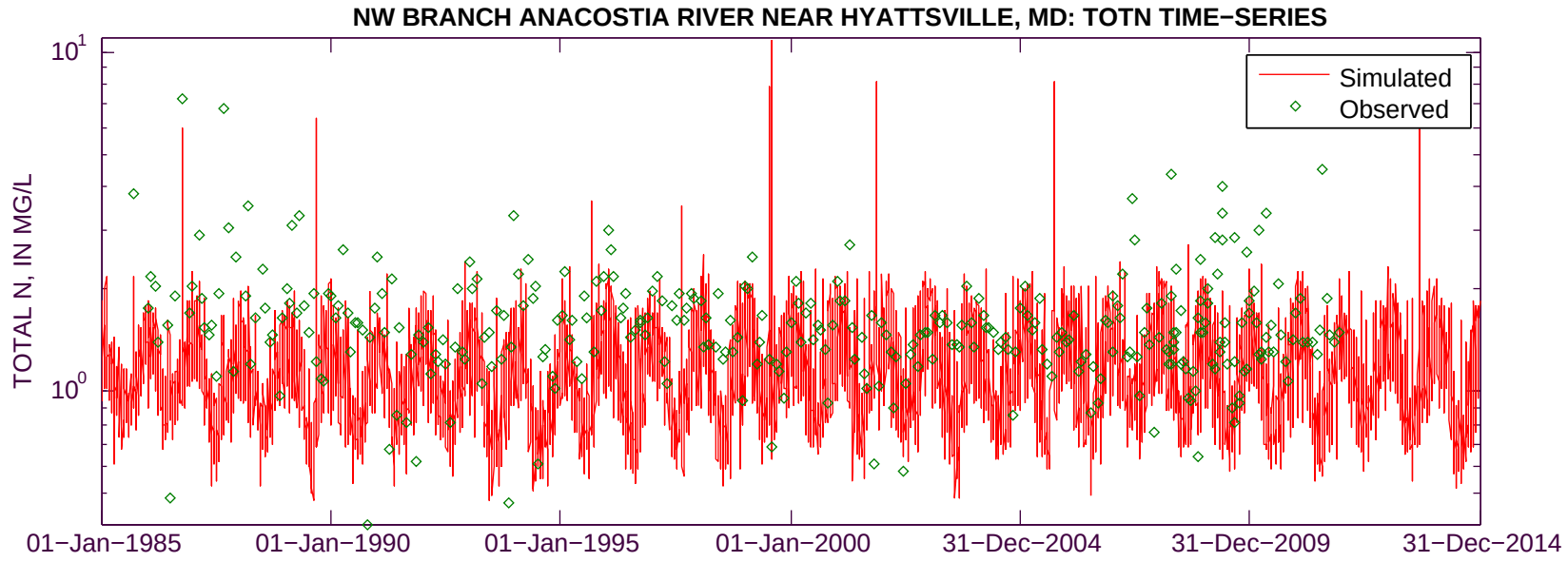
LOAD DATA
LOG10

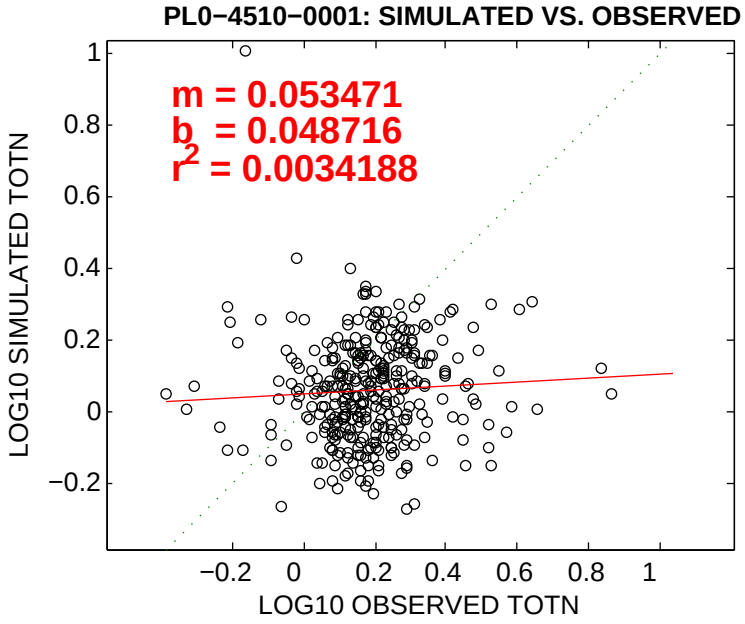


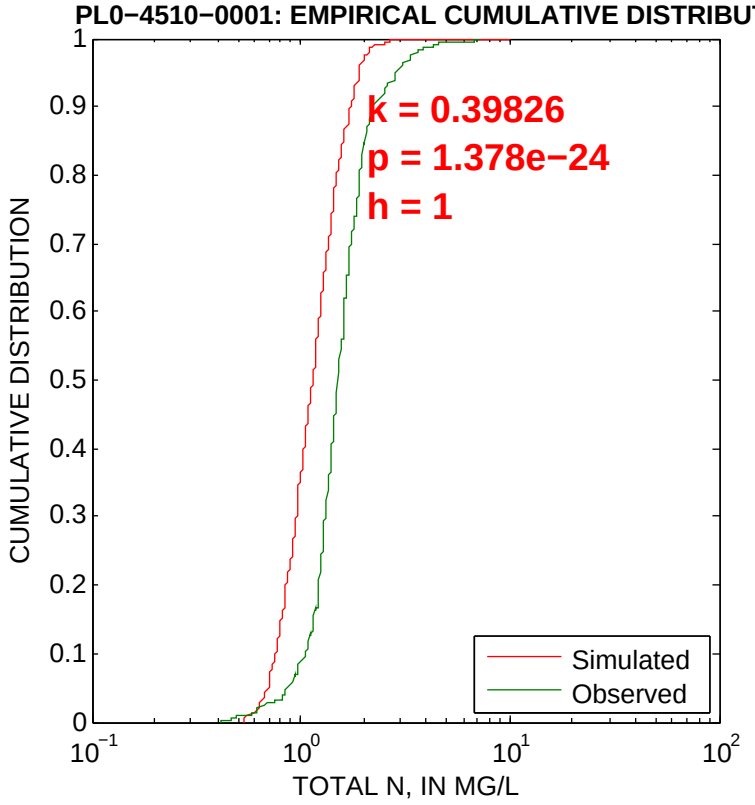












DATA SELECTION

scenario	file
P620171001WQ	TOTN.calib

plot: TOTN - total nitrogen

Dates: 1/1/1985 – 12/31/201

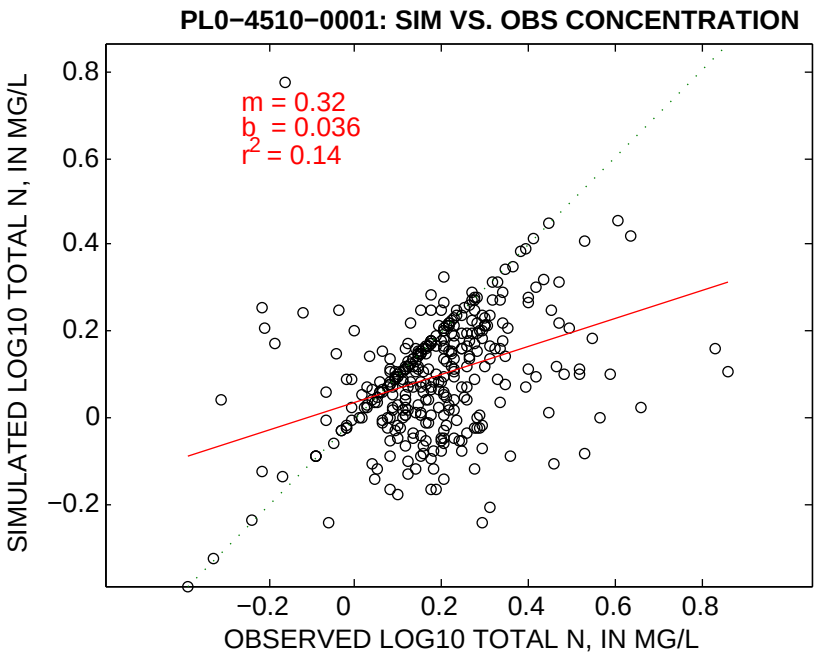
Drive	Directory	Observed
N/A	model	OBS20161101

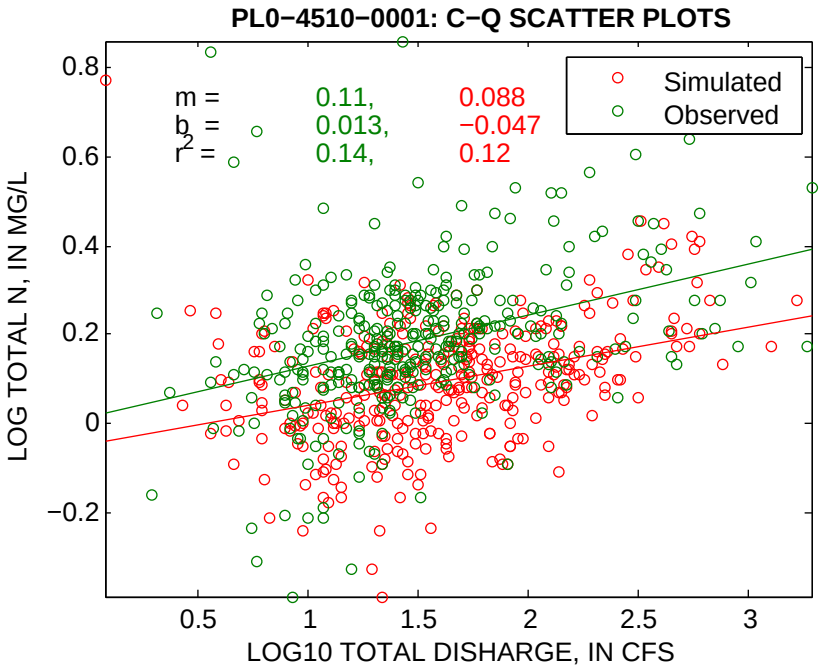
STATISTICS

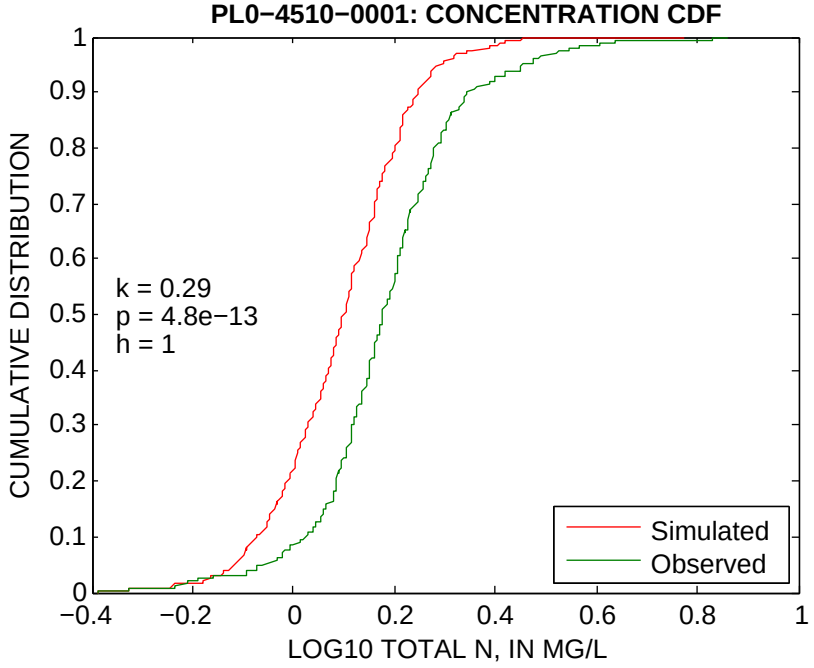
	n	344	344
		observe	simulate
min		0.41	0.53319
		-0.387216	-0.273118
mean		1.64191	1.21895
		0.185231	0.0586208
media		1.5	1.1438
		0.176091	0.0583491
max		7.25	10.185
		0.860338	1.00796
varian		0.513904	0.375787
		0.0246333	0.0206004
JB		0.001	0.001
		0.001	0.001
		ra	log
%		-25.7601	-68.3526
err.va		1.0651	0.0586762
rel.std.err		2.07256	2.38199
mod.eff		-1.07256	-1.38199

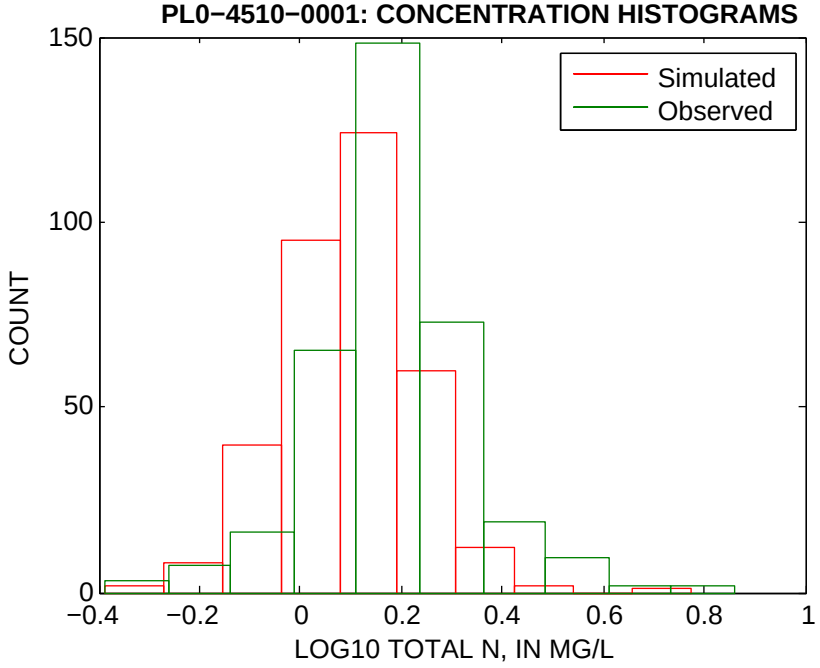
VERSION 2.1

ALL DATA
LOG10

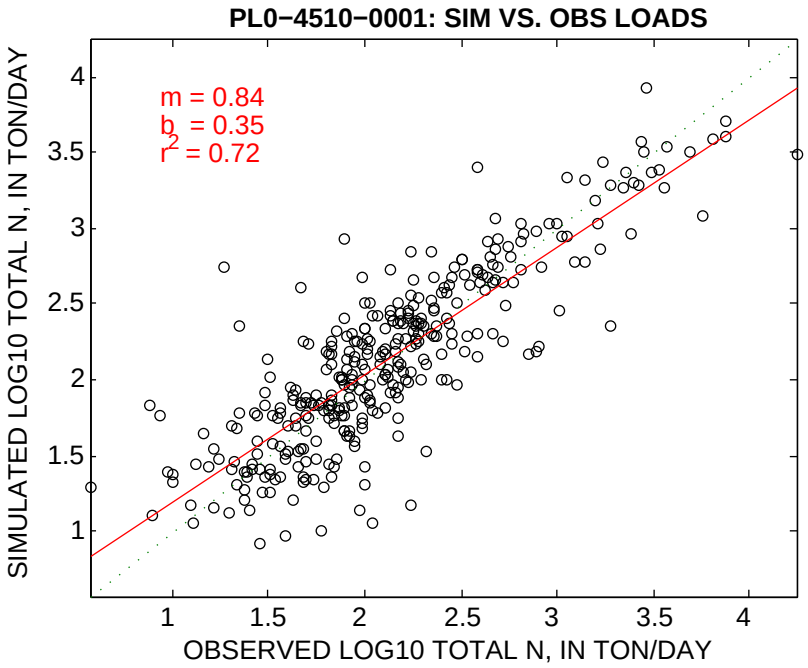


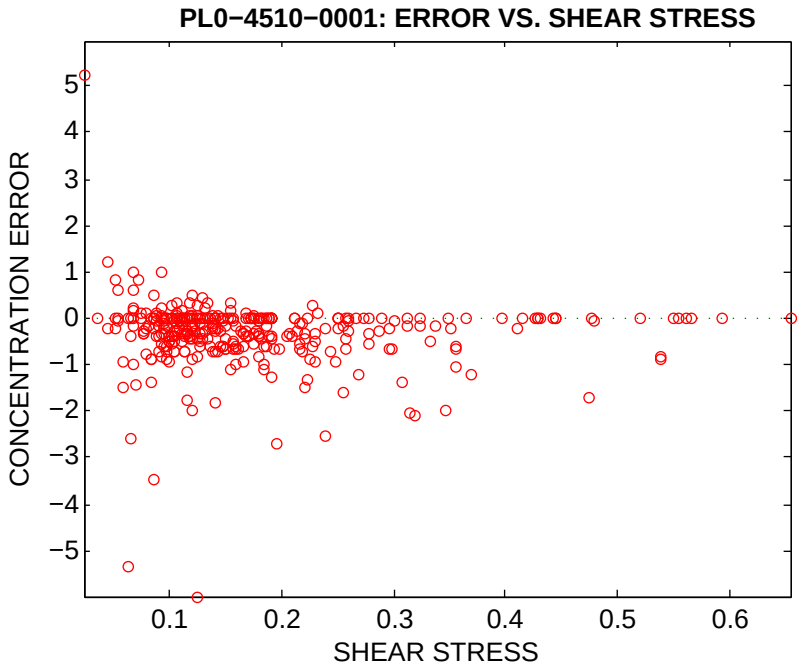


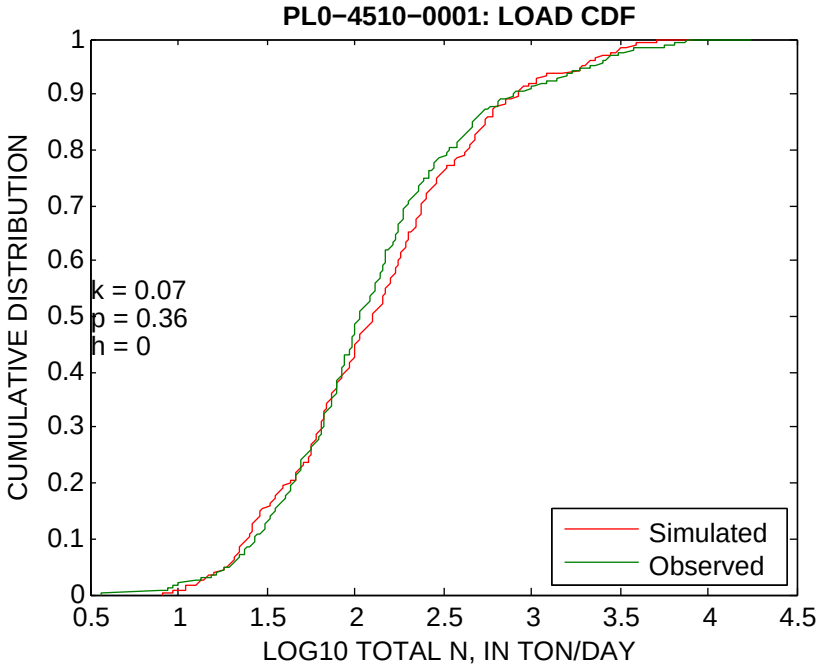


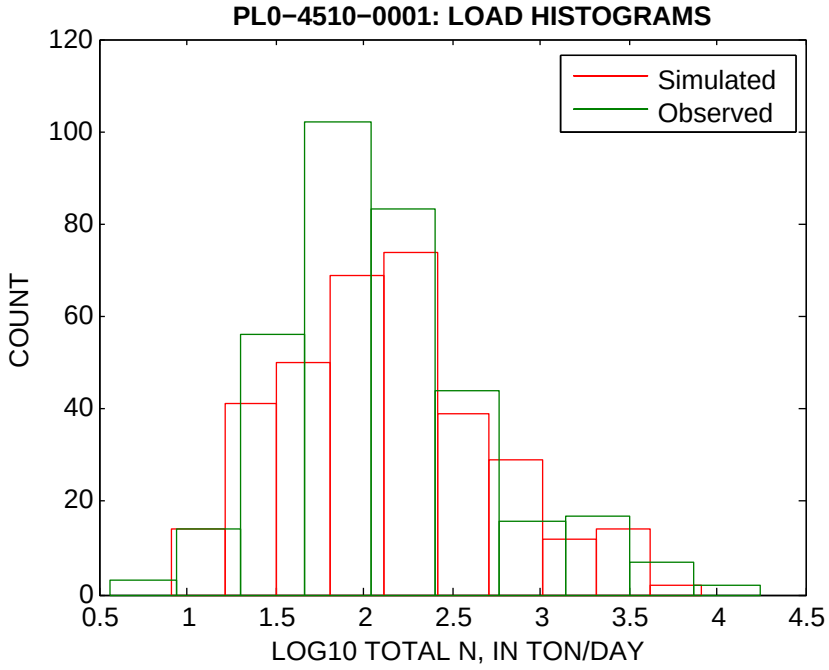


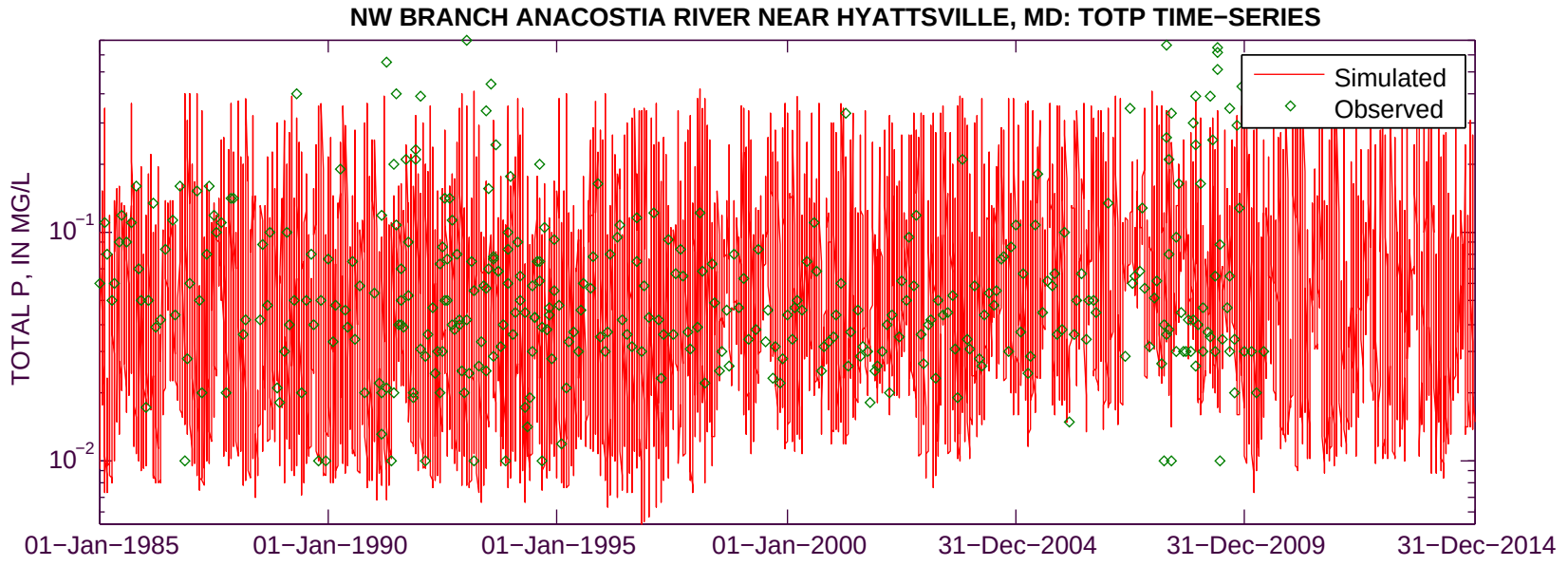
LOAD DATA
LOG10

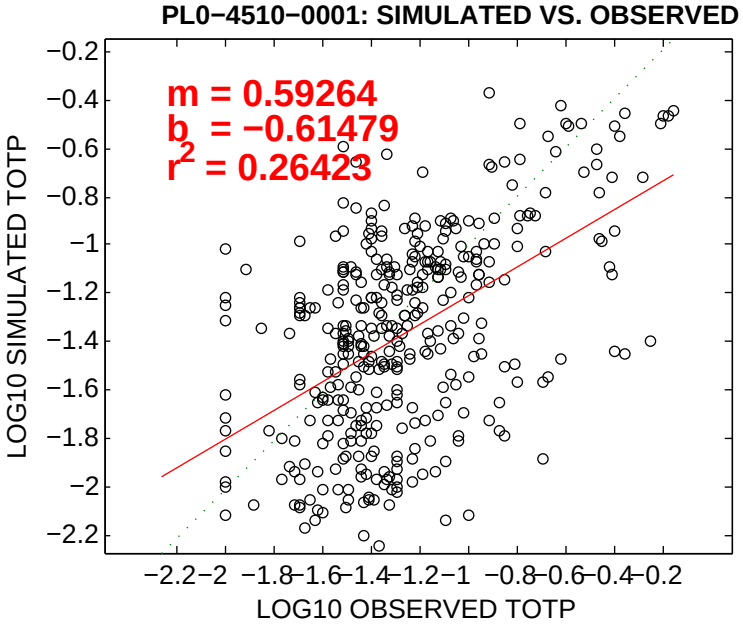


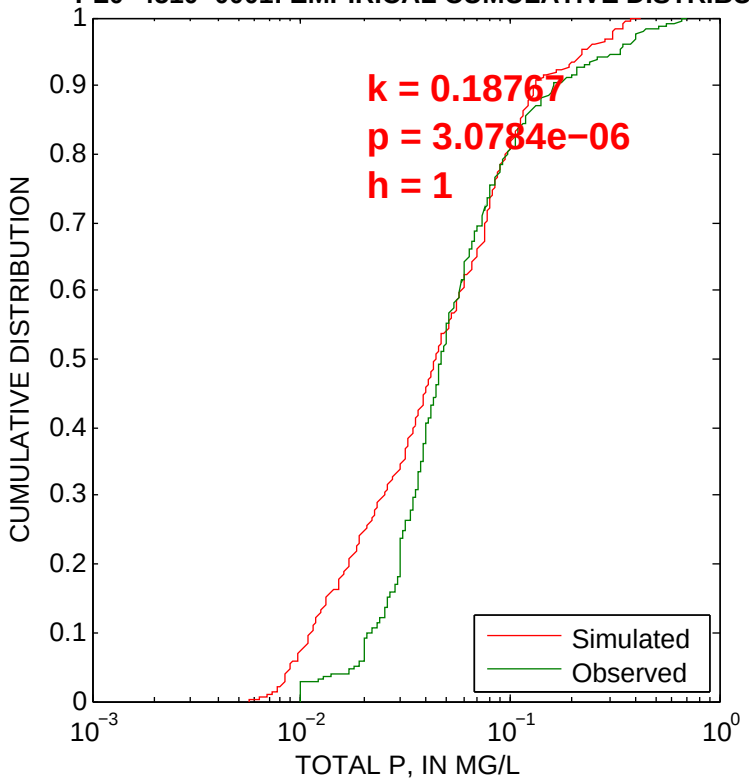












DATA SELECTION

scenario: P620171001WQ | file: TOTP.calib

plot: TOTP - total phosphorus

Dates: 1/1/1985 – 12/31/201

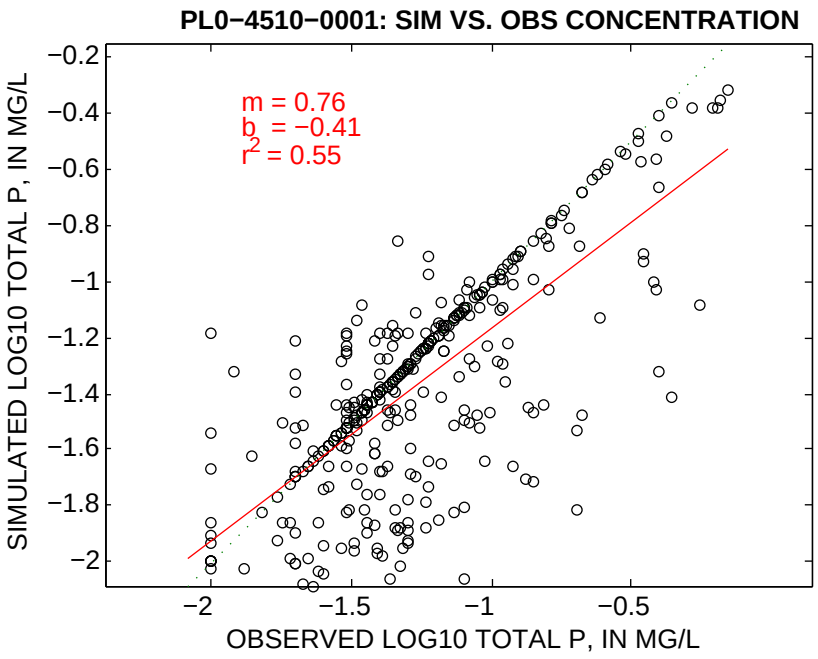
Drive | Directory | Observed: N/A | model | OBS20161101

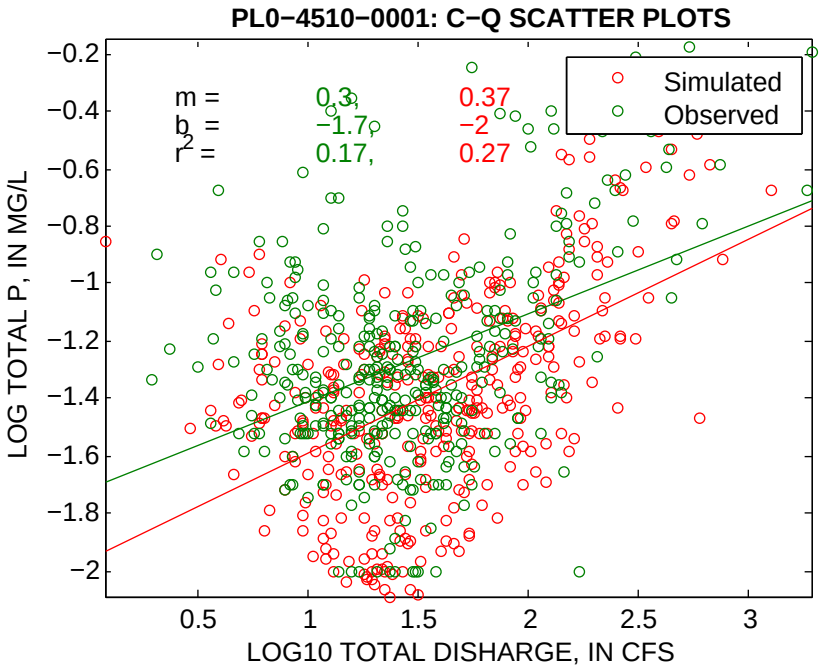
STATISTICS

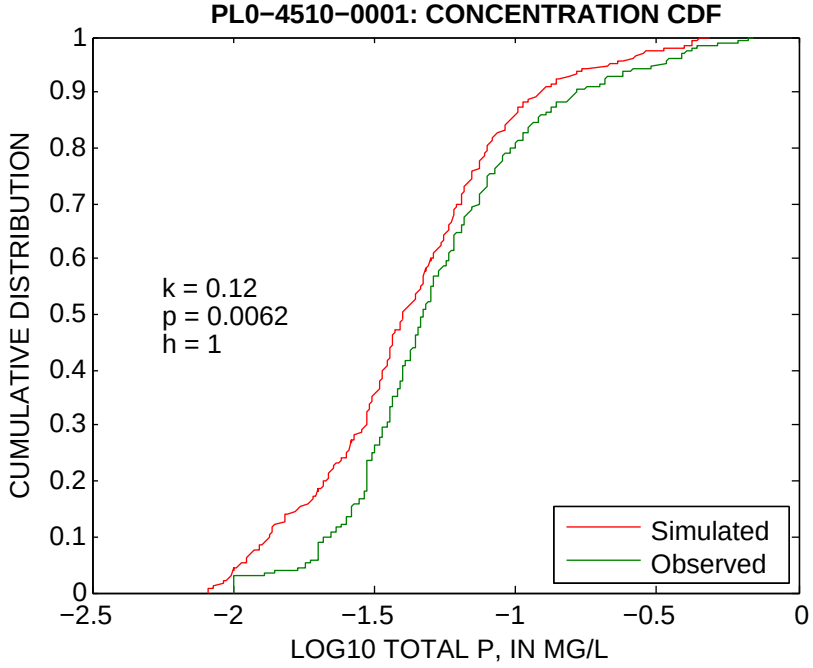
		observe	simulate
n		373	373
min		0.01	0.0057199
		-2	-2.24261
mean		0.0823373	0.0674651
		-1.26537	-1.3647
media		0.047	0.04438
		-1.3279	-1.35281
max		0.7	0.42855
		-0.154902	-0.367999
varian		0.0107904	0.0050937
		0.130192	0.173052
JB		0.001	0.001
		0.001	0.037635
		ra	log
%		-18.0624	7.84942
err.va		0.00690433	0.158822
rel.std.err		0.639857	1.21991
mod.eff		0.360143	-0.219909

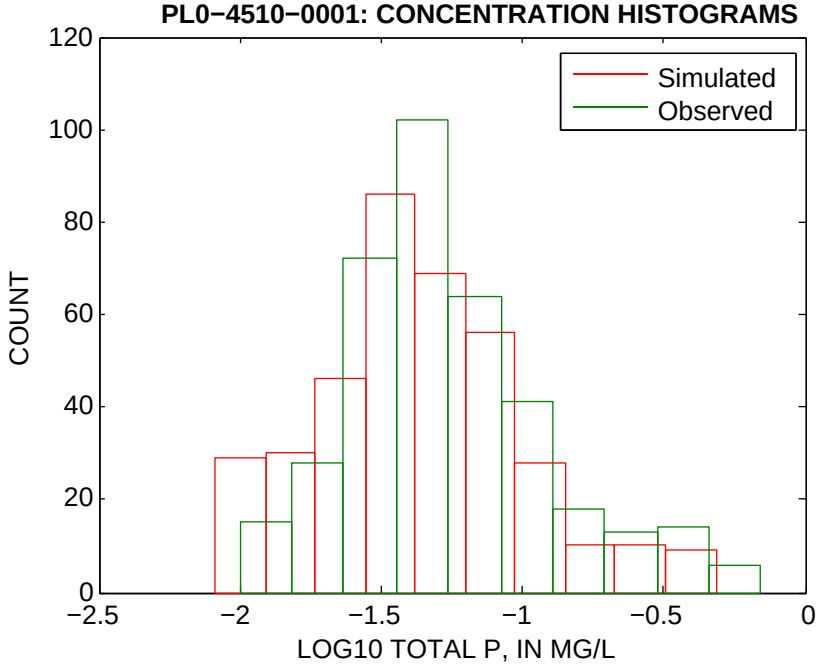
VERSION 2.1

ALL DATA
LOG10

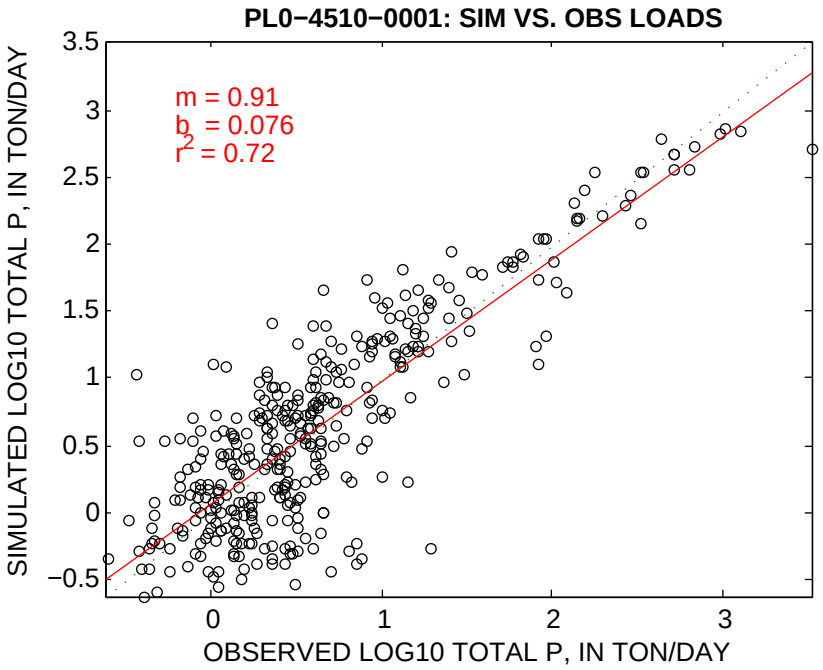


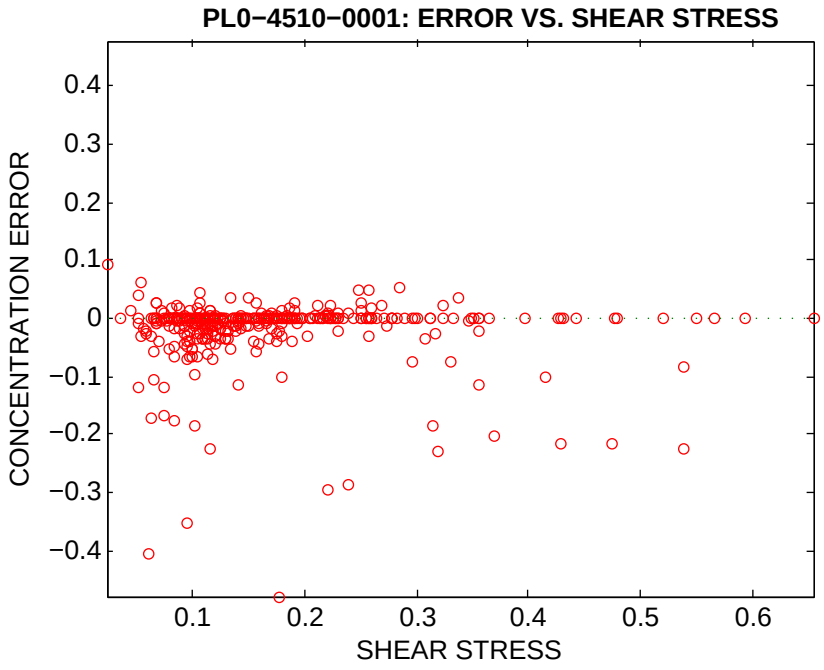


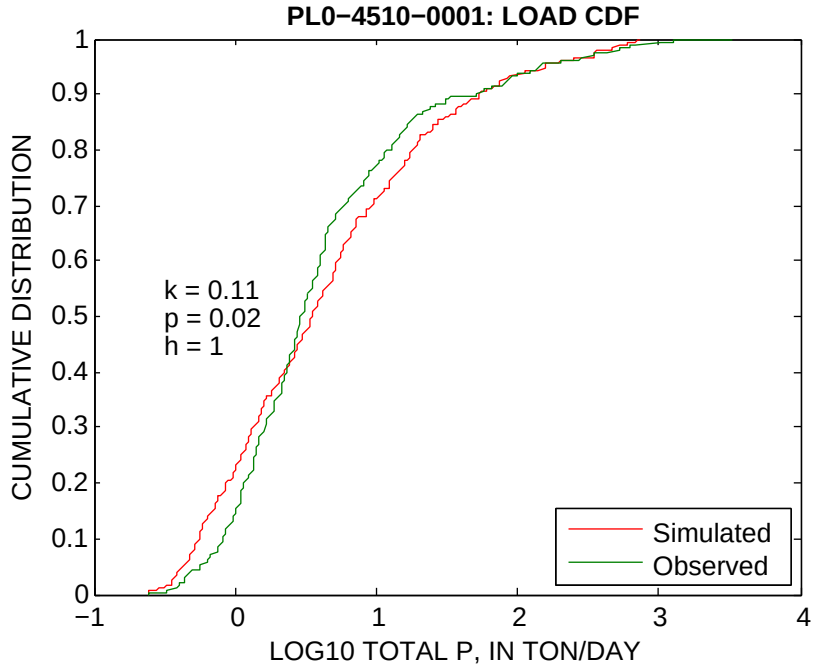


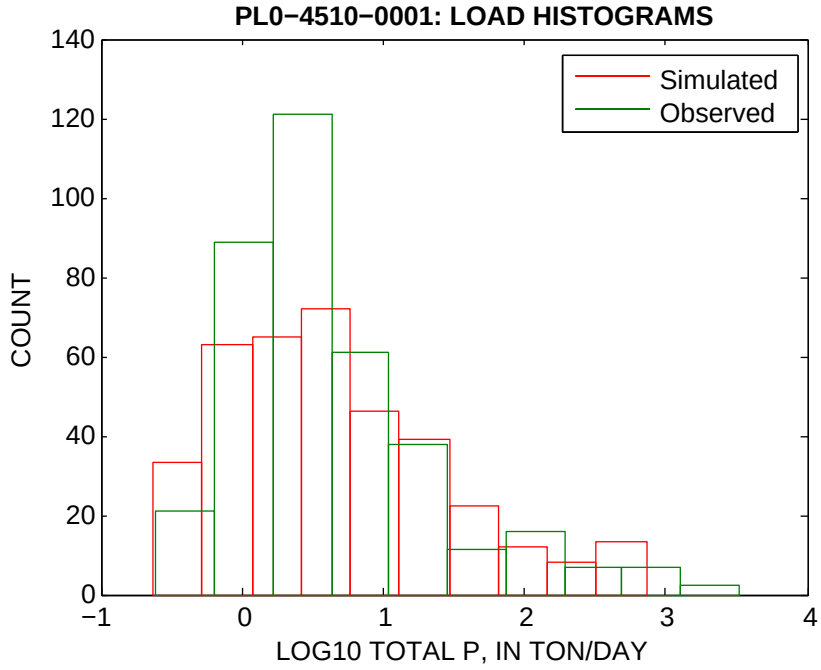


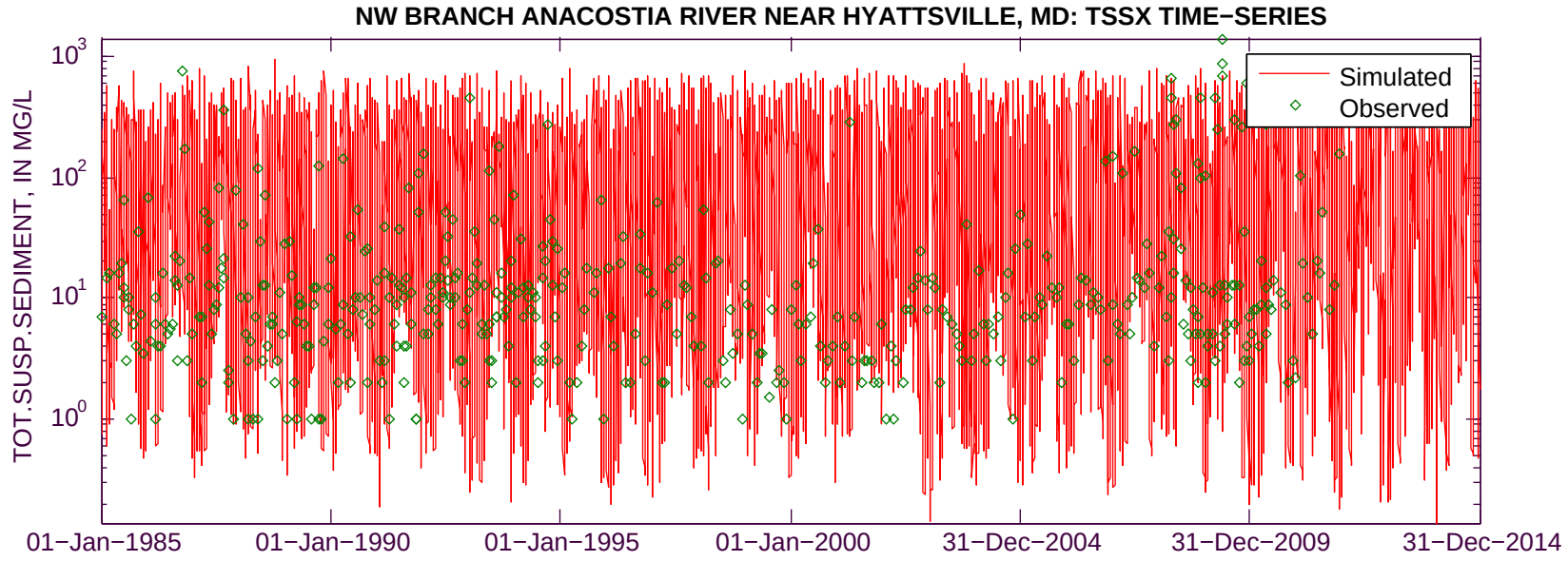
LOAD DATA
LOG10

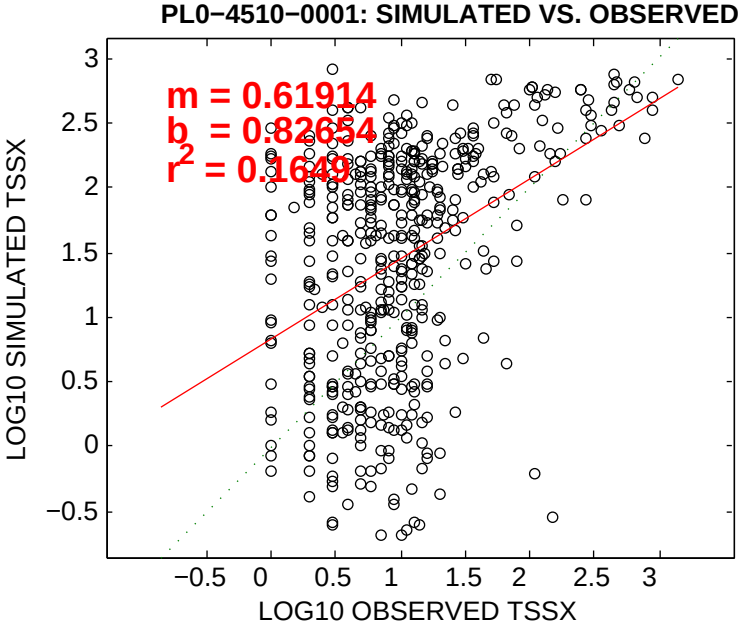


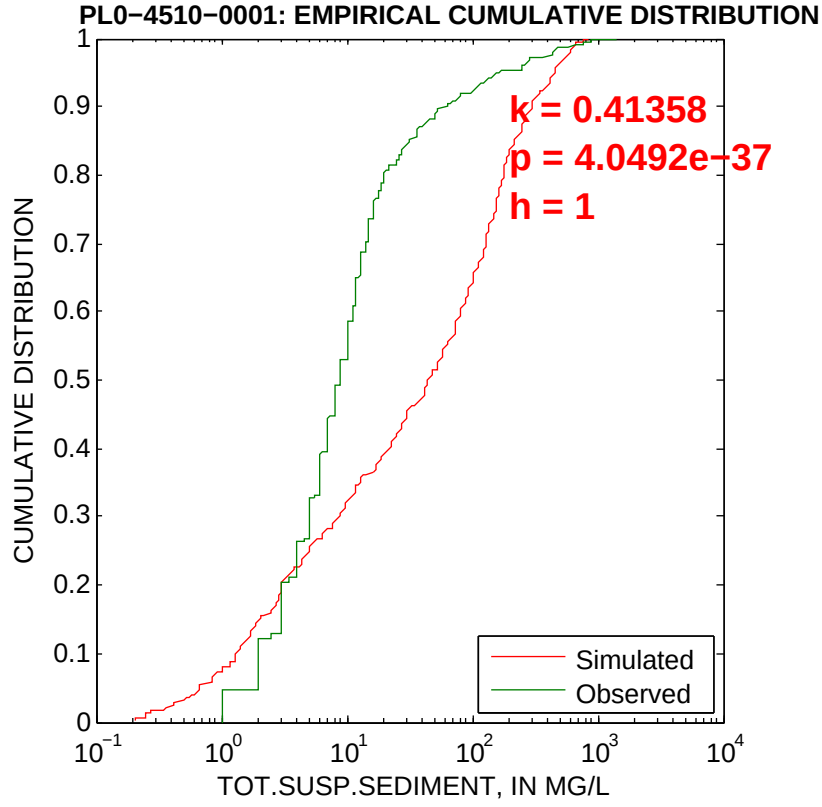












DATA SELECTION

scenario: P620171001WQ | file: TSSX.calib

plot: TSSX - total suspended ...

Dates: 1/1/1985 – 12/31/201

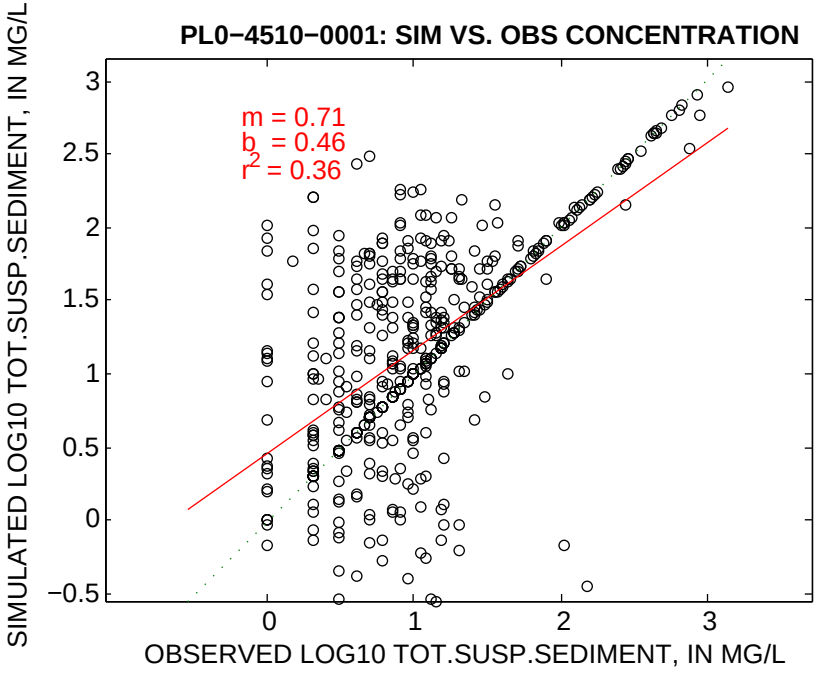
Drive | Directory: N/A | model | Observed: OBS20161101

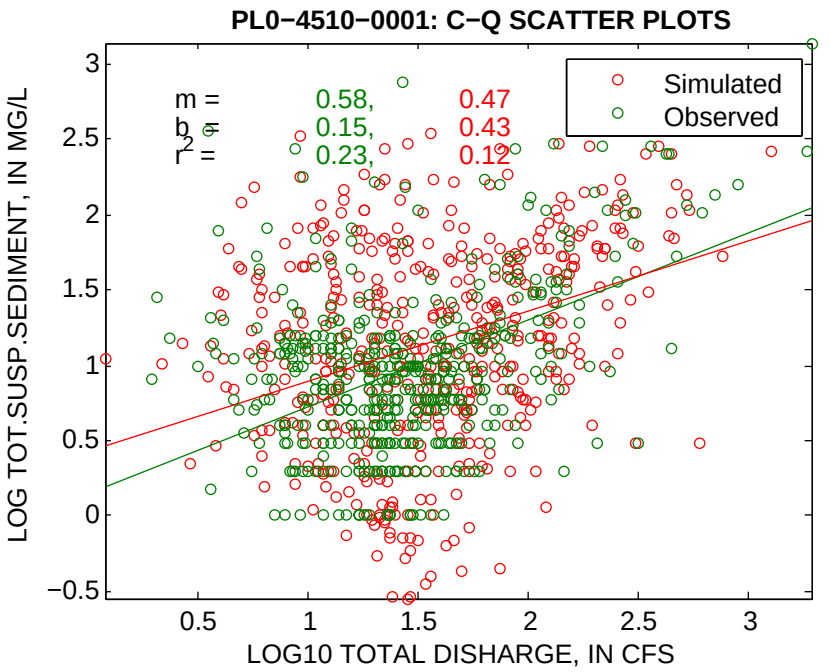
STATISTICS

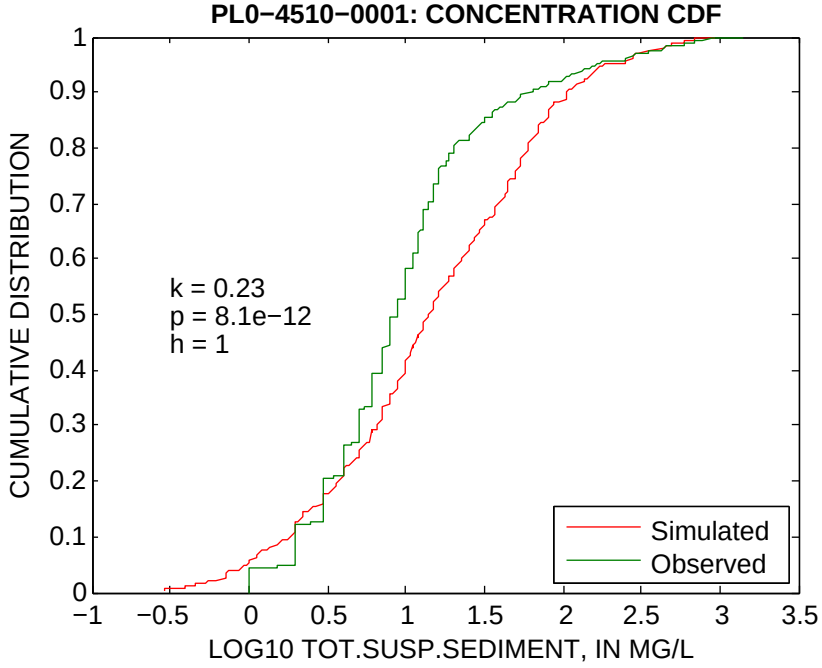
		observe	simulate
n		486	486
min		1	0.202
		0	-0.694649
mean		38.5905	108.041
		1.00017	1.44579
media		9	44.771
		0.954243	1.65099
max		1402.59	830.23
		3.14693	2.9192
varian		14495.5	22412
		0.347195	0.807135
JB		0.001	0.001
		0.001	0.001
		ra	log
%		179.968	44.5543
err.va		21994	0.92339
rel.std.err		1.5173	2.65957
mod.eff		-0.517301	-1.65957

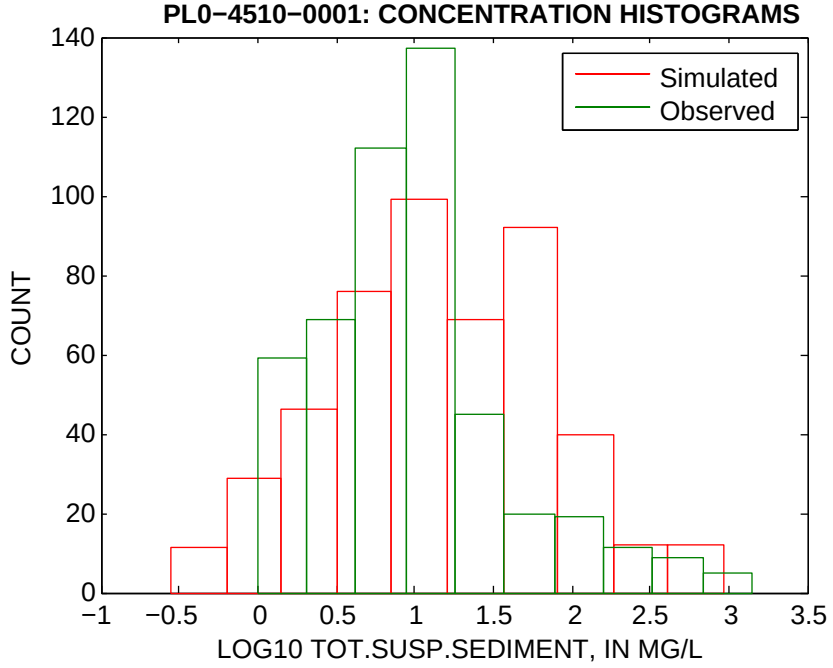
VERSION 2.1

ALL DATA
LOG10

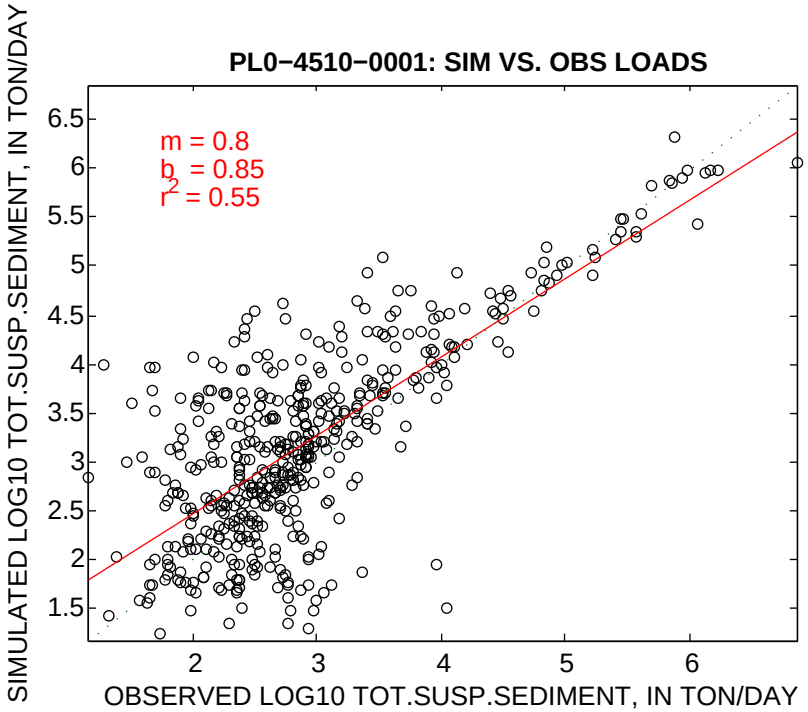


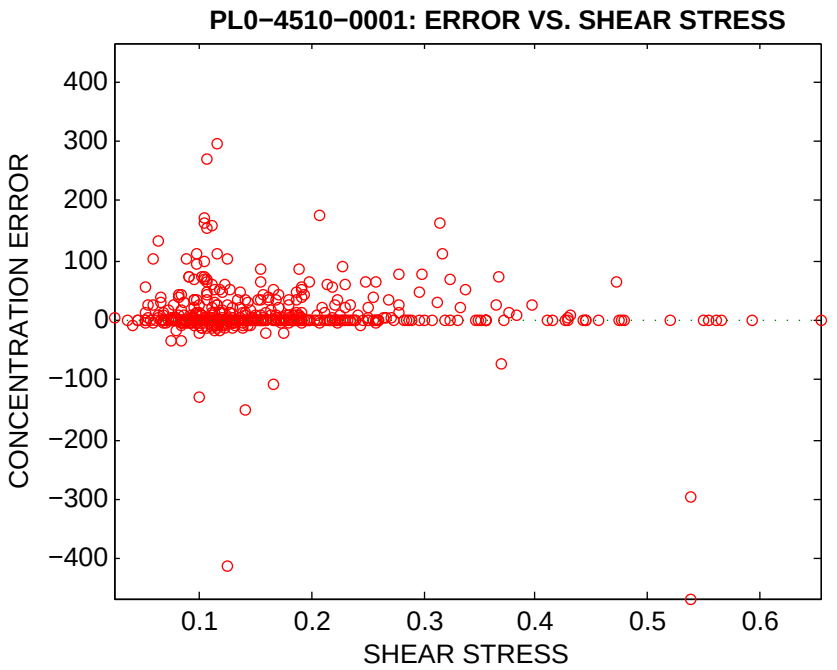


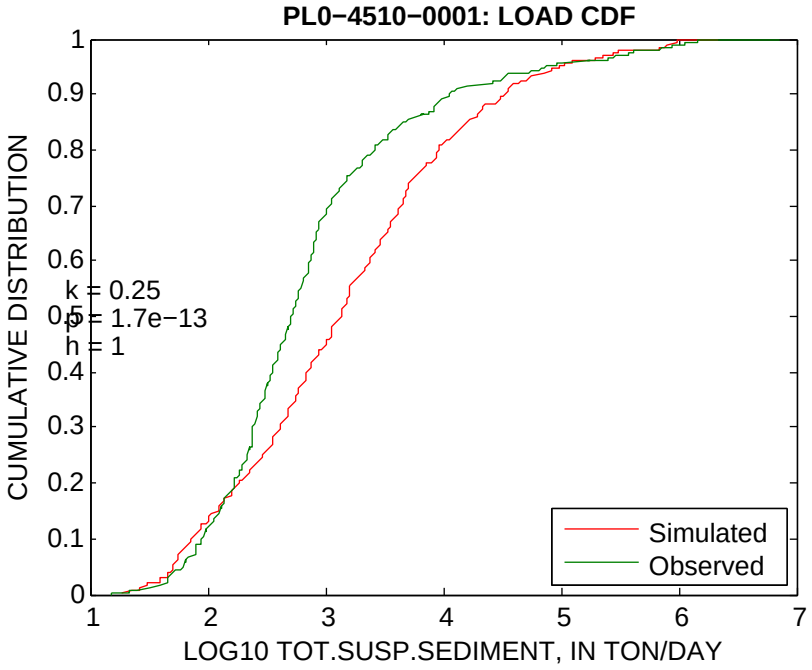


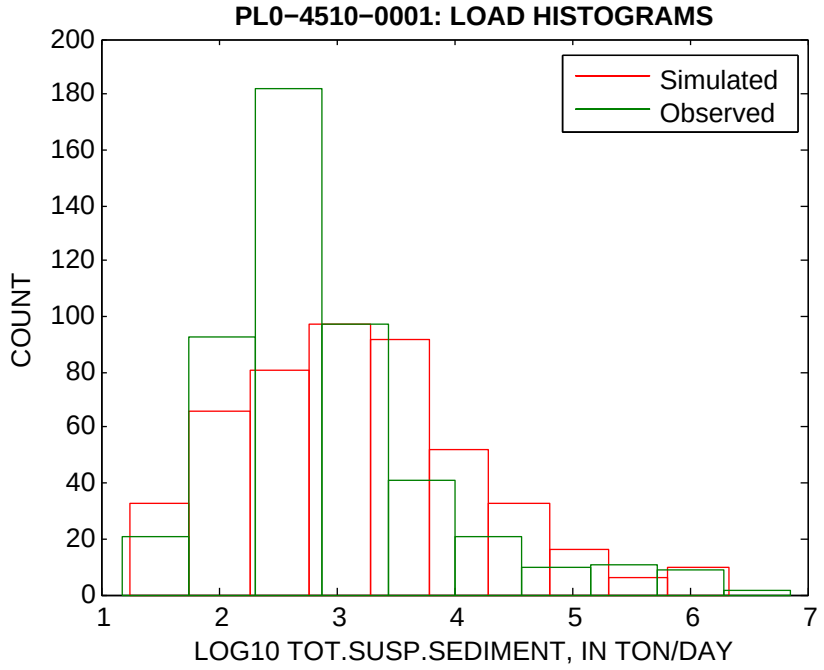


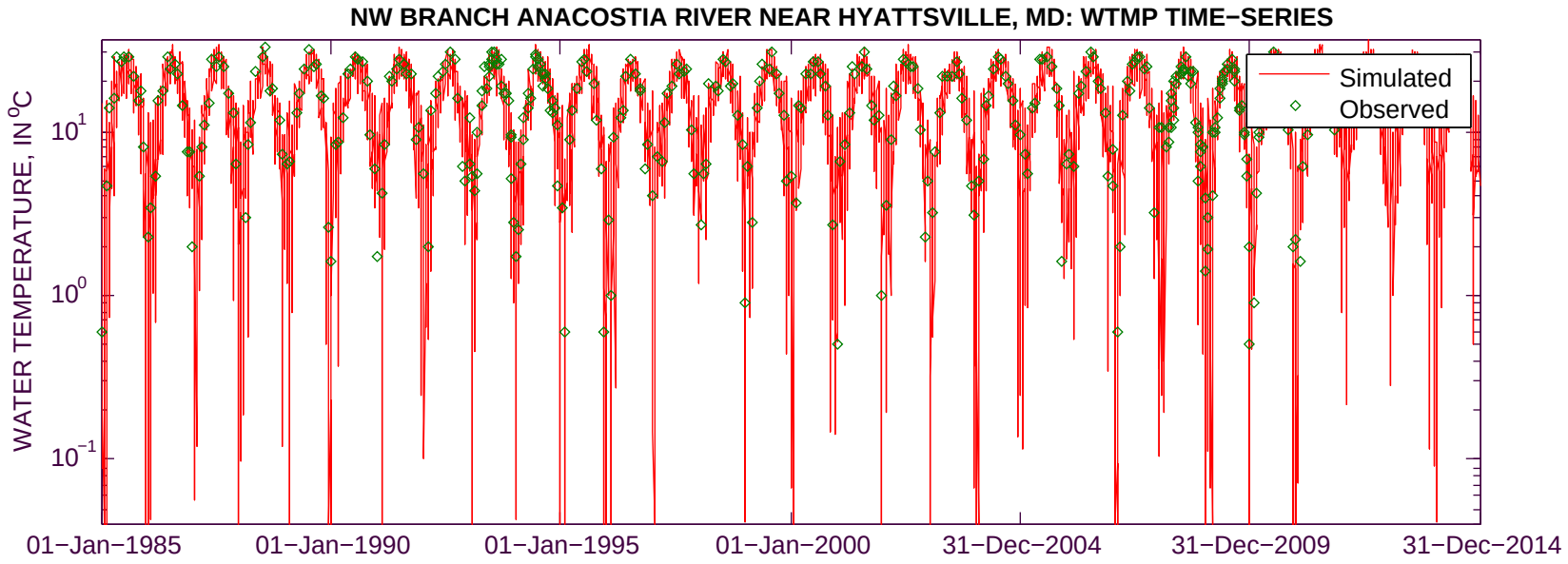
LOAD DATA
LOG10

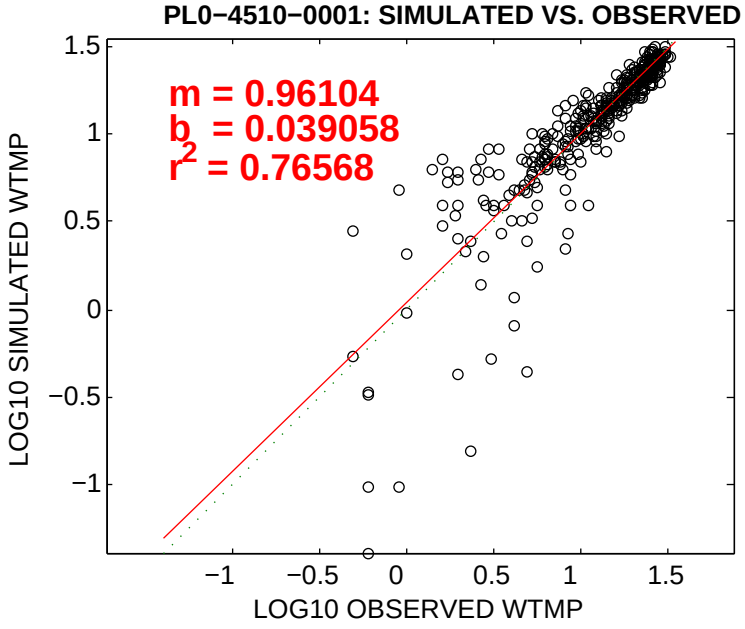


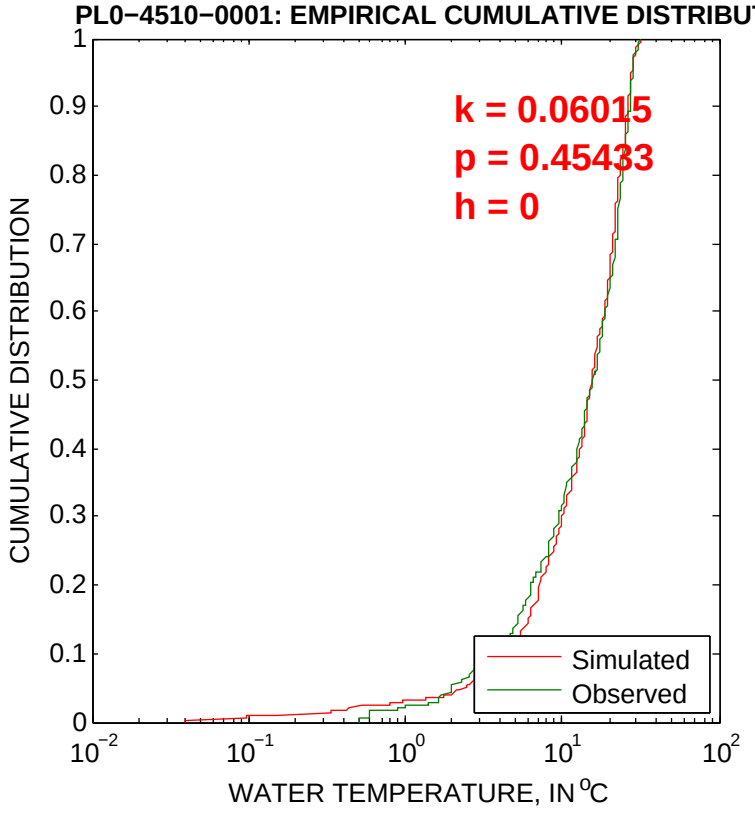












DATA SELECTION

scenario	file
P620171001WQ	WTMP.calib

plot: WTMP - water tempera...

Dates: 1/1/1985 – 12/31/201

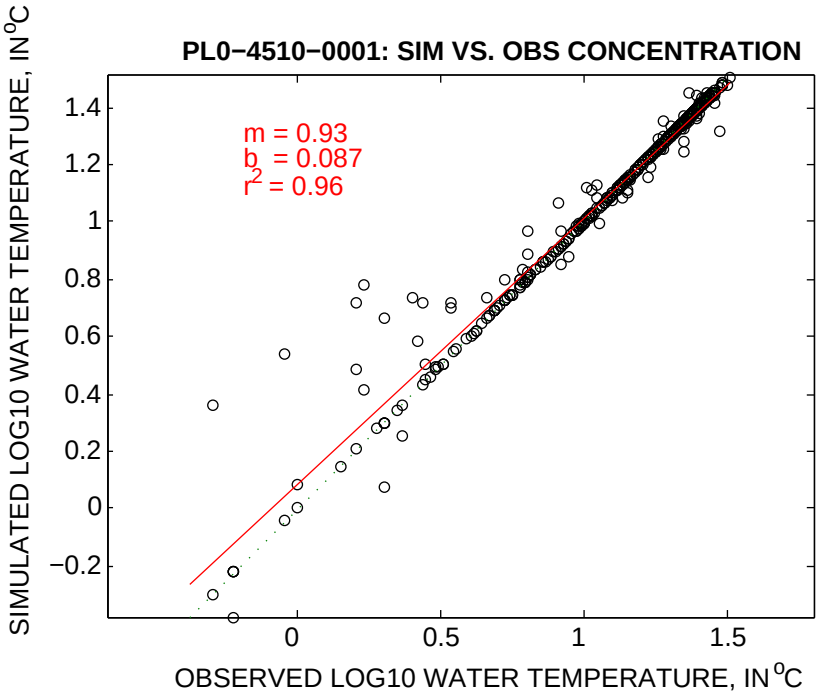
Drive	Directory	Observed
N/A	model	OBS20161101

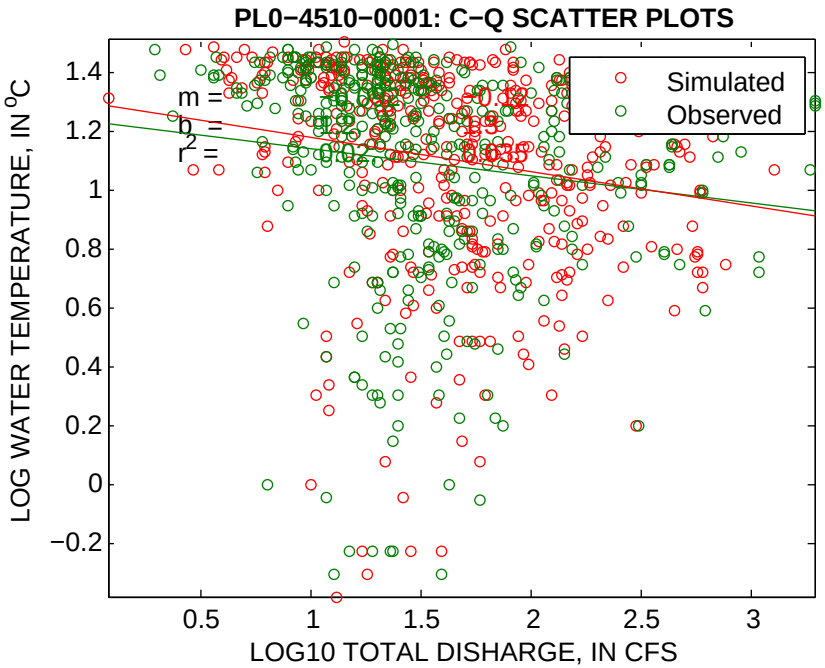
STATISTICS

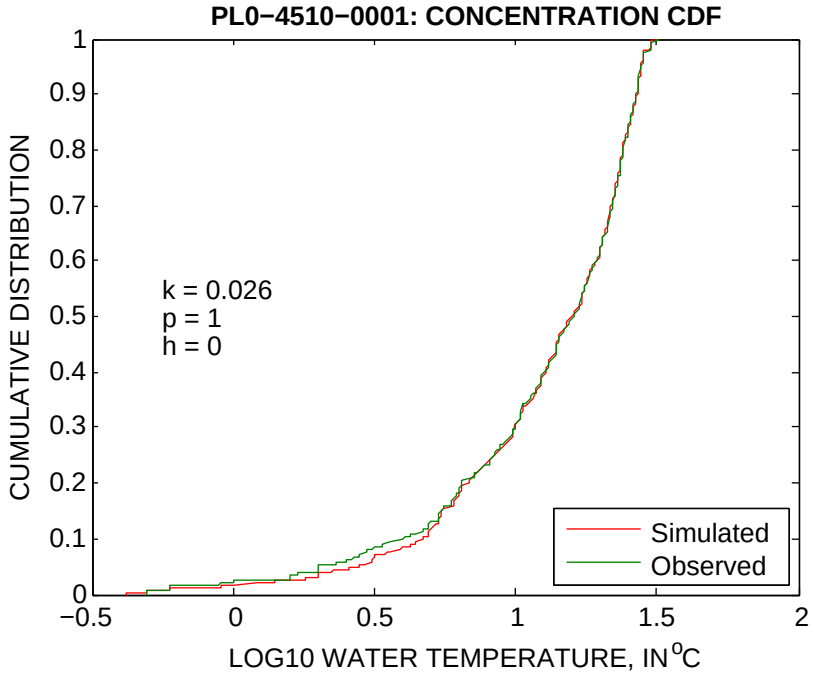
	n	399	399
		observe	simulate
min		0.5	0.040182
		-0.30103	-1.39597
mean		15.5833	15.4986
		1.08298	1.07985
media		15.9	15.586
		1.2014	1.19273
max		32.2	32.026
		1.50786	1.5055
varian		73.3079	65.7571
		0.136918	0.165157
JB		0.001	0.002073
		0.001	0.001
		ra	log
%		-0.543674	-0.289096
err.va		7.08307	0.0389165
rel.std.err		0.966208	0.284232
mod.eff		0.903379	0.715768

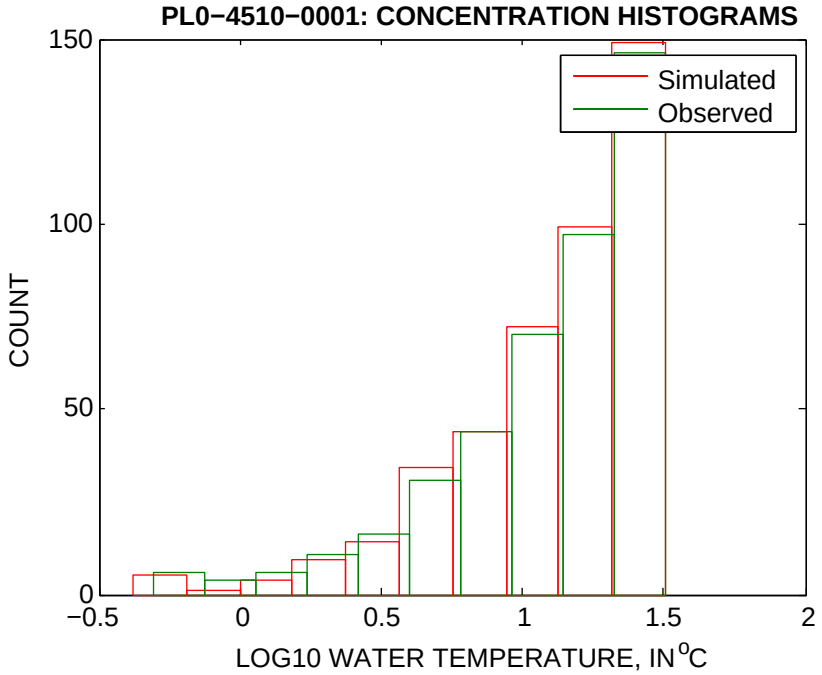
VERSION 2.1

ALL DATA
LOG10

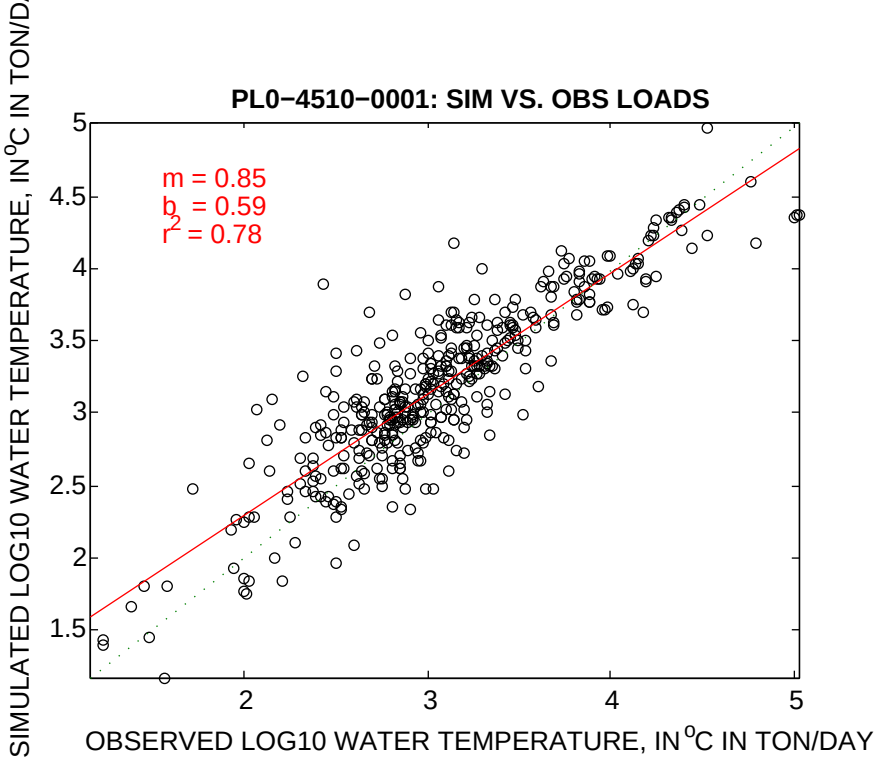


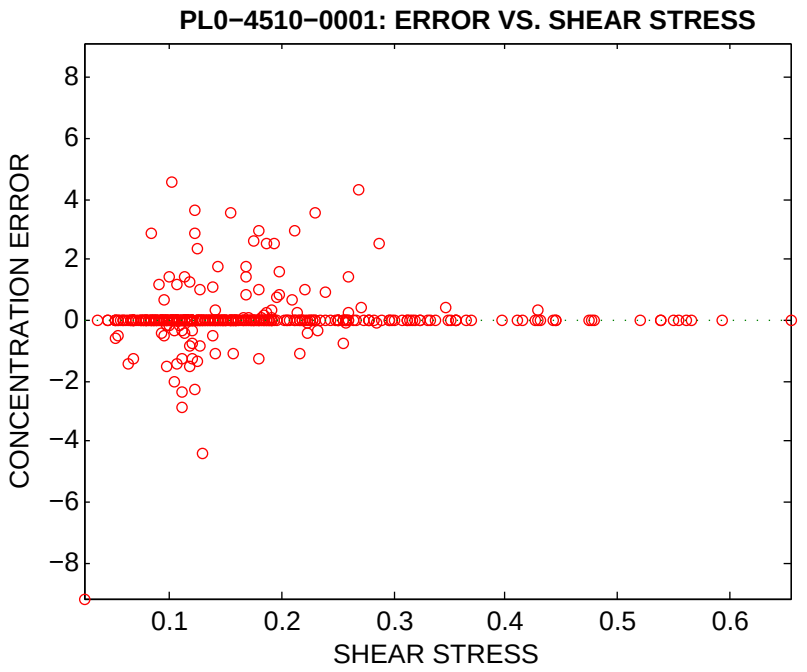


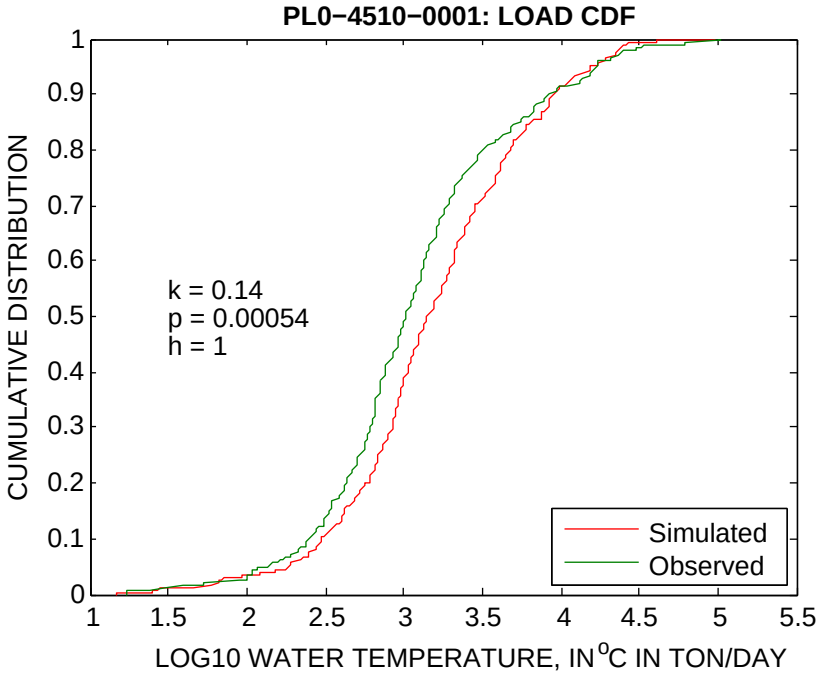


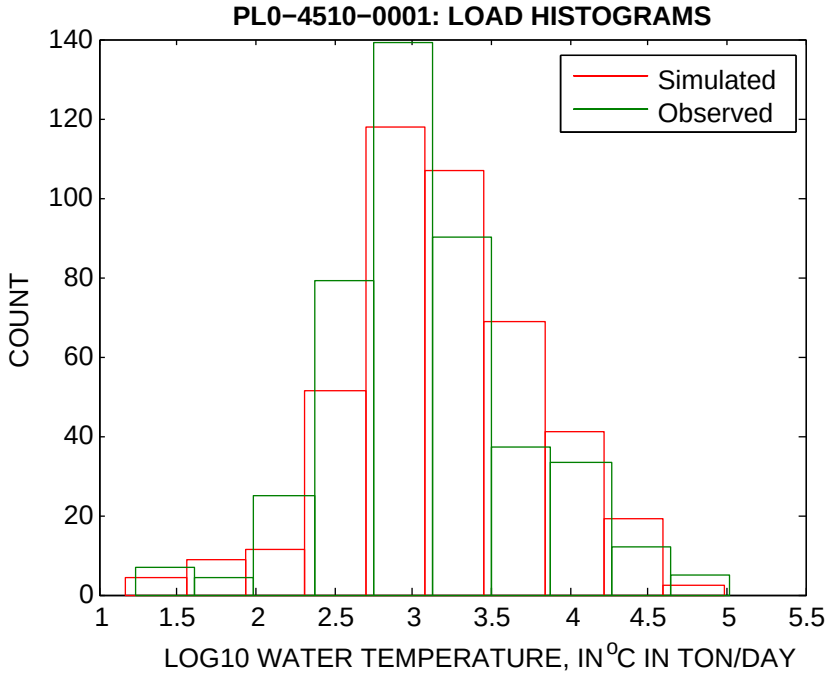


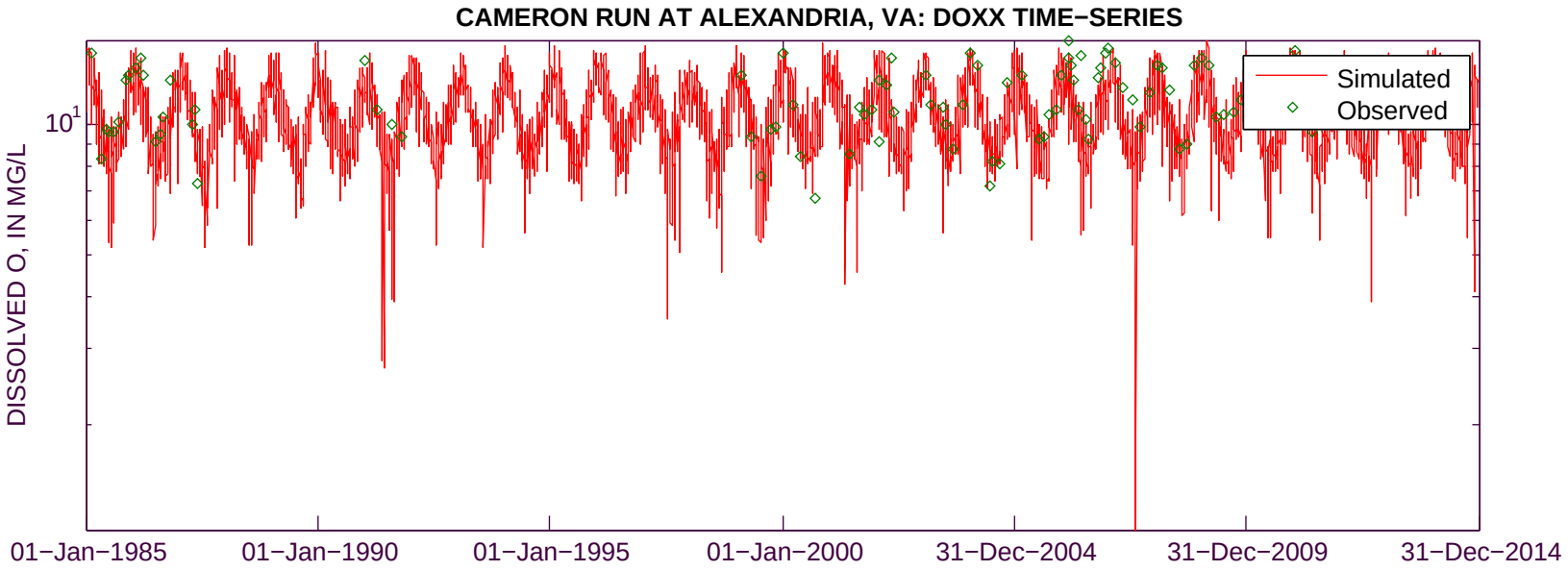
LOAD DATA
LOG10

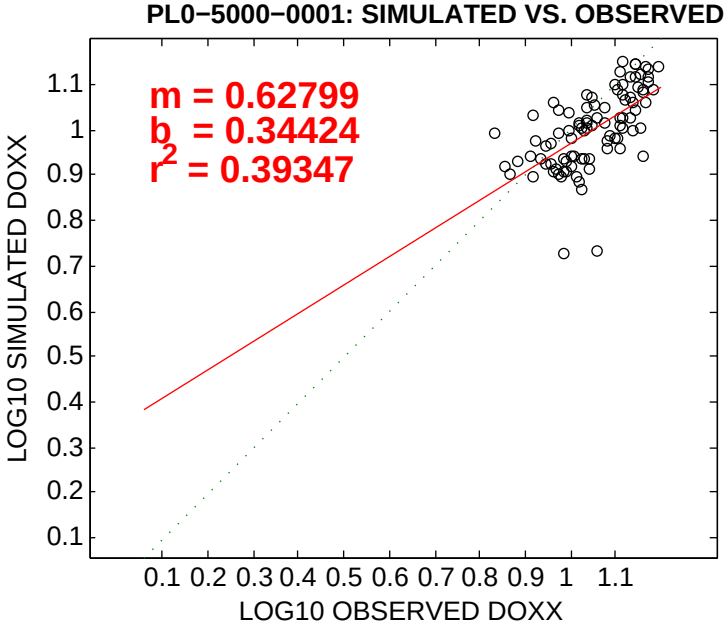


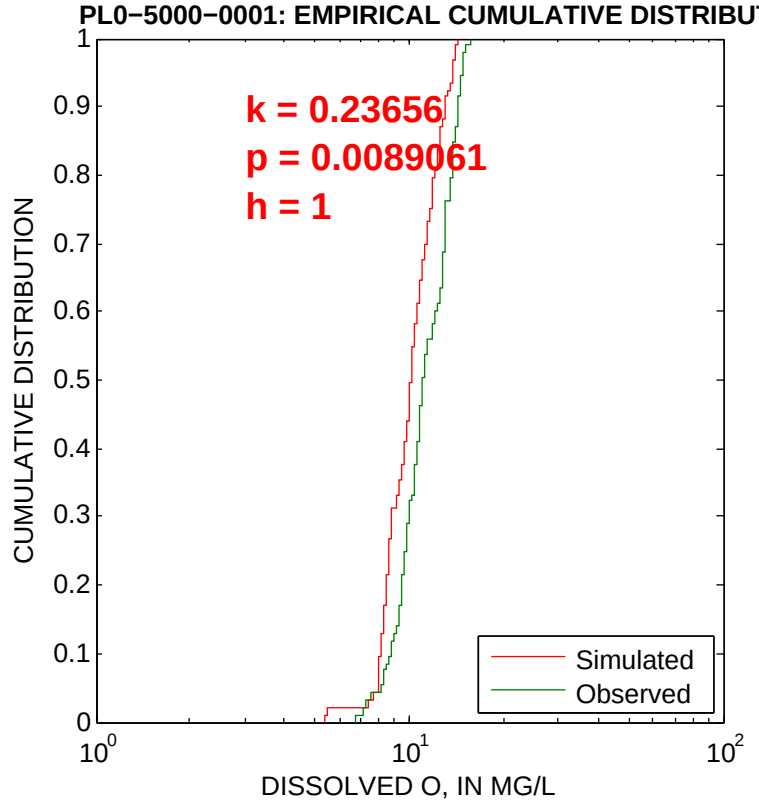












DATA SELECTION

scenario	file
P620171001WQ	DOXX.calib

plot: DOXX - dissolved oxygen

Dates: 1/1/1985 – 12/31/201

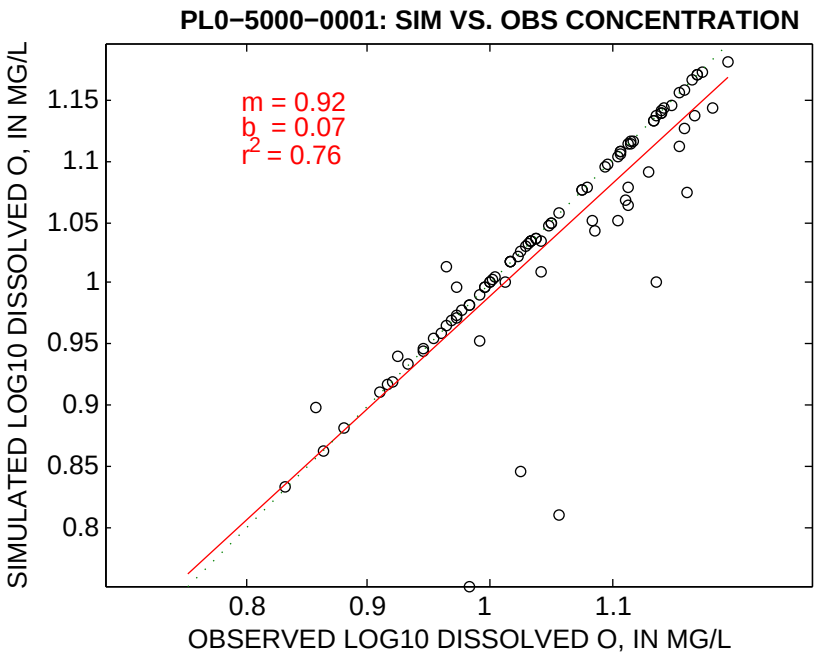
Drive	Directory	Observed
N/A	model	OBS20161101

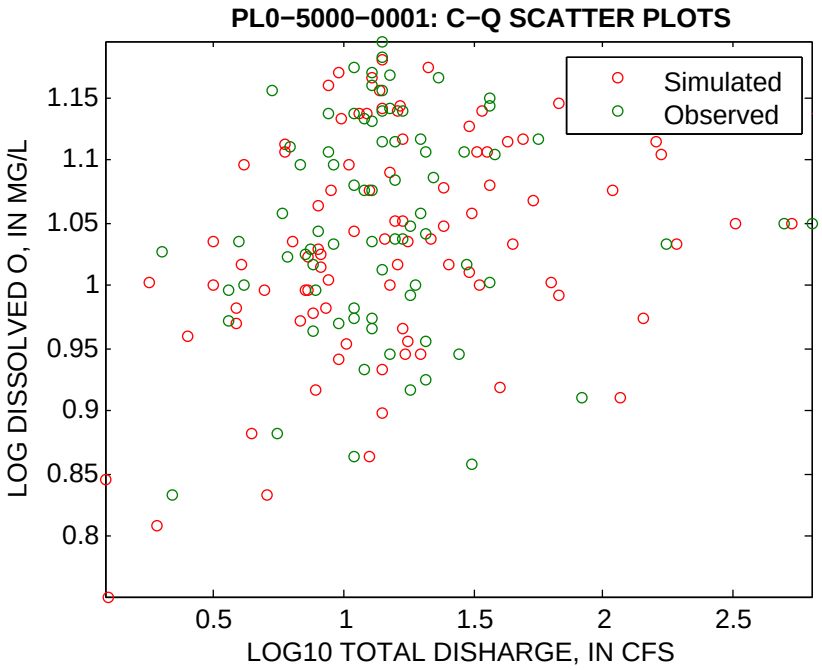
STATISTICS

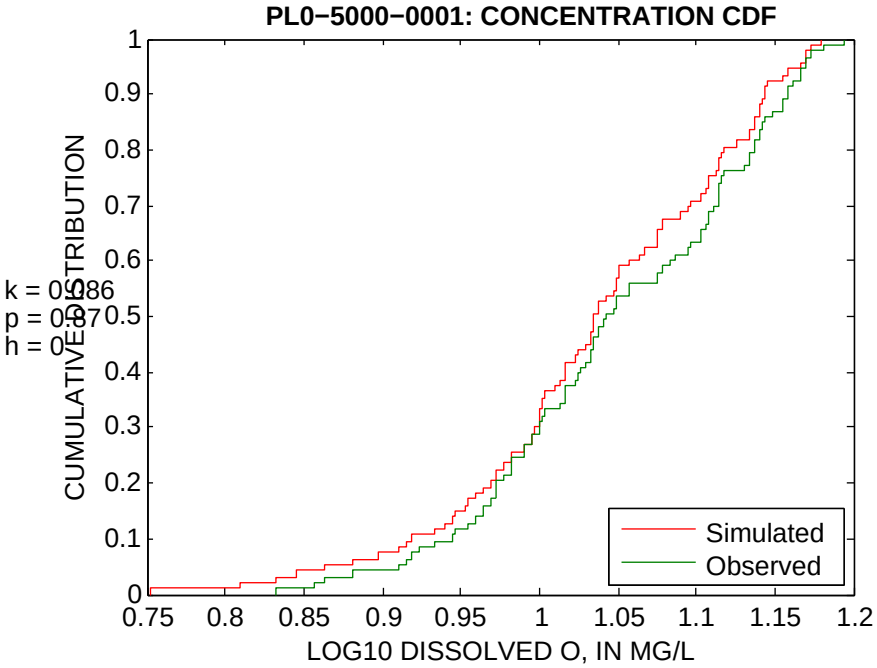
	n	93	93
		observe	simulate
min		6.79	5.3502
		0.83187	0.72837
mean		11.4129	10.2621
		1.04941	1.00326
media		11.02	10.107
		1.04218	1.00462
max		15.67	14.233
		1.19507	1.1533
varian		4.6625	3.77278
		0.0071815	0.00719787
JB		0.102194	0.5
		0.125096	0.078674
		ra	log
%		-10.0837	-4.39752
err.va		4.08354	0.00751237
rel.std.err		0.875828	1.04607
mod.eff		0.124172	-0.0460719

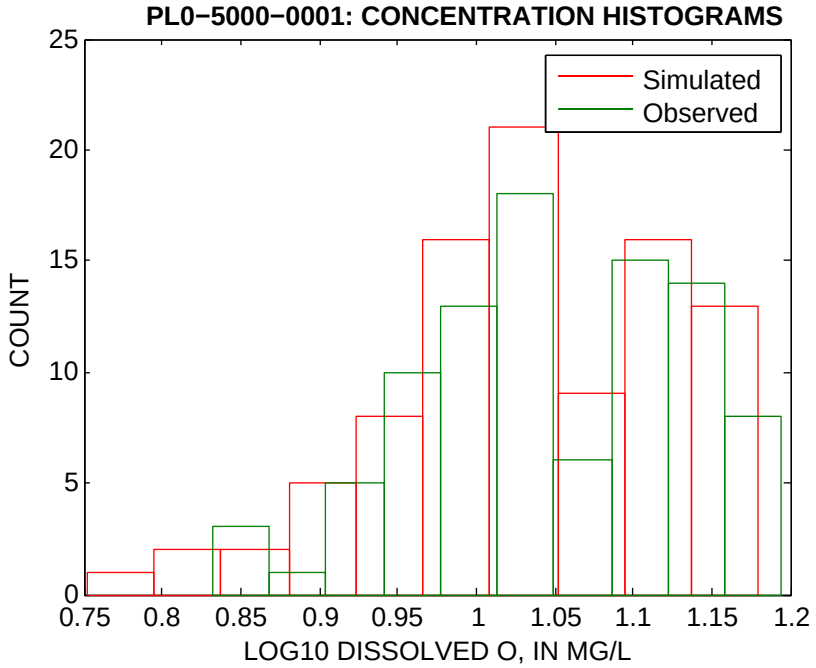
VERSION 2.1

ALL DATA
LOG10

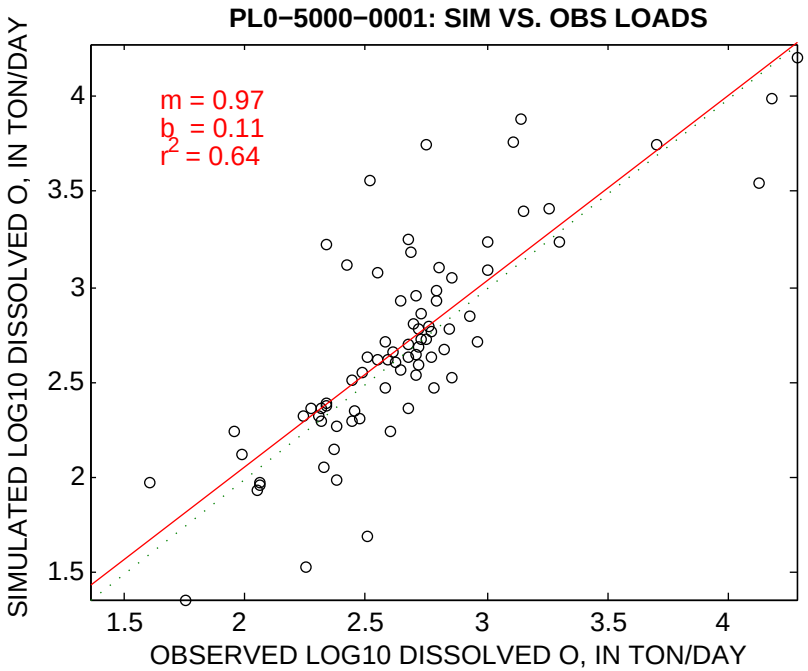


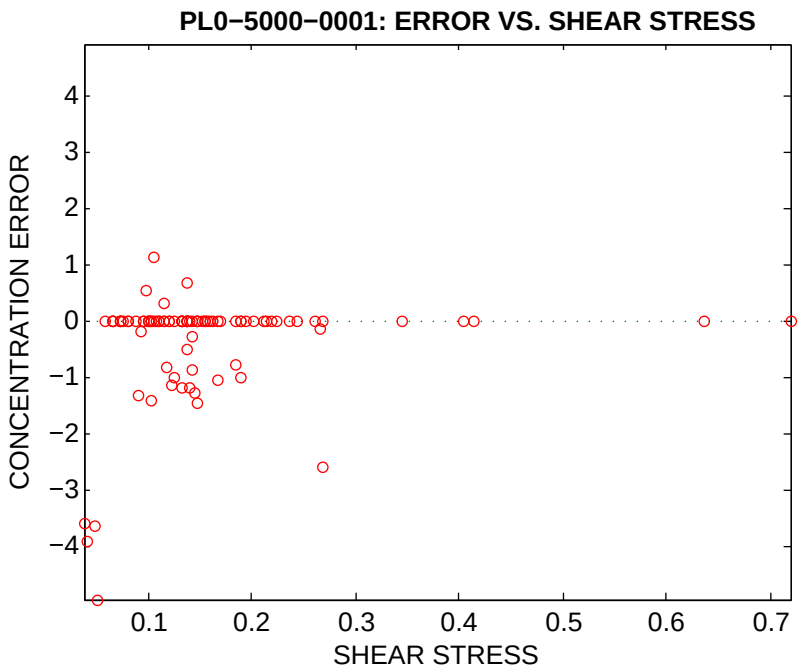


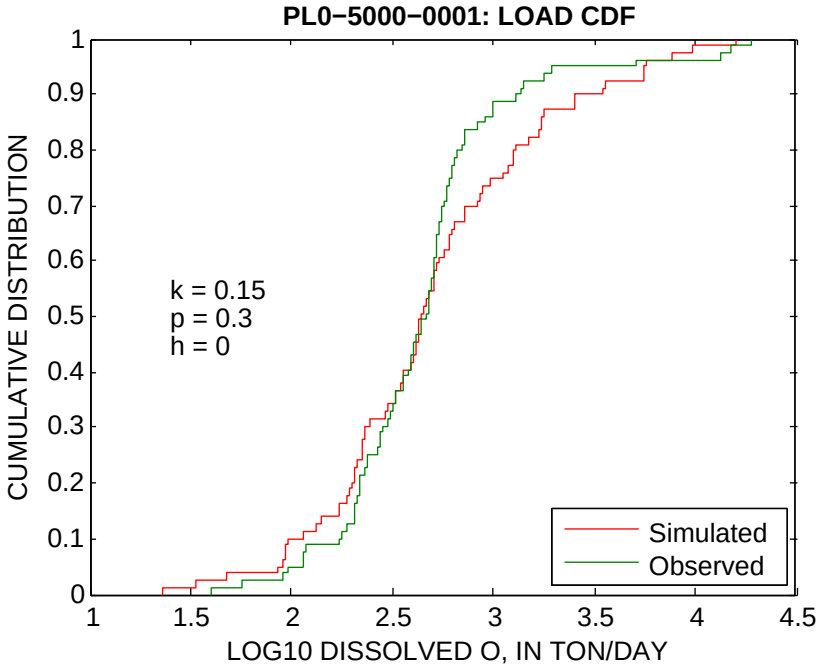


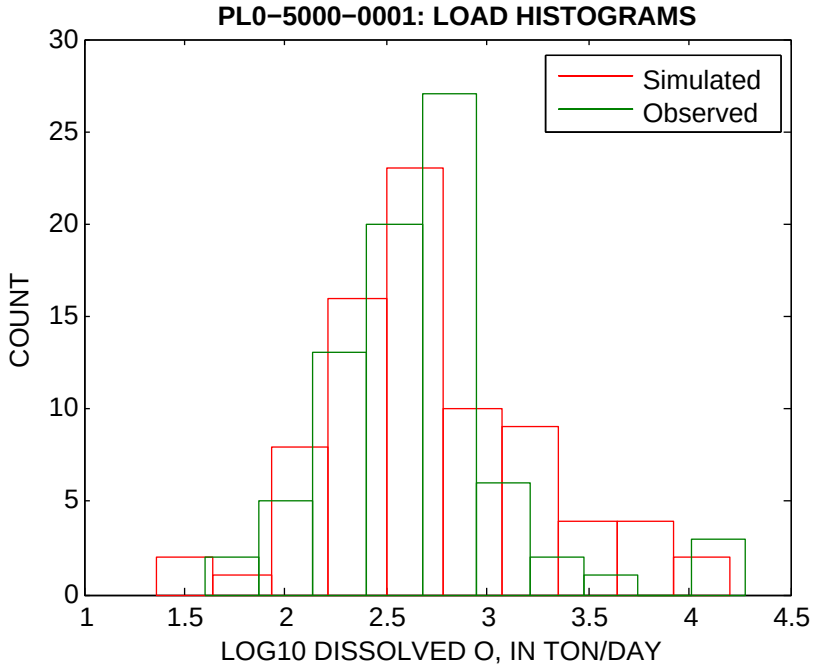


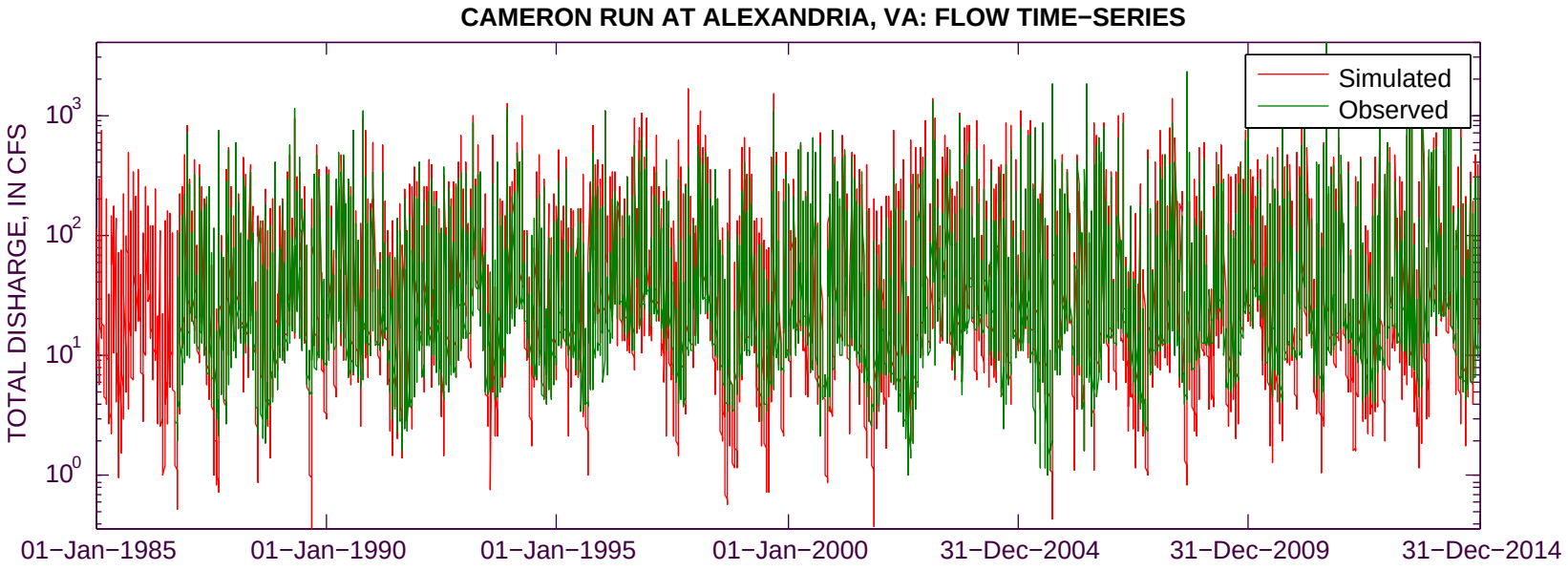
LOAD DATA
LOG10

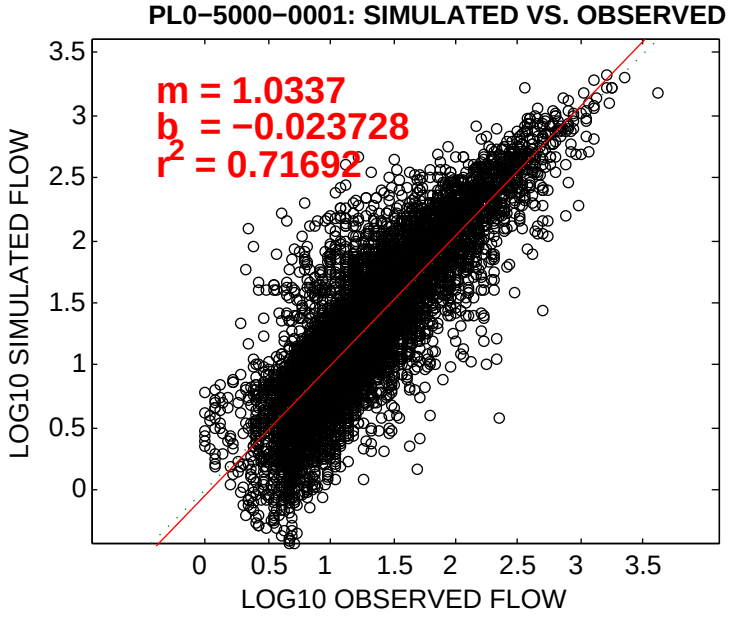


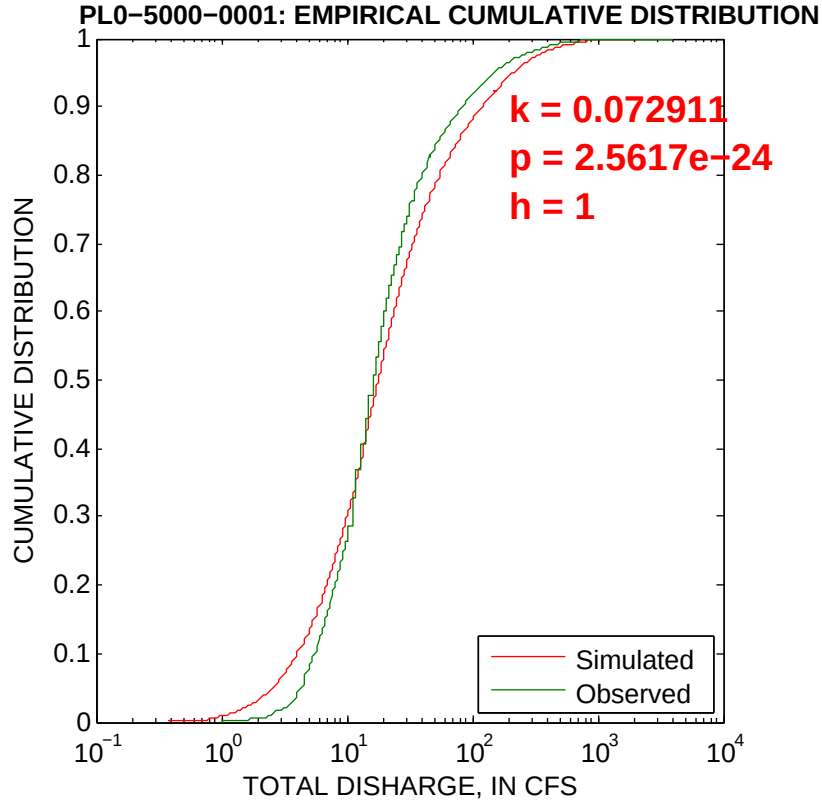












DATA SELECTION

scenario	file
P620171001WQ	FLOW.calib

plot: FLOW - total discharge

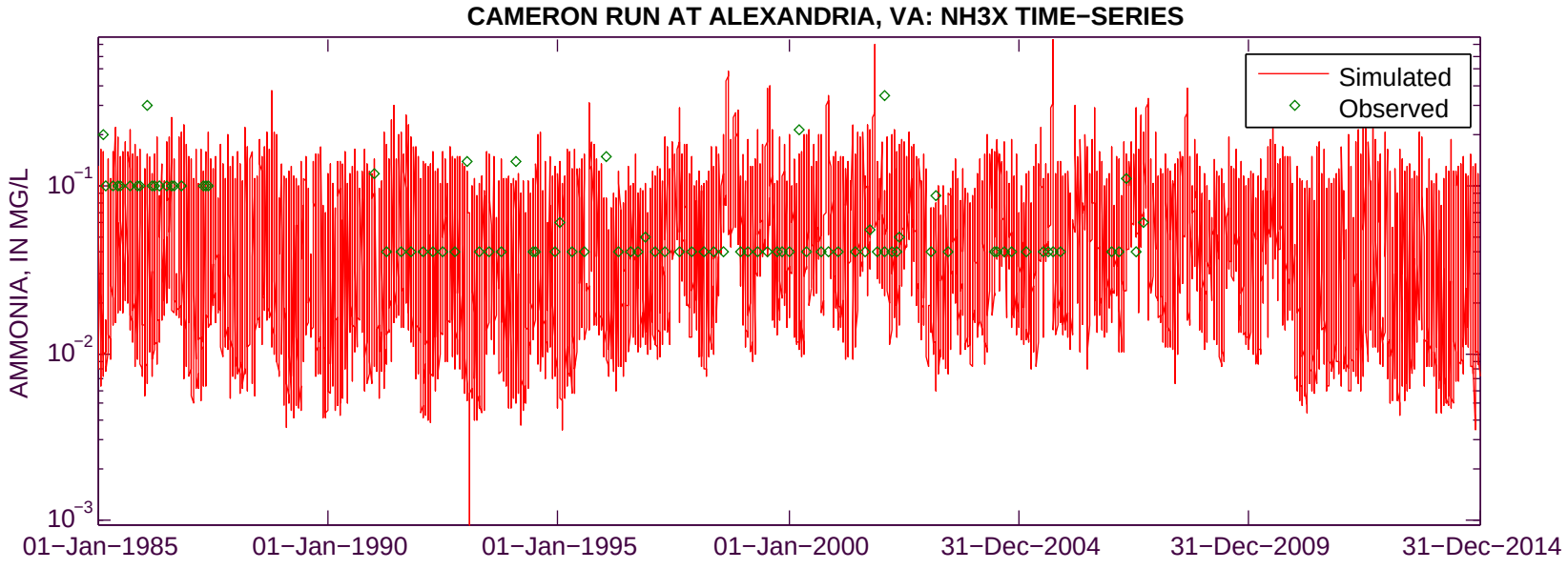
Dates: 1/1/1985 – 12/31/201

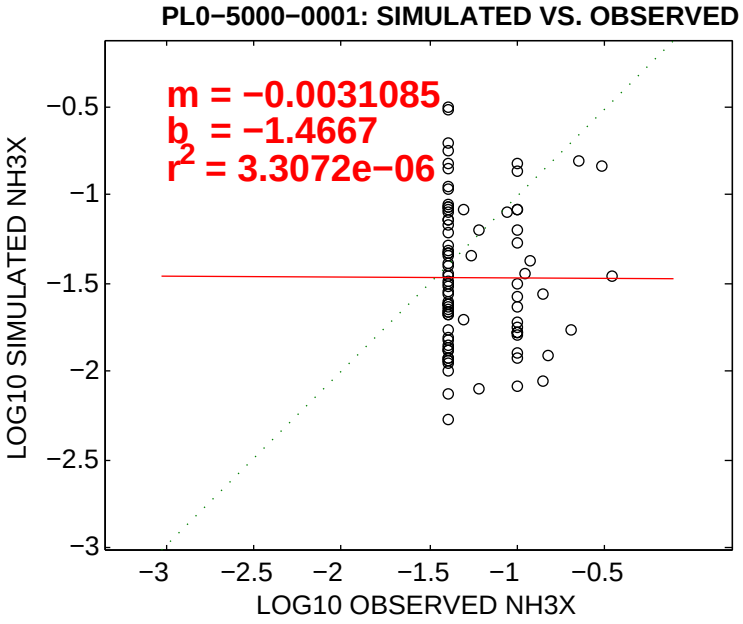
Drive	Directory	Observed
N/A	model	OBS20161101

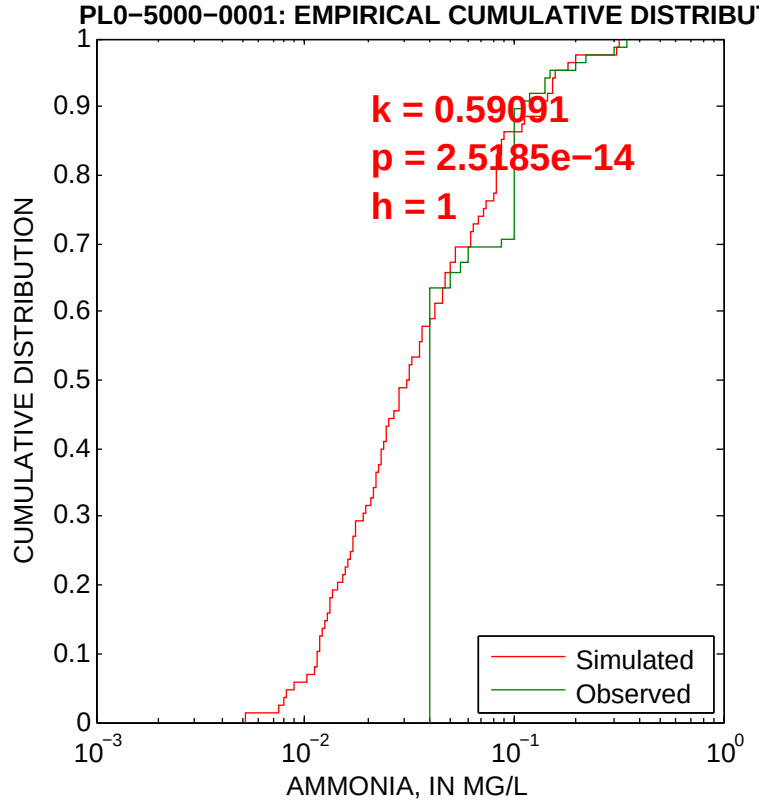
STATISTICS

	n	observe	simulate
		10314	10314
min		1	0.37317
		0	-0.428093
mean		41.264	51.8877
		1.27908	1.2985
media		16	17.9705
		1.20412	1.25456
max		4090	2059.8
		3.61172	3.31383
varian		10674.9	13250.6
		0.216184	0.322234
JB		0.001	0.001
		0.001	0.001
		ra	log
%		25.7456	1.51818
err.va		3971.91	0.0918425
rel.std.err		0.37208	0.424836
mod.eff		0.62792	0.575164

VERSION 2.1







DATA SELECTION

scenario	file
P620171001WQ	NH3X.calib

plot: NH3X - ammonia

Dates: 1/1/1985 – 12/31/201

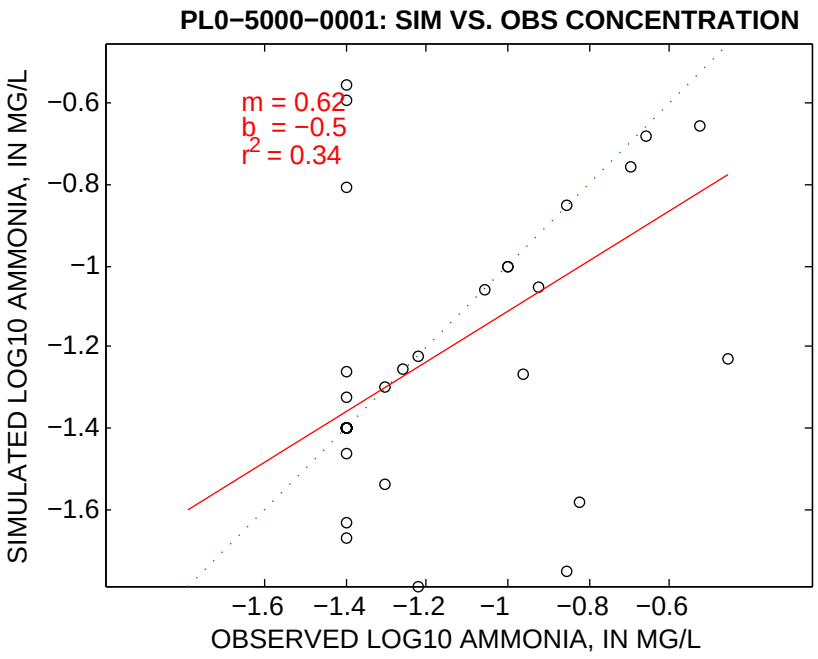
Drive	Directory	Observed
N/A	model	OBS20161101

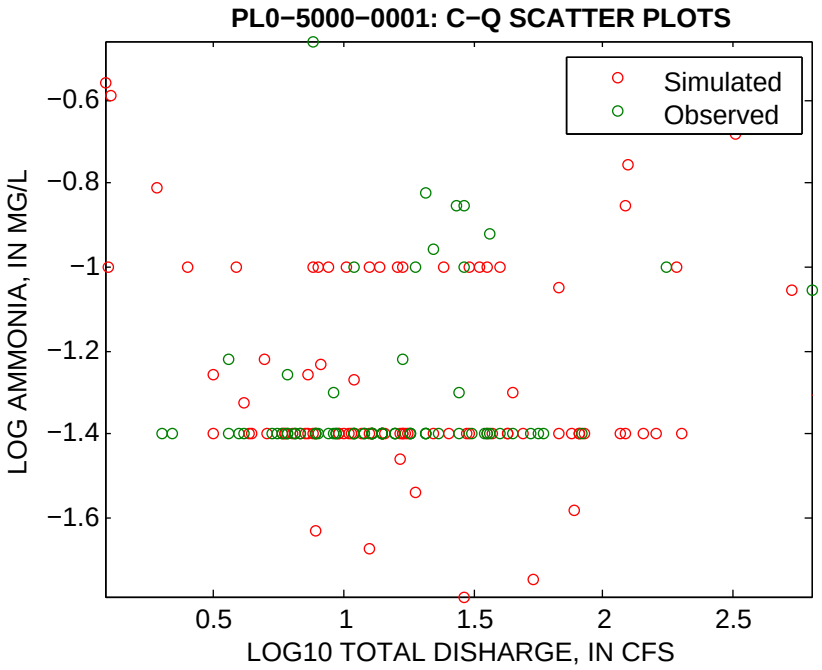
STATISTICS

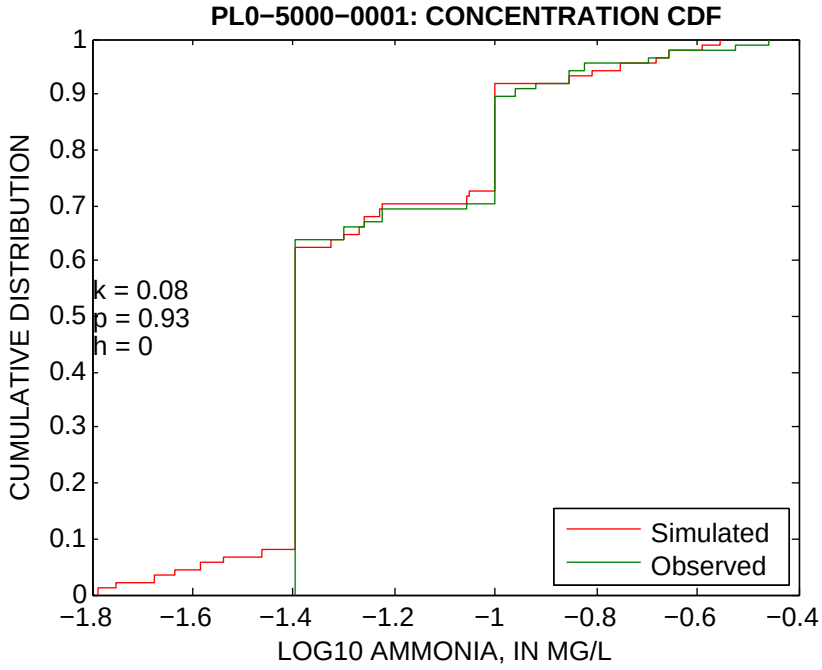
	n	88	88
		observe	simulate
min		0.04	0.0052609
		-1.39794	-2.27894
mean		0.0685535	0.0538123
		-1.2431	-1.46279
media		0.04	0.030876
		-1.39794	-1.5104
max		0.35	0.31843
		-0.455932	-0.496986
varian		0.00296598	0.00352147
		0.0555188	0.162211
JB		0.001	0.001
		0.001307	0.125243
		ra	log
%		-21.5033	17.6728
err.va		0.00651103	0.266894
rel.std.err		2.19524	4.80727
mod.eff		-1.19524	-3.80727

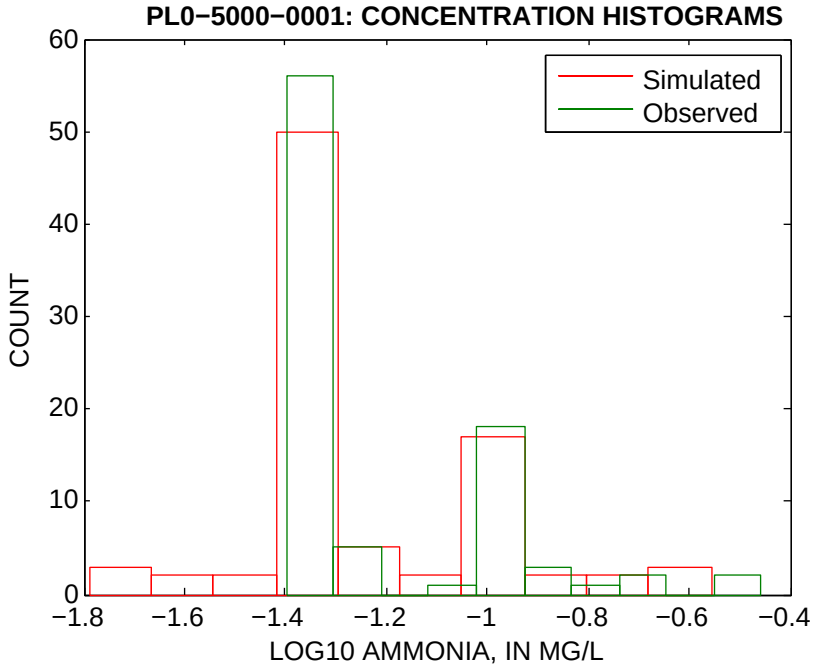
VERSION 2.1

ALL DATA
LOG10

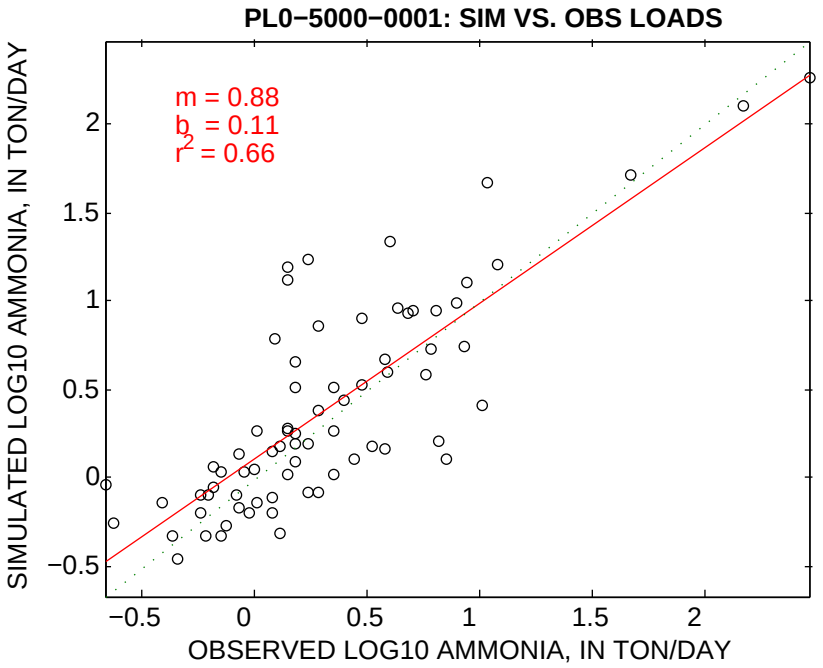


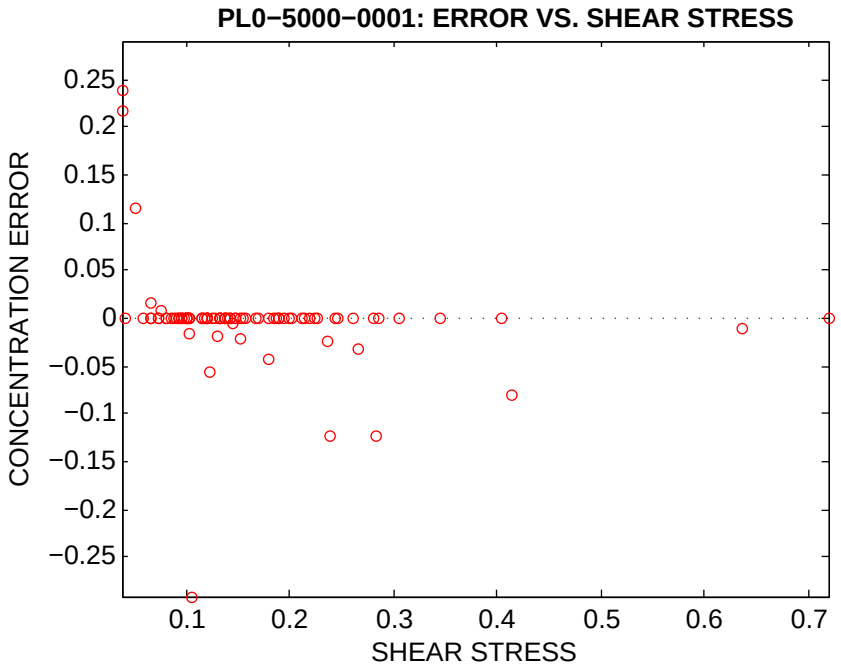


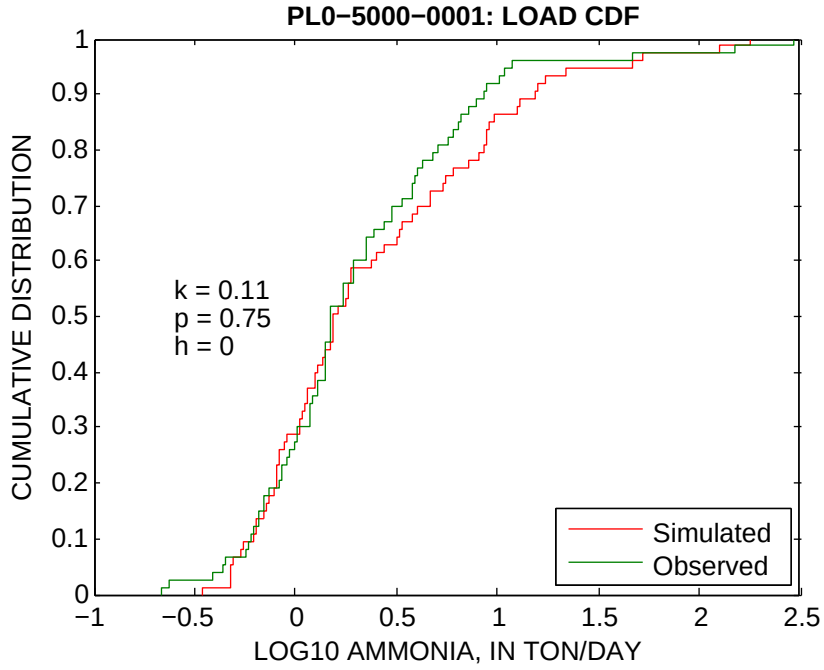


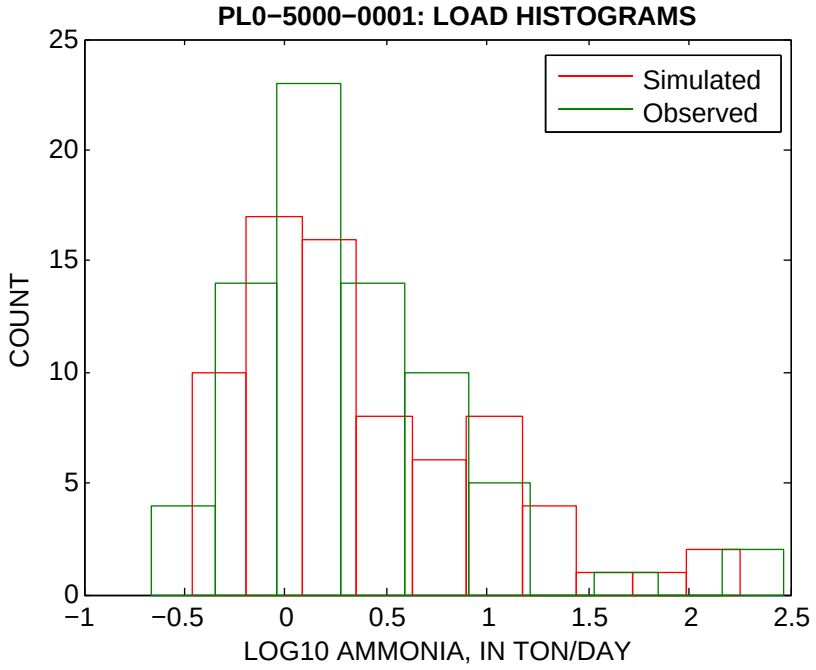


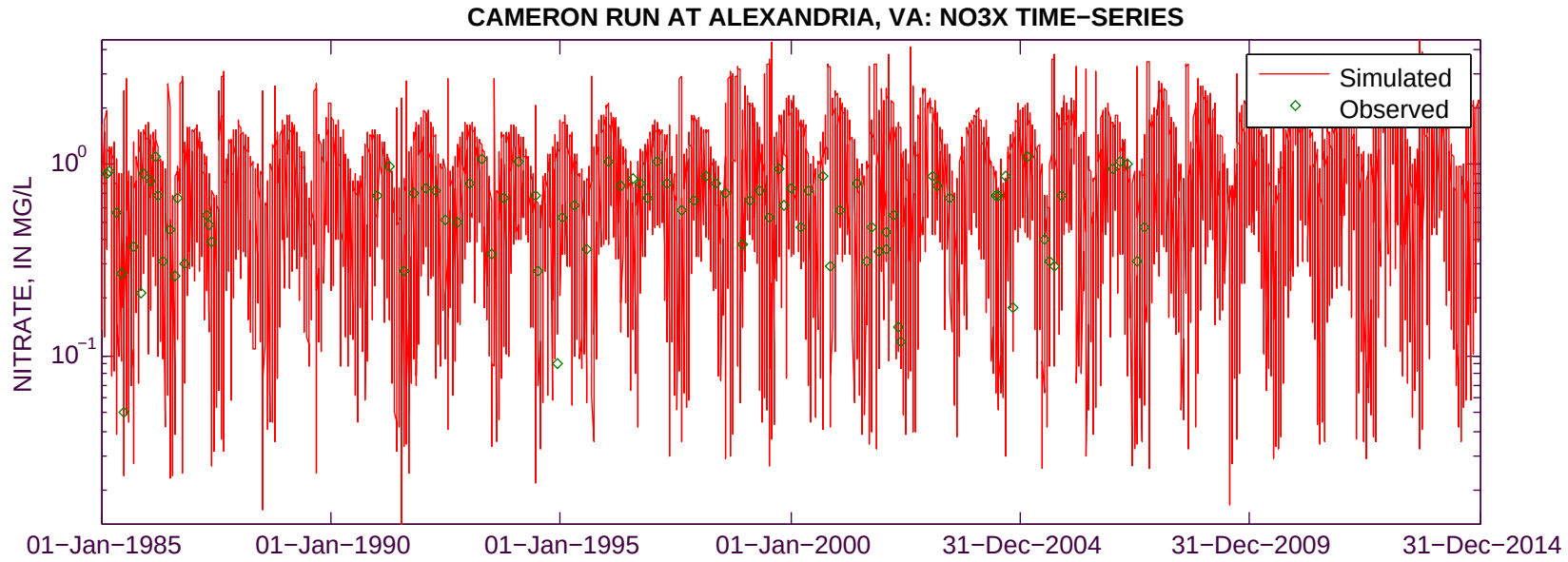
LOAD DATA
LOG10

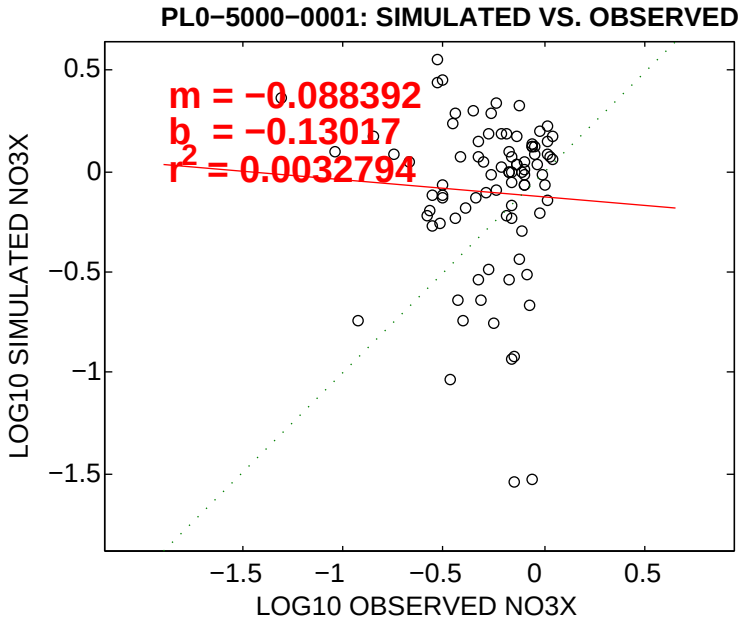


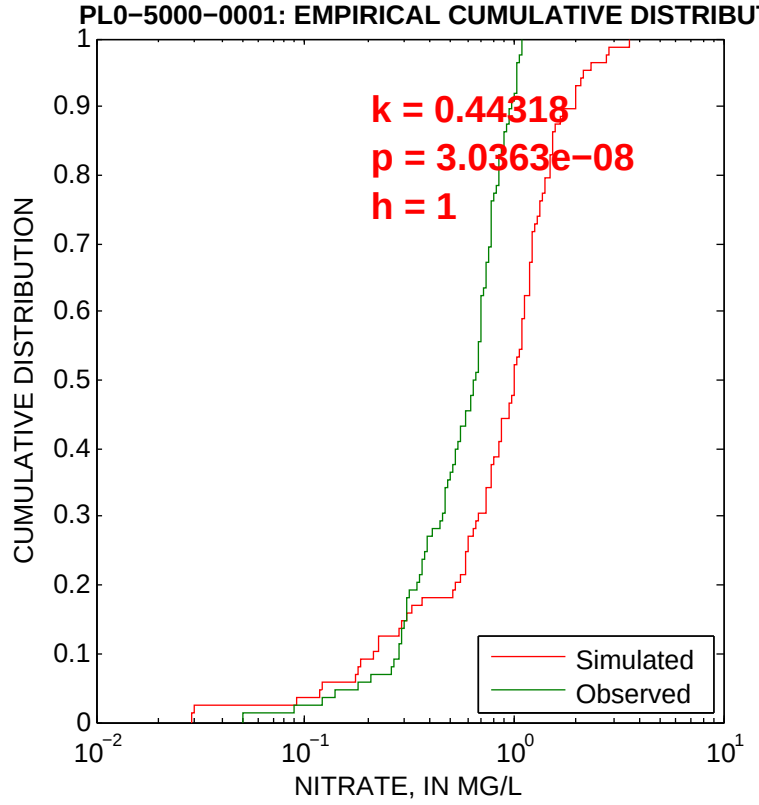












DATA SELECTION

scenario	file
P620171001WQ	NO3X.calib

plot: NO3X - nitrate

Dates: 1/1/1985 – 12/31/201

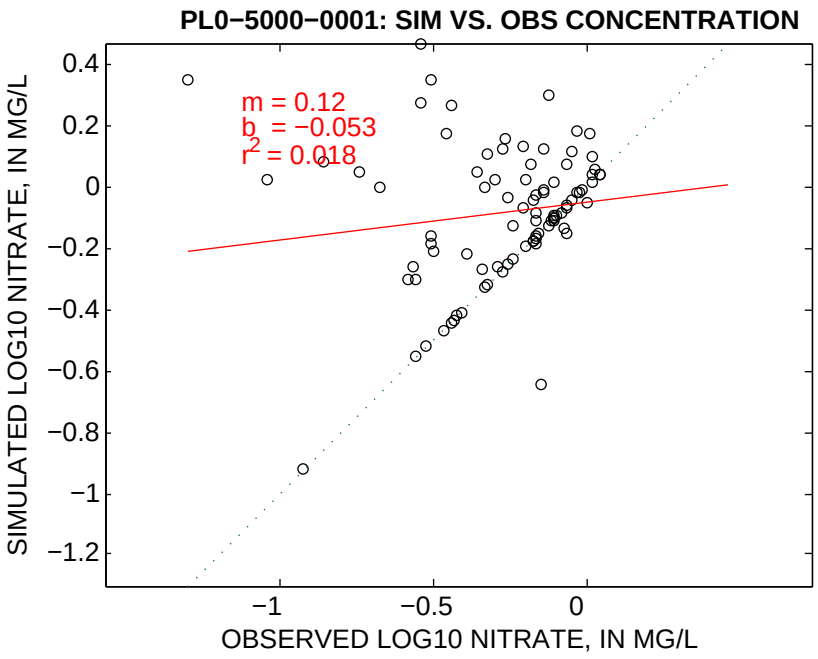
Drive	Directory	Observed
N/A	model	OBS20161101

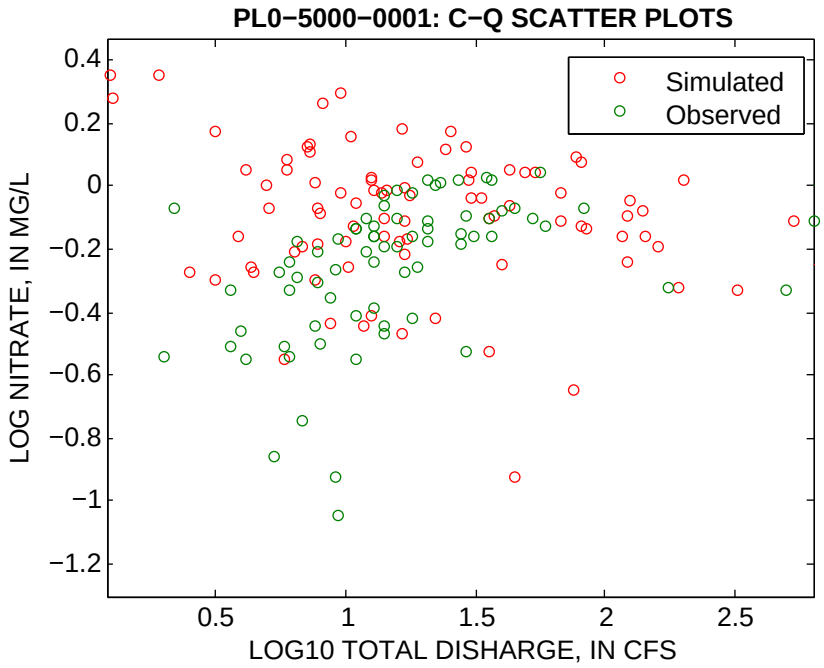
STATISTICS

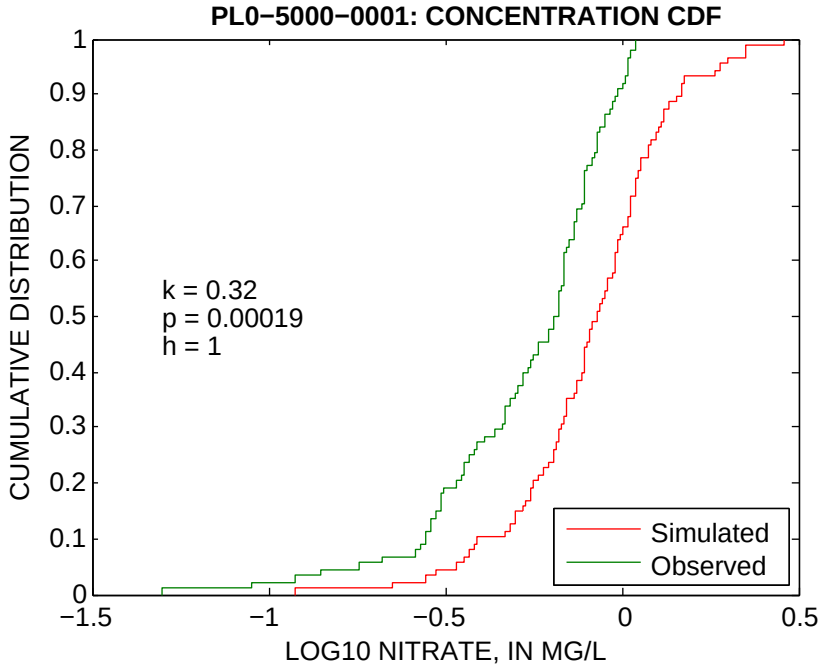
	n	88	88
		observe	simulate
min		0.05	0.02901
		-1.30103	-1.53745
mean		0.610085	1.0332
		-0.271334	-0.106185
media		0.65	1.00046
		-0.187138	0.00020132
max		1.1	3.5517
		0.0413927	0.550436
varian		0.0696994	0.426509
		0.0638507	0.152125
JB		0.154564	0.001151
		0.001	0.001
		ra	log
%		69.3535	-60.8657
err.va		0.706581	0.254851
rel.std.err		10.1376	3.99137
mod.eff		-9.13756	-2.99137

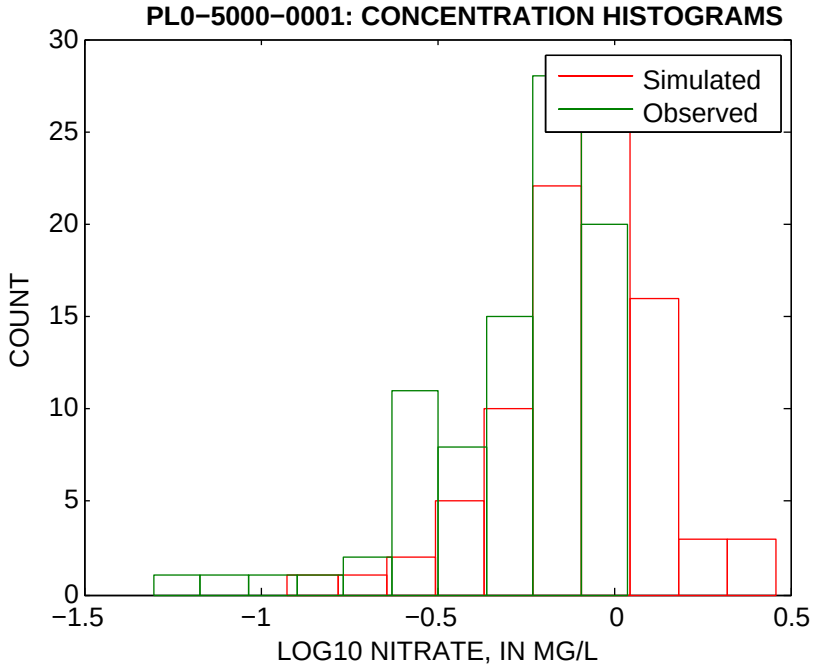
VERSION 3.1

ALL DATA
LOG10

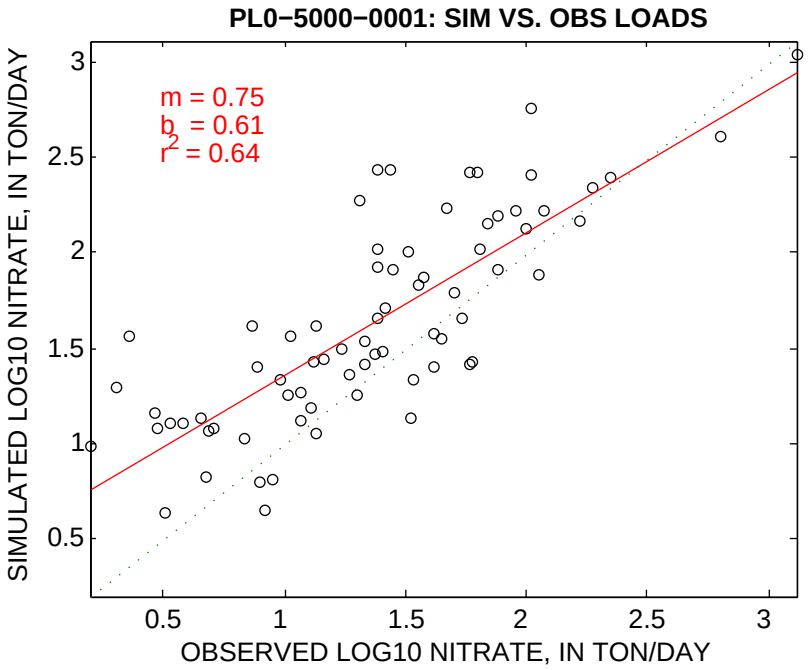


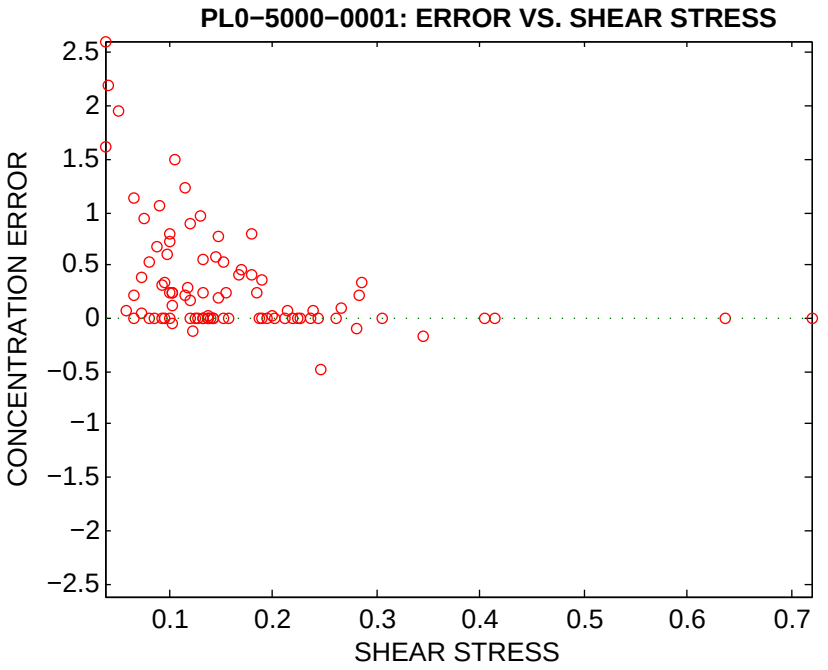


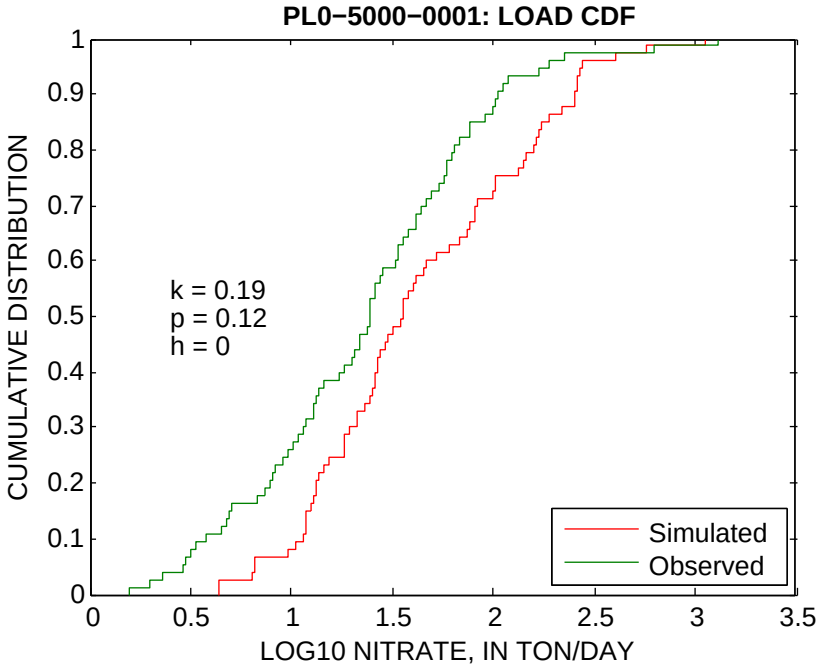


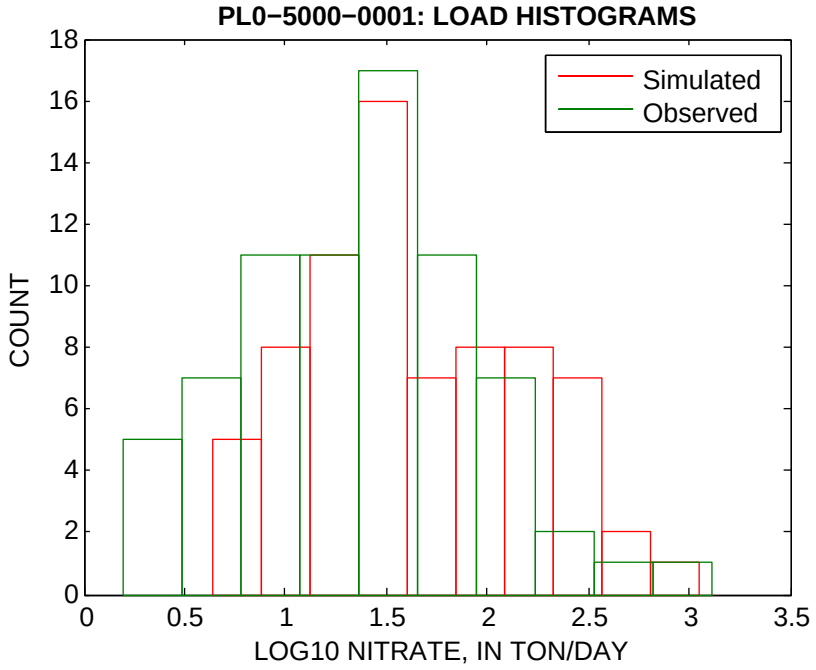


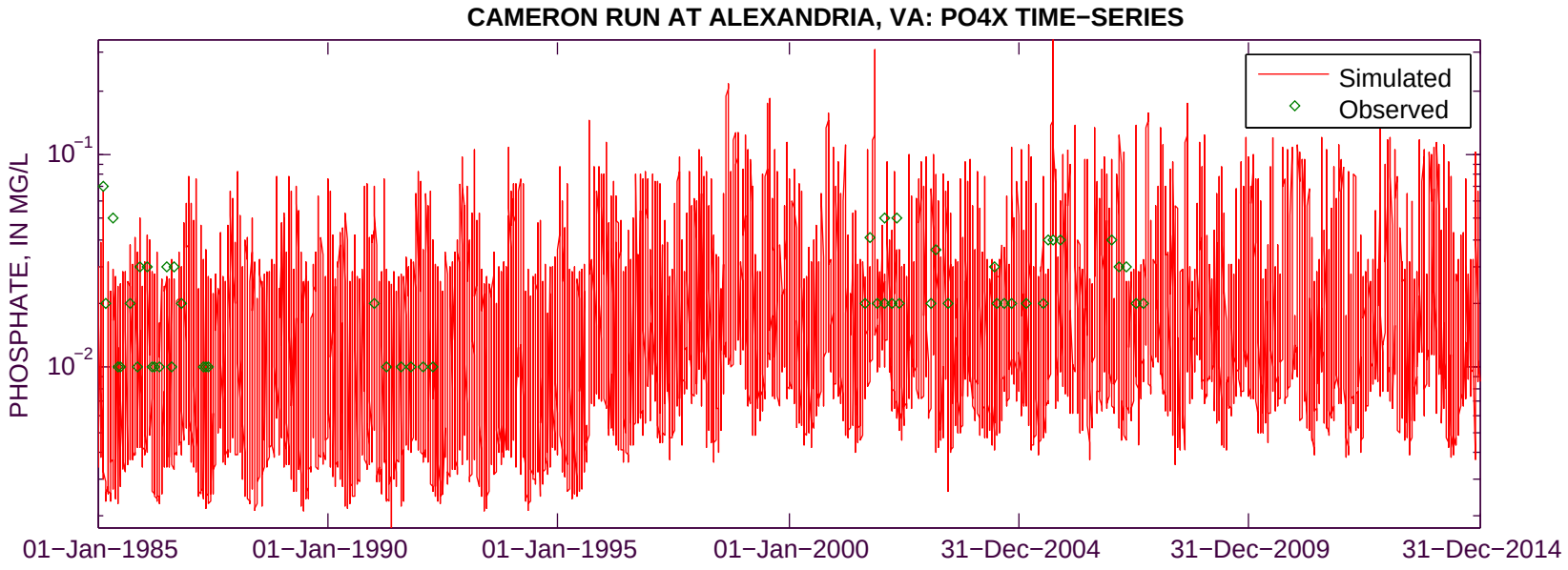
LOAD DATA
LOG10

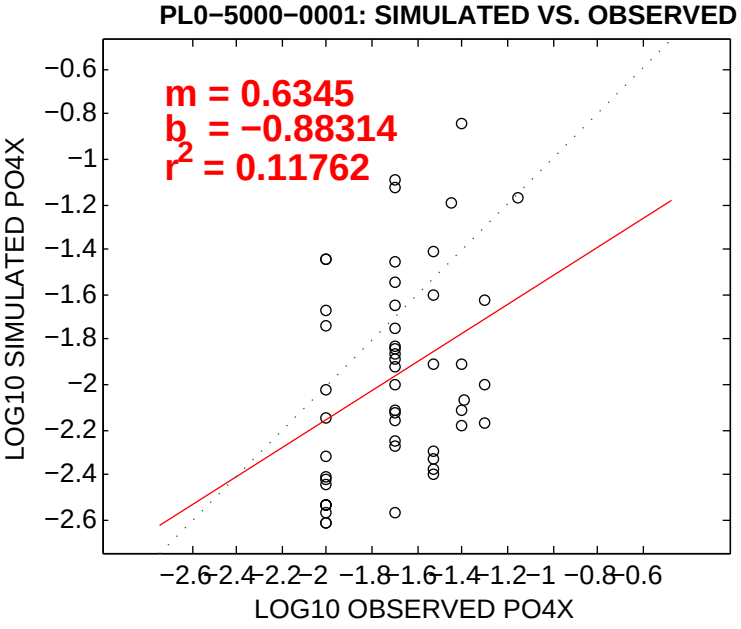


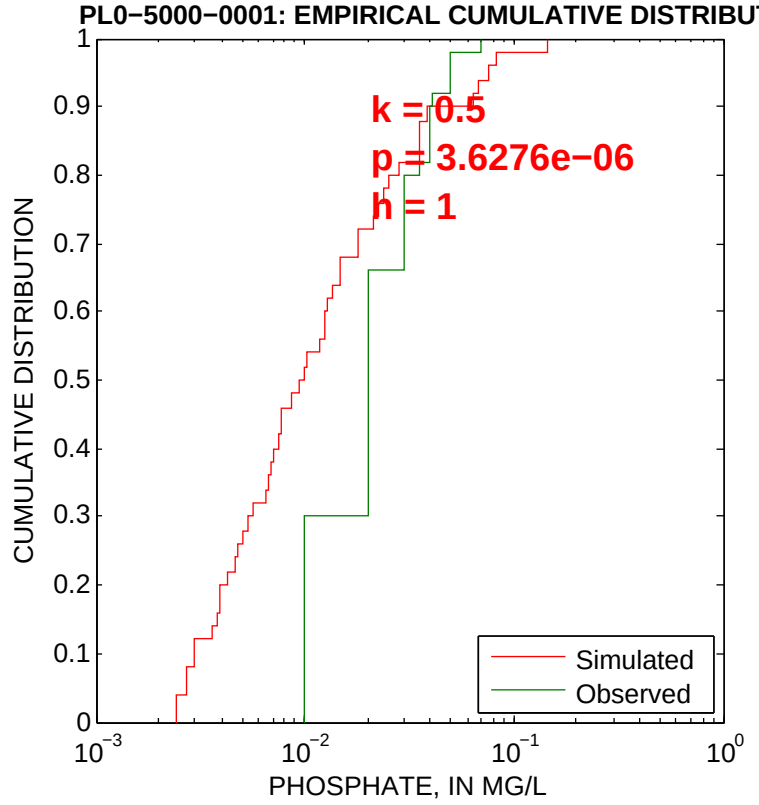












DATA SELECTION

scenario	file
P620171001WQ	PO4X.calib

plot: PO4X - phosphate

Dates: 1/1/1985 – 12/31/201

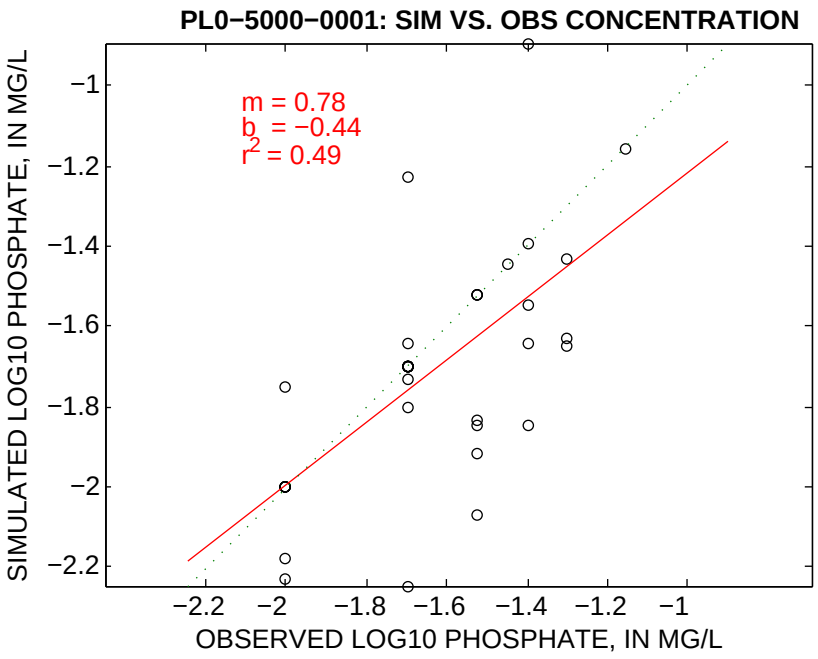
Drive	Directory	Observed
N/A	model	OBS20161101

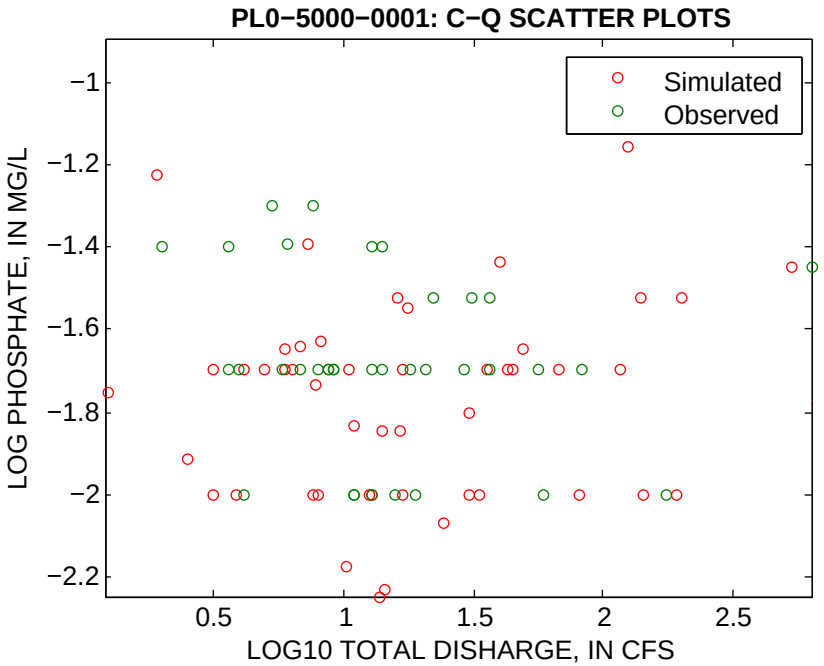
STATISTICS

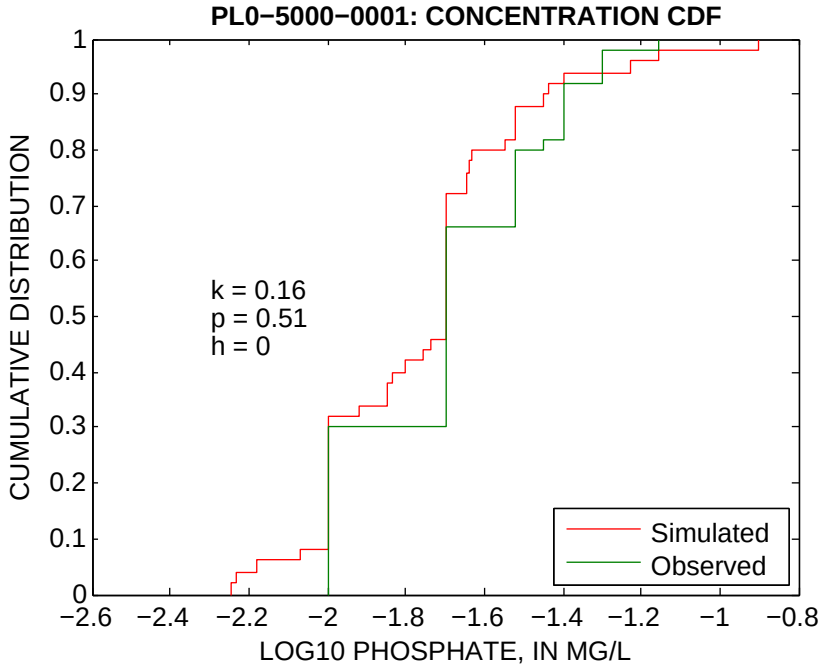
	n	50	50
		observe	simulate
min		0.01	0.0024246
		-2	-2.61536
mean		0.0235225	0.0195716
		-1.69464	-1.95839
media		0.02	0.00977235
		-1.69897	-2.01014
max		0.07	0.14488
		-1.1549	-0.838992
varian		0.00018453	0.00069354
		0.0584824	0.200178
JB		0.006383	0.001
		0.213067	0.12442
		ra	log
%		-16.7962	15.5639
err.va		0.00068366	0.255431
rel.std.err		3.70485	4.36765
mod.eff		-2.70485	-3.36765

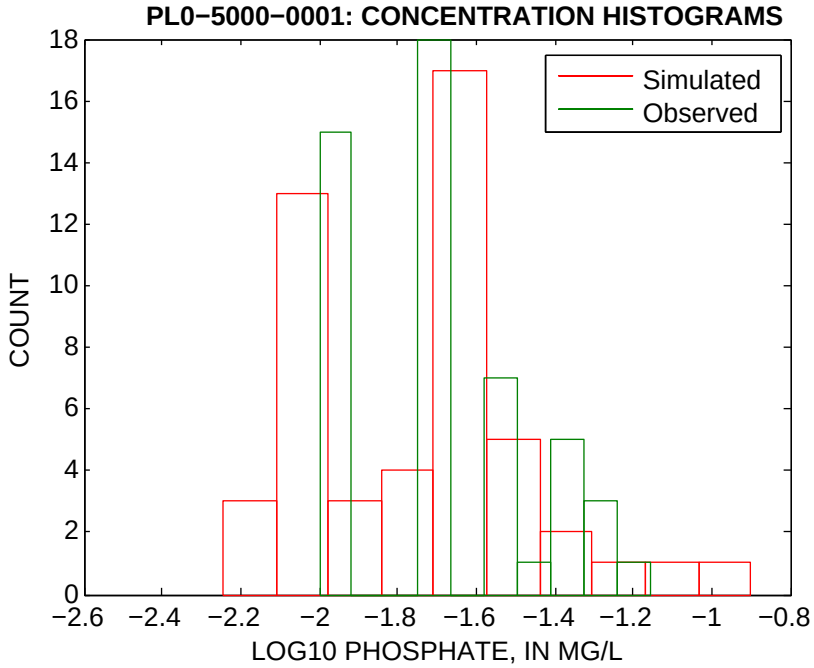
VERSION

ALL DATA
LOG10

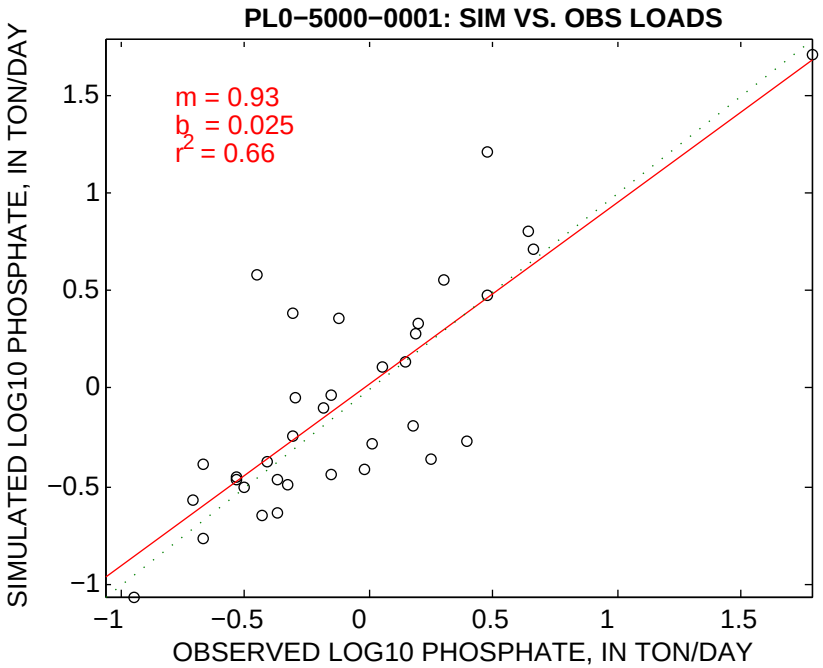


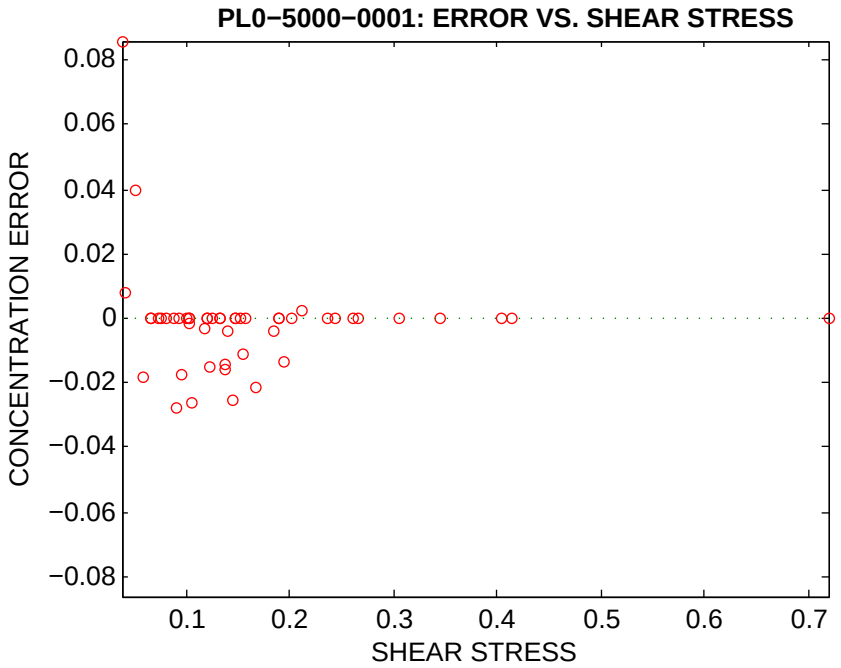


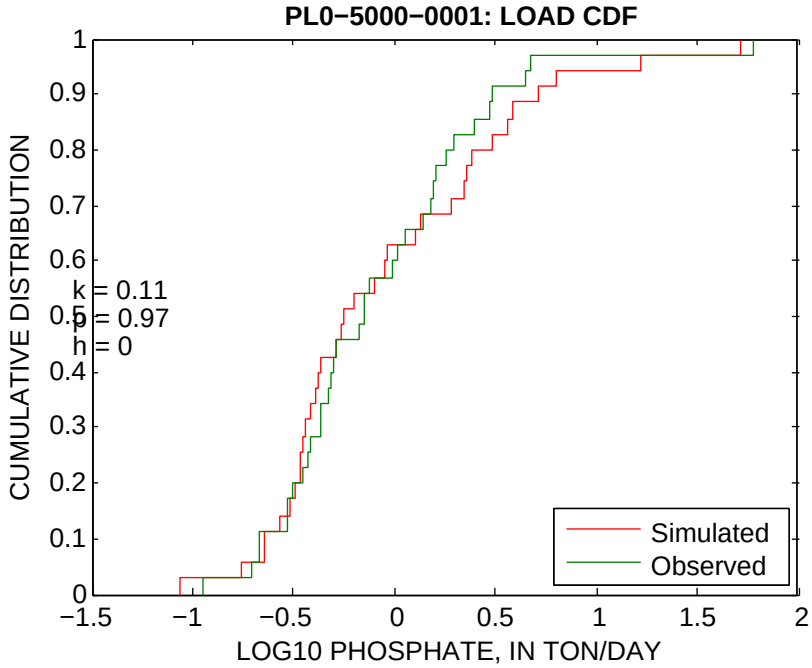


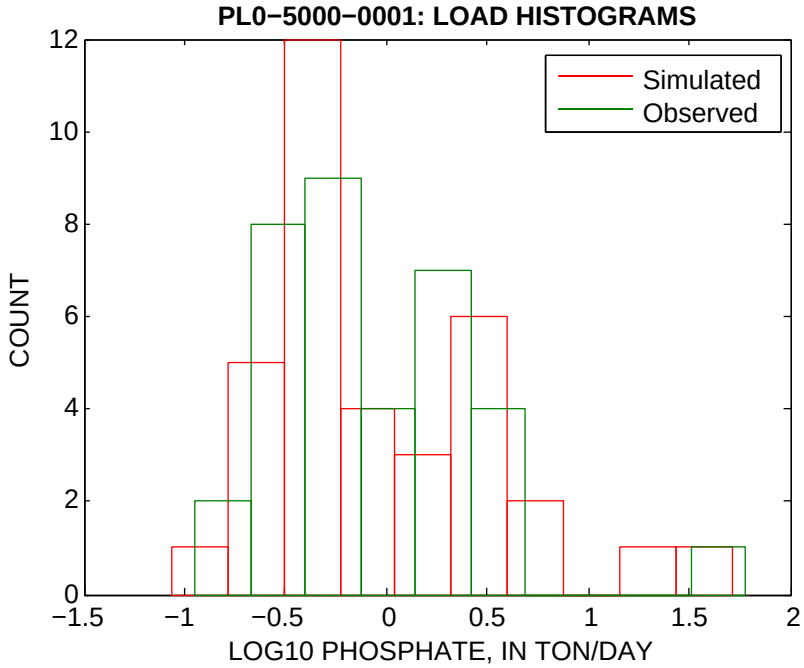


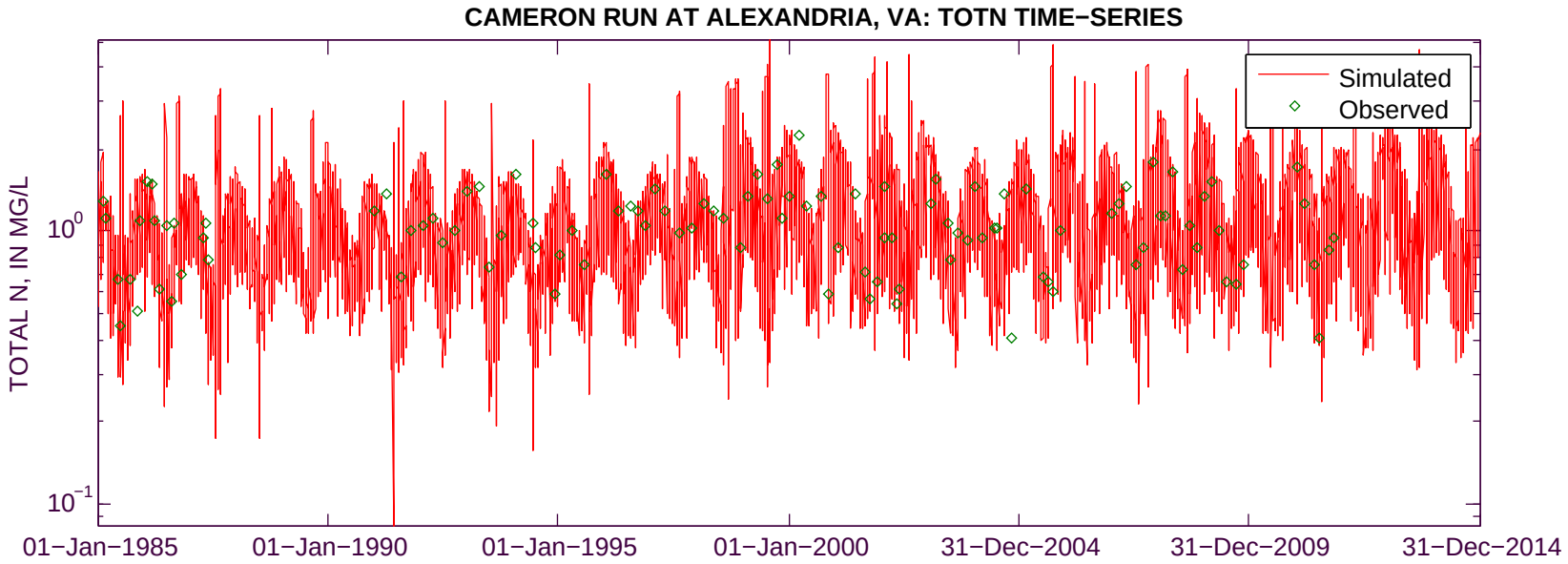
LOAD DATA
LOG10

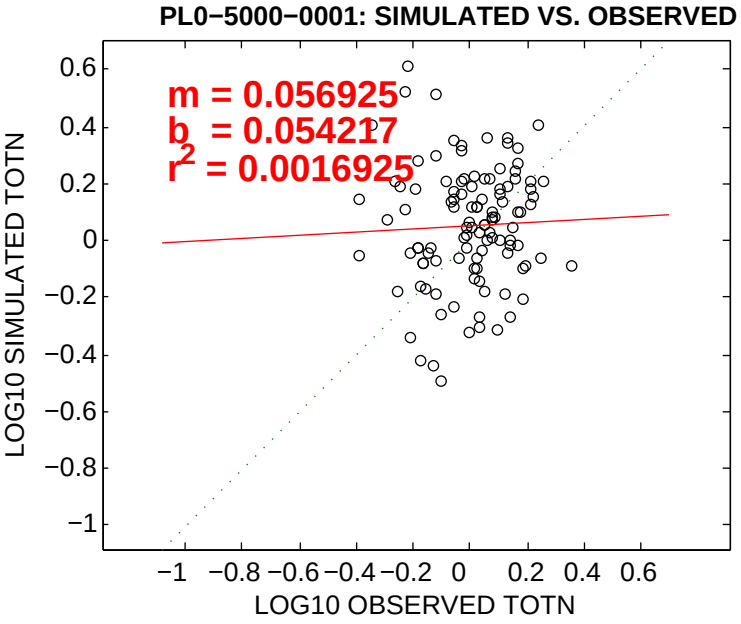


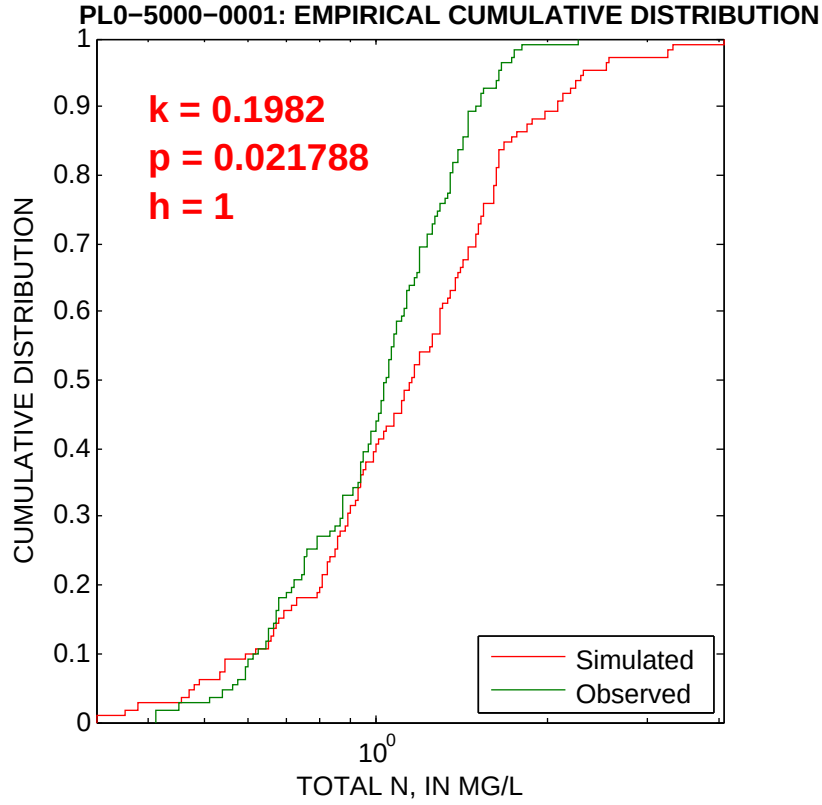












DATA SELECTION

scenario	file
P620171001WQ	TOTN.calib

plot: TOTN - total nitrogen

Dates: 1/1/1985 – 12/31/201

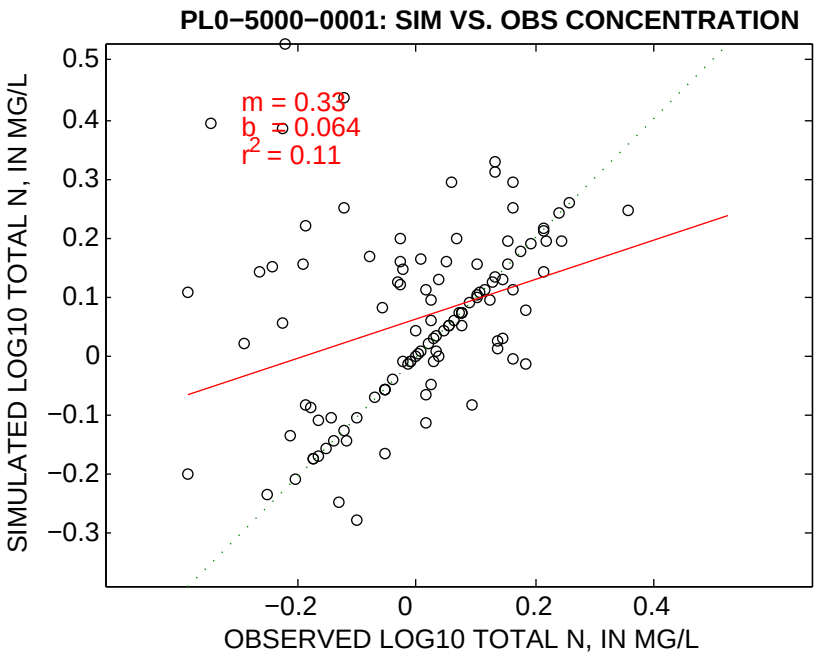
Drive	Directory	Observed
N/A	model	OBS20161101

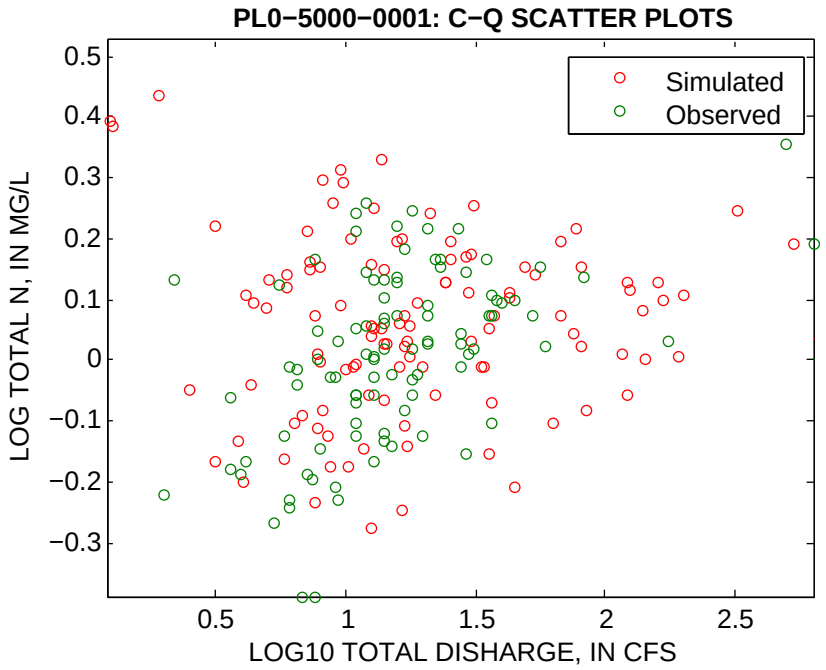
STATISTICS

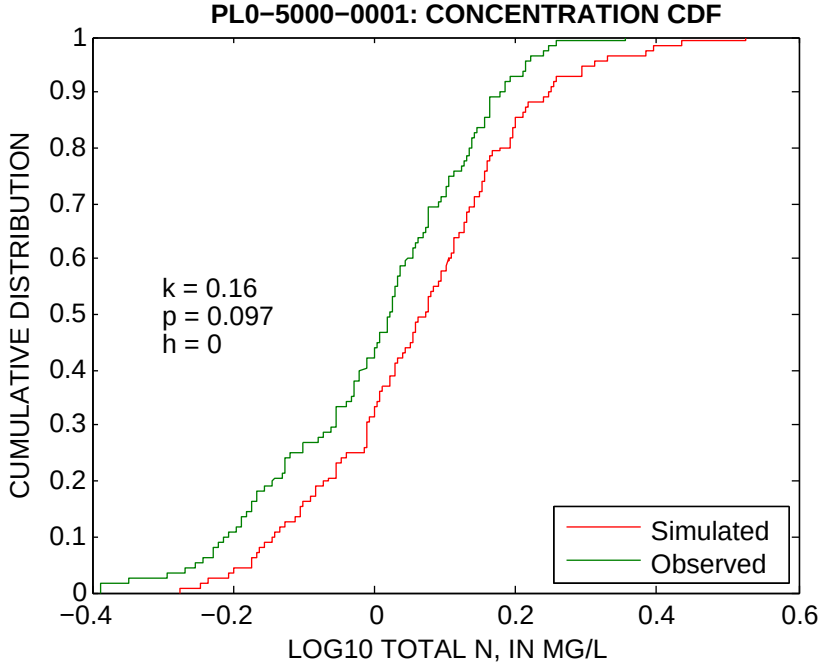
	n	111	111
		observe	simulate
min		0.41	0.32305
		-0.387216	-0.49073
mean		1.05974	1.26675
		0.00065467	0.0542543
media		1.05	1.1617
		0.0211893	0.065094
max		2.27	4.0762
		0.356026	0.610255
varian		0.121545	0.394792
		0.0225711	0.0432148
JB		0.097123	0.001
		0.132834	0.5
		ra	log
%		19.5339	8187.19
err.va		0.568856	0.0661152
rel.std.err		4.68021	2.9292
mod.eff		-3.68021	-1.9292

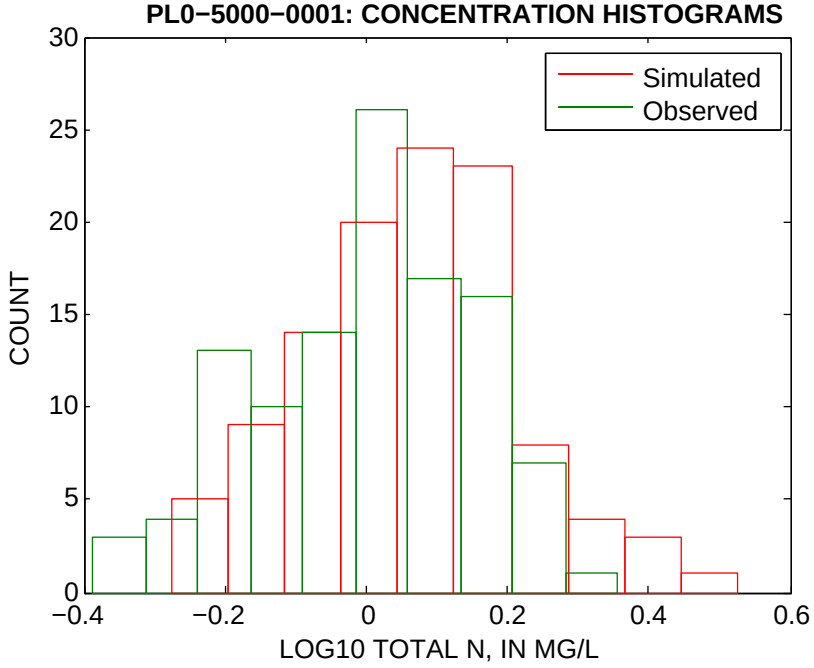
VERSION 2.1

ALL DATA
LOG10

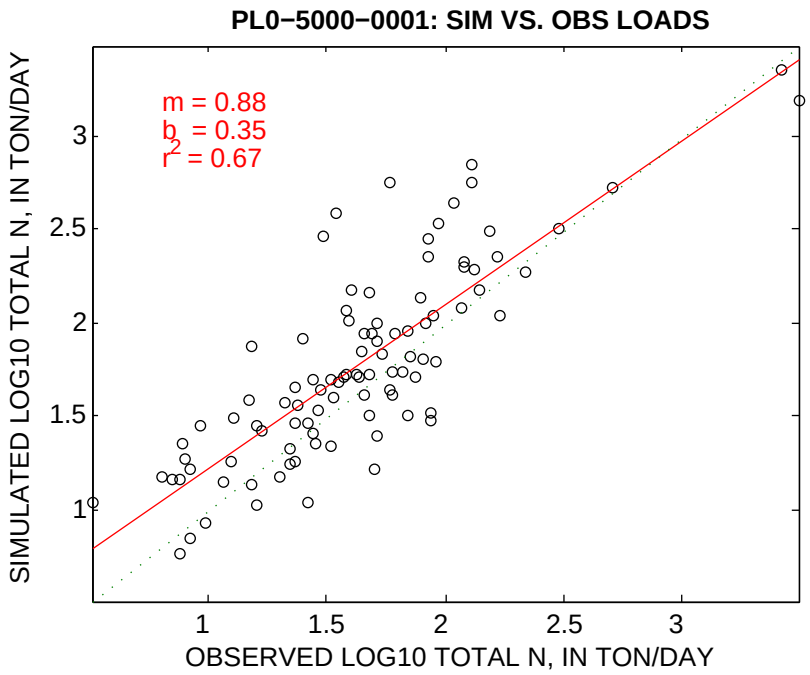


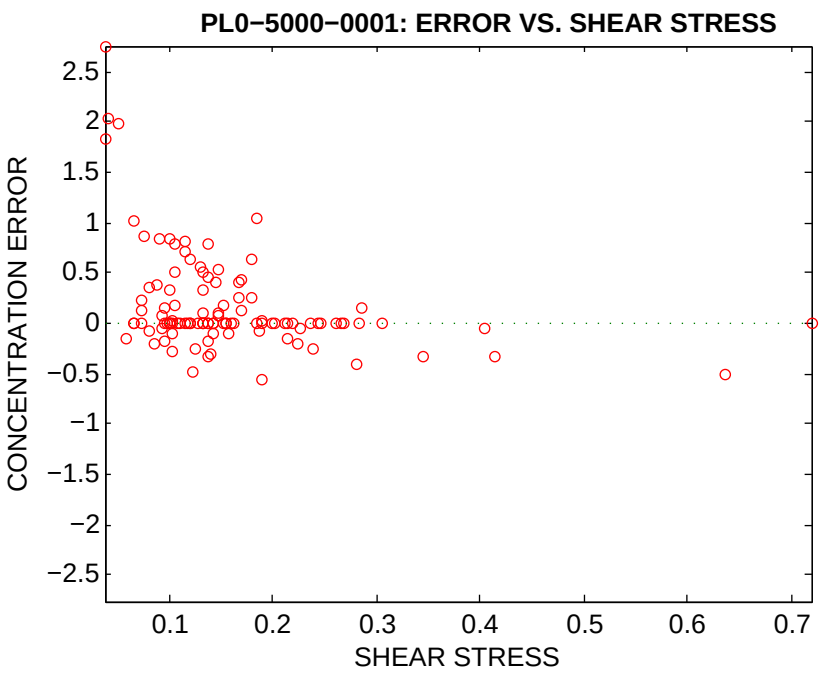


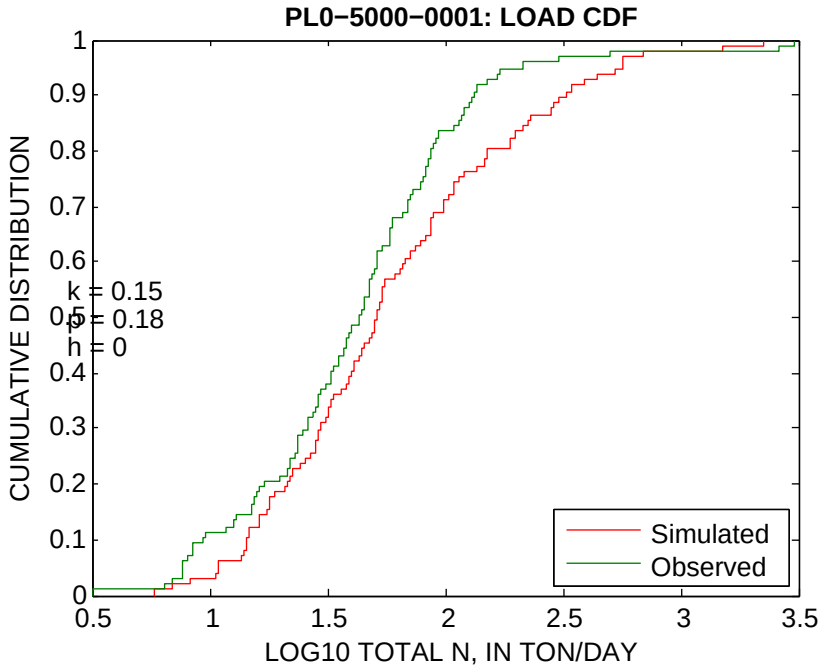


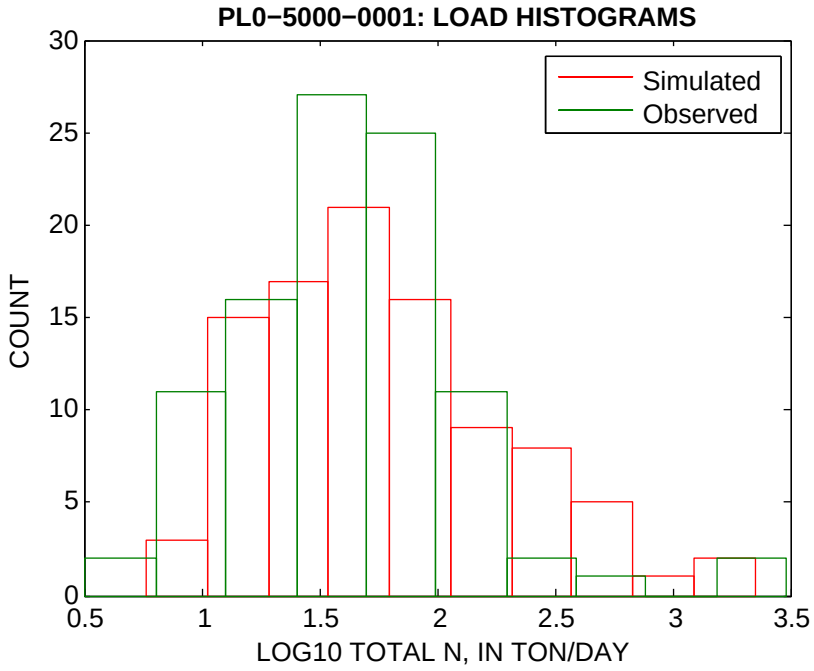


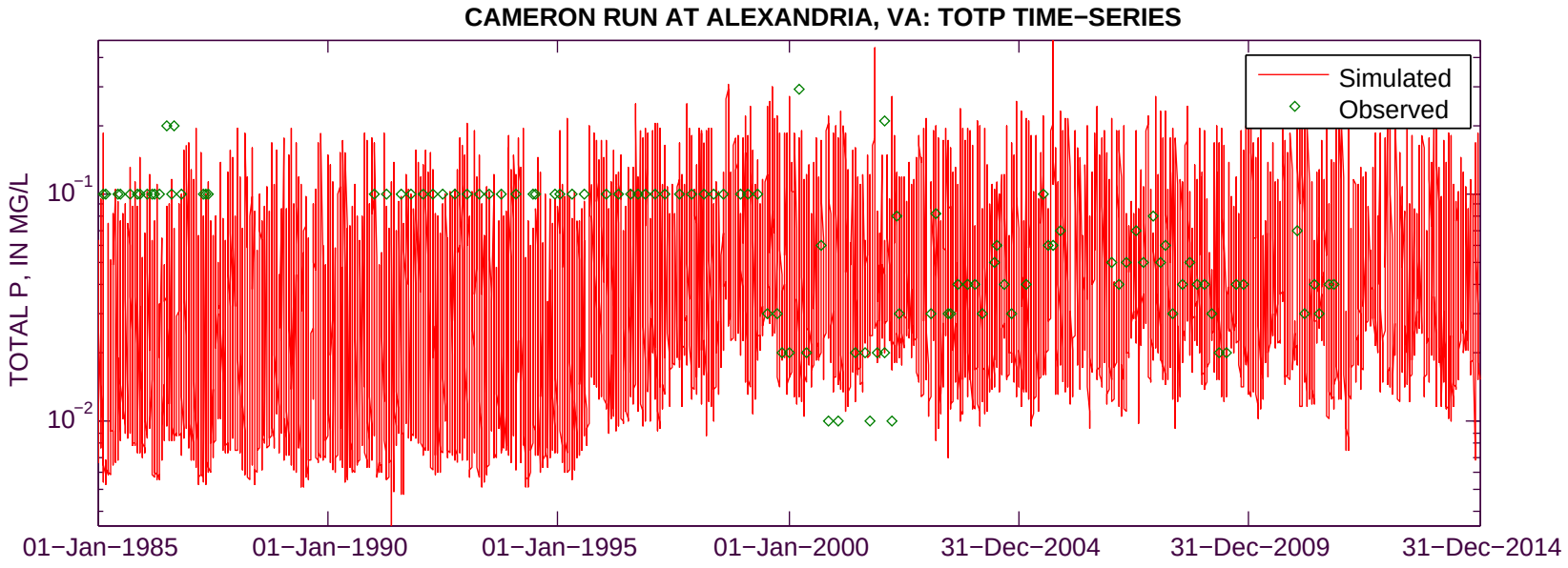
LOAD DATA
LOG10

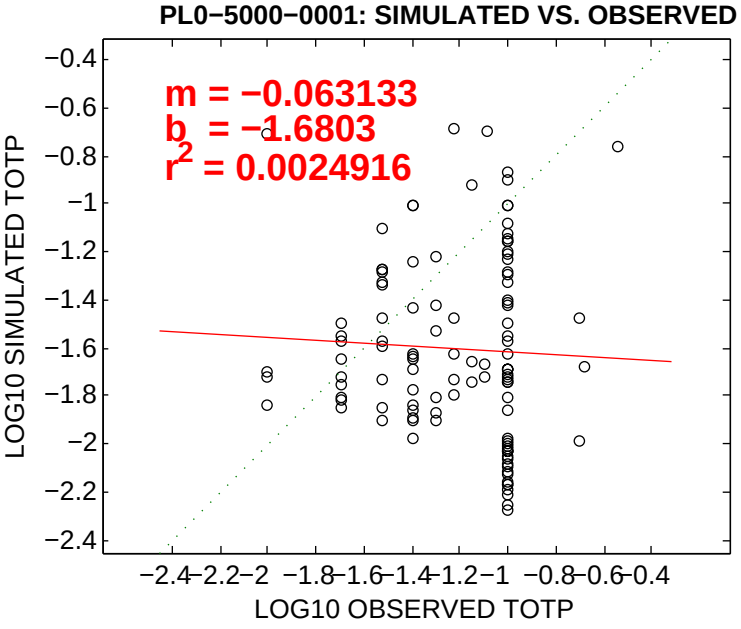


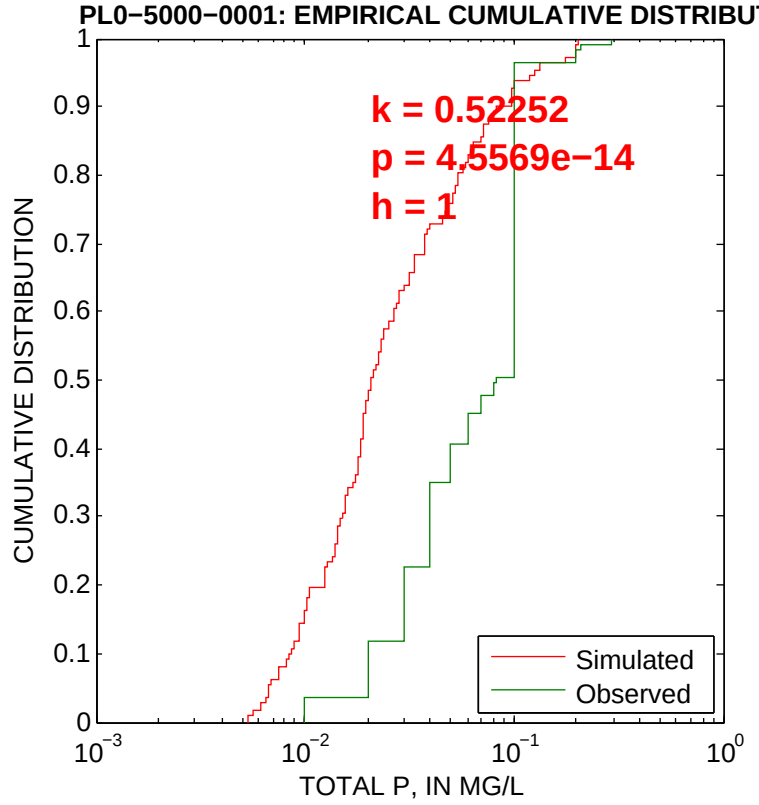












DATA SELECTION

scenario	file
P620171001WQ	TOTP.calib

plot: TOTP - total phosphorus

Dates: 1/1/1985 – 12/31/201

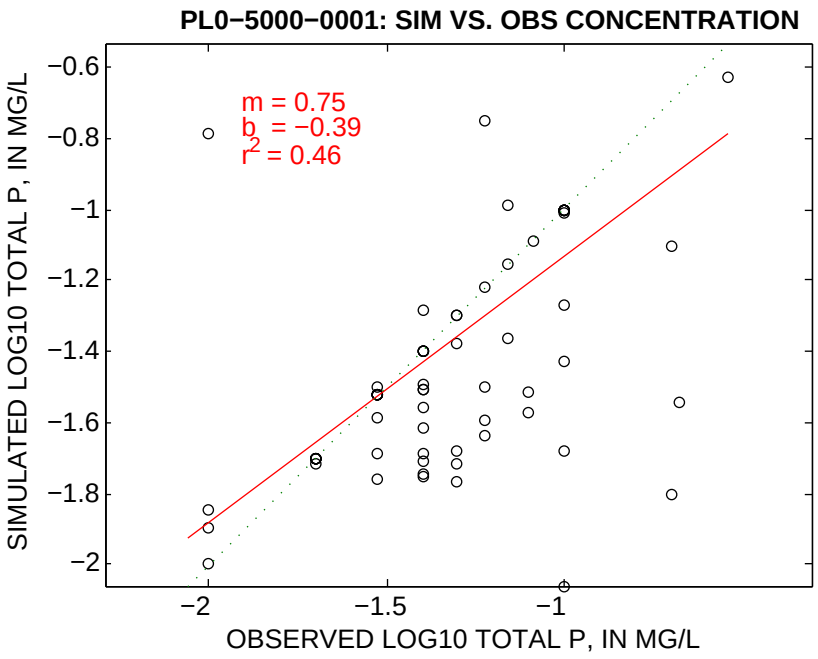
Drive	Directory	Observed
N/A	model	OBS20161101

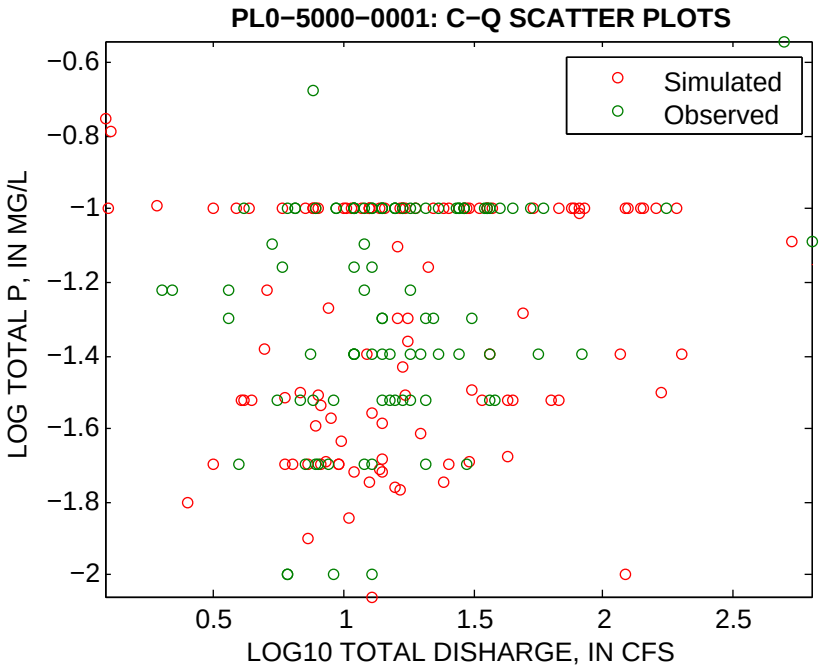
STATISTICS

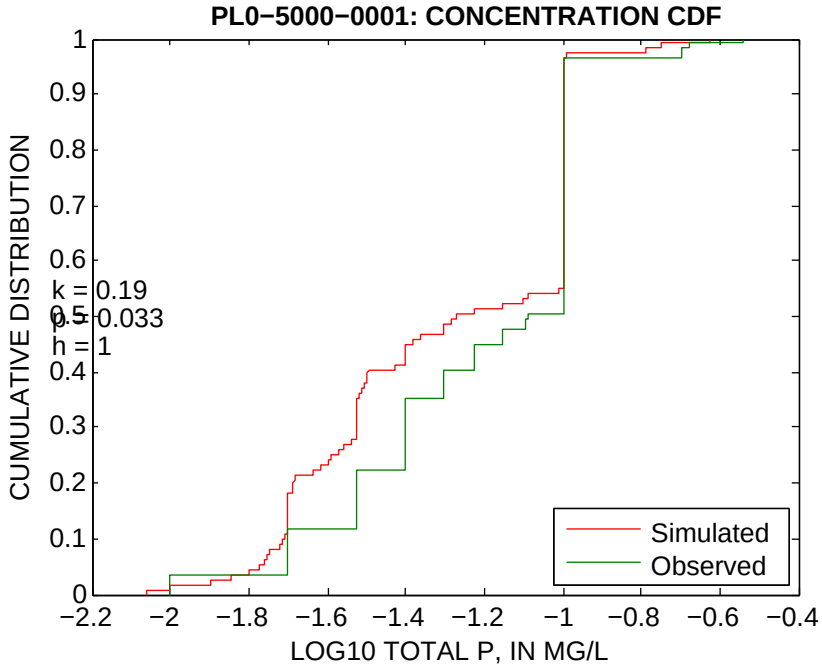
	n	observe	simulate
		111	111
min		0.01	0.0052786
		-2	-2.27748
mean		0.0737987	0.0377006
		-1.21993	-1.60329
media		0.0816558	0.020816
		-1.08801	-1.6816
max		0.29	0.20504
		-0.537602	-0.688161
varian		0.00198213	0.00169235
		0.0901207	0.144166
JB		0.001	0.001
		0.022653	0.059175
		ra	log
%		-48.9142	31.4255
err.va		0.00458668	0.393973
rel.std.err		2.31402	4.37162
mod.eff		-1.31402	-3.37162

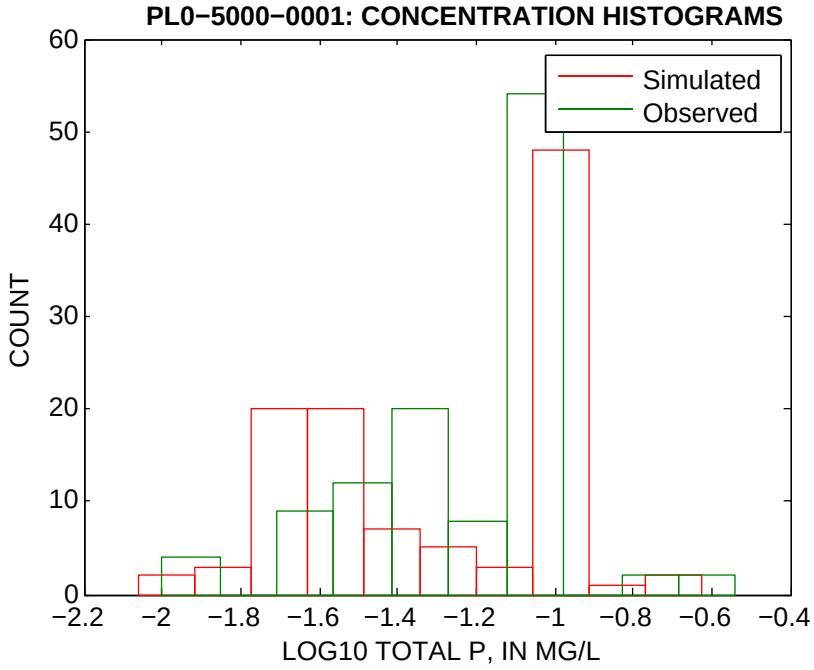
VERSION 2.1

ALL DATA
LOG10

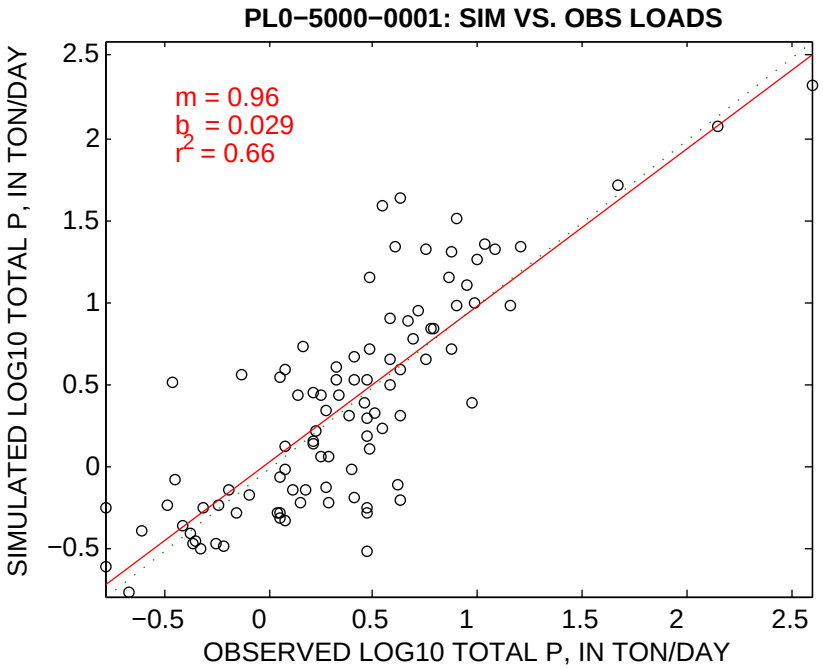


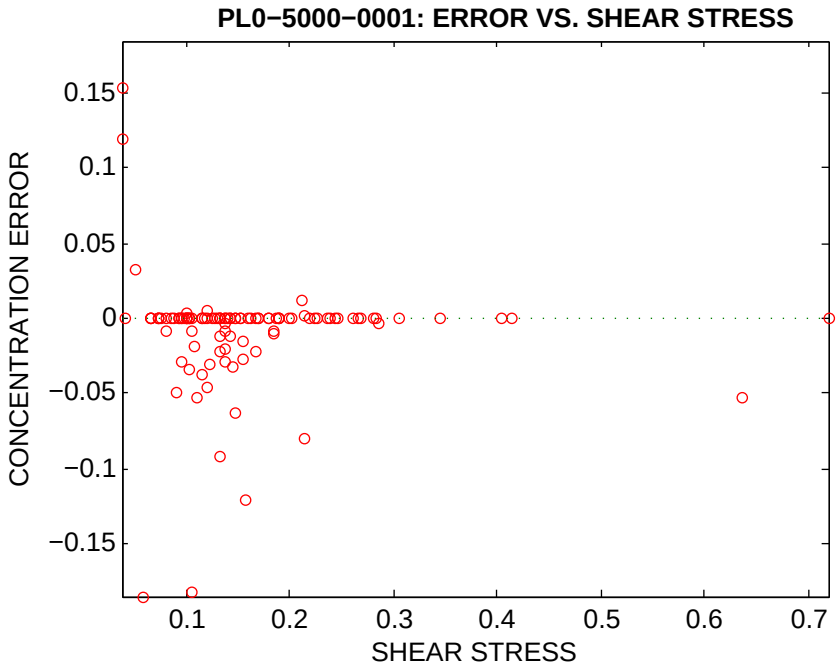


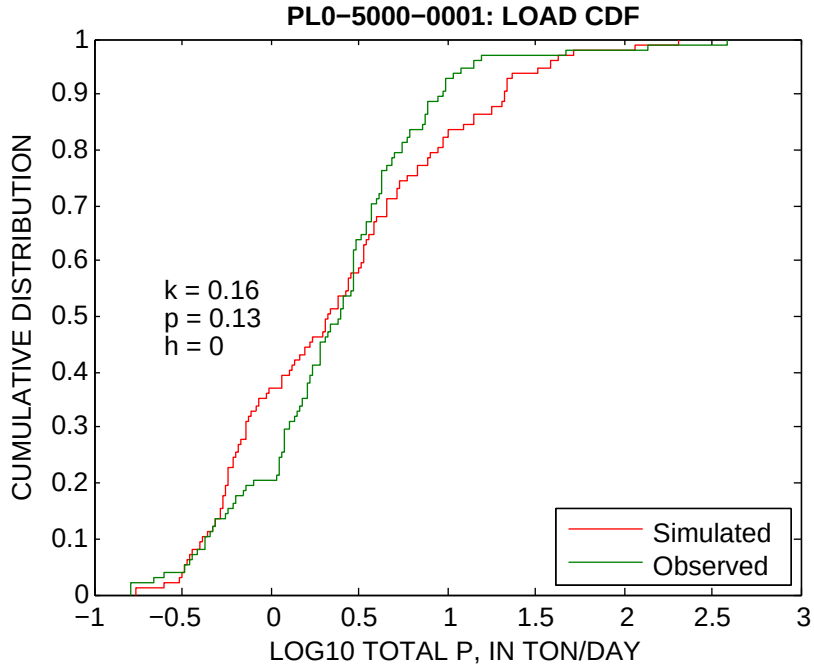


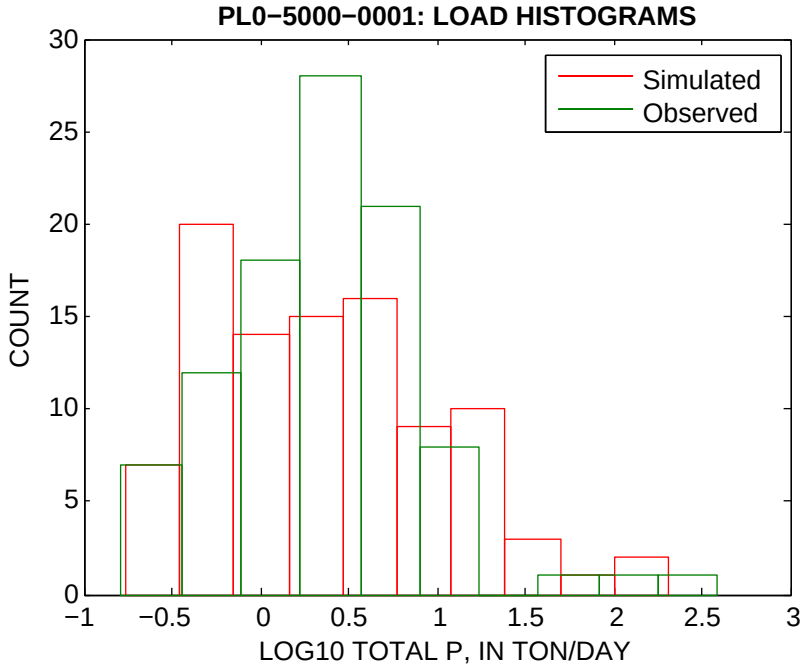


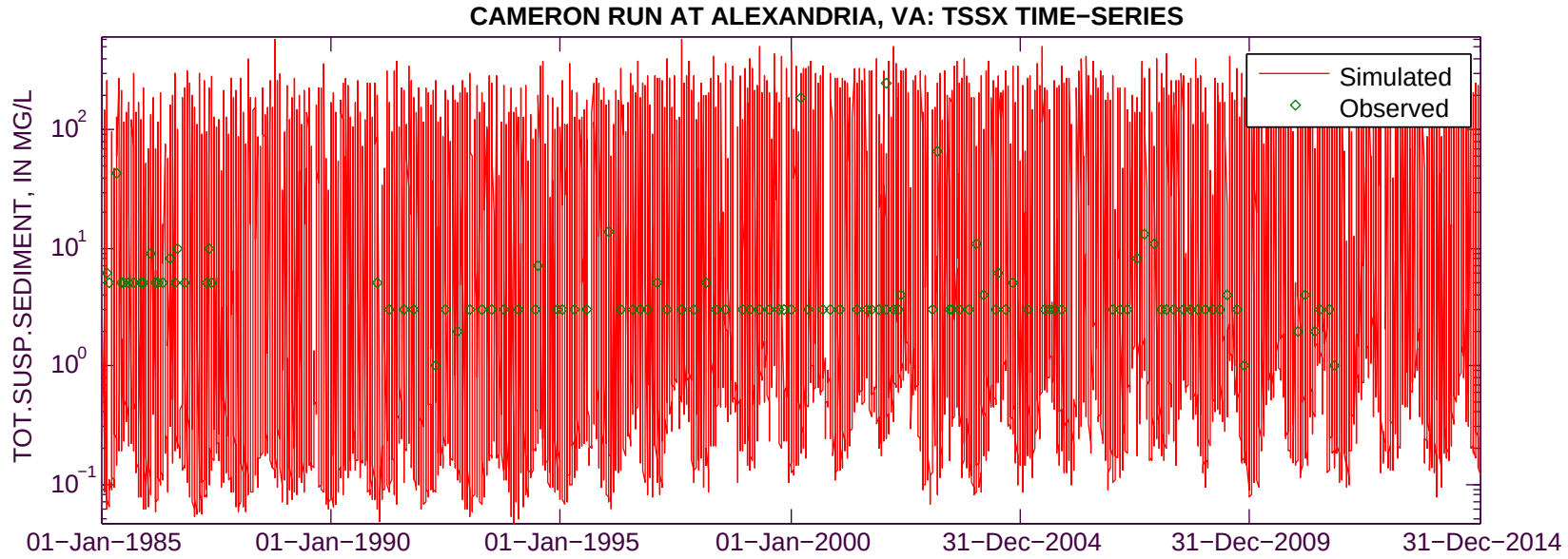
LOAD DATA
LOG10

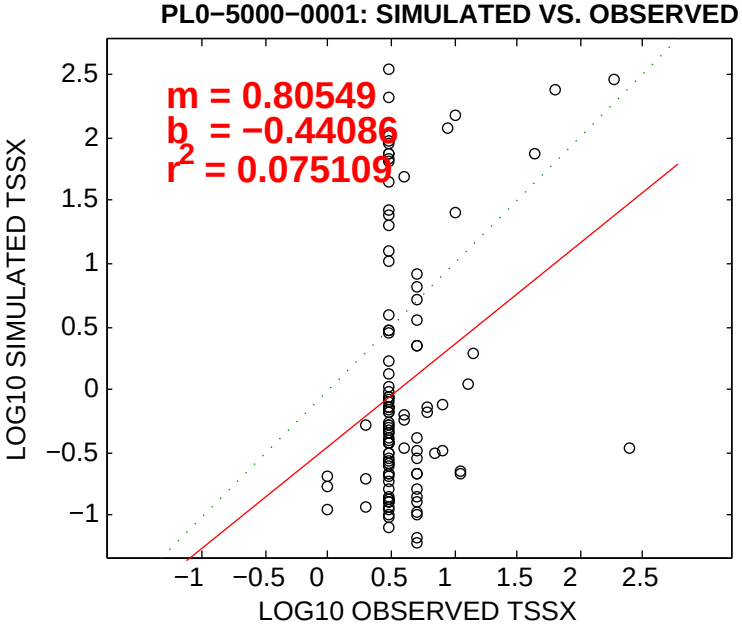


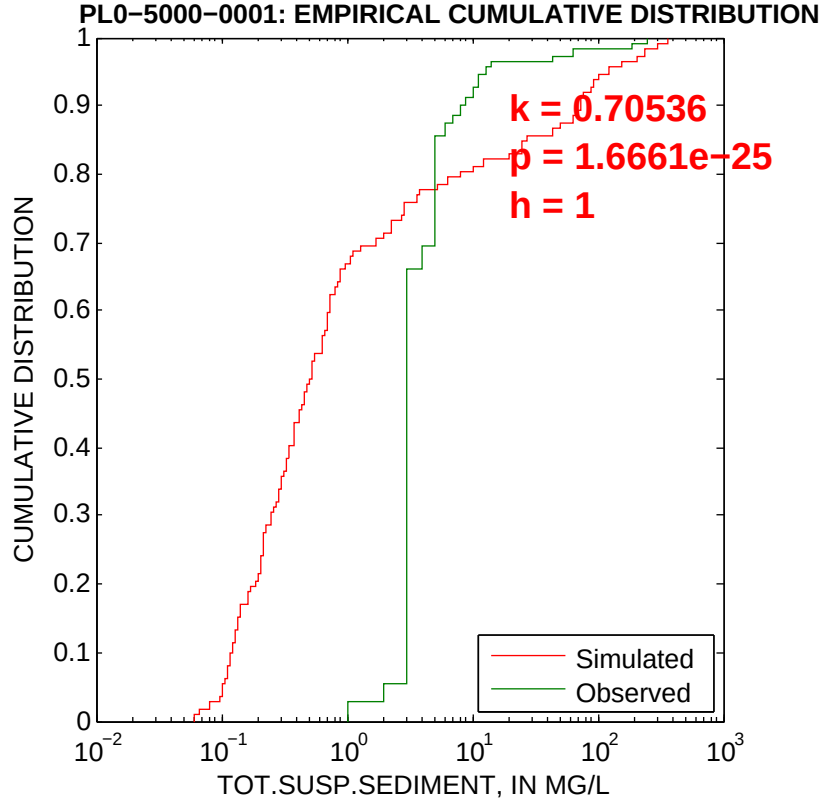












DATA SELECTION

scenario: P620171001WQ | file: TSSX.calib

plot: TSSX - total suspended ...

Dates: 1/1/1985 – 12/31/201

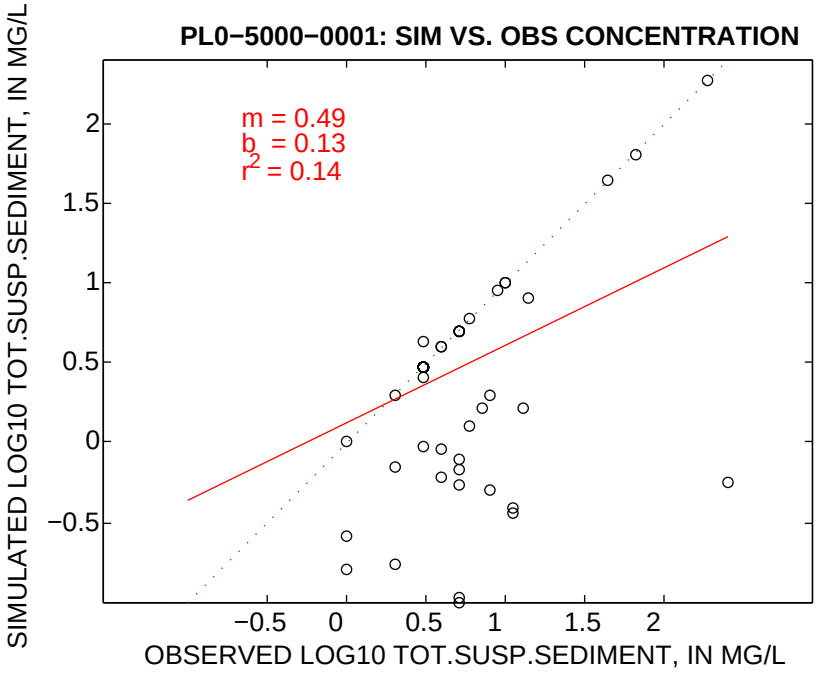
Drive: N/A | Directory: model | Observed: OBS20161101

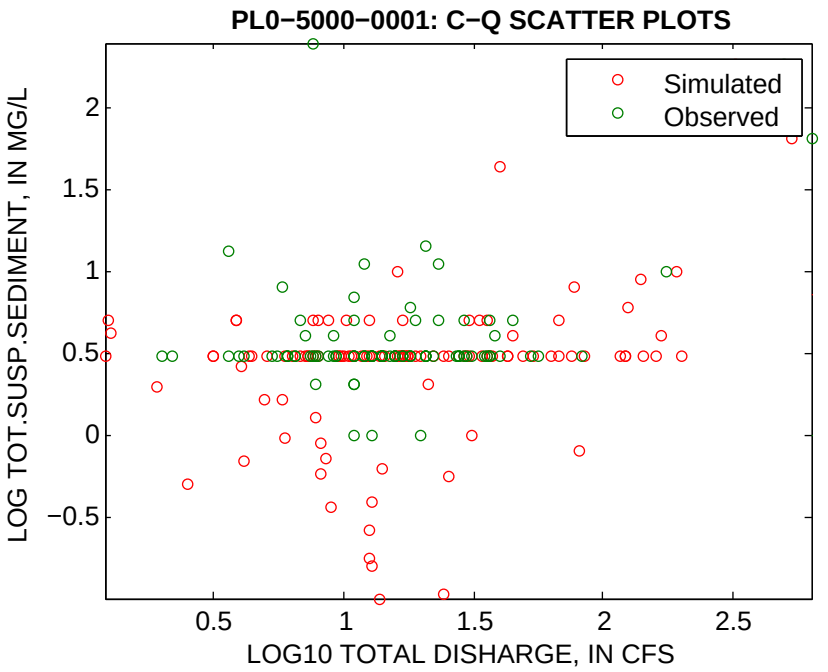
STATISTICS

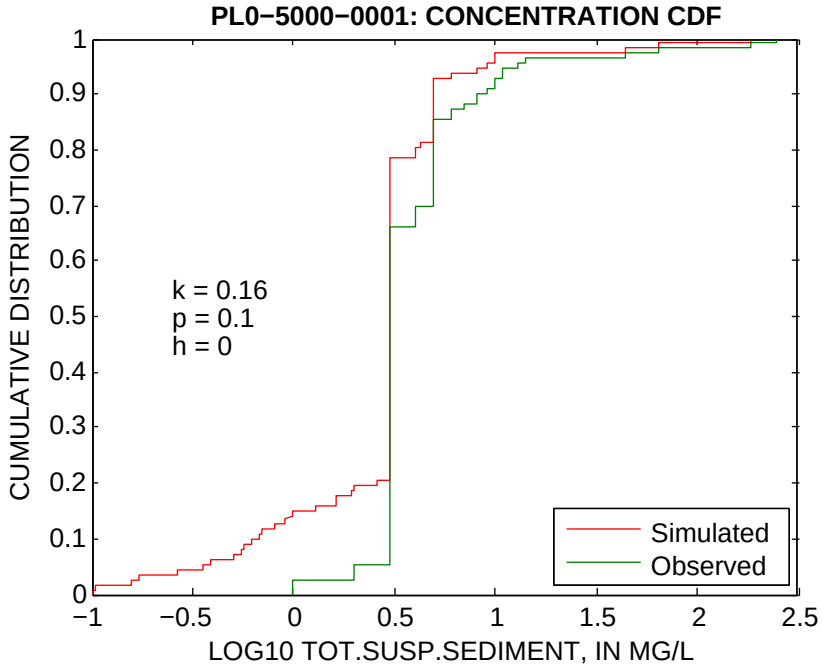
	n	112	112
		observe	simulate
min		1	0.060657
		0	-1.21712
mean		8.69549	20.7032
		0.606777	0.0478957
media		3	0.515335
		0.477121	-0.287925
max		248	358.45
		2.39445	2.55443
varian		862.034	3340.9
		0.115393	0.996802
JB		0.001	0.001
		0.001	0.002851
		ra	log
%		138.092	-92.1065
err.va		3246.59	1.24146
rel.std.err		3.7662	10.7585
mod.eff		-2.7662	-9.75853

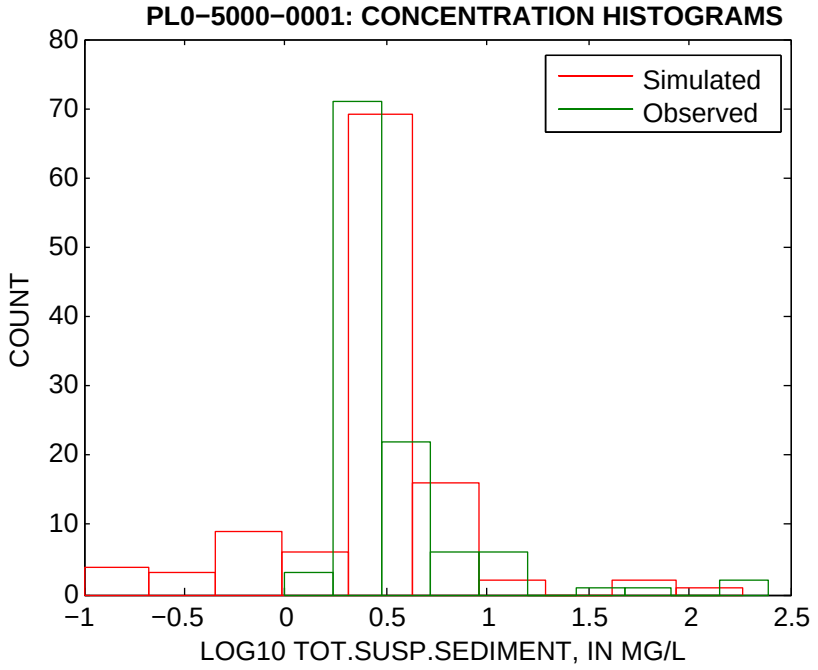
VERSION 2.1

ALL DATA
LOG10

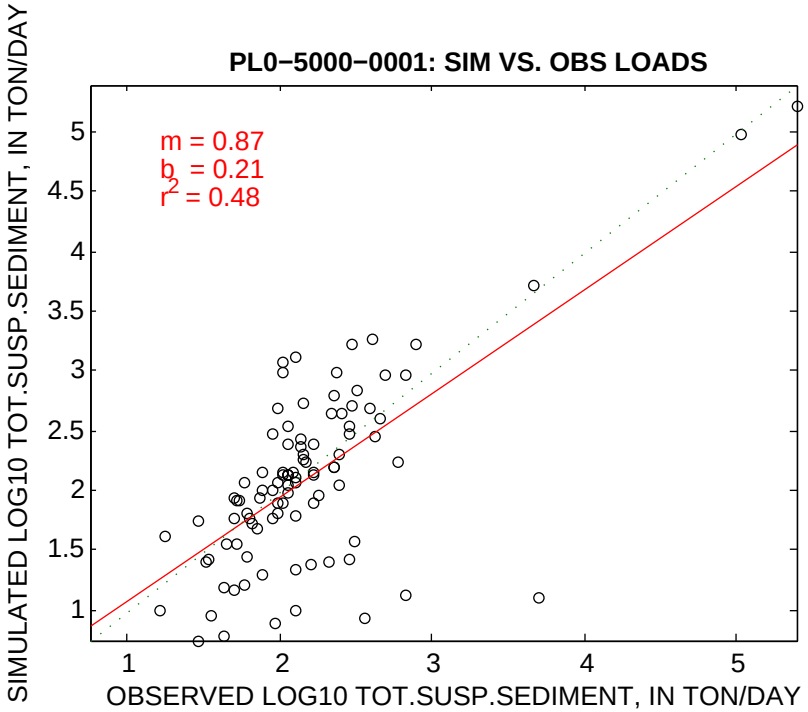


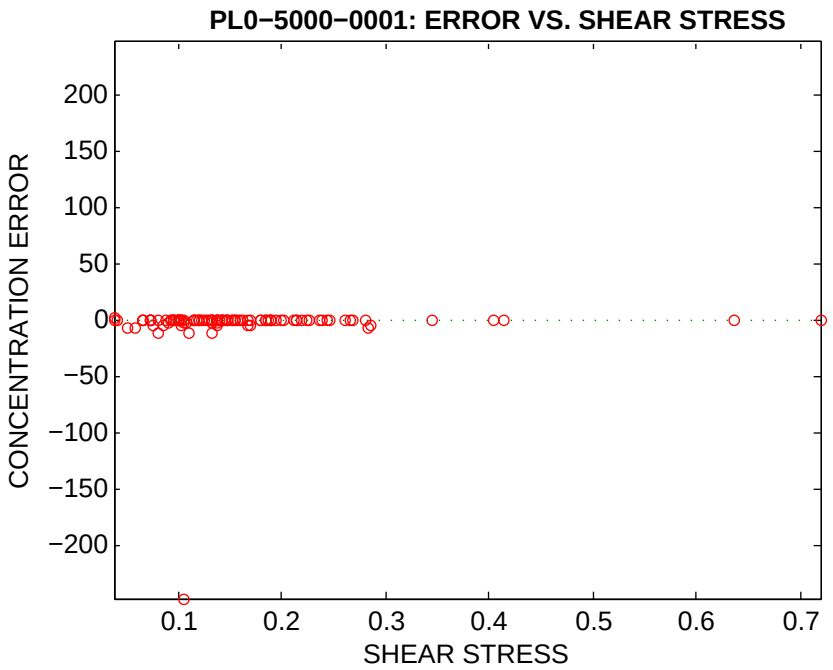


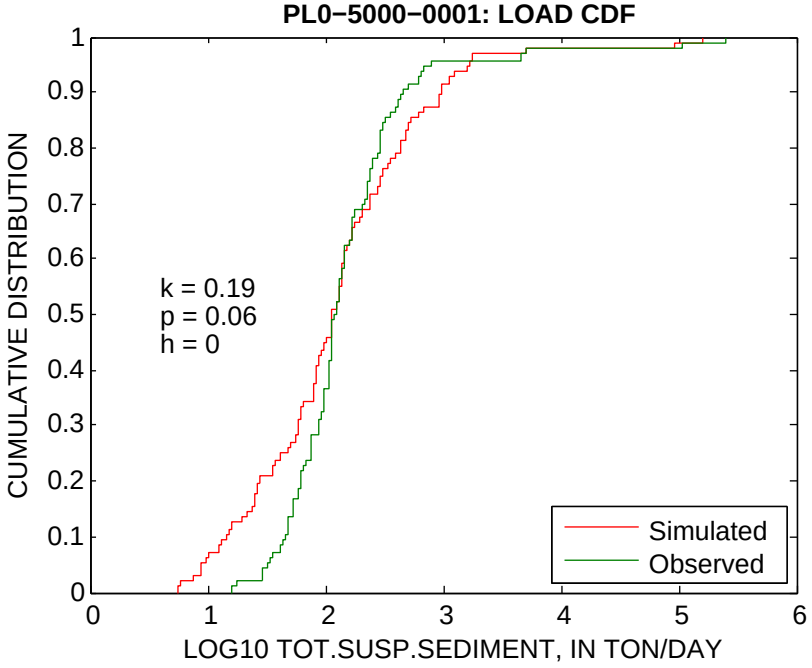


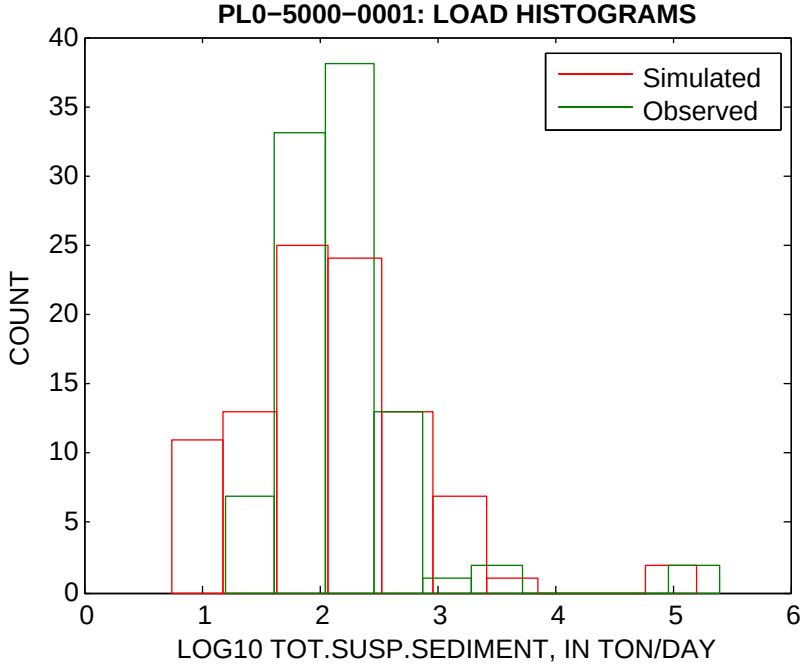


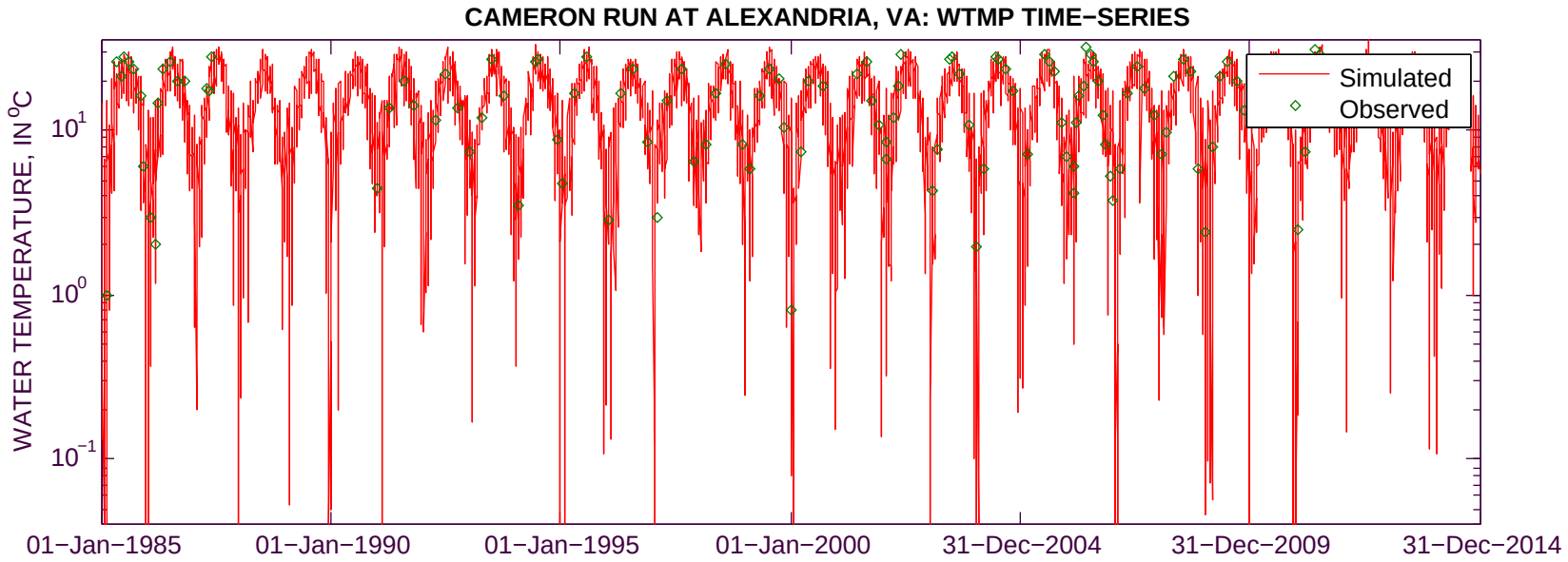
LOAD DATA
LOG10

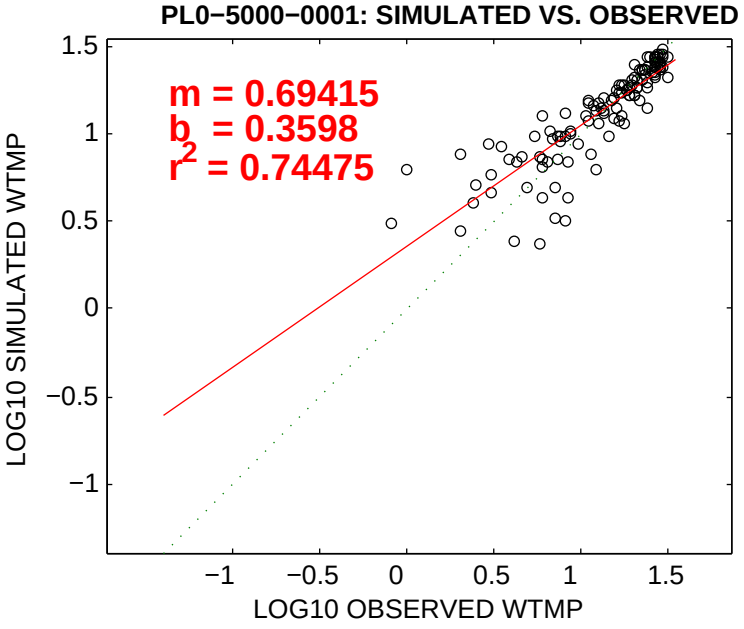


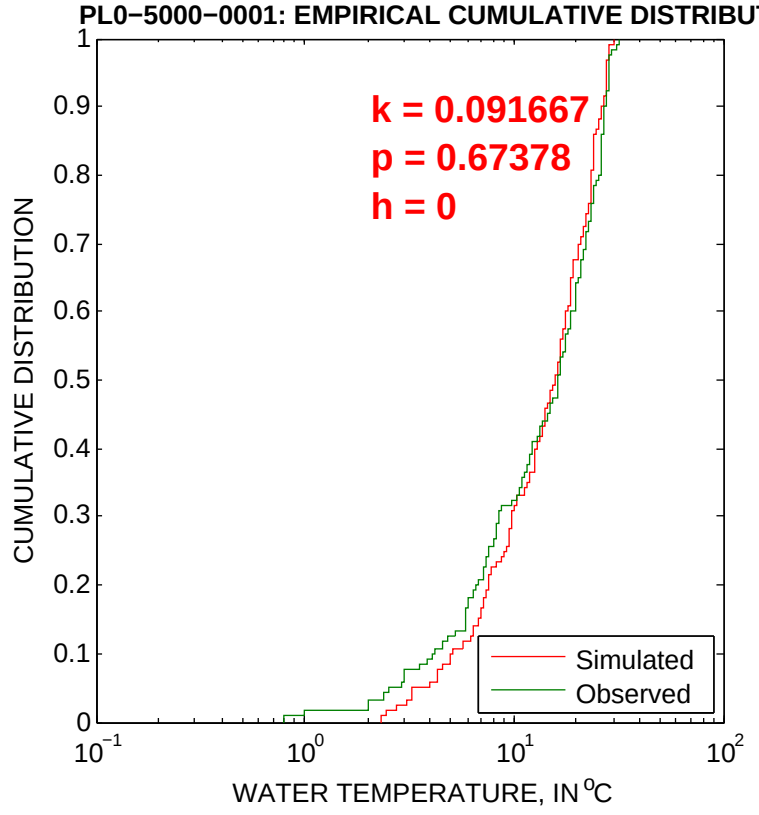












DATA SELECTION

scenario	file
P620171001WQ	WTMP.calib

plot: WTMP - water tempera...

Dates: 1/1/1985 – 12/31/201

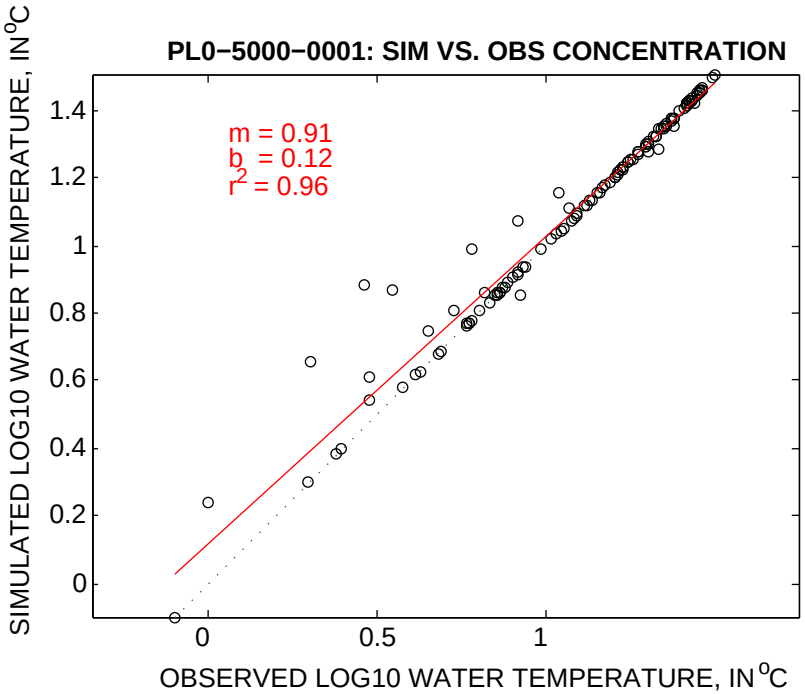
Drive	Directory	Observed
N/A	model	OBS20161101

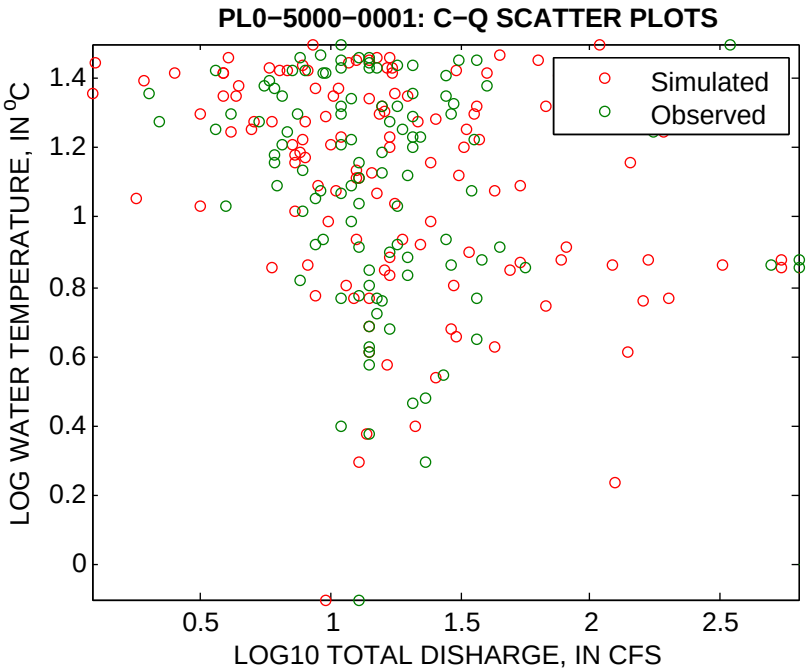
STATISTICS

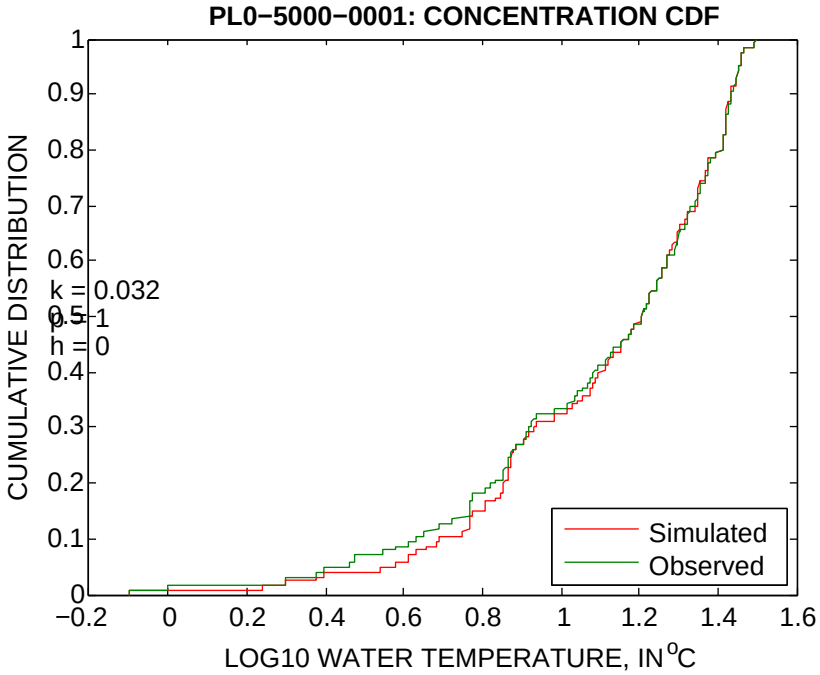
	n	120	120
		observe	simulate
min		0.8	2.3516
		-0.09691	0.371363
mean		15.8113	15.623
		1.09972	1.12318
media		16.25	15.7405
		1.21085	1.19701
max		31.6	30.235
		1.49969	1.48051
varian		75.7871	59.721
		0.115211	0.0745413
JB		0.023111	0.033476
		0.001003	0.006801
		ra	log
%		-1.19105	2.13311
err.va		10.1687	0.0303587
rel.std.err		0.134175	0.263505
mod.eff		0.865825	0.736495

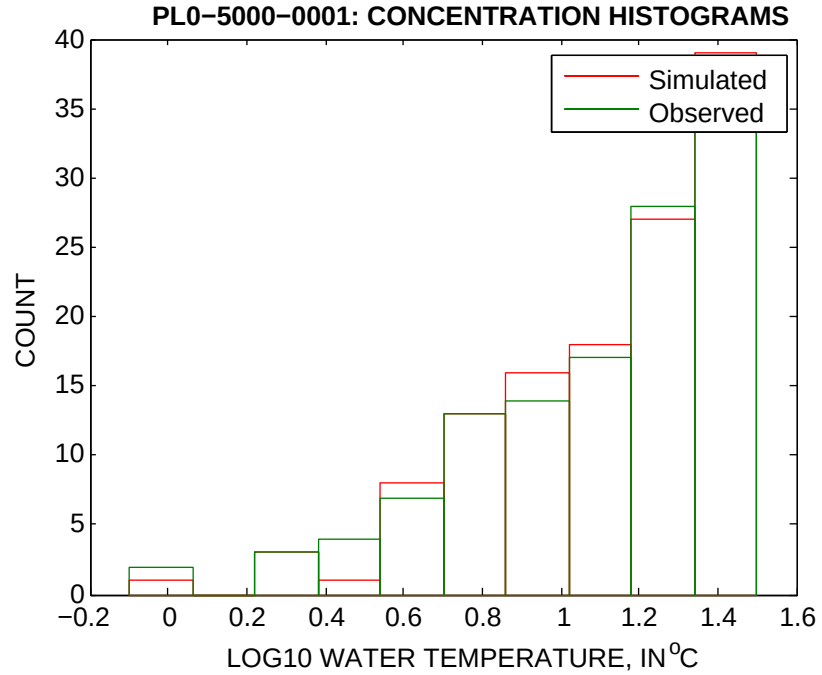
VERSION 2.1

ALL DATA
LOG10

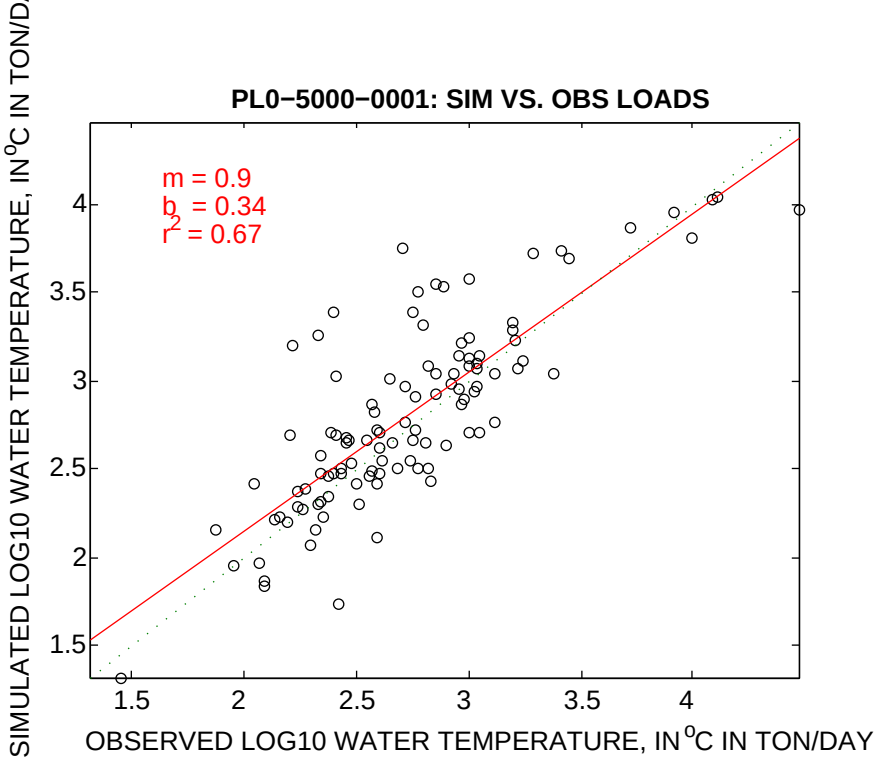


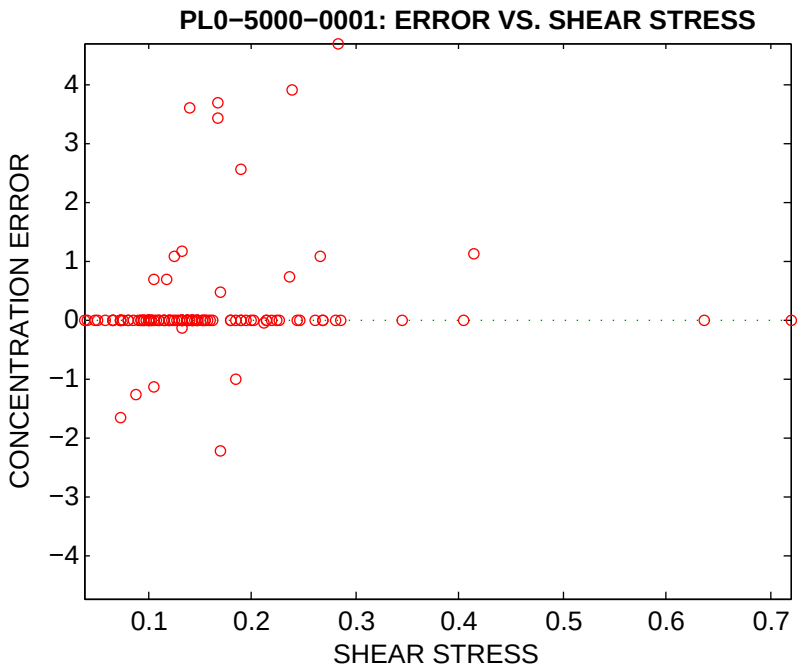


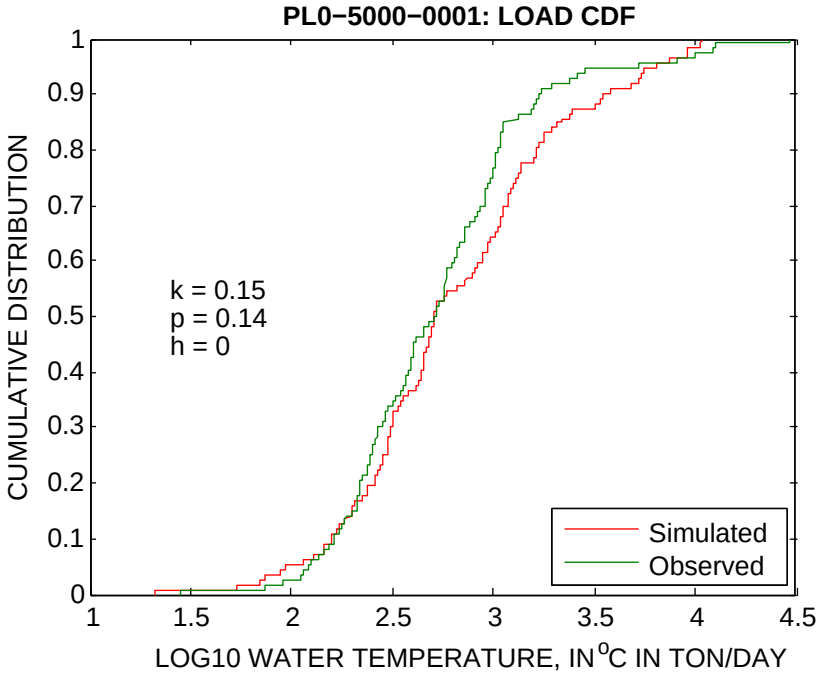


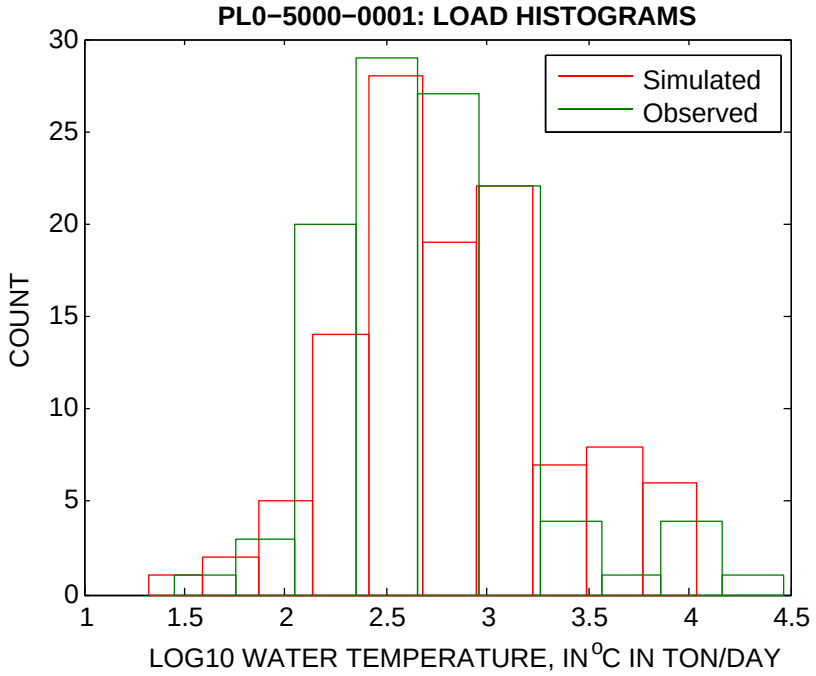


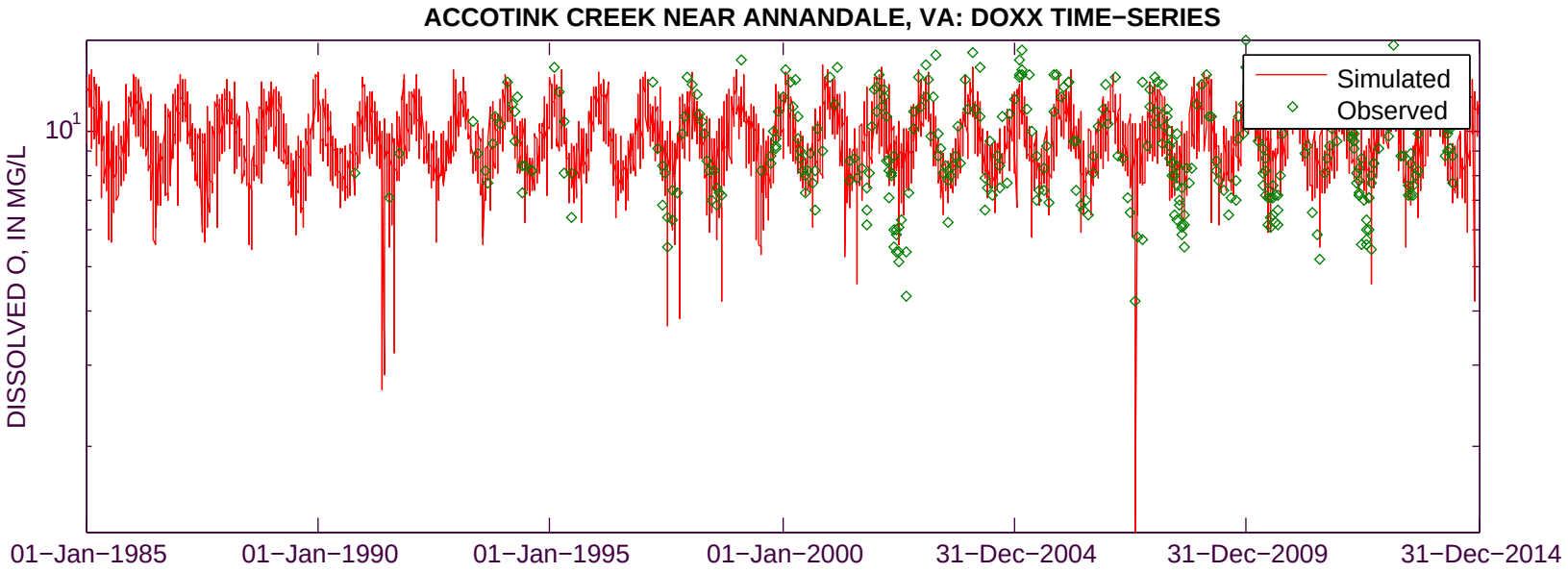
LOAD DATA
LOG10

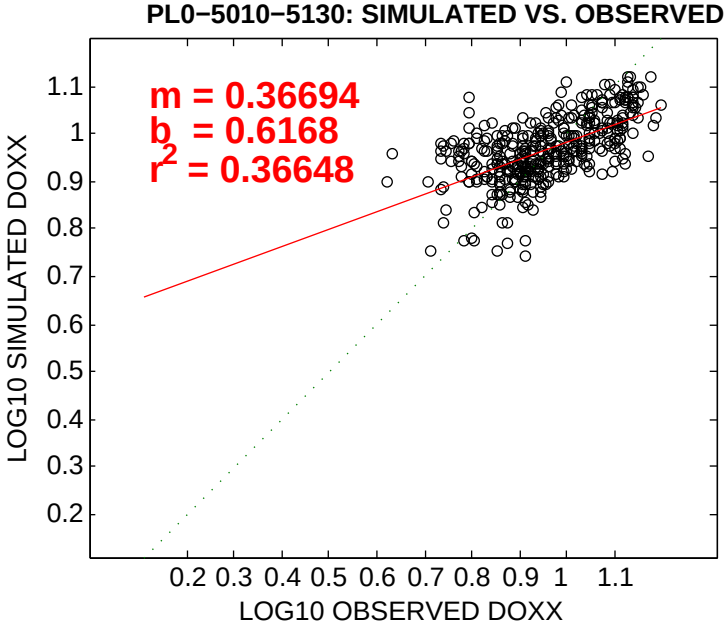


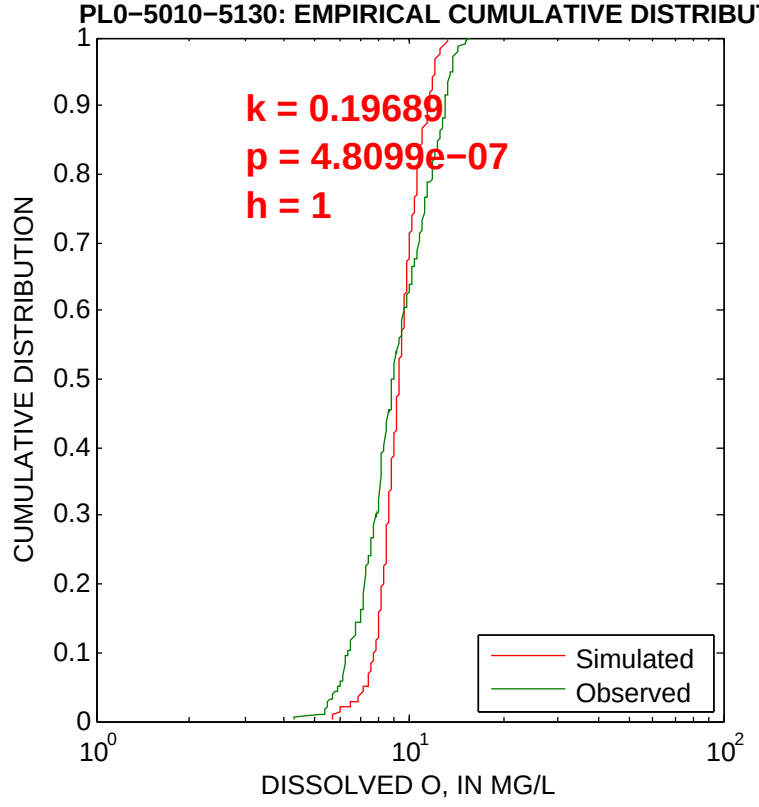












DATA SELECTION

scenario: P620171001WQ | file: DOXX.calib

plot: DOXX - dissolved oxygen

Dates: 1/1/1985 – 12/31/201

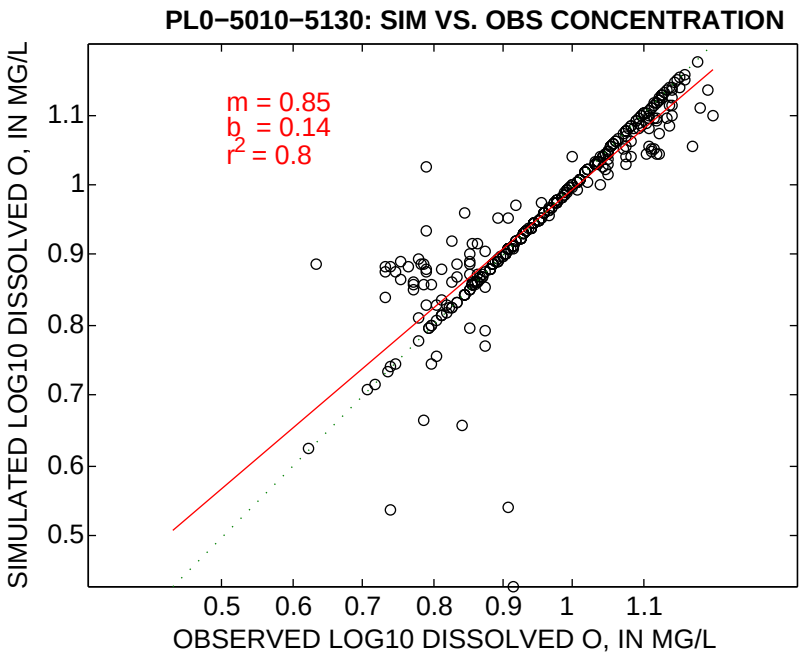
Drive: N/A | Directory: model | Observed: OBS20161101

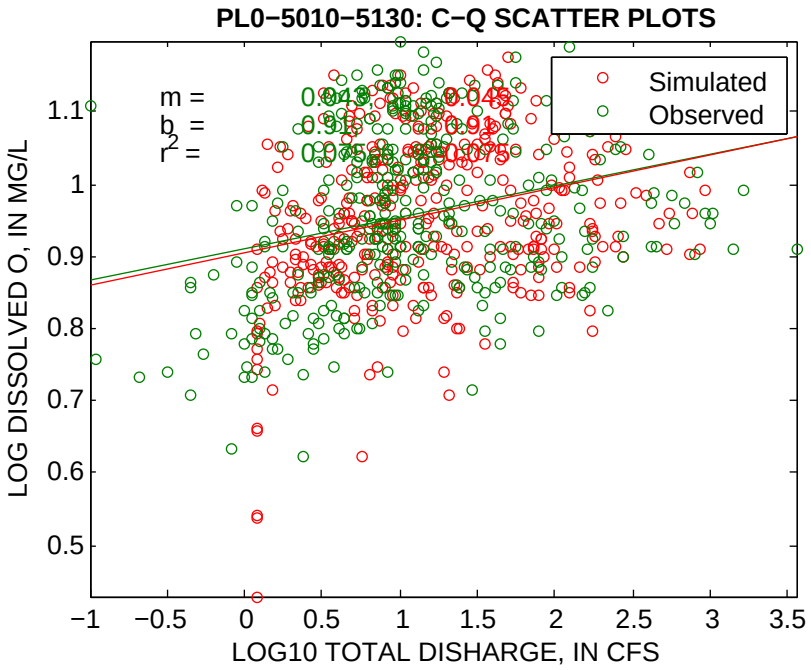
STATISTICS

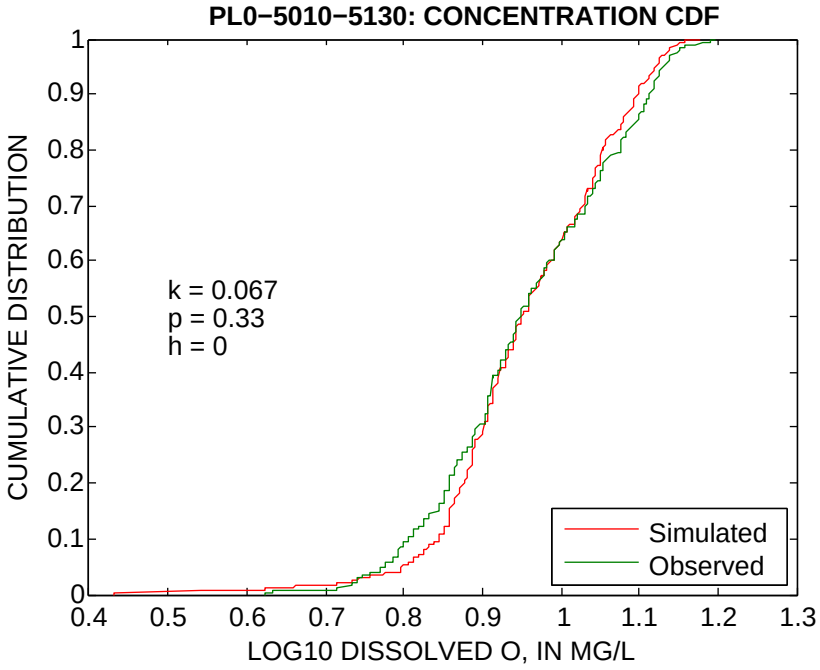
		observe	simulate
n		386	386
min		4.2	5.5592
		0.623249	0.745012
mean		9.38179	9.40931
		0.95772	0.968221
media		8.855	9.25815
		0.947183	0.966524
max		15.8	13.218
		1.19866	1.12117
varian		5.88266	2.14922
		0.0128332	0.00471487
JB		0.002503	0.194479
		0.031420	0.024634
		ra	log
%		0.293365	1.09648
err.va		3.4648	0.00824063
rel.std.err		0.588986	0.642132
mod.eff		0.411014	0.357868

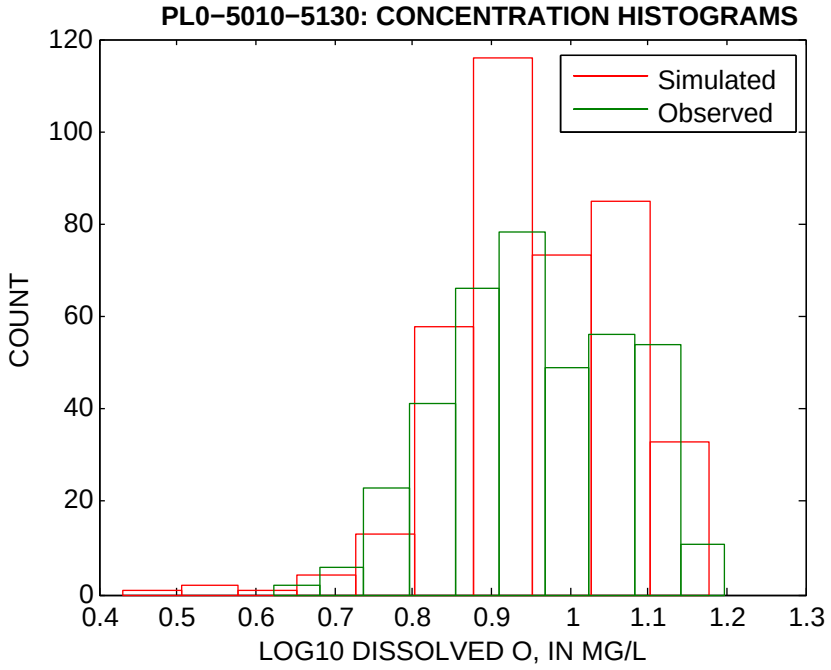
VERSION 2.1

ALL DATA
LOG10

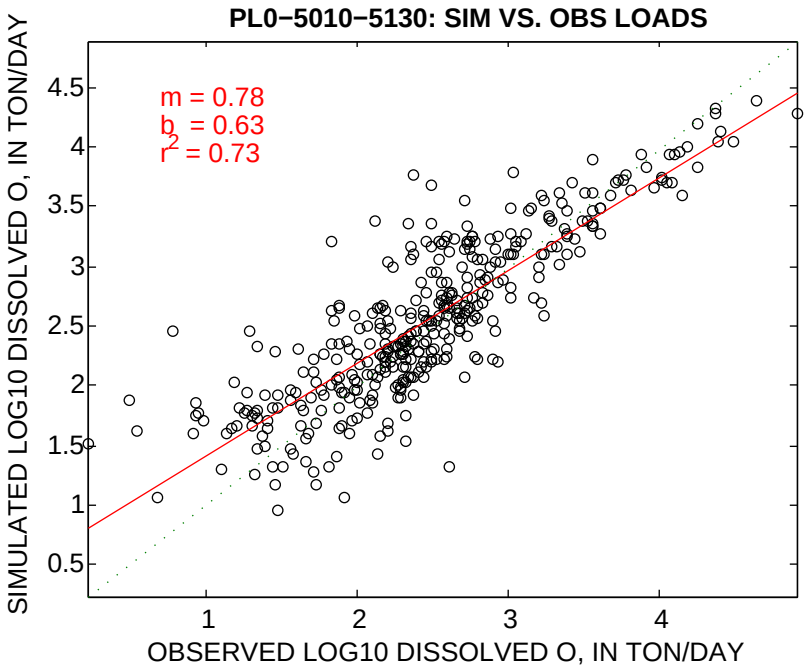


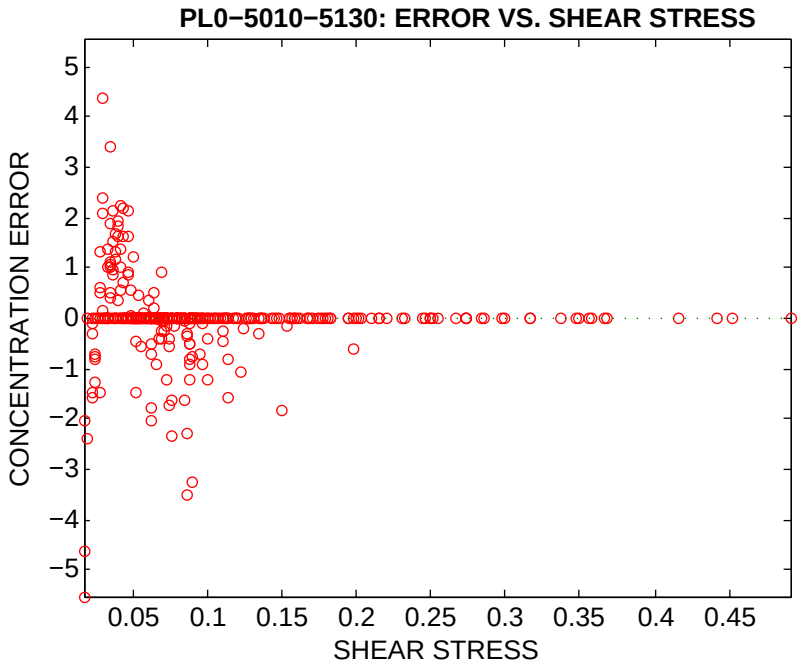


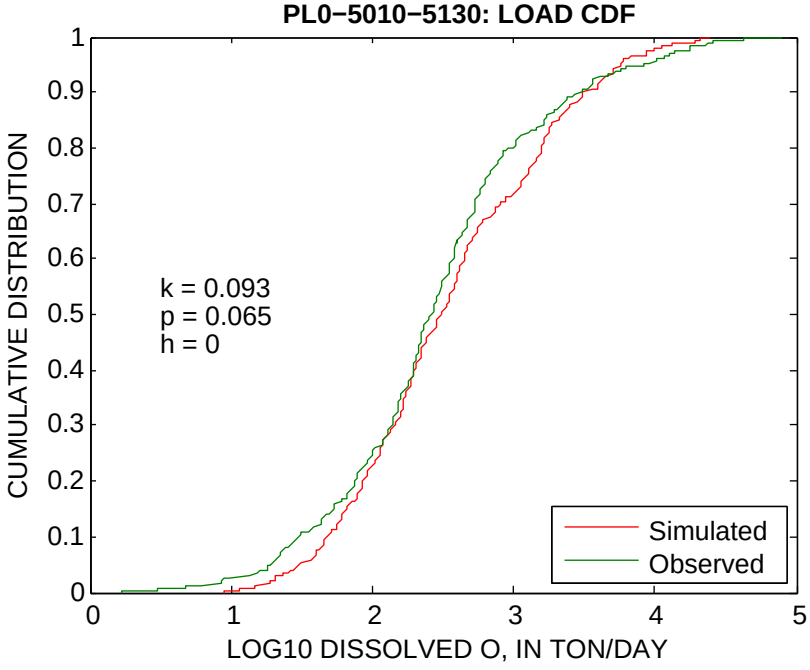


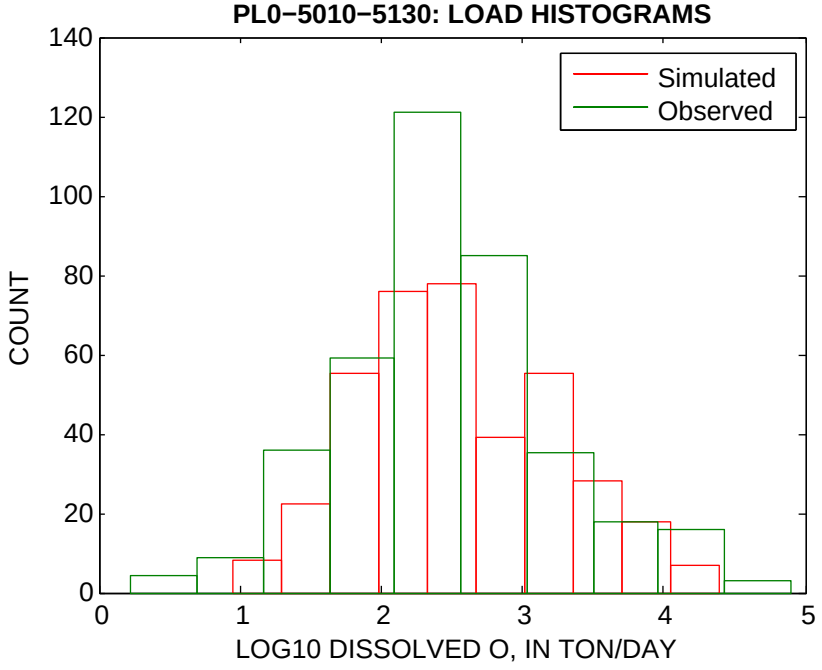


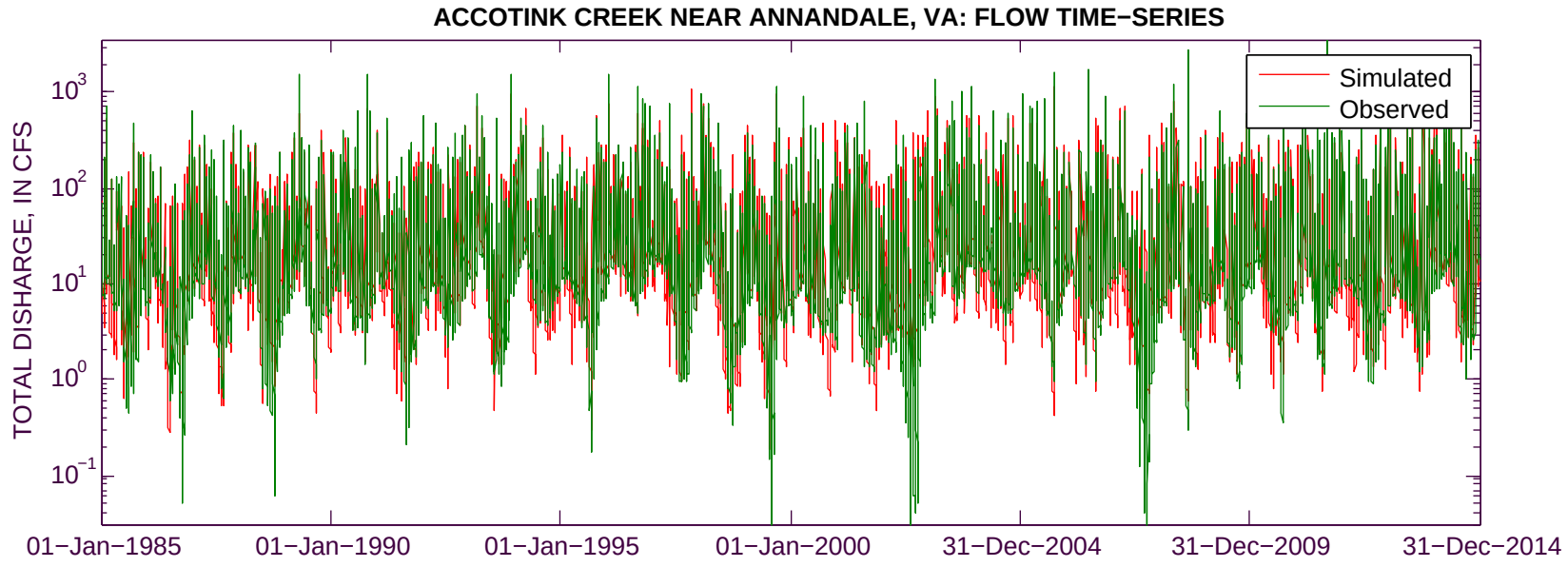
LOAD DATA
LOG10

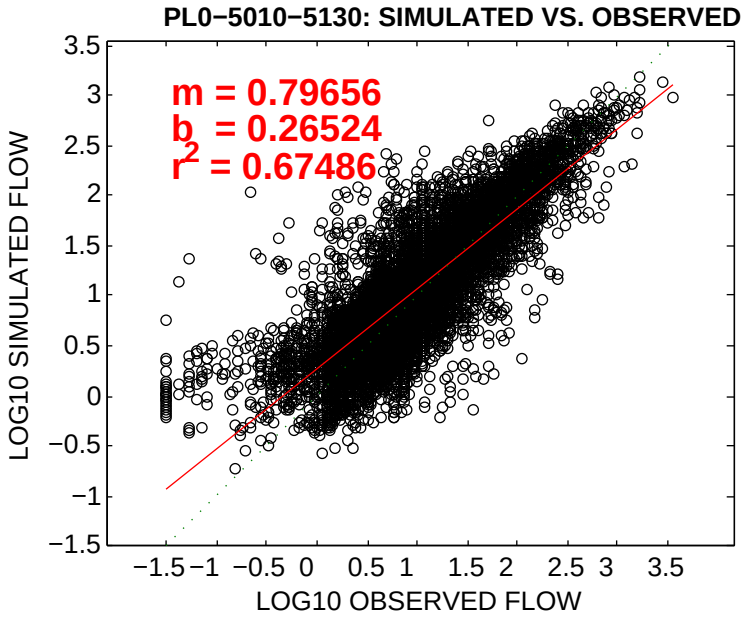


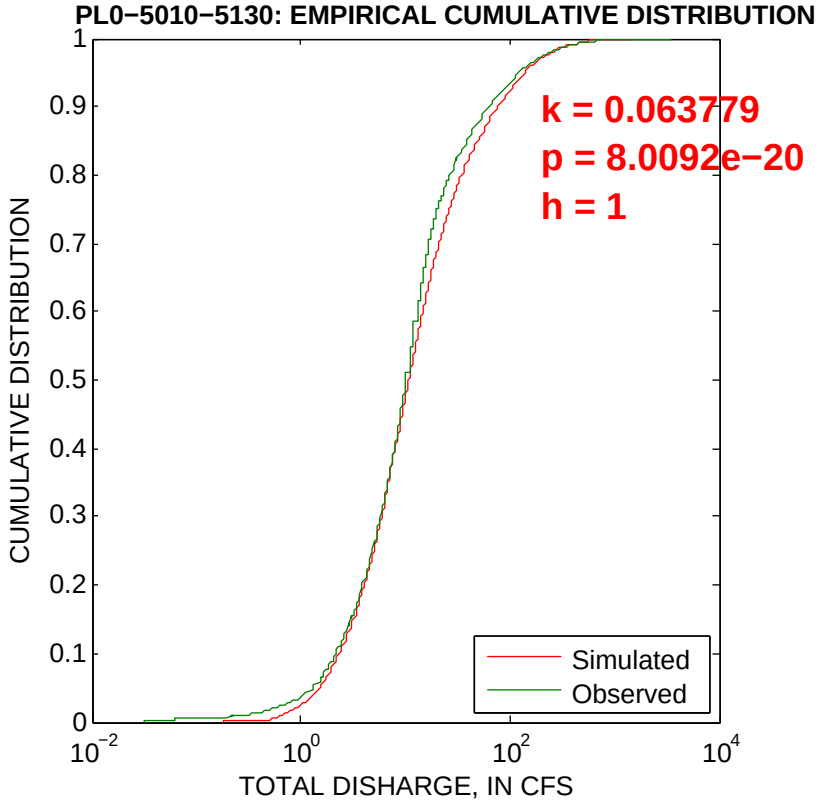












DATA SELECTION

scenario	file
P620171001WQ	FLOW.calib

plot: FLOW - total discharge

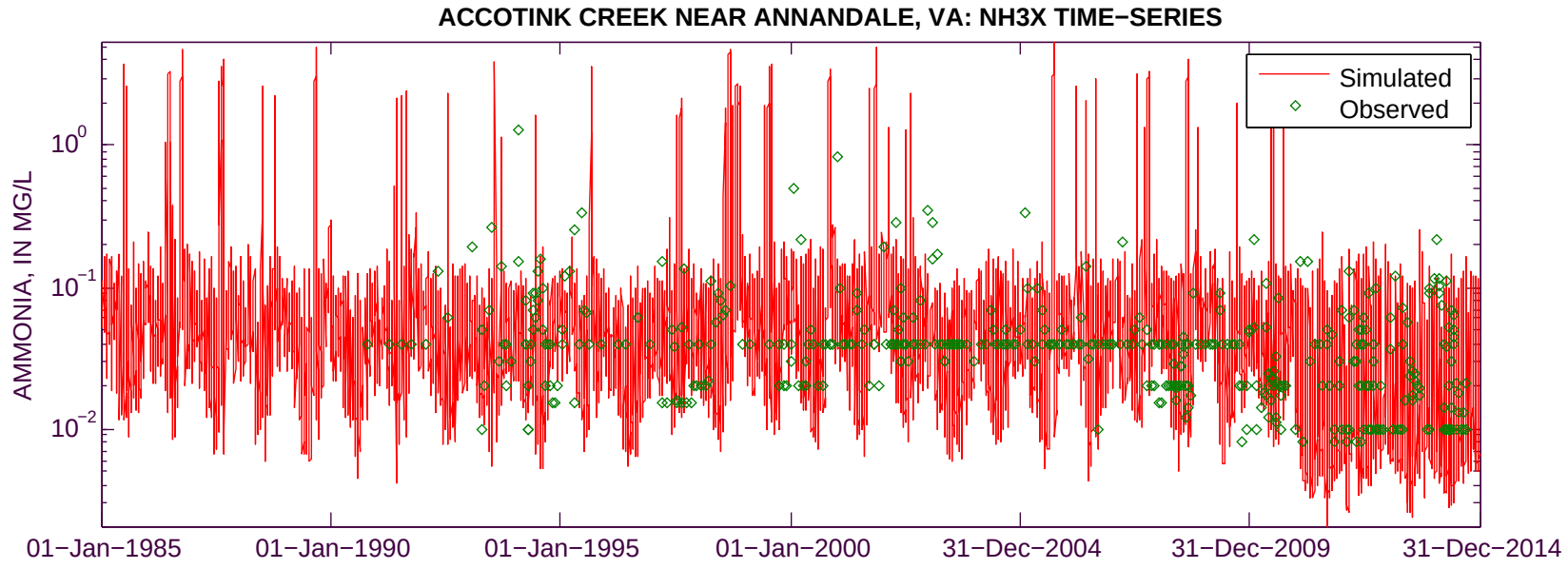
Dates: 1/1/1985 – 12/31/201

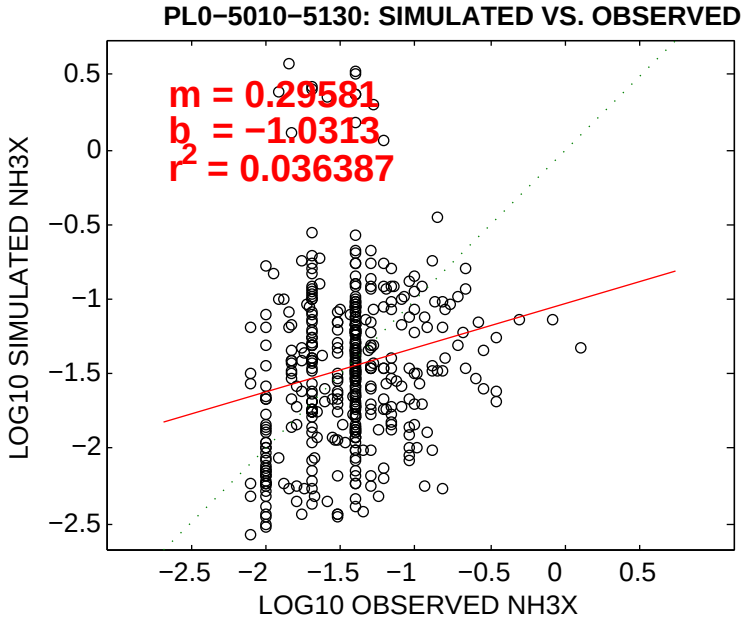
Drive	Directory	Observed
N/A	model	OBS20161101

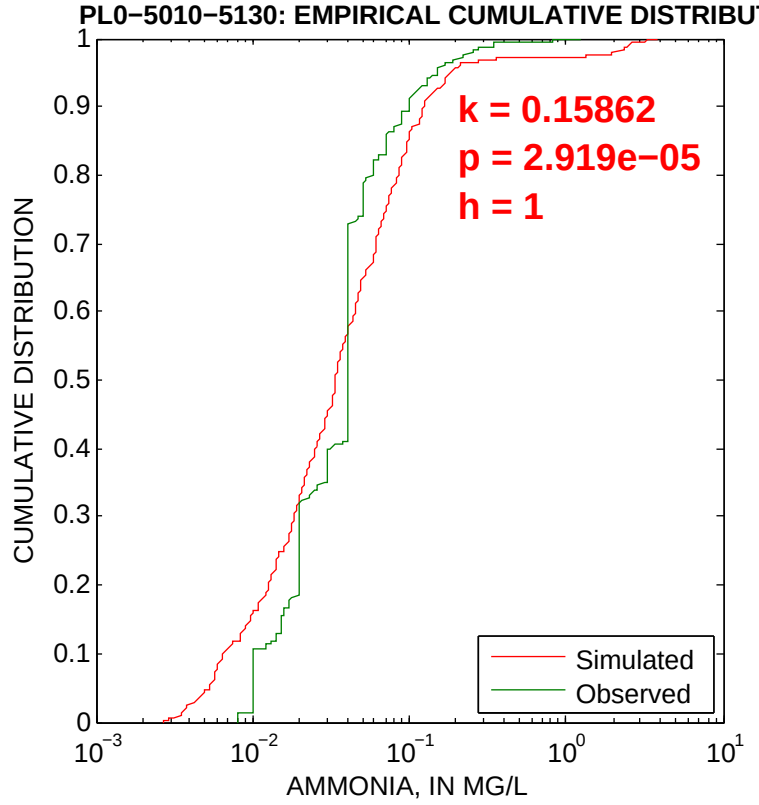
STATISTICS

n	10944	10944
	observe	**simulate**
min	0.0310631	0.18579
	-1.50776	-0.730978
mean	31.6897	33.3174
	1.02612	1.08261
media	10.0311	10.88
	1.00135	1.03663
max	3600.03	1495.4
	3.55631	3.17476
varian	9419.76	5857.56
	0.360146	0.33861
JB	0.001	0.001
	0.001	0.001
	ra	log
%	5.13652	5.50471
err.va	3060.01	0.128191
rel.std.err	0.32485	0.355941
mod.eff	0.67515	0.644059

VERSION 2.1







DATA SELECTION

scenario	file
P620171001WQ	NH3X.calib

plot: NH3X - ammonia

Dates 1/1/1985 12/31/201

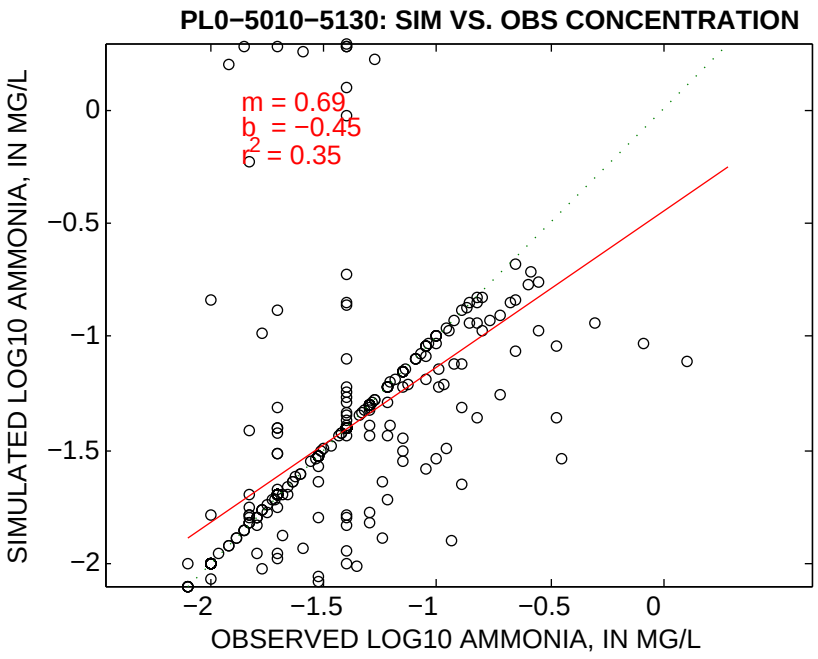
Drive	Directory	Observed
N/A	model	OBS20161101

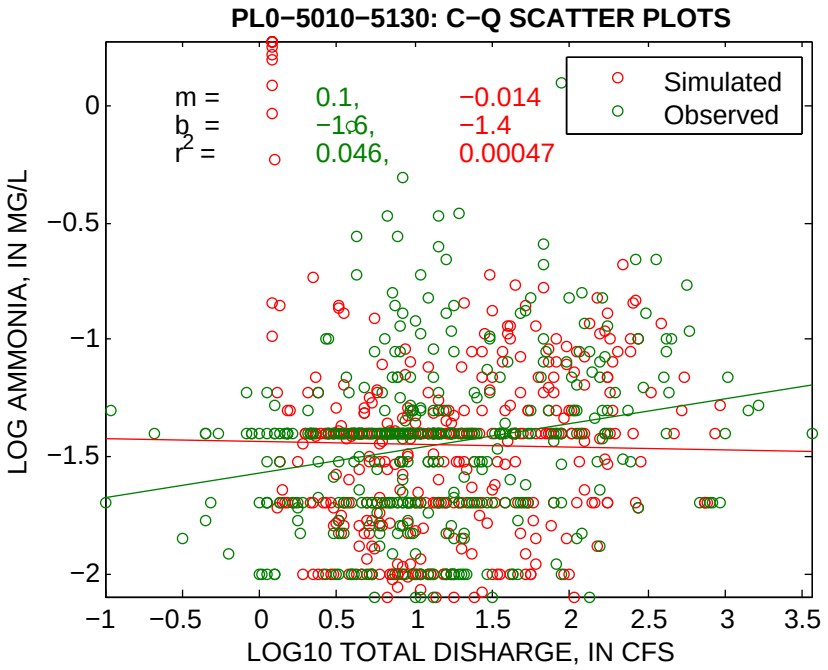
STATISTICS

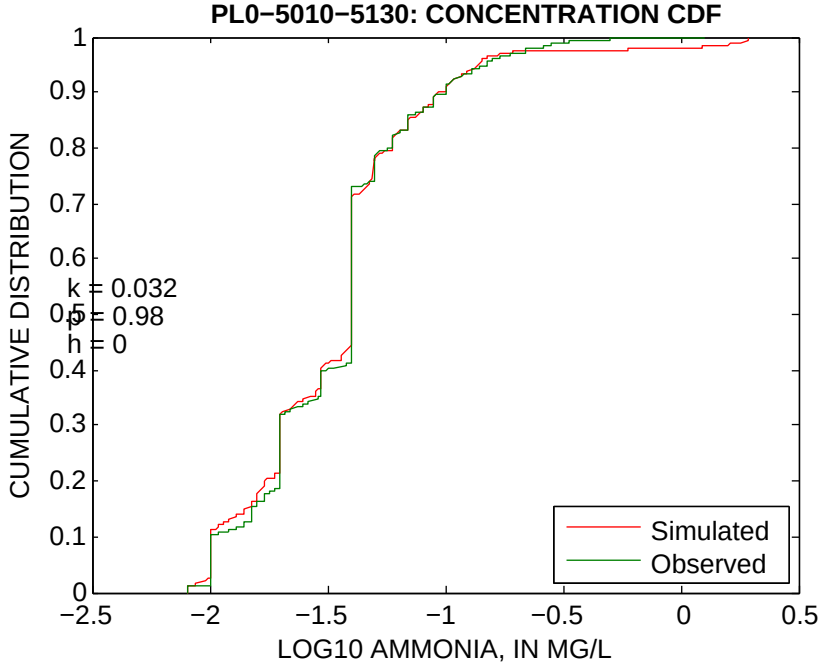
	n	435	435
		observe	simulate
min		0.008	0.002705
		-2.09691	-2.56783
mean		0.0529144	0.117991
		-1.45306	-1.46114
media		0.04	0.033771
		-1.39794	-1.47146
max		1.26	3.8083
		0.100371	0.580731
varian		0.00751752	0.177019
		0.12154	0.292279
JB		0.001	0.001
		0.001	0.001
		ra	log
%		122.985	0.555941
err.va		0.191213	0.34198
rel.std.err		25.4356	2.81371
mod.eff		-24.4356	-1.81371

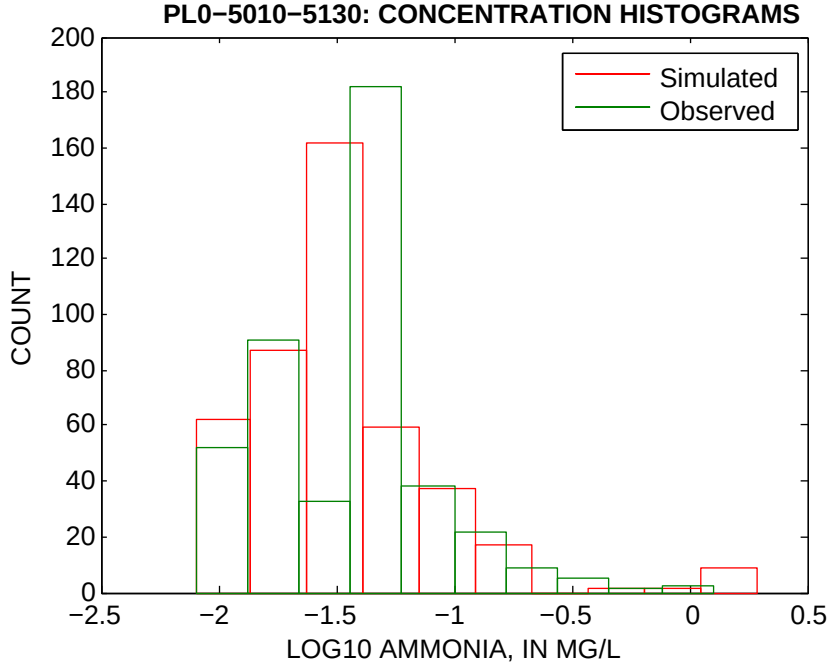
VERSION 2.1

ALL DATA
LOG10

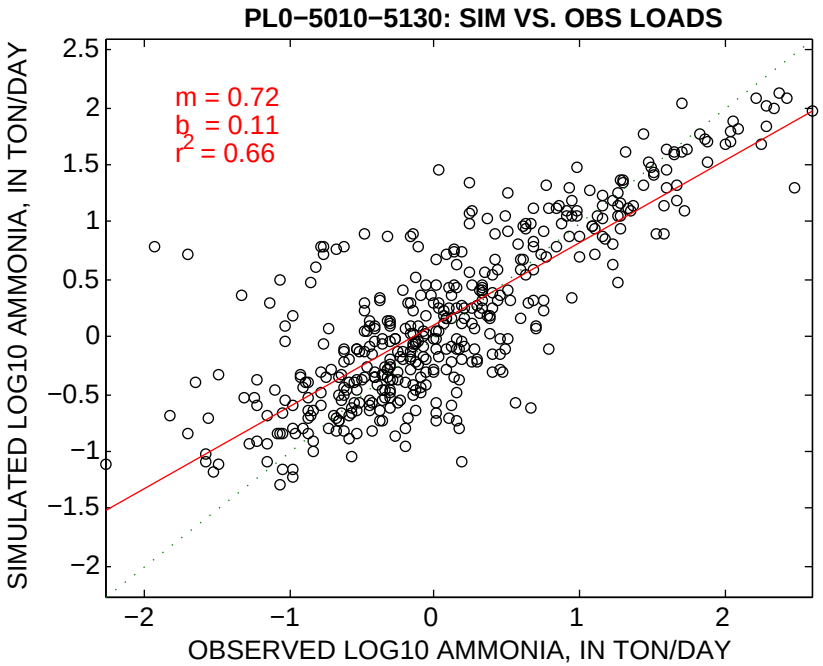


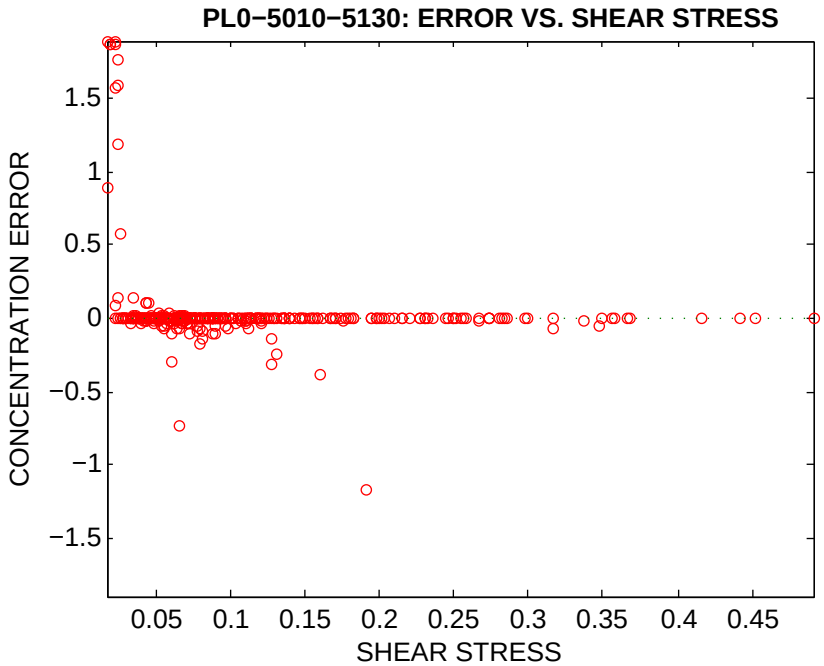


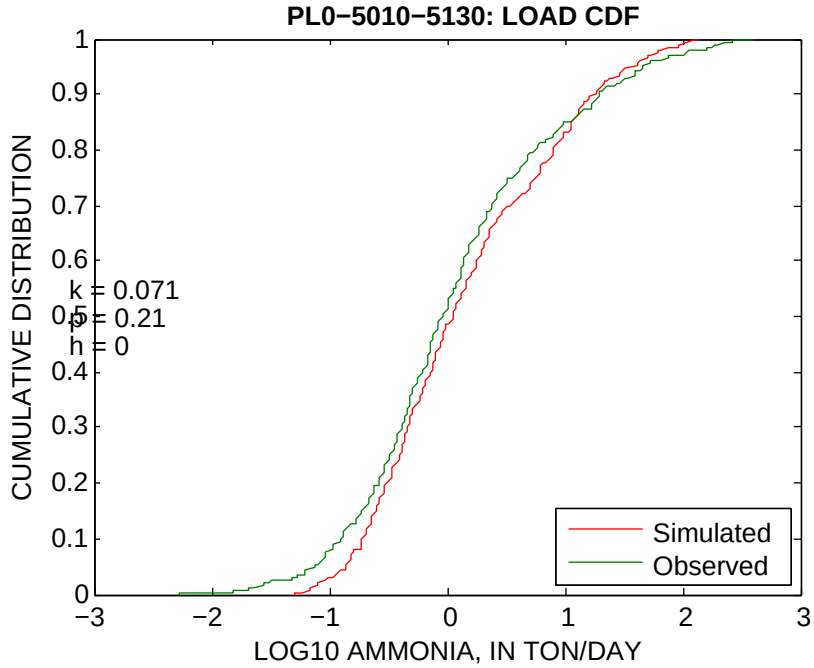


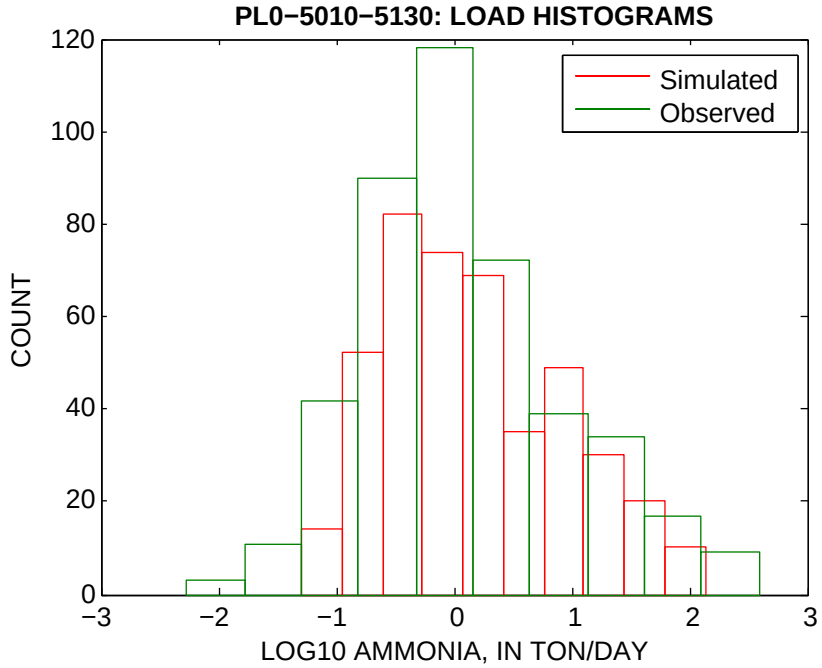


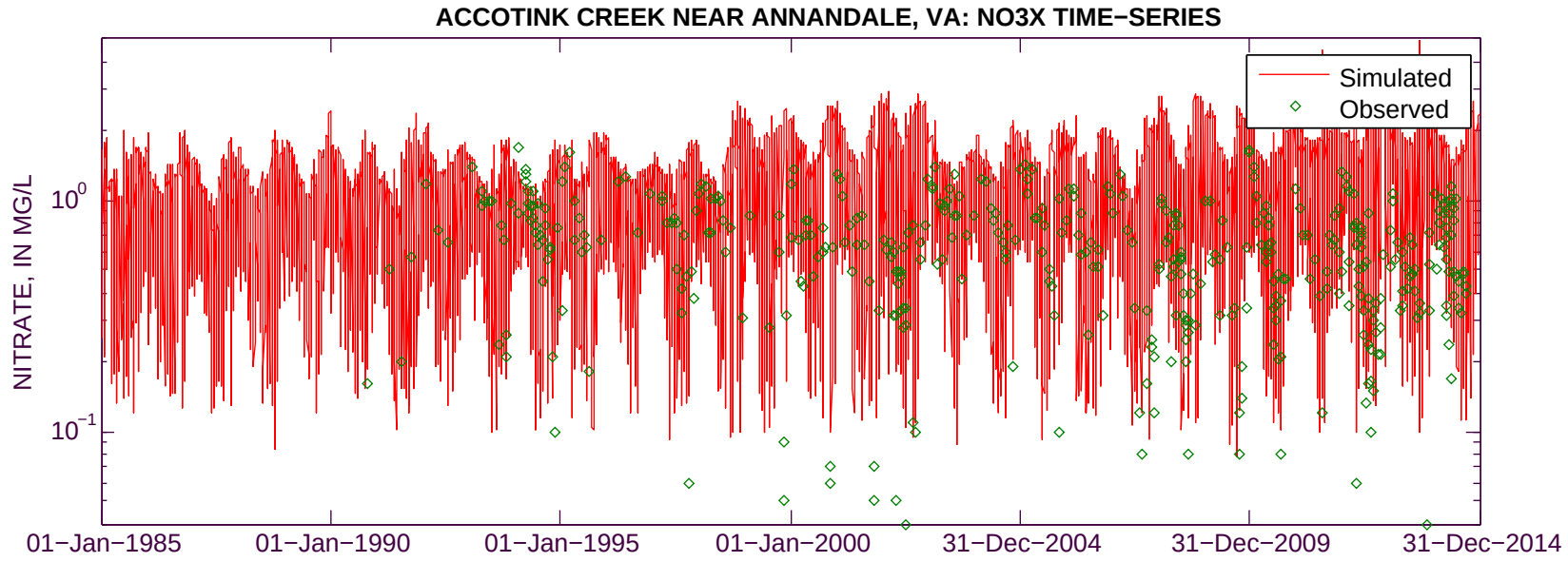
LOAD DATA
LOG10

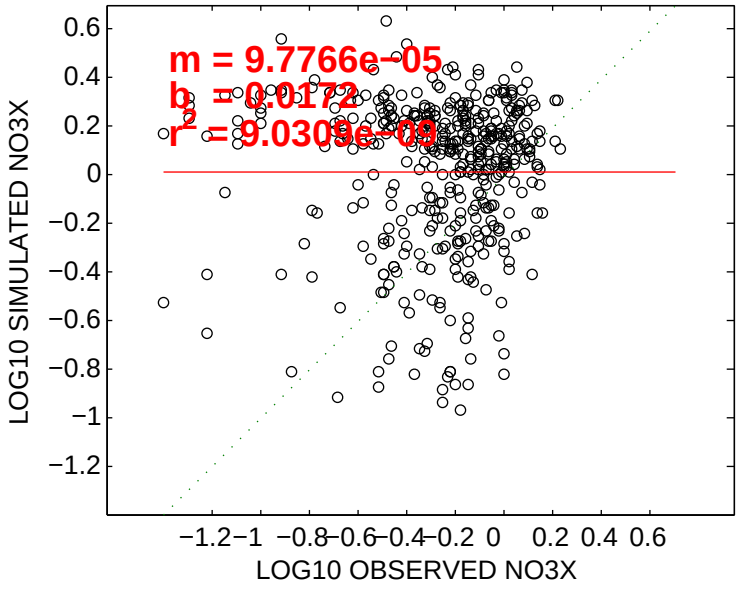


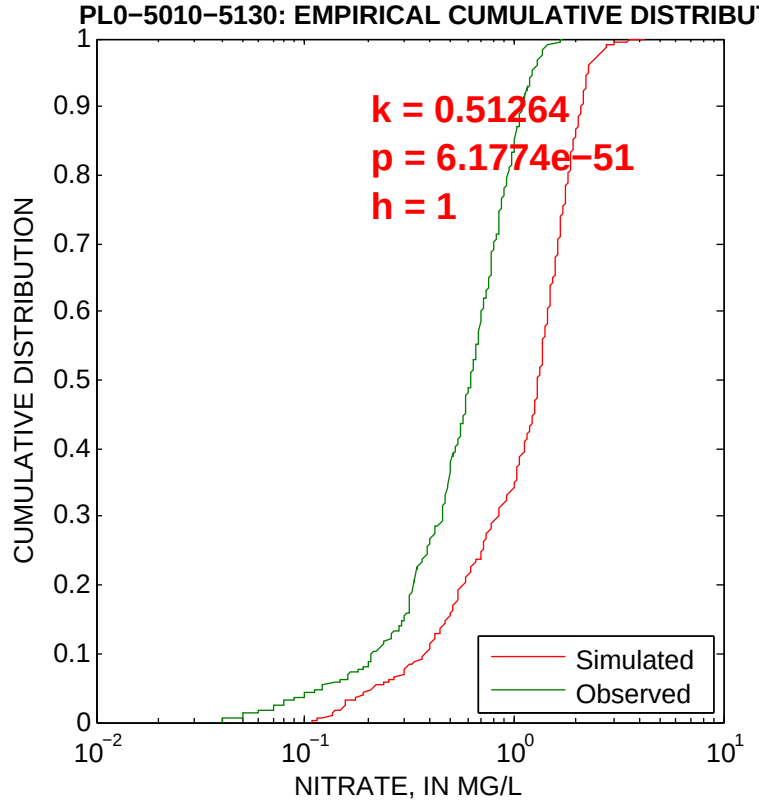












DATA SELECTION

scenario	file
P620171001WQ	NO3X.calib

plot: NO3X - nitrate

Dates: 1/1/1985 – 12/31/201

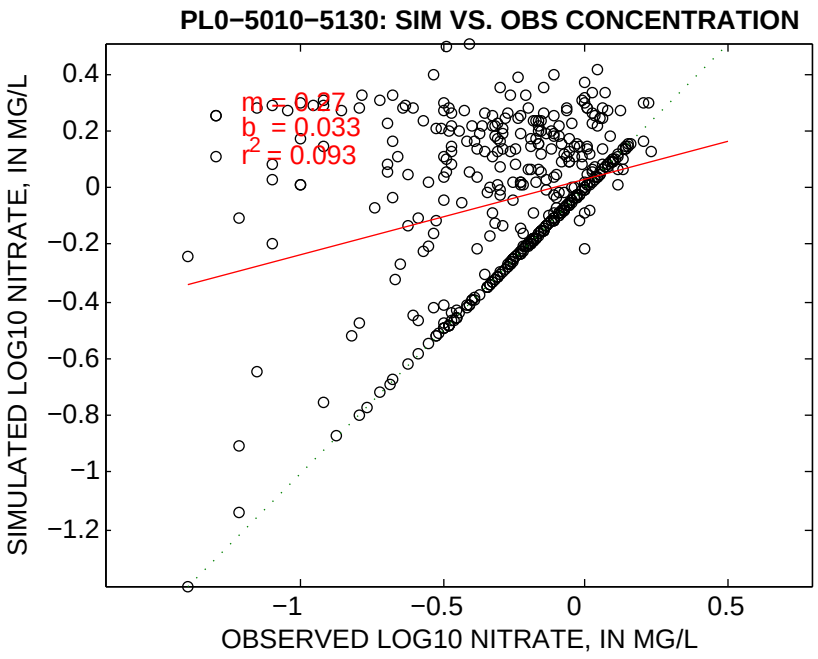
Drive	Directory	Observed
N/A	model	OBS20161101

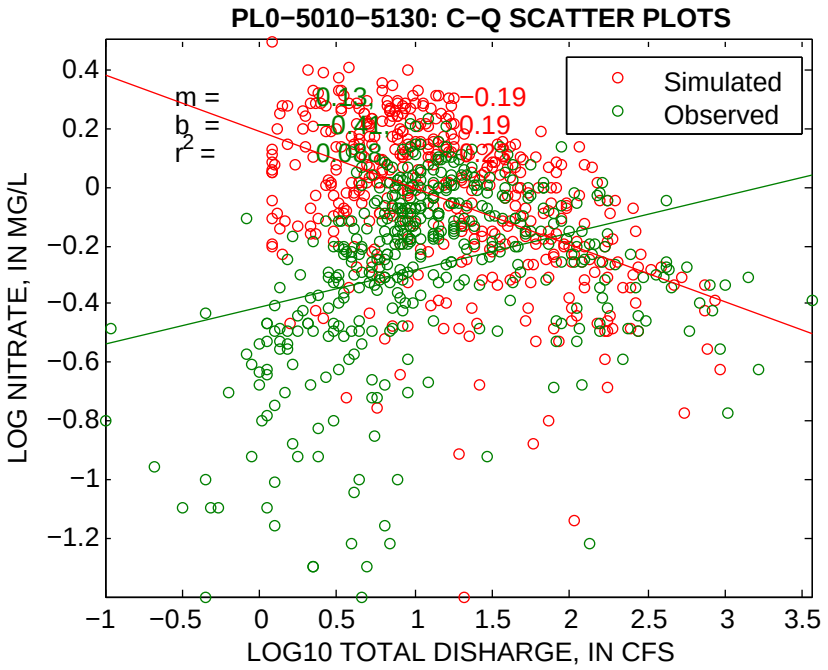
STATISTICS

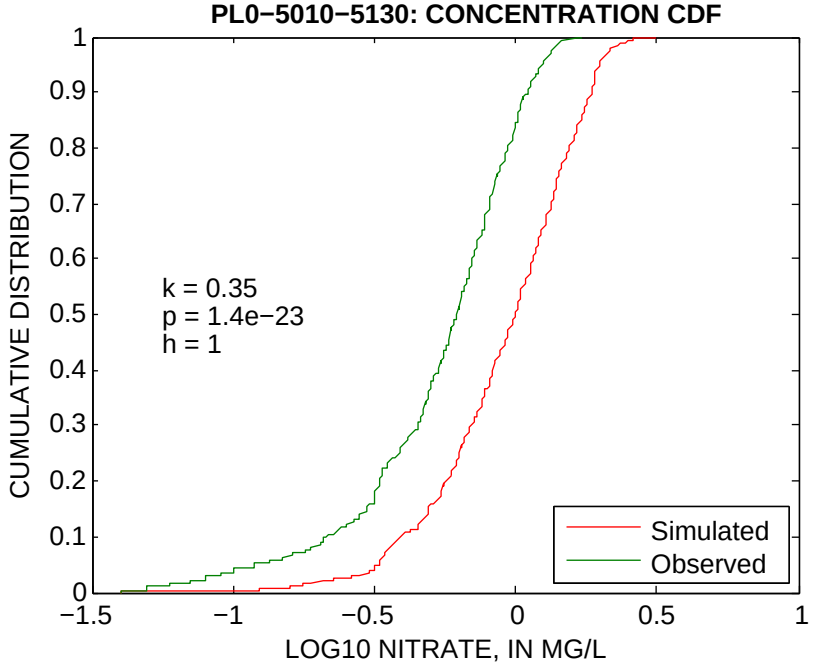
	n	435	435
		observe	simulate
min		0.04	0.10737
		-1.39794	-0.969117
mean		0.645786	1.26781
		-0.270562	0.0171731
media		0.625654	1.3111
		-0.203666	0.117636
max		1.7	4.2729
		0.230449	0.630723
varian		0.113492	0.449812
		0.0910582	0.0963744
JB		0.006301	0.008449
		0.001	0.001
		ra	log
%		96.3202	-106.347
err.va		0.960074	0.270397
rel.std.err		8.45939	2.9695
mod.eff		-7.45939	-1.9695

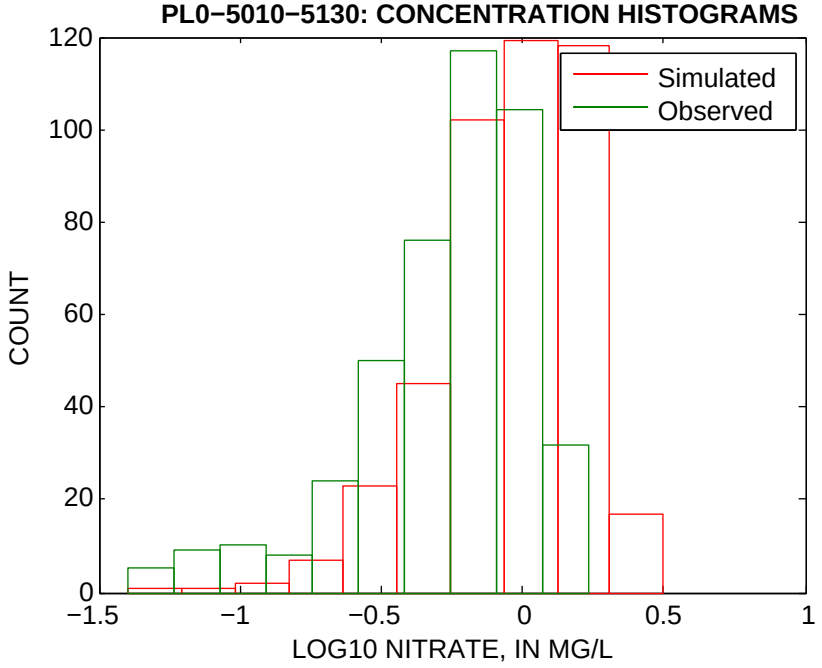
VERSION 2.1

ALL DATA
LOG10

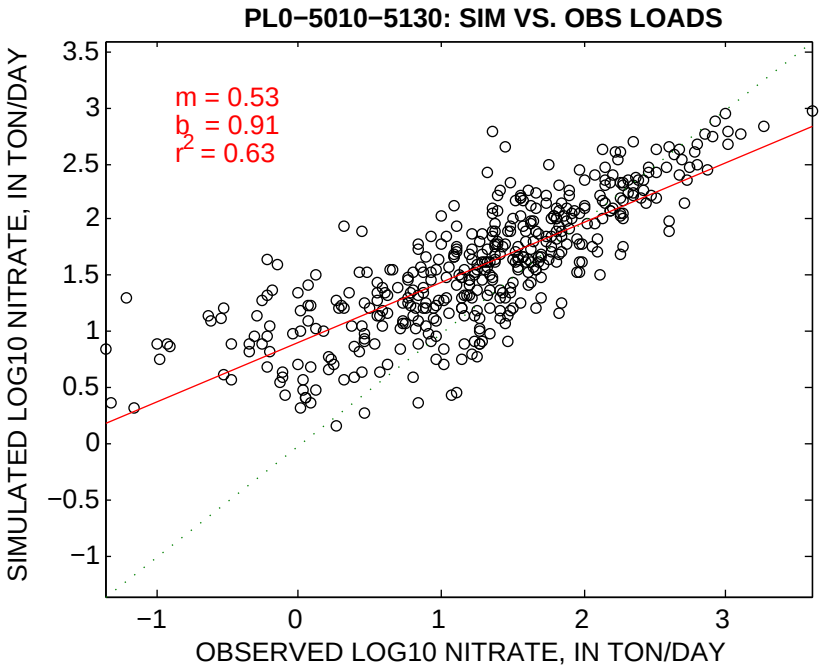


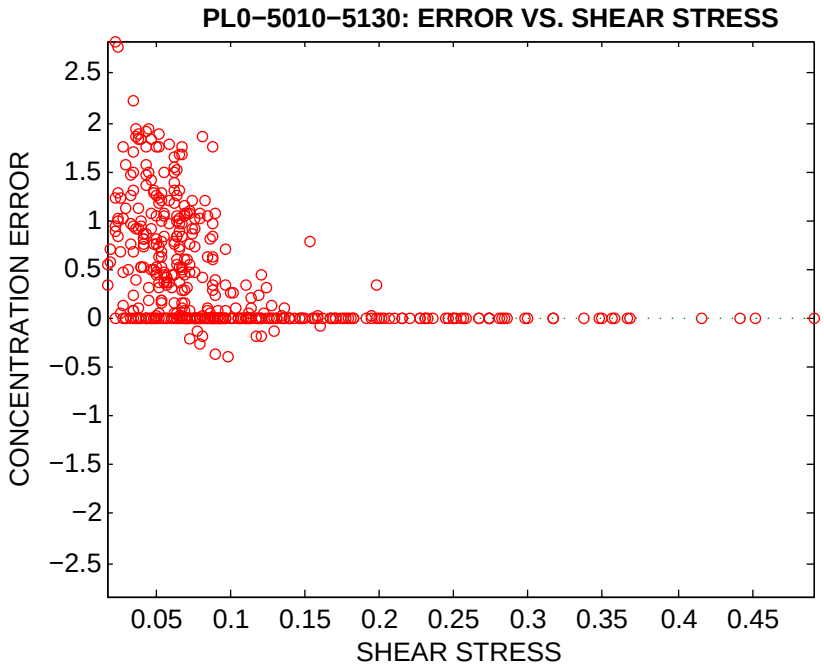


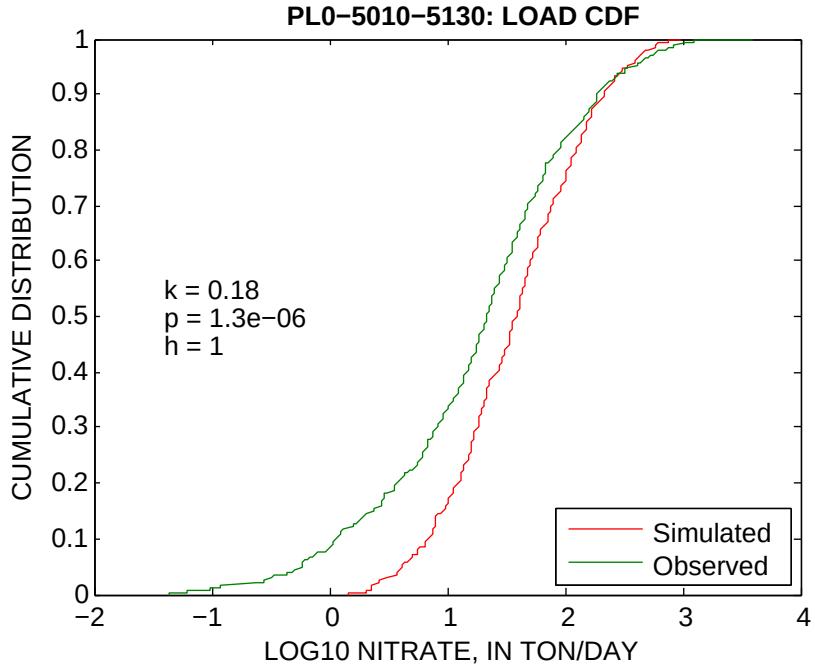


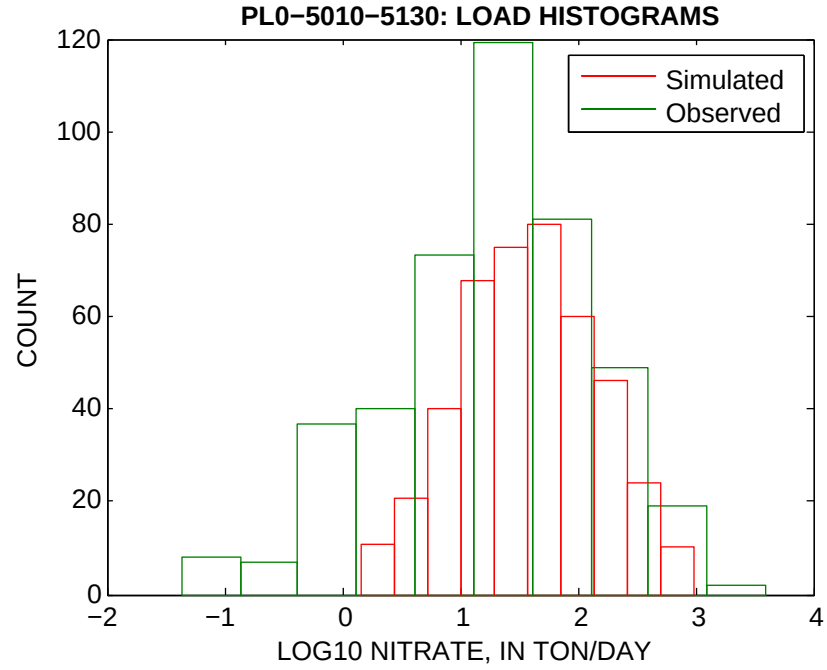


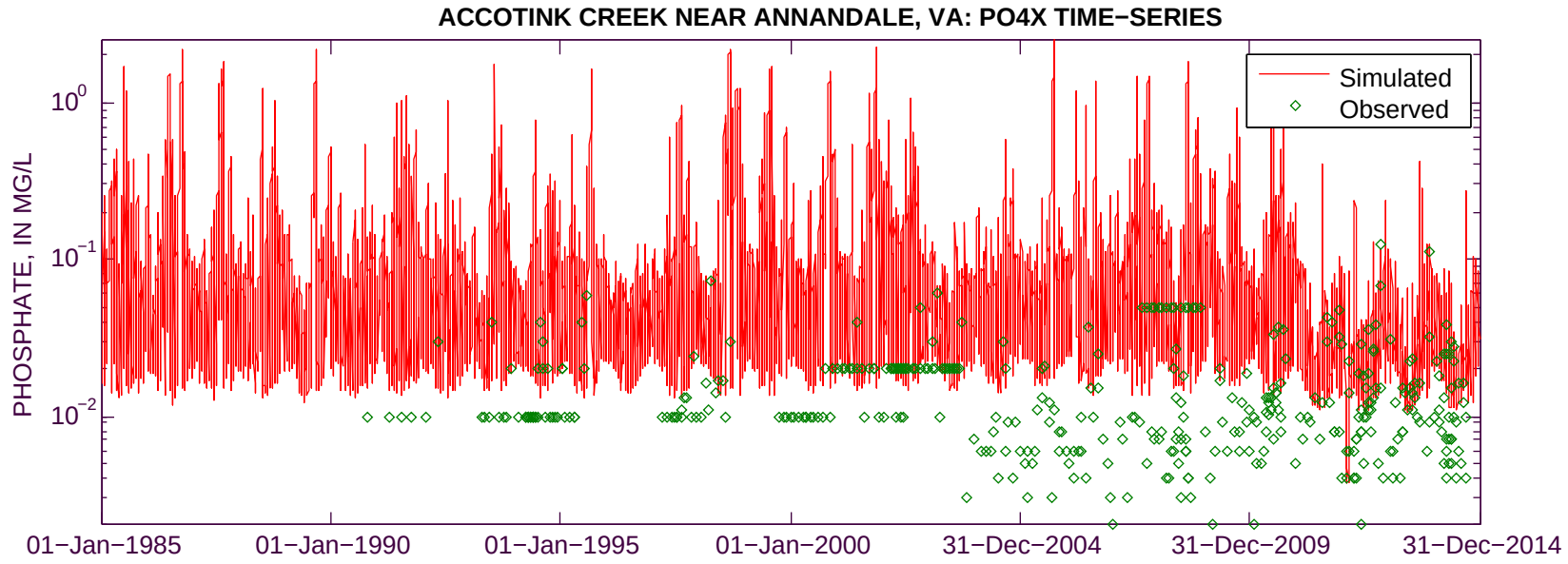
LOAD DATA
LOG10

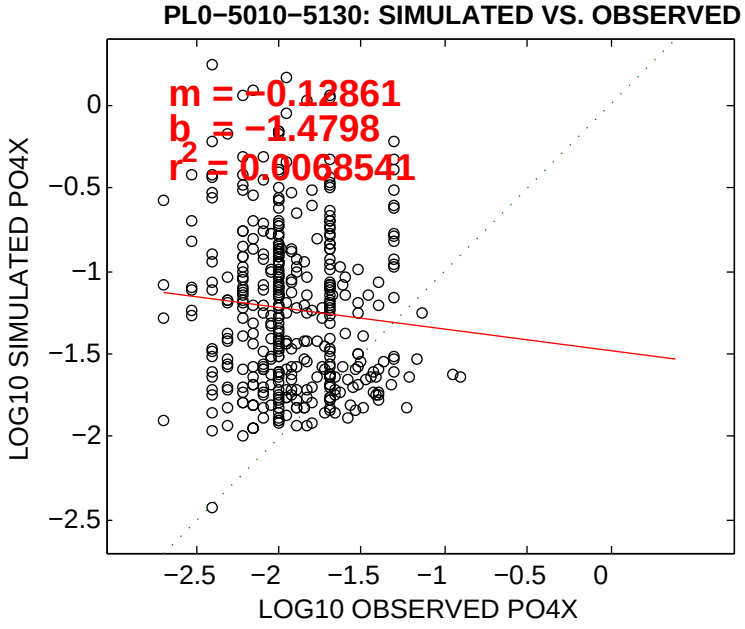


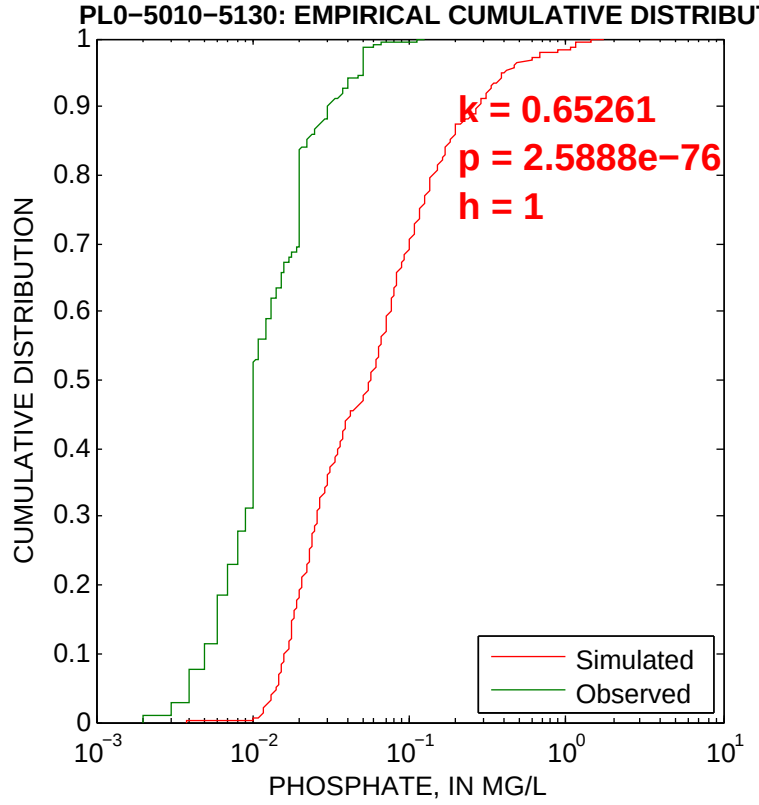












DATA SELECTION

scenario: P620171001WQ | file: PO4X.calib

plot: PO4X - phosphate

Dates: 1/1/1985 – 12/31/201

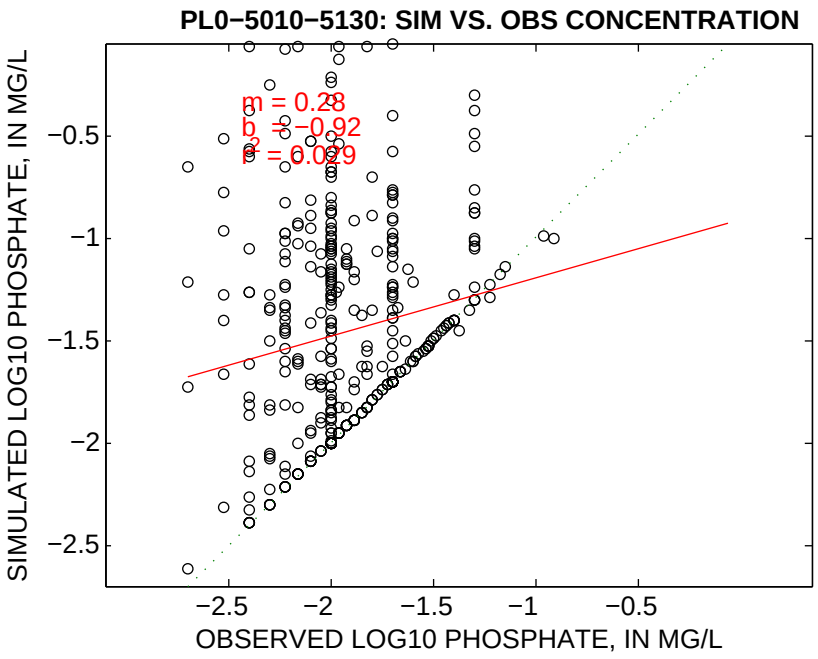
Drive: N/A | Directory: model | Observed: OBS20161101

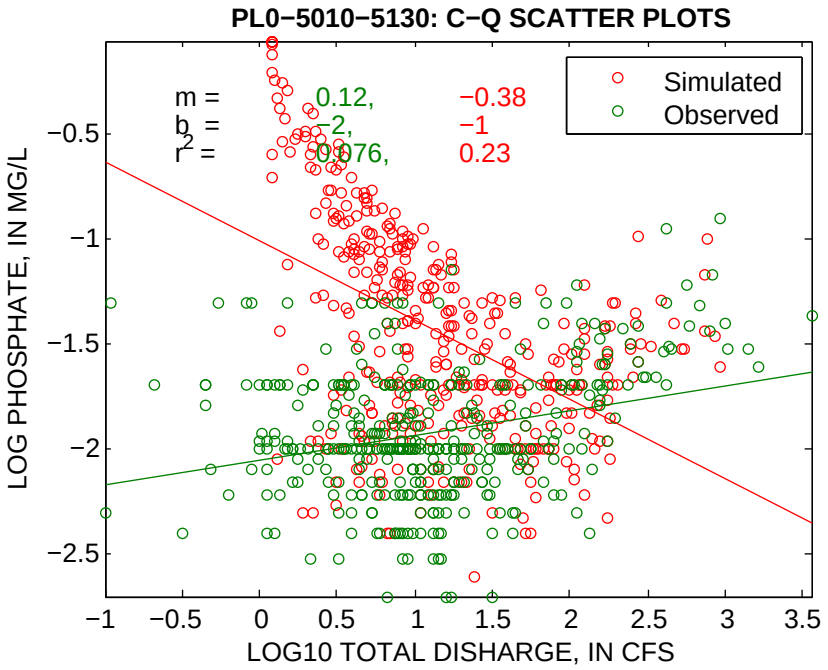
STATISTICS

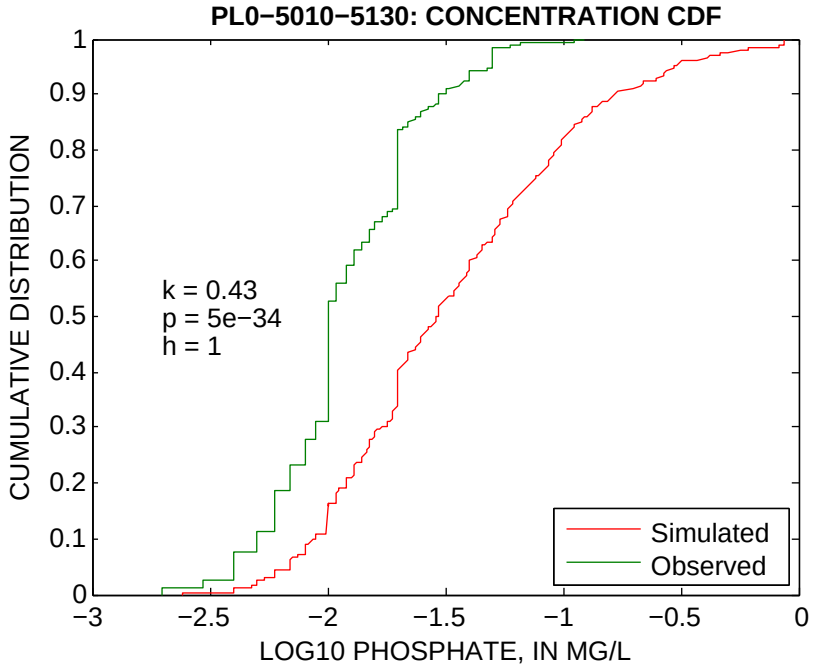
	n	403	403
		observe	simulate
min		0.002	0.0038055
		-2.69897	-2.41959
mean		0.0157268	0.116854
		-1.91839	-1.2331
media		0.01	0.05607
		-2	-1.25127
max		0.123138	1.7289
		-0.909608	0.23777
varian		0.00019376	0.03907
		0.0935484	0.225757
JB		0.001	0.001
		0.041181	0.001052
		ra	log
%		643.024	-35.7222
err.va		0.0498429	0.814161
rel.std.err		257.236	8.7031
mod.eff		-256.236	-7.7031

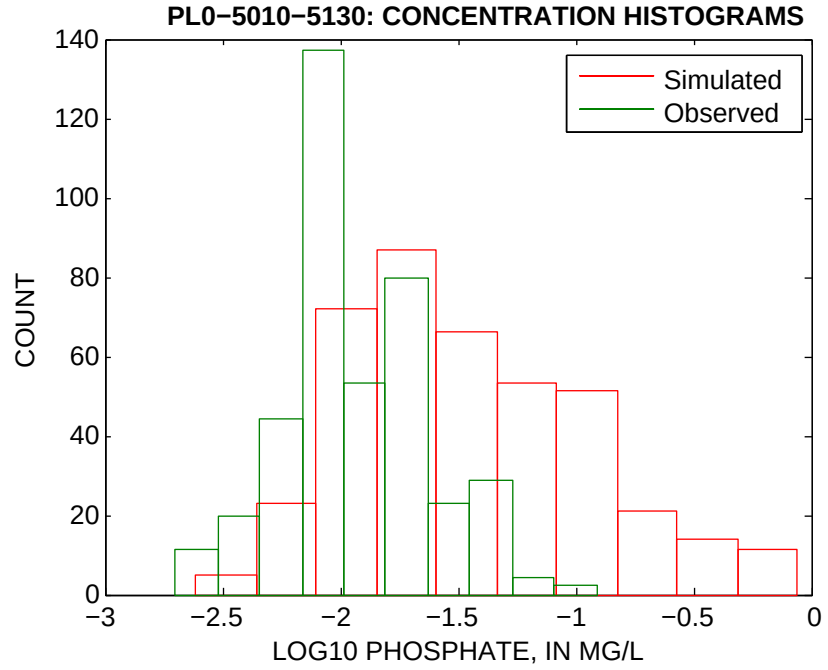
VERSION 2.1

ALL DATA
LOG10

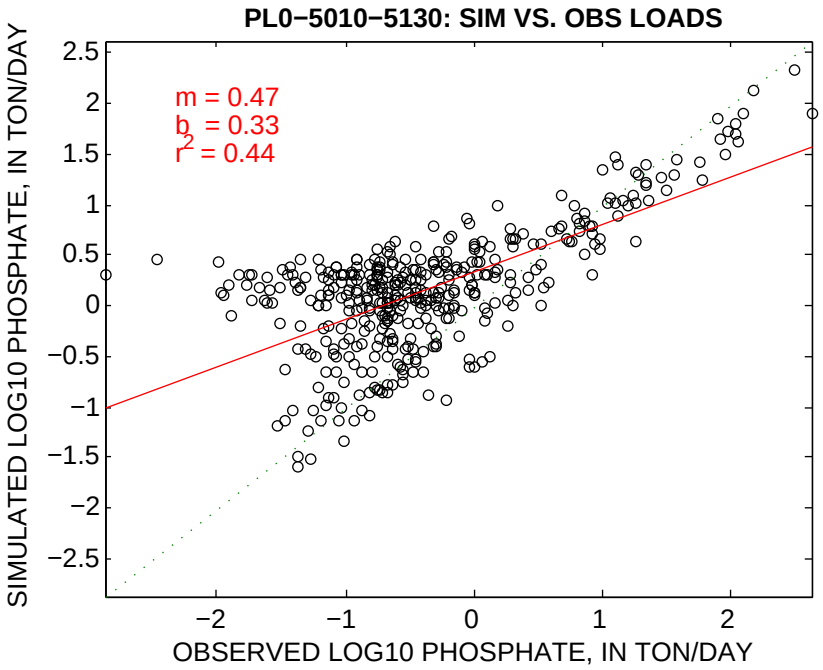


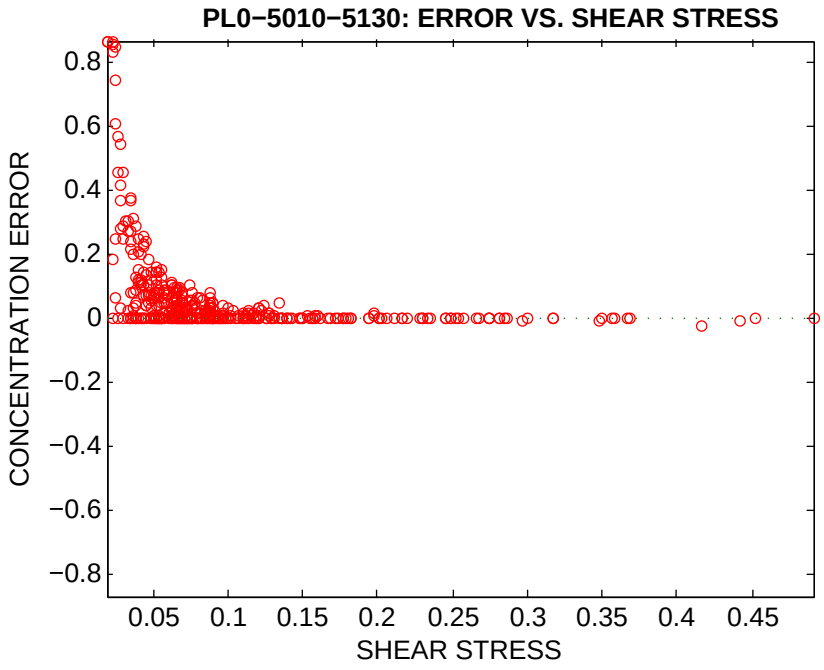


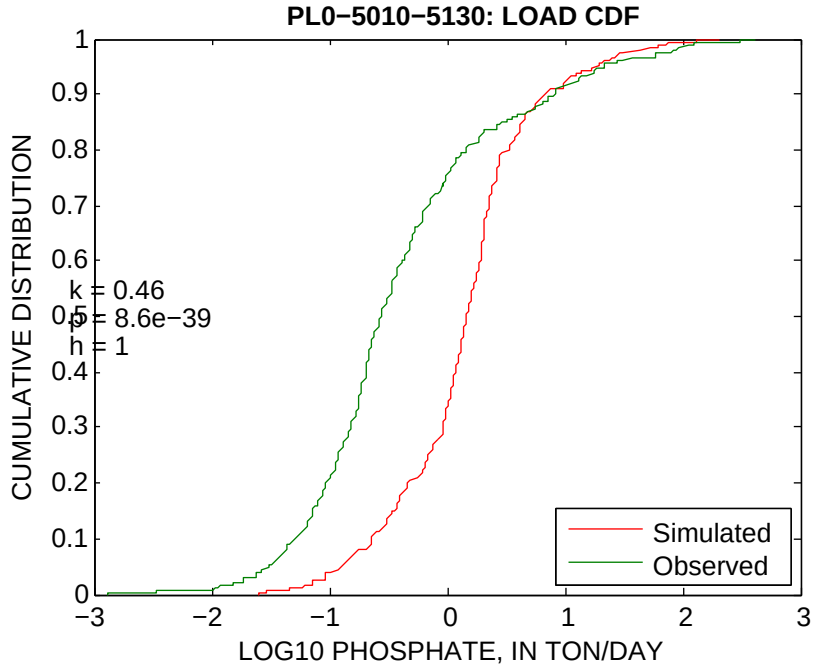


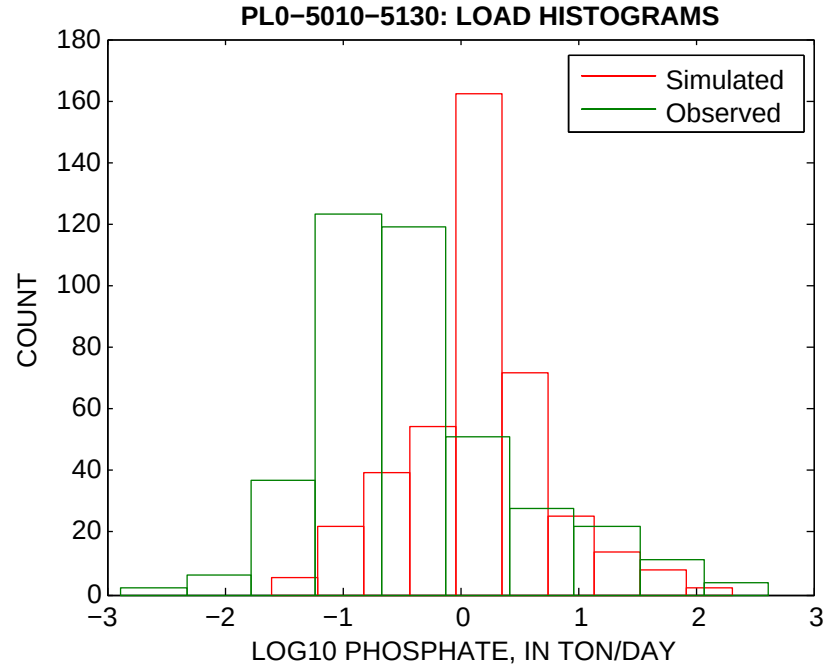


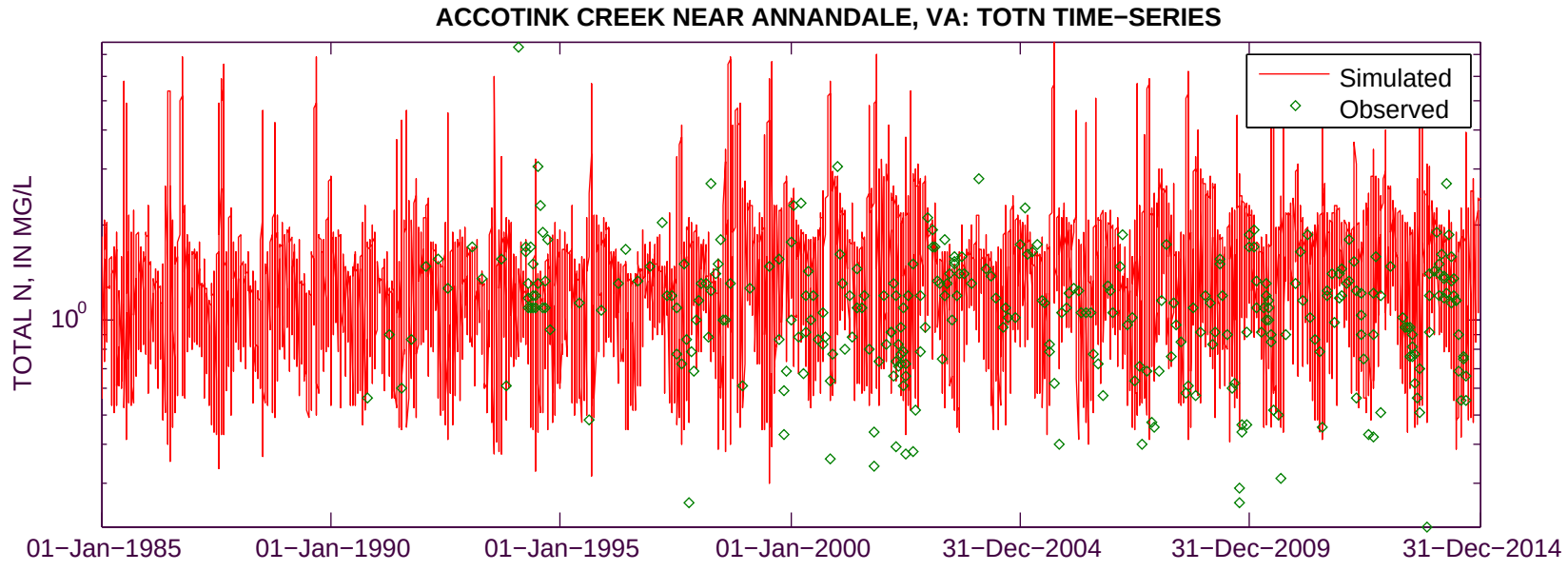
LOAD DATA
LOG10

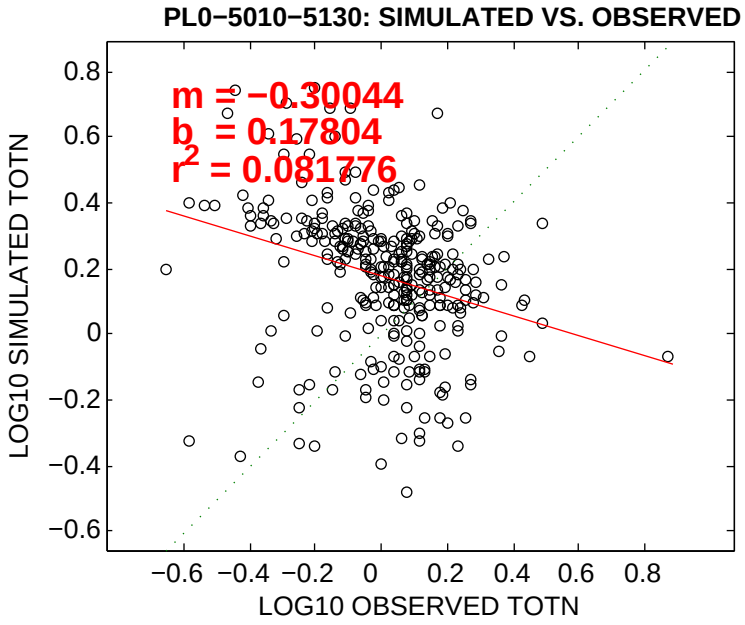


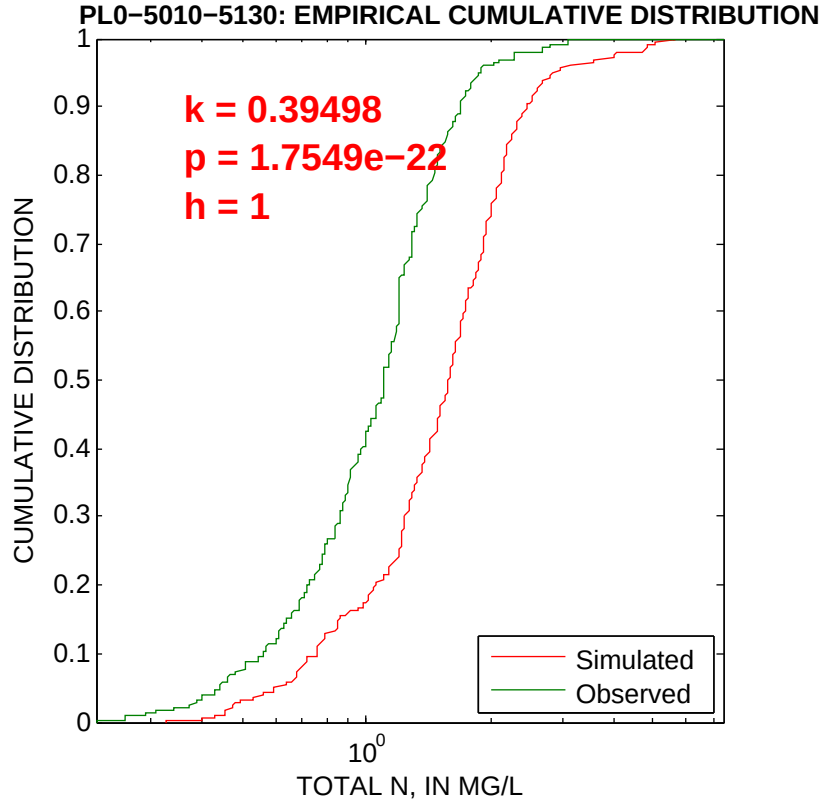












DATA SELECTION

scenario: P620171001WQ | file: TOTN.calib

plot: TOTN - total nitrogen

Dates: 1/1/1985 – 12/31/201

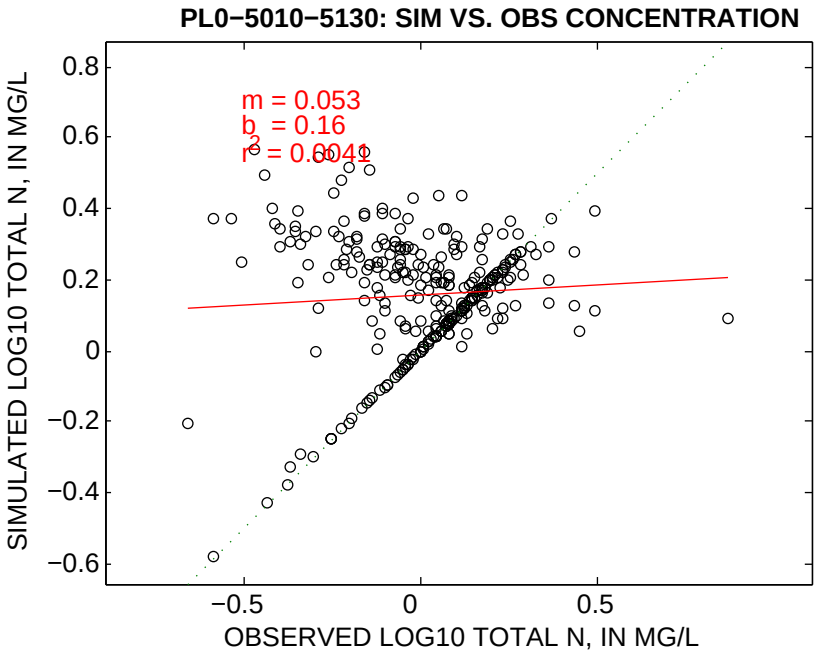
Drive: N/A | Directory: model | Observed: OBS20161101

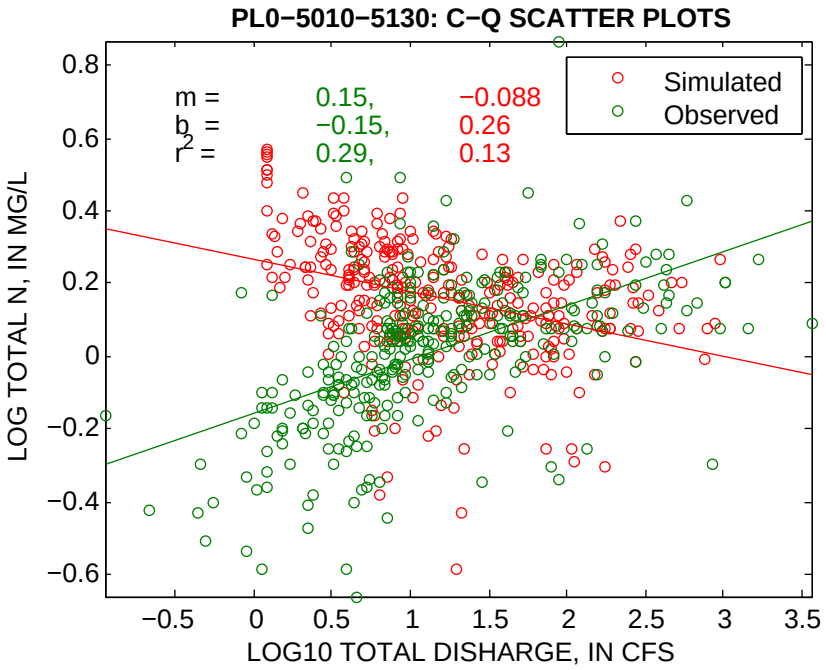
STATISTICS

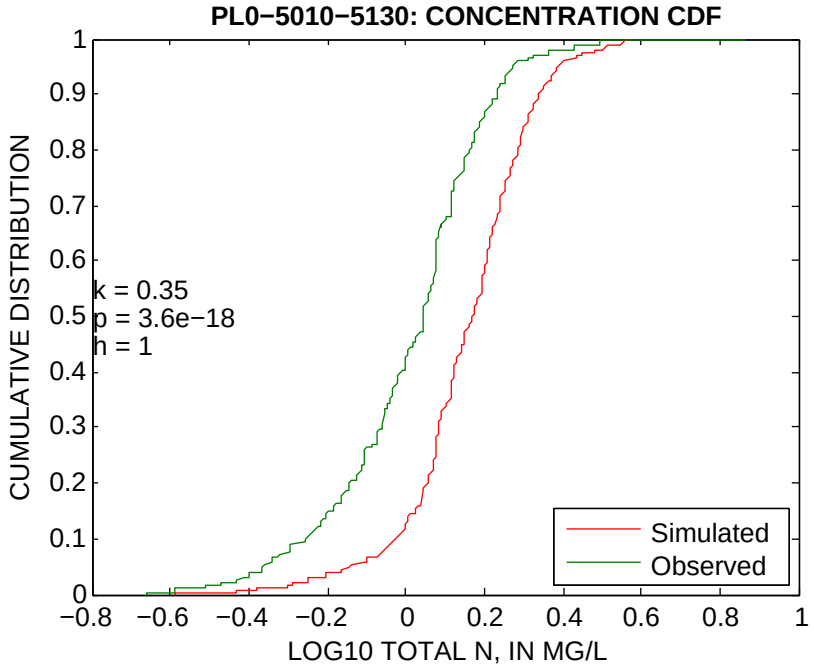
		observe	simulate
n		319	319
min		0.22	0.32859
		-0.657577	-0.483346
mean		1.13862	1.66889
		0.0119093	0.174461
media		1.1	1.5972
		0.0413927	0.203359
max		7.37	5.6156
		0.867467	0.749396
varian		0.341129	0.668396
		0.0395475	0.0436533
JB		0.001	0.001
		0.001	0.009931
		ra	log
%		46.5714	1364.92
err.va		1.56647	0.13347
rel.std.err		4.59202	3.37494
mod.eff		-3.59202	-2.37494

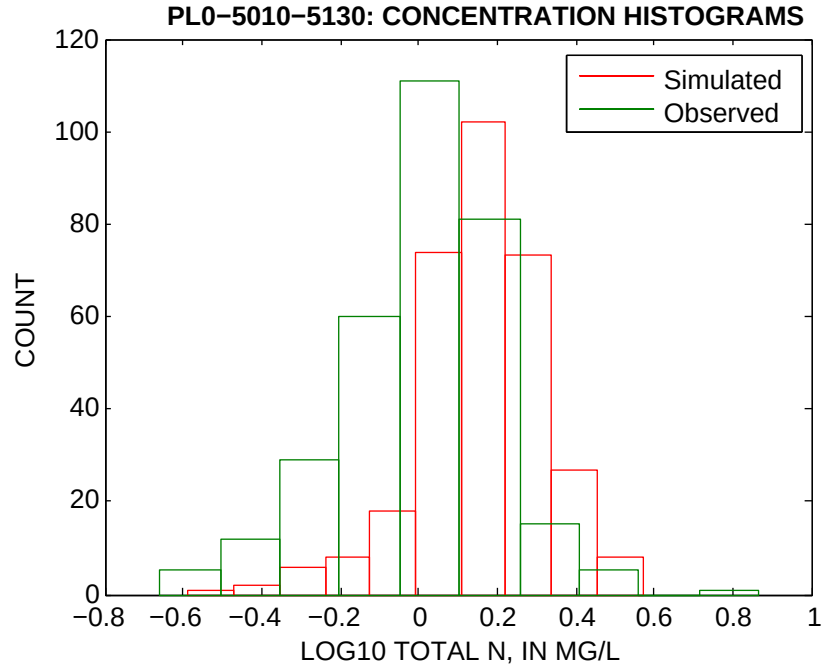
VERSION 3.1

ALL DATA
LOG10

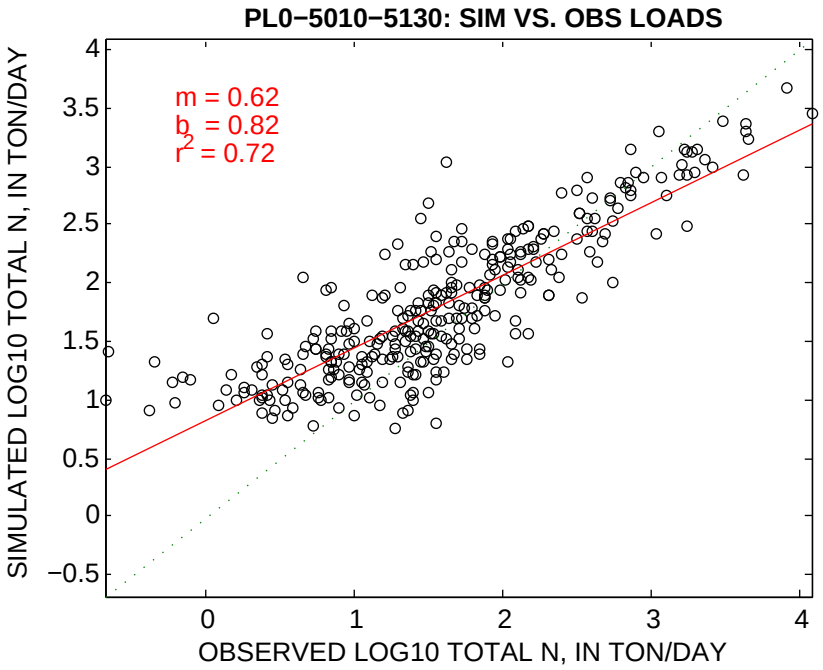


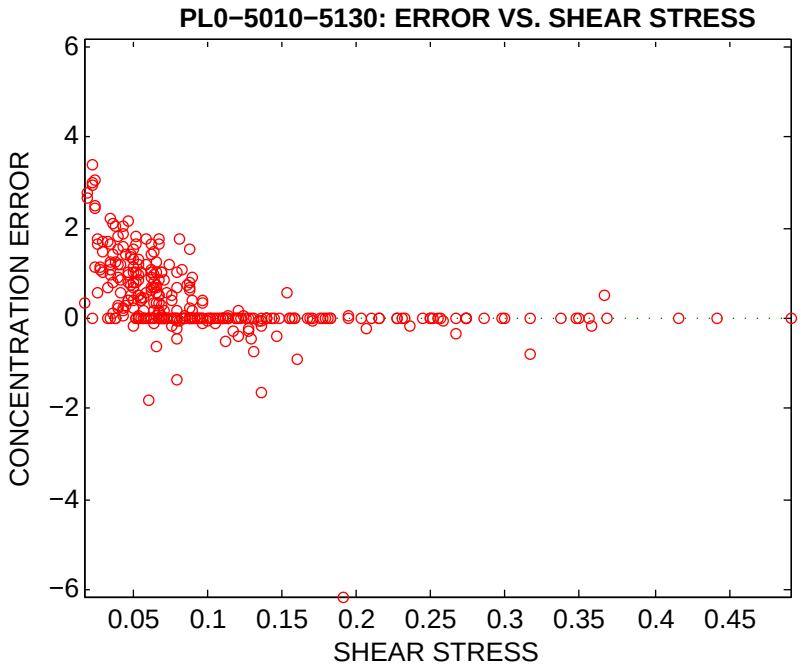


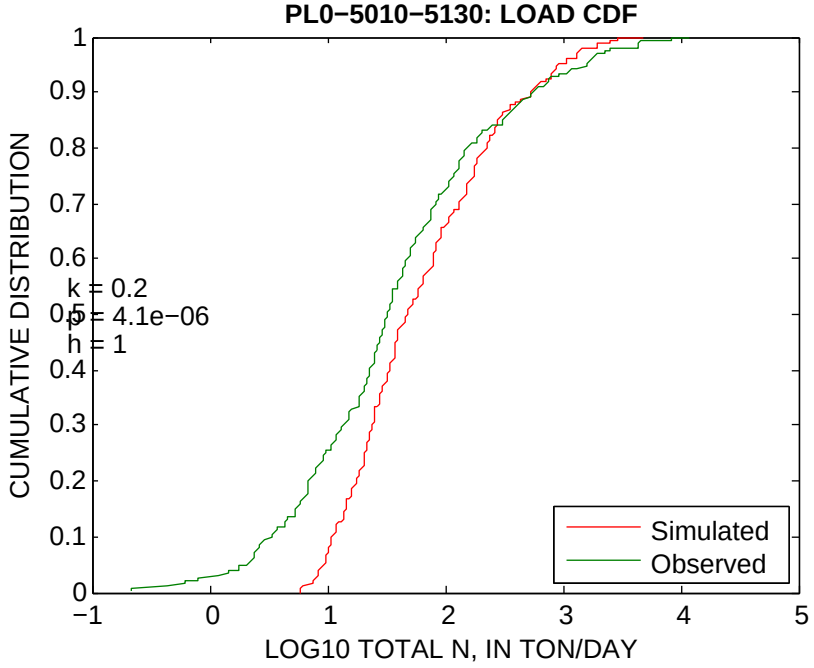


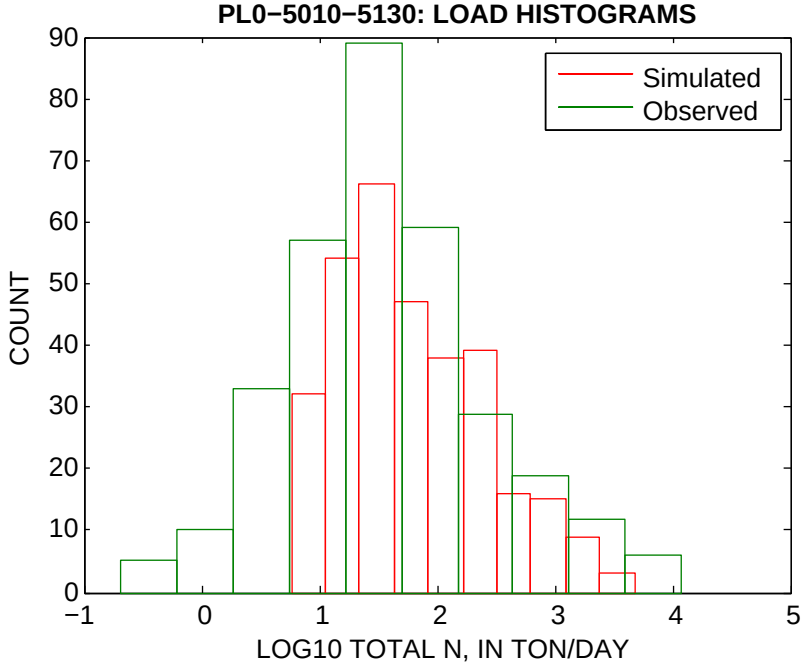


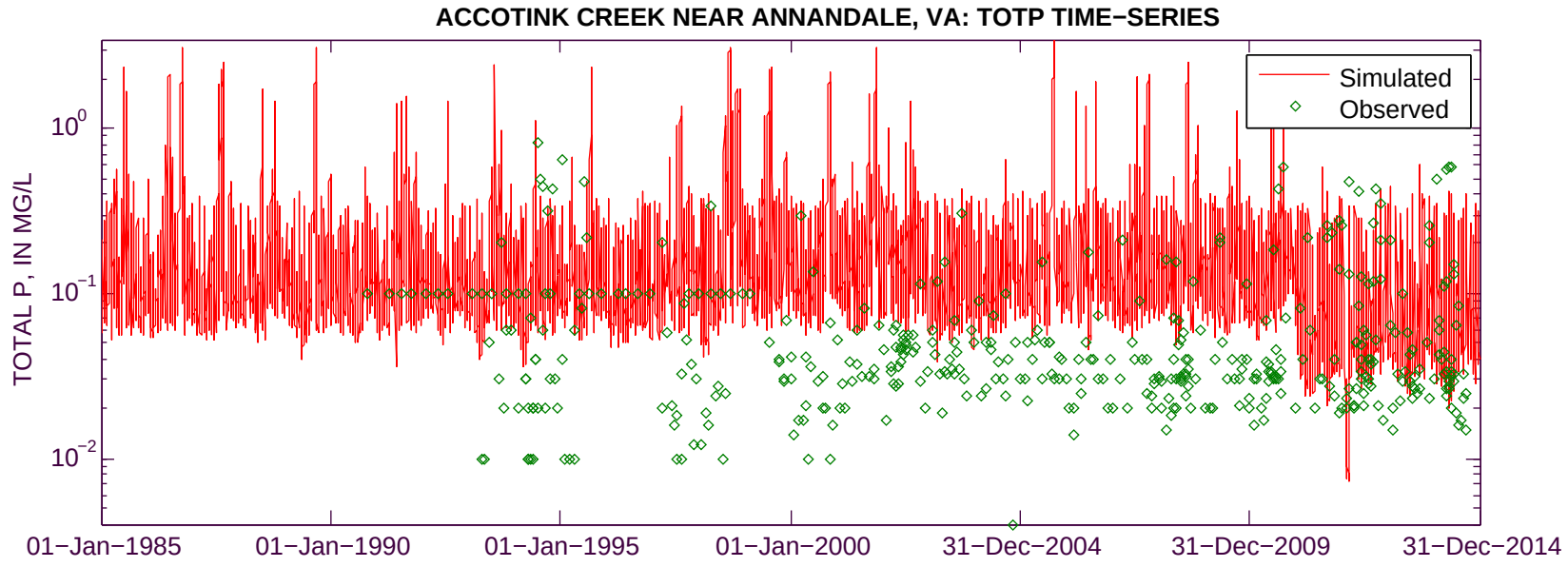
LOAD DATA
LOG10

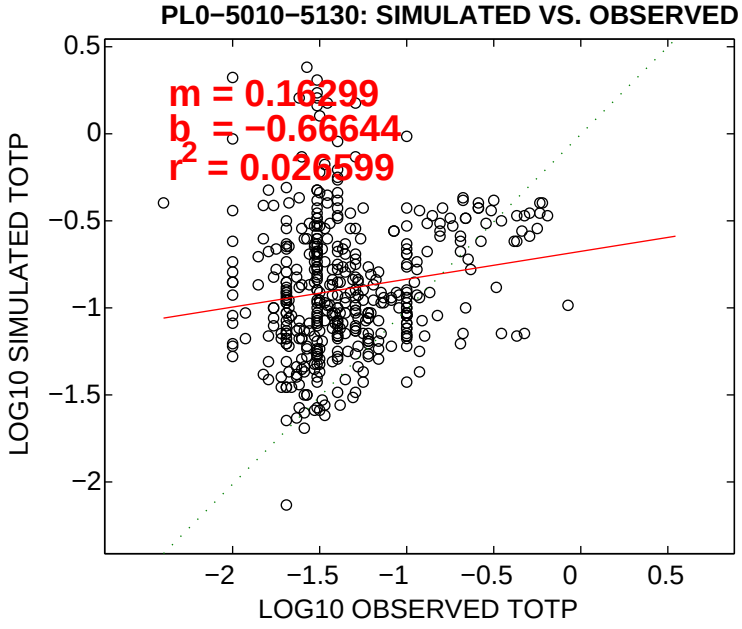


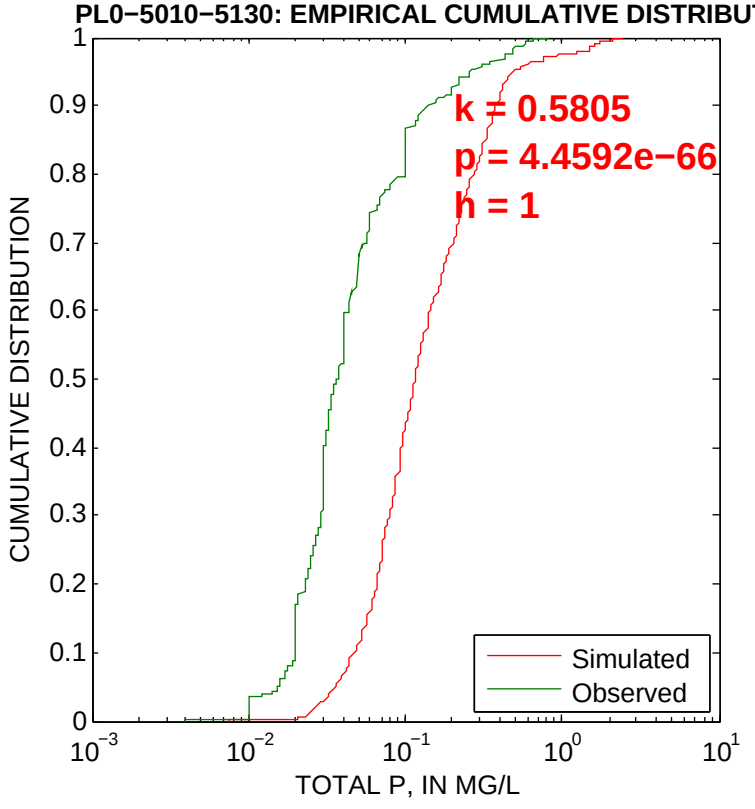












DATA SELECTION

scenario: P620171001WQ | file: TOTP.calib

plot: TOTP - total phosphorus

Dates: 1/1/1985 – 12/31/201

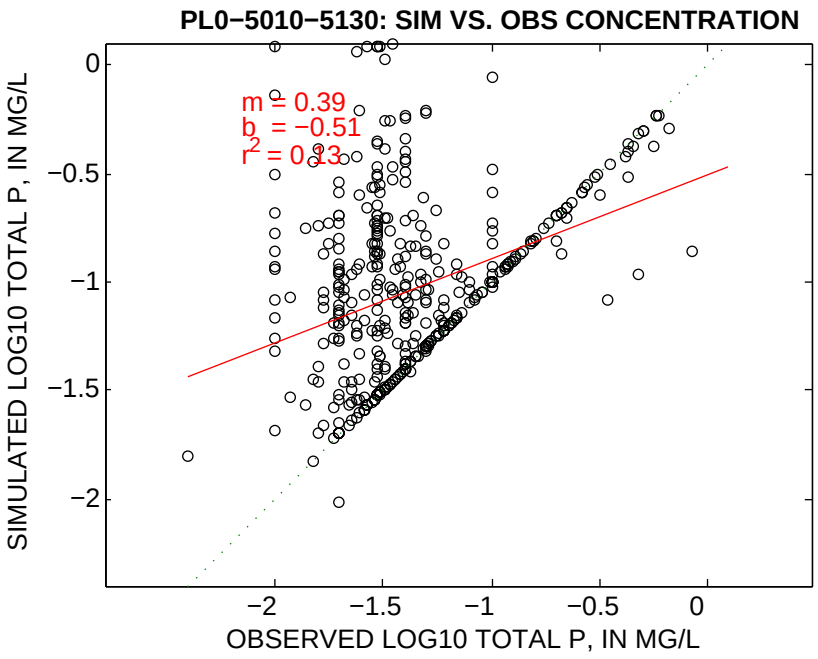
Drive: N/A | Directory: model | Observed: OBS20161101

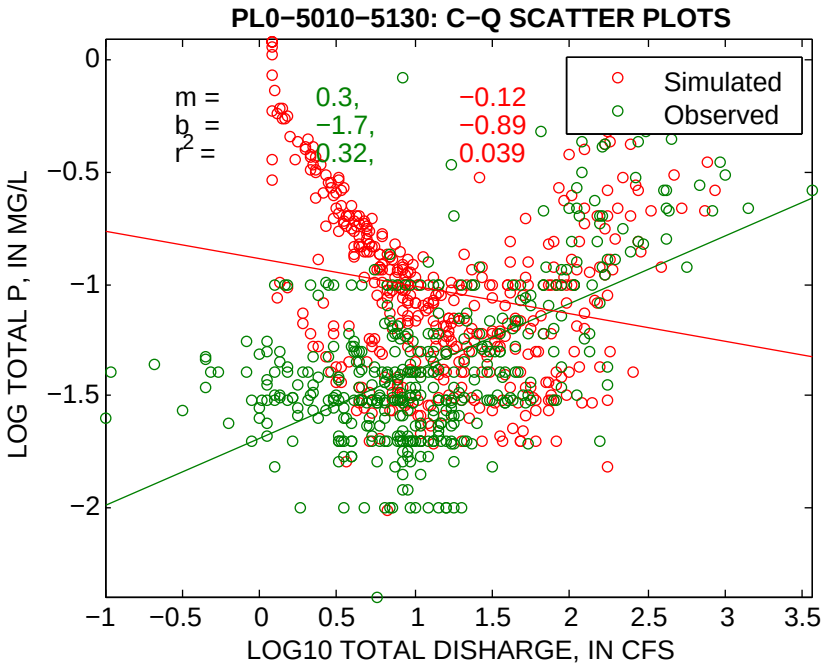
STATISTICS

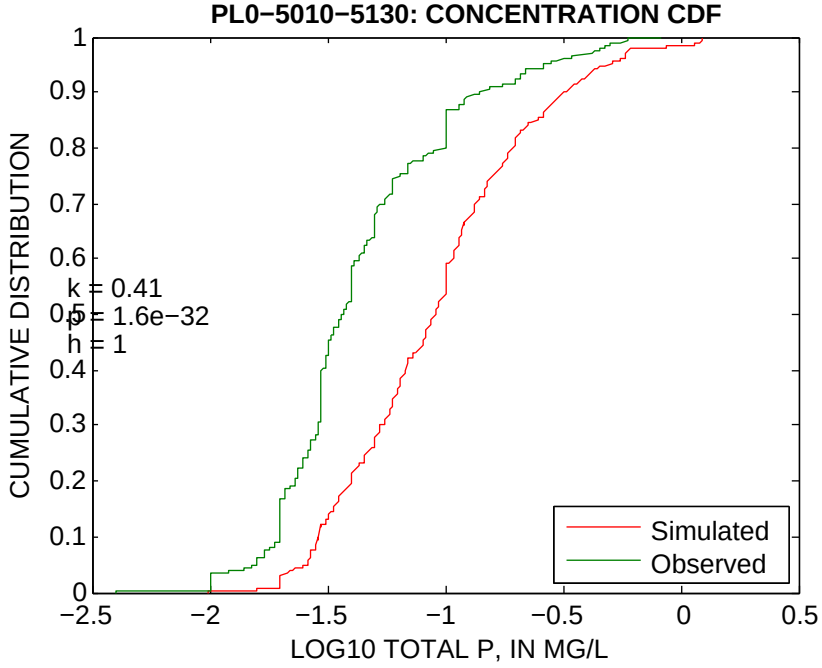
		observe	simulate
n		441	441
min		0.004	0.007485
		-2.39794	-2.12581
mean		0.0717914	0.200685
		-1.35253	-0.88689
media		0.037	0.11433
		-1.4318	-0.94184
max		0.83	2.4355
		-0.0809219	0.386588
varian		0.0107216	0.0770182
		0.140288	0.140112
JB		0.001	0.001
		0.001	0.001
		ra	log
%		179.539	-34.4273
err.va		0.101342	0.451981
rel.std.err		9.45211	3.22182
mod.eff		-8.45211	-2.22182

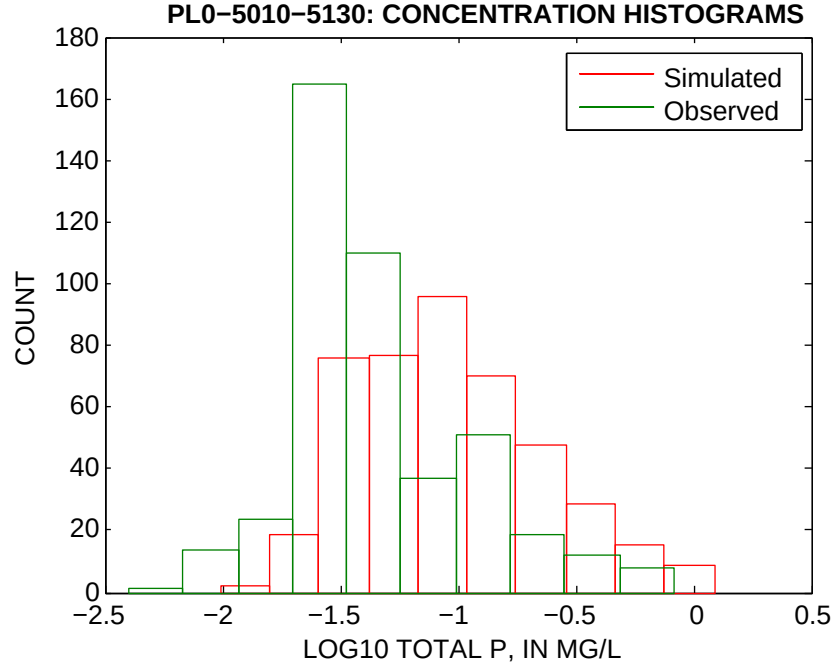
VERSION 2.1

ALL DATA
LOG10

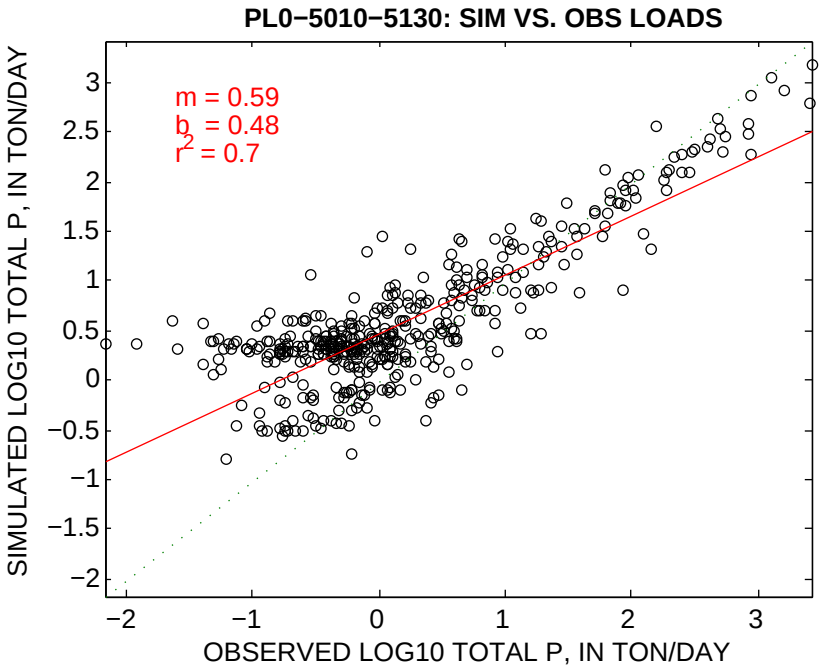


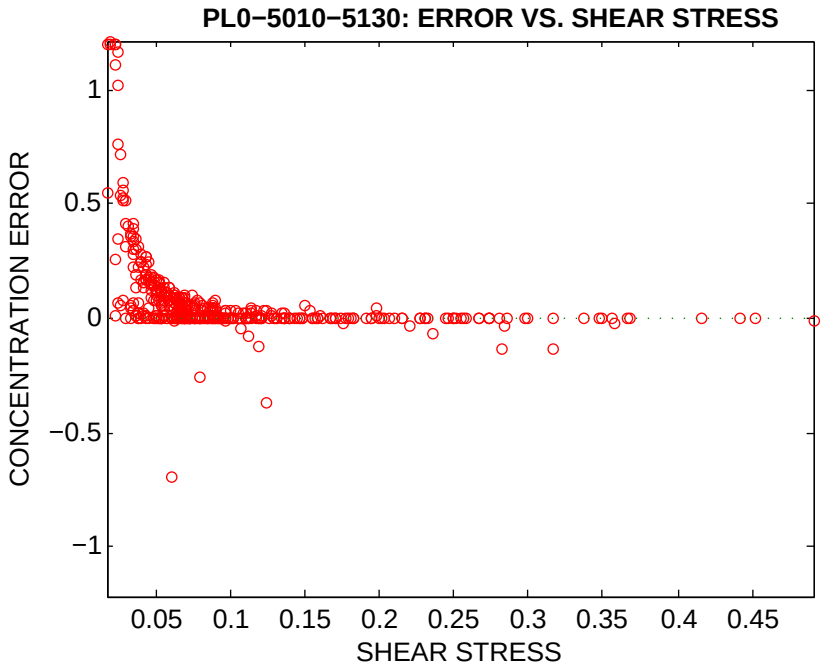


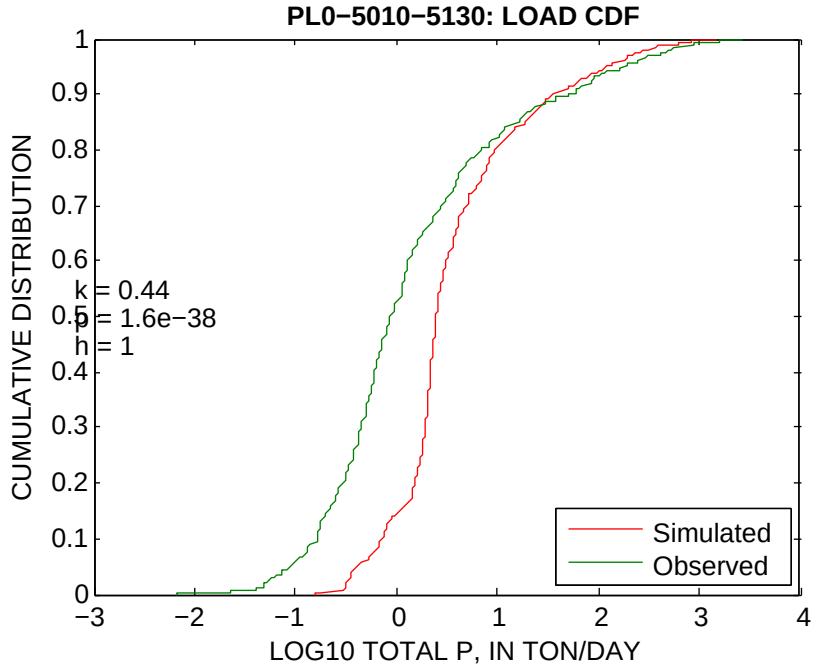


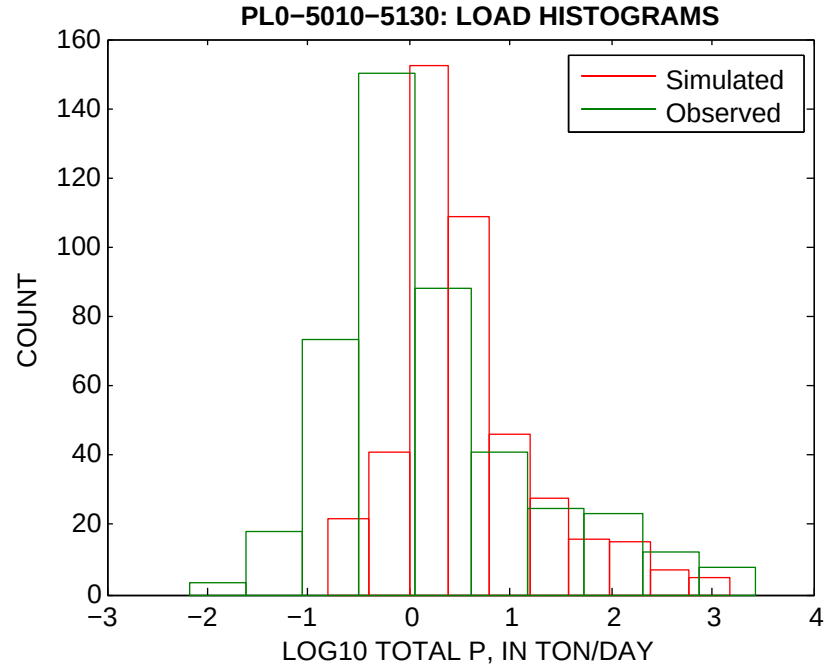


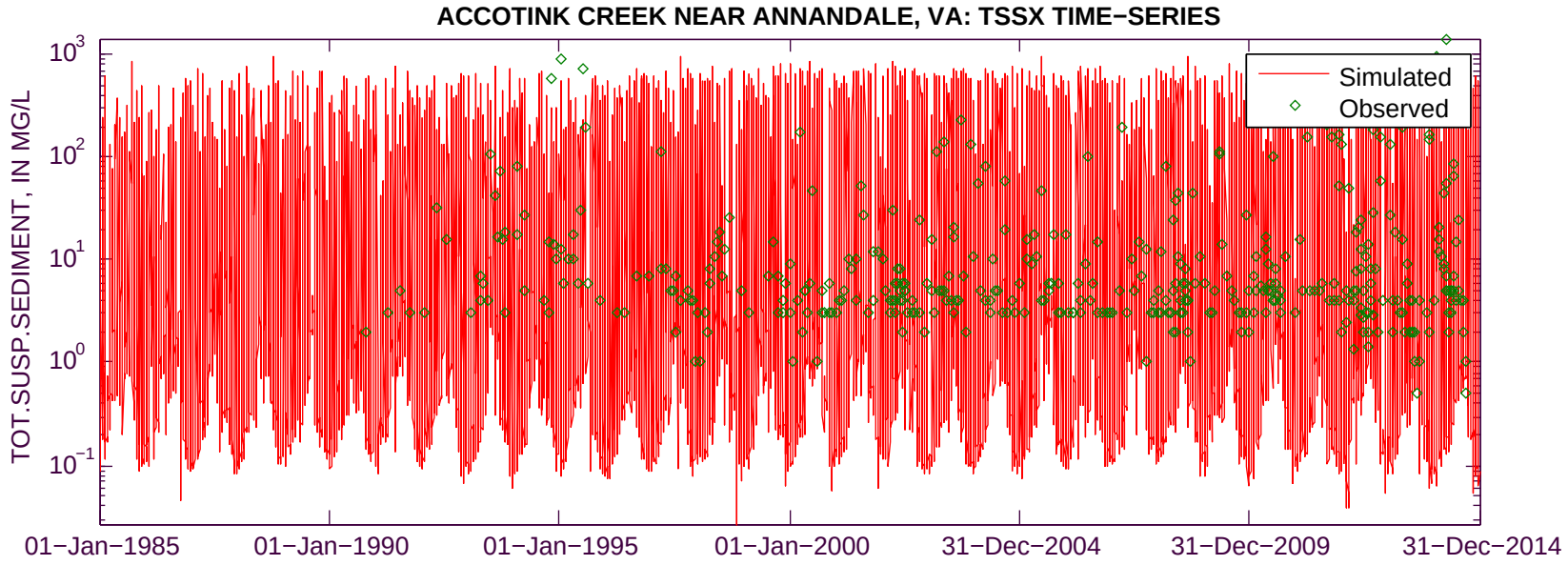
LOAD DATA
LOG10

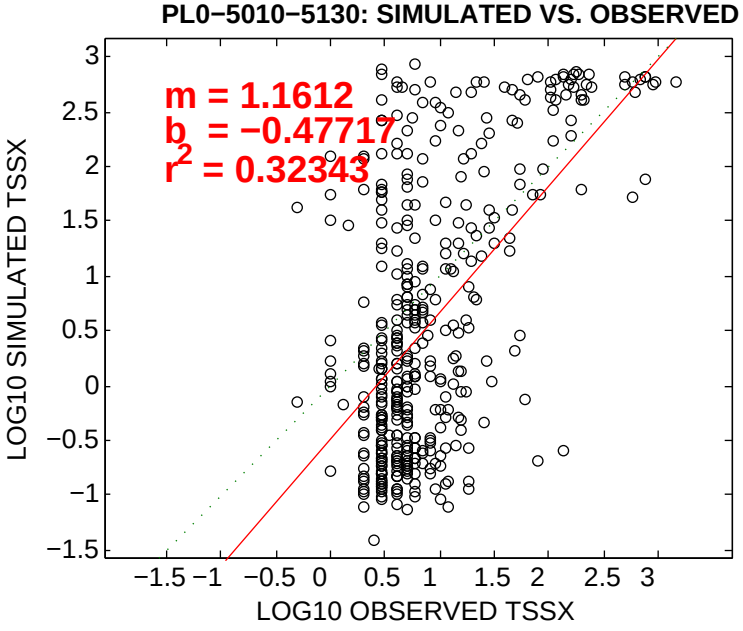


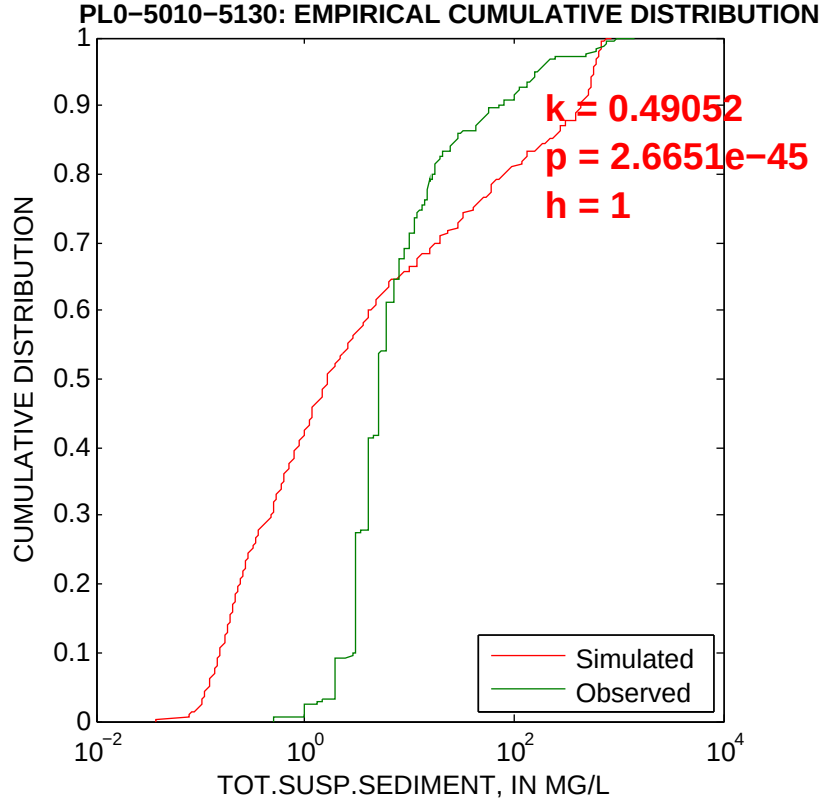












DATA SELECTION

scenario: P620171001WQ | file: TSSX.calib

plot: TSSX - total suspended ...

Dates: 1/1/1985 | 12/31/201

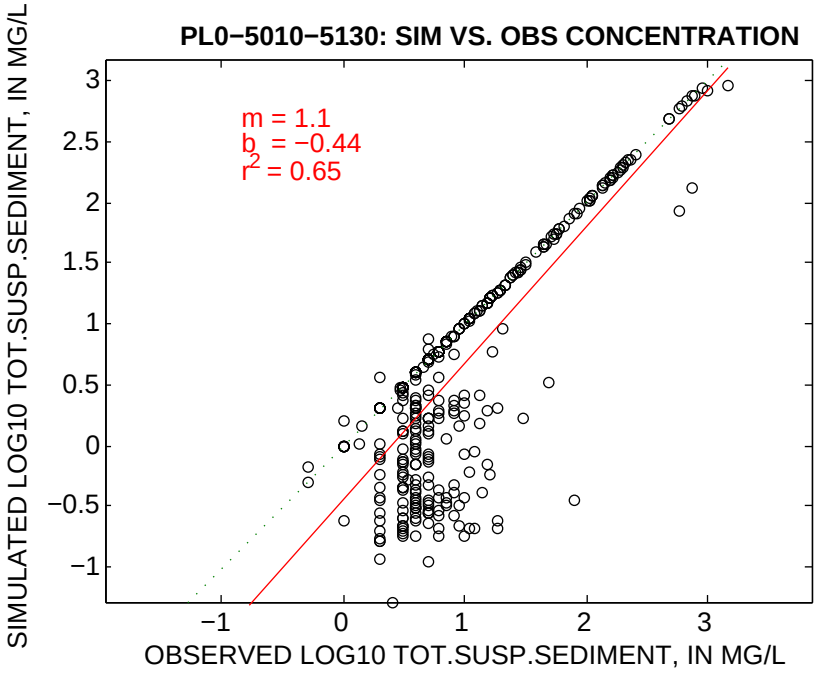
Drive | Directory: N/A | model | Observed: OBS20161101

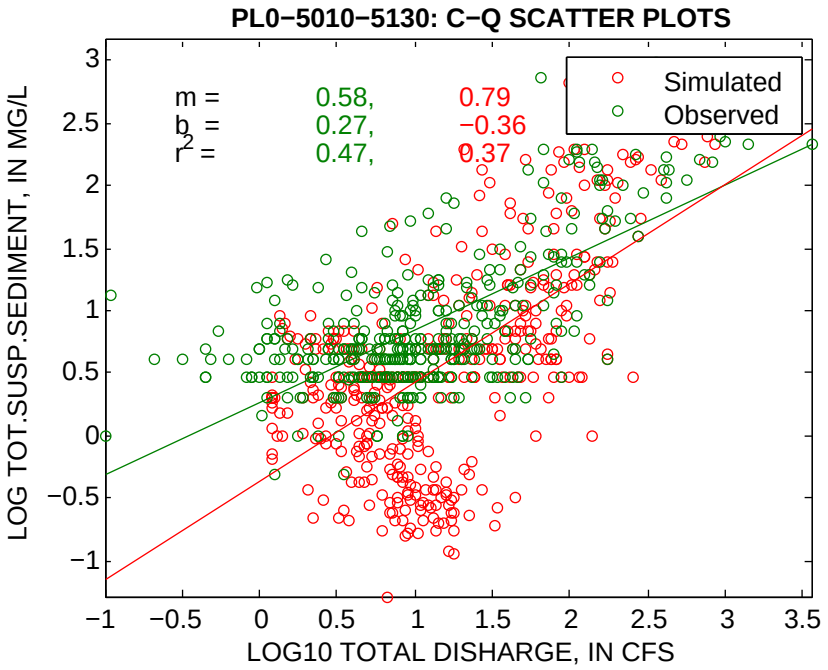
STATISTICS

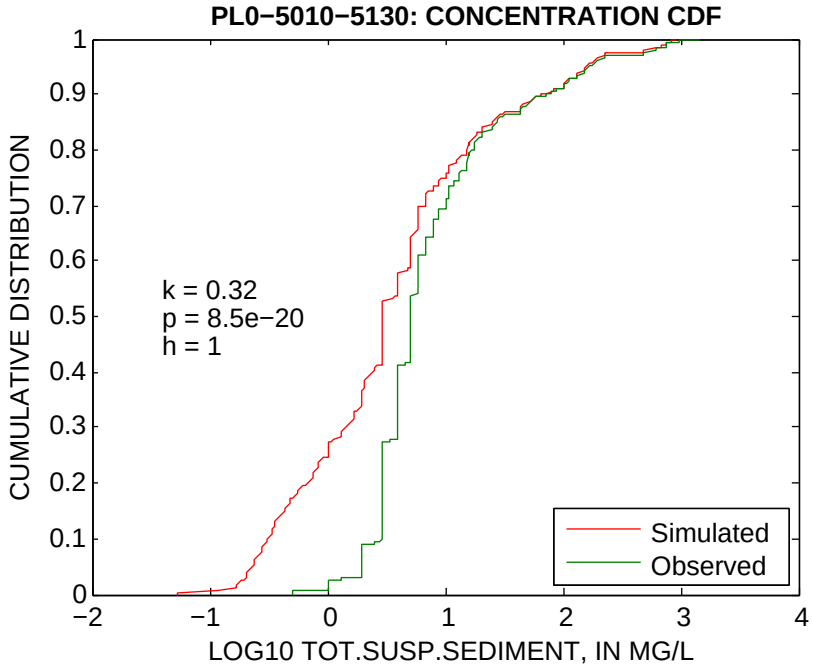
		observe	simulate
n		422	422
min		0.5	0.038041
		-0.30103	-1.41975
mean		39.4628	88.7257
		0.906539	0.575507
media		5	1.6608
		0.69897	0.220317
max		1439	854.59
		3.15806	2.93176
varian		17988.3	35217.5
		0.365621	1.52427
JB		0.001	0.001
		0.001	0.001
		ra	log
%		124.834	-36.5161
err.va		29697.8	1.15061
rel.std.err		1.65095	3.14701
mod.eff		-0.650949	-2.14701

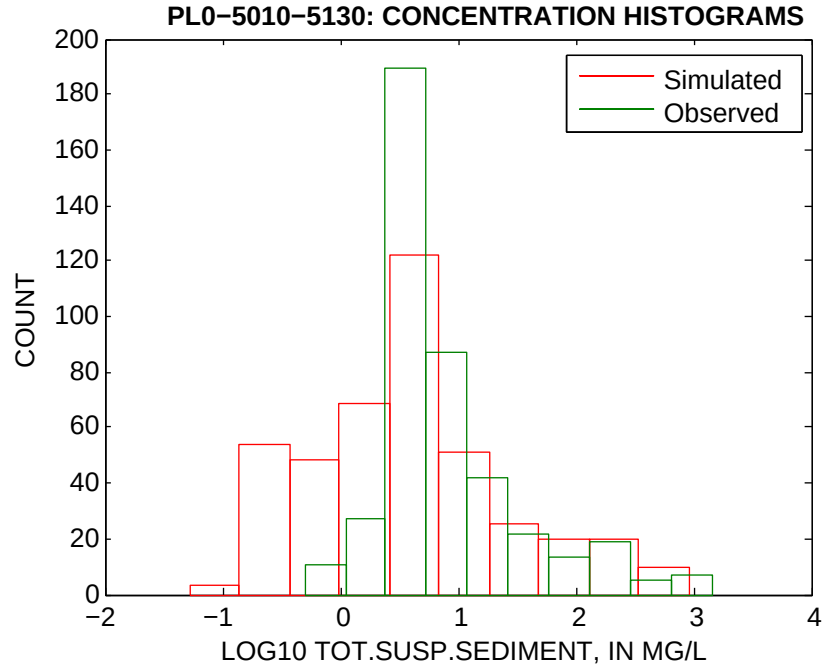
VERSION 2.1

ALL DATA
LOG10

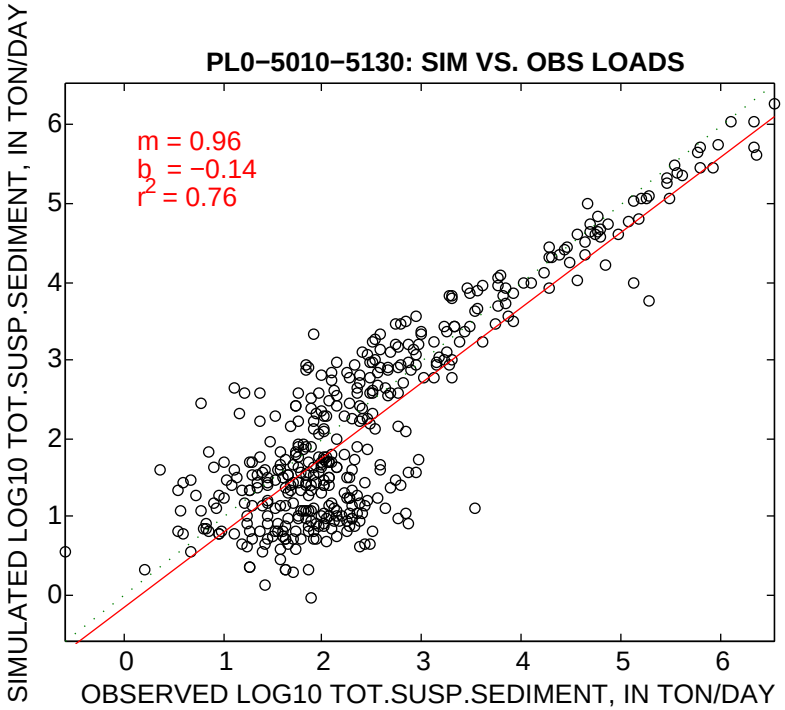


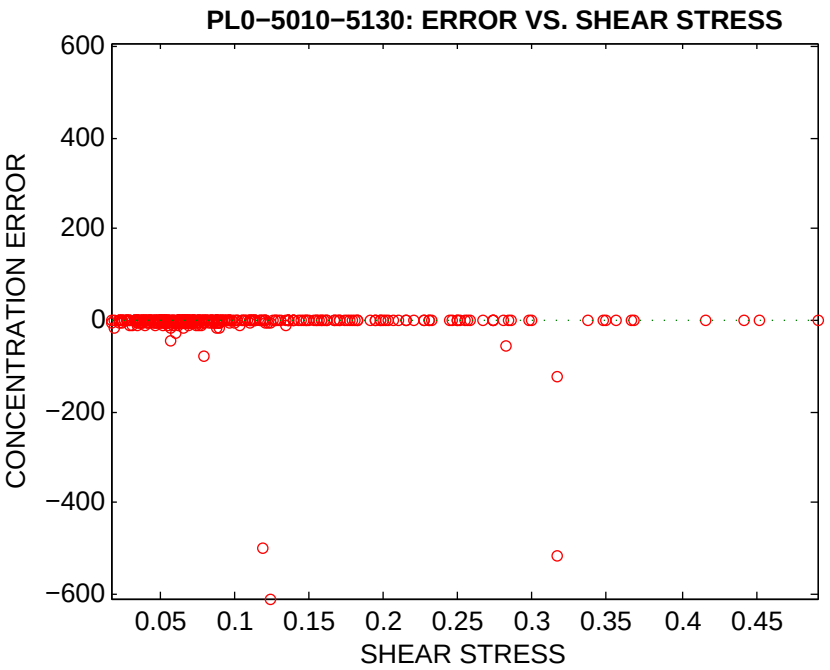


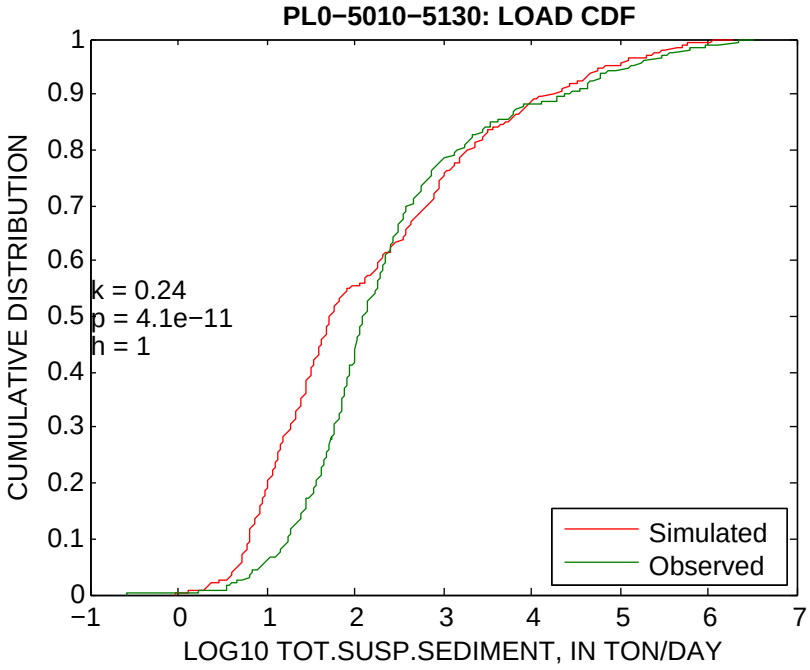


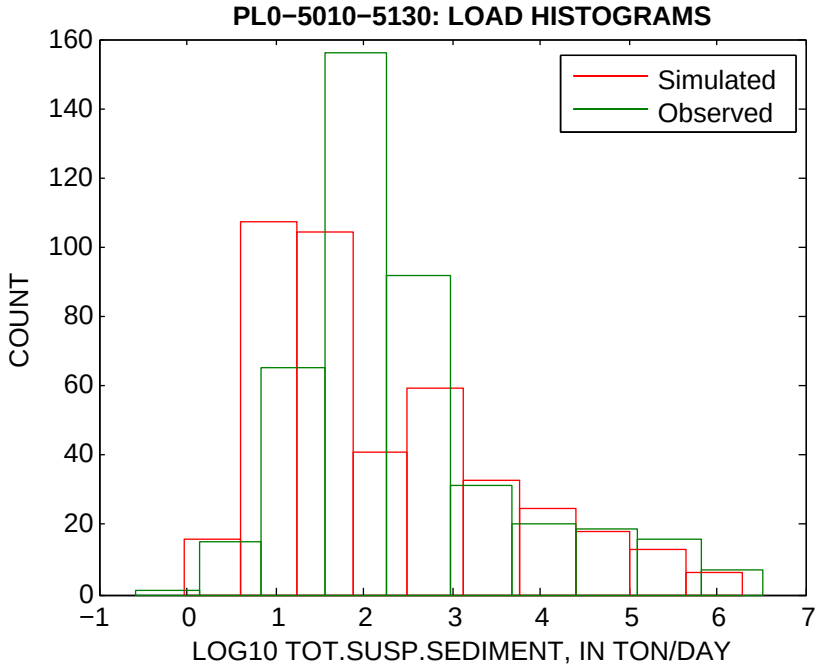


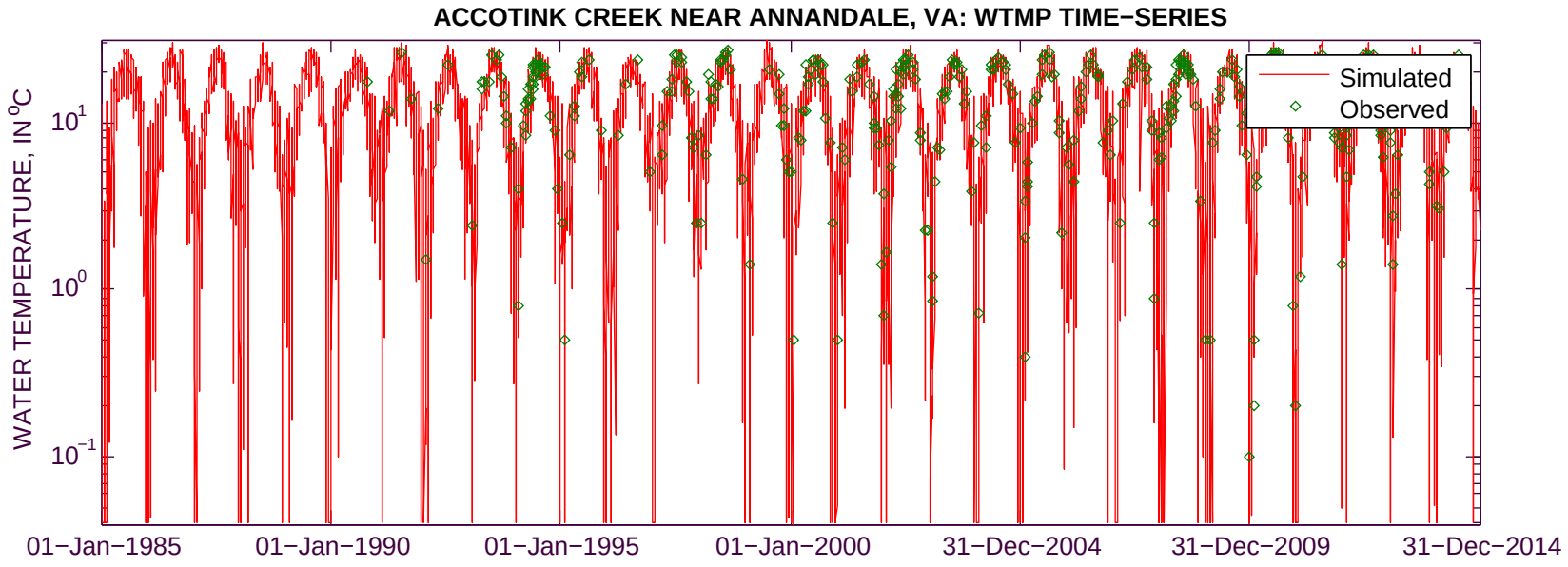
LOAD DATA
LOG10

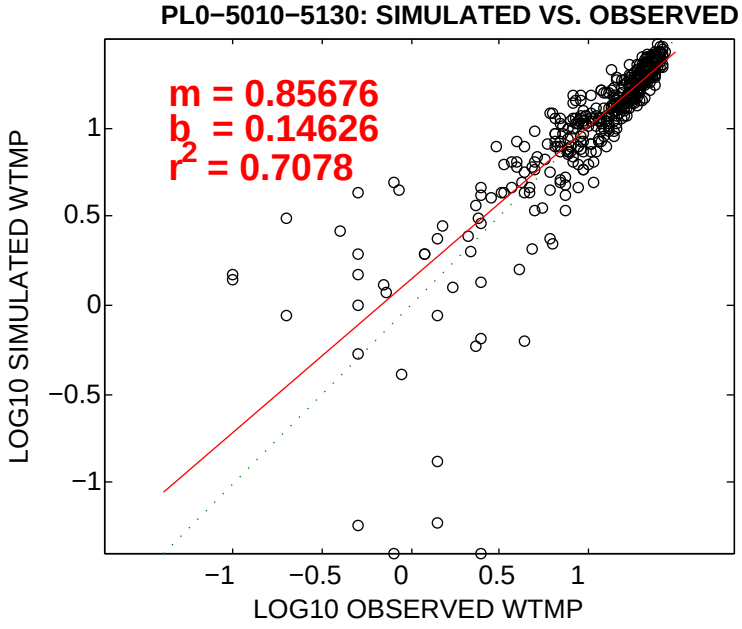


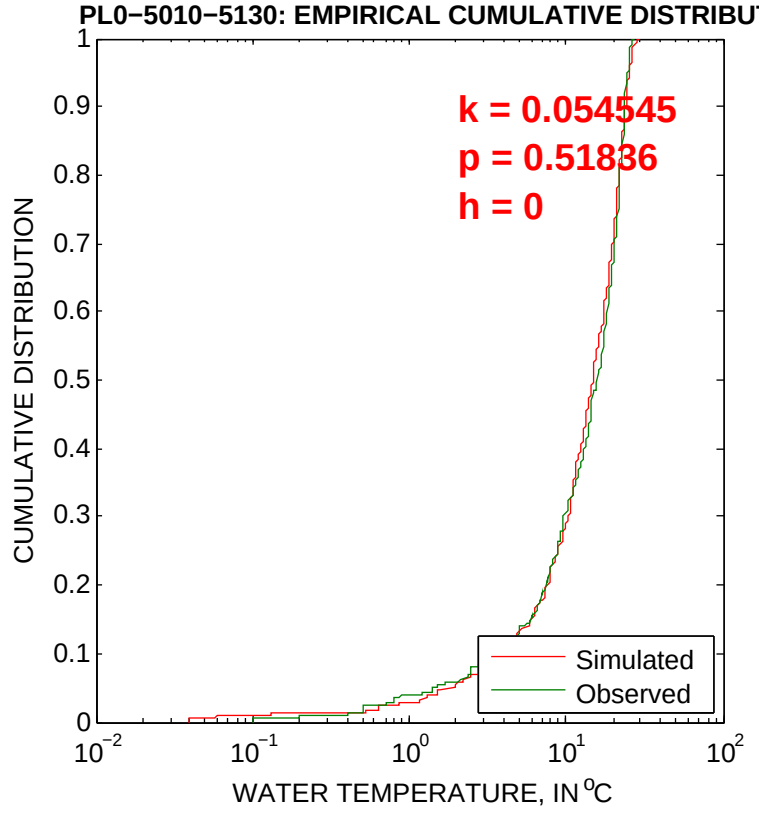












DATA SELECTION

scenario	file
P620171001WQ	WTMP.calib

plot: WTMP - water tempera...

Dates: 1/1/1985 – 12/31/201

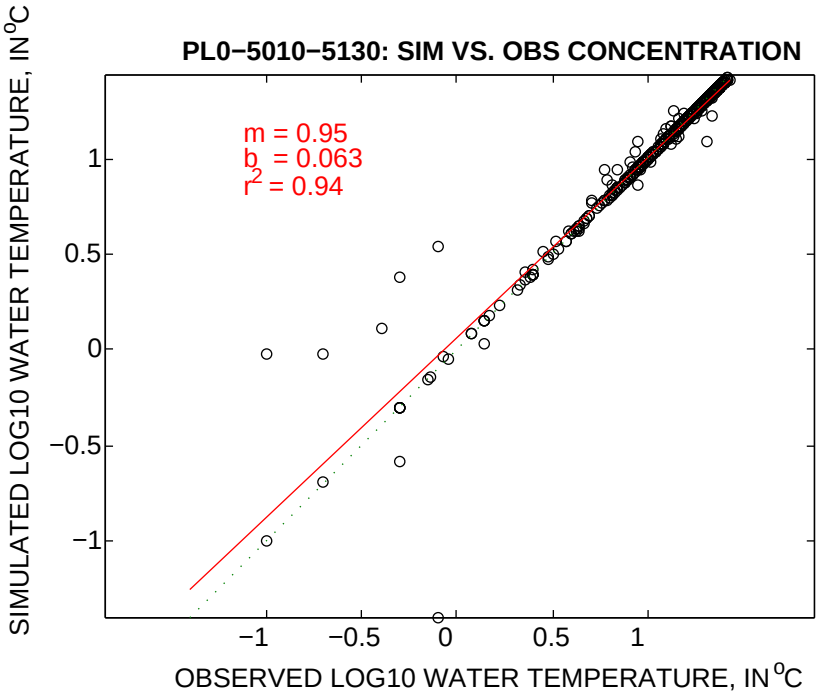
Drive	Directory	Observed
N/A	model	OBS20161101

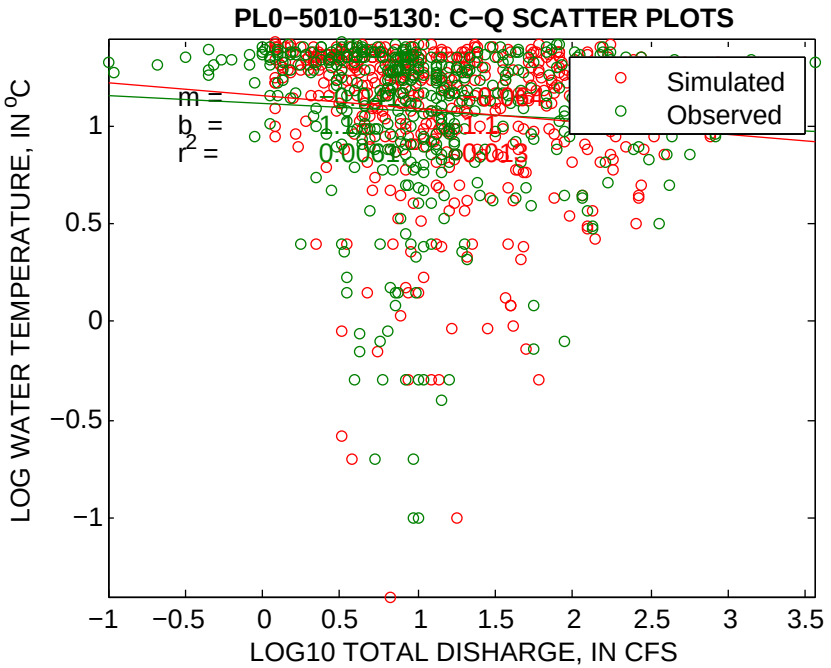
STATISTICS

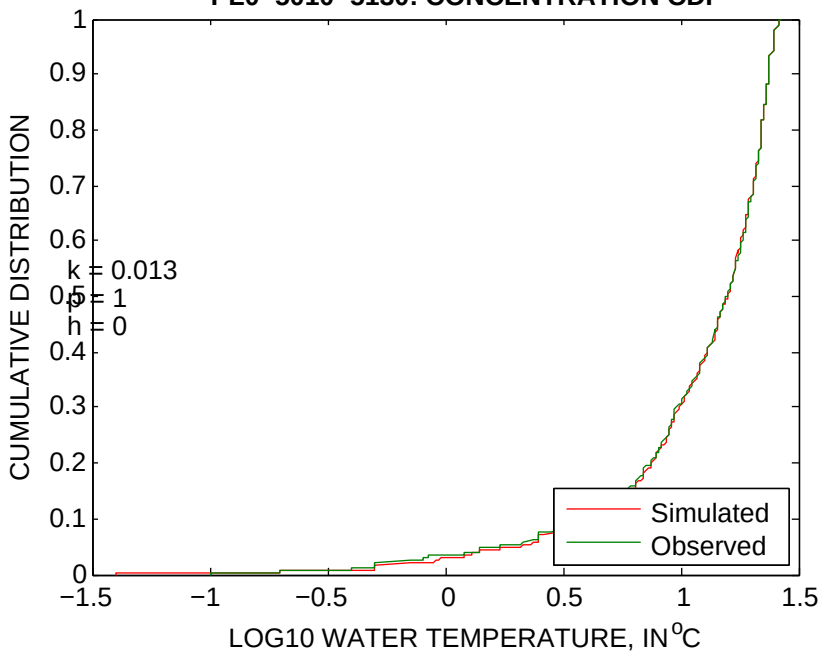
	n	observe	simulate
		440	440
min		0.1	0.040037
		-1	-1.39754
mean		14.8178	14.5496
		1.06026	1.05465
media		16	14.813
		1.20412	1.17064
max		27	29.722
		1.43136	1.47308
varian		54.8954	53.4012
		0.163275	0.169328
JB		0.001	0.001425
		0.001	0.001
		ra	log
%		-1.81011	-0.528833
err.va		6.10104	0.05286
rel.std.err		0.111139	0.323749
mod.eff		0.888861	0.676251

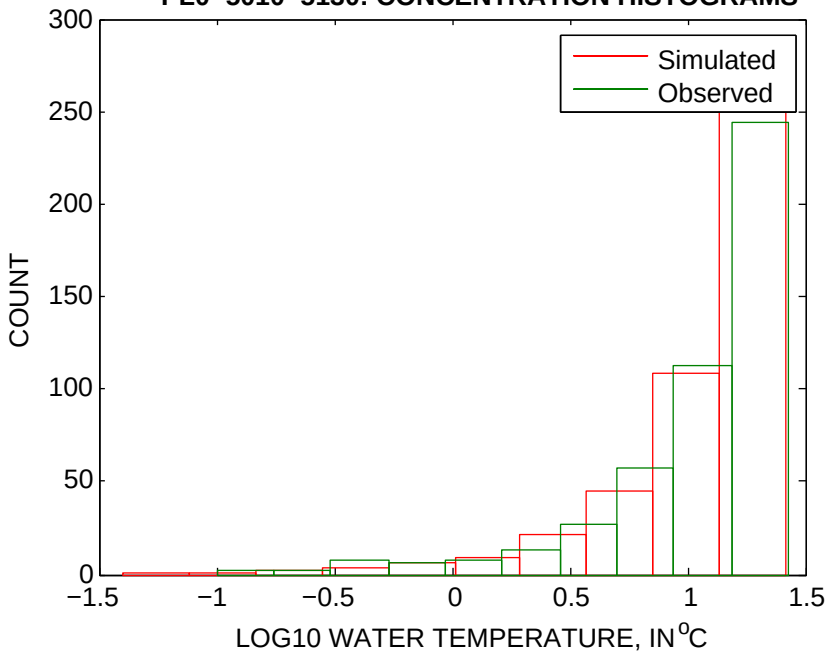
VERSION 2.1

ALL DATA
LOG10

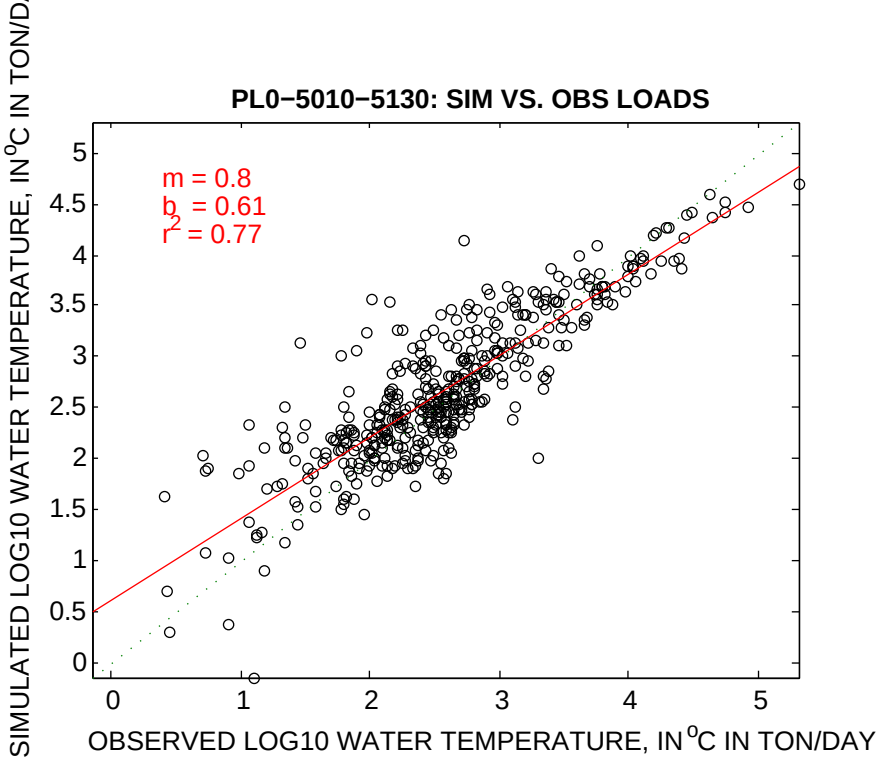


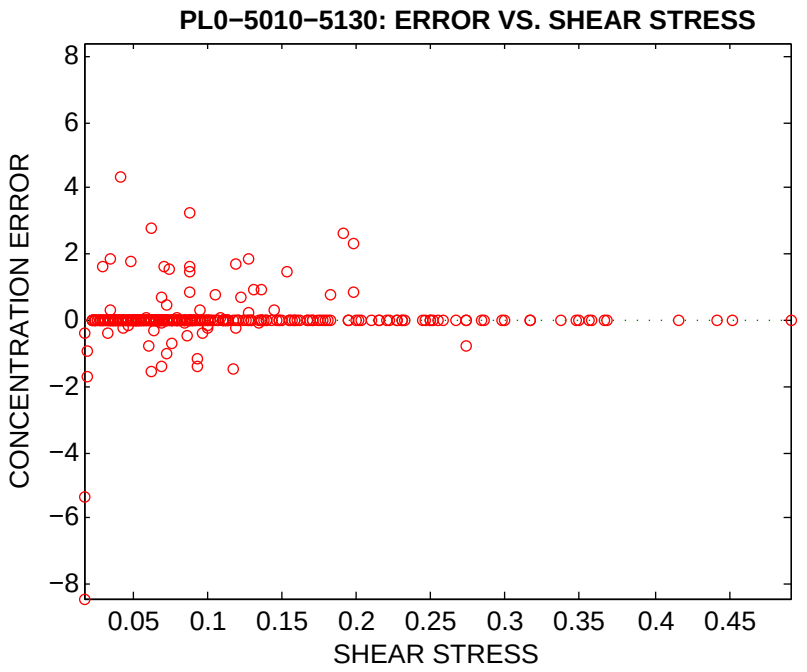


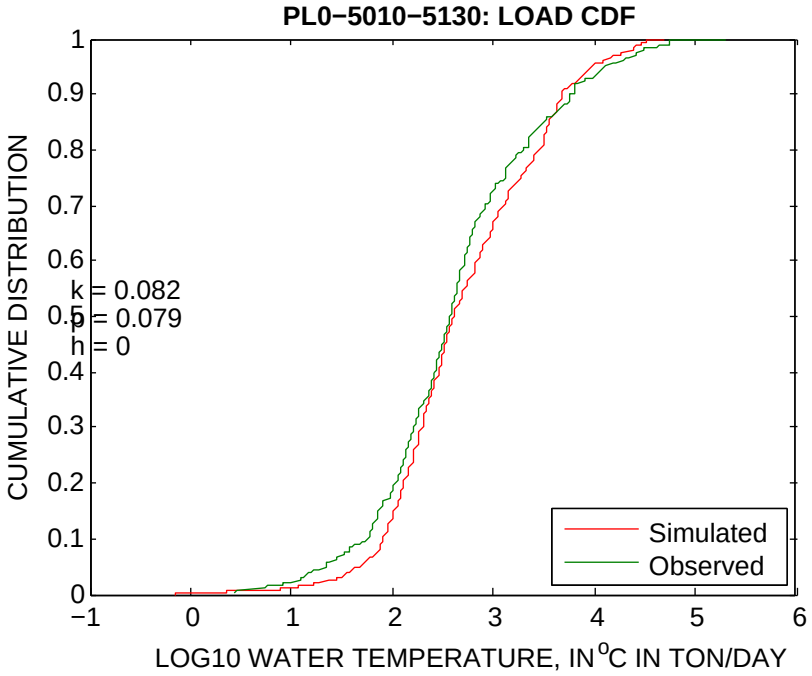


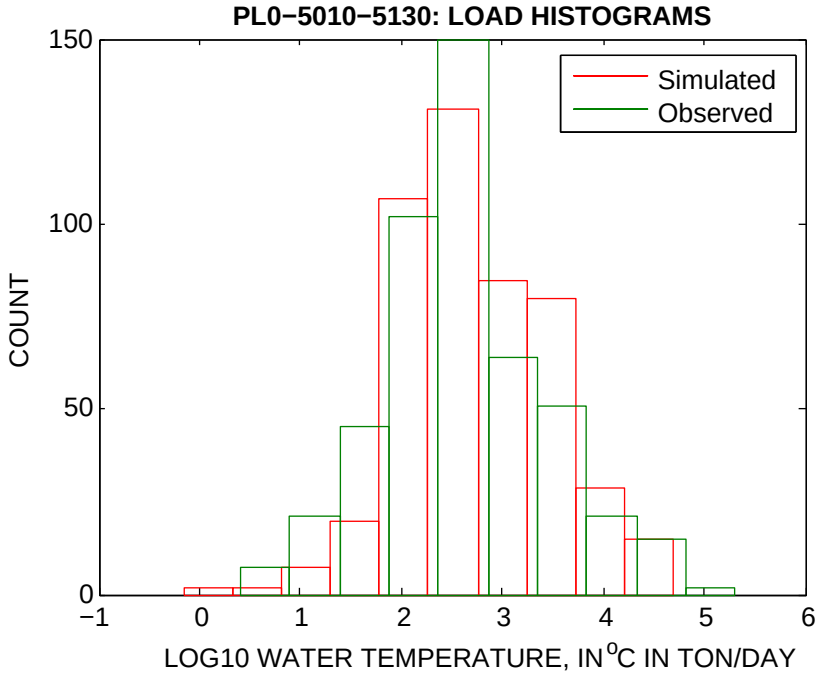


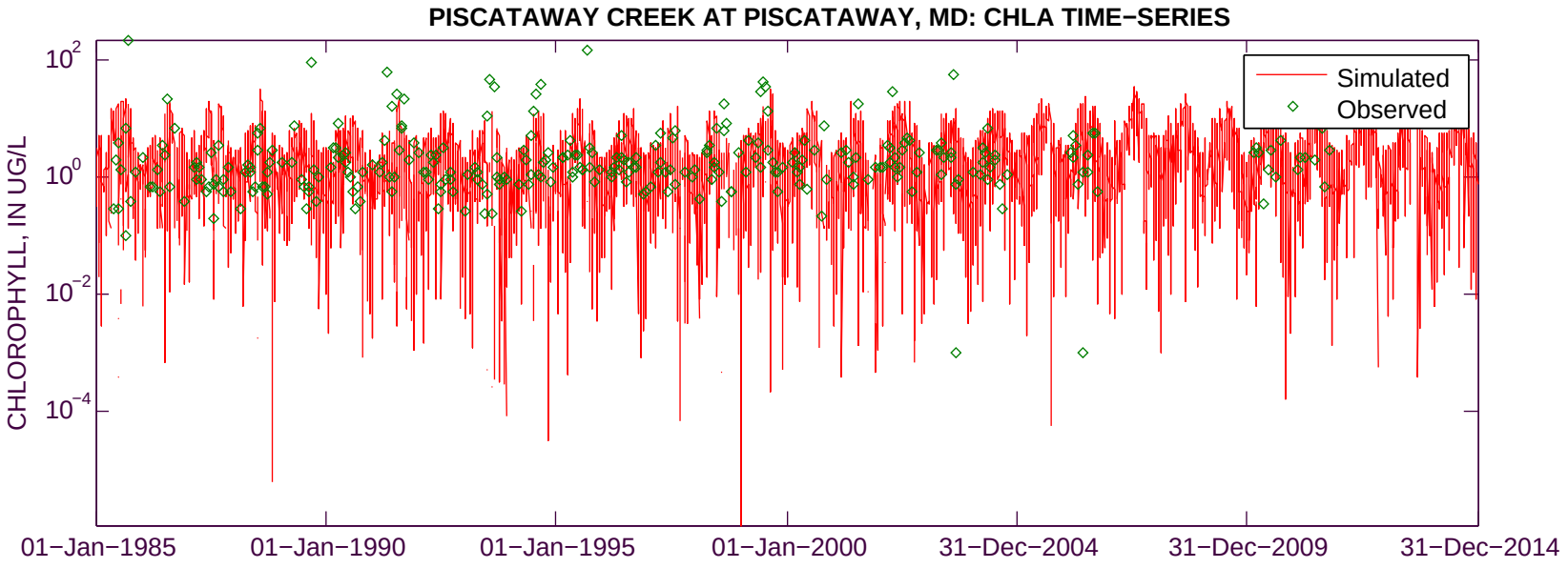
LOAD DATA
LOG10

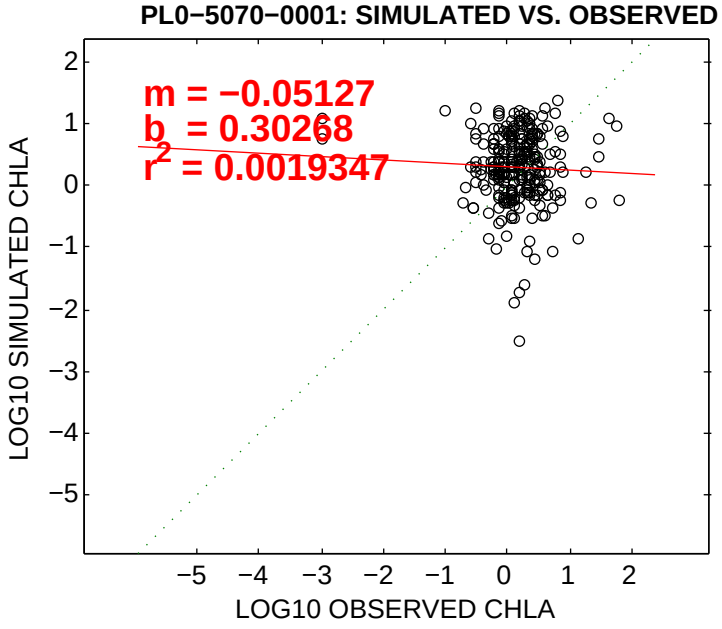


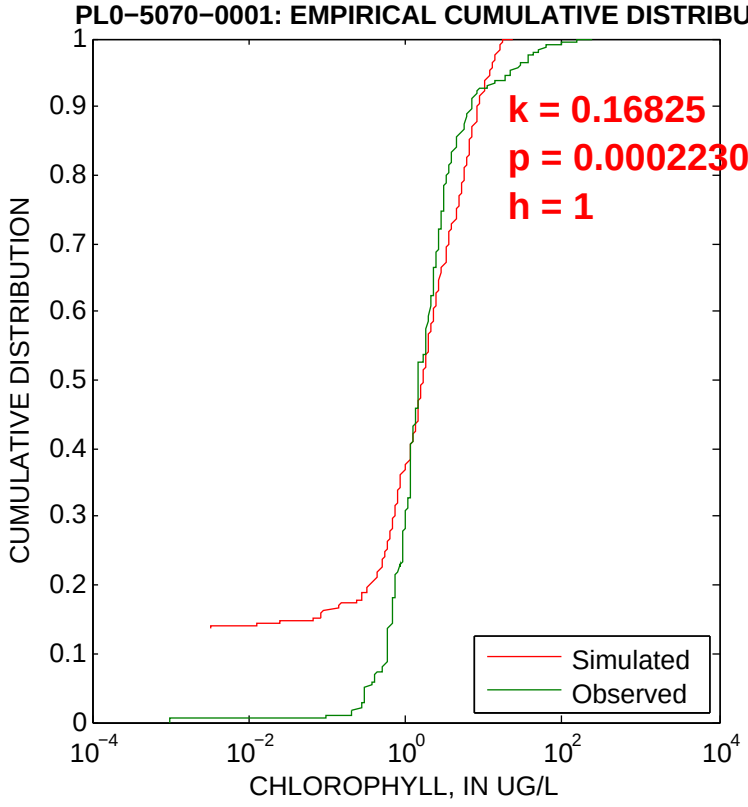












DATA SELECTION

scenario	file
P620171001WQ	CHLA.calib

plot: CHLA - chlorophyll A

Dates: 1/1/1985 – 12/31/201

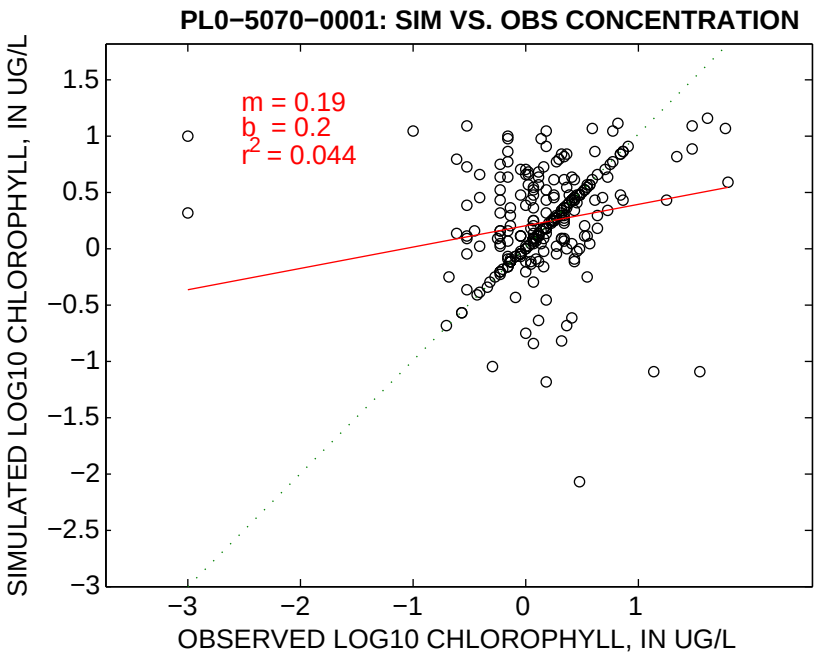
Drive	Directory	Observed
N/A	model	OBS20161101

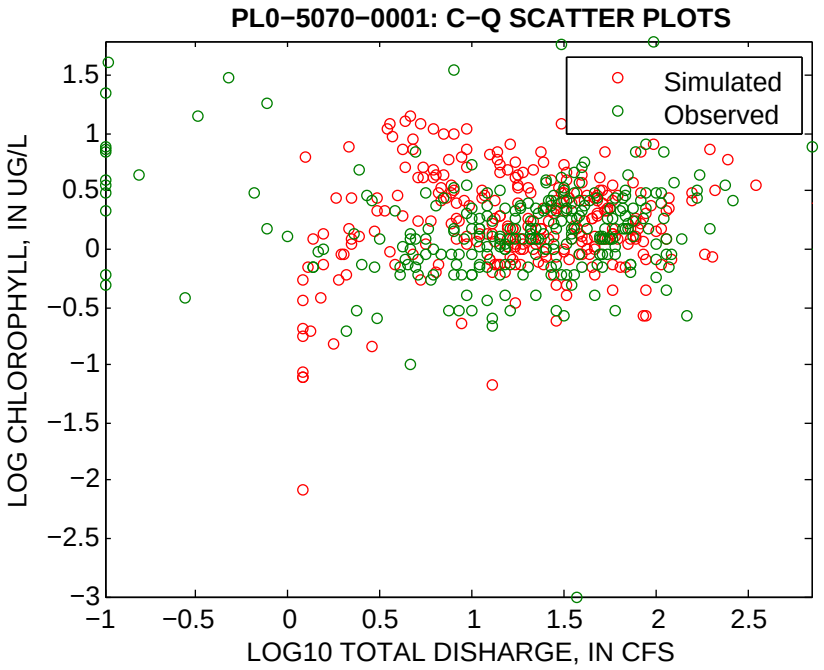
STATISTICS

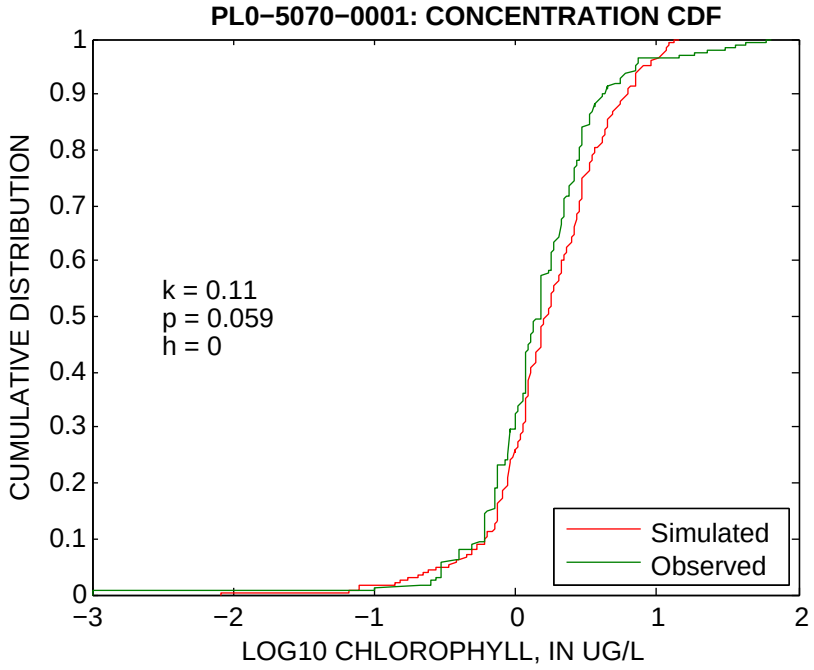
	n	315	272
		observe	simulate
min		0.001	0
		-3	-2.49734
mean		5.31654	3.18441
		0.159704	0.294495
media		1.5	1.6806
		0.174641	0.308061
max		234.1	23.593
		1.80312	1.37278
varian		326.579	15.2236
		0.23767	0.322908
JB		0.001	0.001
		0.001	0.001
		ra	log
%		-40.1037	84.4009
err.va		359.783	0.603185
rel.std.err		1.10167	2.5379
mod.eff		-0.101673	-1.5379

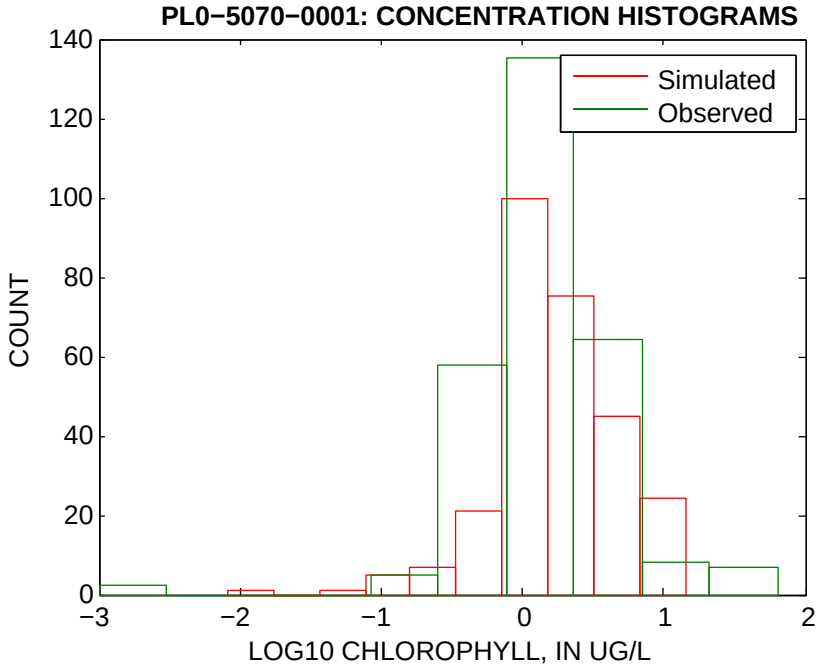
VERSION 3.1

ALL DATA
LOG10

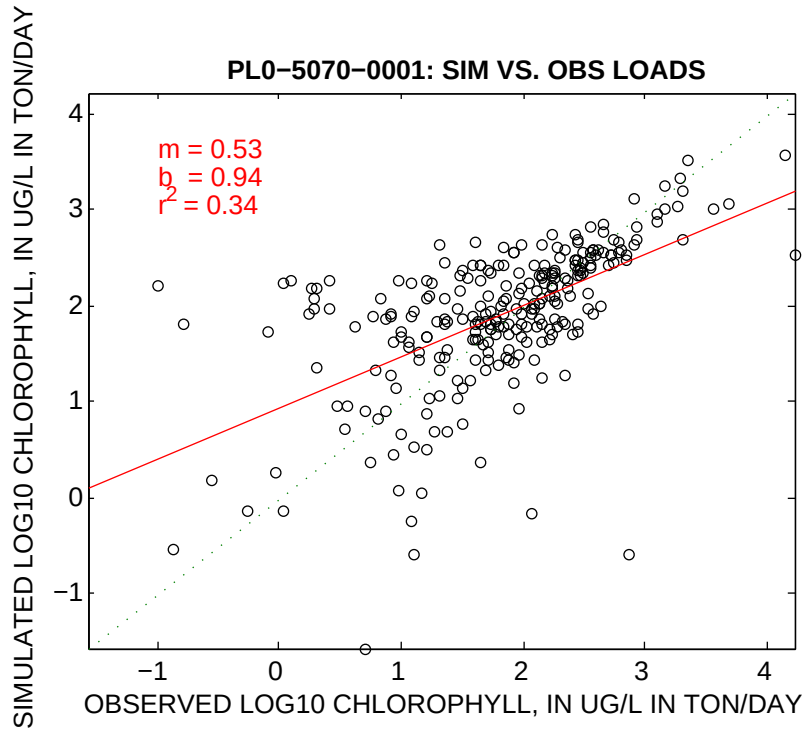


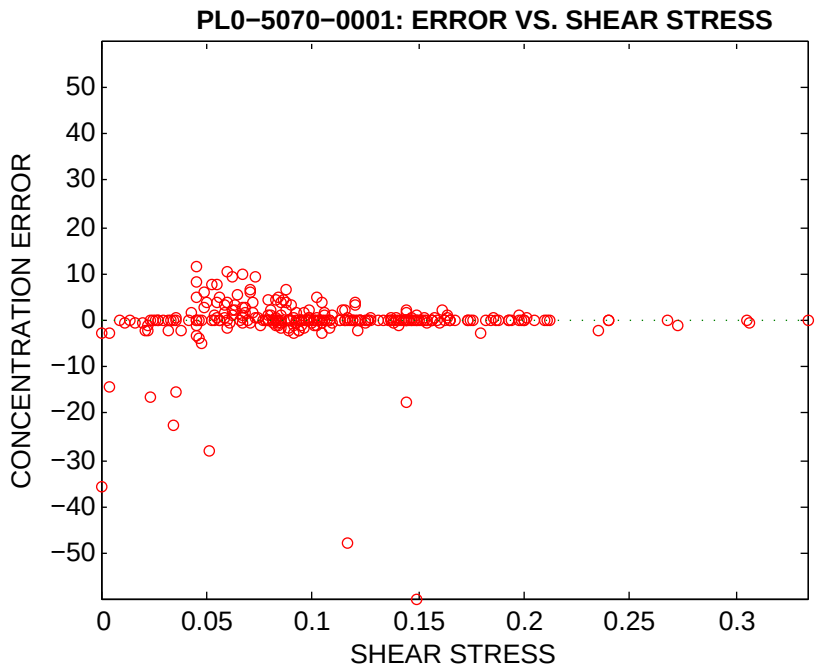


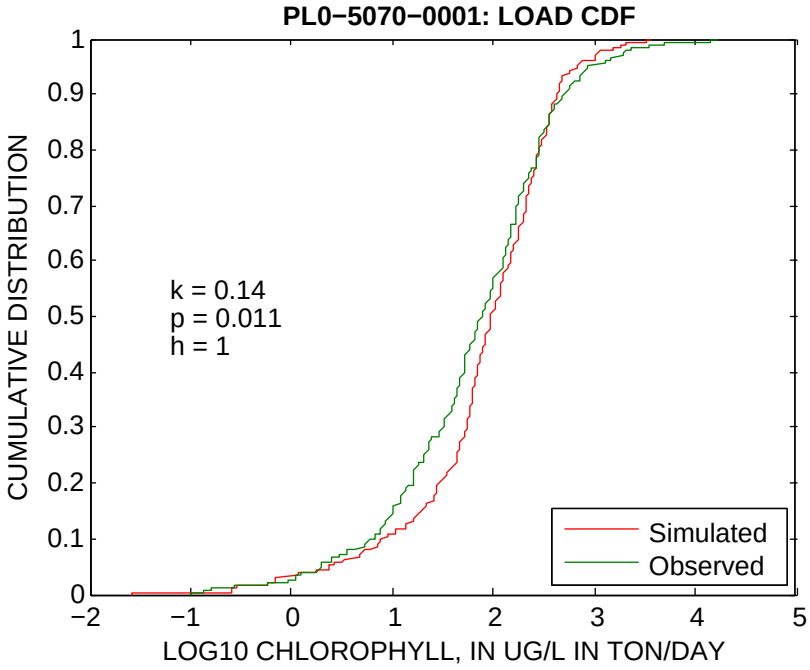


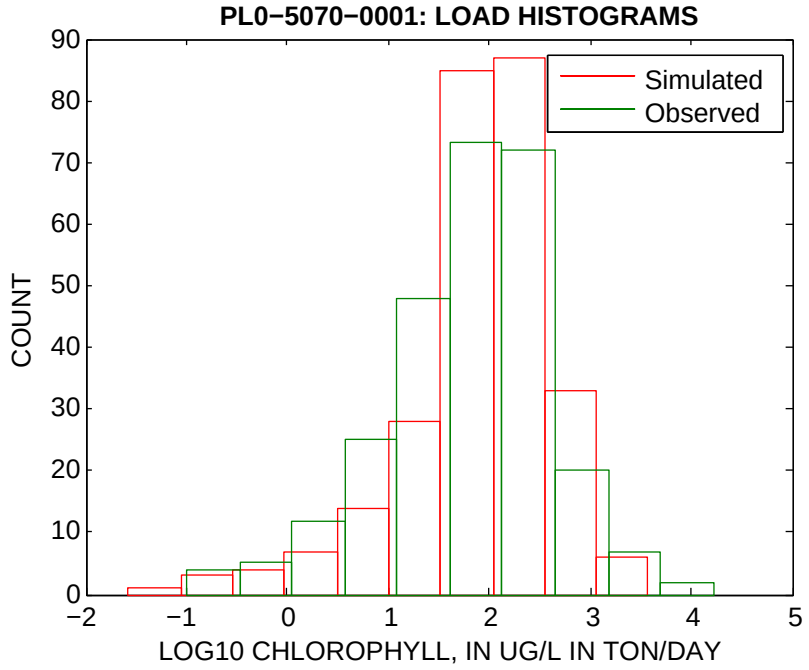


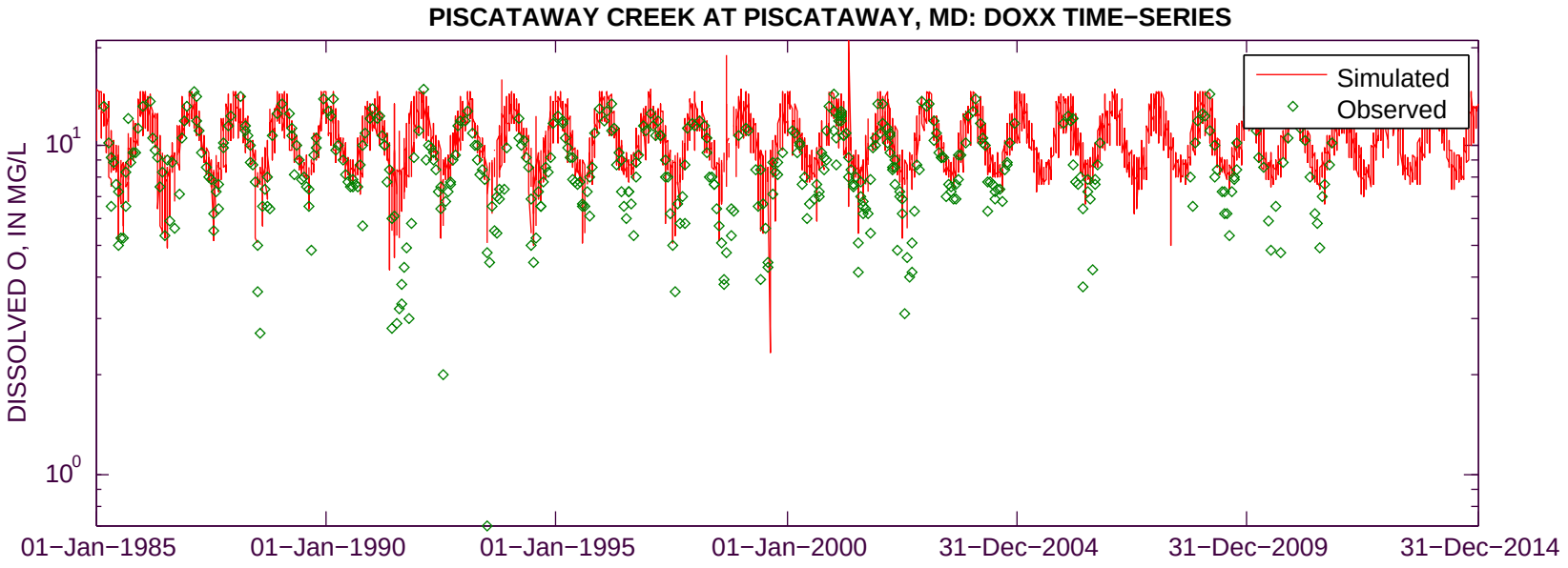
LOAD DATA
LOG10

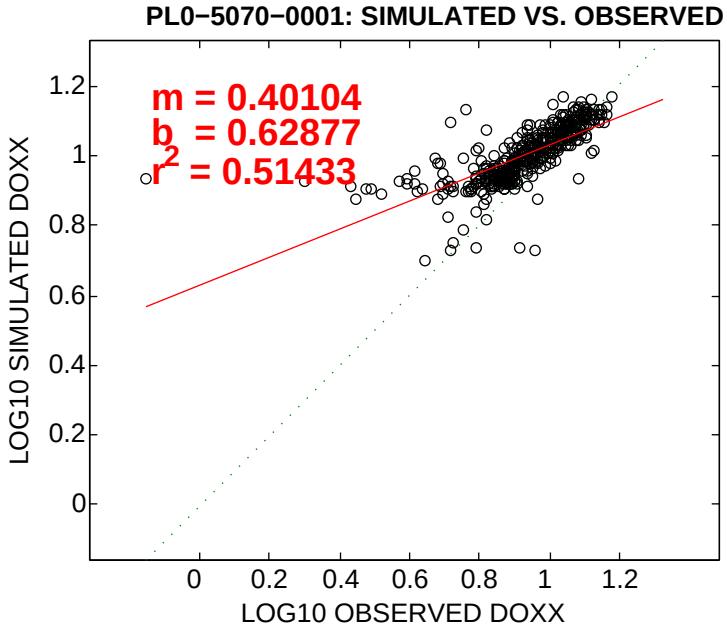


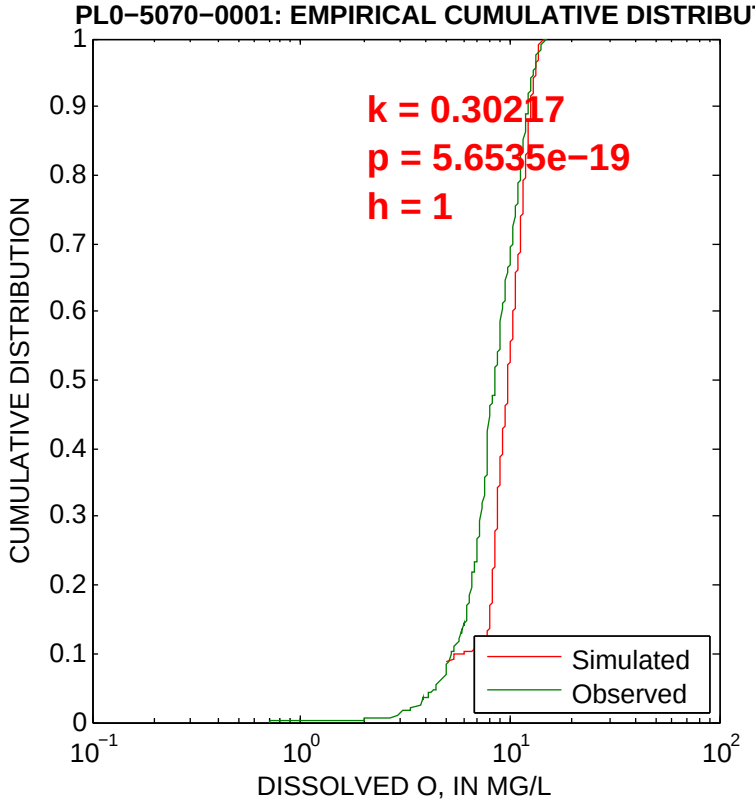












DATA SELECTION

scenario	file
P620171001WQ	DOXX.calib

plot: DOXX - dissolved oxygen

Dates: 1/1/1985 – 12/31/201

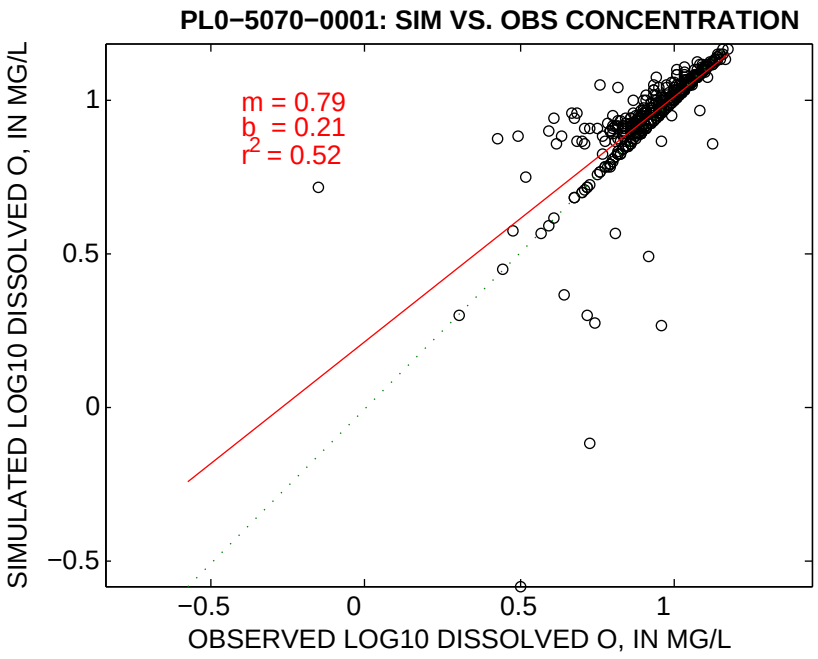
Drive	Directory	Observed
N/A	model	OBS20161101

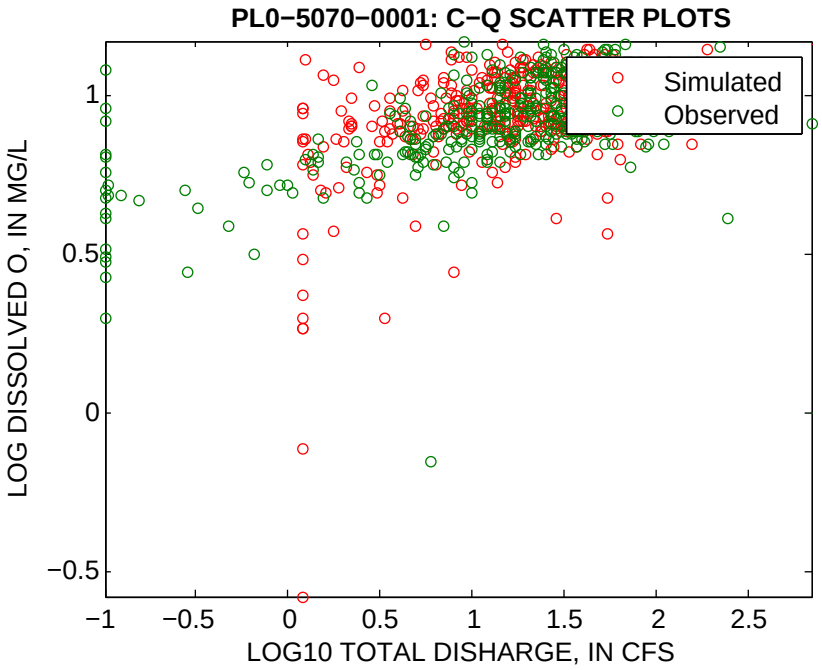
STATISTICS

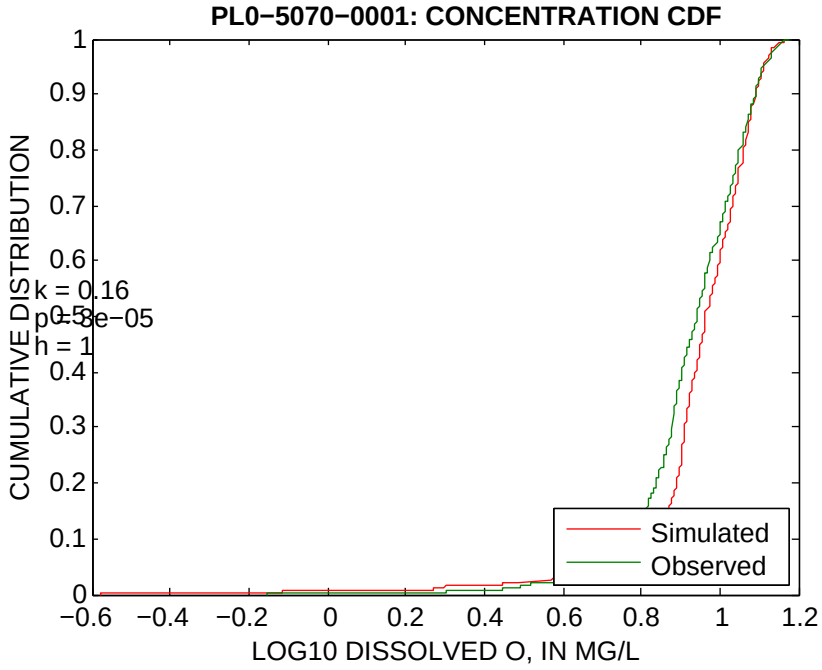
	n	460	420
		observe	simulate
min		0.7	0
		-0.154902	0.696758
mean		8.6992	9.33892
		0.932443	1.00272
media		8.5	9.77815
		0.944483	1.00509
max		15	14.68
		1.17609	1.16673
varian		6.75515	11.3354
		0.0202784	0.00634112
JB		0.160666	0.001
		0.001	0.001301
		ra	log
%		7.35377	7.53664
err.va		6.86135	0.015305
rel.std.err		1.01572	0.754747
mod.eff		-0.0157212	0.245253

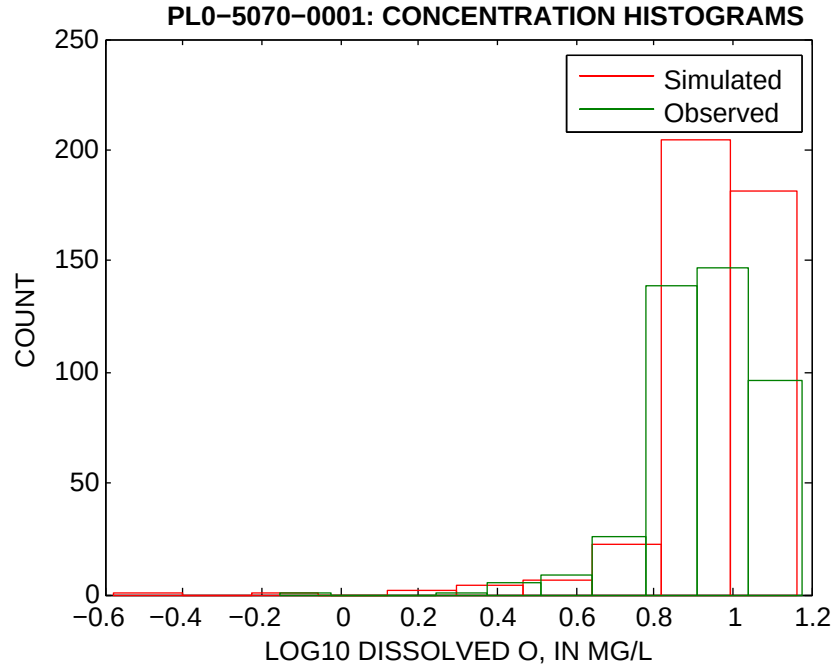
VERSION 2.1

ALL DATA
LOG10

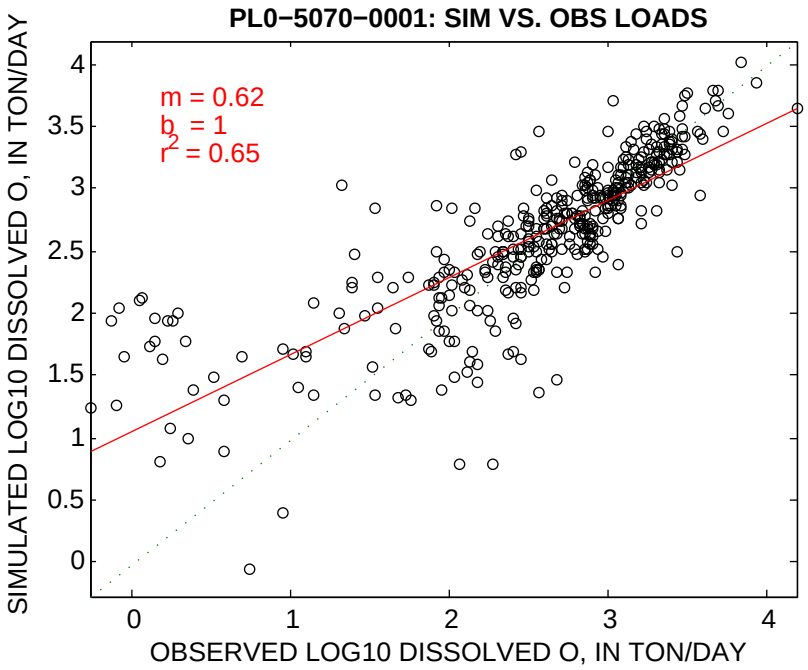


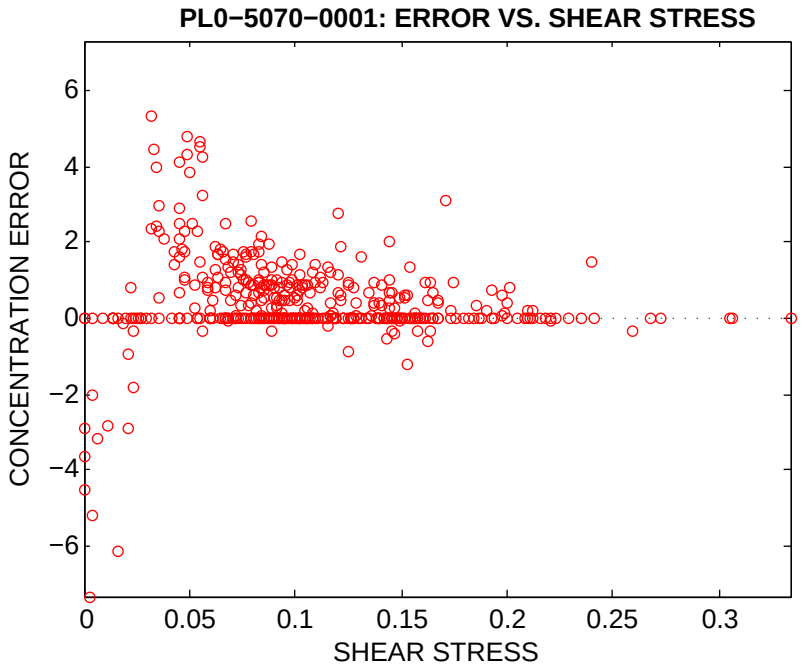


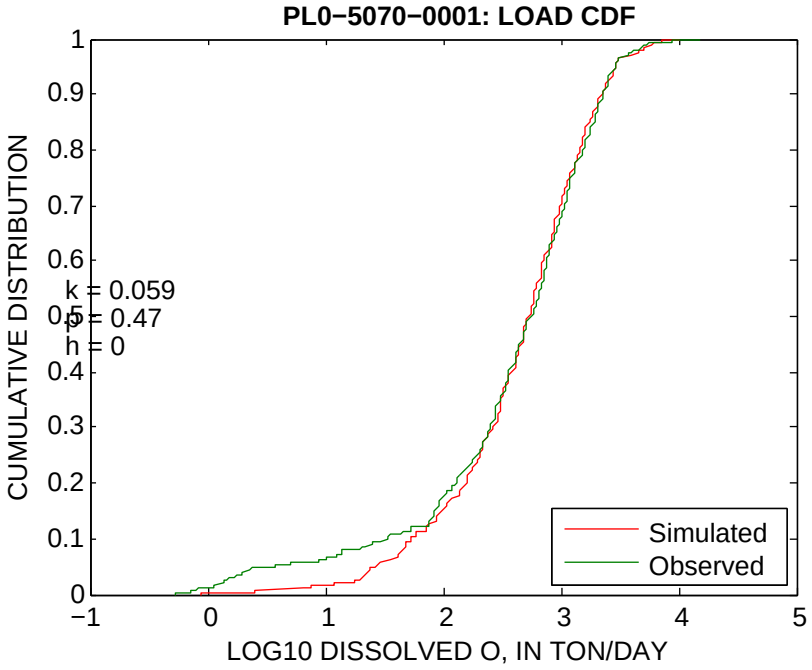


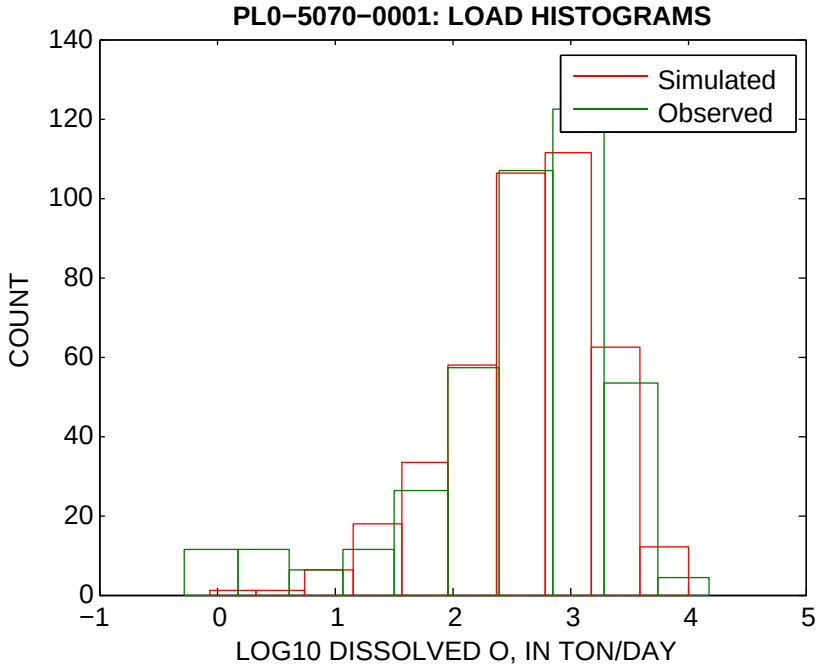


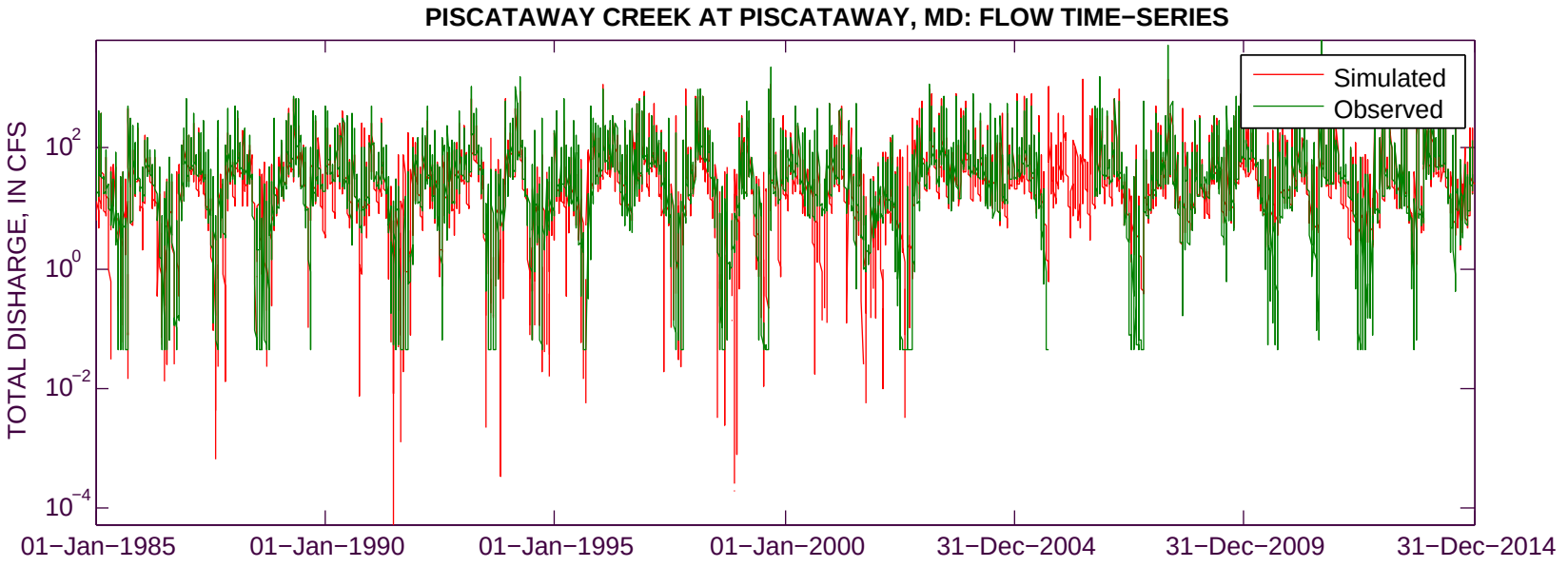
LOAD DATA
LOG10

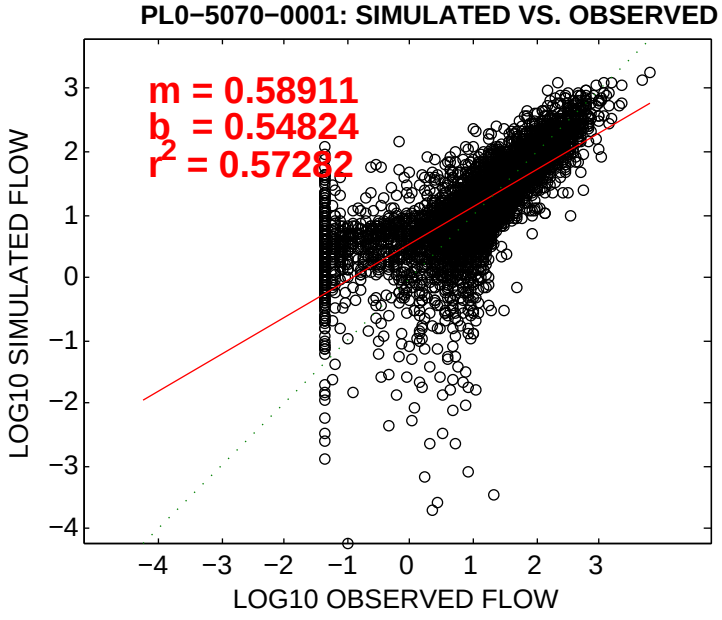


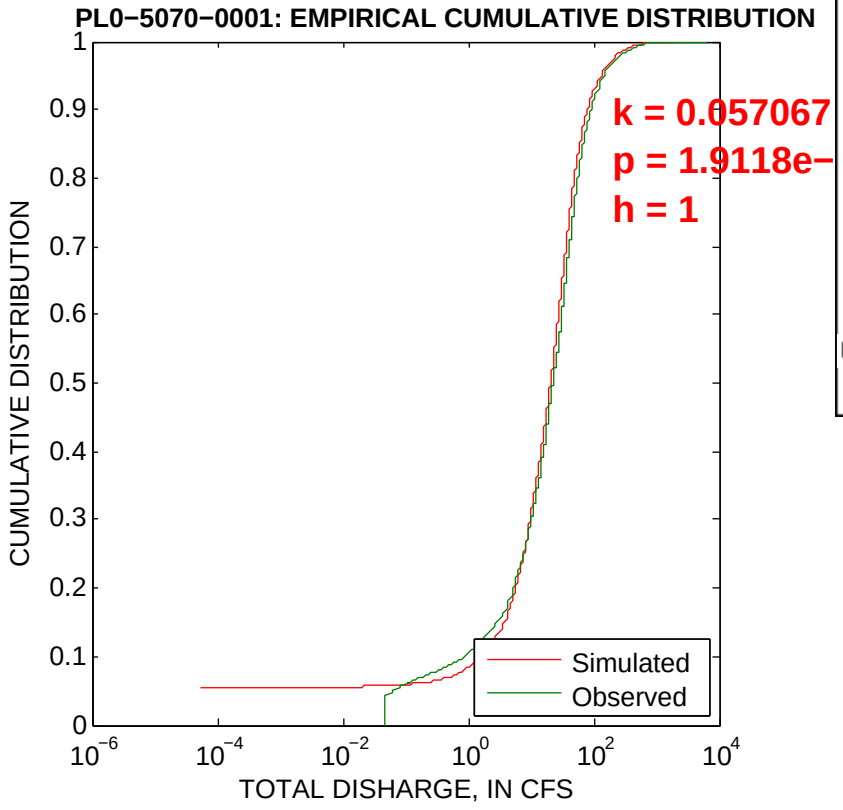












DATA SELECTION

scenario: P620171001WQ | file: FLOW.calib

plot: FLOW - total discharge

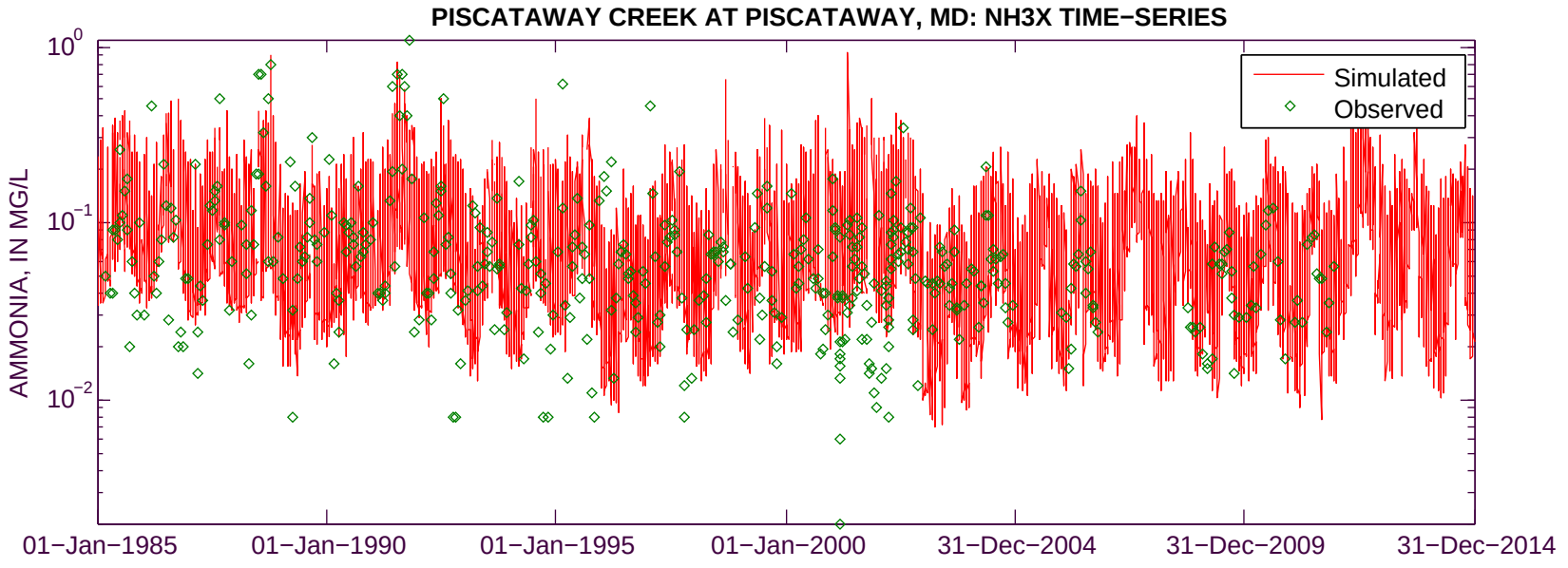
Dates: 1/1/1985 | 12/31/201

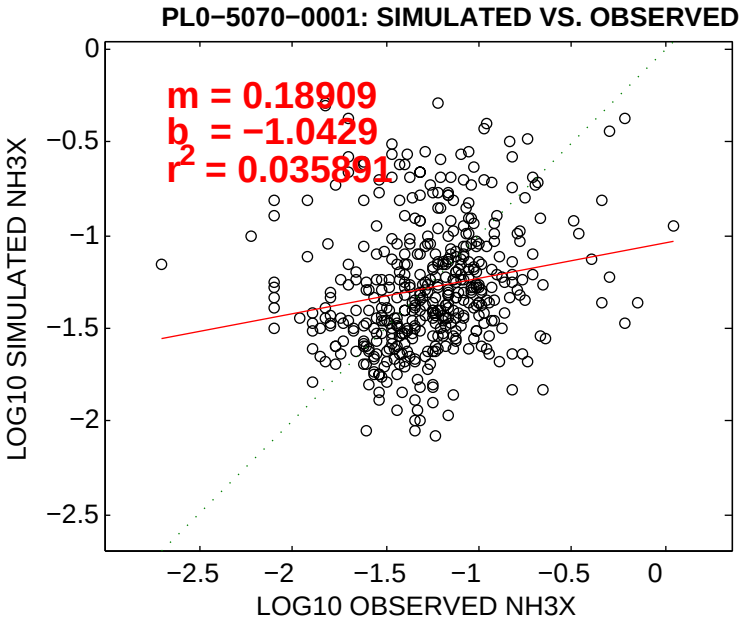
Drive | Directory: N/A | model | Observed: OBS20161101

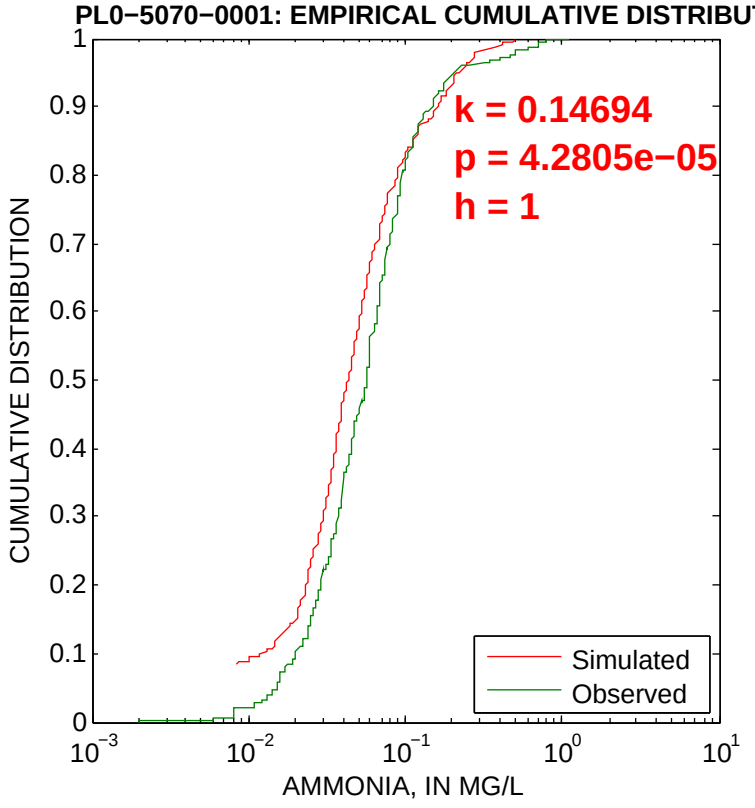
STATISTICS

		observe	simulate
n		10584	10021
min		0.0451089	0
		-1.34574	-4.25125
mean		46.1968	39.6672
		1.24092	1.27927
media		23.0451	20.8335
		1.39872	1.35536
max		6440.05	1907.4
		3.80889	3.28044
varian		15080.5	5894.15
		0.619002	0.375024
JB		0.001	0.001
		0.001	0.001
		ra	log
%		-14.1344	3.09088
err.va		6763.72	0.266181
rel.std.err		0.448508	0.430016
mod.eff		0.551492	0.569984

VERSION 2.1







DATA SELECTION

scenario	file
P620171001WQ	NH3X.calib

plot: NH3X - ammonia

Dates: 1/1/1985 – 12/31/201

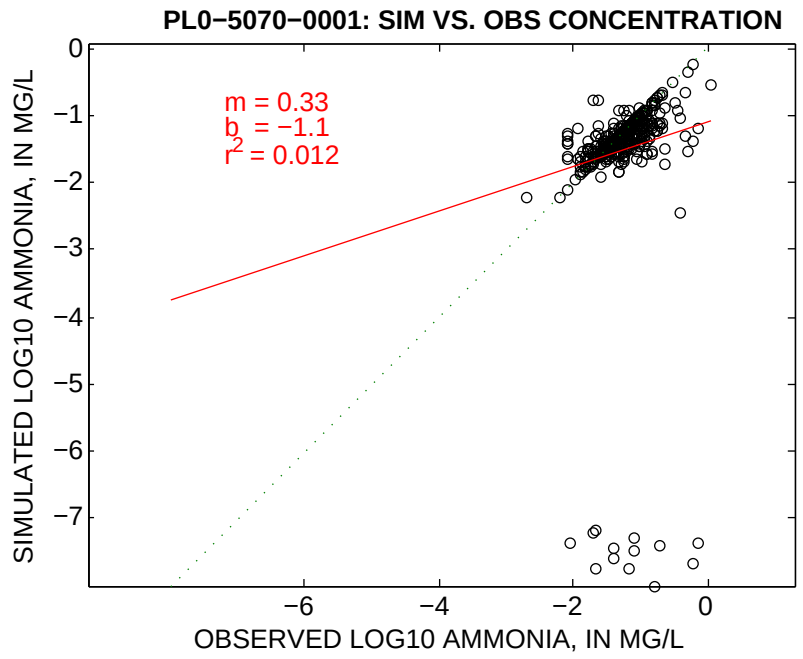
Drive	Directory	Observed
N/A	model	OBS20161101

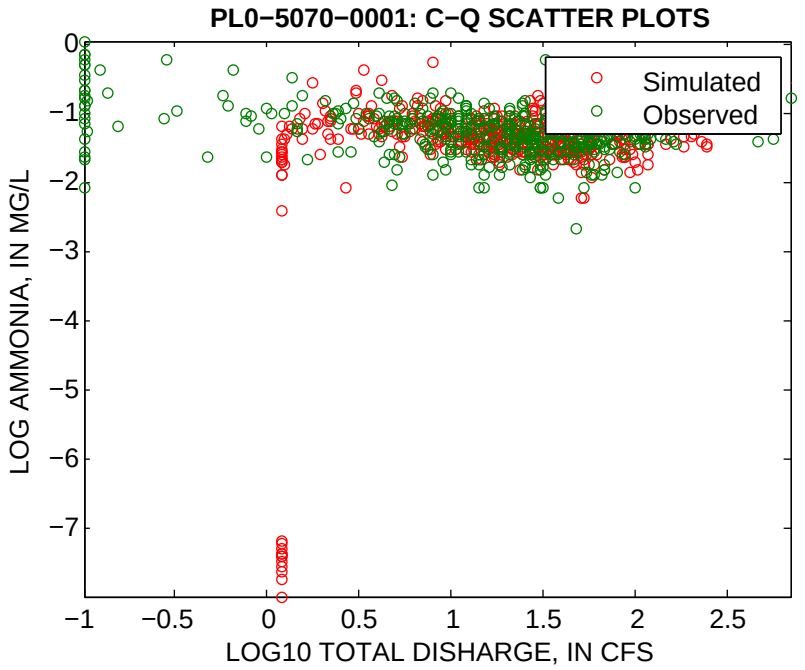
STATISTICS

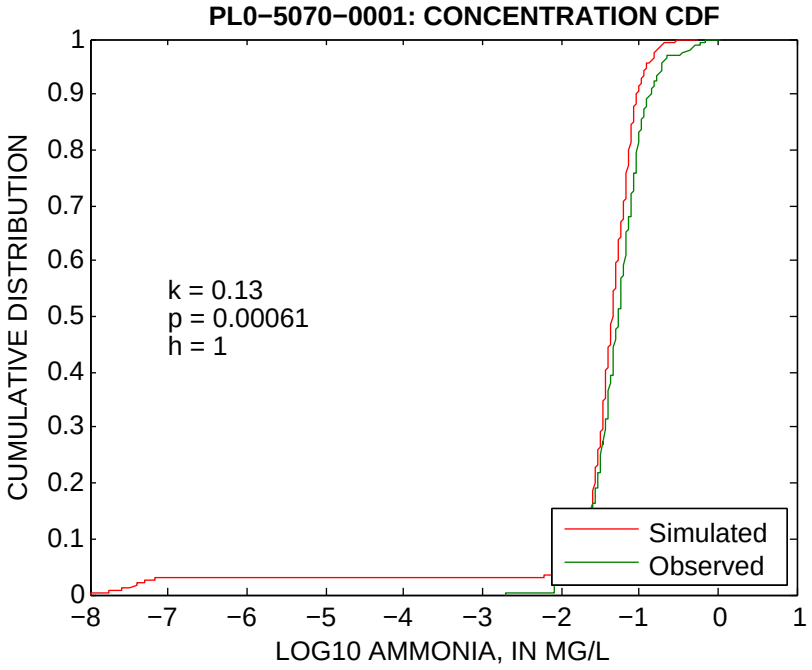
	n	observe	simulate
		490	449
min		0.002	0
		-2.69897	-2.07127
mean		0.0829302	0.0673012
		-1.26923	-1.28295
media		0.056	0.0431715
		-1.25181	-1.32954
max		1.1	0.50883
		0.0413927	-0.293427
varian		0.0125541	0.00574685
		0.115389	0.114956
JB		0.001	0.001
		0.001	0.001068
		ra	log
%		-18.846	1.08038
err.va		0.0175916	0.186895
rel.std.err		1.40127	1.61969
mod.eff		-0.401265	-0.619694

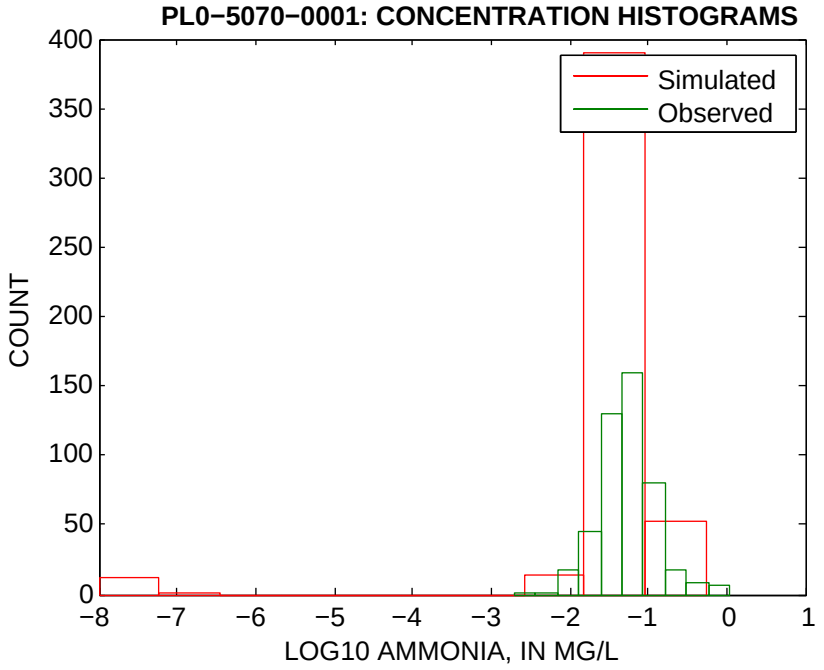
VERSION 2.1

ALL DATA
LOG10

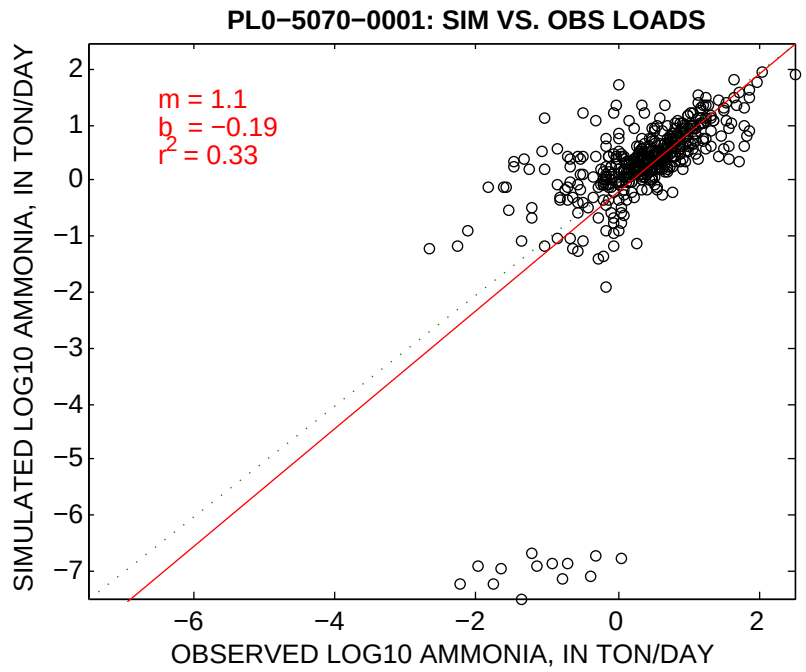


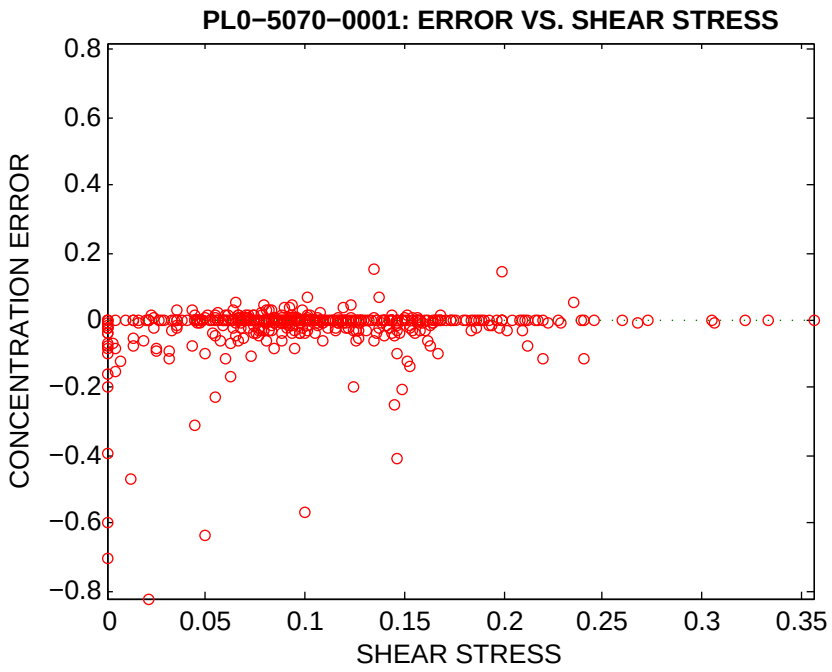


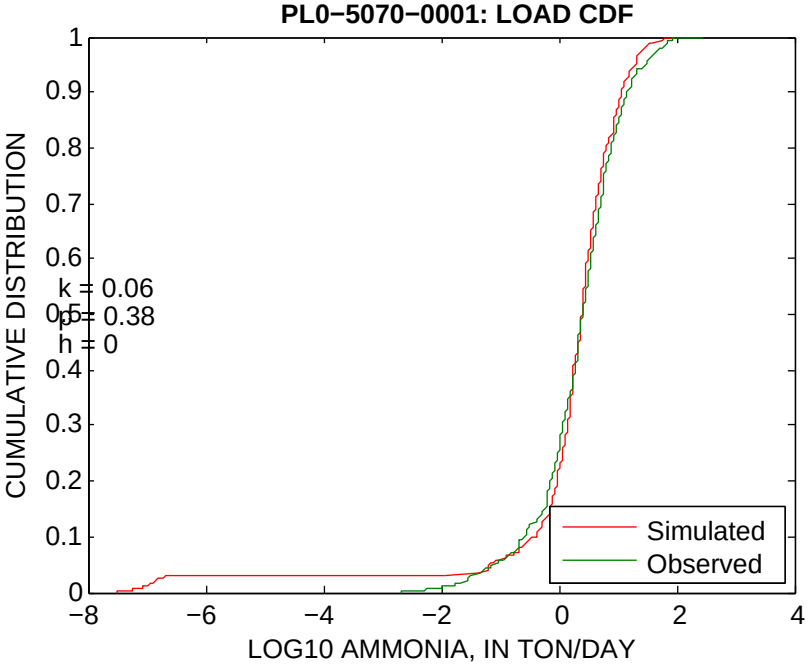


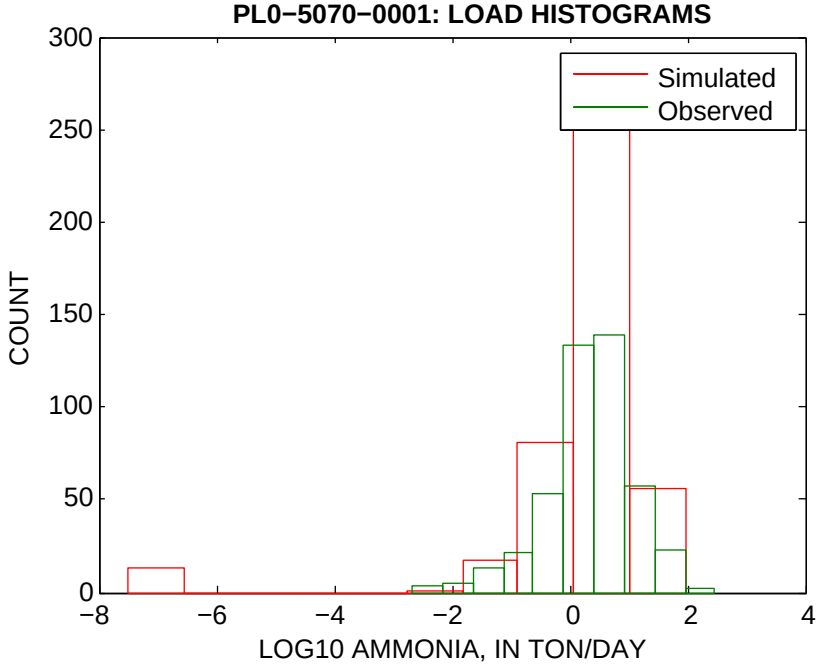


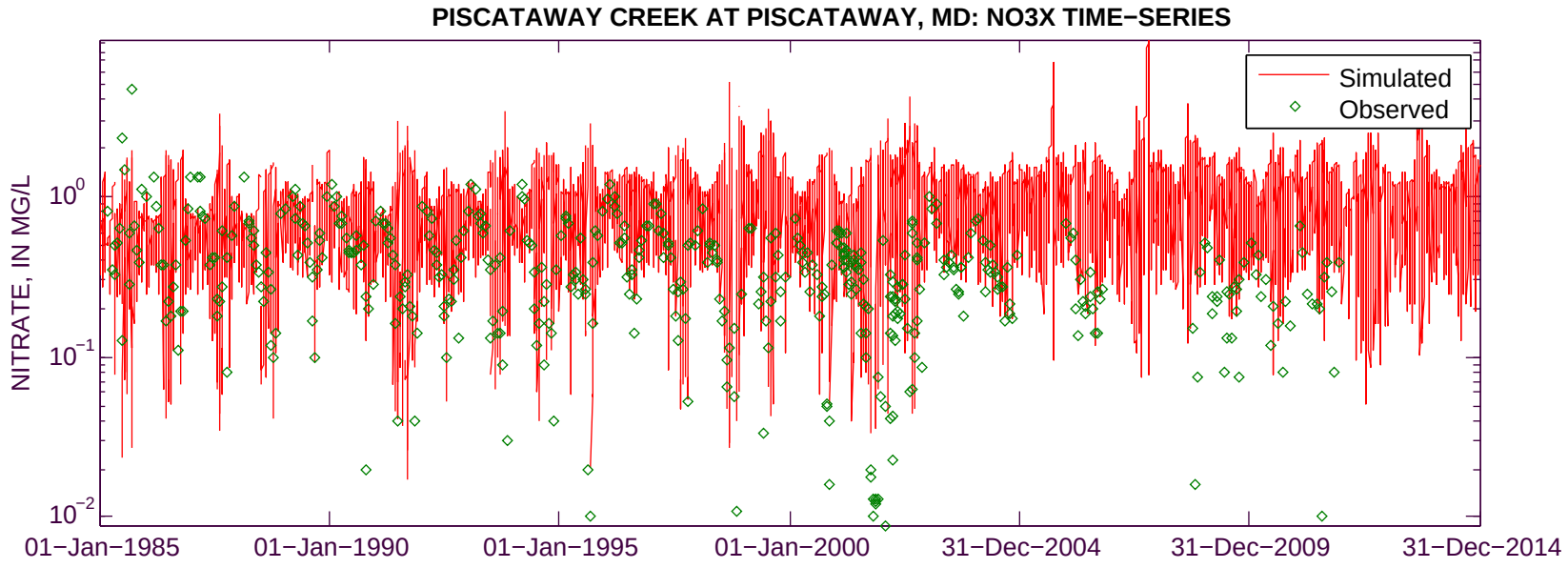
LOAD DATA
LOG10

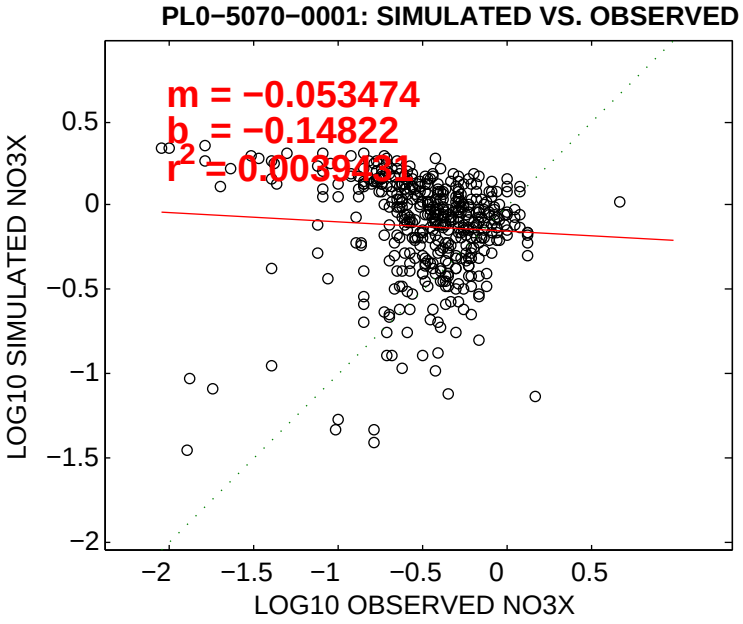


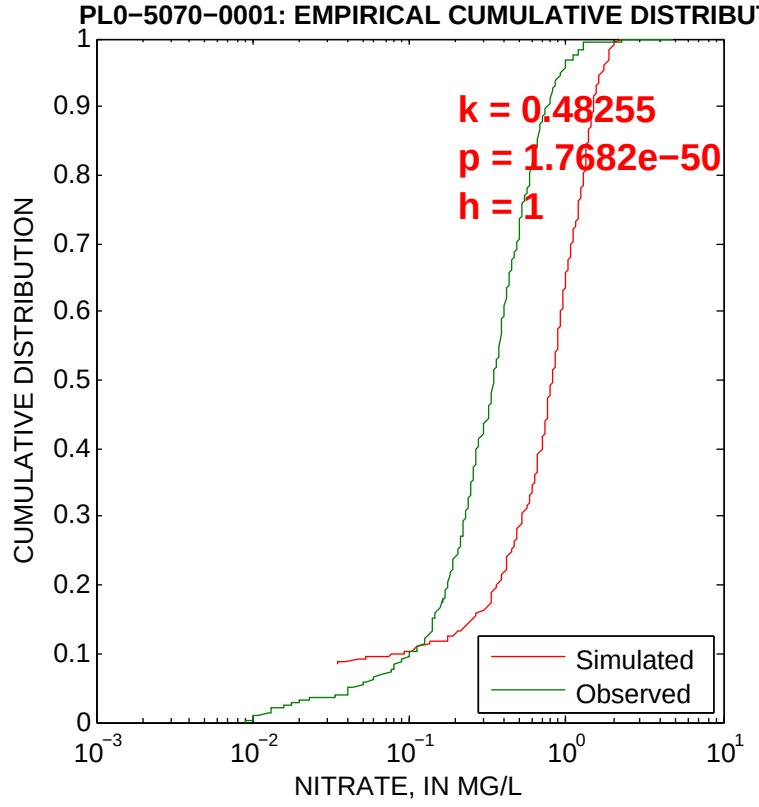












DATA SELECTION

scenario	file
P620171001WQ	NO3X.calib

plot: NO3X - nitrate

Dates: 1/1/1985 – 12/31/201

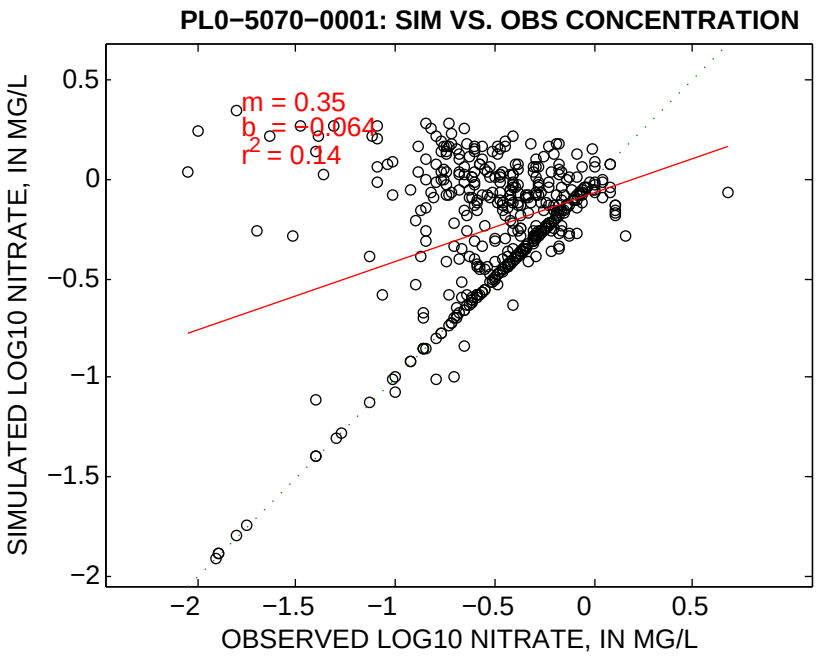
Drive	Directory	Observed
N/A	model	OBS20161101

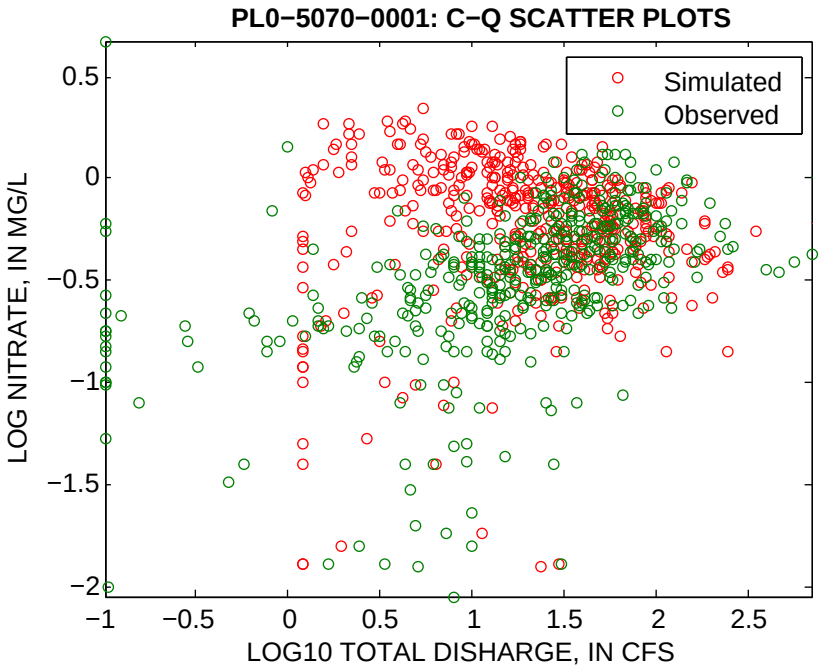
STATISTICS

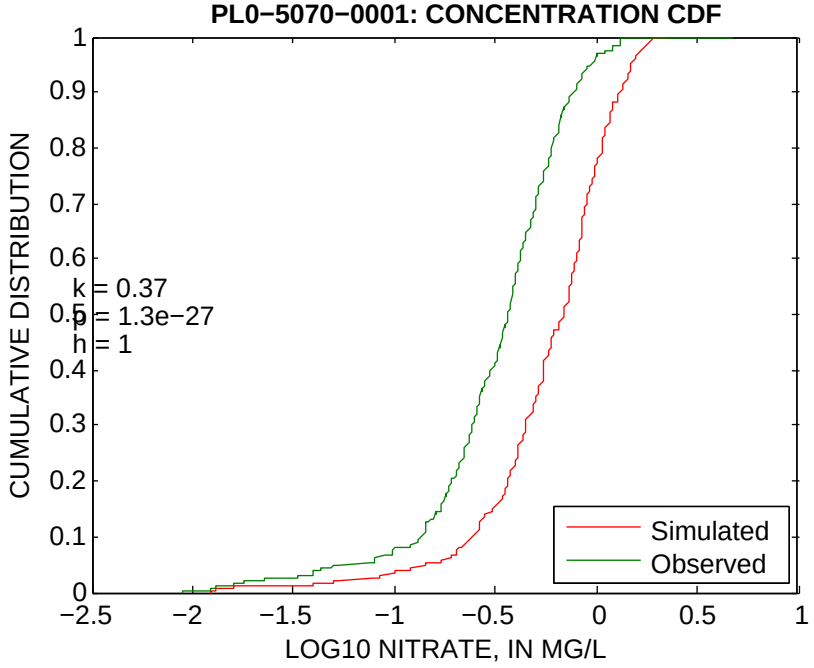
	n	487	446
		observe	simulate
min		0.009	0
		-2.04576	-1.45033
mean		0.405571	0.827586
		-0.482901	-0.122402
media		0.347	0.81359
		-0.430628	-0.0617008
max		4.738	2.269
		0.675595	0.355834
varian		0.116524	0.257403
		0.124947	0.0906104
JB		0.001	0.016153
		0.001	0.001
		ra	log
%		104.055	-74.6528
err.va		0.567432	0.359172
rel.std.err		4.86966	2.8746
mod.eff		-3.86966	-1.8746

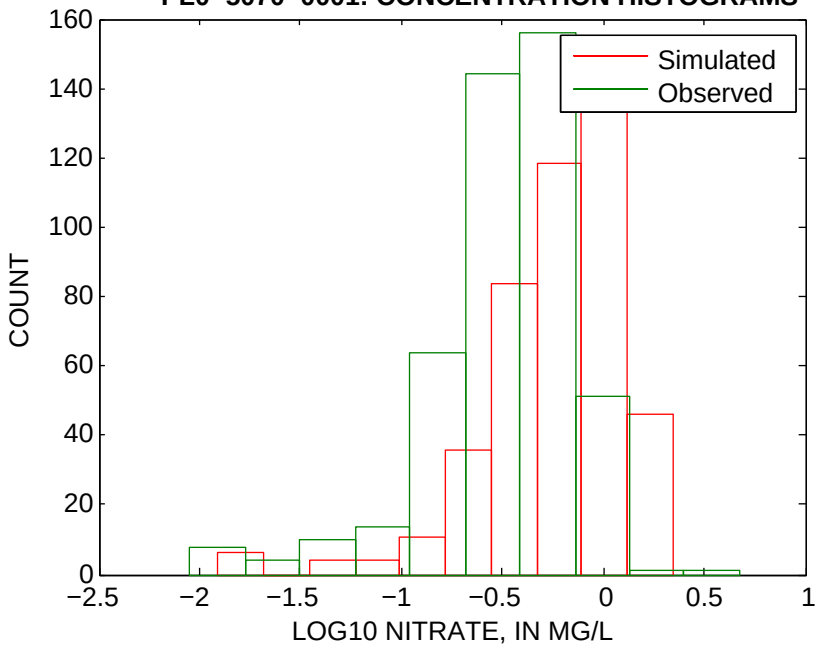
VERSION 2.1

ALL DATA
LOG10

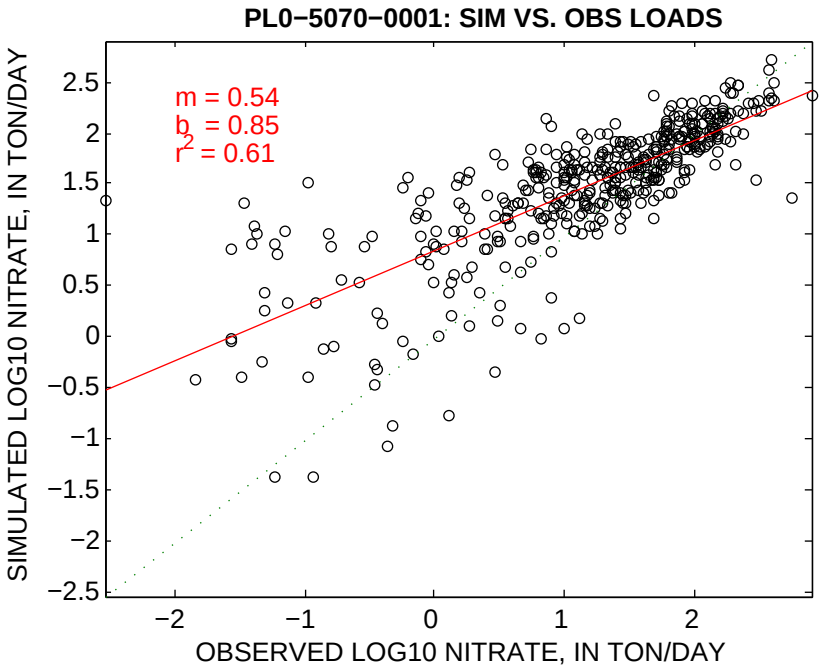


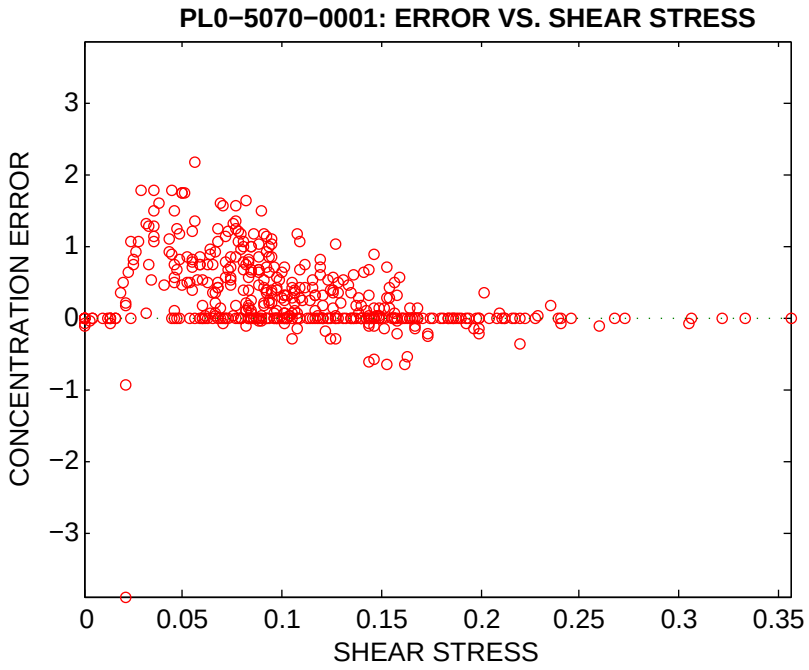


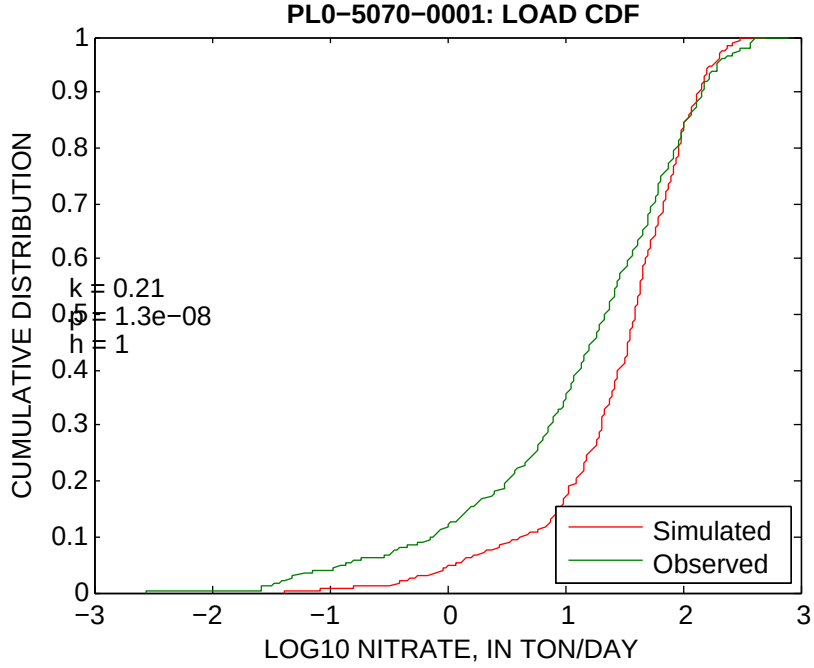


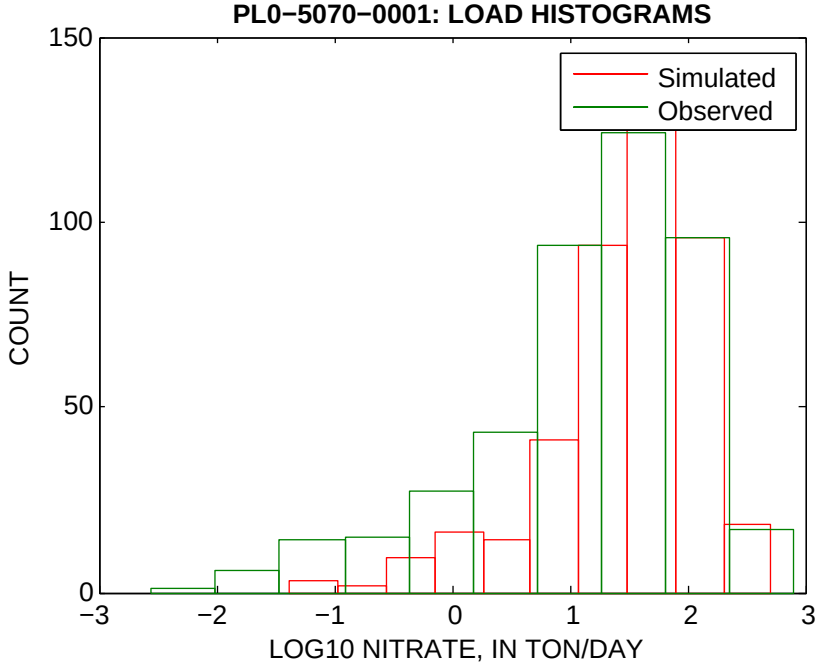


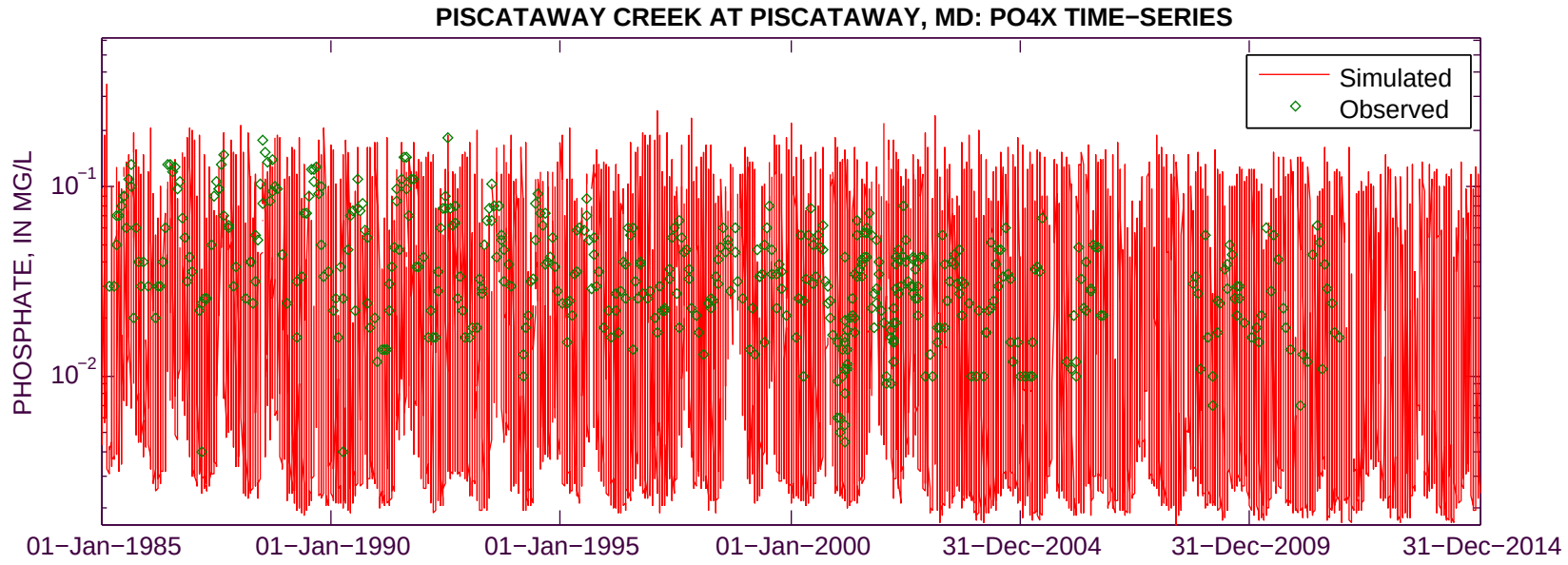
LOAD DATA
LOG10

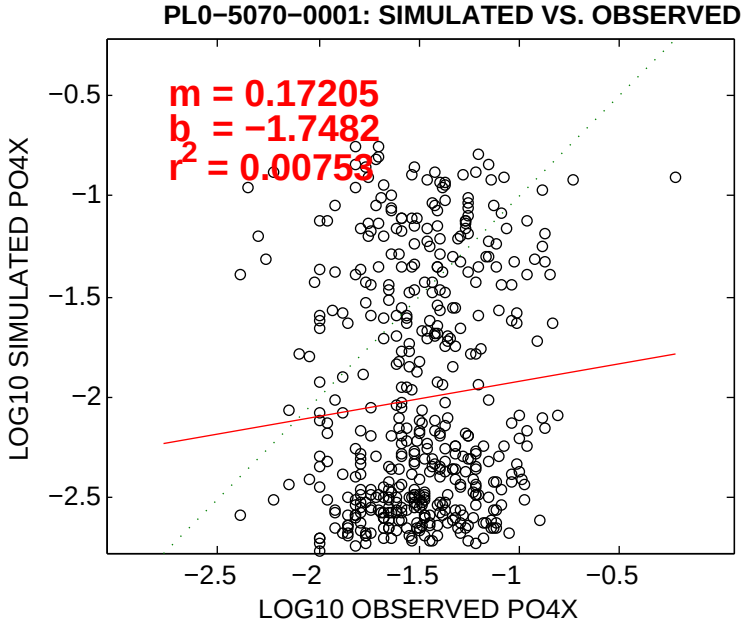


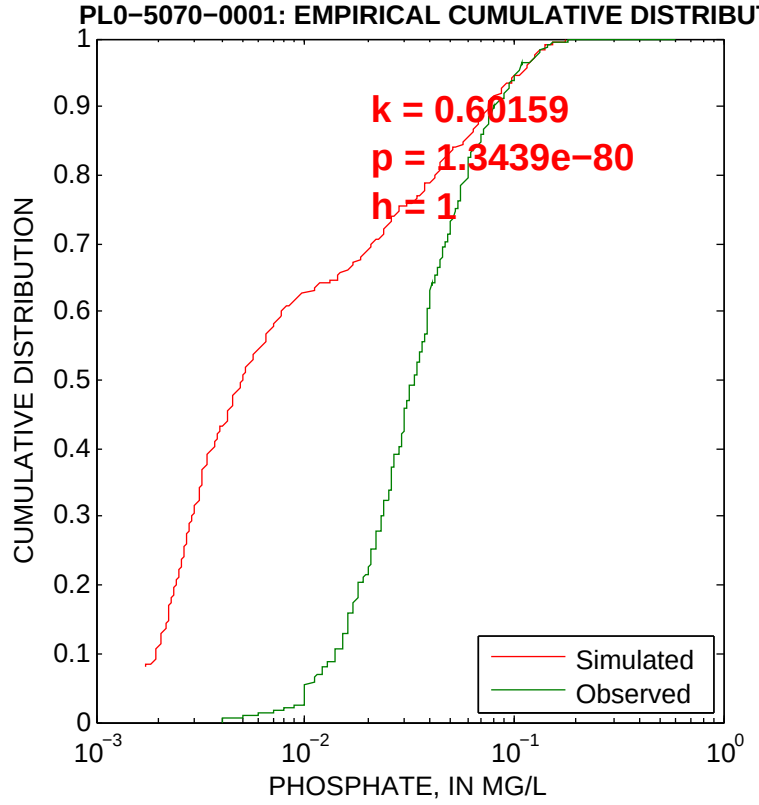












DATA SELECTION

scenario: P620171001WQ | file: PO4X.calib

plot: PO4X - phosphate

Dates: 1/1/1985 – 12/31/201

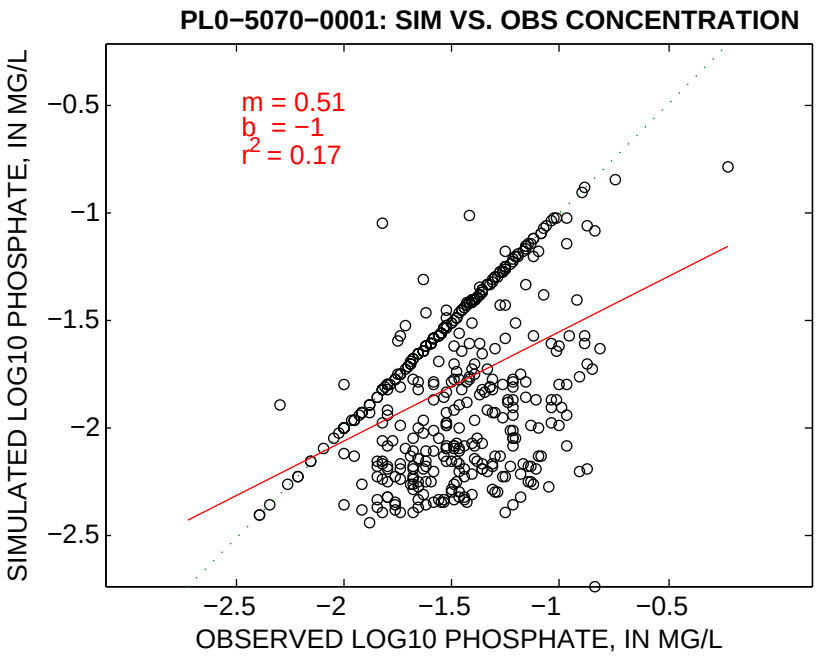
Drive: N/A | Directory: model | Observed: OBS20161101

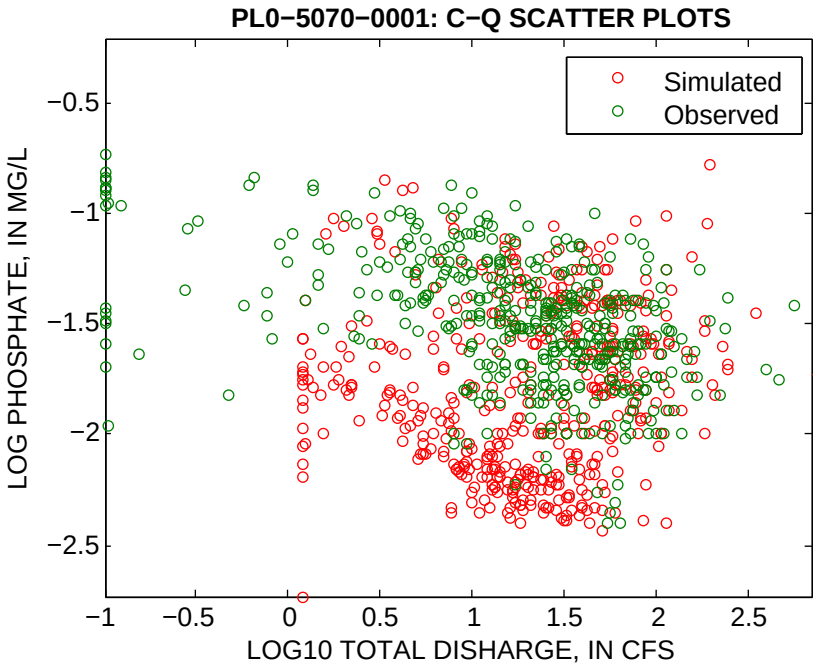
STATISTICS

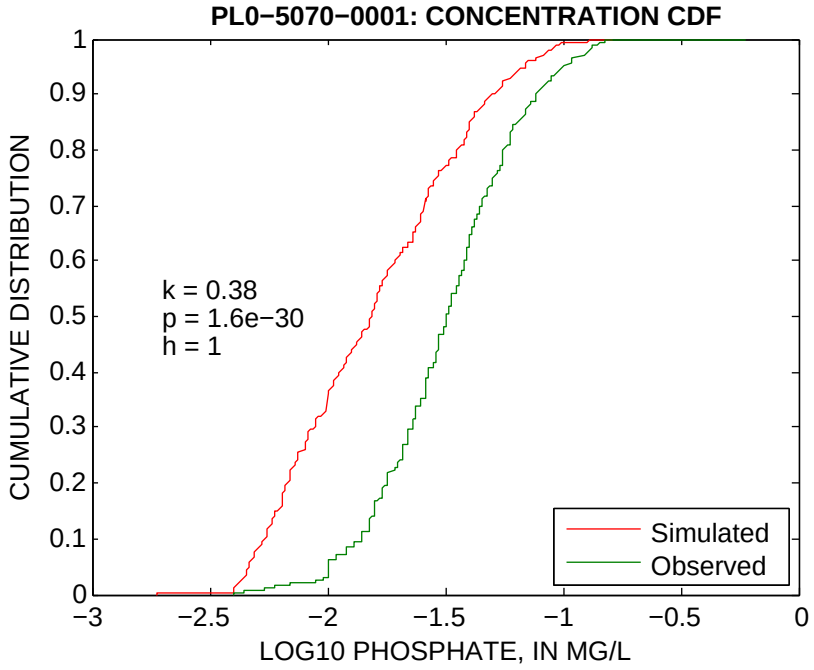
	n	observe	simulate
		502	461
min		0.004	0
		-2.39794	-2.76178
mean		0.0425218	0.0232338
		-1.49568	-2.00549
media		0.033	0.00503605
		-1.49485	-2.22694
max		0.6	0.17563
		-0.221849	-0.755401
varian		0.00149144	0.00123827
		0.0893248	0.35113
JB		0.001	0.001
		0.087499	0.001
		ra	log
%		-45.3603	34.0852
err.va		0.0028421	0.670187
rel.std.err		1.90561	7.50281
mod.eff		-0.905609	-6.50281

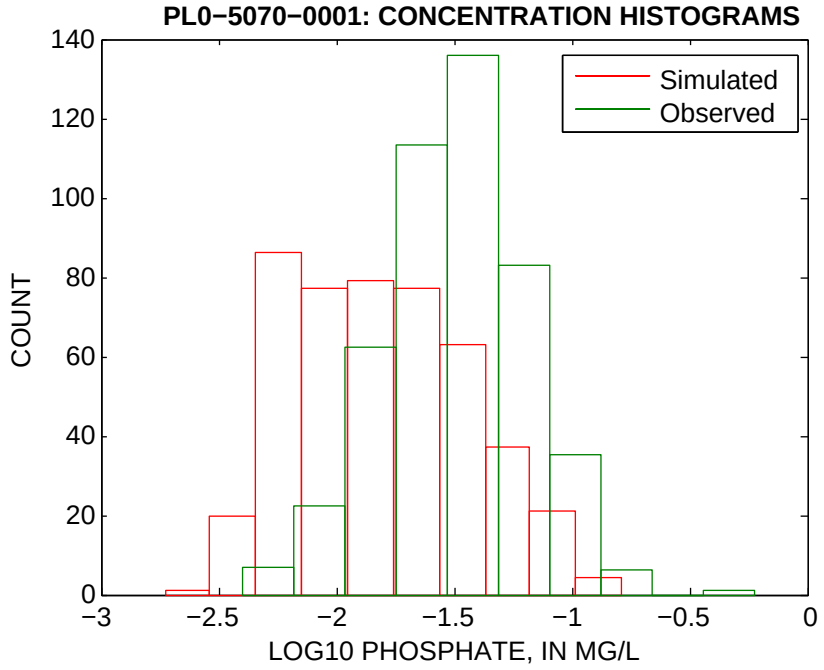
VERSION 2.1

ALL DATA
LOG10

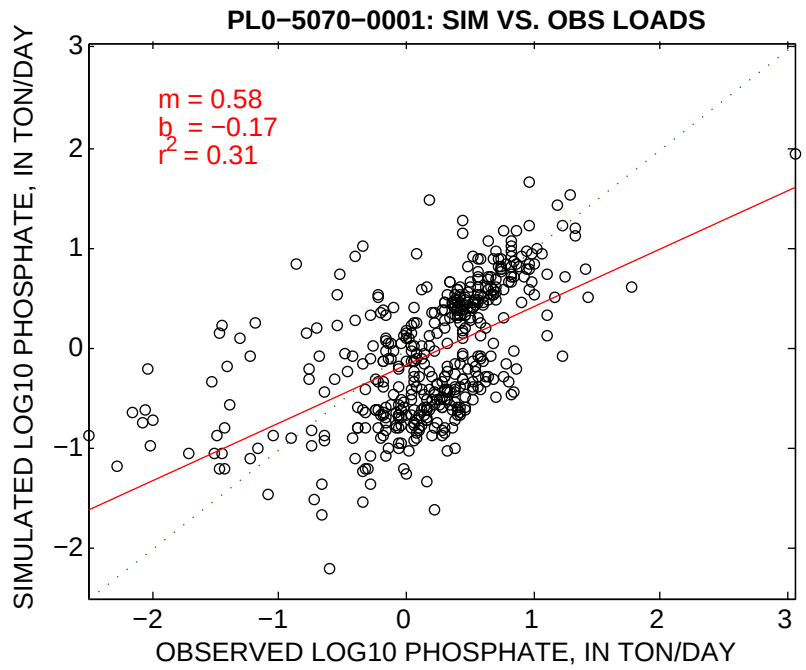


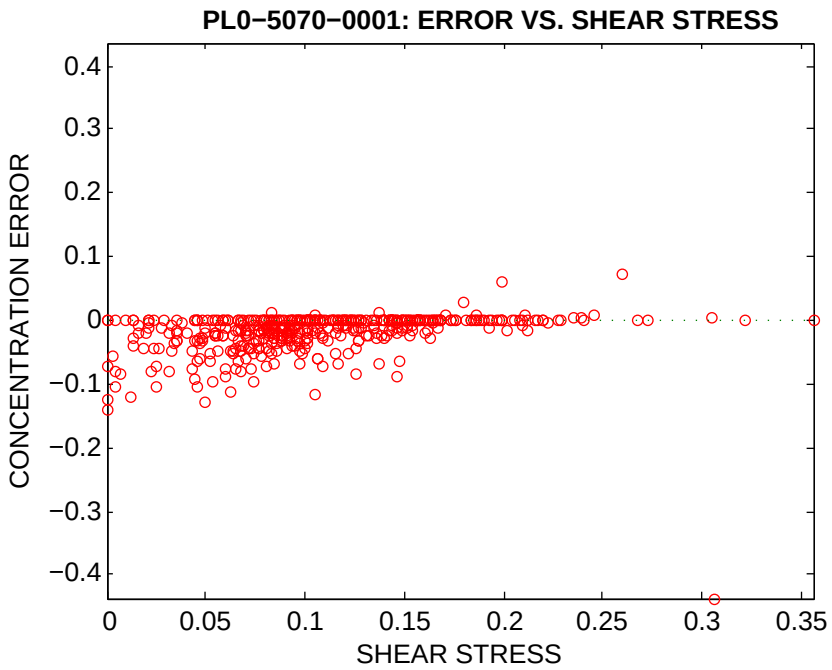


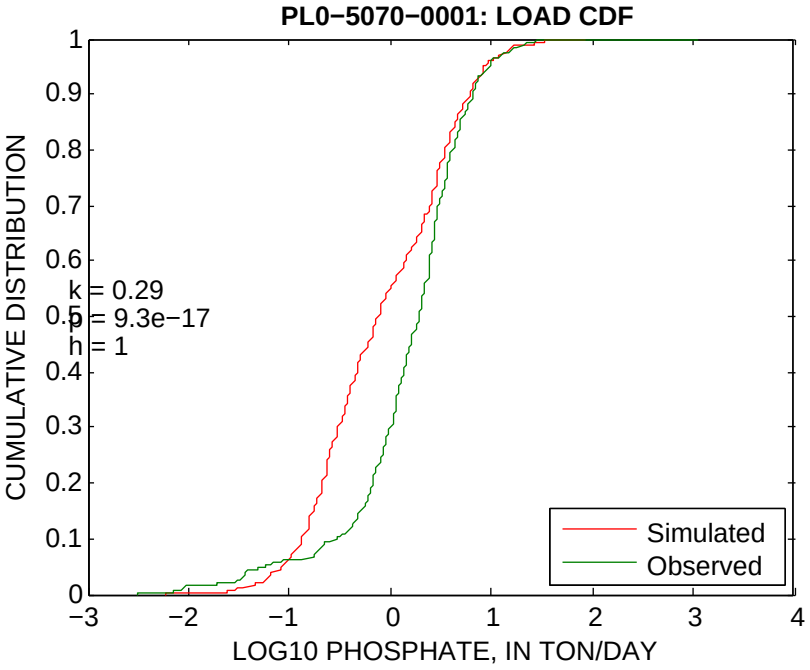


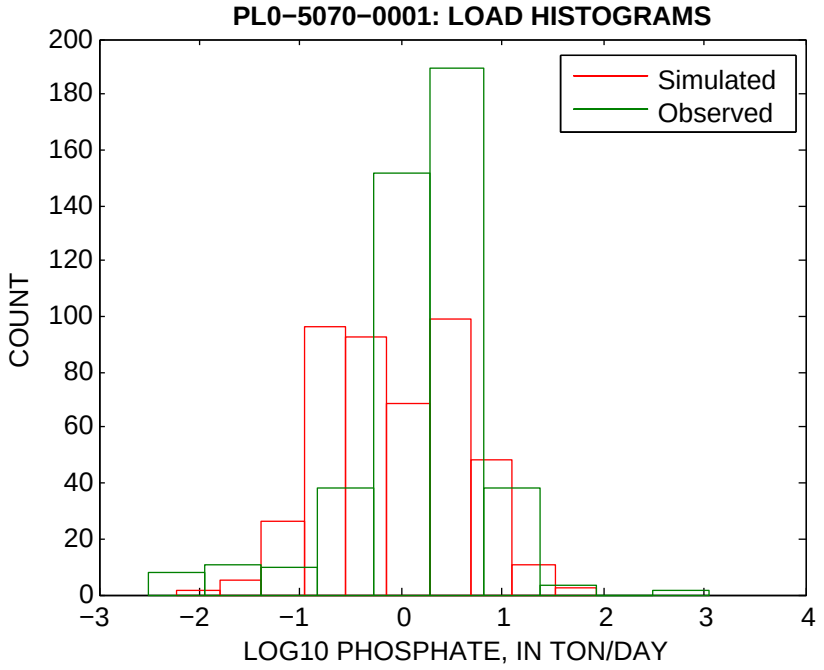


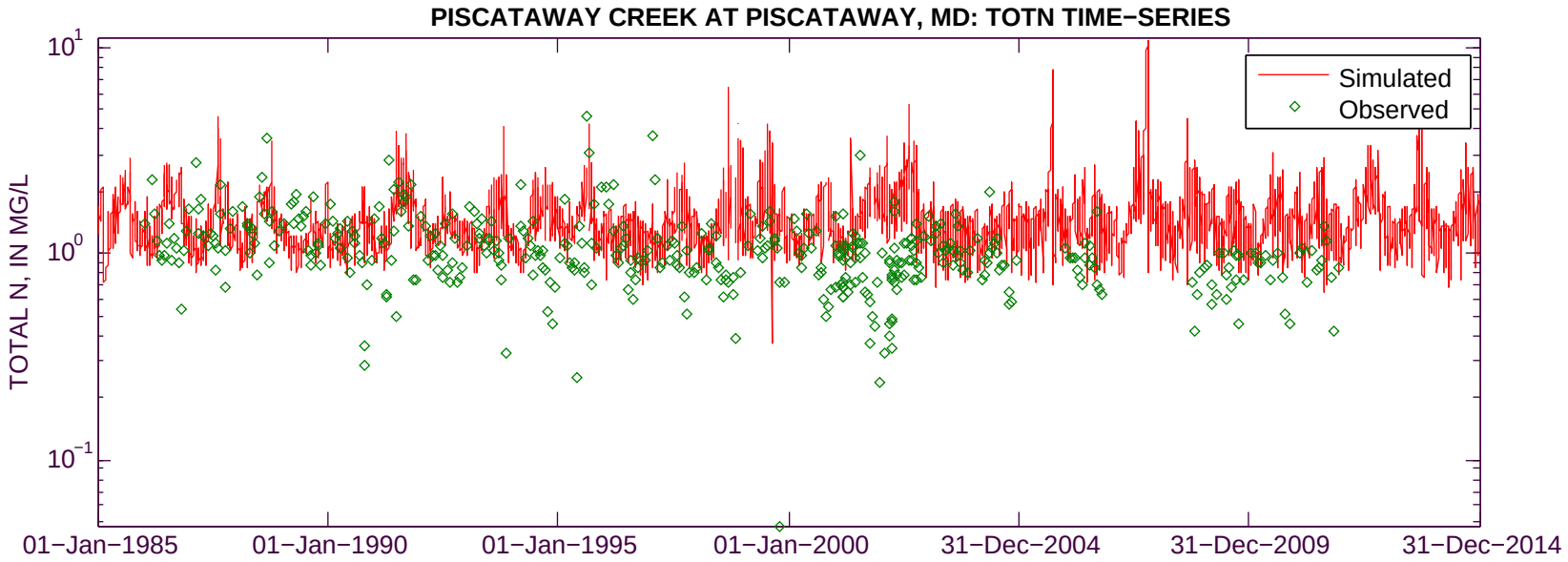
LOAD DATA
LOG10

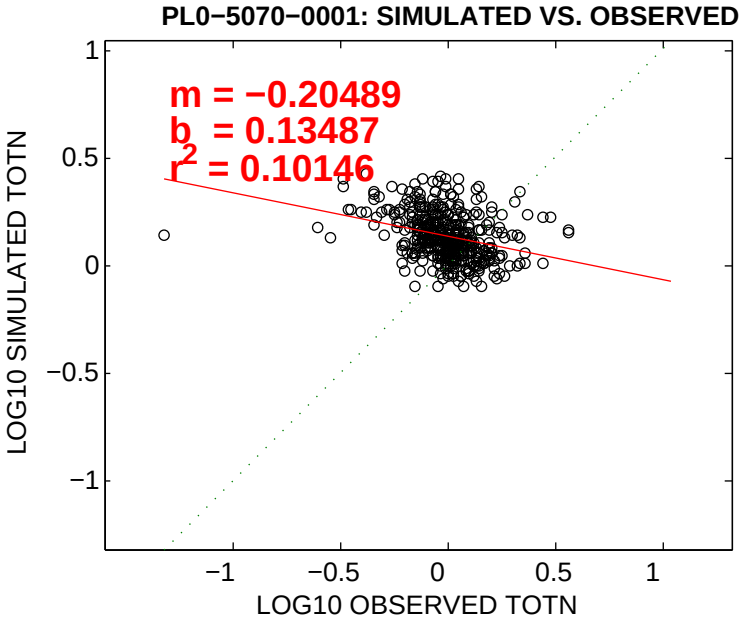


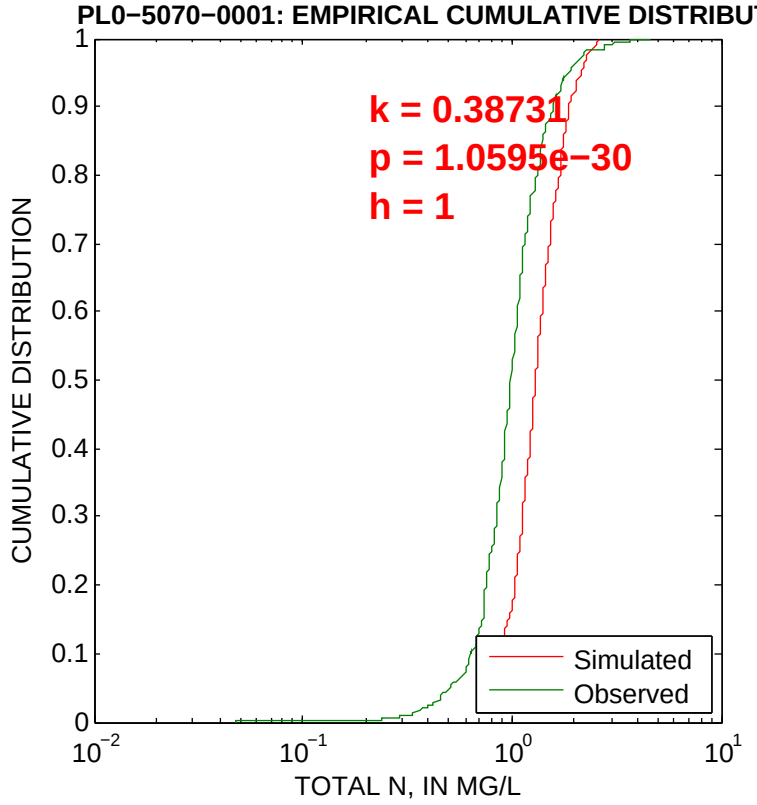












DATA SELECTION

scenario: P620171001WQ | file: TOTN.calib

plot: TOTN - total nitrogen

Dates: 1/1/1985 – 12/31/201

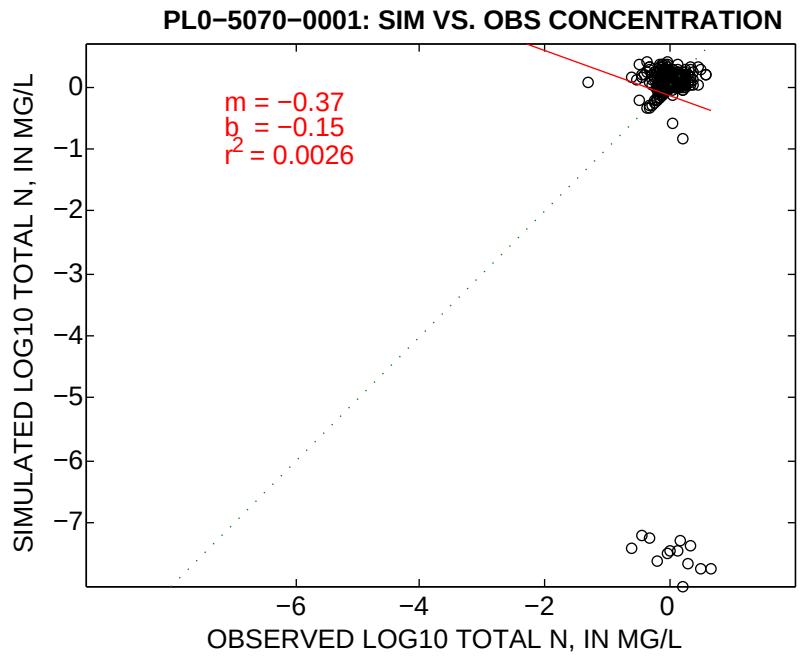
Drive: N/A | Directory: model | Observed: OBS20161101

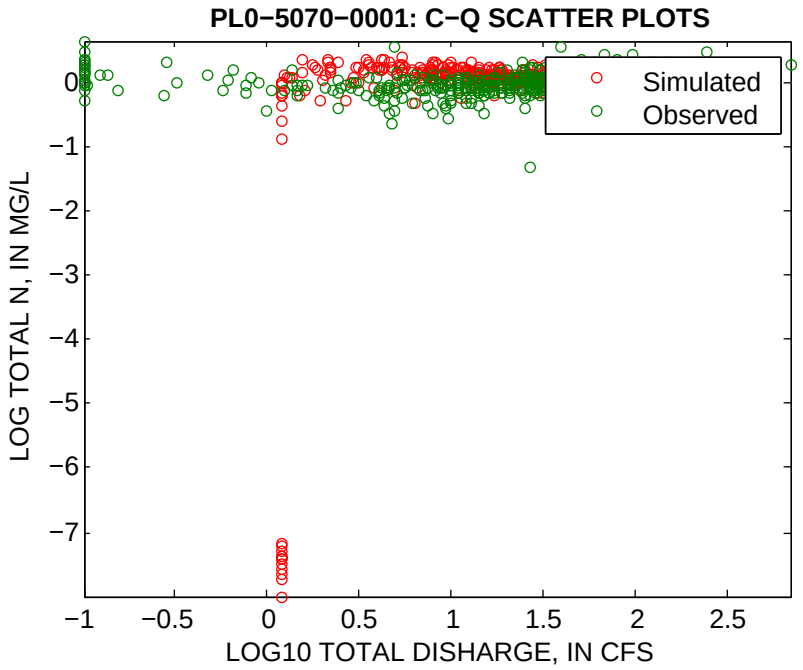
STATISTICS

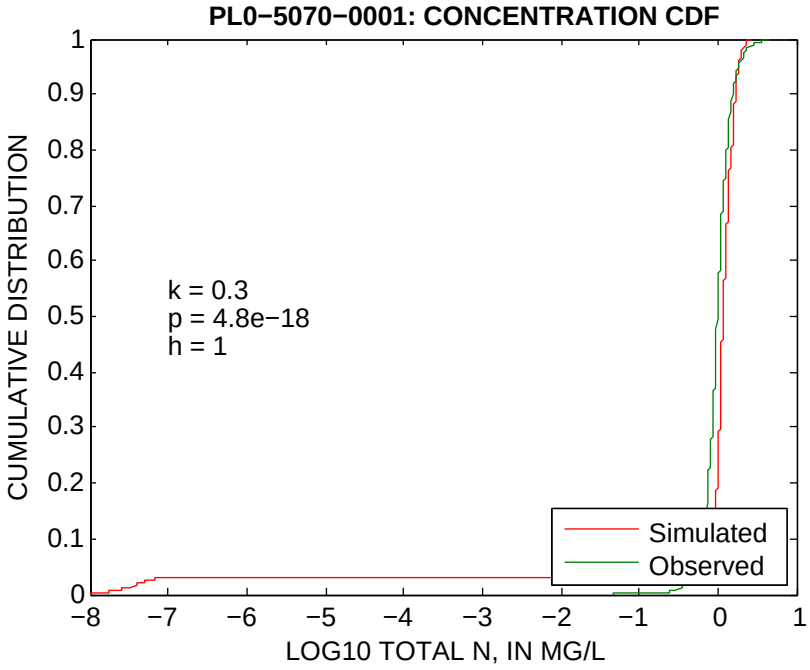
	n	observe	simulate
		457	420
min		0.048	0
		-1.31876	-0.102142
mean		1.07534	1.29854
		-0.0060174	0.136104
media		1	1.2951
		-0.0050238	0.123296
max		4.59	2.6361
		0.566909	0.420962
varian		0.222596	0.27627
		0.0287794	0.0119073
JB		0.001	0.001
		0.001	0.012697
		ra	log
%		20.7562	-2361.81
err.va		0.665337	0.0727267
rel.std.err		2.98899	2.52704
mod.eff		-1.98899	-1.52704

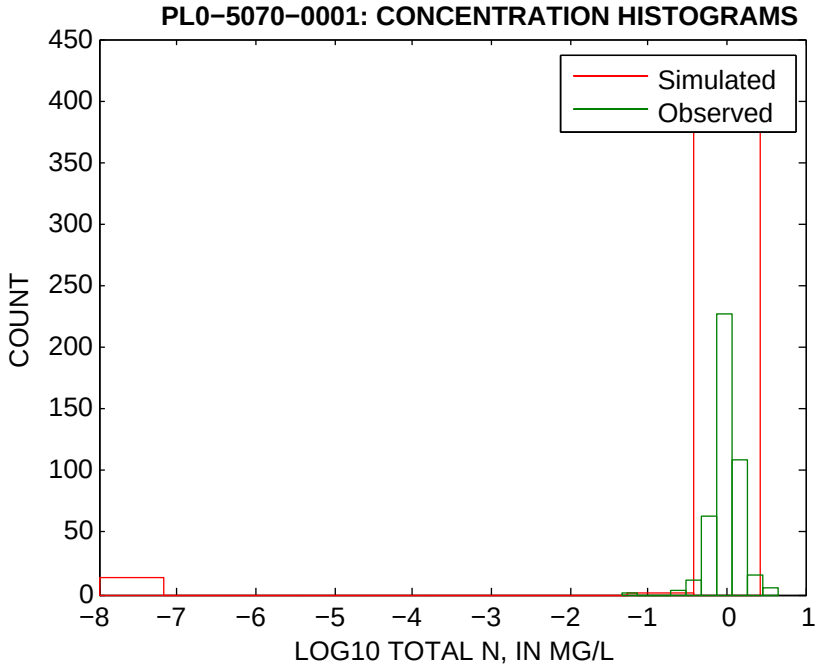
VERSION 2.1

ALL DATA
LOG10

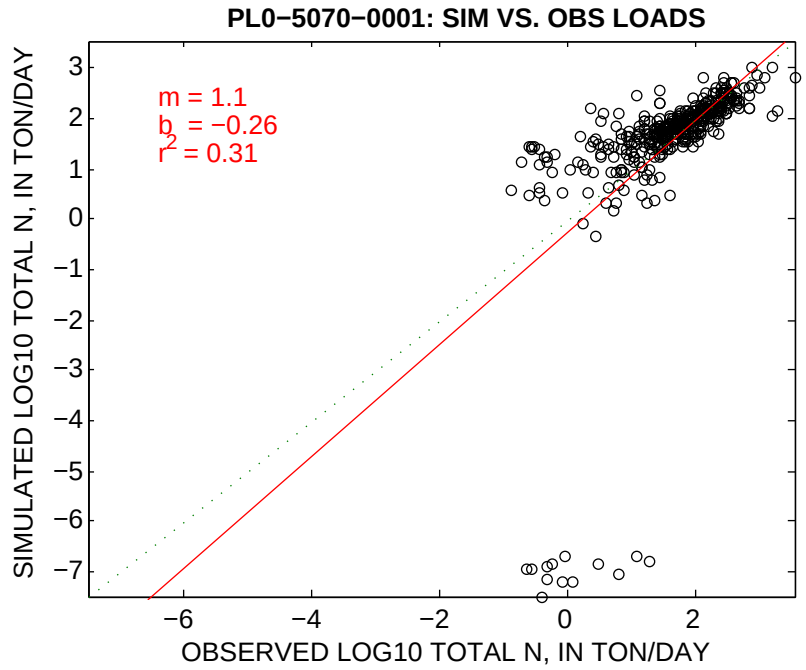


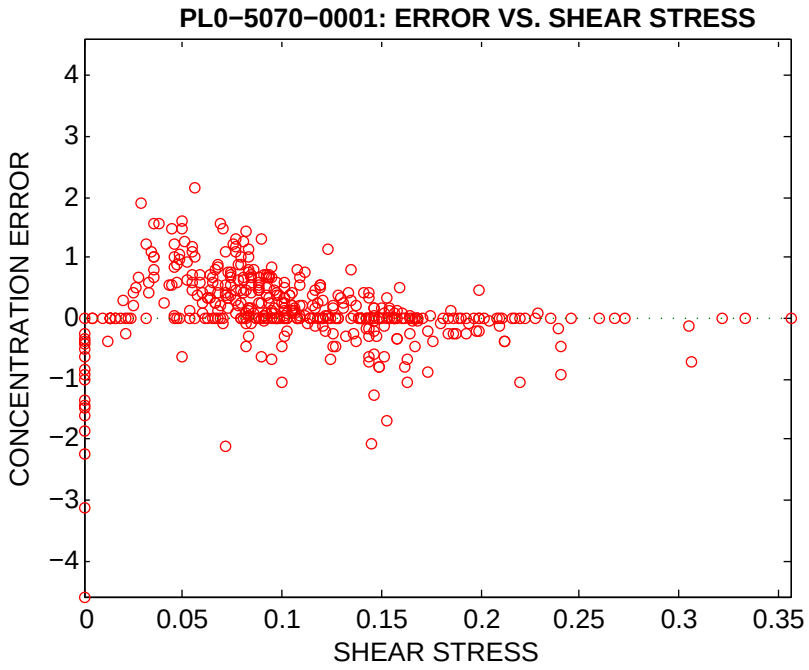


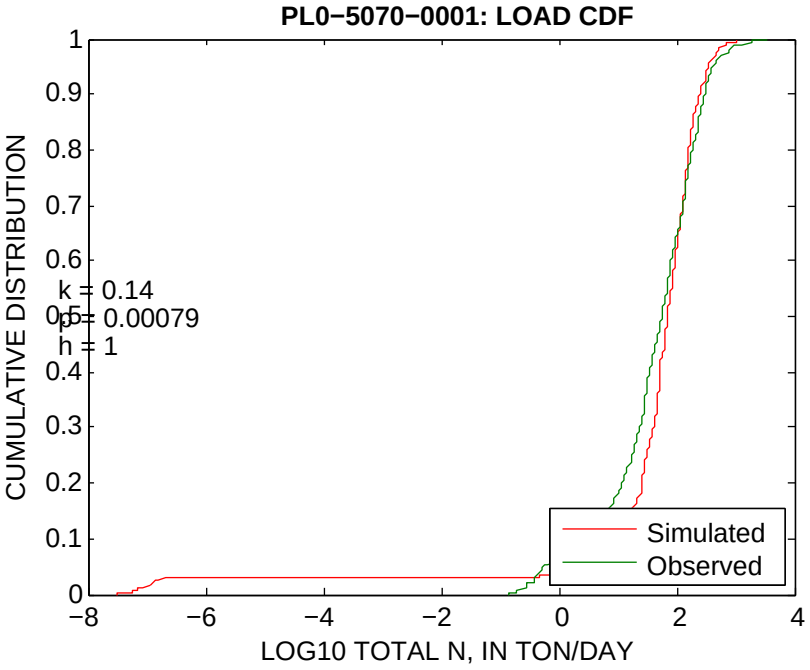


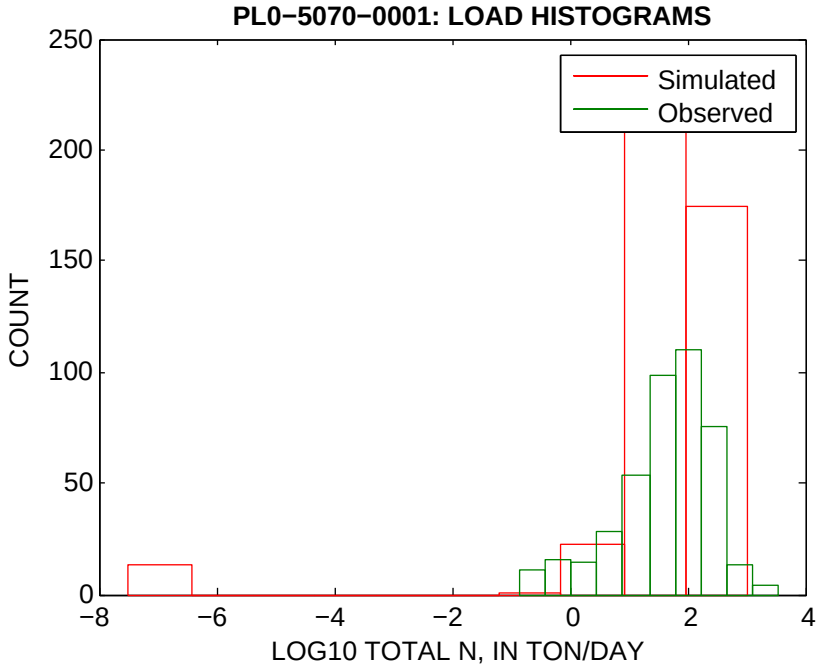


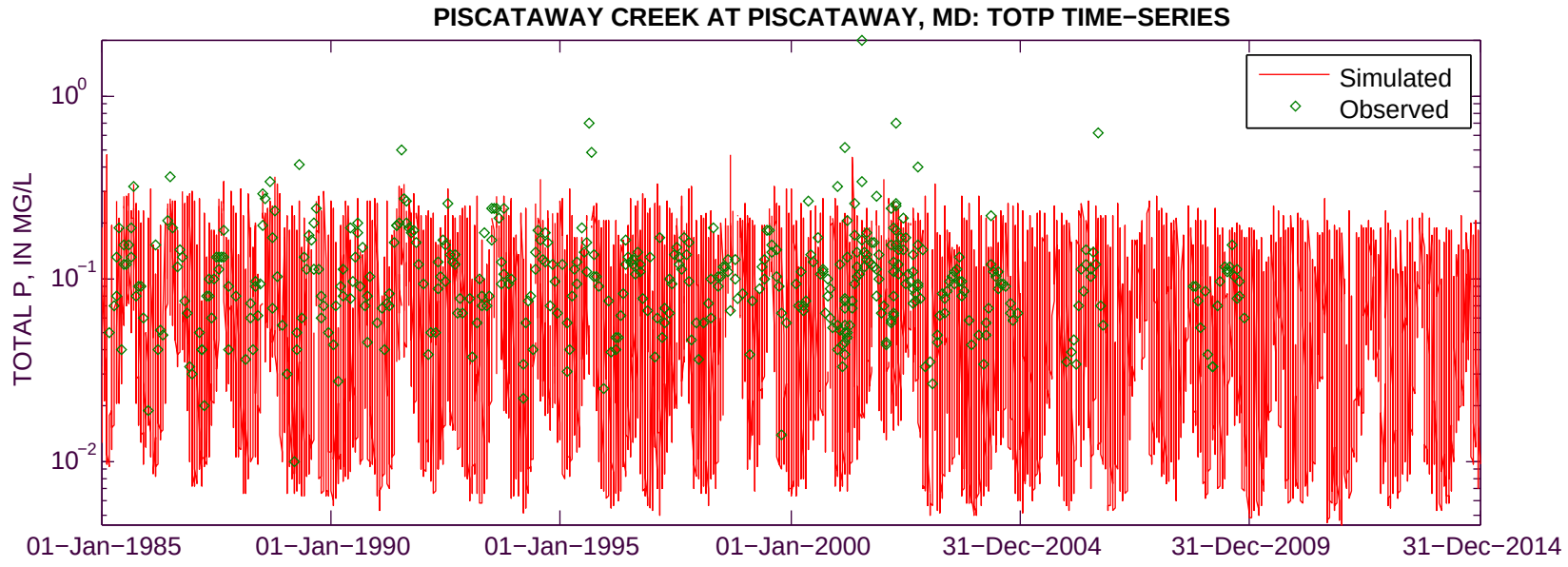
LOAD DATA
LOG10

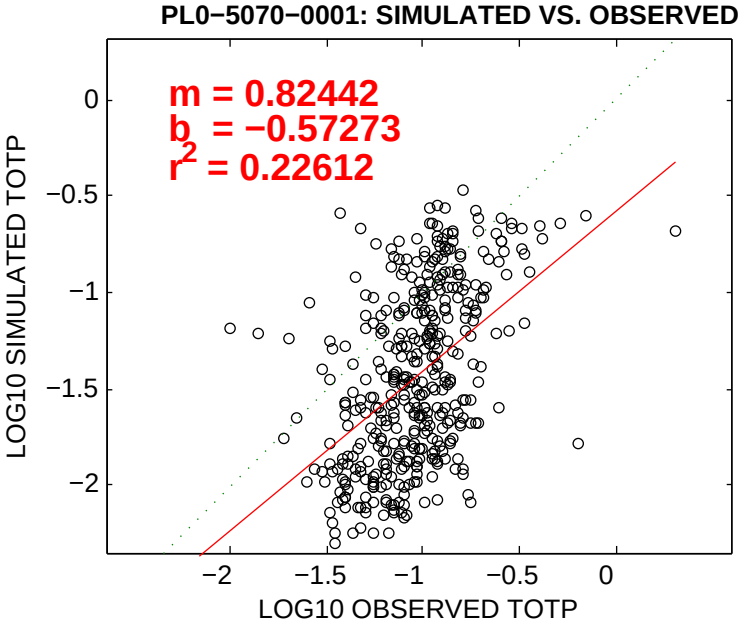


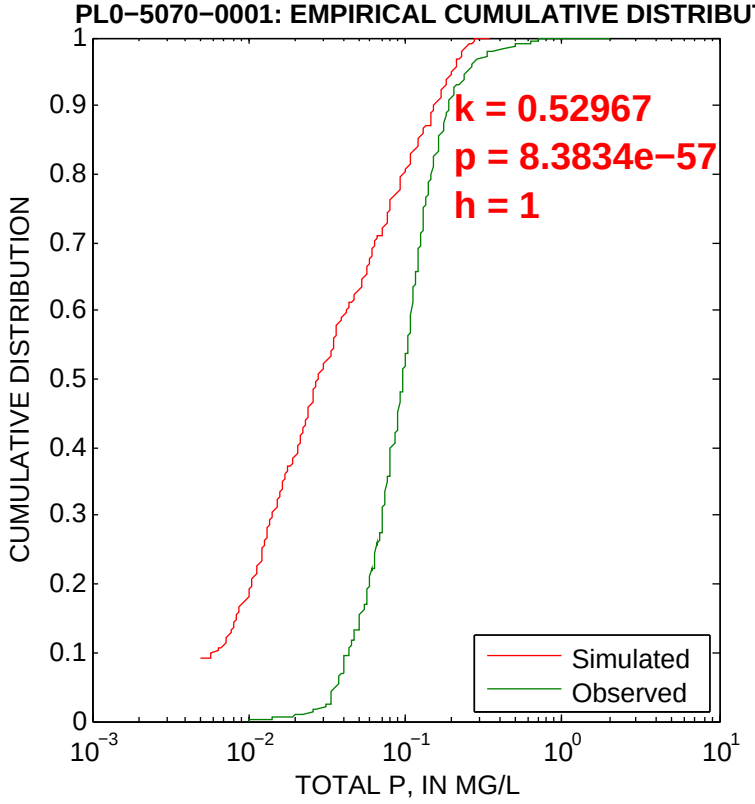












DATA SELECTION

scenario	file
P620171001WQ	TOTP.calib

plot: TOTP - total phosphorus

Dates: 1/1/1985 – 12/31/201

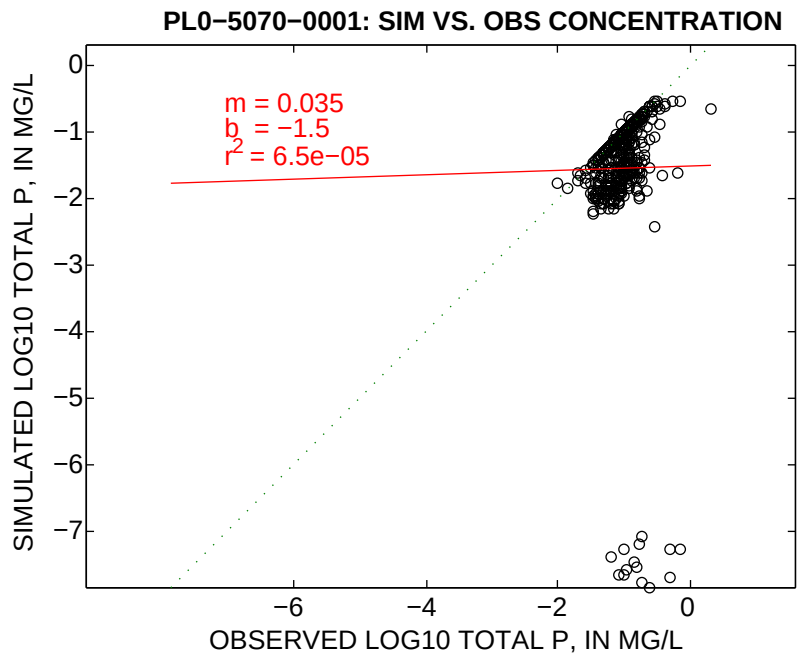
Drive	Directory	Observed
N/A	model	OBS20161101

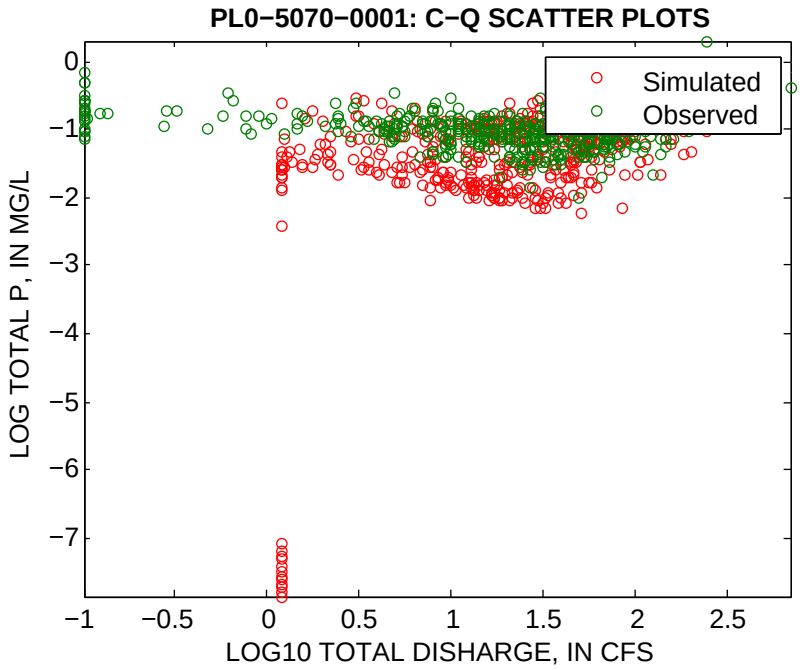
STATISTICS

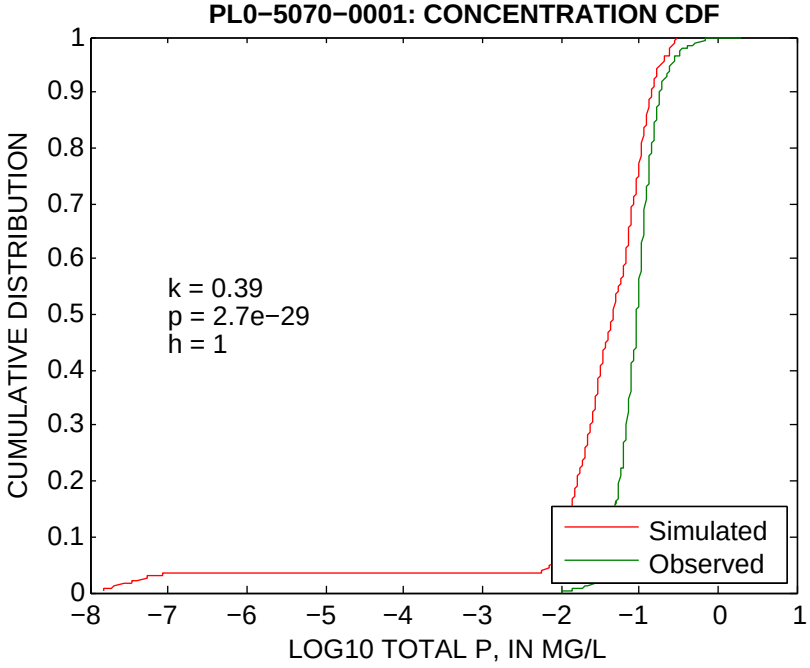
	n	observe	simulate
		455	414
min		0.01	0
		-2	-2.29981
mean		0.11767	0.0564157
		-1.04205	-1.43182
media		0.097	0.027408
		-1.02919	-1.46201
max		2.02856	0.34358
		0.307188	-0.463972
varian		0.0149011	0.00405726
		0.0678904	0.204071
JB		0.001	0.001
		0.001	0.001121
		ra	log
%		-52.0558	37.4048
err.va		0.0182	0.312313
rel.std.err		1.22139	4.60025
mod.eff		-0.221387	-3.60025

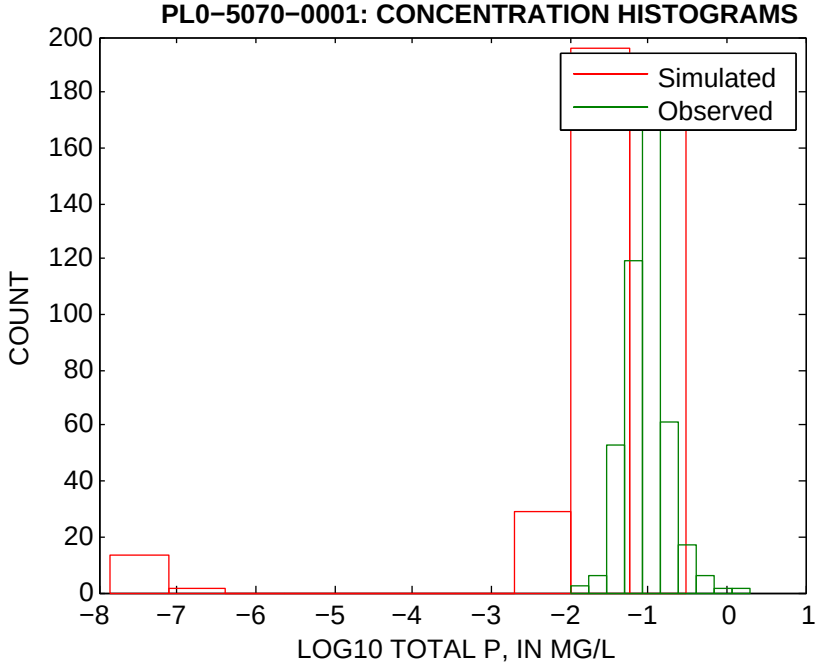
VERSION 2.1

ALL DATA
LOG10

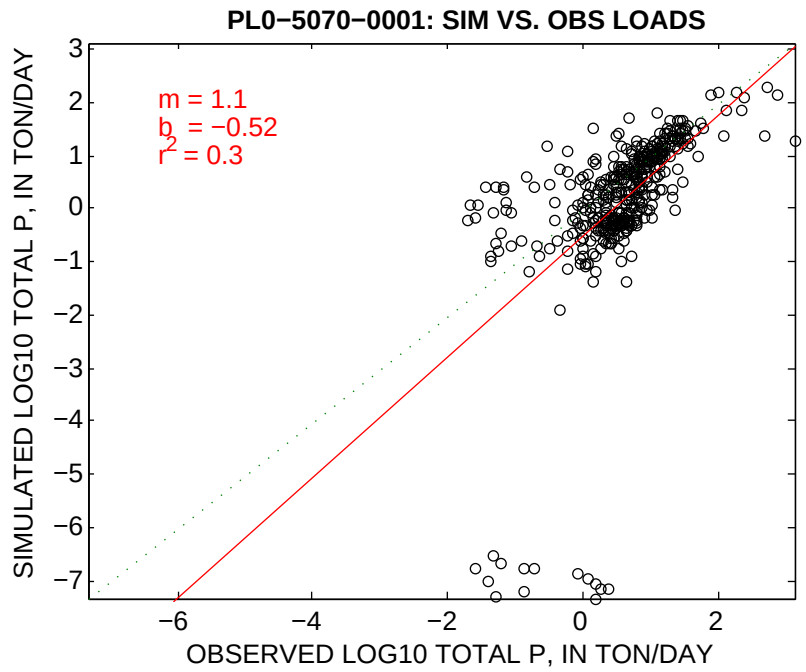


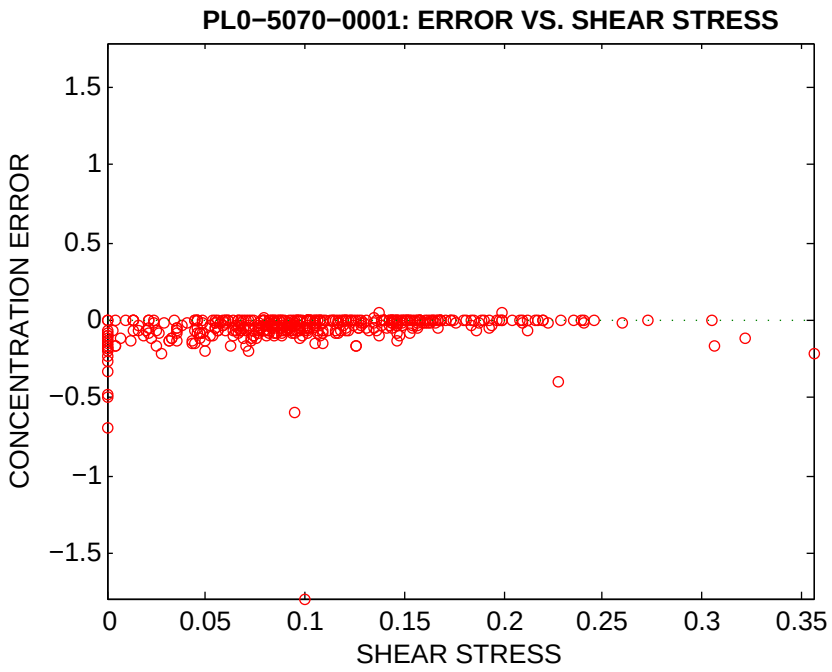


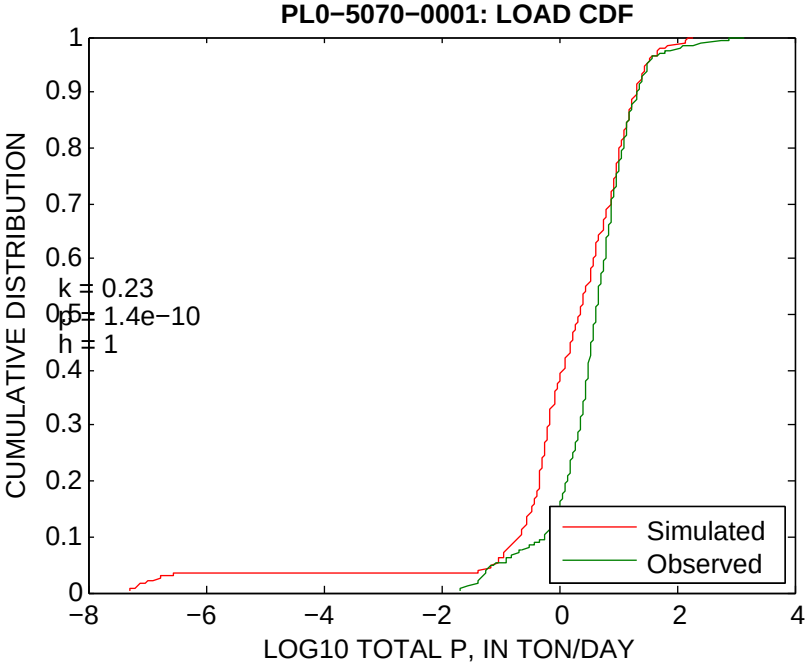


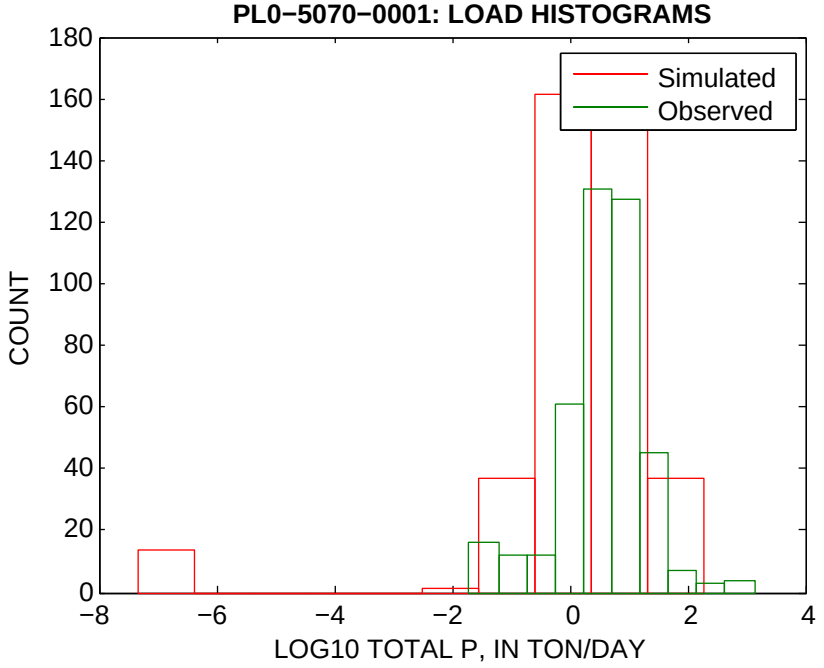


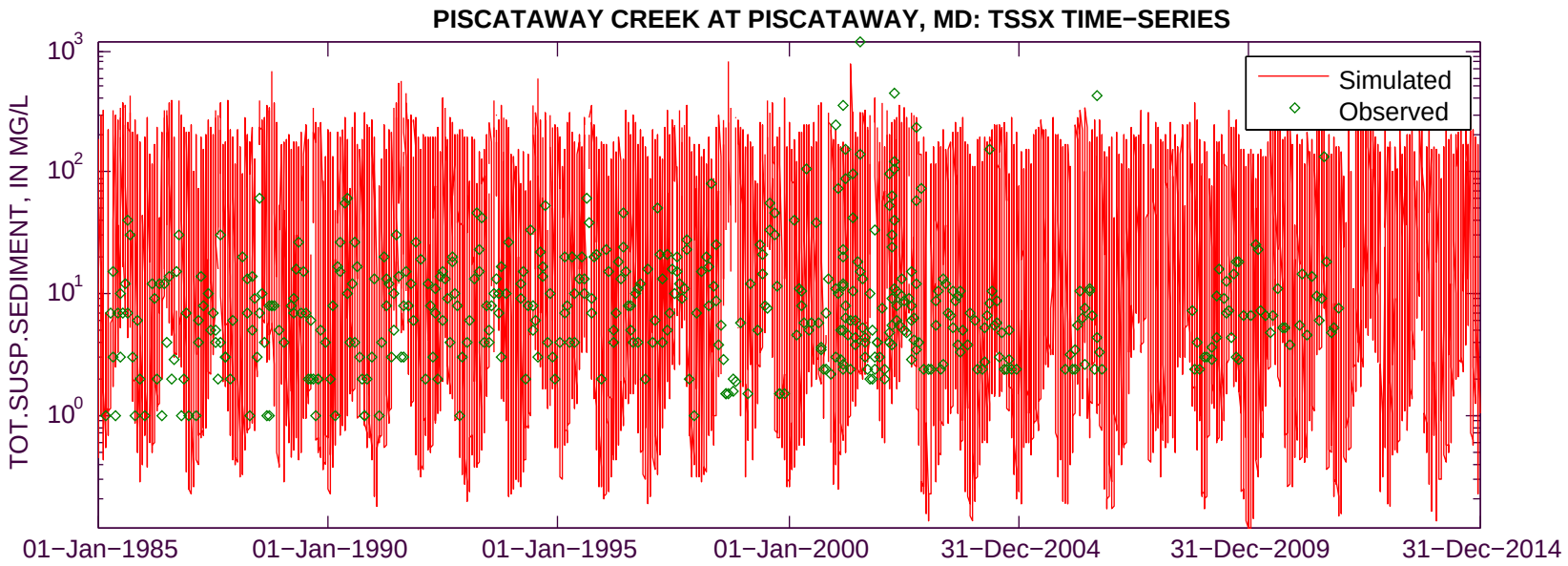
LOAD DATA
LOG10

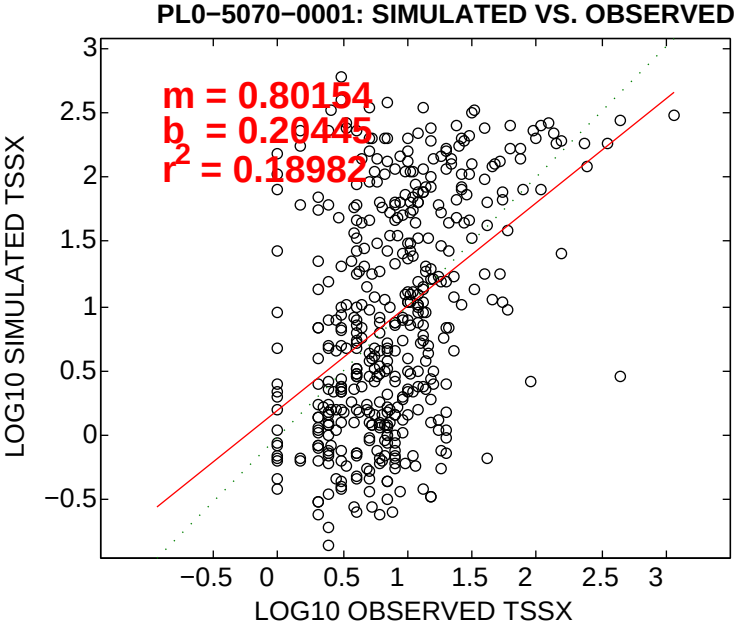


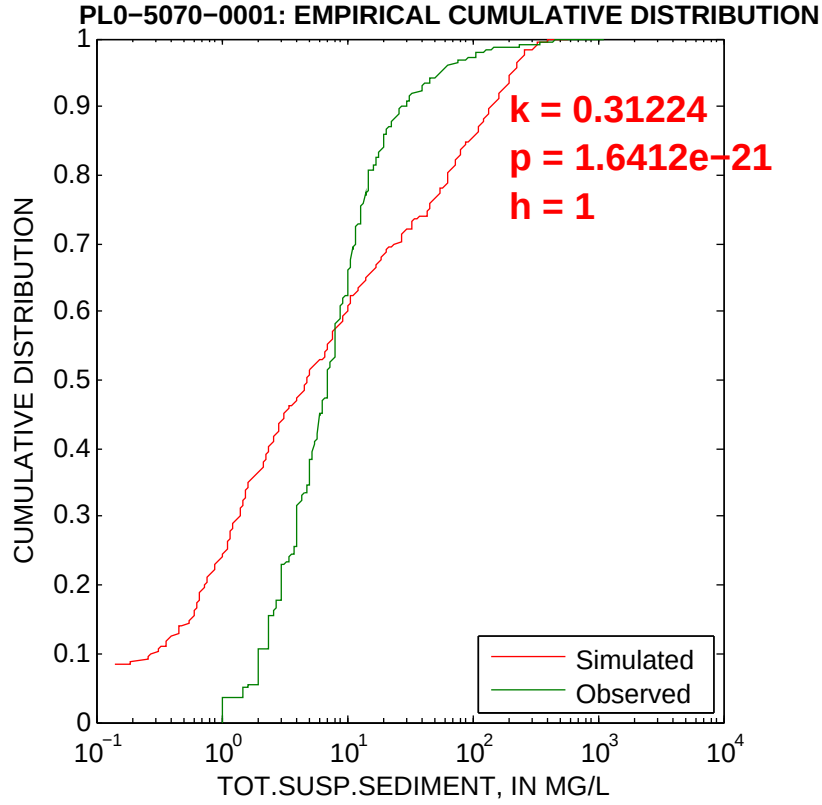












DATA SELECTION

scenario: P620171001WQ | file: TSSX.calib

plot: TSSX - total suspended ...

Dates: 1/1/1985 | 12/31/201

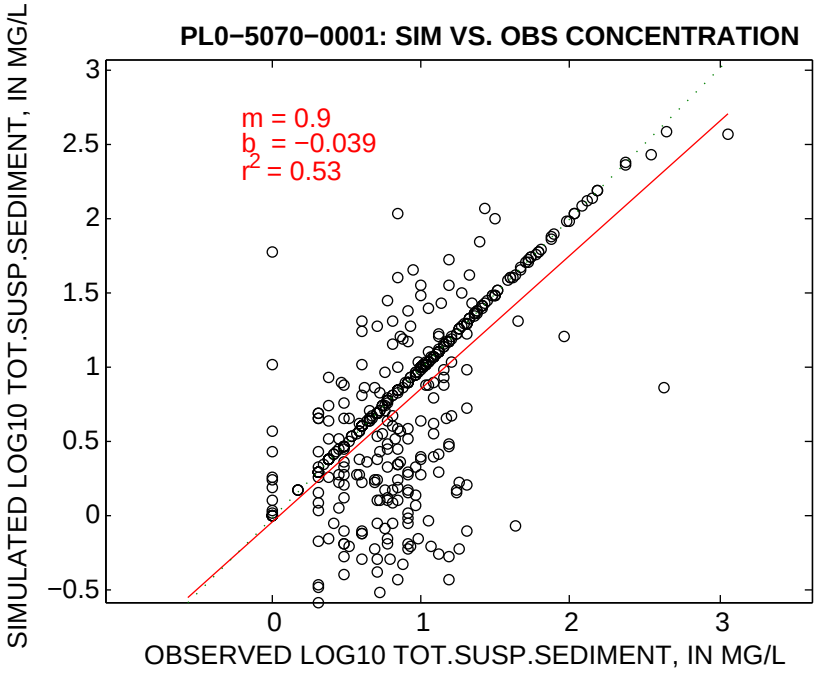
Drive | Directory: N/A | model | Observed: OBS20161101

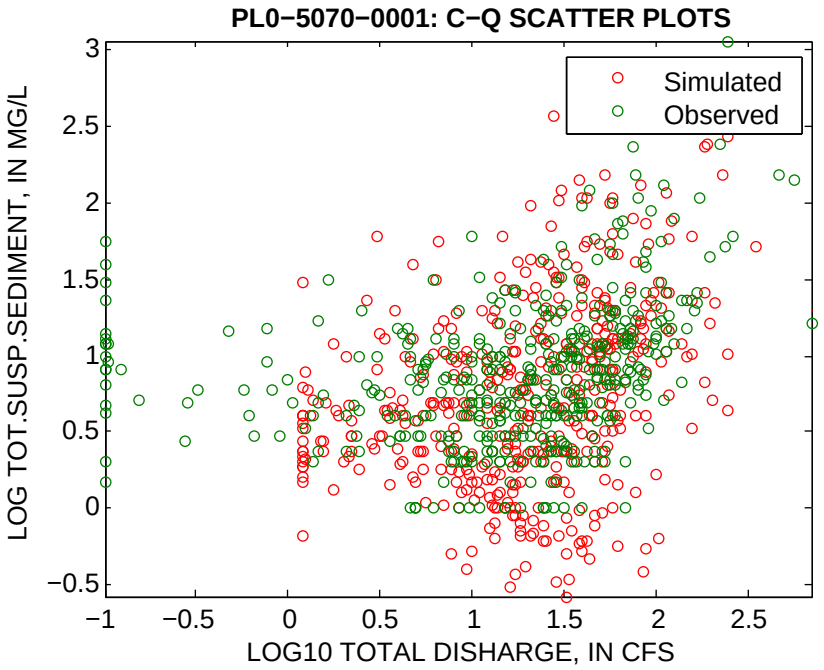
STATISTICS

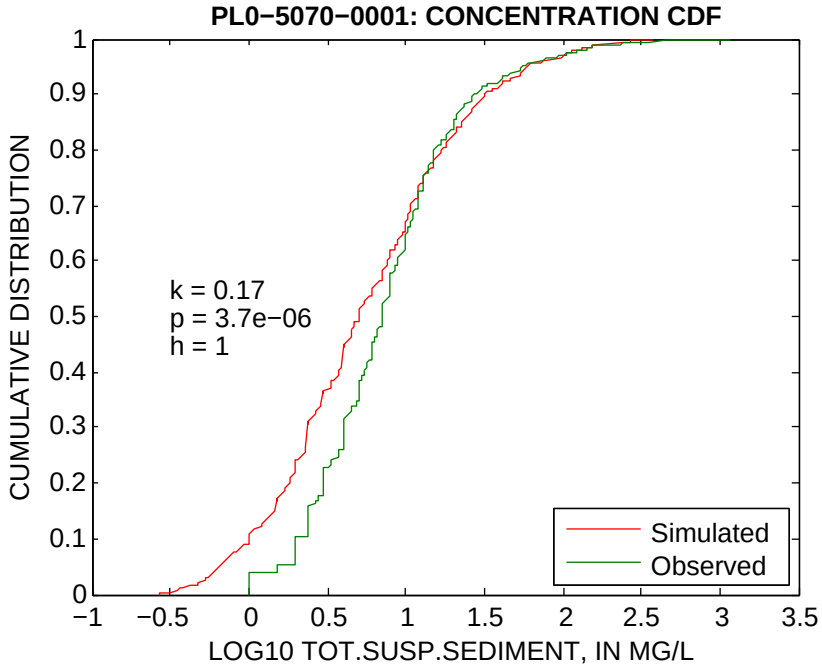
		observe	simulate
n		490	449
min		1	0
		0	-0.853376
mean		18.4689	40.5723
		0.886916	0.915347
media		7	4.77345
		0.845098	0.836748
max		1149.1	580.73
		3.06036	2.76397
varian		4189.09	5676.52
		0.229538	0.776873
JB		0.001	0.001
		0.001	0.001
		ra	log
%		119.679	3.20561
err.va		7442.08	0.639254
rel.std.err		1.77654	2.78496
mod.eff		-0.776538	-1.78496

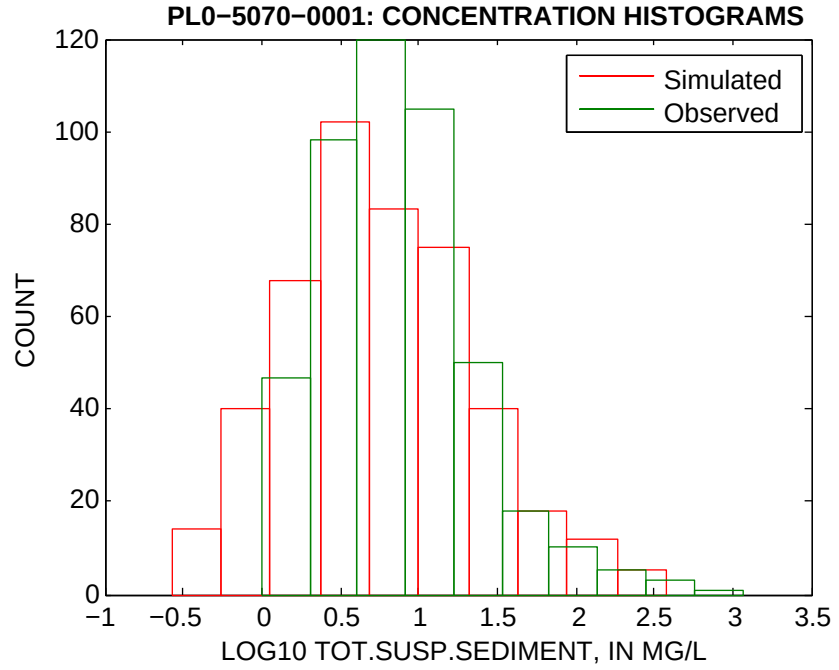
VERSION 2.1

ALL DATA
LOG10

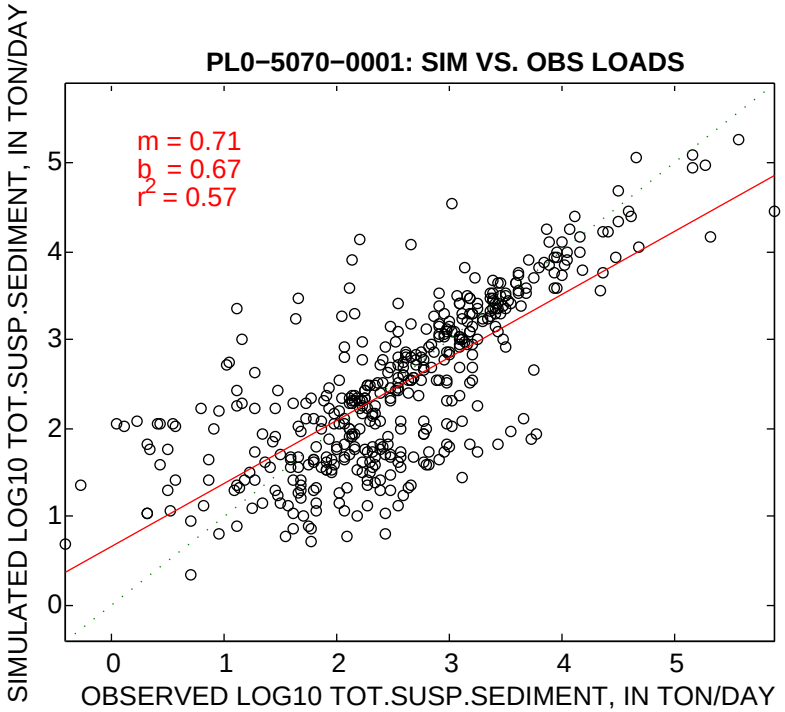


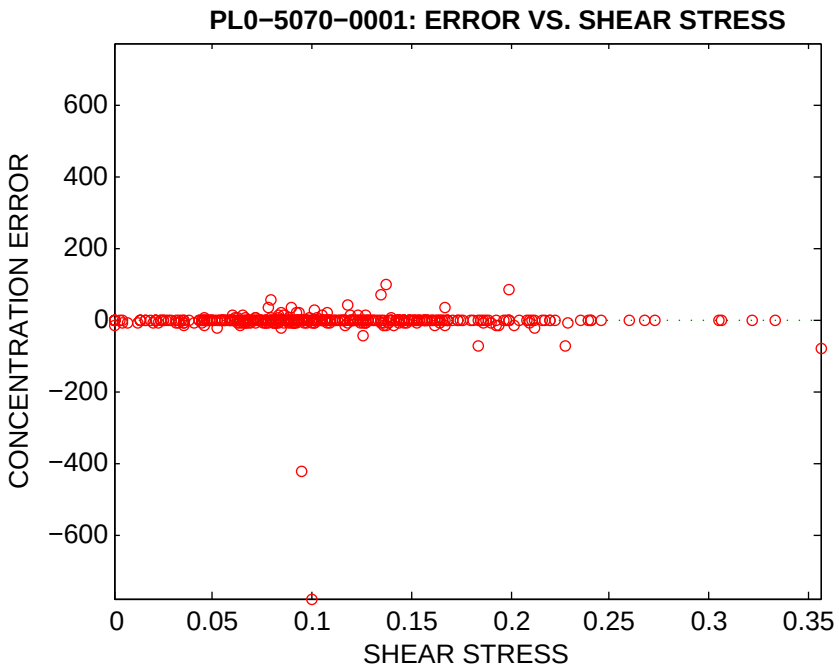


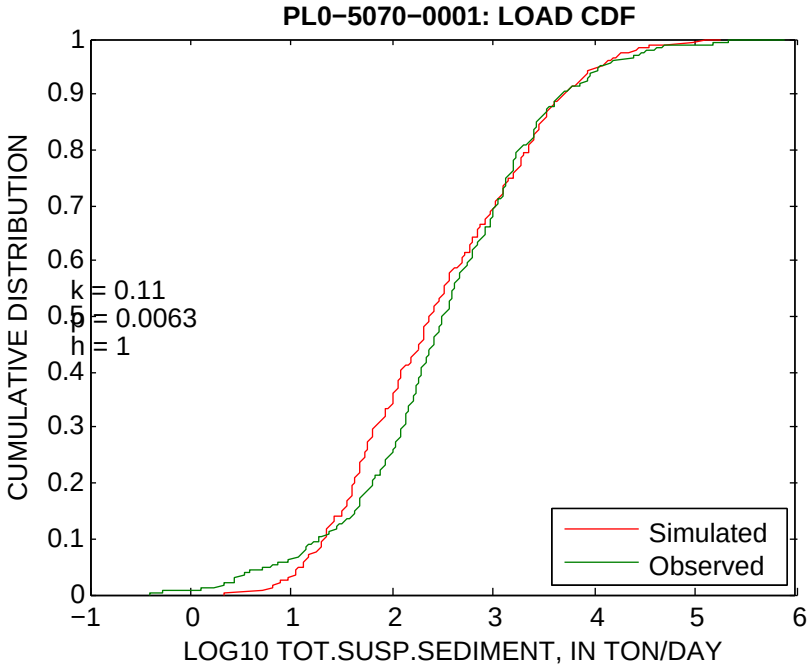


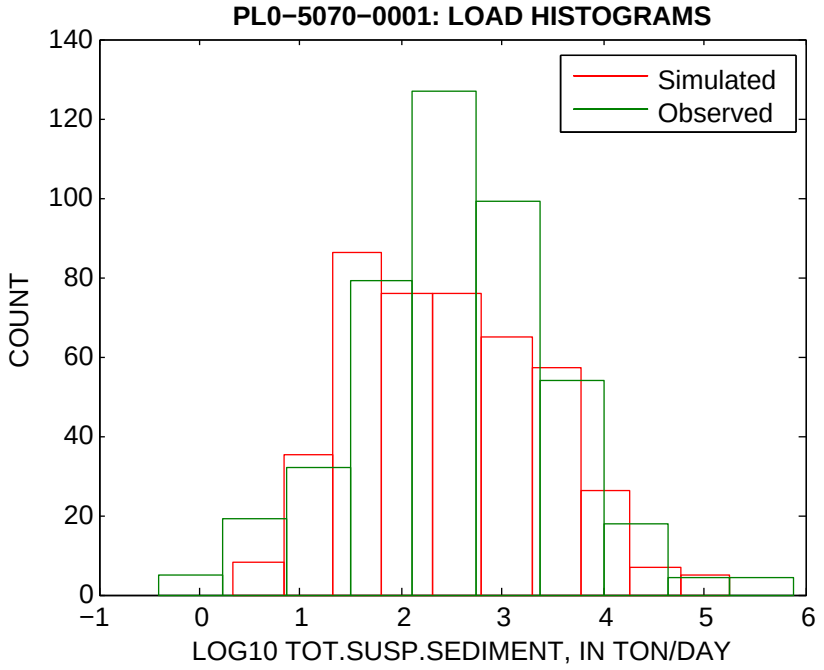


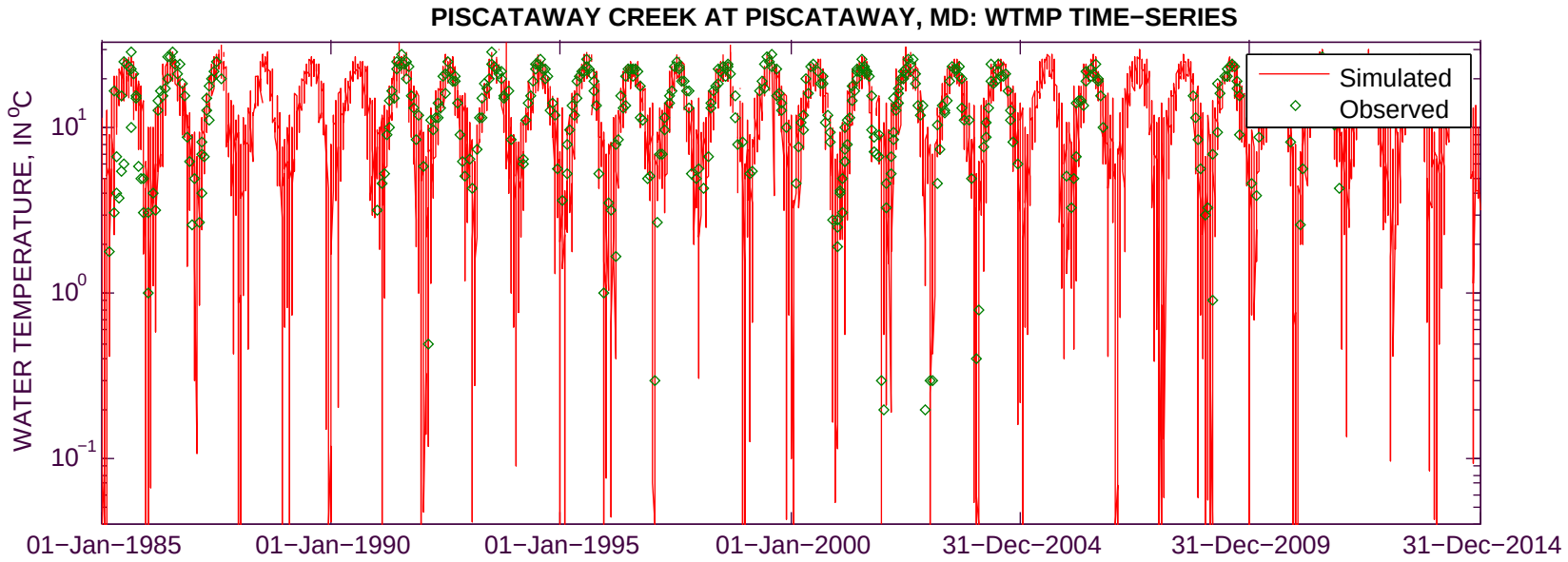
LOAD DATA
LOG10

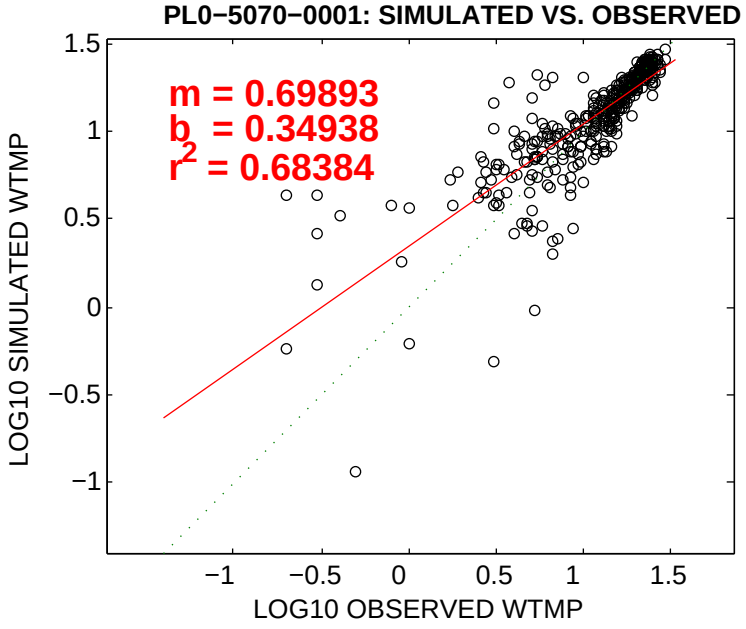


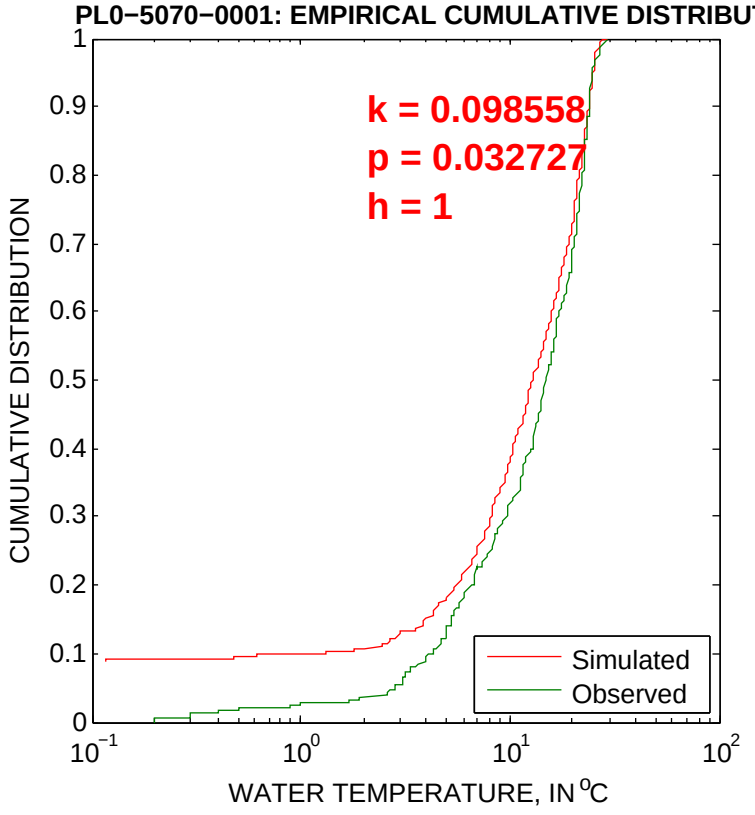












DATA SELECTION

scenario	file
P620171001WQ	WTMP.calib

plot: WTMP - water tempera...

Dates 1/1/1985 12/31/201

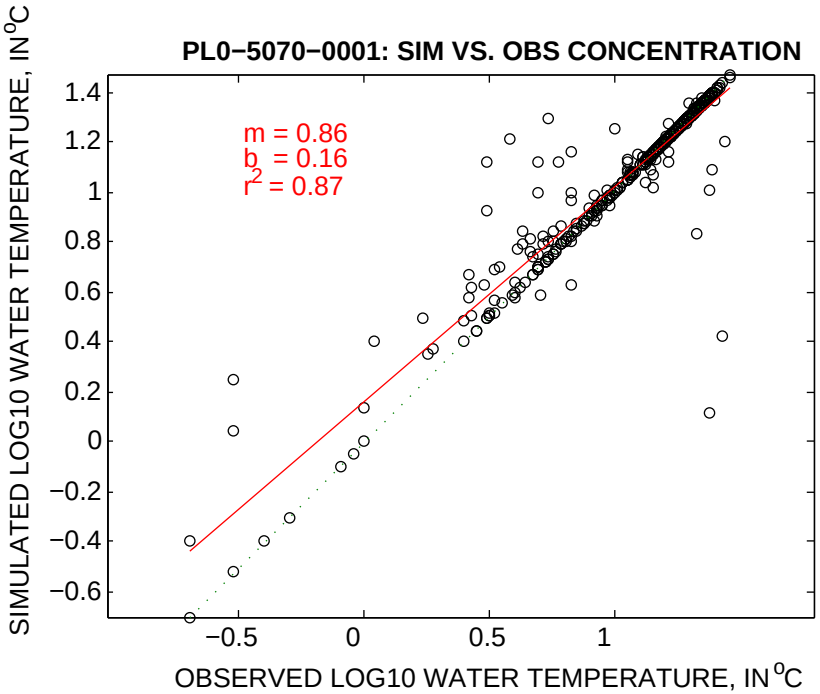
Drive	Directory	Observed
N/A	model	OBS20161101

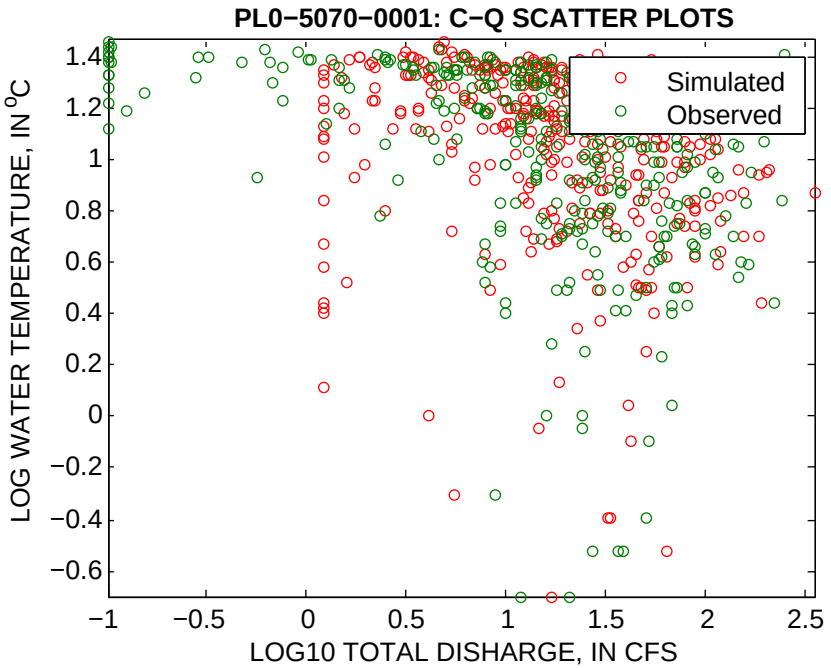
STATISTICS

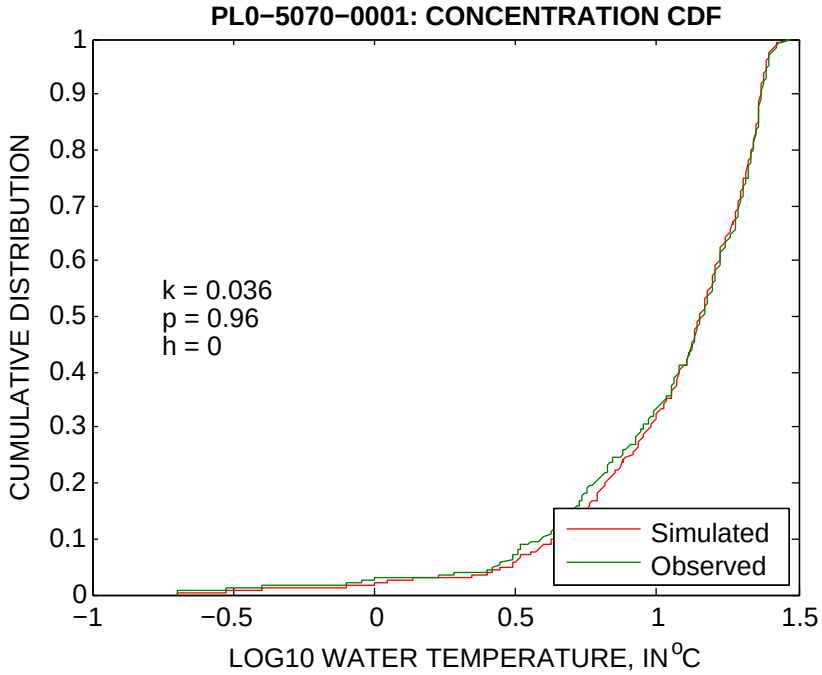
	n	observe	simulate
		416	379
min		0.2	0
		-0.69897	-0.93401
mean		14.5931	13.225
		1.04939	1.08283
media		15.05	12.838
		1.15836	1.15939
max		29.5	29.346
		1.46389	1.46755
varian		56.3124	63.3756
		0.13534	0.0966812
JB		0.001	0.001032
		0.001	0.001
		ra	log
%		-9.37538	3.18649
err.va		45.3985	0.0439558
rel.std.err		0.806189	0.324781
mod.eff		0.193811	0.675219

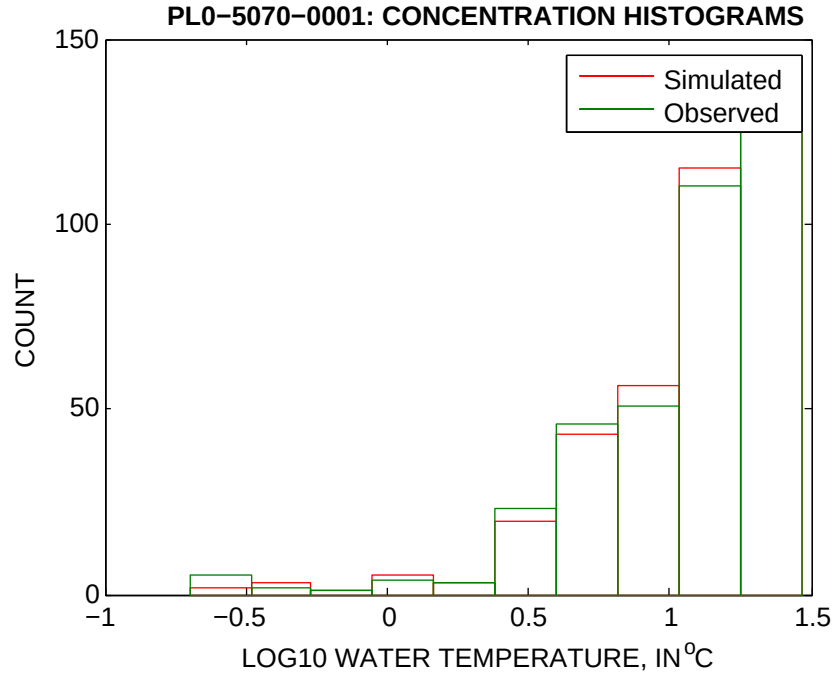
VERSION 2.1

ALL DATA
LOG10

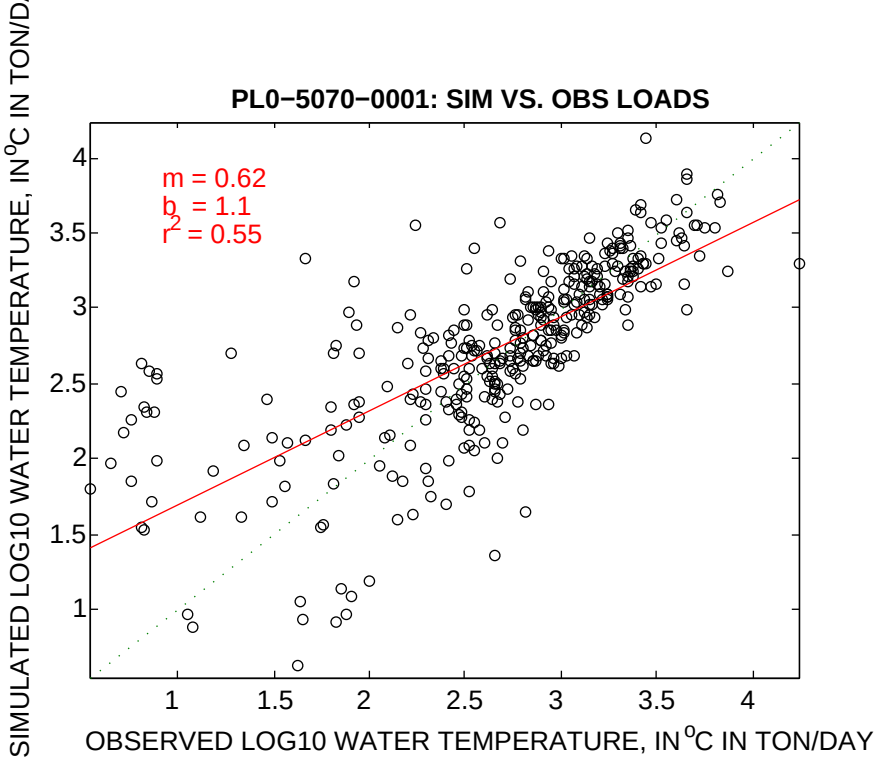


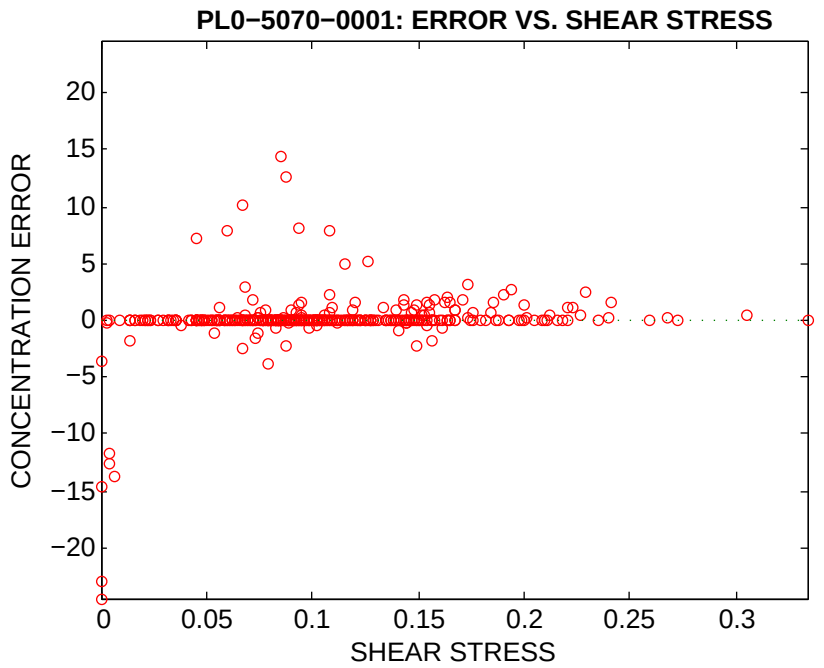


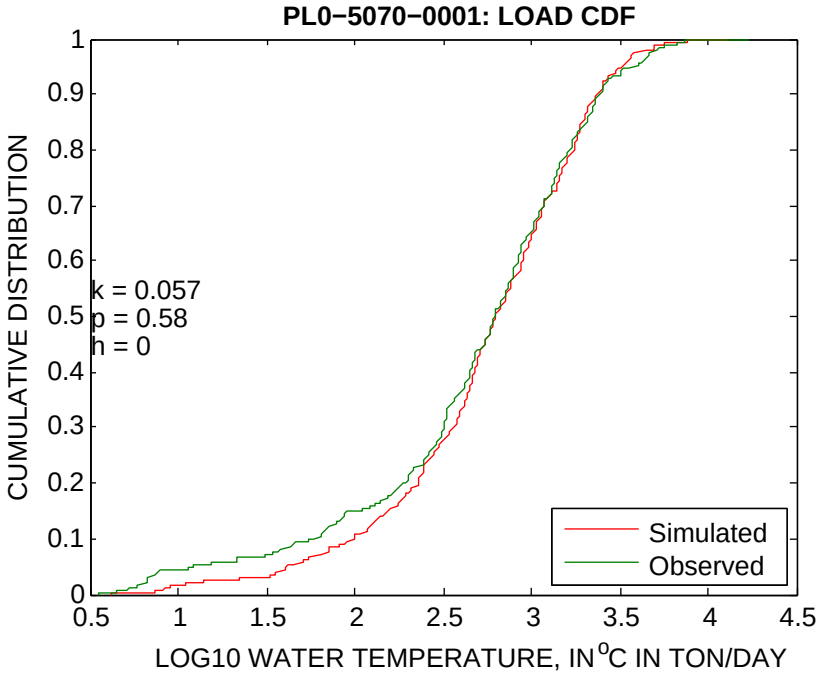


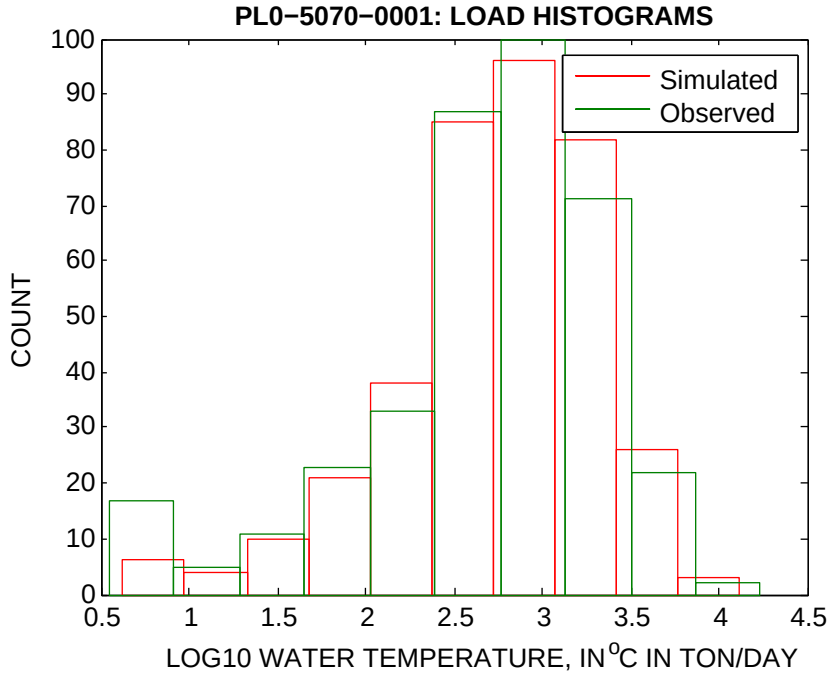


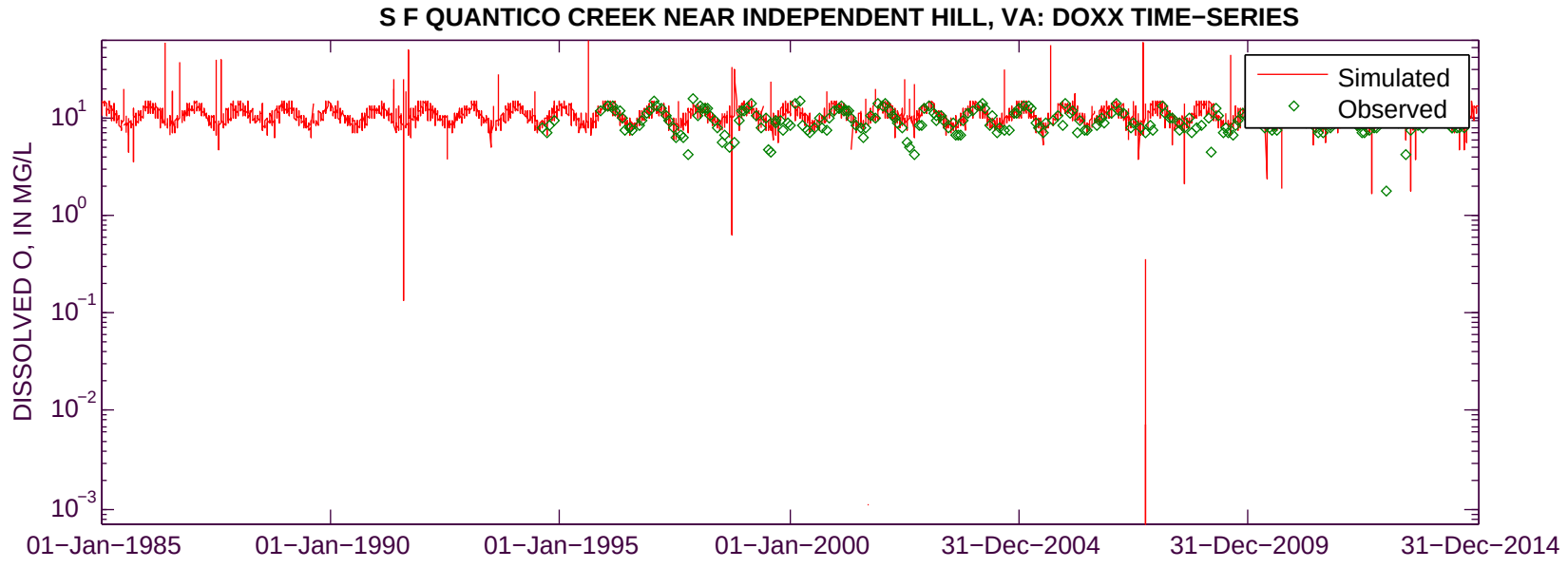
LOAD DATA
LOG10

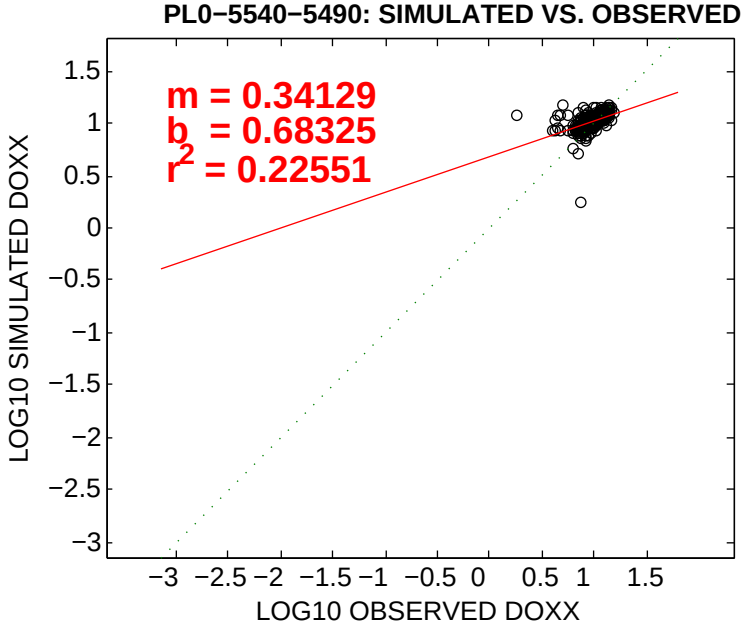


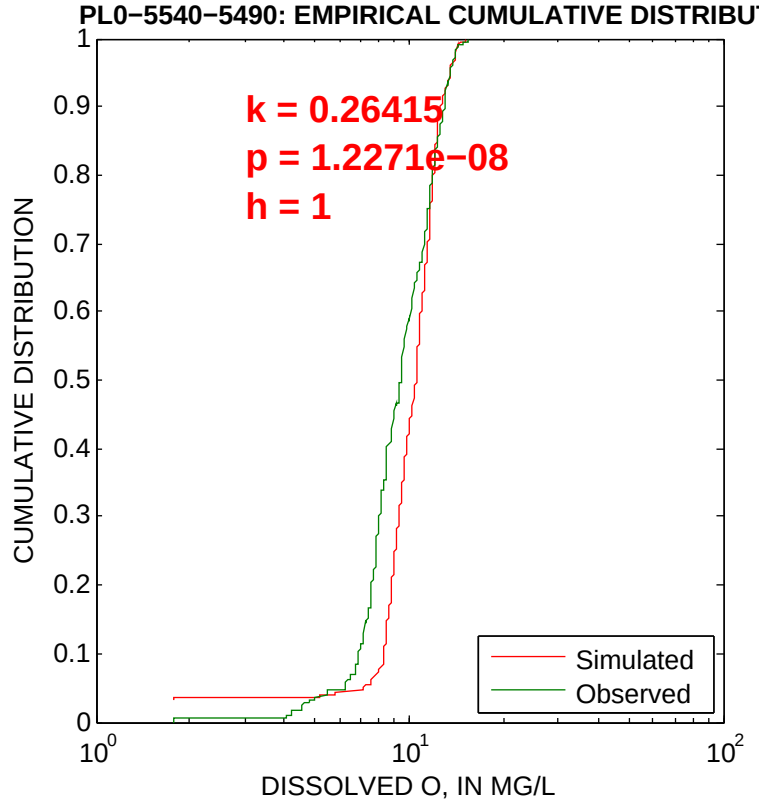












DATA SELECTION

scenario: P620171001WQ; file: DOXX.calib

plot: DOXX - dissolved oxygen

Dates: 1/1/1985 – 12/31/201

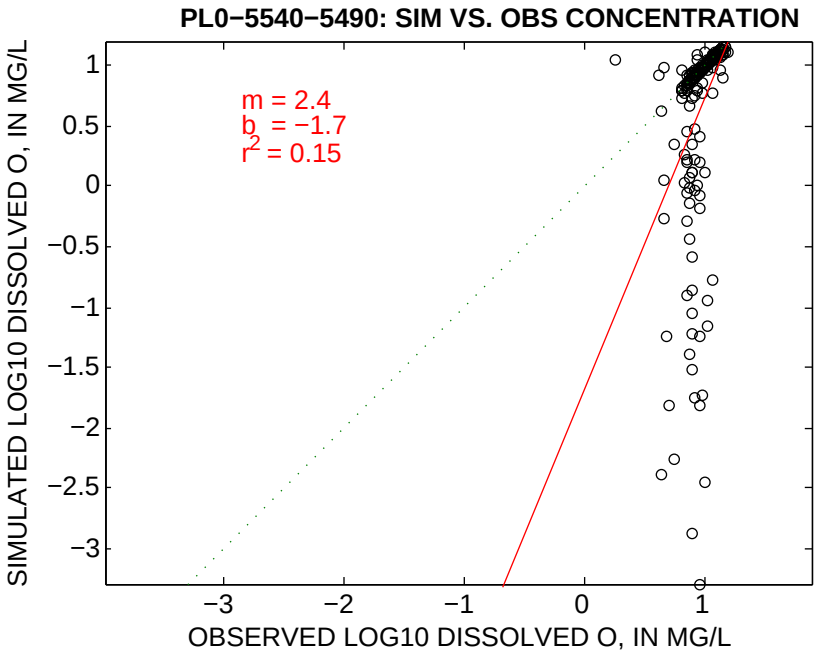
Drive: N/A; Directory: model; Observed: OBS20161101

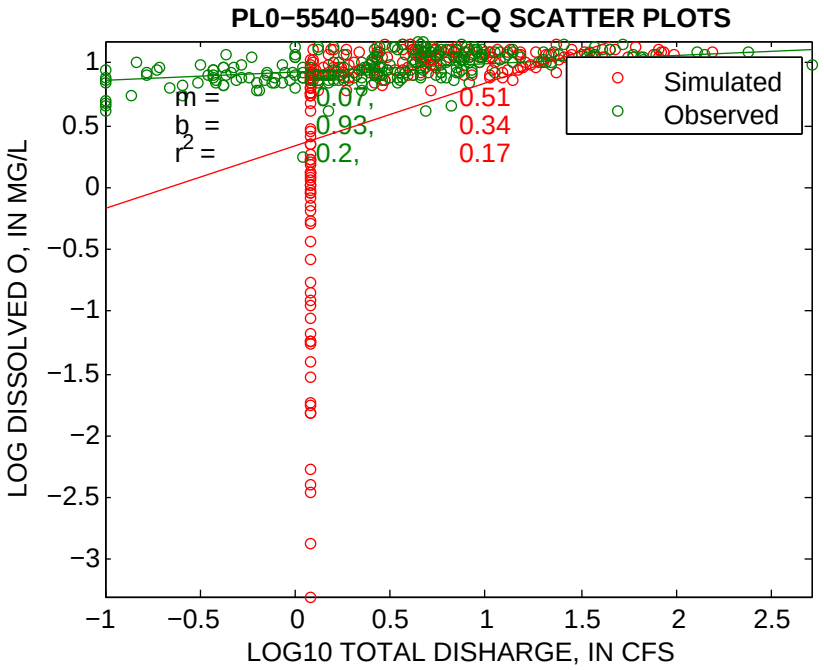
STATISTICS

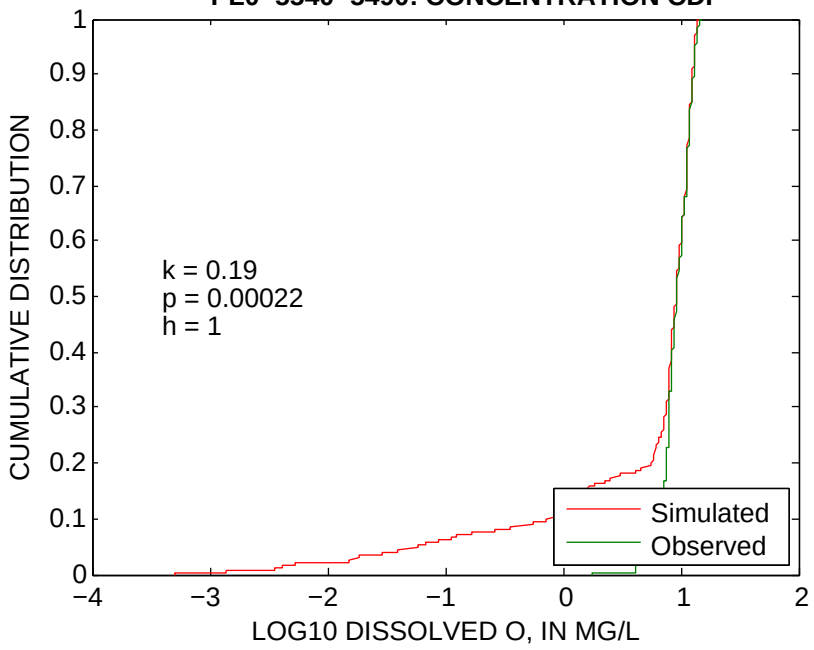
	observe	simulate
n	265	257
min	1.79	0
	0.252853	0.249956
mean	9.59488	10.1831
	0.968304	1.01372
media	9.39	10.503
	0.973128	1.02276
max	15.3	15.209
	1.18469	1.1821
varian	5.69382	6.3669
	0.0145527	0.00751677
JB	0.476823	0.001
	0.001	0.001
	ra	log
%	6.13033	4.69072
err.va	6.73282	0.014207
rel.std.err	1.18248	0.976248
mod.eff	-0.182477	0.0237524

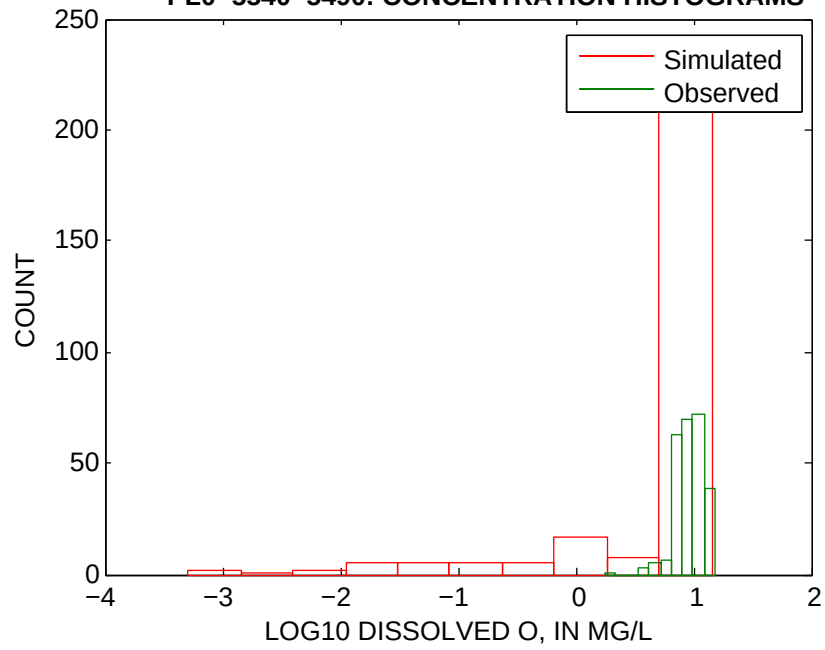
VERSION 2.1

ALL DATA
LOG10

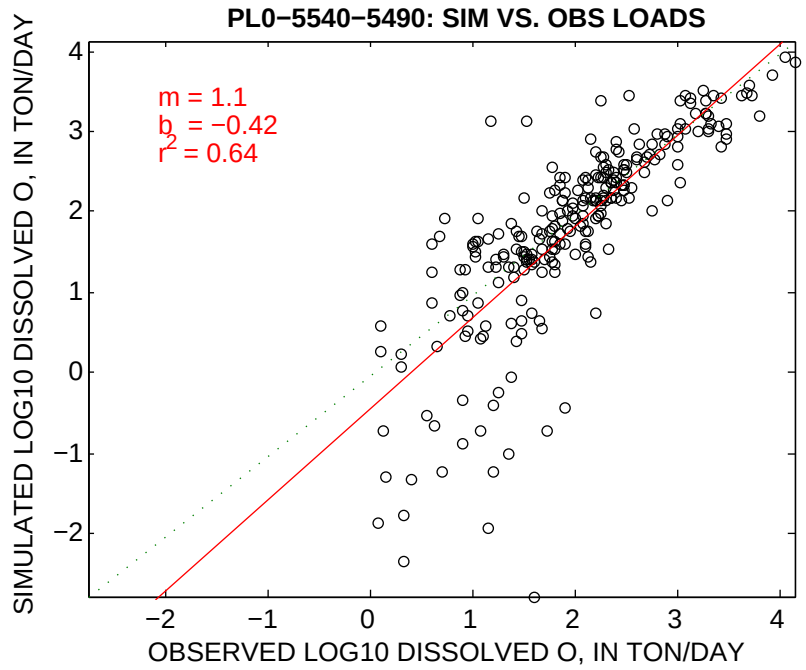


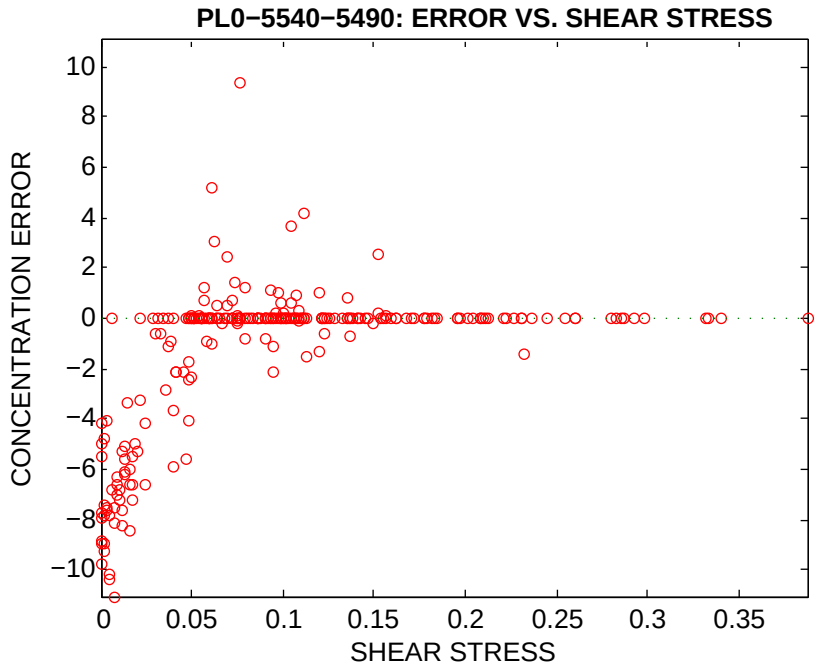


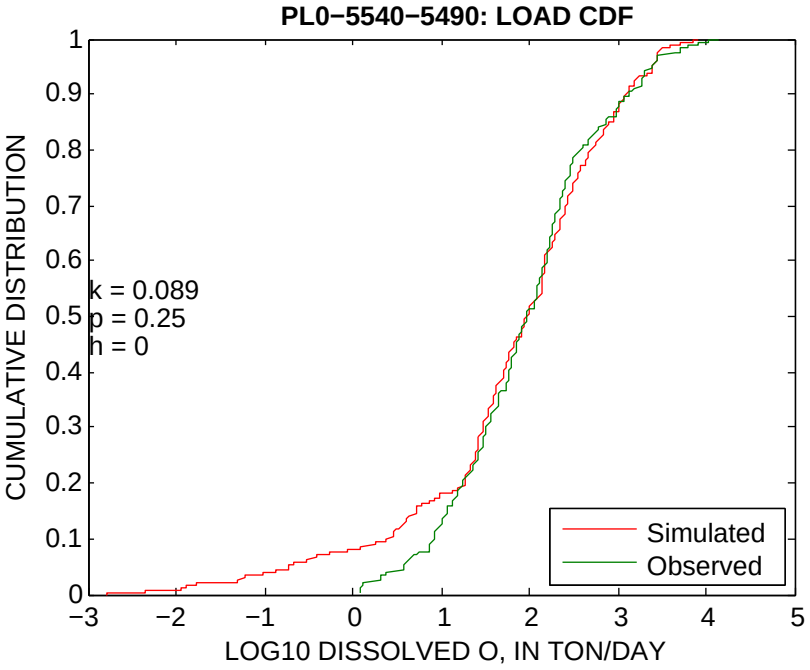


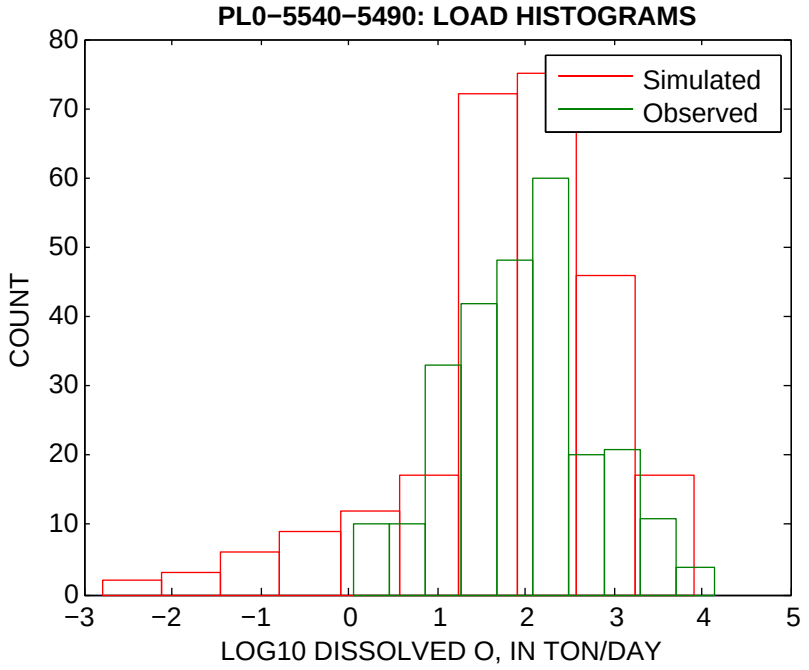


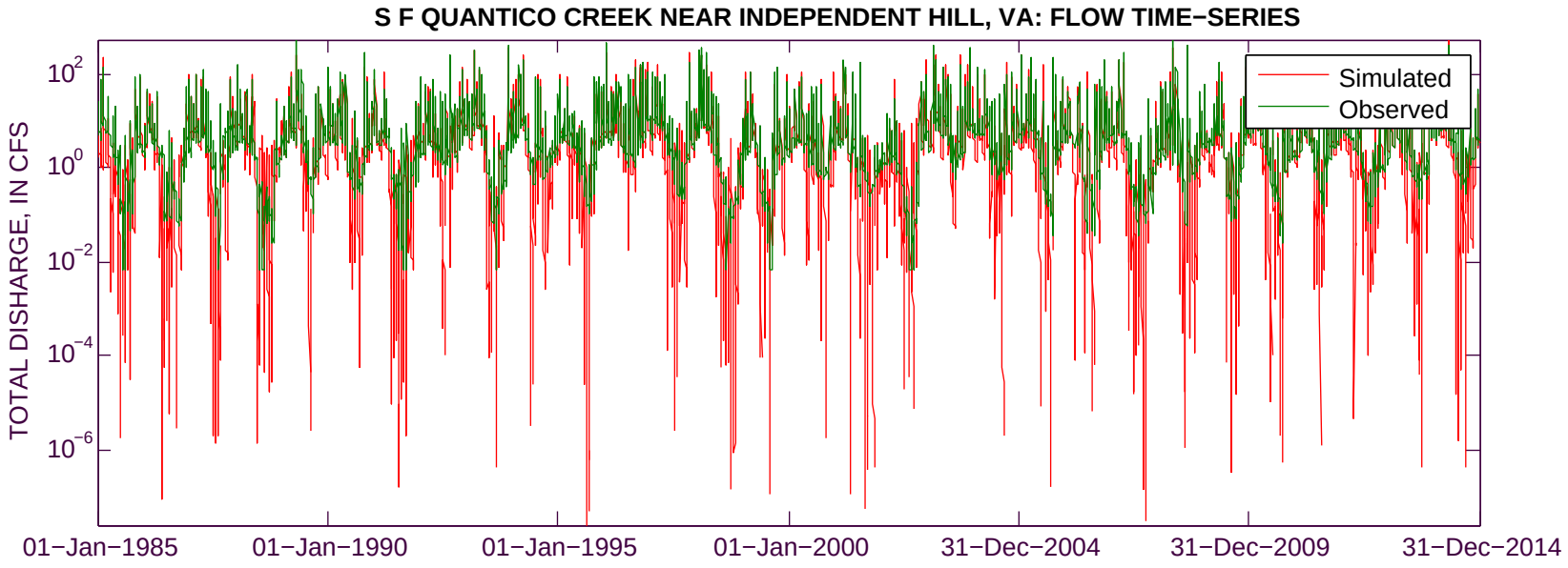
LOAD DATA
LOG10

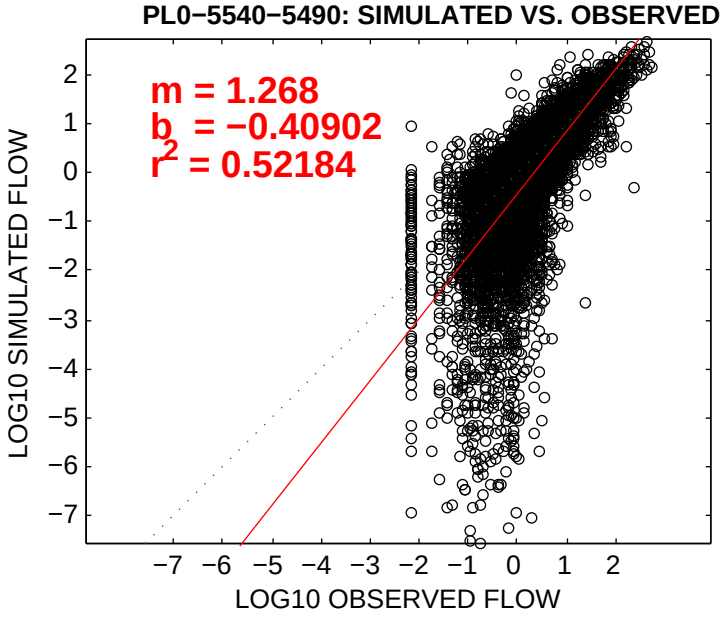


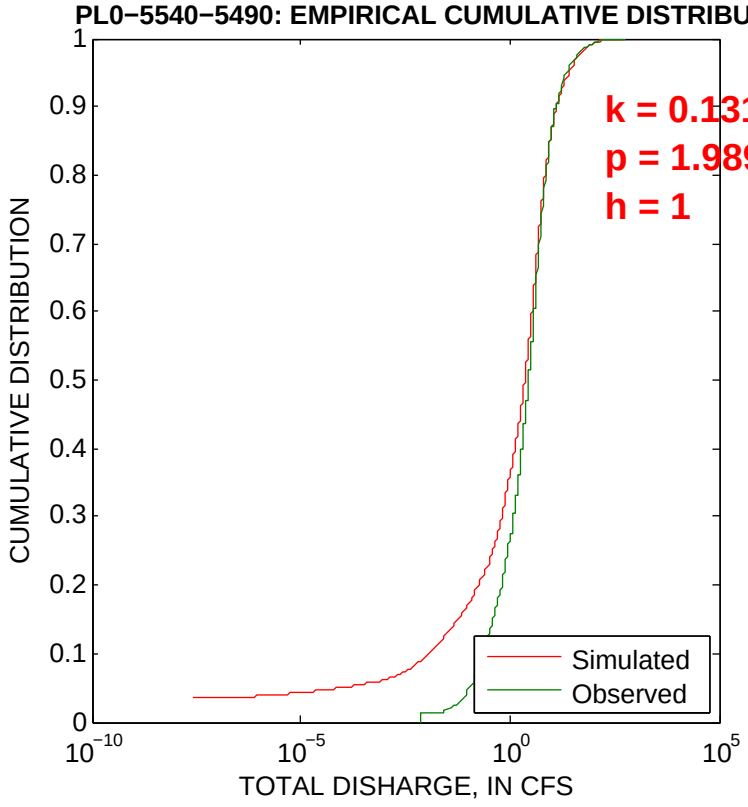












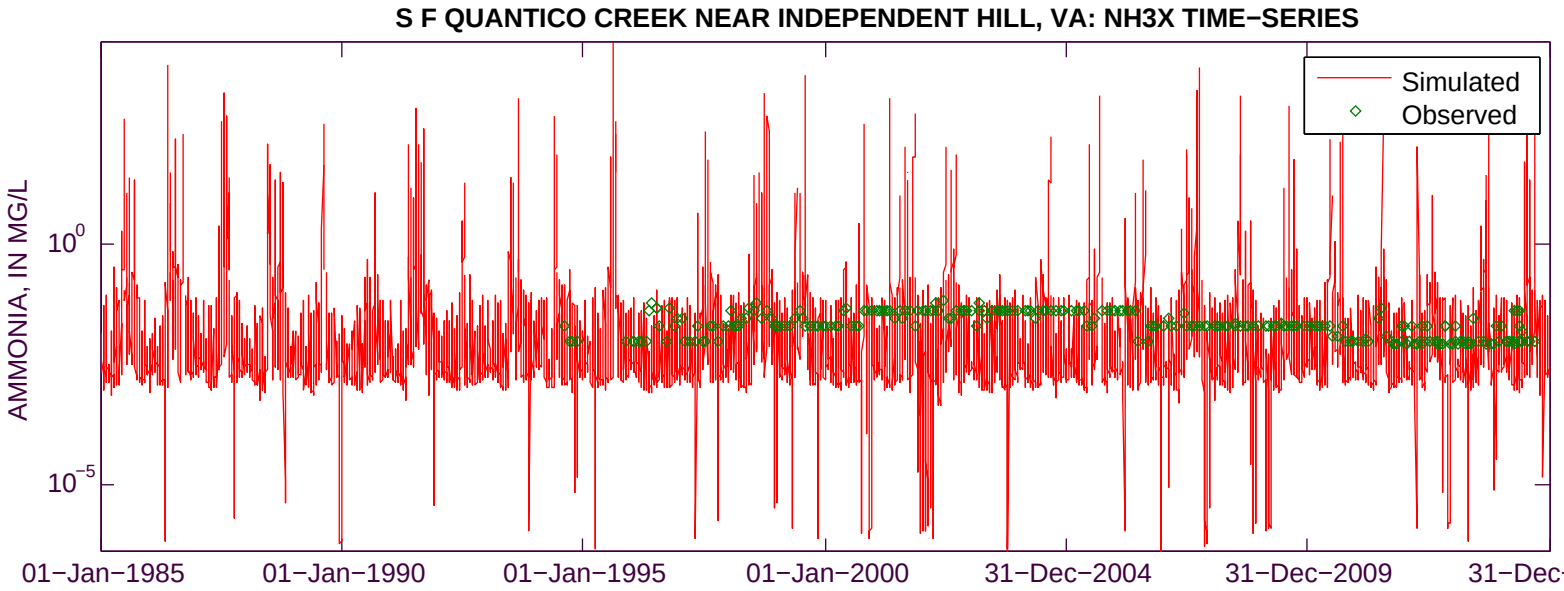
DATA SELECTION

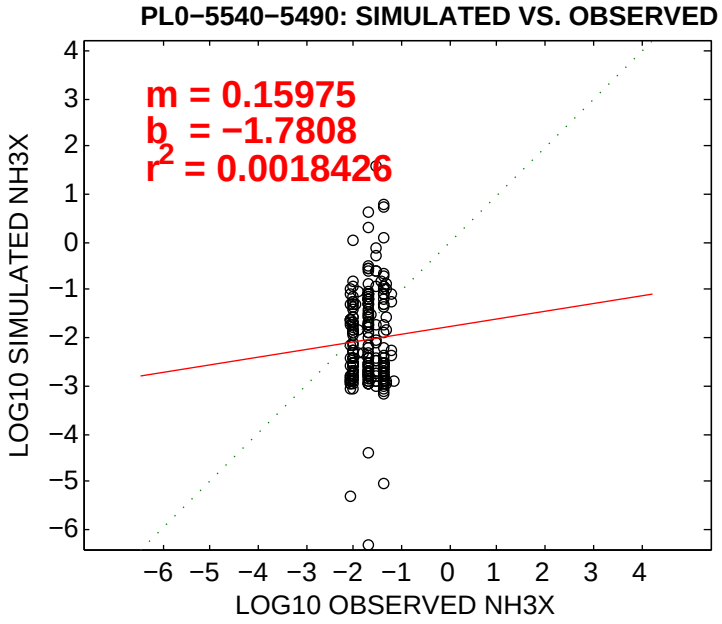
scenario: P620171001WQ
file: FLOW.calib
plot: FLOW - total discharge
Dates: 1/1/1985 – 12/31/201
Drive: N/A
Directory: model
Observed: OBS20161101

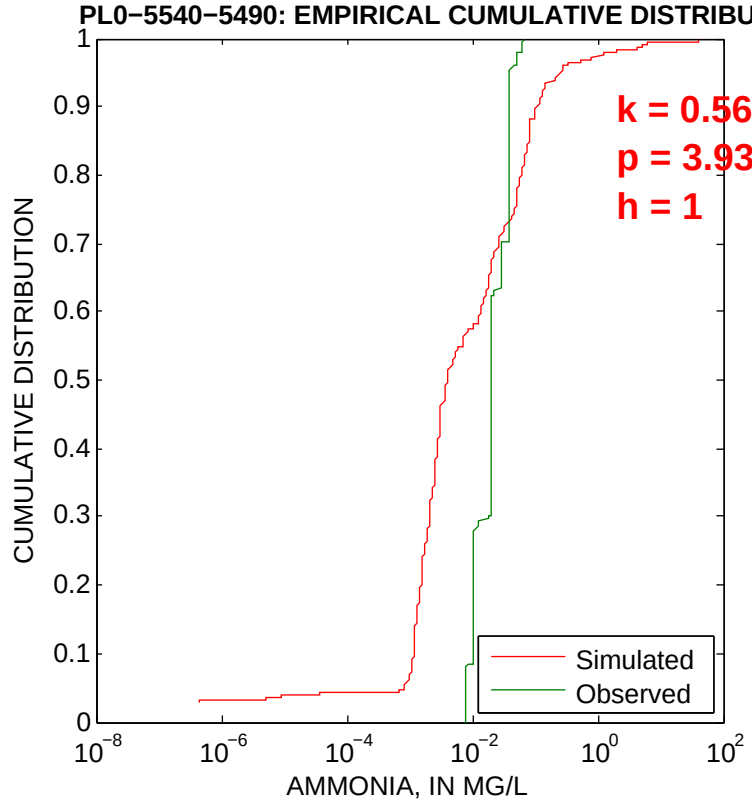
STATISTICS

	observe	simulate
n	10957	10570
min	0.00706188	0
	-2.15108	-7.58613
mean	7.16348	6.76695
	0.38577	0.0801388
media	2.80706	2.3055
	0.478142	0.392758
max	549.007	490.33
	2.73958	2.69049
varian	452.928	344.284
	0.466396	1.43697
JB	0.001	0.001
	0.001	0.001
	ra	log
%	-5.53547	-79.2263
err.va	179.516	0.814015
rel.std.err	0.396346	1.74533
mod.eff	0.603654	-0.745331

VERSION 2.1







DATA SELECTION

scenario	file
P620171001WQ	NH3X.calib

plot: NH3X - ammonia

Dates: 1/1/1985 – 12/31/201

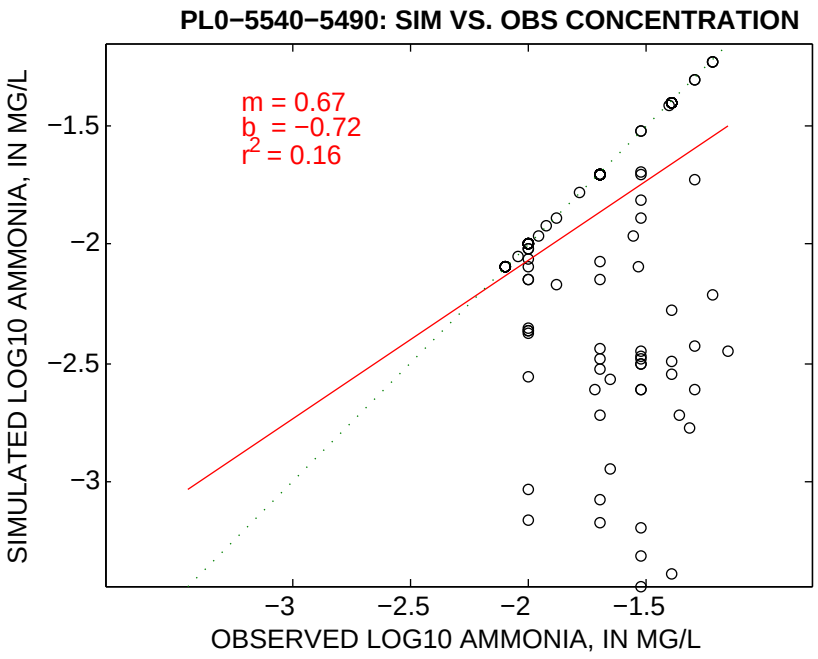
Drive	Directory	Observed
N/A	model	OBS20161101

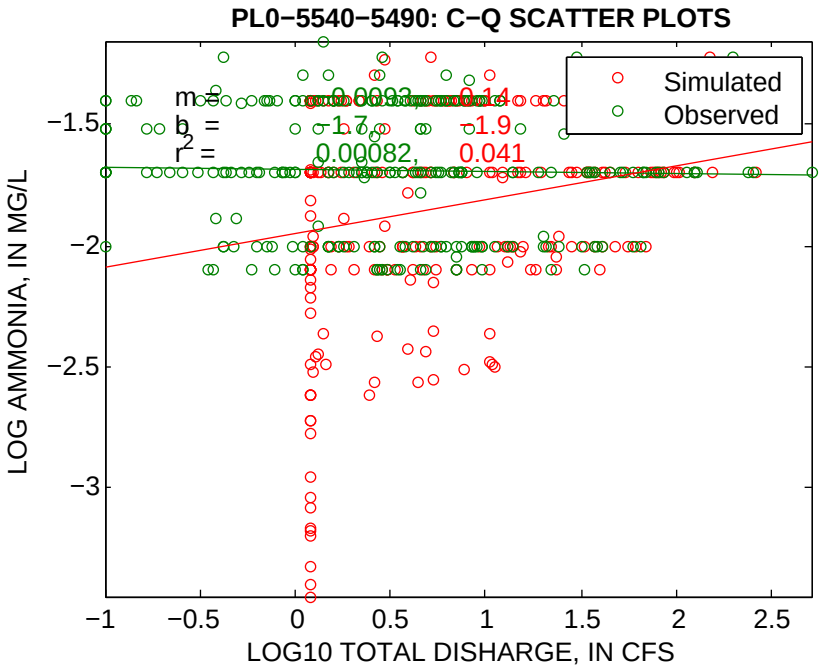
STATISTICS

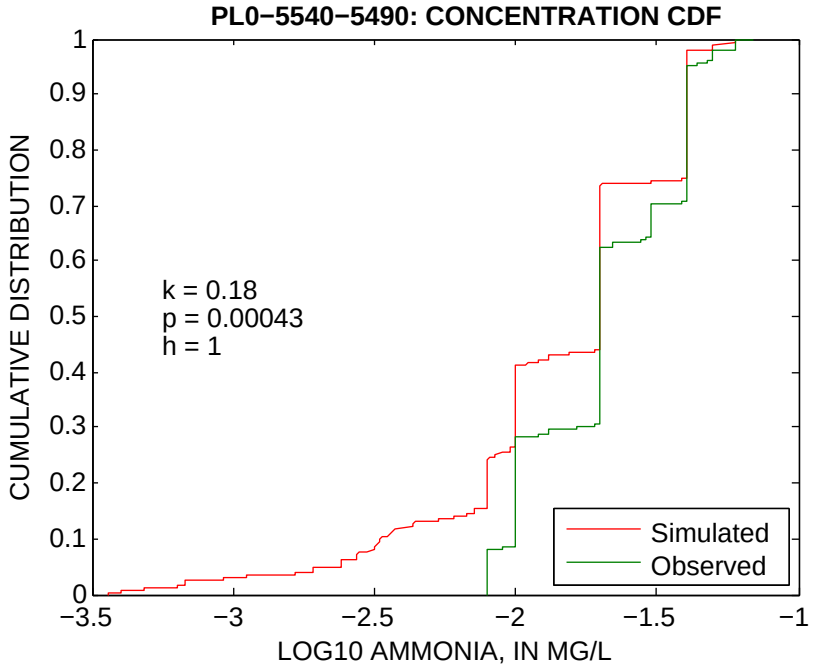
	n	258	251
		observe	simulate
min		0.008	0
		-2.09691	-6.33181
mean		0.0242387	0.264512
		-1.69216	-2.05111
media		0.02	0.0040262
		-1.69897	-2.37112
max		0.07	39.39
		-1.1549	1.59539
varian		0.00017992	6.33333
		0.0655864	0.908431
JB		0.002517	0.001
		0.004770	0.001
		ra	log
%		991.28	21.2126
err.va		6.3883	1.08242
rel.std.err		35506.4	16.5038
mod.eff		-35505.4	-15.5038

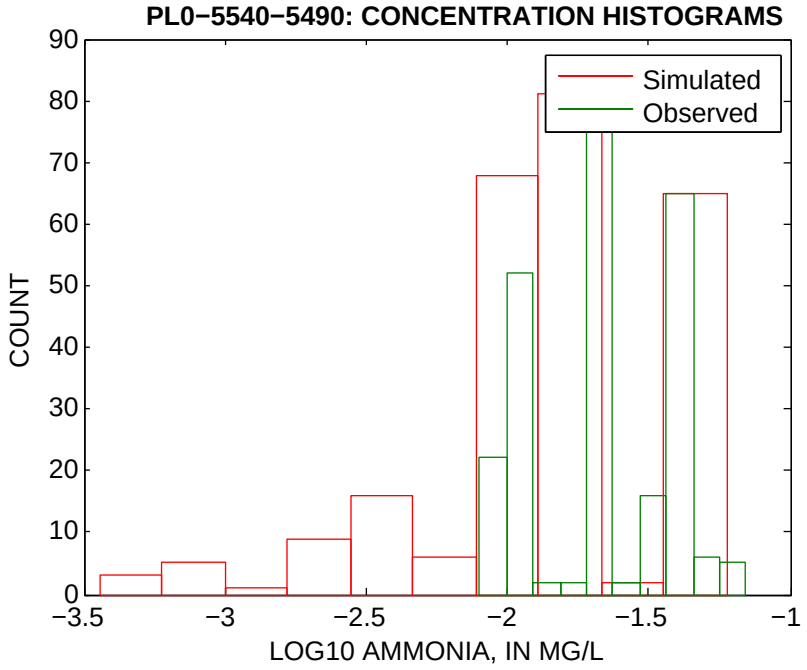
VERSION

ALL DATA
LOG10

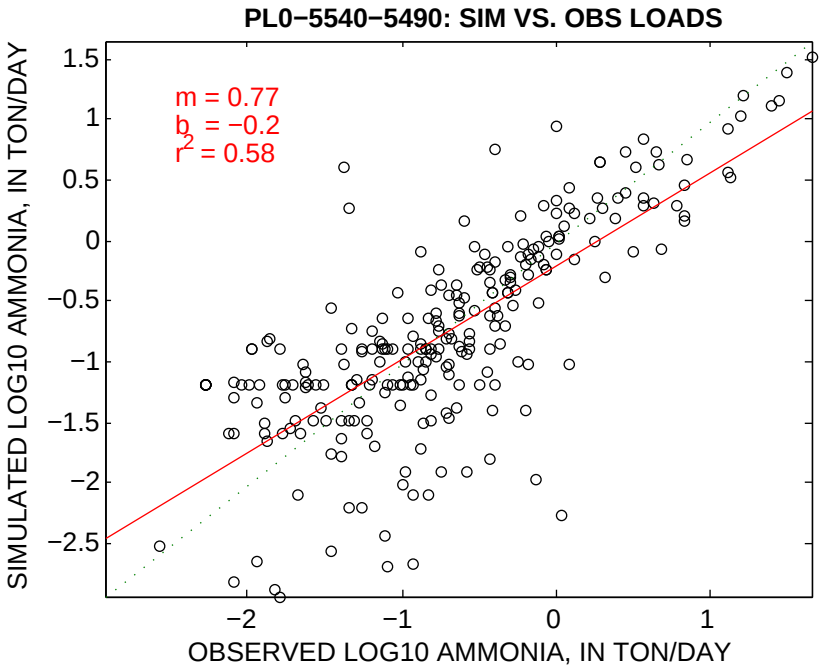


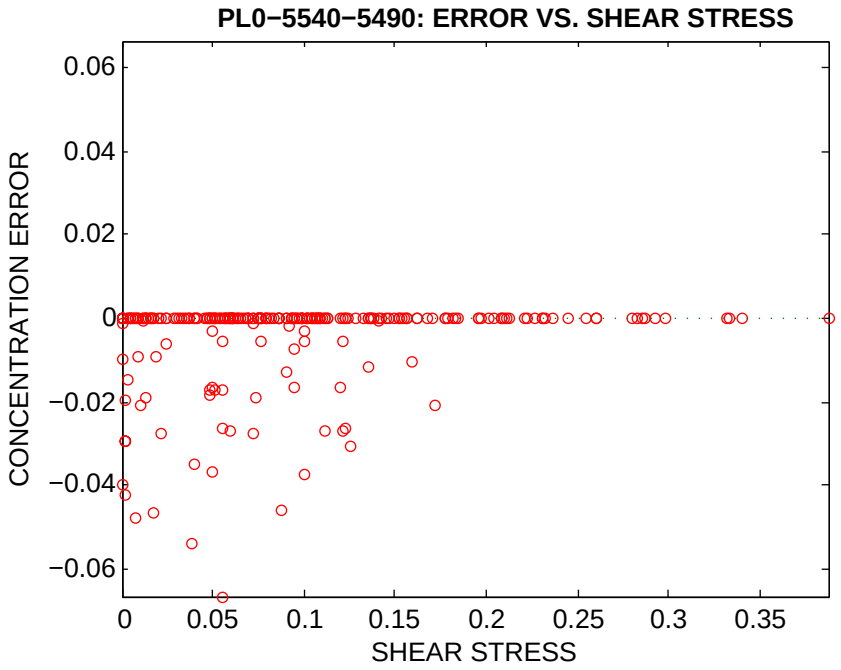


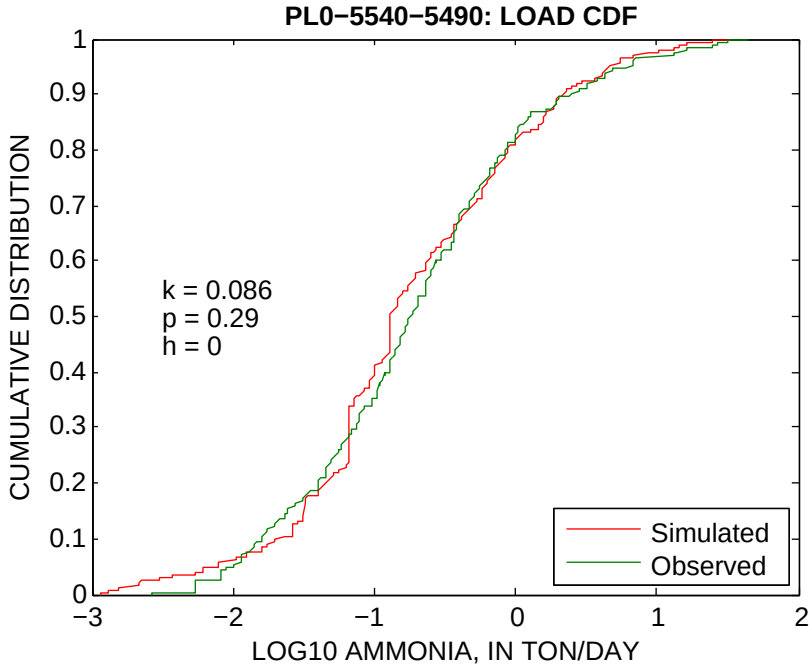


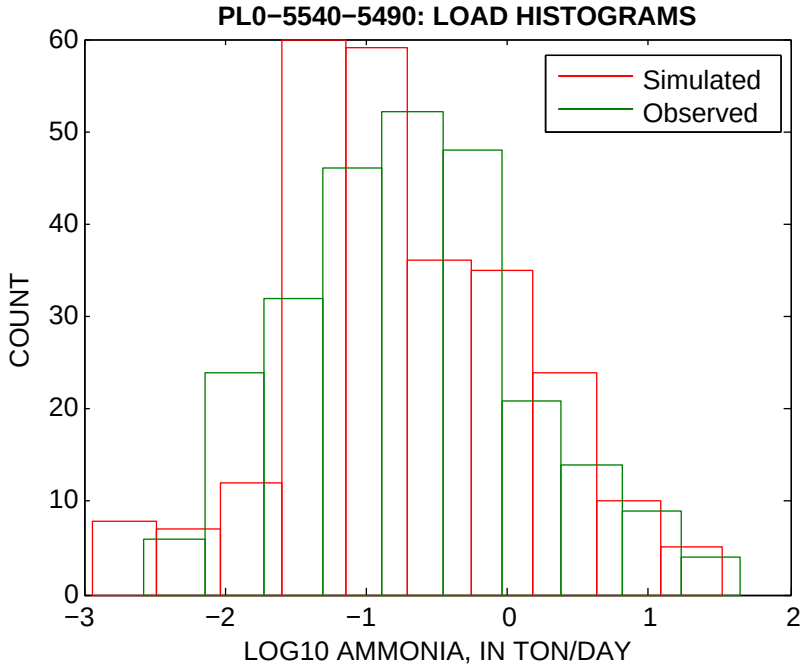


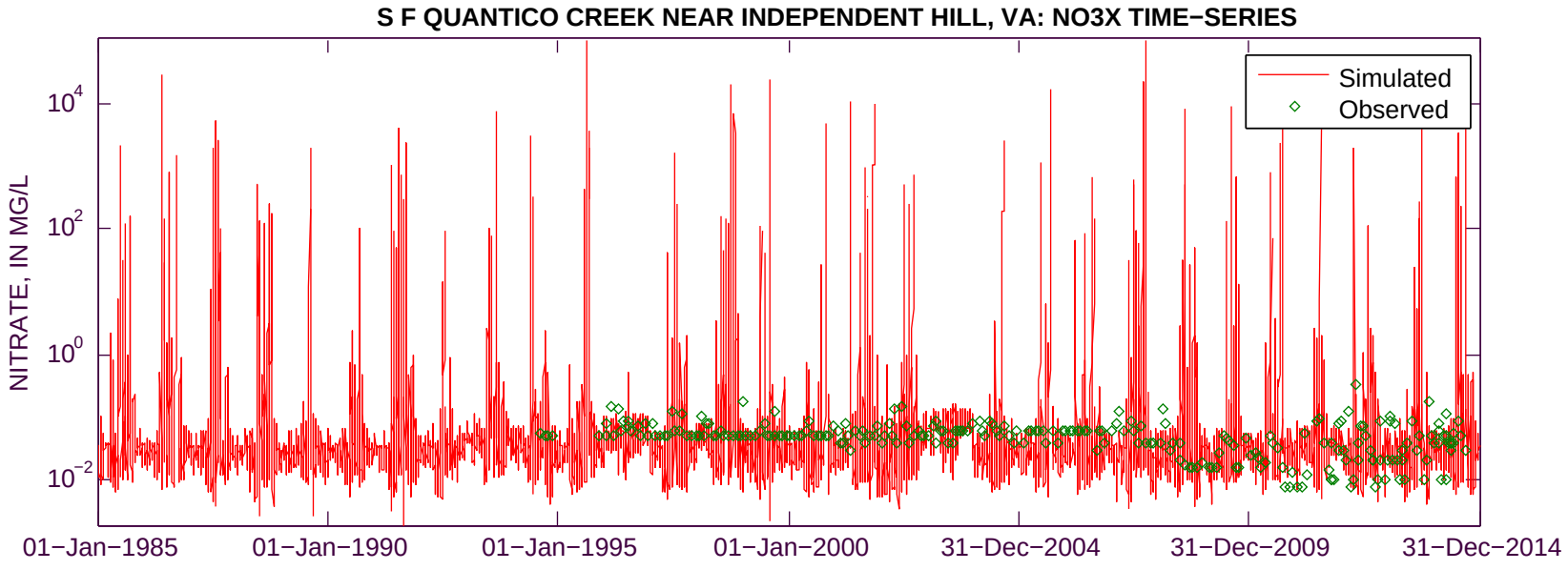
LOAD DATA
LOG10

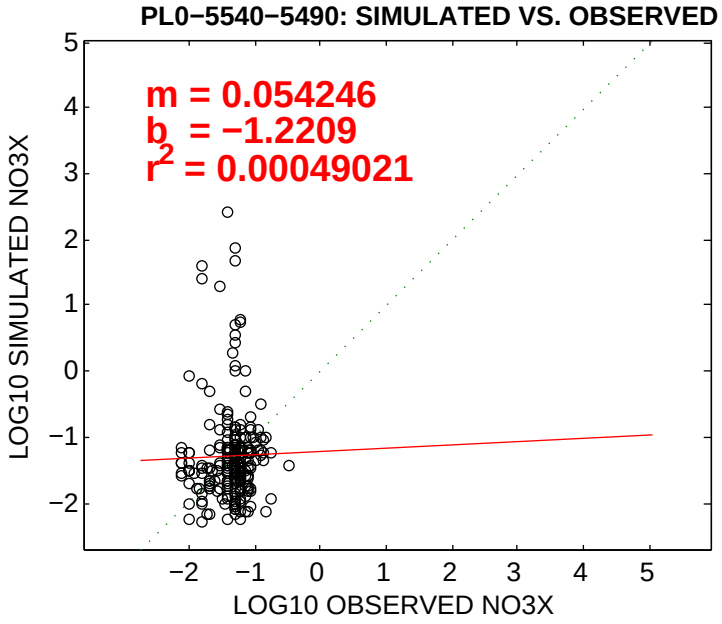


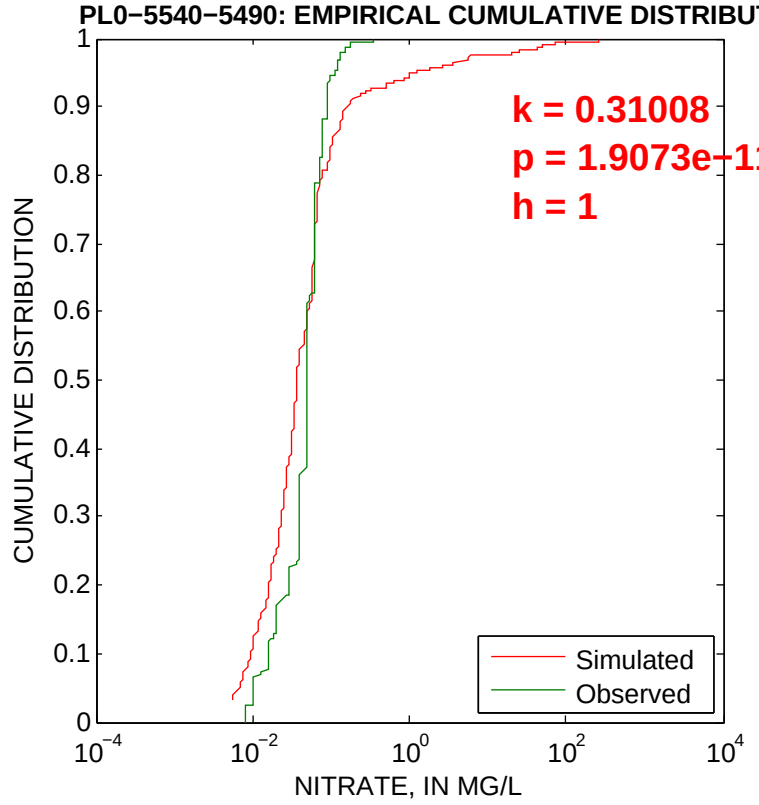












DATA SELECTION

scenario	file
P620171001WQ	NO3X.calib

plot: NO3X - nitrate

Dates: 1/1/1985 – 12/31/201

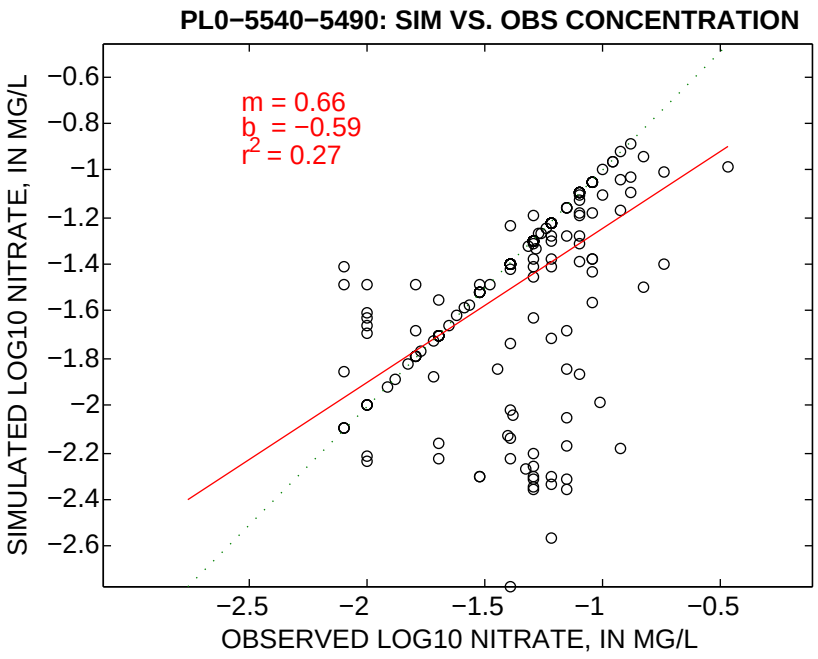
Drive	Directory	Observed
N/A	model	OBS20161101

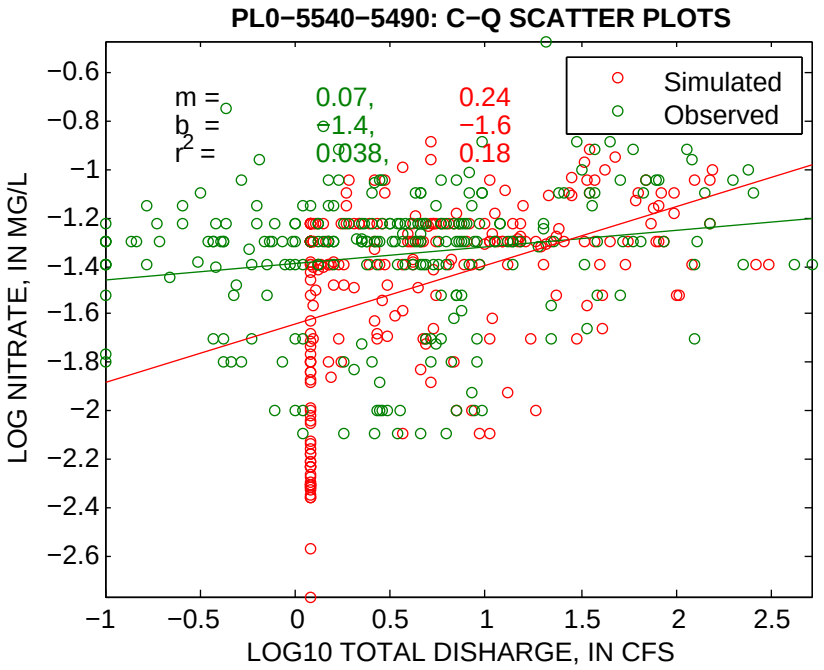
STATISTICS

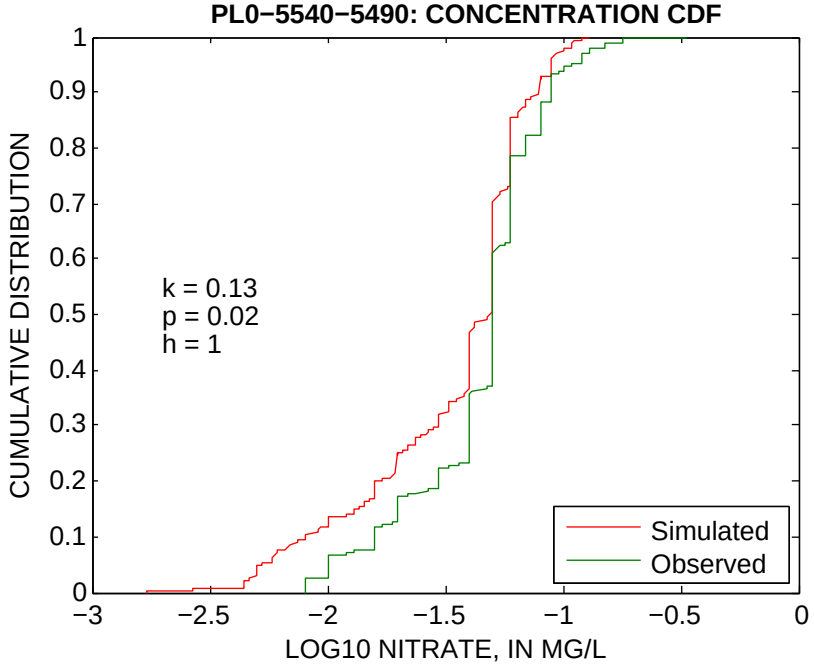
	n	258	251
		observe	simulate
min		0.008	0
		-2.09691	-2.30104
mean		0.0534474	1.98556
		-1.35218	-1.2942
media		0.05	0.0370275
		-1.30103	-1.42527
max		0.34	259.33
		-0.468521	2.41385
varian		0.00115799	299.867
		0.0821752	0.493277
JB		0.001	0.001
		0.001	0.001
		ra	log
%		3614.97	-4.28767
err.va		303.669	0.569912
rel.std.err		262238	6.93533
mod.eff		-262237	-5.93533

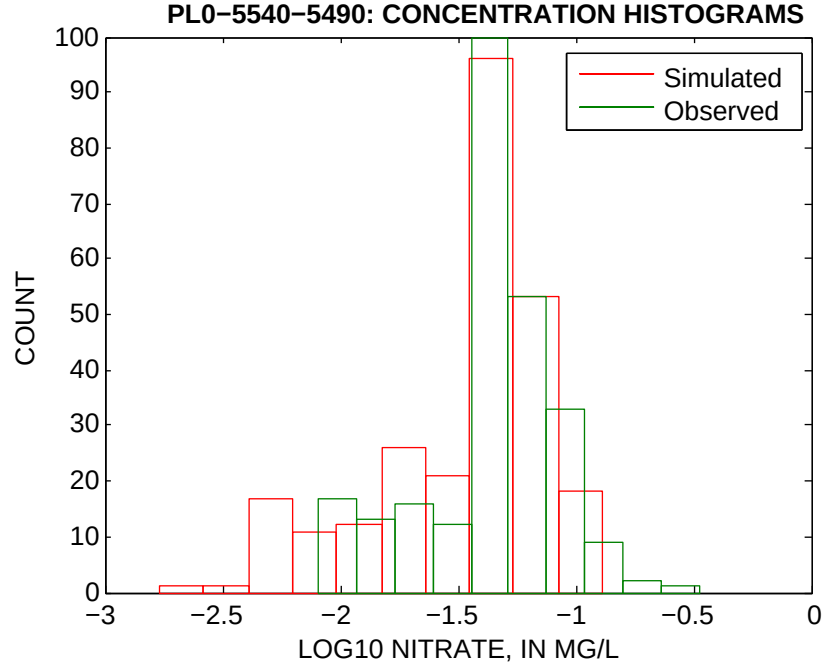
VERSION 2.1

ALL DATA
LOG10

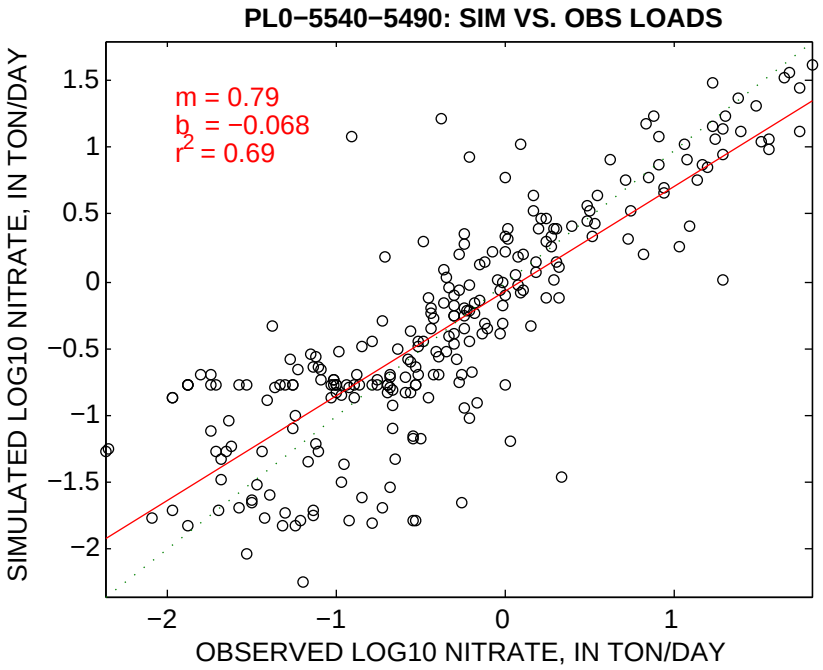


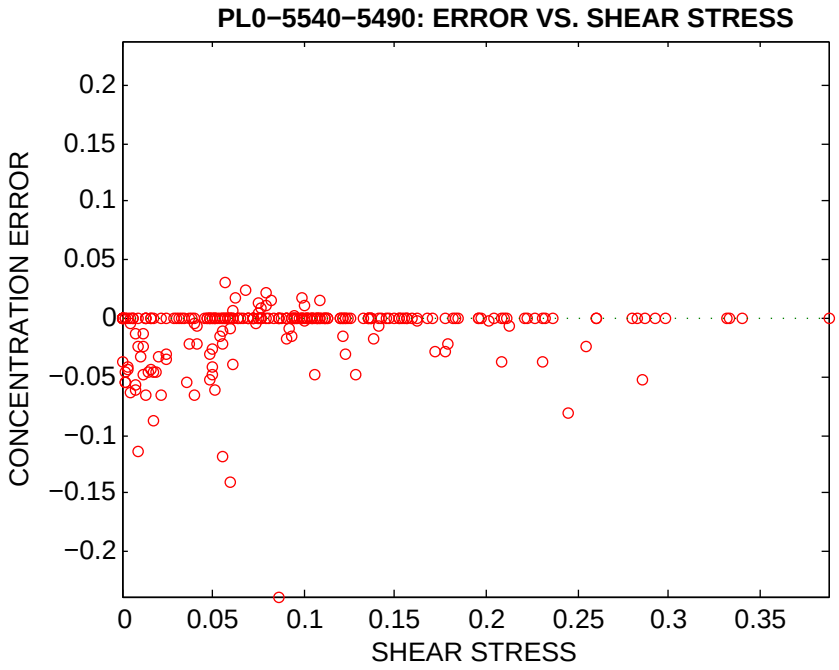


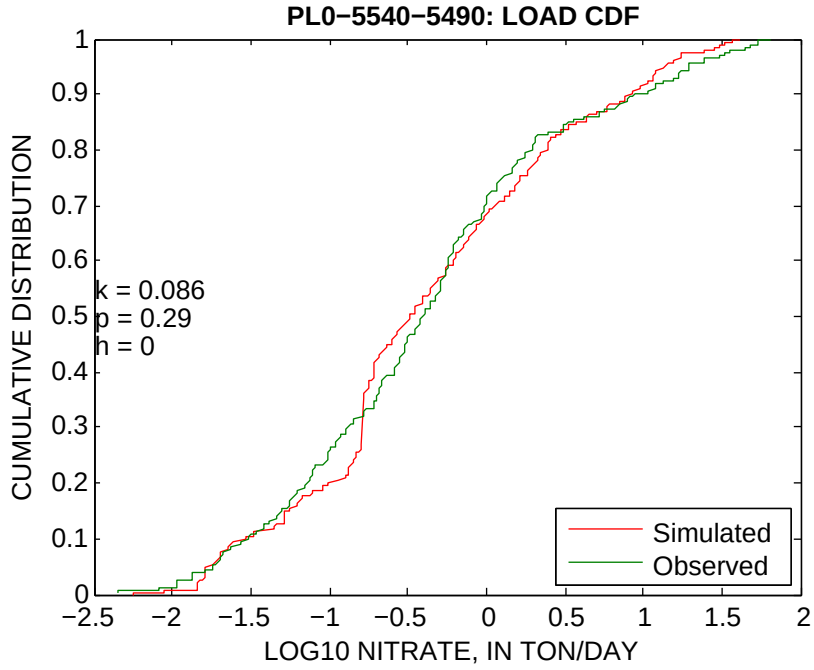


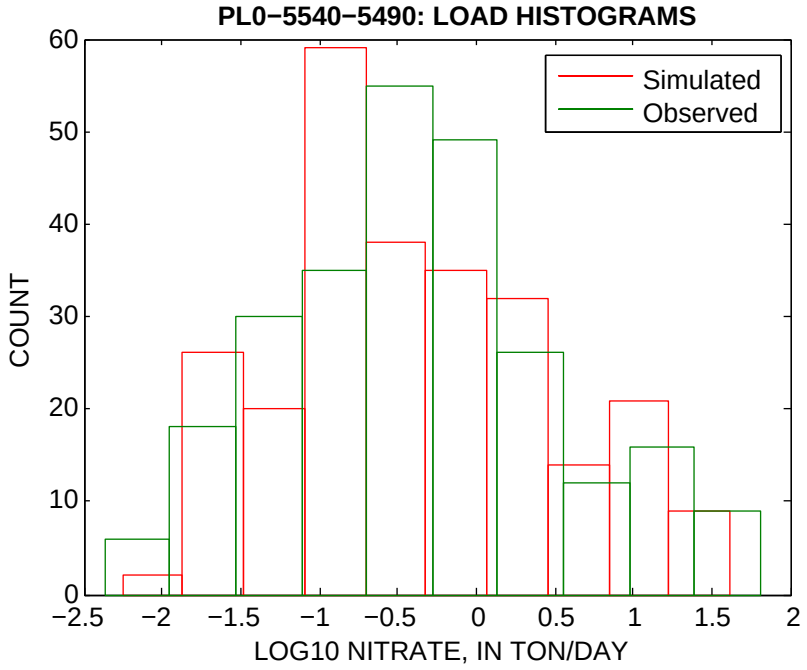


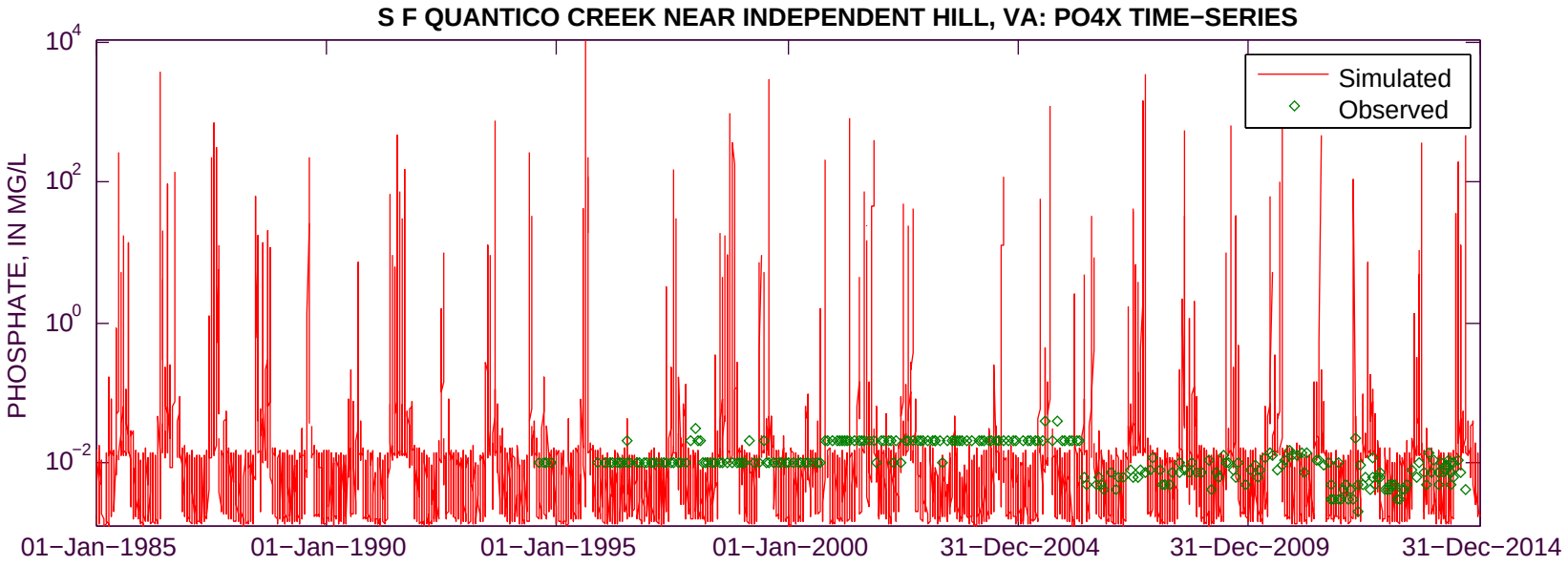
LOAD DATA
LOG10

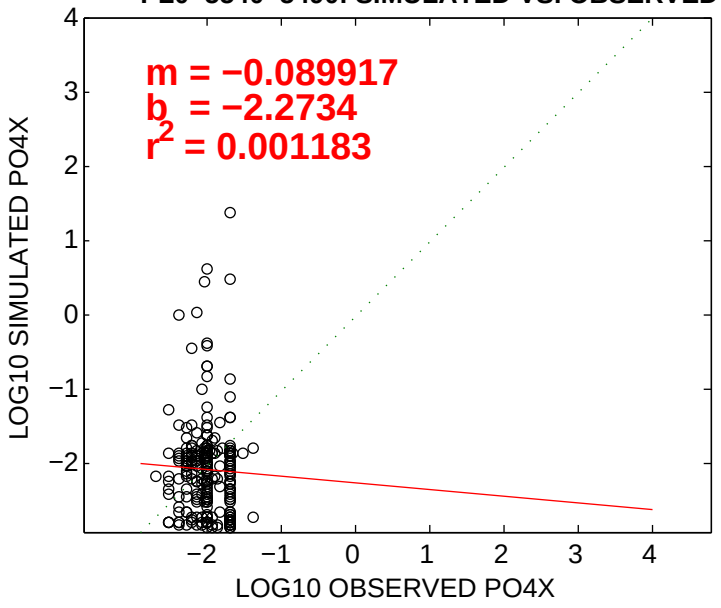


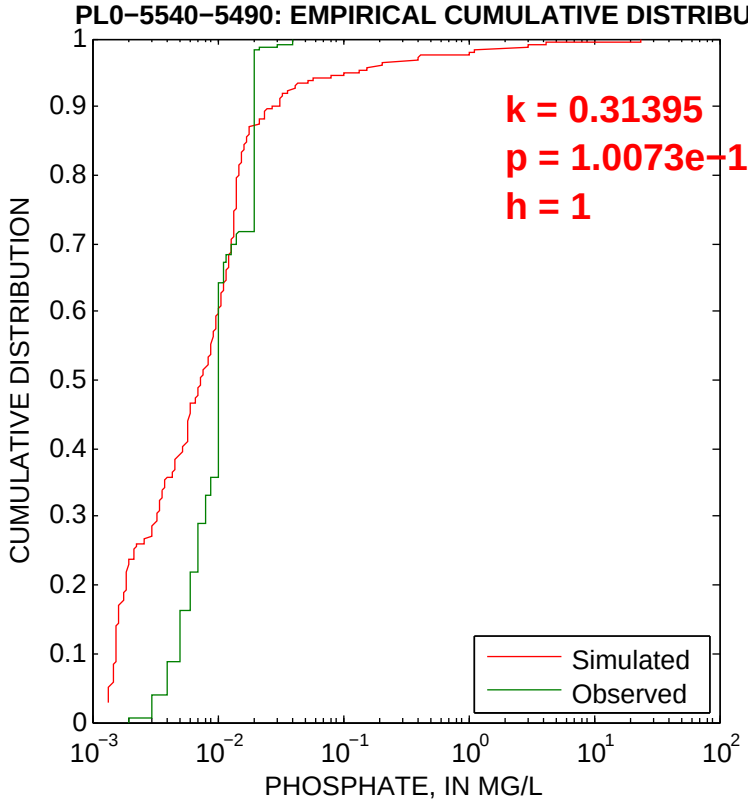












DATA SELECTION

scenario: P620171001WQ | file: PO4X.calib

plot: PO4X - phosphate

Dates: 1/1/1985 – 12/31/201

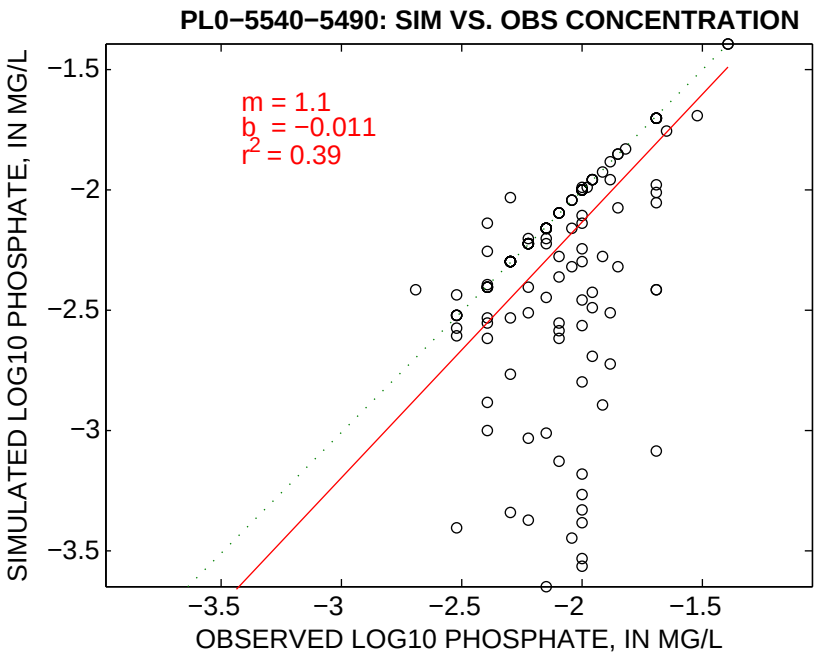
Drive: N/A | Directory: model | Observed: OBS20161101

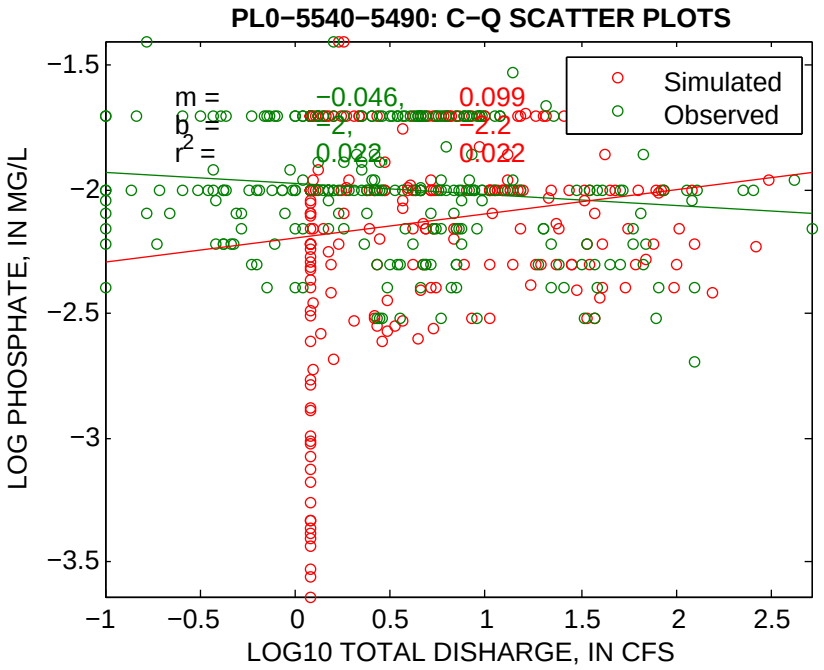
STATISTICS

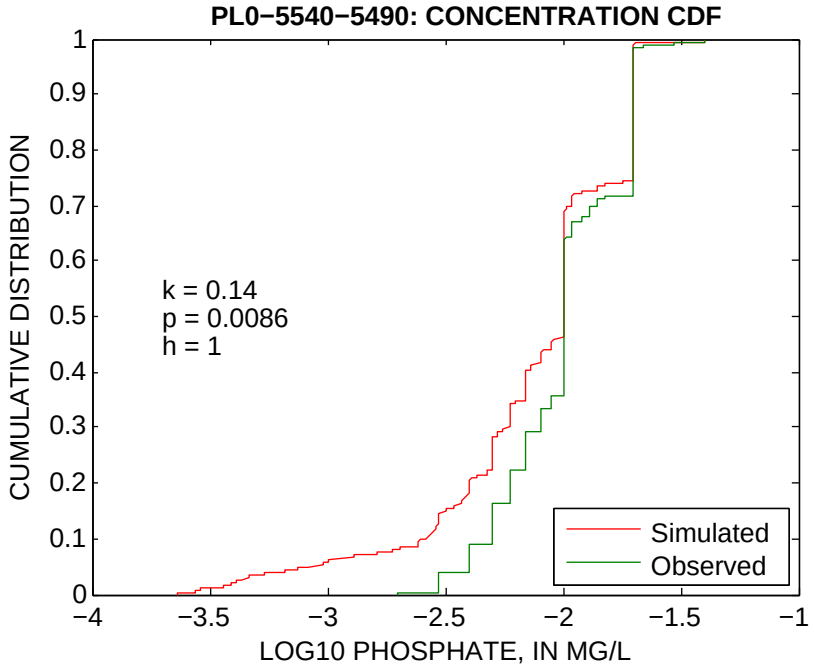
		observe	simulate
n		258	251
min		0.002	0
		-2.69897	-2.87432
mean		0.0117143	0.158564
		-2.00244	-2.09334
media		0.01	0.0074618
		-2	-2.10457
max		0.04	24.396
		-1.39794	1.38732
varian		4.09722e-0	2.43934
		0.060294	0.412062
JB		0.001	0.001
		0.107544	0.001
		ra	log
%		1253.6	4.53968
err.va		2.45951	0.491495
rel.std.err		60028.8	8.15165
mod.eff		-60027.8	-7.15165

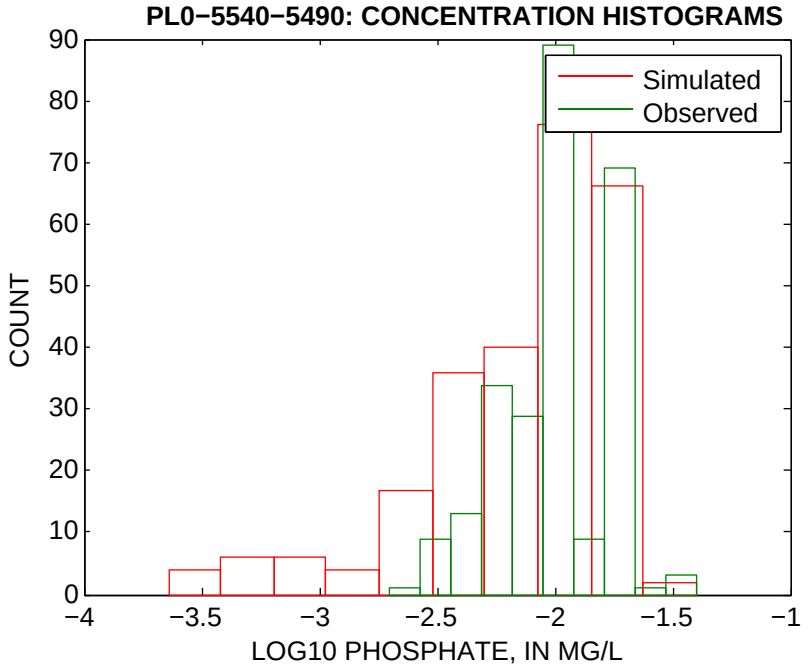
VERSION 2.1

ALL DATA
LOG10

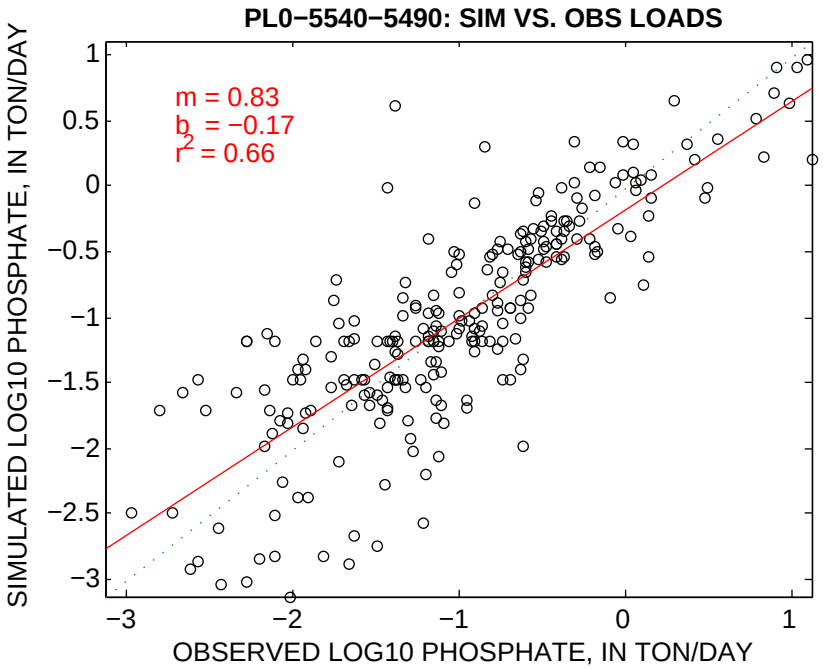


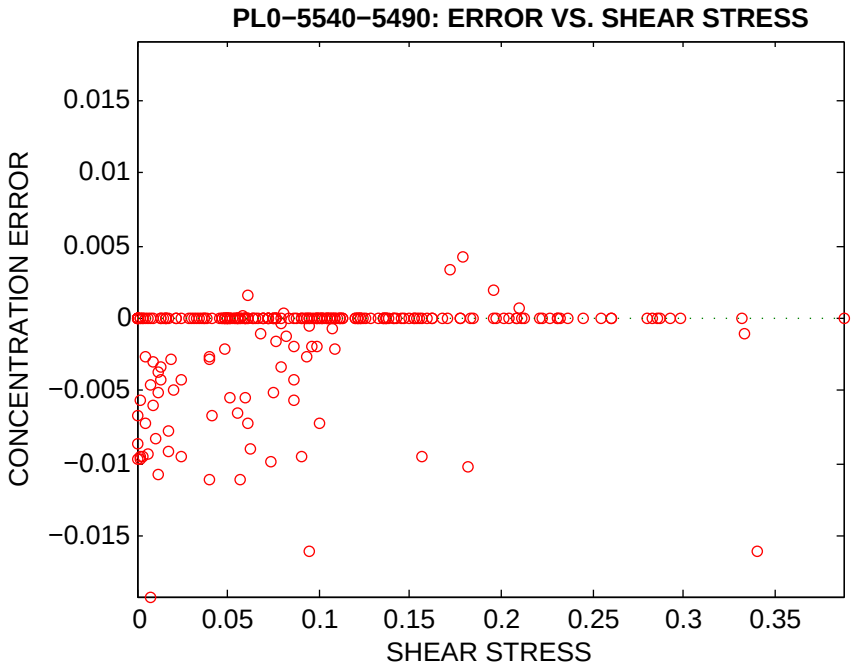


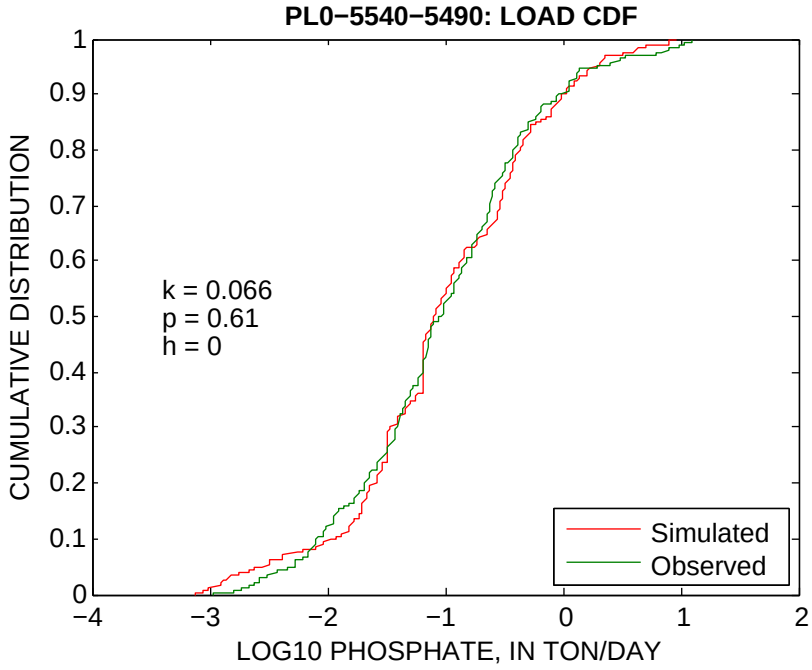


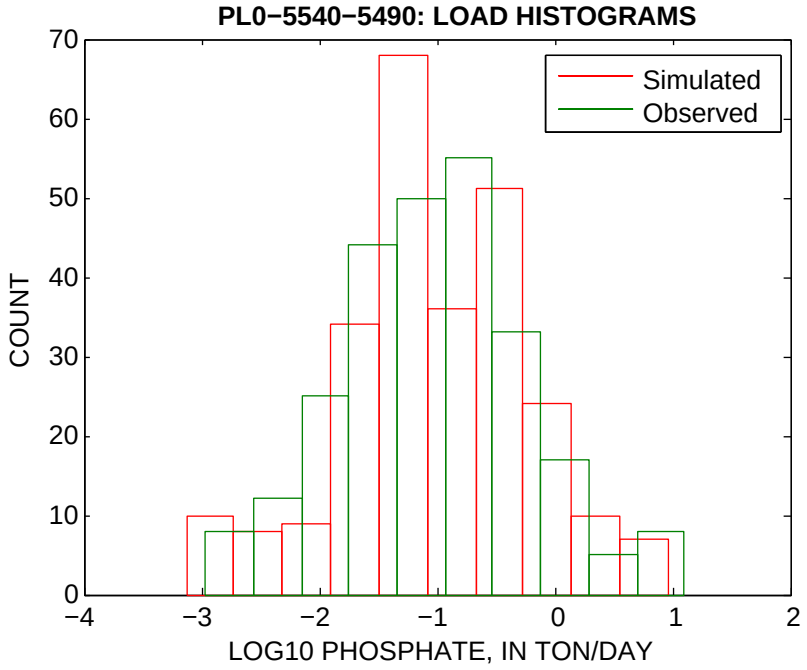


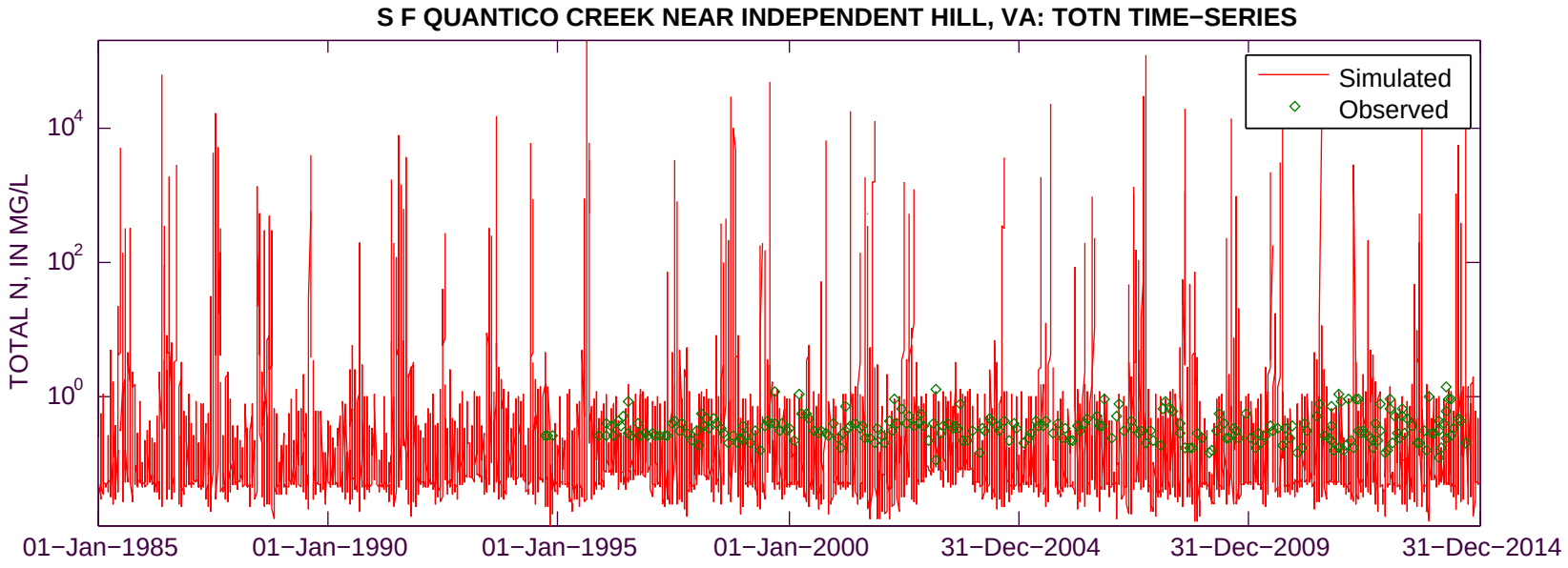
LOAD DATA
LOG10

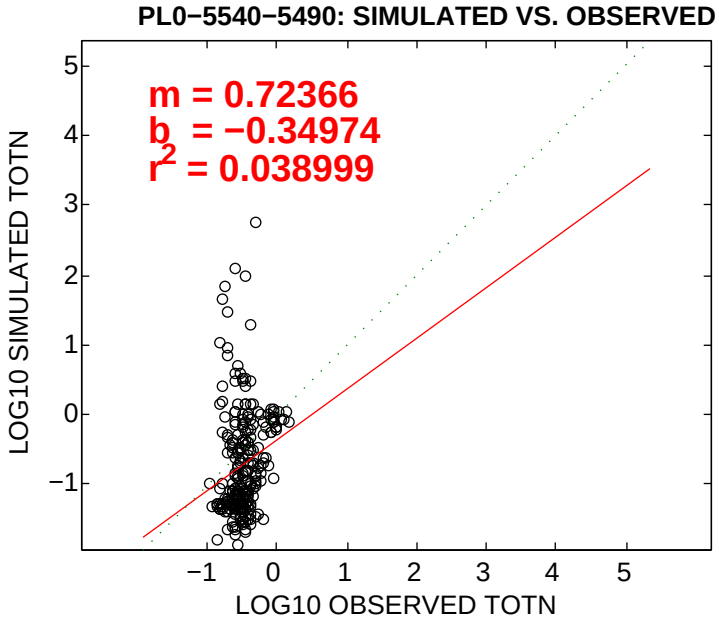


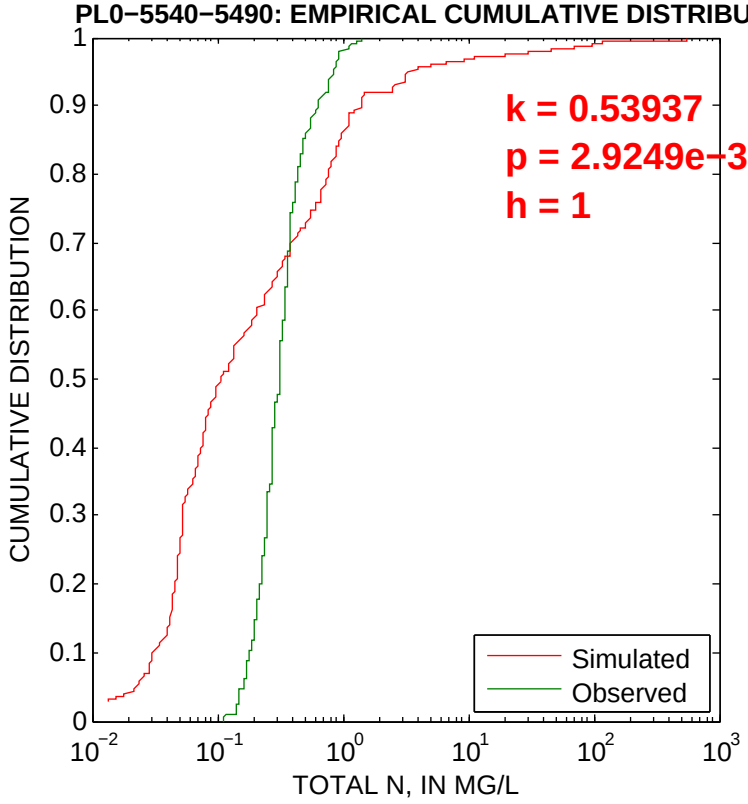












DATA SELECTION

scenario	file
P620171001WQ	TOTN.calib

plot: TOTN - total nitrogen

Dates: 1/1/1985 – 12/31/201

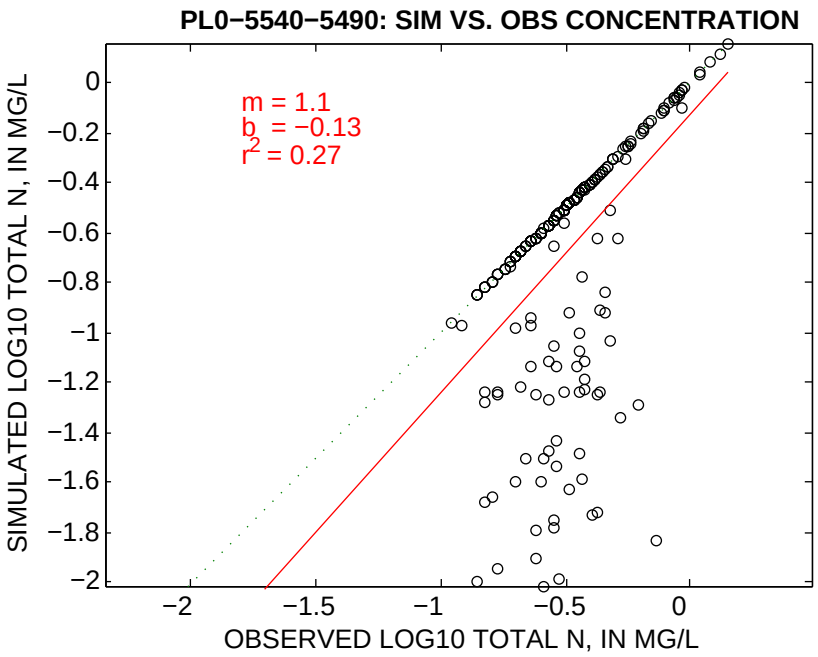
Drive	Directory	Observed
N/A	model	OBS20161101

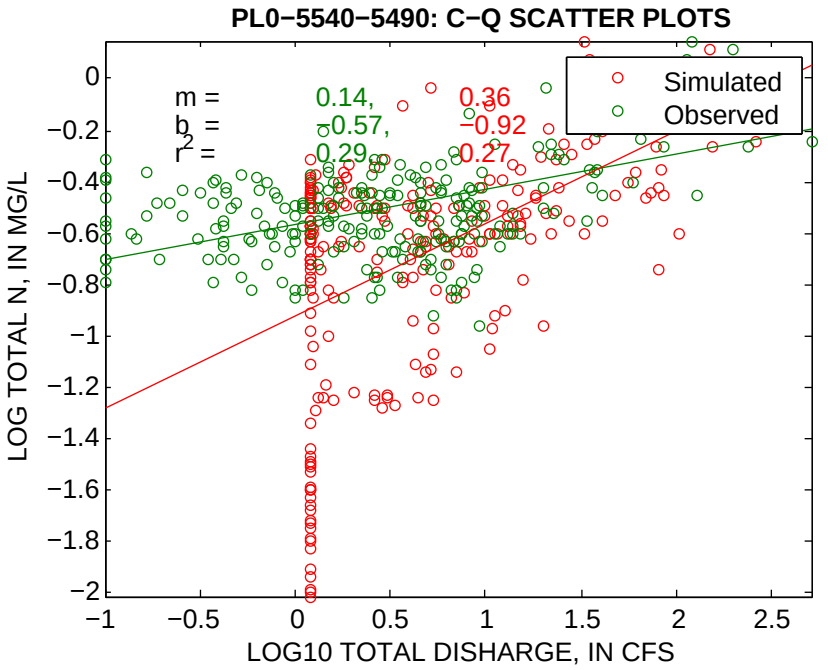
STATISTICS

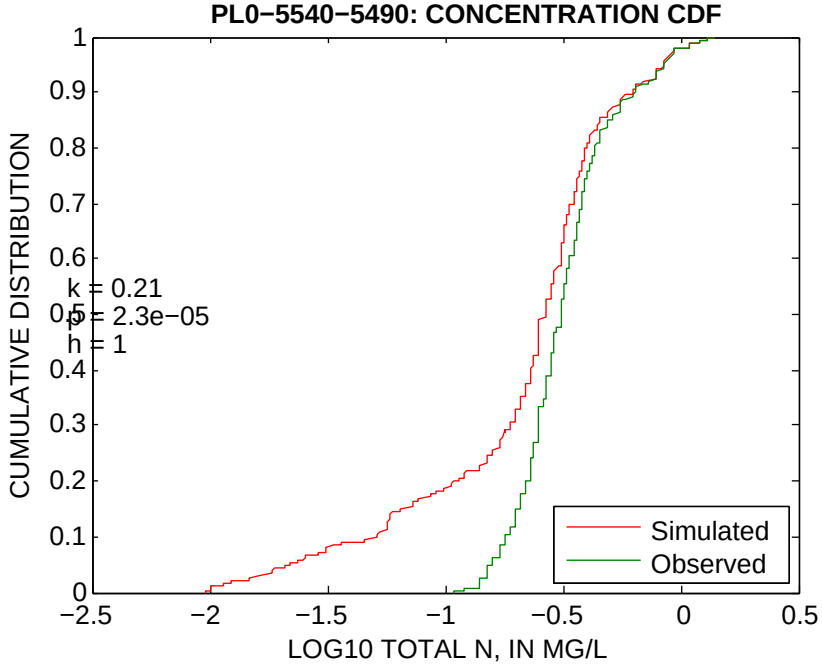
	n	observe	simulate
		254	247
min		0.11	0
		-0.958607	-1.86236
mean		0.364547	4.18248
		-0.488471	-0.703225
media		0.31	0.108295
		-0.508638	-0.906543
max		1.41	550.04
		0.149219	2.74039
varian		0.0446367	1308.42
		0.0425731	0.571677
JB		0.001	0.001
		0.002994	0.001
		ra	log
%		1047.31	43.9646
err.va		1322.88	0.59894
rel.std.err		29636.6	14.0685
mod.eff		-29635.6	-13.0685

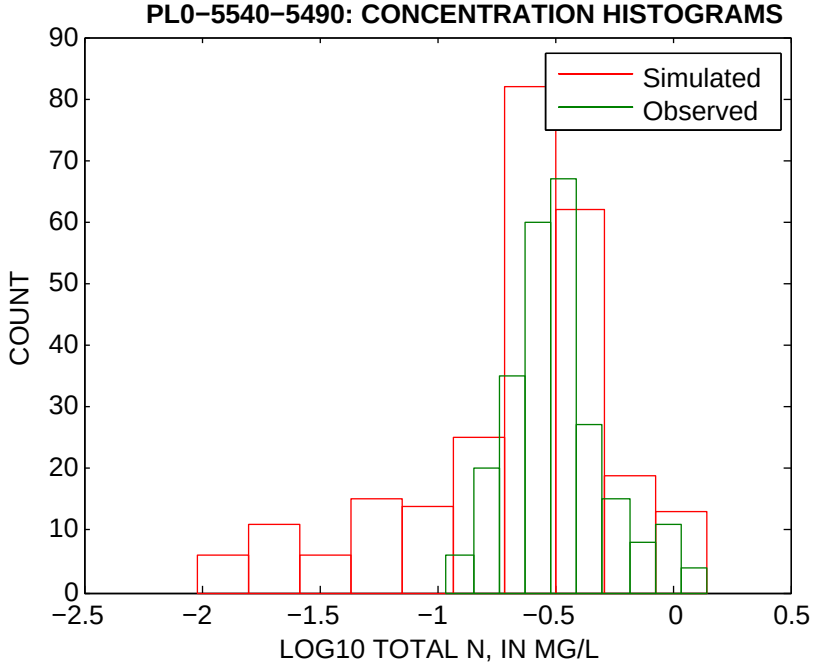
VERSION 2.1

ALL DATA
LOG10

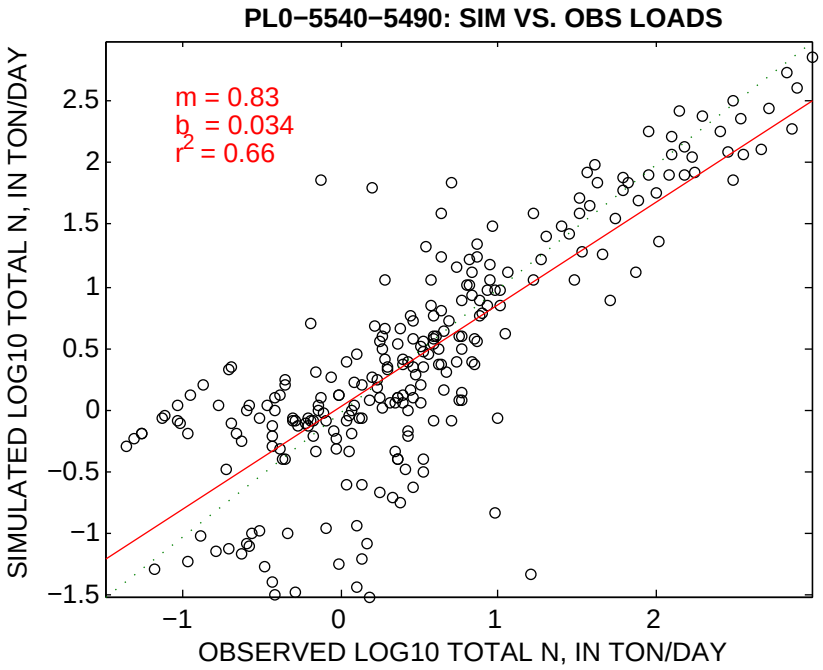


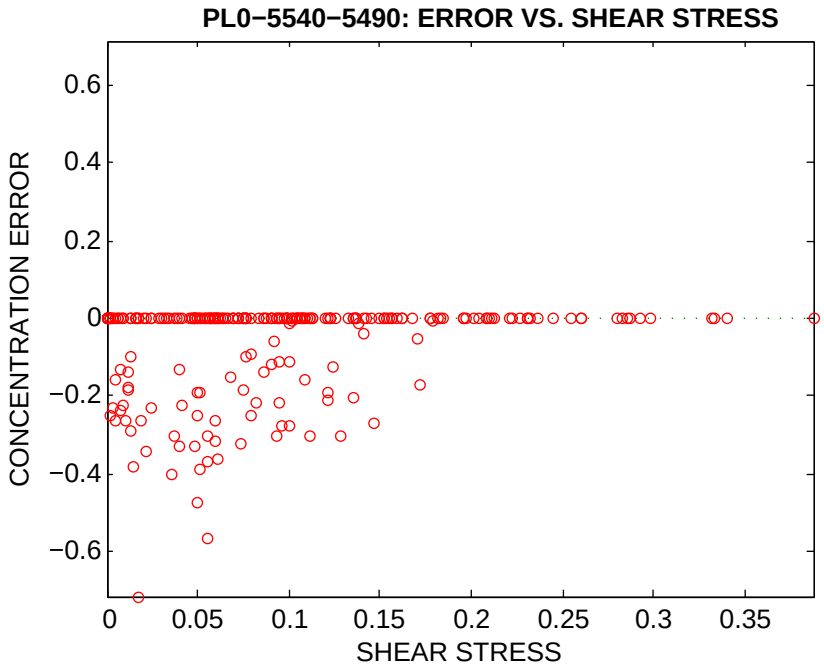


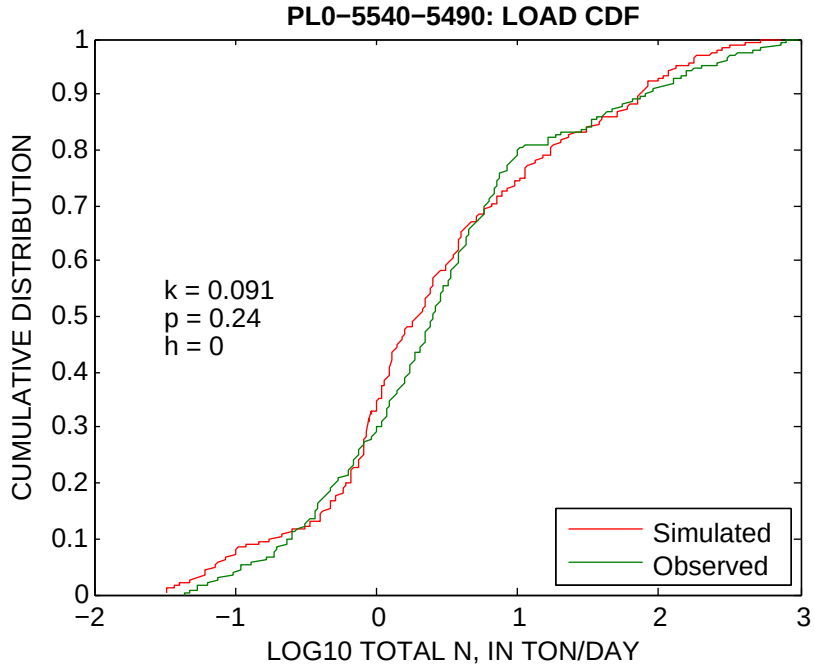


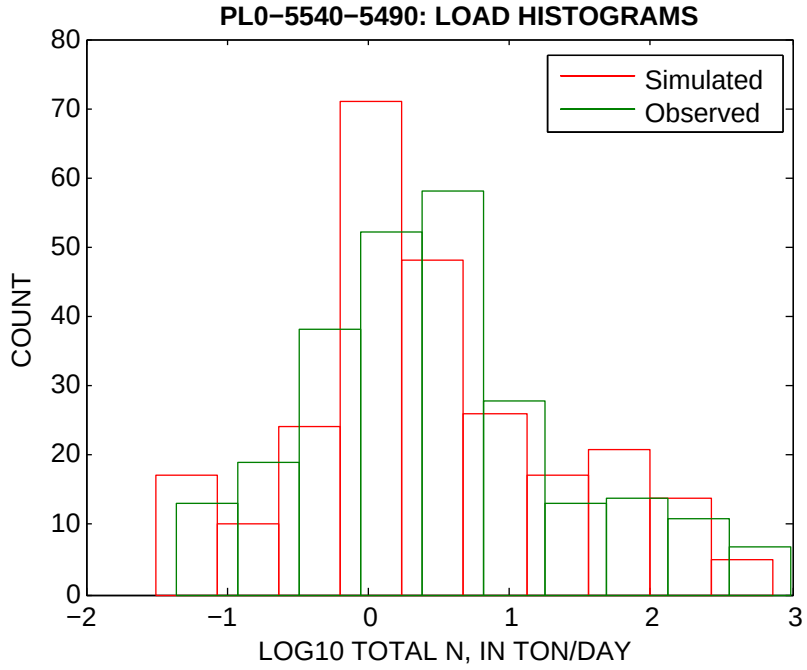


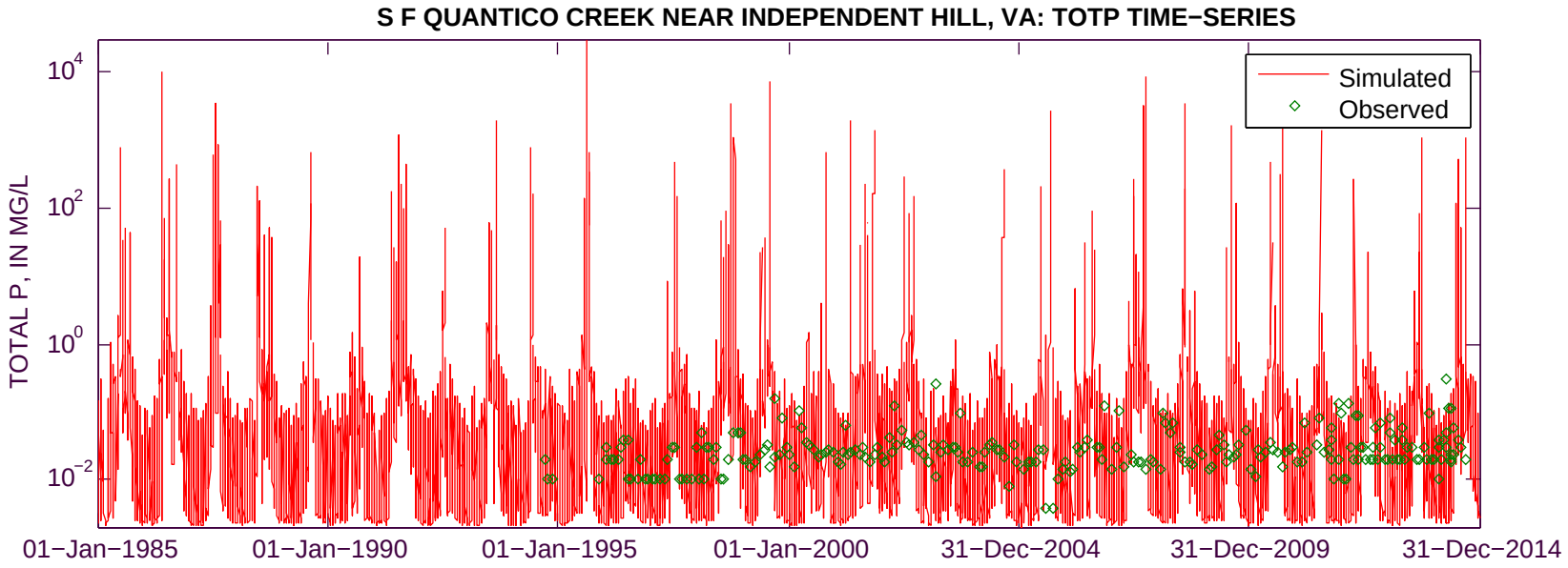
LOAD DATA
LOG10

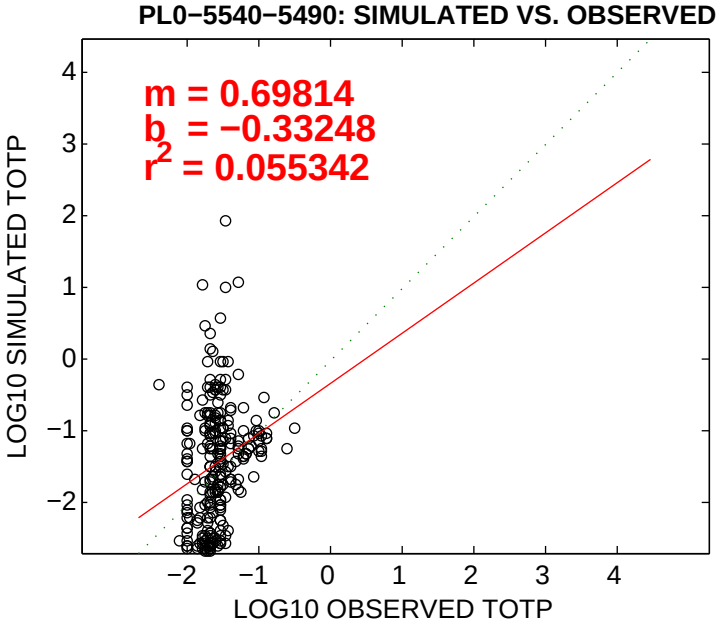


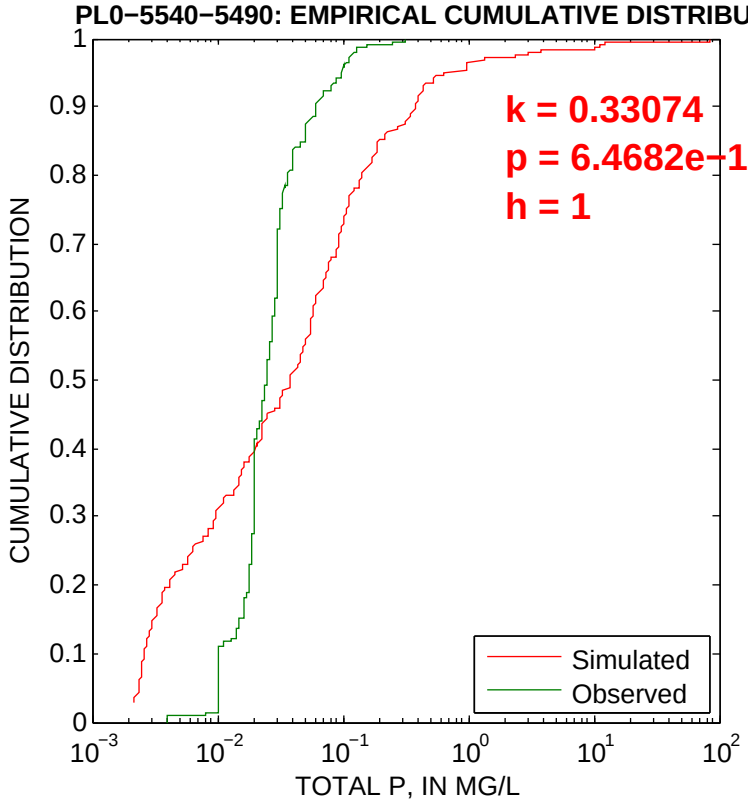












DATA SELECTION

scenario	file
P620171001WQ	TOTP.calib

plot: TOTP - total phosphorus

Dates: 1/1/1985 – 12/31/201

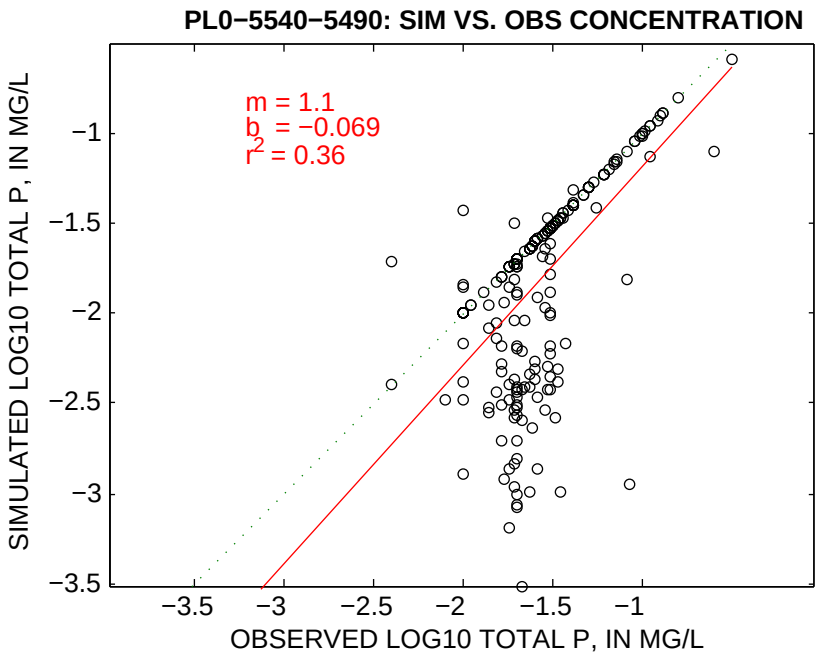
Drive	Directory	Observed
N/A	model	OBS20161101

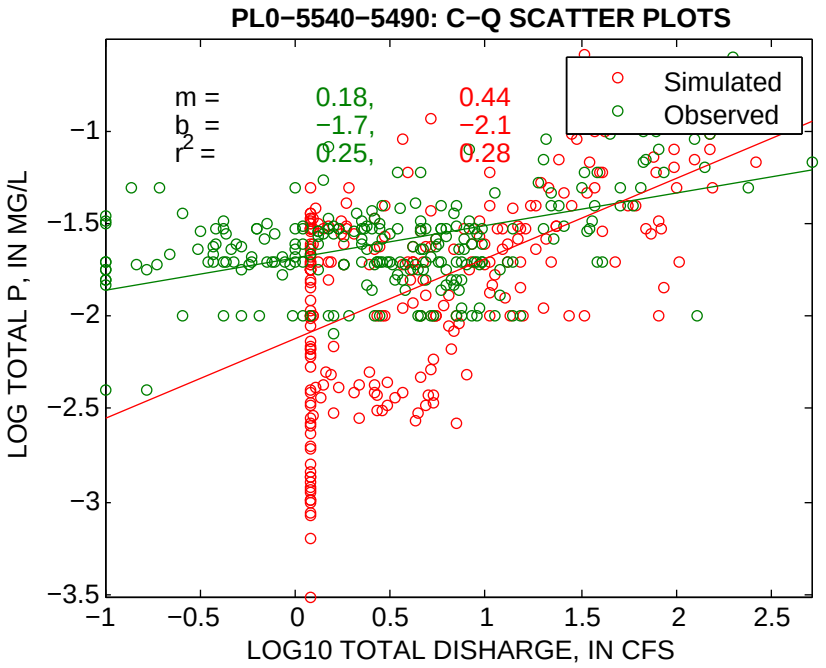
STATISTICS

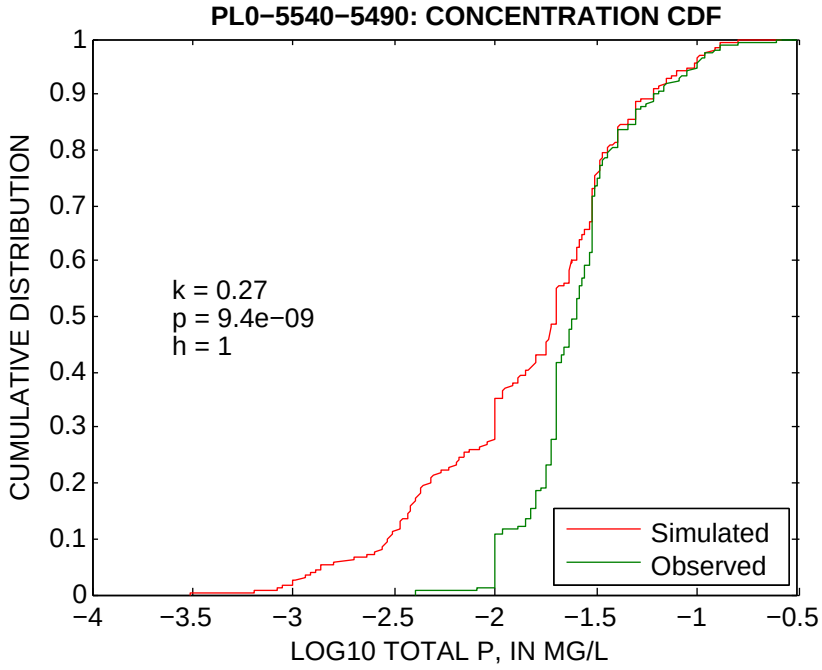
	n	observe	simulate
		257	250
min		0.004	0
		-2.39794	-2.65926
mean		0.0333051	0.596164
		-1.57927	-1.43503
media		0.025	0.038694
		-1.60206	-1.37243
max		0.31	84.376
		-0.508638	1.92622
varian		0.00108311	29.0986
		0.0773753	0.681443
JB		0.001	0.001
		0.001	0.002499
		ra	log
%		1690.01	-9.13365
err.va		29.4183	0.671671
rel.std.err		27161	8.6807
mod.eff		-27160	-7.6807

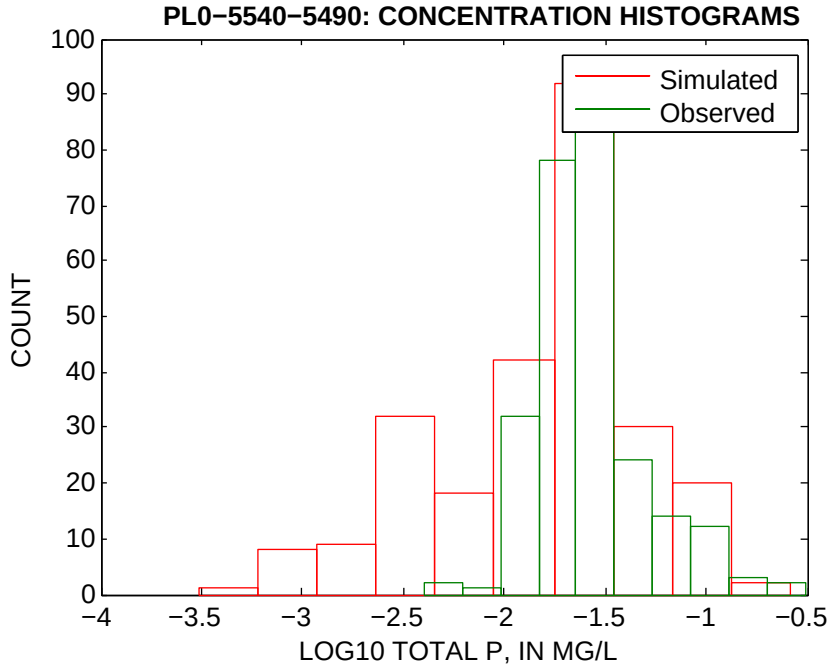
VERSION 2.1

ALL DATA
LOG10

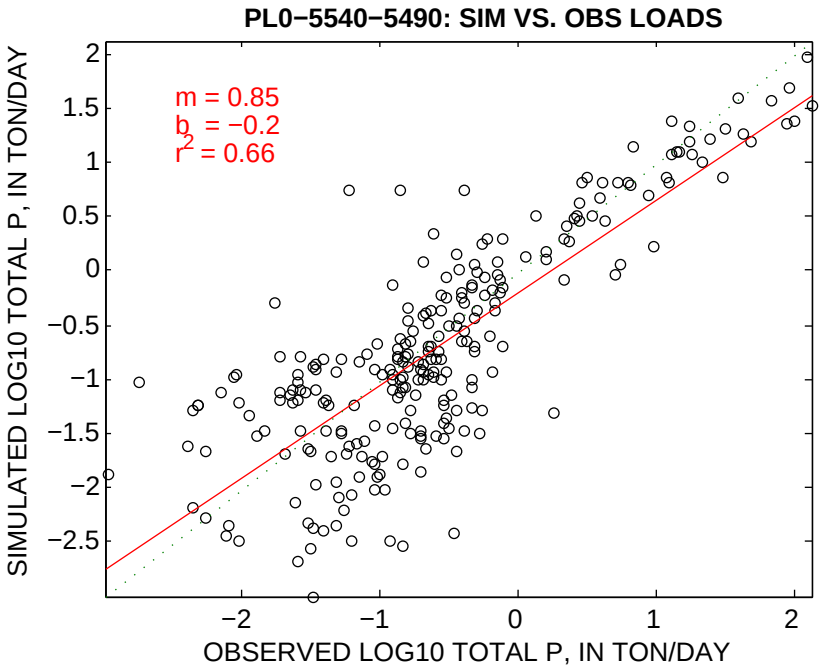


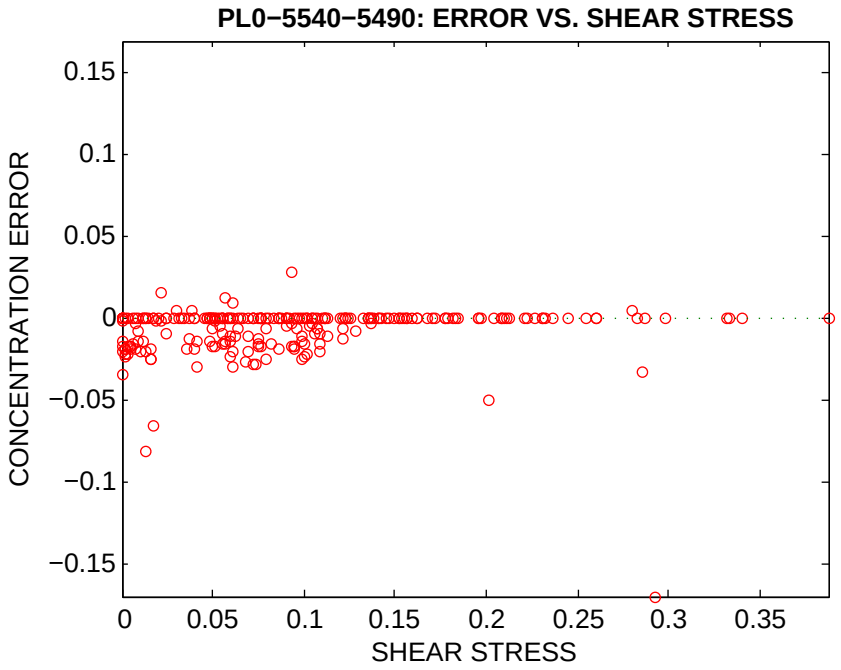


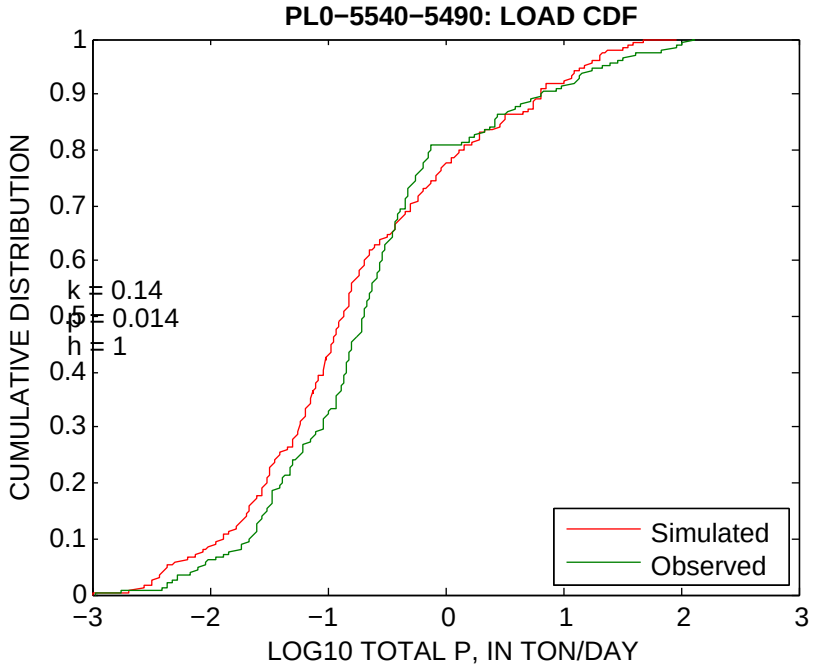


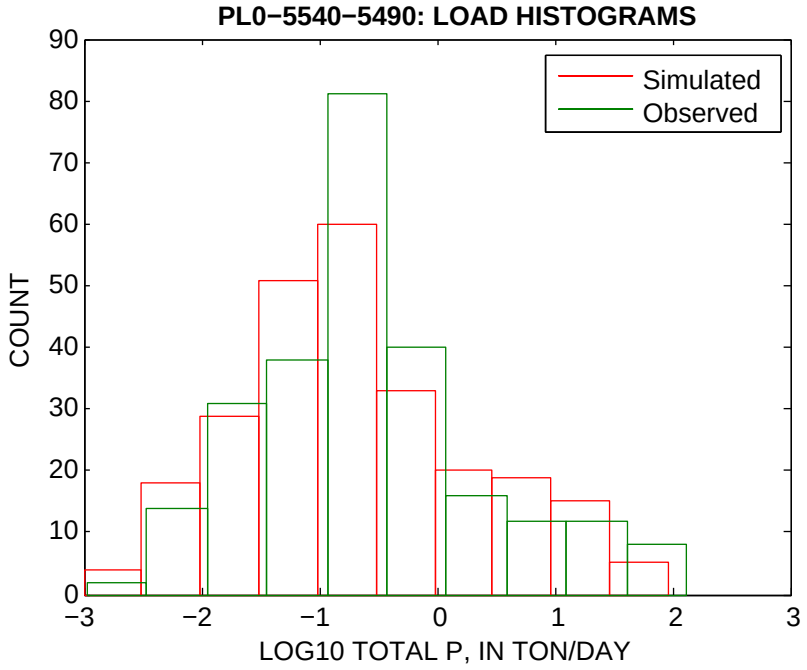


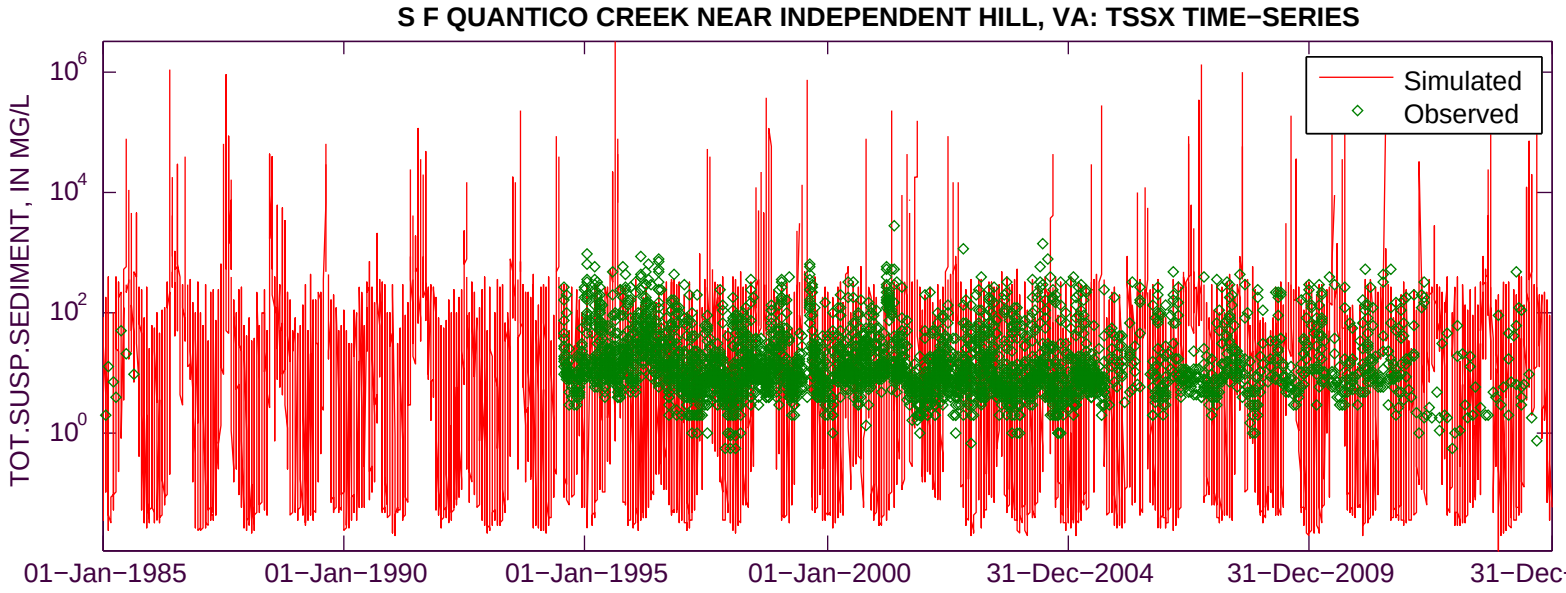
LOAD DATA
LOG10

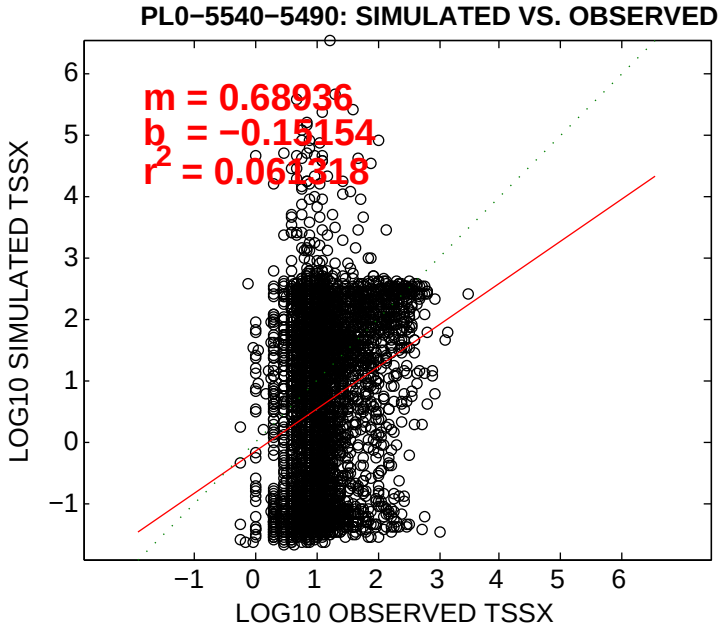


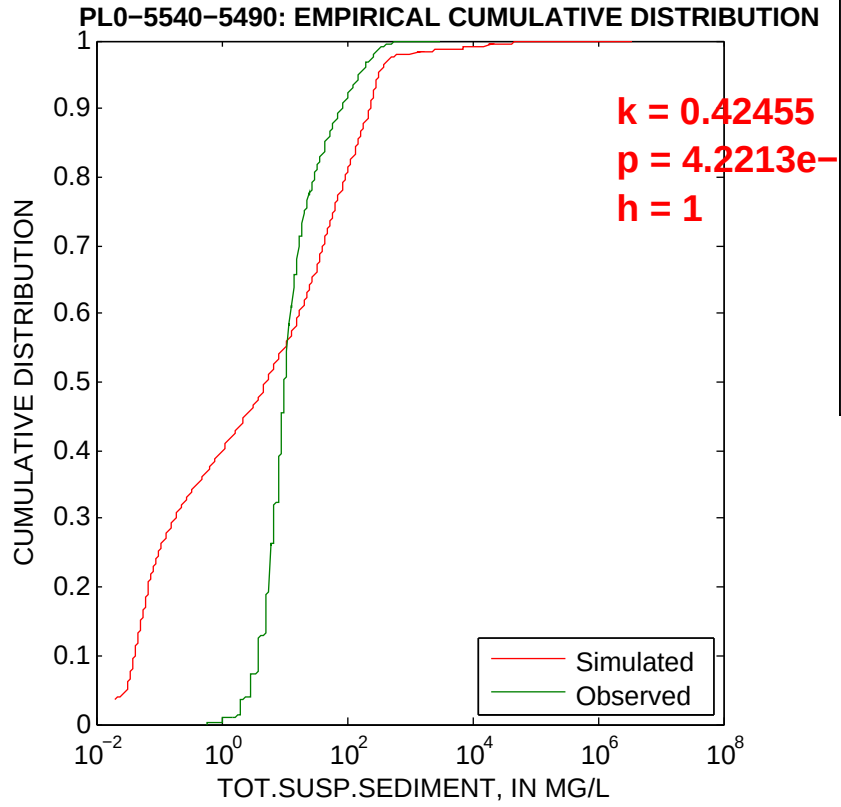












DATA SELECTION

scenario: P620171001WQ | file: TSSX.calib

plot: TSSX - total suspended ...

Dates: 1/1/1985 | 12/31/201

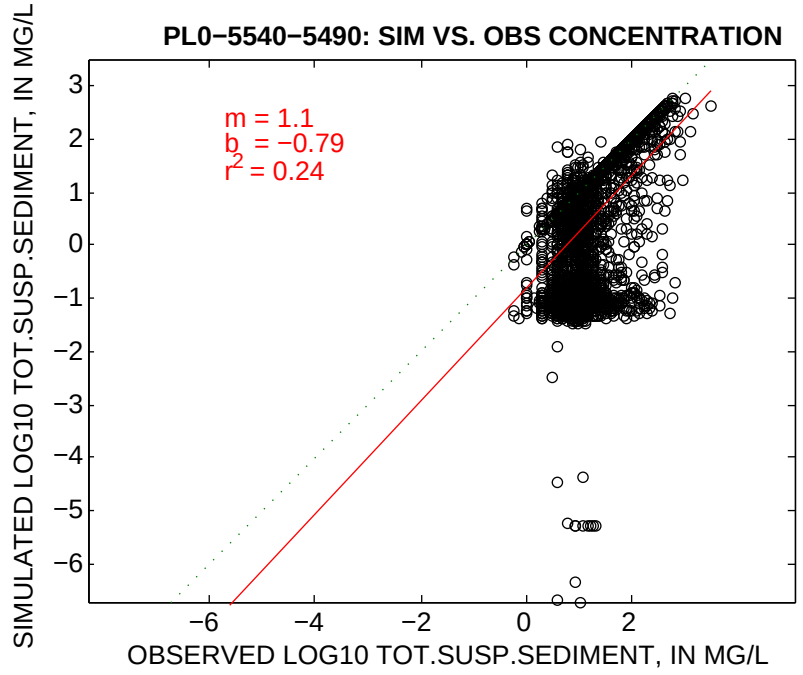
Drive | Directory: N/A | model | Observed: OBS20161101

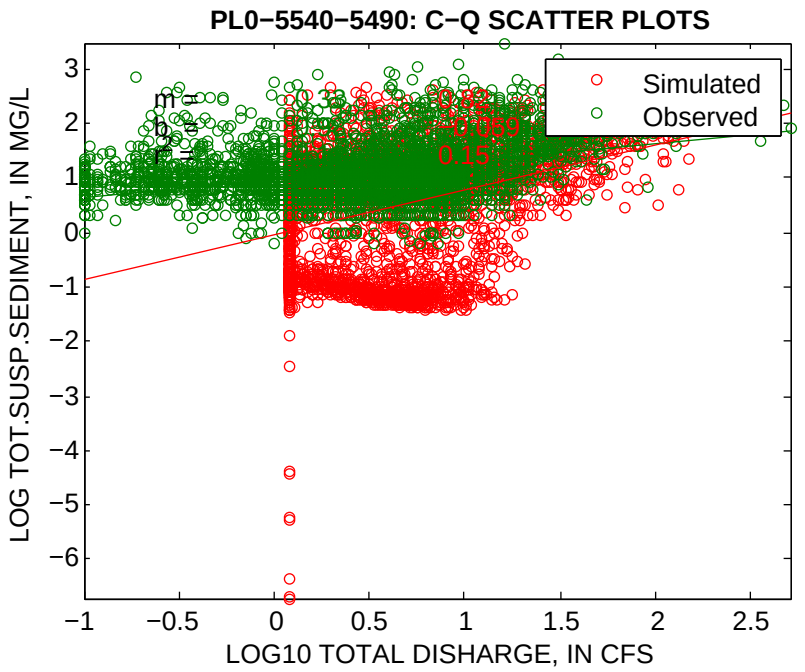
STATISTICS

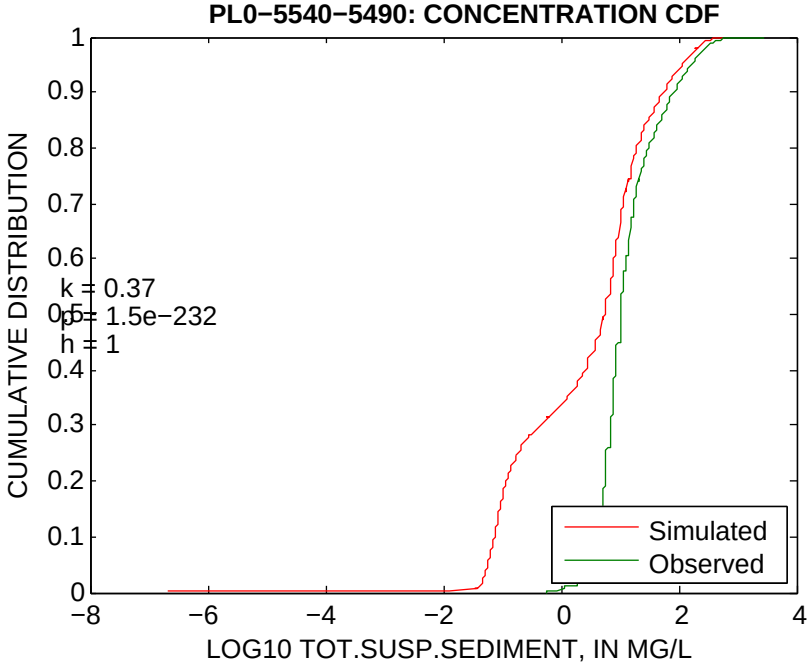
		observe	simulate
n		4049	3903
min		0.595	0
		-0.225483	-1.69379
mean		35.2034	1660.43
		1.13806	0.632993
media		10	5.404
		1.03141	0.815412
max		2974.53	3.4099e+0
		3.47342	6.53274
varian		8438.64	3.01977e+
		0.270225	2.09426
JB		0.001	0.001
		0.001	0.001
		ra	log
%		4616.67	-44.3797
err.va		3.02247e+0	2.24708
rel.std.err		358170	8.31558
mod.eff		-358169	-7.31558

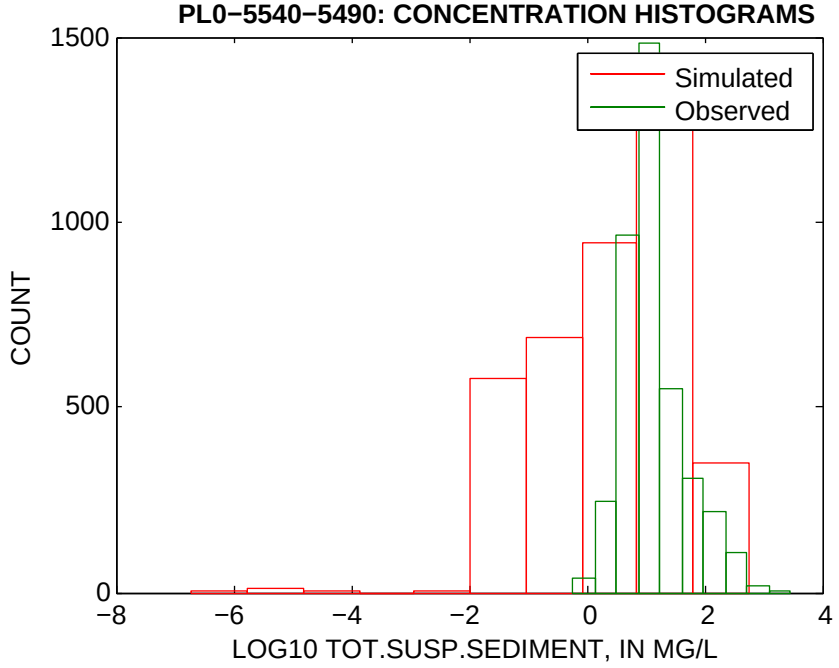
VERSION

ALL DATA
LOG10

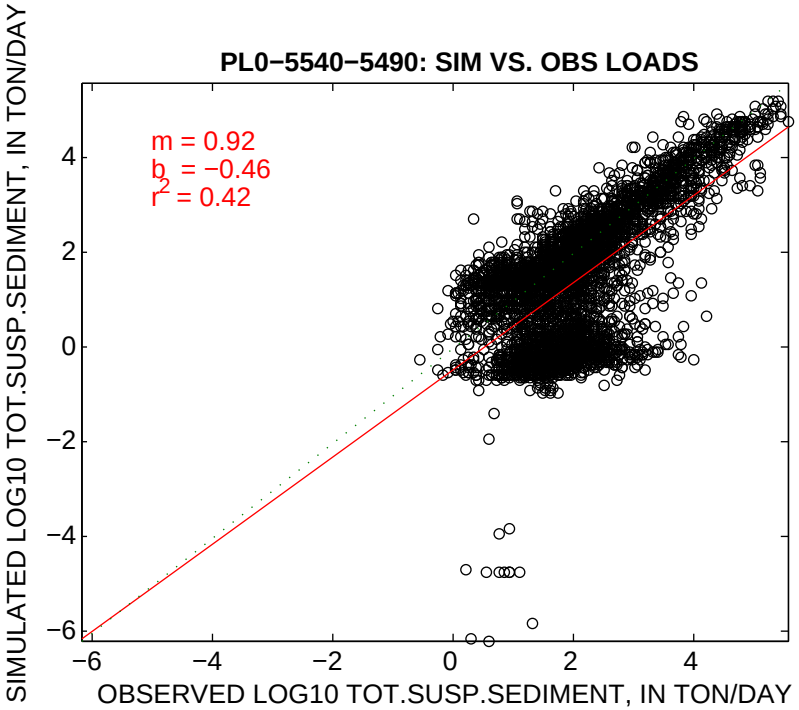


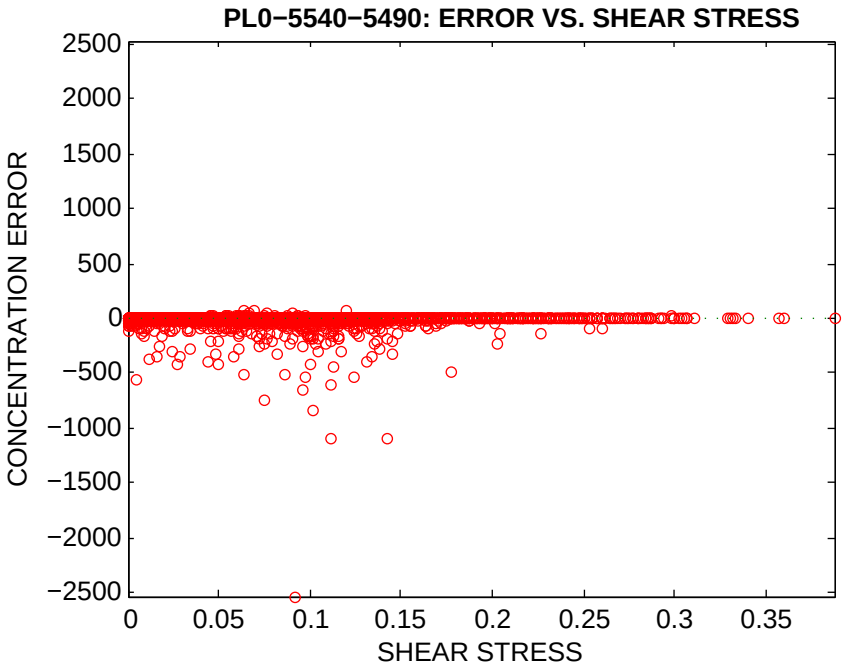


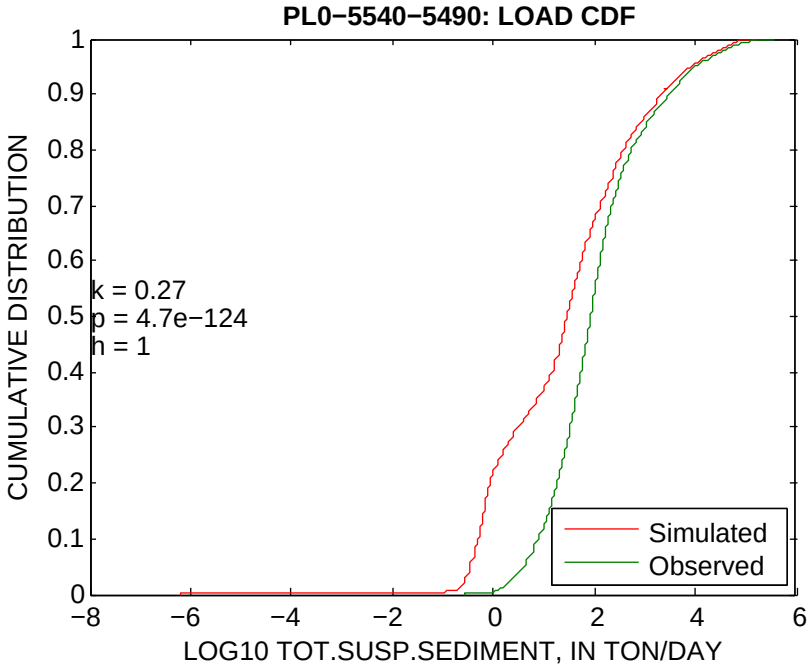


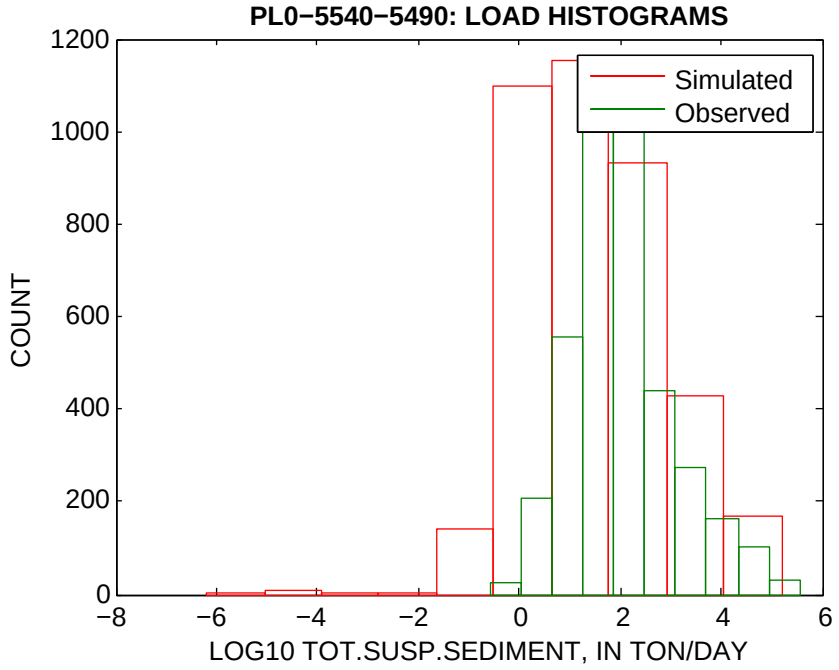


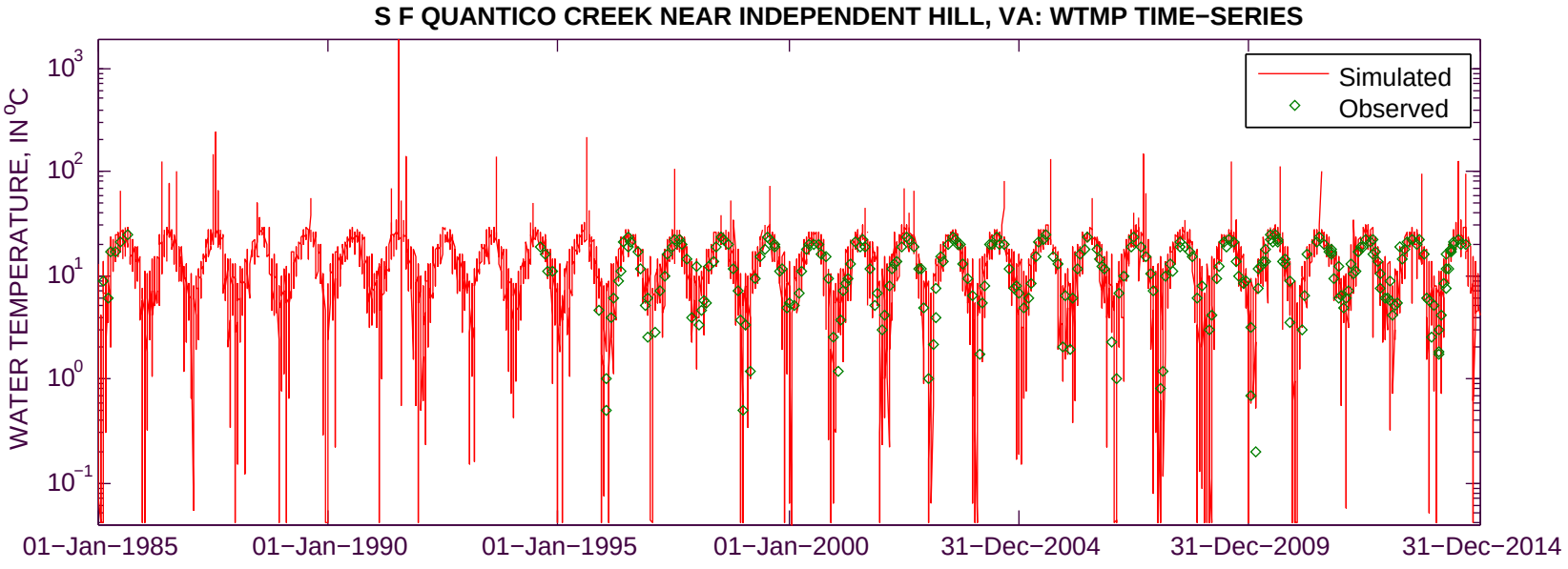
LOAD DATA
LOG10

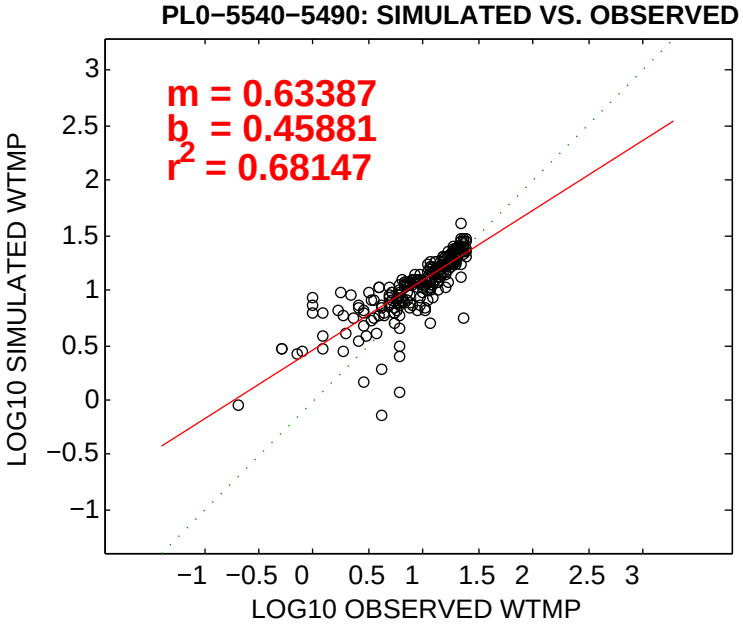


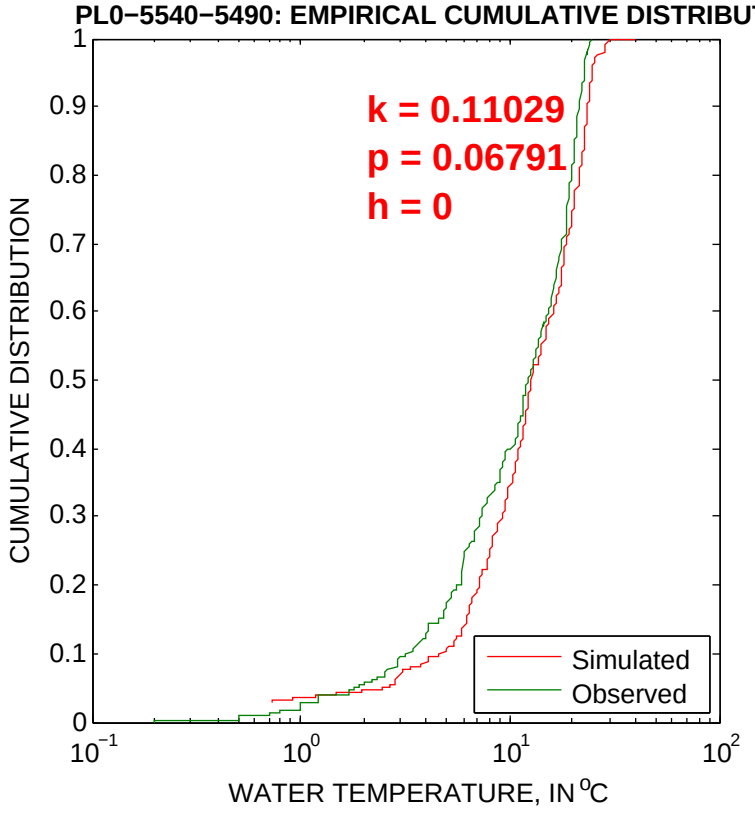












DATA SELECTION

scenario	file
P620171001WQ	WTMP.calib

plot: WTMP - water tempera...

Dates 1/1/1985 12/31/201

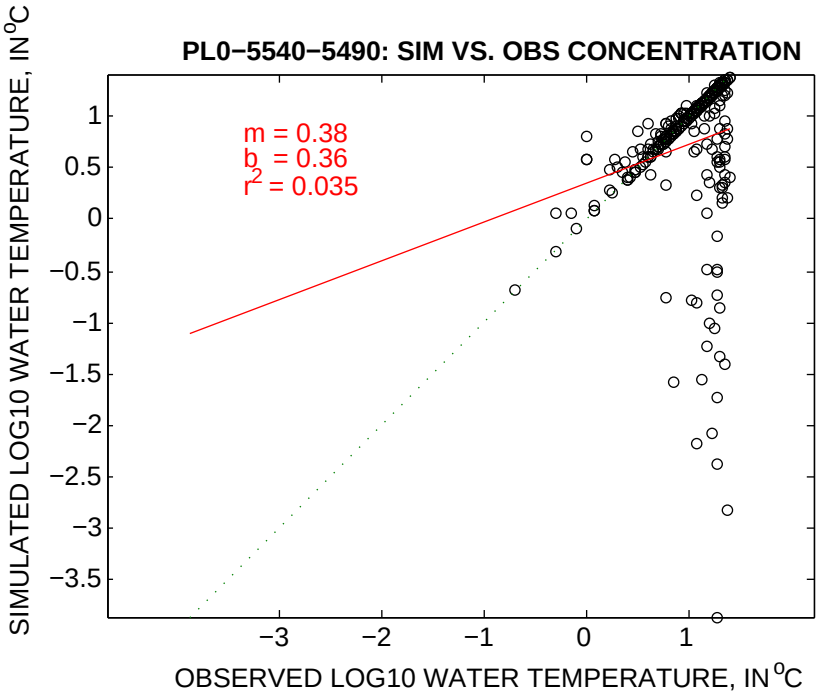
Drive	Directory	Observed
N/A	model	OBS20161101

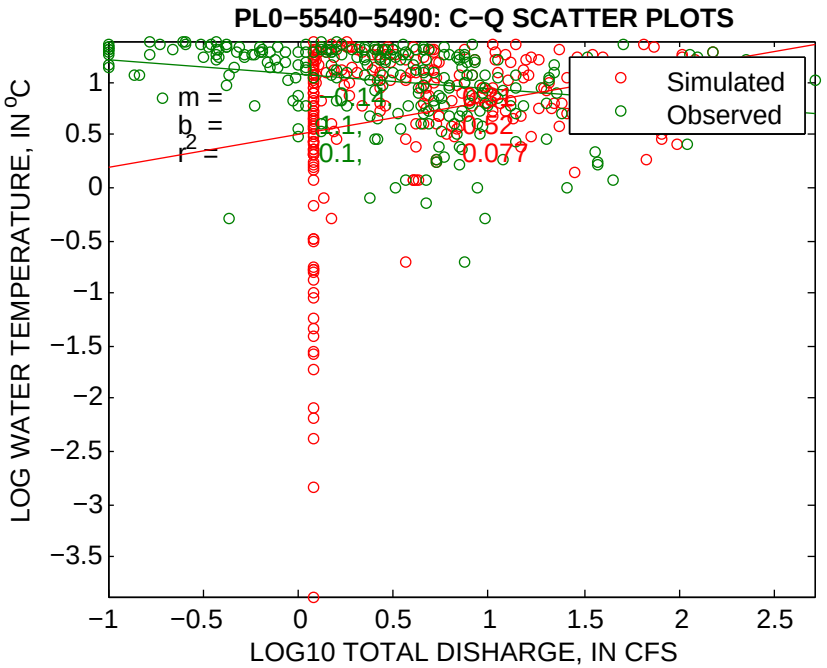
STATISTICS

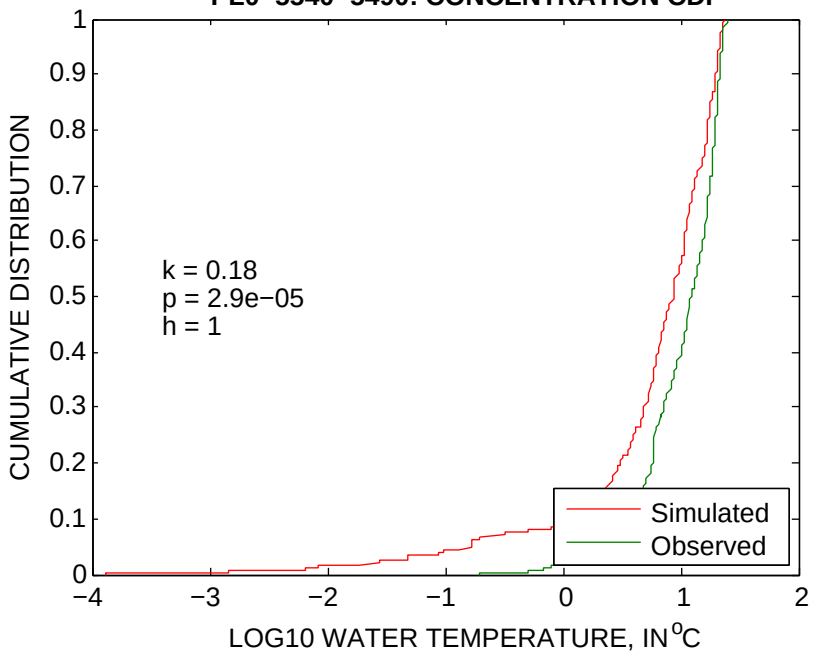
	n	observe	simulate
		272	264
min		0.2	0
		-0.69897	-0.13772
mean		12.5435	13.9071
		0.987613	1.08483
media		12.285	12.722
		1.08098	1.11465
max		25	40.557
		1.39794	1.60807
varian		47.2161	55.1792
		0.133321	0.0786067
JB		0.002847	0.072665
		0.001	0.001
		ra	log
%		10.871	9.84352
err.va		21.3239	0.052397
rel.std.err		0.451623	0.393015
mod.eff		0.548377	0.606985

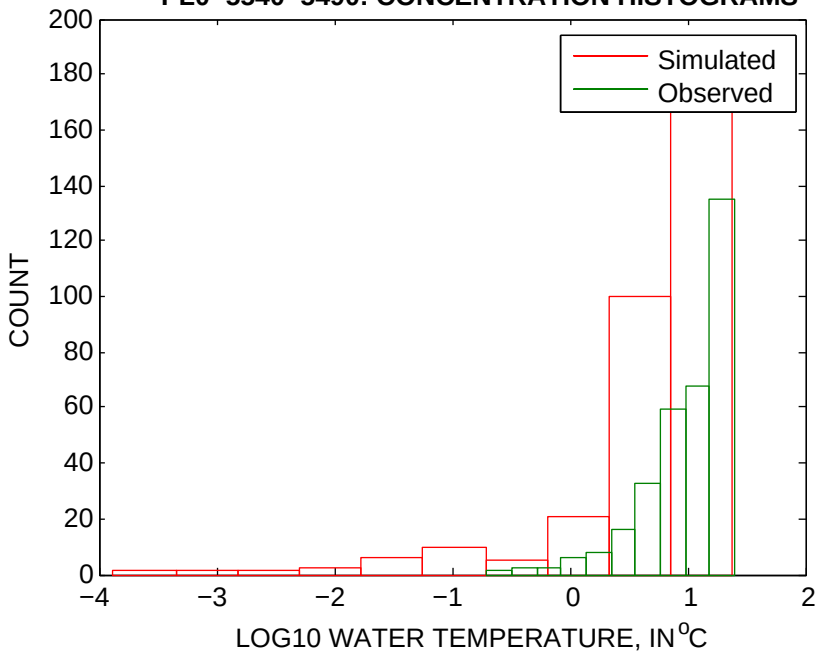
VERSION 2.1

ALL DATA
LOG10

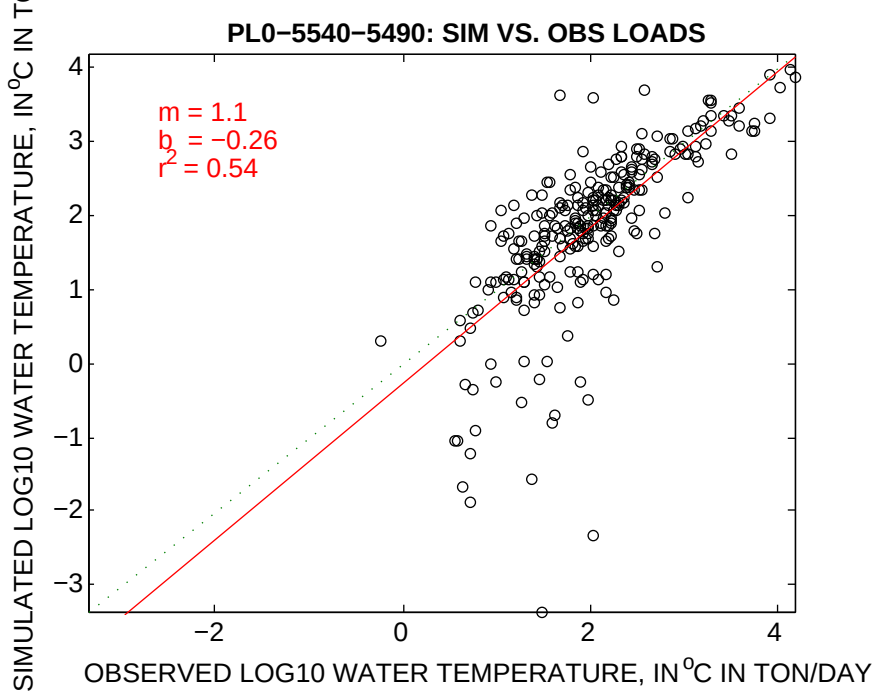


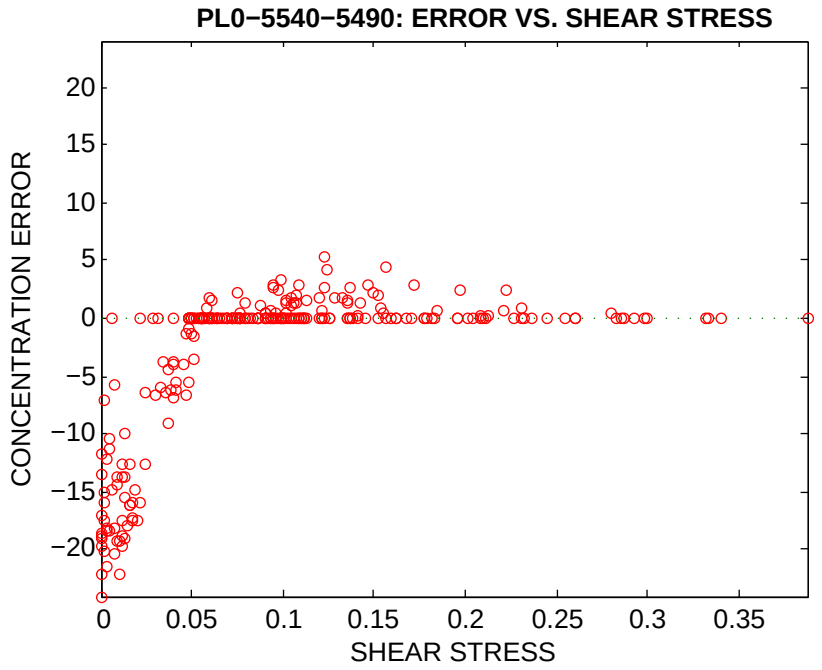


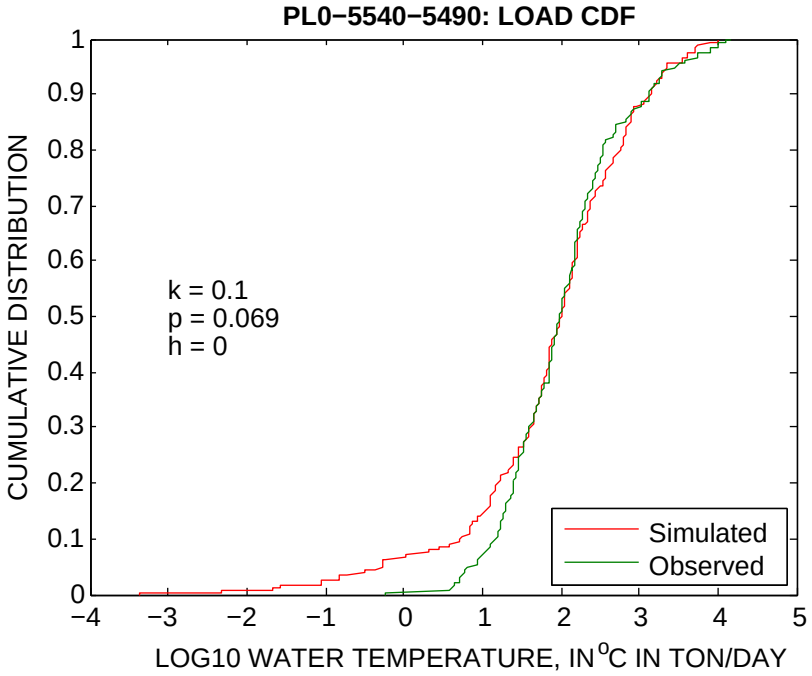


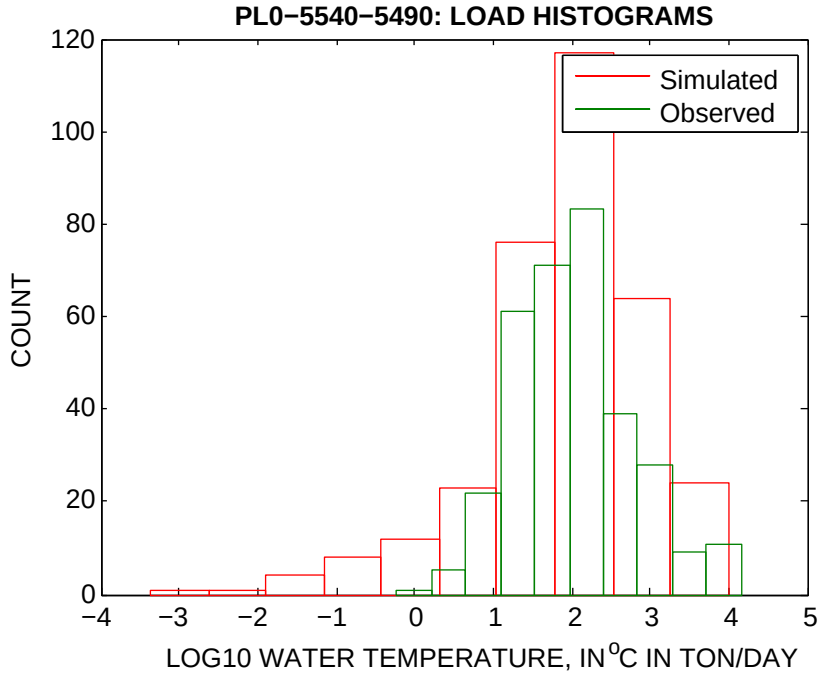


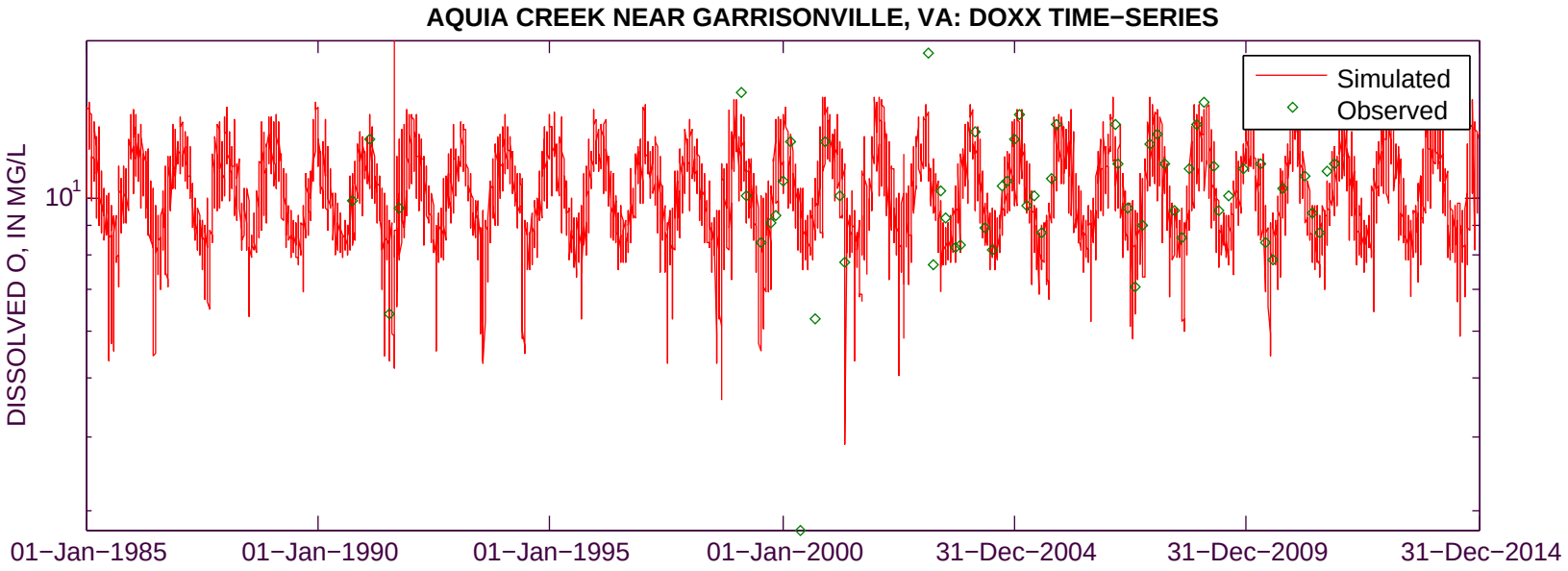
LOAD DATA
LOG10

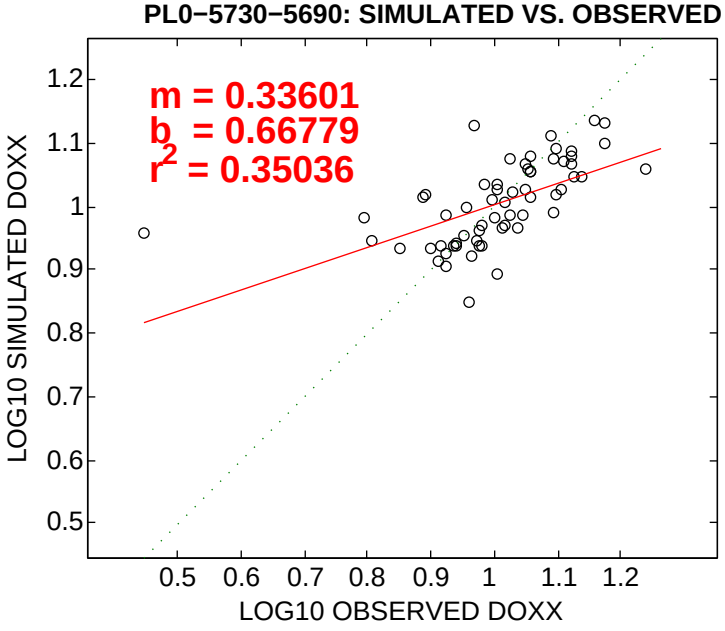


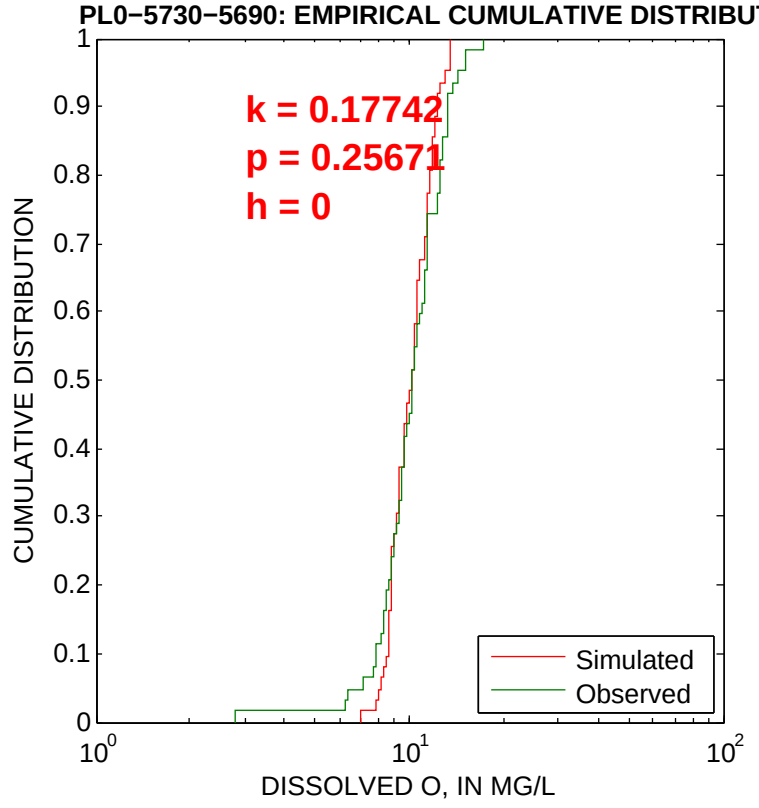












DATA SELECTION

scenario	file
P620171001WQ	DOXX.calib

plot: DOXX - dissolved oxygen

Dates: 1/1/1985 – 12/31/201

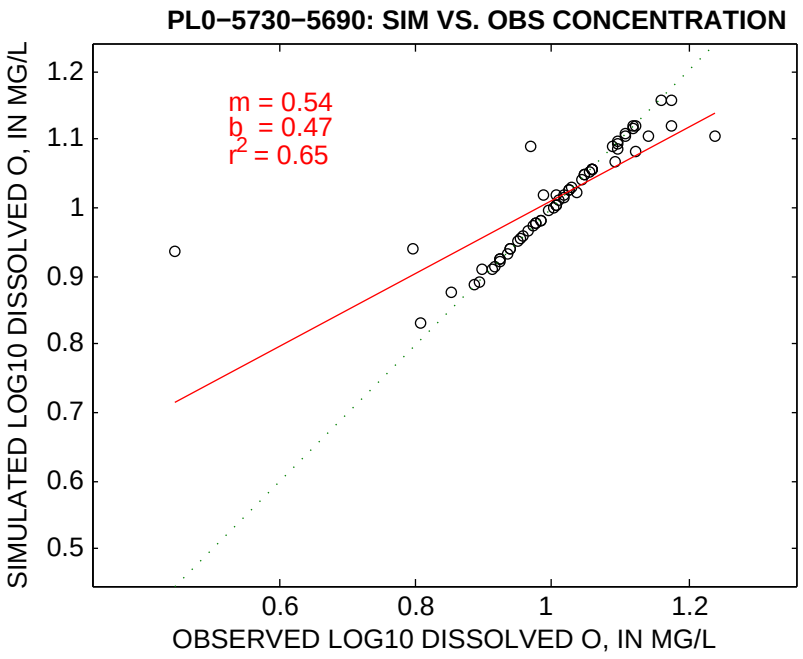
Drive	Directory	Observed
N/A	model	OBS20161101

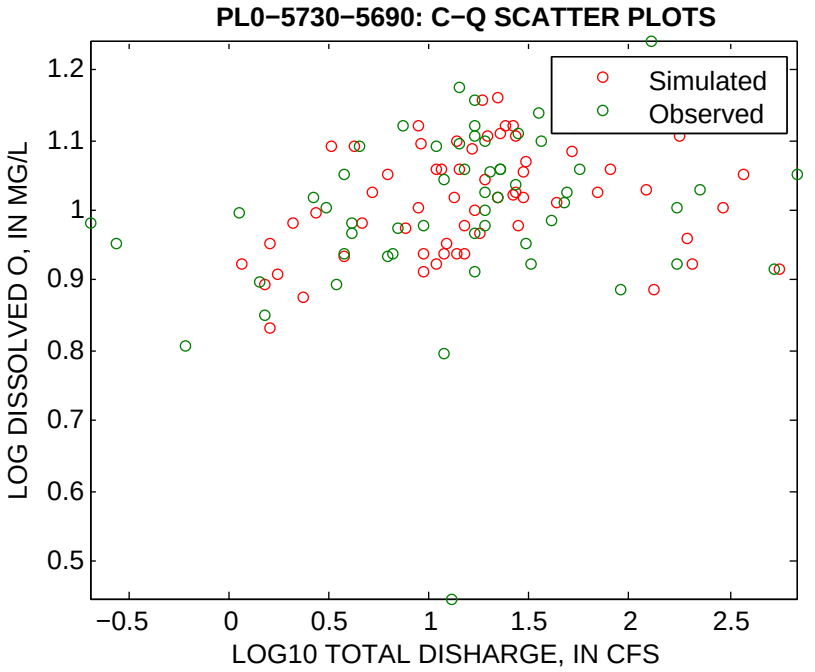
STATISTICS

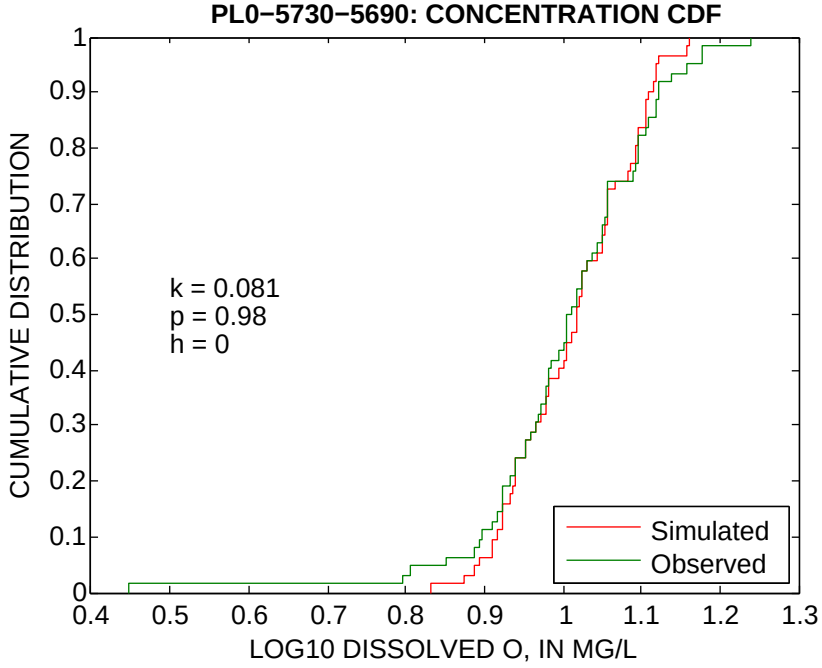
	n	62	62
		observe	simulate
min		2.8	7.0597
		0.447158	0.848786
mean		10.4376	10.2434
		1.00531	1.00558
media		10.175	10.1825
		1.00752	1.00785
max		17.33	13.636
		1.2388	1.13469
varian		5.8245	2.40404
		0.013314	0.00429034
JB		0.123787	0.205381
		0.001	0.40515
		ra	log
%		-1.86049	0.0273753
err.va		3.20343	0.00865727
rel.std.err		0.549992	0.650236
mod.eff		0.450008	0.349764

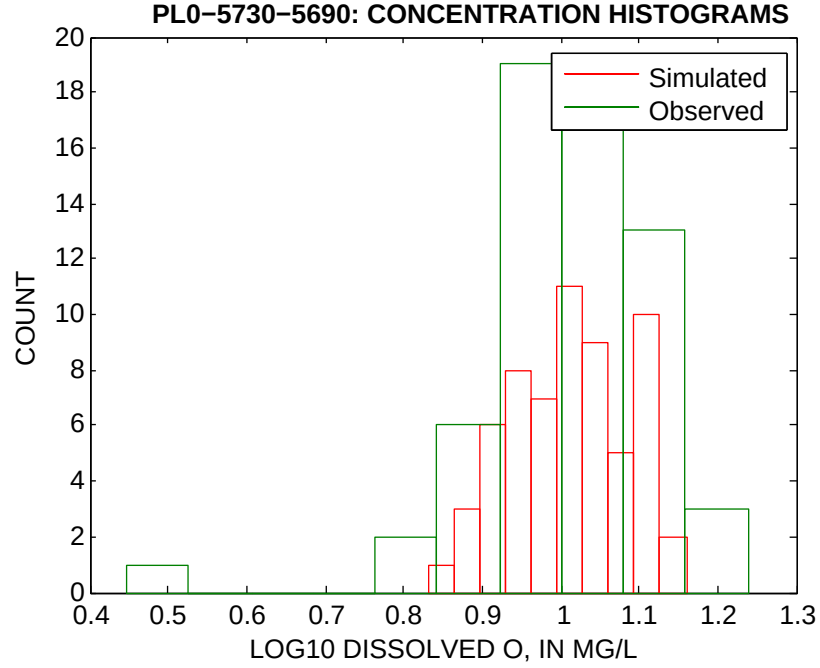
VERSION 2.1

ALL DATA
LOG10

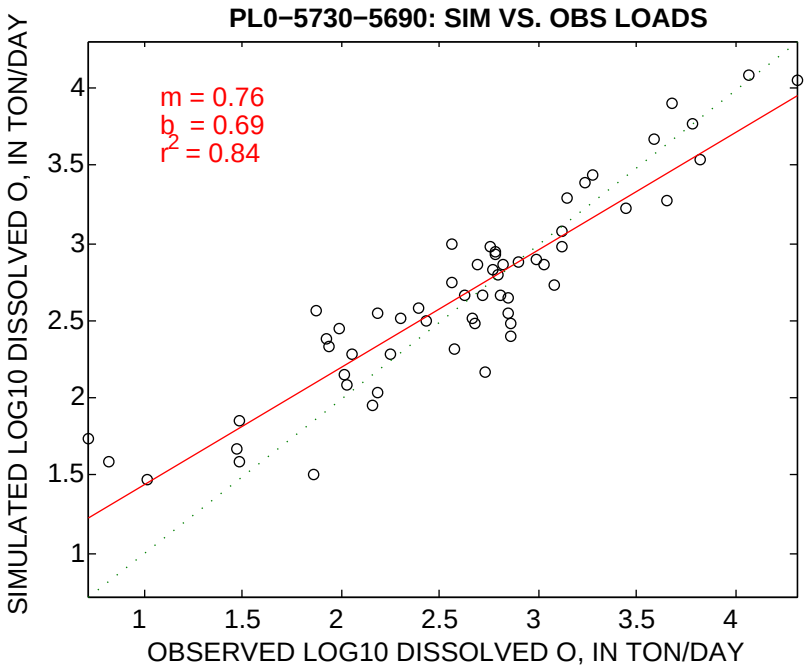


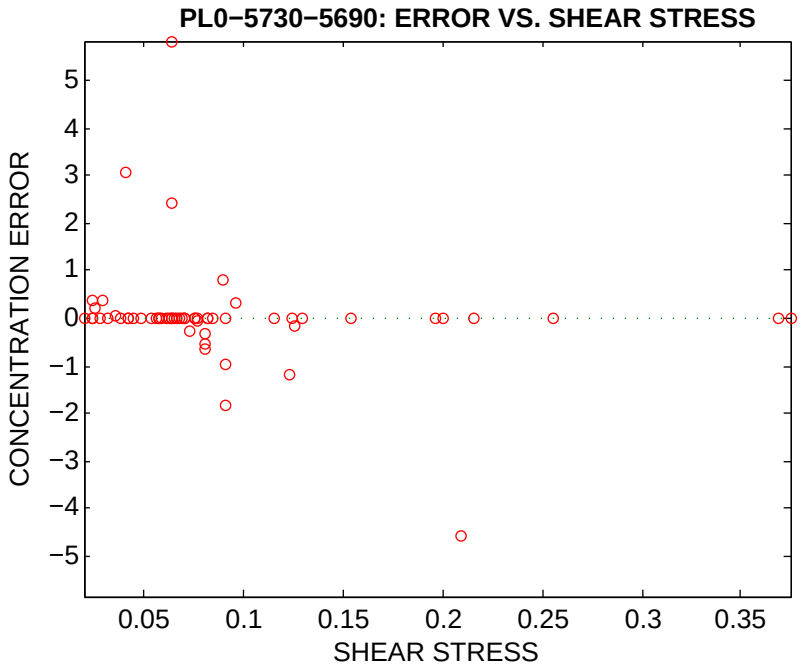


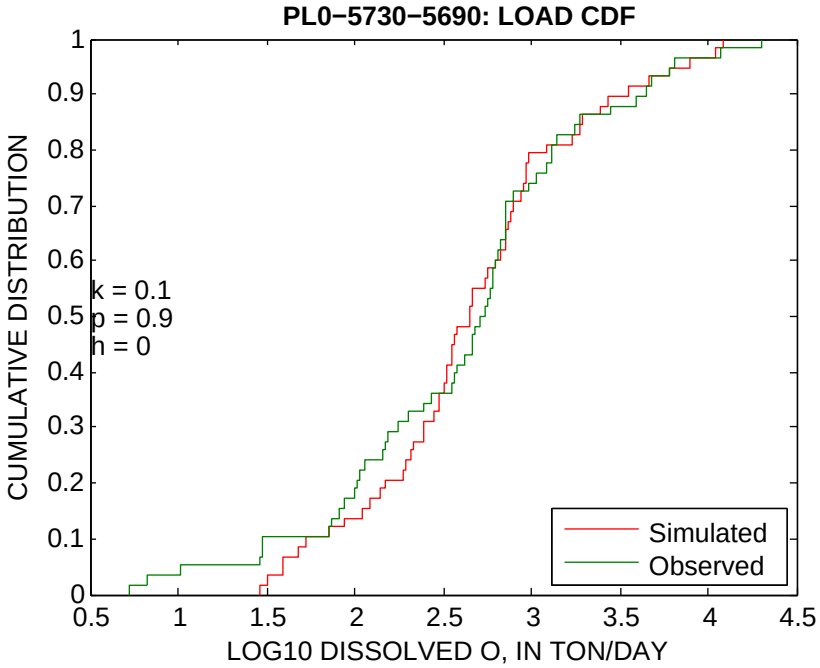


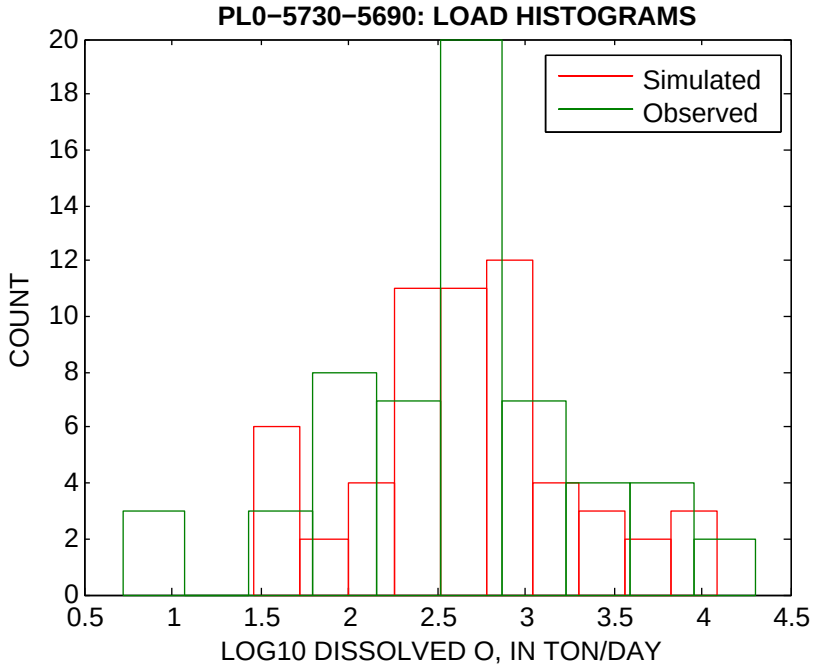


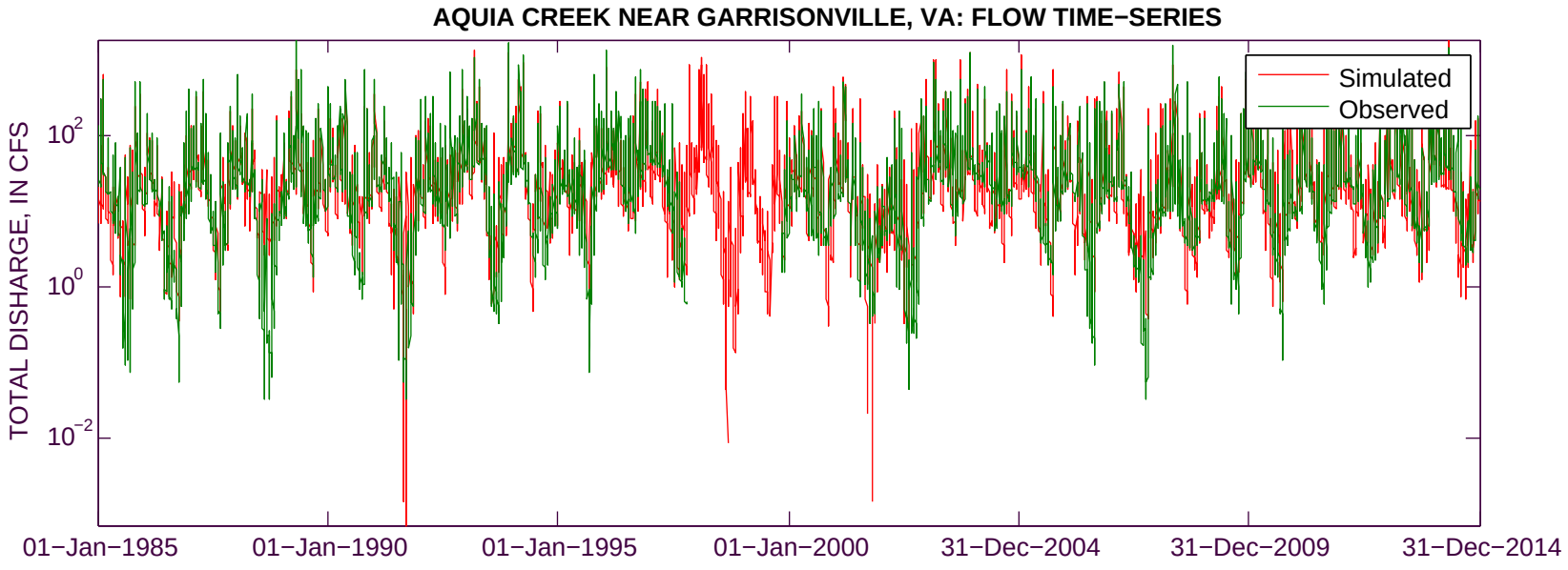
LOAD DATA
LOG10

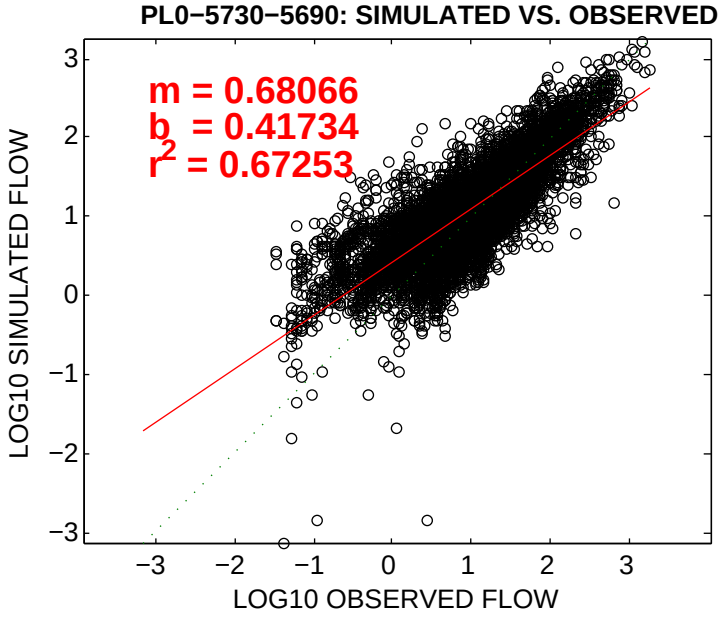


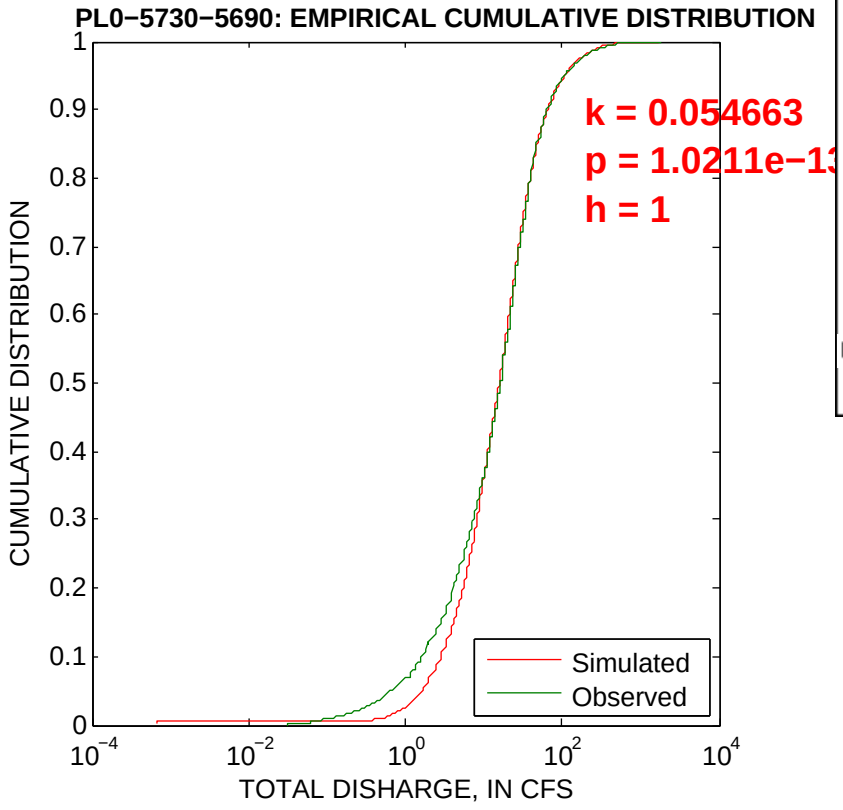












DATA SELECTION

scenario	file
P620171001WQ	FLOW.calib

plot: FLOW - total discharge

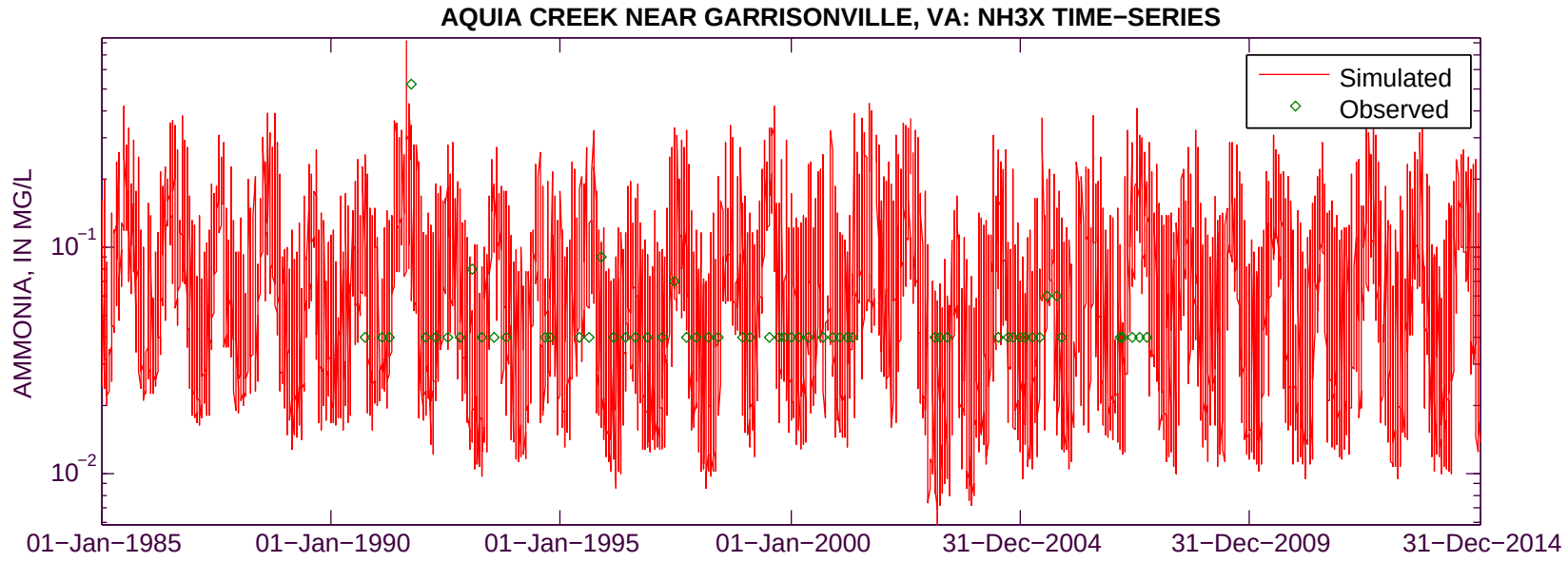
Dates: 1/1/1985 – 12/31/201

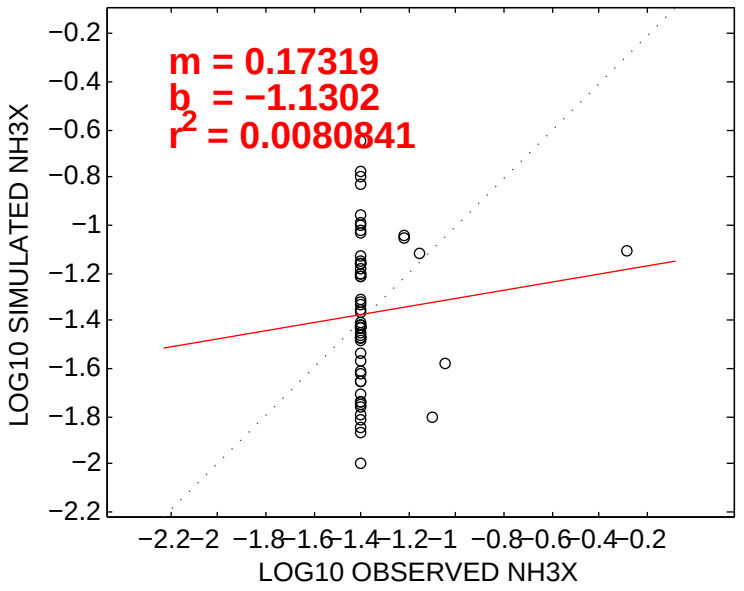
Drive	Directory	Observed
N/A	model	OBS20161101

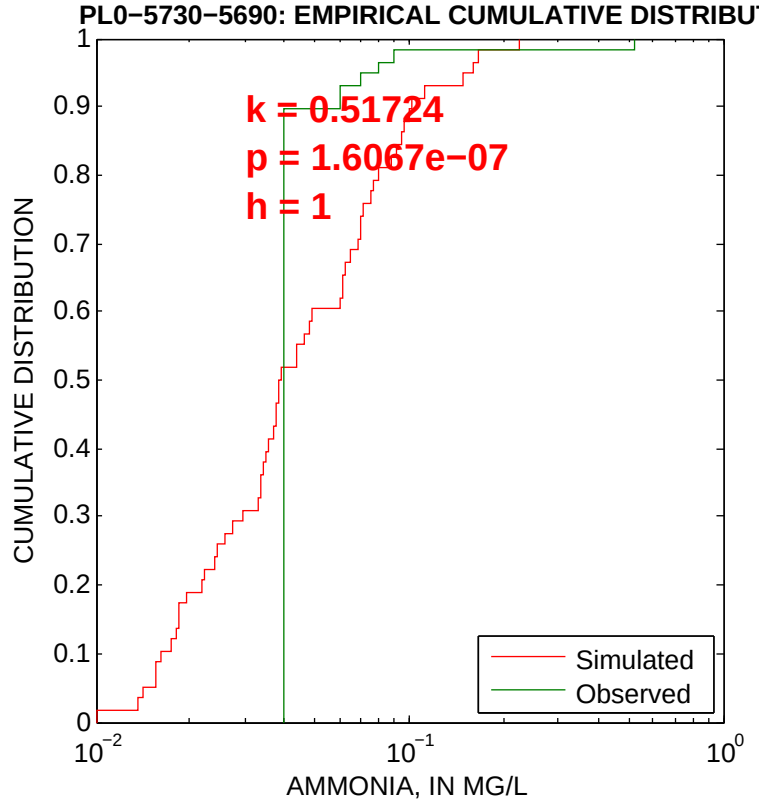
STATISTICS

	observe	simulate
n	10208	10170
min	0.0326543	0
	-1.48606	-3.15415
mean	32.8517	32.2091
	1.1093	1.1724
media	16.0327	15.883
	1.20501	1.20356
max	1810.03	1685.4
	3.25769	3.2267
varian	5201.79	4206.66
	0.434907	0.299601
JB	0.001	0.001
	0.001	0.001
	ra	log
%	-1.95606	5.68834
err.va	1732.49	0.146442
rel.std.err	0.333058	0.336722
mod.eff	0.666942	0.663278

VERSION 2.1







DATA SELECTION

scenario	file
P620171001WQ	NH3X.calib

plot: NH3X - ammonia

Dates: 1/1/1985 – 12/31/201

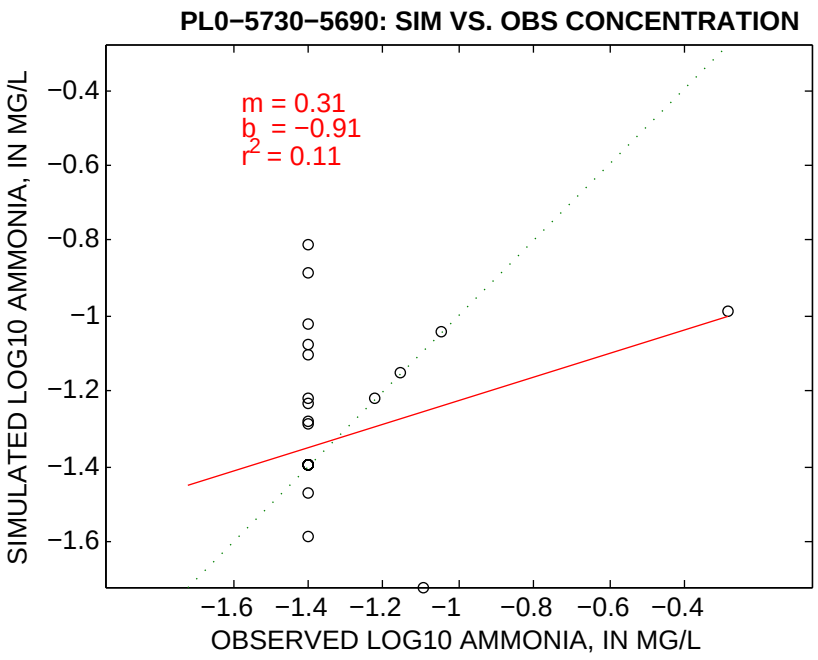
Drive	Directory	Observed
N/A	model	OBS20161101

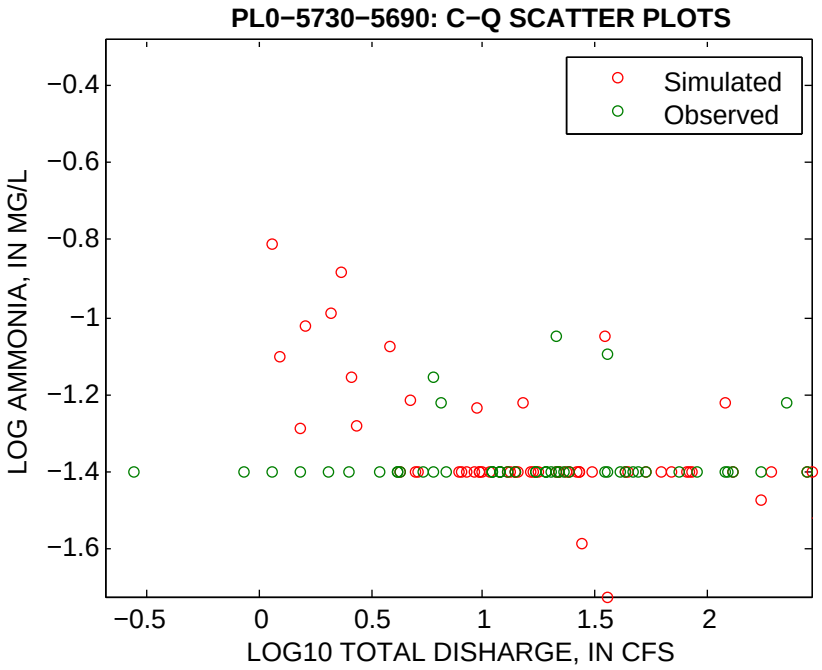
STATISTICS

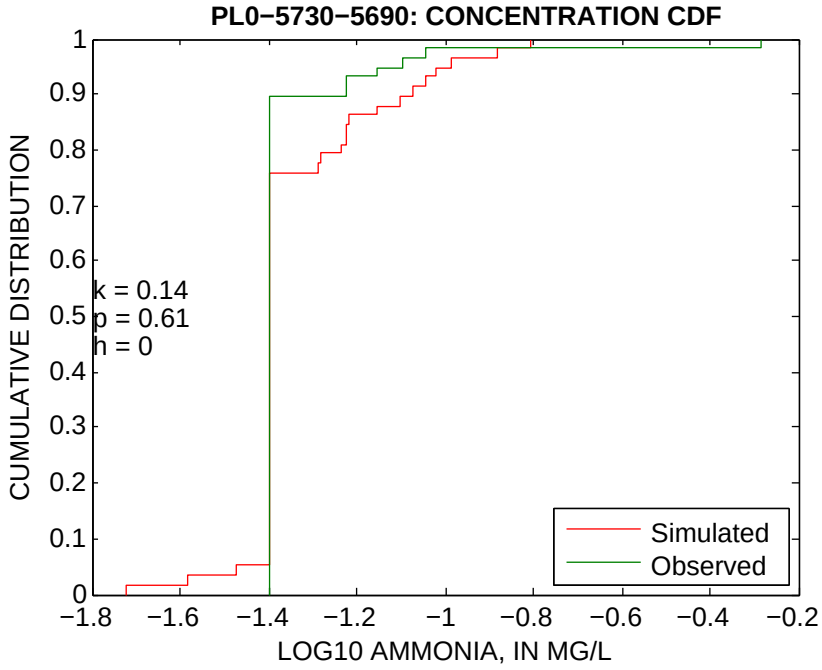
	n	58	58
		observe	simulate
min		0.04	0.010048
		-1.39794	-1.99792
mean		0.0510345	0.0554558
		-1.35721	-1.36531
media		0.04	0.0386845
		-1.39794	-1.41248
max		0.52	0.22391
		-0.283997	-0.649927
varian		0.00401996	0.00182564
		0.0259717	0.0963672
JB		0.001	0.001
		0.001	0.450088
		ra	log
%		8.66348	0.596649
err.va		0.00550436	0.113409
rel.std.err		1.36926	4.36666
mod.eff		-0.369257	-3.36666

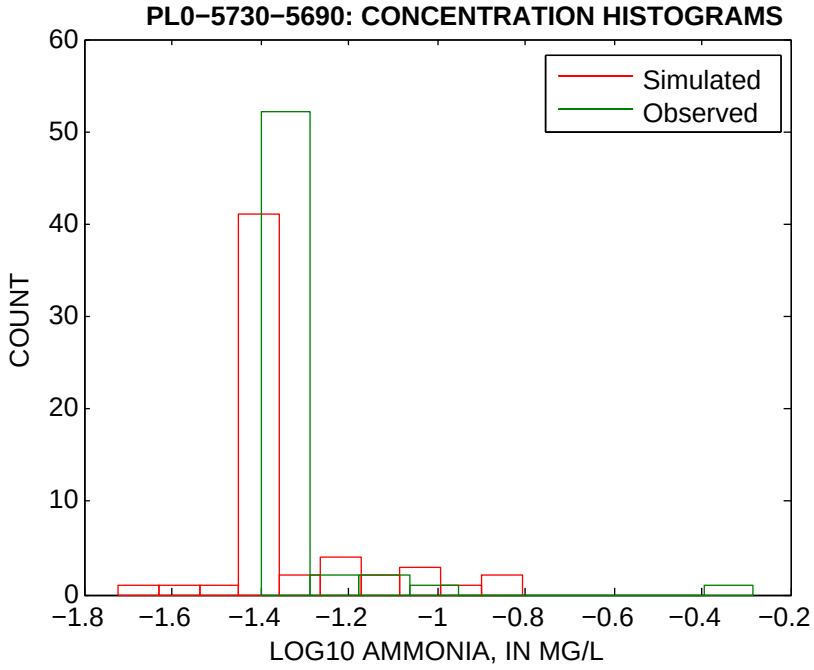
VERSION 2.1

ALL DATA
LOG10

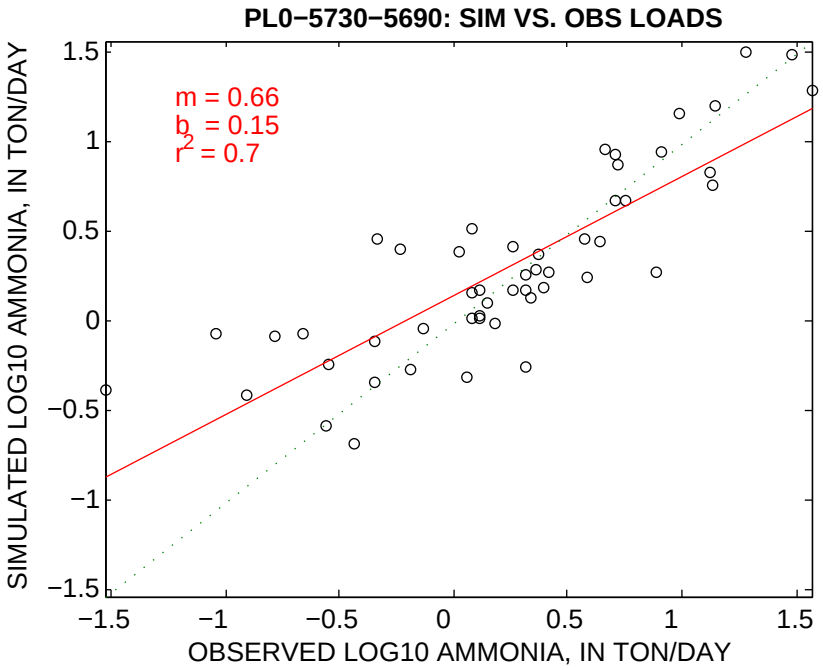




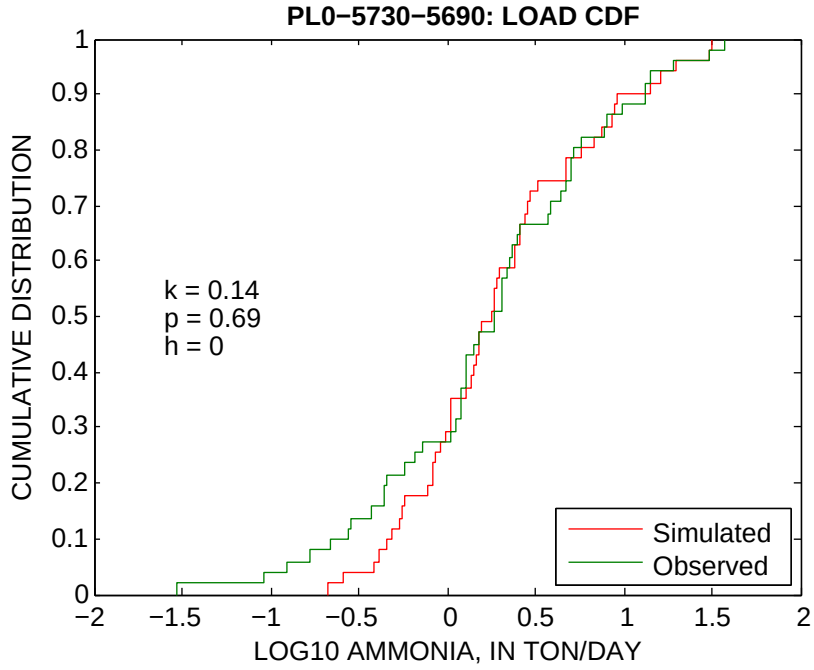


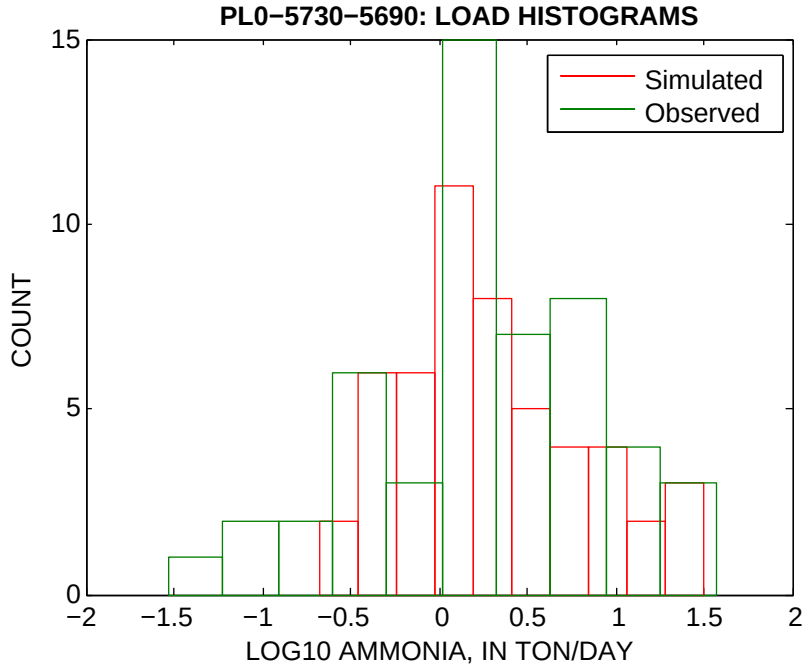


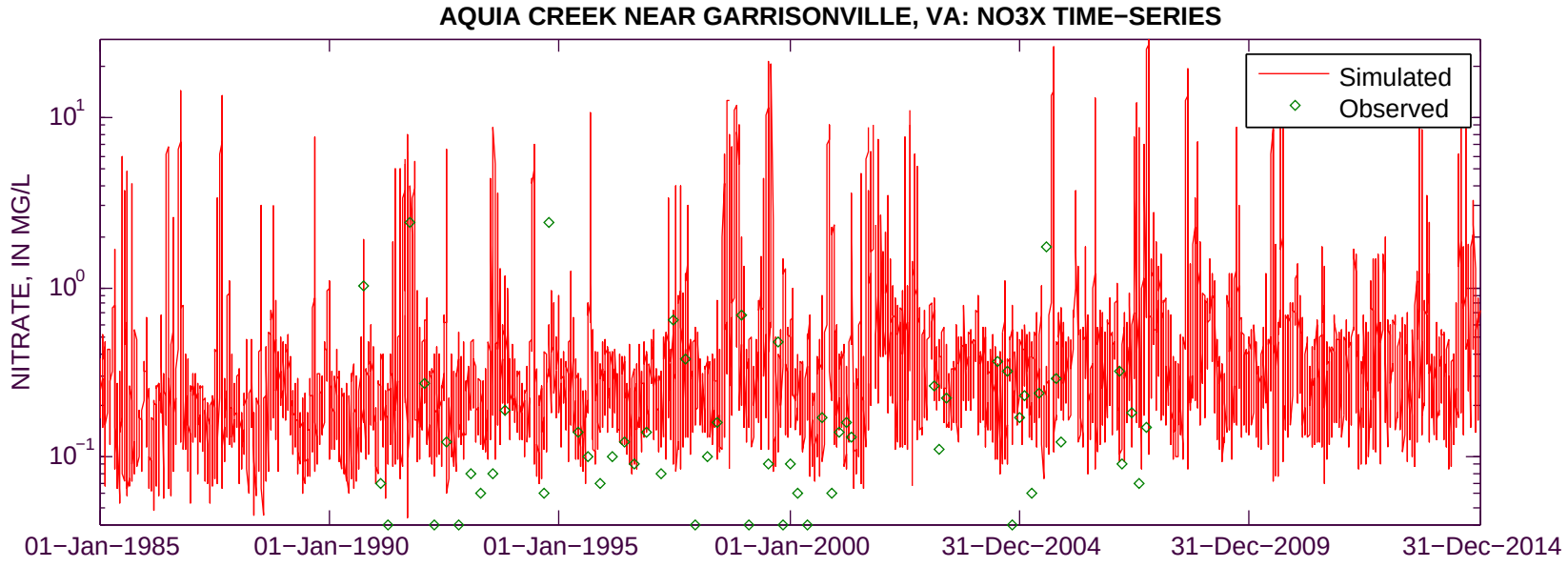
LOAD DATA
LOG10

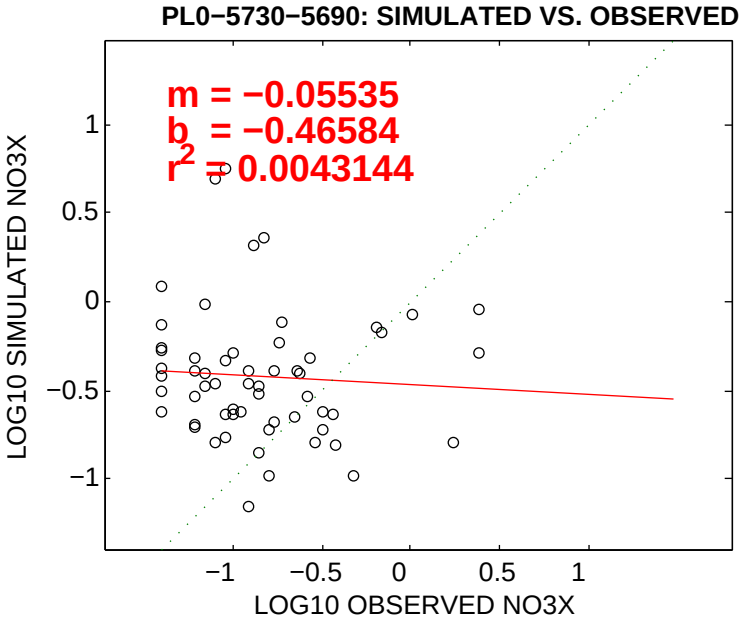


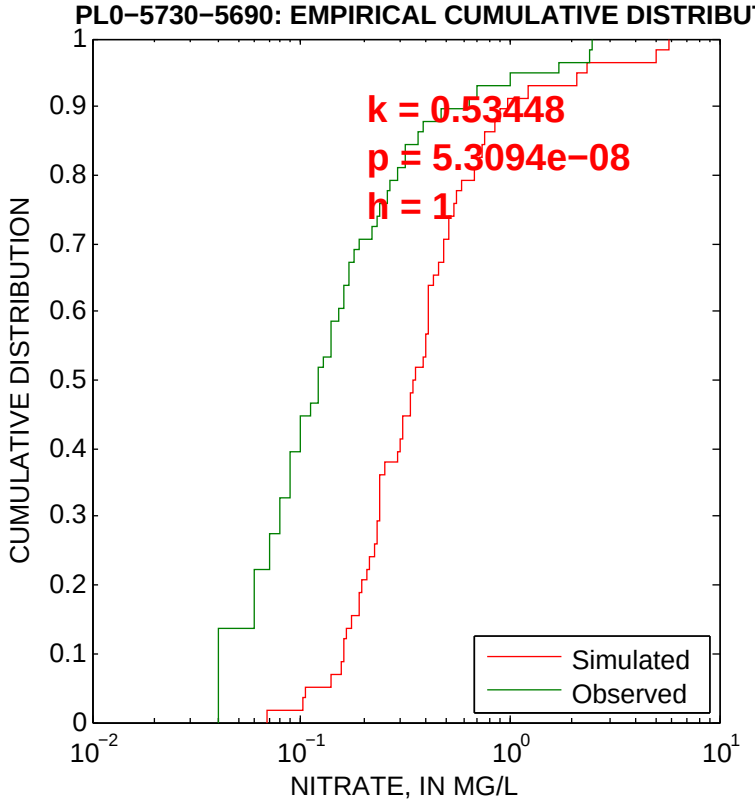












DATA SELECTION

scenario	file
P620171001WQ	NO3X.calib

plot: NO3X - nitrate

Dates 1/1/1985 12/31/201

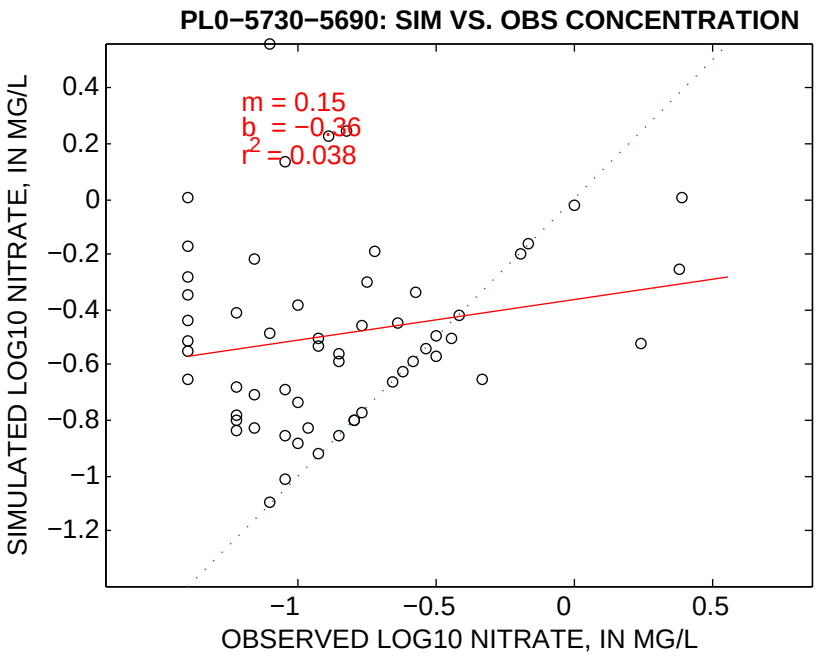
Drive	Directory	Observed
N/A	model	OBS20161101

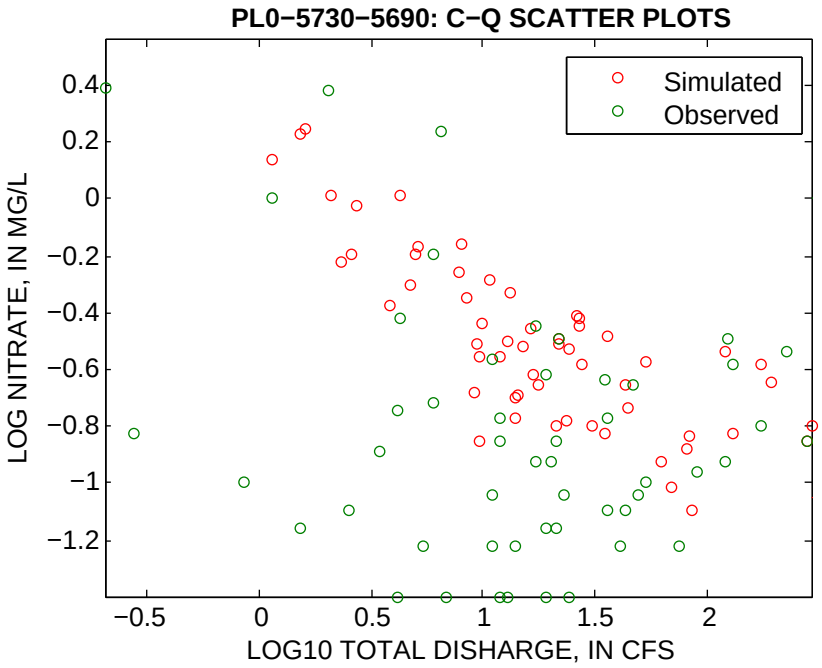
STATISTICS

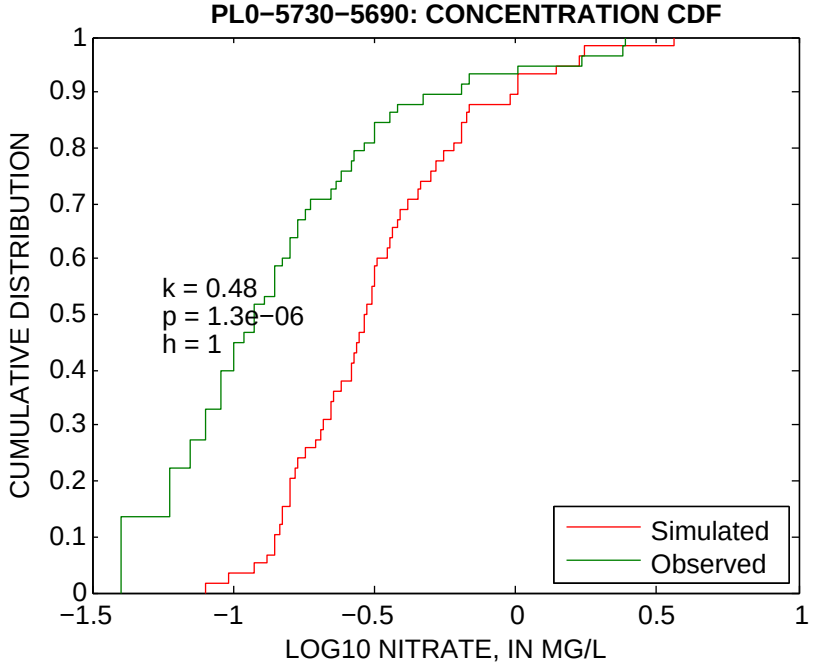
	n	58	58
		observe	simulate
min		0.04	0.069443
		-1.39794	-1.15837
mean		0.27931	0.620693
		-0.844037	-0.419121
media		0.12	0.347925
		-0.920819	-0.458533
max		2.45	5.6925
		0.389166	0.755303
varian		0.239119	0.98166
		0.192436	0.136645
JB		0.001	0.001
		0.011875	0.004443
		ra	log
%		122.223	-50.3433
err.va		1.37241	0.534105
rel.std.err		5.73947	2.77549
mod.eff		-4.73947	-1.77549

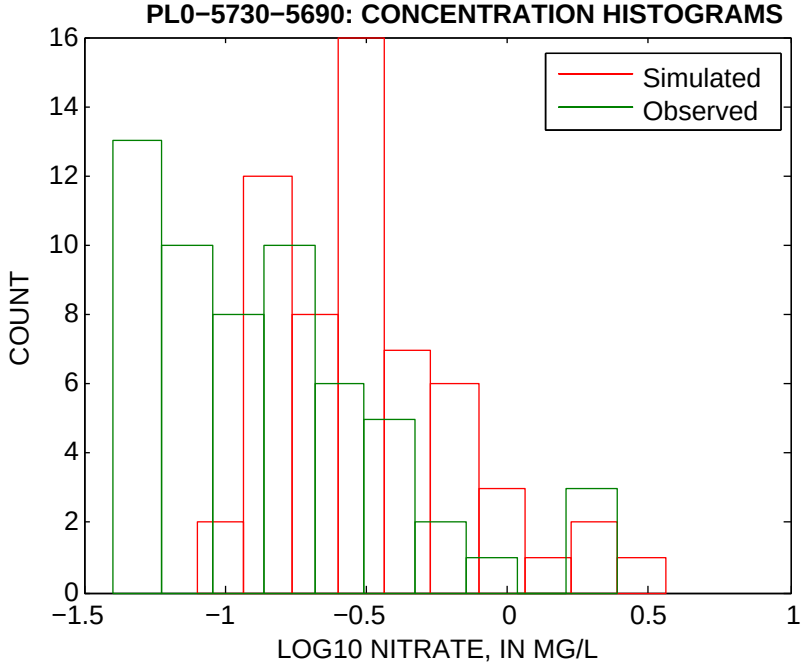
VERSION

ALL DATA
LOG10

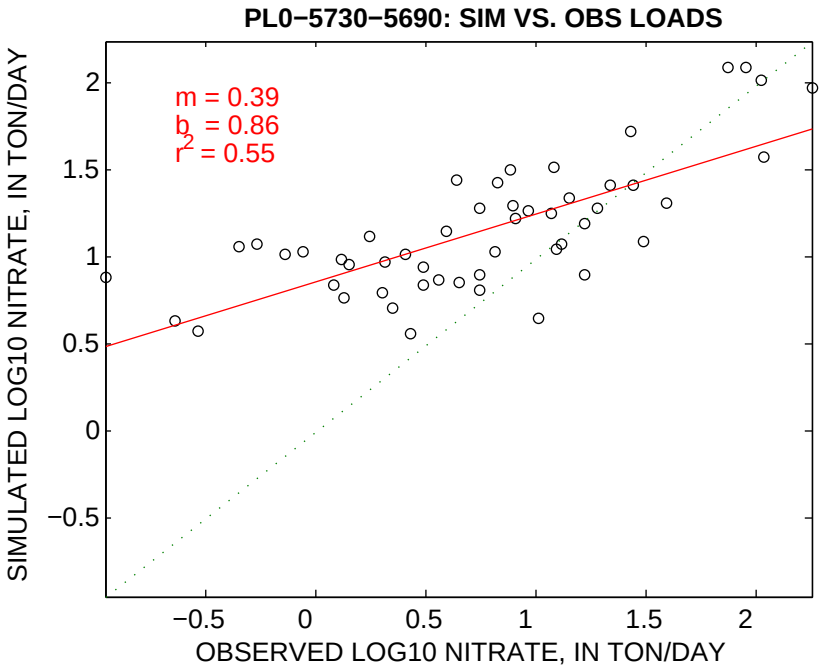


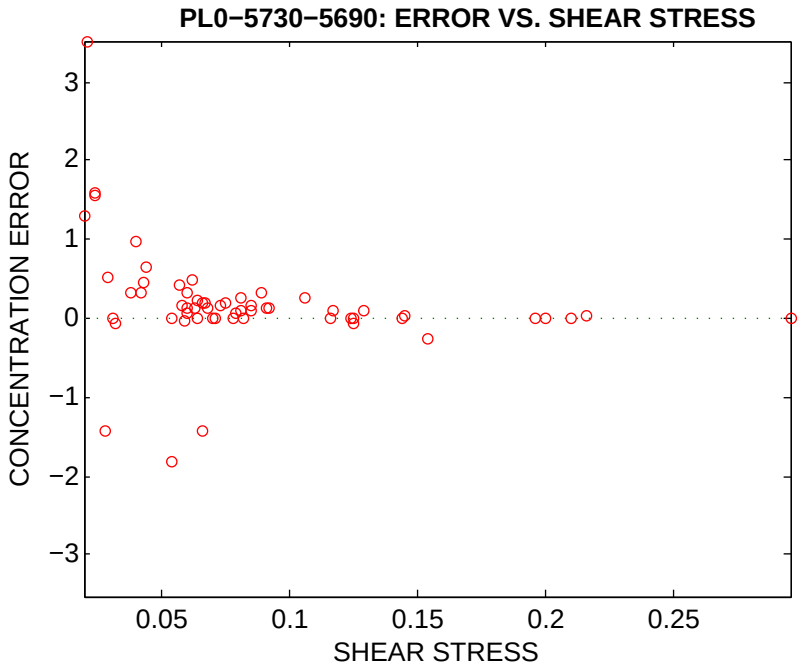


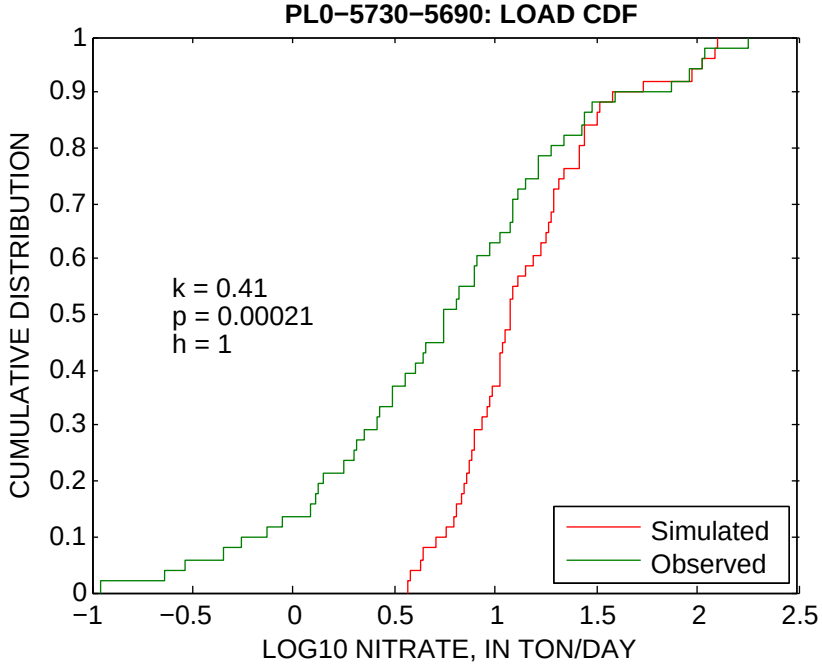


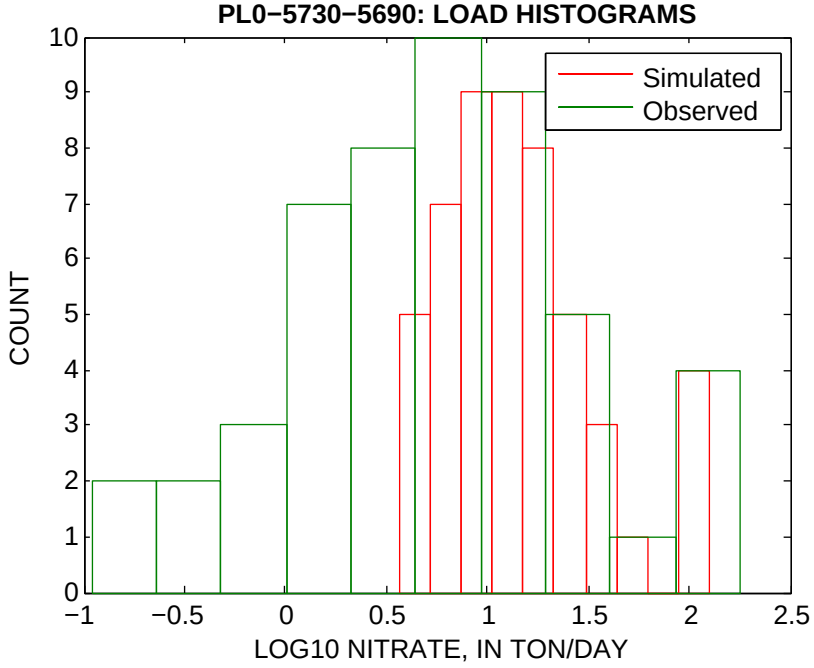


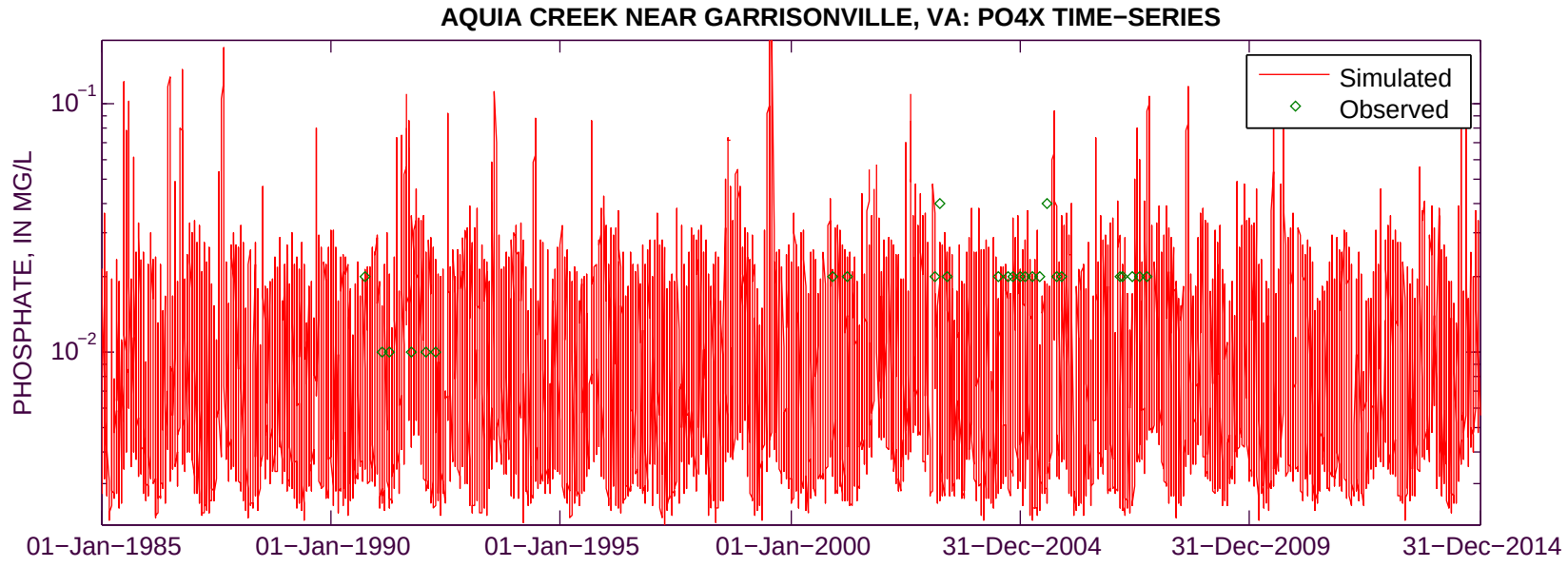
LOAD DATA
LOG10

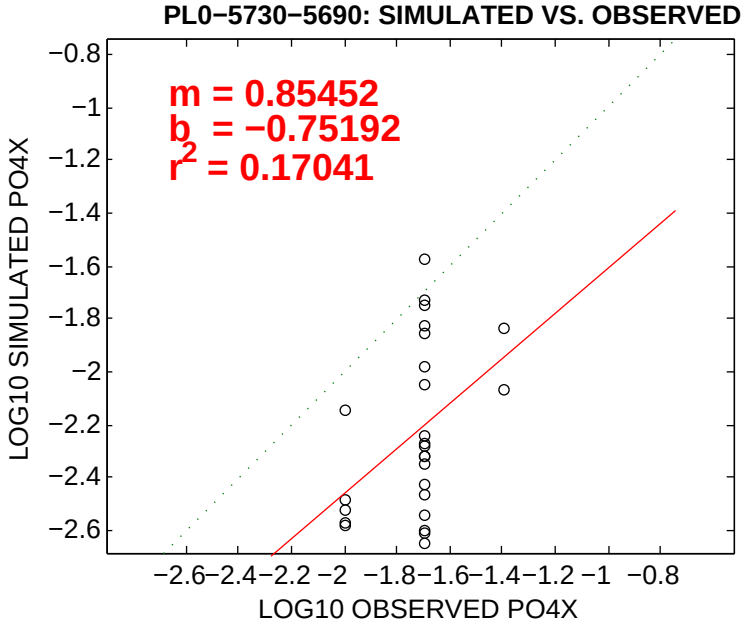


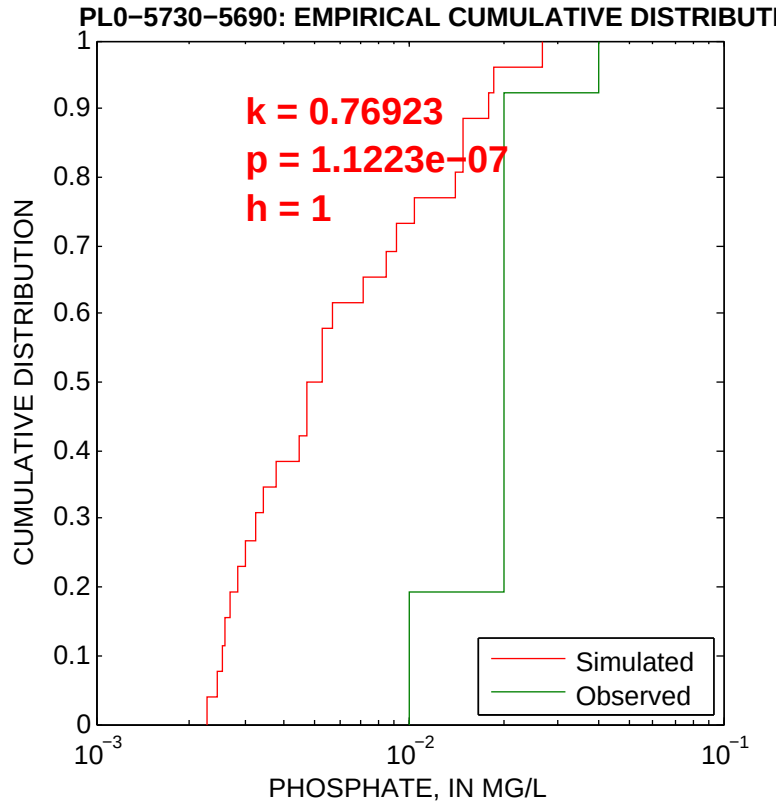












DATA SELECTION

scenario	file
P620171001WQ	PO4X.calib

plot: PO4X - phosphate

Dates: 1/1/1985 – 12/31/201

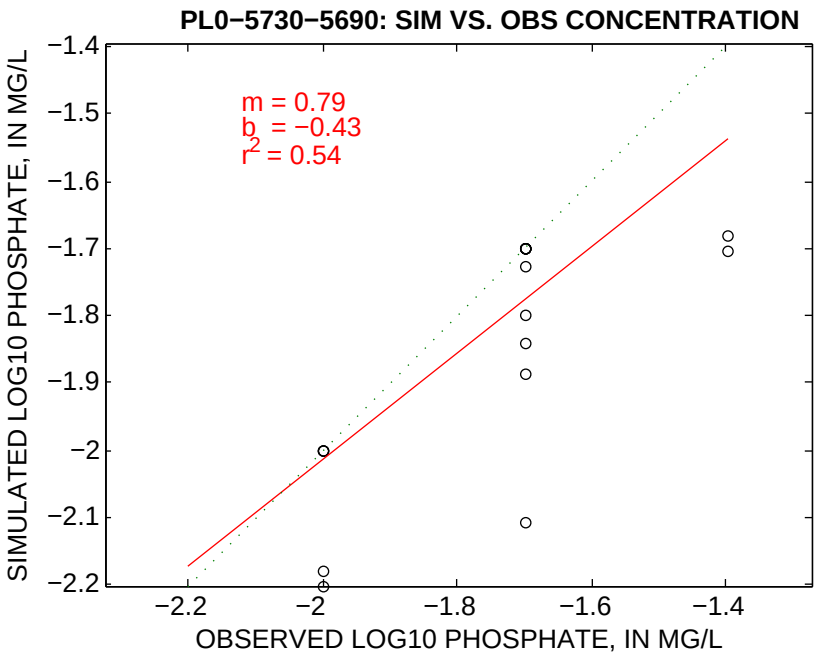
Drive	Directory	Observed
N/A	model	OBS20161101

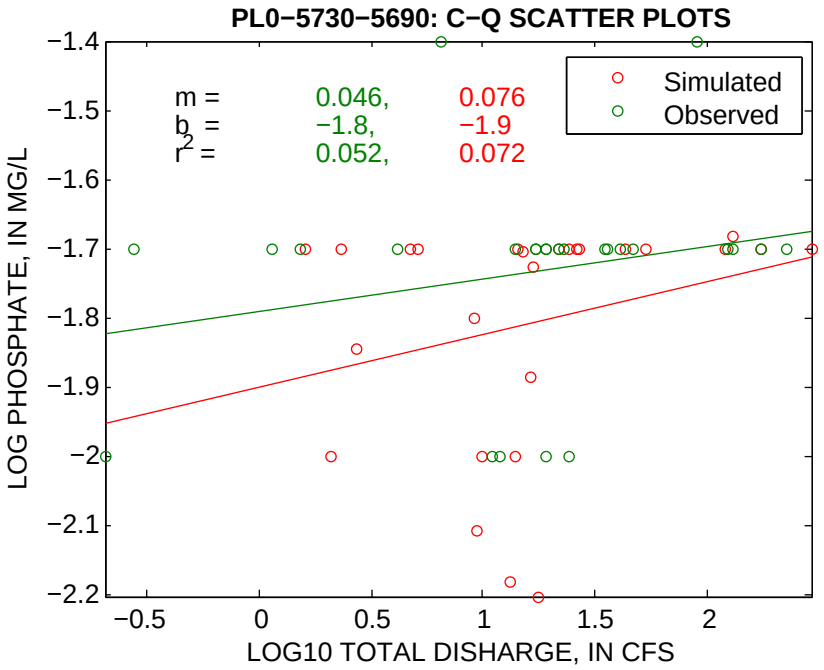
STATISTICS

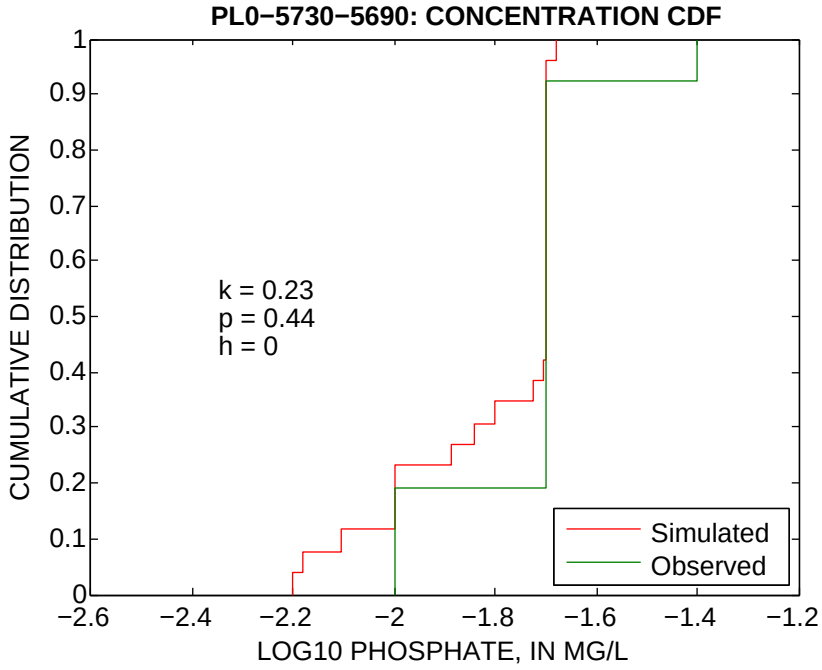
	n	26	26
		observe	simulate
min		0.01	0.0022582
		-2	-2.64624
mean		0.0196154	0.00772158
		-1.7337	-2.23341
media		0.02	0.00498745
		-1.69897	-2.30265
max		0.04	0.02651
		-1.39794	-1.57659
varian		5.18462e-0	4.02672e-0
		0.0241186	0.103346
JB		0.003453	0.012252
		0.5	0.138519
		ra	log
%		-60.6351	28.8229
err.va		0.00021086	0.345937
rel.std.err		4.06714	14.3432
mod.eff		-3.06714	-13.3432

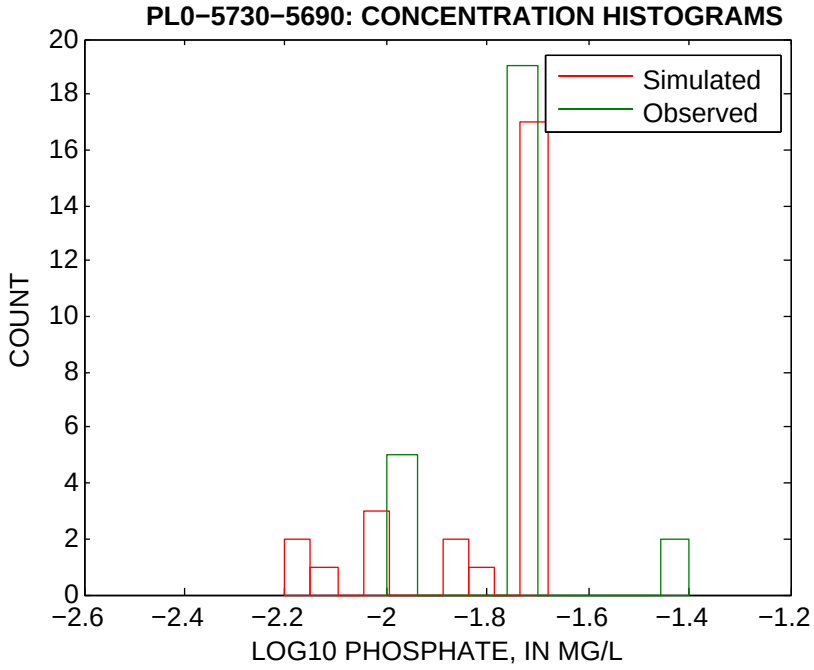
VERSION

ALL DATA
LOG10

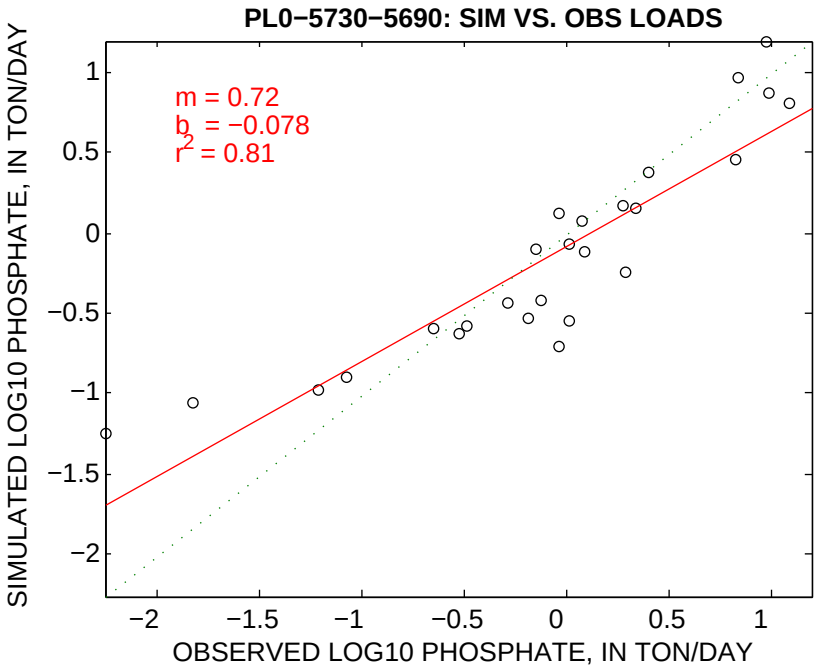


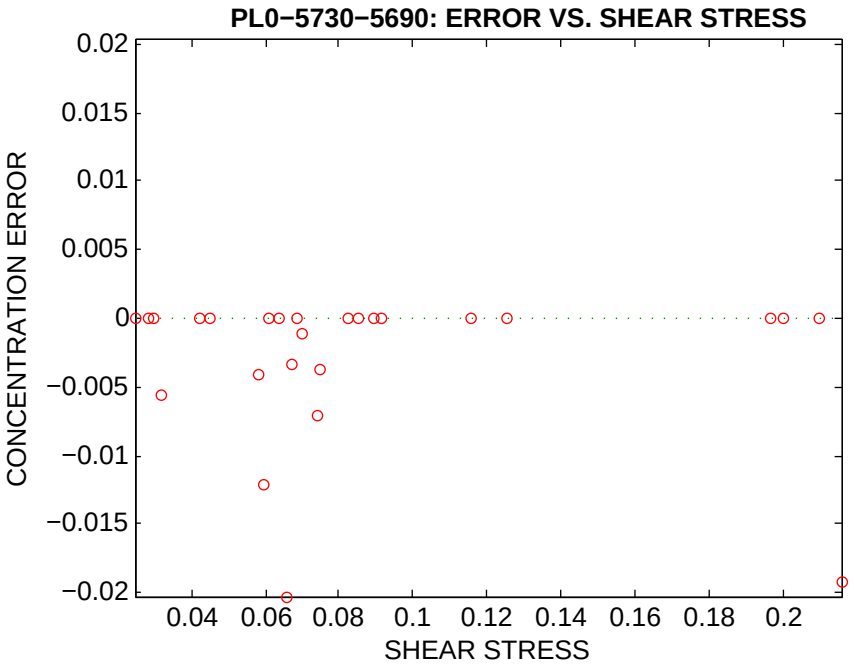


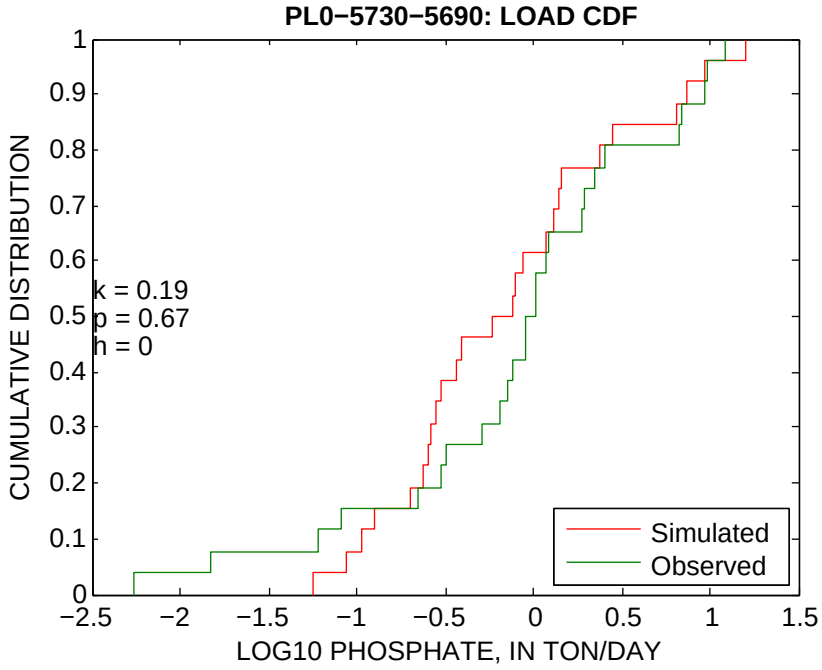


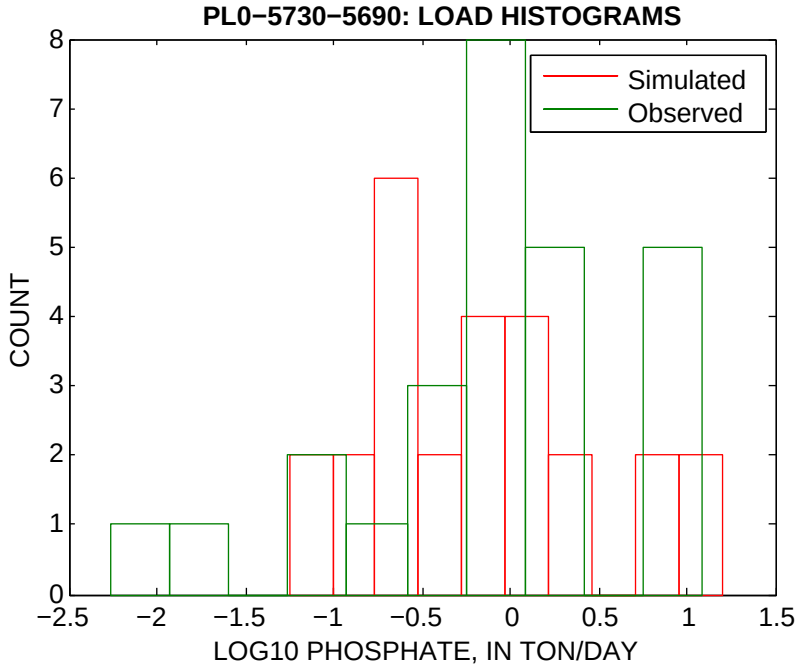


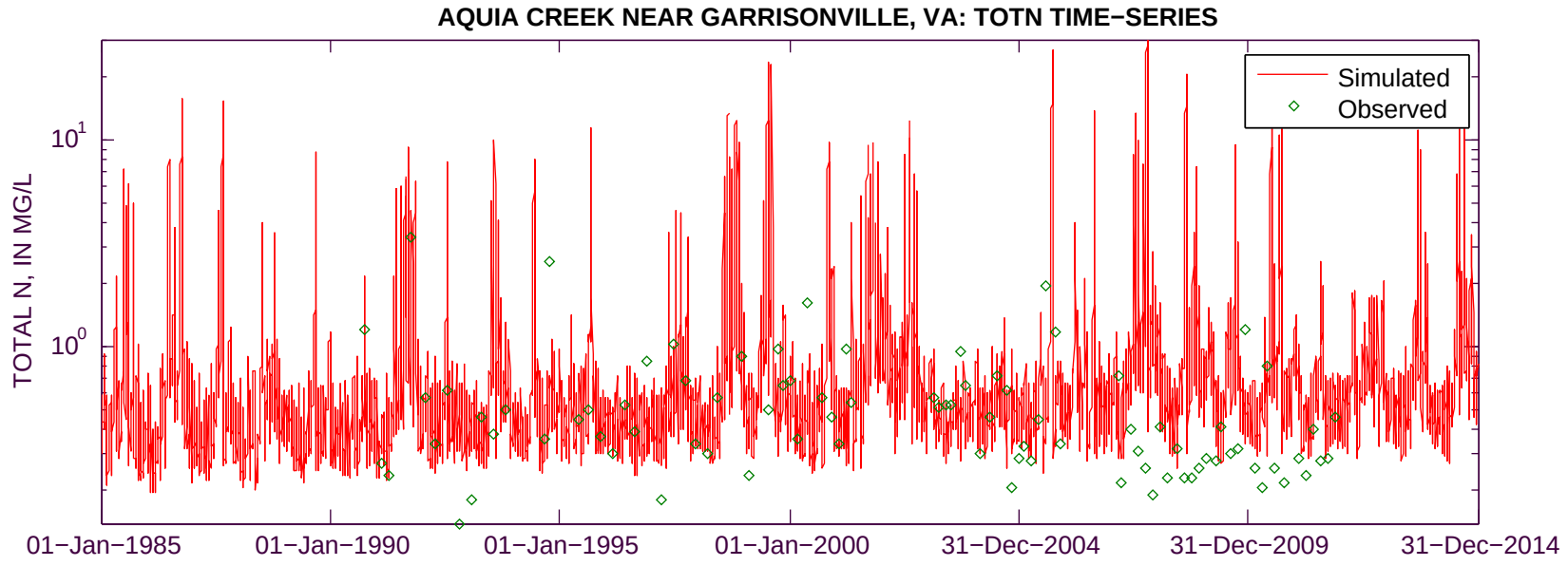
LOAD DATA
LOG10

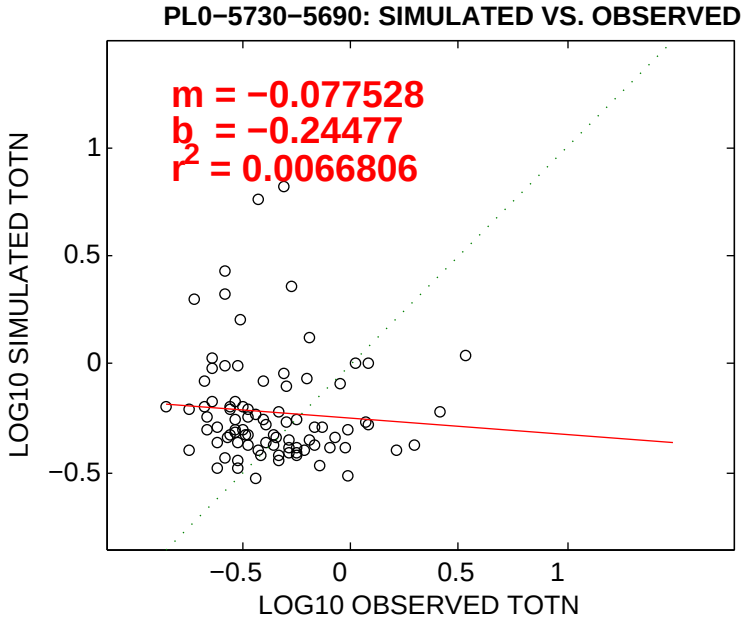


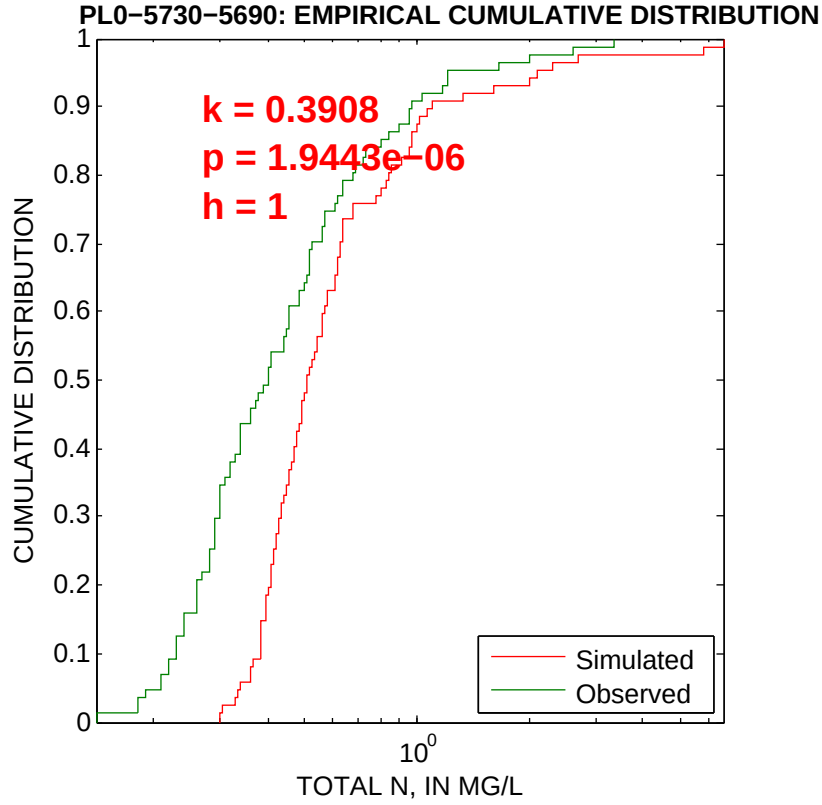












DATA SELECTION

scenario	file
P620171001WQ	TOTN.calib

plot: TOTN - total nitrogen

Dates: 1/1/1985 – 12/31/201

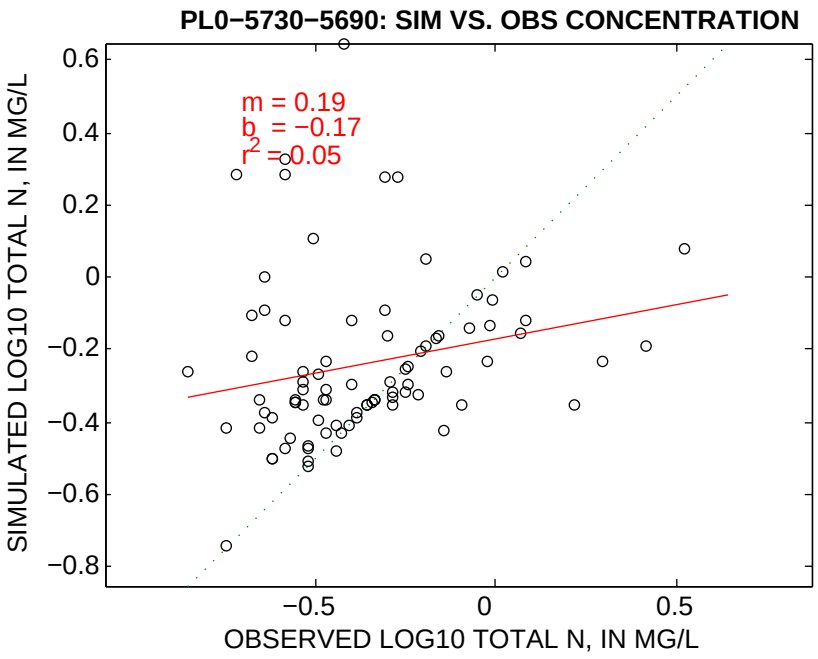
Drive	Directory	Observed
N/A	model	OBS20161101

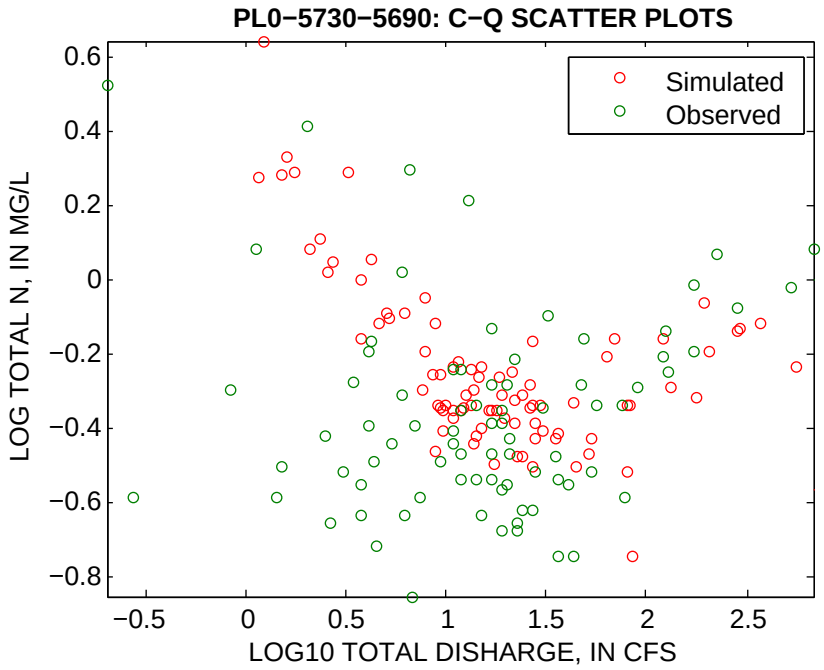
STATISTICS

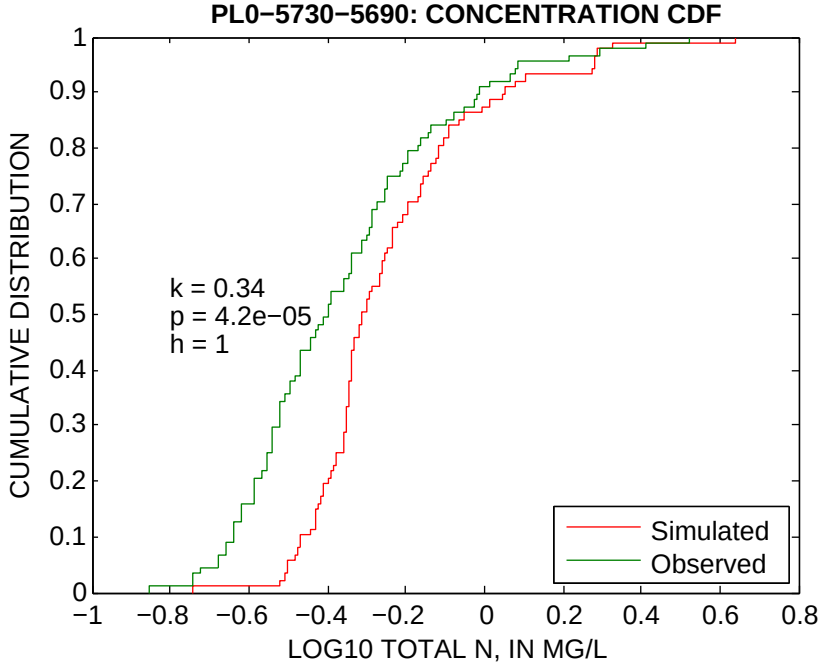
	n	observe	simulate
		87	87
min		0.14	0.2986
		-0.853872	-0.52491
mean		0.546667	0.781153
		-0.359688	-0.216885
media		0.4	0.51009
		-0.39794	-0.292353
max		3.35	6.5061
		0.525045	0.813321
varian		0.245125	0.87599
		0.07025	0.0632036
JB		0.001	0.001
		0.005092	0.001
		ra	log
%		42.8938	-39.7018
err.va		1.21491	0.164976
rel.std.err		4.95629	2.34841
mod.eff		-3.95629	-1.34841

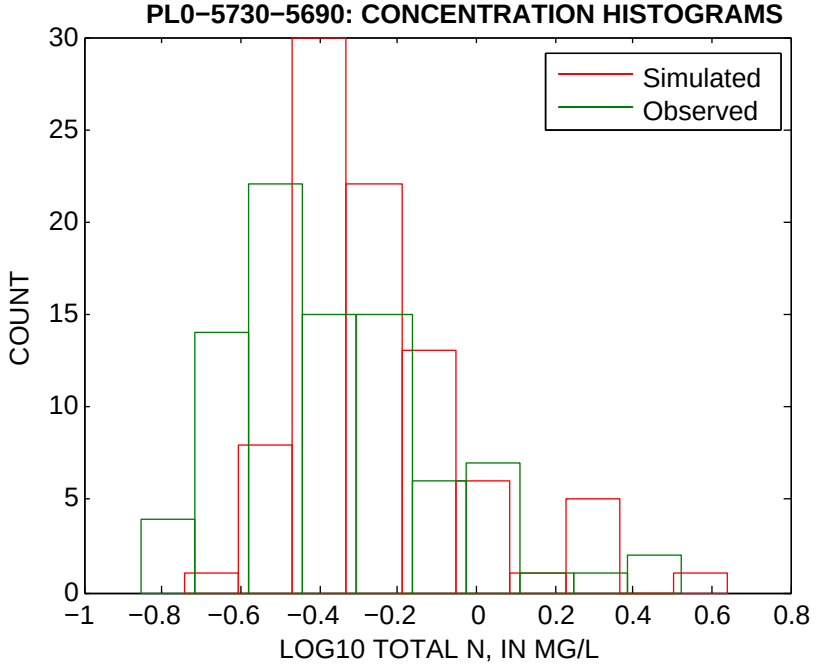
VERSION

ALL DATA
LOG10

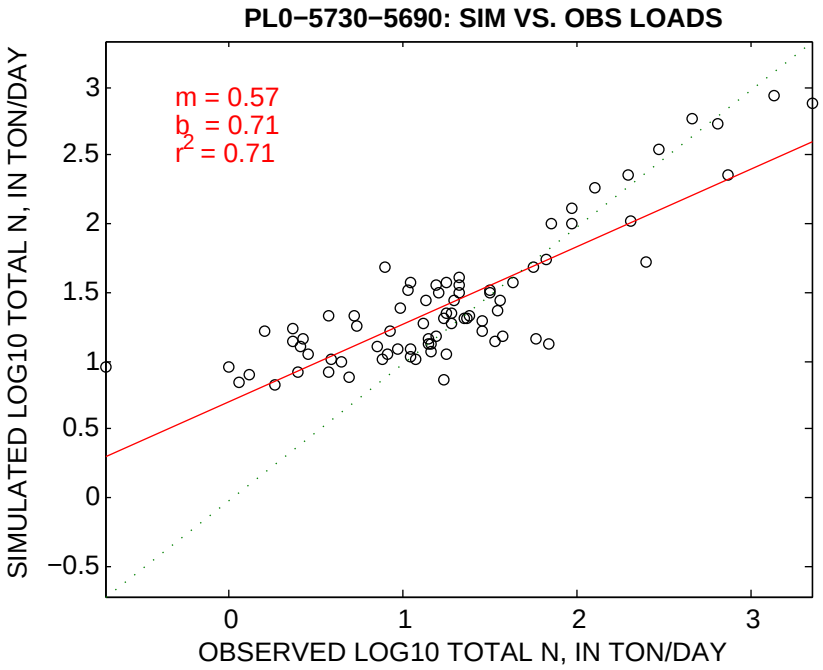


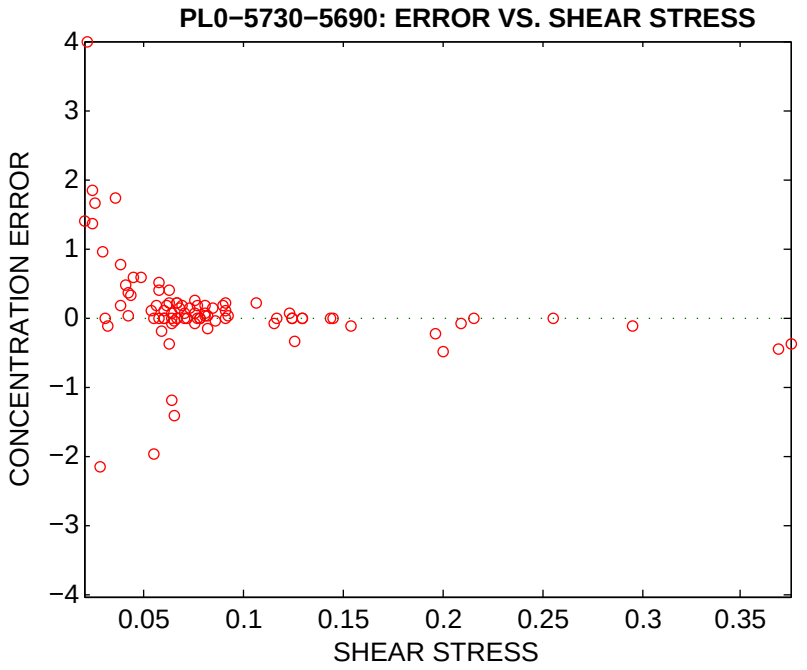


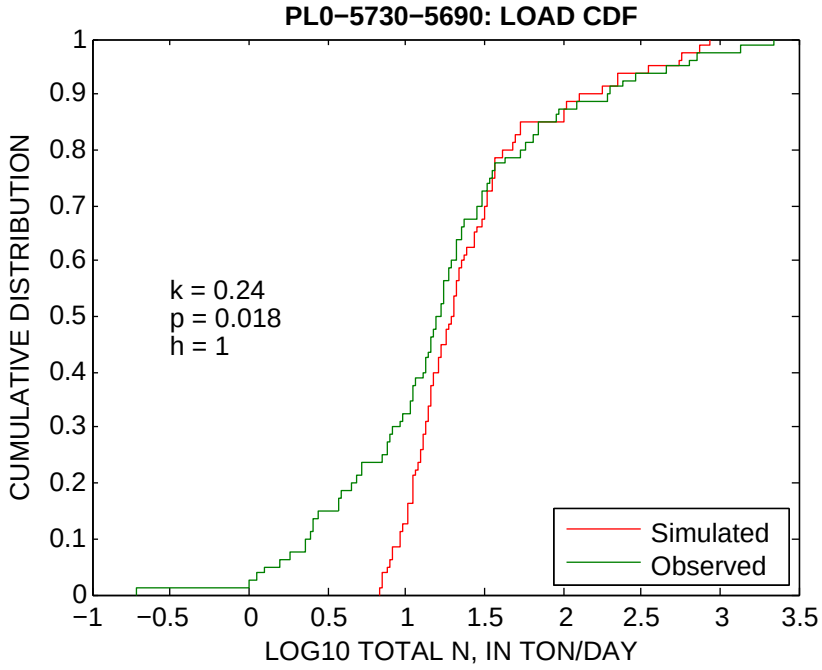


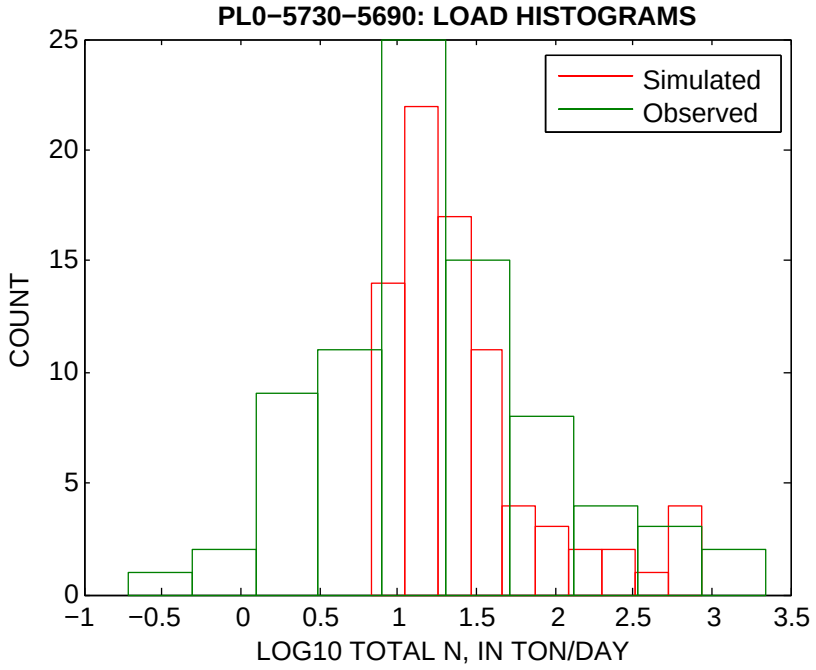


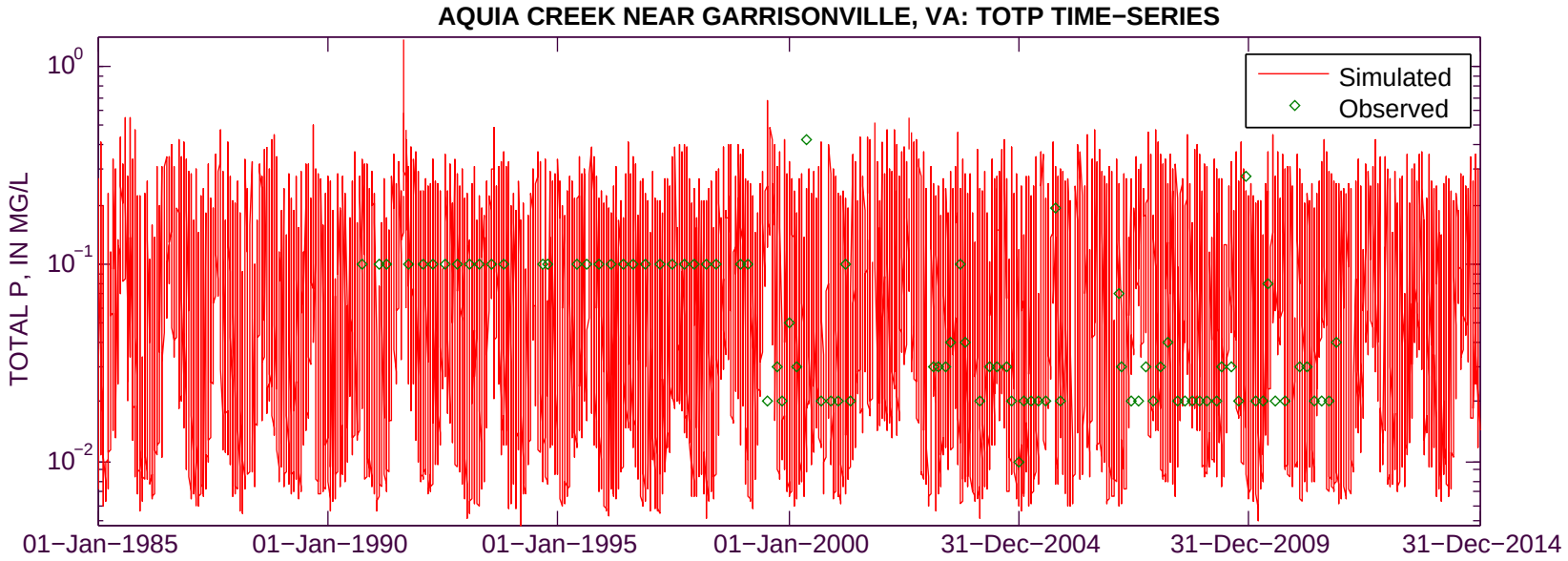
LOAD DATA
LOG10

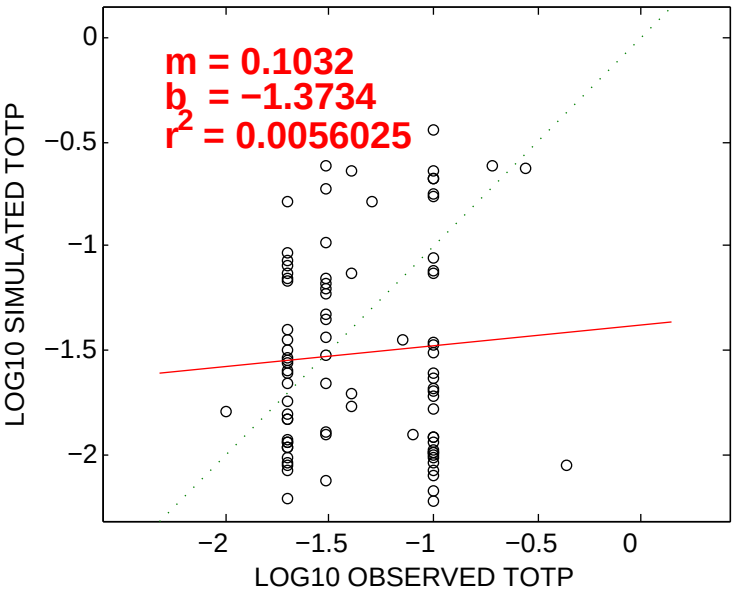


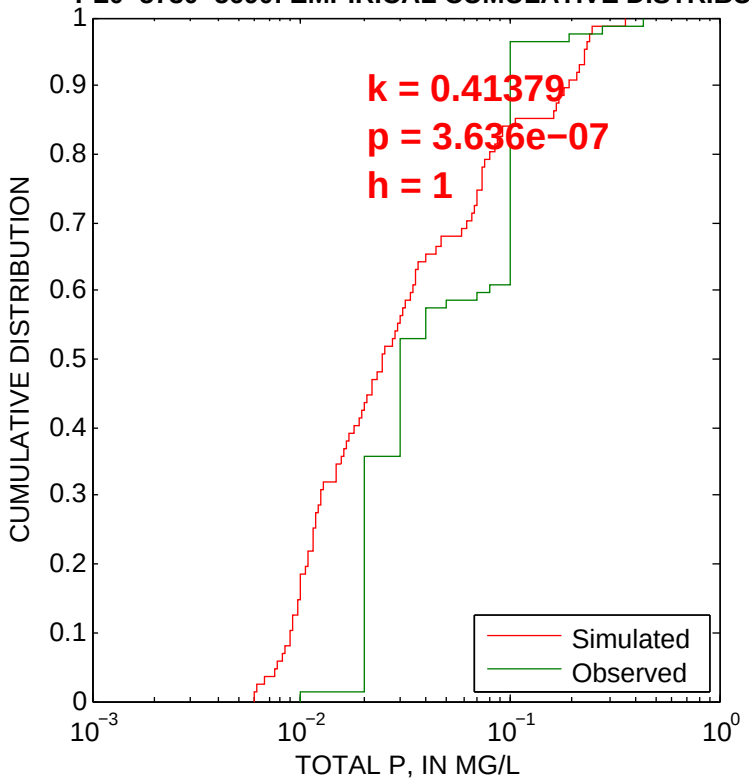












DATA SELECTION

scenario	file
P620171001WQ	TOTP.calib

plot: TOTP - total phosphorus

Dates: 1/1/1985 – 12/31/201

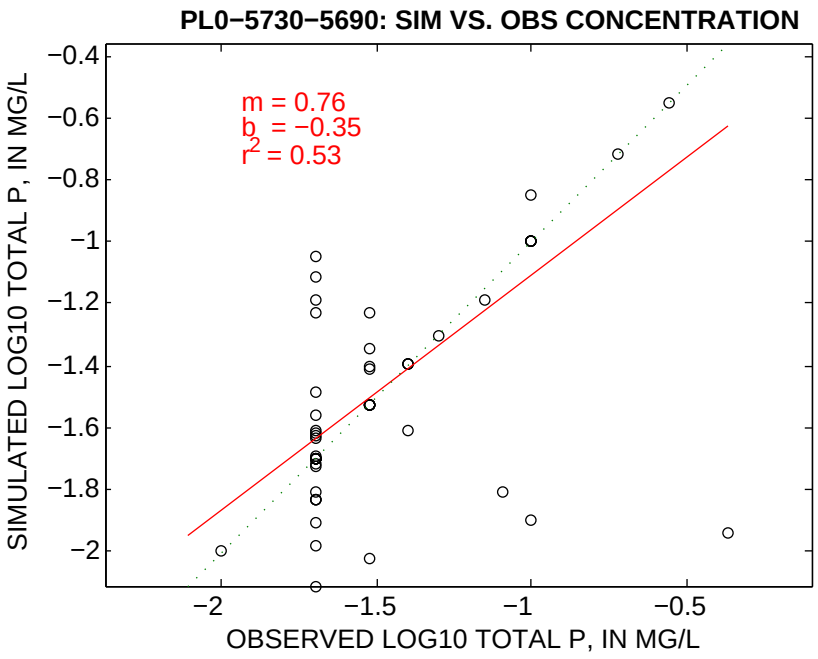
Drive	Directory	Observed
N/A	model	OBS20161101

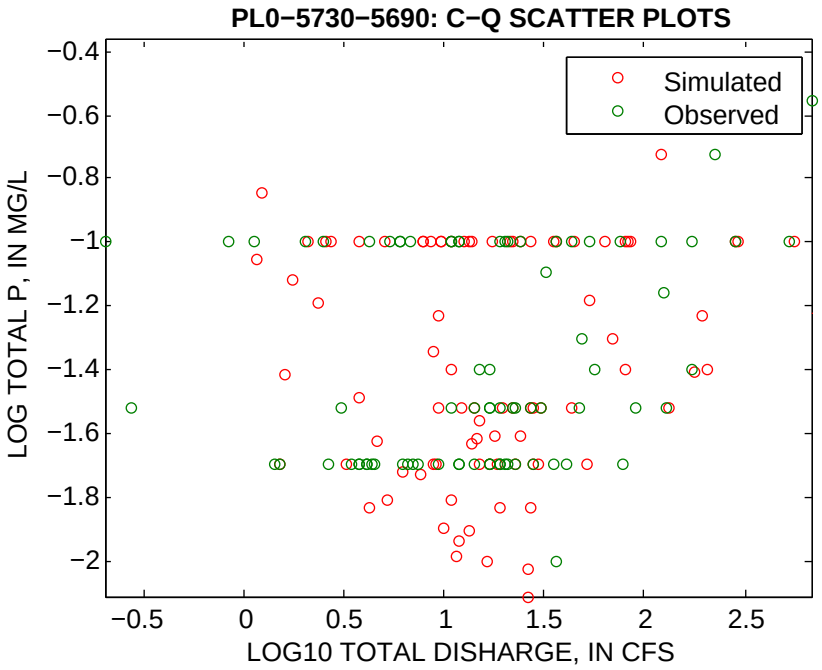
STATISTICS

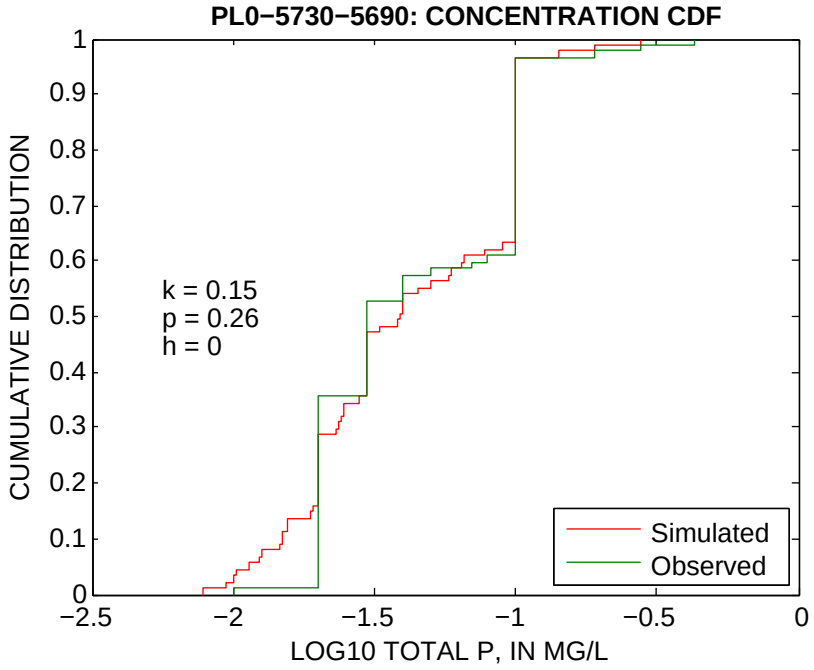
	n	87	87
		observe	simulate
min		0.01	0.0059238
		-2	-2.2274
mean		0.0622989	0.0583626
		-1.3517	-1.51285
media		0.03	0.02465
		-1.52288	-1.60818
max		0.43	0.35994
		-0.366532	-0.44377
varian		0.00369233	0.00548083
		0.121316	0.230607
JB		0.001	0.001
		0.048448	0.034328
		ra	log
%		-6.31829	11.9226
err.va		0.00753153	0.353158
rel.std.err		2.03978	2.91106
mod.eff		-1.03978	-1.91106

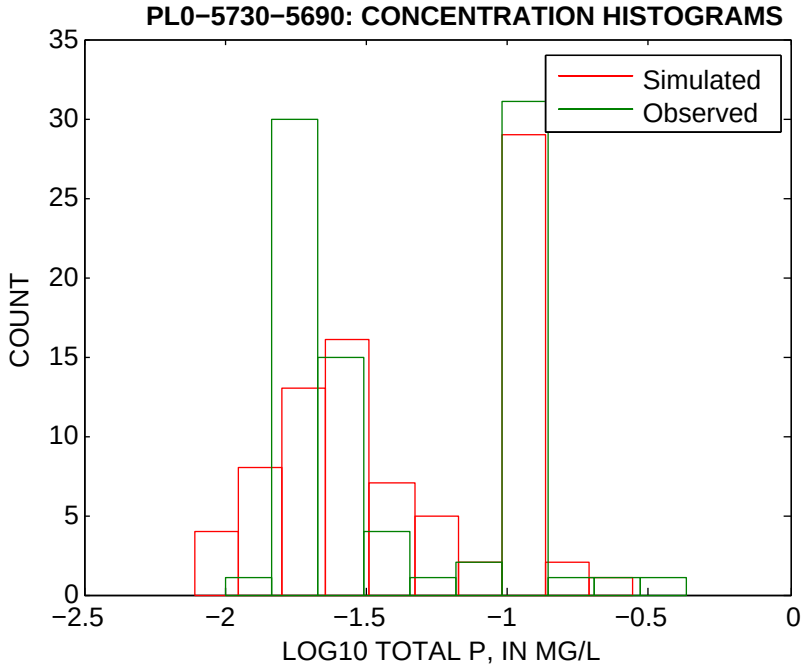
VERSION 2.1

ALL DATA
LOG10

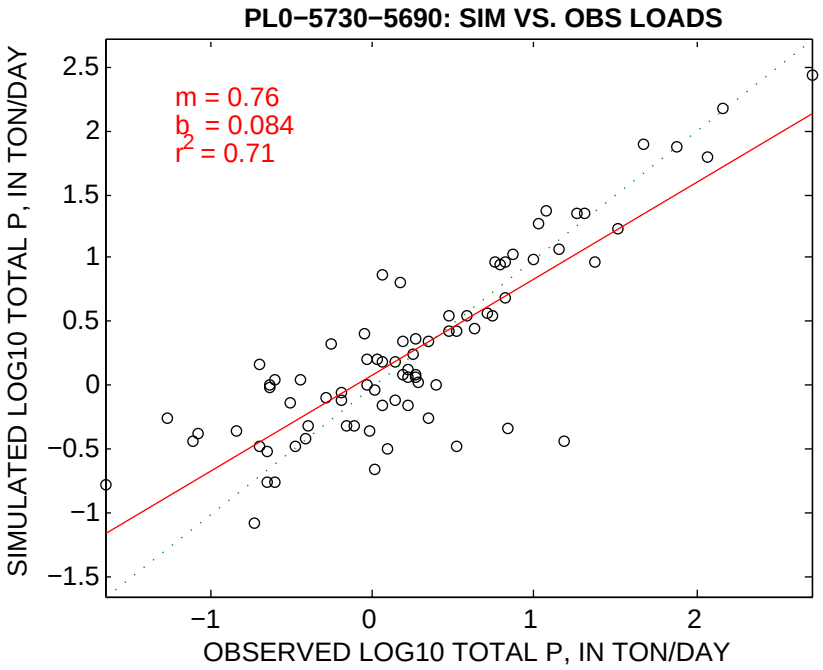


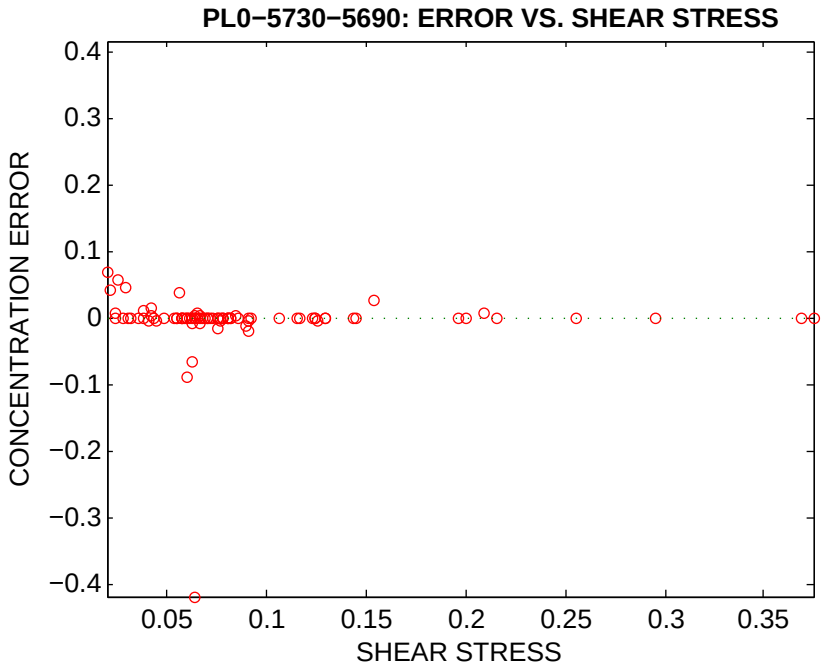


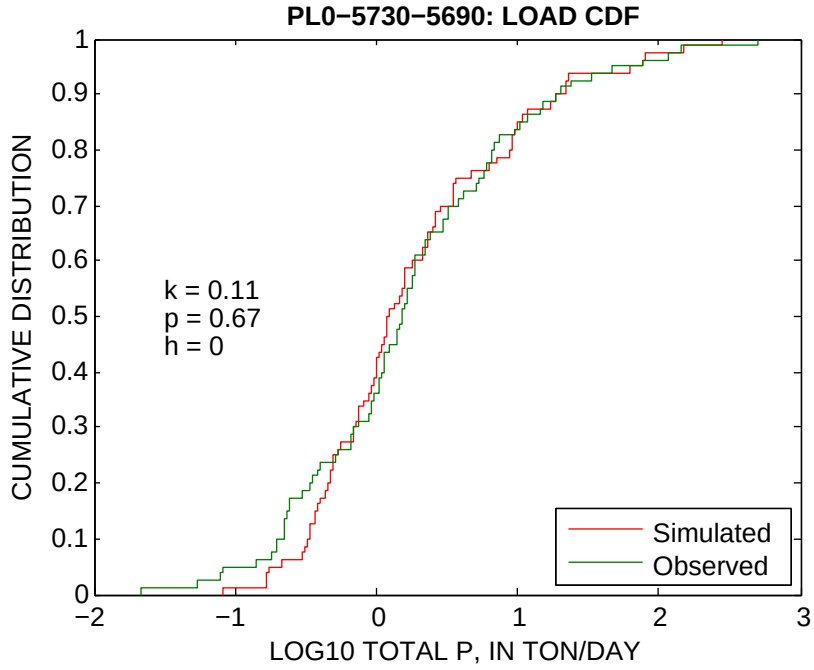


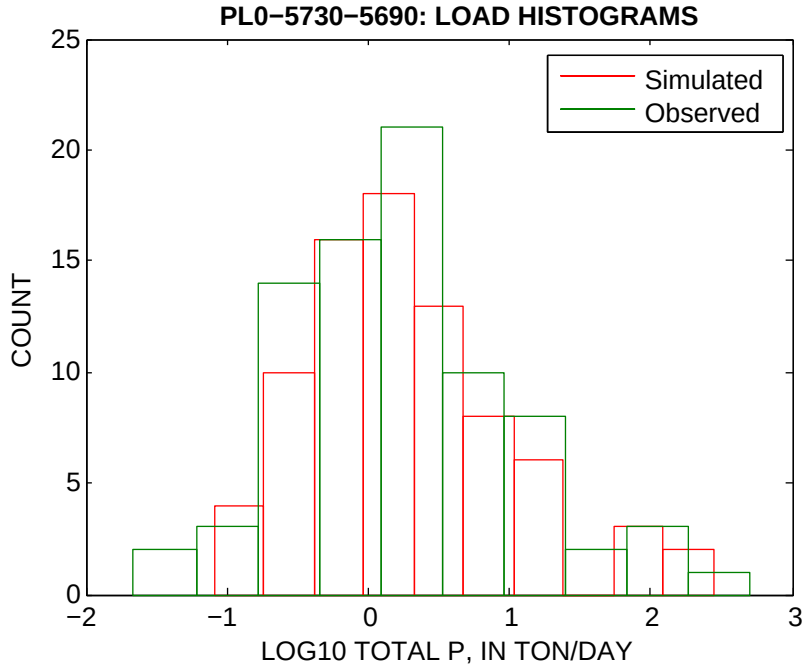


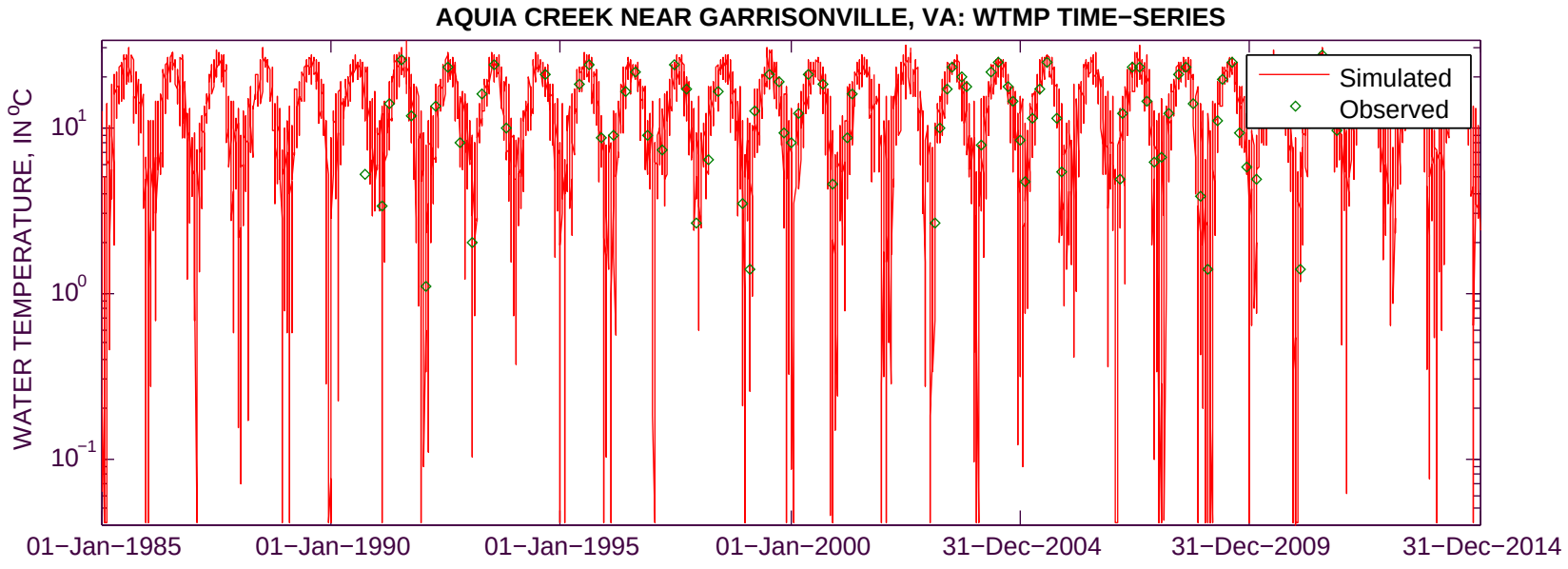
LOAD DATA
LOG10

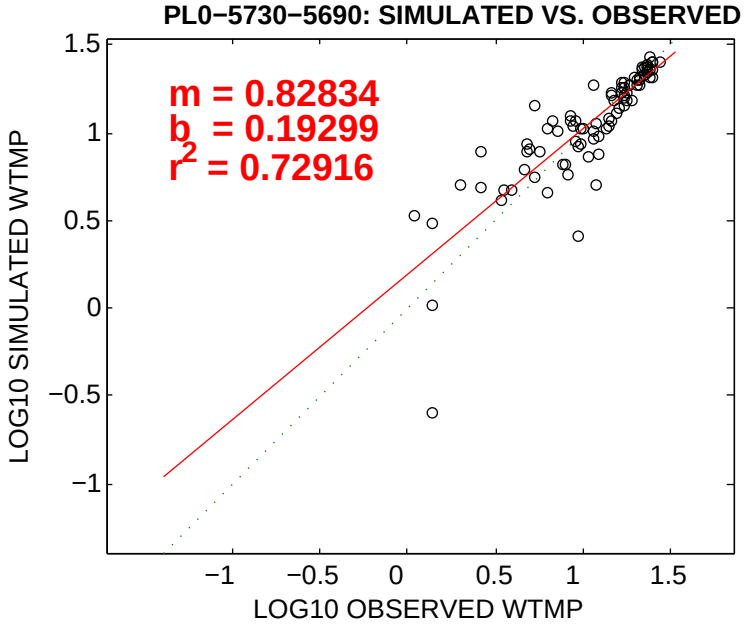


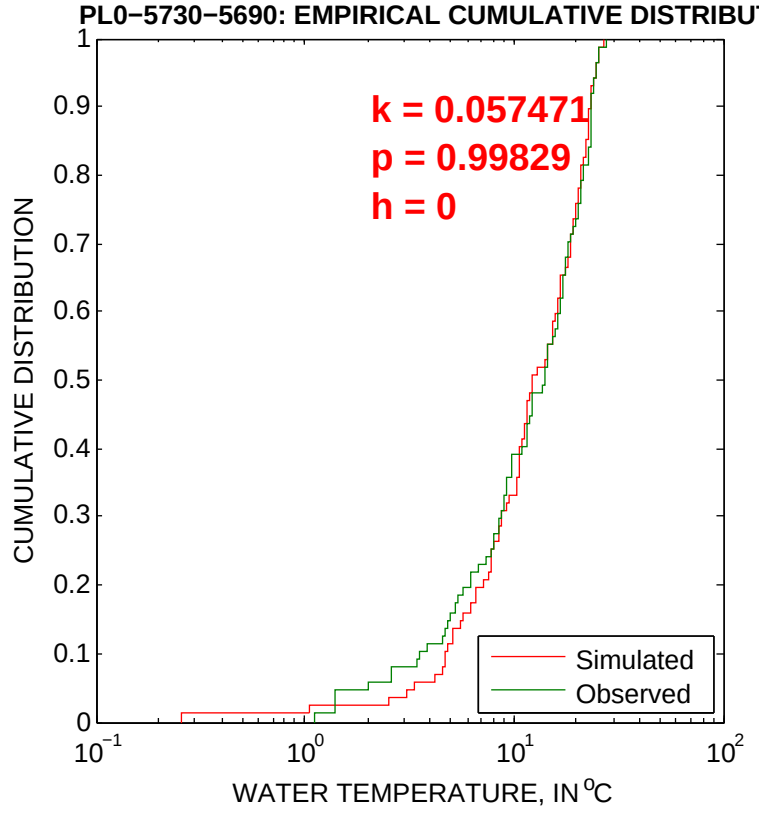












DATA SELECTION

scenario	file
P620171001WQ	WTMP.calib

plot: WTMP - water tempera...

Dates: 1/1/1985 – 12/31/201

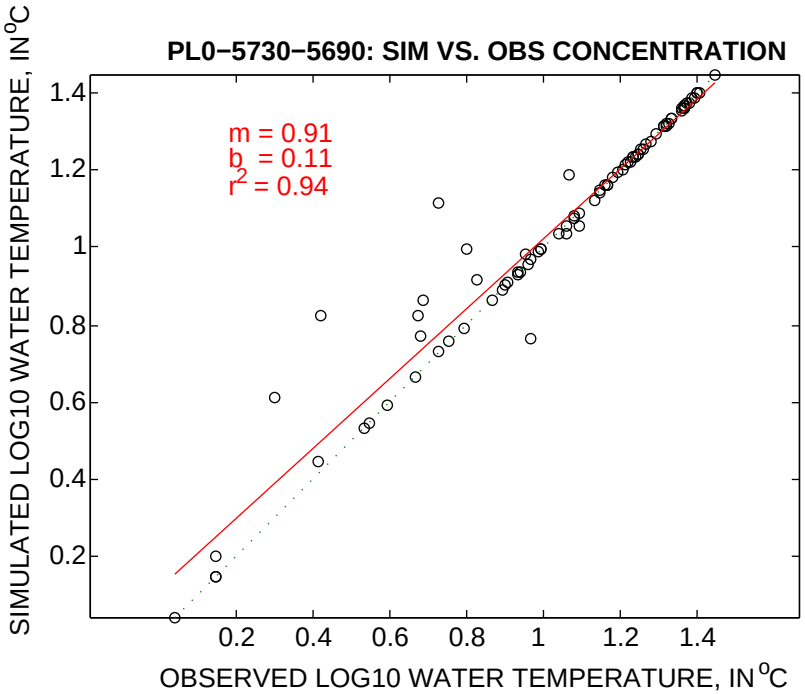
Drive	Directory	Observed
N/A	model	OBS20161101

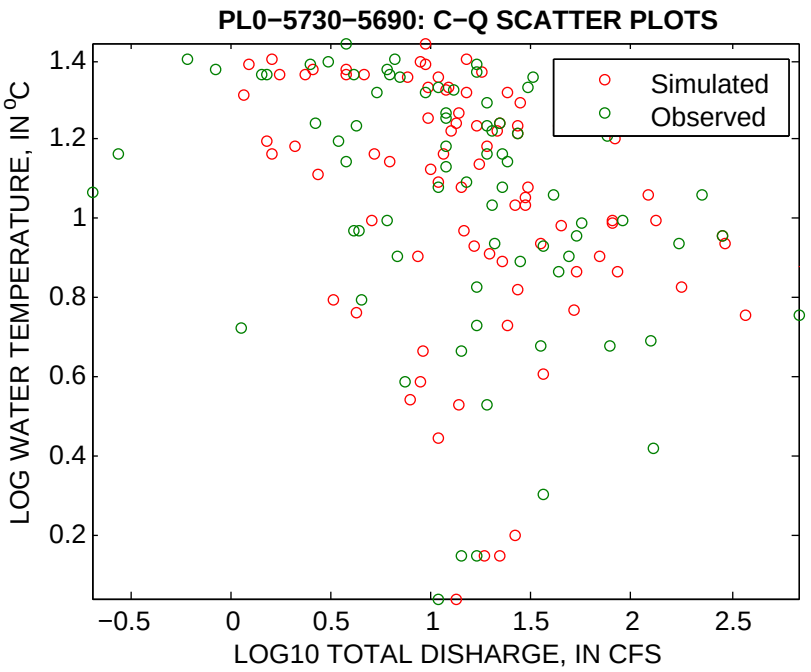
STATISTICS

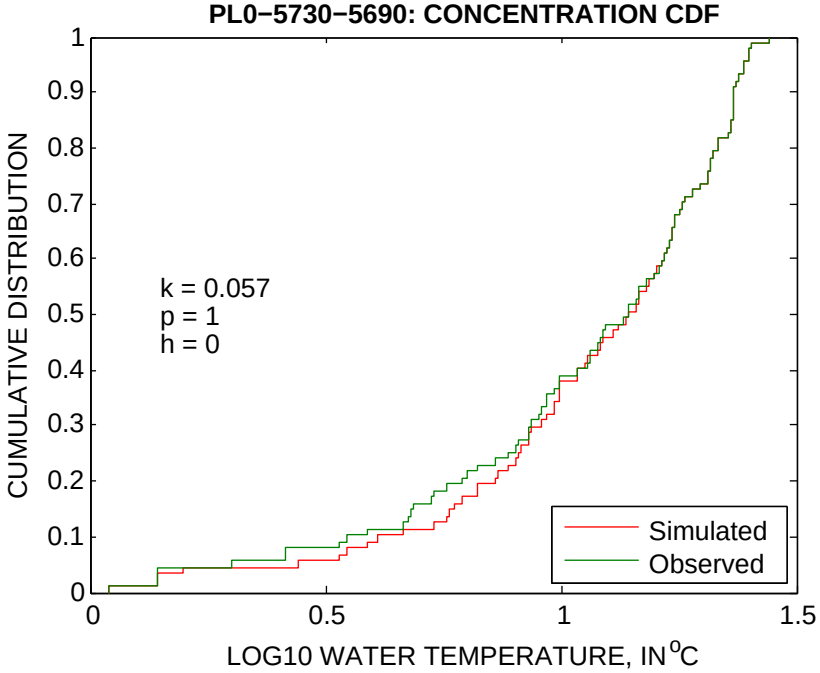
	n	87	87
		observe	simulate
min		1.1	0.25379
		0.0413927	-0.595525
mean		13.6686	13.7304
		1.03946	1.05402
media		13.9	12.34
		1.14301	1.09132
max		27.9	26.937
		1.4456	1.43035
varian		54.7421	48.5341
		0.112631	0.105988
JB		0.053109	0.061060
		0.002864	0.001
		ra	log
%		0.452264	1.40092
err.va		7.63265	0.0322388
rel.std.err		0.139429	0.286233
mod.eff		0.860571	0.713767

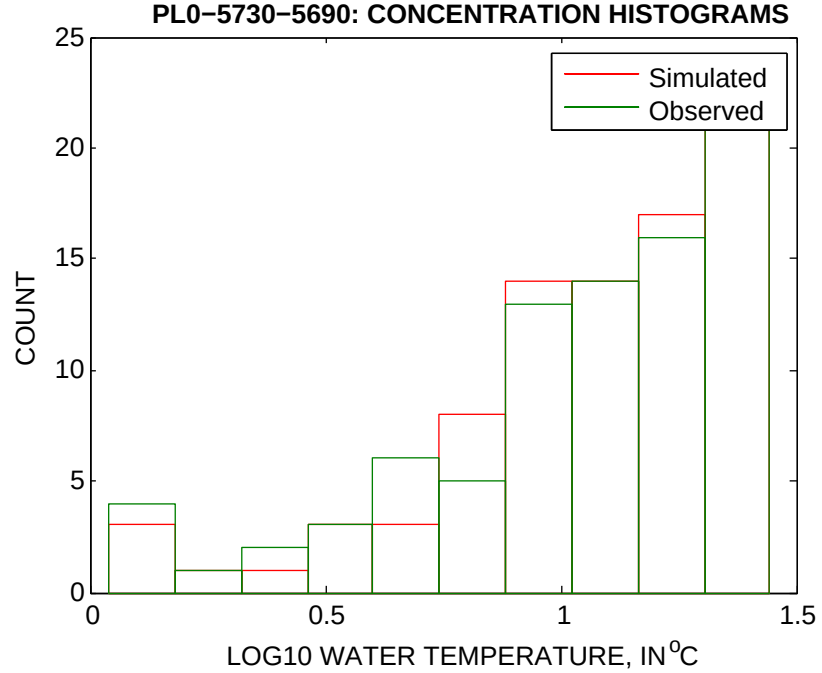
VERSION 2.1

ALL DATA
LOG10

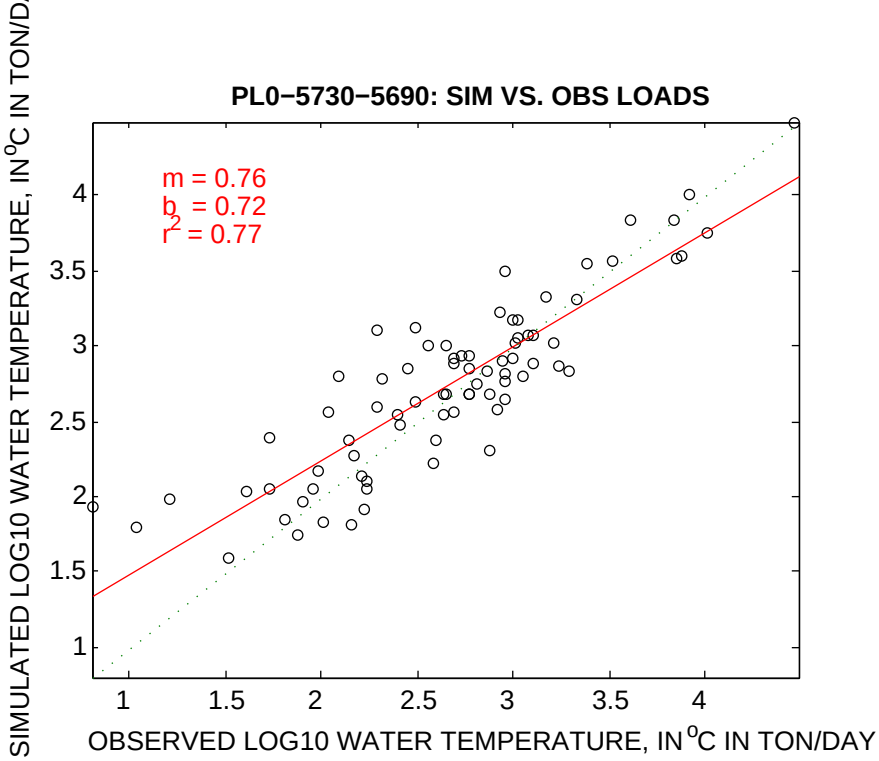


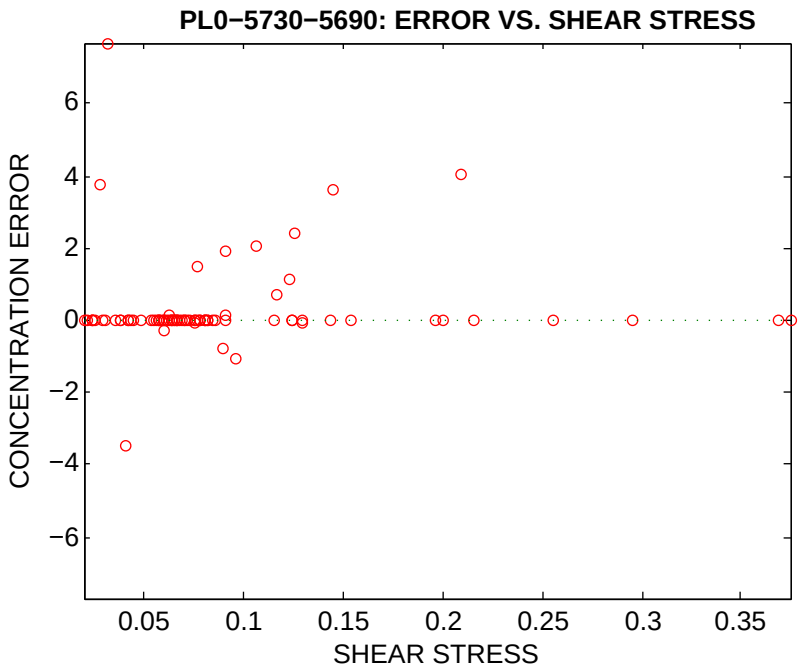


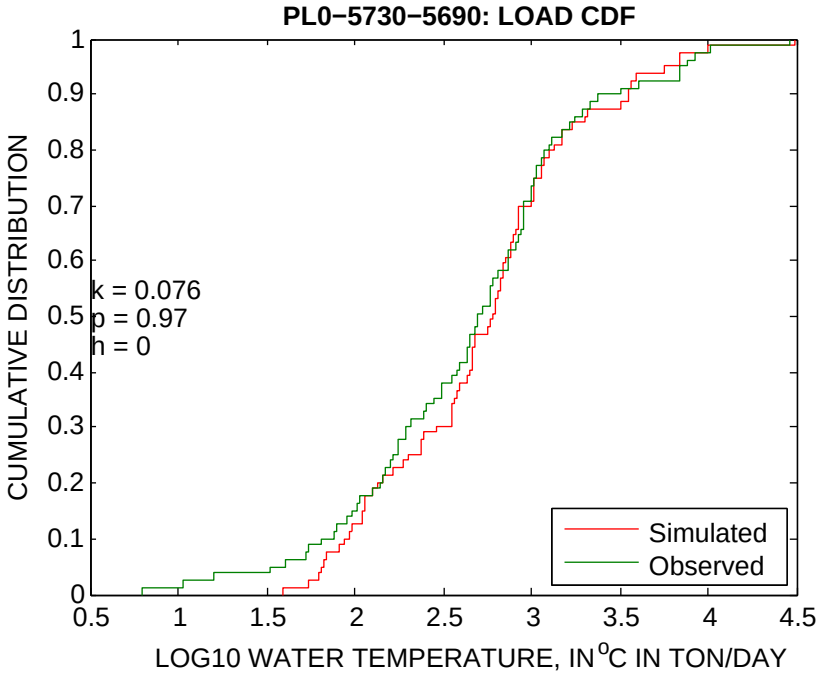


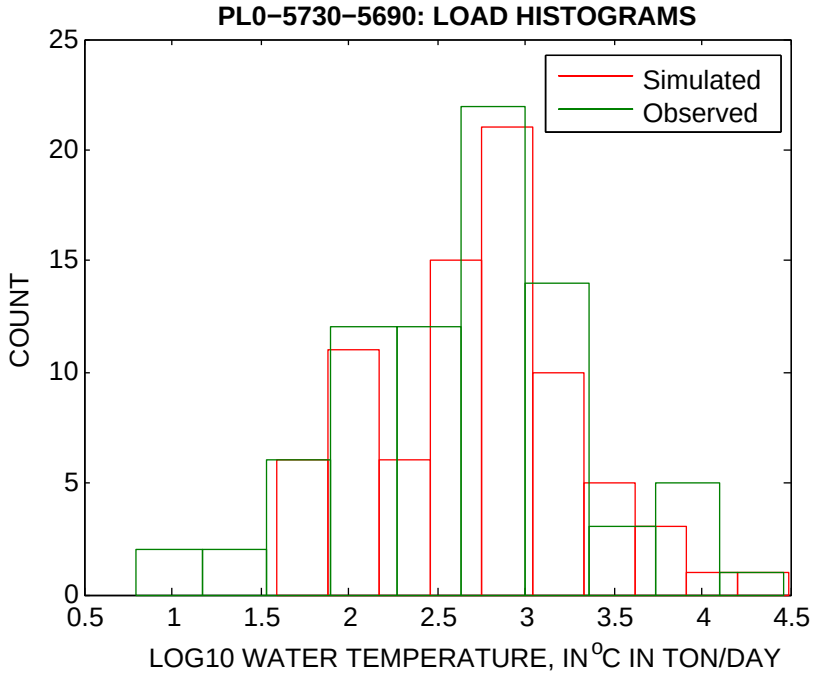


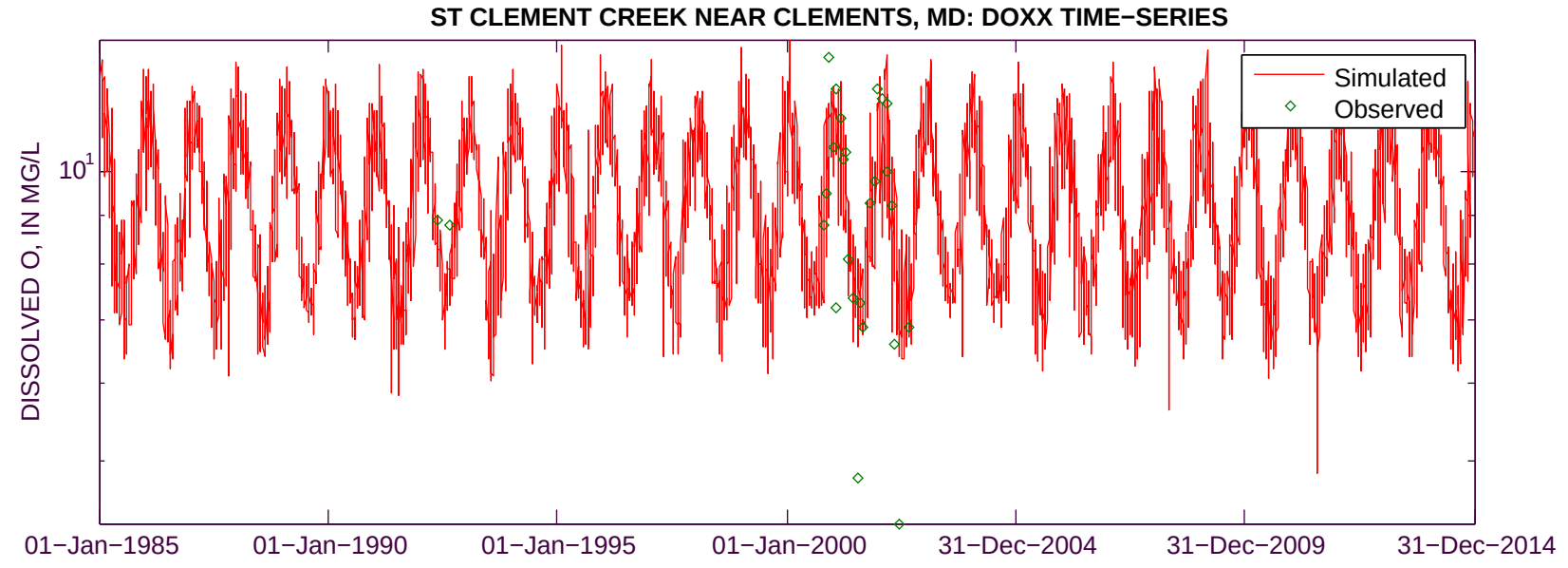
LOAD DATA
LOG10

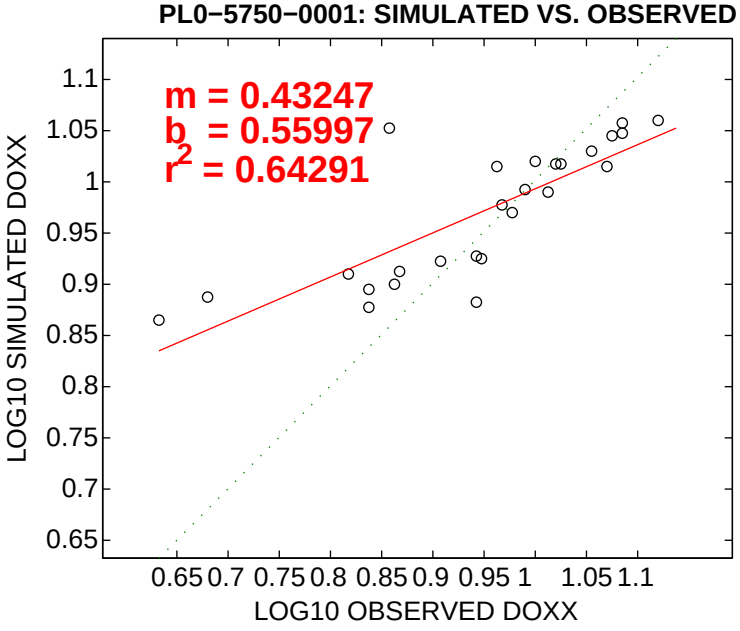


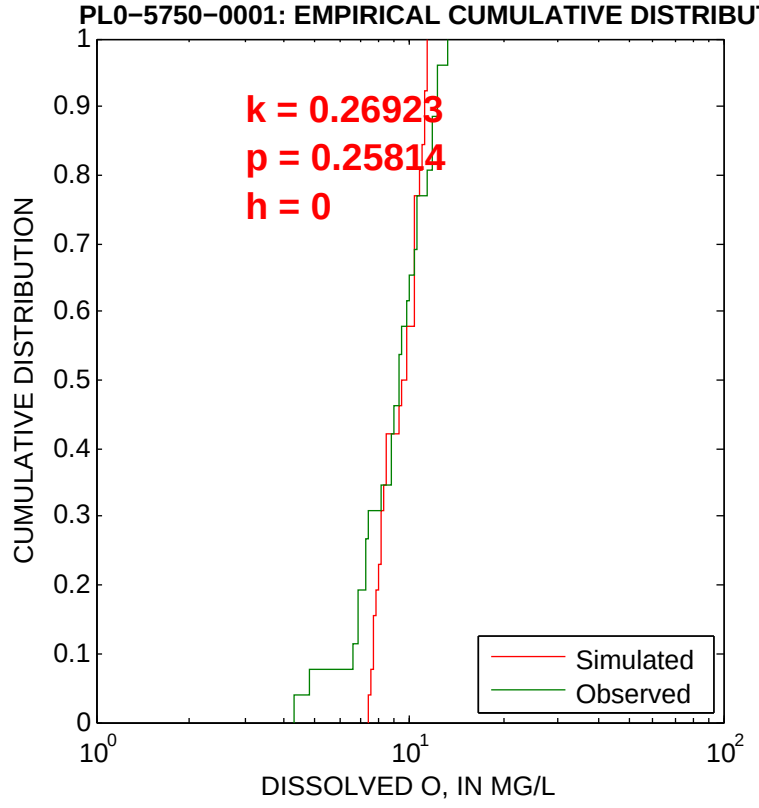












DATA SELECTION

scenario	file
P620171001WQ	DOXX.calib

plot: DOXX - dissolved oxygen

Dates: 1/1/1985 – 12/31/201

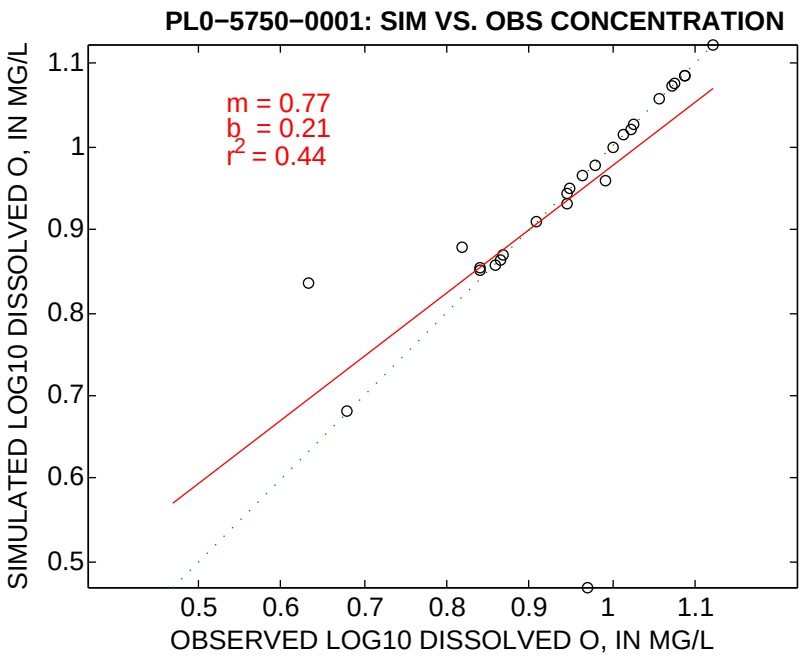
Drive	Directory	Observed
N/A	model	OBS20161101

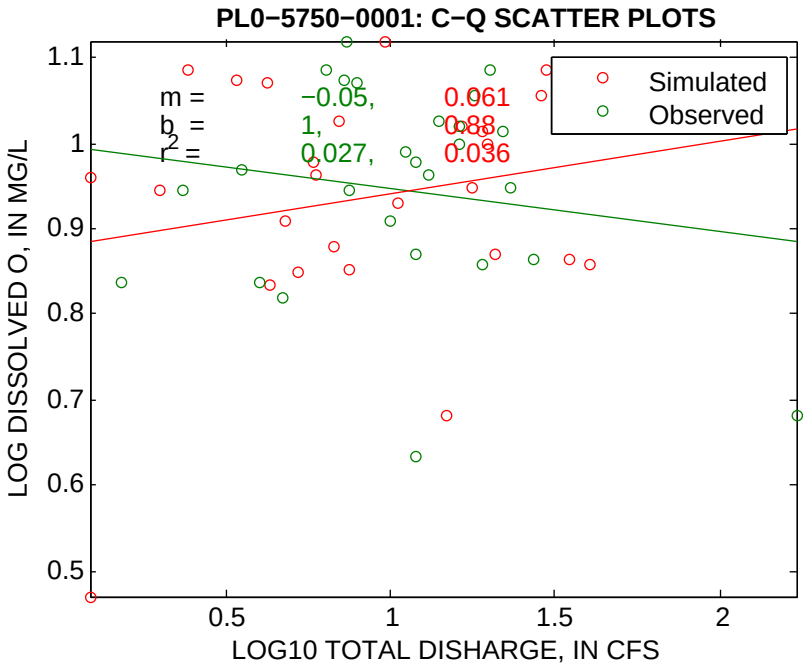
STATISTICS

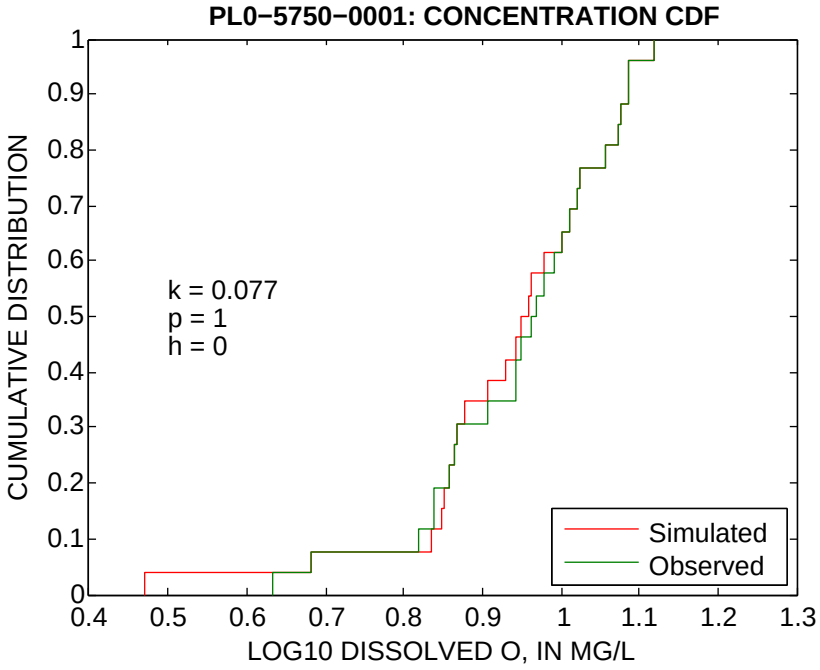
	n	26	26
		observe	simulate
min		4.3	7.3436
		0.633468	0.865909
mean		9.15	9.41787
		0.946418	0.96927
media		9.25	9.6266
		0.966135	0.98342
max		13.2	11.455
		1.12057	1.059
varian		5.2786	1.95364
		0.0146697	0.00426762
JB		0.5	0.10969
		0.066131	0.105189
		ra	log
%		2.92753	2.41466
err.va		2.02951	0.00679203
rel.std.err		0.384478	0.462997
mod.eff		0.615522	0.537003

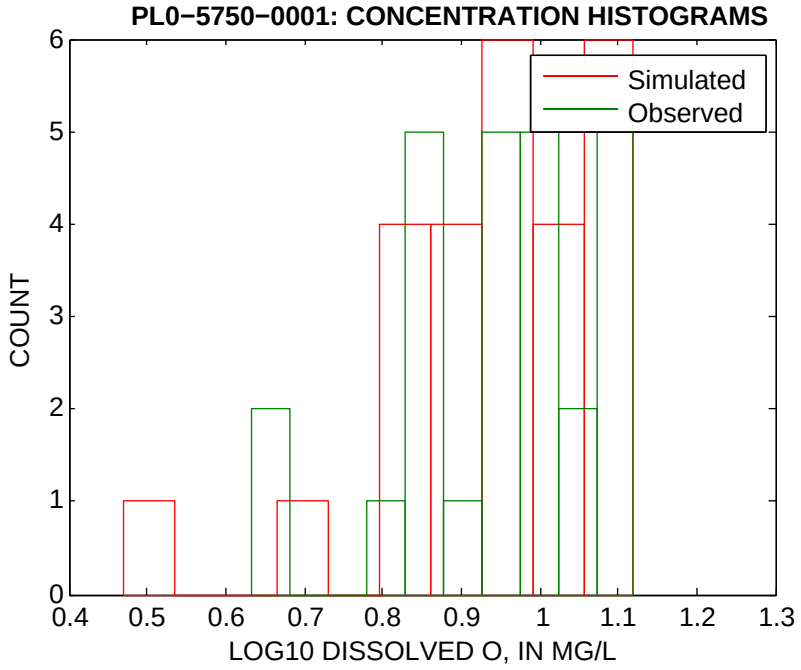
VERSION 2.1

ALL DATA
LOG10

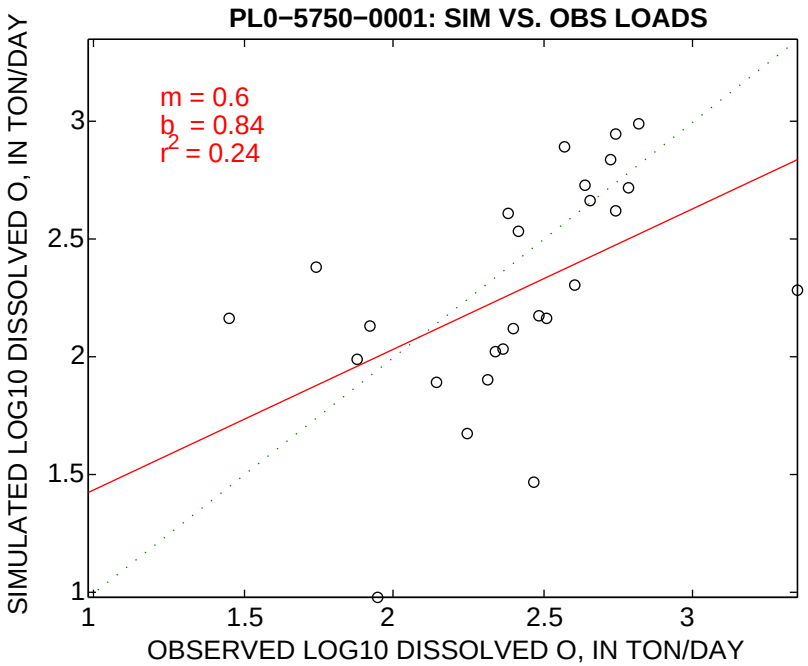


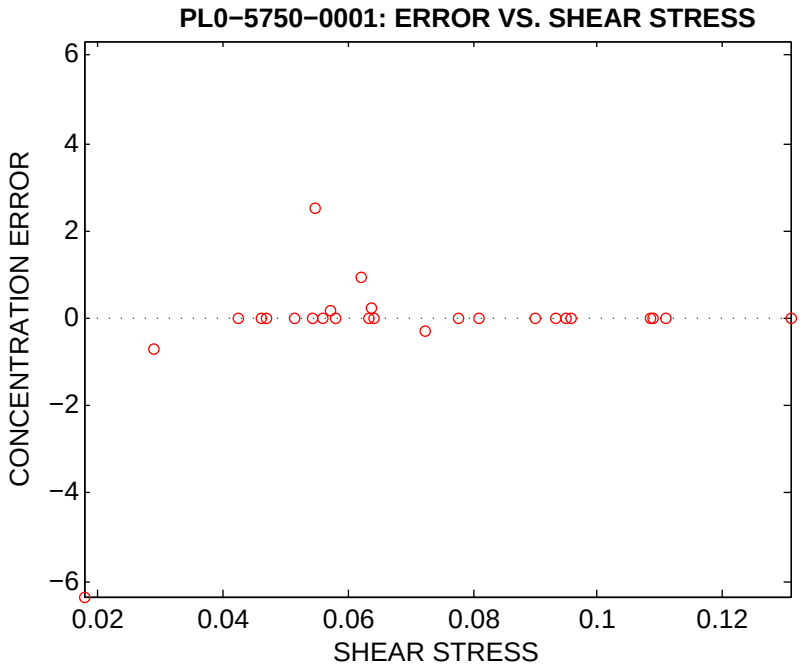


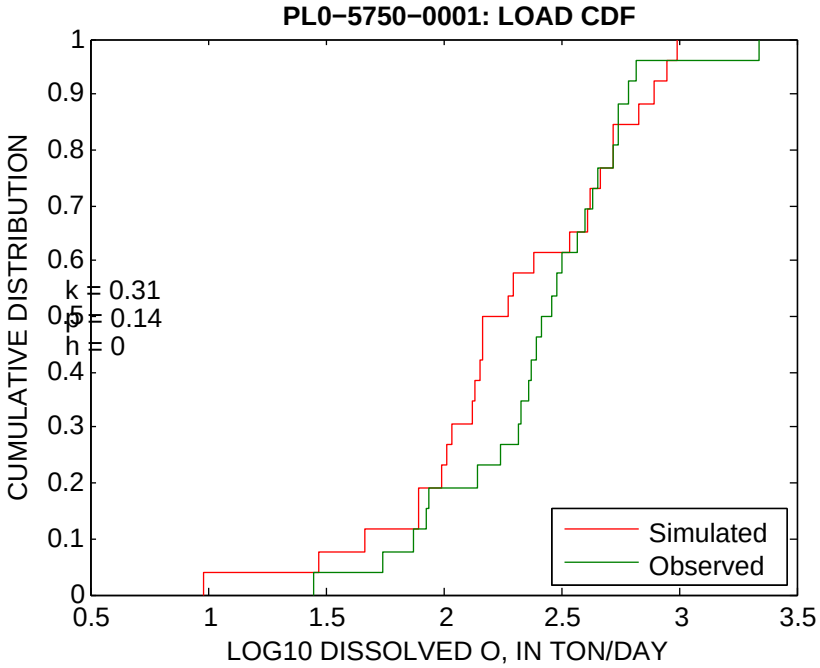


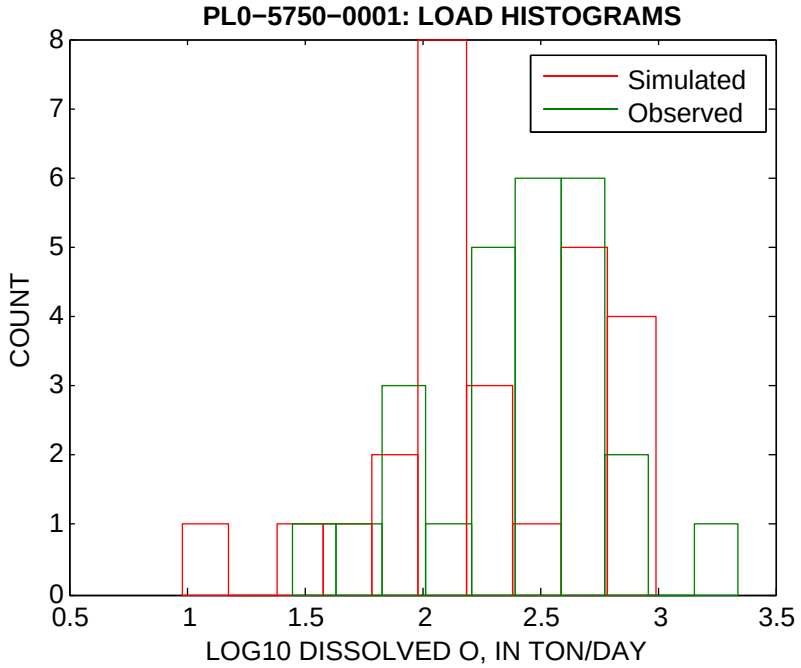


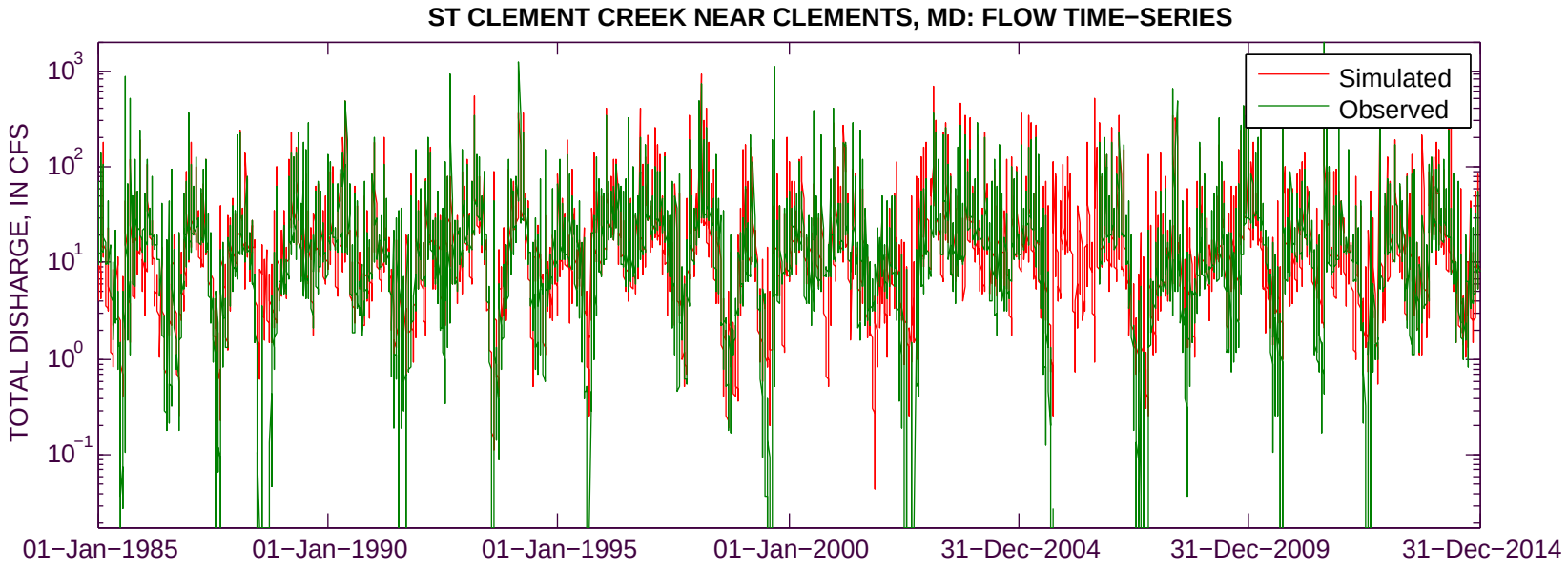
LOAD DATA
LOG10

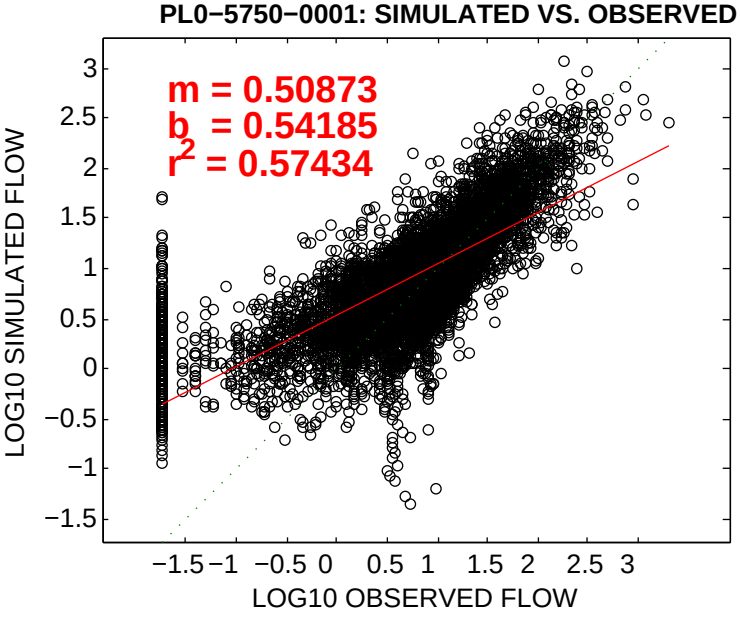


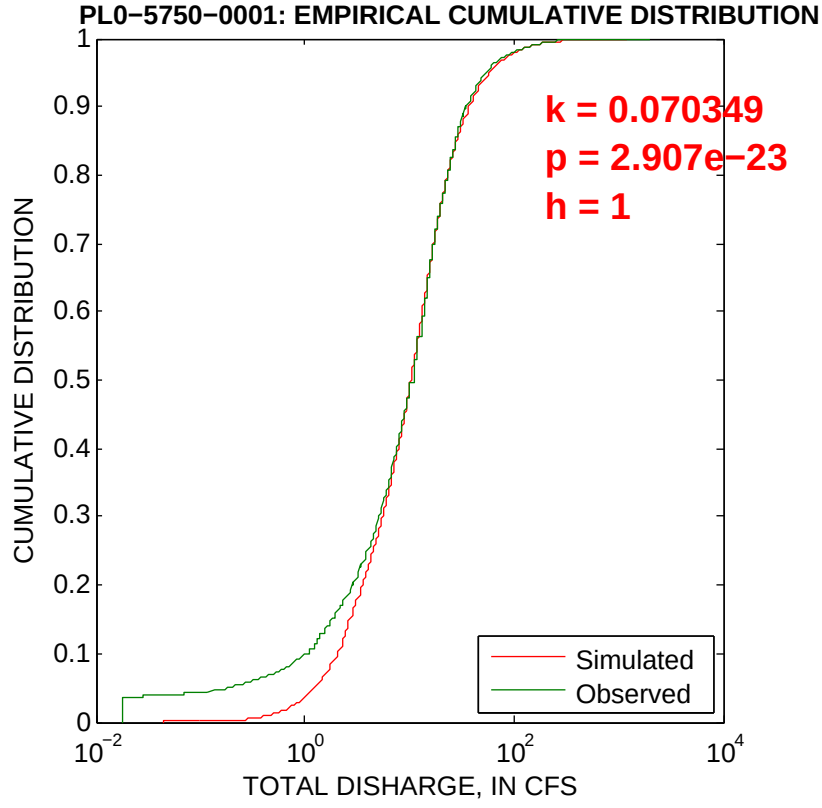












DATA SELECTION

scenario: P620171001WQ | file: FLOW.calib

plot: FLOW - total discharge

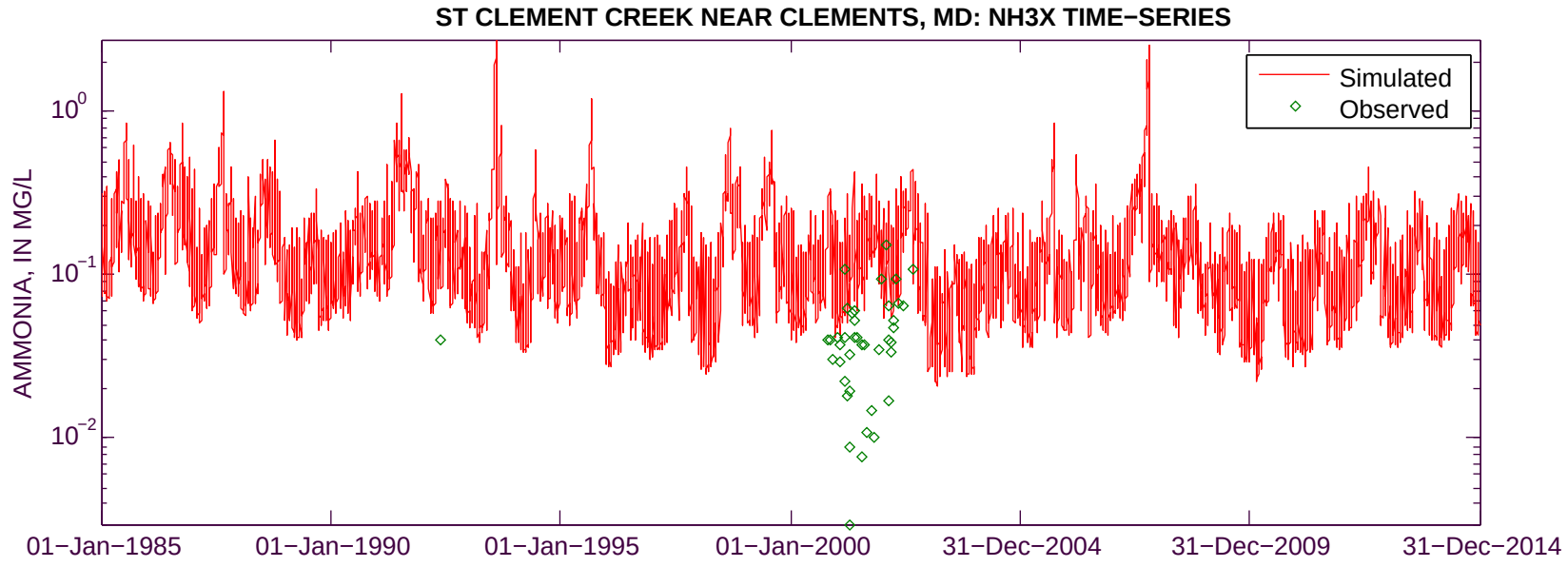
Dates: 1/1/1985 – 12/31/201

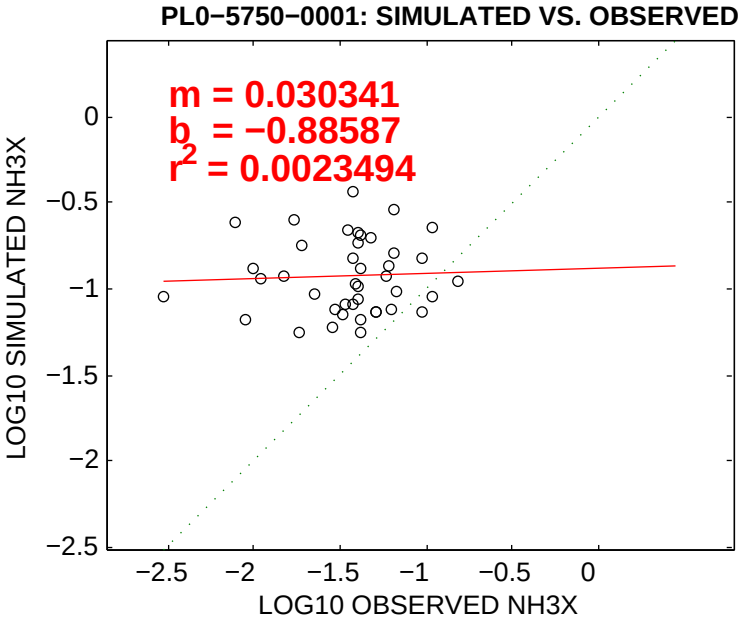
Drive | Directory: N/A | model | Observed: OBS20161101

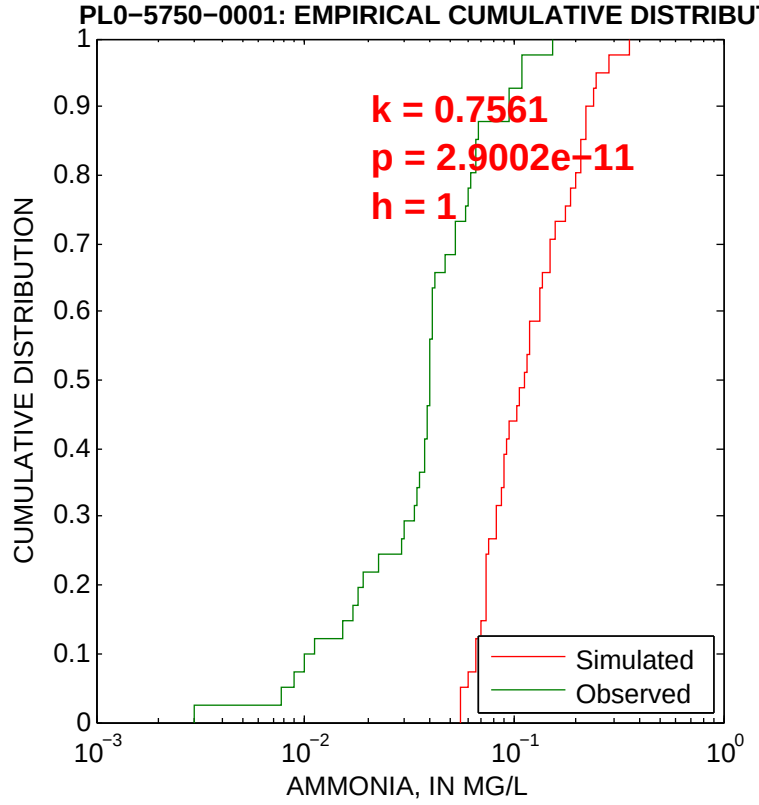
STATISTICS

		observe	simulate
n		10590	10590
min		0.0182369	0.045477
		-1.73905	-1.34221
mean		18.4668	18.9529
		0.855443	0.977041
media		11.0182	10.4275
		1.04211	1.01818
max		2020.02	1195.1
		3.30536	3.0774
varian		1830.64	1380.81
		0.581518	0.262041
JB		0.001	0.001
		0.001	0.001
		ra	log
%		2.63204	14.2146
err.va		1213.44	0.266674
rel.std.err		1.662853	0.458583
mod.eff		0.337147	0.541417

VERSION 2.1







DATA SELECTION

scenario	file
P620171001WQ	NH3X.calib

plot: NH3X - ammonia

Dates: 1/1/1985 – 12/31/201

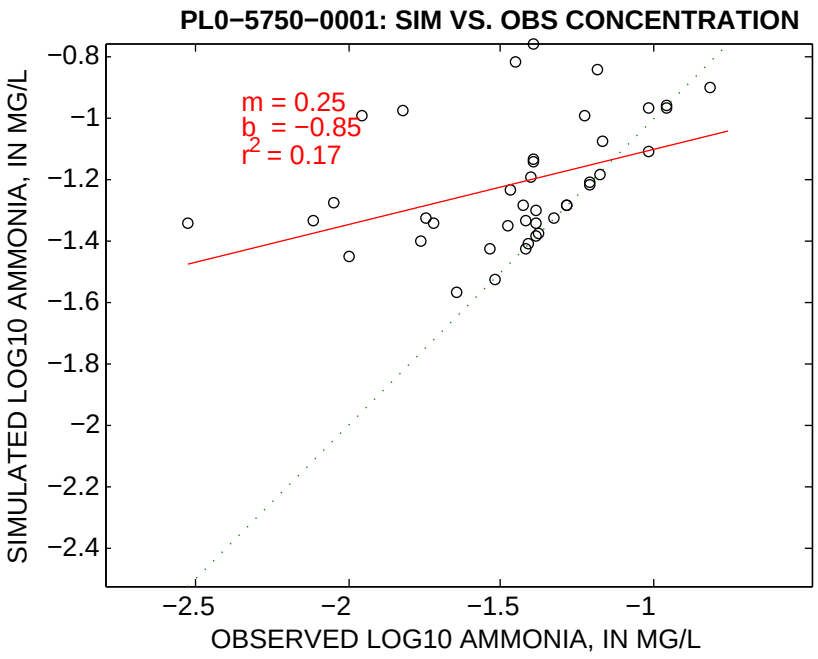
Drive	Directory	Observed
N/A	model	OBS20161101

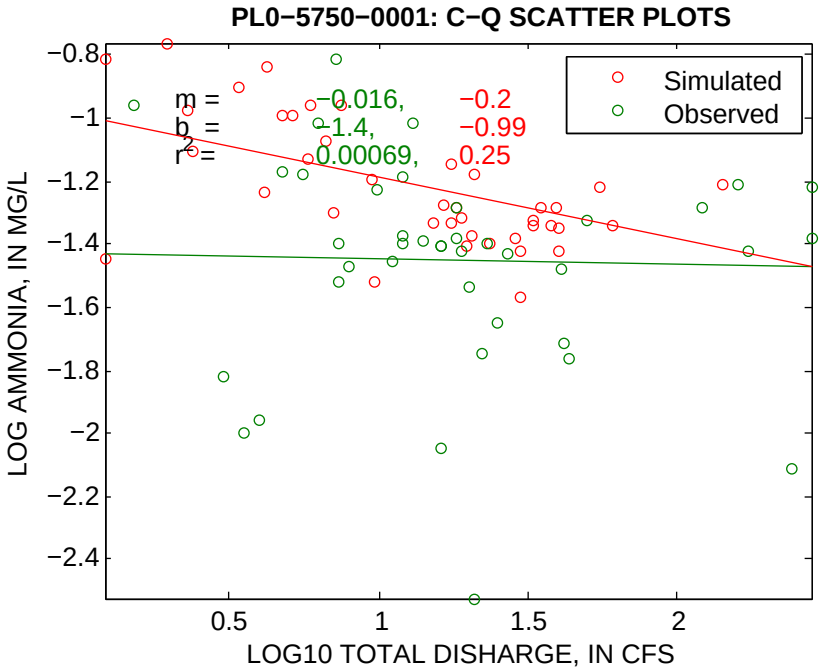
STATISTICS

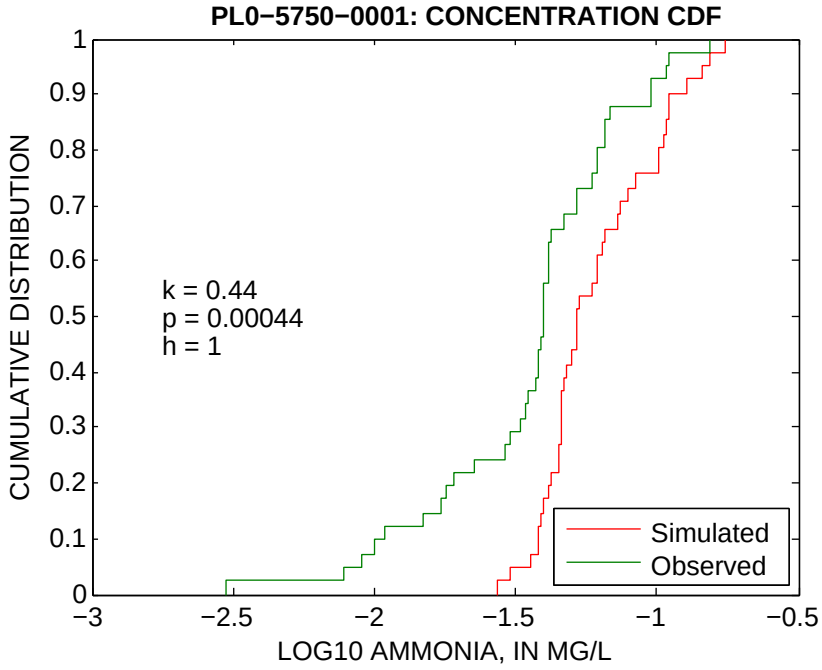
	n	41	41
		observe	simulate
min		0.003	0.055069
		-2.52288	-1.25909
mean		0.0455344	0.133043
		-1.45047	-0.929876
media		0.04	0.11145
		-1.39794	-0.95292
max		0.153	0.36203
		-0.815309	-0.441255
varian		0.00097594	0.00508719
		0.117503	0.0460401
JB		0.002826	0.010392
		0.024433	0.163801
		ra	log
%		192.181	-35.8912
err.va		0.0138585	0.434203
rel.std.err		14.2002	3.69524
mod.eff		-13.2002	-2.69524

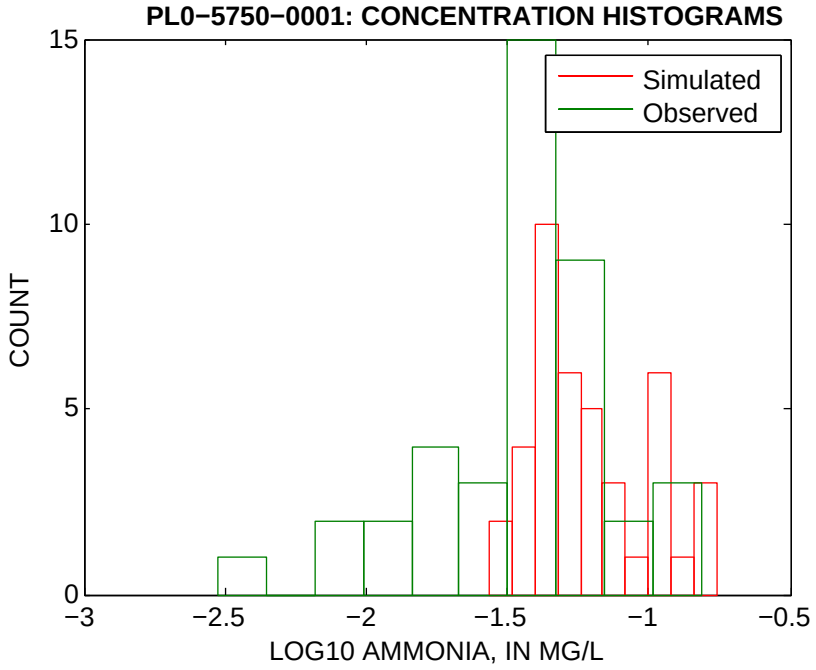
VERSION

ALL DATA
LOG10

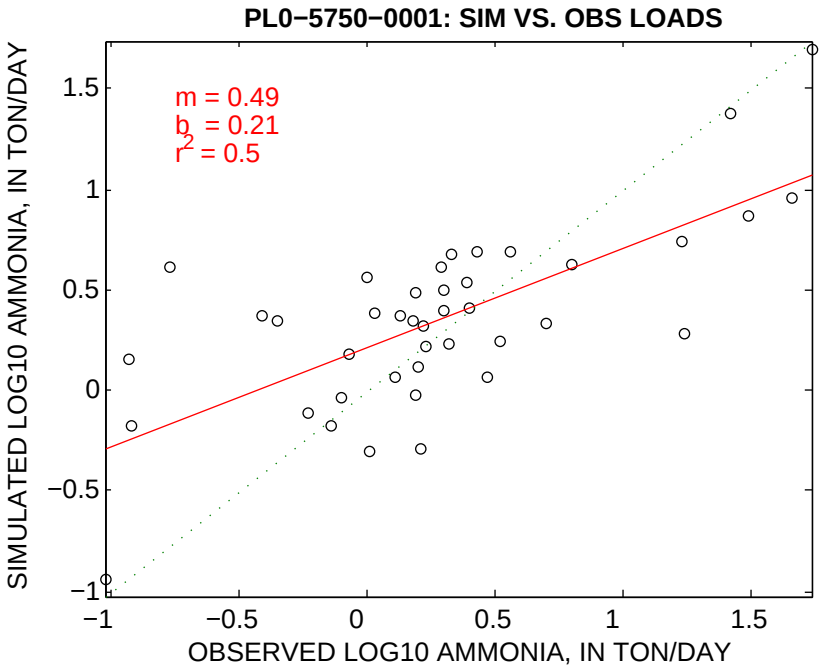


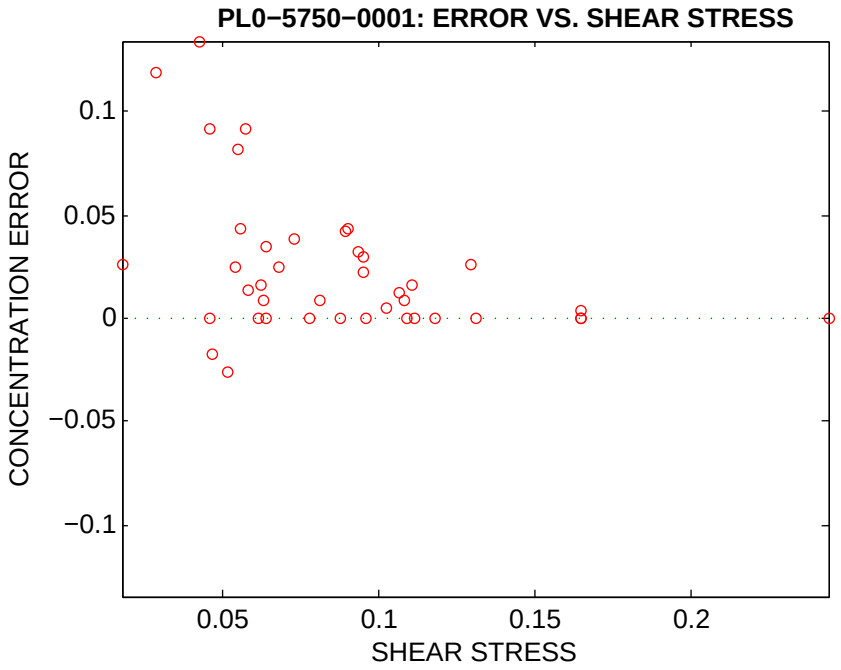


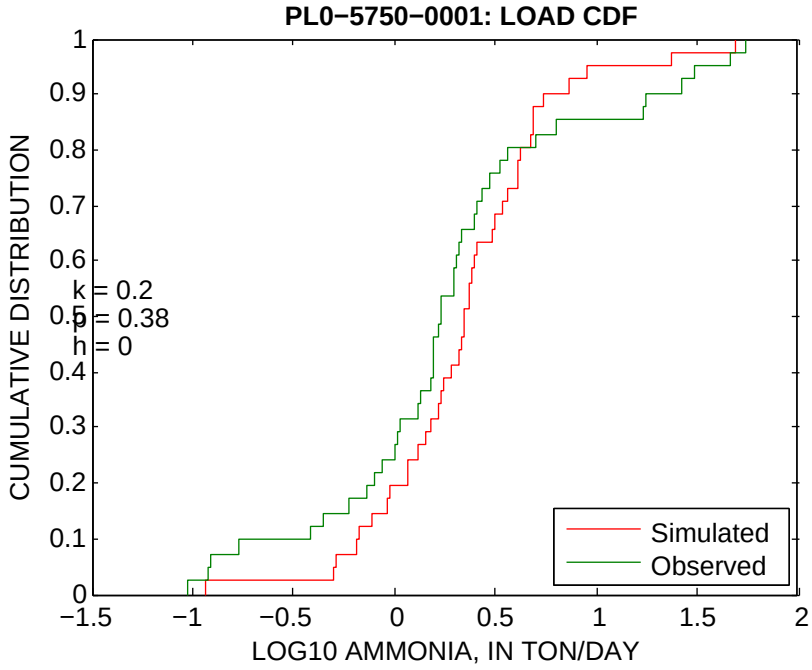


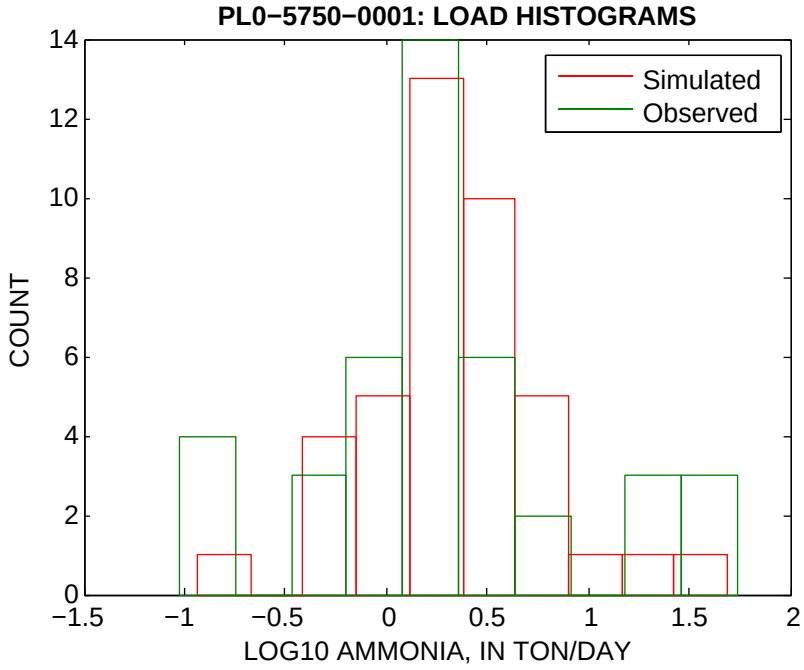


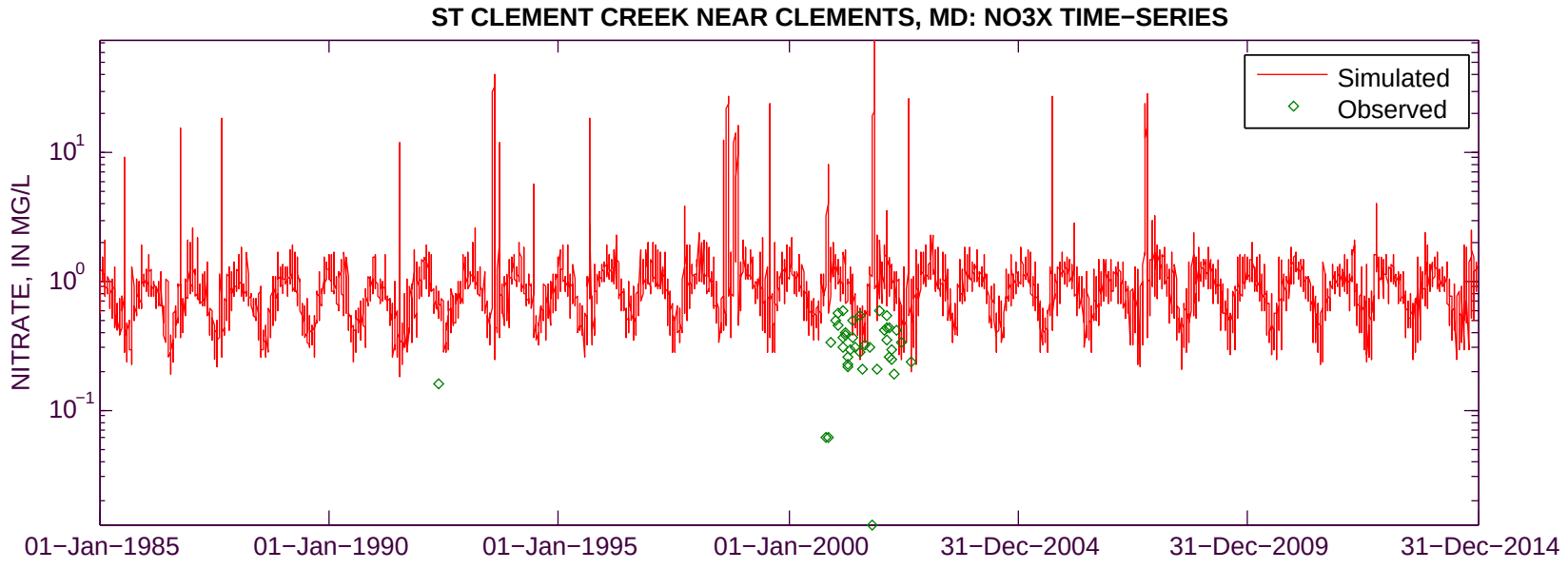
LOAD DATA
LOG10

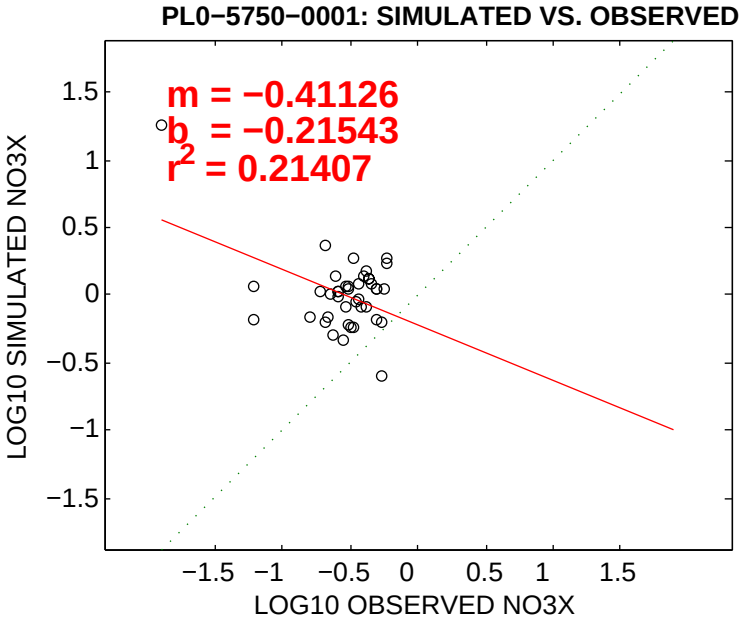


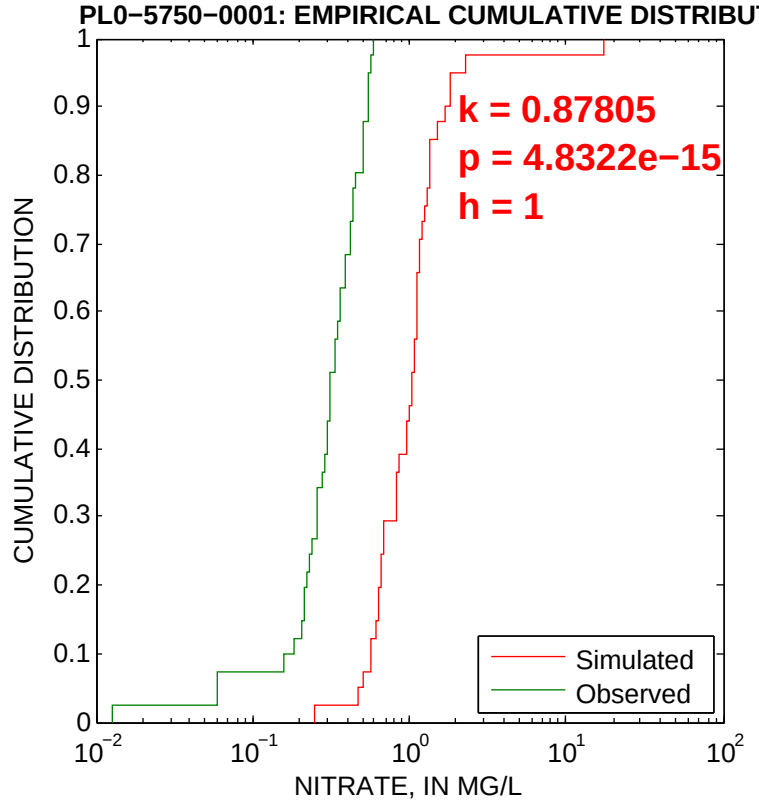












DATA SELECTION

scenario: P620171001WQ | file: NO3X.calib

plot: NO3X - nitrate

Dates: 1/1/1985 – 12/31/201

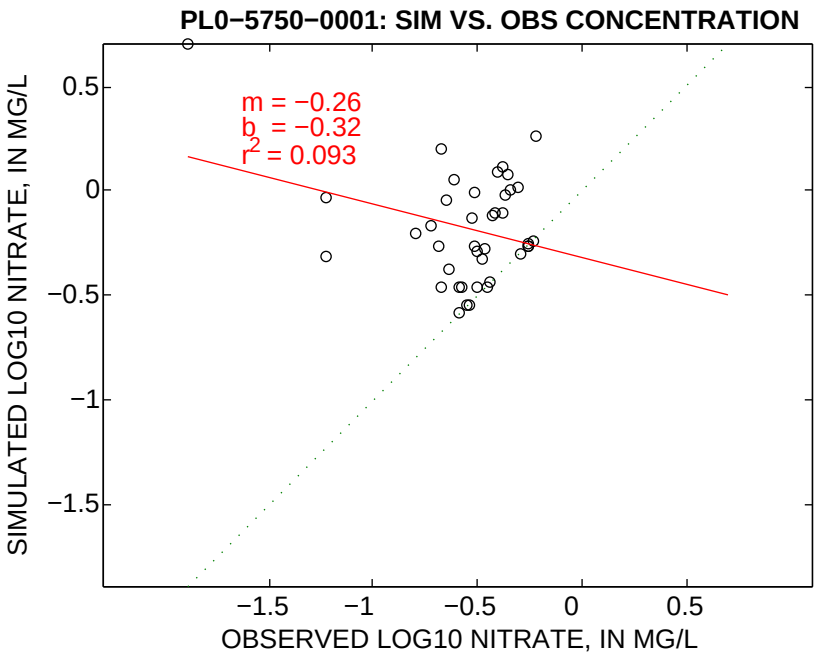
Drive: N/A | Directory: model | Observed: OBS20161101

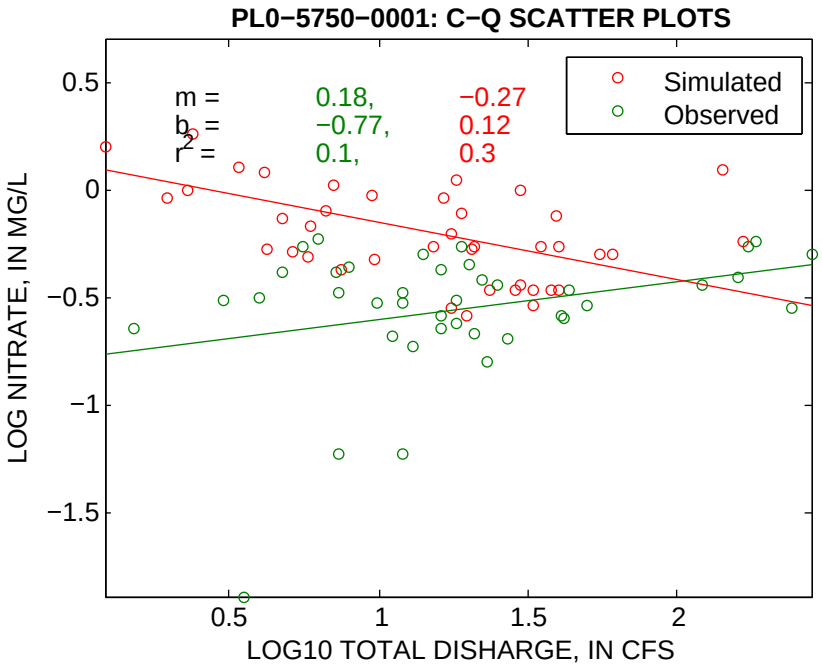
STATISTICS

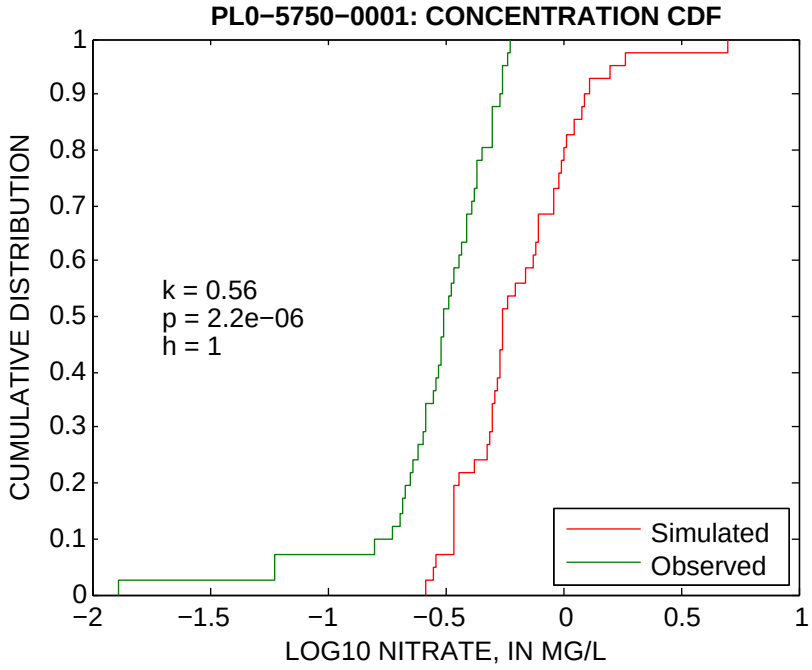
	n	41	41
		observe	simulate
min		0.013	0.24728
		-1.88606	-0.606811
mean		0.334045	1.44069
		-0.543427	0.00805574
media		0.314	1.0489
		-0.50307	0.0207341
max		0.601	17.732
		-0.221126	1.24876
varian		0.0204084	6.97645
		0.0939365	0.0742194
JB		0.5	0.001
		0.001	0.001
		ra	log
%		331.288	-101.482
err.va		8.5024	0.557157
rel.std.err		416.612	5.93122
mod.eff		-415.612	-4.93122

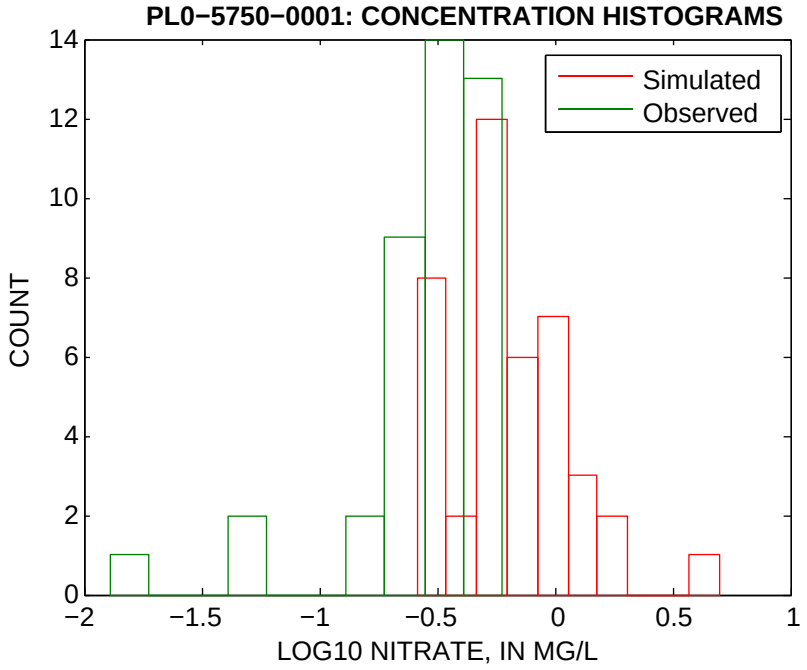
VERSION 2.1

ALL DATA
LOG10

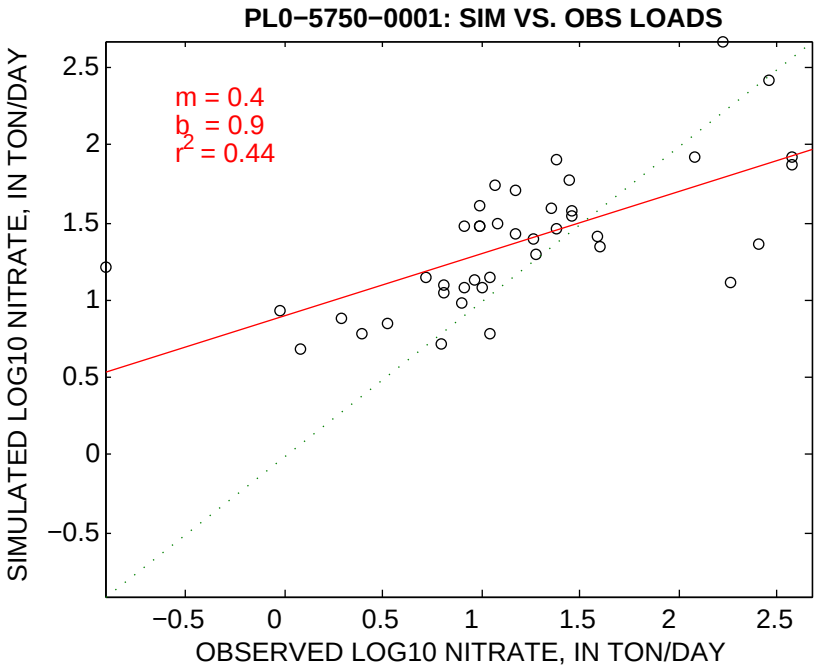


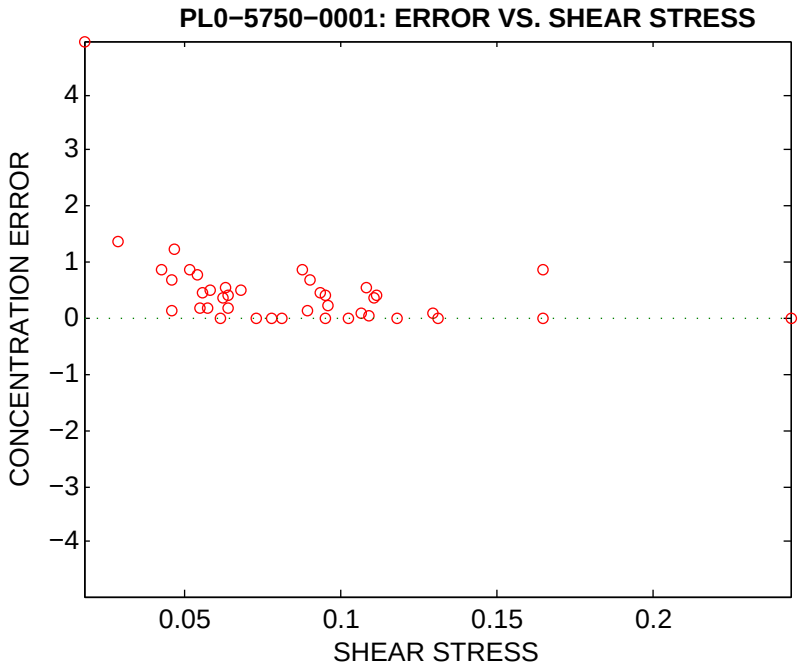


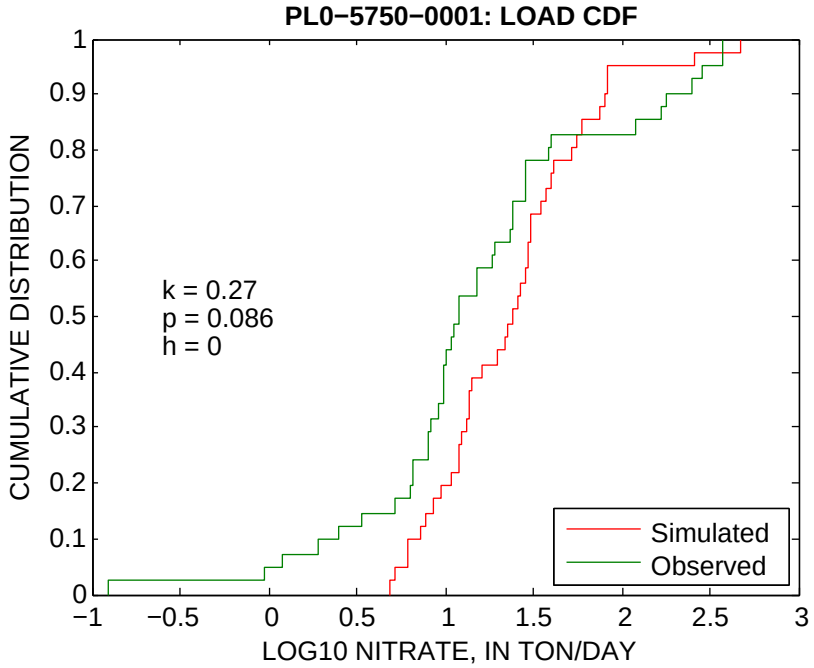


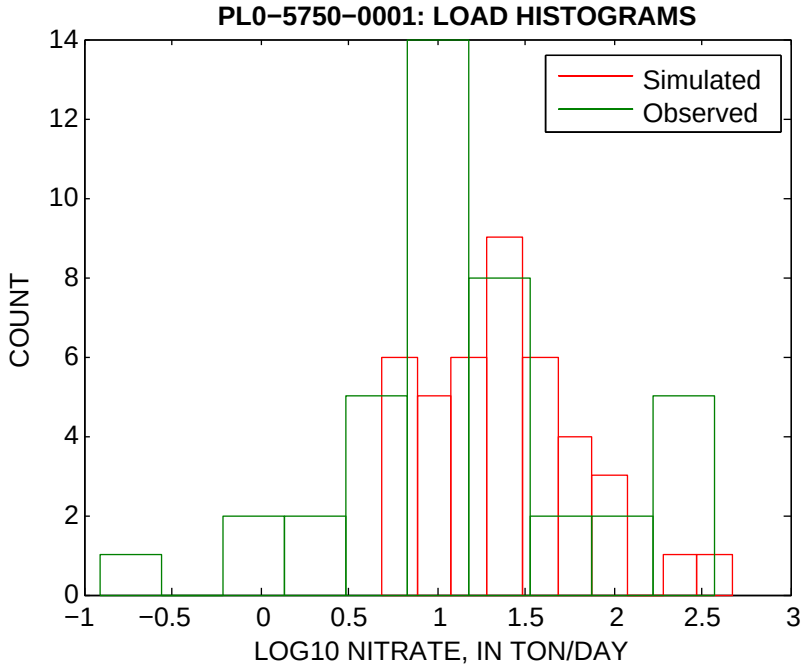


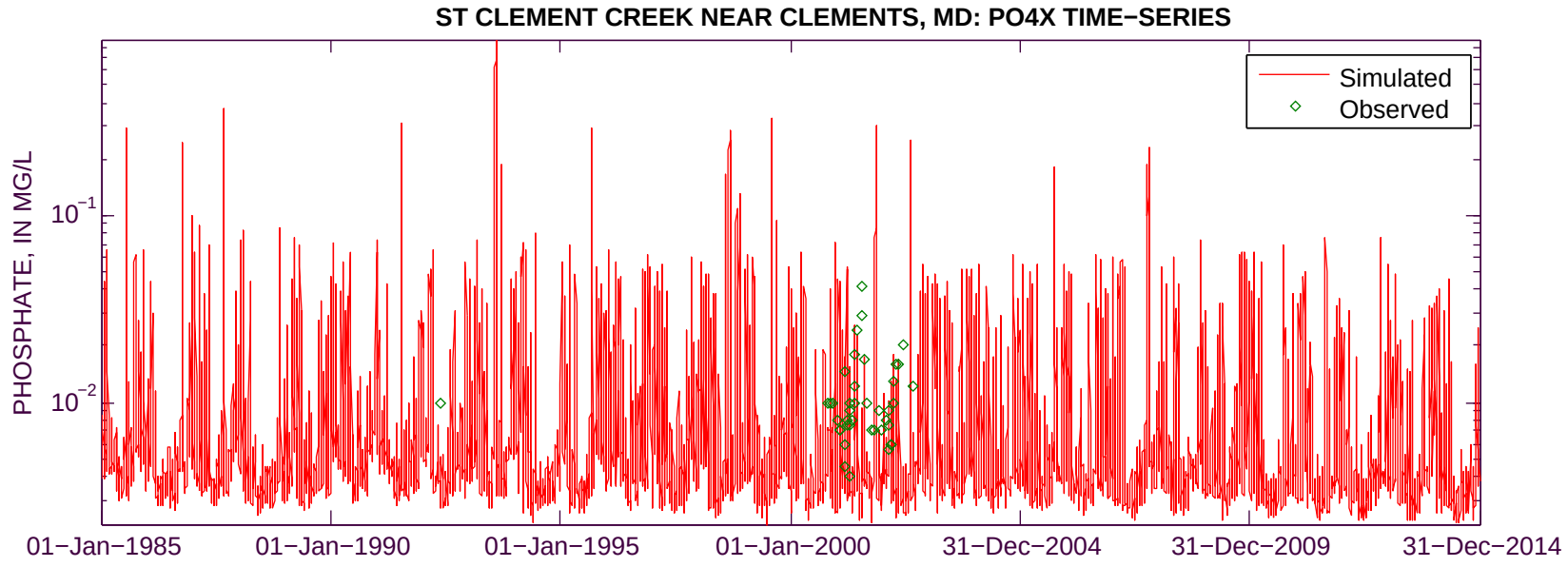
LOAD DATA
LOG10

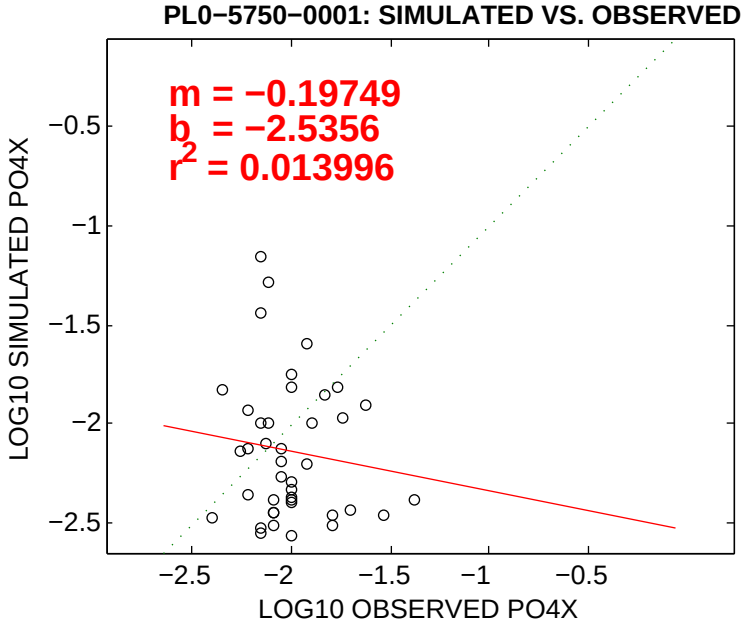


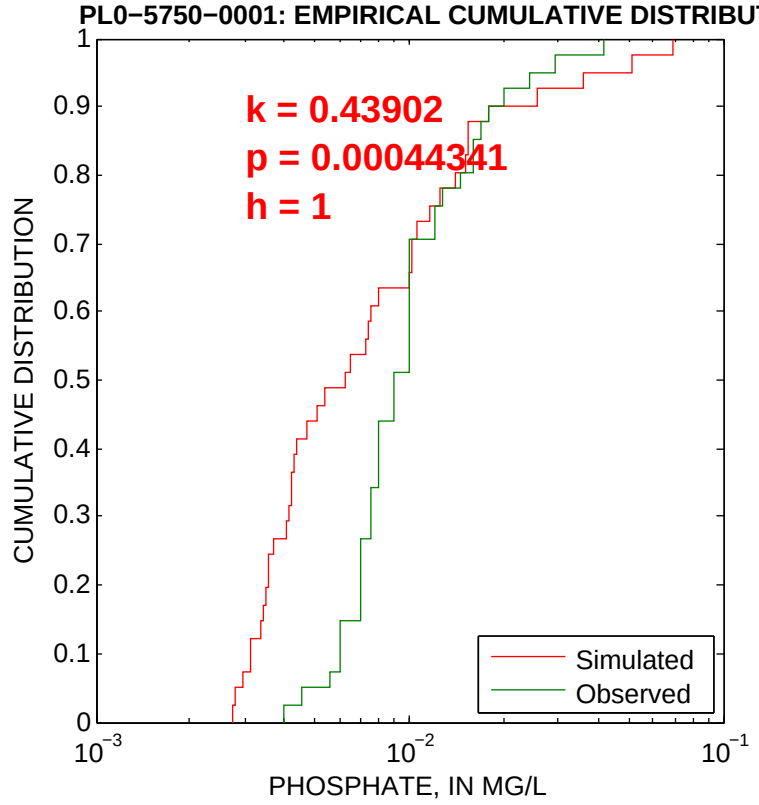












DATA SELECTION

scenario	file
P620171001WQ	PO4X.calib

plot: PO4X - phosphate

Dates: 1/1/1985 – 12/31/201

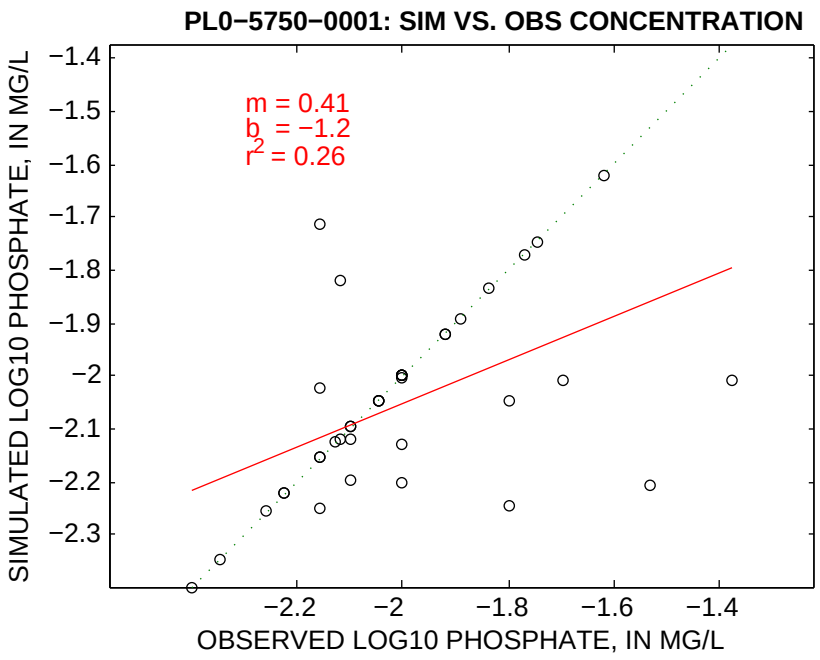
Drive	Directory	Observed
N/A	model	OBS20161101

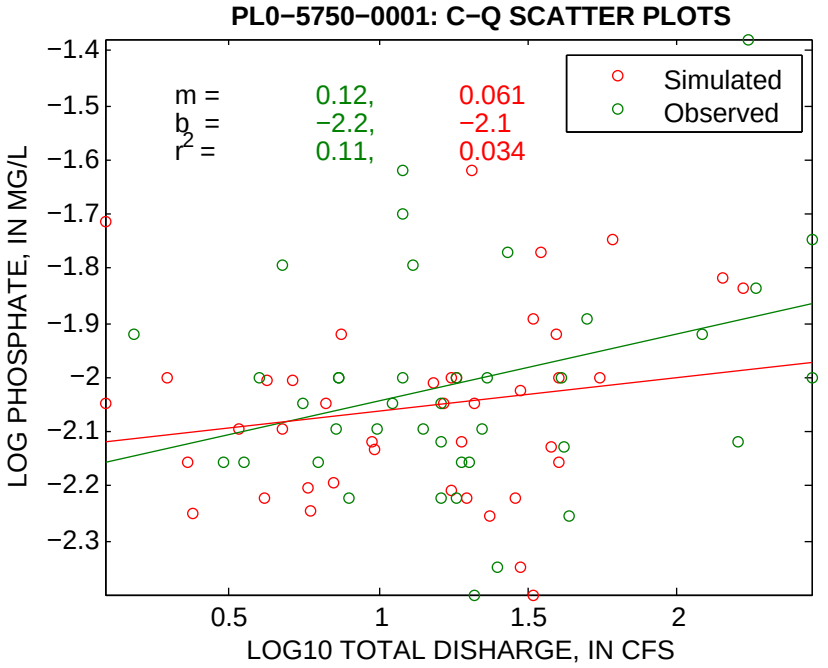
STATISTICS

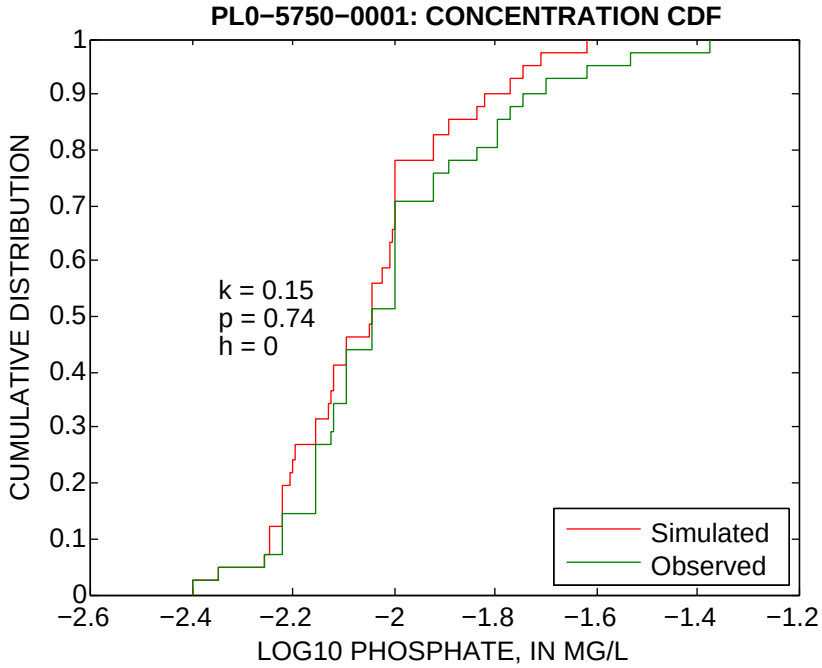
	n	41	41
		observe	simulate
min		0.004	0.002754
		-2.39794	-2.56004
mean		0.0112751	0.0108474
		-2.00574	-2.13951
media		0.009	0.0062529
		-2.04576	-2.20392
max		0.0419339	0.069635
		-1.37743	-1.15717
varian		5.13828e-0	0.00017890
		0.0447394	0.124681
JB		0.001	0.001
		0.031533	0.028574
		ra	log
%		-3.79334	6.66932
err.va		0.00025933	0.205434
rel.std.err		5.04708	4.59179
mod.eff		-4.04708	-3.59179

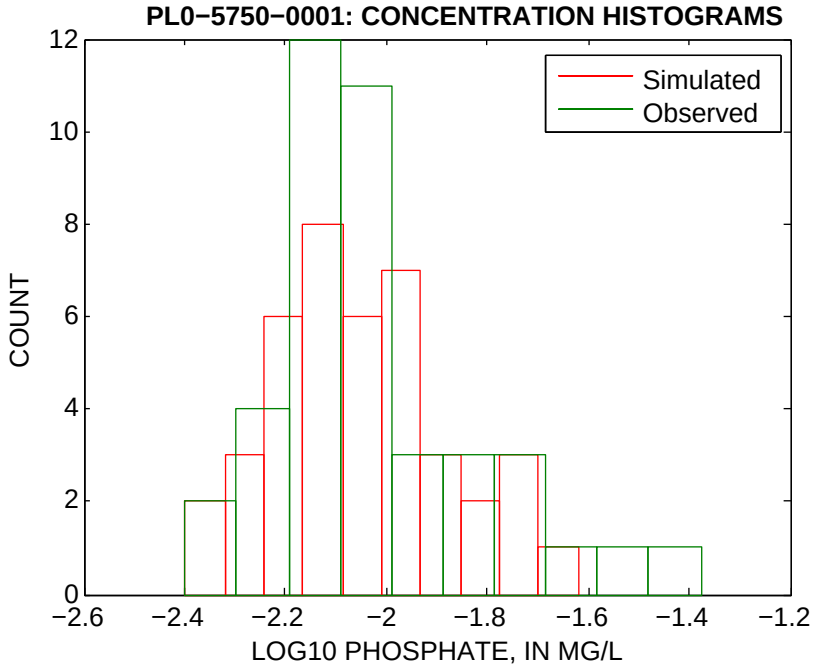
VERSION 2.1

ALL DATA
LOG10

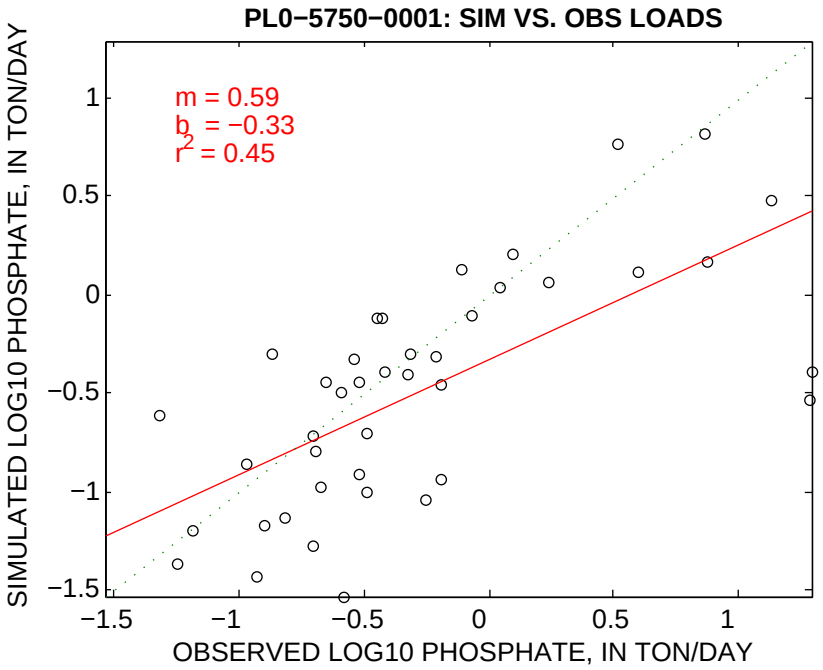


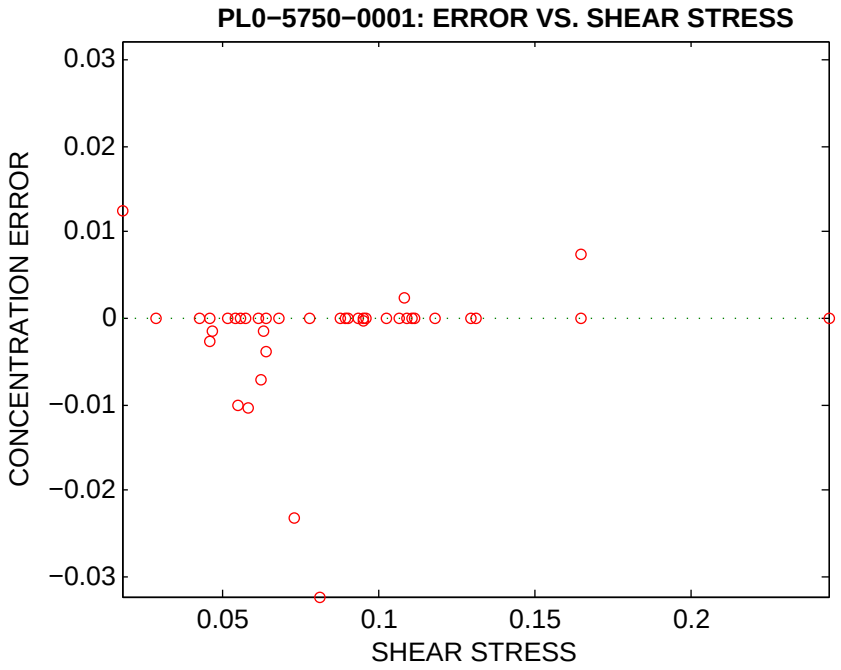


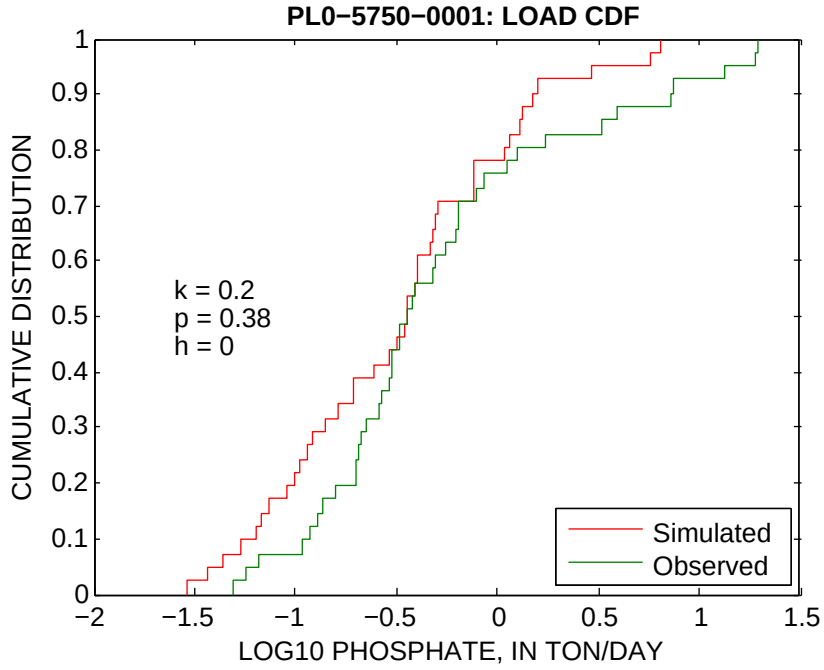


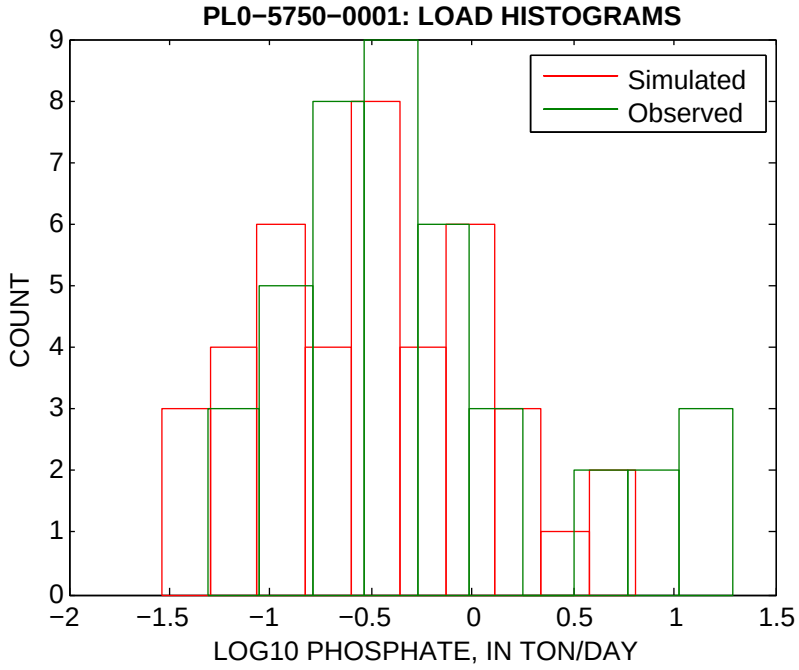


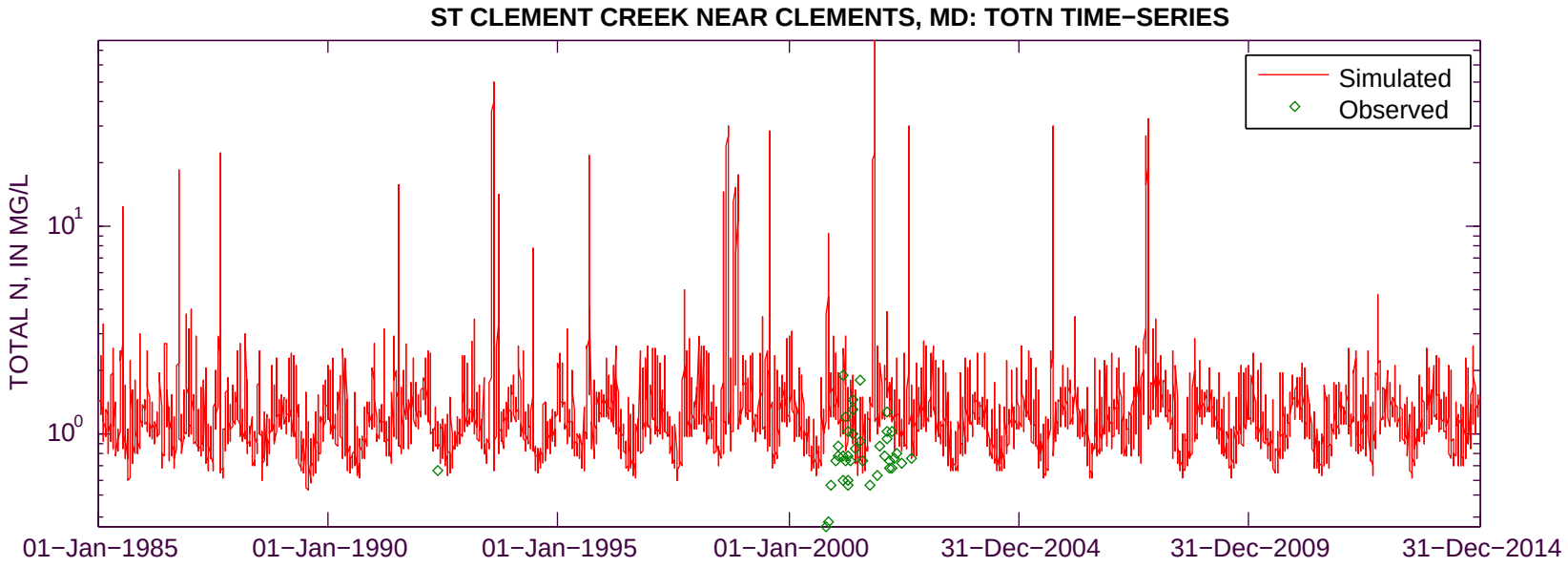
LOAD DATA
LOG10

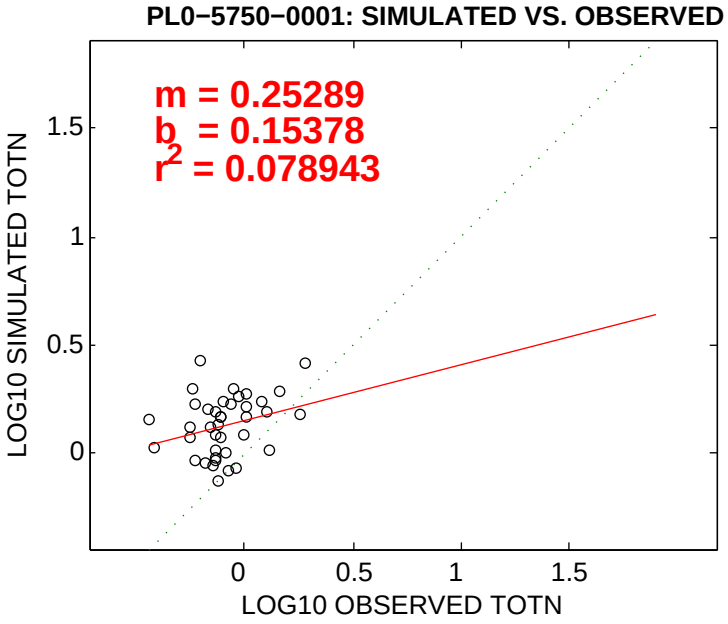


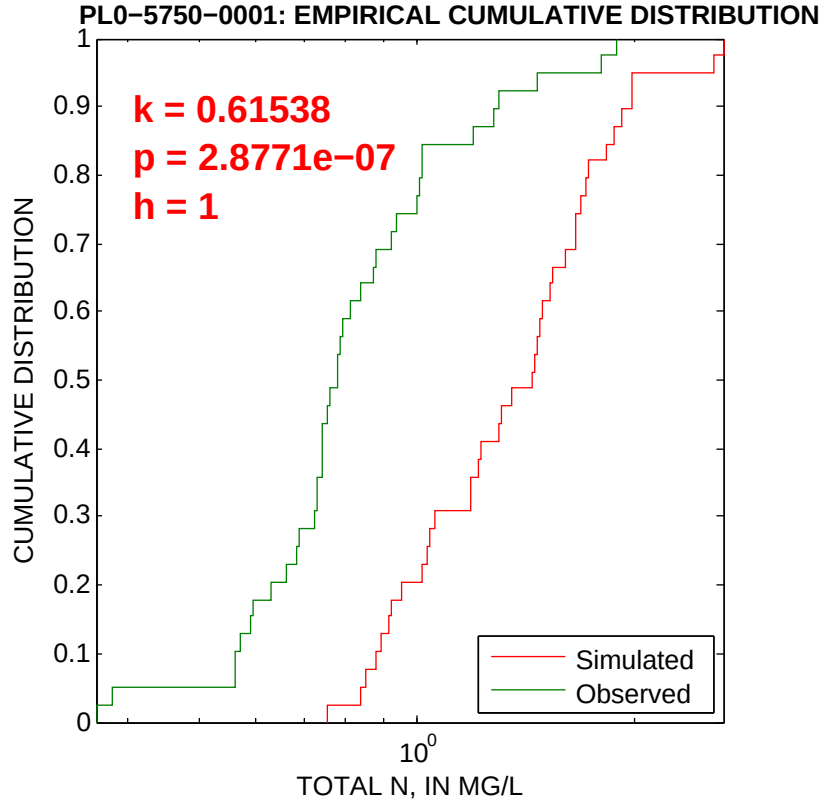












DATA SELECTION

scenario	file
P620171001WQ	TOTN.calib

plot: TOTN - total nitrogen

Dates: 1/1/1985 – 12/31/201

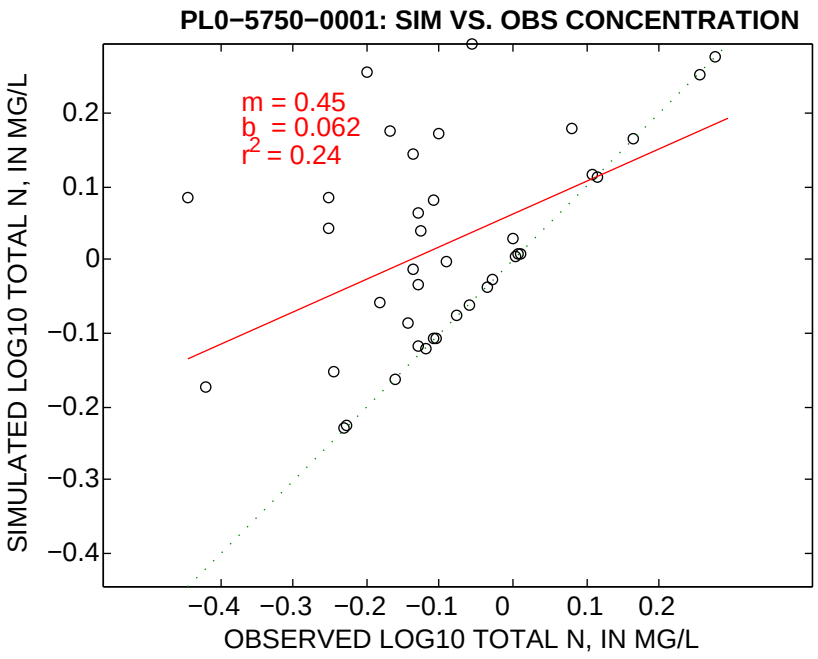
Drive	Directory	Observed
N/A	model	OBS20161101

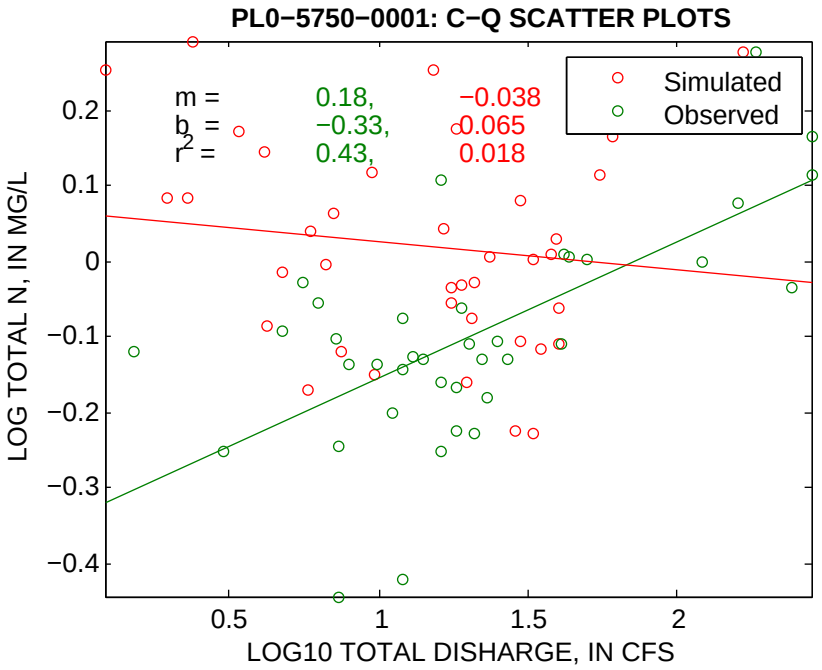
STATISTICS

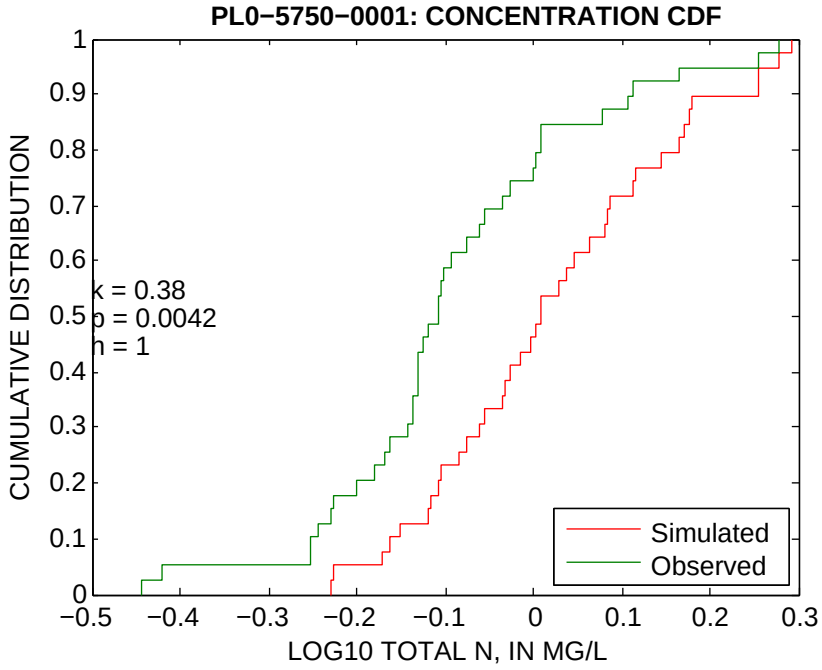
	n	39	39
		observe	simulate
min		0.36	0.75191
		-0.443697	-0.123834
mean		0.860527	1.41695
		-0.0918125	0.130557
media		0.78	1.4455
		-0.107905	0.160018
max		1.89392	2.6511
		0.277362	0.423426
varian		0.10753	0.20423
		0.0228398	0.0185036
JB		0.002408	0.058276
		0.37208	0.5
		ra	log
%		64.6613	-242.2
err.va		0.52596	0.0805409
rel.std.err		4.89129	3.52634
mod.eff		-3.89129	-2.52634

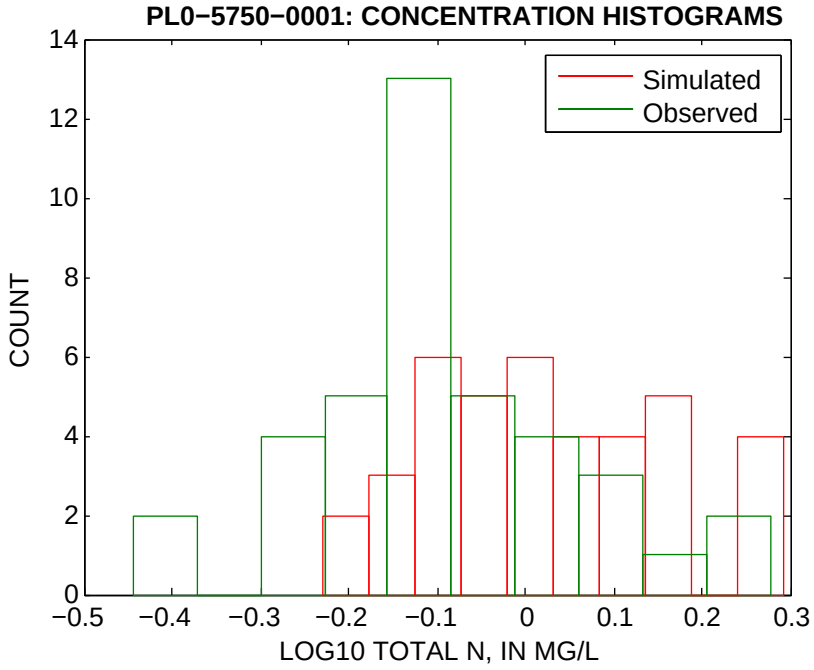
VERSION

ALL DATA
LOG10

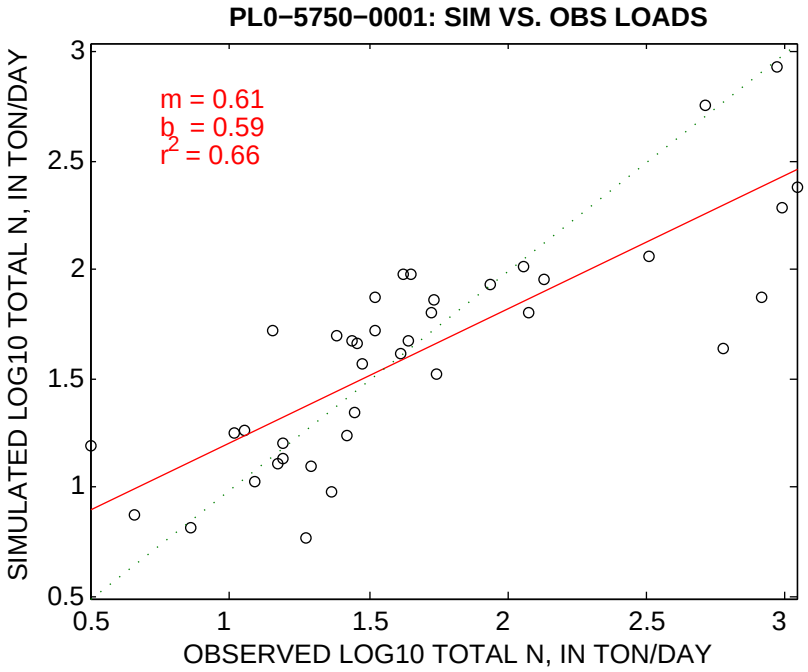


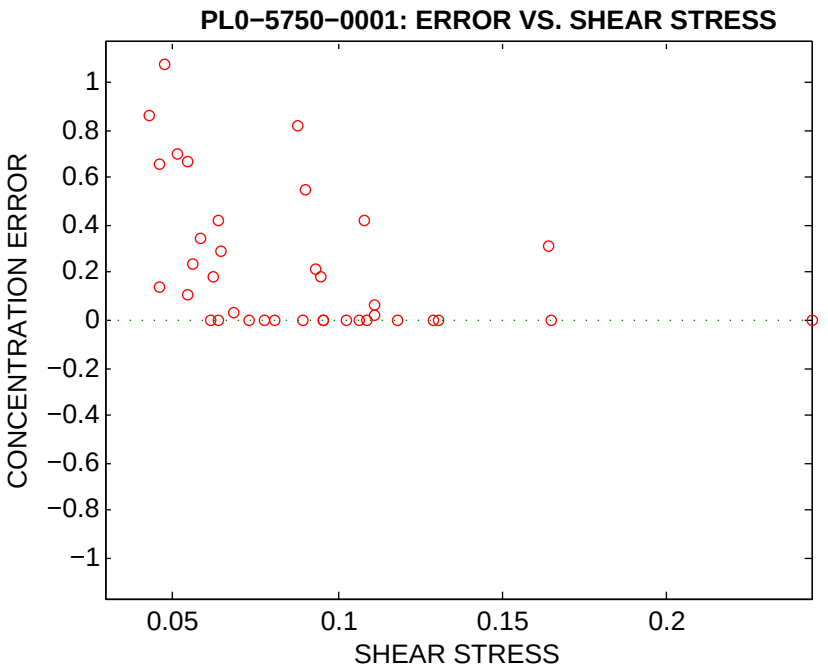


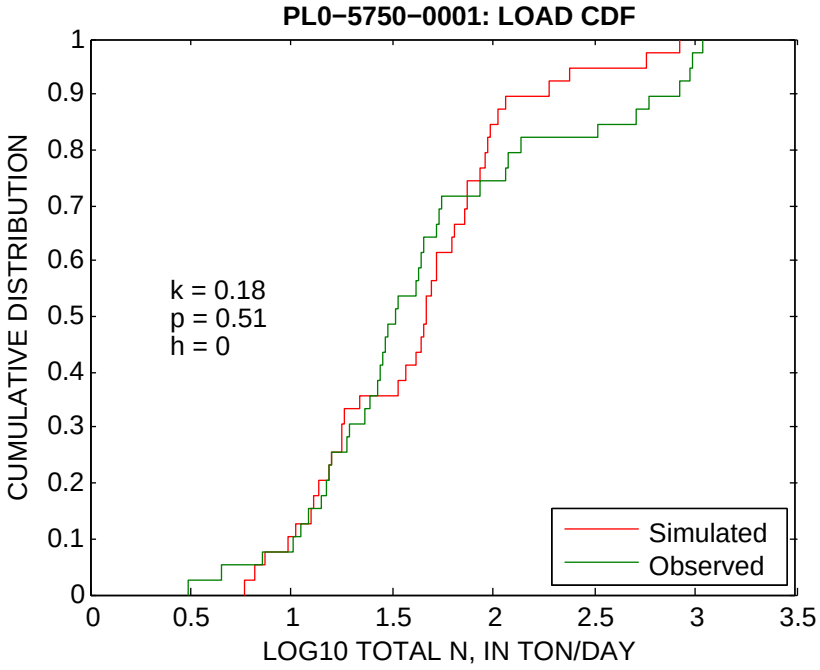


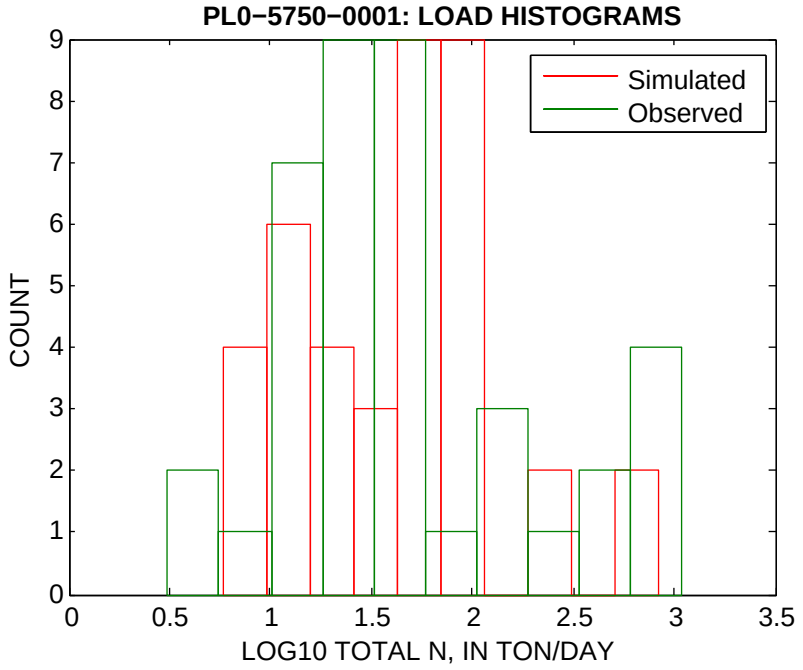


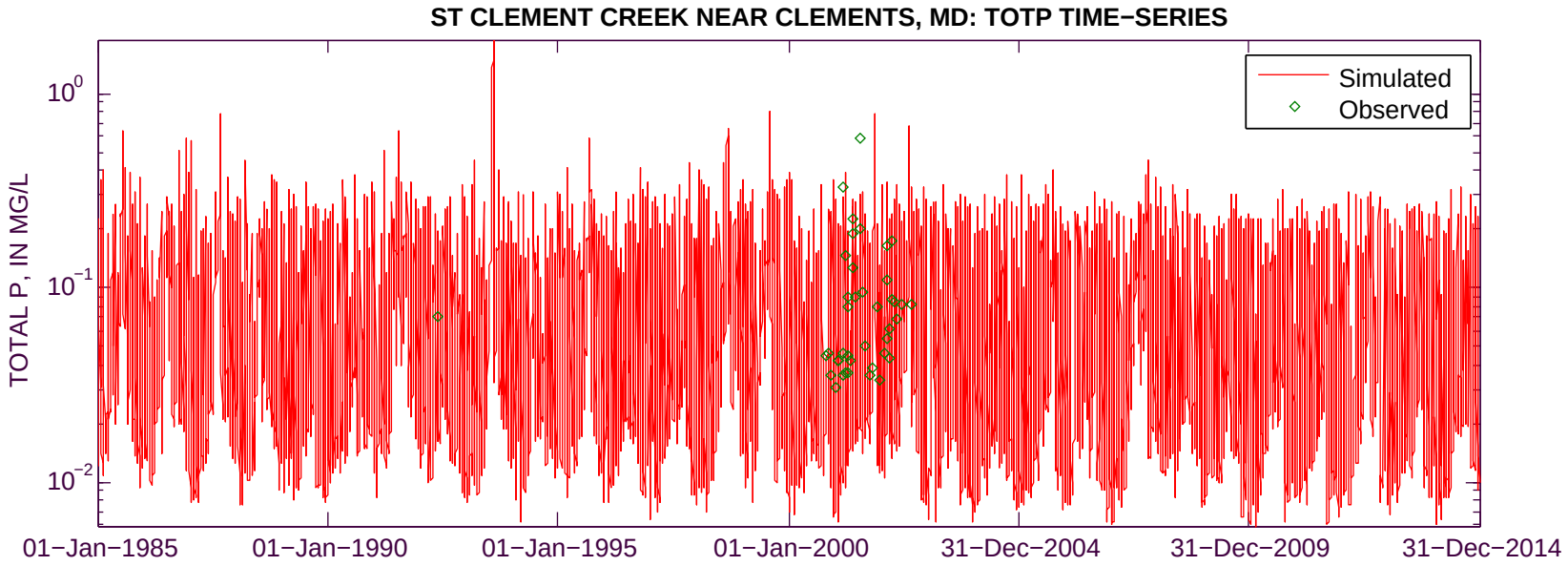
LOAD DATA
LOG10

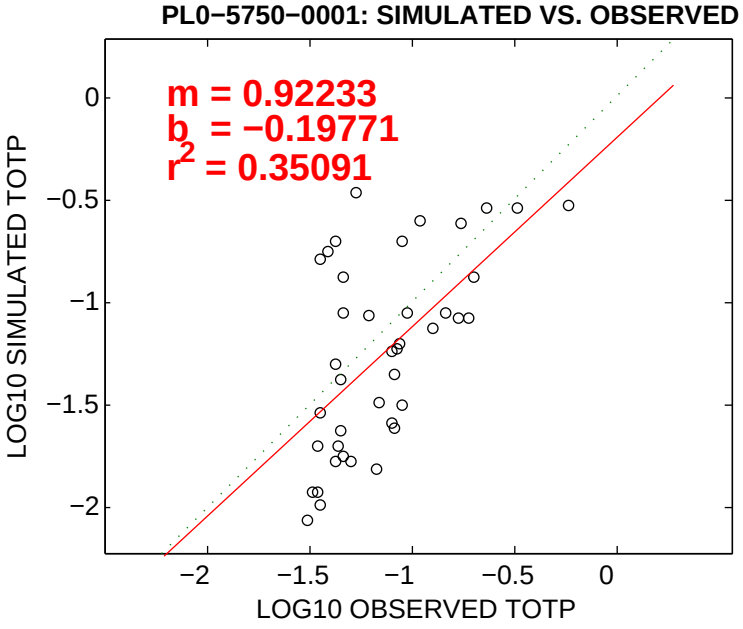


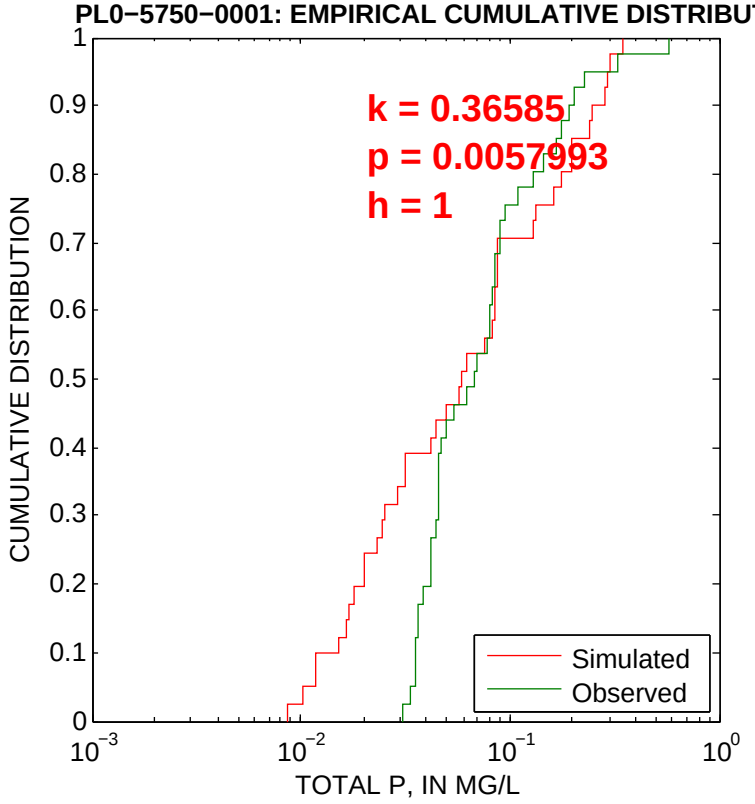












DATA SELECTION

scenario: P620171001WQ | file: TOTP.calib

plot: TOTP - total phosphorus

Dates: 1/1/1985 – 12/31/201

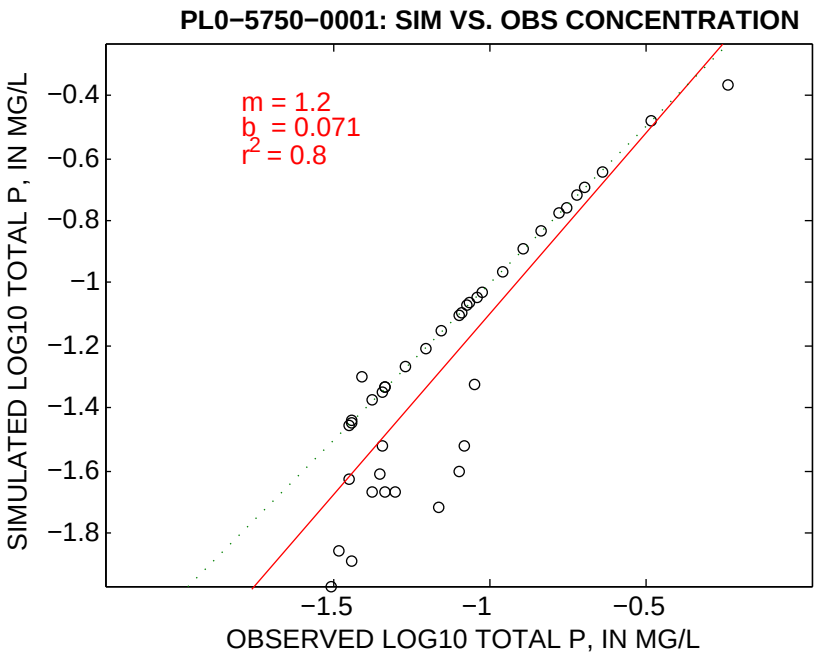
Drive: N/A | Directory: model | Observed: OBS20161101

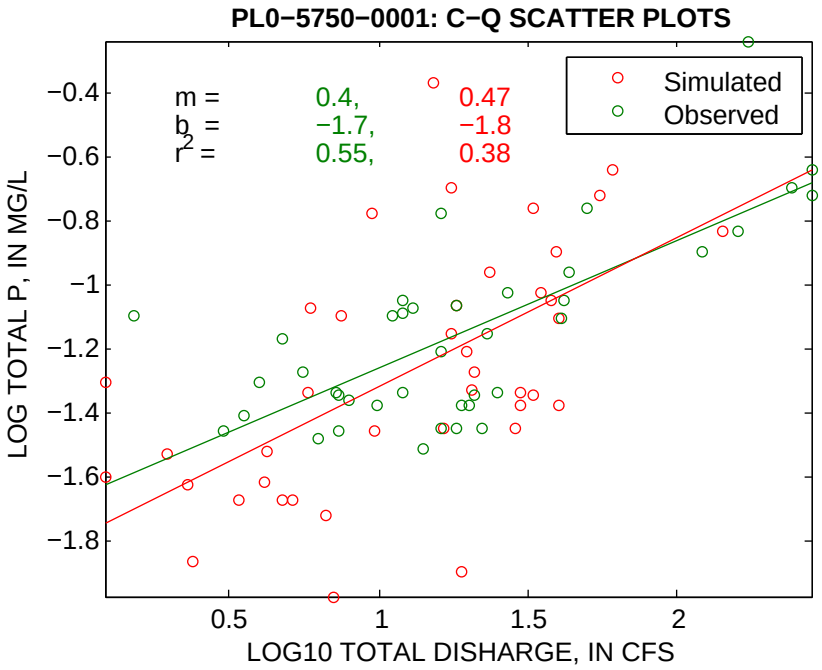
STATISTICS

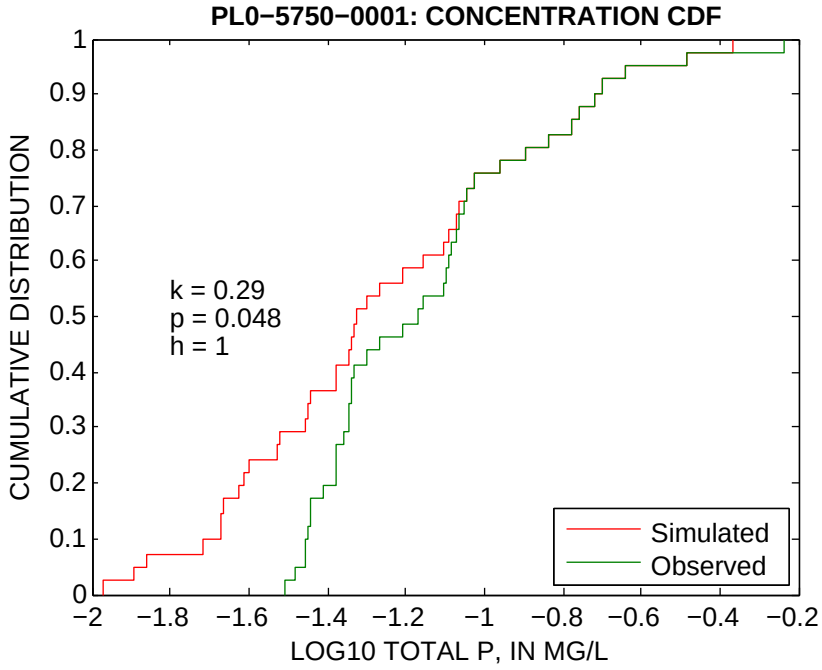
	n	41	41
		observe	simulate
min		0.031	0.0085563
		-1.50864	-2.06771
mean		0.0975938	0.0957207
		-1.13596	-1.24543
media		0.068	0.059509
		-1.16749	-1.22542
max		0.578882	0.34577
		-0.23741	-0.461213
varian		0.0100368	0.00905013
		0.0911341	0.220929
JB		0.001	0.015777
		0.027806	0.152917
		ra	log
%		-1.9192	9.63714
err.va		0.00809277	0.156237
rel.std.err		0.806309	1.71436
mod.eff		0.193691	-0.714359

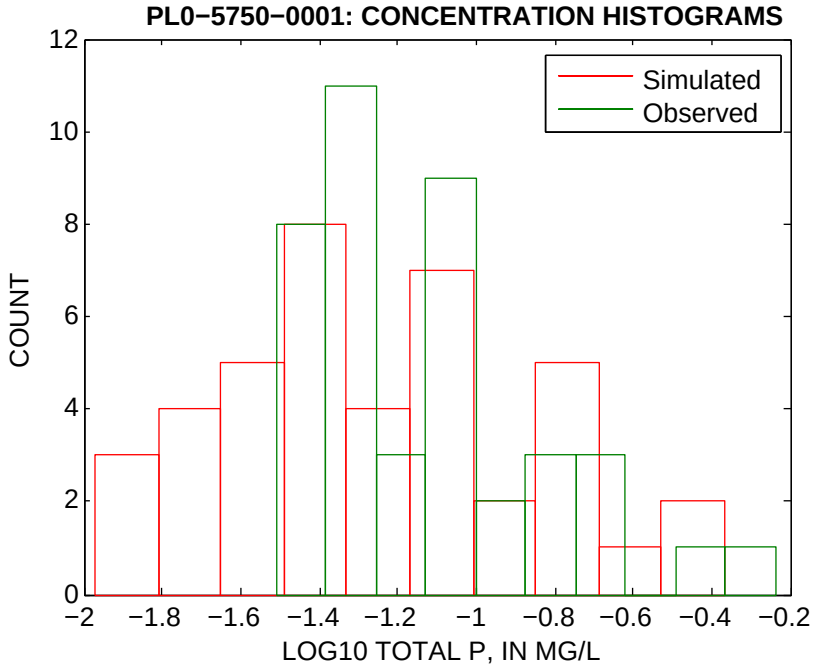
VERSION 2.1

ALL DATA
LOG10

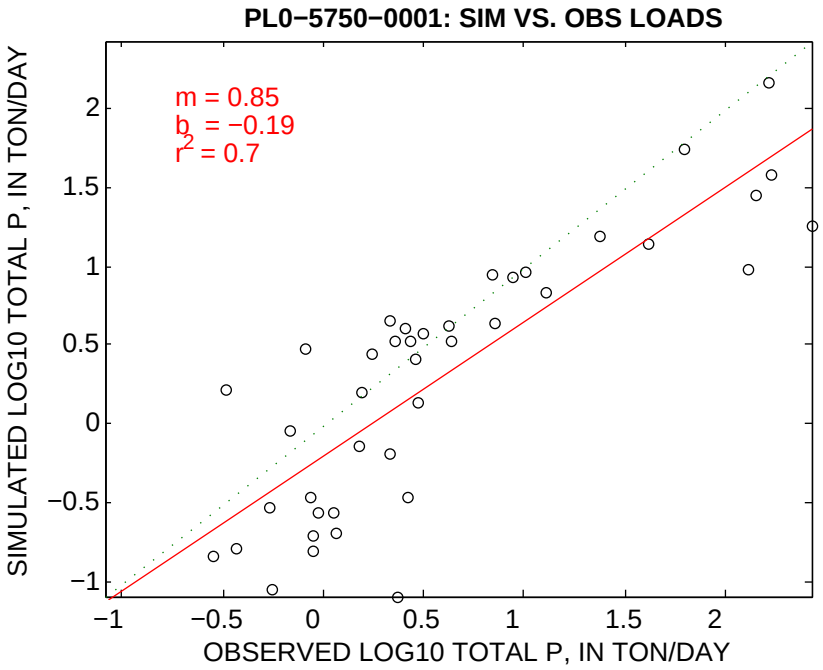


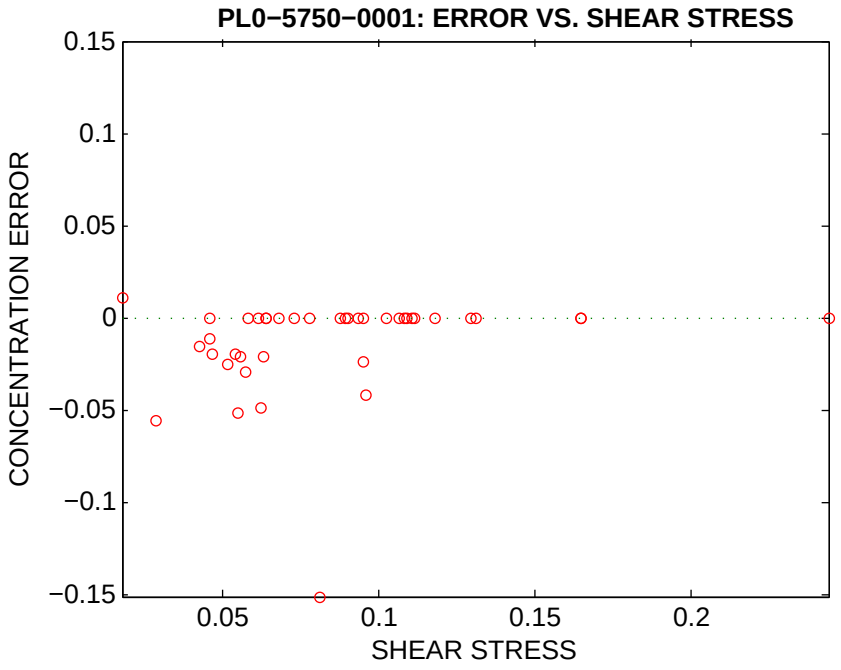


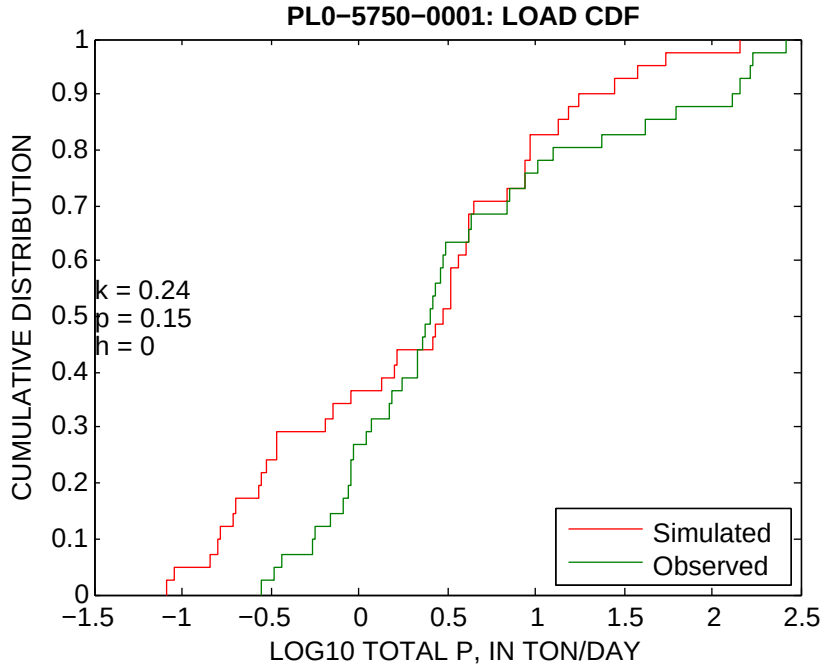


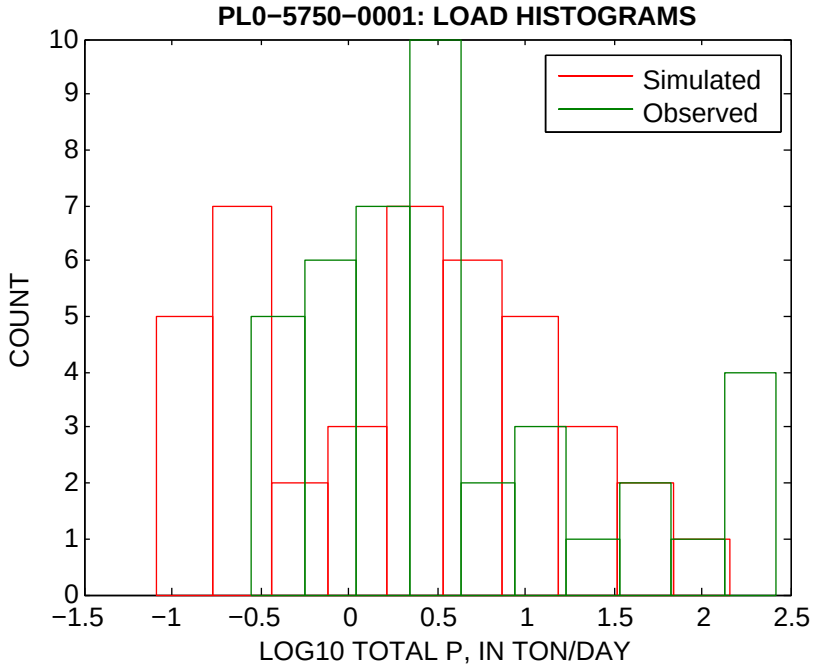


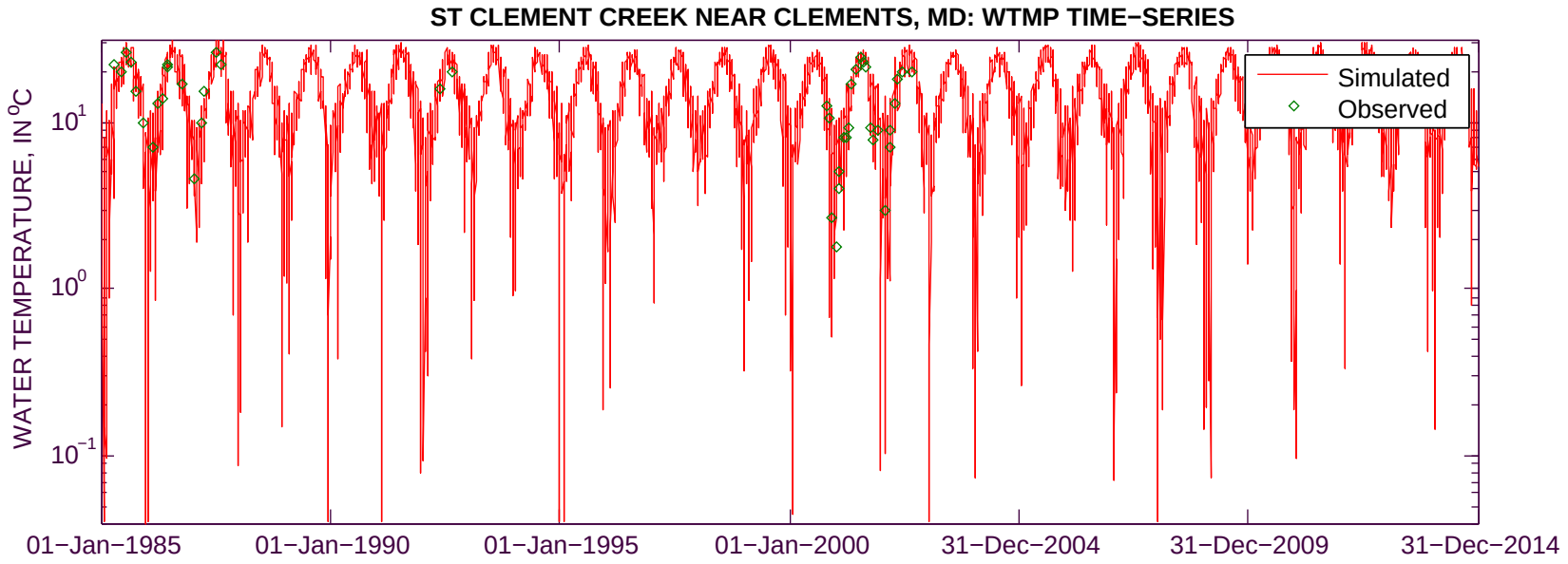
LOAD DATA
LOG10

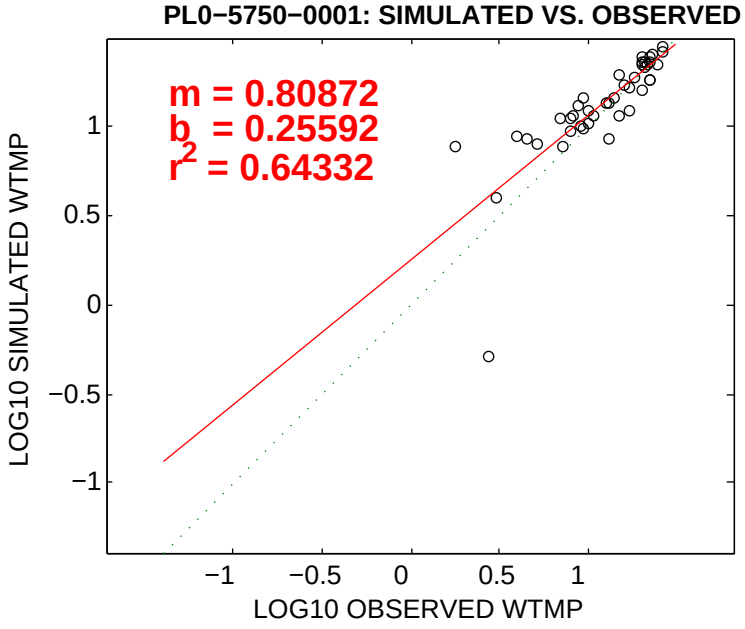


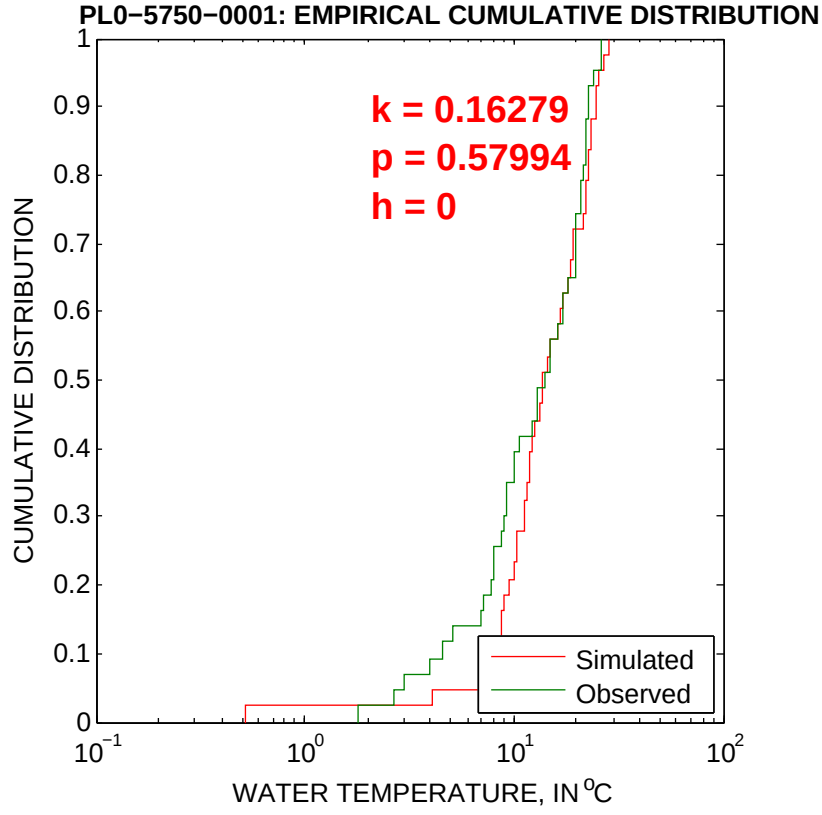












DATA SELECTION

scenario	file
P620171001WQ	WTMP.calib

plot: WTMP - water tempera...

Dates 1/1/1985 12/31/201

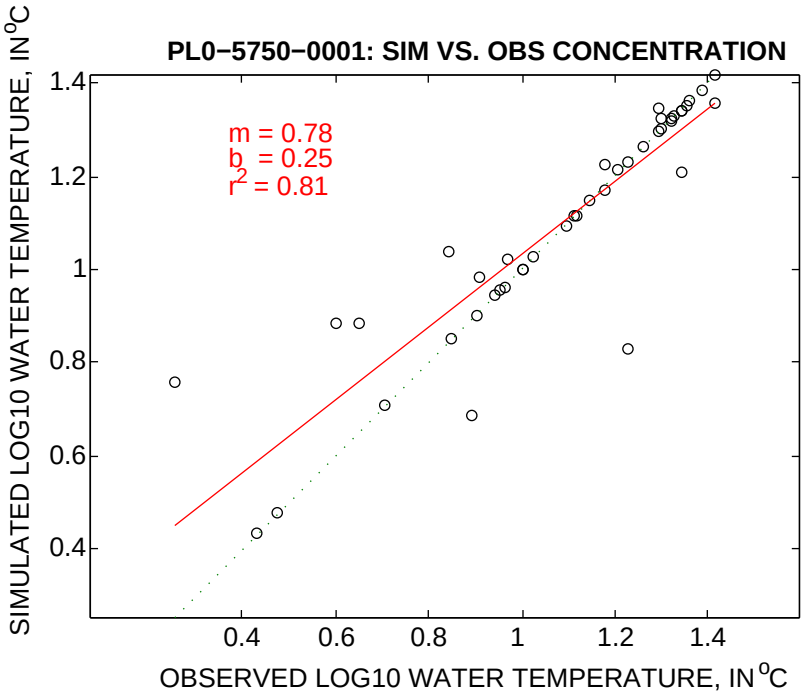
Drive	Directory	Observed
N/A	model	OBS20161101

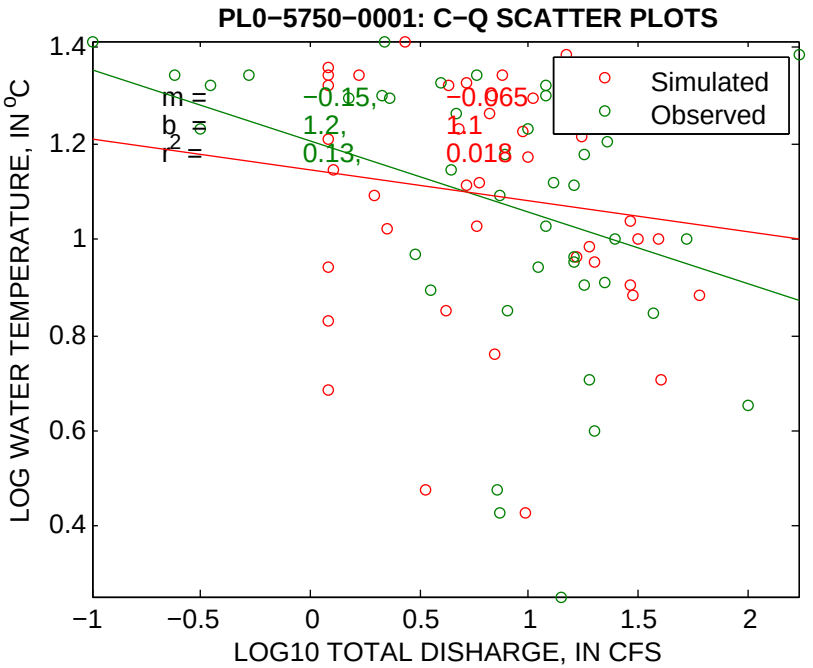
STATISTICS

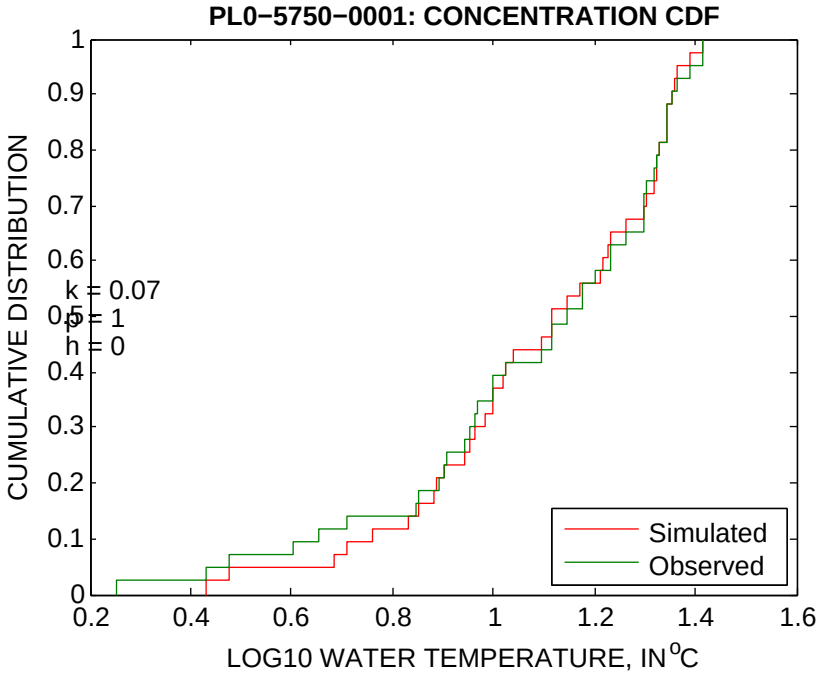
	n	43	43
		observe	simulate
min		1.8	0.51676
		0.255273	-0.286711
mean		14.1256	15.3922
		1.07572	1.12588
media		14	13.731
		1.14613	1.1377
max		26	28.433
		1.41497	1.45382
varian		49.7419	44.627
		0.0823677	0.0837395
JB		0.120101	0.385892
		0.023395	0.001
		ra	log
%		8.9669	4.6628
err.va		8.94065	0.0354575
rel.std.err		0.179741	0.430478
mod.eff		0.820259	0.569522

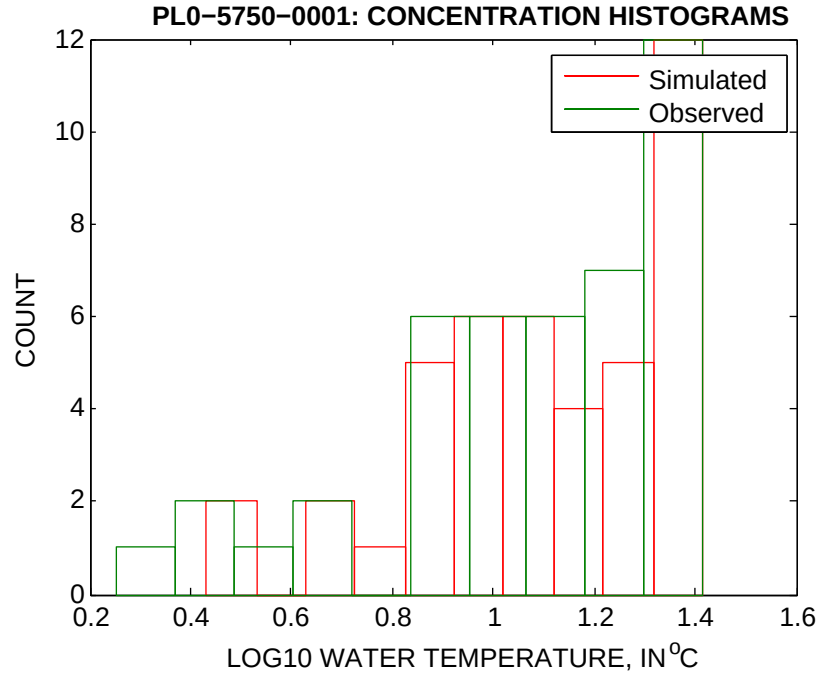
VERSION 2.1

ALL DATA
LOG10

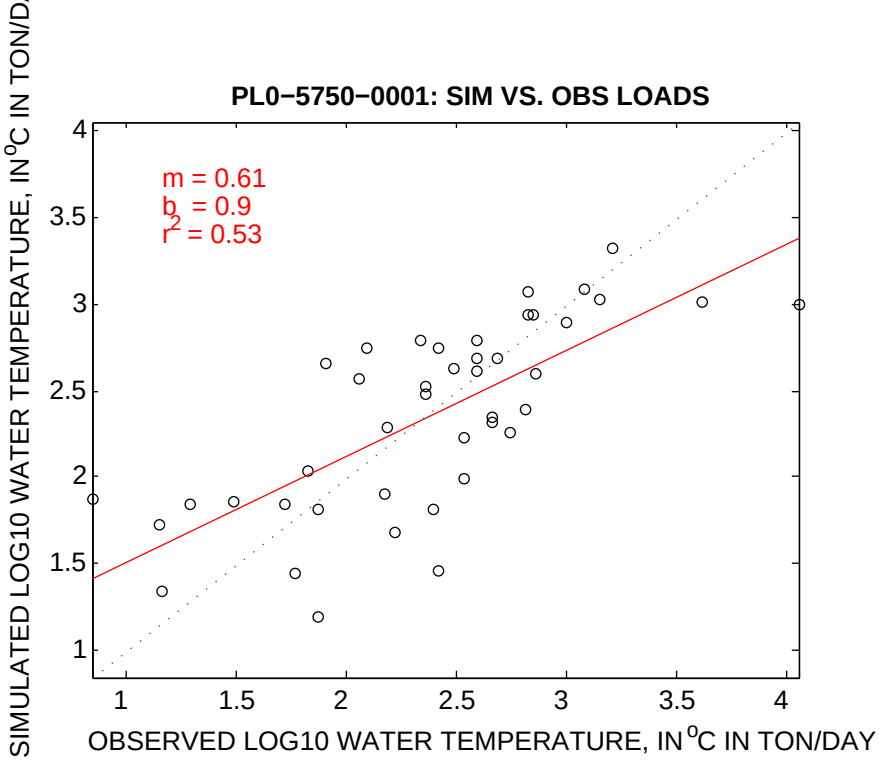


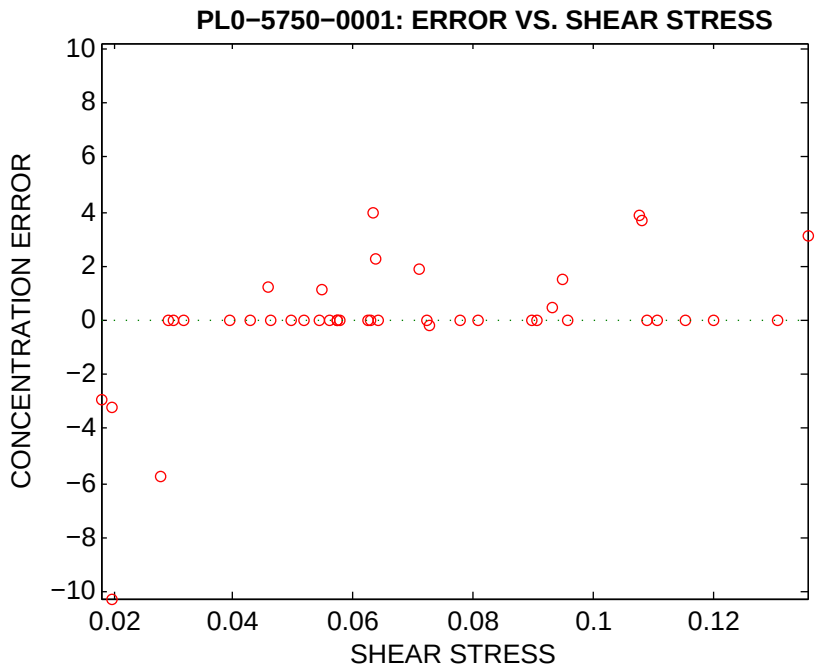


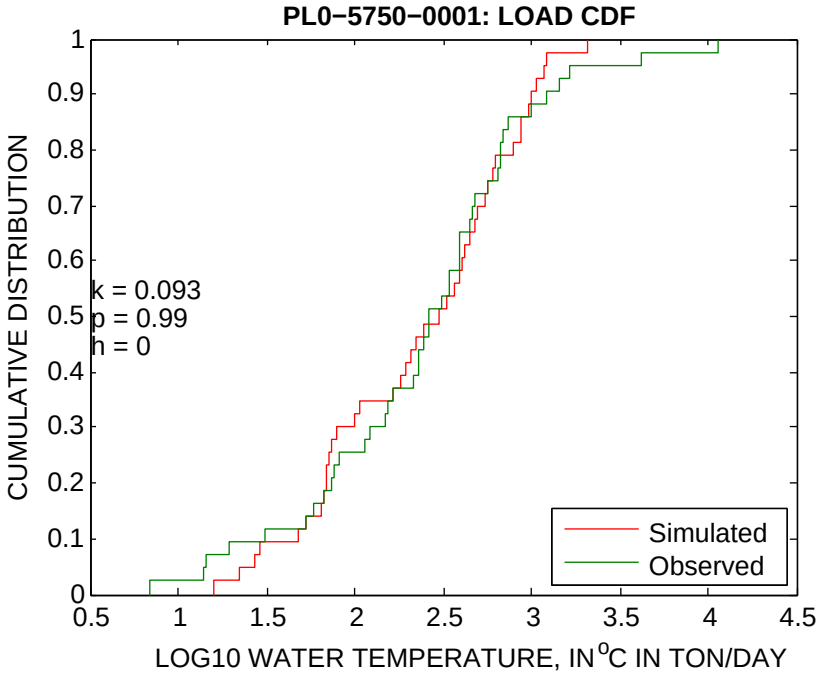


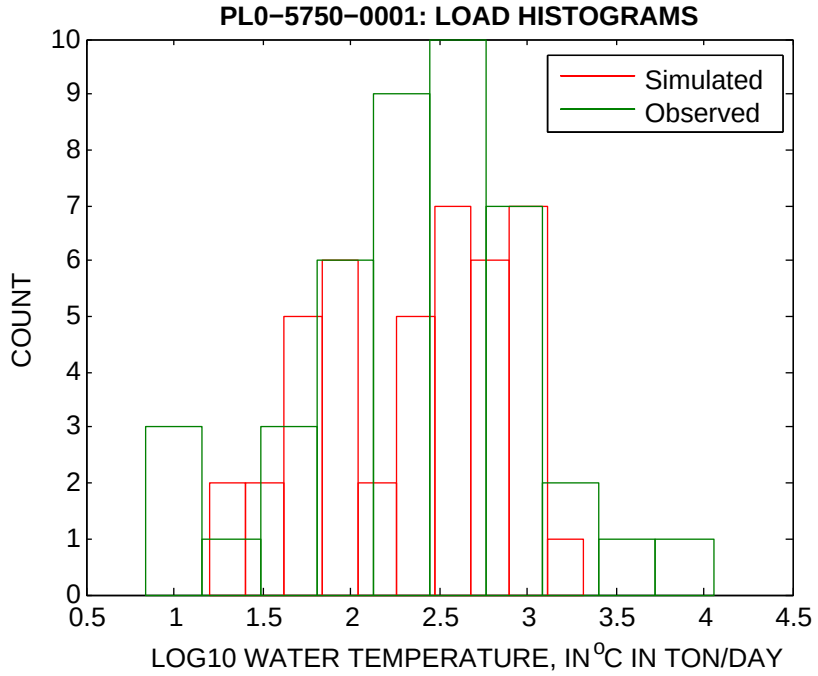


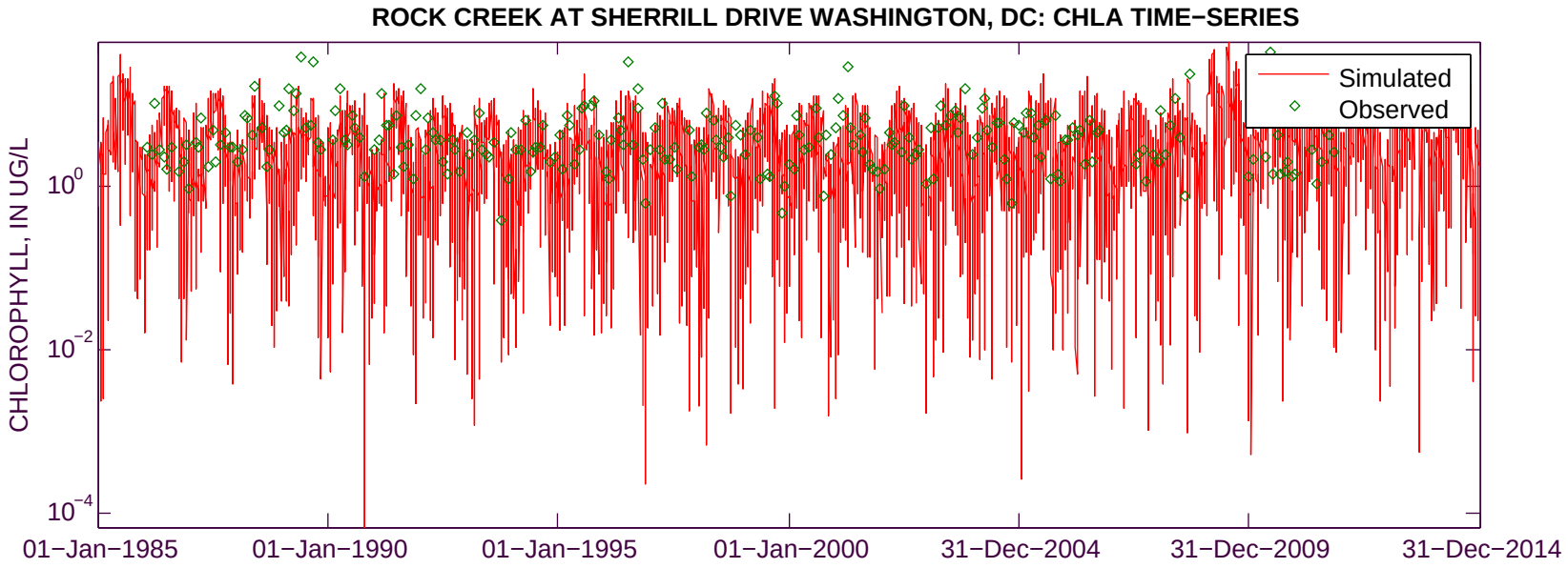
LOAD DATA
LOG10

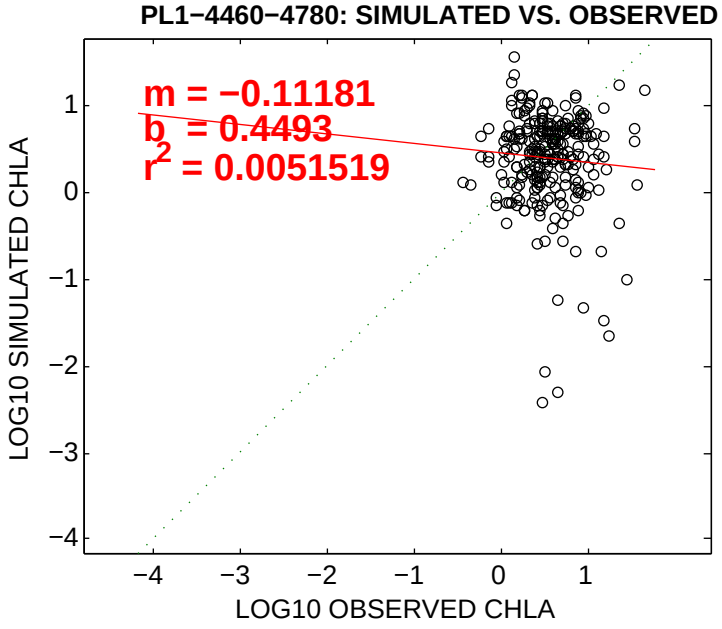


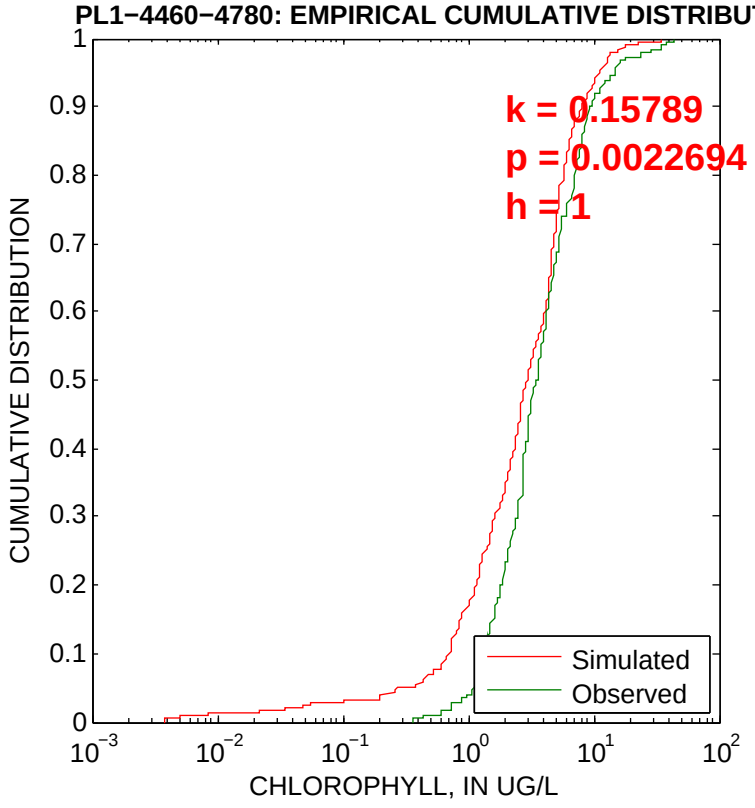












DATA SELECTION

scenario	file
P620171001WQ	CHLA.calib

plot: CHLA - chlorophyll A

Dates: 1/1/1985 – 12/31/201

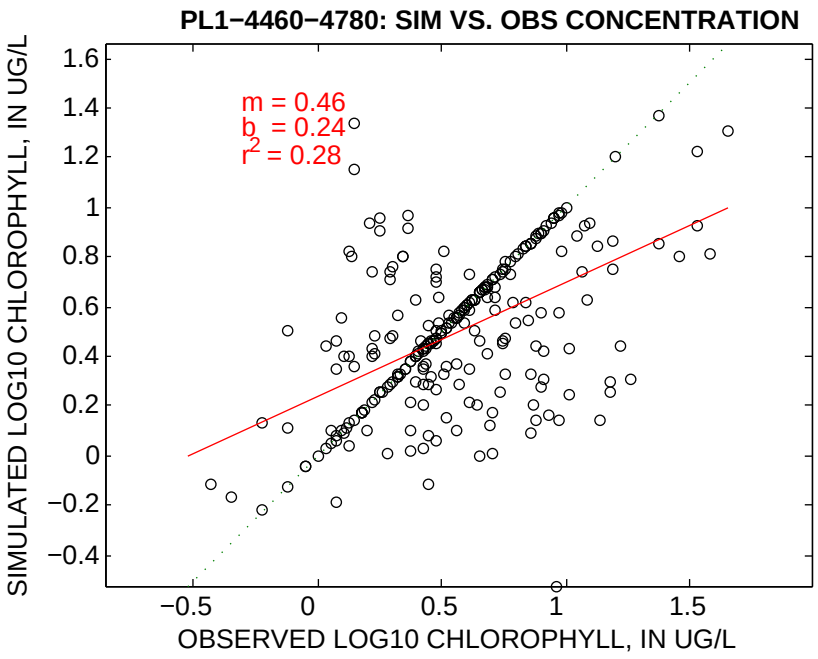
Drive	Directory	Observed
N/A	model	OBS20161101

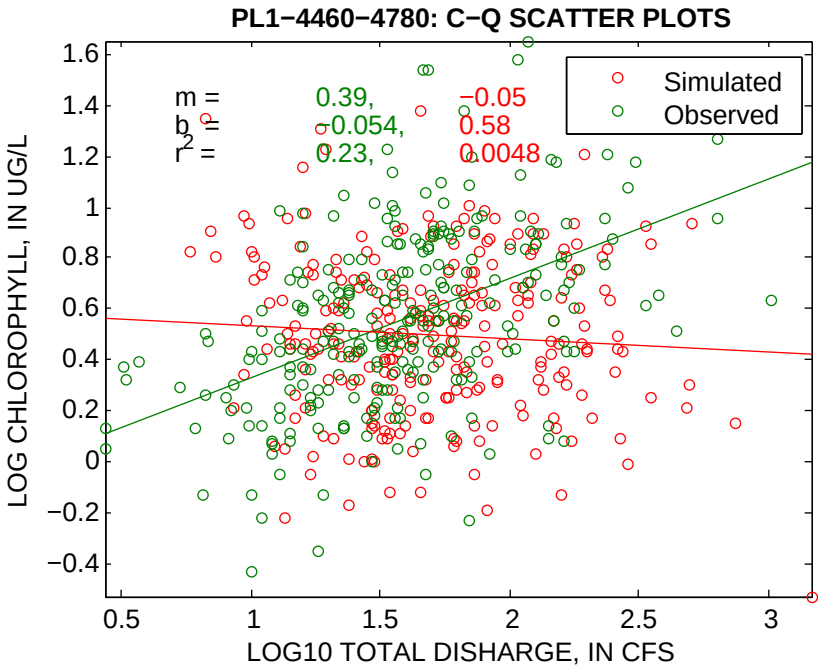
STATISTICS

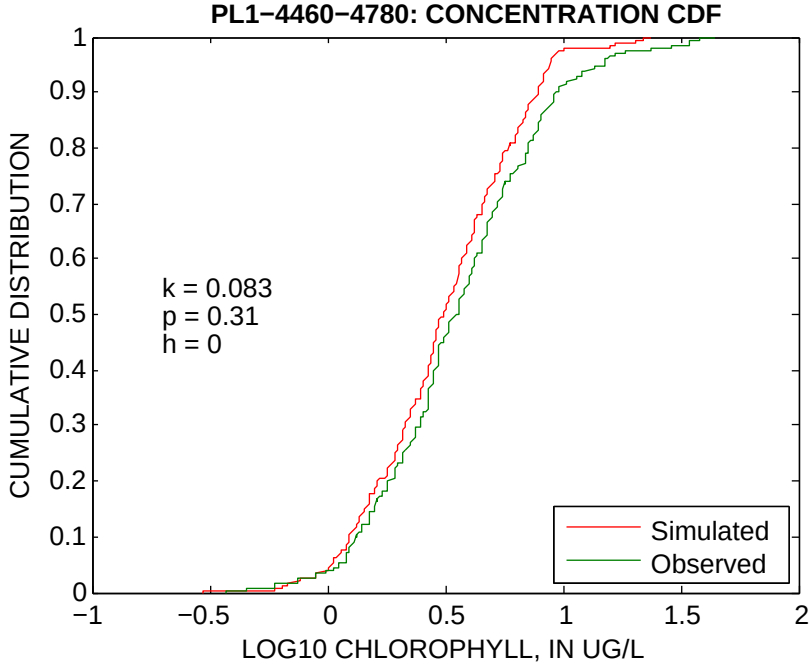
n	266	266
	observe	simulate
min	0.37	0.0037862
	-0.431798	-2.4218
mean	5.16704	3.98604
	0.56166	0.386508
media	3.5705	2.97065
	0.552723	0.472843
max	44.859	35.319
	1.65185	1.54801
varian	32.2338	15.289
	0.12151	0.294832
JB	0.001	0.001
	0.072922	0.001
	ra	log
%	-22.8565	-31.1847
err.va	47.1967	0.474306
rel.std.err	1.4642	3.90345
mod.eff	-0.464198	-2.90345

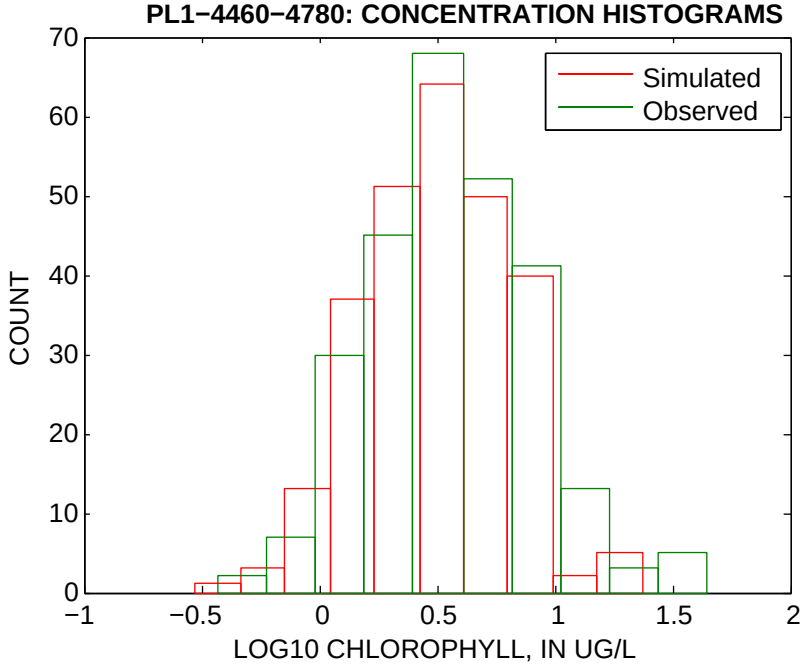
VERSION 2.1

ALL DATA
LOG10

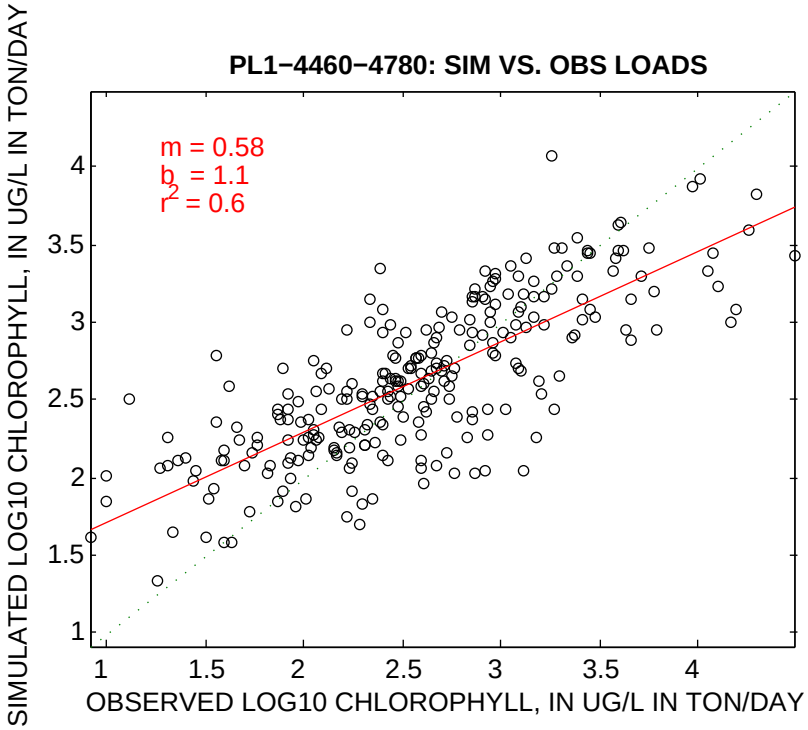


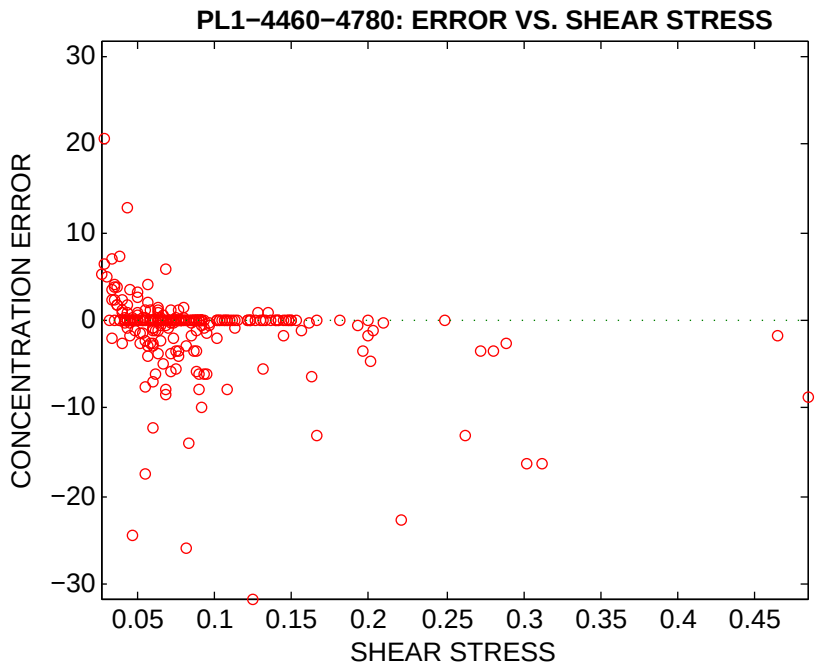


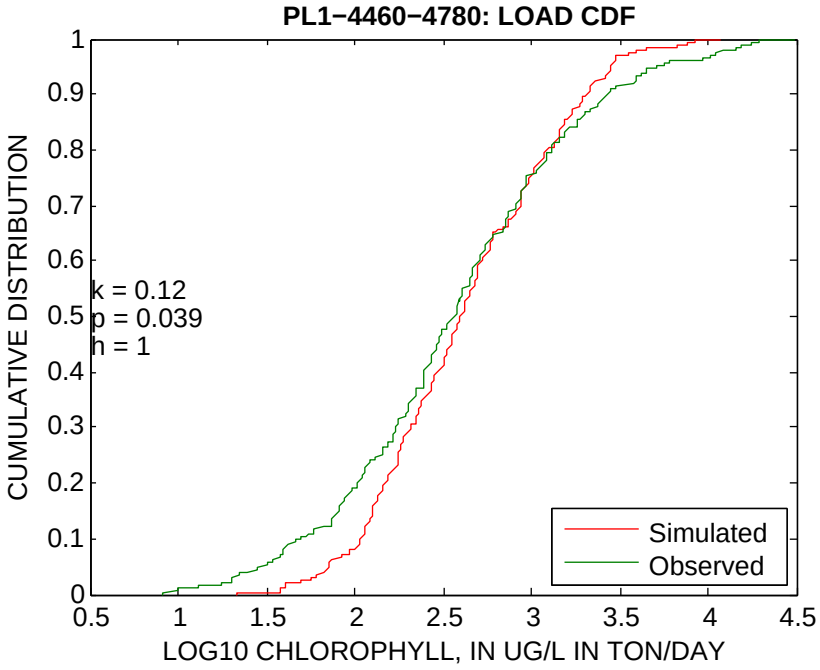


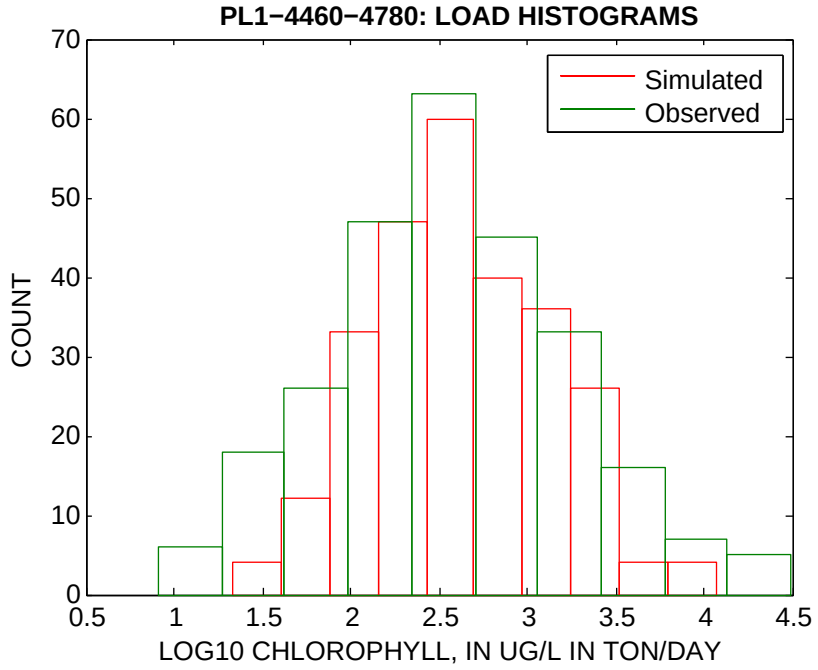


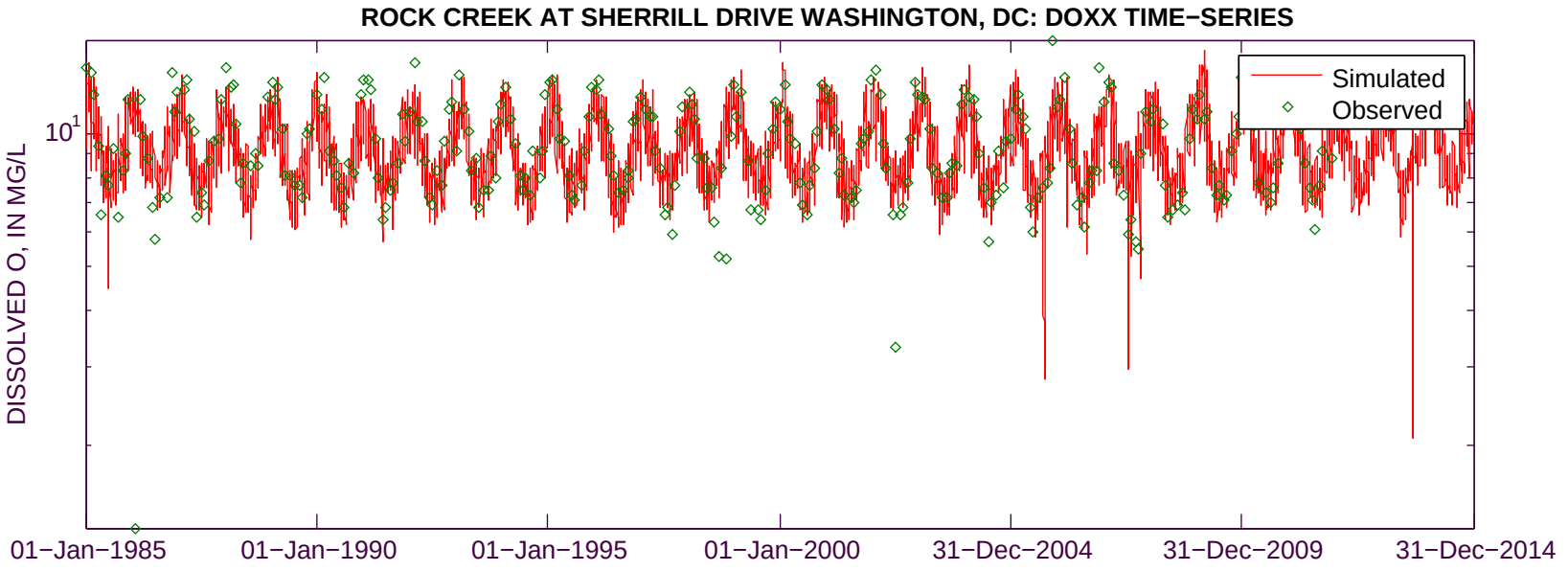
LOAD DATA
LOG10

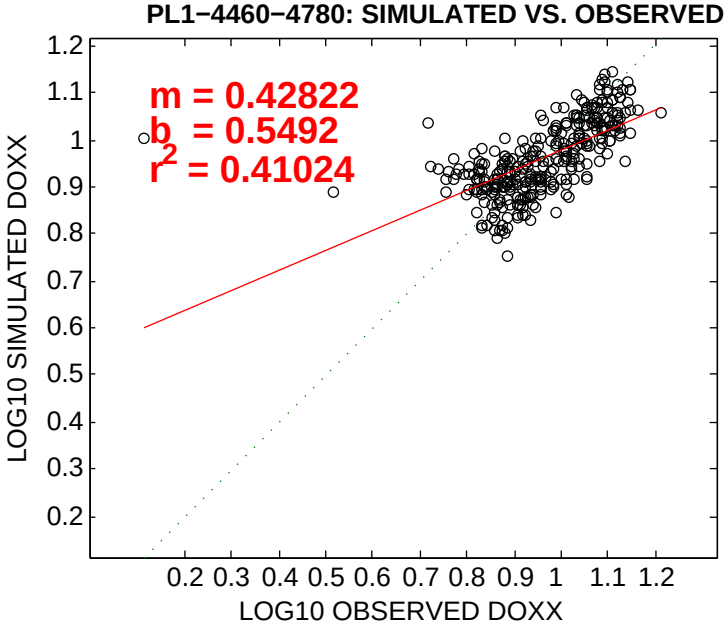


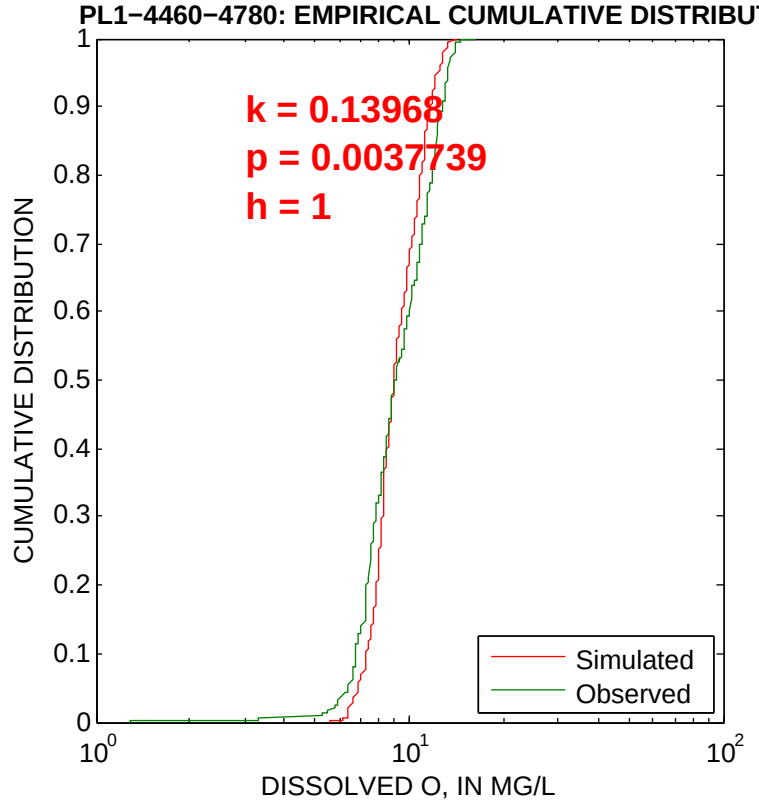












DATA SELECTION

scenario	file
P620171001WQ	DOXX.calib

plot: DOXX - dissolved oxygen

Dates: 1/1/1985 – 12/31/201

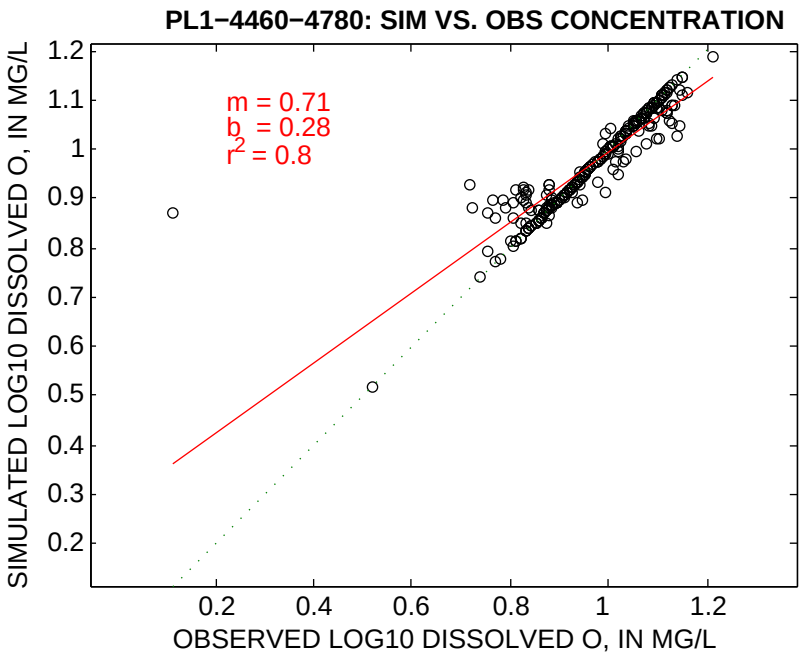
Drive	Directory	Observed
N/A	model	OBS20161101

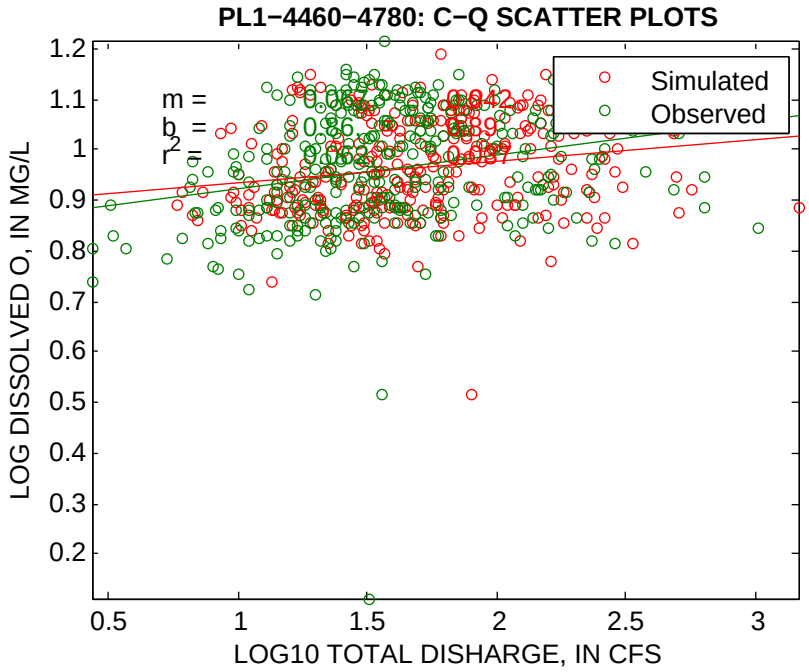
STATISTICS

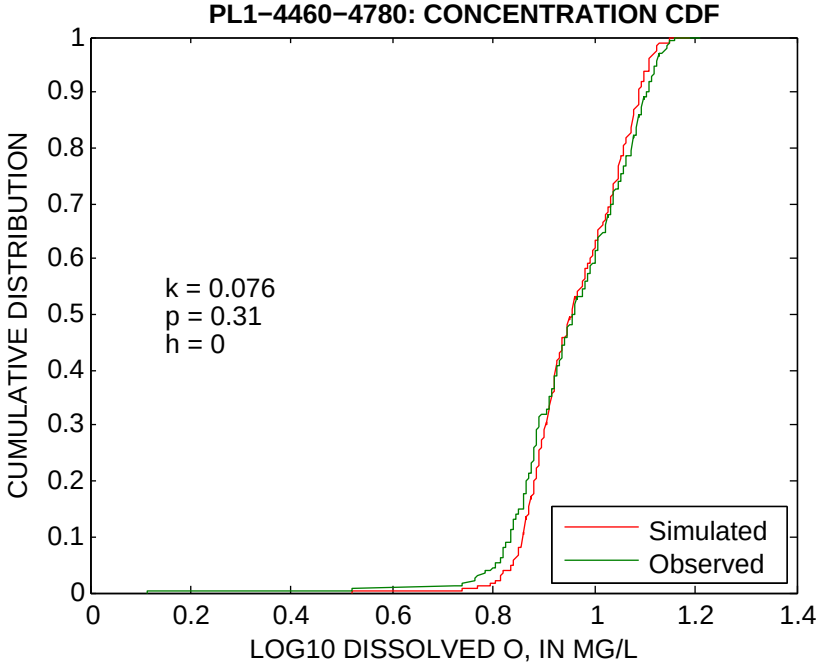
	n	315	315
		observe	simulate
min		1.3	5.6356
		0.113943	0.75094
mean		9.45727	9.28826
		0.961548	0.960949
media		9.099	8.9643
		0.958994	0.952516
max		16.3	13.92
		1.21219	1.14364
varian		5.38137	2.83949
		0.0135428	0.00605337
JB		0.111644	0.004772
		0.001	0.048634
		ra	log
%		-1.78706	-0.0622924
err.va		2.48763	0.00799797
rel.std.err		0.462267	0.59057
mod.eff		0.537733	0.40943

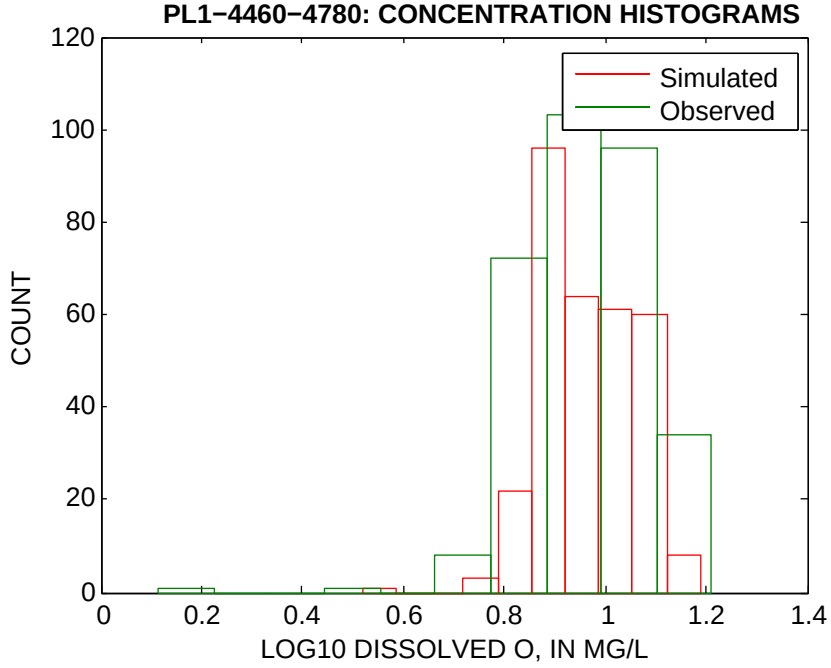
VERSION 2.1

ALL DATA
LOG10

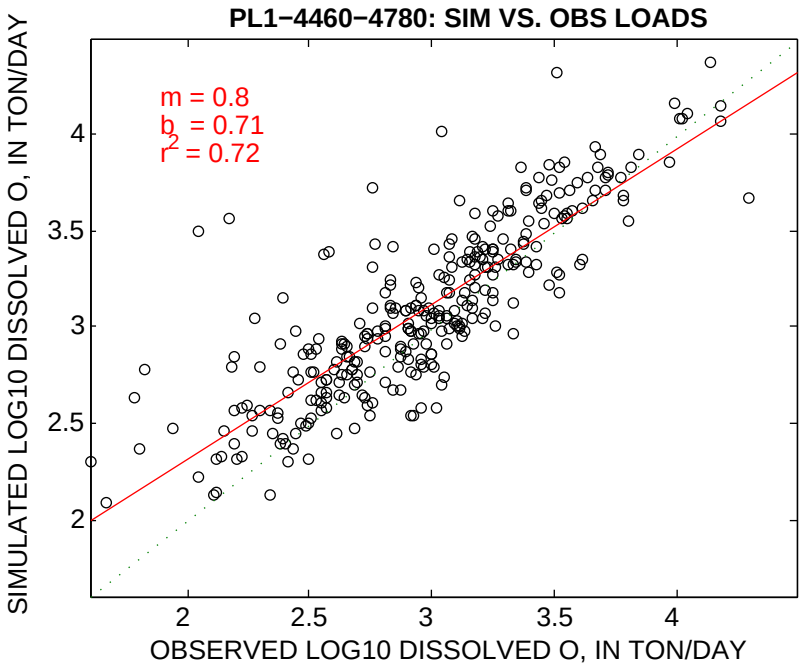


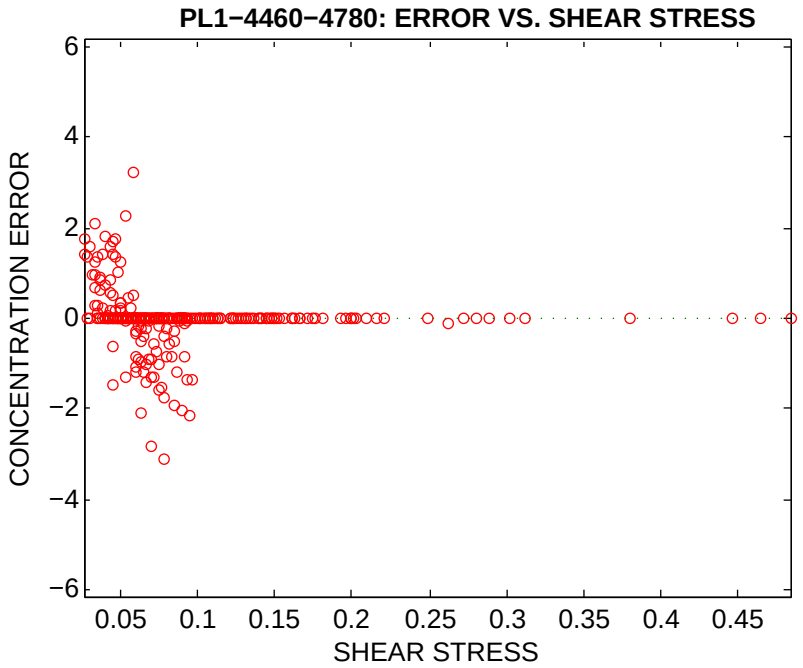


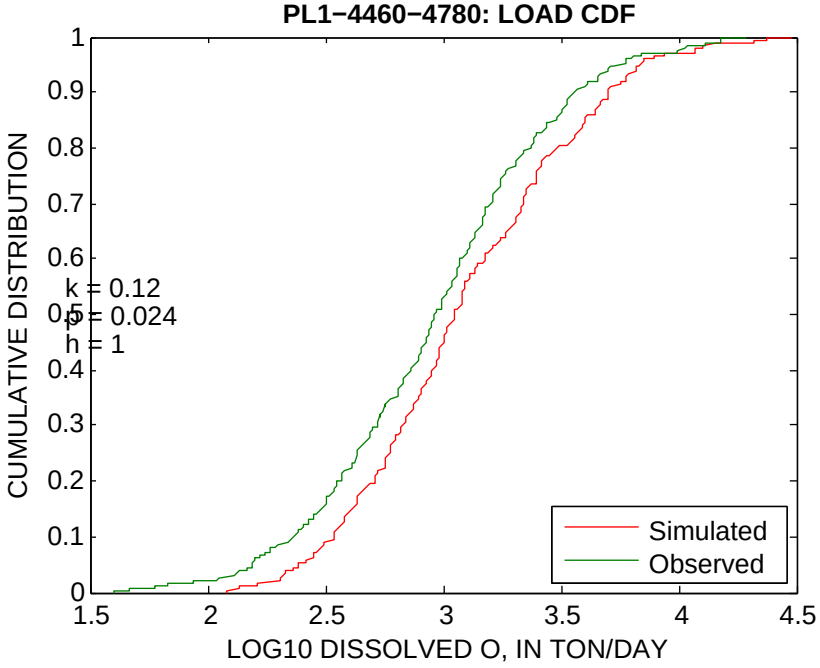


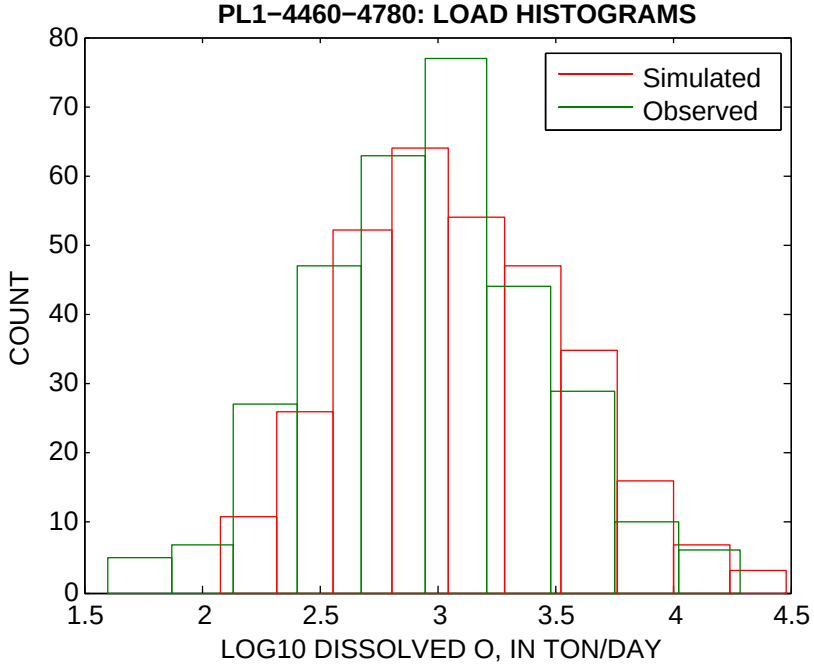


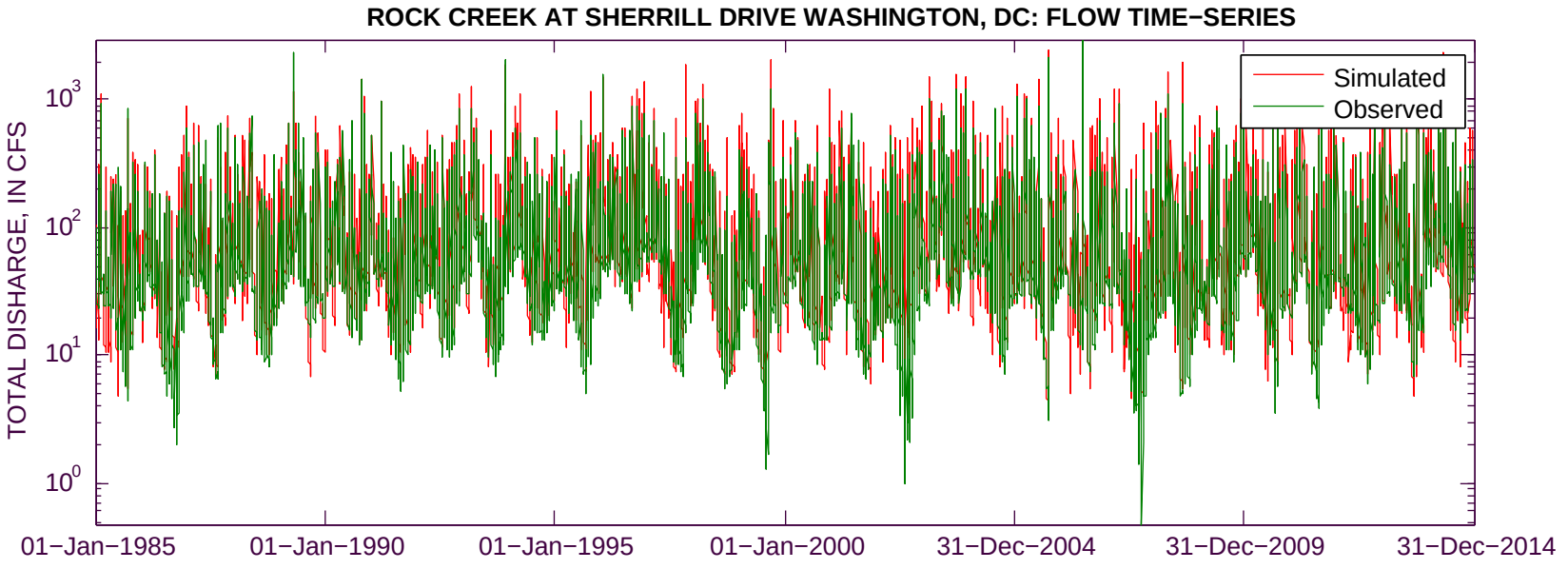
LOAD DATA
LOG10

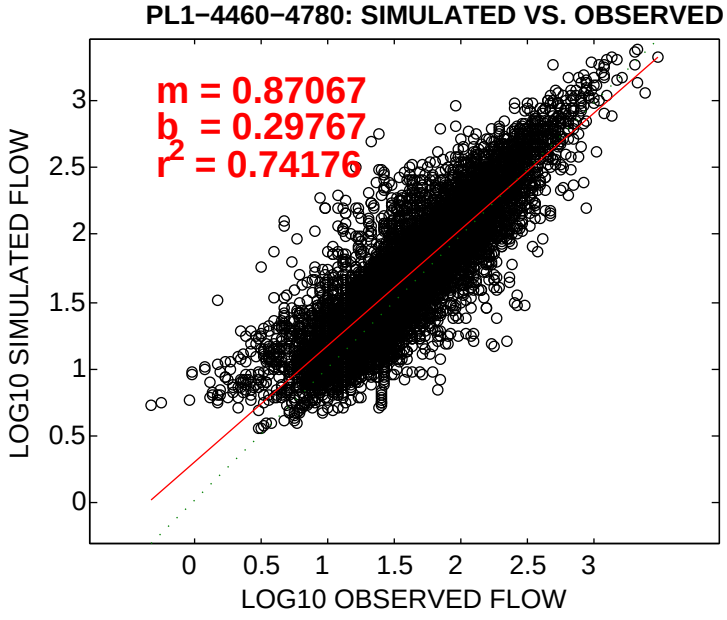


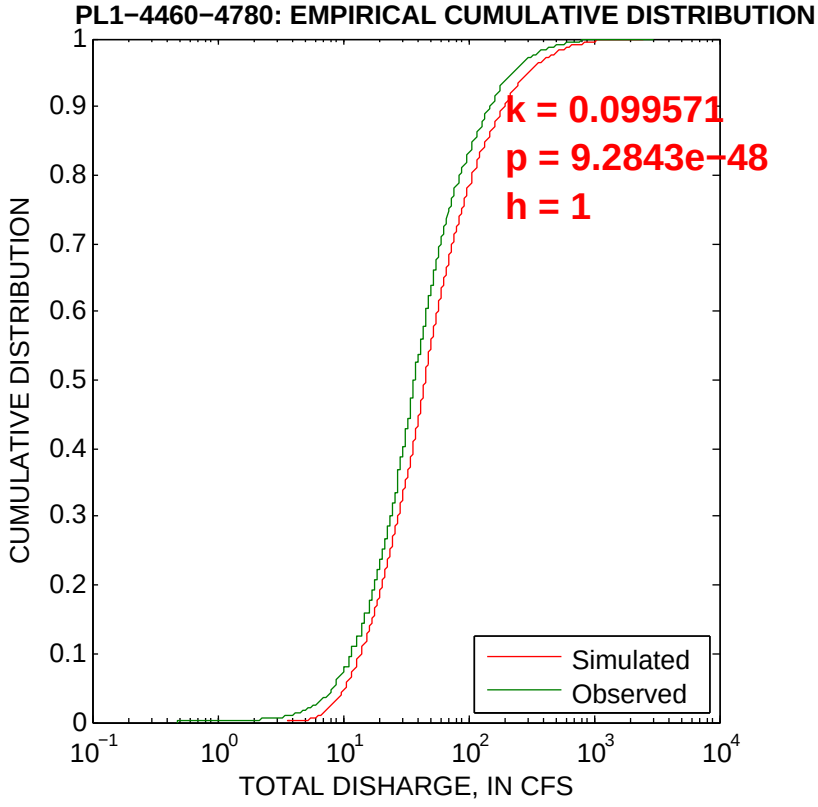












DATA SELECTION

scenario: P620171001WQ | file: FLOW.calib

plot: FLOW - total discharge

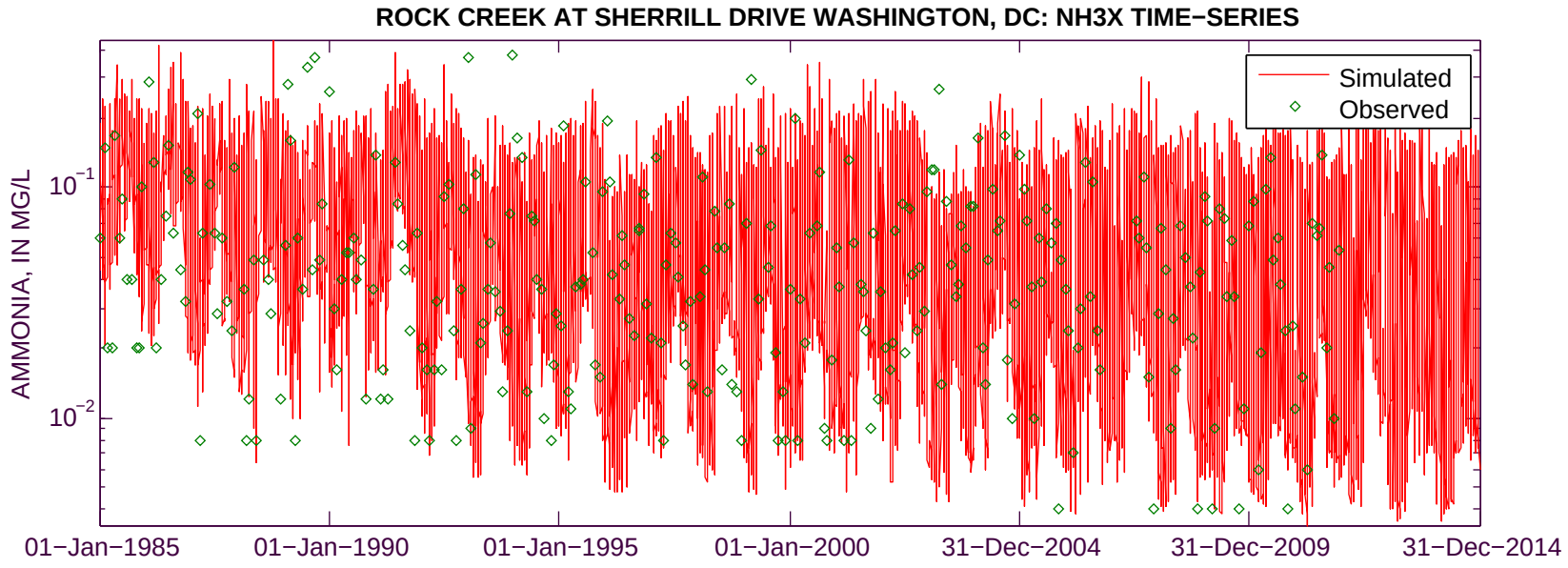
Dates: 1/1/1985 – 12/31/201

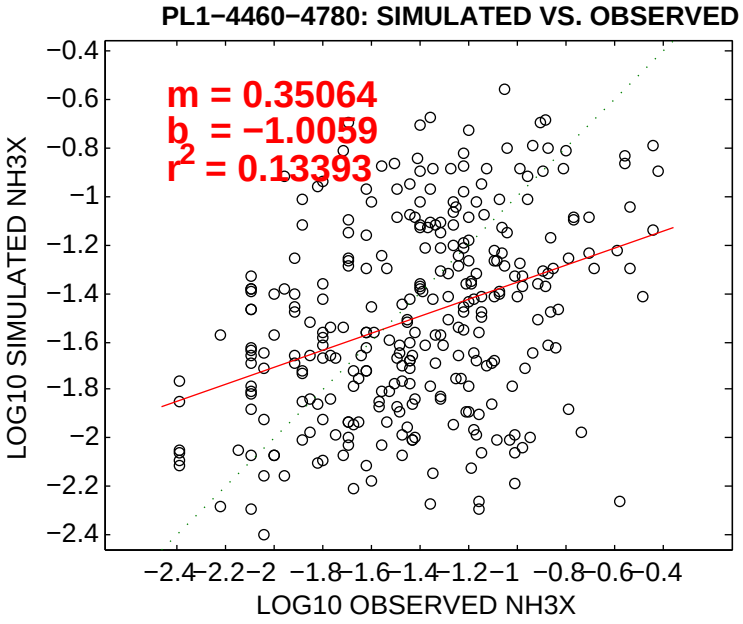
Drive: N/A | Directory: model | Observed: OBS20161101

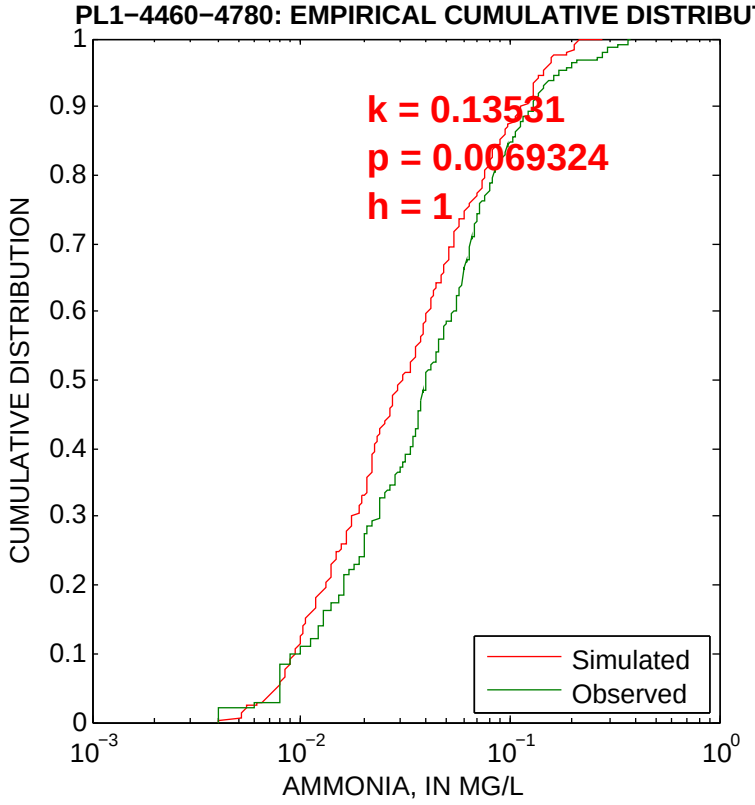
STATISTICS

		observe	simulate
n		10957	10957
min		0.48	3.5565
		-0.318759	0.551023
mean		69.5313	88.6908
		1.59966	1.69046
media		37	45.579
		1.5682	1.65876
max		2980	2467
		3.47422	3.39217
varian		13245.5	21707.1
		0.189444	0.19361
JB		0.001	0.001
		0.001	0.001
		ra	log
%		27.5552	5.67584
err.va		5812.37	0.0614099
rel.std.err		0.438818	0.324159
mod.eff		0.561182	0.675841

VERSION 2.1







DATA SELECTION

scenario: P620171001WQ | file: NH3X.calib

plot: NH3X - ammonia

Dates: 1/1/1985 | 12/31/201

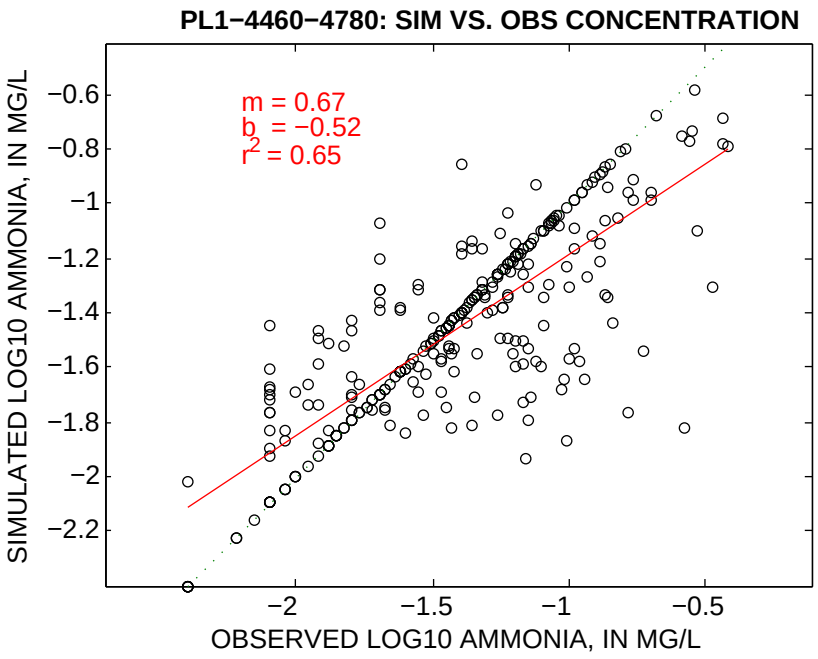
Drive: N/A | Directory: model | Observed: OBS20161101

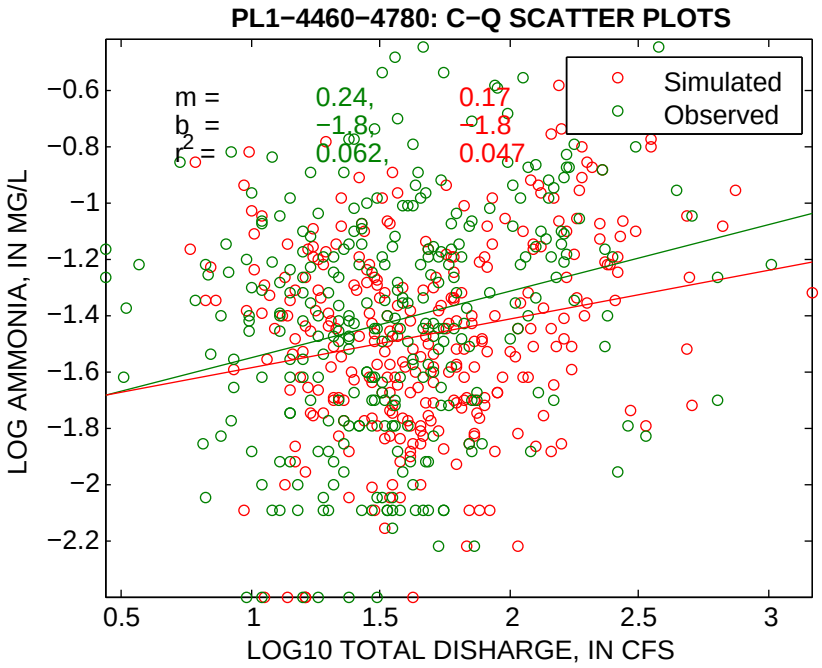
STATISTICS

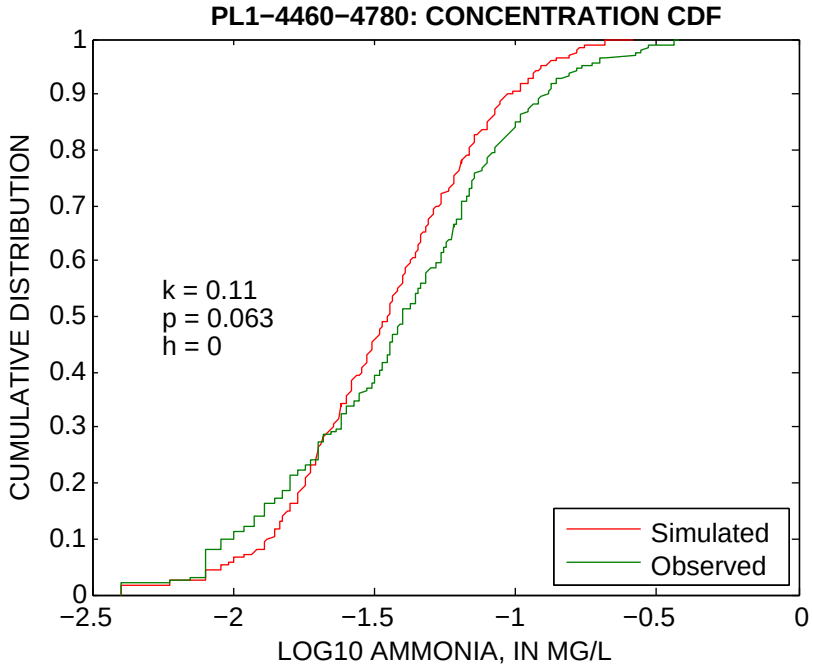
n	303	303
	observe	simulate
min	0.004	0.0039986
	-2.39794	-2.39809
mean	0.0593927	0.0474287
	-1.41597	-1.5024
media	0.04	0.030781
	-1.39794	-1.51172
max	0.38	0.27519
	-0.420216	-0.560367
varian	0.00388873	0.00207439
	0.174534	0.160228
JB	0.001	0.001
	0.284943	0.019257
	ra	log
%	-20.144	6.10361
err.va	0.00438793	0.219859
rel.std.err	1.12837	1.25969
mod.eff	-0.12837	-0.25969

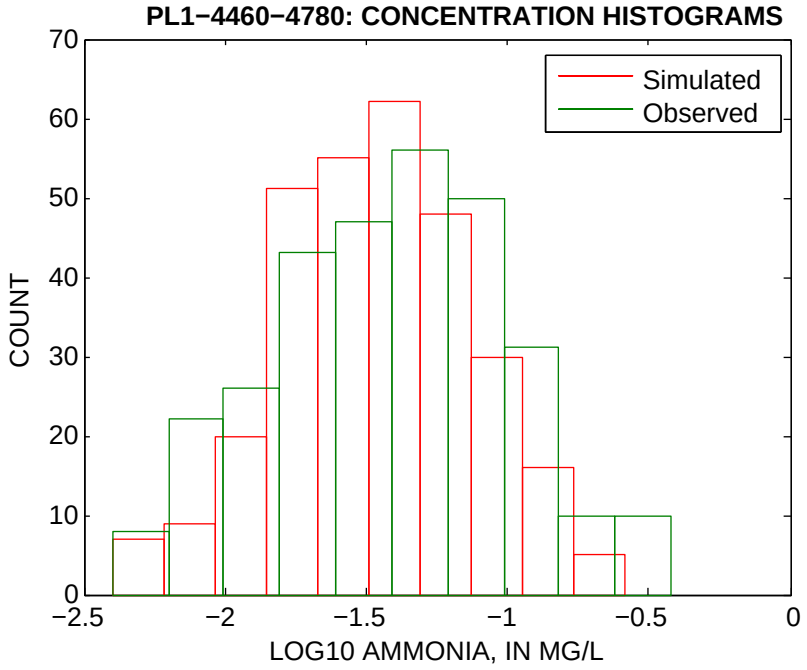
VERSION

ALL DATA
LOG10

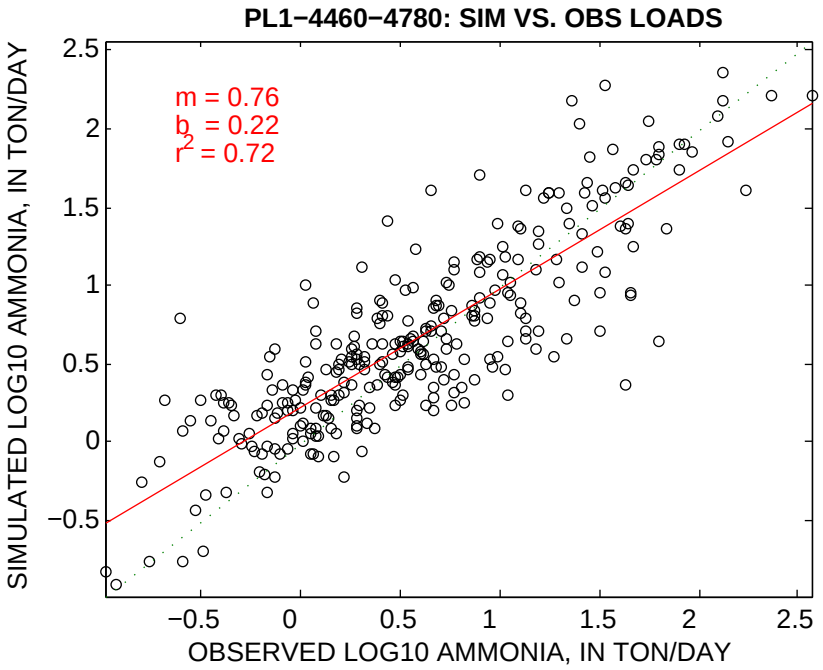


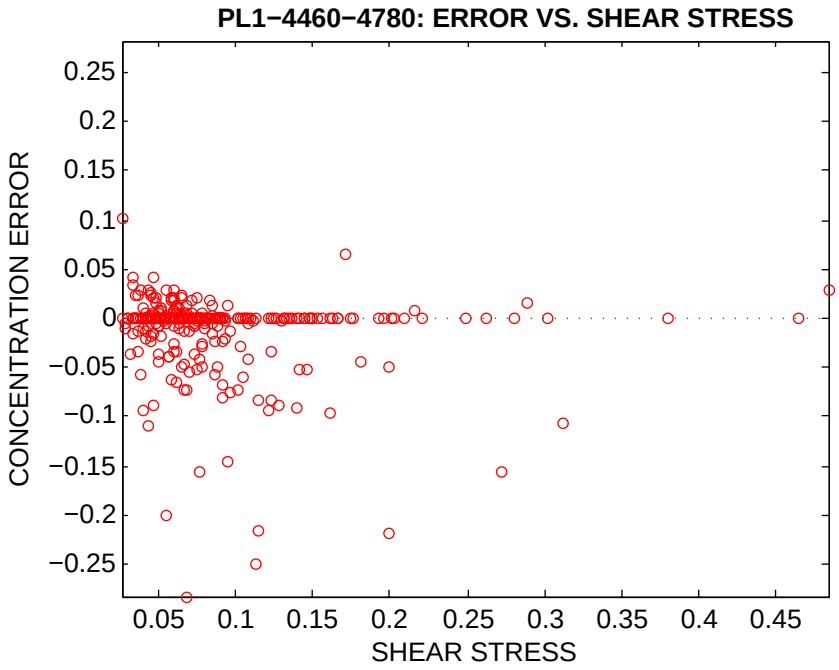


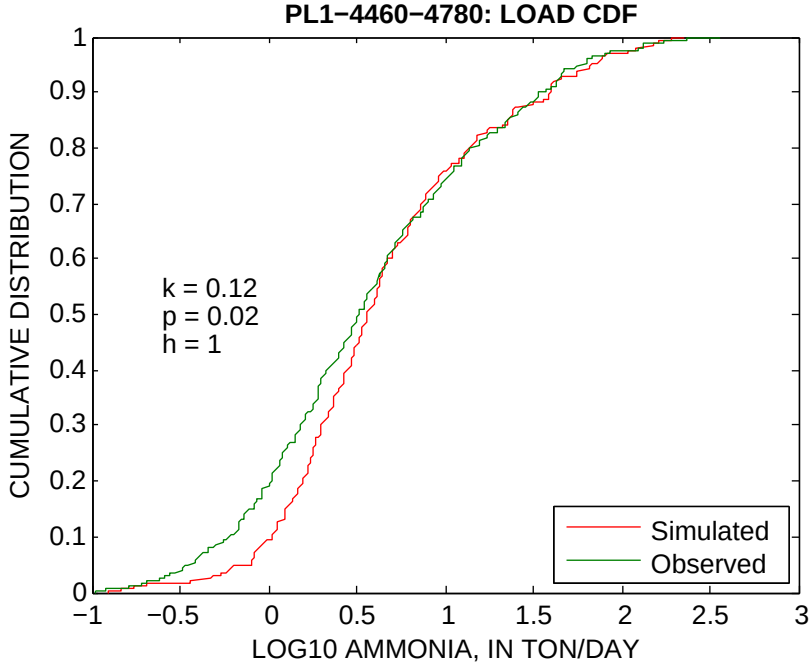


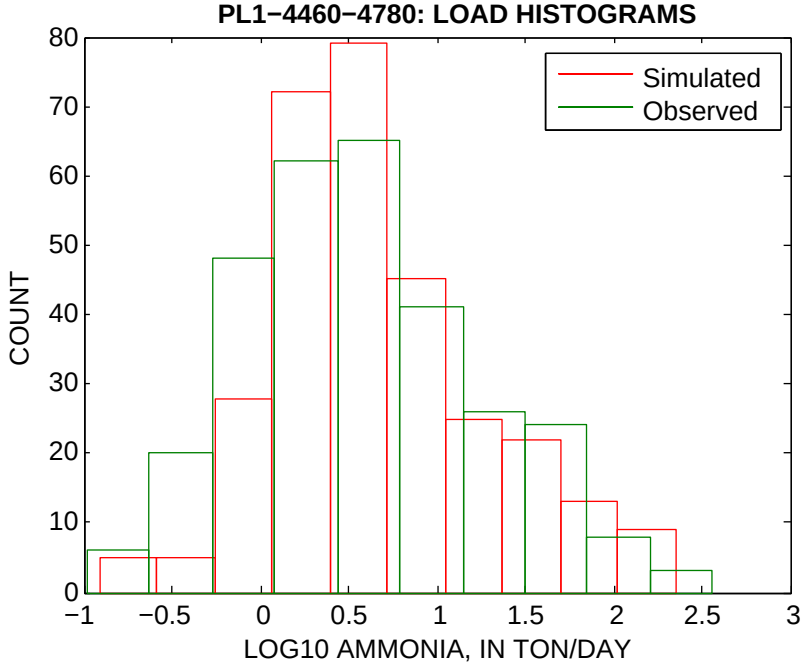


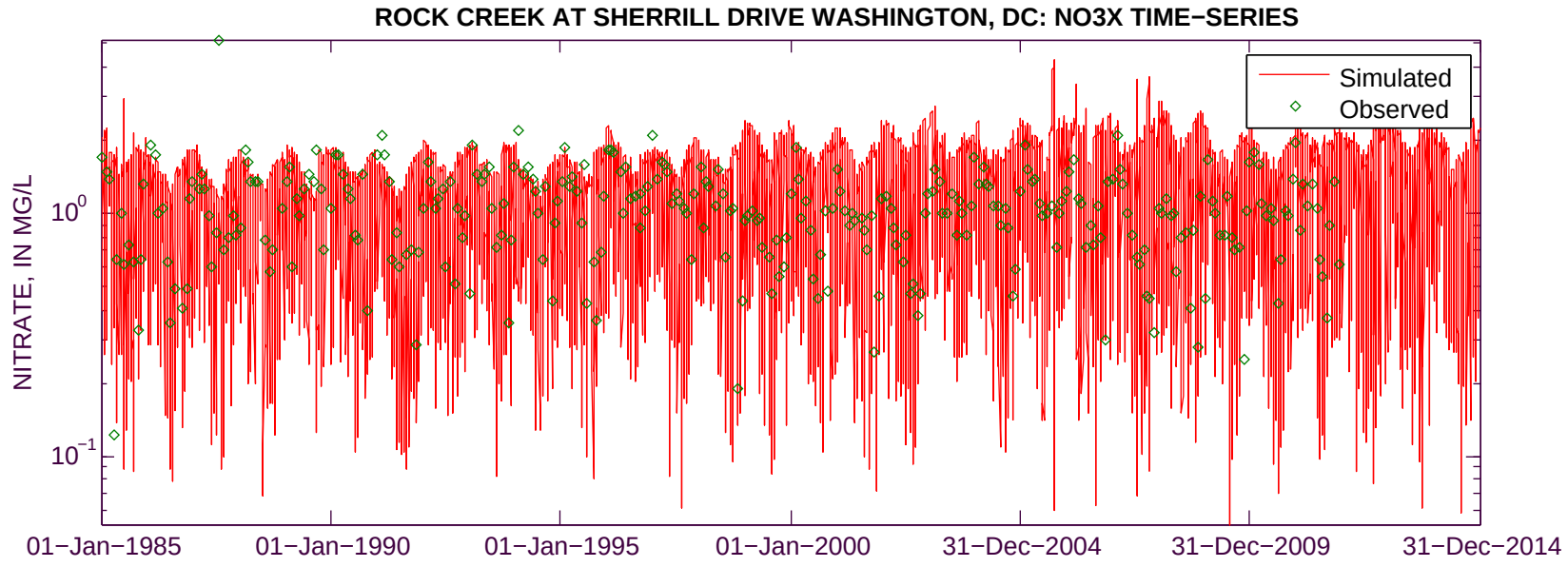
LOAD DATA
LOG10

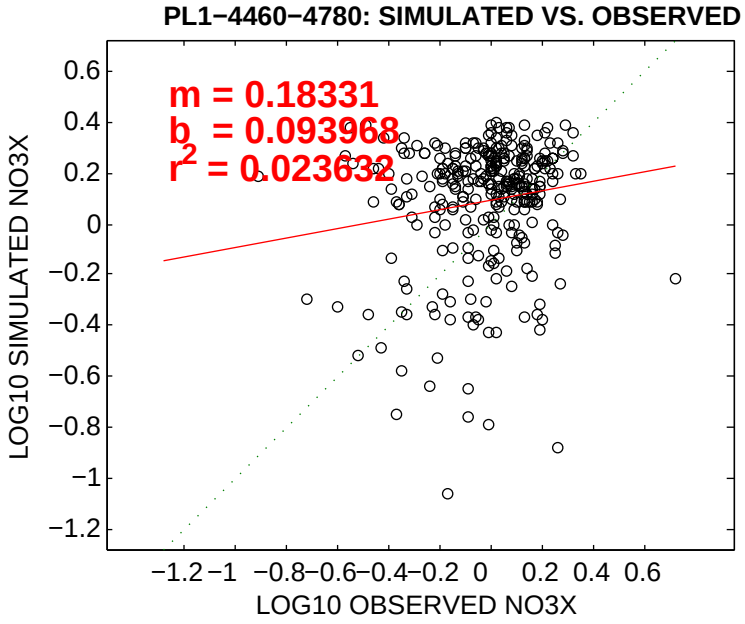


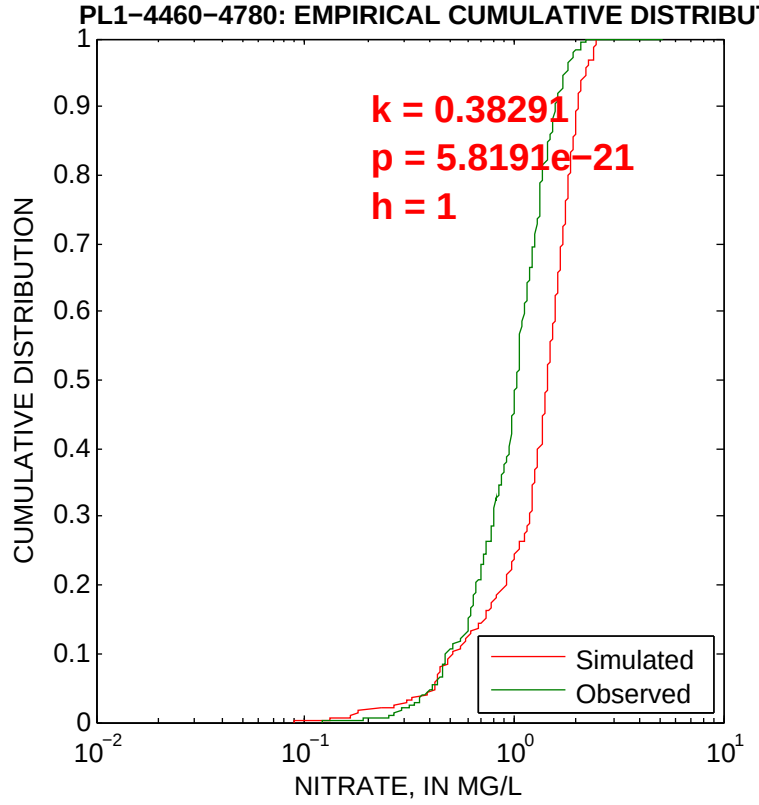












DATA SELECTION

scenario: P620171001WQ | file: NO3X.calib

plot: NO3X - nitrate

Dates: 1/1/1985 – 12/31/201

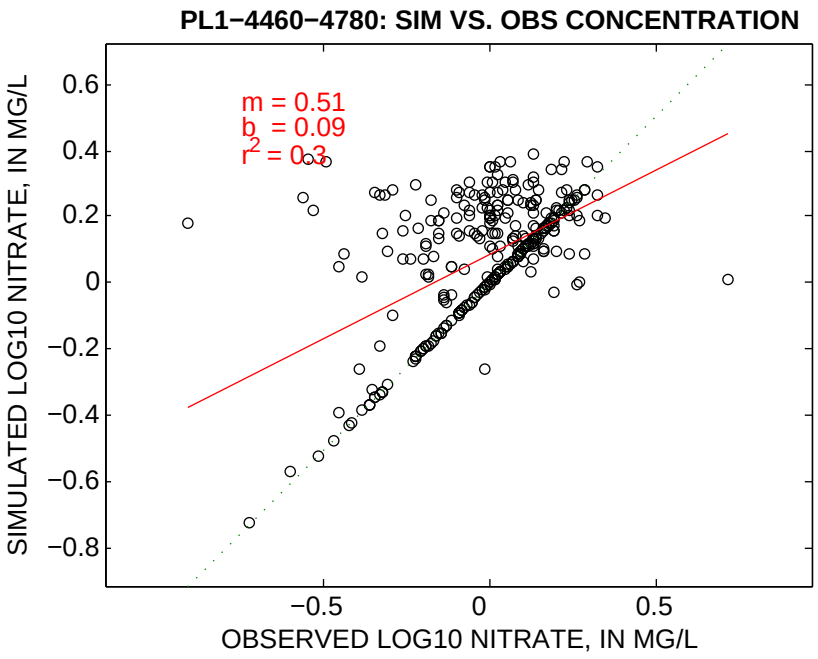
Drive: N/A | Directory: model | Observed: OBS20161101

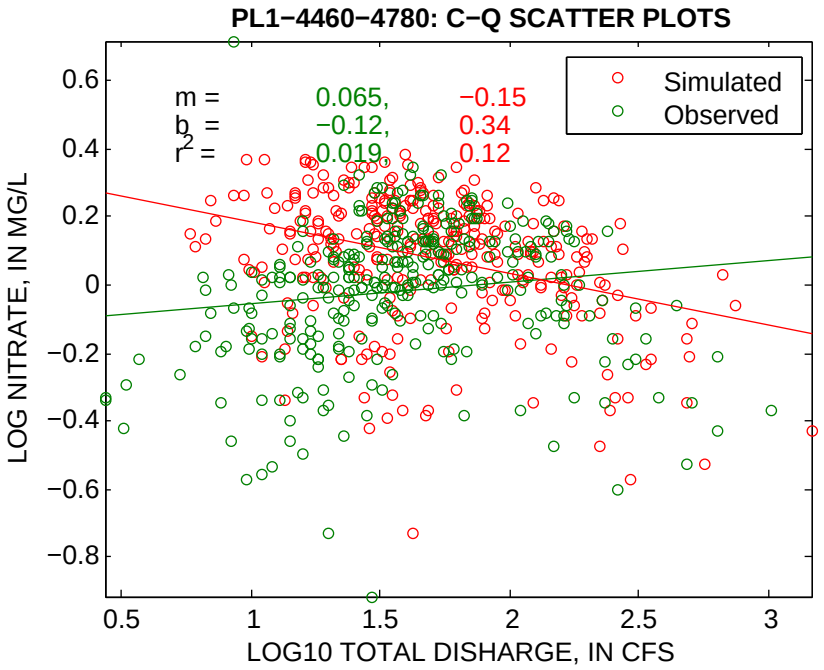
STATISTICS

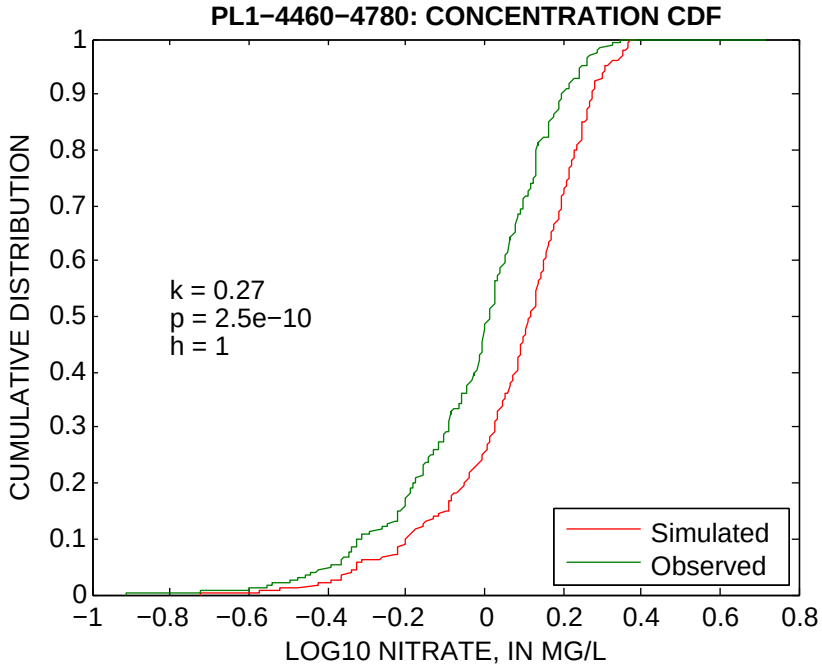
	n	observe	simulate
		316	316
min		0.122	0.087876
		-0.91364	-1.05613
mean		1.0569	1.3845
		-0.0187819	0.0905252
media		1.03	1.44855
		0.0128372	0.160933
max		5.22	2.4755
		0.717671	0.393663
varian		0.222963	0.294062
		0.041158	0.0585226
JB		0.001	0.012601
		0.001	0.001
		ra	log
%		30.9955	-581.98
err.va		0.580256	0.0965771
rel.std.err		2.60248	2.3465
mod.eff		-1.60248	-1.3465

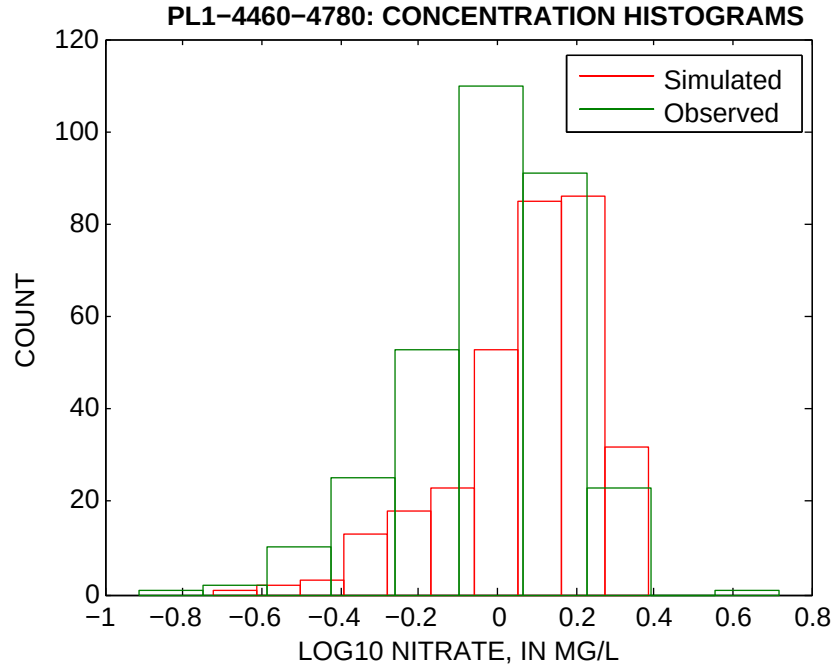
VERSION 2.1

ALL DATA
LOG10

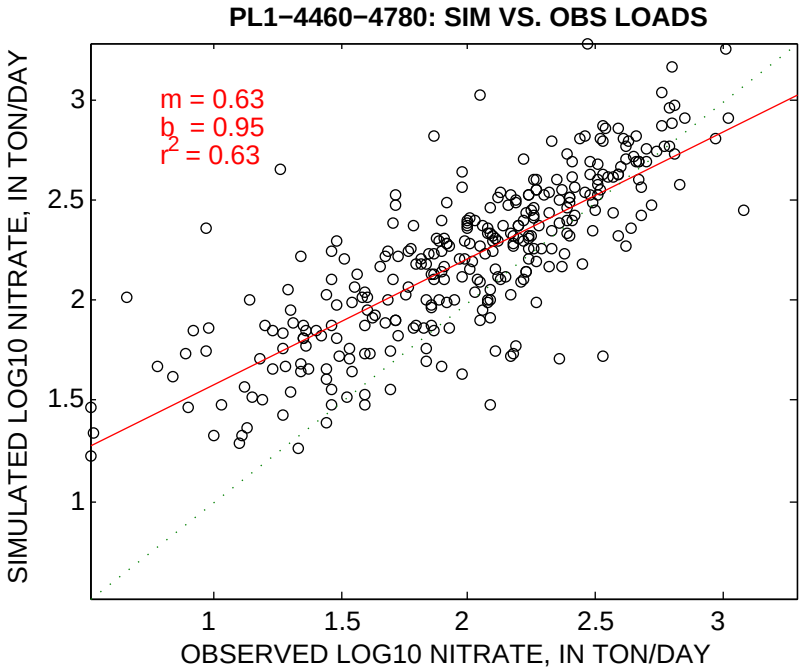


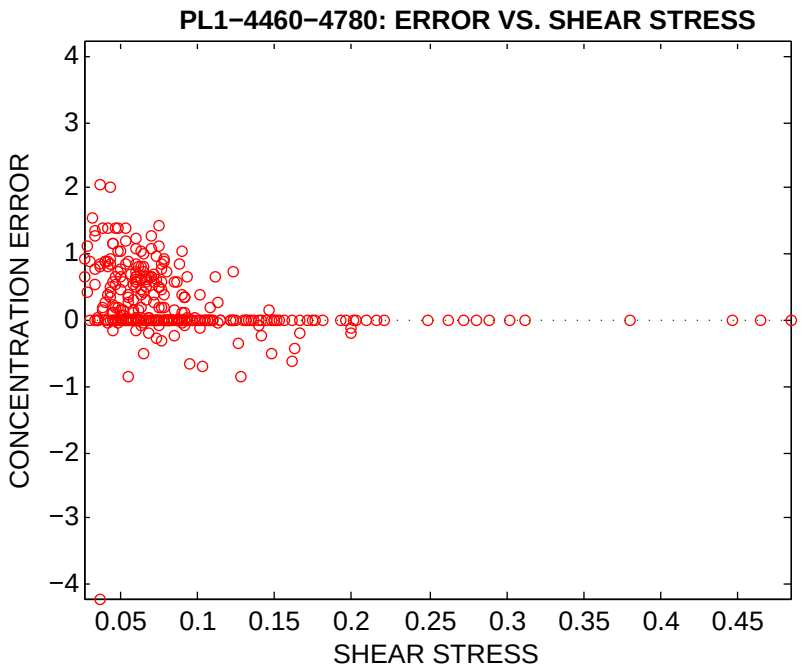


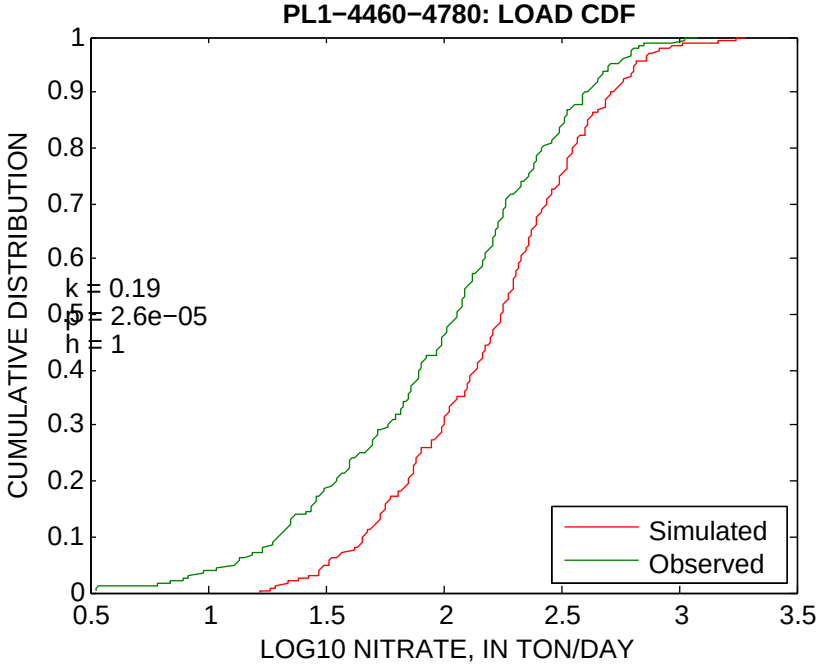


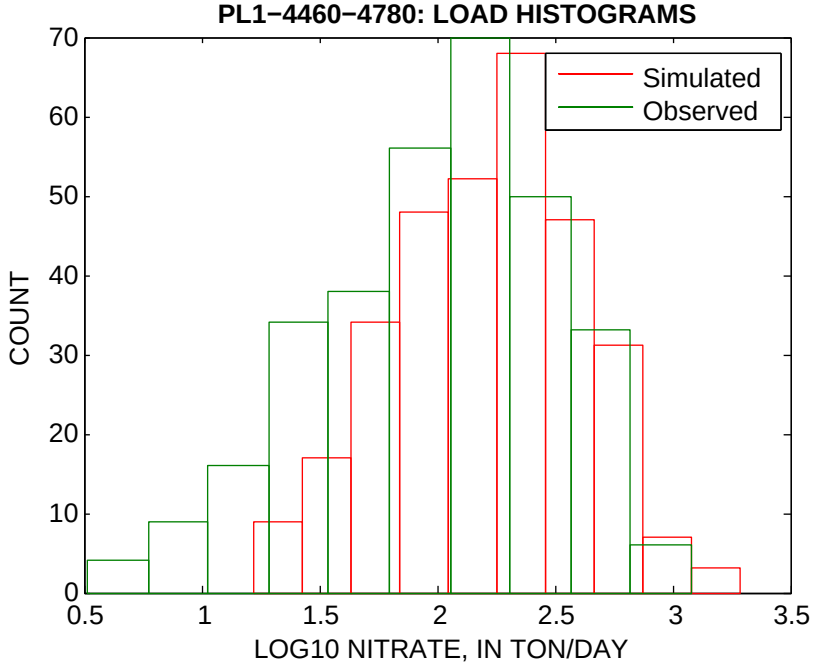


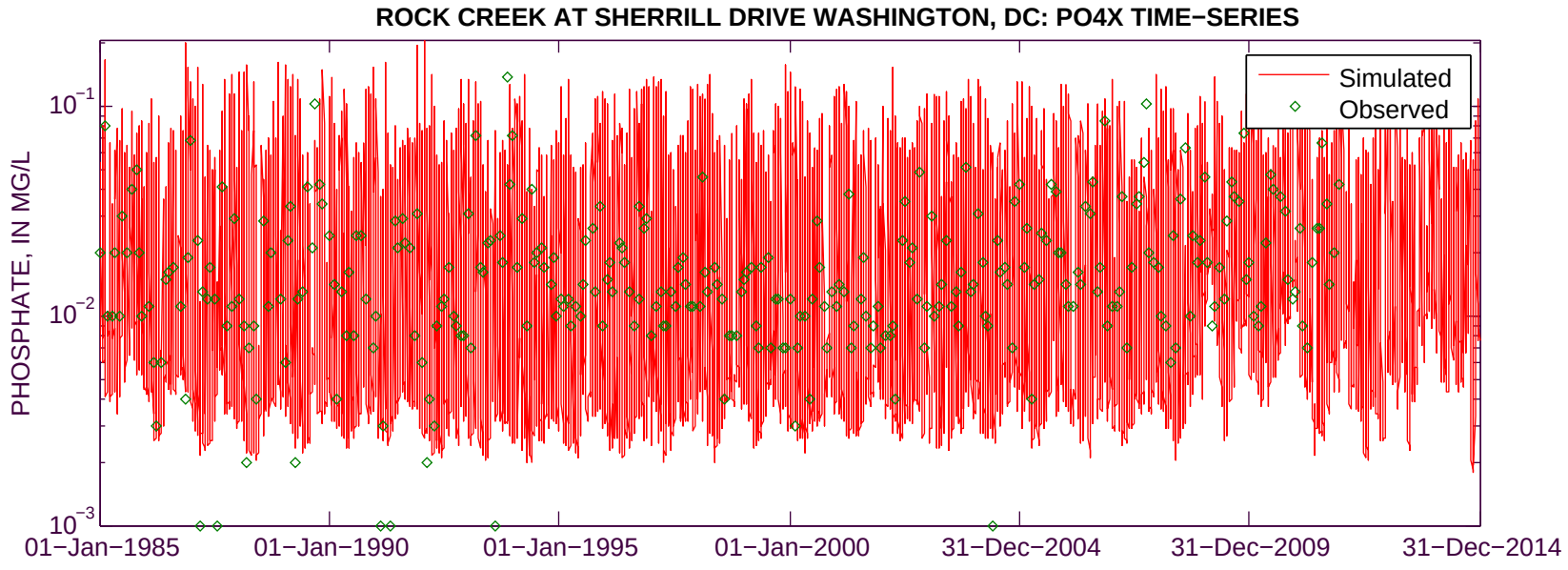
LOAD DATA
LOG10

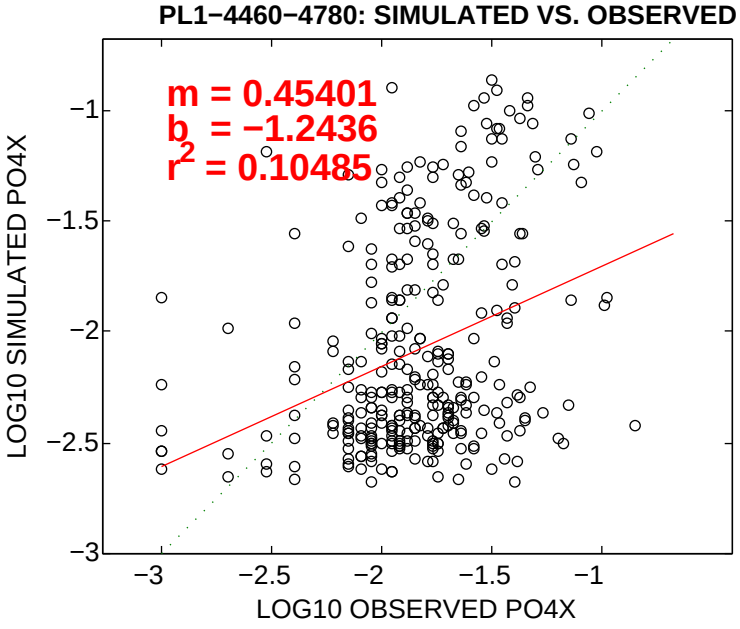


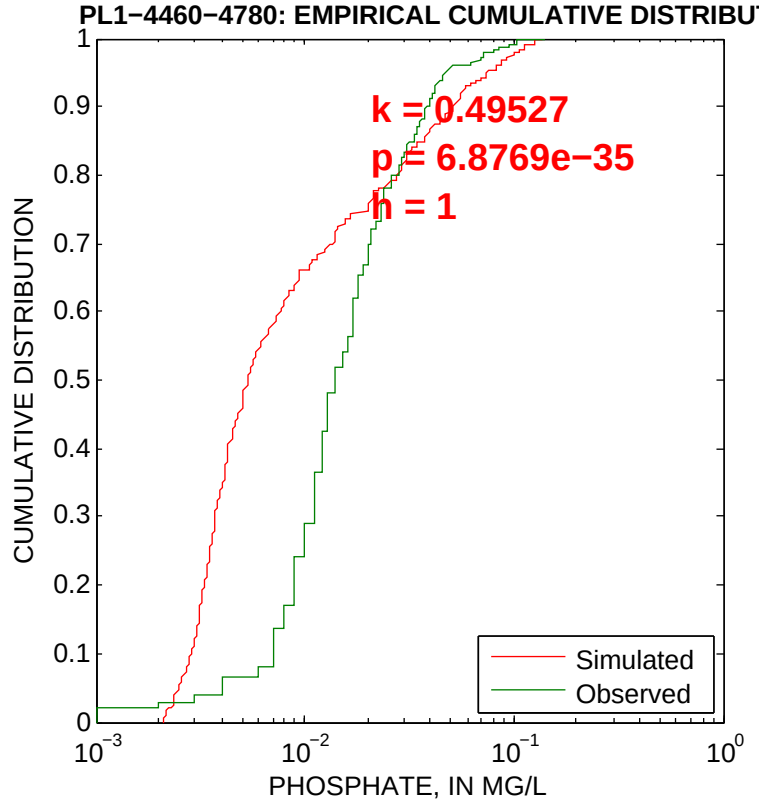












DATA SELECTION

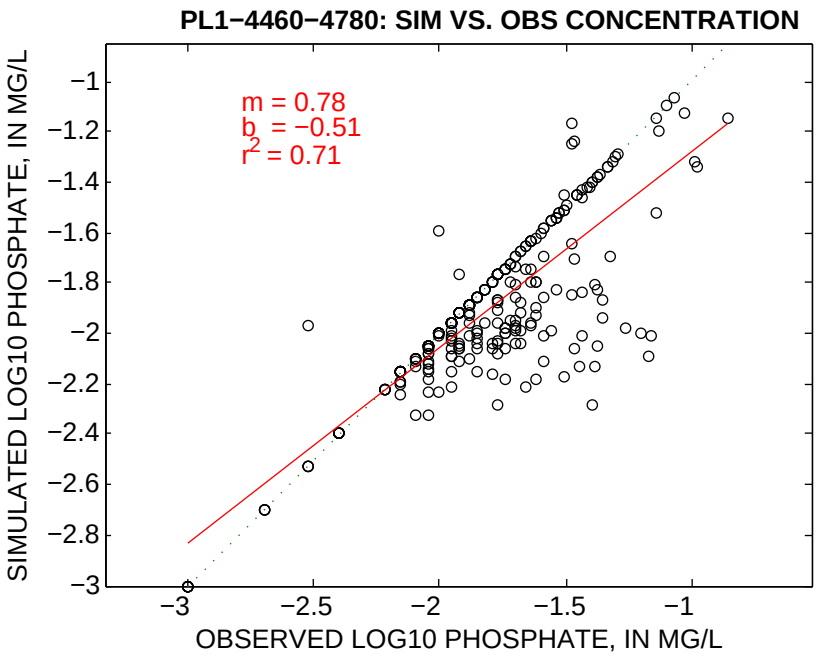
scenario: P620171001WQ
file: PO4X.calib
plot: PO4X - phosphate
Dates: 1/1/1985 12/31/201
Drive: N/A
Directory: model
Observed: OBS20161101

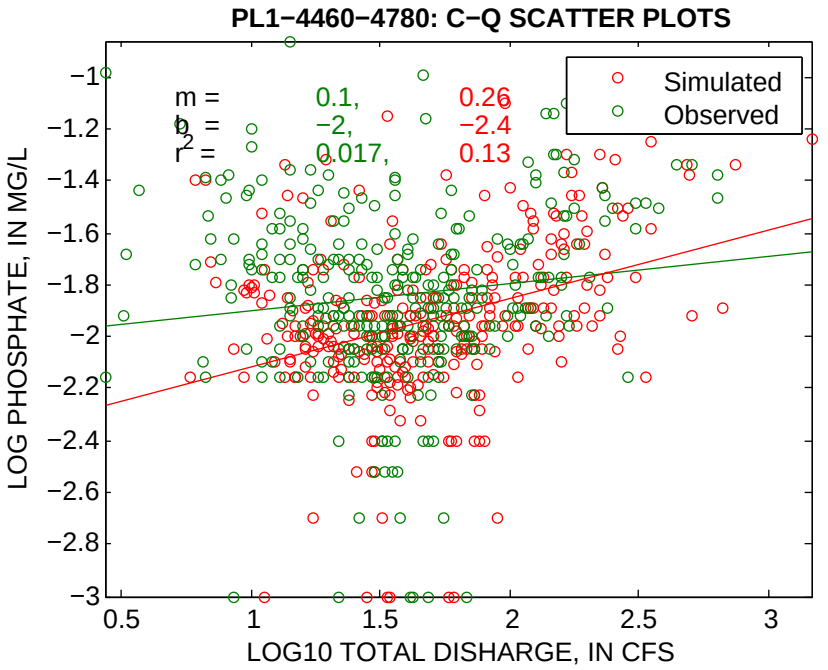
STATISTICS

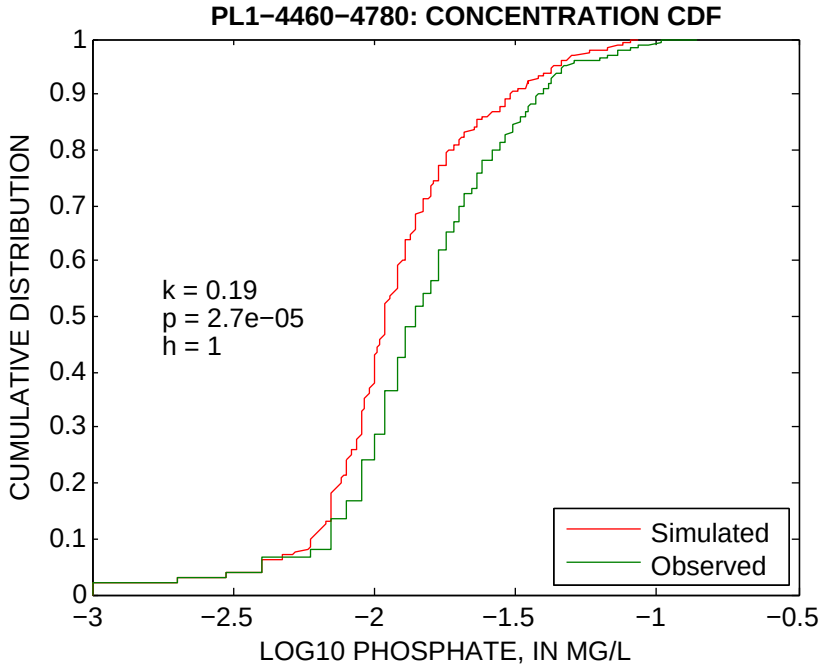
n	317	317
	observe	simulate
min	0.001	0.002108
	-3	-2.67613
mean	0.0195615	0.0171754
	-1.83486	-2.07661
media	0.014	0.0053132
	-1.85387	-2.27464
max	0.139	0.13623
	-0.856985	-0.865727
varian	0.00029918	0.00062597
	0.117152	0.230315
JB	0.001	0.001
	0.001	0.001
	ra	log
%	-12.1981	13.1751
err.va	0.00066602	0.299716
rel.std.err	2.22615	2.55834
mod.eff	-1.22615	-1.55834

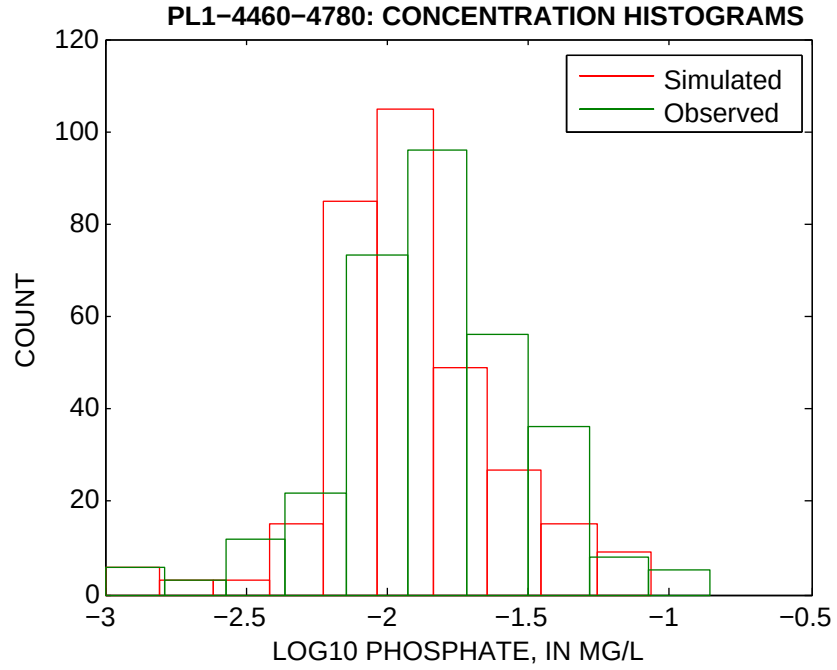
VERSION 2.1

ALL DATA
LOG10

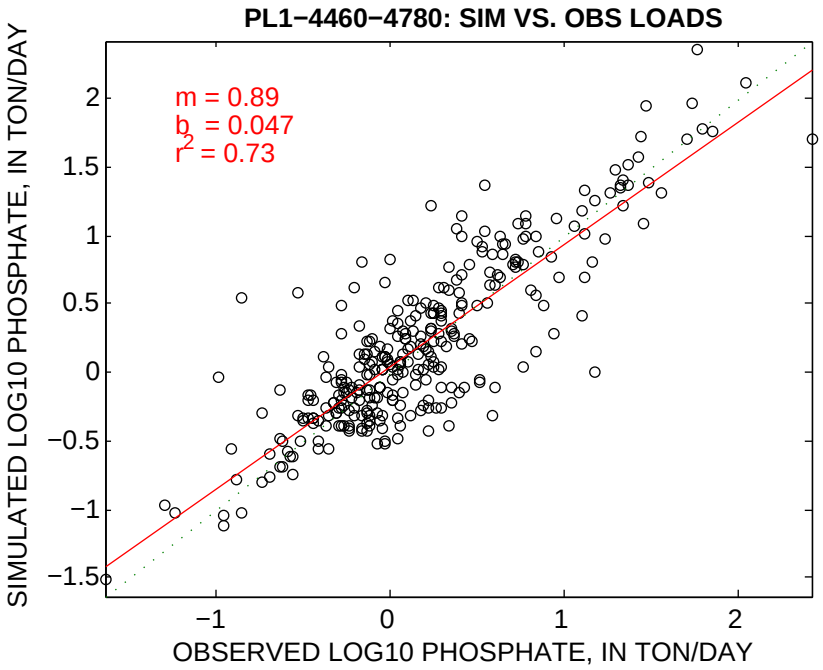


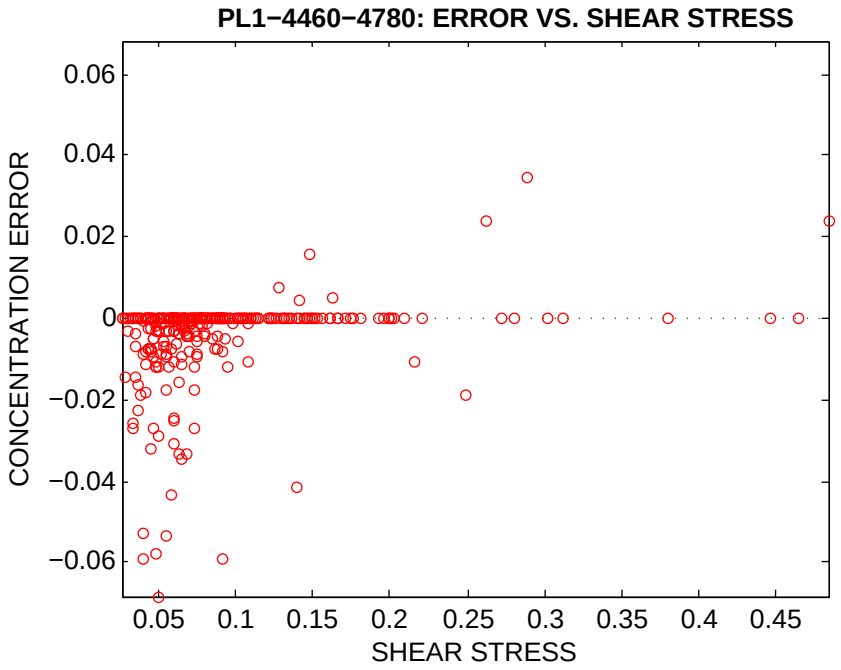


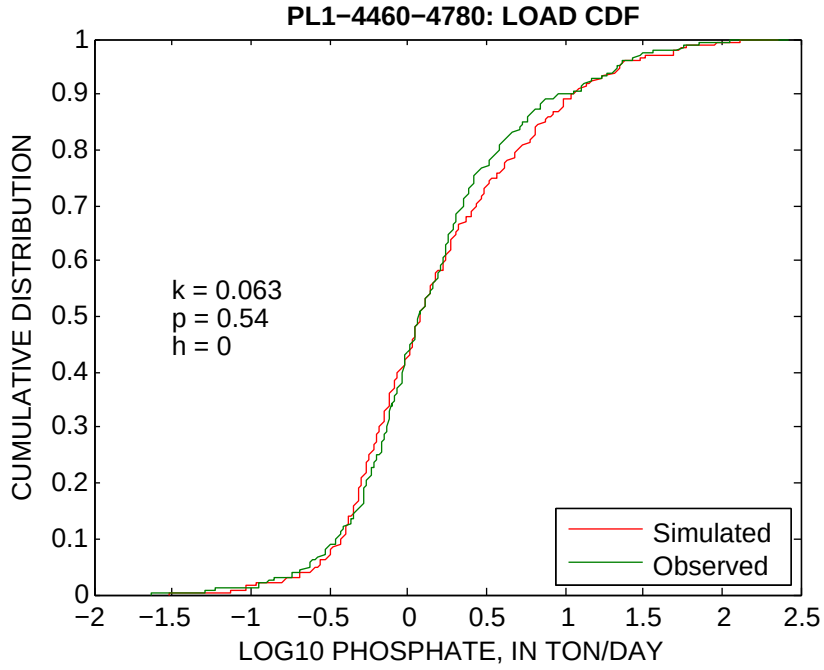


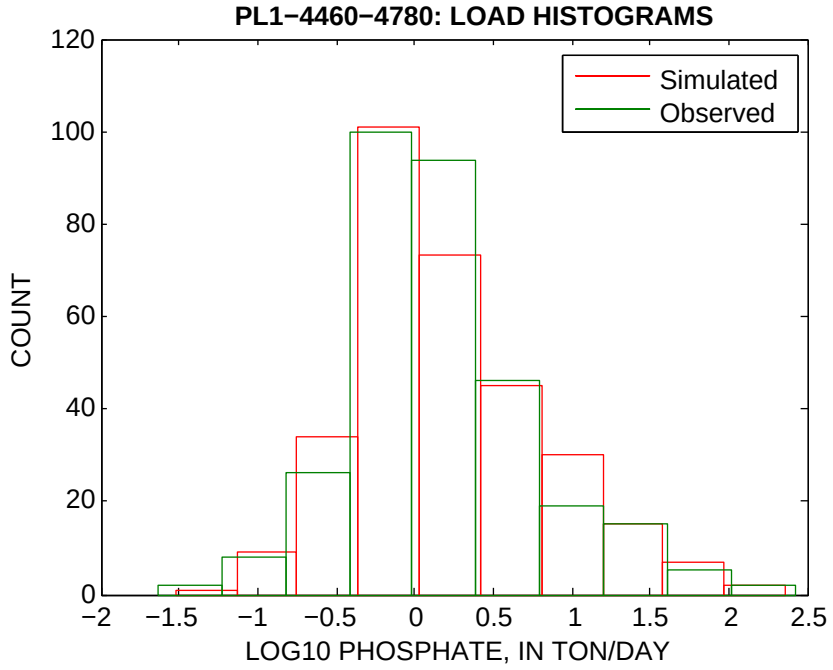


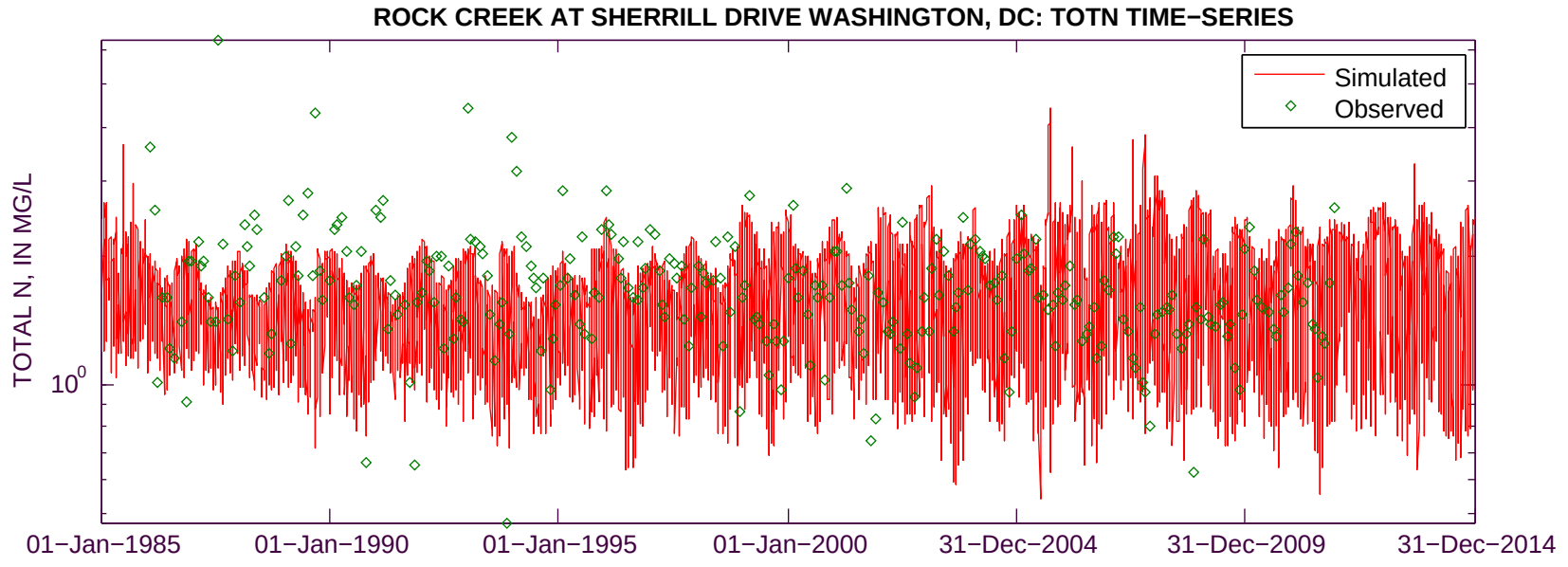
LOAD DATA
LOG10

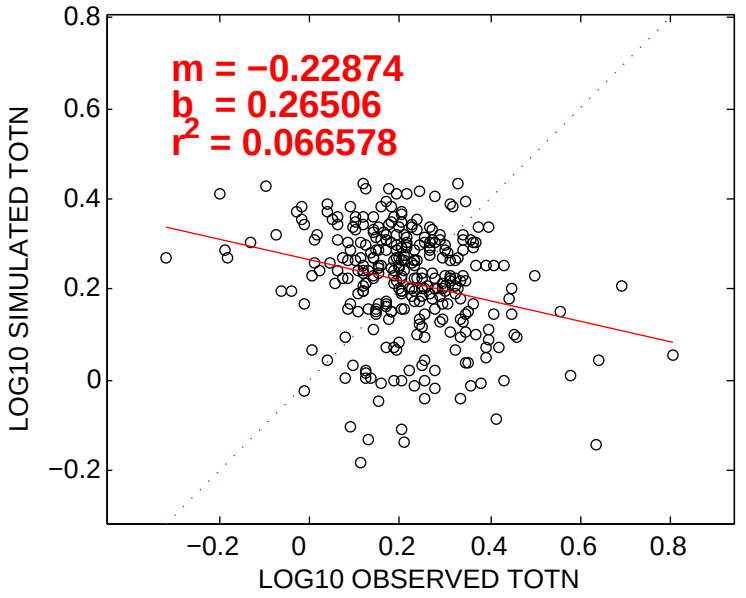


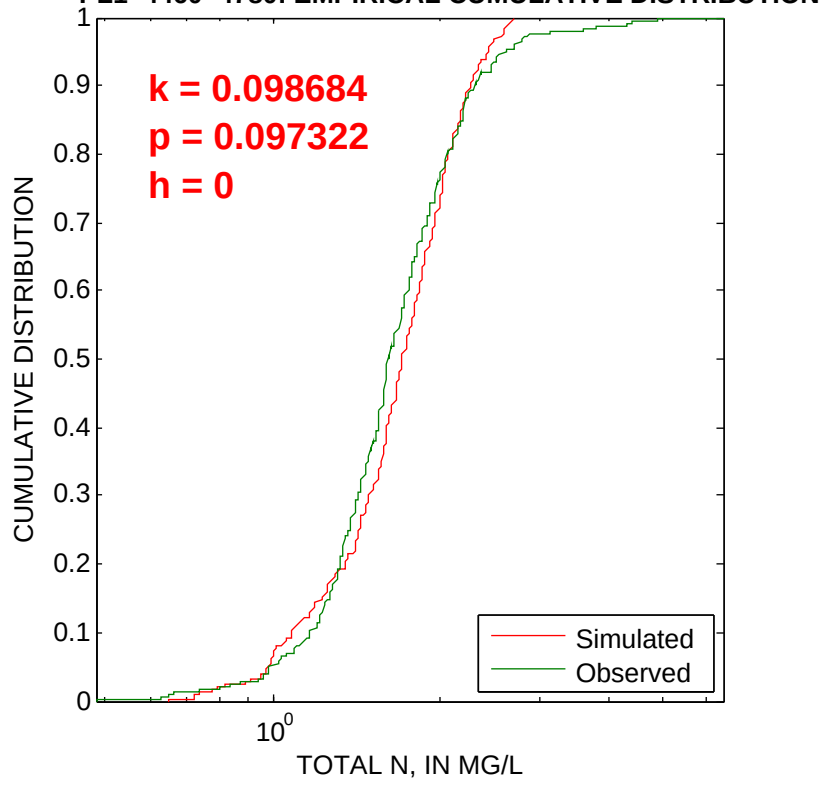












DATA SELECTION

scenario	file
P620171001WQ	TOTN.calib

plot: TOTN - total nitrogen

Dates: 1/1/1985 – 12/31/201

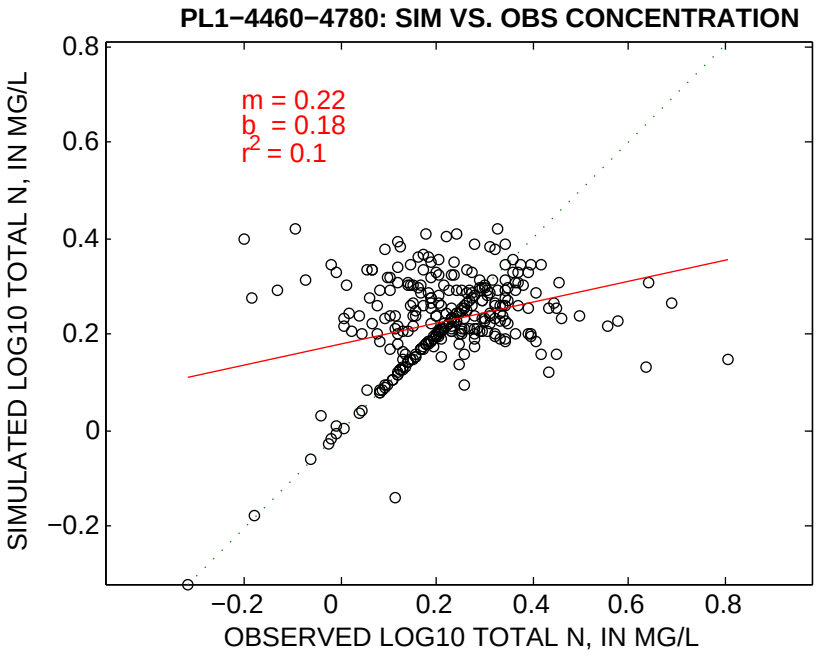
Drive	Directory	Observed
N/A	model	OBS20161101

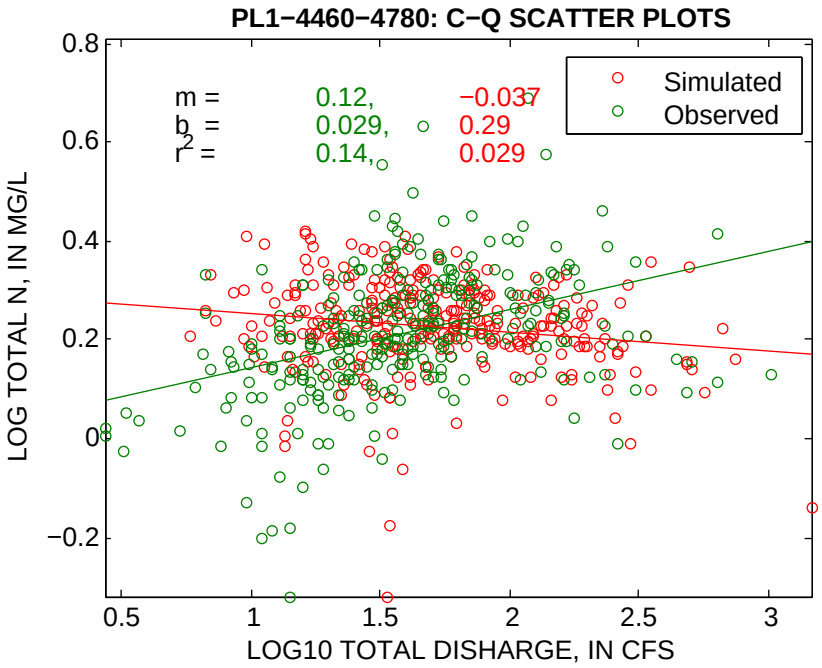
STATISTICS

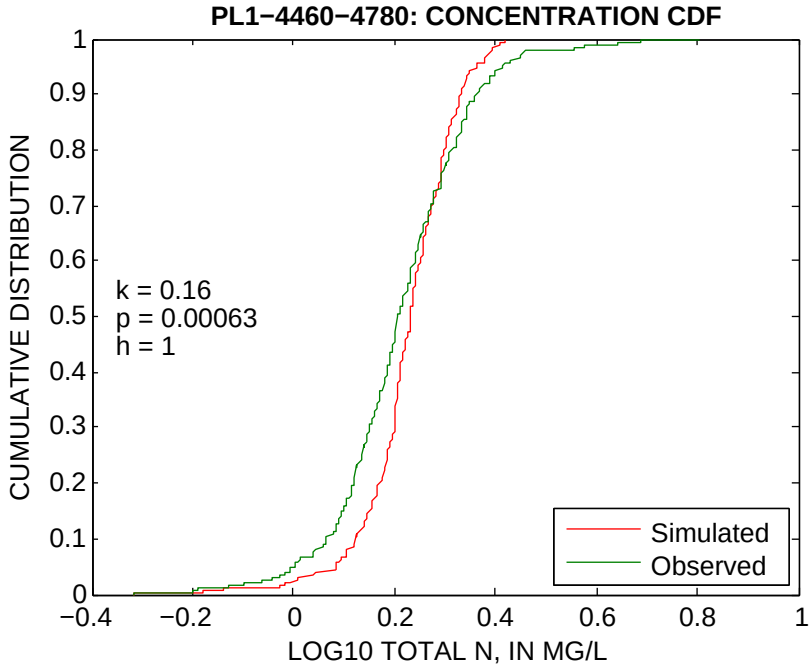
	observe	simulate
n	304	304
min	0.48 -0.318759	0.65091 -0.186479
mean	1.72234 0.214222	1.70425 0.216055
media	1.61149 0.207227	1.70455 0.23161
max	6.4 0.80618	2.7073 0.432536
varian	0.371882 0.0183842	0.186815 0.0144479
JB	0.001 0.001	0.299386 0.001
	ra	log
%	-1.04989	0.85568
err.va	0.702613	0.041246
rel.std.err	1.88935	2.24356
mod.eff	-0.889347	-1.24356

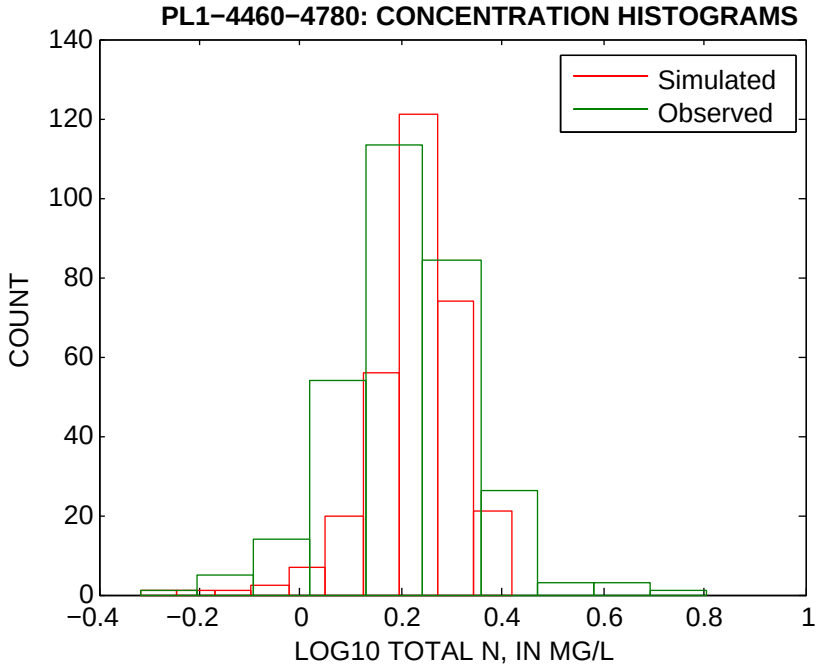
VERSION 2.1

ALL DATA
LOG10

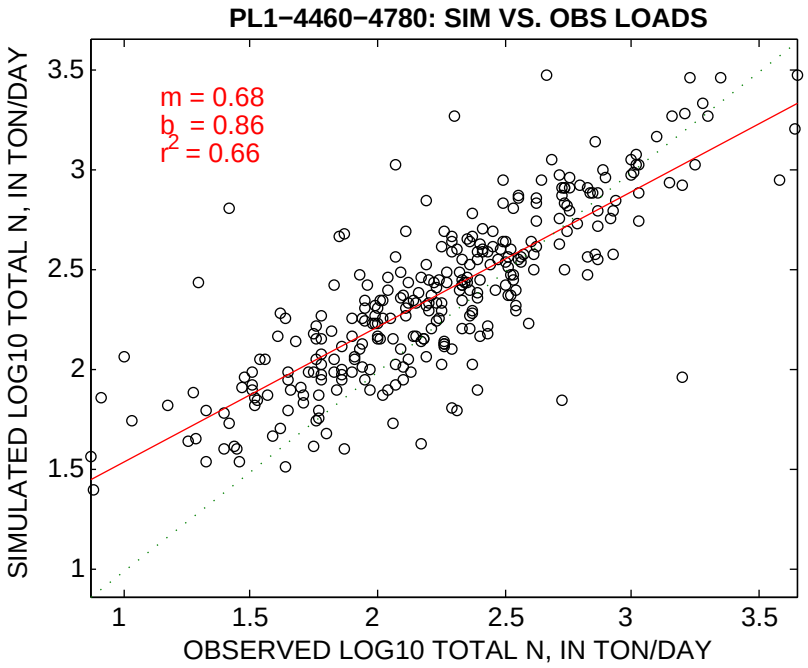


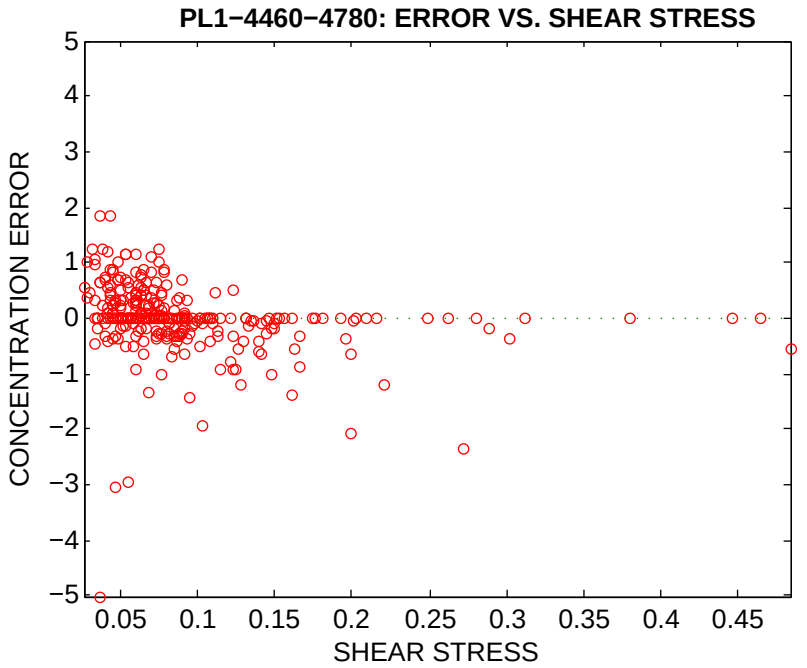


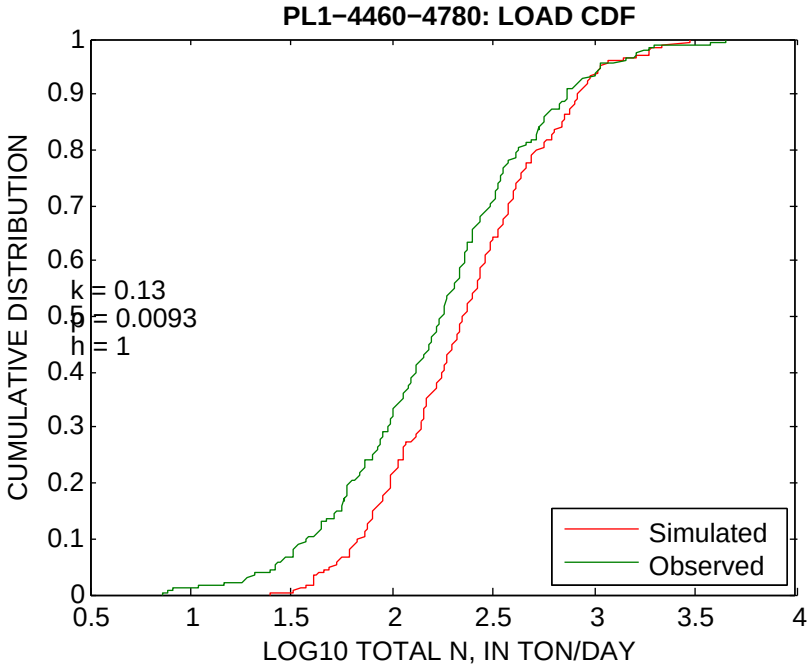


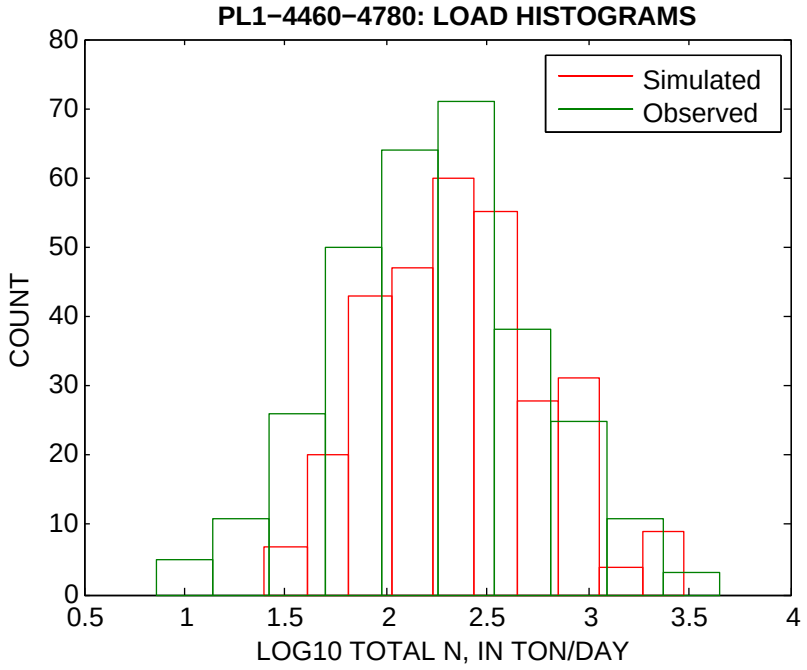


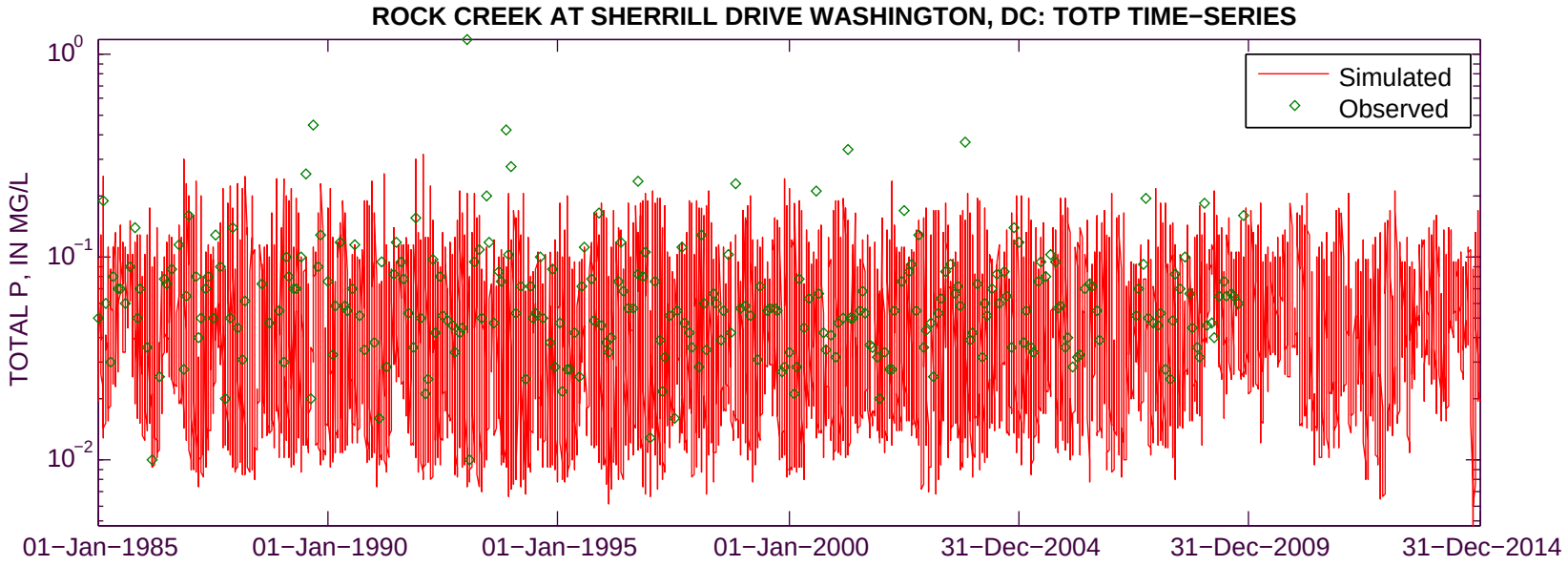
LOAD DATA
LOG10

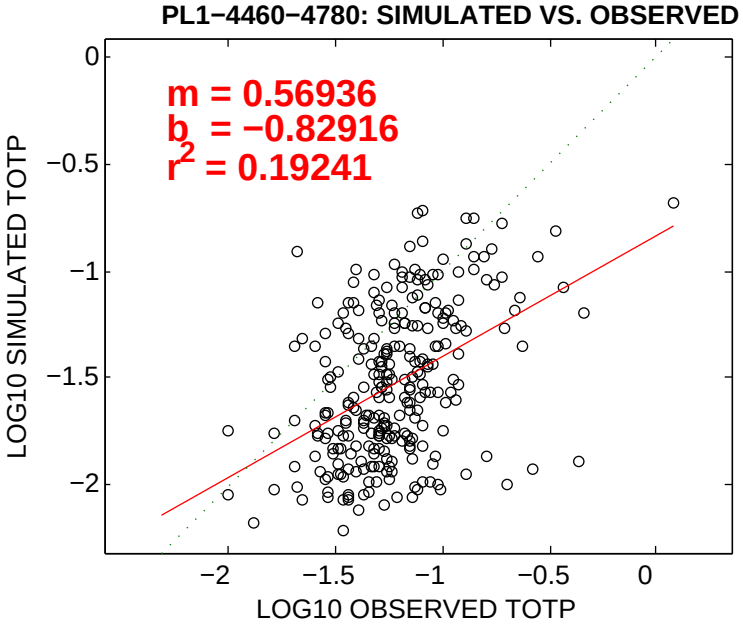


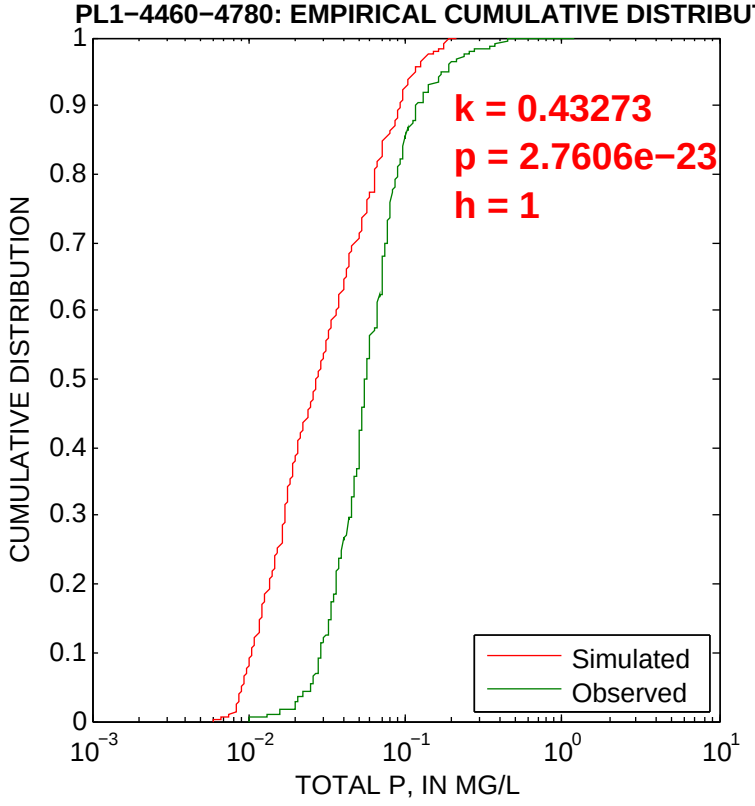












DATA SELECTION

scenario	file
P620171001WQ	TOTP.calib

plot: TOTP - total phosphorus

Dates: 1/1/1985 – 12/31/201

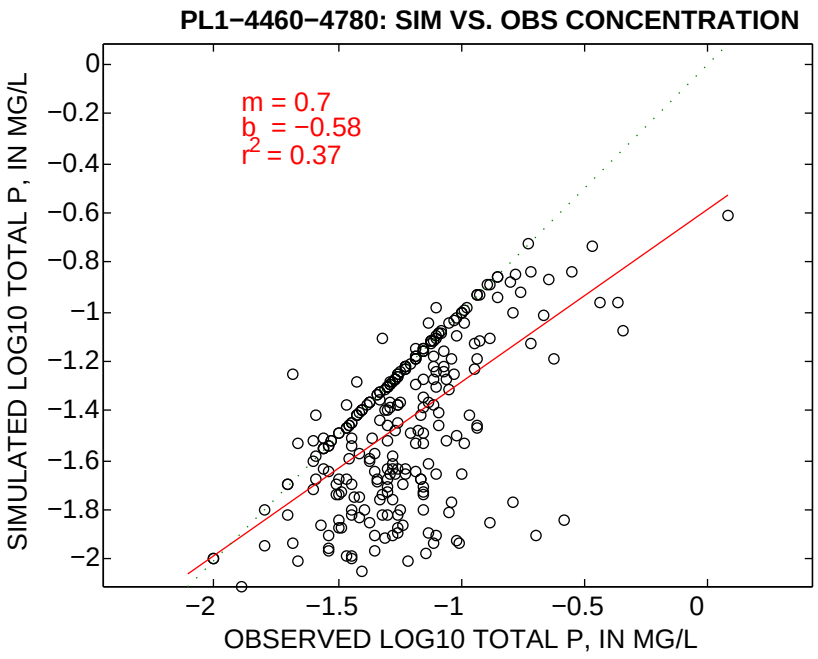
Drive	Directory	Observed
N/A	model	OBS20161101

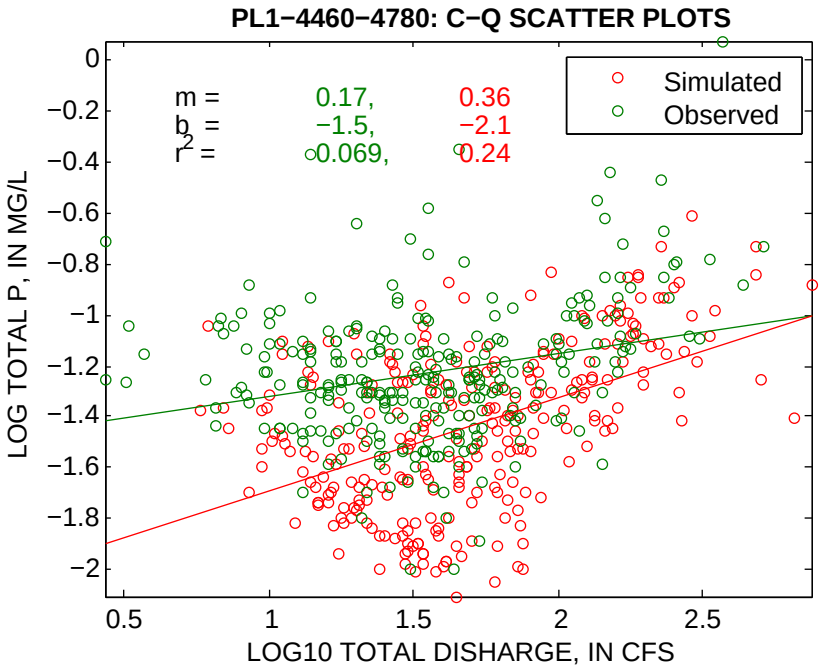
STATISTICS

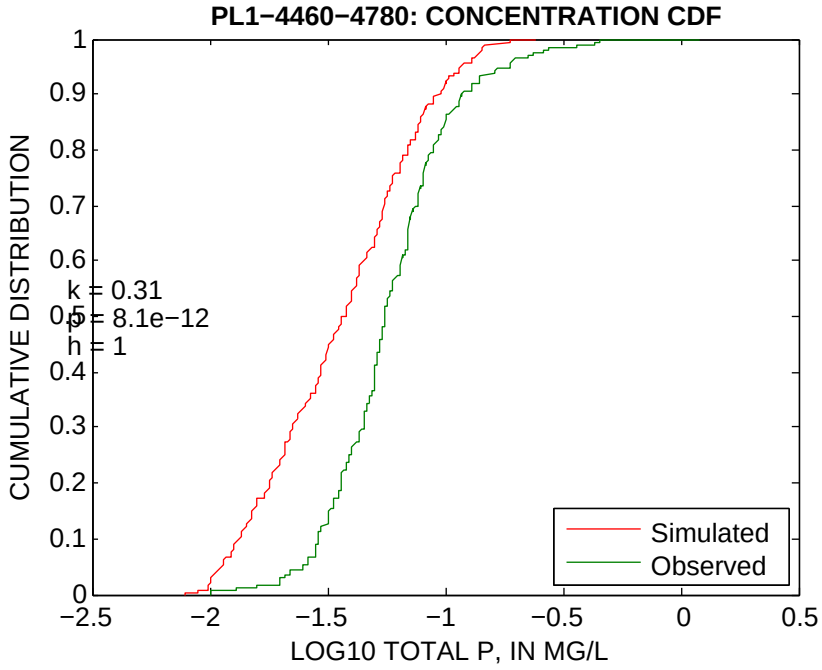
	n	275	275
		observe	simulate
min		0.01	0.0060541
		-2	-2.21795
mean		0.0754545	0.0414053
		-1.22836	-1.52855
media		0.056	0.02761
		-1.25181	-1.55893
max		1.2	0.20875
		0.0791812	-0.680374
varian		0.00795487	0.00137297
		0.0736483	0.124081
JB		0.001	0.001
		0.001	0.008861
		ra	log
%		-45.1255	24.4376
err.va		0.00761938	0.204302
rel.std.err		0.957826	2.77403
mod.eff		0.0421742	-1.77403

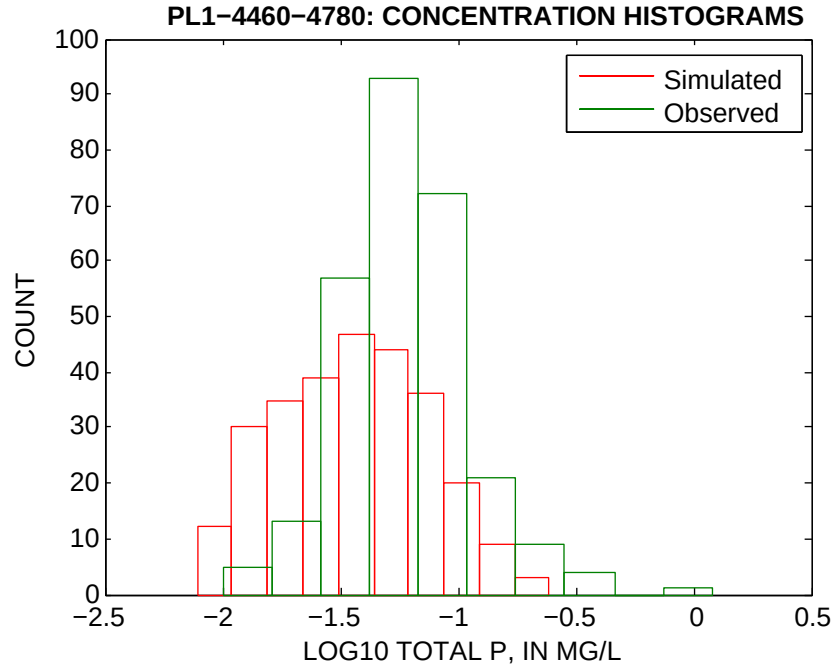
VERSION 2.1

ALL DATA
LOG10

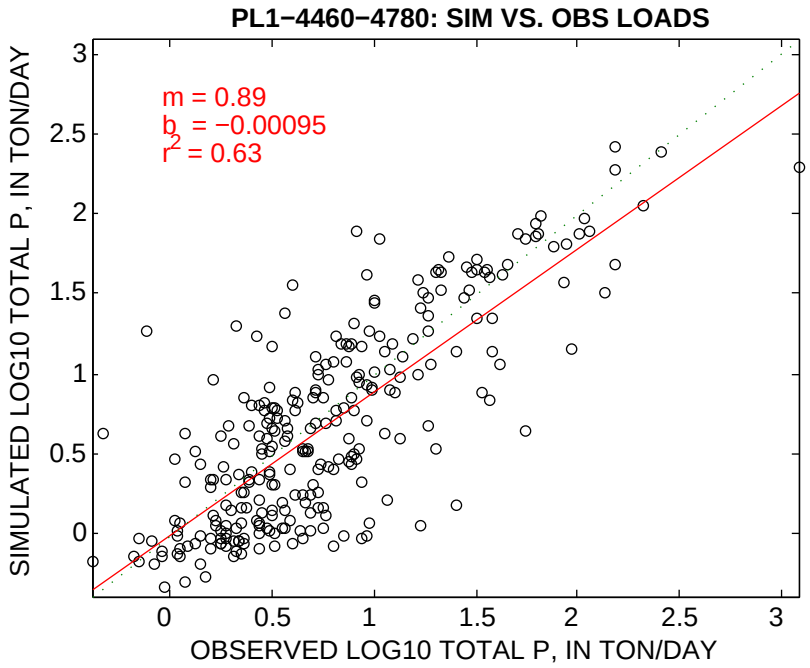


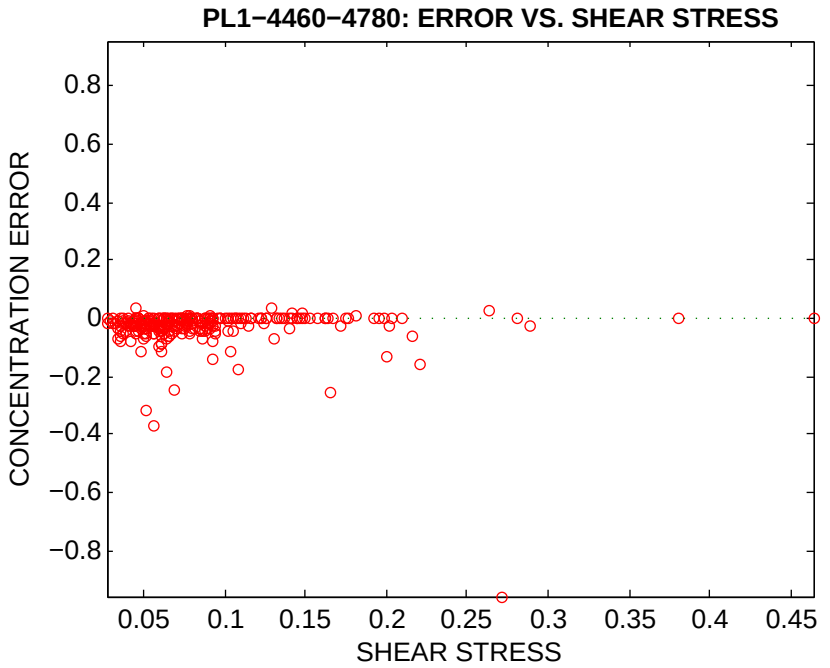


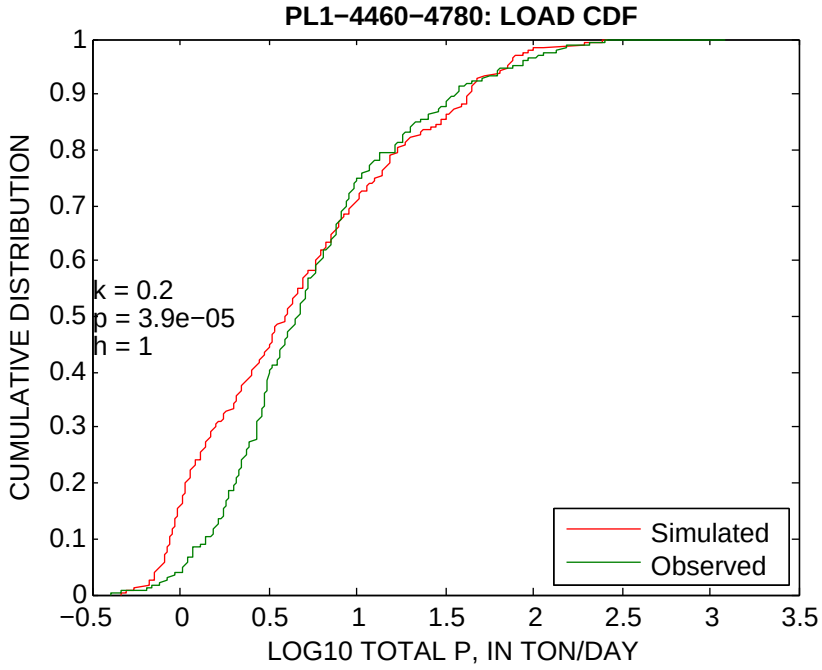


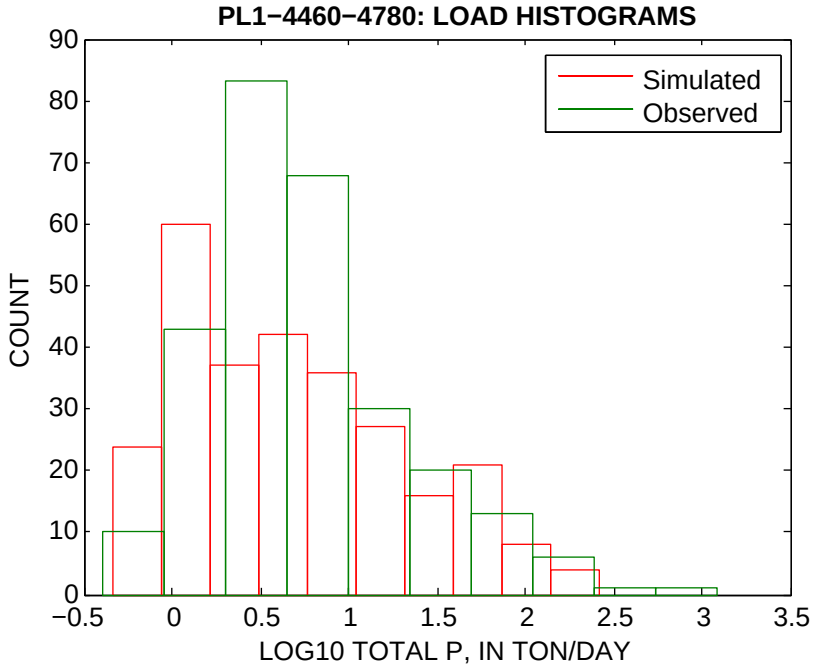


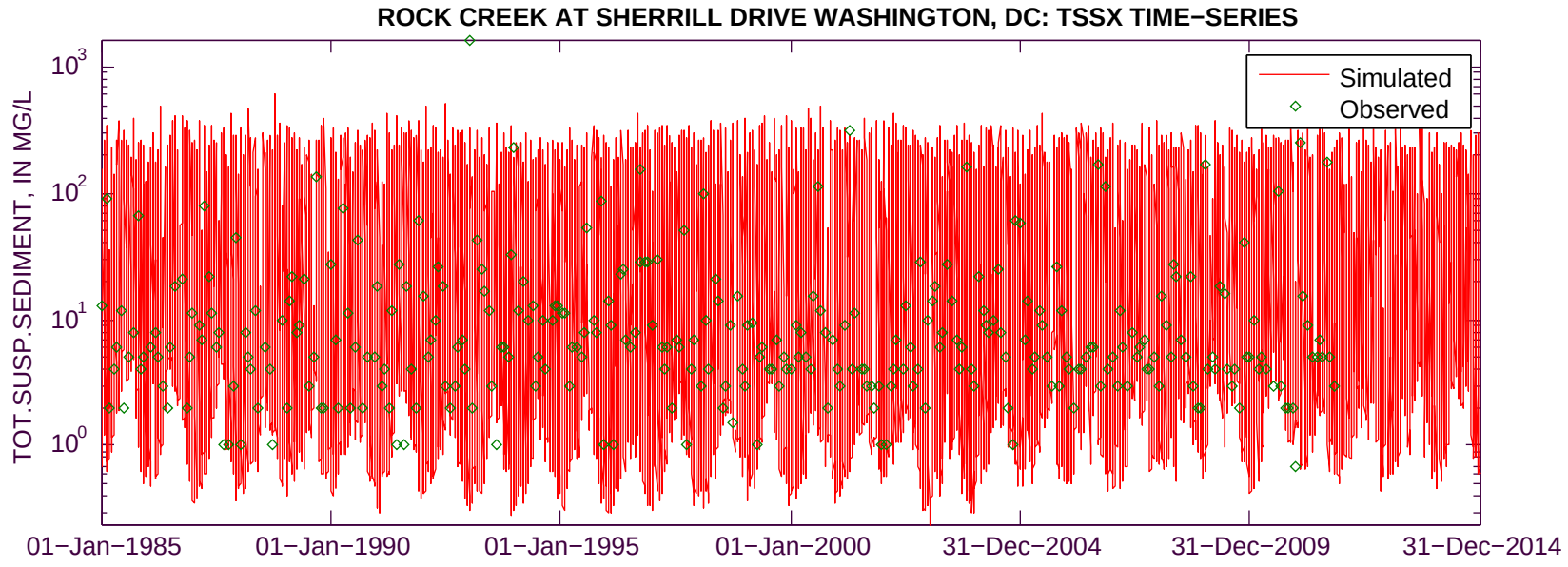
LOAD DATA
LOG10

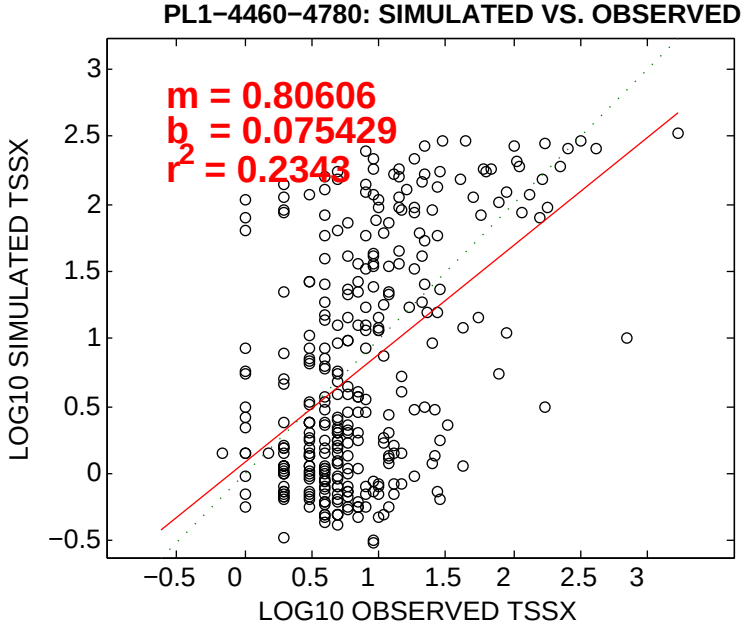


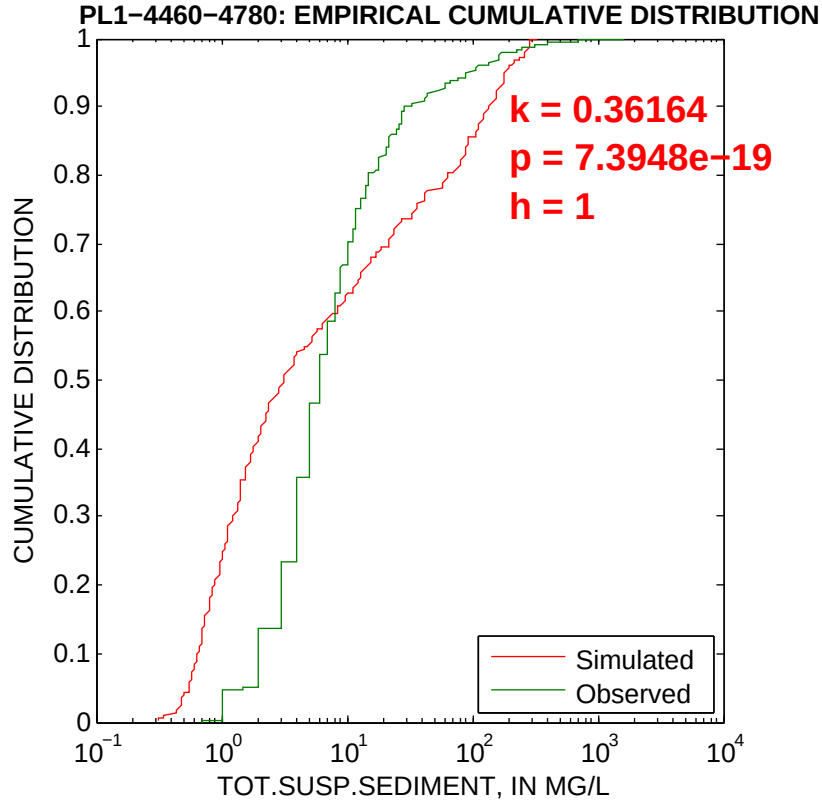












DATA SELECTION

scenario: P620171001WQ | file: TSSX.calib

plot: TSSX - total suspended ...

Dates: 1/1/1985 – 12/31/201

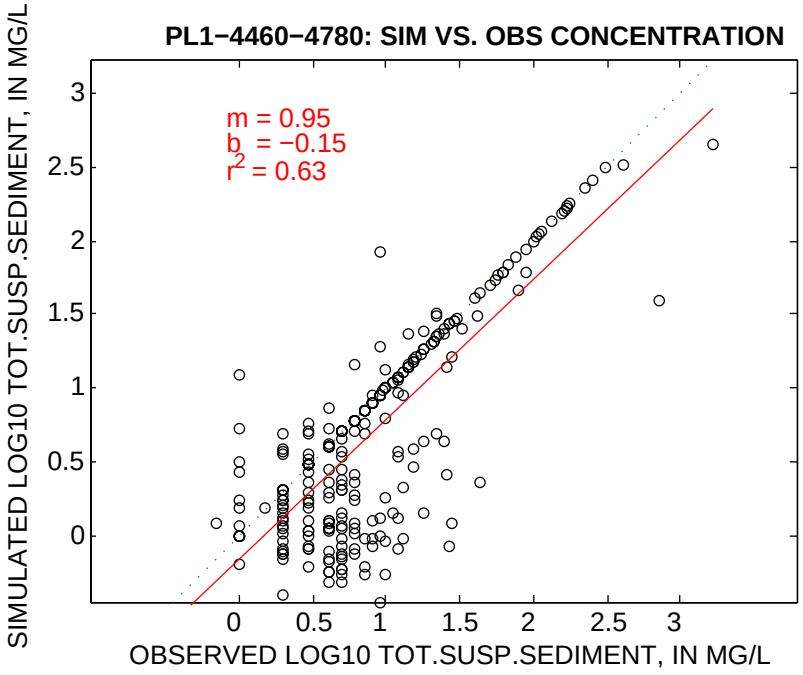
Drive: N/A | Directory: model | Observed: OBS20161101

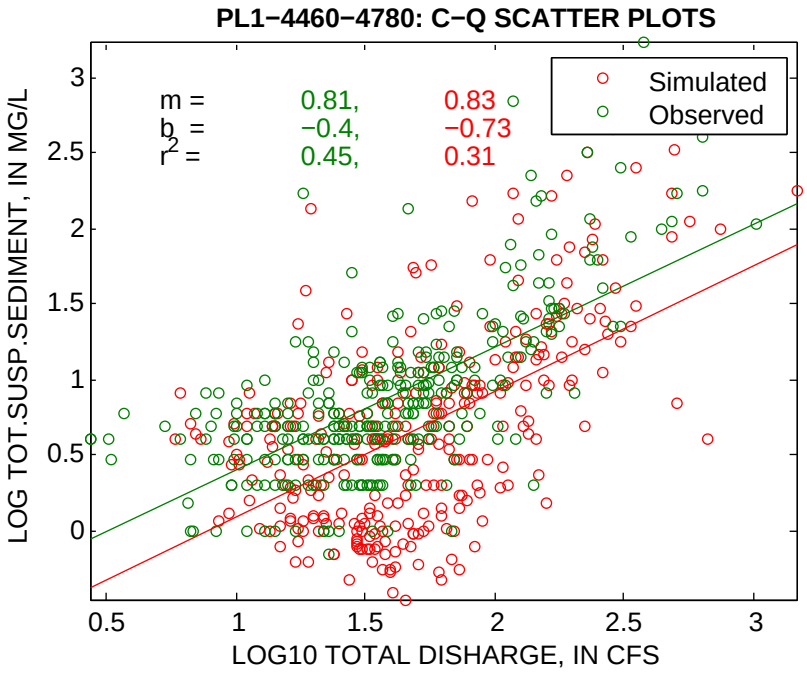
STATISTICS

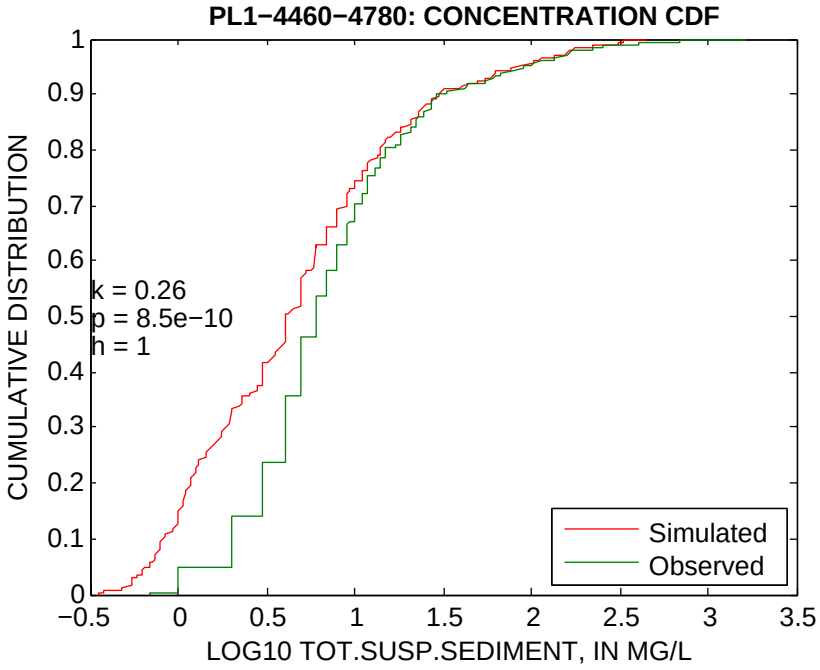
	n	observe	simulate
		318	318
min		0.7	0.30448
		-0.154902	-0.516441
mean		25.3355	36.9574
		0.875573	0.781192
media		6	3.127
		0.778151	0.495127
max		1660	335.6
		3.22011	2.52582
varian		11718	4449.74
		0.276027	0.765431
JB		0.001	0.001
		0.001	0.001
		ra	log
%		45.8717	-10.7794
err.va		10342.1	0.605406
rel.std.err		0.882579	2.19329
mod.eff		0.117421	-1.19329

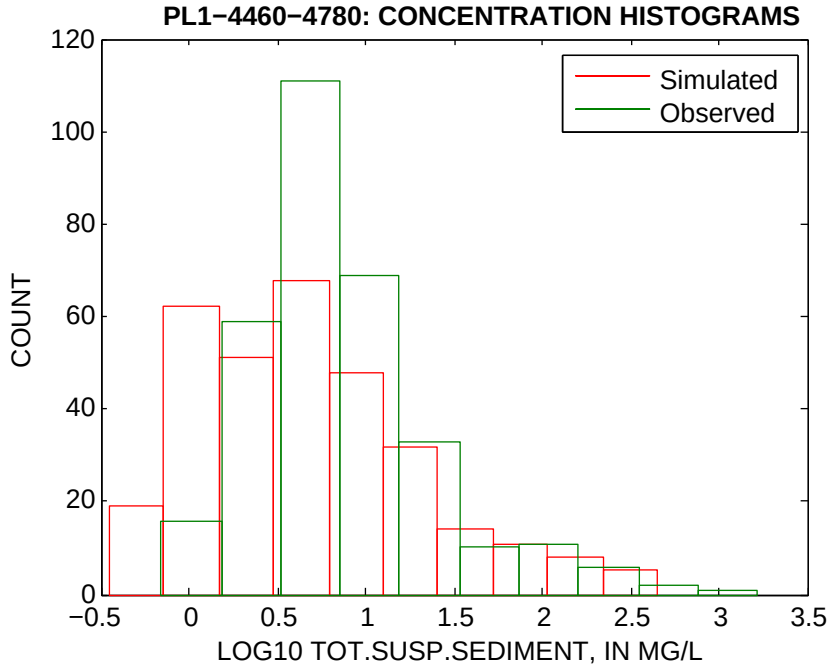
VERSION 2.1

ALL DATA
LOG10

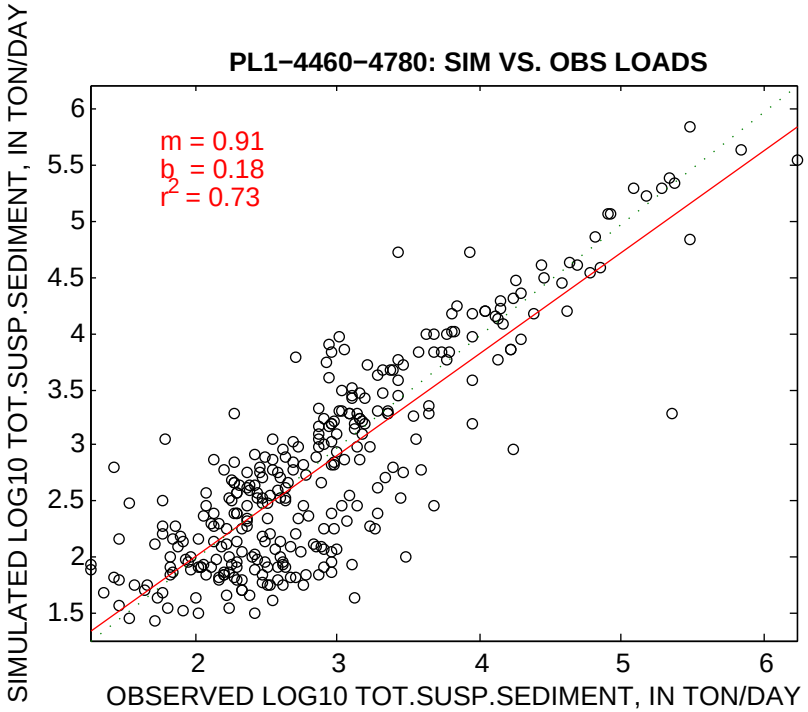


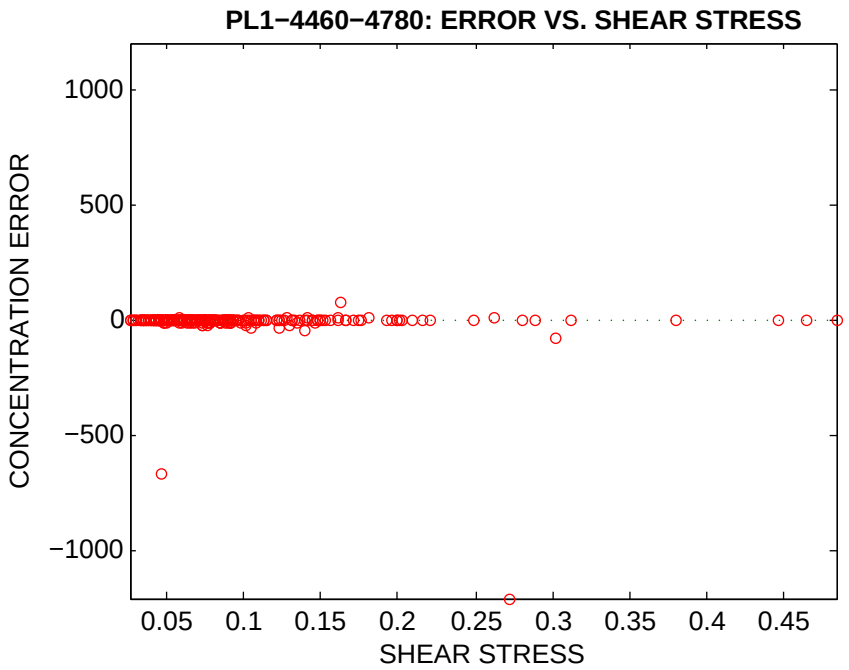


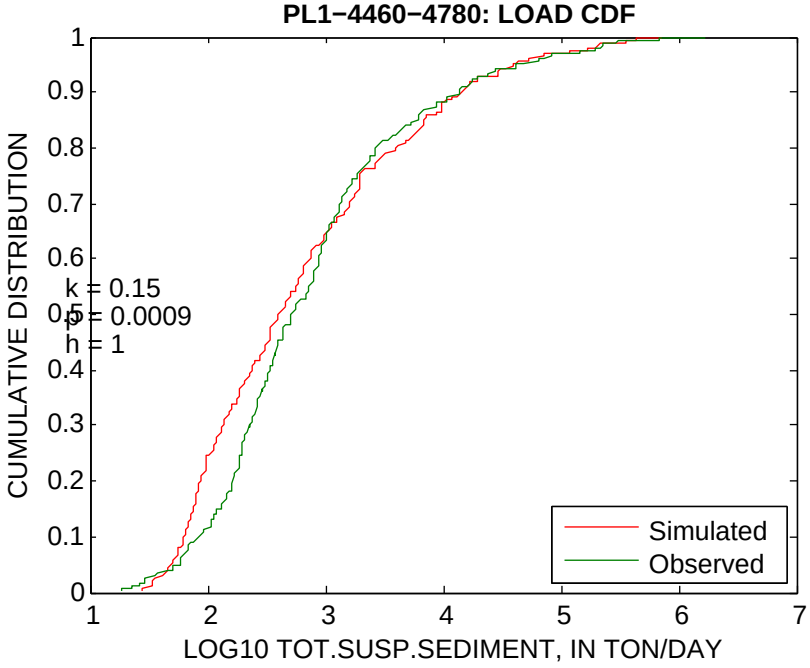


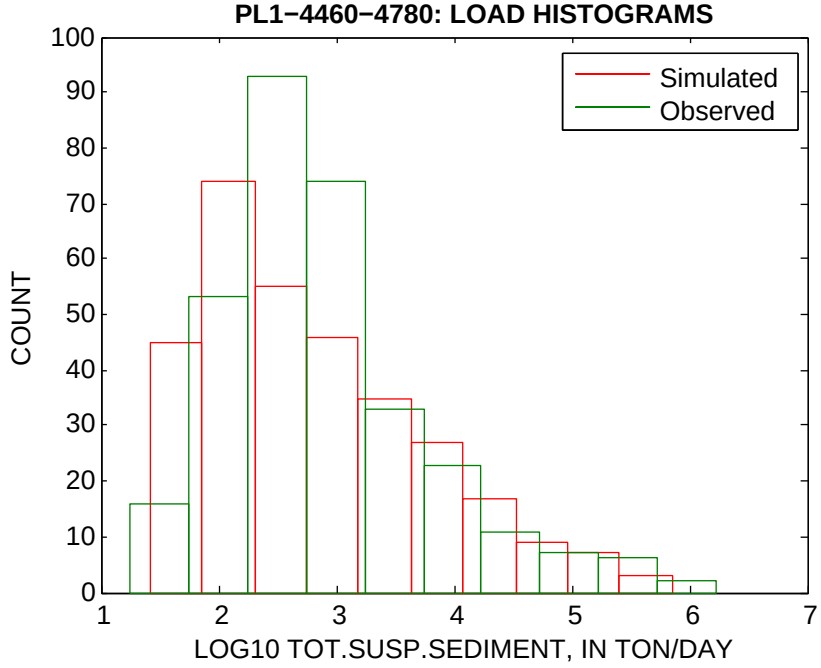


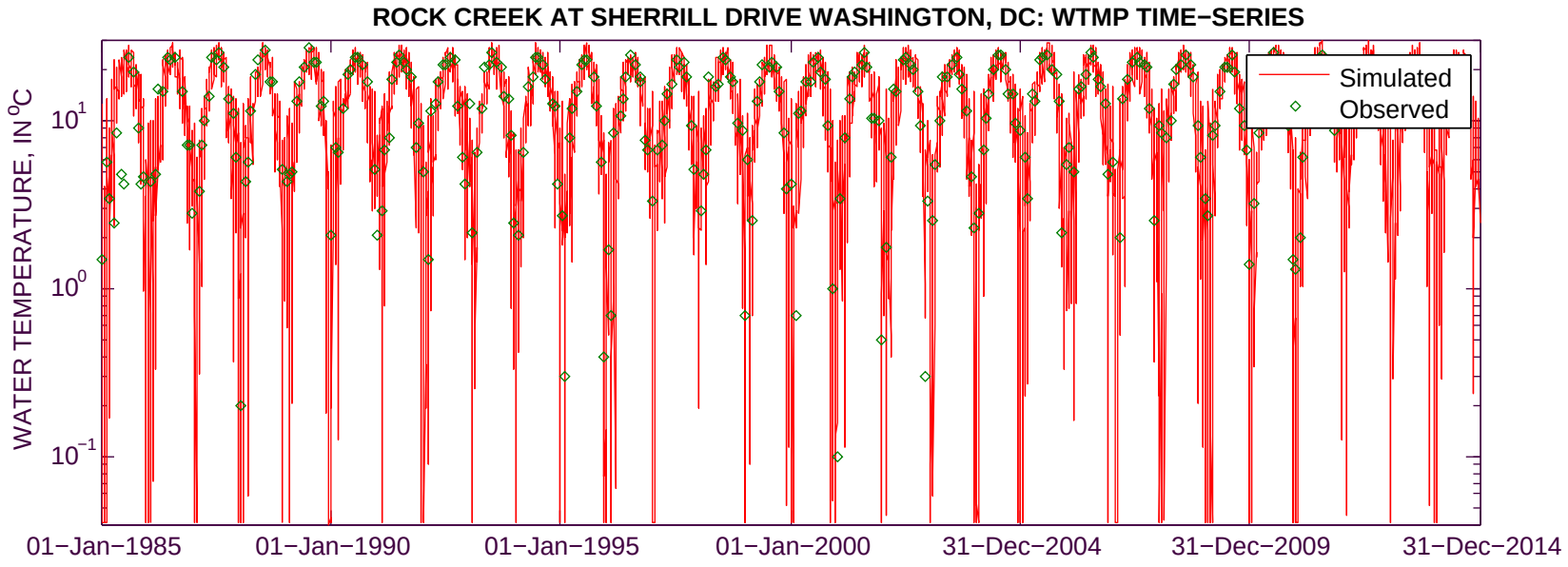
LOAD DATA
LOG10

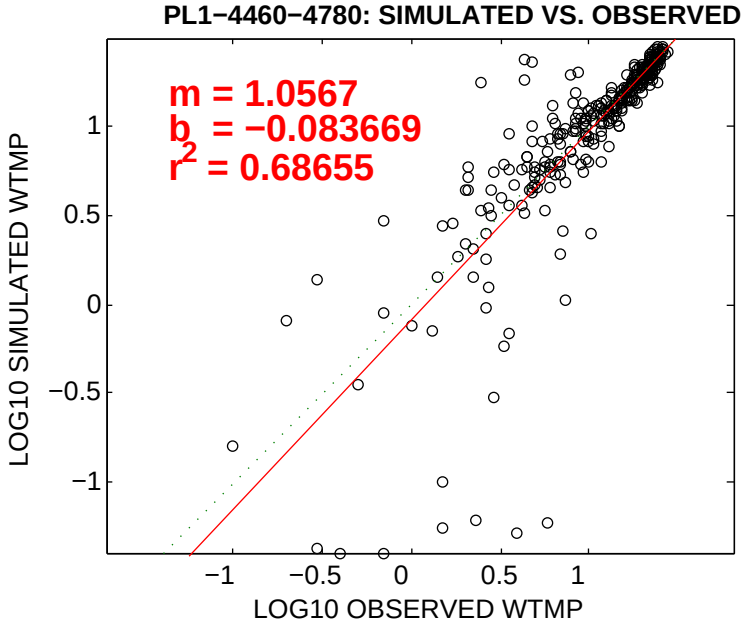


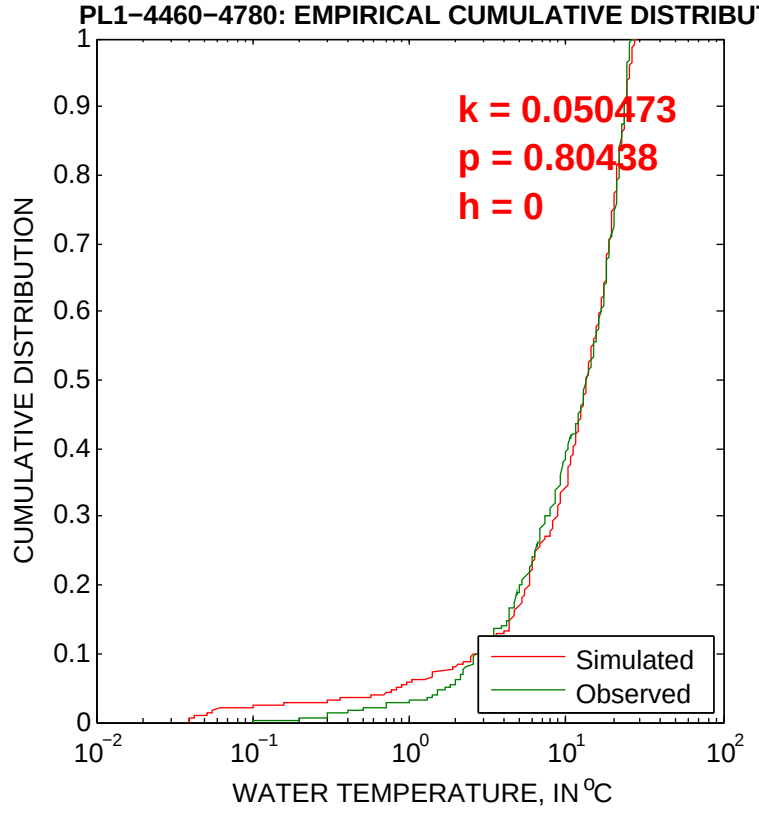












DATA SELECTION

scenario	file
P620171001WQ	WTMP.calib

plot: WTMP - water tempera...

Dates: 1/1/1985 – 12/31/201

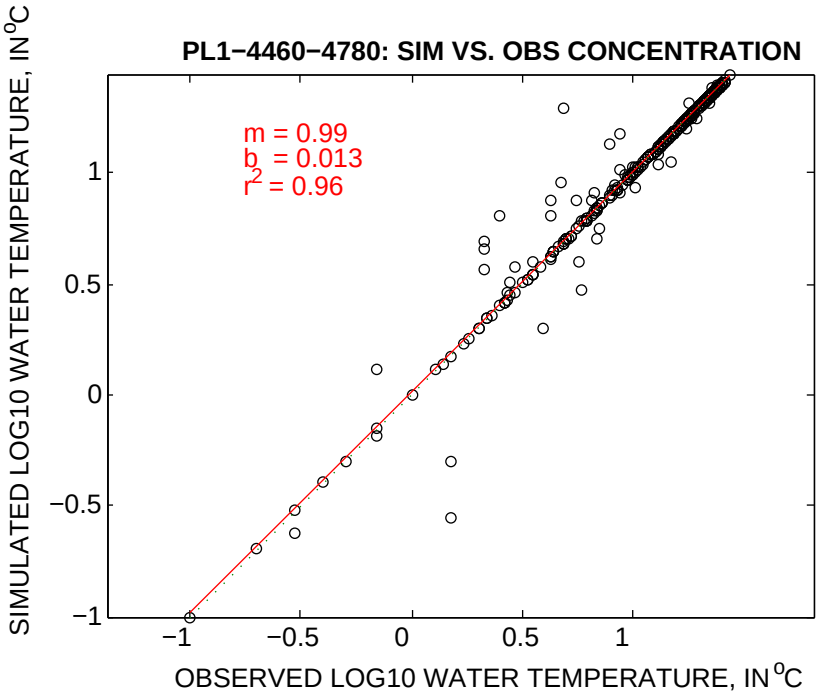
Drive	Directory	Observed
N/A	model	OBS20161101

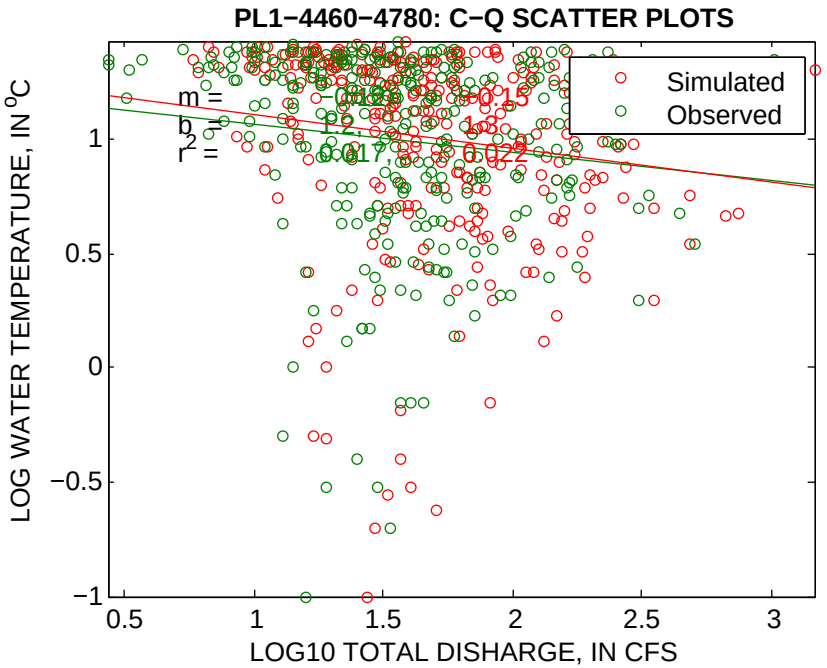
STATISTICS

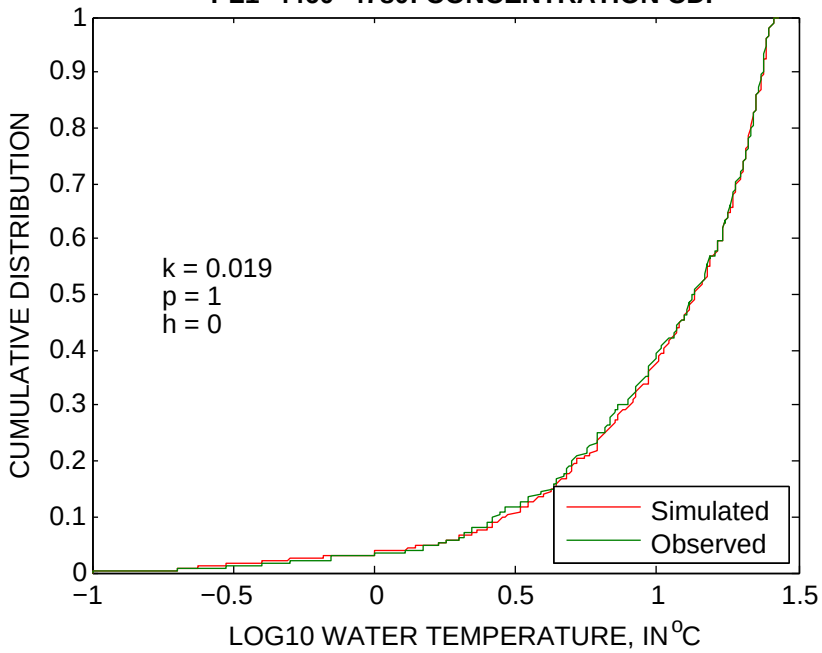
	n	observe	simulate
		317	317
min		0.1	0.040098
		-1	-1.39688
mean		13.4055	13.5211
		1.00155	0.974661
media		13.6	13.446
		1.13354	1.12859
max		27.3	27.866
		1.43616	1.44507
varian		59.2231	59.0674
		0.167164	0.271871
JB		0.001168	0.003356
		0.001	0.001
		ra	log
%		0.862511	-2.68501
err.va		9.17306	0.0864802
rel.std.err		0.15489	0.517338
mod.eff		0.84511	0.482662

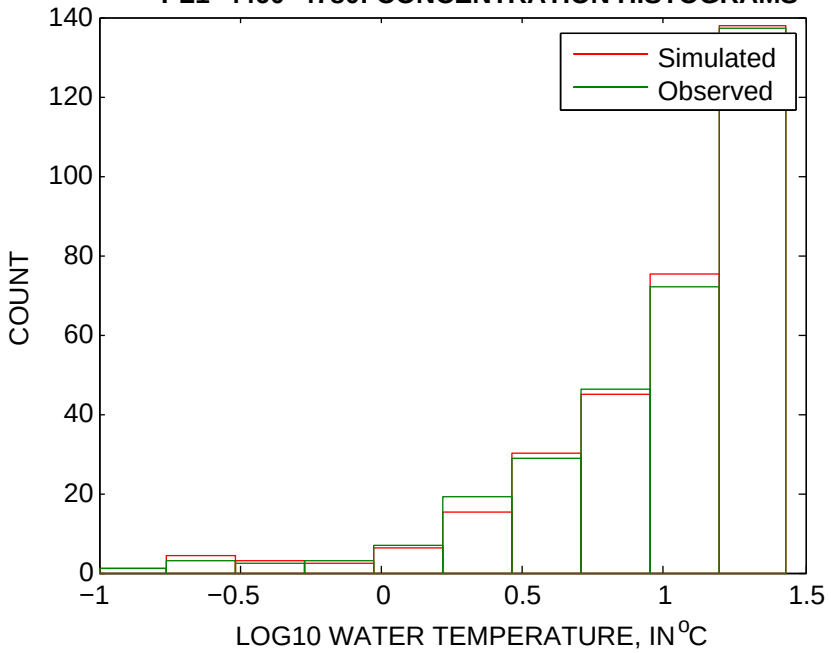
VERSION 2.1

ALL DATA
LOG10

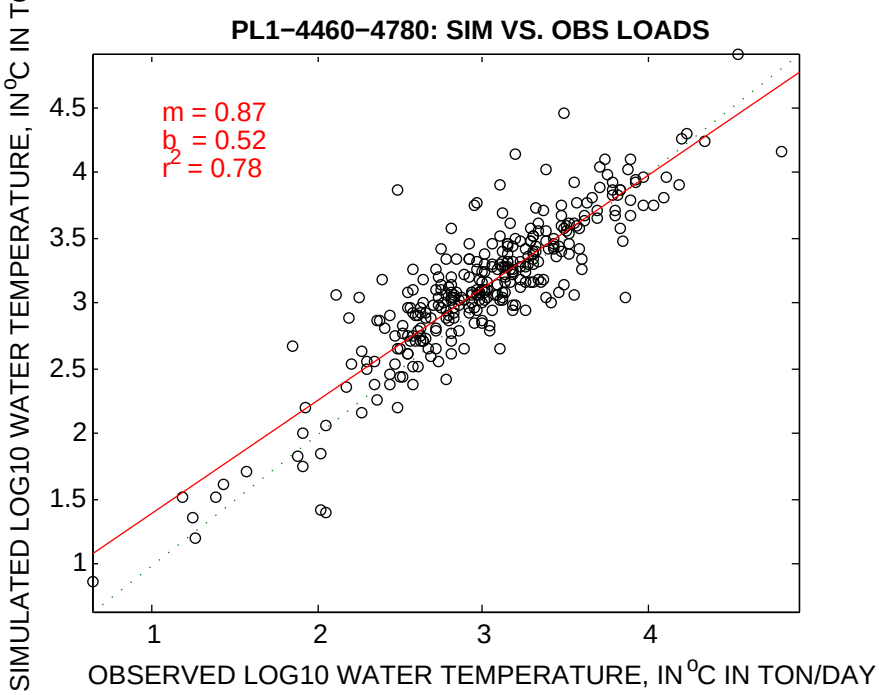


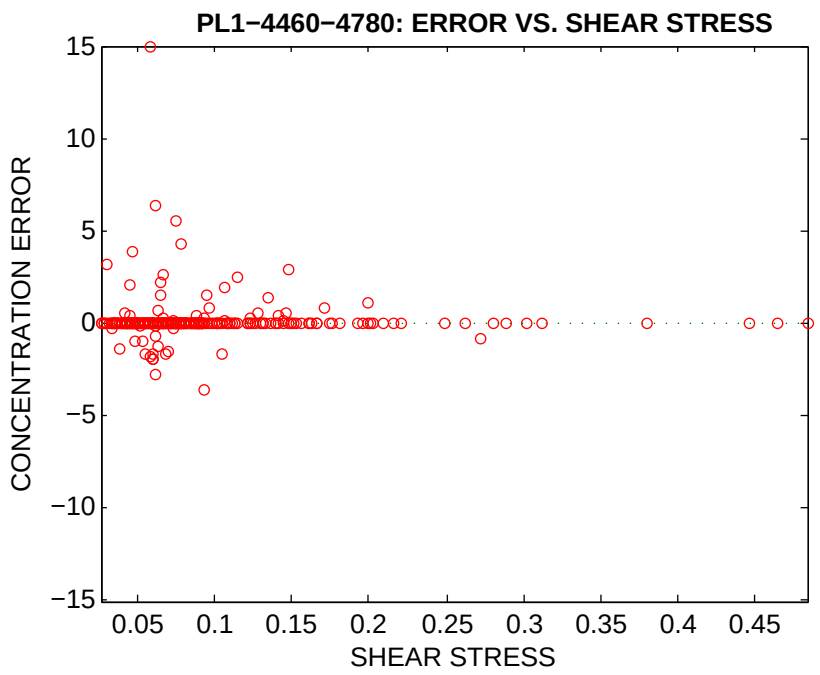


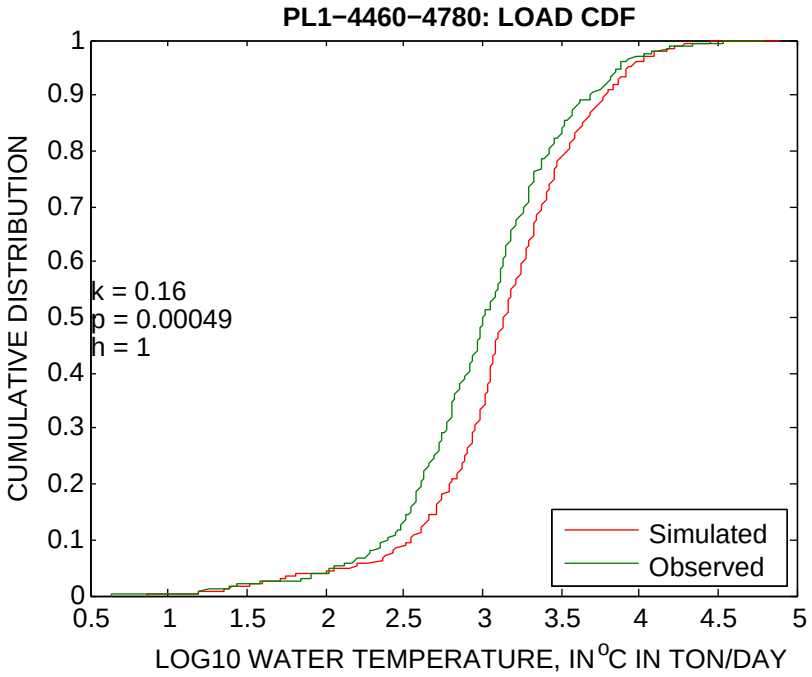


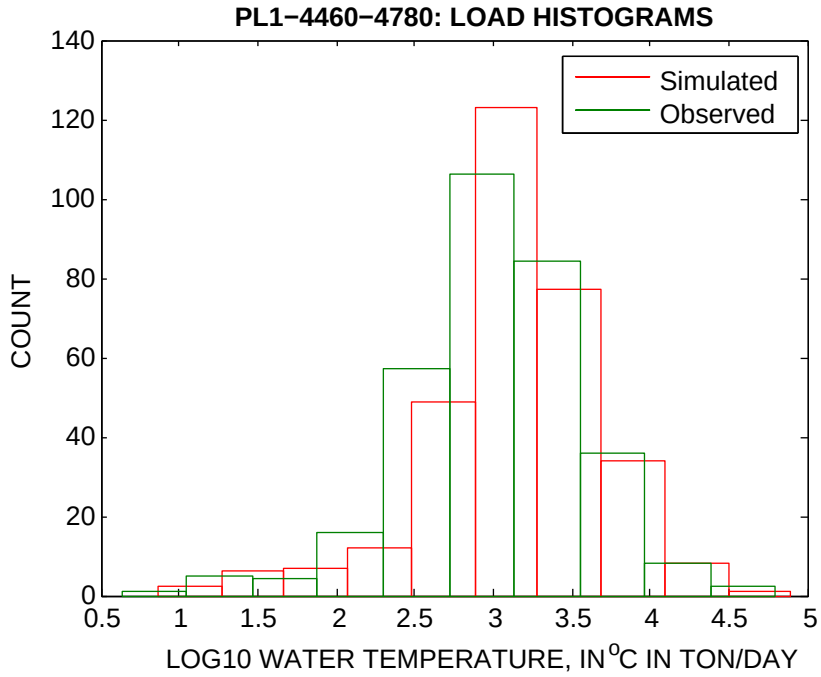


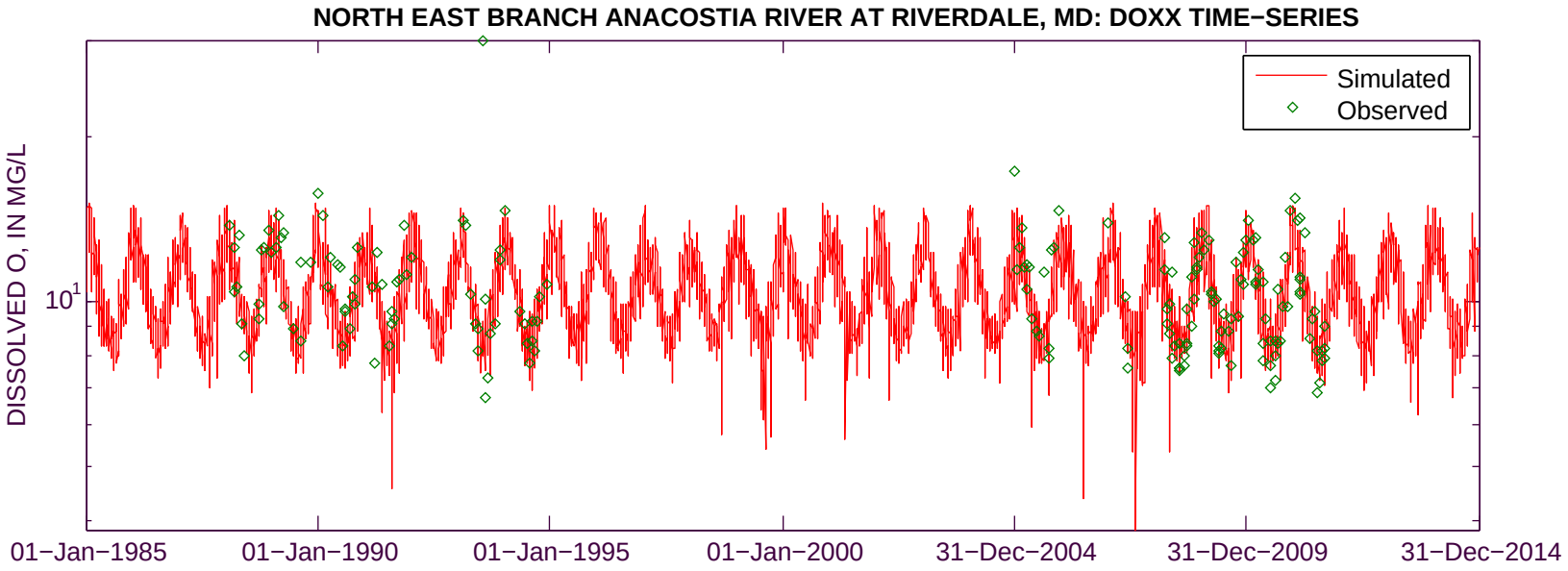
LOAD DATA
LOG10

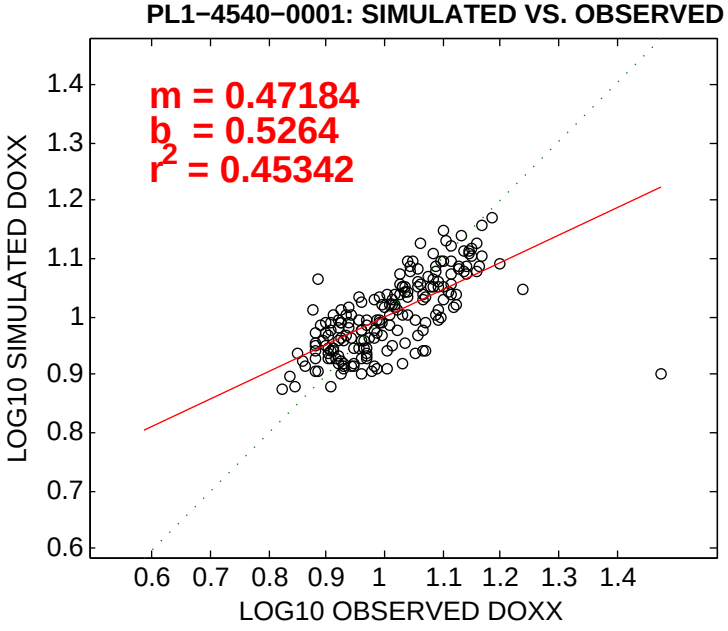


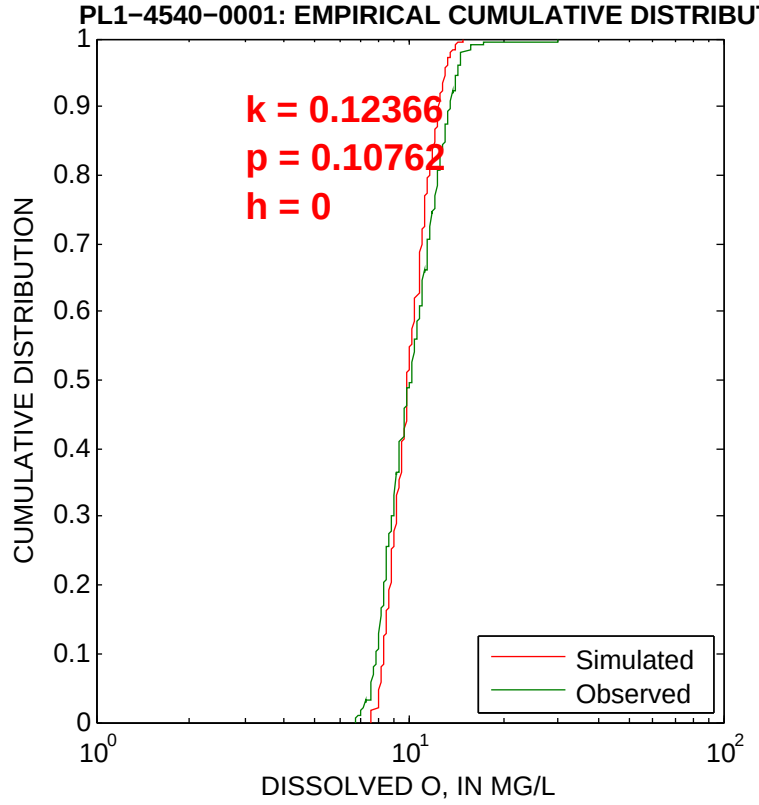












DATA SELECTION

scenario	file
P620171001WQ	DOXX.calib

plot: DOXX - dissolved oxygen

Dates: 1/1/1985 – 12/31/201

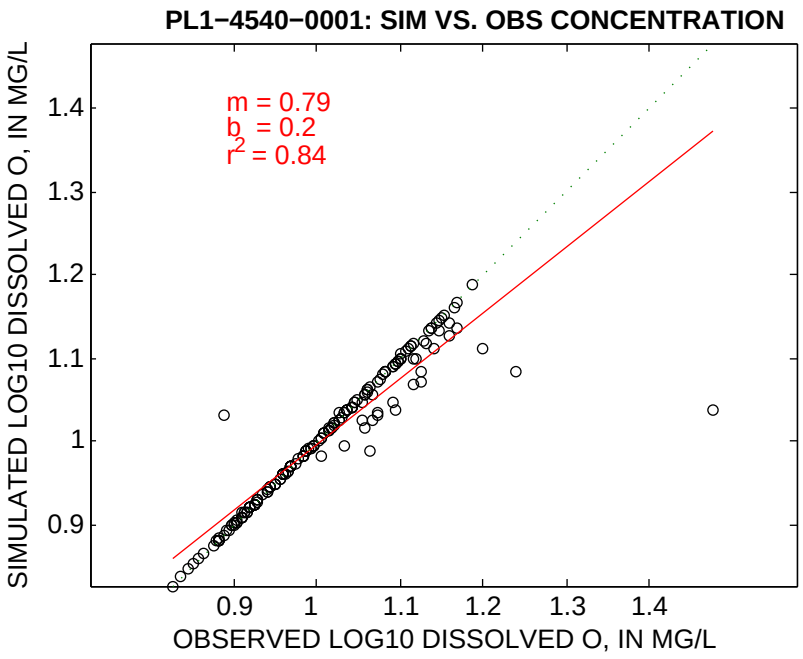
Drive	Directory	Observed
N/A	model	OBS20161101

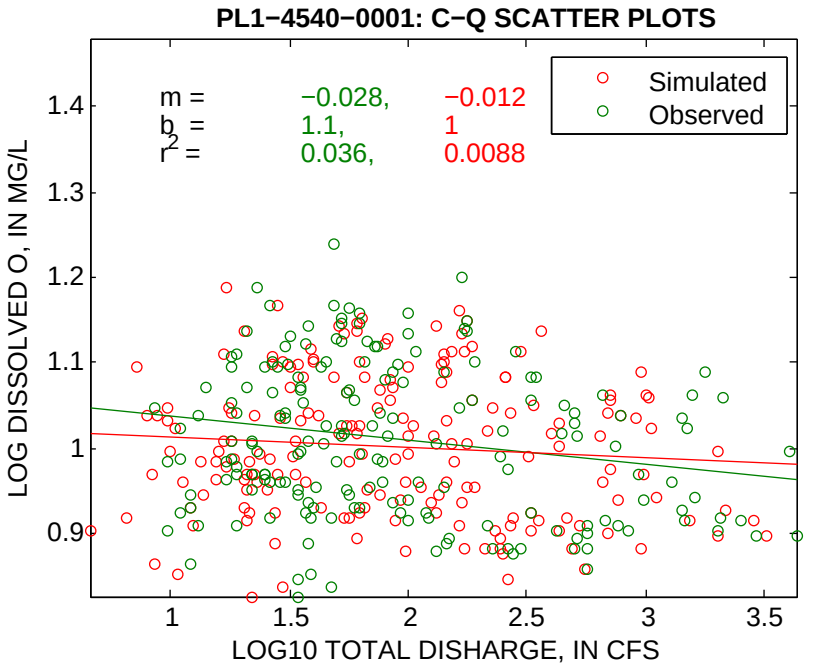
STATISTICS

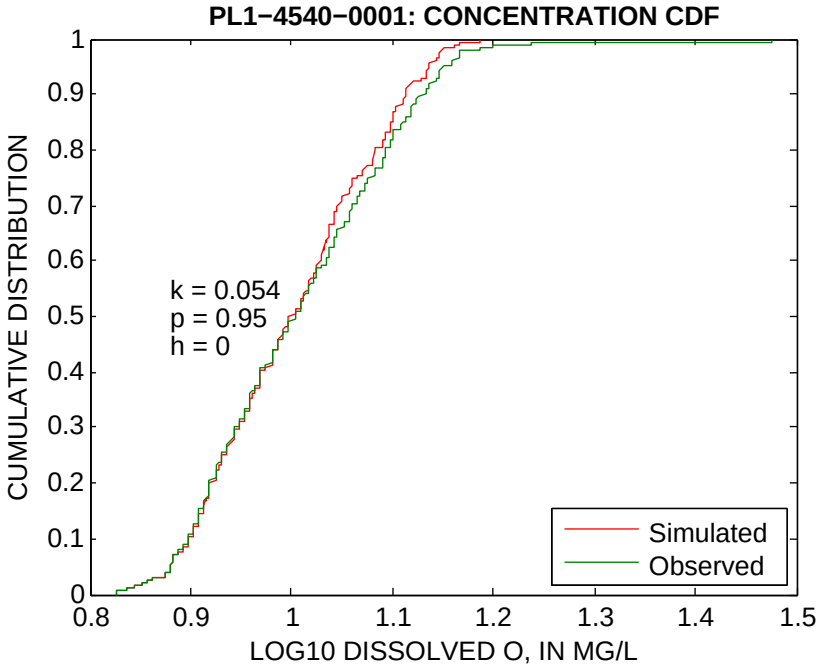
	n	186	186
		observe	simulate
min		6.7	7.5241
		0.826075	0.876455
mean		10.4706	10.1769
		1.00912	1.00254
media		10.1	9.8897
		1.00432	0.995183
max		30	14.804
		1.47712	1.17038
varian		6.643	2.50479
		0.00891317	0.00437632
JB		0.001	0.013484
		0.001	0.036895
		ra	log
%		-2.80536	-0.651991
err.va		4.47168	0.0049219
rel.std.err		0.673142	0.552205
mod.eff		0.326858	0.447795

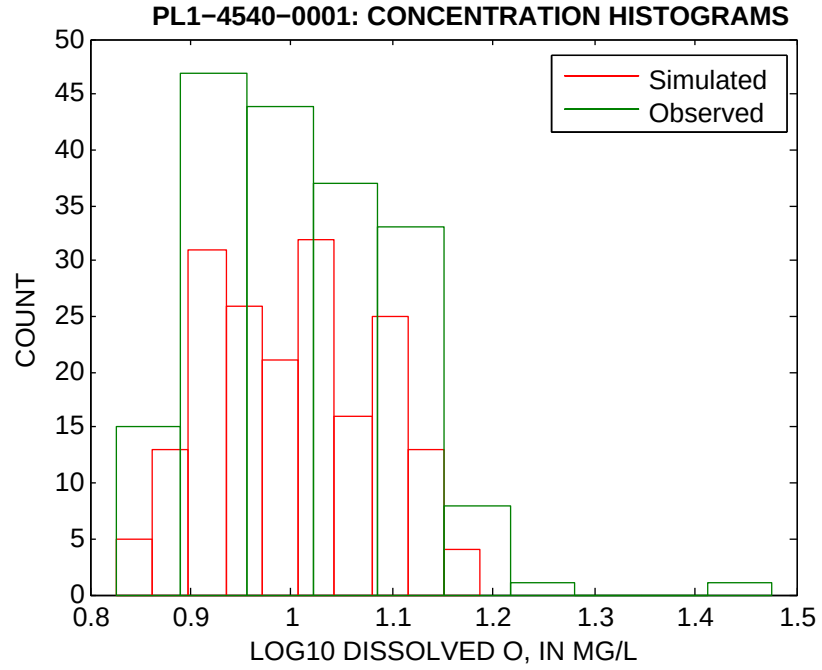
VERSION 2.1

ALL DATA
LOG10

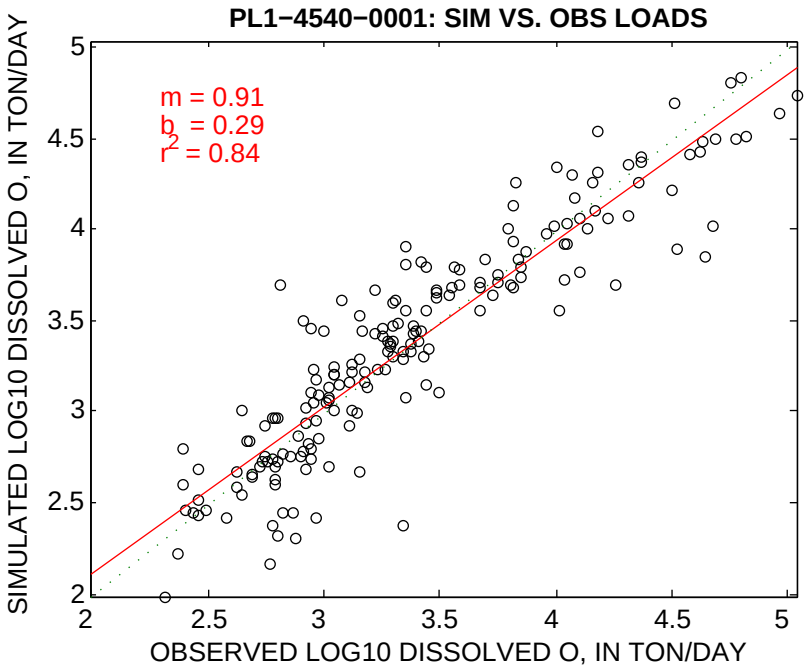




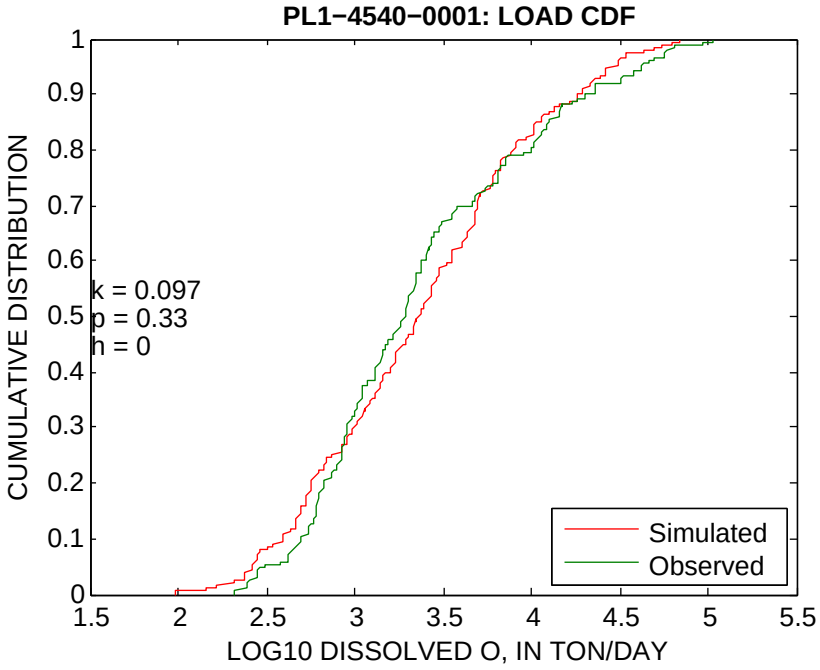


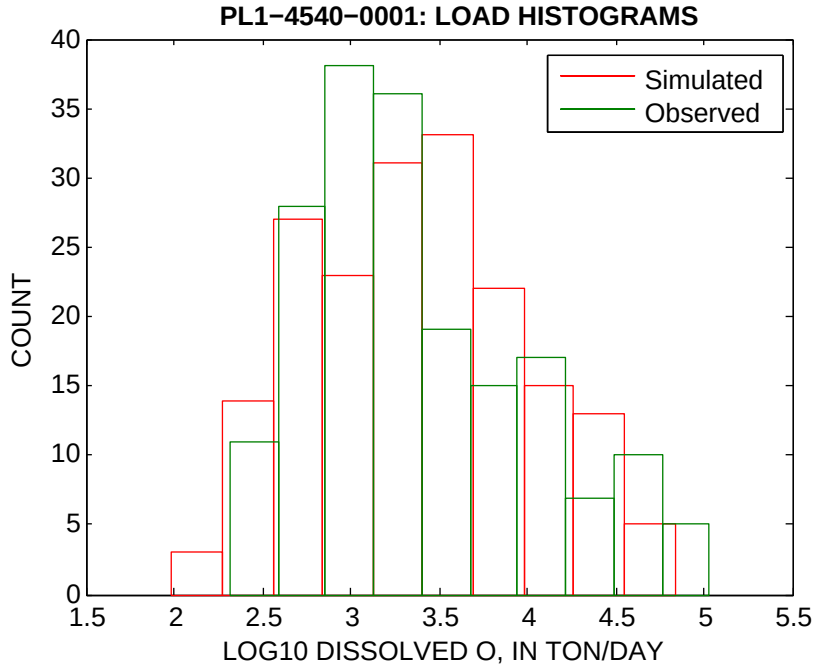


LOAD DATA
LOG10

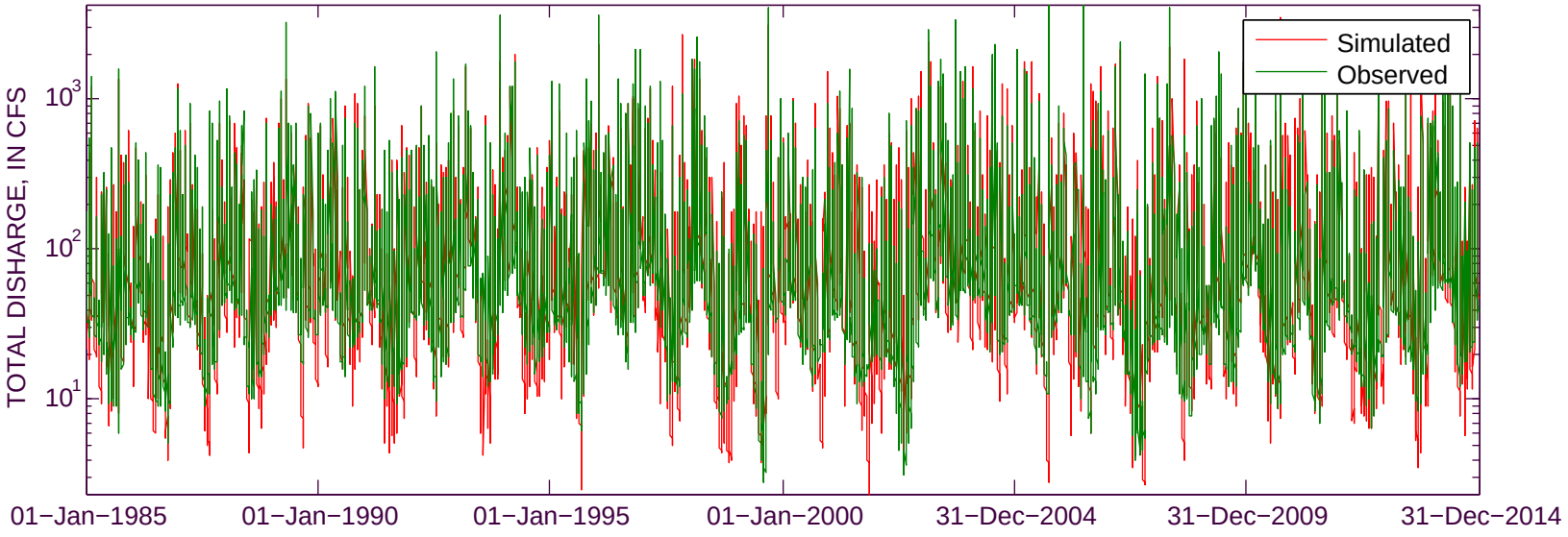




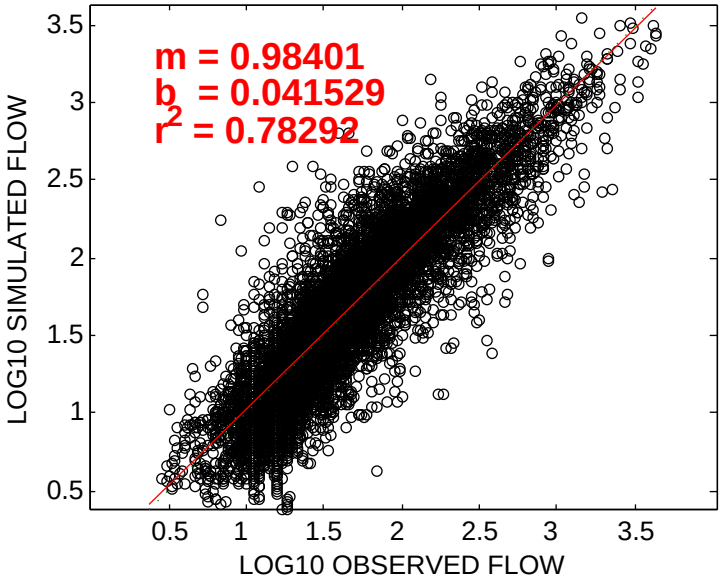




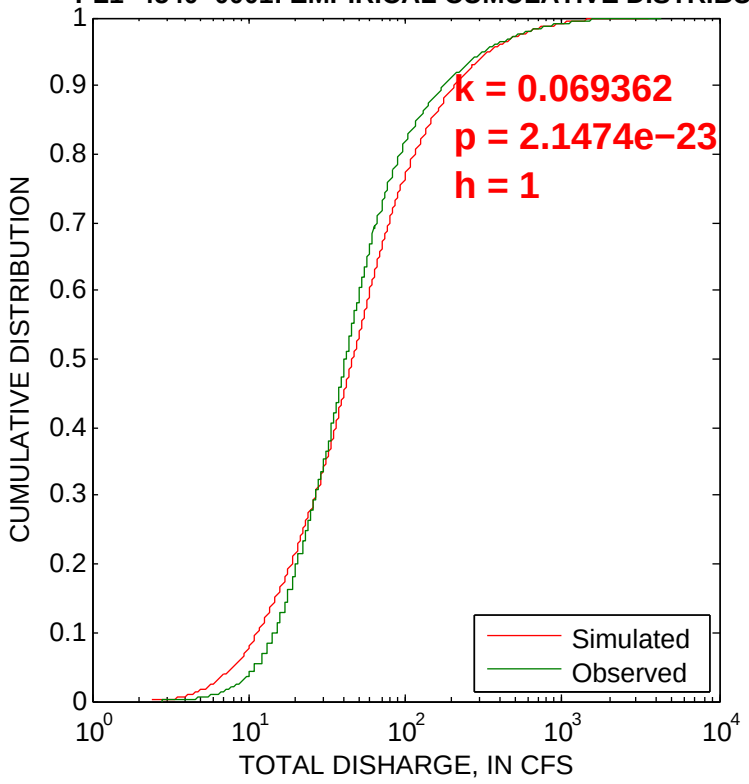
NORTH EAST BRANCH ANACOSTIA RIVER AT RIVERDALE, MD: FLOW TIME-SERIES



PL1-4540-0001: SIMULATED VS. OBSERVED



PL1-4540-0001: EMPIRICAL CUMULATIVE DISTRIBUTION



DATA SELECTION

scenario: P620171001WQ | file: FLOW.calib

plot: FLOW - total discharge

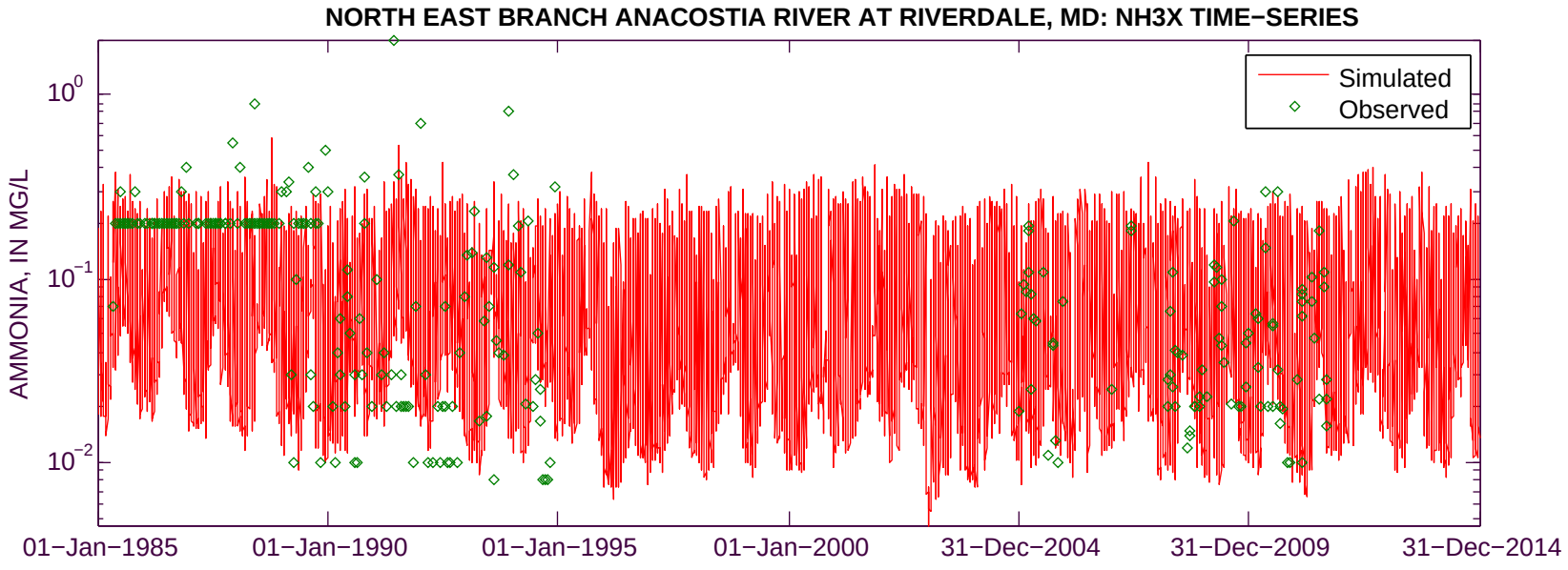
Dates: 1/1/1985 – 12/31/201

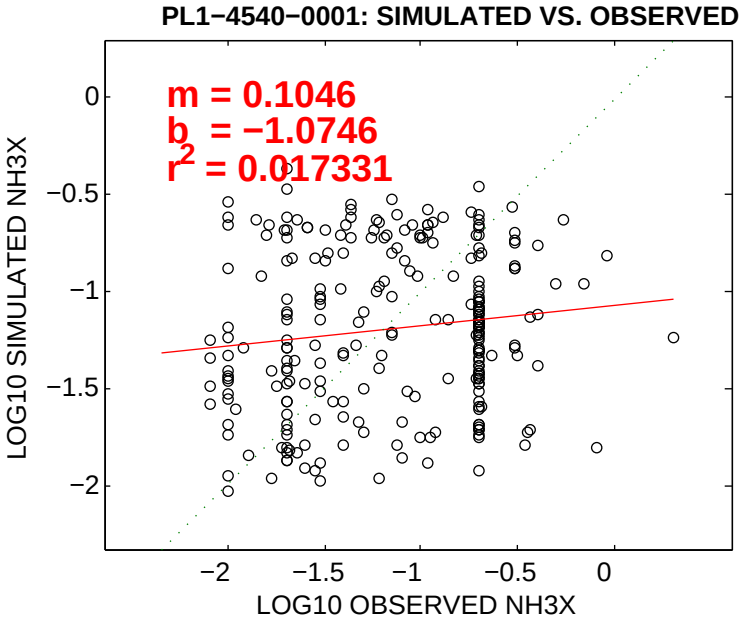
Drive | Directory | Observed: N/A | model | OBS20161101

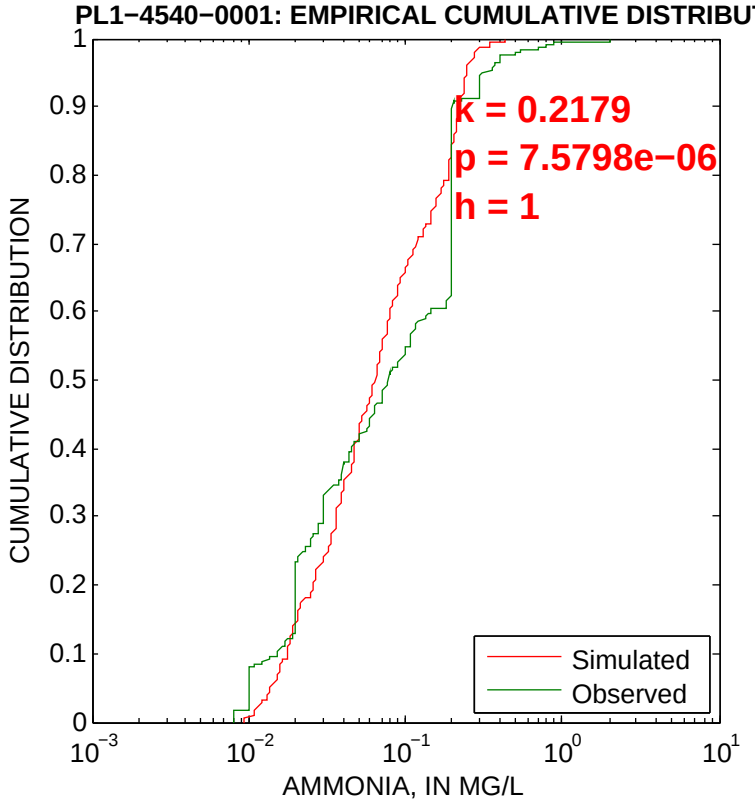
STATISTICS

		observe	simulate
n		10957	10957
min		2.8	2.3608
		0.447158	0.373059
mean		92.3368	98.6066
		1.66701	1.68188
media		42	46.48
		1.62325	1.66727
max		4320	3559.1
		3.63548	3.55134
varian		43858.7	36988.5
		0.193151	0.238878
JB		0.001	0.001
		0.001	0.001
		ra	log
%		6.7901	0.892261
err.va		13052.1	0.0521253
rel.std.err		0.297595	0.269868
mod.eff		0.702405	0.730132

VERSION 2.1







DATA SELECTION

scenario	file
P620171001WQ	NH3X.calib

plot: NH3X - ammonia

Dates: 1/1/1985 – 12/31/201

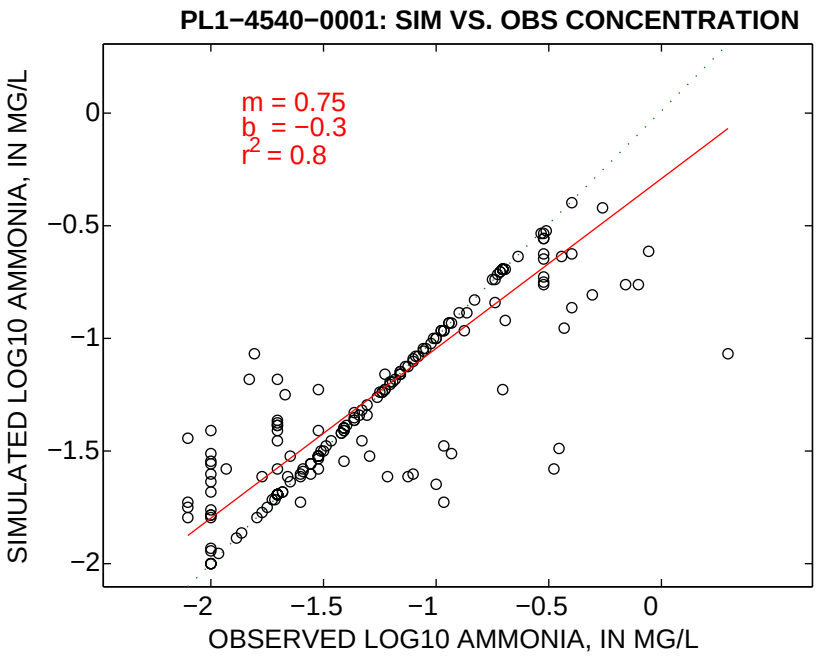
Drive	Directory	Observed
N/A	model	OBS20161101

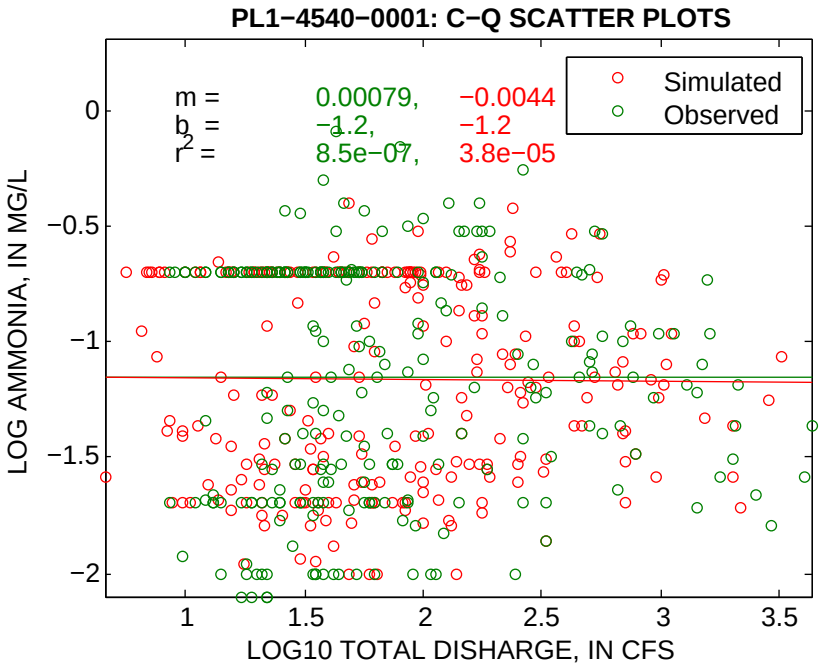
STATISTICS

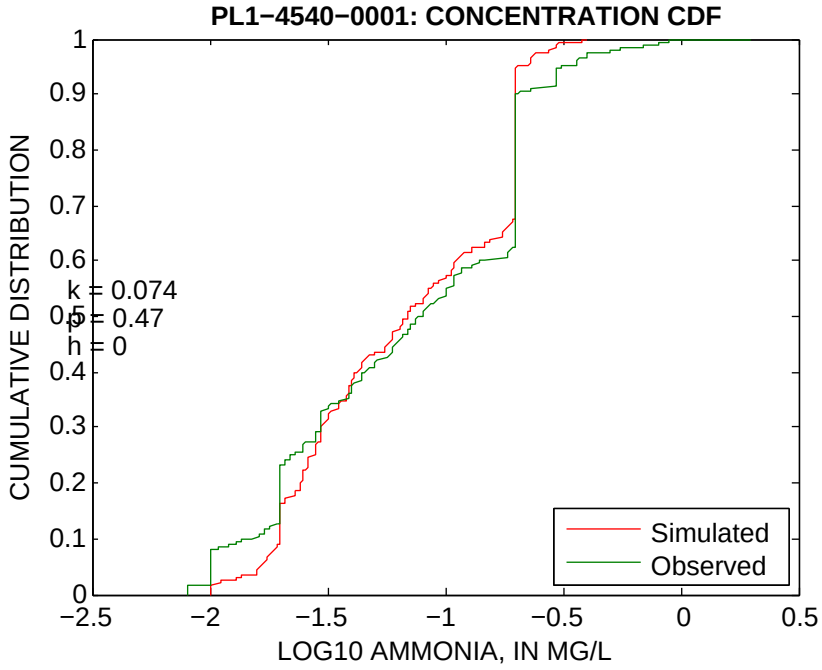
	n	257	257
		observe	simulate
min		0.008	0.0094481
		-2.09691	-2.02466
mean		0.13063	0.0950756
		-1.15026	-1.19491
media		0.08	0.064978
		-1.09691	-1.18723
max		2	0.42938
		0.30103	-0.367158
varian		0.0298149	0.00674221
		0.261097	0.164838
JB		0.001	0.001
		0.009023	0.008963
		ra	log
%		-27.2178	3.88237
err.va		0.0382684	0.373314
rel.std.err		1.28353	1.42979
mod.eff		-0.283533	-0.429792

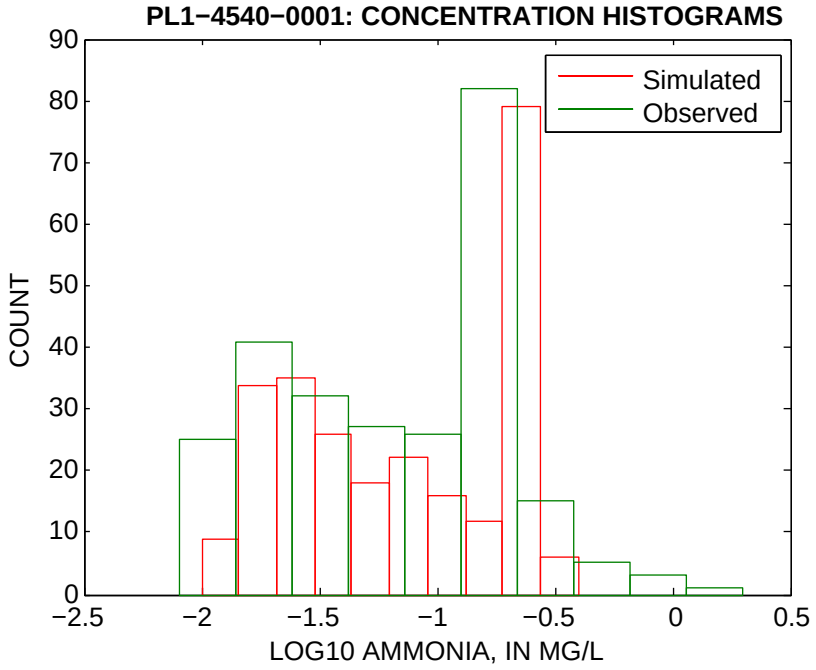
VERSION 2.1

ALL DATA
LOG10

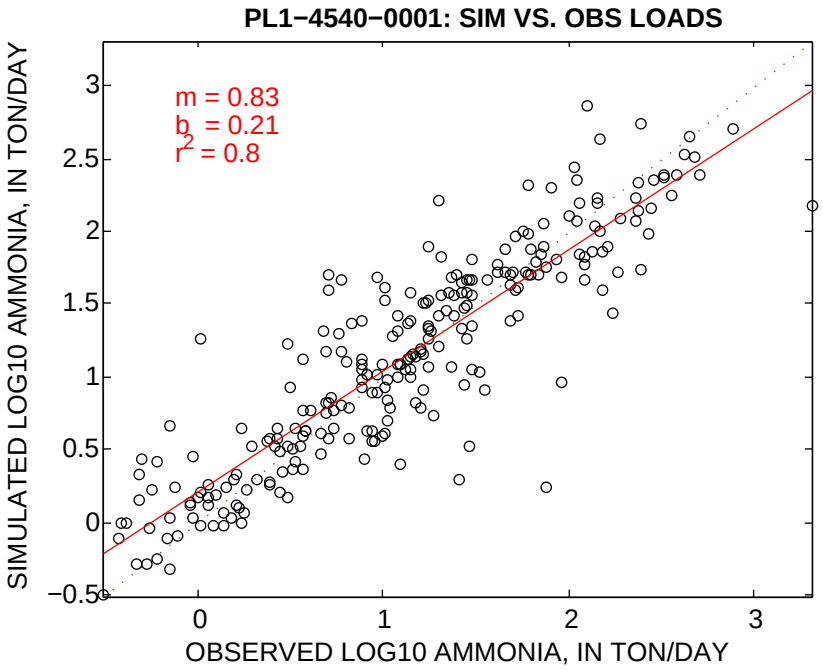


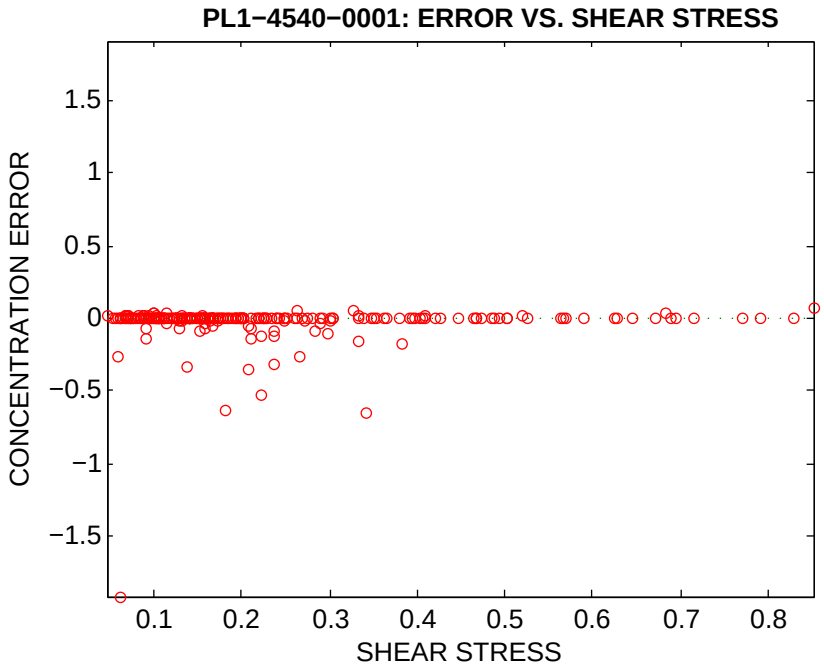


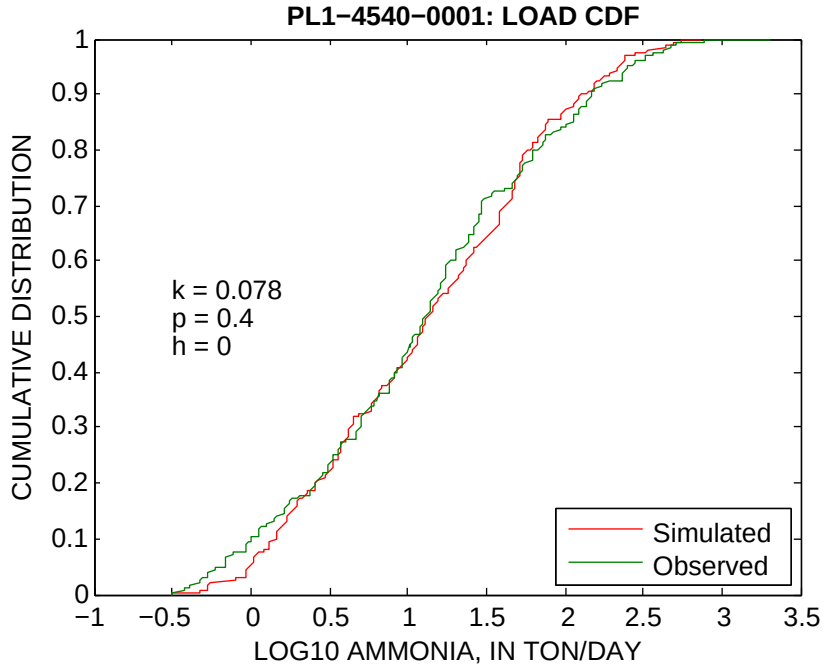


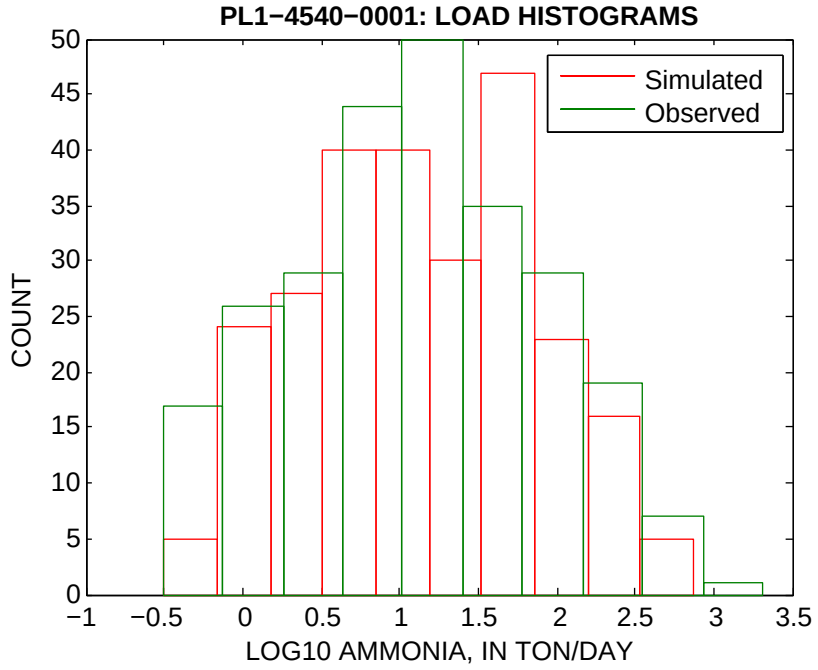


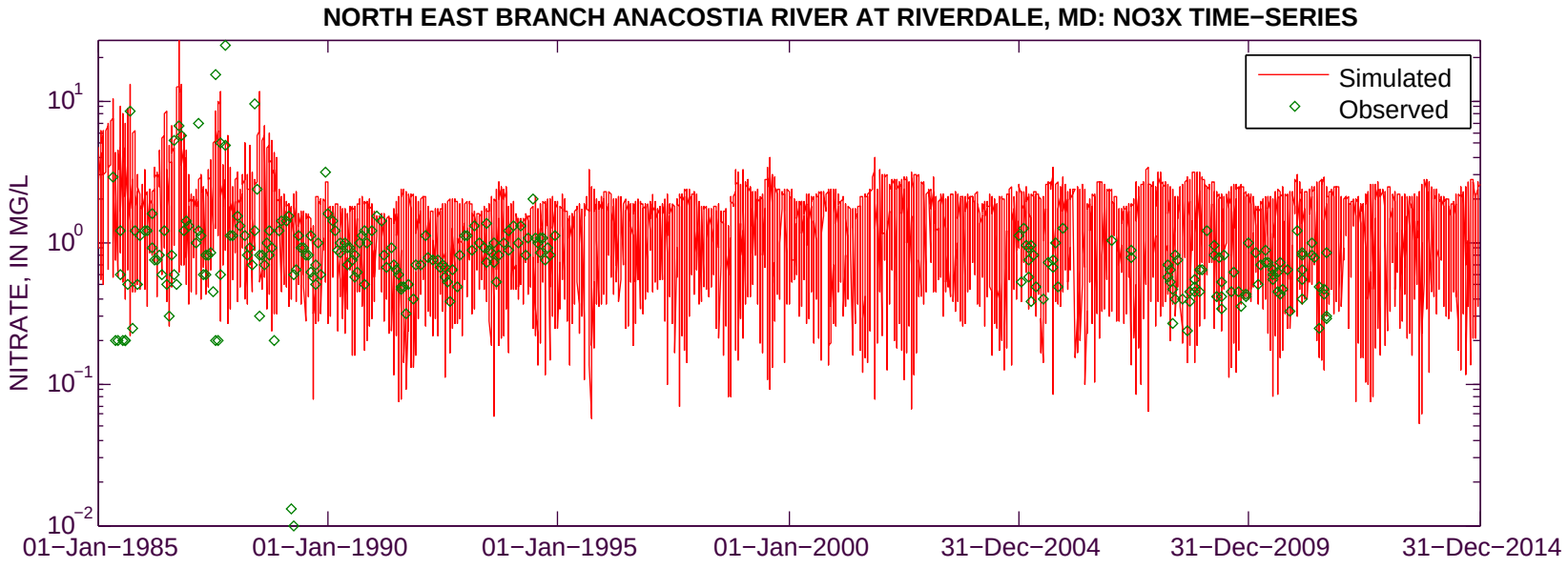
LOAD DATA
LOG10

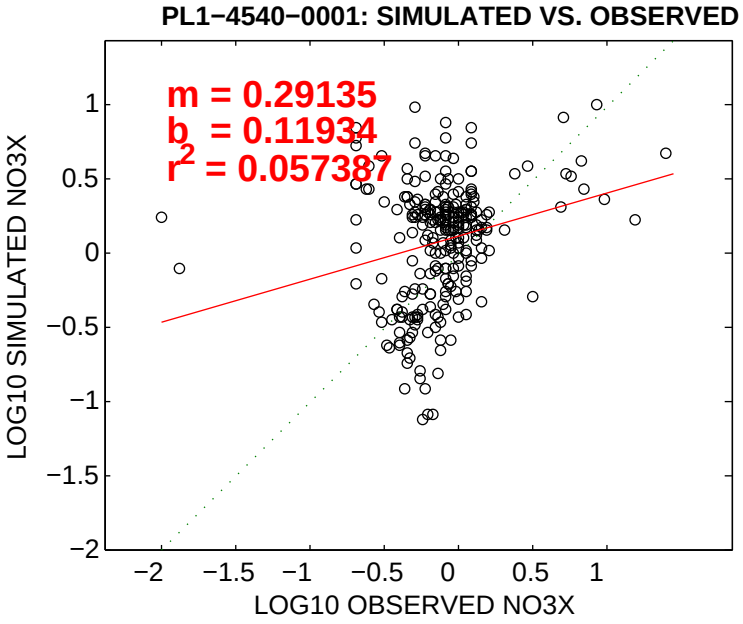


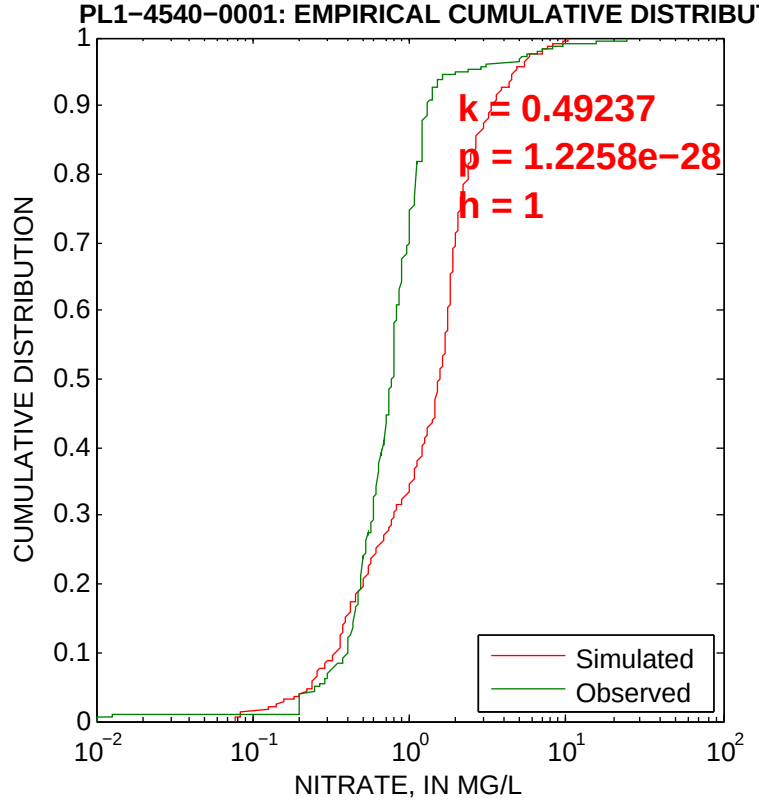












DATA SELECTION

scenario	file
P620171001WQ	NO3X.calib

plot: NO3X - nitrate

Dates: 1/1/1985 – 12/31/201

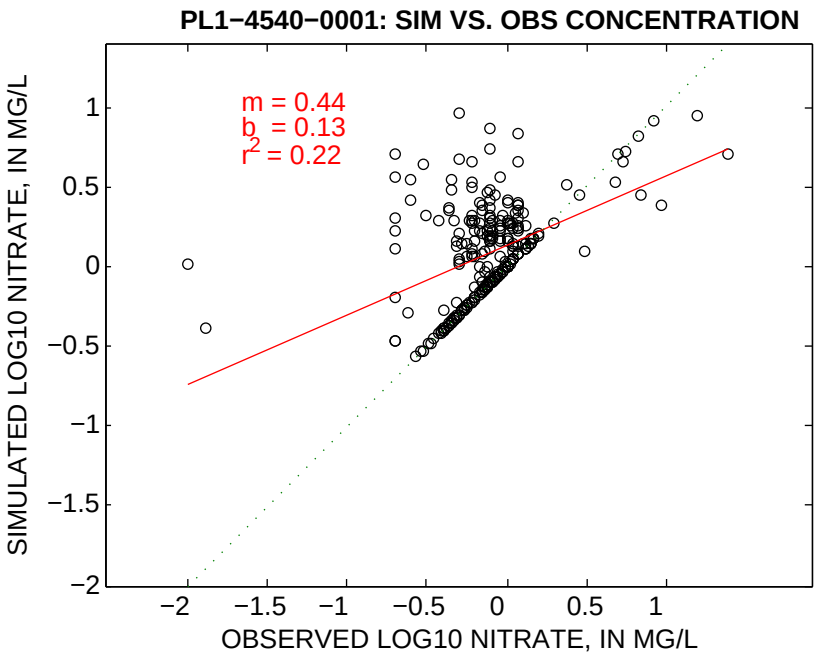
Drive	Directory	Observed
N/A	model	OBS20161101

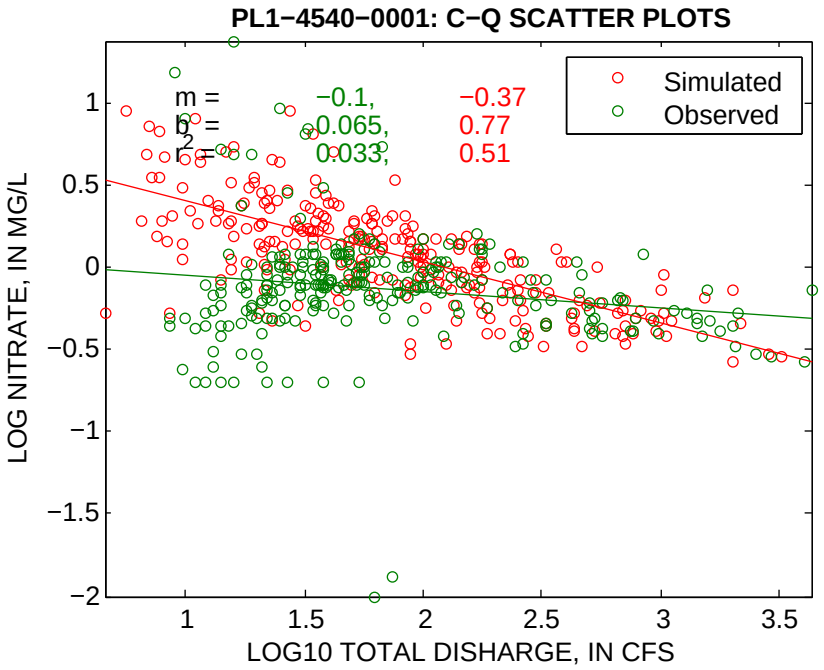
STATISTICS

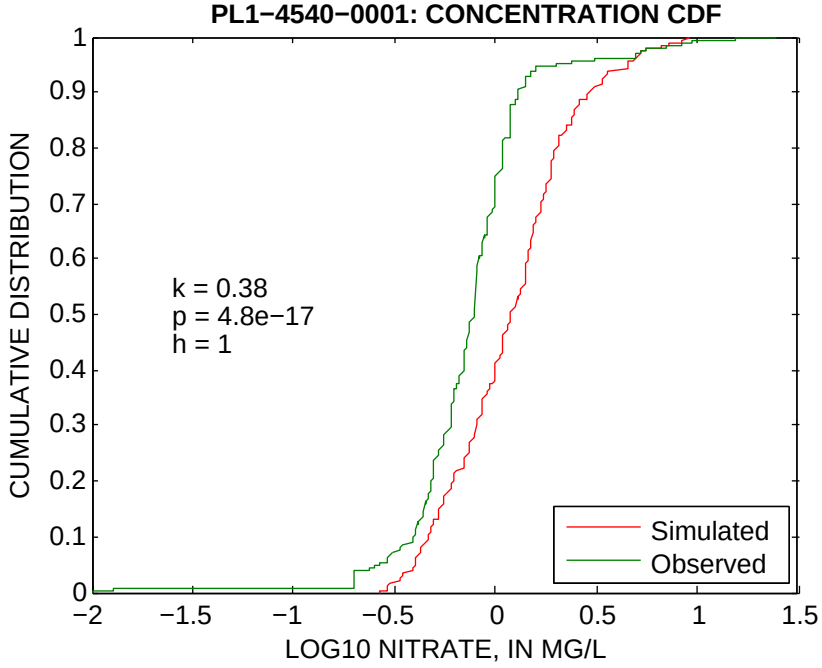
	n	262	262
		observe	simulate
min		0.01	0.07617
		-2	-1.11822
mean		1.11268	1.75399
		-0.120378	0.0842672
media		0.785	1.55015
		-0.105139	0.190366
max		24.5	10.114
		1.38917	1.00492
varian		4.10427	2.39928
		0.110325	0.163184
JB		0.001	0.001
		0.001	0.007881
		ra	log
%		57.6357	-170.002
err.va		5.30758	0.251263
rel.std.err		1.29319	2.27749
mod.eff		-0.293187	-1.27749

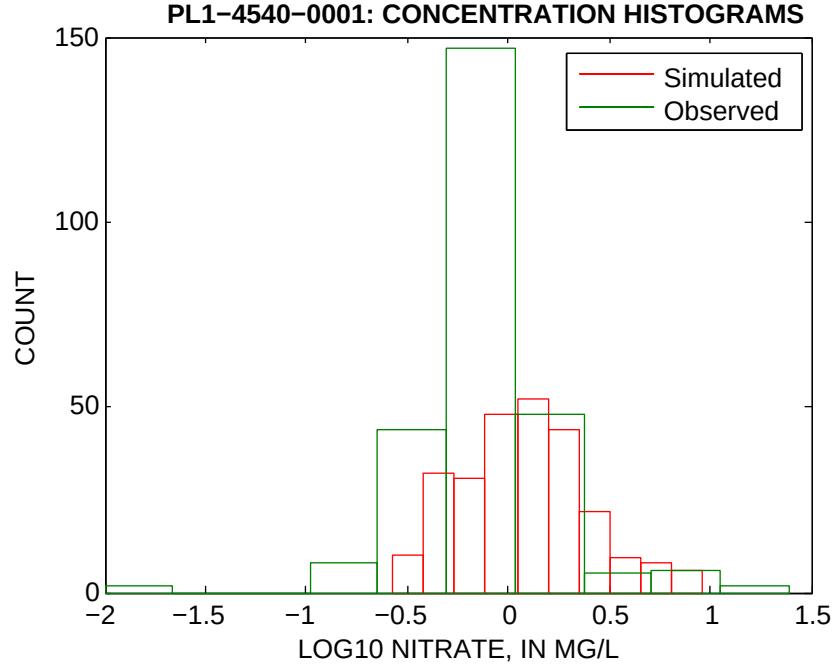
VERSION 2.1

ALL DATA
LOG10

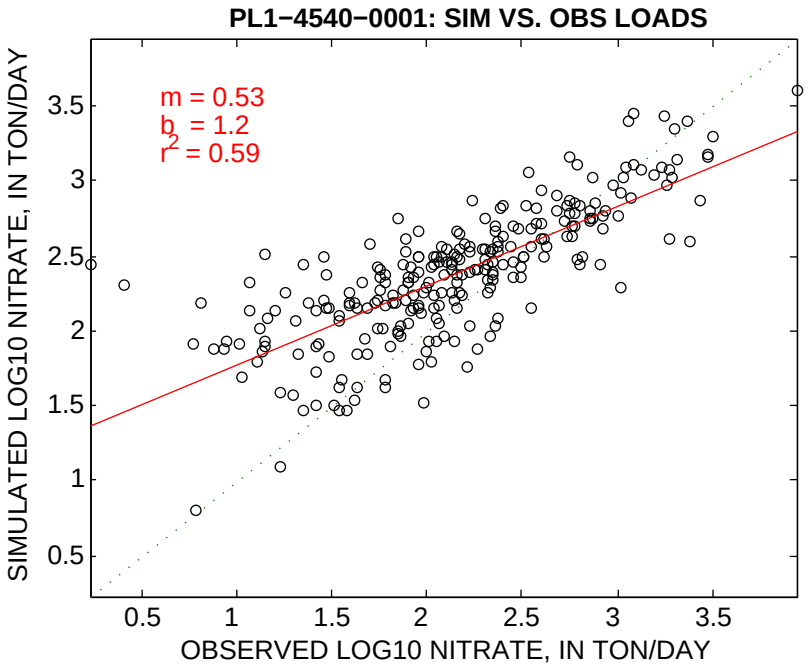


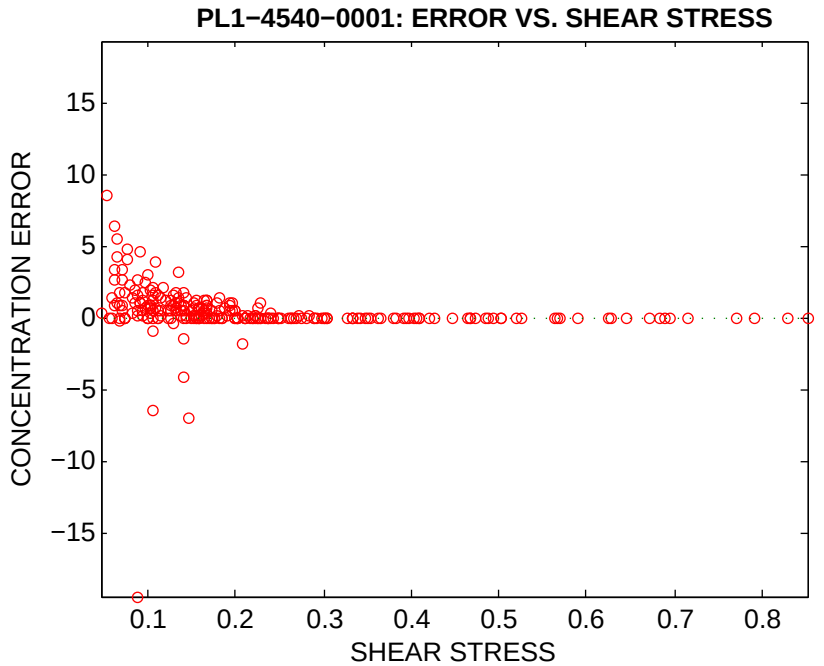


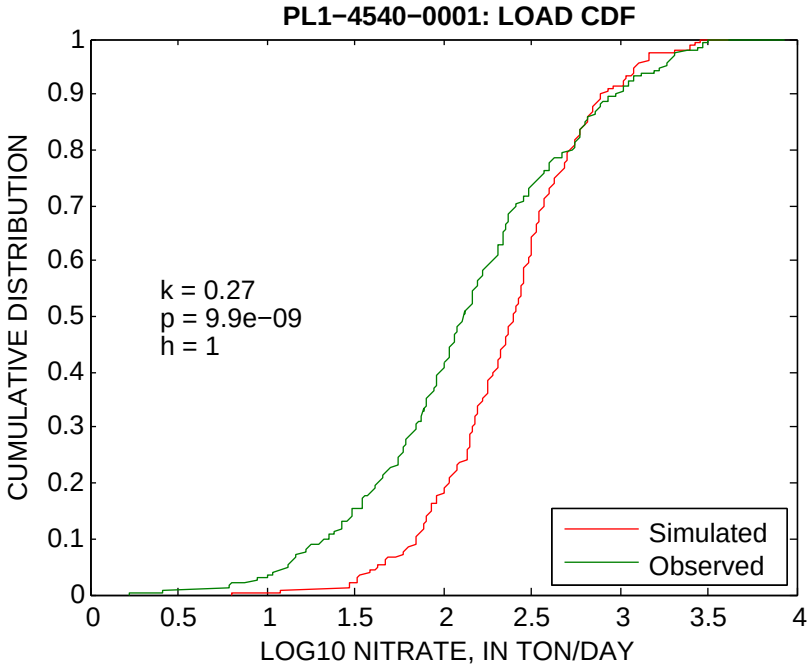


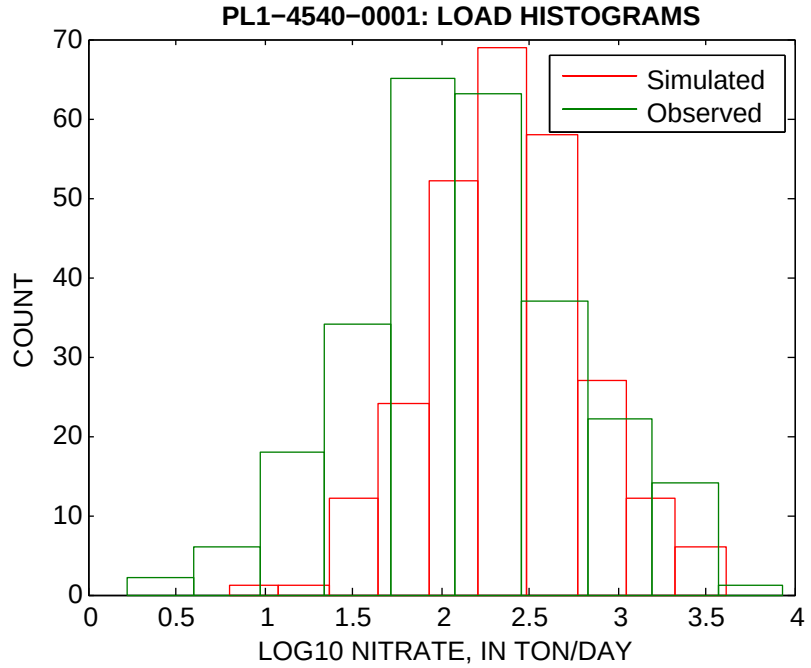


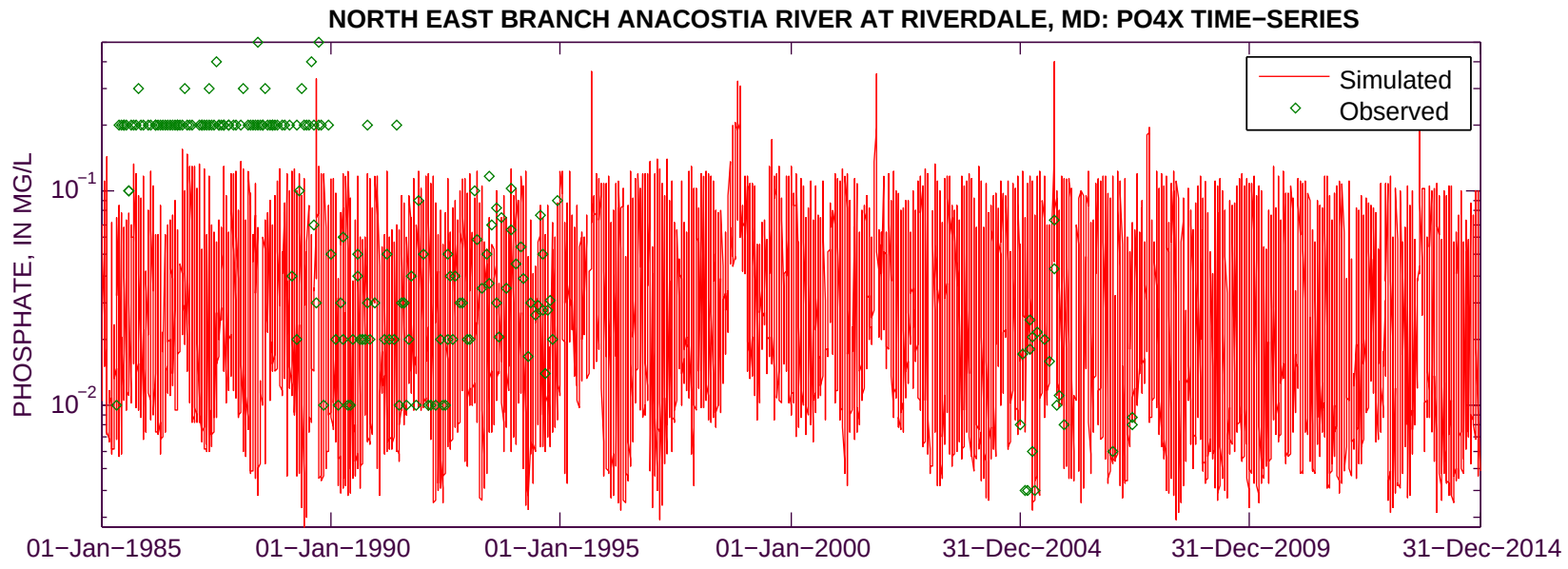
LOAD DATA
LOG10

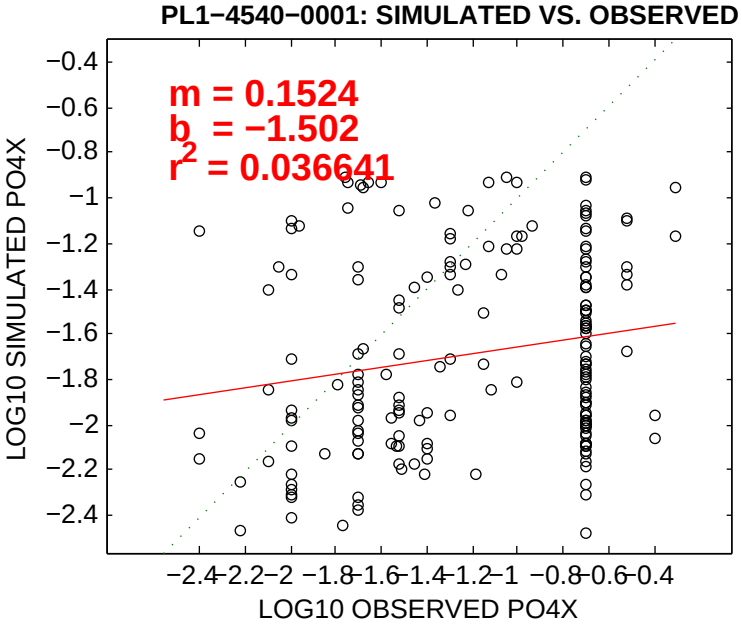


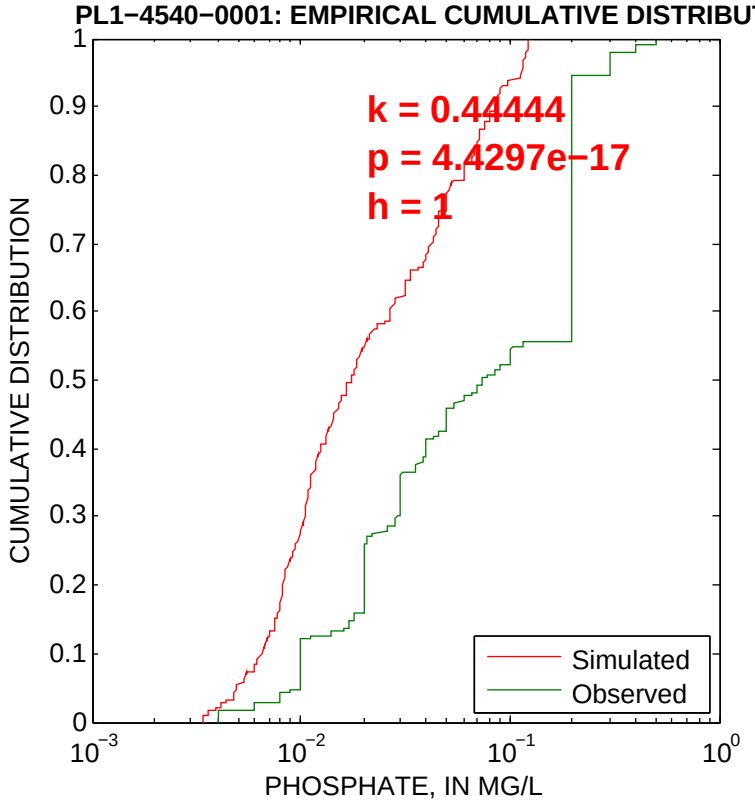












DATA SELECTION

scenario	file
P620171001WQ	PO4X.calib

plot: PO4X - phosphate

Dates: 1/1/1985 – 12/31/201

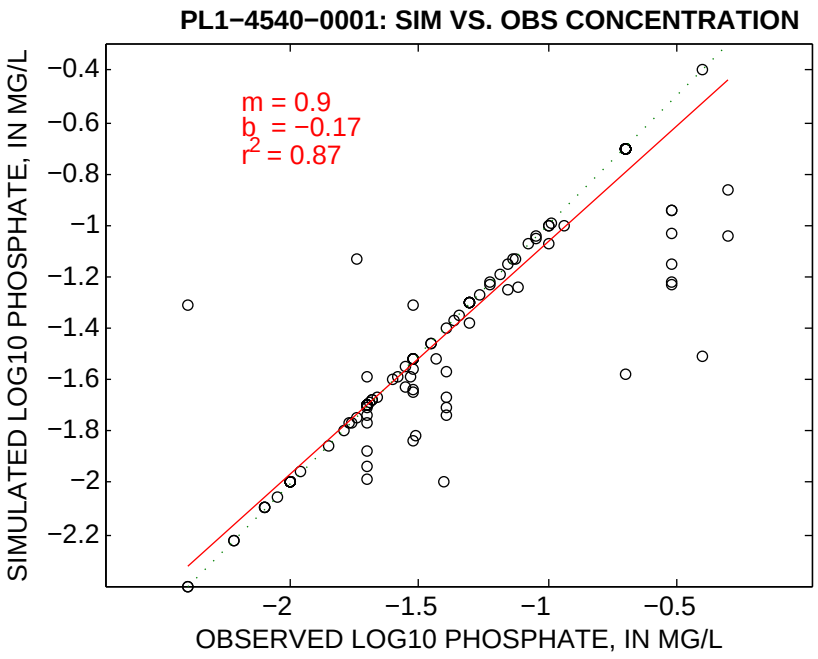
Drive	Directory	Observed
N/A	model	OBS20161101

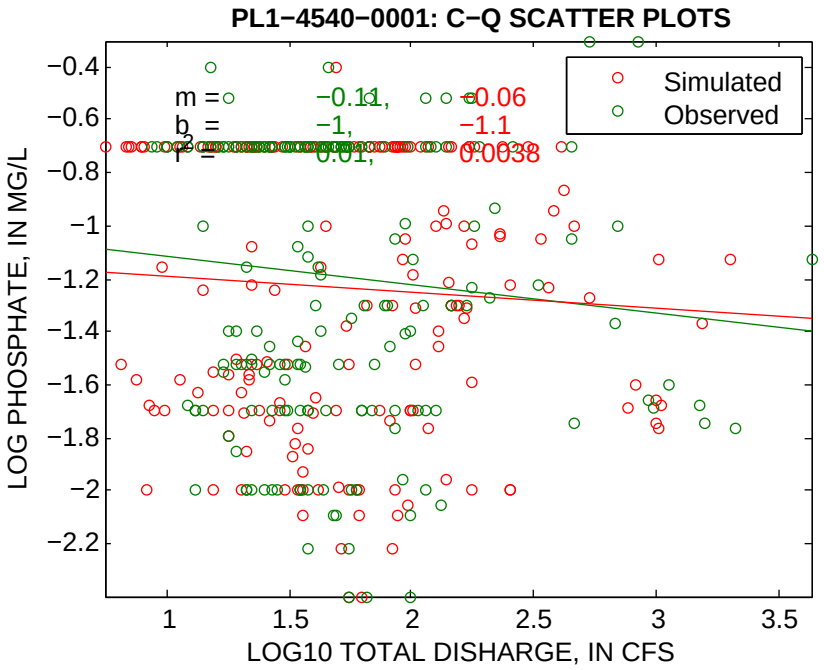
STATISTICS

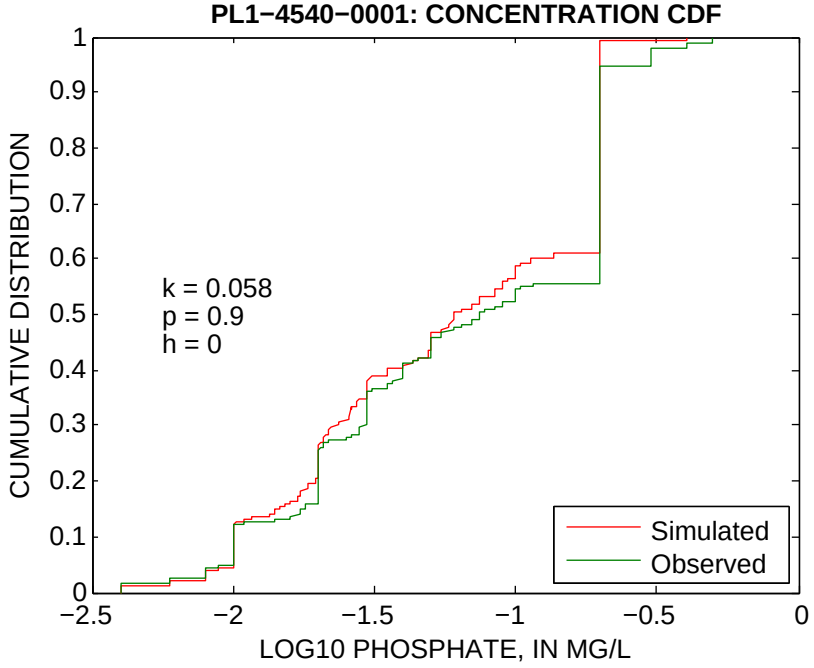
	n	189	189
		observe	simulate
min		0.004	0.0033796
		-2.39794	-2.47113
mean		0.115968	0.0330527
		-1.18784	-1.68307
media		0.074	0.017305
		-1.13077	-1.76183
max		0.5	0.1227
		-0.30103	-0.911155
varian		0.0104684	0.00105408
		0.284624	0.180403
JB		0.001454	0.001
		0.005554	0.010712
		ra	log
%		-71.4985	41.6912
err.va		0.0179418	0.624829
rel.std.err		1.71389	2.19528
mod.eff		-0.713894	-1.19528

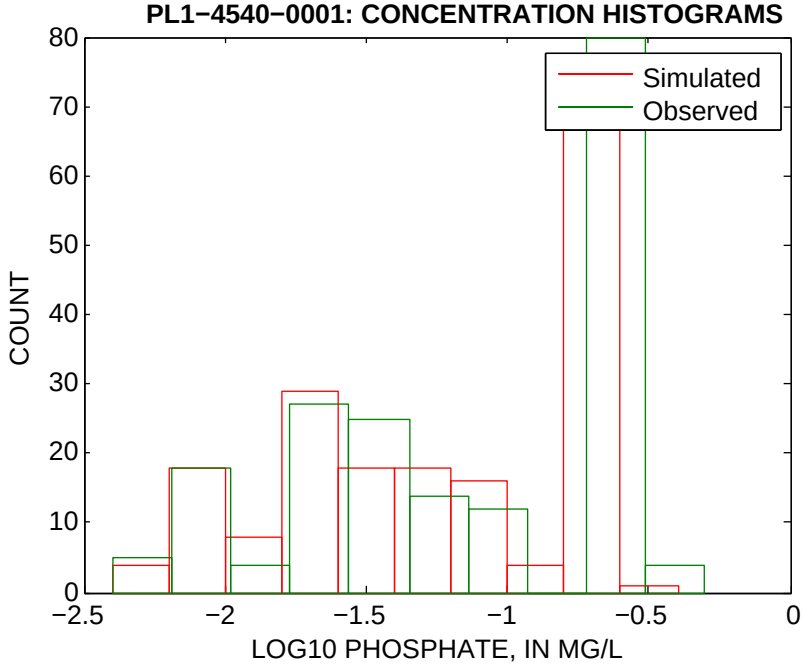
VERSION 2.1

ALL DATA
LOG10

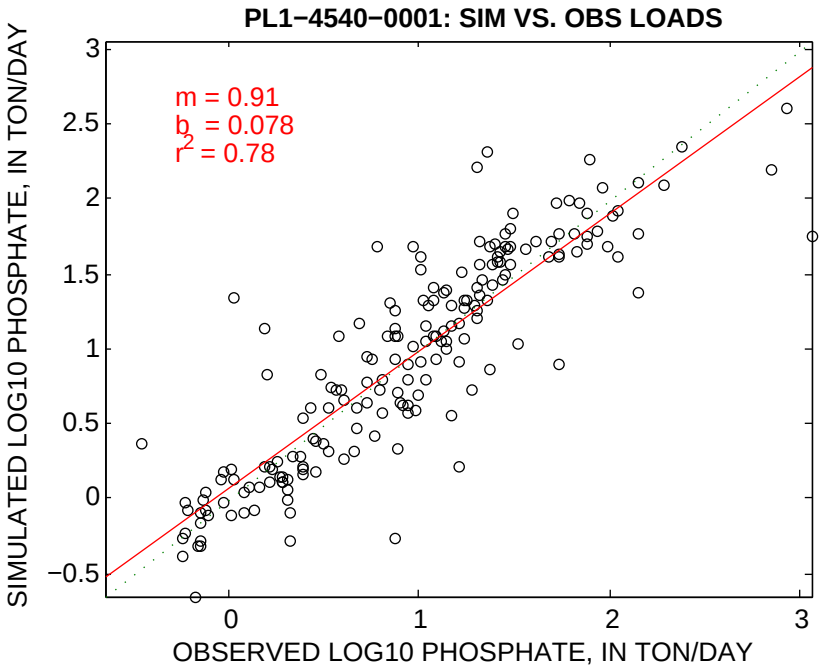




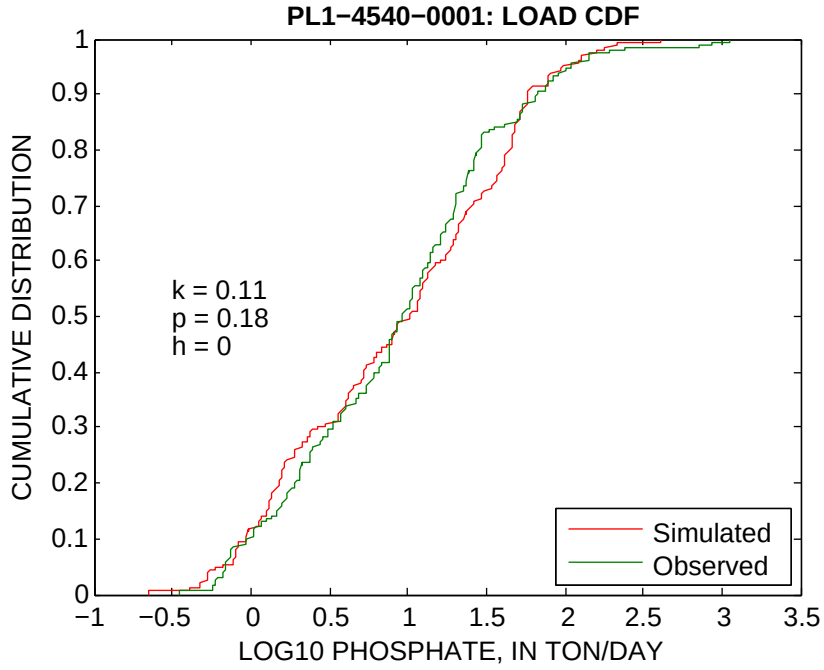


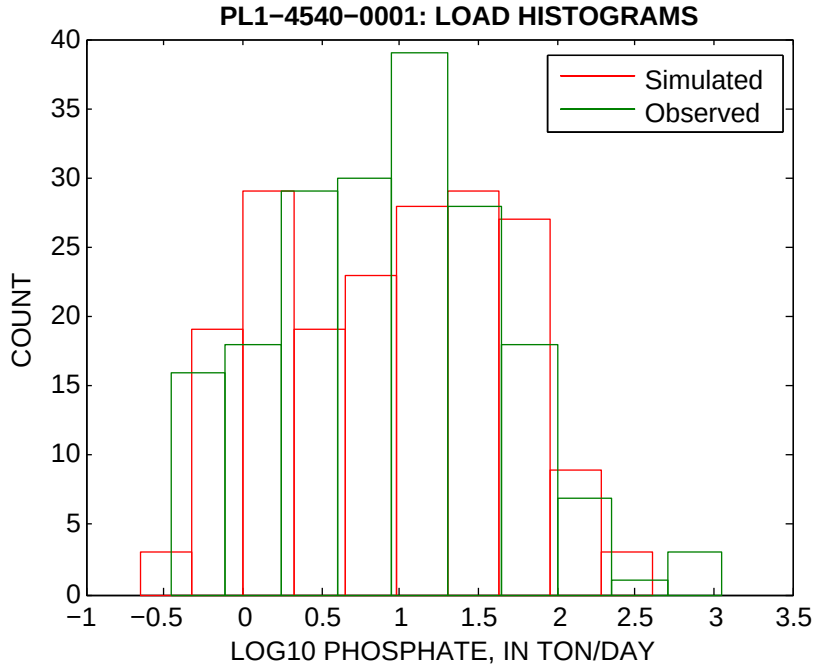


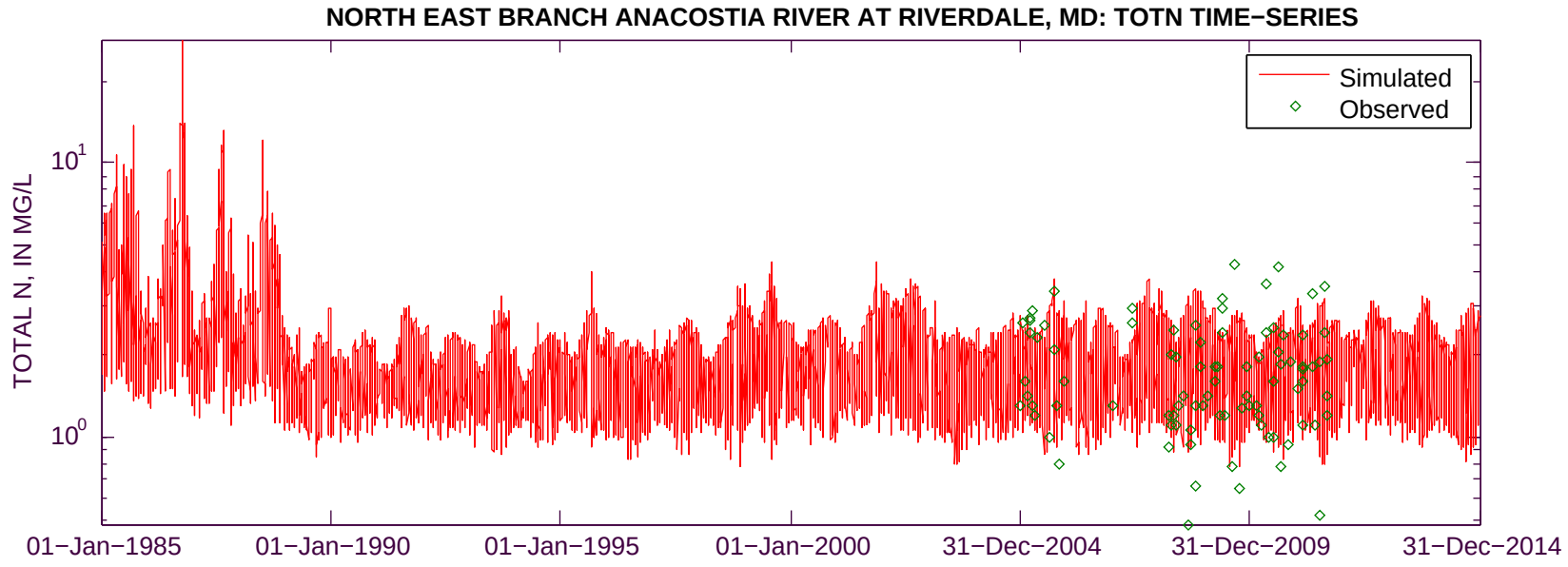
LOAD DATA
LOG10

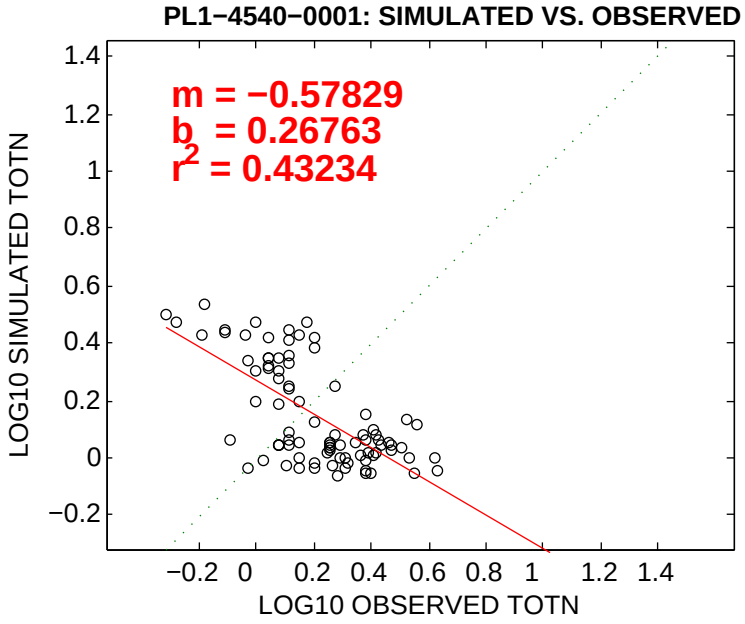


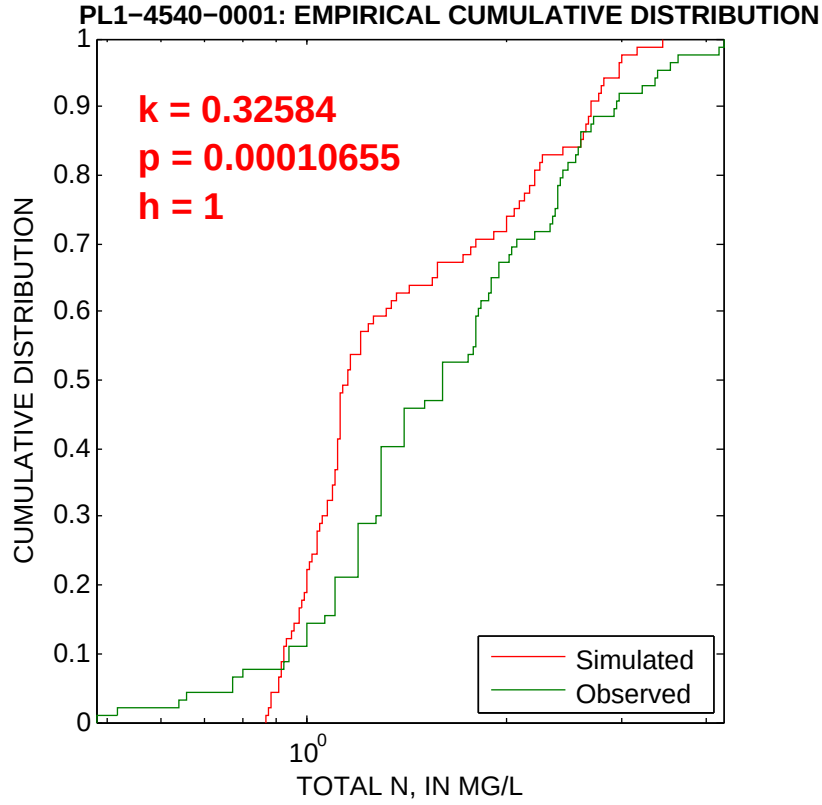












DATA SELECTION

scenario	file
P620171001WQ	TOTN.calib

plot: TOTN - total nitrogen

Dates: 1/1/1985 – 12/31/201

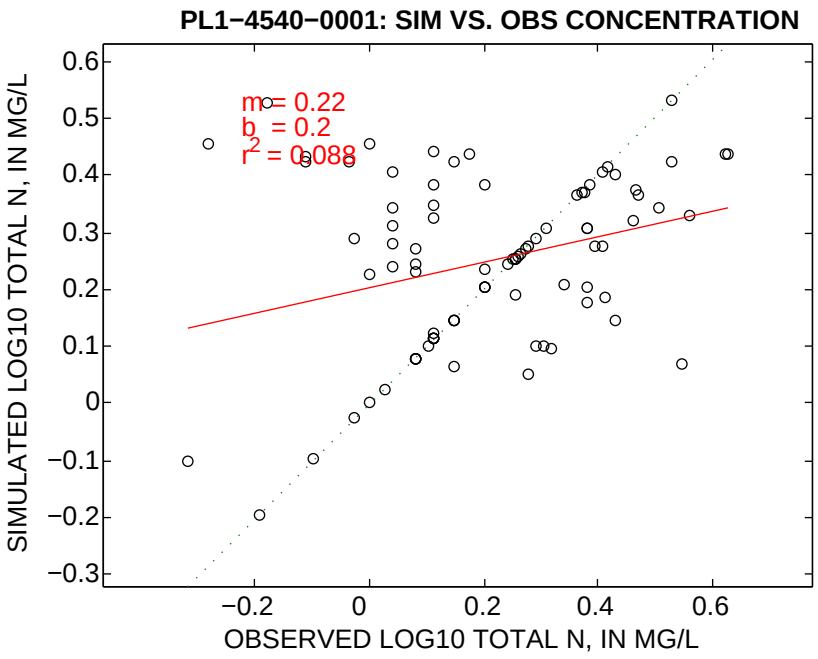
Drive: N/A | Directory: model | Observed: OBS20161101

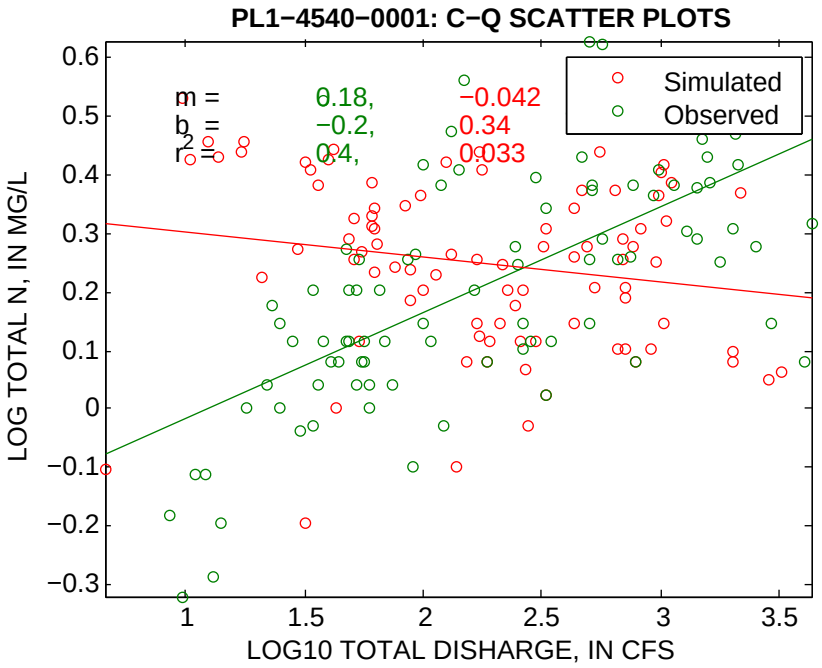
STATISTICS

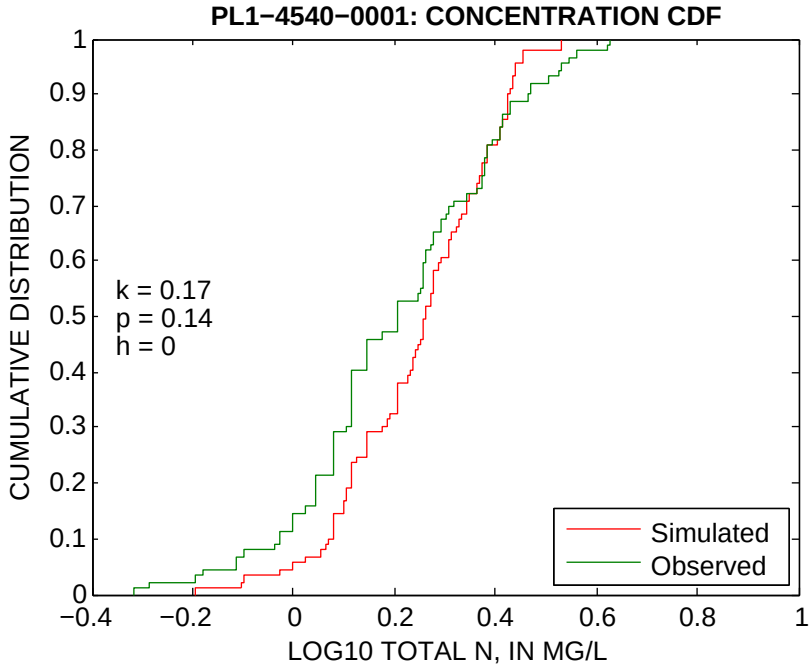
	n	observe	simulate
		89	89
min		0.48	0.86746
		-0.318759	-0.0617505
mean		1.78449	1.53484
		0.207016	0.147914
media		1.6	1.158
		0.20412	0.0637086
max		4.24947	3.4323
		0.628335	0.535585
varian		0.670695	0.484426
		0.0402314	0.0311187
JB		0.009285	0.005714
		0.5	0.013382
		ra	log
%		-13.99	-28.5497
err.va		1.87902	0.121413
rel.std.err		2.8016	3.01788
mod.eff		-1.8016	-2.01788

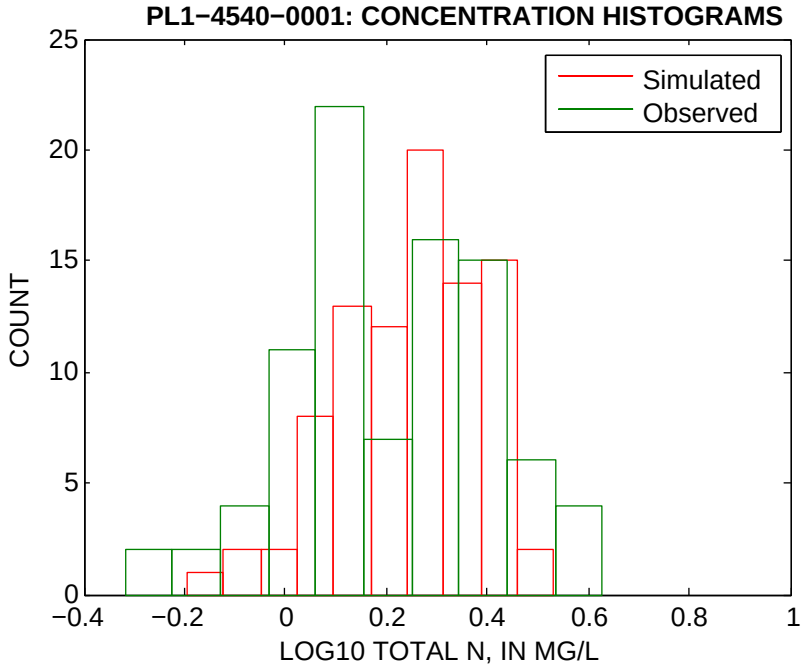
VERSION

ALL DATA
LOG10

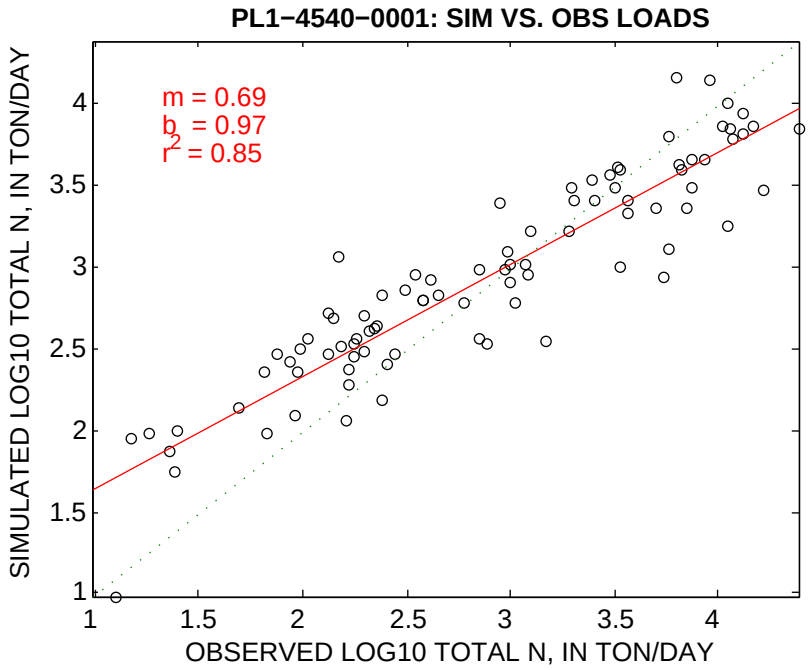


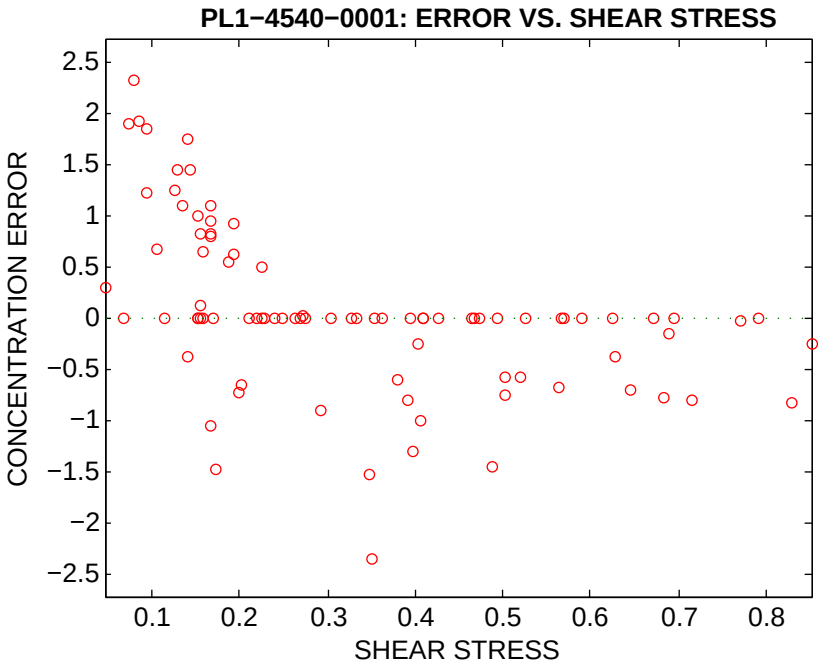


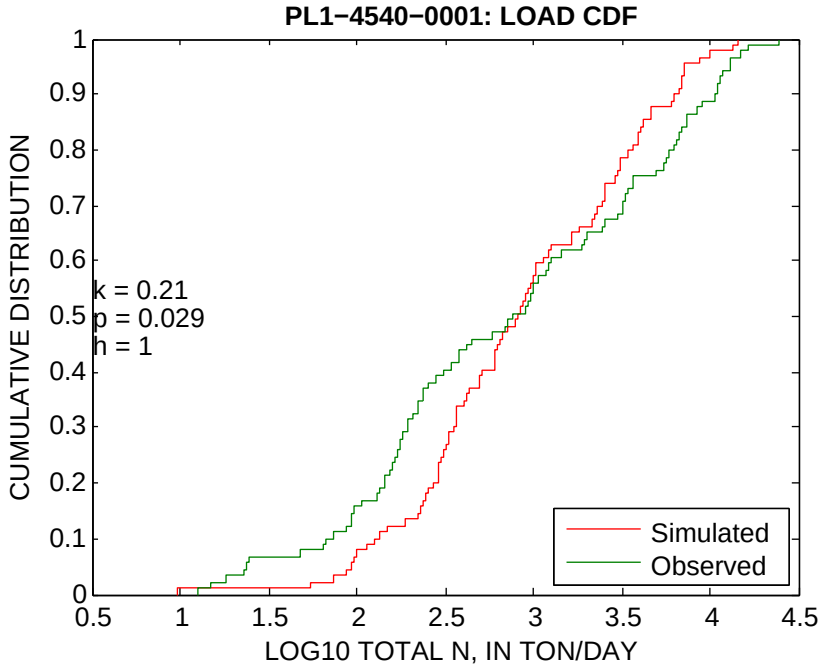


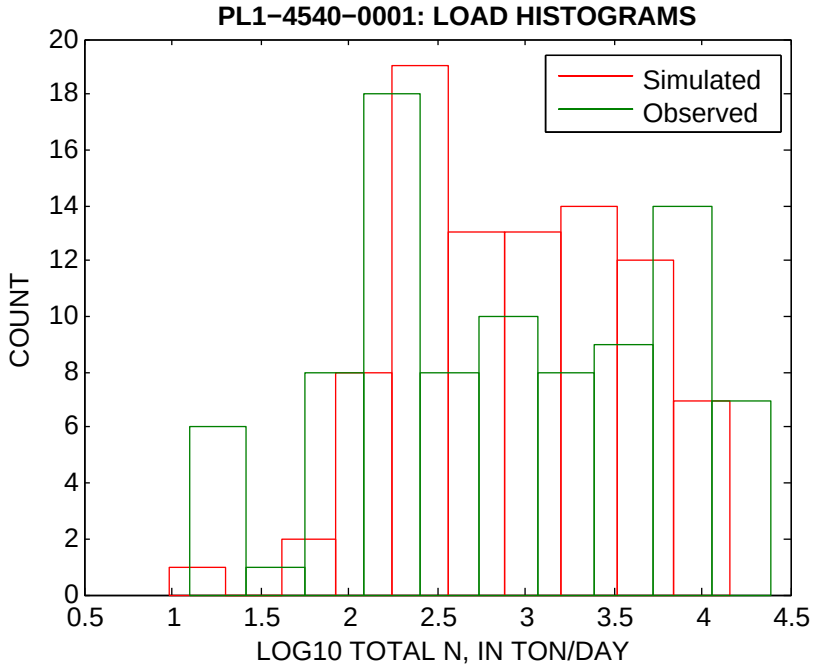


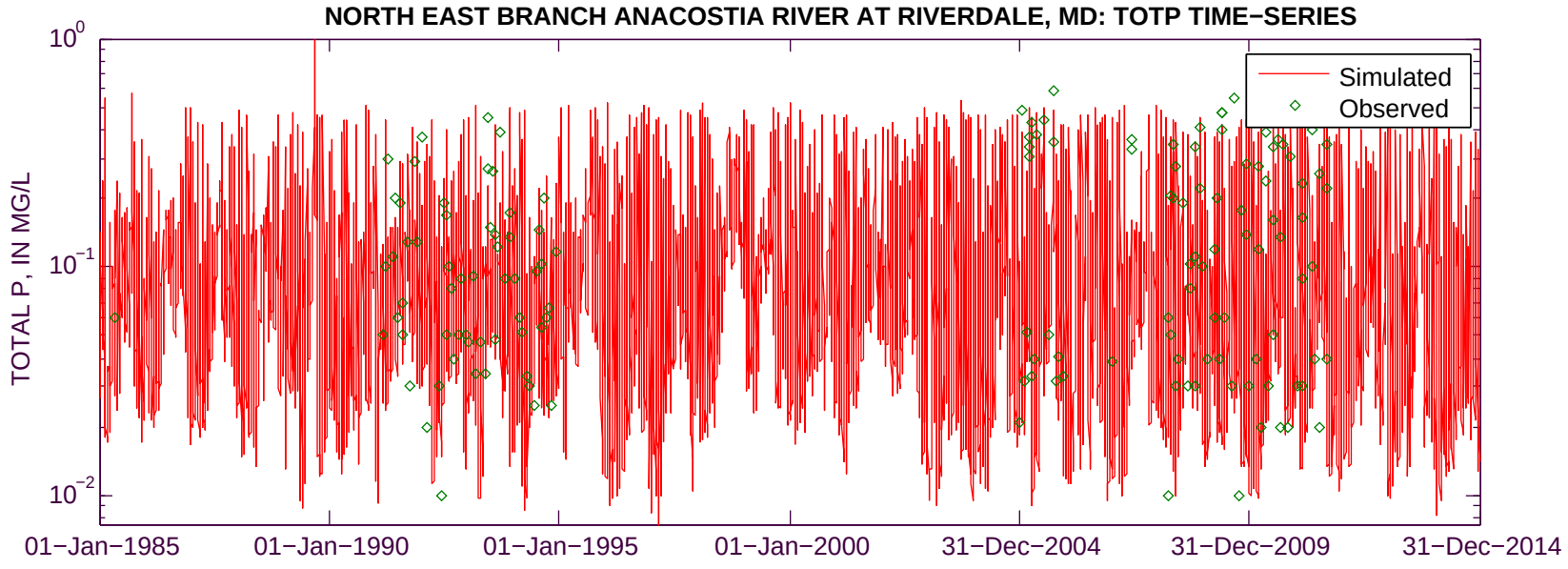
LOAD DATA
LOG10

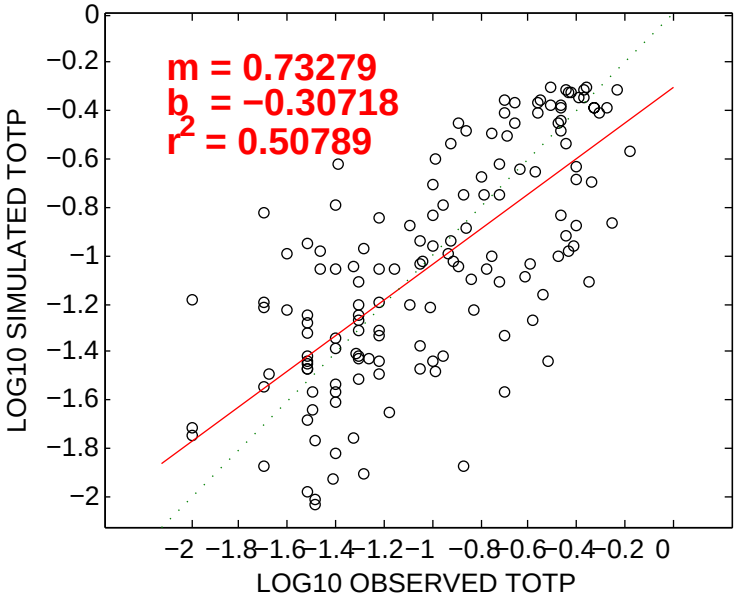


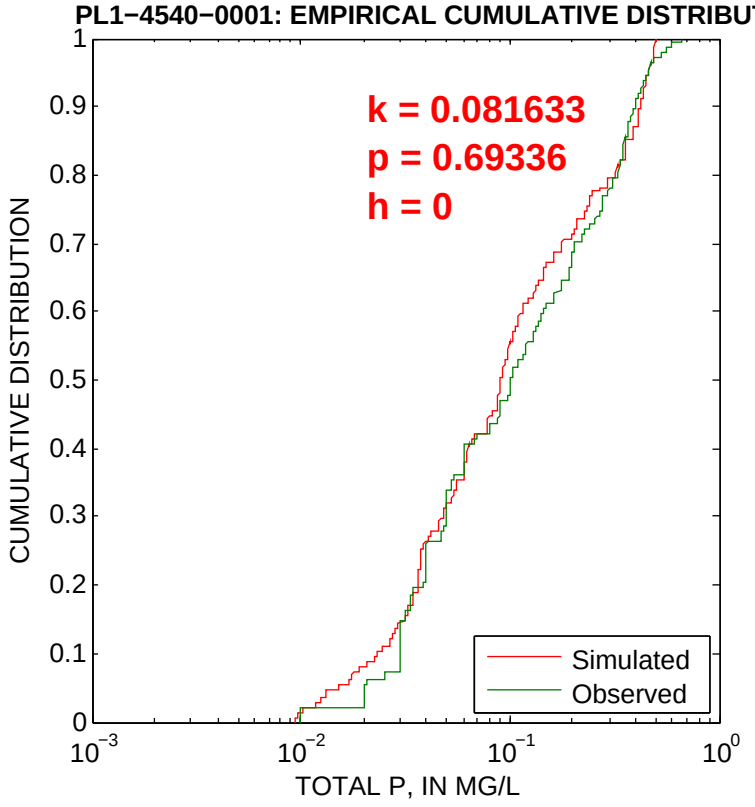












DATA SELECTION

scenario	file
P620171001WQ	TOTP.calib

plot: TOTP - total phosphorus

Dates: 1/1/1985 – 12/31/201

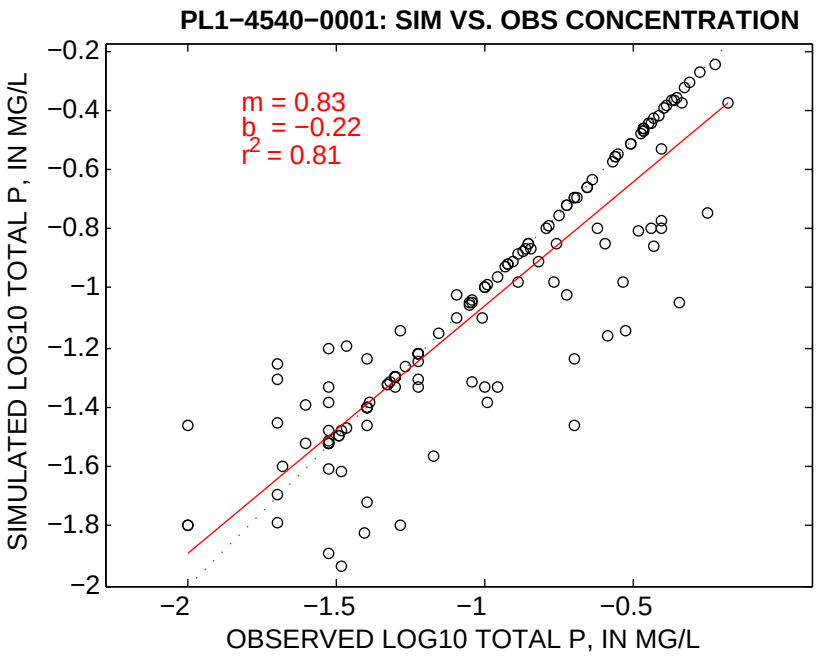
Drive	Directory	Observed
N/A	model	OBS20161101

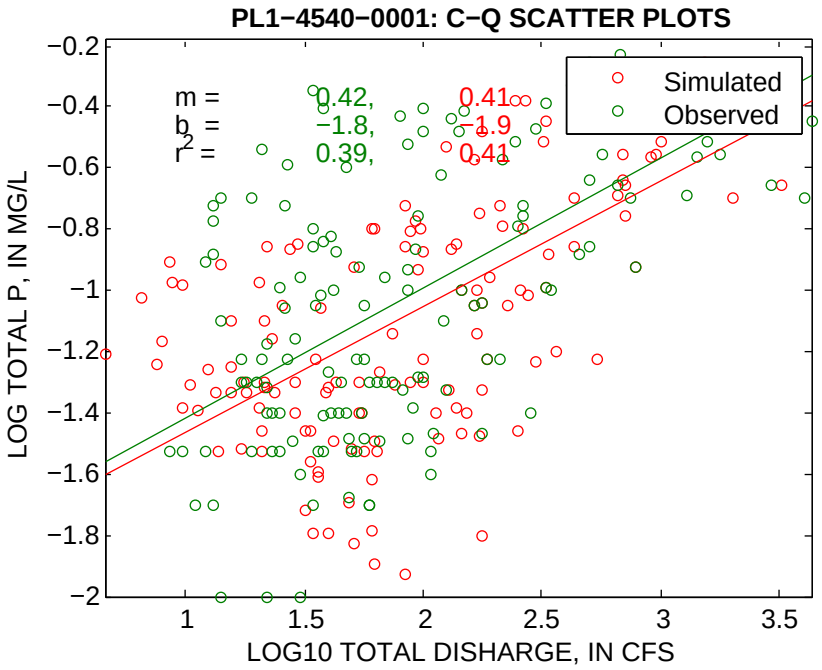
STATISTICS

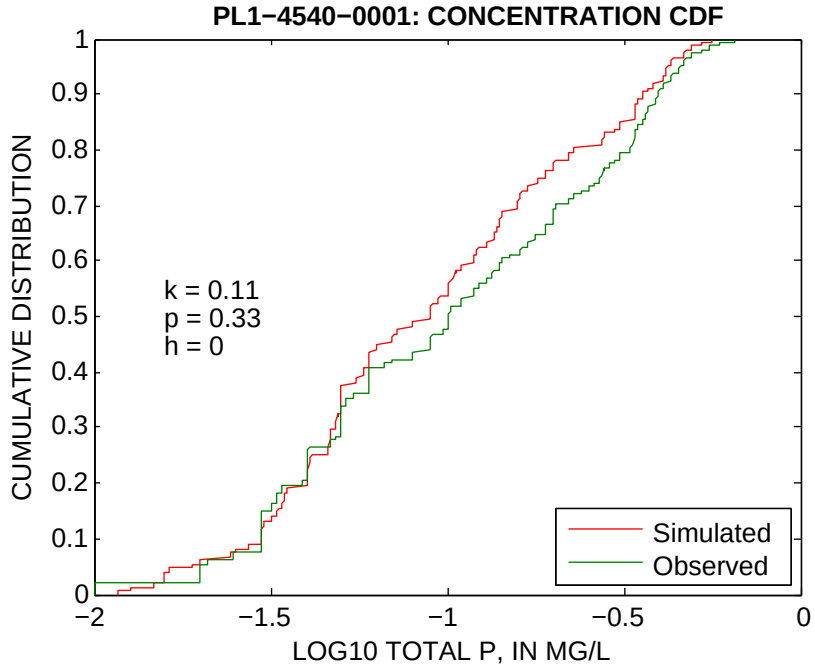
	n	observe	simulate
		147	147
min		0.01	0.0092909
		-2	-2.03194
mean		0.164766	0.153877
		-0.990913	-1.03331
media		0.1	0.090087
		-1	-1.04534
max		0.656833	0.49825
		-0.182545	-0.302553
varian		0.023068	0.0219372
		0.203401	0.215053
JB		0.001254	0.001159
		0.030165	0.053812
		ra	log
%		-6.6083	4.27888
err.va		0.0137302	0.122161
rel.std.err		0.595205	0.600592
mod.eff		0.404795	0.399408

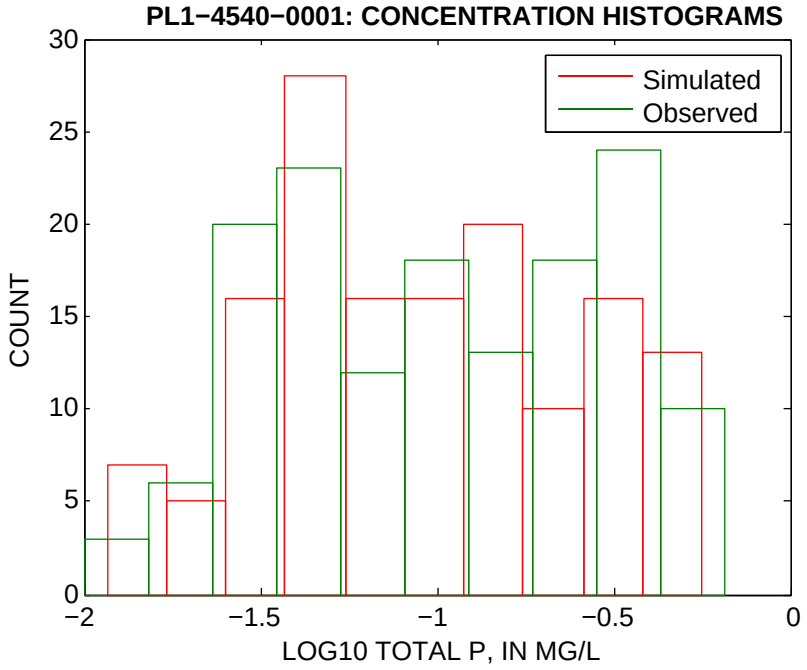
VERSION 2.1

ALL DATA
LOG10

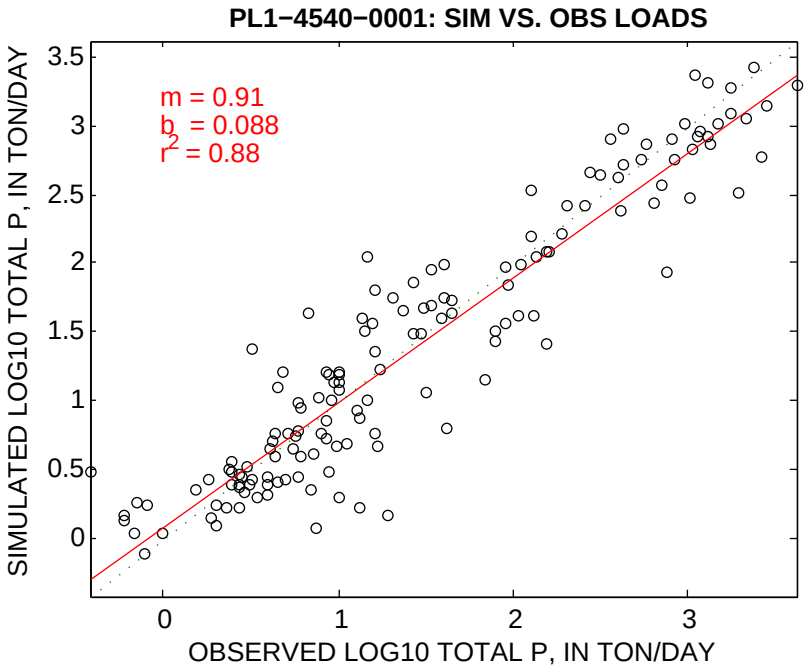


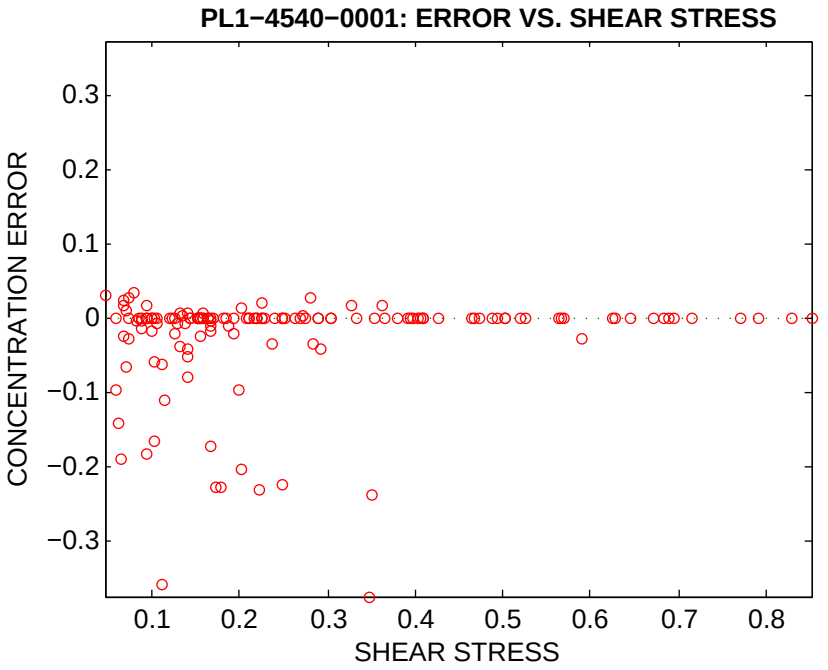


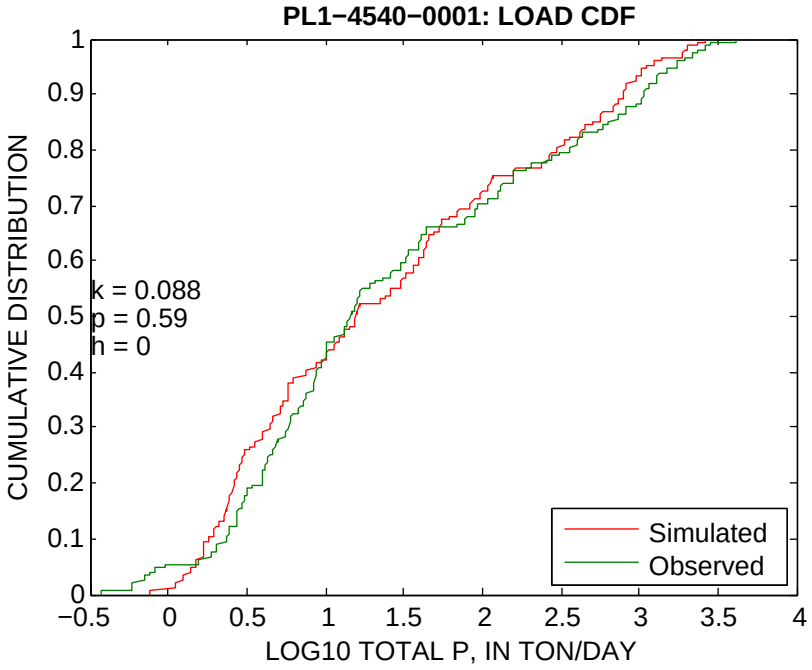


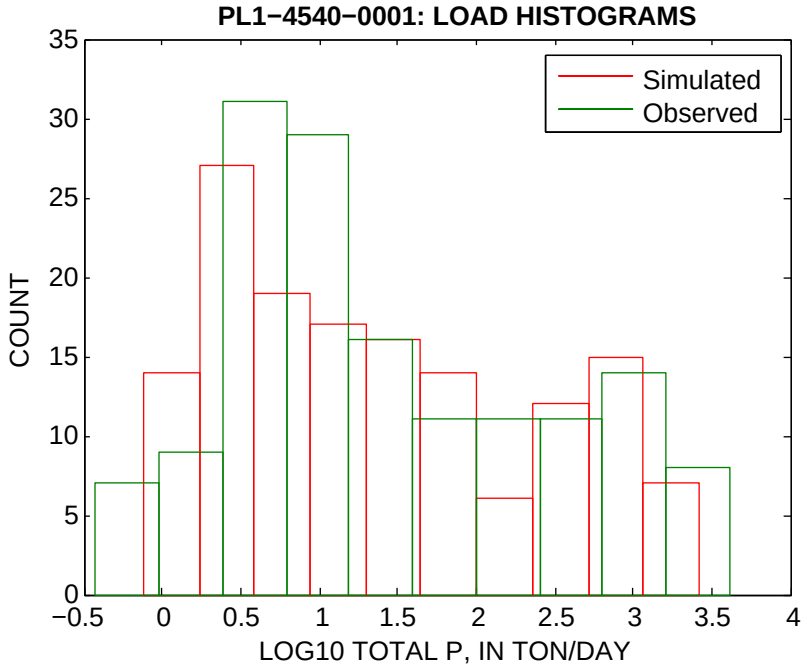


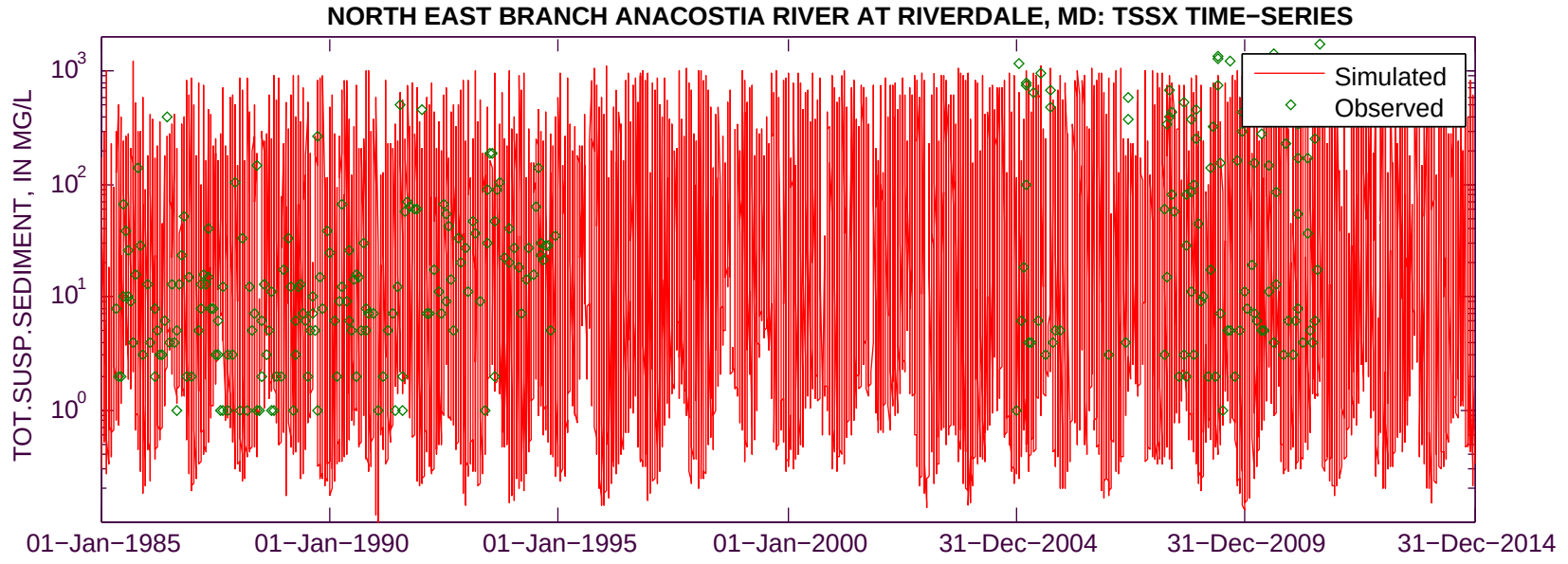
LOAD DATA
LOG10

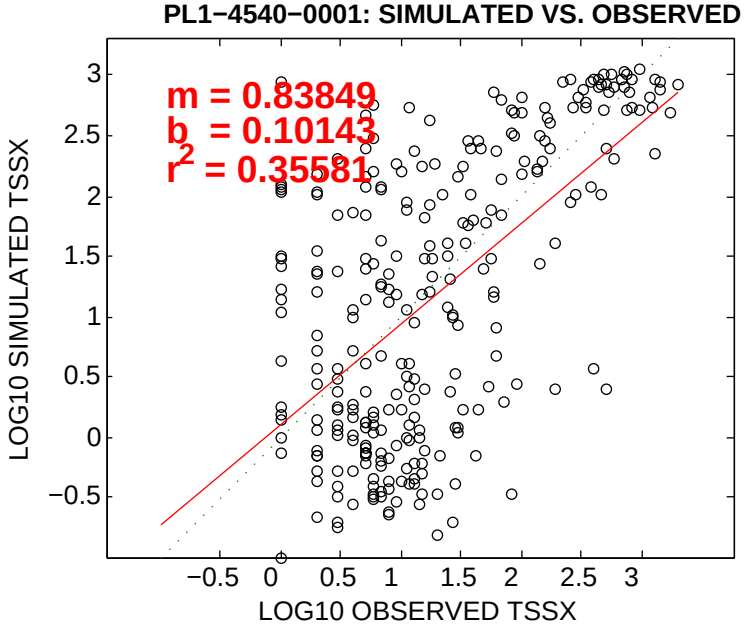


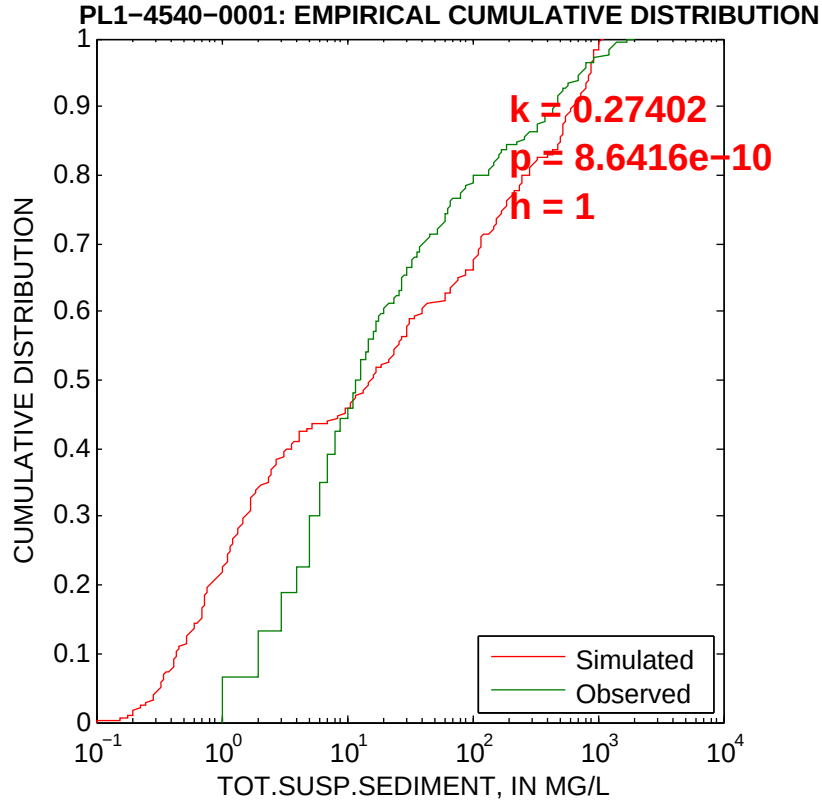












DATA SELECTION

scenario: P620171001WQ | file: TSSX.calib

plot: TSSX - total suspended ...

Dates: 1/1/1985 – 12/31/201

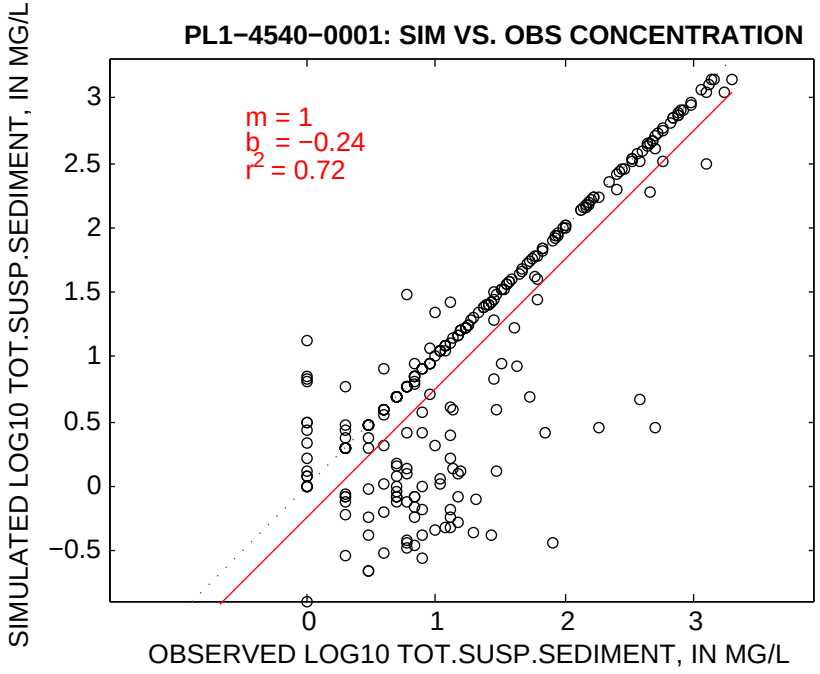
Drive | Directory: N/A | model | Observed: OBS20161101

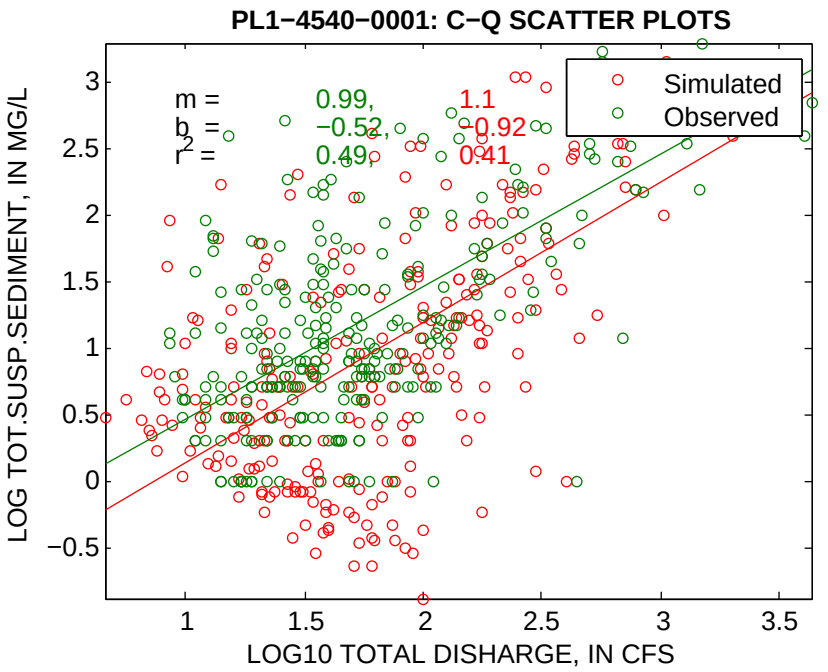
STATISTICS

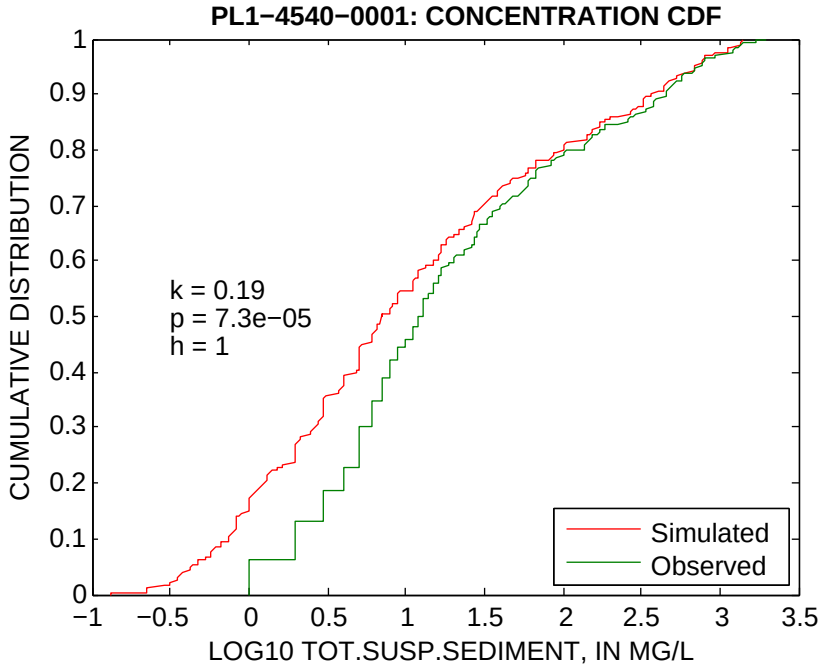
n	281	281
	observe	simulate
min	1	0.10283
	0	-0.98788
mean	127.194	164.009
	1.27684	1.17205
media	12	15.809
	1.07918	1.1989
max	1980	1124.3
	3.29667	3.05088
varian	84620.2	77233.9
	0.708292	1.39956
JB	0.001	0.001
	0.002194	0.001299
	ra	log
%	28.944	-8.20723
err.va	52893.6	0.931083
rel.std.err	0.625071	1.31455
mod.eff	0.374929	-0.314548

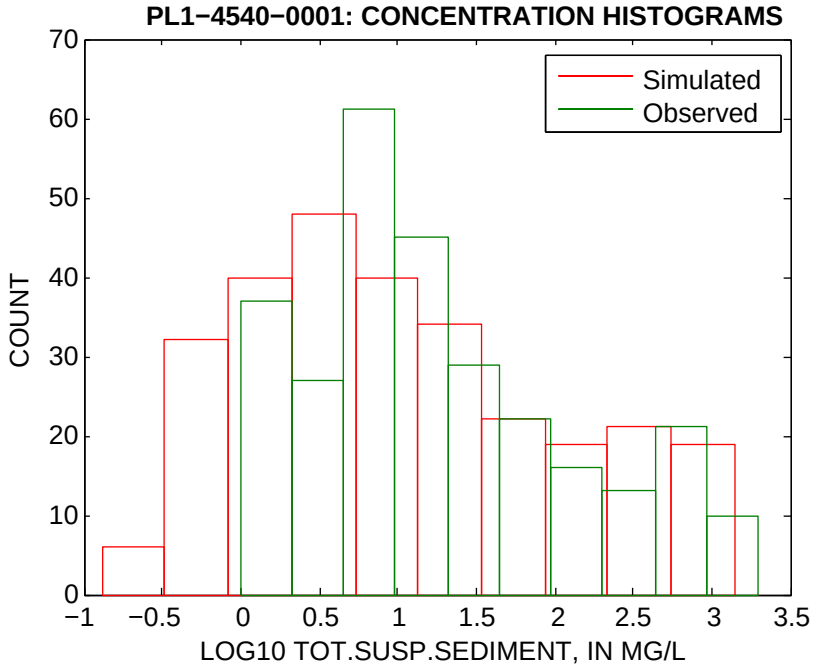
VERSION 2.1

ALL DATA
LOG10

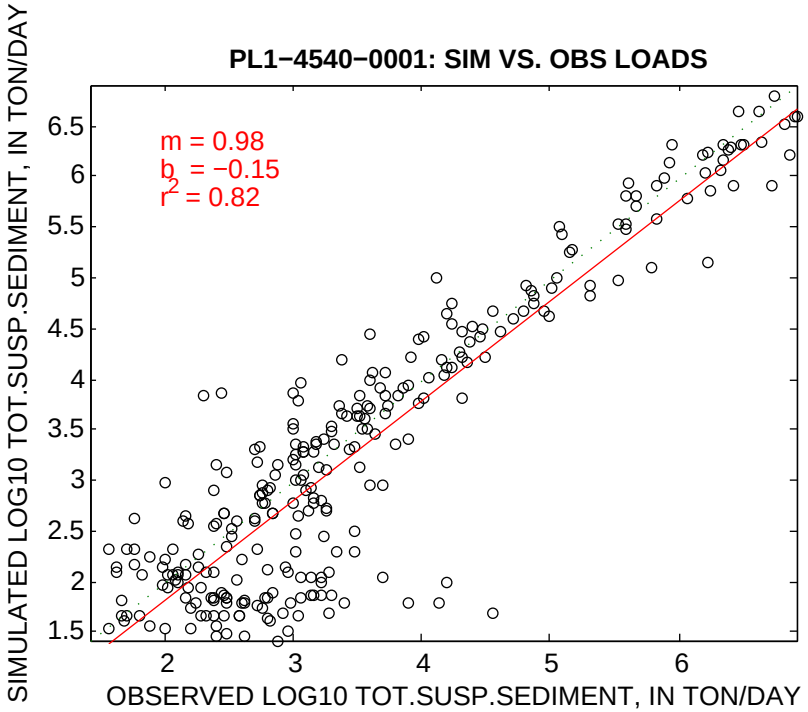


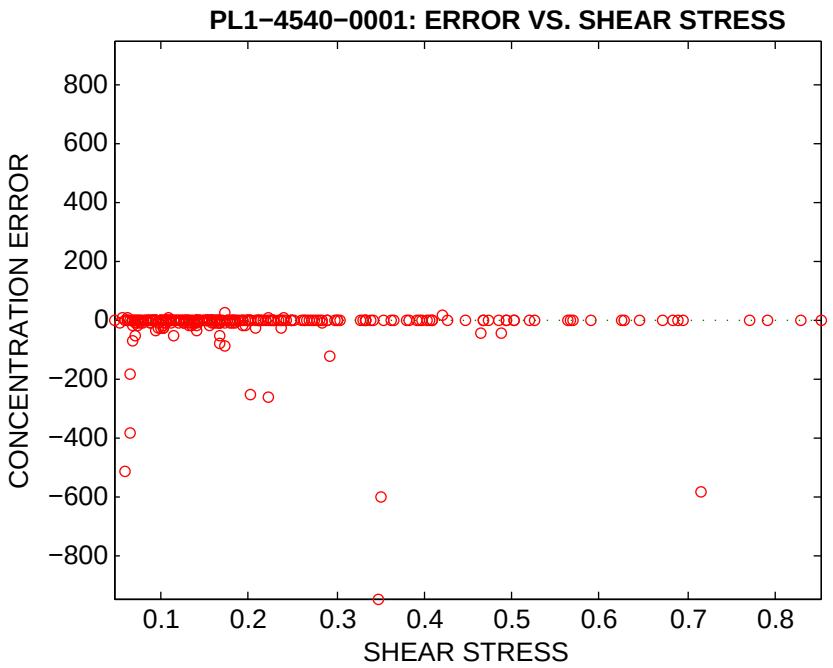


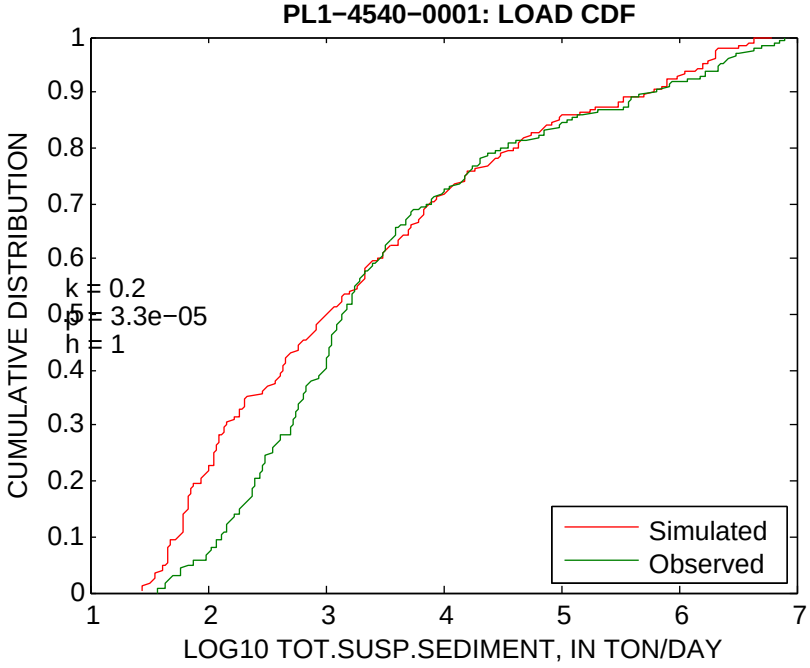


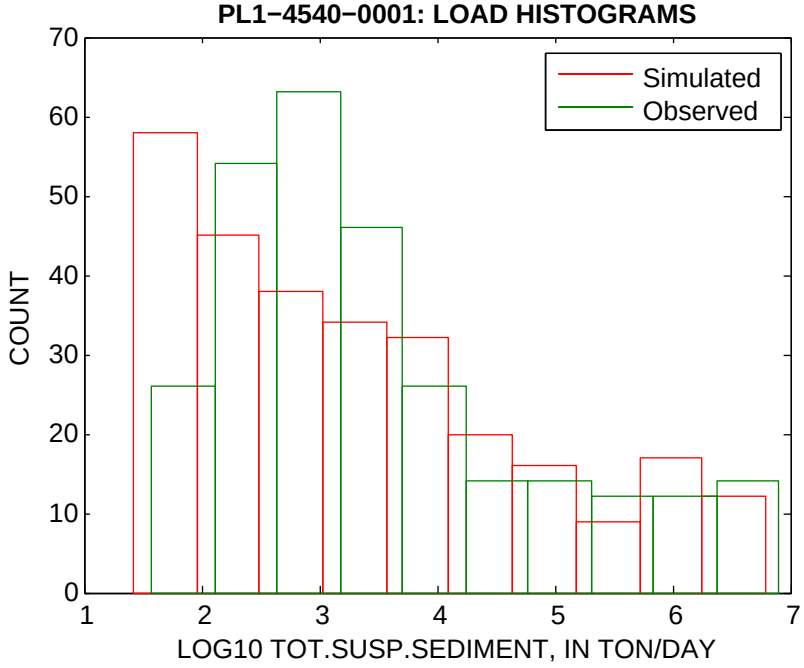


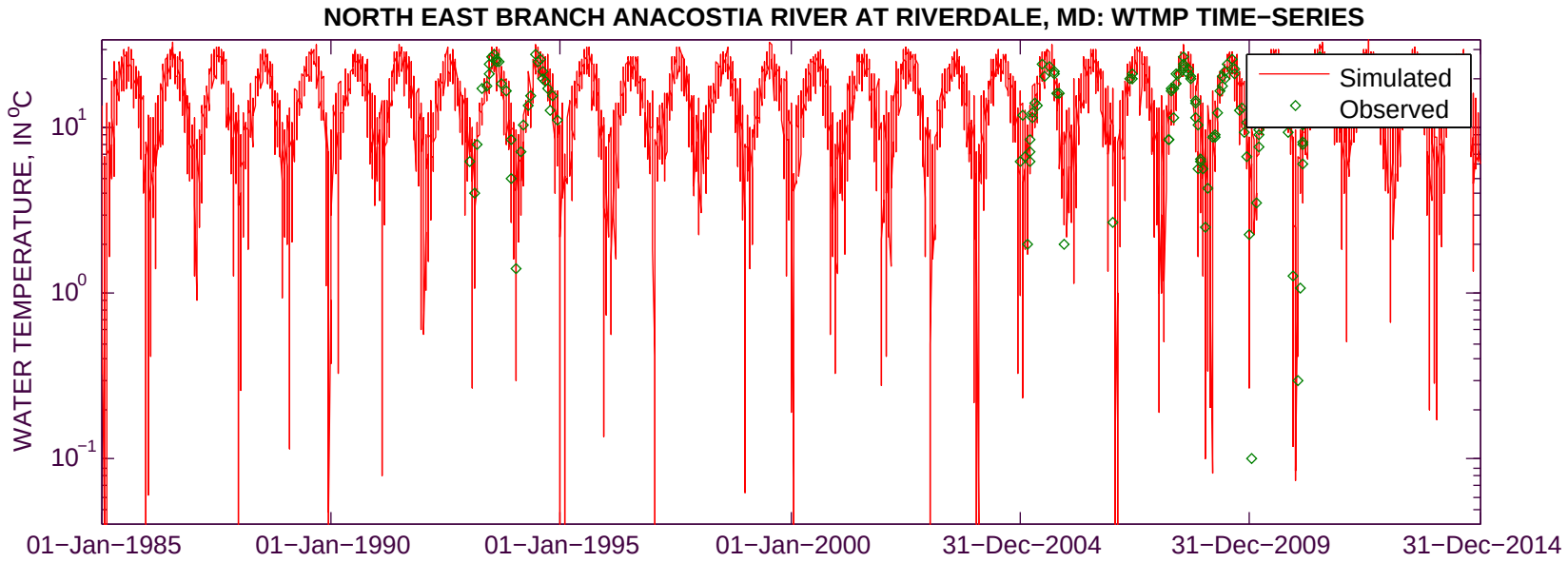
LOAD DATA
LOG10

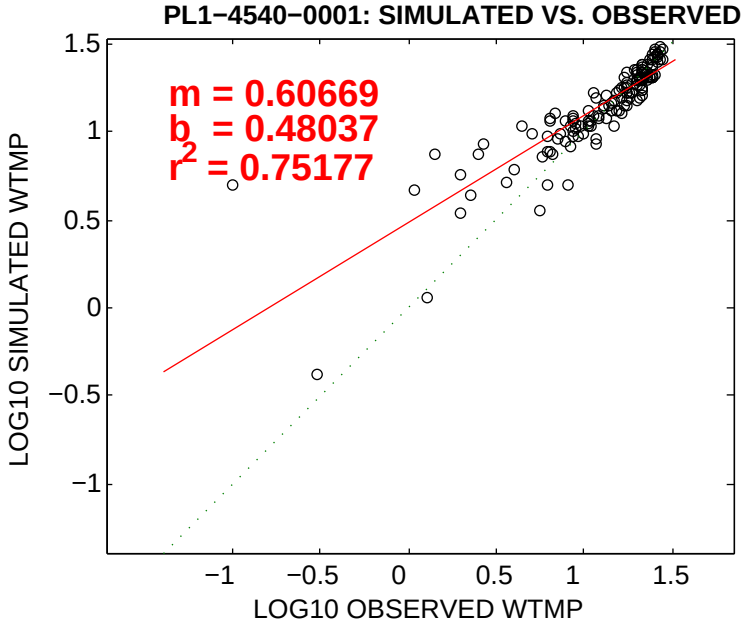


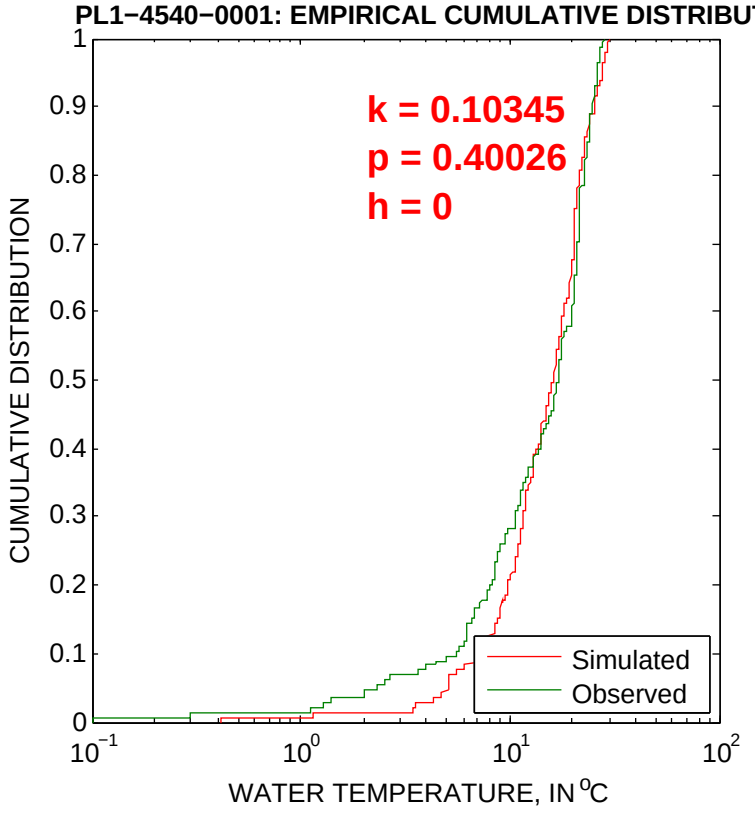












DATA SELECTION

scenario	file
P620171001WQ	WTMP.calib

plot: WTMP - water tempera...

Dates 1/1/1985 12/31/201

Drive Directory: N/A model

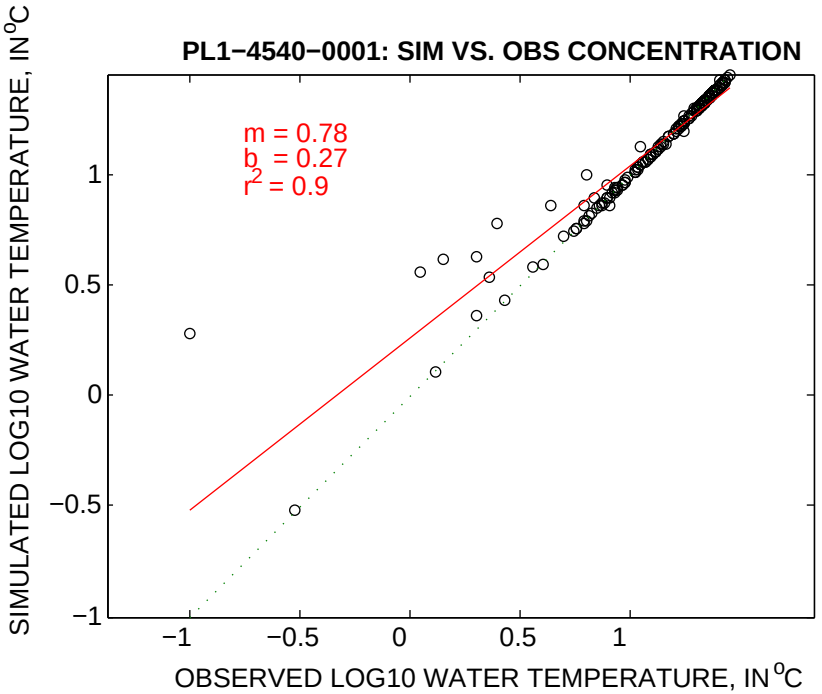
Observed: OBS20161101

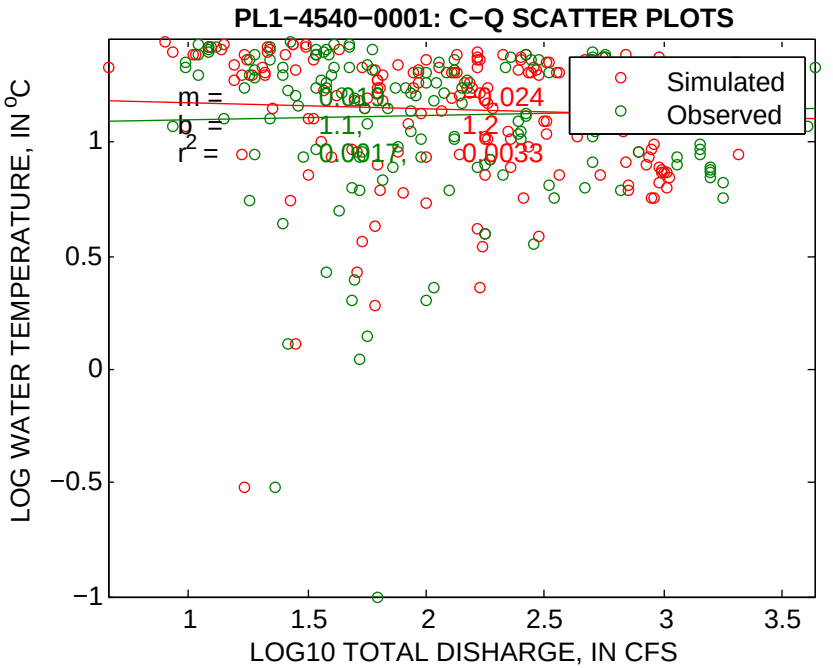
STATISTICS

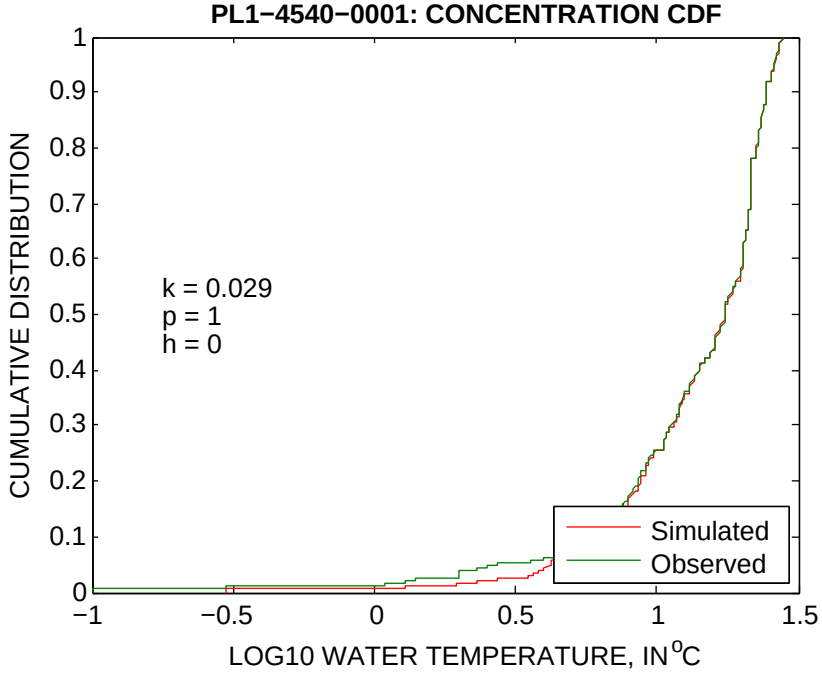
		observe	simulate
n		145	145
min		0.1	0.41461
		-1	-0.38236
mean		15.6448	15.9655
		1.09973	1.14756
media		17	16.303
		1.23045	1.21227
max		28.3	30.353
		1.45179	1.4822
varian		56.8993	45.5643
		0.137469	0.0673057
JB		0.019334	0.156663
		0.001	0.001
		ra	log
%		2.04989	4.34912
err.va		7.02809	0.0402763
rel.std.err		0.123518	0.292984
mod.eff		0.876482	0.707016

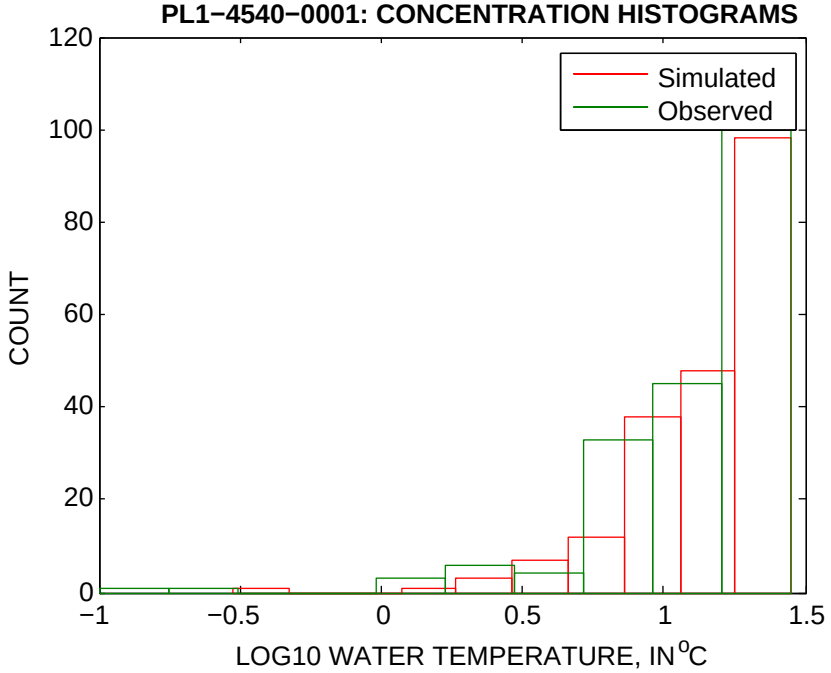
VERSION 2.1

ALL DATA
LOG10

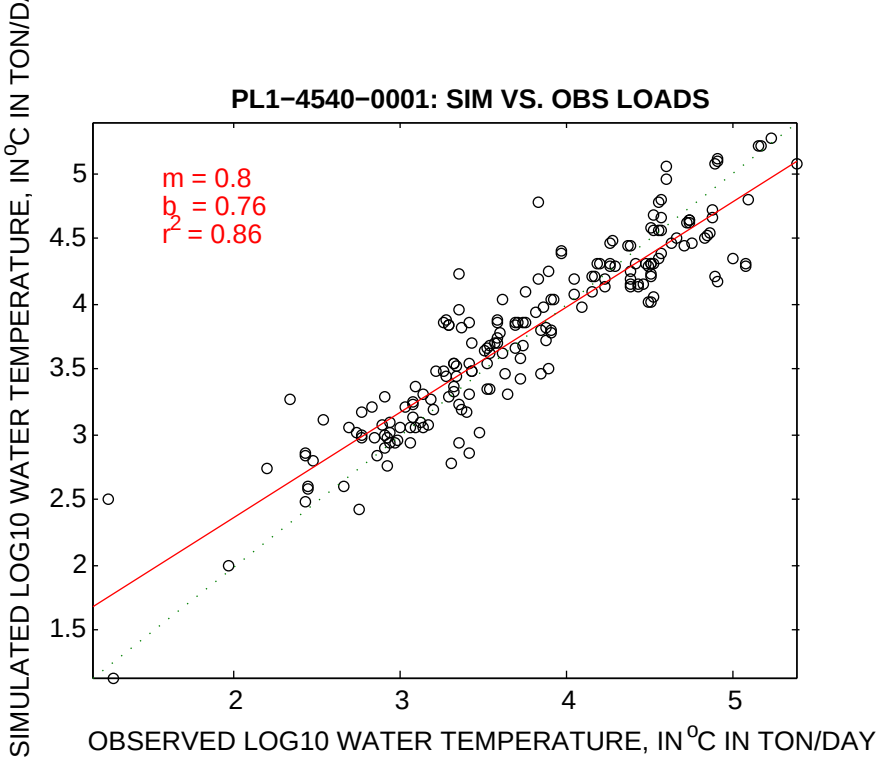


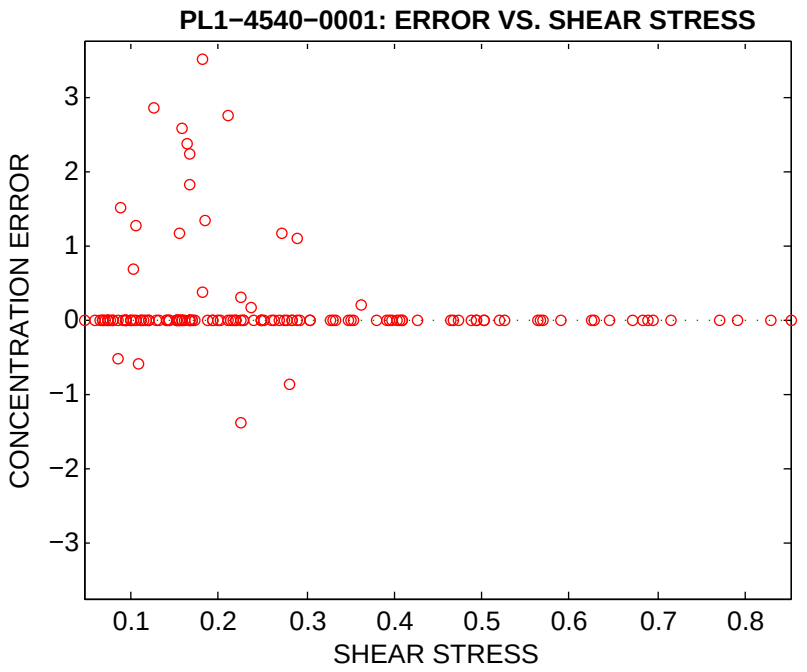


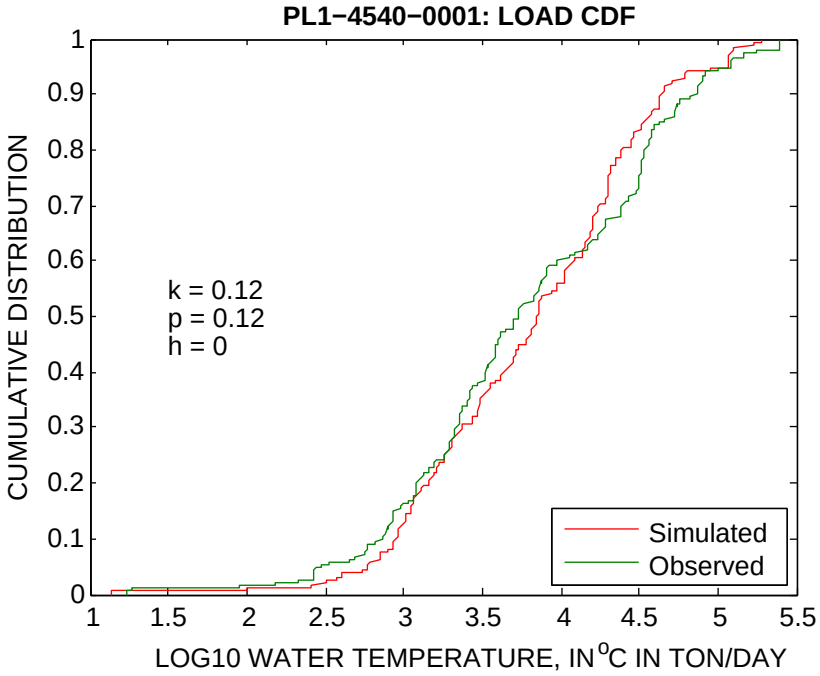


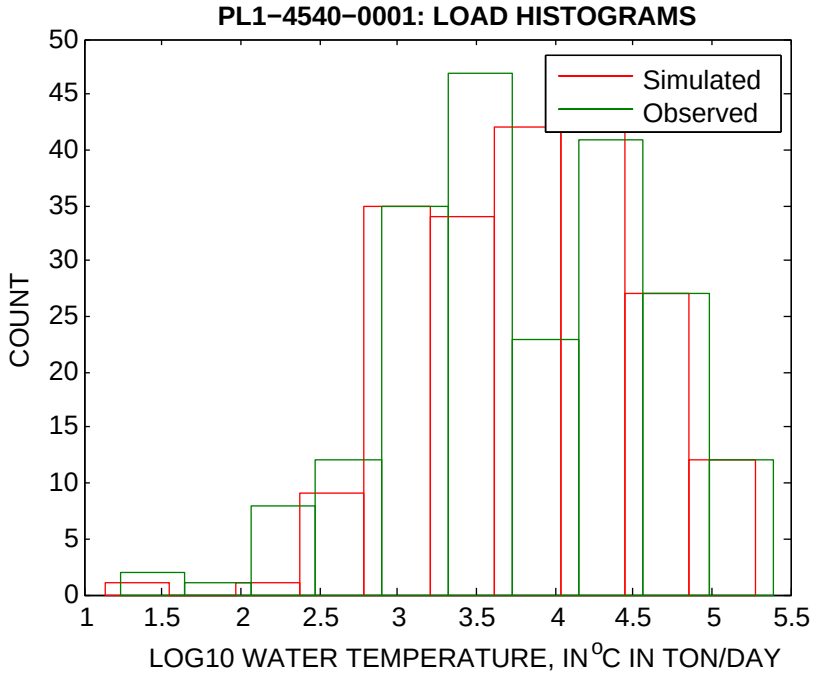


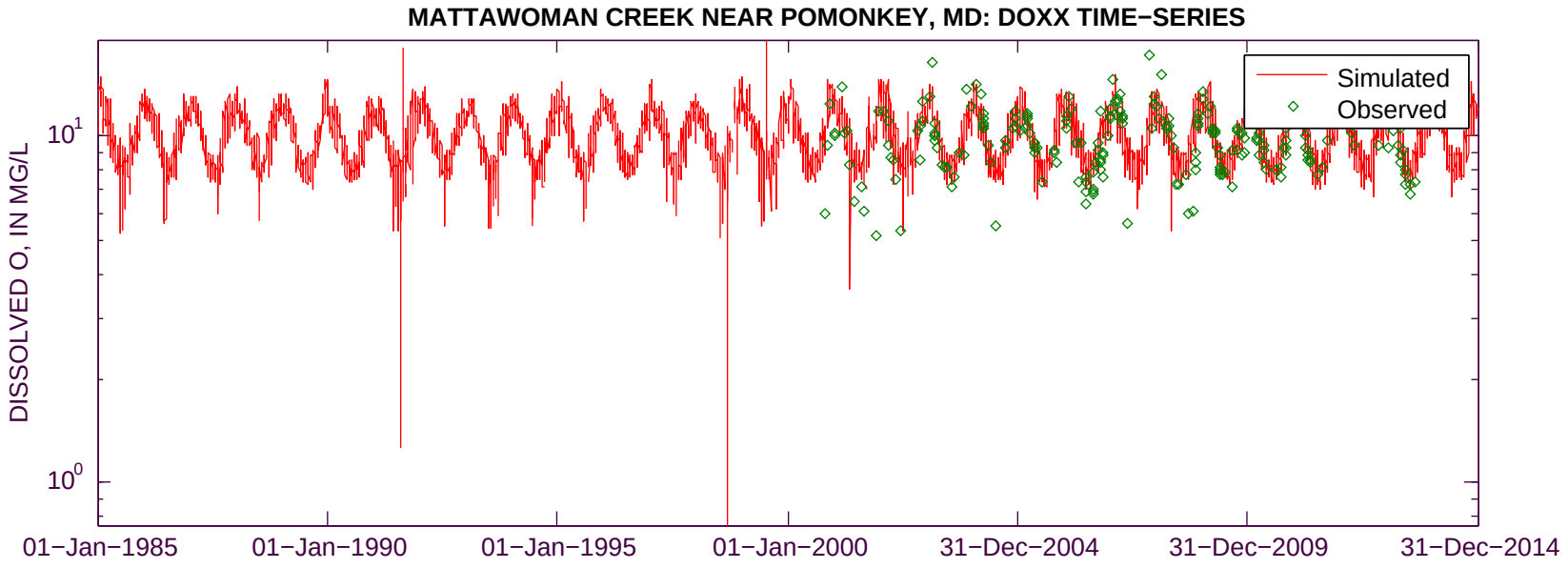
LOAD DATA
LOG10

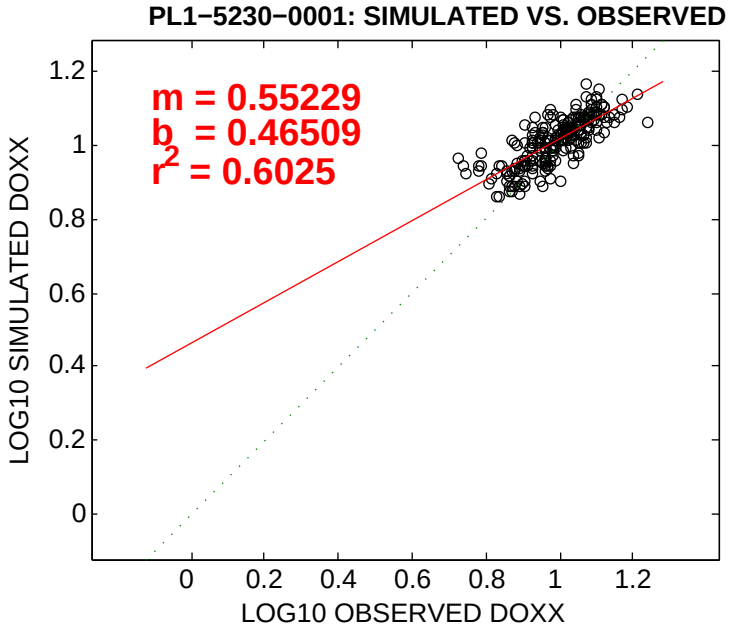


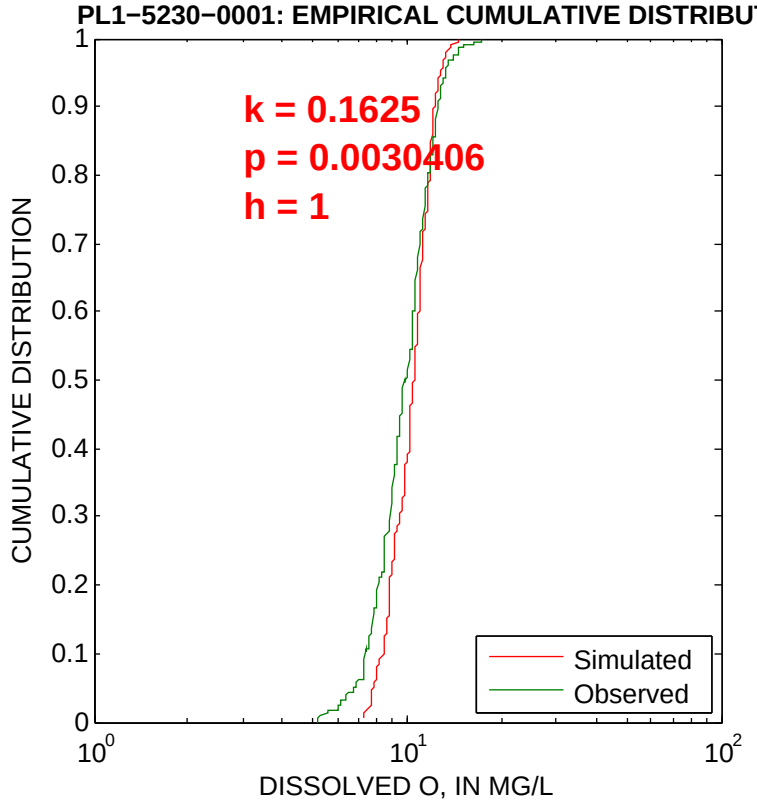












DATA SELECTION

scenario	file
P620171001WQ	DOXX.calib

plot: DOXX - dissolved oxygen

Dates: 1/1/1985 – 12/31/201

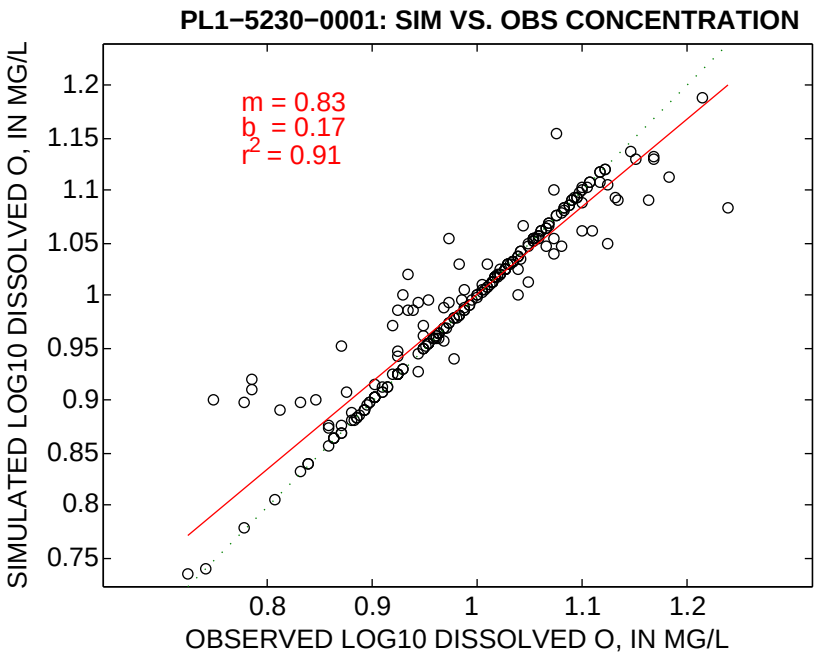
Drive	Directory	Observed
N/A	model	OBS20161101

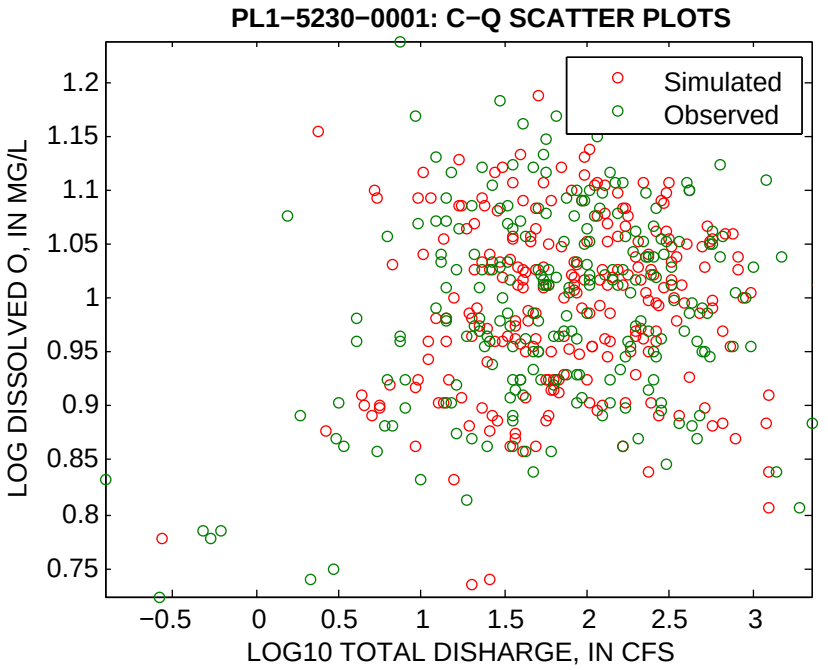
STATISTICS

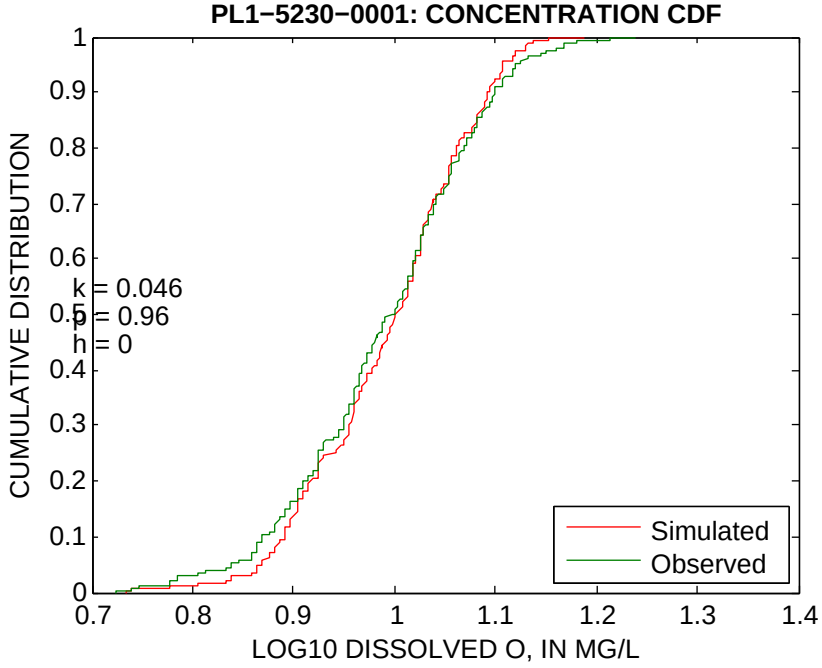
	n	observe	simulate
		240	239
min		5.2	0
		0.724276	0.85993
mean		9.96791	10.3481
		0.990202	1.01197
media		9.93242	10.49
		0.99847	1.02098
max		17.3	14.56
		1.23805	1.16316
varian		4.29015	2.7363
		0.00823271	0.00416789
JB		0.081577	0.001
		0.219829	0.034633
		ra	log
%		3.81396	2.19789
err.va		1.94634	0.00378261
rel.std.err		0.453677	0.459461
mod.eff		0.546323	0.540539

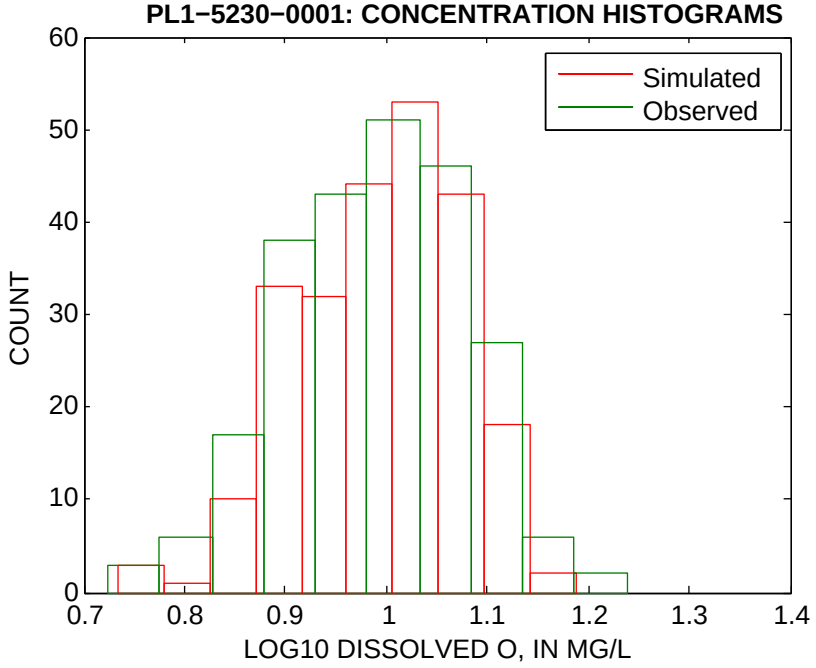
VERSION

ALL DATA
LOG10

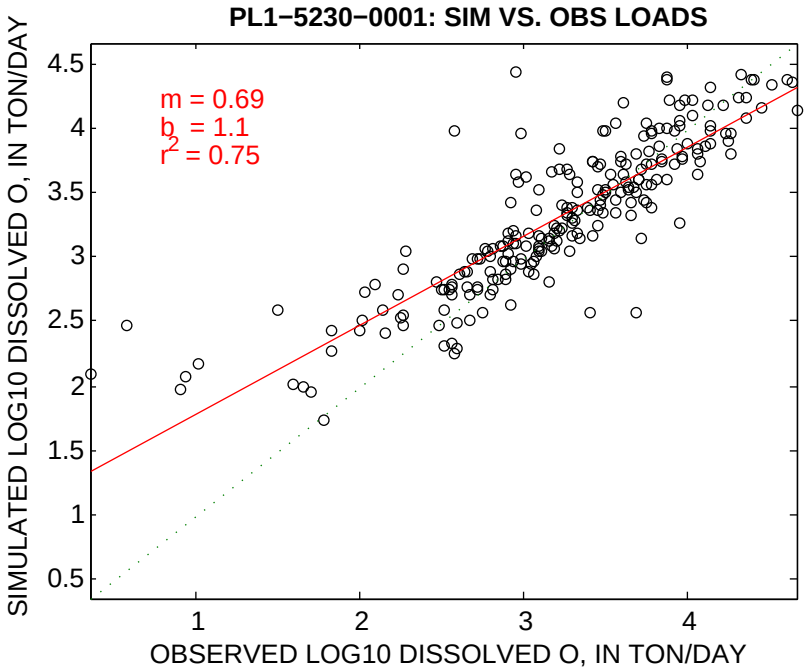


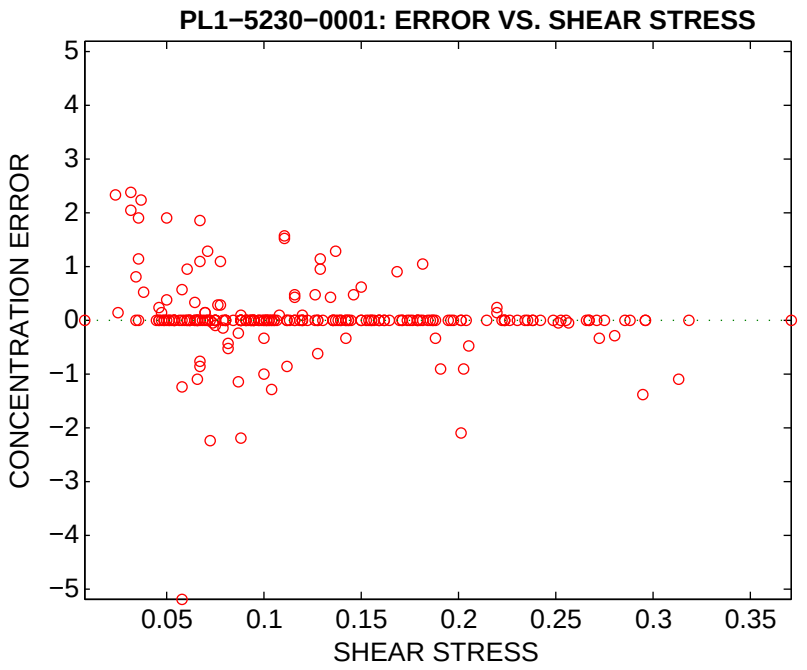


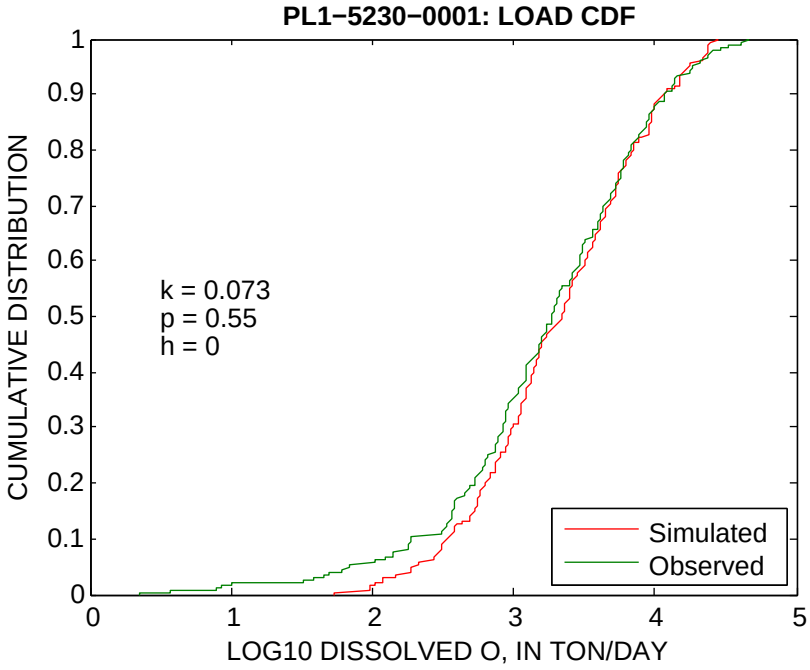


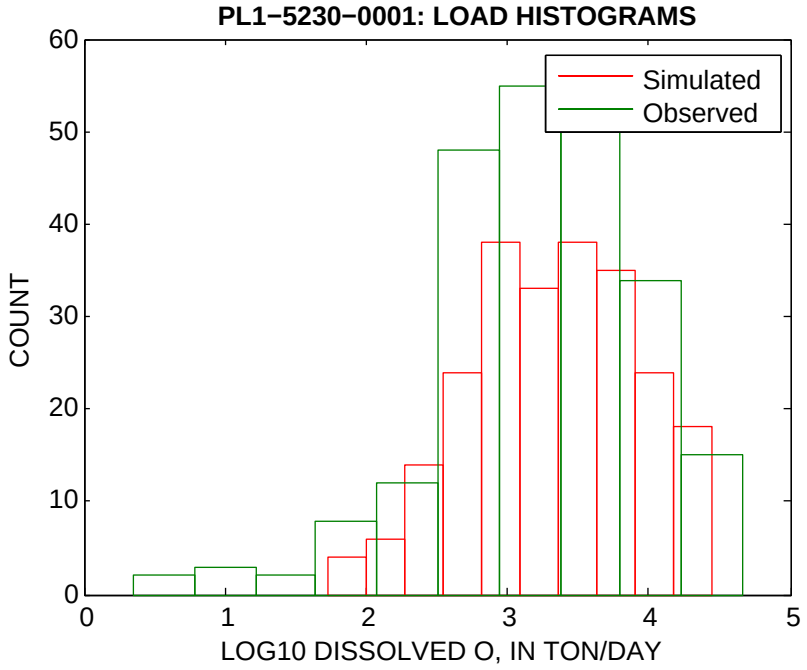


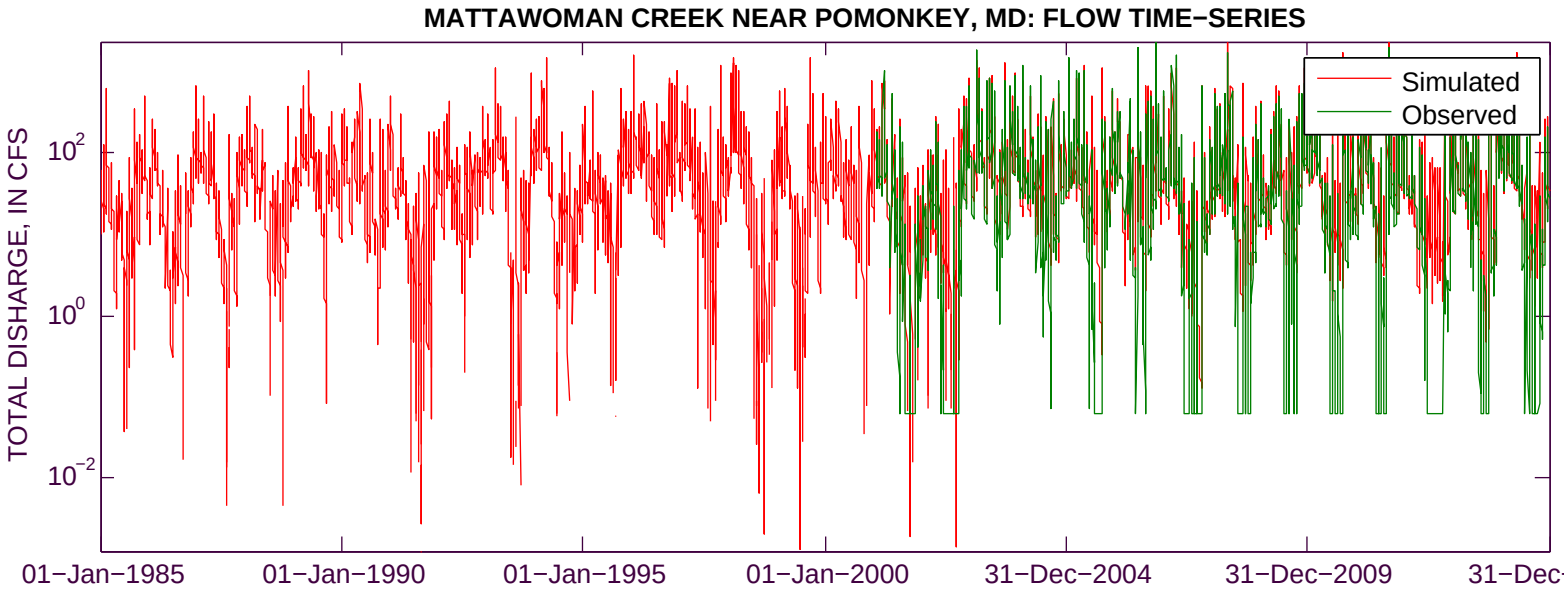
LOAD DATA
LOG10

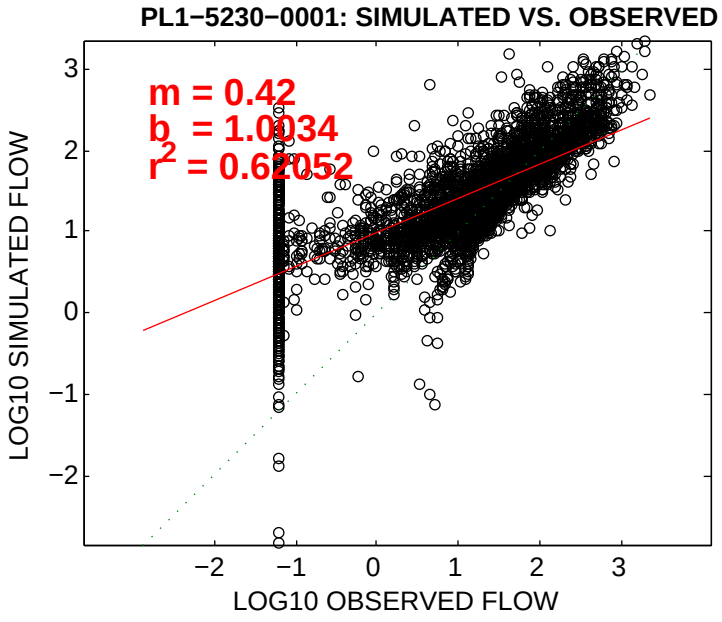


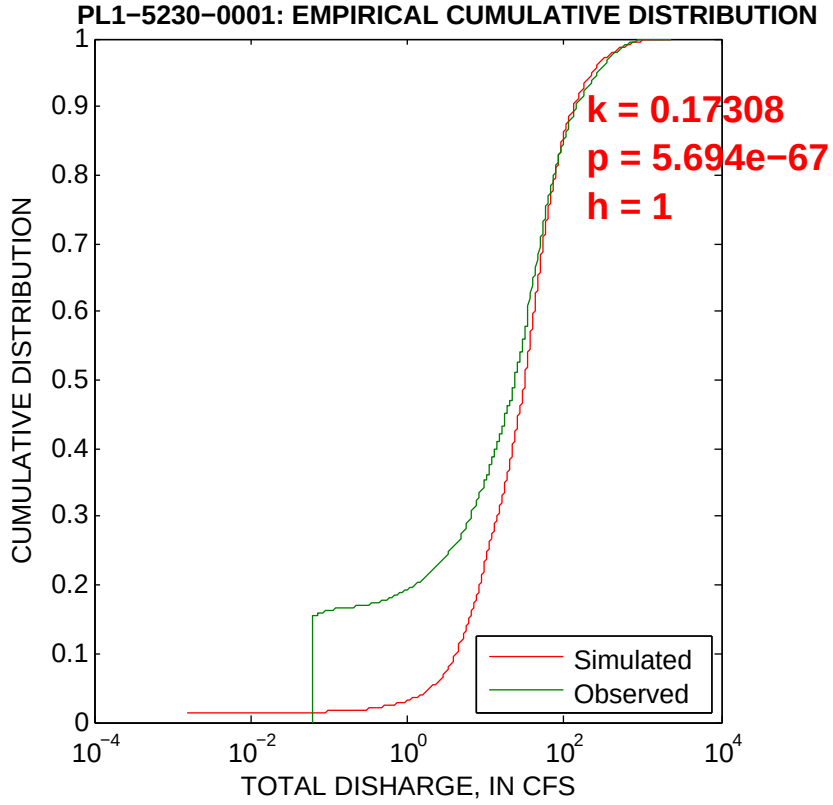












DATA SELECTION

scenario	file
P620171001WQ	FLOW.calib

plot: FLOW - total discharge

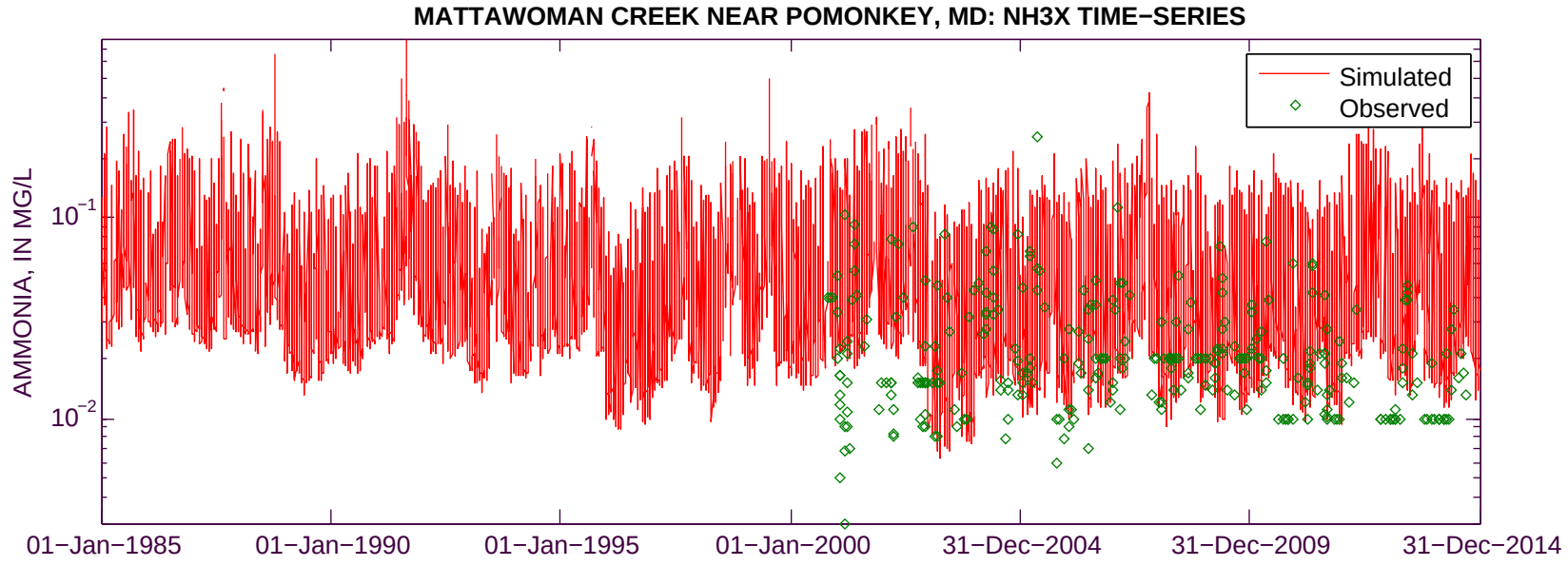
Dates: 1/1/1985 – 12/31/201

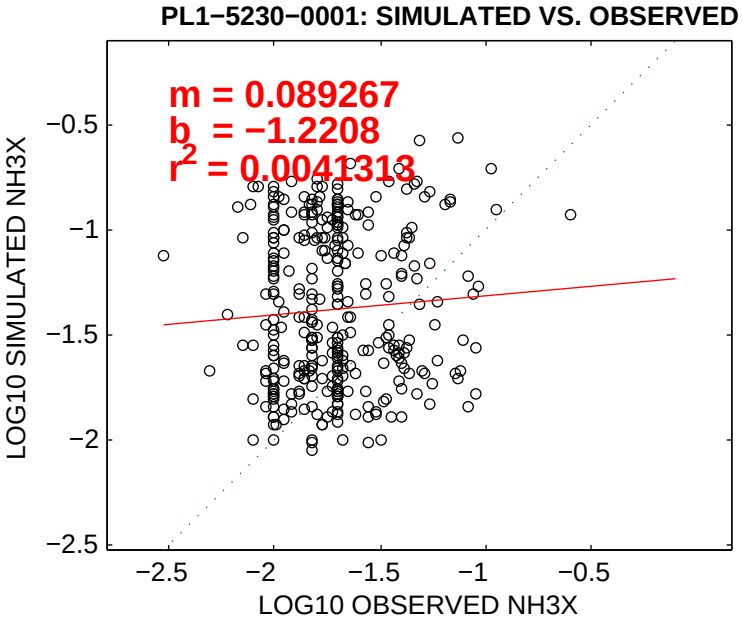
Drive	Directory	Observed
N/A	model	OBS20161101

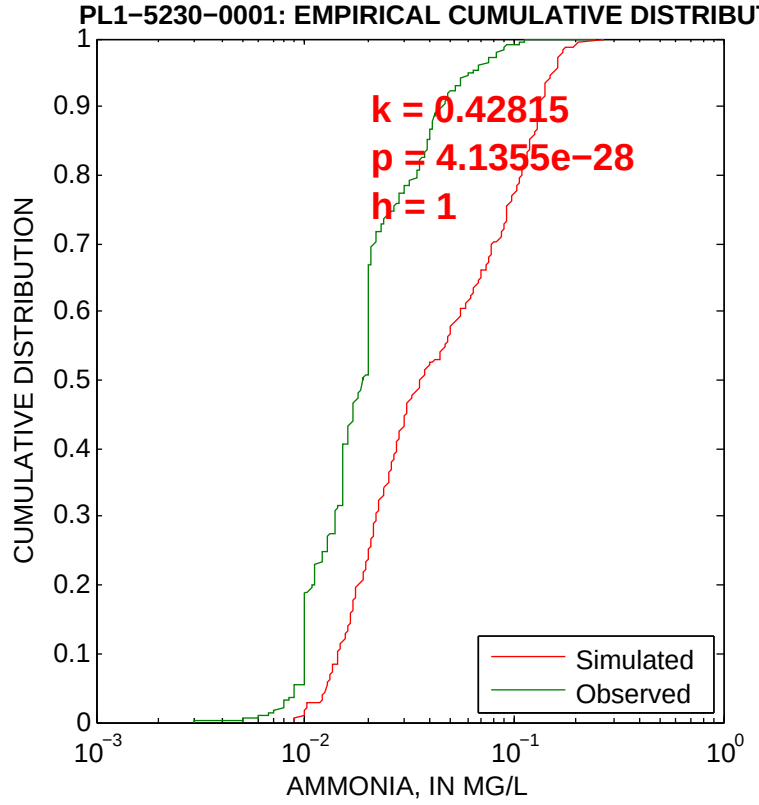
STATISTICS

	n	5090	5022
		observe	simulate
min		0.0624126	0
		-1.20473	-2.82007
mean		62.4749	64.568
		1.0336	1.43753
media		23.5624	31.7645
		1.38134	1.51023
max		2240.06	2281.3
		3.35026	3.35818
varian		17670.9	16544.2
		1.29125	0.367081
JB		0.001	0.001
		0.001	0.001
		ra	log
%		3.35034	39.0805
err.va		9268.21	0.73687
rel.std.err		0.524489	0.570663
mod.eff		0.475511	0.429337

VERSION 2.1







DATA SELECTION

scenario	file
P620171001WQ	NH3X.calib

plot: NH3X - ammonia

Dates: 1/1/1985 – 12/31/201

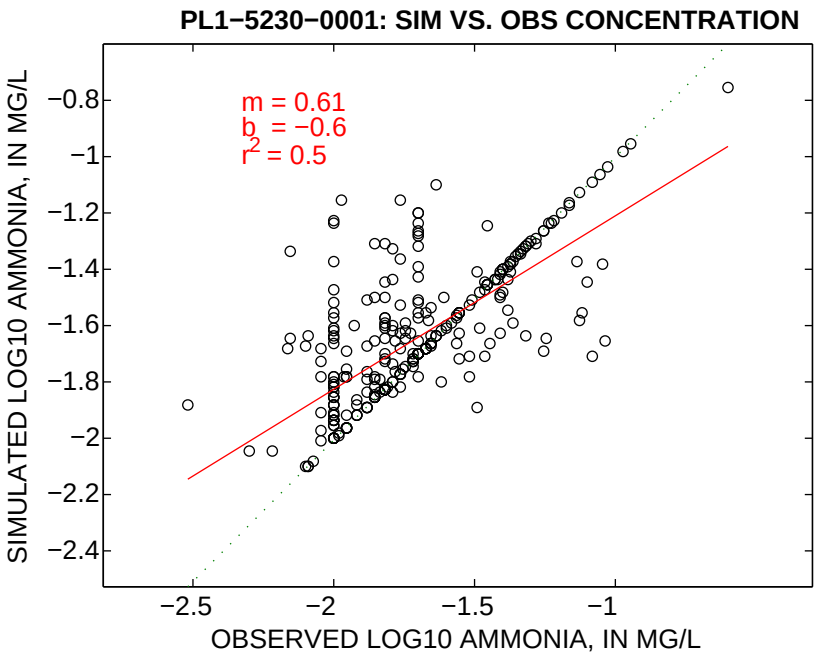
Drive	Directory	Observed
N/A	model	OBS20161101

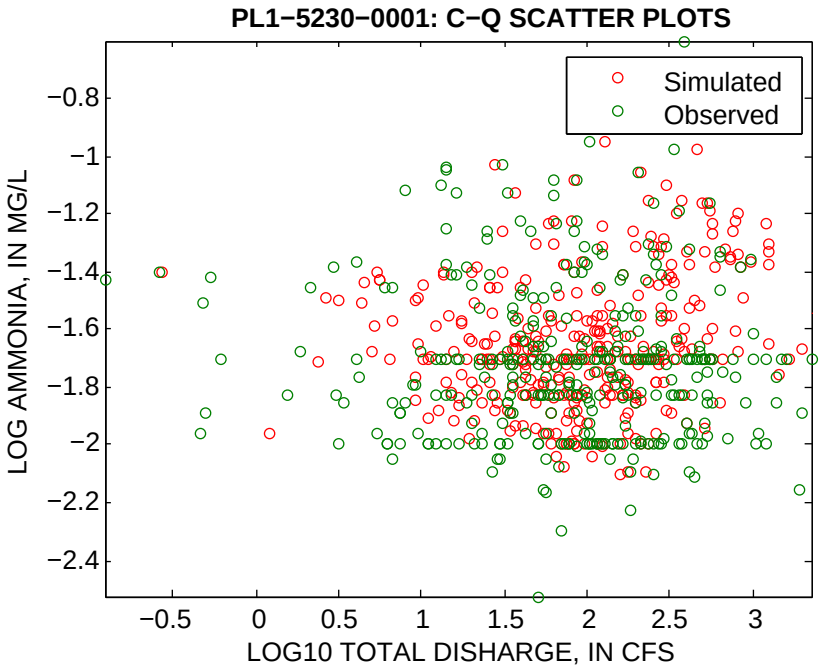
STATISTICS

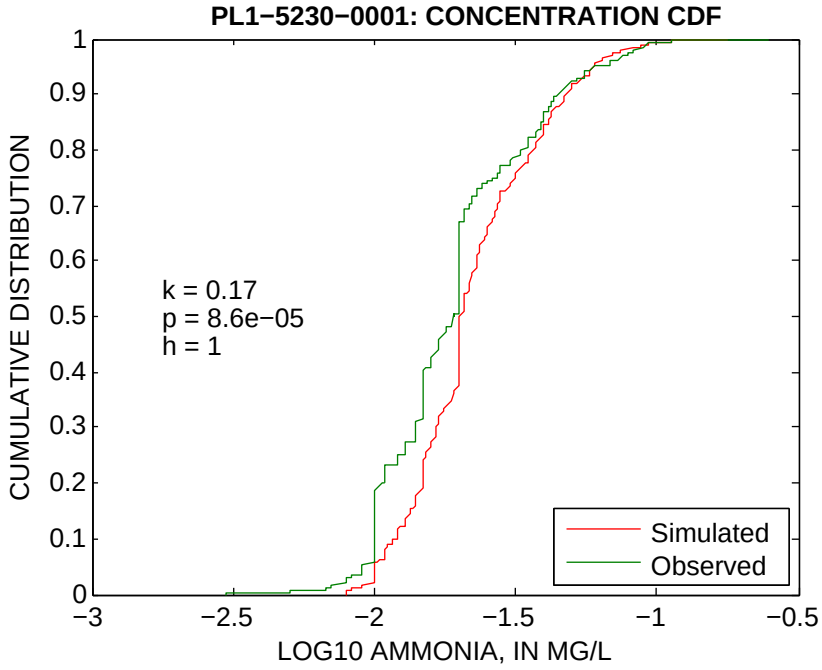
	n	341	340
		observe	simulate
min		0.003	0
		-2.52288	-2.05055
mean		0.0241242	0.059812
		-1.71179	-1.37361
media		0.019	0.035837
		-1.71897	-1.44436
max		0.251	0.27271
		-0.600326	-0.564299
varian		0.00045987	0.0024918
		0.0707524	0.136469
JB		0.001	0.001
		0.001	0.001
		ra	log
%		147.933	-19.7558
err.va		0.00398228	0.309291
rel.std.err		8.65959	4.37145
mod.eff		-7.65959	-3.37145

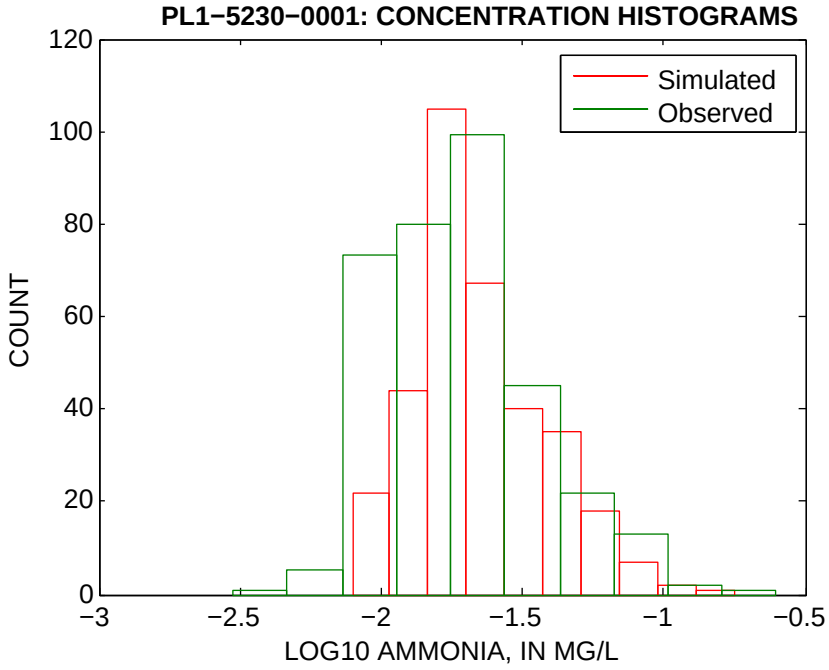
VERSION

ALL DATA
LOG10

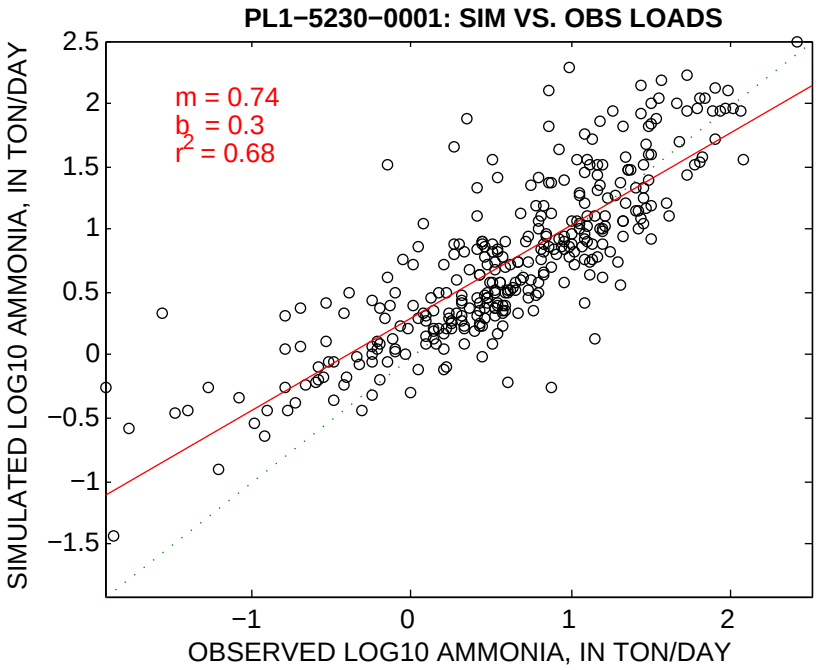


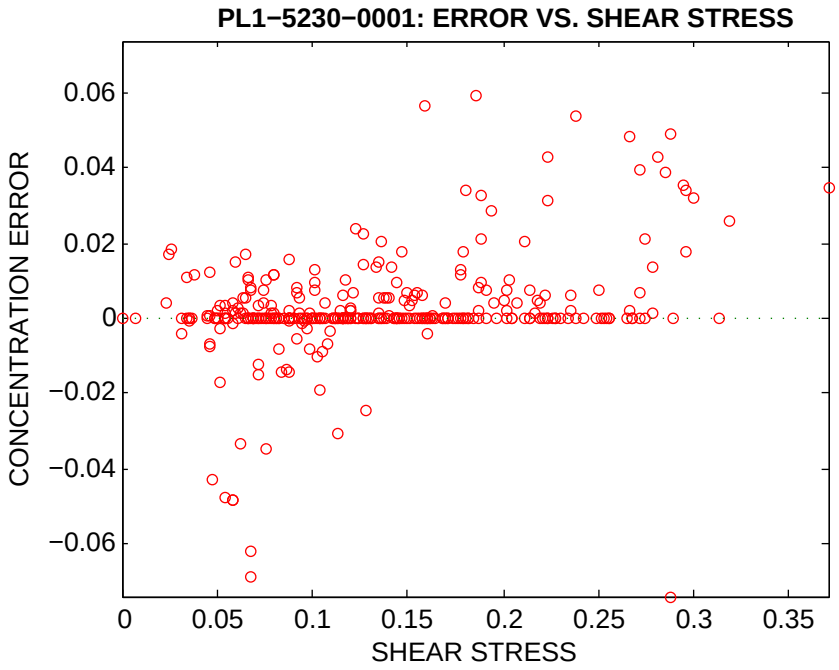


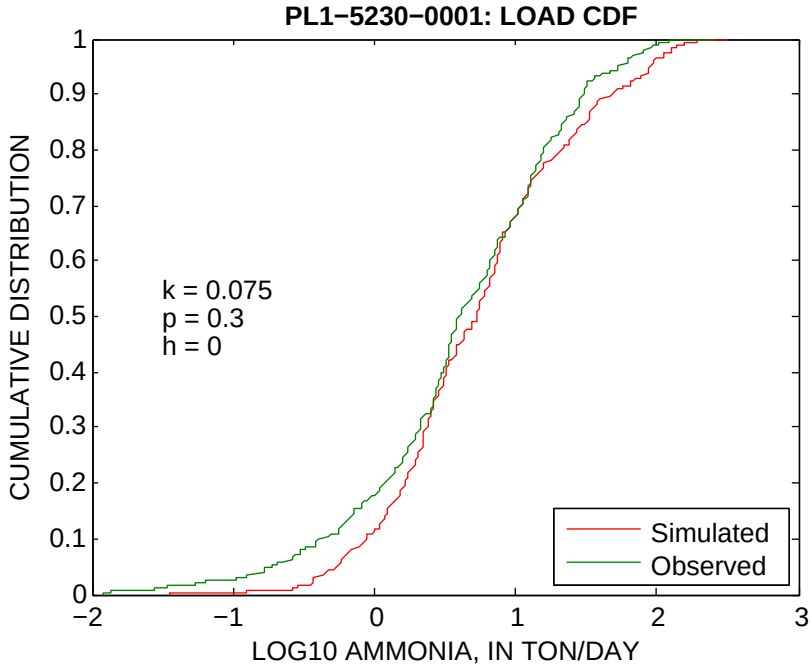


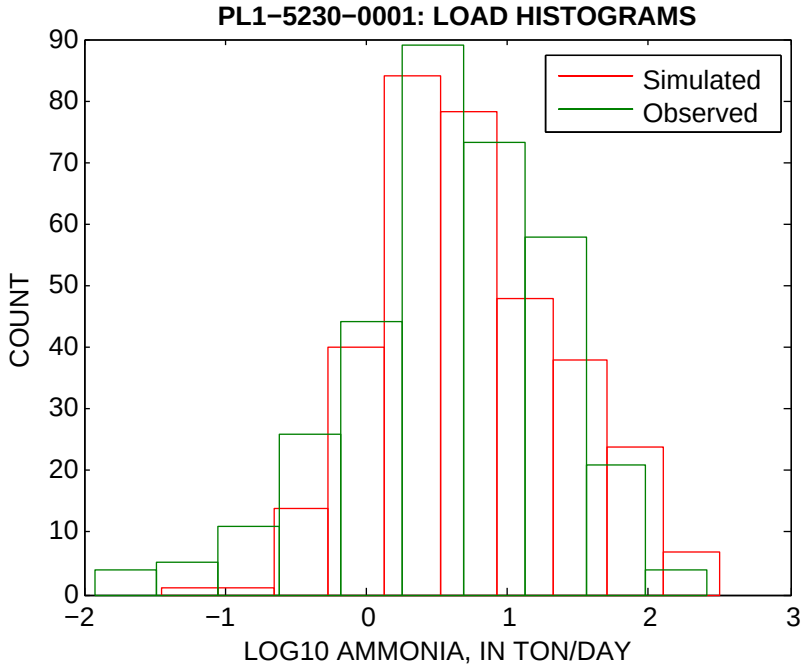


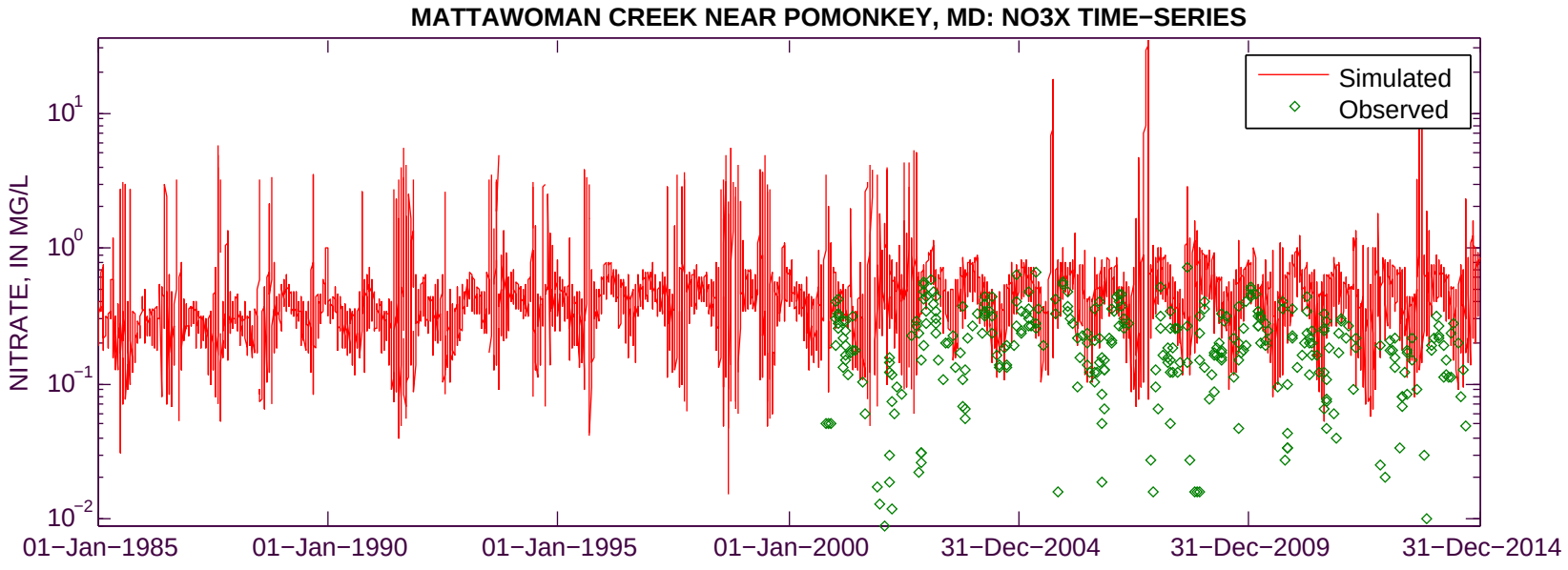
LOAD DATA
LOG10

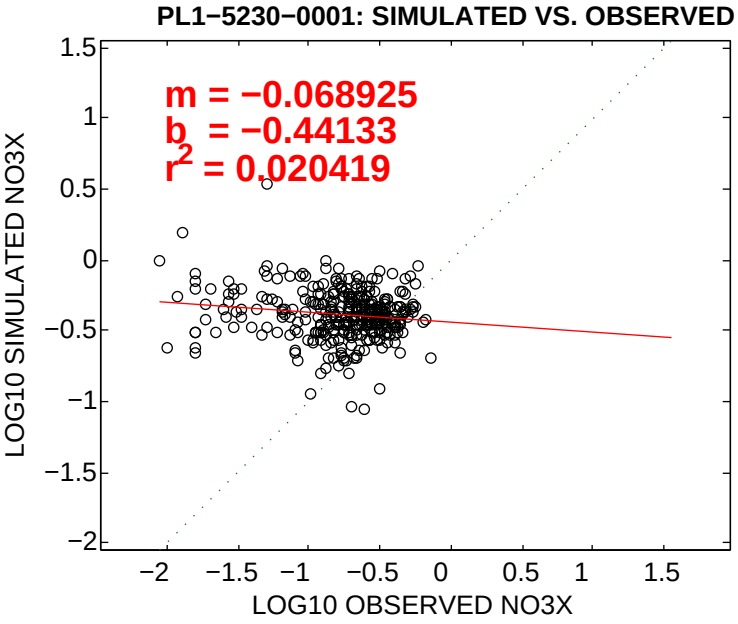


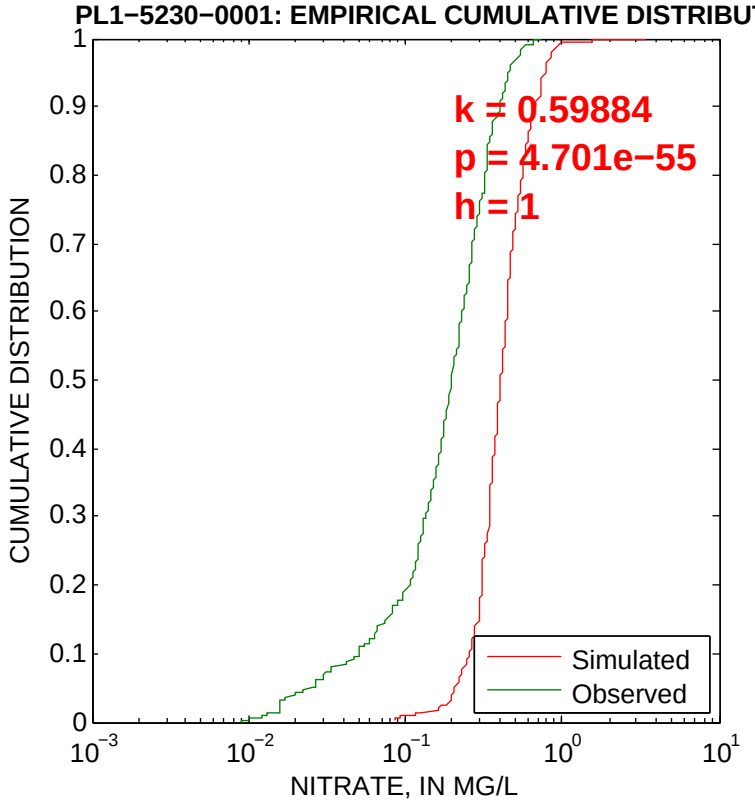












DATA SELECTION

scenario	file
P620171001WQ	NO3X.calib

plot: NO3X - nitrate

Dates: 1/1/1985 – 12/31/201

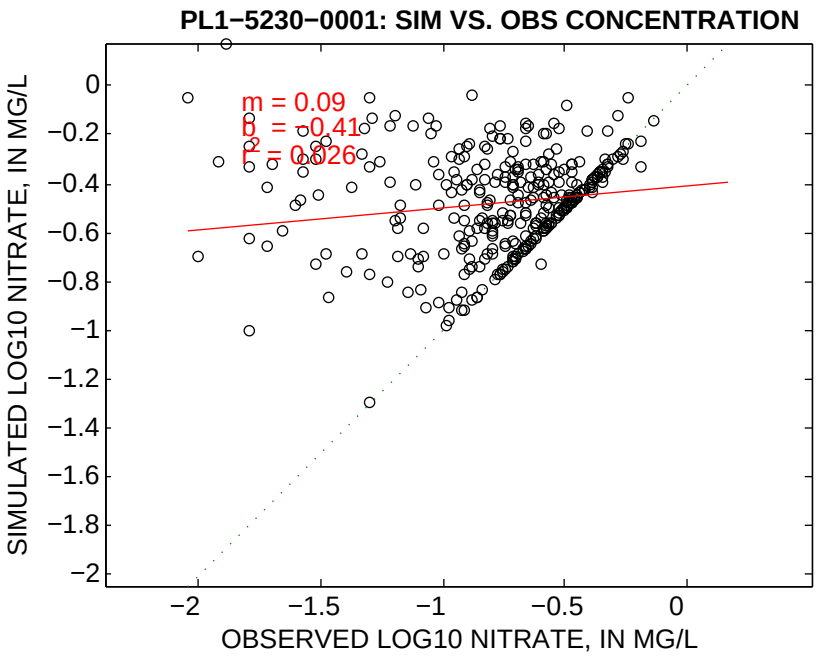
Drive	Directory	Observed
N/A	model	OBS20161101

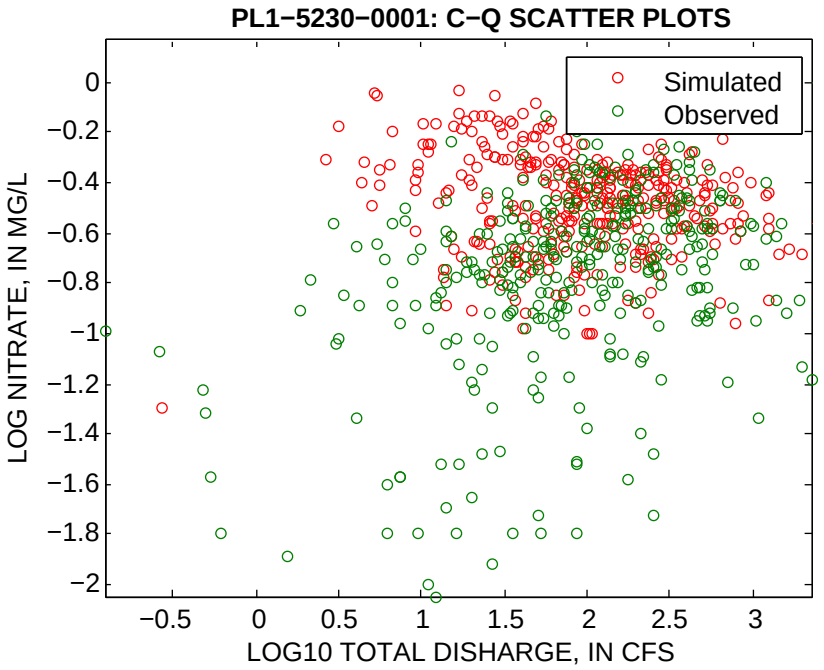
STATISTICS

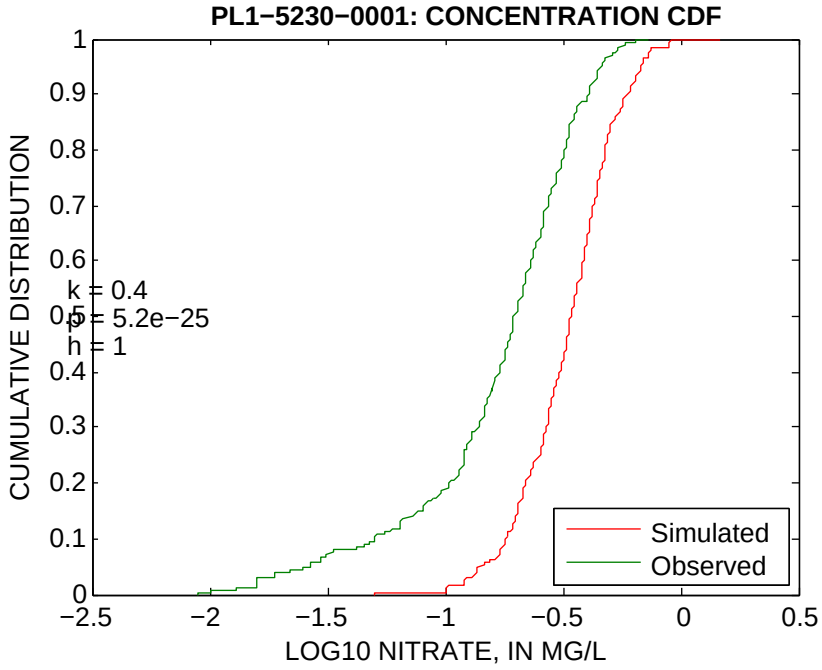
	n	344	343
		observe	simulate
min		0.009	0
		-2.04576	-1.05733
mean		0.216787	0.445098
		-0.775426	-0.38788
media		0.1965	0.403225
		-0.705534	-0.393952
max		0.726	3.4101
		-0.139063	0.532767
varian		0.0177853	0.0560353
		0.13277	0.0308895
JB		0.001	0.001
		0.001	0.001
		ra	log
%		105.316	-49.9785
err.va		0.133148	0.332593
rel.std.err		7.48641	2.50503
mod.eff		-6.48641	-1.50503

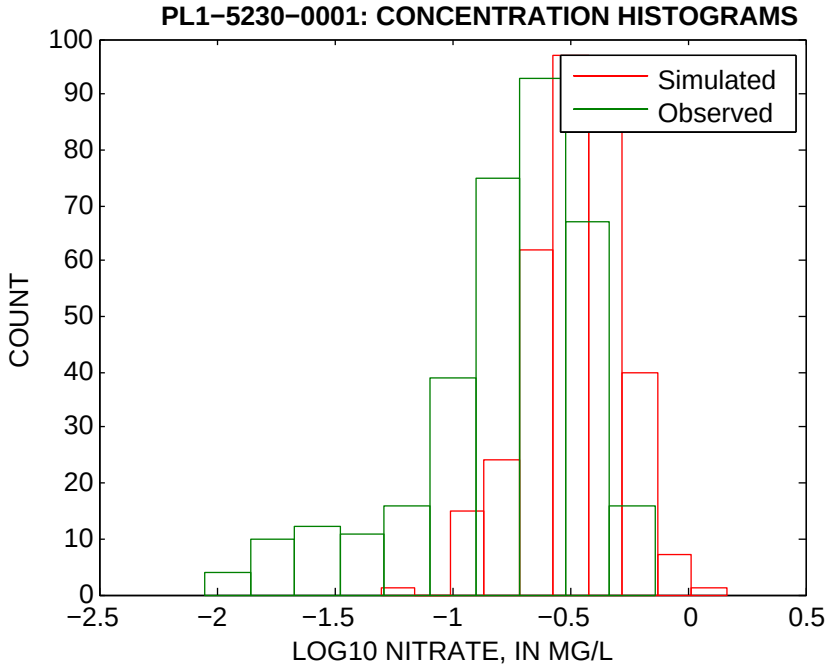
VERSION 3.1

ALL DATA
LOG10

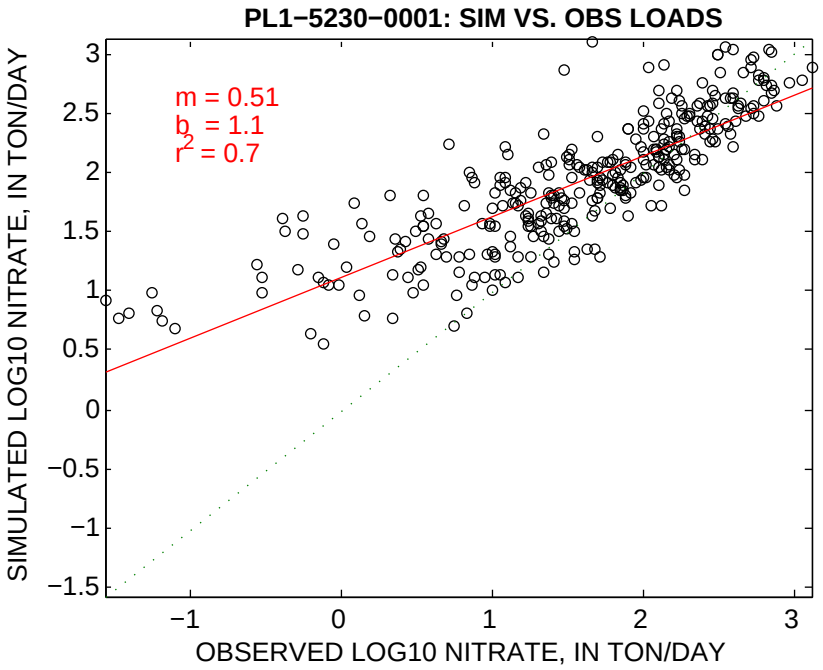


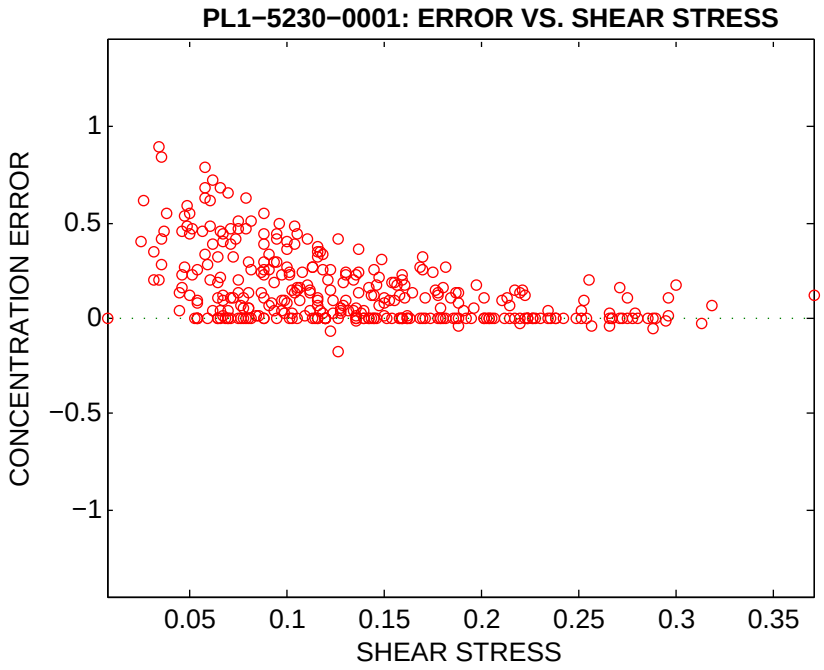


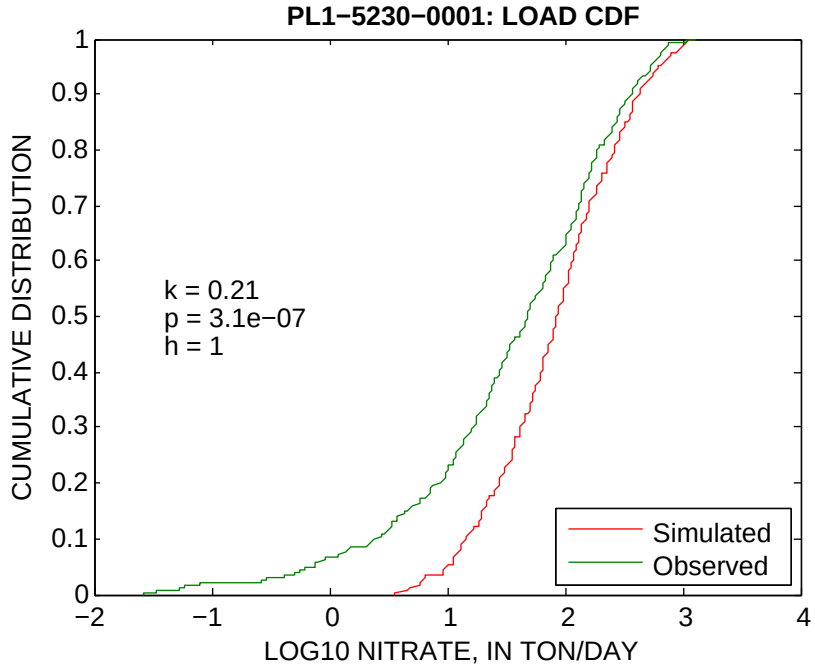


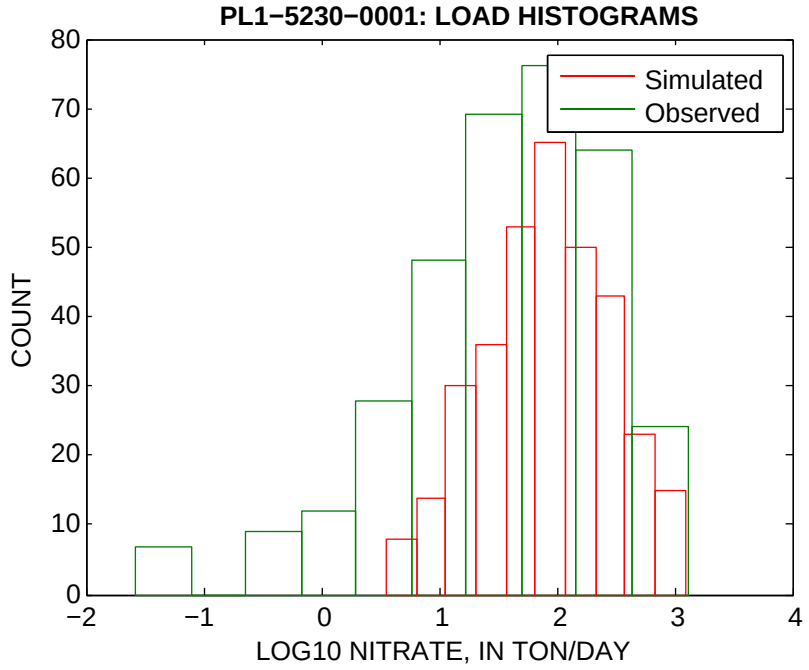


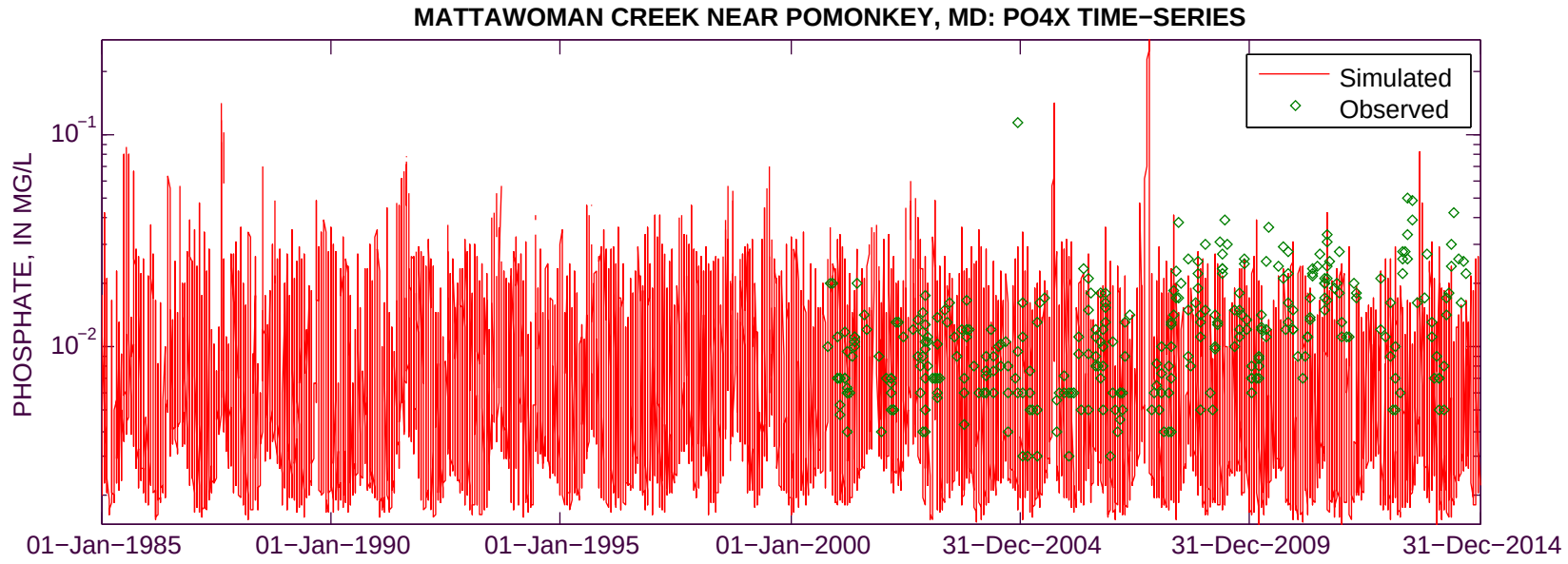
LOAD DATA
LOG10

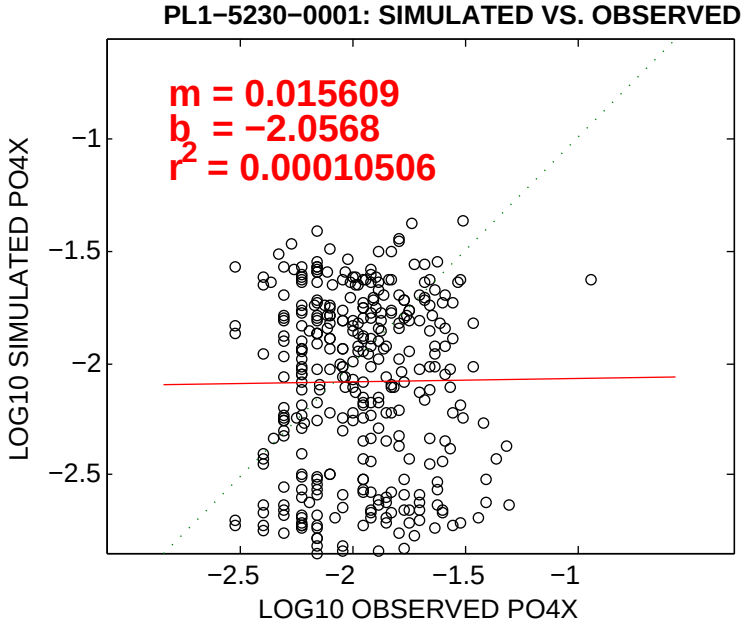


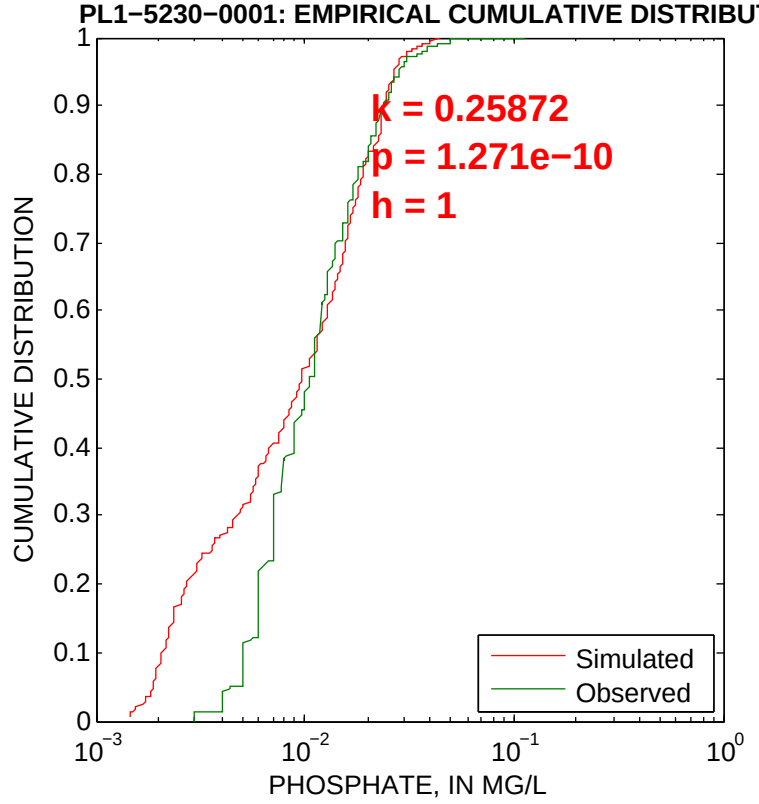












DATA SELECTION

scenario	file
P620171001WQ	PO4X.calib

plot: PO4X - phosphate

Dates: 1/1/1985 – 12/31/201

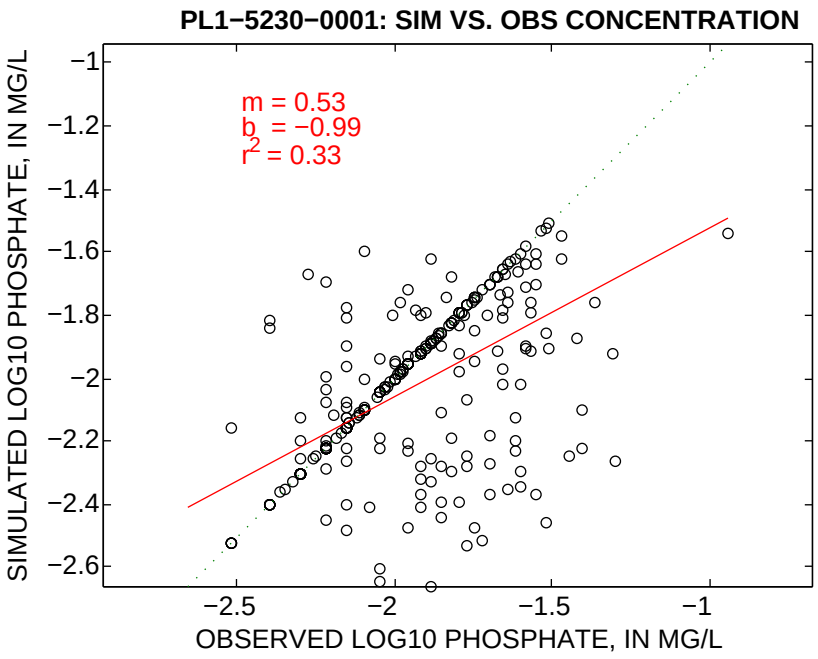
Drive	Directory	Observed
N/A	model	OBS20161101

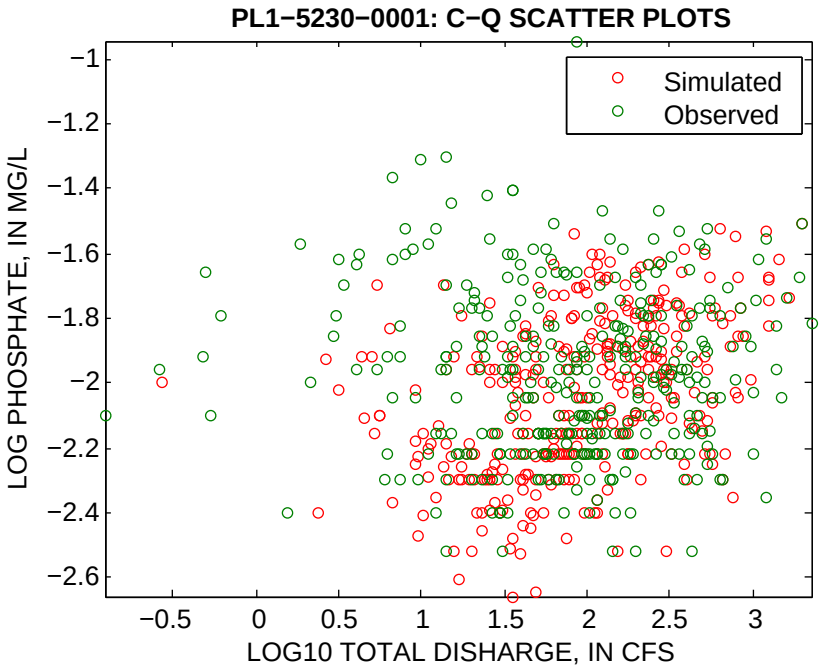
STATISTICS

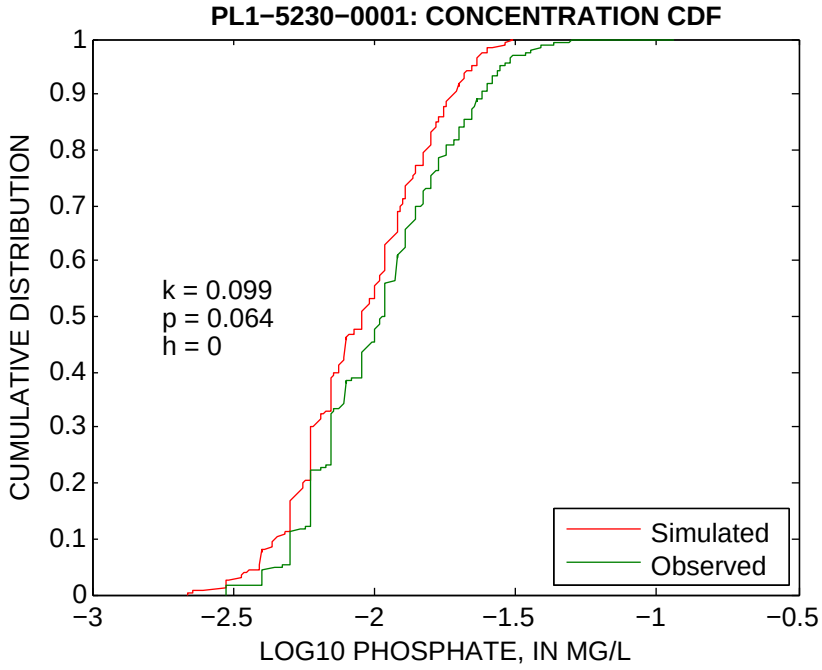
	n	observe	simulate
		344	343
min		0.003	0
		-2.52288	-2.84591
mean		0.012929	0.0115427
		-1.96983	-2.08754
media		0.0106256	0.0096486
		-1.97298	-2.01425
max		0.114	0.043131
		-0.943095	-1.36521
varian		9.34929e-0	7.58778e-0
		0.0664665	0.154145
JB		0.001	0.001
		0.029295	0.001
		ra	log
%		-10.7227	5.97565
err.va		0.00017033	0.232432
rel.std.err		1.82185	3.49698
mod.eff		-0.821854	-2.49698

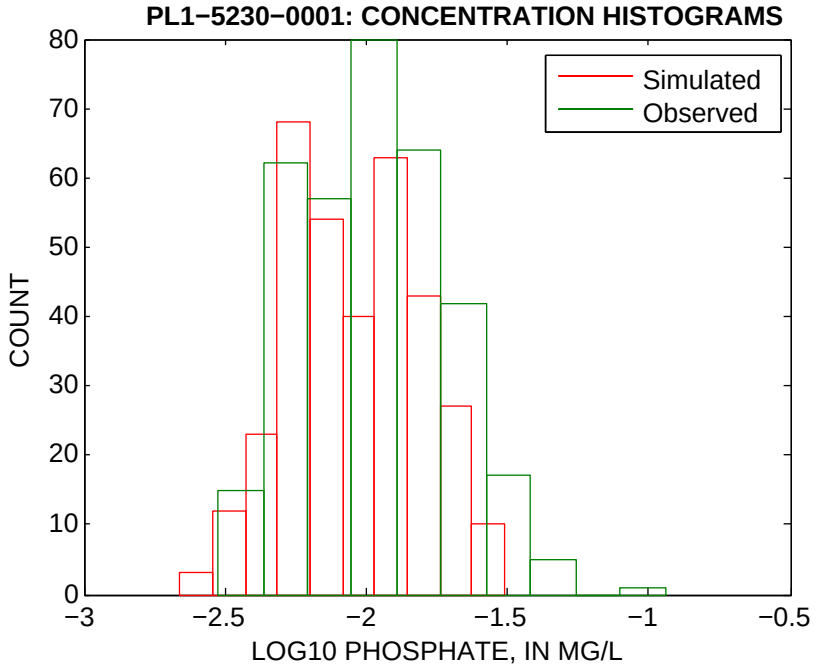
VERSION 2.1

ALL DATA
LOG10

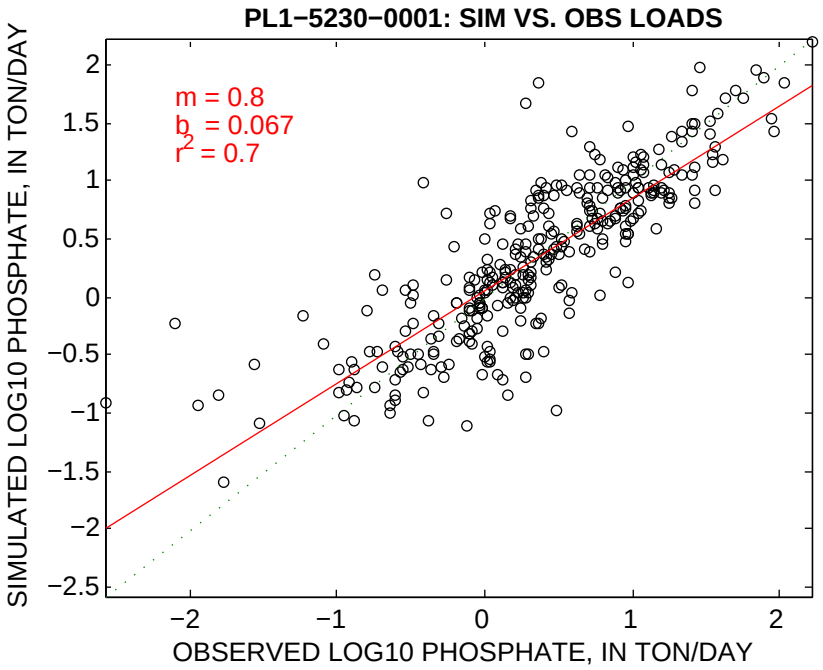


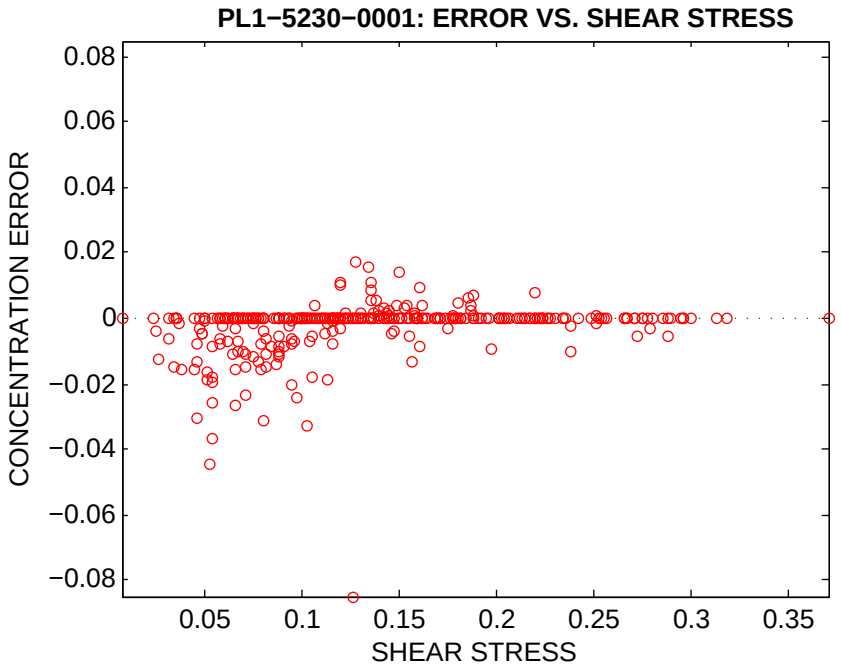


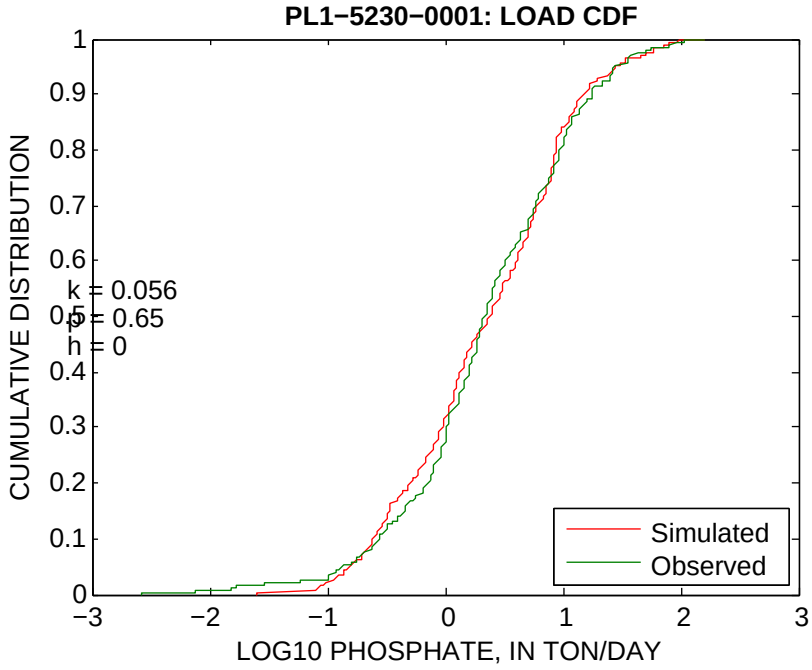


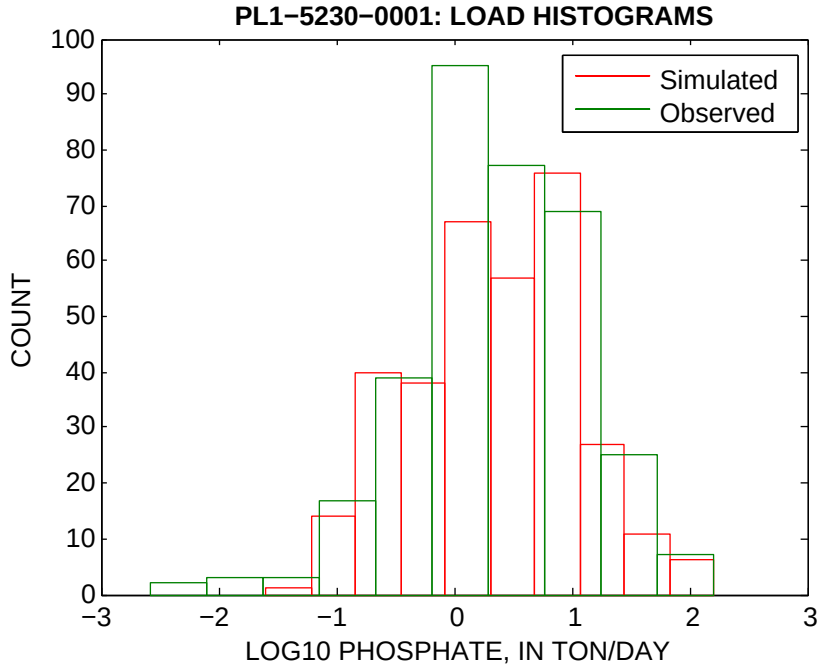


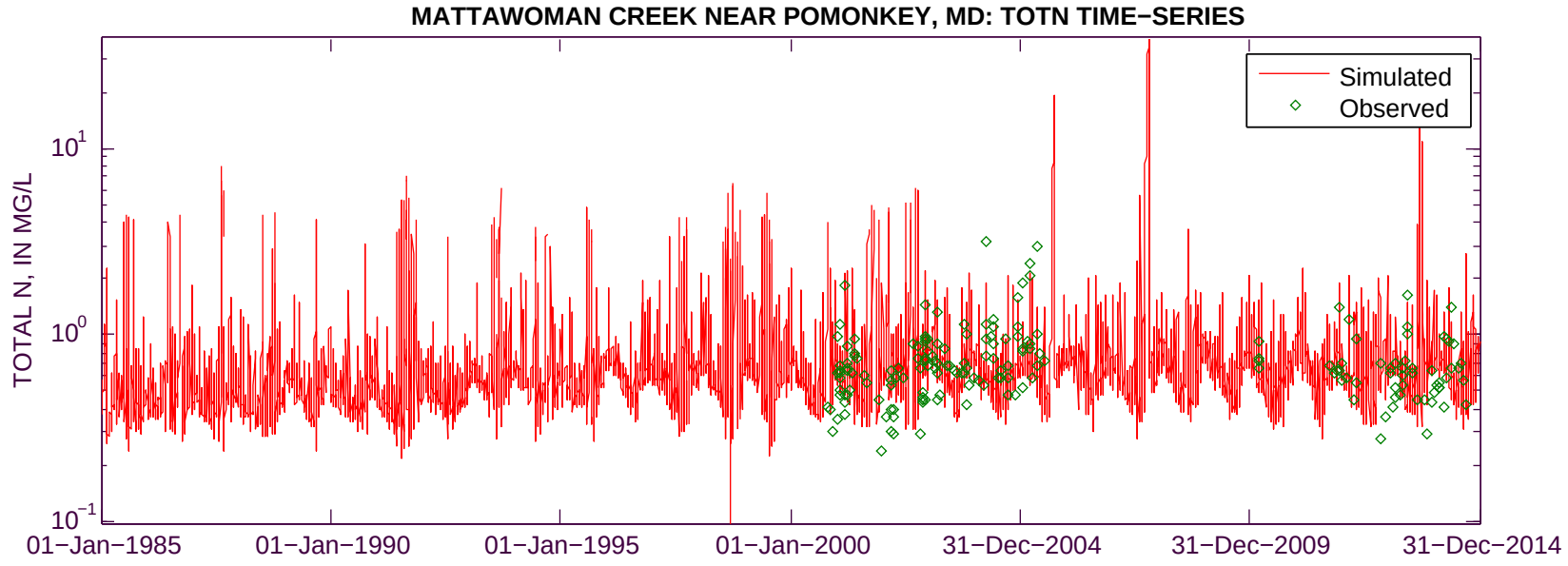
LOAD DATA
LOG10

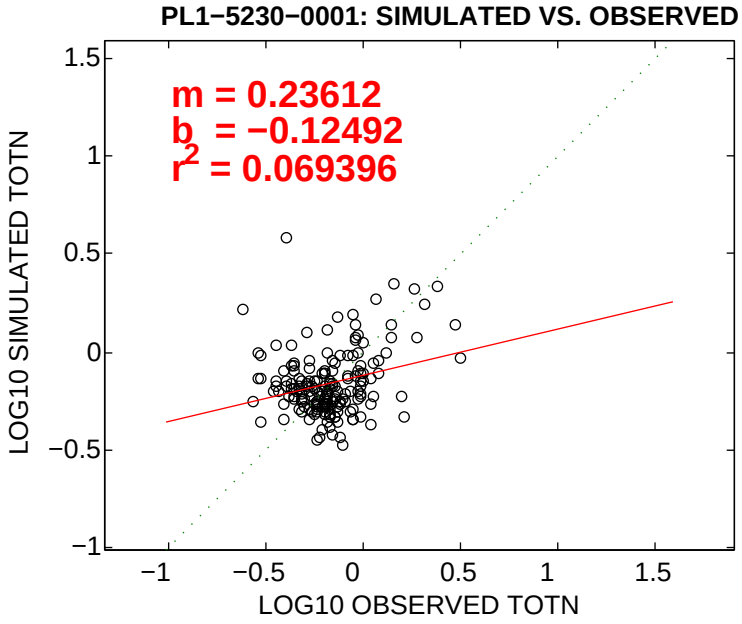


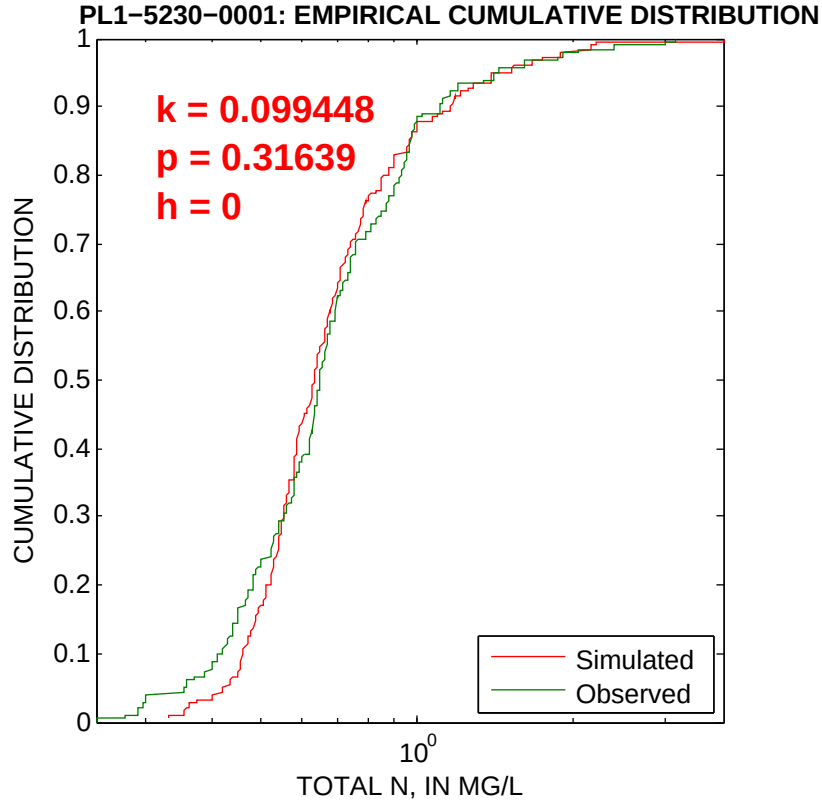












DATA SELECTION

scenario	file
P620171001WQ	TOTN.calib

plot: TOTN - total nitrogen

Dates: 1/1/1985 – 12/31/201

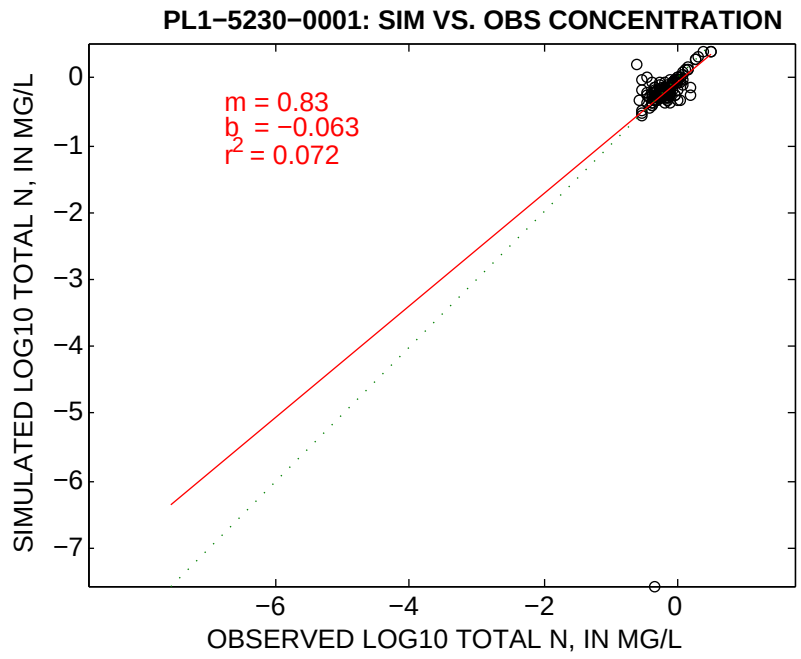
Drive	Directory	Observed
N/A	model	OBS20161101

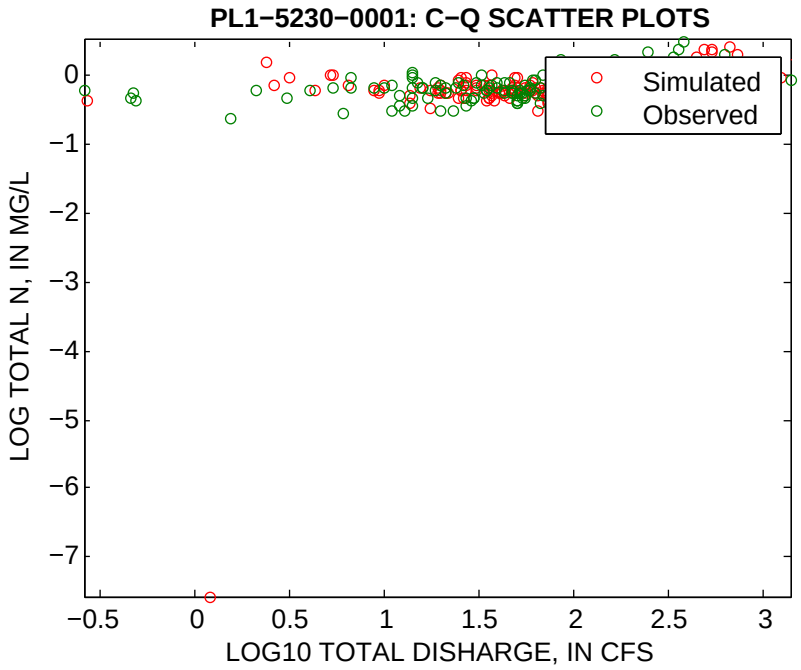
STATISTICS

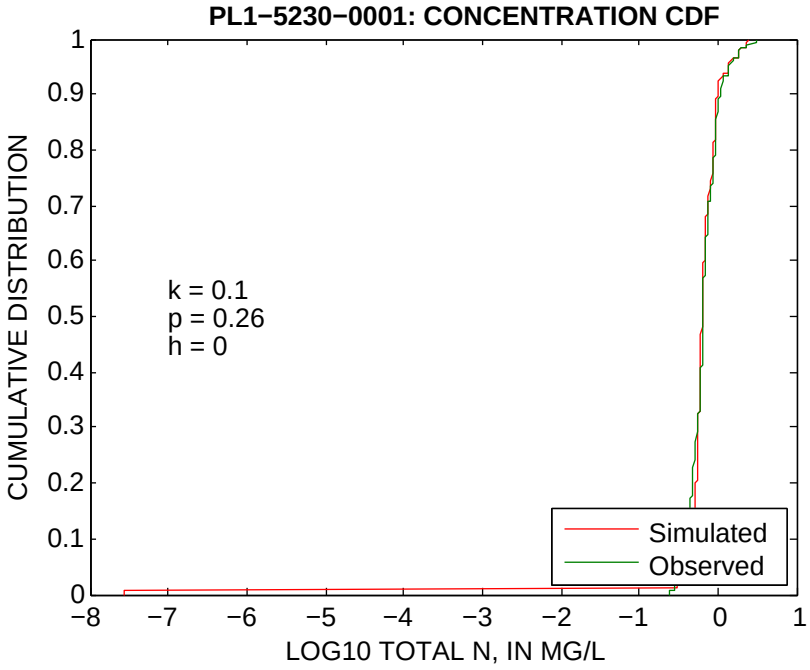
	n	181	180
		observe	simulate
min		0.24	0
		-0.619789	-0.480566
mean		0.742433	0.740771
		-0.171934	-0.165514
media		0.65	0.63408
		-0.187087	-0.197657
max		3.12311	3.8676
		0.494587	0.587442
varian		0.164239	0.163008
		0.0339579	0.0272811
JB		0.001	0.001
		0.001	0.001
		ra	log
%		-0.223776	-3.73362
err.va		0.214049	0.0452443
rel.std.err		1.30328	1.33236
mod.eff		-0.303279	-0.332364

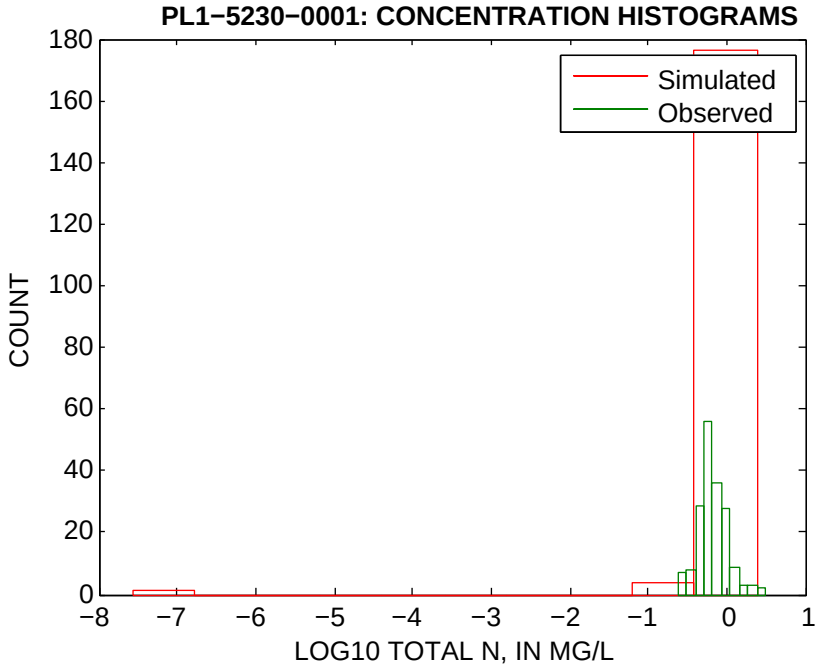
VERSION 3.1

ALL DATA
LOG10

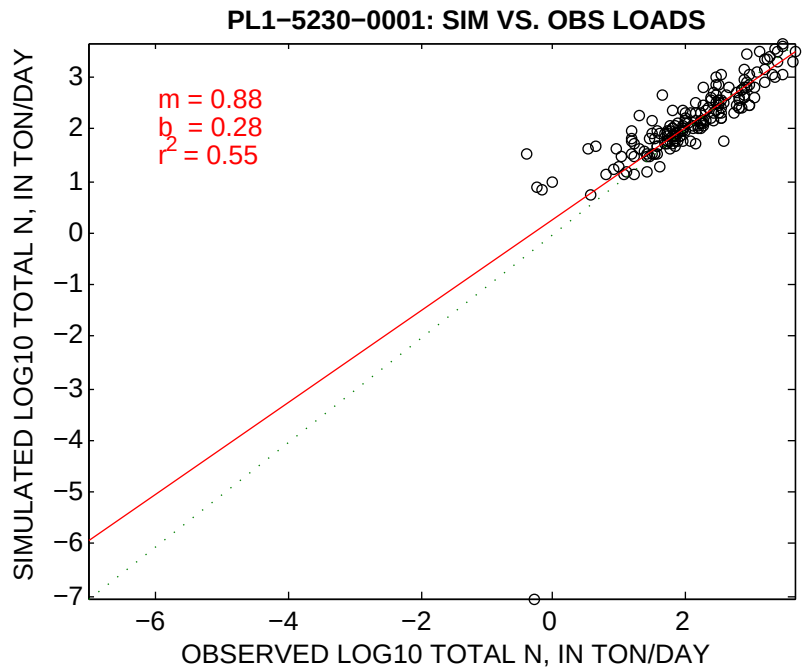


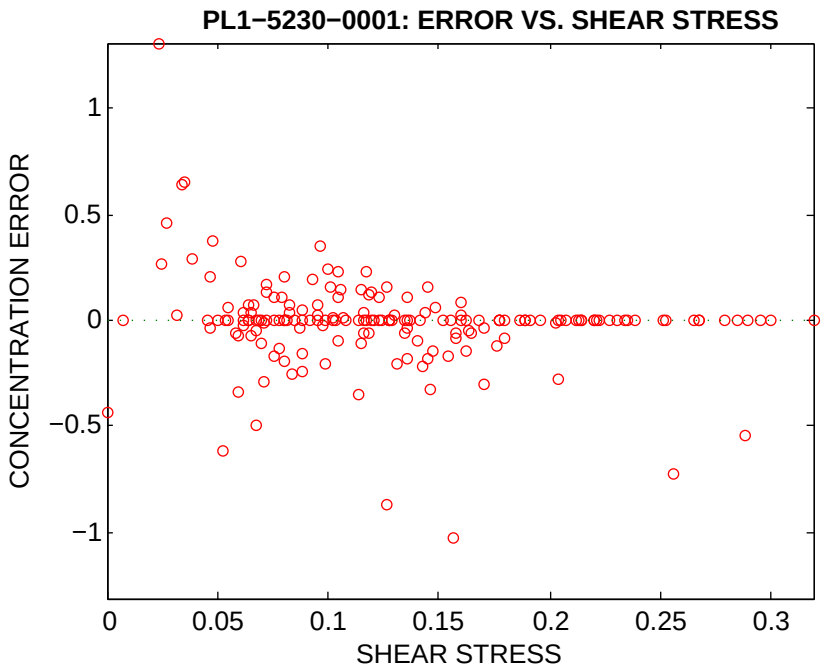


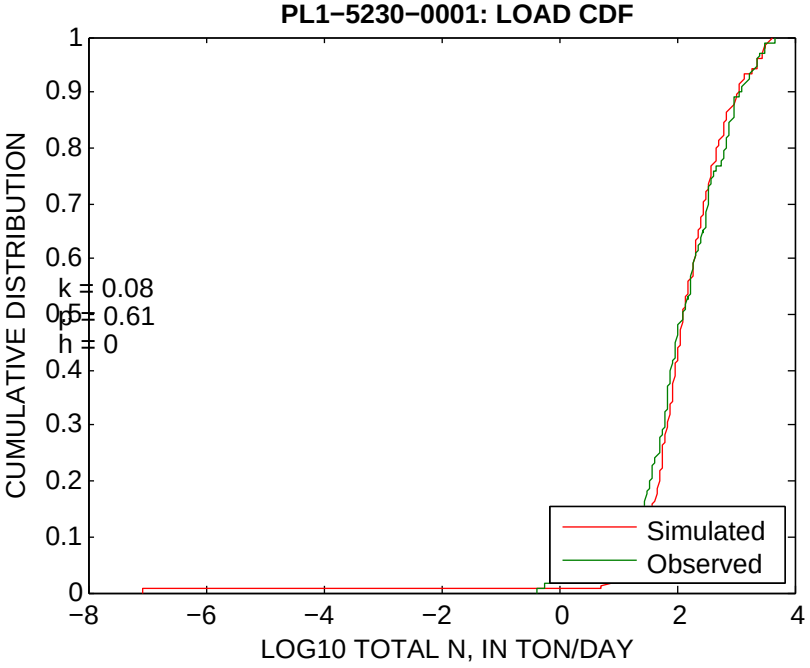


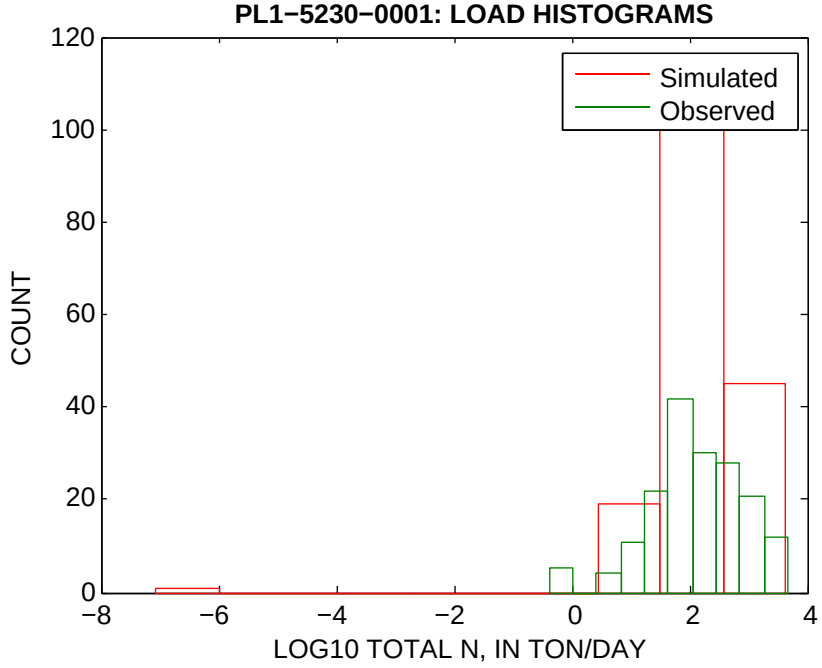


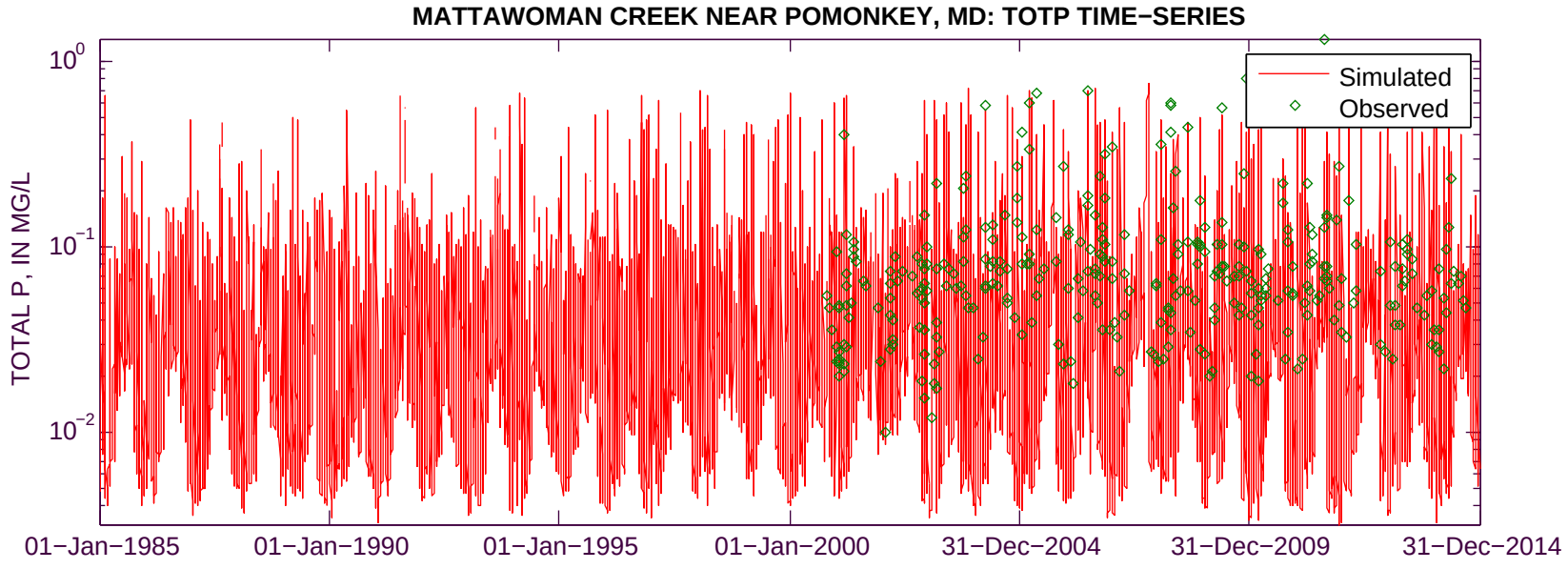
LOAD DATA
LOG10

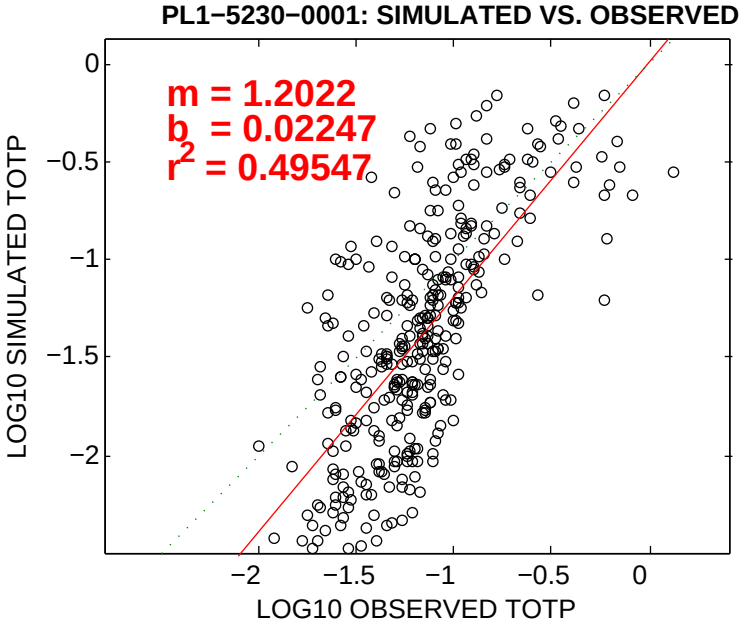


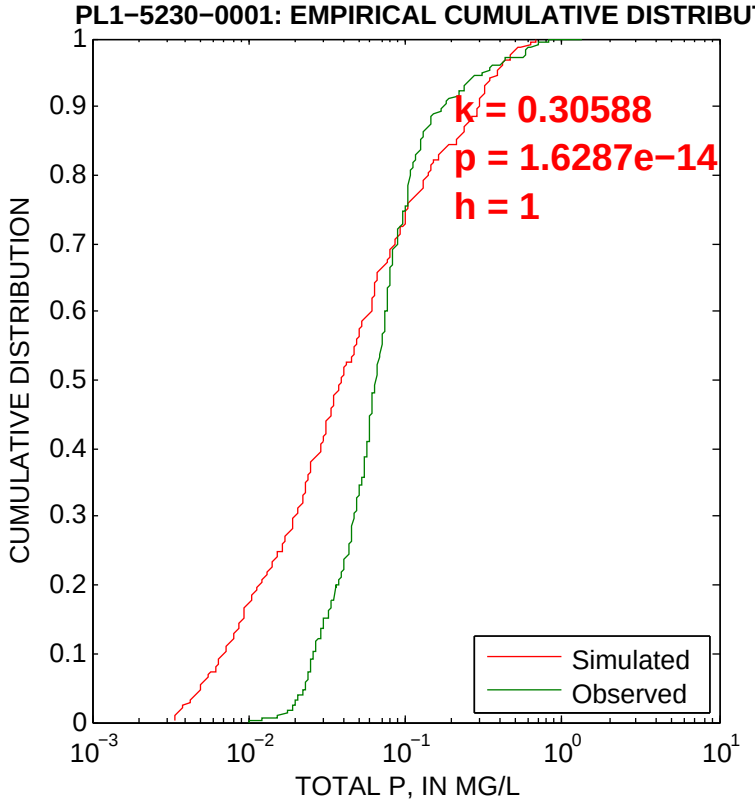












DATA SELECTION

scenario: P620171001WQ | file: TOTP.calib

plot: TOTP - total phosphorus

Dates: 1/1/1985 – 12/31/201

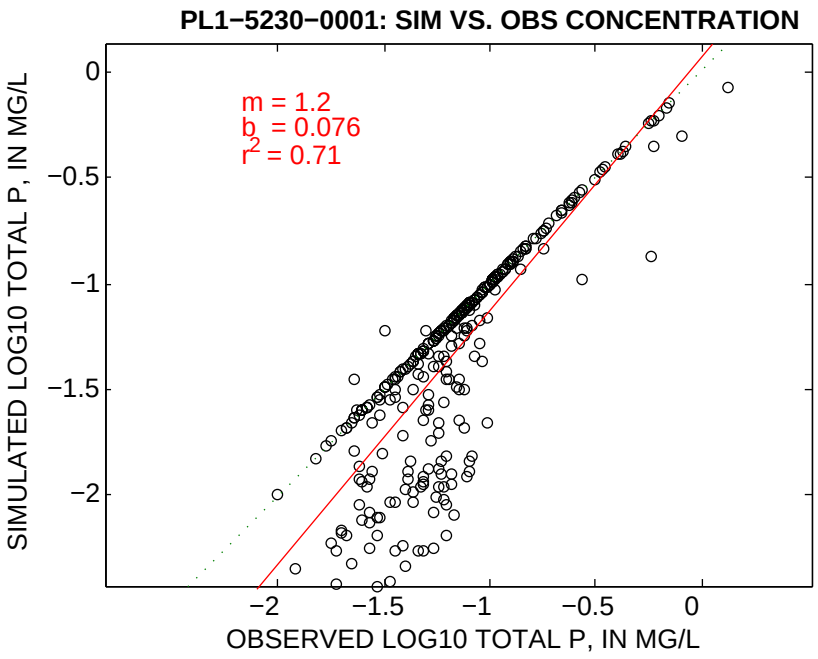
Drive: N/A | Directory: model | Observed: OBS20161101

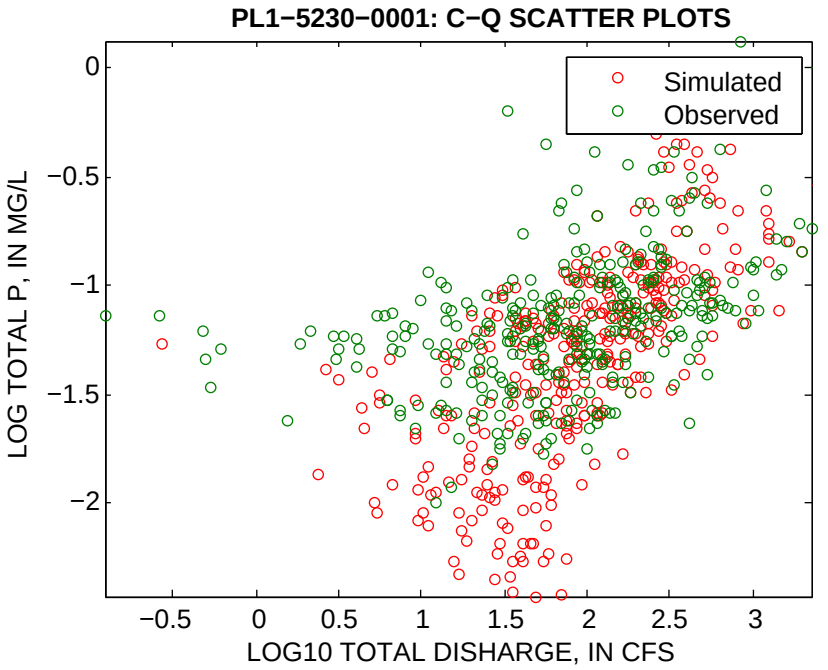
STATISTICS

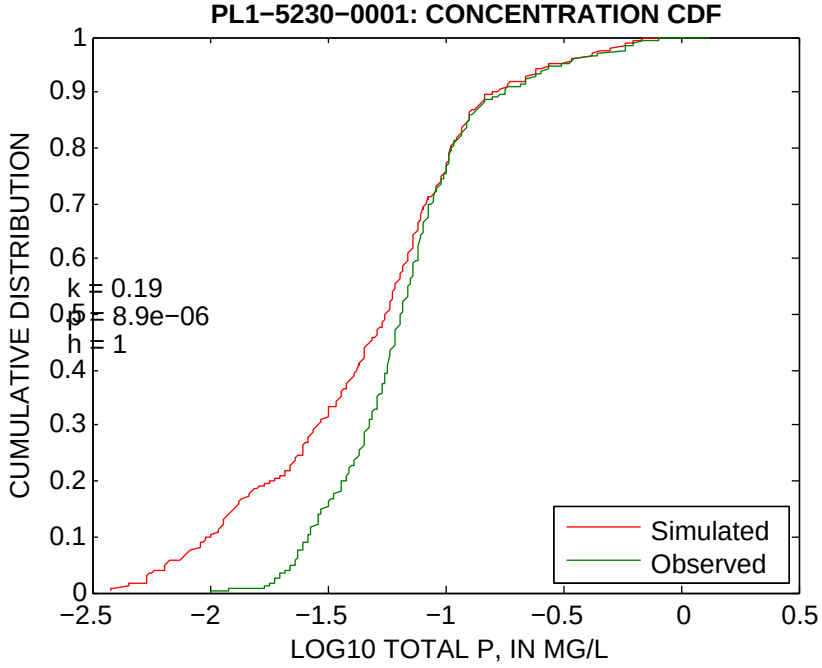
		observe	simulate
n		340	339
min		0.01	0
		-2	-2.47646
mean		0.0992166	0.0937052
		-1.16428	-1.37723
media		0.065	0.039459
		-1.18709	-1.40065
max		1.33	0.6909
		0.123852	-0.160585
varian		0.0170102	0.0164538
		0.111792	0.326097
JB		0.001	0.001
		0.001	0.014149
		ra	log
%		-5.5549	18.2896
err.va		0.0155466	0.214576
rel.std.err		0.913958	1.91943
mod.eff		0.0860424	-0.919425

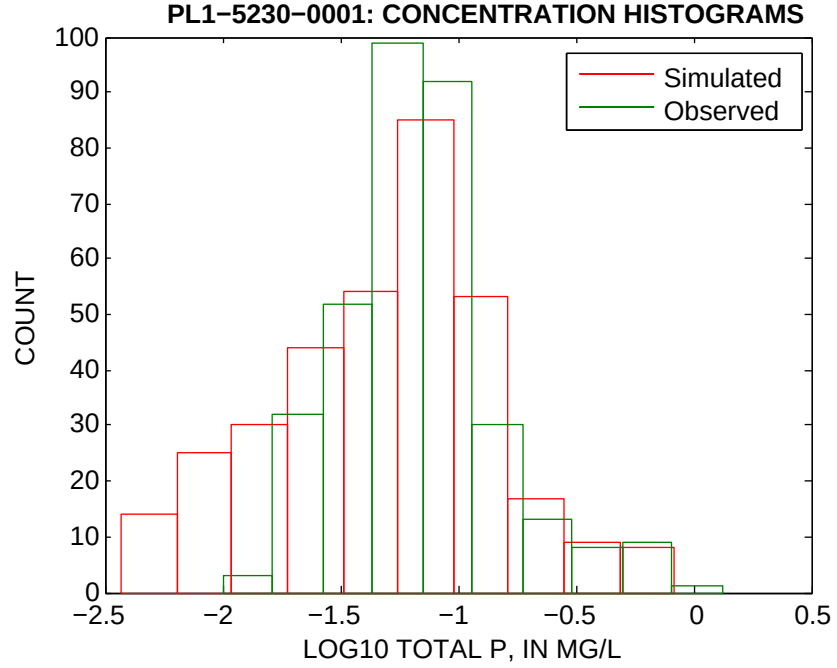
VERSION 2.1

ALL DATA
LOG10

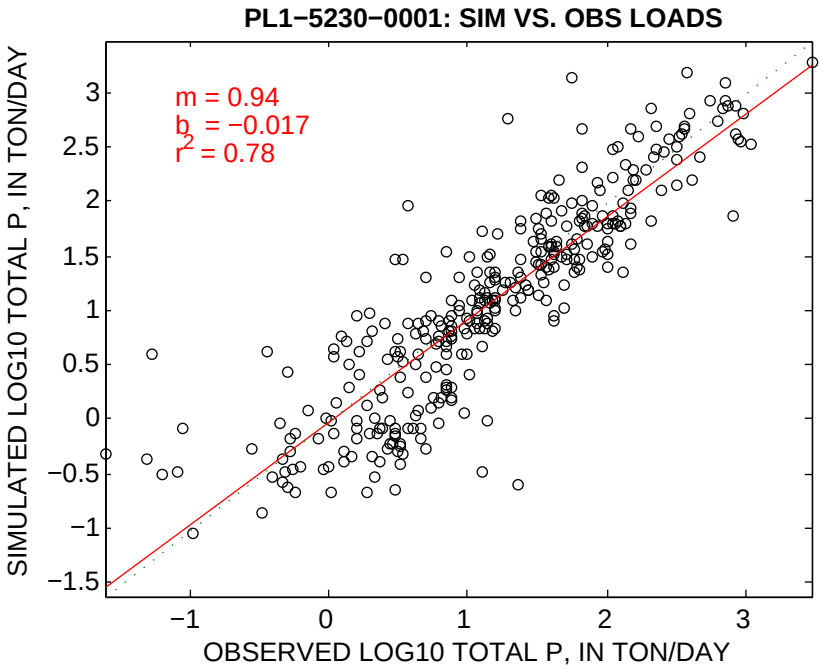


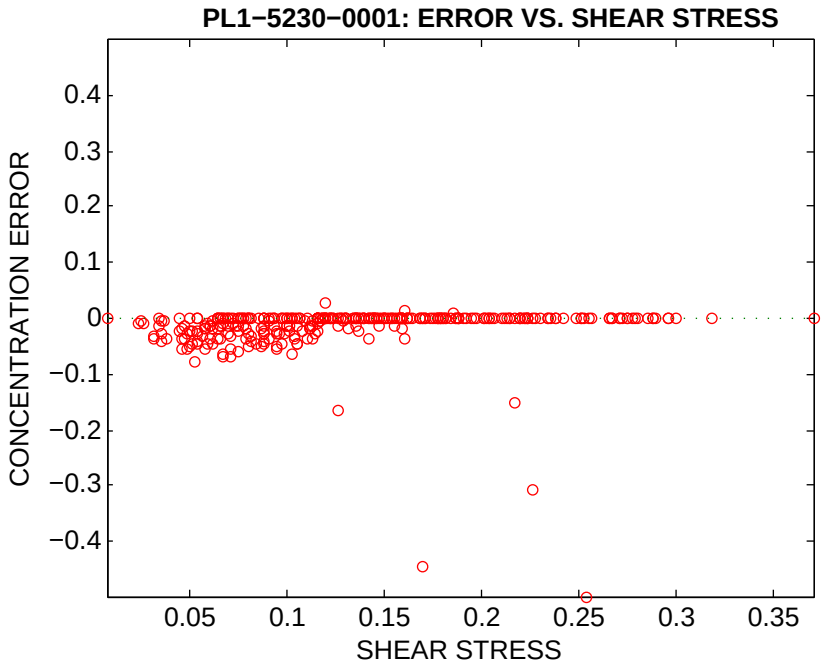


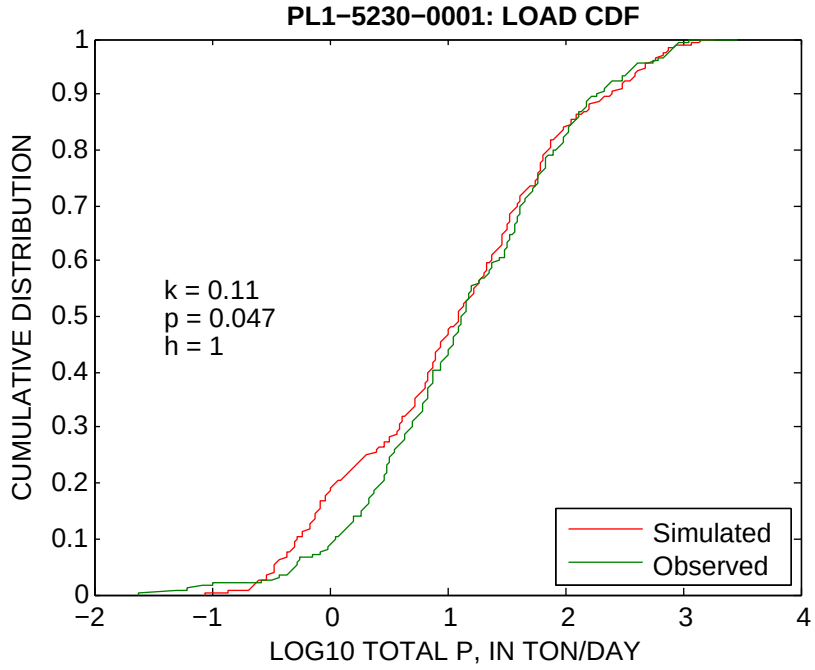


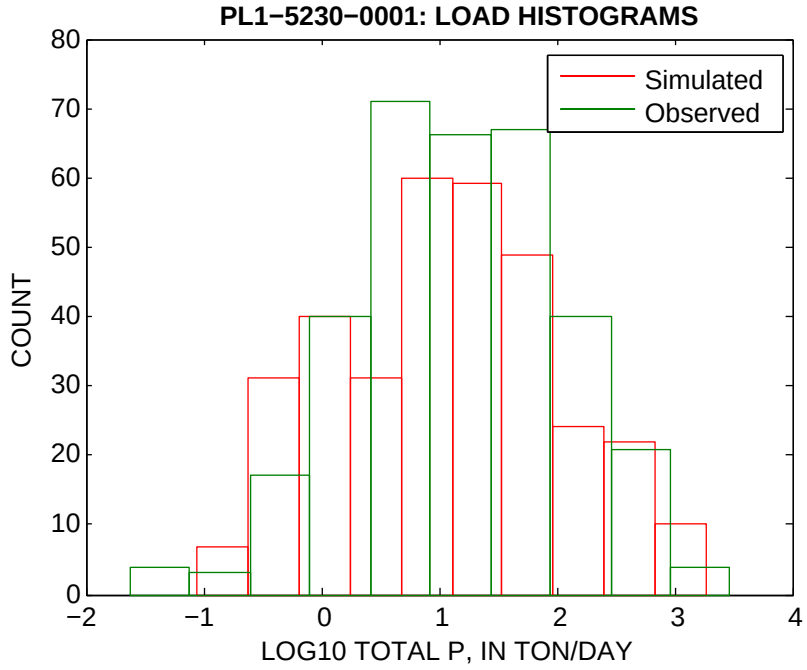


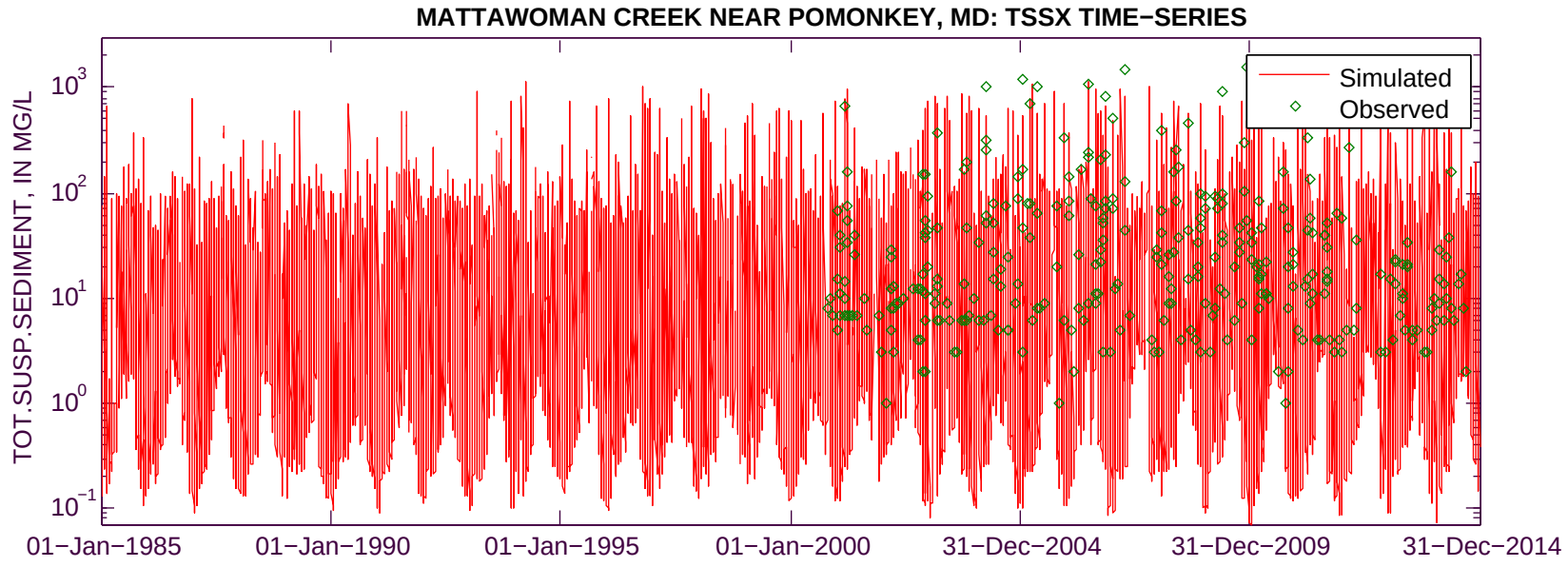
LOAD DATA
LOG10

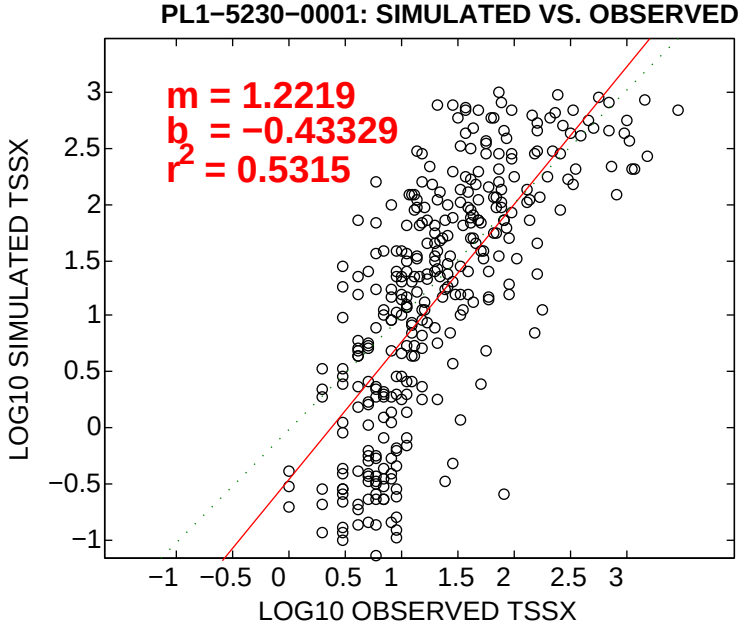


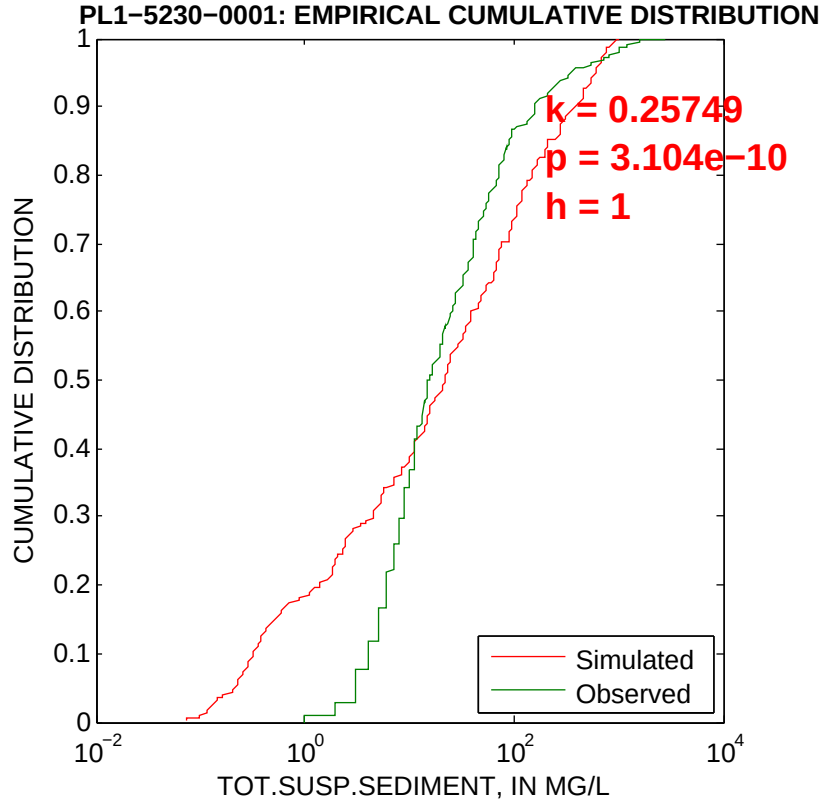












DATA SELECTION

scenario: P620171001WQ | file: TSSX.calib

plot: TSSX - total suspended ...

Dates: 1/1/1985 – 12/31/201

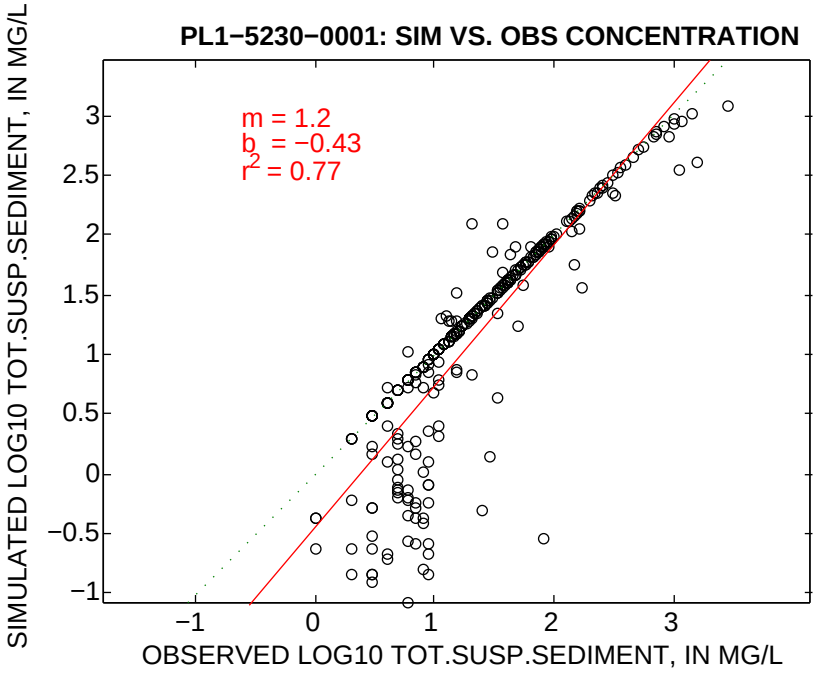
Drive: N/A | Directory: model | Observed: OBS20161101

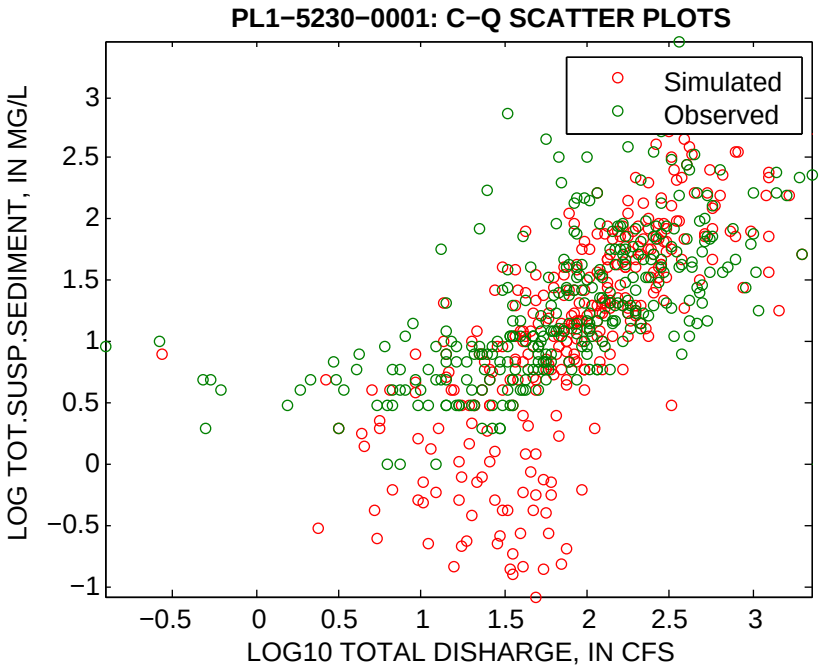
STATISTICS

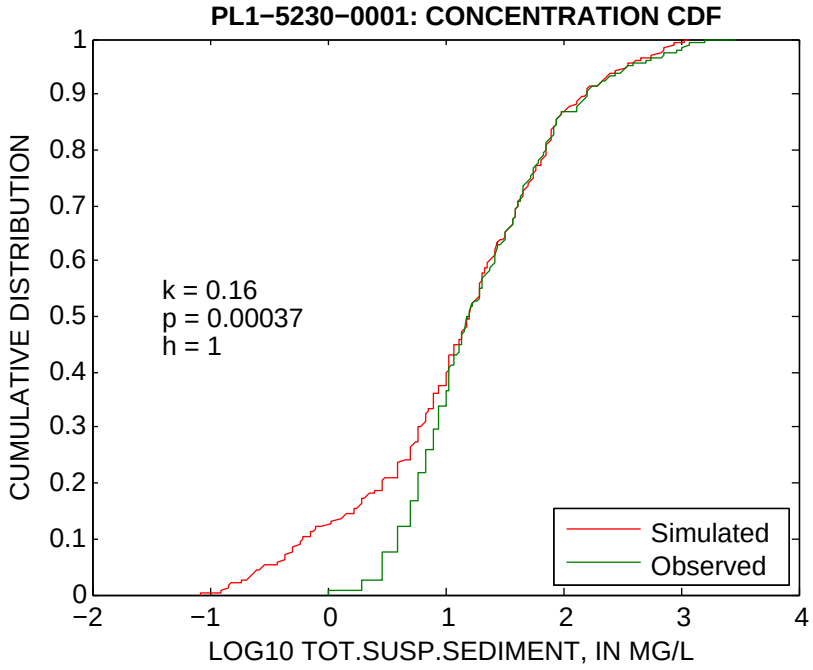
		observe	simulate
n		334	333
min		1	0
		0	-1.13247
mean		85.9385	109.265
		1.33177	1.19394
media		15.5107	22.1945
		1.20412	1.34655
max		2890	991.89
		3.4609	2.99646
varian		62991.3	37478.5
		0.414543	1.16441
JB		0.001	0.001
		0.001	0.002667
		ra	log
%		27.1438	-10.3491
err.va		56602.4	0.584978
rel.std.err		0.898575	1.41114
mod.eff		0.101425	-0.411138

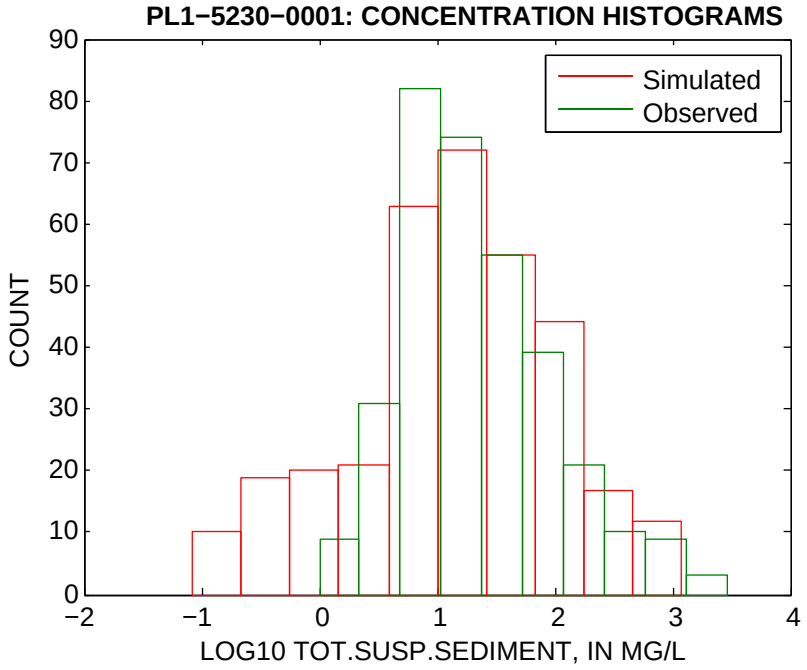
VERSION 2.1

ALL DATA
LOG10

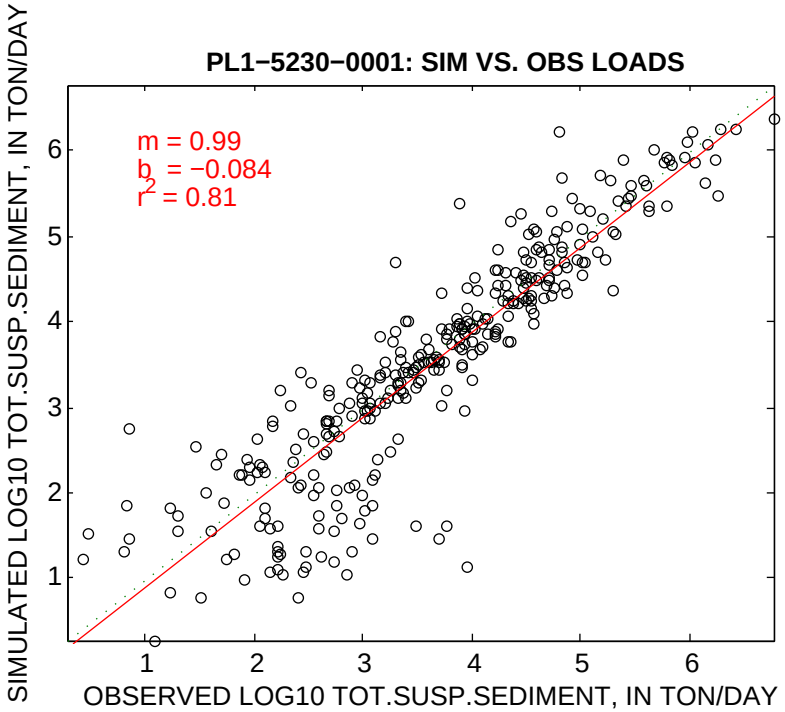


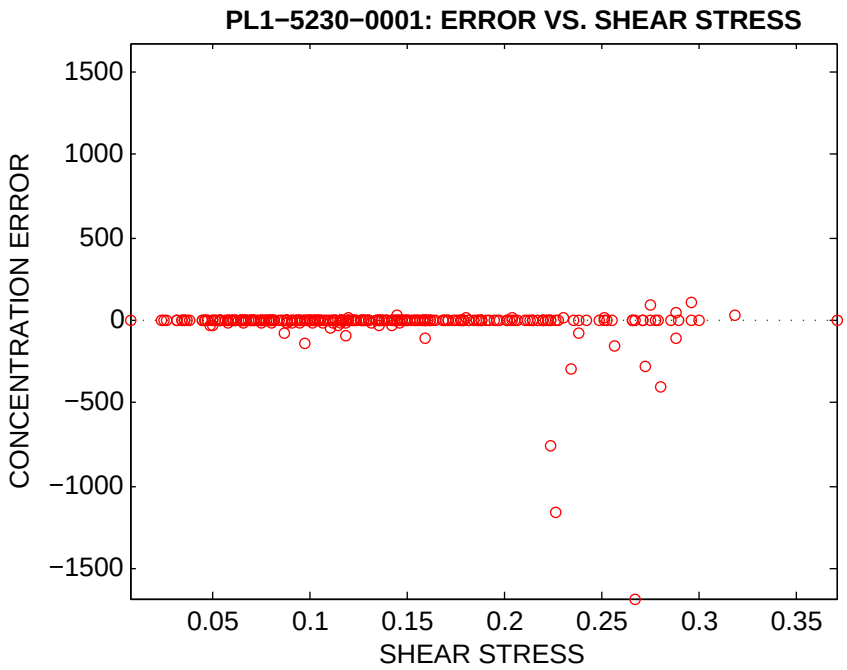


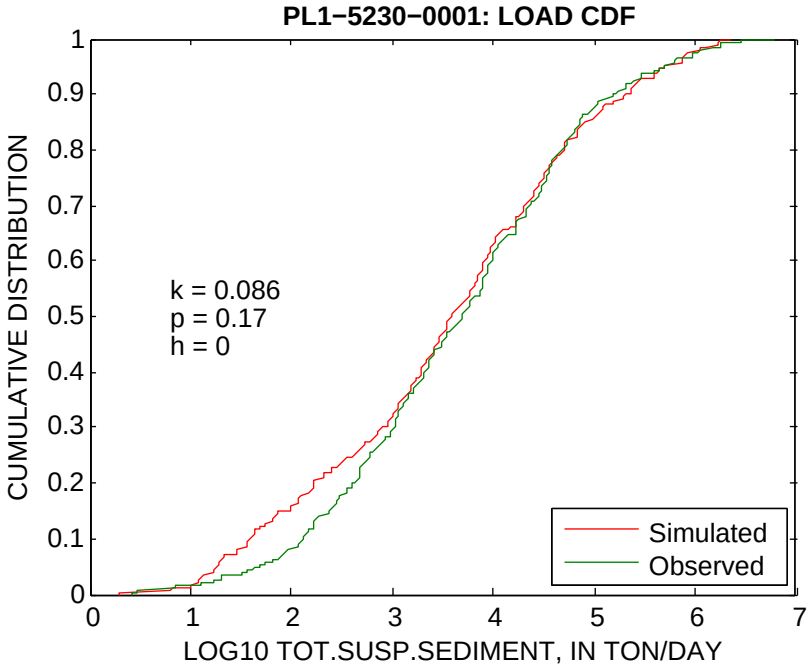


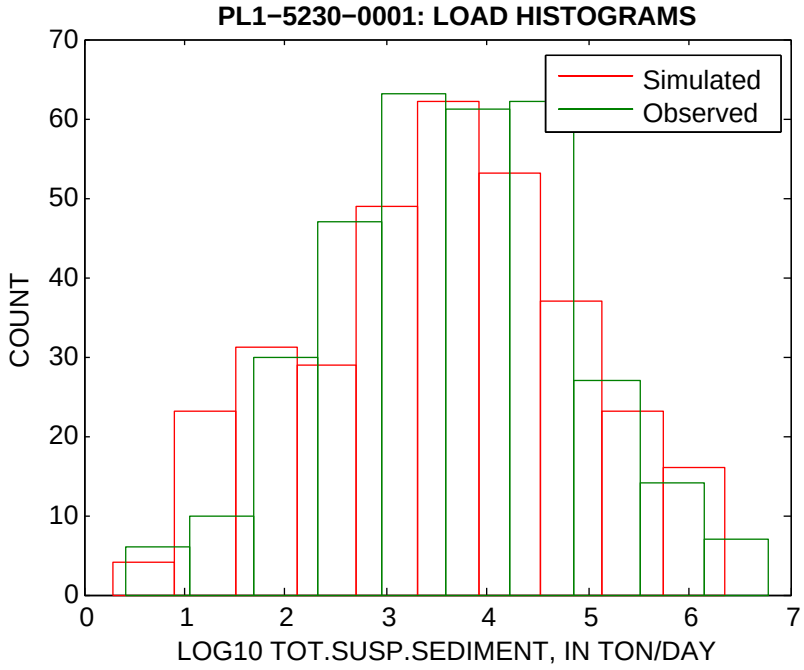


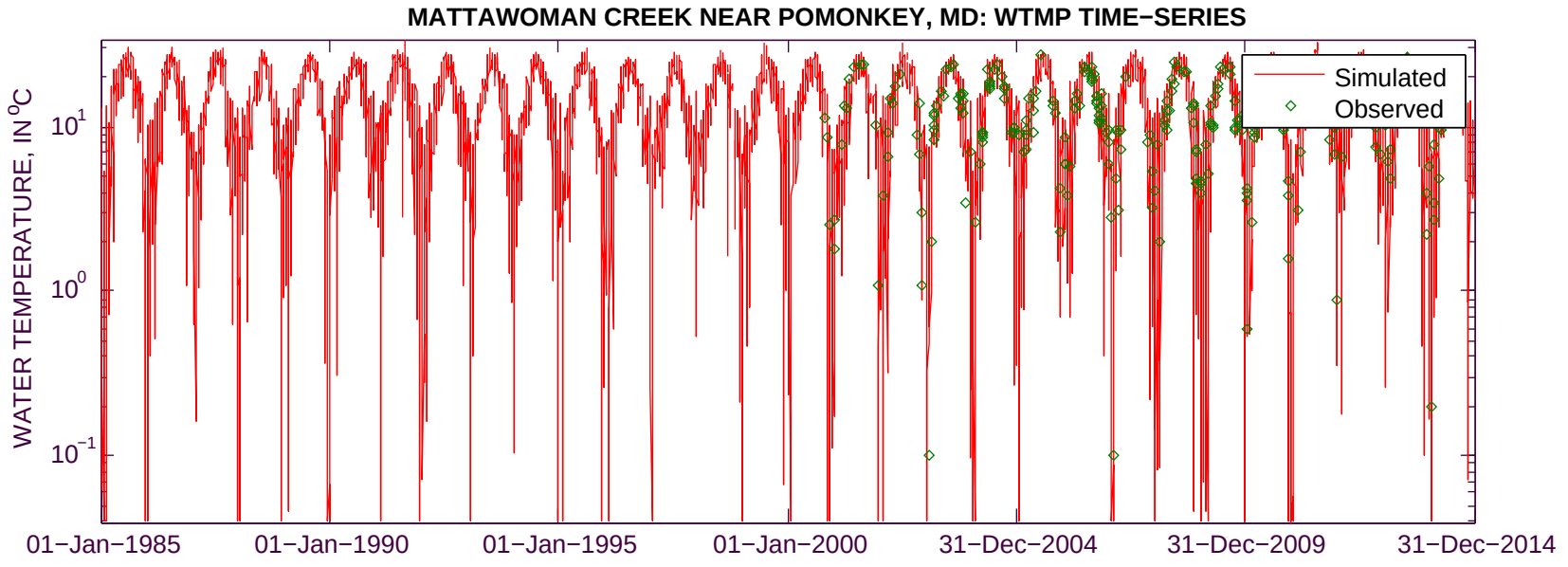
LOAD DATA
LOG10

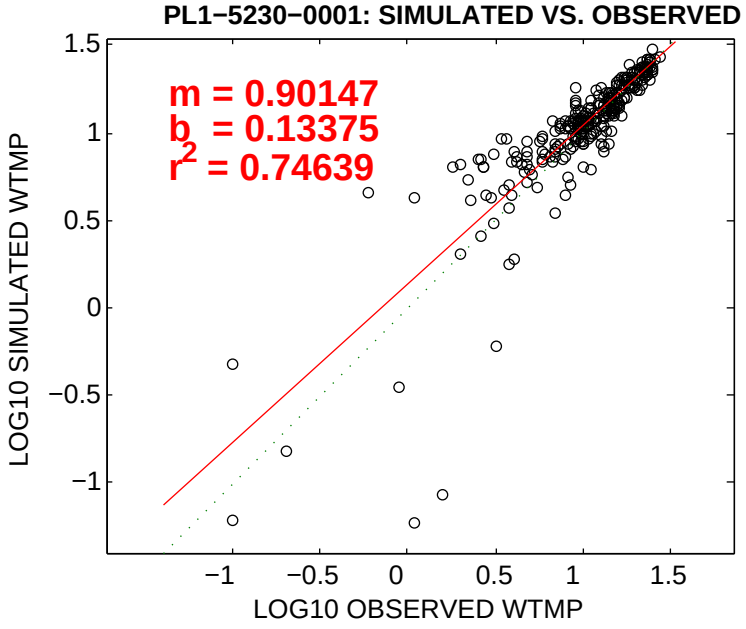


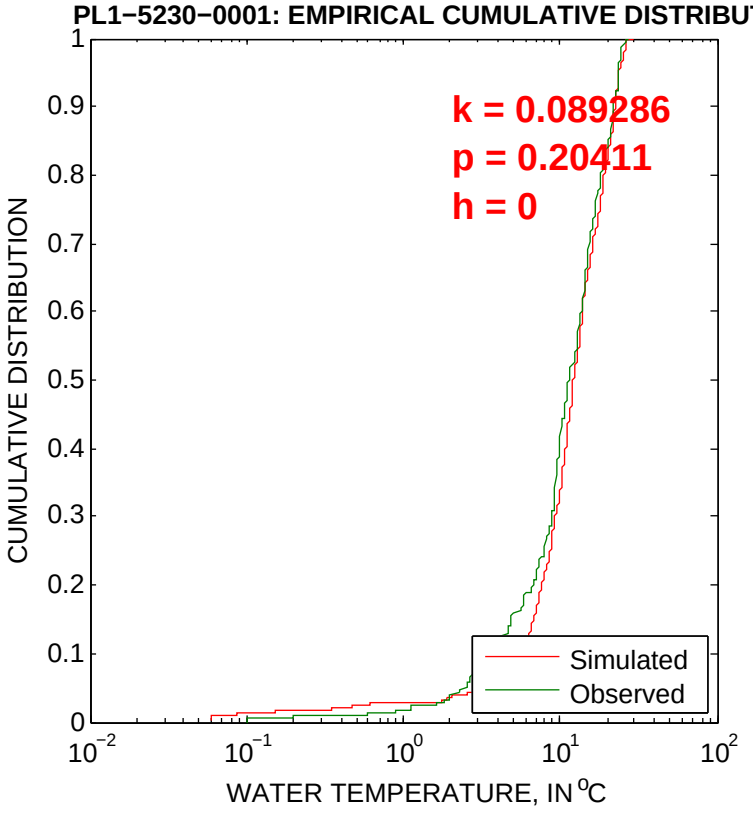












DATA SELECTION

scenario	file
P620171001WQ	WTMP.calib

plot: WTMP - water tempera...

Dates: 1/1/1985 – 12/31/201

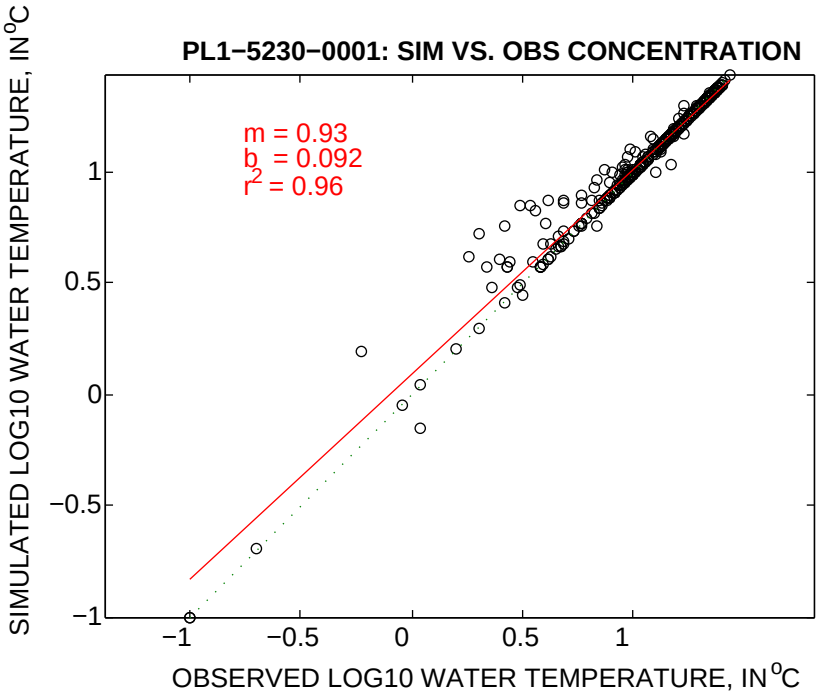
Drive	Directory	Observed
N/A	model	OBS20161101

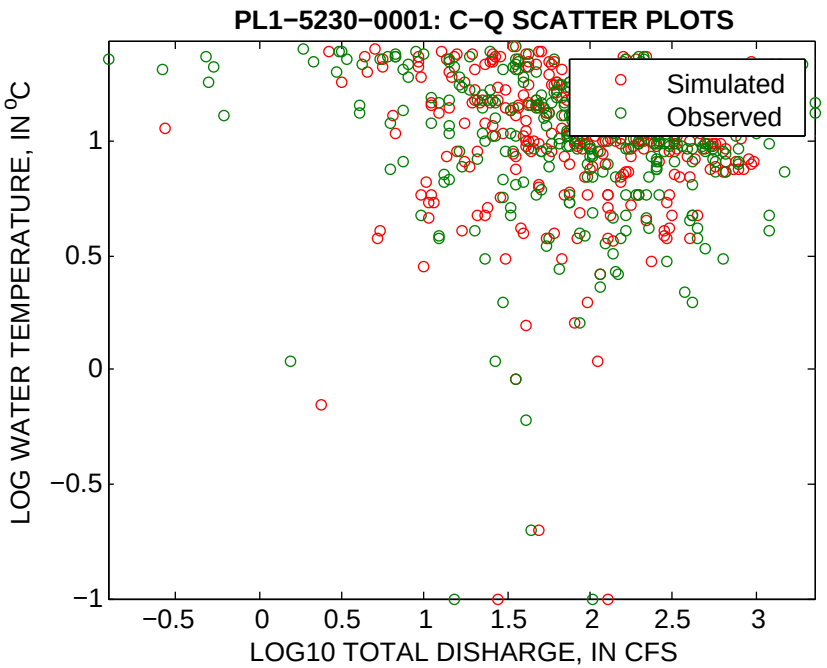
STATISTICS

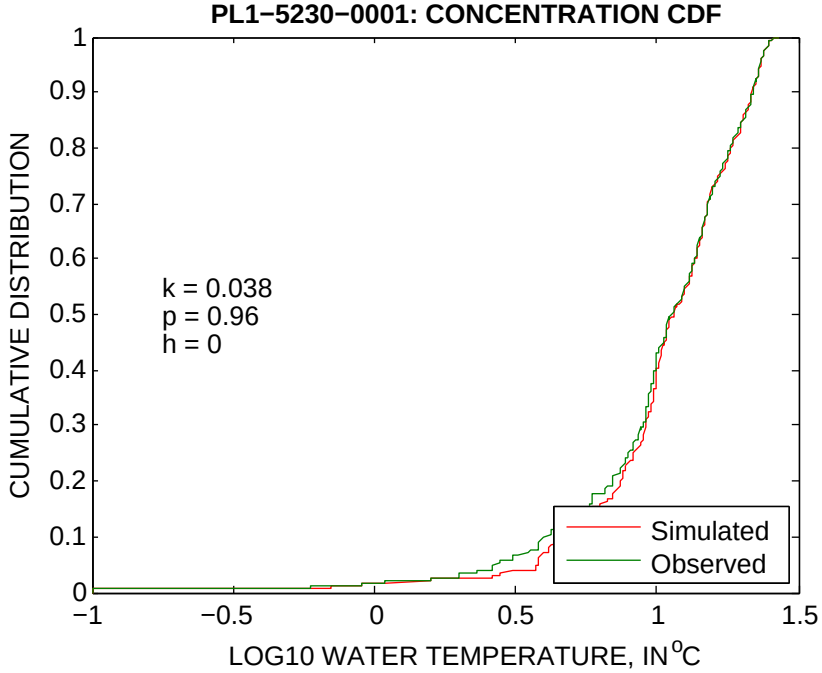
		observe	simulate
n		280	279
min		0.1	0
		-1	-1.22413
mean		12.3561	13.1269
		0.998978	1.0343
media		11.4	12.1715
		1.0607	1.08597
max		27.2	29.491
		1.43457	1.46969
varian		41.8061	40.007
		0.124536	0.135592
JB		0.015848	0.043910
		0.001	0.001
		ra	log
%		6.23844	3.53585
err.va		6.45999	0.0368486
rel.std.err		0.154523	0.295886
mod.eff		0.845477	0.704114

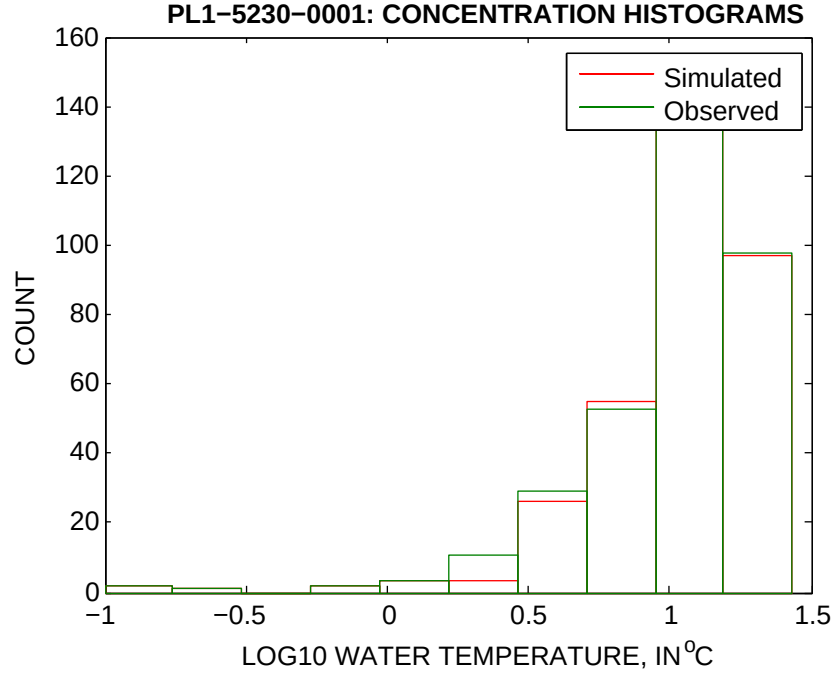
VERSION 2.1

ALL DATA
LOG10

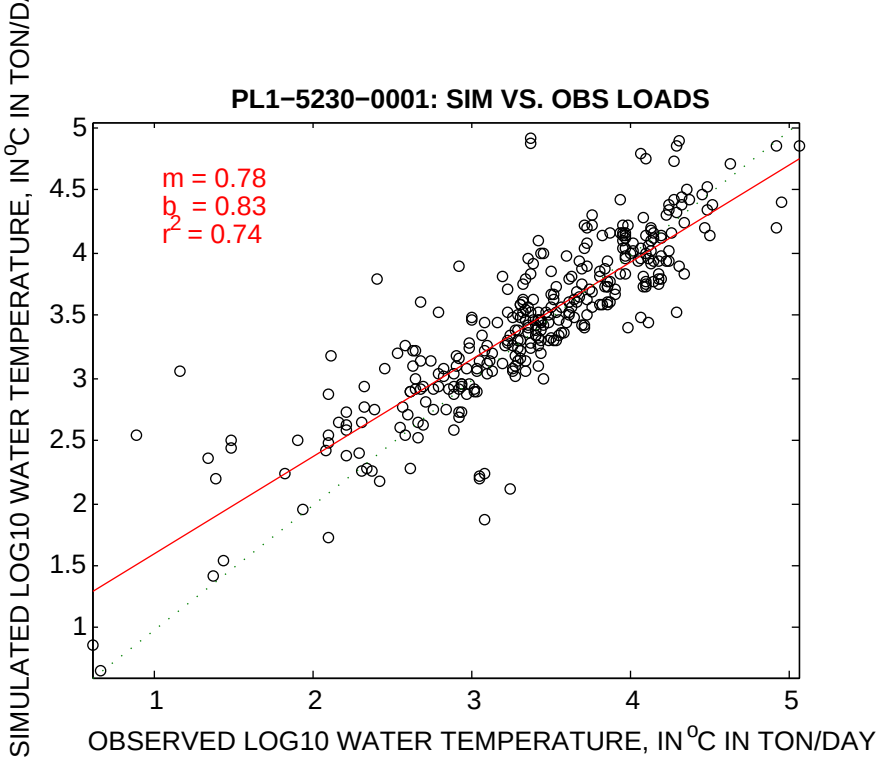


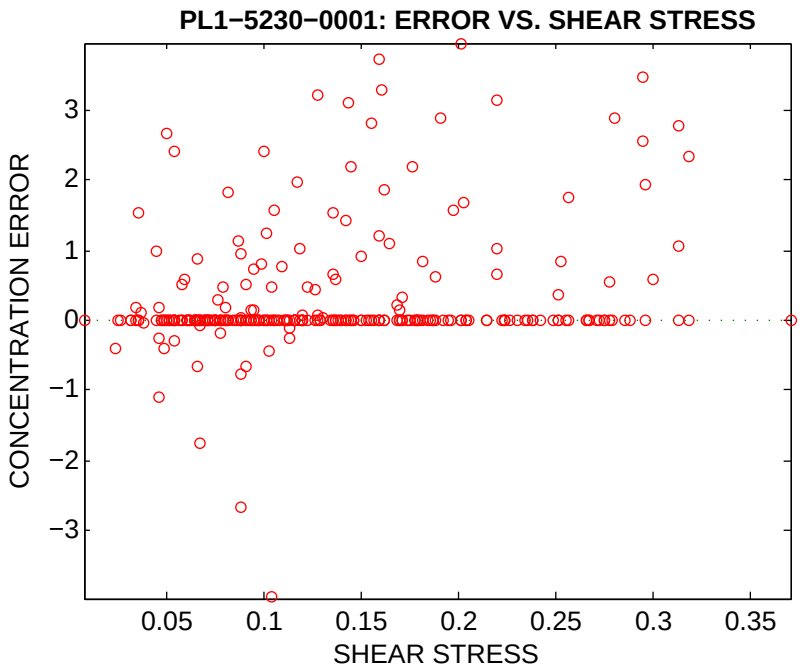


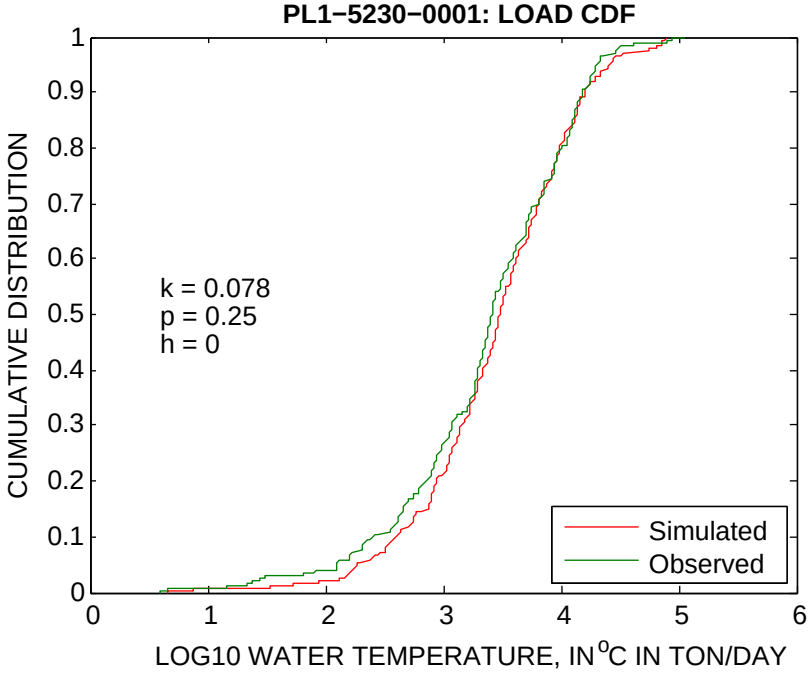


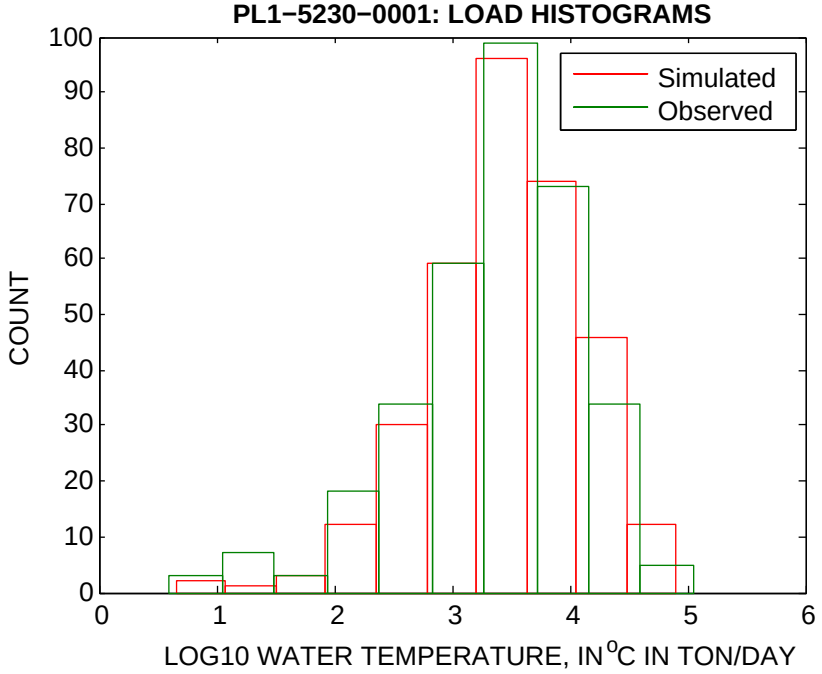


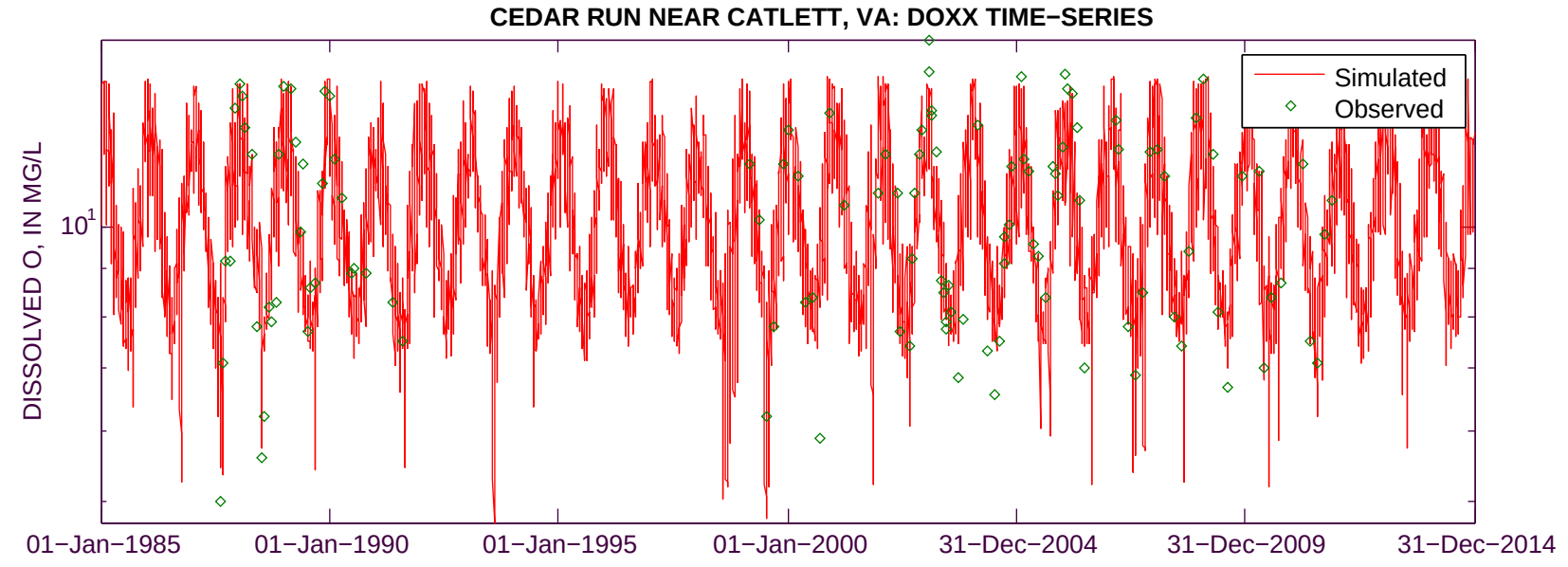
LOAD DATA
LOG10

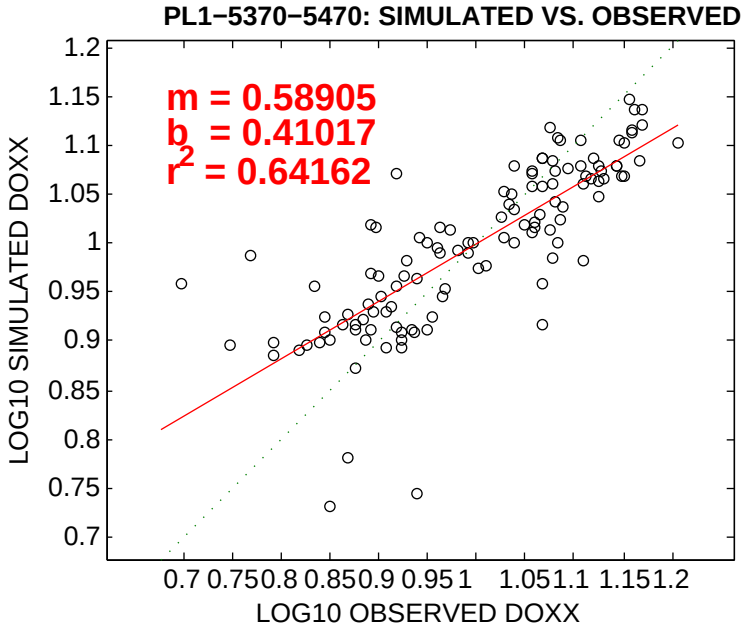


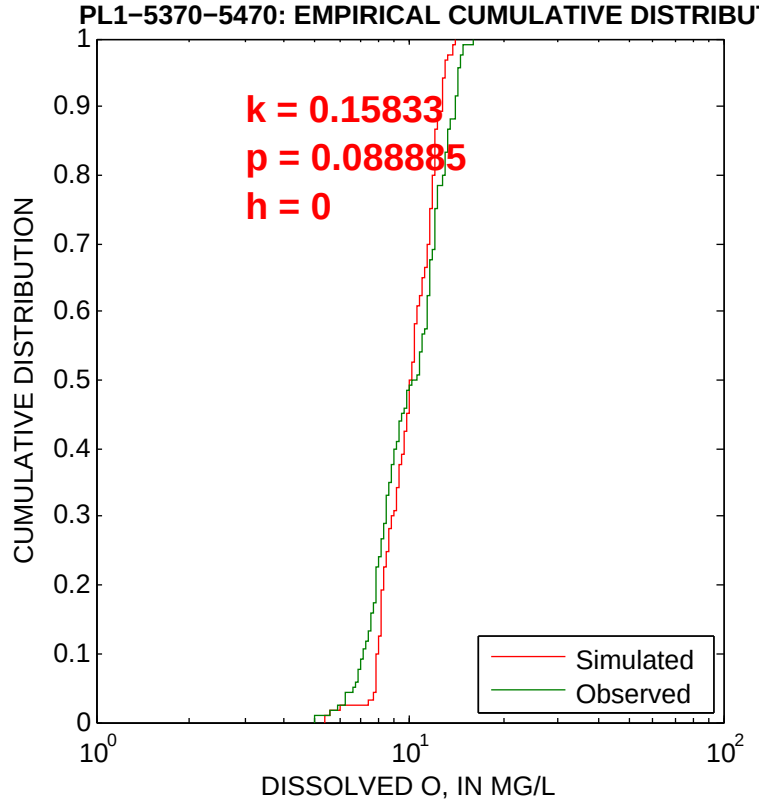












DATA SELECTION

scenario: P620171001WQ | file: DOXX.calib

plot: DOXX - dissolved oxygen

Dates: 1/1/1985 – 12/31/201

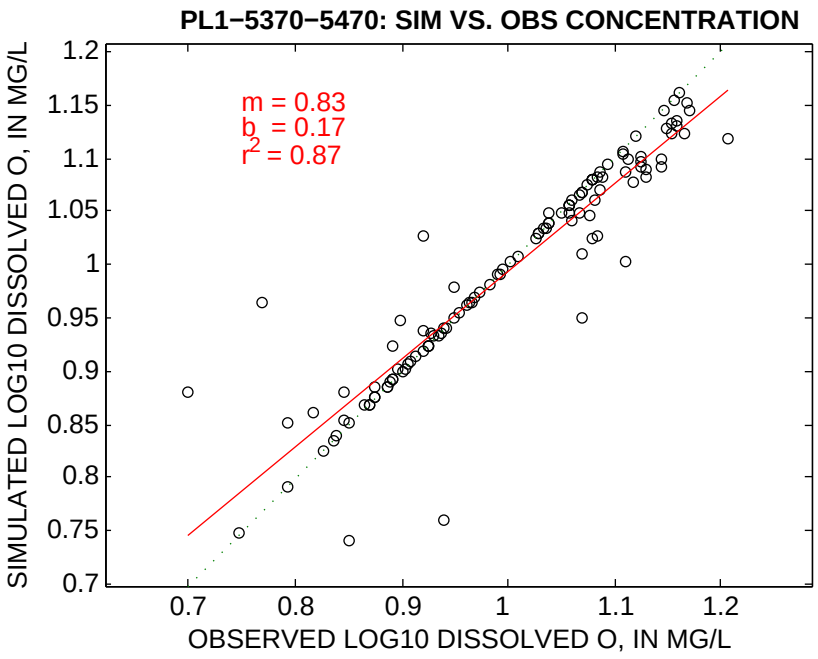
Drive: N/A | Directory: model | Observed: OBS20161101

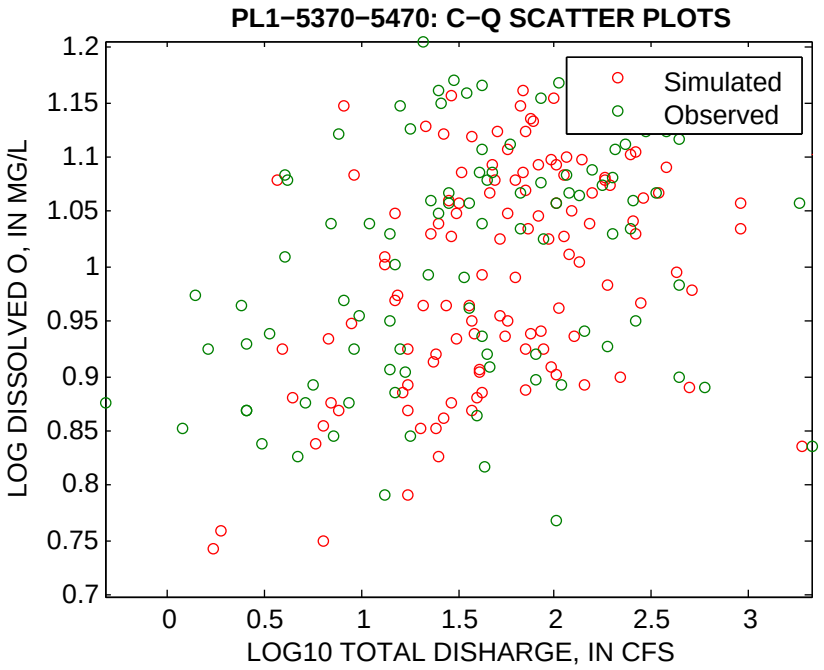
STATISTICS

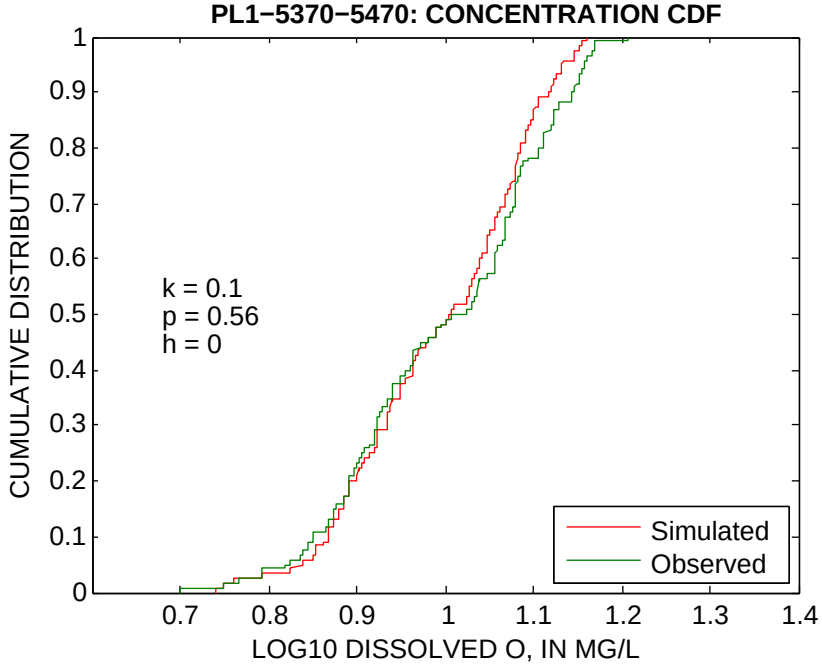
	n	120	120
		observe	simulate
min		5	5.383
		0.69897	0.731024
mean		10.3043	10.1434
		0.99907	0.998678
media		10.4	10.079
		1.01695	1.00341
max		16.08	14.054
		1.20629	1.1478
varian		6.57153	3.39967
		0.0125747	0.00680031
JB		0.045835	0.265566
		0.060418	0.041689
		ra	log
%		-1.56205	-0.0392357
err.va		2.07899	0.00456083
rel.std.err		0.316363	0.362698
mod.eff		0.683637	0.637302

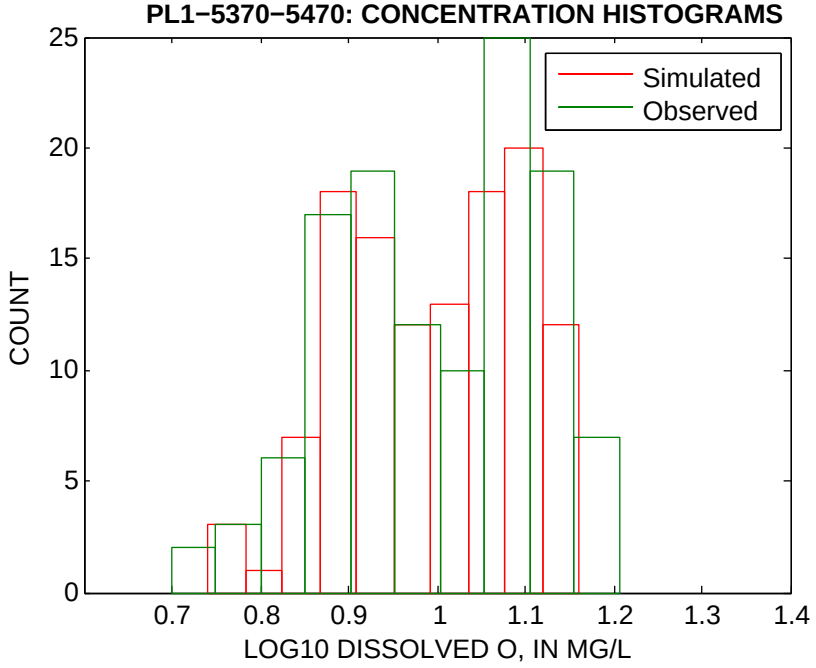
VERSION 2.1

ALL DATA
LOG10

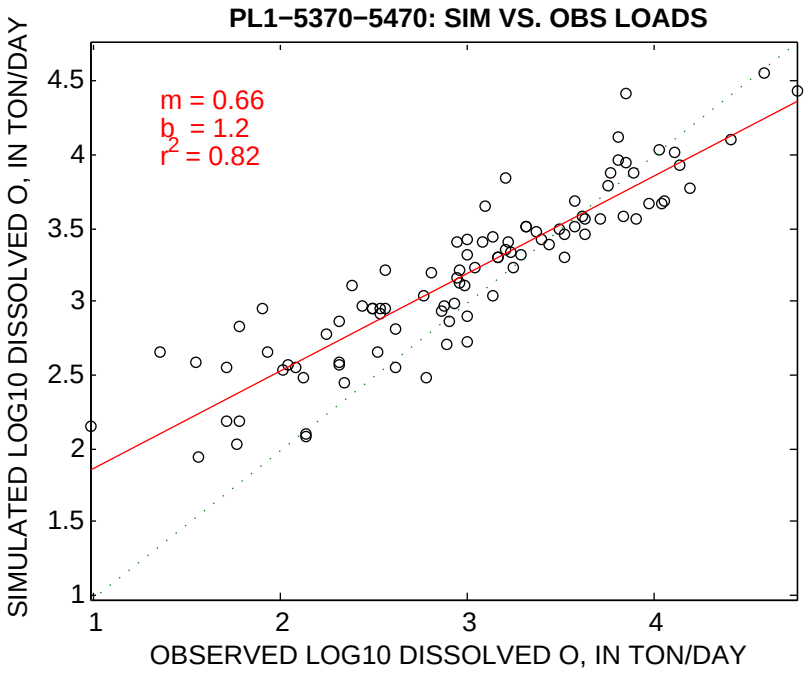


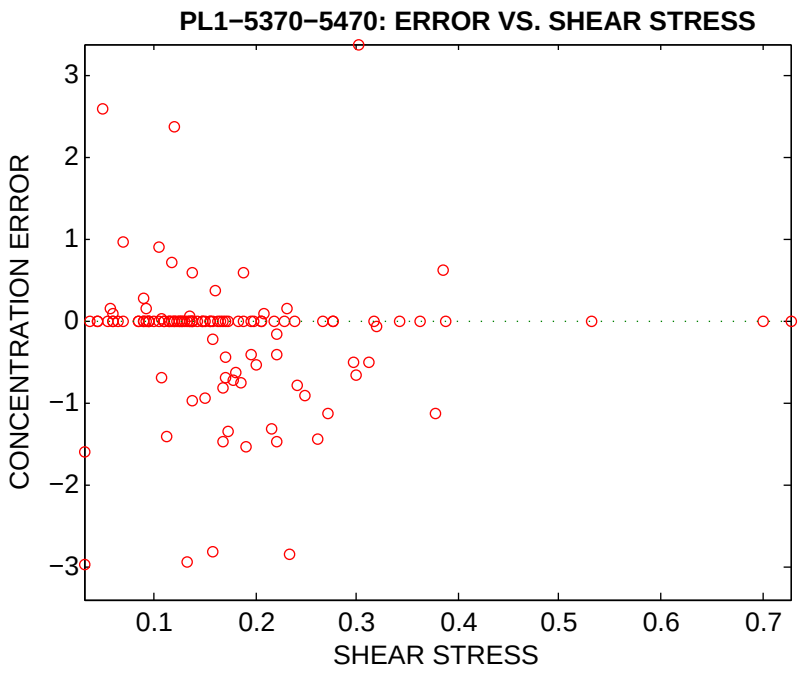


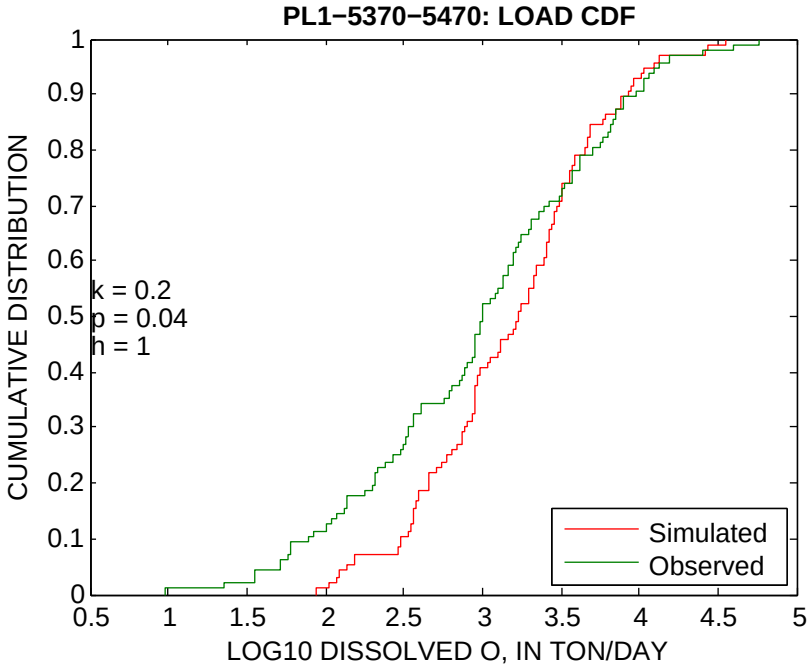


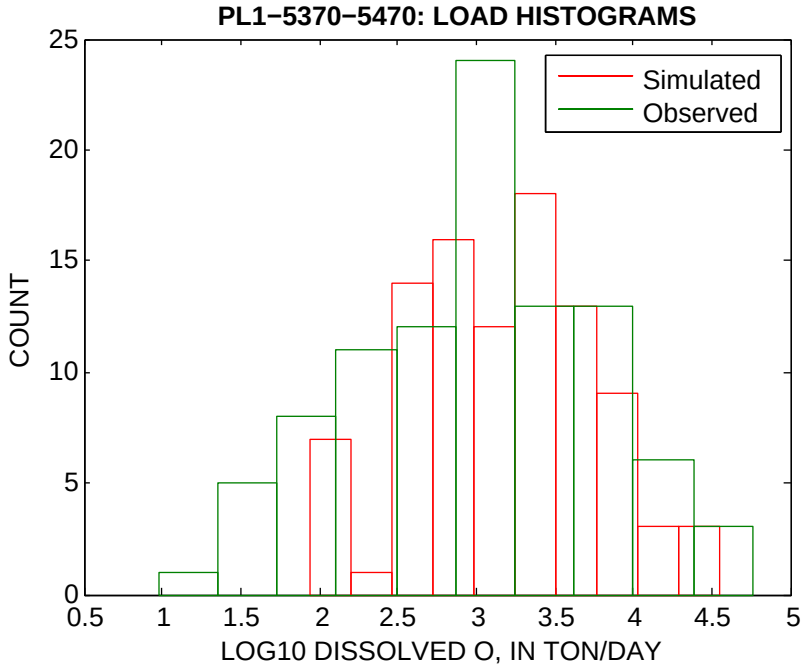


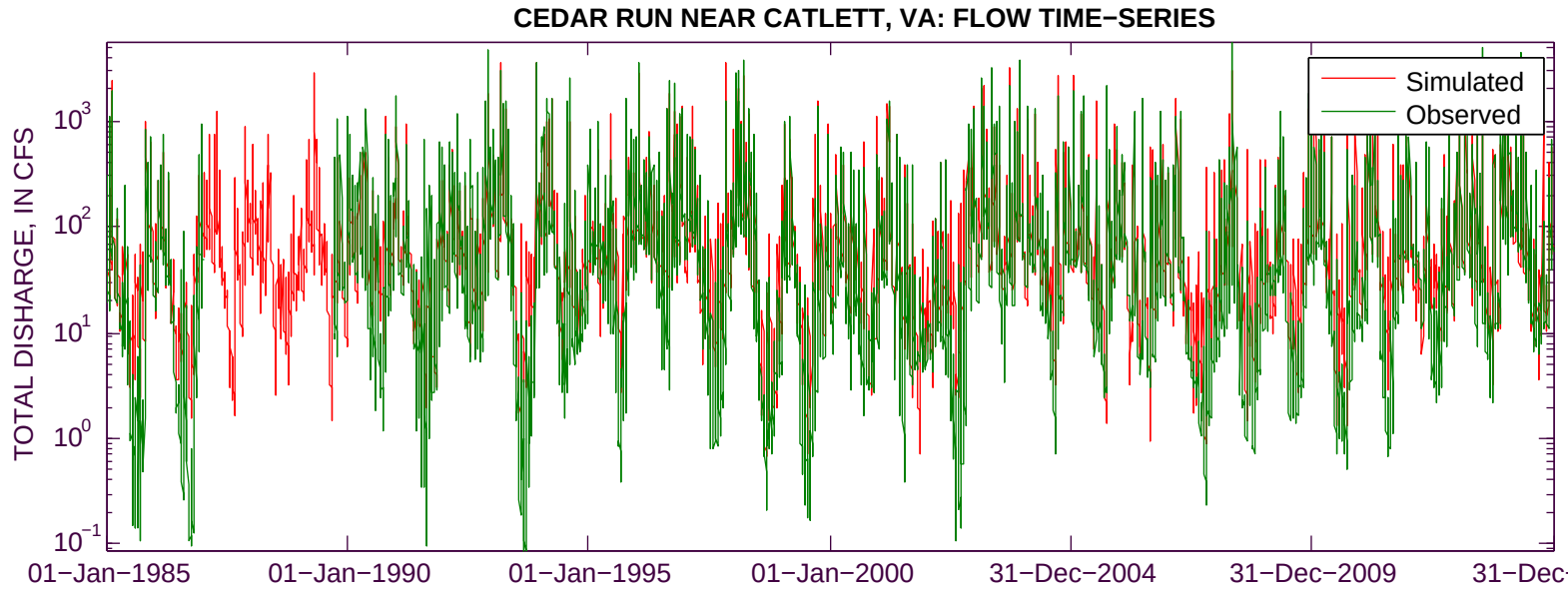
LOAD DATA
LOG10

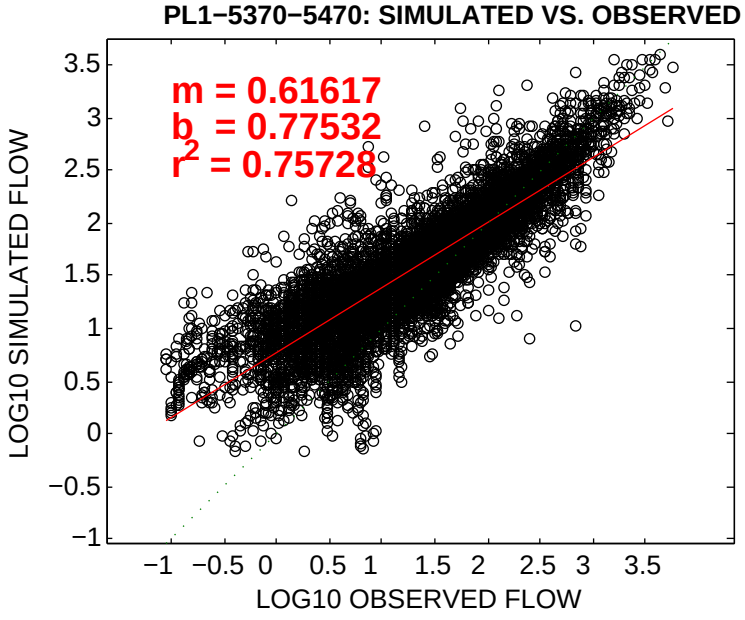


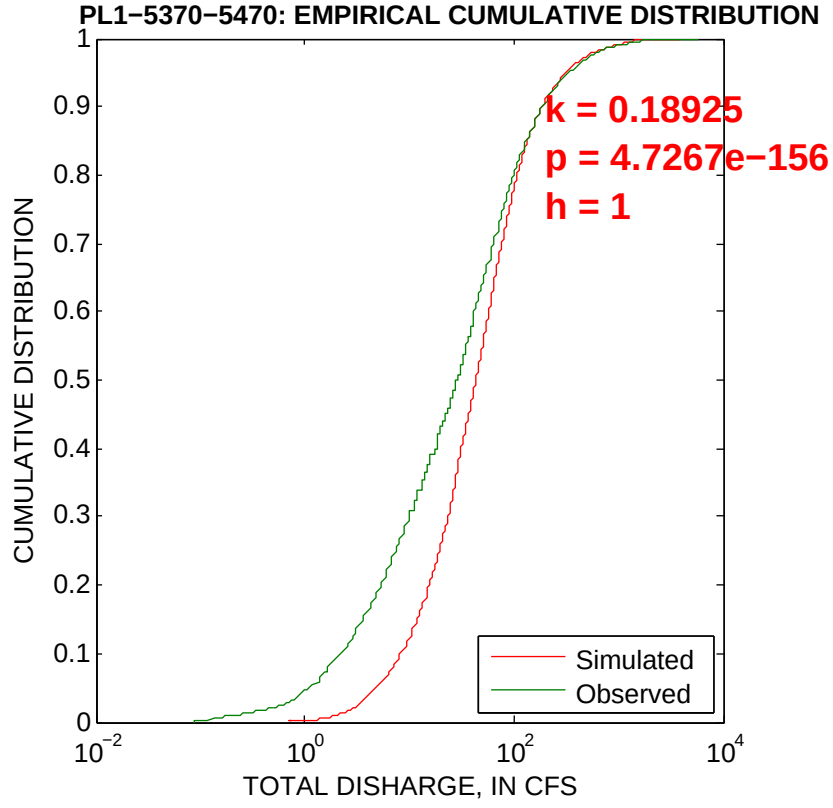












DATA SELECTION

scenario	file
P620171001WQ	FLOW.calib

plot: FLOW - total discharge

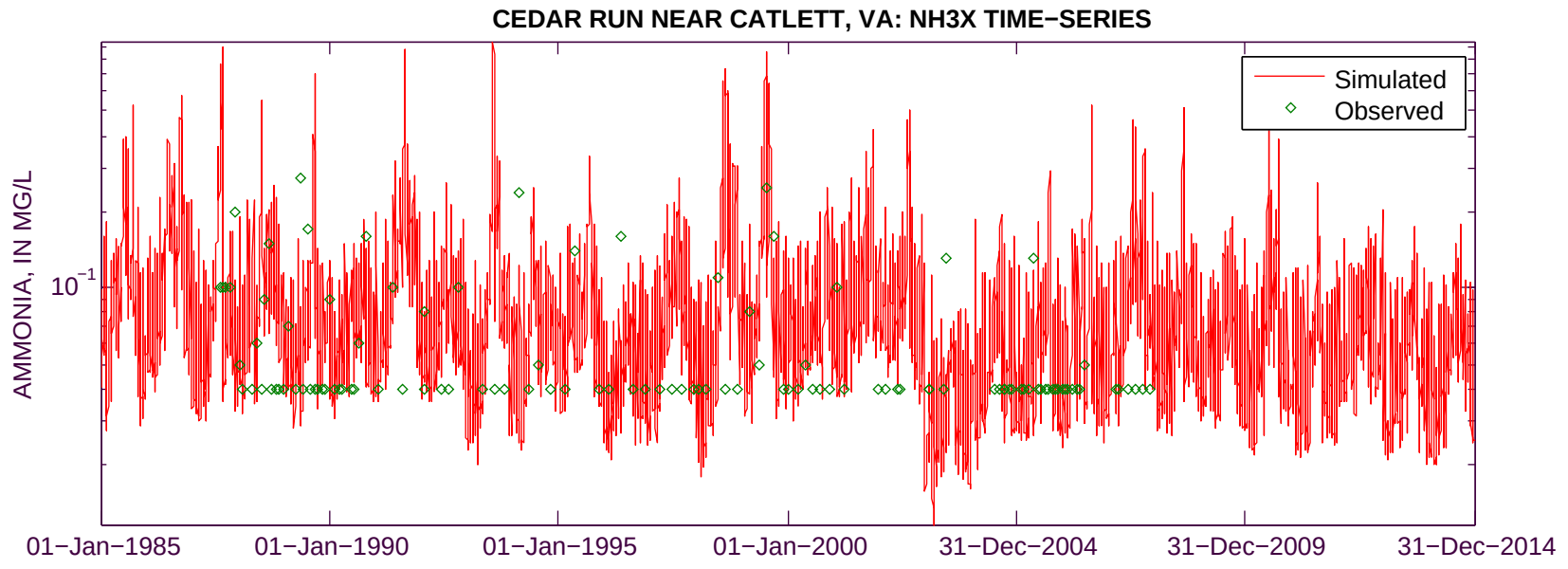
Dates 1/1/1985 12/31/201

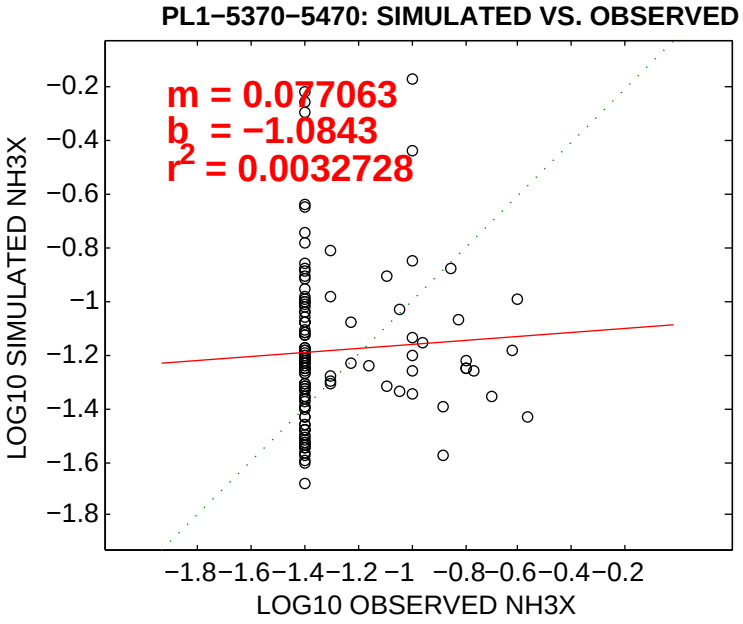
Drive	Directory	Observed
N/A	model	OBS20161101

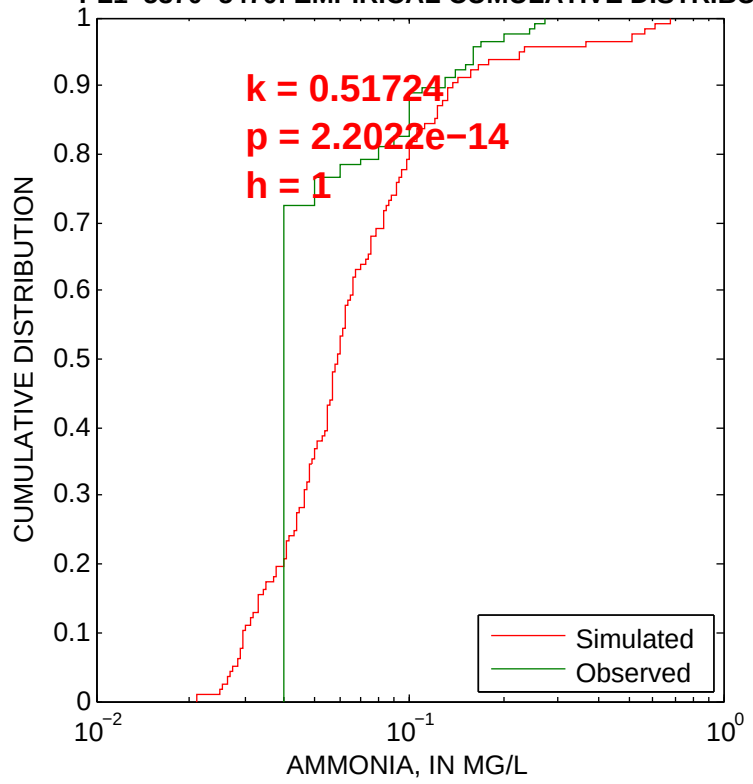
STATISTICS

n	9971	9971
	observe	simulate
min	0.0888775	0.6871
	-1.05121	-0.16298
mean	88.3098	93.7736
	1.37466	1.62235
media	28.0889	43.574
	1.44853	1.63923
max	5710.09	3913.7
	3.75664	3.59259
varian	53376.7	40432.1
	0.579095	0.290333
JB	0.001	0.001
	0.001	0.001
	ra	log
%	6.18701	18.018
err.va	15654.1	0.217142
rel.std.err	0.293276	0.374967
mod.eff	0.706724	0.625033

VERSION 2.1







DATA SELECTION

scenario	file
P620171001WQ	NH3X.calib

plot: NH3X - ammonia

Dates: 1/1/1985 – 12/31/201

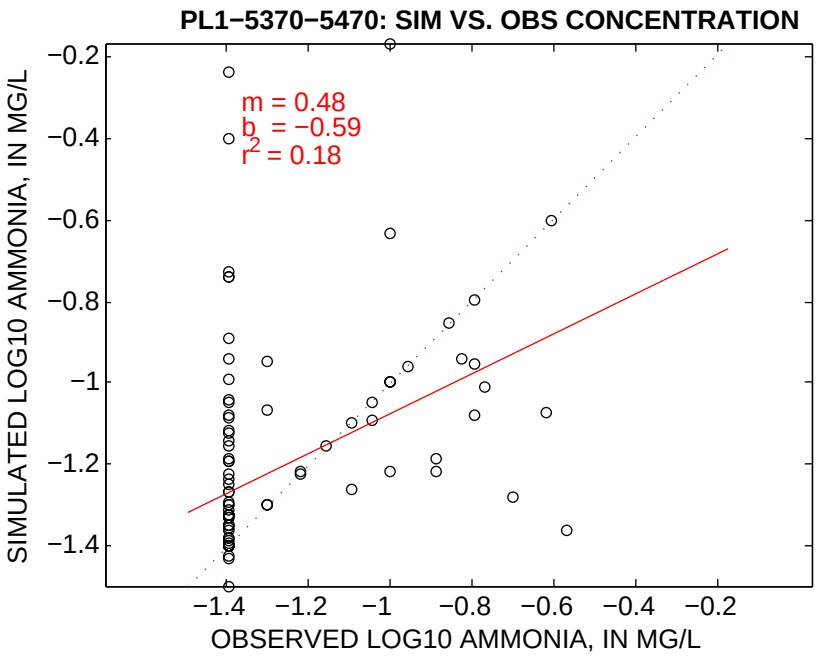
Drive	Directory	Observed
N/A	model	OBS20161101

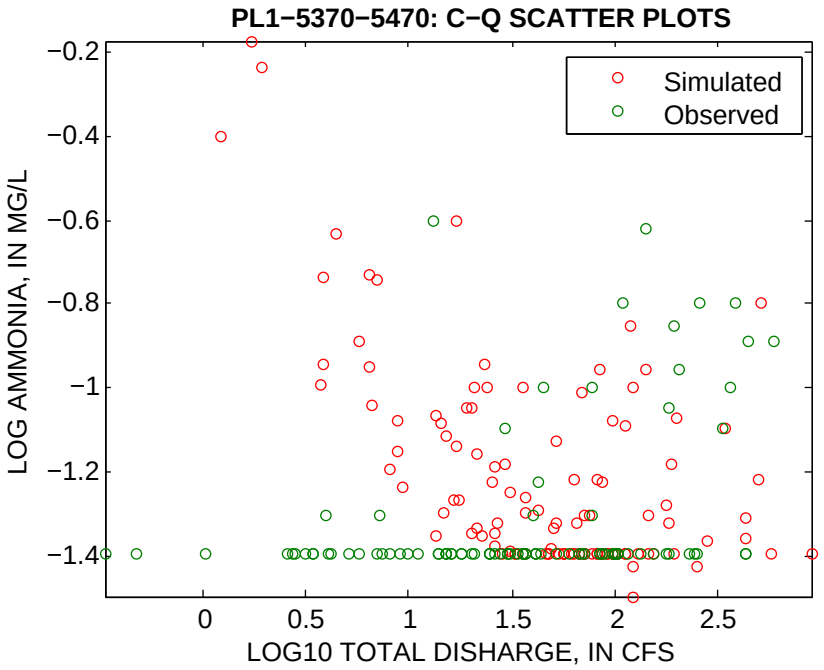
STATISTICS

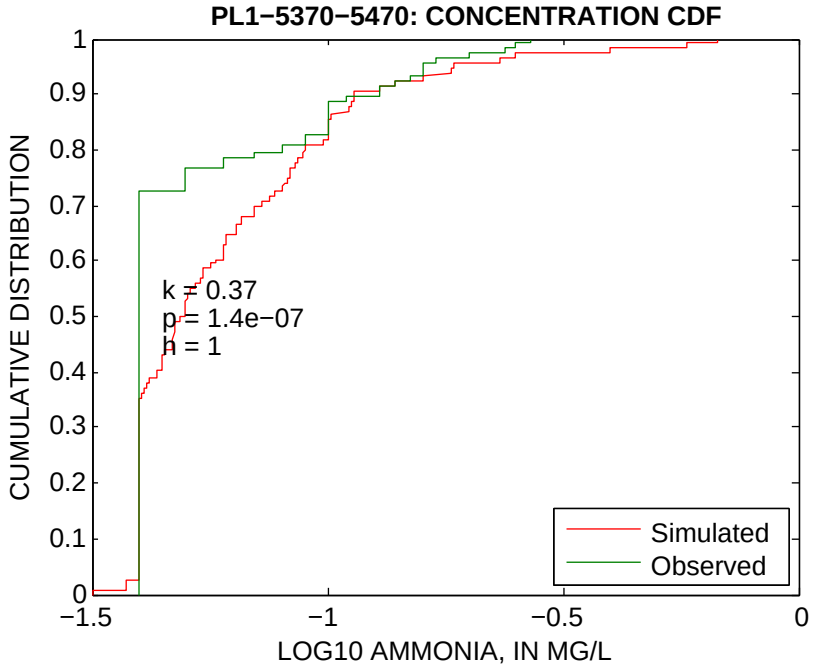
	n	116	116
		observe	simulate
min		0.04	0.020953
		-1.39794	-1.67875
mean		0.0612931	0.0890025
		-1.28337	-1.18325
media		0.04	0.0585795
		-1.39794	-1.23225
max		0.27	0.68427
		-0.568636	-0.164773
varian		0.0021644	0.0114931
		0.0471599	0.0855747
JB		0.001	0.001
		0.001	0.001
		ra	log
%		45.208	-7.80173
err.va		0.0144382	0.135578
rel.std.err		6.67075	2.87487
mod.eff		-5.67075	-1.87487

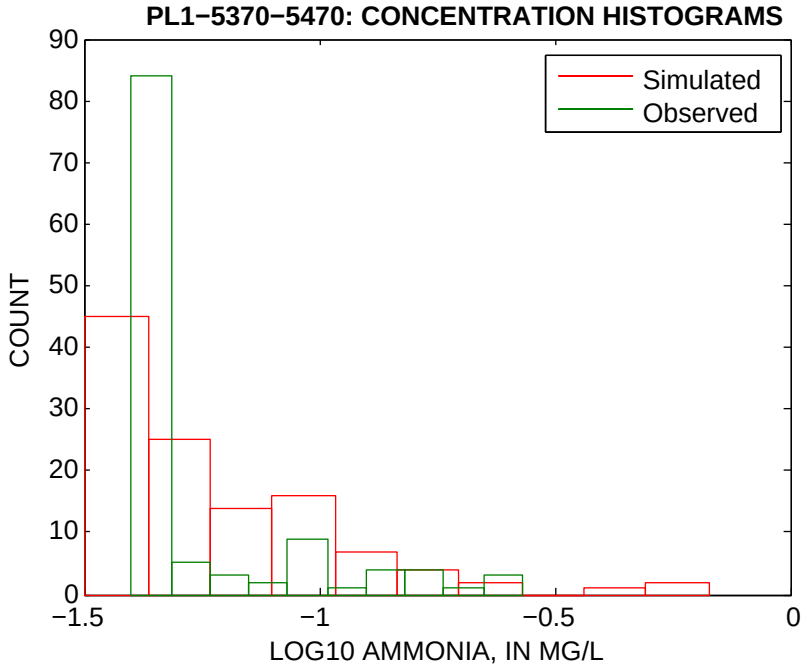
VERSION 2.1

ALL DATA
LOG10

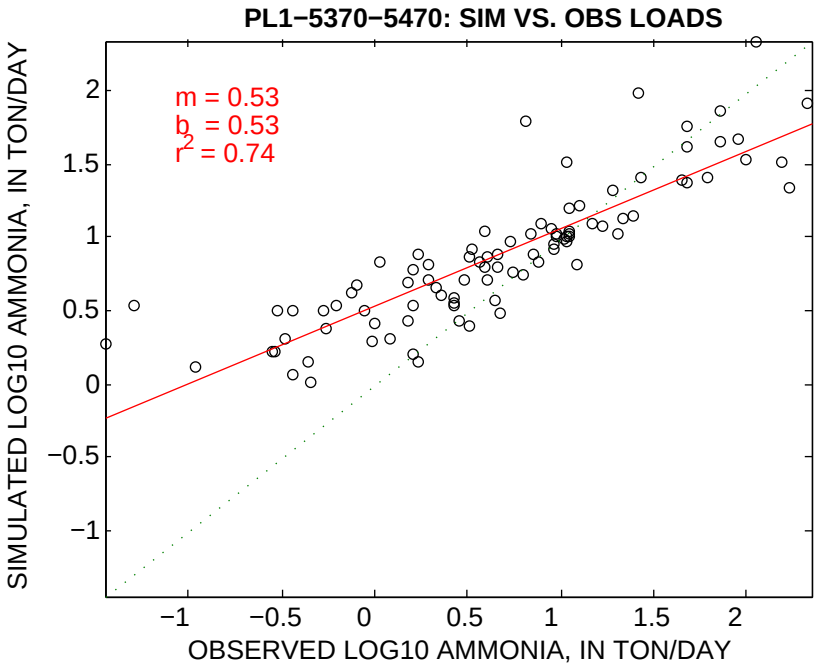


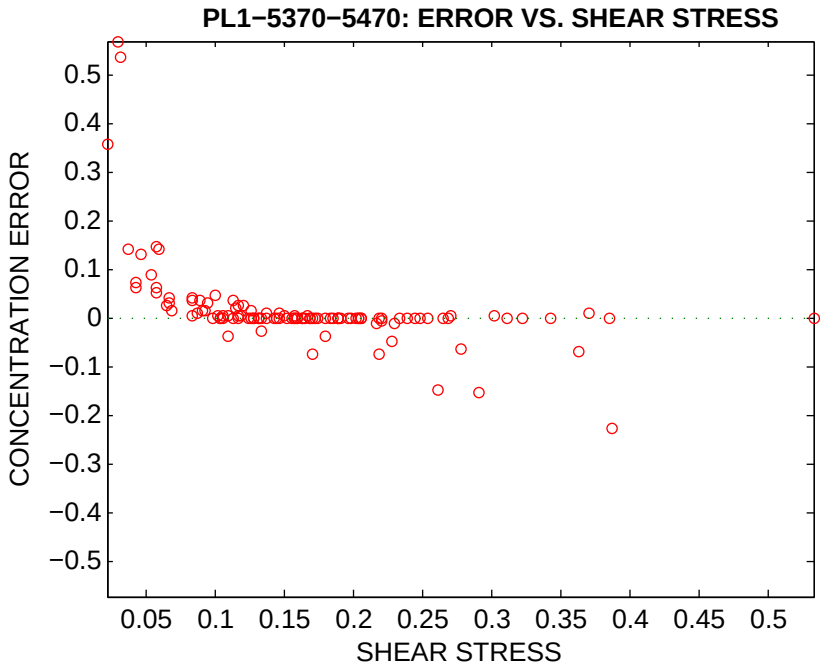


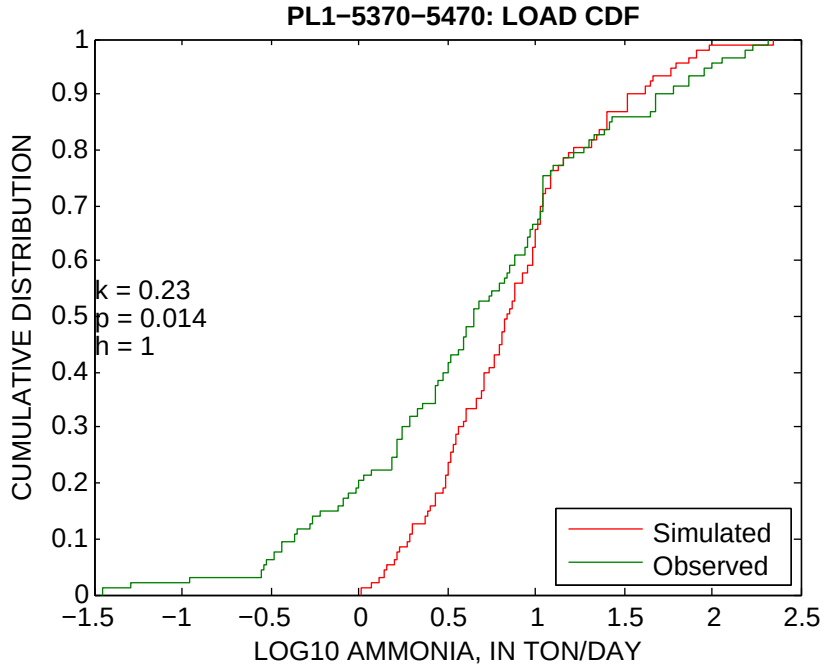


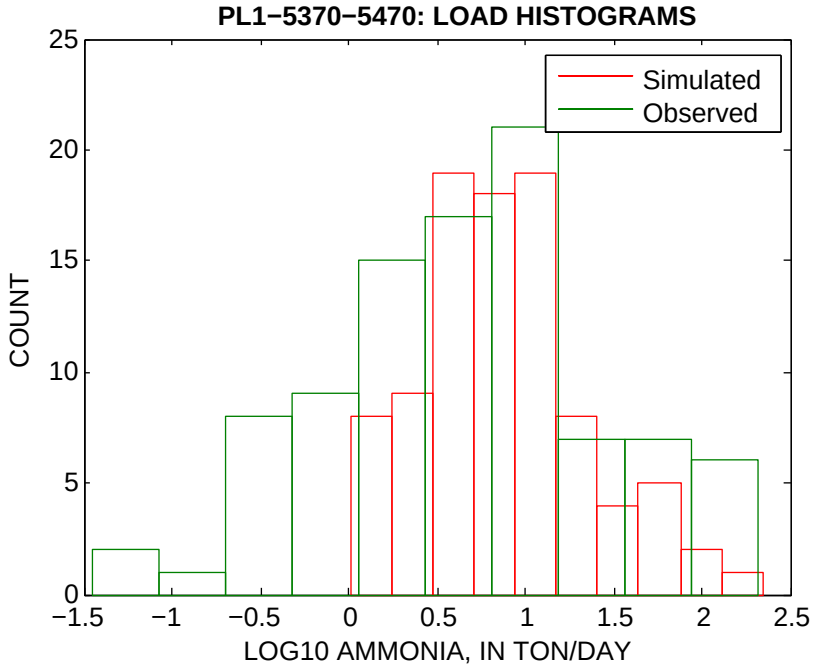


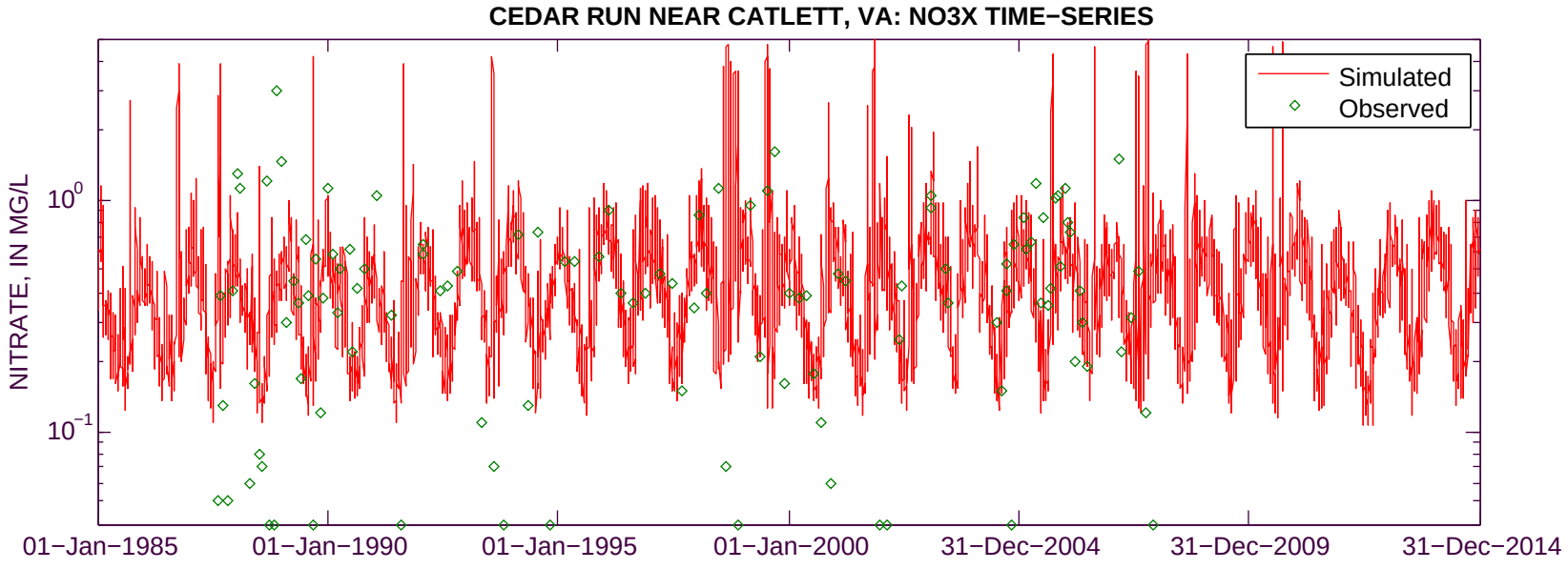
LOAD DATA
LOG10

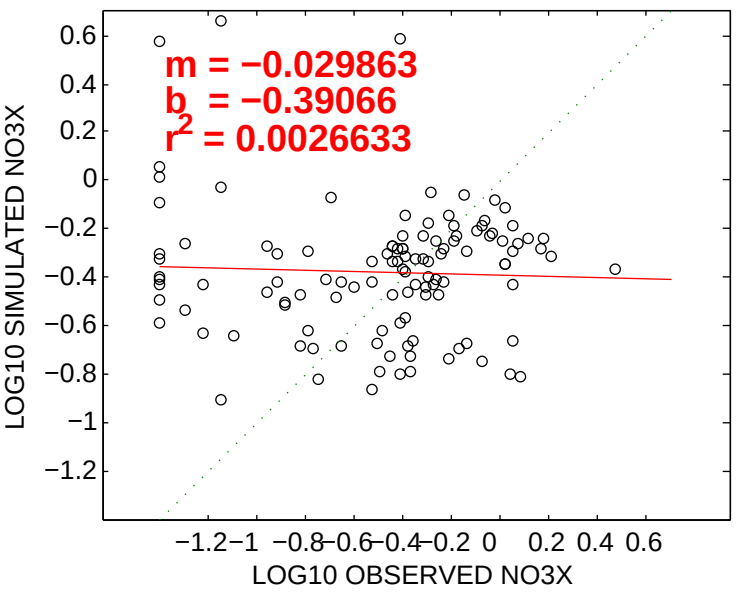


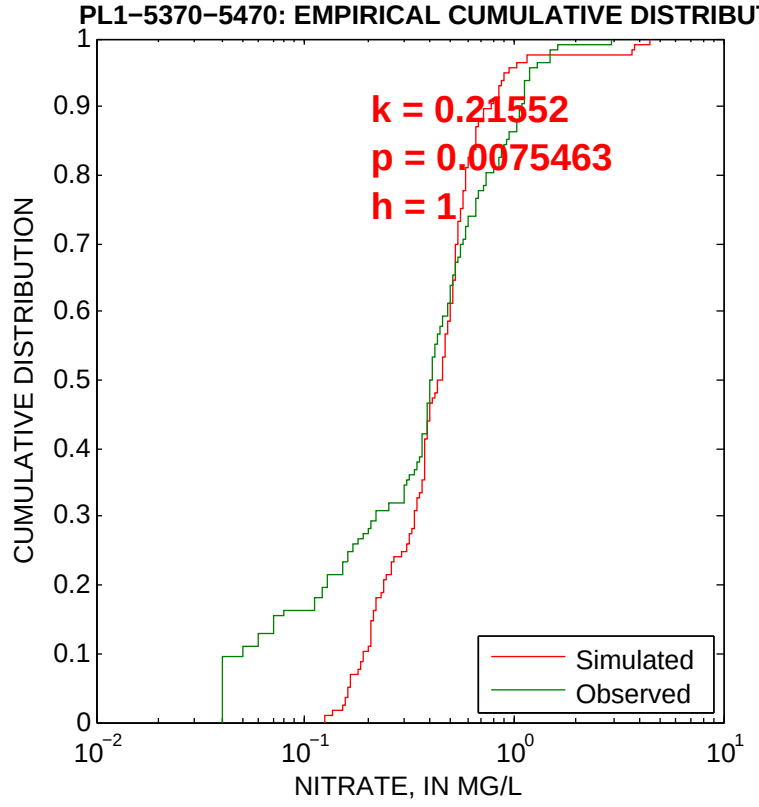












DATA SELECTION

scenario	file
P620171001WQ	NO3X.calib

plot: NO3X - nitrate

Dates 1/1/1985 12/31/201

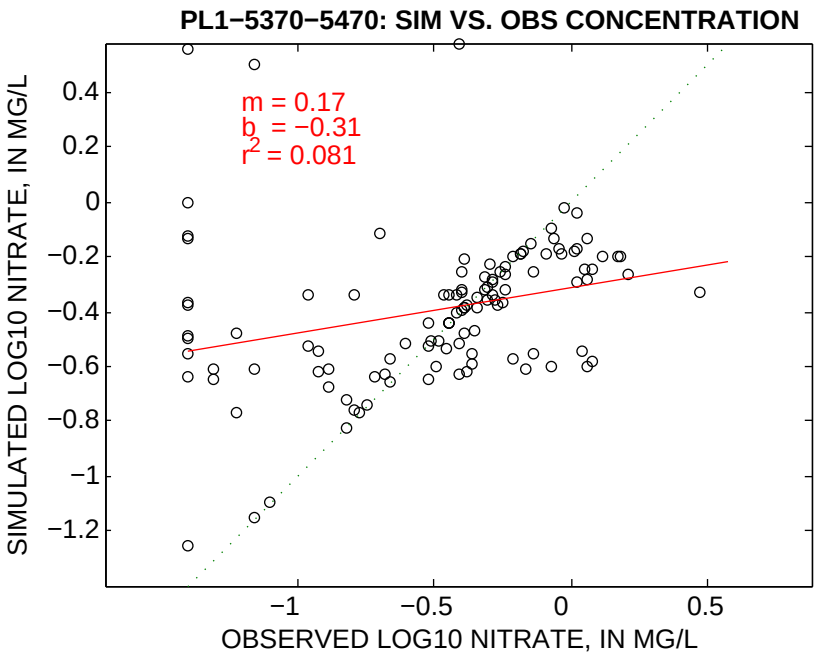
Drive	Directory	Observed
N/A	model	OBS20161101

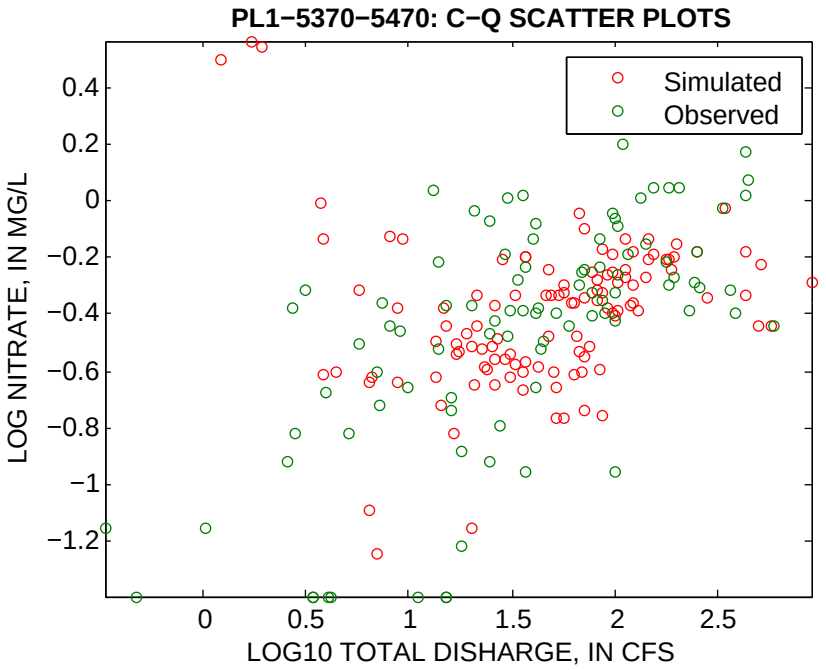
STATISTICS

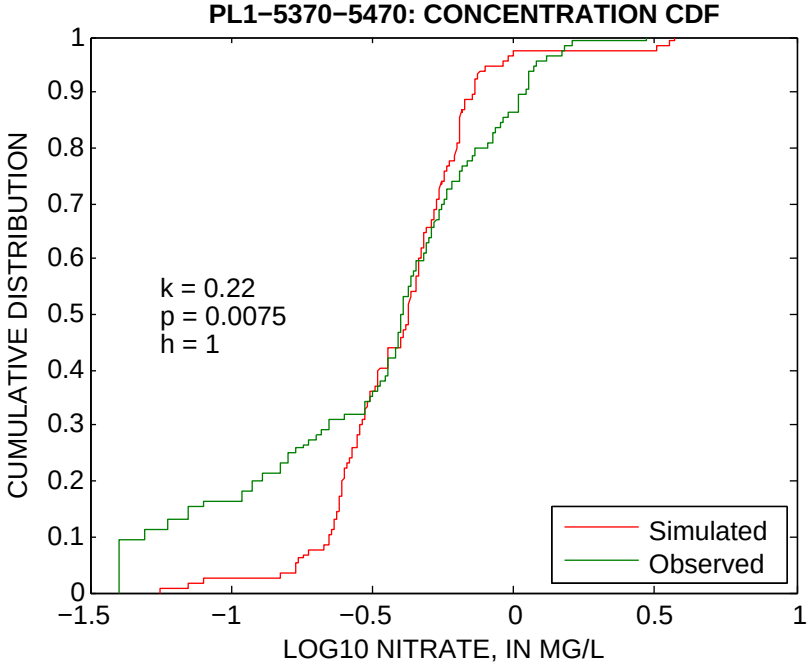
		observe	simulate
n		116	116
min		0.04	0.12642
		-1.39794	-0.898184
mean		0.493103	0.535364
		-0.494341	-0.375901
media		0.405	0.44439
		-0.392578	-0.352363
max		2.95	4.5078
		0.469822	0.653965
varian		0.188091	0.367349
		0.208115	0.0696851
JB		0.001	0.001
		0.021729	0.001
		ra	log
%		8.57033	-23.9591
err.va		0.599189	0.30438
rel.std.err		3.18563	1.46256
mod.eff		-2.18563	-0.462556

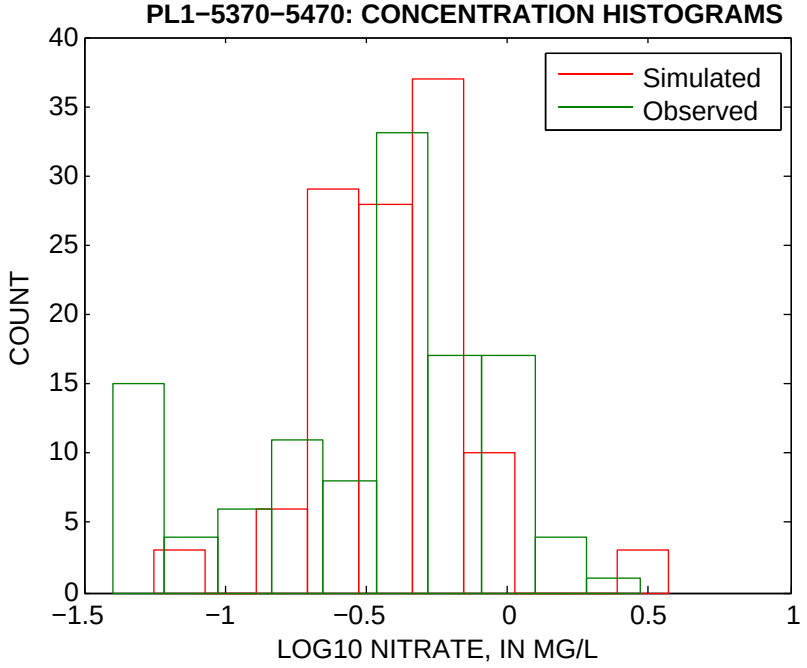
VERSION 2.1

ALL DATA
LOG10

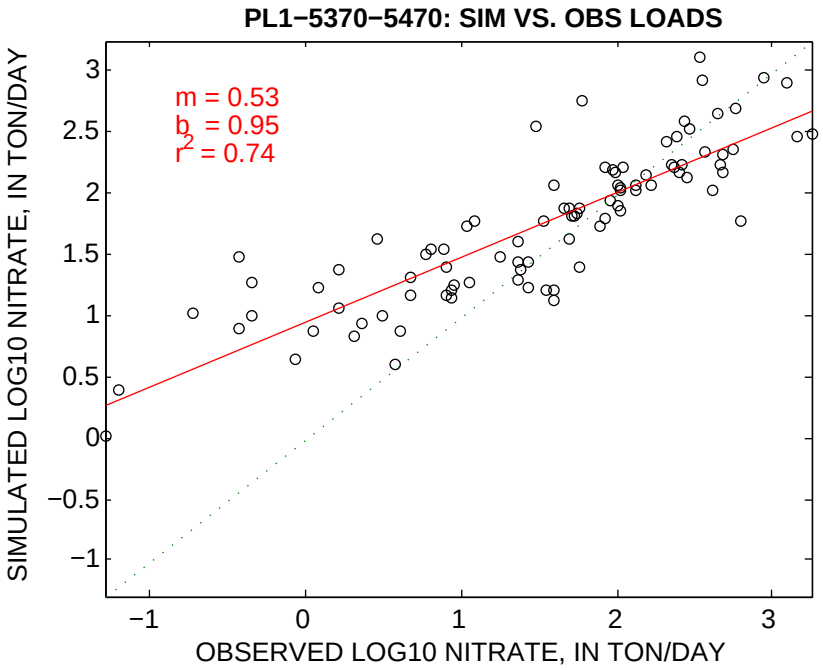


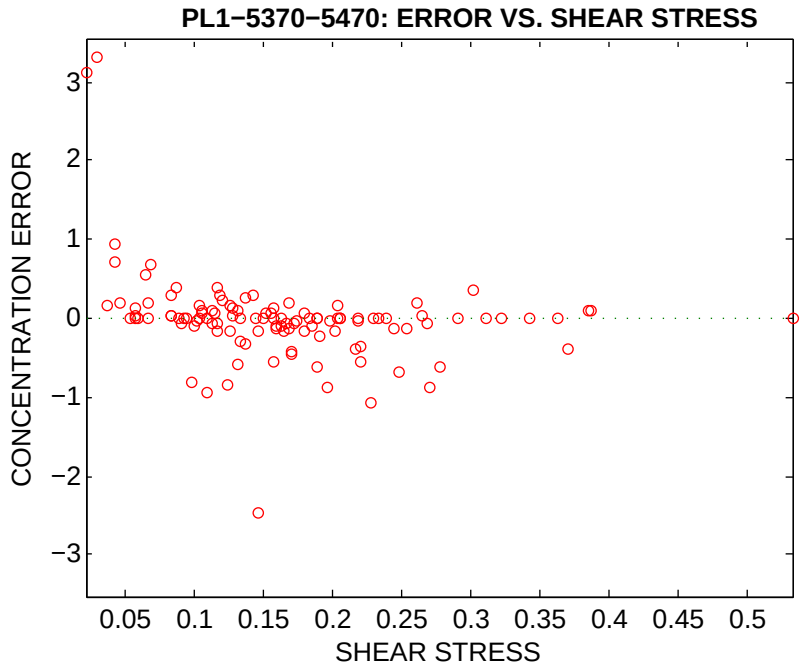


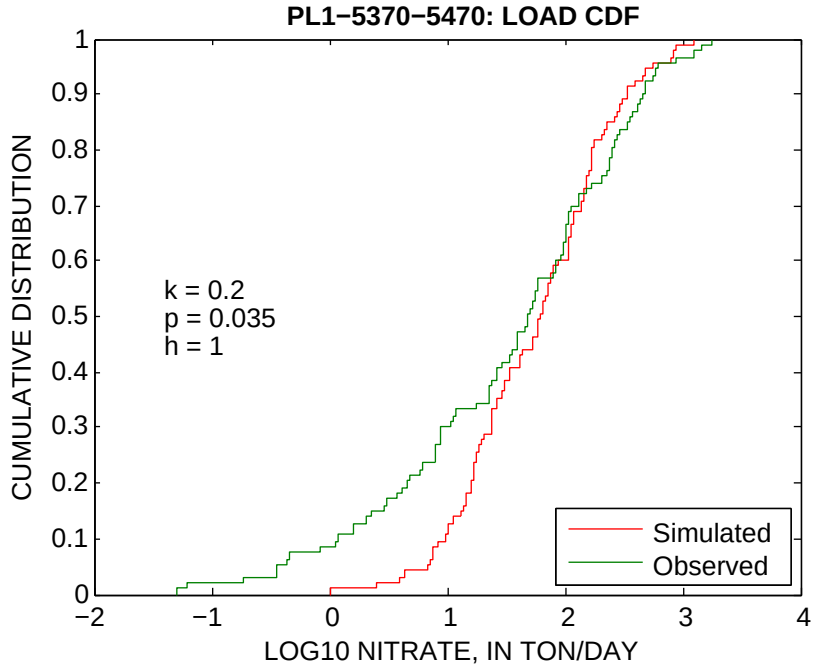


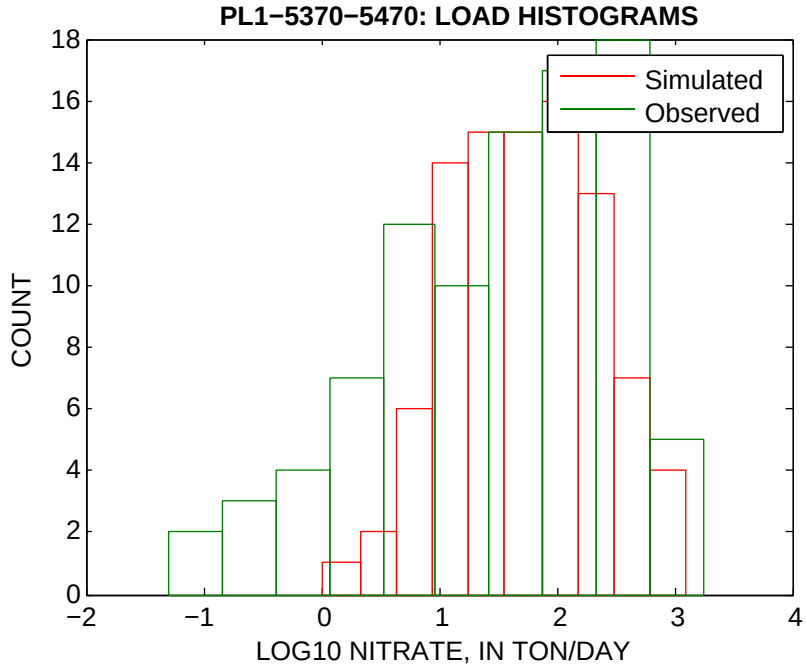


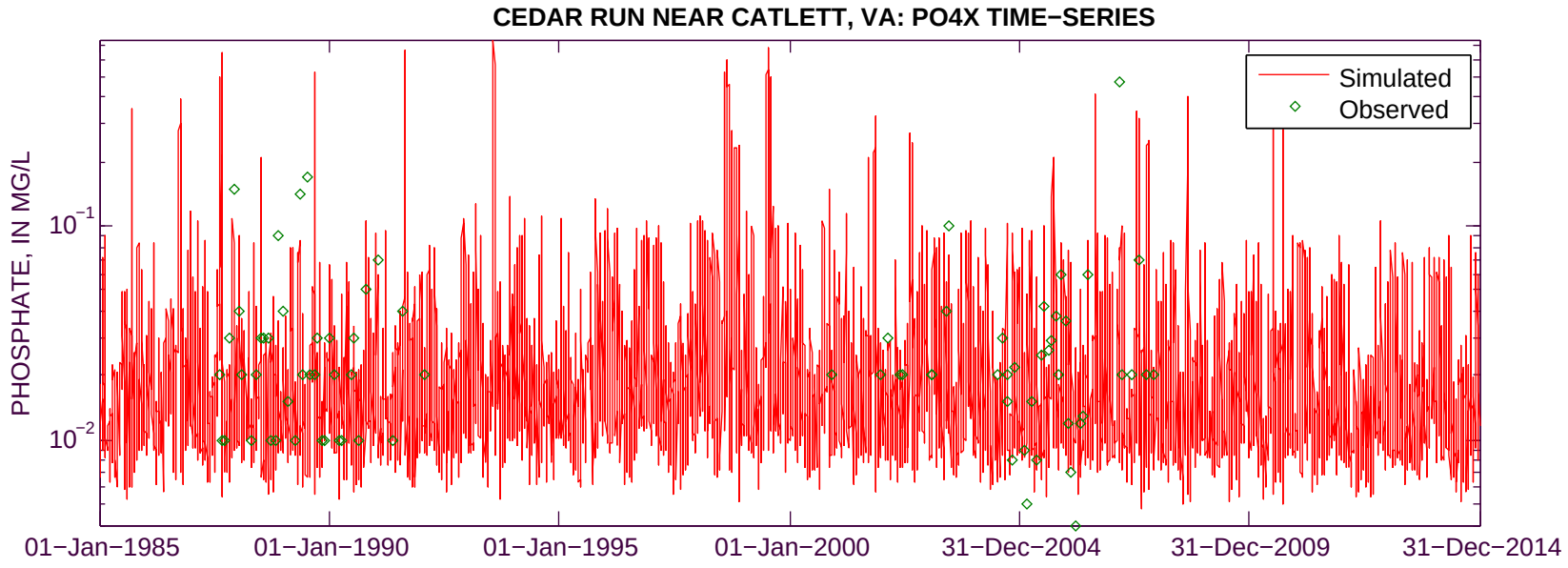
LOAD DATA
LOG10

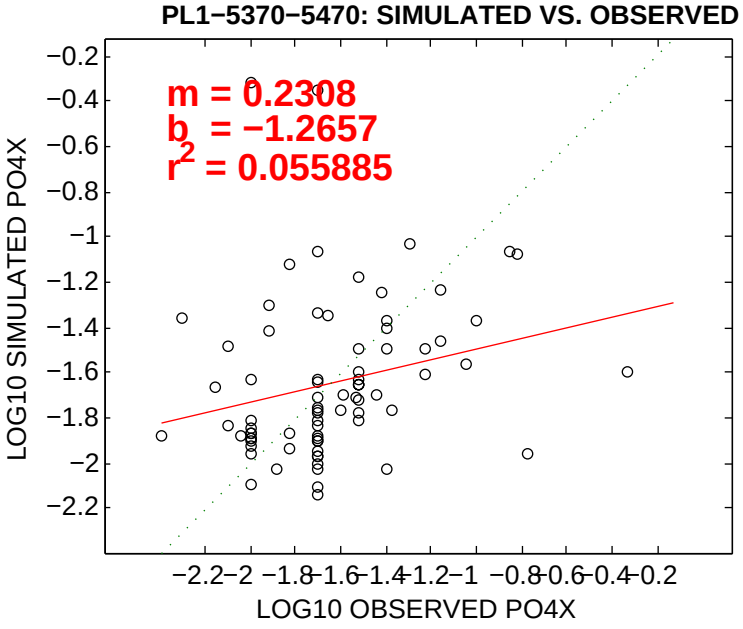


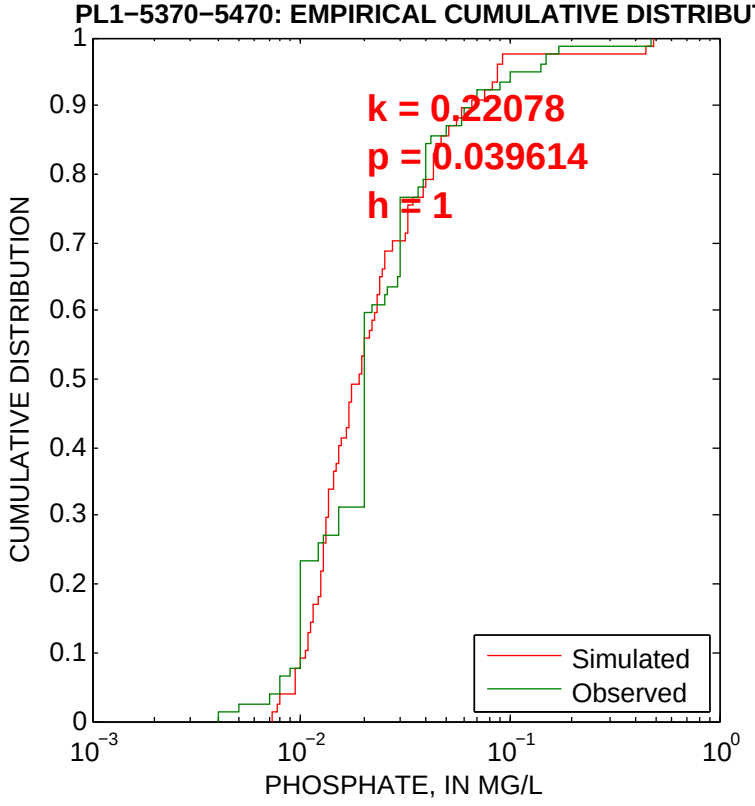












DATA SELECTION

scenario	file
P620171001WQ	PO4X.calib

plot: PO4X - phosphate

Dates: 1/1/1985 – 12/31/201

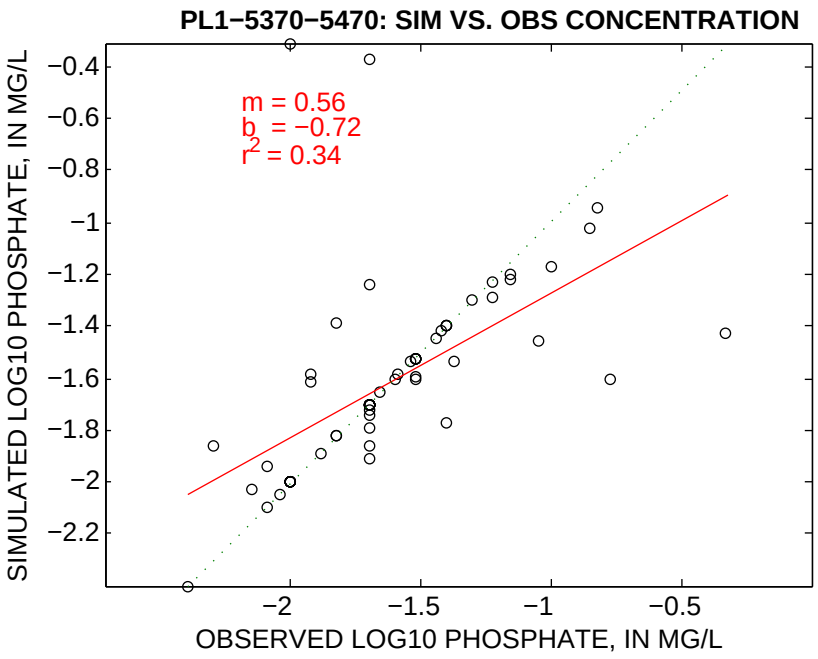
Drive	Directory	Observed
N/A	model	OBS20161101

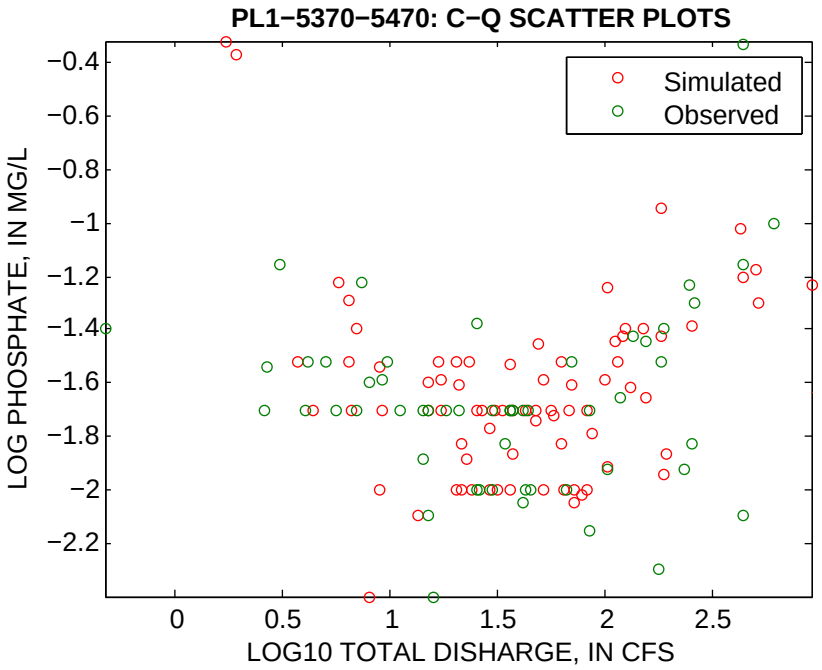
STATISTICS

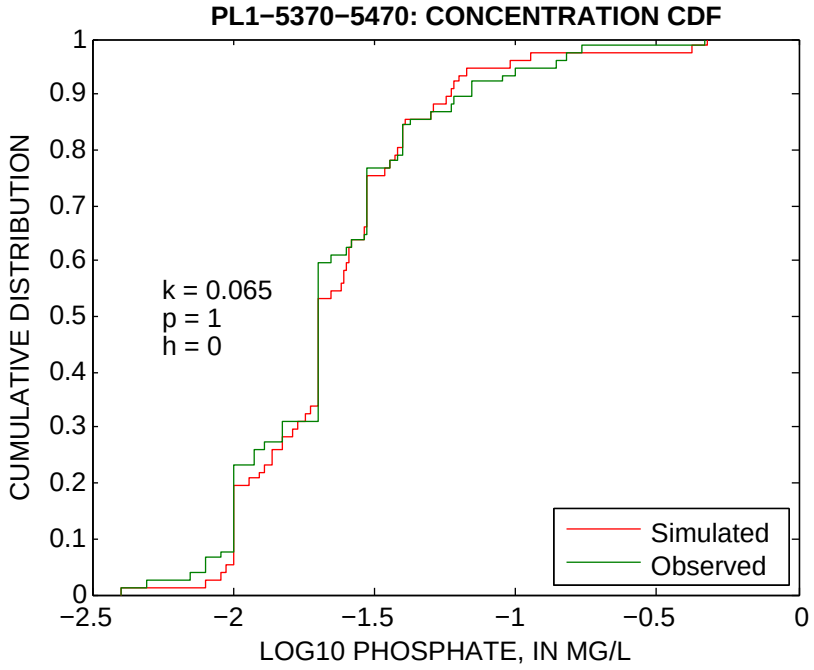
	n	77	77
		observe	simulate
min		0.004	0.0073506
		-2.39794	-2.13368
mean		0.0358442	0.0377243
		-1.64251	-1.64483
media		0.02	0.019247
		-1.69897	-1.71564
max		0.47	0.48926
		-0.327902	-0.31046
varian		0.00346726	0.00543364
		0.12887	0.122834
JB		0.001	0.001
		0.003518	0.001
		ra	log
%		5.24537	0.140964
err.va		0.00888191	0.192224
rel.std.err		2.56165	1.49161
mod.eff		-1.56165	-0.491613

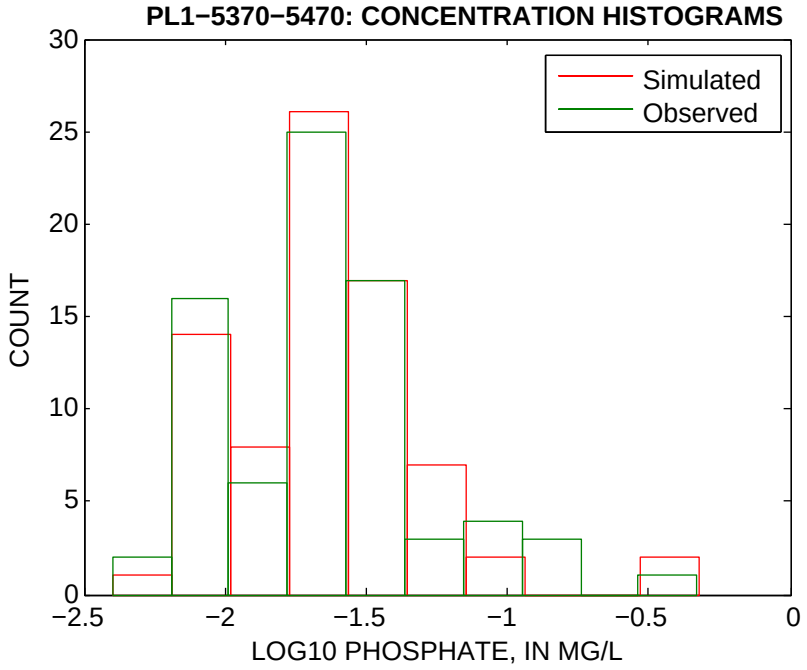
VERSION 2.1

ALL DATA
LOG10

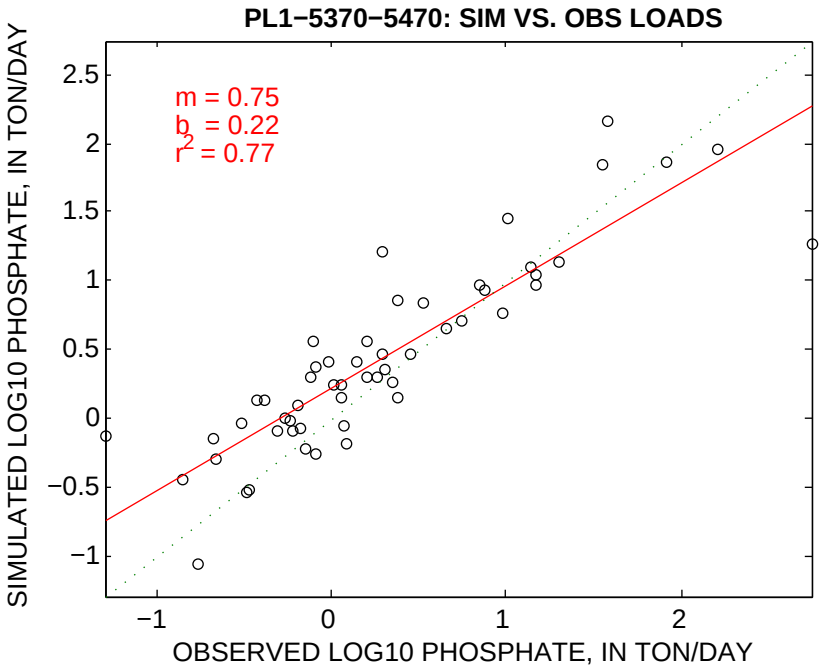


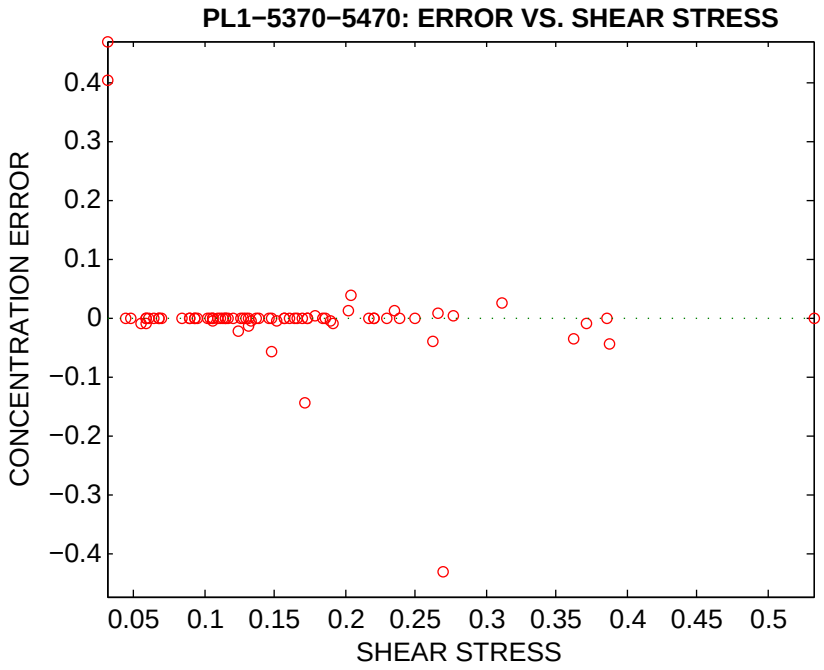


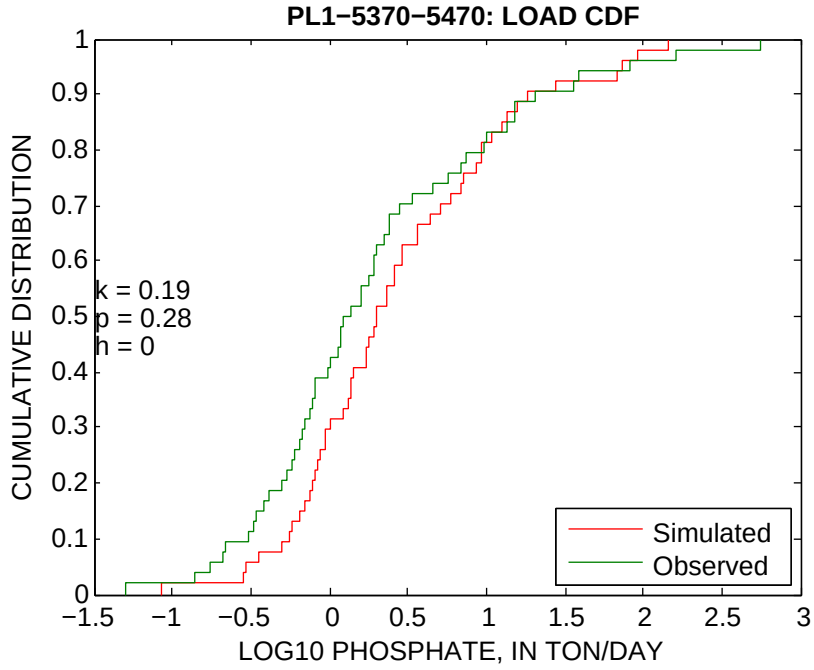


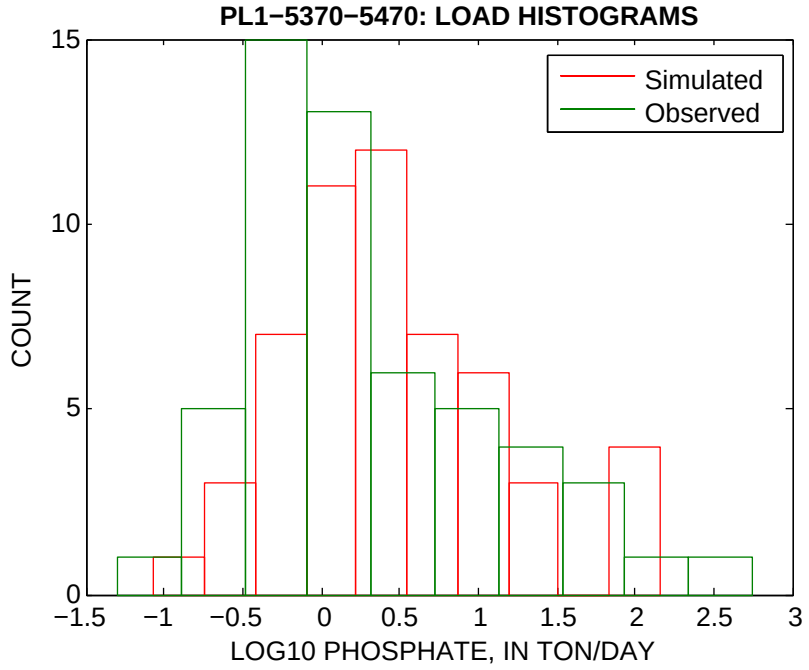


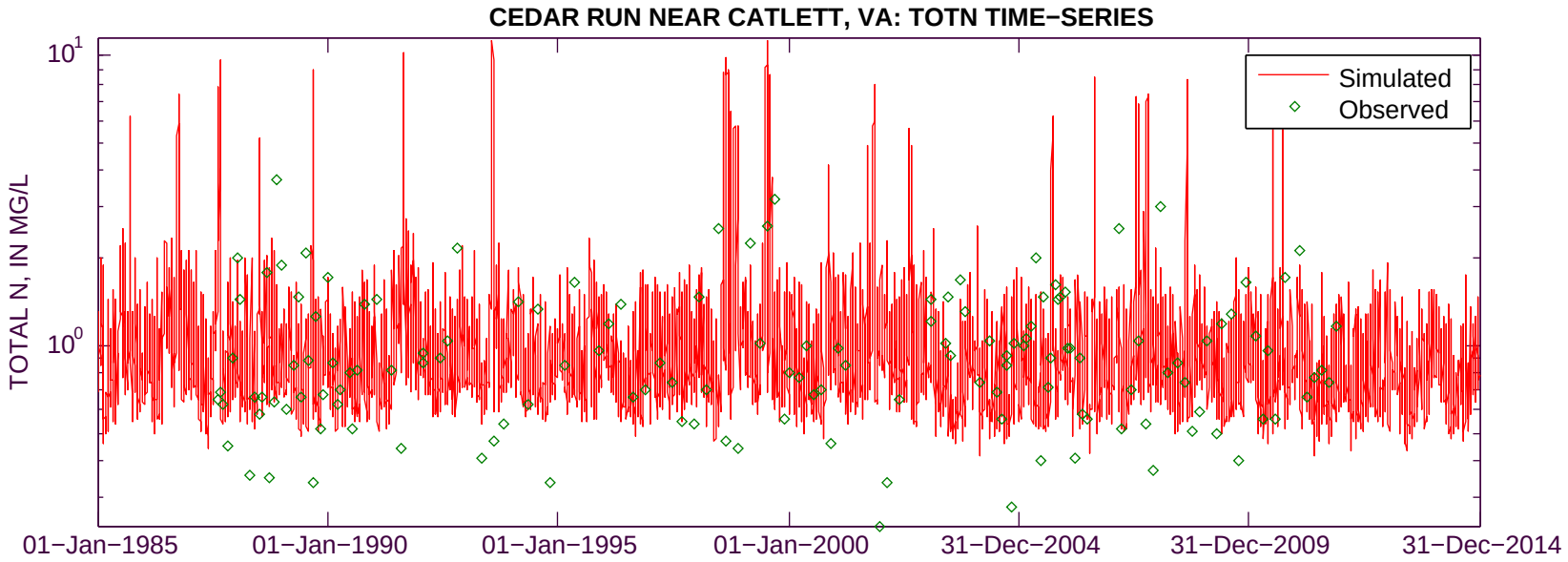
LOAD DATA
LOG10

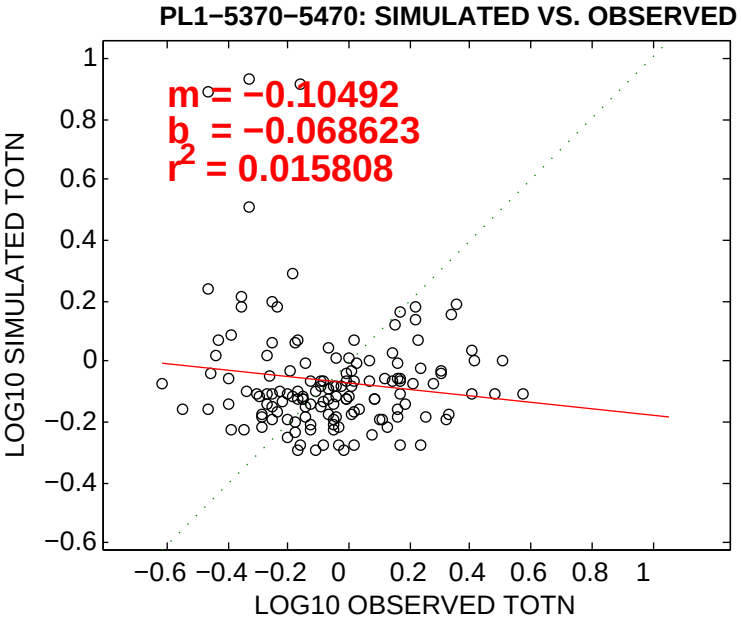


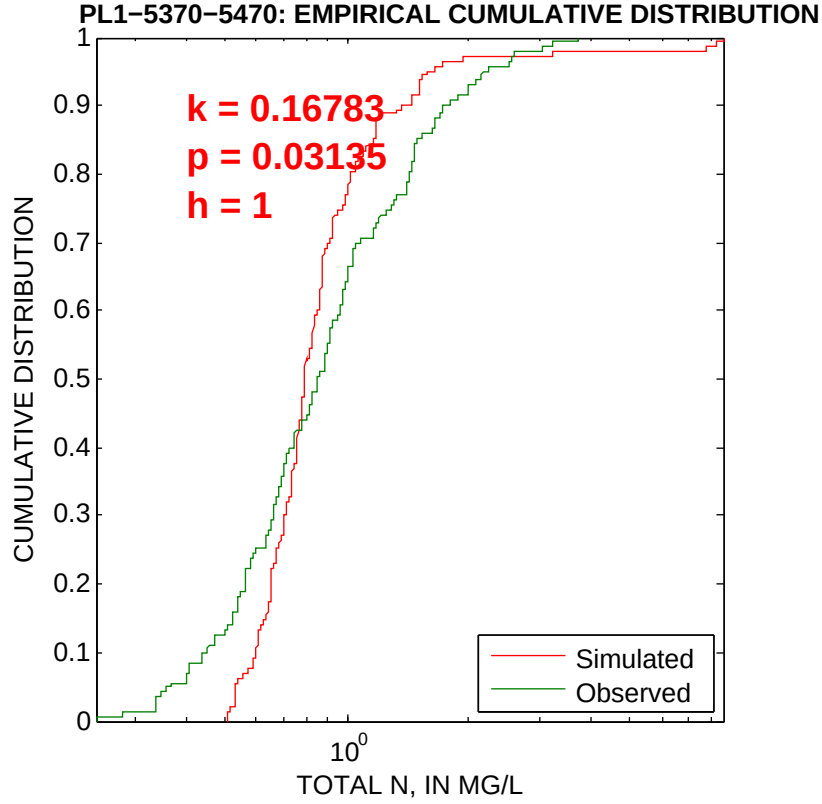












DATA SELECTION

scenario: P620171001WQ | file: TOTN.calib

plot: TOTN - total nitrogen

Dates: 1/1/1985 – 12/31/201

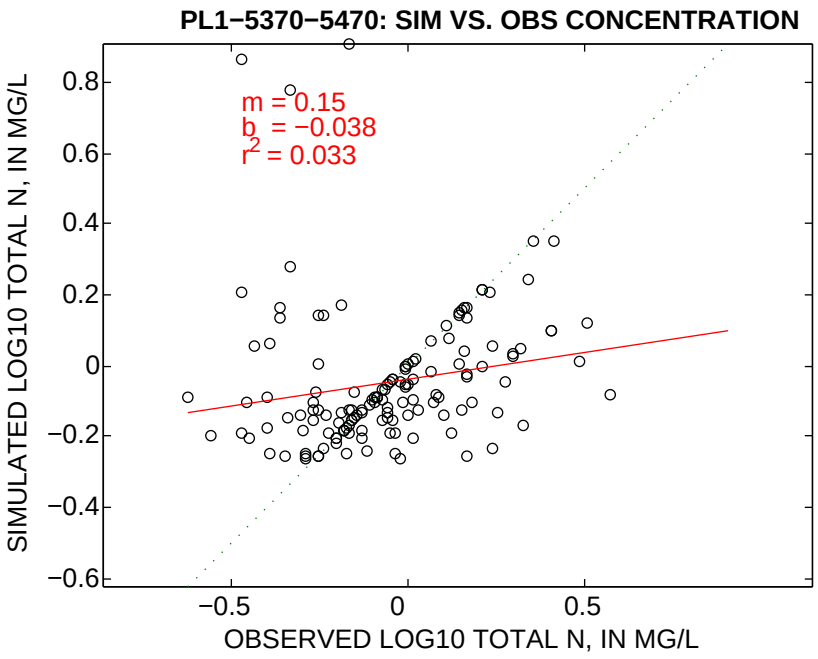
Drive: N/A | Directory: model | Observed: OBS20161101

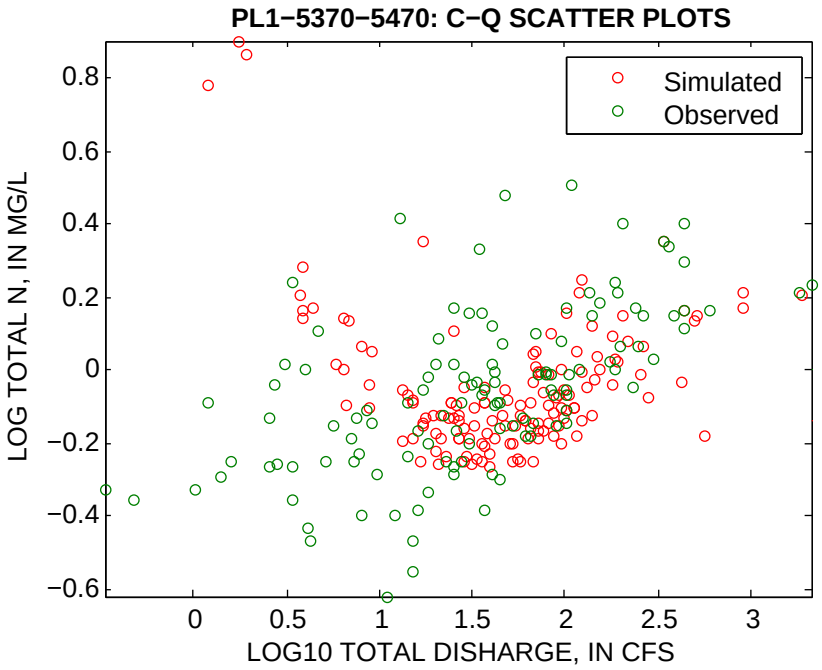
STATISTICS

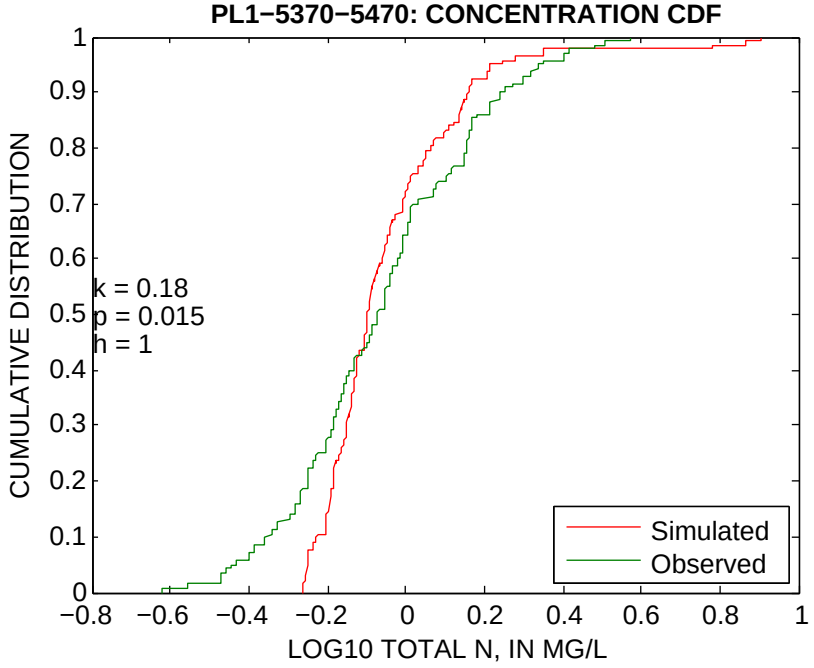
		observe	simulate
n		143	143
min		0.24	0.50591
		-0.619789	-0.295927
mean		1.01245	1.02189
		-0.0584986	-0.0624854
media		0.85	0.78247
		-0.0705811	-0.106532
max		3.75	8.4842
		0.574031	0.928611
varian		0.367557	1.20352
		0.0537198	0.0374071
JB		0.001	0.001
		0.341802	0.001
		ra	log
%		0.932277	6.81516
err.va		1.72241	0.102415
rel.std.err		4.68609	1.90647
mod.eff		-3.68609	-0.906468

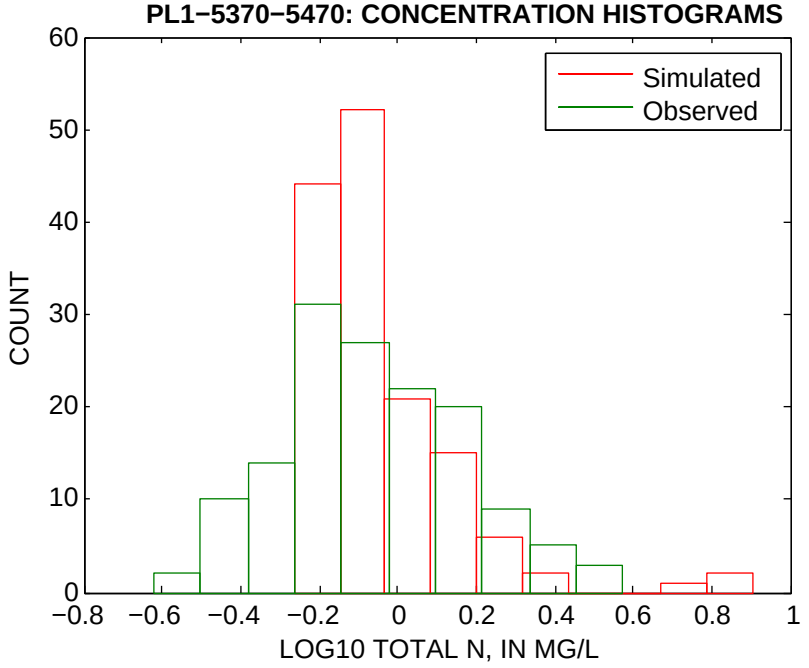
VERSION 2.1

ALL DATA
LOG10

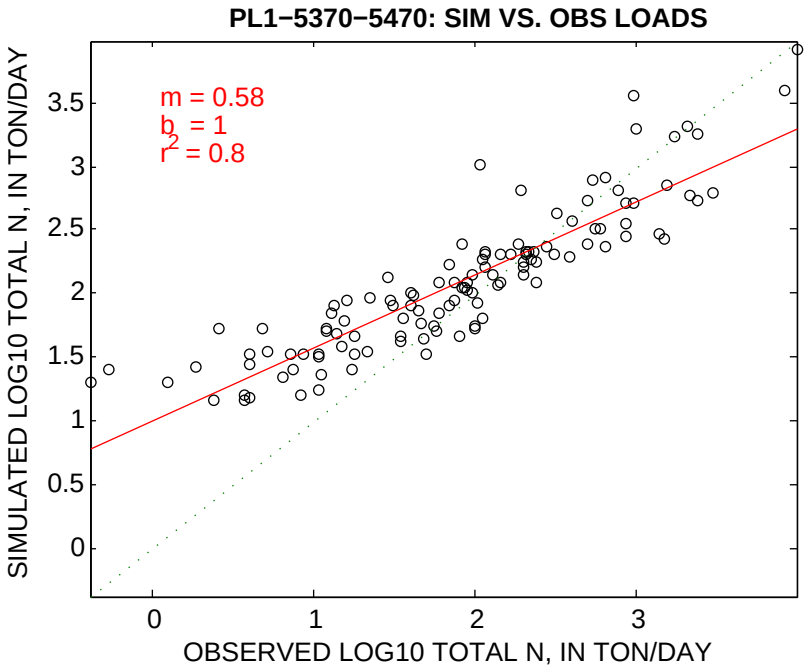


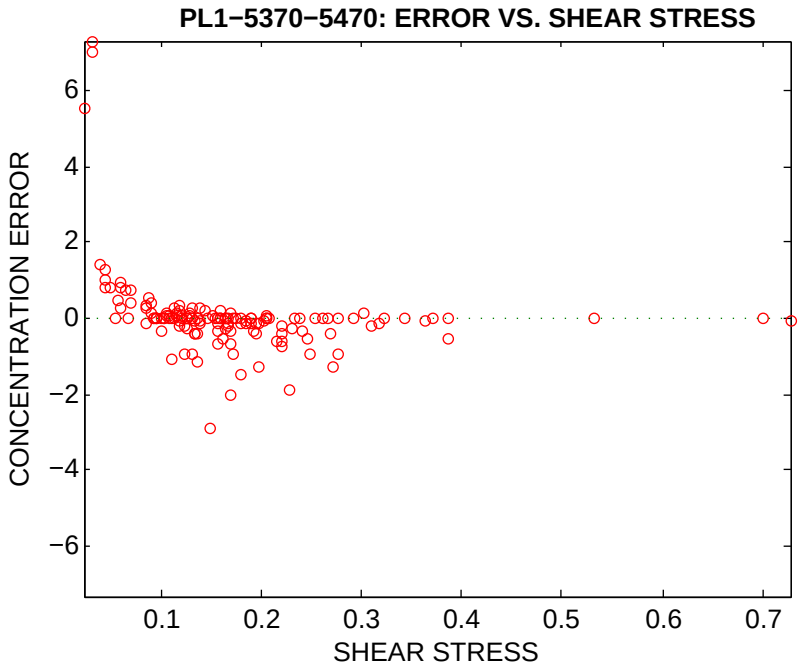


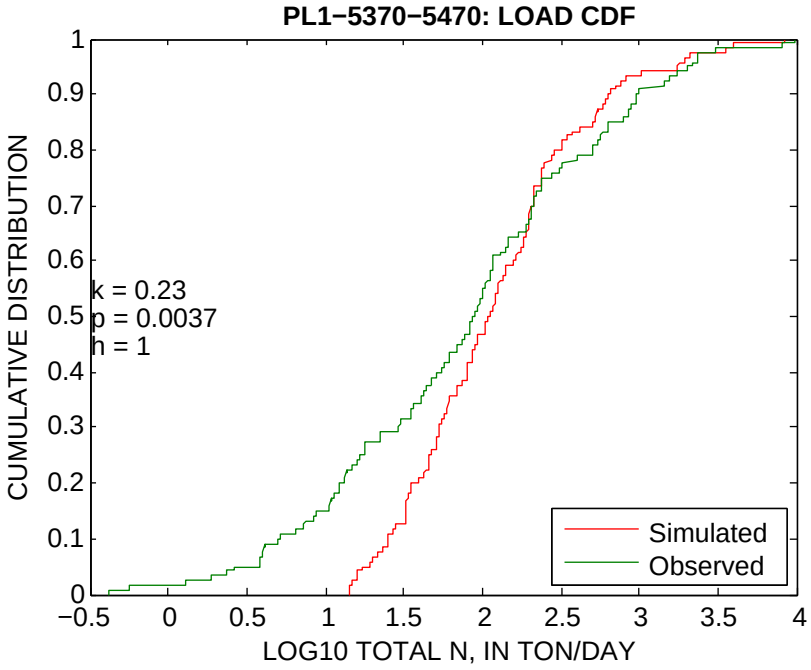


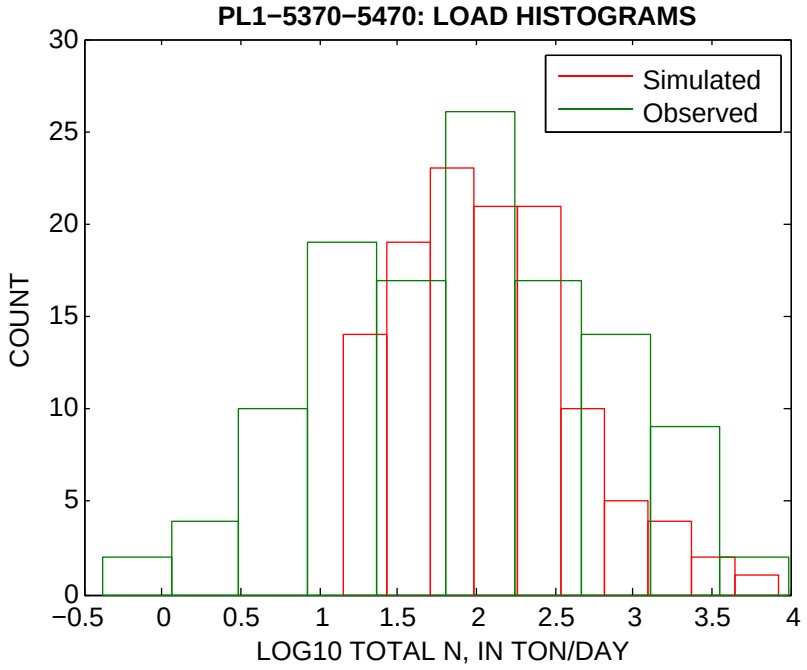


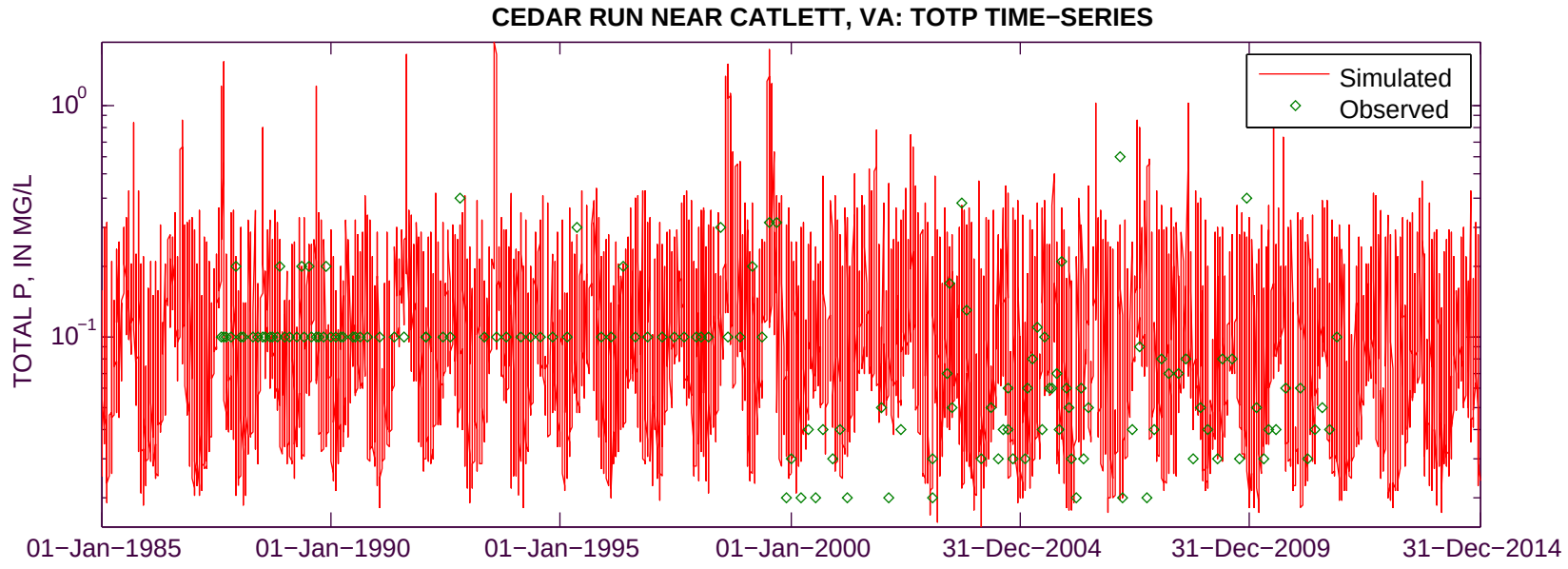
LOAD DATA
LOG10

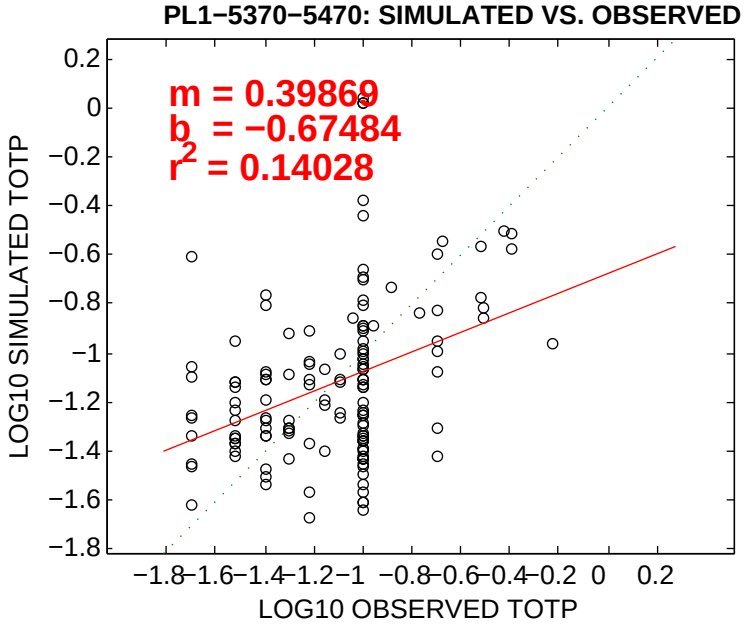


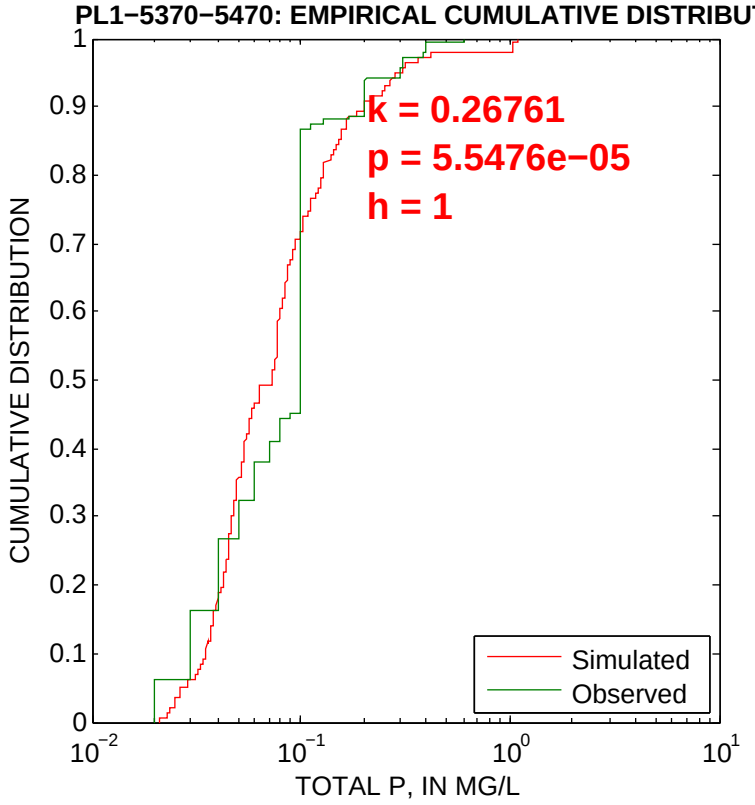












DATA SELECTION

scenario: P620171001WQ | file: TOTP.calib

plot: TOTP - total phosphorus

Dates: 1/1/1985 – 12/31/201

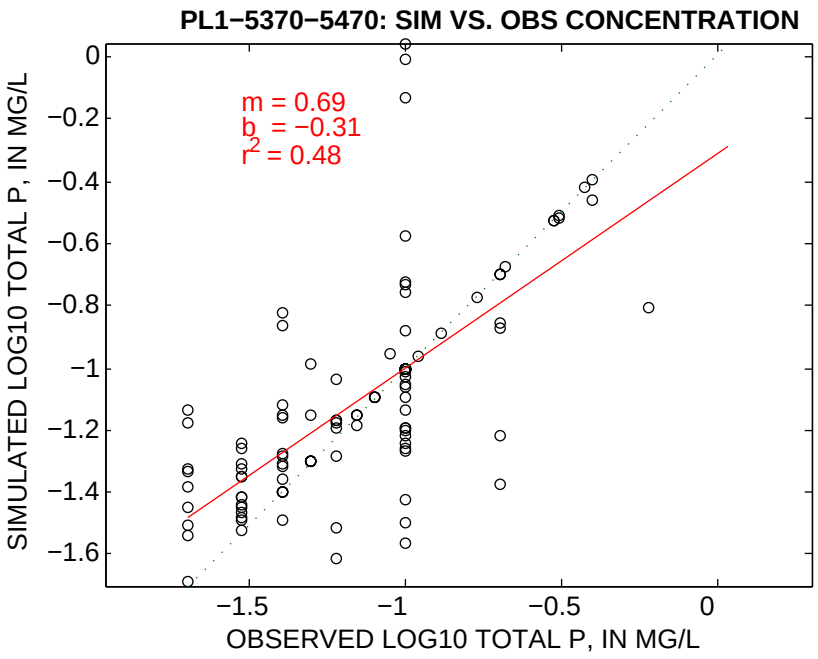
Drive: N/A | Directory: model | Observed: OBS20161101

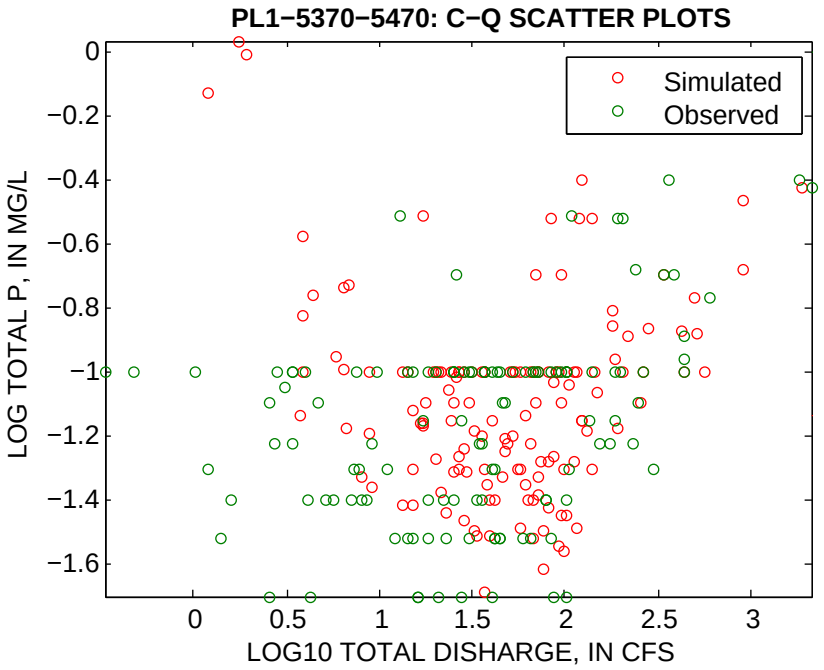
STATISTICS

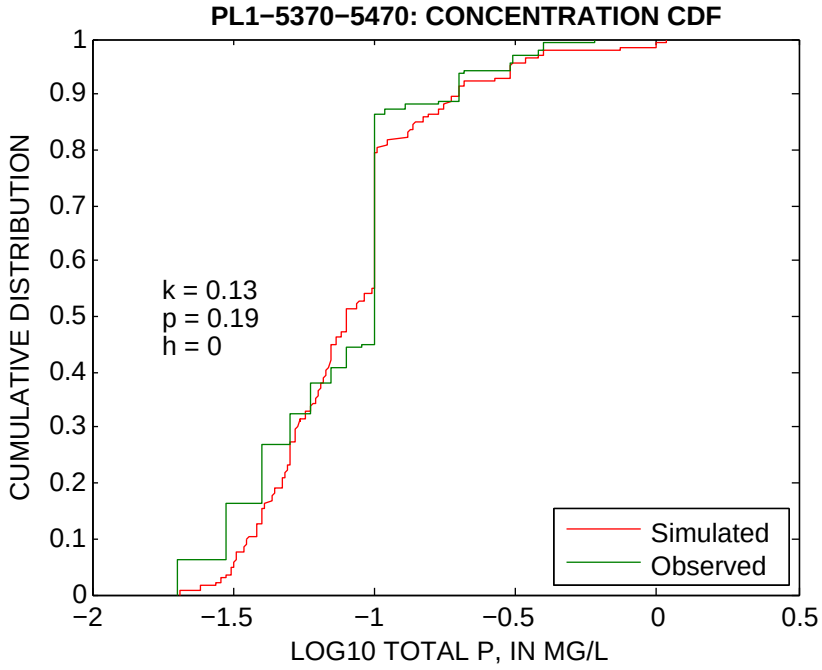
n	142	142
	observe	simulate
min	0.02	0.021056
	-1.69897	-1.67662
mean	0.0969718	0.109924
	-1.12394	-1.12293
media	0.1	0.0728125
	-1	-1.13779
max	0.6	1.1069
	-0.221849	0.0441084
varian	0.00696452	0.0247912
	0.0928606	0.105216
JB	0.001	0.001
	0.5	0.001
	ra	log
%	13.3568	-0.0891328
err.va	0.0262224	0.124033
rel.std.err	3.76514	1.3357
mod.eff	-2.76514	-0.335695

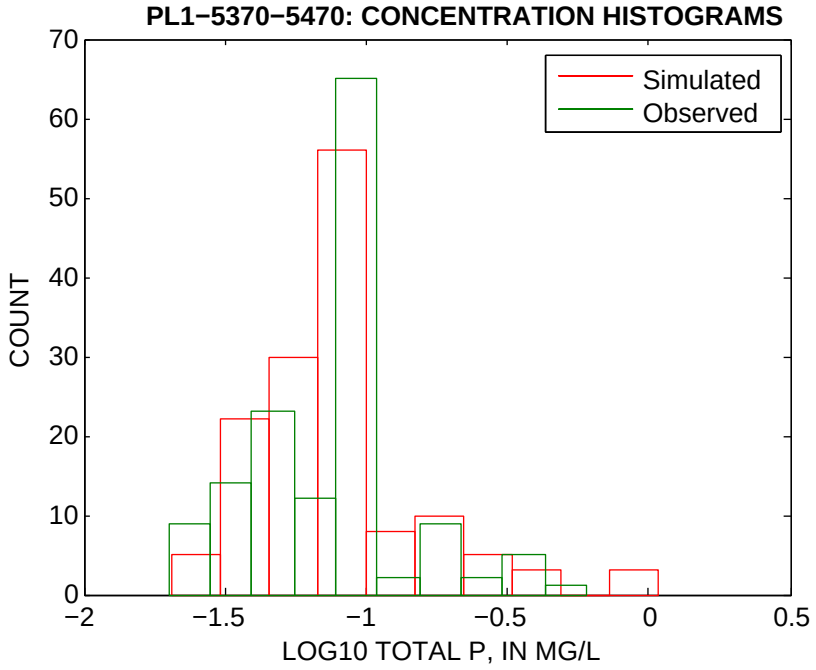
VERSION 2.1

ALL DATA
LOG10

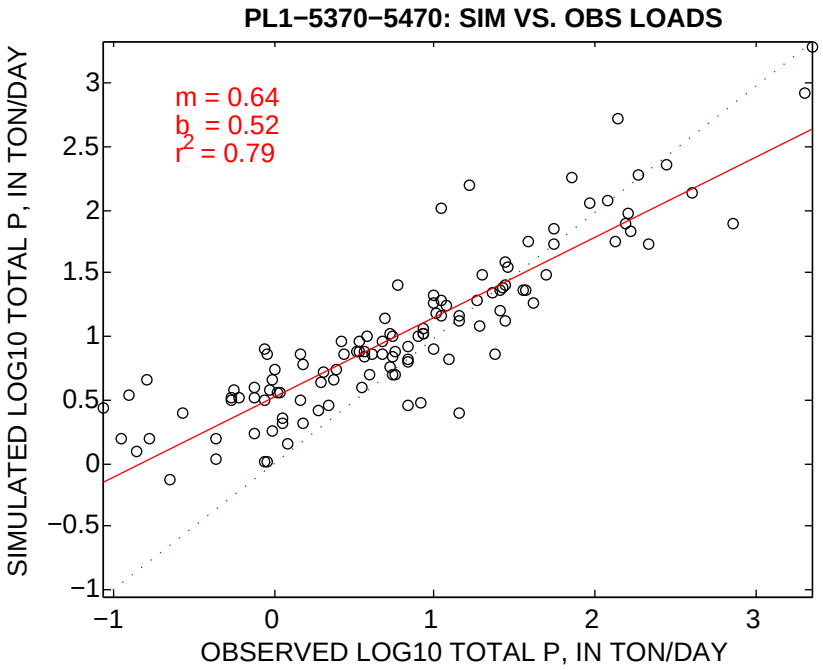


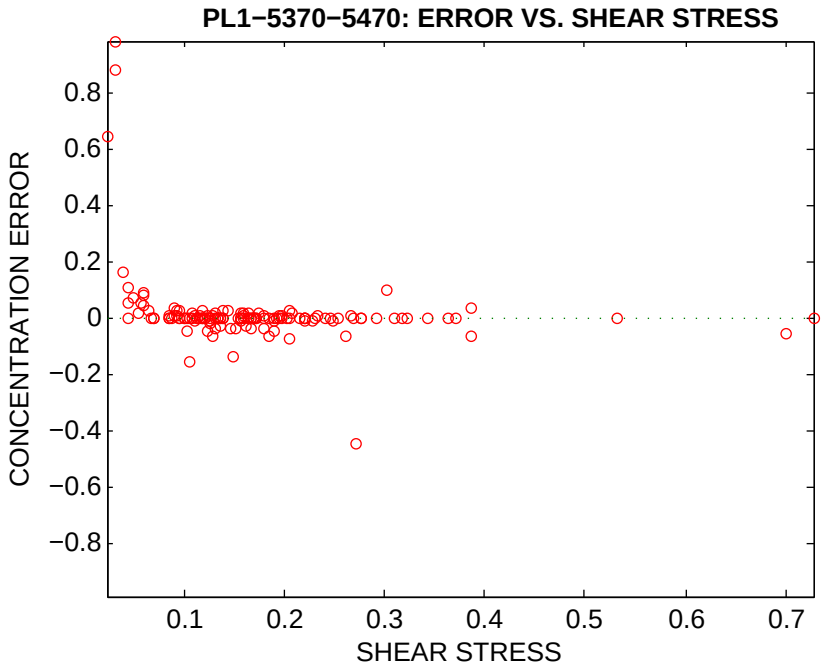


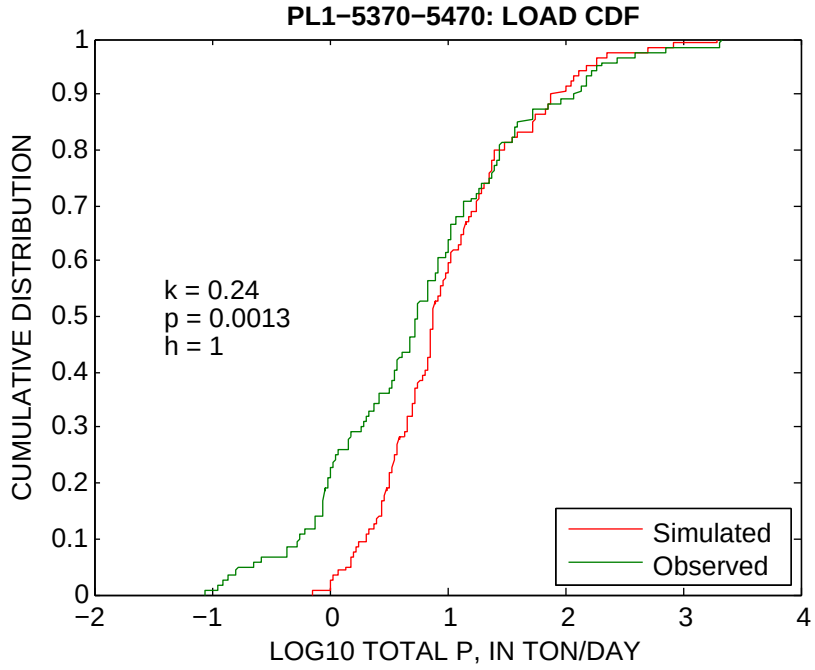


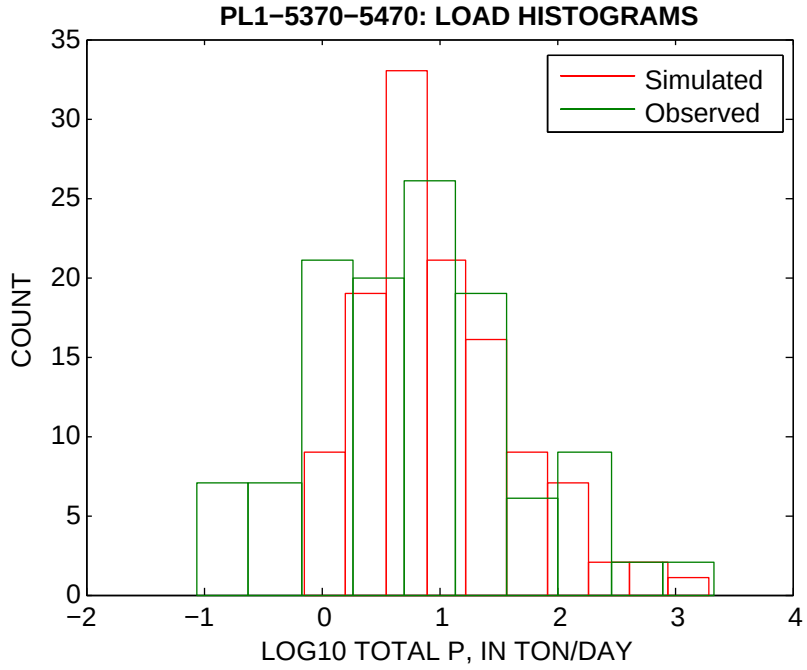


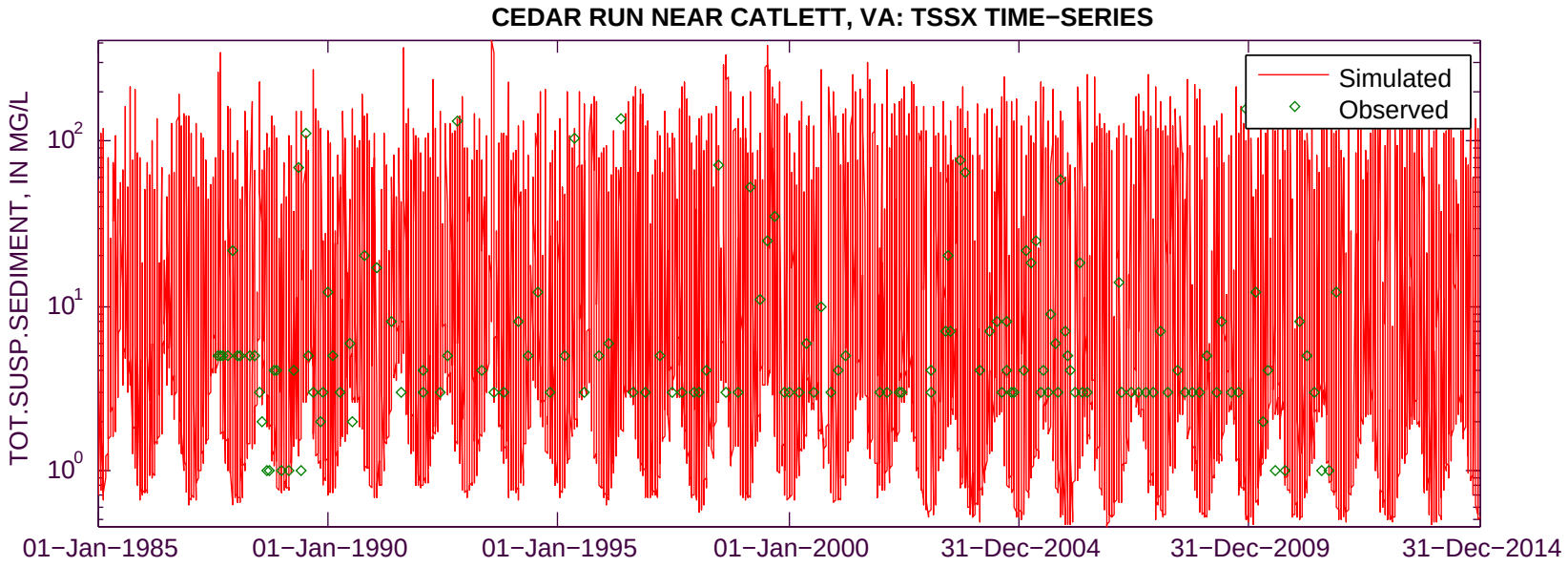
LOAD DATA
LOG10

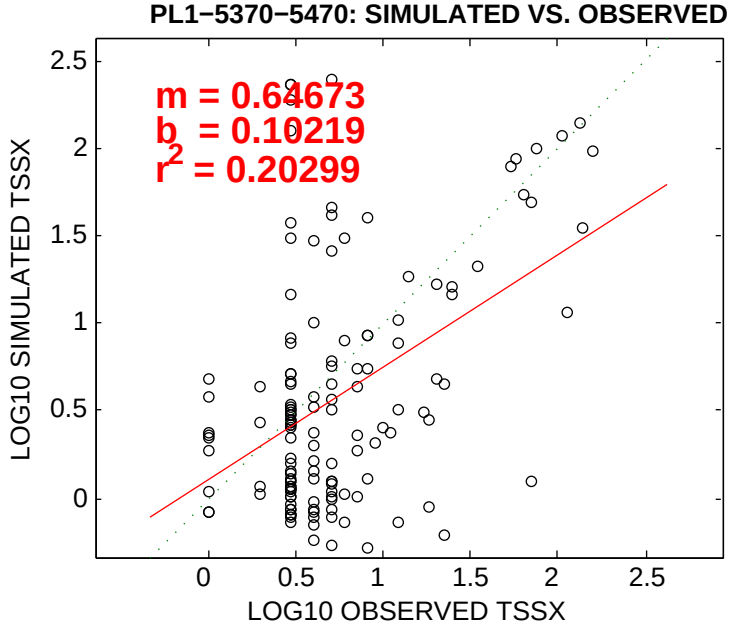


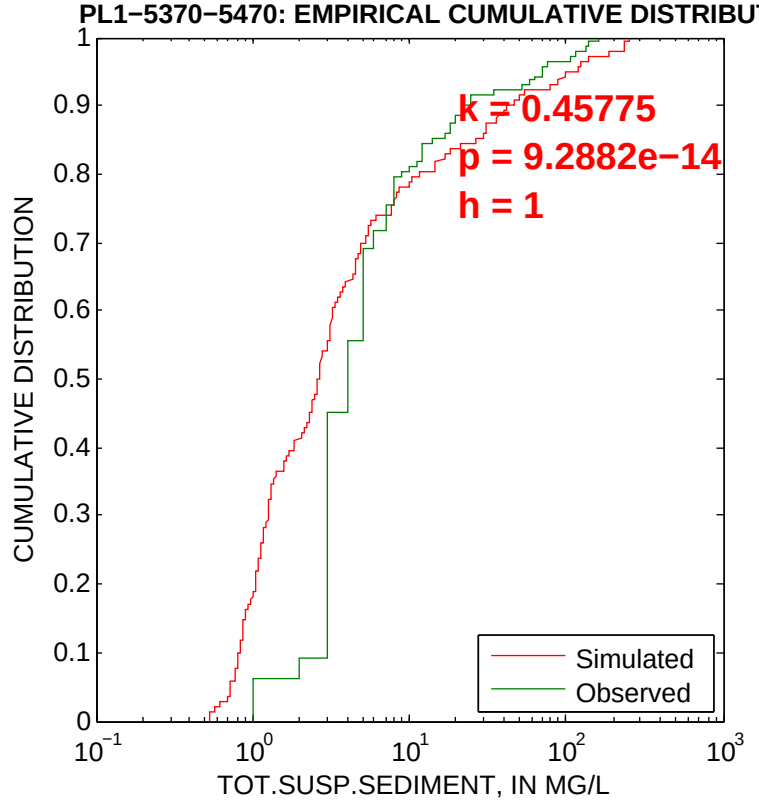












DATA SELECTION

scenario: P620171001WQ | file: TSSX.calib

plot: TSSX - total suspended ...

Dates: 1/1/1985 – 12/31/201

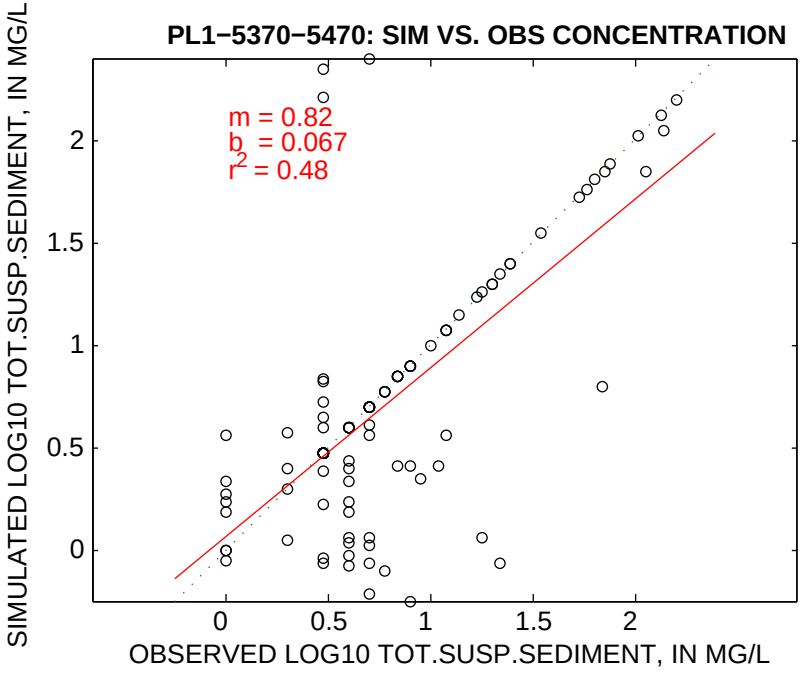
Drive: N/A | Directory: model | Observed: OBS20161101

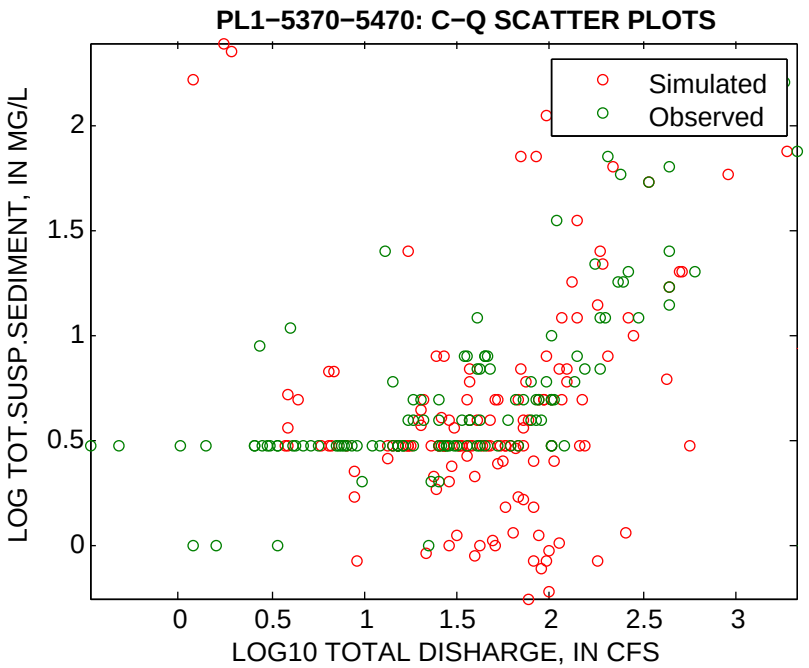
STATISTICS

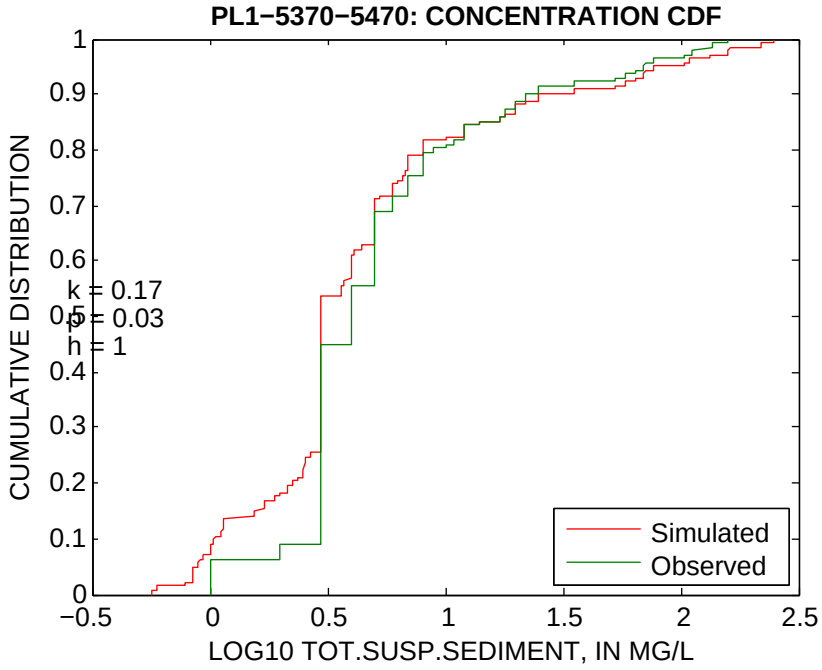
n	142	142
	observe	simulate
min	1	0.52657
	0	-0.278544
mean	12.5775	17.5075
	0.731282	0.575136
media	4	2.64745
	0.60206	0.422795
max	159	250.8
	2.2014	2.39933
varian	691.891	1893.48
	0.216354	0.445813
JB	0.001	0.001
	0.001	0.001192
	ra	log
%	39.1976	-21.3524
err.va	1841.22	0.406874
rel.std.err	2.66115	1.88059
mod.eff	-1.66115	-0.880591

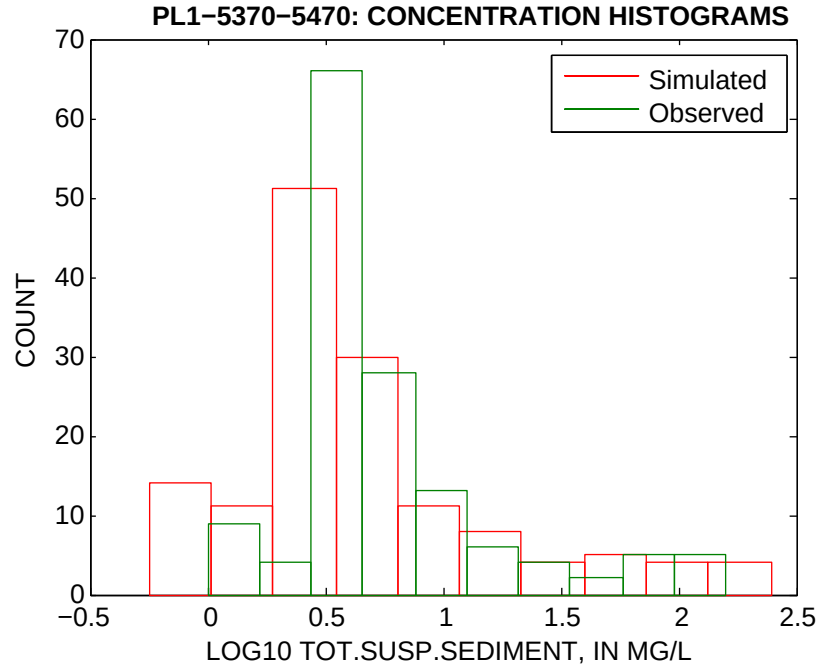
VERSION 2.1

ALL DATA
LOG10

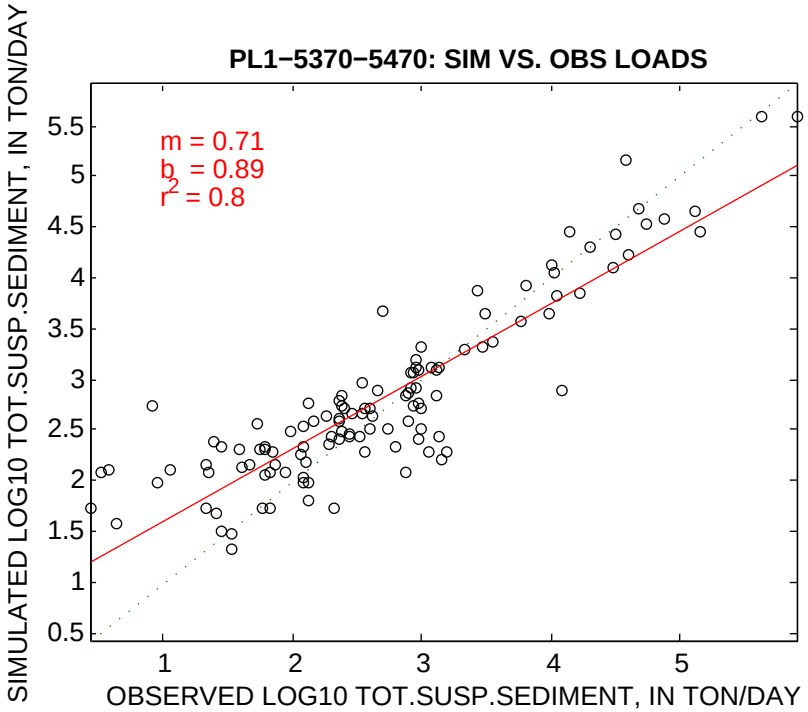


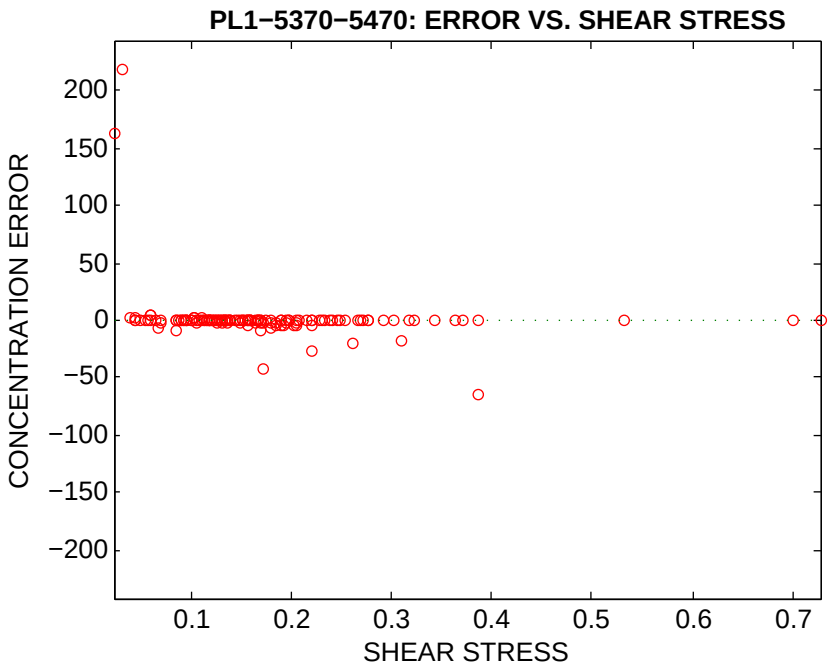


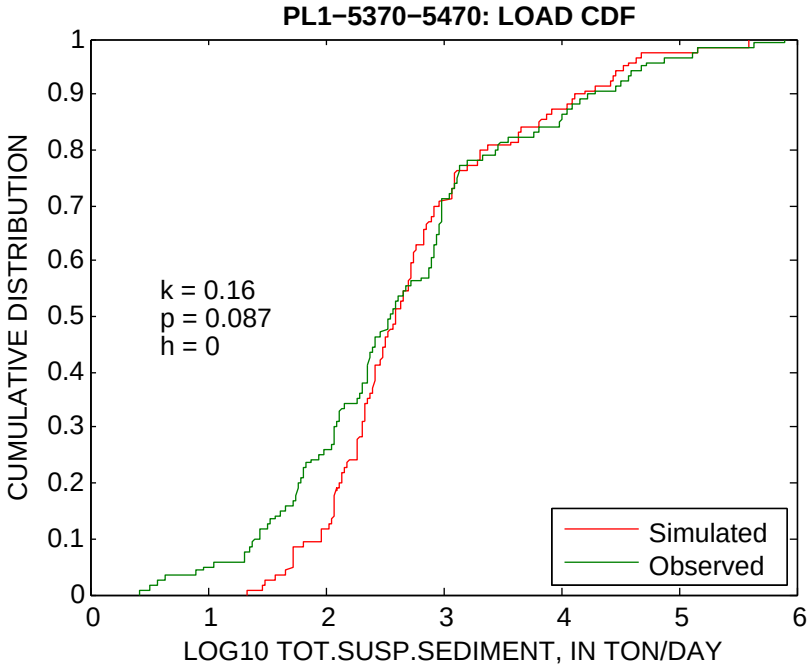


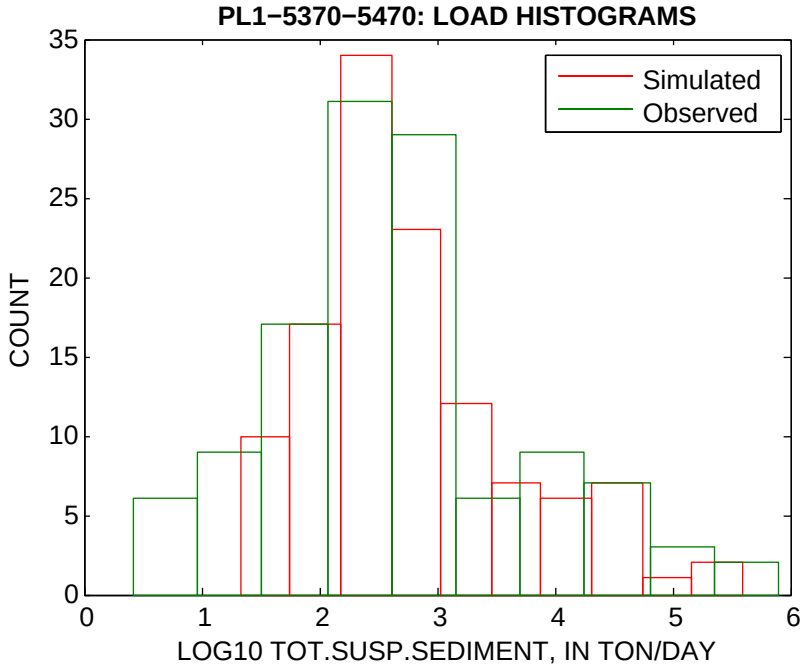


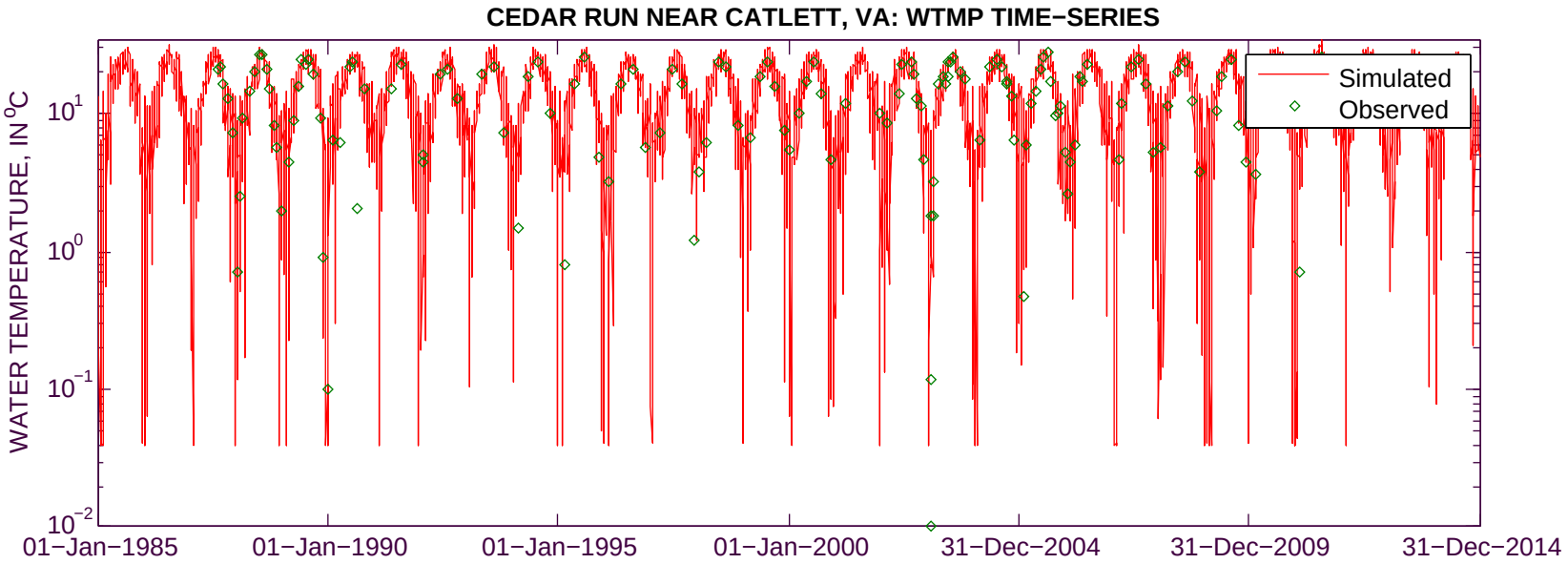
LOAD DATA
LOG10

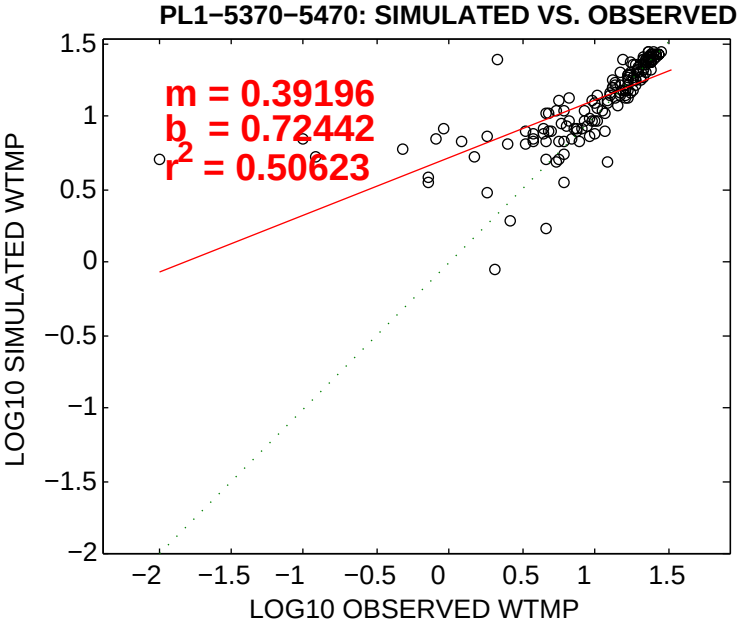


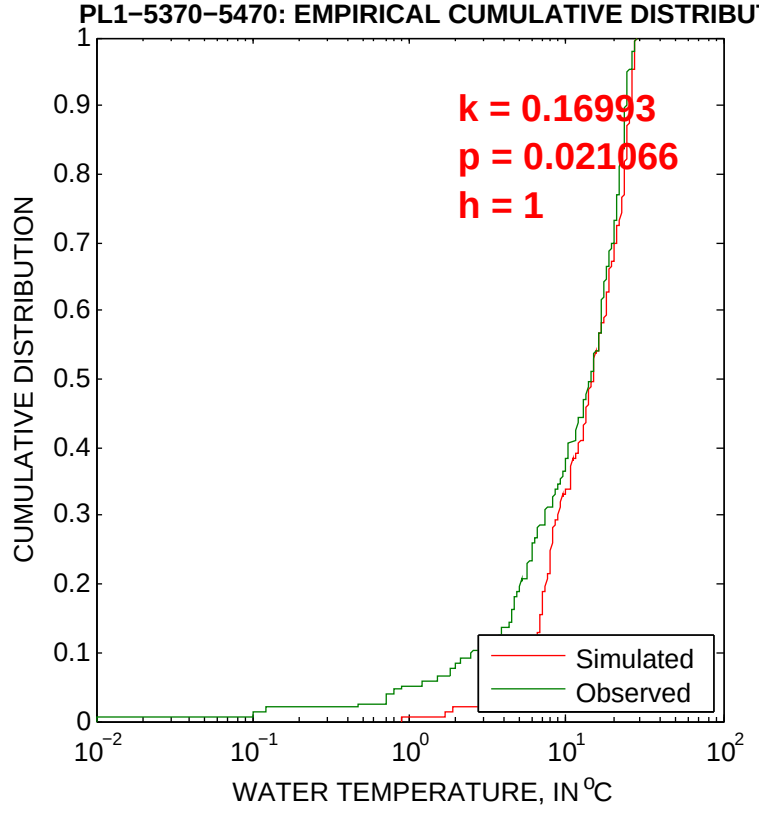












DATA SELECTION

scenario	file
P620171001WQ	WTMP.calib

plot: WTMP - water tempera...

Dates: 1/1/1985 – 12/31/201

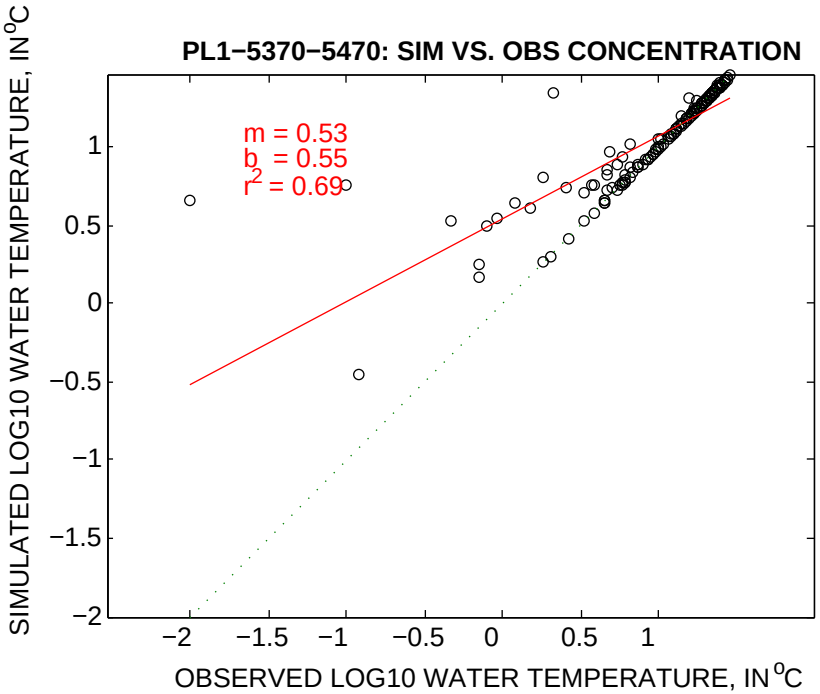
Drive	Directory	Observed
N/A	model	OBS20161101

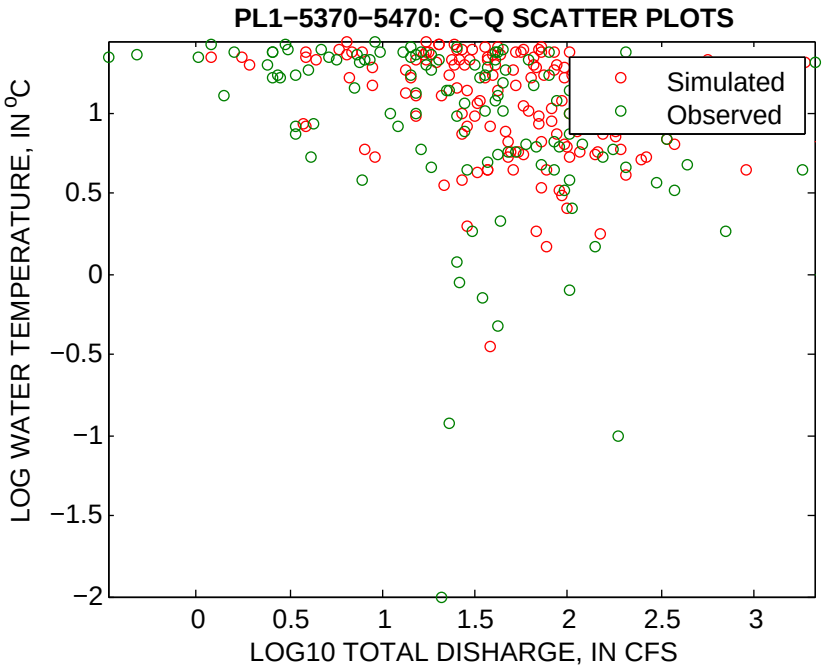
STATISTICS

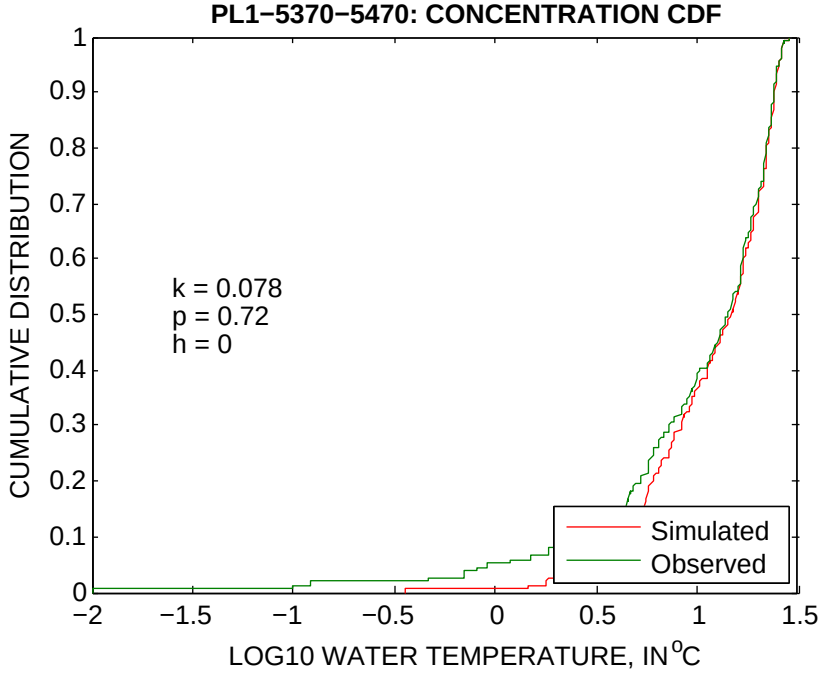
	observe	simulate
n	153	153
min	0.01	0.87901
	-2	-0.0560062
mean	13.6708	15.1692
	0.982596	1.10956
media	14.26	14.77
	1.15412	1.16938
max	28.19	27.918
	1.4501	1.44588
varian	64.449	57.2622
	0.252789	0.0767163
JB	0.013592	0.012719
	0.001	0.001
	ra	log
%	10.9601	12.921
err.va	12.1675	0.147565
rel.std.err	0.188793	0.58375
mod.eff	0.811207	0.41625

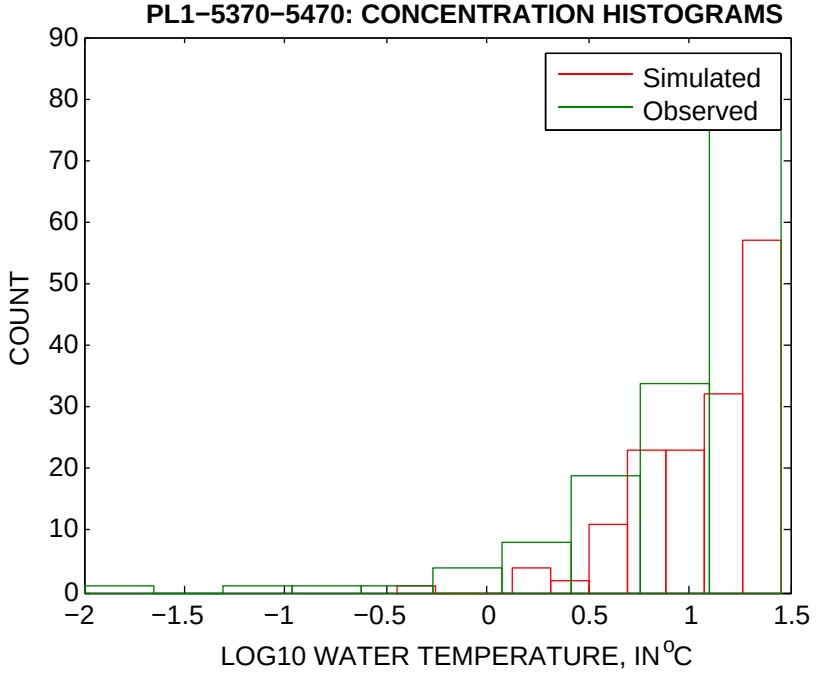
VERSION 2.1

ALL DATA
LOG10

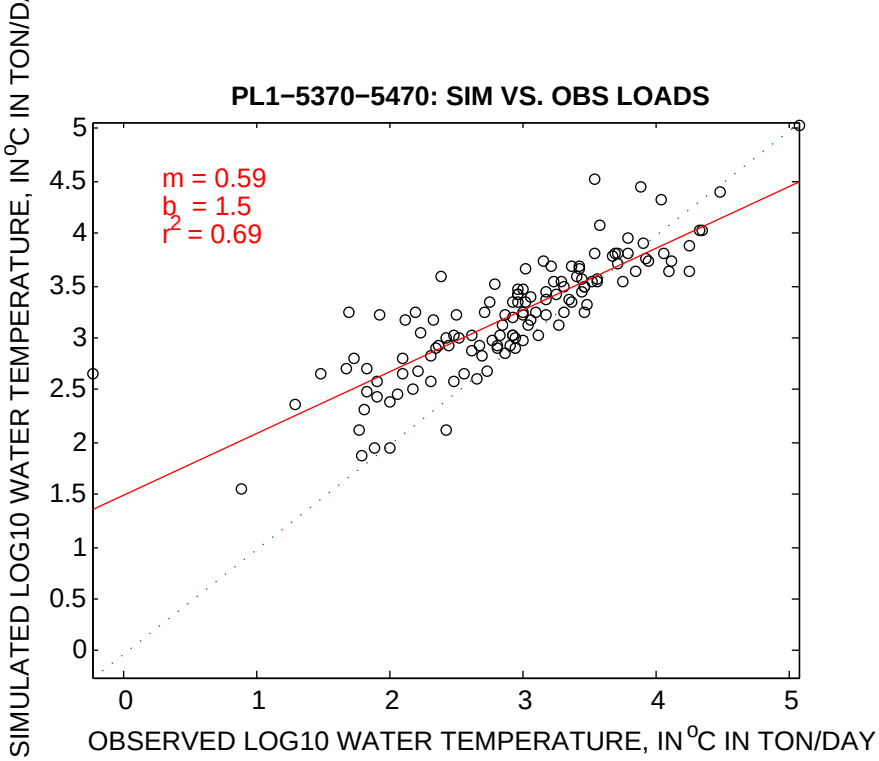


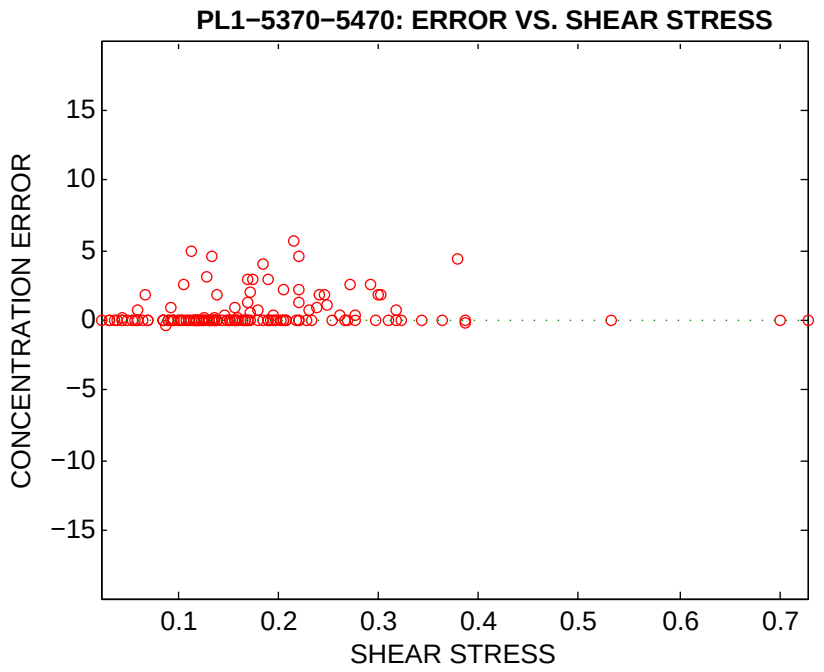


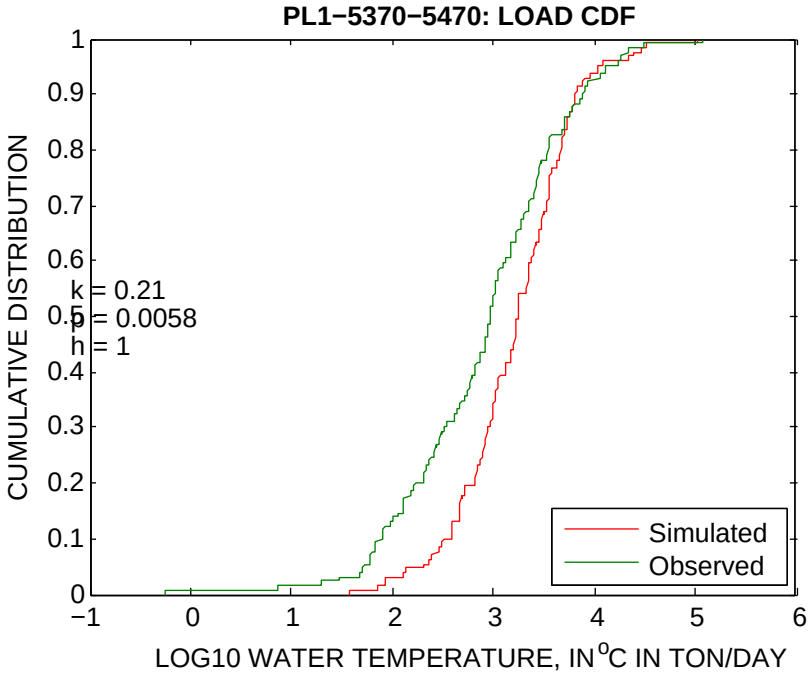


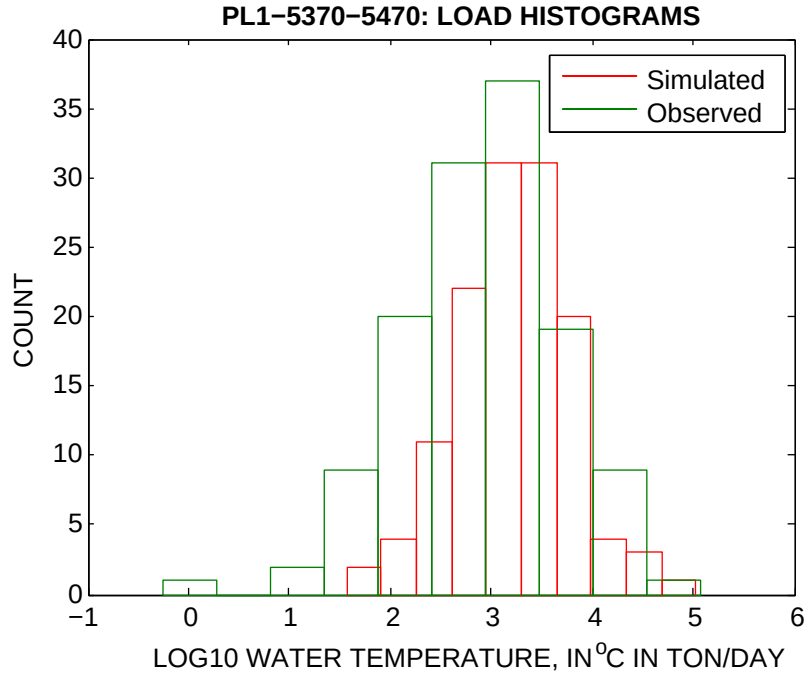


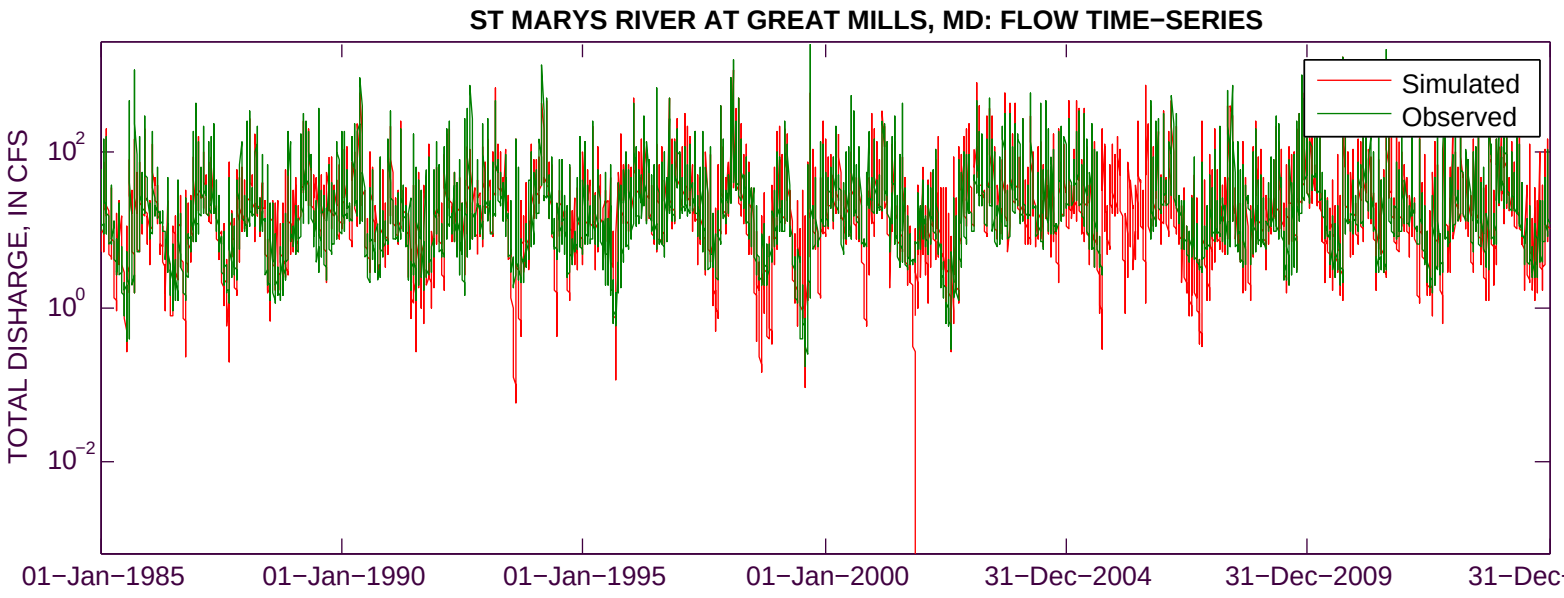
LOAD DATA
LOG10

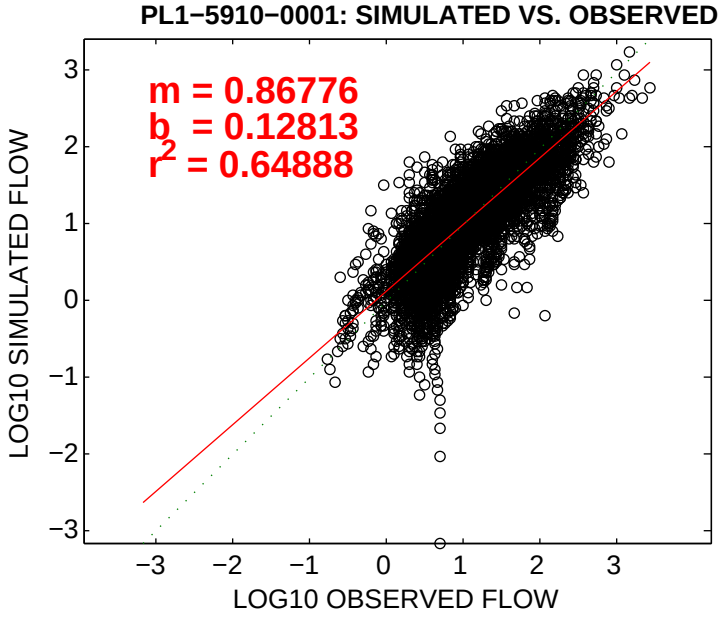


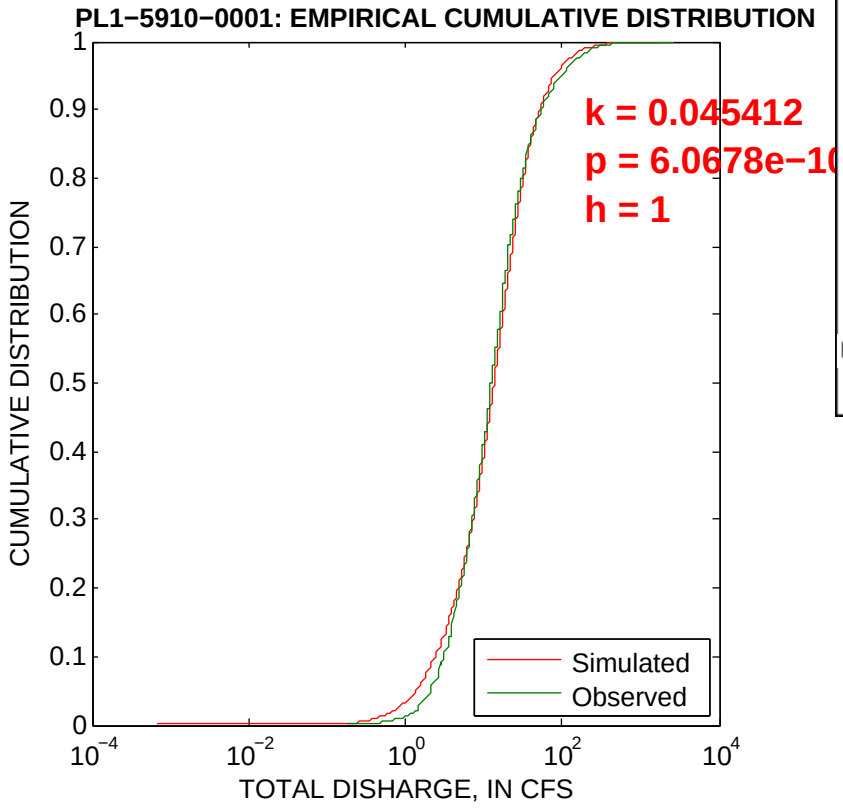












DATA SELECTION

scenario	file
P620171001WQ	FLOW.calib

plot: FLOW - total discharge

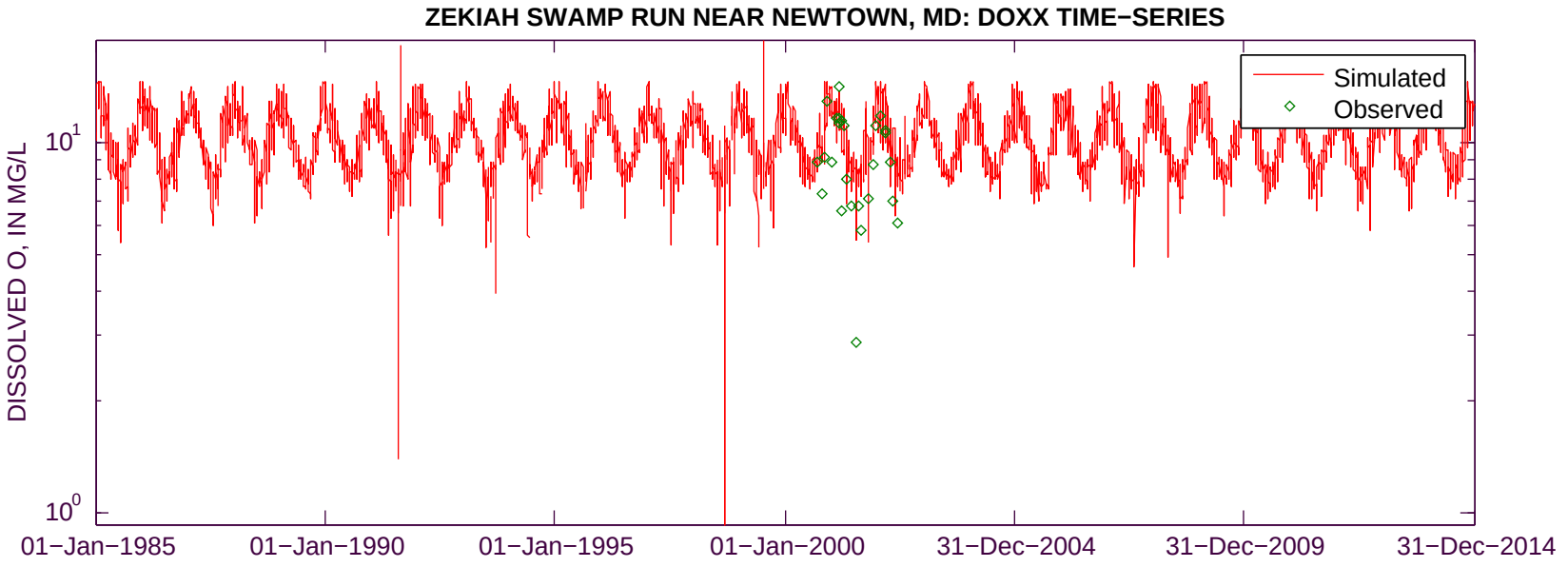
Dates: 1/1/1985 – 12/31/201

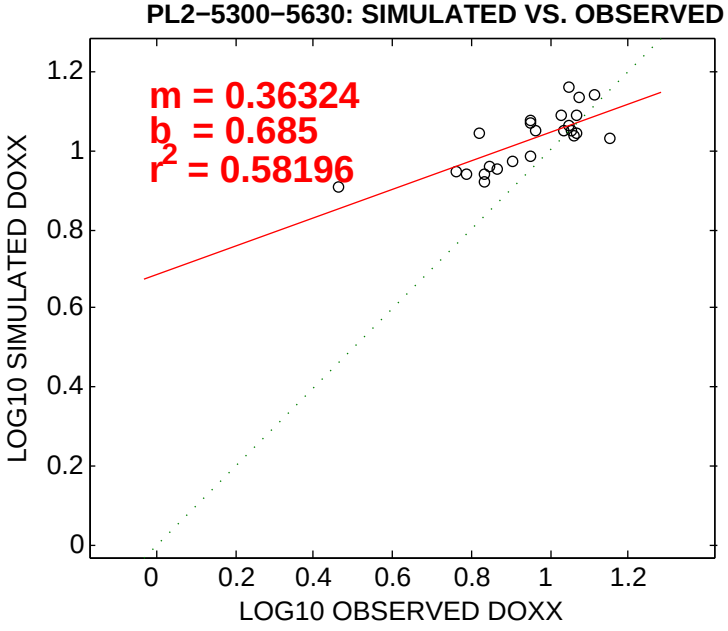
Drive	Directory	Observed
N/A	model	OBS20161101

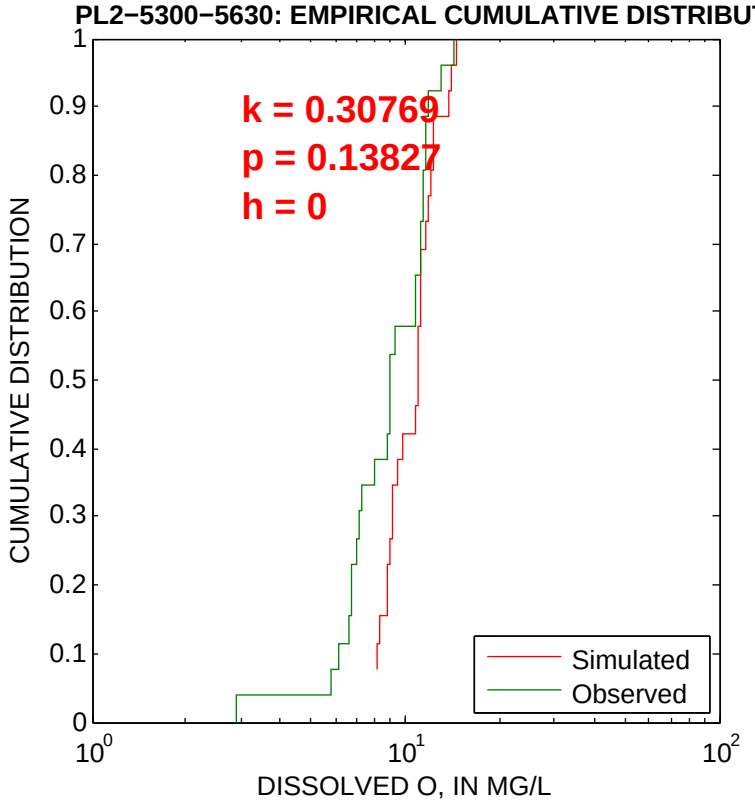
STATISTICS

n	10592	10591
	observe	simulate
min	0.17	0
	-0.769551	-3.18013
mean	28.0268	25.6418
	1.11141	1.09256
media	13	13.653
	1.11394	1.13526
max	2650	1794
	3.42325	3.25382
varian	4970.57	2528.11
	0.251713	0.292105
JB	0.001	0.001
	0.001	0.001
	ra	log
%	-8.50976	-1.69567
err.va	2440.86	0.107321
rel.std.err	0.491063	0.426362
mod.eff	0.508937	0.573638

VERSION 2.1







DATA SELECTION

scenario	file
P620171001WQ	DOXX.calib

plot: DOXX - dissolved oxygen

Dates: 1/1/1985 – 12/31/201

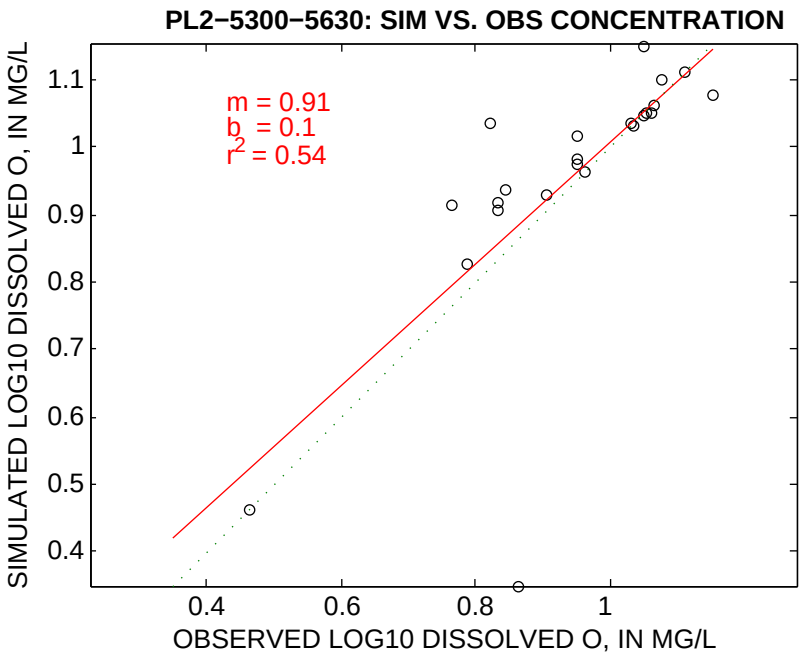
Drive	Directory	Observed
N/A	model	OBS20161101

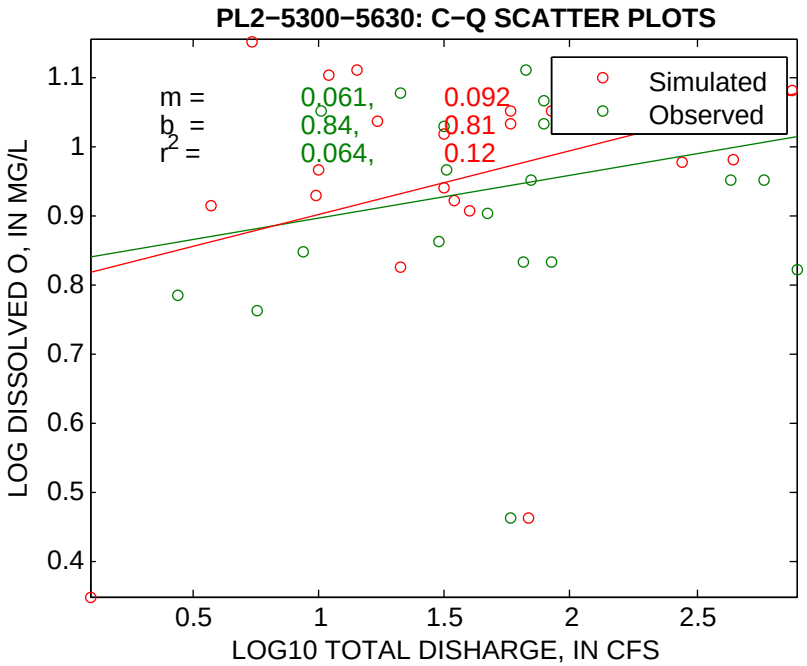
STATISTICS

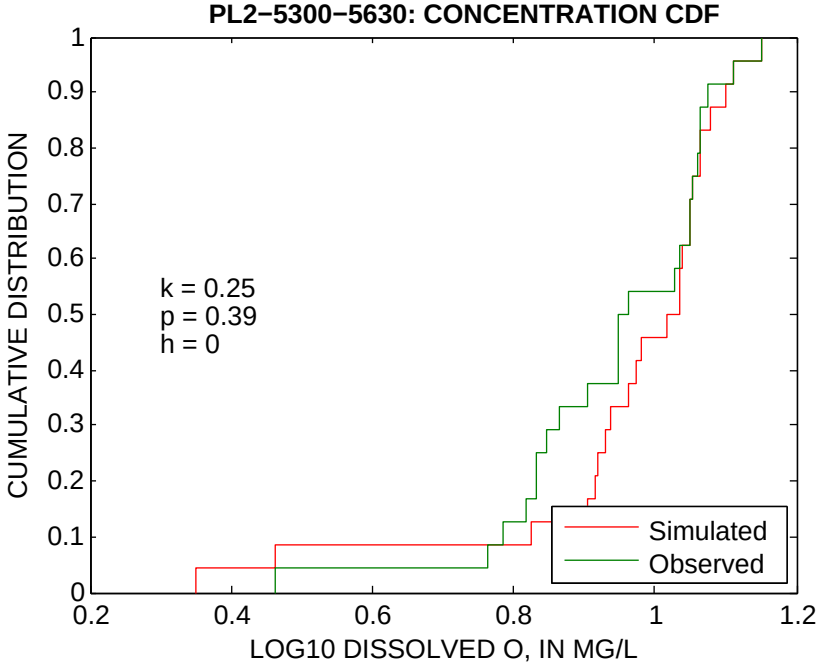
	n	26	24
		observe	simulate
min		2.9	0
		0.462398	0.911254
mean		9.15385	9.97638
		0.944231	1.02798
media		8.9	10.953
		0.956589	1.04273
max		14.2	14.595
		1.15229	1.1642
varian		6.95298	11.6113
		0.0229965	0.00521374
JB		0.5	0.001270
		0.008394	0.5
		ra	log
% err.va		8.98563	8.86987
		10.4139	0.0188232
rel.std.err		1.49775	0.818525
mod.eff		-0.497753	0.181475

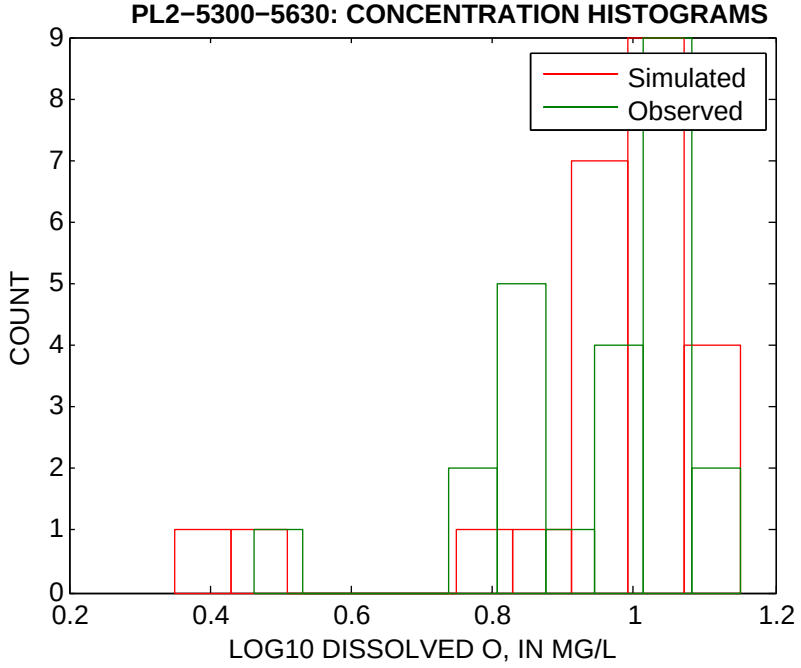
VERSION 2.1

ALL DATA
LOG10

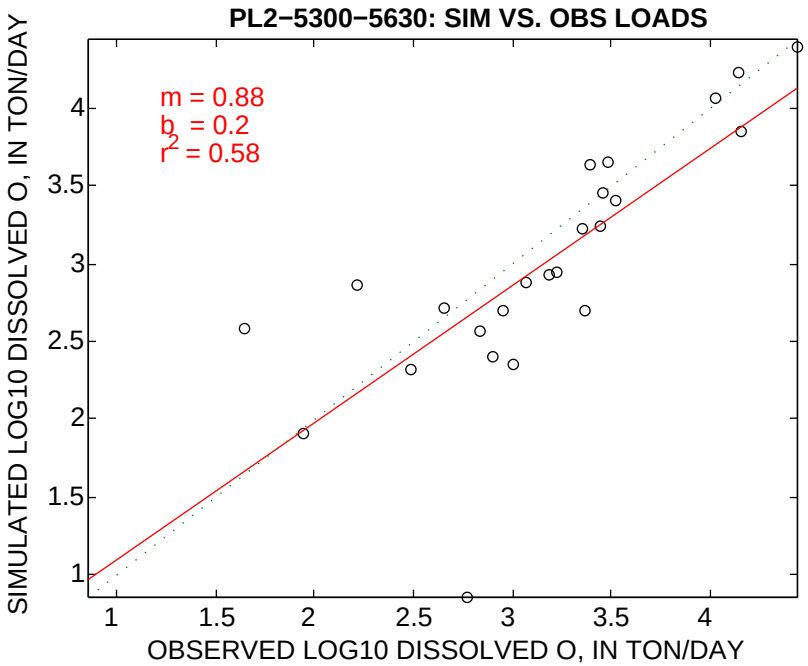


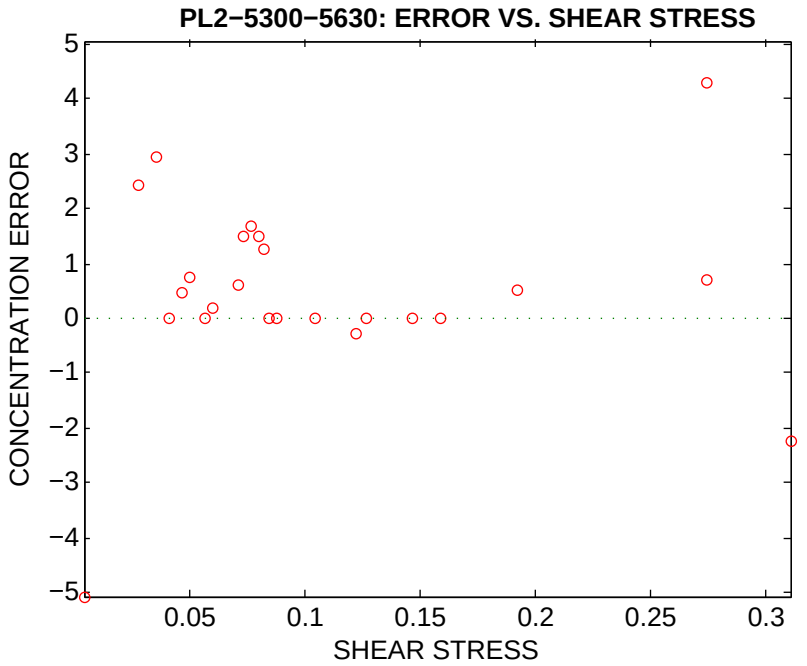


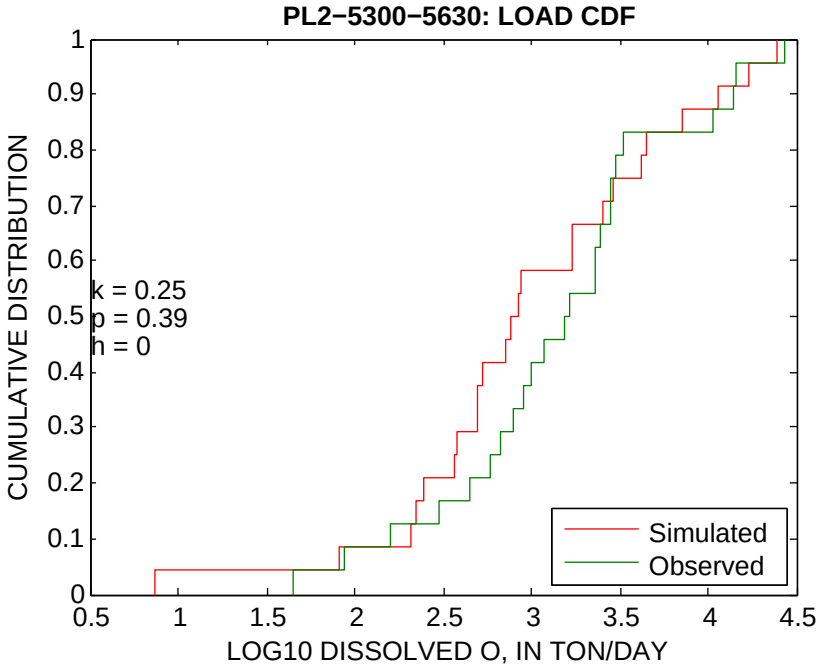


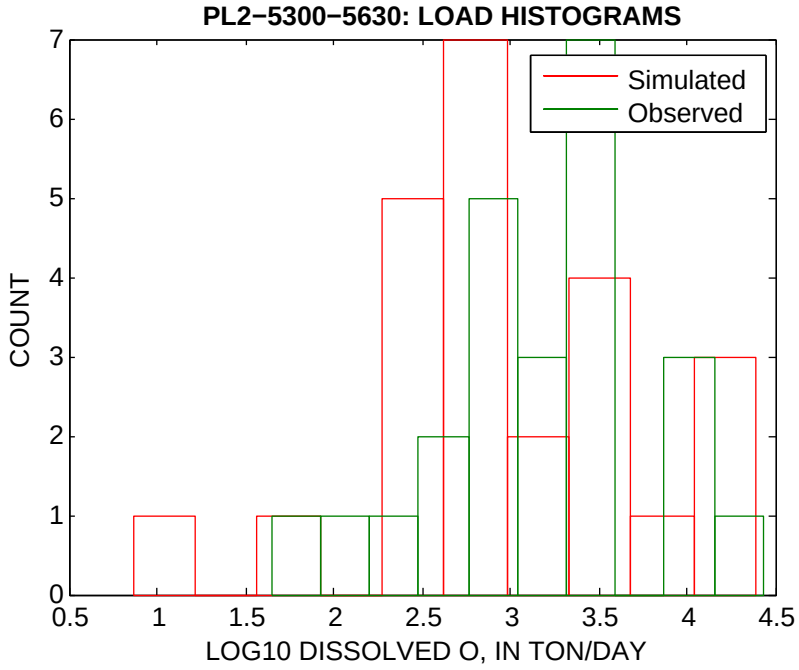


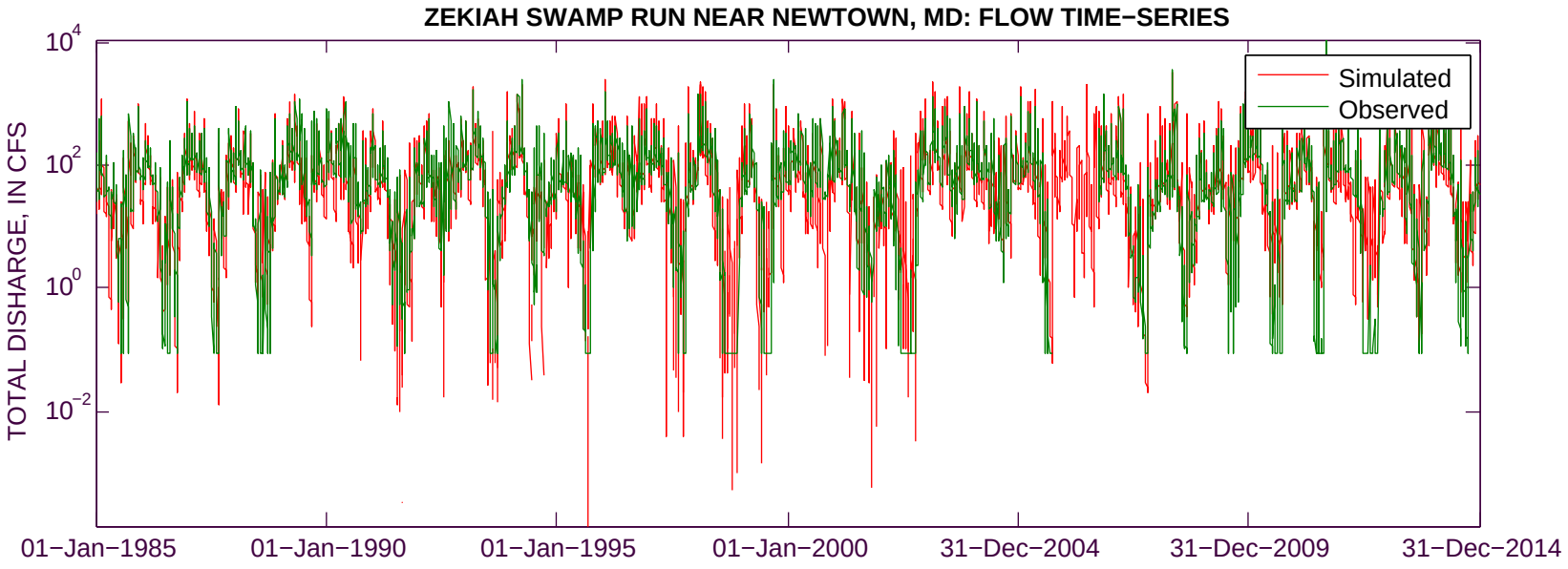
LOAD DATA
LOG10











DATA SELECTION

scenario: P620171001WQ | file: FLOW.calib

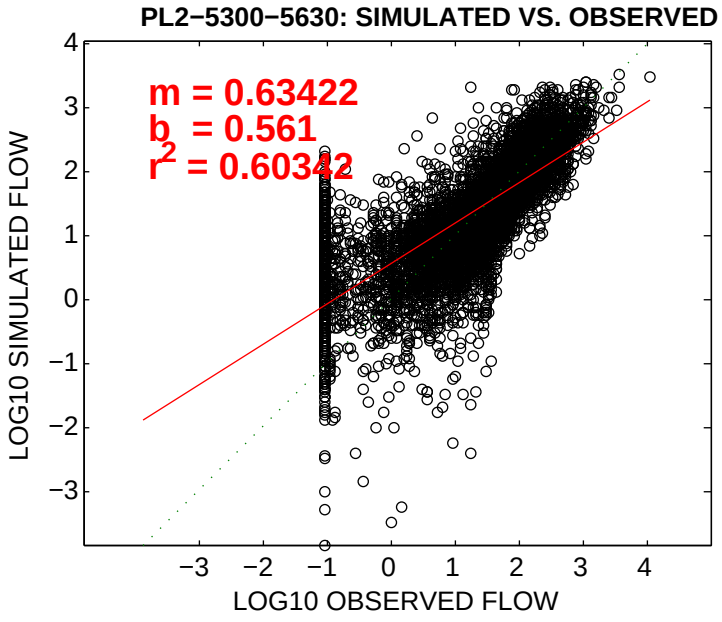
plot: FLOW - total discharge

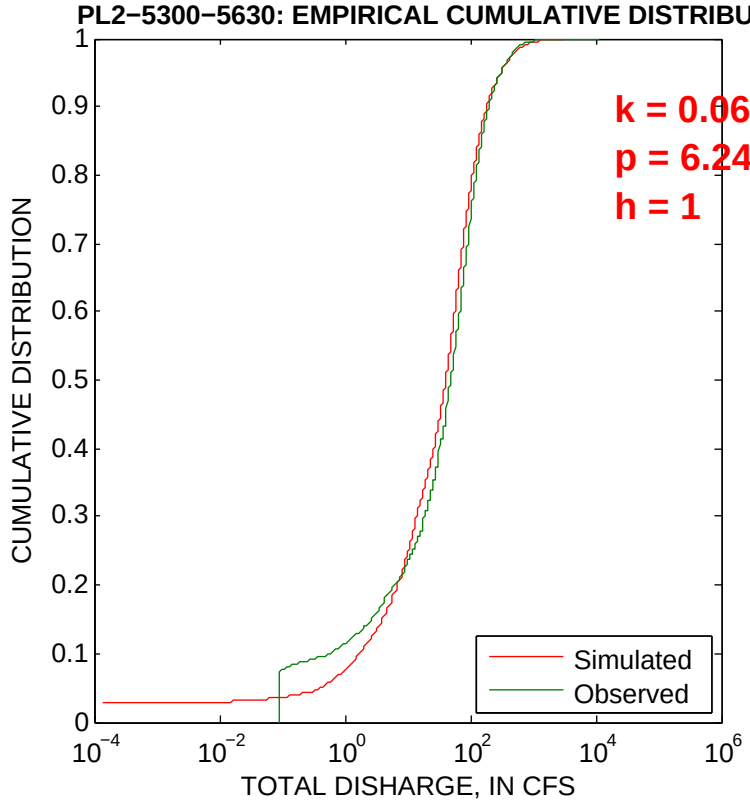
Dates: 1/1/1985 – 12/31/201

Drive | Directory | Observed: N/A | model | OBS20161101

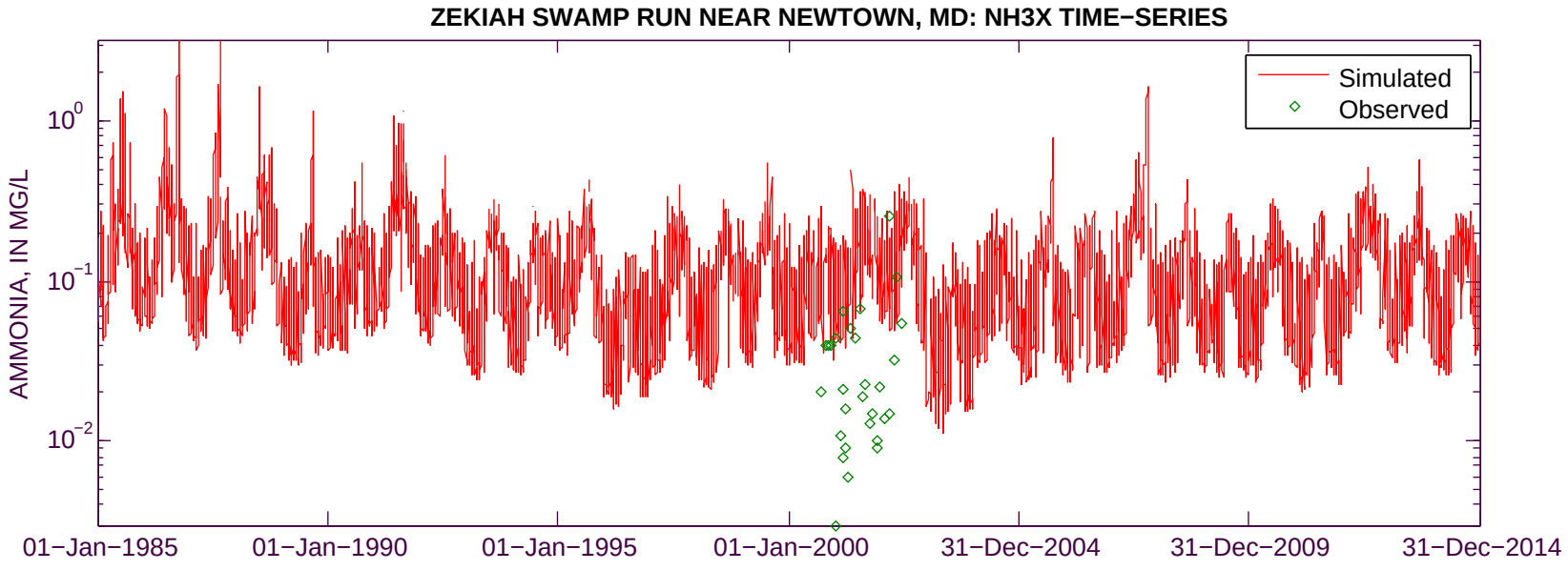
STATISTICS

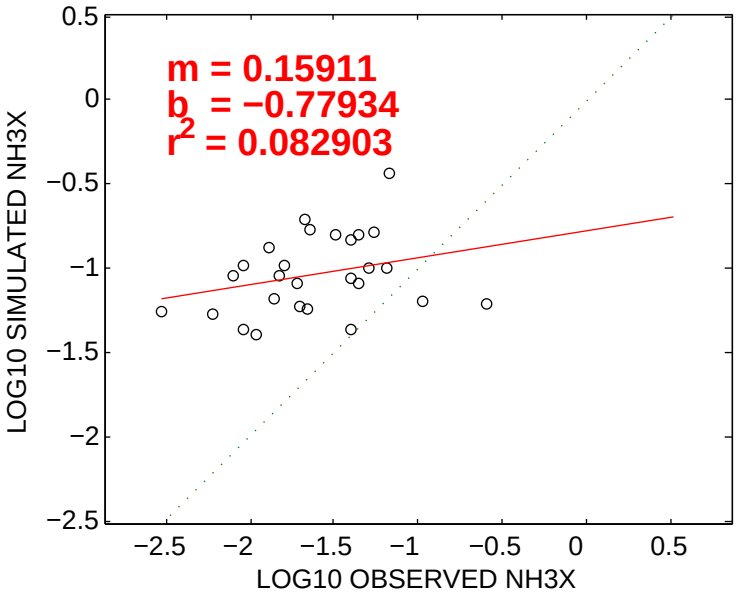
	n	observe	simulate
		10592	10295
min		0.0898258	0
		-1.0466	-3.86401
mean		90.2112	85.5581
		1.44805	1.47938
media		49.0898	41.2635
		1.71675	1.63584
max		11200.1	3116.6
		4.04922	3.49368
varian		35190.6	28159.4
		0.876139	0.584036
JB		0.001	0.001
		0.001	0.001
		ra	log
%		-5.15803	2.1639
err.va		22191.2	0.34982
rel.std.err		0.630601	0.399275
mod.eff		0.369399	0.600725

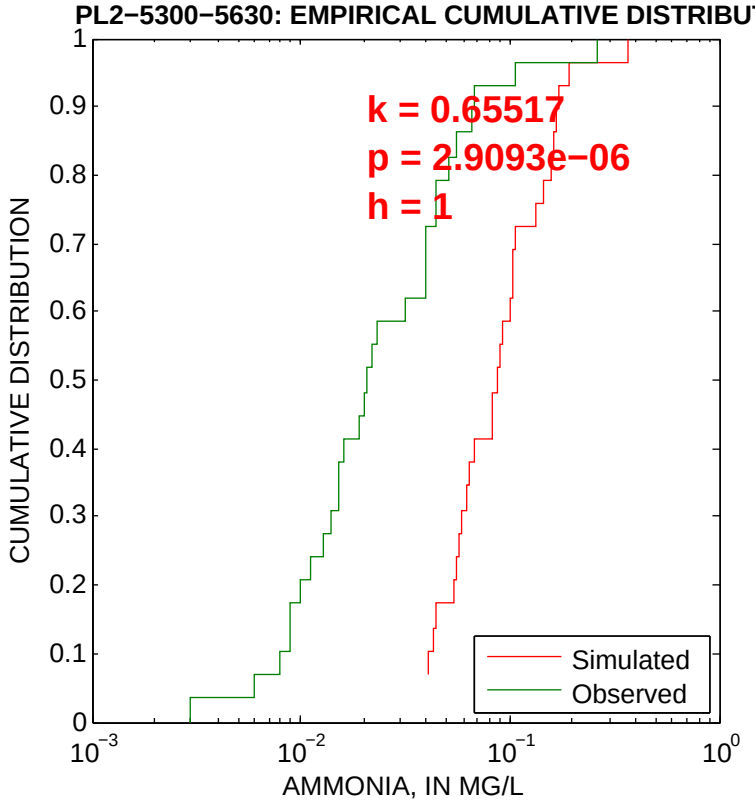




VERSION







DATA SELECTION

scenario	file
P620171001WQ	NH3X.calib

plot: NH3X - ammonia

Dates: 1/1/1985 – 12/31/201

Drive Directory: N/A | model

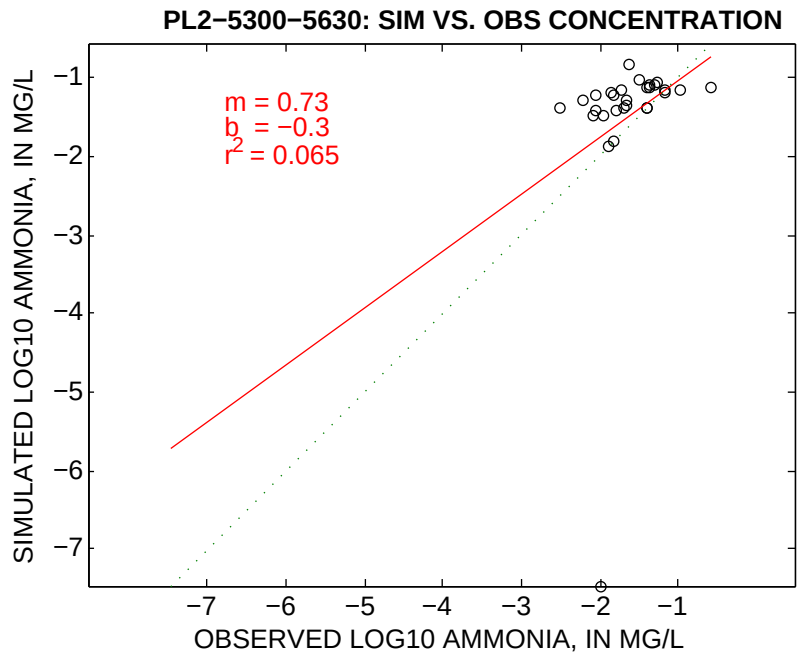
Observed: OBS20161101

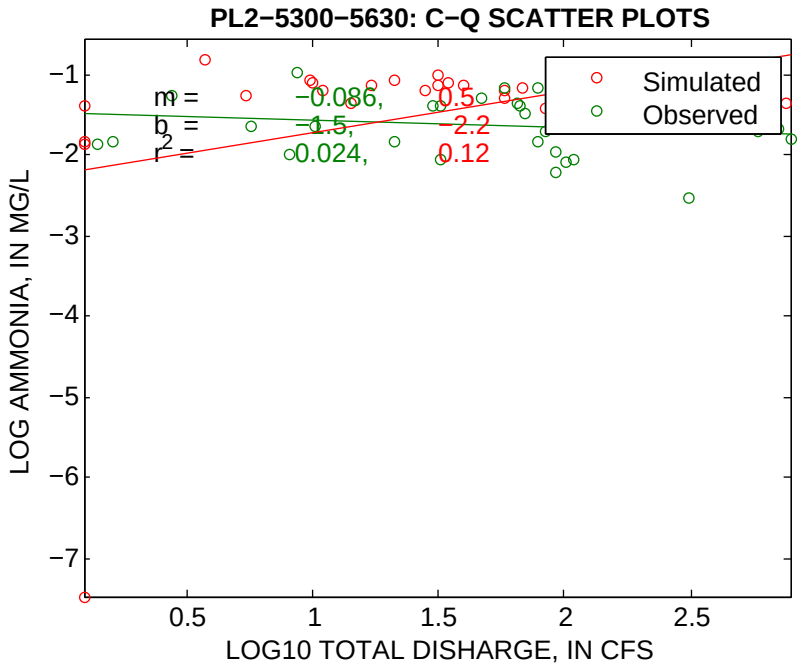
STATISTICS

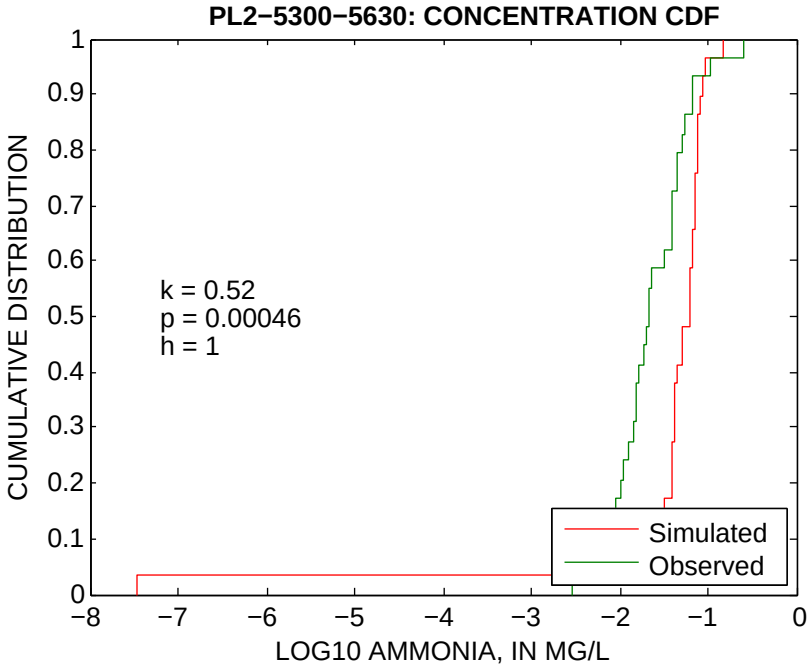
	n	observe	simulate
		29	27
min		0.003	0
		-2.52288	-1.39156
mean		0.0371034	0.0992282
		-1.61206	-1.03584
media		0.021	0.086802
		-1.65758	-1.04206
max		0.259	0.36325
		-0.5867	-0.439794
varian		0.00235702	0.00498247
		0.173258	0.0529068
JB		0.001	0.001
		0.5	0.390419
		ra	log
%		167.437	-35.7446
err.va		0.0107239	0.515838
rel.std.err		4.54978	2.97728
mod.eff		-3.54978	-1.97728

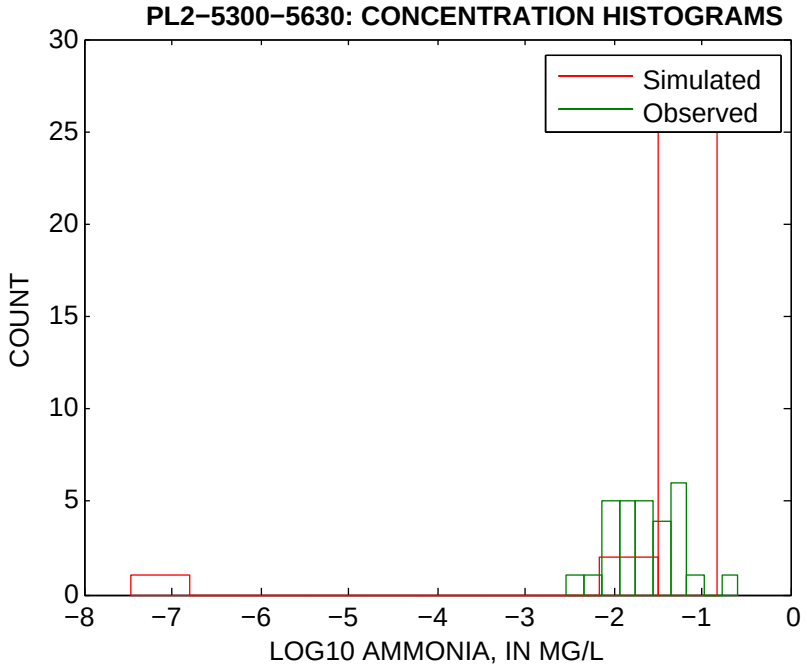
VERSION 2.1

ALL DATA
LOG10

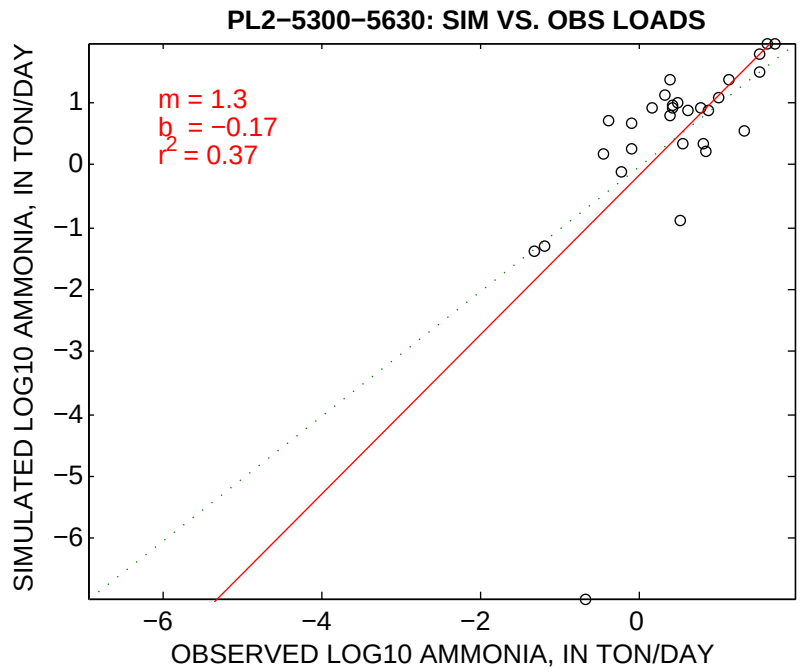


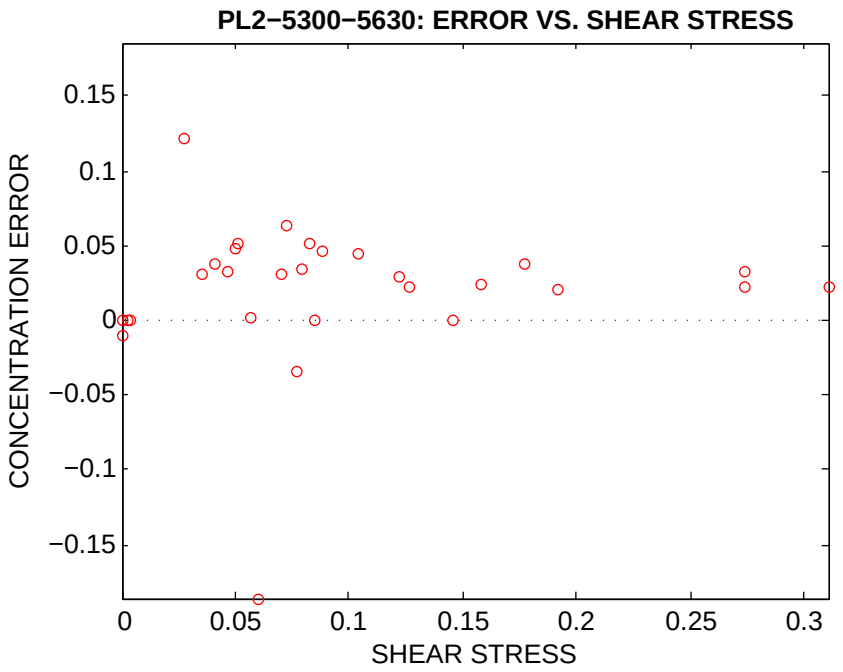


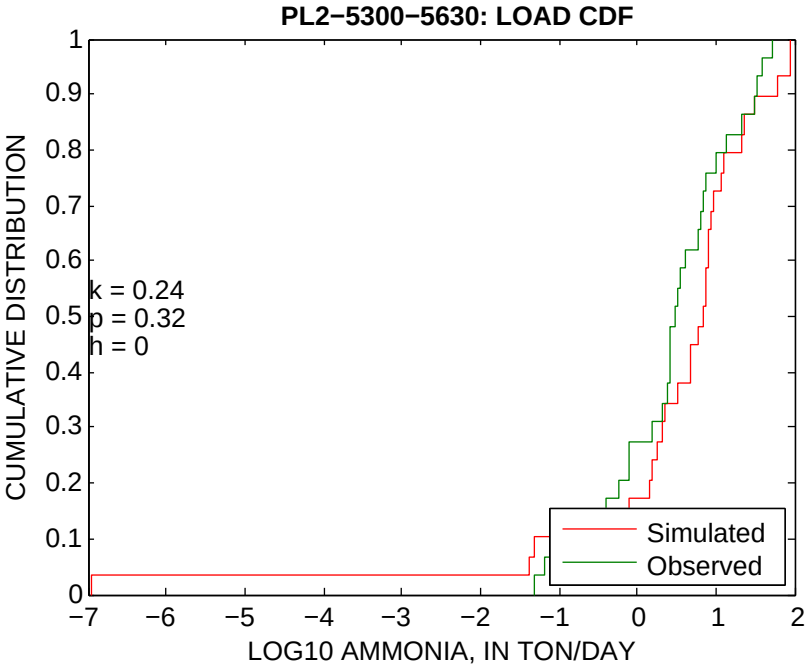


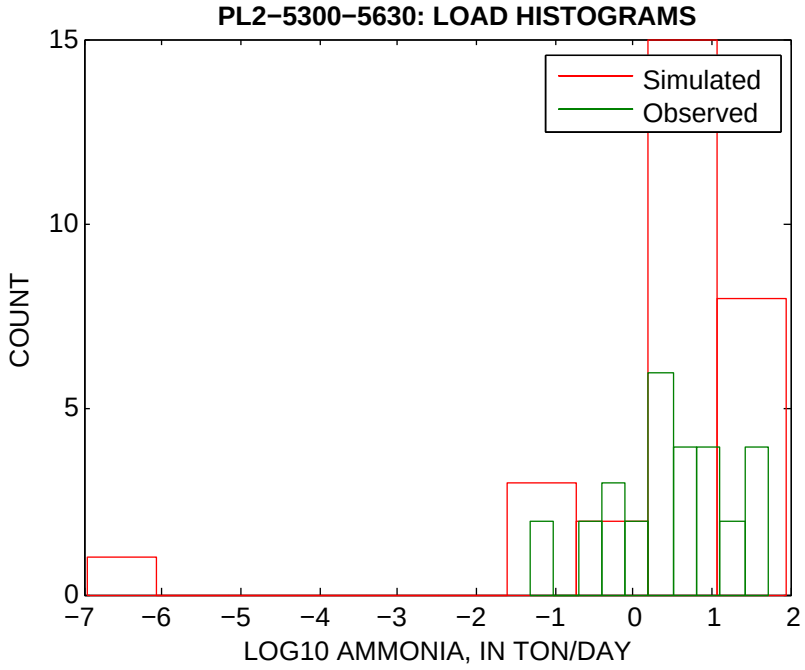


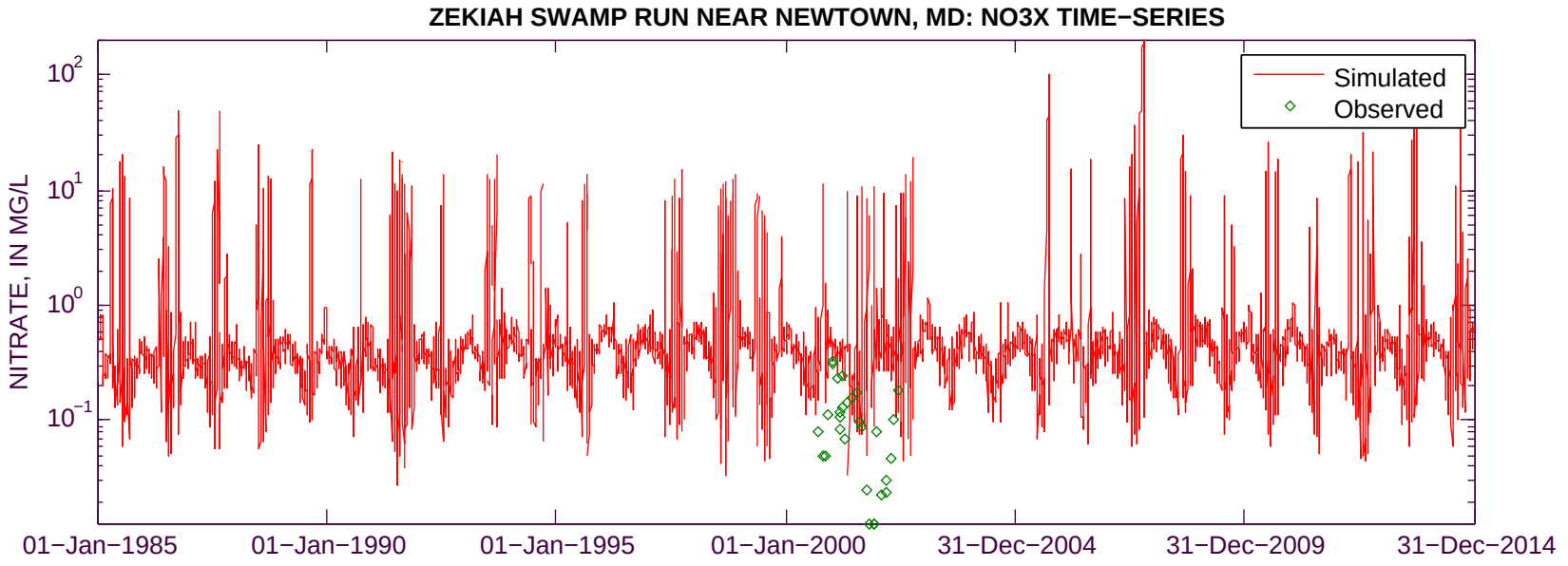
LOAD DATA
LOG10

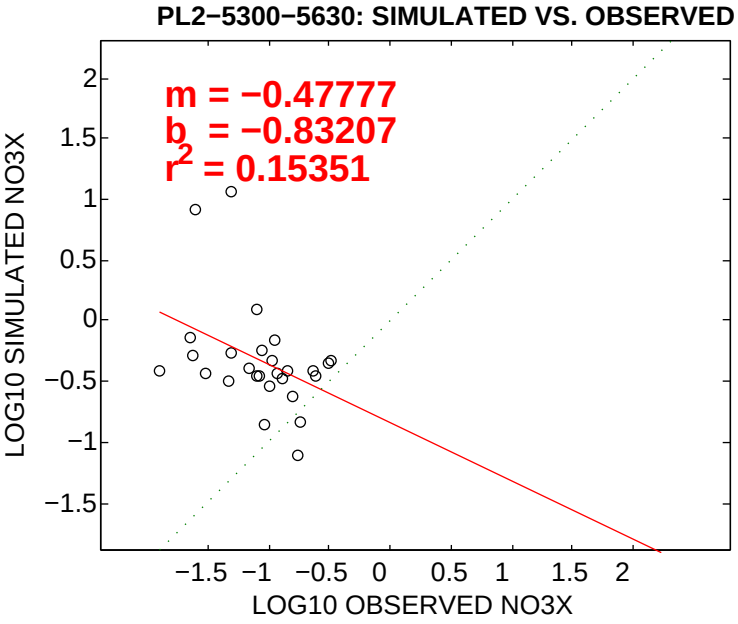


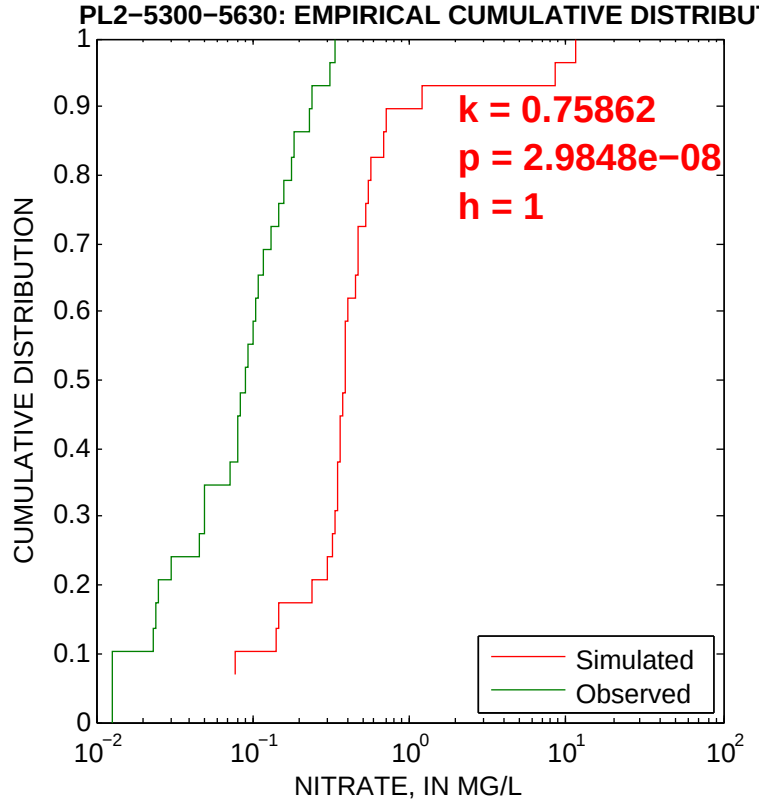












DATA SELECTION

scenario	file
P620171001WQ	NO3X.calib

plot: NO3X - nitrate

Dates: 1/1/1985 – 12/31/201

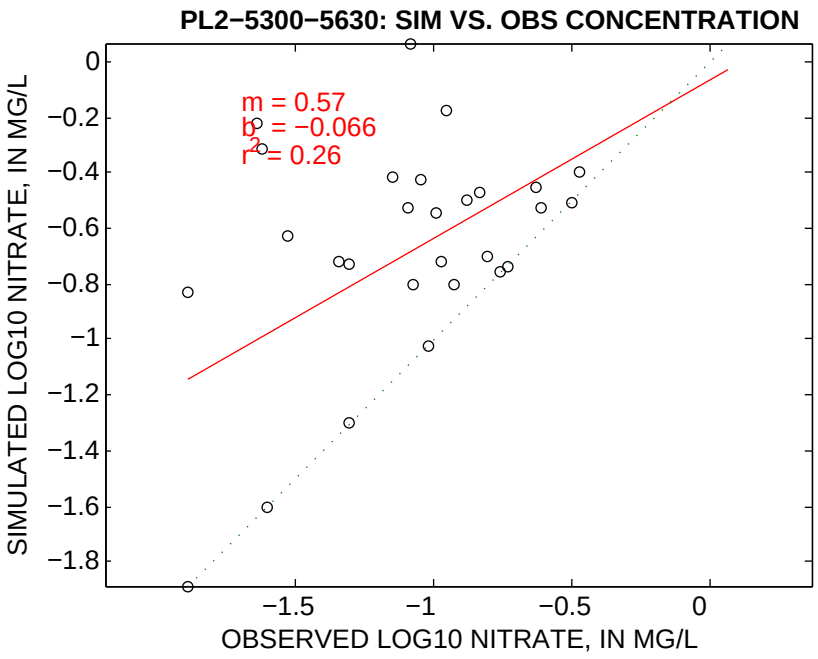
Drive	Directory	Observed
N/A	model	OBS20161101

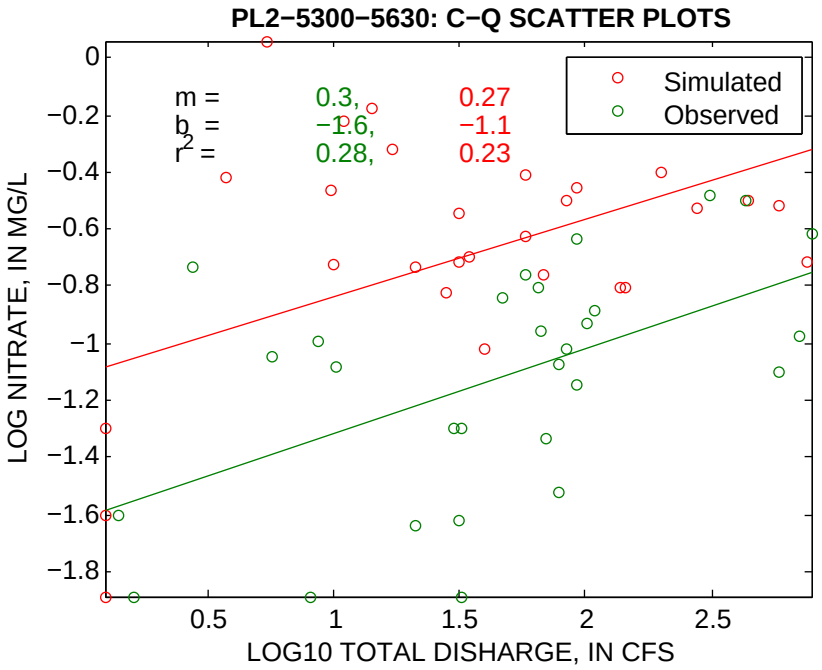
STATISTICS

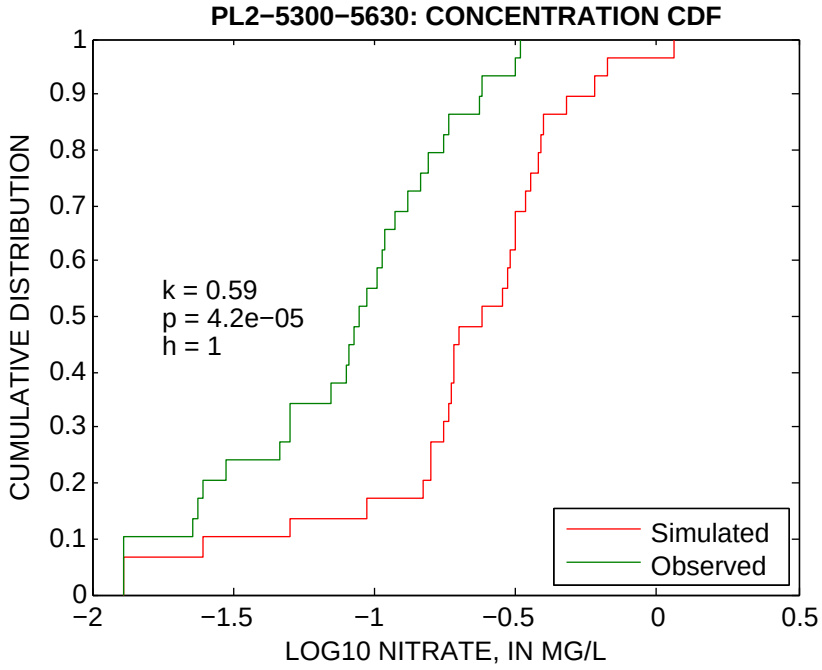
	n	29	27
		observe	simulate
min		0.013	0
		-1.88606	-1.10458
mean		0.108276	1.05191
		-1.06599	-0.32277
media		0.089	0.39026
		-1.02228	-0.407868
max		0.332	11.453
		-0.478862	1.05892
varian		0.00750942	6.26178
		0.132906	0.19763
JB		0.028967	0.001
		0.405547	0.001022
		ra	log
%		871.507	-69.721
err.va		7.28595	1.03115
rel.std.err		970.241	7.75846
mod.eff		-969.241	-6.75846

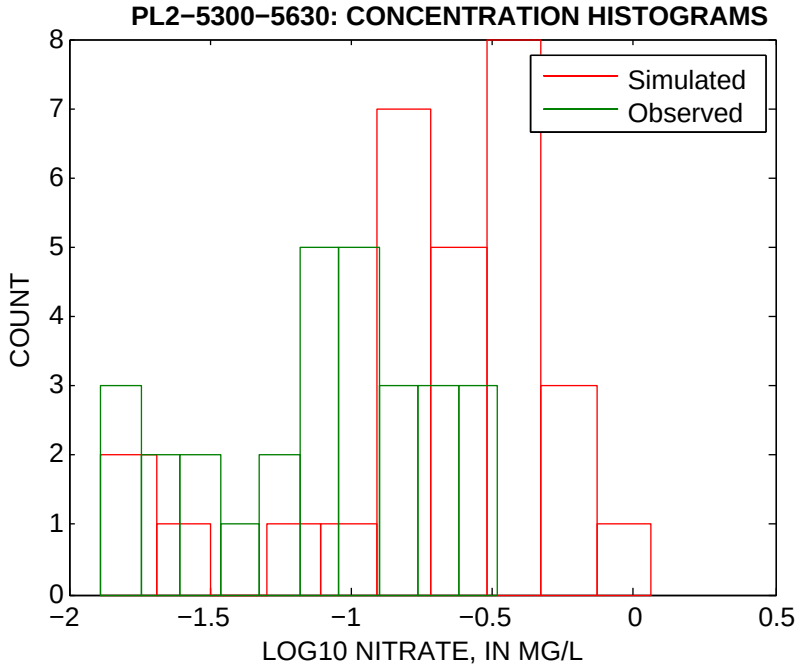
VERSION

ALL DATA
LOG10

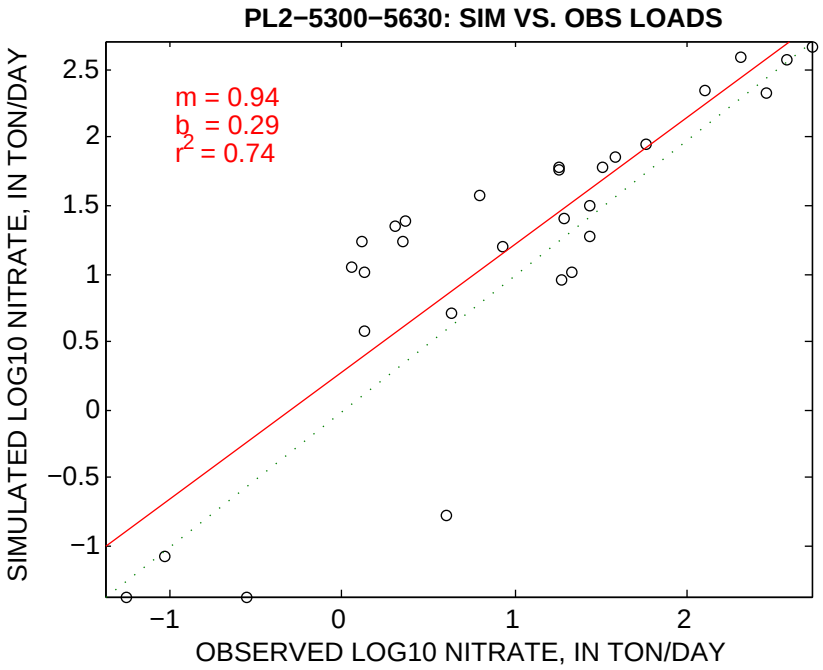


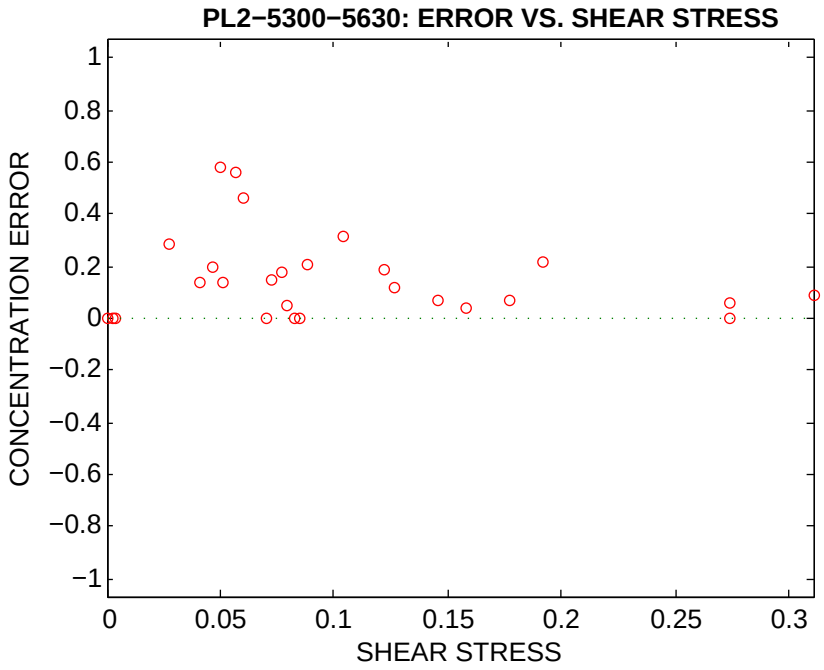


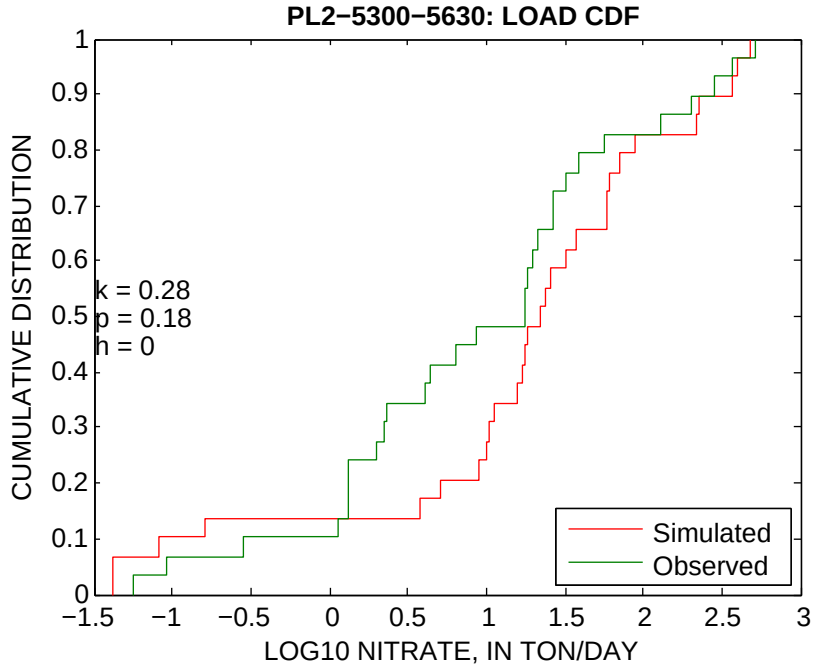


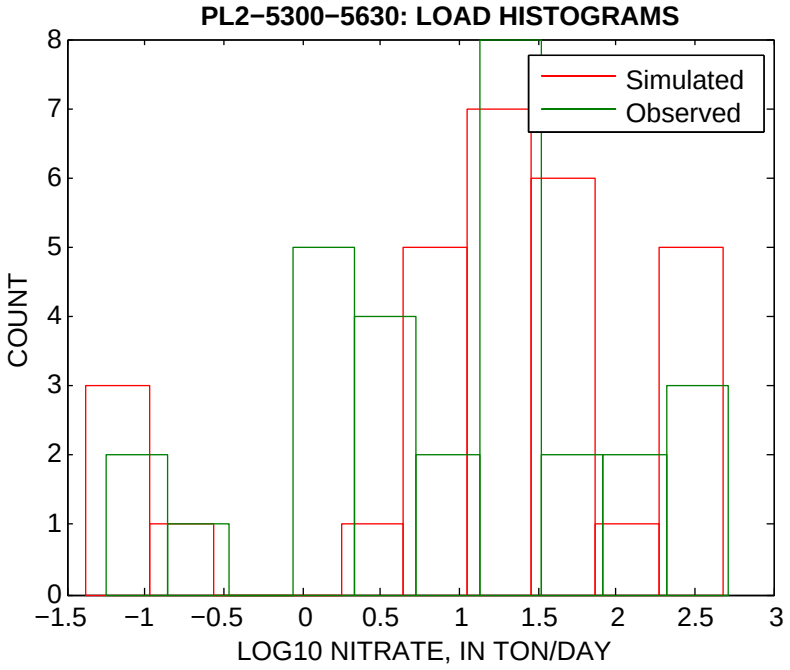


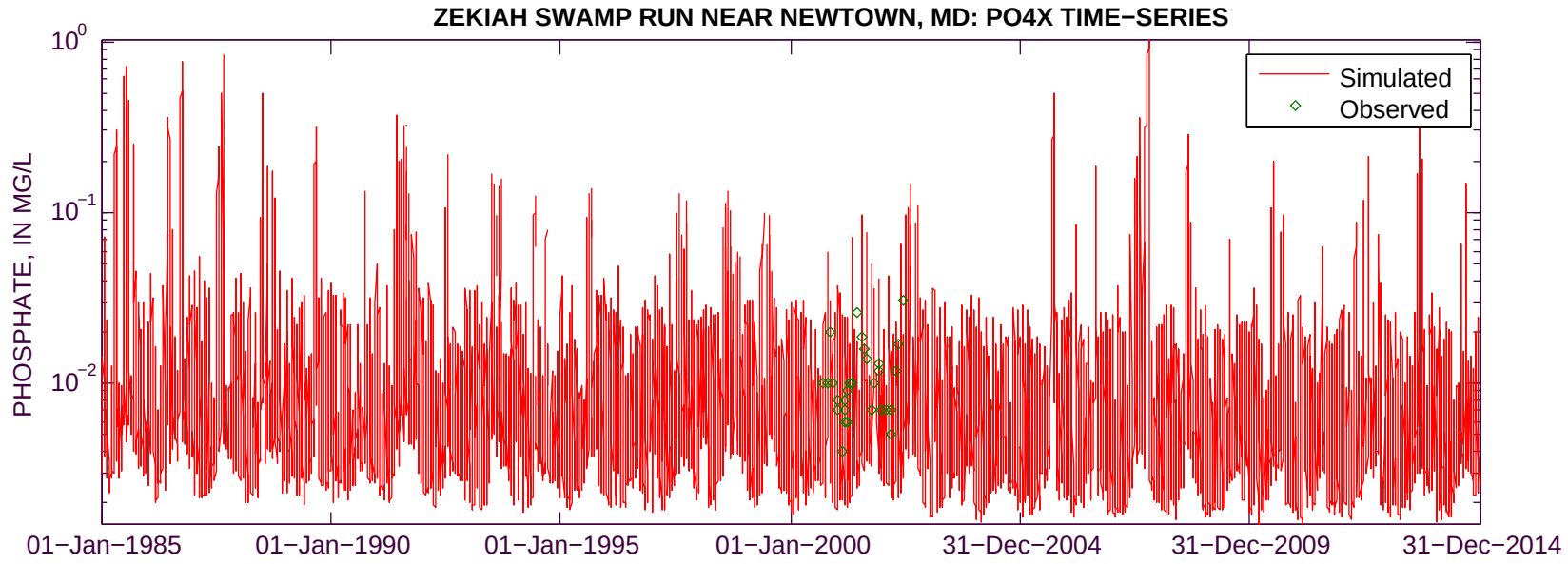
LOAD DATA
LOG10

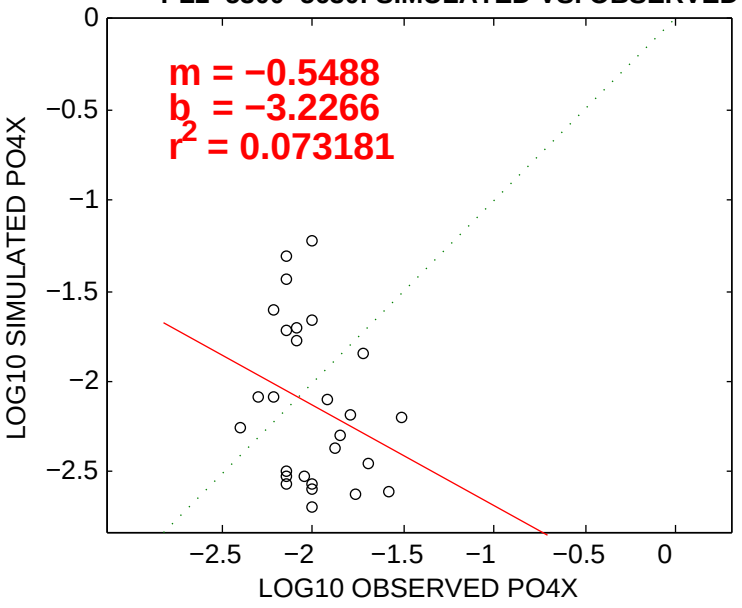


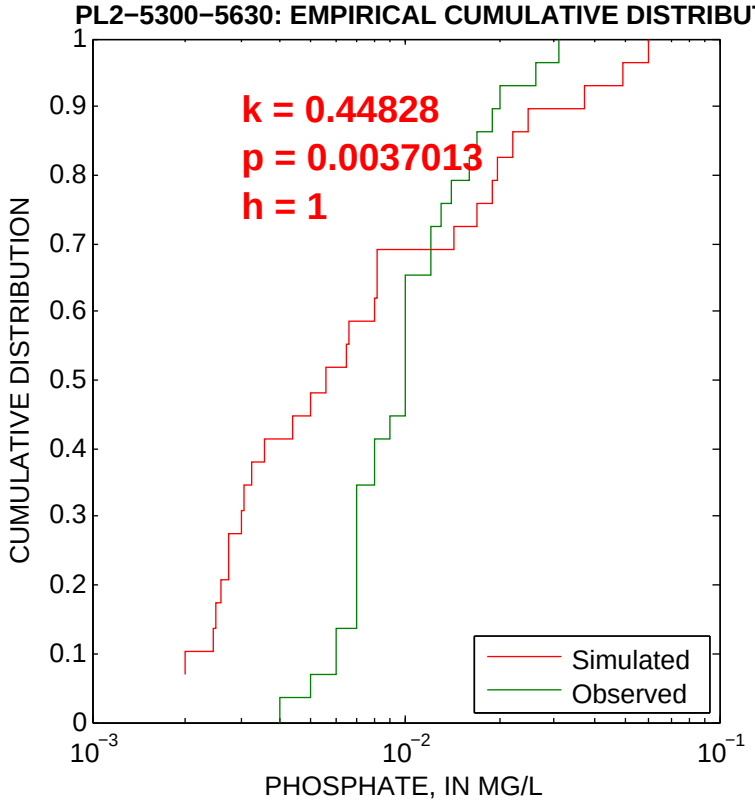












DATA SELECTION

scenario: P620171001WQ | file: PO4X.calib

plot: PO4X - phosphate

Dates: 1/1/1985 – 12/31/201

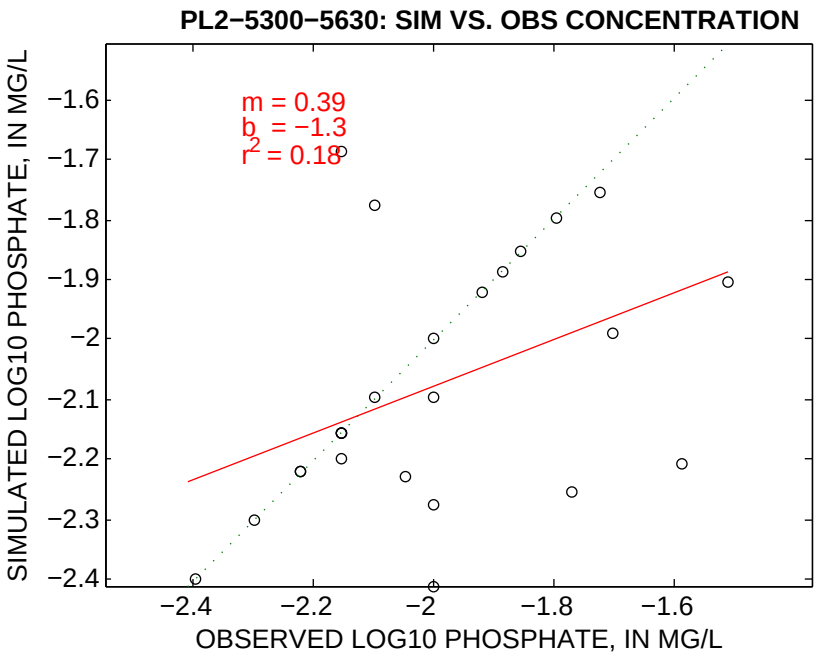
Drive: N/A | Directory: model | Observed: OBS20161101

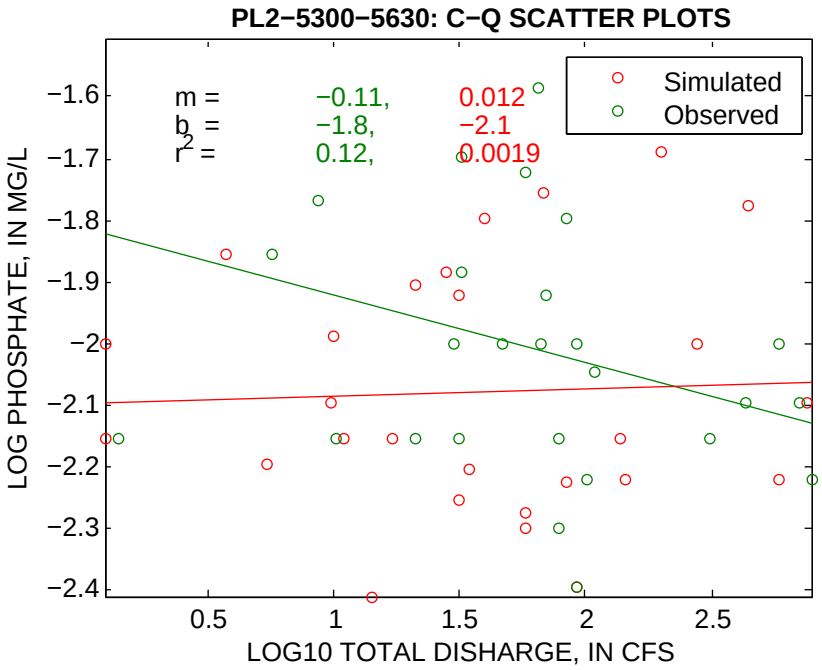
STATISTICS

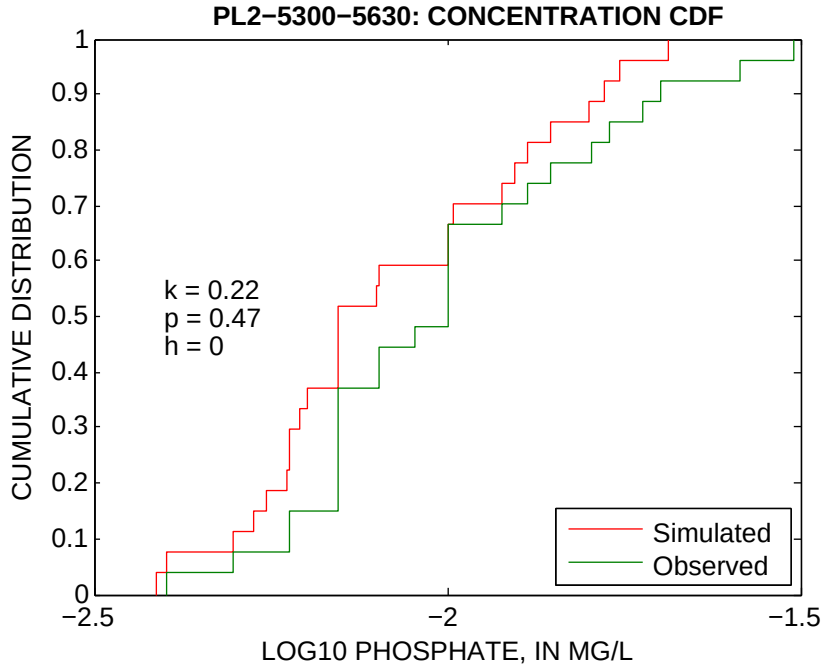
	n	29	27
		observe	simulate
min		0.004	0
		-2.39794	-2.69836
mean		0.0113103	0.0118238
		-2.00192	-2.12798
media		0.01	0.005548
		-2	-2.19117
max		0.031	0.059745
		-1.50864	-1.2237
varian		3.93645e-0	0.00021855
		0.0472882	0.194622
JB		0.003874	0.001057
		0.324982	0.125771
		ra	log
%		4.53973	6.29733
err.va		0.00030326	0.310318
rel.std.err		7.70398	6.56227
mod.eff		-6.70398	-5.56227

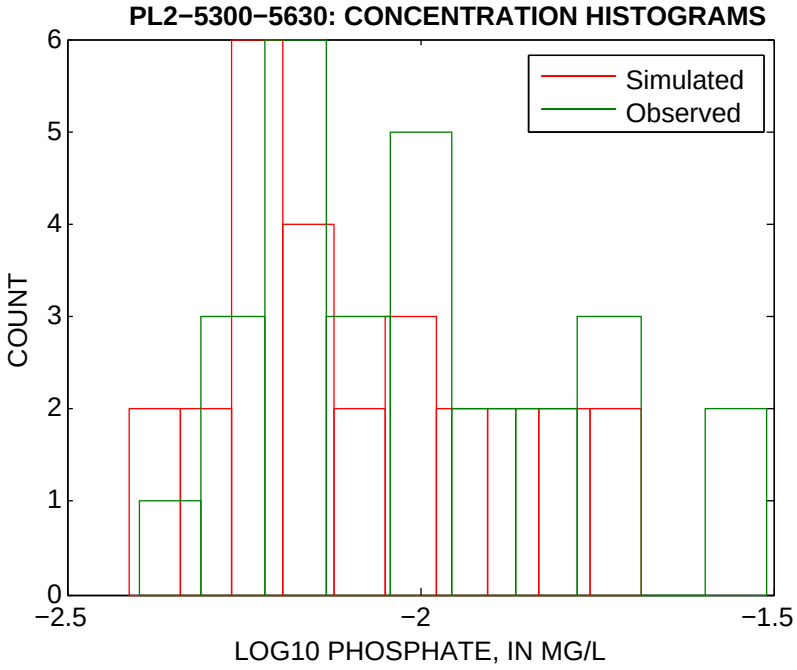
VERSION 2.1

ALL DATA
LOG10

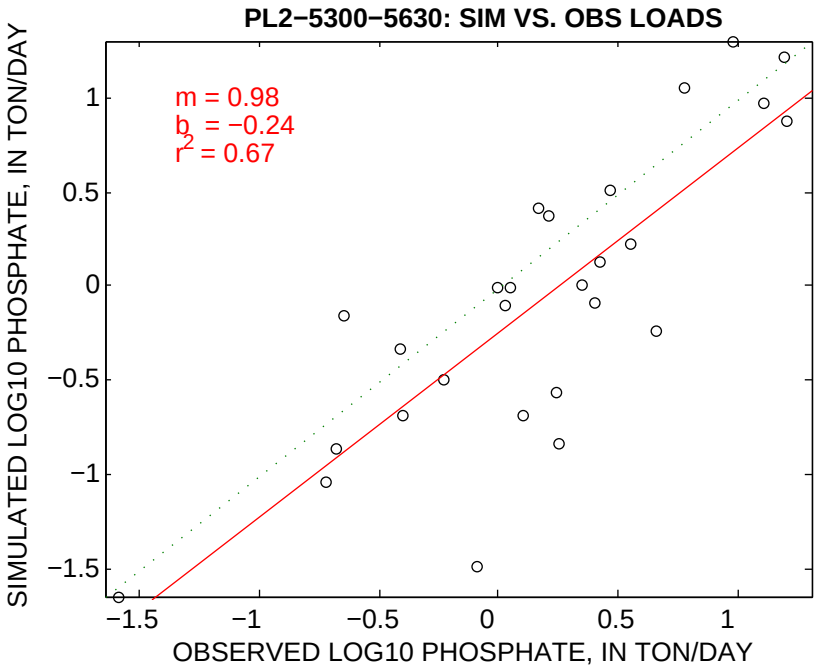


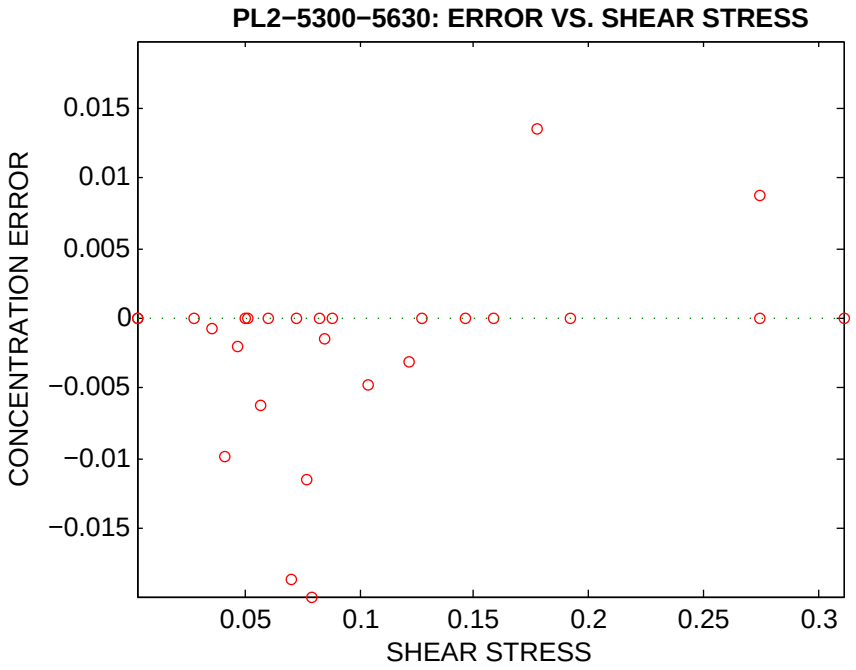


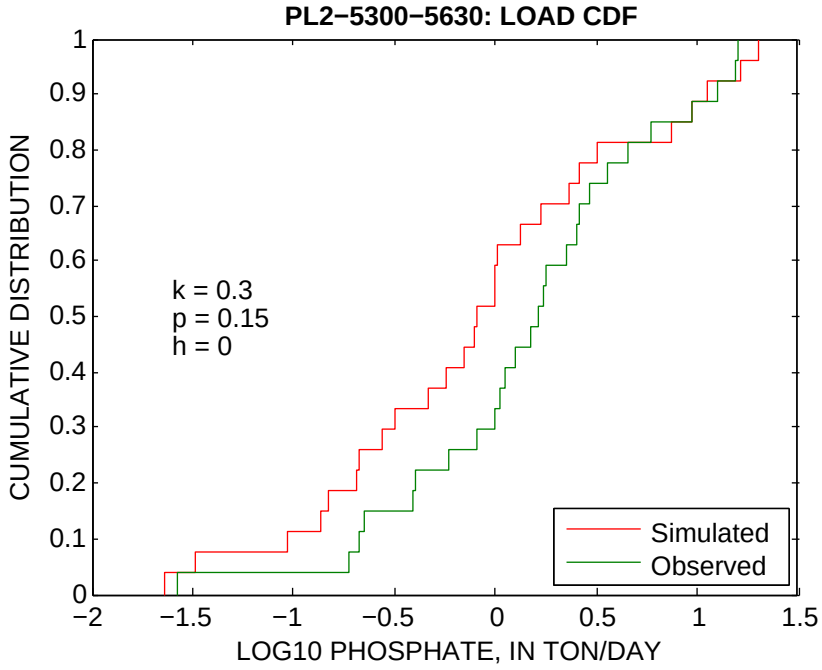


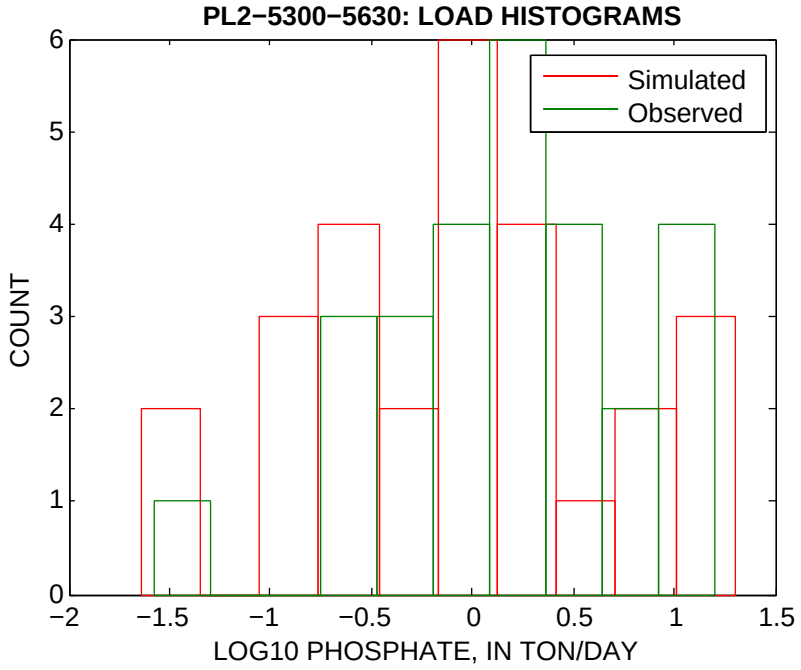


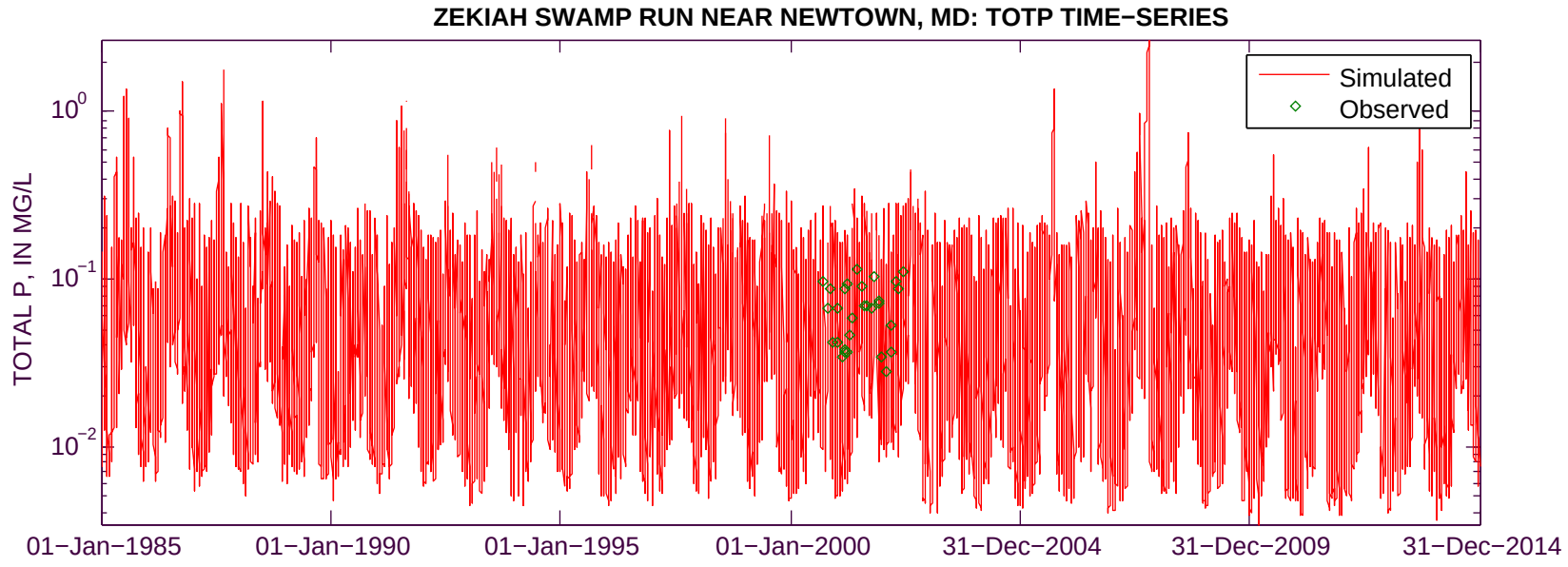
LOAD DATA
LOG10

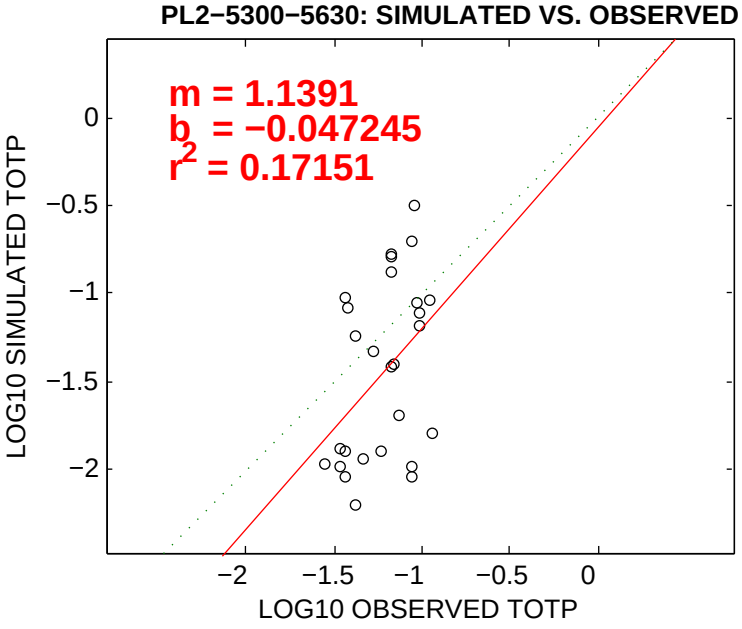


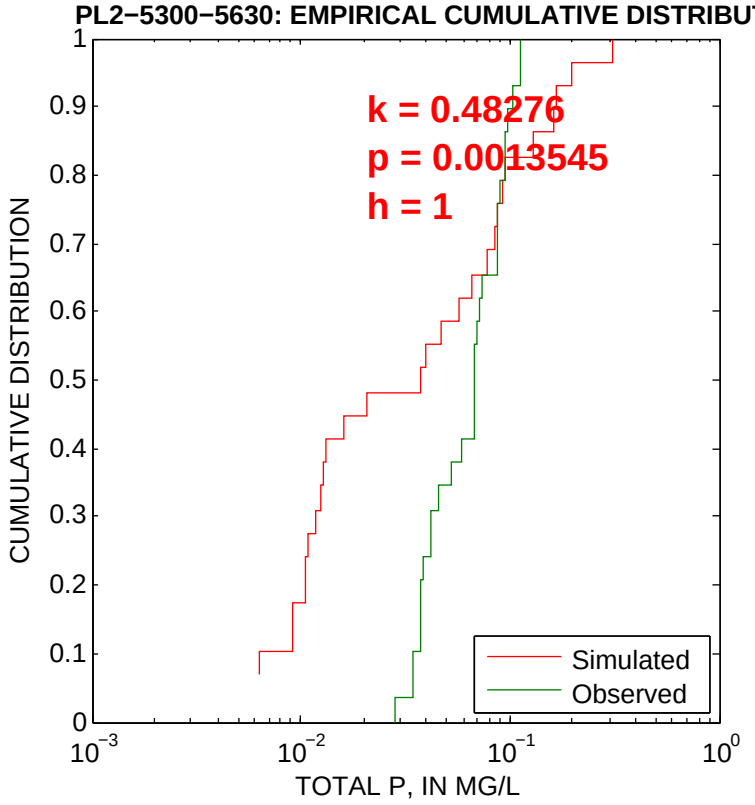












DATA SELECTION

scenario	file
P620171001WQ	TOTP.calib

plot: TOTP - total phosphorus

Dates 1/1/1985 12/31/201

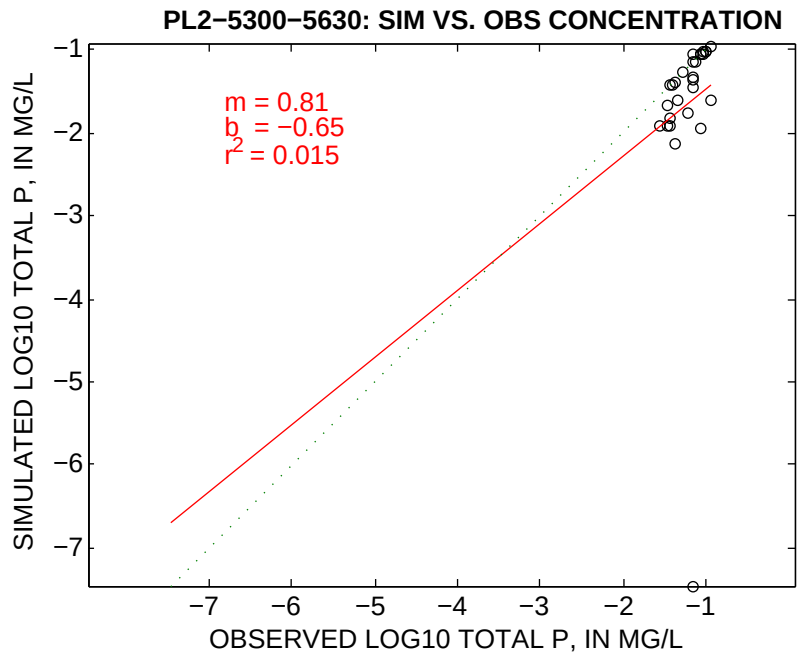
Drive	Directory	Observed
N/A	model	OBS20161101

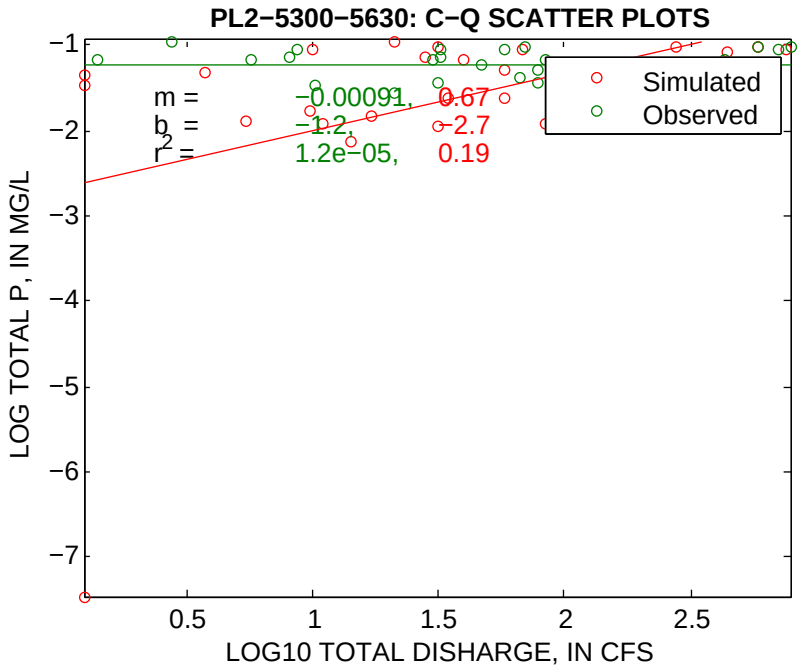
STATISTICS

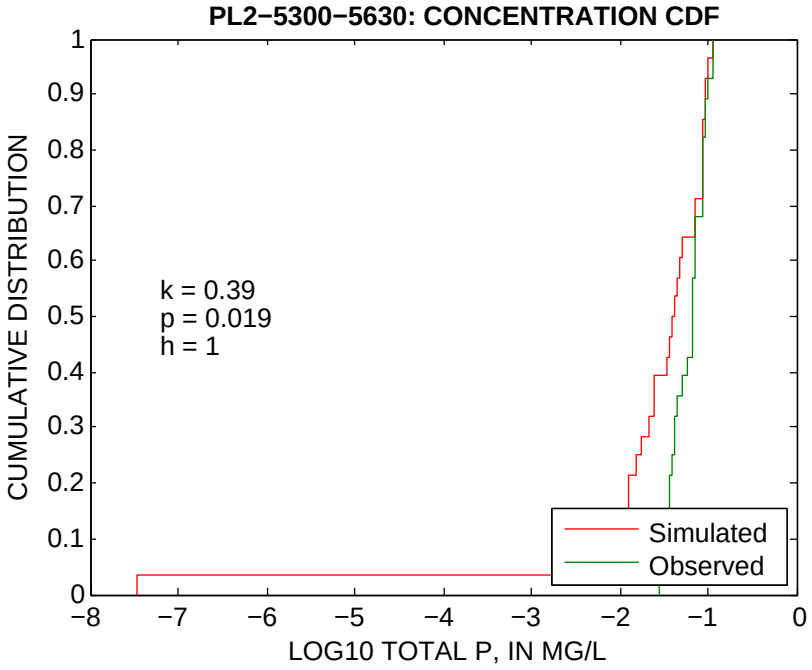
	n	29	27
		observe	simulate
min		0.028	0
		-1.55284	-2.19346
mean		0.0667931	0.0619542
		-1.22054	-1.43759
media		0.067	0.037967
		-1.17393	-1.40552
max		0.114	0.31283
		-0.943095	-0.504692
varian		0.00067517	0.00533319
		0.0335806	0.254064
JB		☑ 0.181239	0.001513
		☑ 0.148491	0.137953 ☑
		ra	log
%		-7.24464	17.7828
err.va		0.00504726	0.260061
rel.std.err		7.47554	7.7444
mod.eff		-6.47554	-6.7444

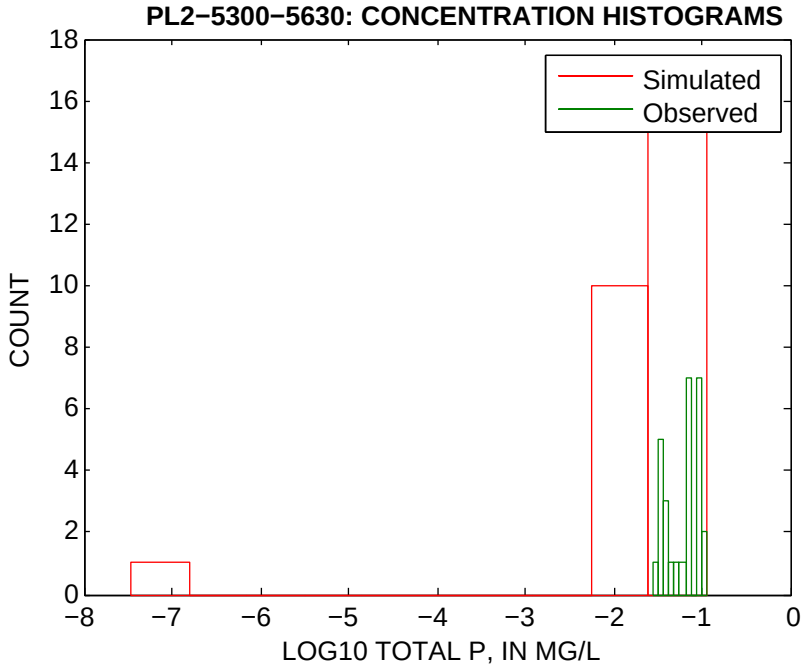
VERSION 2.1

ALL DATA
LOG10

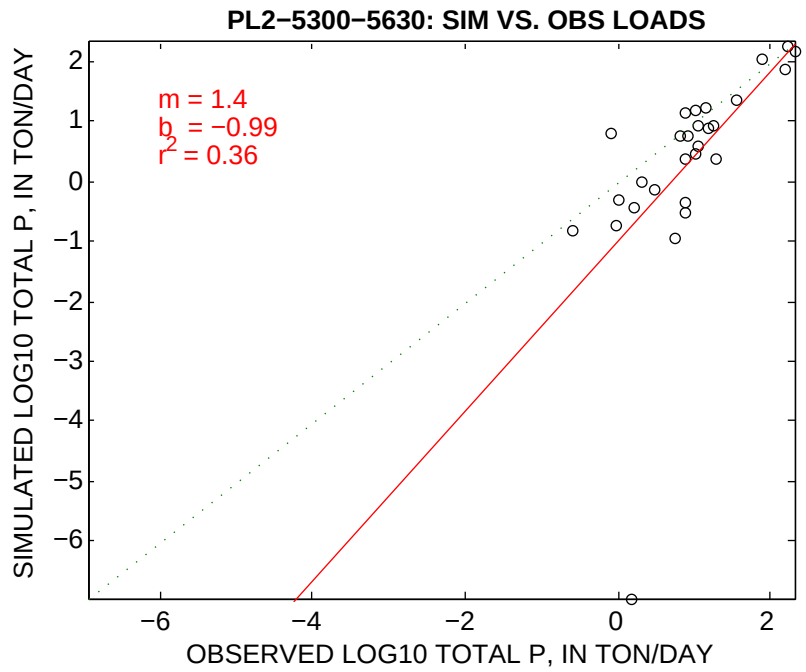


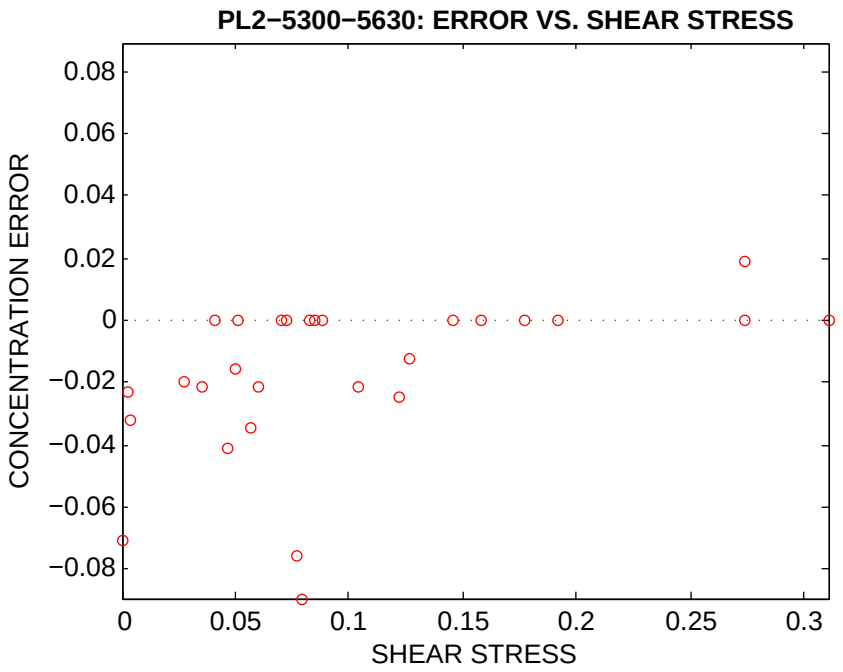


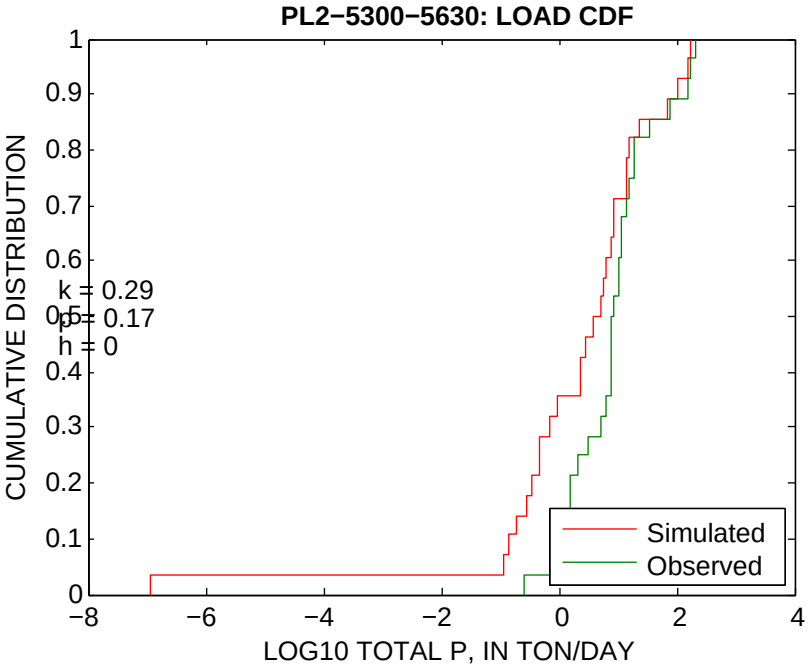


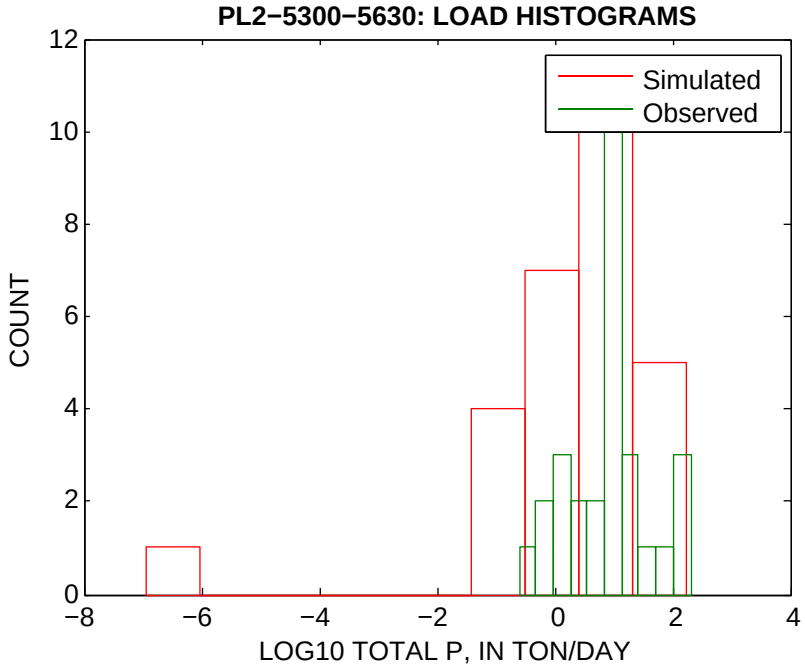


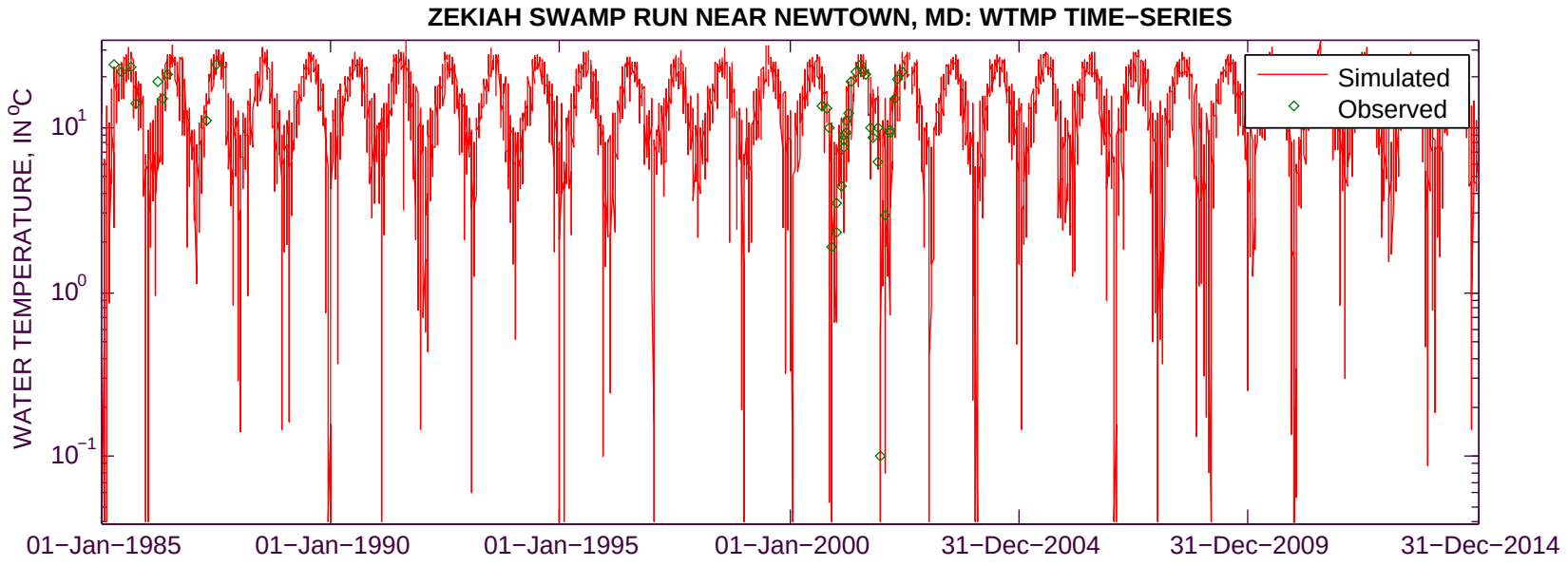
LOAD DATA
LOG10

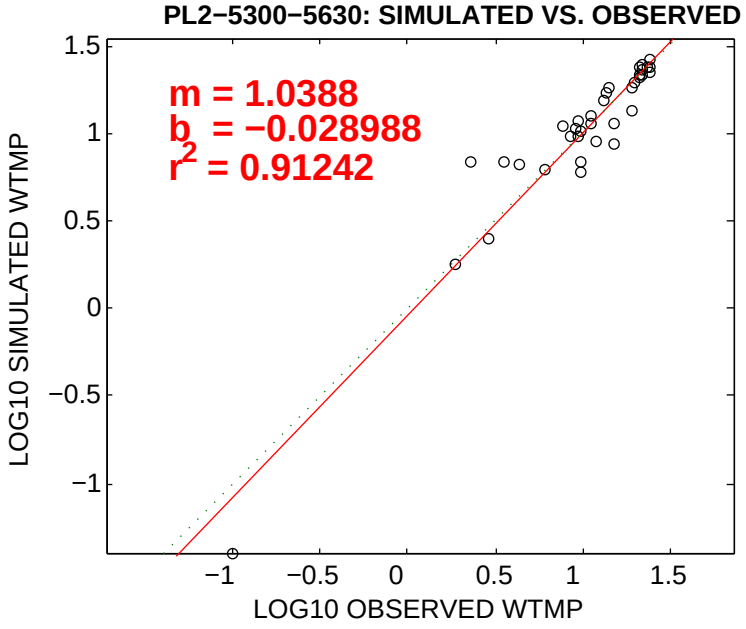


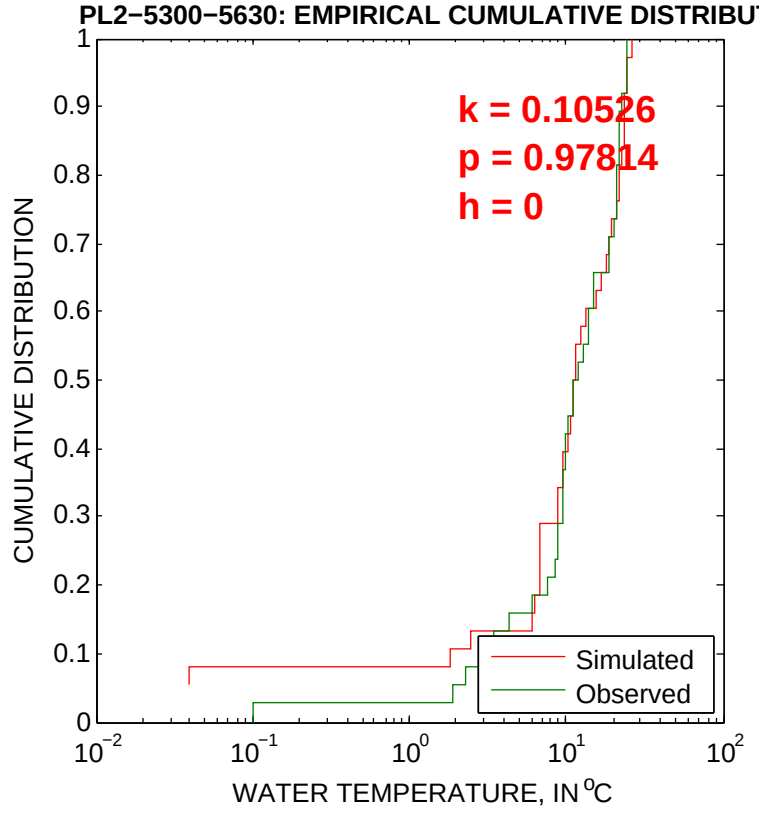












DATA SELECTION

scenario	file
P620171001WQ	WTMP.calib

plot: WTMP - water tempera...

Dates: 1/1/1985 – 12/31/201

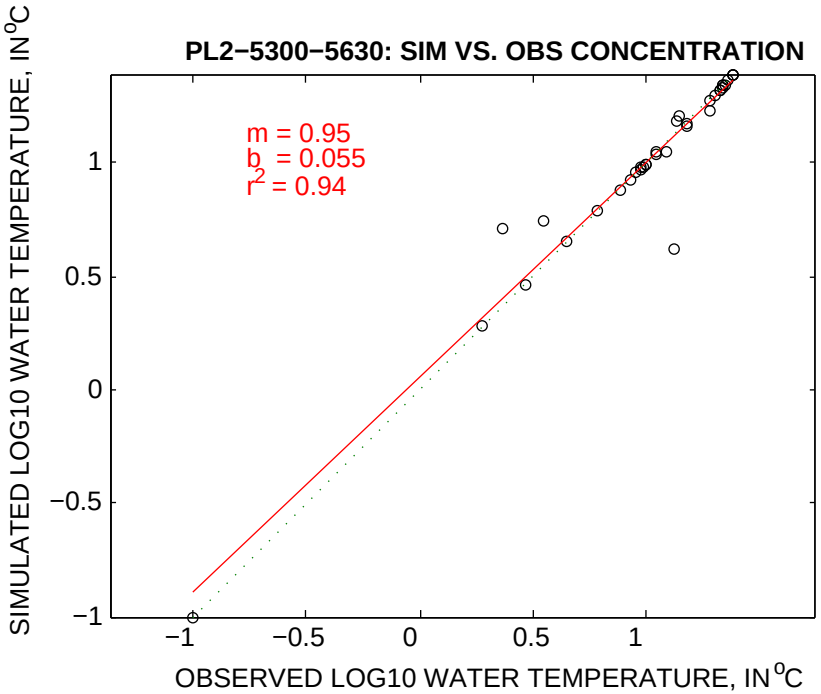
Drive	Directory	Observed
N/A	model	OBS20161101

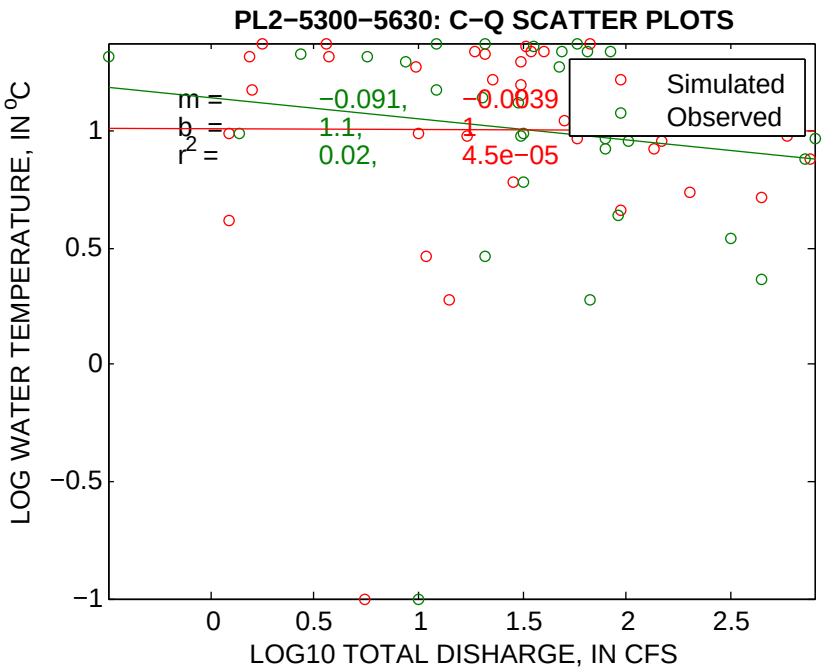
STATISTICS

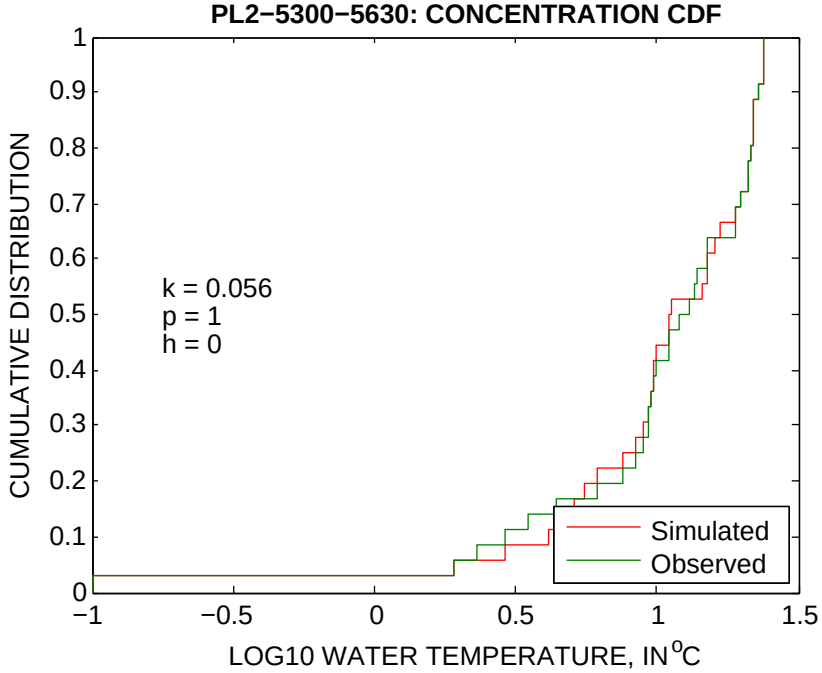
	observe	simulate
n	38	36
min	0.1 -1	0 -1.39712
mean	13.1605 1.00068	12.9717 1.01054
media	11.6 1.10003	11.3385 1.06131
max	24 1.38021	25.933 1.41385
varian	51.4273 0.206302	60.5462 0.243998
JB	0.17296 0.001	0.188125 0.001
	ra	log
%	-1.43502	0.984883
err.va	11.2748	0.0217791
rel.std.err	0.219237	0.105569
mod.eff	0.780763	0.894431

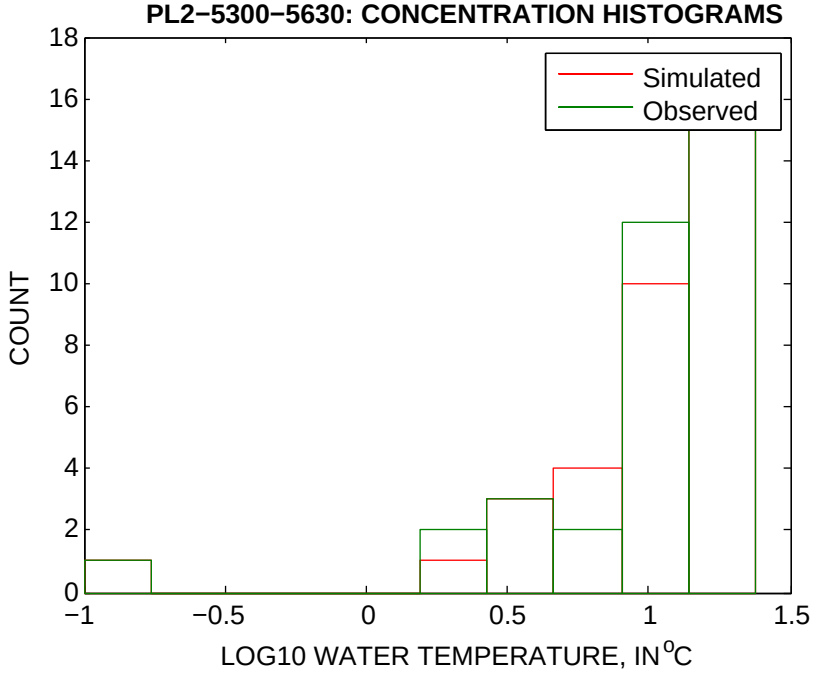
VERSION 2.1

ALL DATA
LOG10

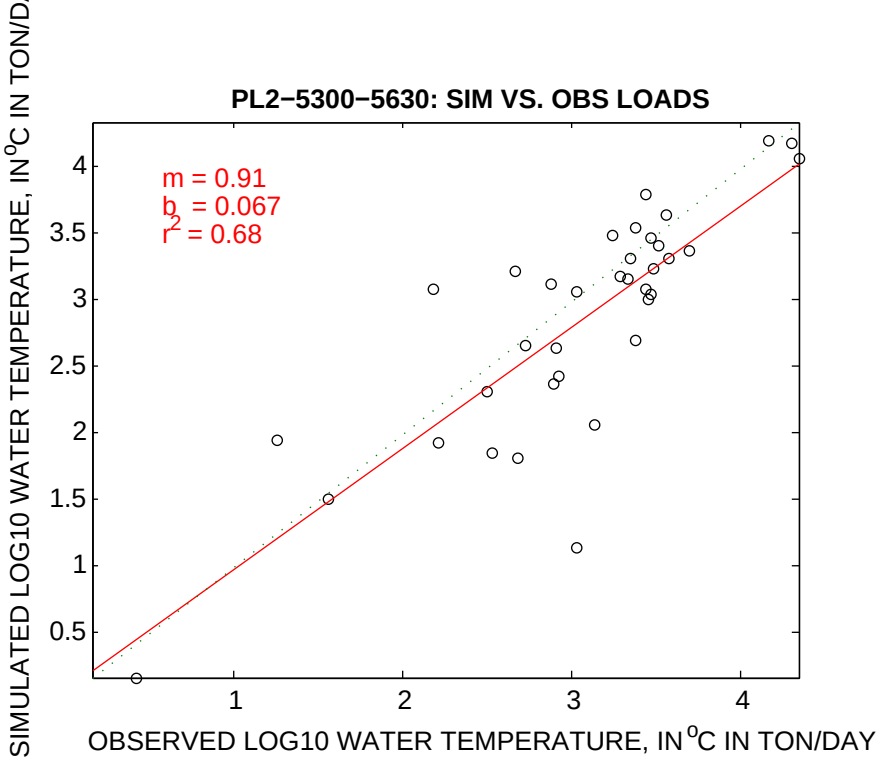


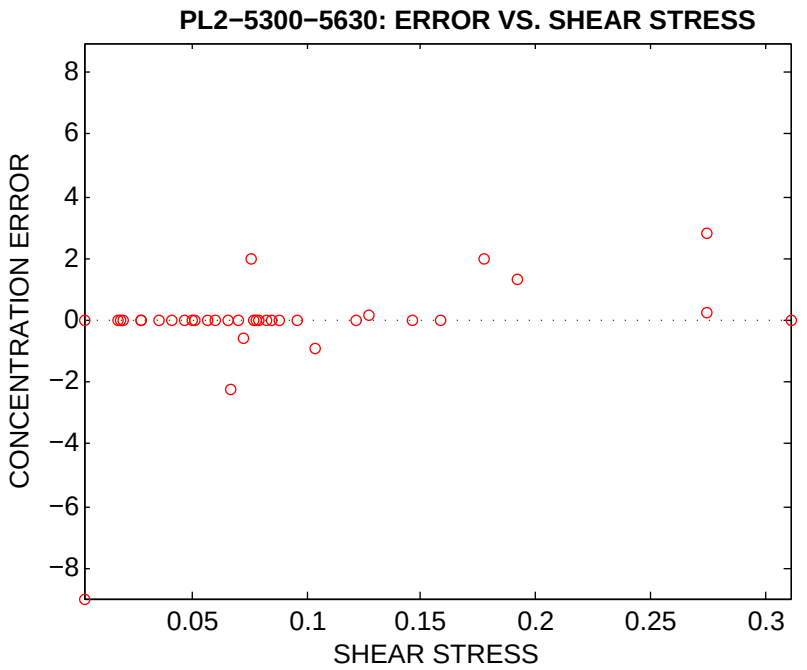


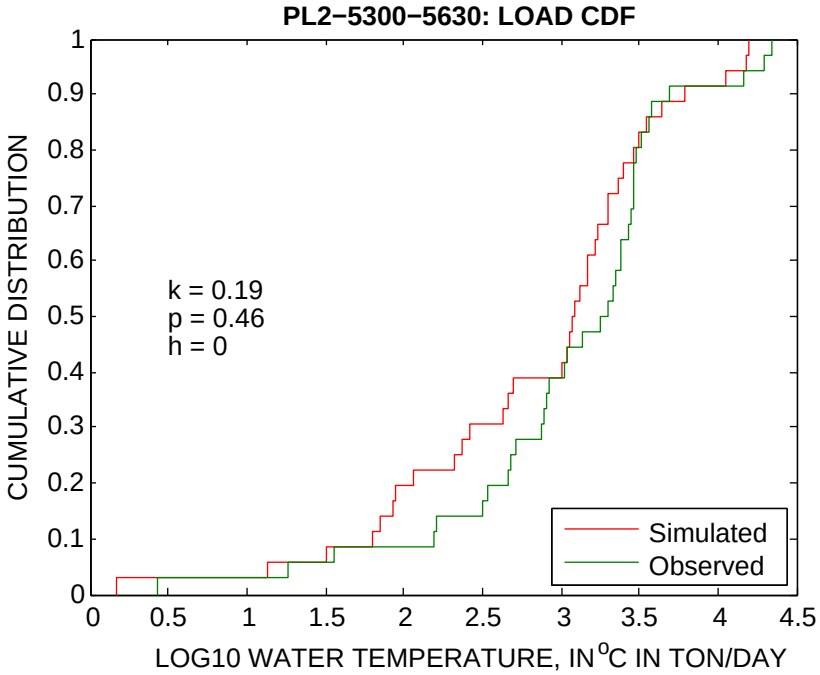


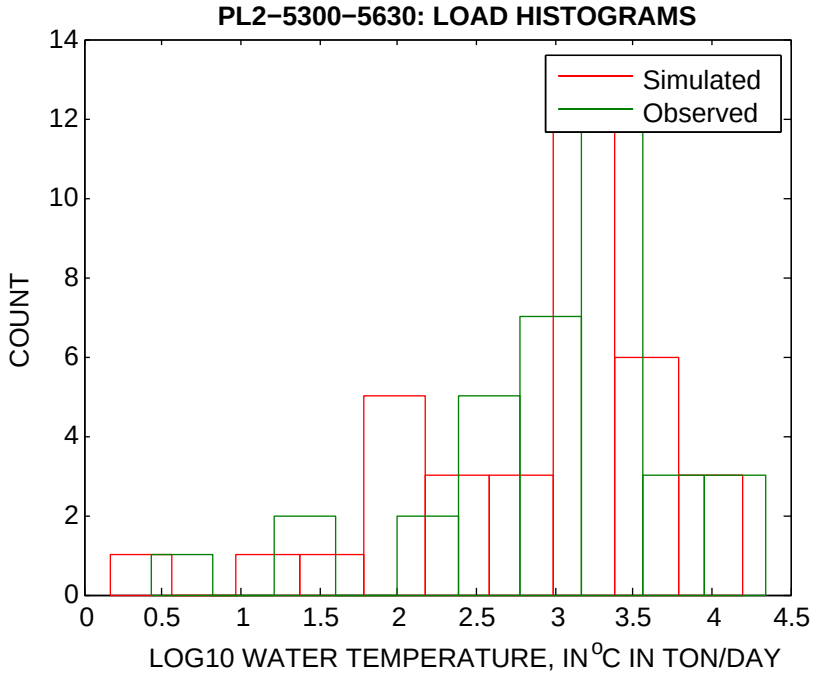


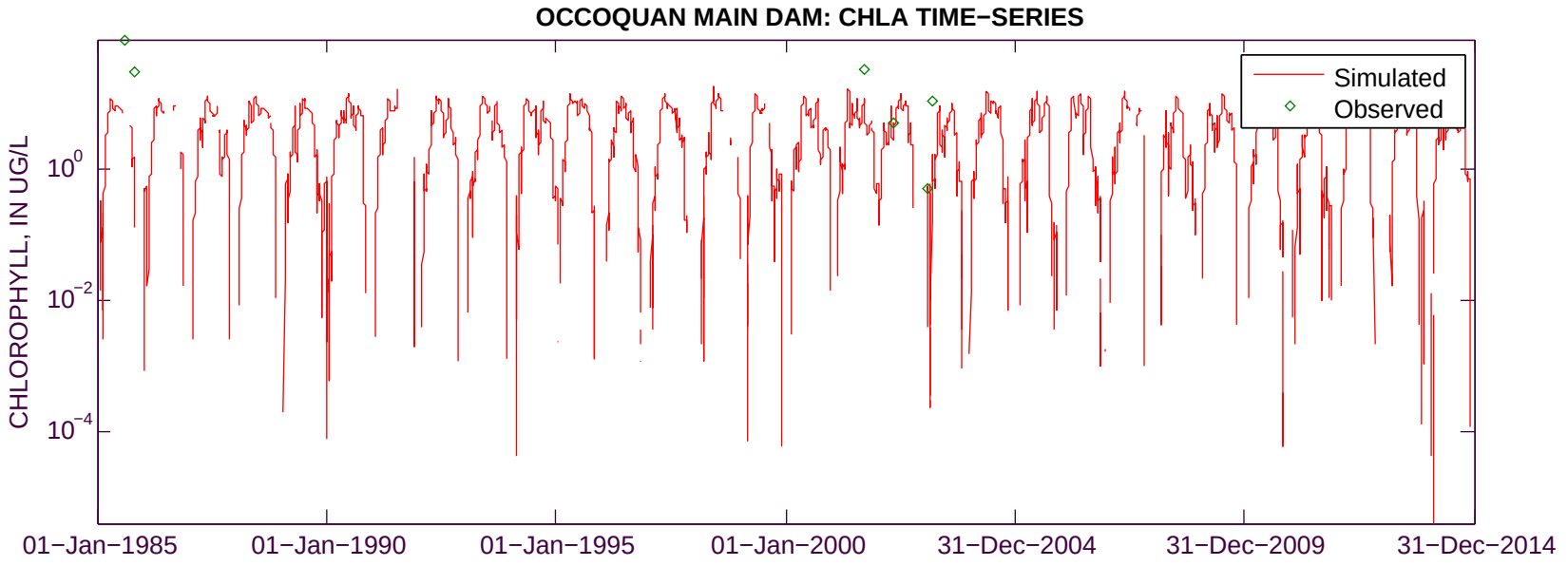
LOAD DATA
LOG10

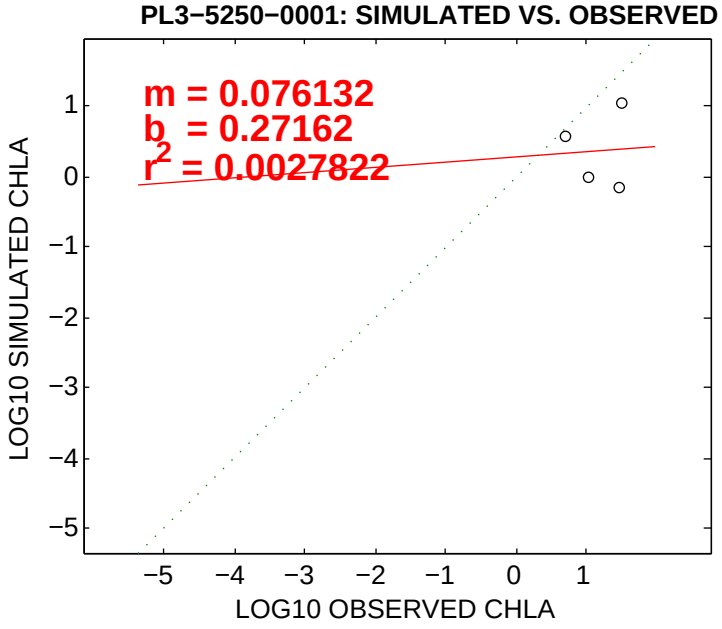


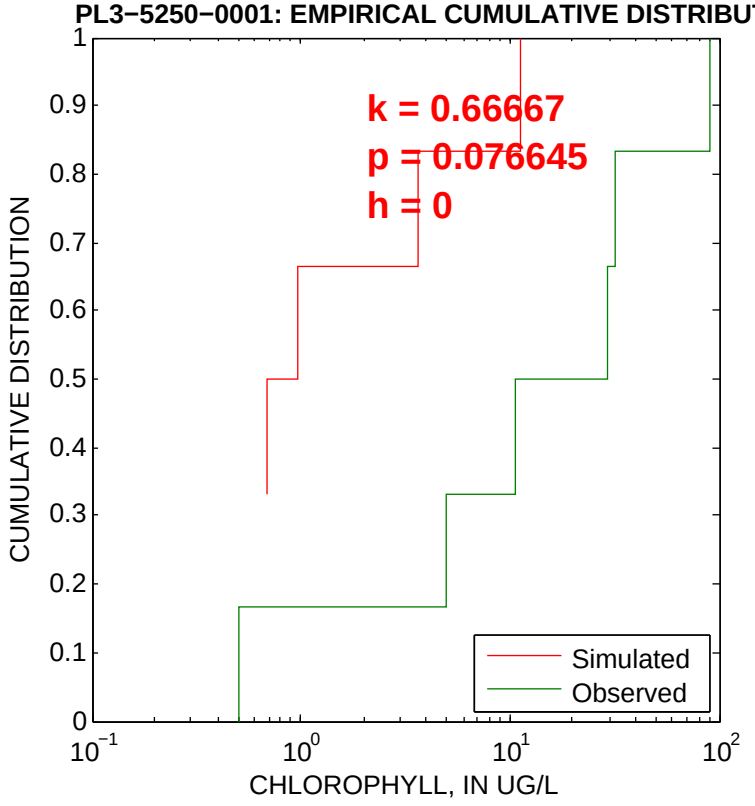












DATA SELECTION

scenario	file
P620171001WQ	CHLA.calib

plot: CHLA - chlorophyll A

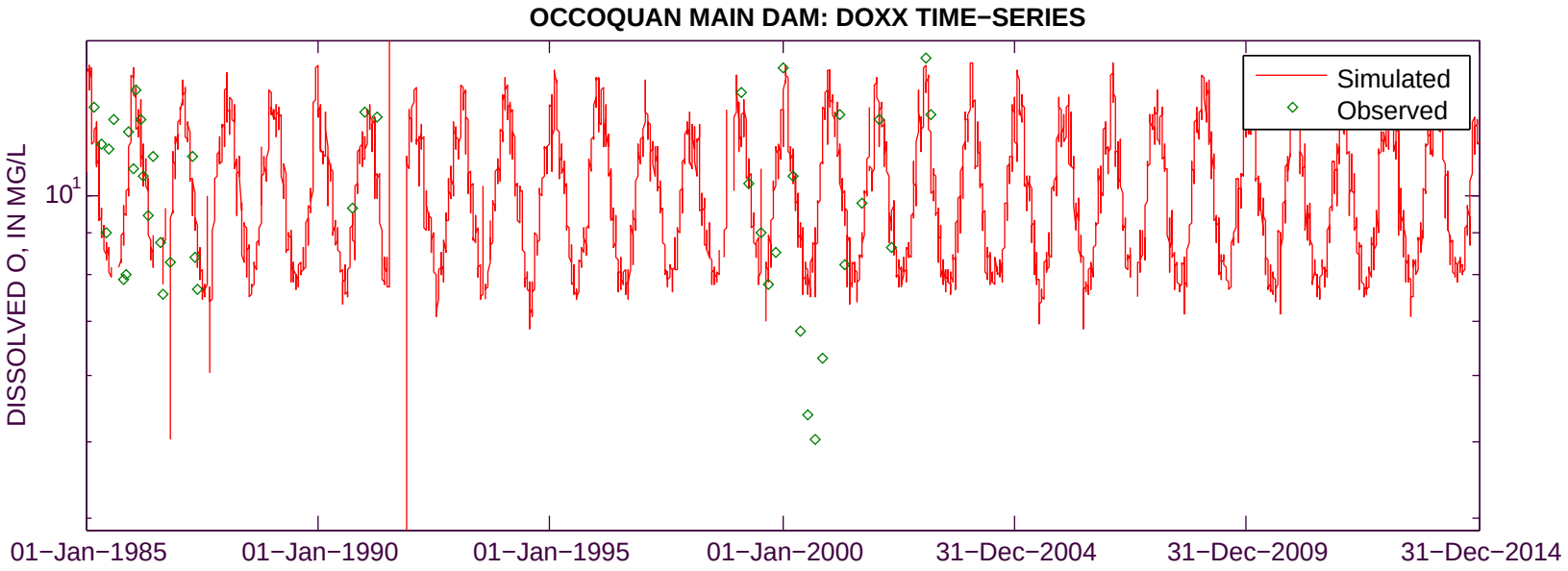
Dates: 1/1/1985 – 12/31/201

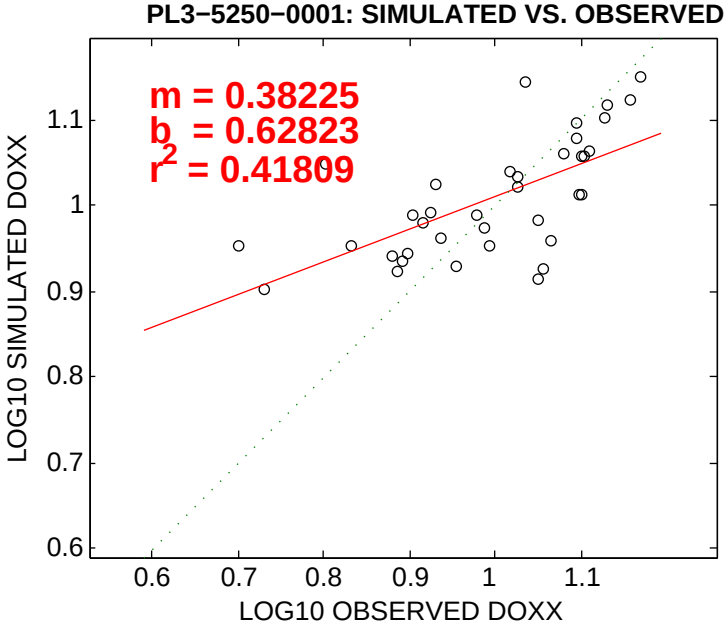
Drive	Directory	Observed
N/A	model	OBS20161101

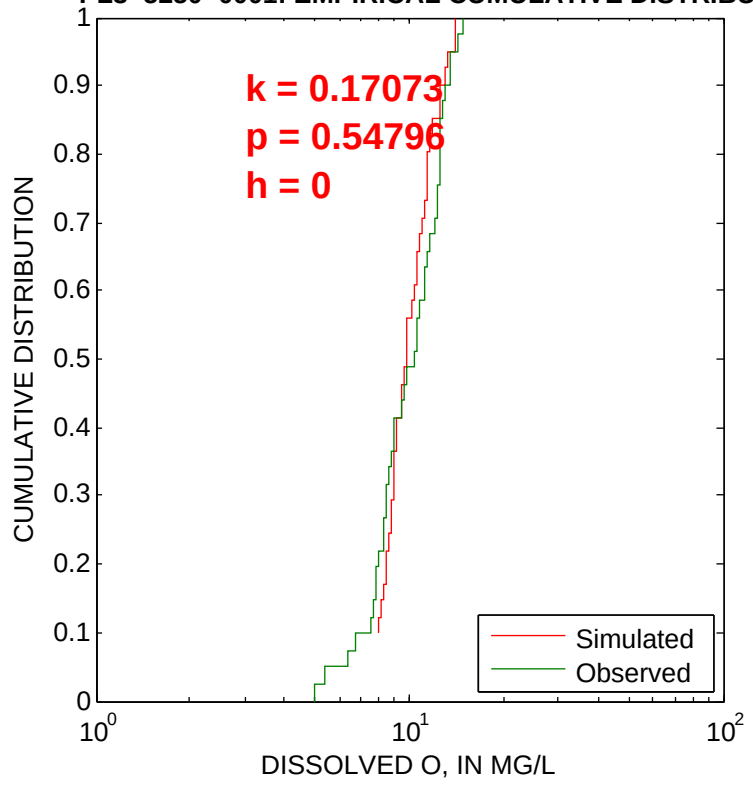
STATISTICS

	n	6	4
		observe	simulate
min		0.5	0
		0.692847	-0.16226
mean		28.095	2.78503
		1.17462	0.361046
media		20.06	0.82718
		1.24875	0.275132
max		90.8	11.381
		1.50813	1.05618
varian		1110.43	19.58
		0.150428	0.31338
JB		0.051038	0.017632
		0.493691	0.5
		ra	log
%		-90.0871	-69.2627
err.va		1920.35	1.32344
rel.std.err		1.72938	8.79783
mod.eff		-0.729383	-7.79783

VERSION







DATA SELECTION

scenario	file
P620171001WQ	DOXX.calib

plot: DOXX - dissolved oxygen

Dates: 1/1/1985 – 12/31/201

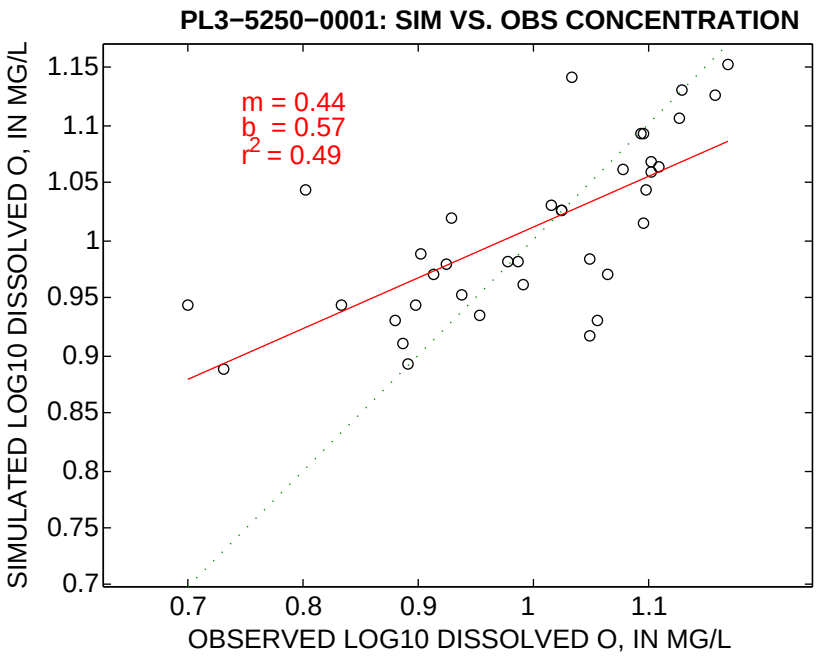
Drive	Directory	Observed
N/A	model	OBS20161101

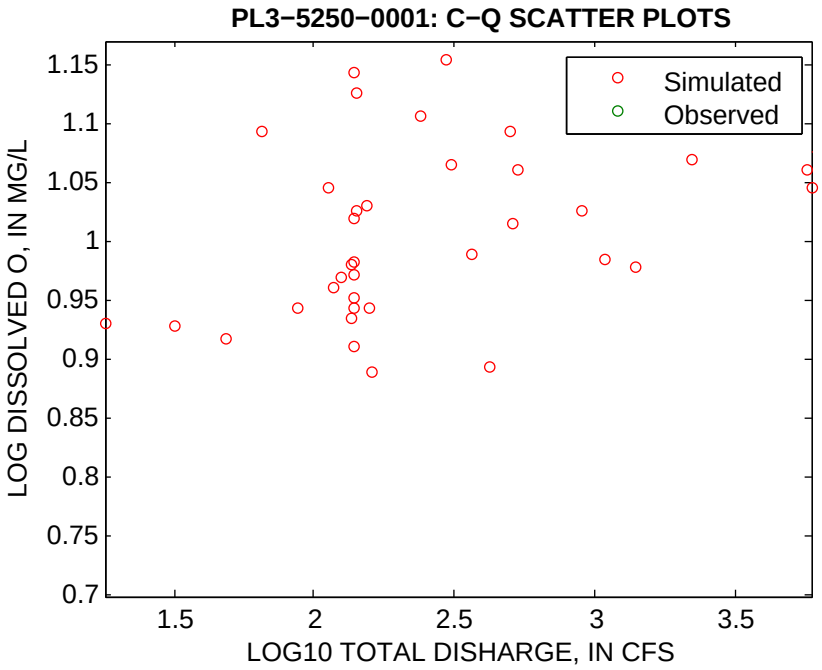
STATISTICS

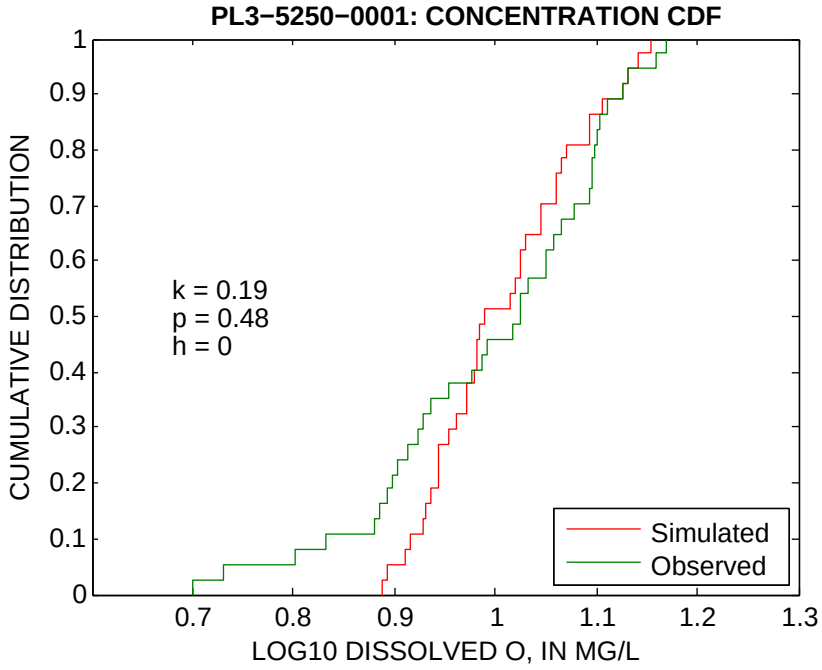
	n	41	37
		observe	simulate
min		5.01	0
		0.699838	0.901164
mean		10.1671	9.323
		0.995333	1.00869
media		10.4	9.7263
		1.02531	0.990769
max		14.78	14.139
		1.16967	1.15042
varian		6.04339	12.2096
		0.0136518	0.00477106
JB		0.394942	0.001360
		0.099422	0.17145
		ra	log
%		-8.30198	1.34239
err.va		12.5606	0.00816949
rel.std.err		2.07841	0.59842
mod.eff		-1.07841	0.40158

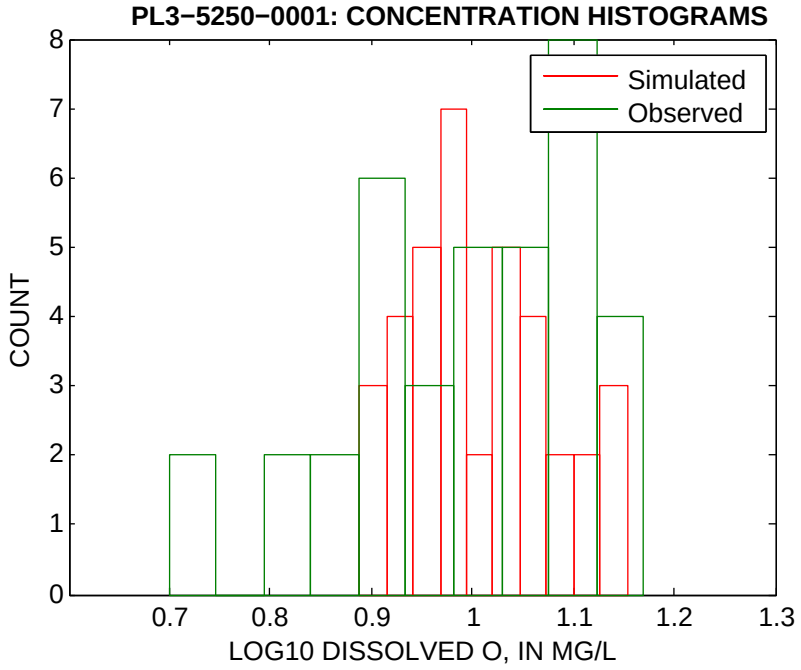
VERSION

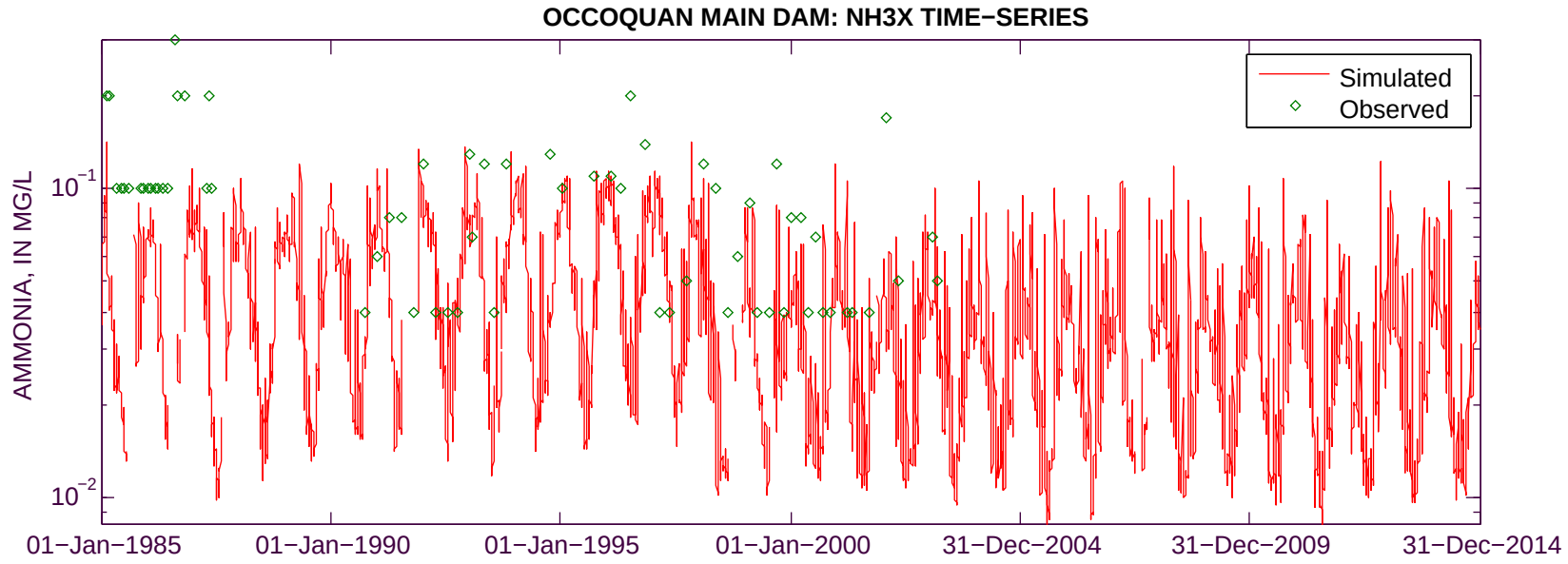
ALL DATA
LOG10

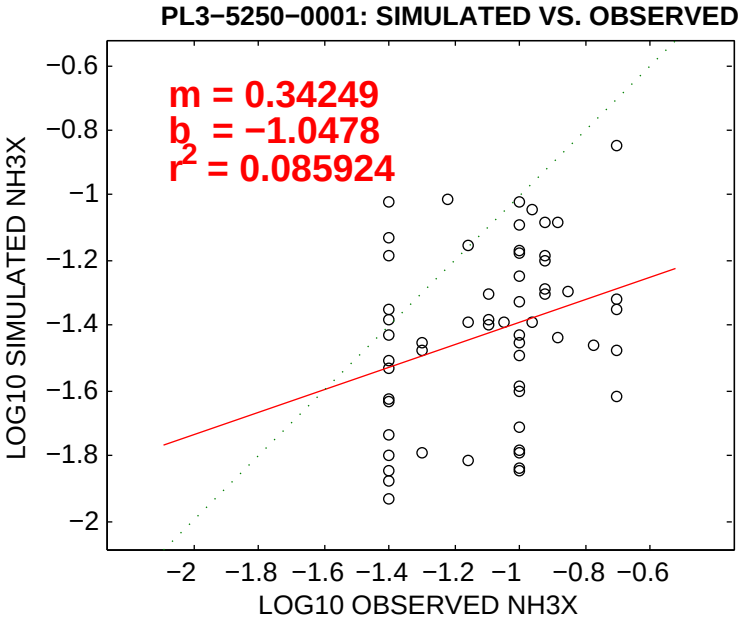


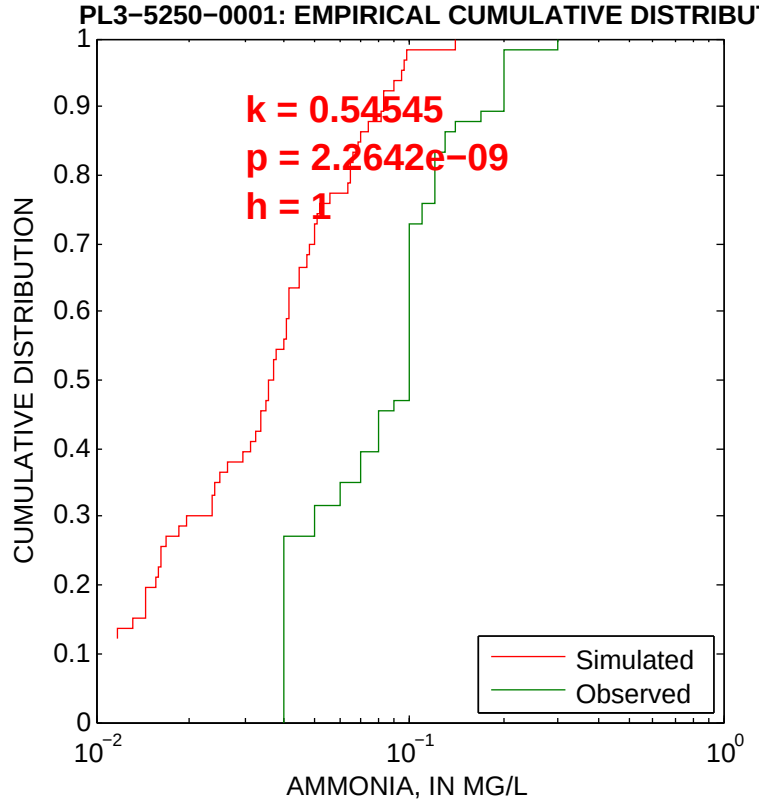












DATA SELECTION

scenario: P620171001WQ | file: NH3X.calib

plot: NH3X - ammonia

Dates: 1/1/1985 – 12/31/201

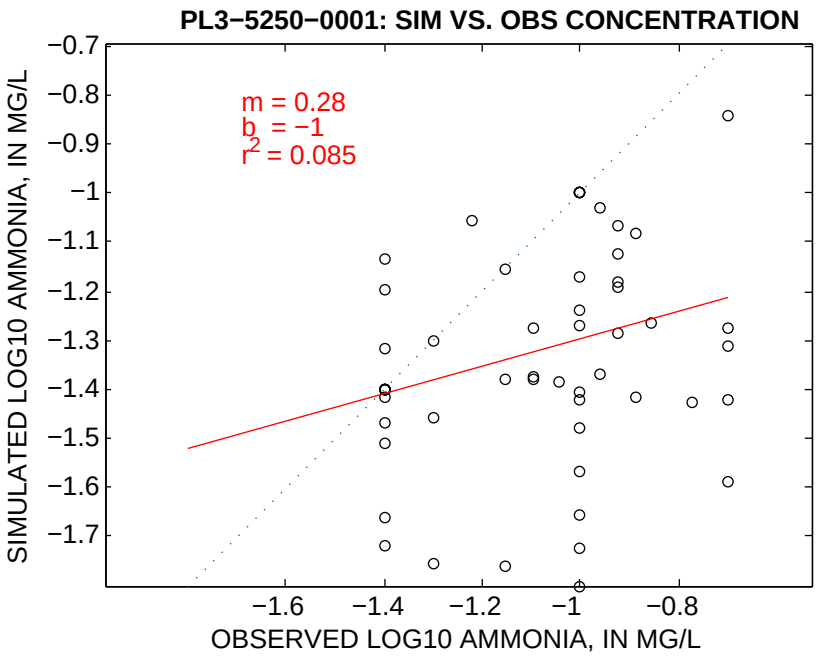
Drive | Directory: N/A | model | Observed: OBS20161101

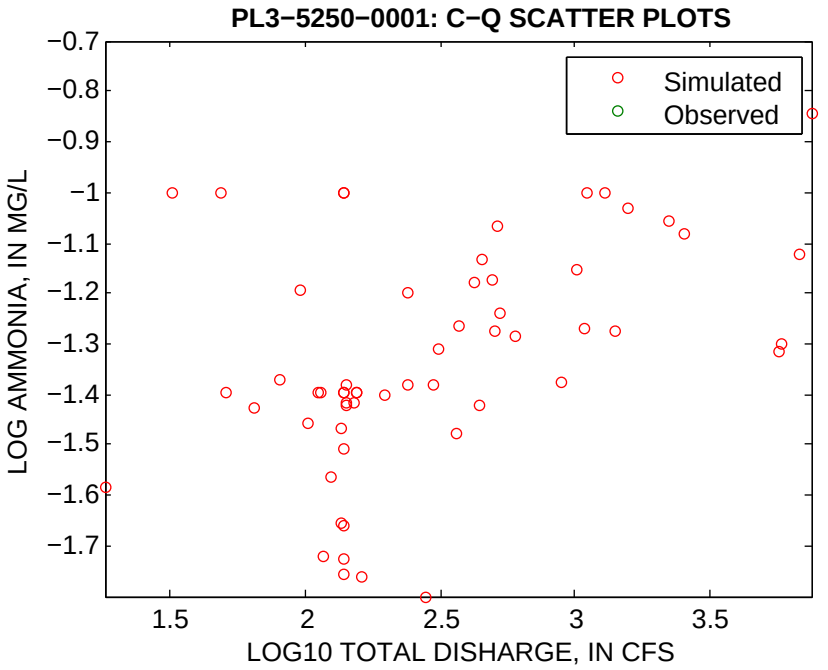
STATISTICS

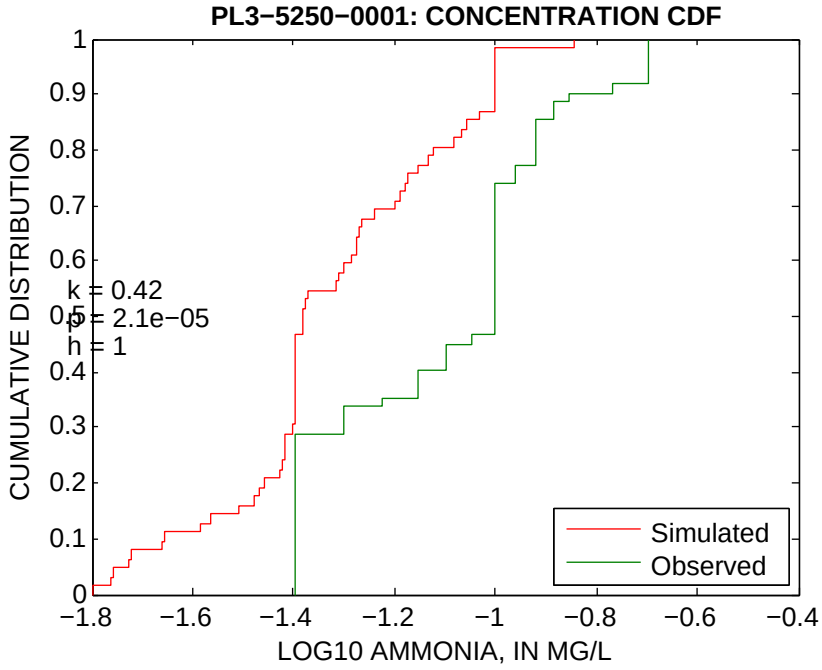
	n	observe	simulate
		66	58
min		0.04	0
		-1.39794	-1.93423
mean		0.0939394	0.0395813
		-1.0915	-1.42164
media		0.1	0.0360595
		-1	-1.39291
max		0.3	0.14103
		-0.69897	-0.850688
varian		0.00289193	0.00085287
		0.0509016	0.0694893
JB		0.001056	0.013013
		0.13111	0.330708
		ra	log
%		-57.865	30.2464
err.va		0.00633891	0.196428
rel.std.err		2.19193	3.85897
mod.eff		-1.19193	-2.85897

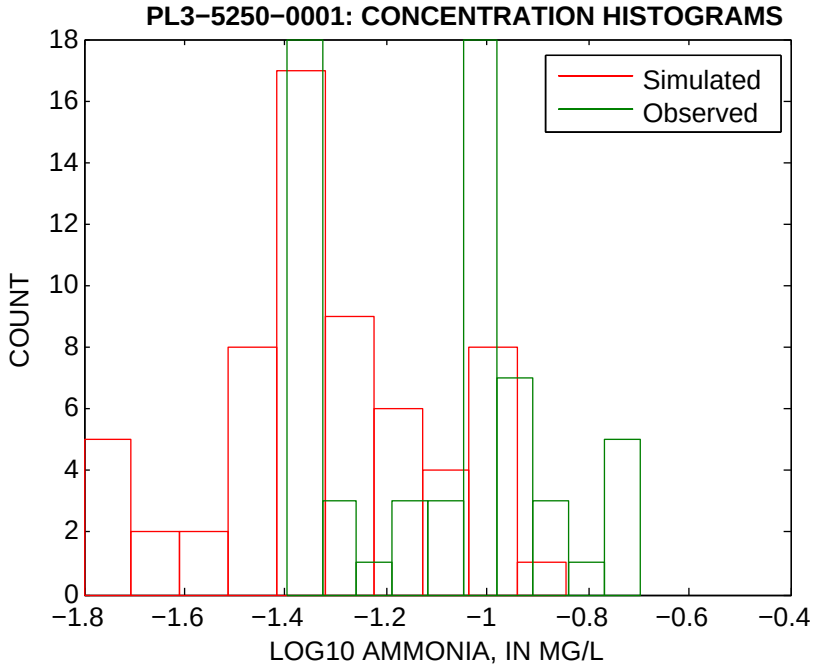
VERSION 2.1

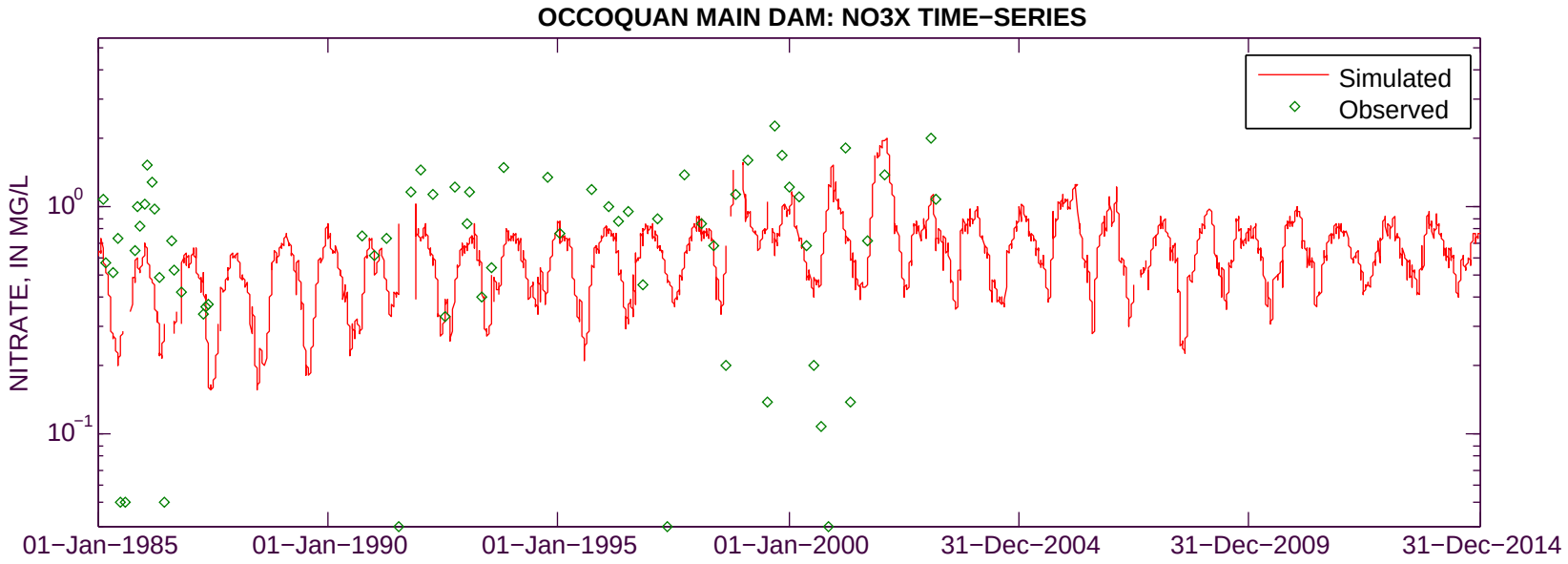
ALL DATA
LOG10

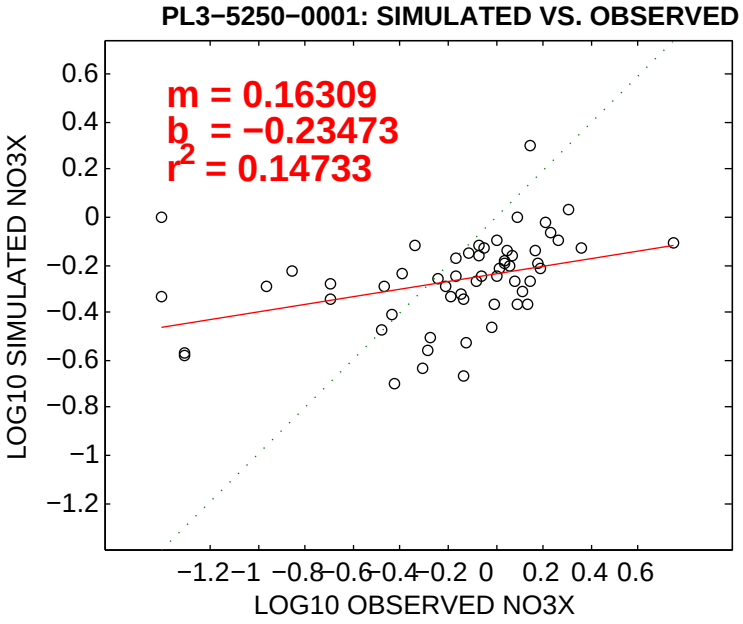


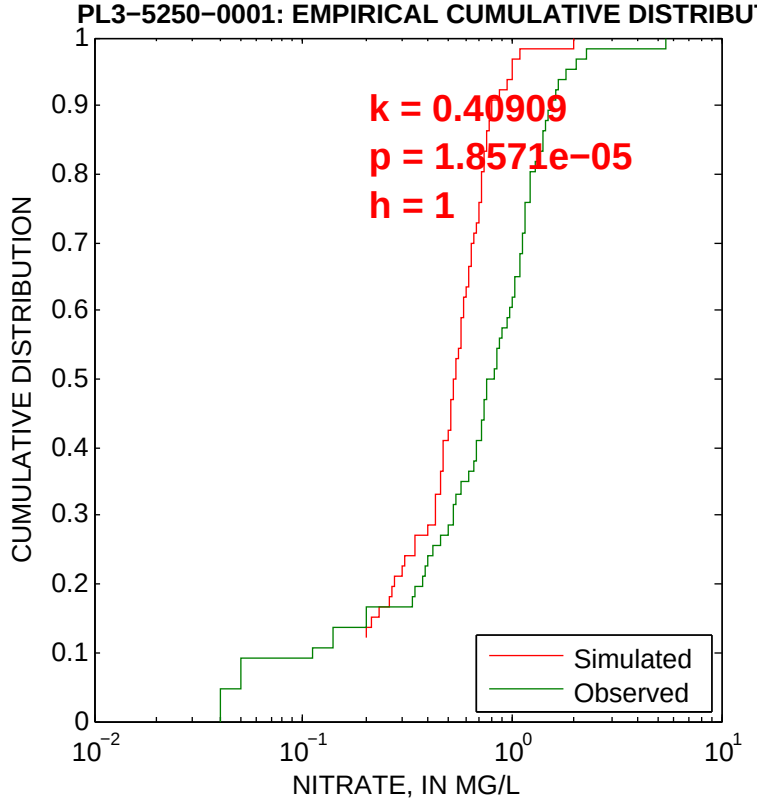












DATA SELECTION

scenario	file
P620171001WQ	NO3X.calib

plot: NO3X - nitrate

Dates: 1/1/1985 – 12/31/201

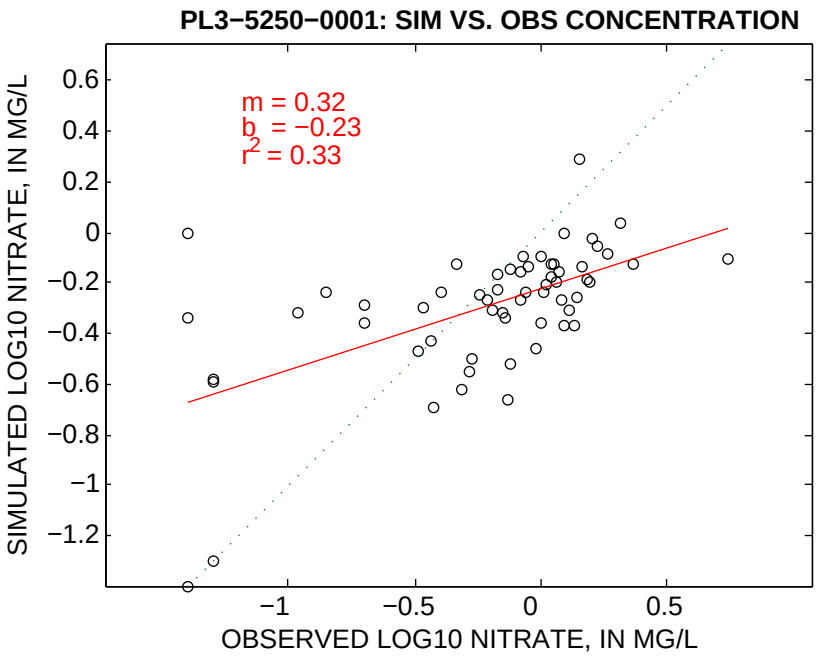
Drive	Directory	Observed
N/A	model	OBS20161101

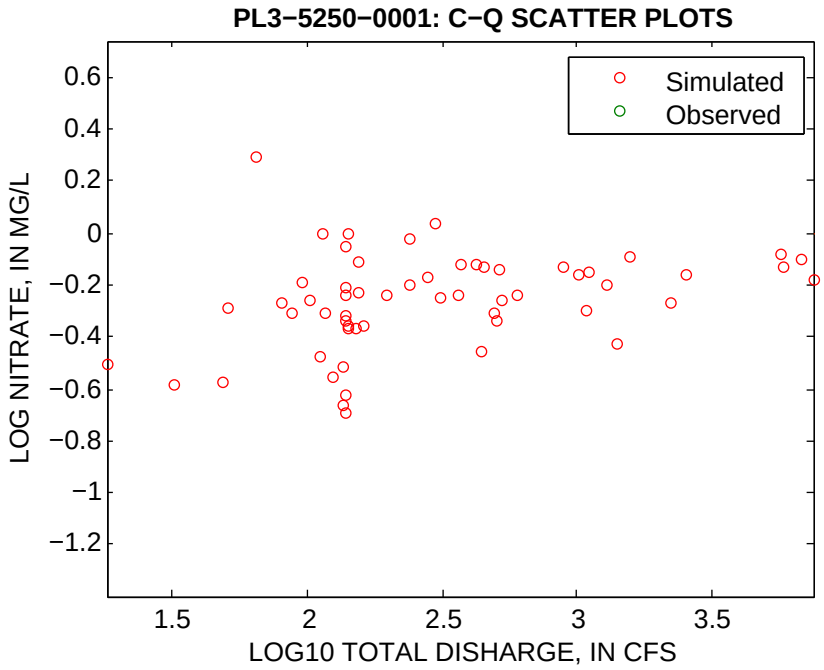
STATISTICS

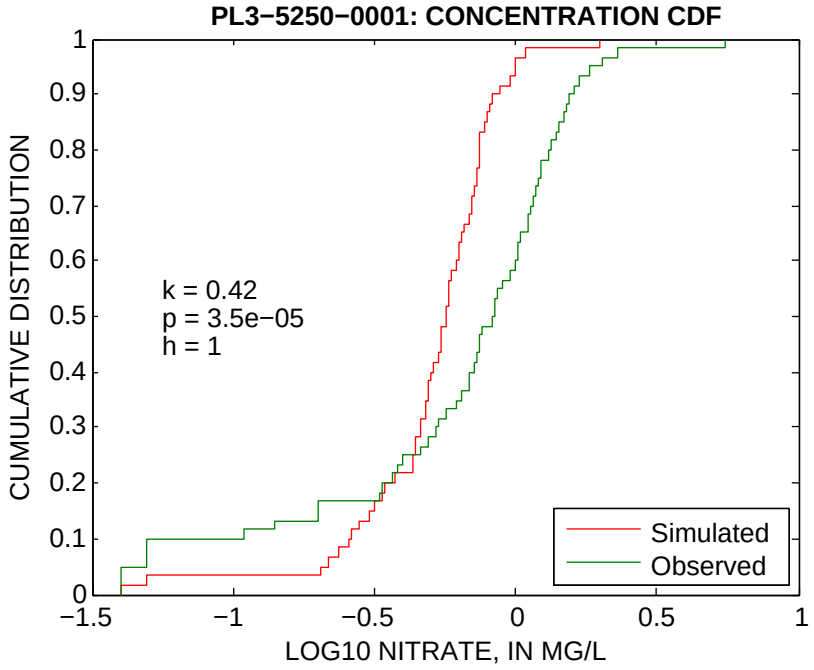
	n	66	58
		observe	simulate
min		0.04	0
		-1.39794	-0.701868
mean		0.898485	0.523572
		-0.17719	-0.263629
media		0.795	0.536755
		-0.0731509	-0.245545
max		5.5	1.9726
		0.740363	0.295039
varian		0.603838	0.104022
		0.190995	0.0344795
JB		0.001	0.001
		0.002912	0.37644
		ra	log
%		-41.7272	48.7833
err.va		0.655583	0.17078
rel.std.err		1.08569	0.894158
mod.eff		-0.0856942	0.105842

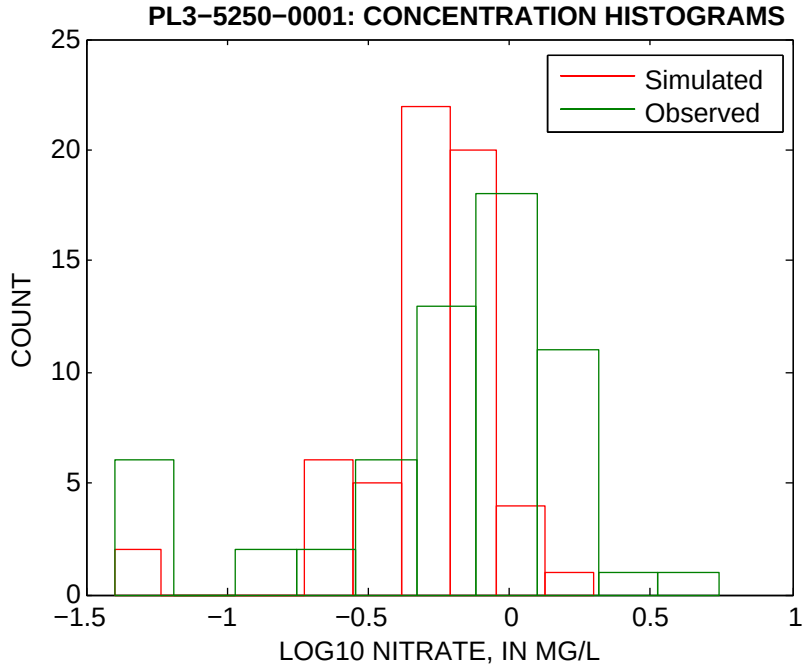
VERSION

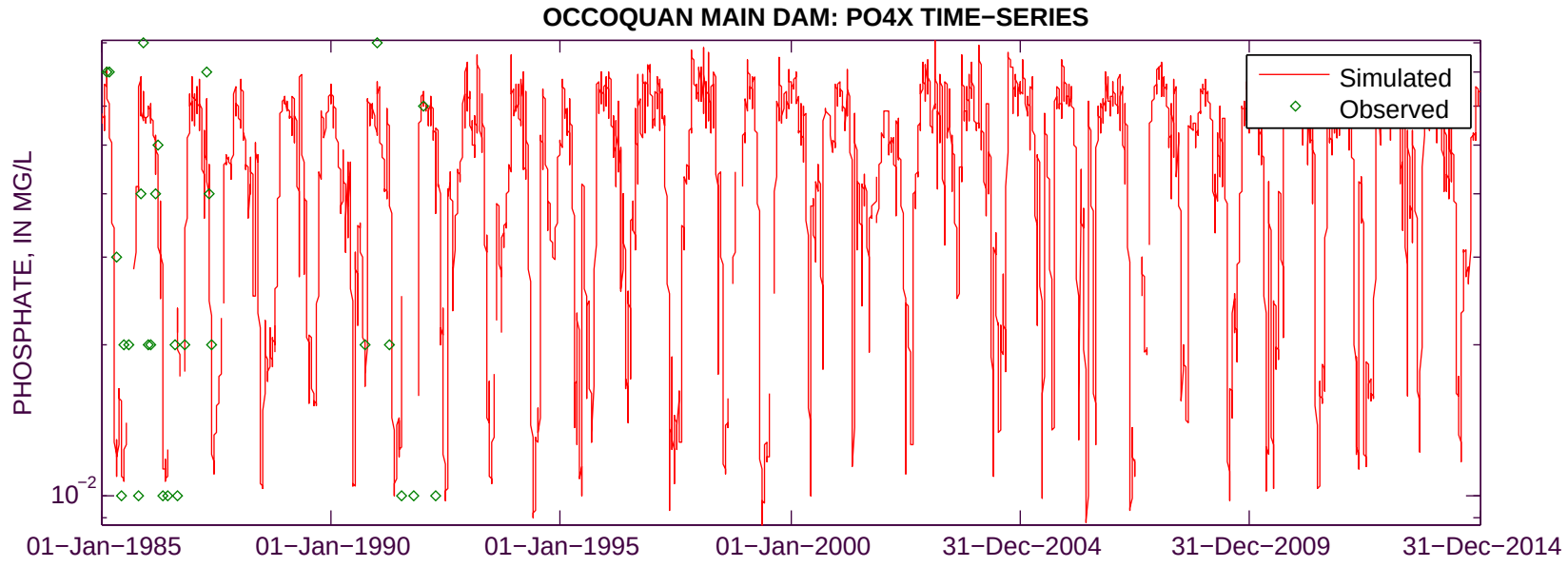
ALL DATA
LOG10

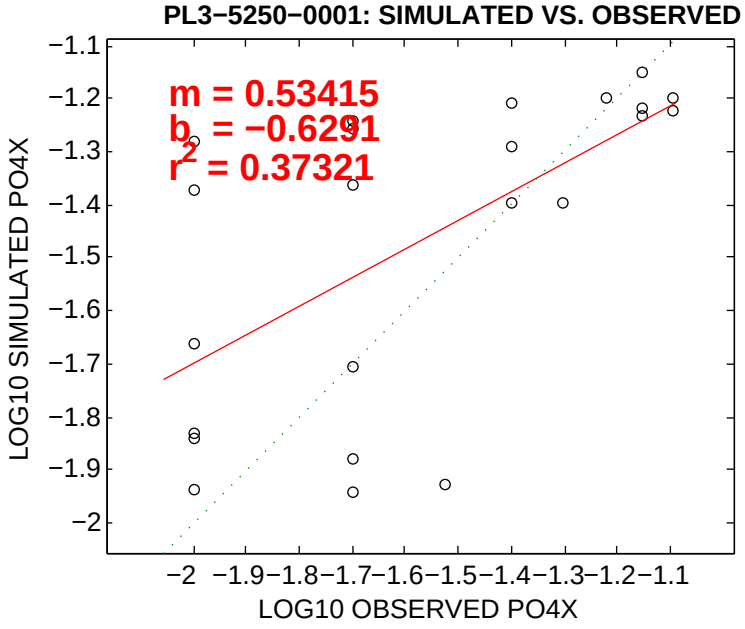


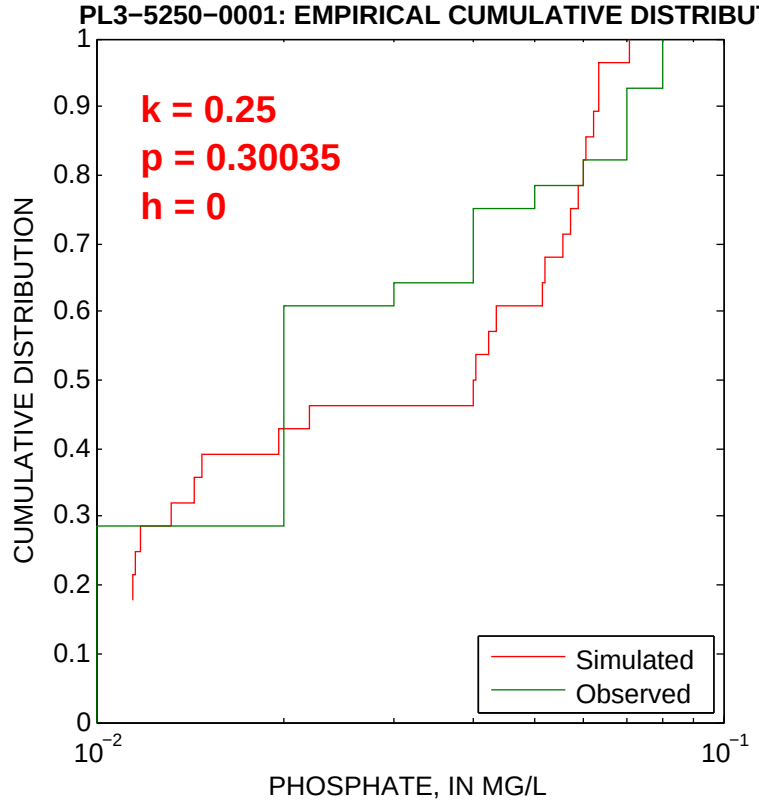












DATA SELECTION

scenario	file
P620171001WQ	PO4X.calib

plot: PO4X - phosphate

Dates: 1/1/1985 – 12/31/201

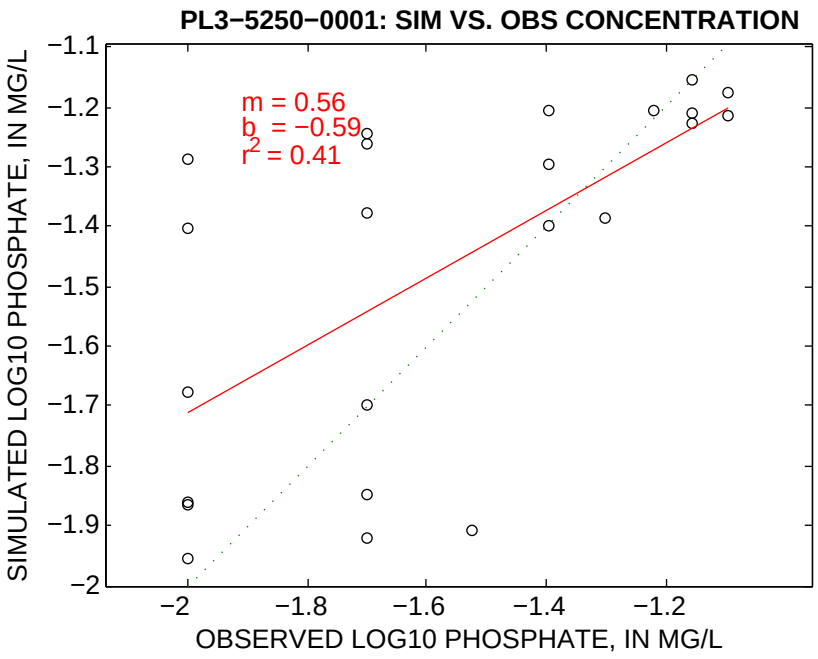
Drive	Directory	Observed
N/A	model	OBS20161101

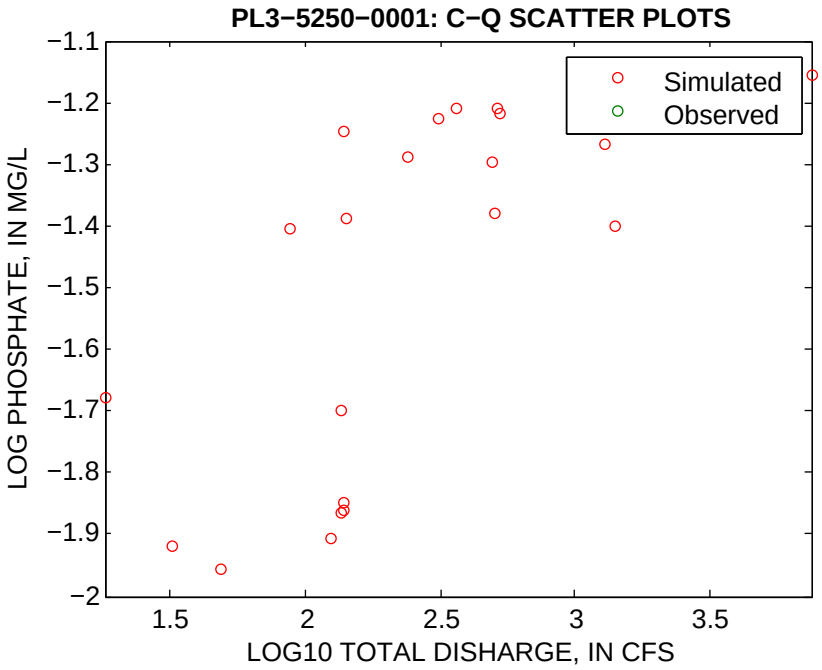
STATISTICS

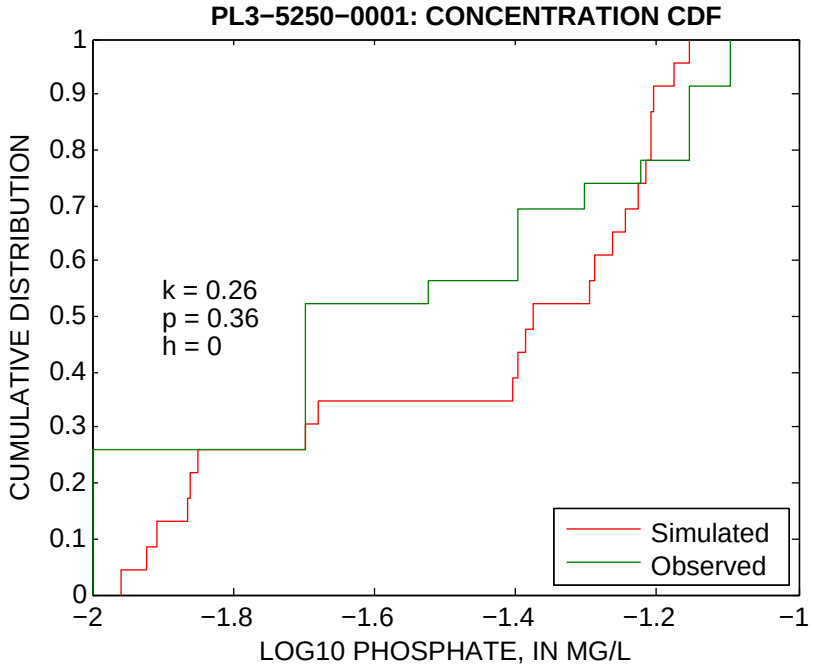
	n	28	23
		observe	simulate
min		0.01	0
		-2	-1.94203
mean		0.0317857	0.0335752
		-1.56921	-1.4673
media		0.02	0.0400945
		-1.69897	-1.36196
max		0.08	0.070793
		-1.09691	-1.15001
varian		0.00057076	0.00061365
		0.111742	0.0854259
JB		0.051157	0.087396
		0.155136	0.071720
		ra	log
%		5.62978	-6.49465
err.va		0.00035923	0.0886519
rel.std.err		0.629385	0.793363
mod.eff		0.370615	0.206637

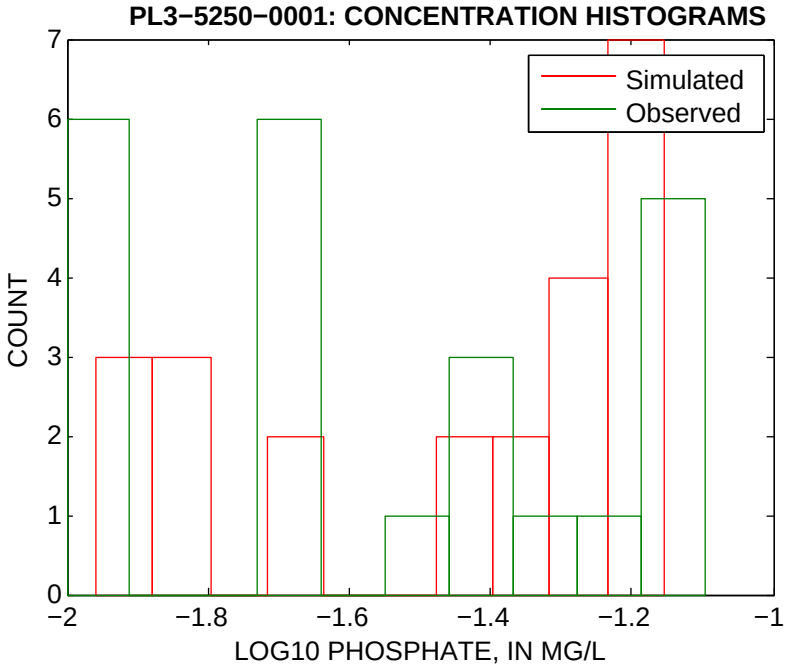
VERSION 2.1

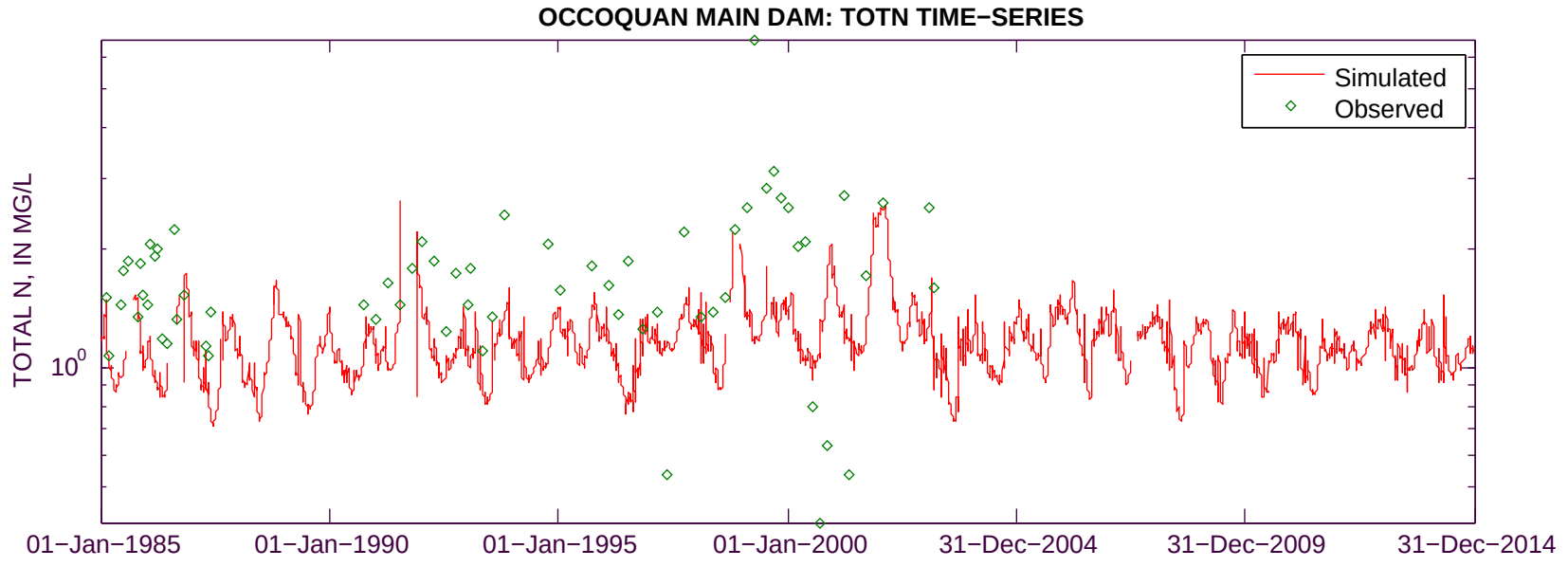
ALL DATA
LOG10

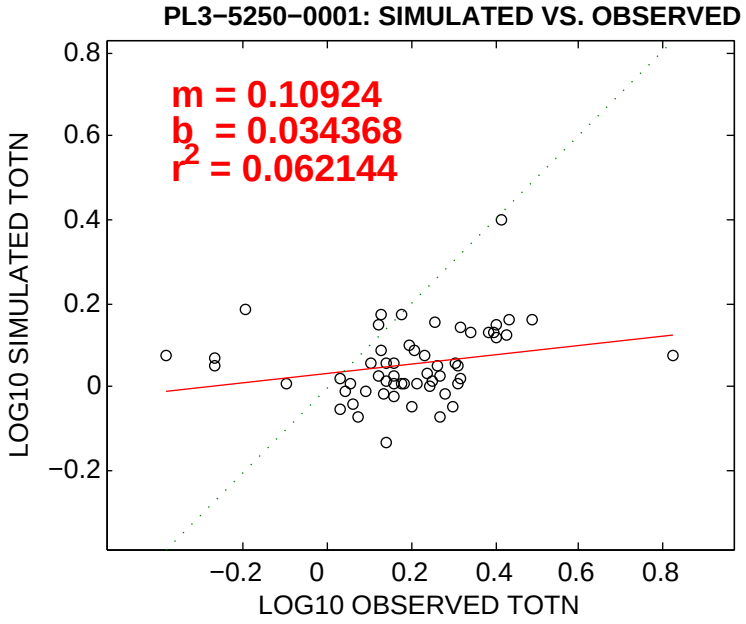


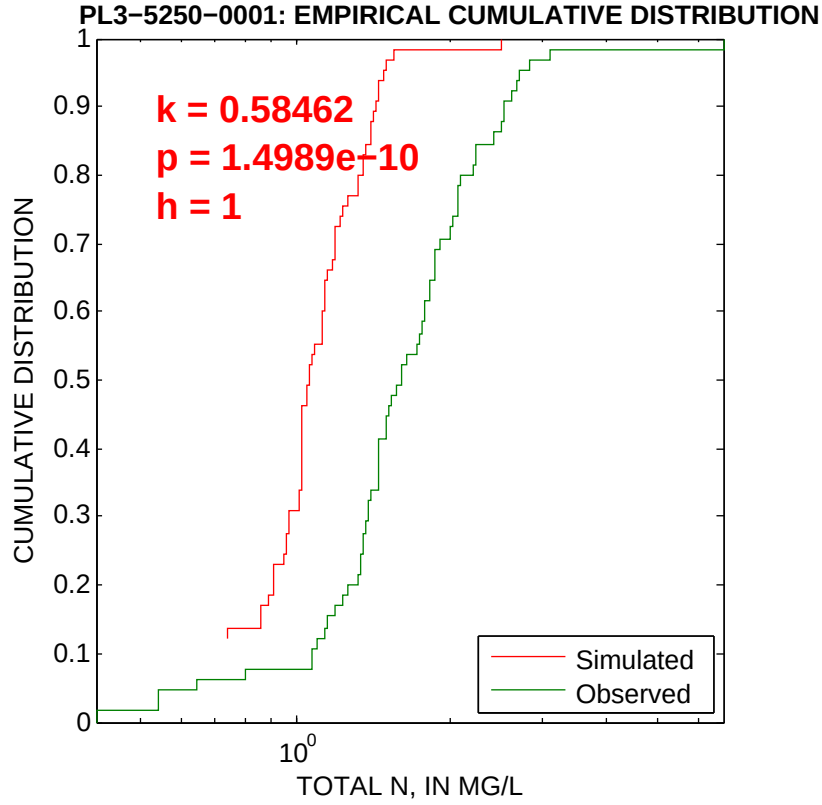












DATA SELECTION

scenario	file
P620171001WQ	TOTN.calib

plot: TOTN - total nitrogen

Dates: 1/1/1985 – 12/31/201

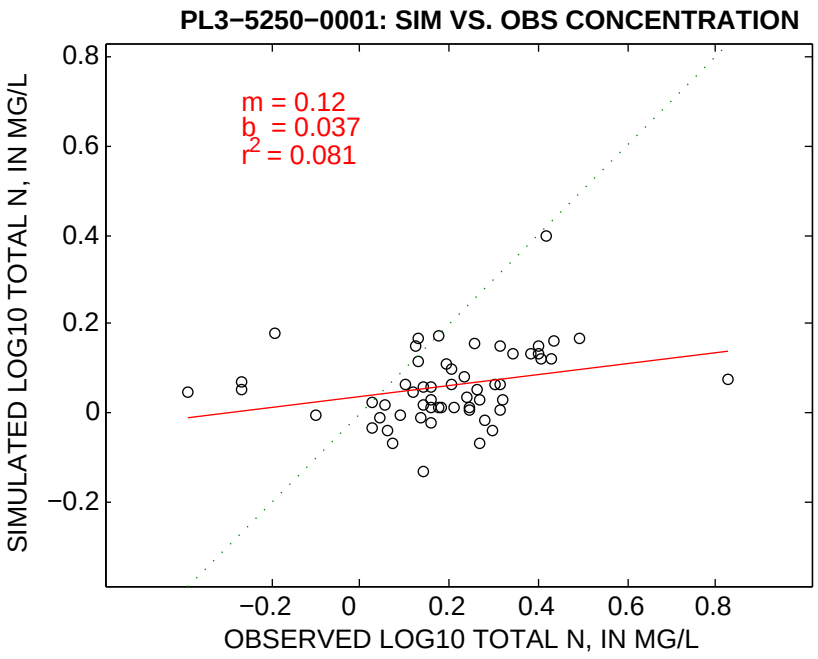
Drive	Directory	Observed
N/A	model	OBS20161101

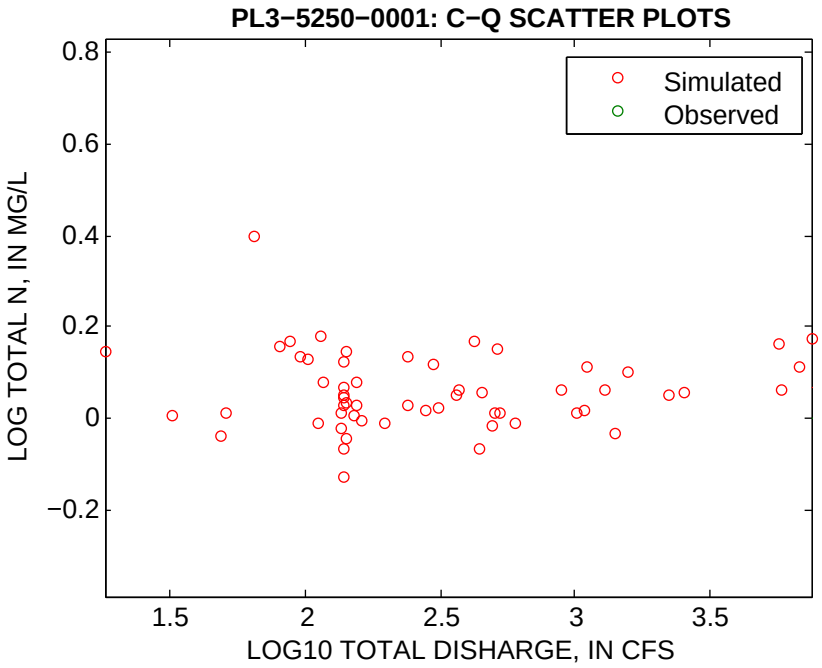
STATISTICS

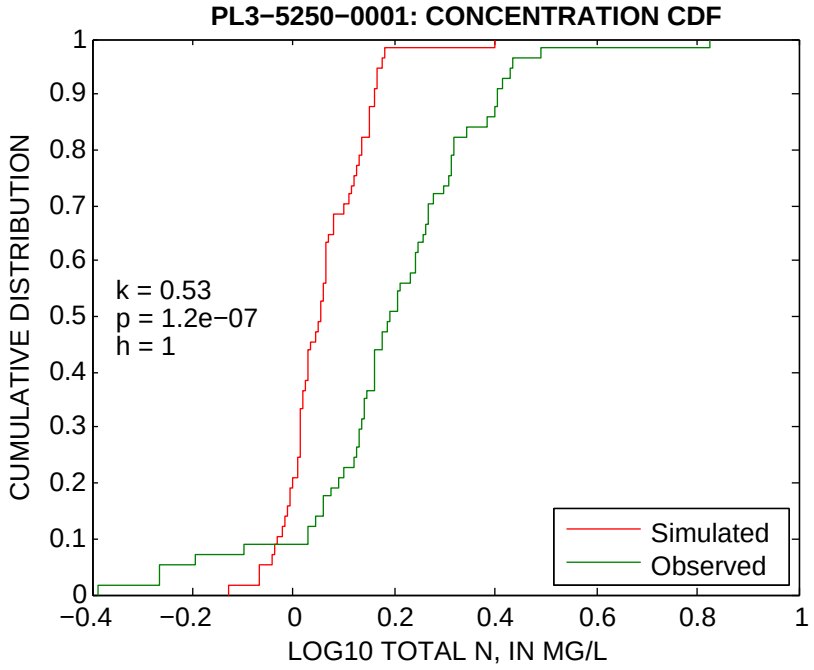
	n	observe	simulate
		65	57
min		0.41	0
		-0.387216	-0.131514
mean		1.74431	1.01712
		0.193168	0.0554702
media		1.6	1.0614
		0.193125	0.0496444
max		6.7	2.5059
		0.826075	0.398964
varian		0.710837	0.207668
		0.0381748	0.00733118
JB		0.001	0.005055
		0.009037	0.00125
		ra	log
%		-41.6894	-71.284
err.va		1.39355	0.0564646
rel.std.err		1.96044	1.47911
mod.eff		-0.96044	-0.479107

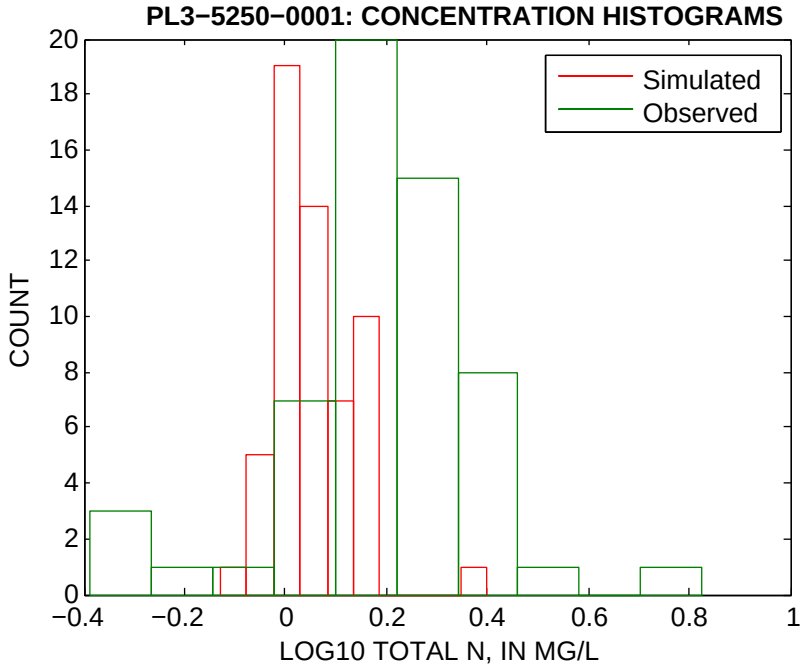
VERSION 2.1

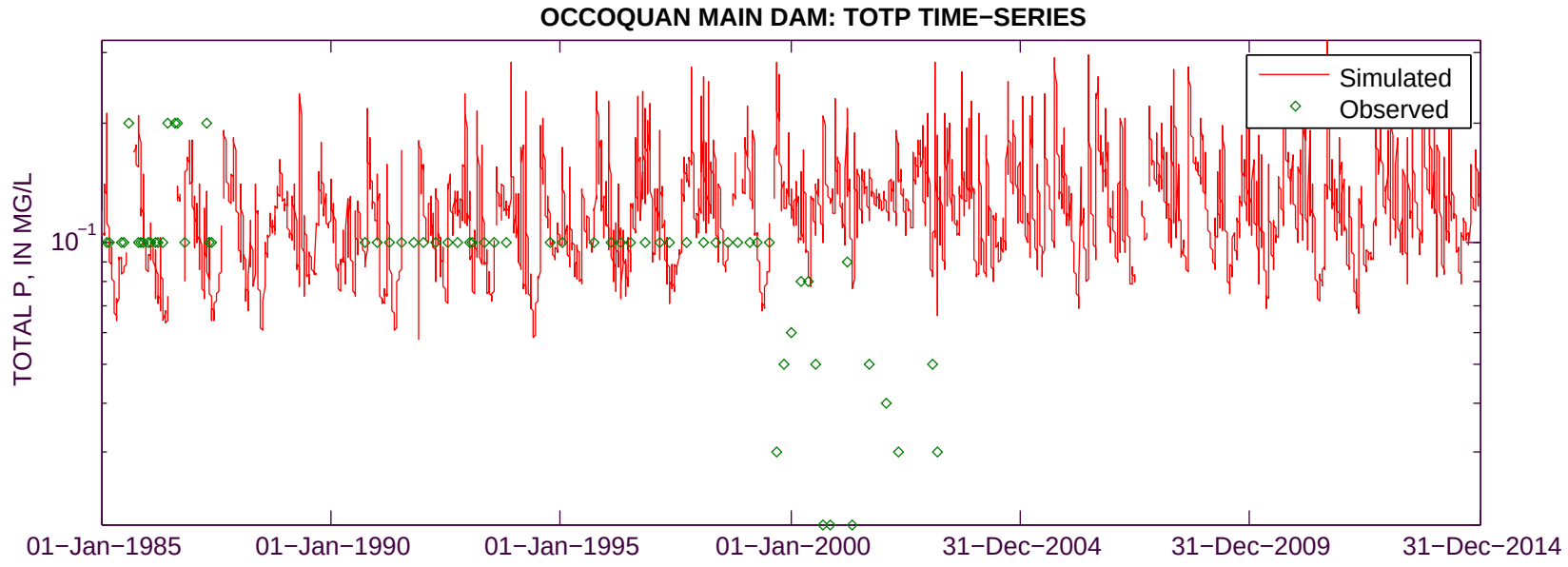
ALL DATA
LOG10

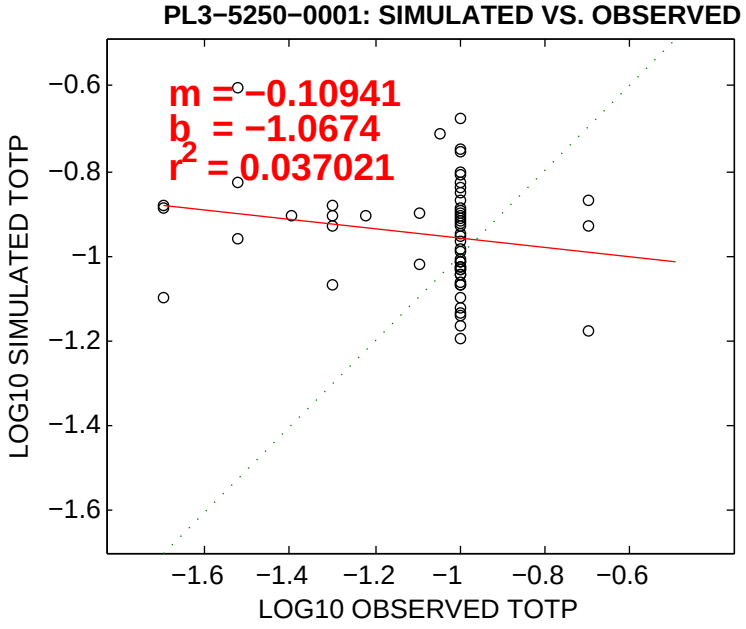


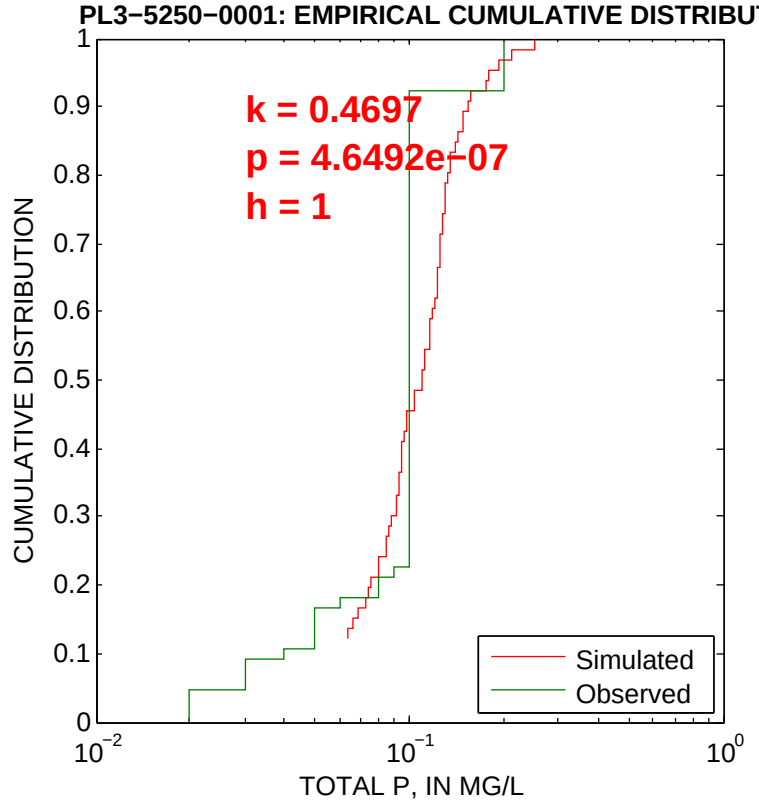












DATA SELECTION

scenario	file
P620171001WQ	TOTP.calib

plot: TOTP - total phosphorus

Dates: 1/1/1985 – 12/31/201

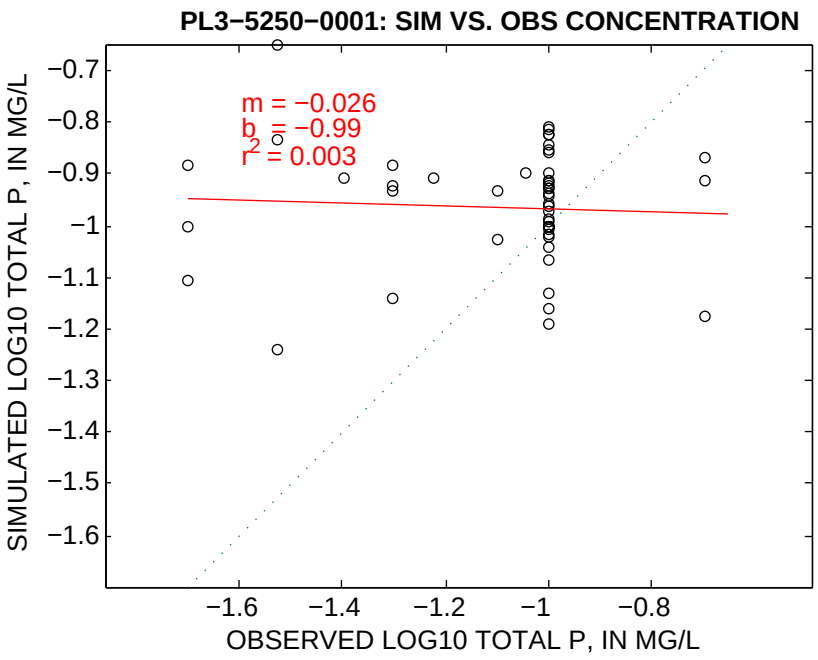
Drive	Directory	Observed
N/A	model	OBS20161101

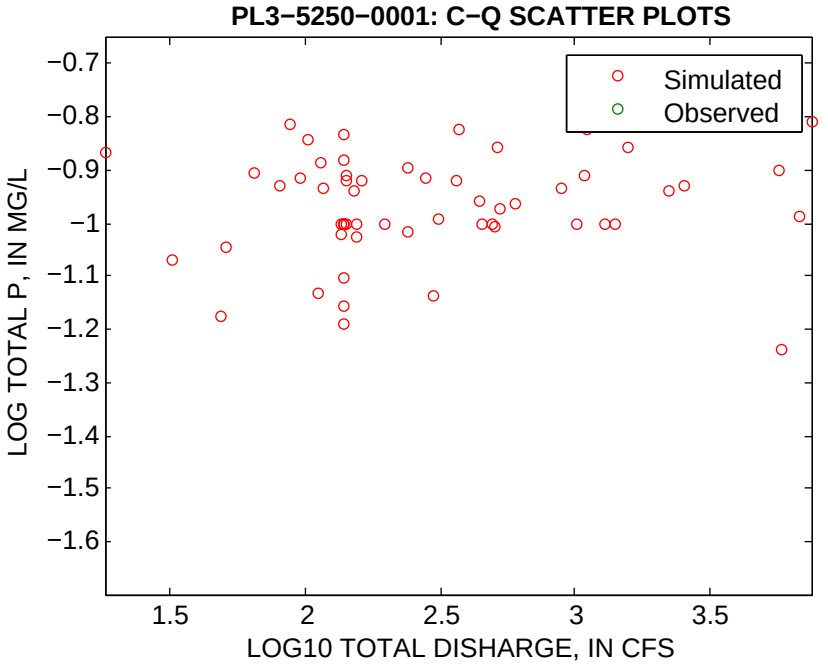
STATISTICS

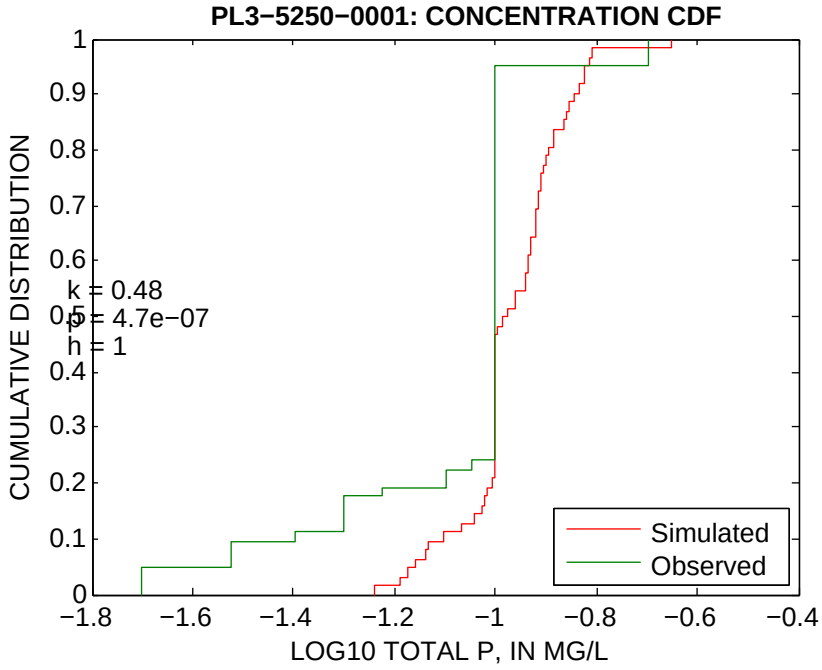
	n	66	58
		observe	simulate
min		0.02	0
		-1.69897	-1.19374
mean		0.0954545	0.103071
		-1.08321	-0.948874
media		0.1	0.10928
		-1	-0.93187
max		0.2	0.24953
		-0.69897	-0.602877
varian		0.00151748	0.00261817
		0.0481951	0.015583
JB		0.003217	0.16912
		0.001730	0.5
		ra	log
%		7.97863	-12.4013
err.va		0.00547776	0.0926856
rel.std.err		3.60977	1.92313
mod.eff		-2.60977	-0.923133

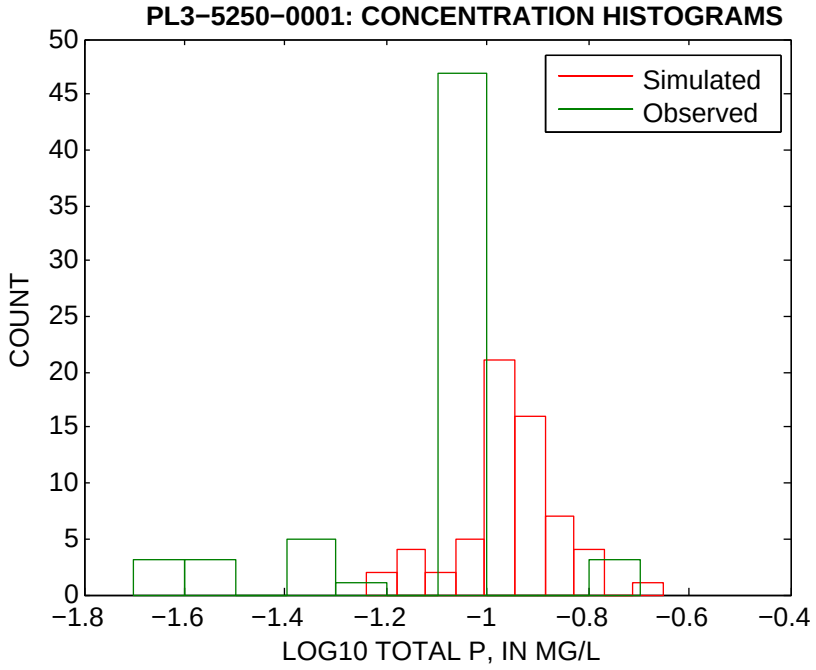
VERSION 2.1

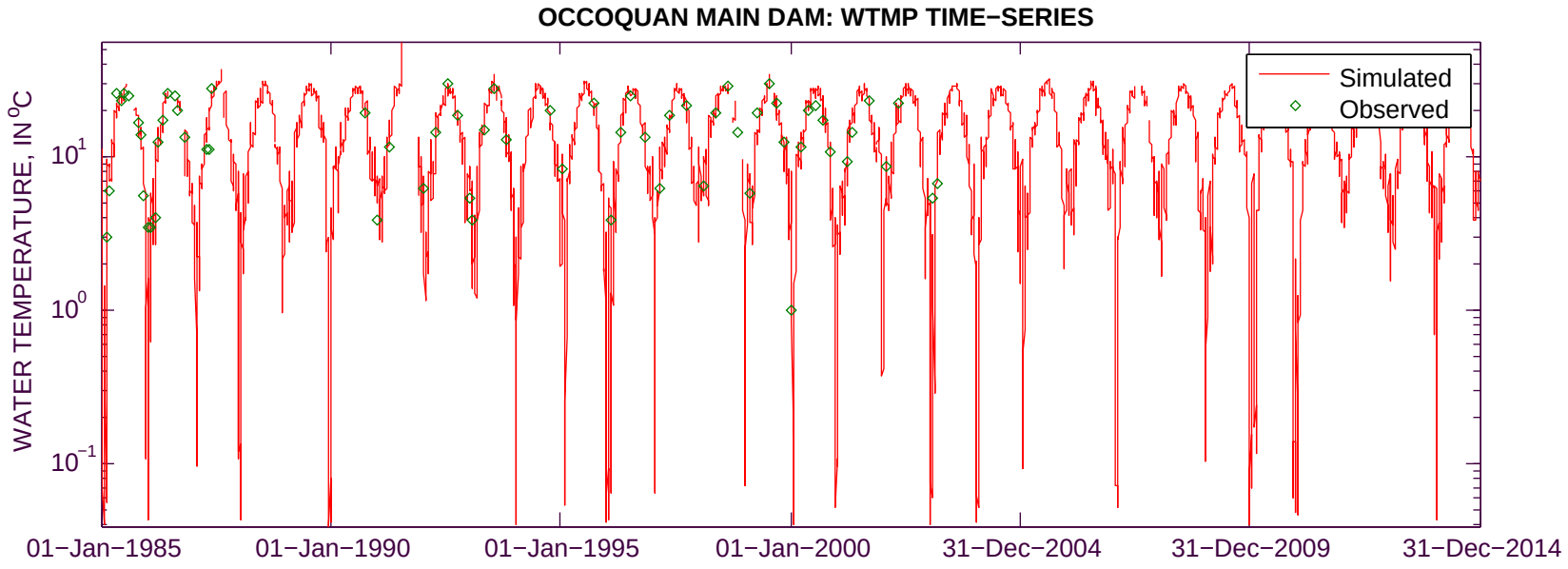
ALL DATA
LOG10

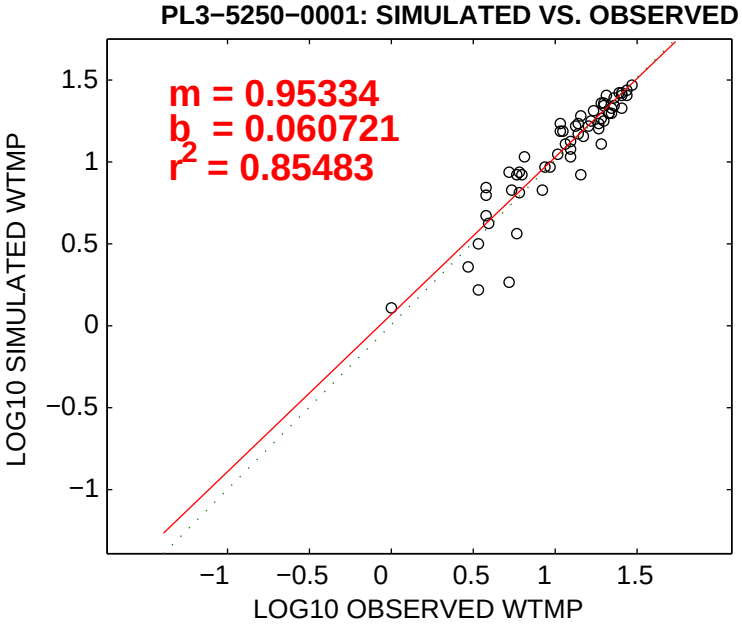


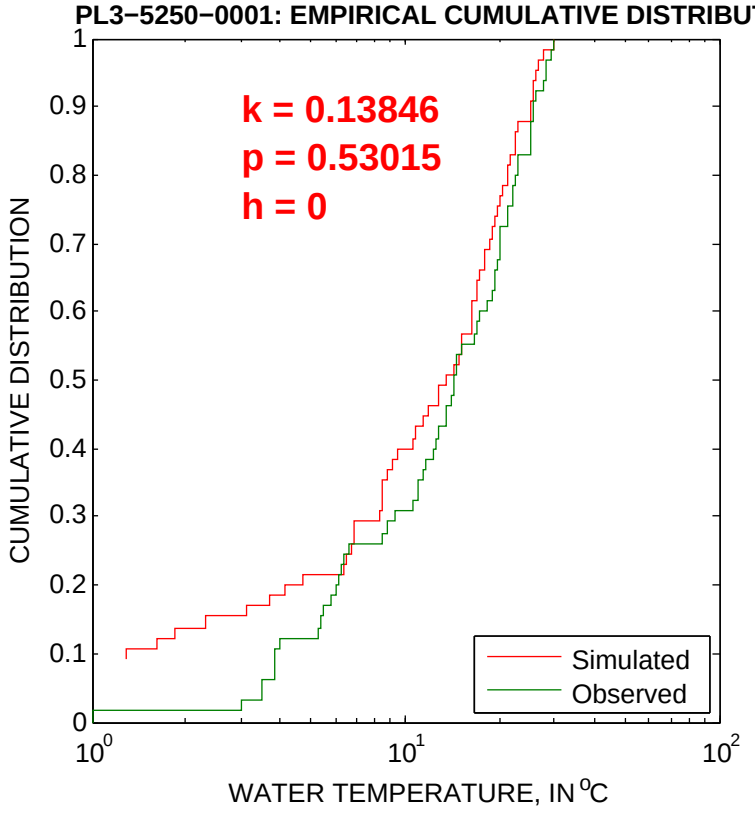












DATA SELECTION

scenario	file
P620171001WQ	WTMP.calib

plot: WTMP - water tempera...

Dates: 1/1/1985 – 12/31/201

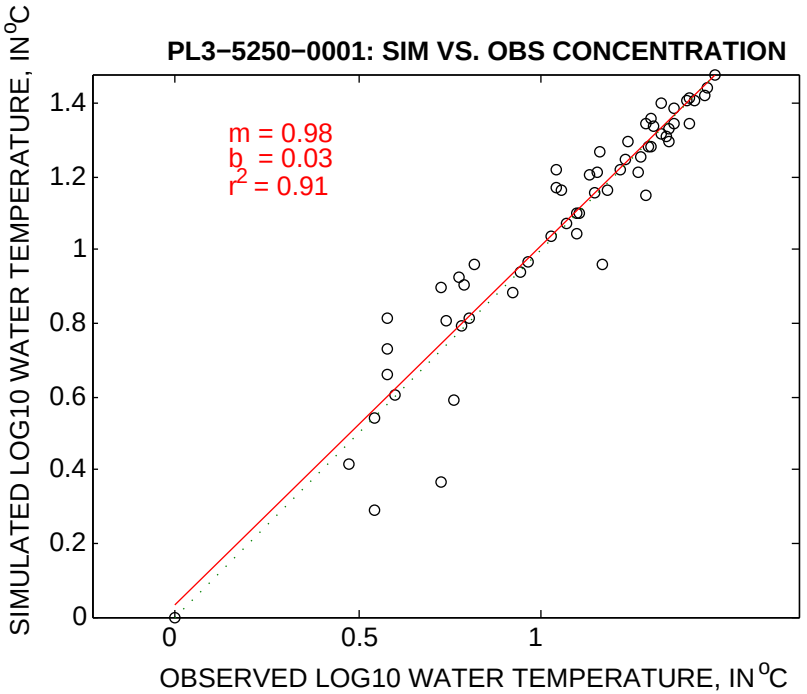
Drive	Directory	Observed
N/A	model	OBS20161101

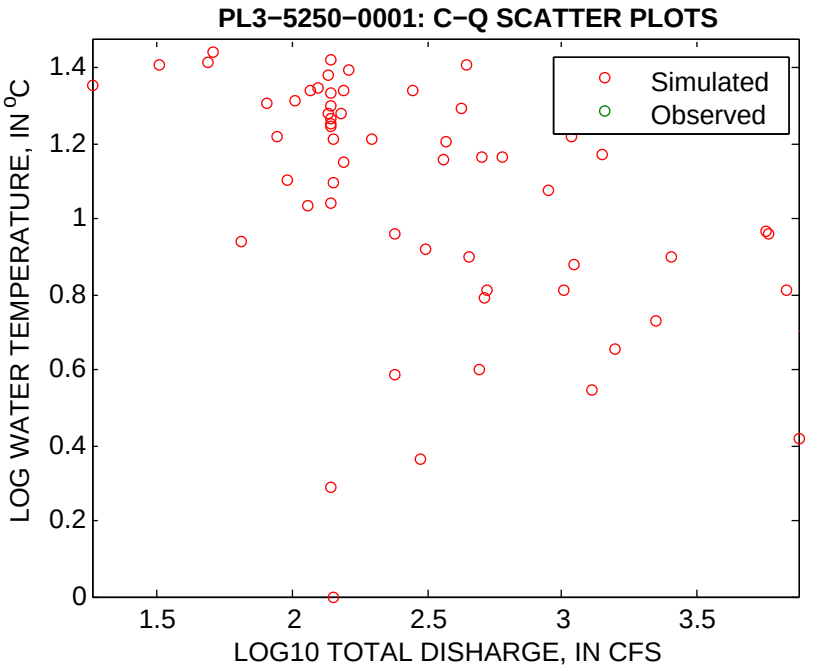
STATISTICS

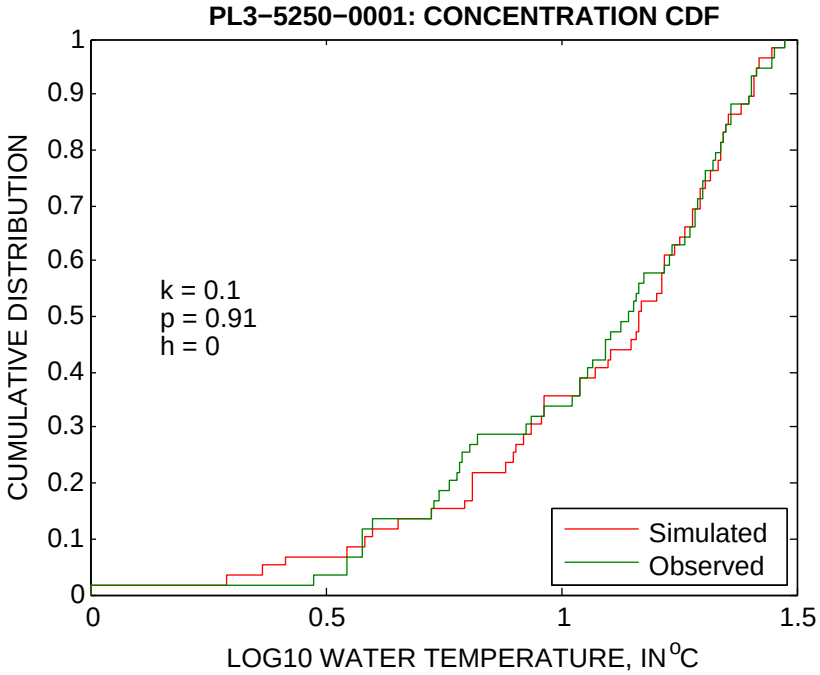
	n	65	59
		observe	simulate
min		1 0	0 0.113241
mean		14.9171 1.06003	13.1716 1.07129
media		14.4 1.14613	13.43 1.18136
max		29.8 1.47422	29.555 1.47063
varian		65.1639 0.0998436	71.1157 0.106154
JB		0.085592 0.018314	0.109252 0.005942
		ra	log
% err.va		-11.7014 57.295	1.06215 0.015757
rel.std.err		0.879245	0.157817
mod.eff		0.120755	0.842183

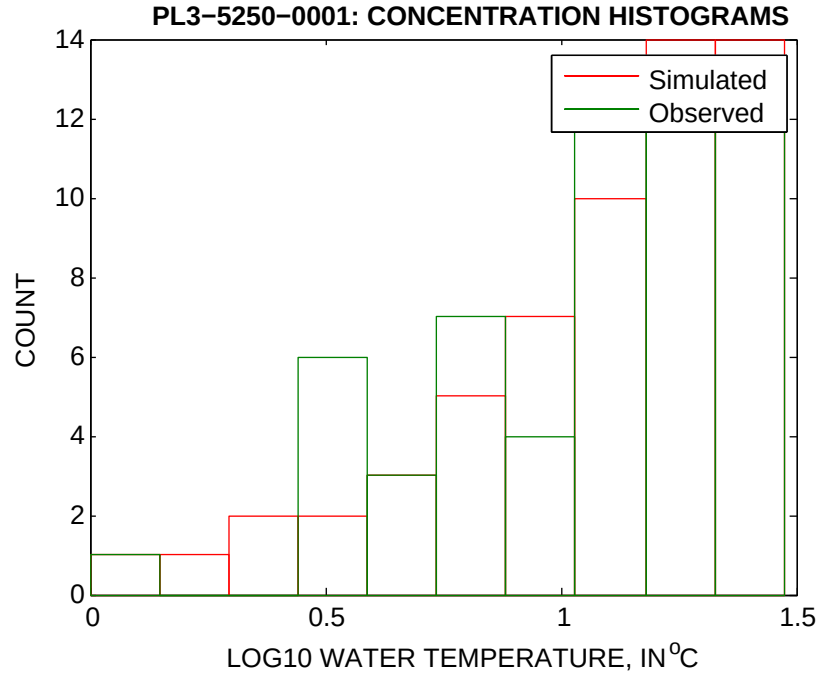
VERSION 2.1

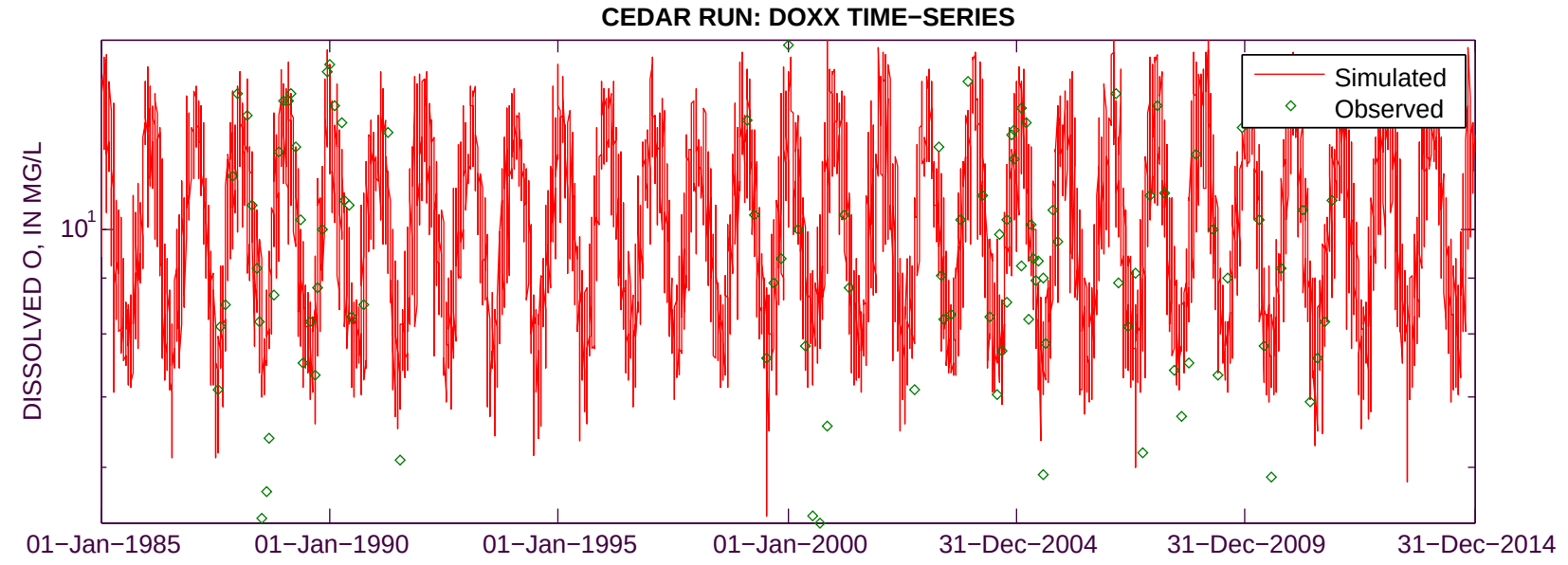
ALL DATA
LOG10

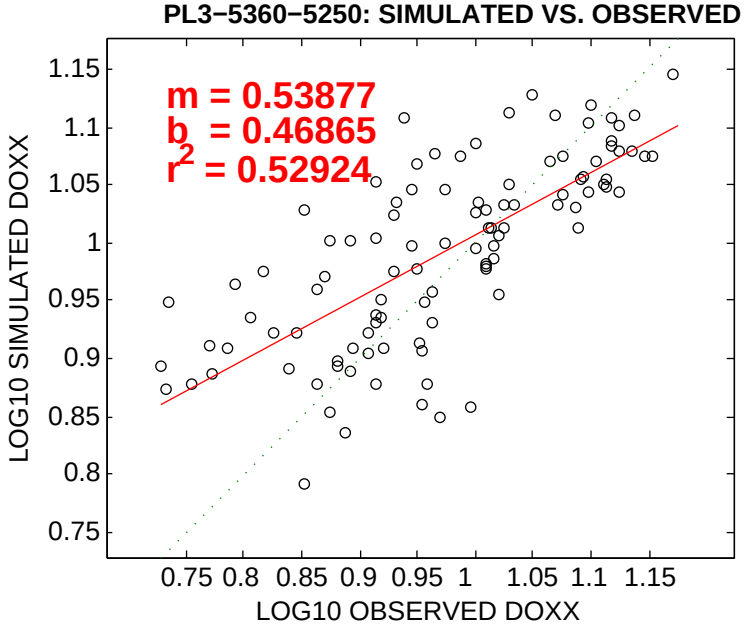


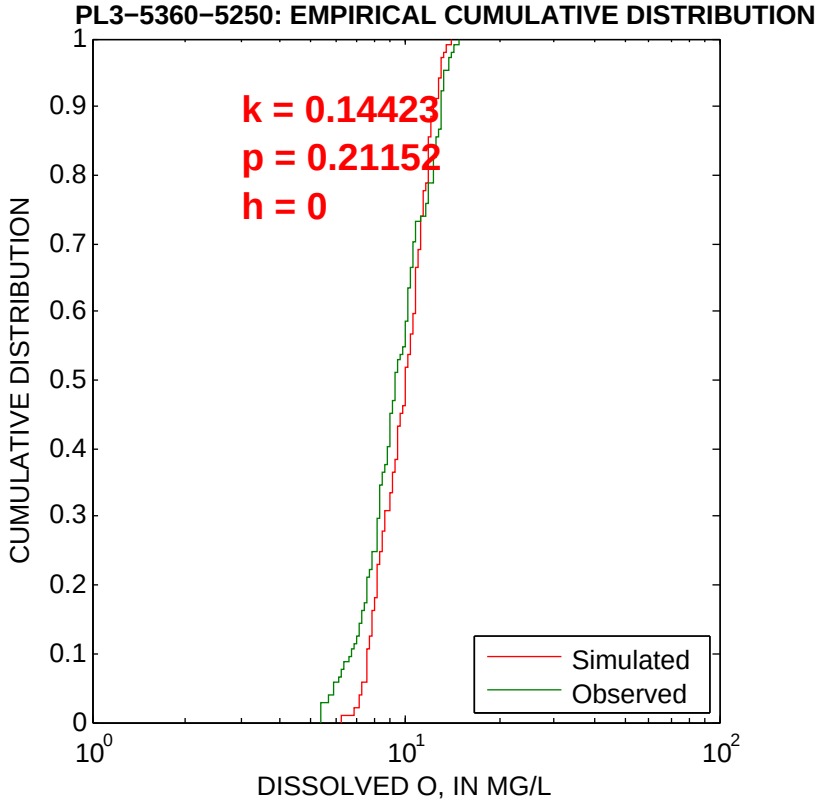












DATA SELECTION

scenario	file
P620171001WQ	DOXX.calib

plot: DOXX - dissolved oxygen

Dates: 1/1/1985 – 12/31/201

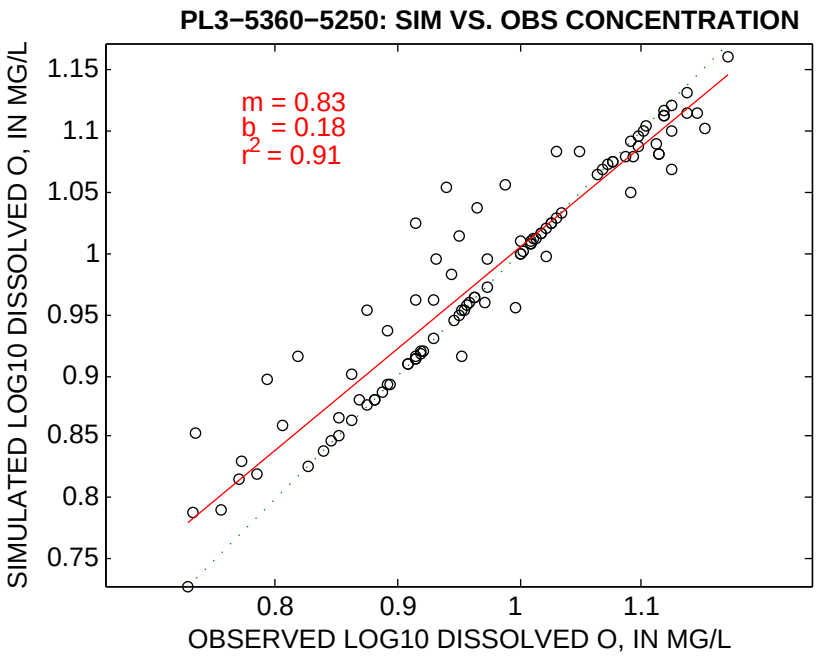
Drive	Directory	Observed
N/A	model	OBS20161101

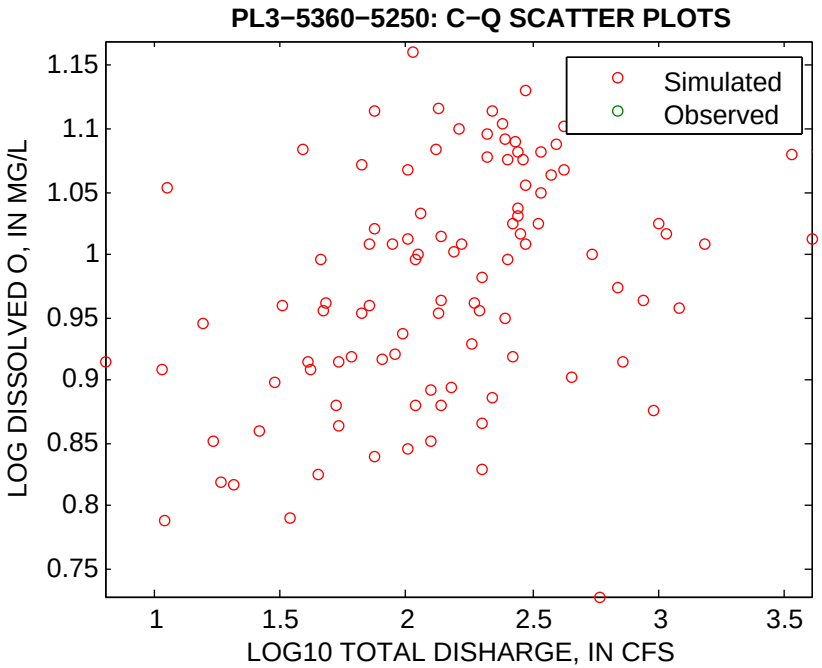
STATISTICS

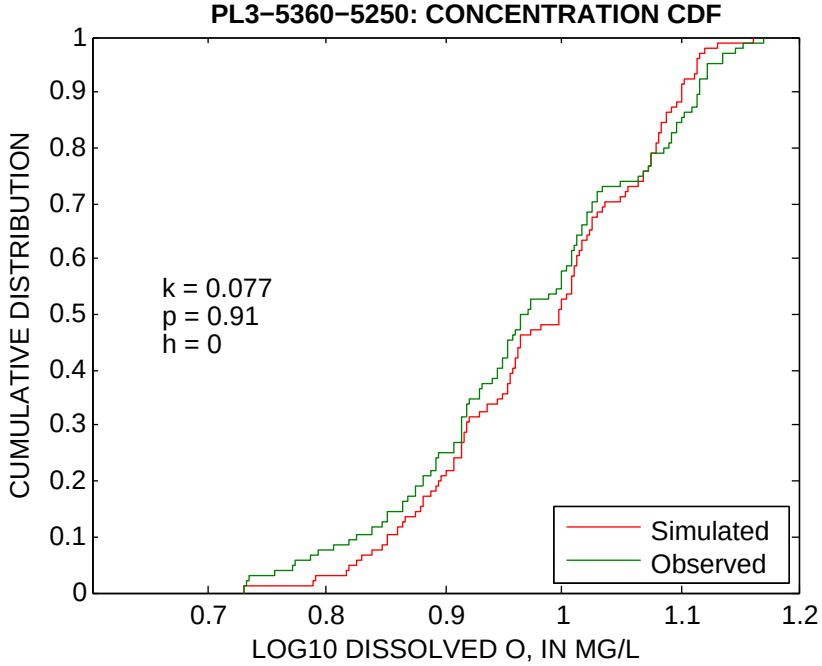
	n	104	104
		observe	simulate
min		5.35	6.1946
		0.728354	0.792013
mean		9.65481	9.98559
		0.971726	0.992186
media		9.28	10.0405
		0.967539	1.00176
max		14.8	13.964
		1.17026	1.14501
varian		5.46431	3.24144
		0.0116898	0.00641145
JB		0.098986	0.084711
		0.16546	0.072080
		ra	log
%		3.42604	2.10546
err.va		2.50495	0.00592774
rel.std.err		0.458419	0.507085
mod.eff		0.541581	0.492915

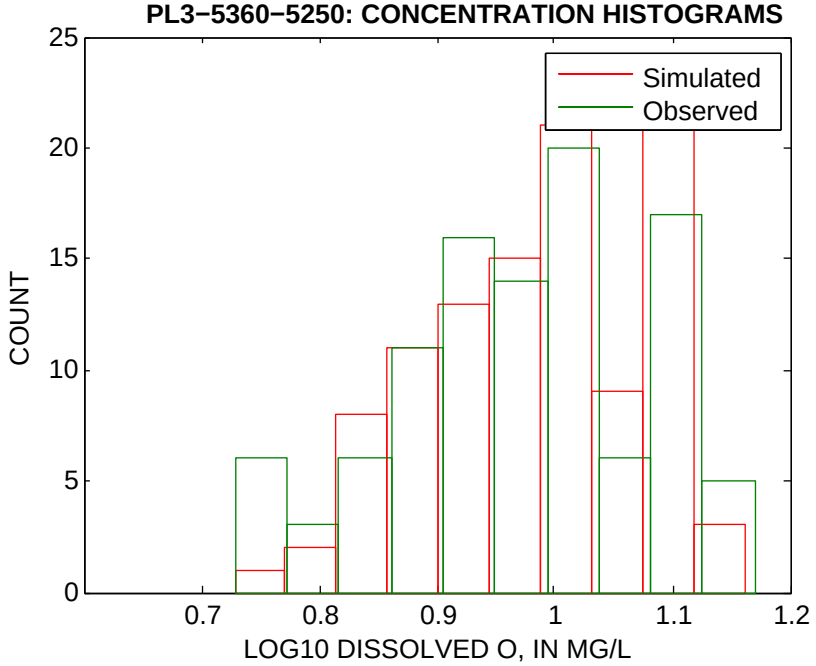
VERSION 2.1

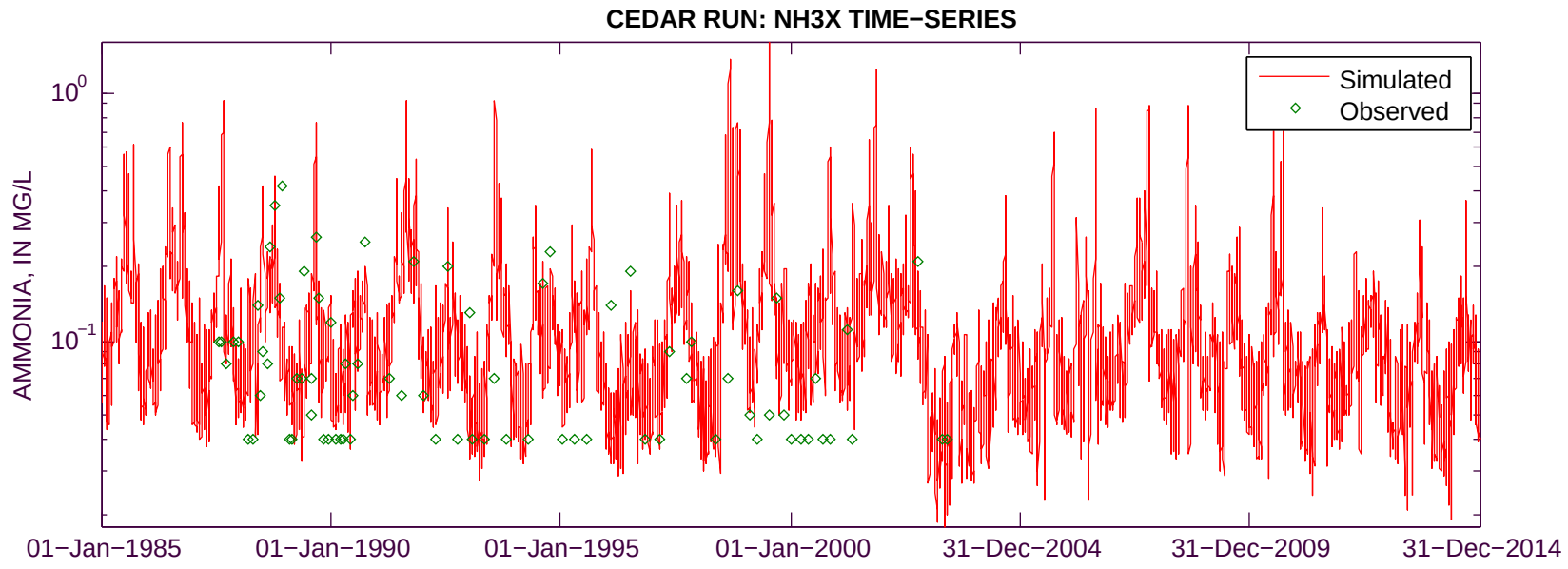
ALL DATA
LOG10

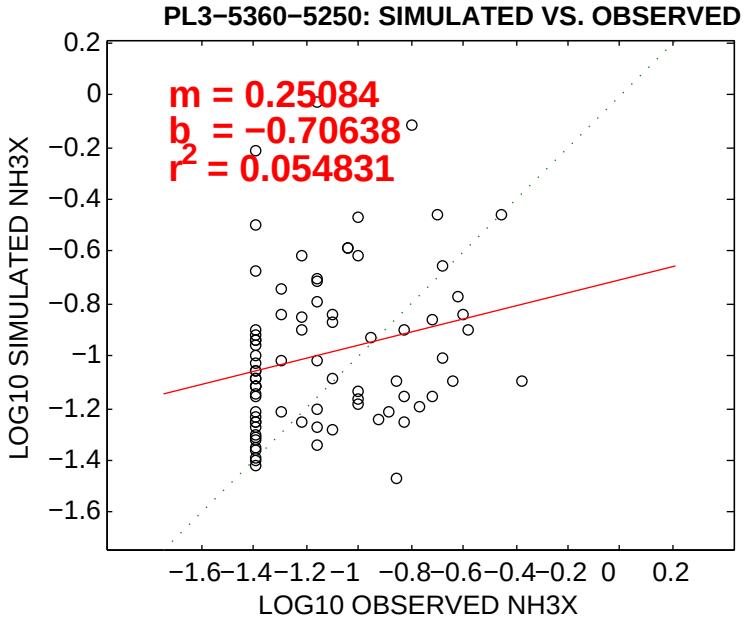


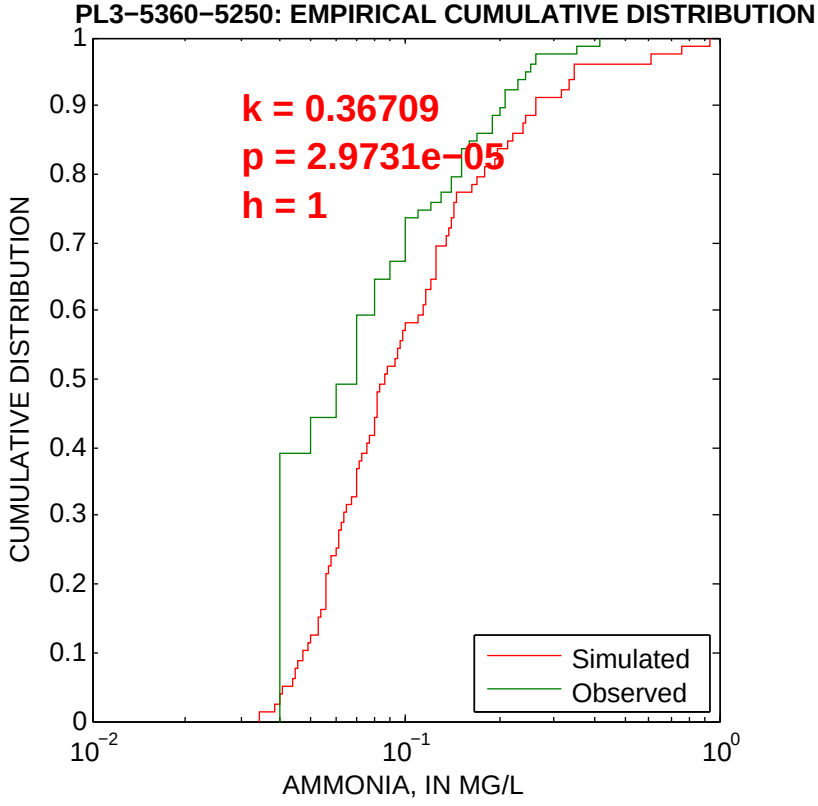












DATA SELECTION

scenario	file
P620171001WQ	NH3X.calib

plot: NH3X - ammonia

Dates: 1/1/1985 – 12/31/201

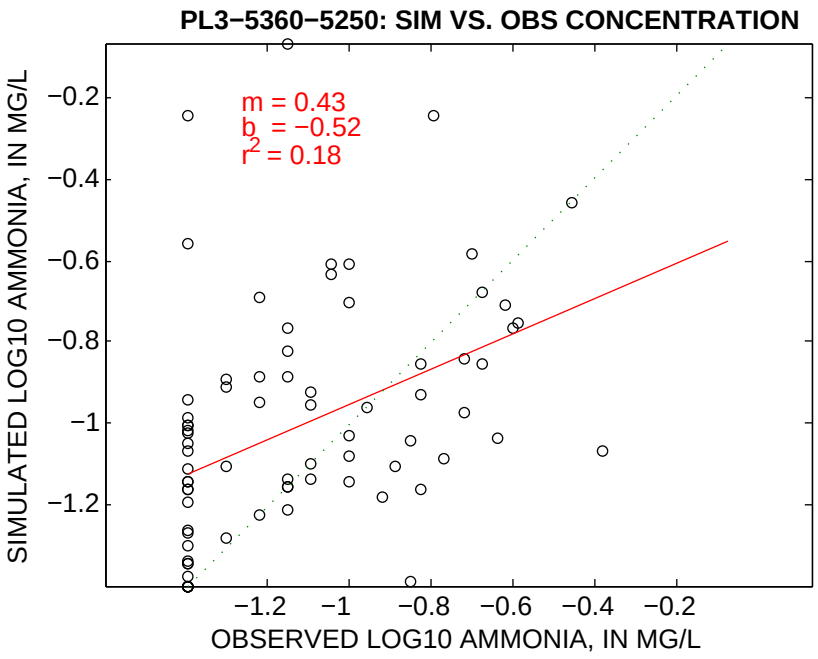
Drive: N/A | Directory: model | Observed: OBS20161101

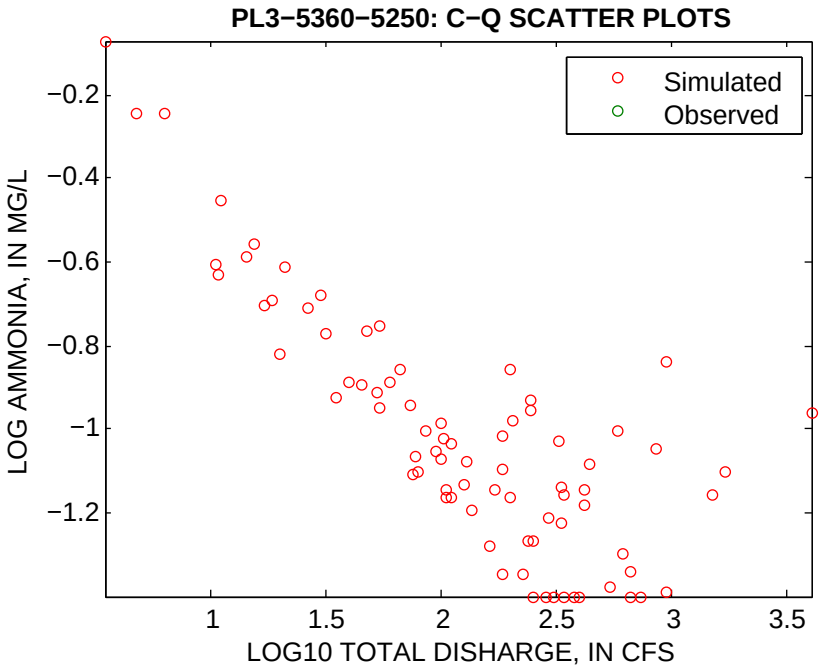
STATISTICS

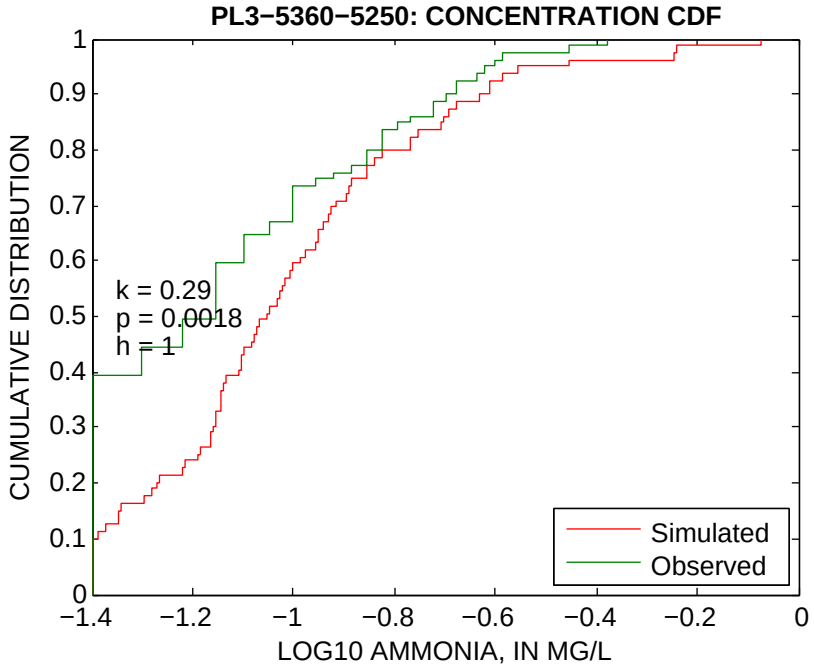
	n	79	79
		observe	simulate
min		0.04	0.033973
		-1.39794	-1.46887
mean		0.0937975	0.13828
		-1.13204	-0.990343
media		0.07	0.086774
		-1.1549	-1.06161
max		0.42	0.93589
		-0.376751	-0.0287752
varian		0.00582642	0.0221256
		0.0810295	0.0929844
JB		0.001	0.001
		0.020956	0.007724
		ra	log
%		47.4241	-12.5171
err.va		0.0270928	0.153699
rel.std.err		4.64998	1.89682
mod.eff		-3.64998	-0.896824

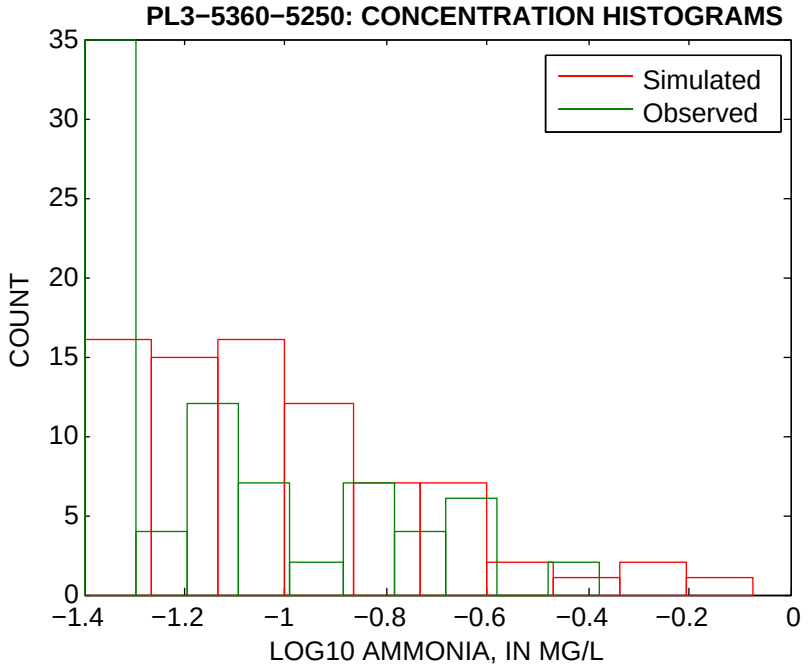
VERSION 2.1

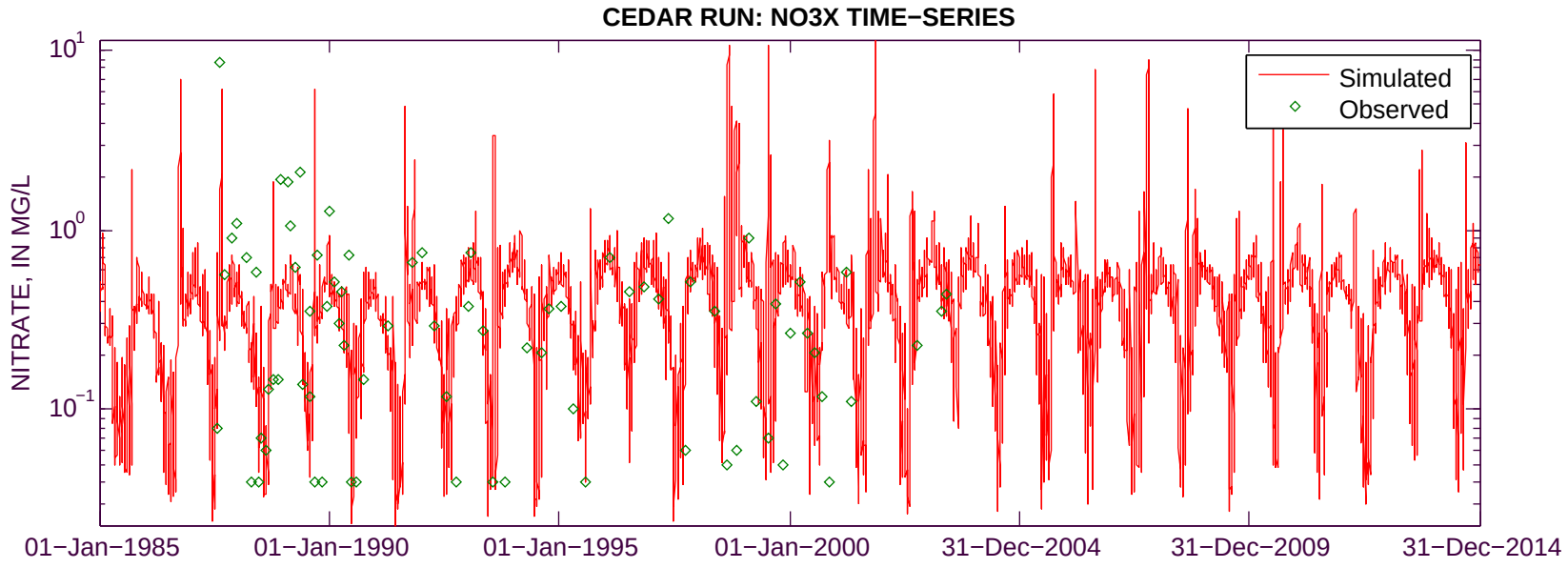
ALL DATA
LOG10

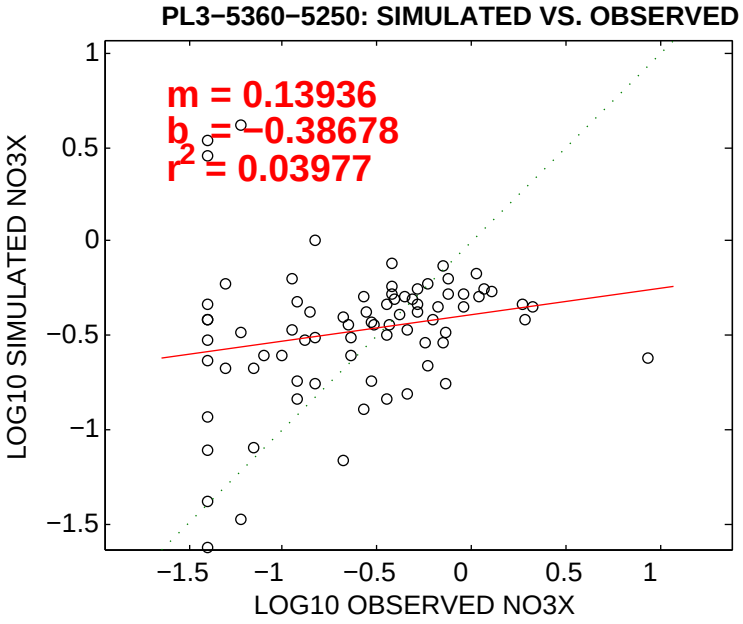


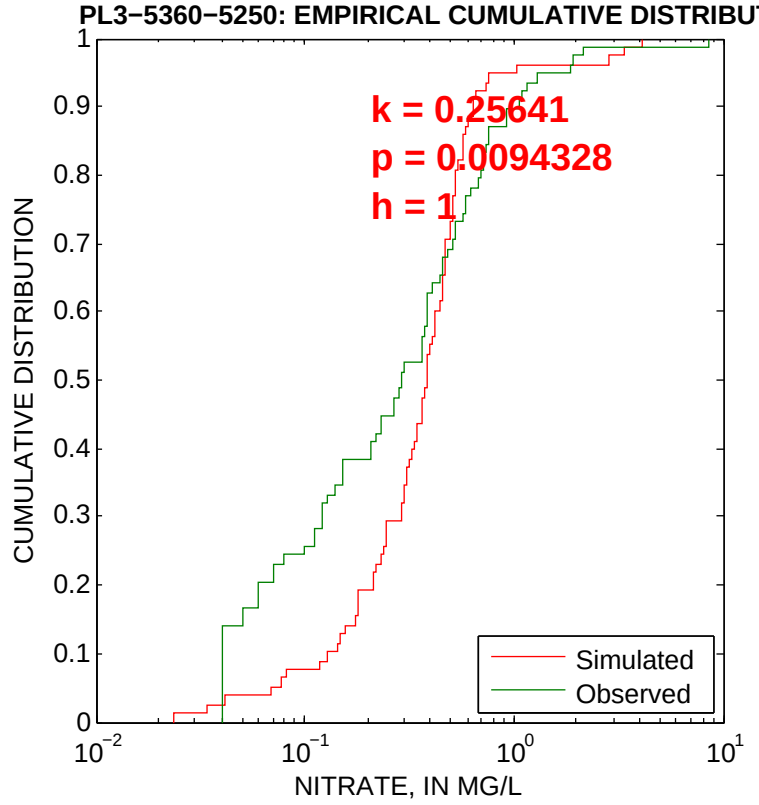












DATA SELECTION

scenario: P620171001WQ | file: NO3X.calib

plot: NO3X - nitrate

Dates: 1/1/1985 – 12/31/201

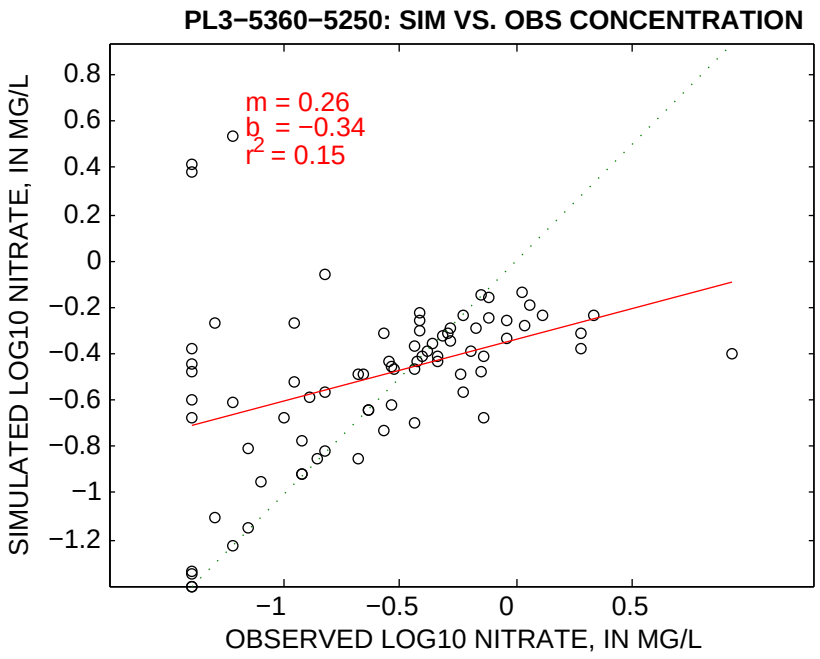
Drive: N/A | Directory: model | Observed: OBS20161101

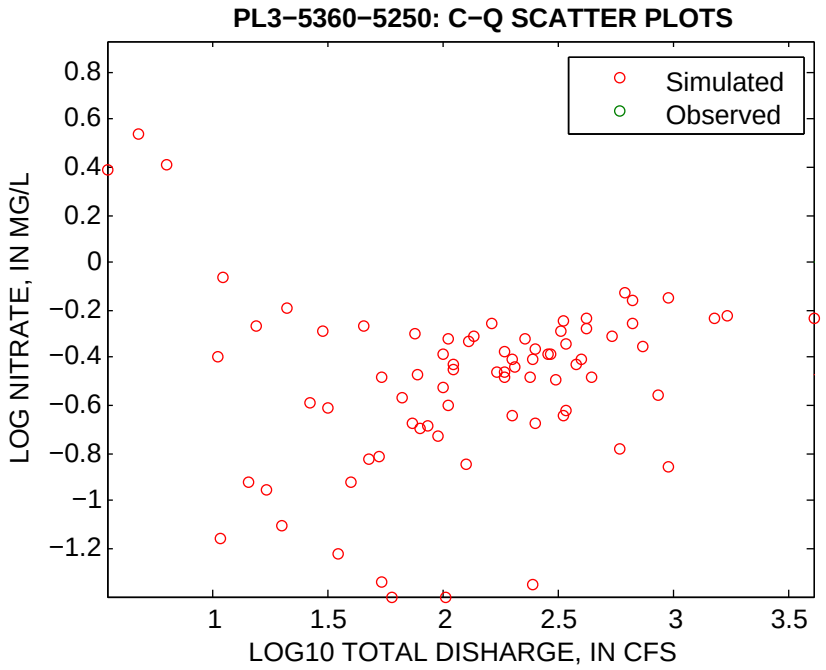
STATISTICS

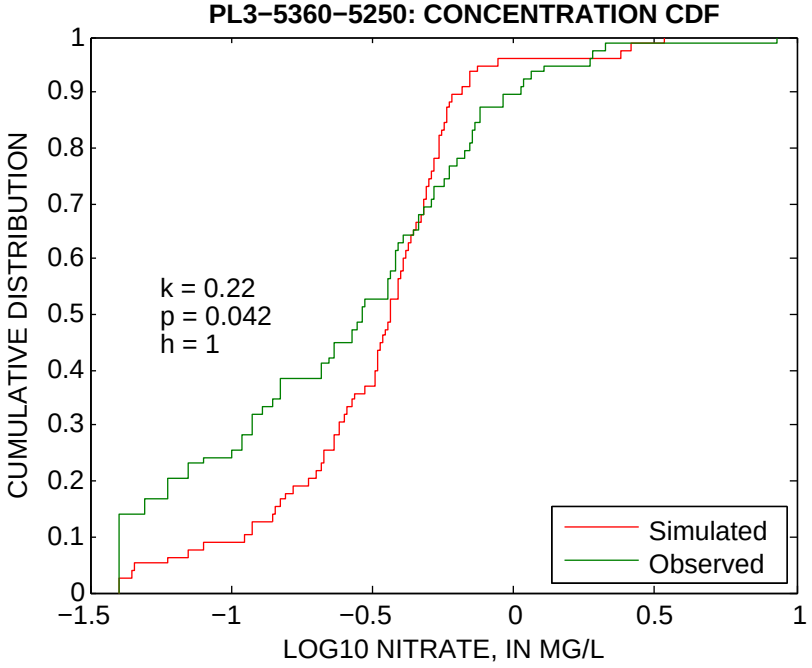
	n	78	78
		observe	simulate
min		0.04	0.023598
		-1.39794	-1.62712
mean		0.515641	0.489074
		-0.608567	-0.471584
media		0.29	0.38591
		-0.537602	-0.413514
max		8.5	4.1039
		0.929419	0.613197
varian		1.02898	0.400273
		0.273629	0.133617
JB		0.001	0.001
		0.5	0.003194
		ra	log
%		-5.15215	-22.5091
err.va		1.51518	0.34999
rel.std.err		1.4725	1.27907
mod.eff		-0.472504	-0.279067

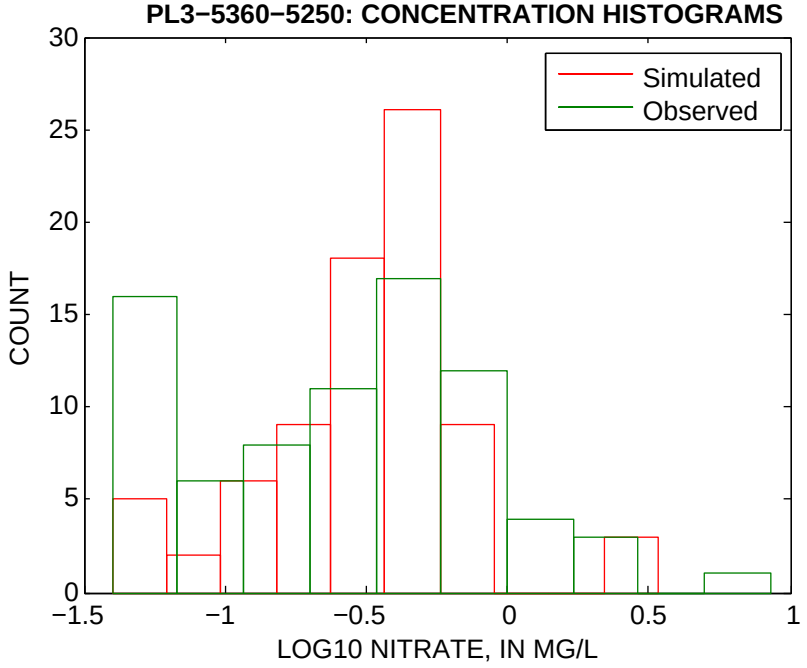
VERSION 2.1

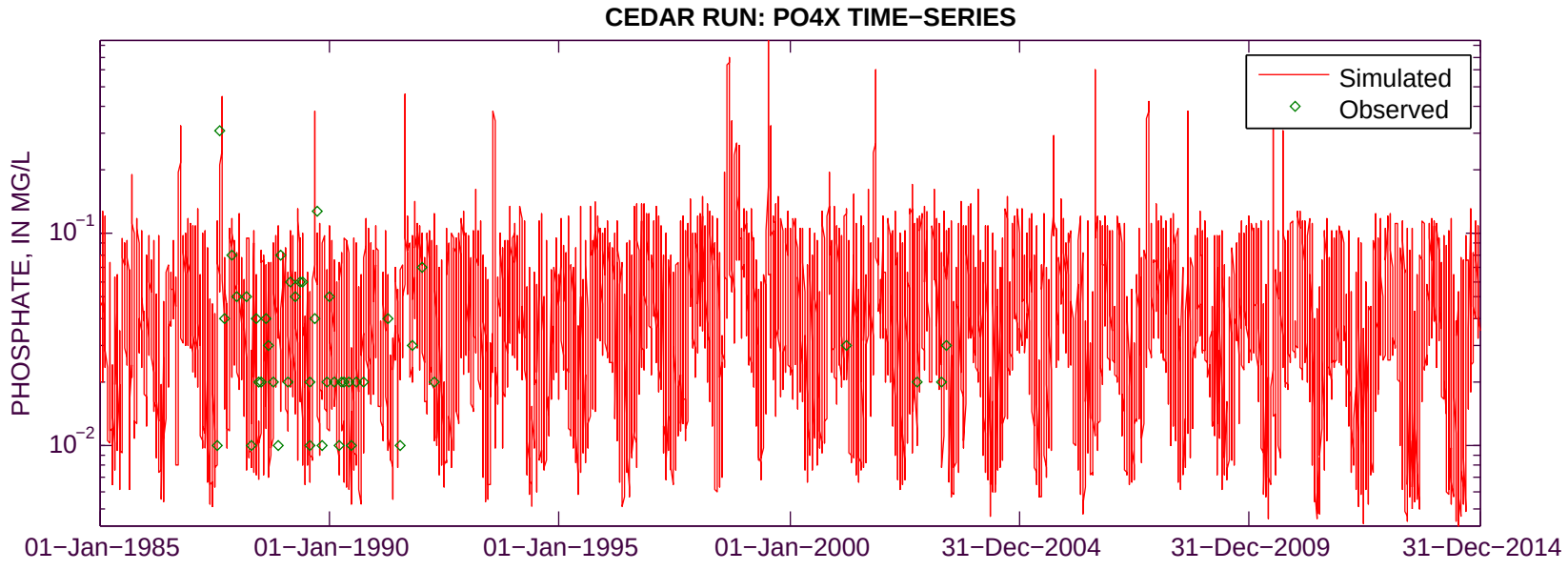
ALL DATA
LOG10

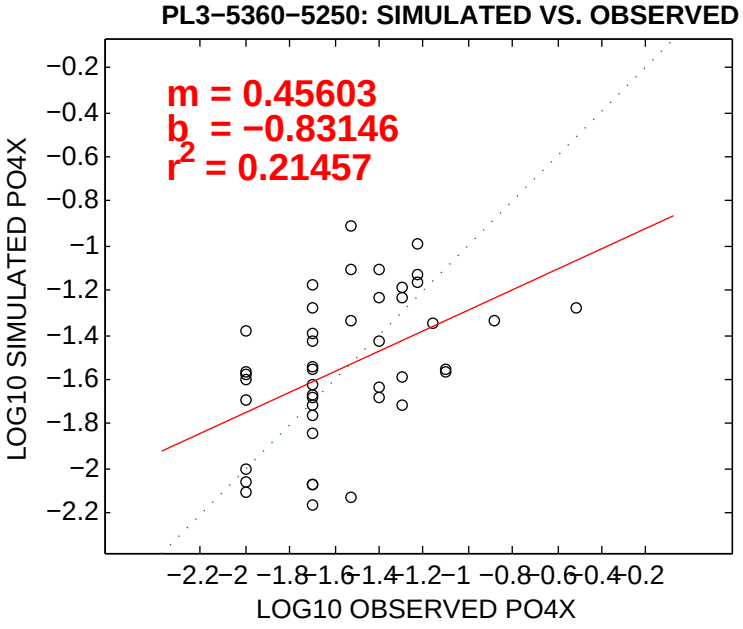


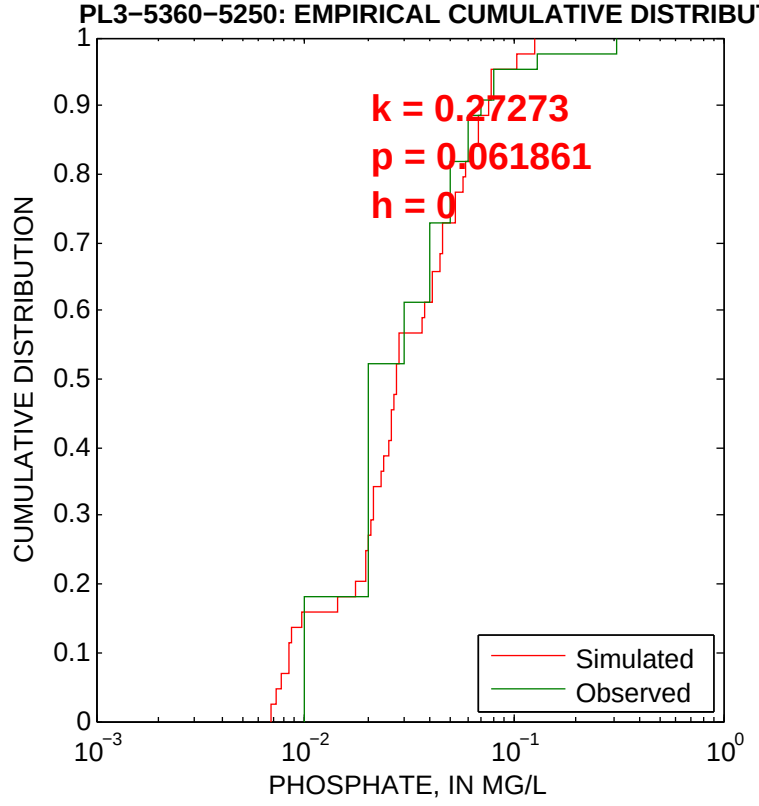












DATA SELECTION

scenario: P620171001WQ | file: PO4X.calib

plot: PO4X - phosphate

Dates: 1/1/1985 – 12/31/201

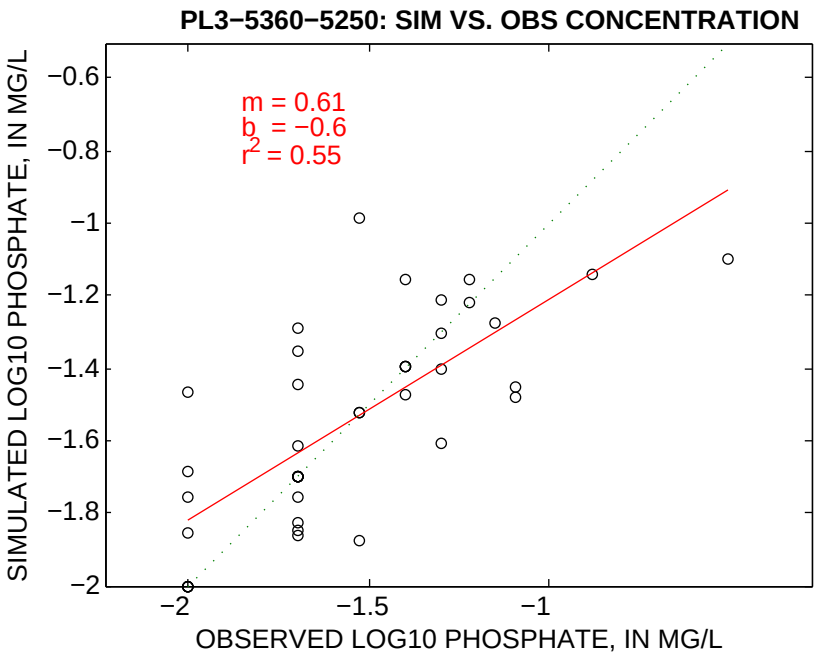
Drive: N/A | Directory: model | Observed: OBS20161101

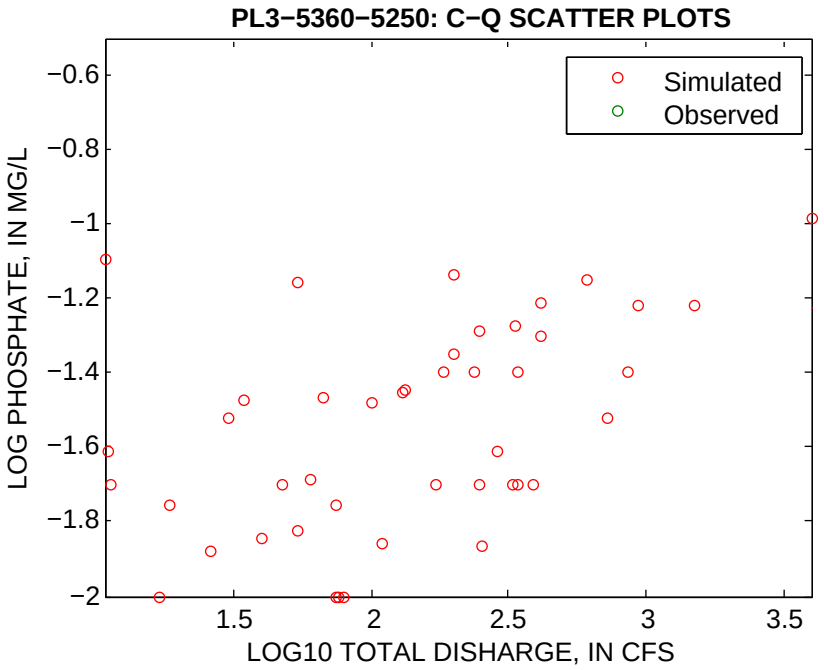
STATISTICS

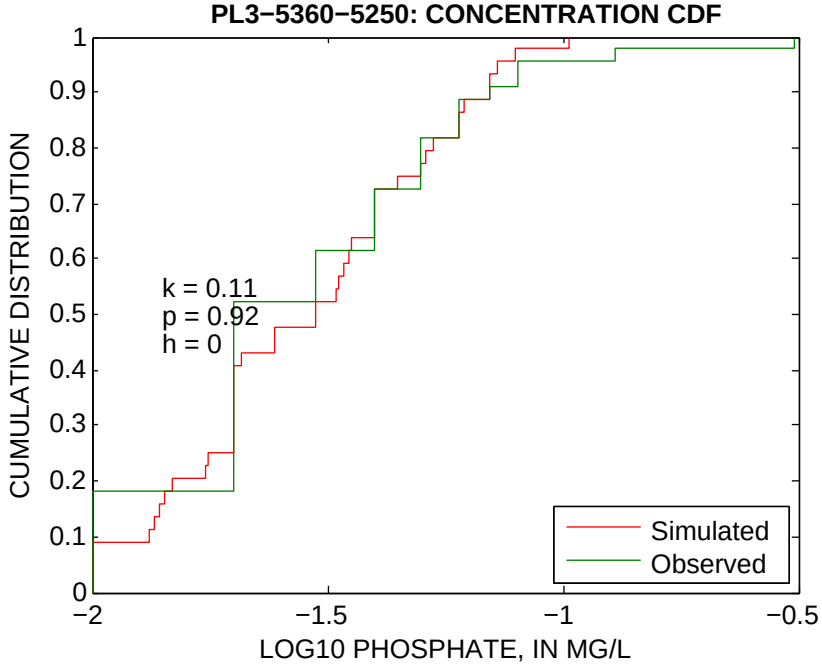
	n	observe	simulate
		44	44
min		0.01	0.0068767
		-2	-2.16262
mean		0.0397727	0.0373434
		-1.54952	-1.53809
media		0.02	0.027514
		-1.69897	-1.56045
max		0.31	0.12423
		-0.508638	-0.905774
varian		0.00233251	0.00070707
		0.110101	0.106714
JB		0.001	0.007506
		0.060433	0.417572
		ra	log
%		-6.10814	-0.737743
err.va		0.00241733	0.11653
rel.std.err		1.03637	1.05838
mod.eff		-0.0363668	-0.0583844

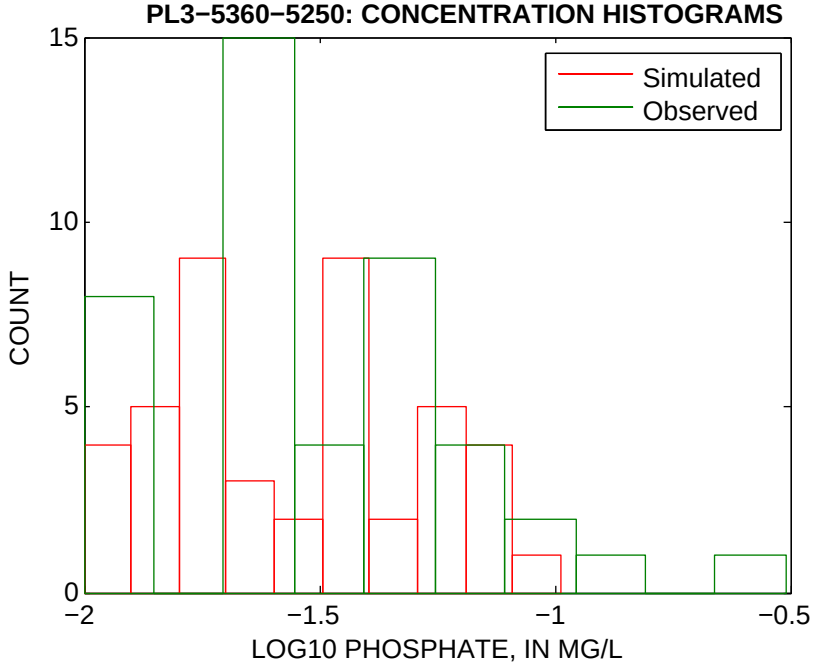
VERSION 2.1

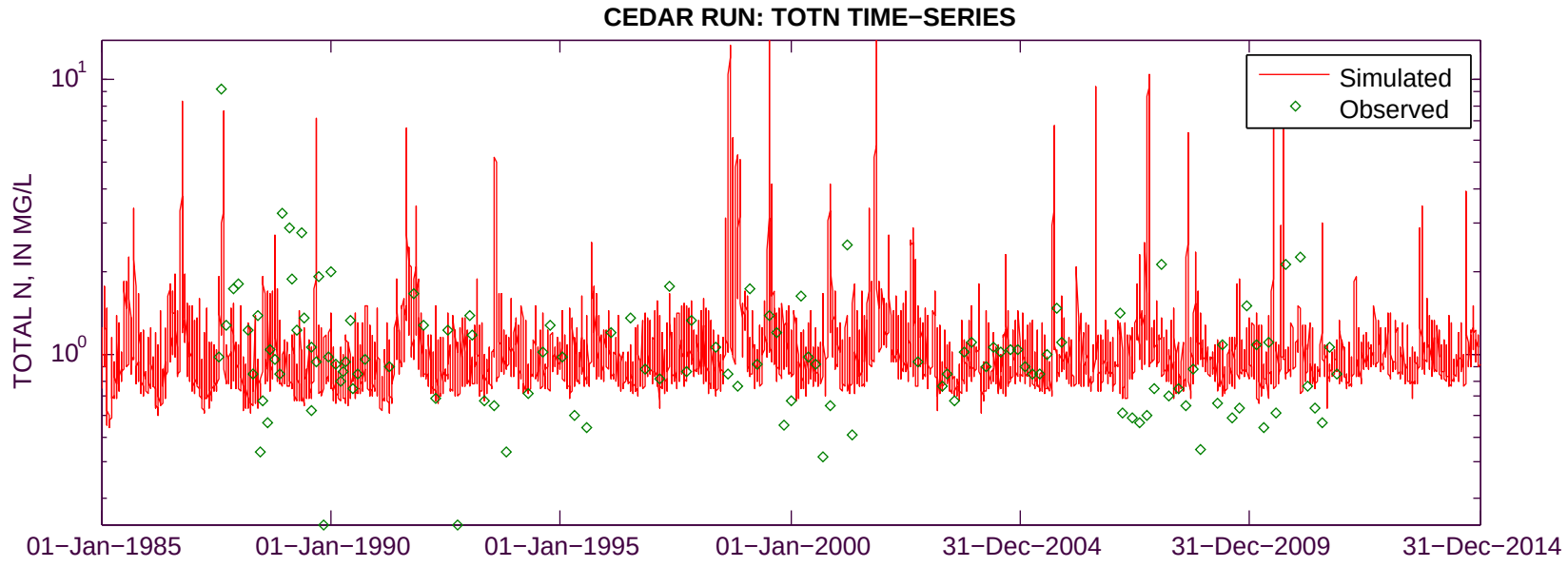
ALL DATA
LOG10

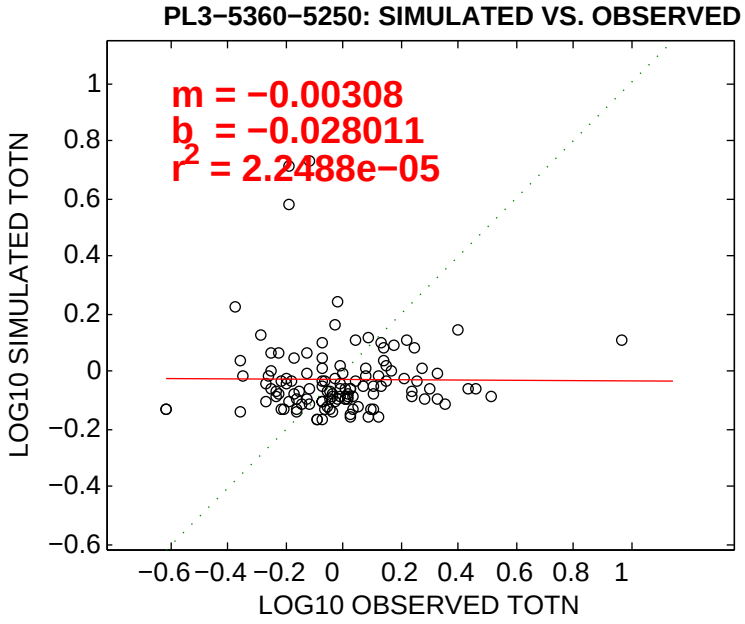


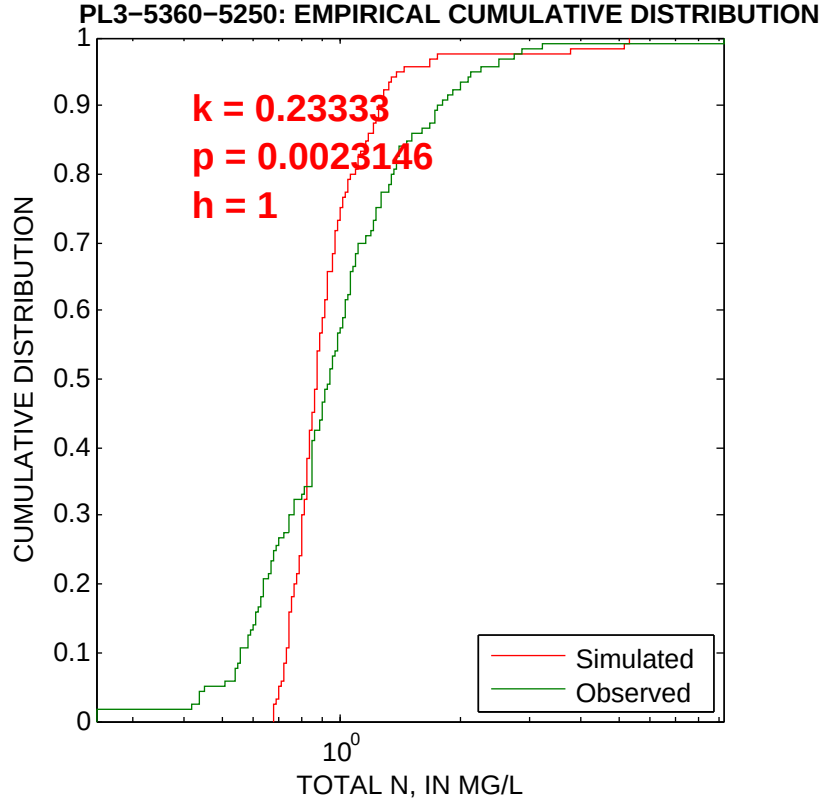












DATA SELECTION

scenario	file
P620171001WQ	TOTN.calib

plot: TOTN - total nitrogen

Dates: 1/1/1985 – 12/31/201

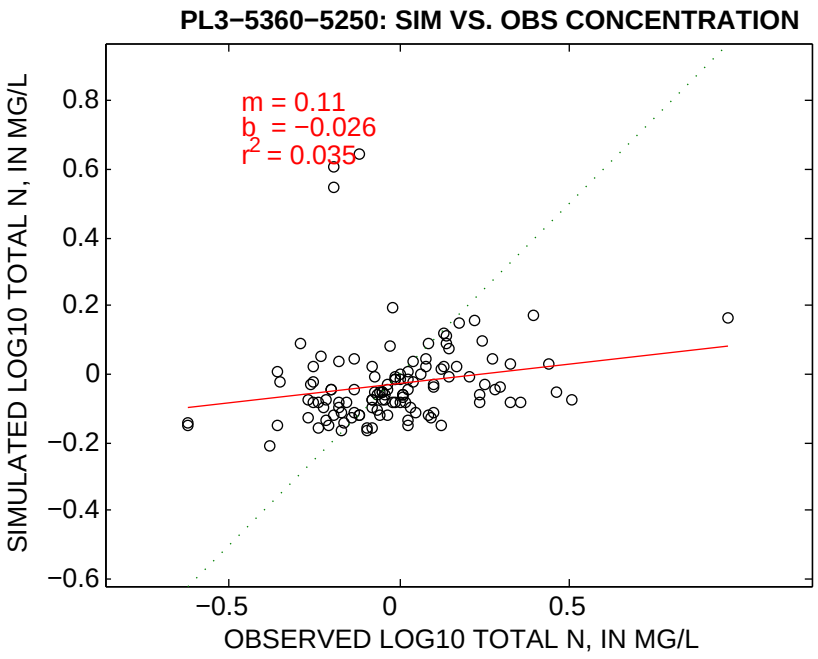
Drive	Directory	Observed
N/A	model	OBS20161101

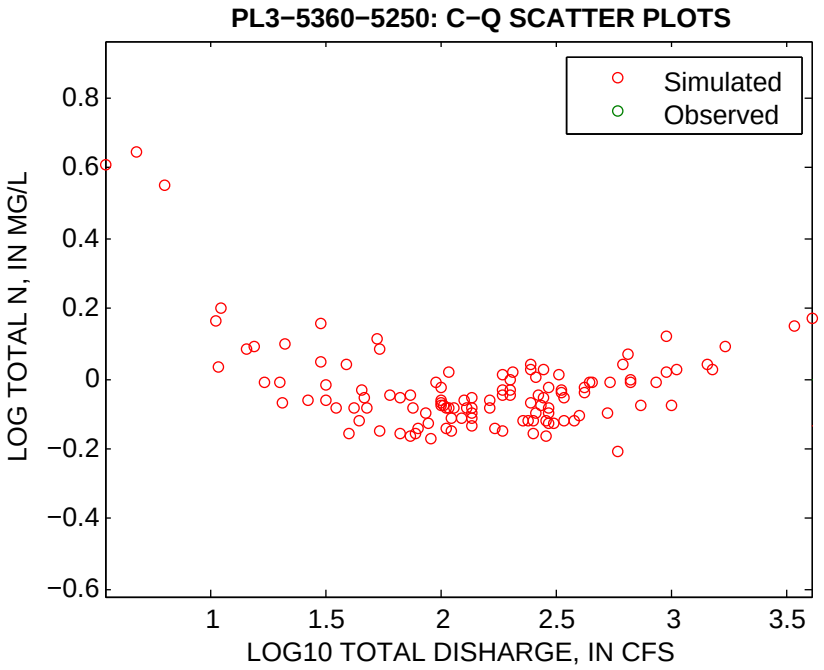
STATISTICS

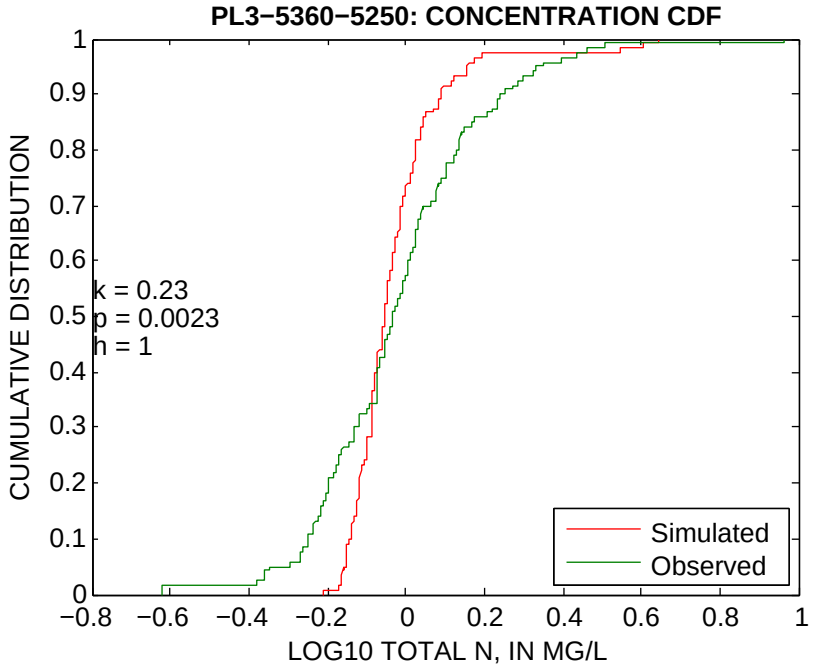
	n	120	120
		observe	simulate
min		0.24	0.67365
		-0.619789	-0.171566
mean		1.11667	1.01439
		-0.0169382	-0.0279591
media		0.93	0.868595
		-0.0315171	-0.0611832
max		9.2	5.3204
		0.963788	0.725944
varian		0.825918	0.414534
		0.0472315	0.0199237
JB		0.001	0.001
		0.001	0.001
		ra	log
%		-9.15919	65.0657
err.va		1.27164	0.0675686
rel.std.err		1.53967	1.43059
mod.eff		-0.539669	-0.430585

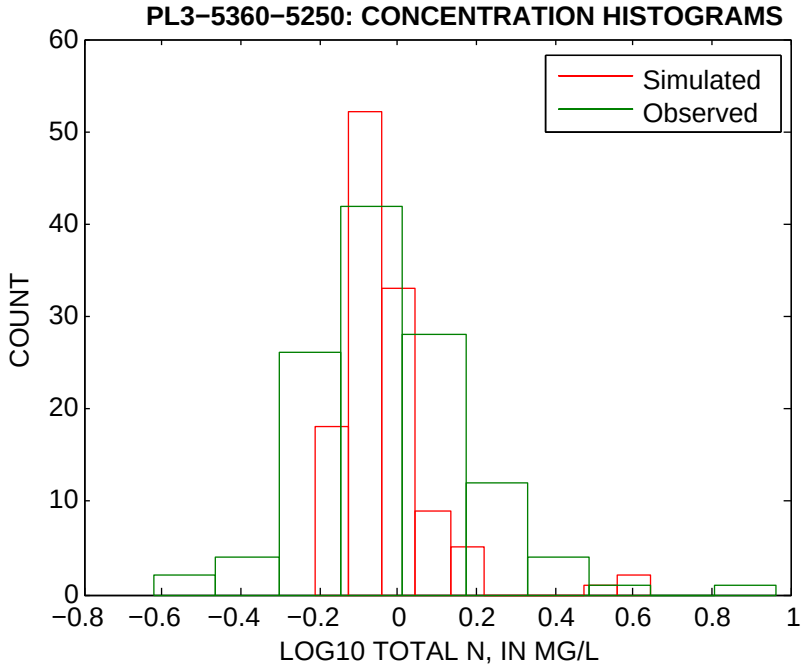
VERSION 2.1

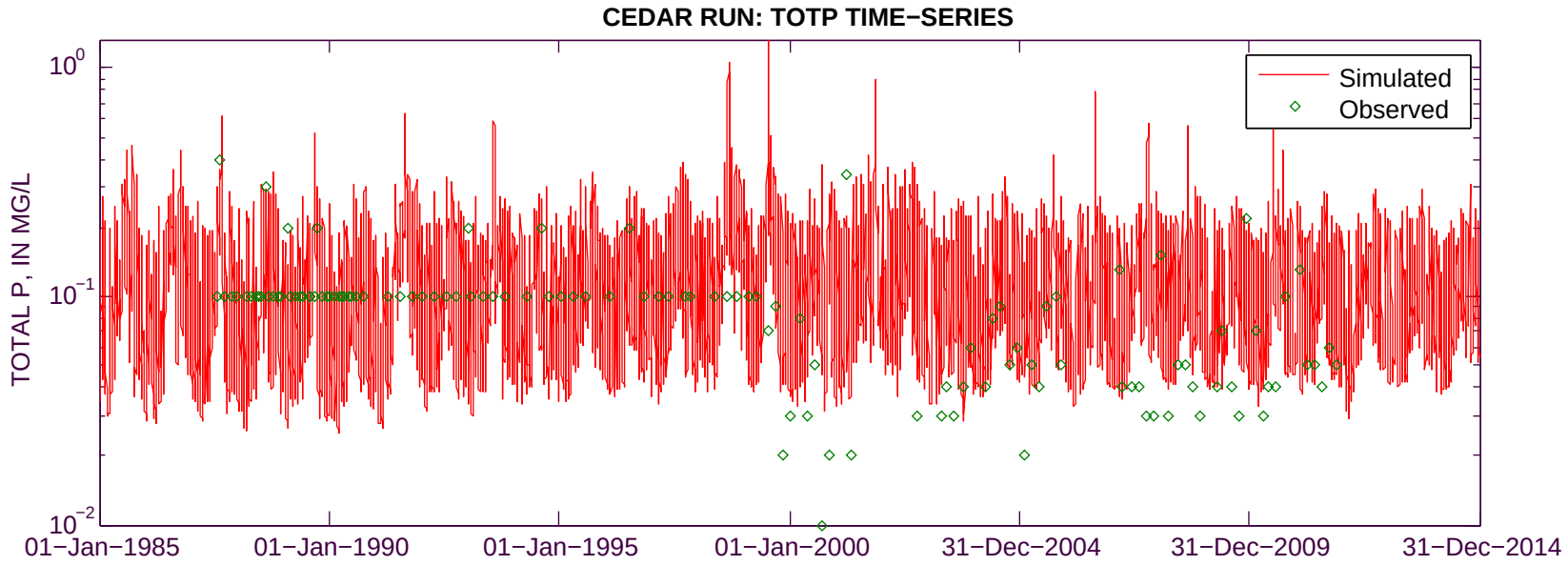
ALL DATA
LOG10

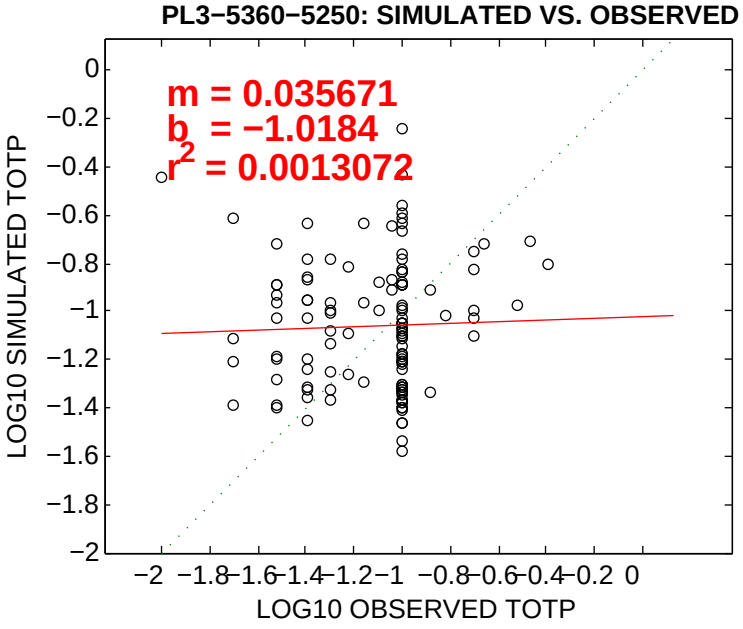


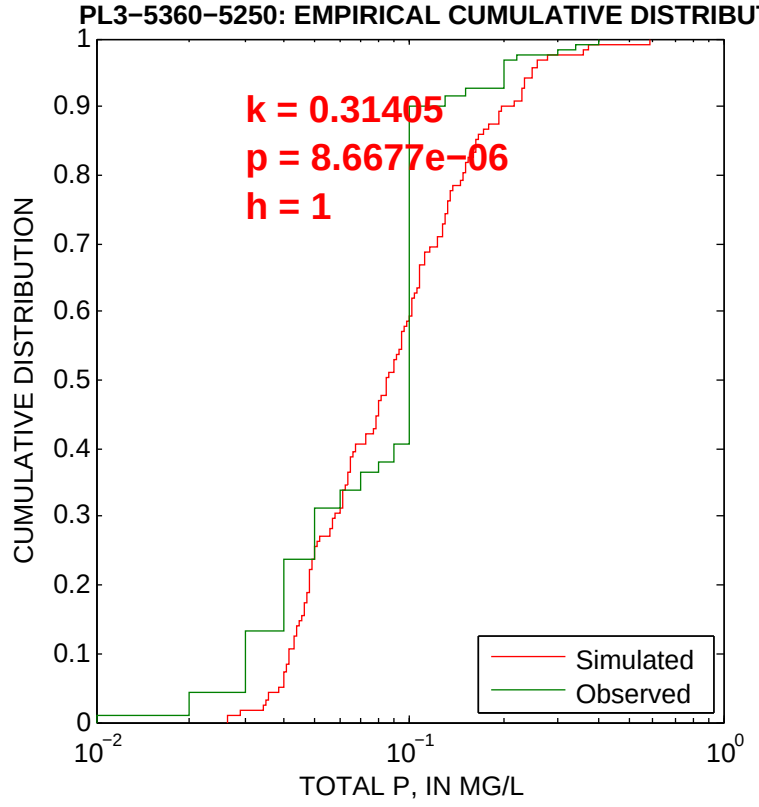












DATA SELECTION

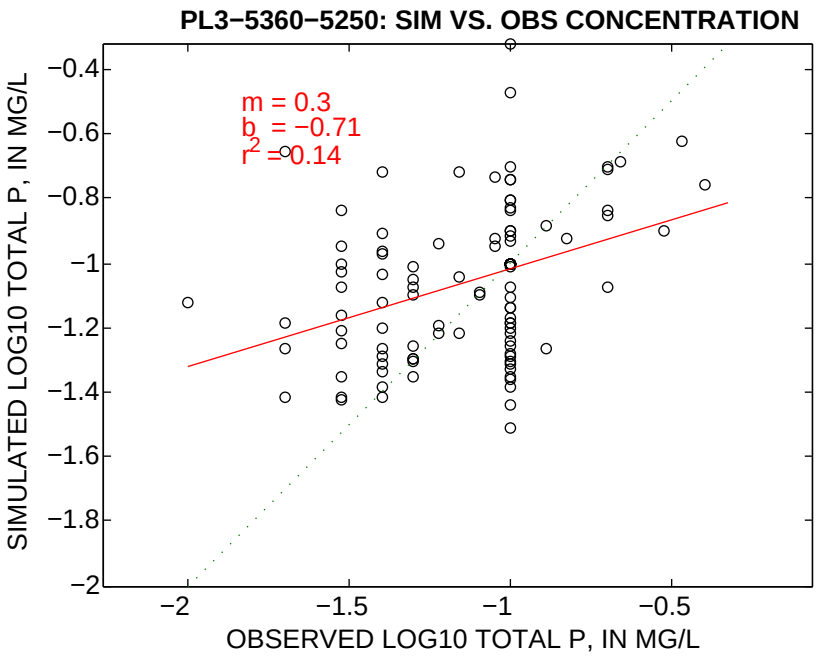
scenario: P620171001WQ
file: TOTP.calib
plot: TOTP - total phosphorus
Dates: 1/1/1985 12/31/201
Drive: N/A
Directory: model
Observed: OBS20161101

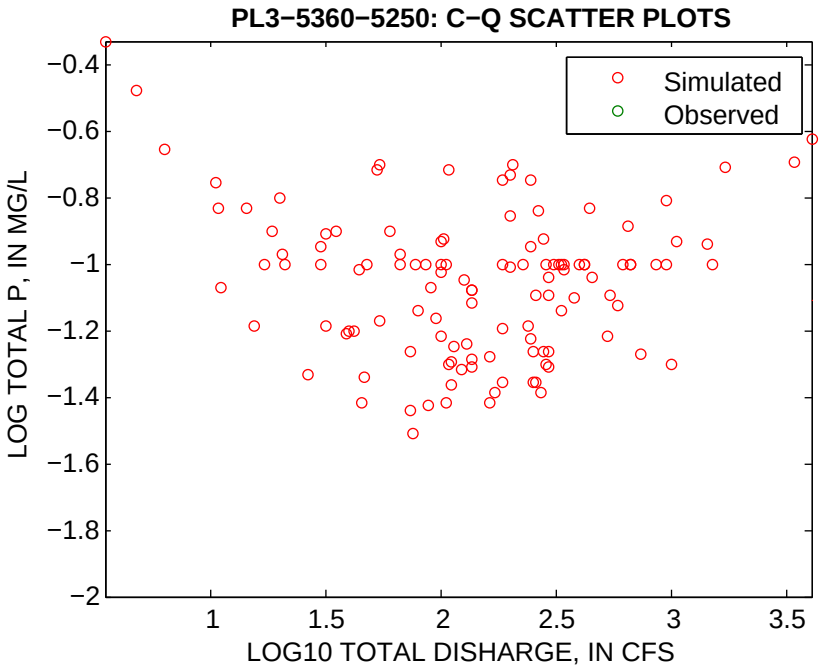
STATISTICS

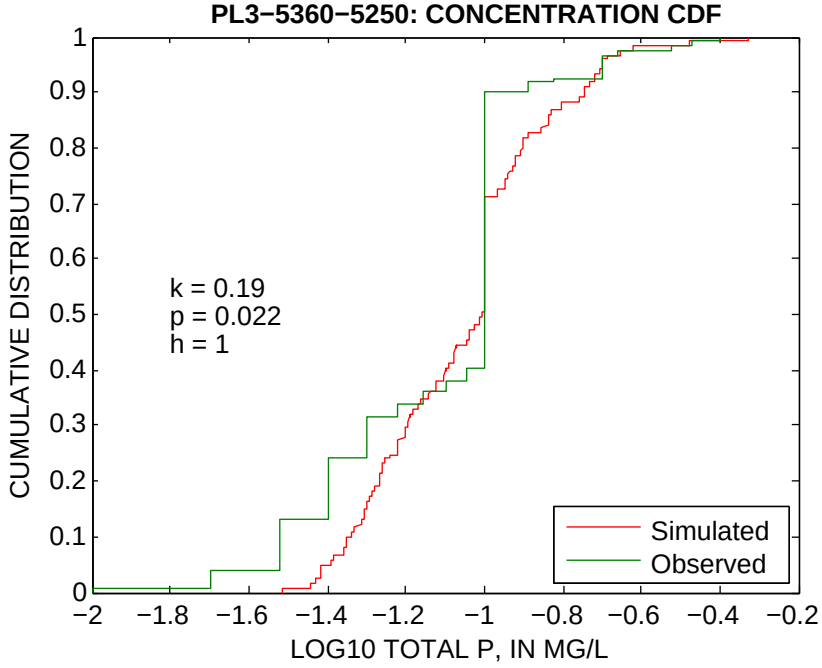
	observe	simulate
n	121	121
min	0.01	0.026106
	-2	-1.58326
mean	0.0899174	0.106839
	-1.12421	-1.05847
media	0.1	0.084921
	-1	-1.07098
max	0.4	0.58212
	-0.39794	-0.234987
varian	0.00341249	0.00636867
	0.0726144	0.0706831
JB	0.001	0.001
	0.072683	0.078438
	ra	log
%	18.8187	-5.84791
err.va	0.00920952	0.142475
rel.std.err	2.69877	1.96208
mod.eff	-1.69877	-0.962079

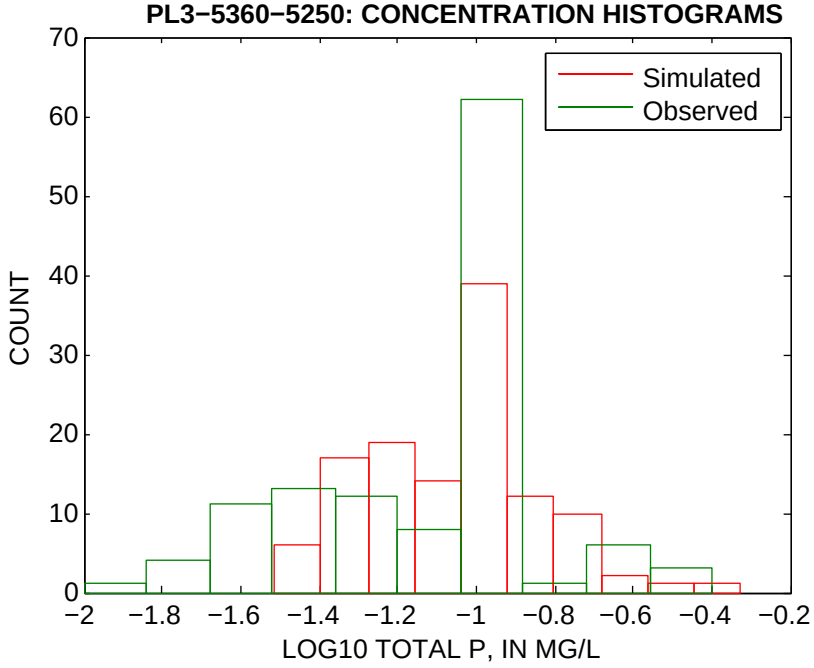
VERSION 2.1

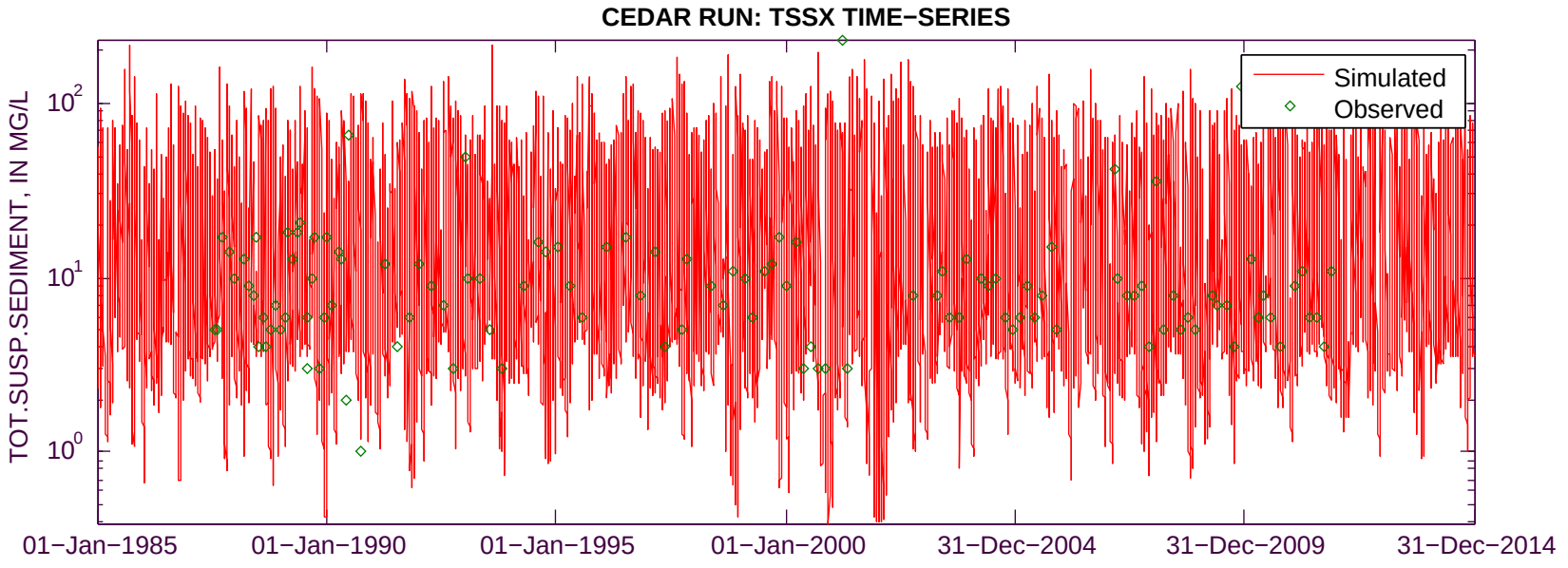
ALL DATA
LOG10

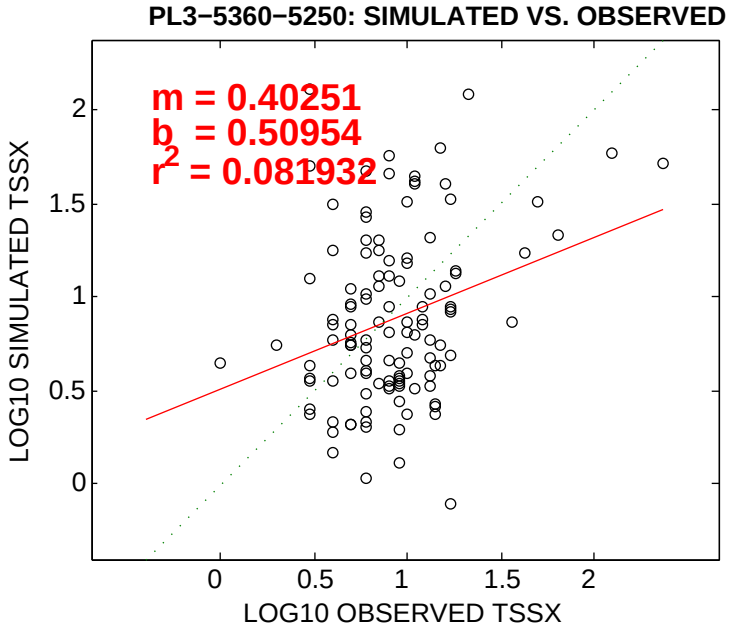


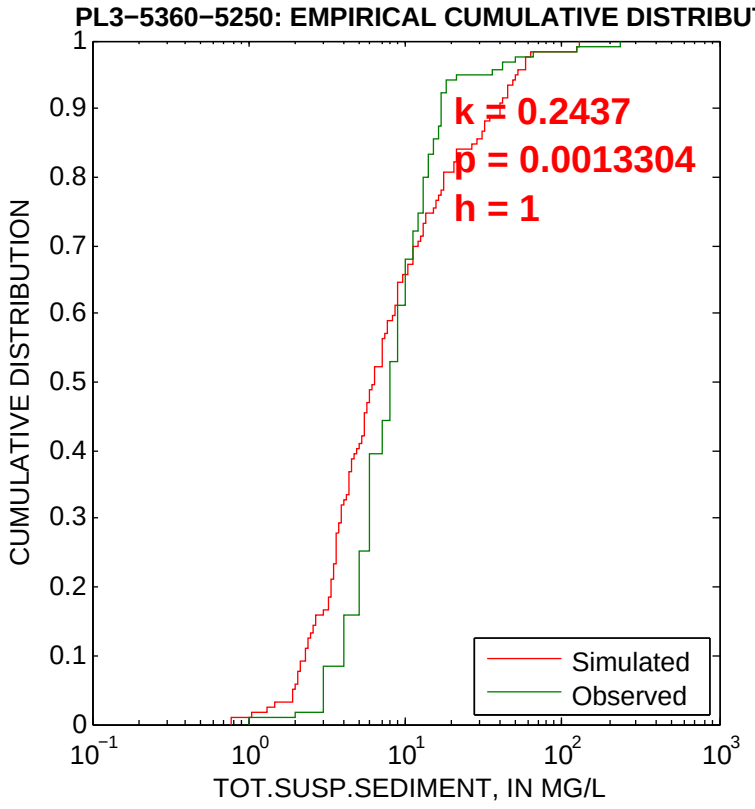












DATA SELECTION

scenario	file
P620171001WQ	TSSX.calib

plot: TSSX - total suspended ...

Dates: 1/1/1985 – 12/31/201

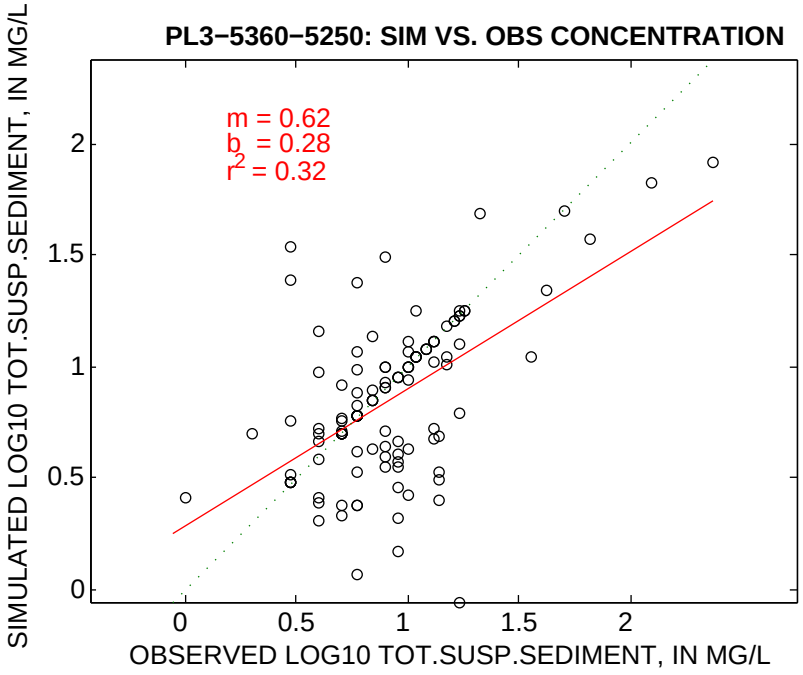
Drive	Directory	Observed
N/A	model	OBS20161101

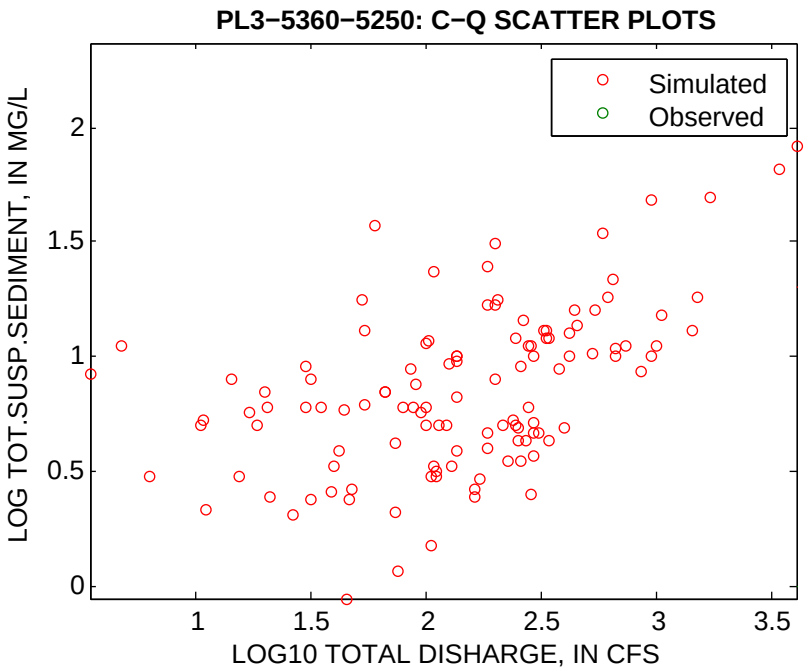
STATISTICS

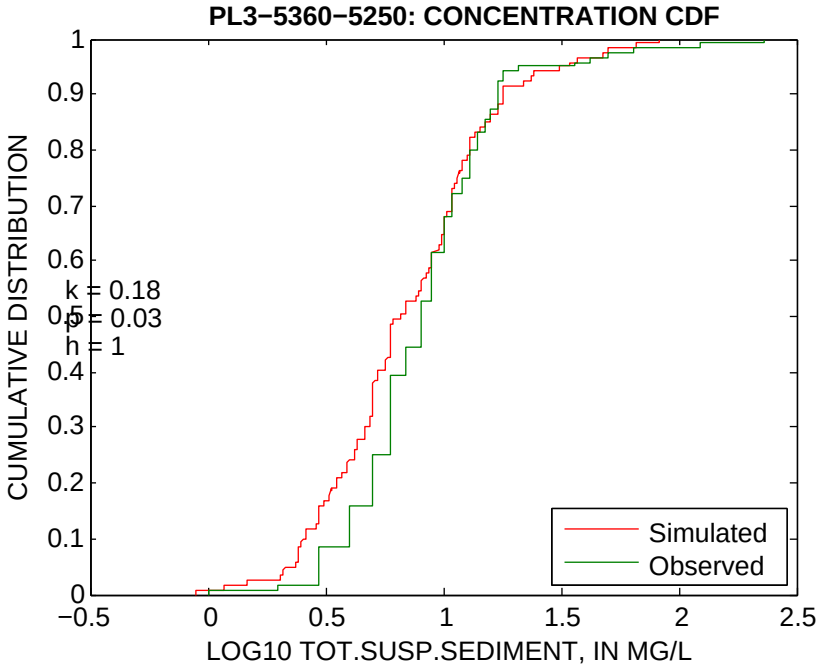
	n	119	119
		observe	simulate
min		1	0.76818
		0	-0.114537
mean		12.8067	14.1004
		0.925348	0.881995
media		8	6.3607
		0.90309	0.803505
max		234	131.2
		2.36922	2.11793
varian		600.818	418.92
		0.10481	0.20725
JB		0.001	0.001
		0.001	0.042045
		ra	log
%		10.1016	-4.685
err.va		744.018	0.229582
rel.std.err		1.23834	2.19046
mod.eff		-0.238342	-1.19046

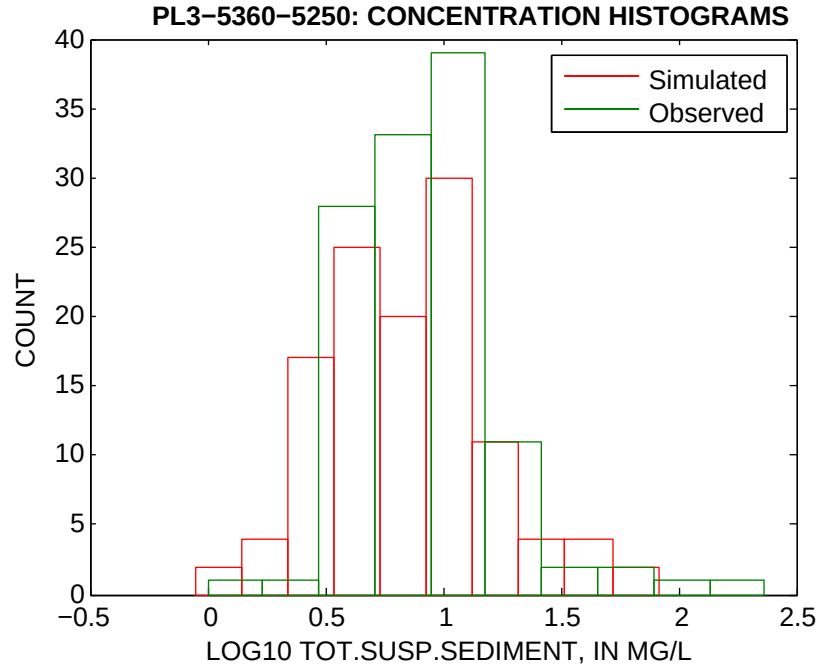
VERSION 2.1

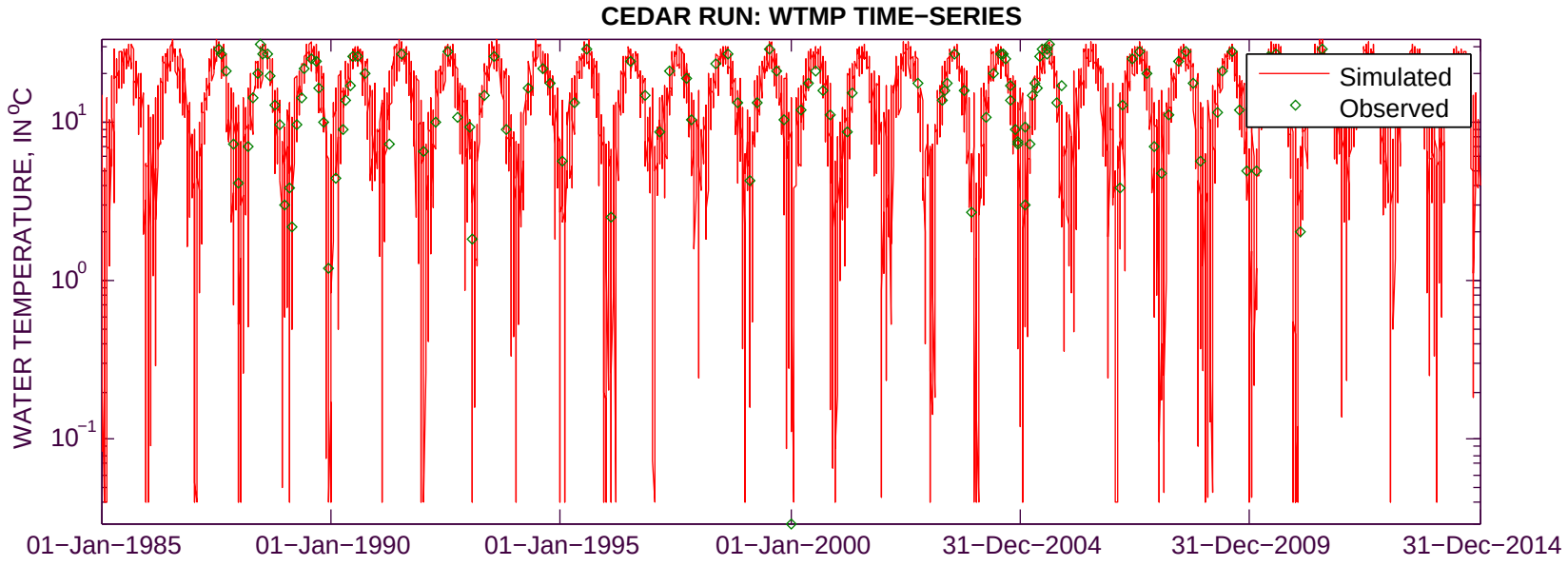
ALL DATA
LOG10

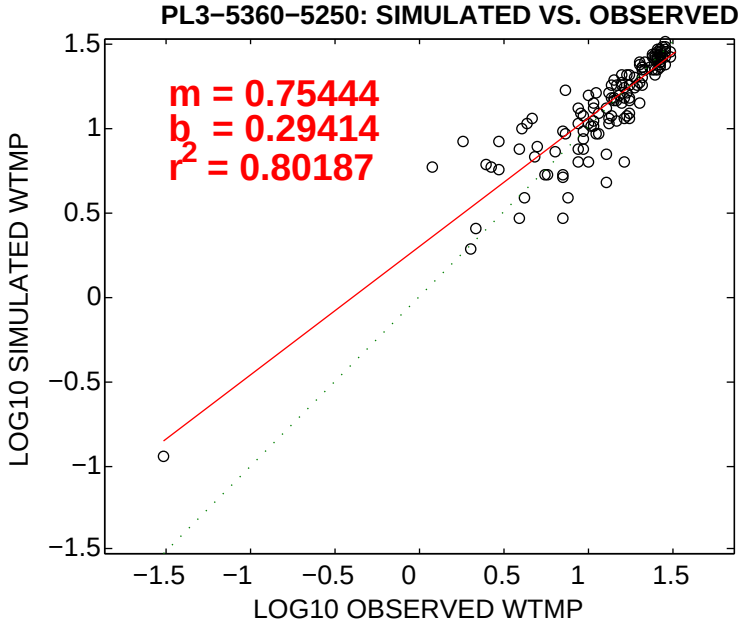


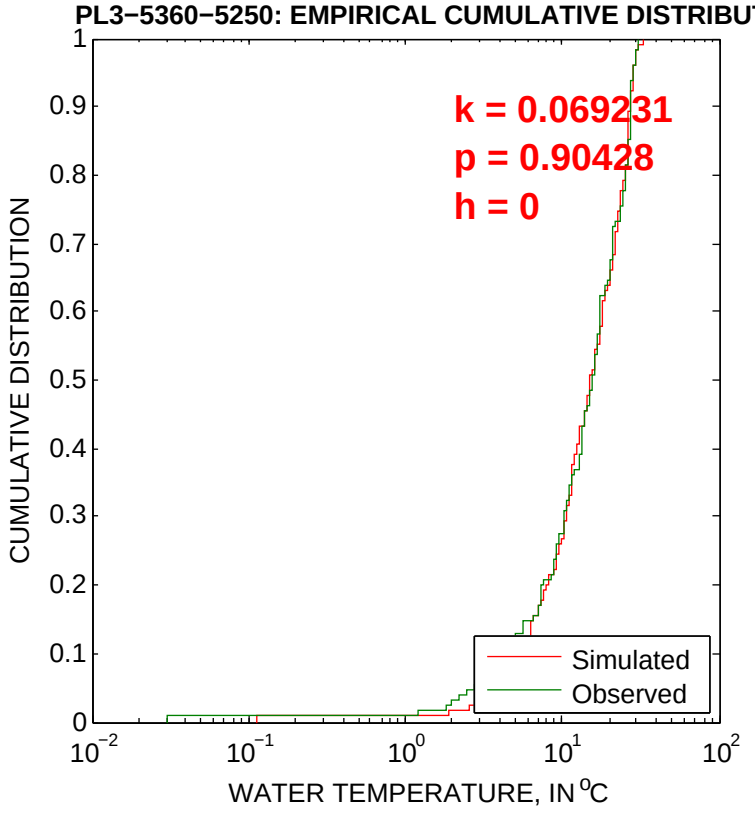












DATA SELECTION

scenario	file
P620171001WQ	WTMP.calib

plot: WTMP - water tempera...

Dates 1/1/1985 12/31/201

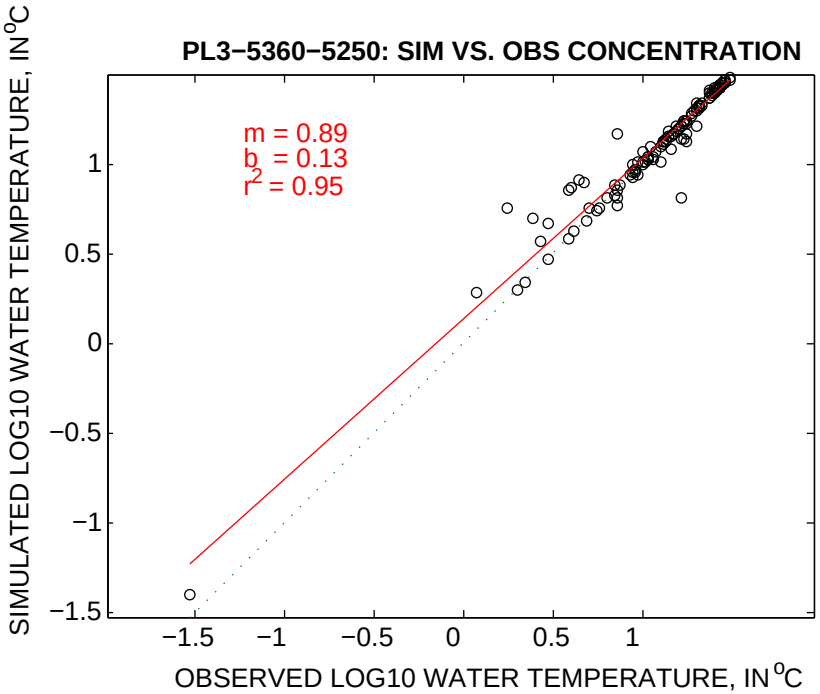
Drive	Directory	Observed
N/A	model	OBS20161101

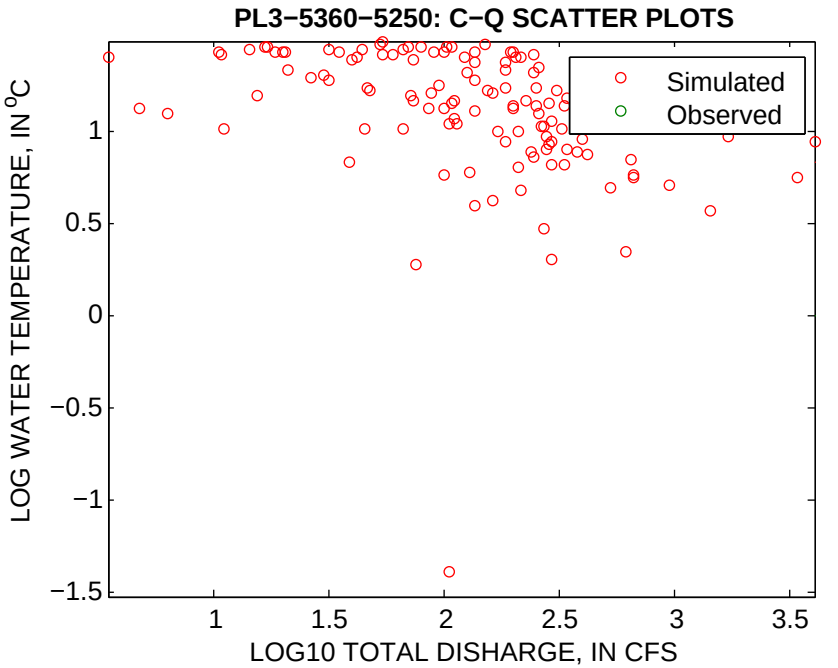
STATISTICS

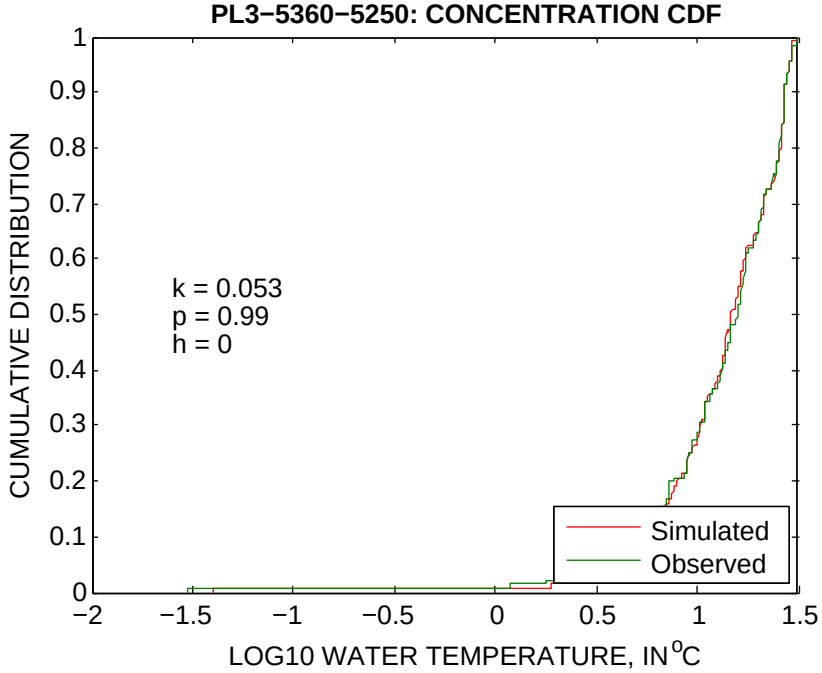
n	130	130
	observe	**simulate**
min	0.03	0.11194
	-1.52288	-0.951015
mean	15.8859	16.0555
	1.10086	1.12467
media	15.8	15.169
	1.19866	1.18095
max	31.02	32.44
	1.49164	1.51108
varian	69.7526	65.5123
	0.146771	0.104179
JB	0.032632	0.029418
	0.001	0.001
	ra	log
%	1.06777	2.16234
err.va	10.8878	0.0300625
rel.std.err	0.156091	0.204826
mod.eff	0.843909	0.795174

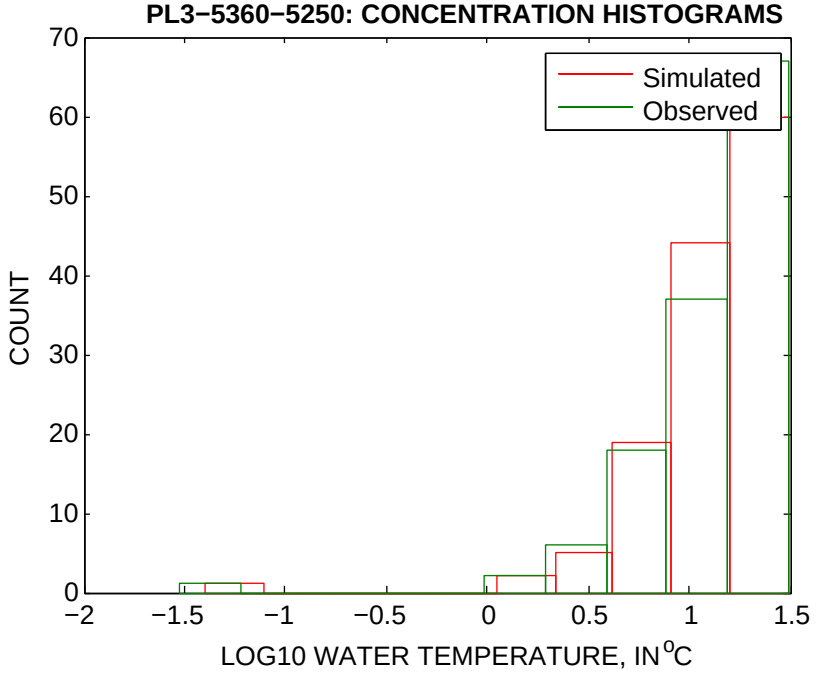
VERSION 2.1

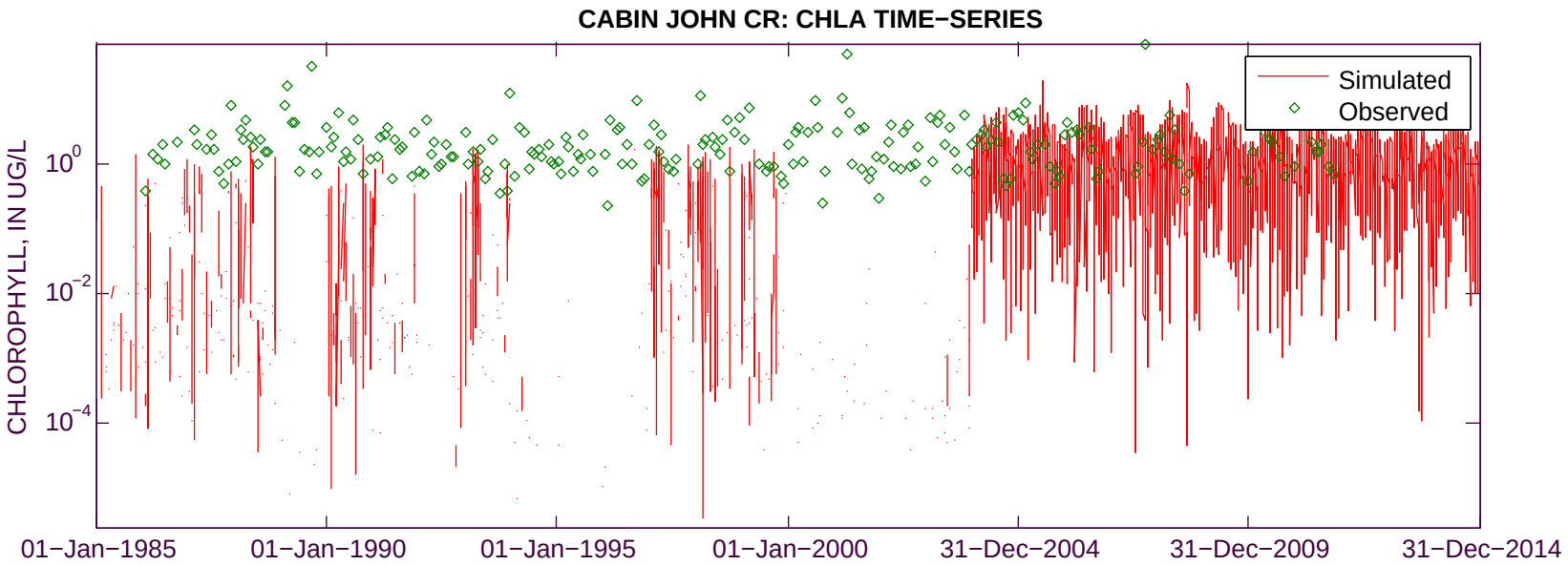
ALL DATA
LOG10

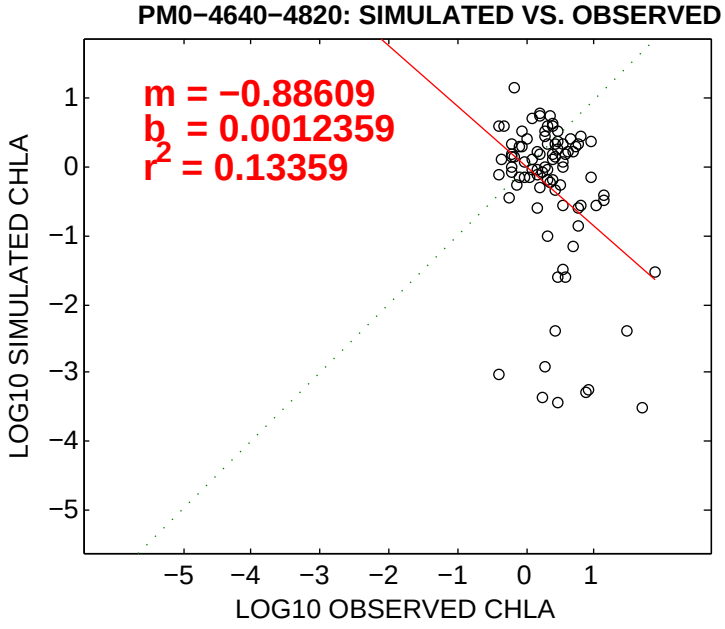


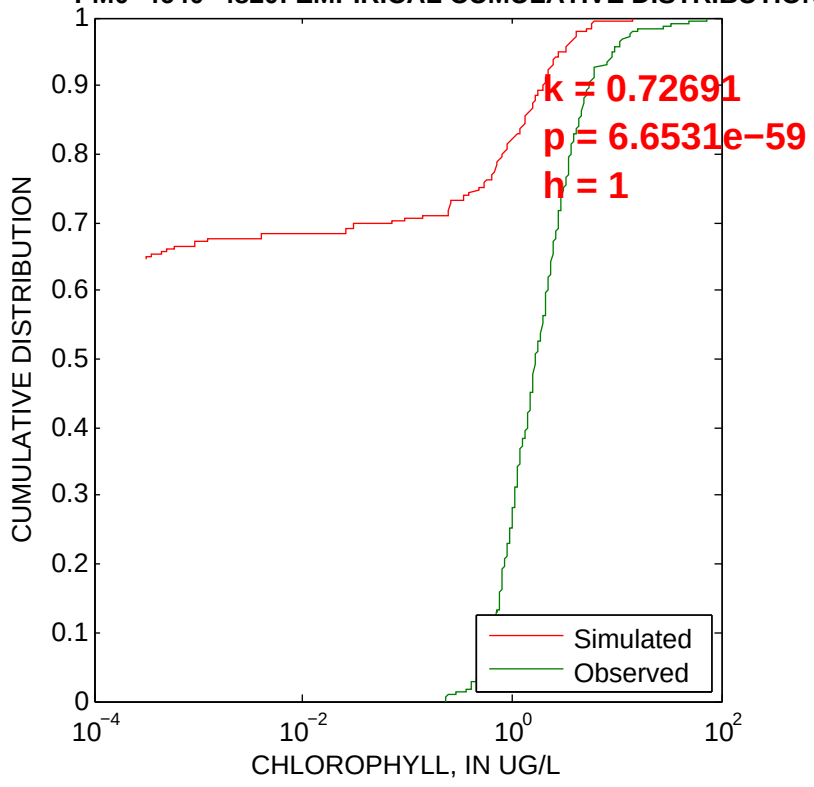












DATA SELECTION

scenario	file
P620171001WQ	CHLA.calib

plot: CHLA - chlorophyll A

Dates: 1/1/1985 – 12/31/201

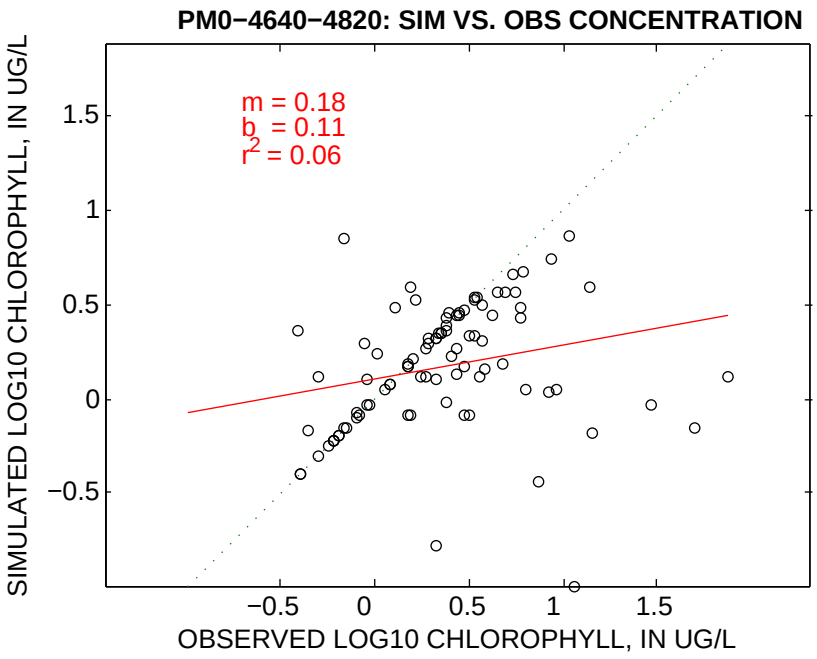
Drive	Directory	Observed
N/A	model	OBS20161101

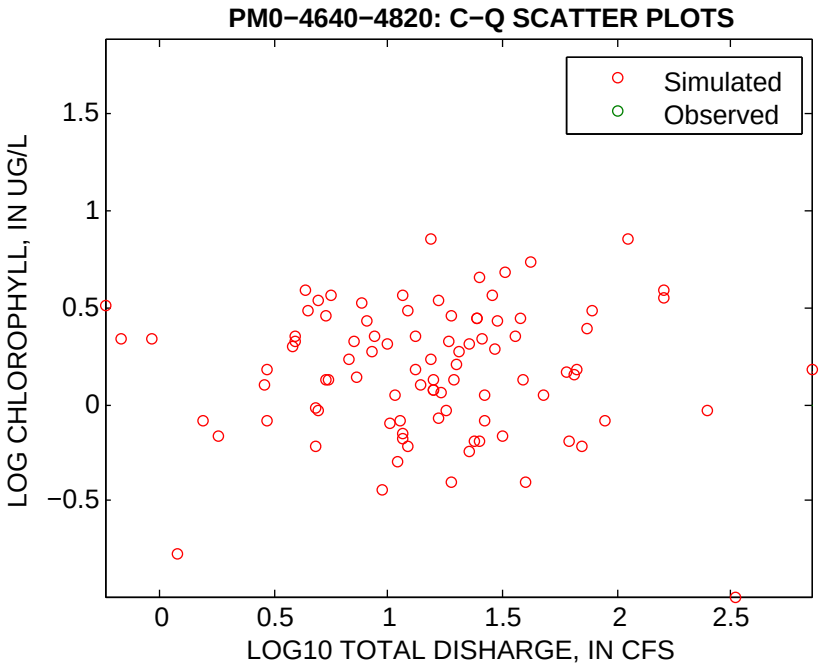
STATISTICS

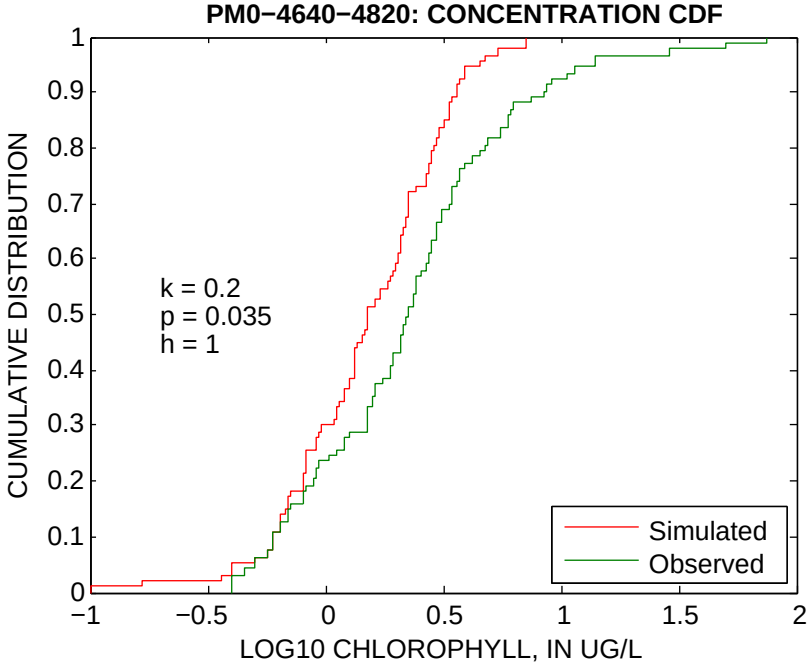
	n	observe	simulate
		249	88
min		0.239	0
		-0.399027	-3.50968
mean		3.22512	0.562968
		0.357892	-0.315889
media		1.7	0
		0.340331	0.0129921
max		74.76	13.944
		1.87367	1.14439
varian		42.4985	1.93362
		0.198198	1.16485
JB		0.001	0.001
		0.008397	0.001
		ra	log
%		-82.5443	-188.264
err.va		52.6815	2.17349
rel.std.err		1.23961	10.9663
mod.eff		-0.239608	-9.96627

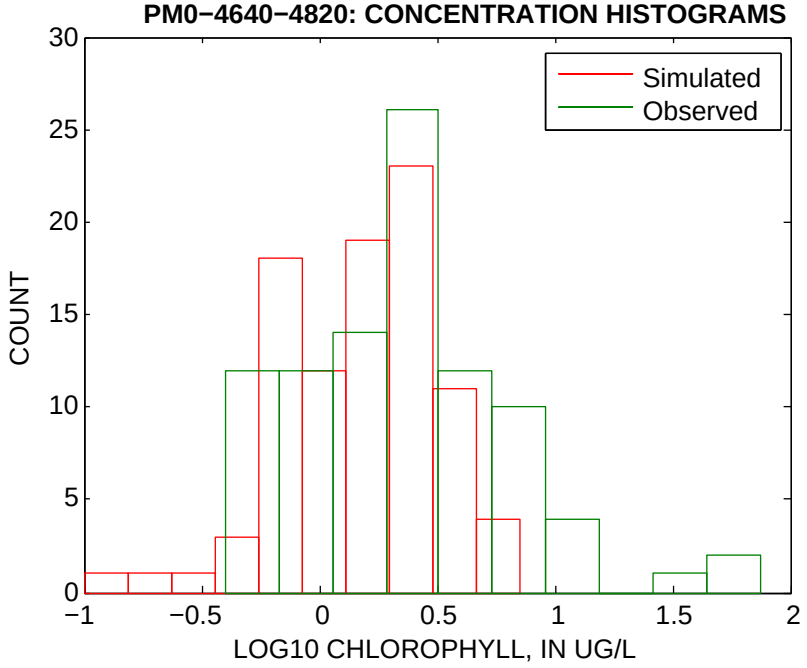
VERSION 2.1

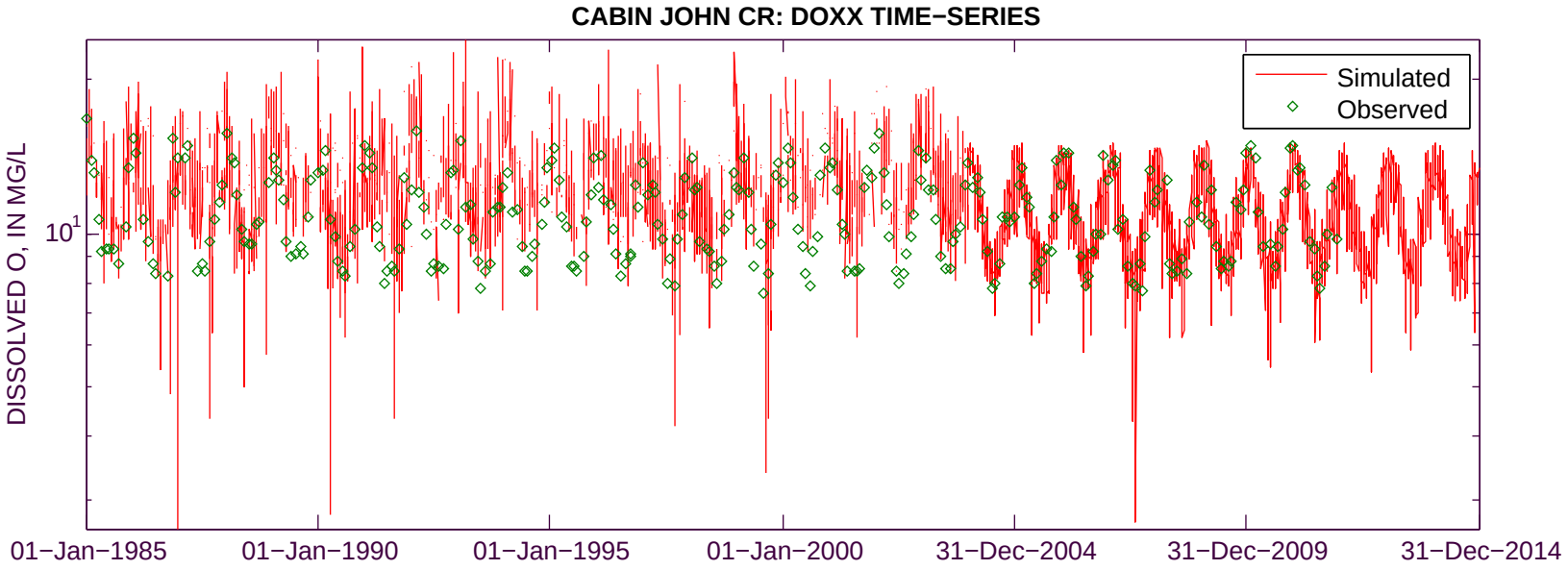
ALL DATA
LOG10

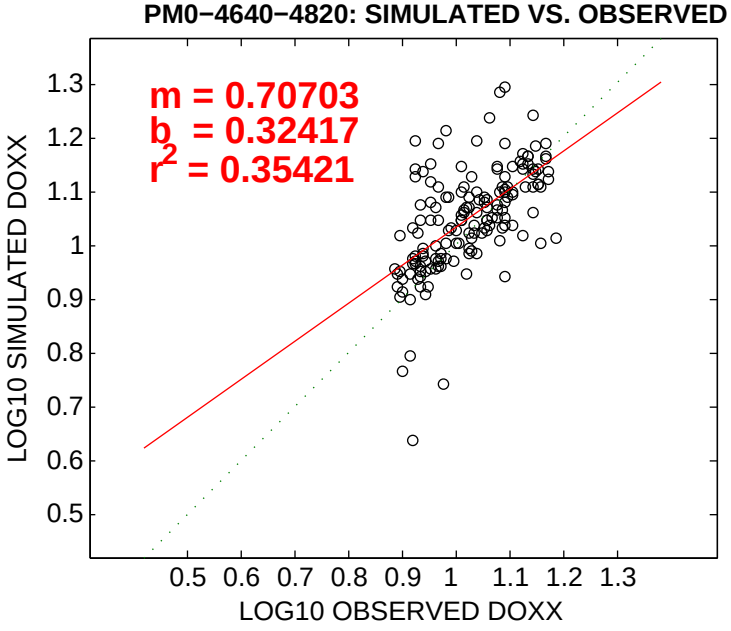


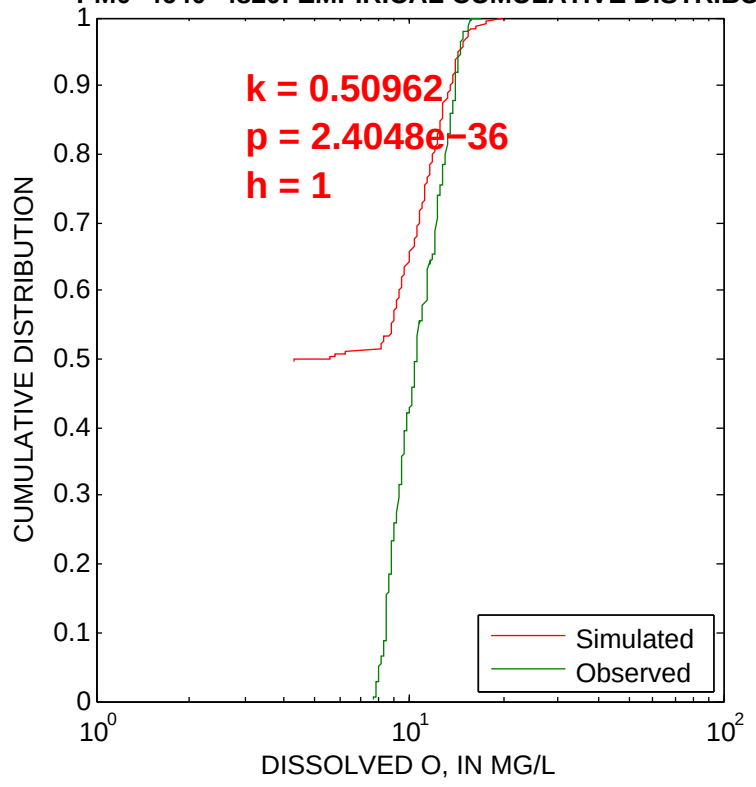












DATA SELECTION

scenario	file
P620171001WQ	DOXX.calib

plot: DOXX - dissolved oxygen

Dates: 1/1/1985 – 12/31/201

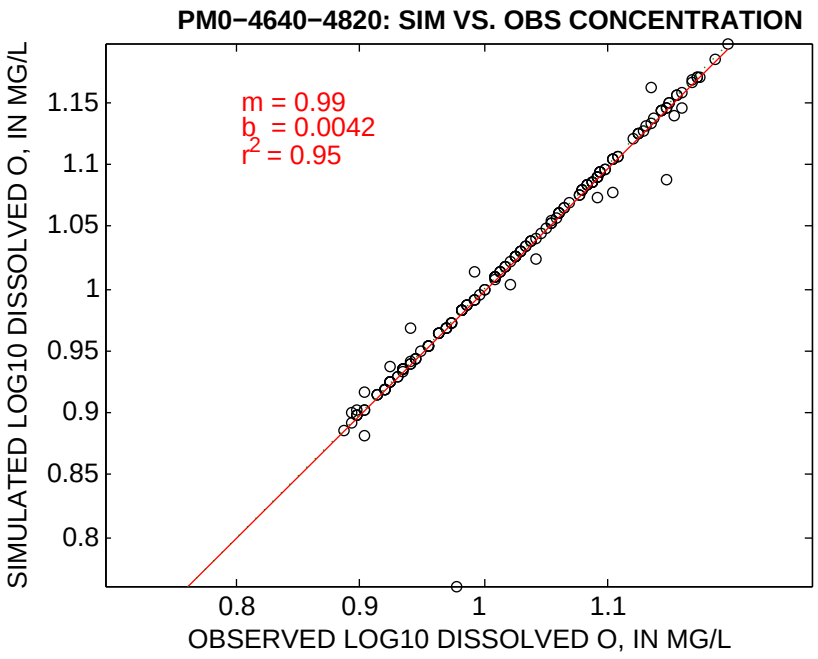
Drive	Directory	Observed
N/A	model	OBS20161101

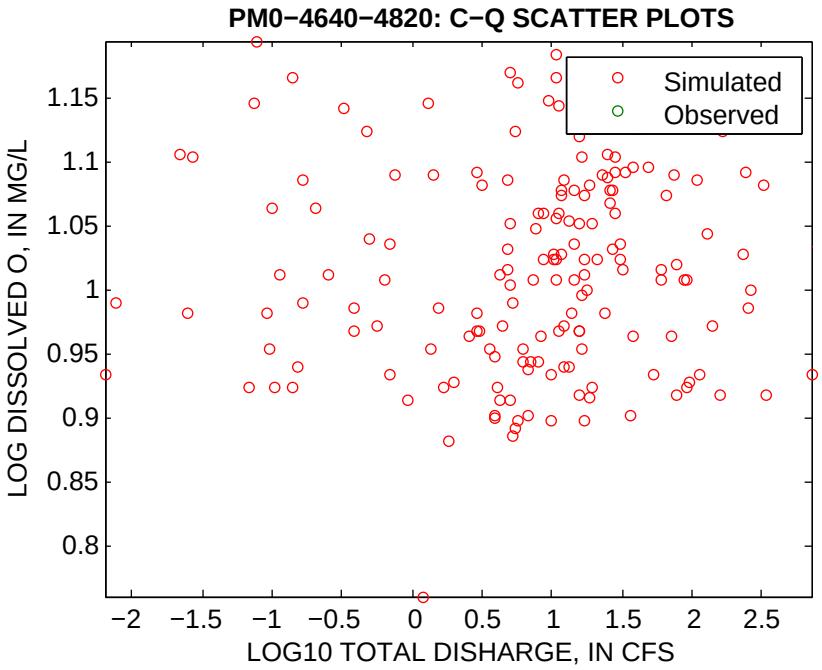
STATISTICS

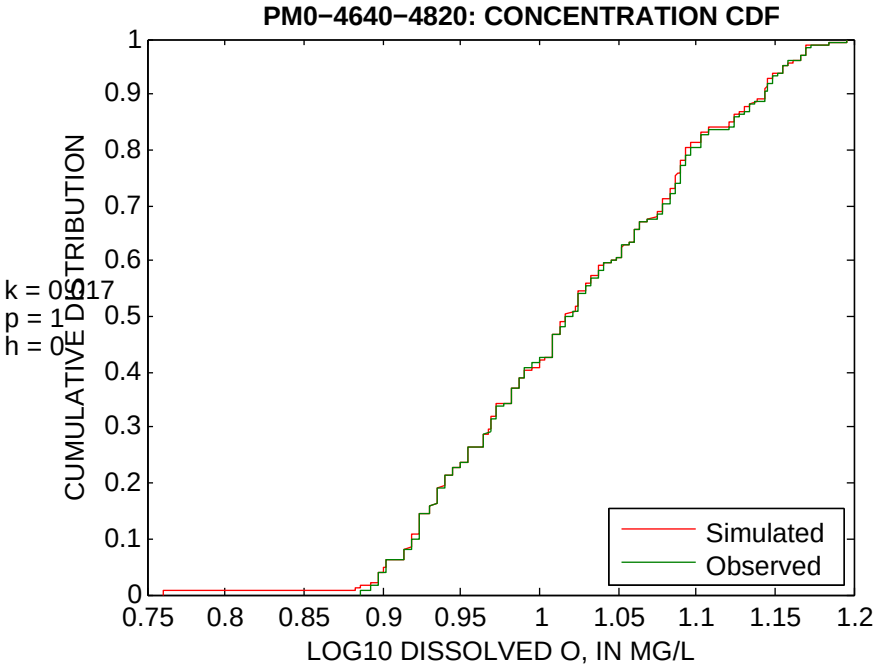
	n	312	157
		observe	simulate
min		7.6	0
		0.886491	0.635856
mean		10.8803	5.76786
		1.02518	1.049
media		10.5	4.9297
		1.02531	1.0508
max		16.8	19.593
		1.18469	1.2921
varian		4.61292	35.965
		0.0066285	0.00935453
JB		0.001690	0.001
		0.019011	0.001
		ra	log
%		-46.9882	2.32339
err.va		65.0133	0.00718094
rel.std.err		14.0937	1.08334
mod.eff		-13.0937	-0.0833433

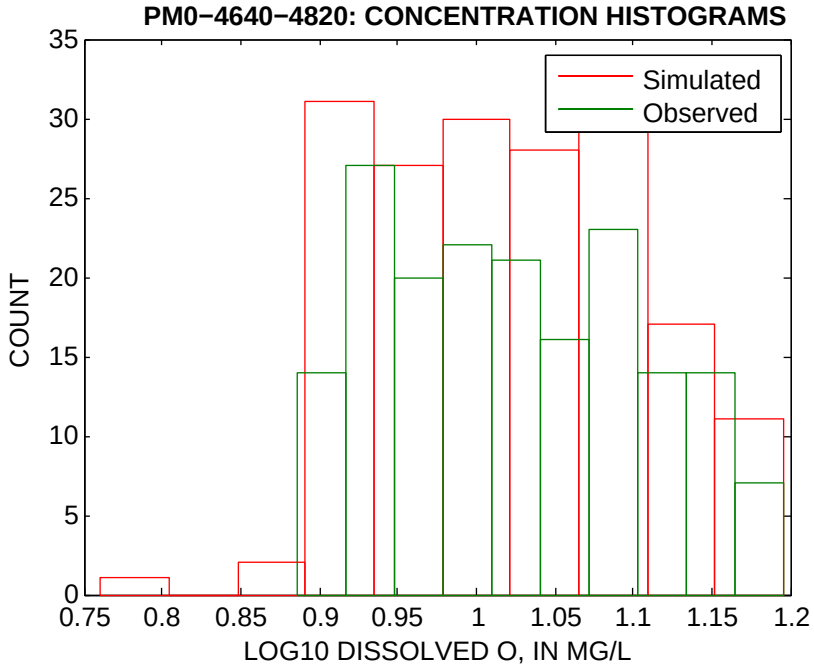
VERSION 2.1

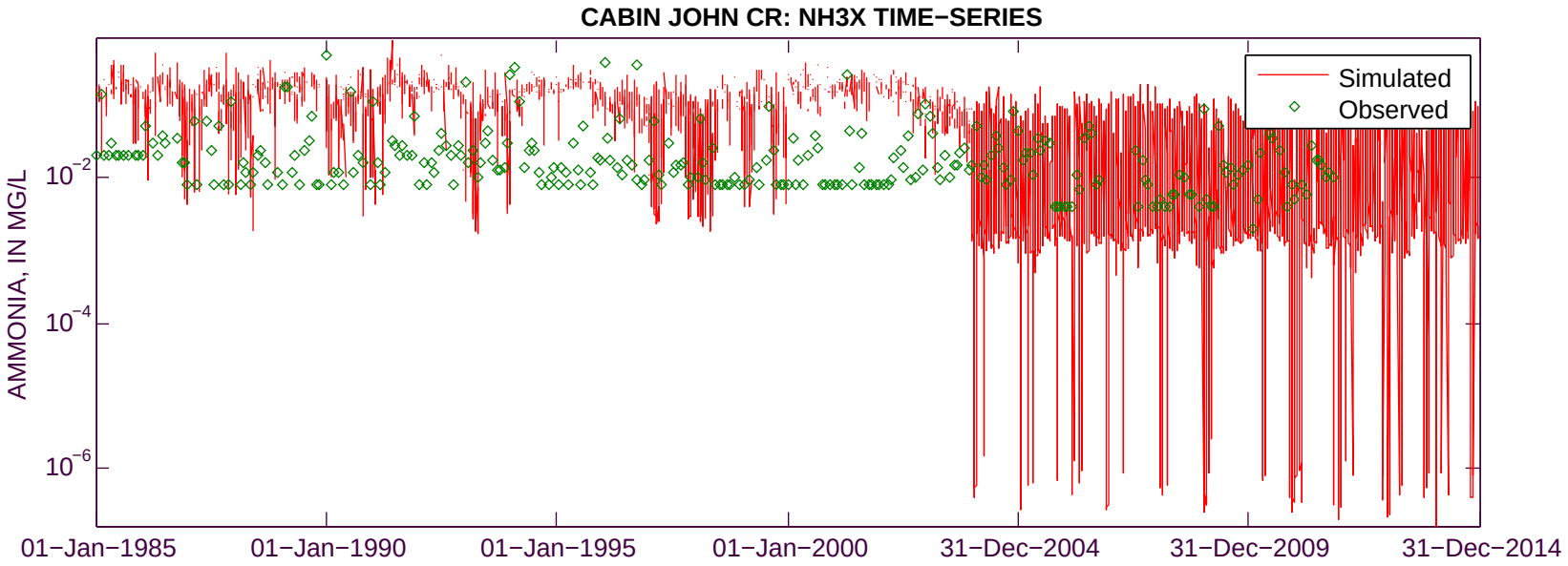
ALL DATA
LOG10

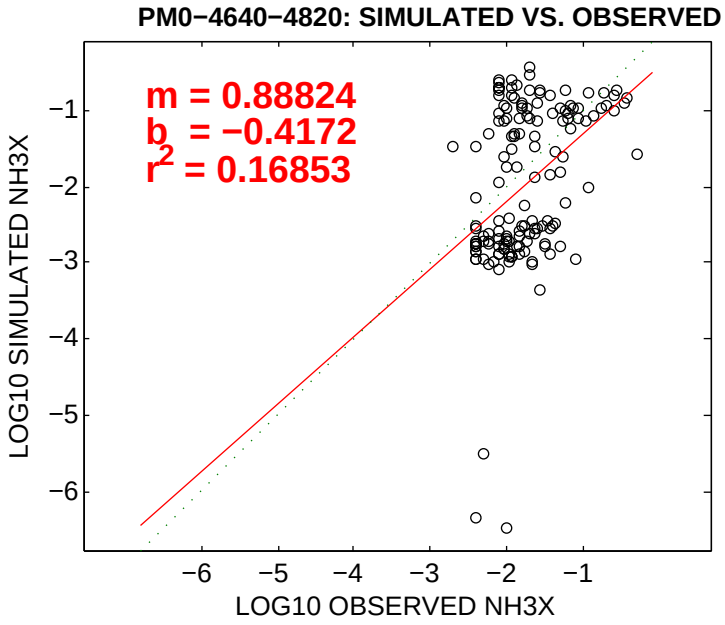


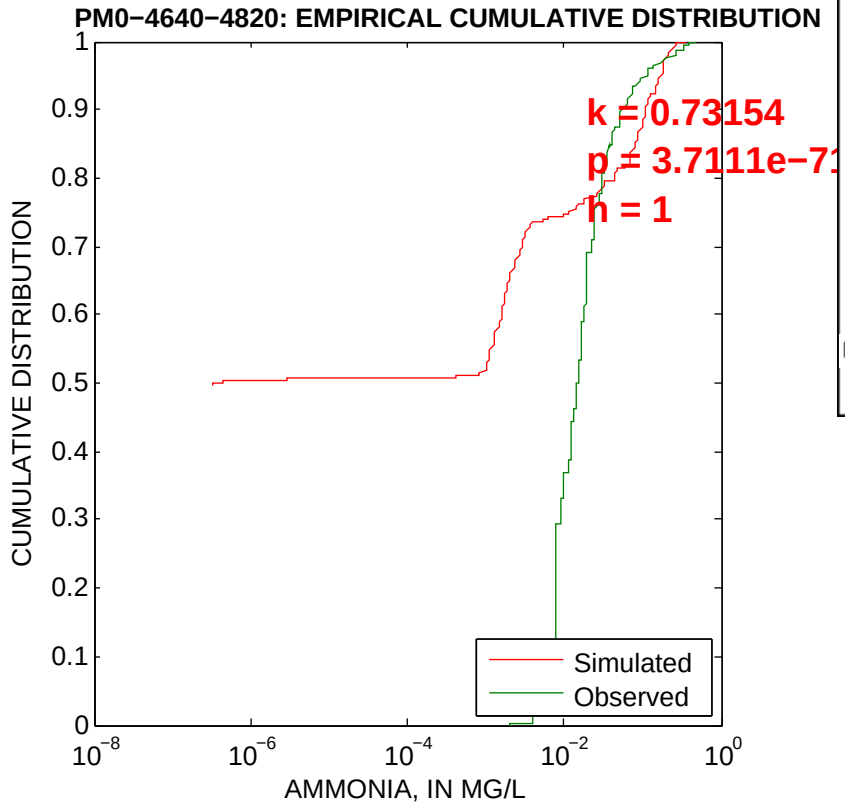












DATA SELECTION

scenario	file
P620171001WQ	NH3X.calib

plot: NH3X - ammonia

Dates: 1/1/1985 – 12/31/201

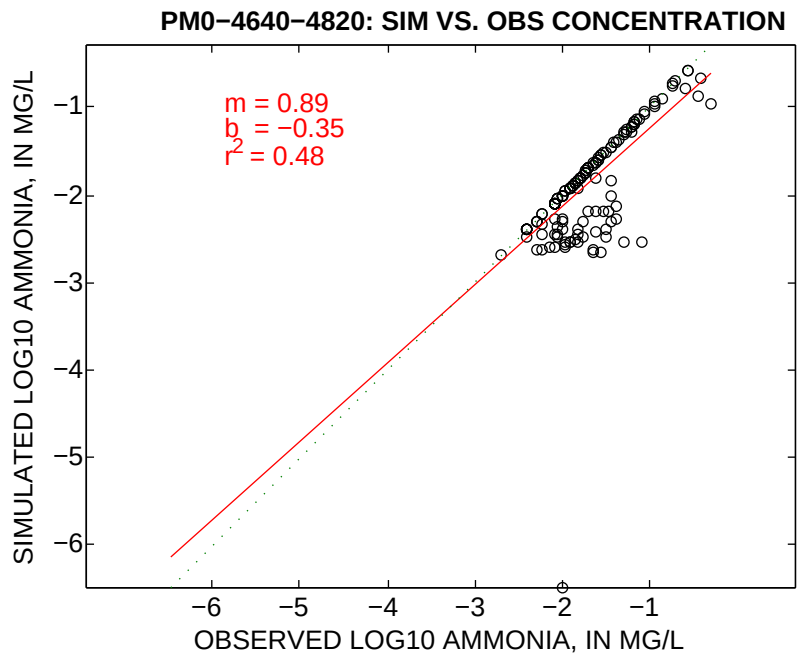
Drive	Directory	Observed
N/A	model	OBS20161101

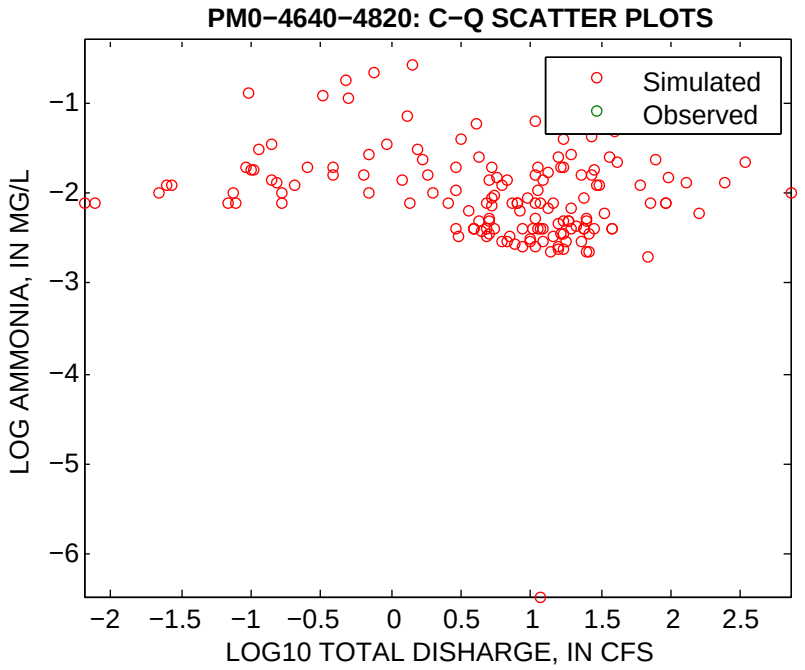
STATISTICS

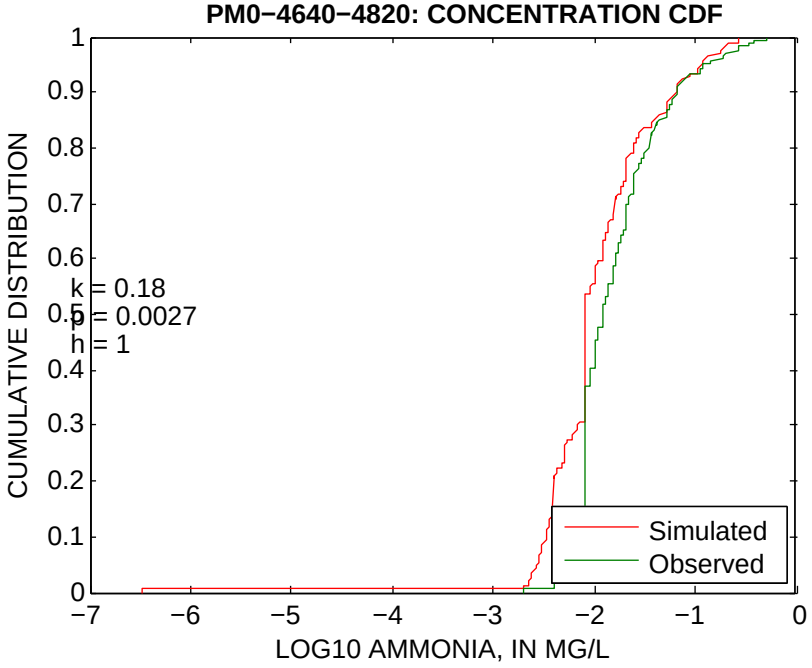
	n	observe	simulate
		298	150
min		0.002	0
		-2.69897	-6.48092
mean		0.0303322	0.0276124
		-1.74819	-1.97003
media		0.0145	3.92835e-0
		-1.82391	-1.981
max		0.5	0.35747
		-0.30103	-0.44676
varian		0.00314537	0.00340479
		0.236095	1.10526
JB		0.001	0.001
		0.004604	0.001
		ra	log
%		-8.96686	12.6893
err.va		0.00484983	0.971476
rel.std.err		1.5419	4.11477
mod.eff		-0.541897	-3.11477

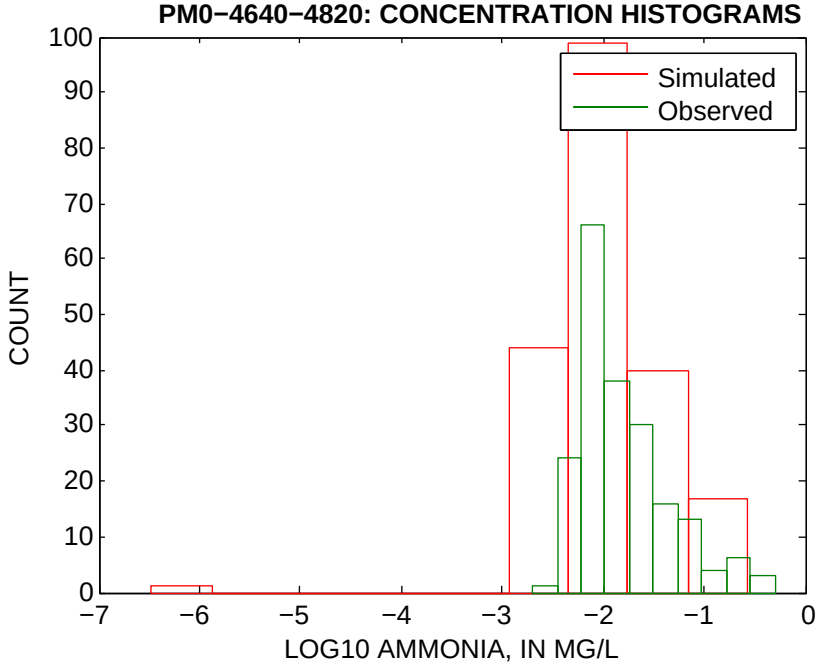
VERSION 2.1

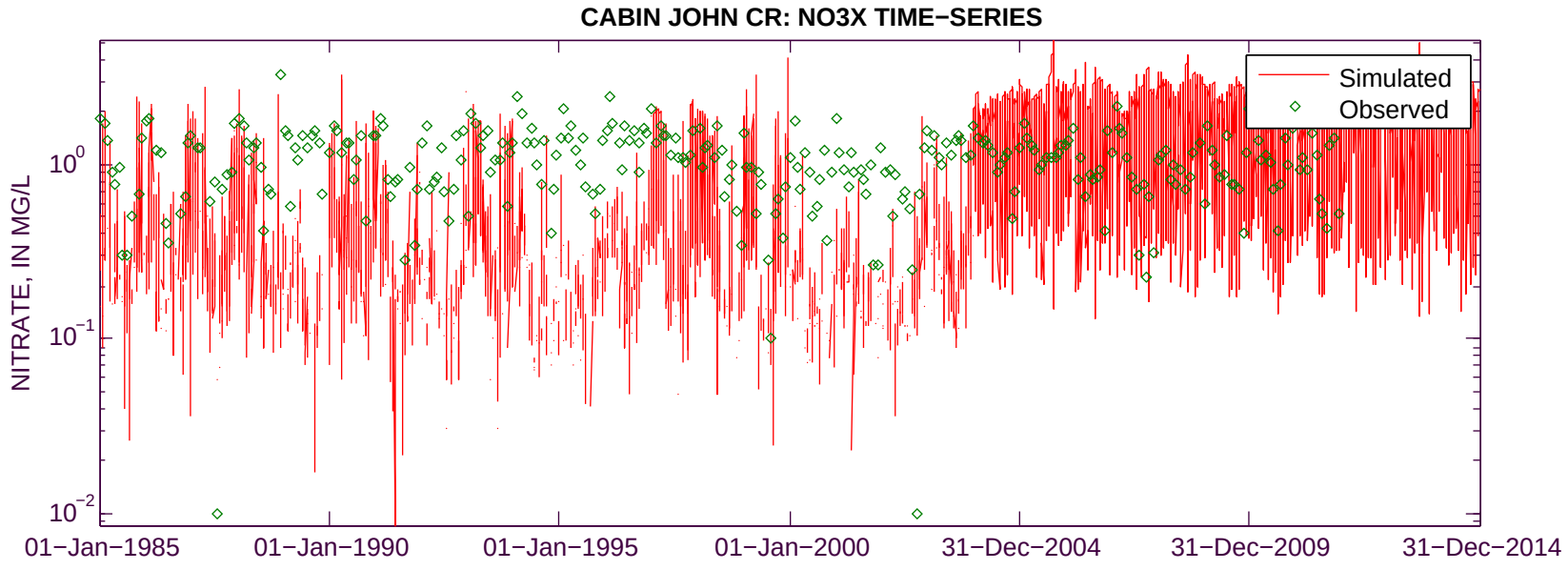
ALL DATA
LOG10

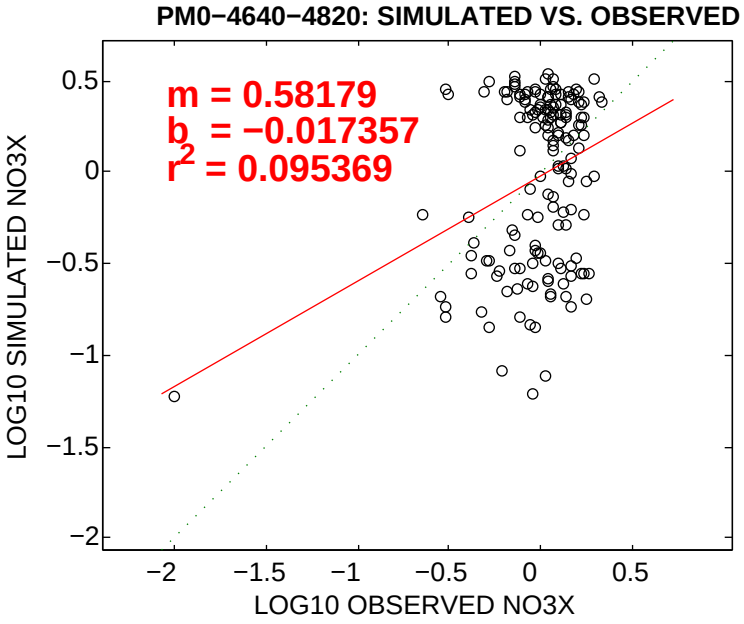


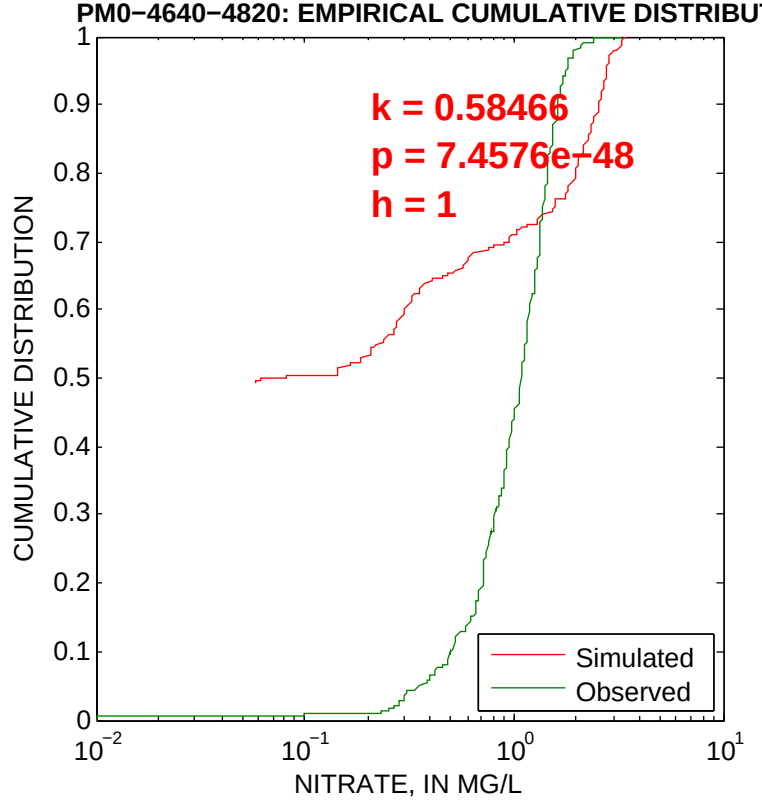












DATA SELECTION

scenario	file
P620171001WQ	NO3X.calib

plot: NO3X - nitrate

Dates: 1/1/1985 – 12/31/201

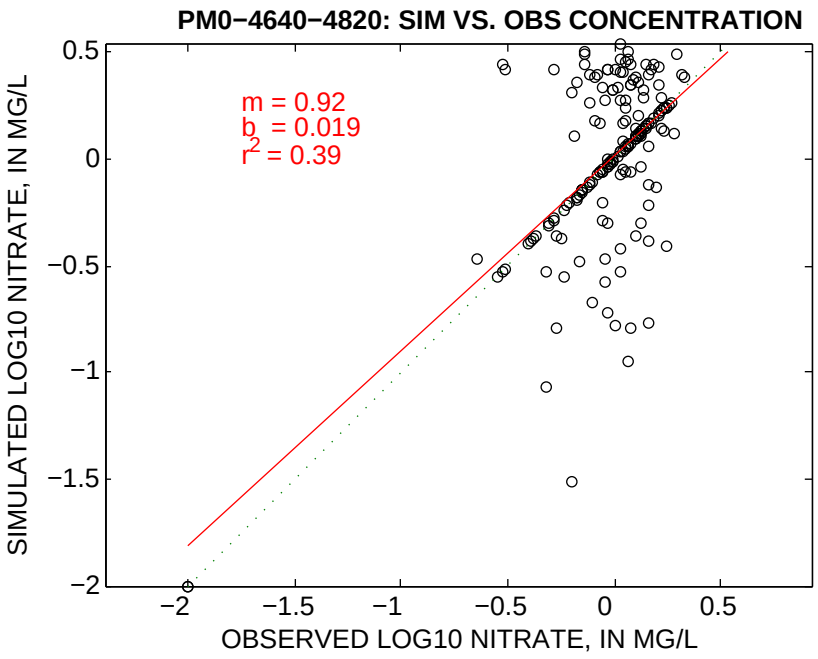
Drive	Directory	Observed
N/A	model	OBS20161101

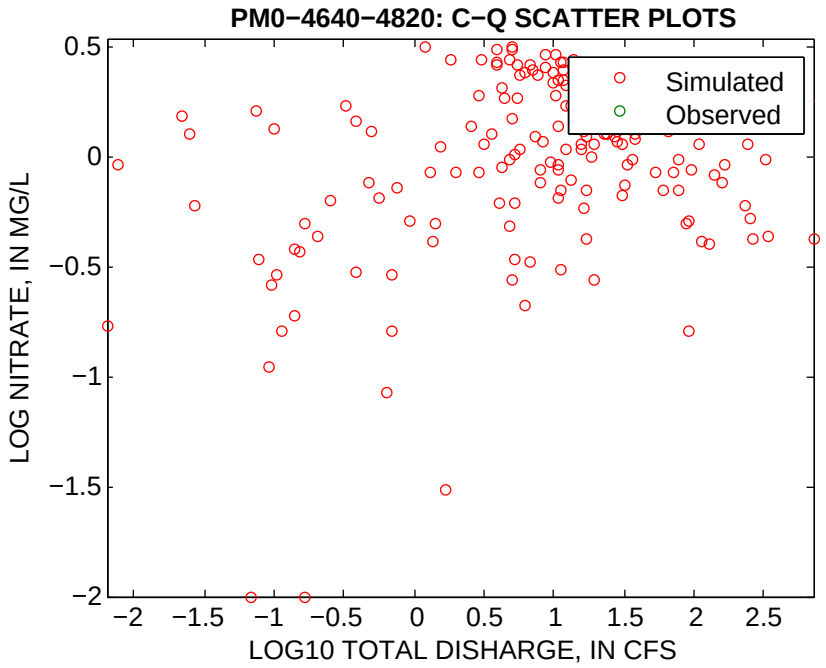
STATISTICS

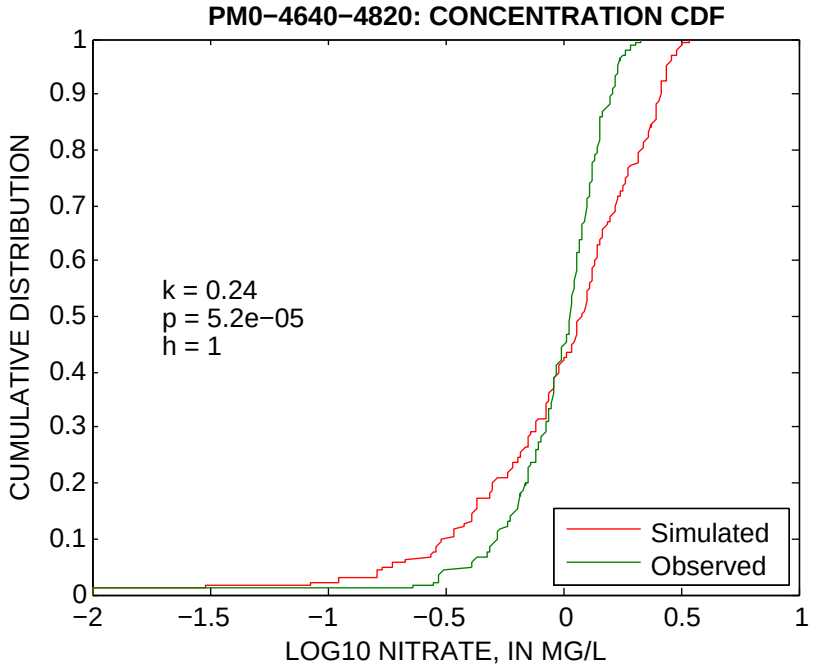
	n	observe	simulate
		313	159
min		0.01	0
		-2	-1.22877
mean		1.08512	0.735712
		-0.0098949	-0.0231142
media		1.08	0.078075
		0.0370279	0.189069
max		3.28	3.4712
		0.334454	0.54048
varian		0.204503	1.07163
		0.0603353	0.214141
JB		0.001	0.001
		0.001	0.005491
		ra	log
%		-32.1996	133.595
err.va		1.33772	0.204447
rel.std.err		6.5413	3.38851
mod.eff		-5.5413	-2.38851

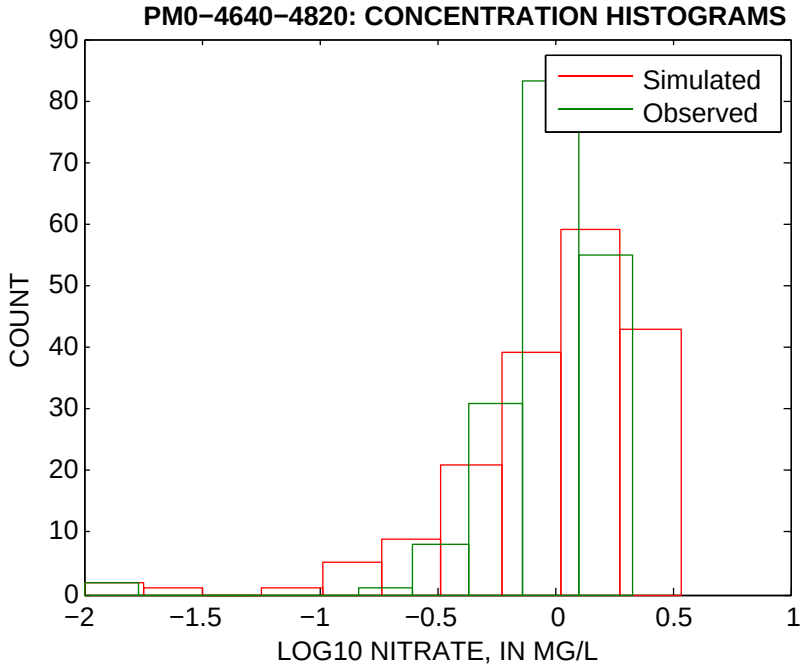
VERSION 2.1

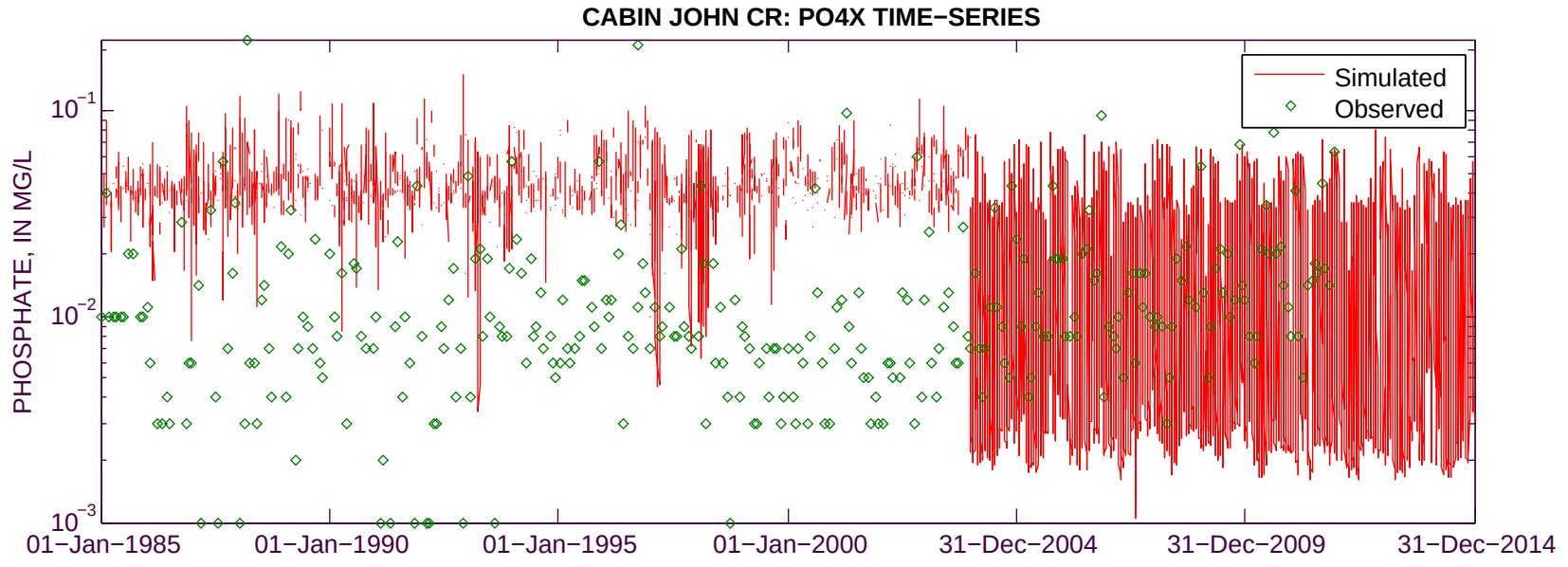
ALL DATA
LOG10

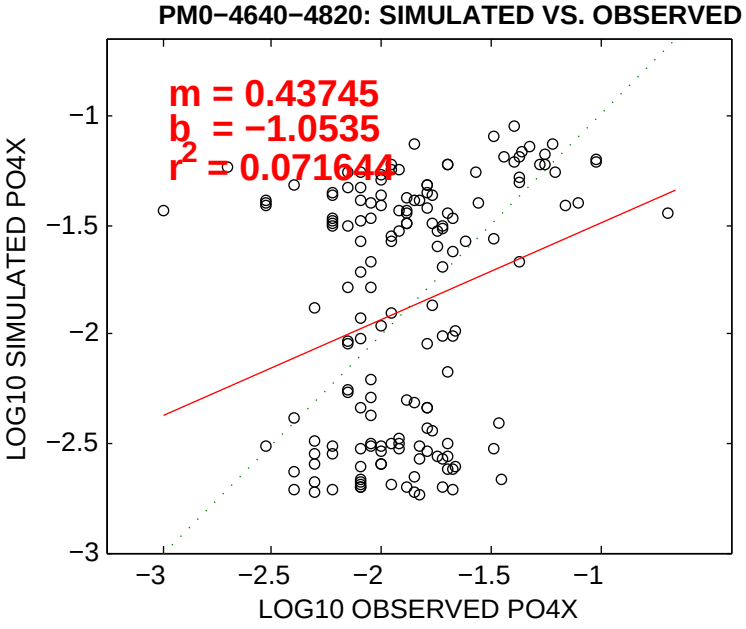


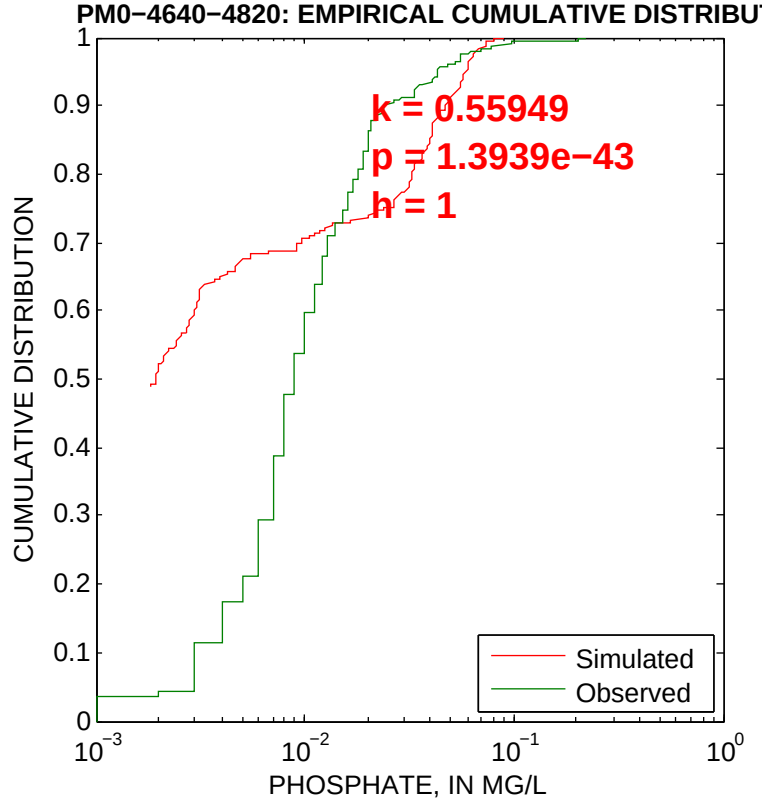












DATA SELECTION

scenario: P620171001WQ | file: PO4X.calib

plot: PO4X - phosphate

Dates: 1/1/1985 – 12/31/201

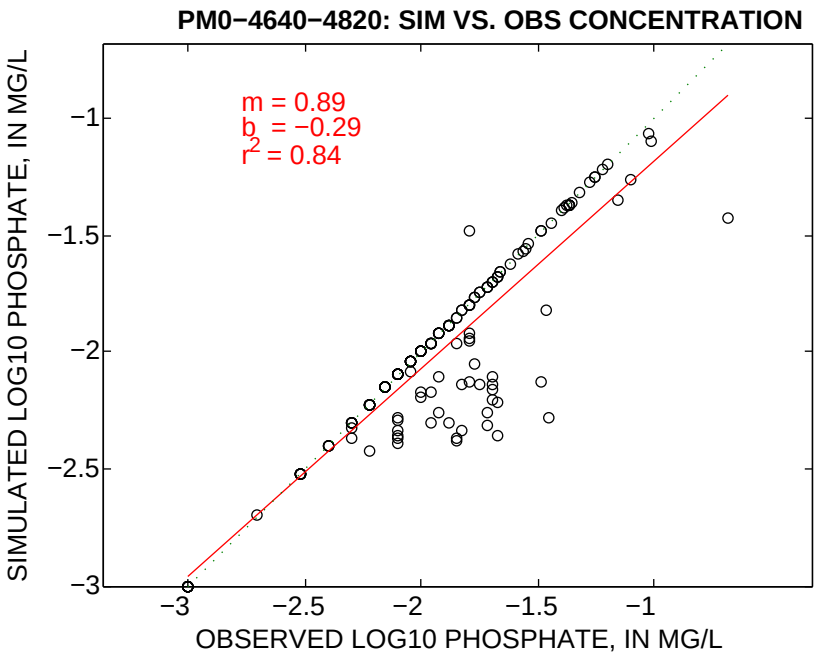
Drive | Directory | Observed: N/A | model | OBS20161101

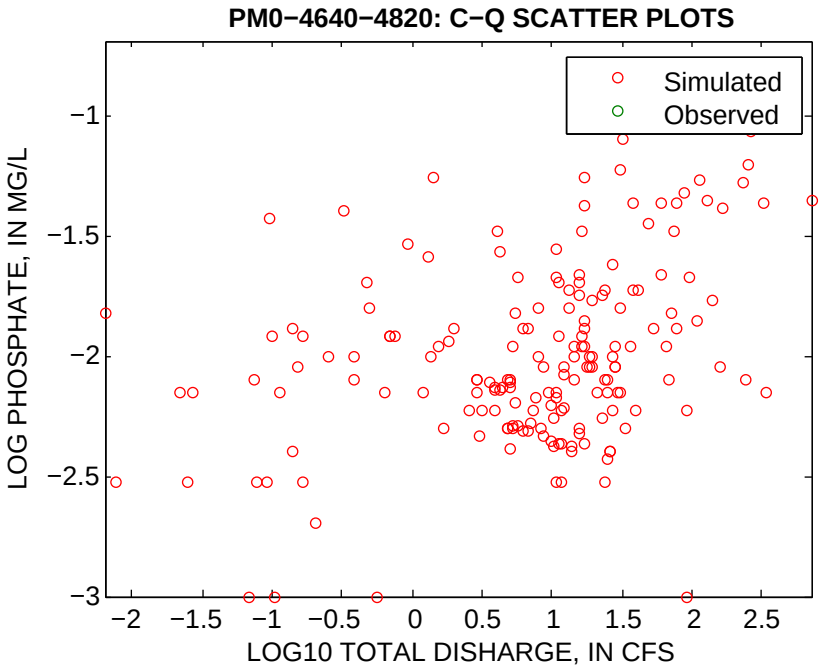
STATISTICS

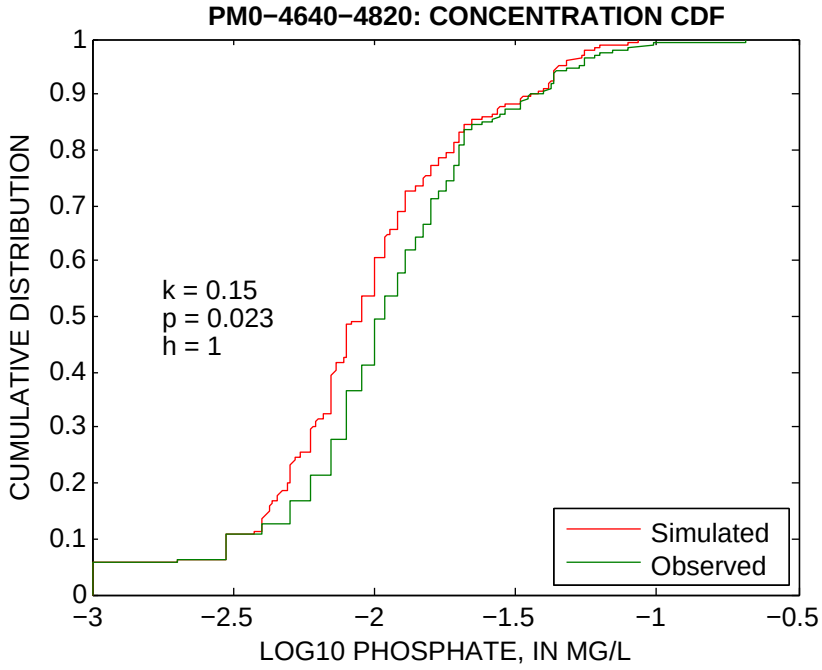
	n	observe	simulate
		311	159
min		0.001	0
		-3	-2.73457
mean		0.0143408	0.0129874
		-1.88337	-1.87737
media		0.009	0.0019356
		-1.92082	-1.663
max		0.223	0.090298
		-0.686133	-1.04432
varian		0.00044354	0.00042657
		0.119679	0.319663
JB		0.001	0.001
		0.019331	0.003431
		ra	log
%		-9.43767	-0.318523
err.va		0.00057492	0.334672
rel.std.err		1.29622	2.79641
mod.eff		-0.29622	-1.79641

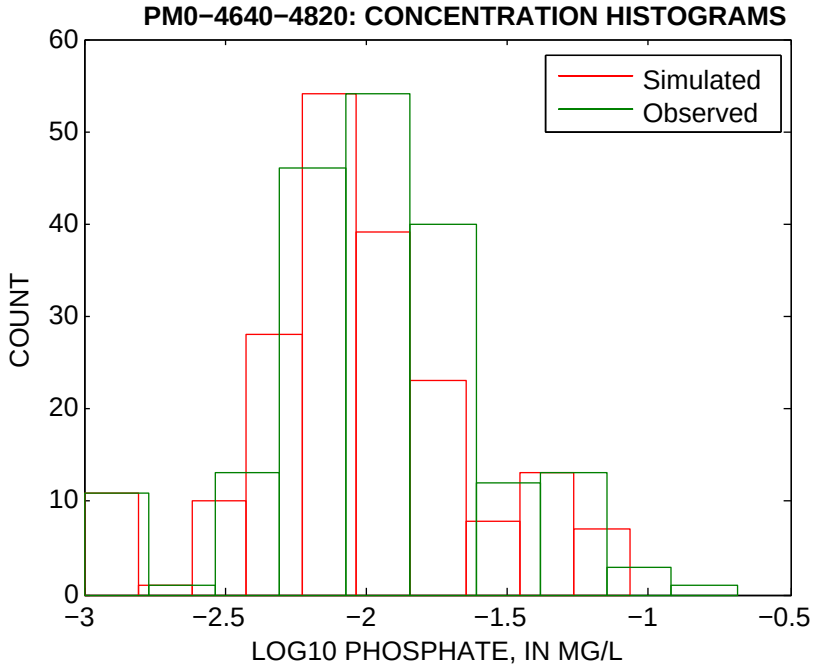
VERSION 2.1

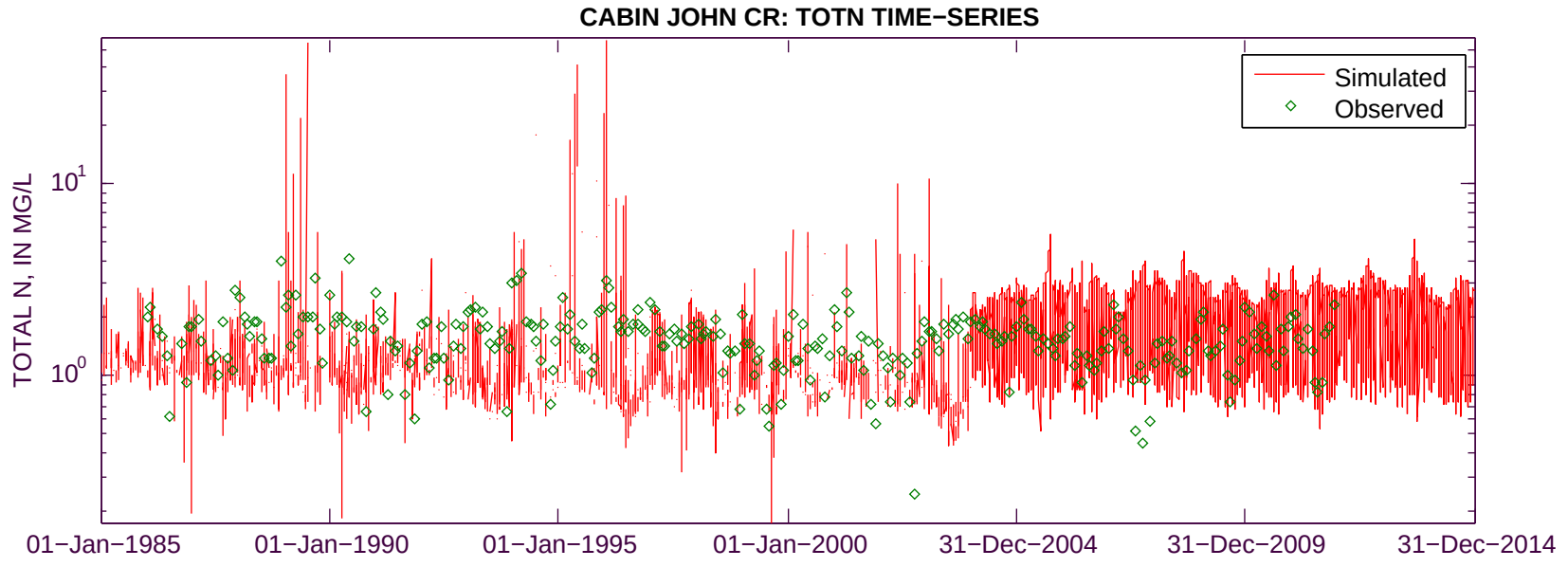
ALL DATA
LOG10

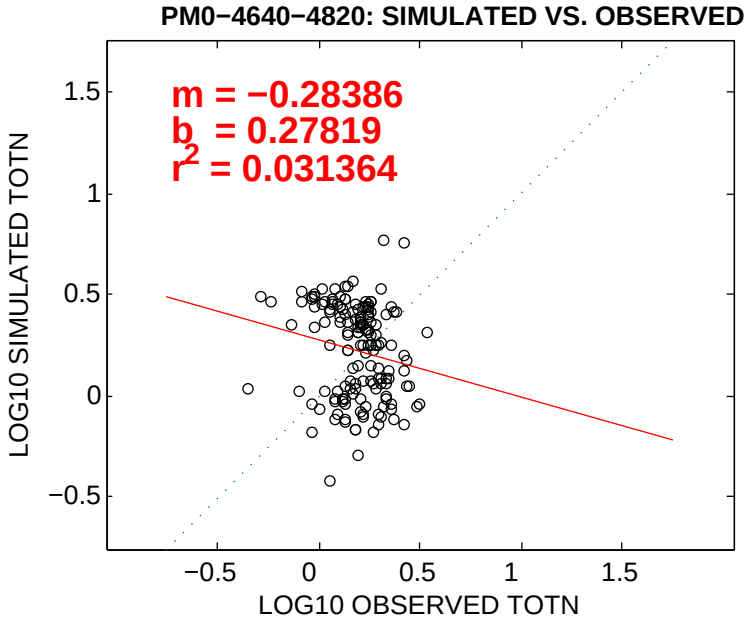


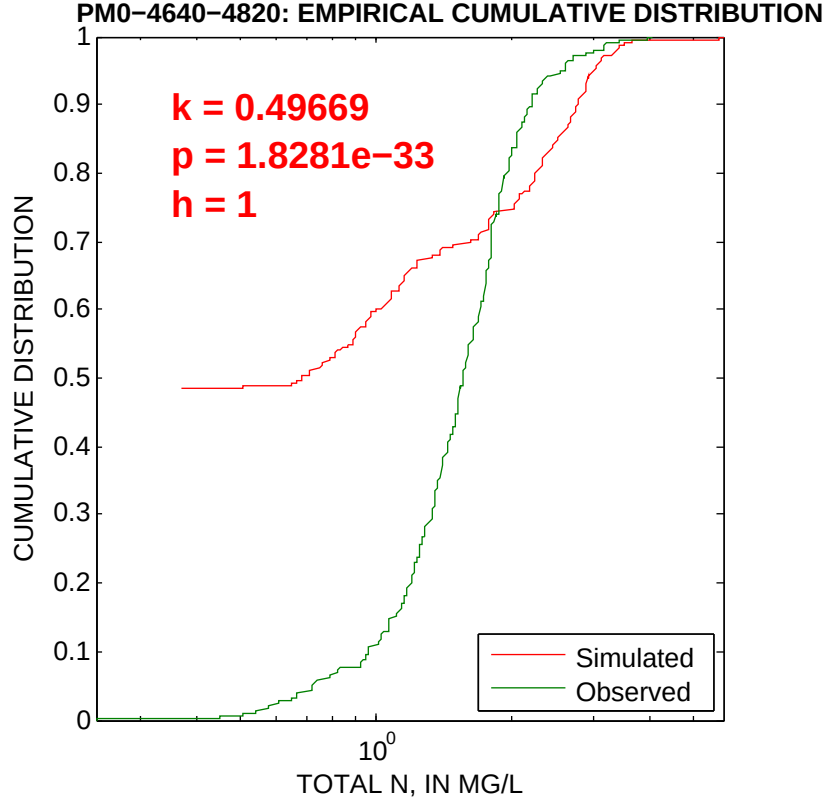












DATA SELECTION

scenario	file
P620171001WQ	TOTN.calib

plot: TOTN - total nitrogen

Dates: 1/1/1985 – 12/31/201

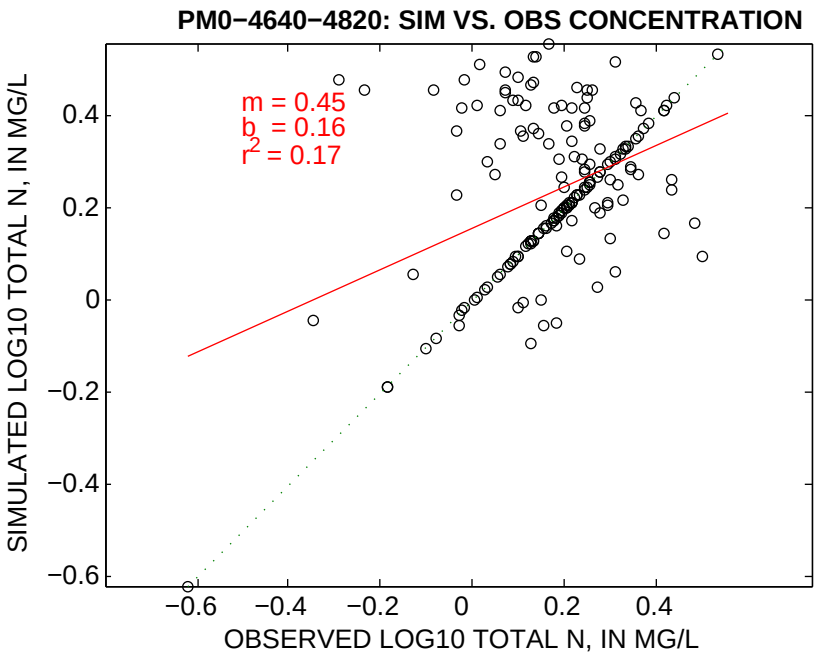
Drive	Directory	Observed
N/A	model	OBS20161101

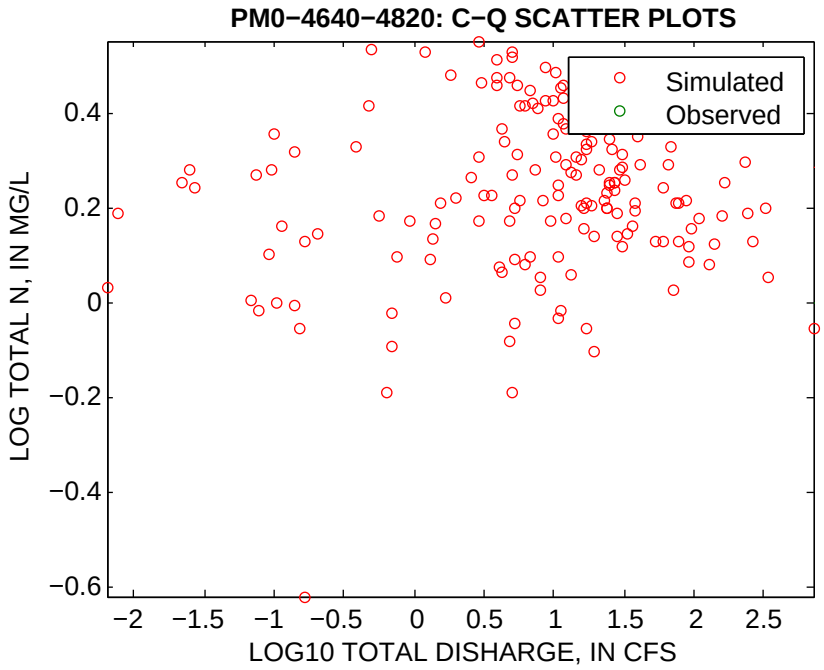
STATISTICS

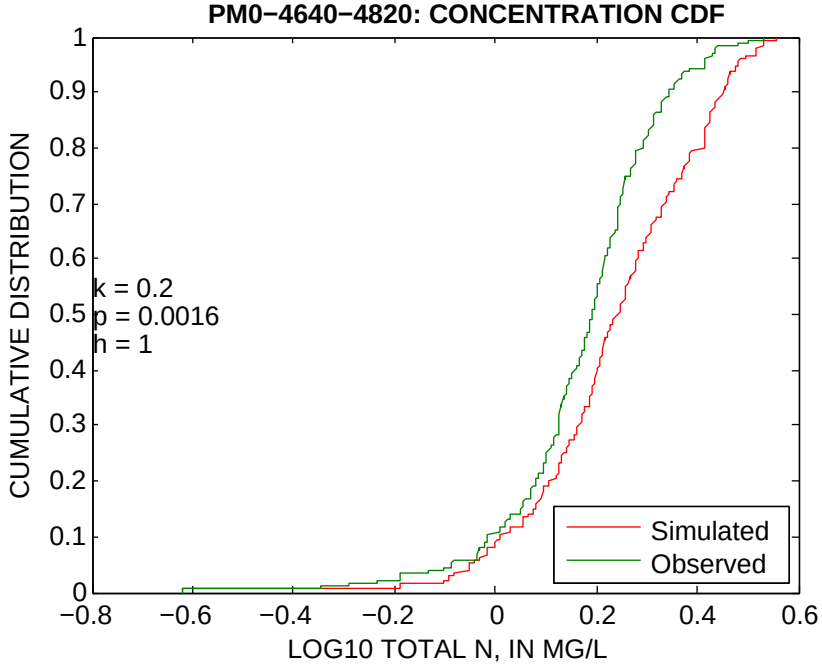
	n	302	156
		observe	simulate
min		0.24	0
		-0.346787	-0.427744
mean		1.58889	0.988885
		0.1872	0.225054
media		1.555	0.68443
		0.200027	0.278187
max		4.05	5.8117
		0.532754	0.764303
varian		0.292968	1.38525
		0.020741	0.0532862
JB		0.001	0.001
		0.002322	0.03932
		ra	log
%		-37.7626	20.2213
err.va		2.06857	0.0872445
rel.std.err		7.06075	4.20638
mod.eff		-6.06075	-3.20638

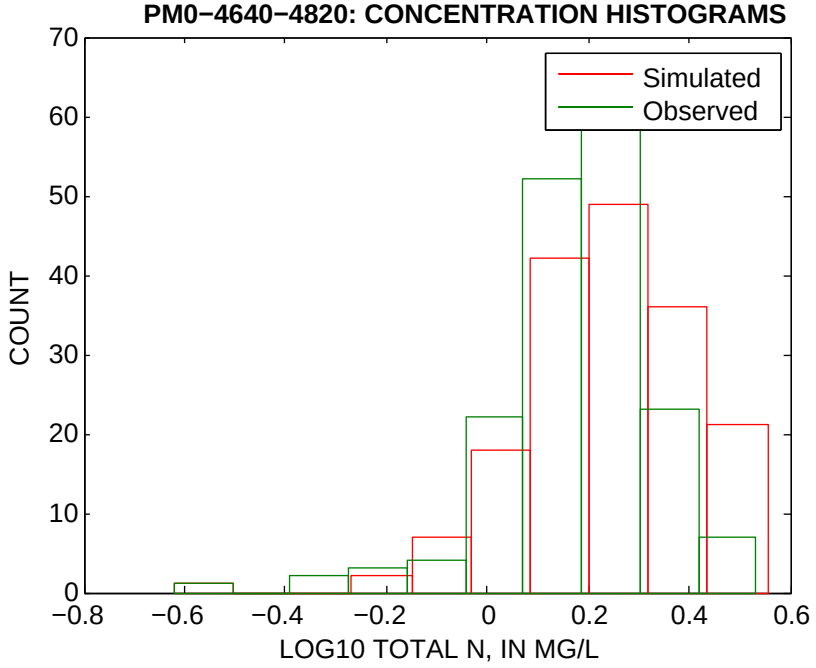
VERSION 2.1

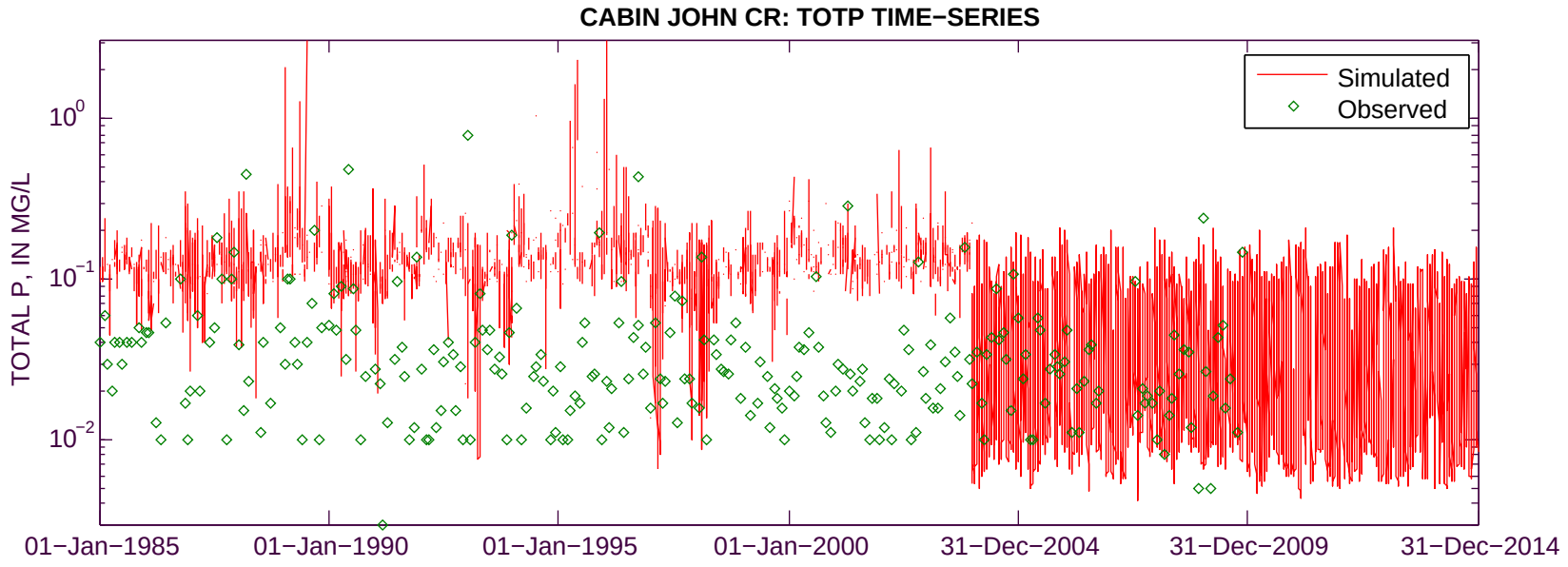
ALL DATA
LOG10

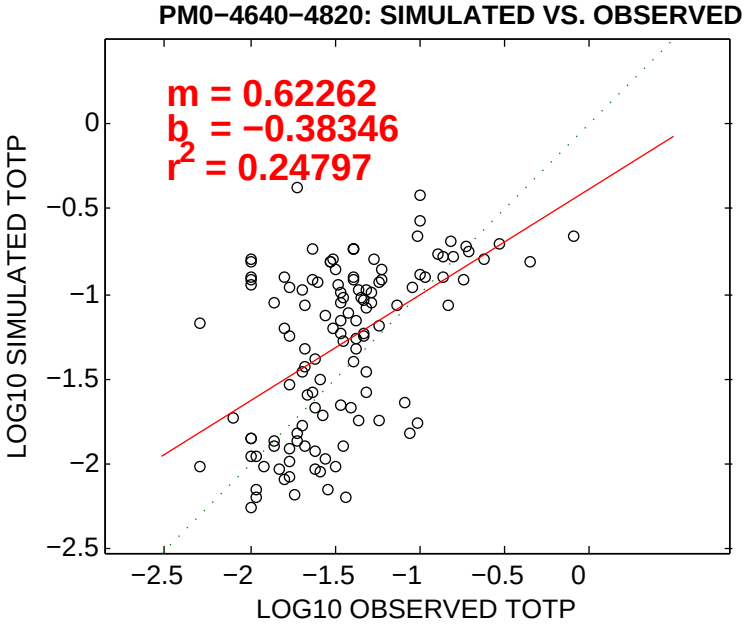


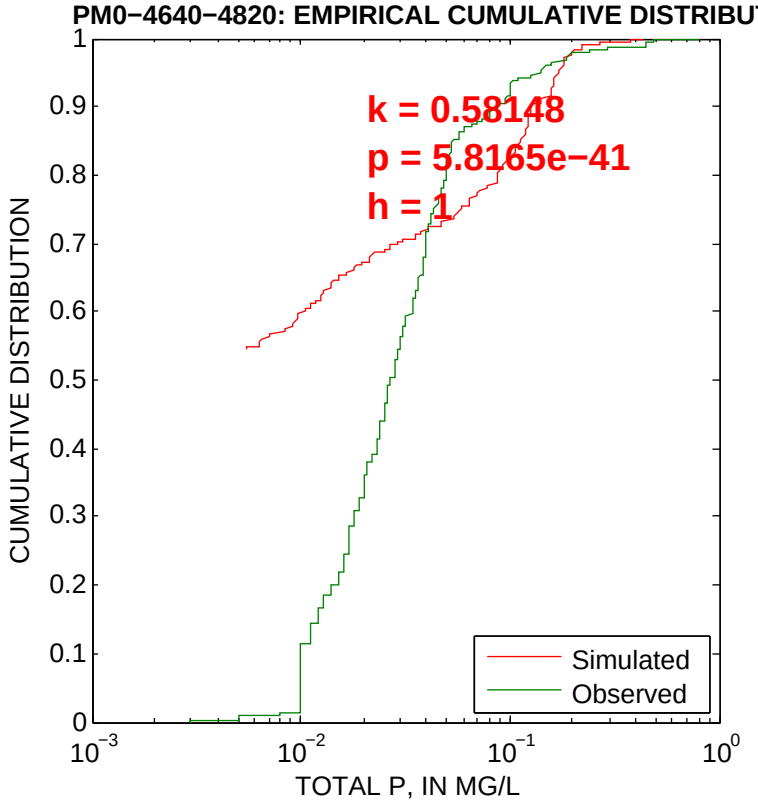












DATA SELECTION

scenario	file
P620171001WQ	TOTP.calib

plot: TOTP - total phosphorus

Dates: 1/1/1985 – 12/31/201

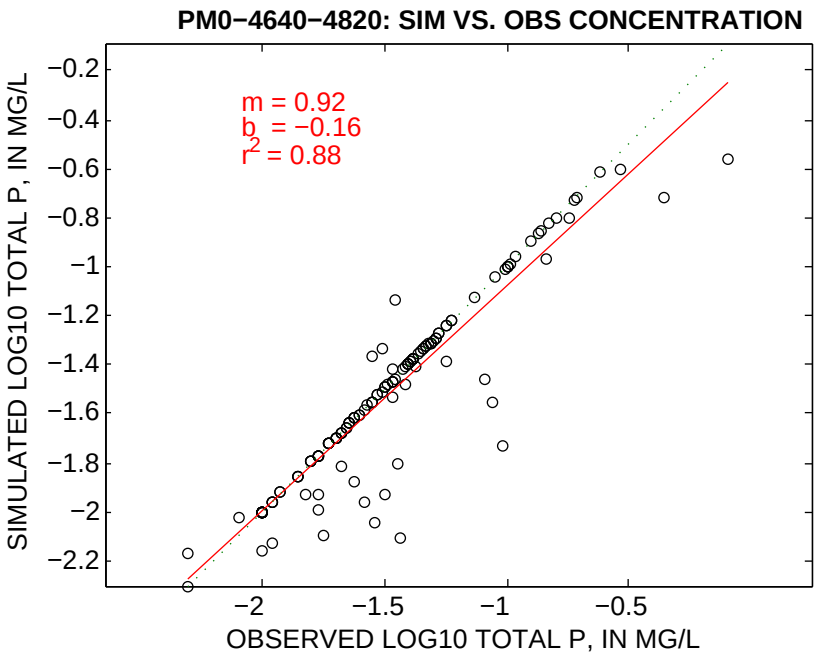
Drive	Directory	Observed
N/A	model	OBS20161101

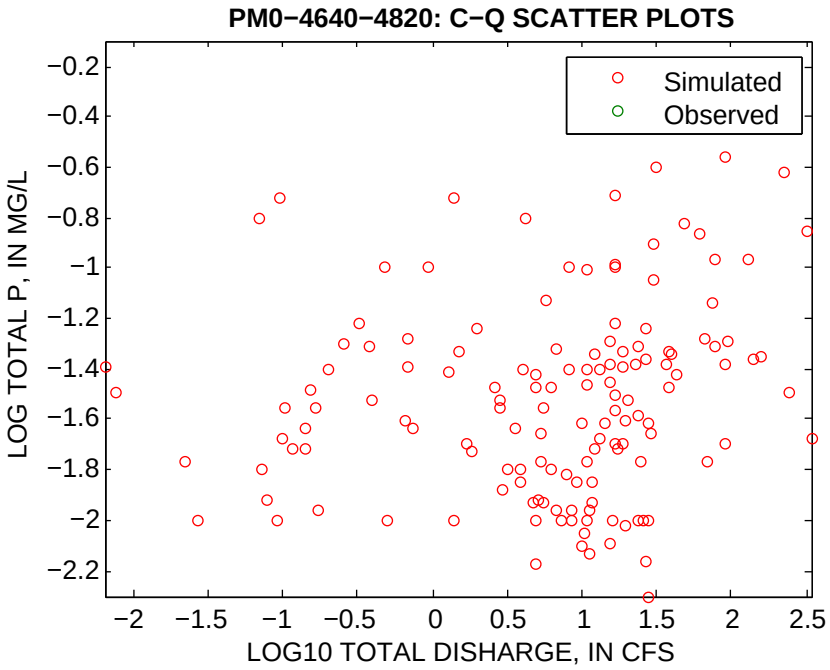
STATISTICS

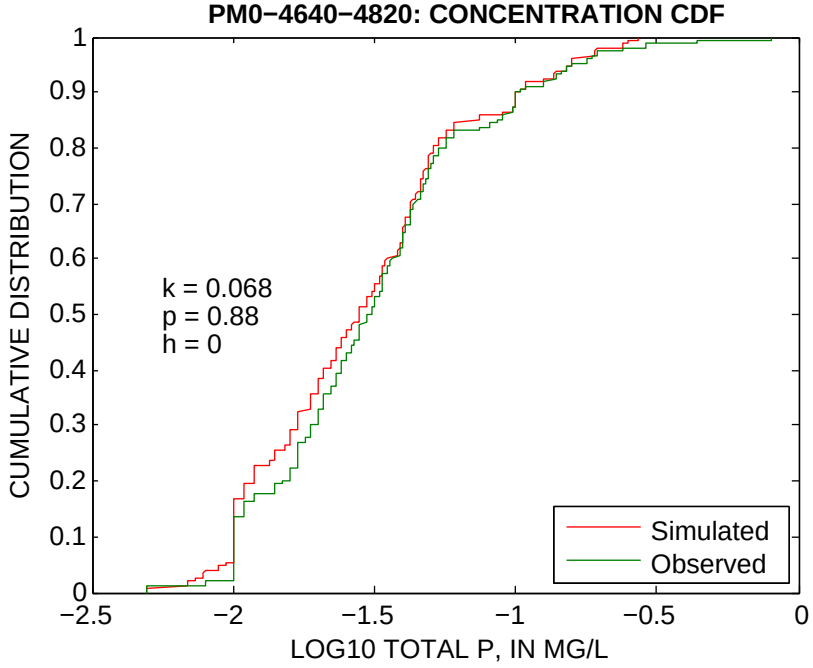
	n	270	123
		observe	simulate
min		0.003	0
		-2.30103	-2.25665
mean		0.0455037	0.0383751
		-1.46478	-1.29546
media		0.027	0
		-1.48149	-1.15782
max		0.8	0.43008
		-0.09691	-0.366451
varian		0.00555804	0.00436325
		0.154315	0.24124
JB		0.001	0.001
		0.010651	0.016628
		ra	log
%		-15.666	-11.5594
err.va		0.00667689	0.2323
rel.std.err		1.2013	1.50536
mod.eff		-0.201302	-0.505359

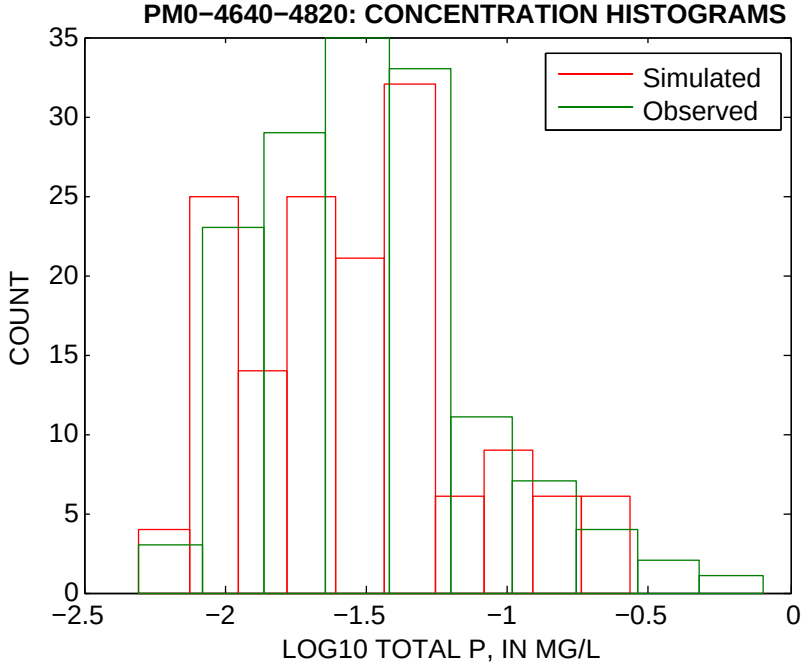
VERSION 2.1

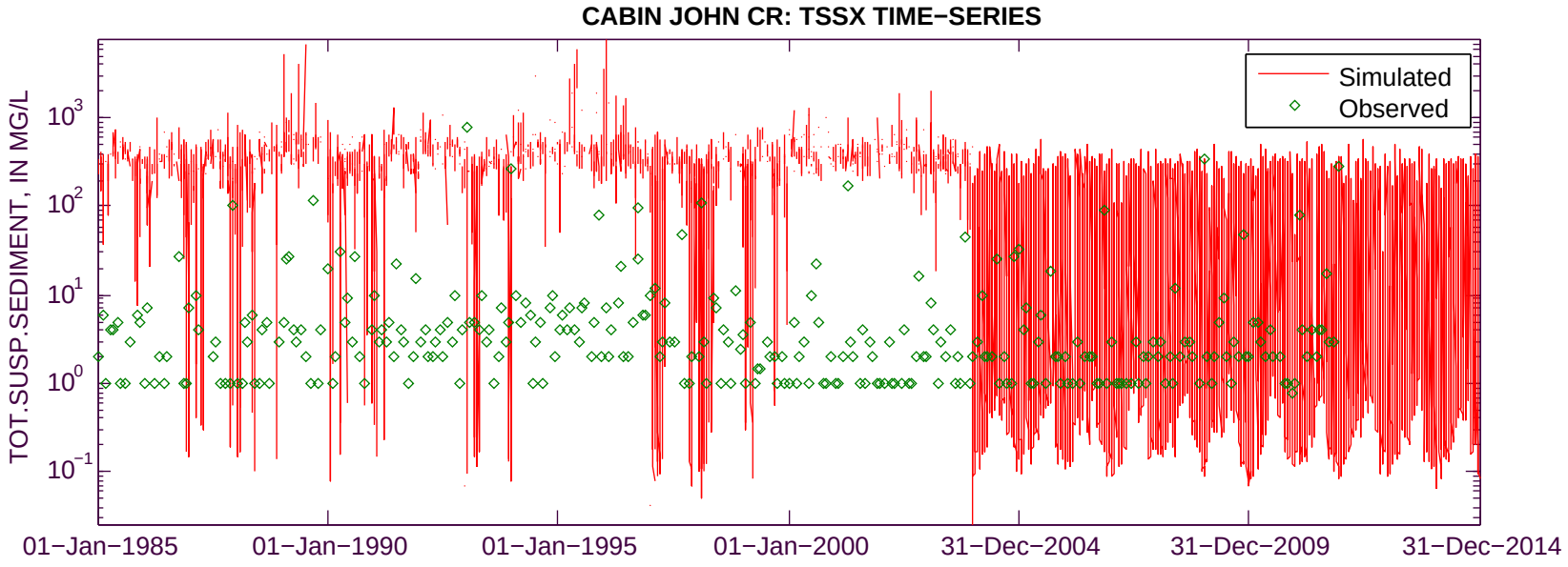
ALL DATA
LOG10

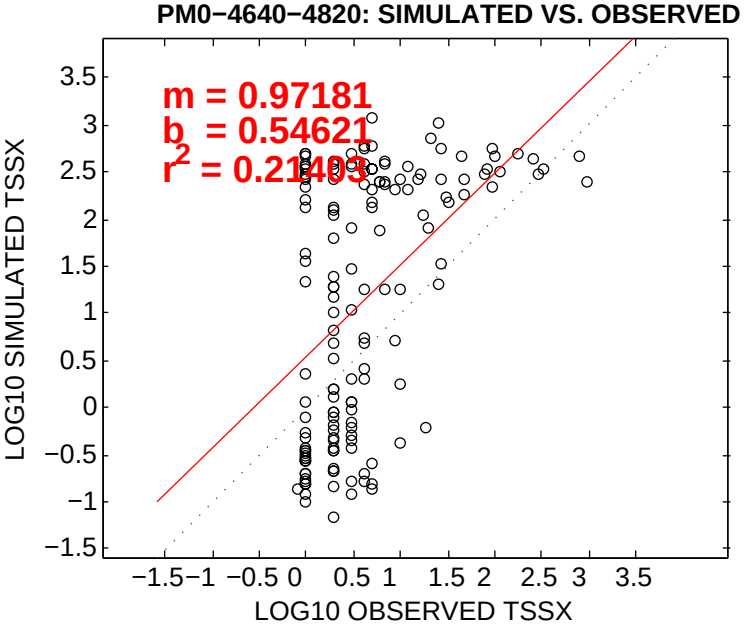


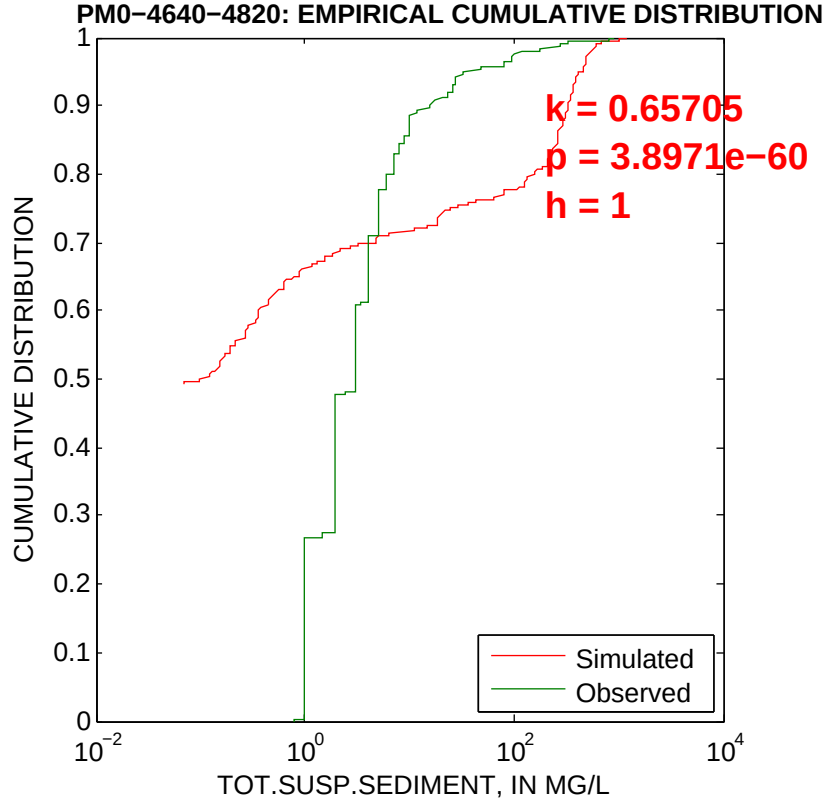












DATA SELECTION

scenario	file
P620171001WQ	TSSX.calib

plot: TSSX - total suspended ...

Dates: 1/1/1985 – 12/31/201

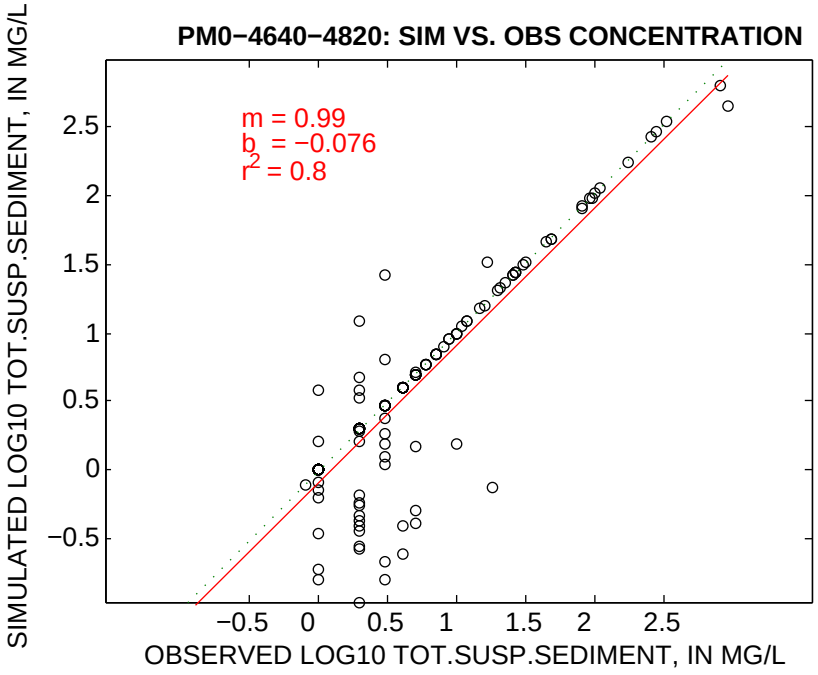
Drive	Directory	Observed
N/A	model	OBS20161101

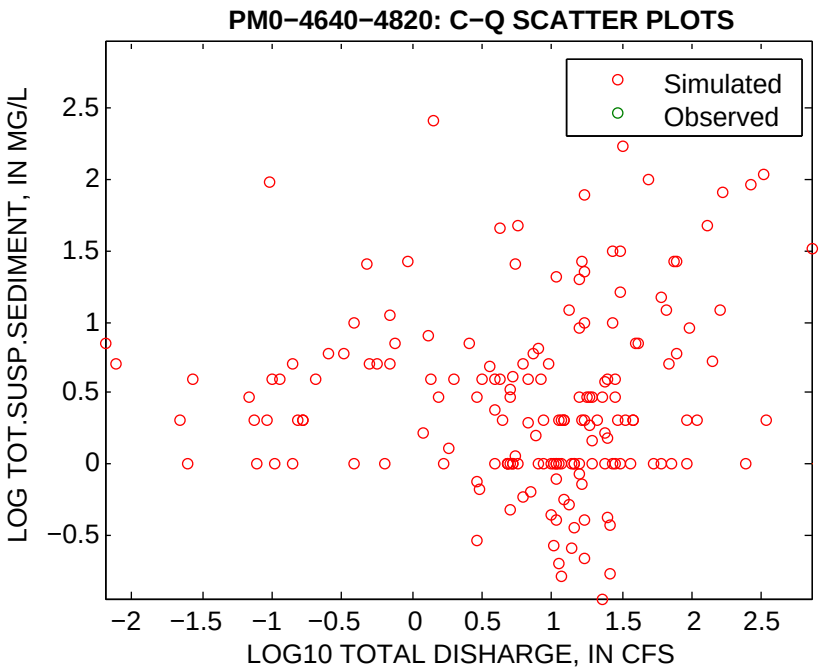
STATISTICS

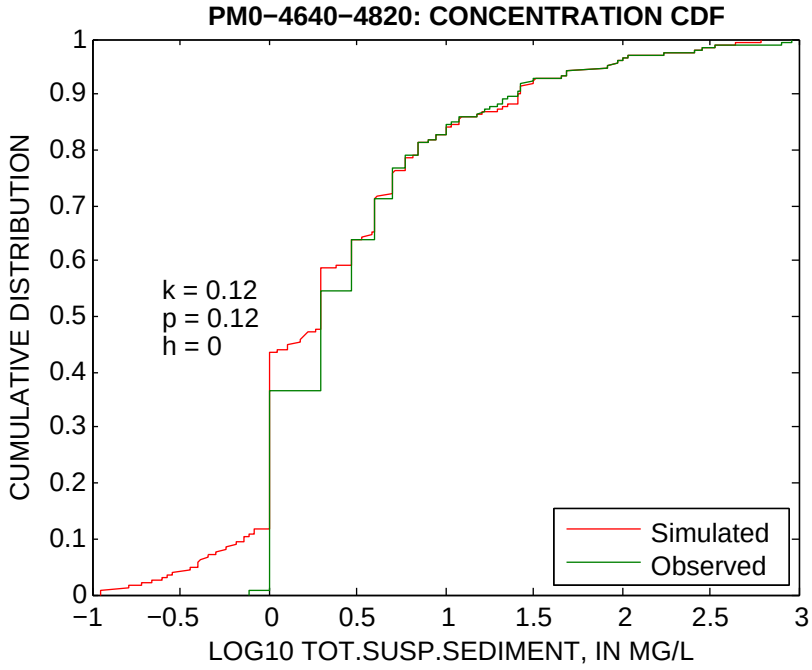
	n	observe	simulate
		312	158
min		0.79	0
		-0.102373	-1.157
mean		15.6788	80.2352
		0.614212	1.14311
media		3	0.107153
		0.477121	1.36196
max		932	1196.9
		2.96942	3.07806
varian		5884.41	28589.2
		0.42268	1.86504
JB		0.001	0.001
		0.001	0.003425
		ra	log
%		411.743	86.1098
err.va		32091	1.74771
rel.std.err		5.45355	4.13483
mod.eff		-4.45355	-3.13483

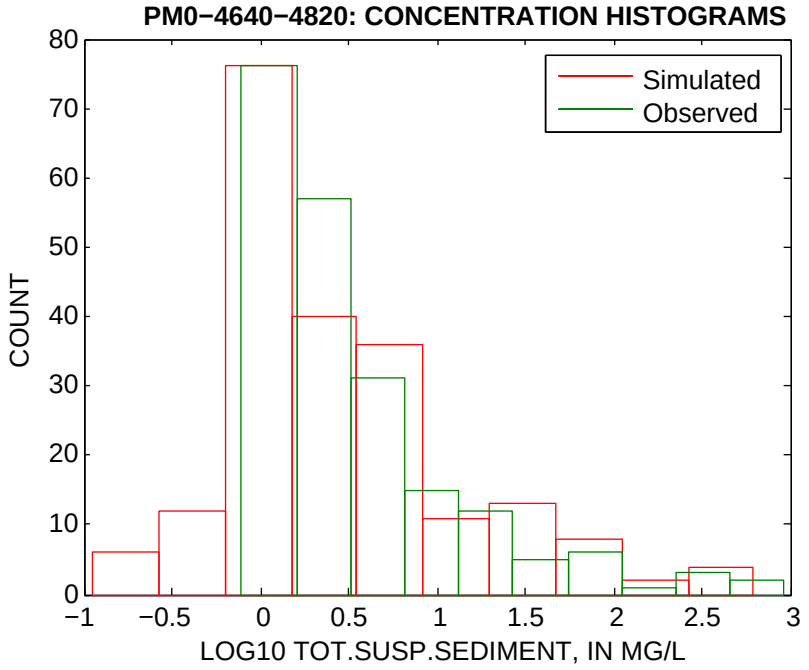
VERSION

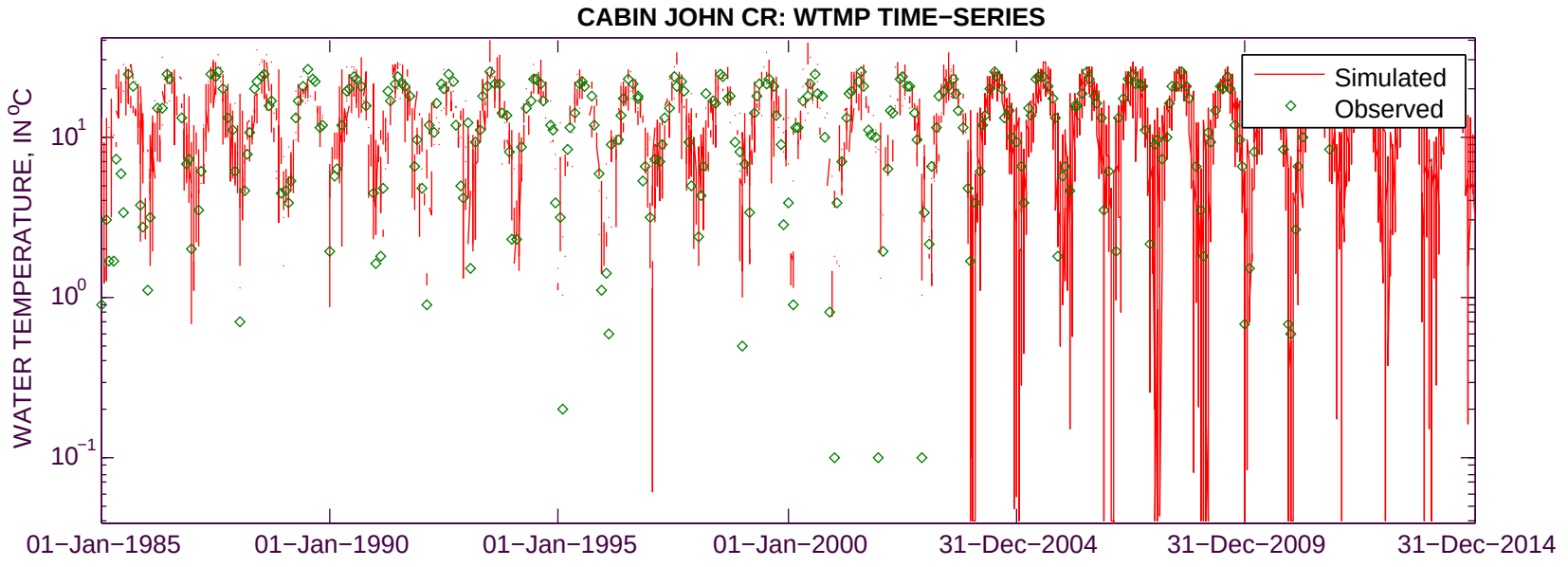
ALL DATA
LOG10

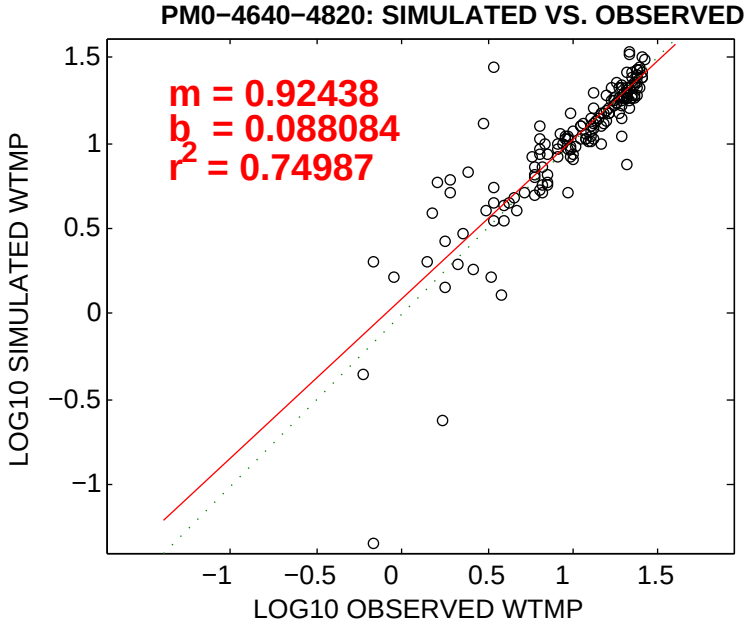


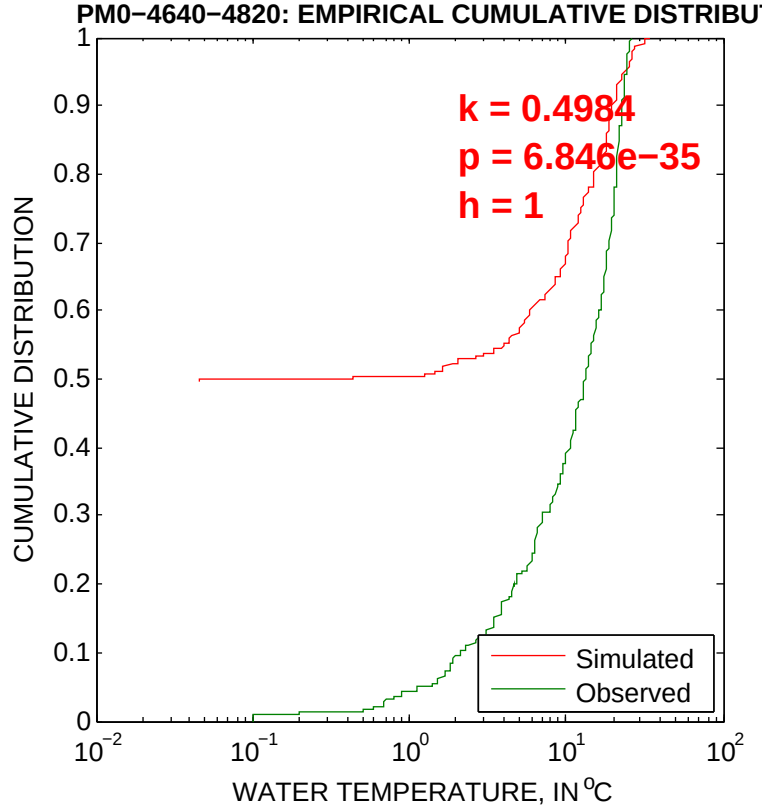












DATA SELECTION

scenario	file
P620171001WQ	WTMP.calib

plot: WTMP - water tempera...

Dates: 1/1/1985 – 12/31/201

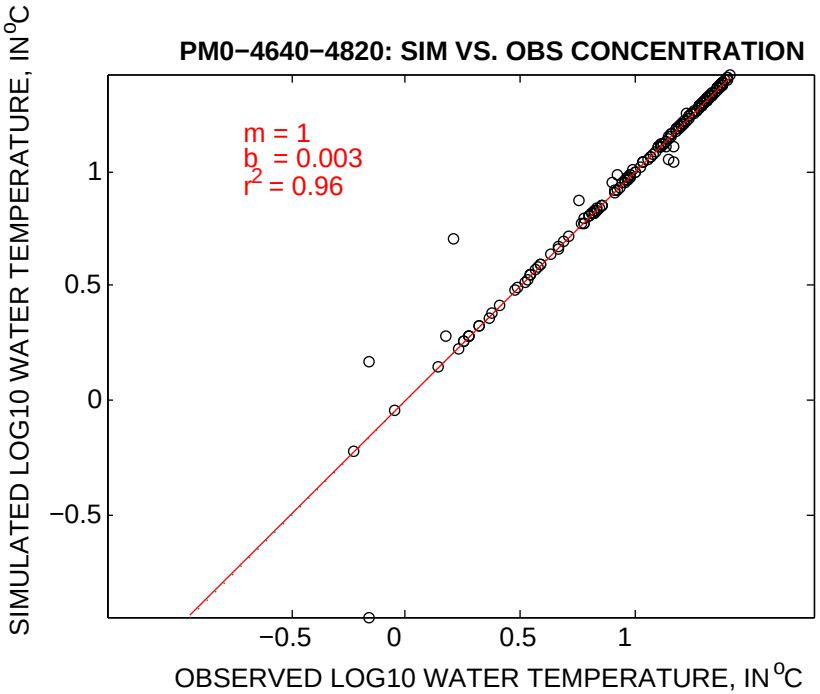
Drive	Directory	Observed
N/A	model	OBS20161101

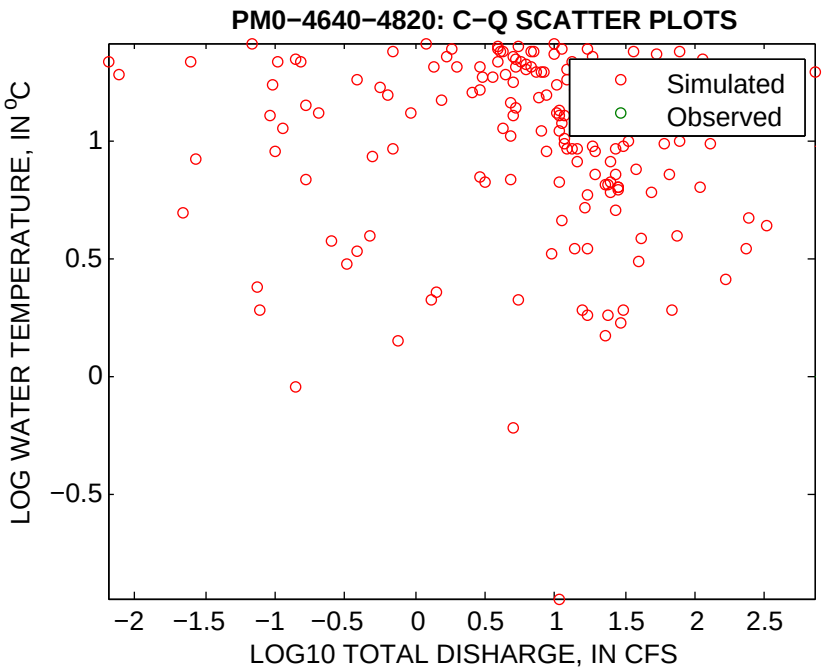
STATISTICS

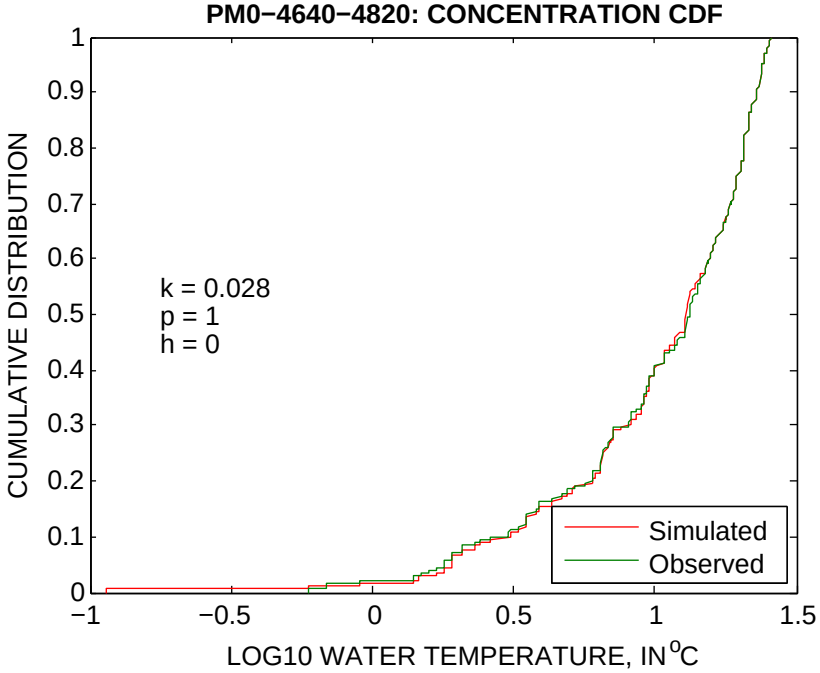
	observe	simulate
n	313	158
min	0.1 -0.221849	0 -1.34288
mean	13.0254 1.00012	6.74974 1.01257
media	13.2 1.11059	0.23966 1.09578
max	26 1.41497	34.355 1.53599
varian	58.1102 0.139521	74.2565 0.158983
JB	0.001324 0.001	0.001 0.001
	ra	log
%	-48.1801	1.24488
err.va	120.733	0.0407207
rel.std.err	2.07765	0.291861
mod.eff	-1.07765	0.708139

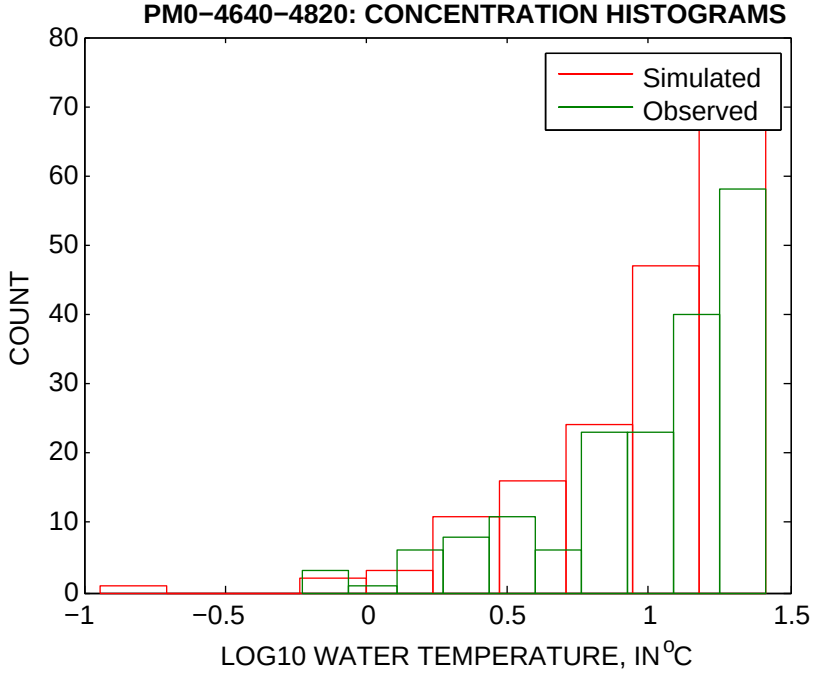
VERSION 2.1

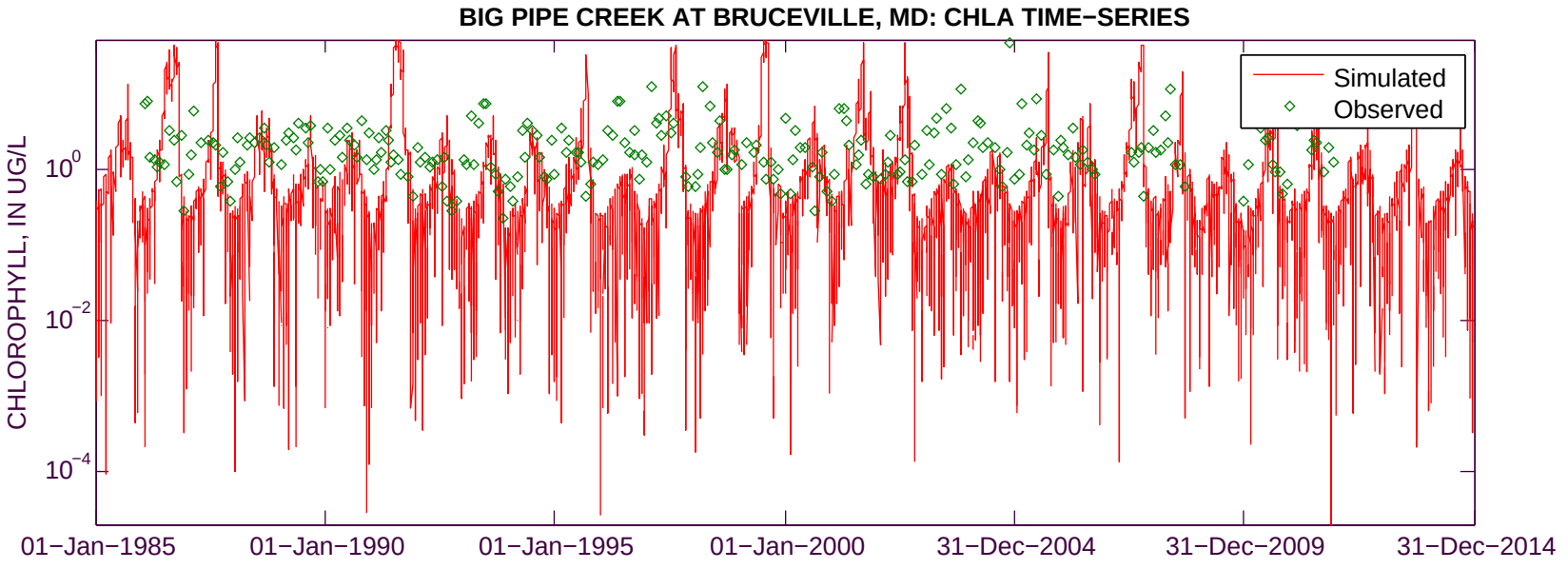
ALL DATA
LOG10

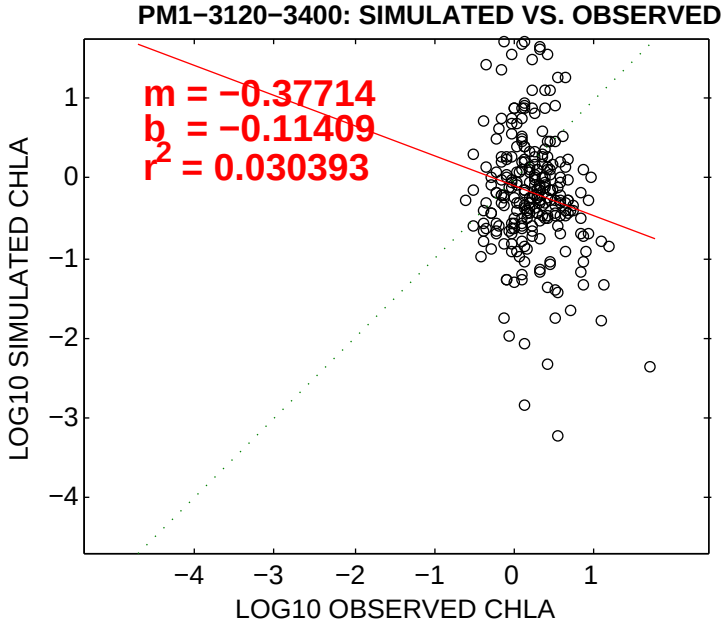


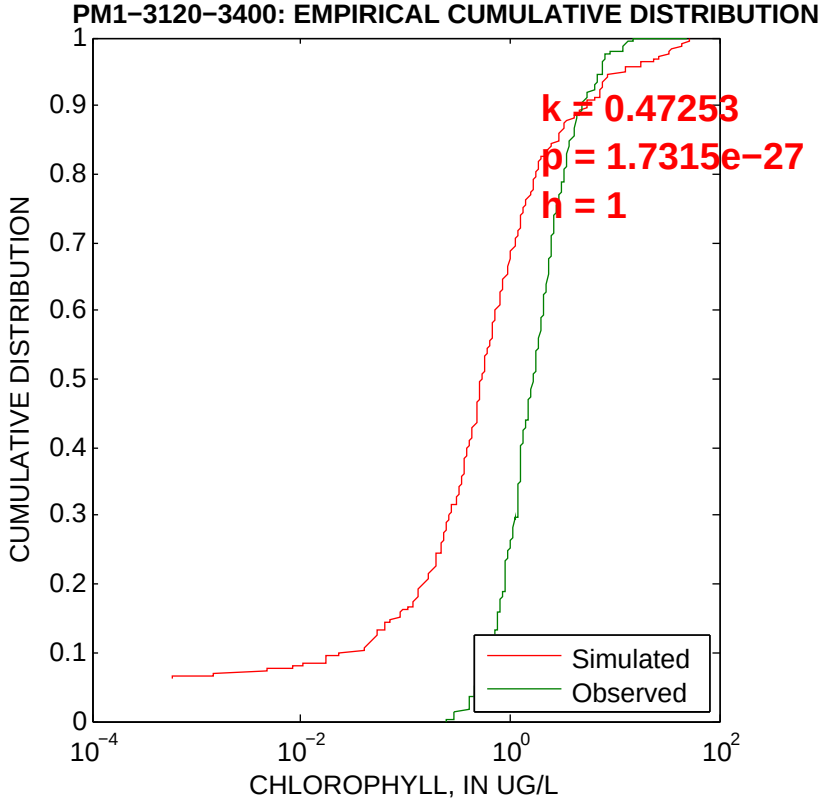












DATA SELECTION

scenario	file
P620171001WQ	CHLA.calib

plot: CHLA - chlorophyll A

Dates	1/1/1985	12/31/201

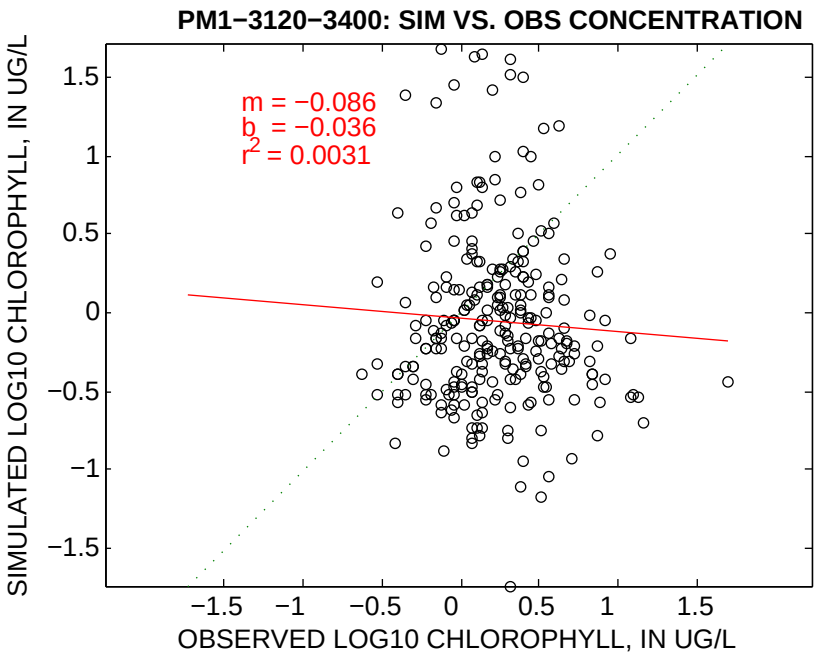
Drive	Directory	Observed
N/A	model	OBS20161101

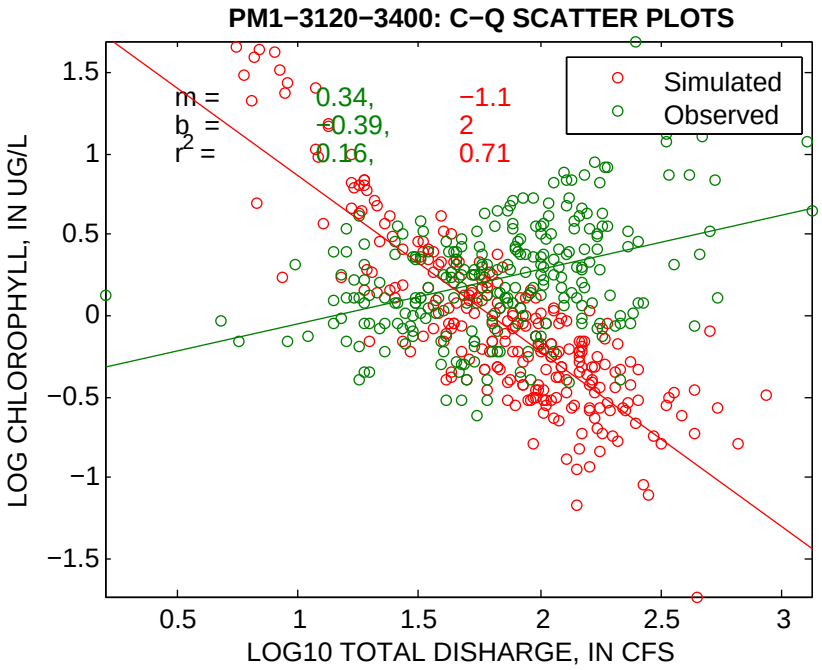
STATISTICS

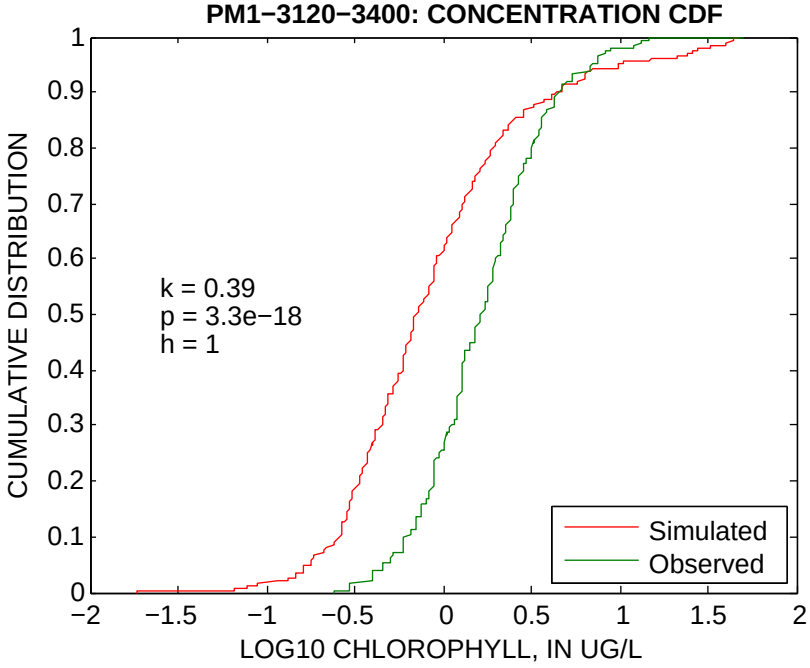
n	273	256
	observe	**simulate**
min	0.24	0
	-0.619789	-3.22714
mean	2.55315	2.71827
	0.220822	-0.197374
media	1.7	0.53427
	0.20344	-0.231711
max	50.2	52.648
	1.7007	1.72138
varian	13.4731	58.9551
	0.121192	0.567167
JB	0.001	0.001
	0.004466	0.001
	ra	log
%	6.46732	-189.382
err.va	77.1049	0.955346
rel.std.err	5.72287	7.88289
mod.eff	-4.72287	-6.88289

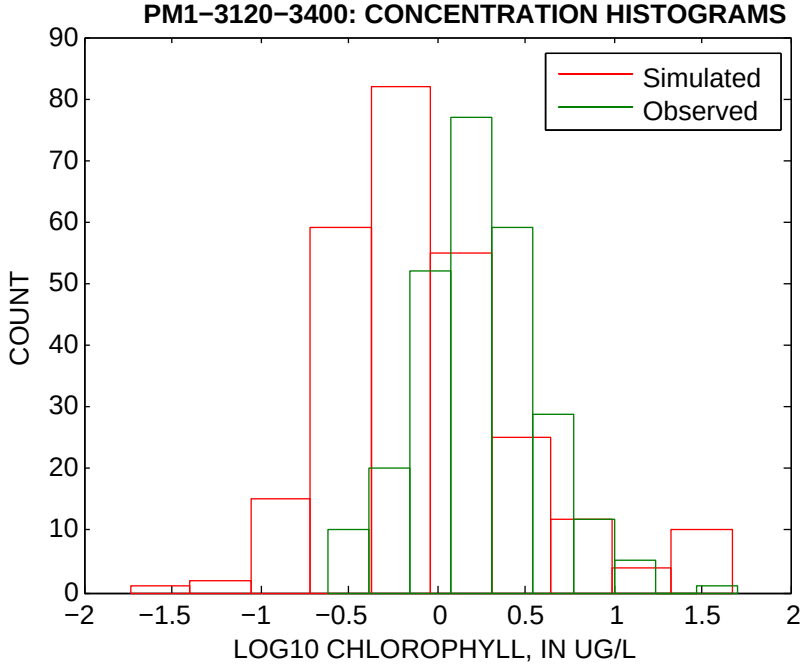
VERSION 3.1

ALL DATA
LOG10

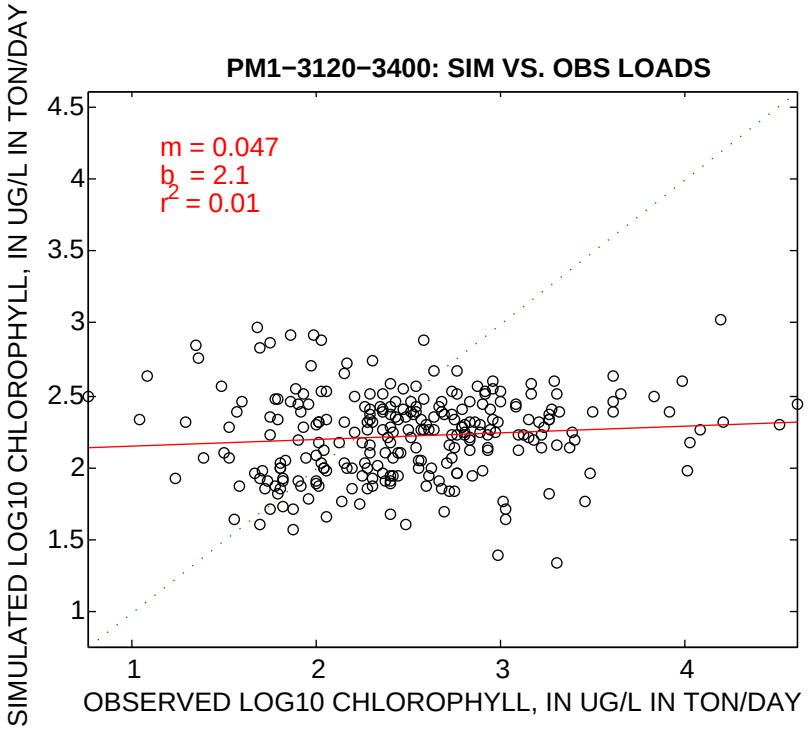


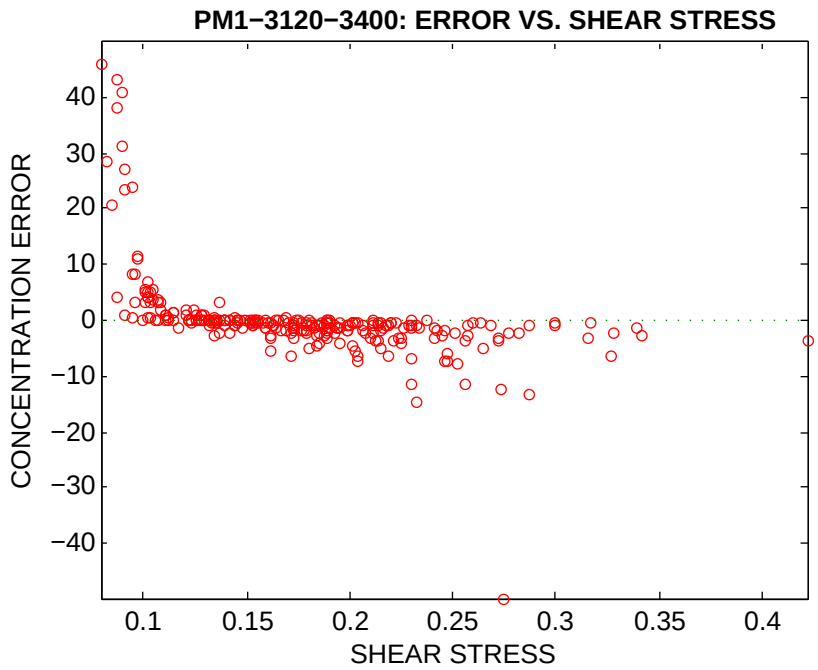


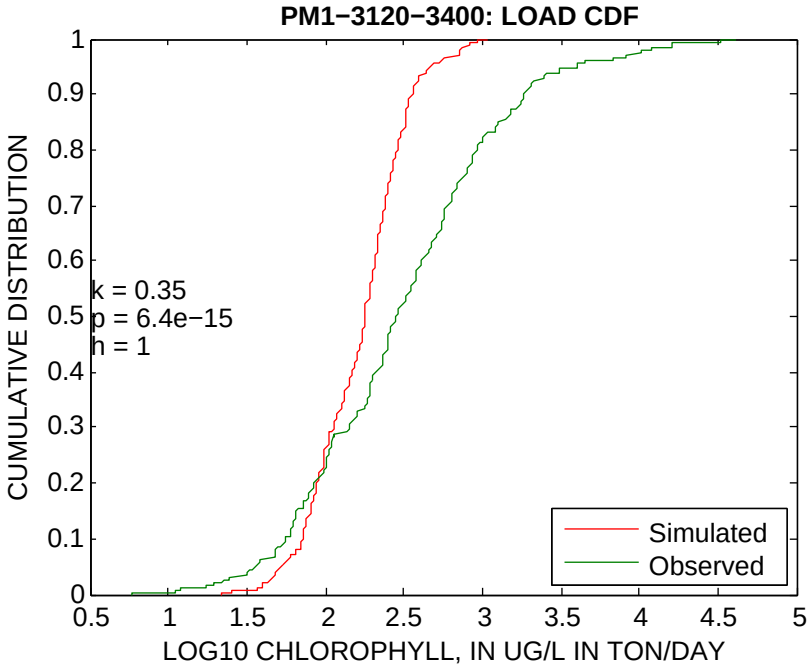


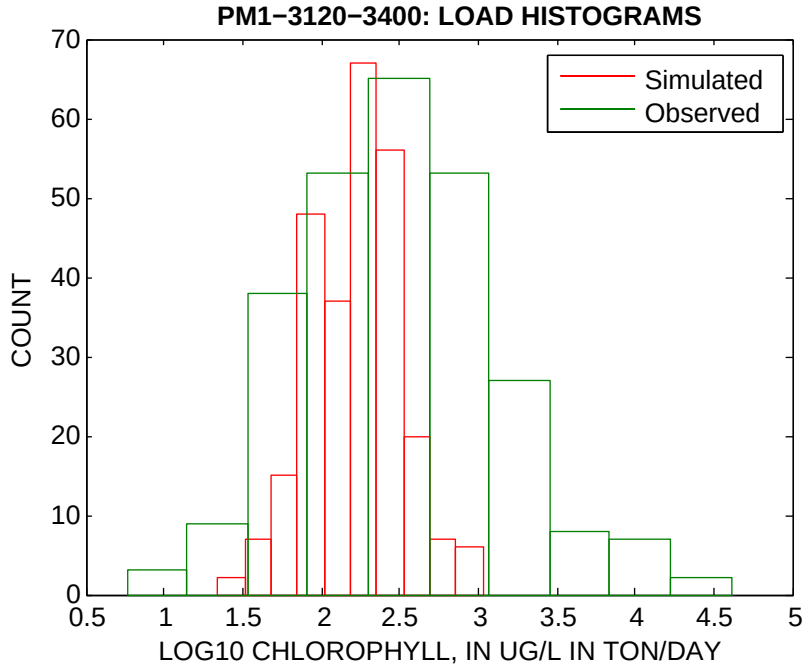


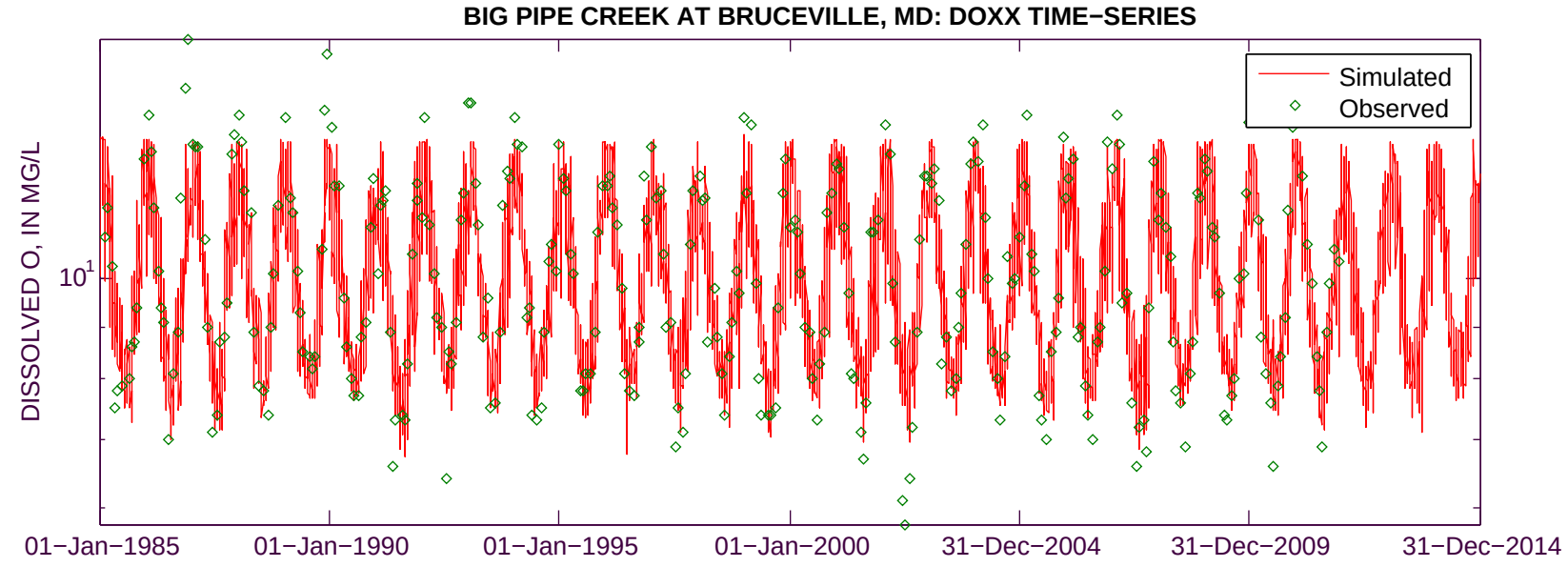
LOAD DATA
LOG10

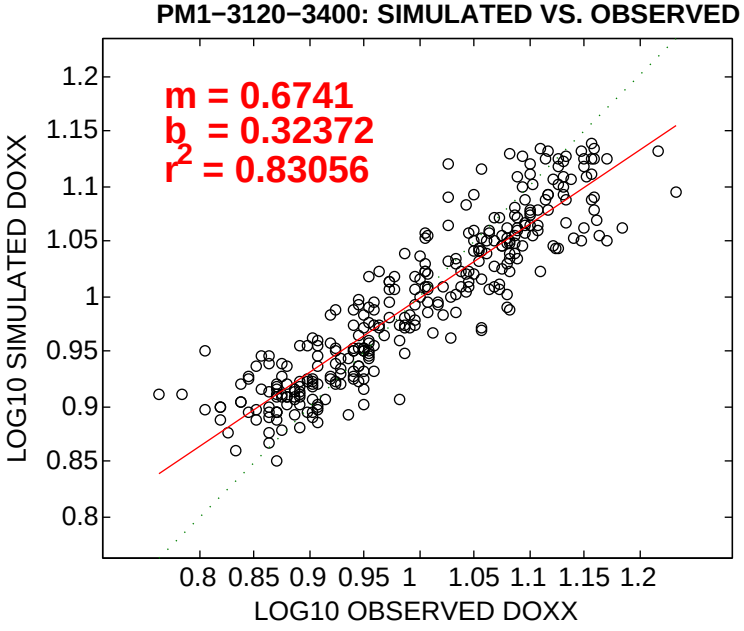


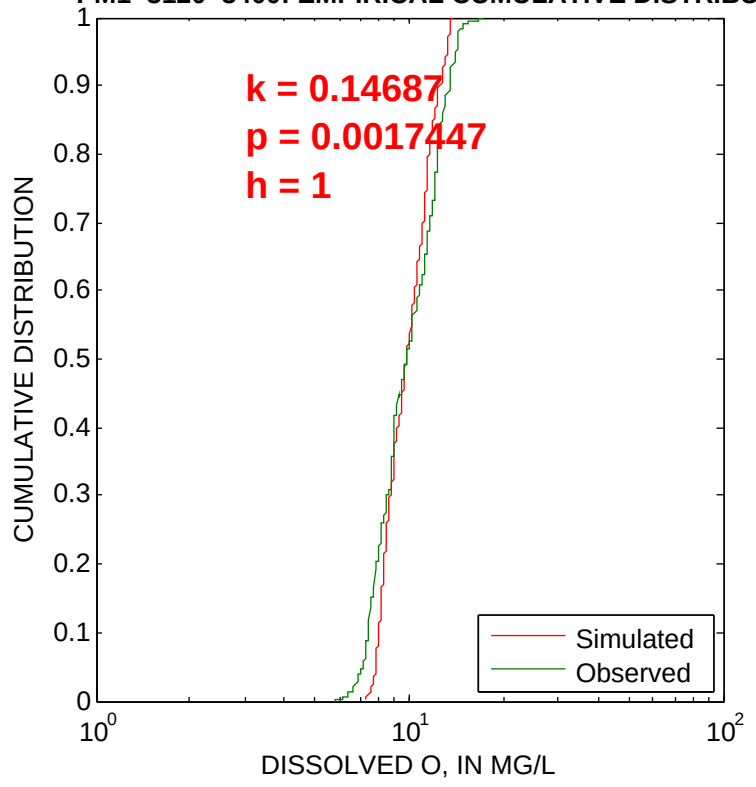












DATA SELECTION

scenario	file
P620171001WQ	DOXX.calib

plot: DOXX - dissolved oxygen

Dates: 1/1/1985 – 12/31/201

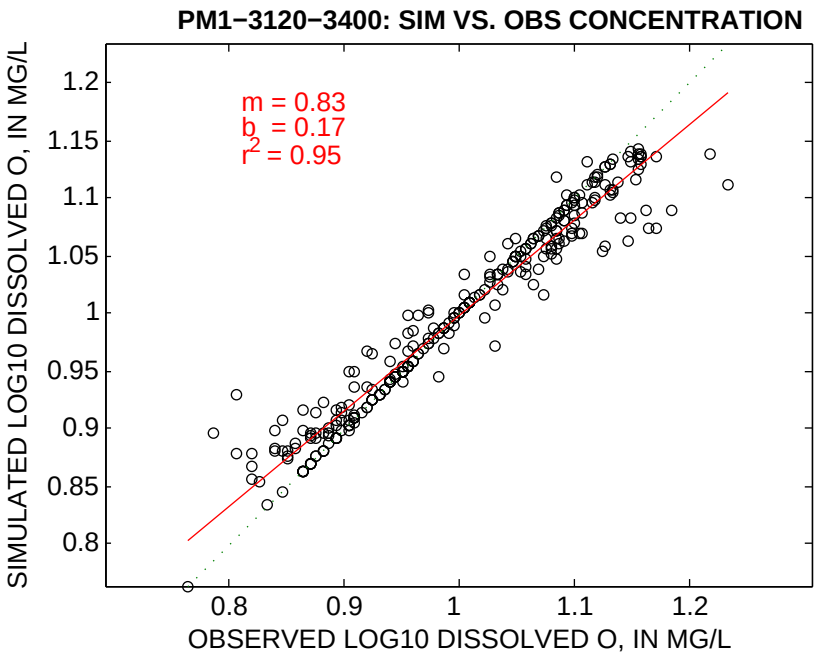
Drive	Directory	Observed
N/A	model	OBS20161101

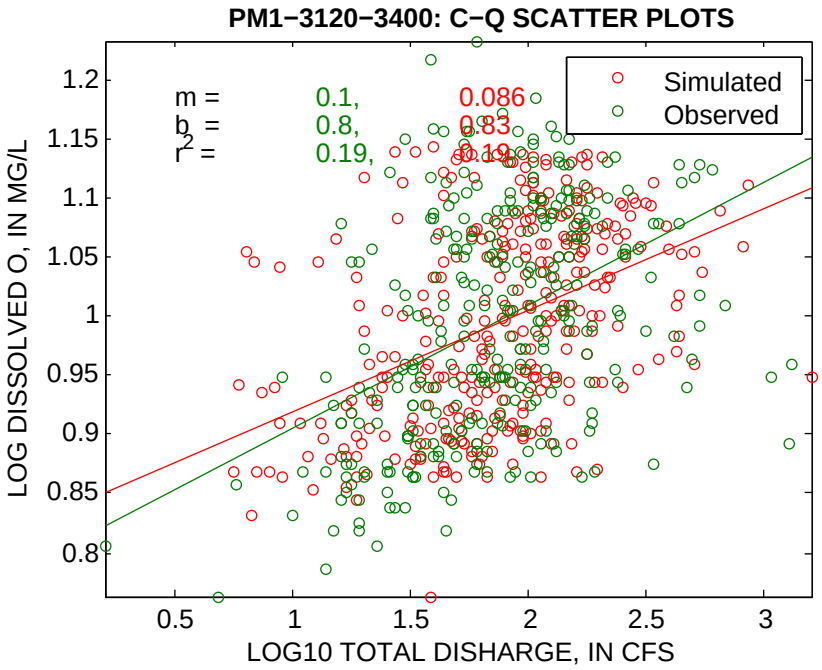
STATISTICS

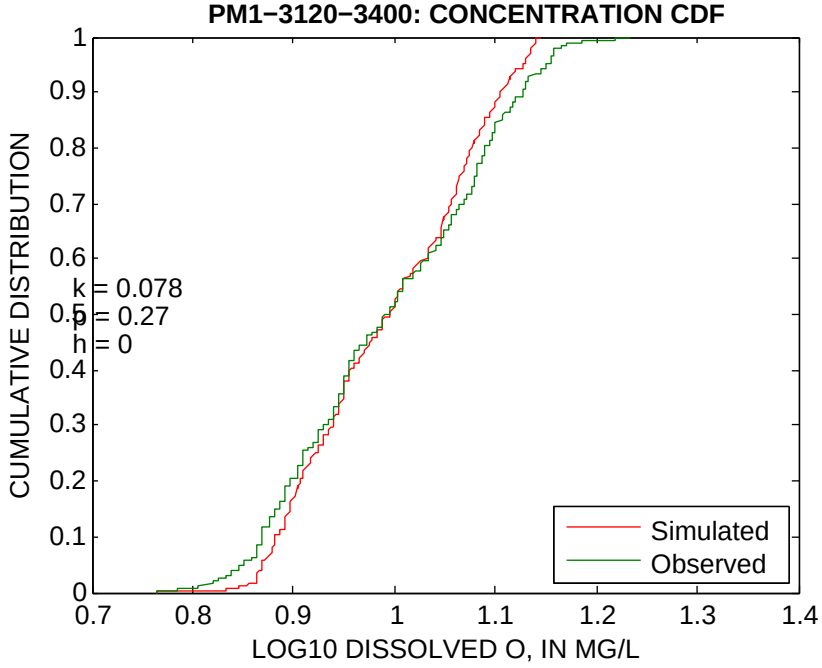
	n	observe	simulate
		320	320
min		5.8	7.0886
		0.763428	0.85056
mean		10.1532	10.0216
		0.995626	0.994878
media		9.849	9.8313
		0.993387	0.992611
max		17.1	13.733
		1.233	1.13777
varian		5.25559	2.86088
		0.00958001	0.00524142
JB		0.003977	0.002106
		0.005883	0.002998
		ra	log
%		-1.29674	-0.0751452
err.va		1.11846	0.00190618
rel.std.err		1.212814	0.198975
mod.eff		0.787186	0.801025

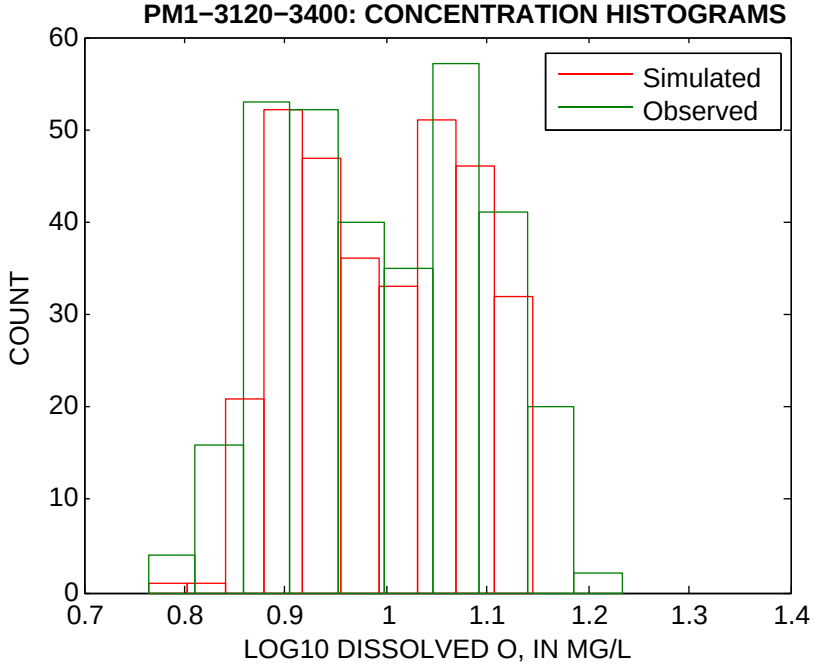
VERSION 2.1

ALL DATA
LOG10

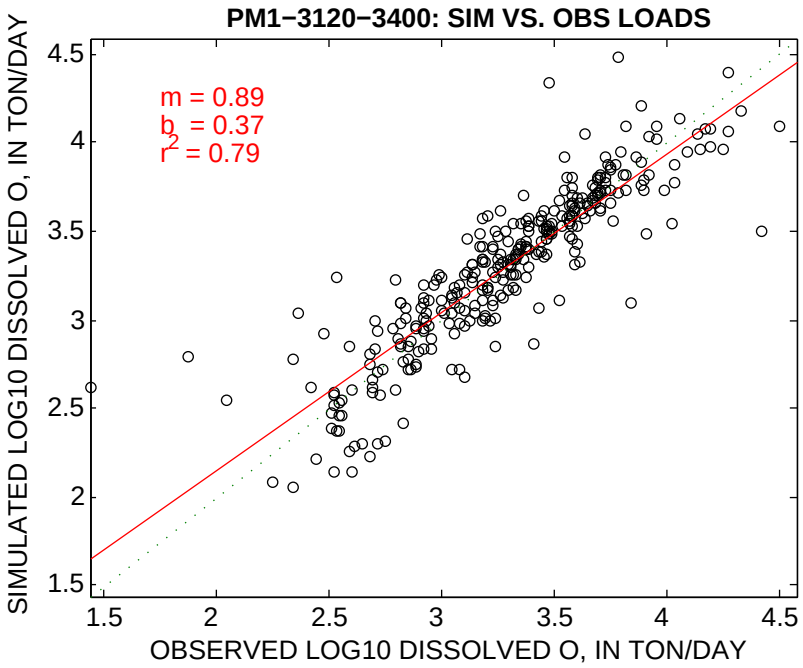


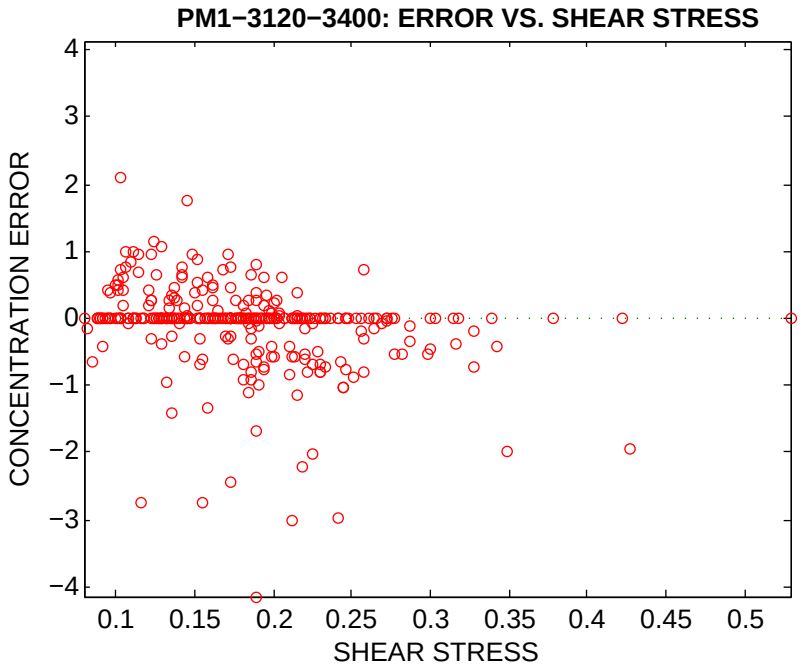


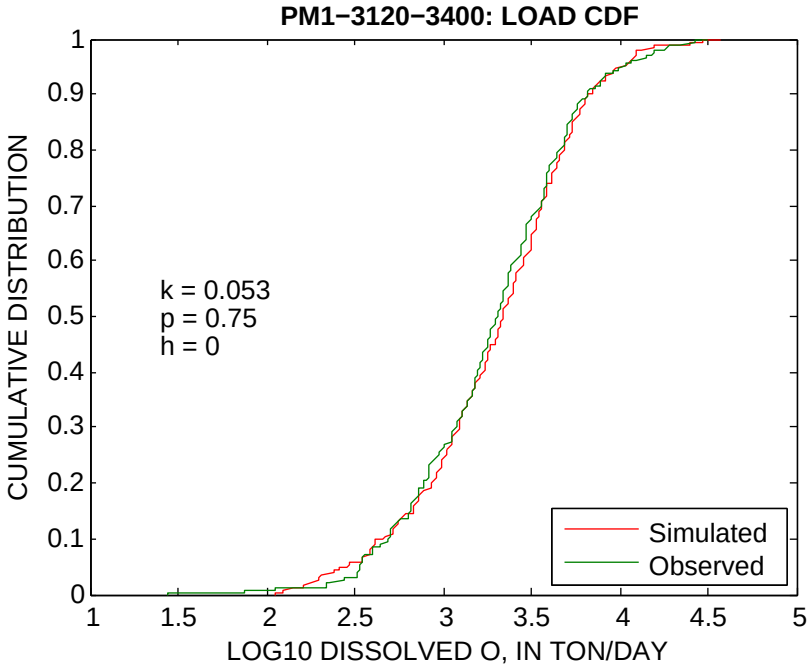


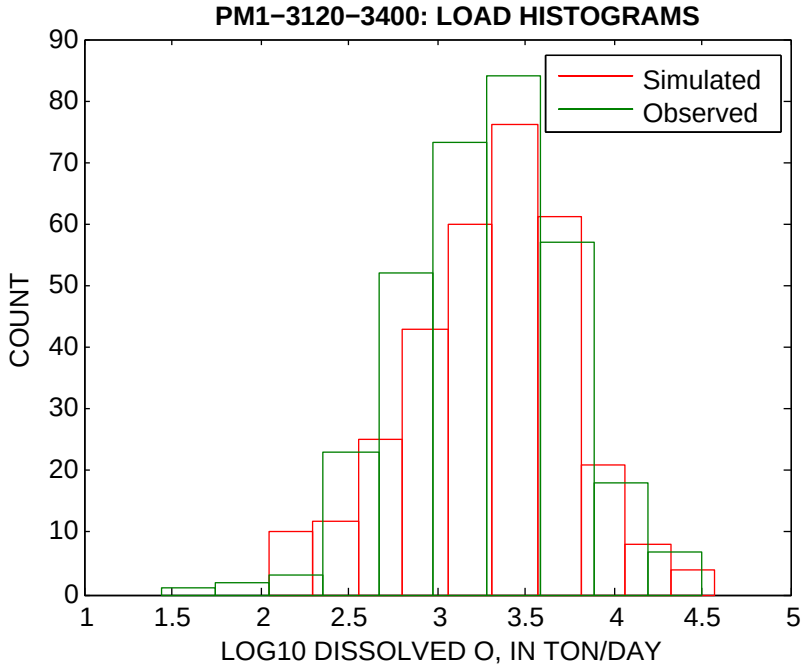


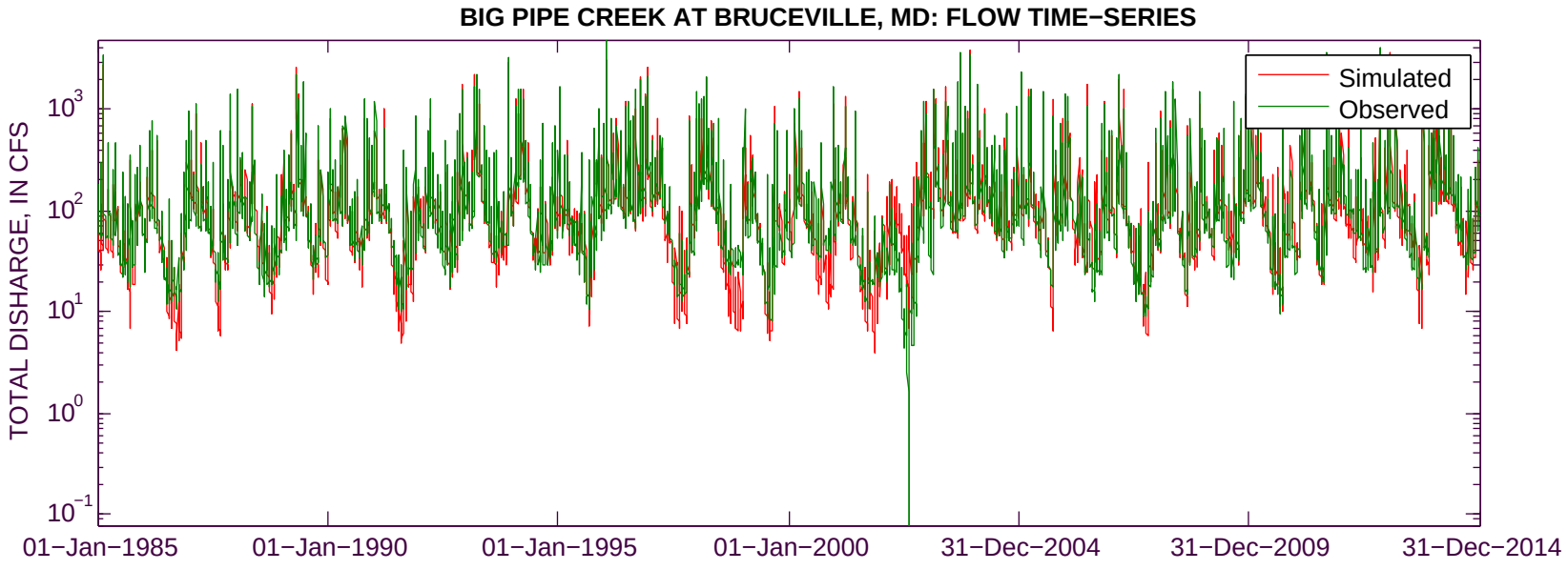
LOAD DATA
LOG10

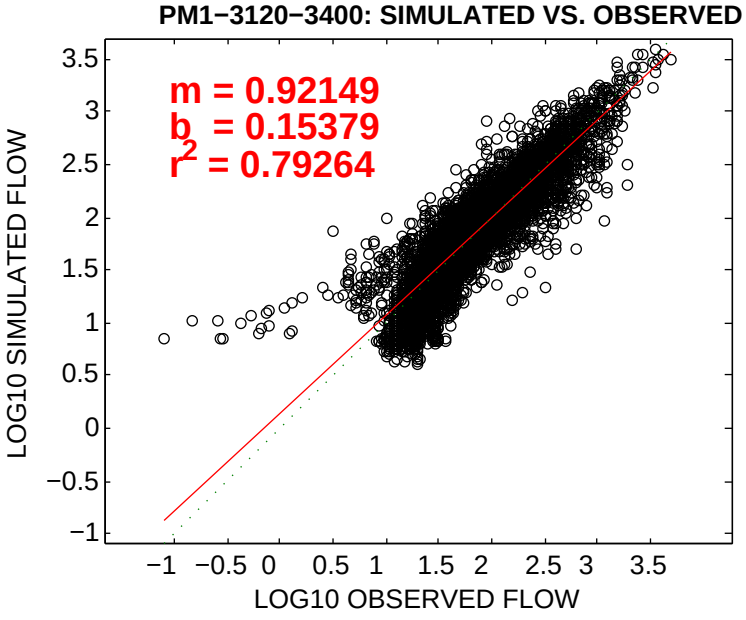


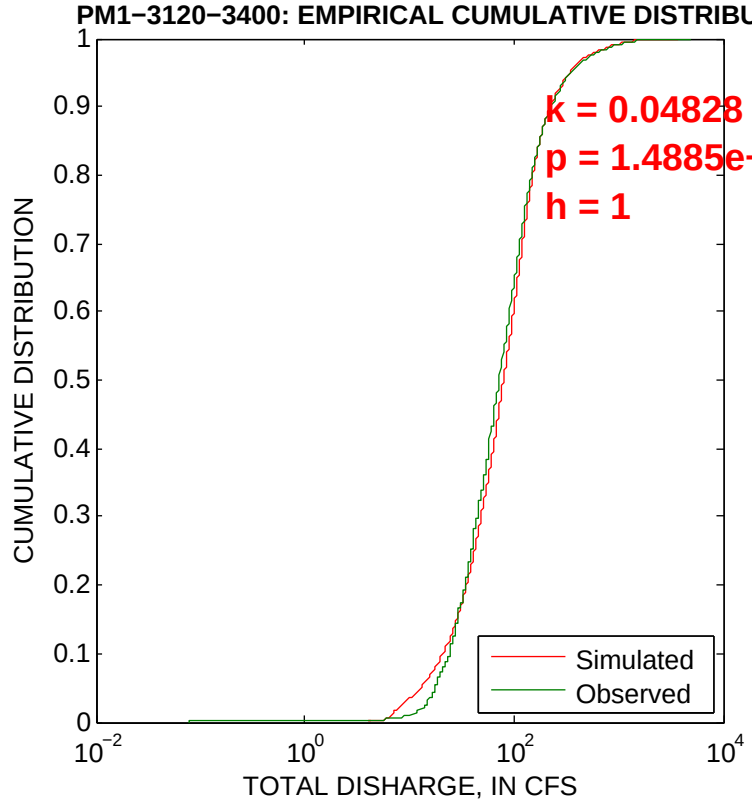












DATA SELECTION

scenario: P620171001WQ | file: FLOW.calib

plot: FLOW - total discharge

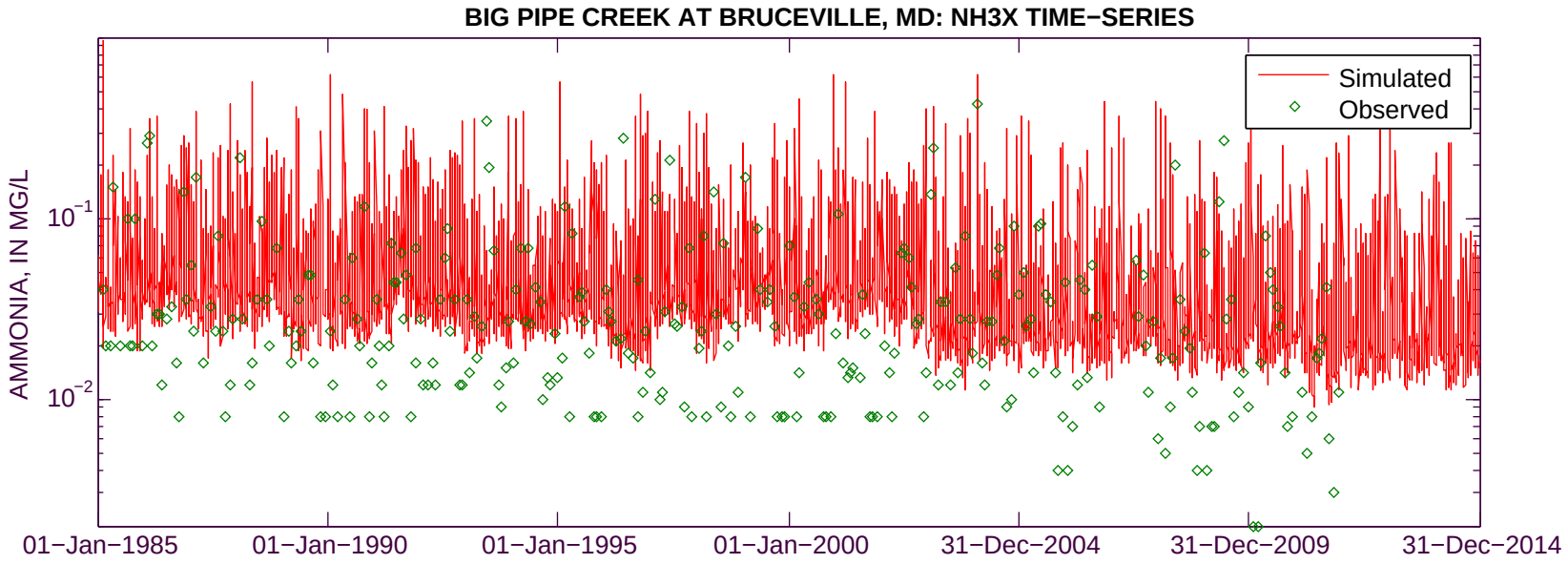
Dates: 1/1/1985 – 12/31/201

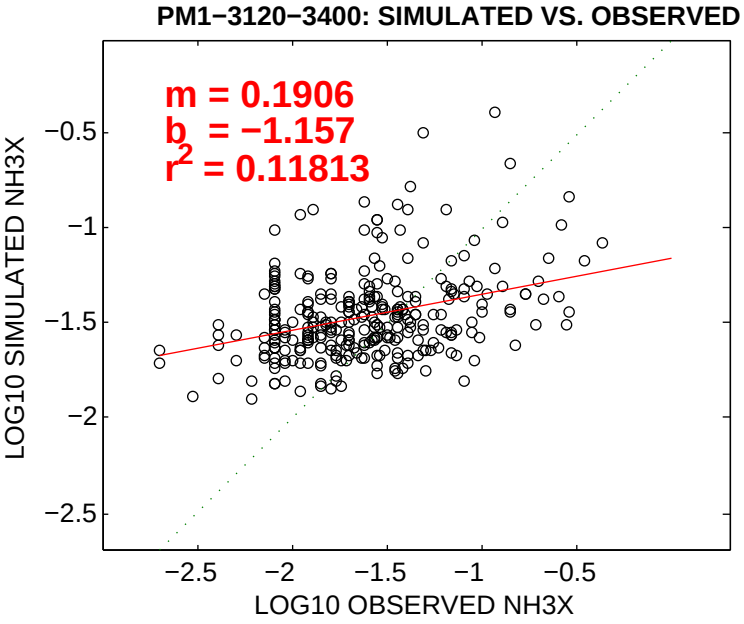
Drive: N/A | Directory: model | Observed: OBS20161101

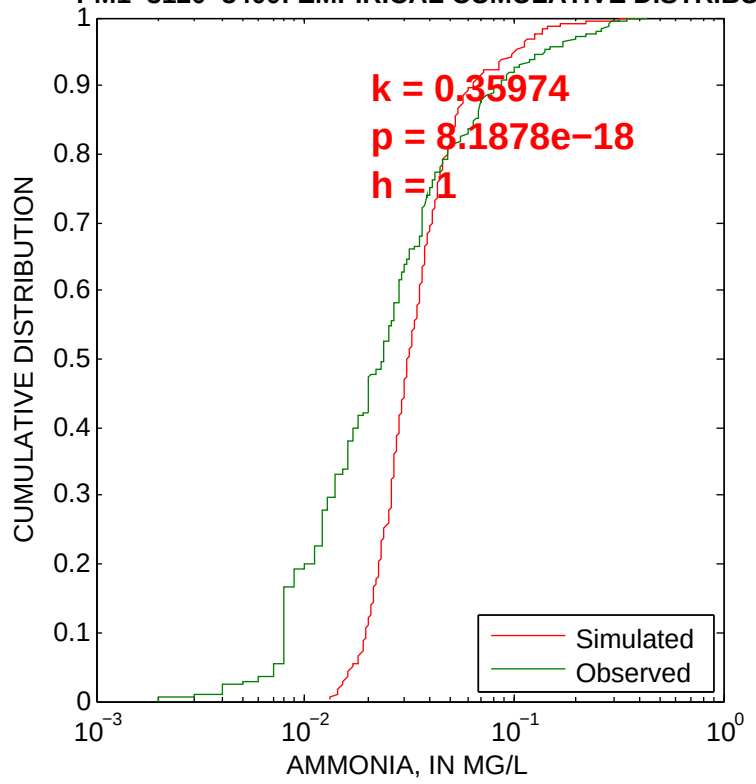
STATISTICS

		observe	simulate
n		10957	10957
min		0.08	4.009
		-1.09691	0.603036
mean		121.628	122.902
		1.86866	1.87574
media		73	80.102
		1.86332	1.90364
max		4960	3794.3
		3.69548	3.57913
varian		40496.4	36582.9
		0.165961	0.177792
JB		0.001	0.001
		0.001	0.001
		ra	log
%		1.04688	0.379109
err.va		9108.14	0.0379403
rel.std.err		0.224912	0.22861
mod.eff		0.775088	0.77139

VERSION 2.1







DATA SELECTION

scenario	file
P620171001WQ	NH3X.calib

plot: NH3X - ammonia

Dates: 1/1/1985 – 12/31/201

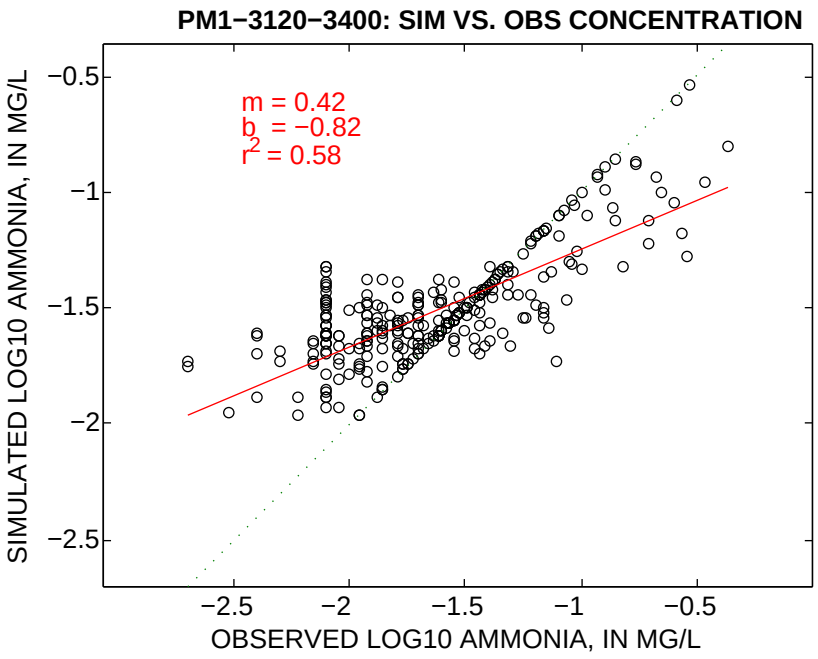
Drive	Directory	Observed
N/A	model	OBS20161101

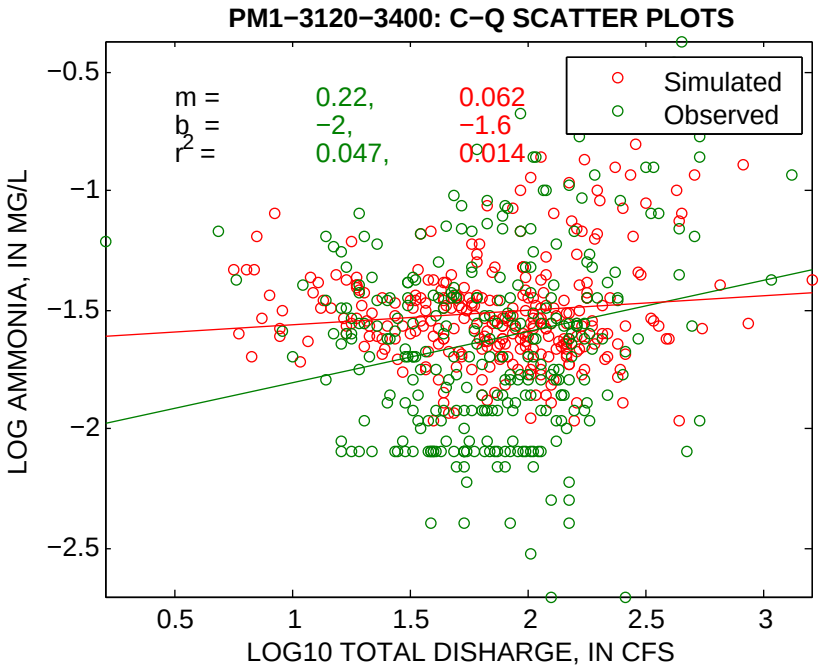
STATISTICS

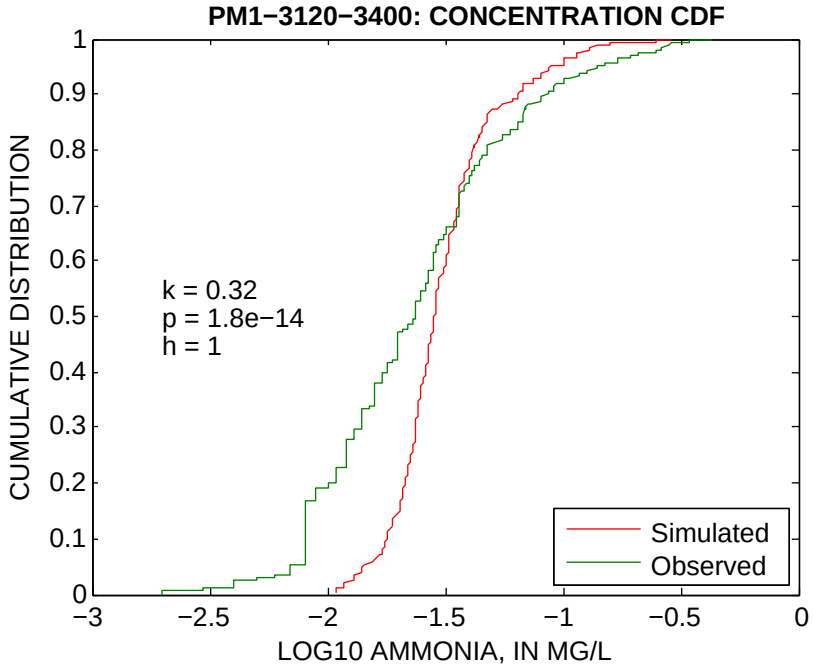
	n	303	303
		observe	simulate
min		0.002	0.012787
		-2.69897	-1.89323
mean		0.0398383	0.0409293
		-1.62086	-1.46594
media		0.024	0.031079
		-1.61979	-1.50753
max		0.43	0.40895
		-0.366532	-0.38833
varian		0.00298928	0.00138884
		0.169849	0.0522323
JB		0.001	0.001
		0.011003	0.001
		ra	log
%		2.73853	-9.558
err.va		0.00333774	0.181415
rel.std.err		1.11657	1.0681
mod.eff		-0.116572	-0.0680963

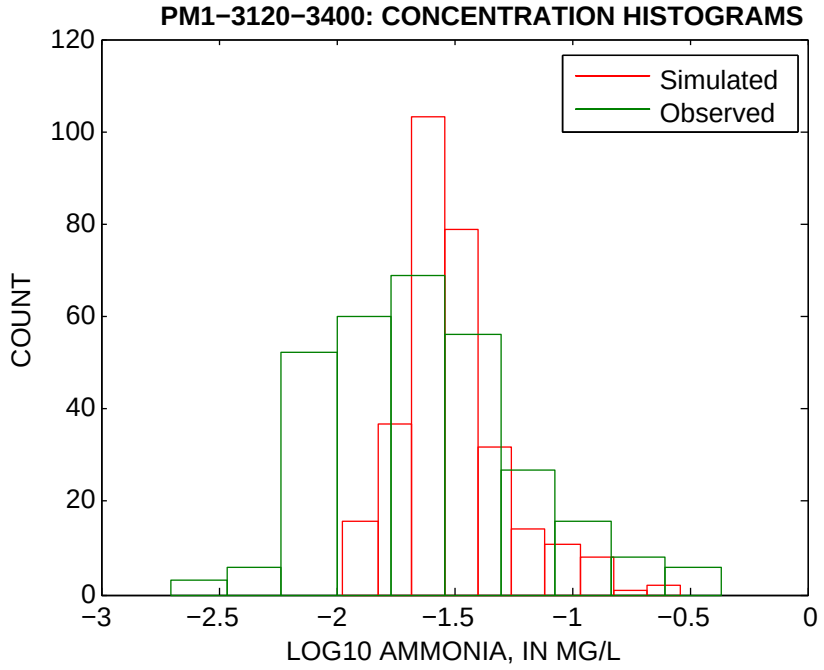
VERSION 2.1

ALL DATA
LOG10

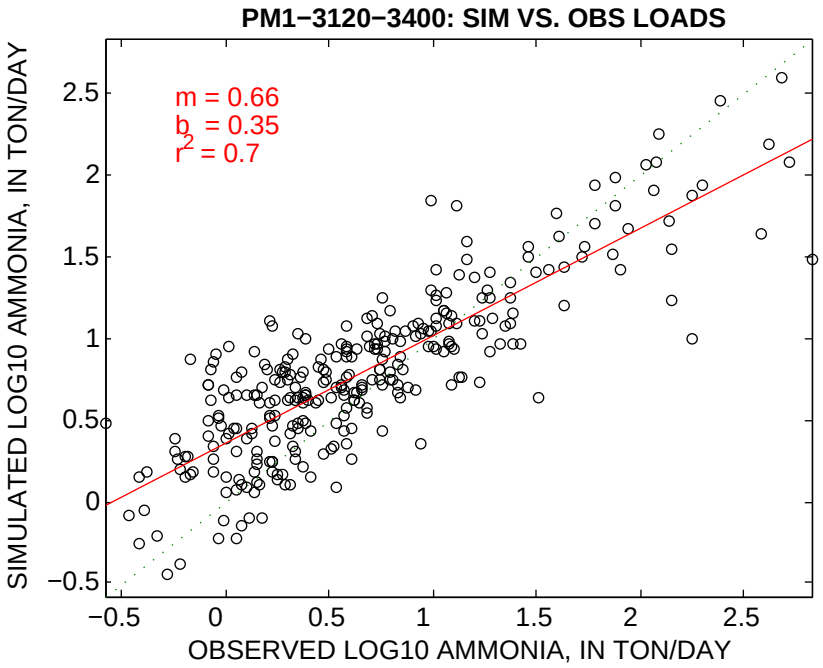


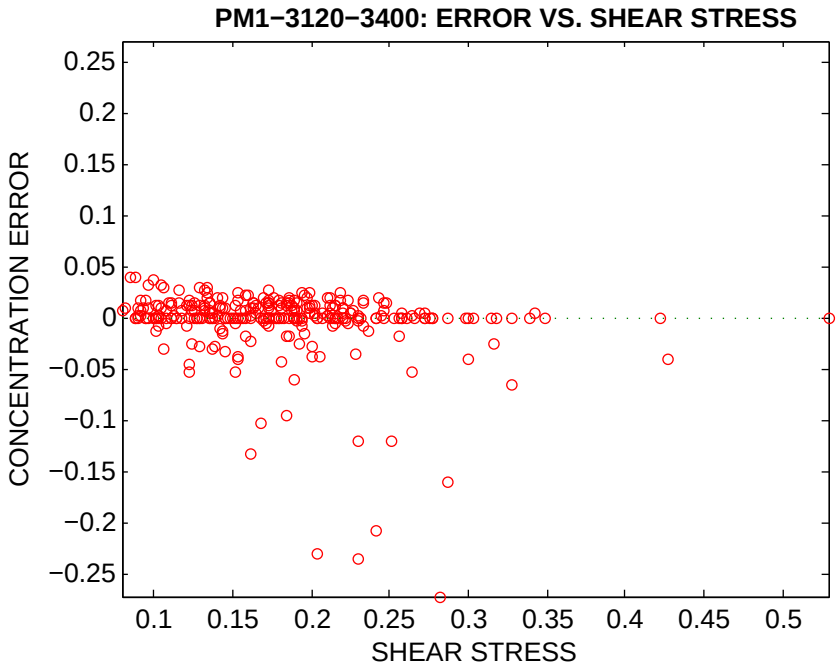


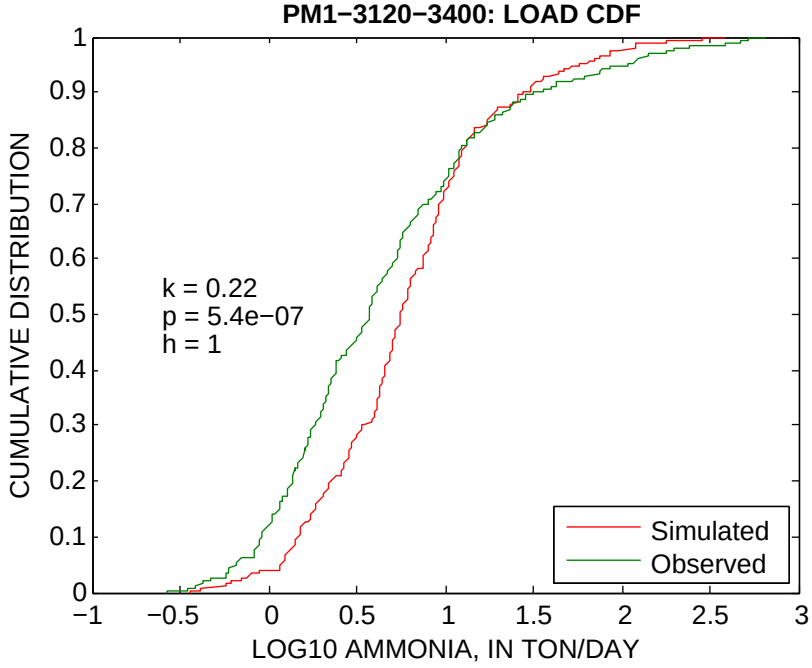


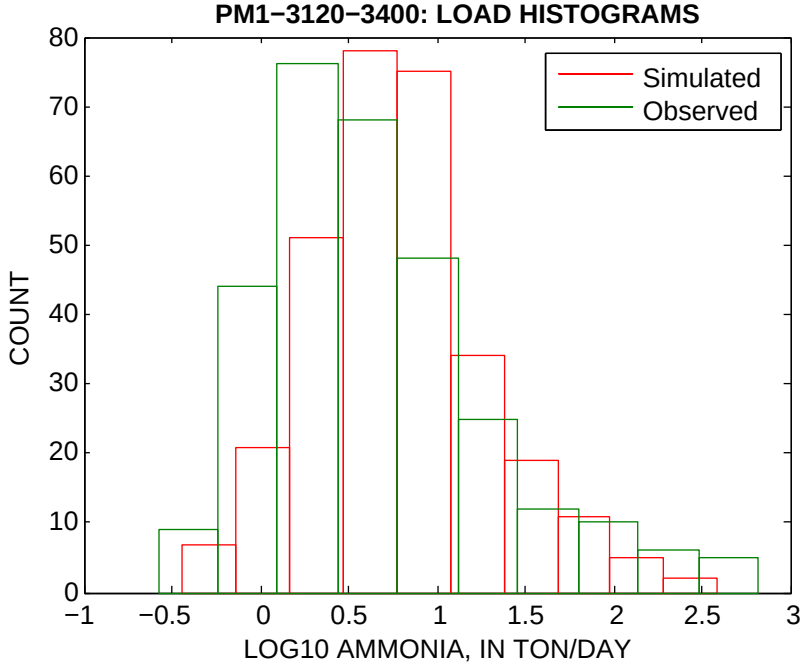


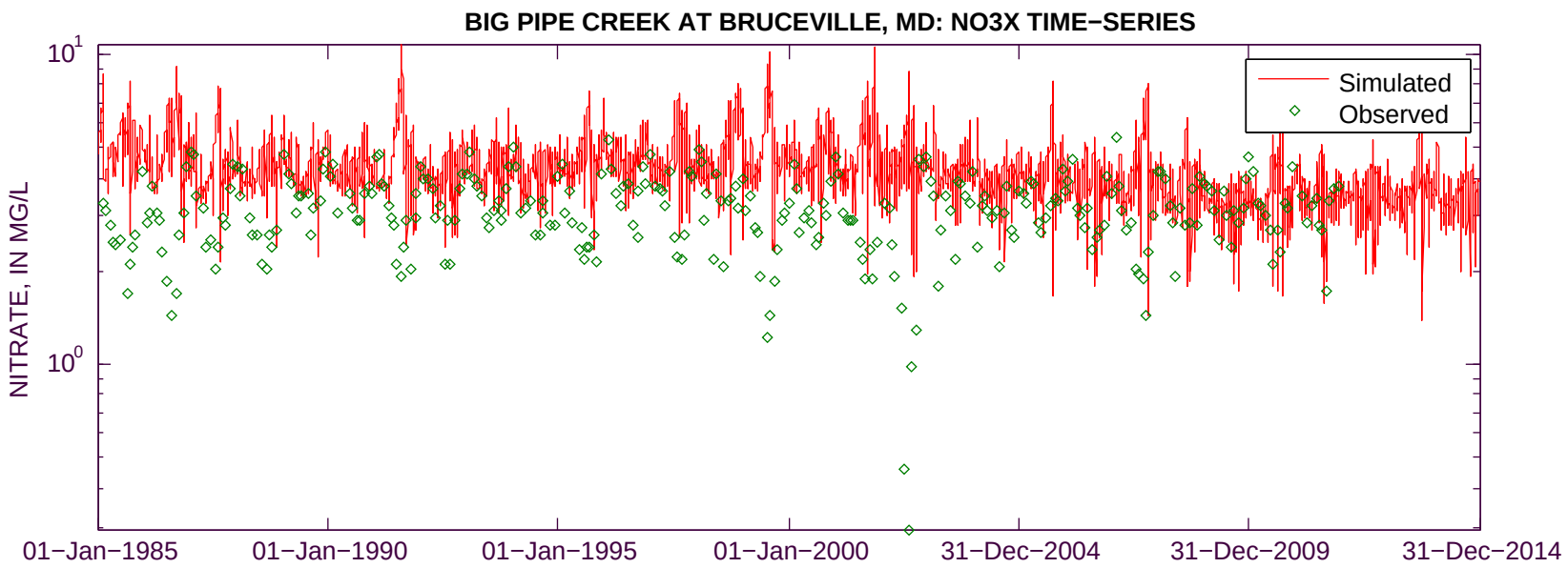
LOAD DATA
LOG10

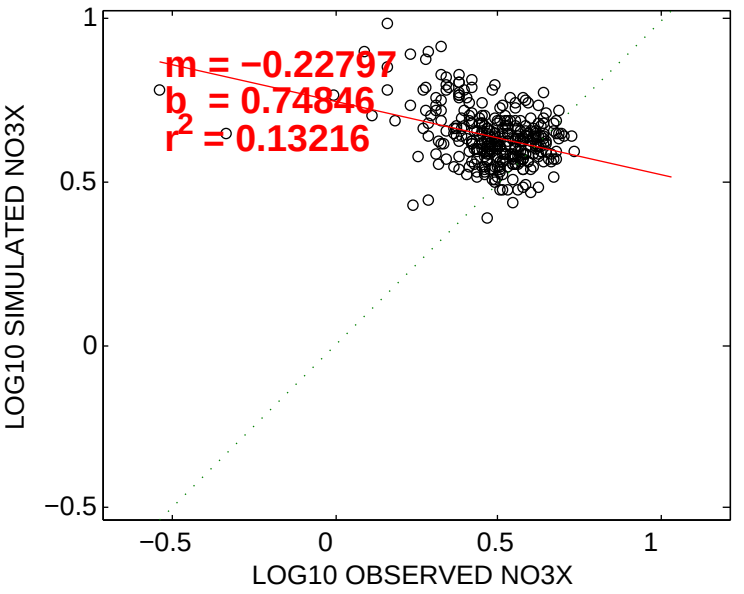


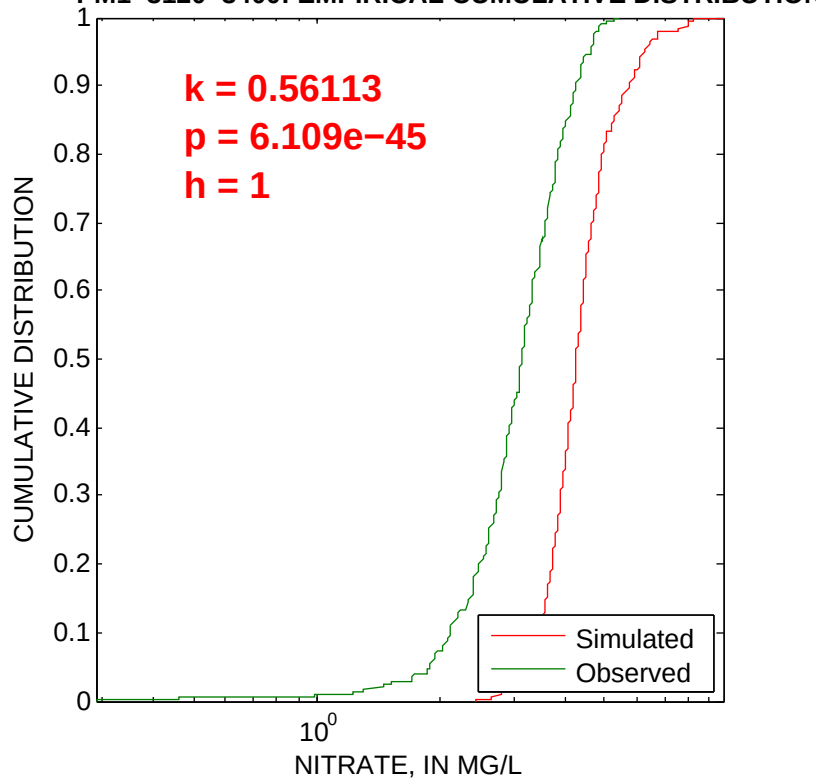












DATA SELECTION

scenario: P620171001WQ | file: NO3X.calib

plot: NO3X - nitrate

Dates: 1/1/1985 – 12/31/201

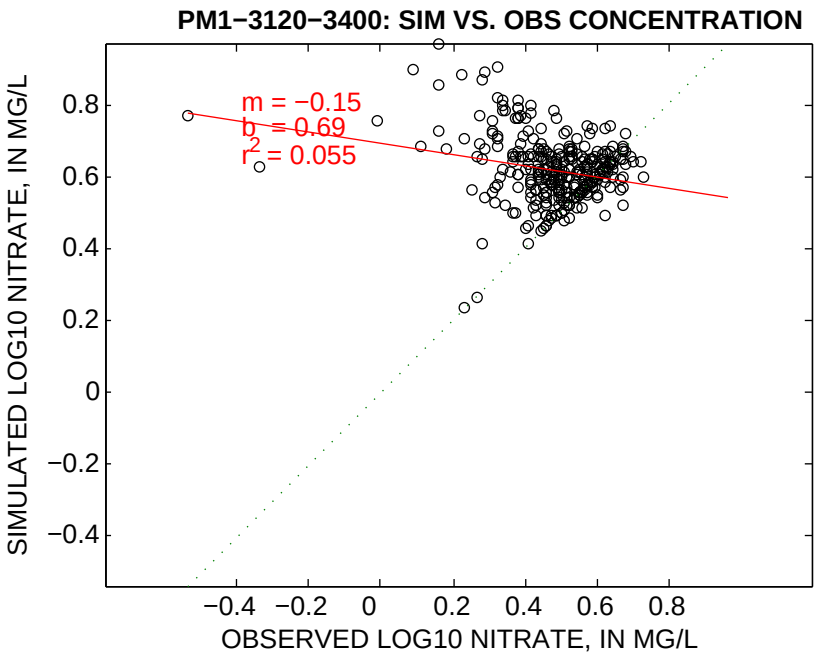
Drive: N/A | Directory: model | Observed: OBS20161101

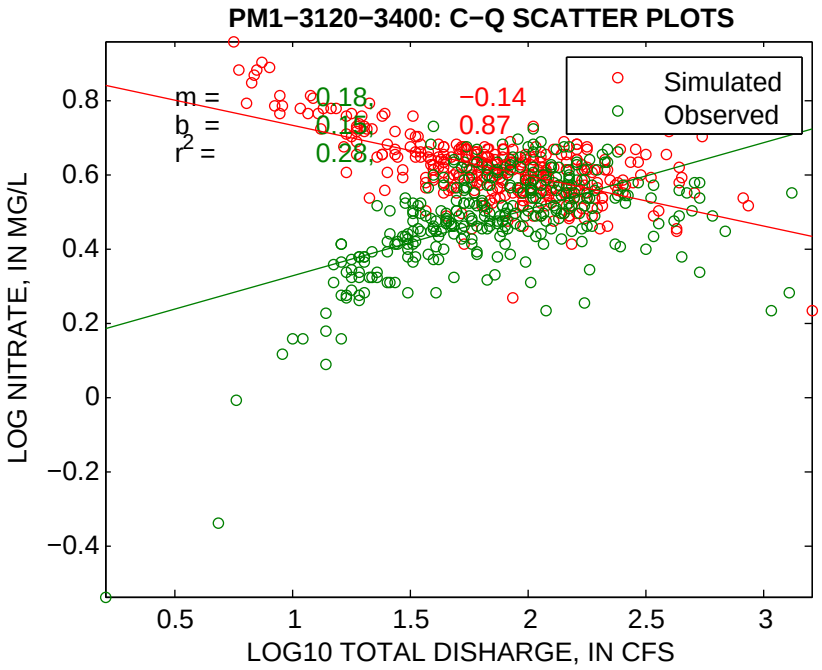
STATISTICS

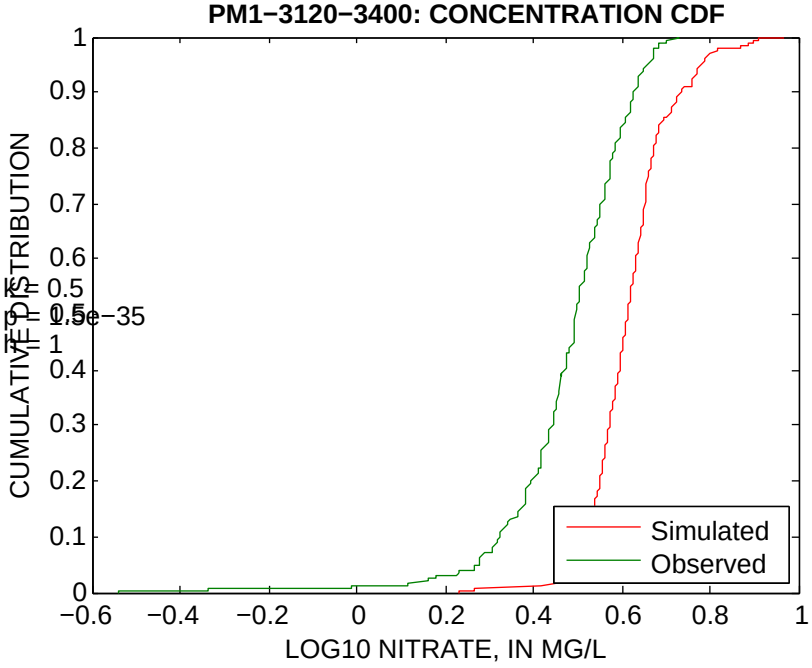
	n	319	319
		observe	simulate
min		0.29	2.4452
		-0.537602	0.388314
mean		3.16882	4.4418
		0.482506	0.638459
media		3.14	4.2581
		0.49693	0.629216
max		5.4	9.6828
		0.732394	0.986001
varian		0.68928	0.937072
		0.0192694	0.00757784
JB		0.481274	0.001
		0.001	0.001
		ra	log
%		40.1719	32.3214
err.va		3.84839	0.0600308
rel.std.err		5.5832	3.11534
mod.eff		-4.5832	-2.11534

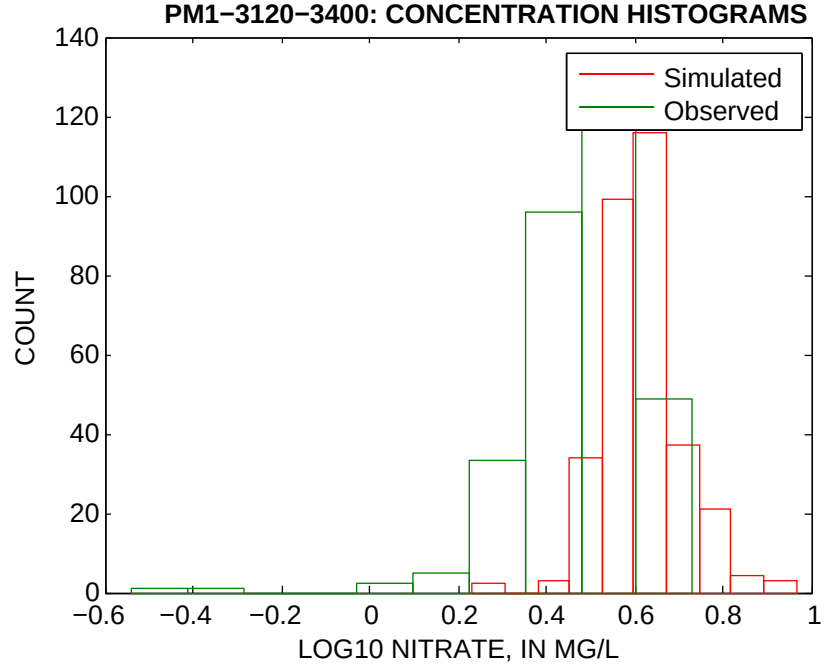
VERSION 2.1

ALL DATA
LOG10

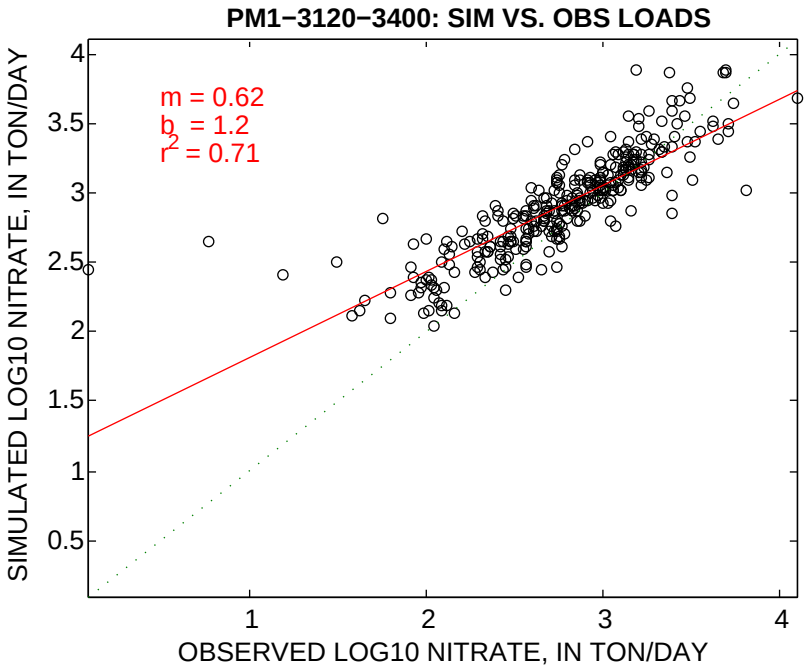


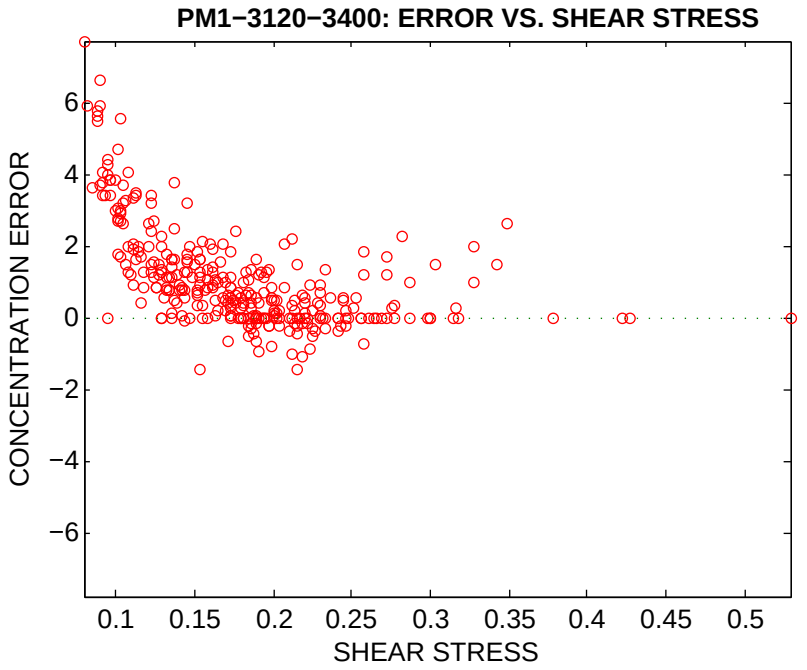


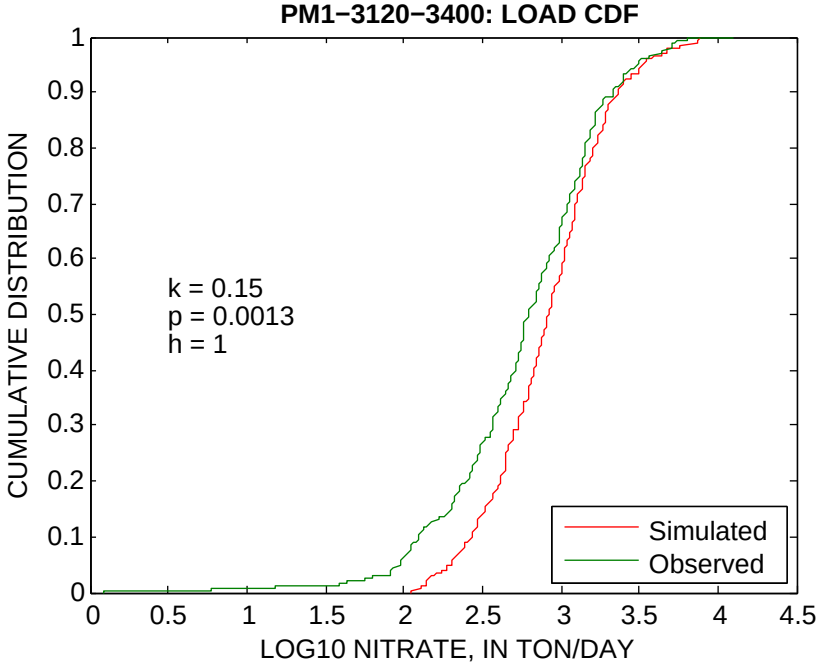


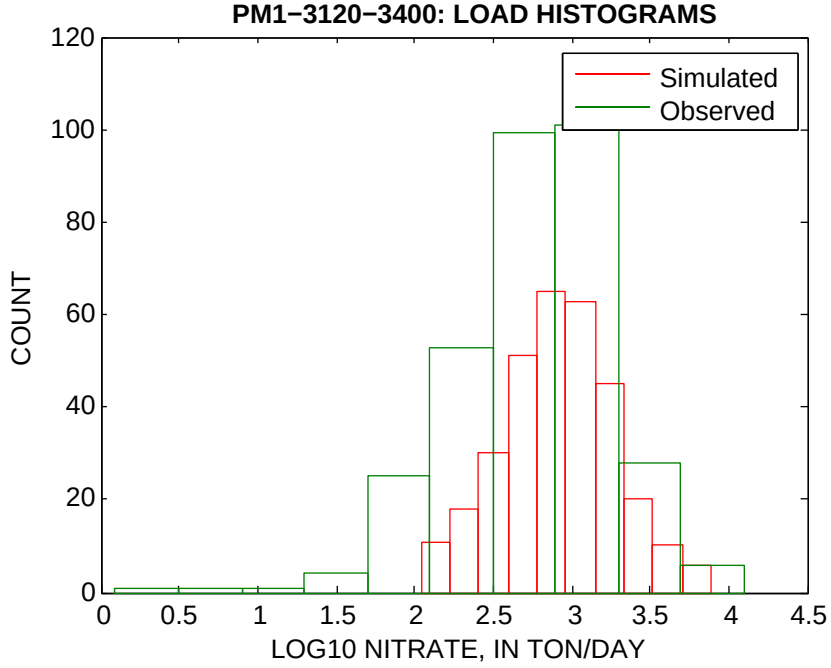


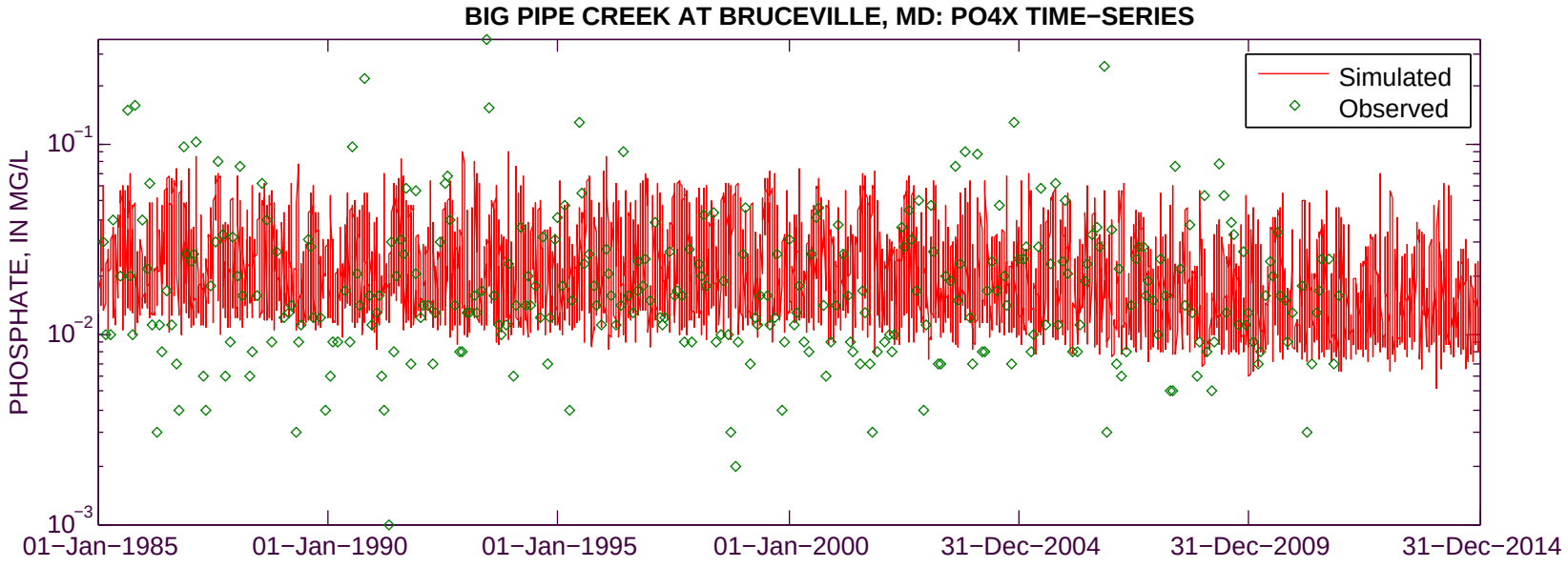
LOAD DATA
LOG10

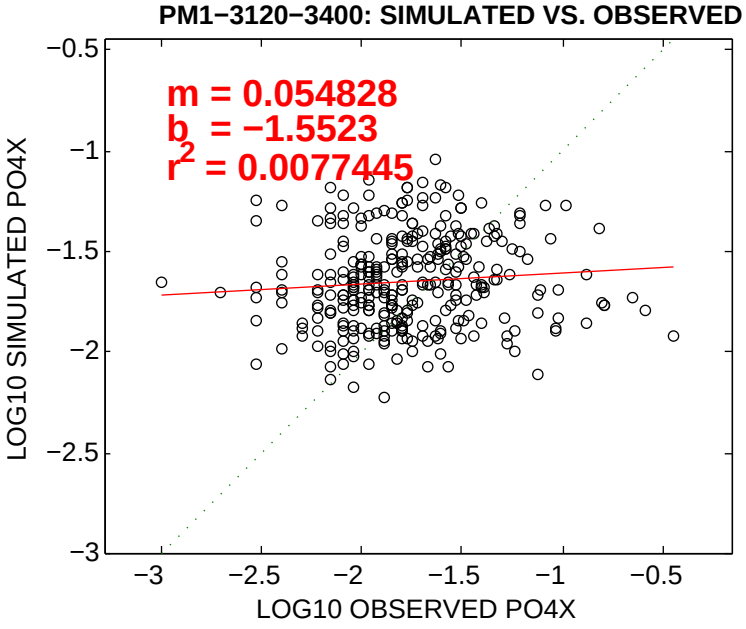


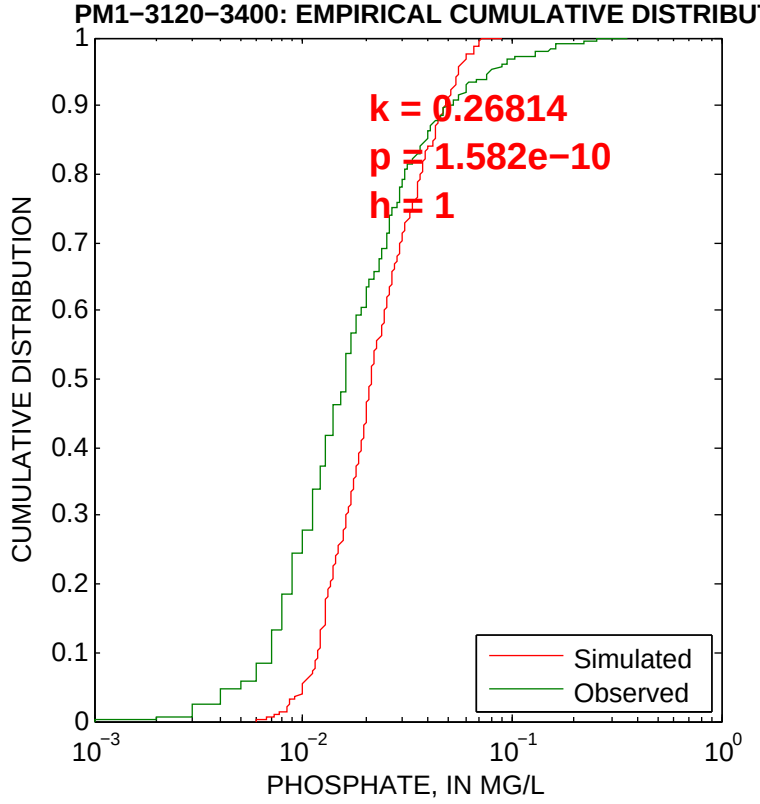












DATA SELECTION

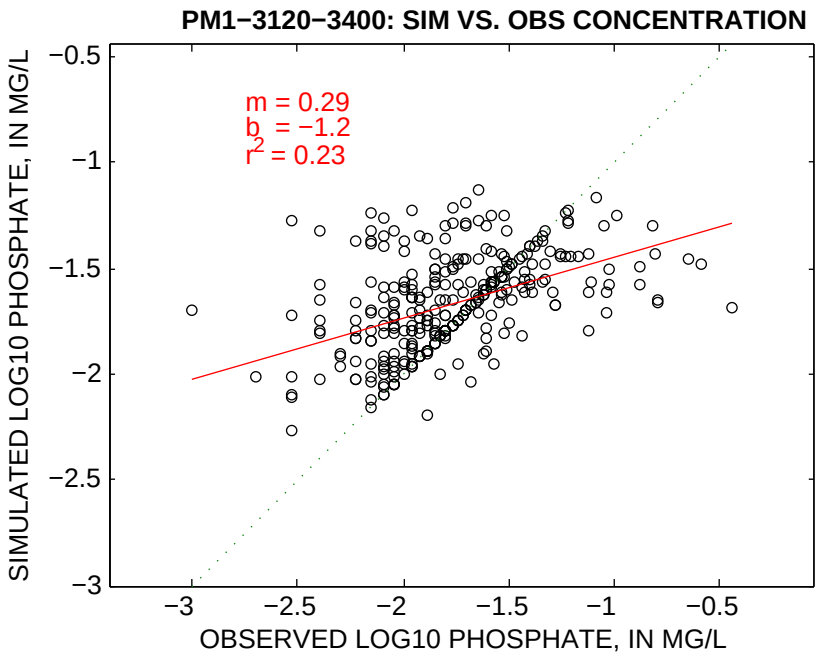
scenario: P620171001WQ
file: PO4X.calib
plot: PO4X - phosphate
Dates: 1/1/1985 – 12/31/201
Drive: N/A
Directory: model
Observed: OBS20161101

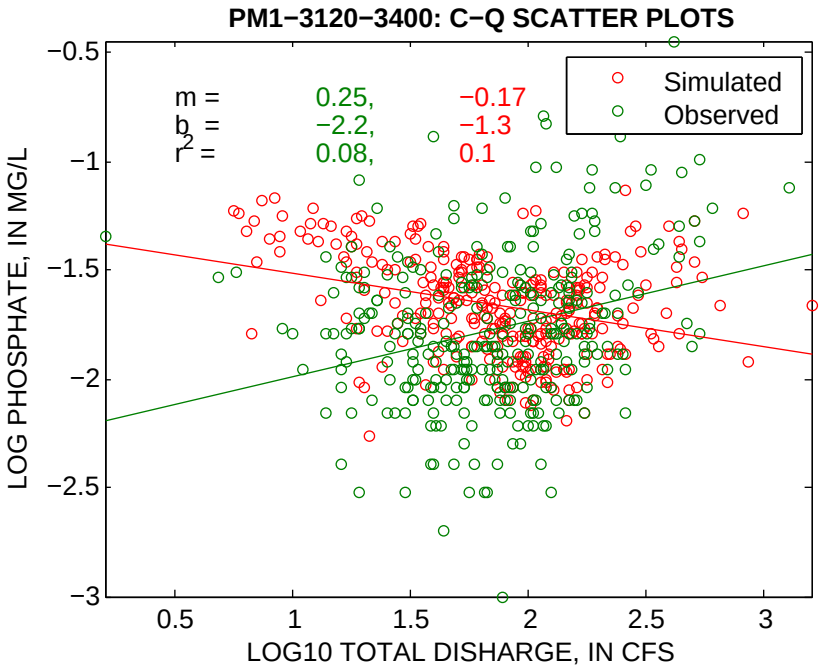
STATISTICS

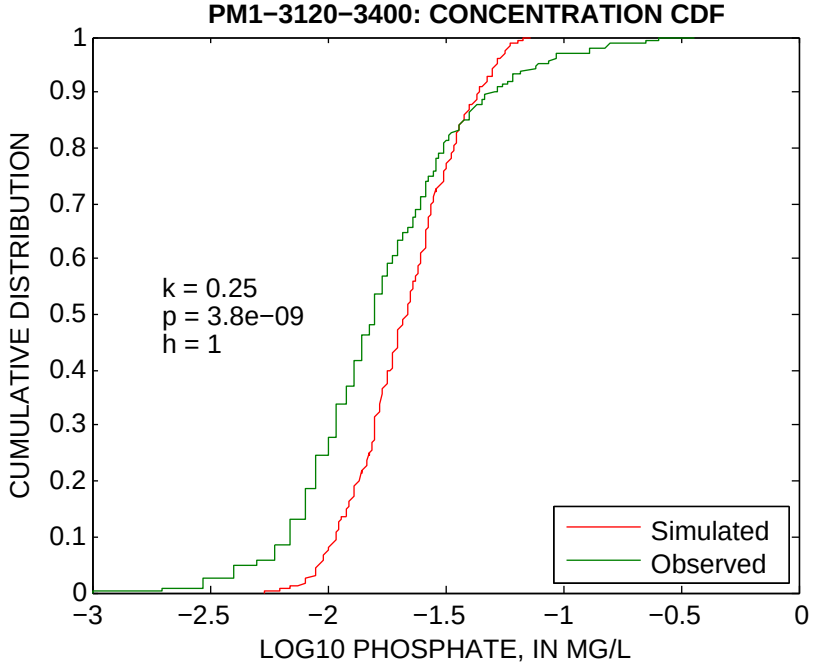
	observe	simulate
n	317	317
min	0.001 -3	0.0059285 -2.22706
mean	0.026 -1.76829	0.0258456 -1.64926
media	0.016 -1.79588	0.021401 -1.66957
max	0.359 -0.444906	0.089649 -1.04745
varian	0.00126044 0.136023	0.00021159 0.0527979
JB	0.001 0.001254	0.001 0.036993
	ra	log
%	-0.593958	-6.73117
err.va	0.00149905	0.188117
rel.std.err	1.18931	1.38298
mod.eff	-0.189309	-0.382983

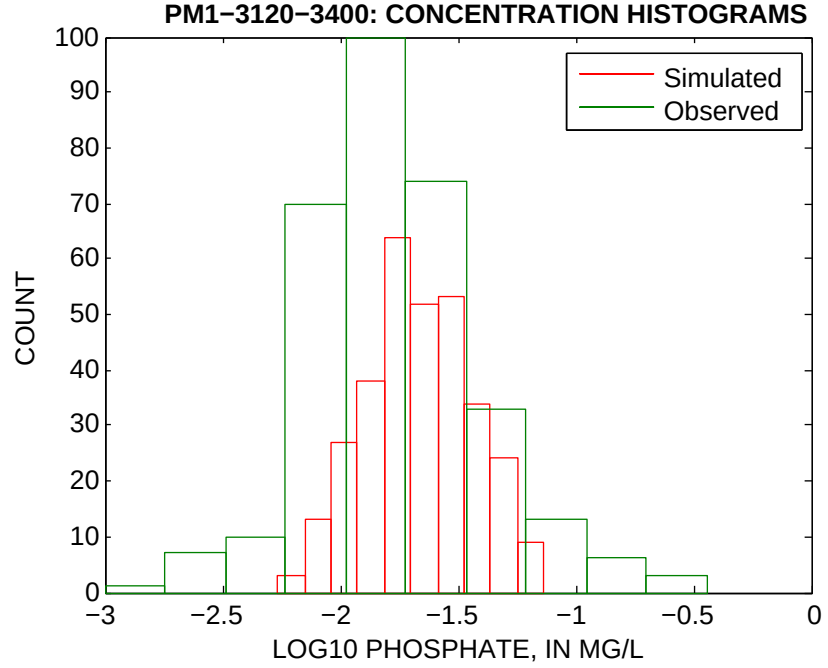
VERSION 2.1

ALL DATA
LOG10

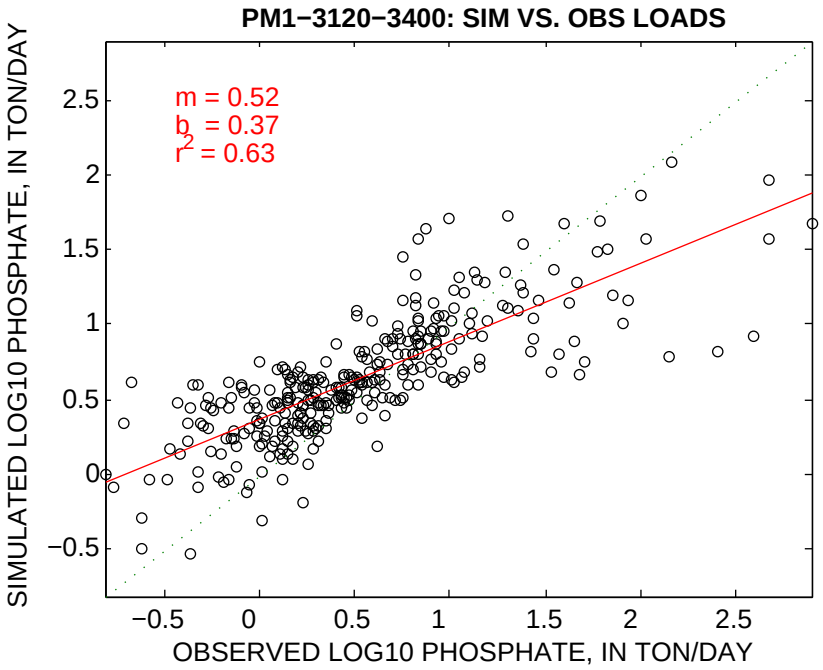


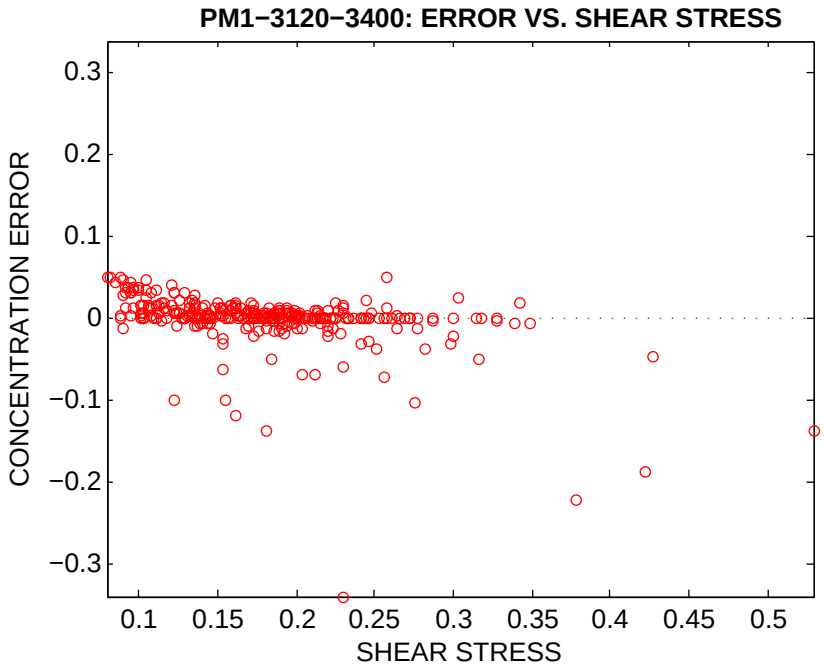


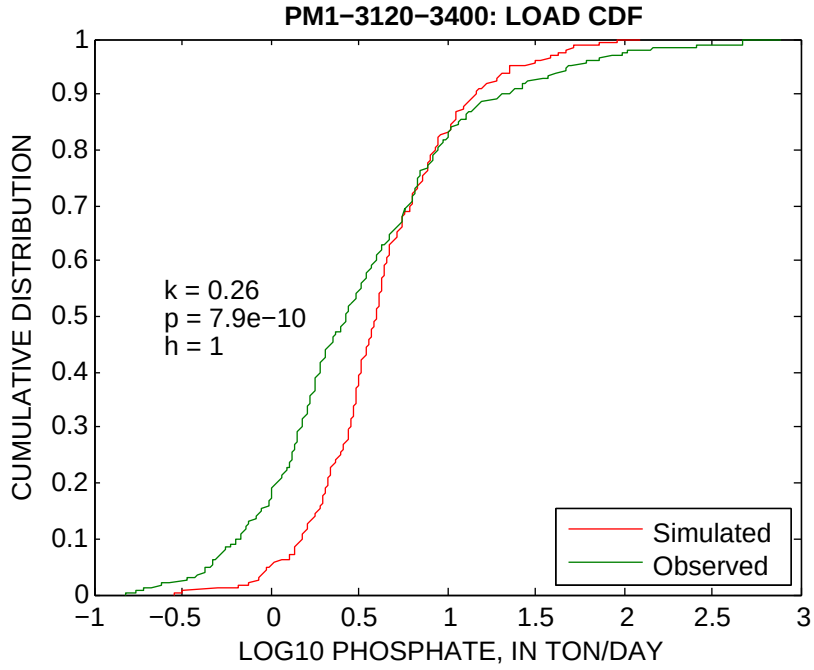


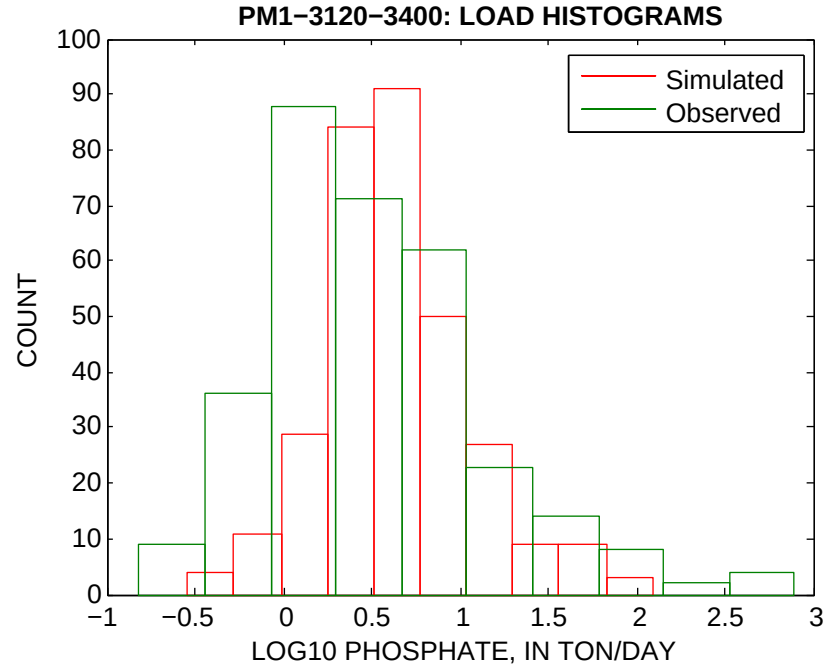


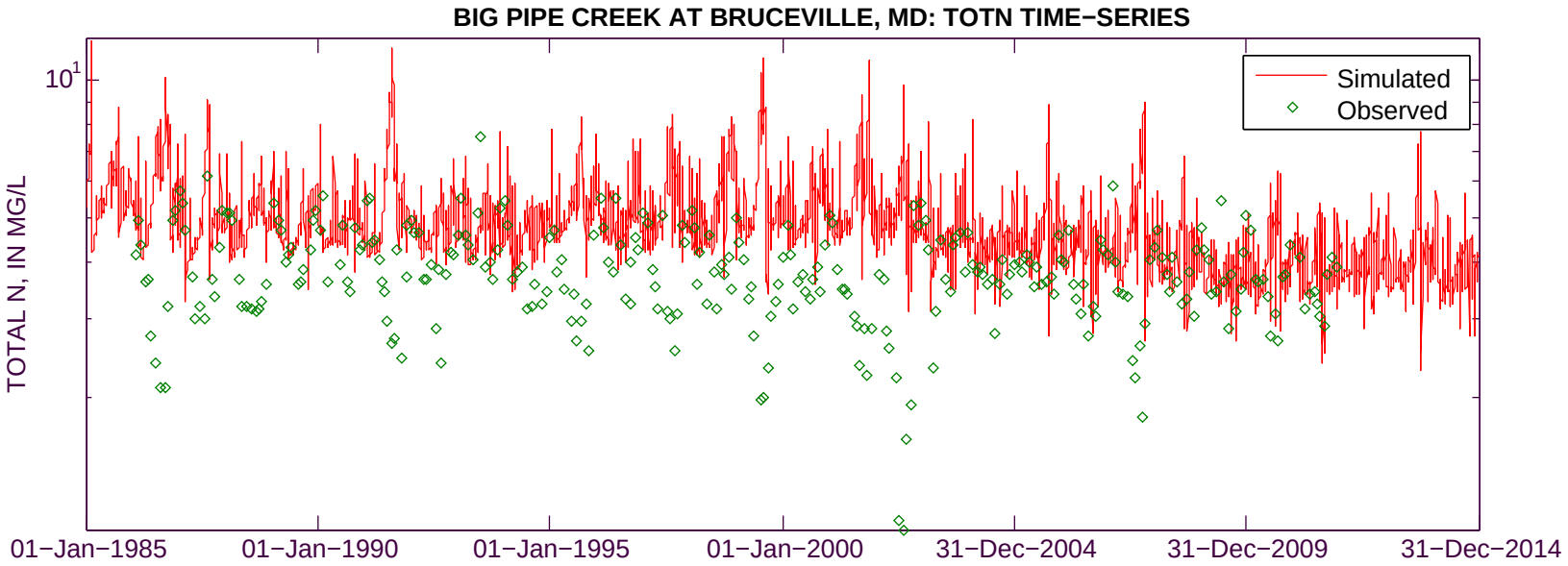
LOAD DATA
LOG10

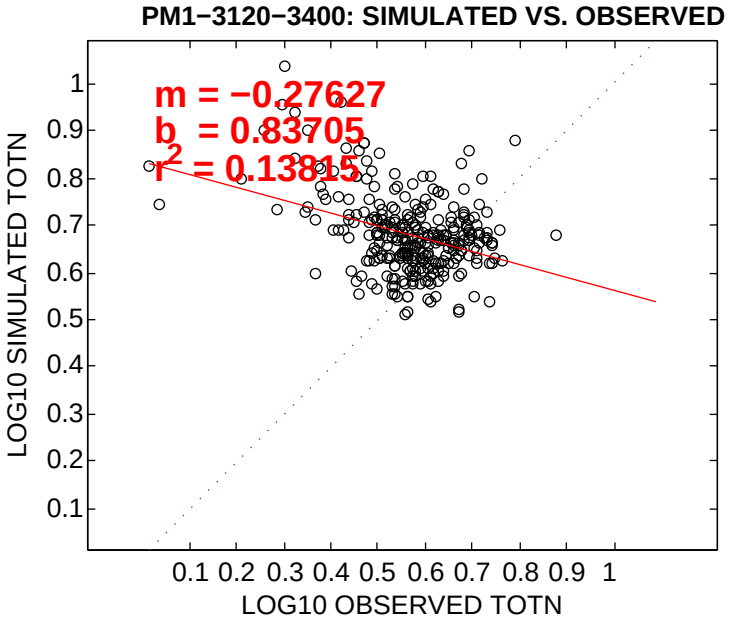


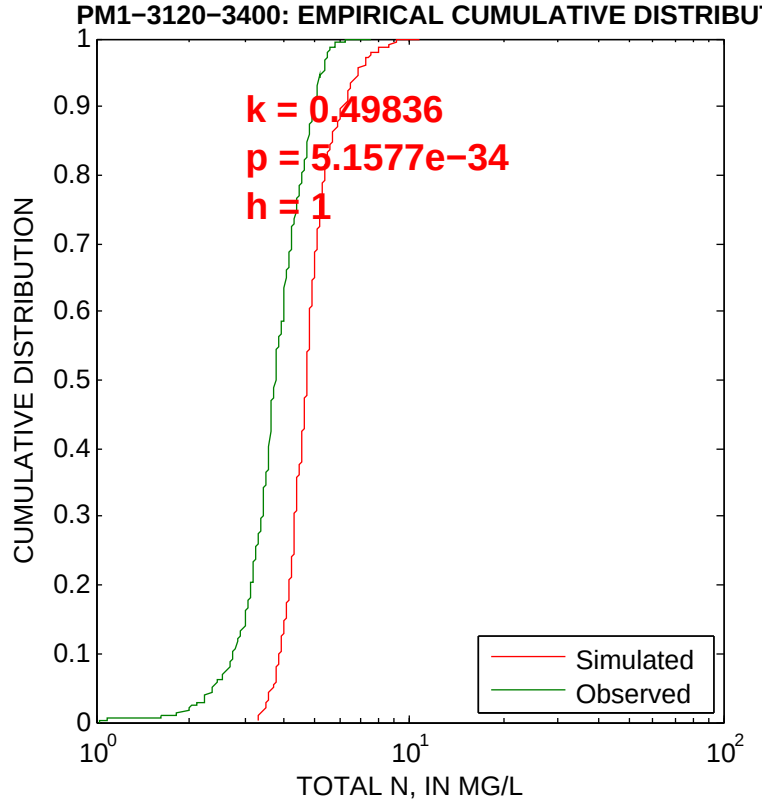












DATA SELECTION

scenario: P620171001WQ | file: TOTN.calib

plot: TOTN - total nitrogen

Dates: 1/1/1985 – 12/31/201

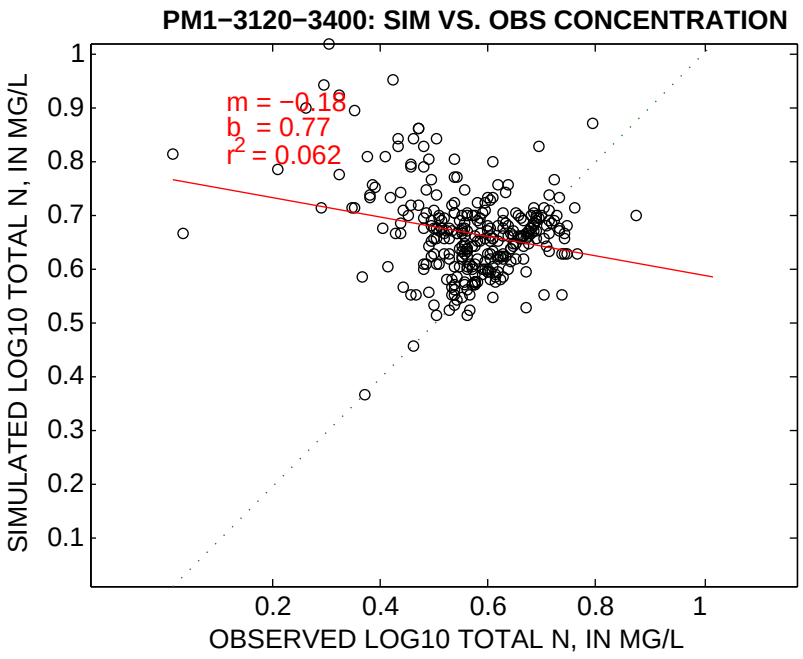
Drive: N/A | Directory: model | Observed: OBS20161101

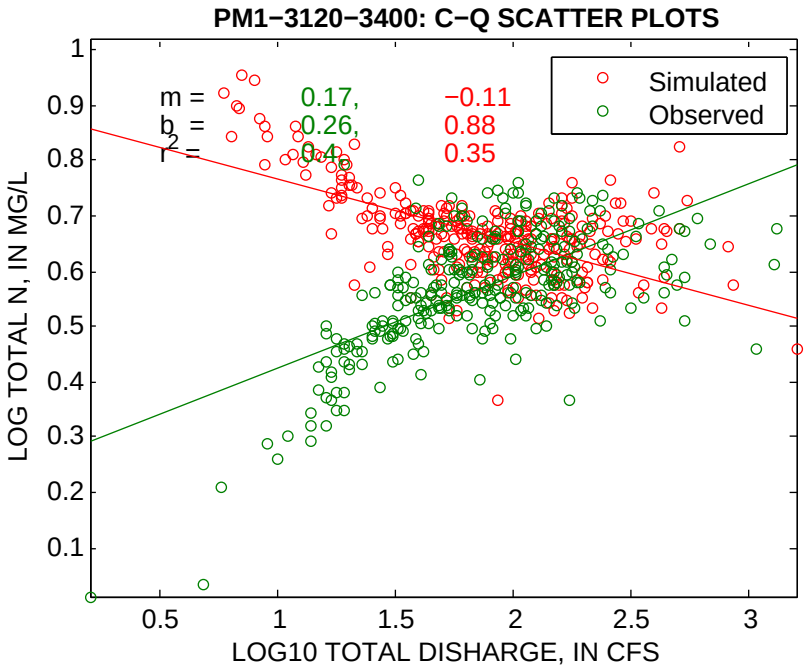
STATISTICS

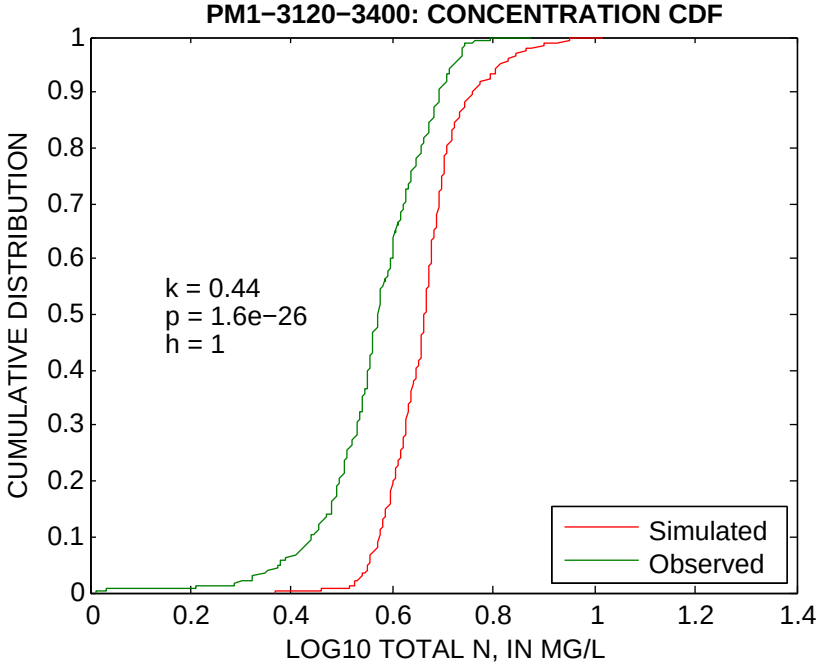
n	305	305
	observe	simulate
min	1.03	3.2616
	0.0128372	0.513431
mean	3.8085	4.87693
	0.568105	0.680099
media	3.74997	4.7086
	0.574028	0.672892
max	7.51	10.842
	0.87564	1.03511
varian	0.772317	1.03221
	0.0119234	0.00658725
JB	0.010095	0.001
	0.001	0.001
	ra	log
%	28.0537	19.7136
err.va	3.5459	0.0376826
rel.std.err	4.59125	3.1604
mod.eff	-3.59125	-2.1604

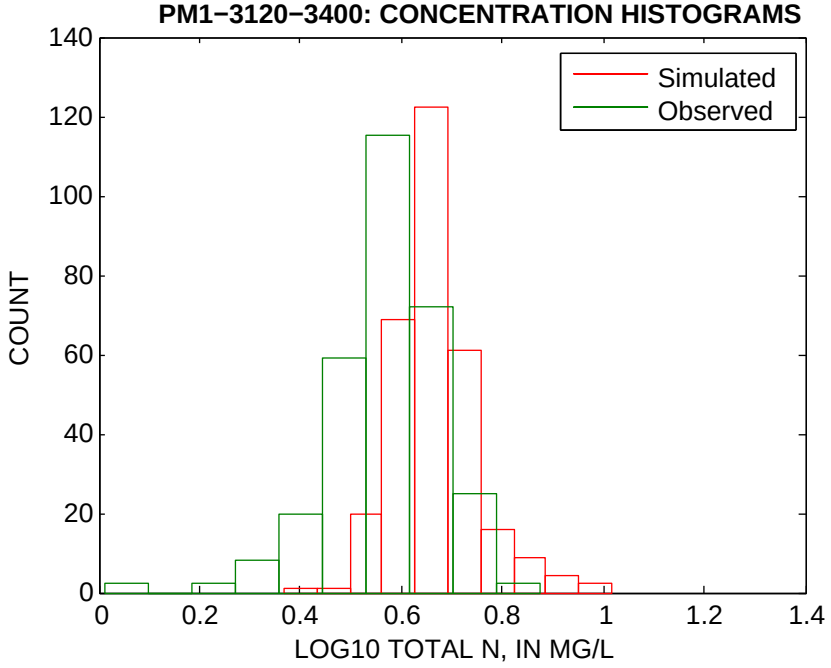
VERSION 2.1

ALL DATA
LOG10

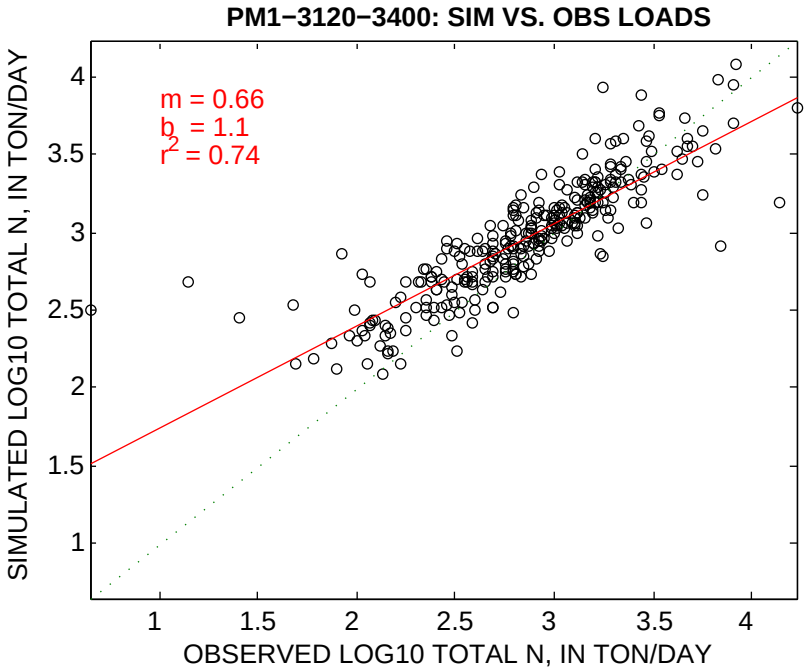


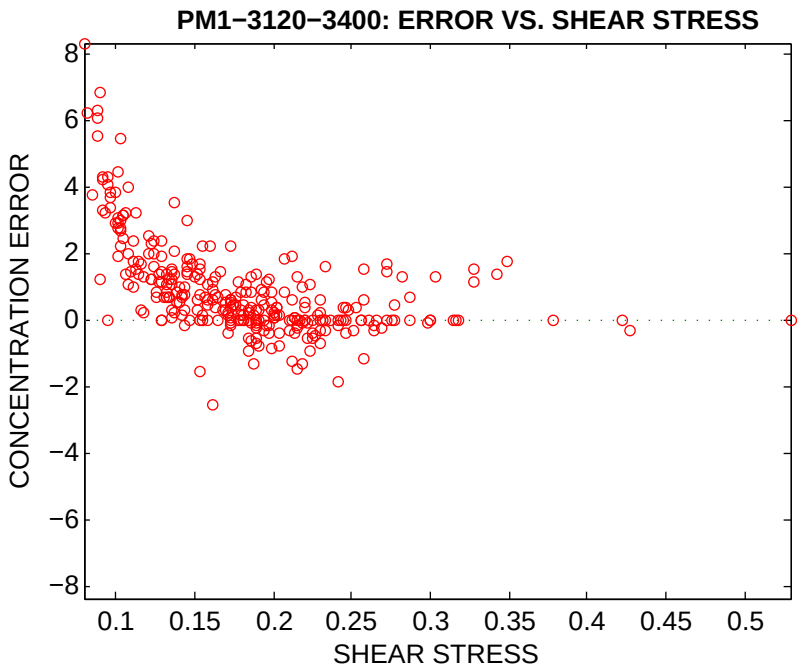


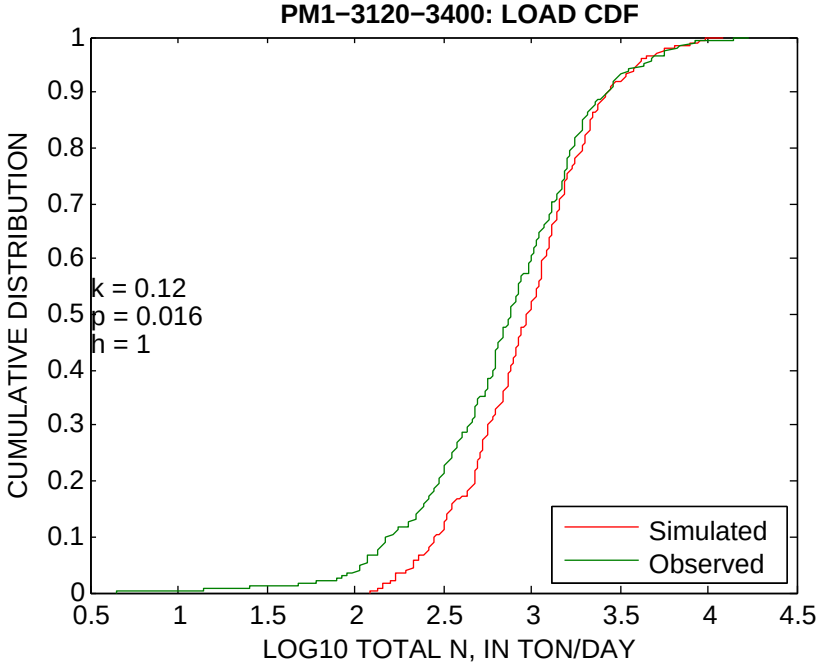


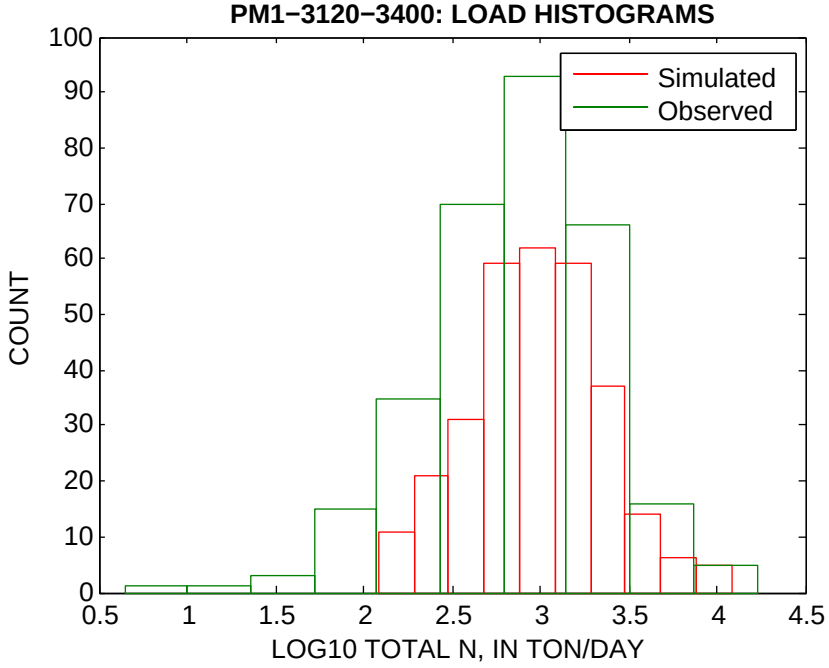


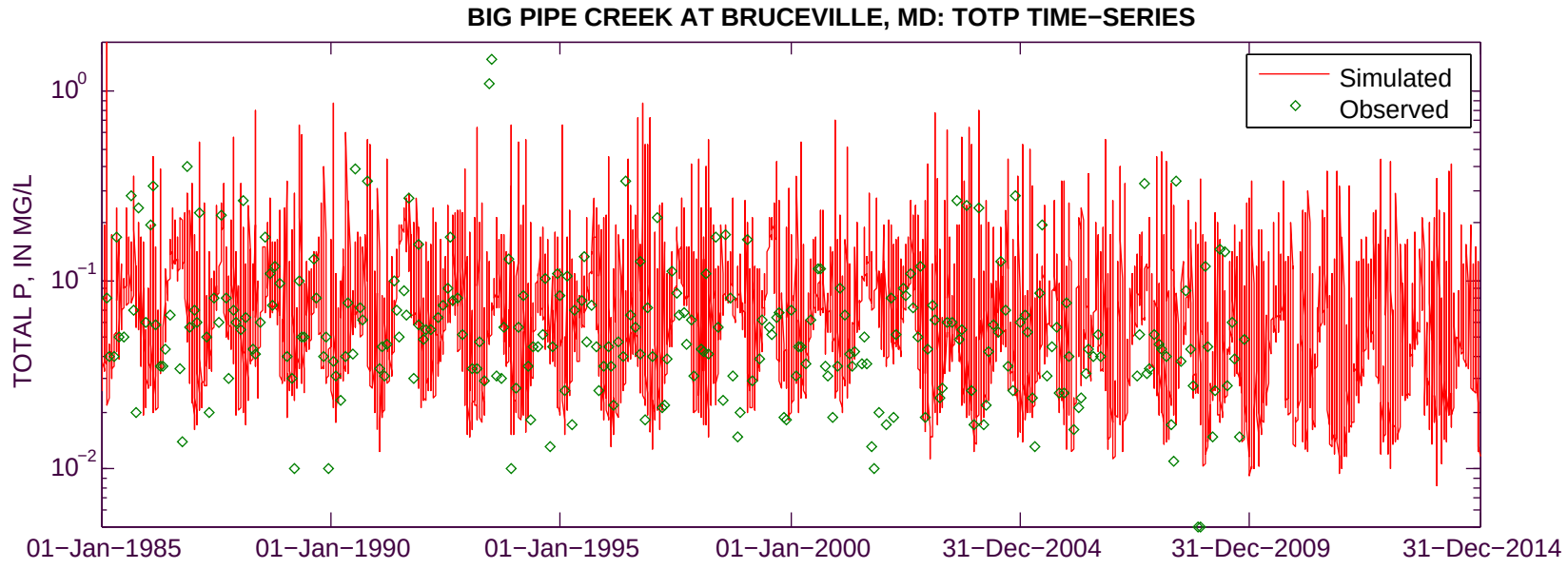
LOAD DATA
LOG10

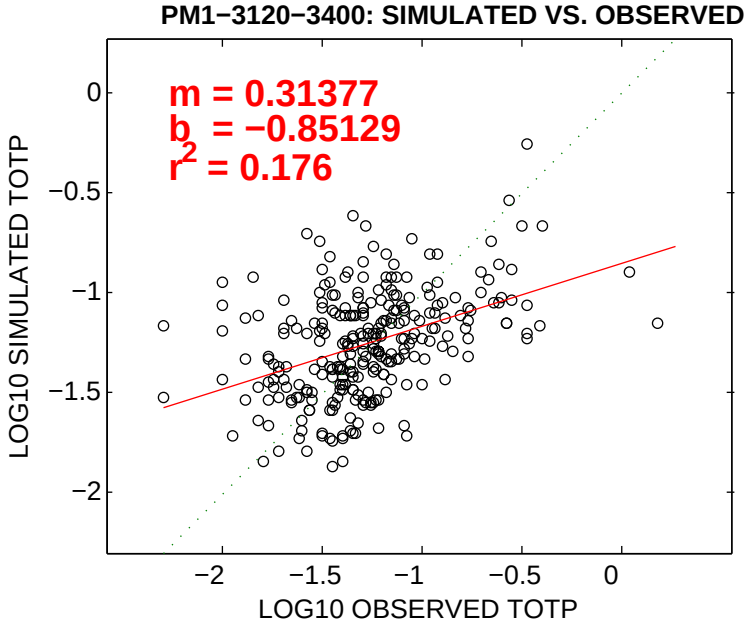


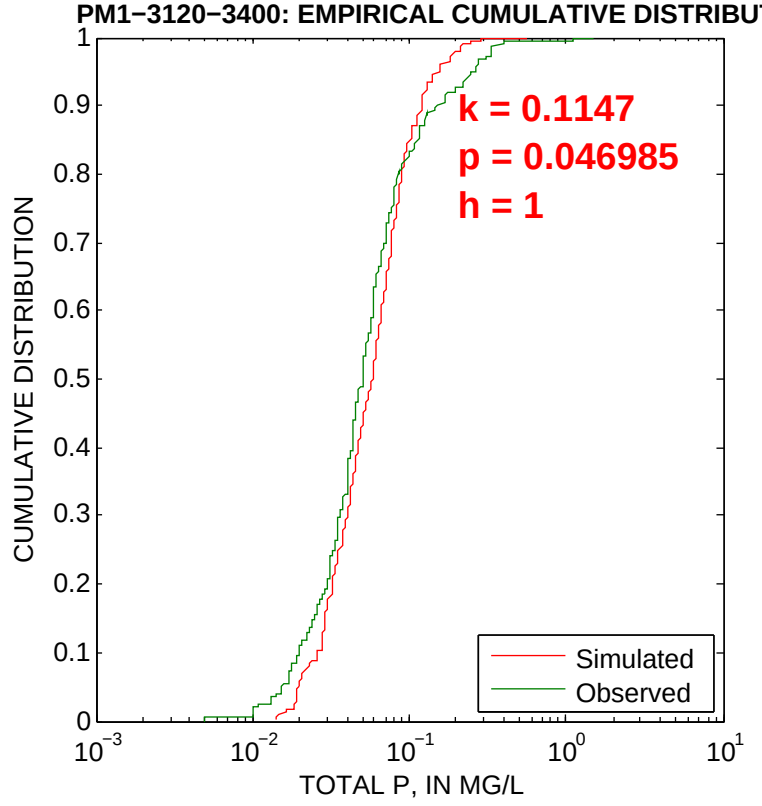












DATA SELECTION

scenario: P620171001WQ | file: TOTP.calib

plot: TOTP - total phosphorus

Dates: 1/1/1985 – 12/31/201

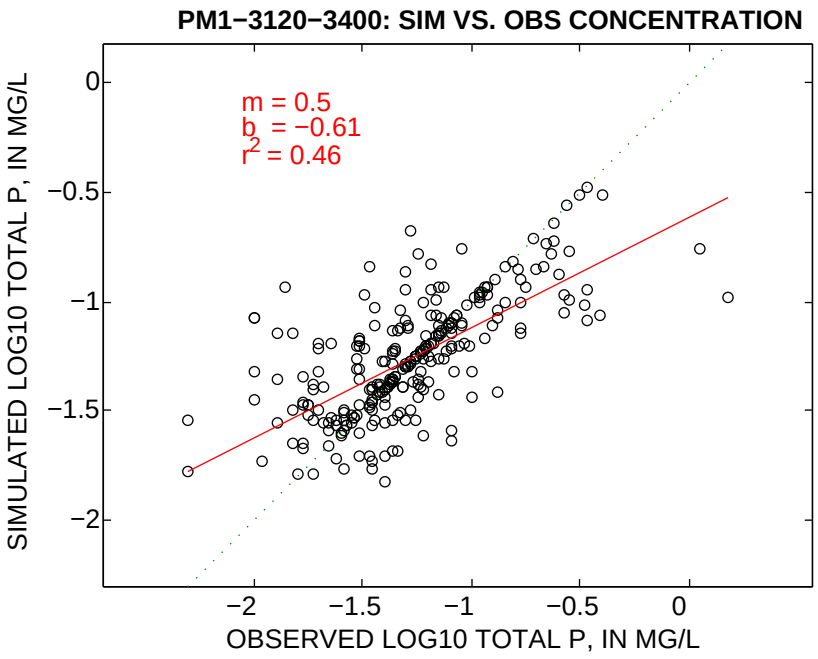
Drive: N/A | Directory: model | Observed: OBS20161101

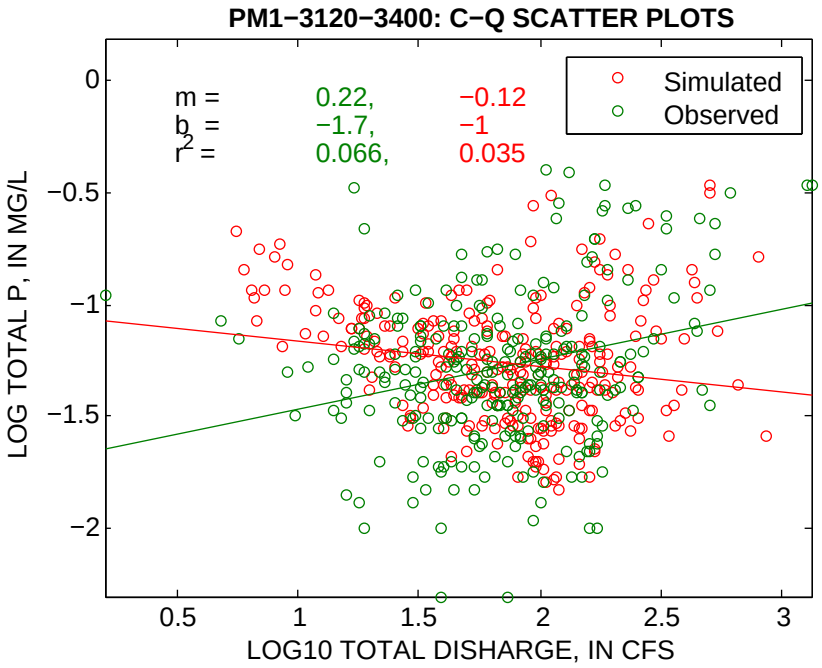
STATISTICS

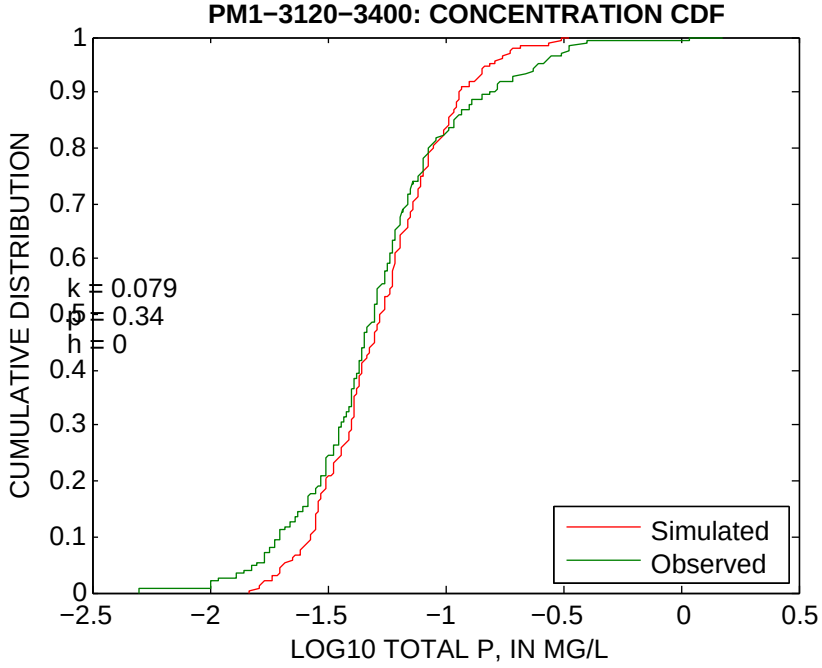
n	279	279
	observe	simulate
min	0.005	0.013632
	-2.30103	-1.86544
mean	0.0793978	0.0678547
	-1.27904	-1.25262
media	0.05	0.058726
	-1.30103	-1.23117
max	1.5	0.55834
	0.176091	-0.253101
varian	0.0157732	0.00265126
	0.125119	0.0699896
JB	0.001	0.001
	0.001	0.334982
	ra	log
%	-14.5383	-2.06557
err.va	0.0149356	0.117291
rel.std.err	0.946898	0.937434
mod.eff	0.0531023	0.0625655

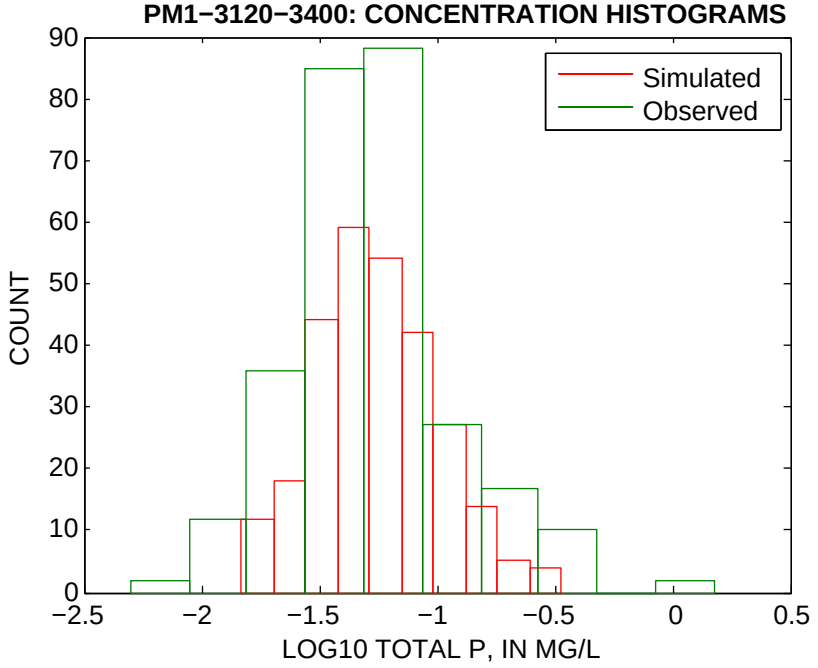
VERSION 2.1

ALL DATA
LOG10

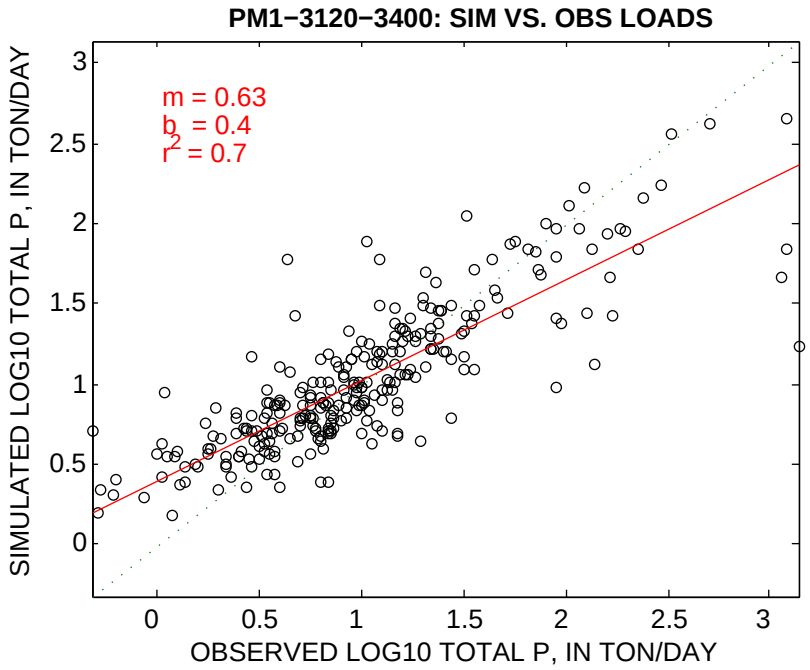


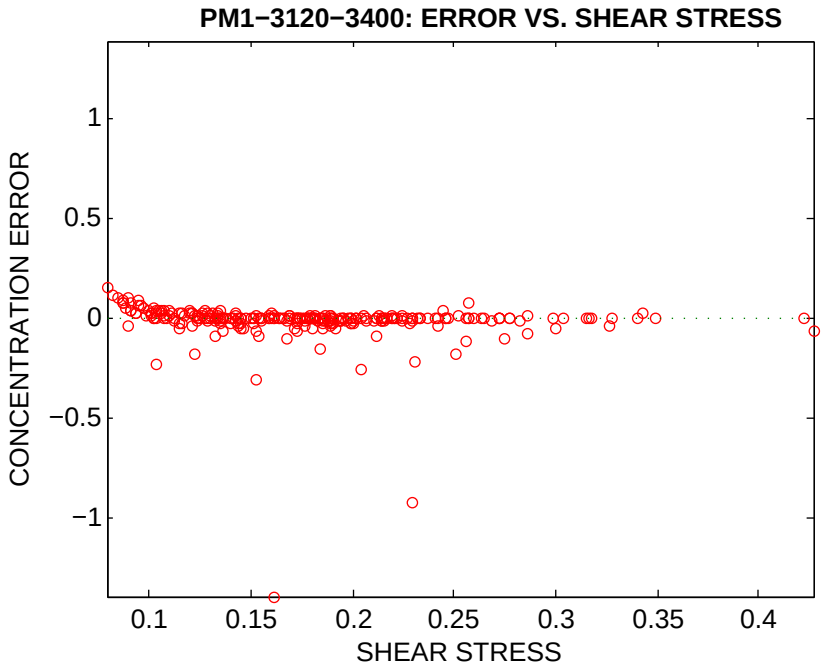


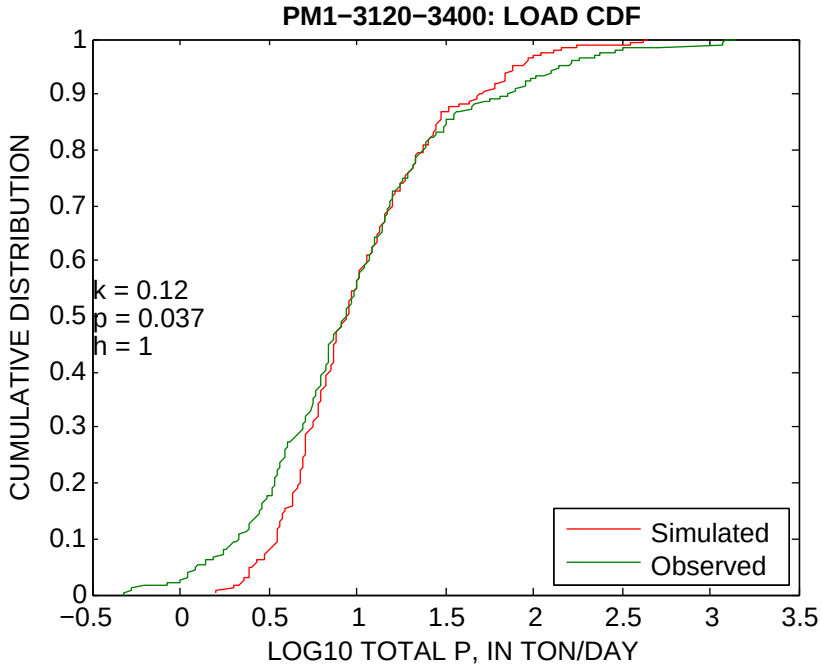


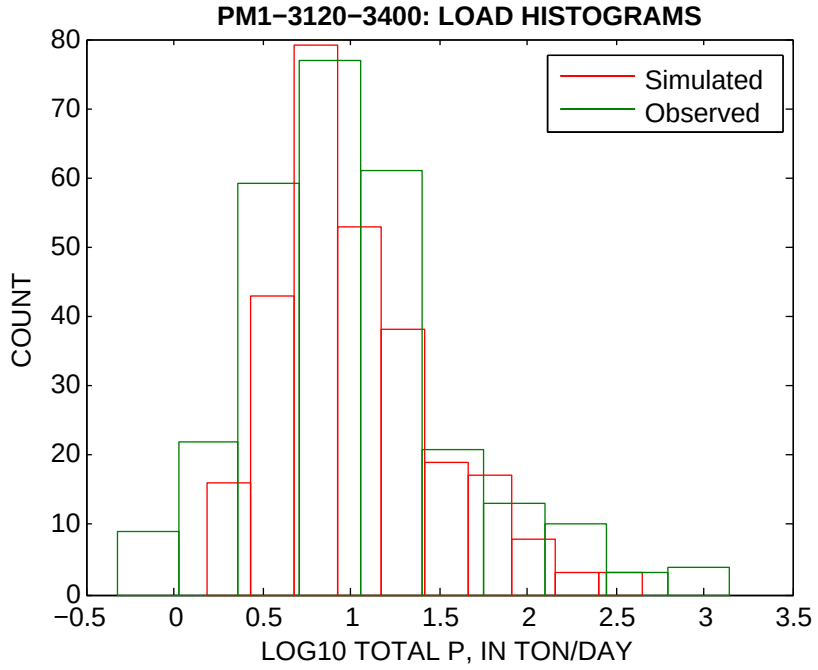


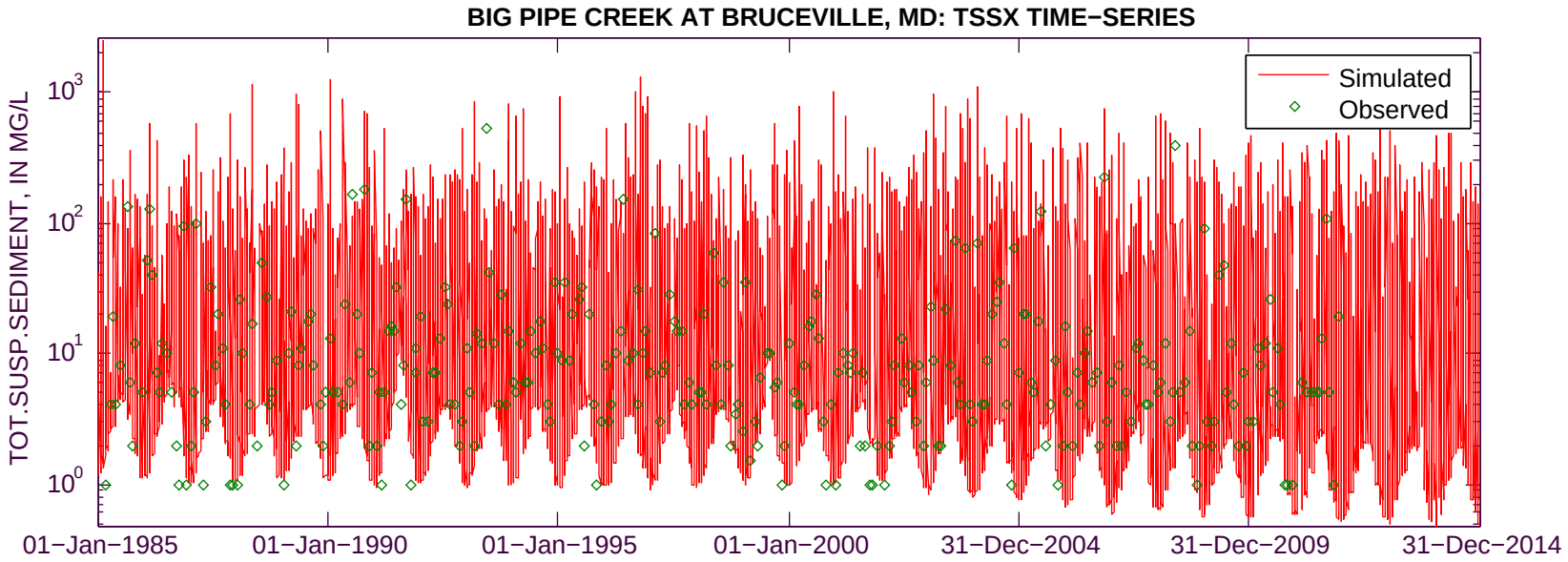
LOAD DATA
LOG10

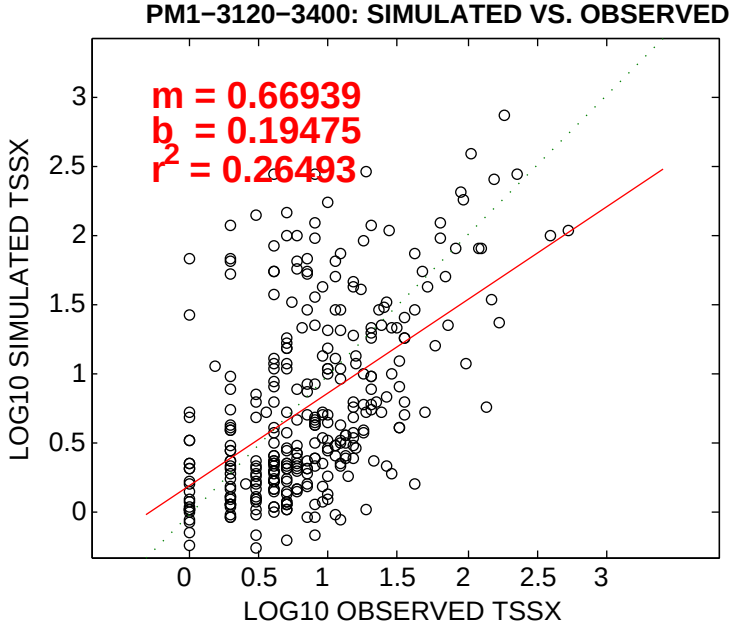


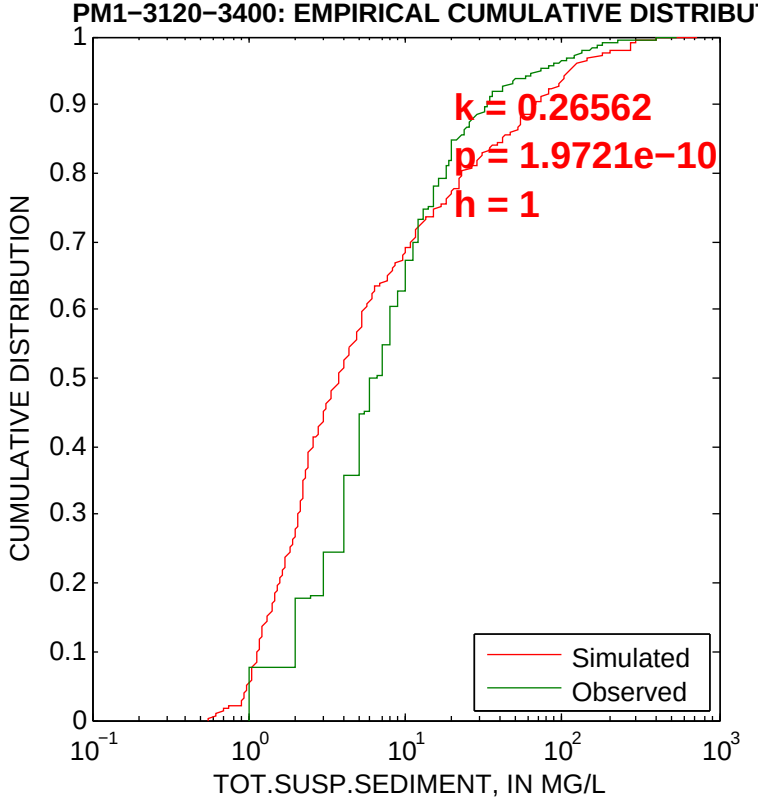












DATA SELECTION

scenario	file
P620171001WQ	TSSX.calib

plot: TSSX - total suspended ...

Dates: 1/1/1985 – 12/31/201

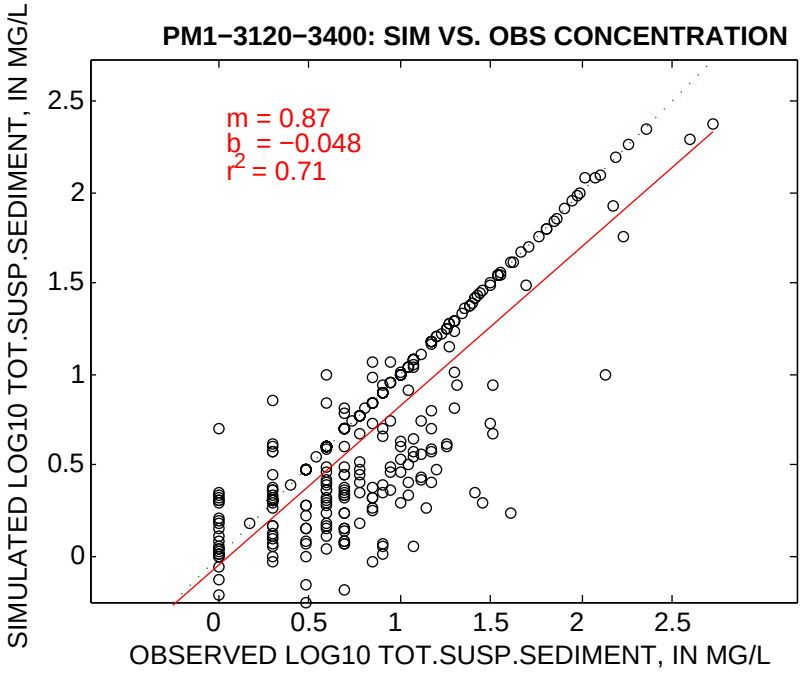
Drive	Directory	Observed
N/A	model	OBS20161101

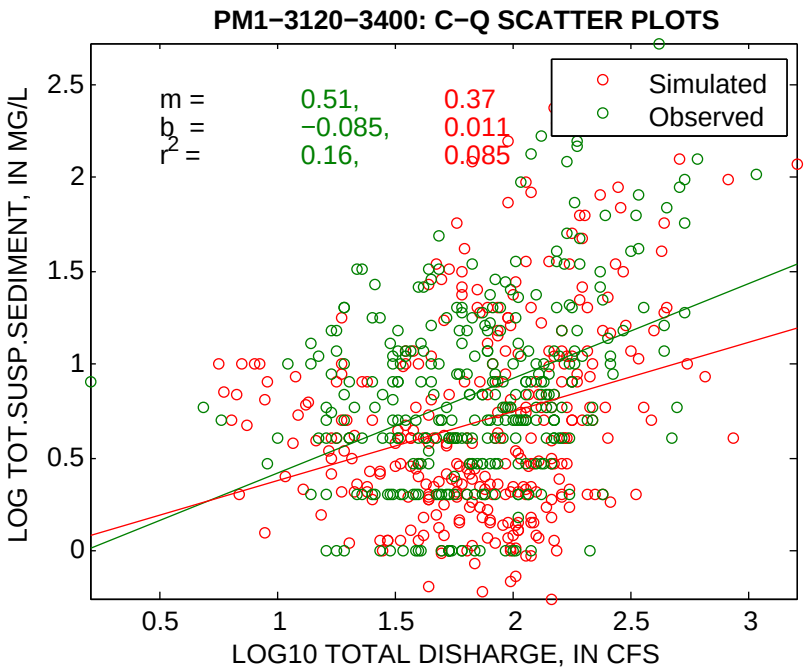
STATISTICS

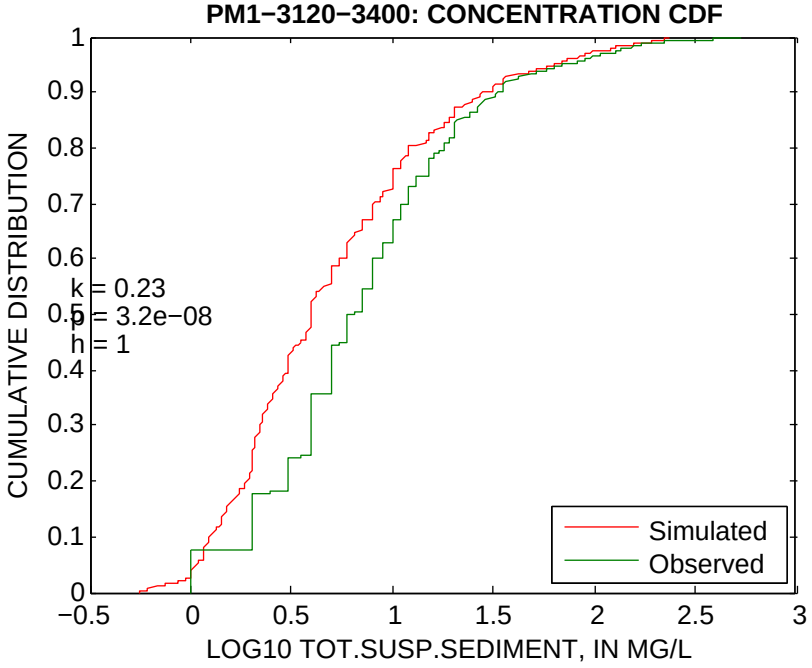
	n	observe	simulate
		320	320
min		1	0.5565
		0	-0.254535
mean		18.0391	24.6032
		0.862311	0.771966
media		6.25	3.7159
		0.795532	0.570064
max		530	732.82
		2.72428	2.865
varian		2061.05	4028.92
		0.264587	0.447505
JB		0.001	0.001
		0.001	0.001
		ra	log
%		36.3883	-10.4771
err.va		3745.39	0.366058
rel.std.err		1.81722	1.38351
mod.eff		-0.817223	-0.38351

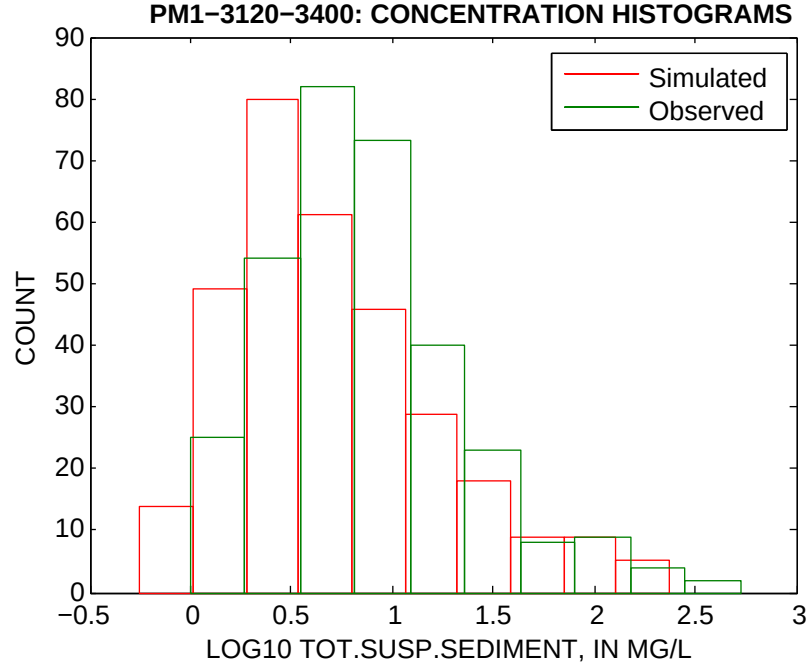
VERSION 2.1

ALL DATA
LOG10

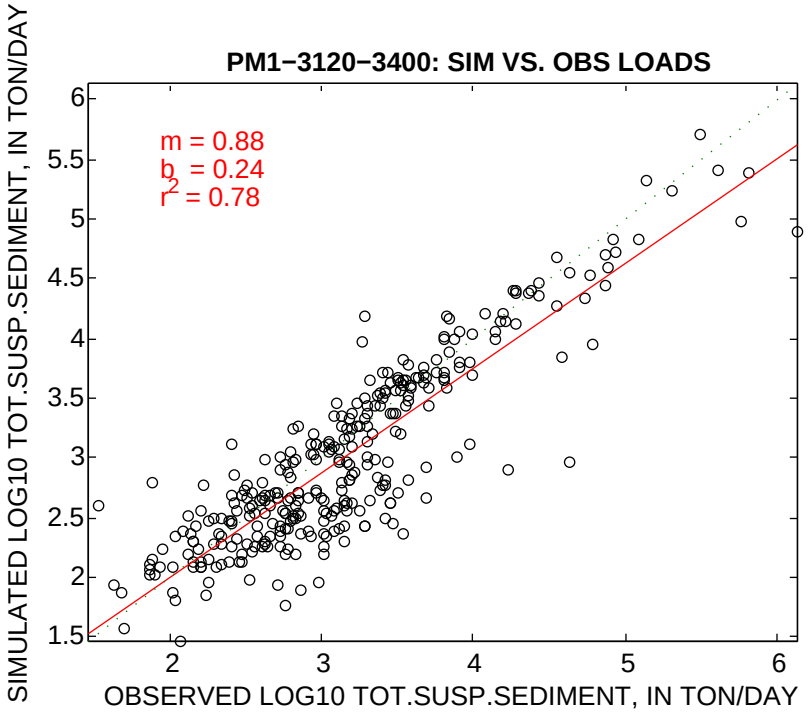


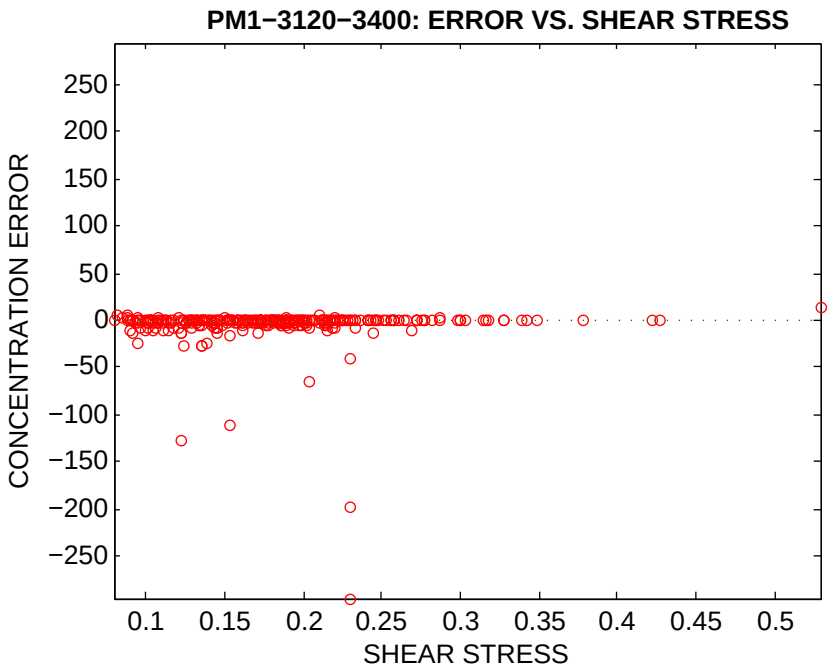


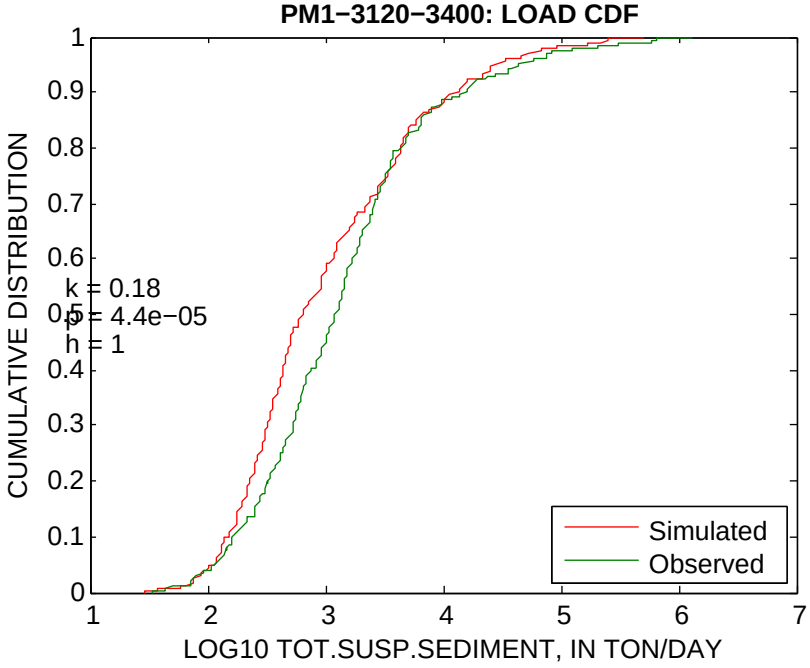


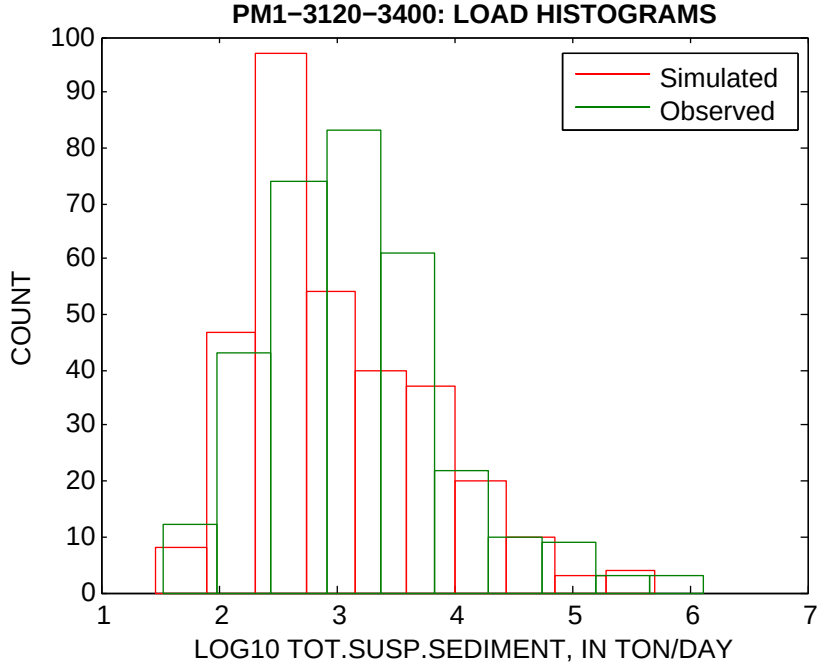


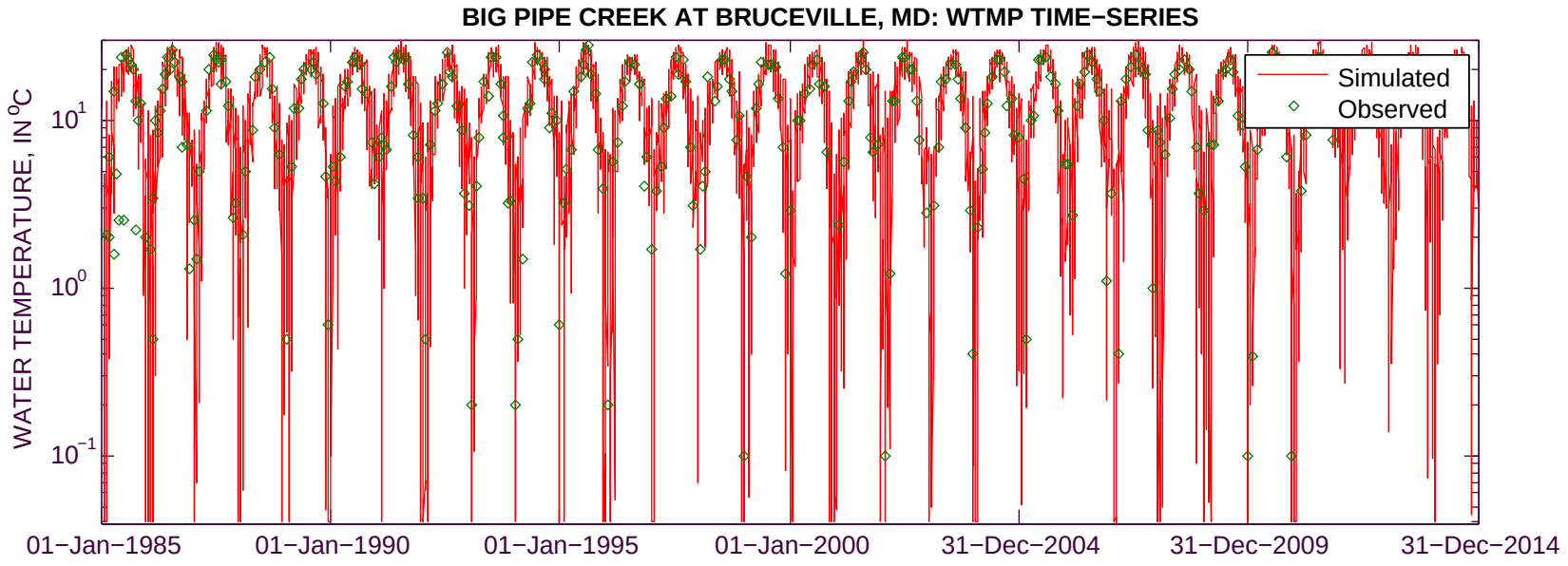
LOAD DATA
LOG10

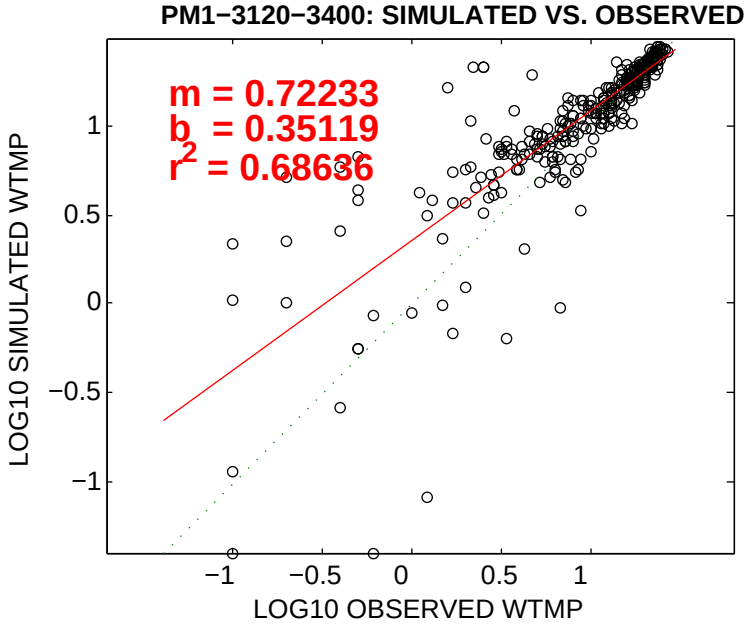


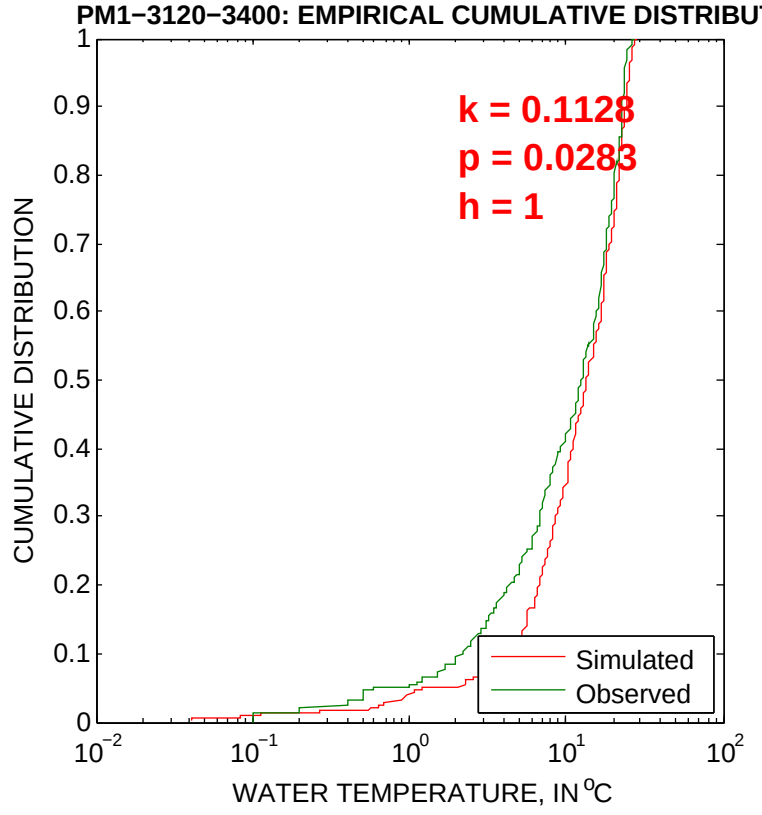












DATA SELECTION

scenario	file
P620171001WQ	WTMP.calib

plot: WTMP - water tempera...

Dates: 1/1/1985 – 12/31/201

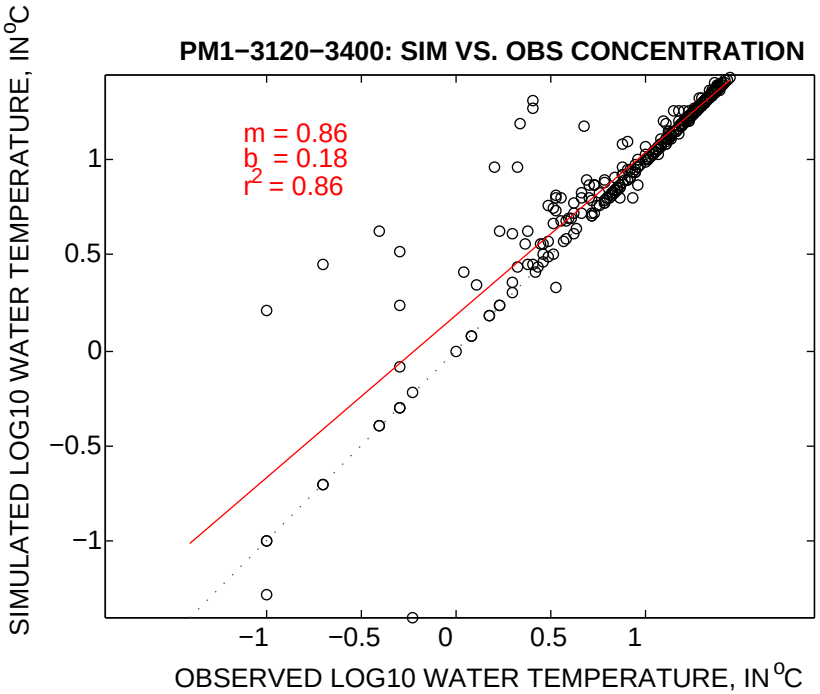
Drive	Directory	Observed
N/A	model	OBS20161101

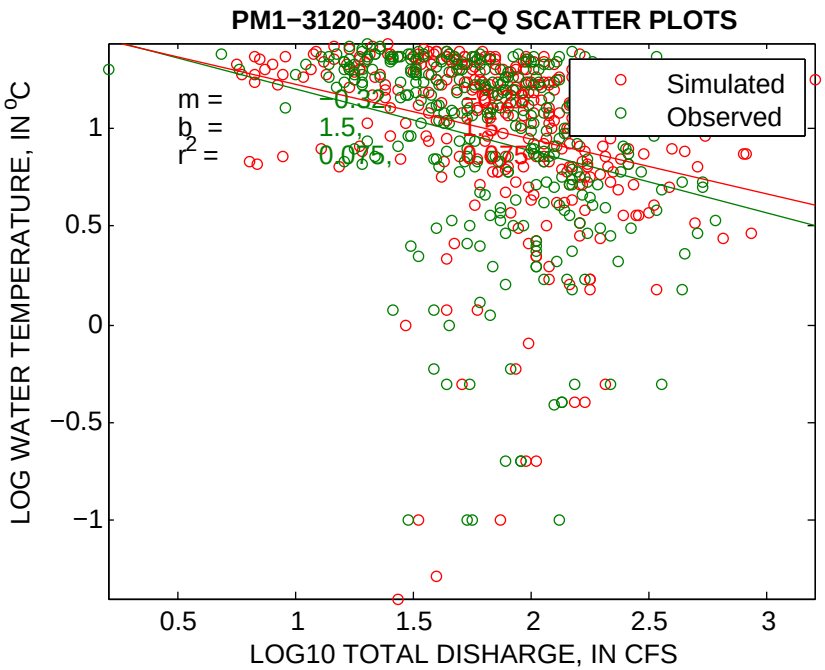
STATISTICS

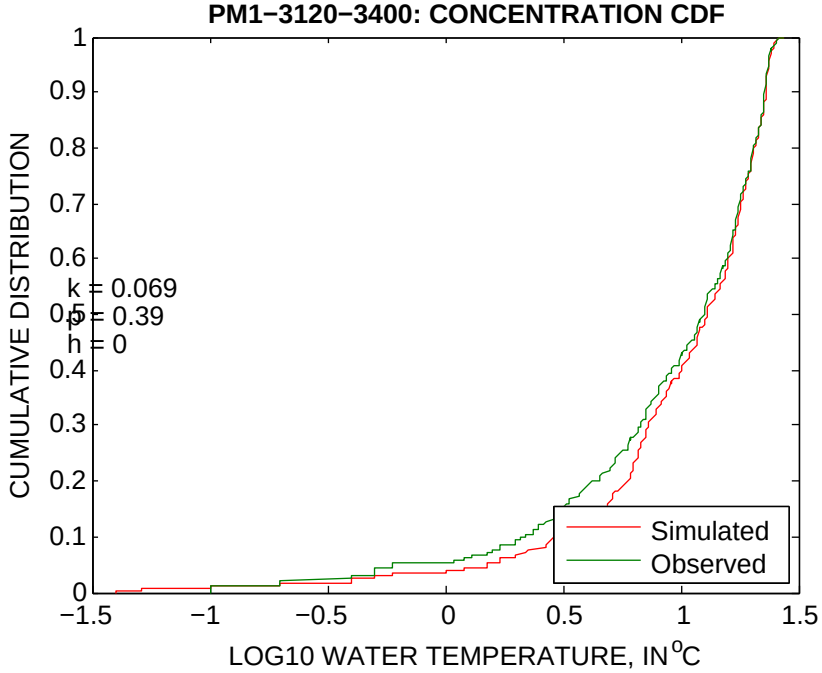
	n	observe	simulate
		328	328
min		0.1	0.040031
		-1	-1.3976
mean		12.5376	13.9301
		0.938774	1.02929
media		12.65	13.603
		1.10209	1.13363
max		27.5	27.917
		1.43933	1.44587
varian		59.2231	54.8703
		0.23292	0.177062
JB		0.001130	0.002982
		0.001	0.001
		ra	log
%		11.1062	9.64204
err.va		10.8877	0.08171
rel.std.err		0.183842	0.350807
mod.eff		0.816158	0.649193

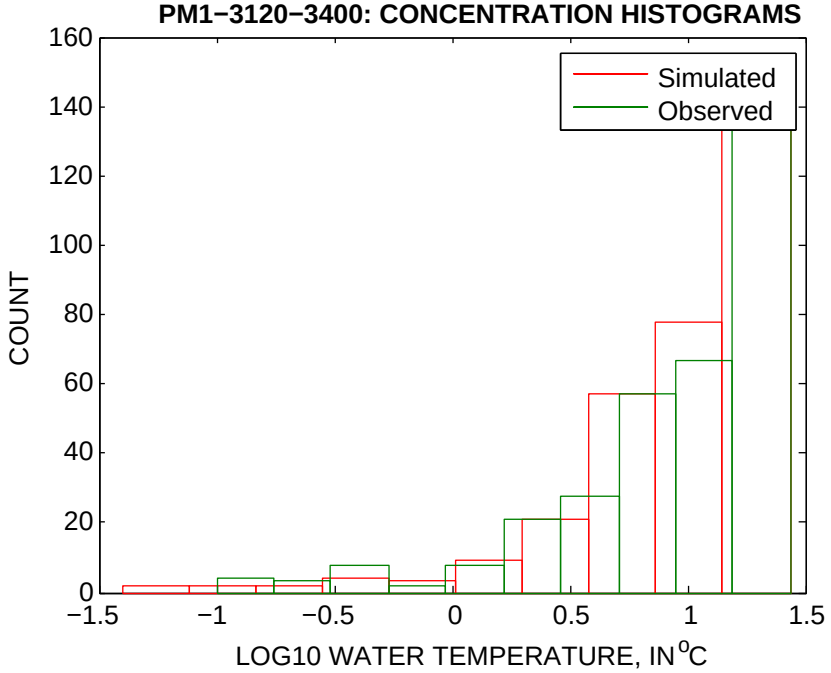
VERSION 2.1

ALL DATA
LOG10

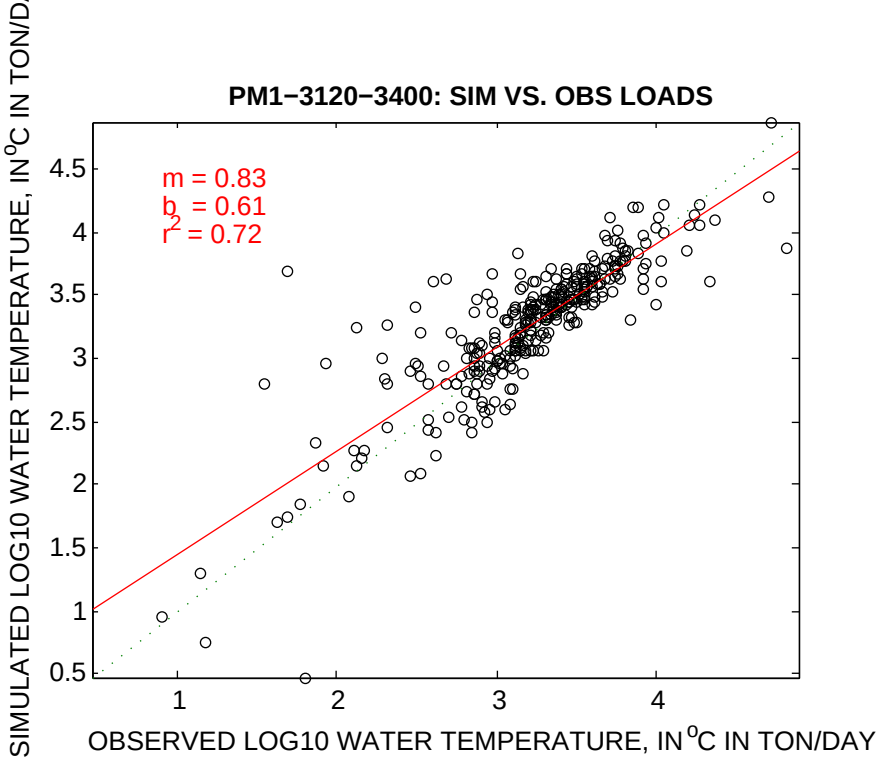


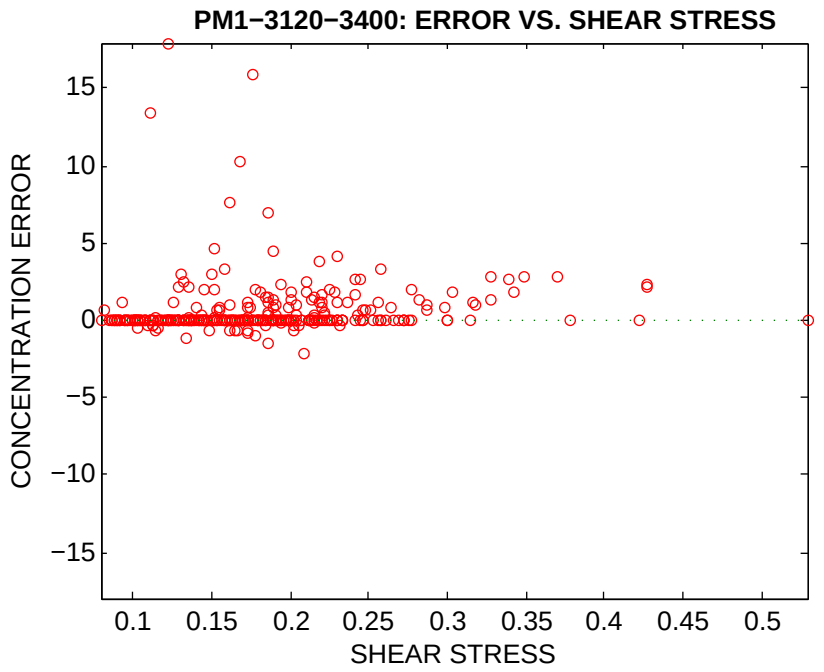


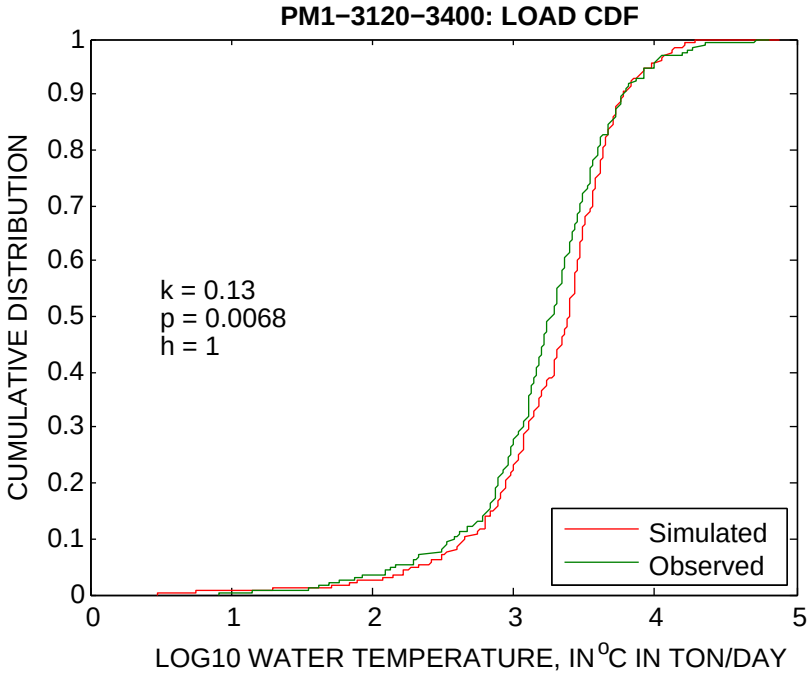


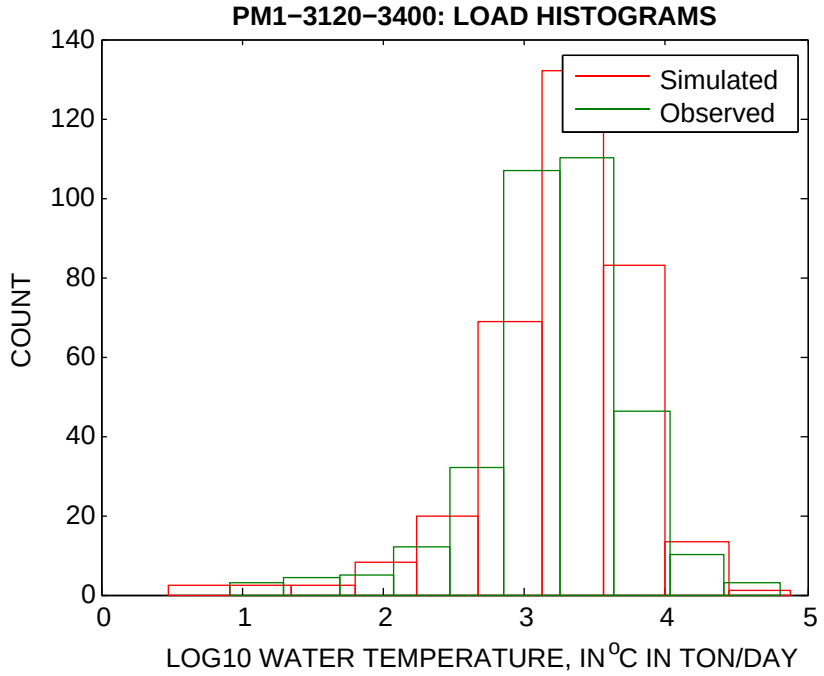


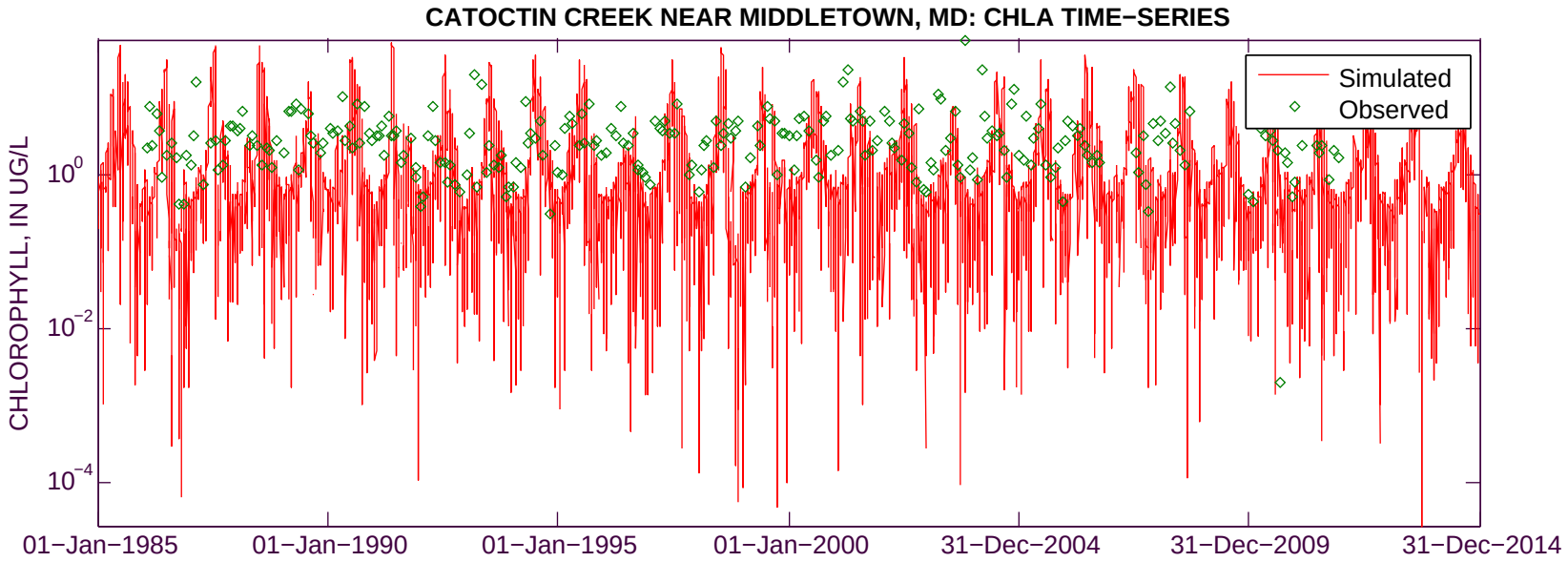
LOAD DATA
LOG10

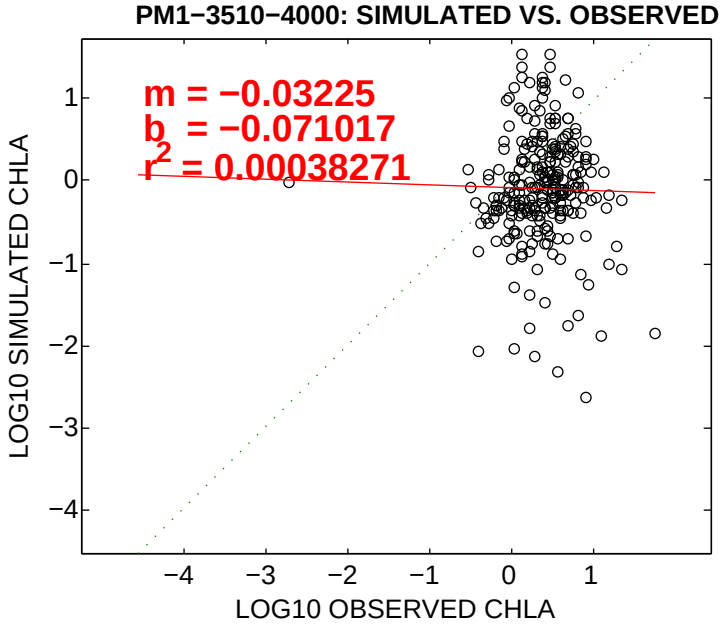


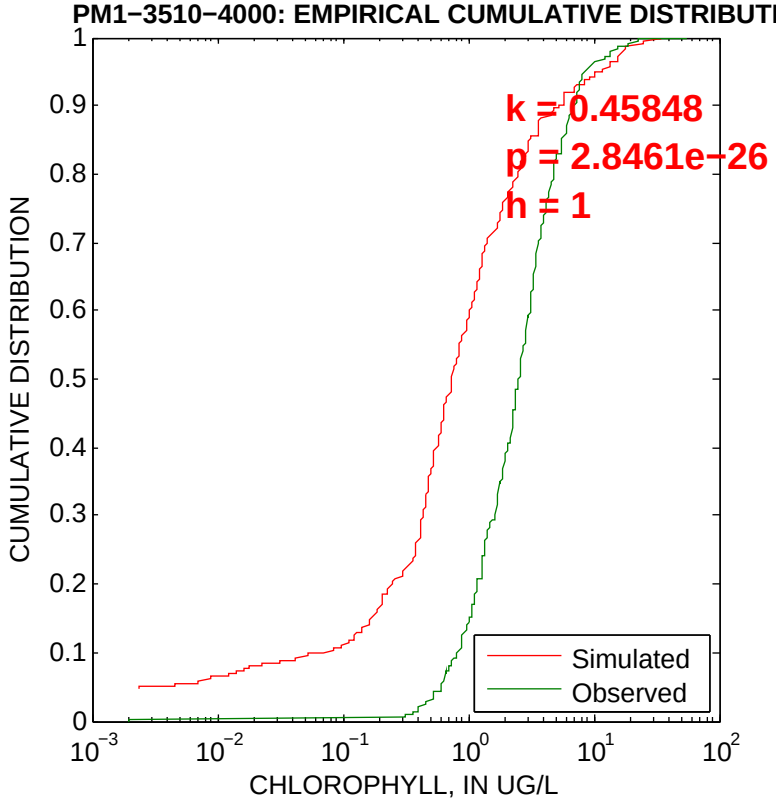












DATA SELECTION

scenario	file
P620171001WQ	CHLA.calib

plot: CHLA - chlorophyll A

Dates: 1/1/1985 – 12/31/201

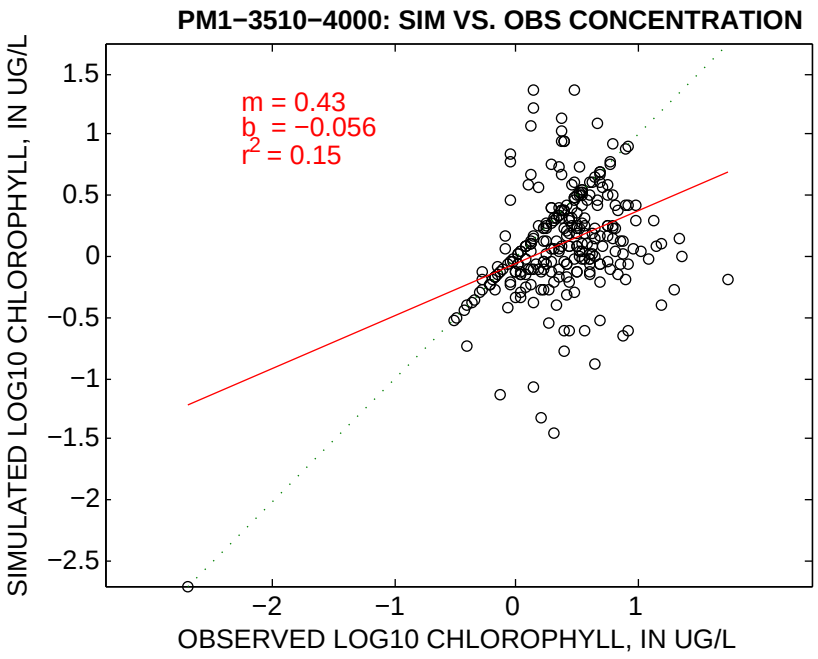
Drive	Directory	Observed
N/A	model	OBS20161101

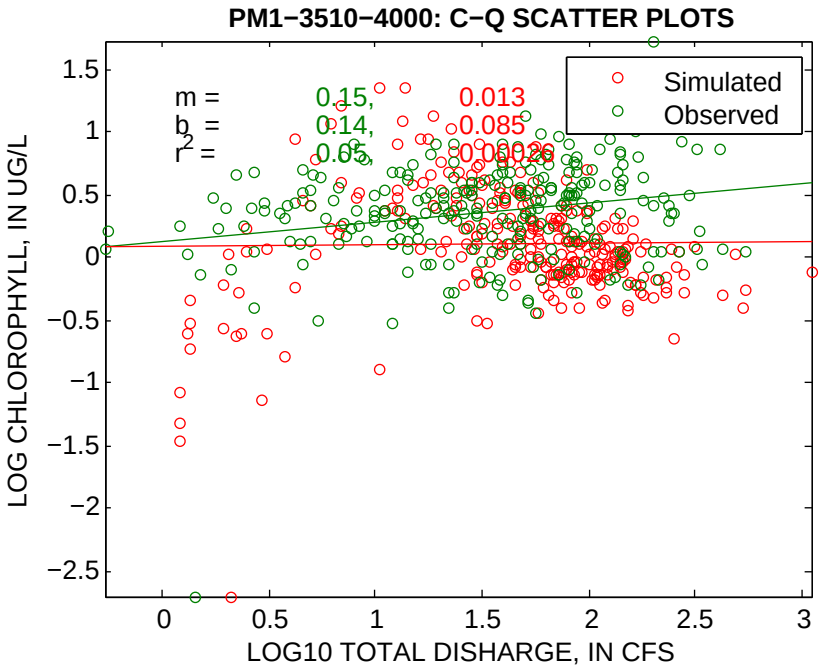
STATISTICS

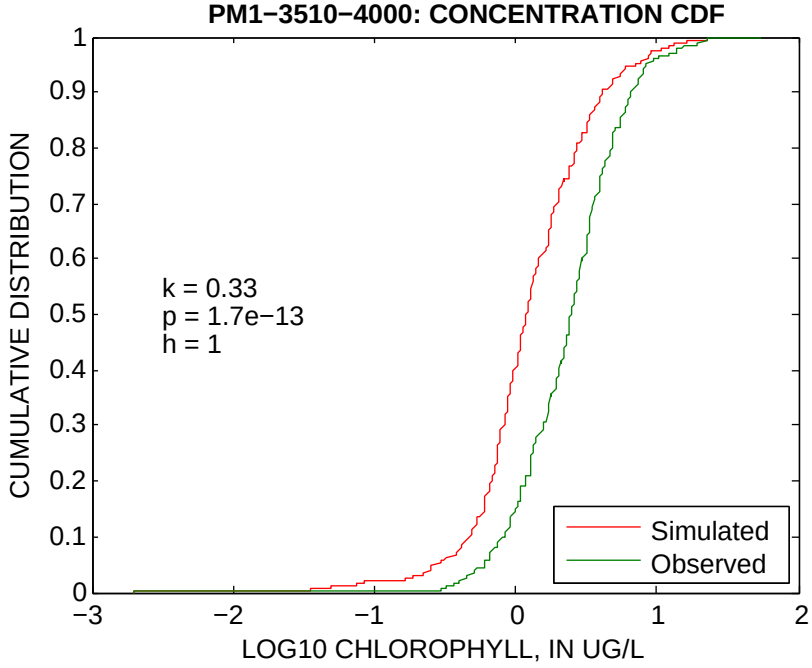
	n	277	264
		observe	simulate
min		0.002	0
		-2.69897	-2.62086
mean		3.56944	2.25591
		0.371532	-0.0829992
media		2.54	0.74642
		0.396199	-0.0884811
max		54.33	34.921
		1.73504	1.54309
varian		19.491	21.1605
		0.165782	0.450543
JB		0.001	0.001
		0.001	0.001
		ra	log
%		-36.7994	-122.34
err.va		45.8887	0.834402
rel.std.err		2.35435	5.03312
mod.eff		-1.35435	-4.03312

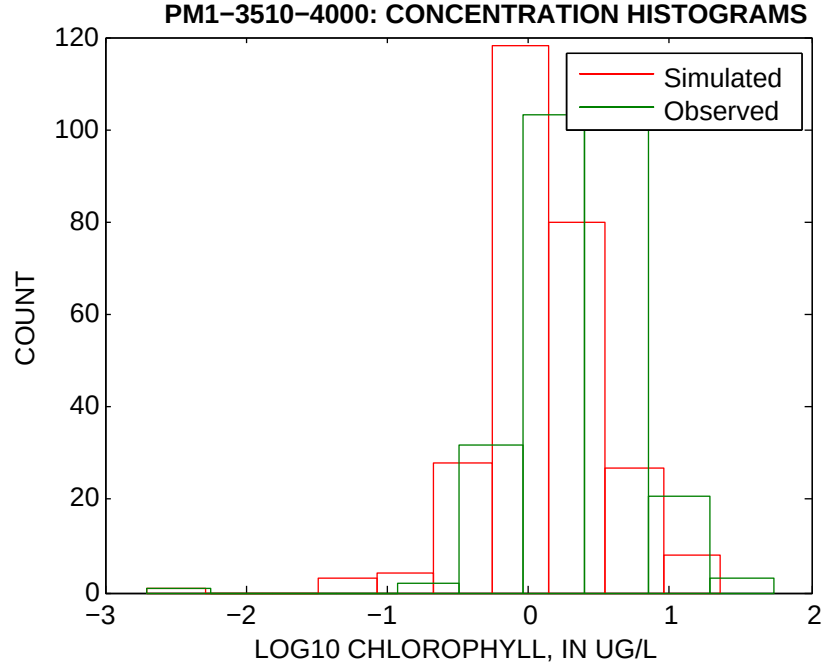
VERSION 2.1

ALL DATA
LOG10

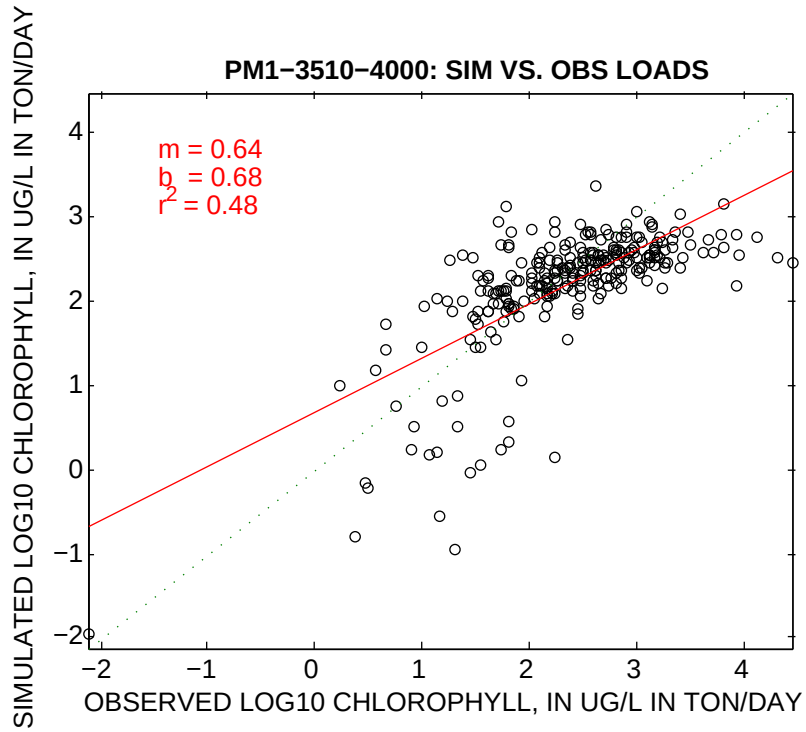


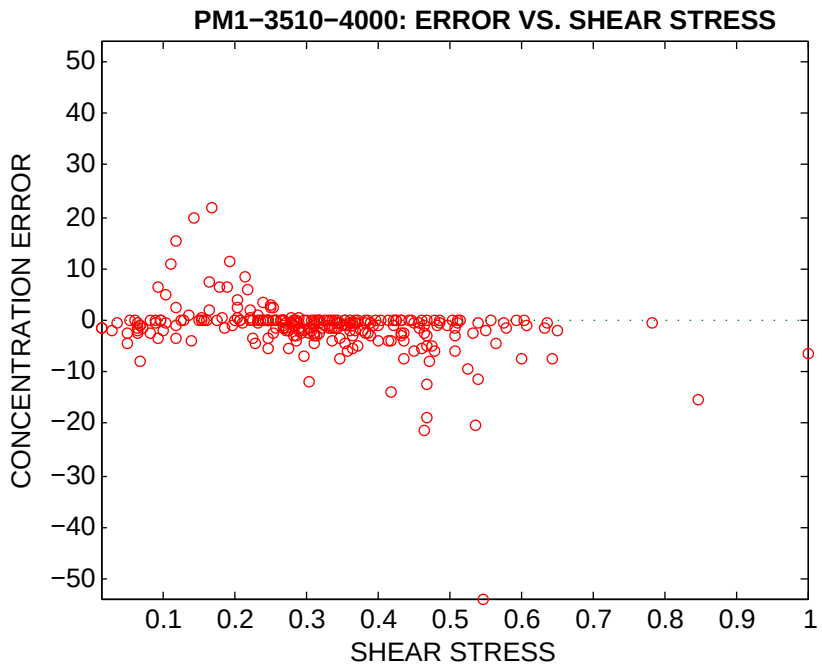


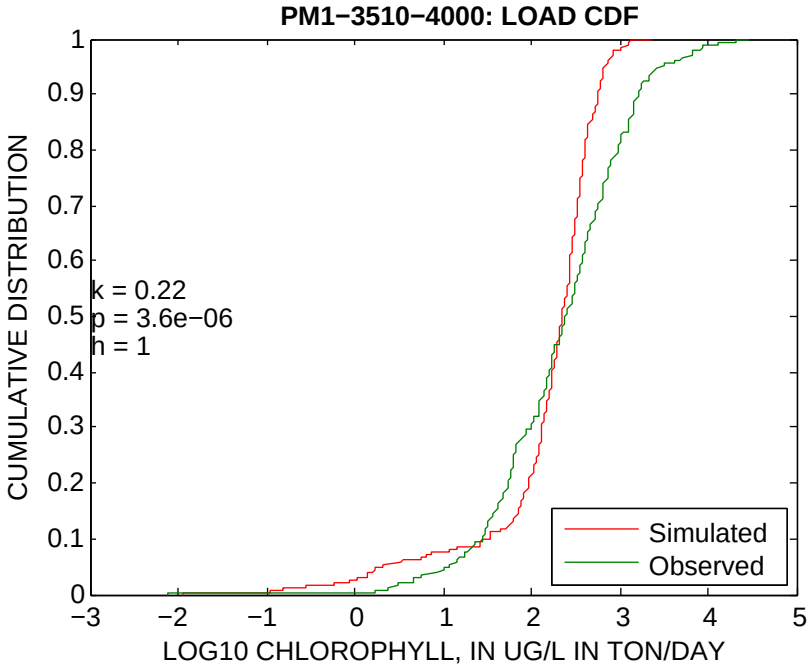


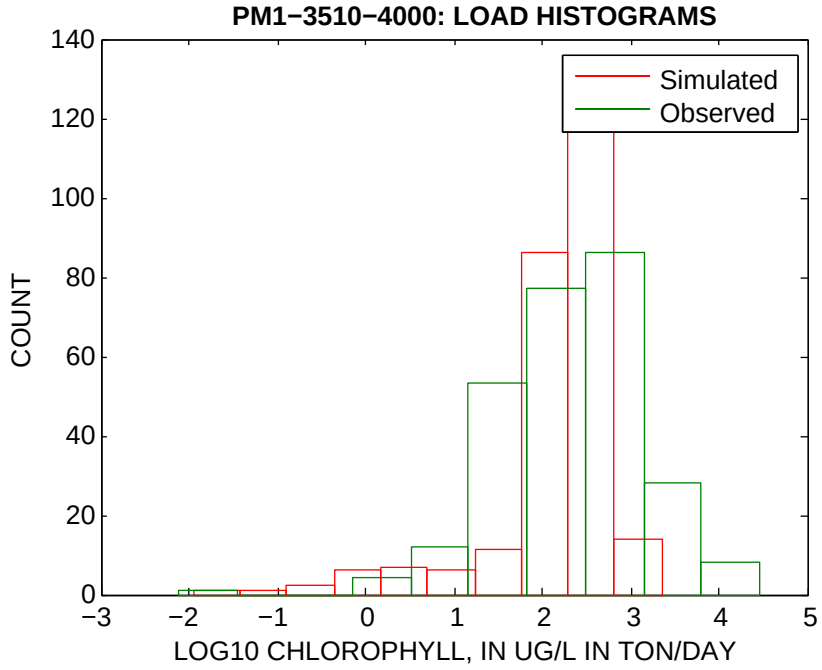


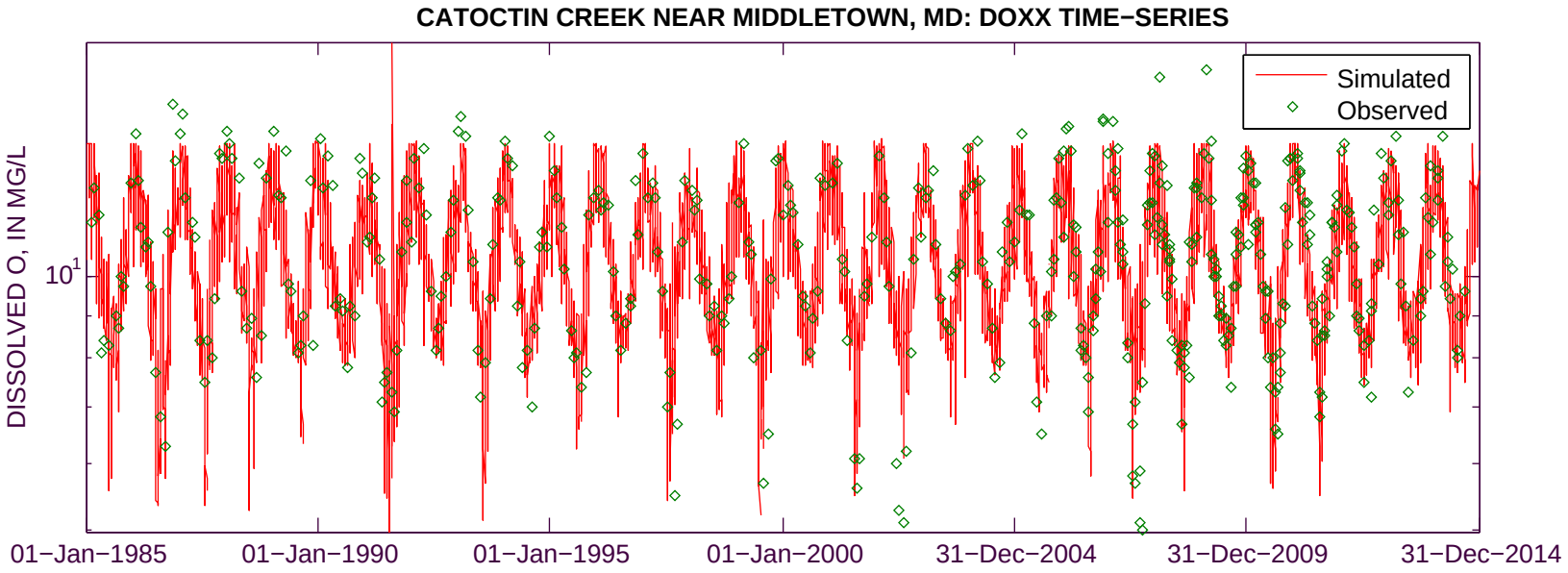
LOAD DATA
LOG10

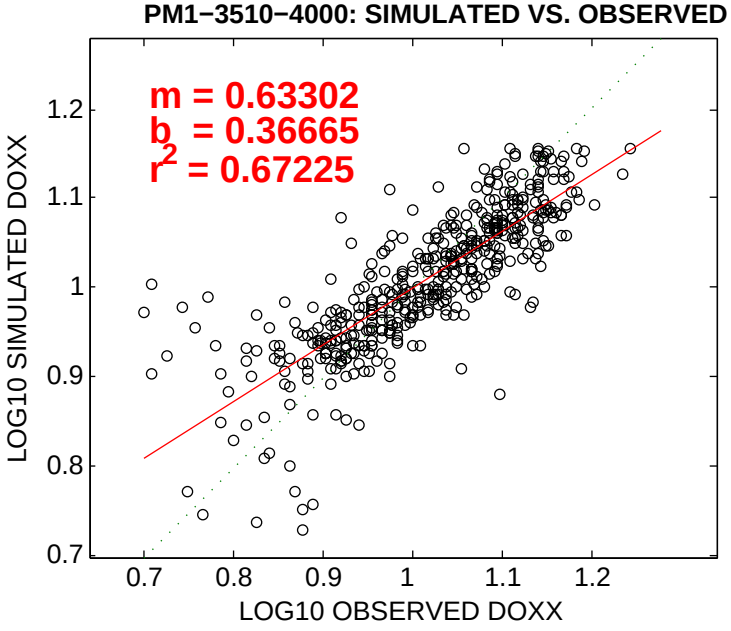


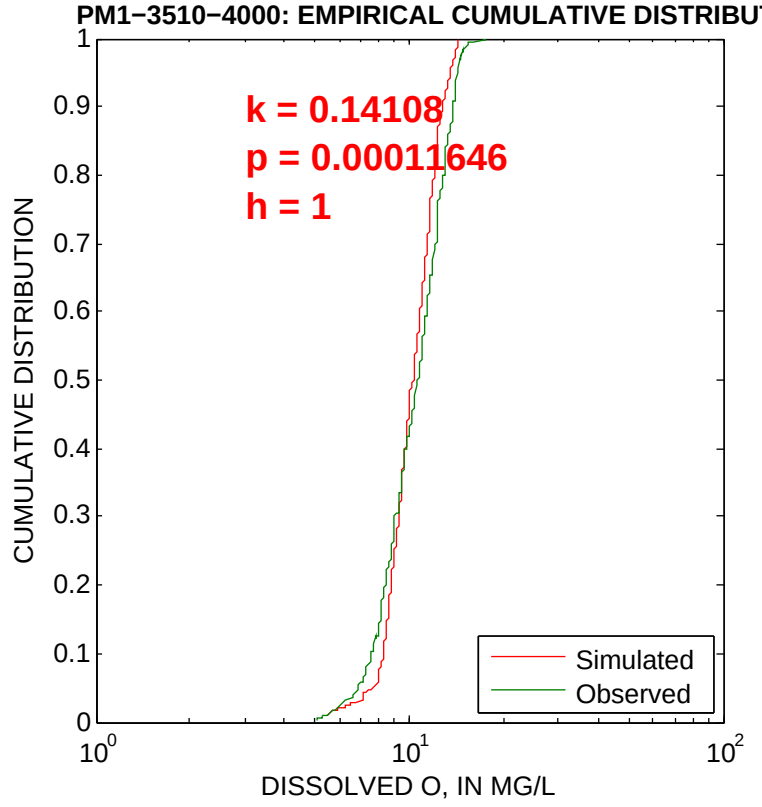












DATA SELECTION

scenario	file
P620171001WQ	DOXX.calib

plot: DOXX - dissolved oxygen

Dates: 1/1/1985 — 12/31/201

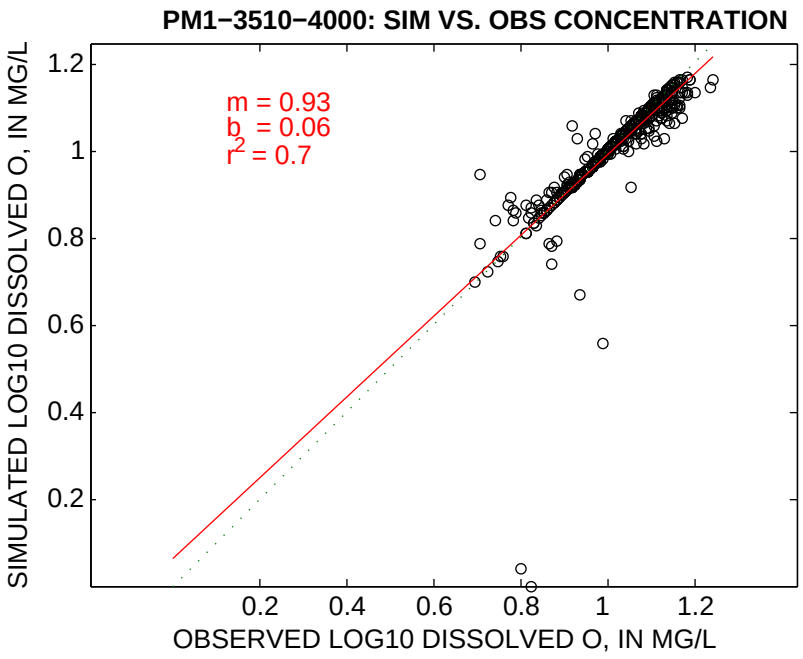
Drive	Directory	Observed
N/A	model	OBS20161101

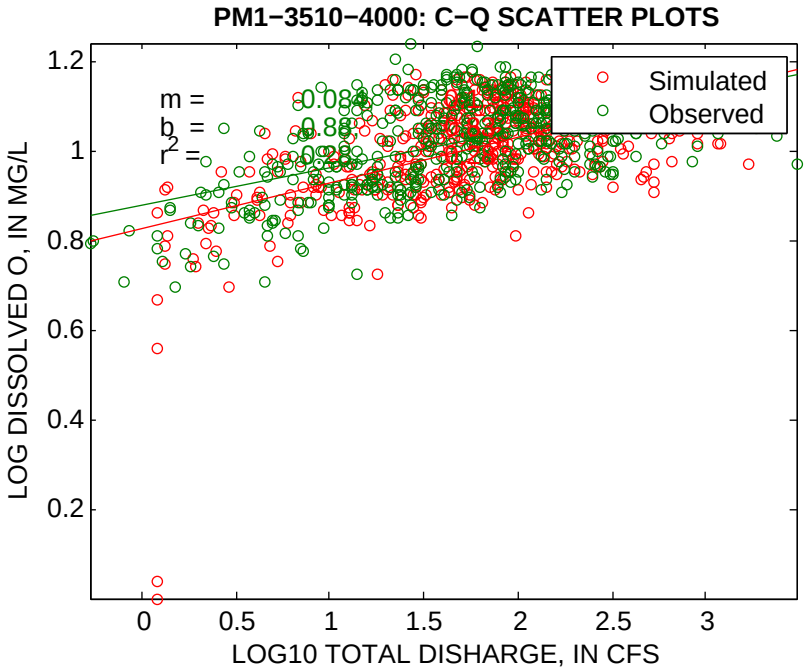
STATISTICS

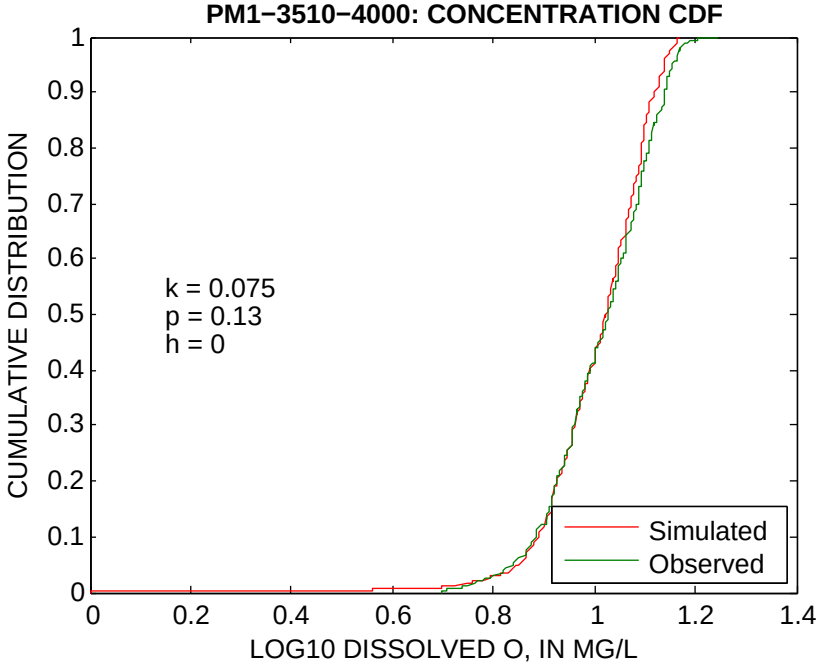
	n	observe	simulate
		482	479
min		5	0
		0.69897	0.728256
mean		10.613	10.3165
		1.01537	1.0094
media		10.6495	10.3045
		1.02934	1.01326
max		17.5	14.356
		1.24304	1.15703
varian		5.64235	3.9157
		0.0102862	0.00613145
JB		0.019388	0.001
		0.001693	0.001
		ra	log
%		-2.79323	-0.587625
err.va		2.07926	0.00343055
rel.std.err		0.368509	0.333511
mod.eff		0.631491	0.666489

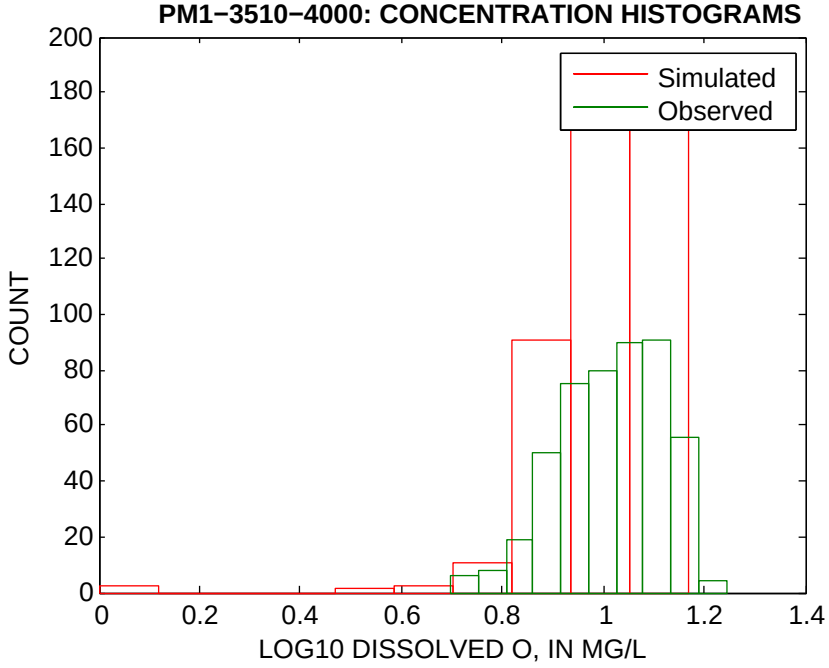
VERSION 2.1

ALL DATA
LOG10

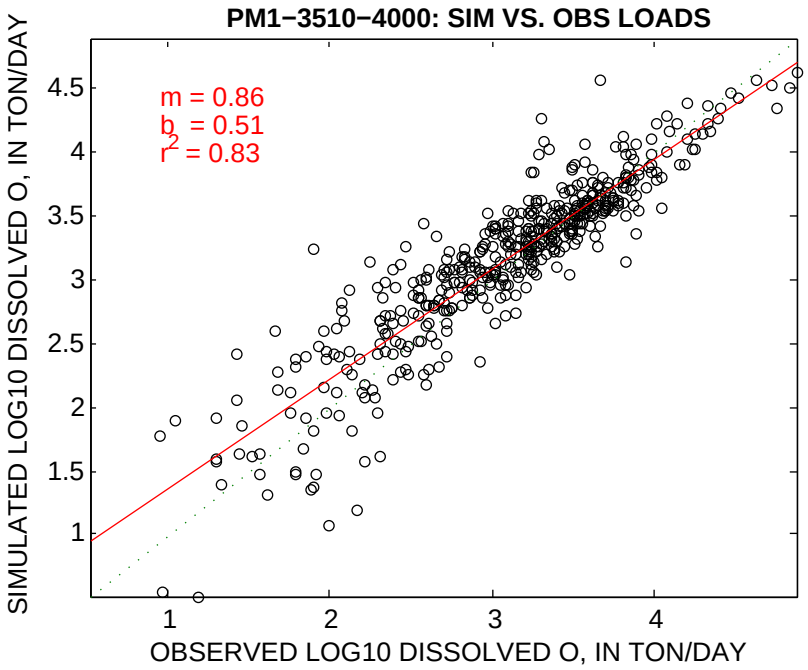


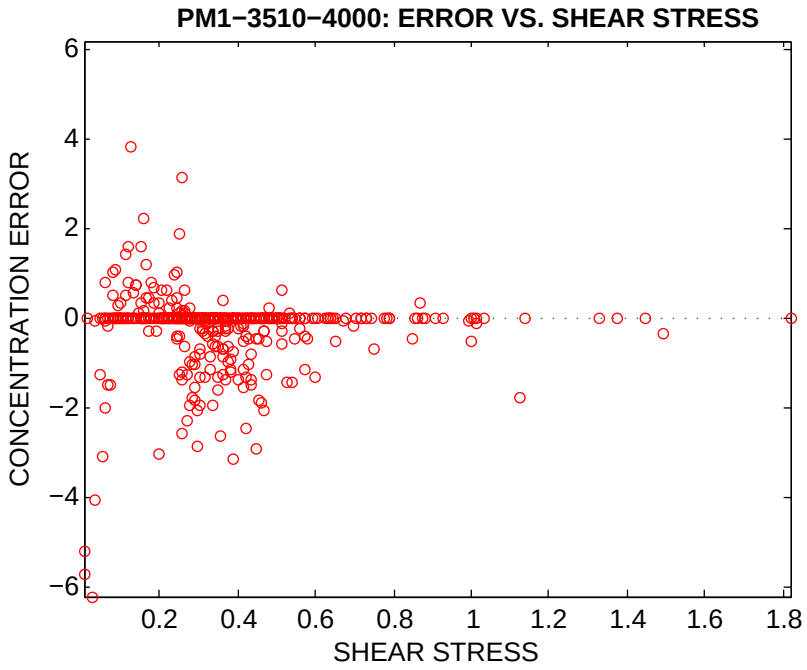


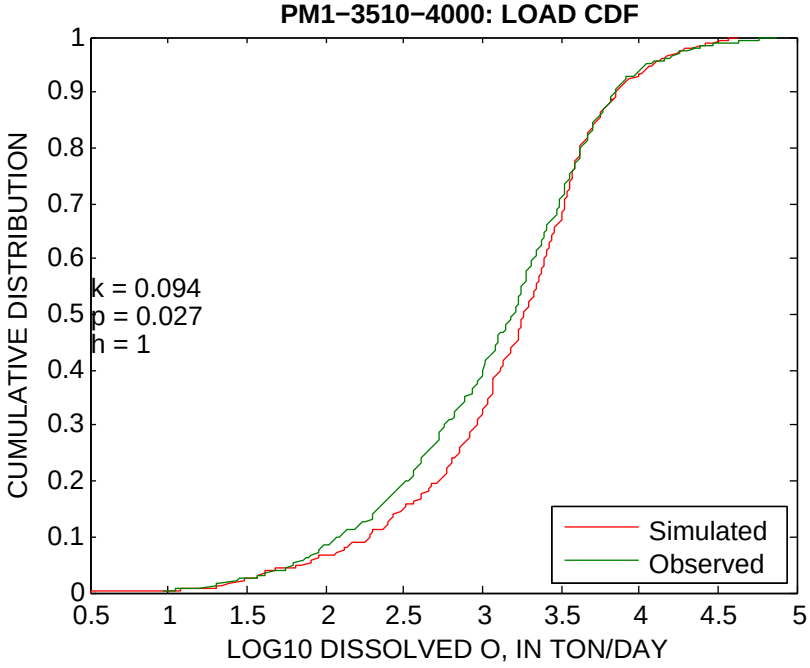


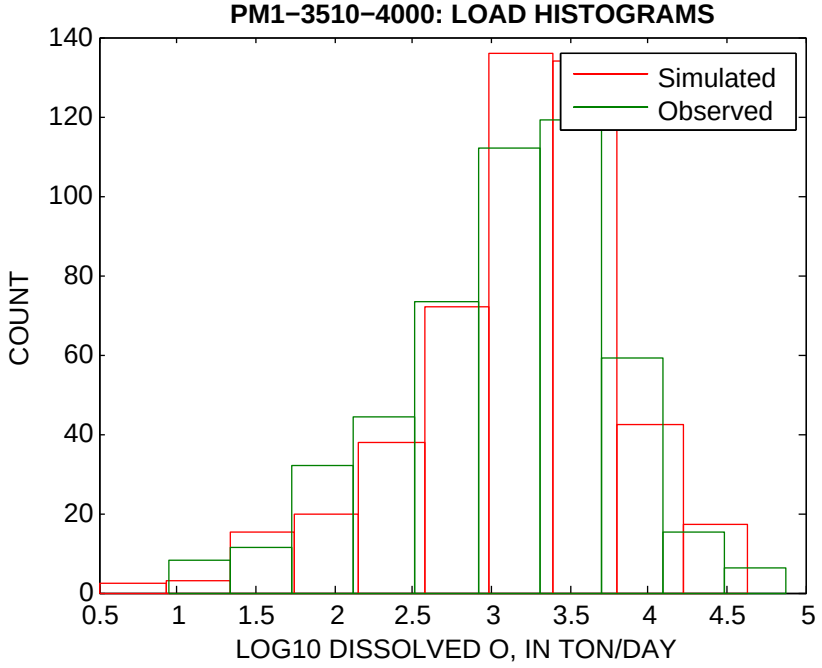


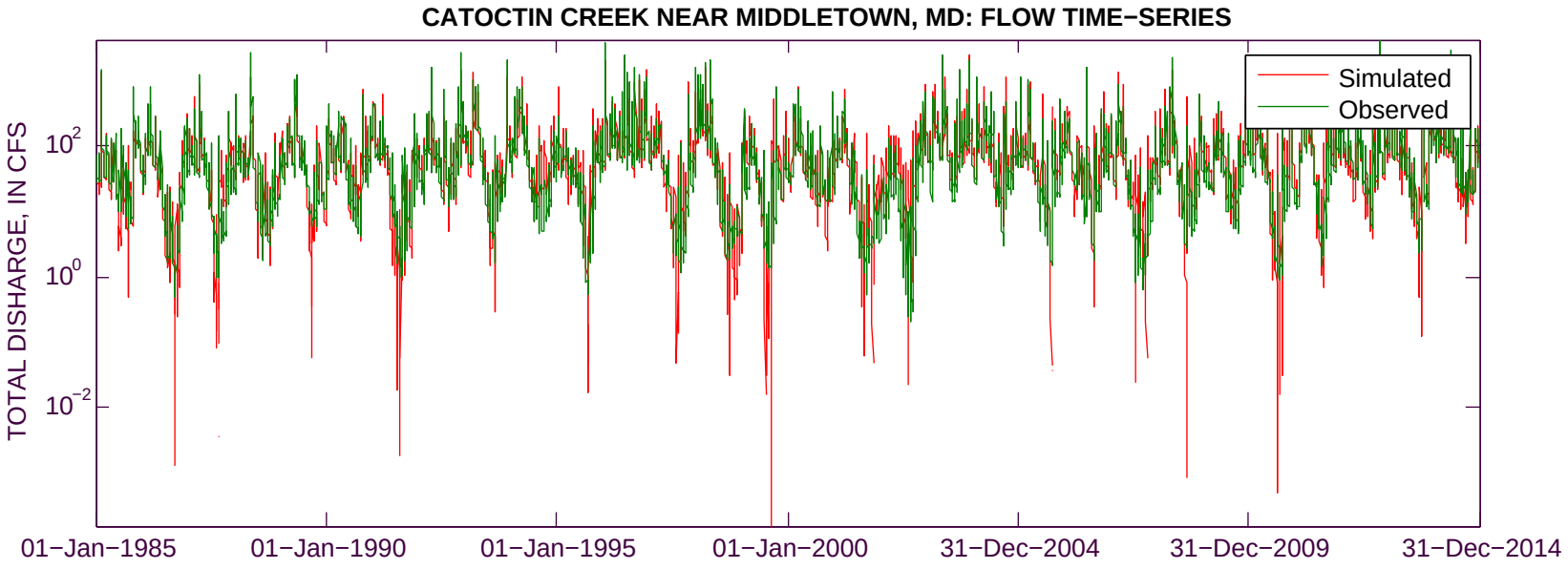
LOAD DATA
LOG10

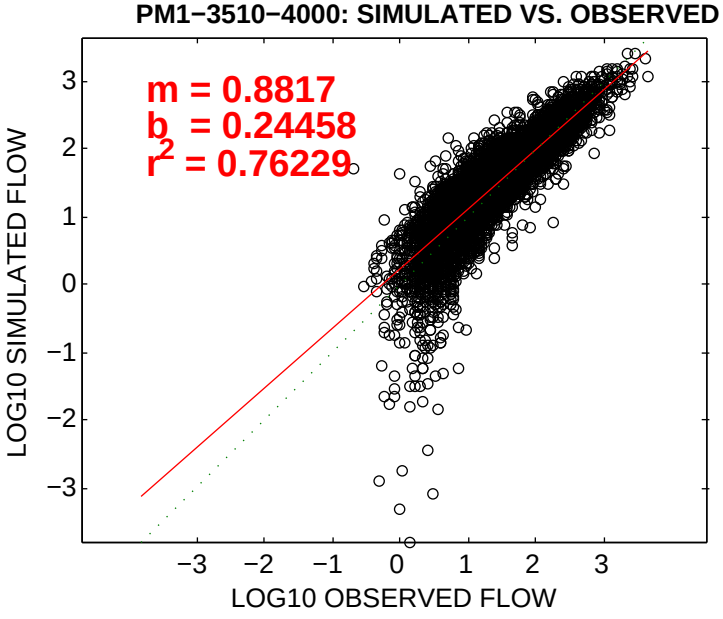


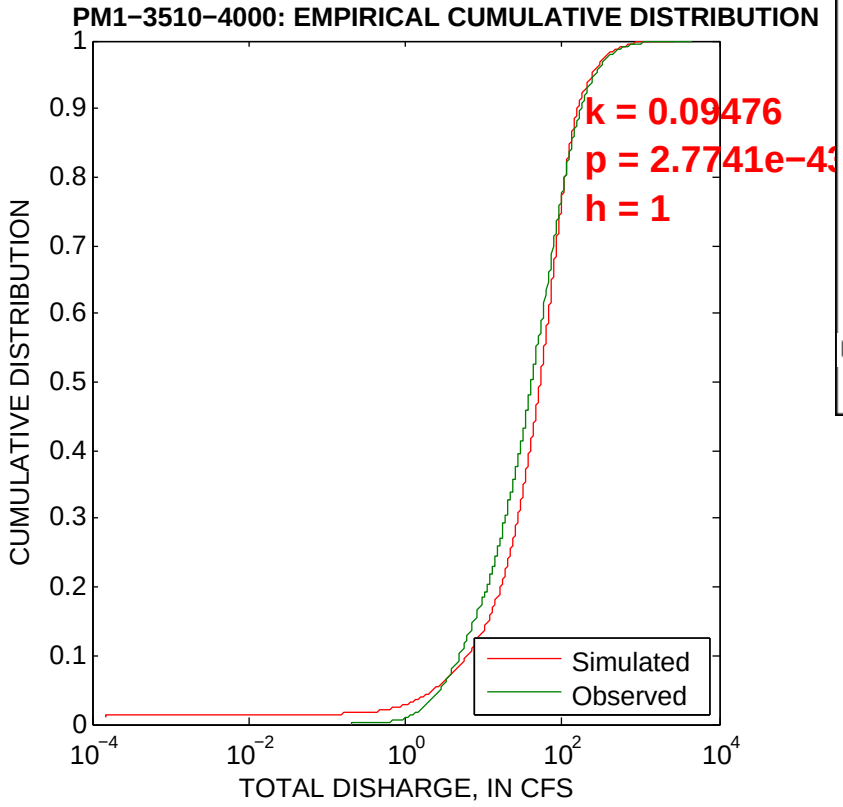












DATA SELECTION

scenario: P620171001WQ | file: FLOW.calib

plot: FLOW - total discharge

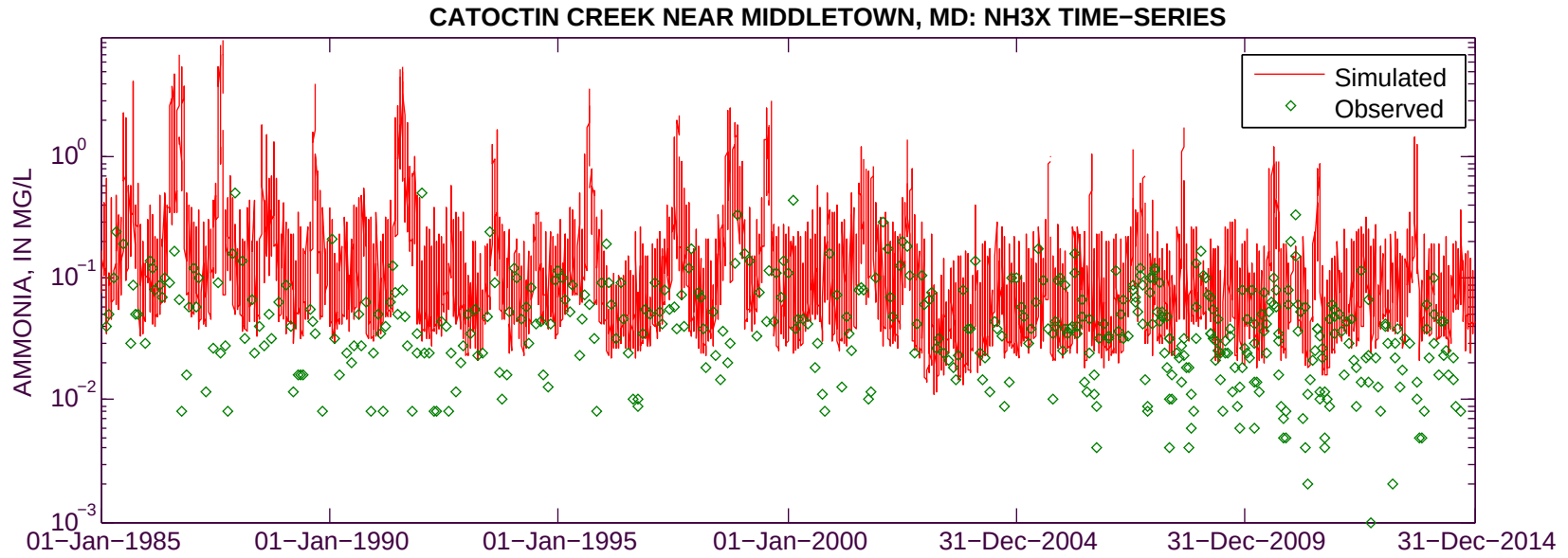
Dates: 1/1/1985 – 12/31/201

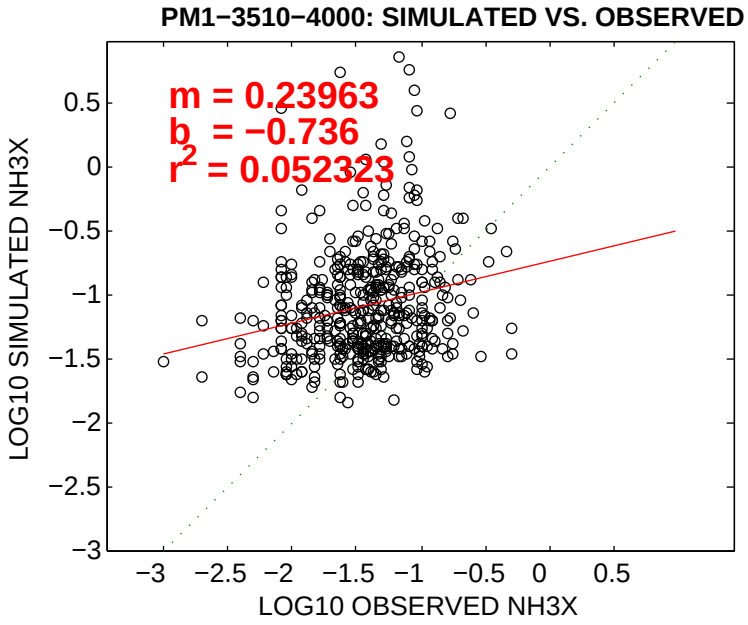
Drive: N/A | Directory: model | Observed: OBS20161101

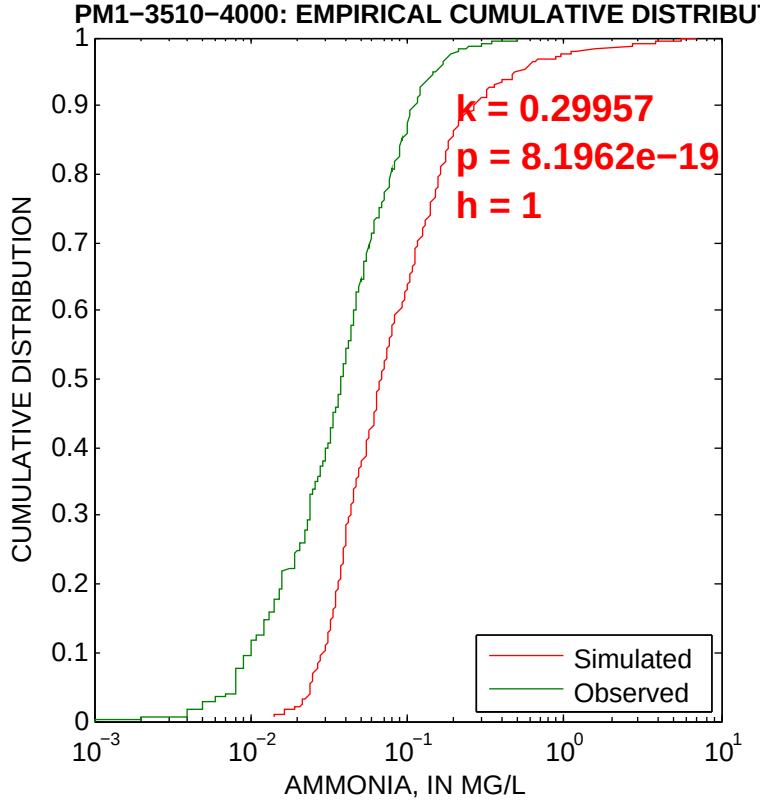
STATISTICS

		observe	simulate
n		10954	10831
min		0.2	0
		-0.69897	-3.82019
mean		80.3941	80.8754
		1.56002	1.62005
media		41	52.702
		1.62325	1.72873
max		4440	2616.7
		3.64738	3.41775
varian		23715.9	14582.4
		0.34345	0.350256
JB		0.001	0.001
		0.001	0.001
		ra	log
%		0.598654	3.84795
err.va		6627.61	0.0916699
rel.std.err		0.279458	0.266909
mod.eff		0.720542	0.733091

VERSION 2.1







DATA SELECTION

scenario	file
P620171001WQ	NH3X.calib

plot: NH3X - ammonia

Dates: 1/1/1985 – 12/31/201

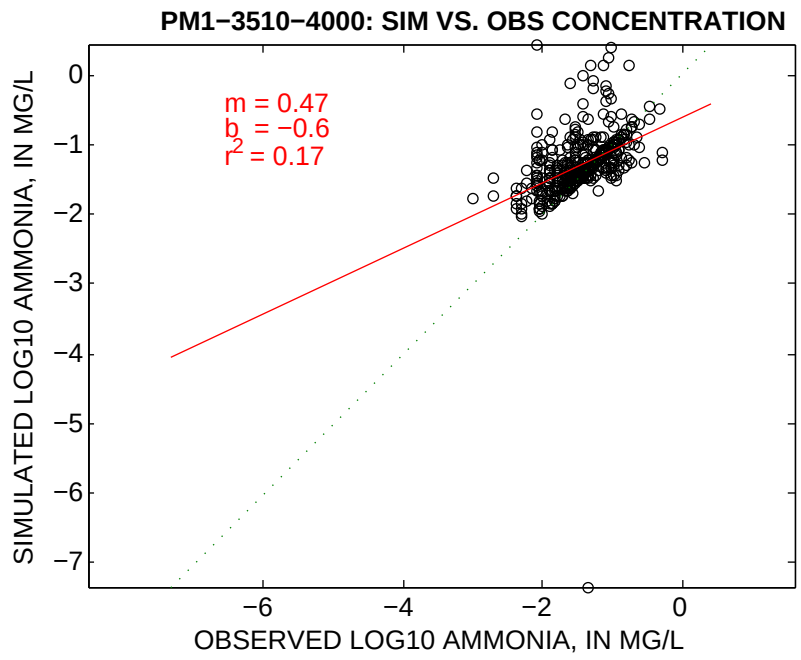
Drive	Directory	Observed
N/A	model	OBS20161101

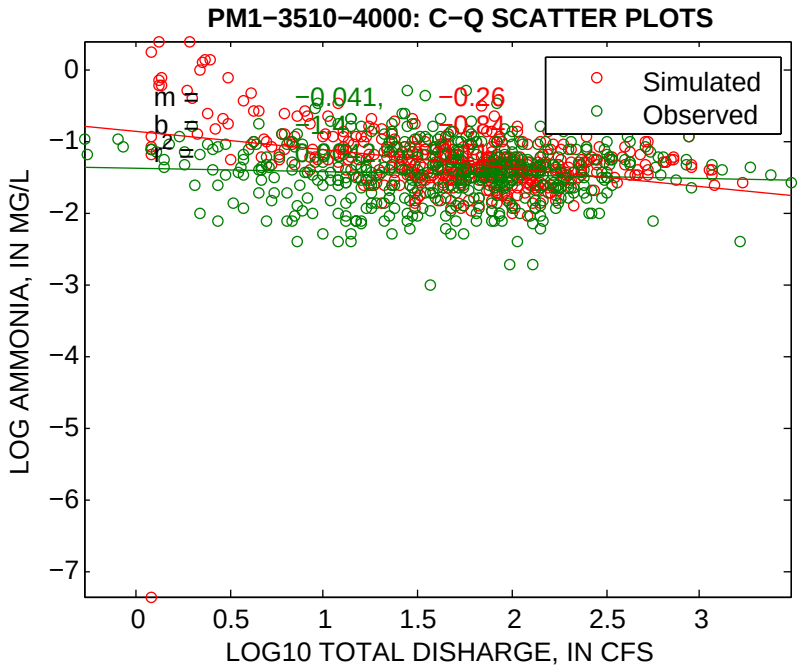
STATISTICS

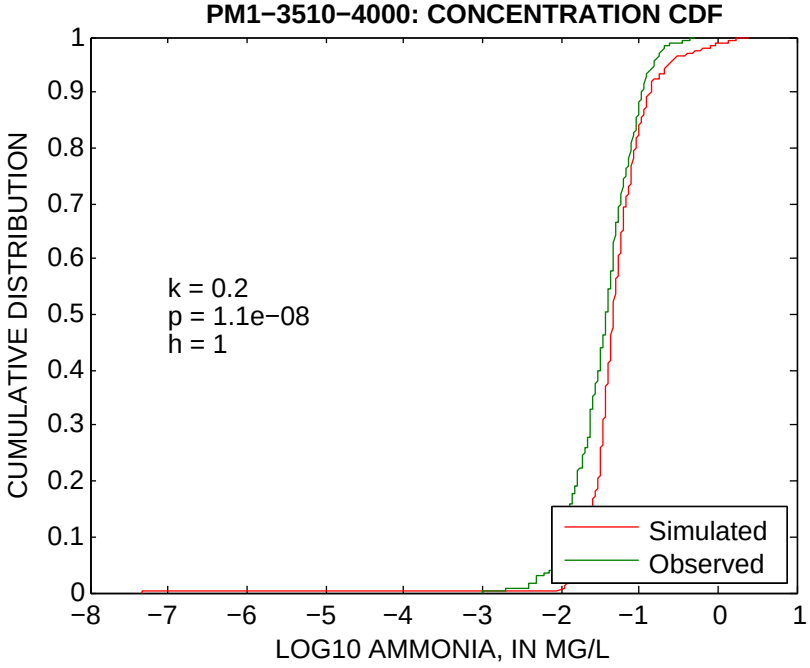
	n	464	461
		observe	simulate
min		0.001	0
		-3	-1.846
mean		0.0541897	0.186128
		-1.44871	-1.08315
media		0.038	0.0679865
		-1.42022	-1.16583
max		0.5	7.0806
		-0.30103	0.85007
varian		0.00348363	0.334505
		0.167228	0.183527
JB		0.001	0.001
		0.049095	0.001
		ra	log
%		243.475	-25.2333
err.va		0.351649	0.404531
rel.std.err		100.943	2.41903
mod.eff		-99.9432	-1.41903

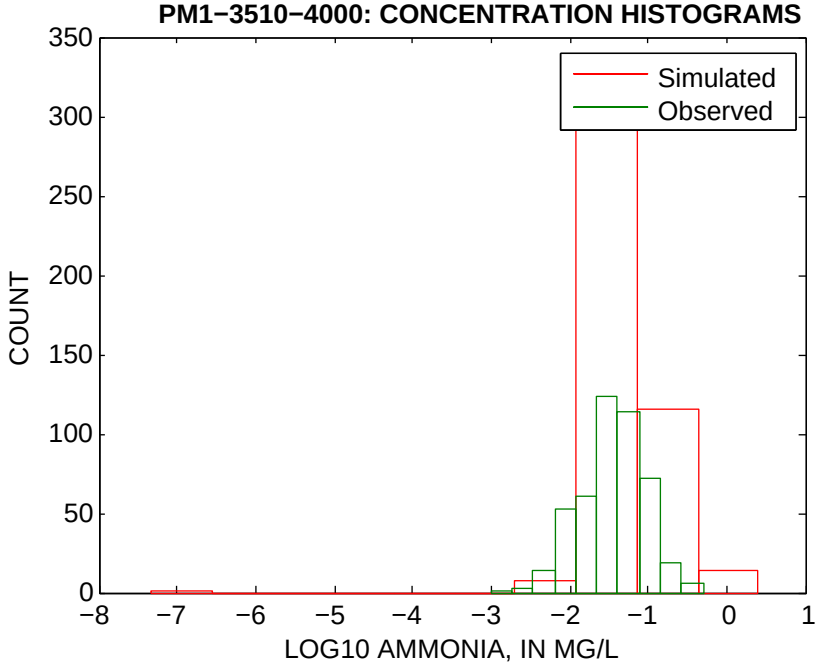
VERSION 2.1

ALL DATA
LOG10

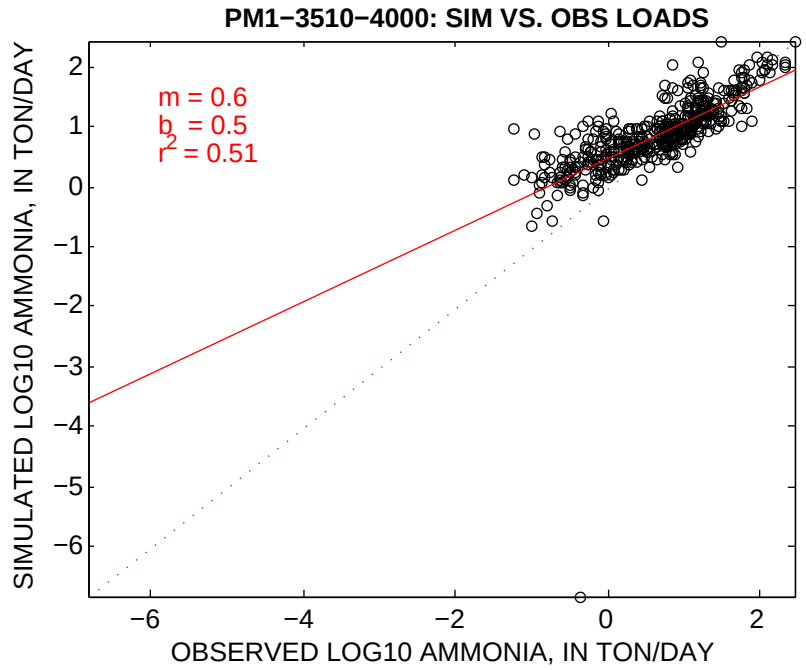


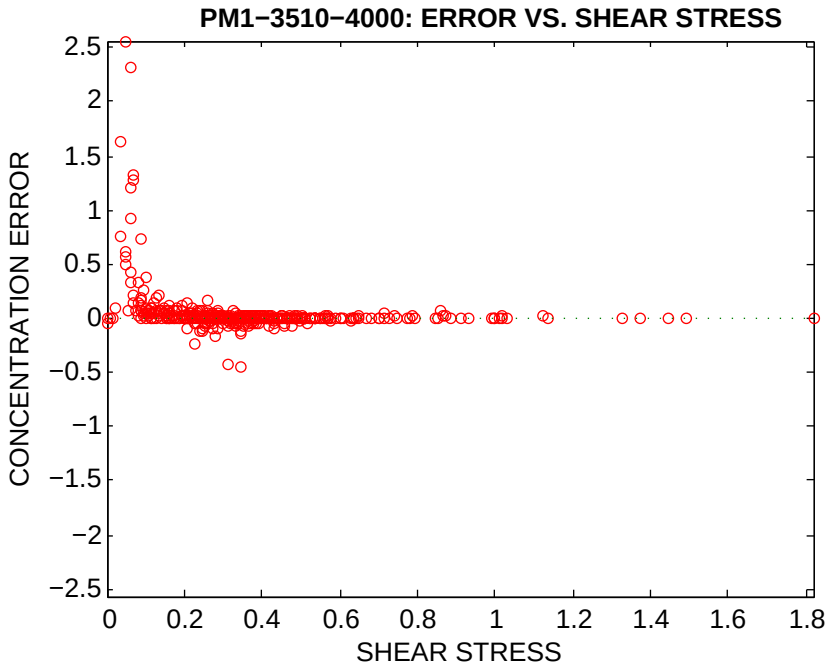


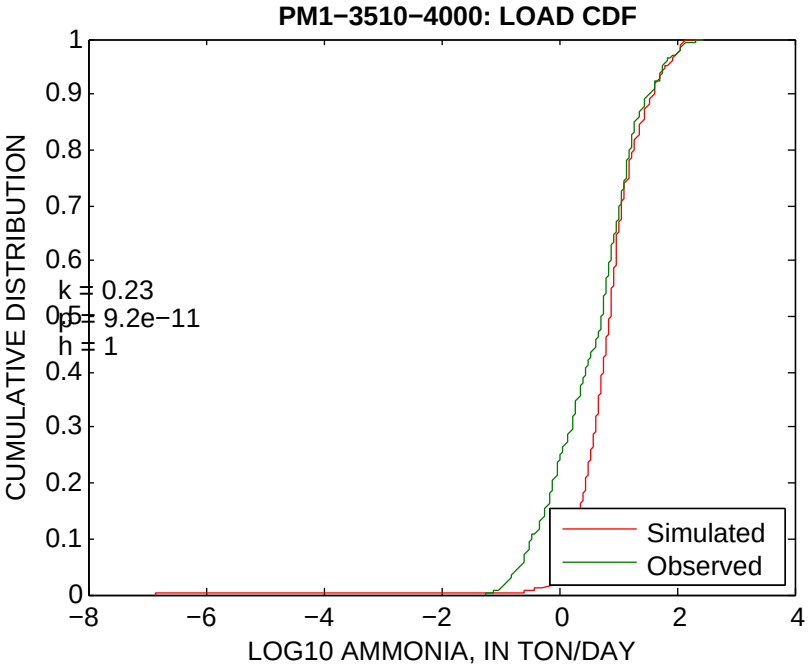


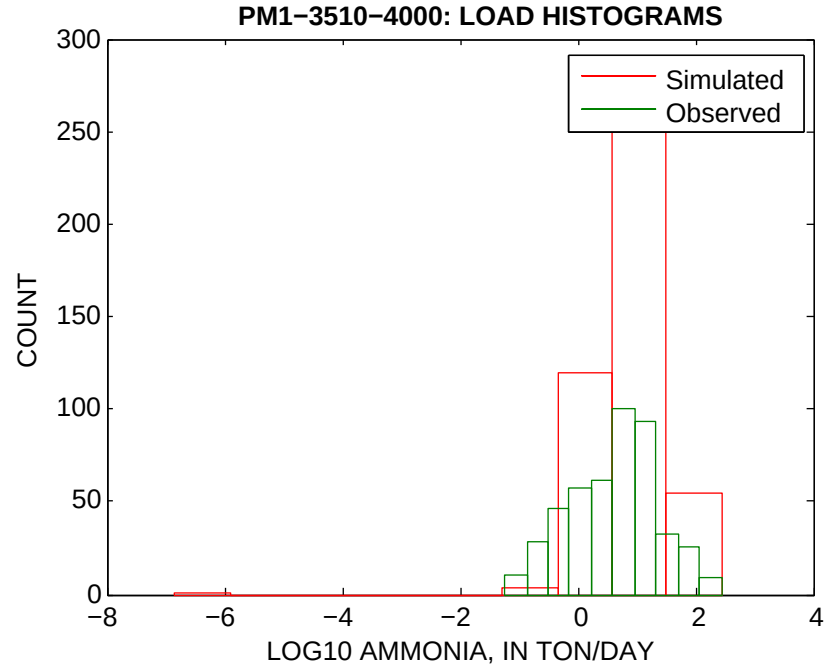


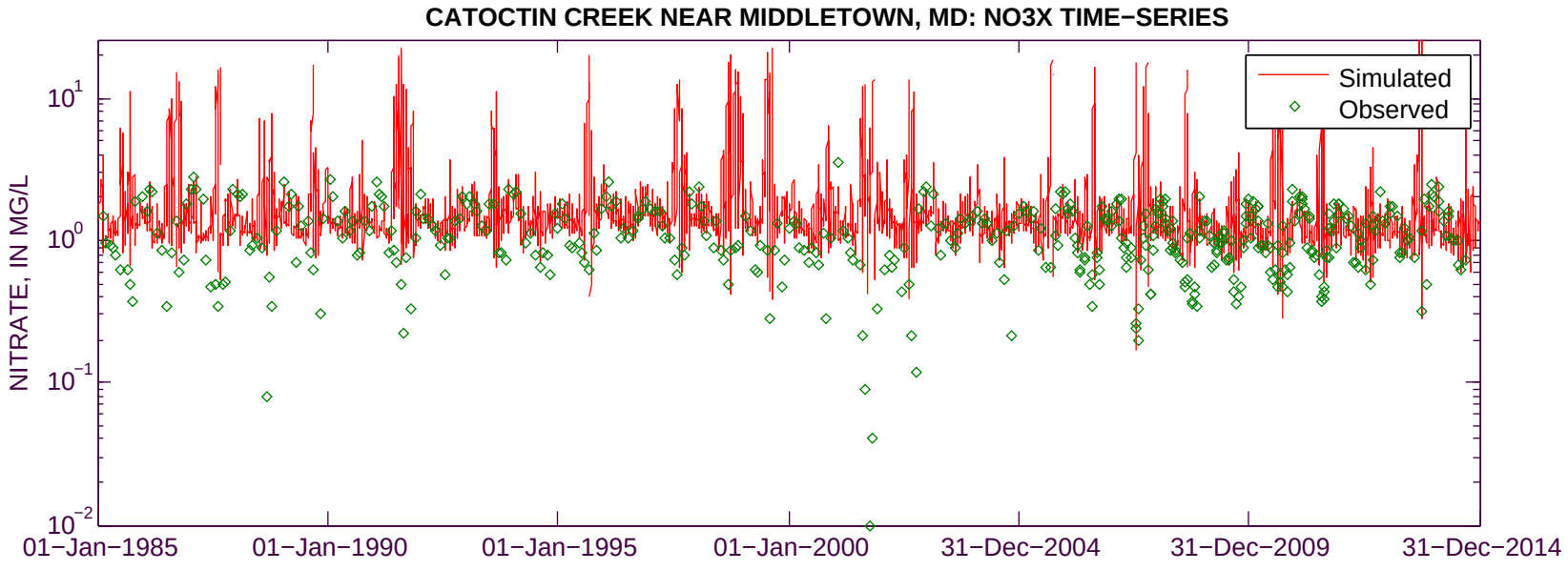
LOAD DATA
LOG10

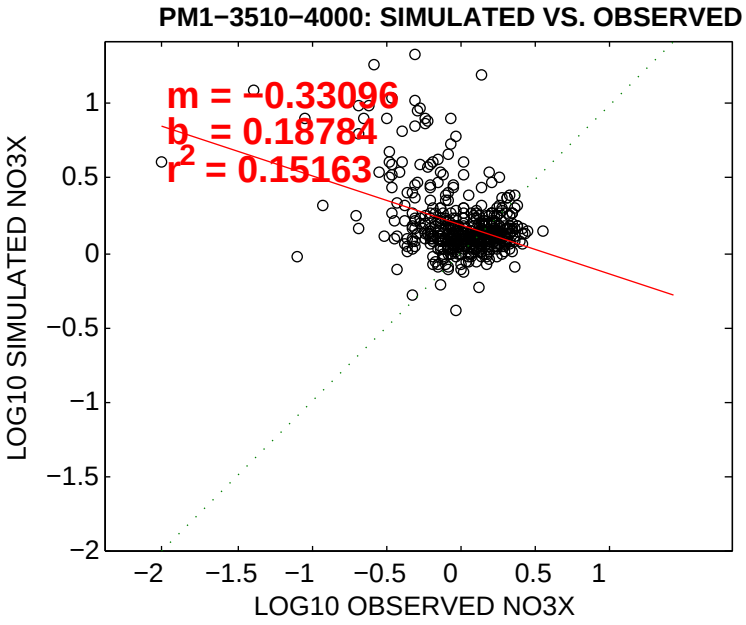


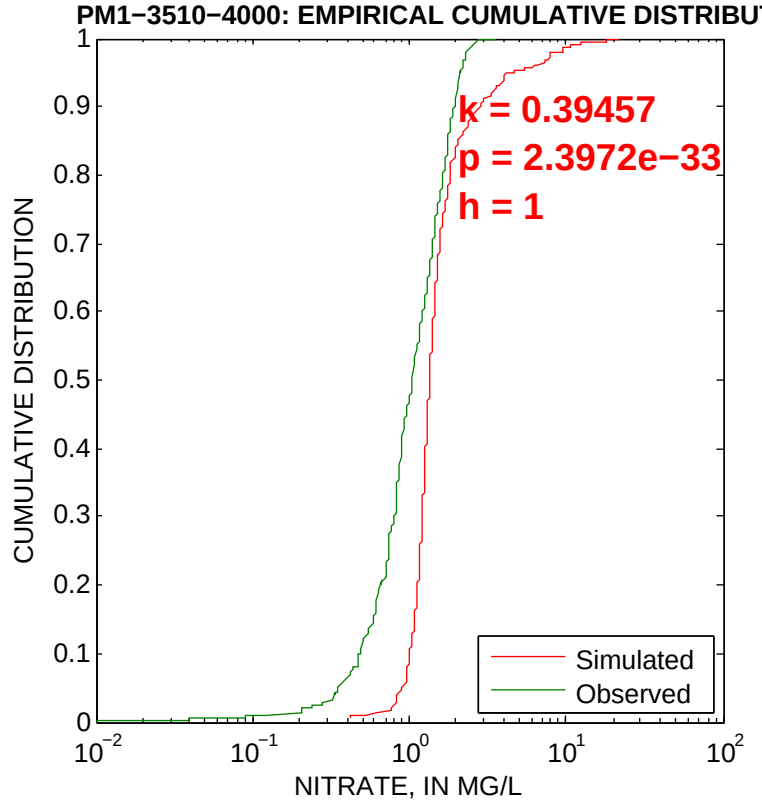












DATA SELECTION

scenario	file
P620171001WQ	NO3X.calib

plot: NO3X - nitrate

Dates: 1/1/1985 – 12/31/201

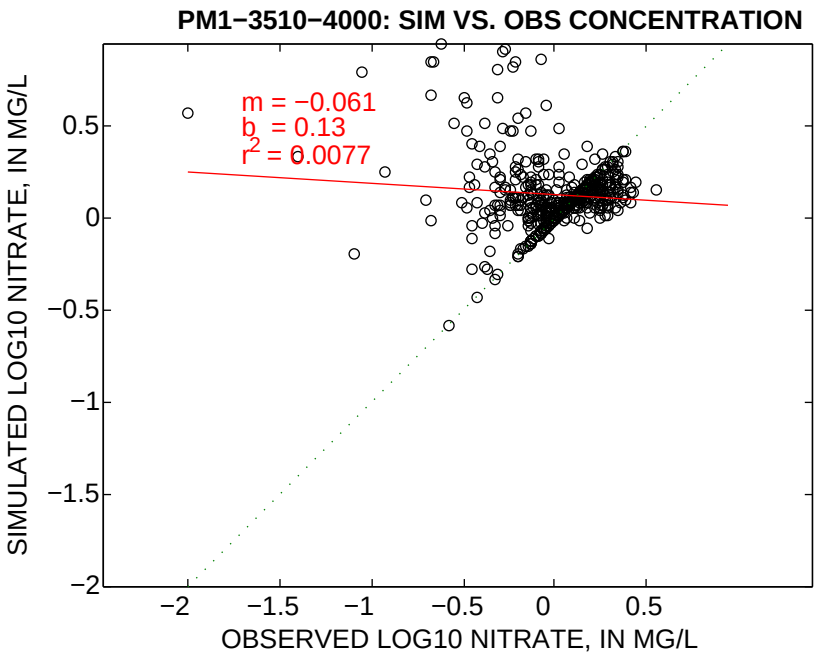
Drive	Directory	Observed
N/A	model	OBS20161101

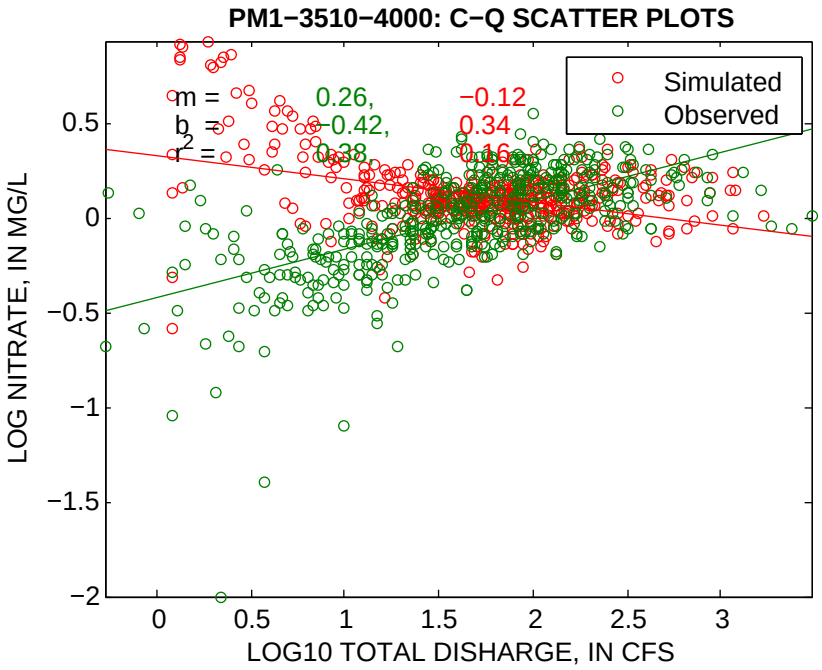
STATISTICS

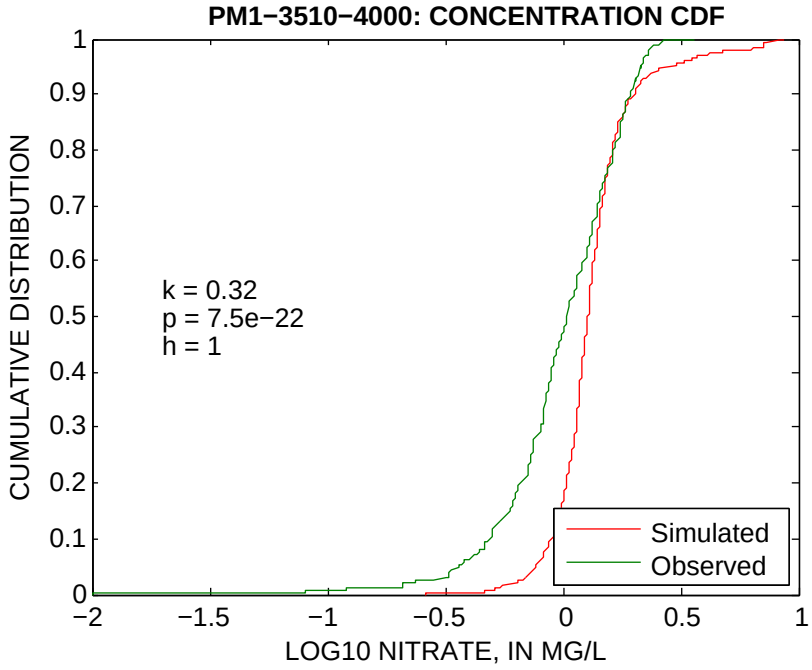
	n	observe	simulate
		479	476
min		0.01	0
		-2	-0.379104
mean		1.1458	1.87971
		-0.0028297	0.188773
media		1.048	1.3557
		0.0232493	0.132372
max		3.59	21.723
		0.555094	1.33692
varian		0.315884	4.07742
		0.0701888	0.0507014
JB		0.001	0.001
		0.001	0.001
		ra	log
%		64.0524	-6770.91
err.va		5.54453	0.204138
rel.std.err		17.5524	2.90841
mod.eff		-16.5524	-1.90841

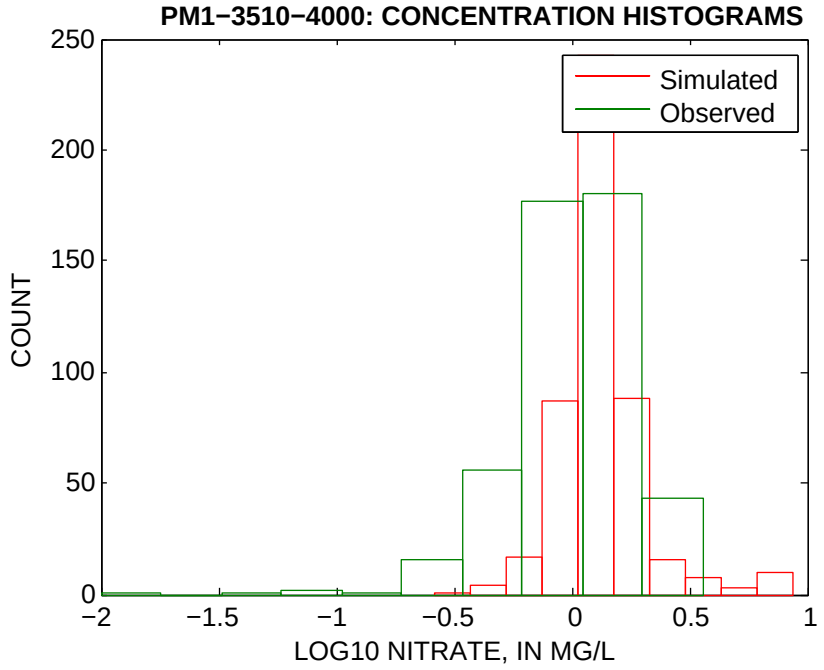
VERSION 2.1

ALL DATA
LOG10

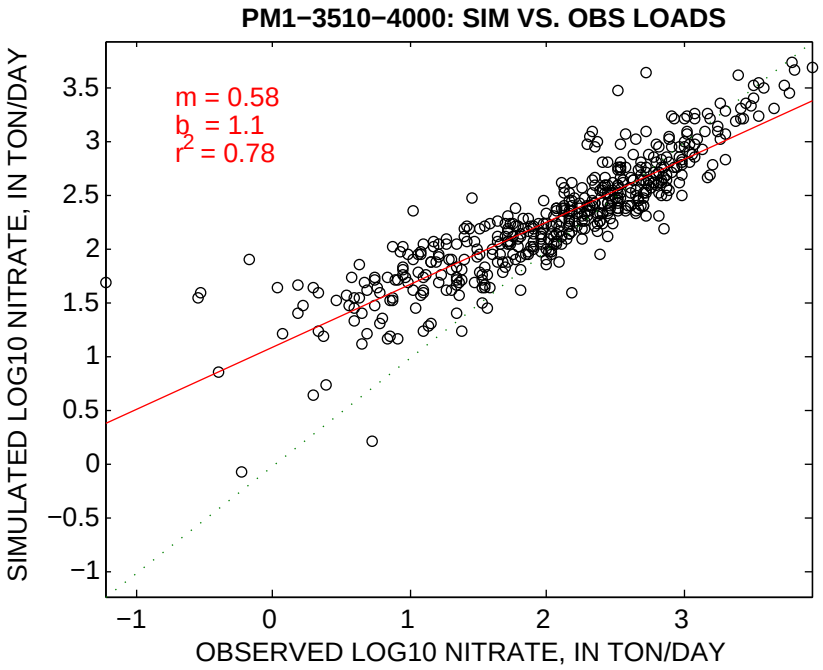


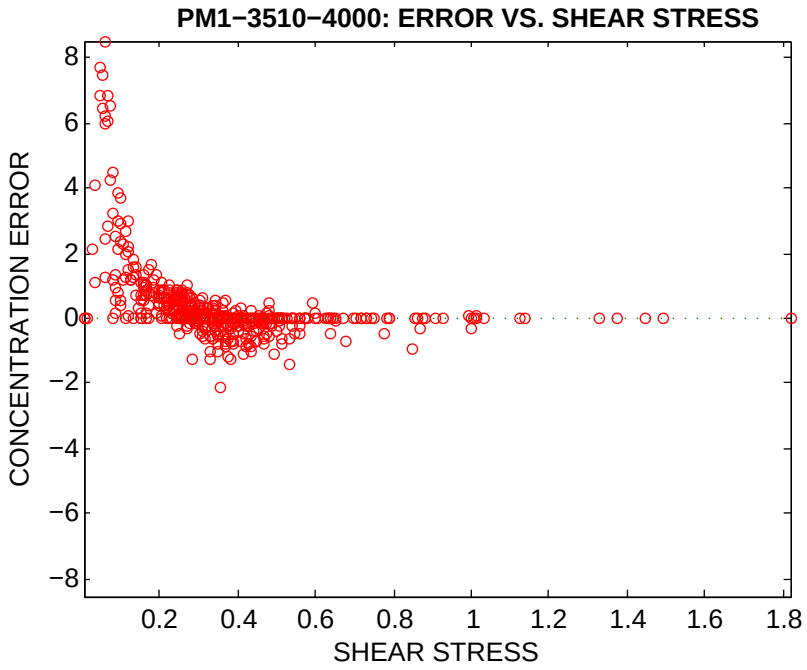


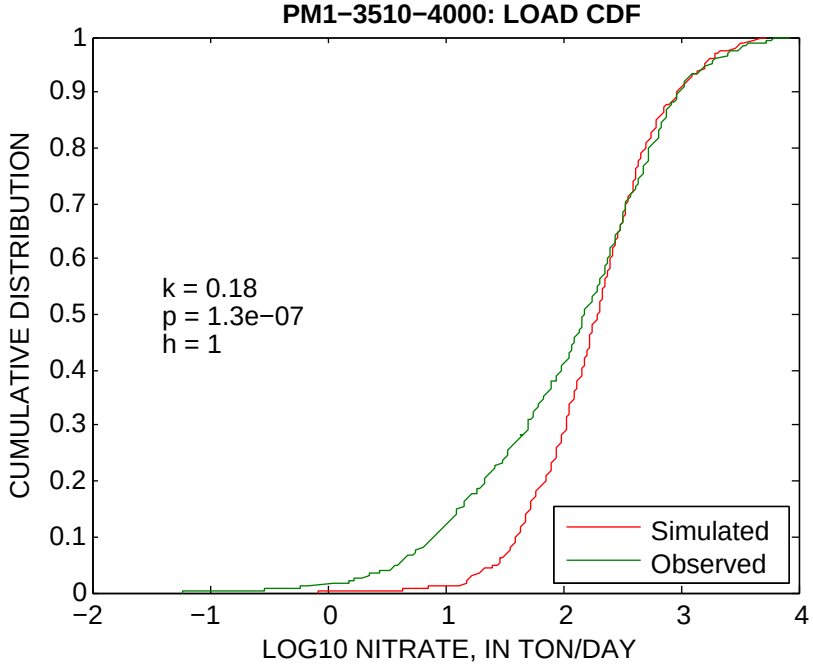


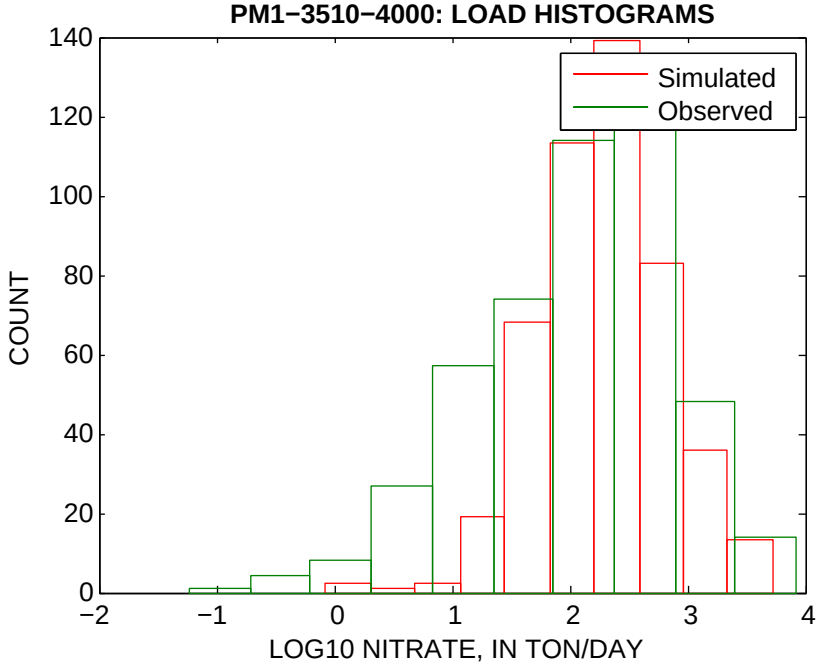


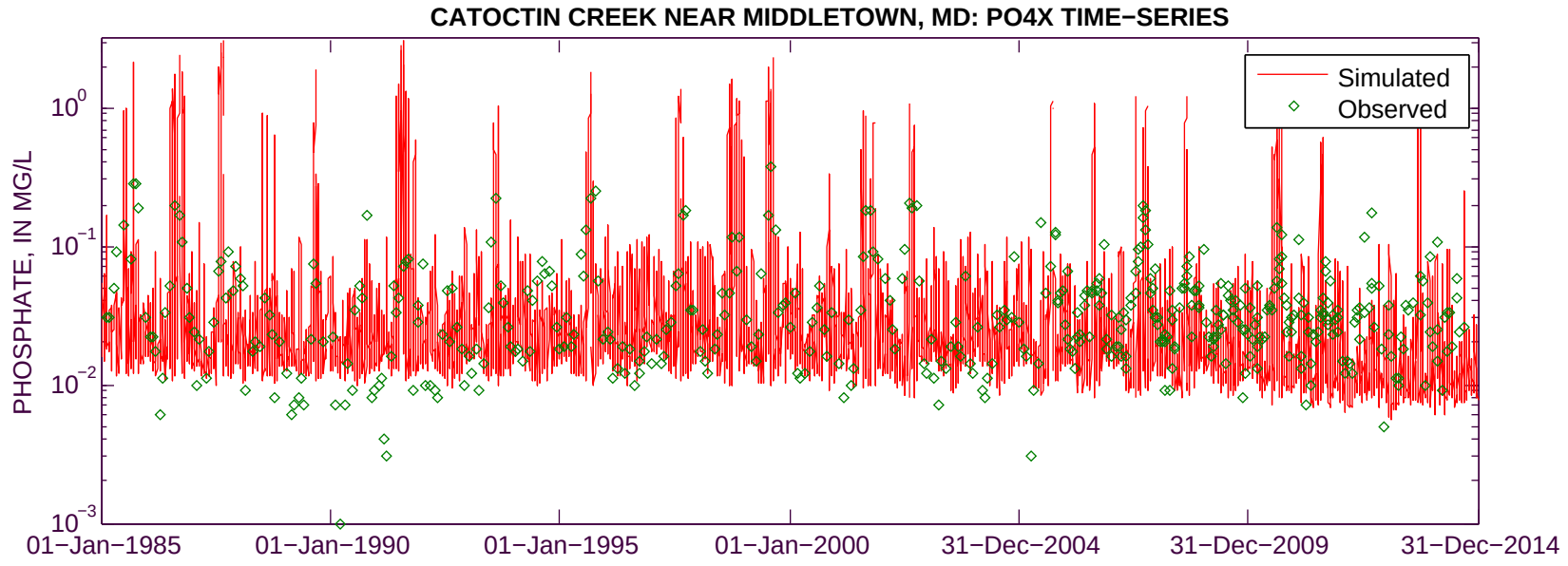
LOAD DATA
LOG10

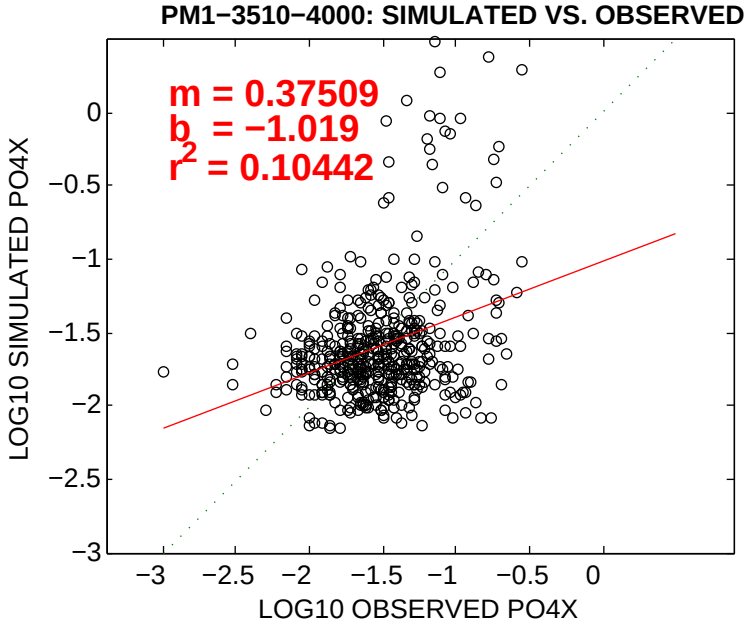


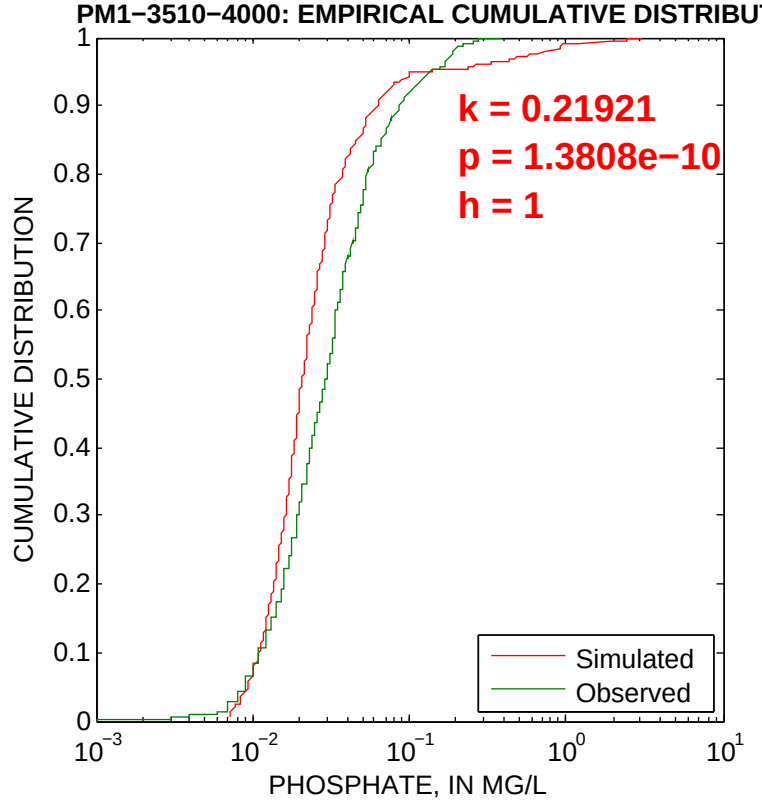












DATA SELECTION

scenario	file
P620171001WQ	PO4X.calib

plot: PO4X - phosphate

Dates: 1/1/1985 – 12/31/201

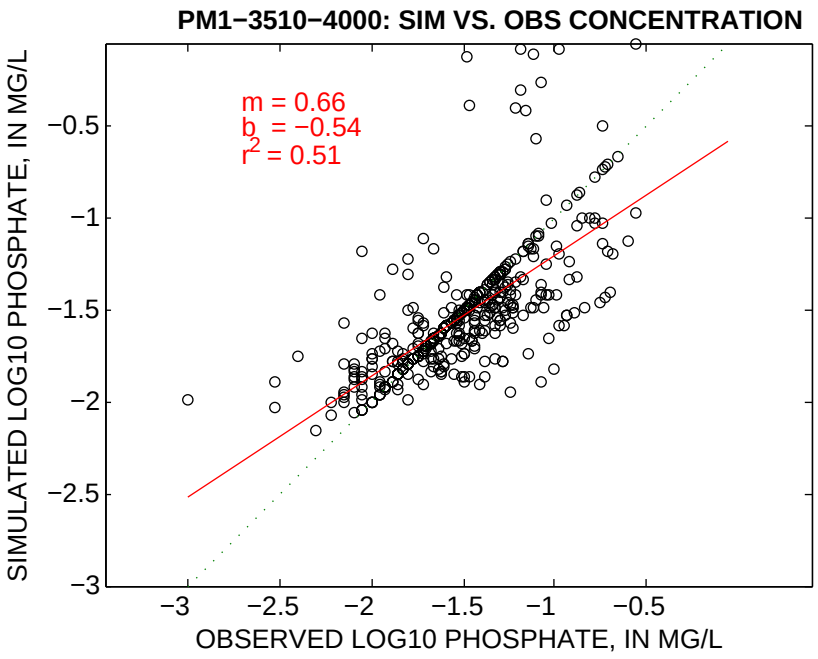
Drive	Directory	Observed
N/A	model	OBS20161101

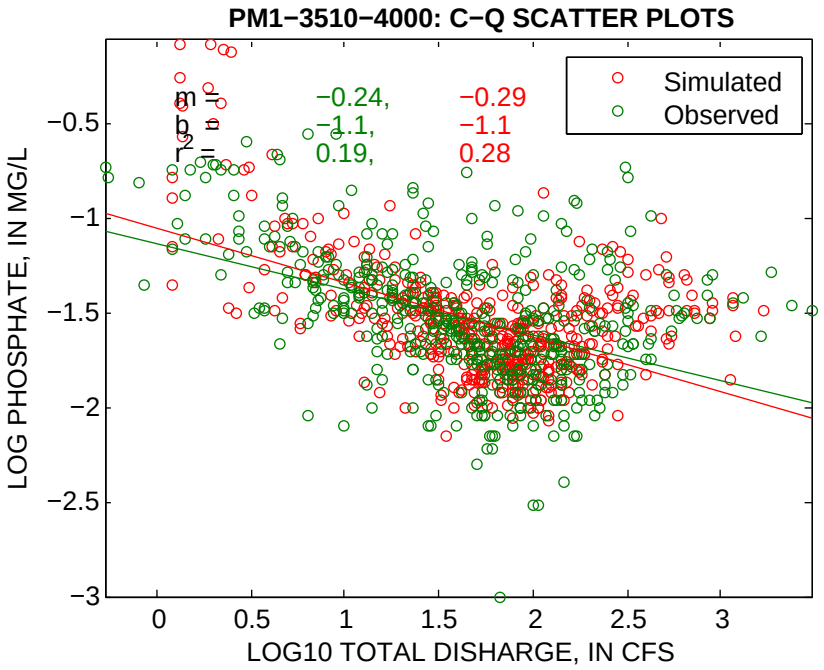
STATISTICS

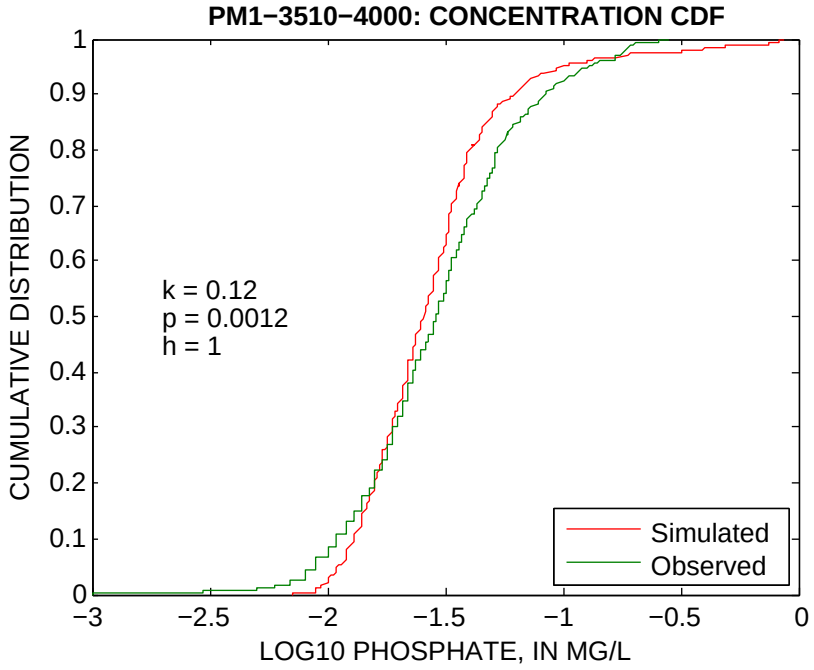
	n	479	476
		observe	simulate
min		0.001	0
		-3	-2.1496
mean		0.0430188	0.0670585
		-1.52648	-1.59155
media		0.029	0.020916
		-1.5376	-1.67751
max		0.38	3.0208
		-0.552842	0.480122
varian		0.00205427	0.0600945
		0.121356	0.163507
JB		0.001	0.001
		0.019071	0.001
		ra	log
%		55.8818	4.26289
err.va		0.0569284	0.198067
rel.std.err		27.7122	1.63212
mod.eff		-26.7122	-0.632118

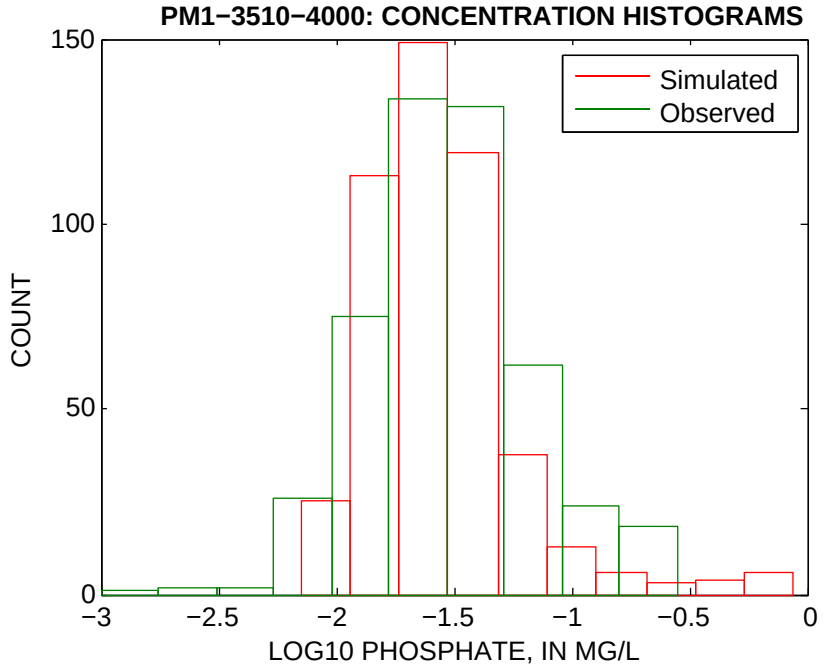
VERSION 2.1

ALL DATA
LOG10

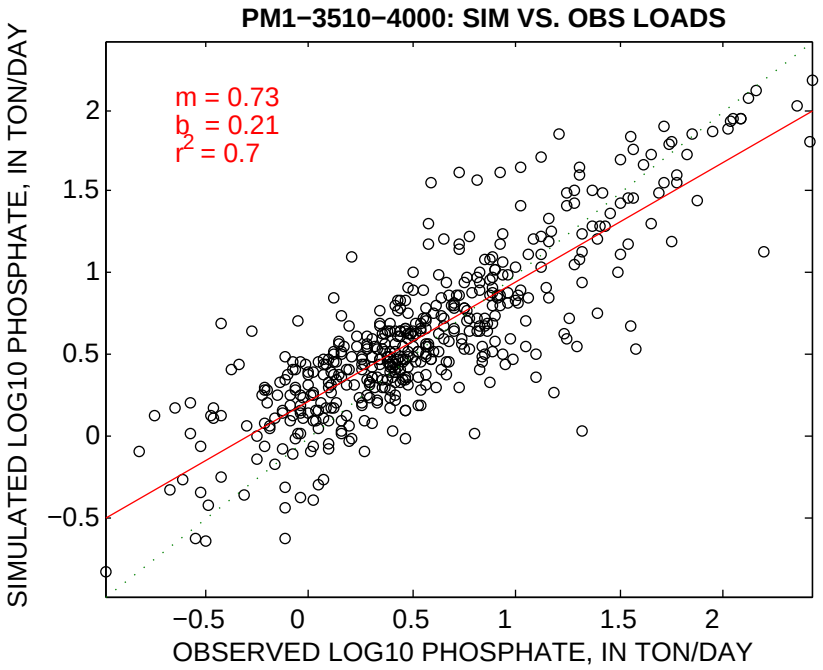


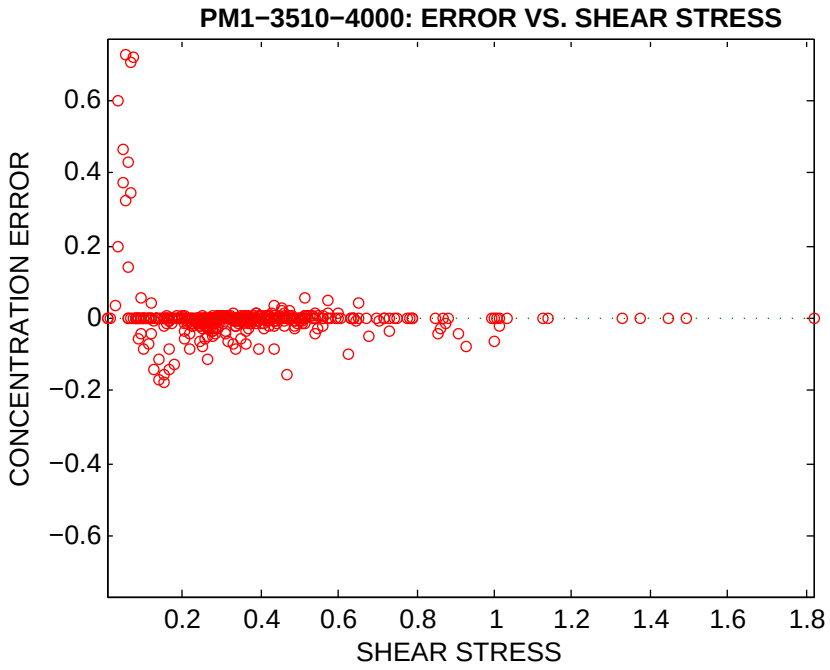


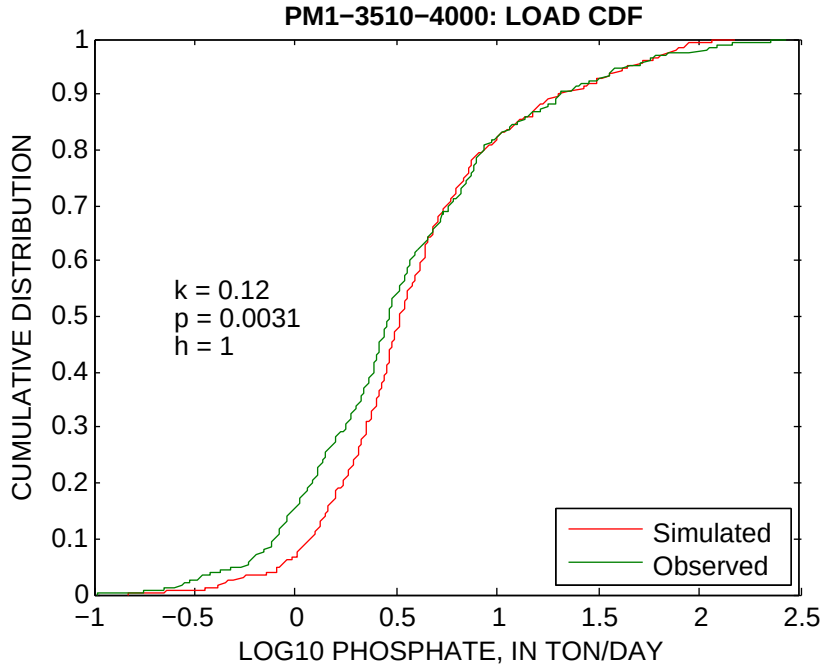


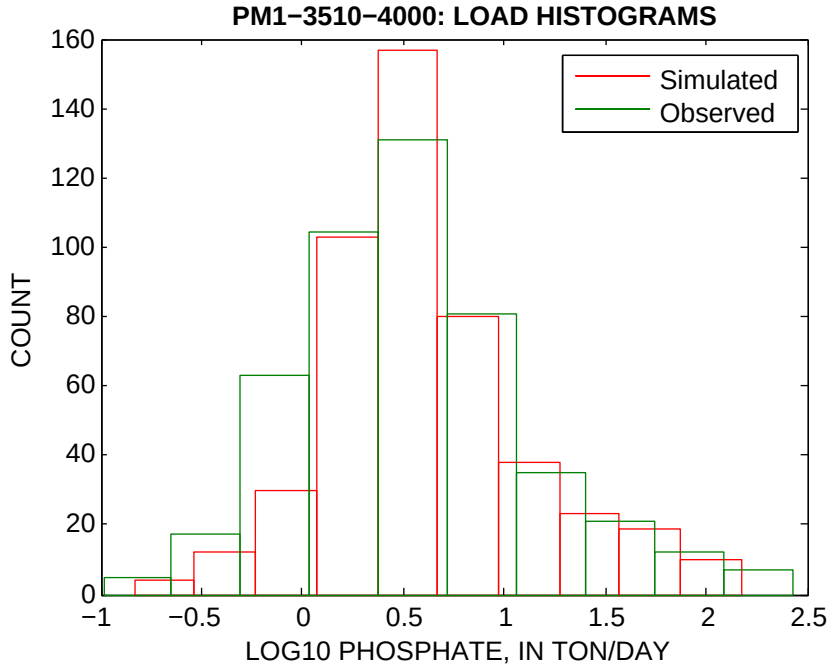


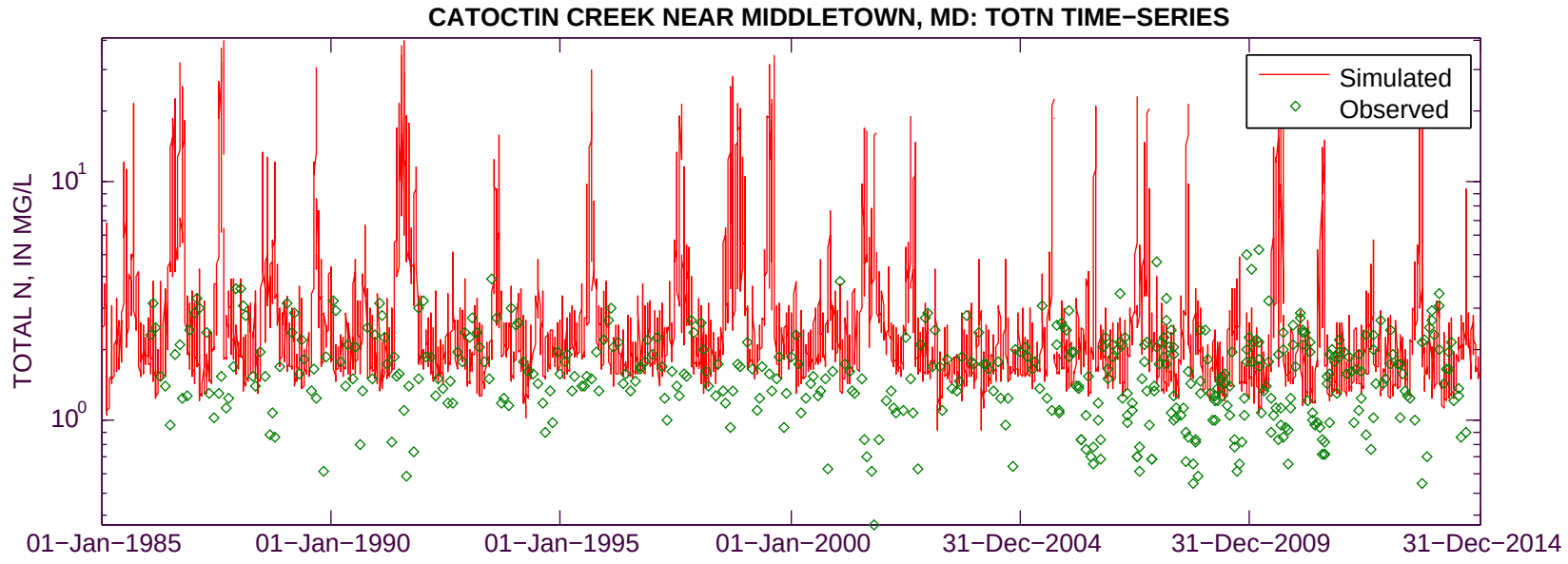
LOAD DATA
LOG10

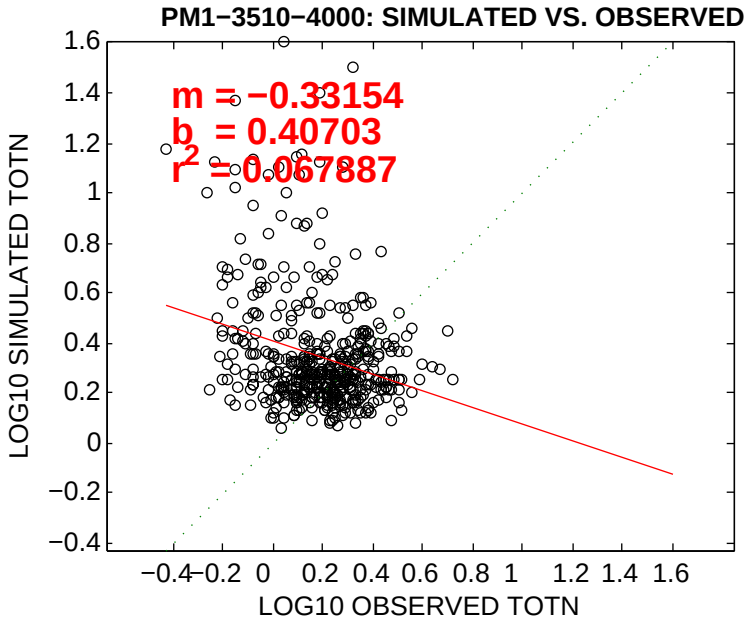


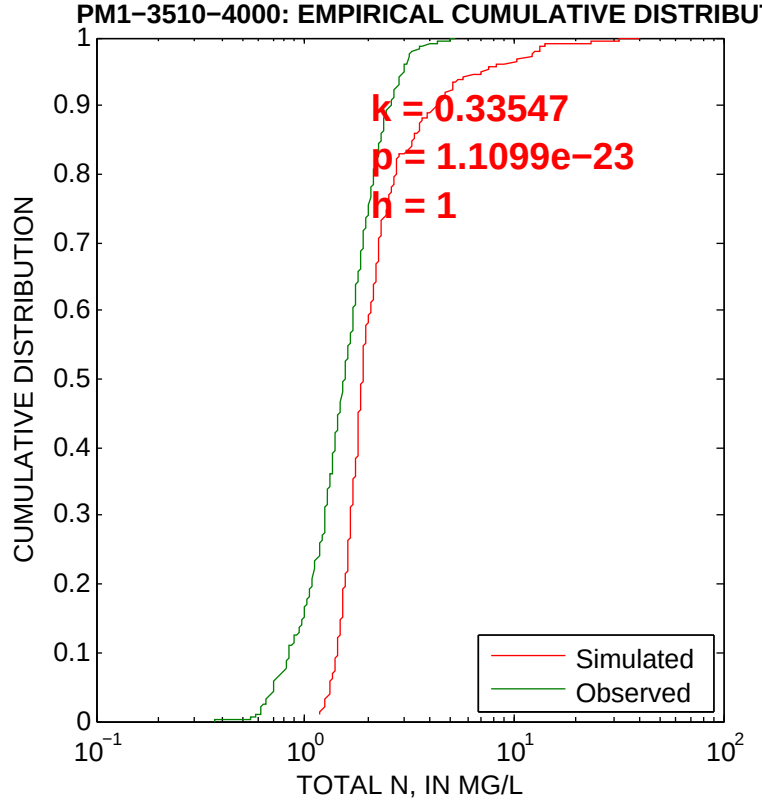












DATA SELECTION

scenario	file
P620171001WQ	TOTN.calib

plot: TOTN - total nitrogen

Dates: 1/1/1985 – 12/31/201

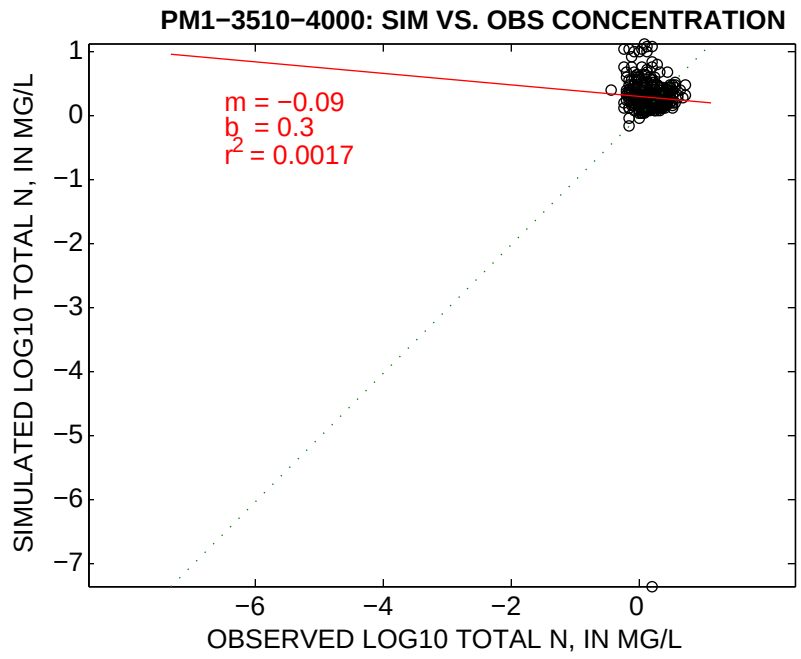
Drive	Directory	Observed
N/A	model	OBS20161101

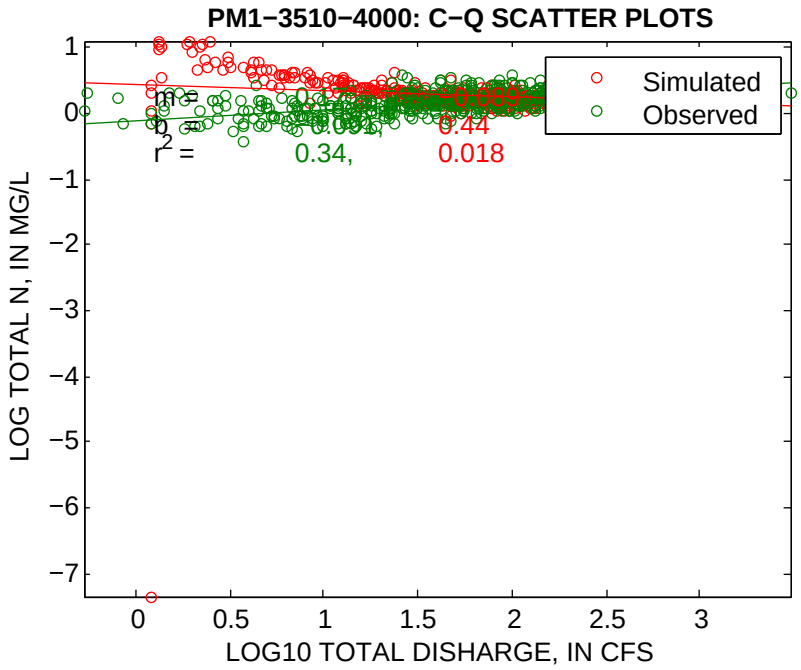
STATISTICS

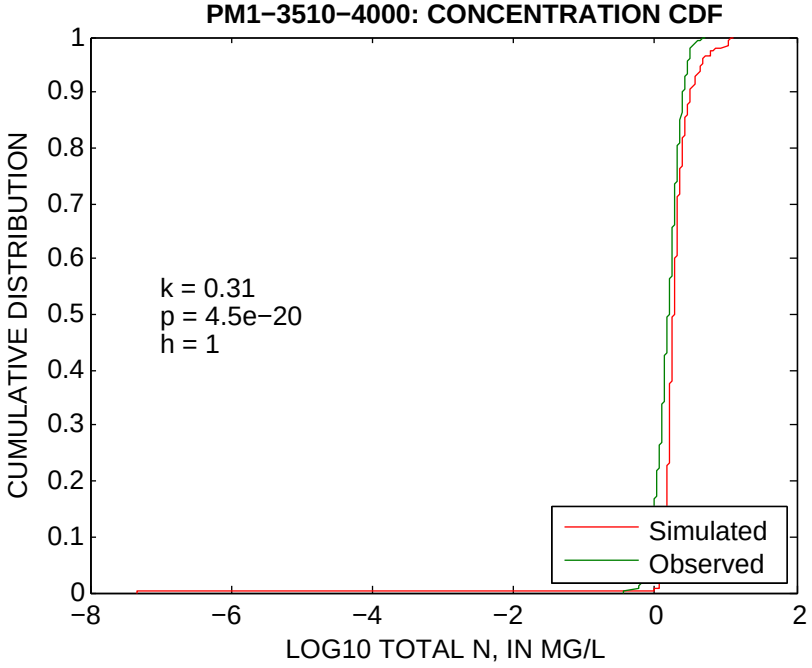
	n	observe	simulate
		468	465
min		0.37	0
		-0.431798	0.0623187
mean		1.6555	2.76657
		0.181656	0.346806
media		1.547	1.88085
		0.190332	0.275104
max		5.1999	40.044
		0.715995	1.60254
varian		0.497666	11.2242
		0.0333922	0.0540676
JB		0.001	0.001
		0.424896	0.001
		ra	log
%		67.114	90.9141
err.va		13.7168	0.136935
rel.std.err		27.5623	4.10081
mod.eff		-26.5623	-3.10081

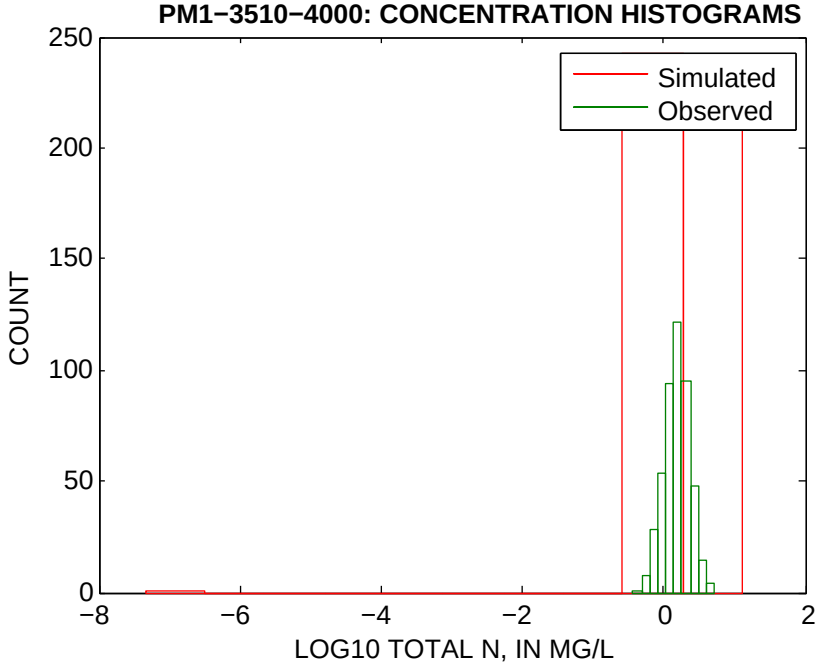
VERSION 3.1

ALL DATA
LOG10

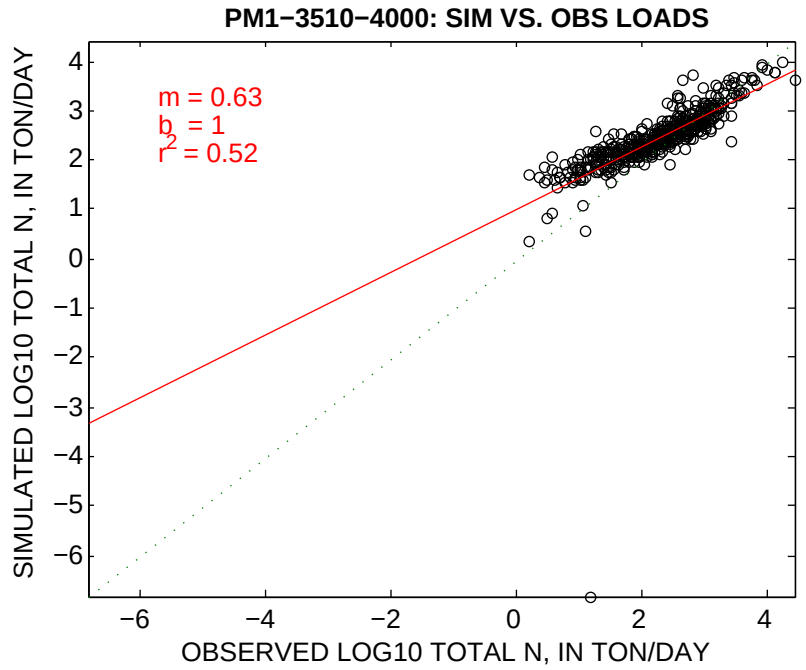


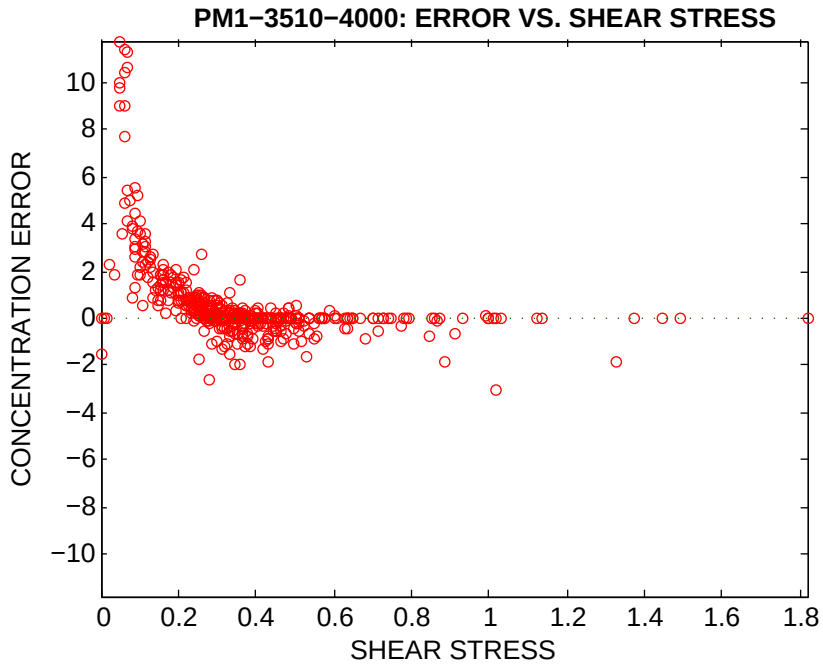


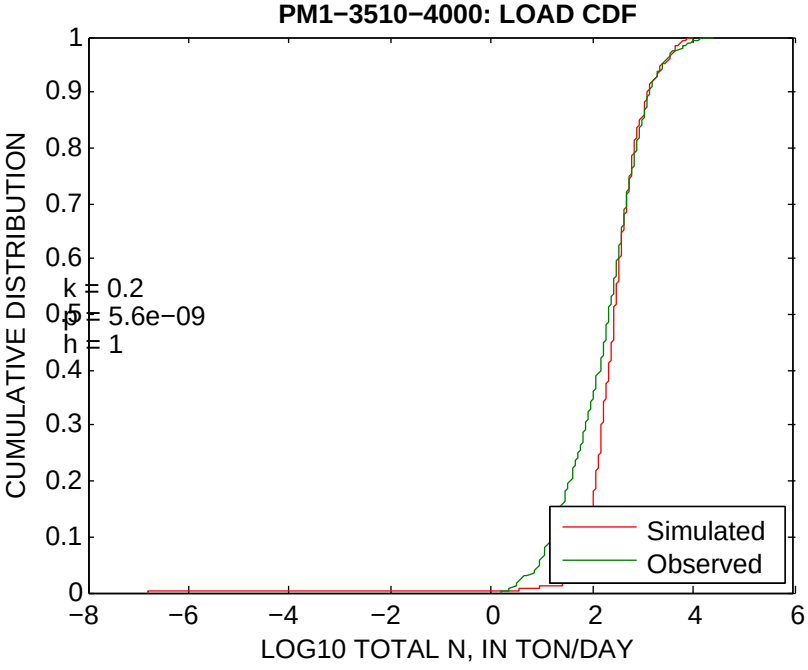


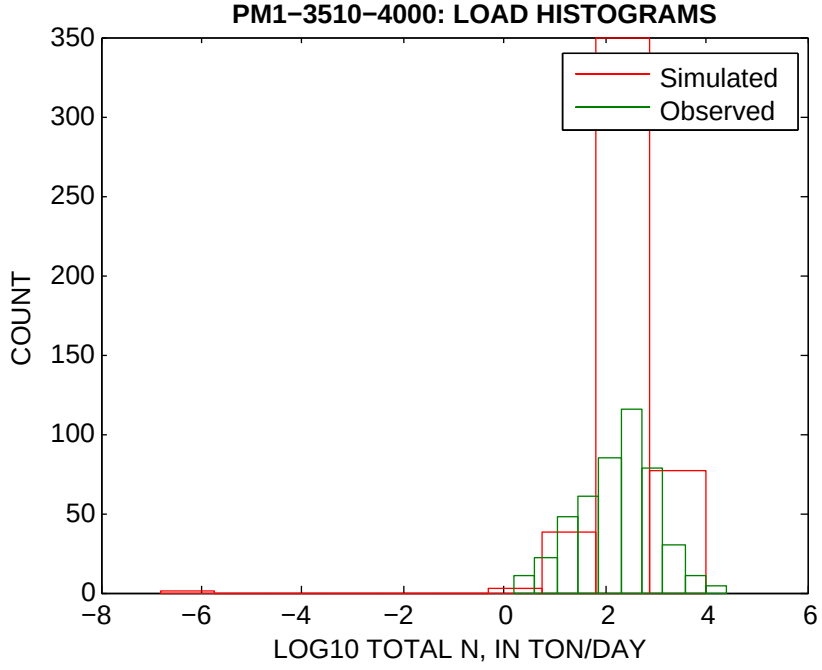


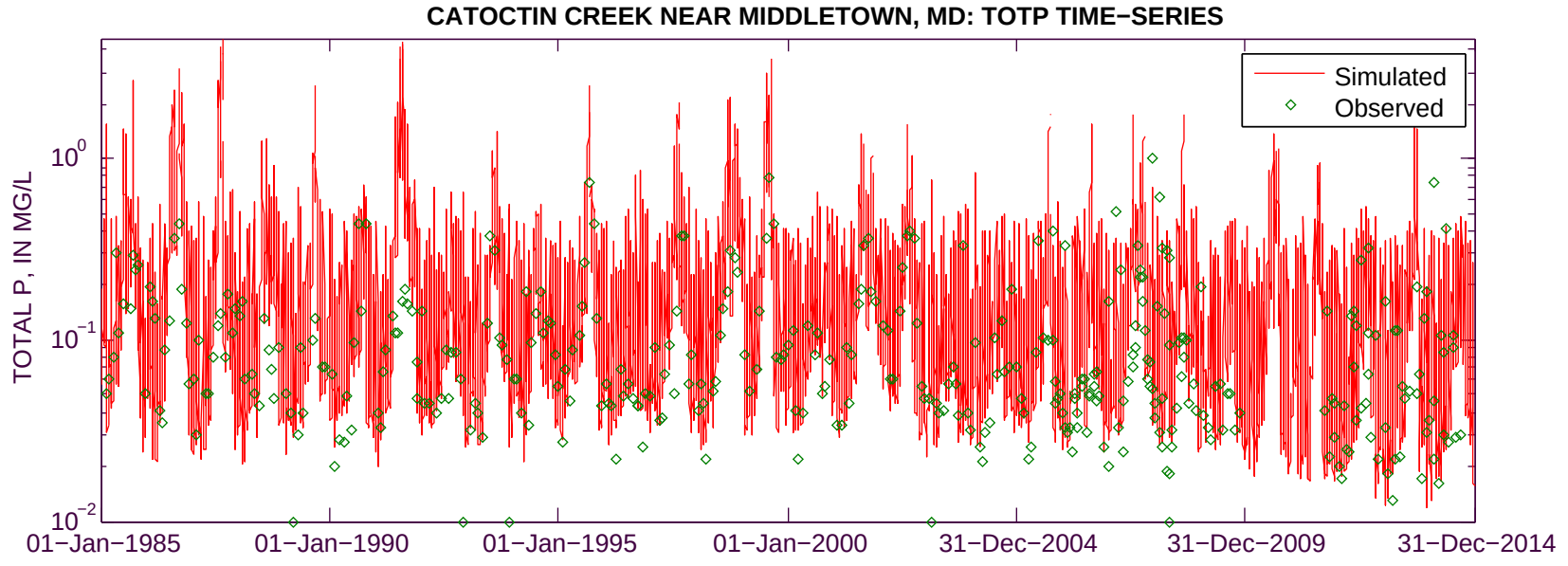
LOAD DATA
LOG10

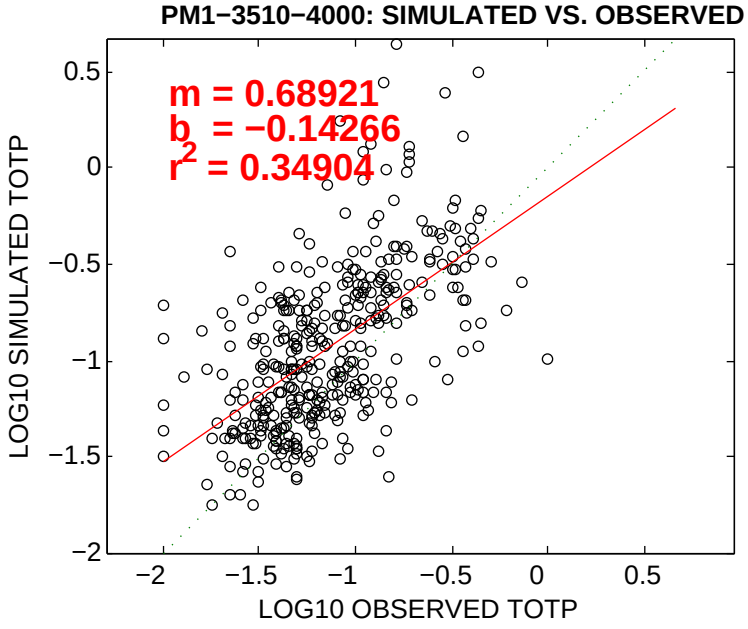


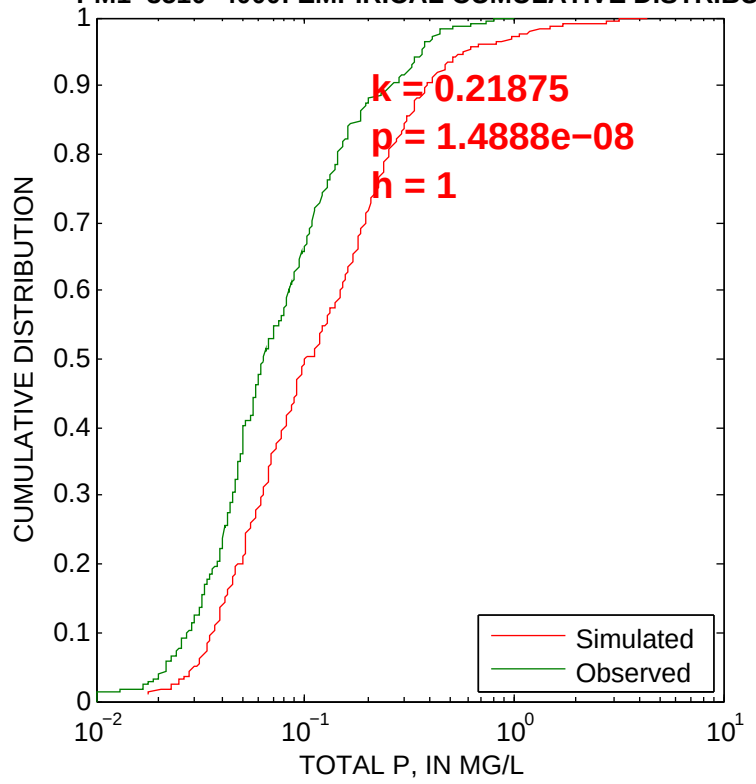












DATA SELECTION

scenario	file
P620171001WQ	TOTP.calib

plot: TOTP - total phosphorus

Dates 1/1/1985 12/31/201

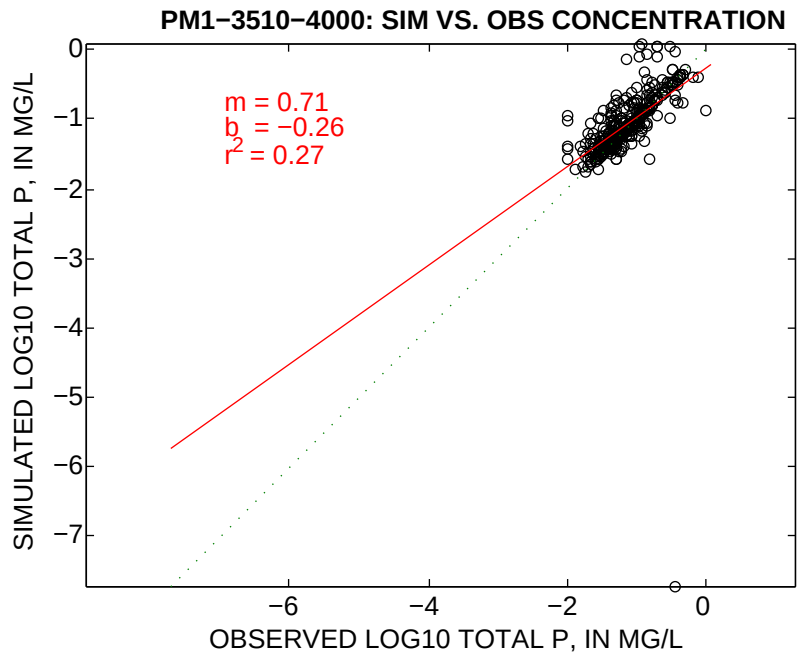
Drive	Directory	Observed
N/A	model	OBS20161101

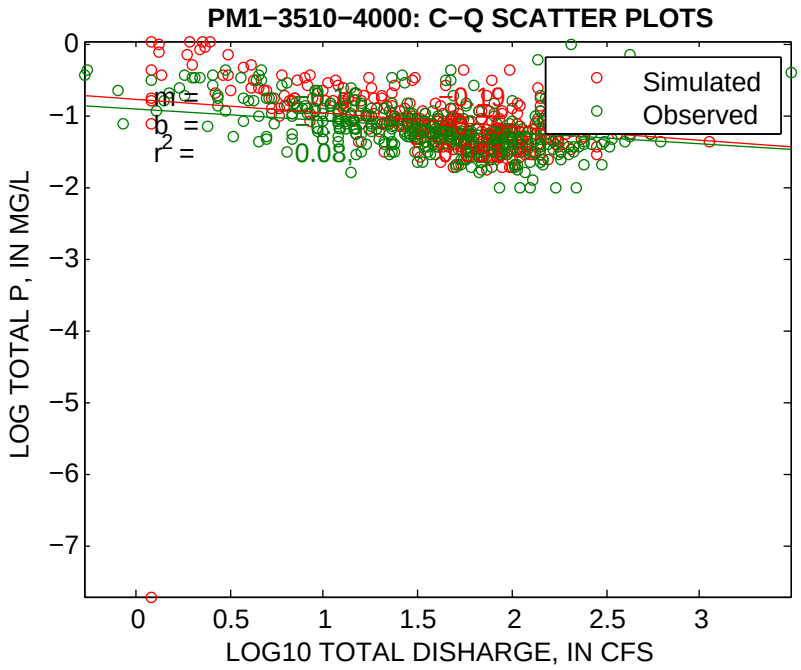
STATISTICS

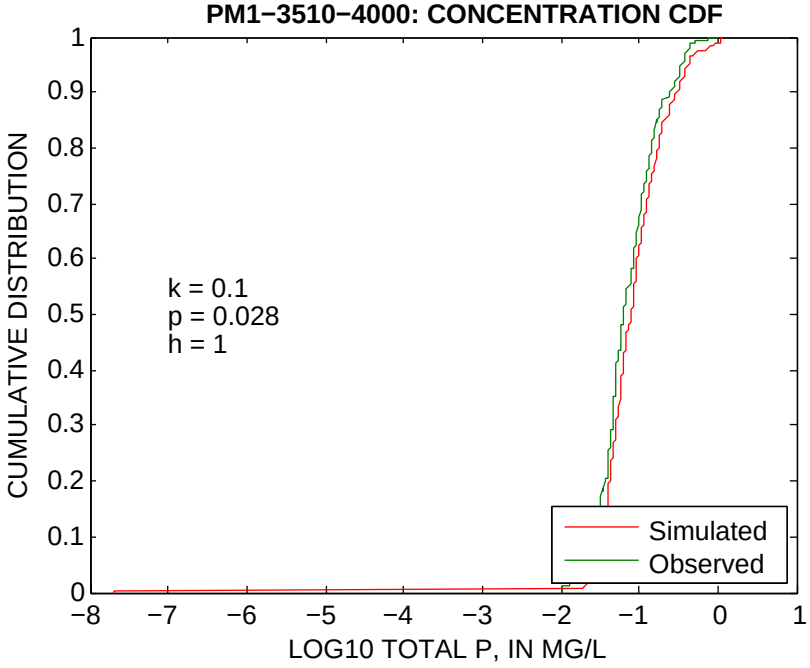
	n	384	381
		observe	**simulate**
min		0.01 -2	0 -1.75281
mean		0.109375 -1.13981	0.208894 -0.928221
media		0.064 -1.19382	0.10125 -0.95652
max		0.994 -0.0026136	4.3621 0.639696
varian		0.0150156 0.129742	0.146744 0.176567
JB		0.001 0.015250	0.001 0.001
		ra	log
%		90.9889	-18.5632
err.va		0.146831	0.172356
rel.std.err		9.77857	1.32845
mod.eff		-8.77857	-0.328451

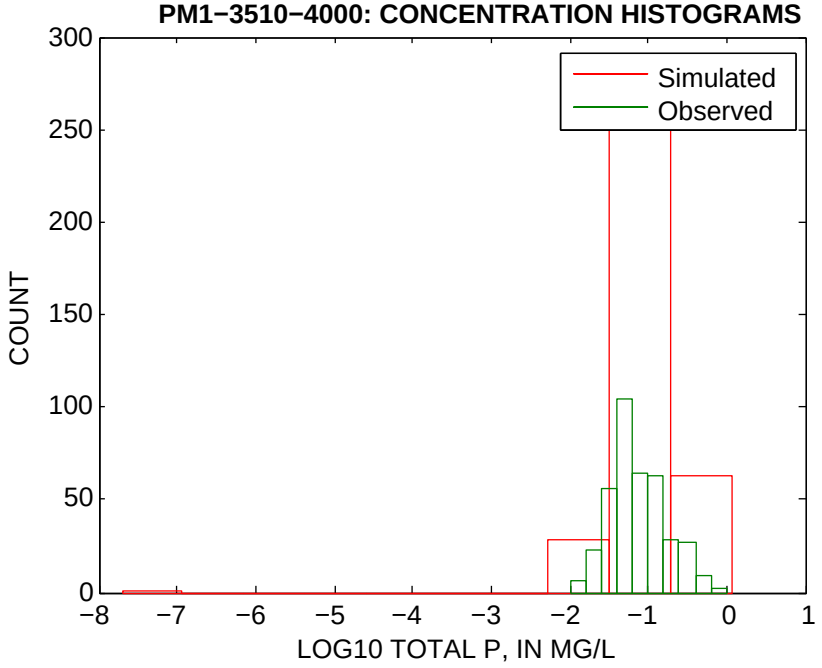
VERSION 2.1

ALL DATA
LOG10

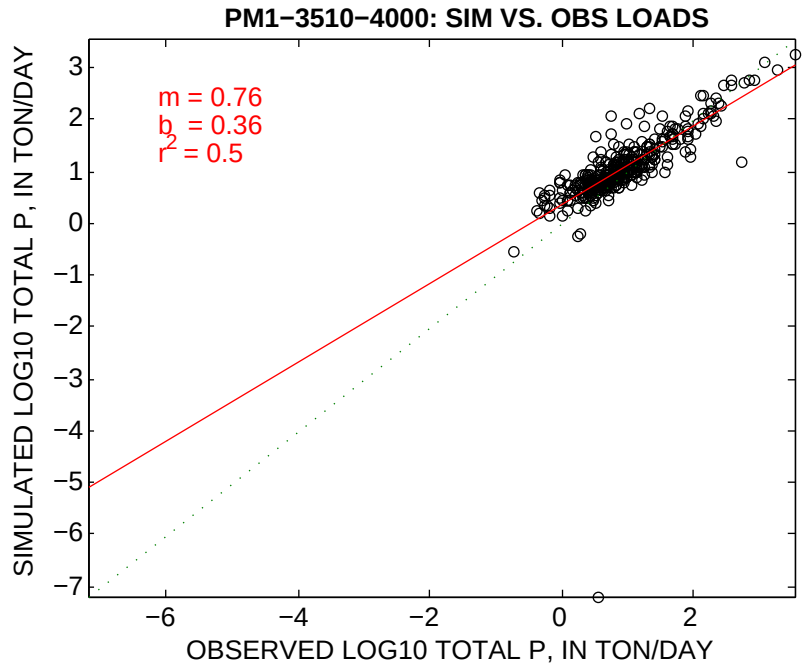


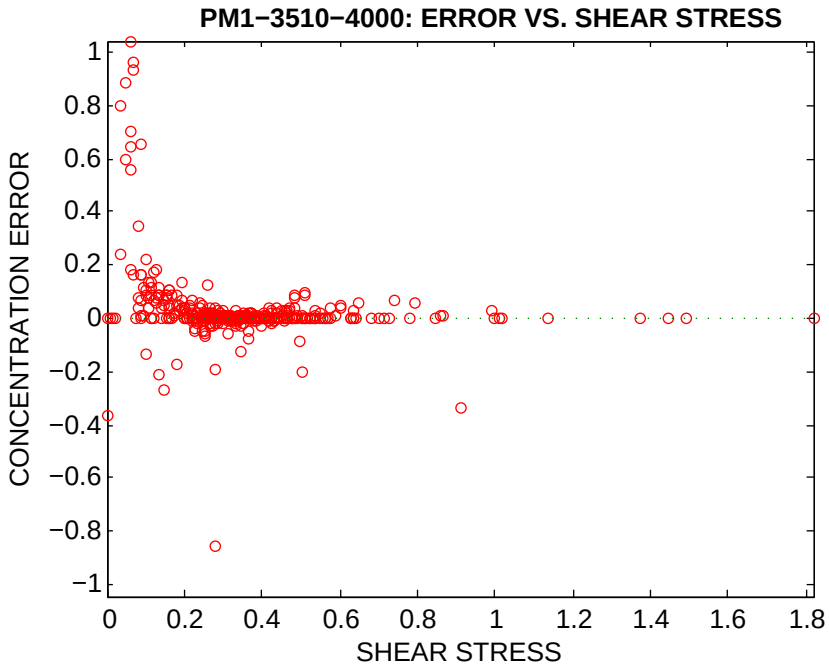


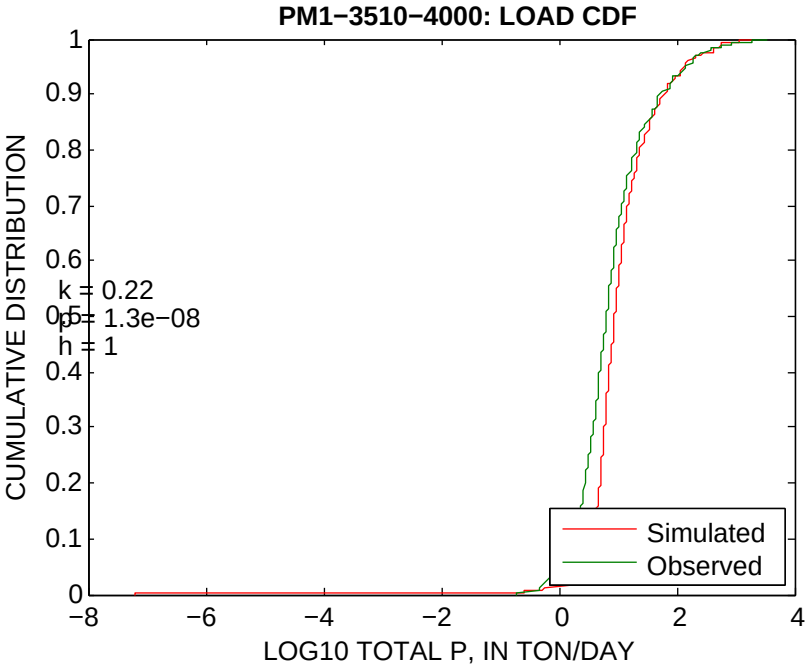


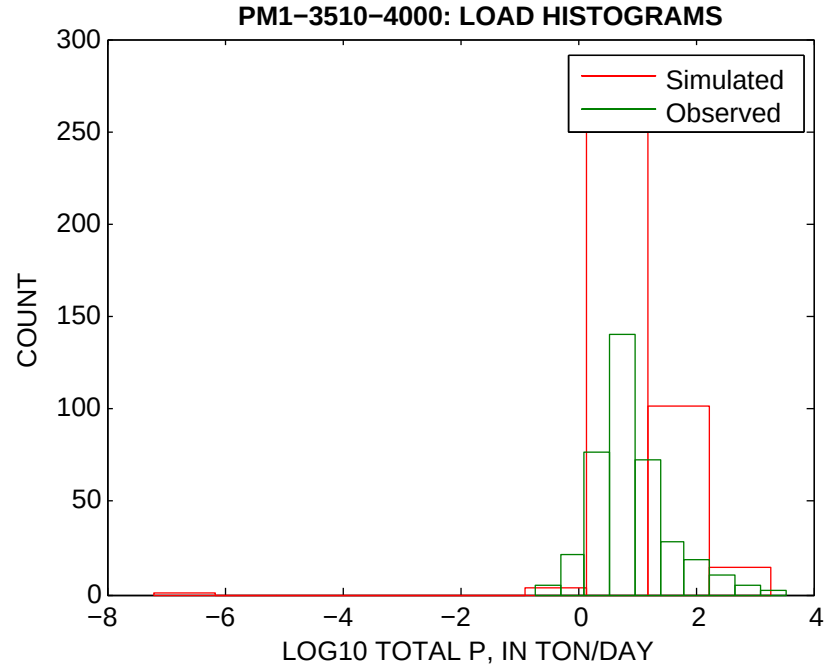


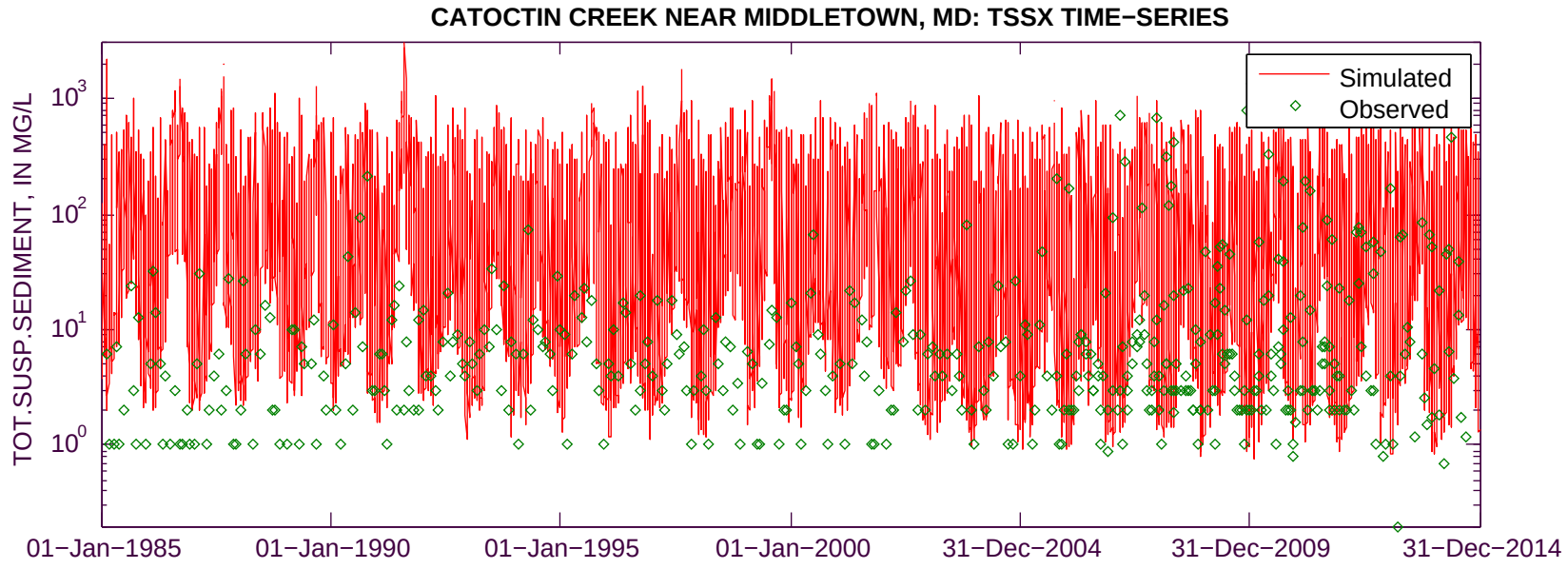
LOAD DATA
LOG10

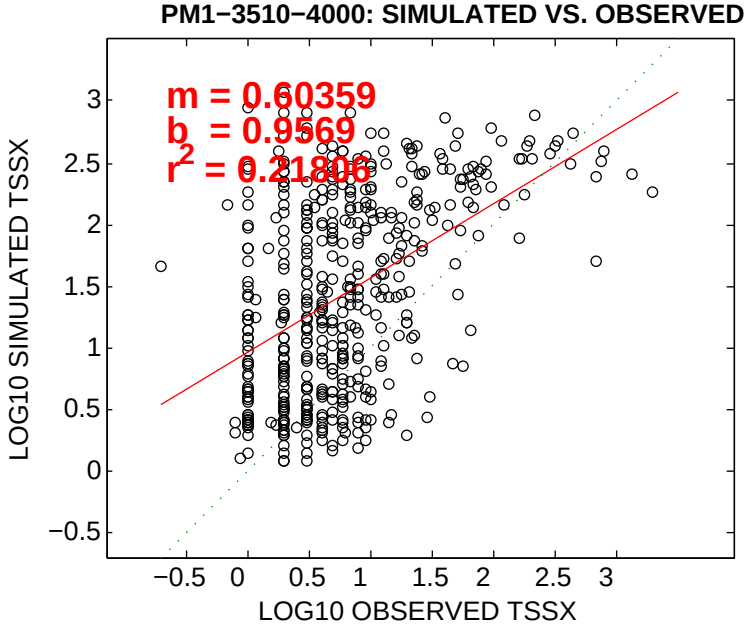


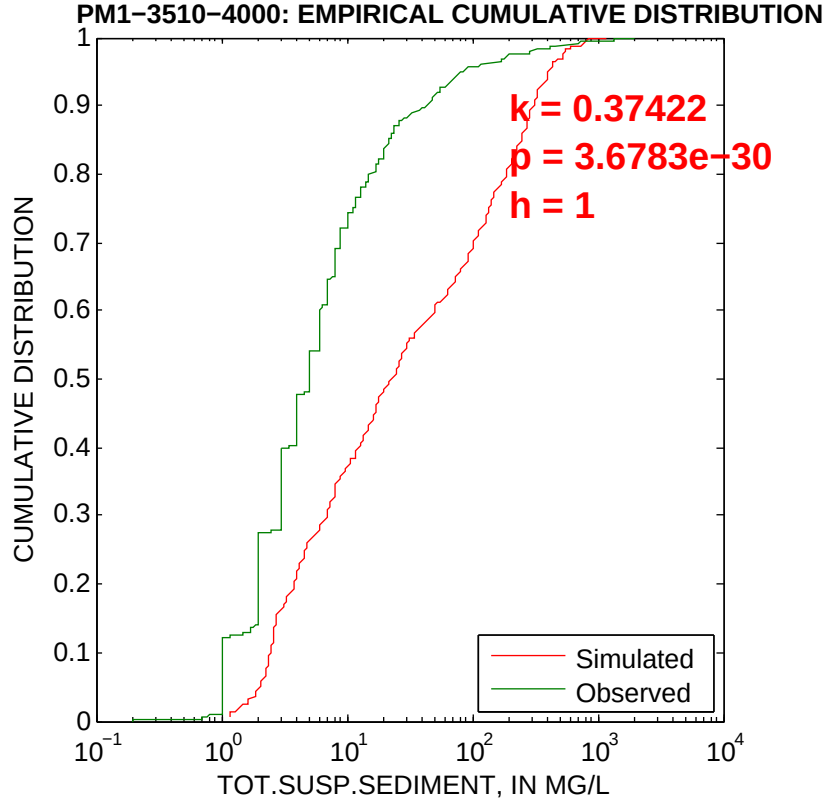












DATA SELECTION

scenario: P620171001WQ | file: TSSX.calib

plot: TSSX - total suspended ...

Dates: 1/1/1985 – 12/31/201

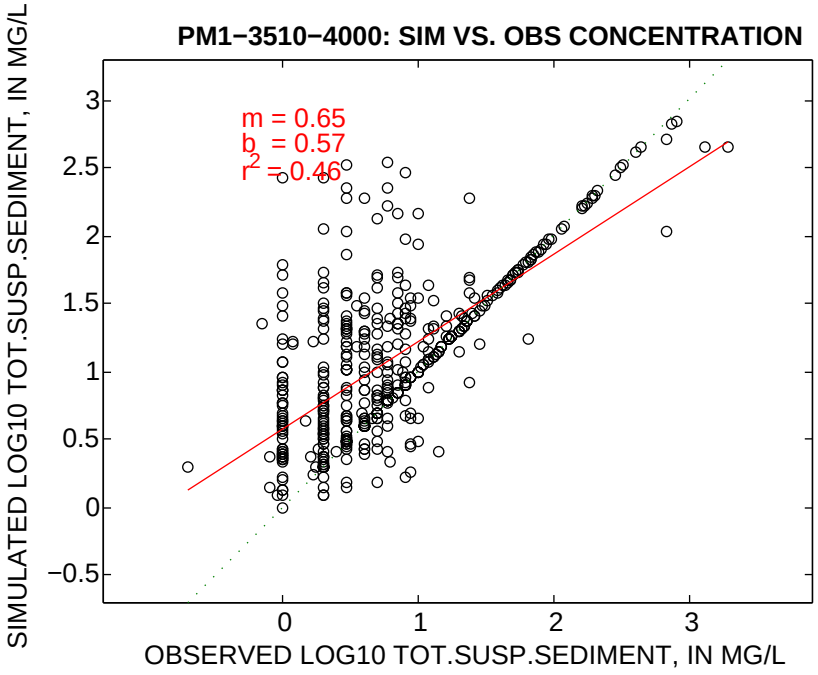
Drive: N/A | Directory: model | Observed: OBS20161101

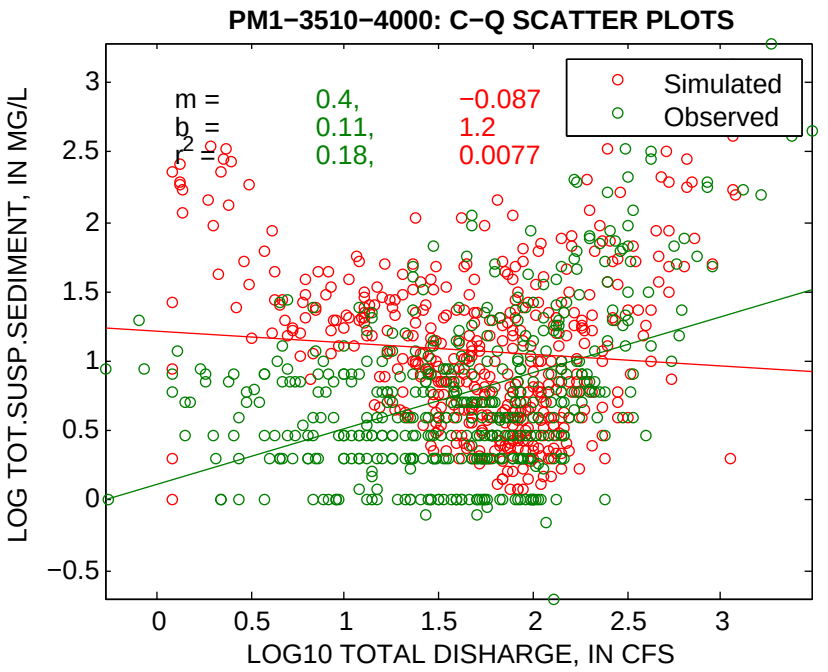
STATISTICS

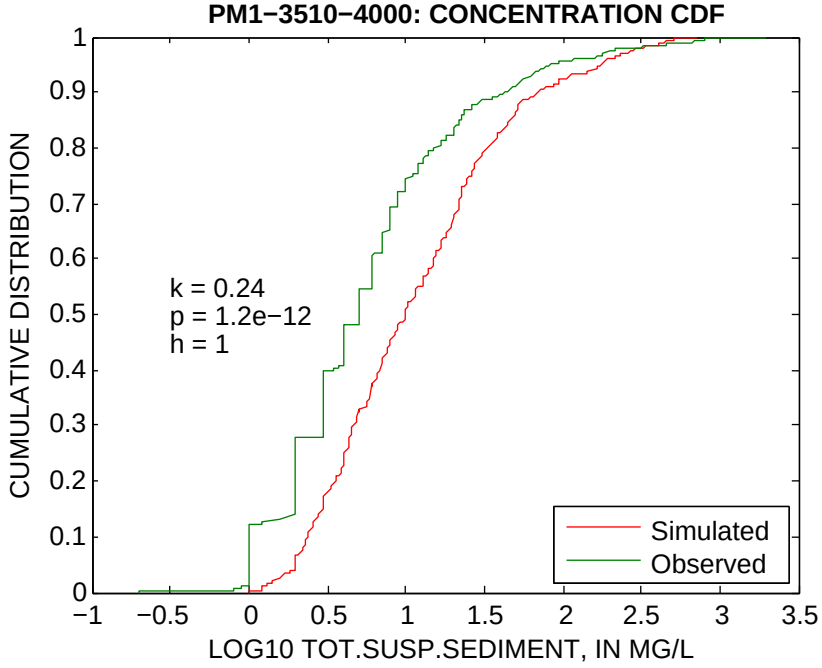
	n	observe	simulate
		481	478
min		0.2	0
		-0.69897	0.0711084
mean		29.8086	101.195
		0.776359	1.42551
media		5	23.123
		0.69897	1.37679
max		1947	1183
		3.28937	3.07298
varian		17472.9	25127.9
		0.373029	0.623221
JB		0.001	0.001
		0.001	0.001
		ra	log
%		239.483	83.6142
err.va		38877	0.968213
rel.std.err		2.22498	2.59554
mod.eff		-1.22498	-1.59554

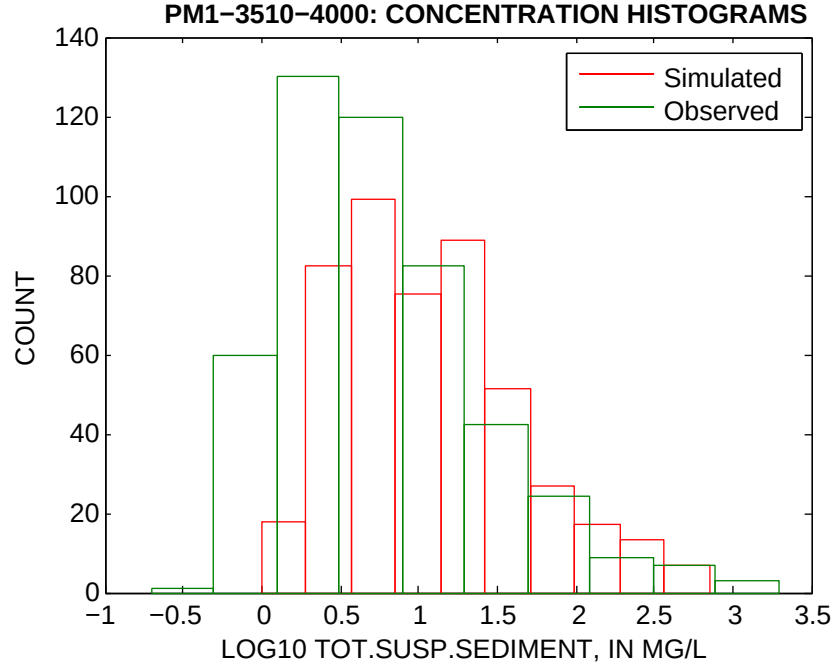
VERSION 2.1

ALL DATA
LOG10

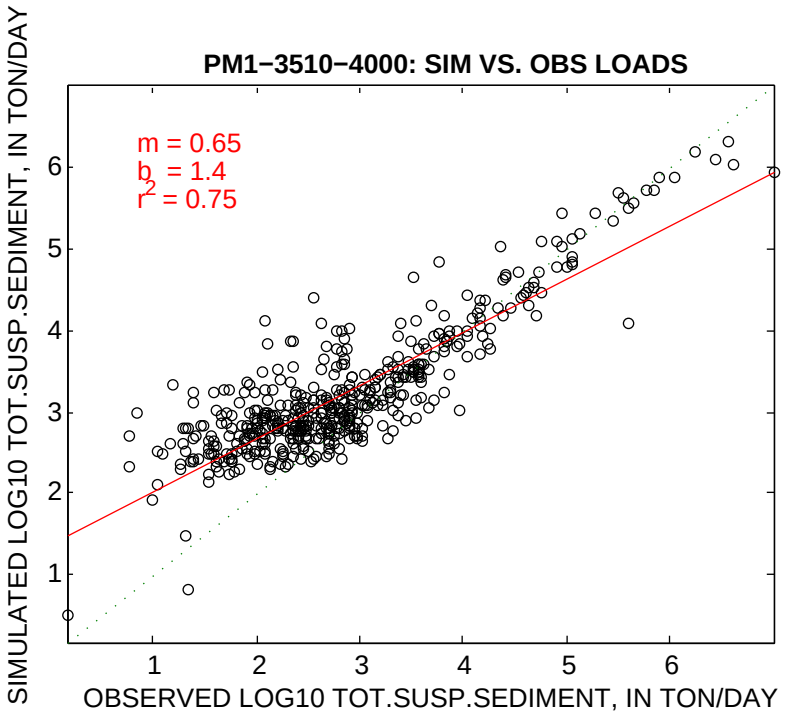


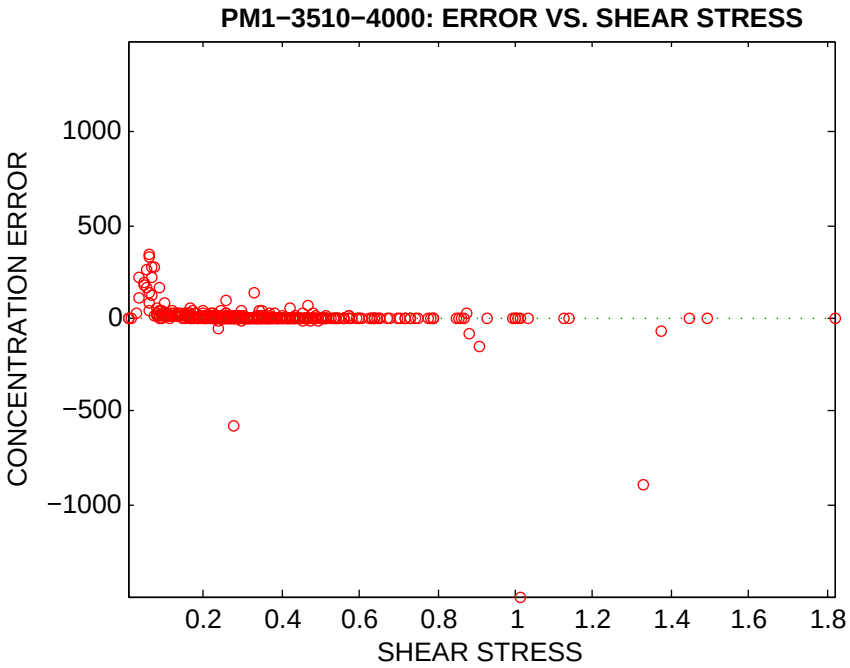


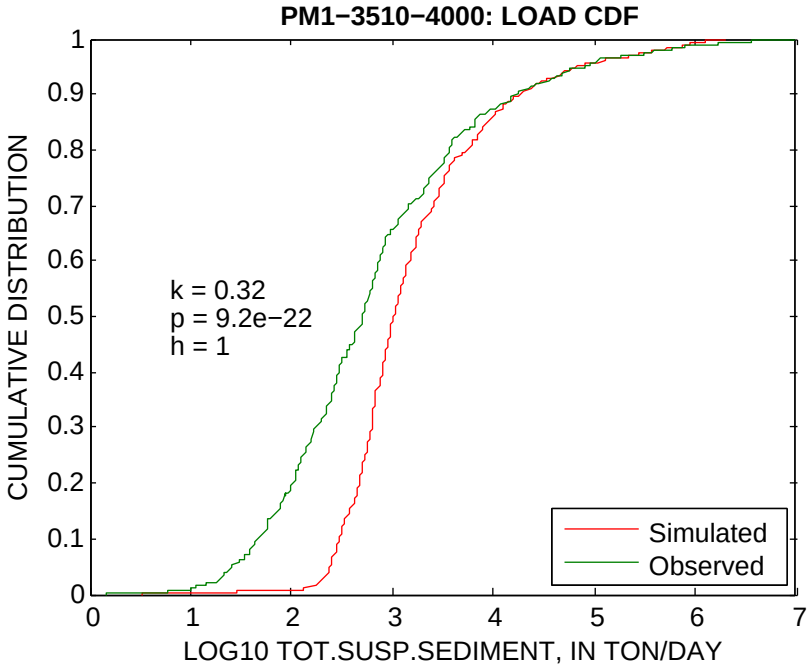


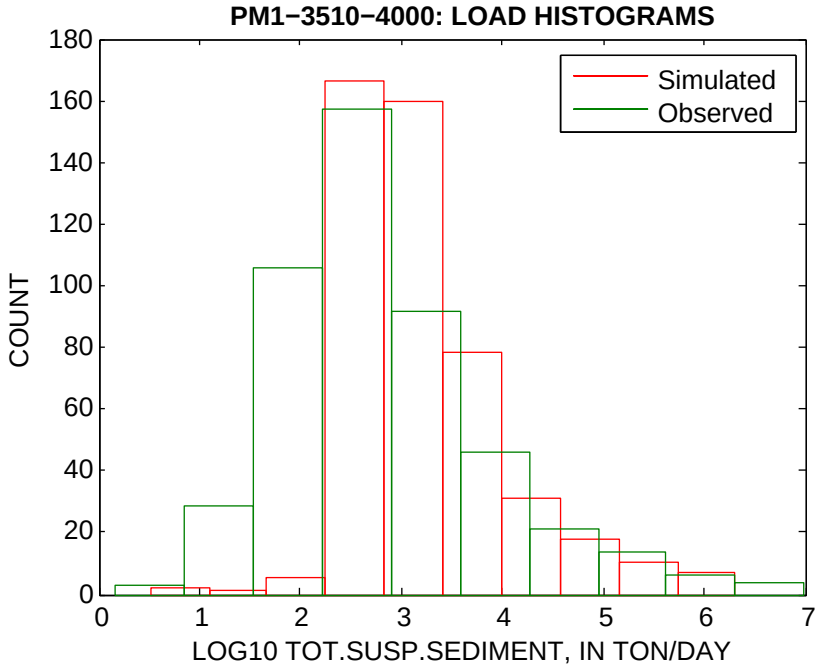


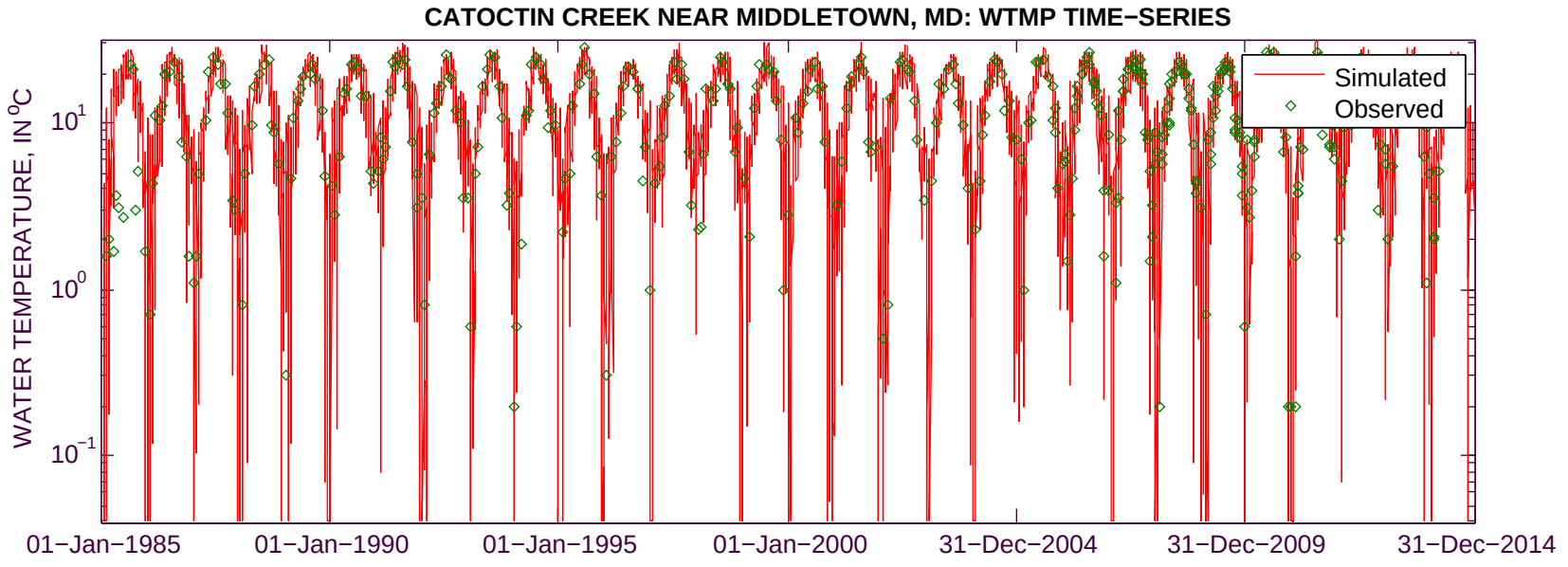
LOAD DATA
LOG10

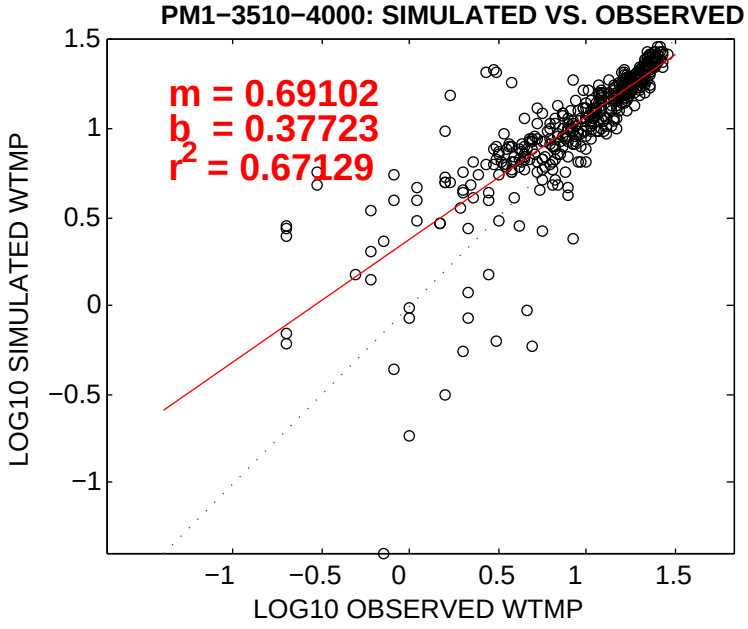


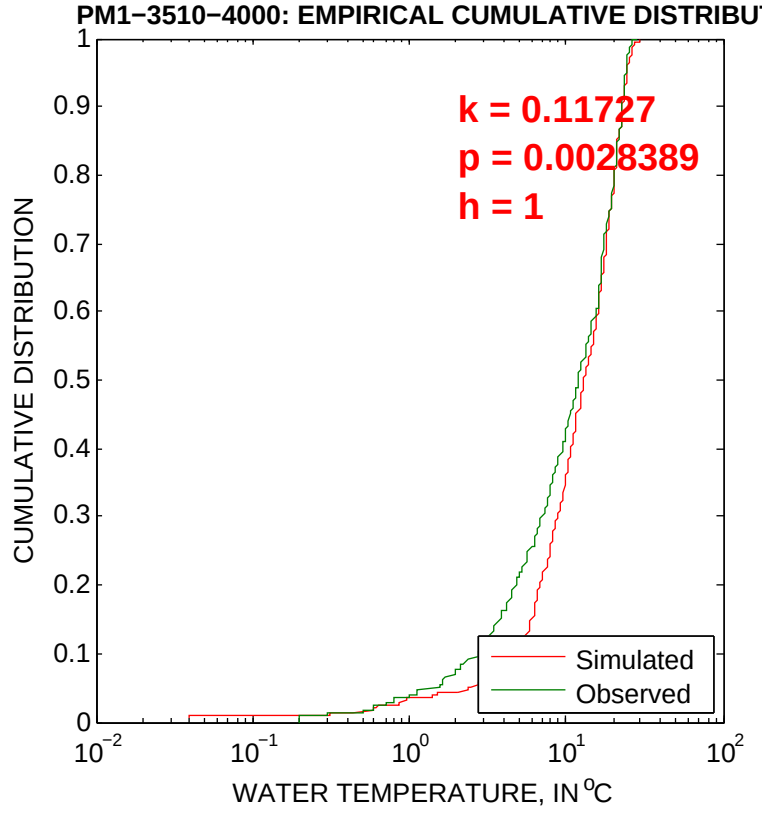












DATA SELECTION

scenario	file
P620171001WQ	WTMP.calib

plot: WTMP - water tempera...

Dates: 1/1/1985 – 12/31/201

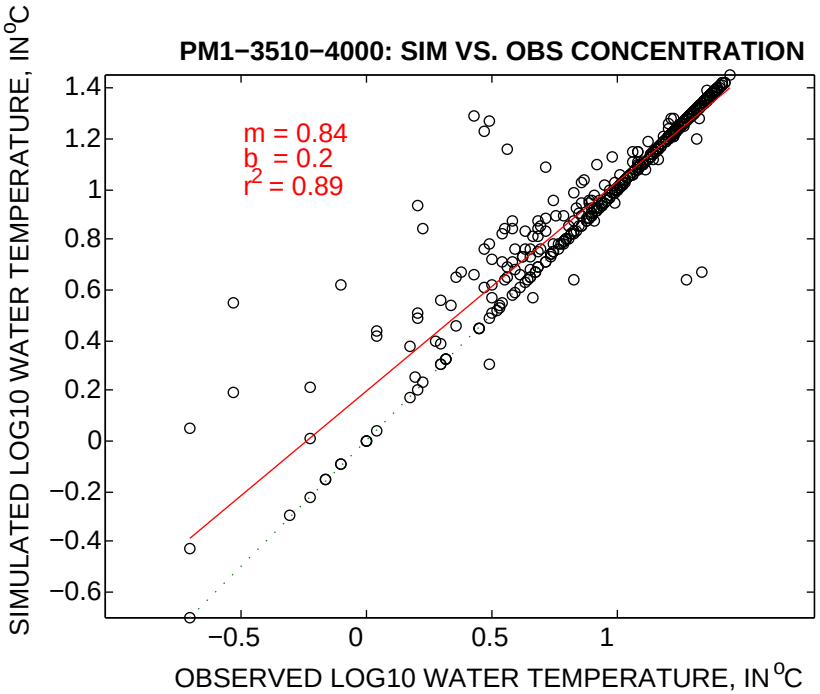
Drive	Directory	Observed
N/A	model	OBS20161101

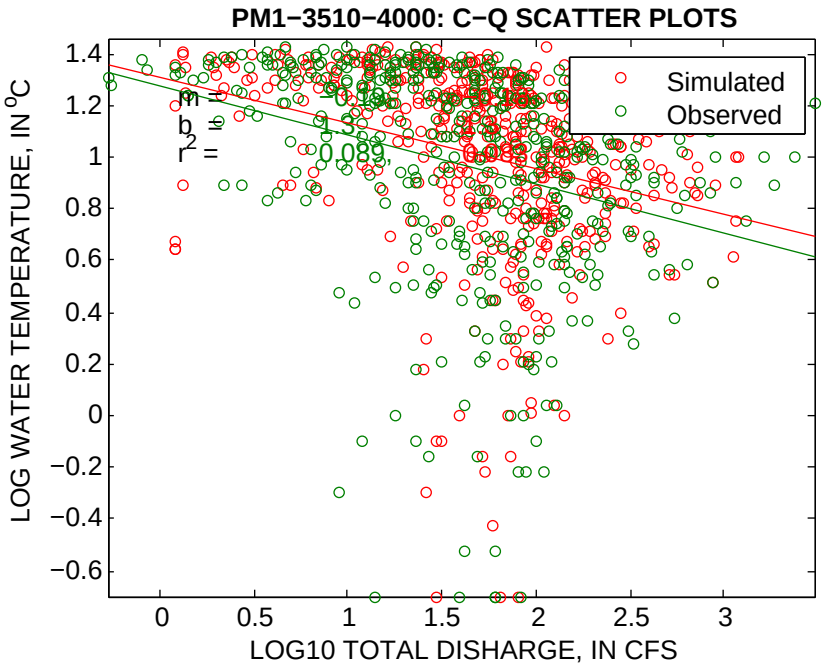
STATISTICS

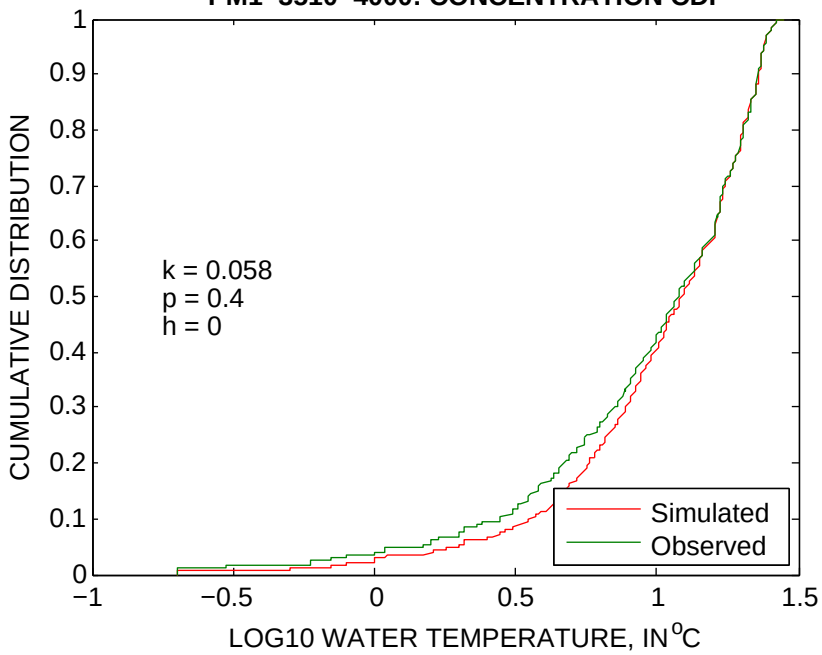
	observe	simulate
n	469	466
min	0.2	0
	-0.69897	-1.39747
mean	12.5246	13.5429
	0.964176	1.0435
media	12	12.998
	1.07918	1.11811
max	28.2	29.146
	1.45025	1.46458
varian	55.8975	48.8327
	0.171794	0.122202
JB	0.001	0.001954
	0.001	0.001
	ra	log
%	8.12997	8.22681
err.va	12.3207	0.0628763
rel.std.err	0.220417	0.365998
mod.eff	0.779583	0.634002

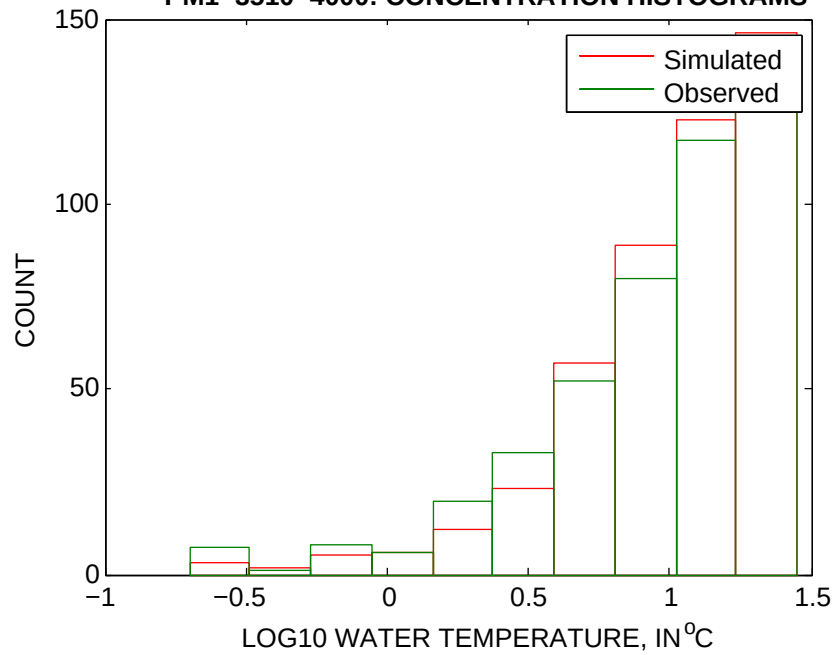
VERSION 2.1

ALL DATA
LOG10

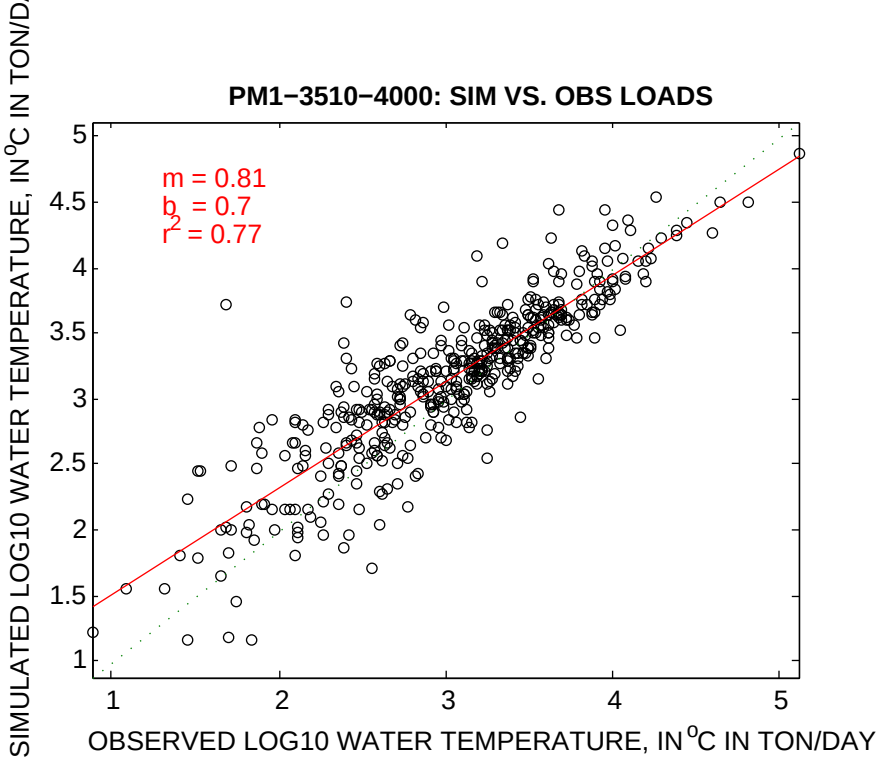


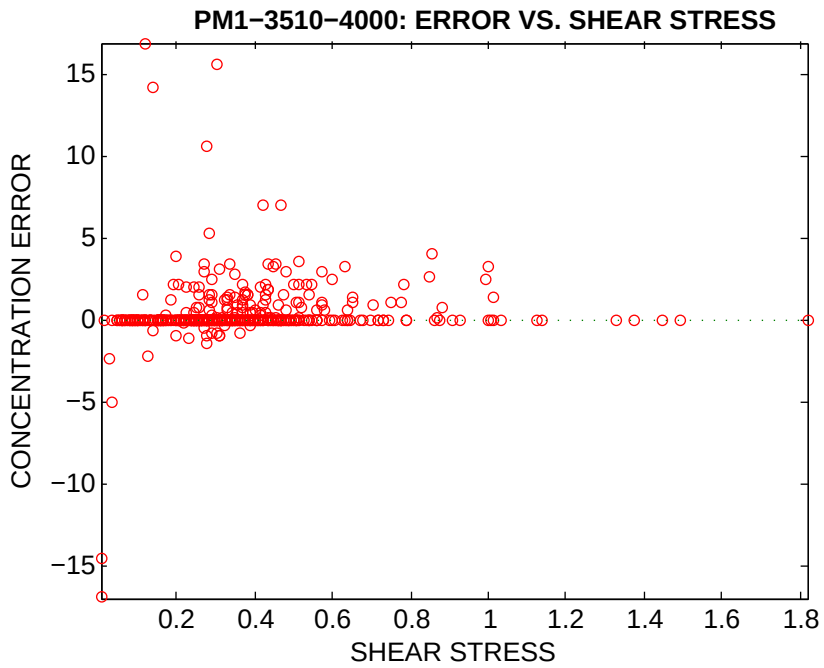


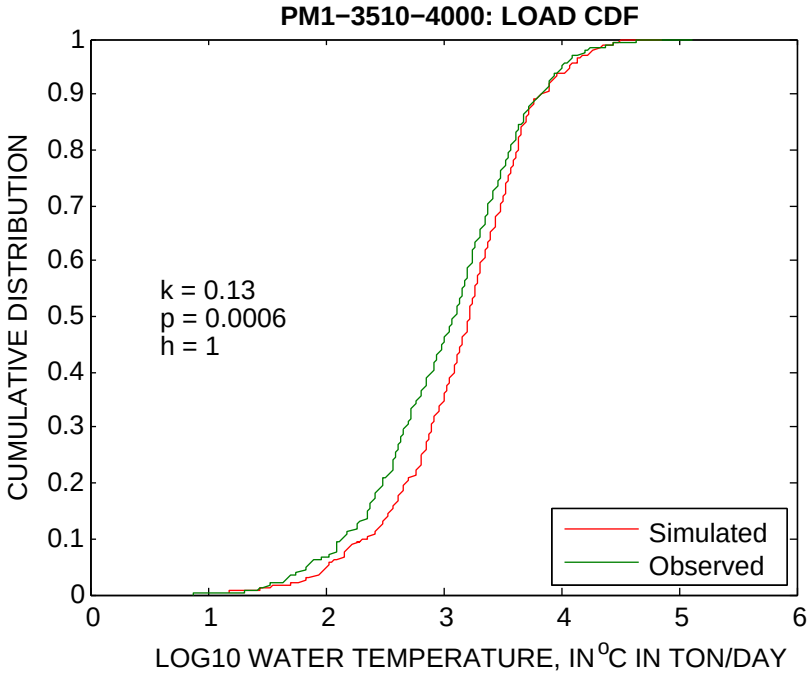


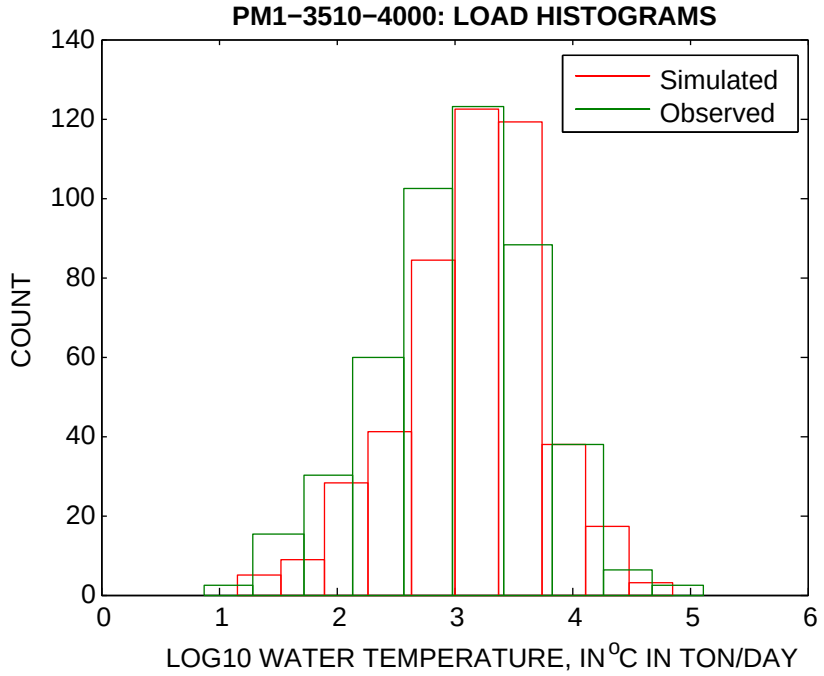


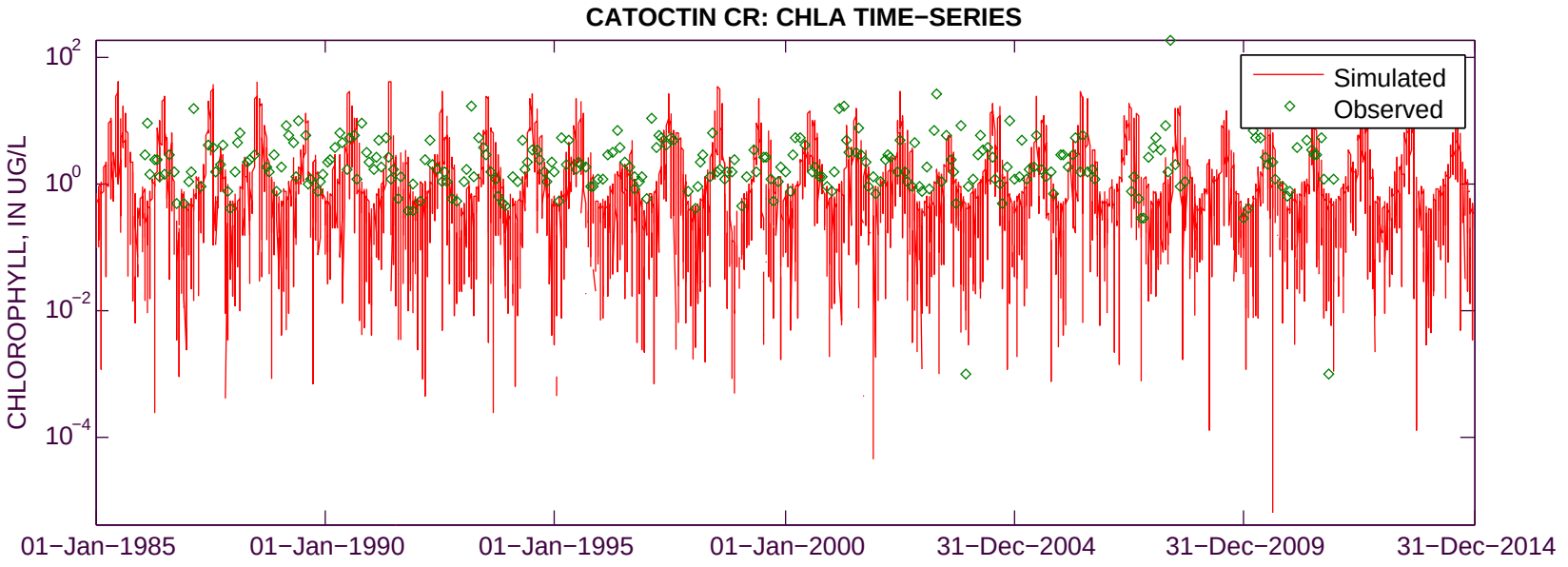
LOAD DATA
LOG10

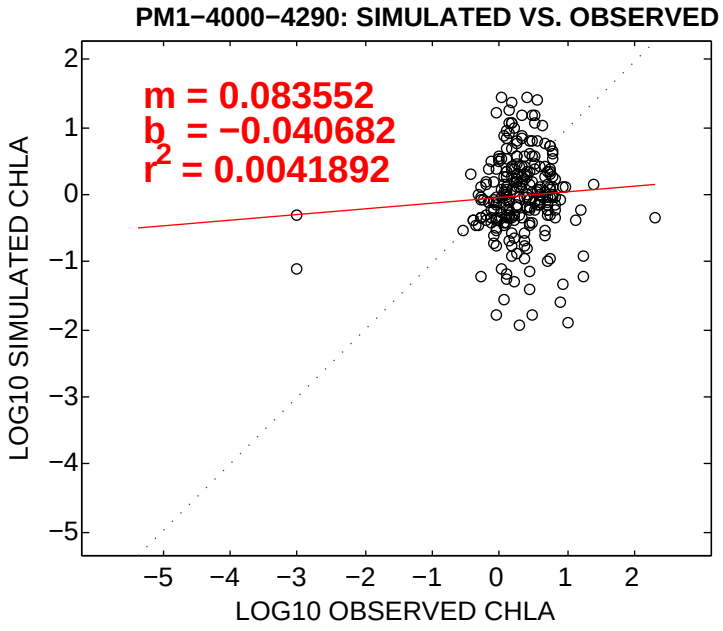


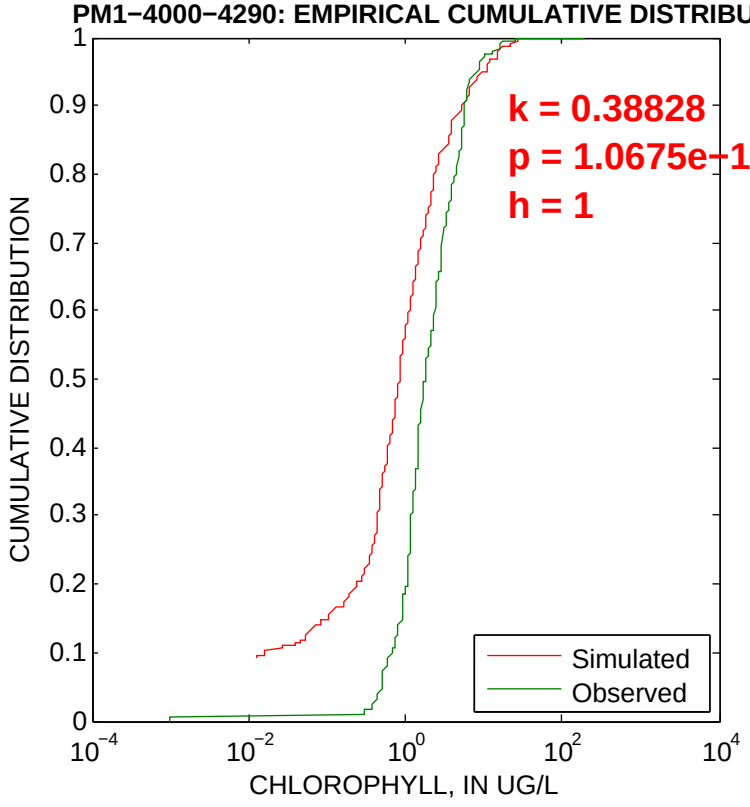












DATA SELECTION

scenario	file
P620171001WQ	CHLA.calib

plot: CHLA - chlorophyll A

Dates: 1/1/1985 – 12/31/201

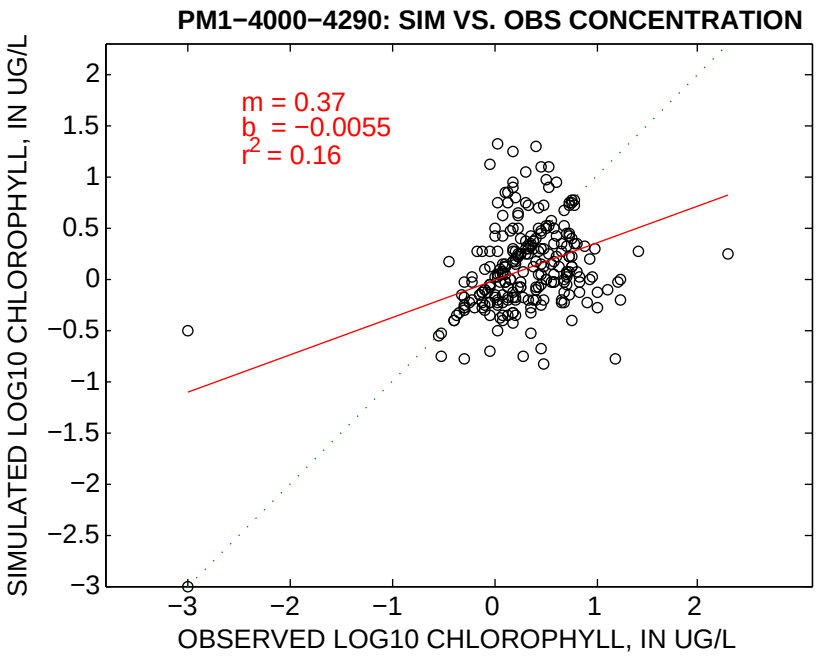
Drive	Directory	Observed
N/A	model	OBS20161101

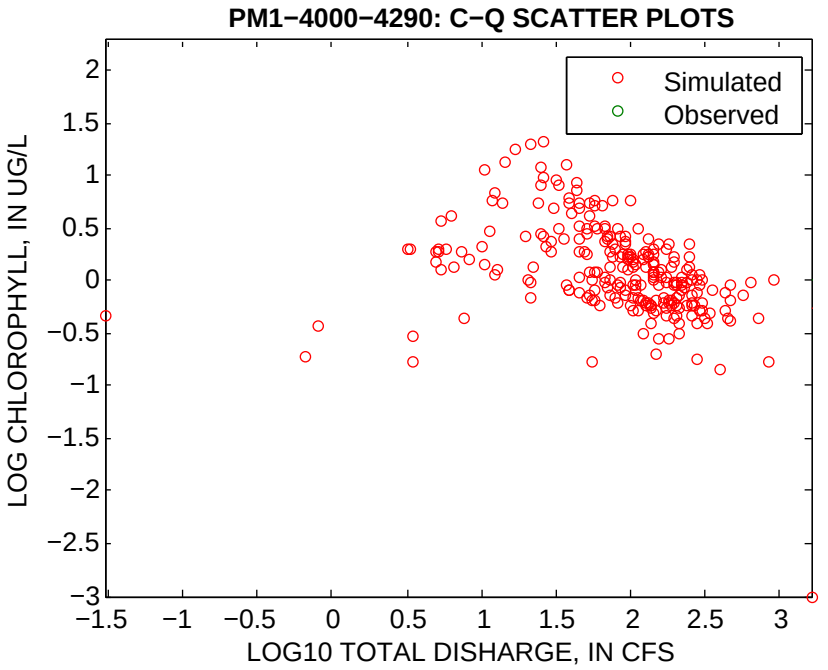
STATISTICS

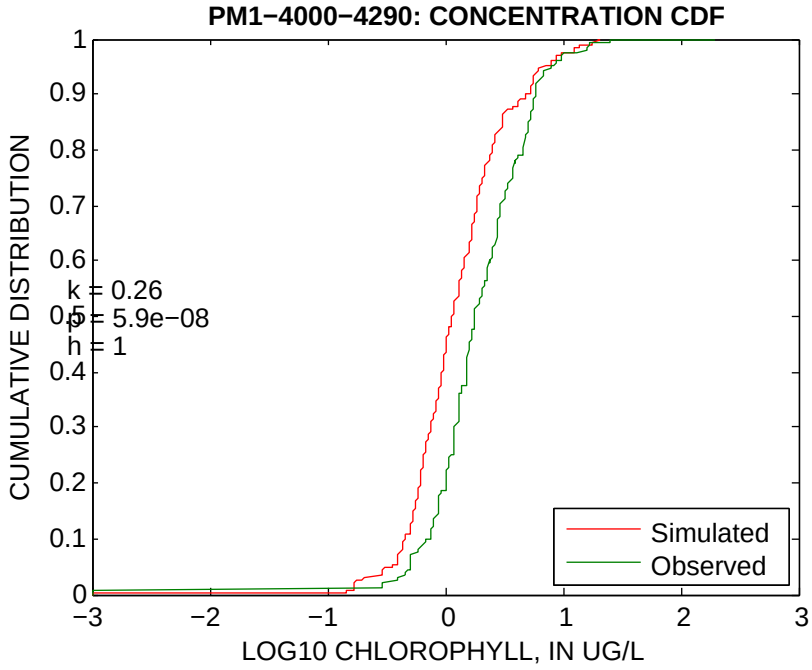
	observe	simulate
n	273	249
min	0.001 -3	0 -1.93712
mean	3.54496 0.283467	2.17818 -0.0169978
media	1.79 0.253822	0.84968 -0.038992
max	194.376 2.28864	28.061 1.4481
varian	143.443 0.225196	16.7089 0.375261
JB	0.001 0.001	0.001 0.010259
	ra	log
%	-38.5556	-105.996
err.va	166.049	0.653469
rel.std.err	1.15759	2.90178
mod.eff	-0.157592	-1.90178

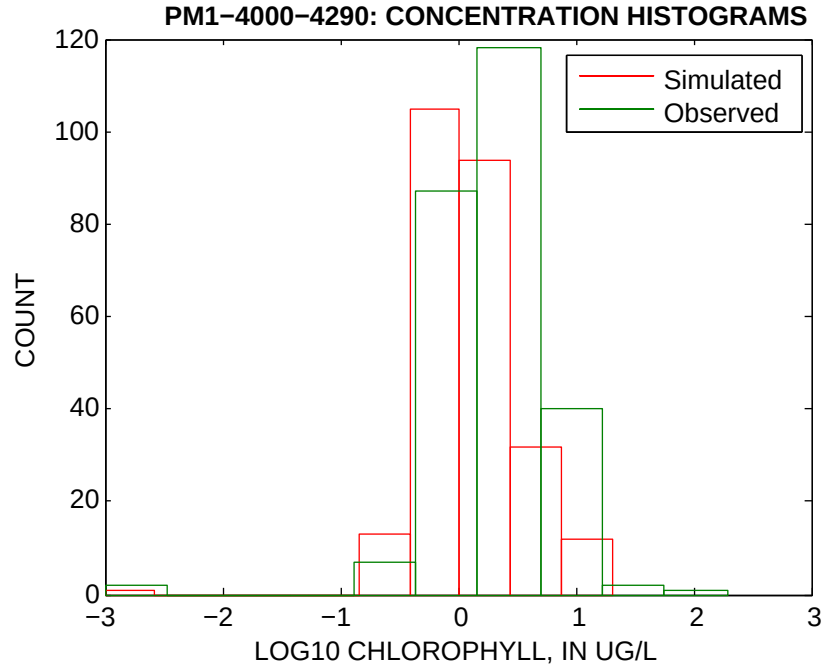
VERSION 2.1

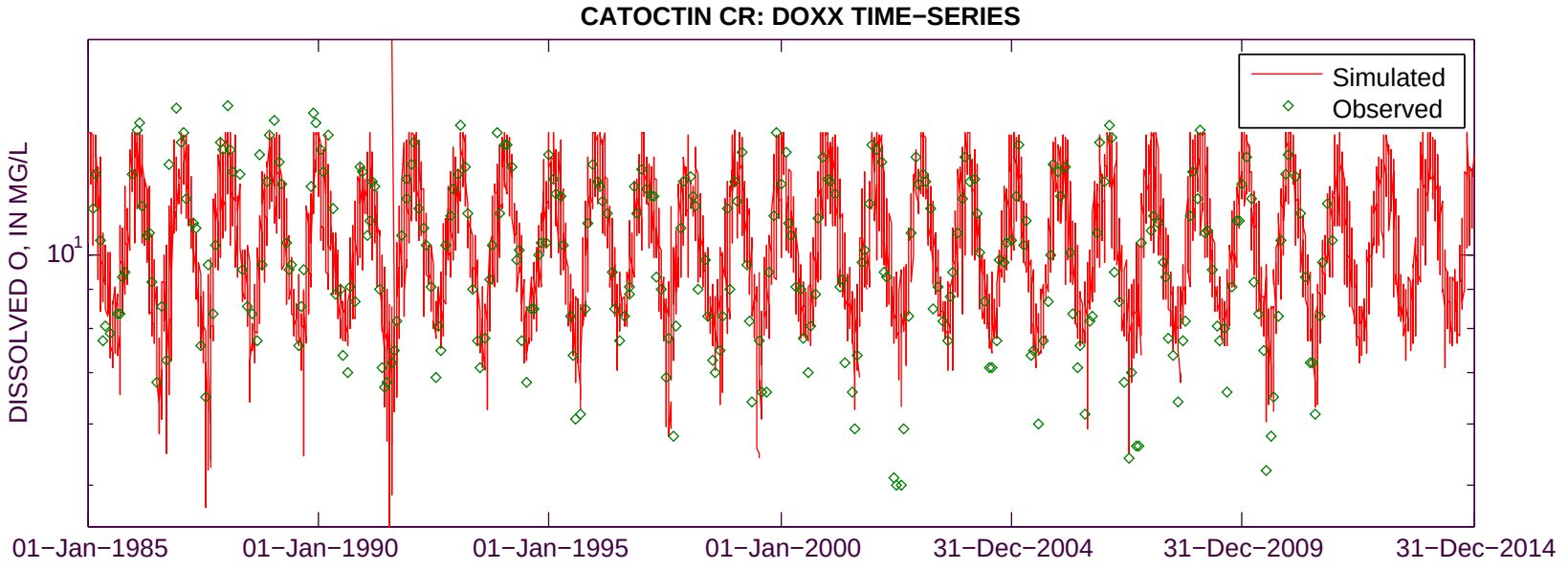
ALL DATA
LOG10

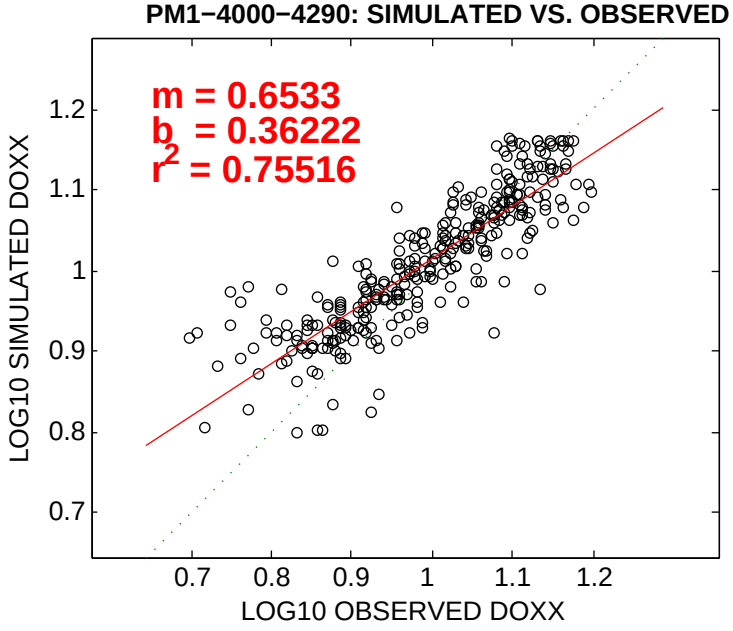


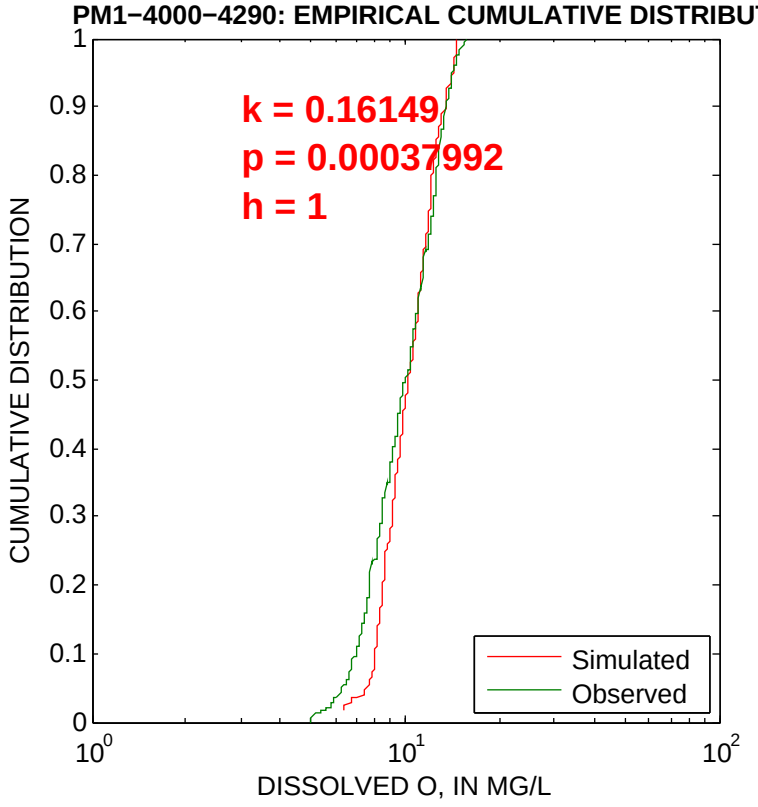












DATA SELECTION

scenario	file
P620171001WQ	DOXX.calib

plot: DOXX - dissolved oxygen

Dates: 1/1/1985 – 12/31/201

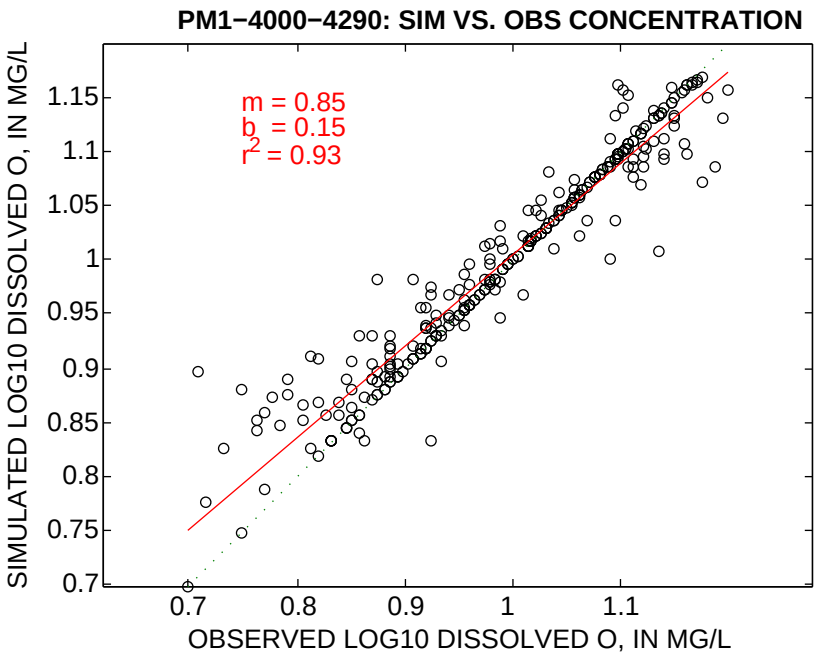
Drive	Directory	Observed
N/A	model	OBS20161101

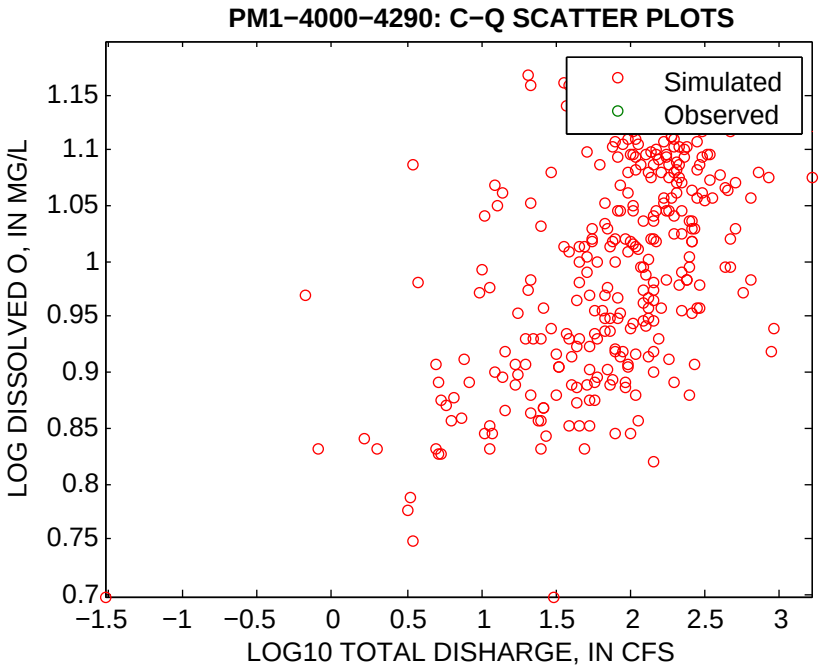
STATISTICS

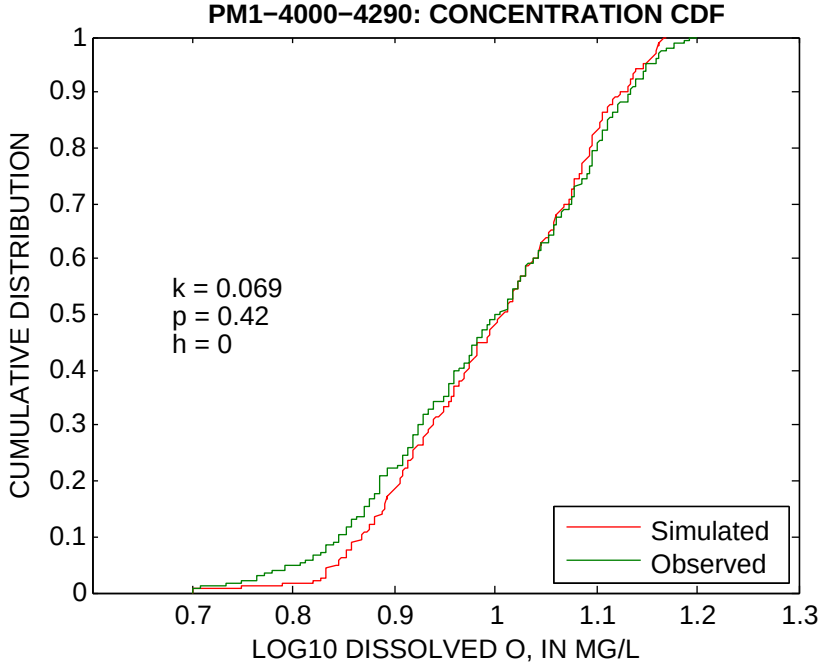
	n	observe	simulate
		322	318
min		5	0
		0.69897	0.799403
mean		10.1413	10.3365
		0.994549	1.01196
media		10	10.2605
		1.00432	1.01208
max		15.8	14.569
		1.19866	1.16343
varian		6.30915	5.23939
		0.0121985	0.00689426
JB		0.007785	0.001
		0.008708	0.035002
		ra	log
%		1.92554	1.75034
err.va		2.04359	0.00345827
rel.std.err		0.323909	0.283499
mod.eff		0.676091	0.716501

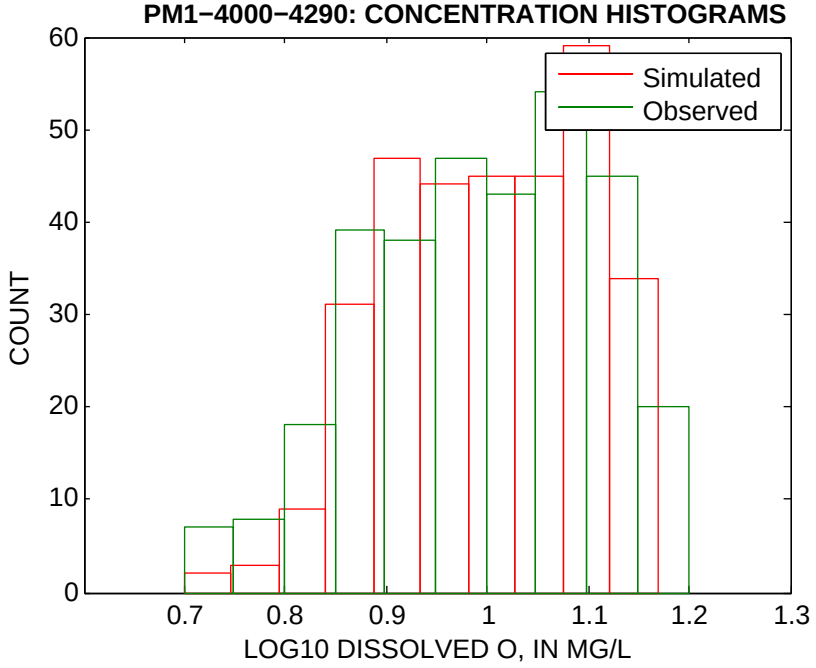
VERSION 2.1

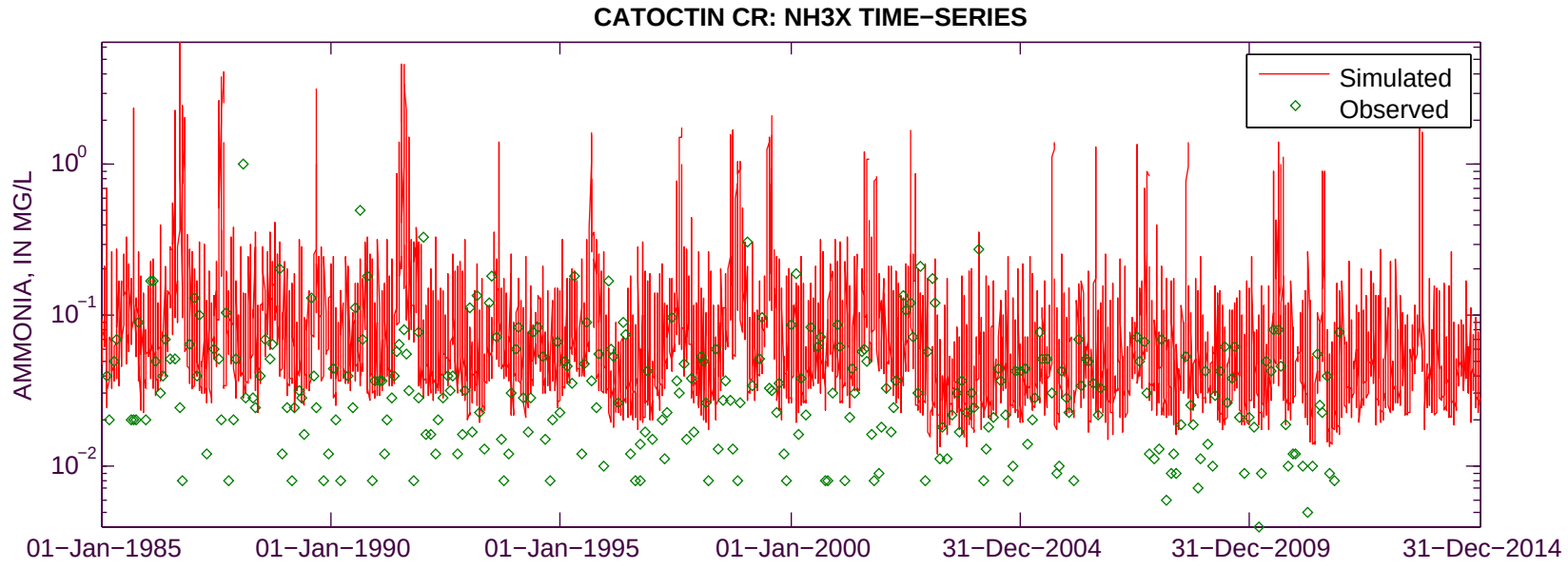
ALL DATA
LOG10

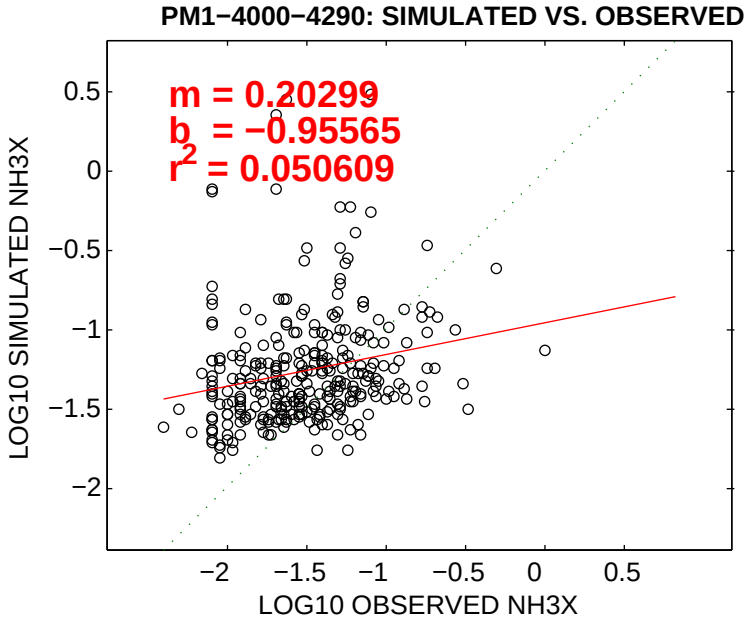


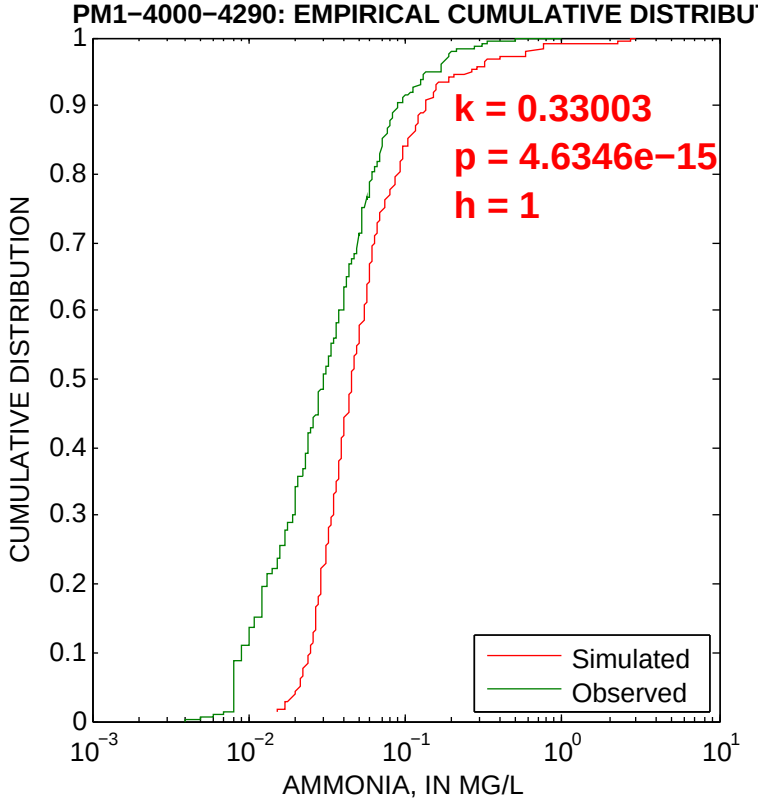












DATA SELECTION

scenario	file
P620171001WQ	NH3X.calib

plot: NH3X - ammonia

Dates: 1/1/1985 – 12/31/201

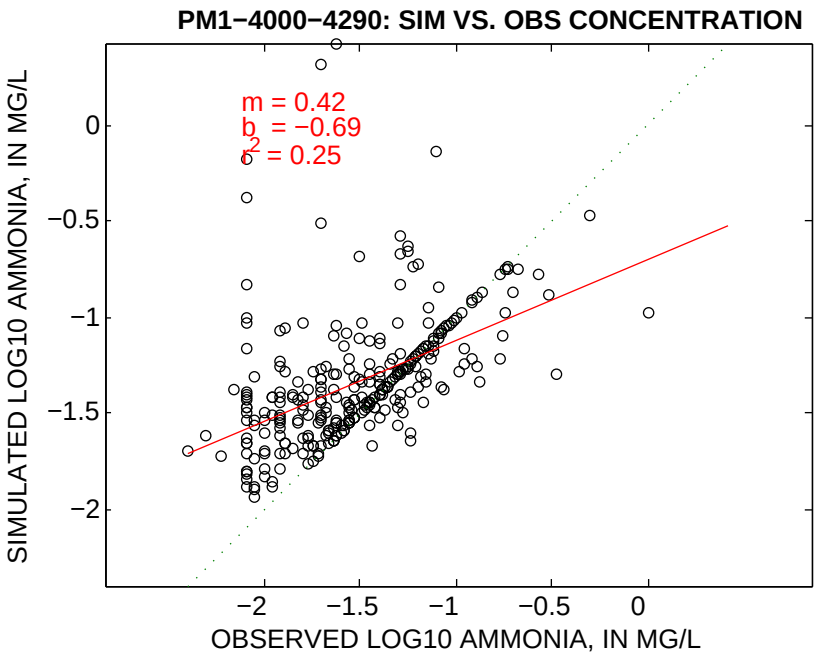
Drive	Directory	Observed
N/A	model	OBS20161101

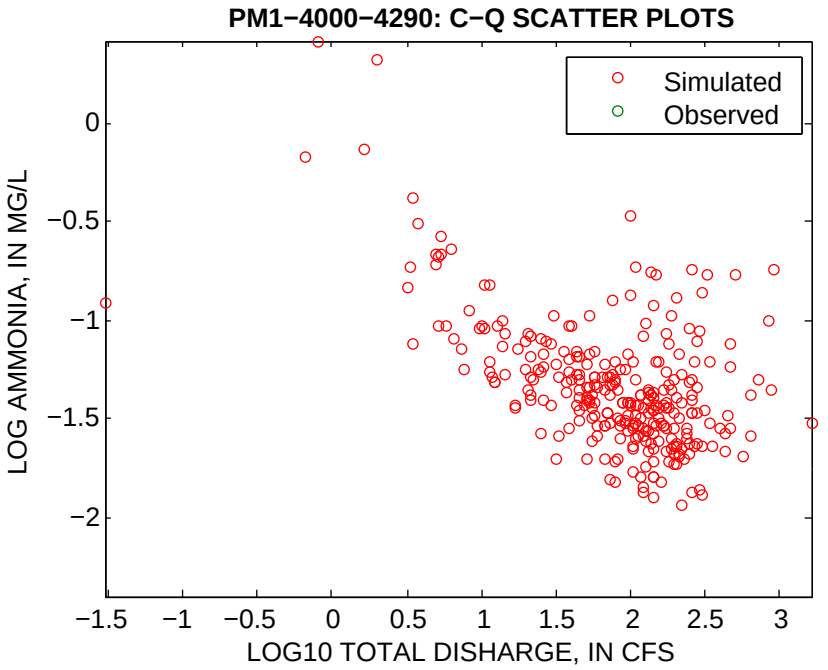
STATISTICS

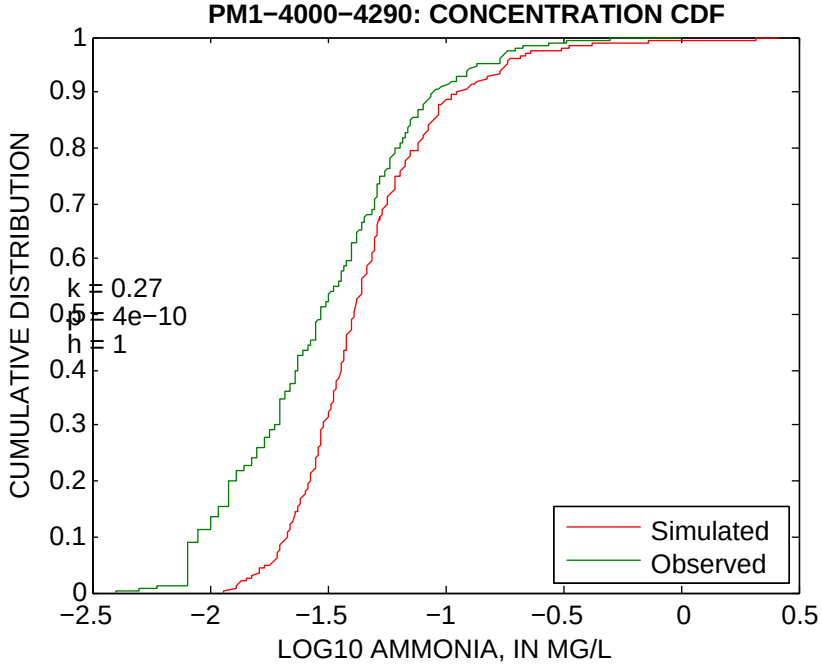
		observe	simulate
n		303	299
min		0.004	0
		-2.39794	-1.81369
mean		0.048769	0.0991764
		-1.51444	-1.26307
media		0.03	0.045251
		-1.52288	-1.33712
max		1	2.9793
		0	0.474114
varian		0.0057952	0.0771908
		0.151914	0.123686
JB		0.001	0.001
		0.014444	0.001
		ra	log
%		103.36	-16.5987
err.va		0.0846864	0.277329
rel.std.err		14.6132	1.82556
mod.eff		-13.6132	-0.825564

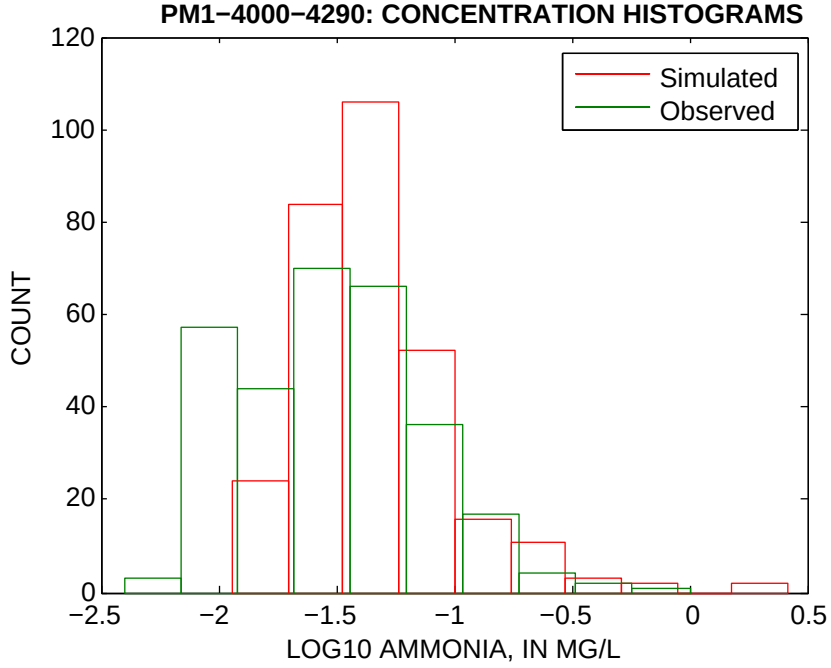
VERSION 2.1

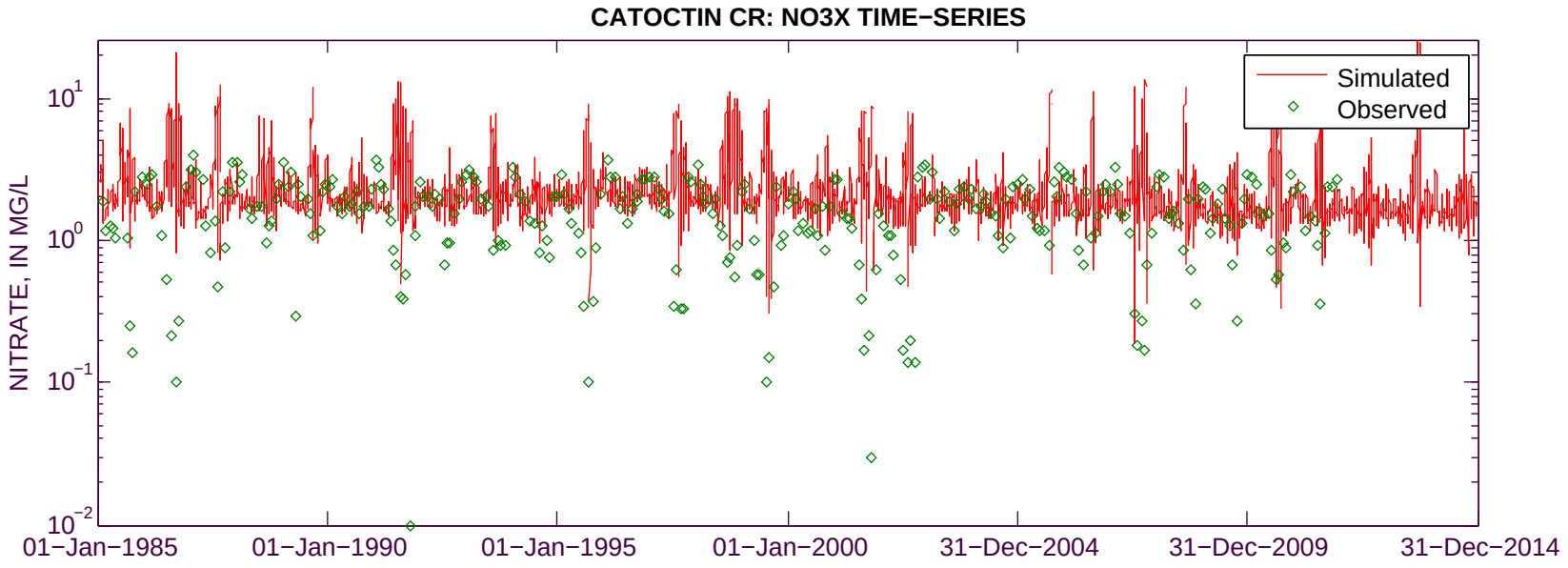
ALL DATA
LOG10

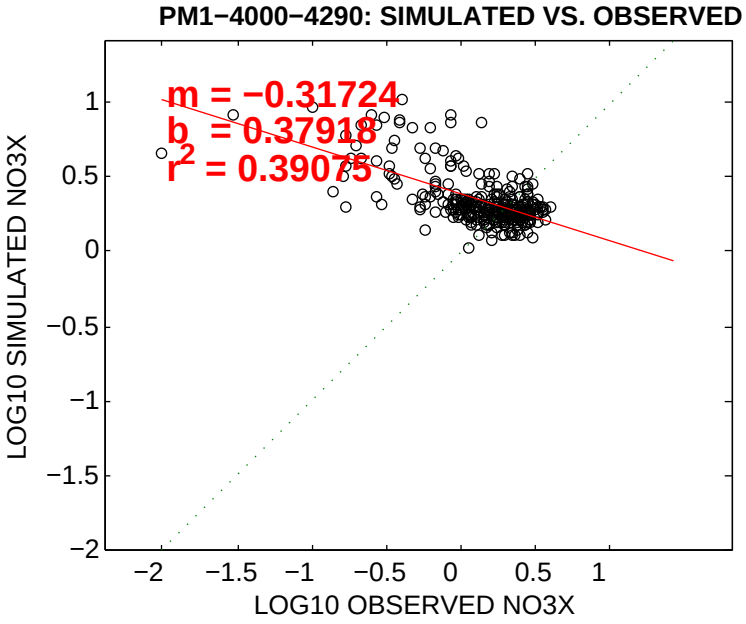


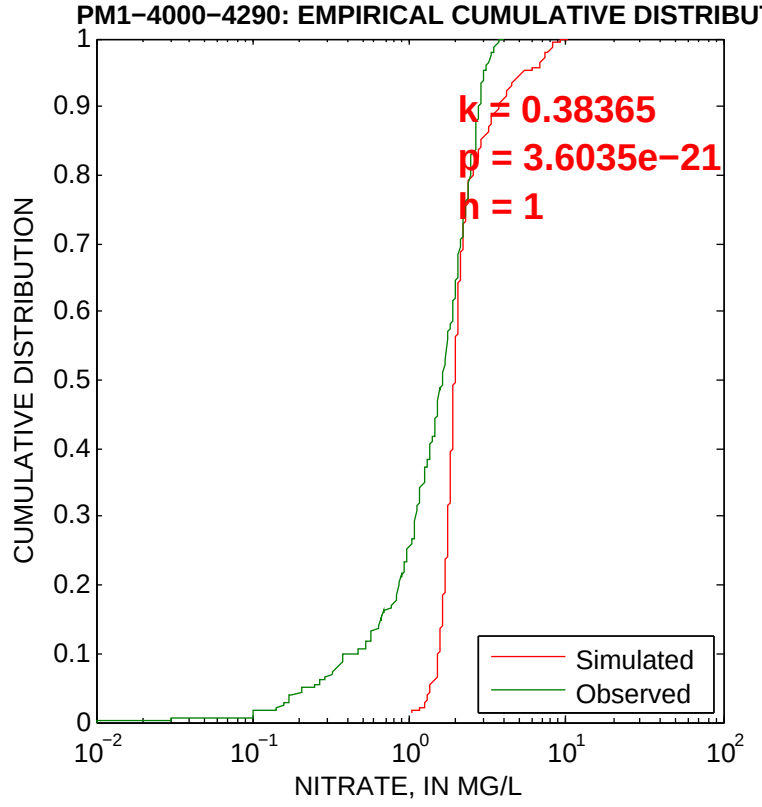












DATA SELECTION

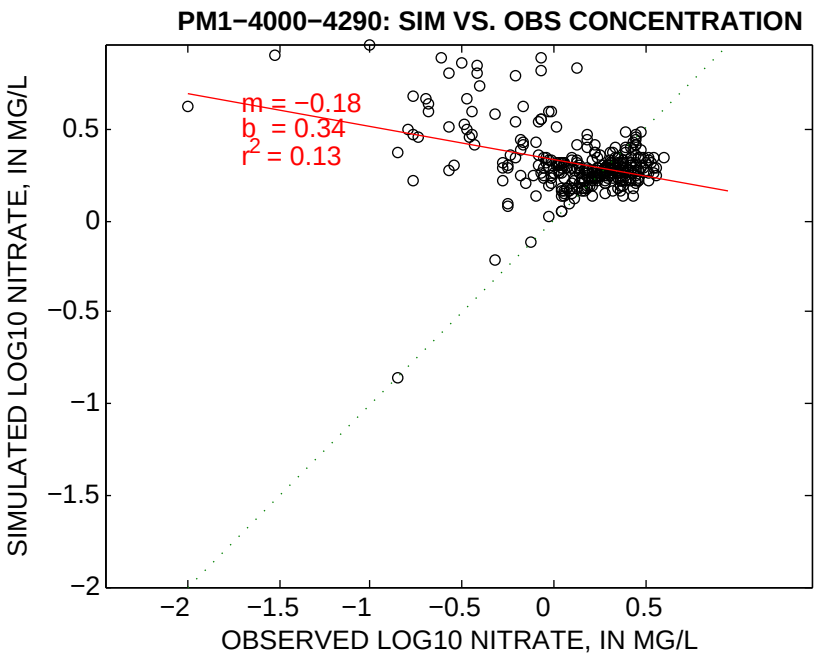
scenario: P620171001WQ
file: NO3X.calib
plot: NO3X - nitrate
Dates: 1/1/1985 – 12/31/201
Drive: N/A
Directory: model
Observed: OBS20161101

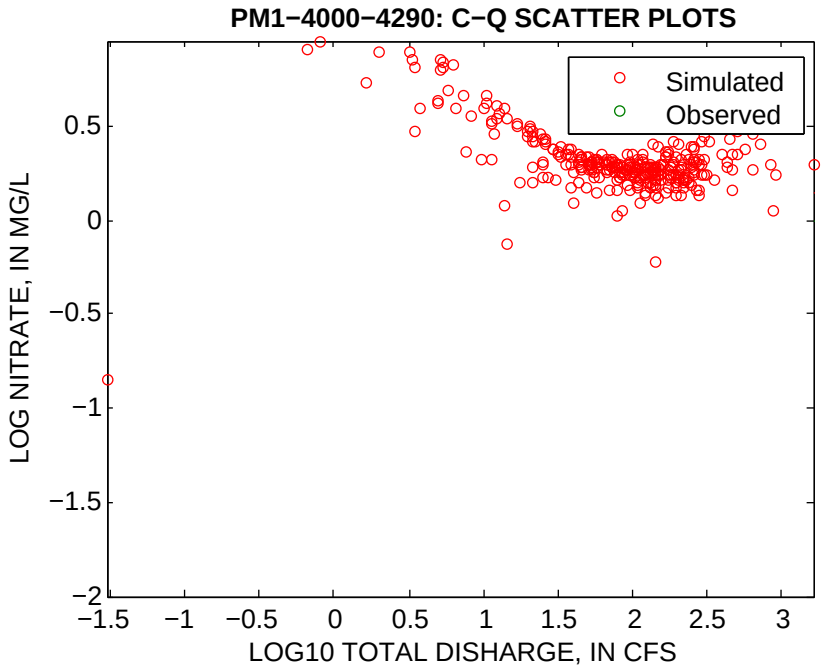
STATISTICS

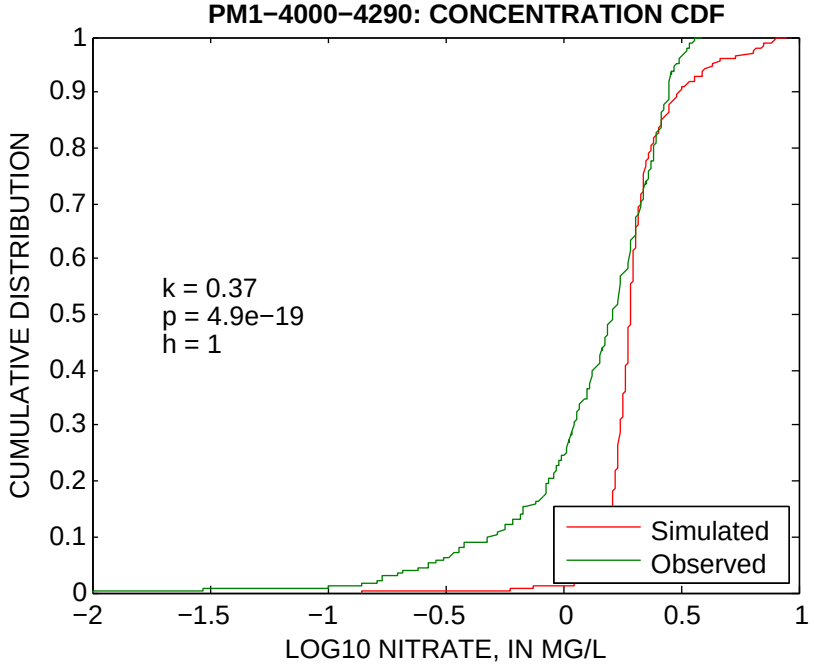
	n	observe	simulate
		318	314
min		0.01	0
		-2	0.0182843
mean		1.64699	2.36868
		0.132677	0.337087
media		1.6285	1.93405
		0.214844	0.288283
max		3.96	10.287
		0.597695	1.01229
varian		0.750697	2.02087
		0.113937	0.0293448
JB		0.027503	0.001
		0.001	0.001
		ra	log
%		43.8185	154.066
err.va		4.34937	0.257488
rel.std.err		5.79378	2.25992
mod.eff		-4.79378	-1.25992

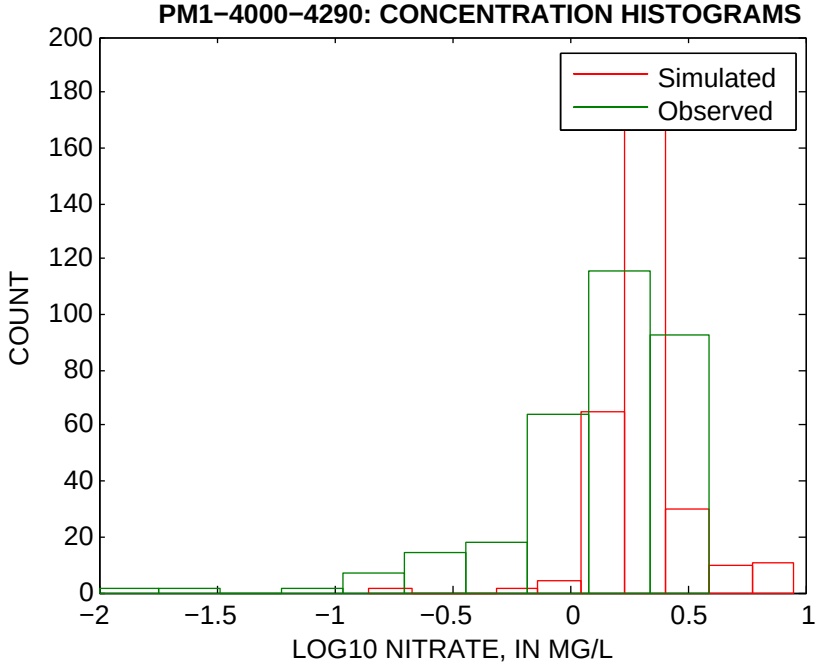
VERSION 2.1

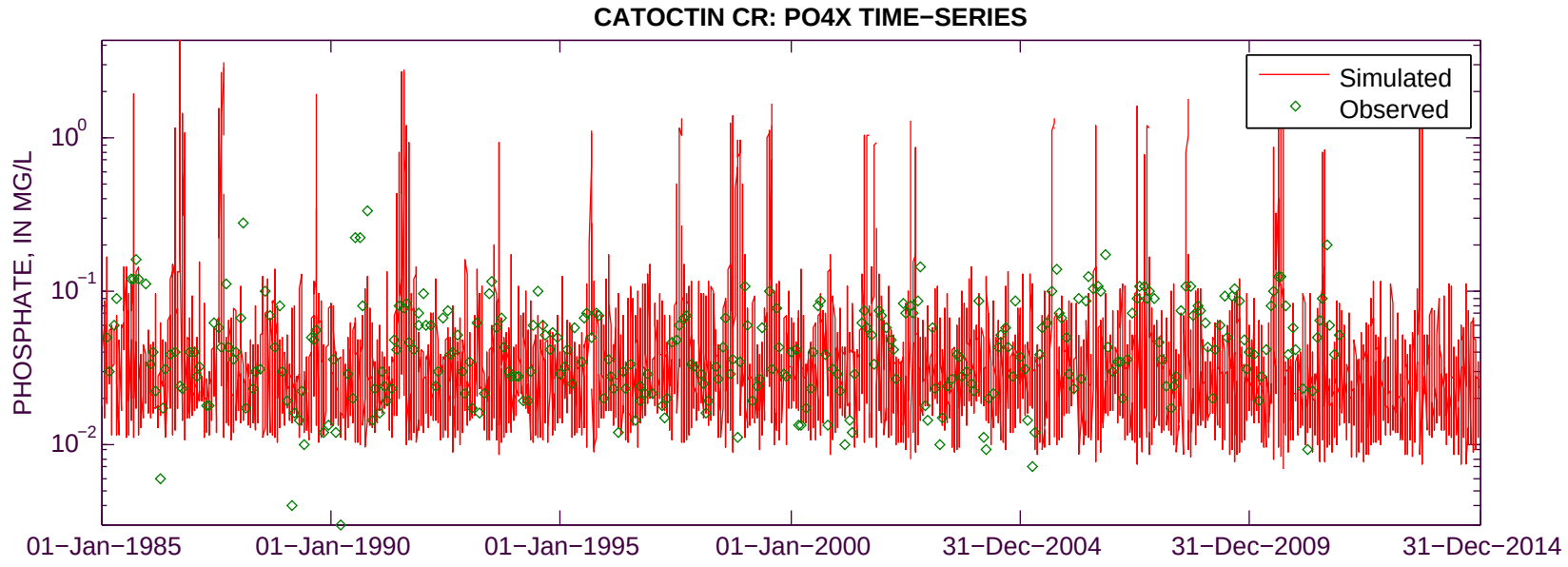
ALL DATA
LOG10

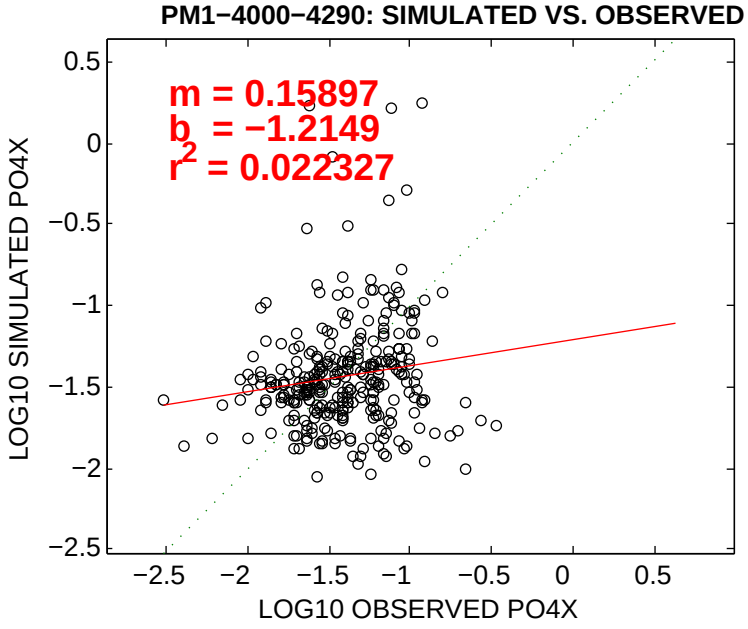


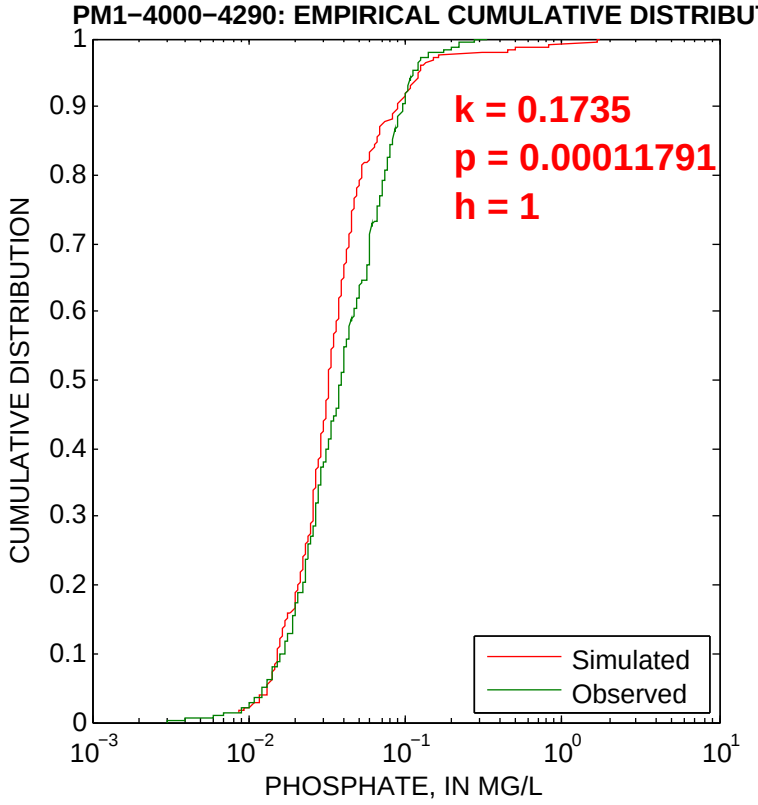












DATA SELECTION

scenario: P620171001WQ | file: PO4X.calib

plot: PO4X - phosphate

Dates: 1/1/1985 – 12/31/201

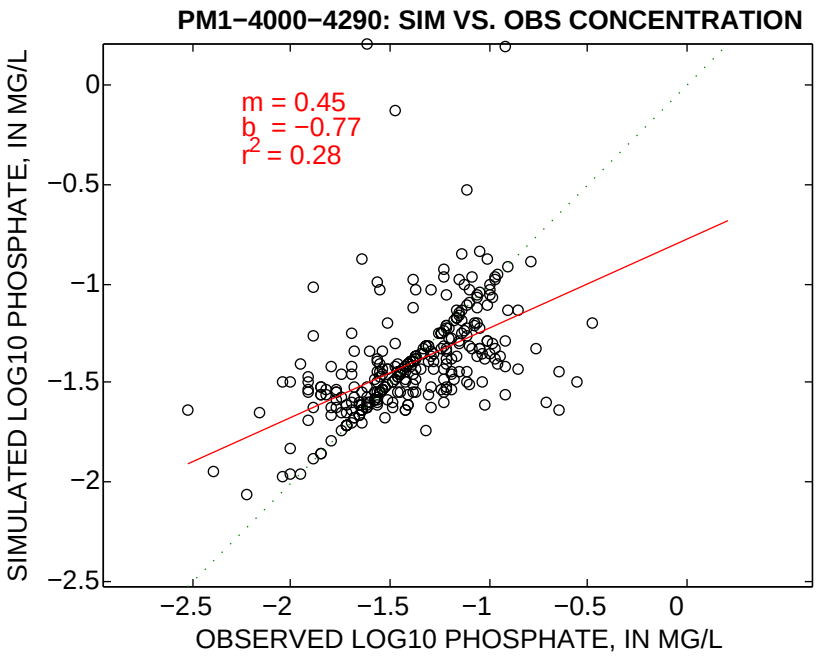
Drive: N/A | Directory: model | Observed: OBS20161101

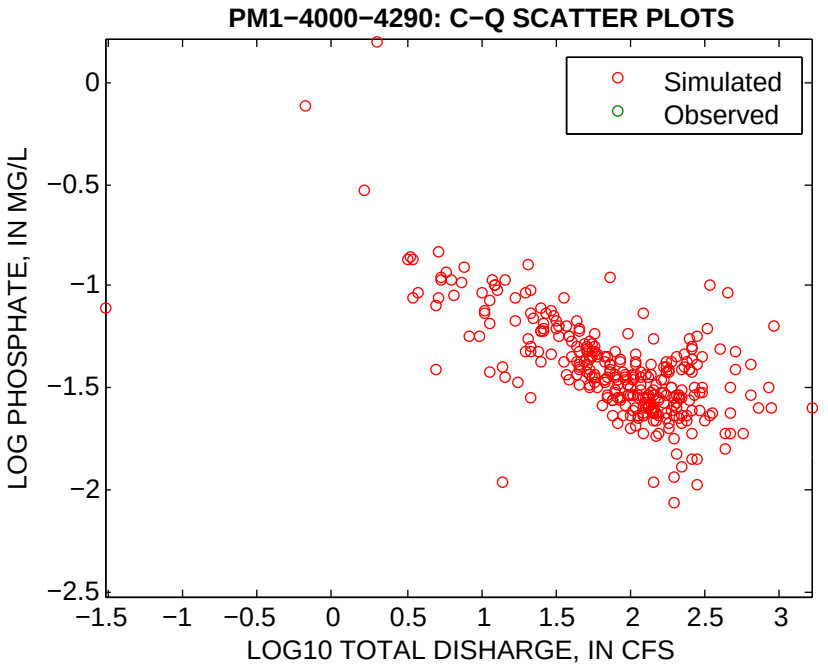
STATISTICS

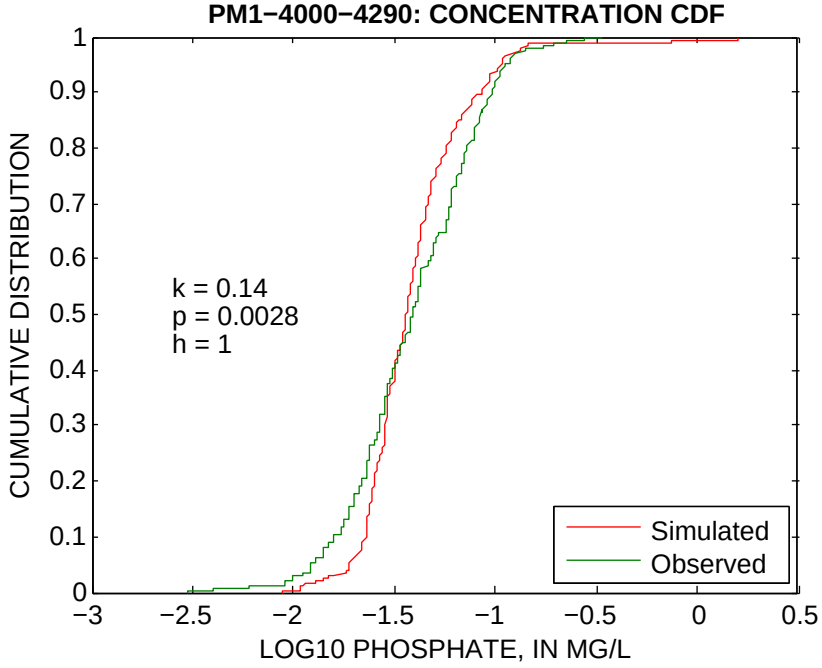
		observe	simulate
n		317	313
min		0.003	0
		-2.52288	-2.05658
mean		0.0503596	0.0622939
		-1.4081	-1.43874
media		0.039	0.032602
		-1.40894	-1.48614
max		0.334	1.7515
		-0.476254	0.24341
varian		0.00160071	0.0297917
		0.0963269	0.109027
JB		0.001	0.001
	☑	0.373932	0.001
		ra	log
%		23.6982	2.17563
err.va		0.0305183	0.17567
rel.std.err		19.0655	1.82368
mod.eff		-18.0655	-0.823682

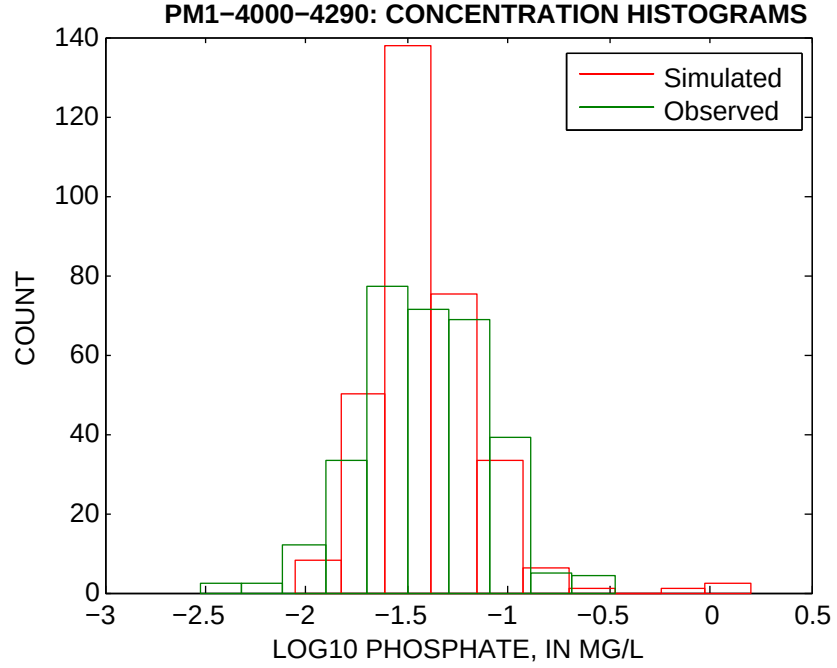
VERSION 2.1

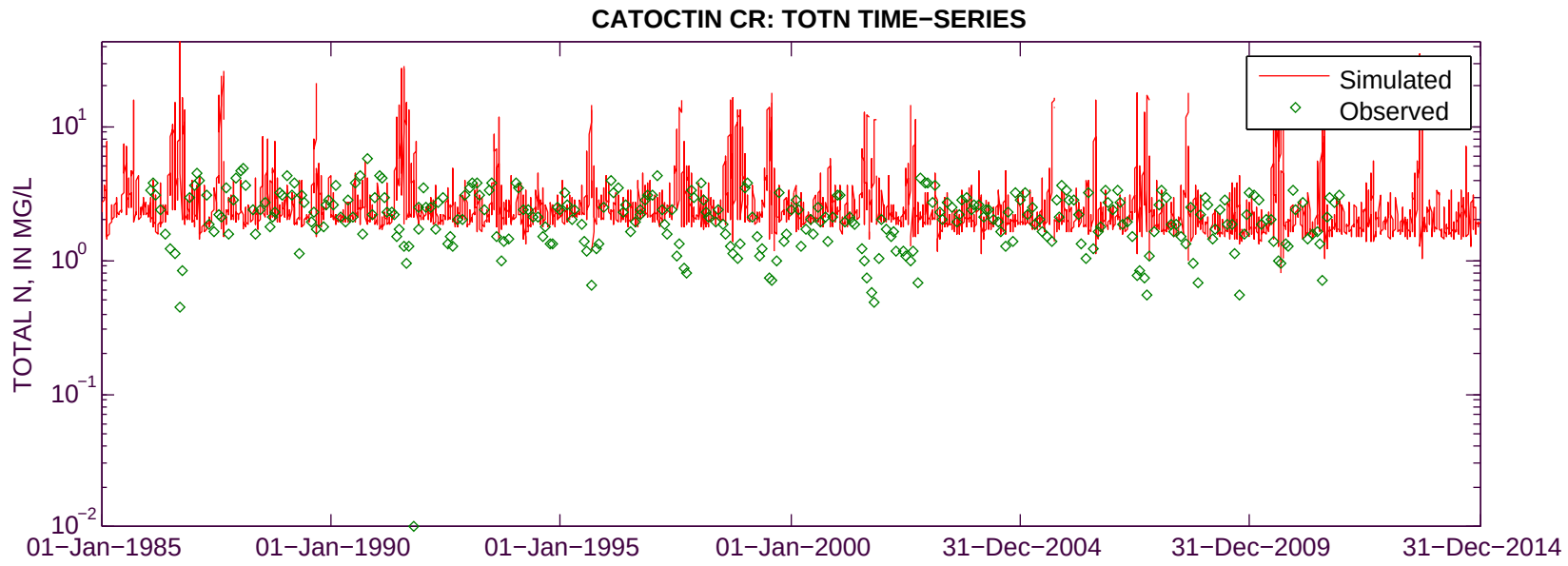
ALL DATA
LOG10

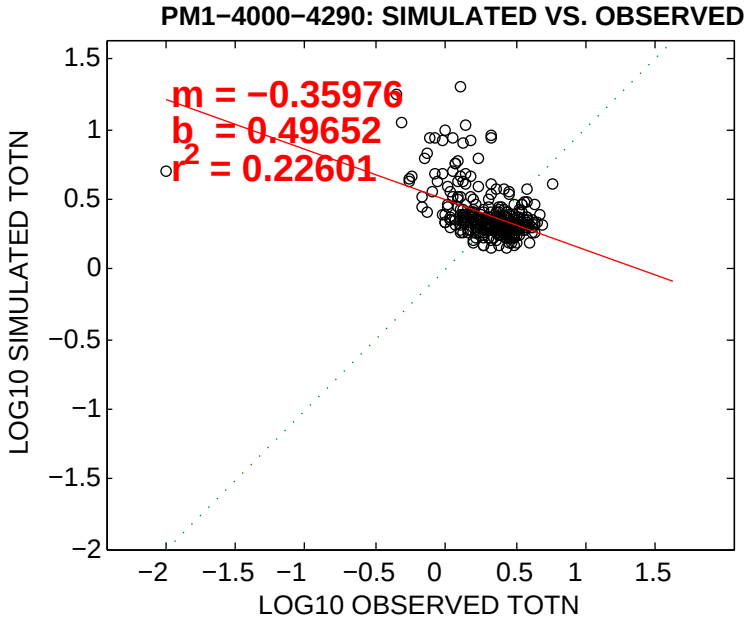


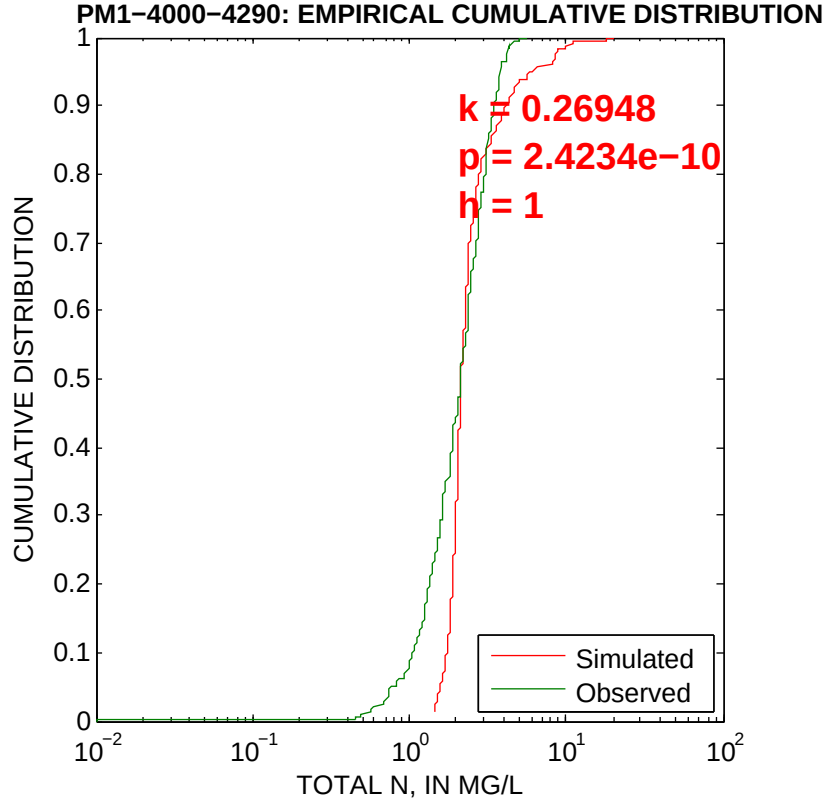












DATA SELECTION

scenario	file
P620171001WQ	TOTN.calib

plot: TOTN - total nitrogen

Dates: 1/1/1985 – 12/31/201

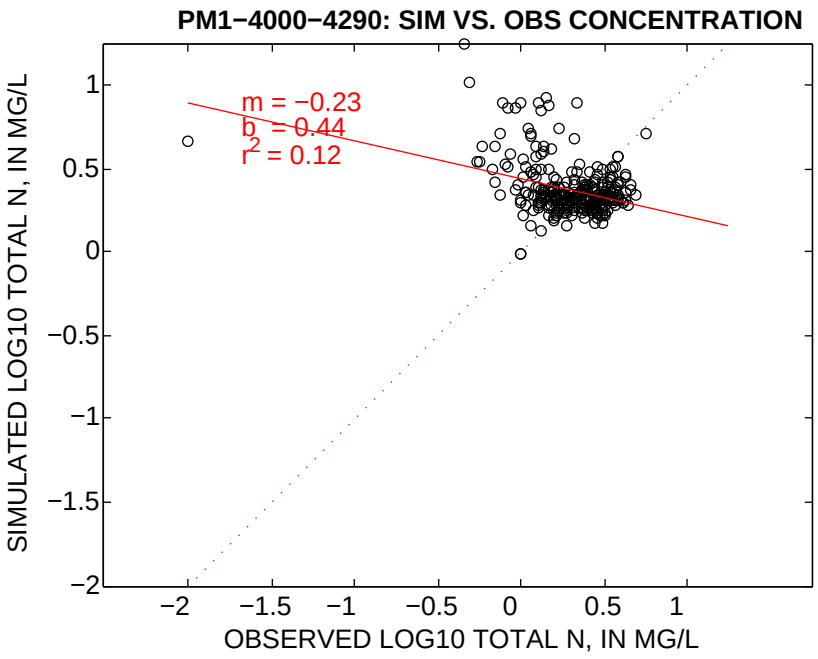
Drive	Directory	Observed
N/A	model	OBS20161101

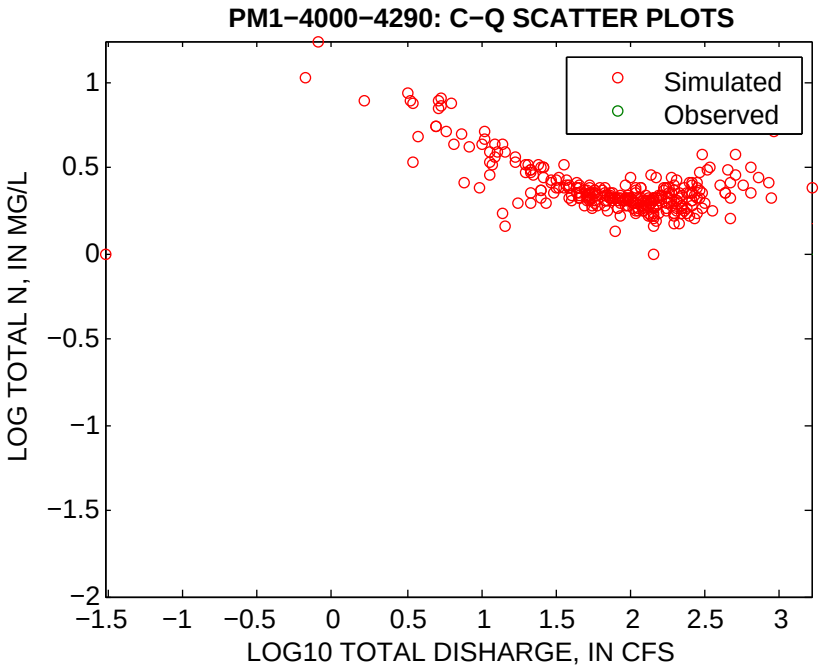
STATISTICS

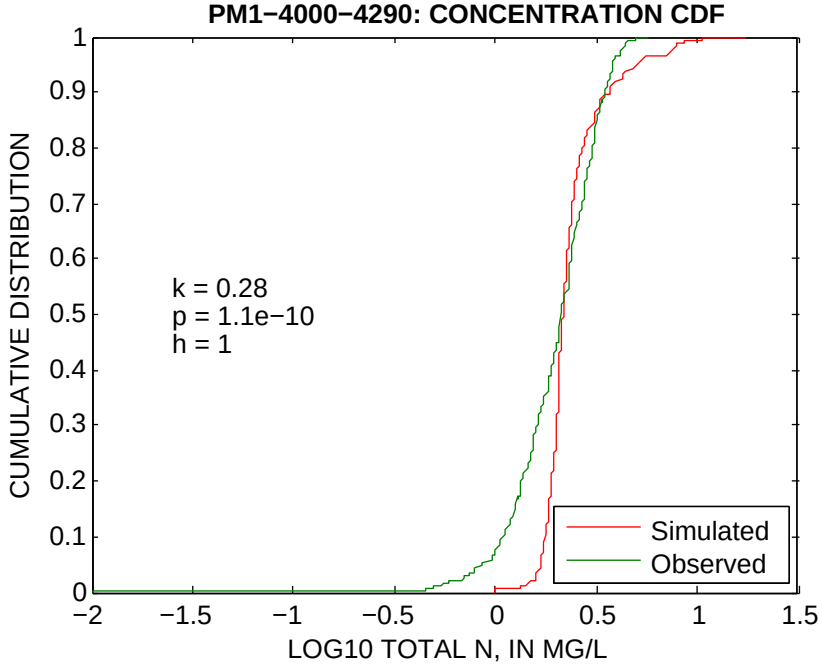
	n	observe	simulate
		308	304
min		0.01	0
		-2	0.155184
mean		2.2068	2.72076
		0.300081	0.388559
media		2.1	2.13695
		0.323436	0.330099
max		5.7	20.068
		0.755875	1.3025
varian		0.890897	4.10652
		0.056676	0.0324556
JB		0.010166	0.001
		0.001	0.001
		ra	log
%		23.2897	29.4847
err.va		6.48059	0.137765
rel.std.err		7.27422	2.43075
mod.eff		-6.27422	-1.43075

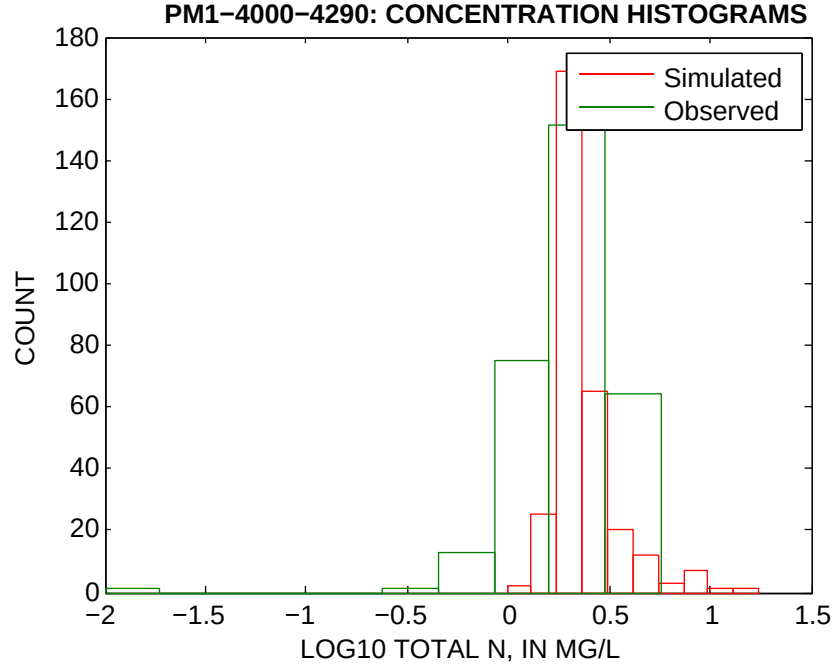
VERSION

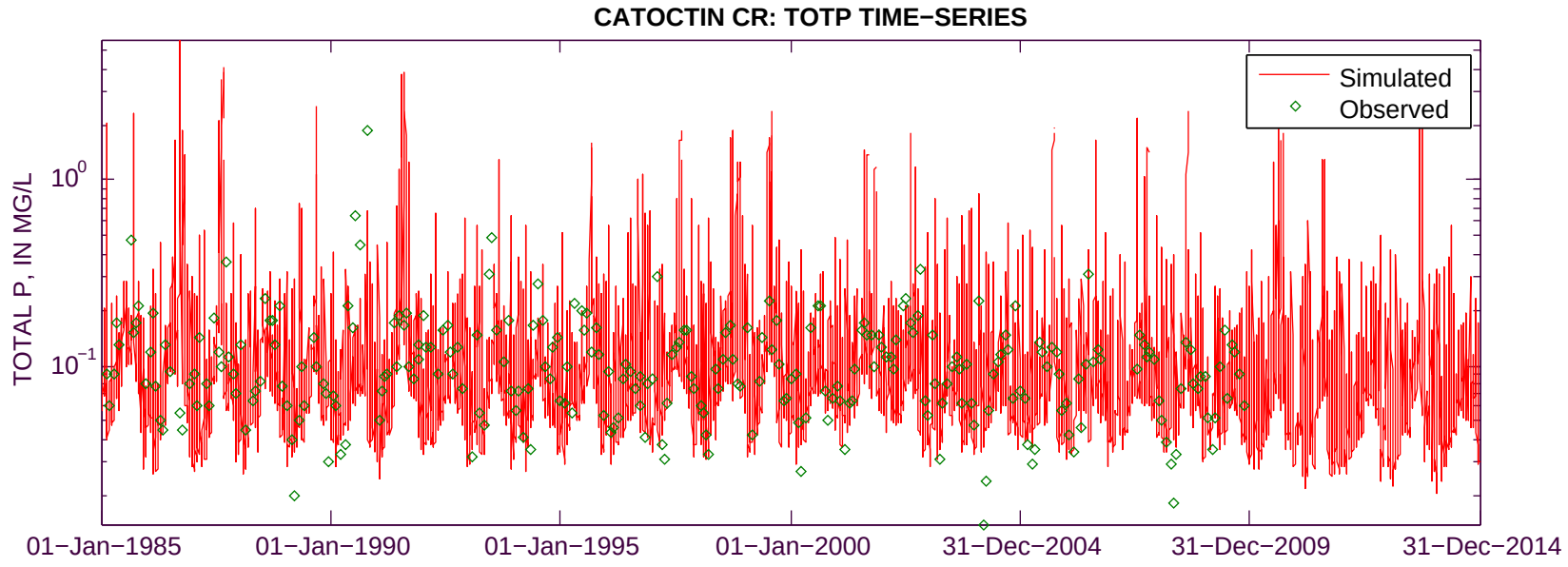
ALL DATA
LOG10

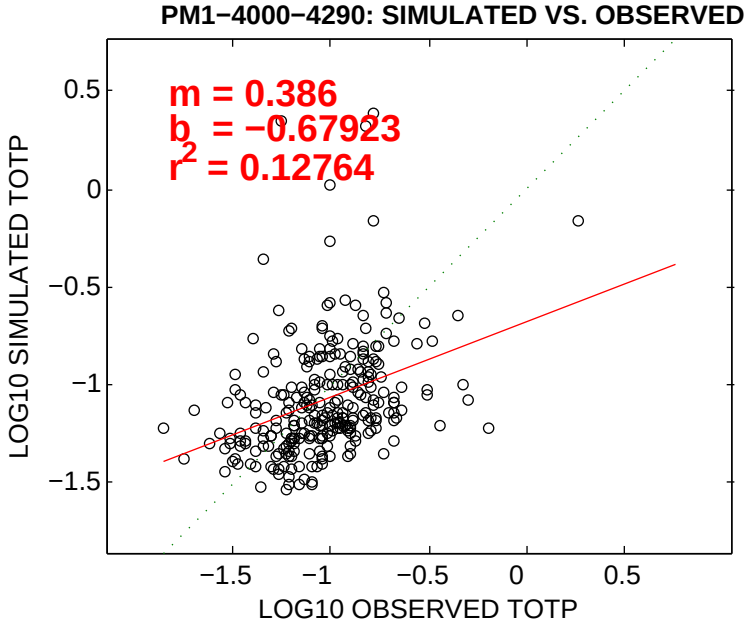


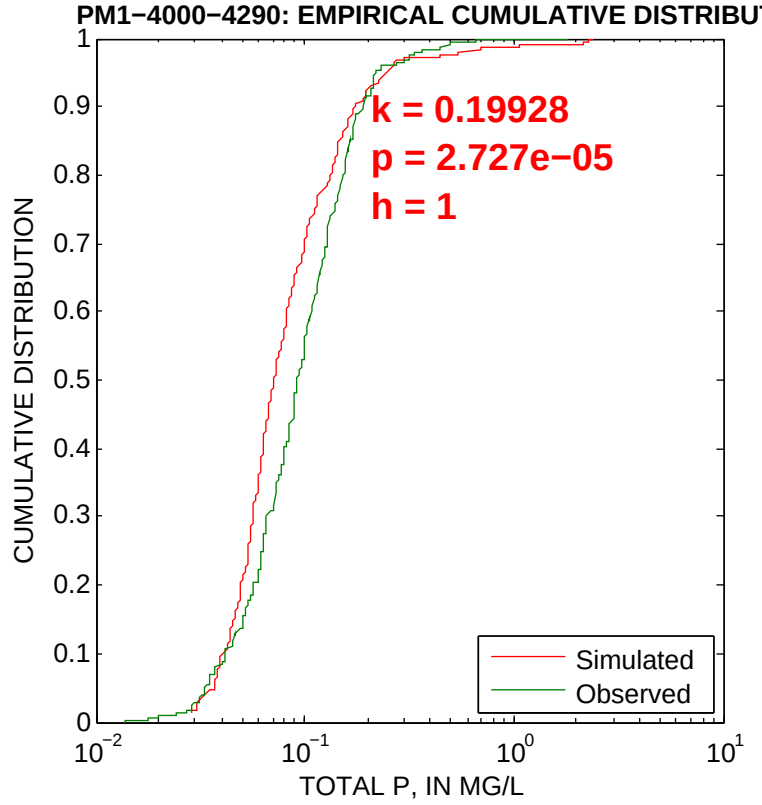












DATA SELECTION

scenario	file
P620171001WQ	TOTP.calib

plot: TOTP - total phosphorus

Dates: 1/1/1985 – 12/31/201

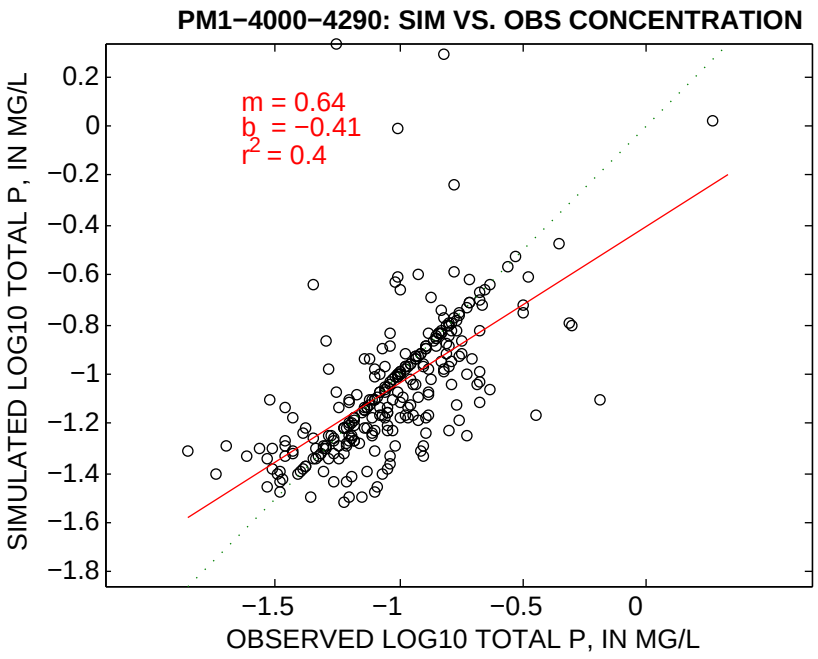
Drive	Directory	Observed
N/A	model	OBS20161101

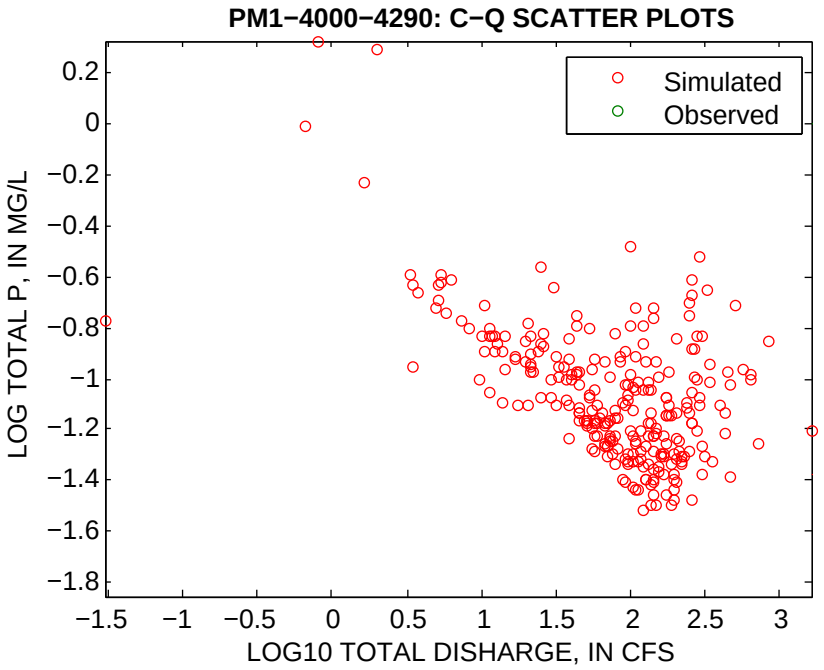
STATISTICS

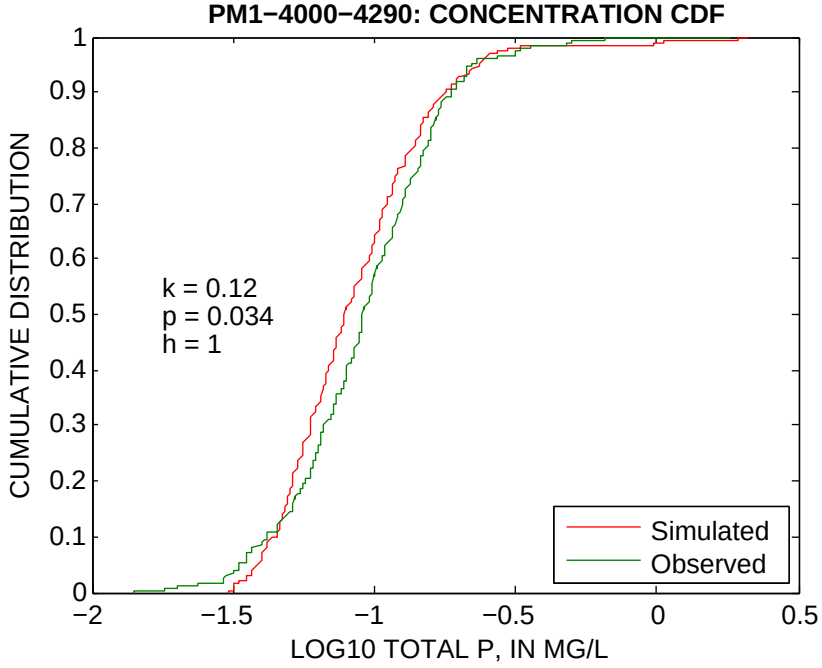
		observe	simulate
n		276	272
min		0.014	0
		-1.85387	-1.53865
mean		0.116768	0.121921
		-1.0336	-1.07819
media		0.092	0.071664
		-1.04096	-1.14209
max		1.832	2.4166
		0.262925	0.383205
varian		0.0166119	0.0606169
		0.0735867	0.0858949
JB		0.001	0.001
		0.001	0.001
		ra	log
%		4.41258	4.31384
err.va		0.0675086	0.104669
rel.std.err		4.06387	1.42239
mod.eff		-3.06387	-0.422387

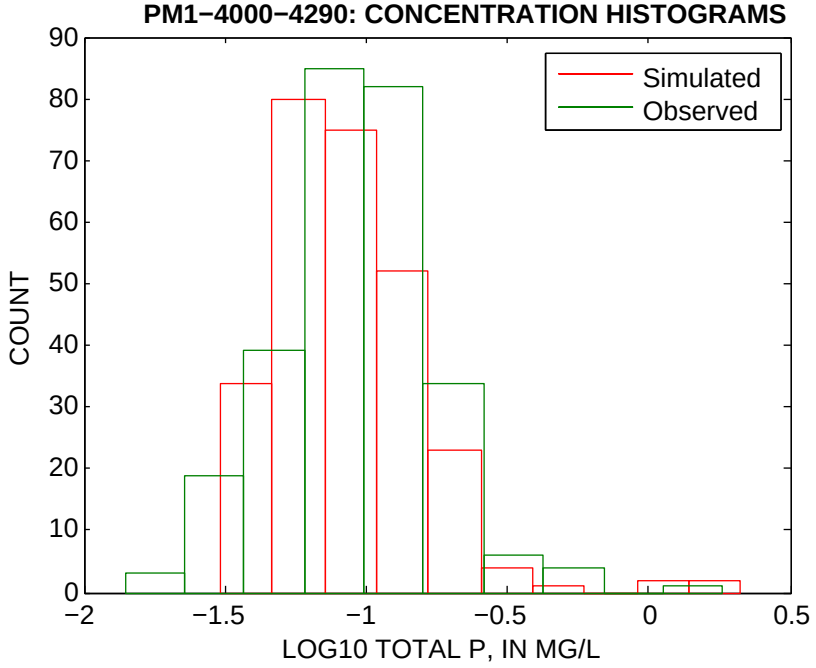
VERSION 2.1

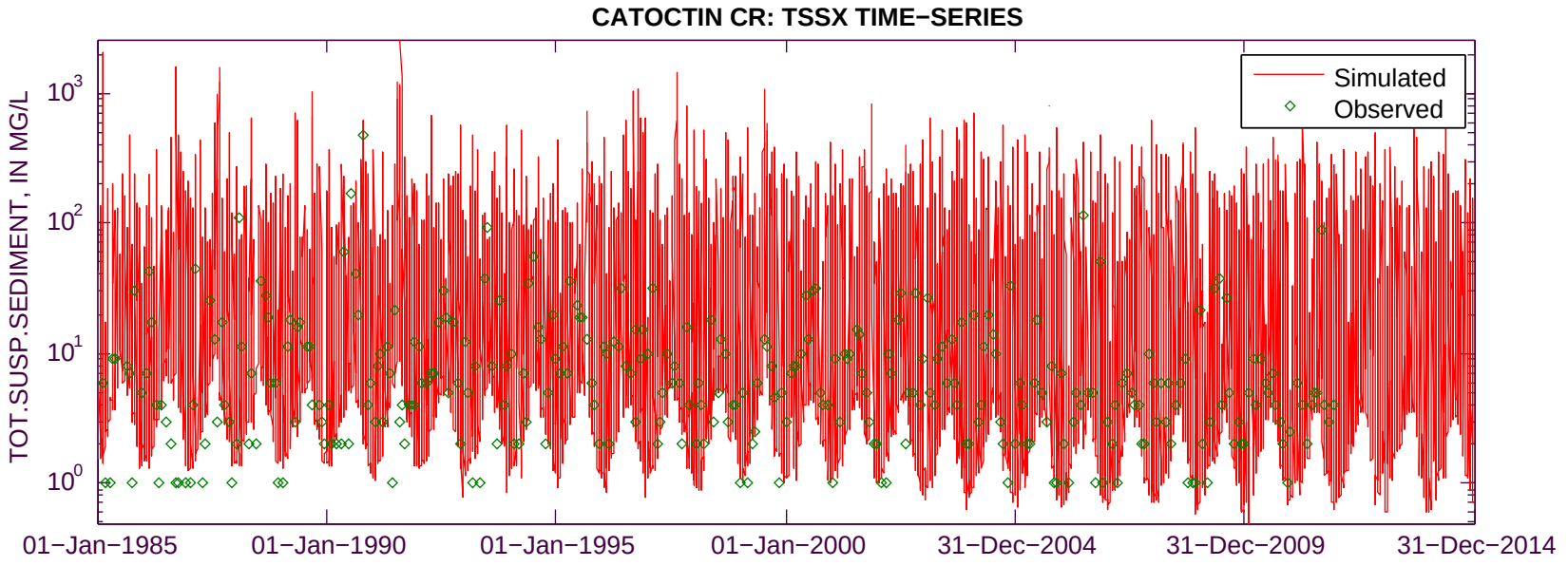
ALL DATA
LOG10

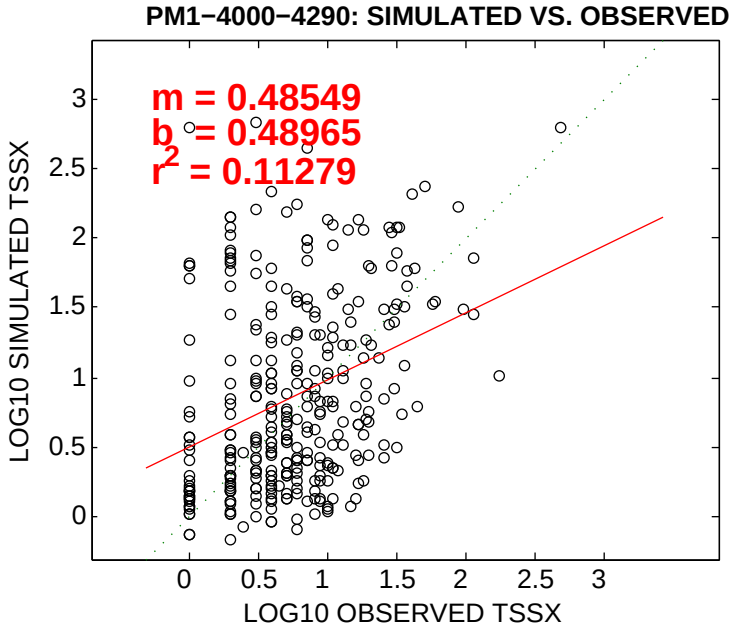


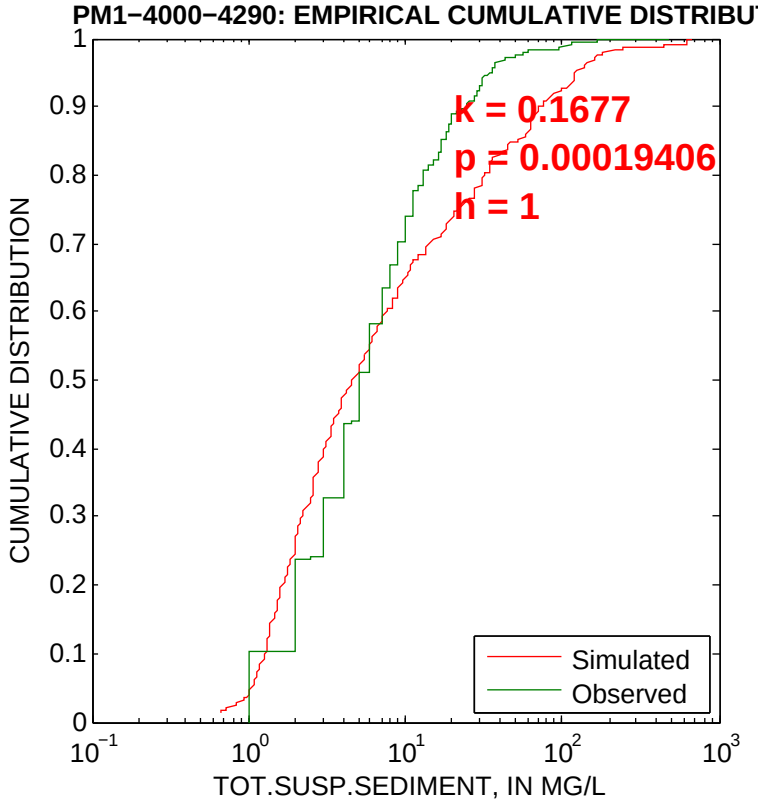












DATA SELECTION

scenario	file
P620171001WQ	TSSX.calib

plot: TSSX - total suspended ...

Dates: 1/1/1985 – 12/31/201

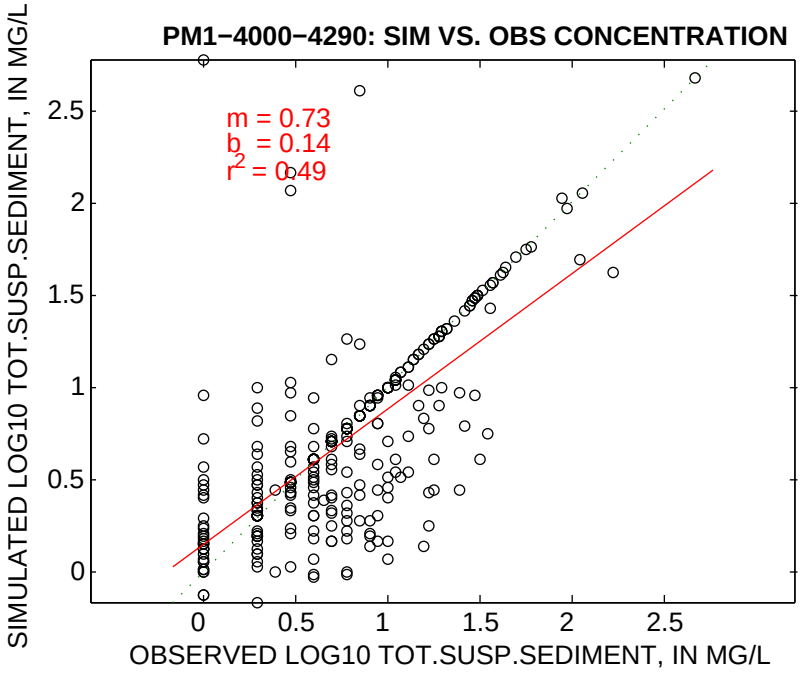
Drive	Directory	Observed
N/A	model	OBS20161101

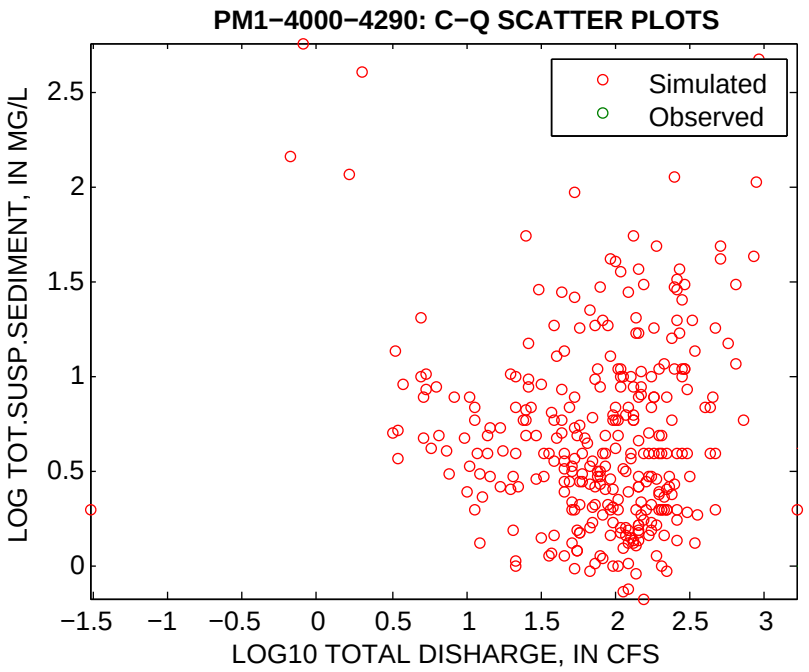
STATISTICS

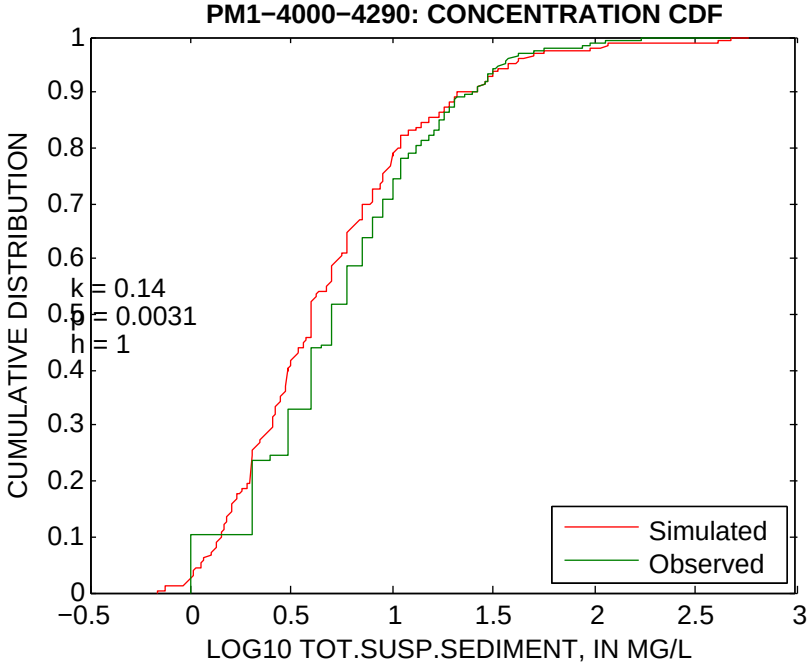
	n	observe	simulate
		322	318
min		1 0	0 -0.175393
mean		11.7748 0.752208	28.7874 0.854838
media		5 0.69897	4.64435 0.680284
max		475 2.67669	683.51 2.83474
varian		950.612 0.220181	5634.68 0.460112
JB		0.001 0.002360	0.001 0.001
		ra	log
%		144.482	13.6438
err.va		4926.4	0.477067
rel.std.err		5.18234	2.1667
mod.eff		-4.18234	-1.1667

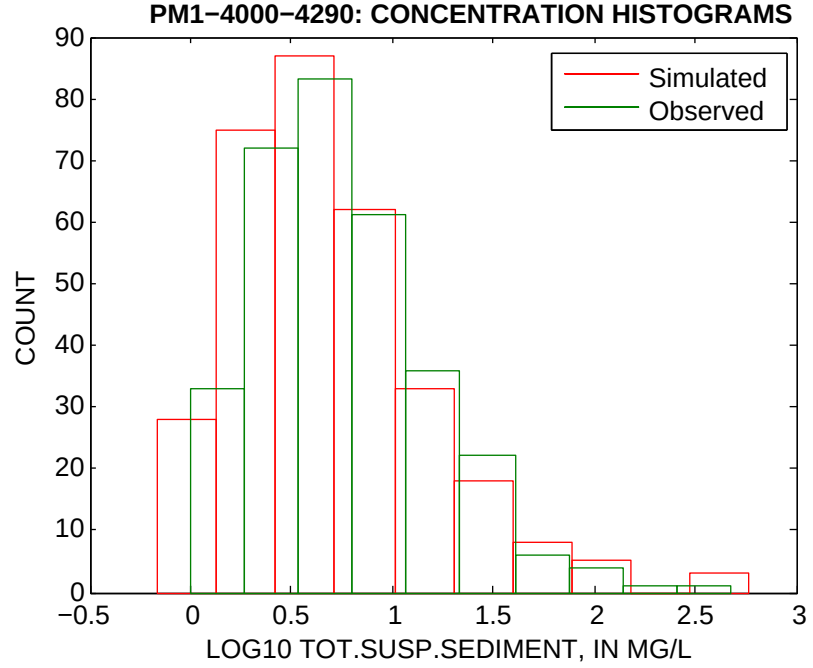
VERSION

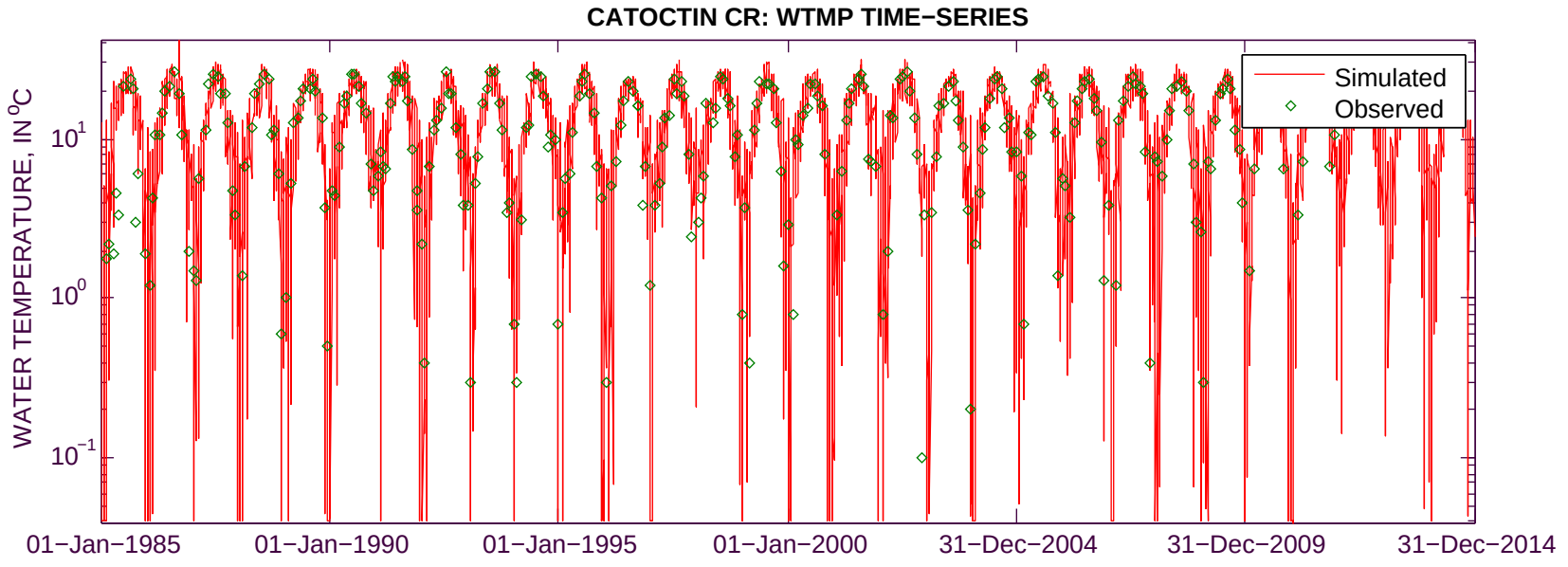
ALL DATA
LOG10

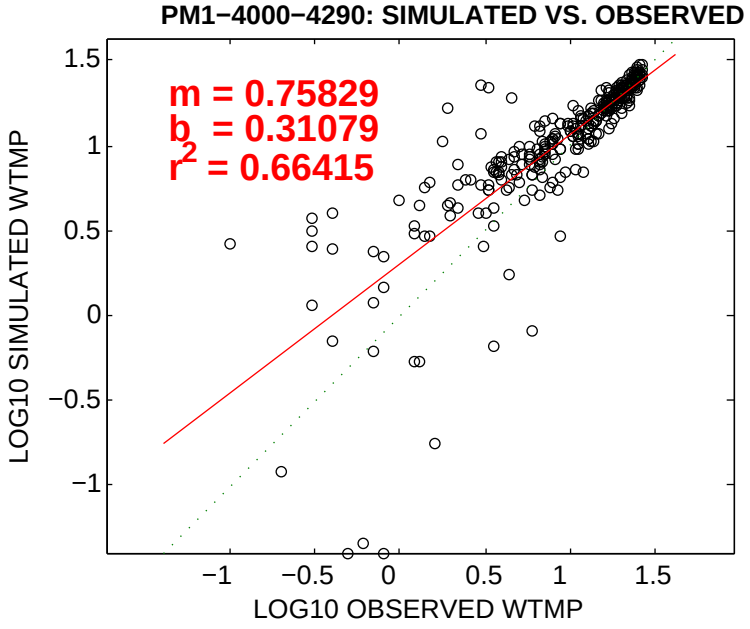


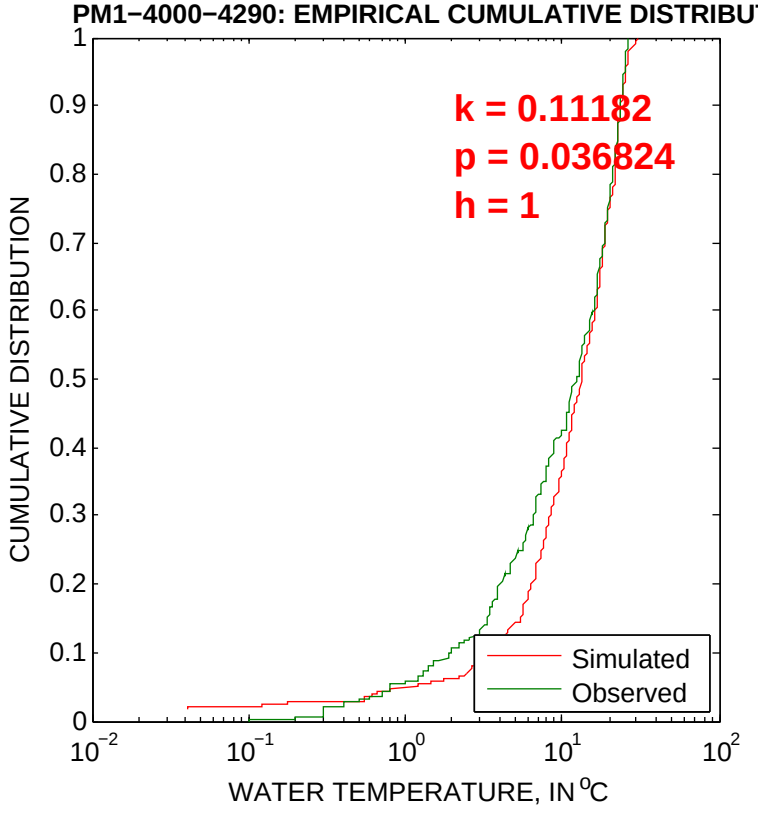












DATA SELECTION

scenario	file
P620171001WQ	WTMP.calib

plot: WTMP - water tempera...

Dates: 1/1/1985 – 12/31/201

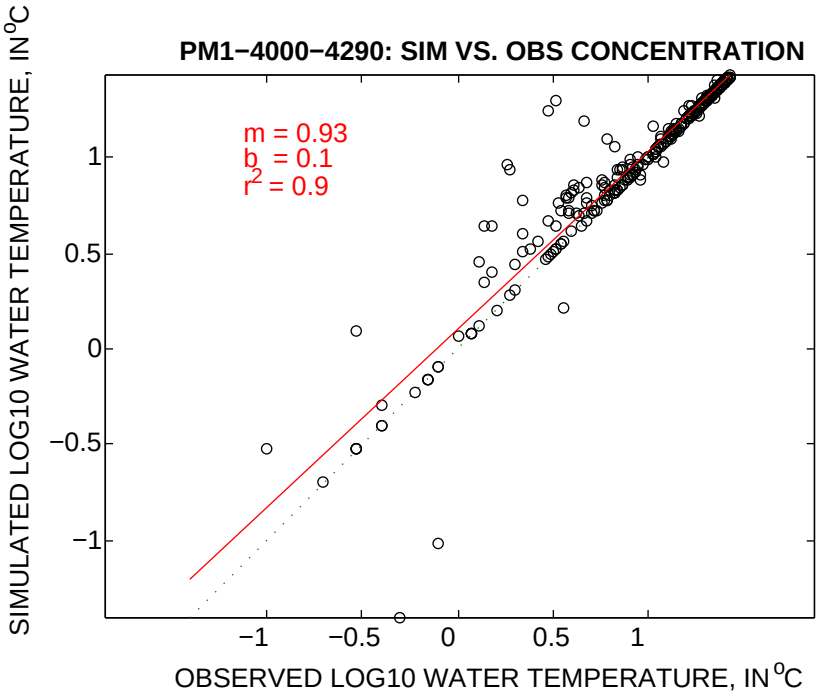
Drive	Directory	Observed
N/A	model	OBS20161101

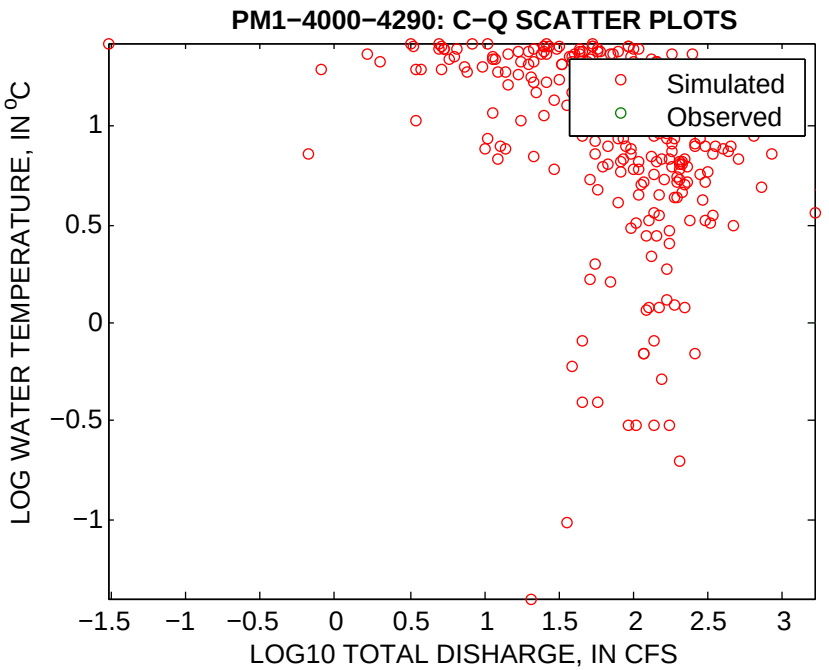
STATISTICS

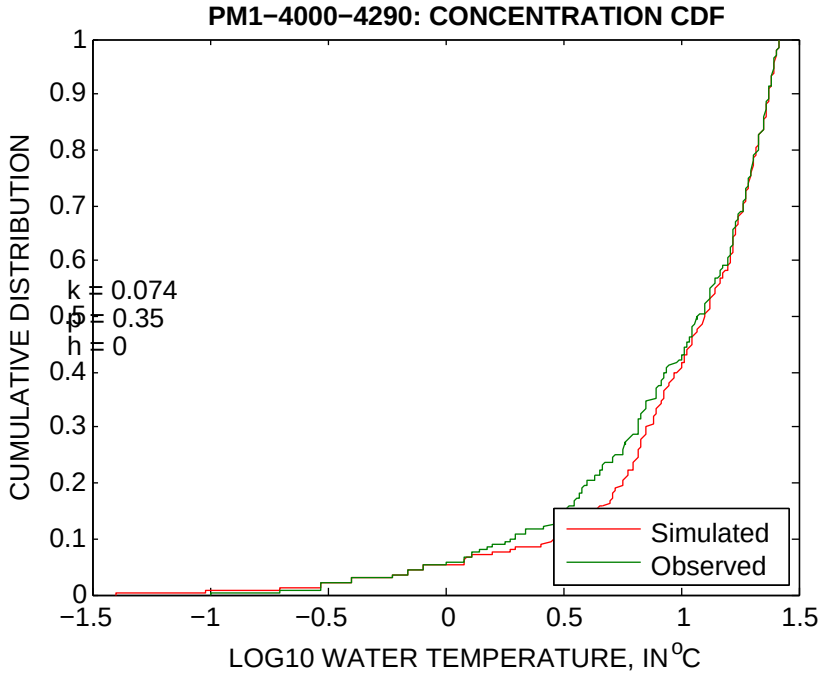
	n	observe	simulate
		313	309
min		0.1	0
		-1	-1.39745
mean		12.6373	13.6706
		0.937945	1.02203
media		12.2	13.483
		1.07555	1.13197
max		26.5	30.351
		1.42325	1.48217
varian		63.9703	58.265
		0.216216	0.187196
JB		0.001192	0.005639
		0.001	0.001
		ra	log
%		8.17698	8.96462
err.va		17.0905	0.0825953
rel.std.err		0.267163	0.382005
mod.eff		0.732837	0.617995

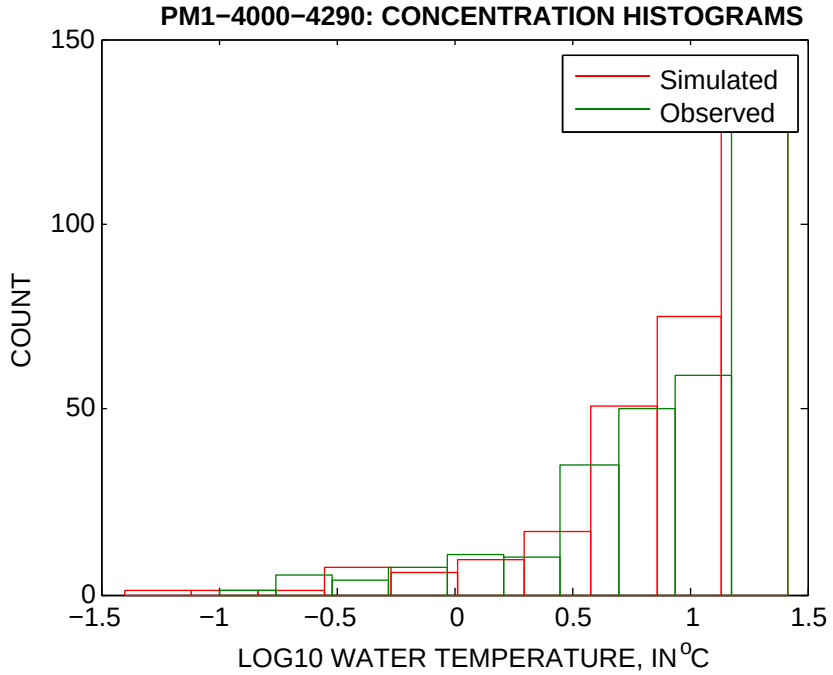
VERSION 2.1

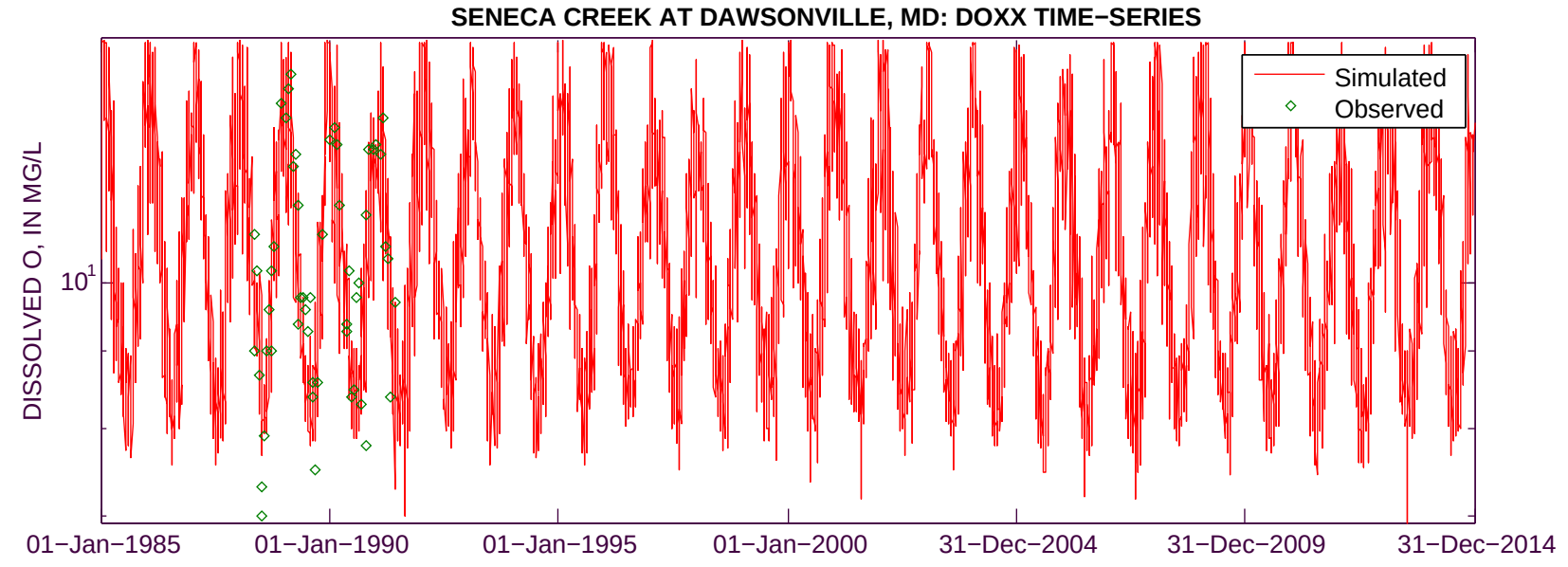
ALL DATA
LOG10

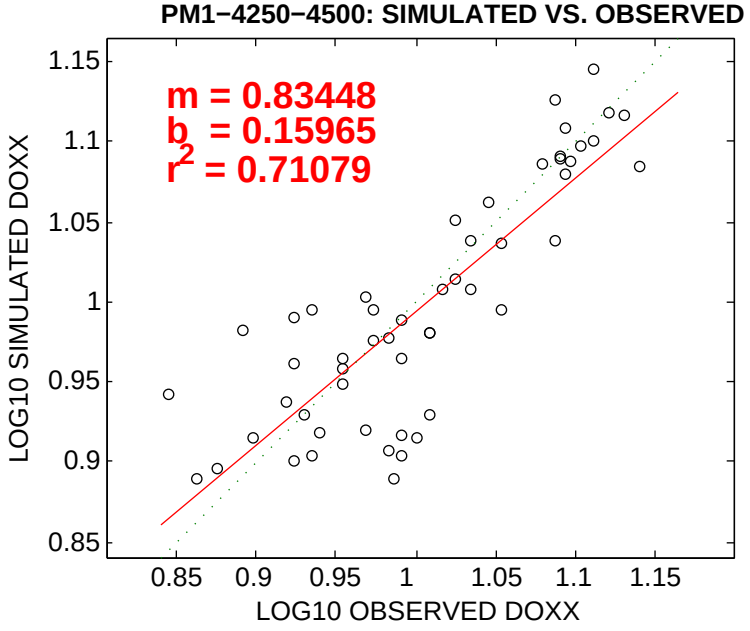


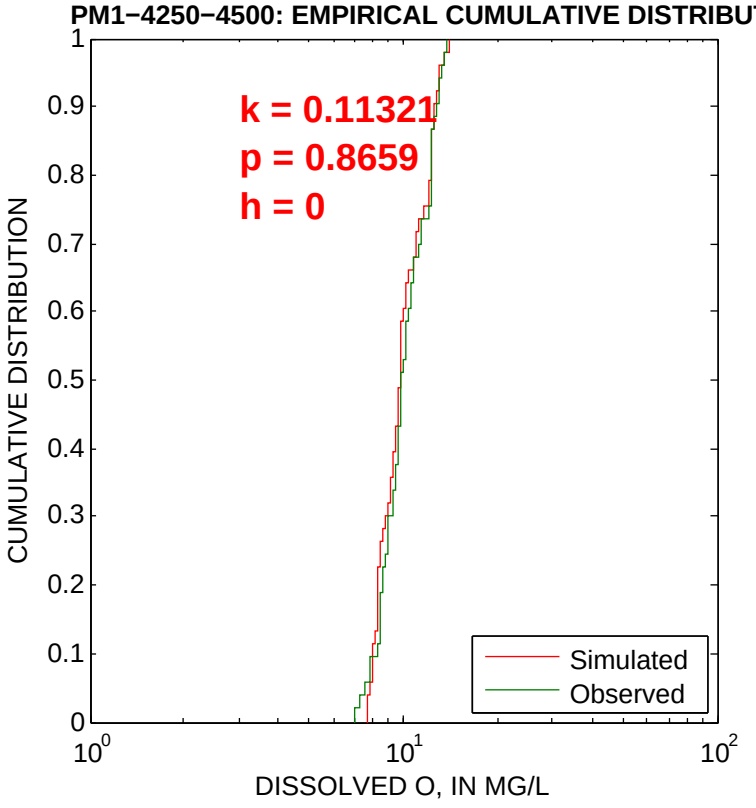












DATA SELECTION

scenario	file
P620171001WQ	DOXX.calib

plot: DOXX - dissolved oxygen

Dates: 1/1/1985 – 12/31/201

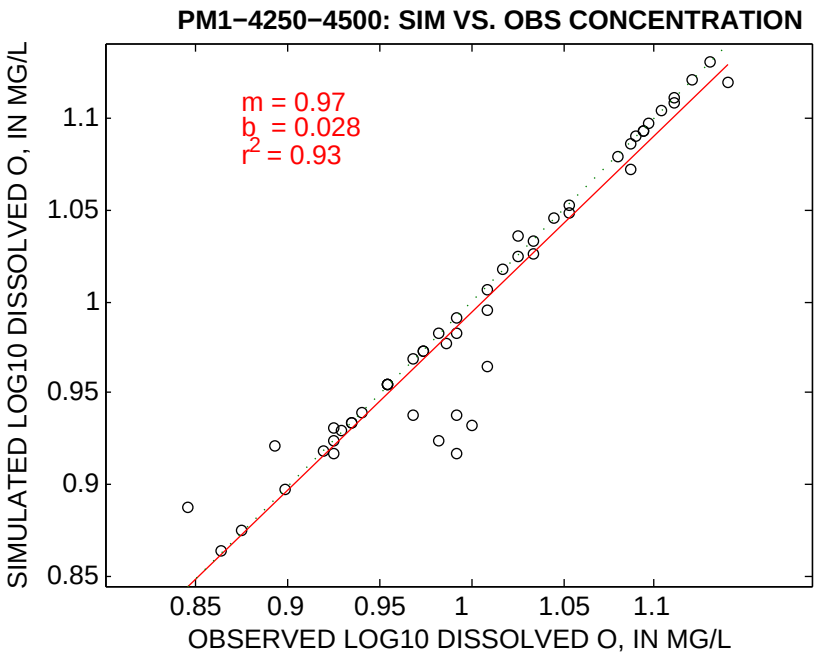
Drive	Directory	Observed
N/A	model	OBS20161101

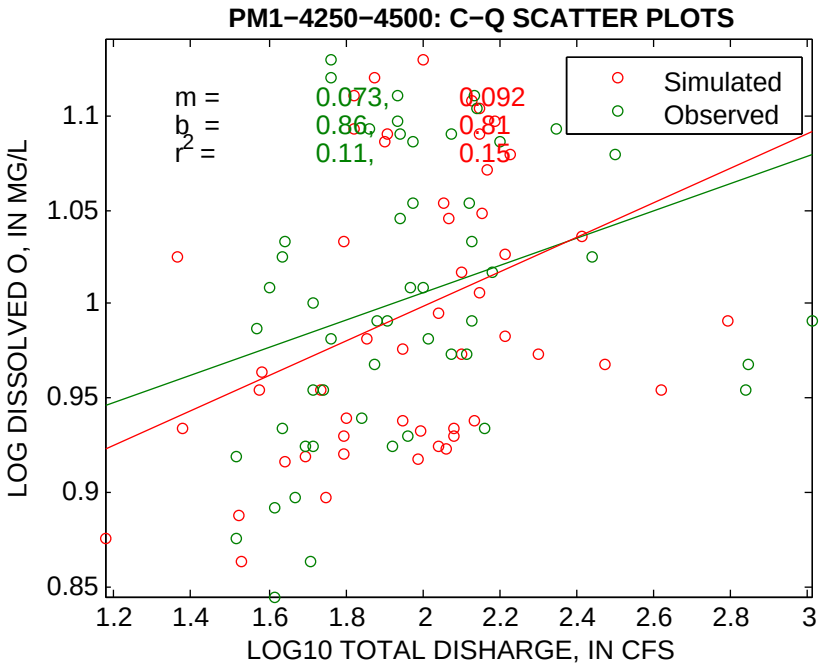
STATISTICS

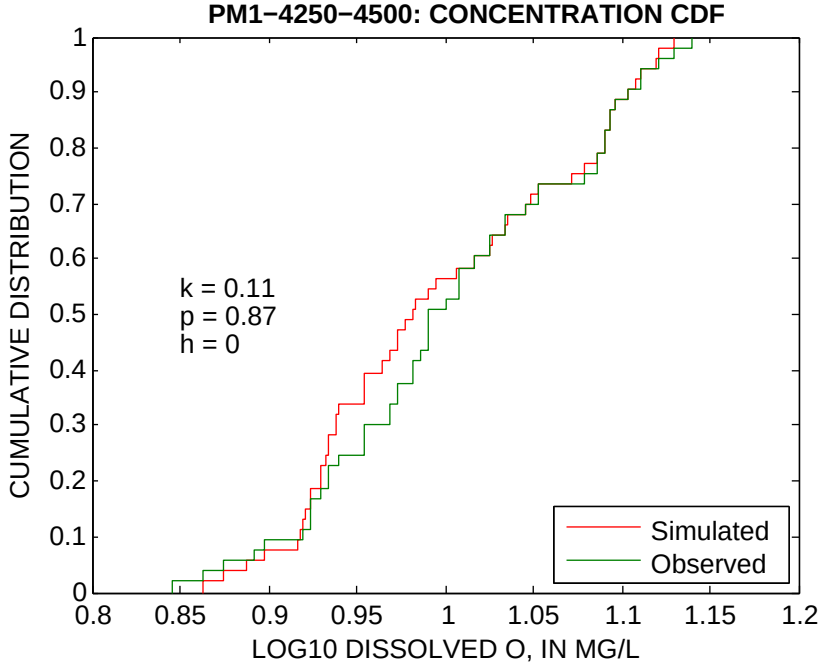
	n	53	53
		observe	simulate
min		7	7.7498
		0.845098	0.88929
mean		10.2396	10.0866
		1.00393	0.997407
media		9.8	9.7497
		0.991226	0.988991
max		13.8	13.964
		1.13988	1.14501
varian		3.12282	3.12352
		0.00564663	0.00553195
JB		0.159836	0.064493
		0.301935	0.085177
		ra	log
%		-1.49416	-0.649644
err.va		0.834933	0.00179799
rel.std.err		0.267365	0.318417
mod.eff		0.732635	0.681583

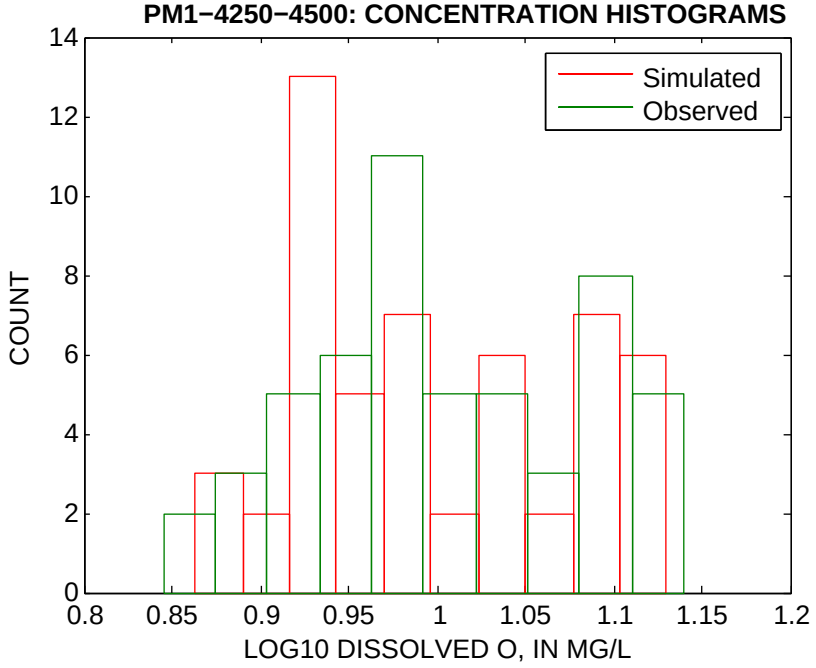
VERSION 2.1

ALL DATA
LOG10

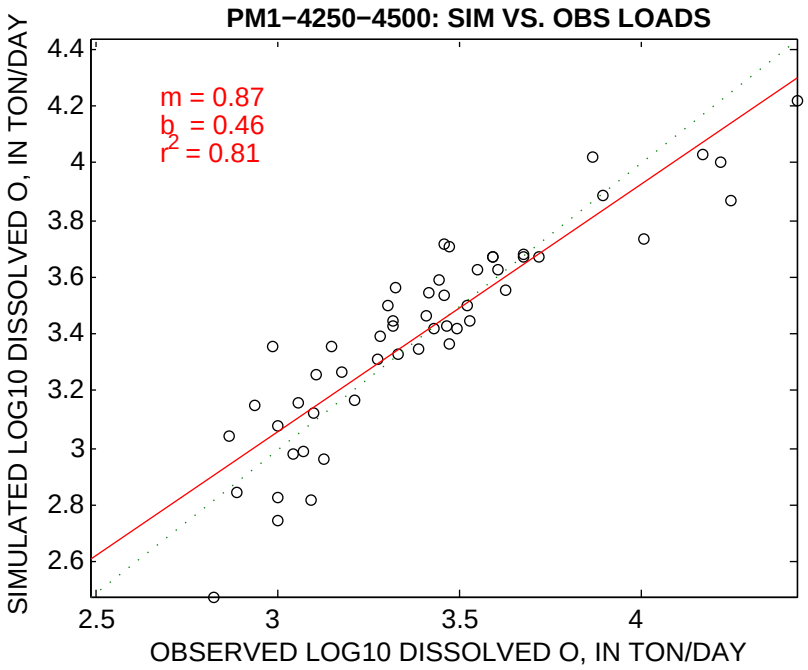


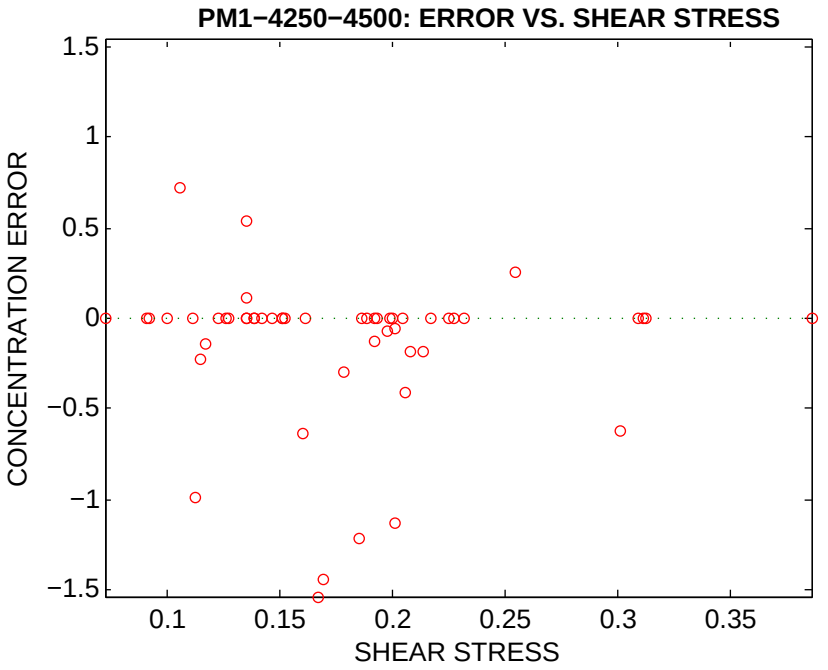


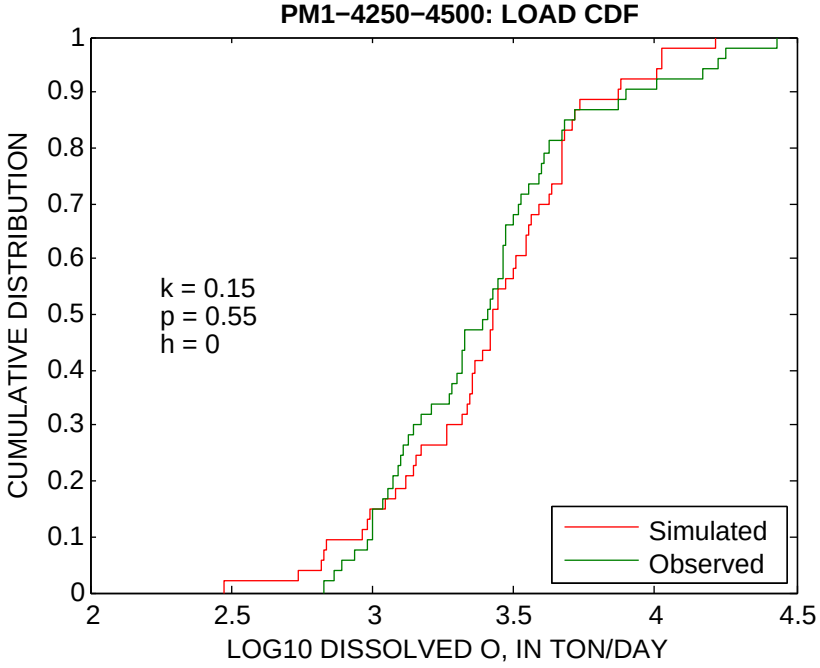


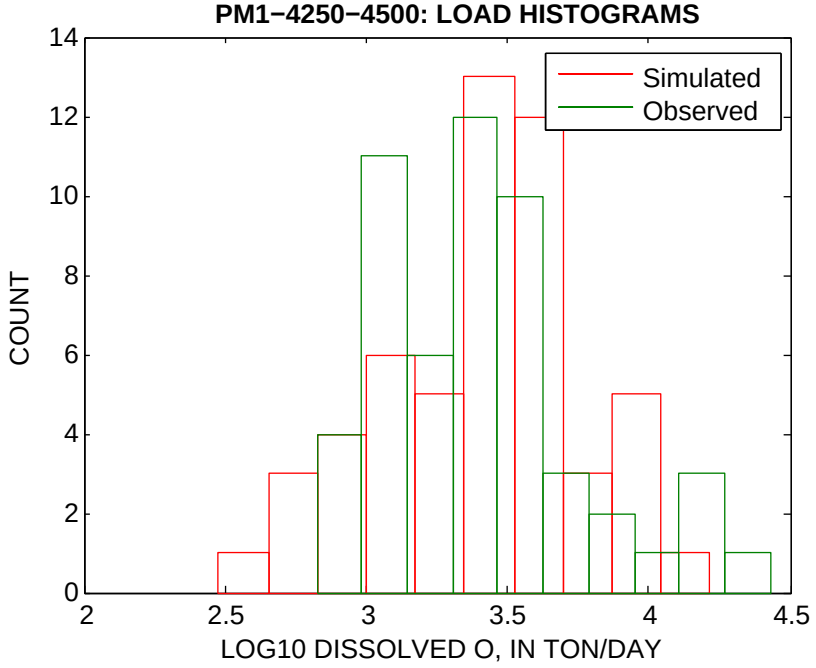


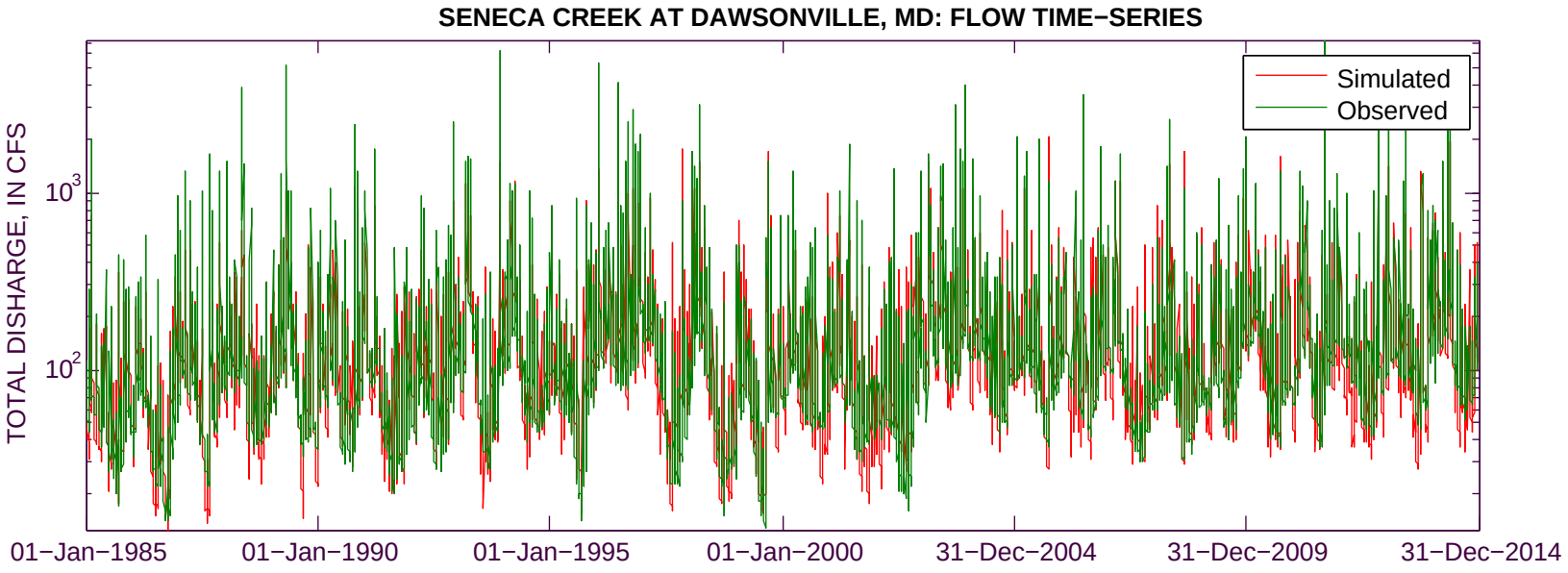
LOAD DATA
LOG10

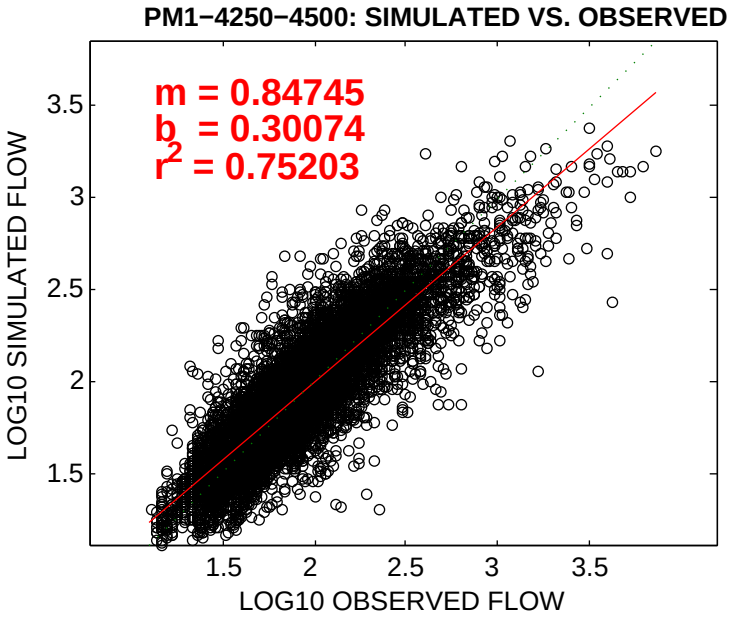


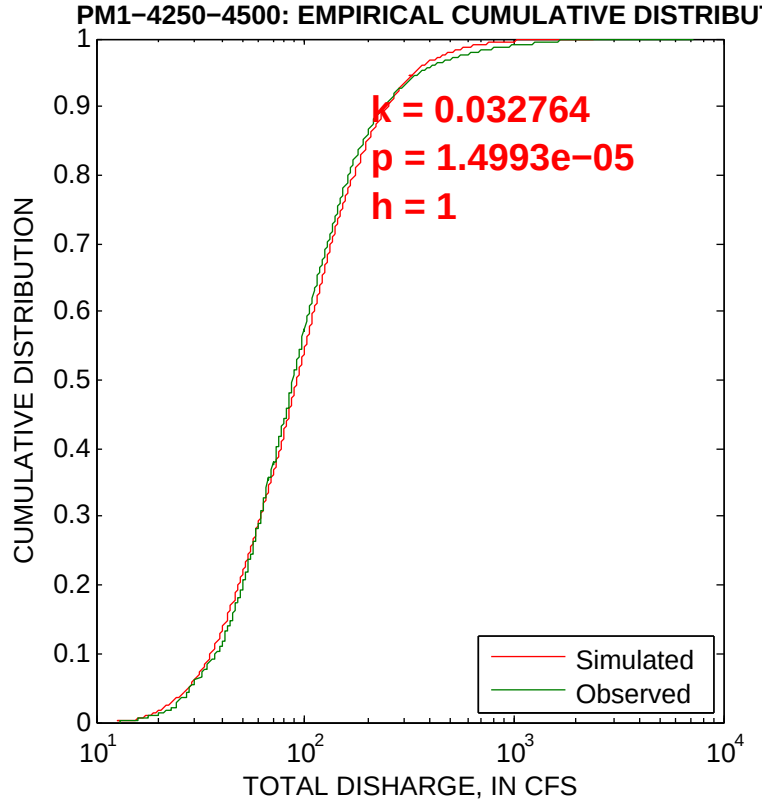












DATA SELECTION

scenario	file
P620171001WQ	FLOW.calib

plot: FLOW - total discharge

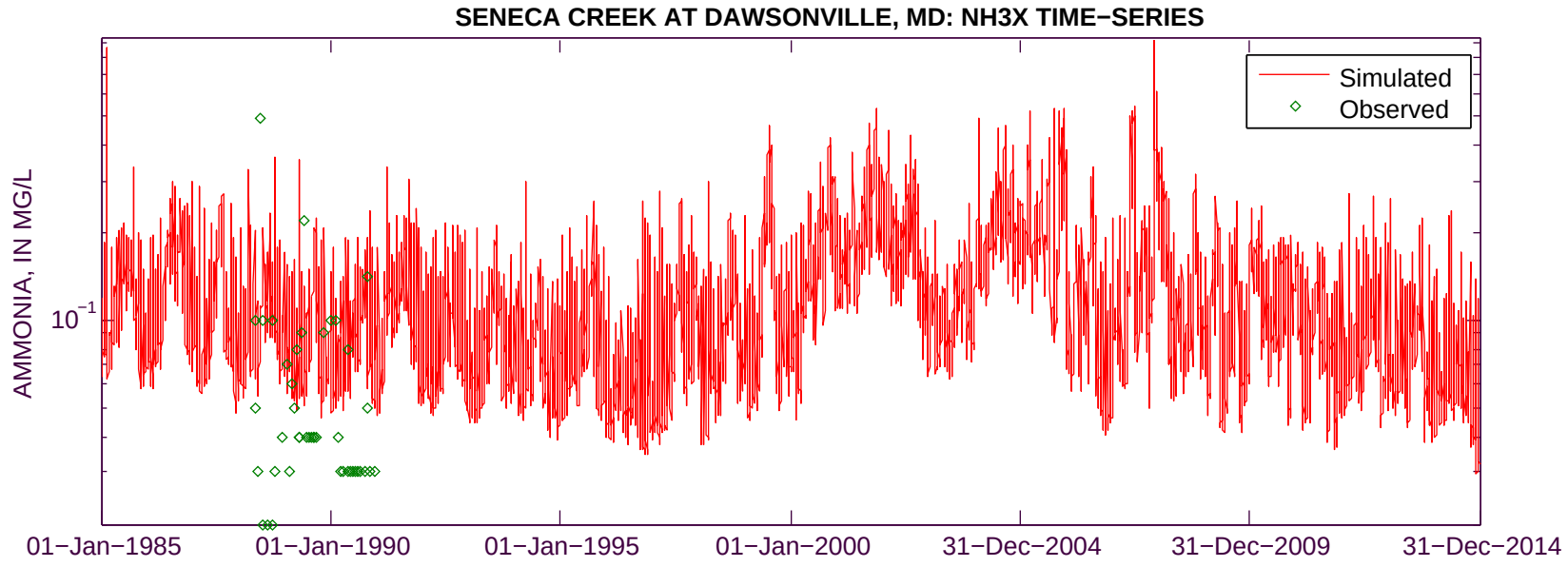
Dates: 1/1/1985 – 12/31/201

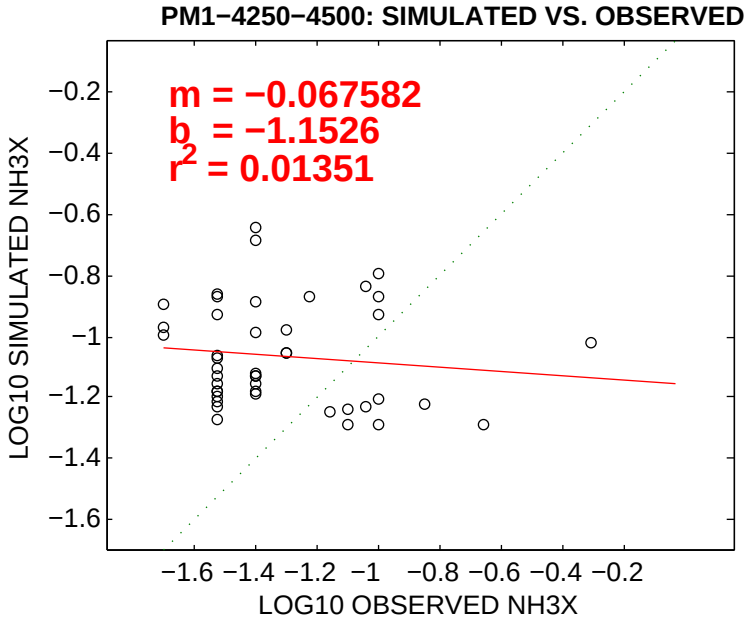
Drive	Directory	Observed
N/A	model	OBS20161101

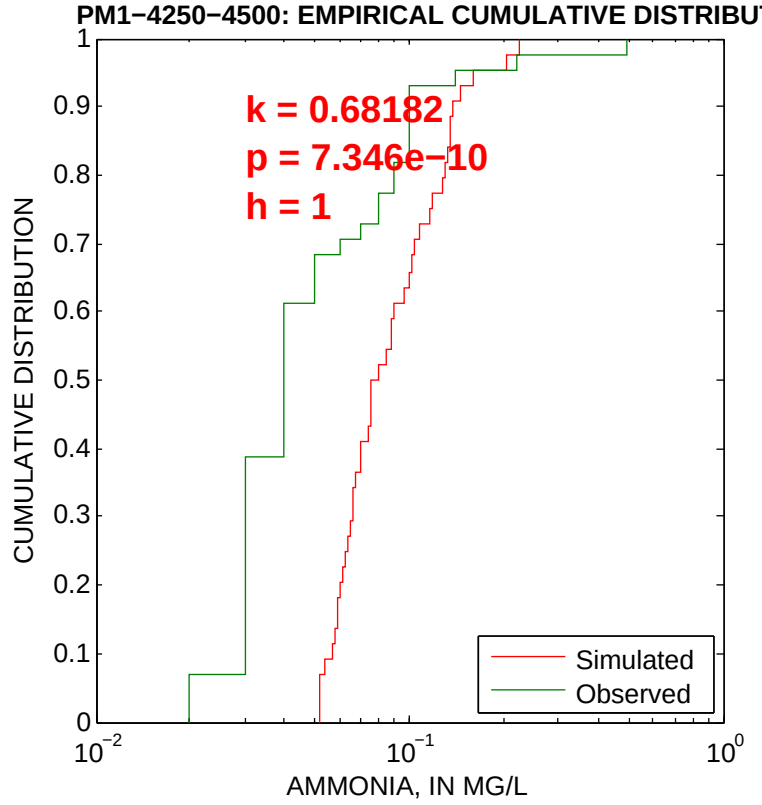
STATISTICS

	observe	simulate
n	10957	10957
min	13 1.11394	12.635 1.10158
mean	139.388 1.97081	128.286 1.97092
media	88 1.94448	92.33 1.96534
max	7250 3.86034	2416.1 3.38311
varian	60196.6 0.114695	18782.7 0.109532
JB	0.001 0.001	0.001 0.001
	ra	log
%	-7.96432	0.00542108
err.va	28009.1	0.0298297
rel.std.err	0.465293	0.260078
mod.eff	0.534707	0.739922

VERSION 2.1







DATA SELECTION

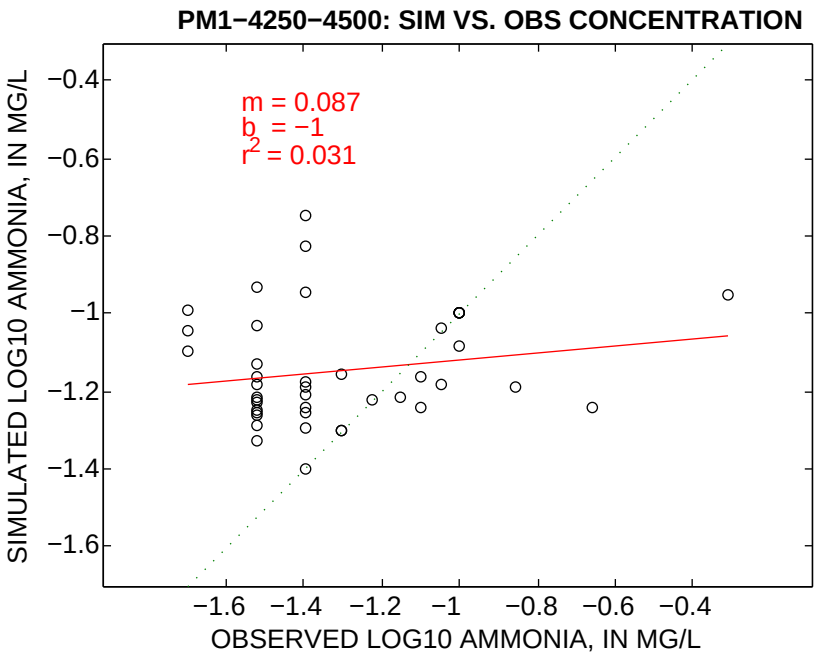
scenario: P620171001WQ
file: NH3X.calib
plot: NH3X - ammonia
Dates: 1/1/1985 12/31/201
Drive: N/A
Directory: model
Observed: OBS20161101

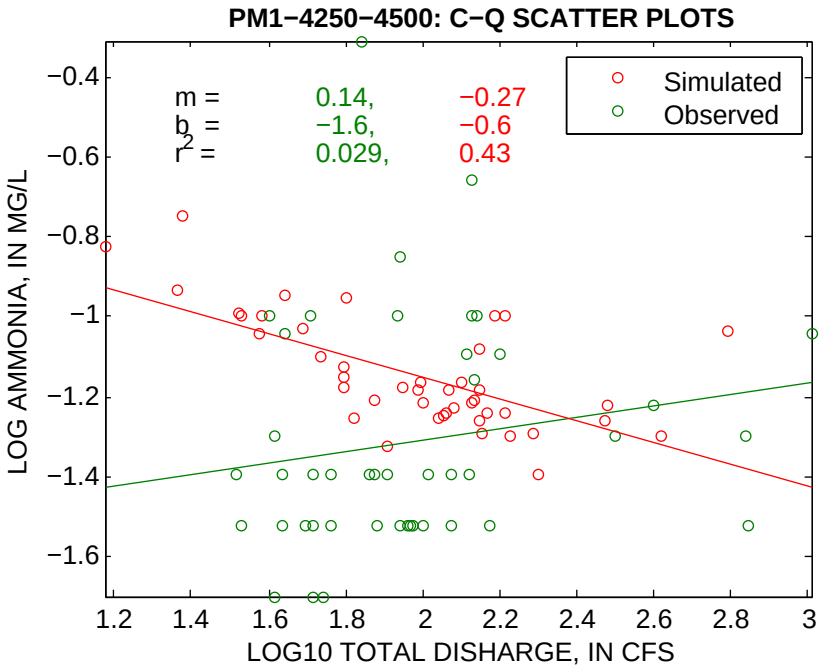
STATISTICS

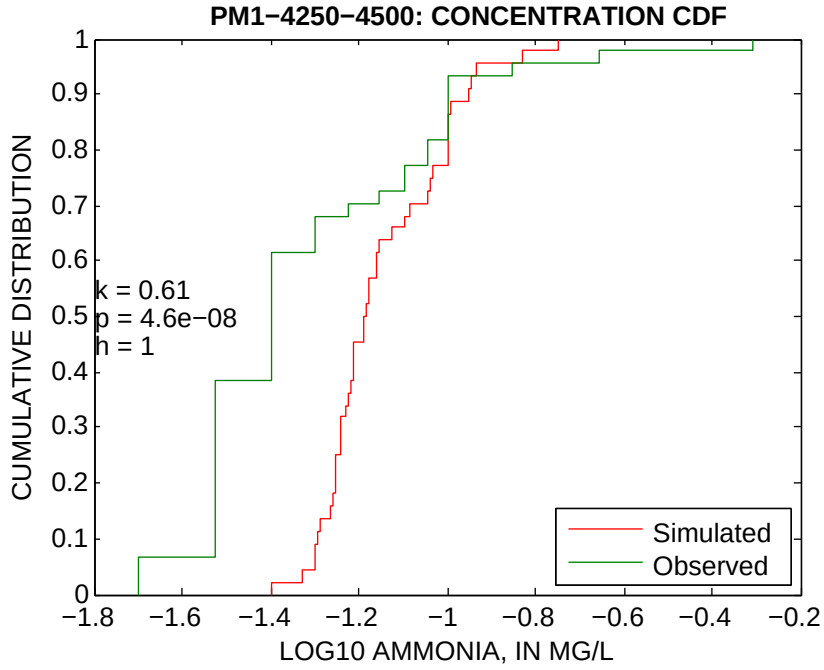
	n	44	44
		observe	simulate
min		0.02	0.05151
		-1.69897	-1.28811
mean		0.0647727	0.0932585
		-1.31325	-1.06382
media		0.04	0.0777025
		-1.39794	-1.10967
max		0.49	0.22527
		-0.309804	-0.647297
varian		0.00577437	0.00162519
		0.0823799	0.0278491
JB		0.001	0.003447
		0.003948	0.096686
		ra	log
%		43.9781	-18.9936
err.va		0.00860214	0.185028
rel.std.err		1.48971	2.24603
mod.eff		-0.489711	-1.24603

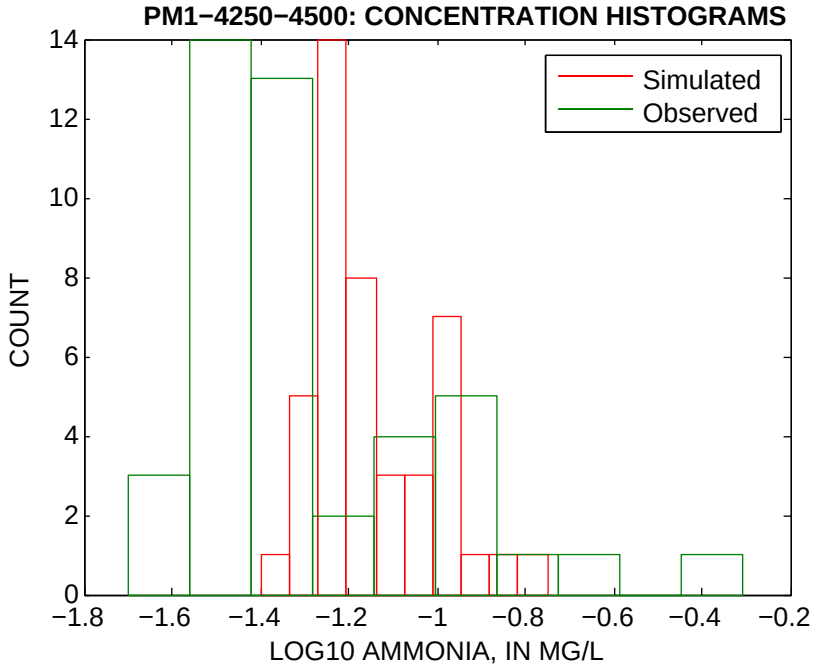
VERSION 2.1

ALL DATA
LOG10

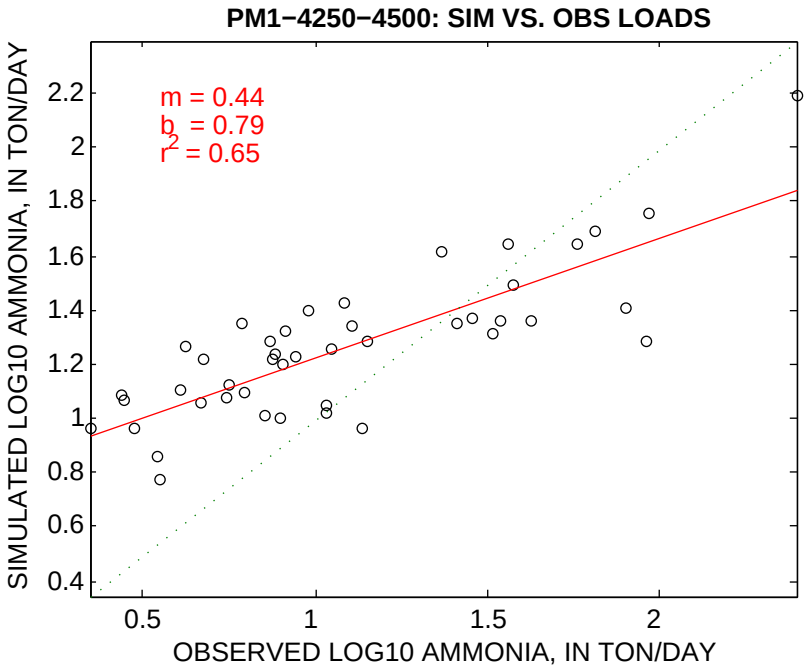


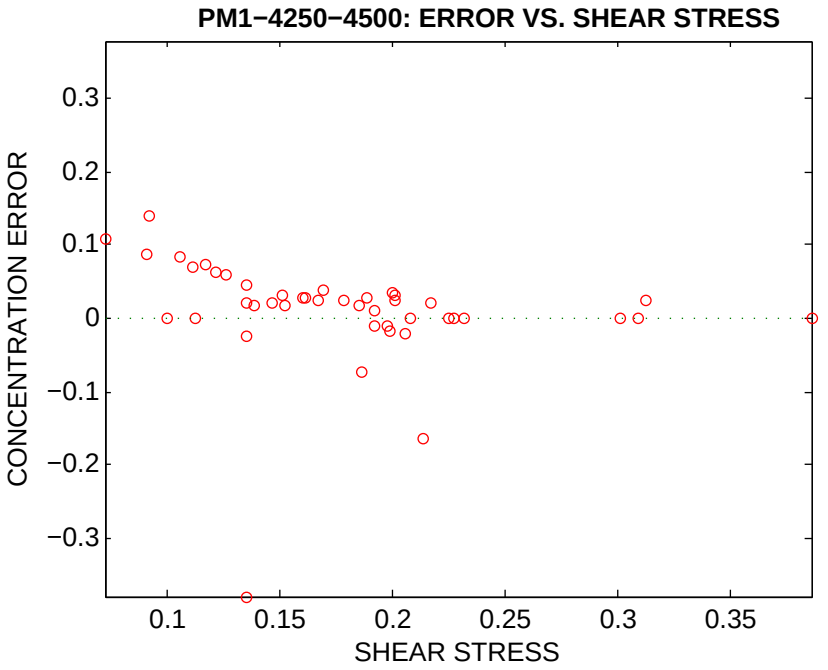


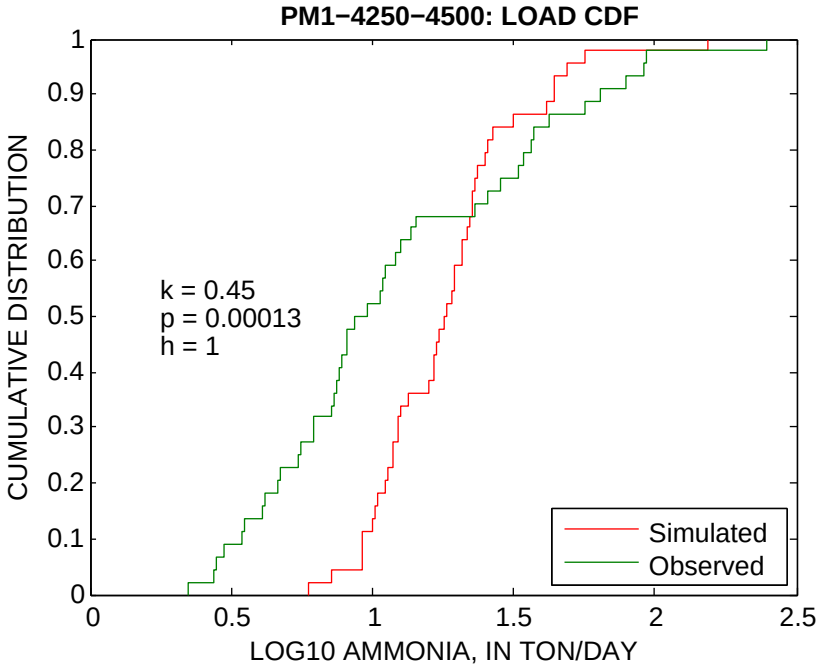


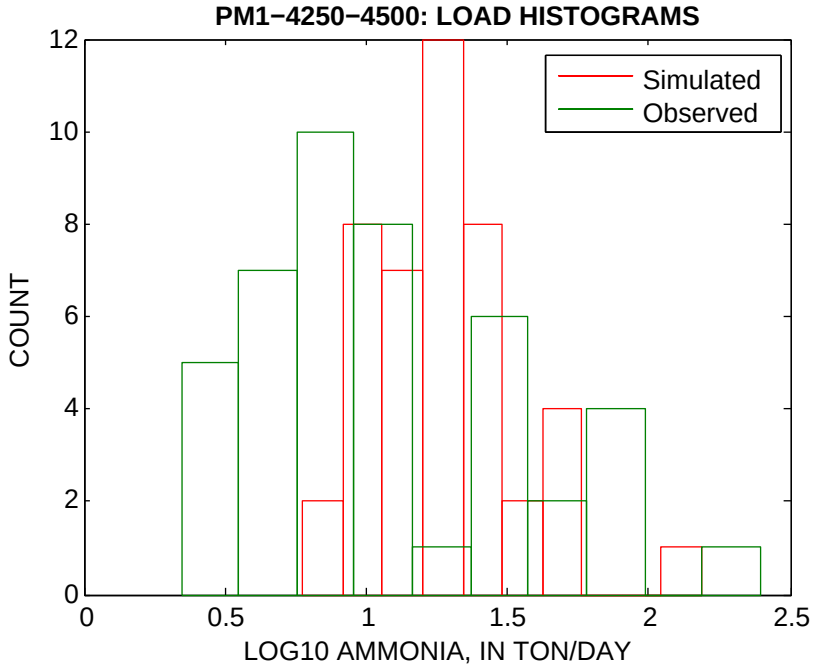


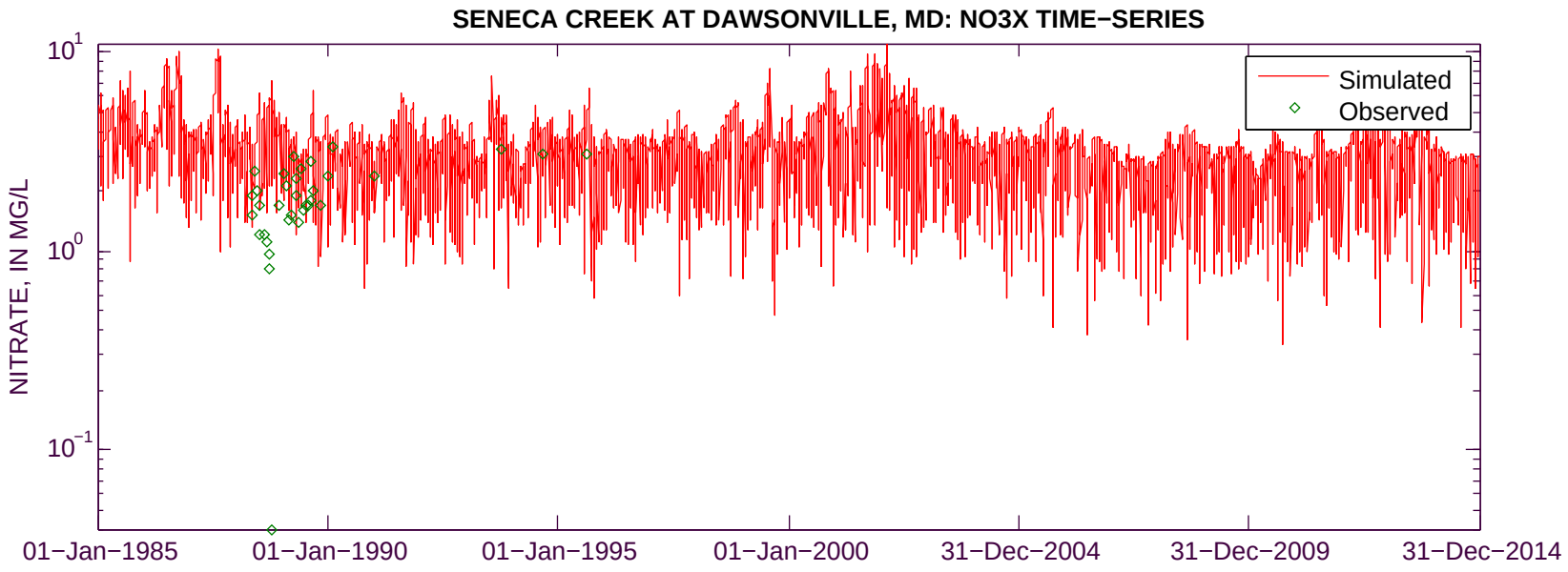
LOAD DATA
LOG10

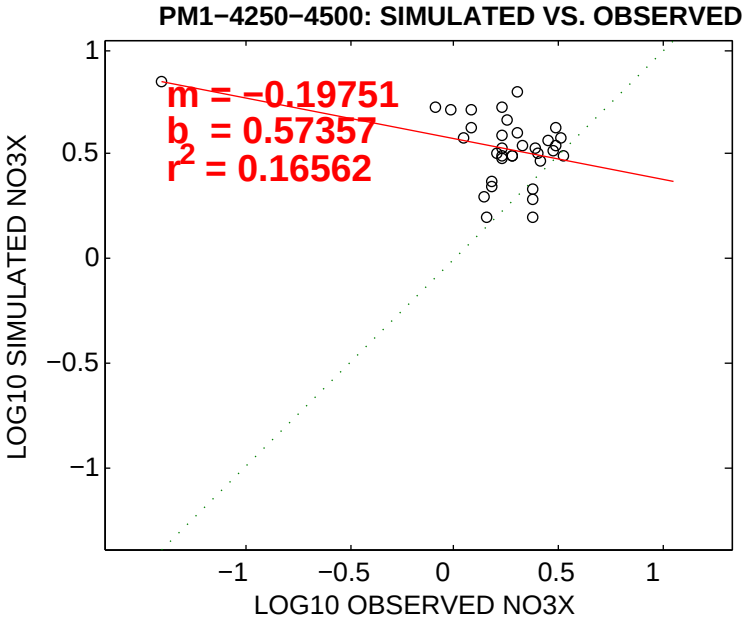


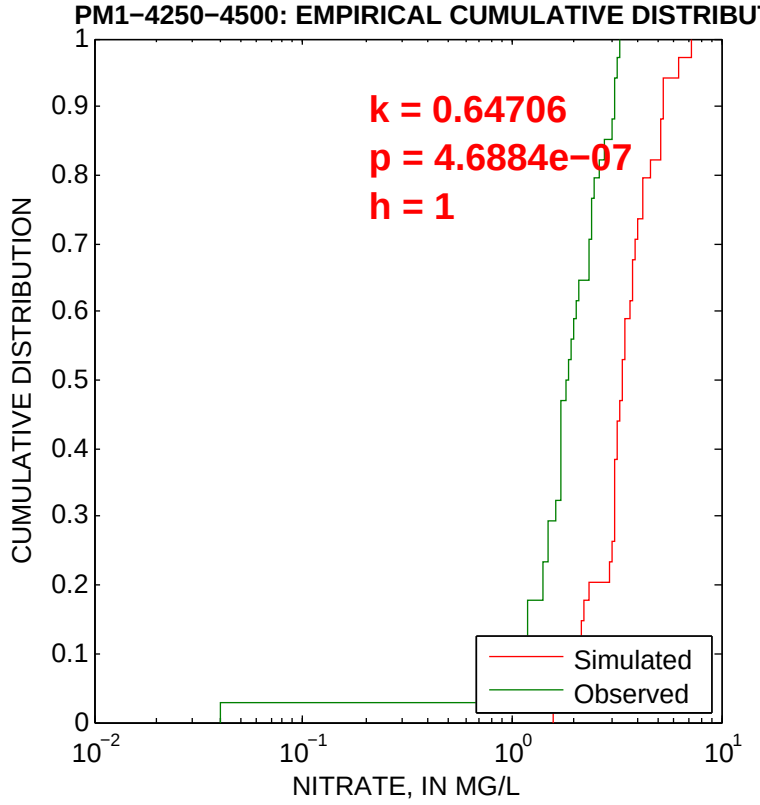












DATA SELECTION

scenario: P620171001WQ | file: NO3X.calib

plot: NO3X - nitrate

Dates: 1/1/1985 – 12/31/201

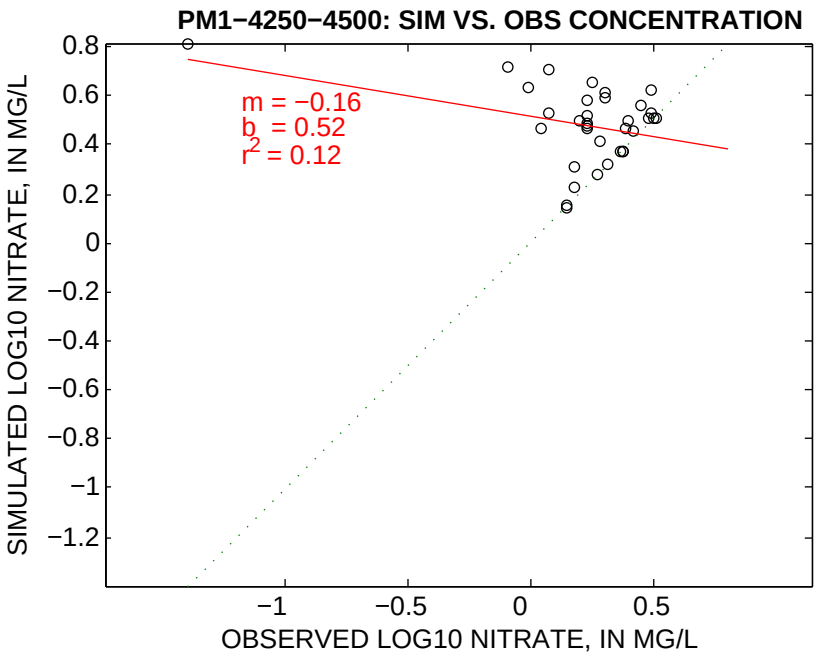
Drive: N/A | Directory: model | Observed: OBS20161101

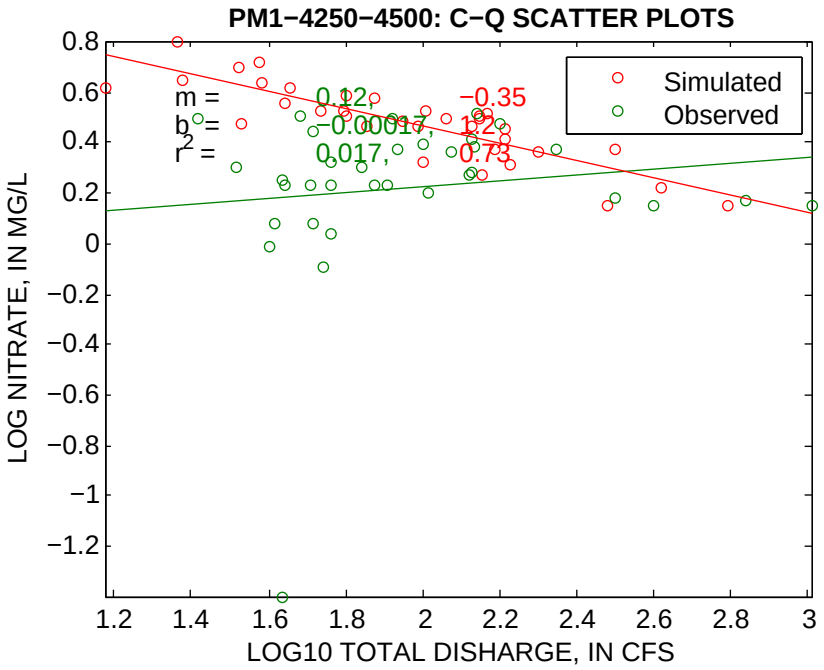
STATISTICS

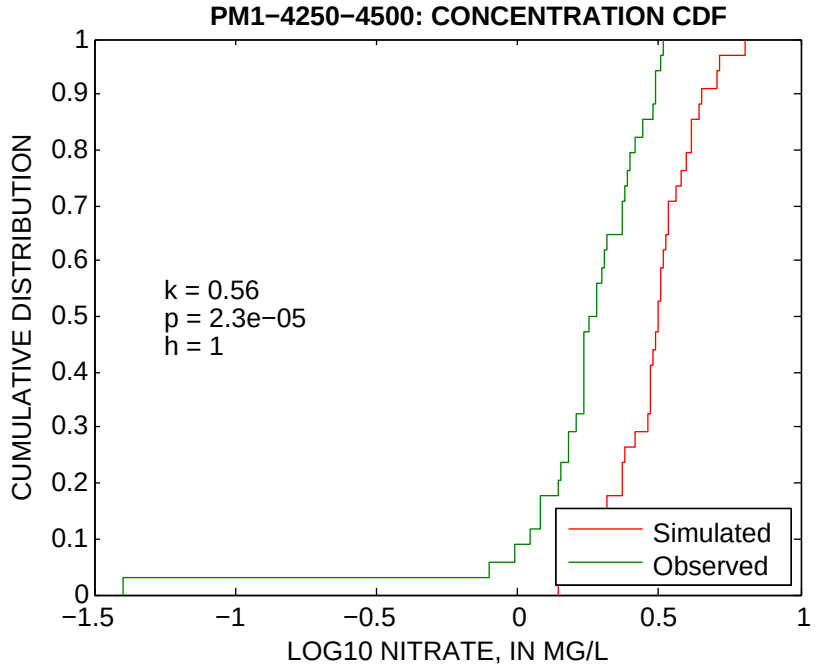
	n	34	34
		observe	simulate
min		0.04	1.5658
		-1.39794	0.194736
mean		1.94353	3.59691
		0.22623	0.52889
media		1.845	3.37115
		0.265867	0.52776
max		3.3	7.1386
		0.518514	0.853613
varian		0.563484	1.65264
		0.105861	0.0249349
JB		0.5	0.076953
		0.001	0.5
		ra	log
%		85.0711	133.785
err.va		5.75273	0.266992
rel.std.err		10.2092	2.52211
mod.eff		-9.20921	-1.52211

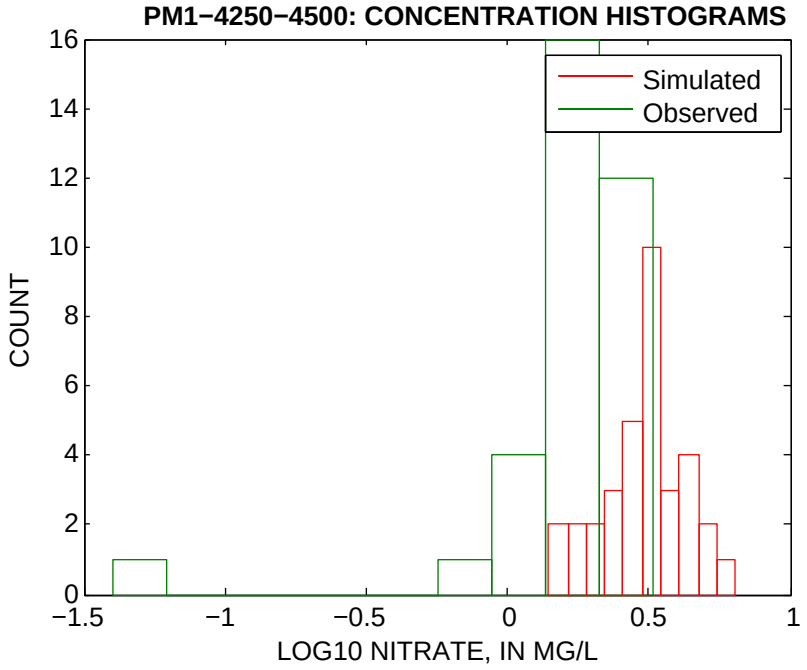
VERSION 2.1

ALL DATA
LOG10

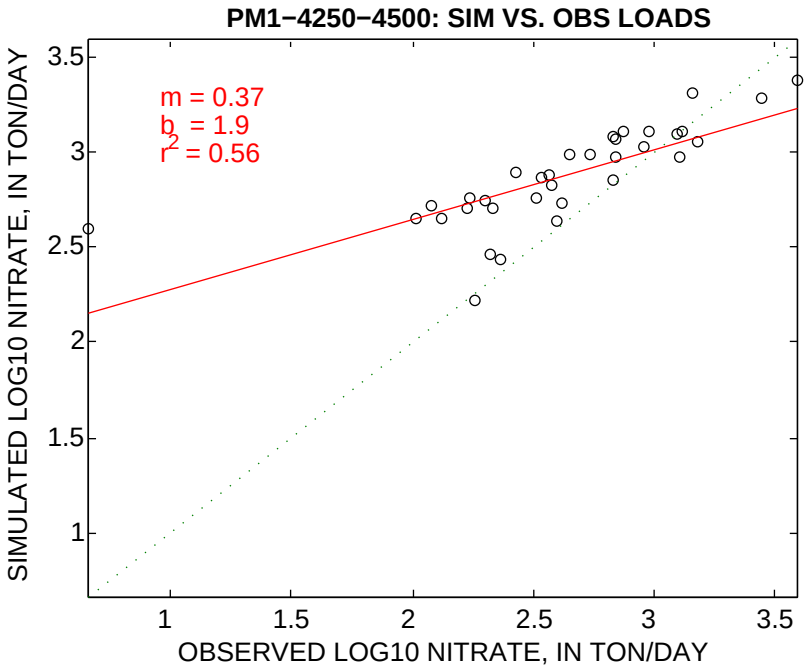


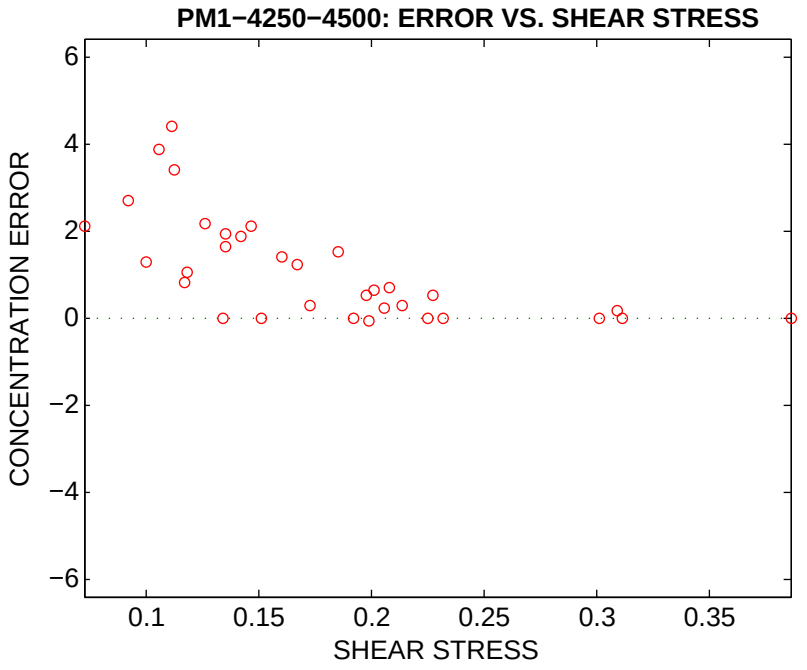


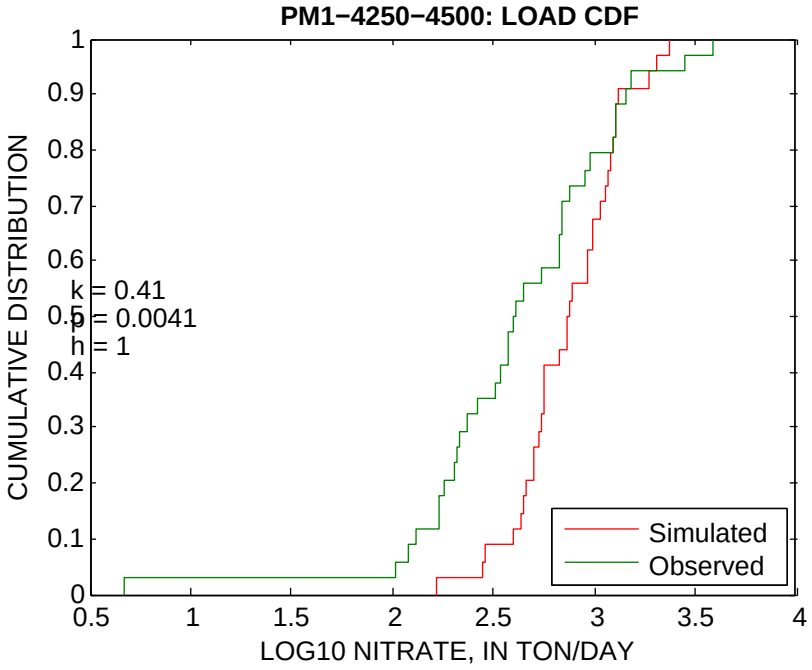


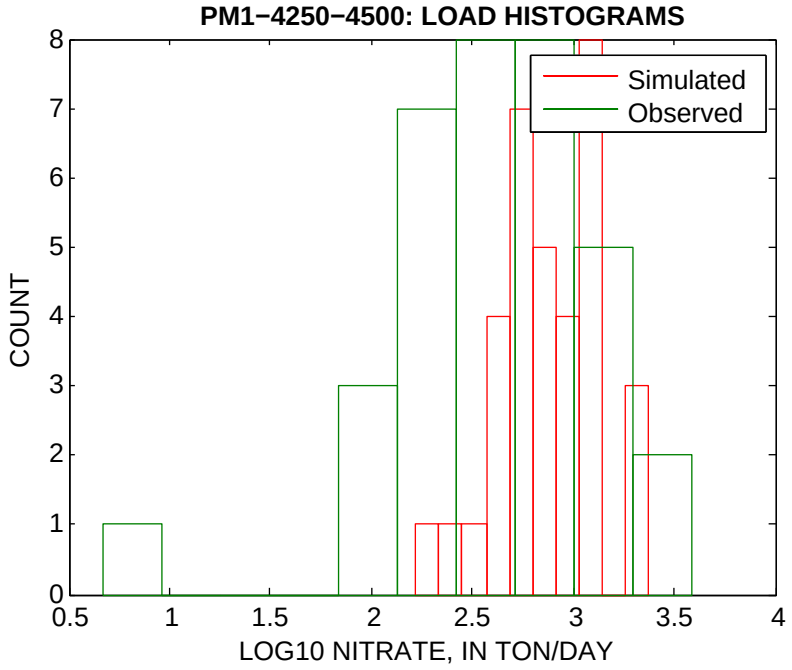


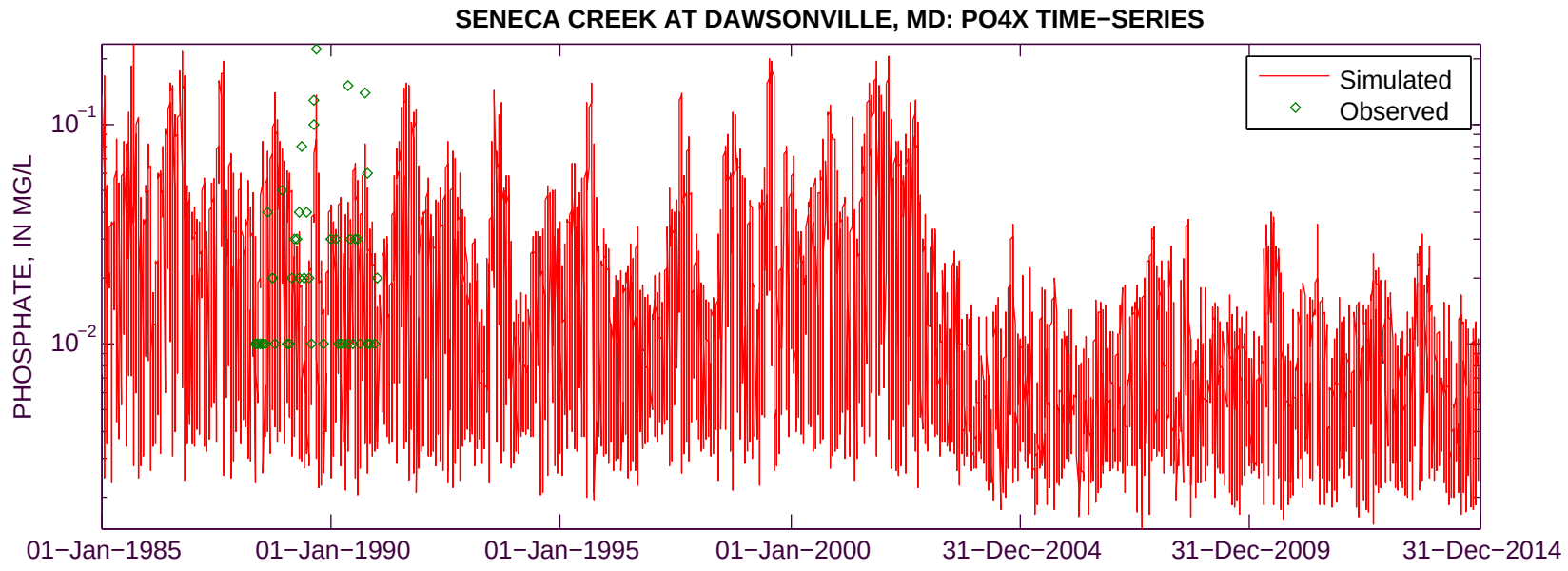
LOAD DATA
LOG10

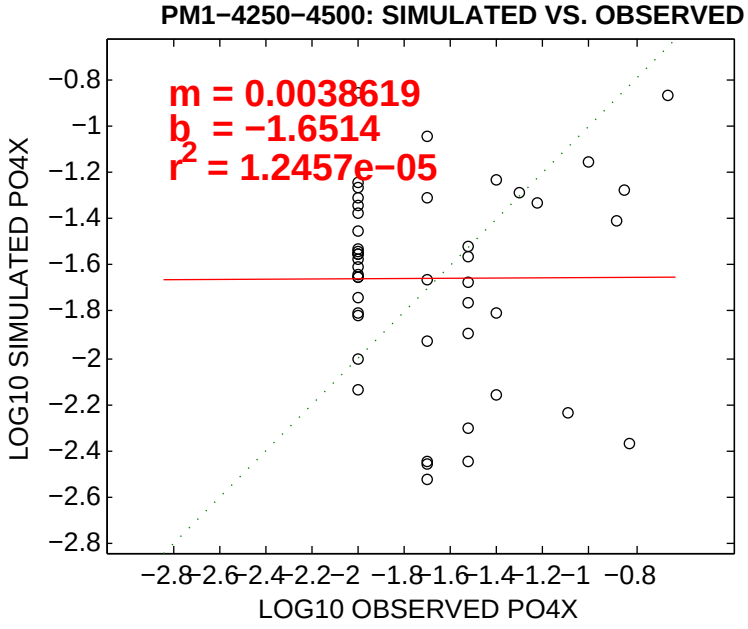


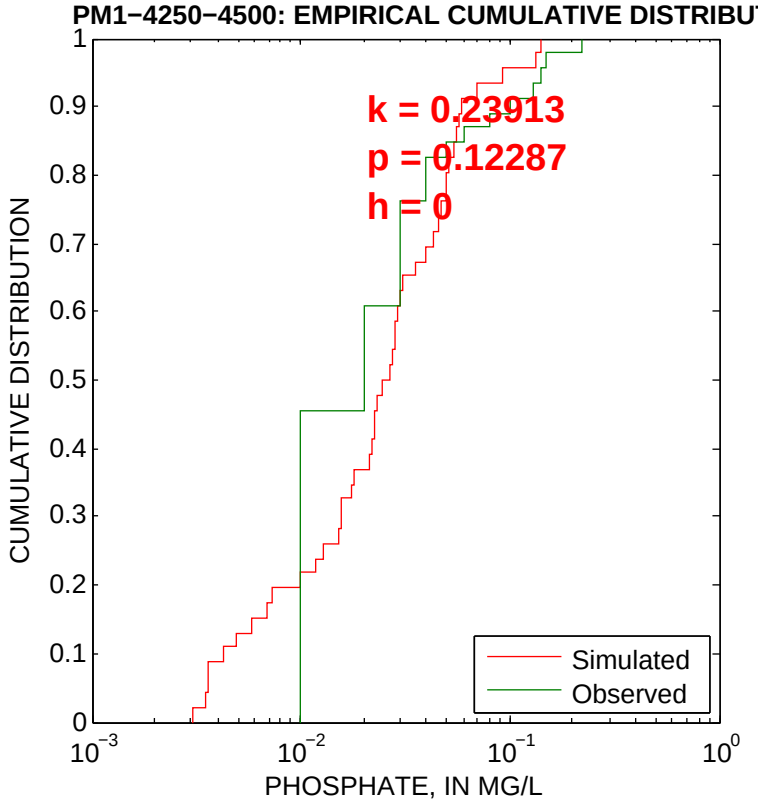












DATA SELECTION

scenario: P620171001WQ | file: PO4X.calib

plot: PO4X - phosphate

Dates: 1/1/1985 – 12/31/201

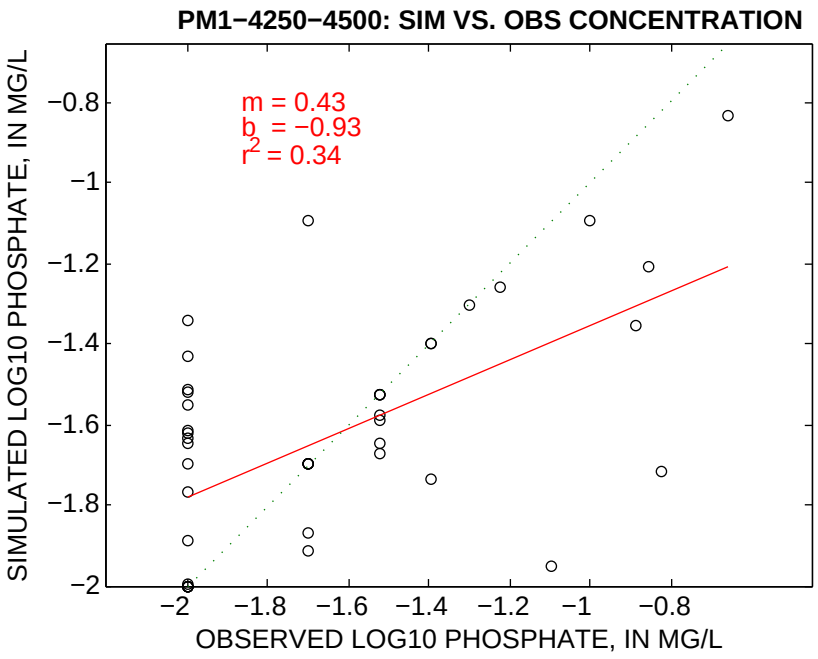
Drive Directory: N/A | Observed: model | OBS20161101

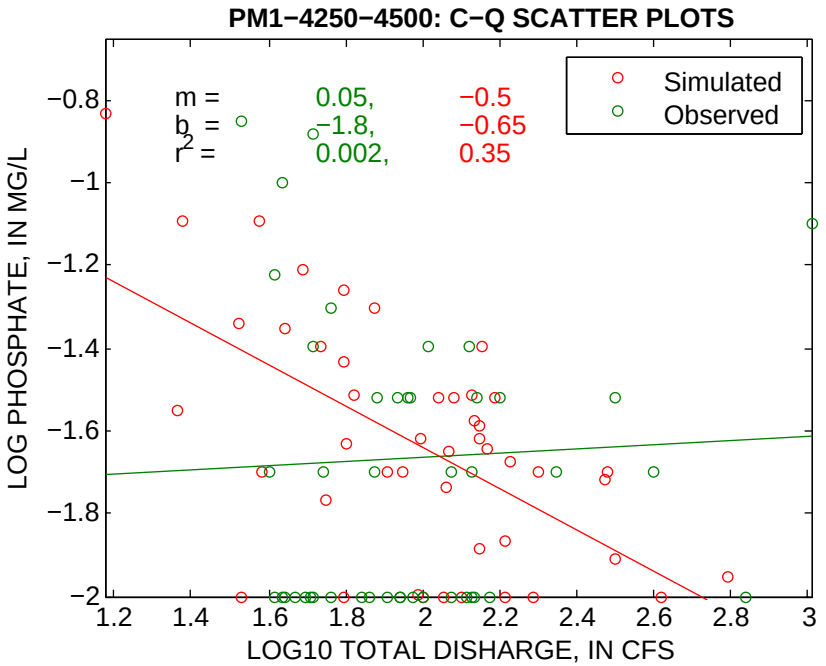
STATISTICS

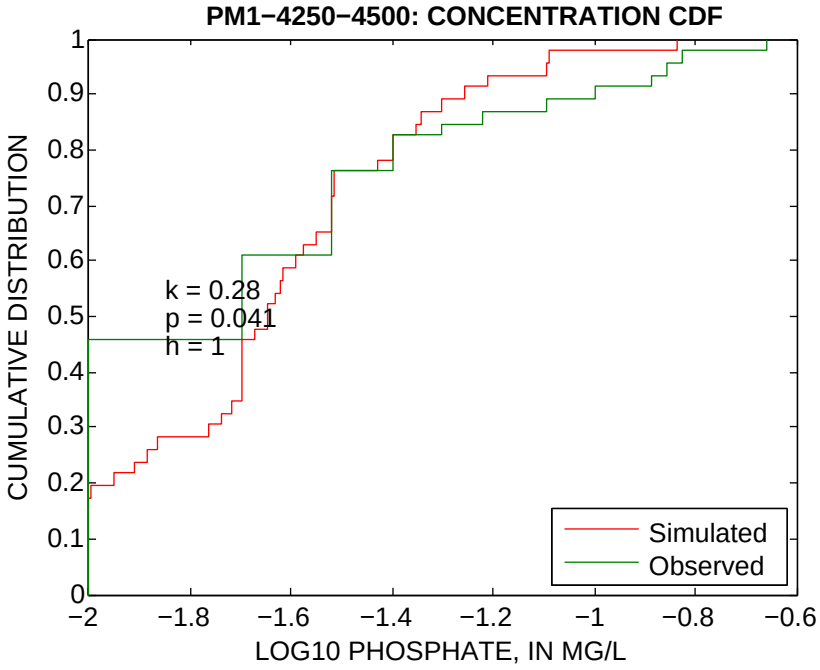
		observe	simulate
n		46	46
min		0.01	0.0030155
		-2	-2.52064
mean		0.035	0.0329203
		-1.66496	-1.65781
media		0.02	0.0255585
		-1.69897	-1.59269
max		0.22	0.13951
		-0.657577	-0.855395
varian		0.00199	0.00090672
		0.151133	0.18095
JB		0.001	0.001
		0.027029	0.278579
		ra	log
%		-5.94202	-0.429395
err.va		0.00199166	0.330968
rel.std.err		1.00083	2.18992
mod.eff		-0.0008333	-1.18992

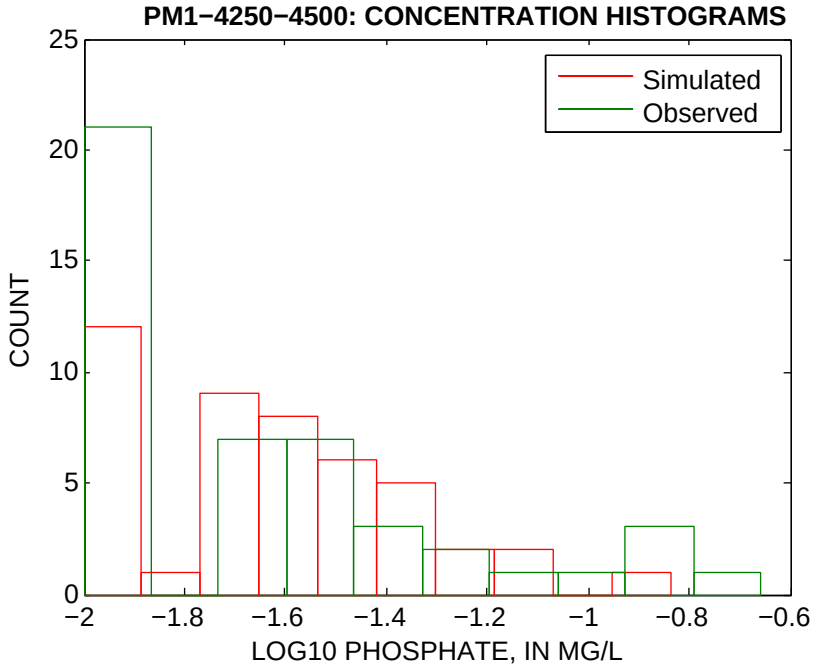
VERSION 2.1

ALL DATA
LOG10

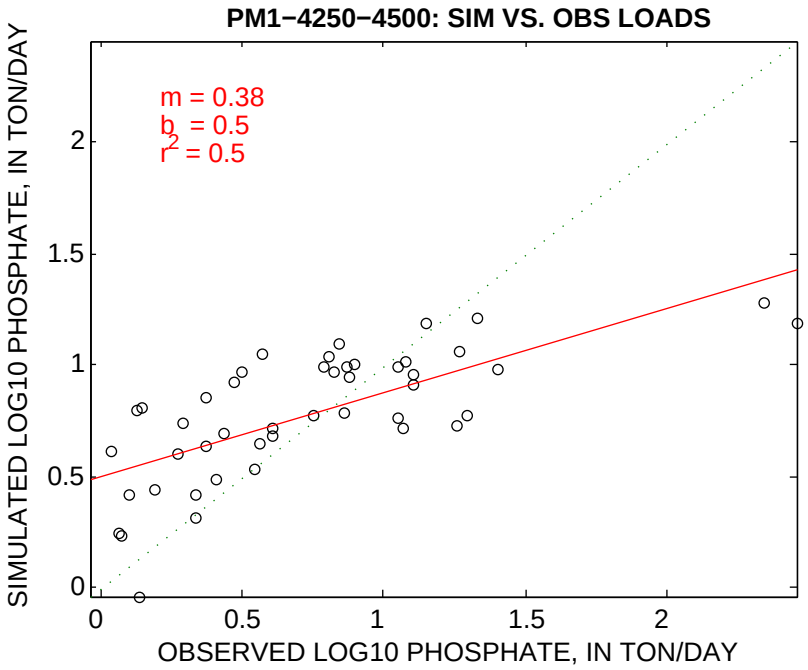


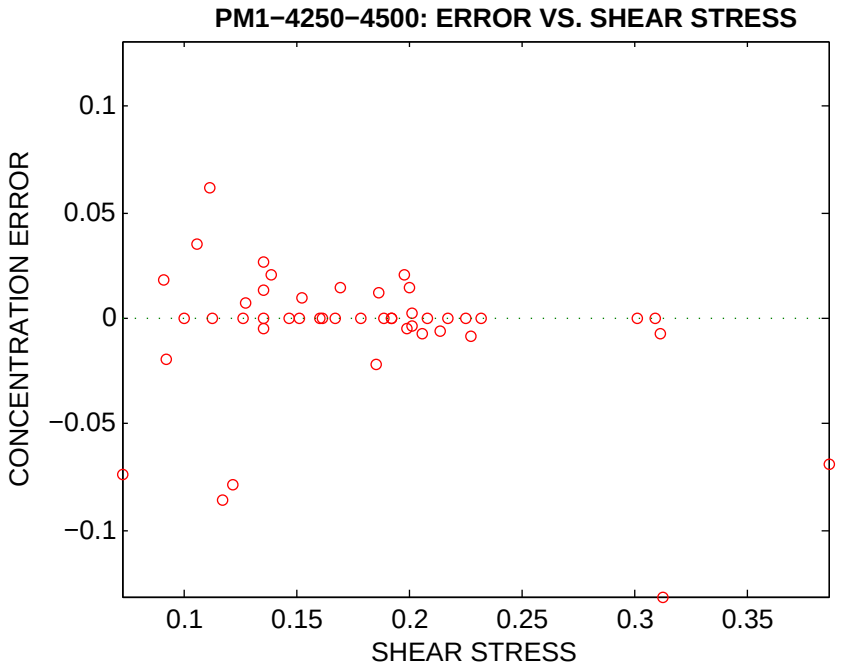


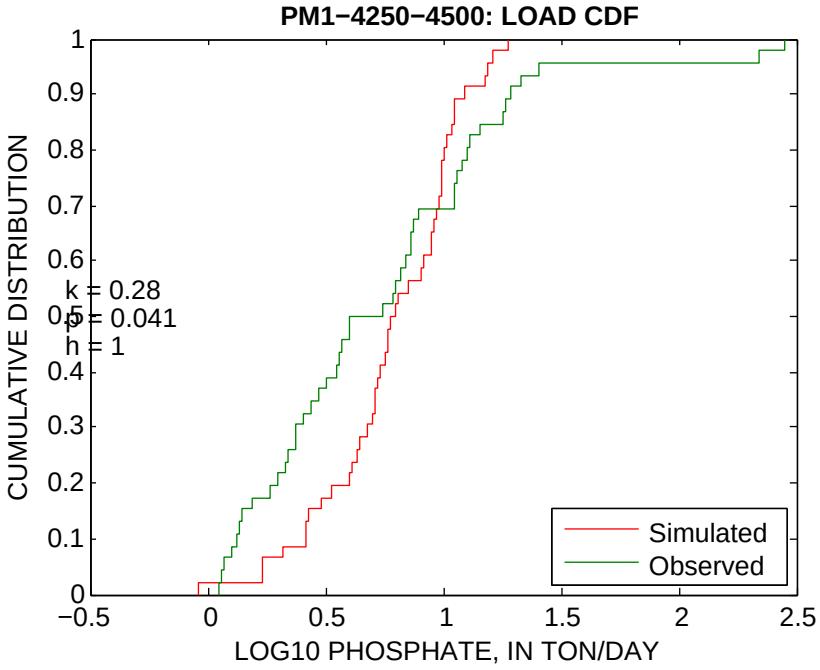


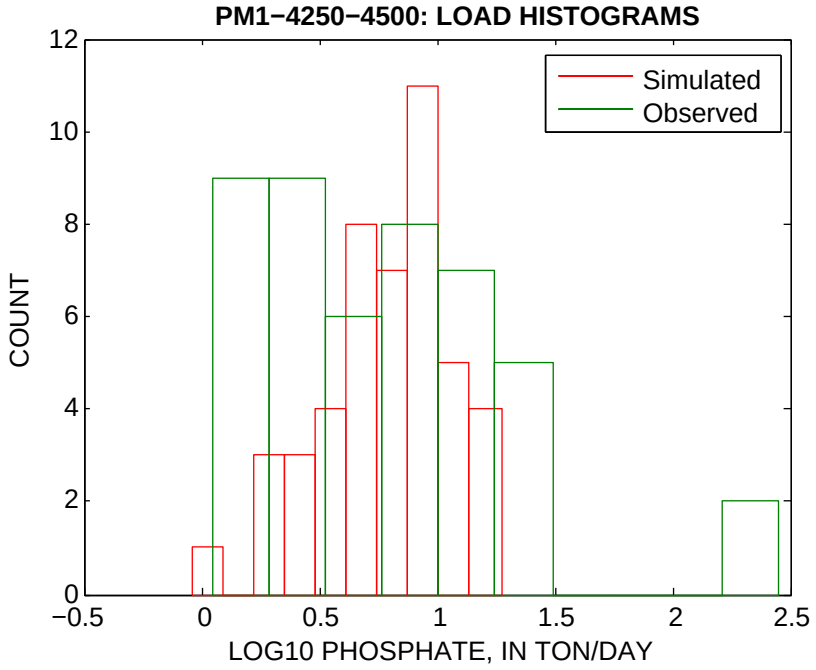


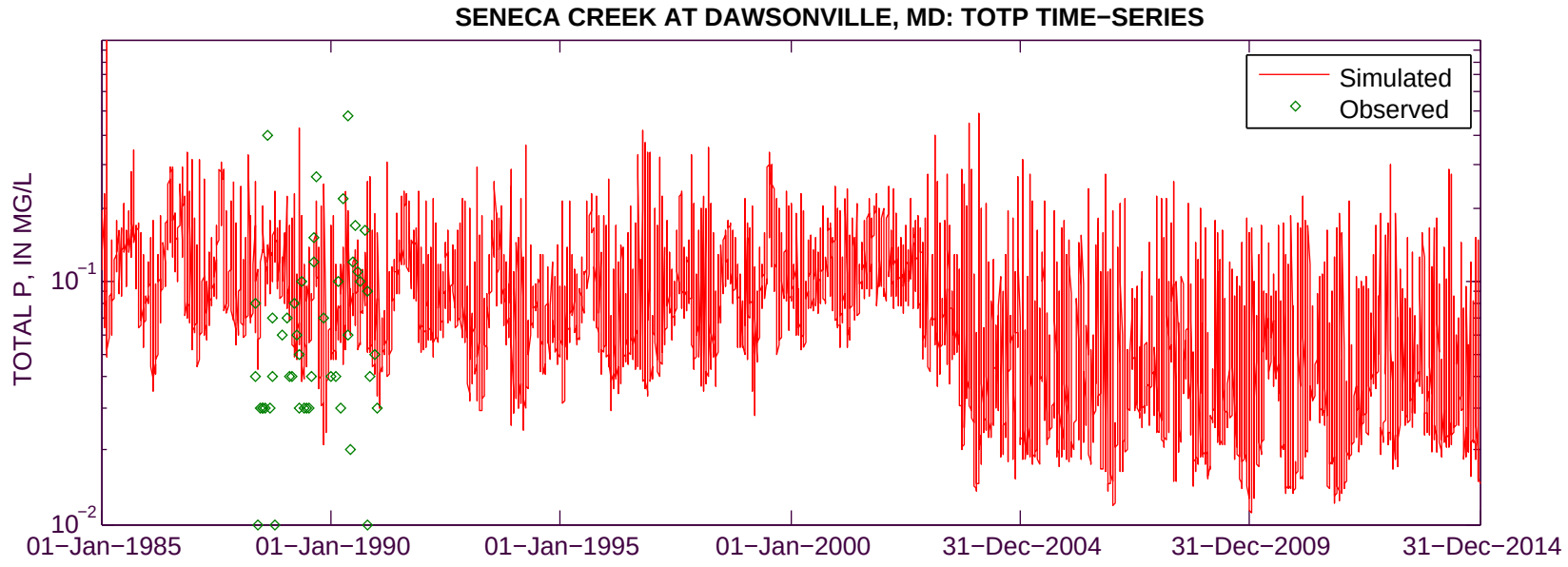
LOAD DATA
LOG10

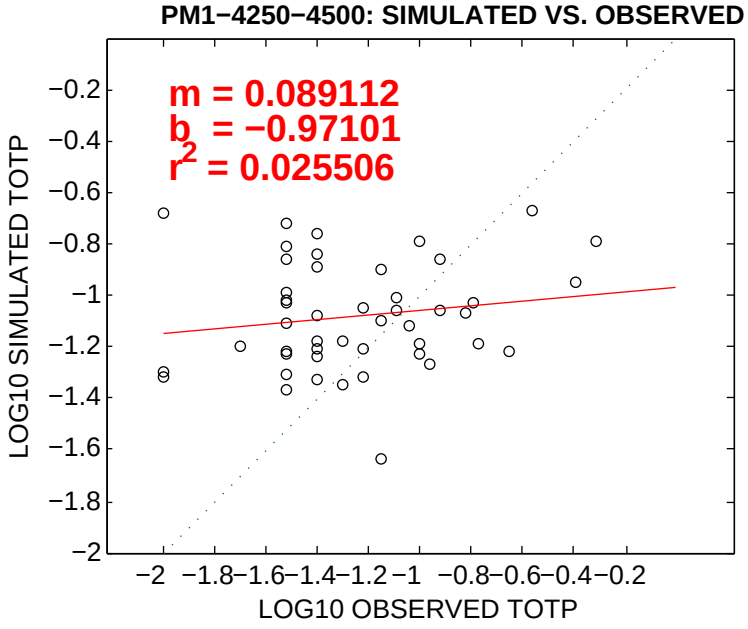


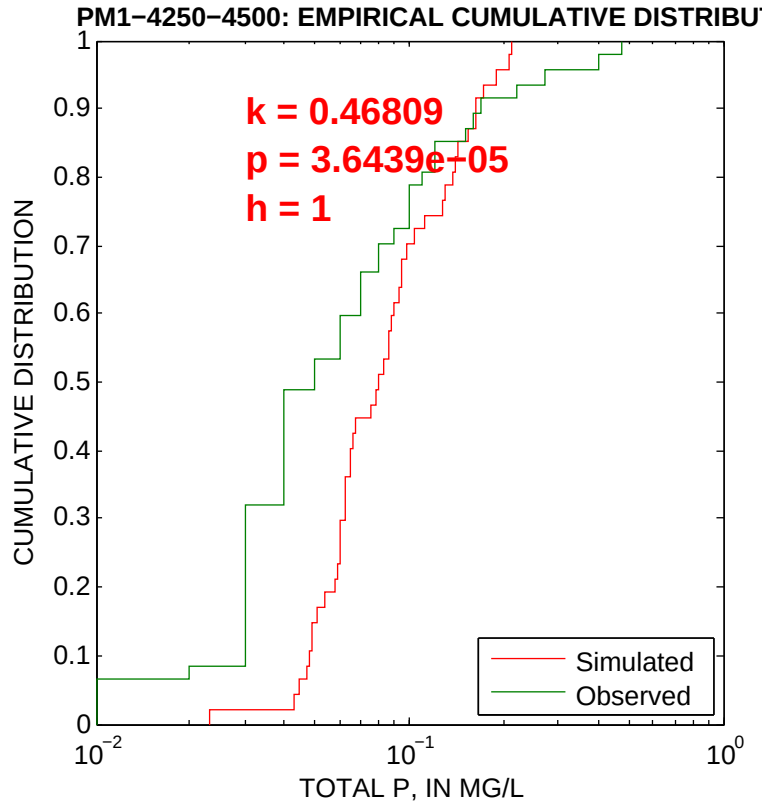












DATA SELECTION

scenario: P620171001WQ | file: TOTP.calib

plot: TOTP - total phosphorus

Dates: 1/1/1985 – 12/31/201

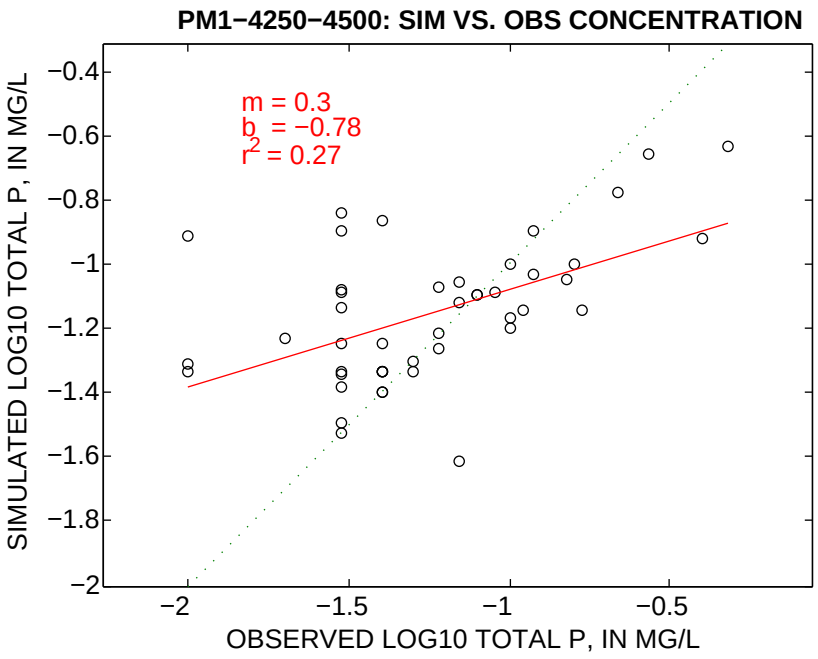
Drive: N/A | Directory: model | Observed: OBS20161101

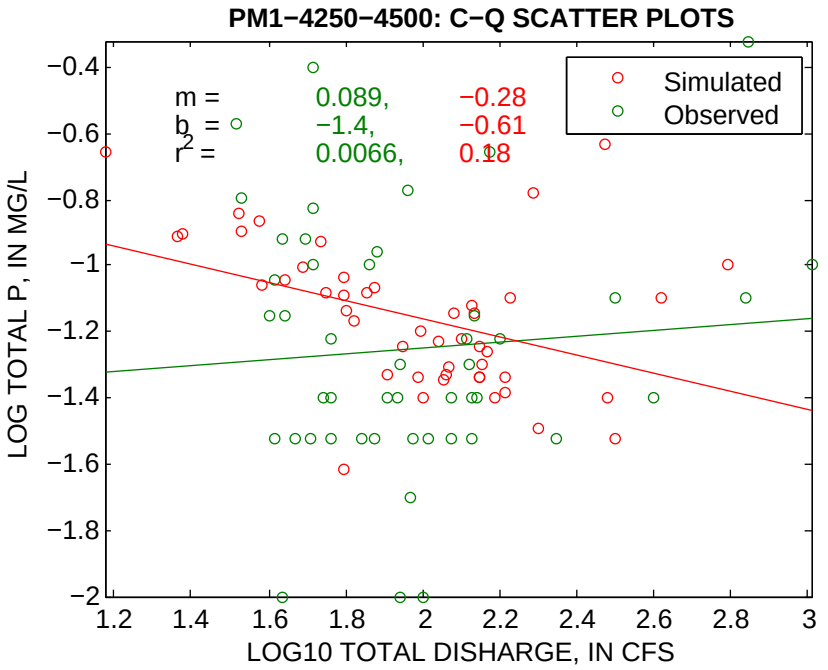
STATISTICS

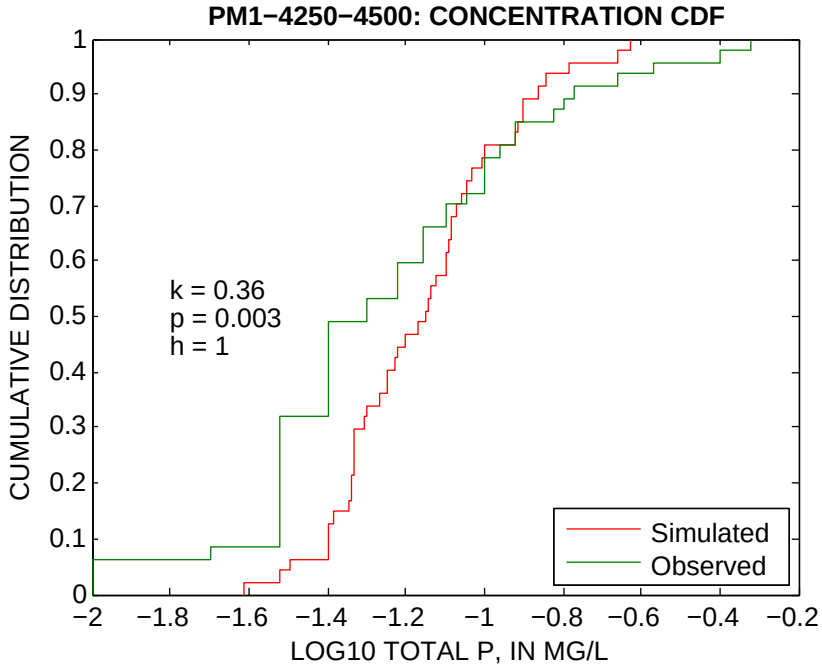
		observe	simulate
n		47	47
min		0.01	0.022942
		-2	-1.63937
mean		0.0838298	0.0928034
		-1.24976	-1.08238
media		0.05	0.079409
		-1.30103	-1.10013
max		0.48	0.21361
		-0.318759	-0.670378
varian		0.00878501	0.00217267
		0.141799	0.044148
JB		0.001	0.022362
		0.5	0.5
		ra	log
%		10.7046	-13.3927
err.va		0.00882209	0.189298
rel.std.err		1.00422	1.33498
mod.eff		-0.0042203	-0.33498

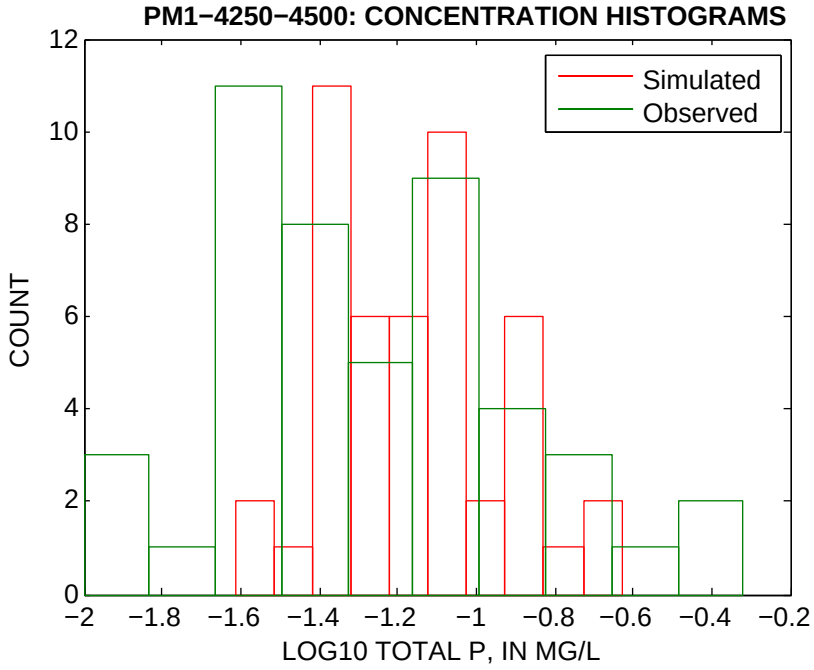
VERSION 2.1

ALL DATA
LOG10

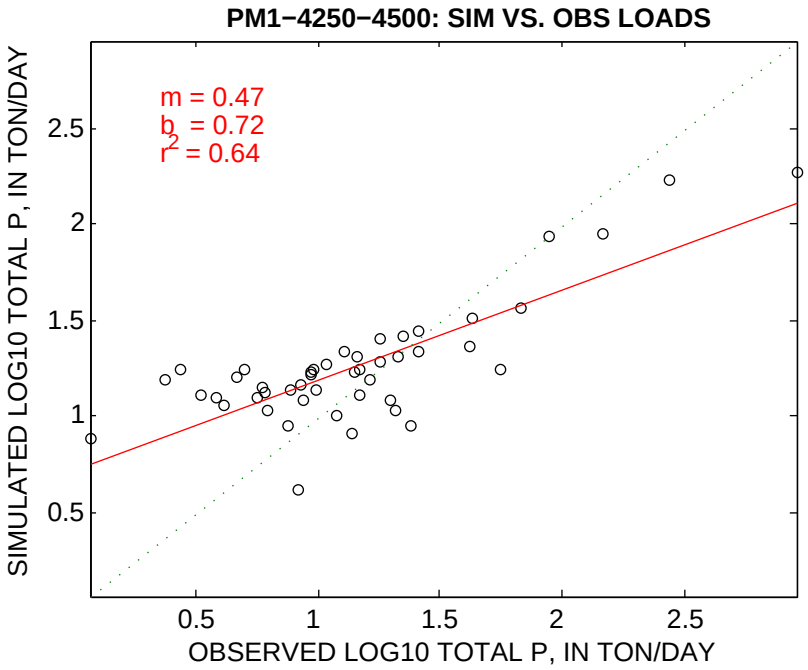


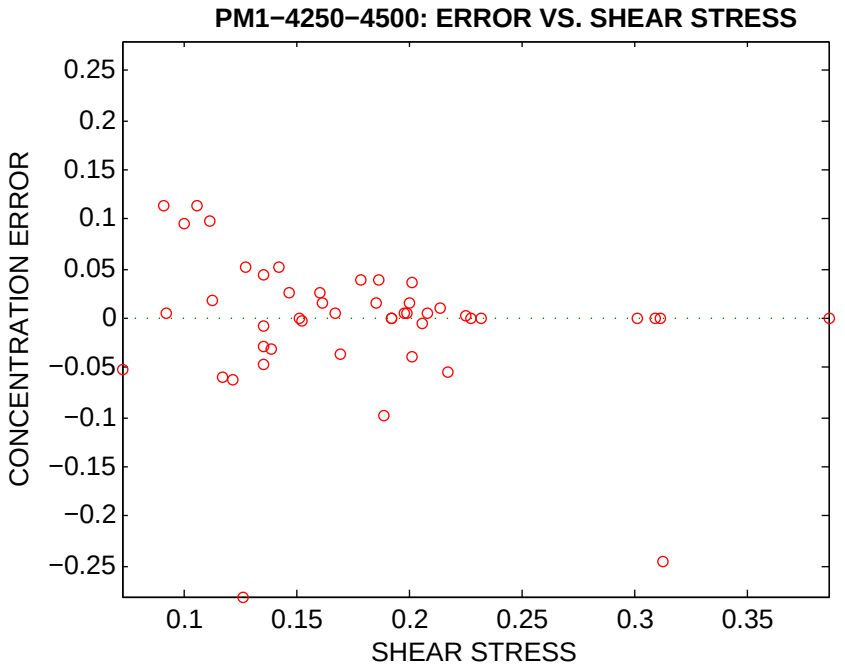


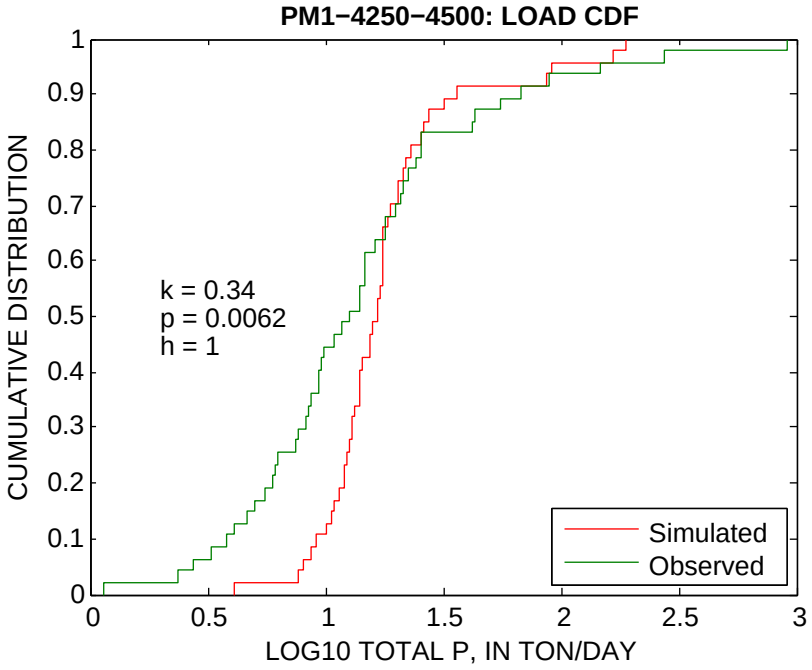


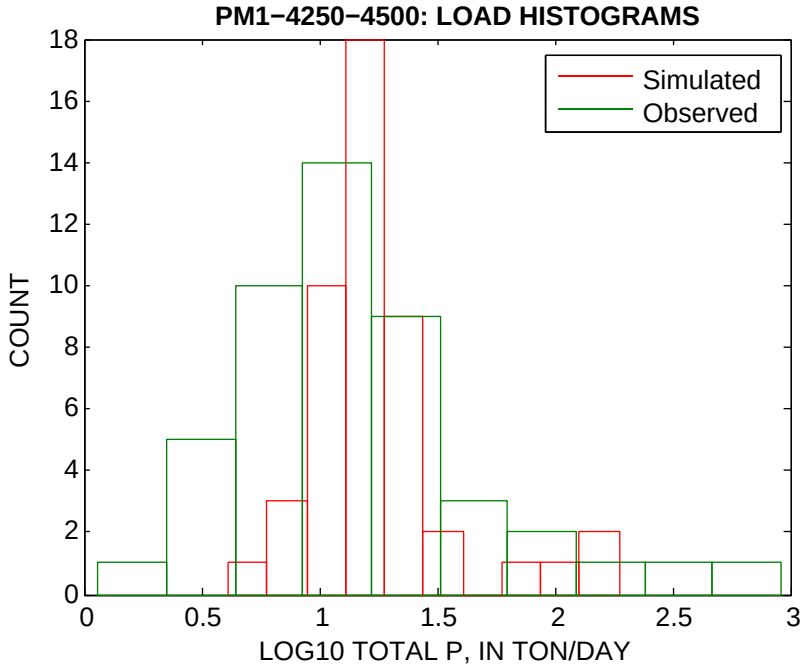


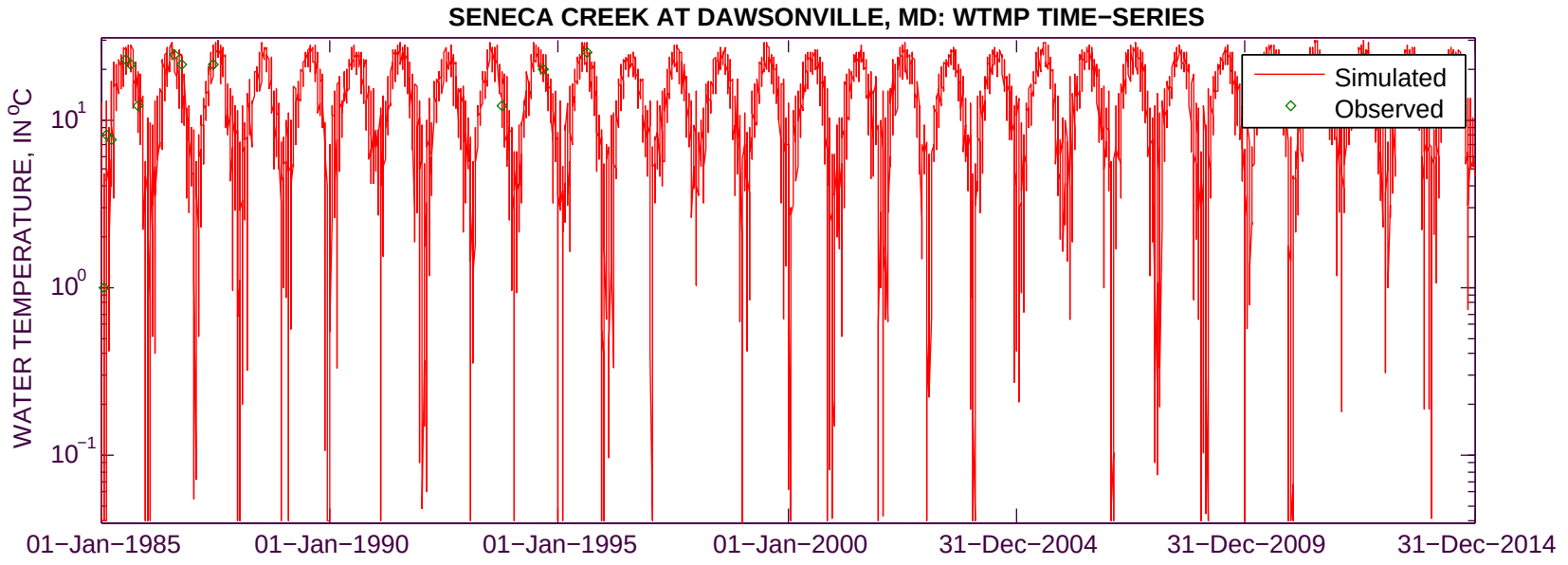
LOAD DATA
LOG10

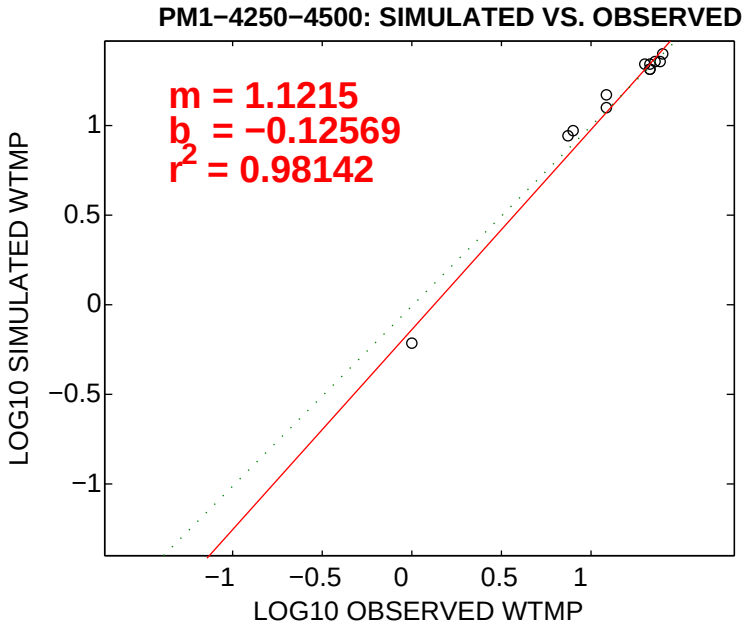


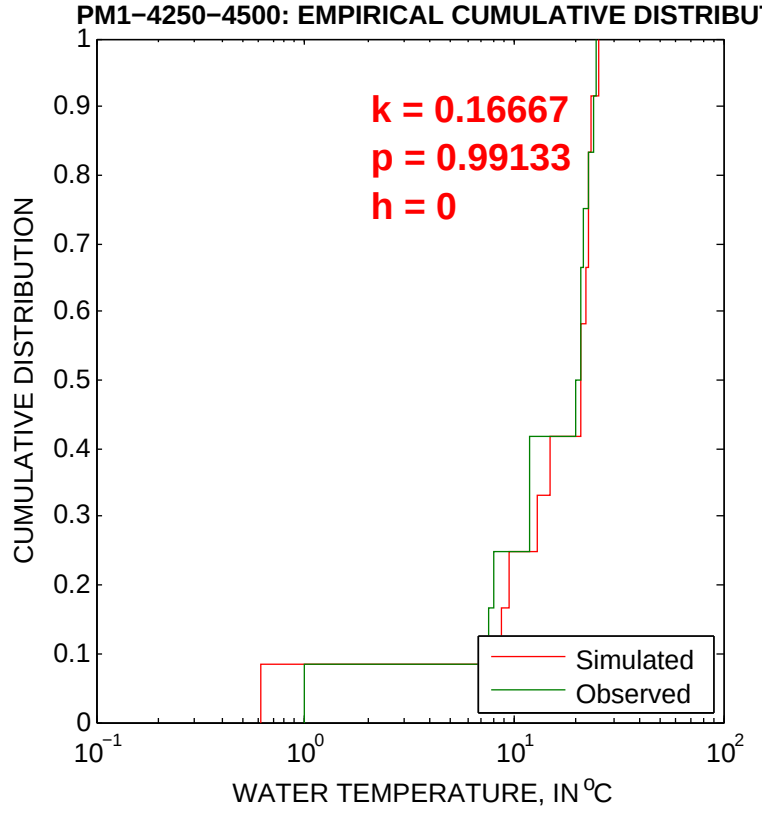












DATA SELECTION

scenario	file
P620171001WQ	WTMP.calib

plot: WTMP - water tempera...

Dates 1/1/1985 12/31/201

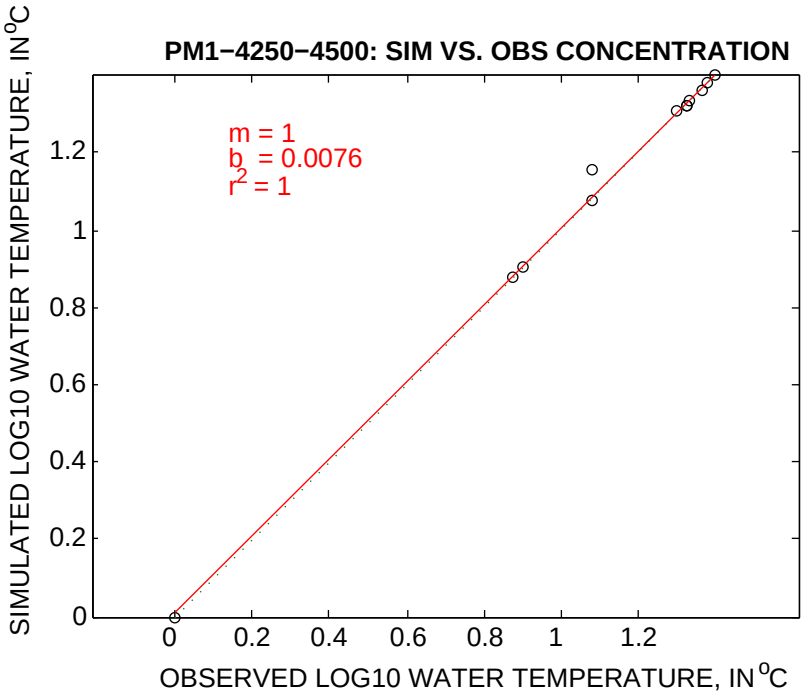
Drive	Directory	Observed
N/A	model	OBS20161101

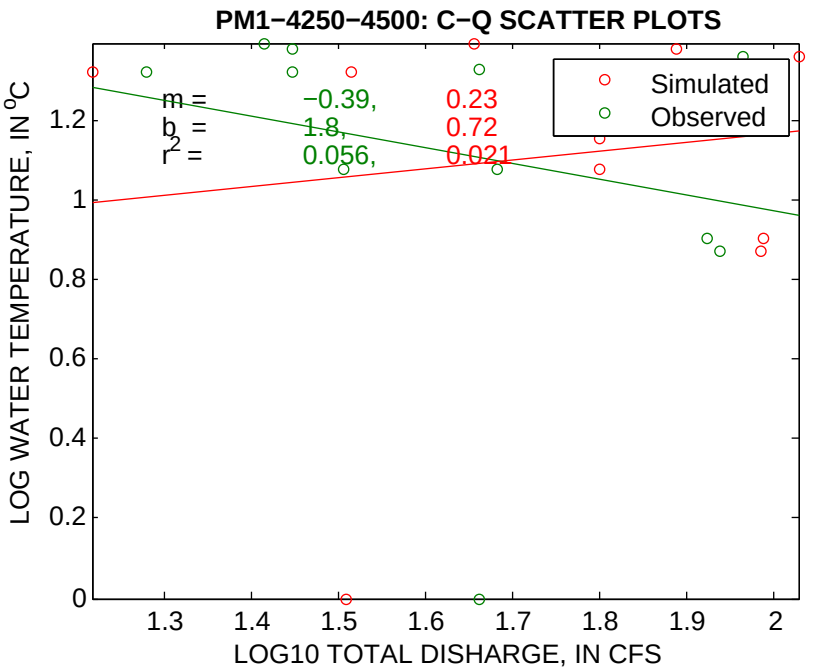
STATISTICS

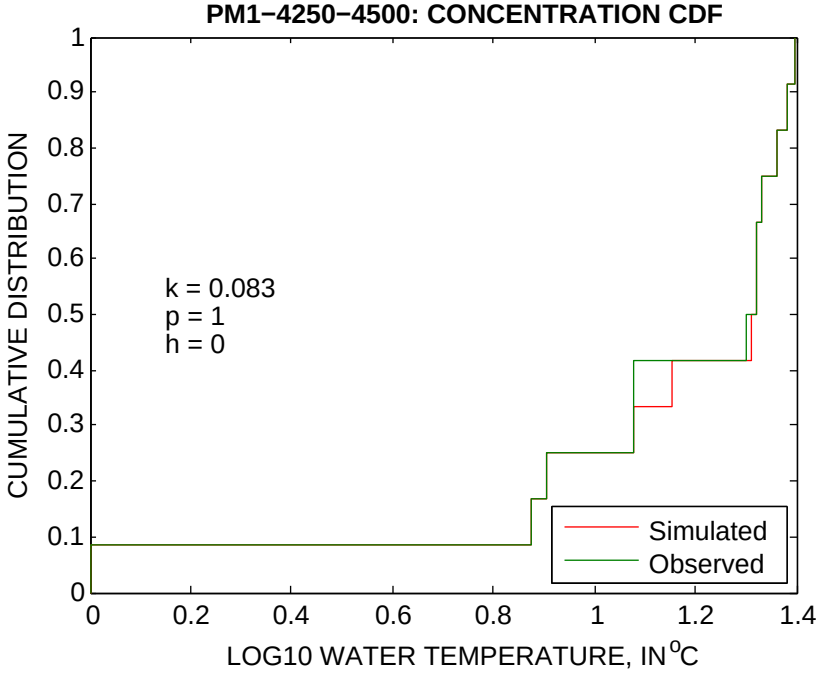
	n	12	12
		observe	simulate
min		1	0.615
		0	-0.211125
mean		16.3333	17.0863
		1.11286	1.12242
media		20.5	21.032
		1.31162	1.32287
max		25	25.371
		1.39794	1.40434
varian		62.0152	58.976
		0.157022	0.201249
JB		0.198406	0.1232
		0.001501	0.001
		ra	log
%		4.6101	0.859494
err.va		1.90931	0.006159
rel.std.err		0.0307878	0.0392237
mod.eff		0.969212	0.960776

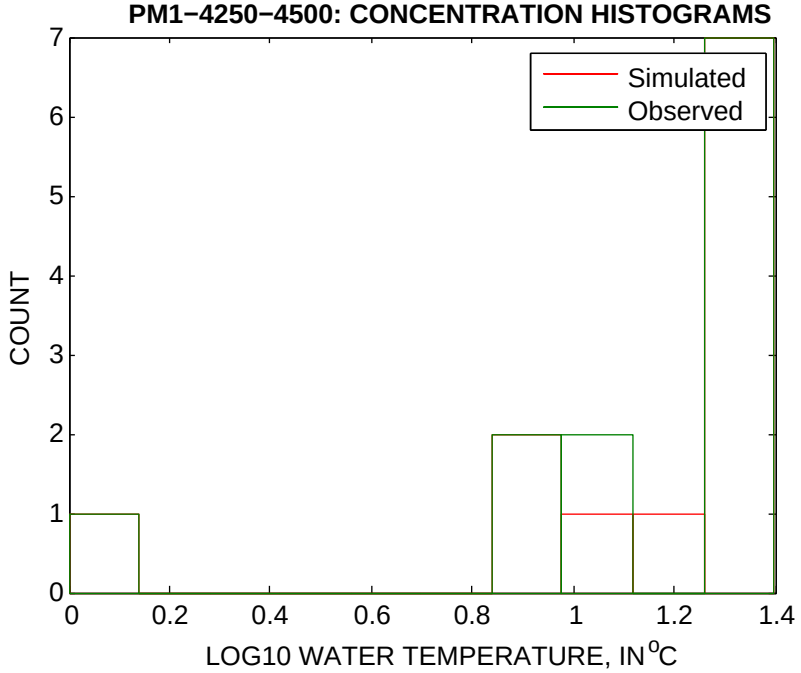
VERSION 2.1

ALL DATA
LOG10

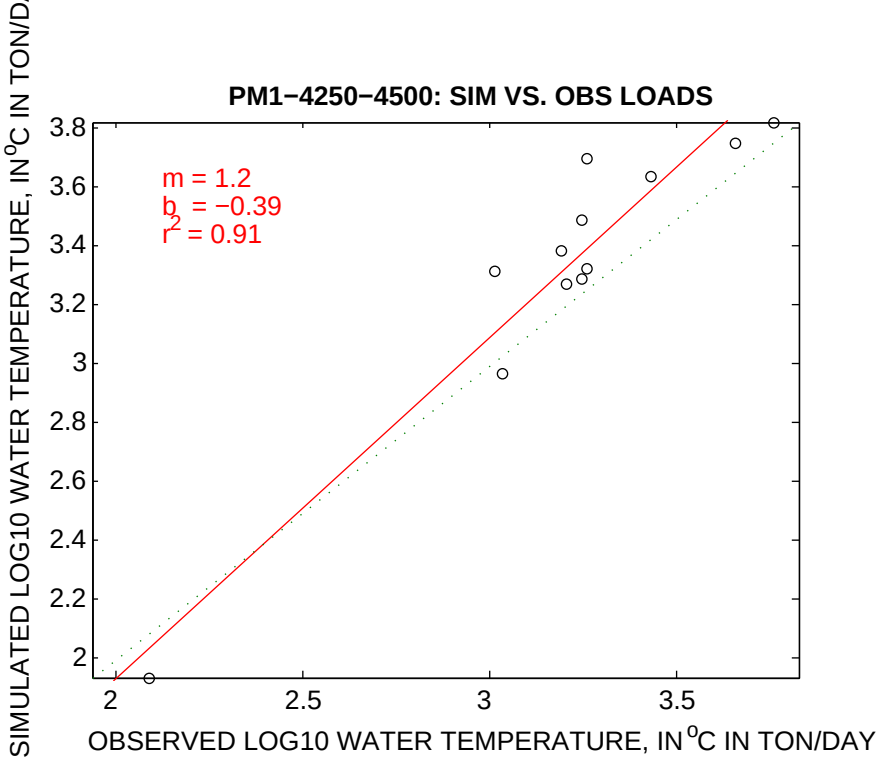


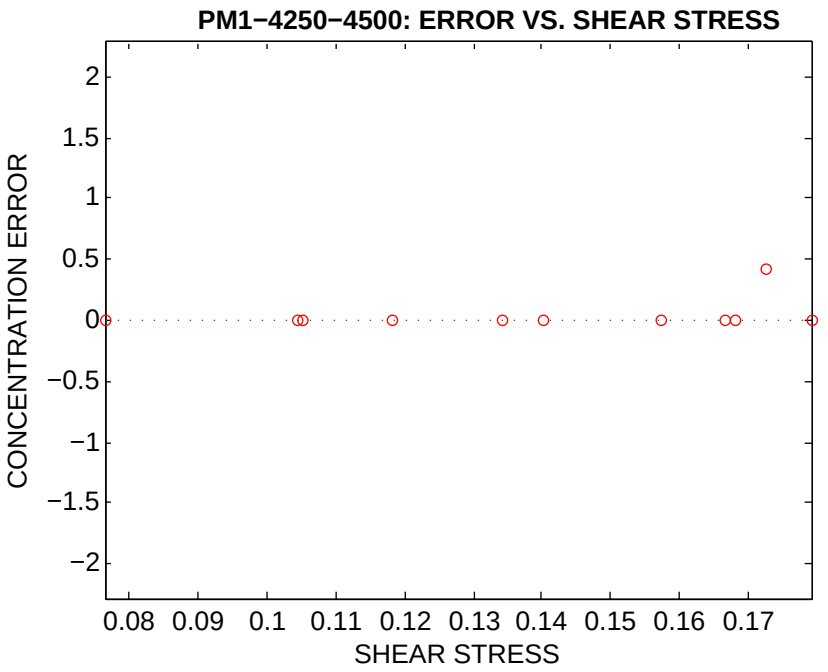


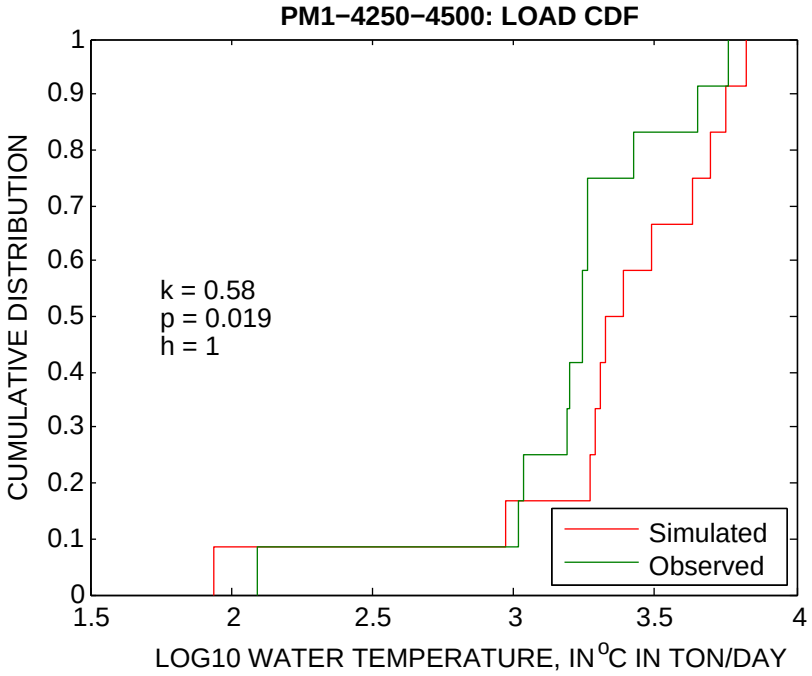


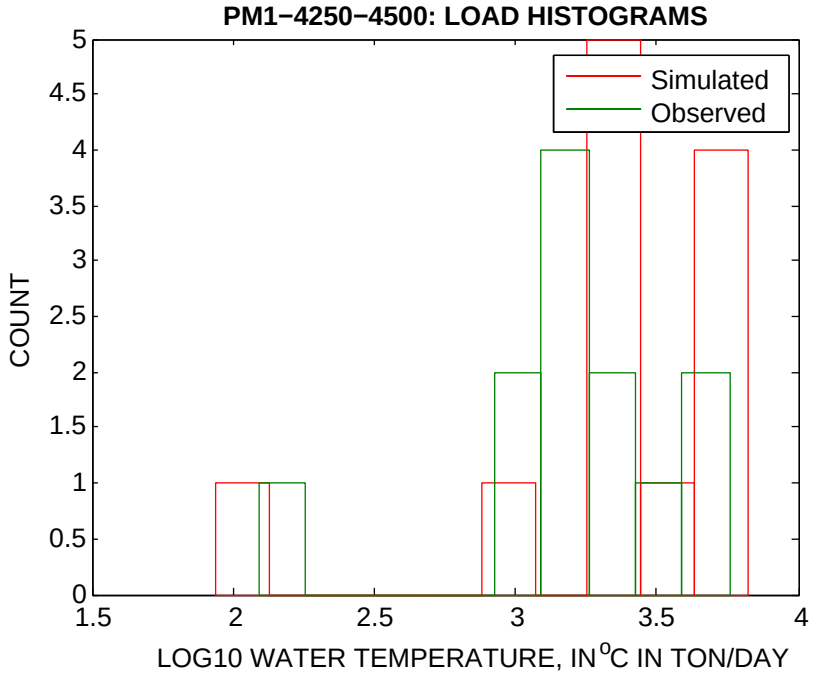


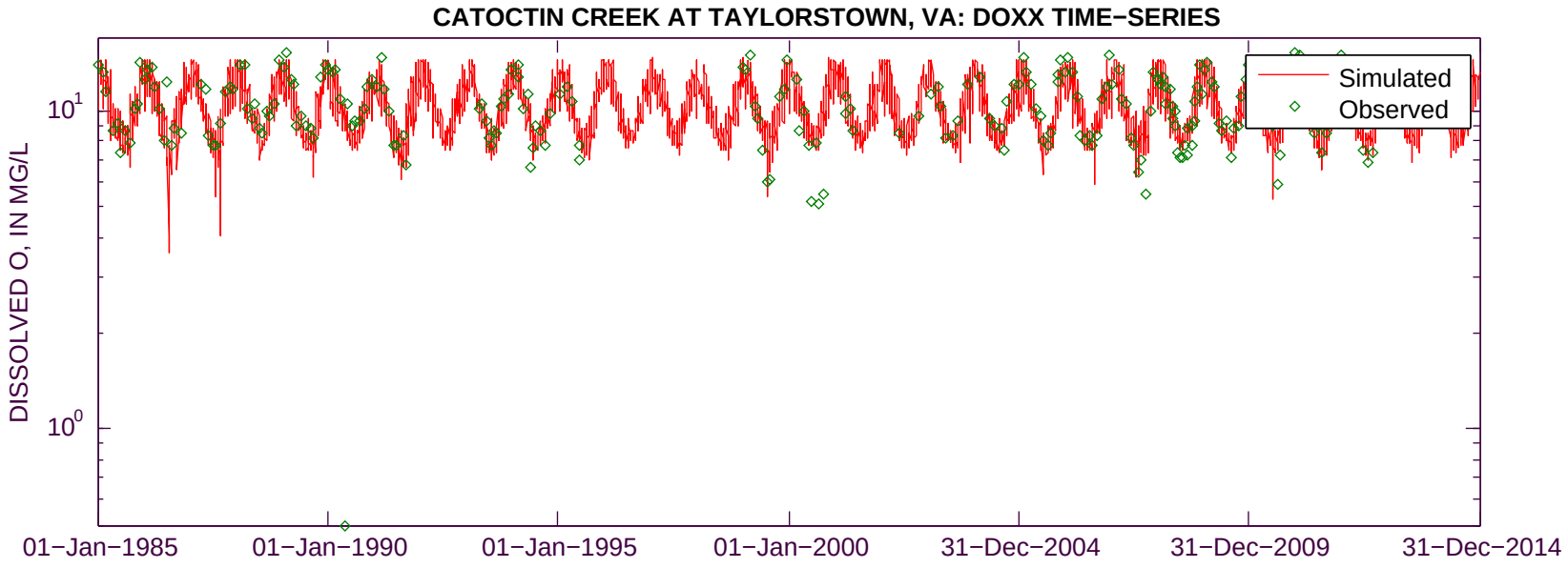
LOAD DATA
LOG10

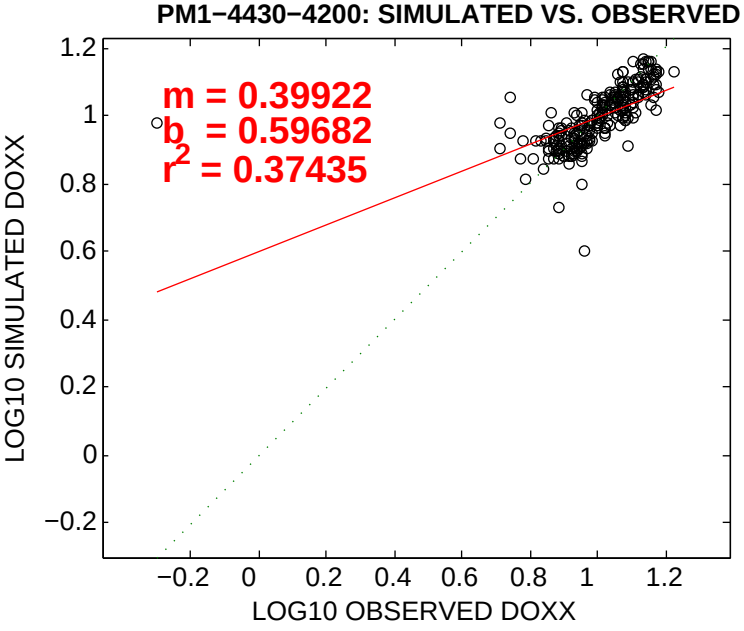


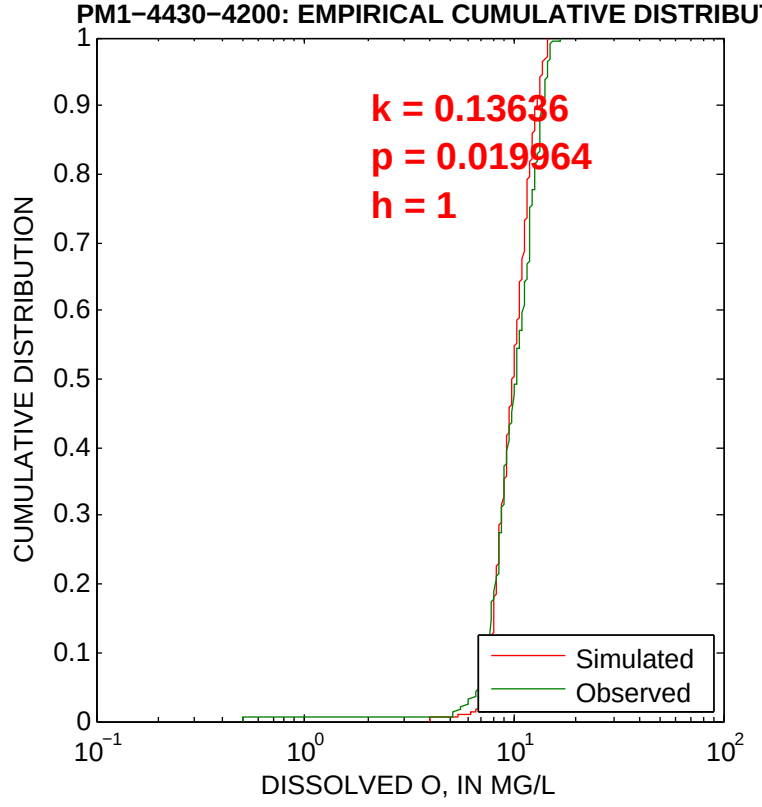












DATA SELECTION

scenario	file
P620171001WQ	DOXX.calib

plot: DOXX - dissolved oxygen

Dates: 1/1/1985 – 12/31/201

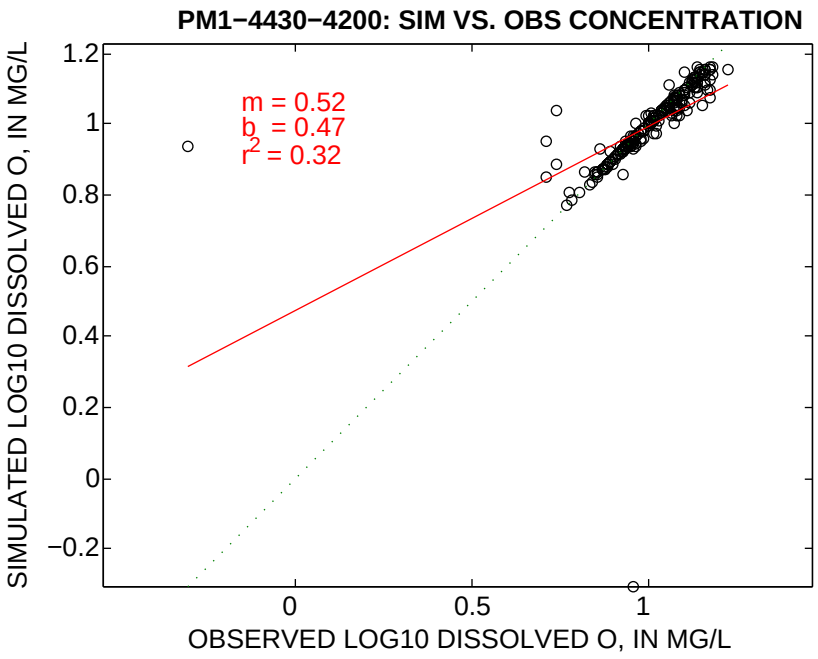
Drive	Directory	Observed
N/A	model	OBS20161101

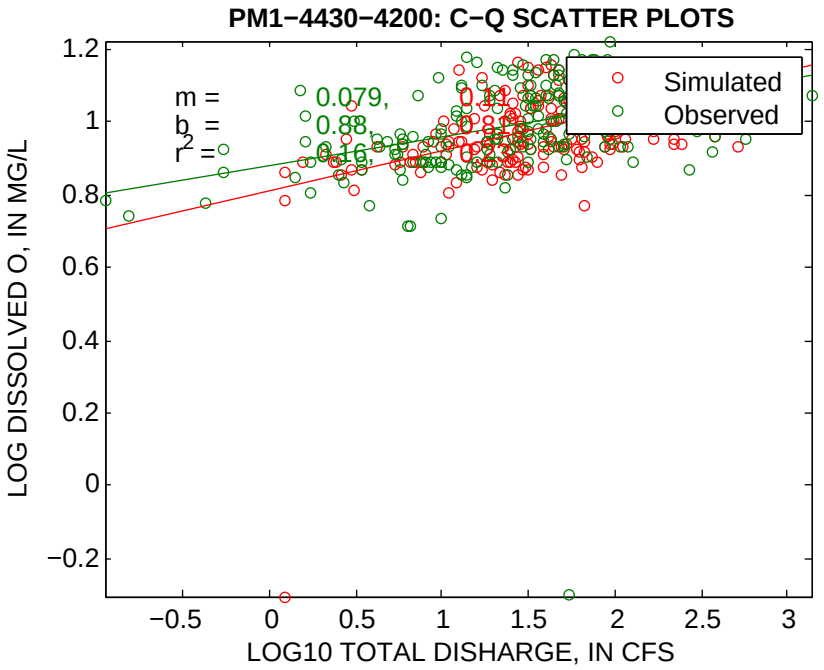
STATISTICS

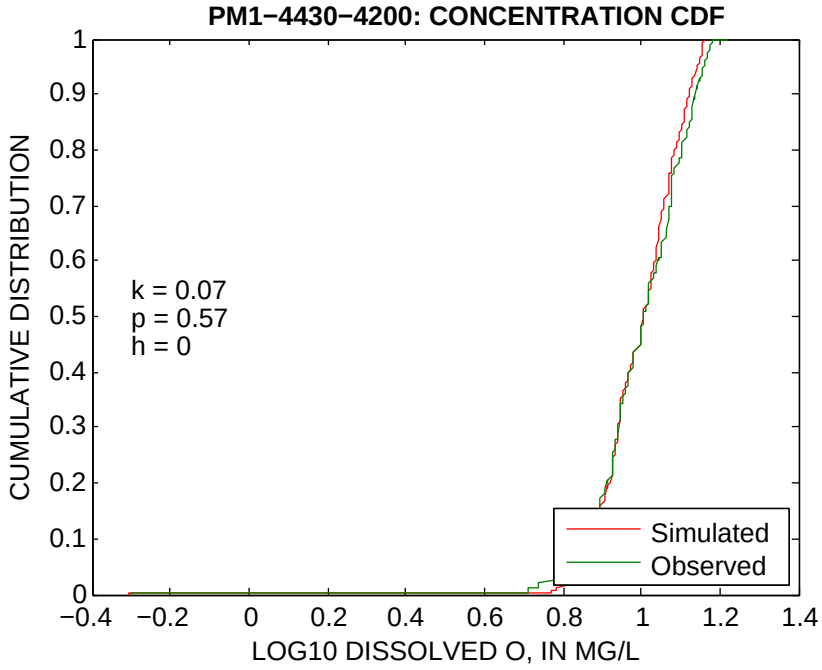
	n	242	242
		observe	simulate
min		0.5	4.0186
		-0.30103	0.604075
mean		10.3647	10.1036
		0.99996	0.996027
media		10.2	9.88945
		1.0086	0.995171
max		16.73	14.637
		1.2235	1.16545
varian		6.13081	3.90603
		0.017674	0.00752474
JB	☑	0.5	0.089984 ☑
	☐	0.001	0.012138 ☐
		ra	log
%		-2.51948	-0.393333
err.va		2.30791	0.0111025
rel.std.err		0.376444	0.628182
mod.eff		0.623556	0.371818

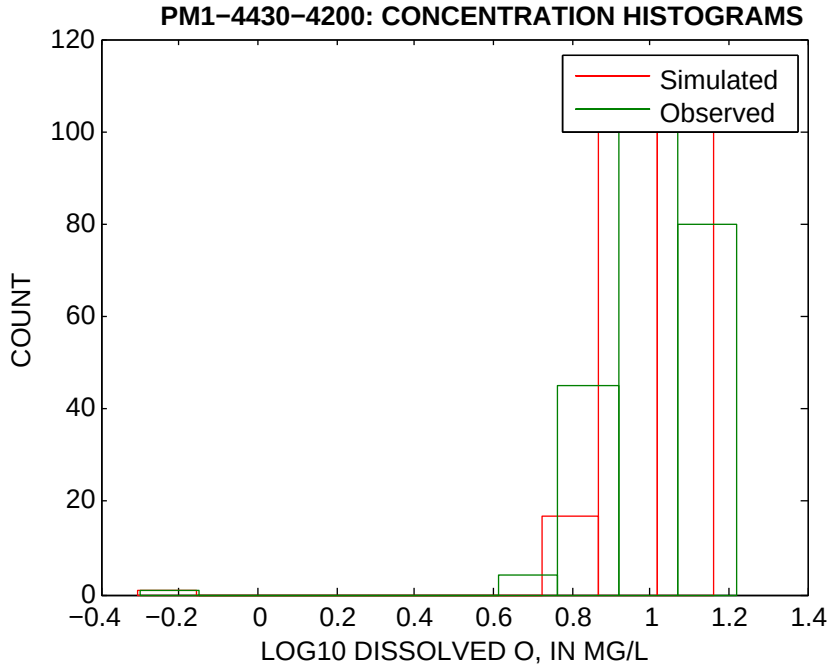
VERSION 2.1

ALL DATA
LOG10

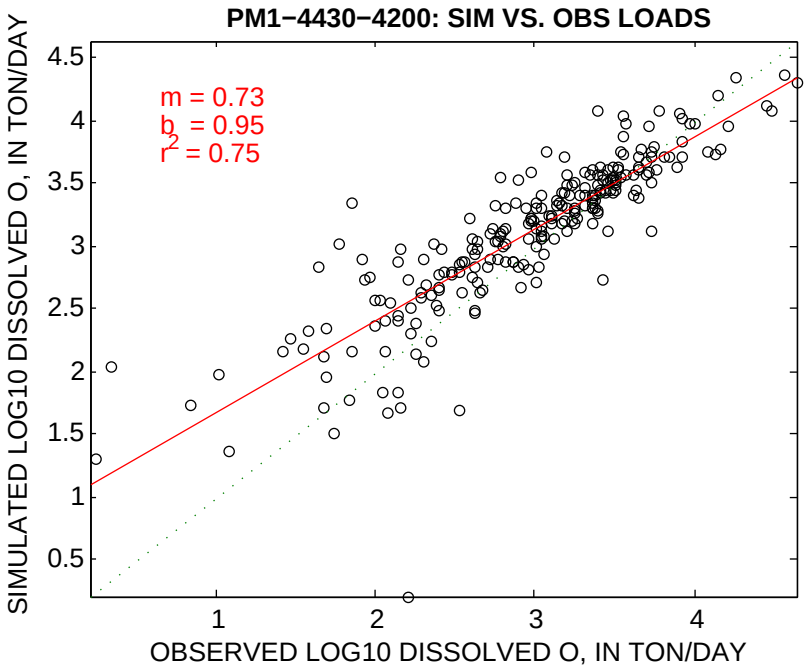


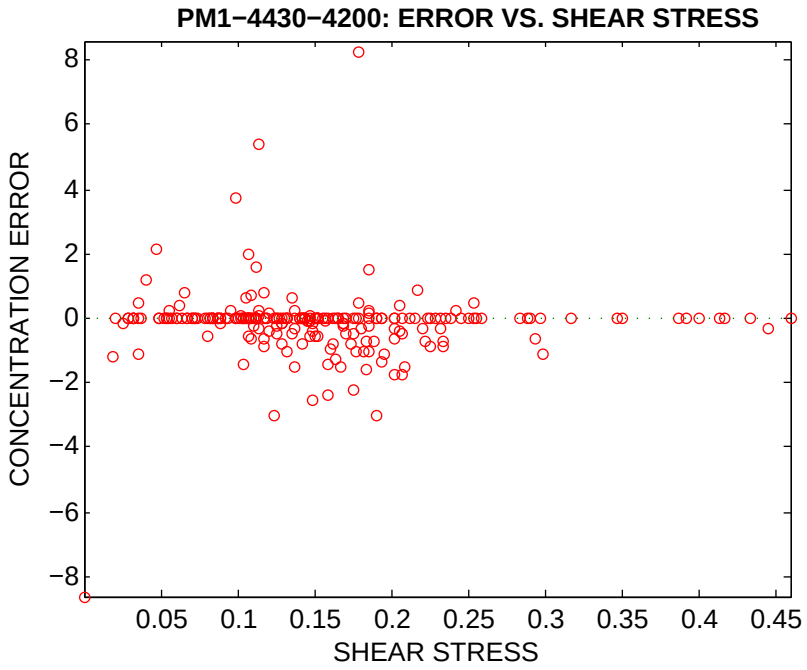


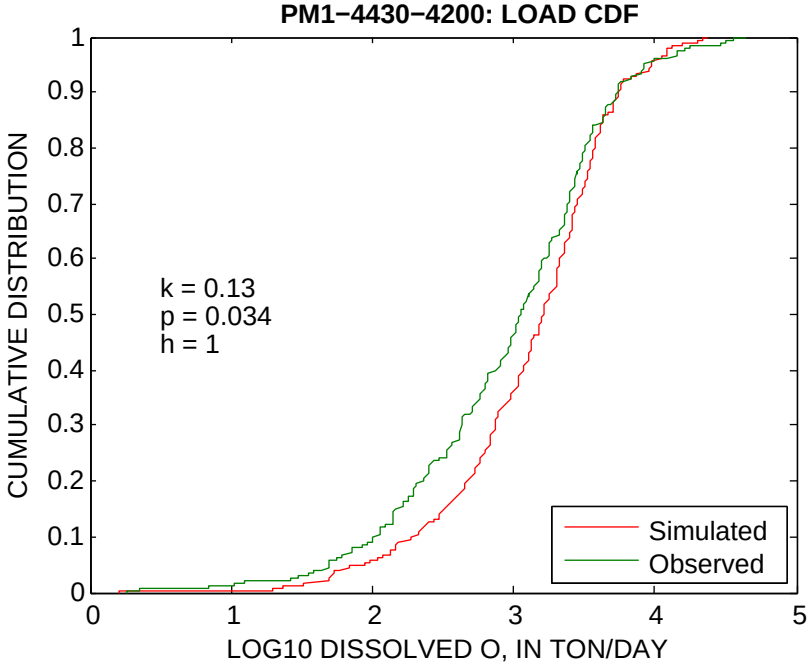


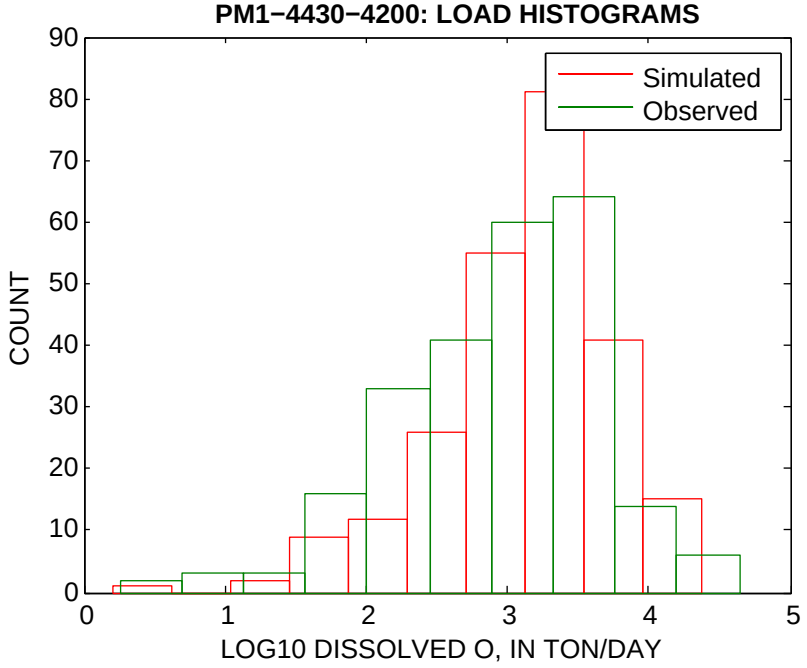


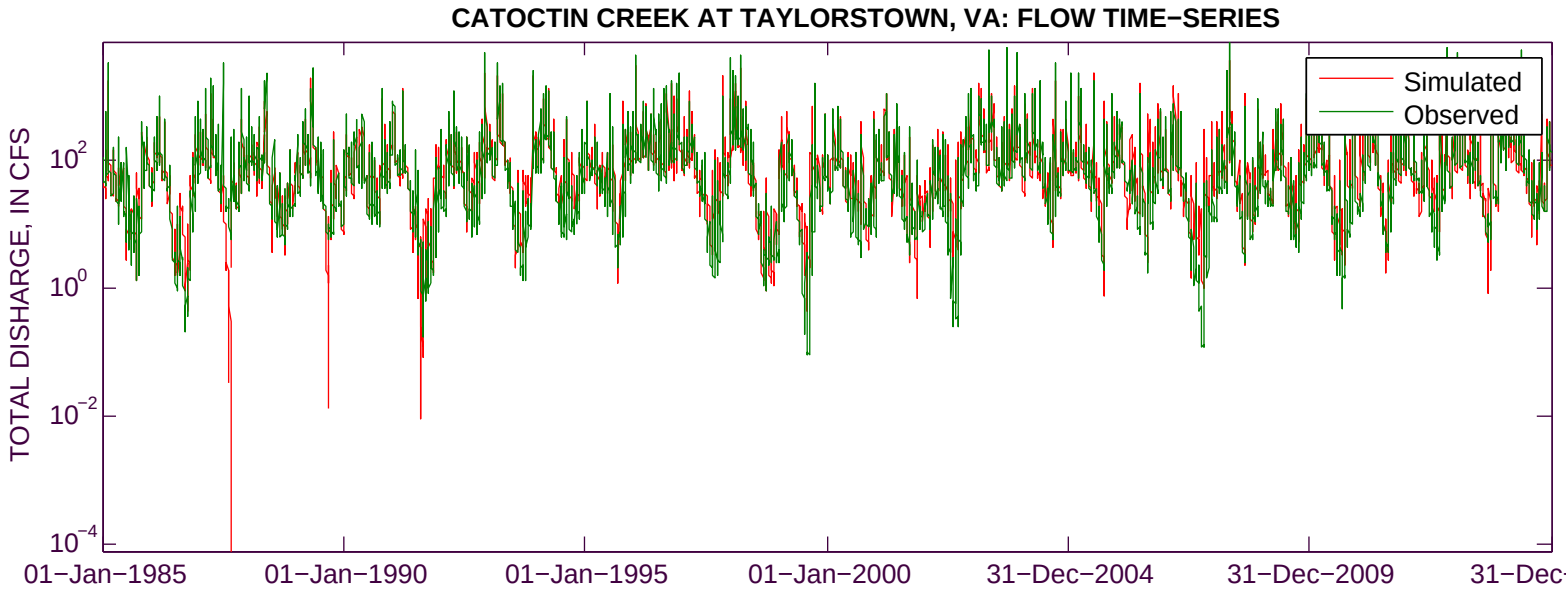
LOAD DATA
LOG10

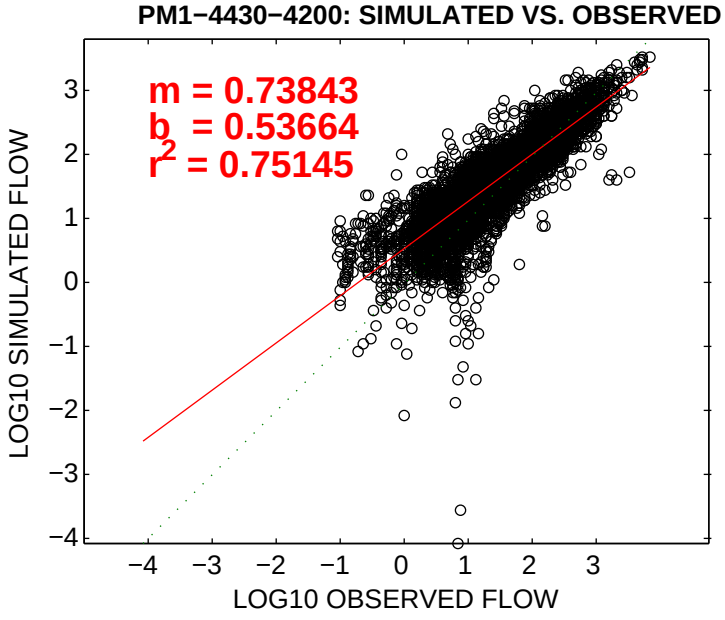


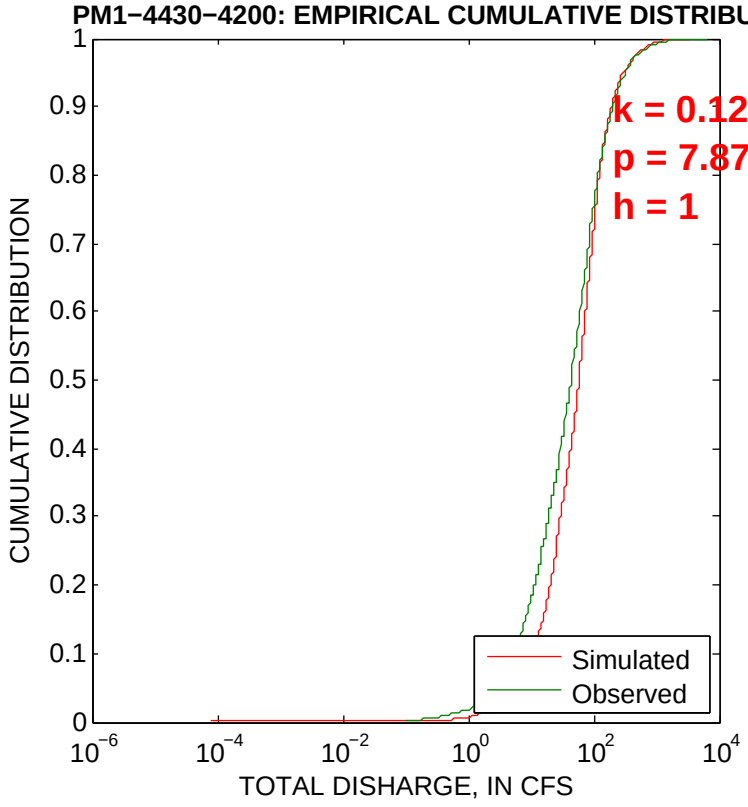












DATA SELECTION

scenario: P620171001WQ | file: FLOW.calib

plot: FLOW - total discharge

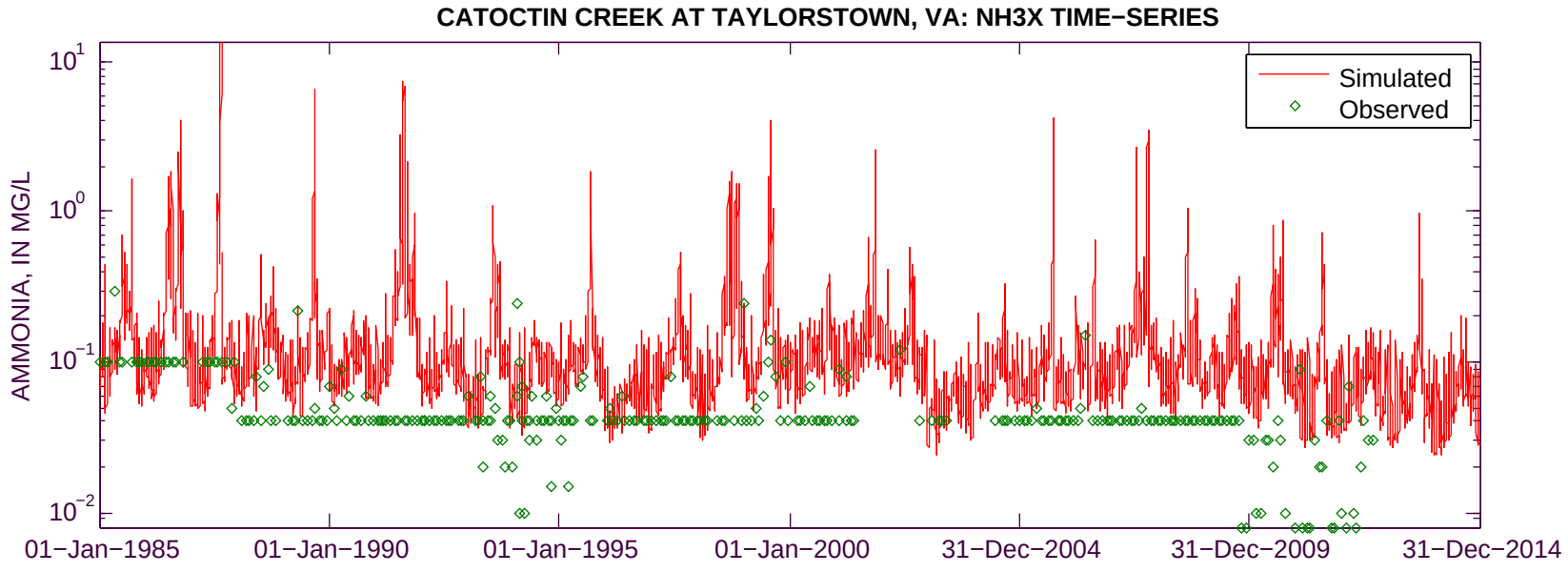
Dates: 1/1/1985 – 12/31/201

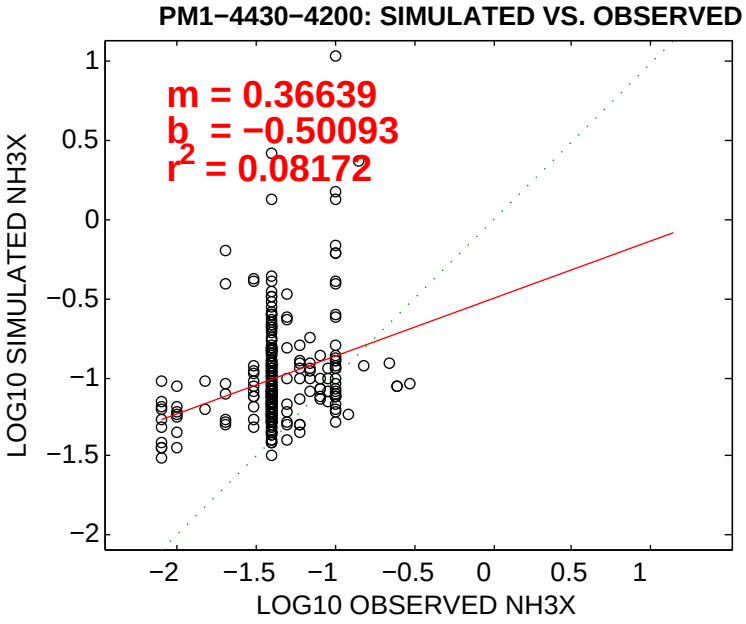
Drive: N/A | Directory: model | Observed: OBS20161101

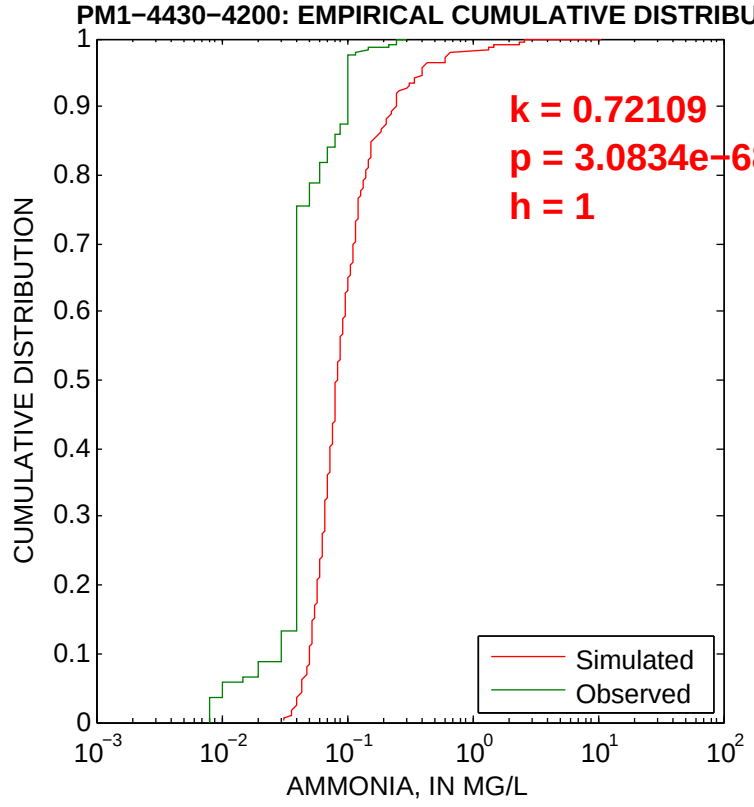
STATISTICS

		observe	simulate
n		10957	10950
min		0.09	0
		-1.04576	-4.08201
mean		97.2382	98.8087
		1.5703	1.69619
media		44	58.963
		1.65321	1.77068
max		6770	3546.2
		3.83059	3.54976
varian		54753.7	29005.1
		0.418725	0.303841
JB		0.001	0.001
		0.001	0.001
		ra	log
%		1.61507	8.01698
err.va		16327.4	0.120018
rel.std.err		0.298197	0.286627
mod.eff		0.701803	0.713373

VERSION 2.1







DATA SELECTION

scenario	file
P620171001WQ	NH3X.calib

plot: NH3X - ammonia

Dates: 1/1/1985 – 12/31/201

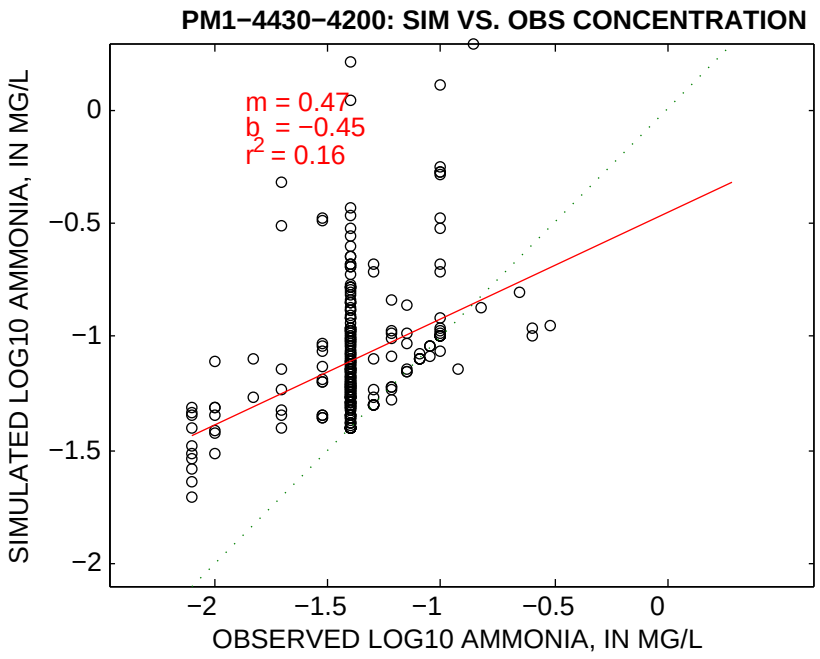
Drive	Directory	Observed
N/A	model	OBS20161101

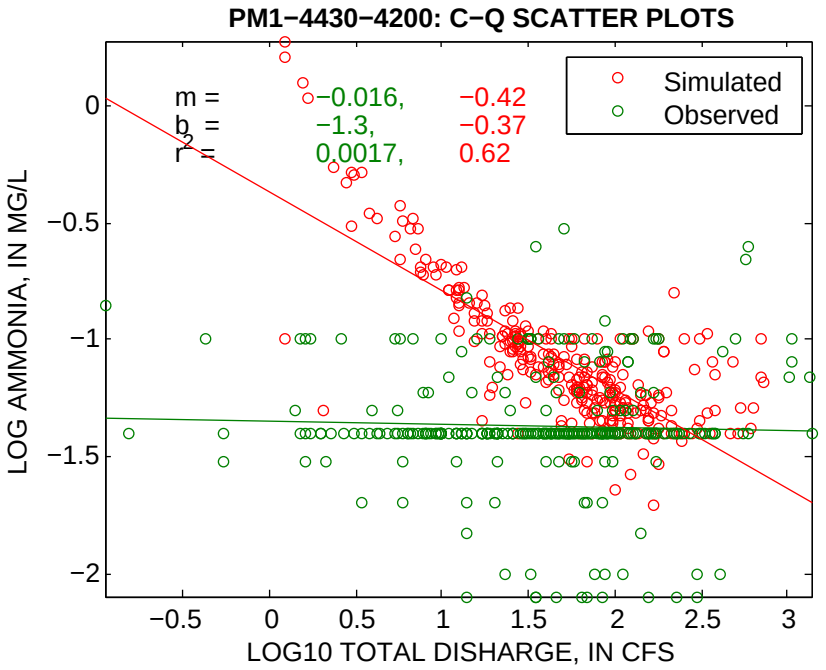
STATISTICS

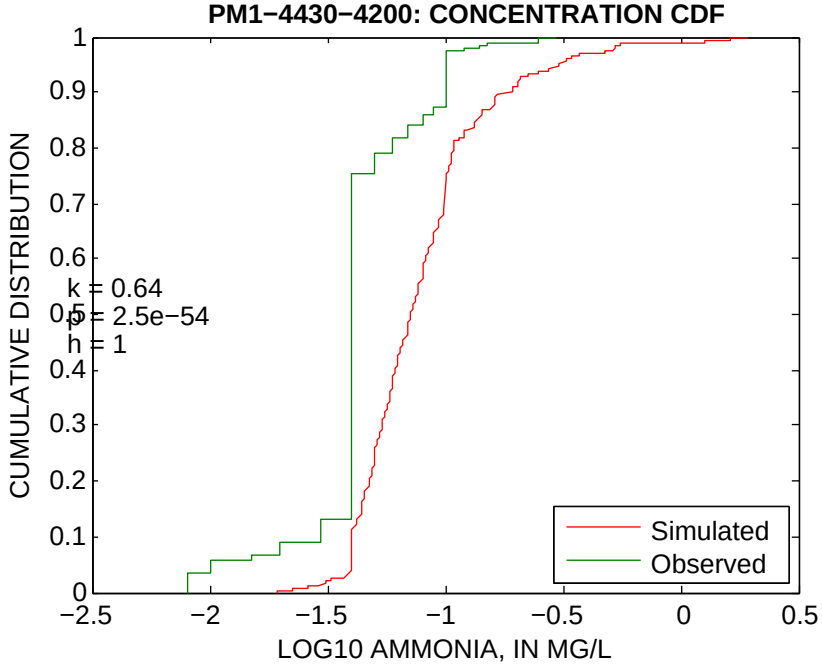
		observe	simulate
n		294	294
min		0.008	0.030447
		-2.09691	-1.51646
mean		0.0502041	0.178897
		-1.37012	-1.00293
media		0.04	0.0829395
		-1.39794	-1.08124
max		0.3	10.698
		-0.522879	1.0293
varian		0.00117945	0.442285
		0.0626187	0.102865
JB		0.001	0.001
		0.001	0.001
		ra	log
%		256.339	-26.7996
err.va		0.453719	0.254883
rel.std.err		384.688	4.07039
mod.eff		-383.688	-3.07039

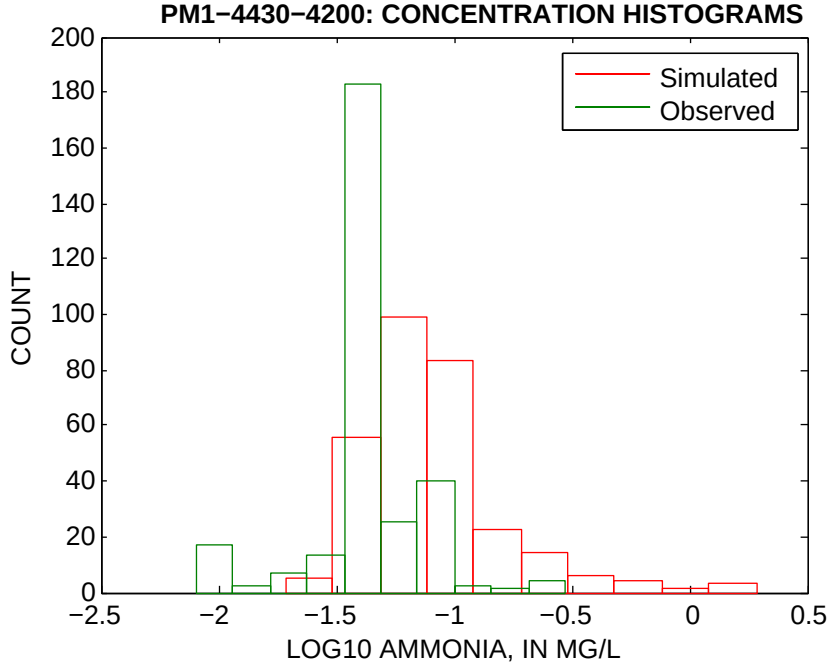
VERSION 2.1

ALL DATA
LOG10

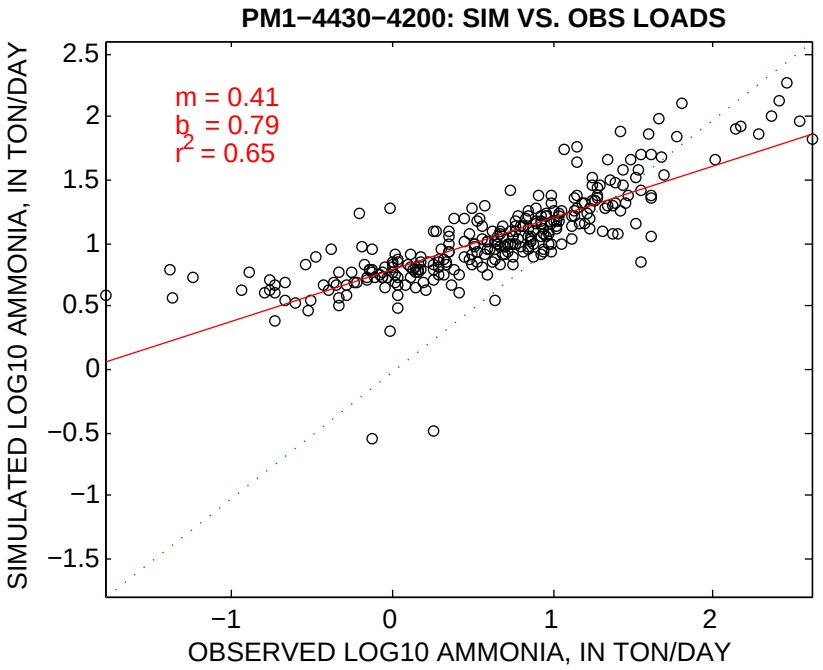


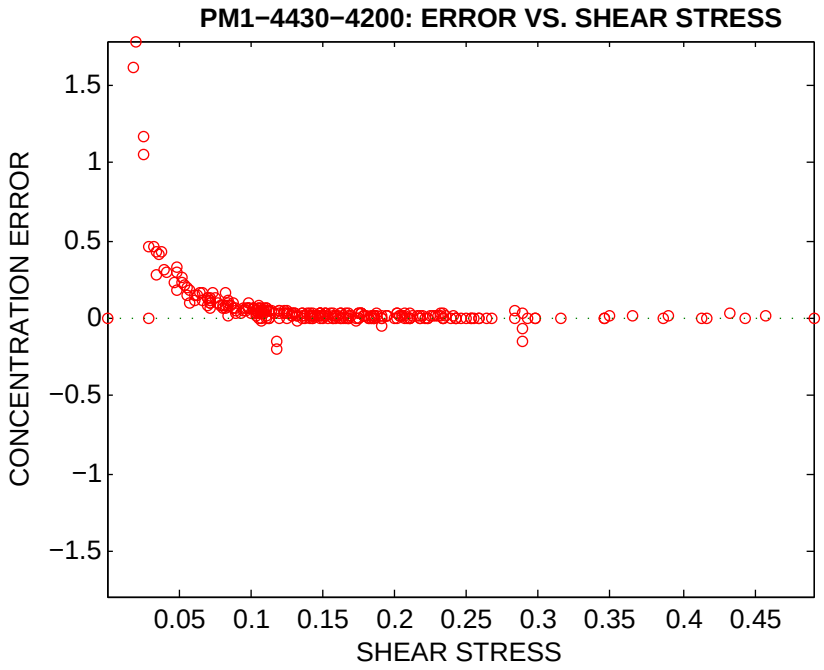


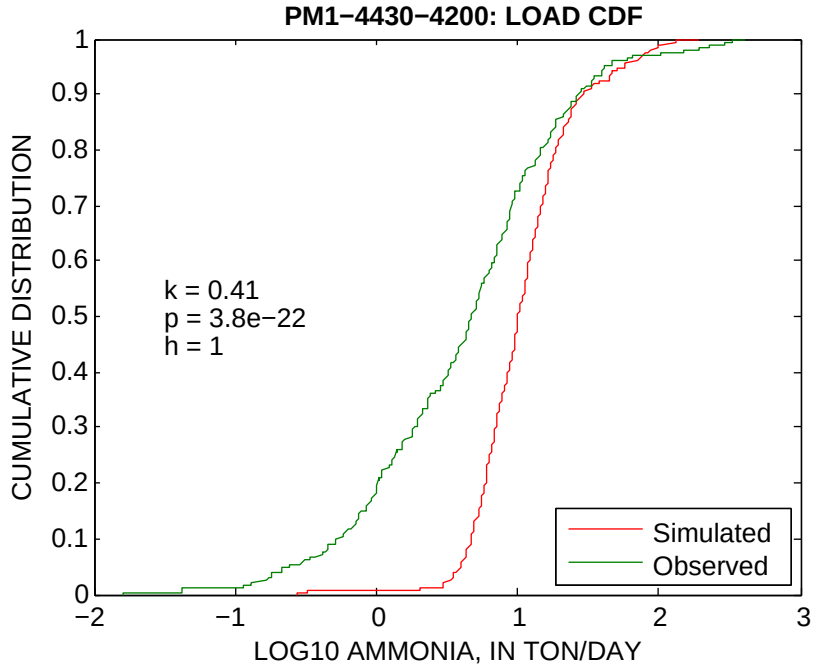


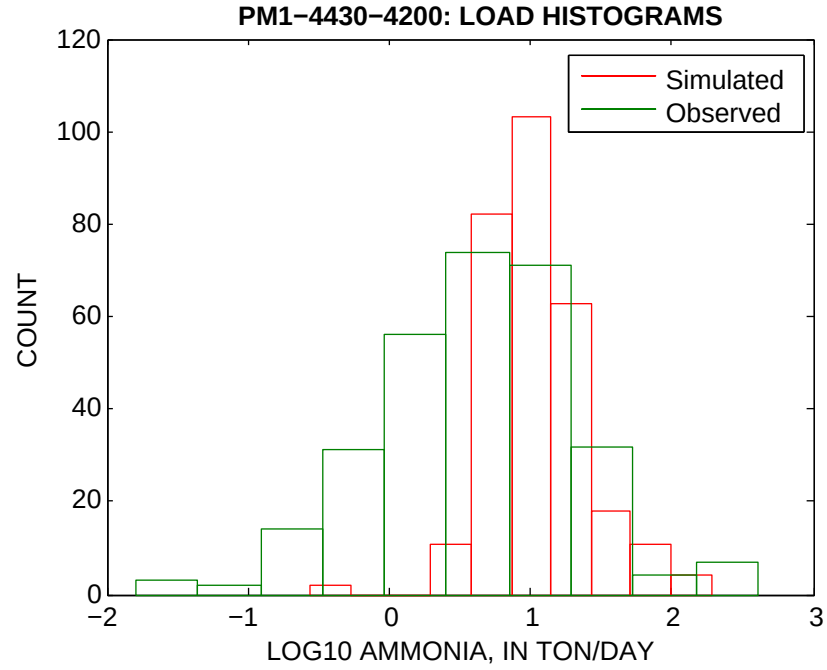


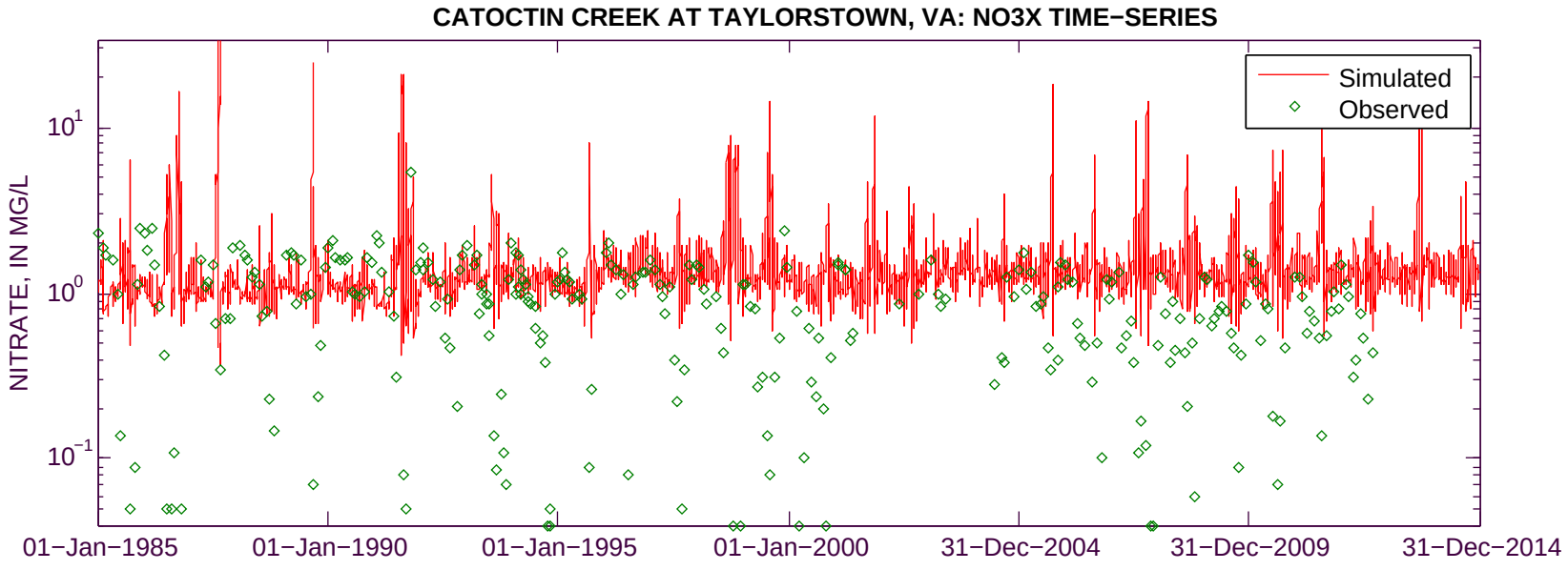
LOAD DATA
LOG10

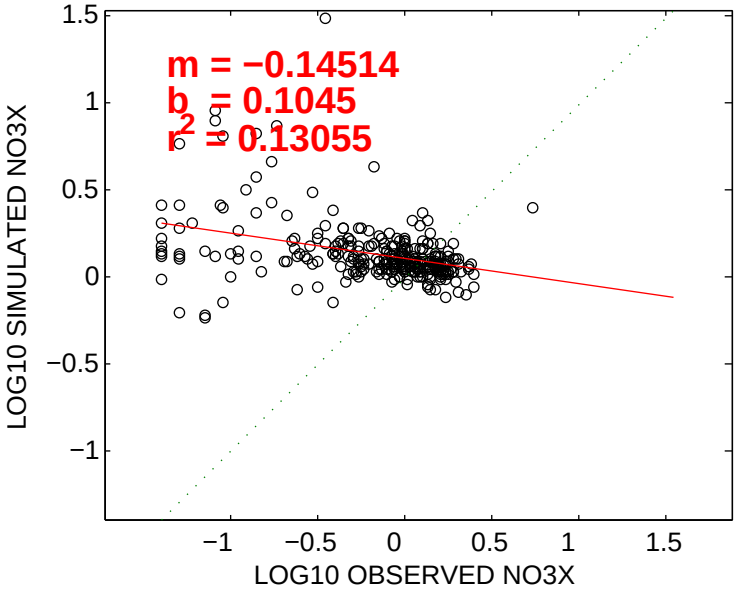


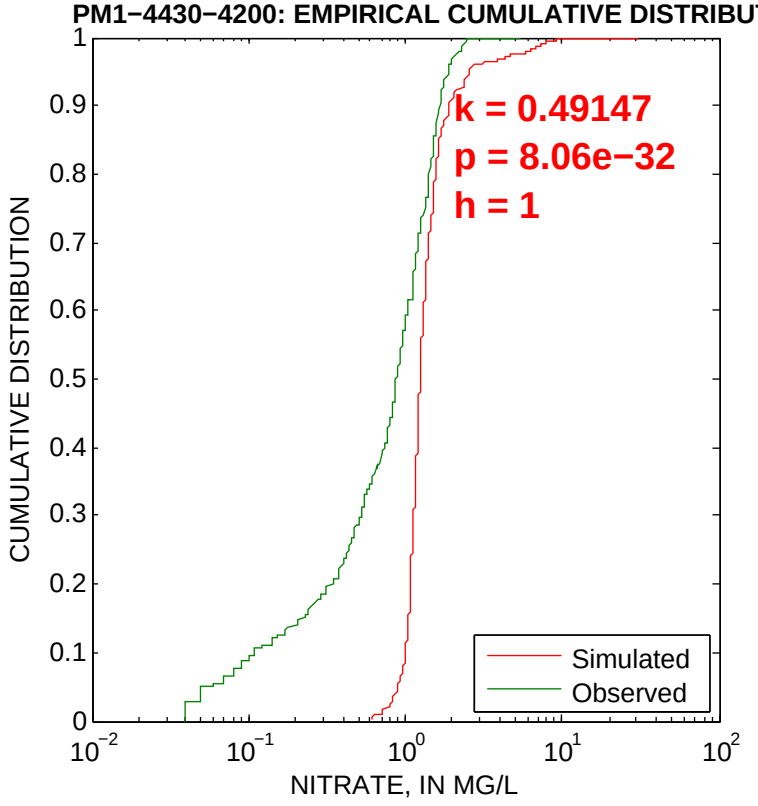












DATA SELECTION

scenario	file
P620171001WQ	NO3X.calib

plot: NO3X - nitrate

Dates: 1/1/1985 – 12/31/201

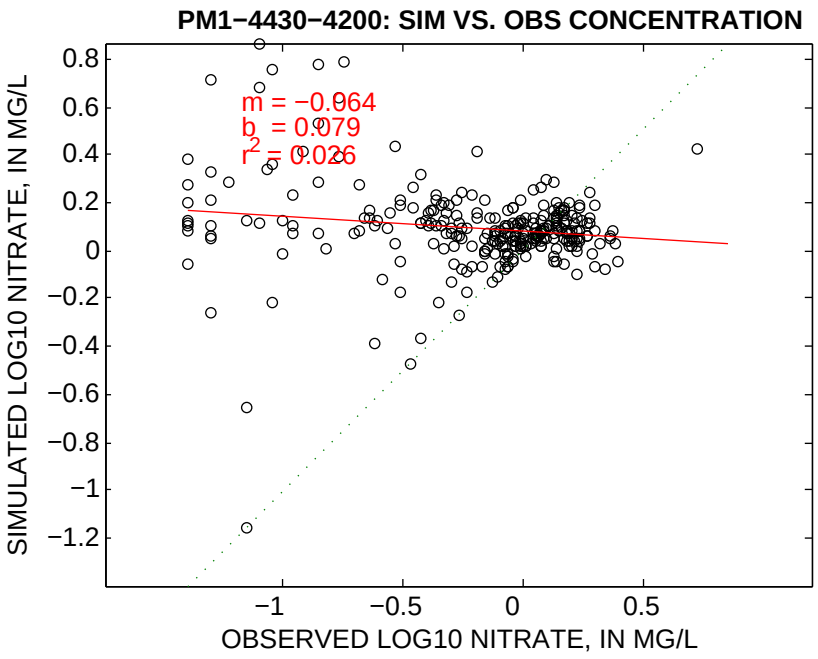
Drive	Directory	Observed
N/A	model	OBS20161101

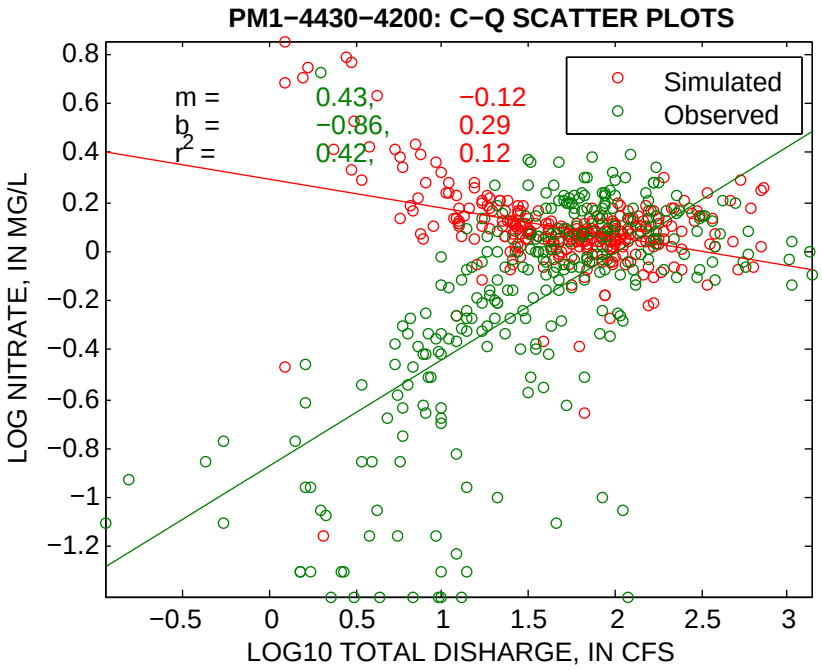
STATISTICS

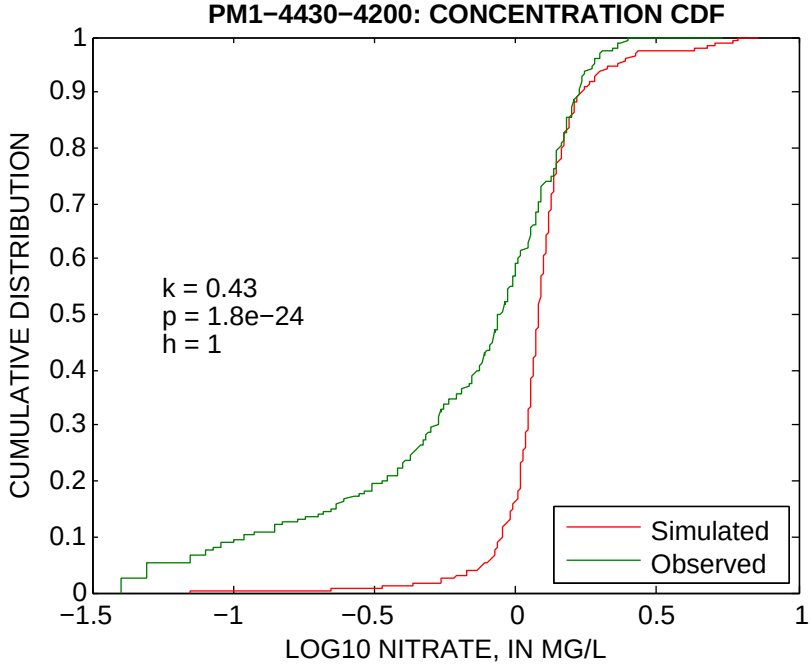
	n	293	293
		observe	simulate
min		0.04	0.58334
		-1.39794	-0.234078
mean		0.916234	1.5744
		-0.192611	0.13246
media		0.88	1.2478
		-0.0555173	0.096145
max		5.38	30.43
		0.730782	1.4833
varian		0.394413	3.80917
		0.197686	0.0318975
JB		0.001	0.001
		0.001	0.001
		ra	log
%		71.8334	-168.771
err.va		5.09773	0.393001
rel.std.err		12.9248	1.98801
mod.eff		-11.9248	-0.988008

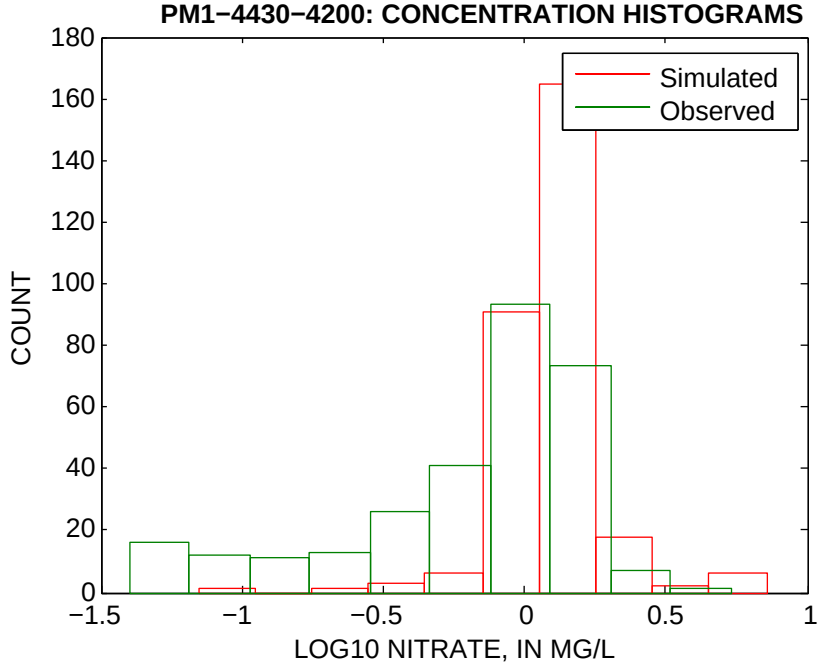
VERSION 3.1

ALL DATA
LOG10

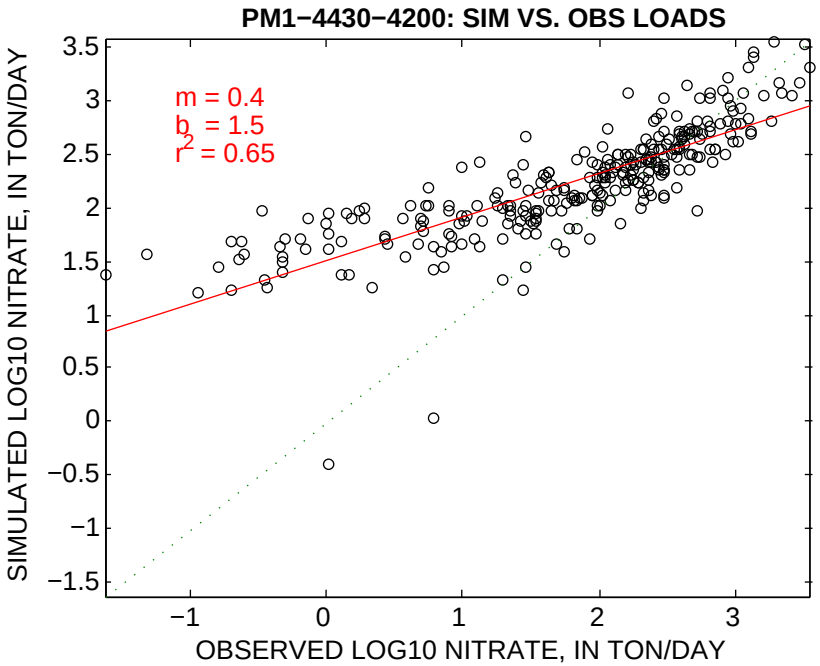


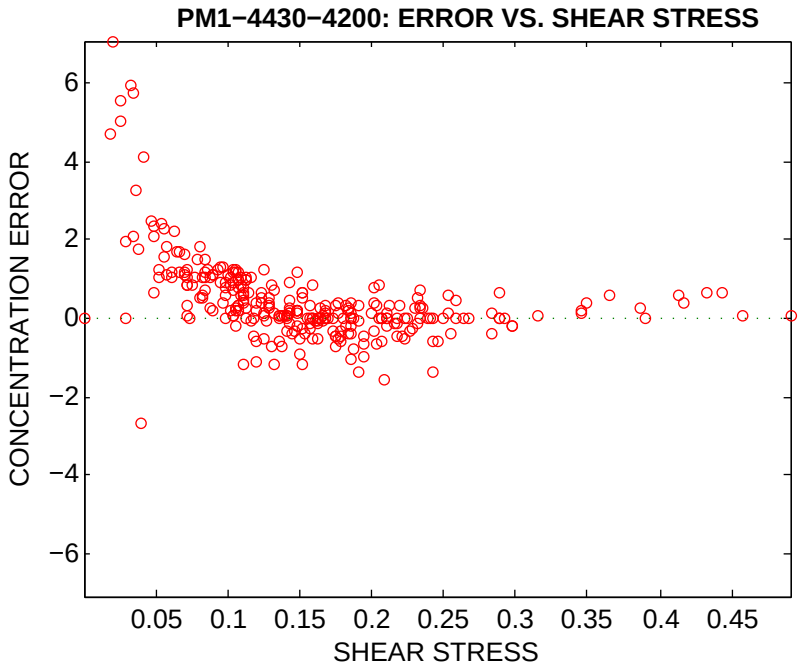


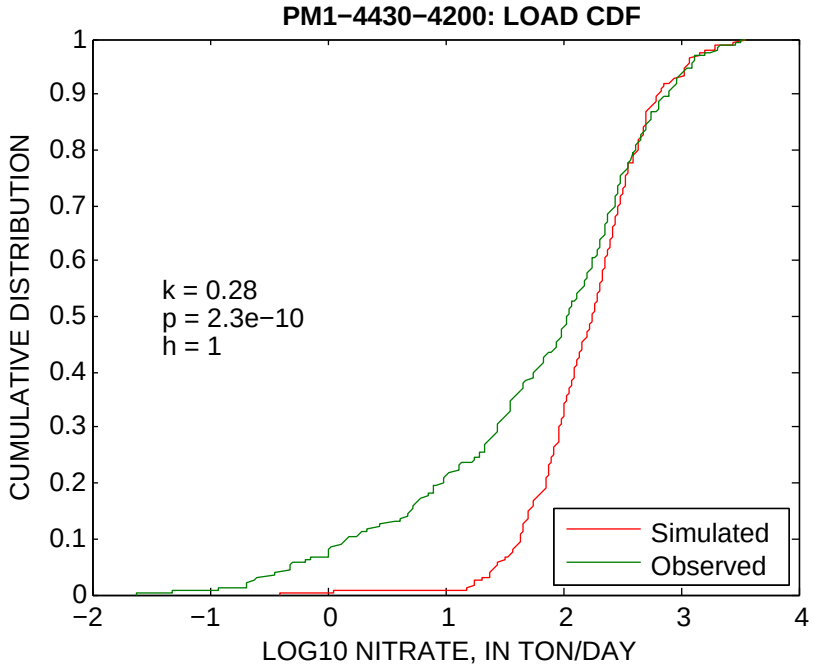


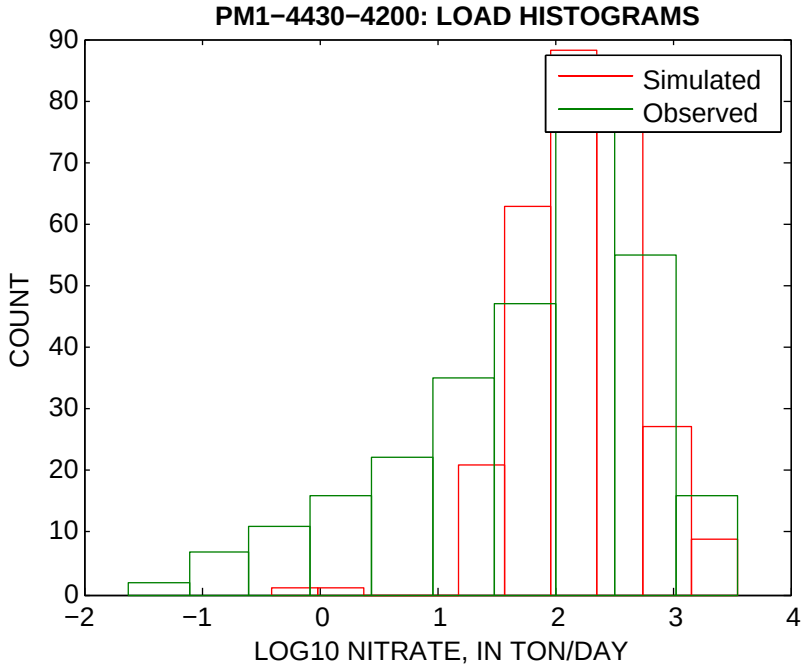


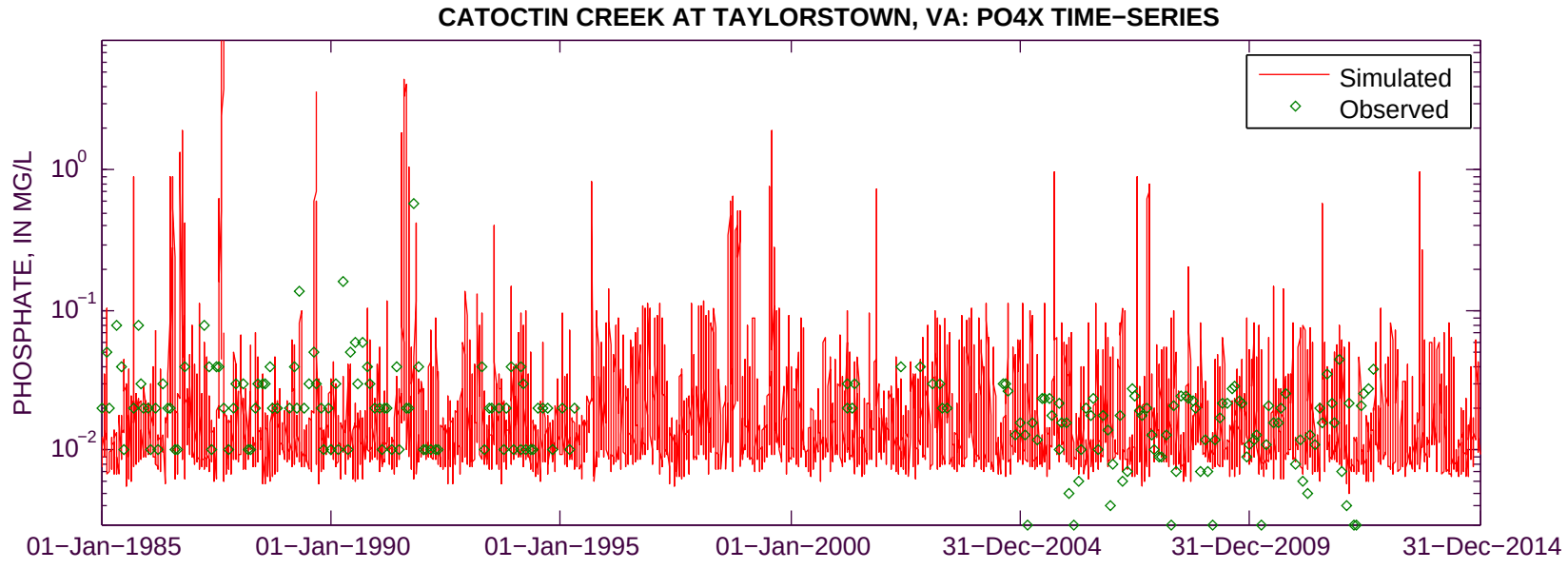
LOAD DATA
LOG10

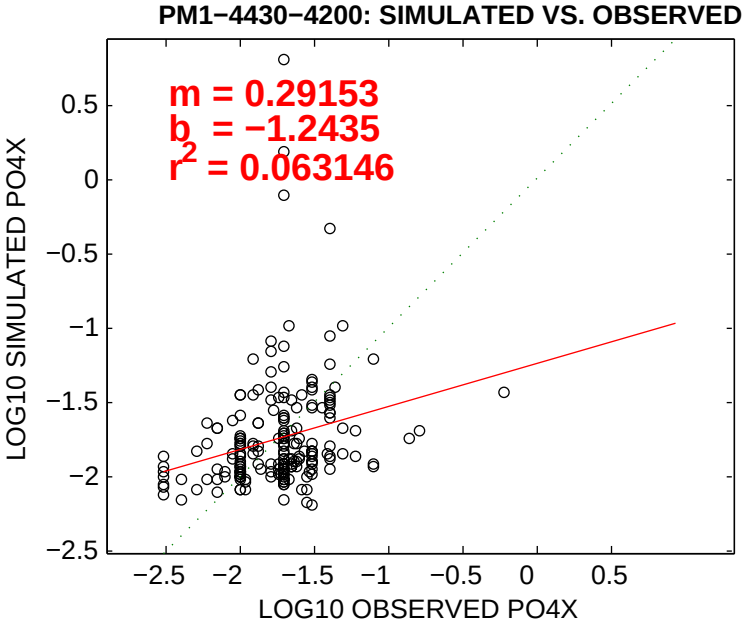


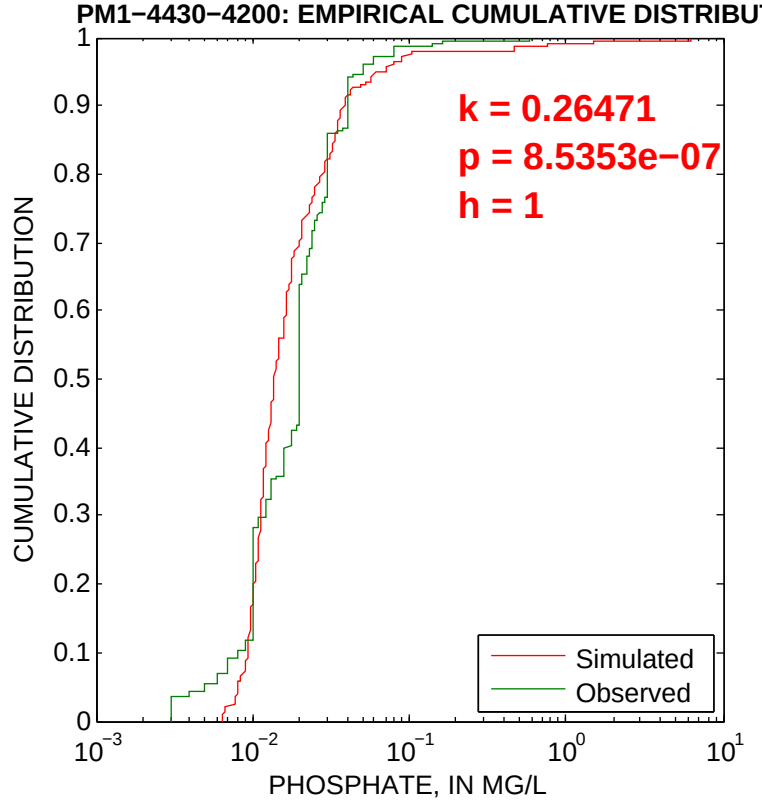












DATA SELECTION

scenario	file
P620171001WQ	PO4X.calib

plot: PO4X - phosphate

Dates: 1/1/1985 – 12/31/201

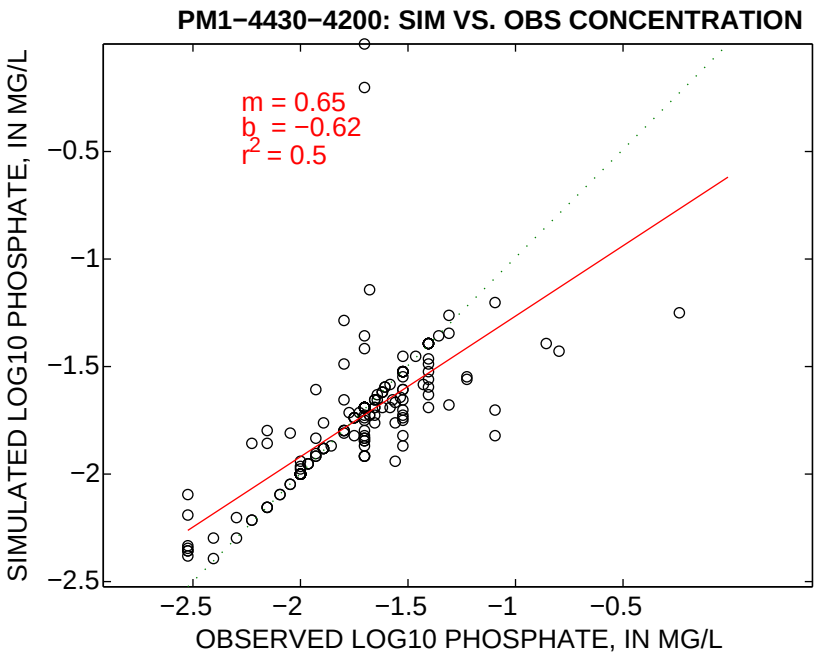
Drive	Directory	Observed
N/A	model	OBS20161101

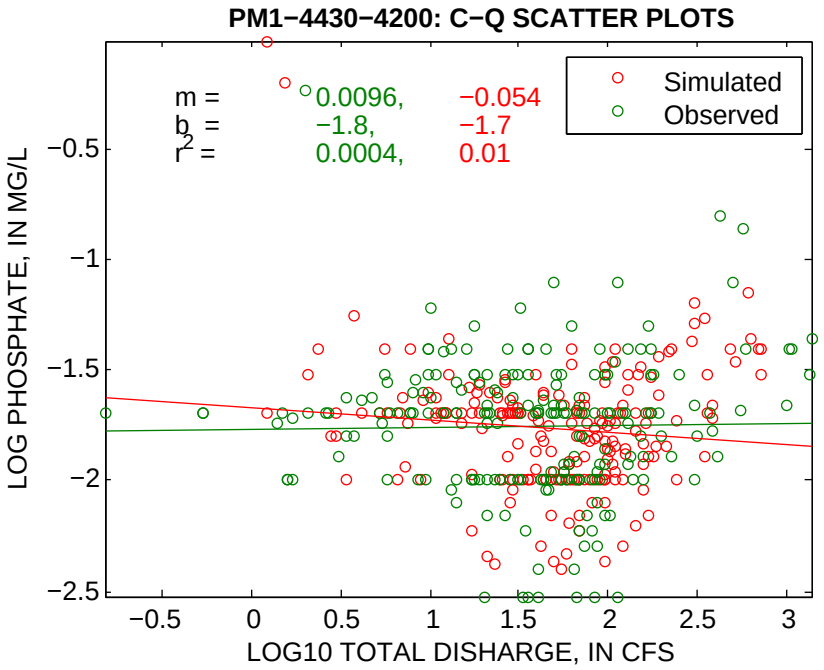
STATISTICS

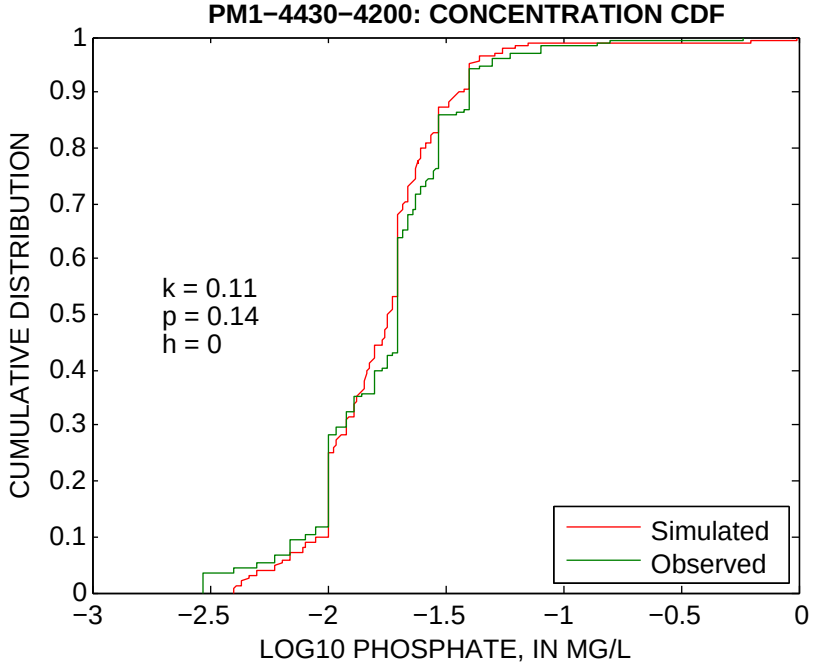
	n	204	204
		observe	simulate
min		0.003	0.0064536
		-2.52288	-2.1902
mean		0.024848	0.0639476
		-1.75081	-1.75386
media		0.02	0.013826
		-1.69897	-1.8593
max		0.59	6.3612
		-0.229148	0.803539
varian		0.00192091	0.211216
		0.100586	0.135378
JB		0.001	0.001
		0.001	0.001
		ra	log
%		157.355	0.174027
err.va		0.214819	0.177326
rel.std.err		111.832	1.76292
mod.eff		-110.832	-0.762924

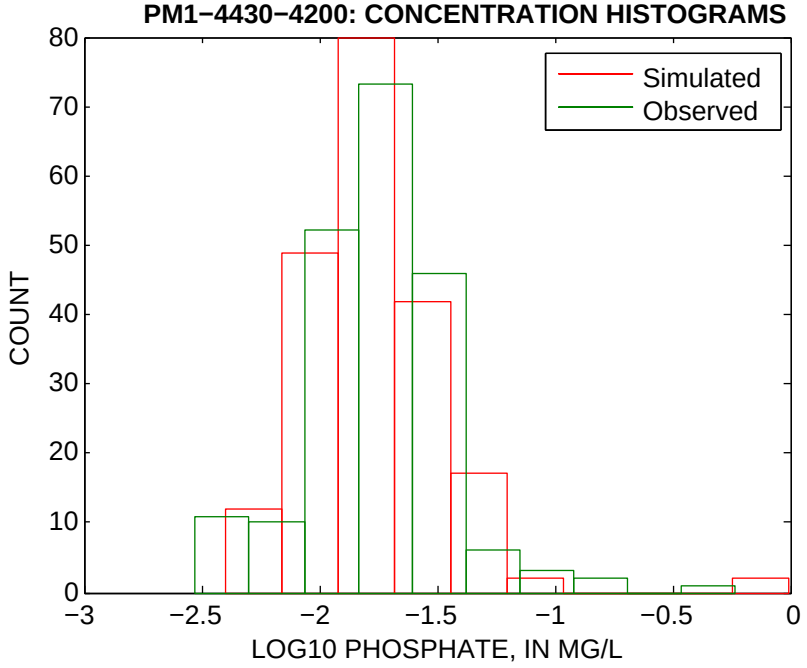
VERSION 2.1

ALL DATA
LOG10

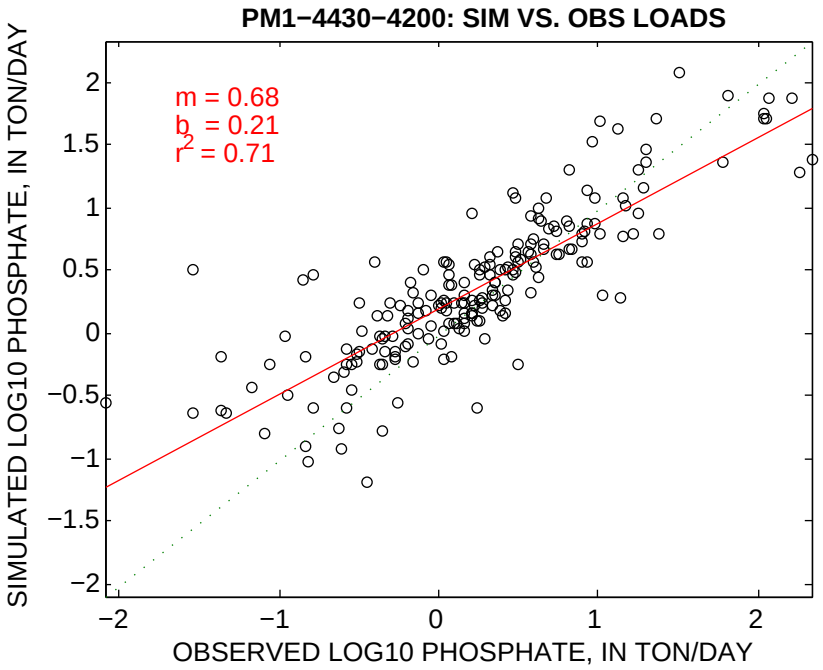


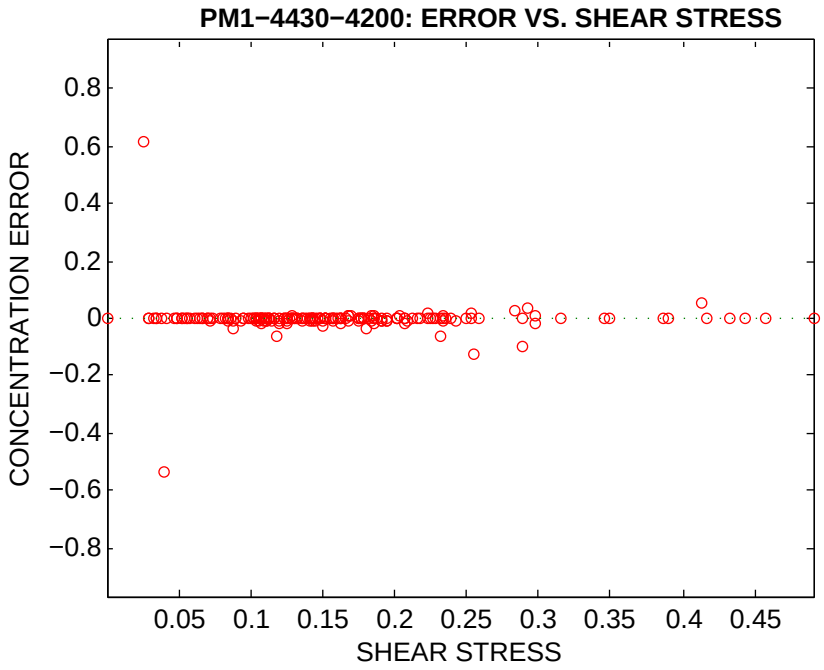


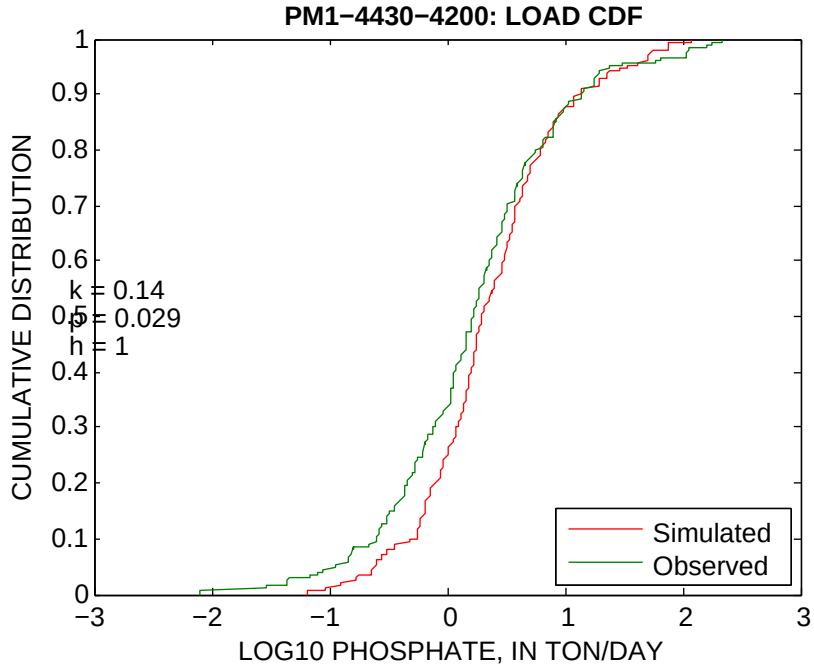


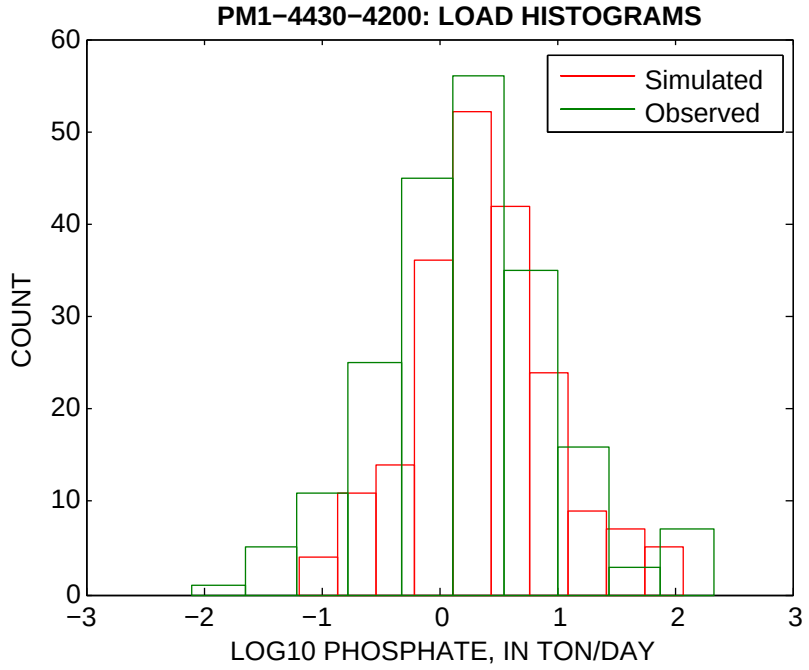


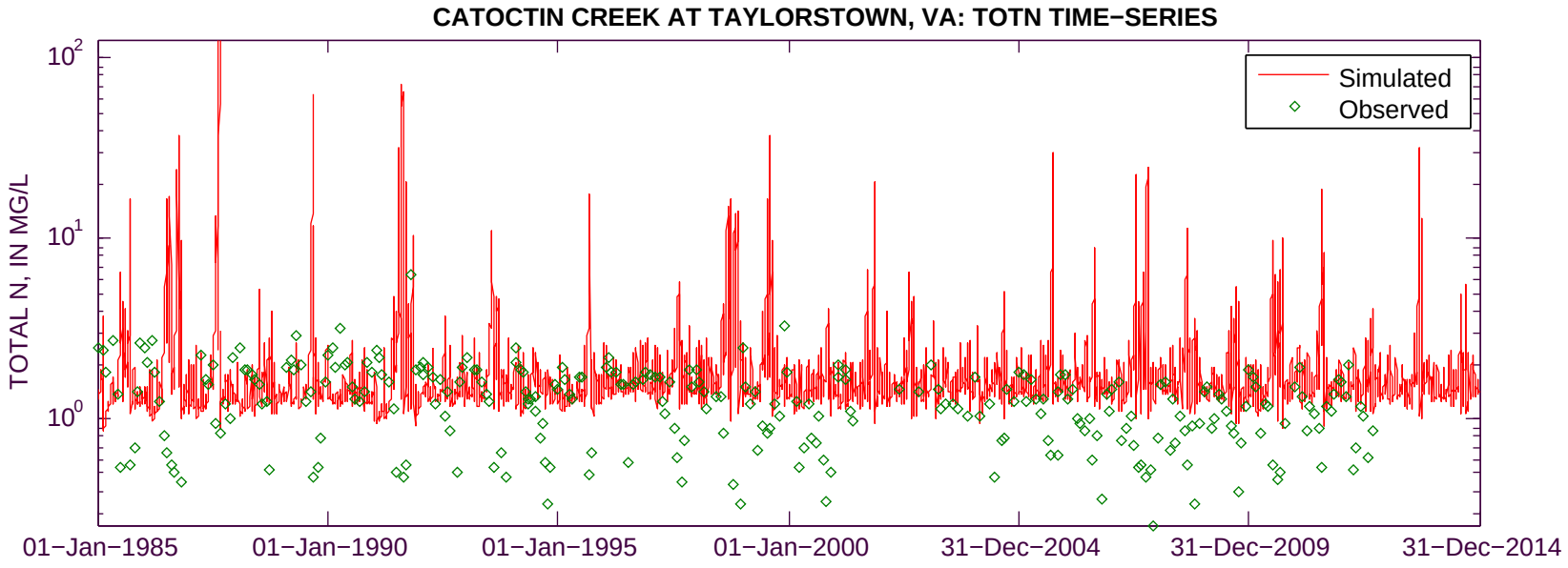
LOAD DATA
LOG10

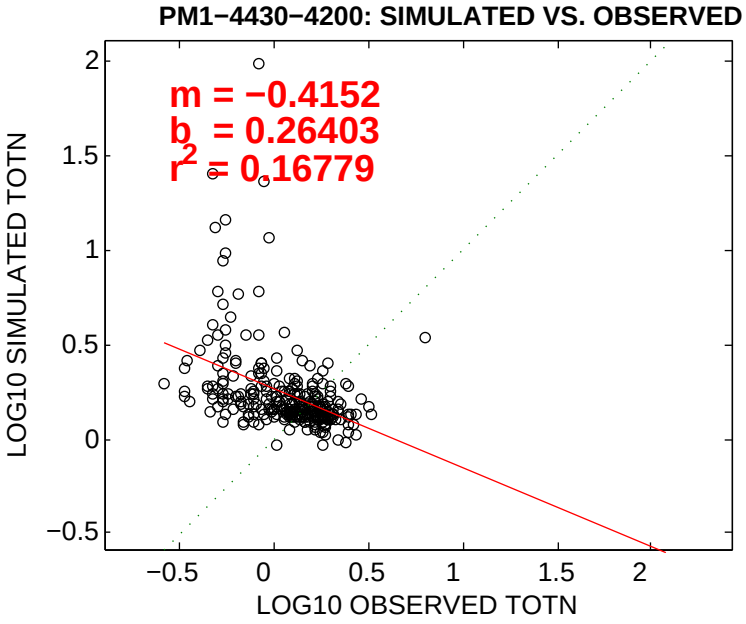


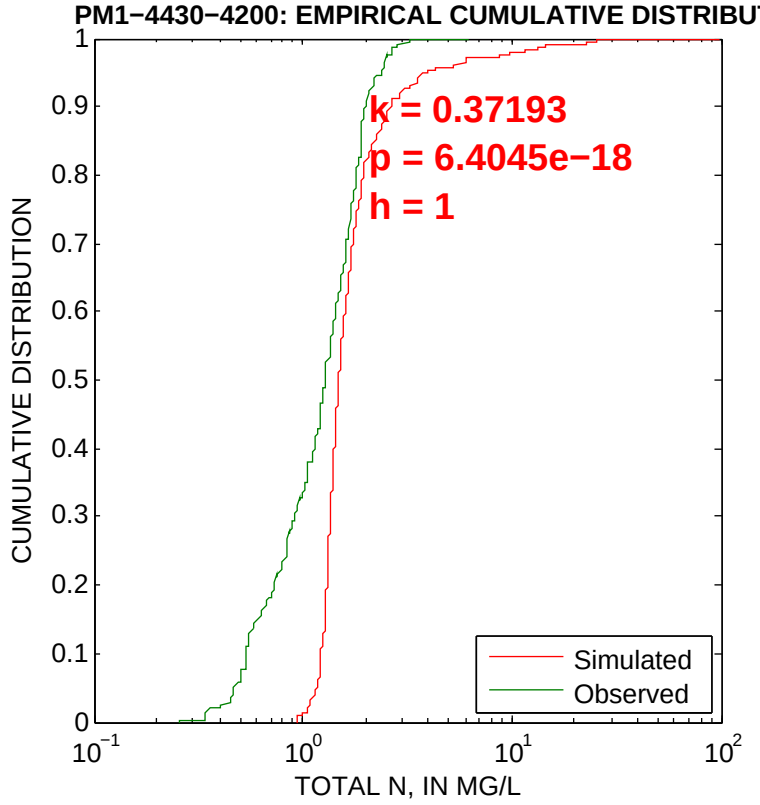












DATA SELECTION

scenario: P620171001WQ | file: TOTN.calib

plot: TOTN - total nitrogen

Dates: 1/1/1985 – 12/31/201

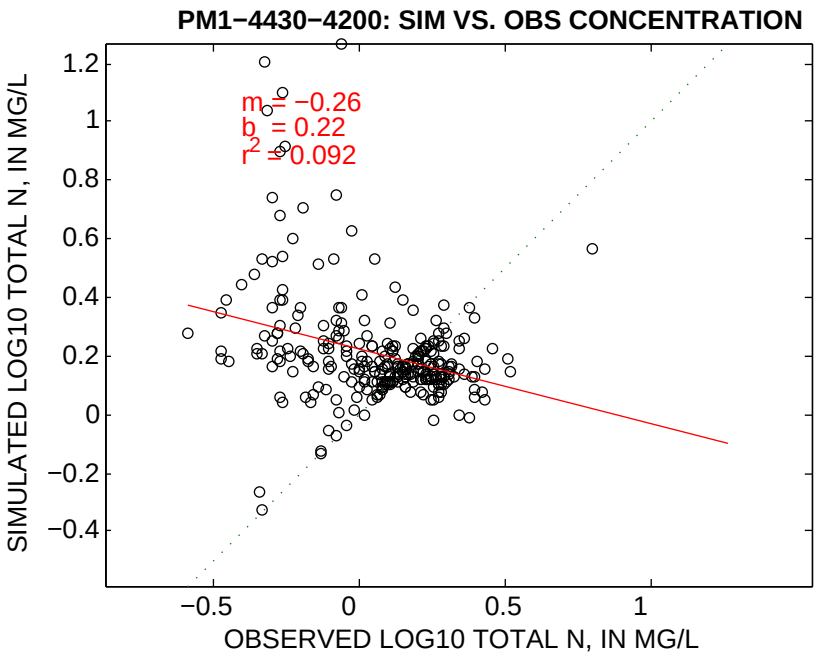
Drive: N/A | Directory: model | Observed: OBS20161101

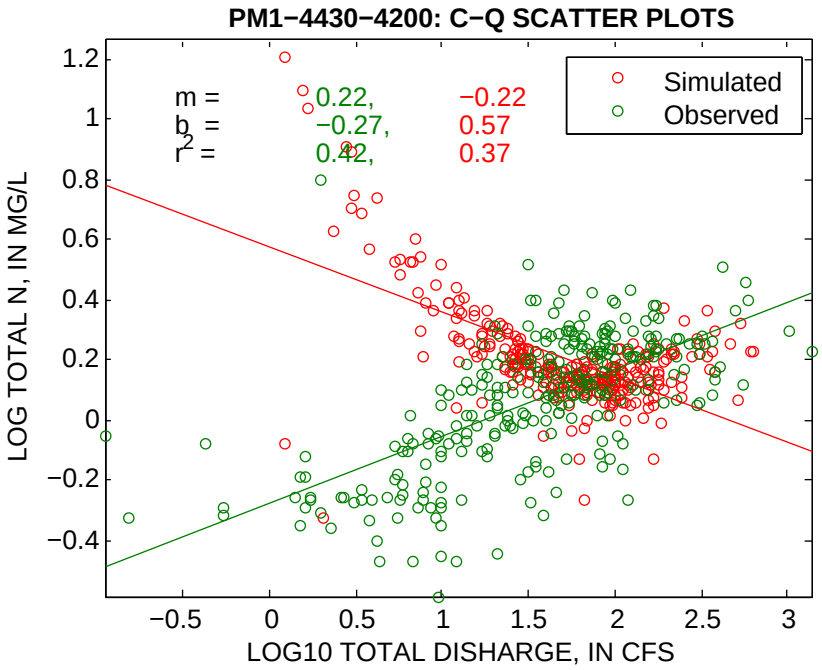
STATISTICS

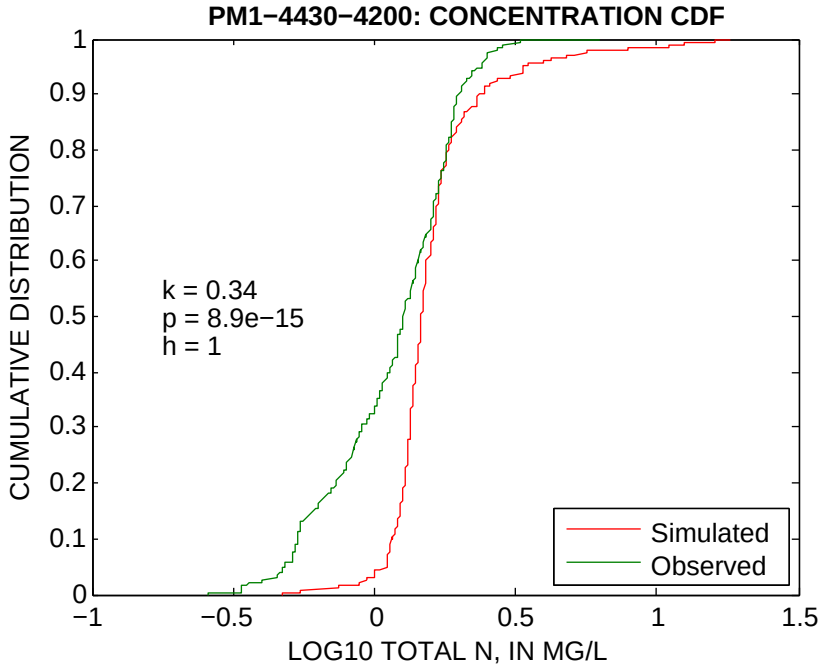
		observe	simulate
n		285	285
min		0.26	0.92845
		-0.585027	-0.0322415
mean		1.31946	2.3742
		0.0679287	0.235822
media		1.27742	1.4812
		0.106334	0.170614
max		6.28	98.241
		0.79796	1.99229
varian		0.424931	38.2815
		0.0491222	0.0504691
JB		0.001	0.001
		0.020139	0.001
		ra	log
%		79.9364	247.161
err.va		40.8705	0.16867
rel.std.err		96.1814	3.43368
mod.eff		-95.1814	-2.43368

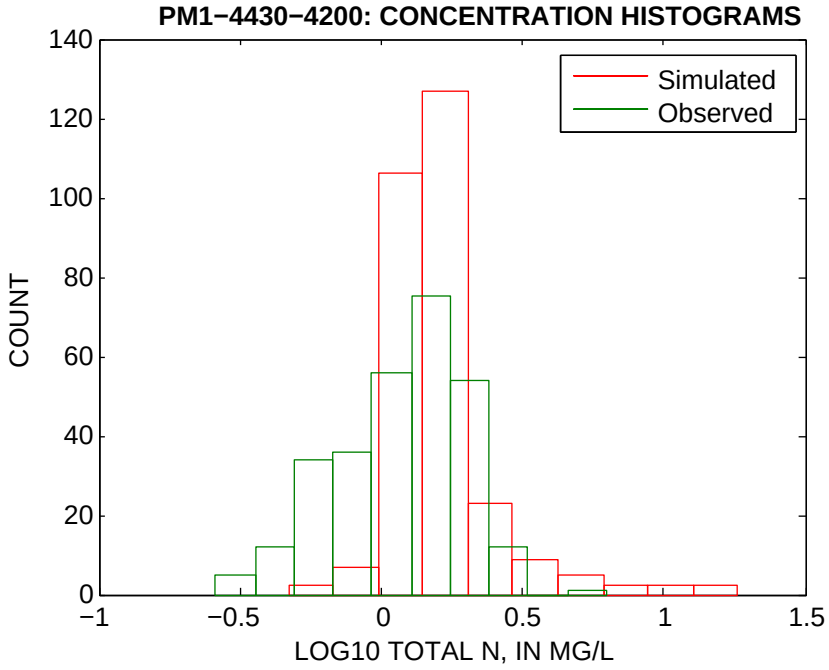
VERSION 2.1

ALL DATA
LOG10

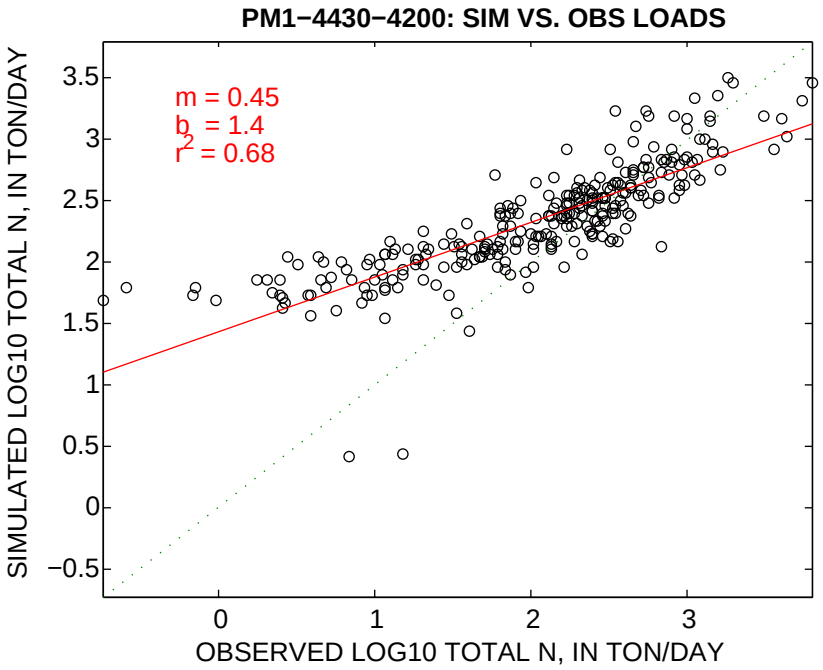


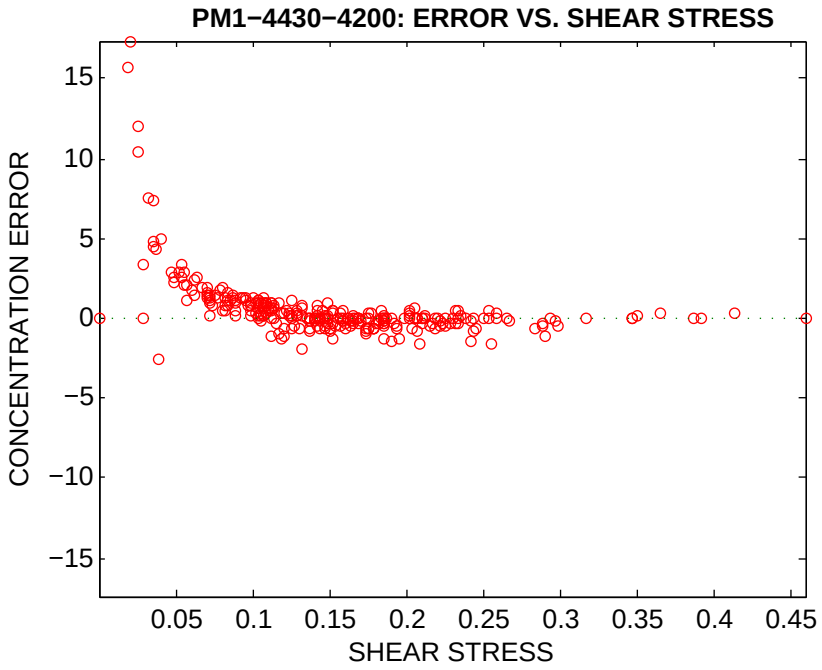


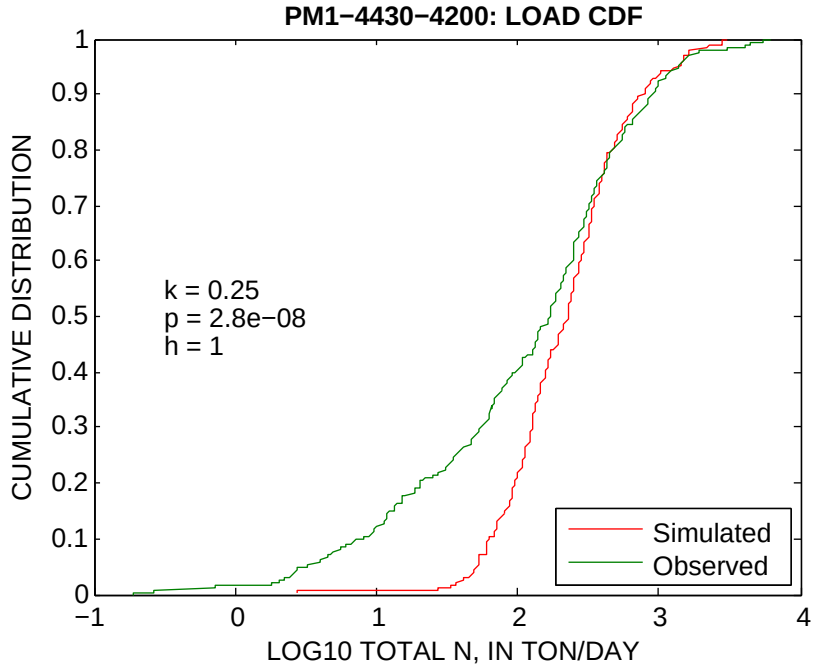


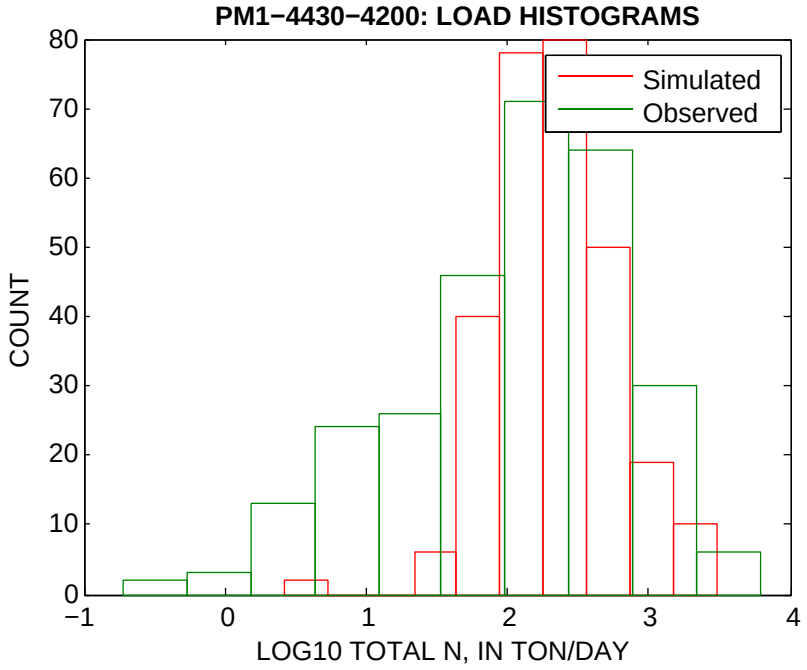


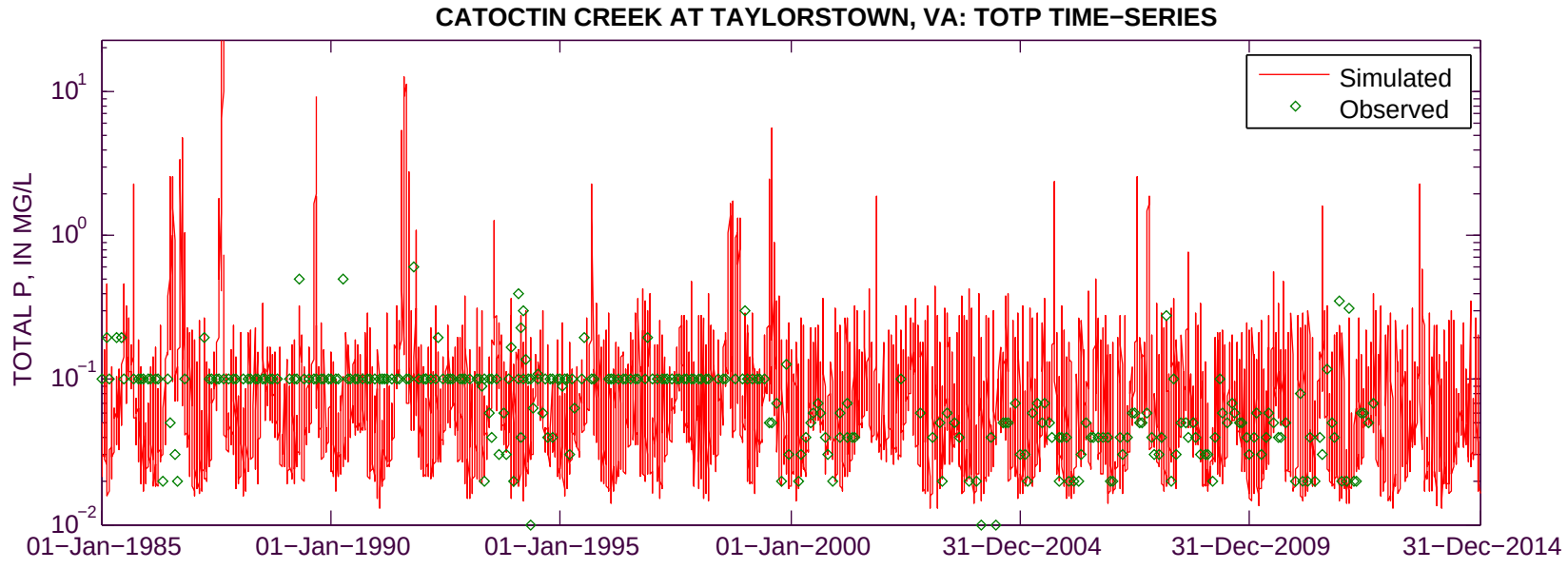
LOAD DATA
LOG10

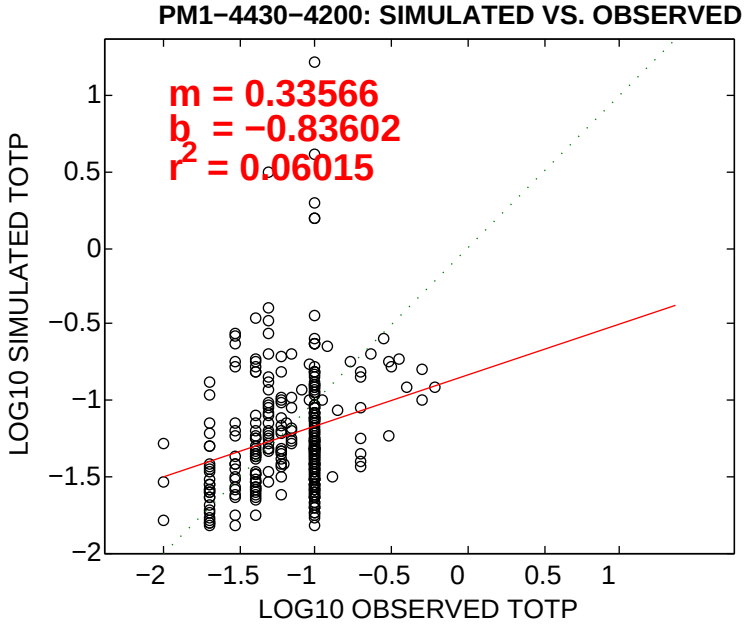


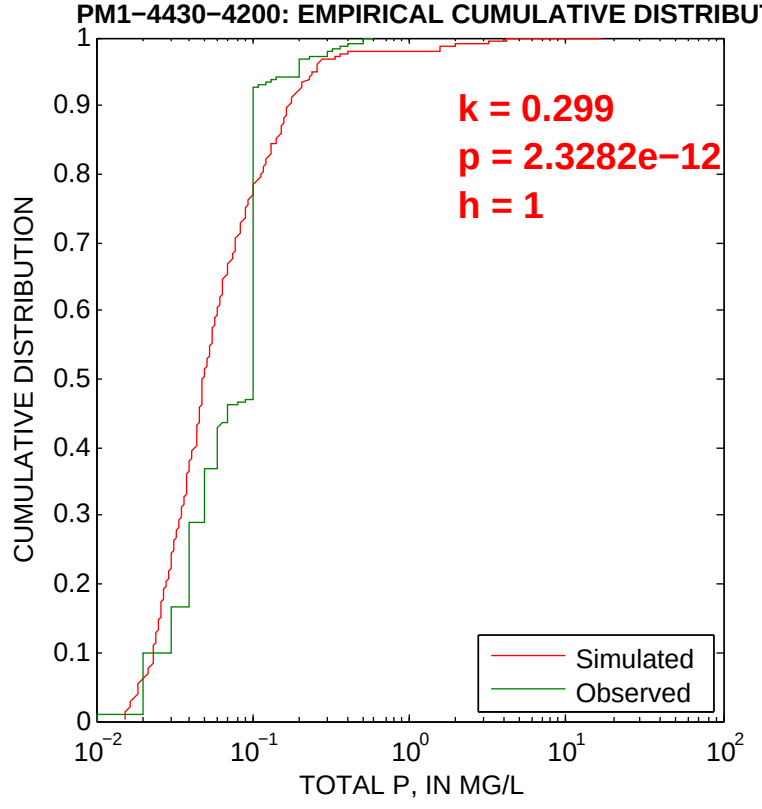












DATA SELECTION

scenario: P620171001WQ | file: TOTP.calib

plot: TOTP - total phosphorus

Dates: 1/1/1985 – 12/31/201

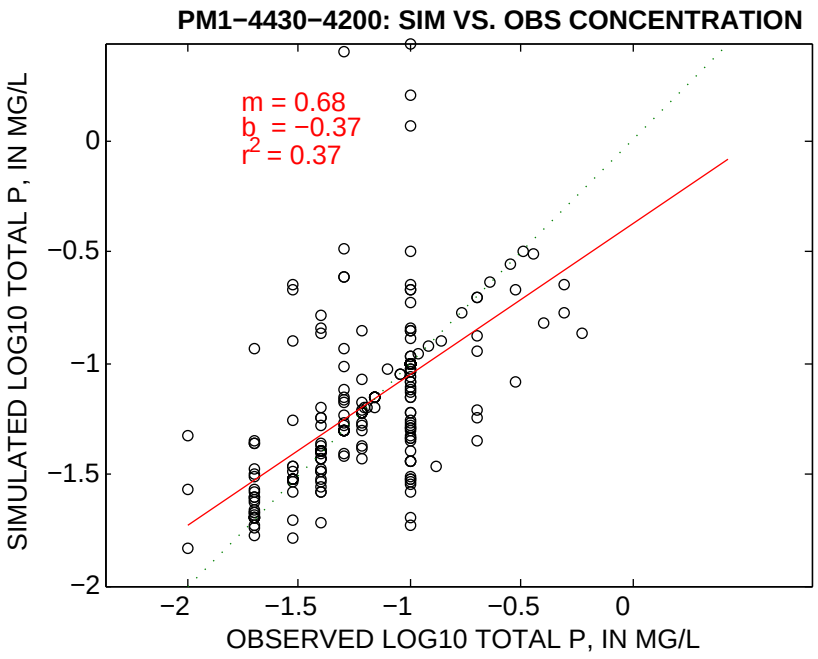
Drive: N/A | Directory: model | Observed: OBS20161101

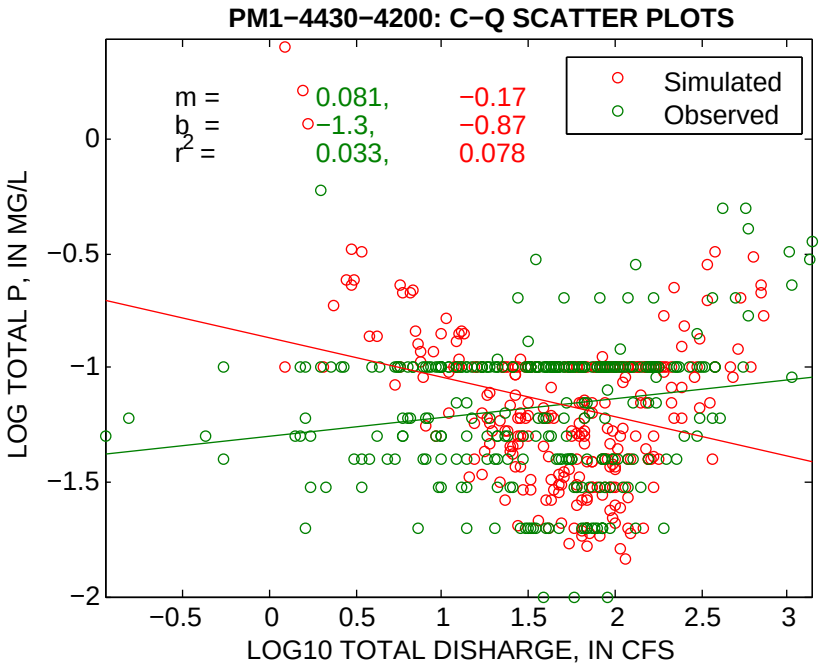
STATISTICS

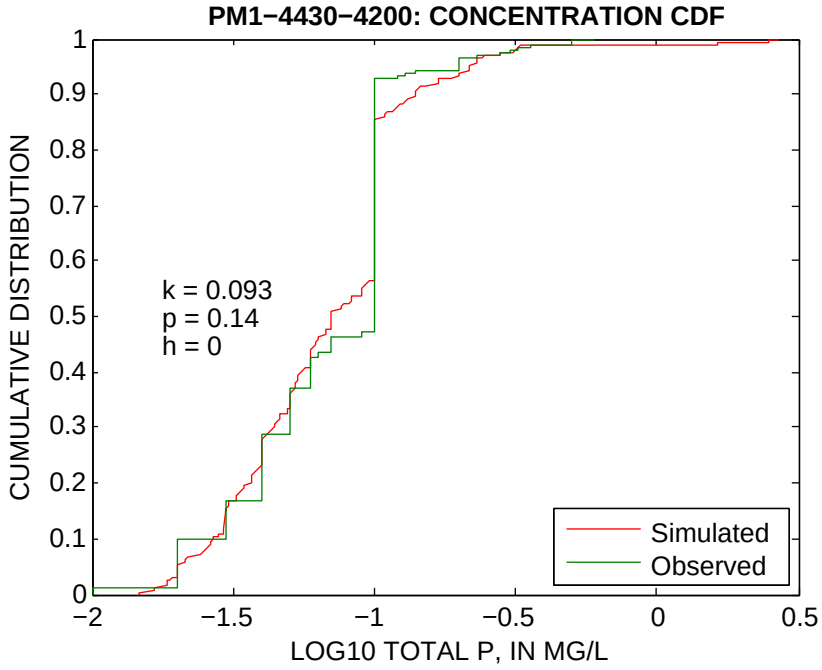
n	301	301
	observe	simulate
min	0.01	0.01486
	-2	-1.82798
mean	0.0845082	0.168088
	-1.172	-1.22941
media	0.1	0.048868
	-1	-1.31098
max	0.6	16.714
	-0.221849	1.22308
varian	0.0047951	1.03334
	0.0866102	0.162234
JB	0.001	0.001
	0.106243	0.001
	ra	log
%	98.9009	4.89862
err.va	1.04148	0.194007
rel.std.err	217.197	2.24
mod.eff	-216.197	-1.24

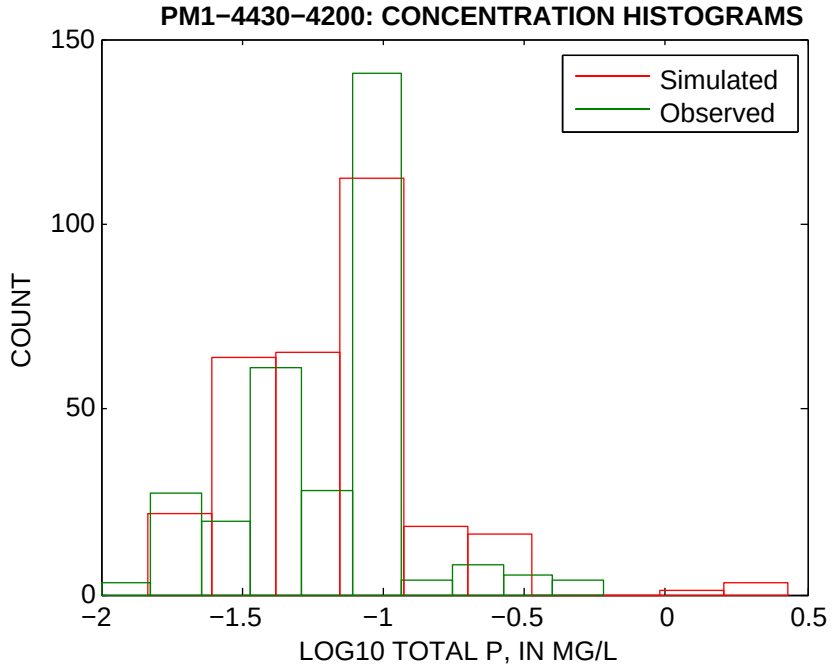
VERSION 2.1

ALL DATA
LOG10

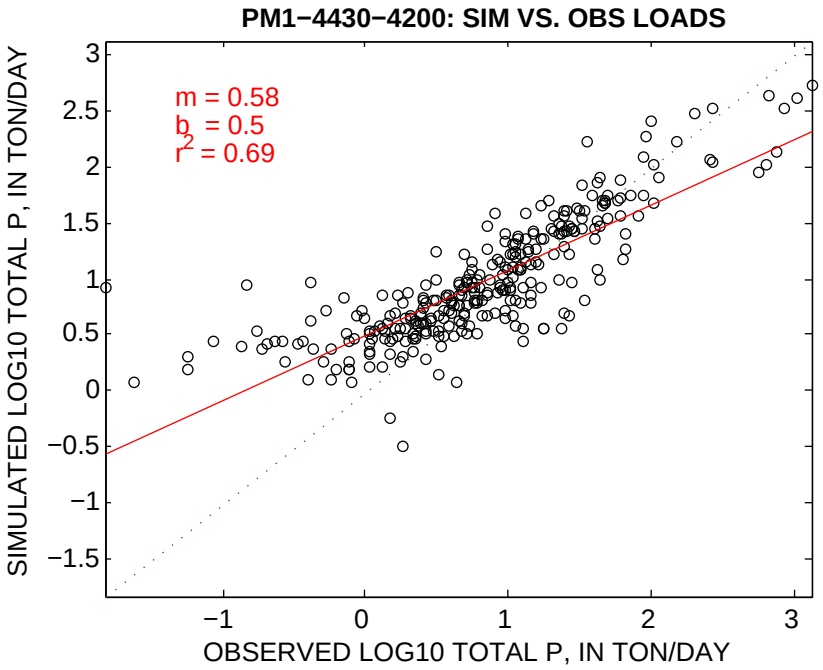


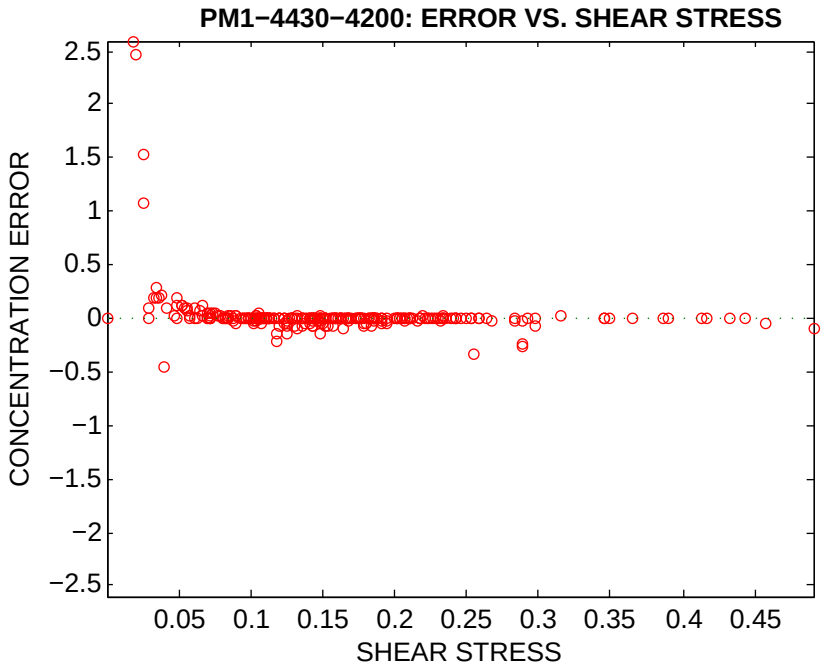


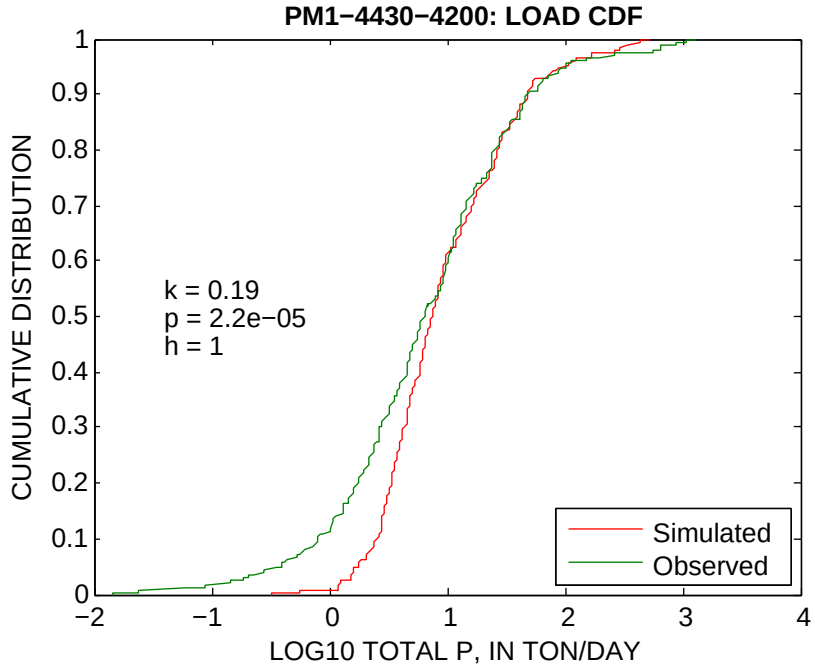


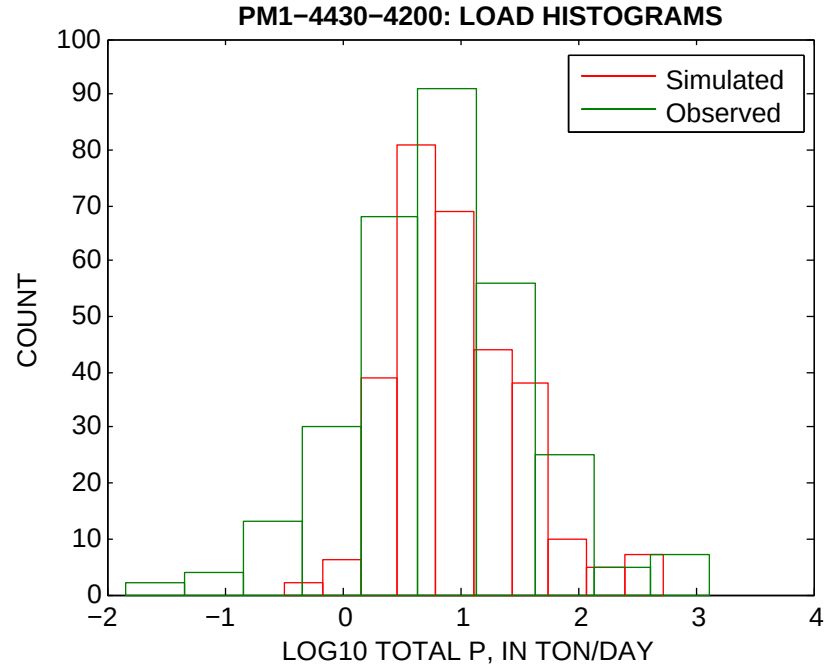


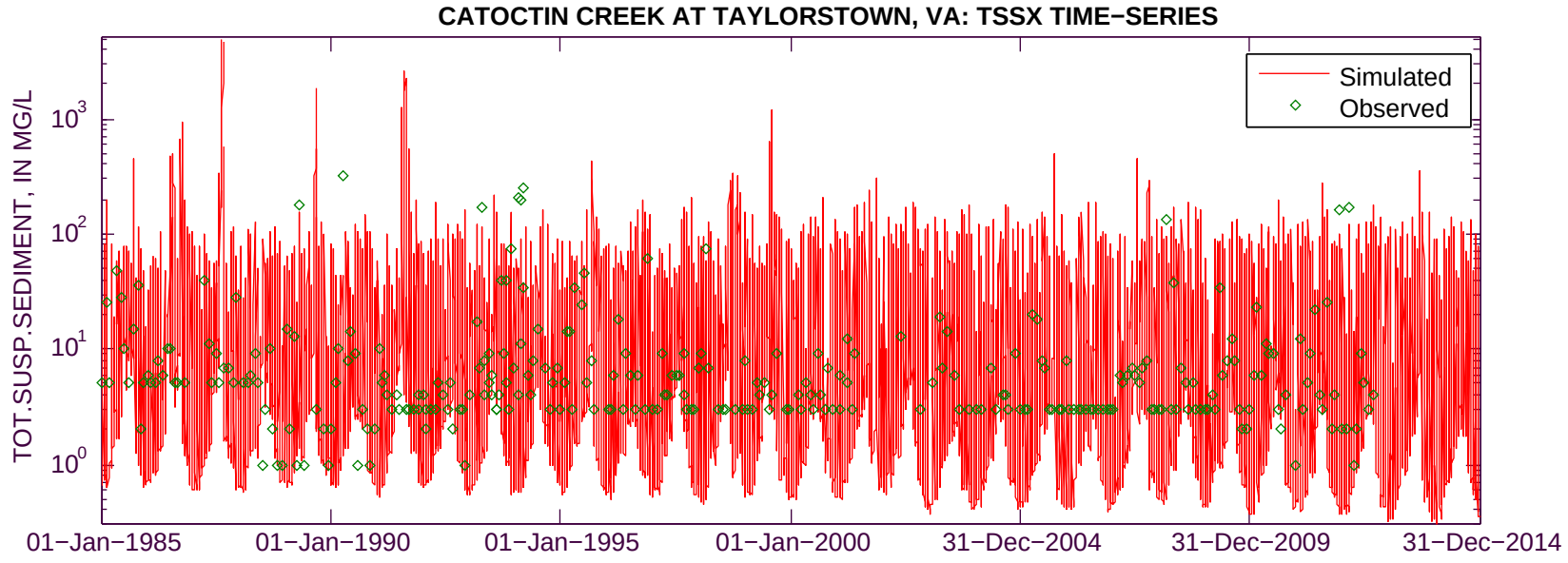
LOAD DATA
LOG10

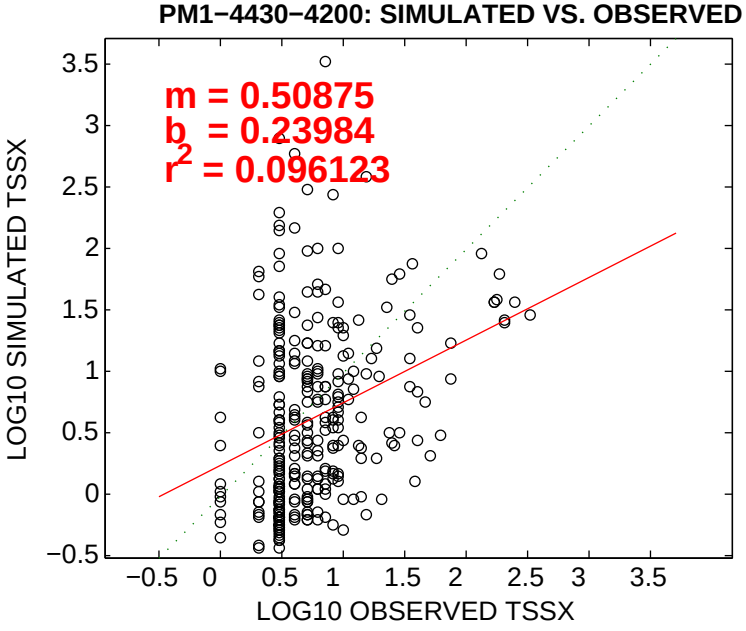


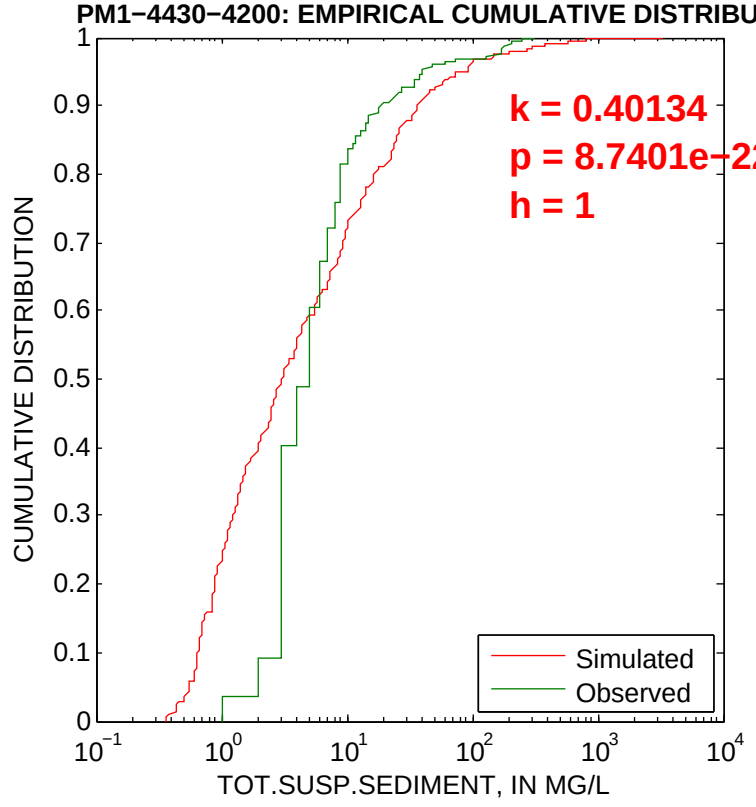












DATA SELECTION

scenario	file
P620171001WQ	TSSX.calib

plot: TSSX - total suspended ...

Dates: 1/1/1985 – 12/31/201

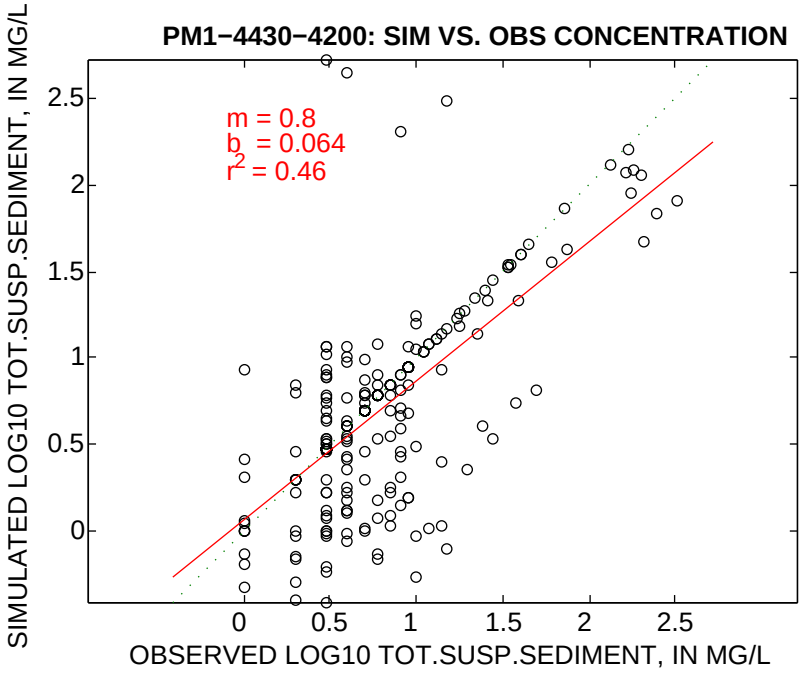
Drive	Directory	Observed
N/A	model	OBS20161101

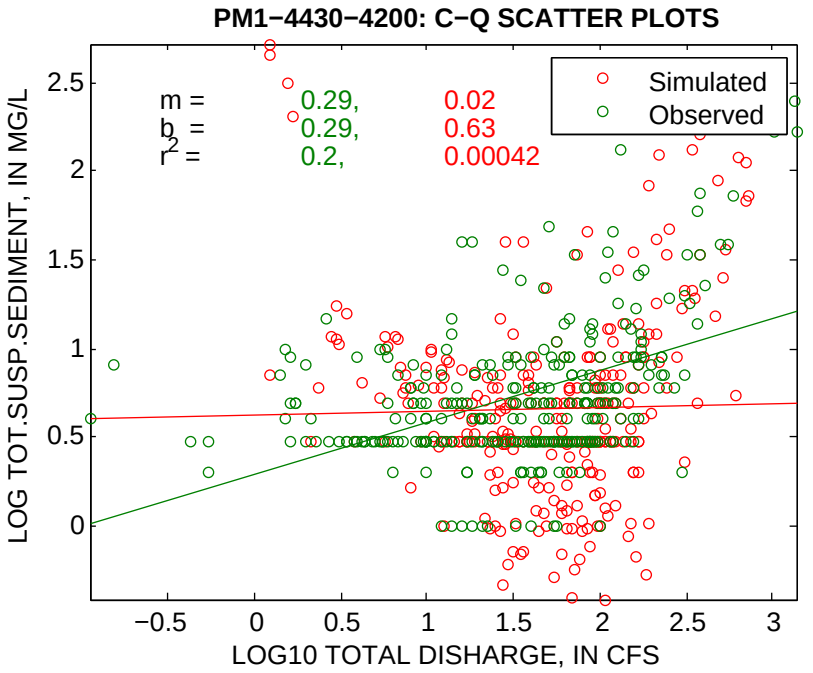
STATISTICS

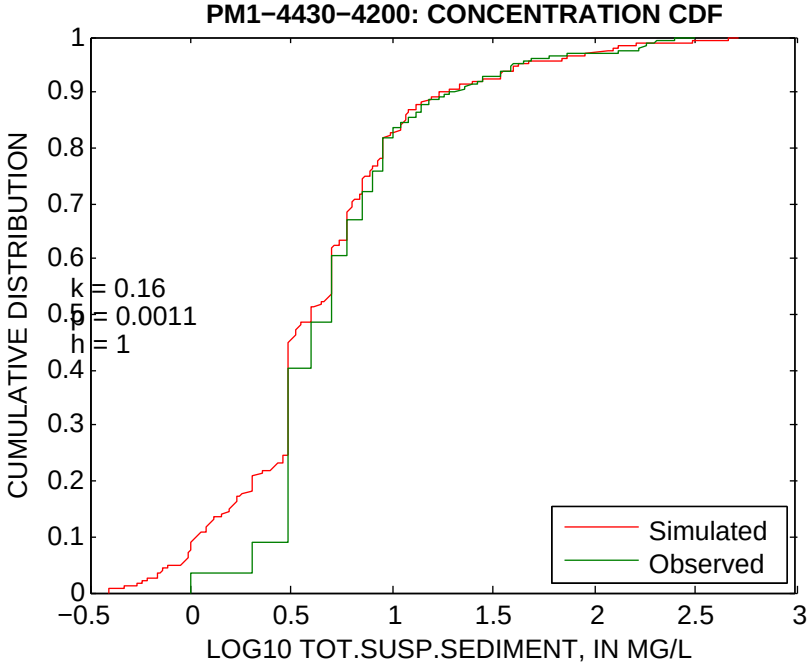
	observe	simulate
n	299	299
min	1 0	0.36727 -0.435015
mean	13.292 0.750675	31.0068 0.621748
media	5 0.69897	3.1311 0.495697
max	318 2.50243	3310.3 3.51987
varian	1246.4 0.190122	40921.4 0.511942
JB	0.001 0.001	0.001 0.001
	ra	log
%	133.274	-17.1748
err.va	42404.4	0.525292
rel.std.err	34.0215	2.76292
mod.eff	-33.0215	-1.76292

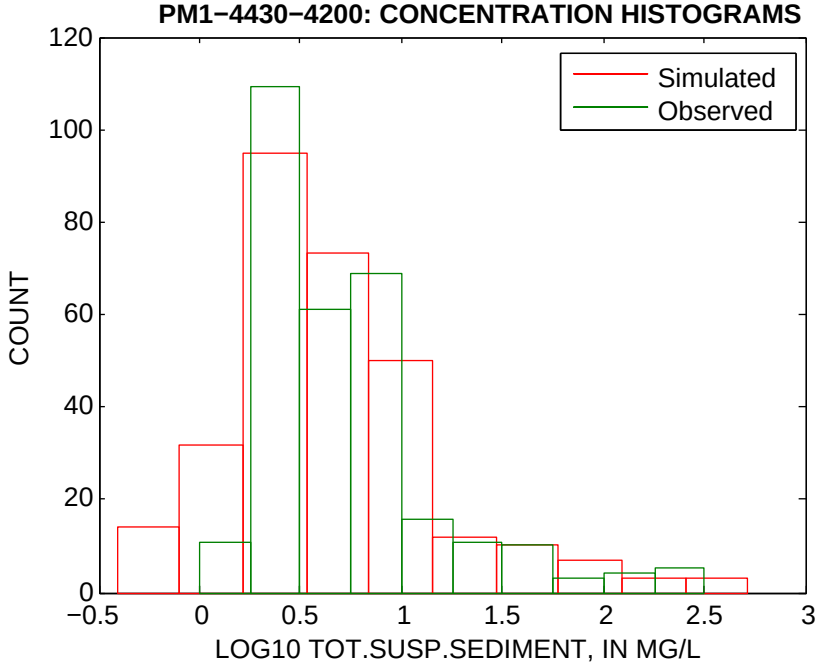
VERSION 2.1

ALL DATA
LOG10

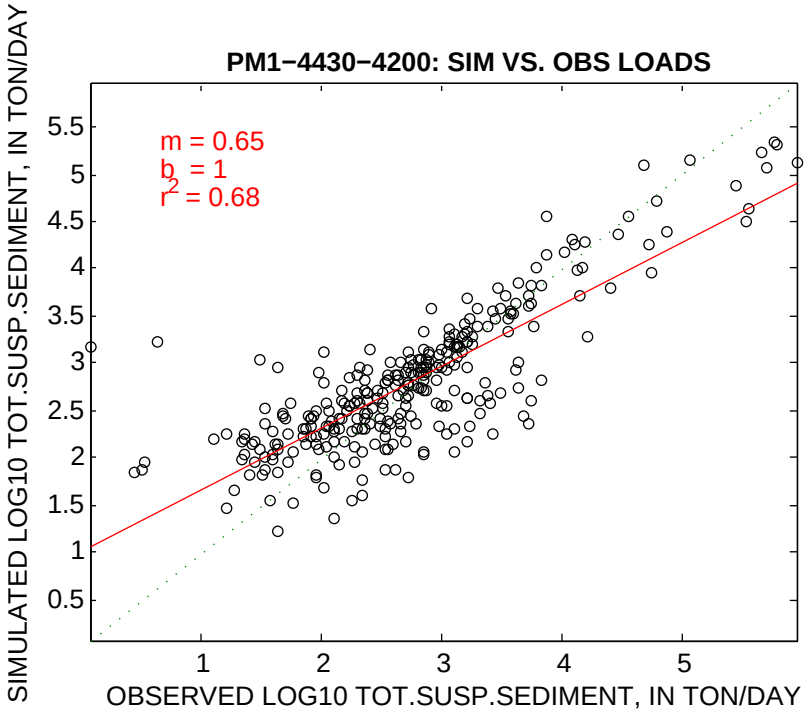


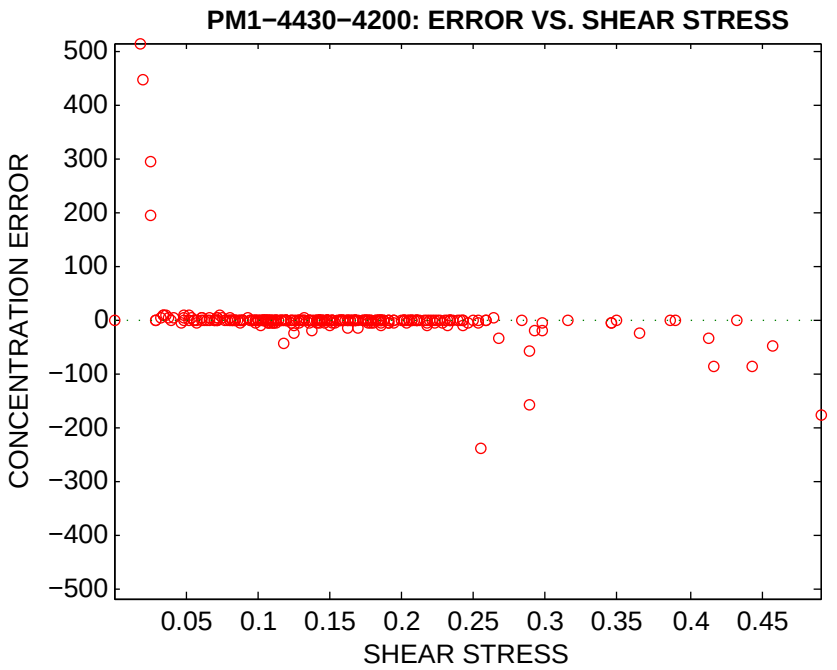


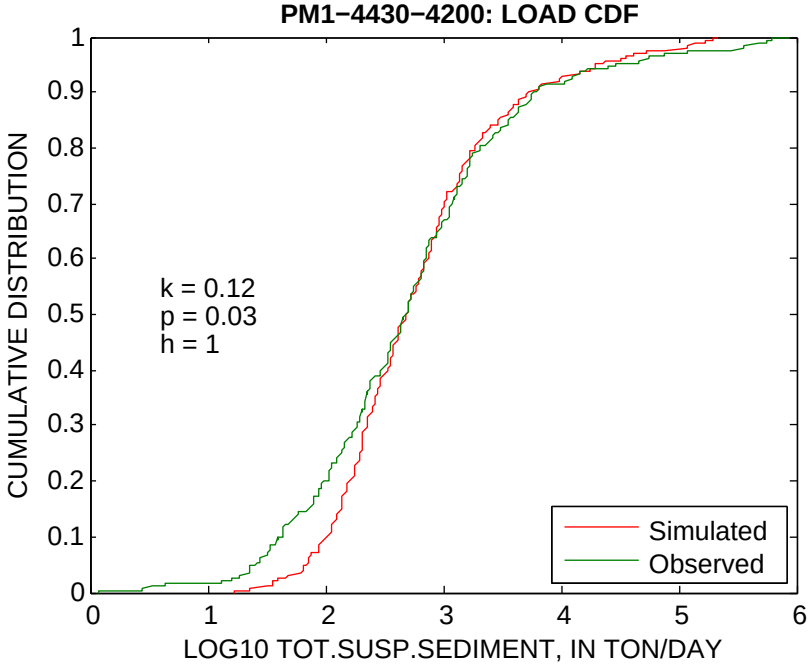


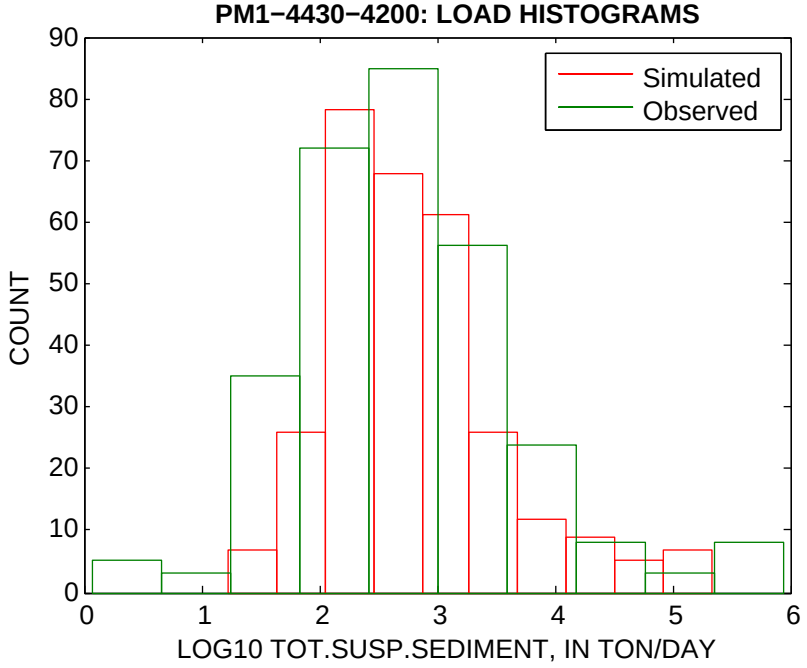


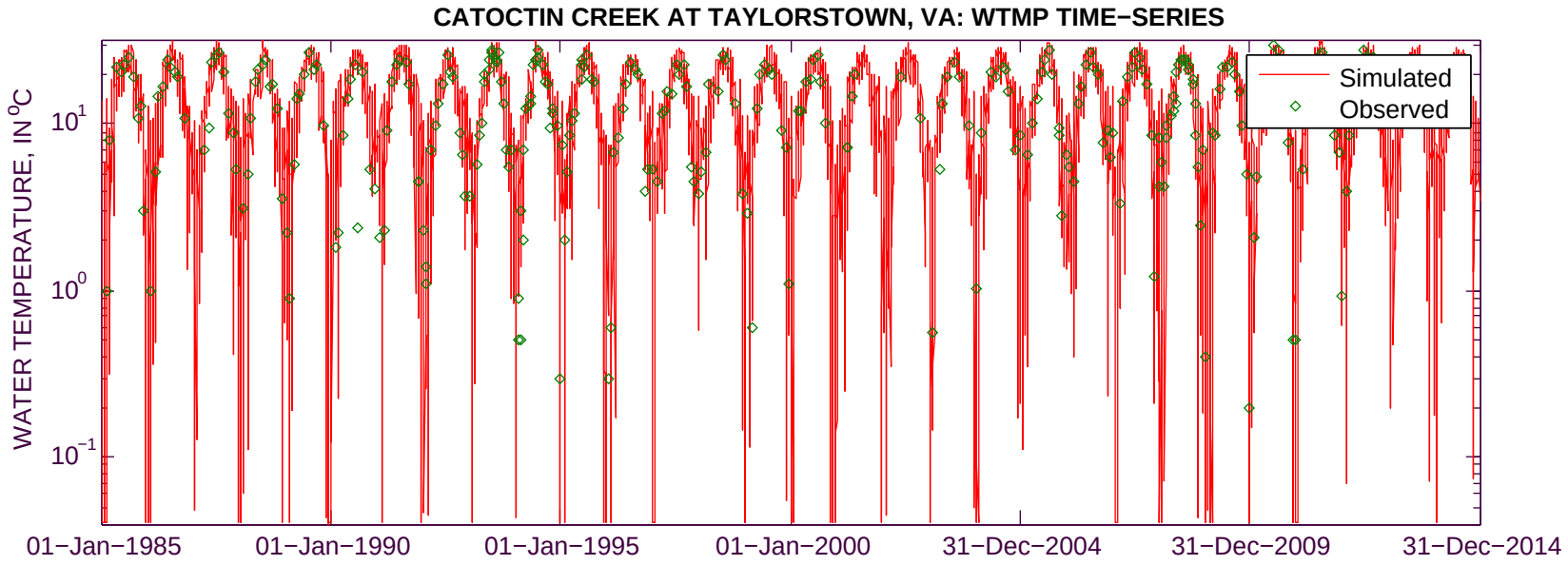
LOAD DATA
LOG10

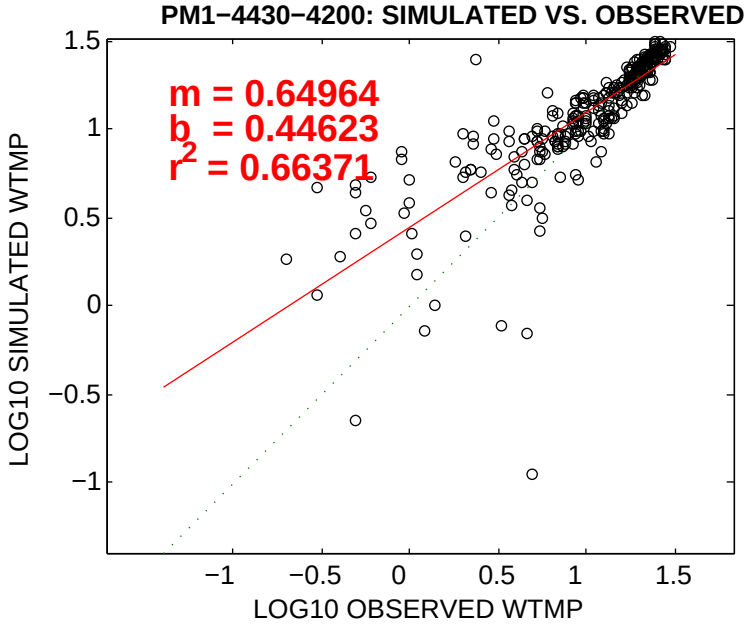


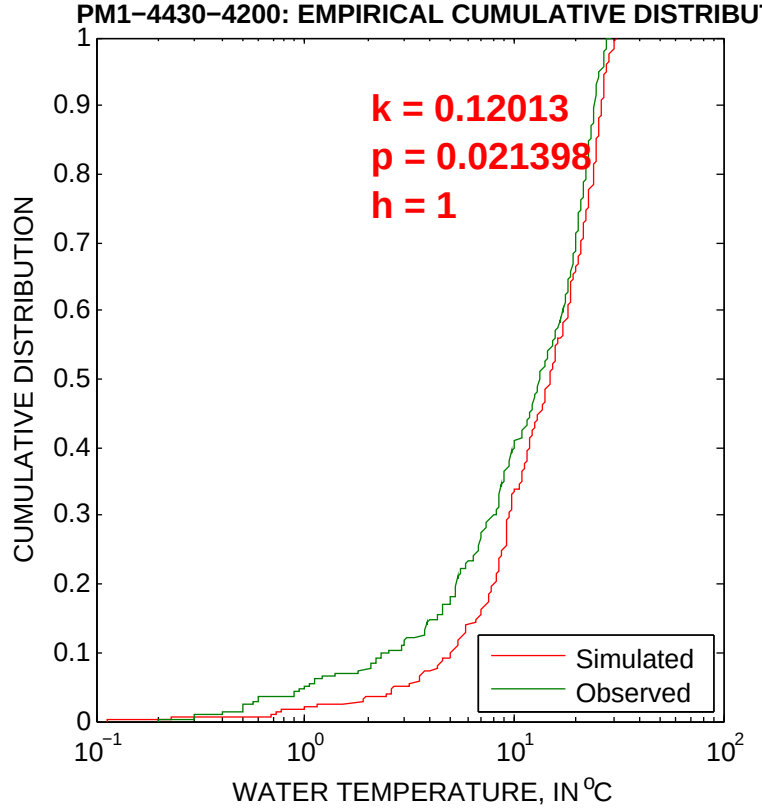












DATA SELECTION

scenario	file
P620171001WQ	WTMP.calib

plot: WTMP - water tempera...

Dates: 1/1/1985 – 12/31/201

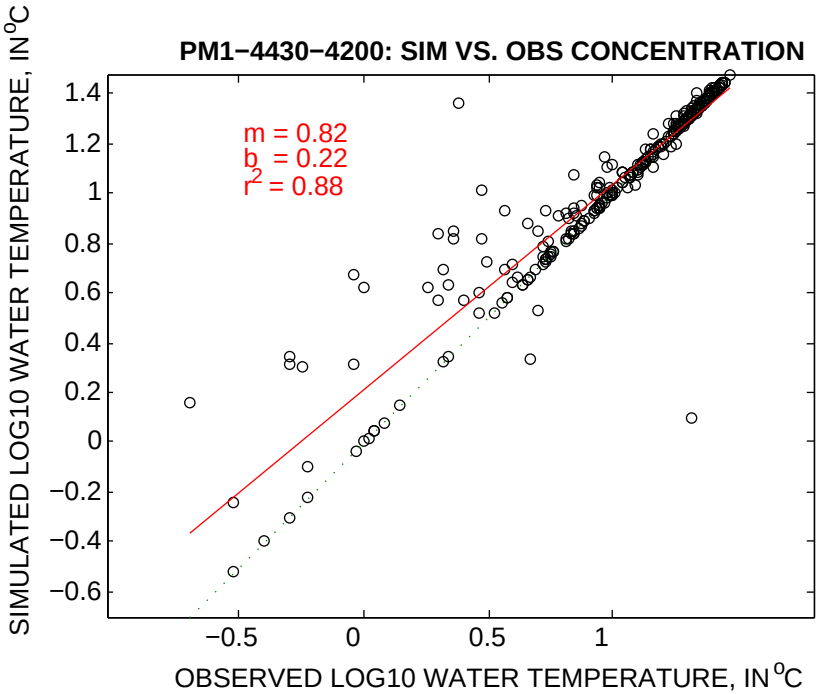
Drive	Directory	Observed
N/A	model	OBS20161101

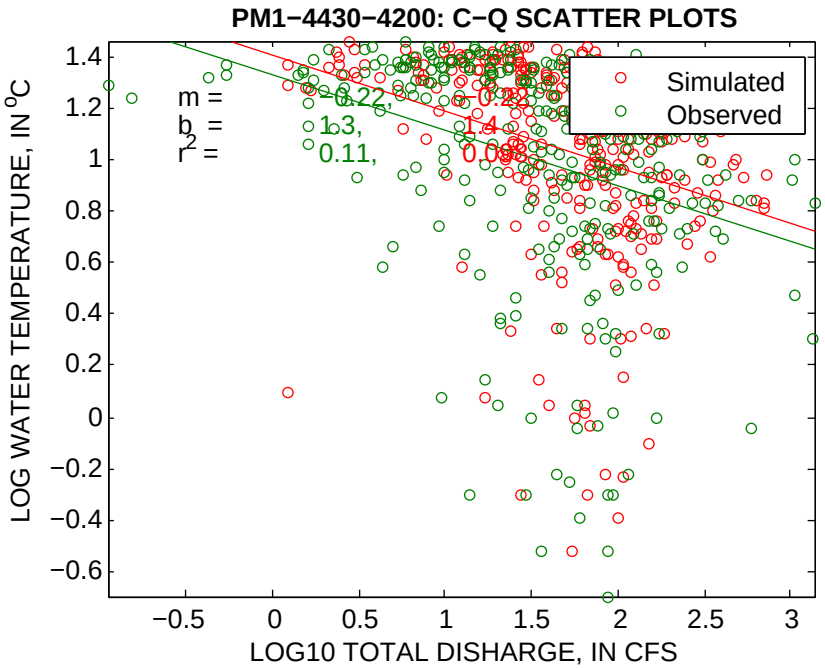
STATISTICS

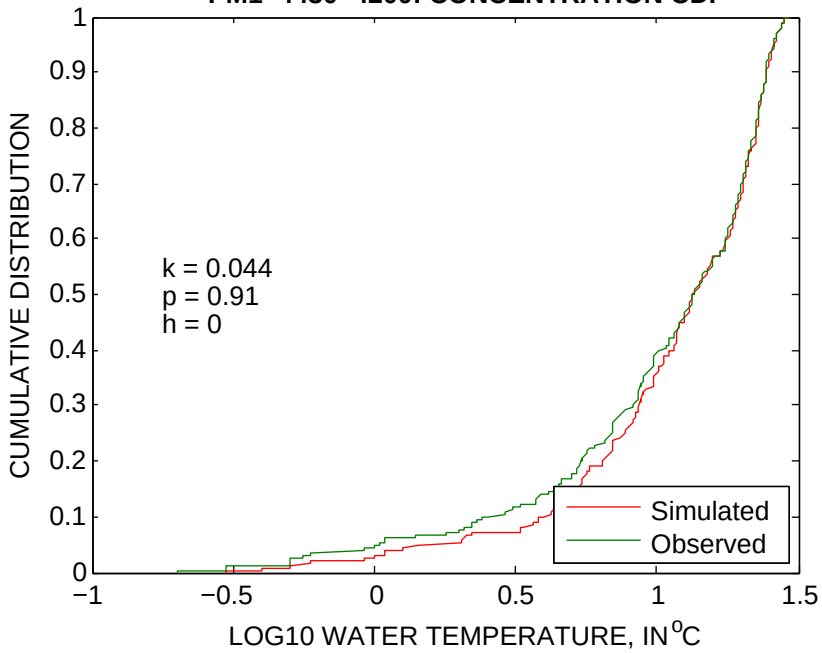
	n	observe	simulate
		308	308
min		0.2	0.1128
		-0.69897	-0.947691
mean		13.7032	15.3862
		0.998437	1.09486
media		13.355	15.0155
		1.12564	1.17654
max		29.4	31.359
		1.46835	1.49636
varian		65.9366	64.0267
		0.186833	0.118801
JB		0.001749	0.003544
		0.001	0.001
		ra	log
%		12.2815	9.65721
err.va		10.918	0.0722129
rel.std.err		0.165583	0.38651
mod.eff		0.834417	0.61349

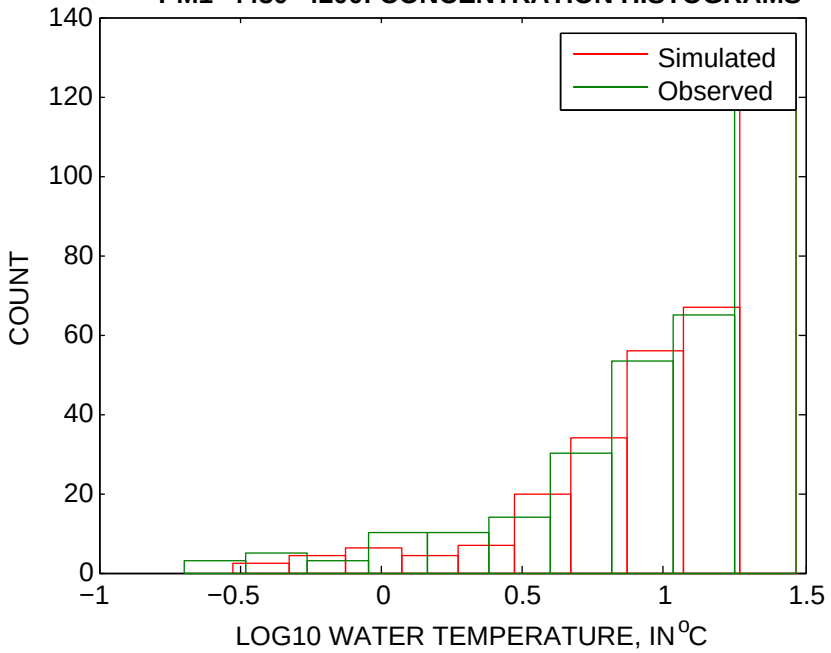
VERSION 2.1

ALL DATA
LOG10

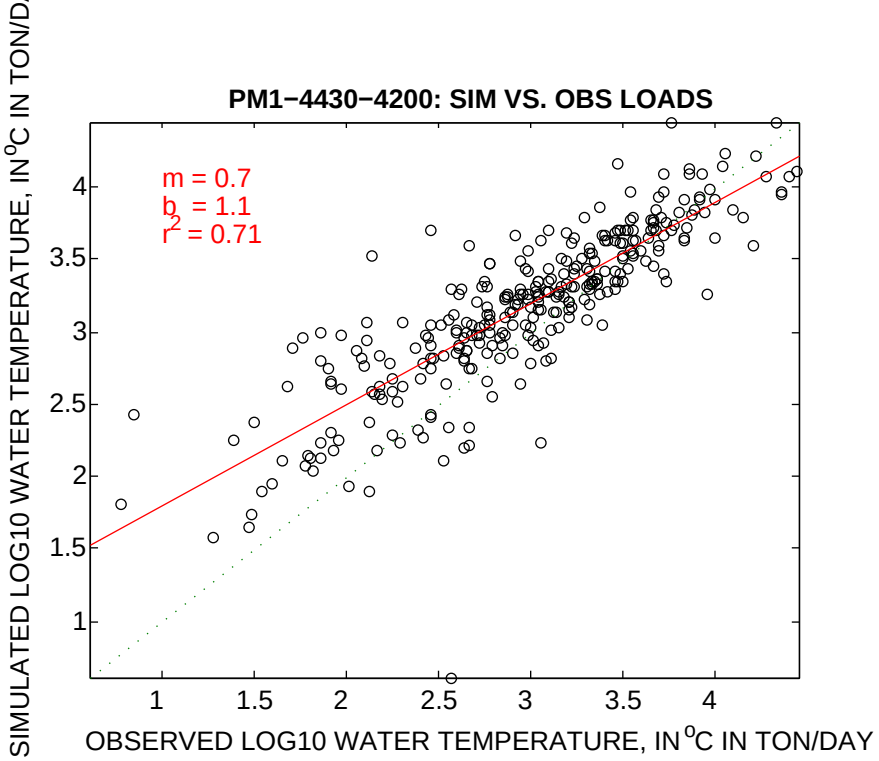


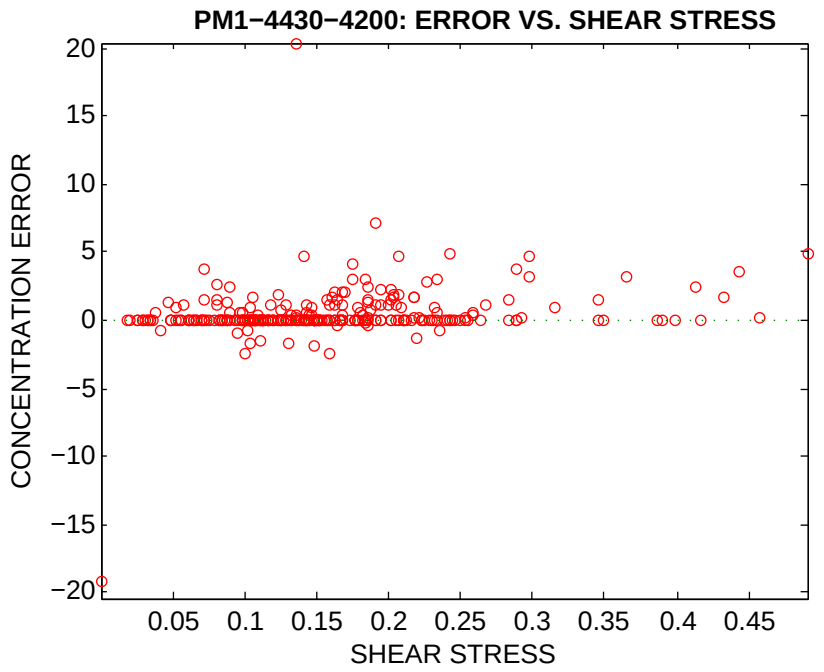


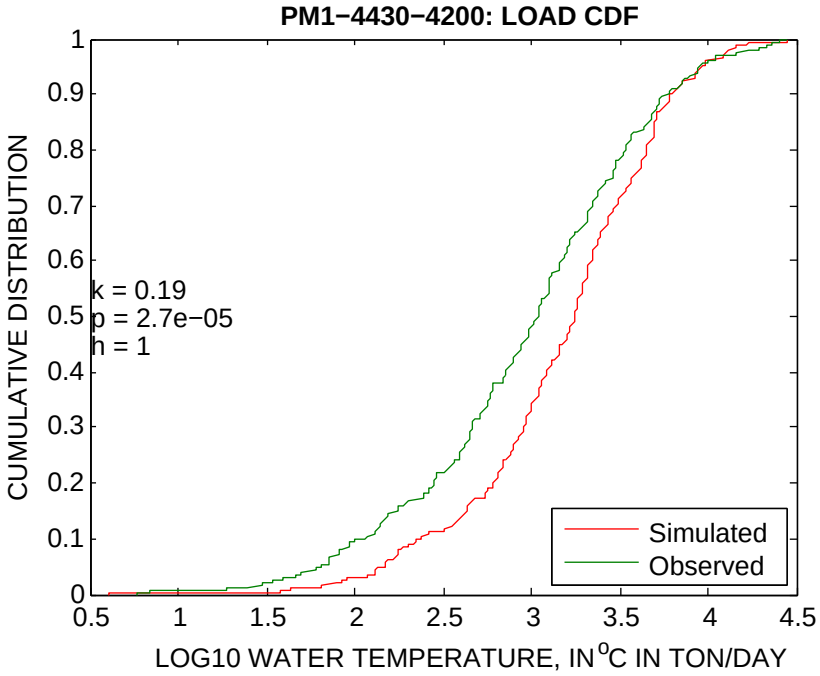


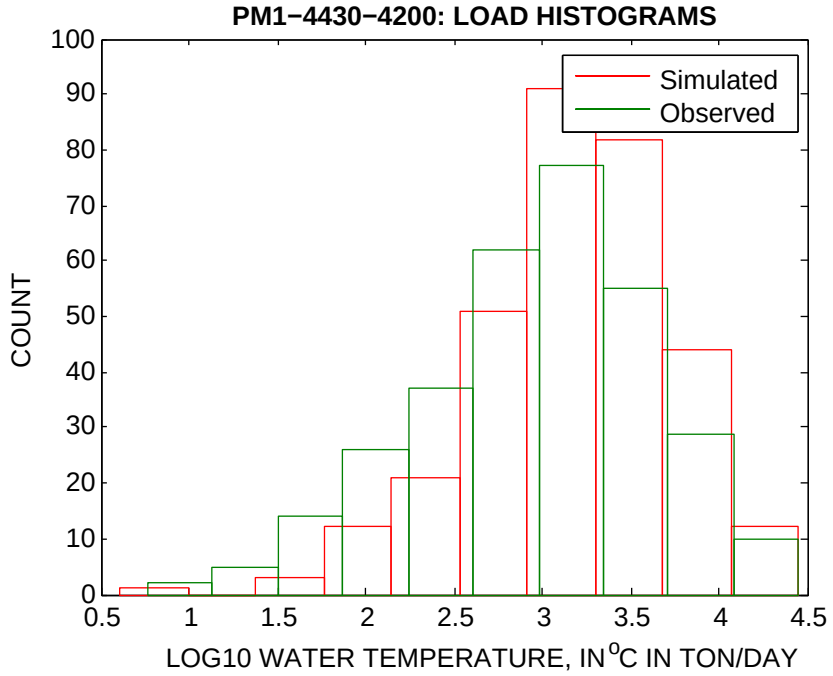


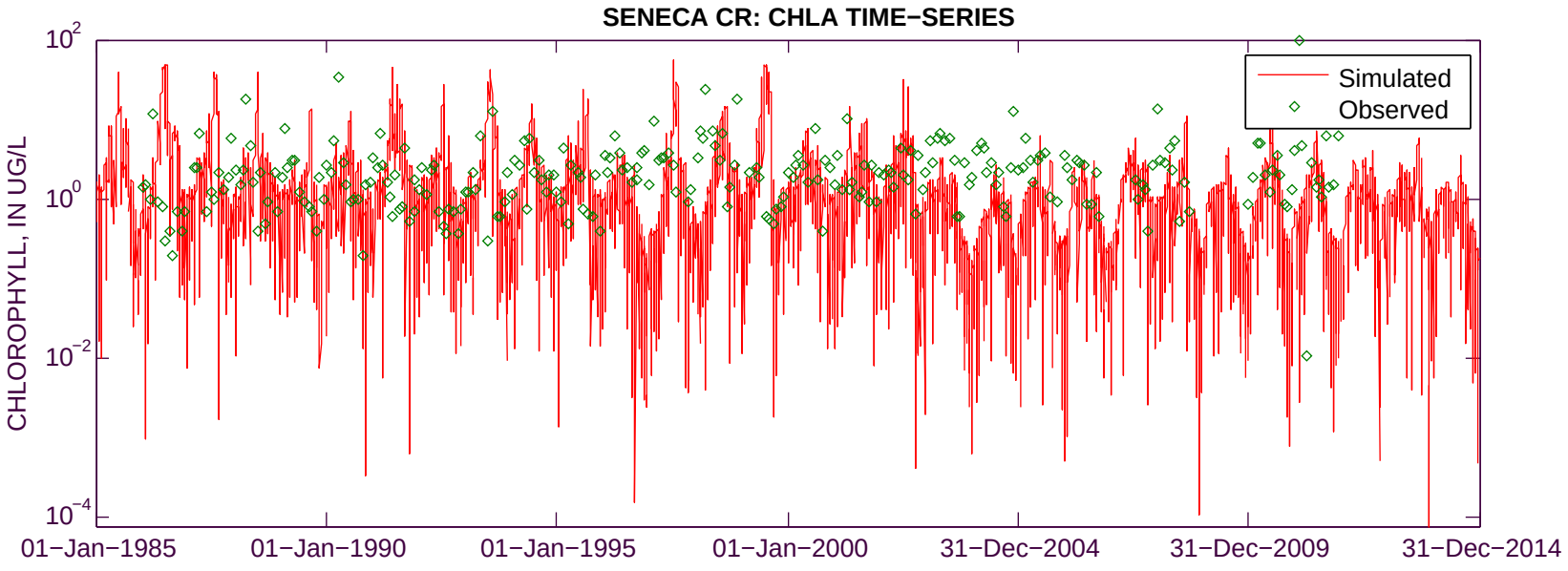
LOAD DATA
LOG10

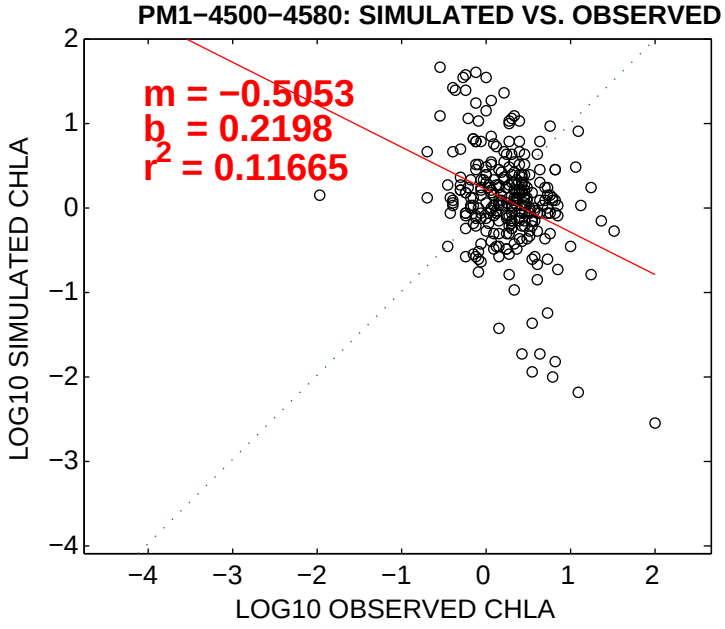


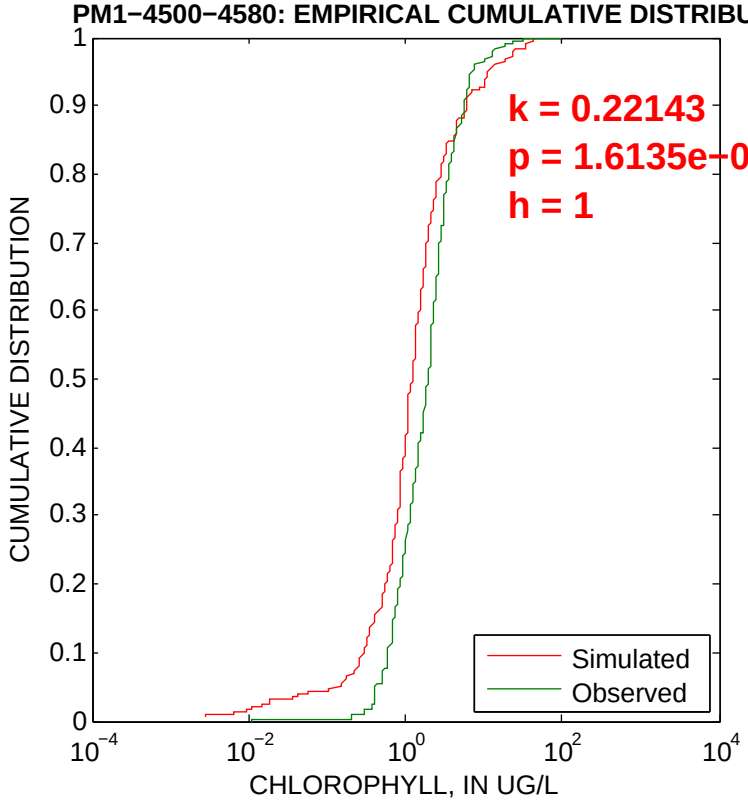












DATA SELECTION

scenario	file
P620171001WQ	CHLA.calib

plot: CHLA - chlorophyll A

Dates: 1/1/1985 – 12/31/201

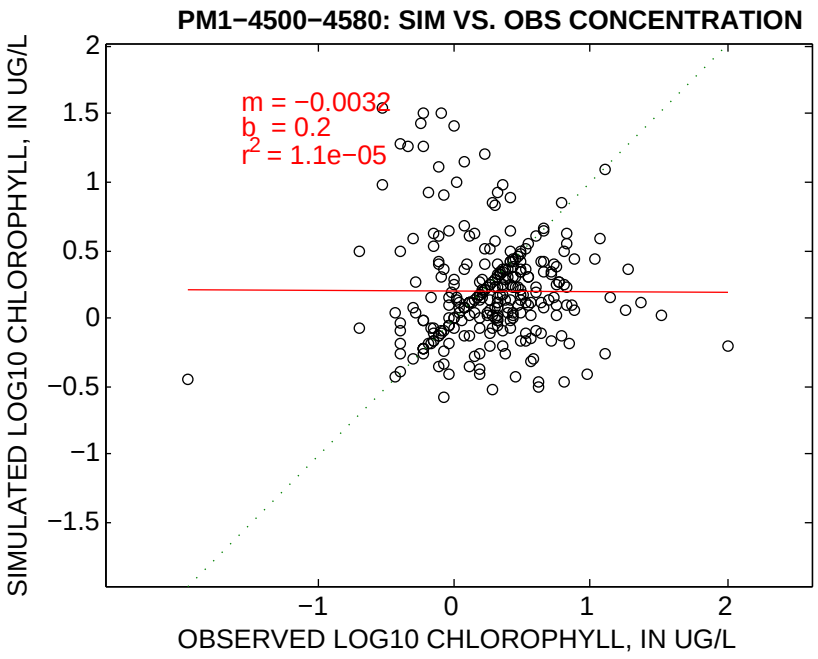
Drive	Directory	Observed
N/A	model	OBS20161101

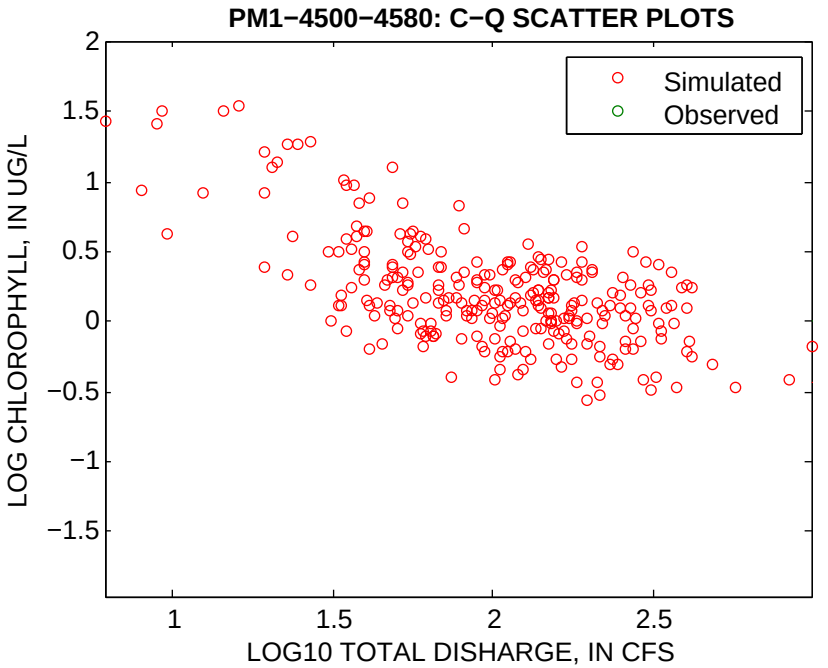
STATISTICS

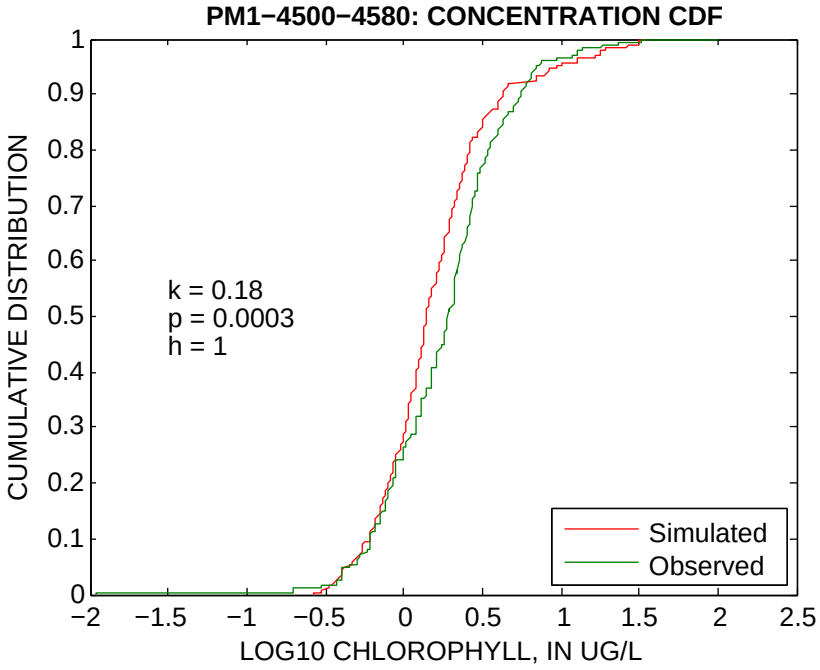
	n	280	278
		observe	simulate
min		0.011	0
		-1.95861	-2.56265
mean		3.08924	2.99867
		0.261923	0.0874474
media		1.94	1.2279
		0.287802	0.0902746
max		101.458	46.2
		2.00629	1.66464
varian		45.9084	38.0562
		0.164394	0.359821
JB		0.001	0.001
		0.001	0.001
		ra	log
%		-2.93157	-66.6133
err.va		92.1811	0.720901
rel.std.err		2.00794	4.38521
mod.eff		-1.00794	-3.38521

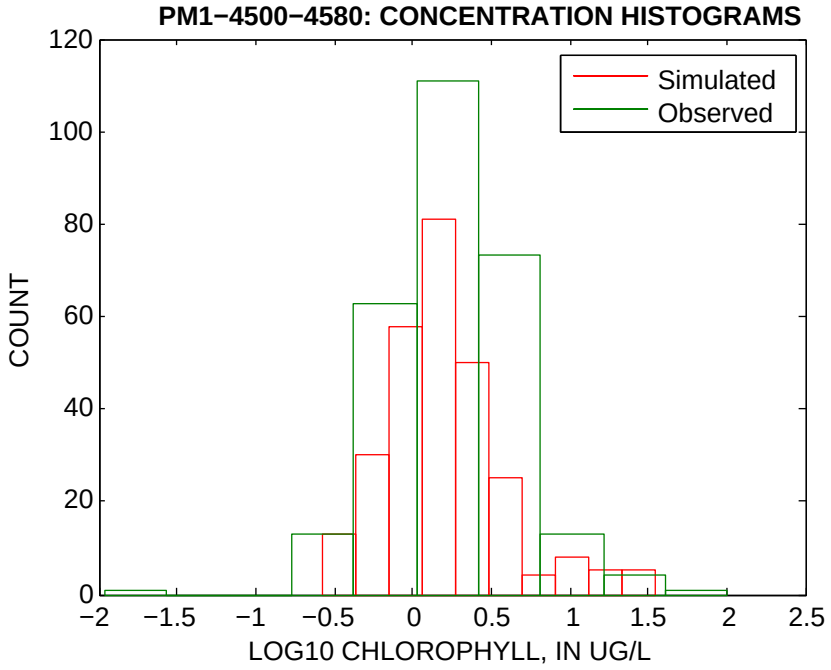
VERSION 2.1

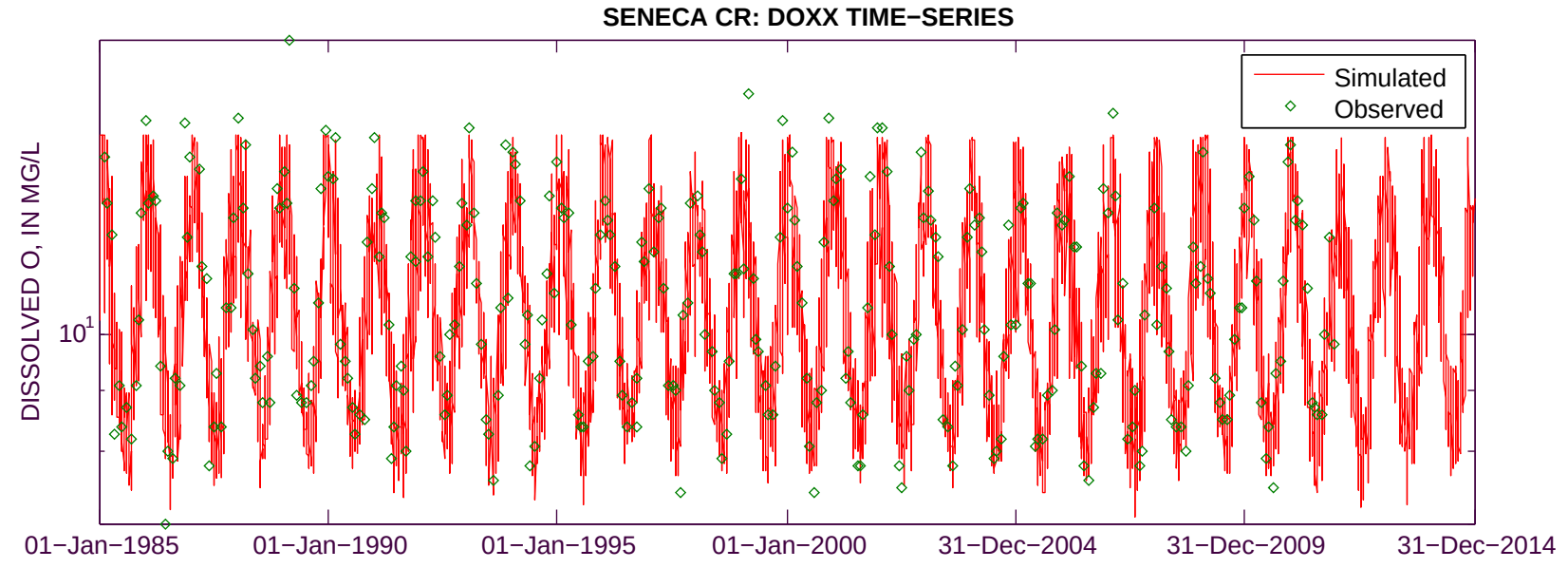
ALL DATA
LOG10

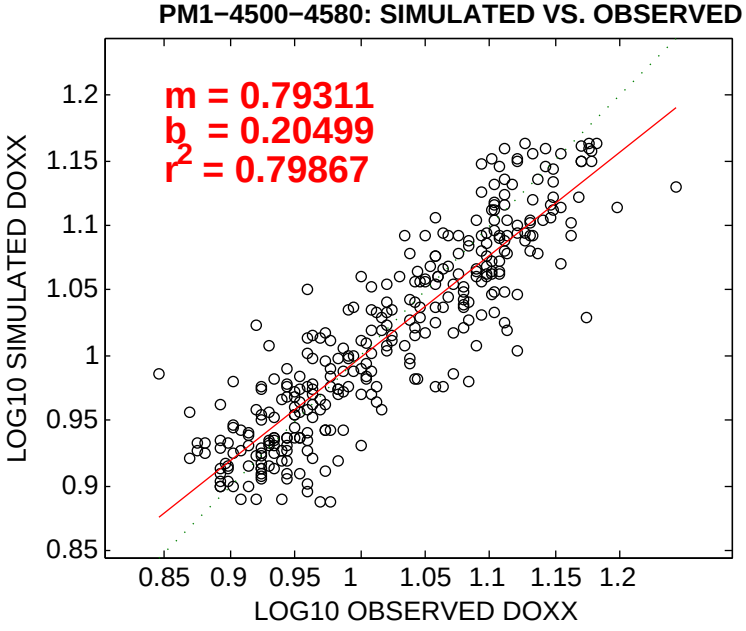


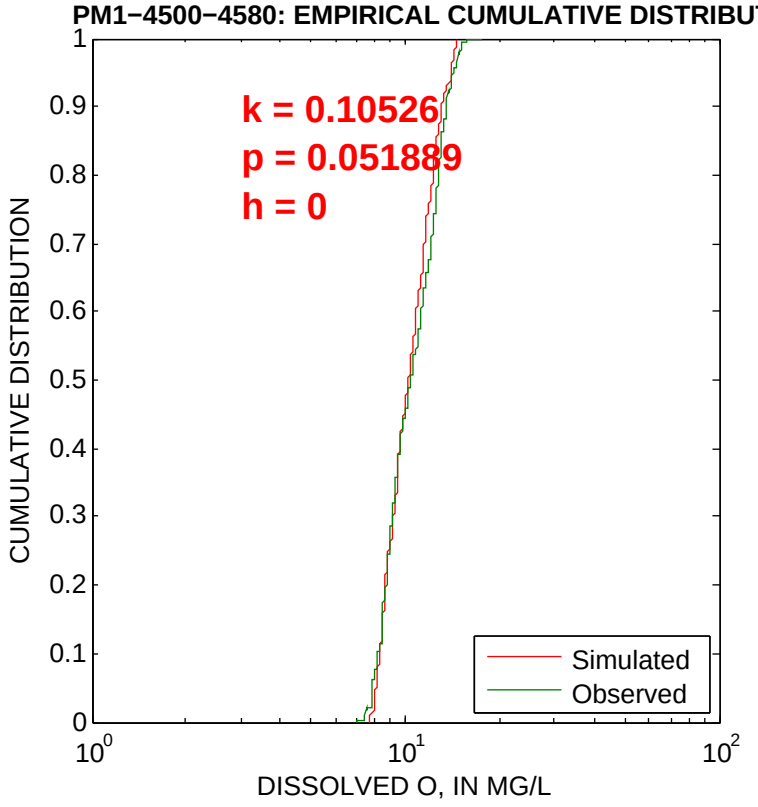












DATA SELECTION

scenario	file
P620171001WQ	DOXX.calib

plot: DOXX - dissolved oxygen

Dates: 1/1/1985 – 12/31/201

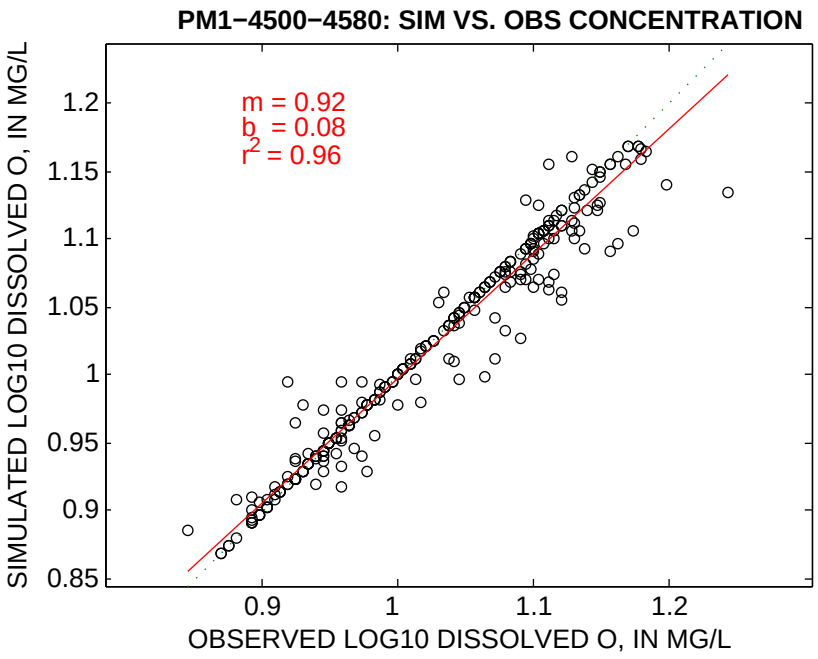
Drive	Directory	Observed
N/A	model	OBS20161101

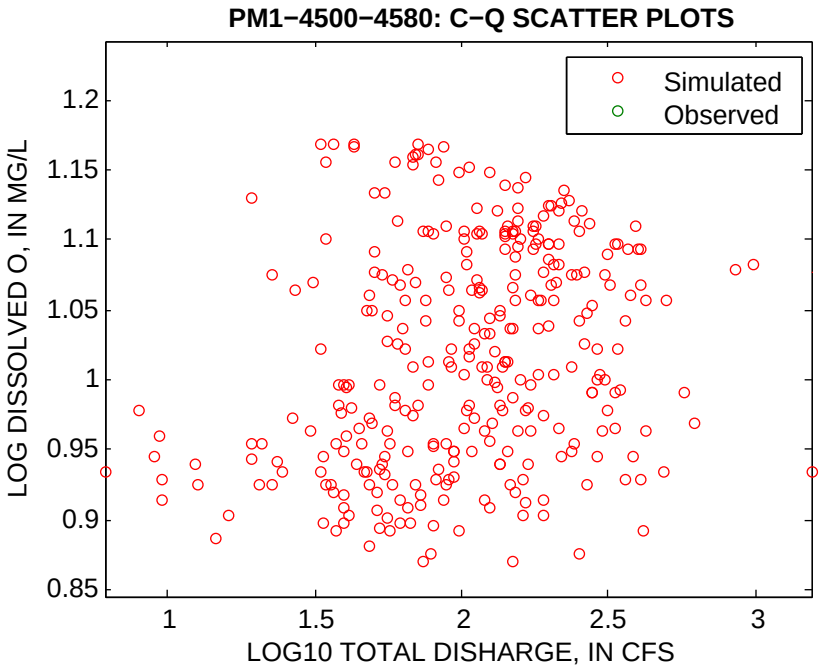
STATISTICS

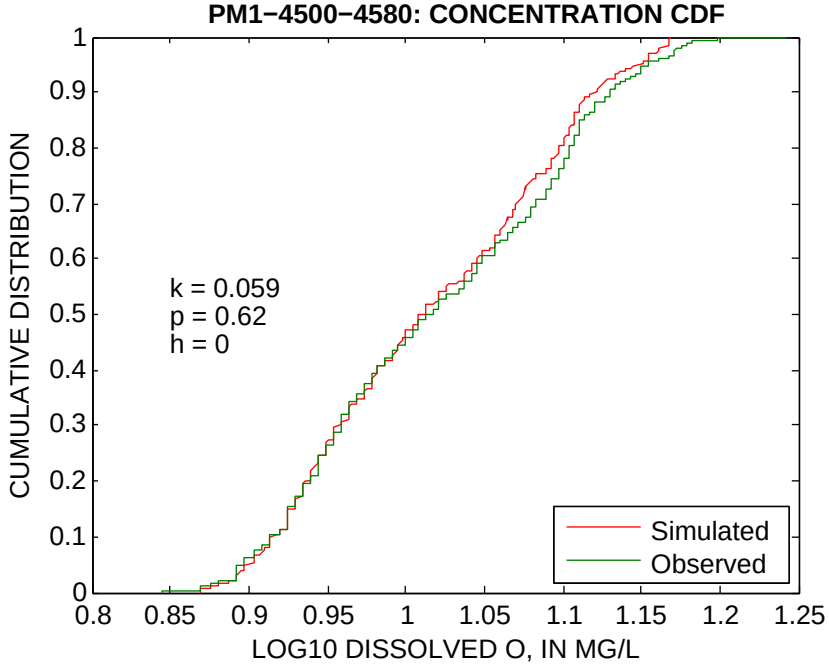
	n	observe	simulate
		323	323
min		7	7.7241
		0.845098	0.887848
mean		10.6946	10.5004
		1.02103	1.01477
media		10.4	10.258
		1.01703	1.01106
max		17.5	14.566
		1.24304	1.16334
varian		4.36429	3.34735
		0.00705649	0.00555761
JB		0.003151	0.002037
		0.003419	0.003234
		ra	log
%		-1.81513	-0.612232
err.va		0.926709	0.00146016
rel.std.err		0.212339	0.206925
mod.eff		0.787661	0.793075

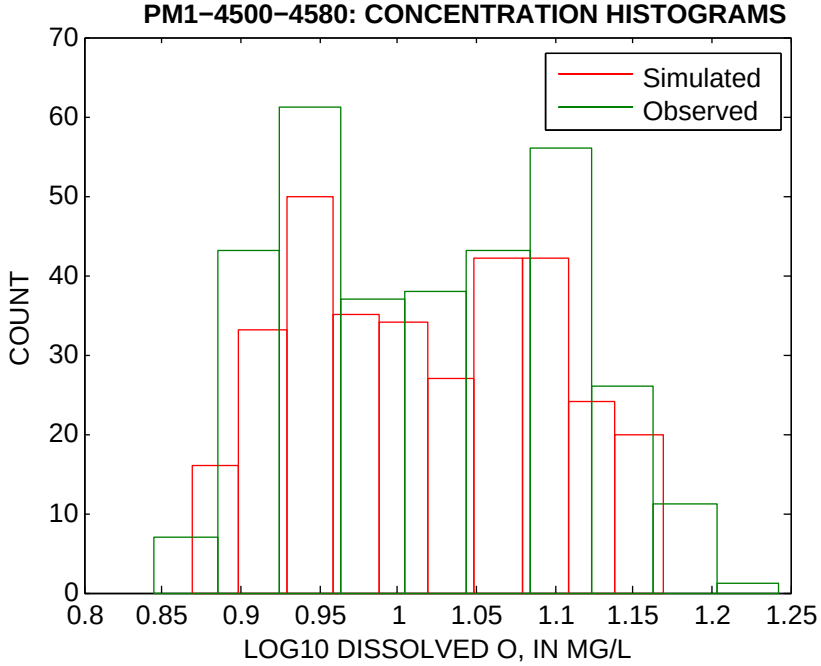
VERSION 2.1

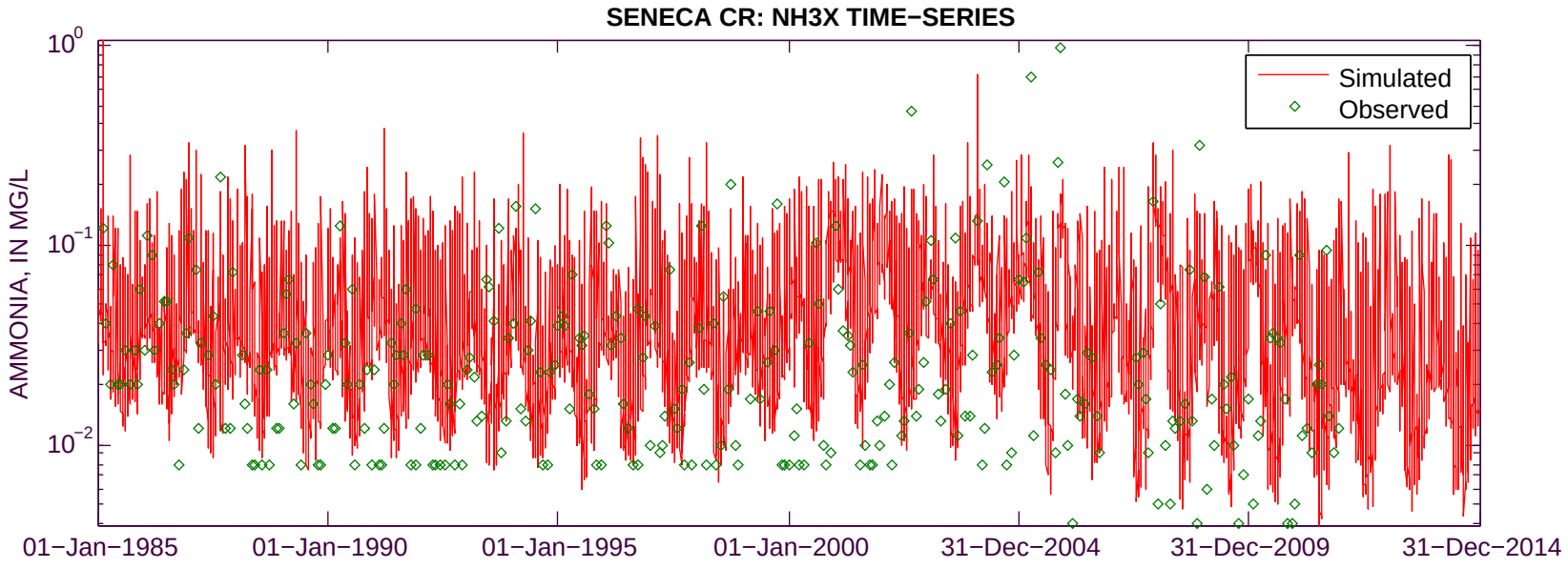
ALL DATA
LOG10

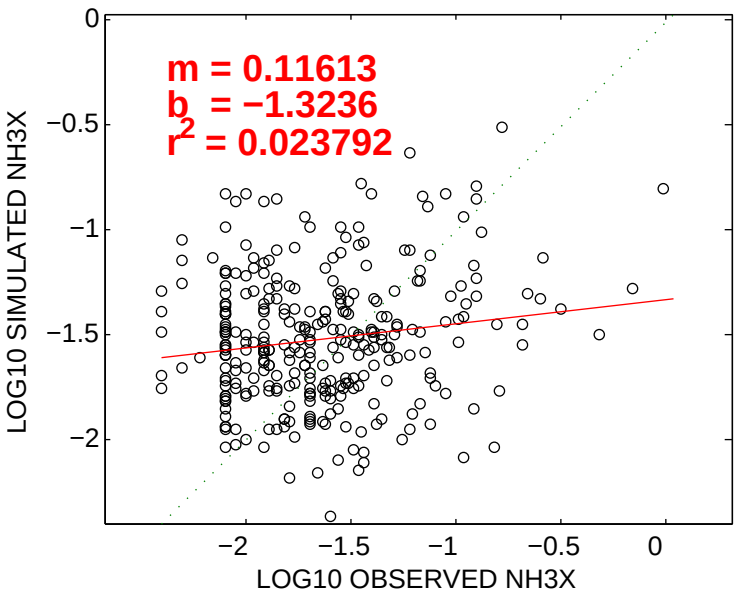


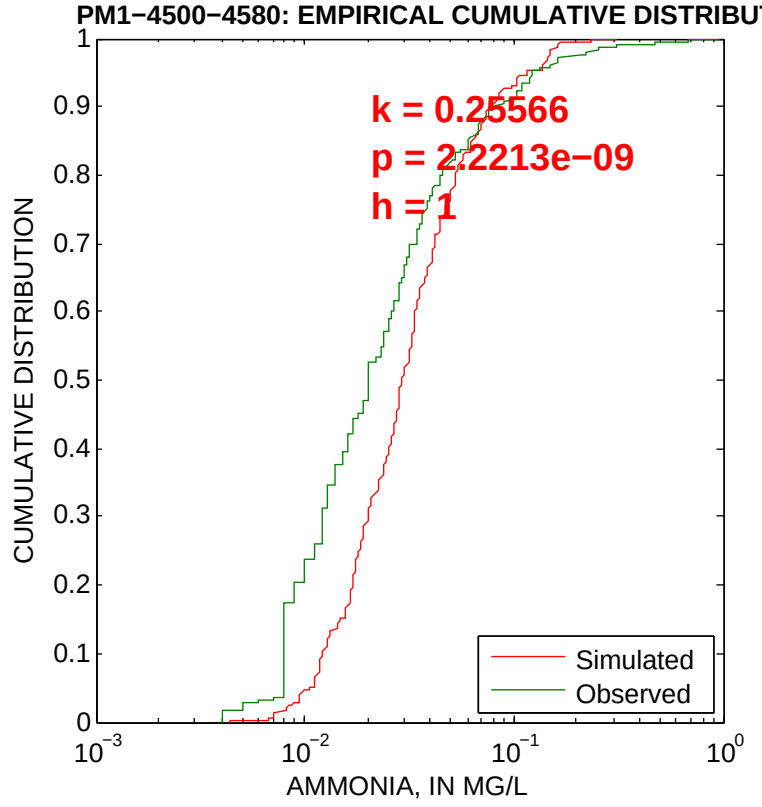












DATA SELECTION

scenario	file
P620171001WQ	NH3X.calib

plot: NH3X - ammonia

Dates 1/1/1985 12/31/201

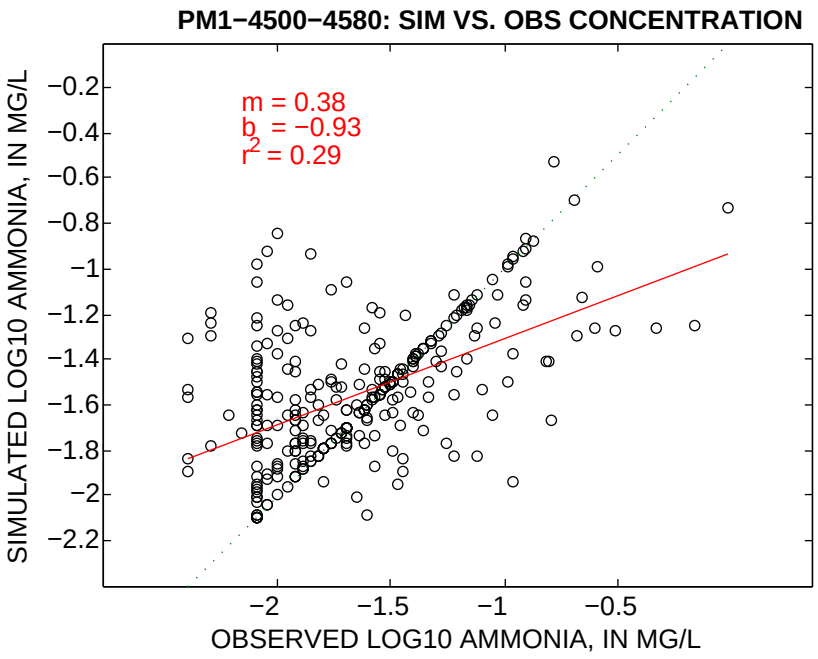
Drive	Directory	Observed
N/A	model	OBS20161101

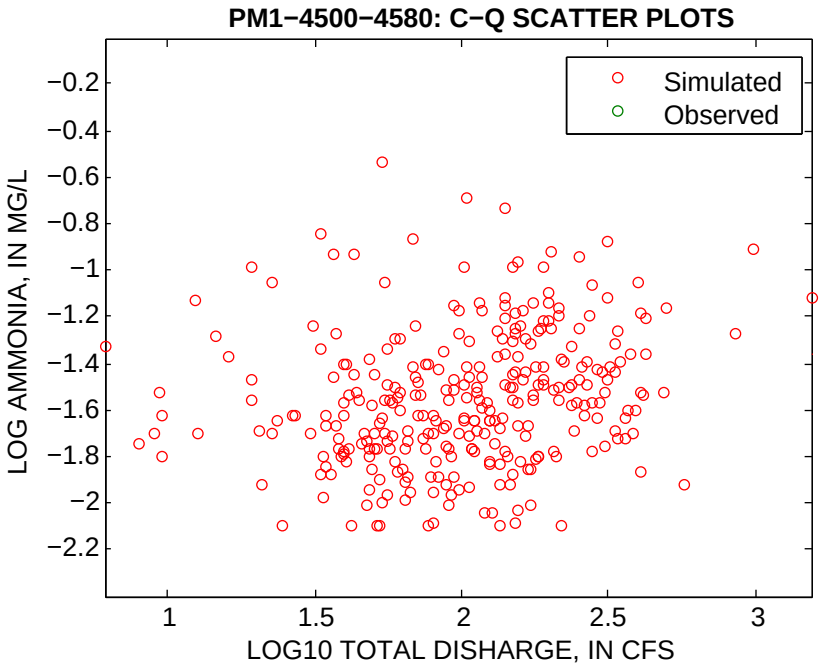
STATISTICS

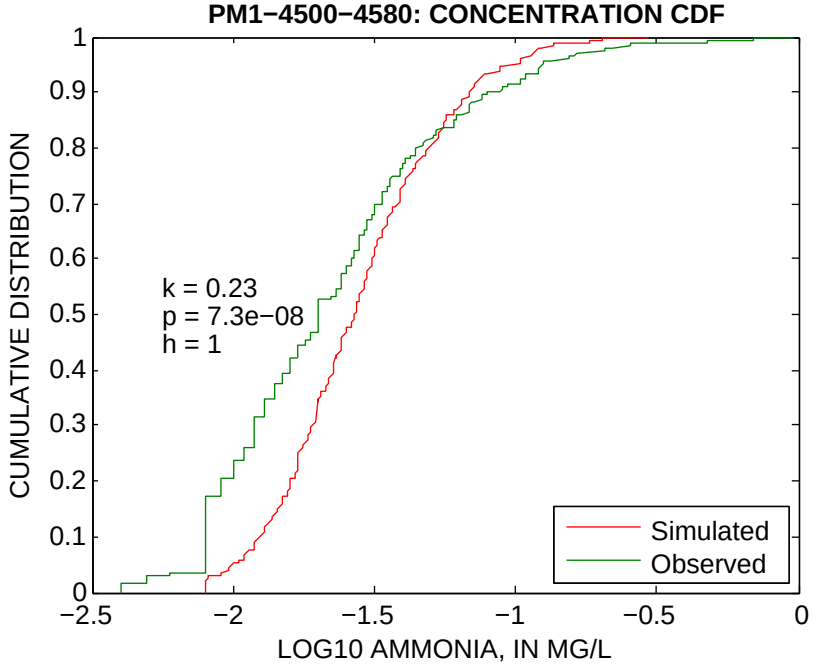
	n	309	309
		observe	simulate
min		0.004	0.0043355
		-2.39794	-2.36296
mean		0.041	0.0402567
		-1.64386	-1.51452
media		0.02	0.029291
		-1.69897	-1.53327
max		0.97	0.30781
		-0.0132283	-0.511717
varian		0.00659721	0.00132889
		0.169547	0.0961056
JB		0.001	0.001
		0.001	0.035740
		ra	log
%		-1.81297	-7.8683
err.va		0.00655777	0.243058
rel.std.err		0.994021	1.43357
mod.eff		0.00597917	-0.433572

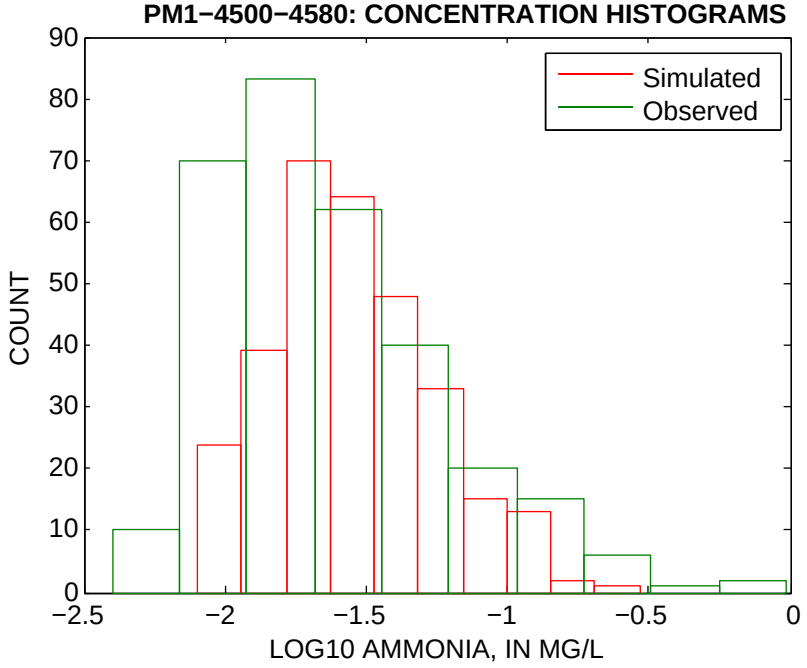
VERSION 2.1

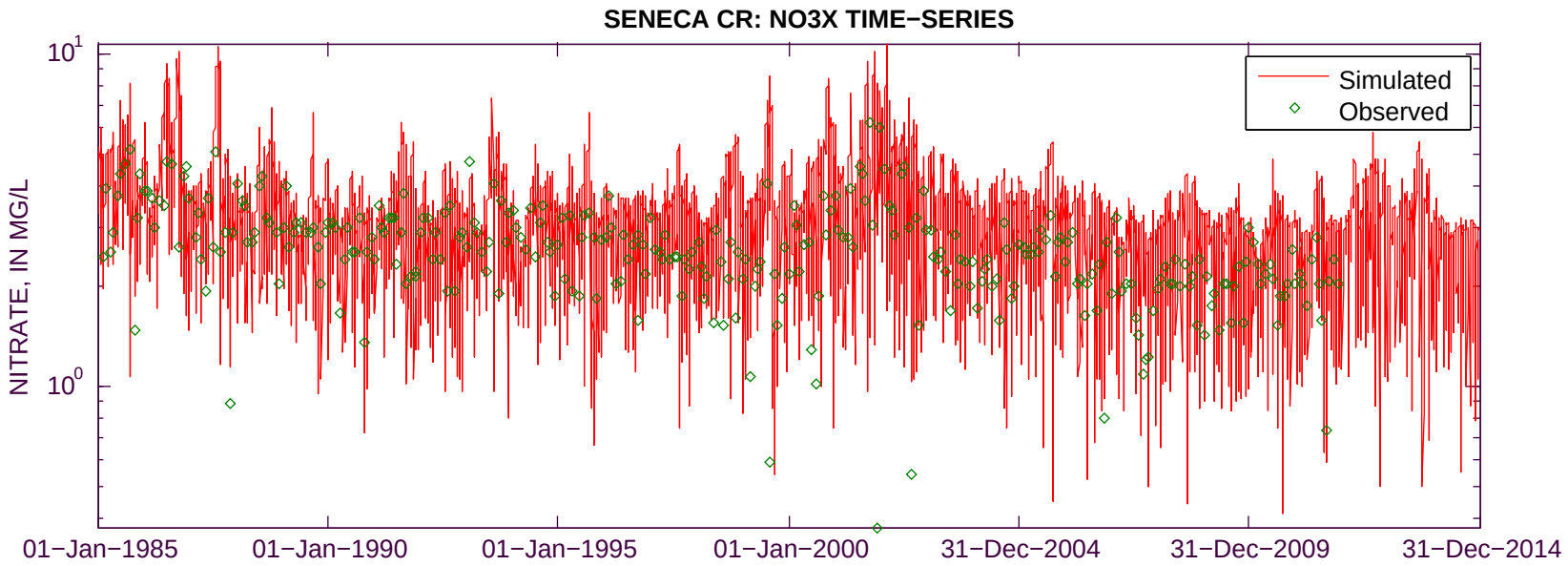
ALL DATA
LOG10

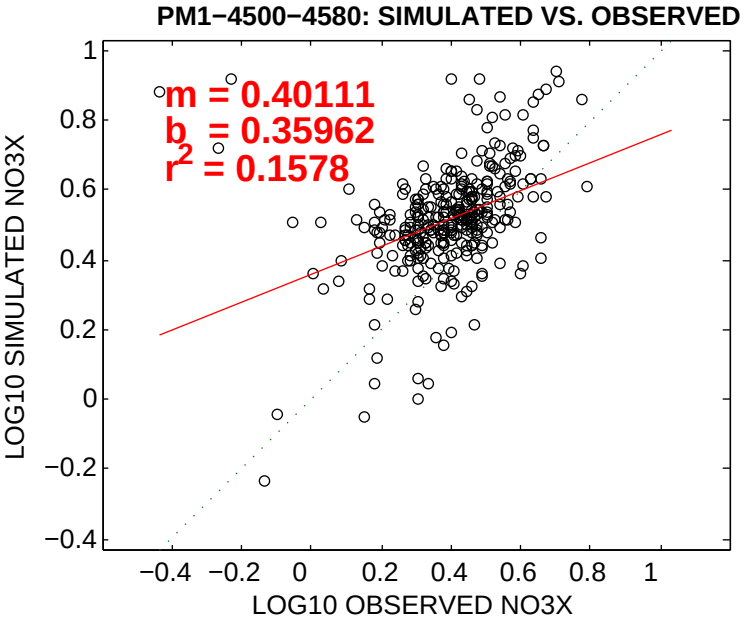


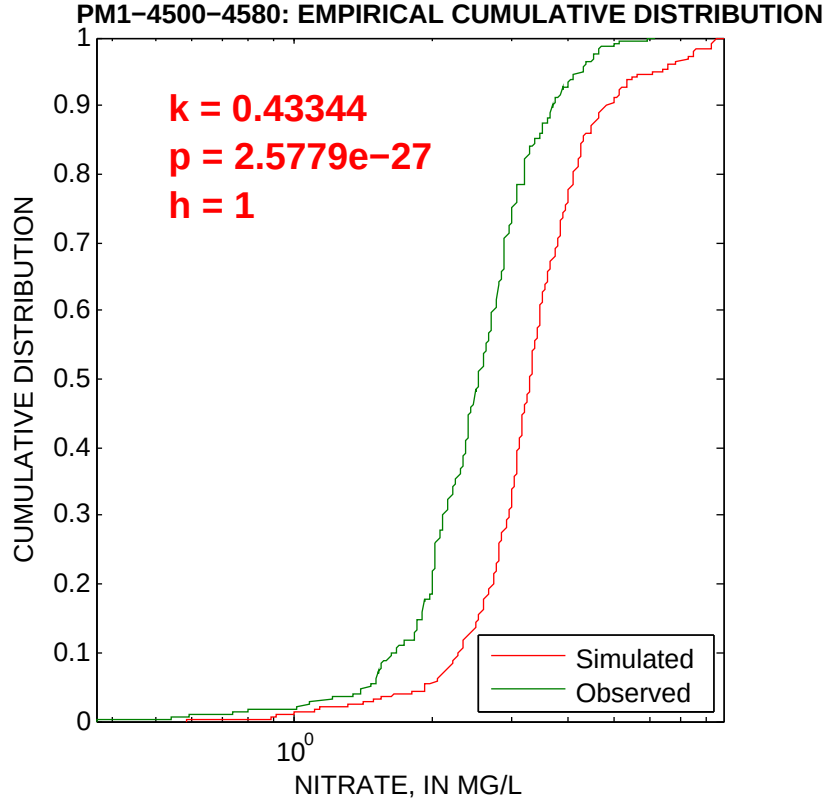












DATA SELECTION

scenario: P620171001WQ | file: NO3X.calib

plot: NO3X - nitrate

Dates: 1/1/1985 – 12/31/201

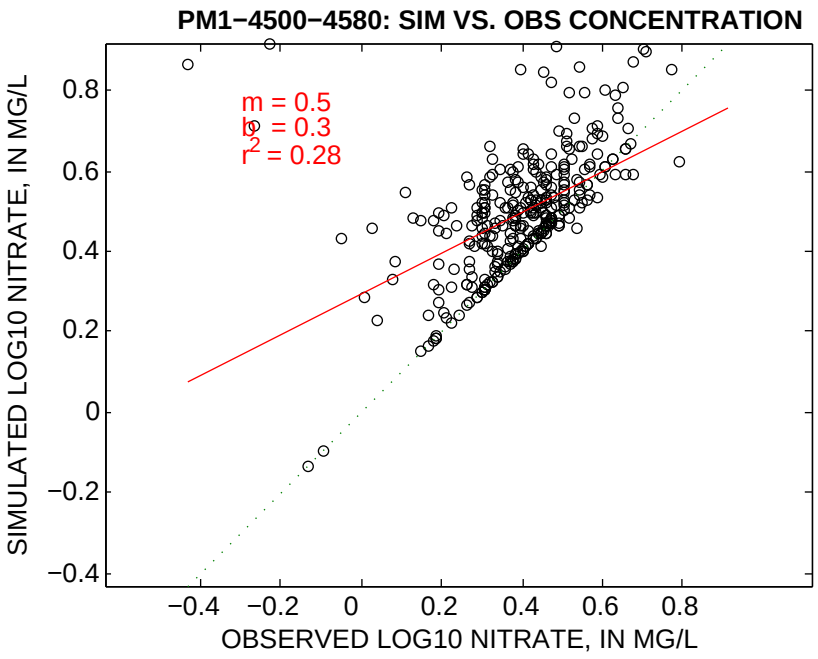
Drive | Directory: N/A | model | Observed: OBS20161101

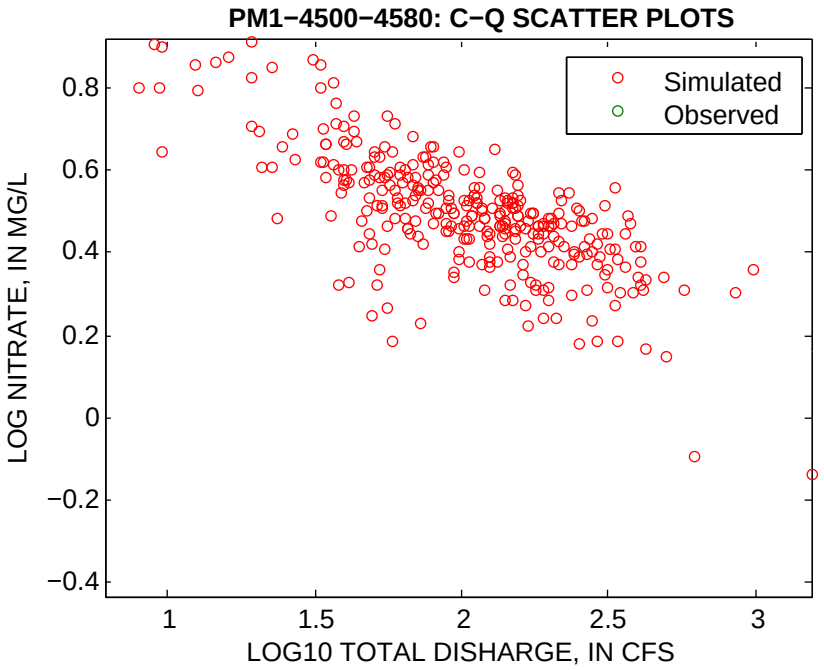
STATISTICS

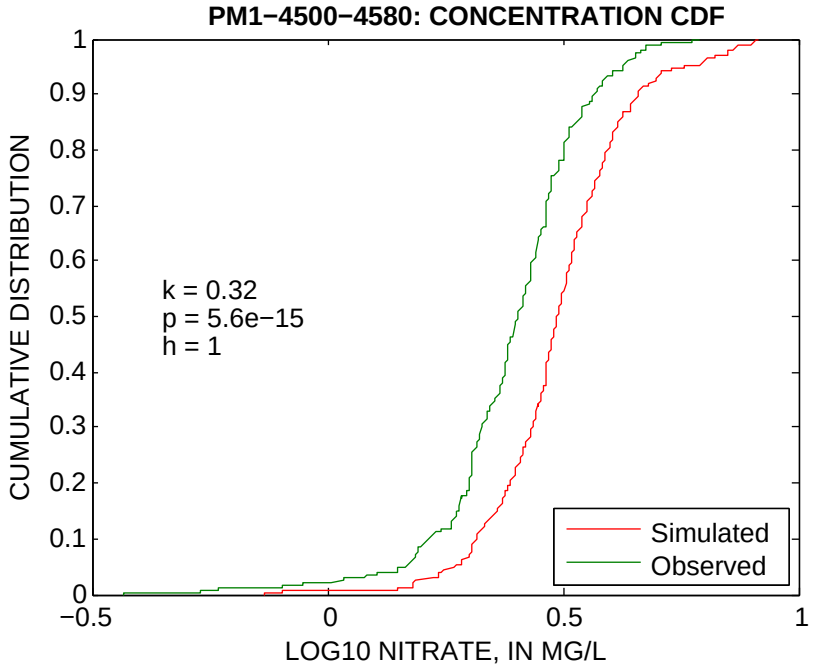
	observe	simulate
n	323	323
min	0.37	0.58686
	-0.431798	-0.231465
mean	2.6231	3.50181
	0.394499	0.517856
media	2.536	3.2985
	0.404149	0.518316
max	6.19	8.6729
	0.791691	0.938164
varian	0.714853	1.6023
	0.0235246	0.0239854
JB	0.001	0.001
	0.001	0.001
	ra	log
%	33.4988	31.2692
err.va	2.10309	0.0439021
rel.std.err	2.94199	1.86622
mod.eff	-1.94199	-0.866221

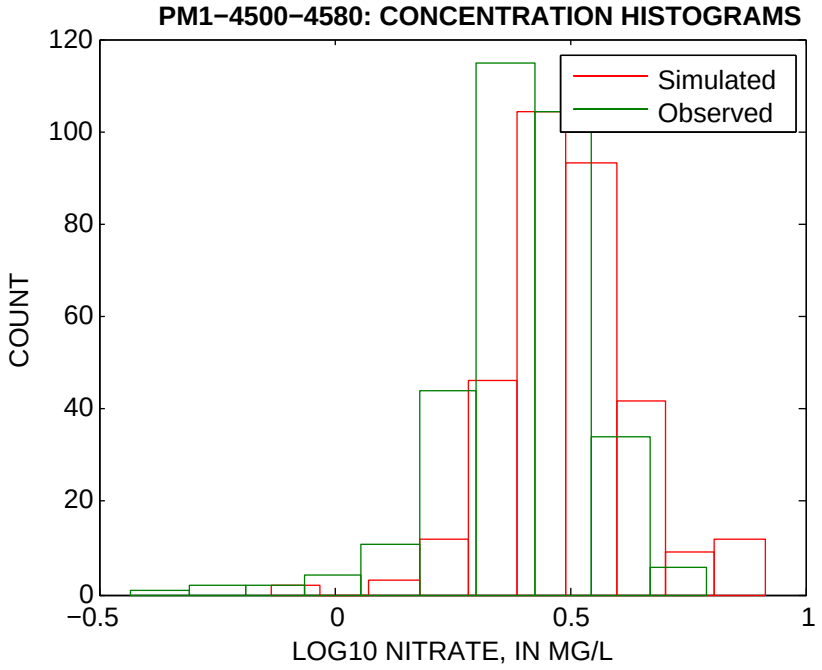
VERSION 2.1

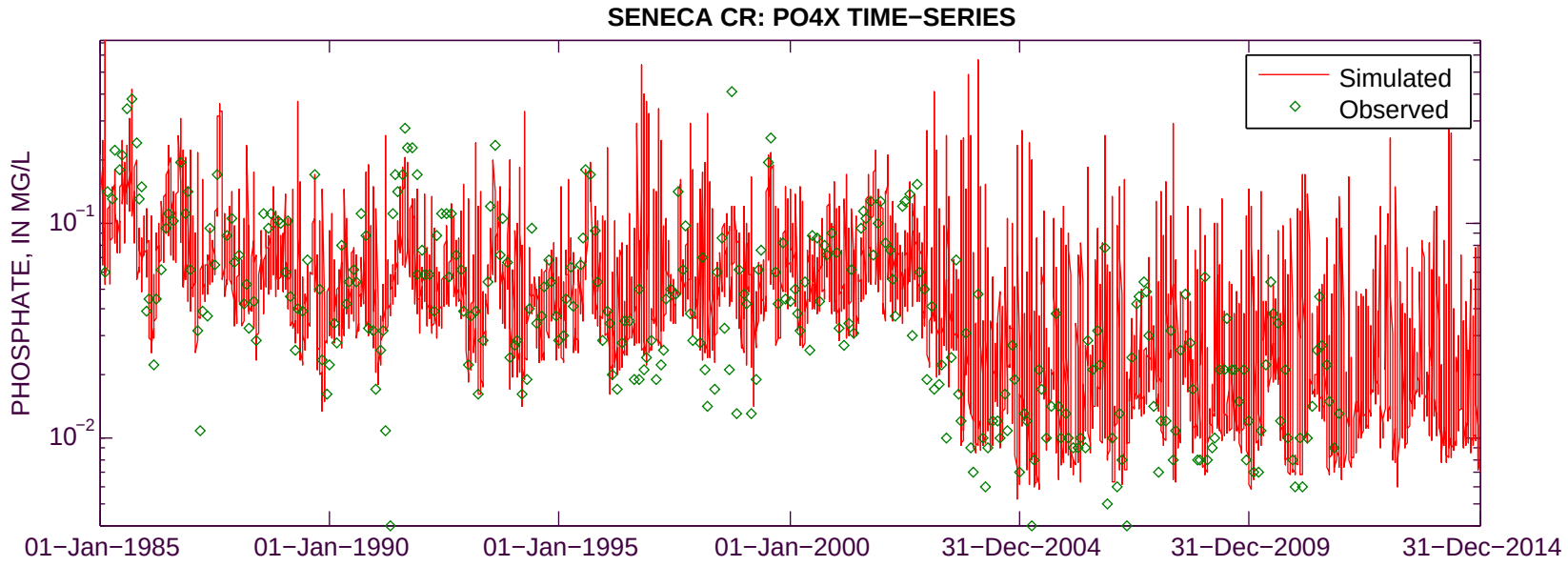
ALL DATA
LOG10

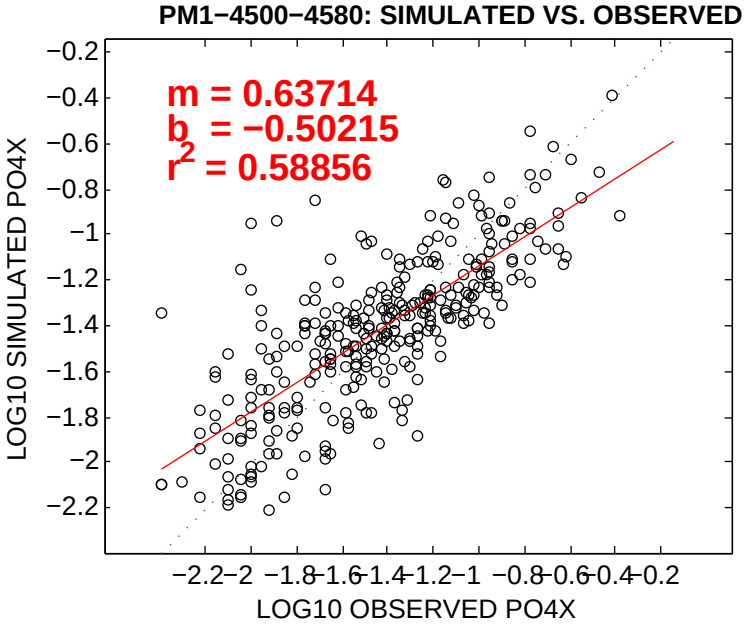


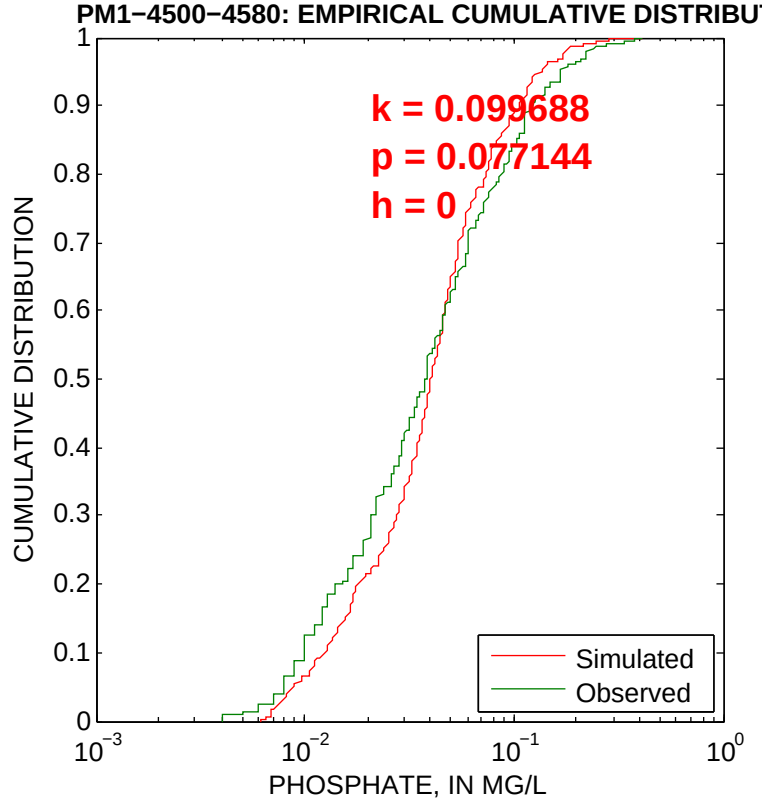












DATA SELECTION

scenario	file
P620171001WQ	PO4X.calib

plot: PO4X - phosphate

Dates: 1/1/1985 – 12/31/201

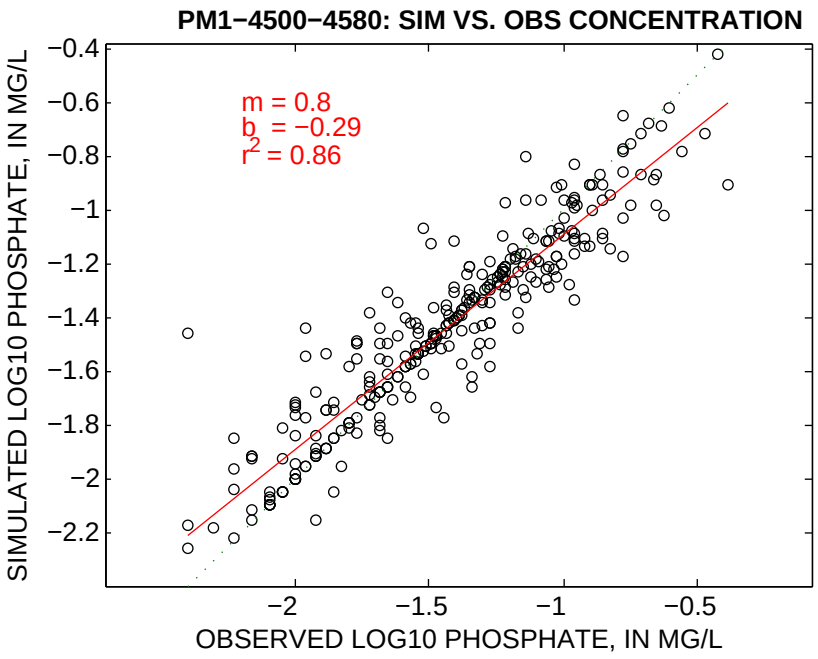
Drive	Directory	Observed
N/A	model	OBS20161101

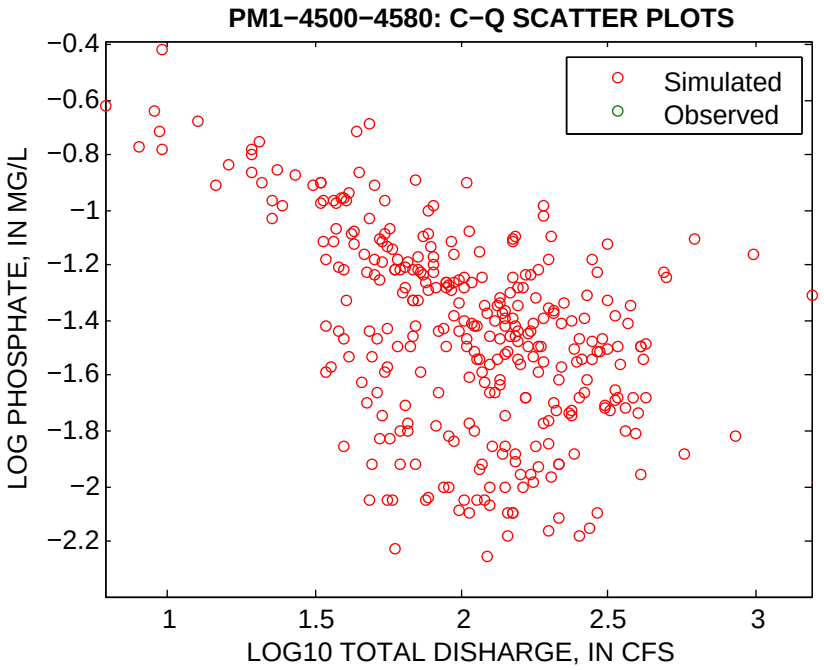
STATISTICS

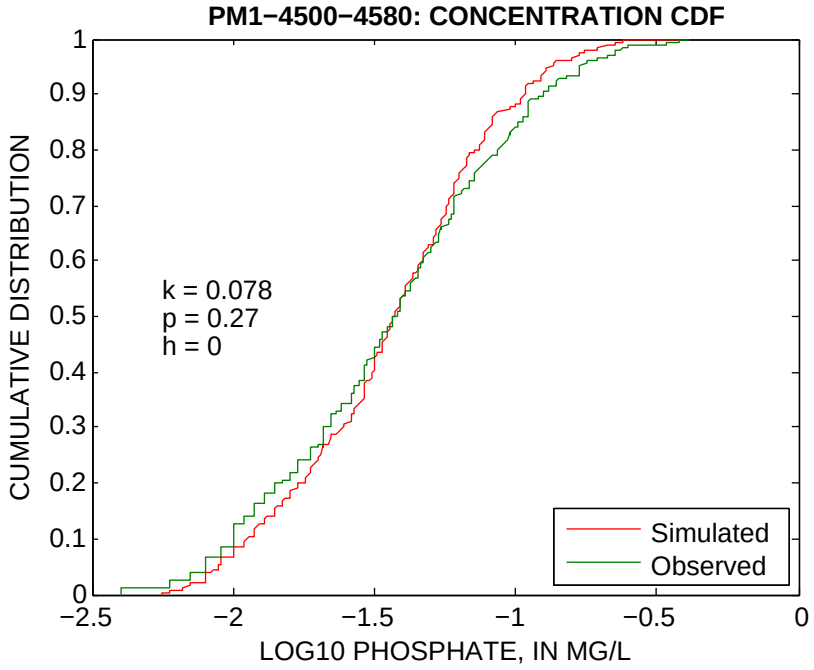
	n	321	321
		observe	simulate
min		0.004	0.0061158
		-2.39794	-2.21355
mean		0.056405	0.0515821
		-1.43838	-1.4186
media		0.038	0.040439
		-1.42022	-1.3932
max		0.412	0.41197
		-0.385103	-0.385134
varian		0.00347418	0.00207432
		0.171069	0.117992
JB		0.001	0.001
		0.104577	0.5
		ra	log
%		-8.55041	-1.37533
err.va		0.00161953	0.0714635
rel.std.err		0.466162	0.417747
mod.eff		0.533838	0.582253

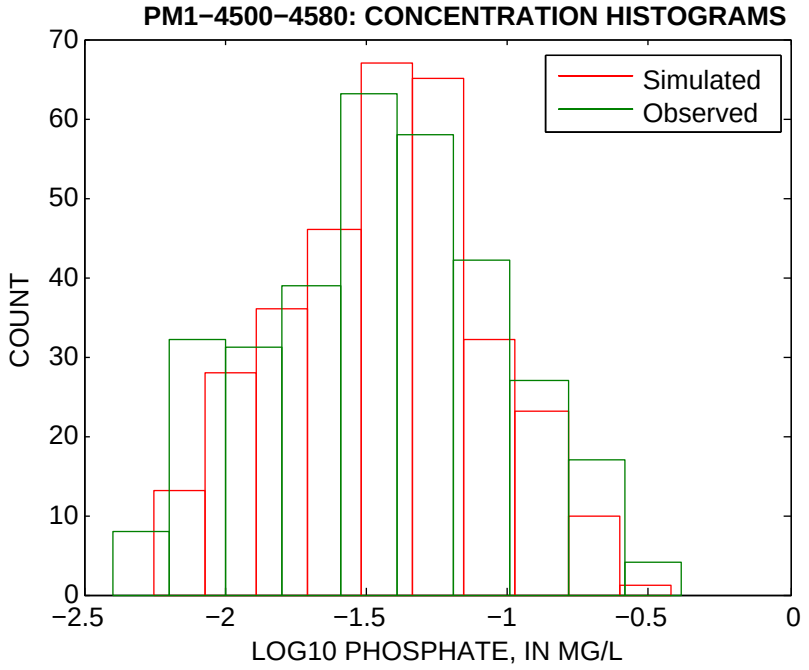
VERSION 2.1

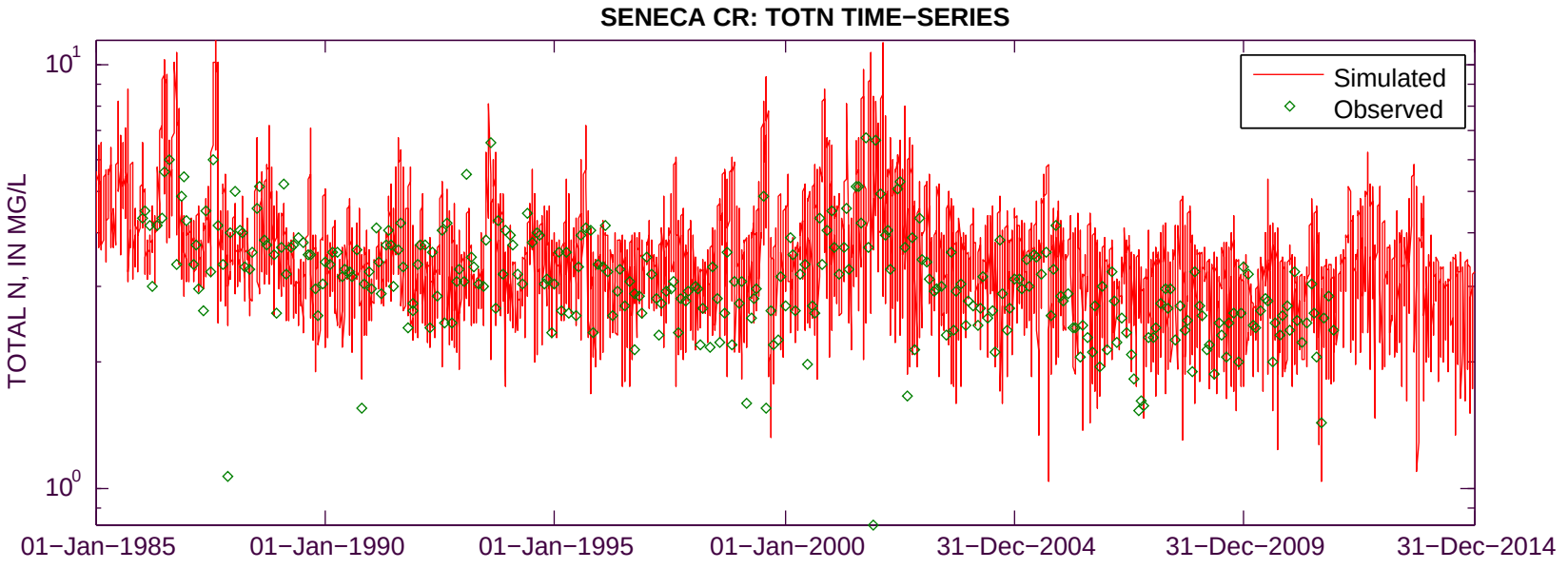
ALL DATA
LOG10

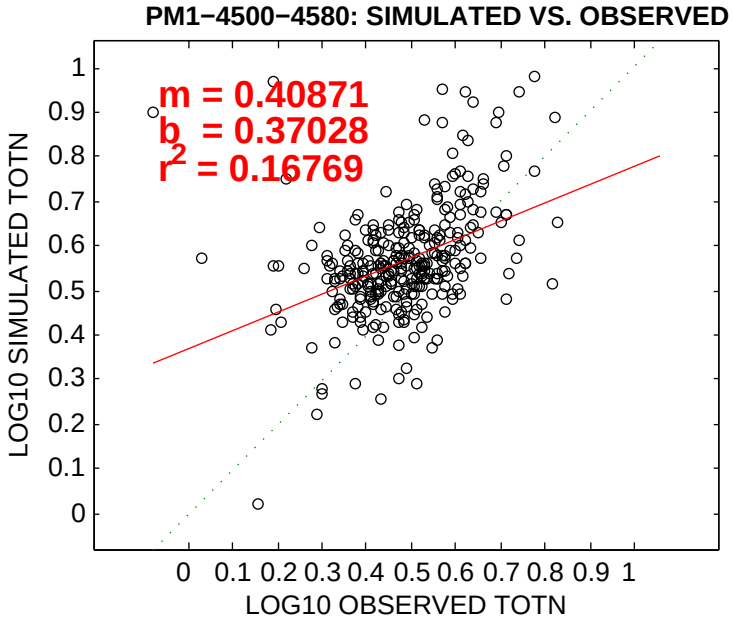


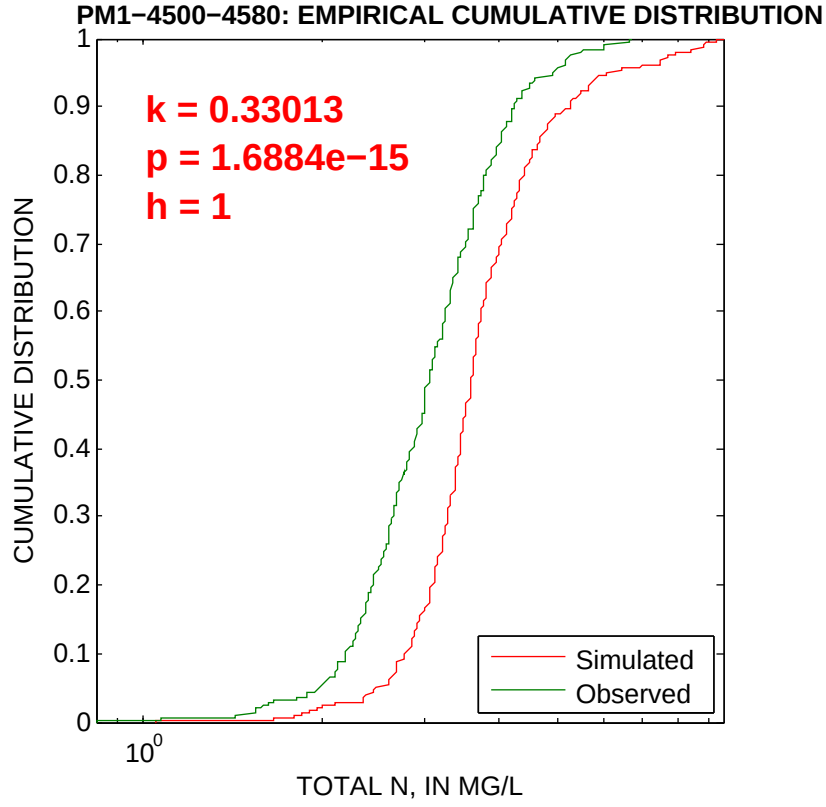












DATA SELECTION

scenario: P620171001WQ | file: TOTN.calib

plot: TOTN - total nitrogen

Dates: 1/1/1985 – 12/31/201

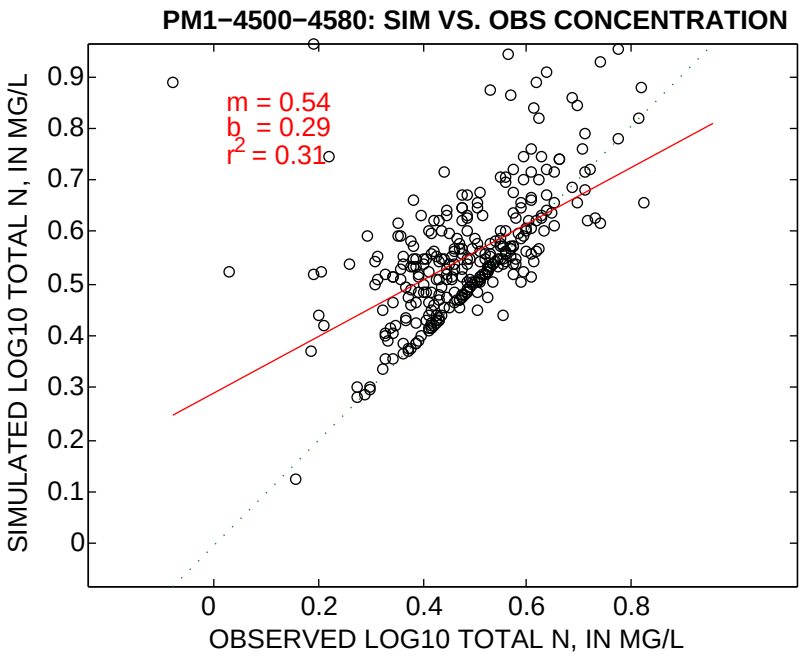
Drive: N/A | Directory: model | Observed: OBS20161101

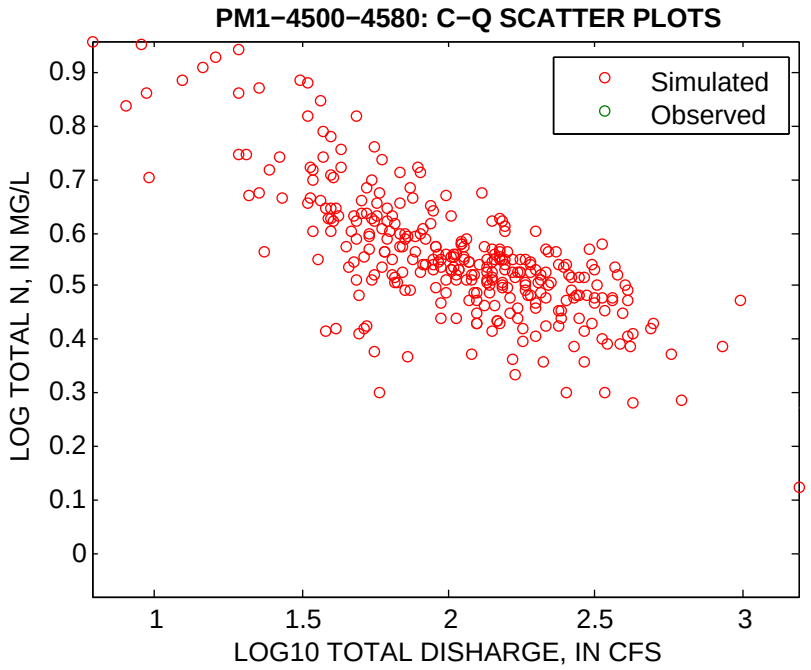
STATISTICS

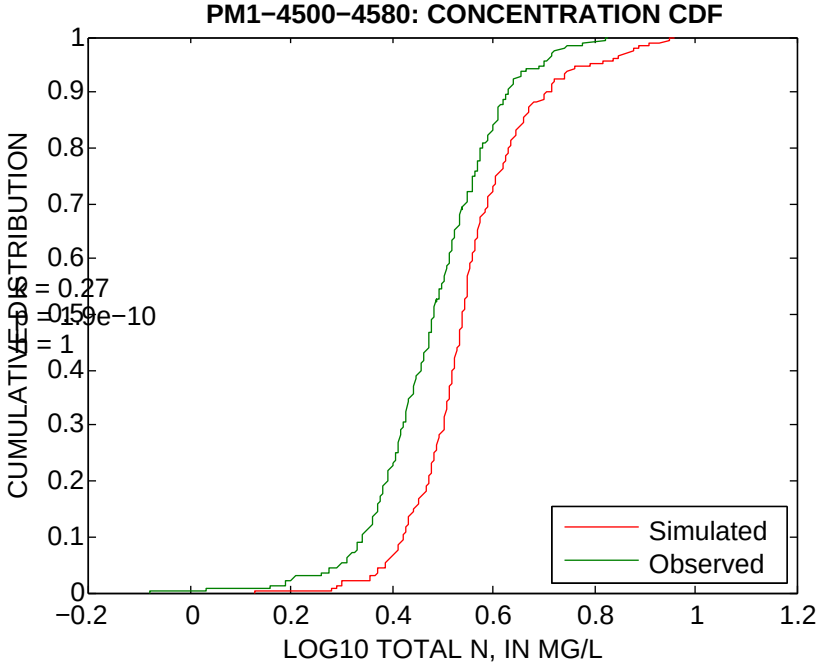
n	312	312
	observe	simulate
min	0.83	1.0495
	-0.0809219	0.0209824
mean	3.16709	3.85857
	0.483323	0.567814
media	3.05	3.5904
	0.4843	0.555143
max	6.71	9.5485
	0.826723	0.979935
varian	0.824603	1.55317
	0.0154184	0.0153582
JB	0.001	0.001
	0.001	0.001
	ra	log
%	21.8331	17.4812
err.va	1.84688	0.0253351
rel.std.err	2.23972	1.64318
mod.eff	-1.23972	-0.643176

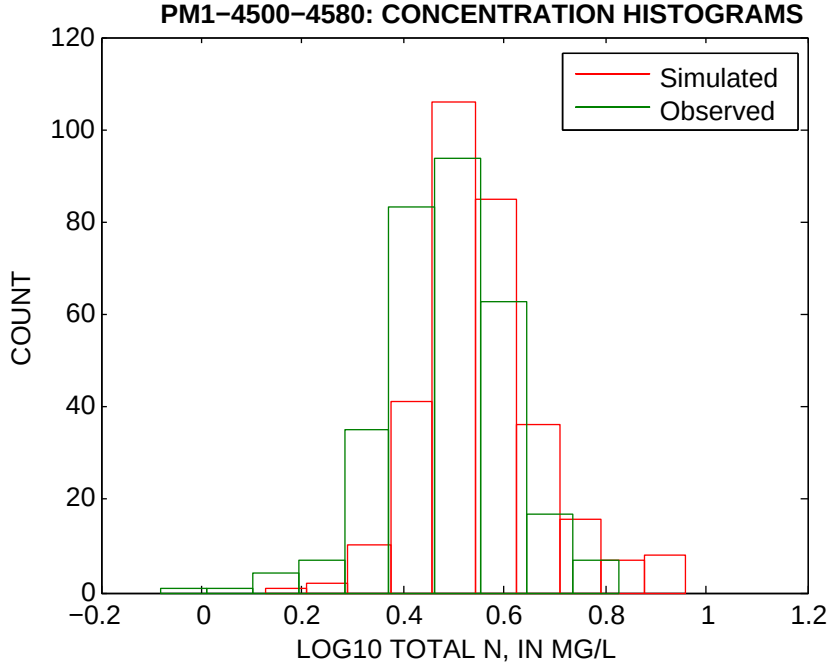
VERSION

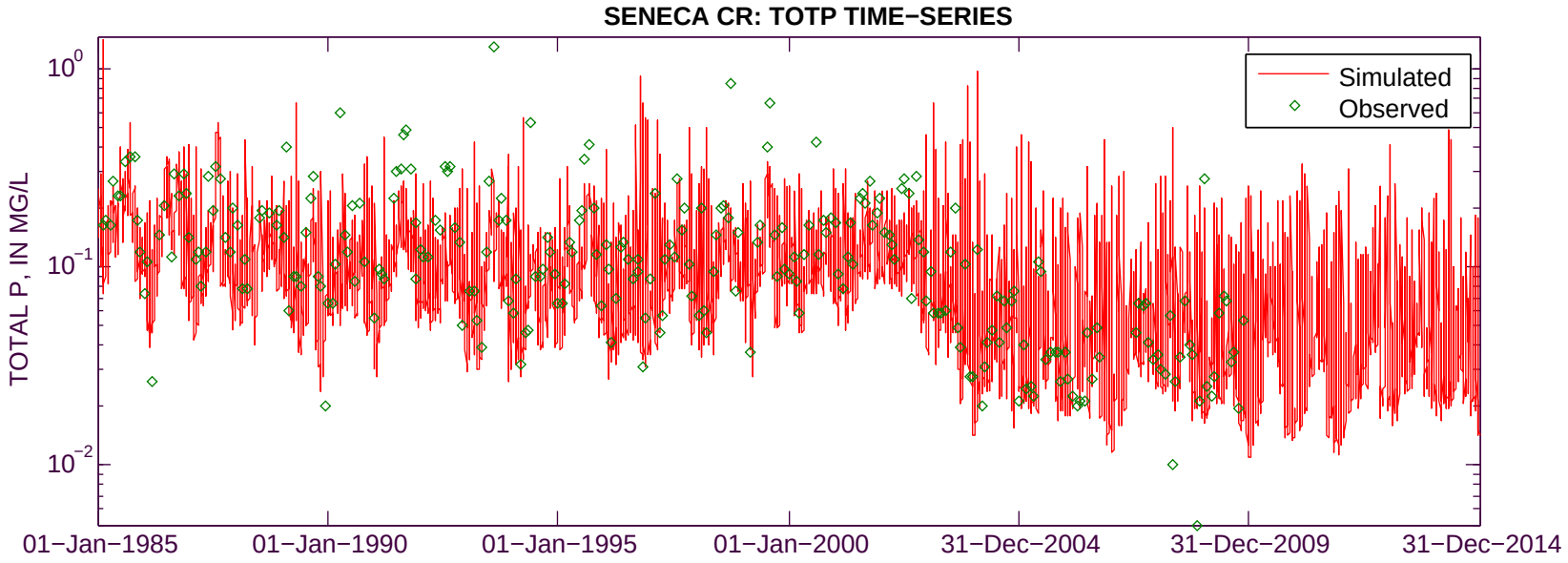
ALL DATA
LOG10

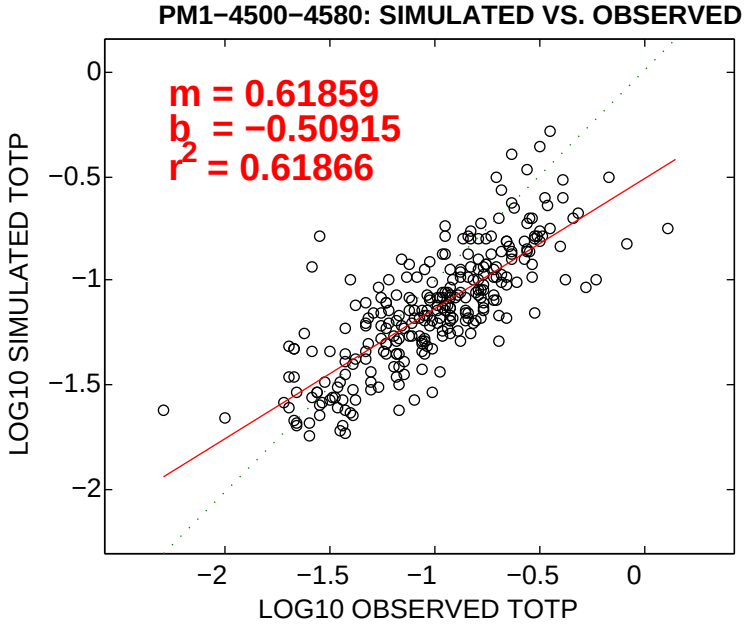


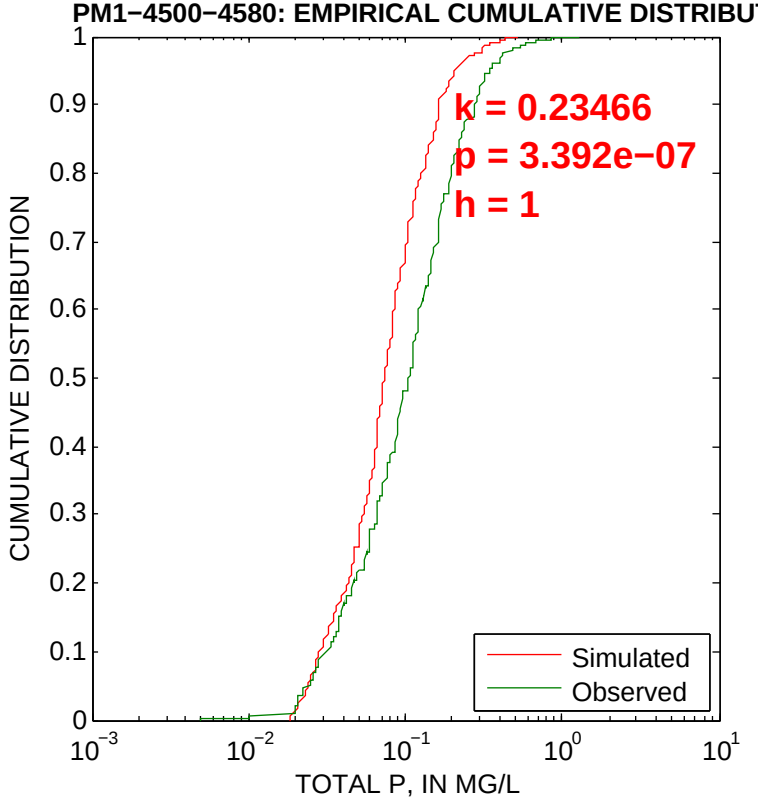












DATA SELECTION

scenario	file
P620171001WQ	TOTP.calib

plot: TOTP - total phosphorus

Dates: 1/1/1985 – 12/31/201

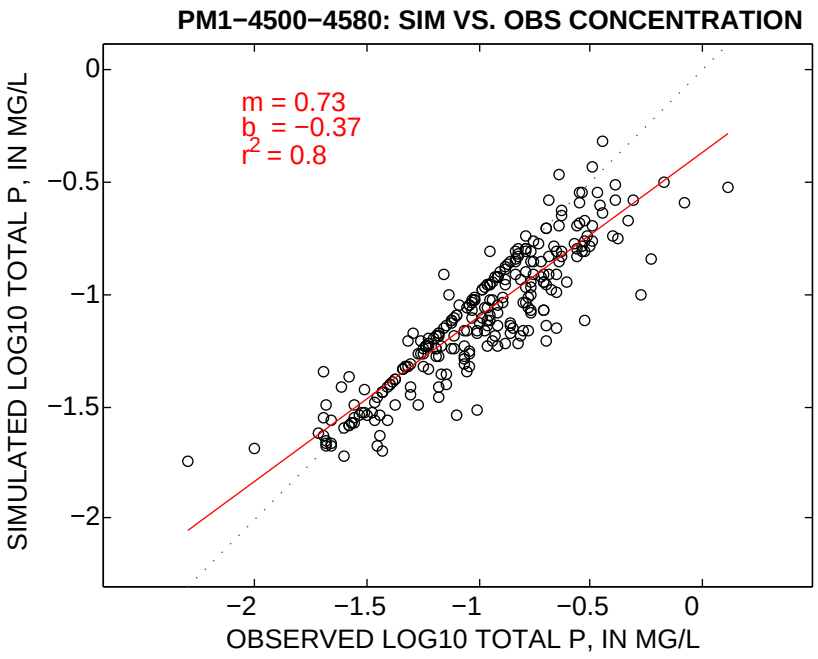
Drive	Directory	Observed
N/A	model	OBS20161101

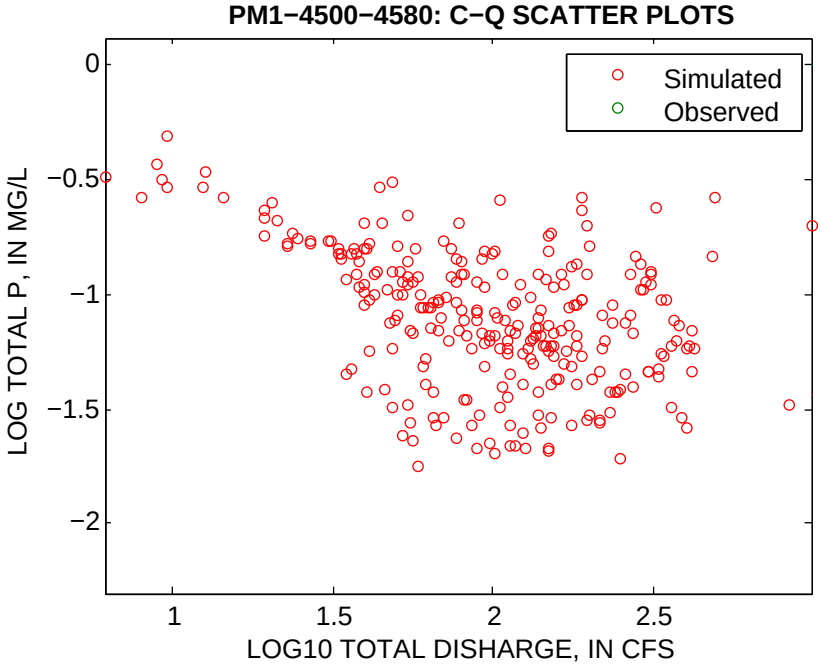
STATISTICS

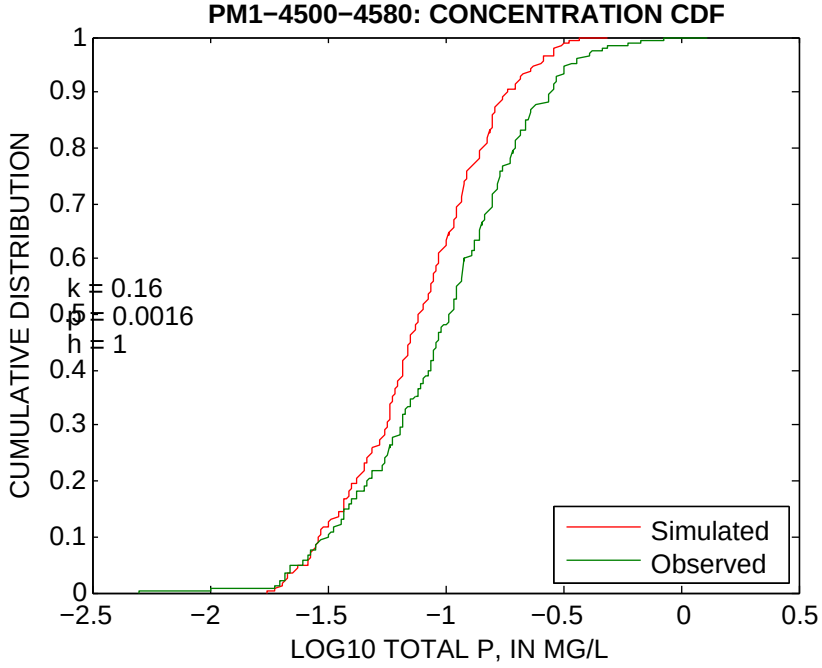
	n	277	277
		observe	simulate
min		0.005	0.018288
		-2.30103	-1.73783
mean		0.13769	0.0918281
		-1.00573	-1.13129
media		0.107	0.073237
		-0.970616	-1.13527
max		1.3	0.51886
		0.113943	-0.28495
varian		0.0176069	0.00471642
		0.130662	0.0808185
JB		0.001	0.001
		0.434569	0.5
		ra	log
%		-33.3079	12.4846
err.va		0.0135718	0.0656499
rel.std.err		0.770822	0.50244
mod.eff		0.229178	0.49756

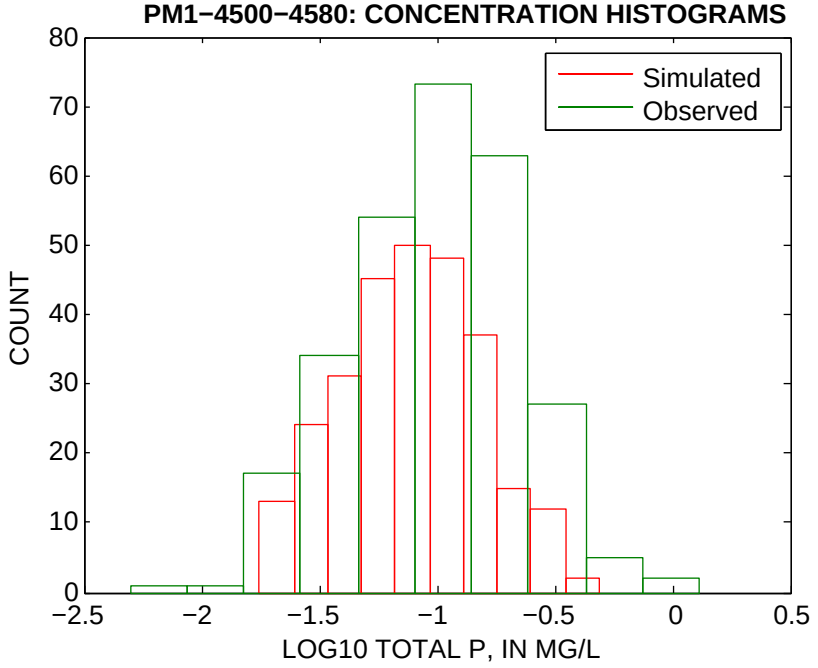
VERSION 2.1

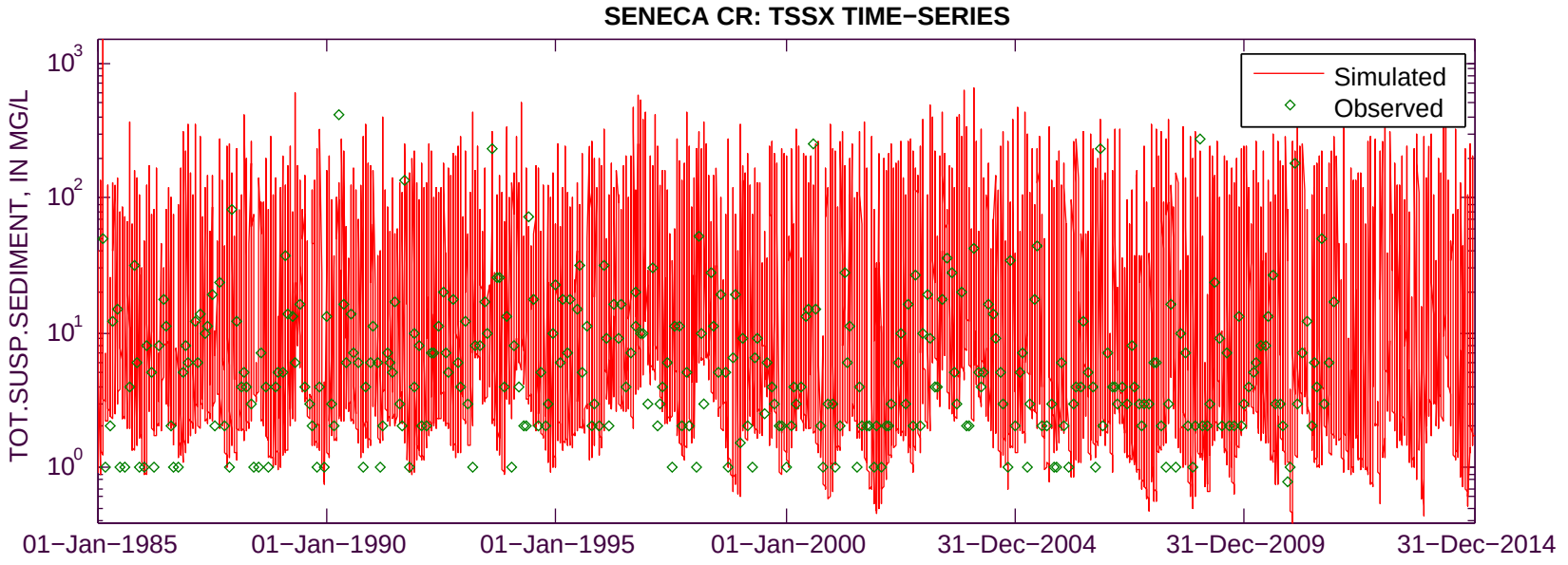
ALL DATA
LOG10

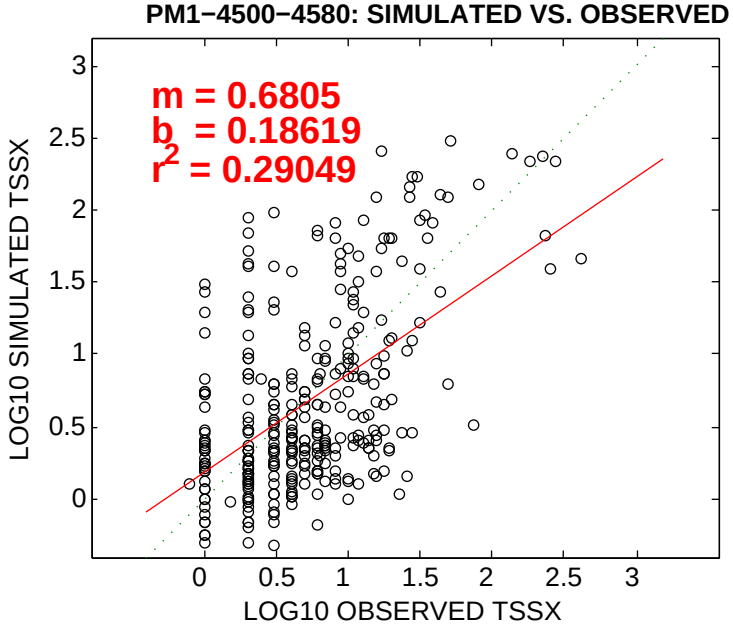


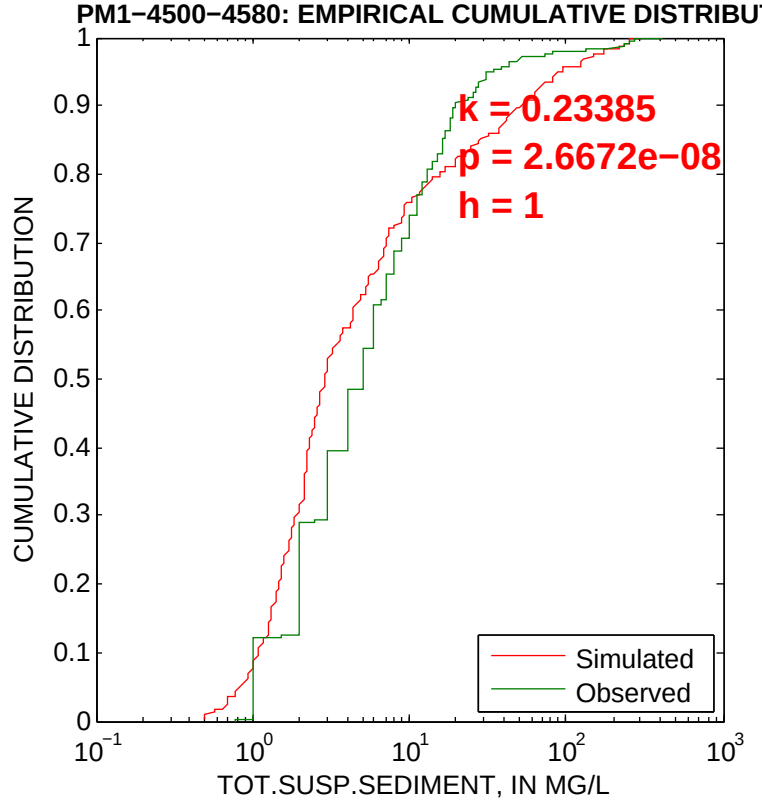












DATA SELECTION

scenario	file
P620171001WQ	TSSX.calib

plot: TSSX - total suspended ...

Dates: 1/1/1985 – 12/31/201

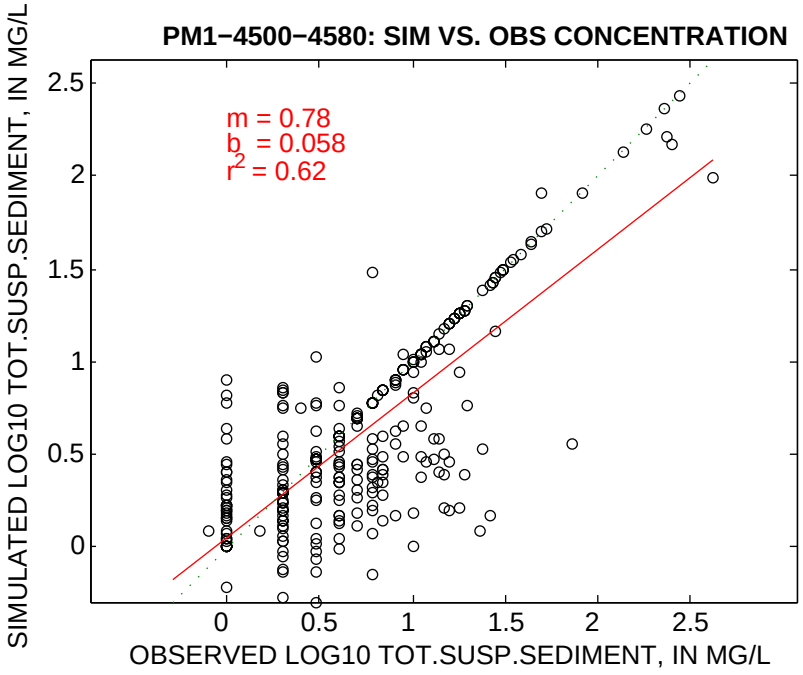
Drive	Directory	Observed
N/A	model	OBS20161101

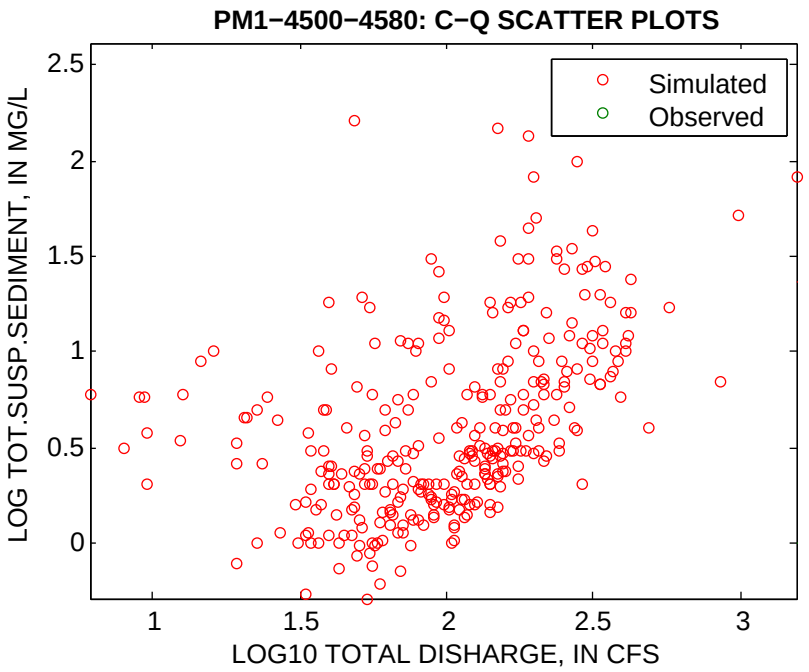
STATISTICS

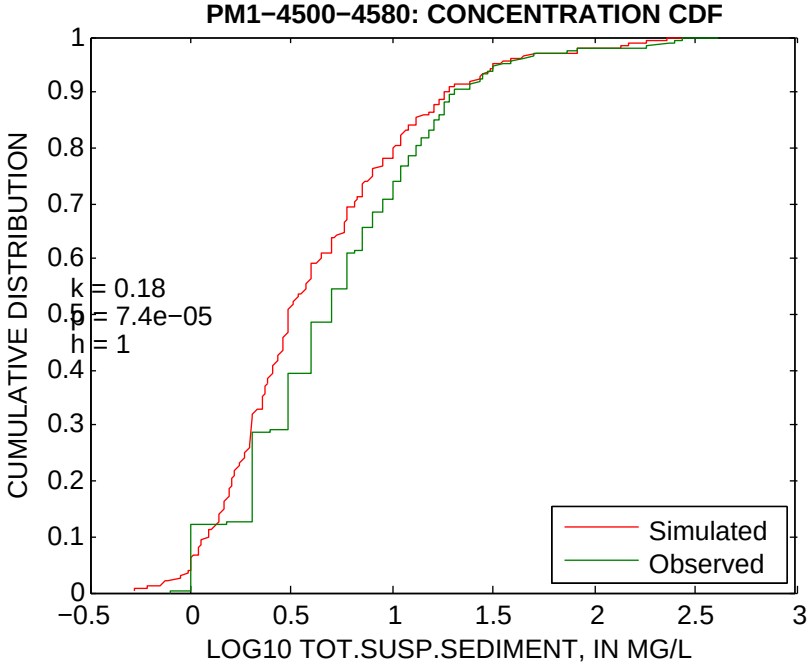
	n	observe	simulate
		325	325
min		0.79	0.47052
		-0.102373	-0.327422
mean		13.344	18.1727
		0.721396	0.677101
media		5	2.8653
		0.69897	0.45717
max		415	309.23
		2.61805	2.49028
varian		1431.21	1786.41
		0.251425	0.400803
JB		0.001	0.001
		0.001	0.001
		ra	log
%		36.1865	-6.14005
err.va		1667.75	0.312008
rel.std.err		1.16527	1.24096
mod.eff		-0.165273	-0.240959

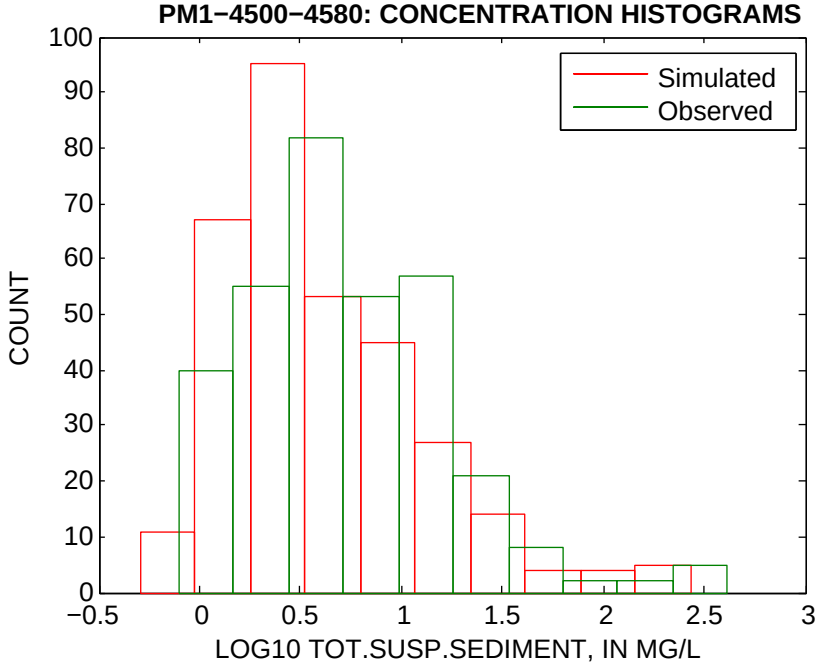
VERSION 2.1

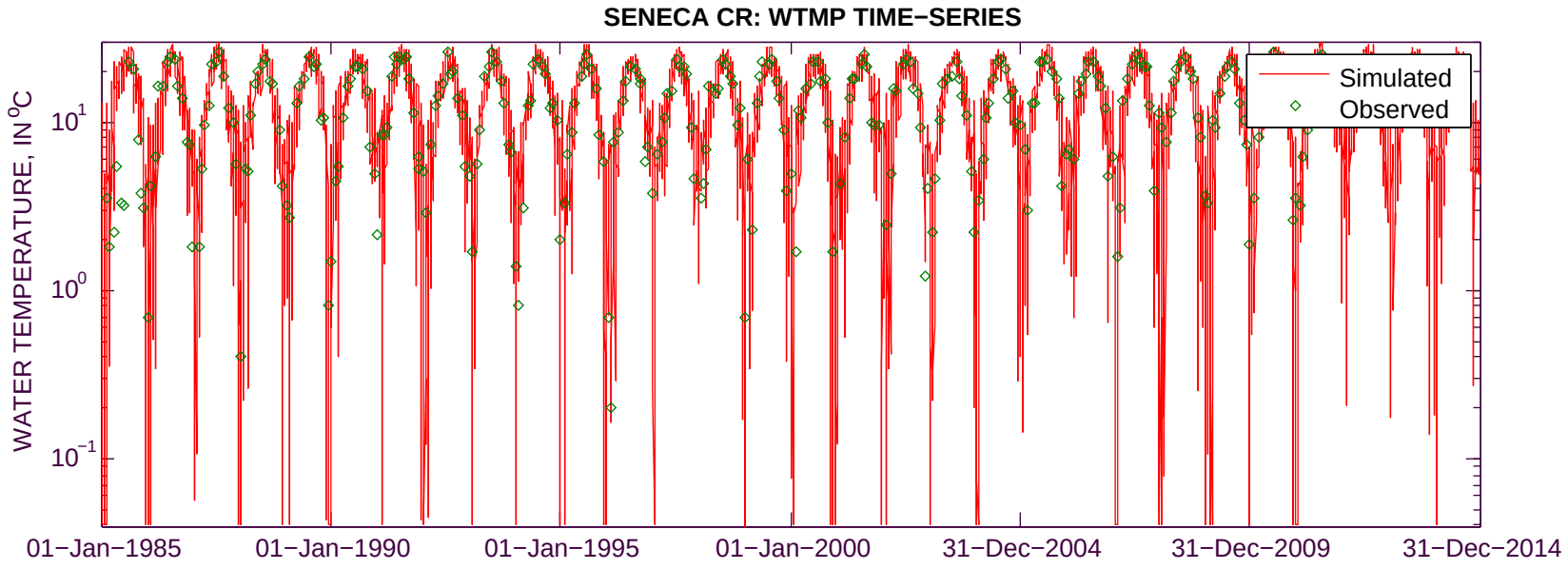
ALL DATA
LOG10

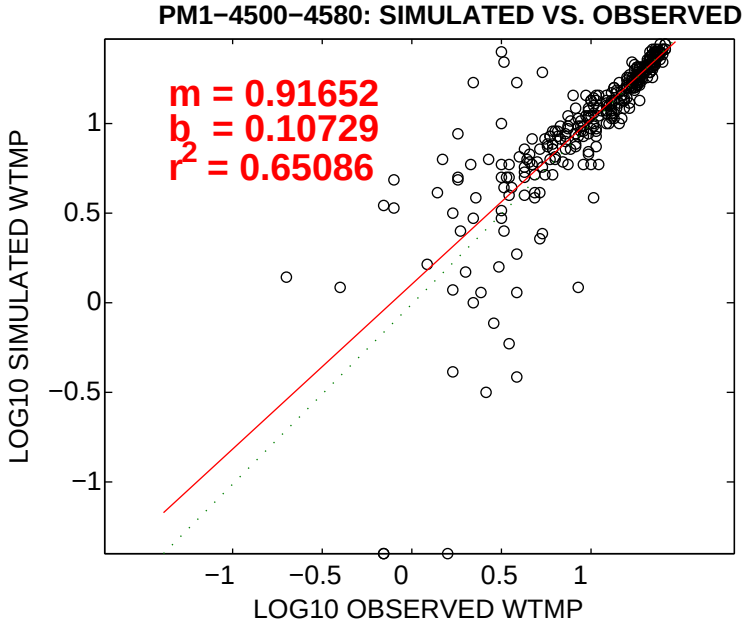


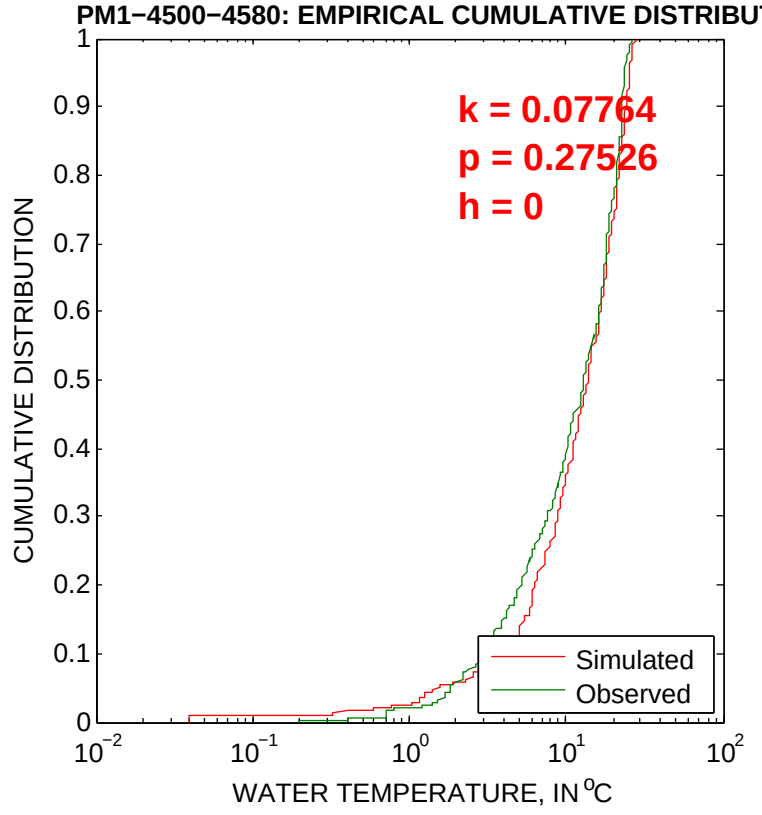












DATA SELECTION

scenario	file
P620171001WQ	WTMP.calib

plot: WTMP - water tempera...

Dates: 1/1/1985 – 12/31/201

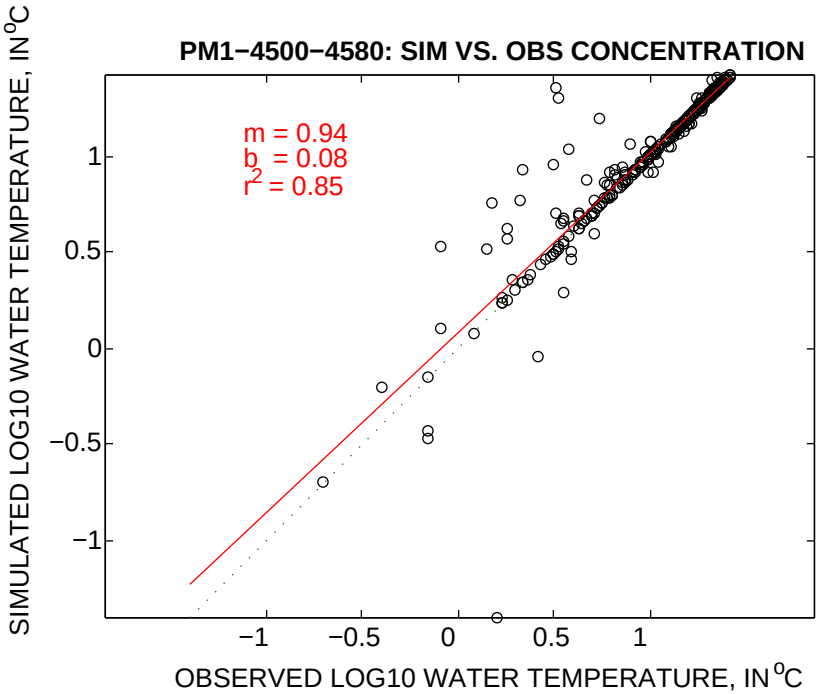
Drive	Directory	Observed
N/A	model	OBS20161101

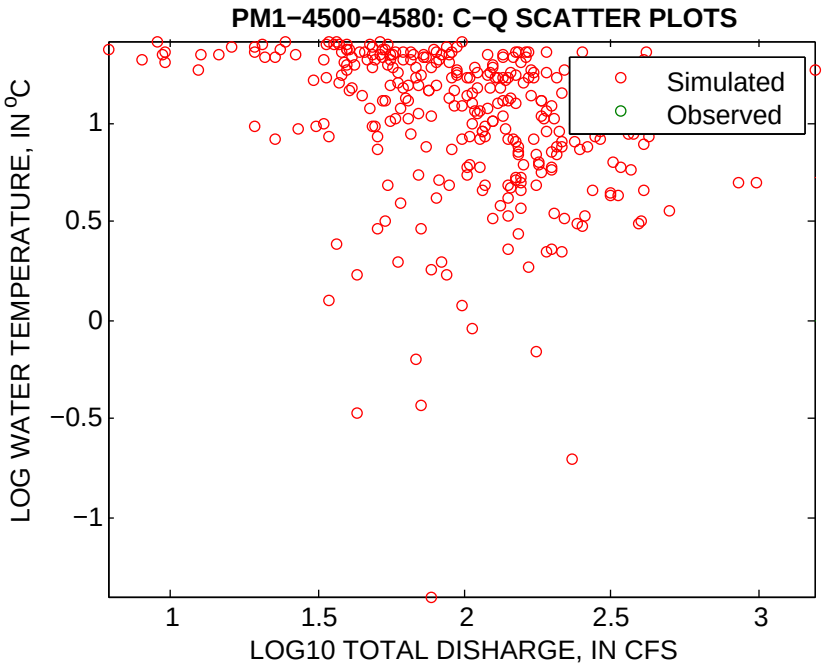
STATISTICS

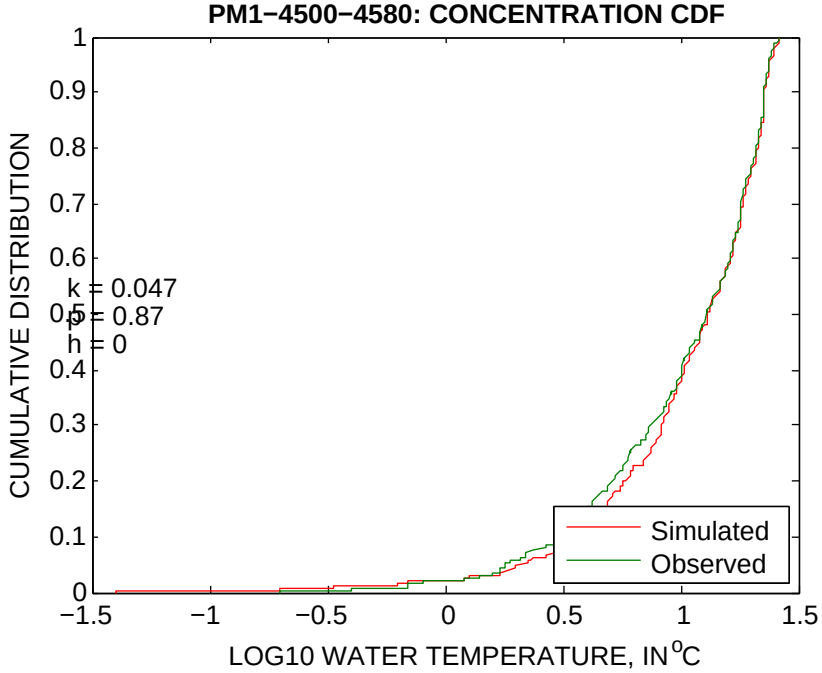
	observe	simulate
n	322	322
min	0.2	0.040025
	-0.69897	-1.39767
mean	13.0222	13.8791
	1.0023	1.02592
media	12.9	13.715
	1.11059	1.1372
max	26.1	28.565
	1.41664	1.45583
varian	54.3617	56.1135
	0.137215	0.177092
JB	0.001289	0.003347
	0.001	0.001
	ra	log
%	6.58047	2.35685
err.va	9.15191	0.0633461
rel.std.err	0.168352	0.461657
mod.eff	0.831648	0.538343

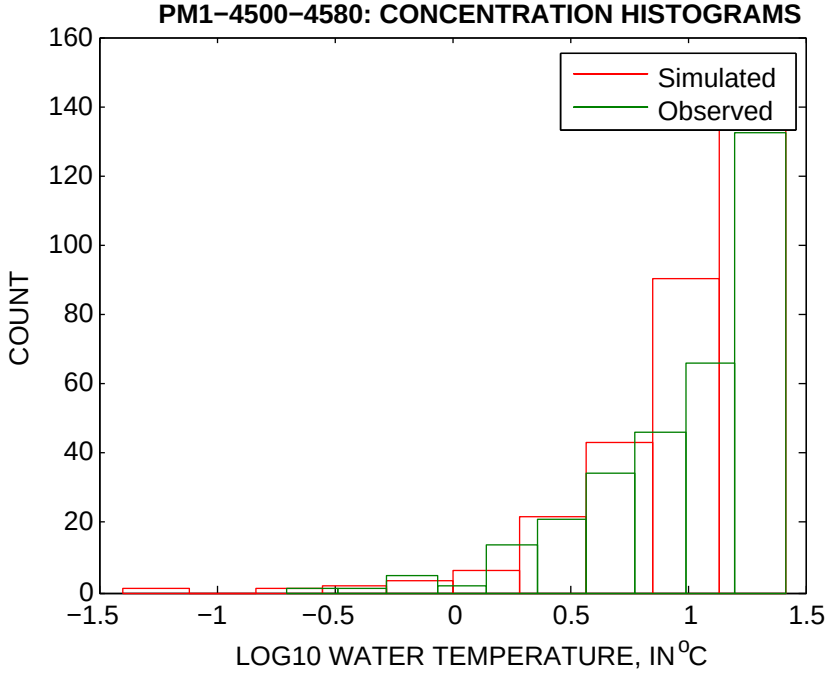
VERSION 2.1

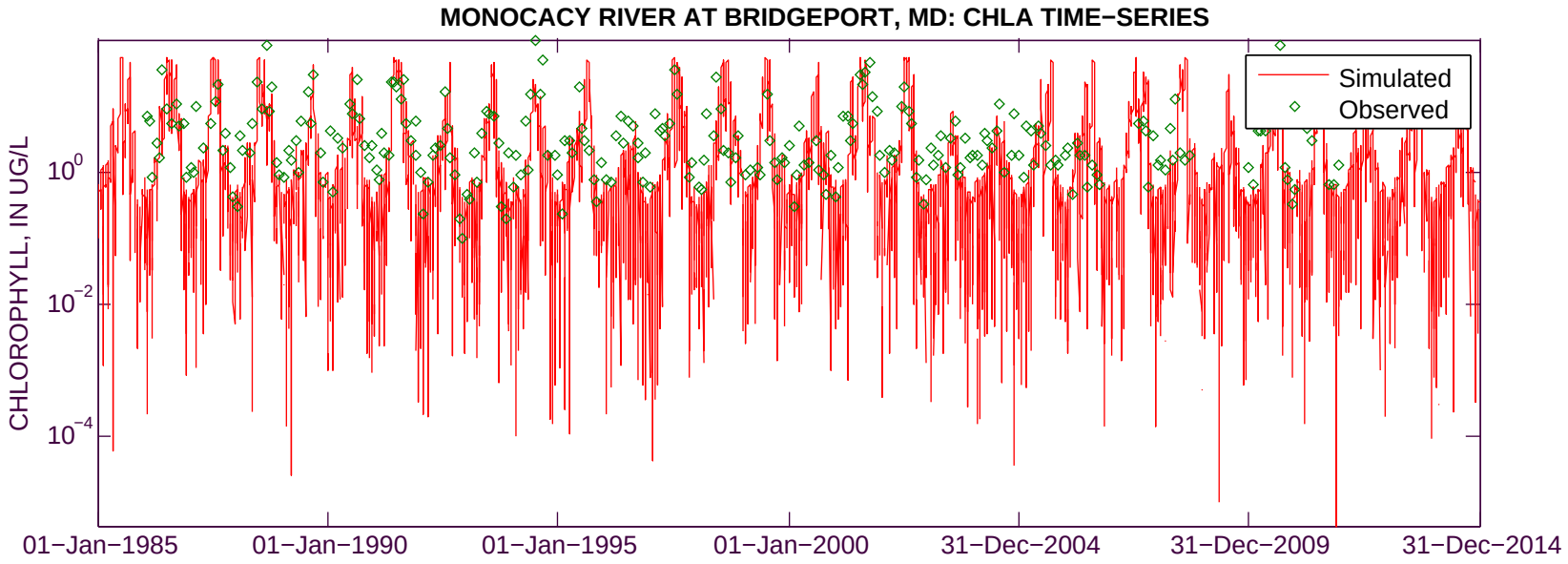
ALL DATA
LOG10

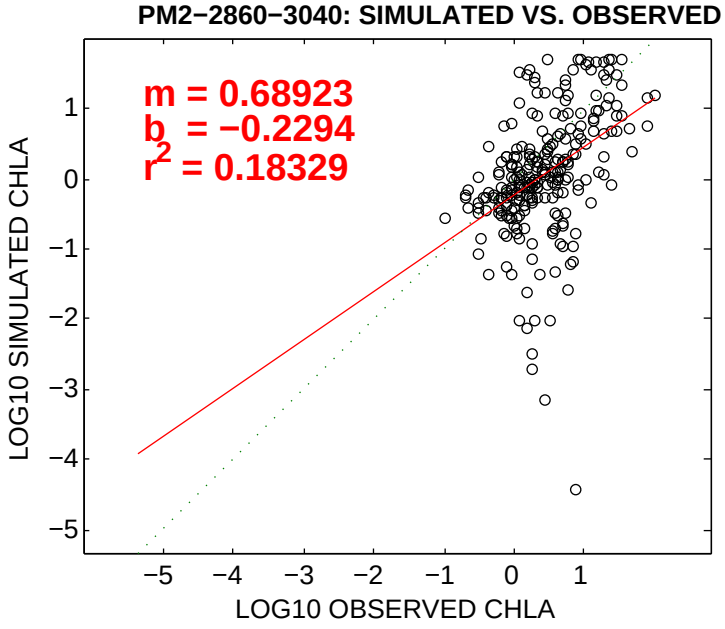


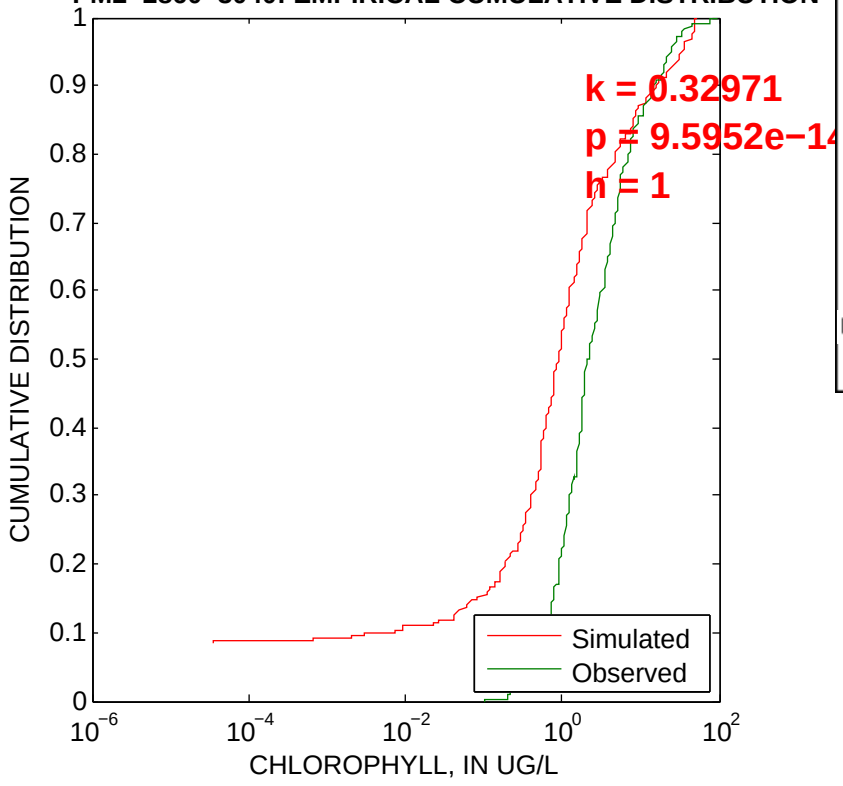












DATA SELECTION

scenario	file
P620171001WQ	CHLA.calib

plot: CHLA - chlorophyll A

Dates: 1/1/1985 – 12/31/201

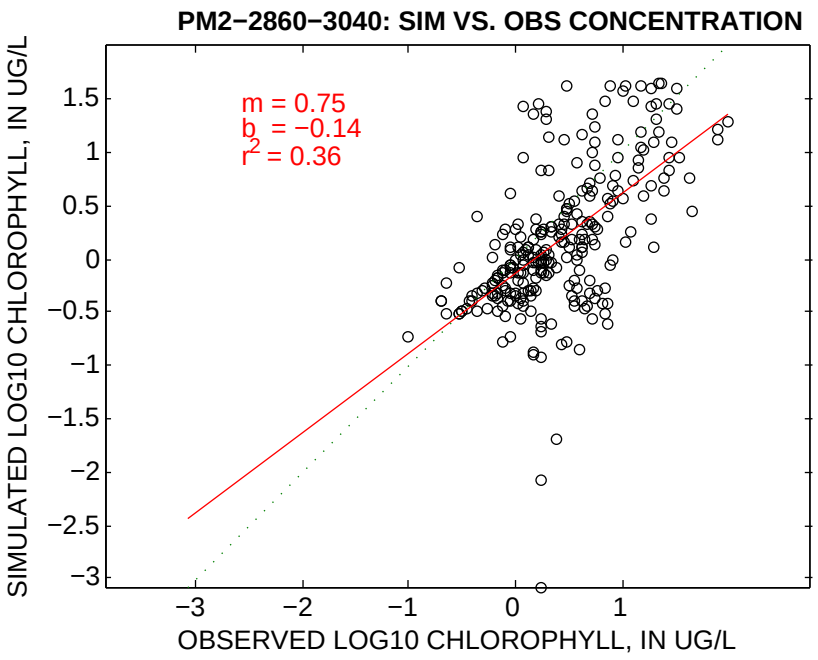
Drive	Directory	Observed
N/A	model	OBS20161101

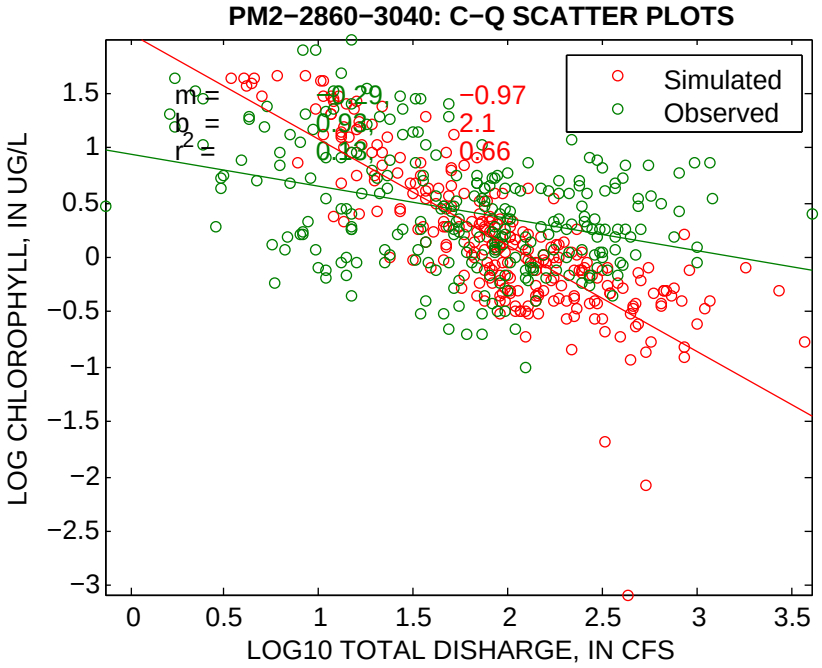
STATISTICS

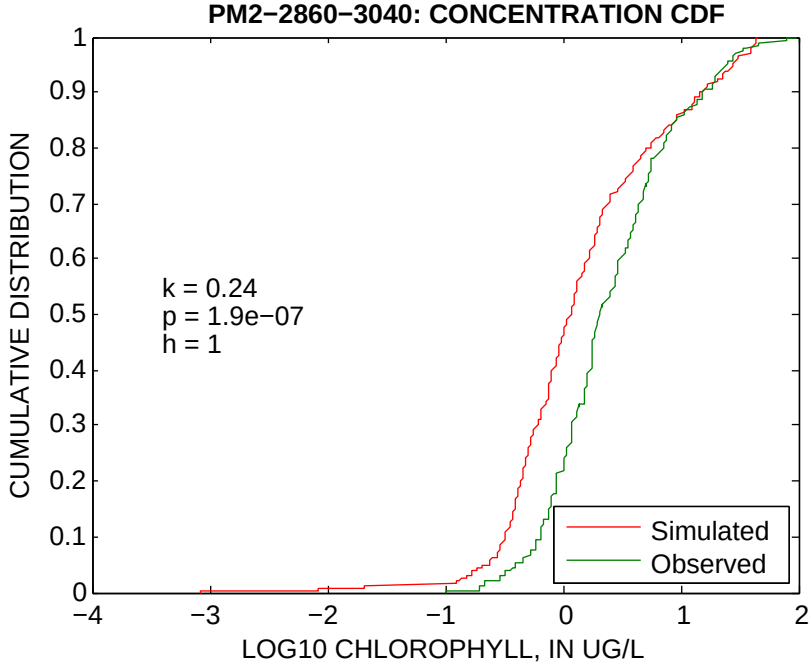
		observe	simulate
n		276	253
min		0.1	0
		-1	-4.44126
mean		6.00135	5.07822
		0.420068	0.0601227
media		2.145	0.88953
		0.322219	0.00889811
max		99.28	51.078
		1.99686	1.70823
varian		124.657	115.41
		0.297621	0.771378
JB		0.001	0.001
		0.042595	0.001
		ra	log
%		-15.3821	-85.6874
err.va		162.728	0.788812
rel.std.err		1.30541	2.65039
mod.eff		-0.30541	-1.65039

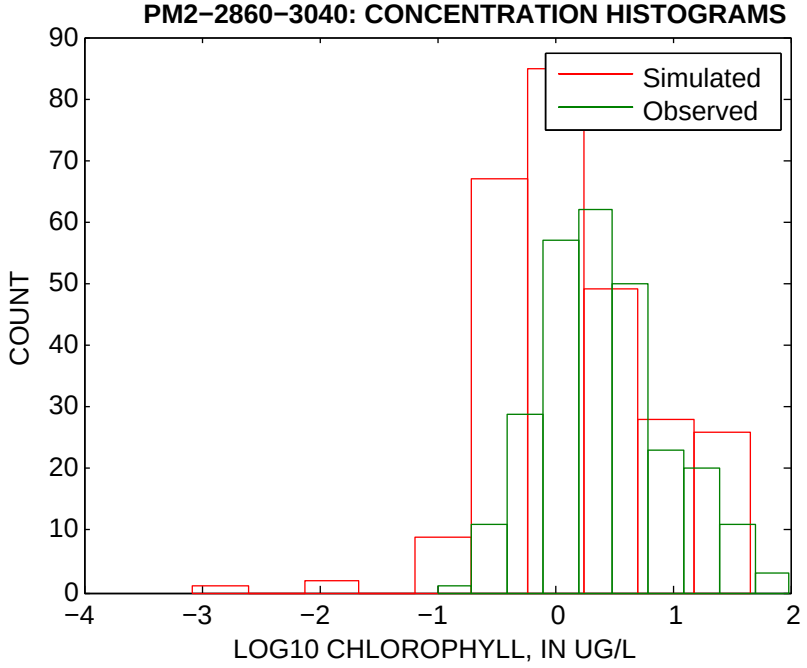
VERSION 2.1

ALL DATA
LOG10

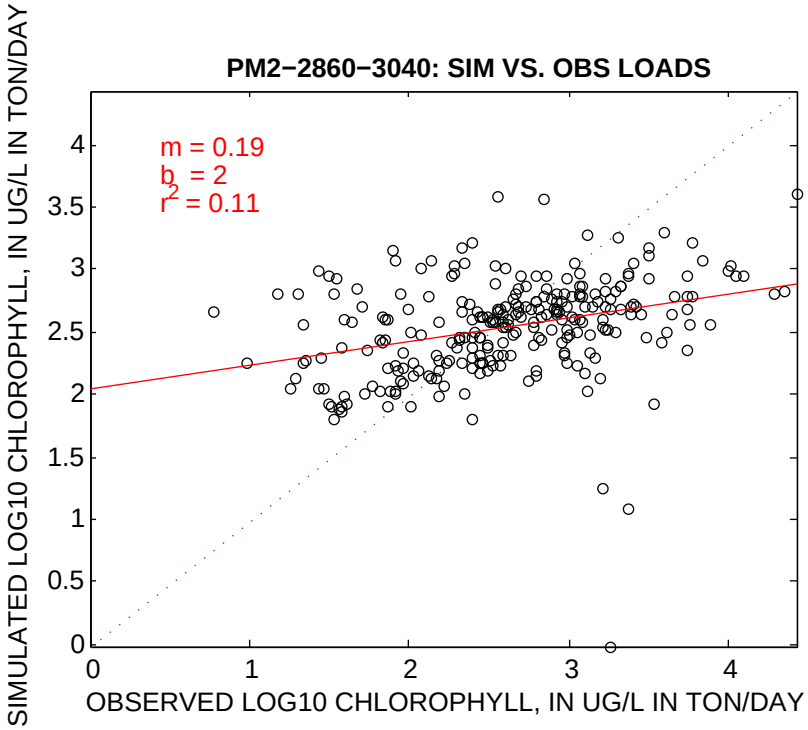


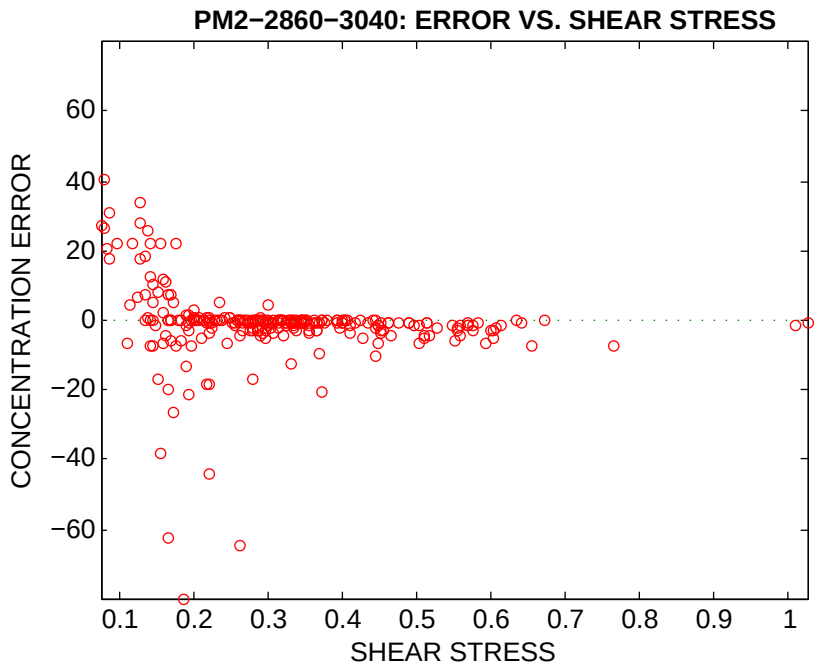


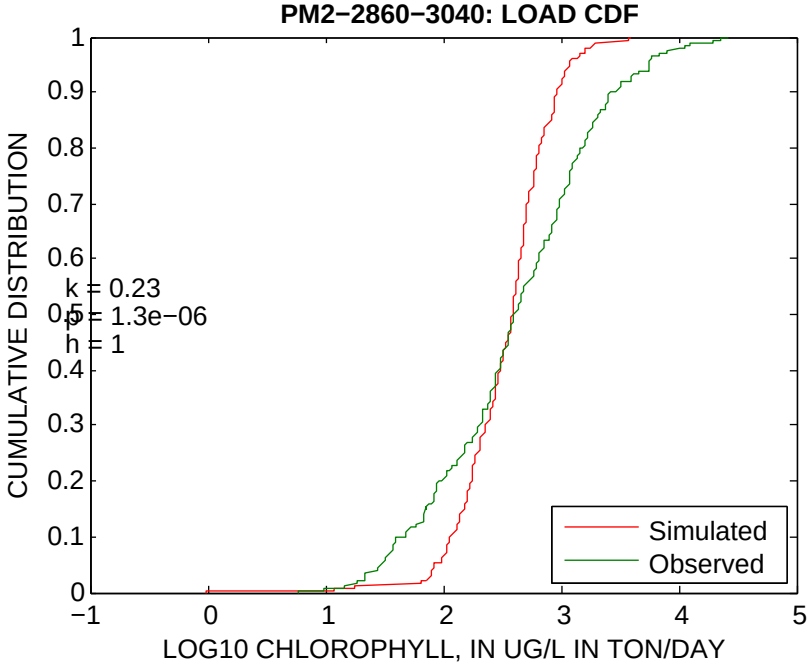


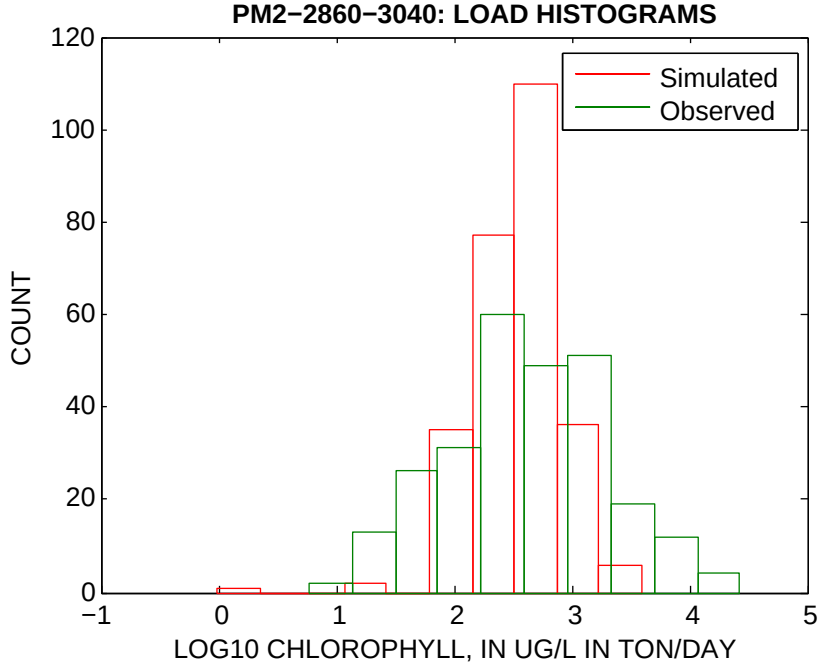


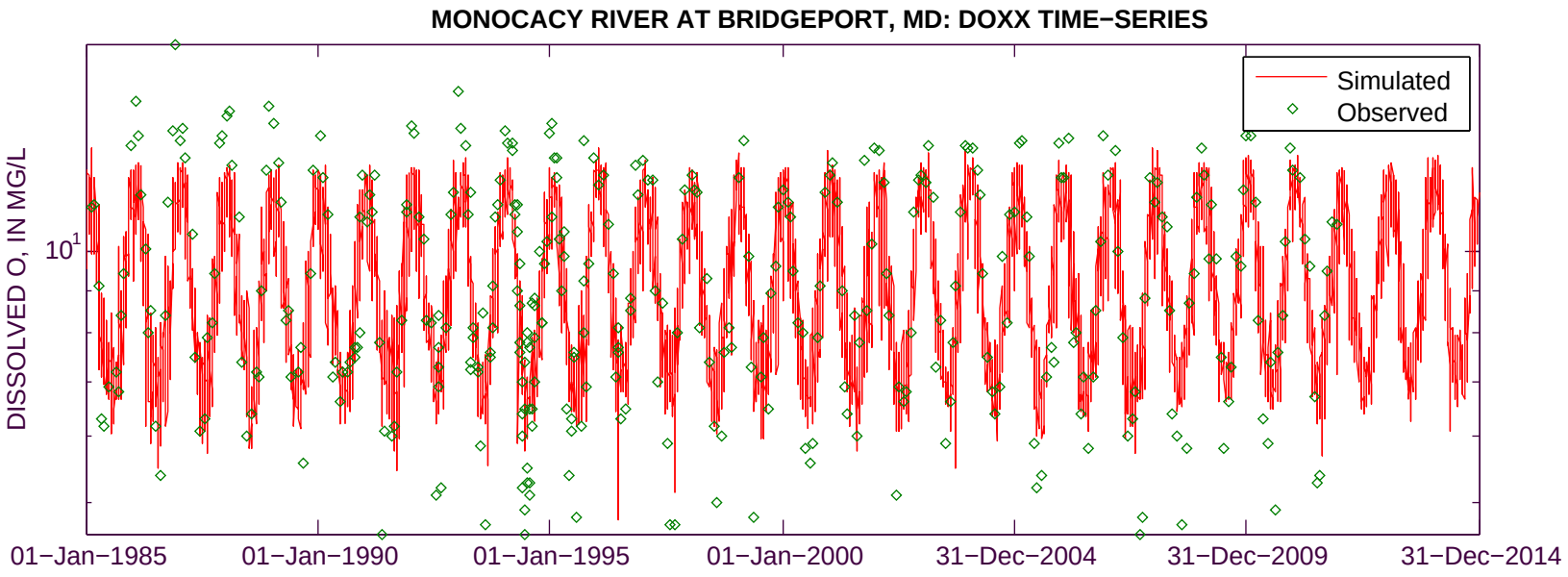
LOAD DATA
LOG10

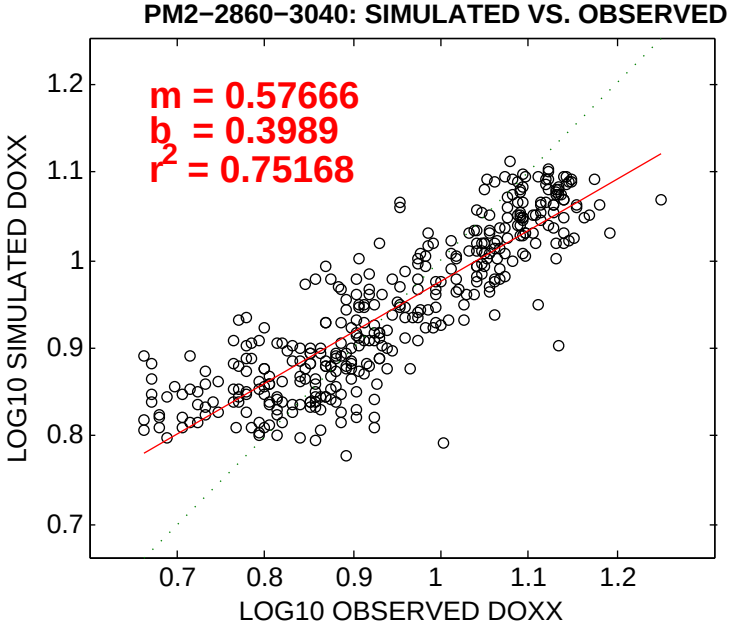


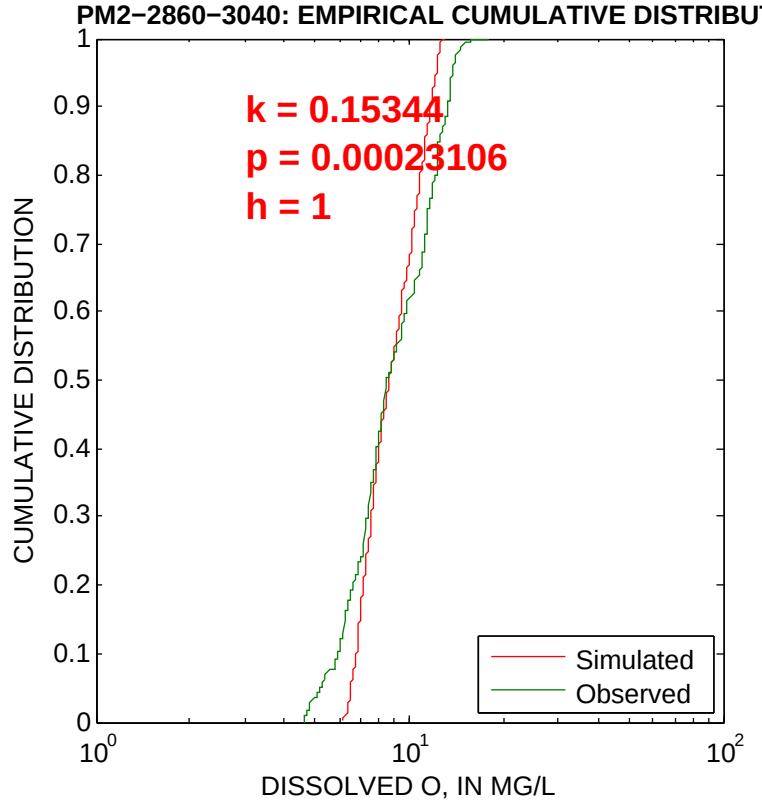












DATA SELECTION

scenario: P620171001WQ | file: DOXX.calib

plot: DOXX - dissolved oxygen

Dates: 1/1/1985 – 12/31/201

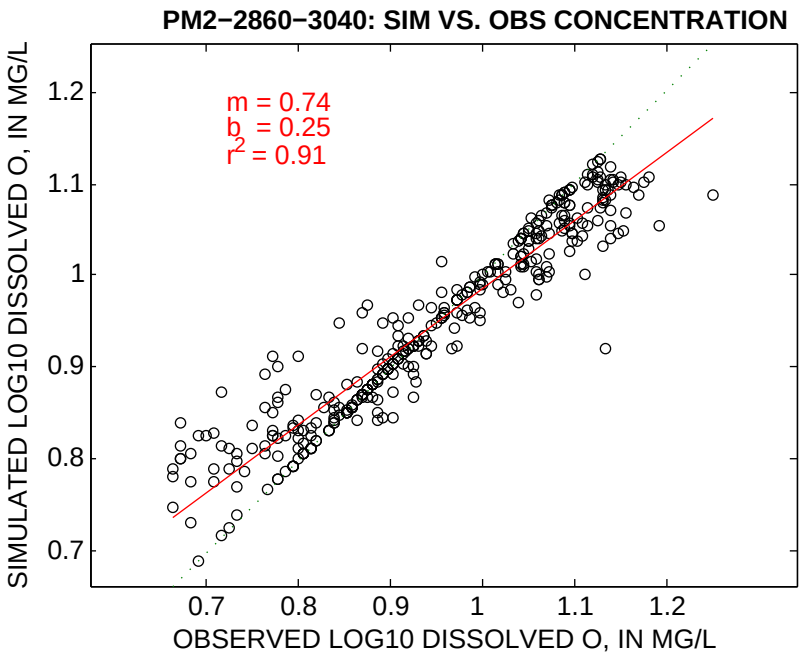
Drive: N/A | Directory: model | Observed: OBS20161101

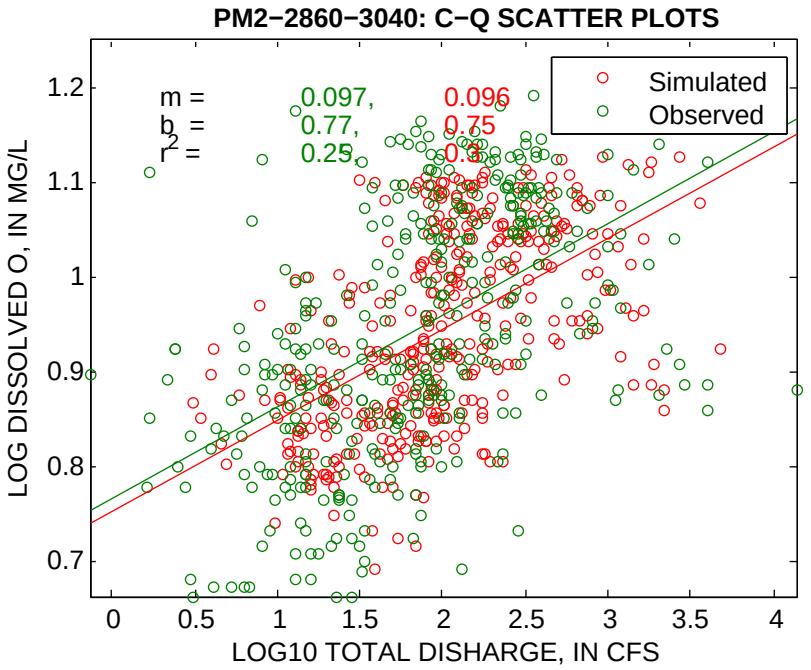
STATISTICS

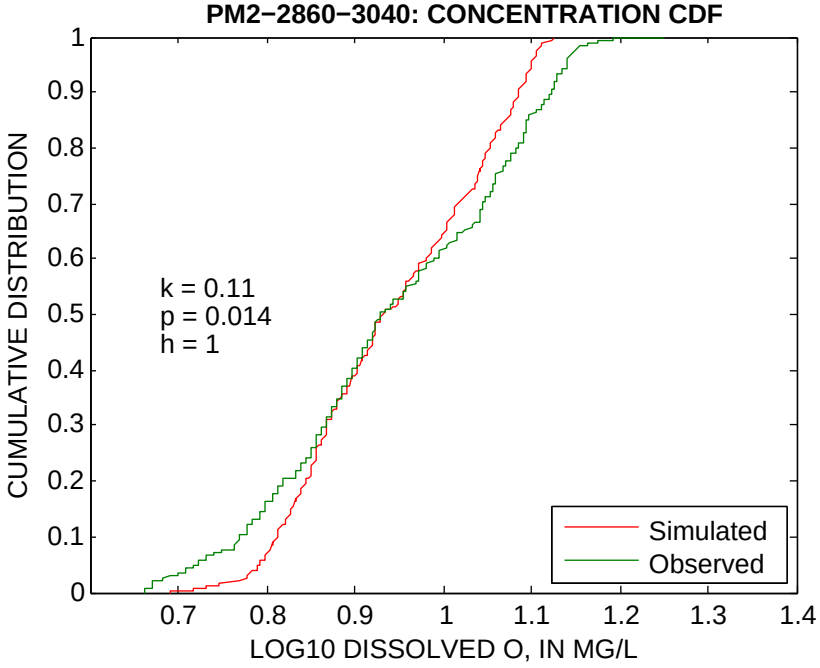
		observe	simulate
n		378	378
min		4.6	5.9891
		0.662758	0.777362
mean		9.2361	8.97848
		0.945678	0.944228
media		8.5	8.6128
		0.929419	0.935144
max		17.8	12.937
		1.25042	1.11183
varian		7.61687	3.37947
		0.0175969	0.00778462
JB		0.001749	0.001
		0.004021	0.001
		ra	log
%		-2.78924	-0.153361
err.va		2.13815	0.00508894
rel.std.err		0.280713	0.289195
mod.eff		0.719287	0.710805

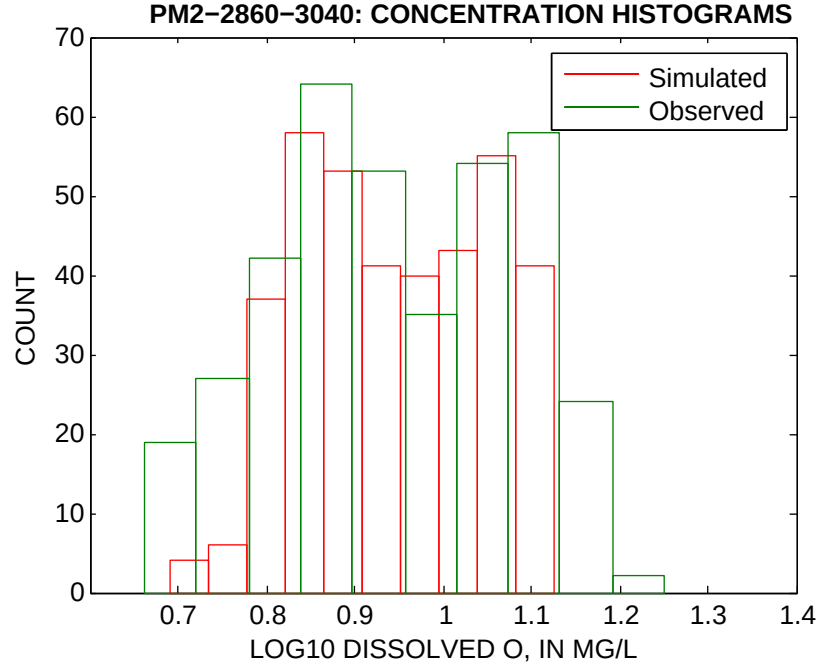
VERSION 2.1

ALL DATA
LOG10

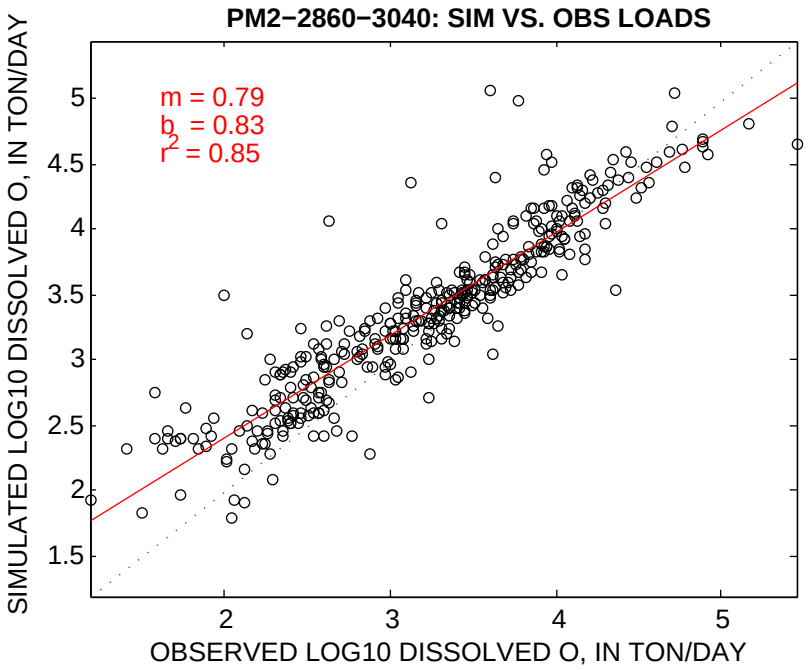


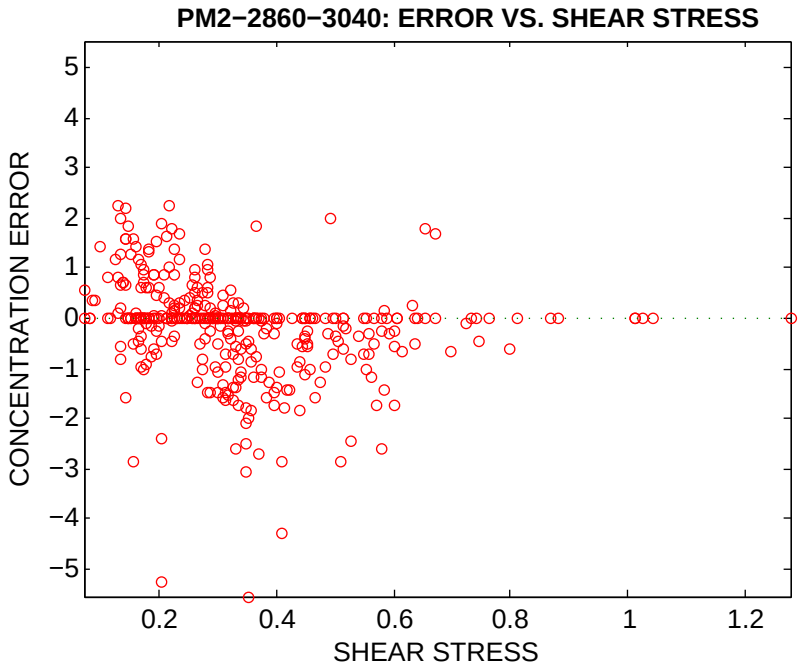


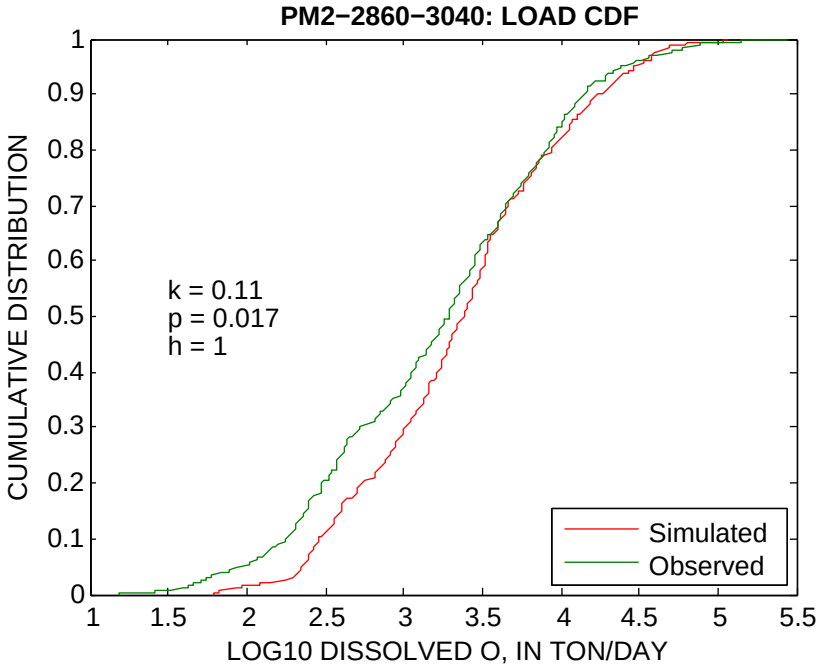


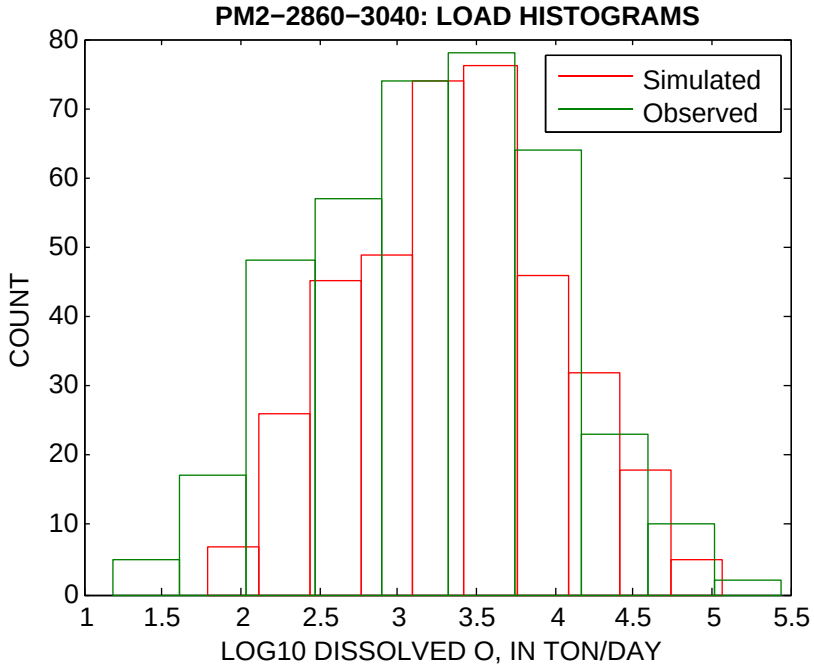


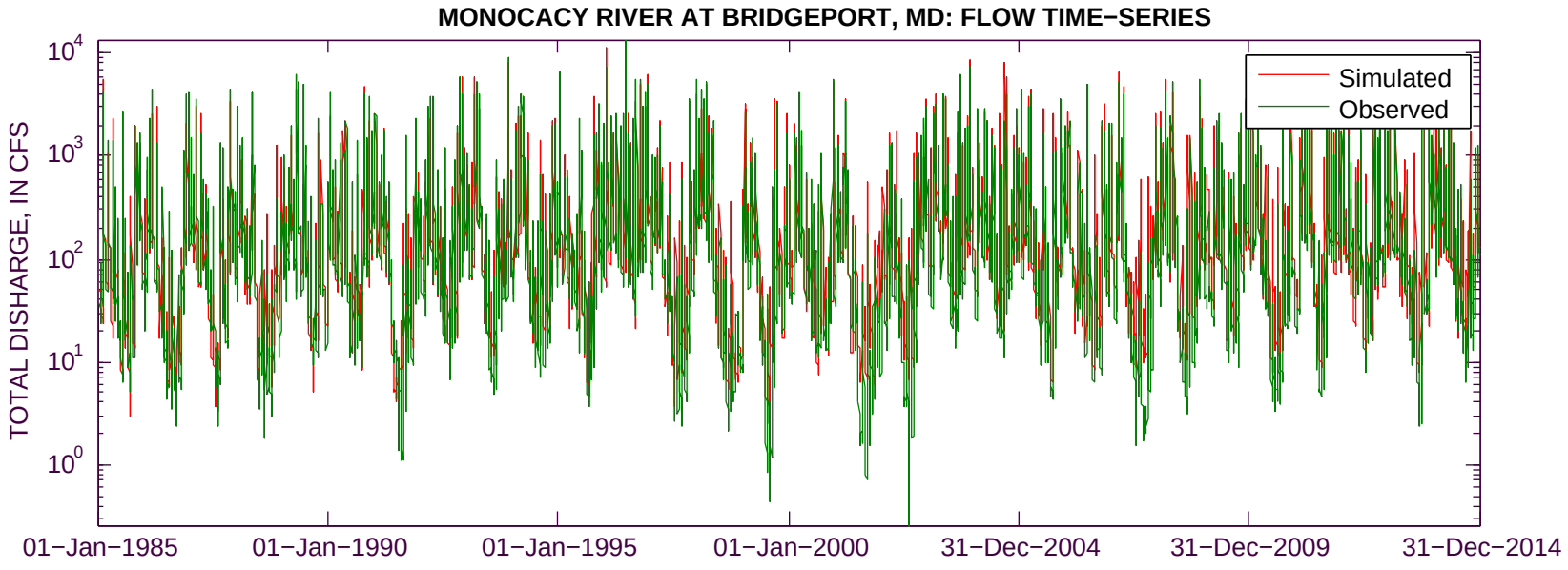
LOAD DATA
LOG10

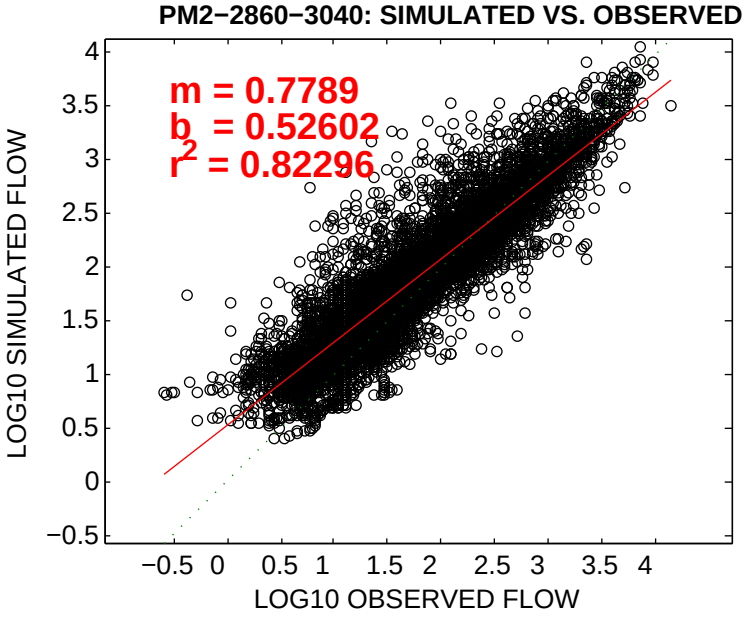


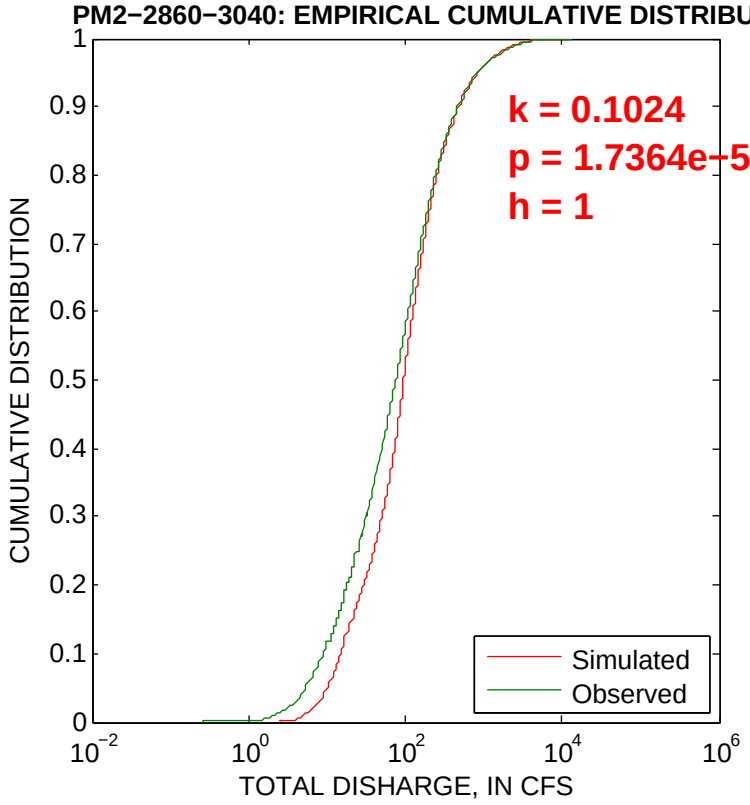












DATA SELECTION

scenario: P620171001WQ | file: FLOW.calib

plot: FLOW - total discharge

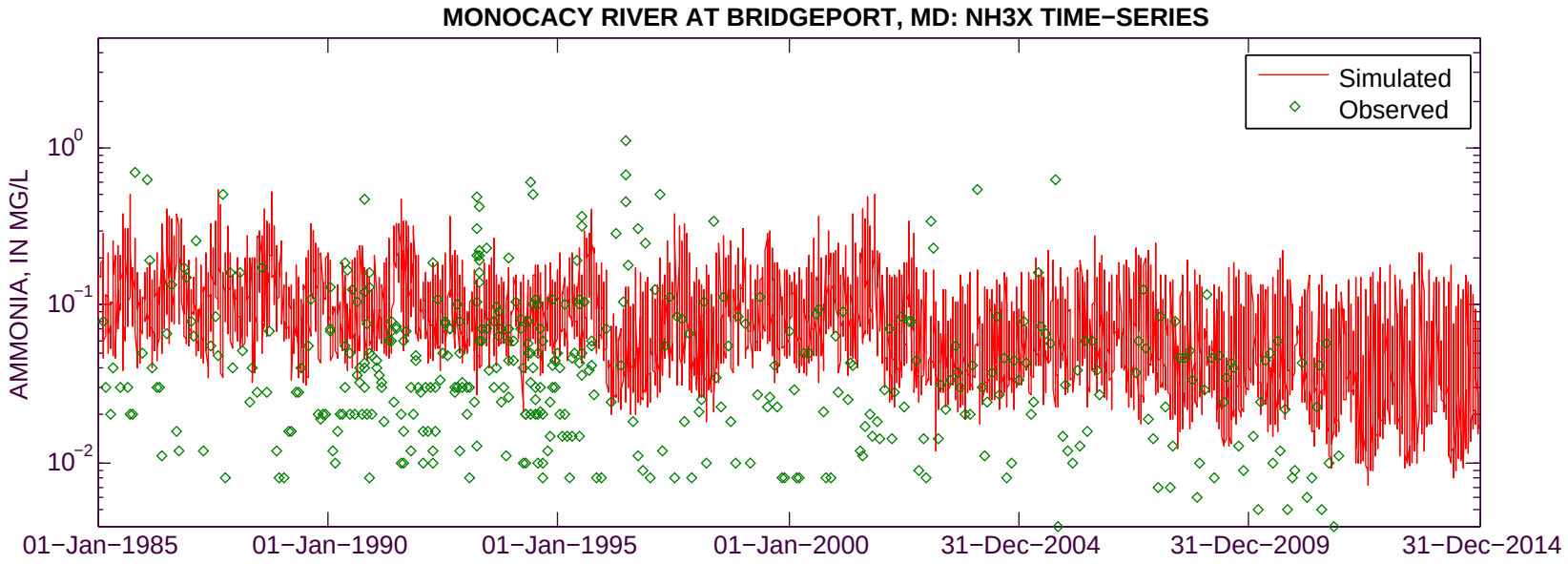
Dates: 1/1/1985 – 12/31/201

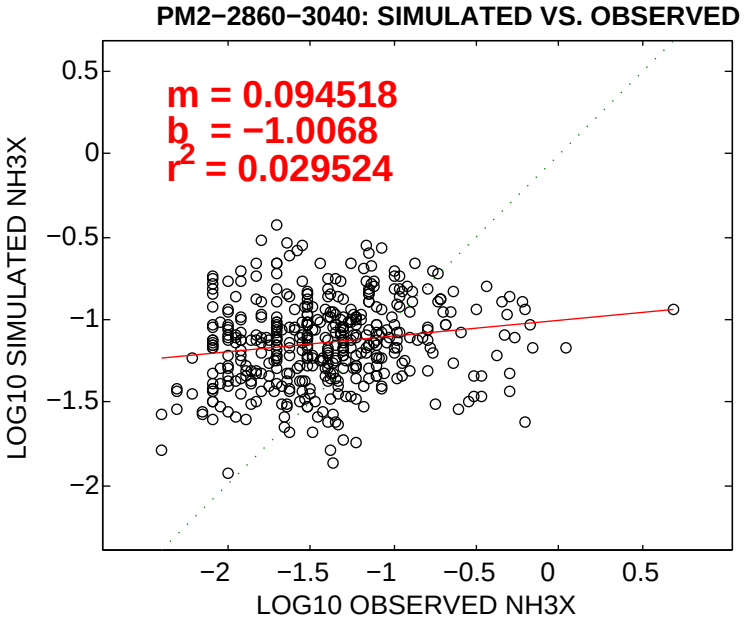
Drive | Directory | Observed: N/A | model | OBS20161101

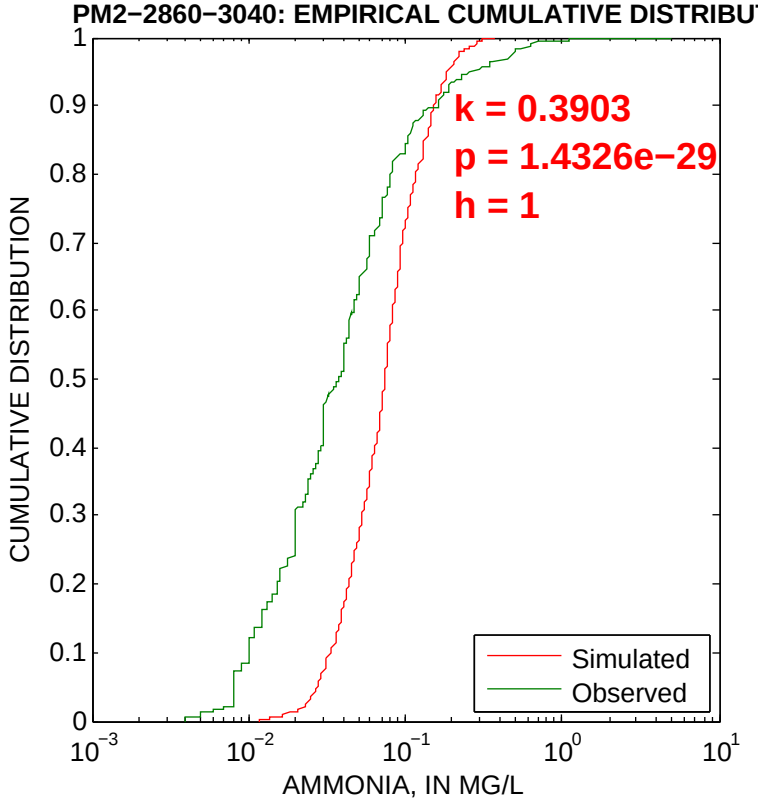
STATISTICS

		observe	simulate
n		10957	10957
min		0.26	2.5008
		-0.585027	0.398079
mean		225.324	232.16
		1.84952	1.9666
media		76	95.234
		1.88081	1.97879
max		13700	11385
		4.13672	4.05633
varian		312861	271336
		0.443679	0.327078
JB		0.001	0.001
	☑	0.190214	0.001
		ra	log
%		3.03363	6.3305
err.va		93896.5	0.0933075
rel.std.err		0.300122	0.210304
mod.eff		0.699878	0.789696

VERSION 2.1







DATA SELECTION

scenario	file
P620171001WQ	NH3X.calib

plot: NH3X - ammonia

Dates: 1/1/1985 – 12/31/201

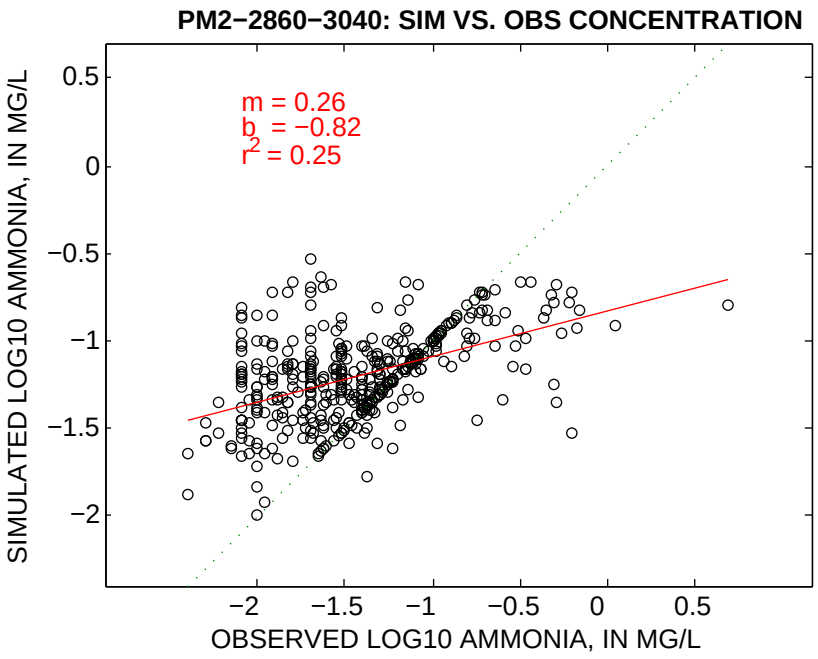
Drive	Directory	Observed
N/A	model	OBS20161101

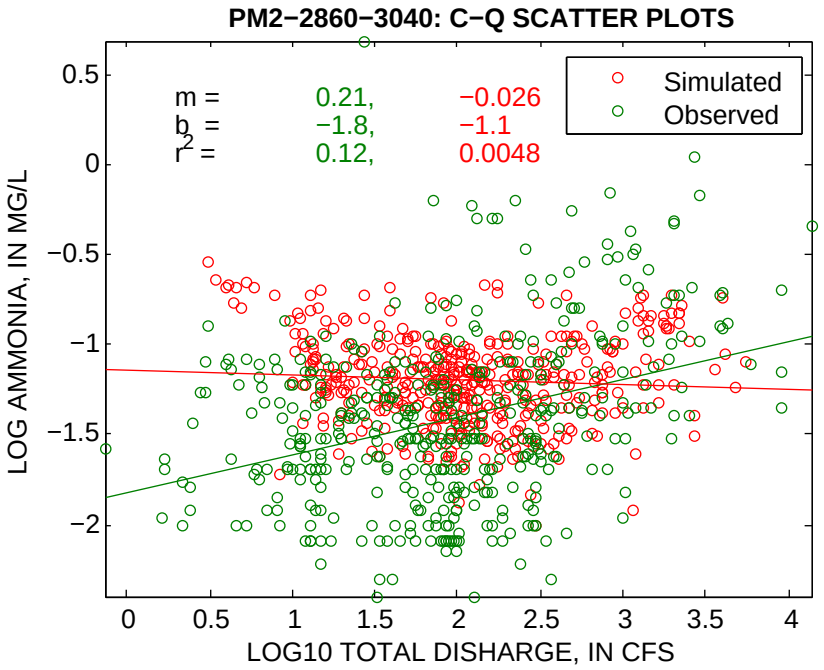
STATISTICS

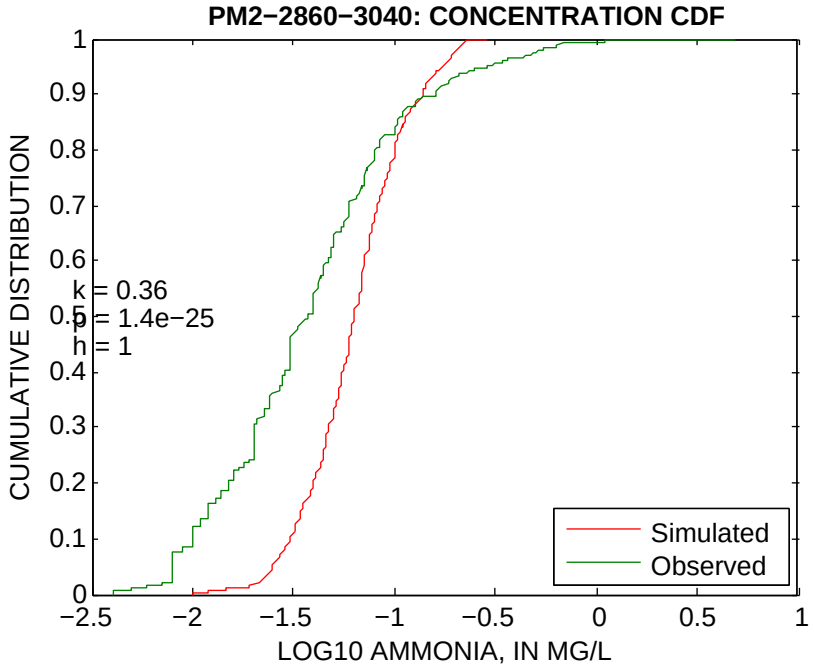
	observe	simulate
n	433	433
min	0.004 -2.39794	0.011896 -1.9246
mean	0.0819515 -1.41507	0.0855475 -1.14056
media	0.037 -1.4318	0.074394 -1.12846
max	4.9 0.690196	0.36787 -0.434306
varian	0.066942 0.21296	0.00275472 0.064439
JB	0.001 0.001	0.001 0.5
	ra	log
%	4.38795	-19.3991
err.va	0.0686107	0.312673
rel.std.err	1.02493	1.46823
mod.eff	-0.0249283	-0.468226

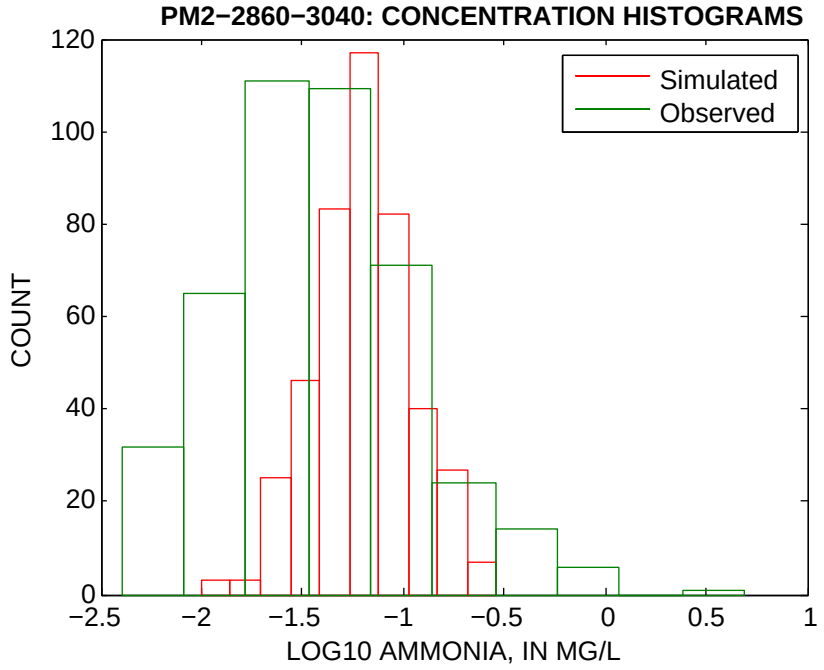
VERSION 2.1

ALL DATA
LOG10

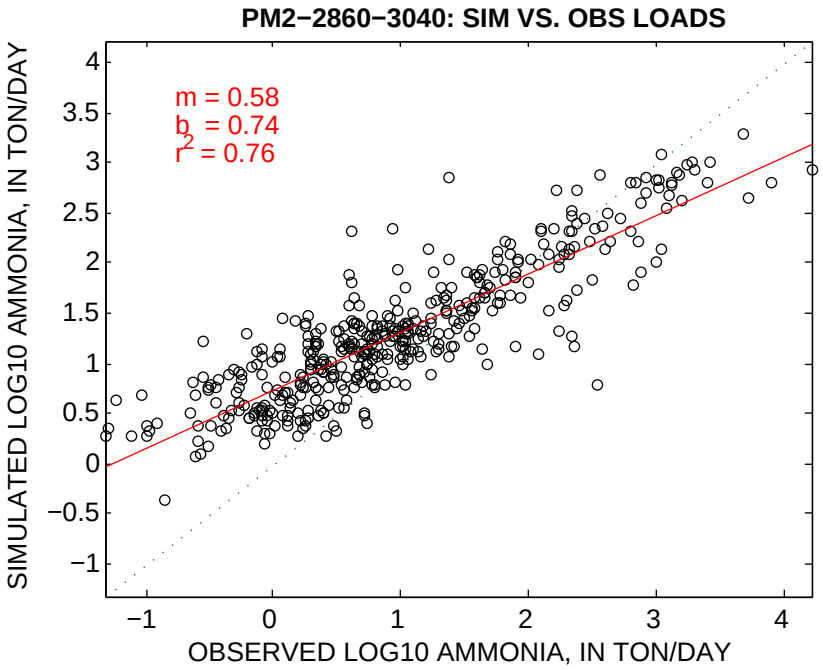


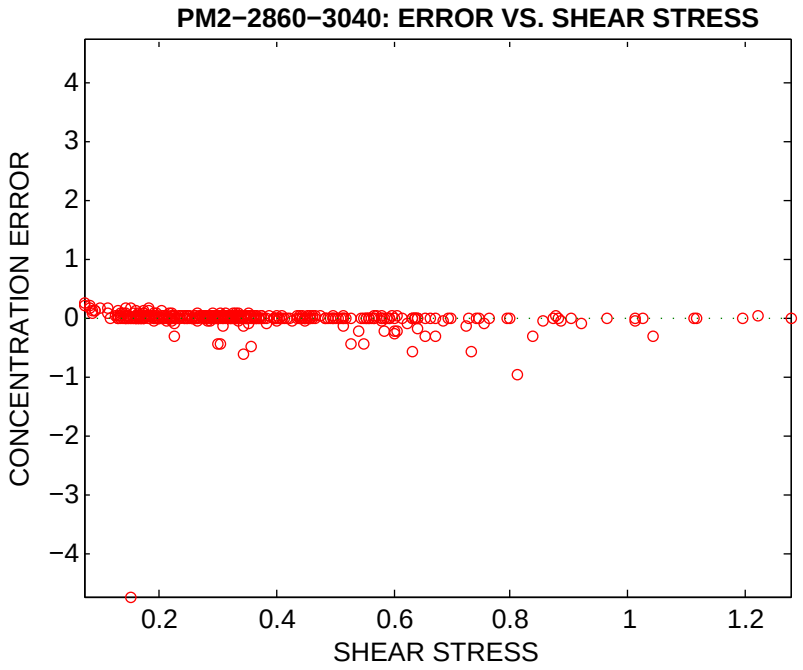


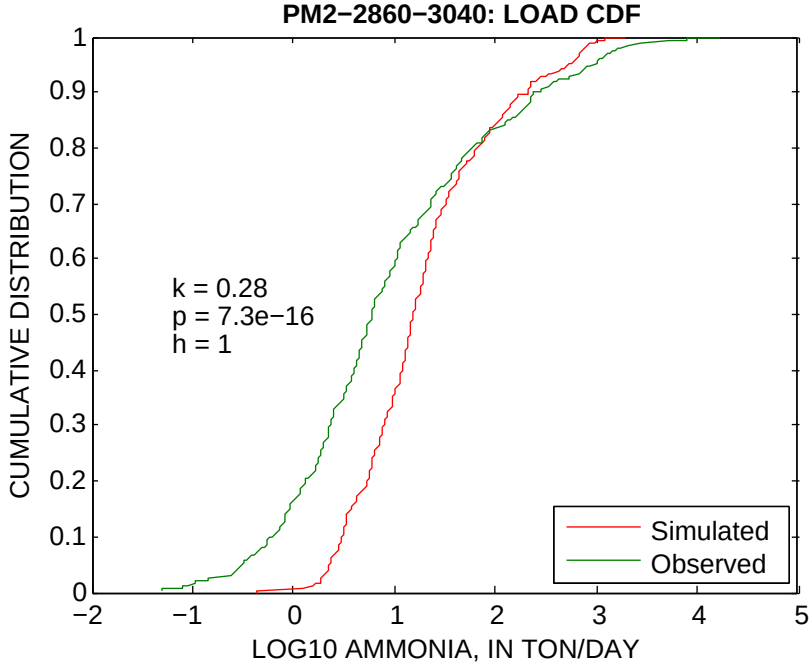


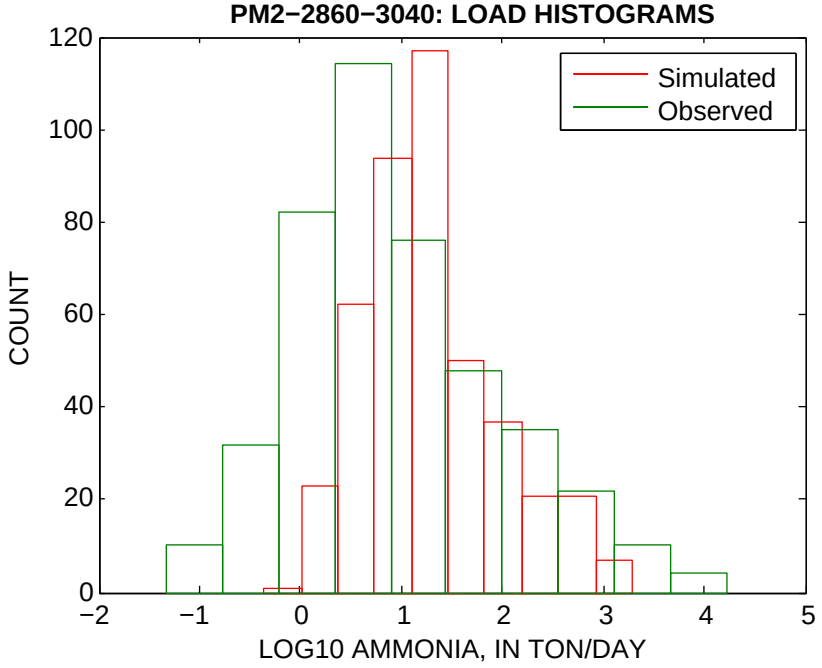


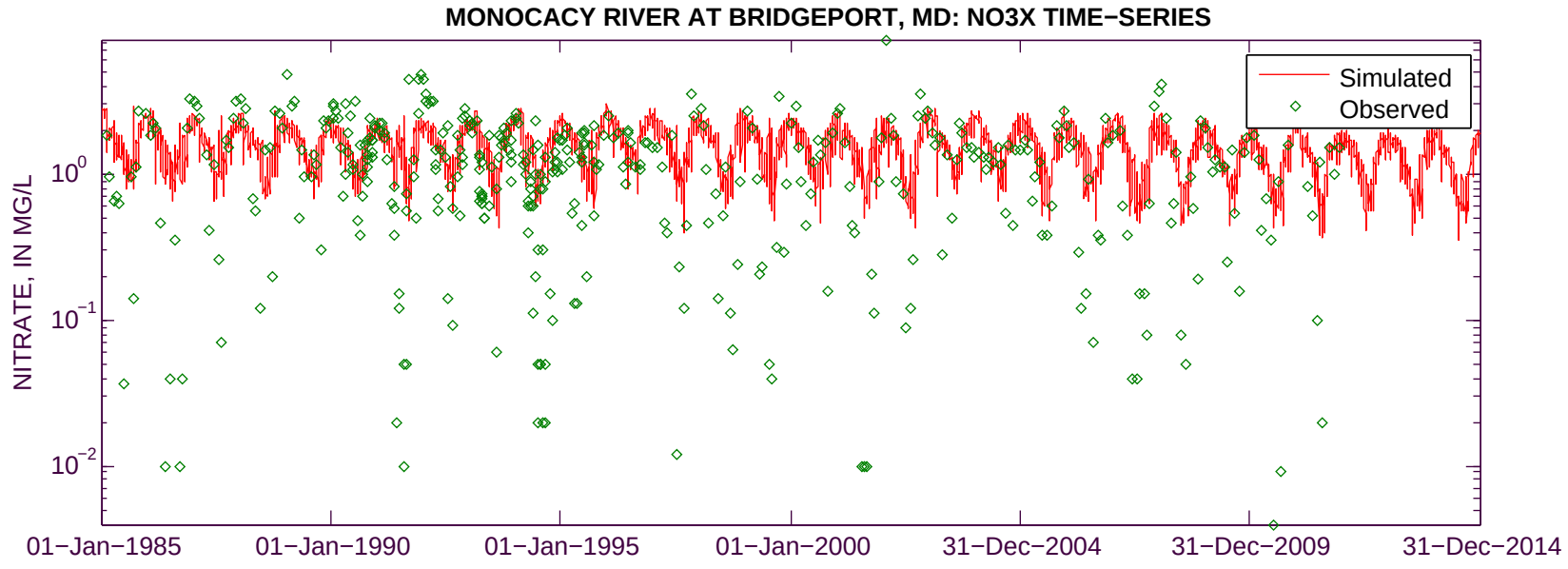
LOAD DATA
LOG10

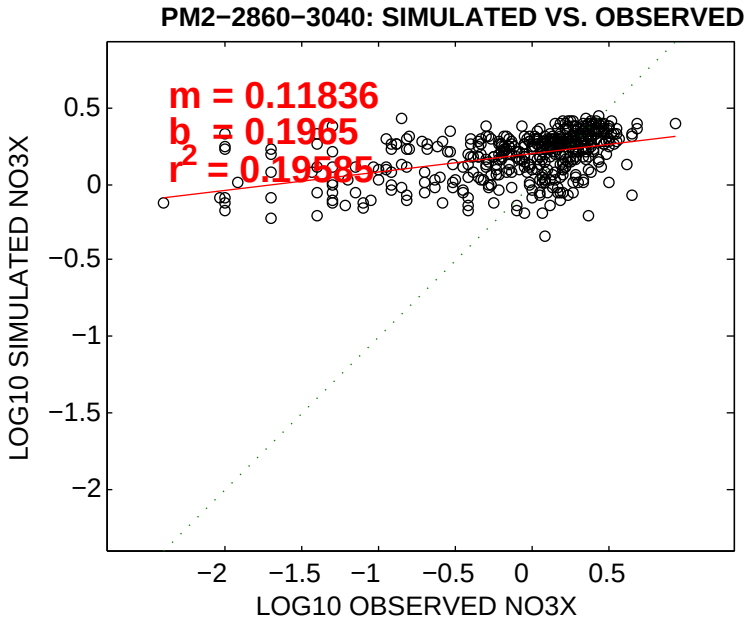


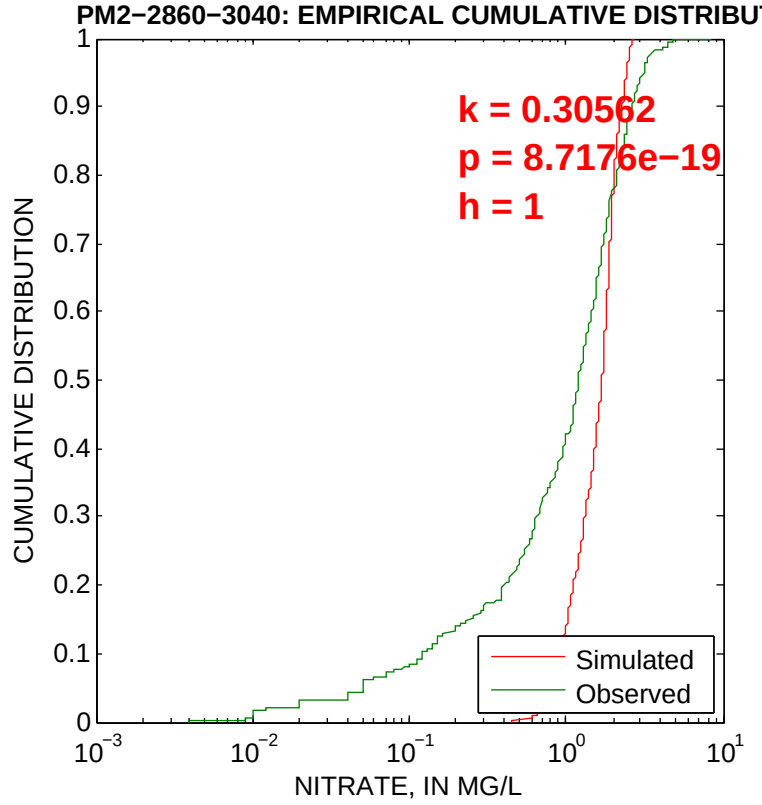












DATA SELECTION

scenario: P620171001WQ | file: NO3X.calib

plot: NO3X - nitrate

Dates: 1/1/1985 – 12/31/201

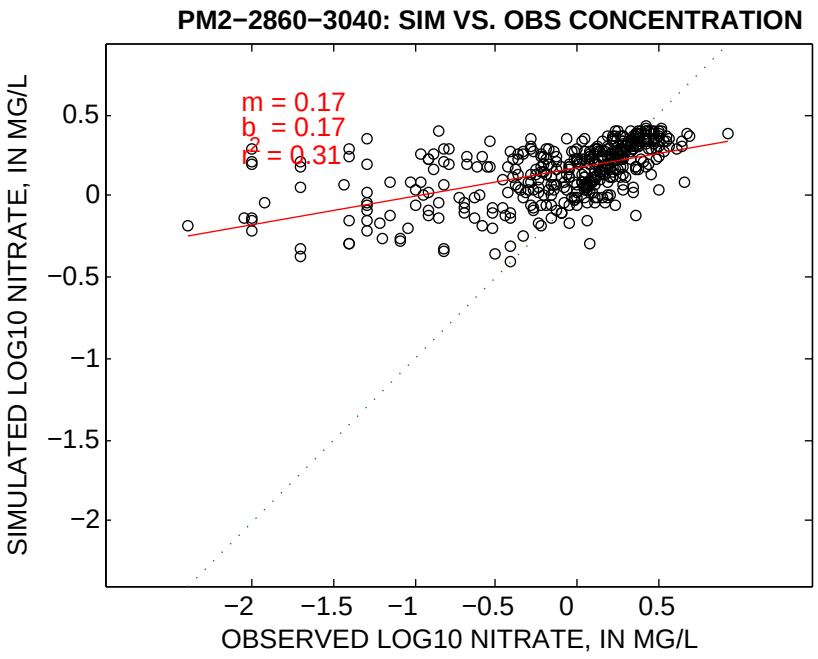
Drive: N/A | Directory: model | Observed: OBS20161101

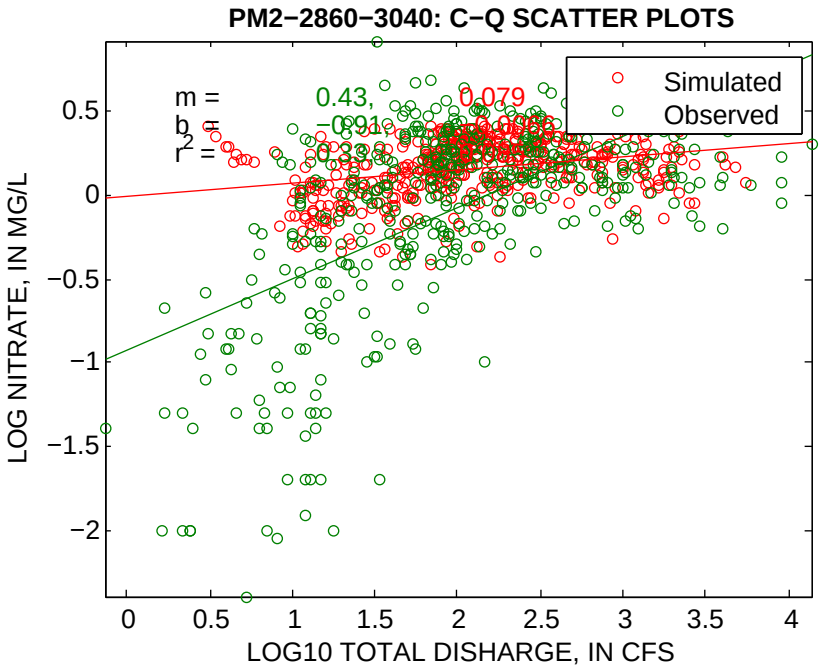
STATISTICS

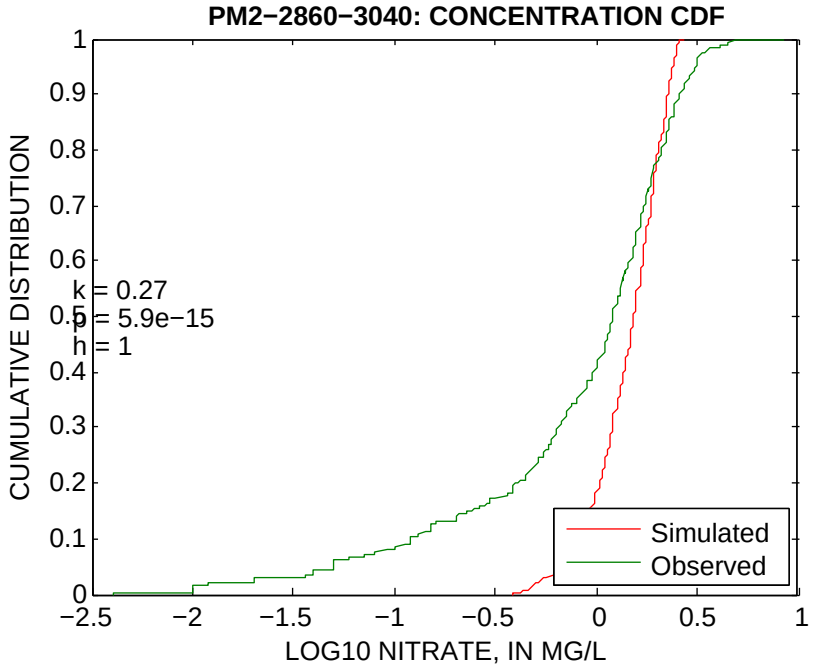
	n	observe	simulate
		445	445
min		0.004	0.44629
		-2.39794	-0.350383
mean		1.32941	1.62055
		-0.0877275	0.186118
media		1.2	1.6996
		0.0791812	0.230347
max		8.48	2.752
		0.928396	0.439648
varian		1.03389	0.246259
		0.31341	0.0224203
JB		0.001	0.007754
		0.001	0.001
		ra	log
%		21.9001	-312.155
err.va		0.892801	0.336797
rel.std.err		0.86354	1.07462
mod.eff		0.13646	-0.0746227

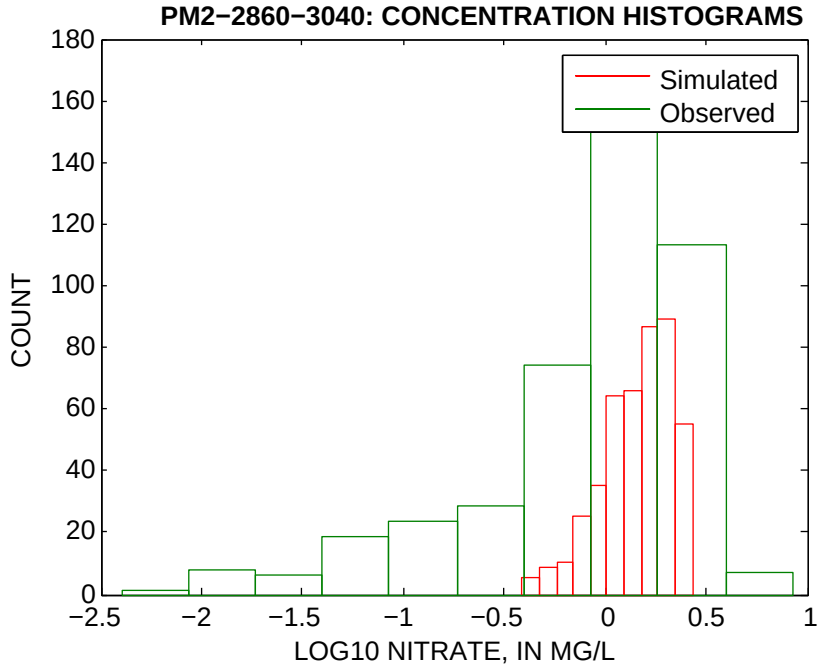
VERSION 2.1

ALL DATA
LOG10

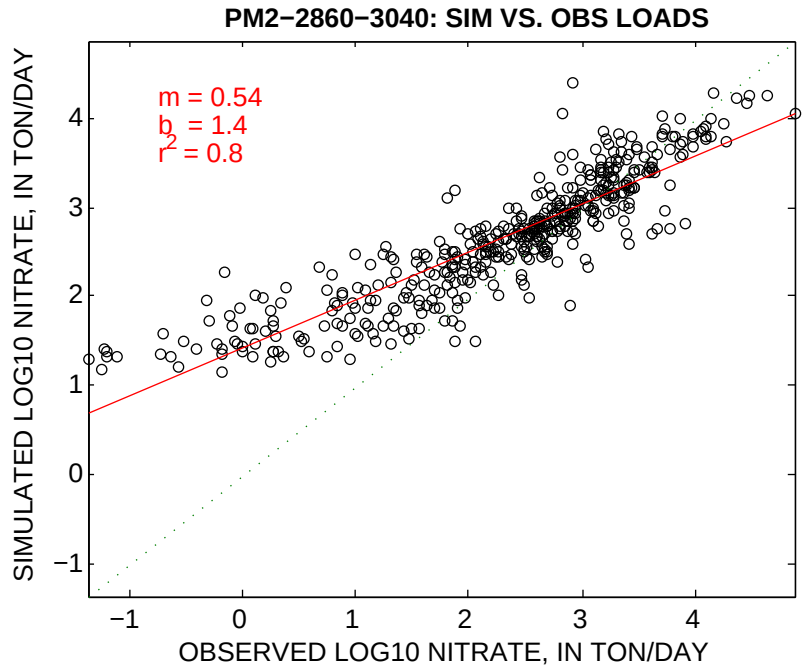


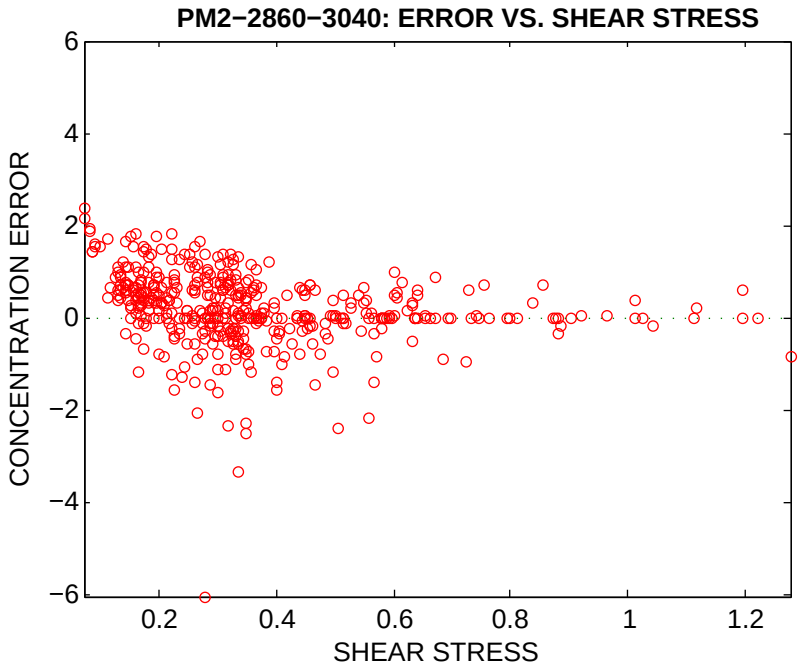


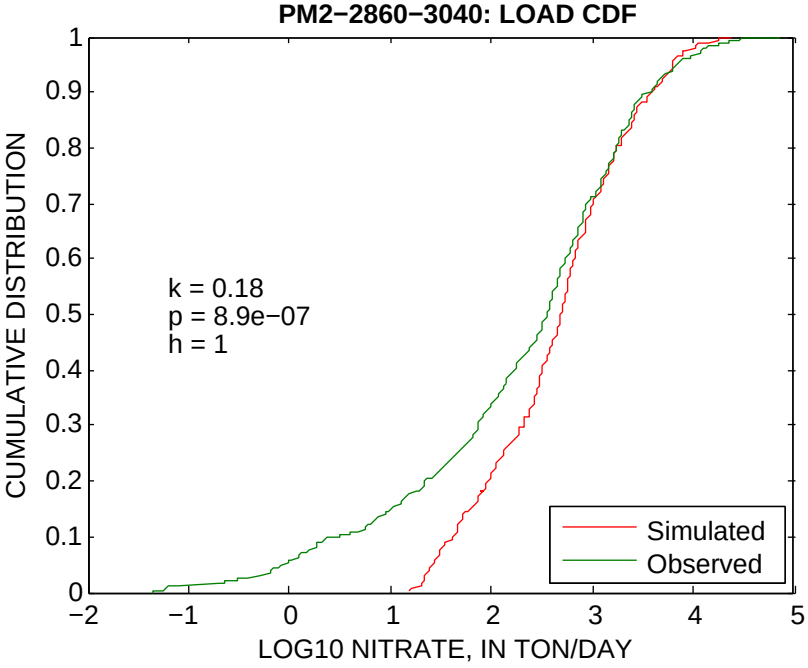


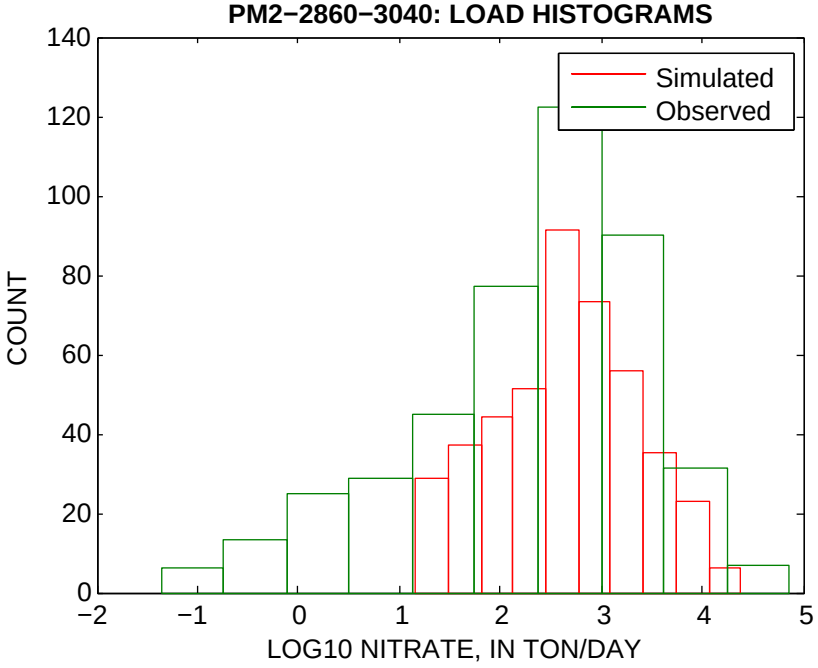


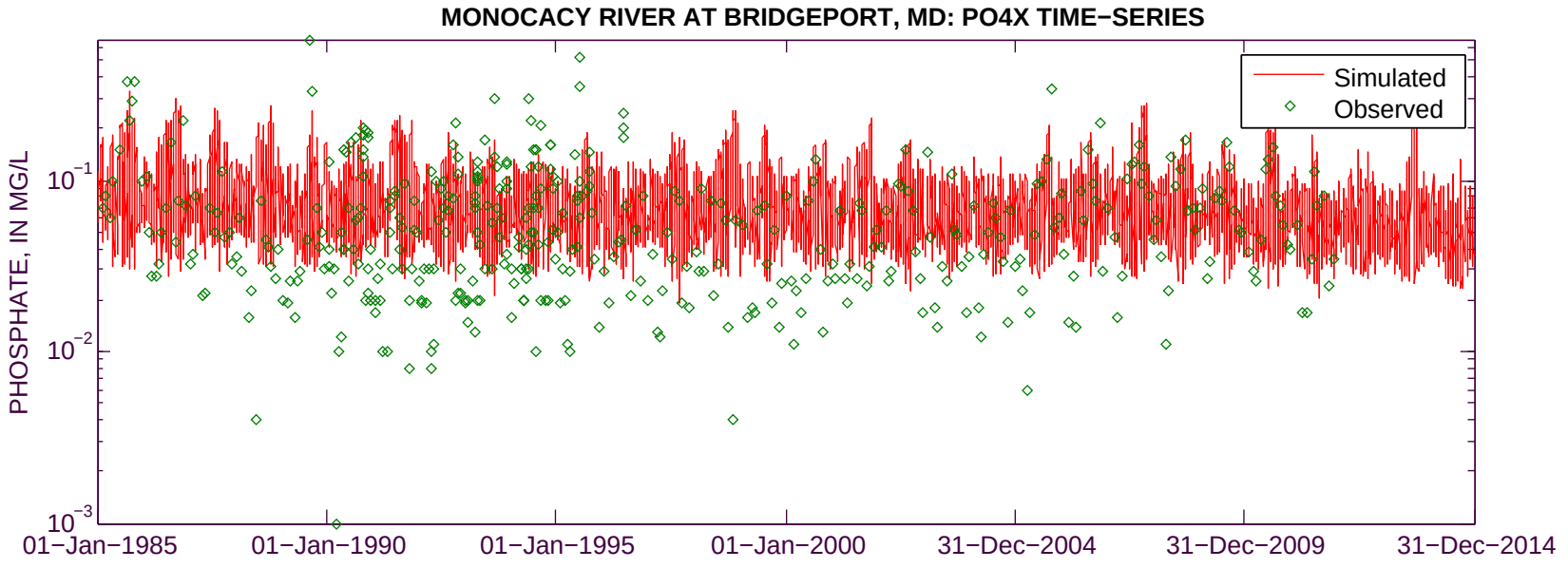
LOAD DATA
LOG10

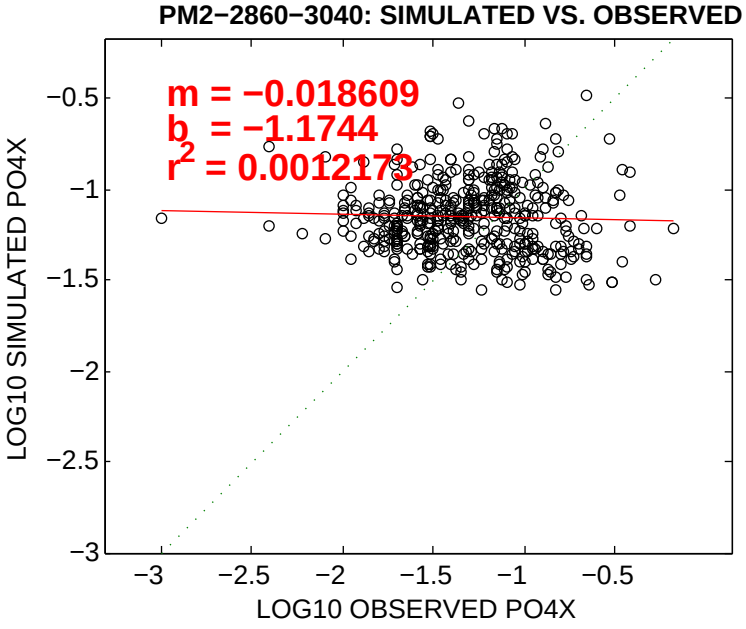


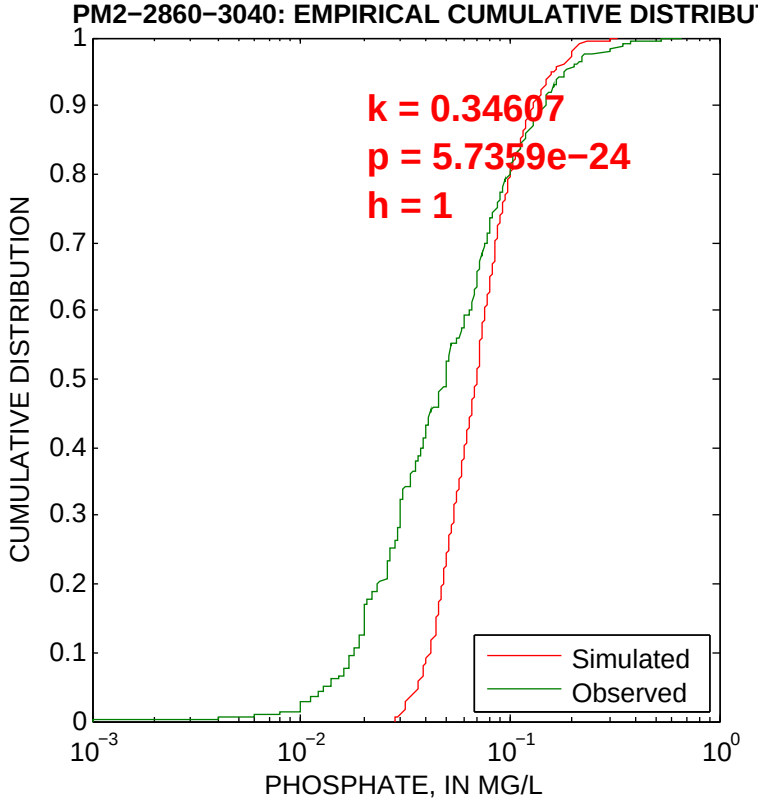












DATA SELECTION

scenario	file
P620171001WQ	PO4X.calib

plot: PO4X - phosphate

Dates: 1/1/1985 – 12/31/201

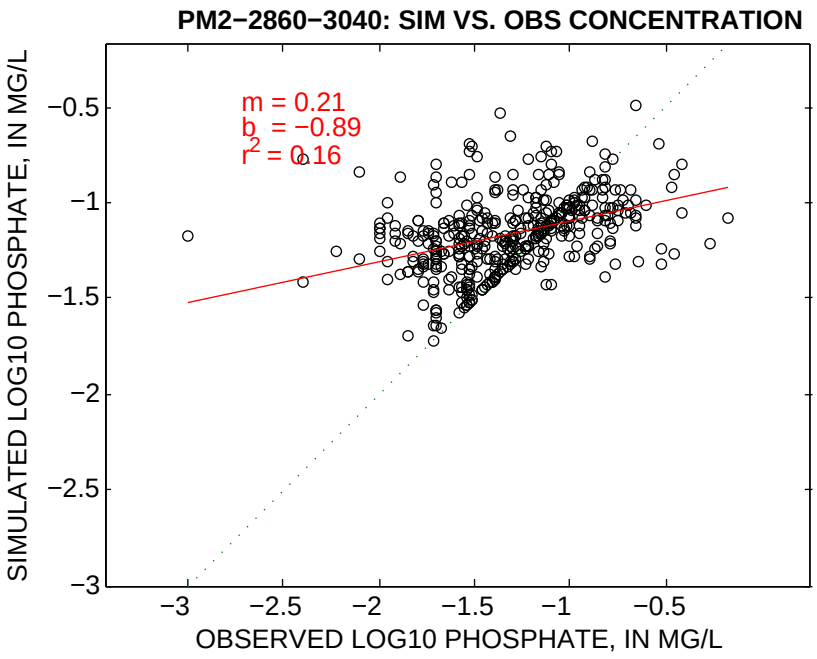
Drive	Directory	Observed
N/A	model	OBS20161101

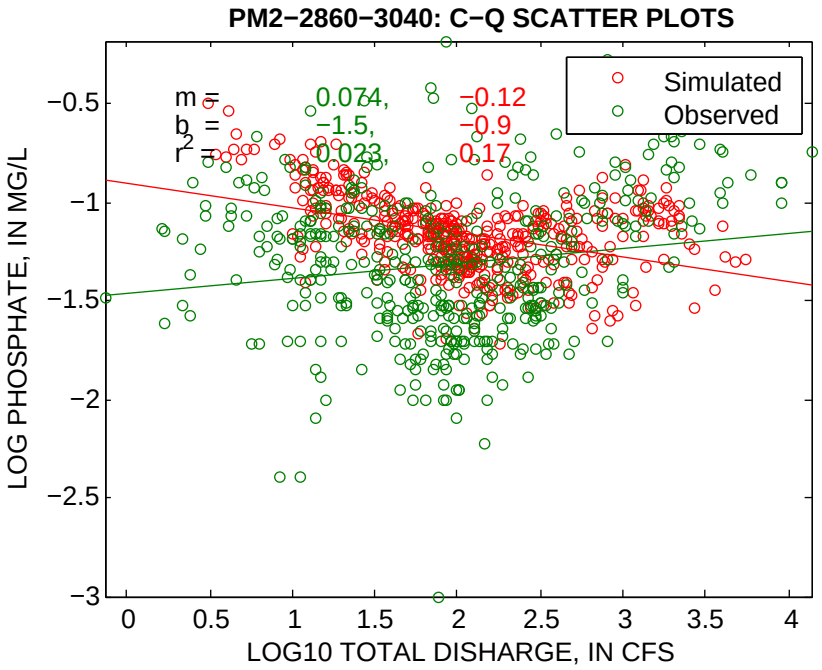
STATISTICS

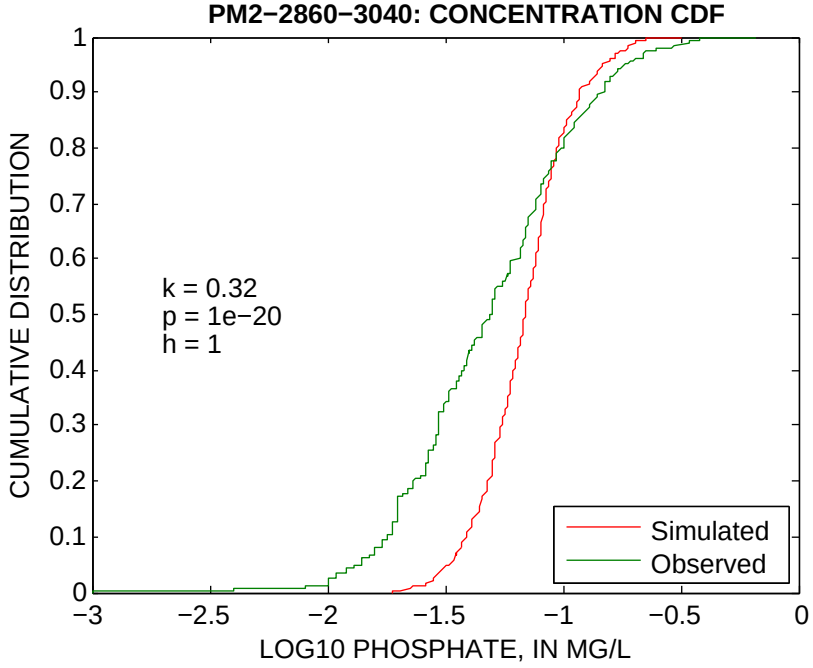
	n	observe	simulate
		445	445
min		0.001	0.027902
		-3	-1.55436
mean		0.0693107	0.0789201
		-1.3125	-1.15001
media		0.049	0.069588
		-1.3098	-1.15747
max		0.668	0.32906
		-0.175224	-0.482725
varian		0.0048512	0.00172147
		0.134649	0.0383051
JB		0.001	0.001
		0.017186	0.002355
		ra	log
%		13.8641	-12.3803
err.va		0.00676693	0.204428
rel.std.err		1.3949	1.51823
mod.eff		-0.394897	-0.518231

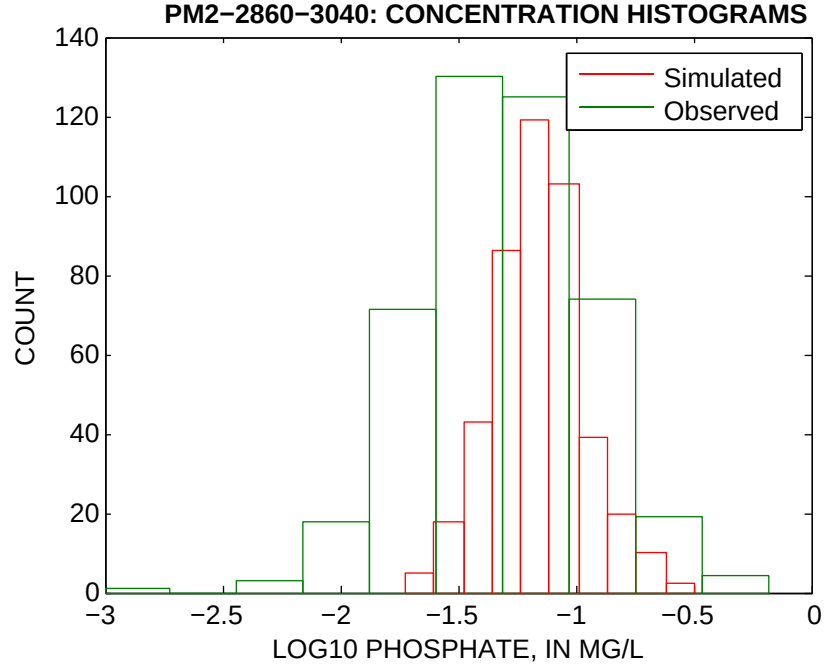
VERSION 3.1

ALL DATA
LOG10

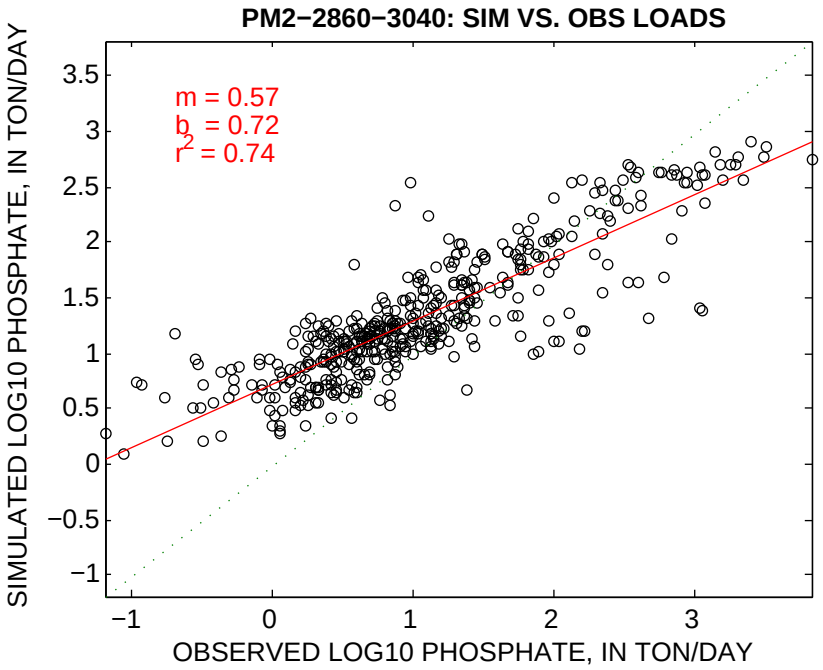


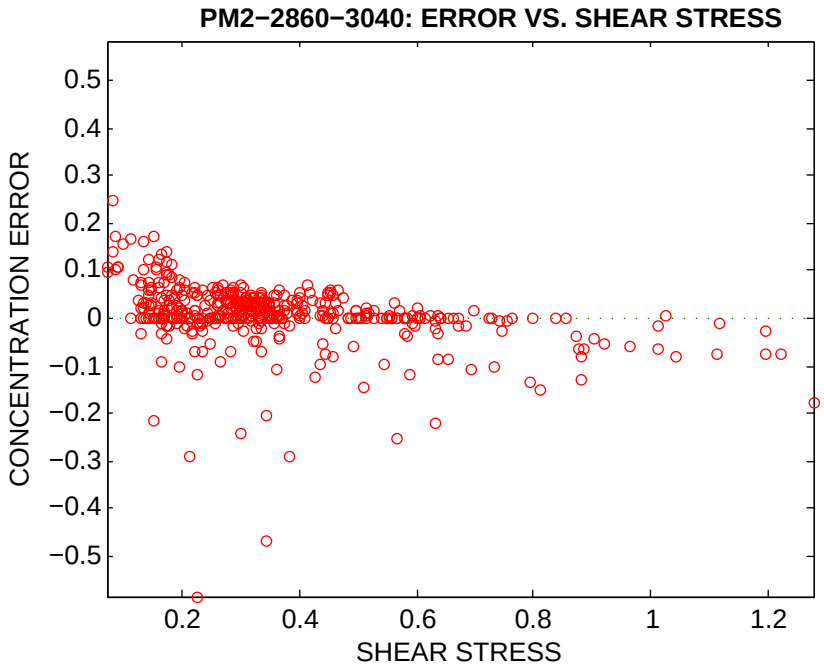


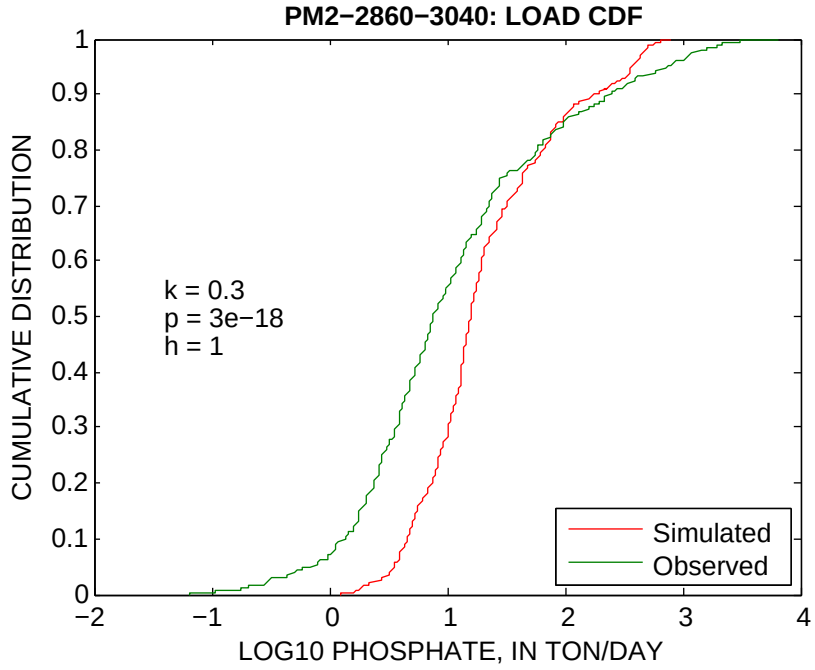


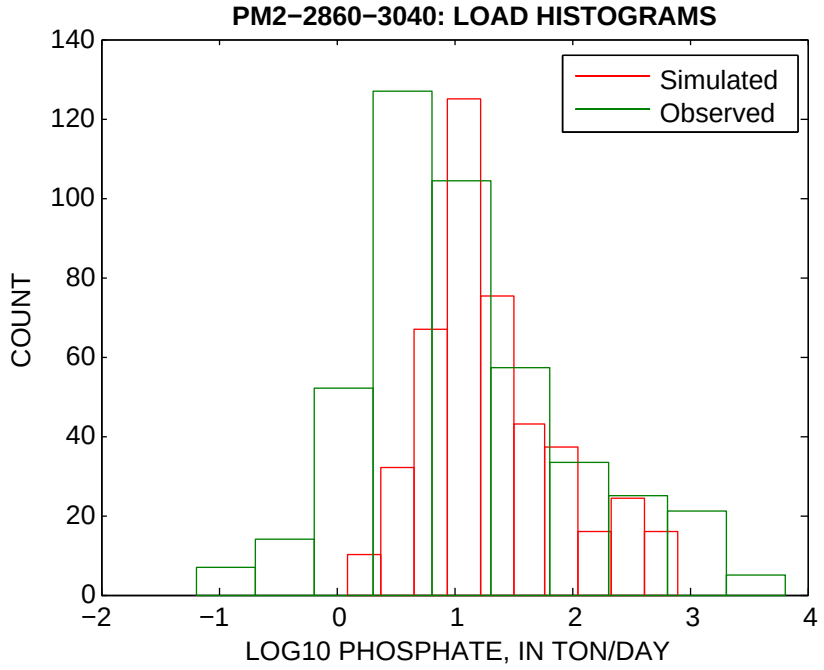


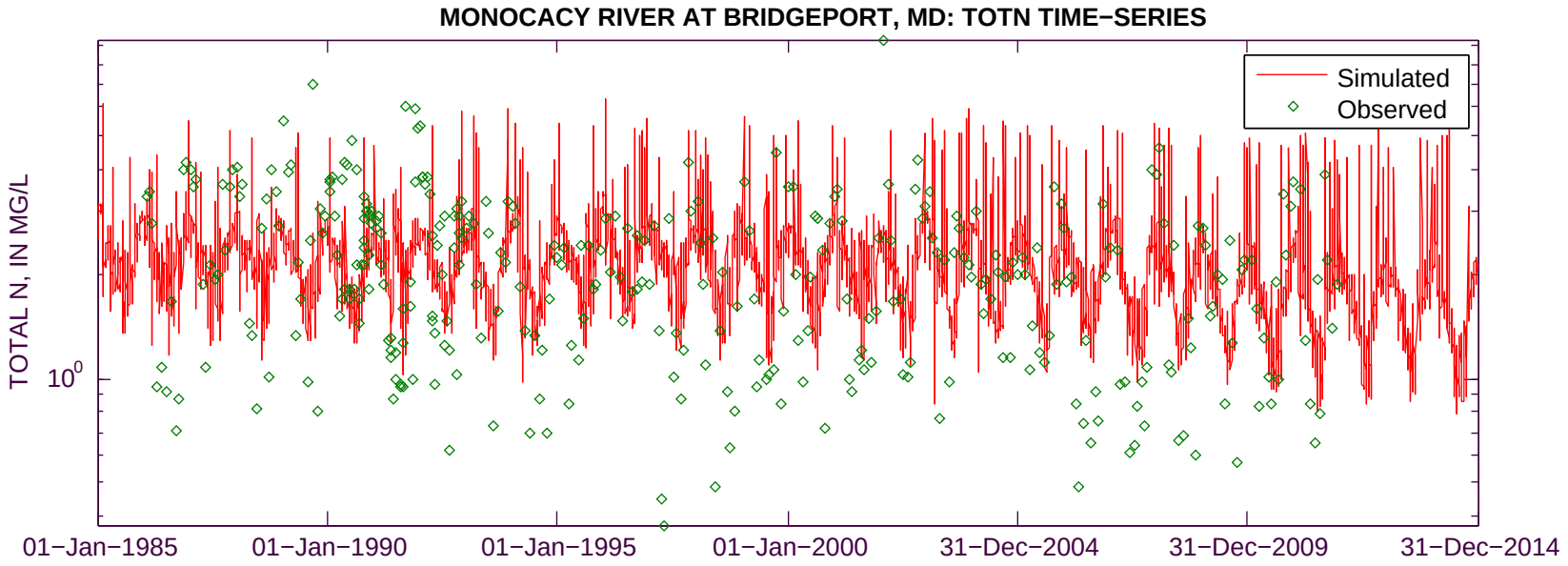
LOAD DATA
LOG10

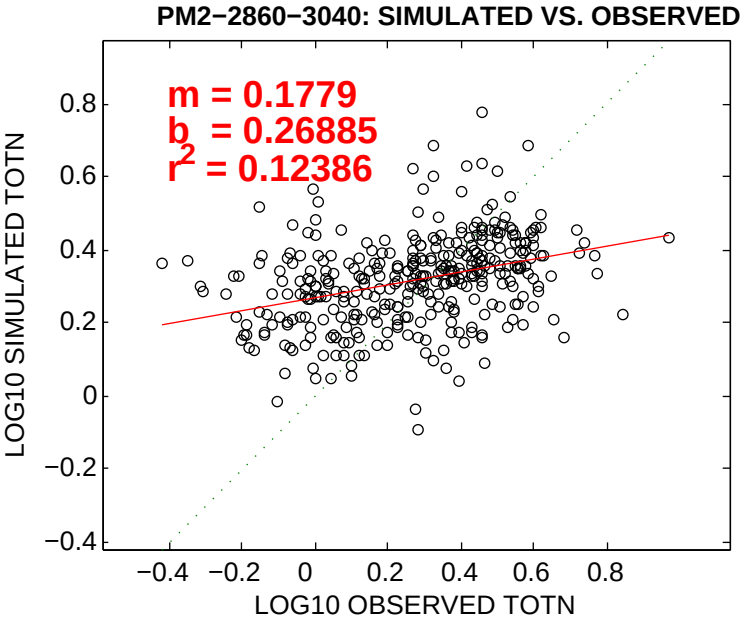


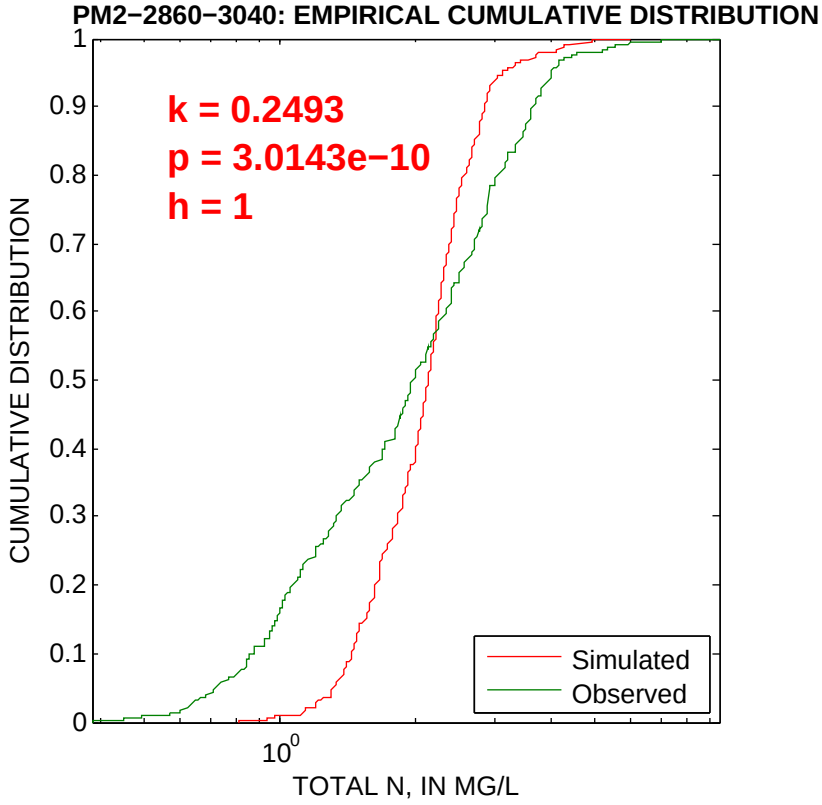












DATA SELECTION

scenario	file
P620171001WQ	TOTN.calib

plot: TOTN - total nitrogen

Dates: 1/1/1985 – 12/31/201

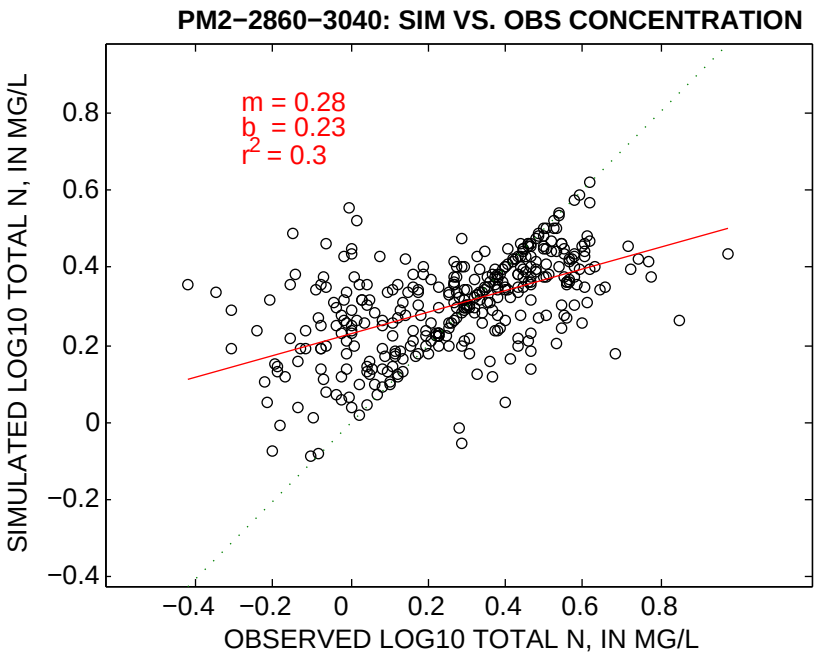
Drive	Directory	Observed
N/A	model	OBS20161101

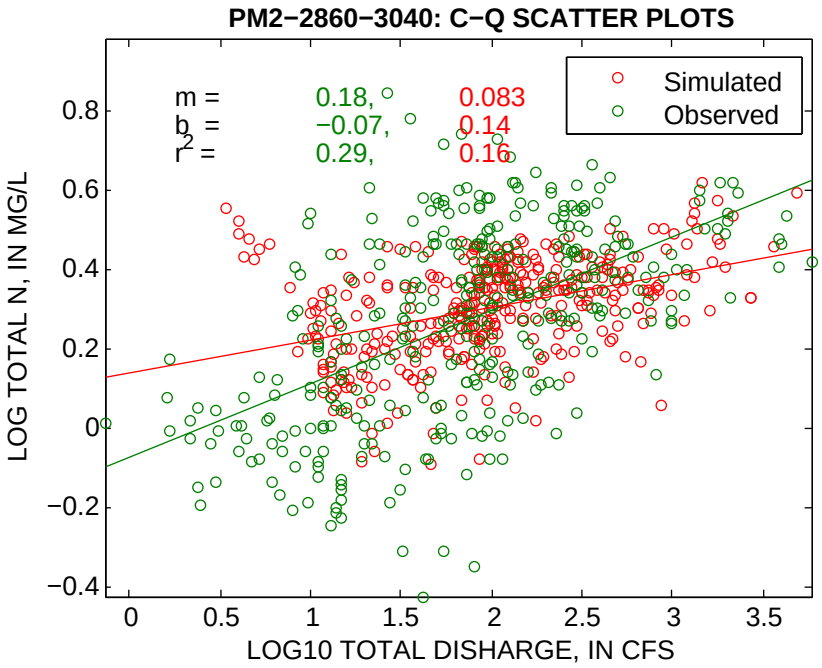
STATISTICS

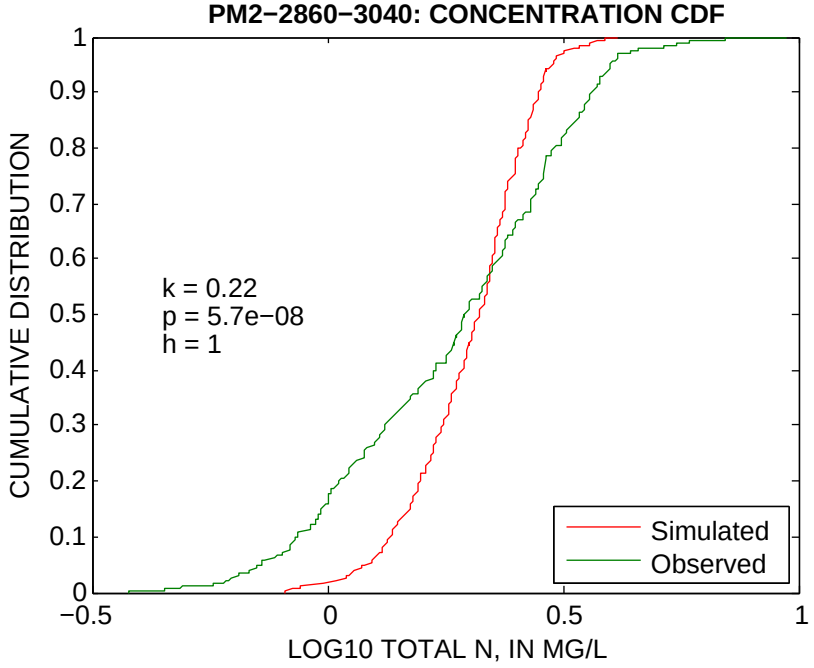
	n	357	357
		observe	simulate
min		0.38	0.81056
		-0.420216	-0.0912148
mean		2.15802	2.15938
		0.270514	0.316978
media		1.97	2.1337
		0.294466	0.329133
max		9.41	5.9907
		0.97359	0.777478
varian		1.37132	0.408703
		0.0585197	0.0149521
JB		0.001	0.001
		0.028177	0.011859
		ra	log
%		0.062678	17.1761
err.va		1.31285	0.054816
rel.std.err		0.95736	0.936709
mod.eff		0.0426396	0.0632907

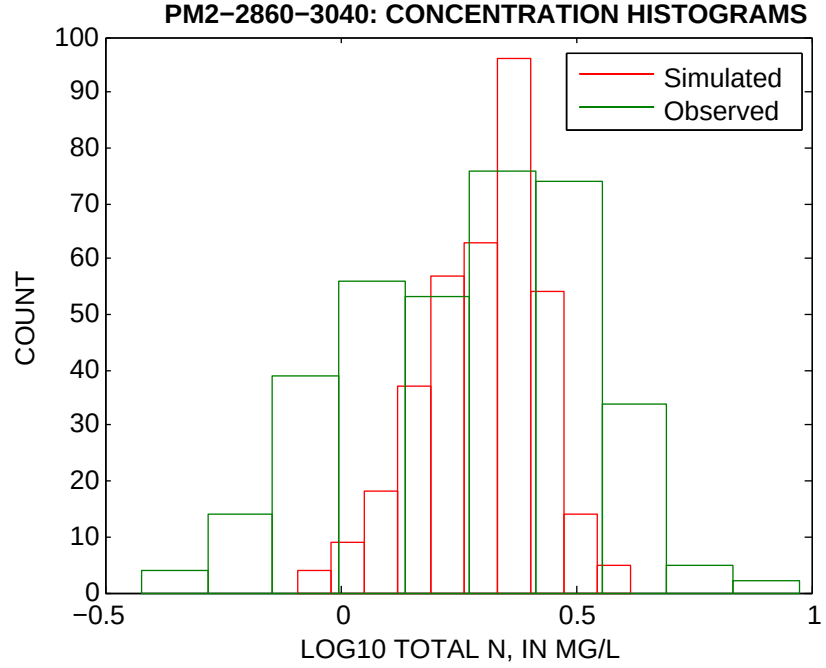
VERSION 2.1

ALL DATA
LOG10

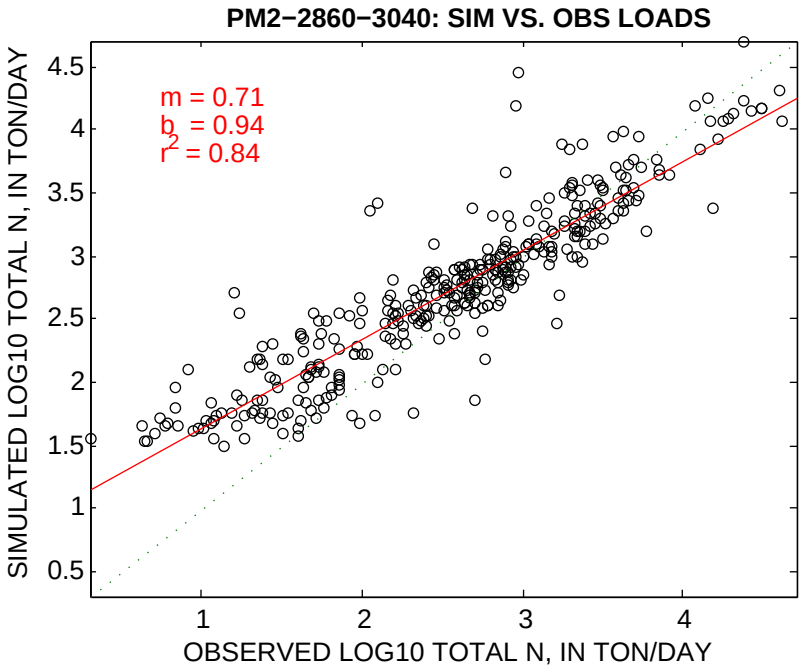


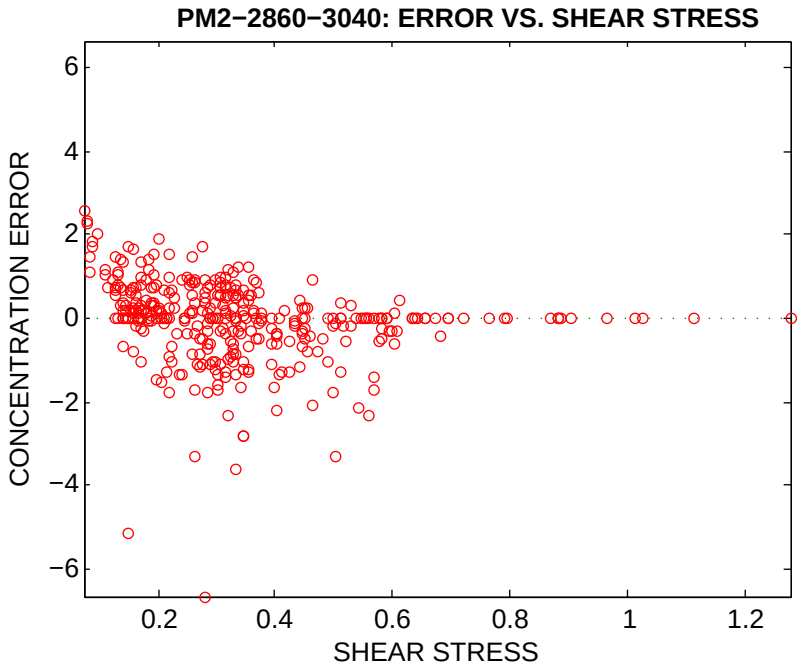


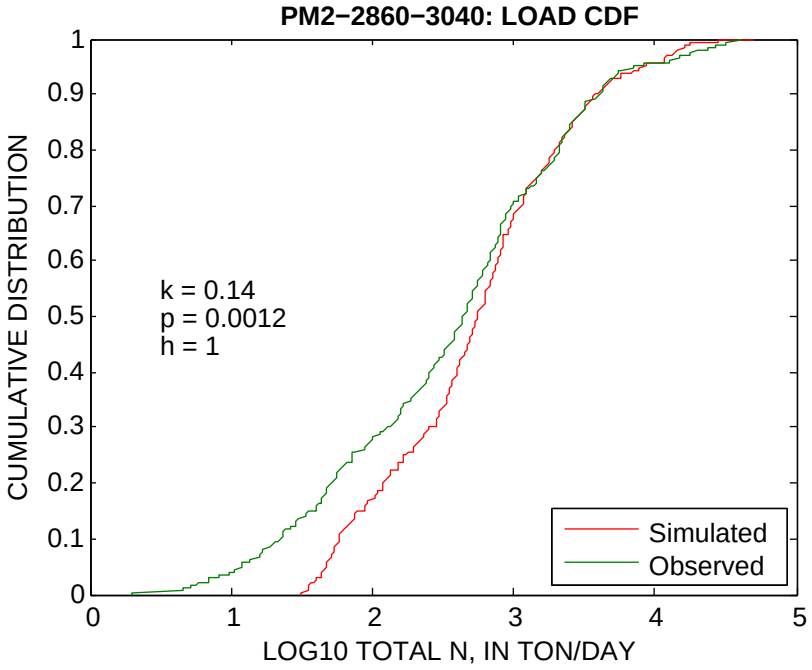


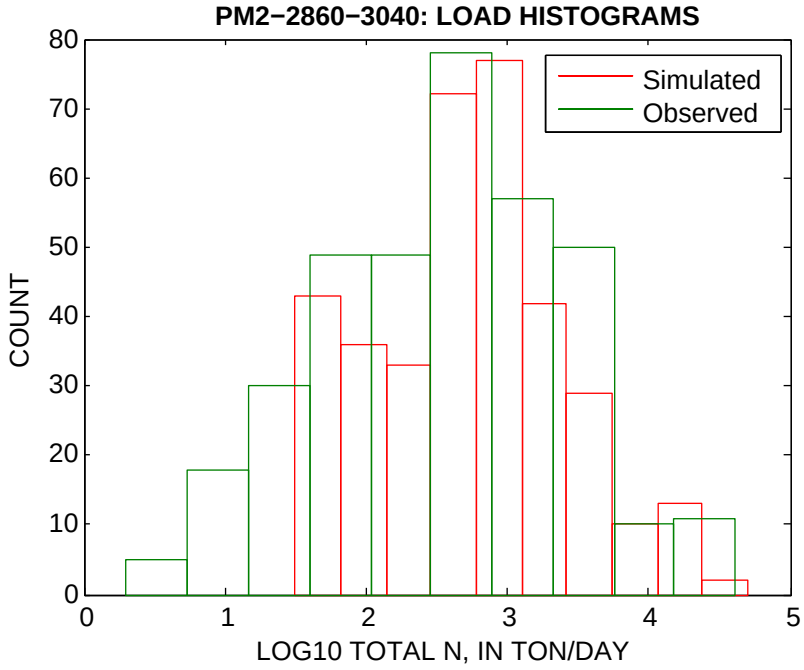


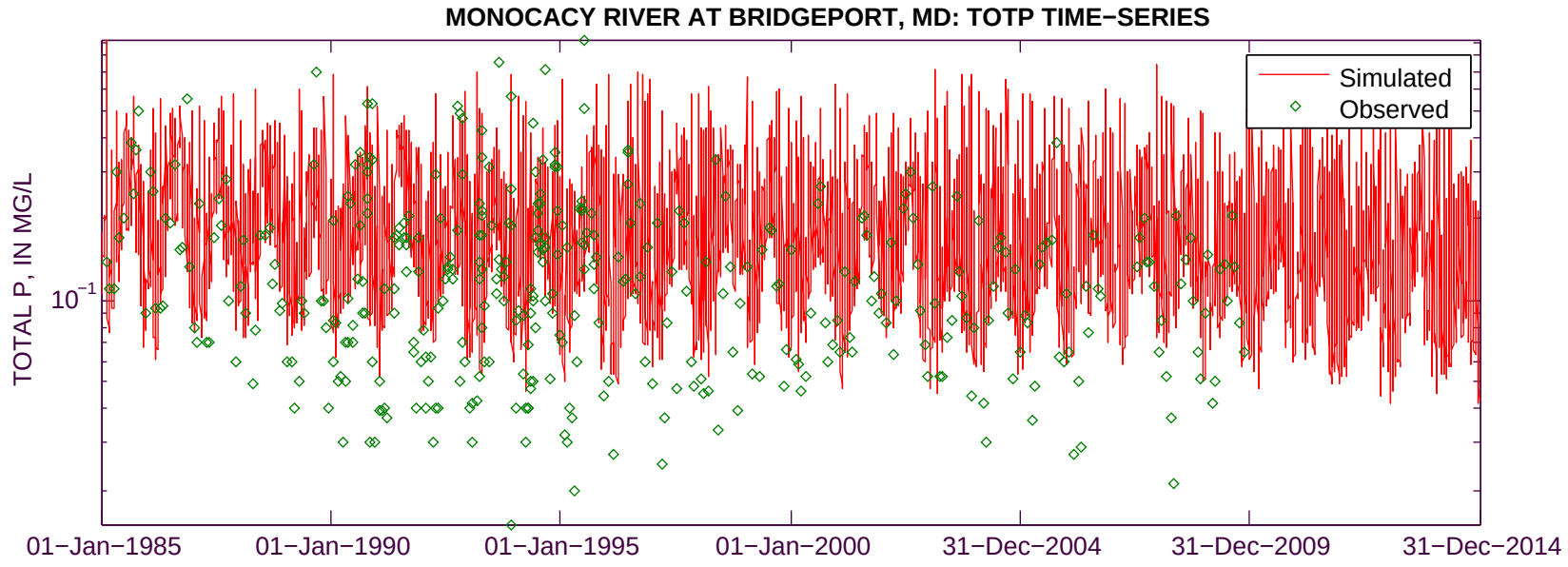
LOAD DATA
LOG10

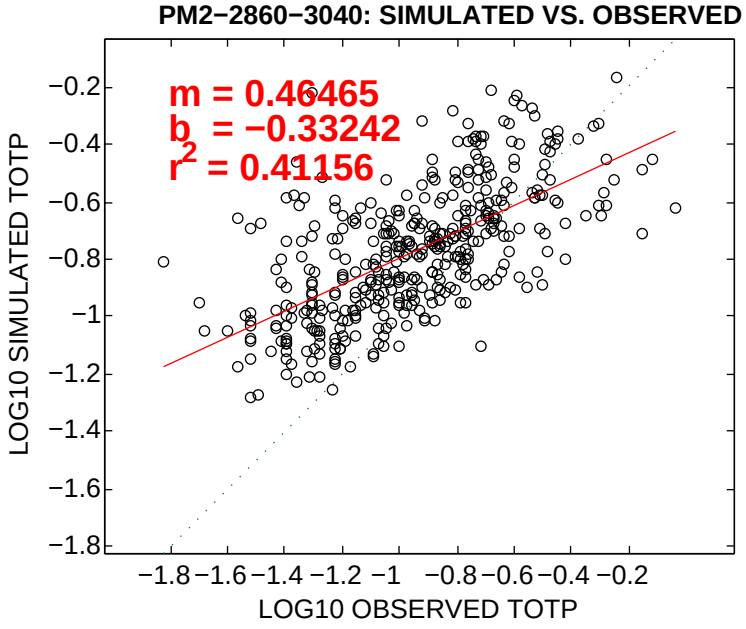


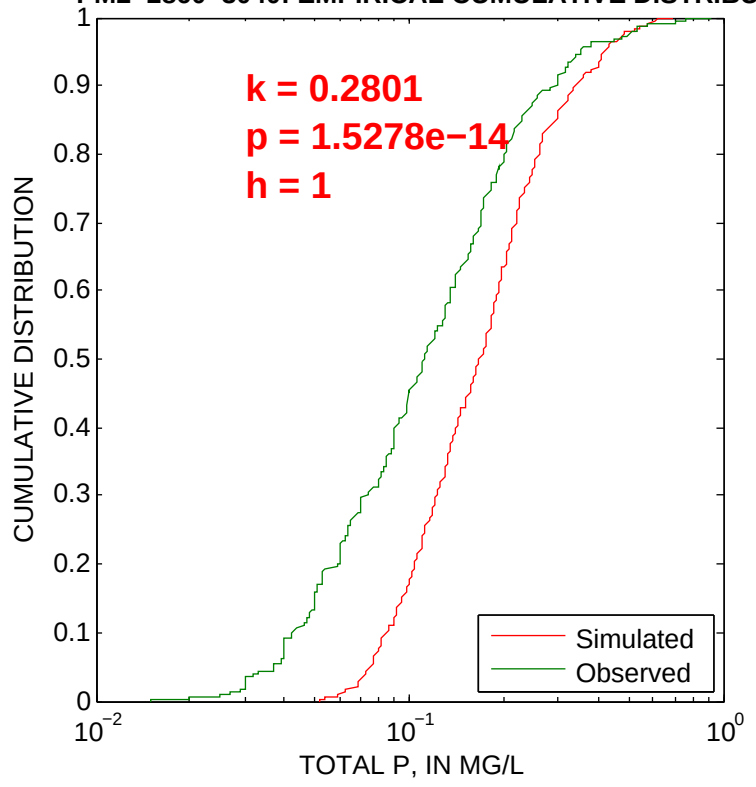












DATA SELECTION

scenario: P620171001WQ | file: TOTP.calib

plot: TOTP - total phosphorus

Dates: 1/1/1985 – 12/31/201

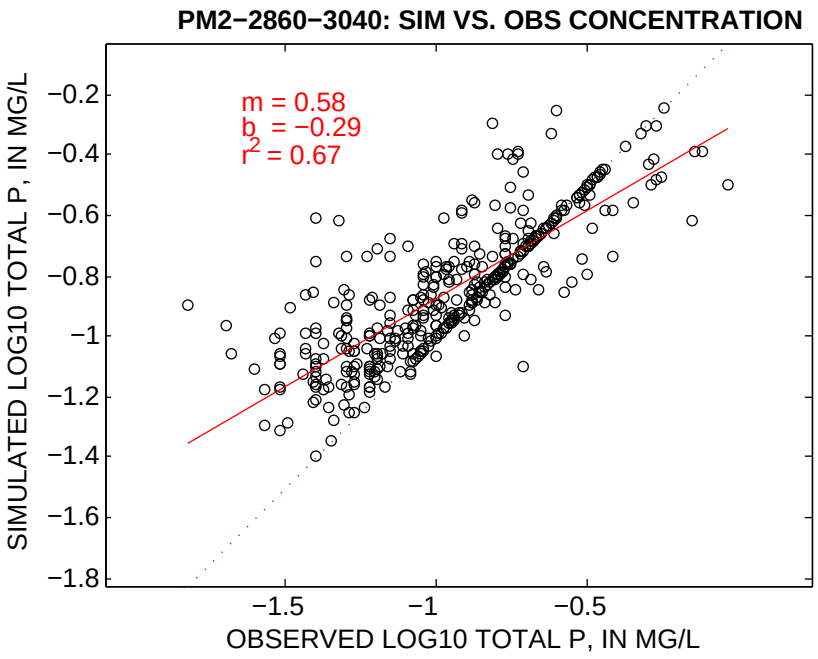
Drive: N/A | Directory: model | Observed: OBS20161101

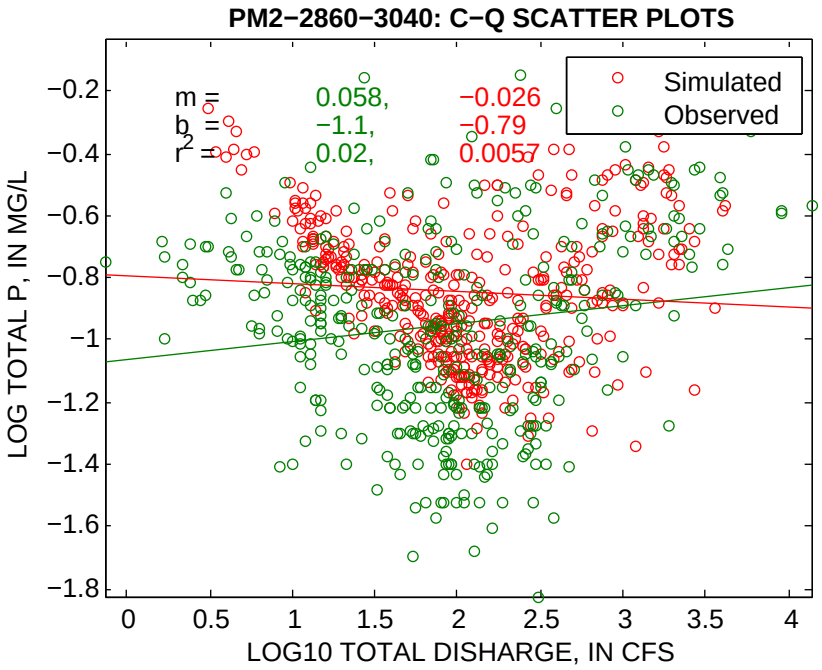
STATISTICS

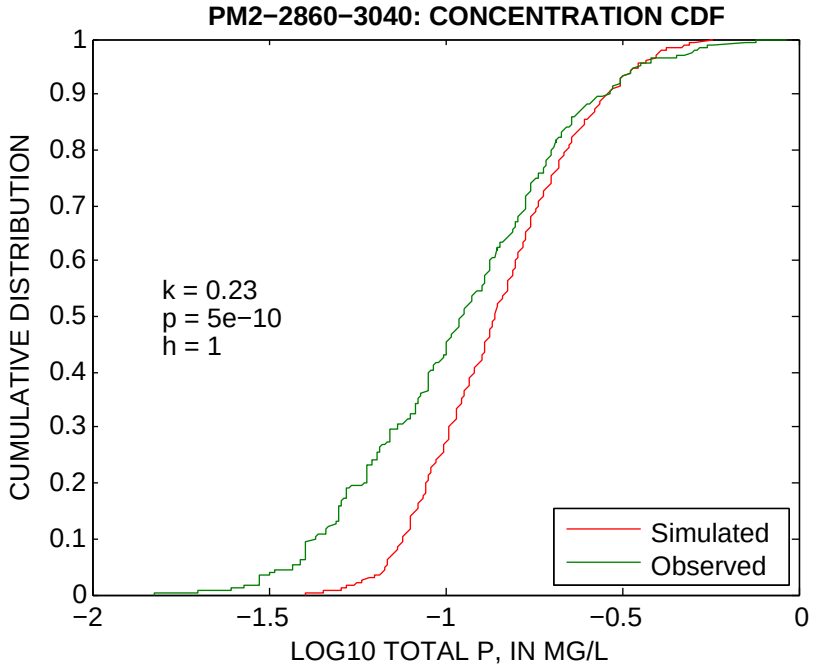
		observe	simulate
n		407	407
min		0.015	0.051848
		-1.82391	-1.28527
mean		0.144825	0.192896
		-0.952469	-0.774987
media		0.112	0.16797
		-0.950782	-0.774768
max		0.92	0.68779
		-0.0362122	-0.162544
varian		0.0140581	0.0119728
		0.0974926	0.051144
JB		0.001	0.001
		0.316973	0.037736
		ra	log
%		33.1927	-18.6338
err.va		0.0144485	0.0896131
rel.std.err		1.02777	0.919179
mod.eff		-0.0277739	0.0808208

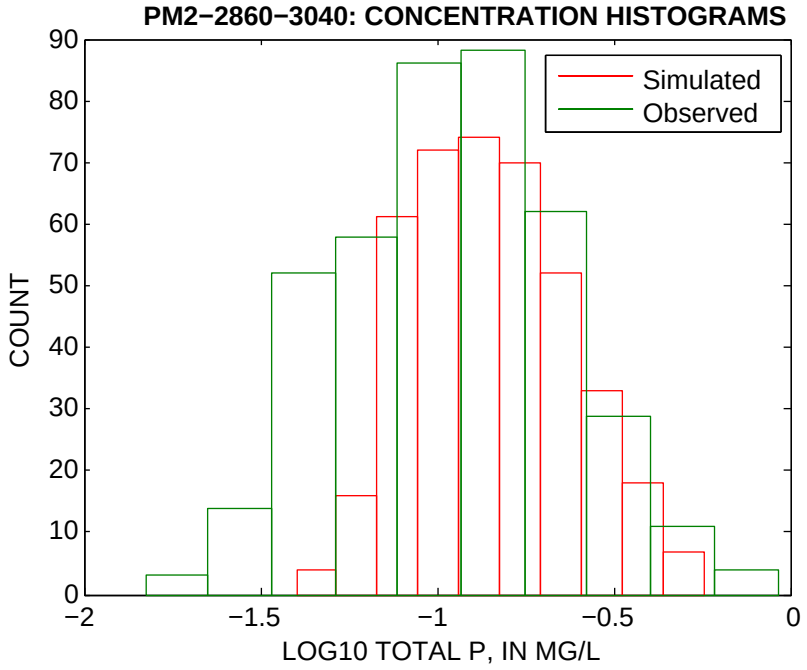
VERSION 2.1

ALL DATA
LOG10

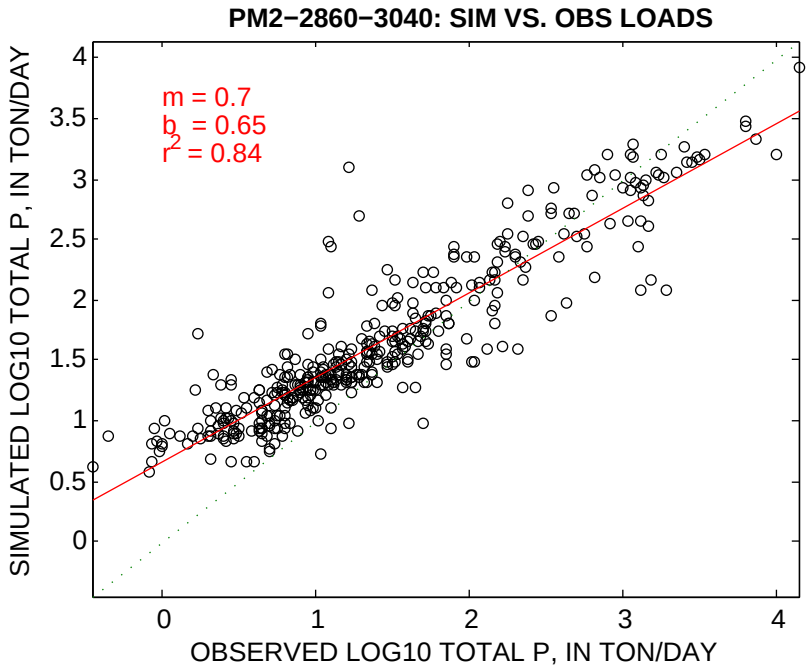


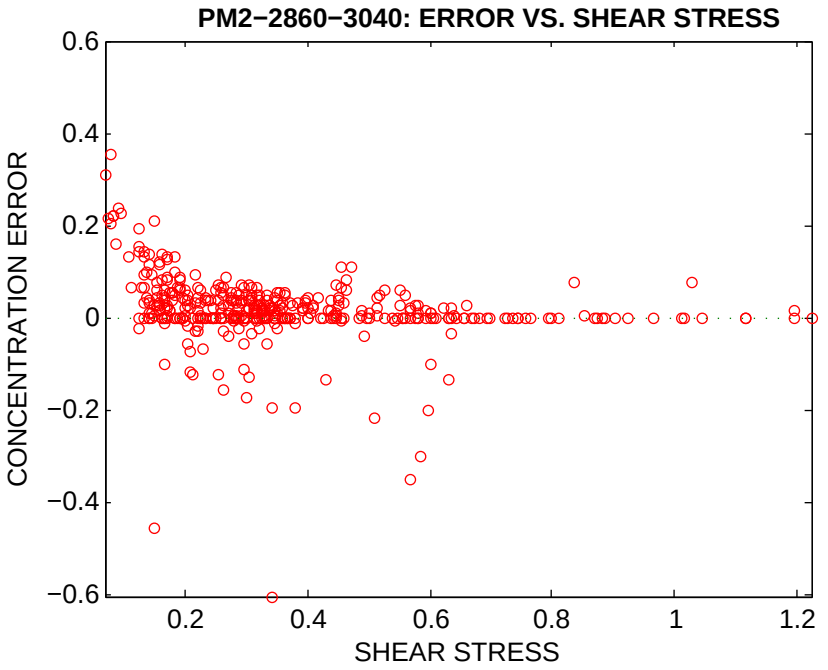


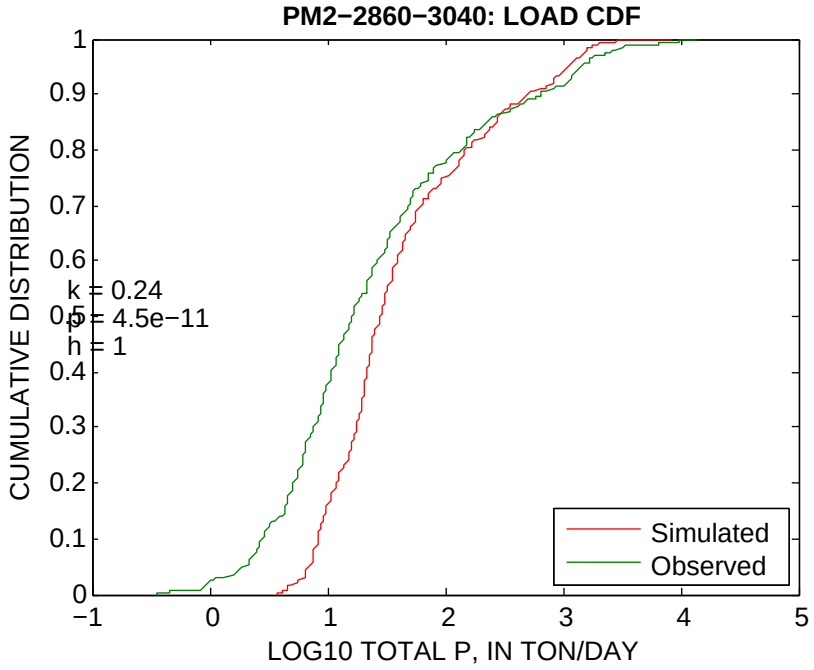


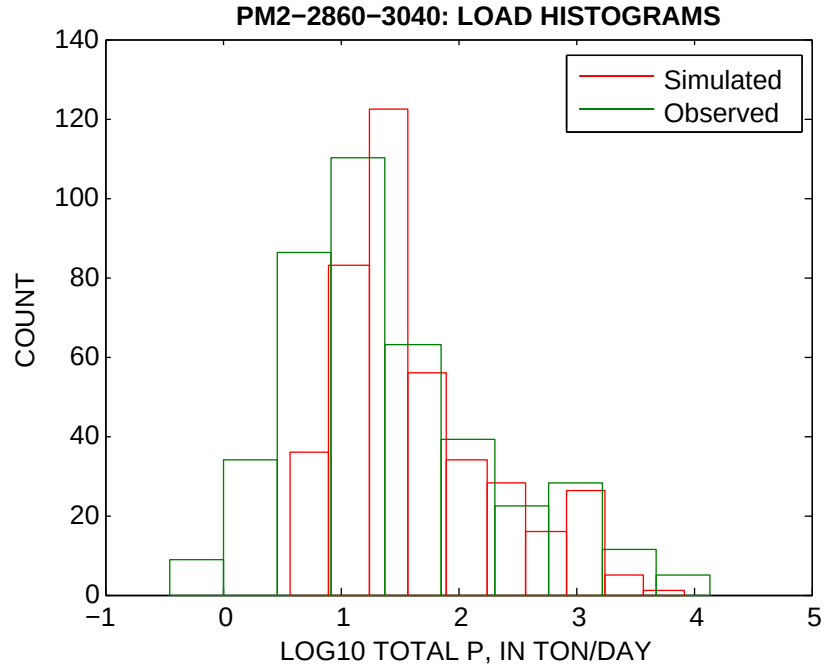


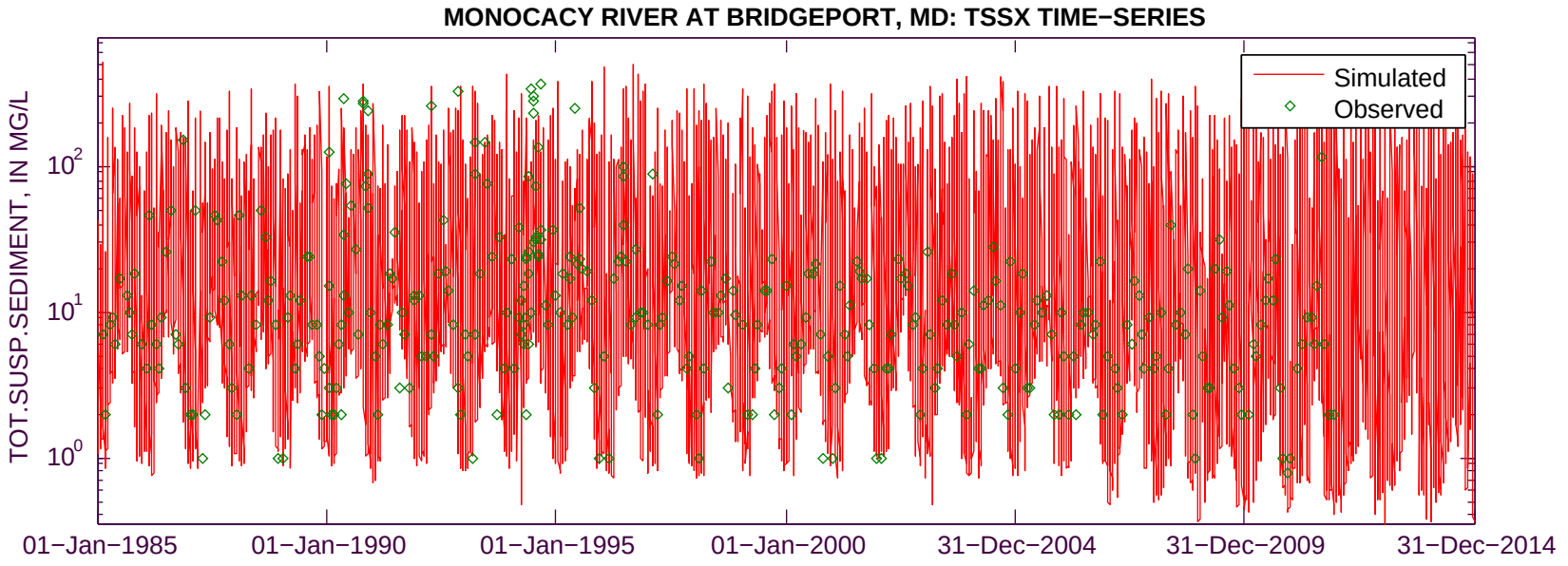
LOAD DATA
LOG10

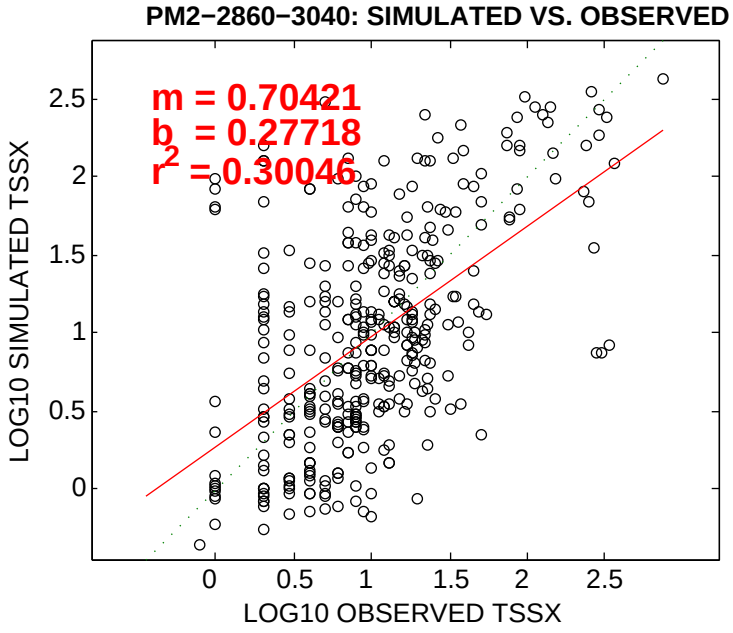


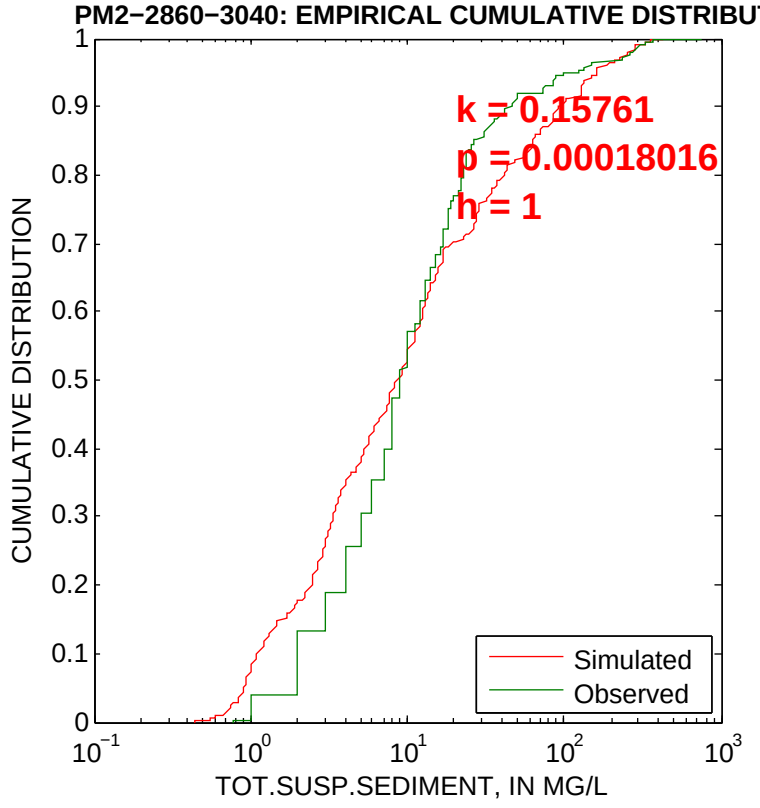












DATA SELECTION

scenario: P620171001WQ | file: TSSX.calib

plot: TSSX - total suspended ...

Dates: 1/1/1985 | 12/31/201

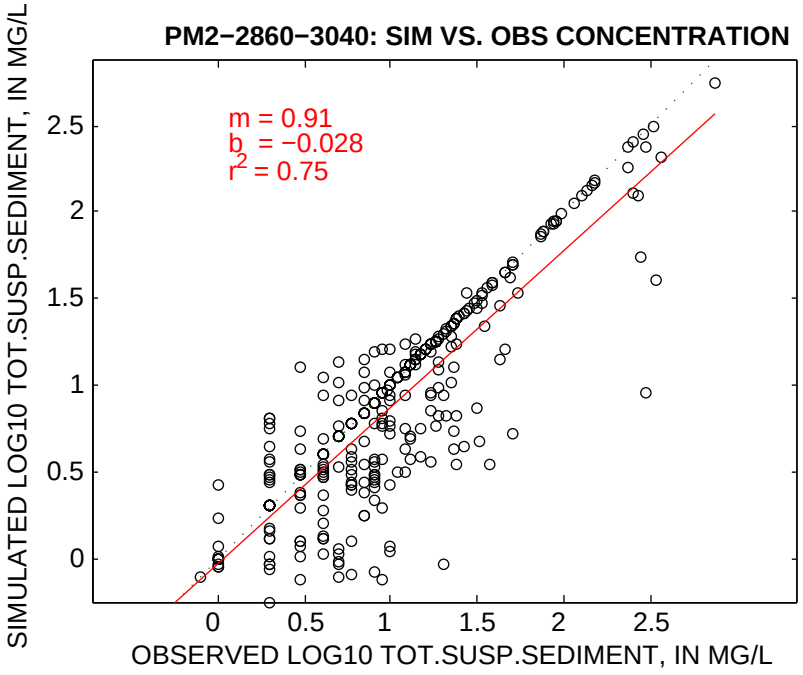
Drive: N/A | Directory: model | Observed: OBS20161101

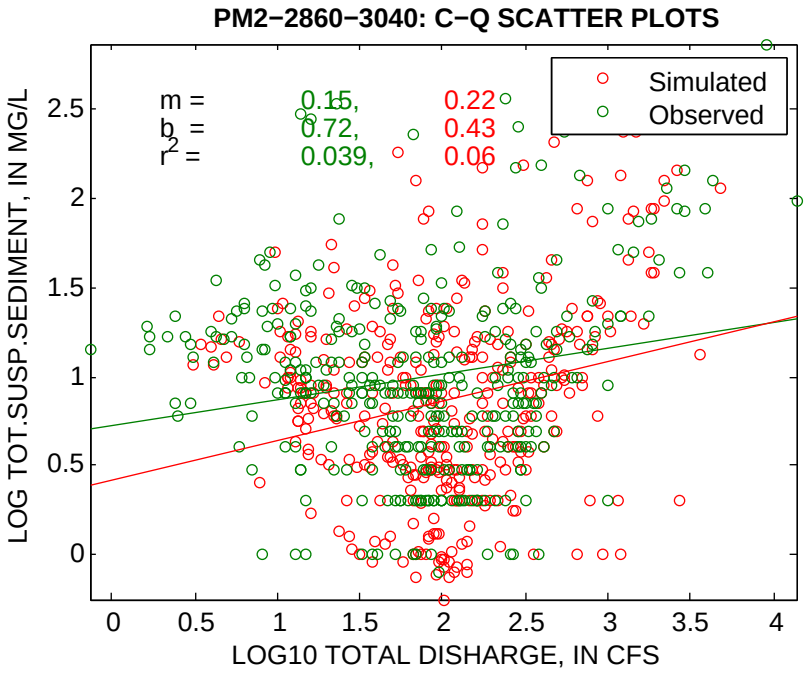
STATISTICS

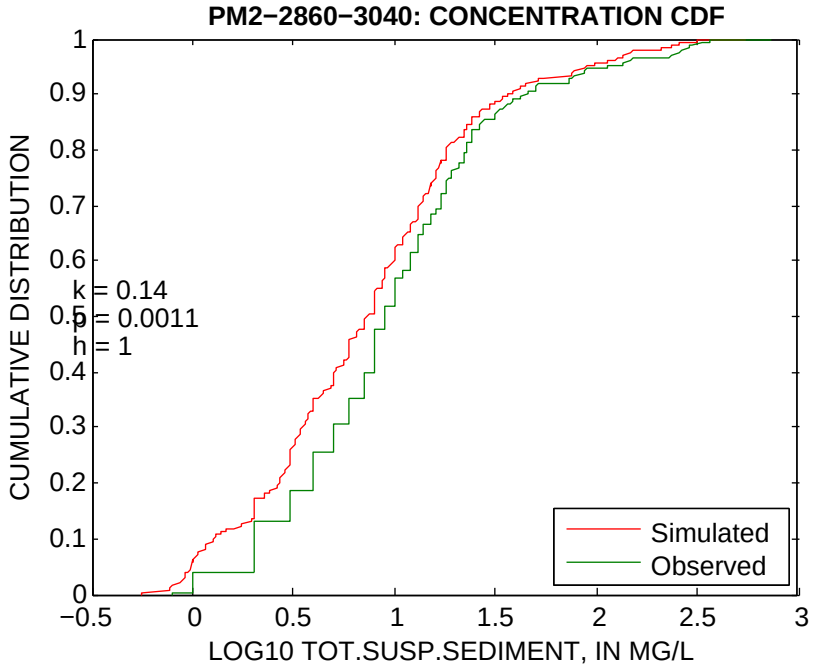
		observe	simulate
n		368	368
min		0.79	0.43852
		-0.102373	-0.358011
mean		26.5492	32.7765
		0.998305	0.980204
media		9	8.7348
		0.954243	0.941253
max		743.25	425.45
		2.87113	2.62885
varian		4237.31	3745.68
		0.287153	0.473952
JB		0.001	0.001
		0.001	0.005625
		ra	log
%		23.4559	-1.81318
err.va		3389.57	0.357
rel.std.err		0.799934	1.24324
mod.eff		0.200066	-0.243242

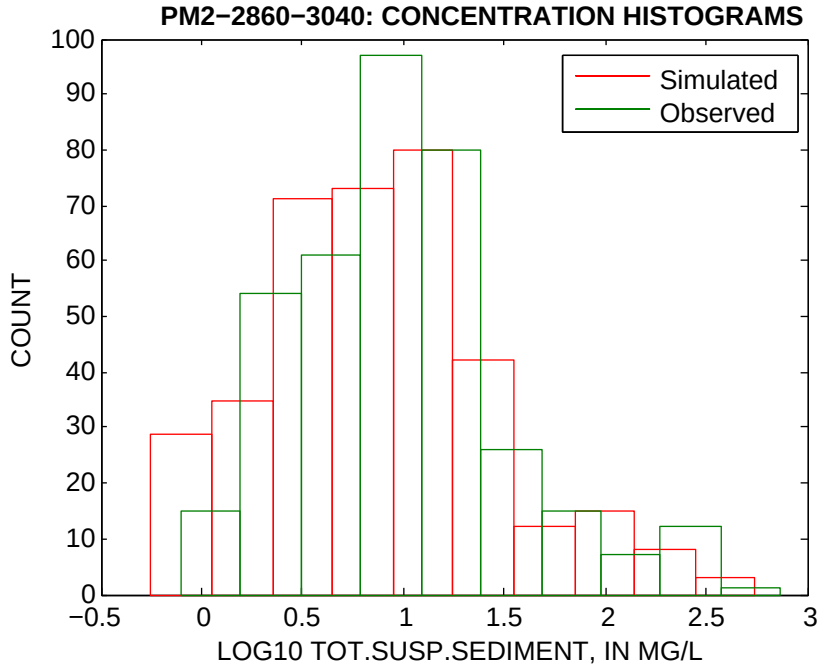
VERSION 2.1

ALL DATA
LOG10

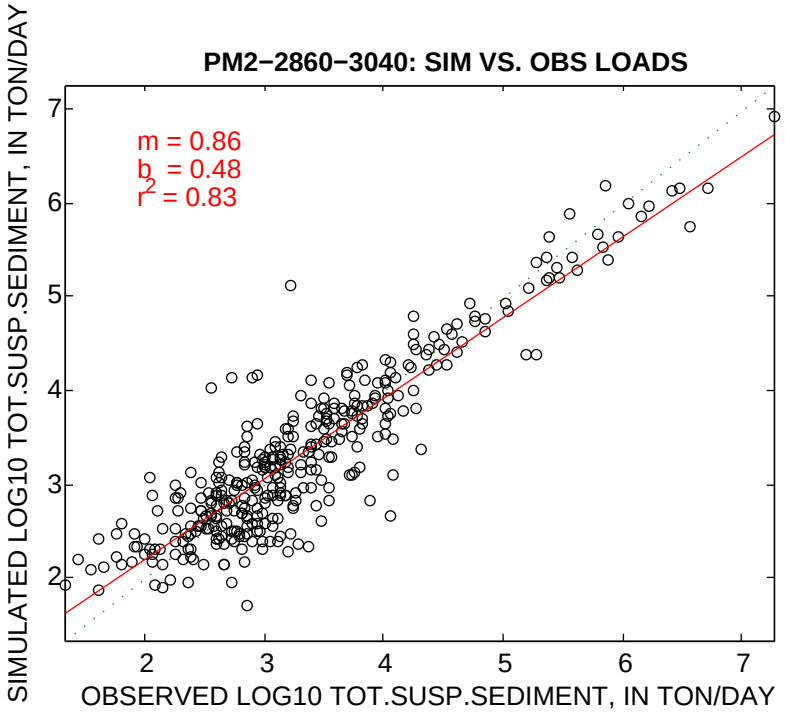


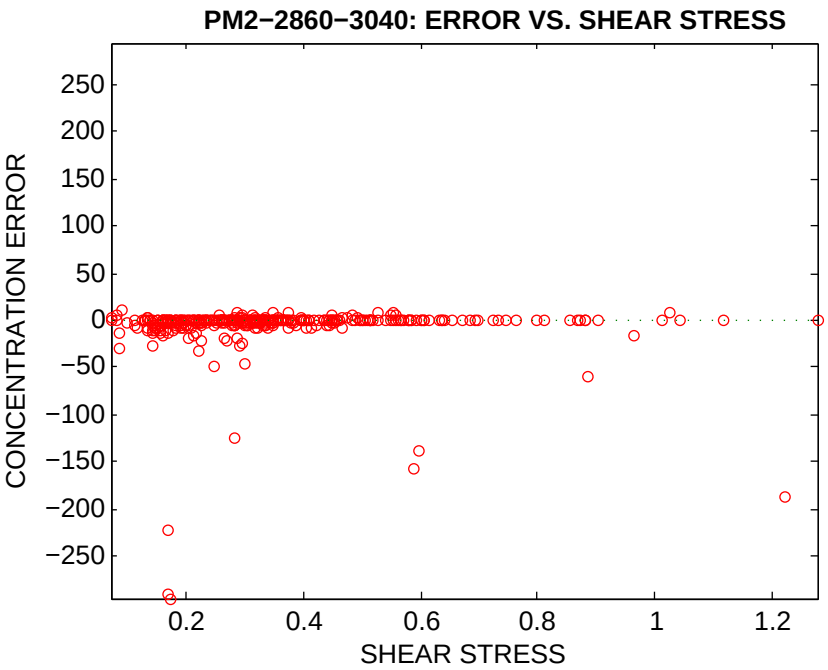


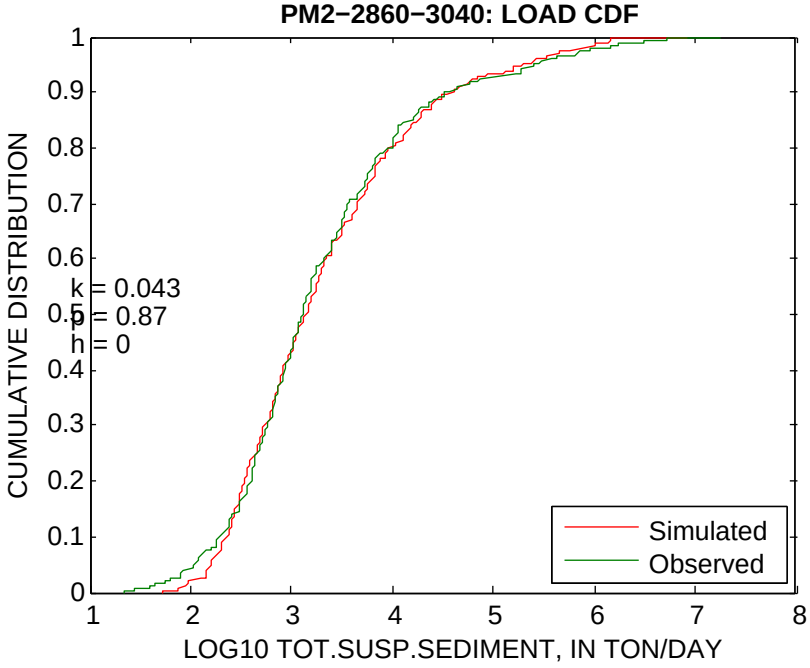


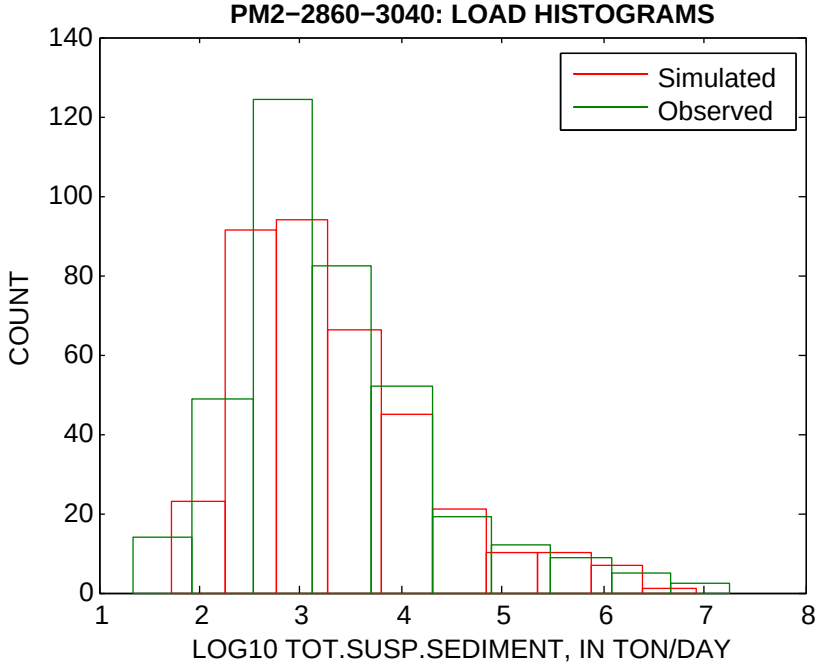


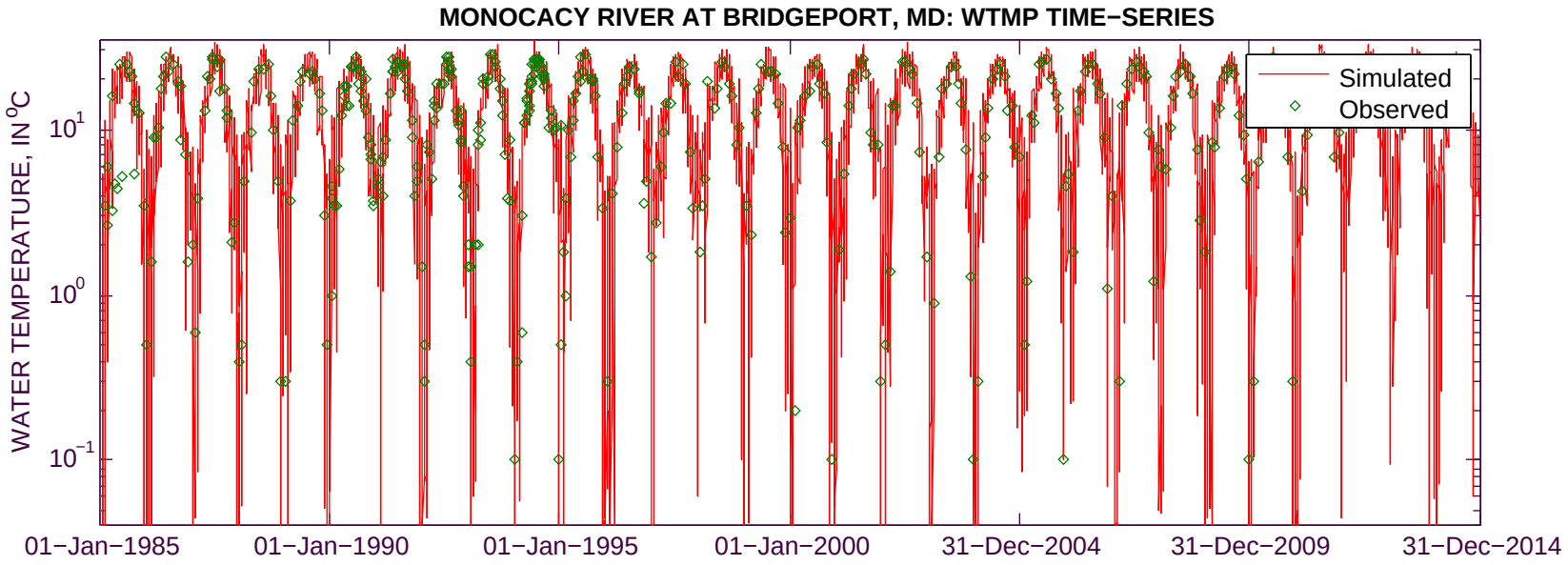
LOAD DATA
LOG10

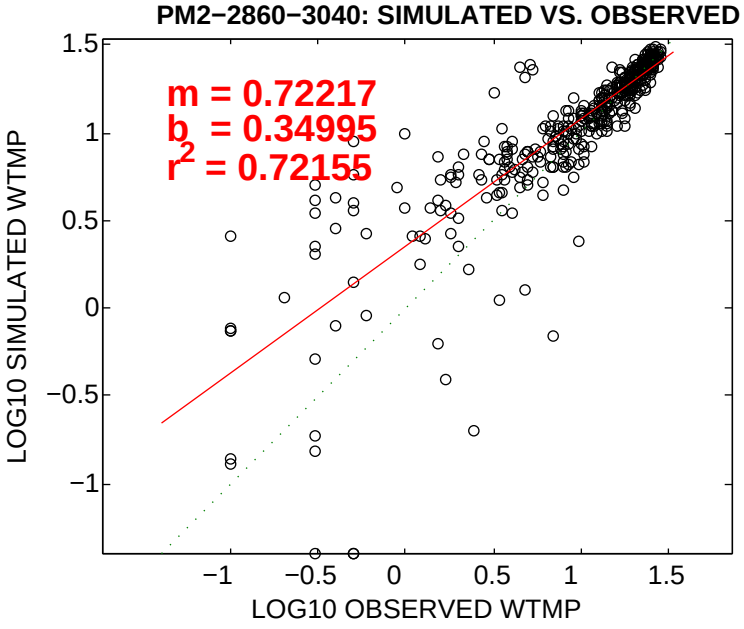


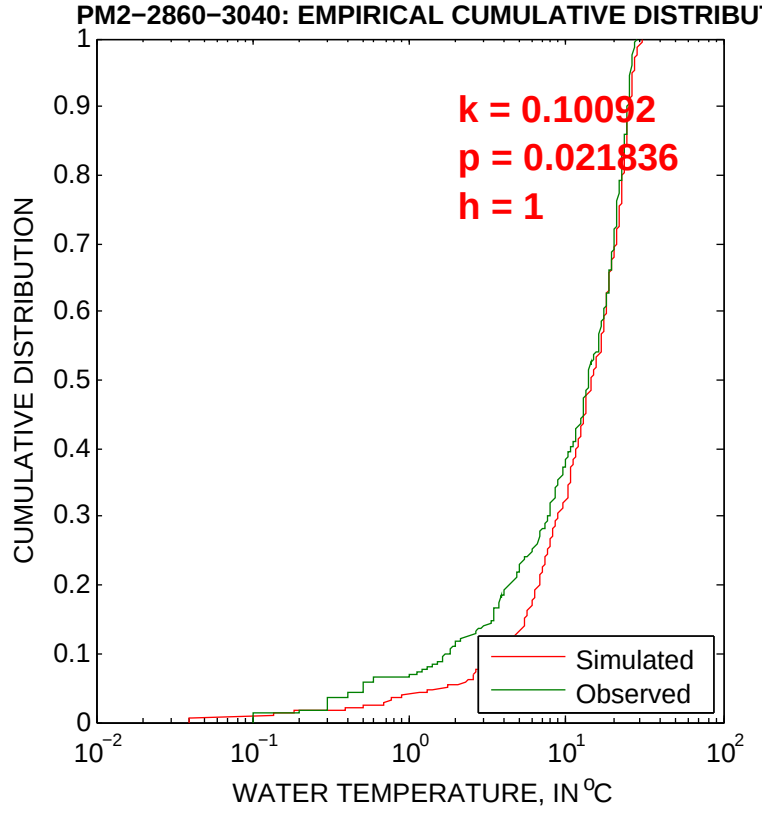












DATA SELECTION

scenario	file
P620171001WQ	WTMP.calib

plot: WTMP - water tempera...

Dates	1/1/1985	12/31/201

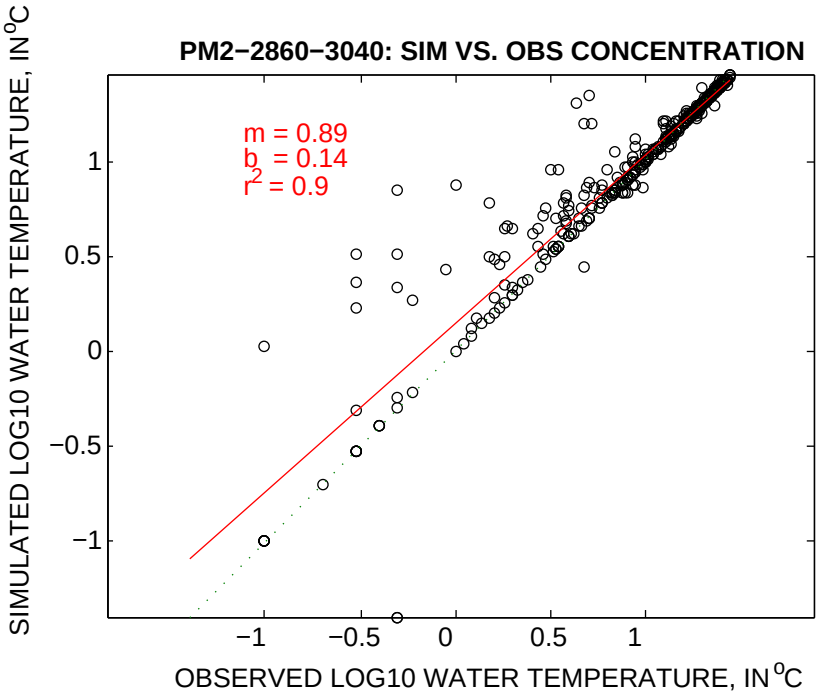
Drive	Directory	Observed
N/A	model	OBS20161101

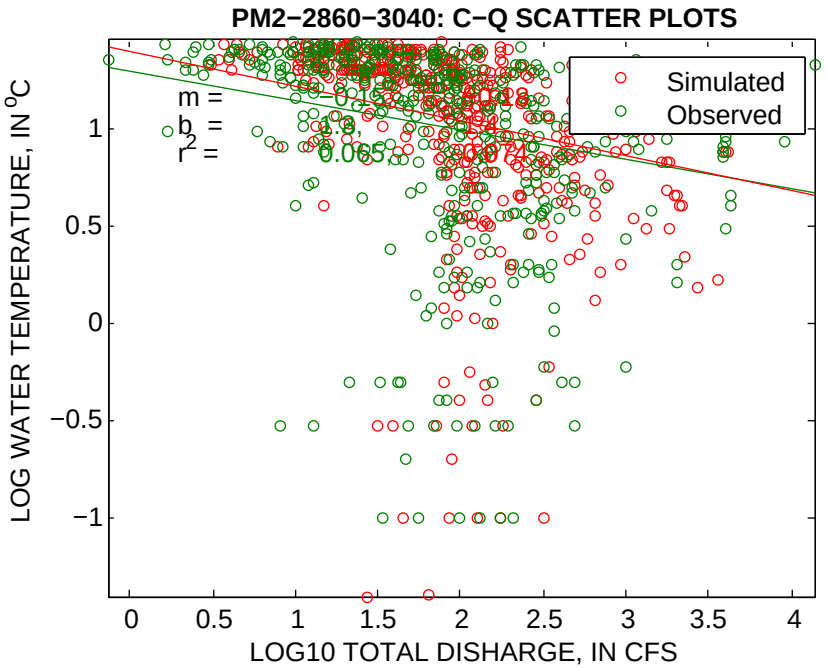
STATISTICS

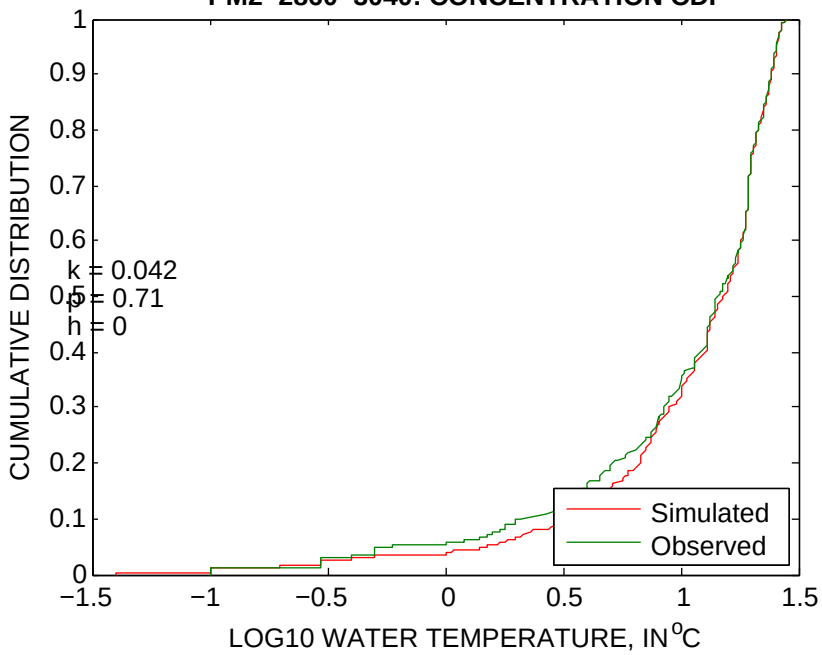
		observe	simulate
n		436	436
min		0.1	0.040032
		-1	-1.39759
mean		13.6893	14.7535
		0.95857	1.0422
media		13.9	14.4215
		1.14301	1.15901
max		28	30.447
		1.44716	1.48354
varian		71.001	65.9265
		0.272793	0.19717
JB		0.001	0.001
		0.001	0.001
		ra	log
%		7.77383	8.72413
err.va		10.1576	0.0829692
rel.std.err		0.143063	0.304147
mod.eff		0.856937	0.695853

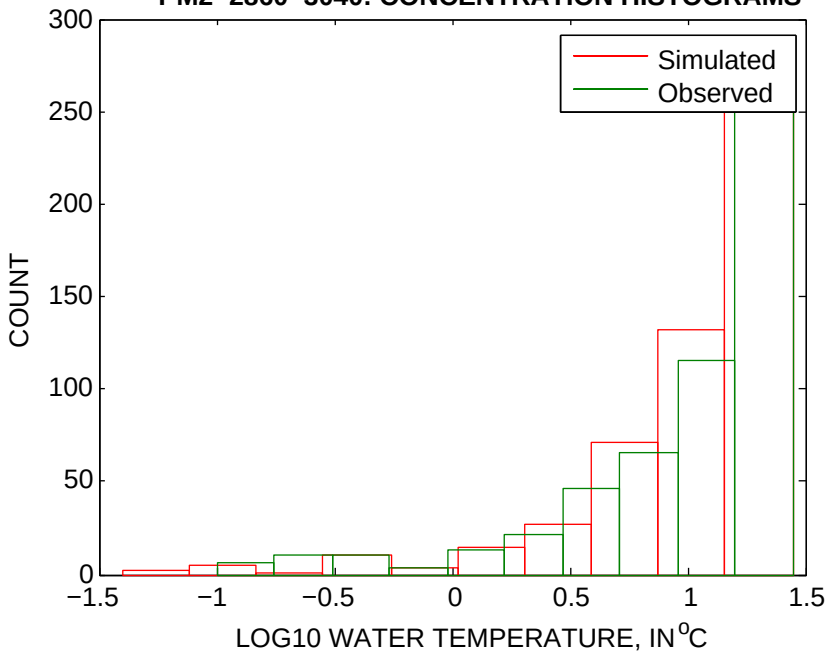
VERSION 2.1

ALL DATA
LOG10

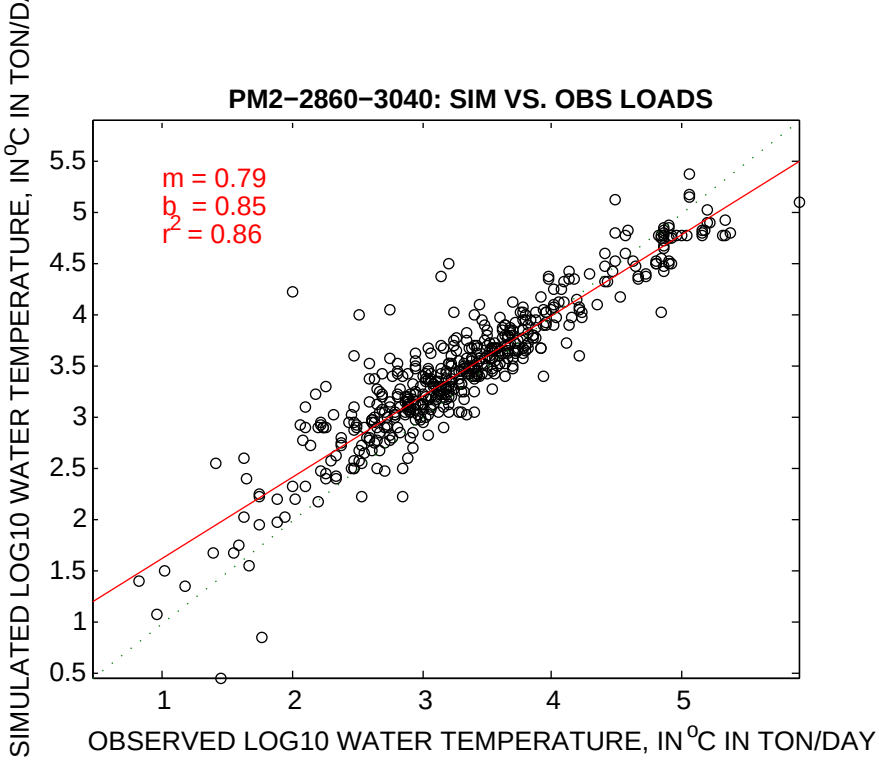


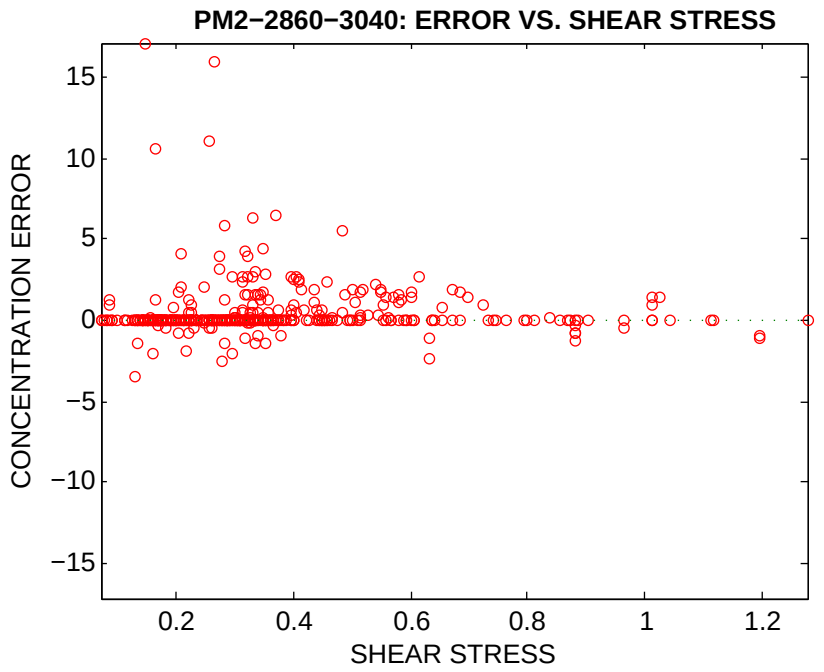


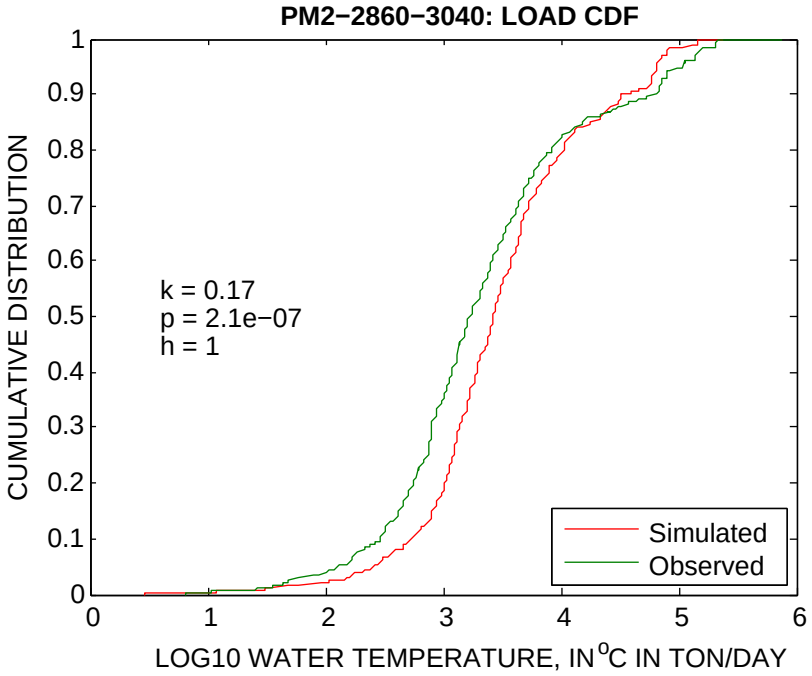


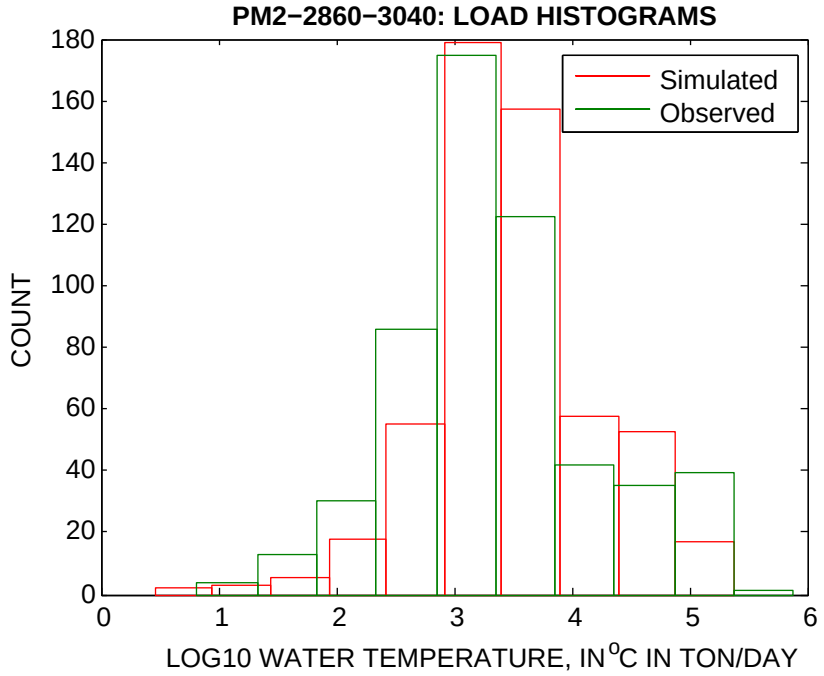


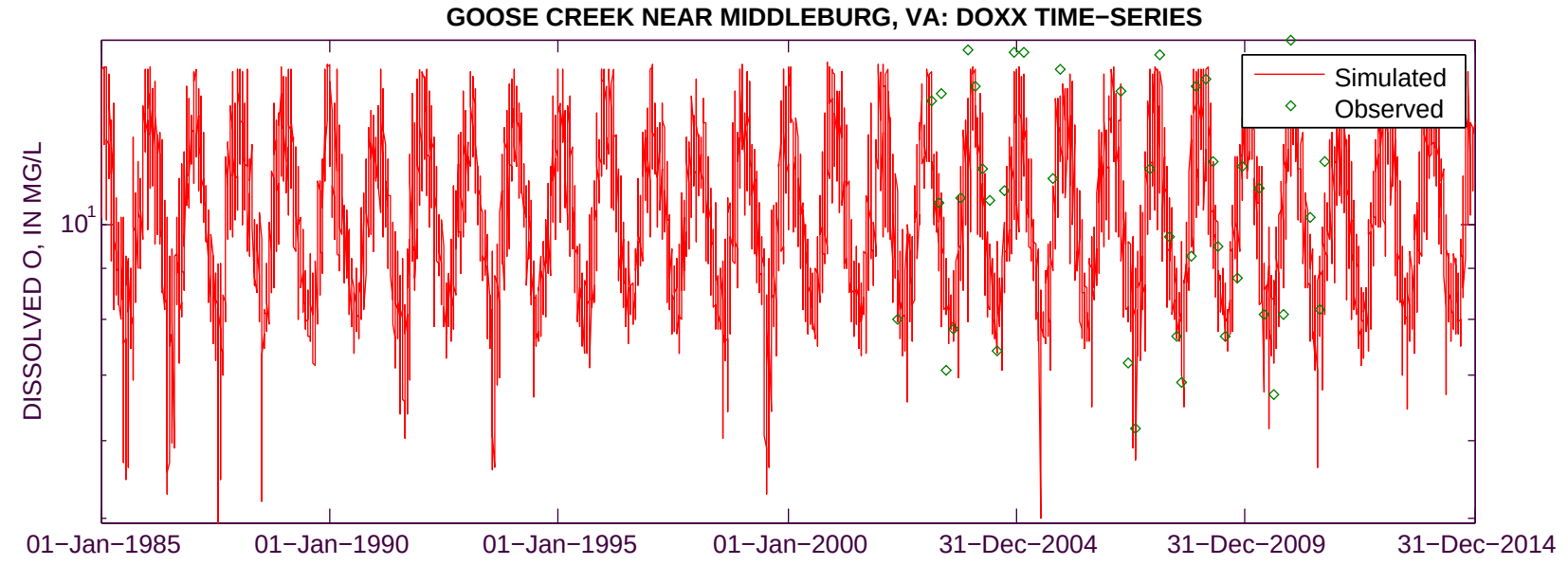
LOAD DATA
LOG10

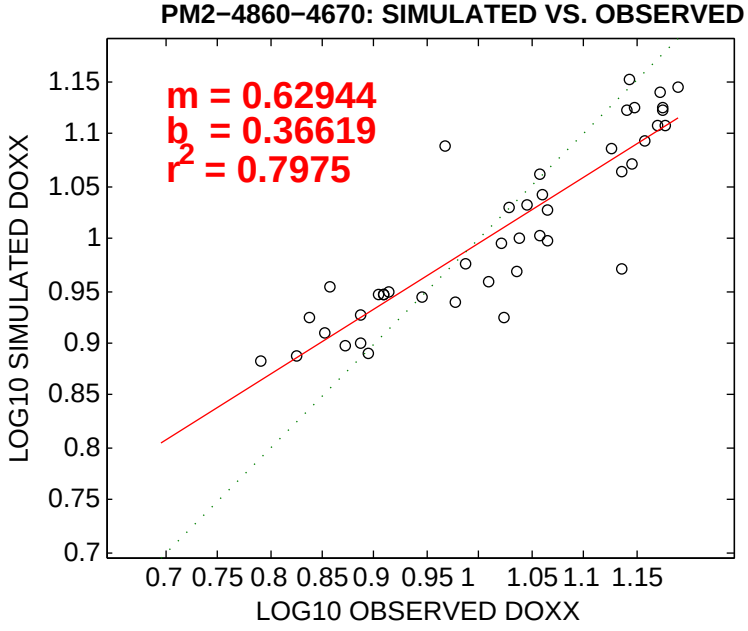


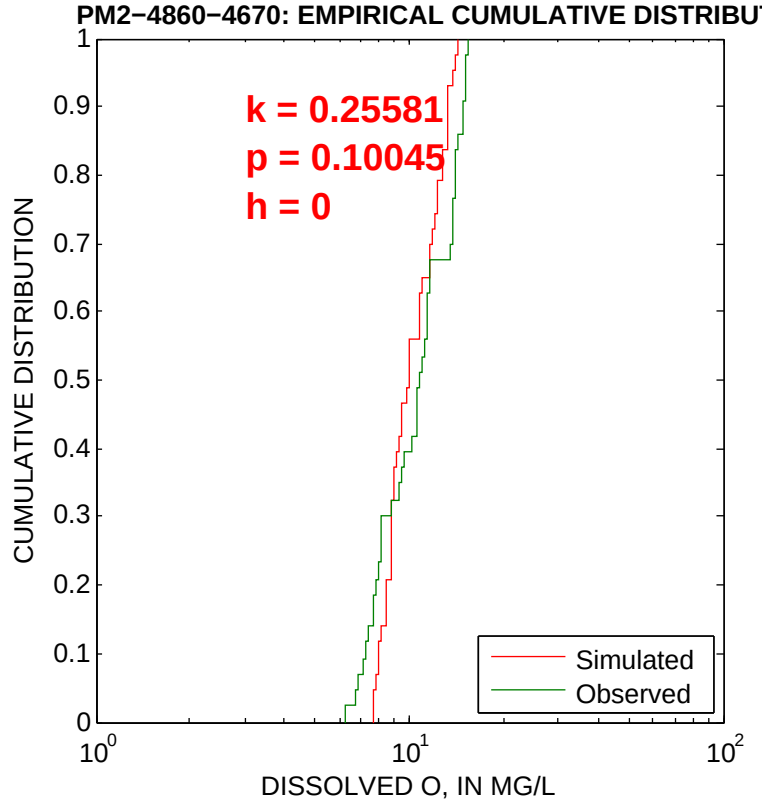












DATA SELECTION

scenario	file
P620171001WQ	DOXX.calib

plot: DOXX - dissolved oxygen

Dates: 1/1/1985 – 12/31/201

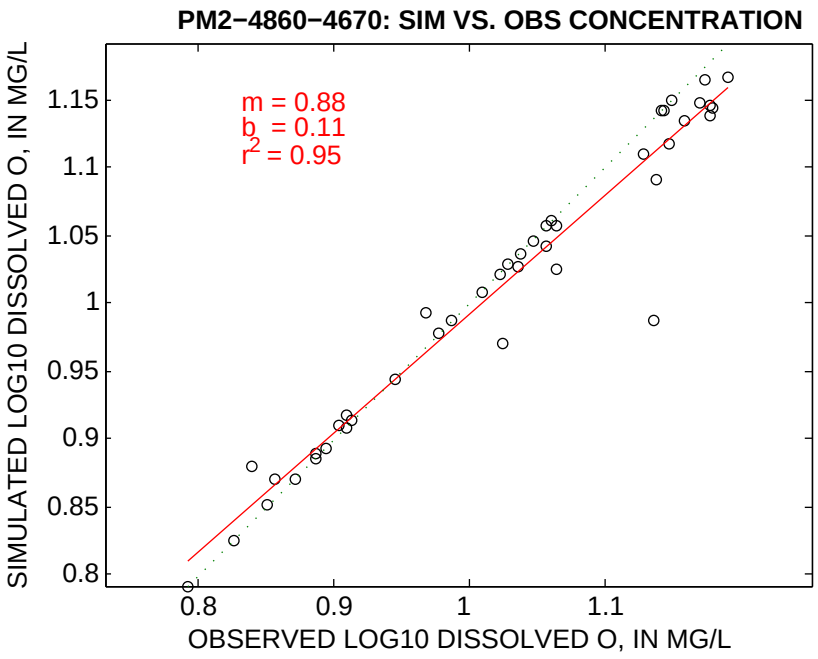
Drive	Directory	Observed
N/A	model	OBS20161101

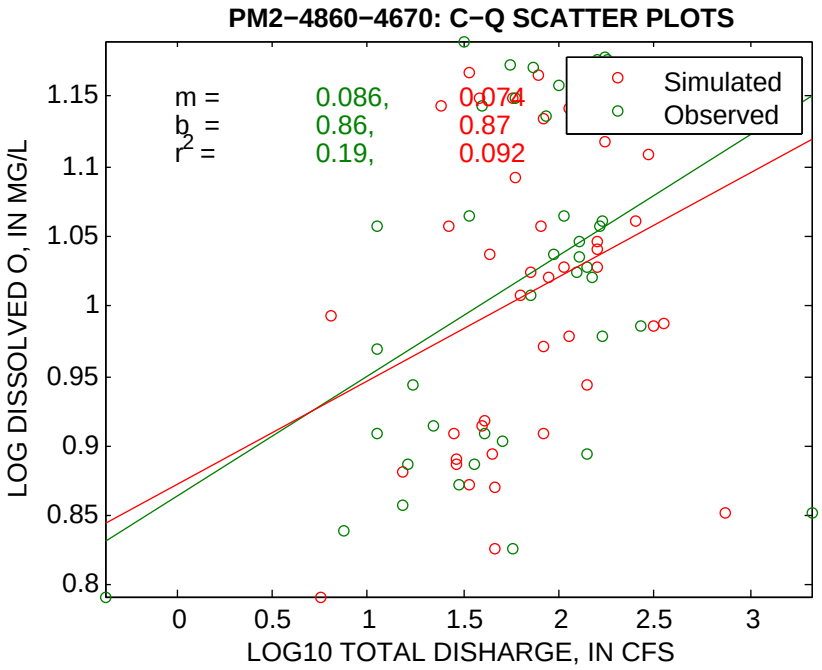
STATISTICS

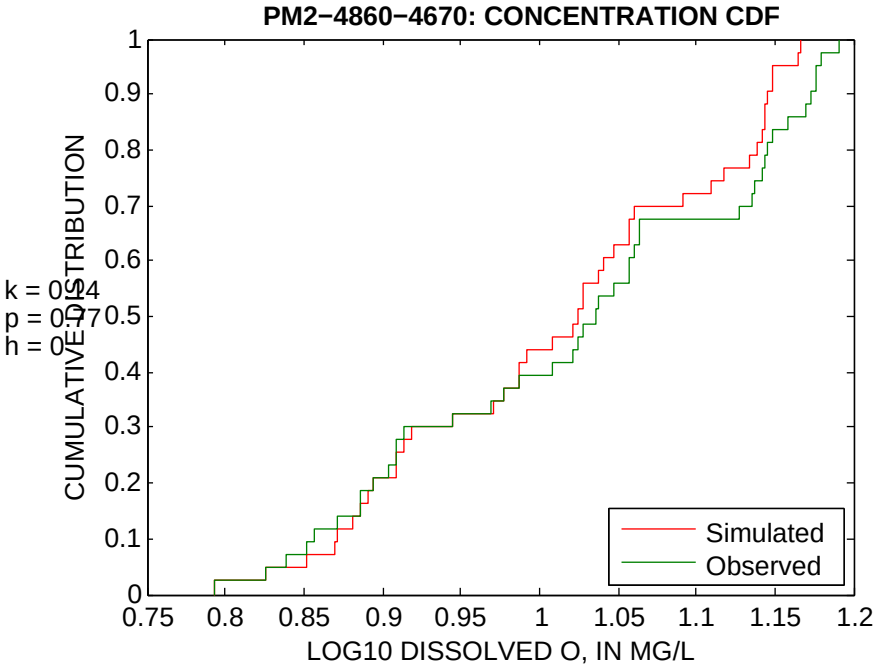
	n	observe	simulate
		43	43
min		6.2	7.6292
		0.792392	0.882479
mean		10.8893	10.4026
		1.02158	1.00921
media		10.86	9.9709
		1.03583	0.998734
max		15.5	14.201
		1.19033	1.15232
varian		8.2291	4.12594
		0.0140704	0.00699013
JB		0.094087	0.073620
		0.10312	0.087257
		ra	log
%		-4.46957	-1.21103
err.va		2.15017	0.00350429
rel.std.err		0.261288	0.249054
mod.eff		0.738712	0.750946

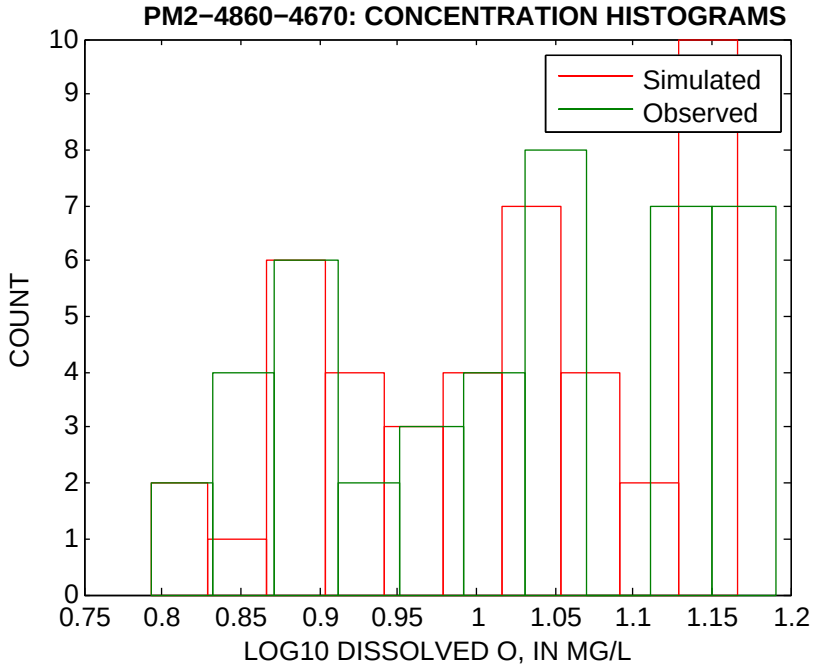
VERSION 2.1

ALL DATA
LOG10

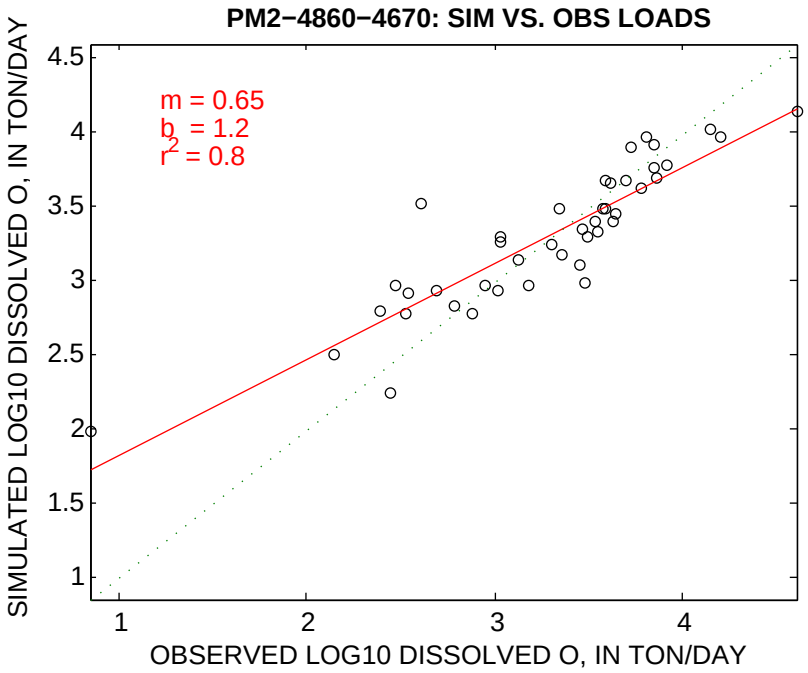


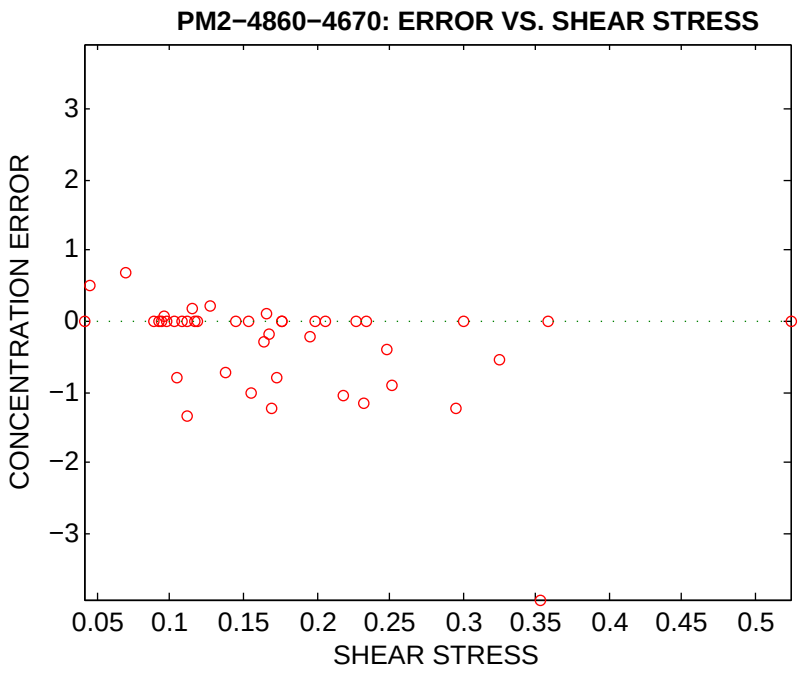


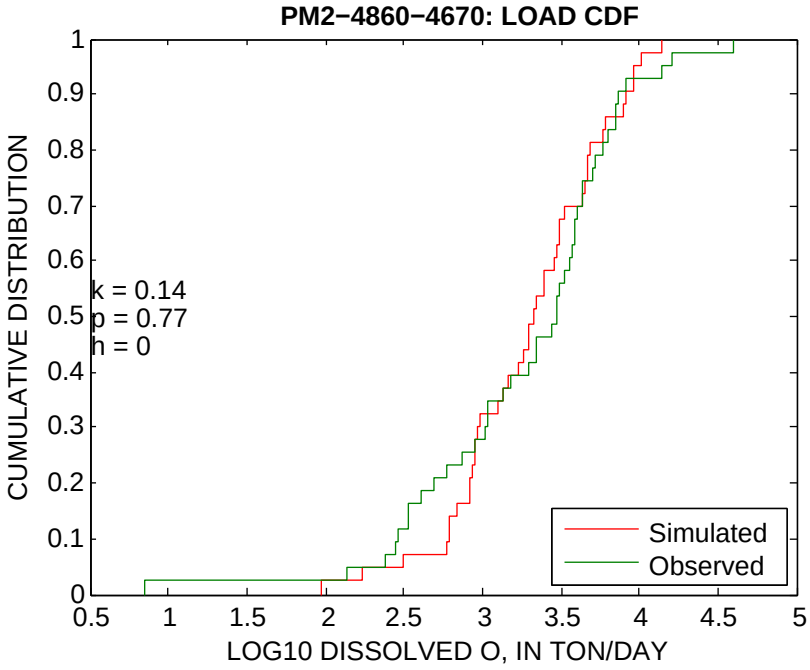


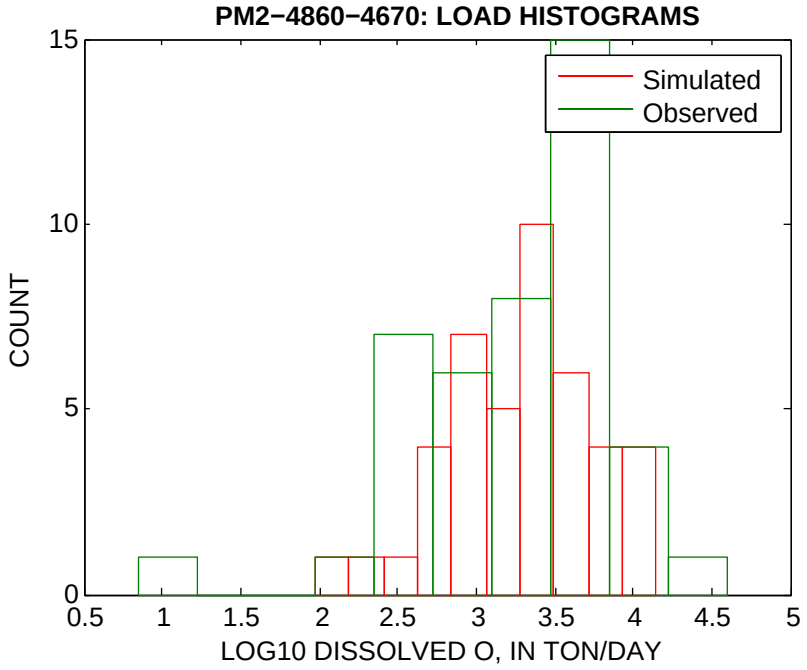


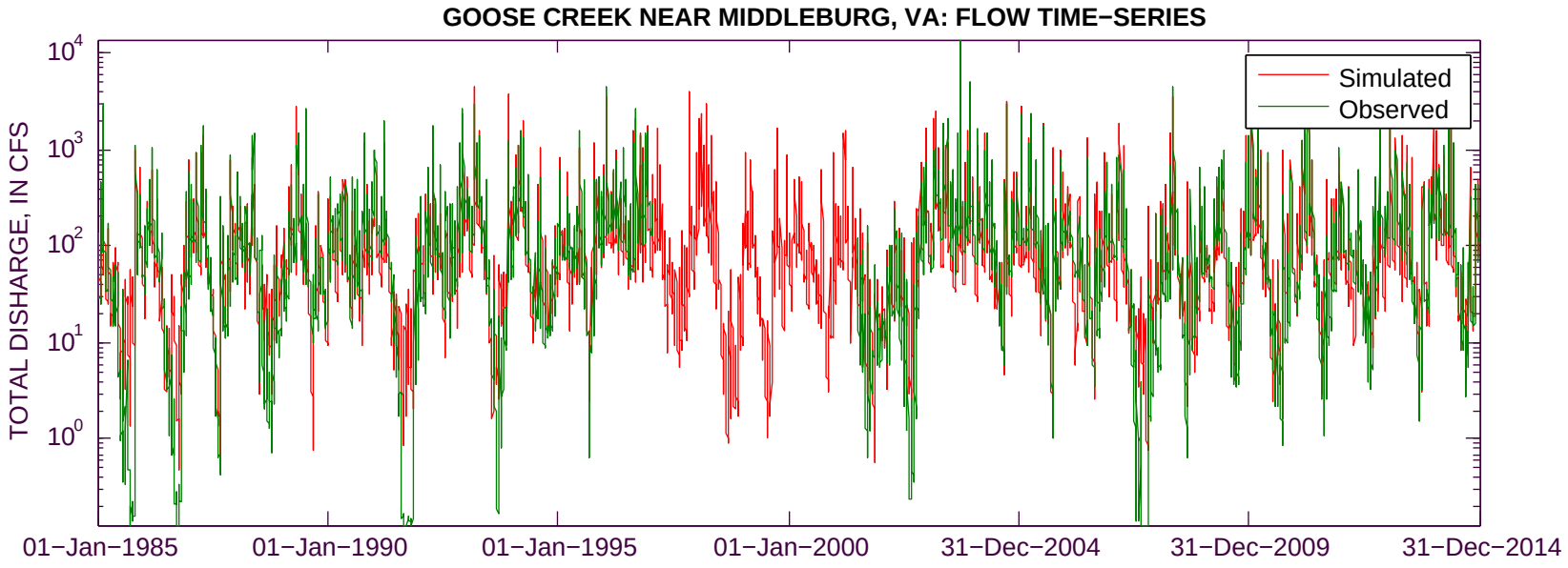
LOAD DATA
LOG10

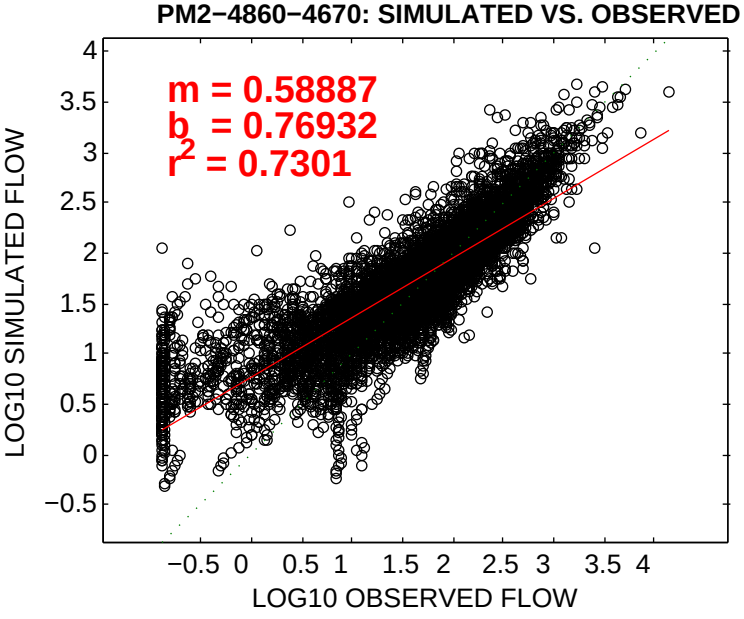


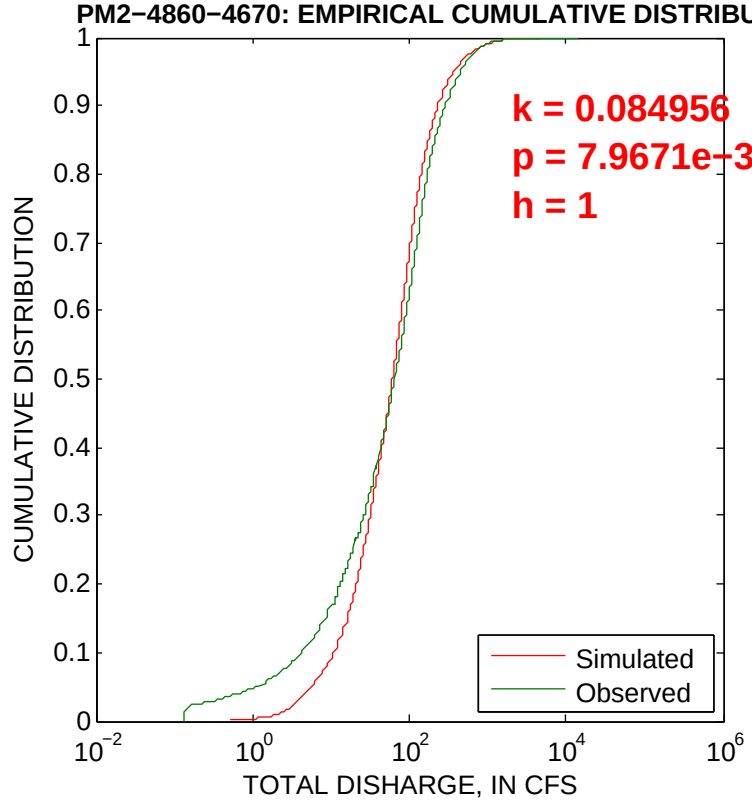












DATA SELECTION

scenario	file
P620171001WQ	FLOW.calib

plot: FLOW - total discharge

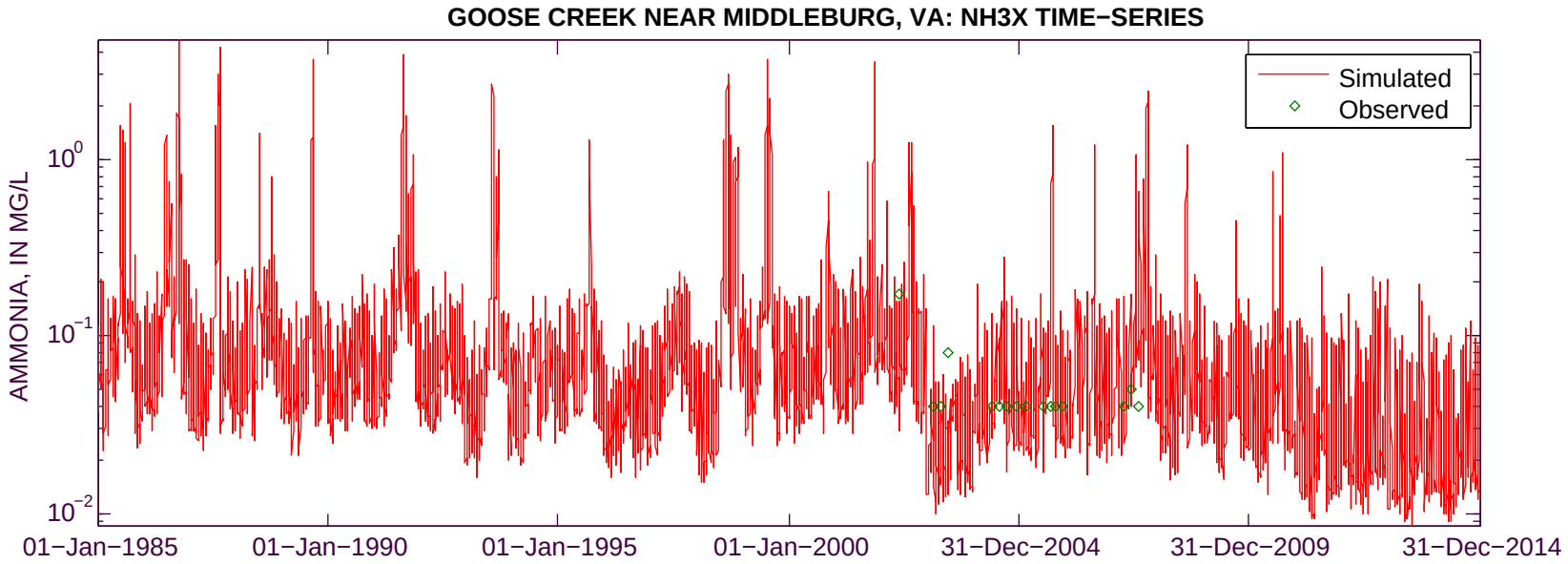
Dates 1/1/1985 12/31/201

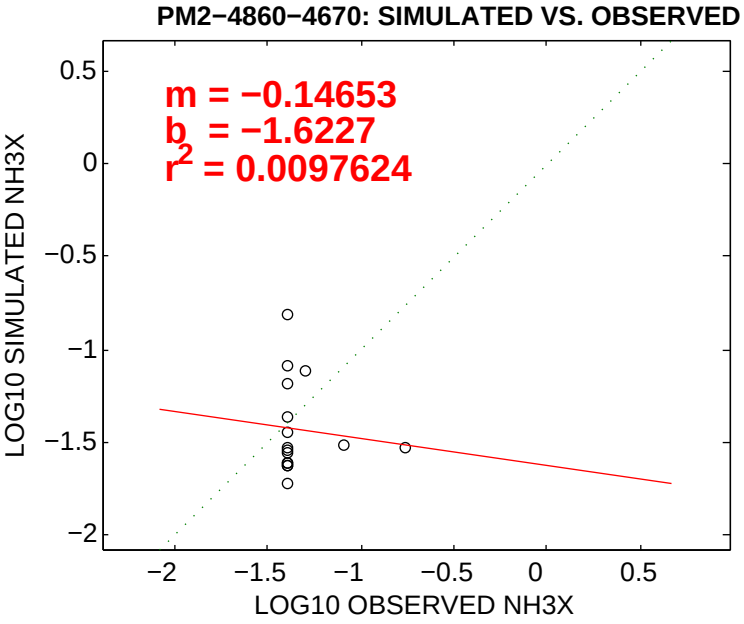
Drive	Directory	Observed
N/A	model	OBS20161101

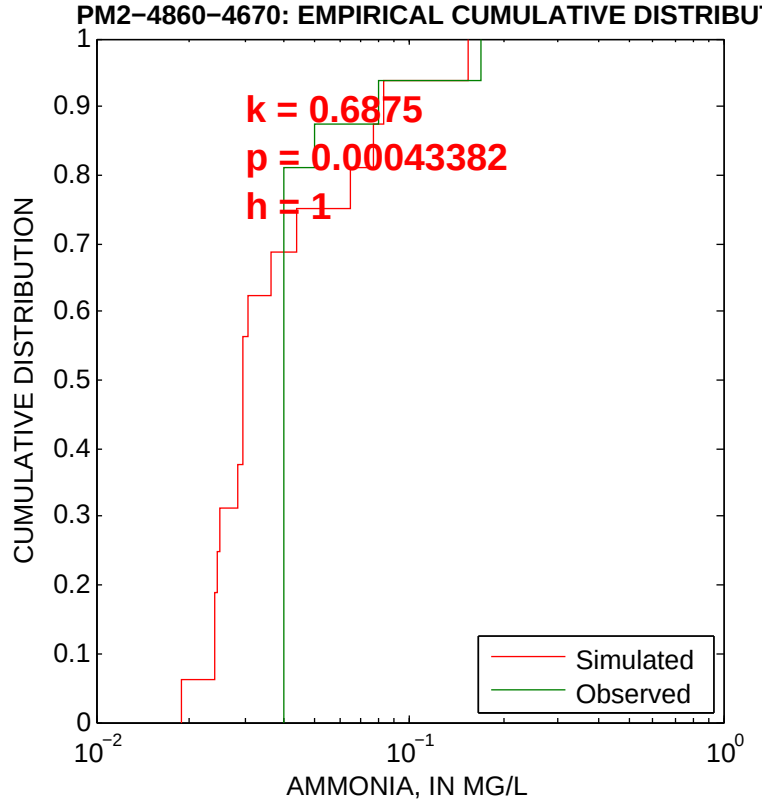
STATISTICS

	observe	simulate
n	9346	9346
min	0.129519	0.47744
	-0.887667	-0.321081
mean	129.608	116.303
	1.65138	1.74177
media	66.1295	61.317
	1.8204	1.78758
max	14000.1	4728
	4.14613	3.67468
varian	79702.6	52313.9
	0.616301	0.292718
JB	0.001	0.001
	0.001	0.001
	ra	log
%	-10.266	5.47395
err.va	32454	0.191347
rel.std.err	0.407188	0.310476
mod.eff	0.592812	0.689524

VERSION







DATA SELECTION

scenario	file
P620171001WQ	NH3X.calib

plot: NH3X - ammonia

Dates: 1/1/1985 – 12/31/201

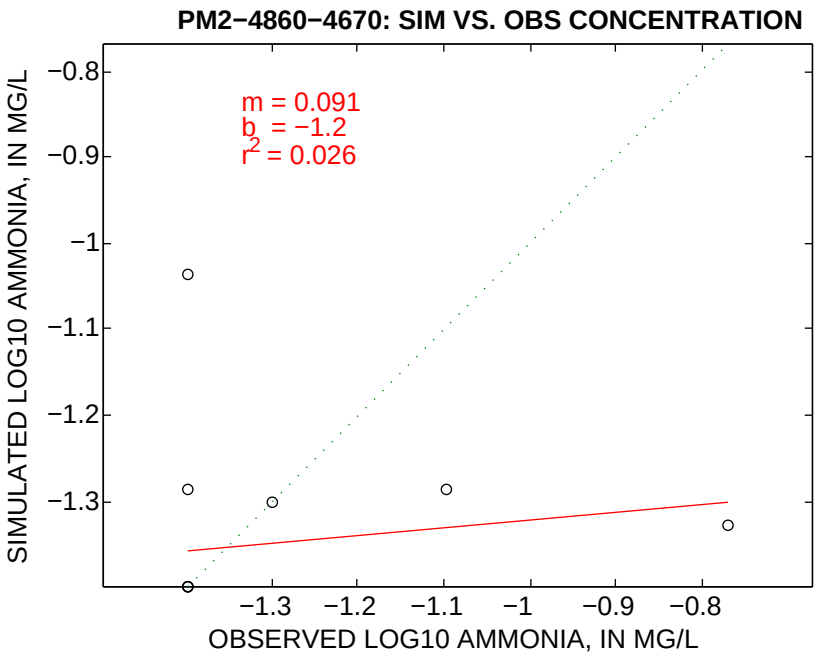
Drive	Directory	Observed
N/A	model	OBS20161101

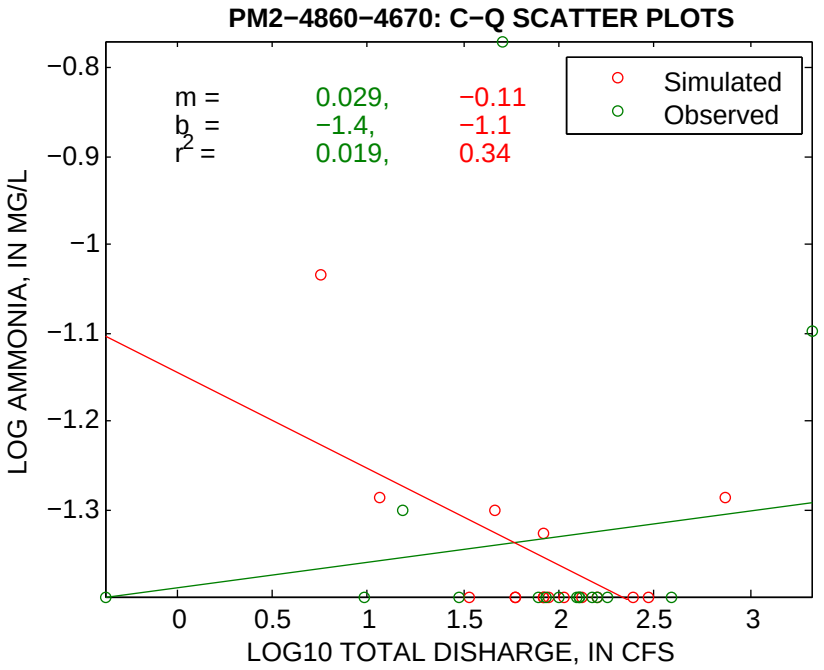
STATISTICS

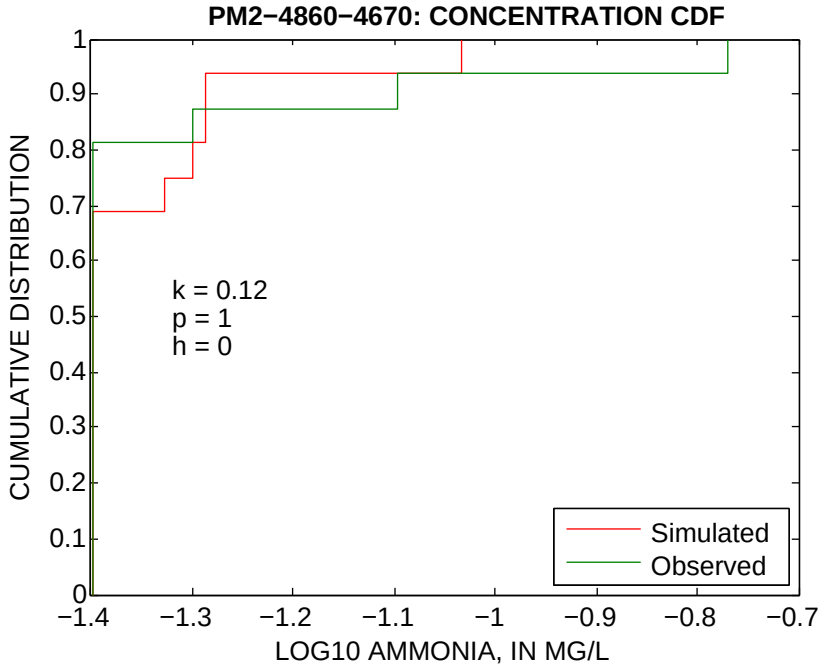
	n	16	16
		observe	simulate
min		0.04	0.018927
		-1.39794	-1.72292
mean		0.05125	0.0451516
		-1.33379	-1.42722
media		0.04	0.0293245
		-1.39794	-1.53277
max		0.17	0.1551
		-0.769551	-0.809388
varian		0.001105	0.00124208
		0.0286033	0.062907
JB		0.001	0.001
		0.001	0.046441
		ra	log
%		-11.8994	7.00478
err.va		0.00269797	0.109204
rel.std.err		2.4416	3.81787
mod.eff		-1.4416	-2.81787

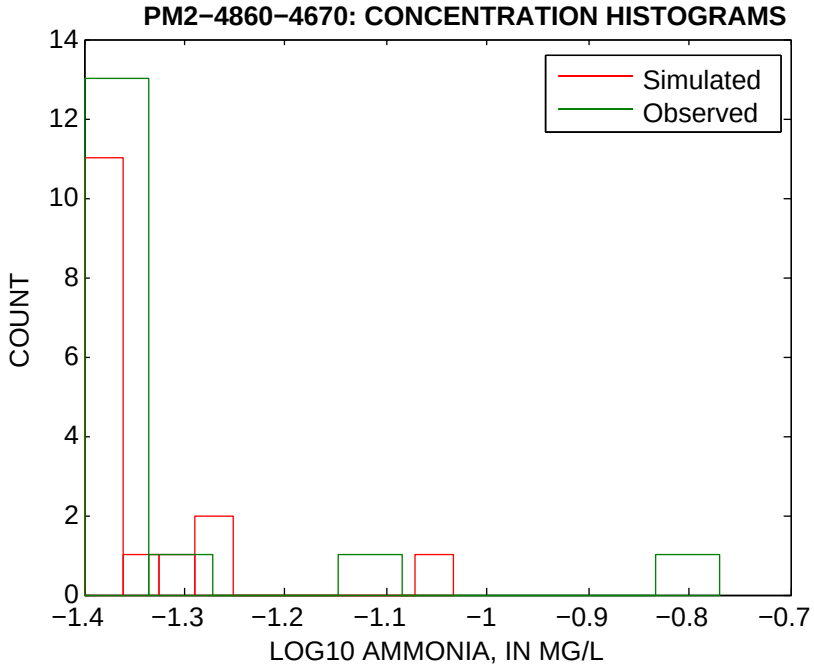
VERSION 2.1

ALL DATA
LOG10

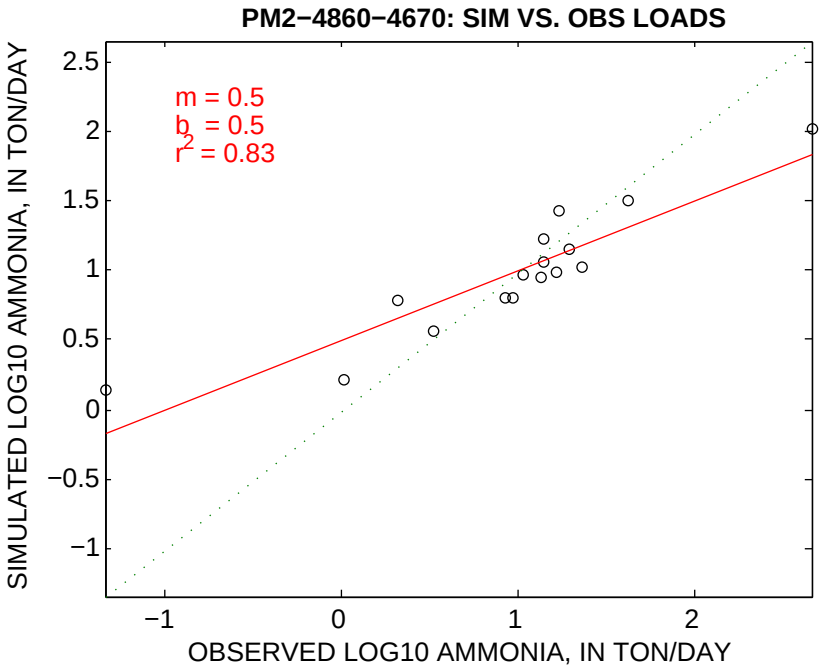


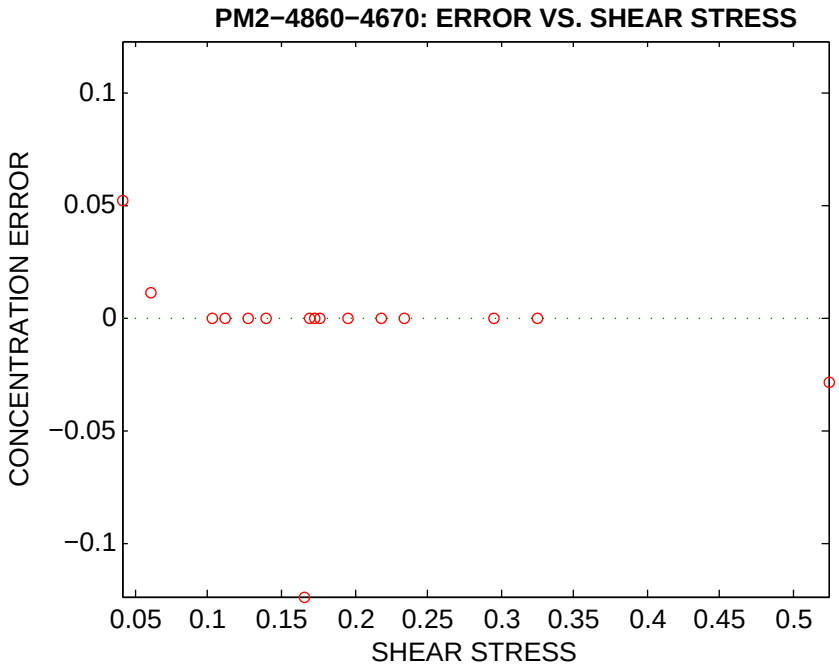


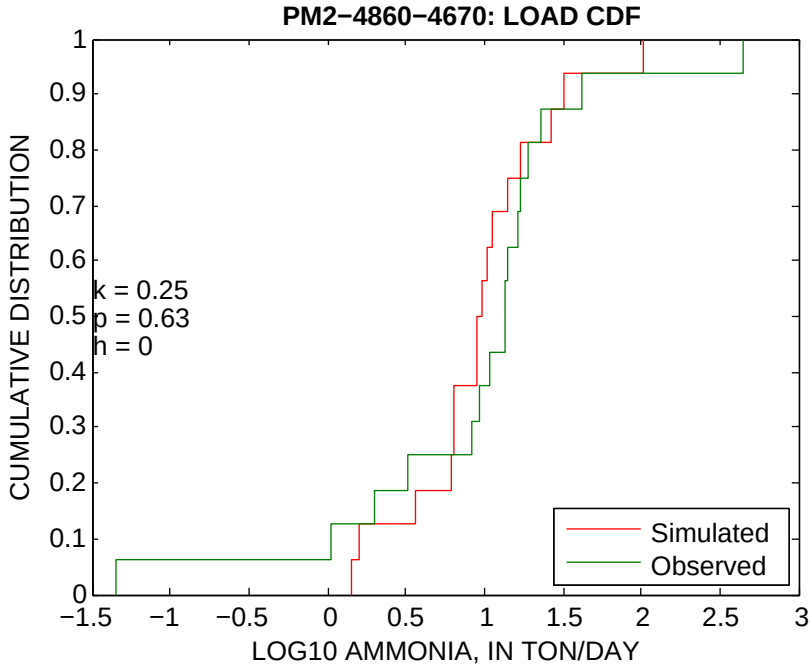


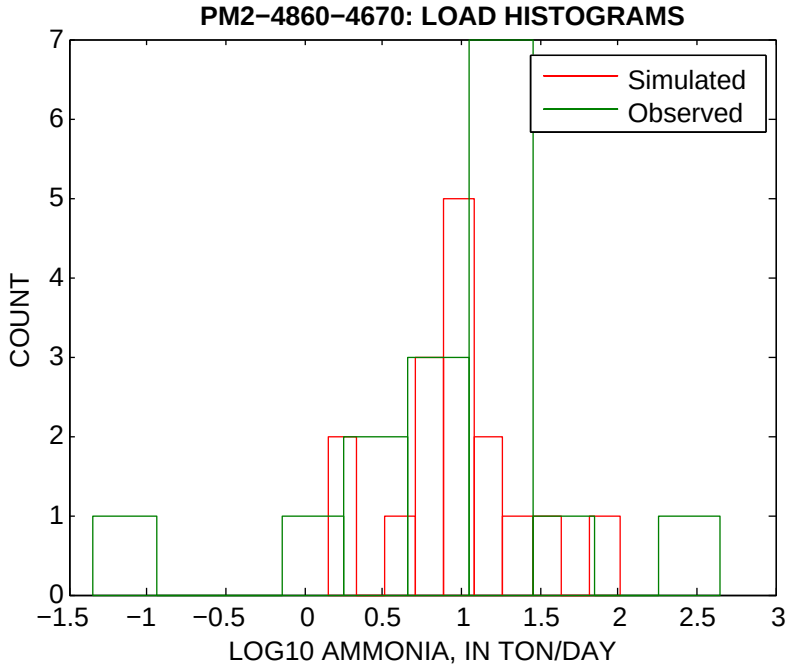


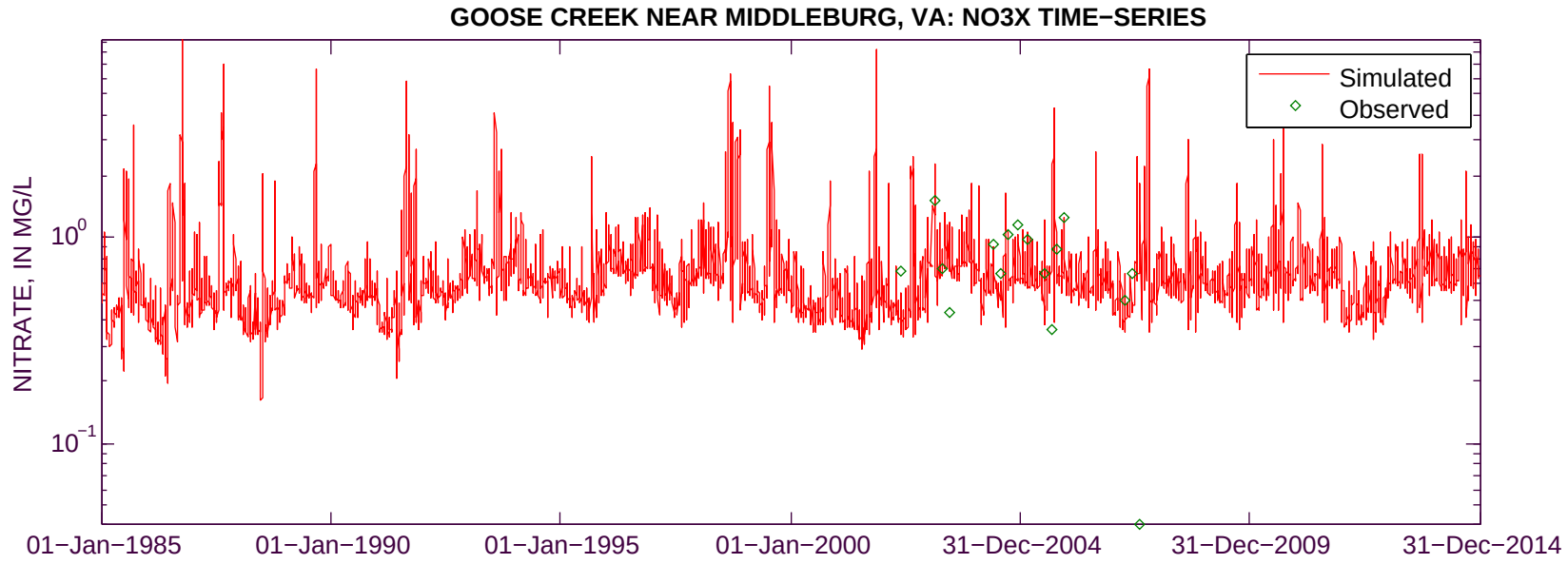
LOAD DATA
LOG10

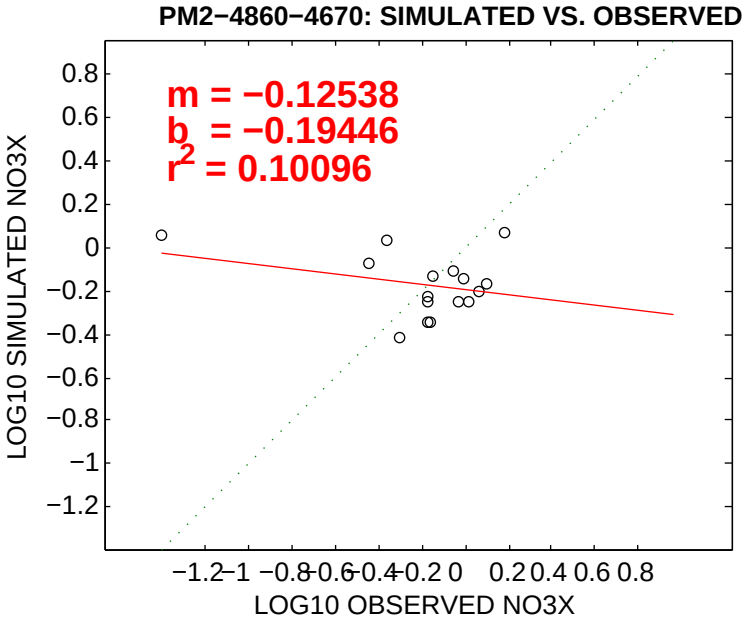


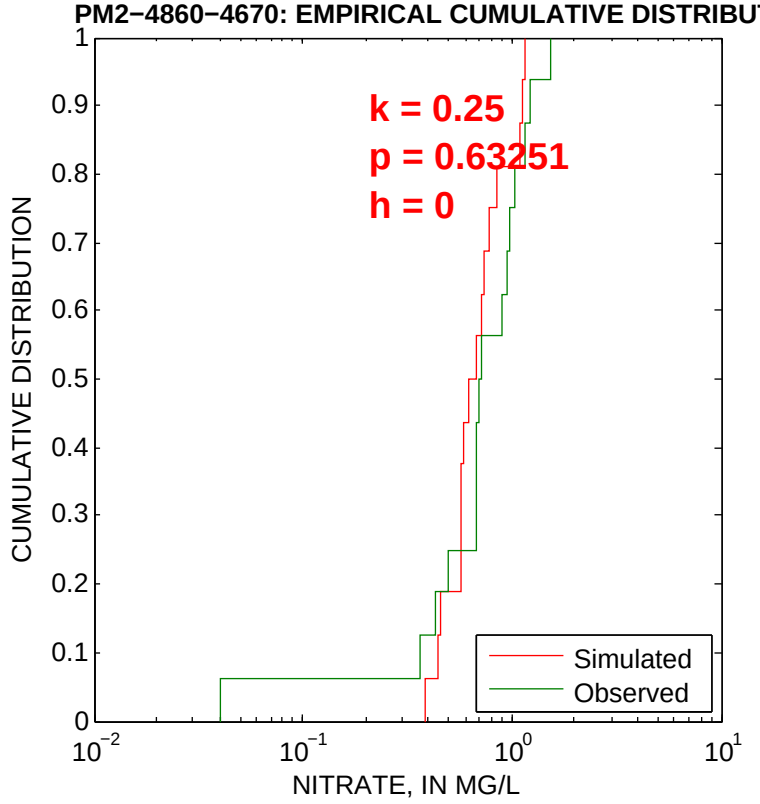












DATA SELECTION

scenario	file
P620171001WQ	NO3X.calib

plot: NO3X - nitrate

Dates: 1/1/1985 – 12/31/201

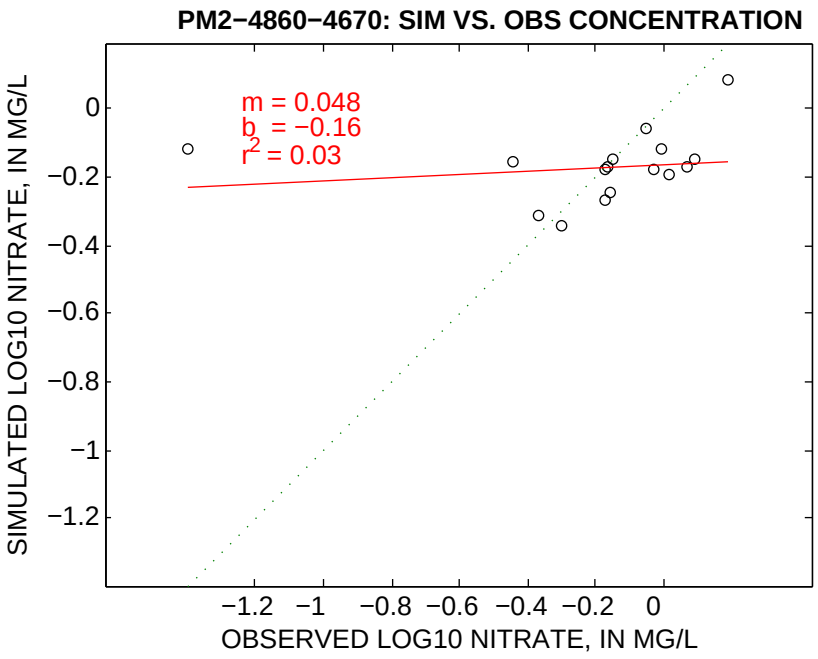
Drive	Directory	Observed
N/A	model	OBS20161101

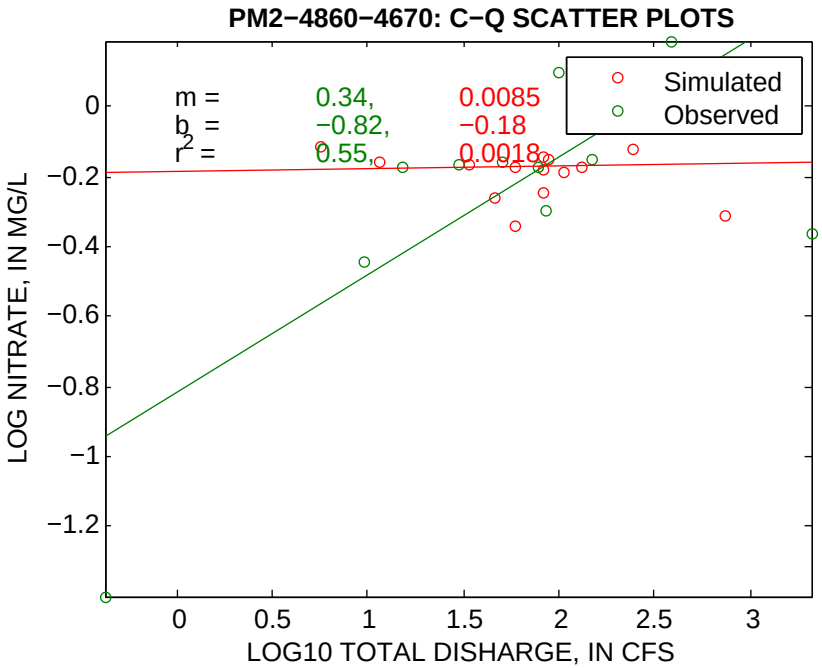
STATISTICS

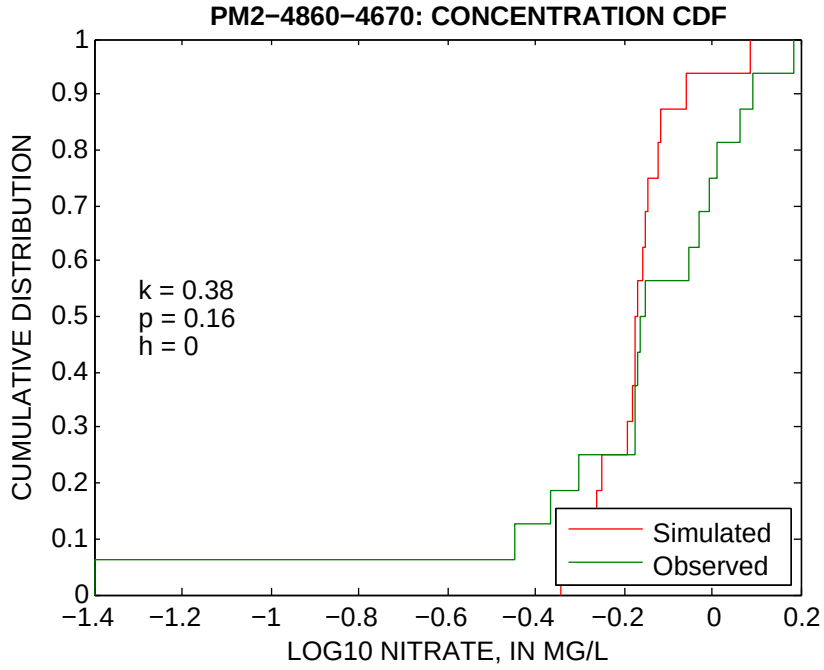
	n	16	16
		observe	simulate
min		0.04	0.38608
		-1.39794	-0.413323
mean		0.78375	0.711286
		-0.191128	-0.170491
media		0.7	0.652045
		-0.154946	-0.186175
max		1.54	1.1677
		0.187521	0.0673313
varian		0.136652	0.0589603
		0.131983	0.0205507
JB		0.5	0.155065
		0.001	0.5
		ra	log
%		-9.24577	-10.7973
err.va		0.212871	0.186085
rel.std.err		1.55776	1.40991
mod.eff		-0.557762	-0.409914

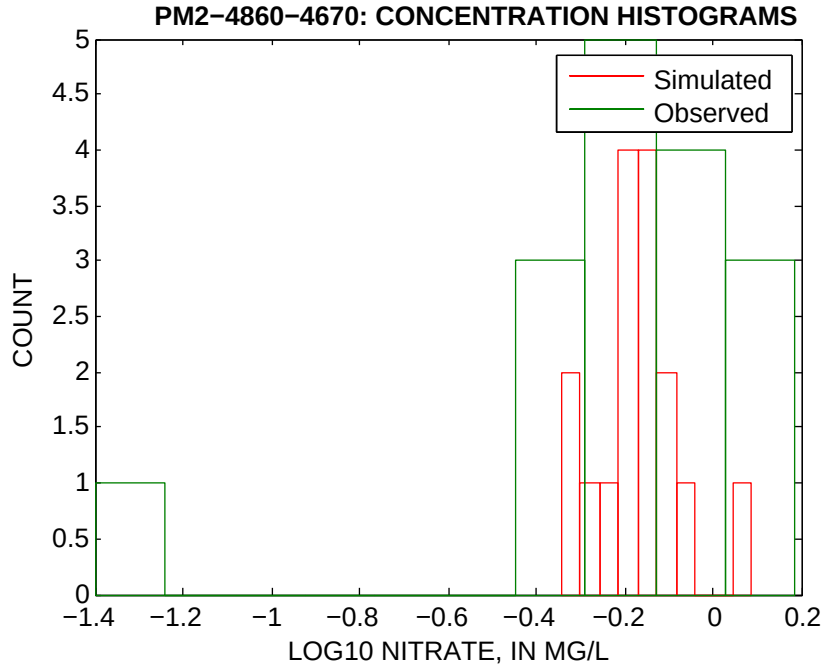
VERSION 2.1

ALL DATA
LOG10

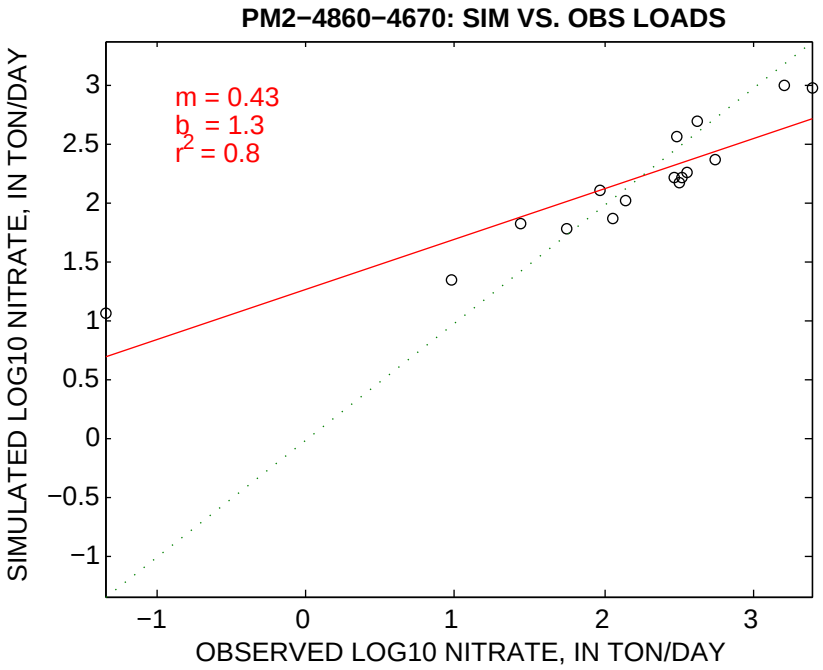


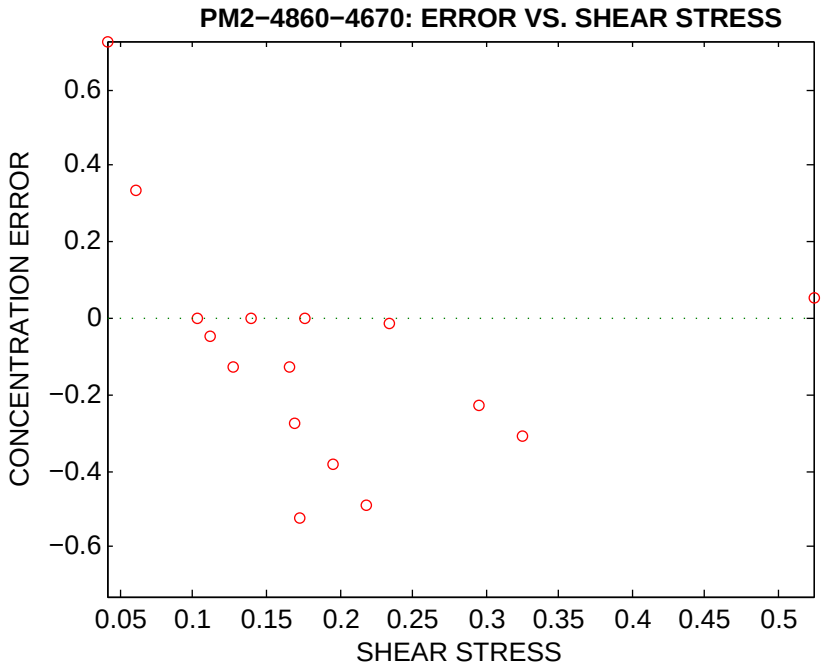


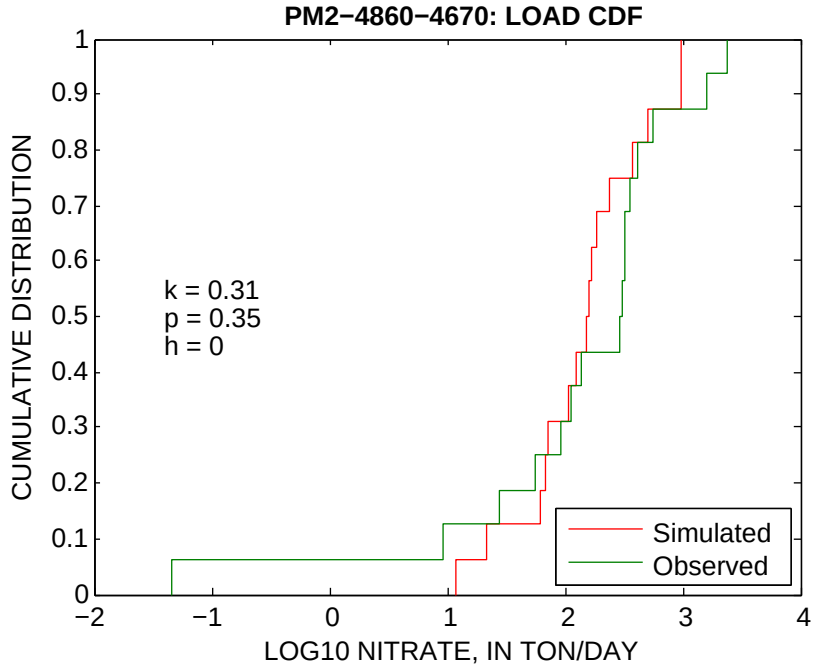


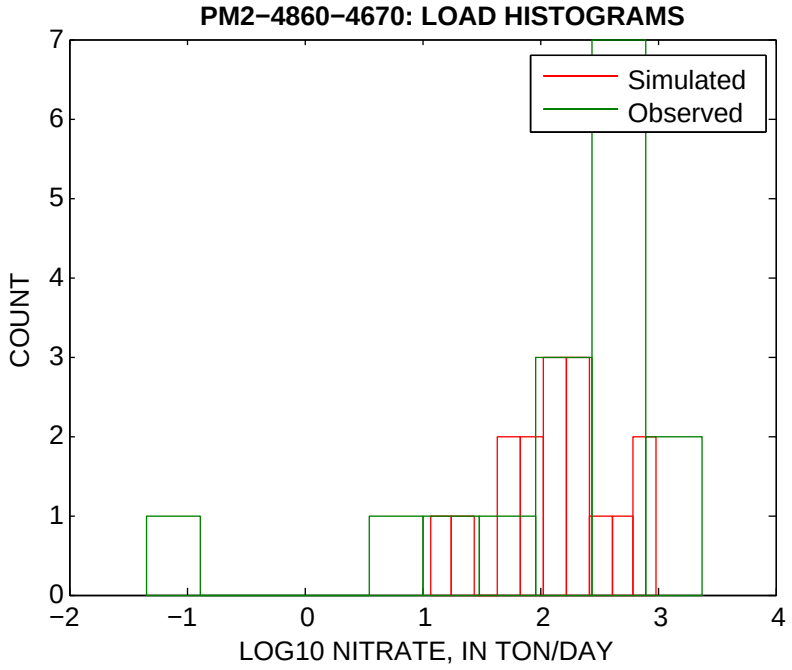


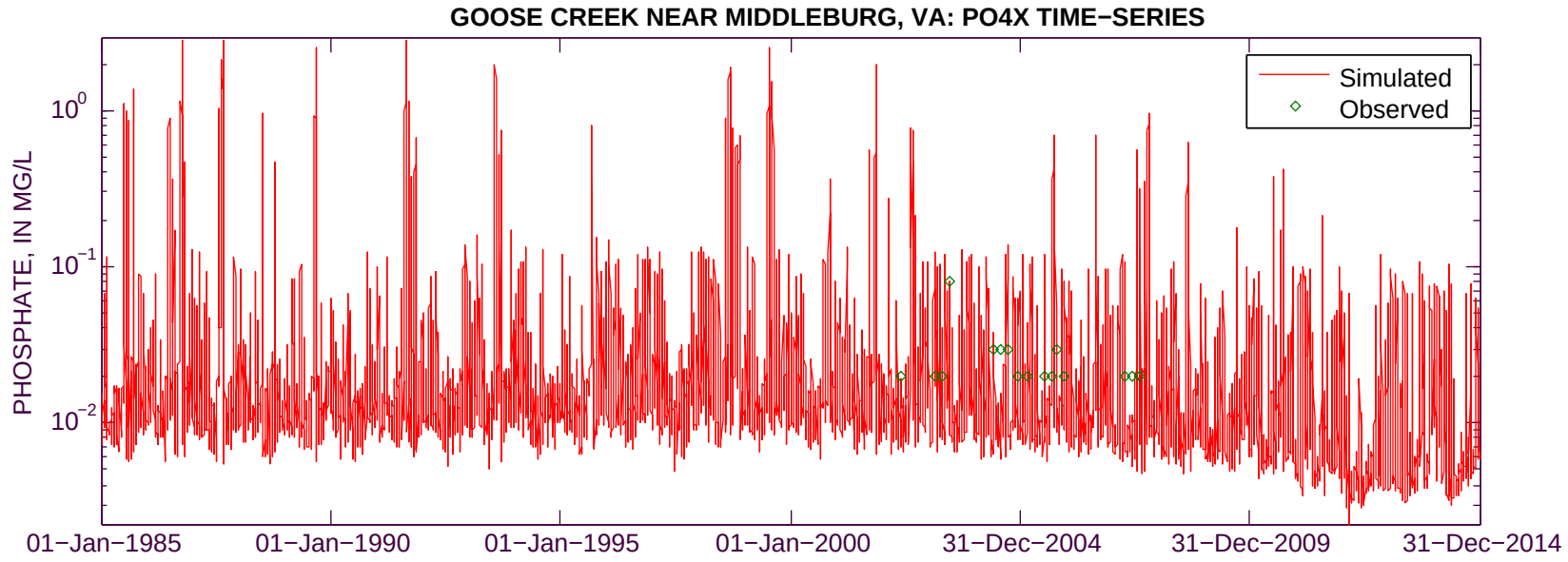
LOAD DATA
LOG10

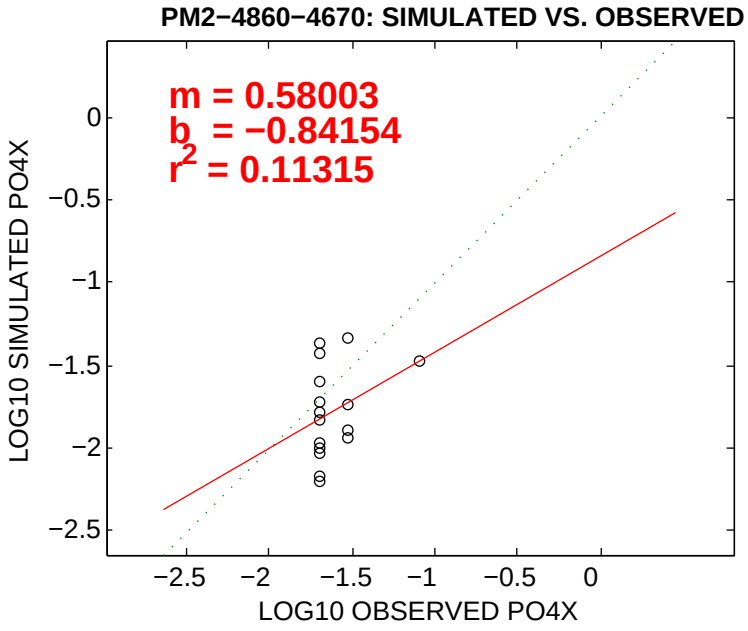


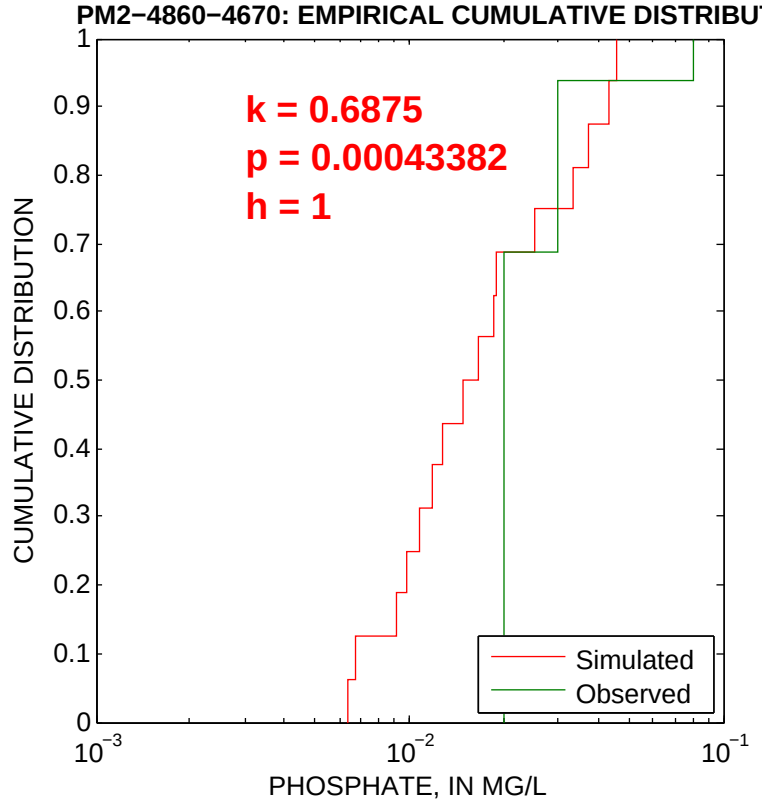












DATA SELECTION

scenario	file
P620171001WQ	PO4X.calib

plot: PO4X - phosphate

Dates: 1/1/1985 – 12/31/201

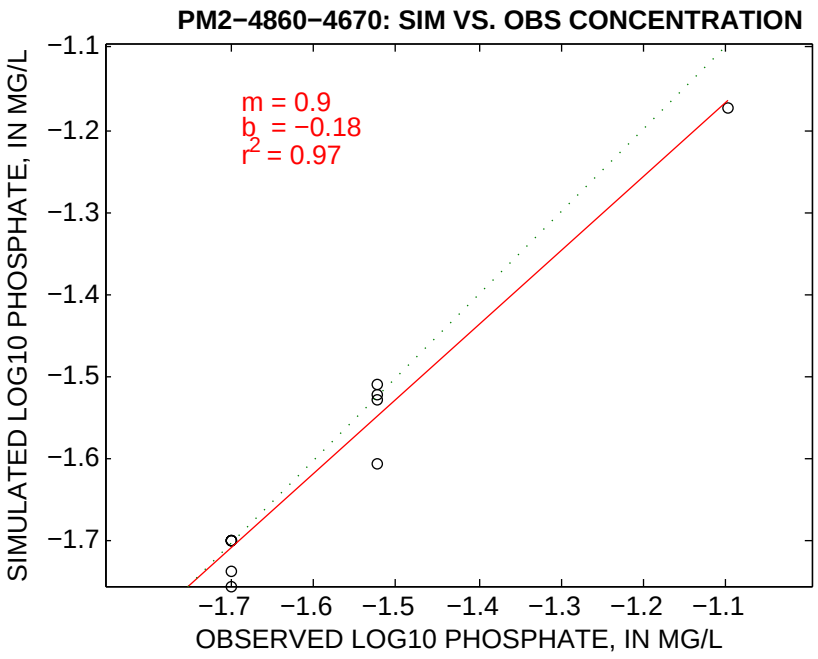
Drive	Directory	Observed
N/A	model	OBS20161101

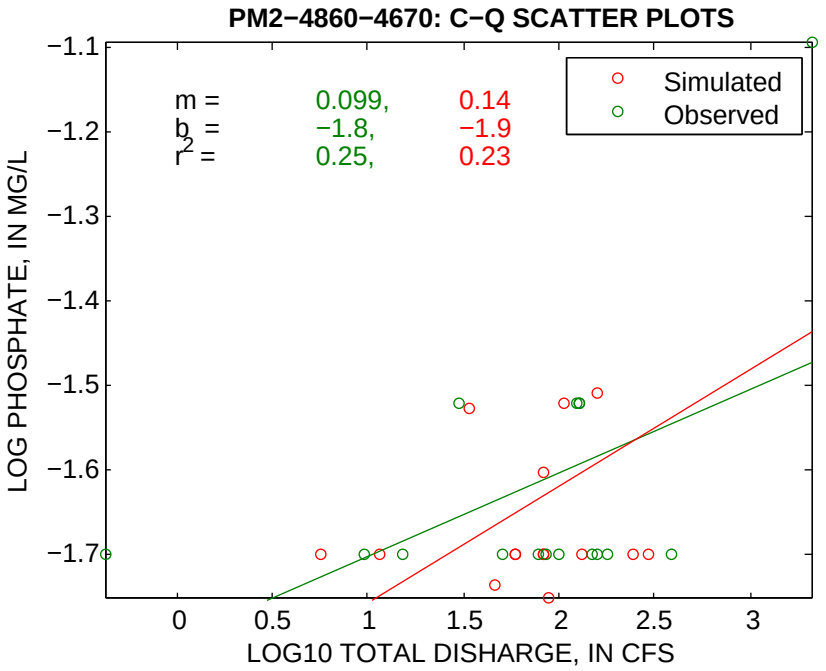
STATISTICS

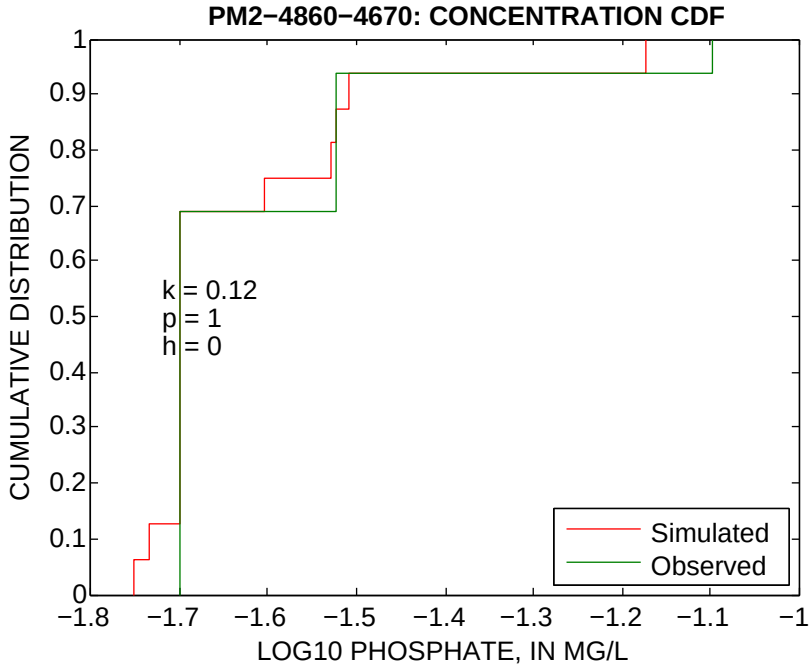
	n	16	16
		observe	simulate
min		0.02	0.0063791
		-1.69897	-2.19524
mean		0.02625	0.0200426
		-1.61732	-1.77964
media		0.02	0.0157645
		-1.69897	-1.80298
max		0.08	0.045862
		-1.09691	-1.33855
varian		0.000225	0.00016726
		0.0253225	0.0752952
JB		0.001	0.091102
		0.001	0.436398
		ra	log
%		-23.6473	10.0363
err.va		0.00031686	0.099346
rel.std.err		1.40828	3.92324
mod.eff		-0.40828	-2.92324

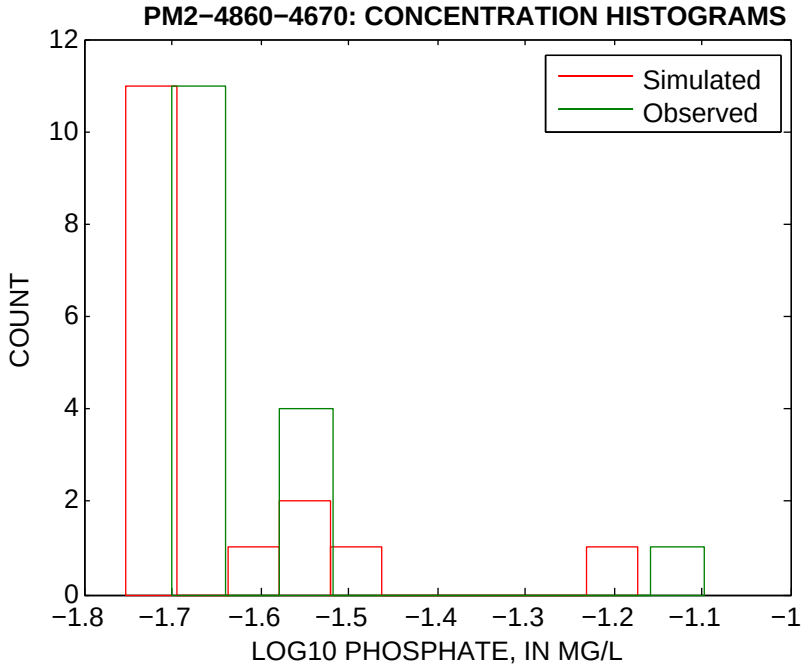
VERSION 2.1

ALL DATA
LOG10

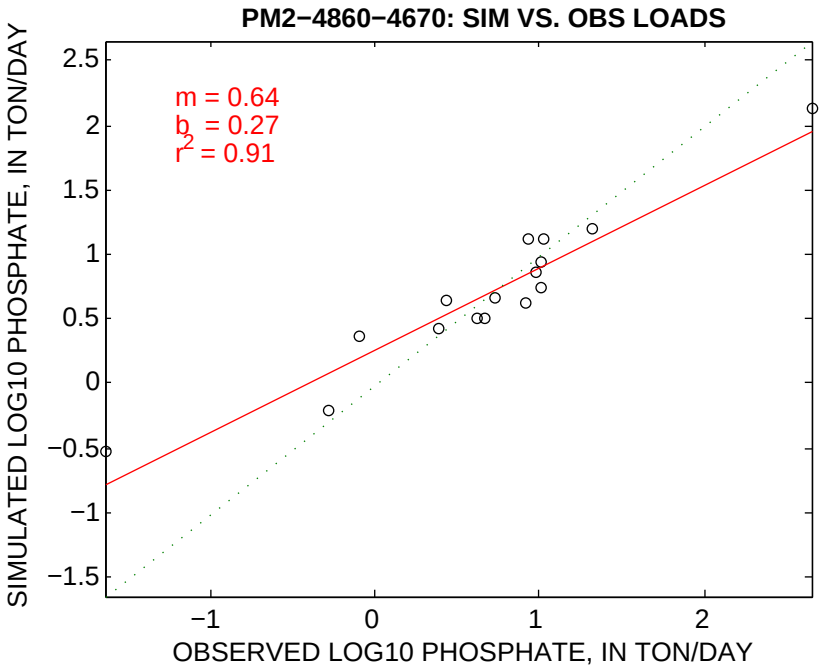


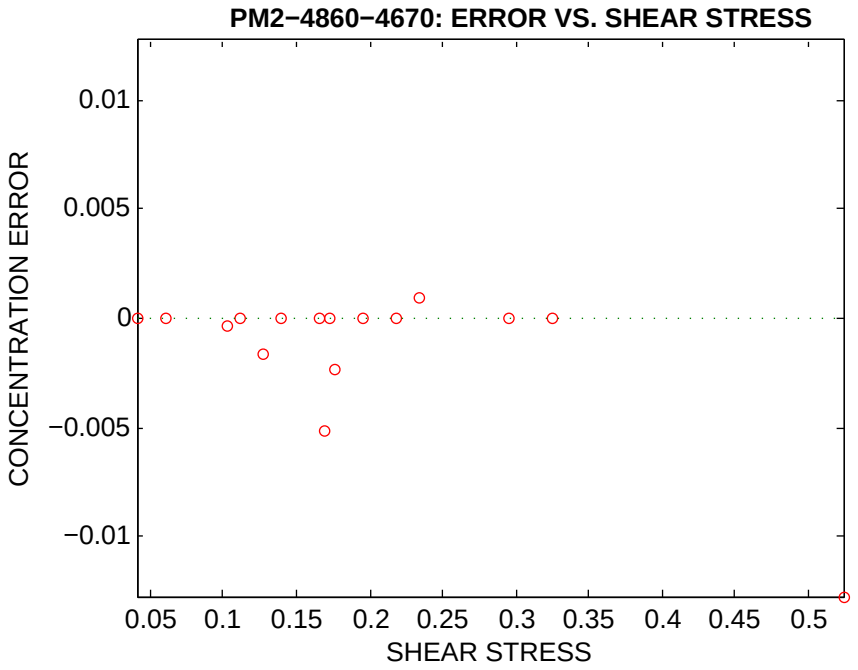


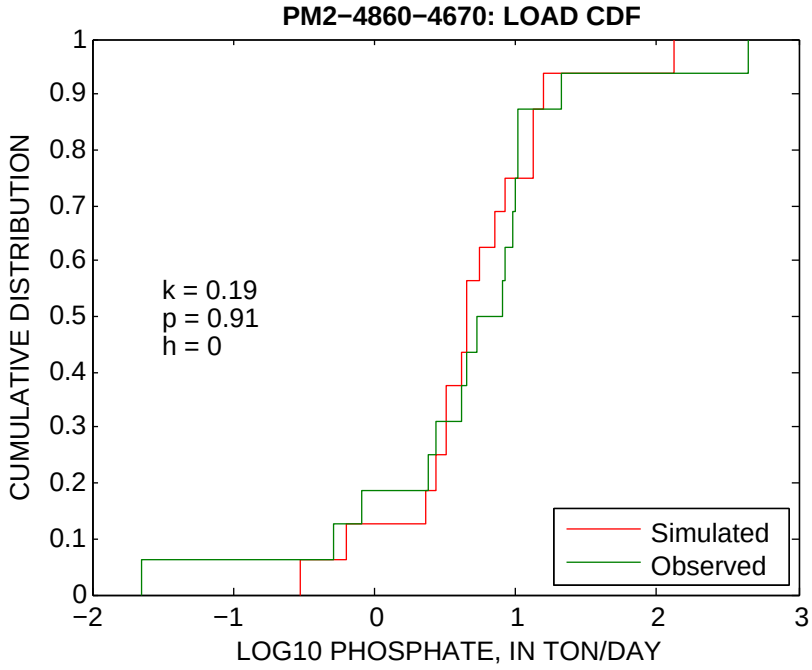


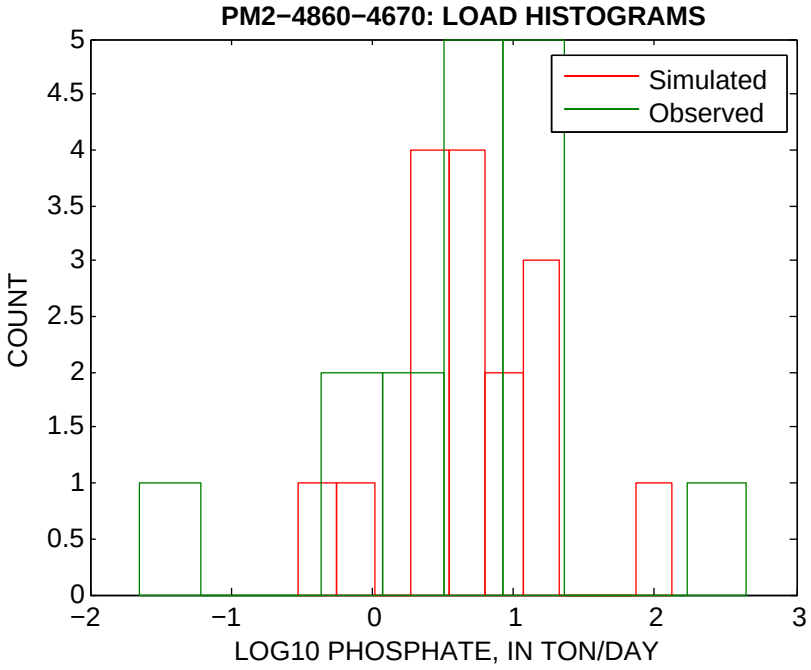


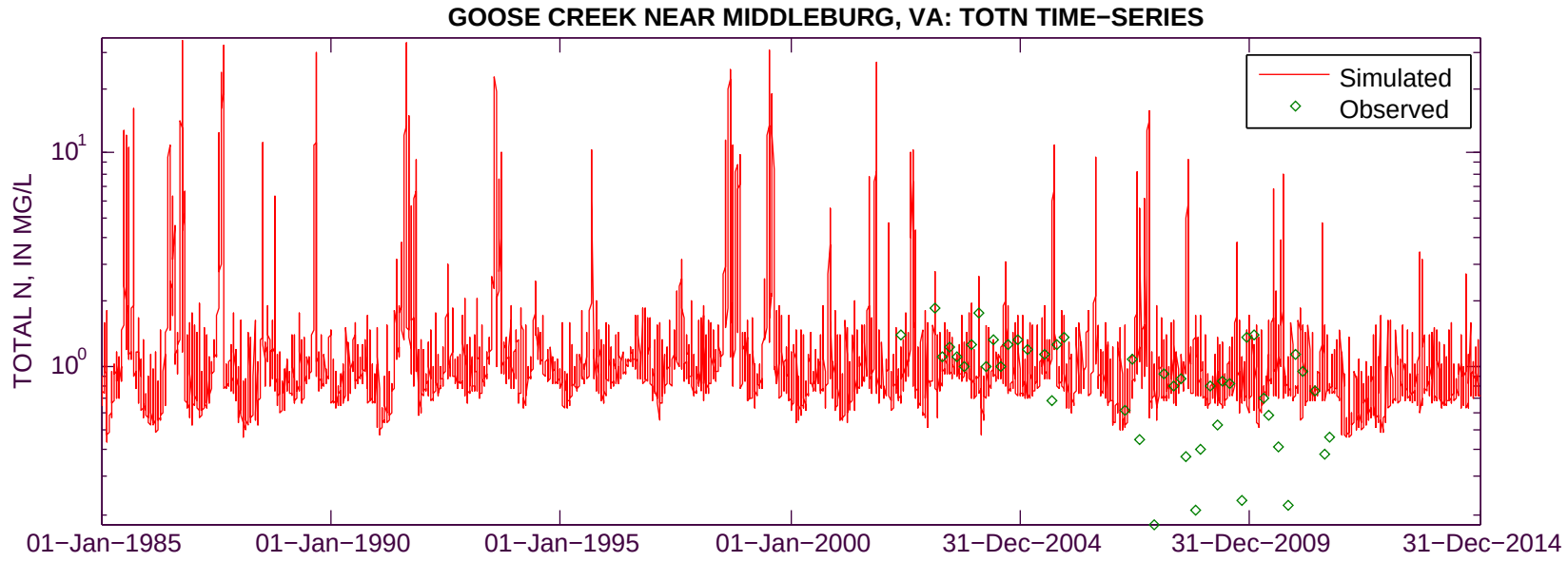
LOAD DATA
LOG10

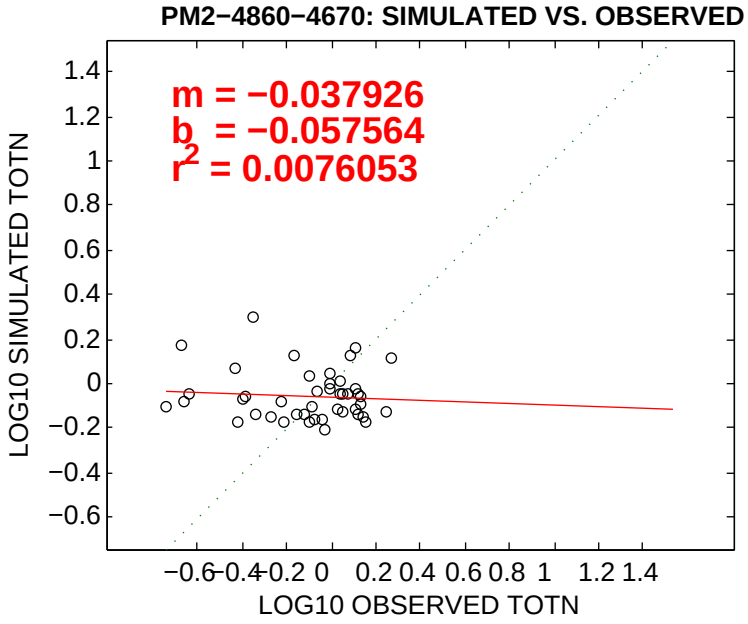


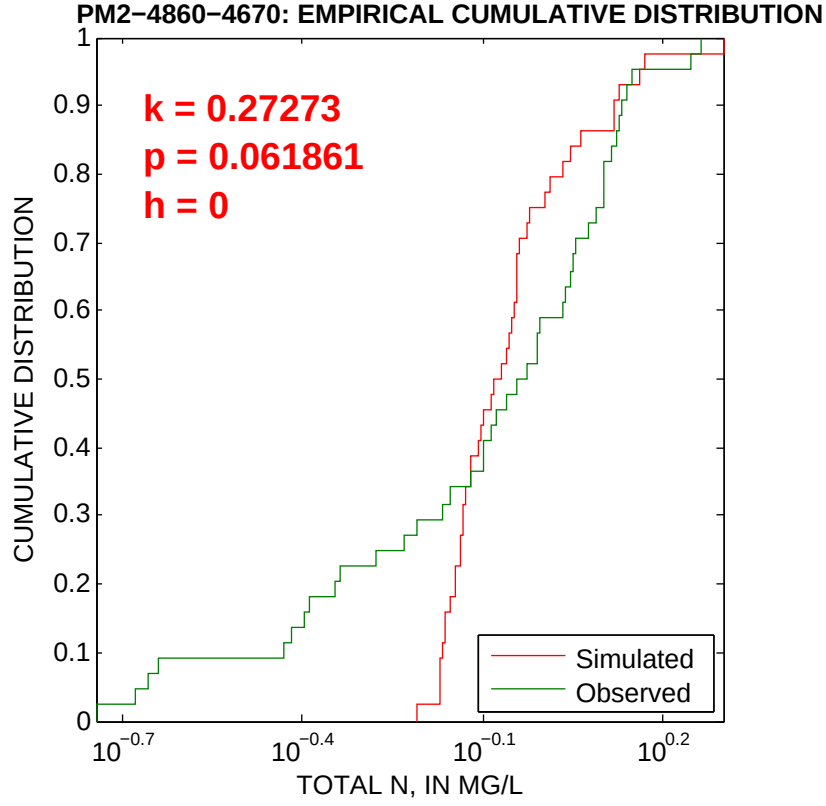












DATA SELECTION

scenario	file
P620171001WQ	TOTN.calib

plot: TOTN - total nitrogen

Dates: 1/1/1985 – 12/31/201

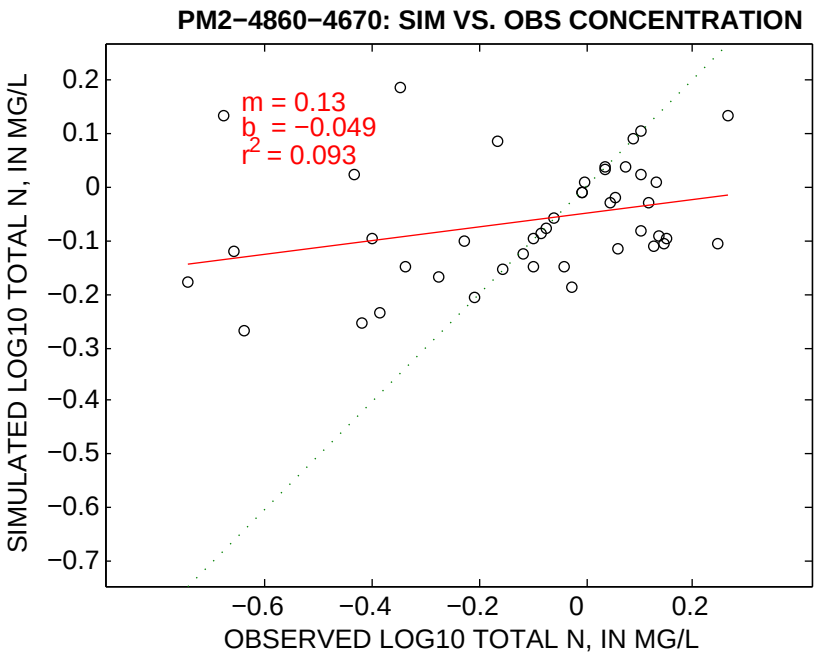
Drive	Directory	Observed
N/A	model	OBS20161101

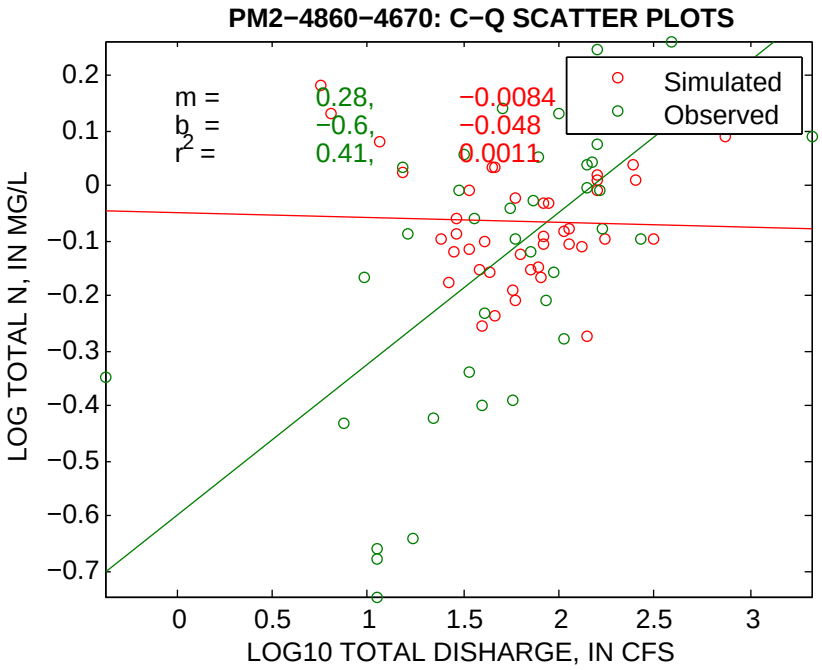
STATISTICS

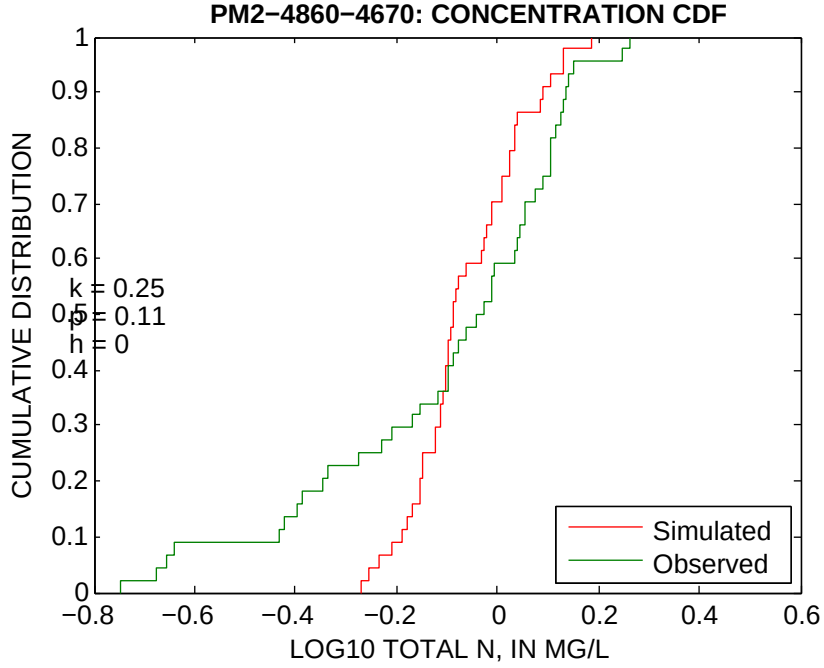
	n	44	44
		observe	simulate
min		0.18	0.61933
		-0.744727	-0.208078
mean		0.901364	0.91605
		-0.106512	-0.0535245
media		0.925	0.840435
		-0.0339154	-0.0755515
max		1.84	2.0012
		0.264818	0.30129
varian		0.175598	0.0761764
		0.0658374	0.0124516
JB		0.5	0.001
		0.032370	0.011098
		ra	log
%		1.62937	-49.748
err.va		0.267399	0.0861558
rel.std.err		1.52279	1.30861
mod.eff		-0.522788	-0.308615

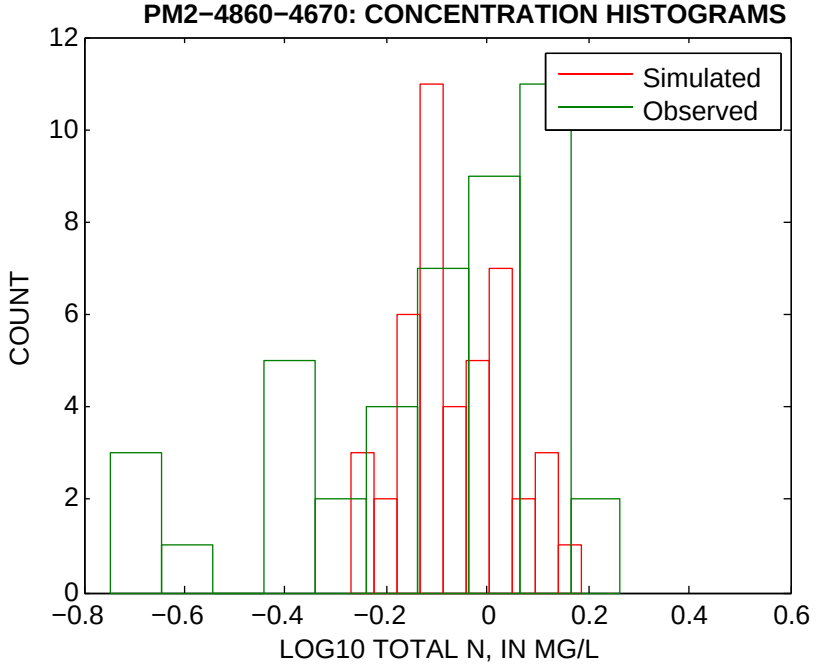
VERSION

ALL DATA
LOG10

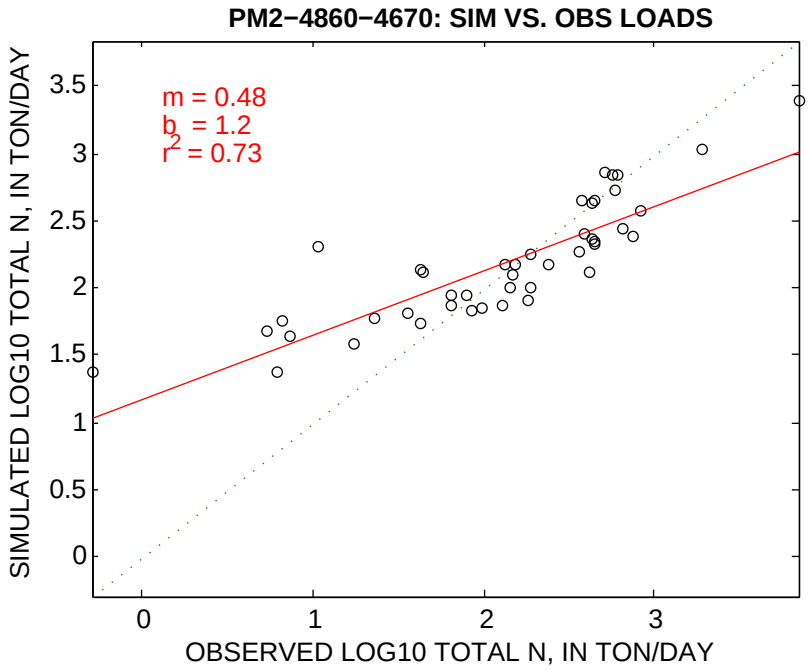


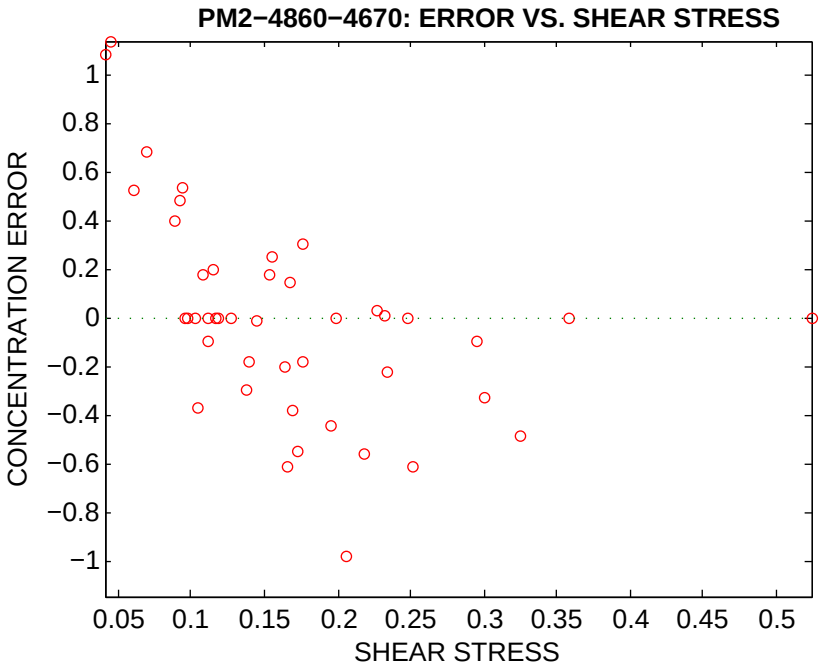


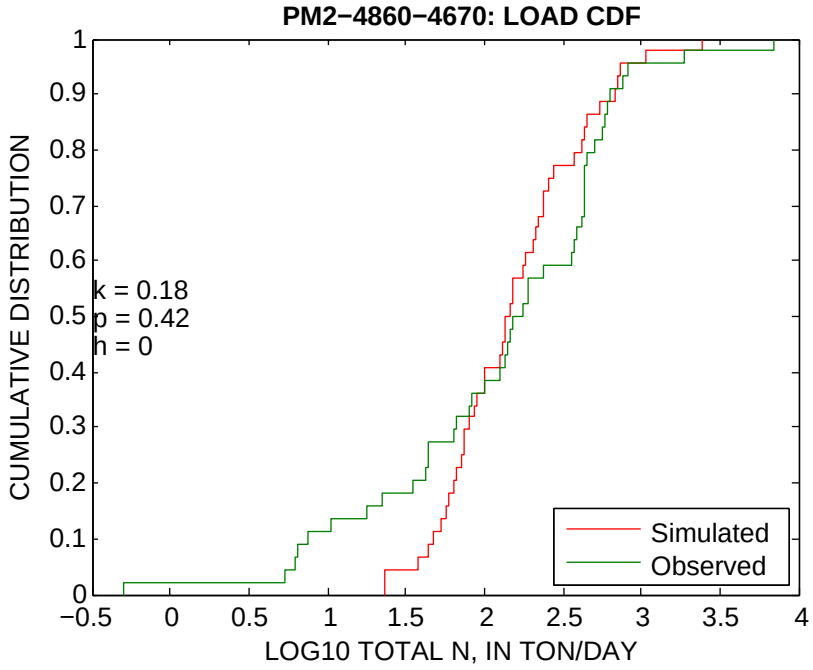


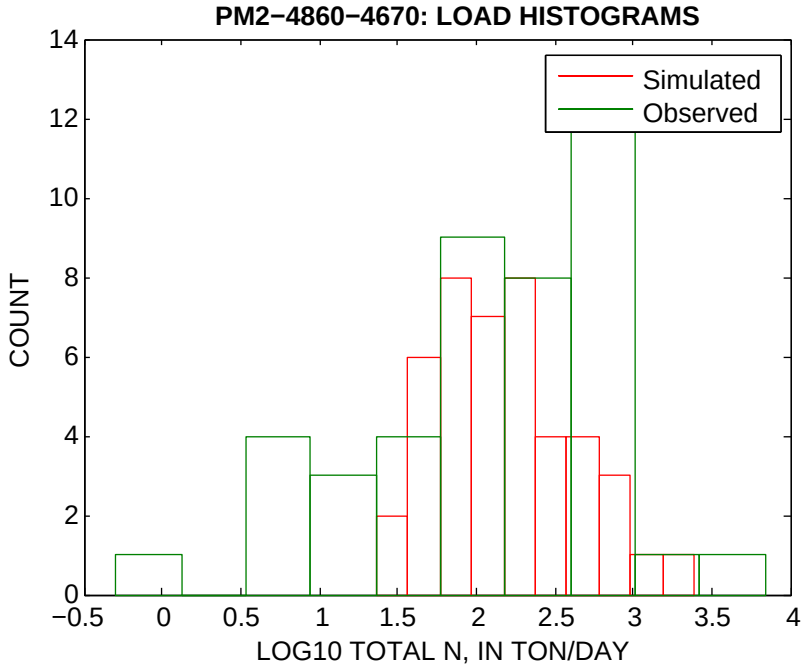


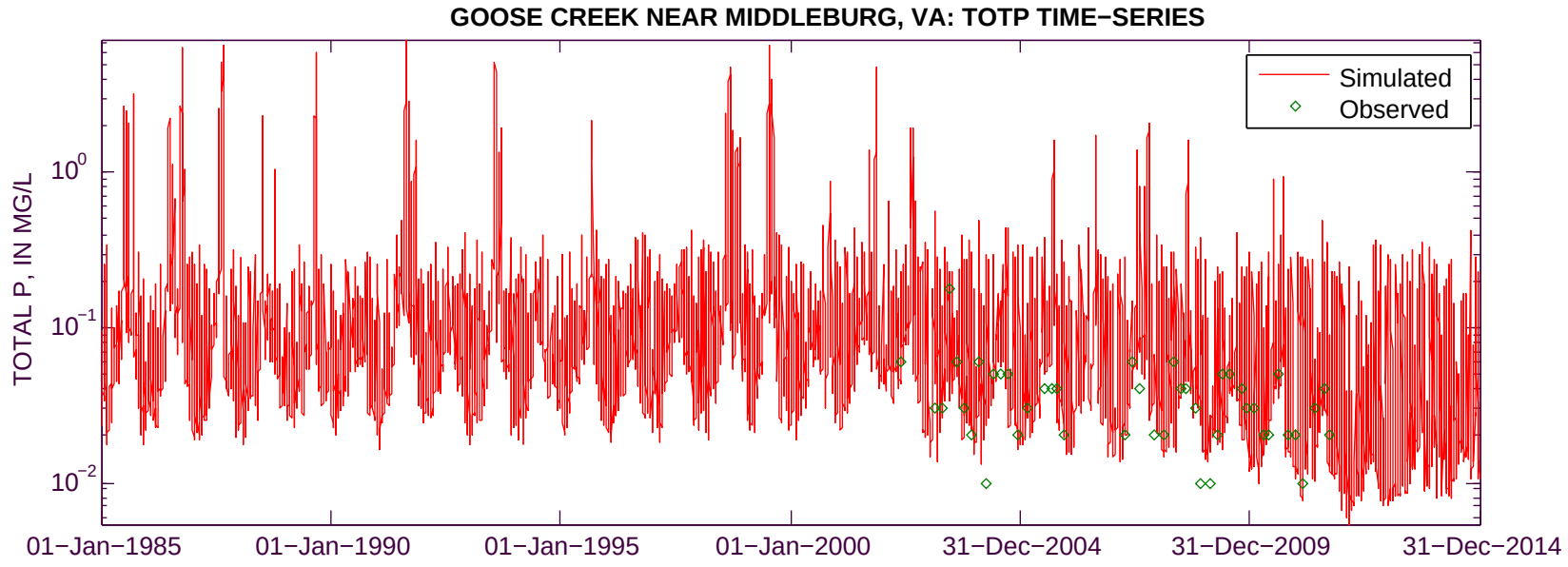
LOAD DATA
LOG10

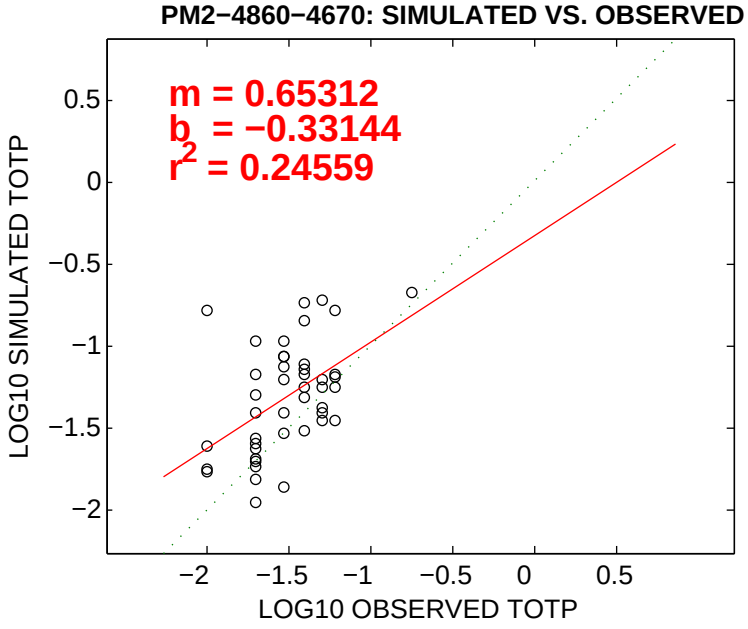


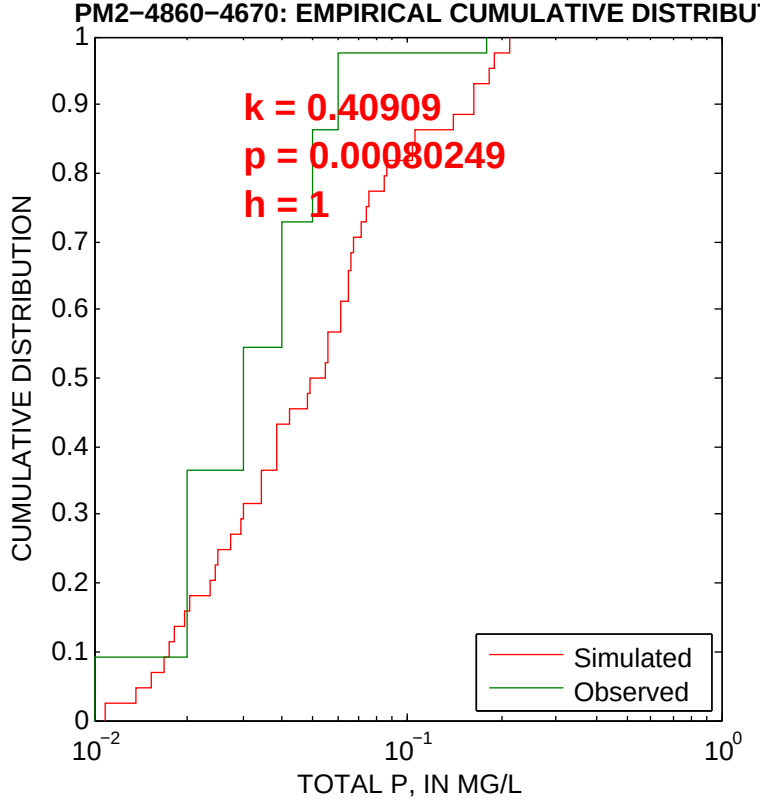












DATA SELECTION

scenario	file
P620171001WQ	TOTP.calib

plot: TOTP - total phosphorus

Dates: 1/1/1985 – 12/31/201

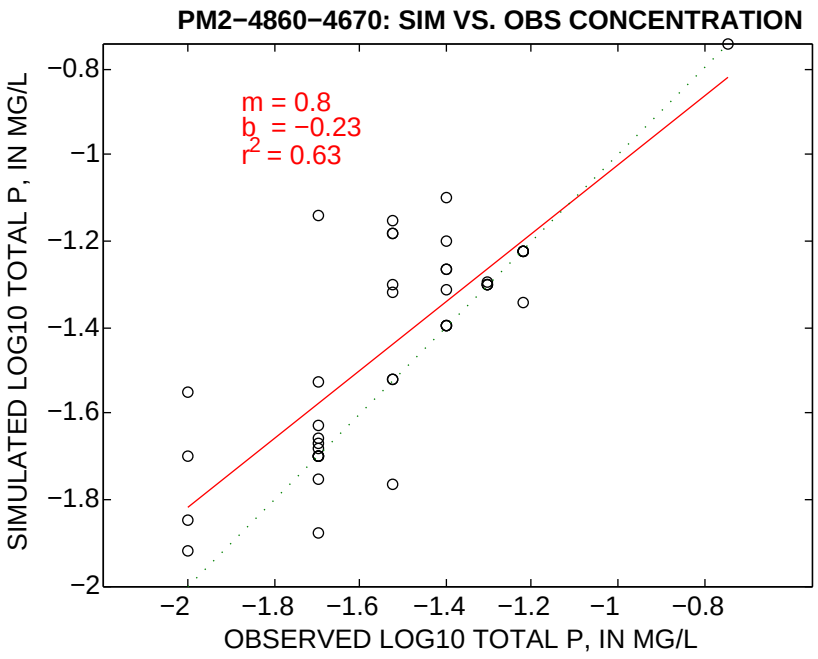
Drive	Directory	Observed
N/A	model	OBS20161101

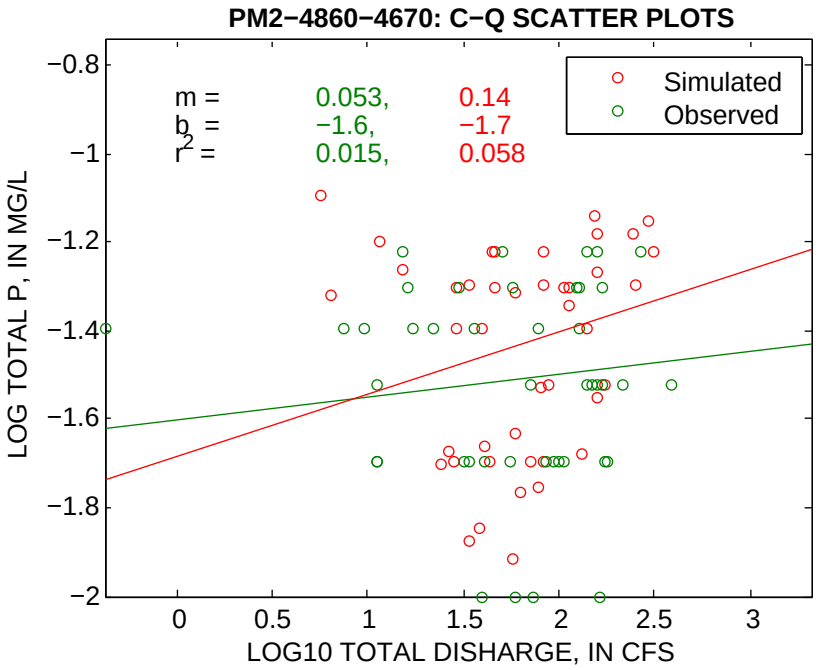
STATISTICS

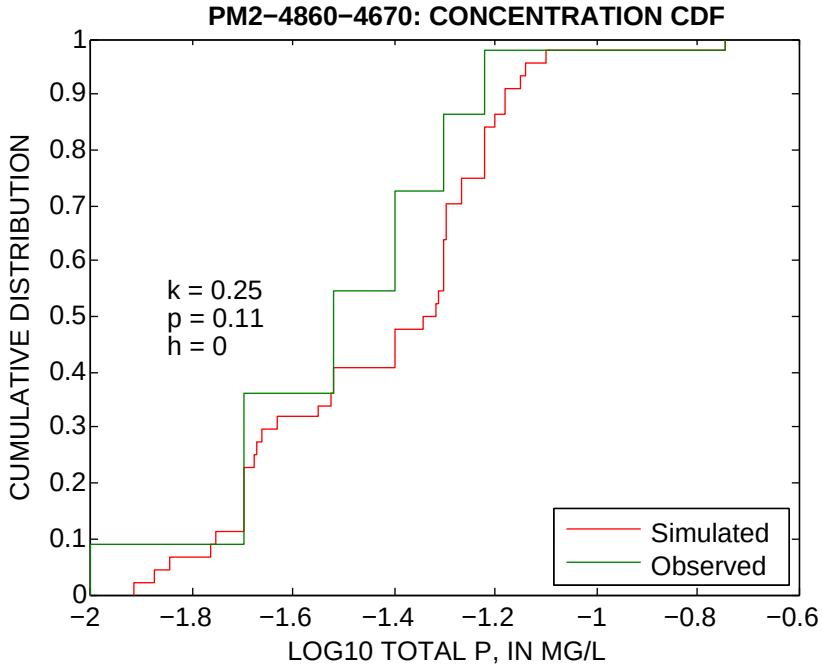
	n	44	44
		observe	simulate
min		0.01	0.010801
		-2	-1.96654
mean		0.0368182	0.0640075
		-1.50942	-1.31728
media		0.03	0.0517285
		-1.52288	-1.28686
max		0.18	0.21212
		-0.744727	-0.673418
varian		0.00071987	0.00262619
		0.0640348	0.111222
JB		0.001	0.004950
		0.5	0.47279
		ra	log
%		73.8475	-12.7293
err.va		0.00268093	0.129387
rel.std.err		3.72418	2.02057
mod.eff		-2.72418	-1.02057

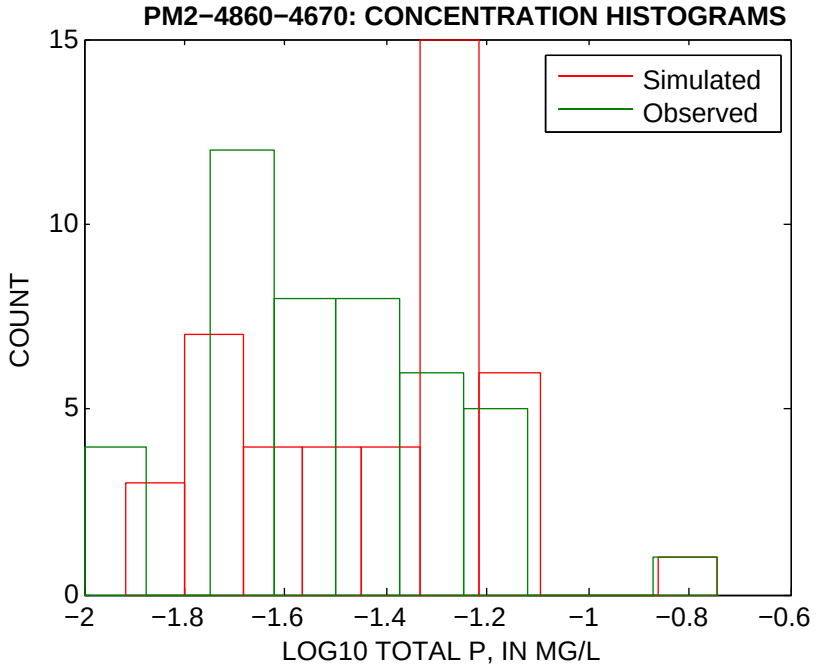
VERSION 2.1

ALL DATA
LOG10

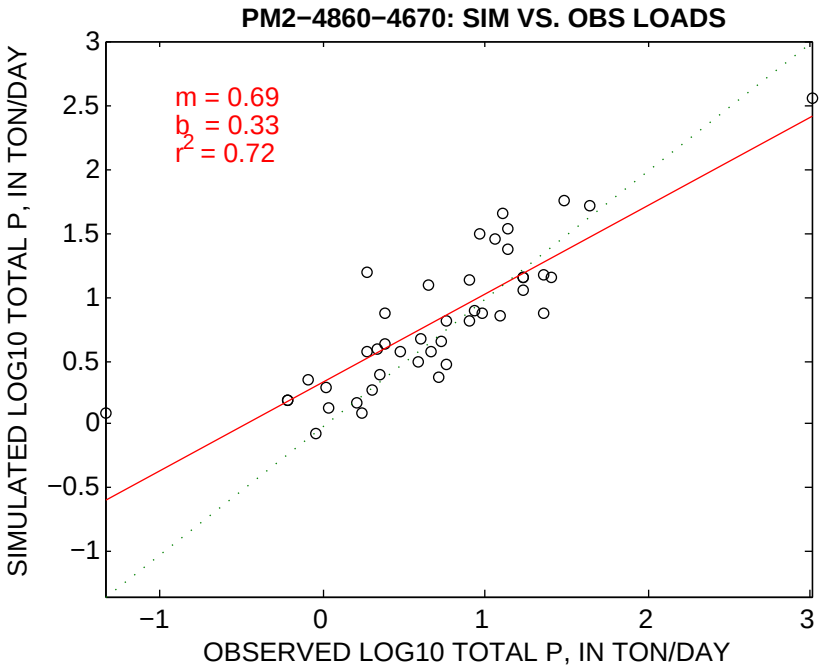


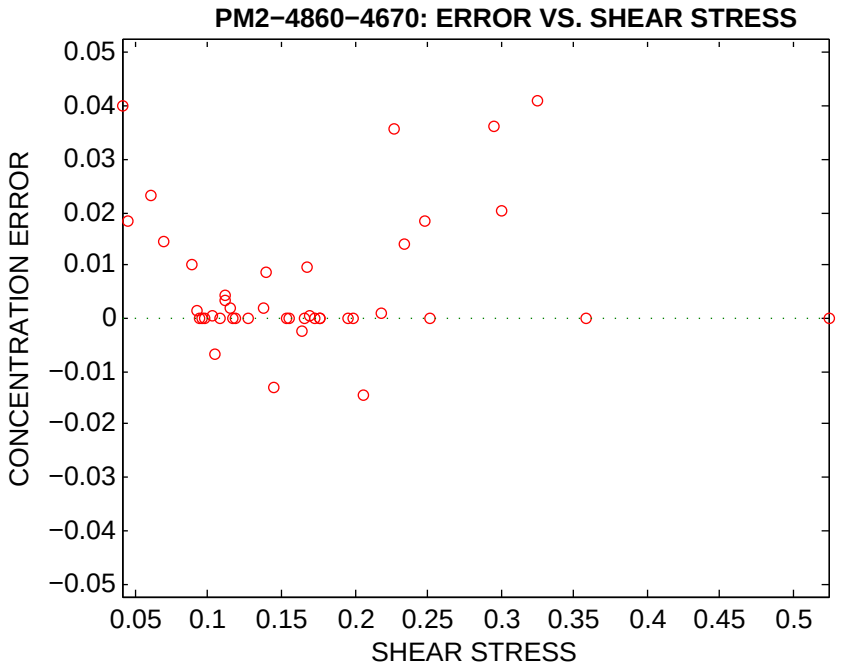


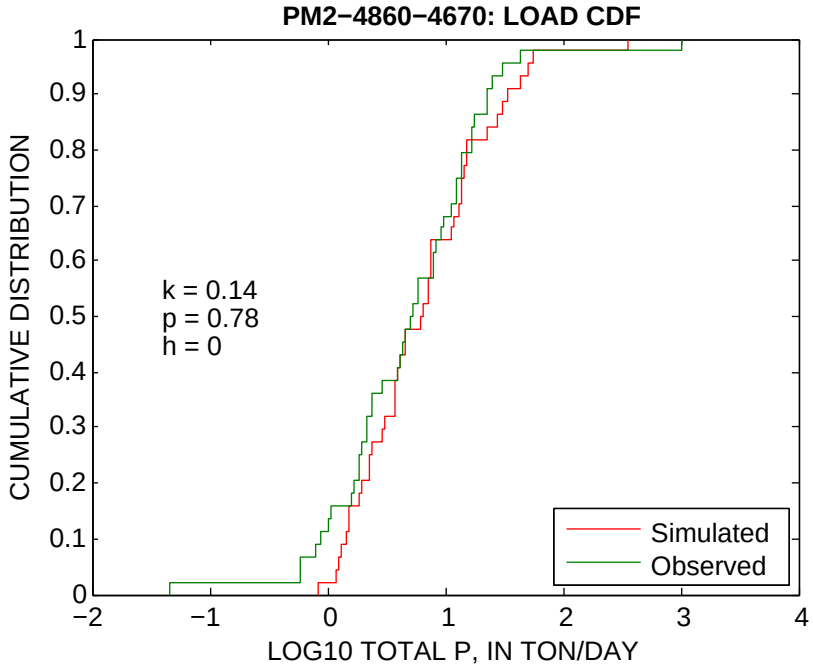


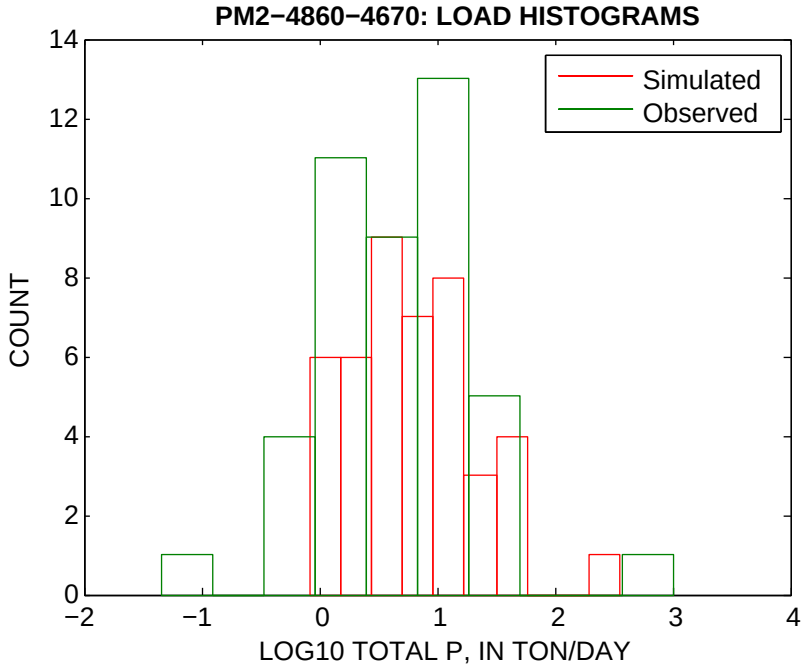


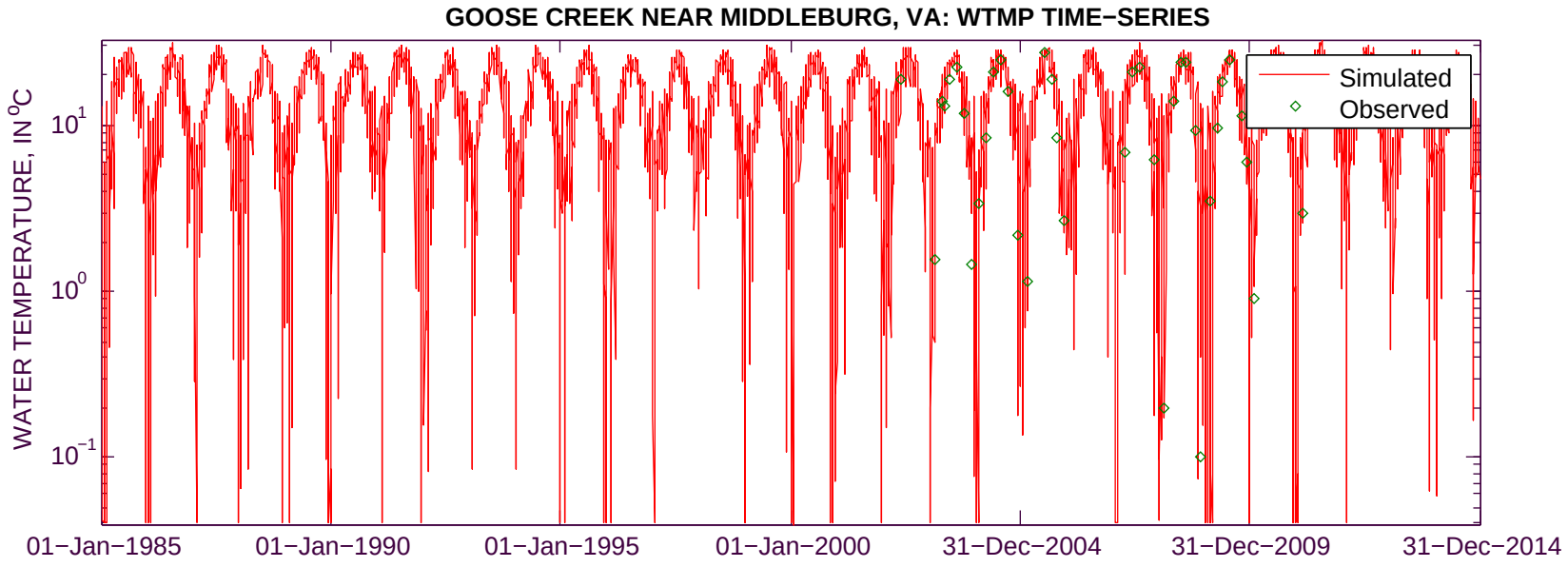
LOAD DATA
LOG10

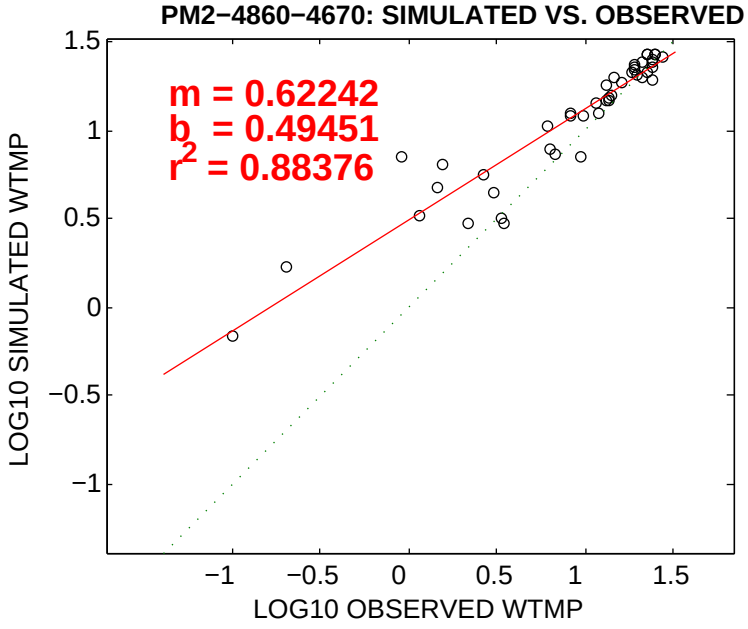


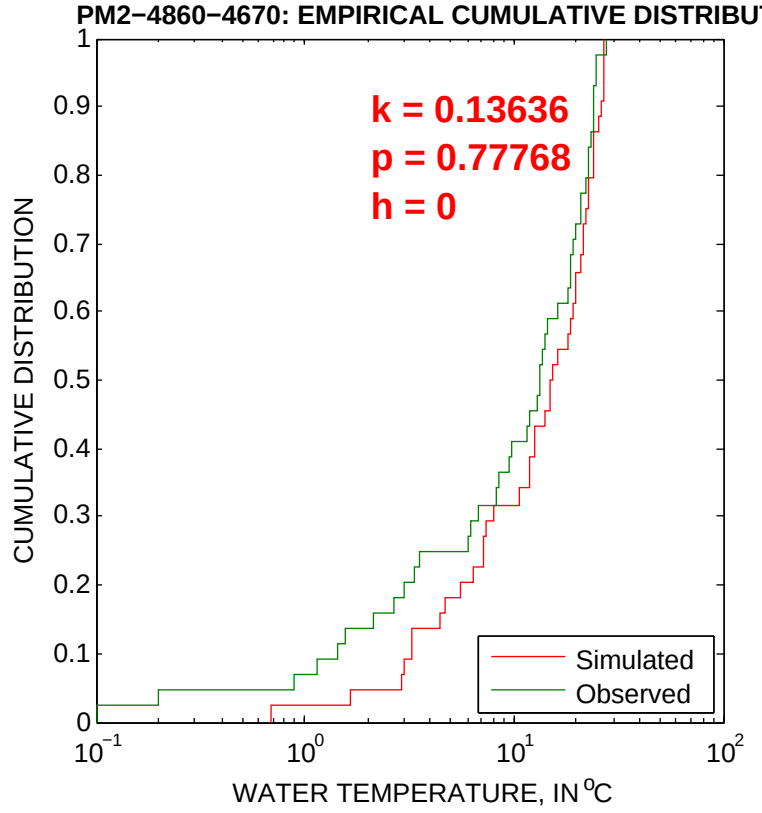












DATA SELECTION

scenario	file
P620171001WQ	WTMP.calib

plot: WTMP - water tempera...

Dates 1/1/1985 12/31/201

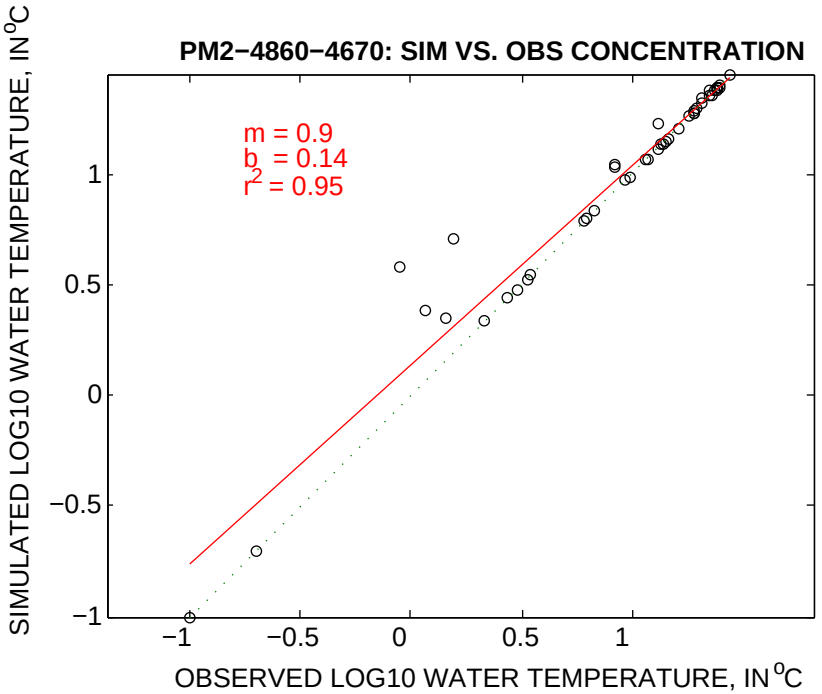
Drive	Directory	Observed
N/A	model	OBS20161101

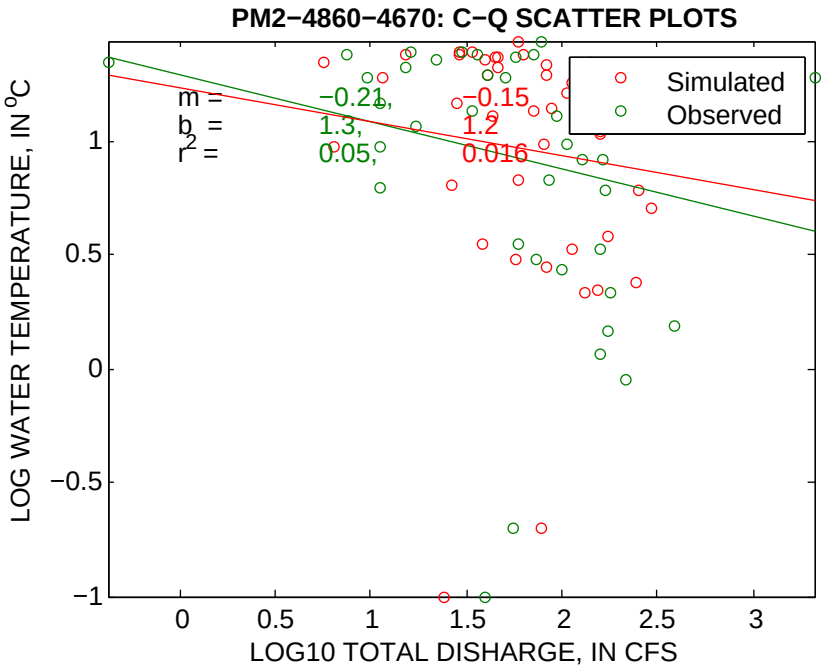
STATISTICS

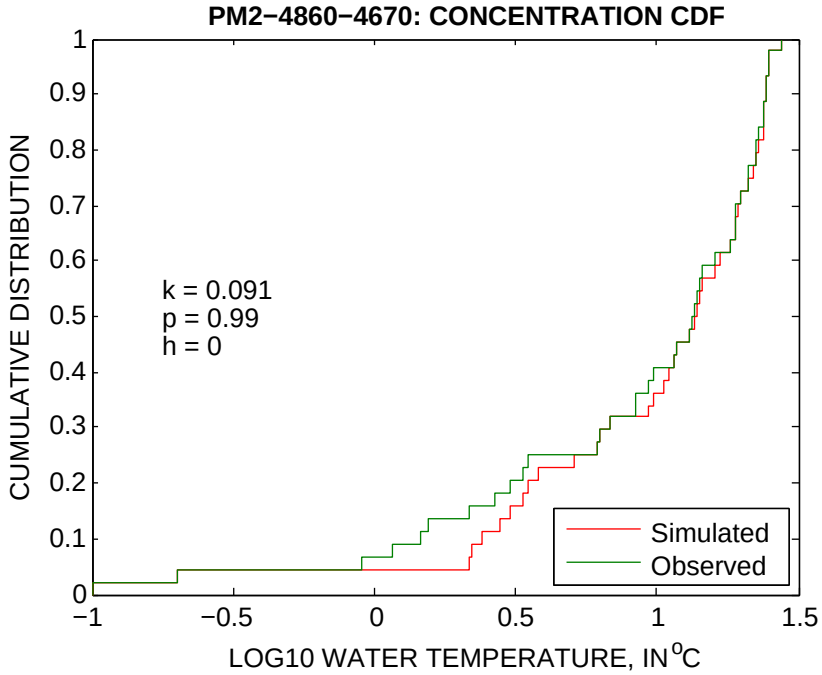
	n	observe	simulate
		44	44
min		0.1	0.68959
		-1	-0.161409
mean		13.0568	14.977
		0.91382	1.06329
media		13.345	15.1255
		1.12529	1.17966
max		27.7	27.028
		1.44248	1.43181
varian		73.6178	70.5479
		0.31877	0.139735
JB		0.086450	0.084893
		0.001301	0.007152
		ra	log
%		14.7065	16.3564
err.va		9.12609	0.0845501
rel.std.err		0.123966	0.265238
mod.eff		0.876034	0.734762

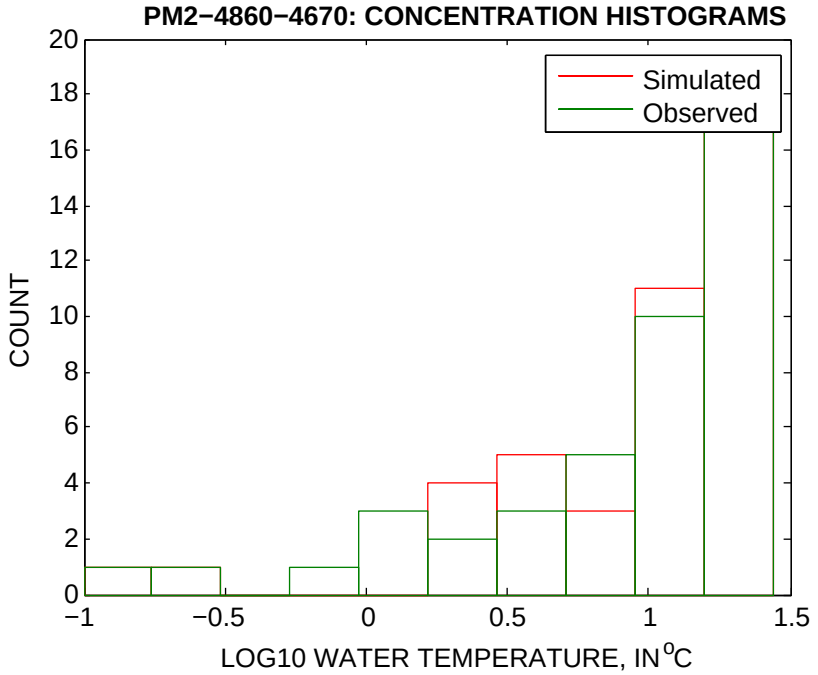
VERSION

ALL DATA
LOG10

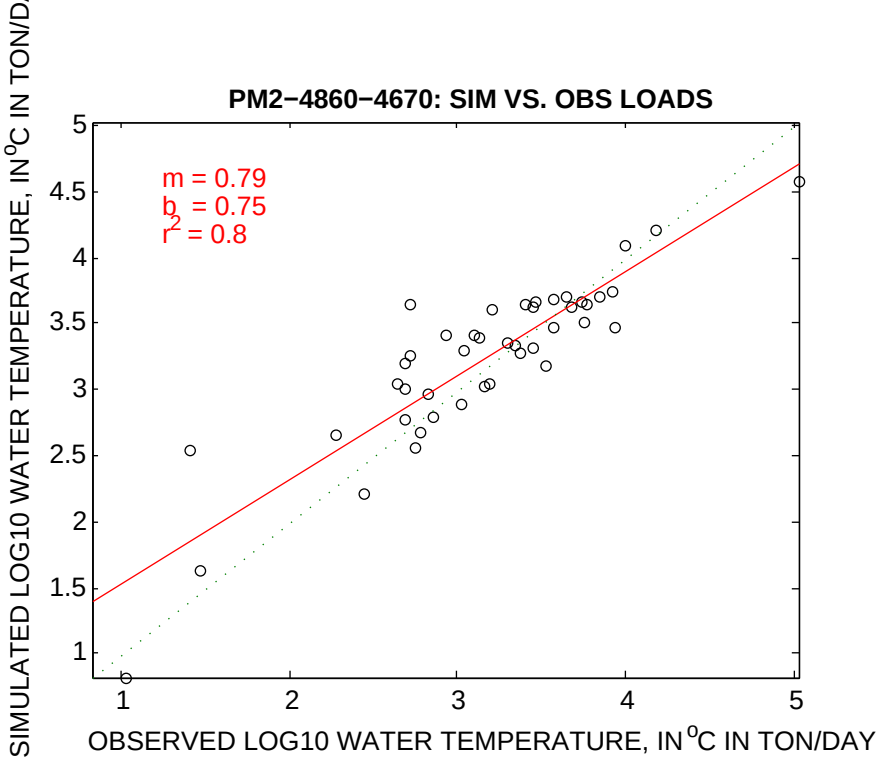


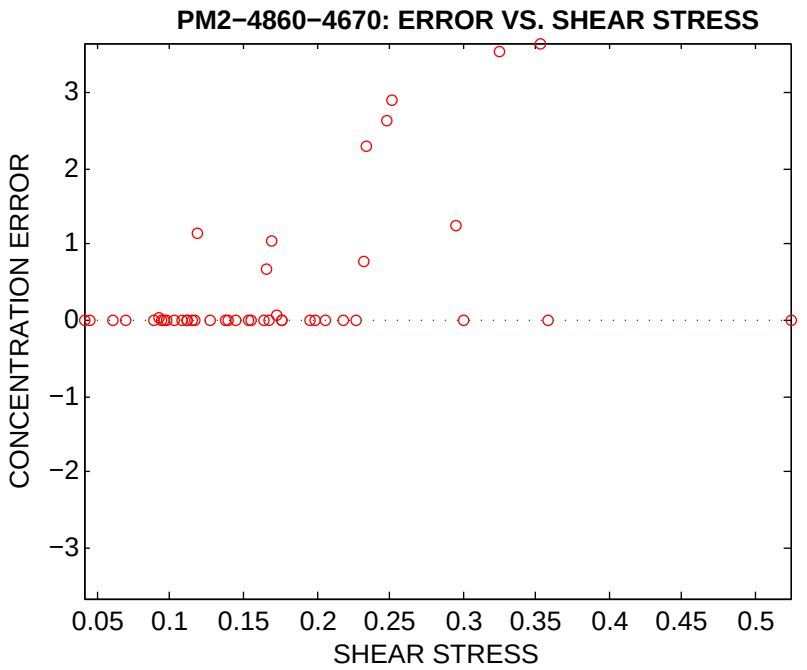


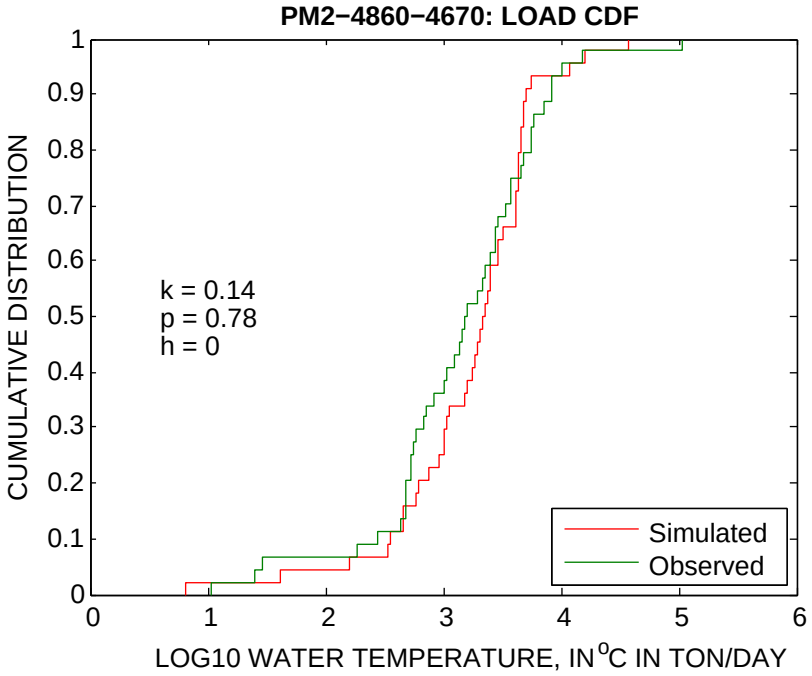


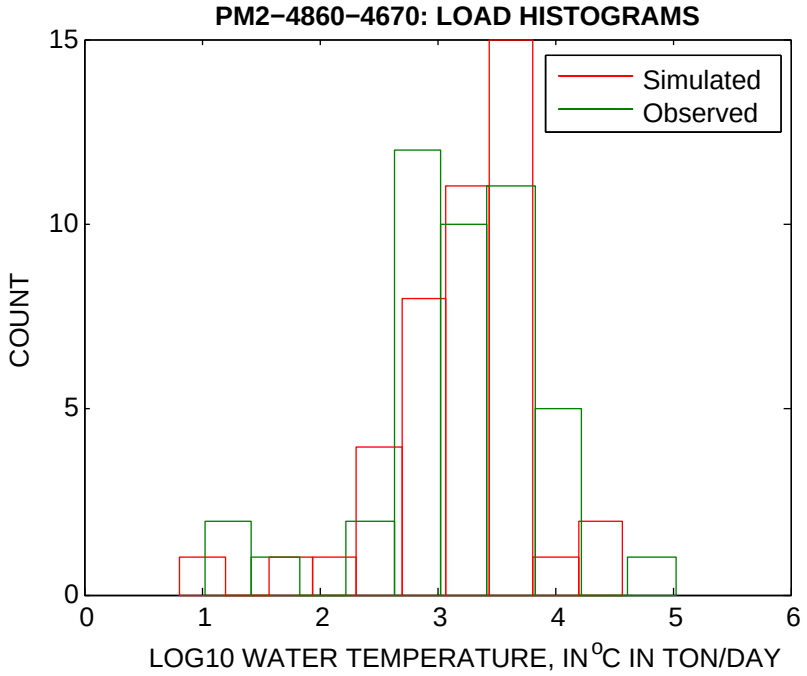


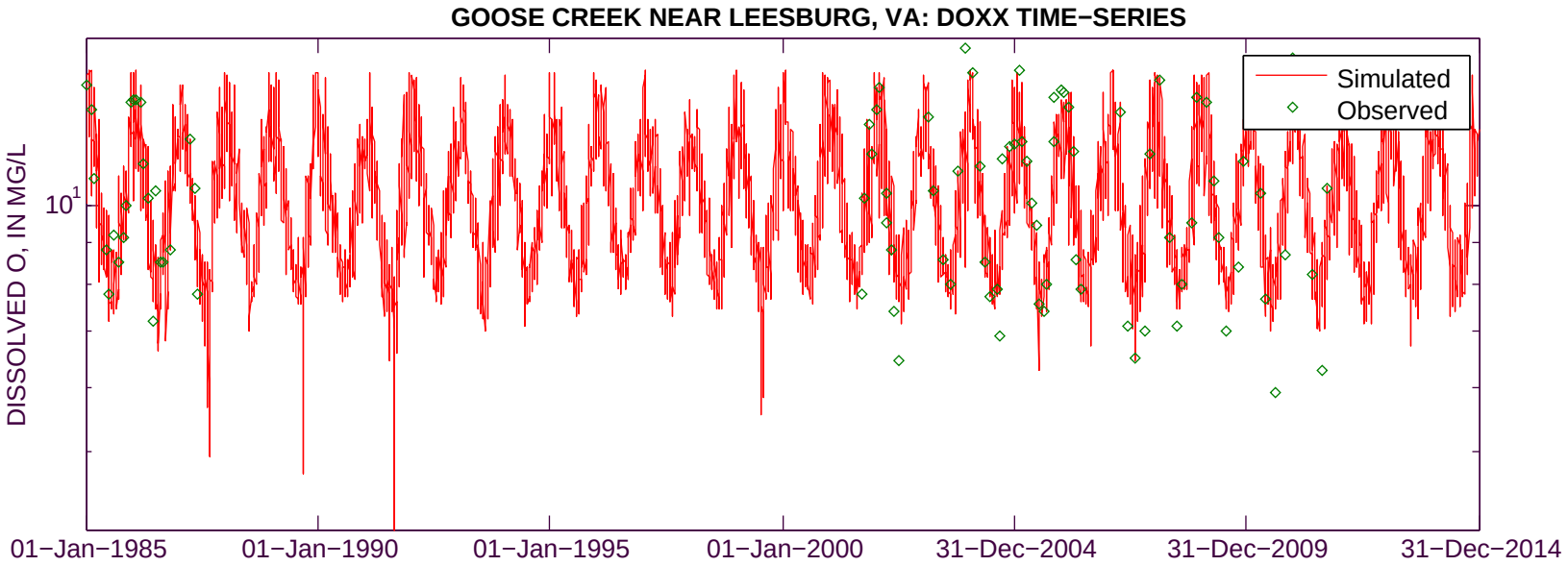
LOAD DATA
LOG10

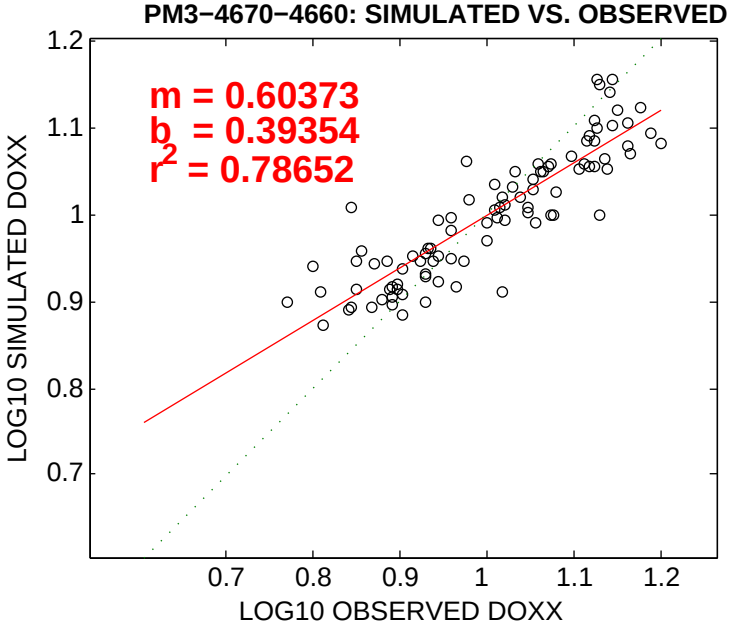


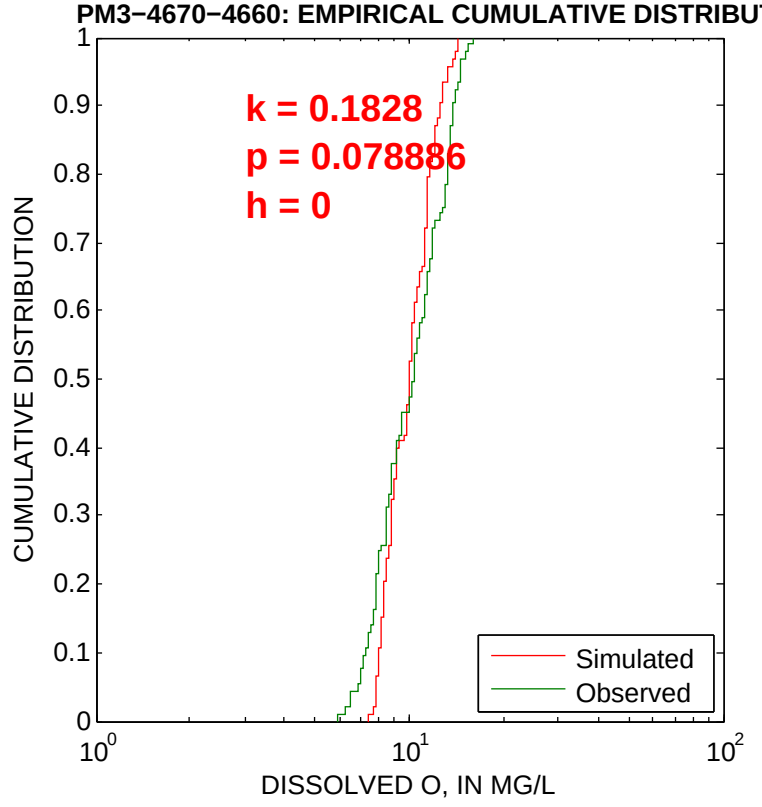












DATA SELECTION

scenario	file
P620171001WQ	DOXX.calib

plot: DOXX - dissolved oxygen

Dates: 1/1/1985 – 12/31/201

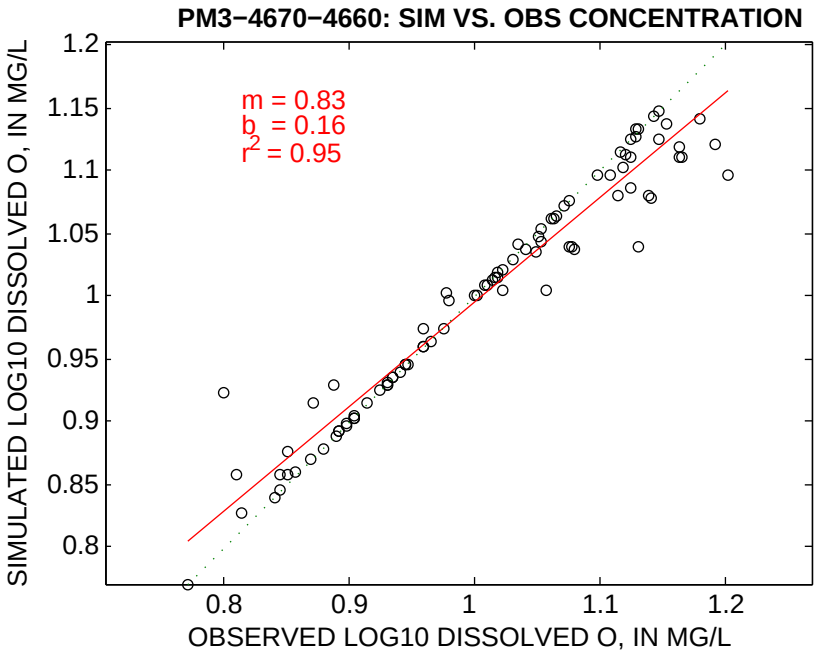
Drive	Directory	Observed
N/A	model	OBS20161101

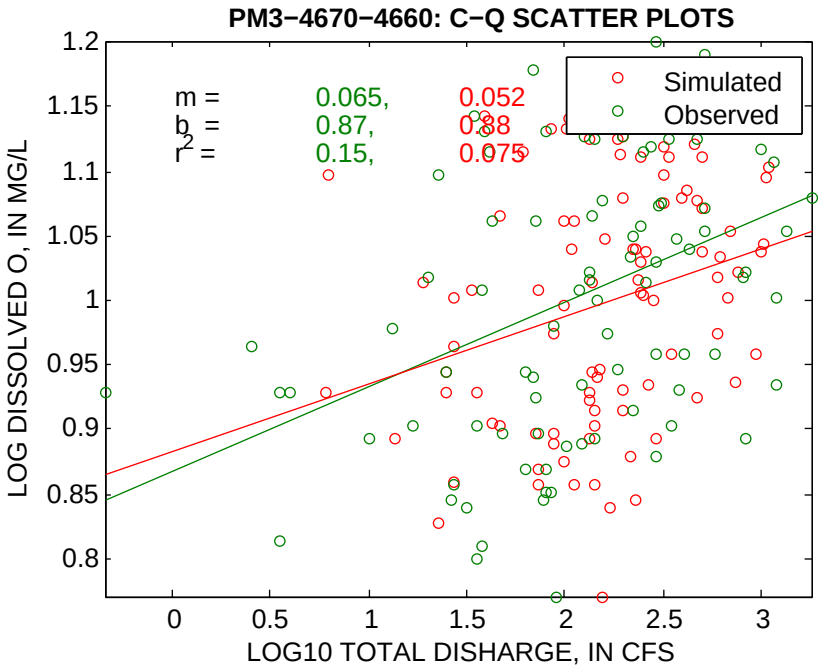
STATISTICS

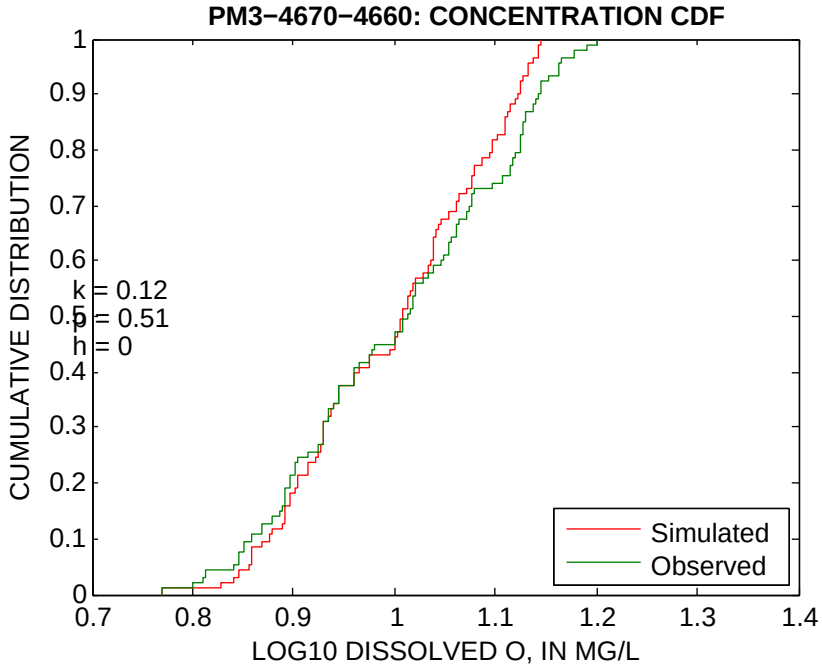
n	93	93
	observe	**simulate**
min	5.9	7.4619
	0.770852	0.872849
mean	10.399	10.1348
	1.00378	0.999554
media	10.3	9.9645
	1.01284	0.998456
max	15.89	14.292
	1.20112	1.15509
varian	6.53452	3.06318
	0.0117534	0.00544682
JB	✓ 0.051033	0.056132 ✓
	✓ 0.065245	0.074469 ✓
	ra	log
%	-2.54112	-0.420903
err.va	1.72505	0.00302642
rel.std.err	0.26399	0.257493
mod.eff	0.73601	0.742507

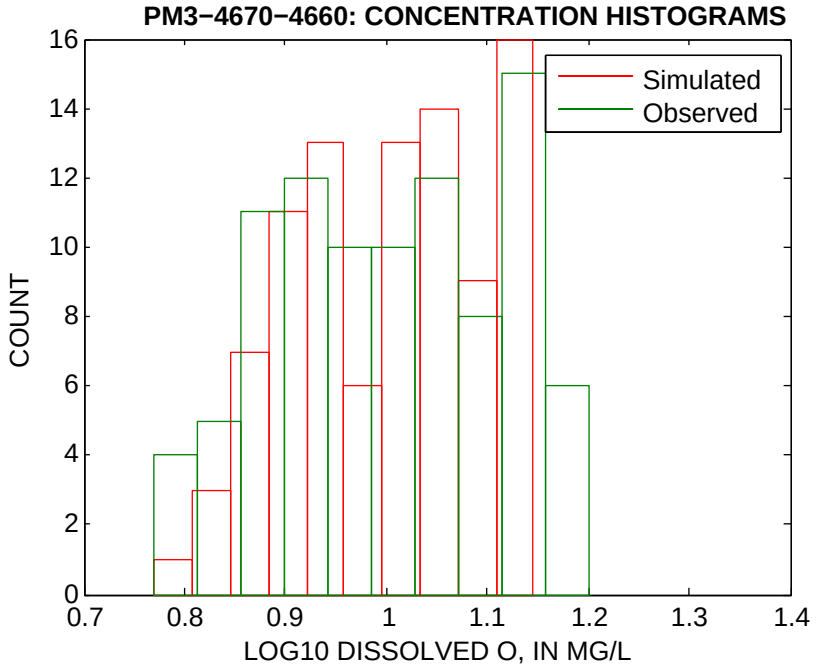
VERSION 2.1

ALL DATA
LOG10

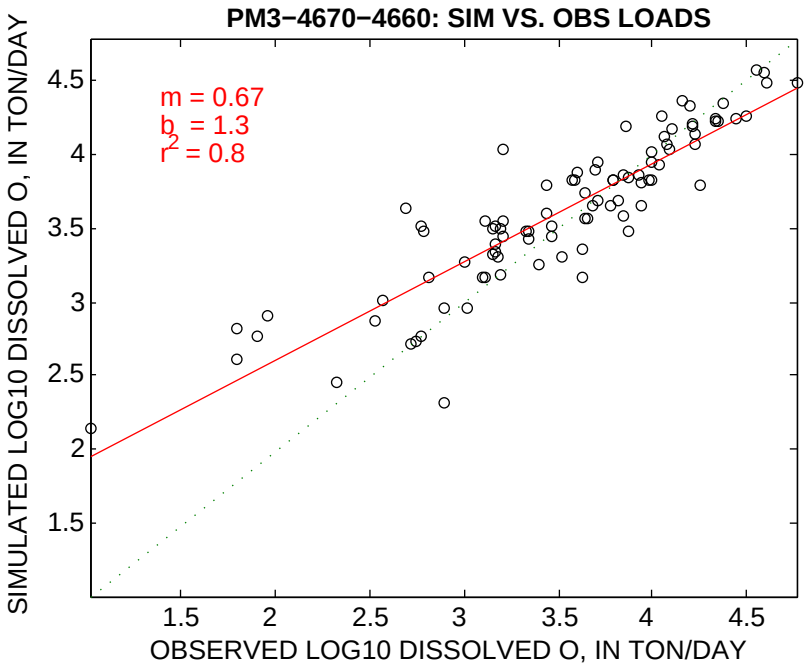


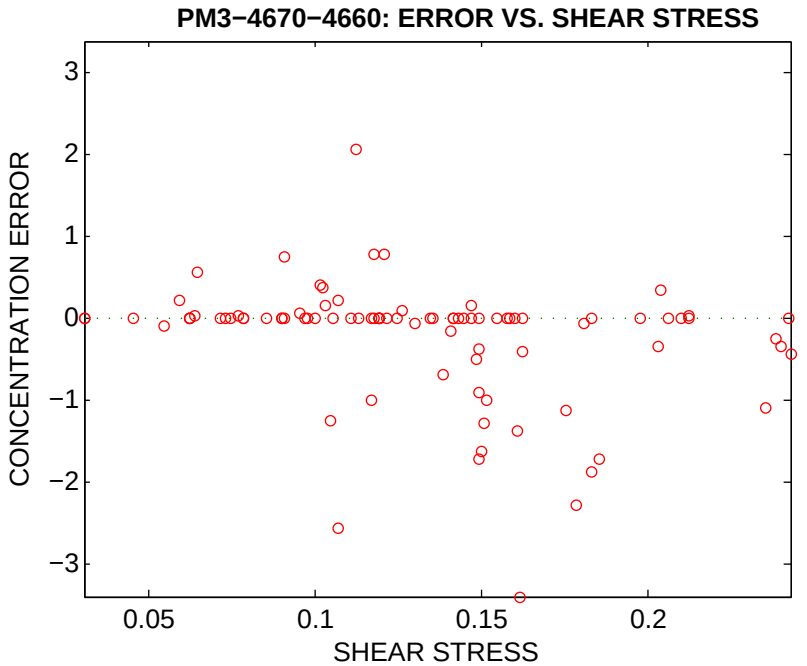


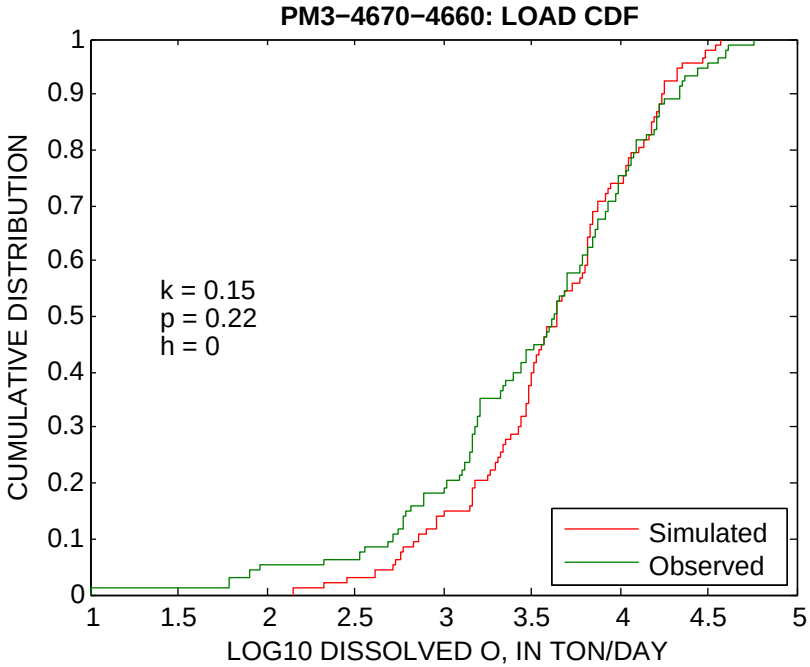


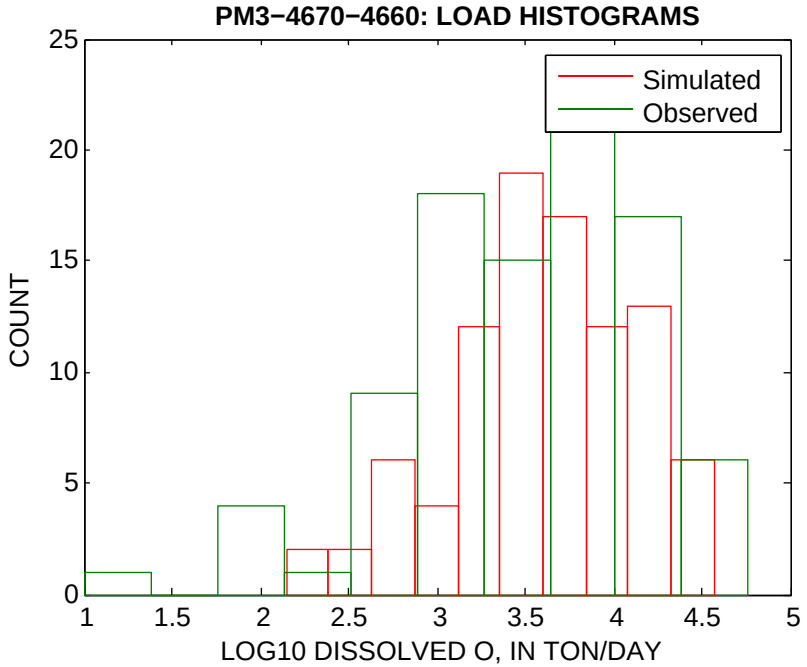


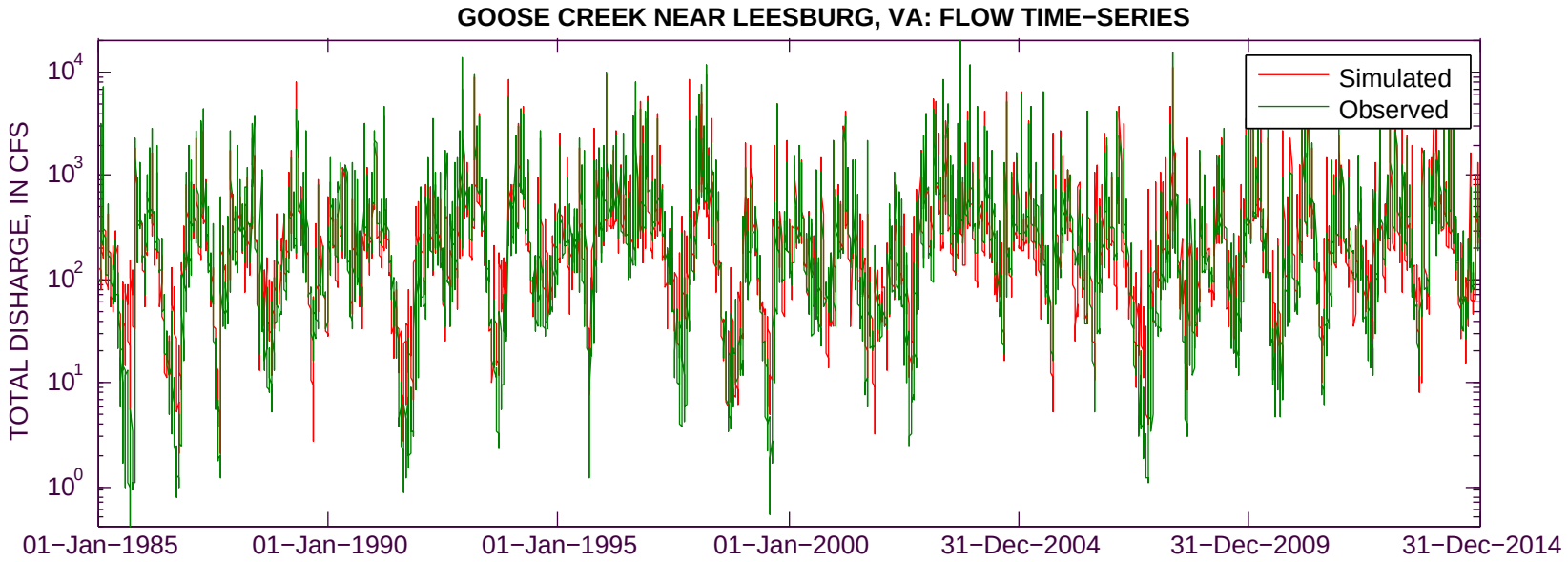
LOAD DATA
LOG10

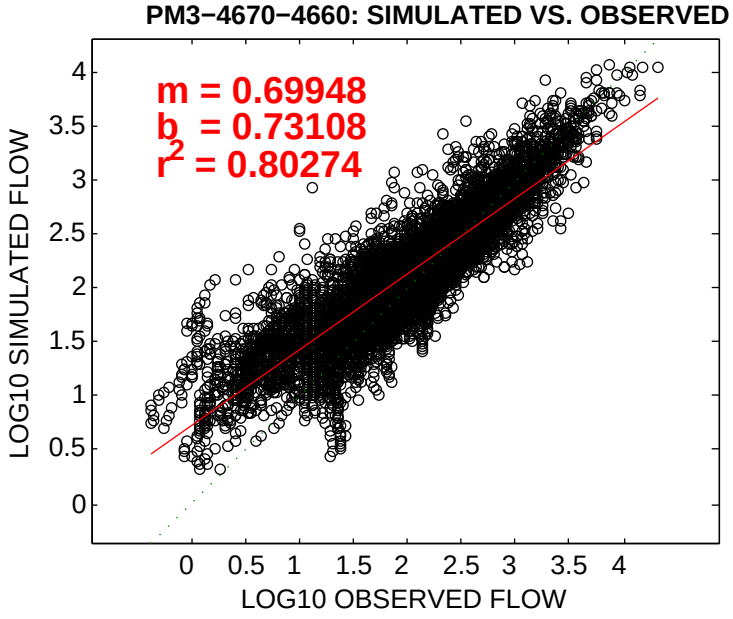


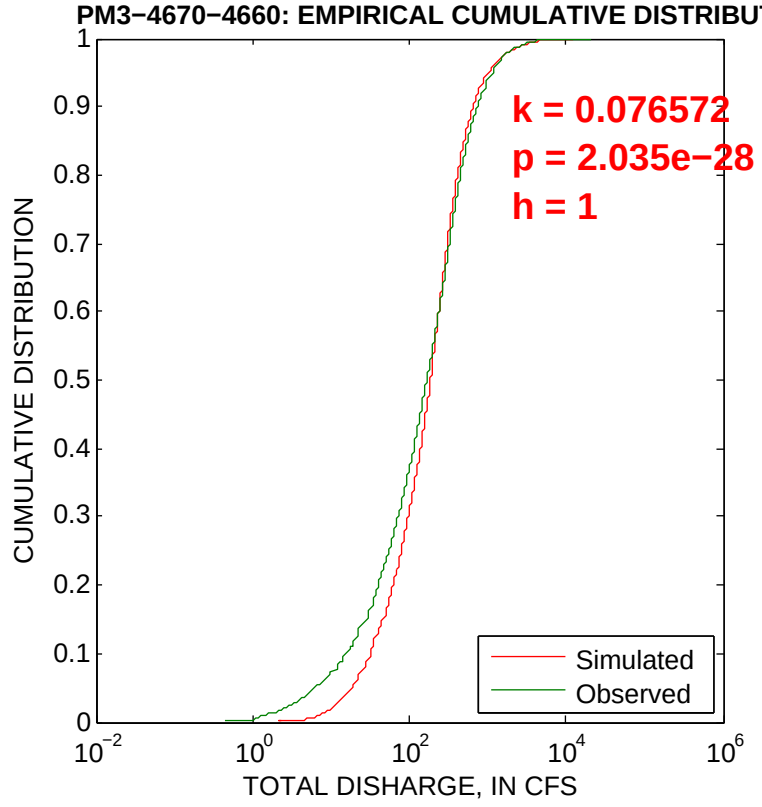












DATA SELECTION

scenario: P620171001WQ | file: FLOW.calib

plot: FLOW - total discharge

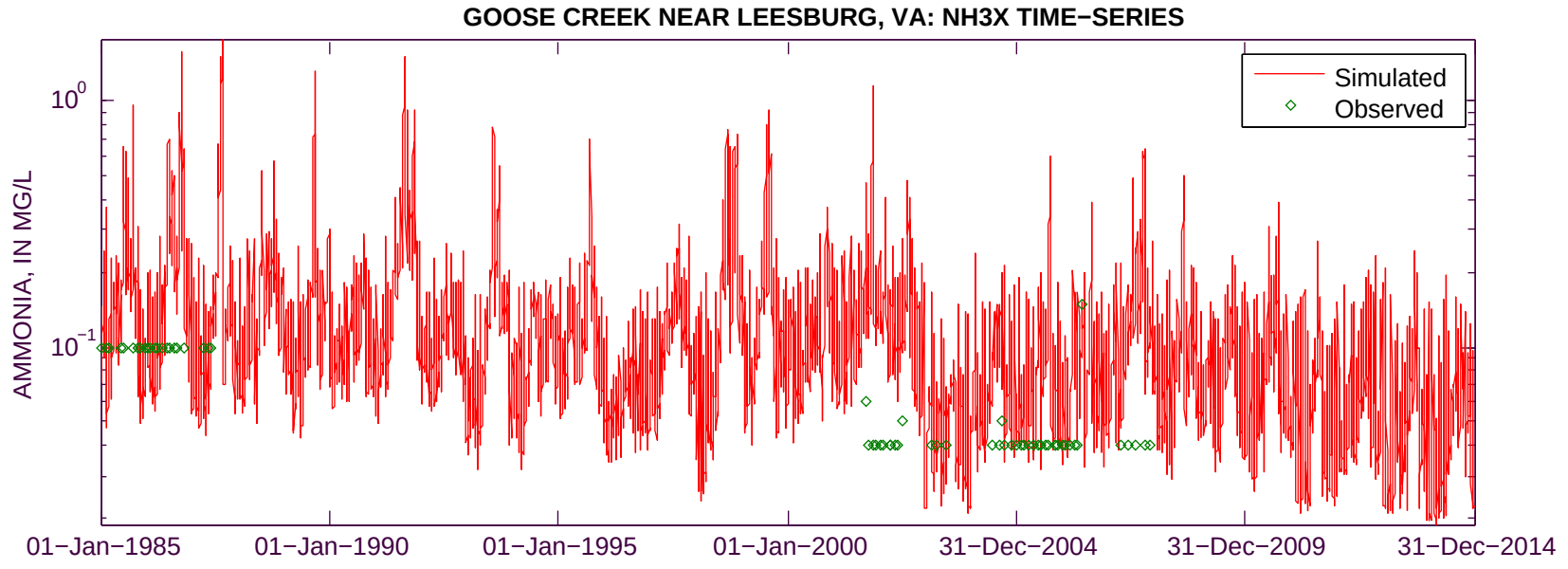
Dates: 1/1/1985 – 12/31/201

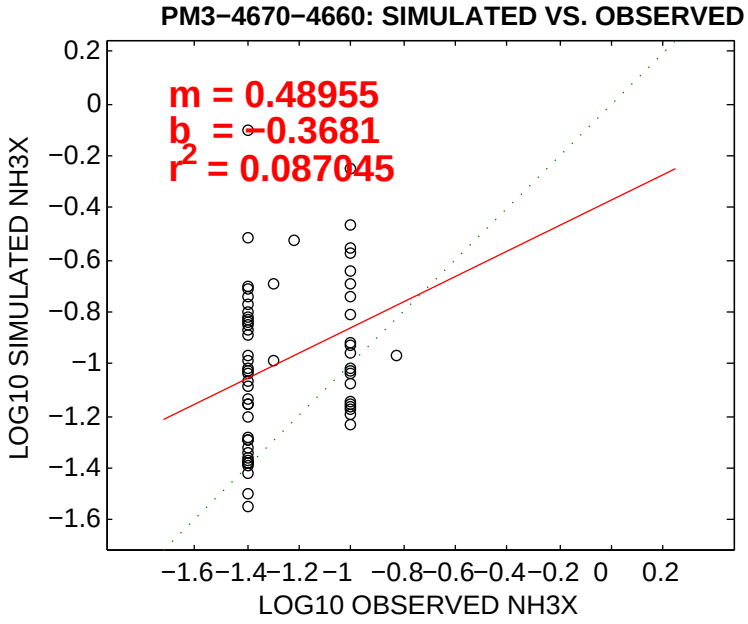
Drive | Directory: N/A | model | Observed: OBS20161101

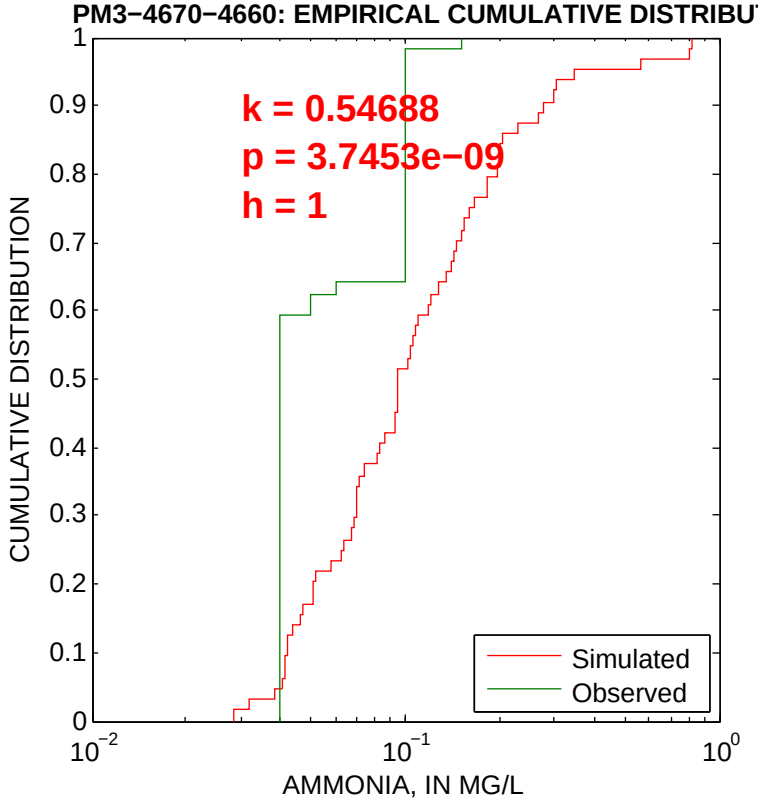
STATISTICS

		observe	simulate
n		10957	10957
min		0.42	2.085
		-0.376751	0.319106
mean		337.898	331.344
		2.12319	2.2162
media		169	187.29
		2.22789	2.27251
max		20800	11889
		4.31806	4.07515
varian		443704	371146
		0.453201	0.276226
JB		0.001	0.001
		0.001	0.001
		ra	log
%		-1.93957	4.38083
err.va		108432	0.104071
rel.std.err		0.244379	0.229636
mod.eff		0.755621	0.770364

VERSION 2.1







DATA SELECTION

scenario	file
P620171001WQ	NH3X.calib

plot: NH3X - ammonia

Dates: 1/1/1985 – 12/31/201

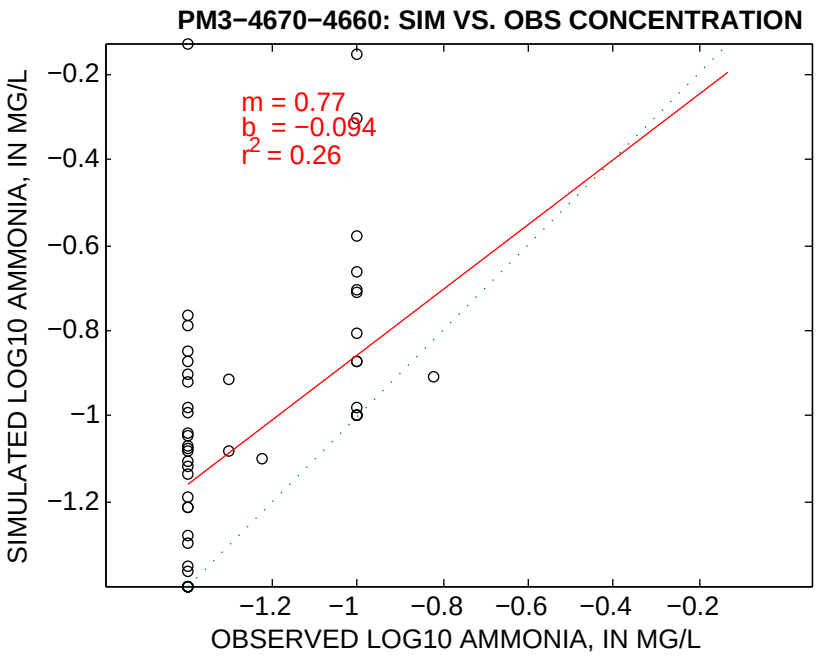
Drive	Directory	Observed
N/A	model	OBS20161101

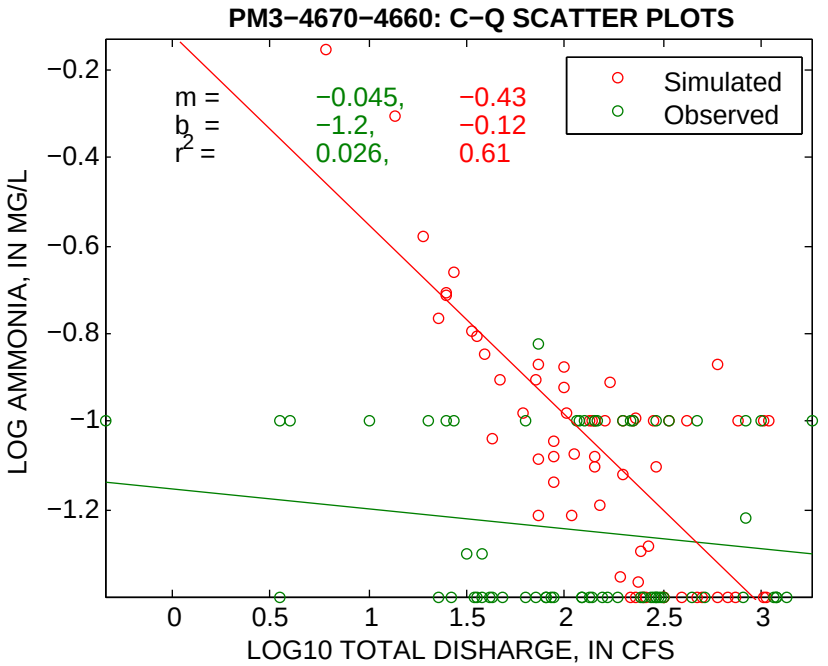
STATISTICS

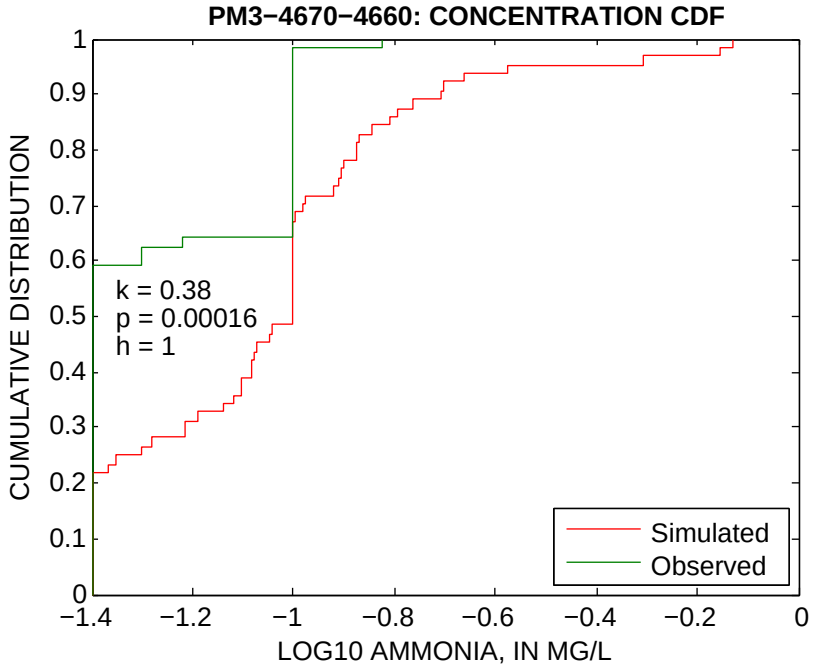
	n	64	64
		observe	simulate
min		0.04	0.028442
		-1.39794	-1.54604
mean		0.0629688	0.144393
		-1.2464	-0.978267
media		0.04	0.095138
		-1.39794	-1.02165
max		0.15	0.8242
		-0.823909	-0.0839674
varian		0.00092279	0.0230407
		0.0379905	0.104596
JB		0.022327	0.001
		0.016291	0.057084
		ra	log
%		129.309	-21.5125
err.va		0.0288652	0.178427
rel.std.err		31.2802	4.69661
mod.eff		-30.2802	-3.69661

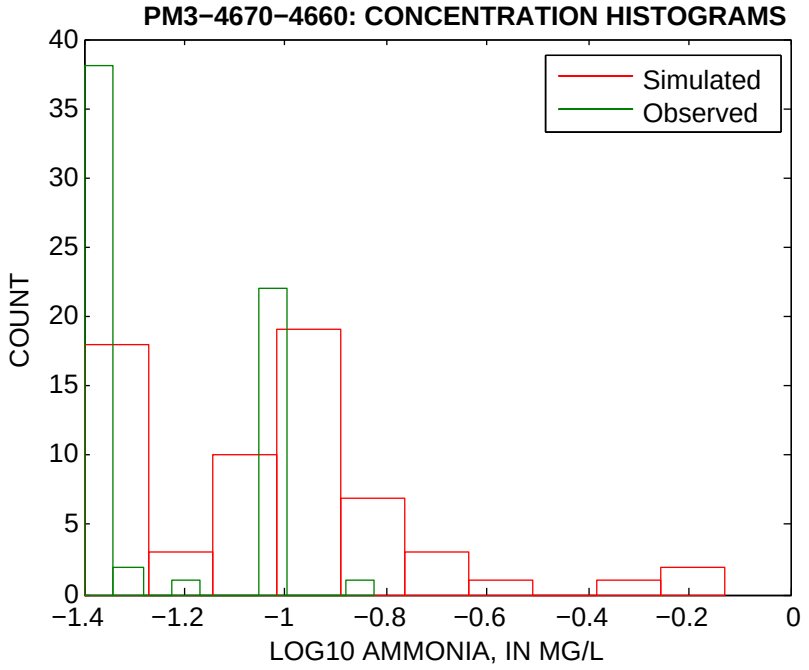
VERSION

ALL DATA
LOG10

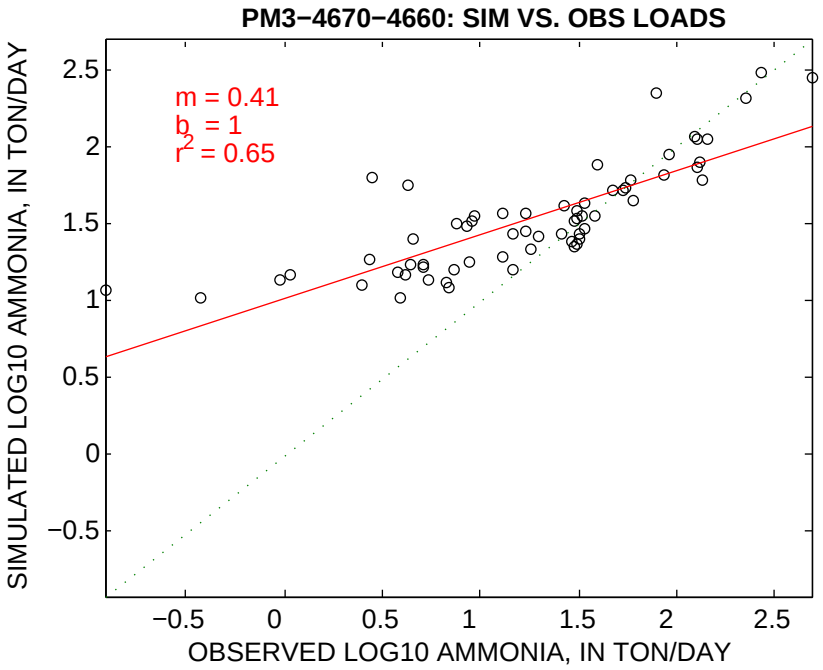


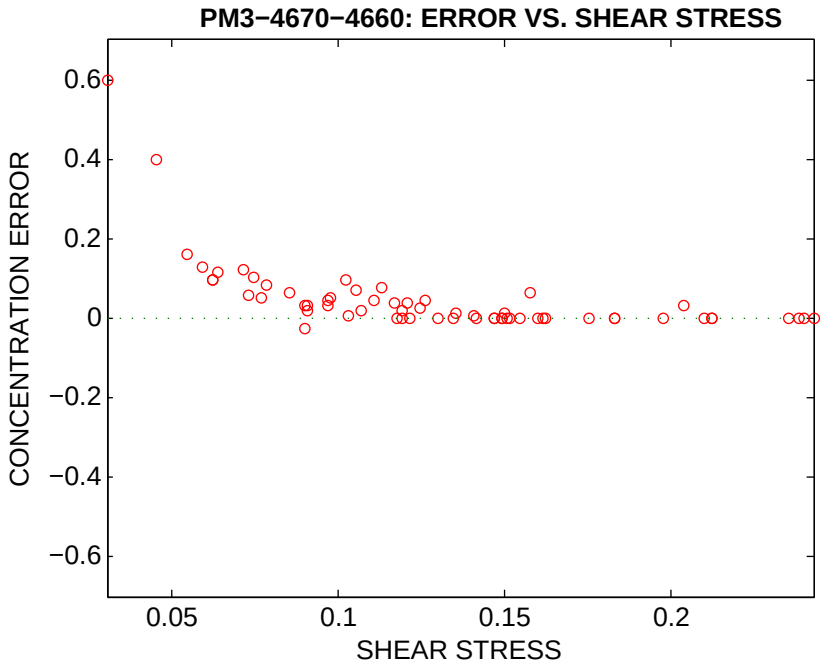


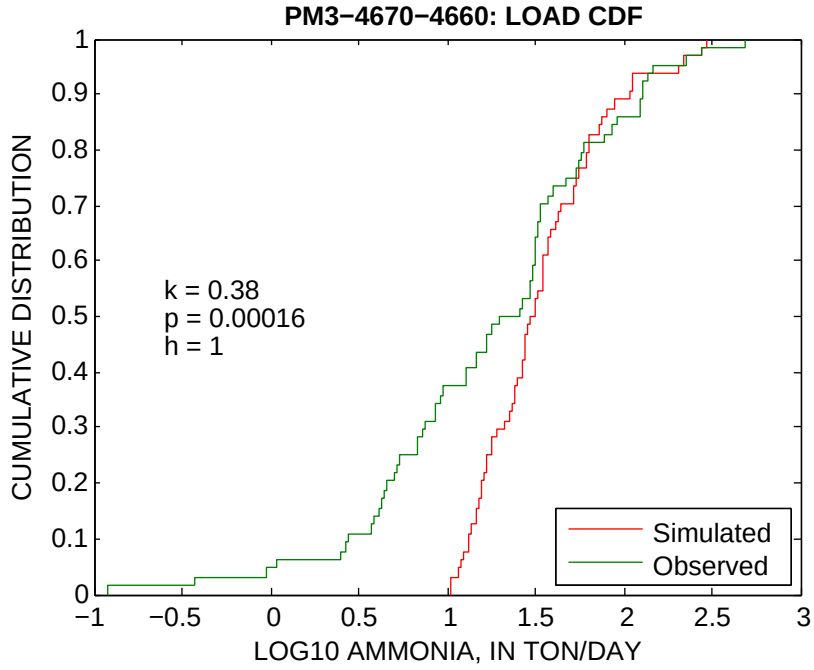


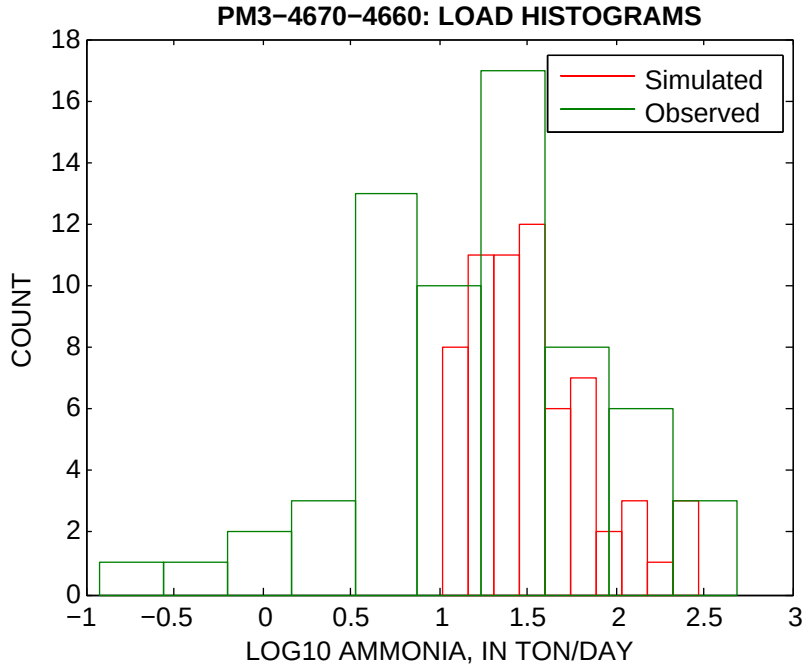


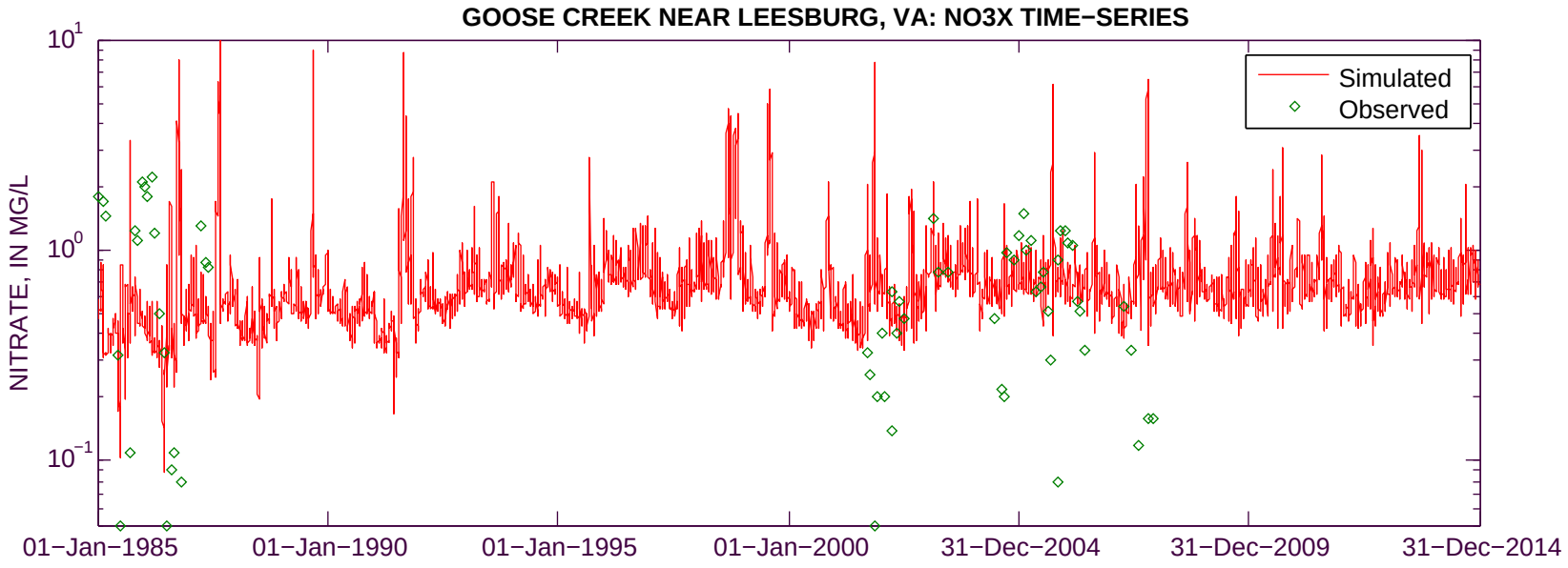
LOAD DATA
LOG10

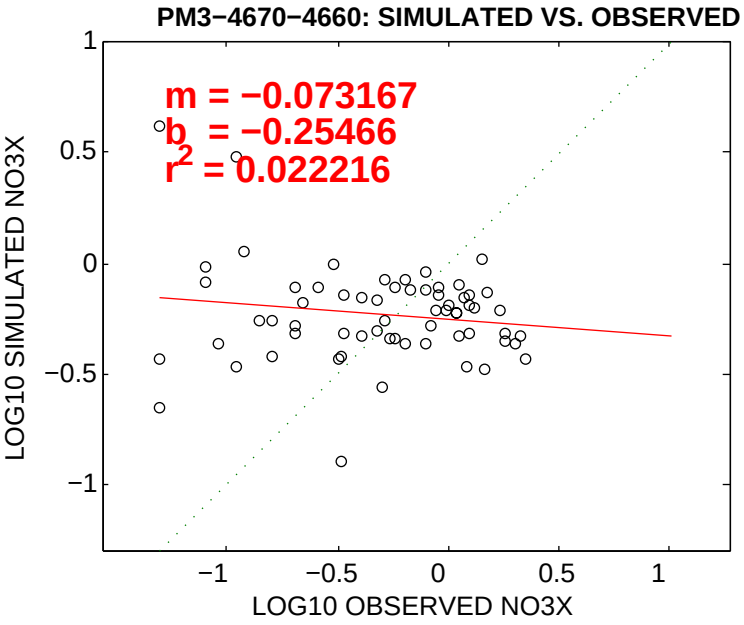


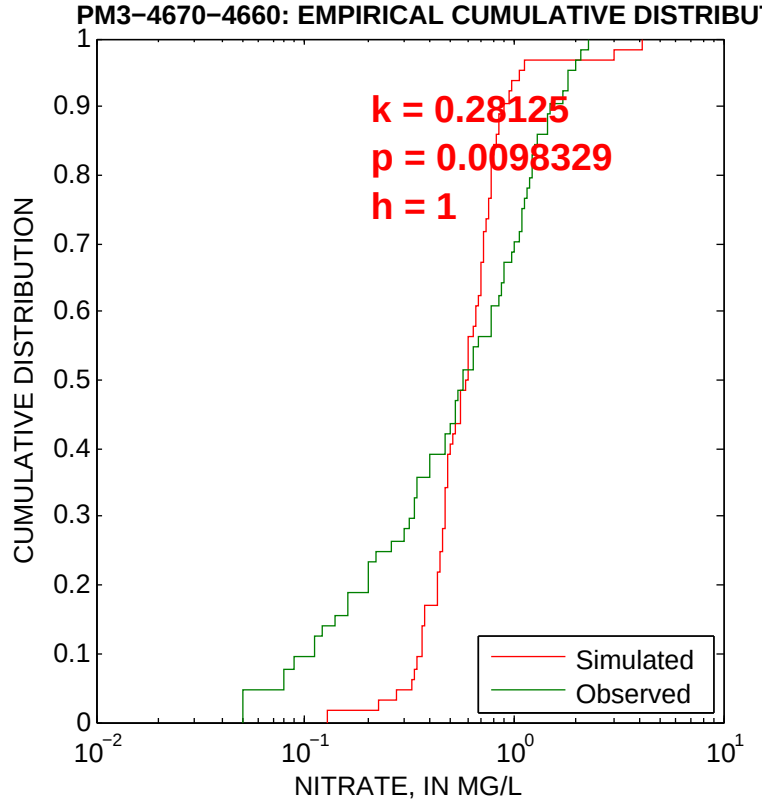












DATA SELECTION

scenario	file
P620171001WQ	NO3X.calib

plot: NO3X - nitrate

Dates: 1/1/1985 – 12/31/201

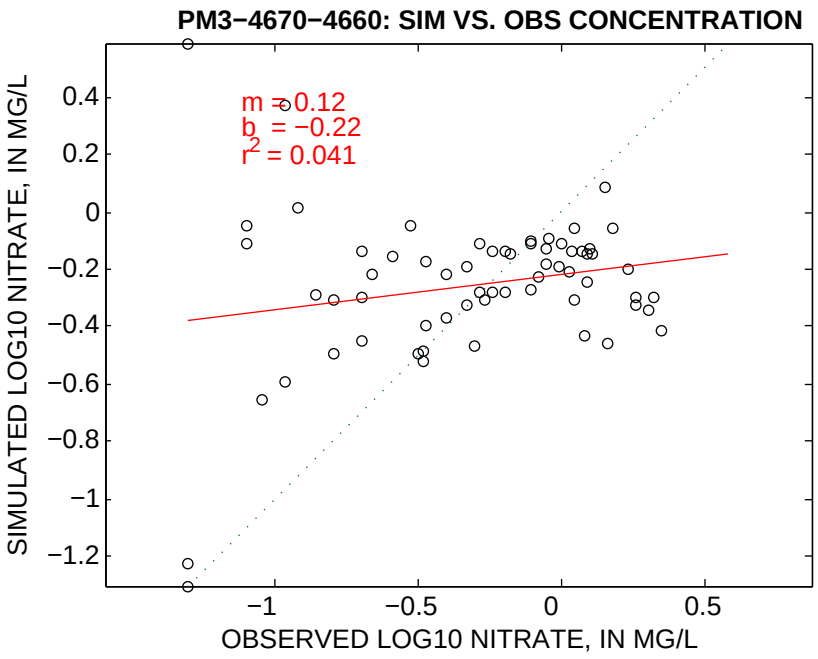
Drive	Directory	Observed
N/A	model	OBS20161101

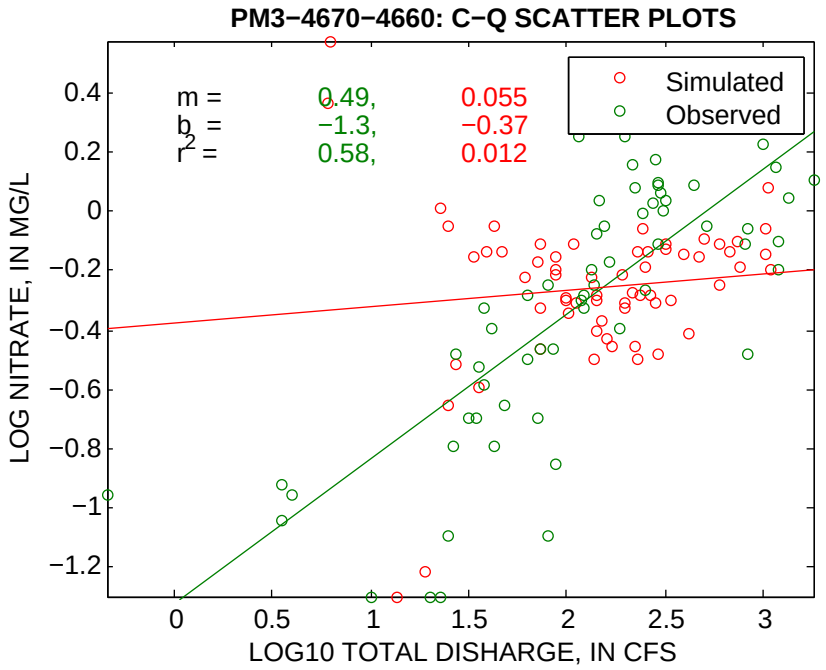
STATISTICS

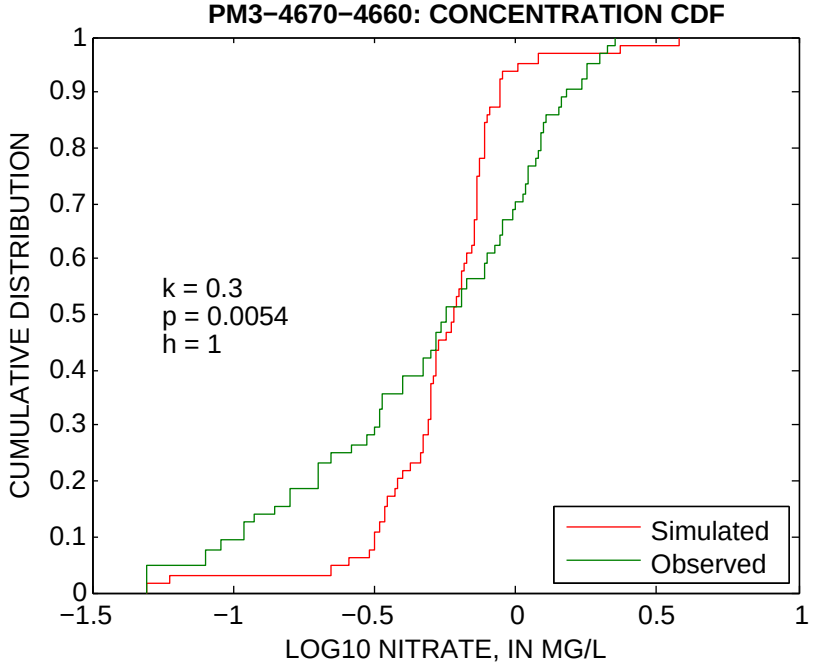
	n	64	64
		observe	simulate
min		0.05	0.12786
		-1.30103	-0.893265
mean		0.730781	0.684889
		-0.312115	-0.231825
media		0.57	0.59683
		-0.244125	-0.22415
max		2.25	4.1416
		0.352183	0.617168
varian		0.326715	0.325109
		0.197653	0.0476283
JB		0.030635	0.001
		0.056715	0.001
		ra	log
%		-6.27988	-25.7243
err.va		0.791218	0.280753
rel.std.err		2.42174	1.42044
mod.eff		-1.42174	-0.420436

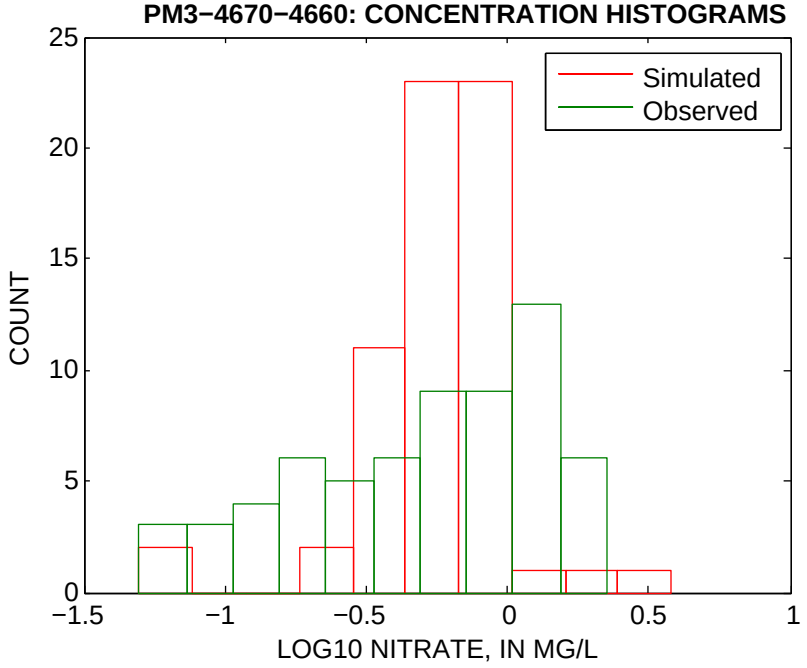
VERSION 2.1

ALL DATA
LOG10

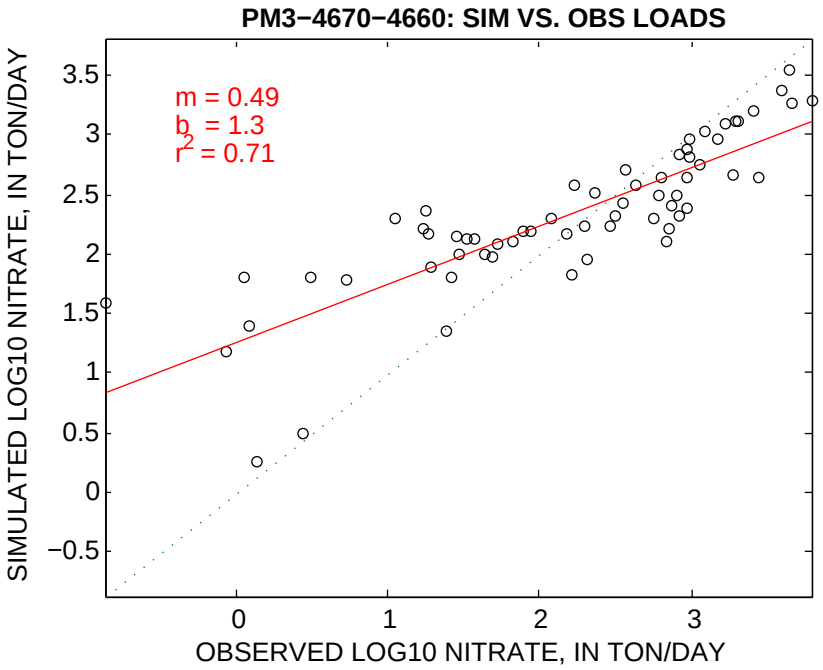


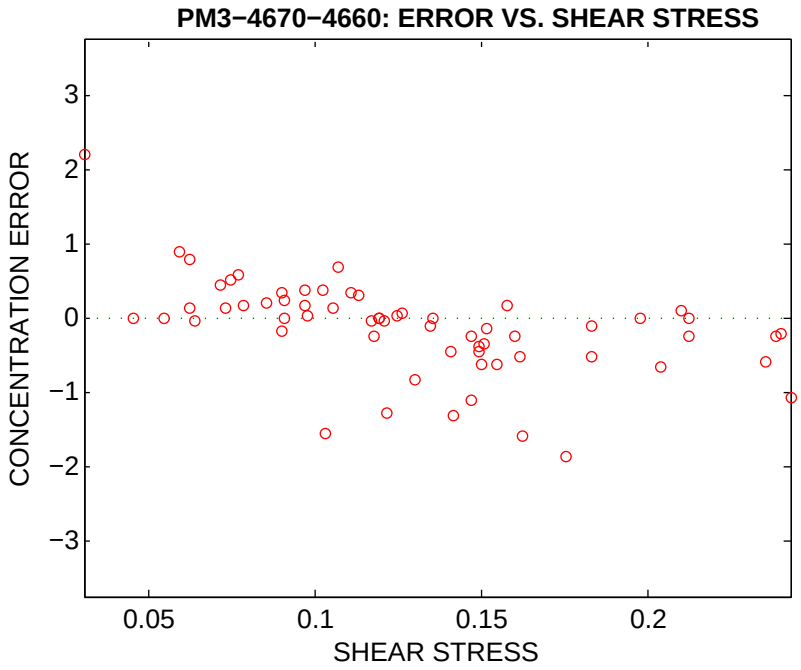


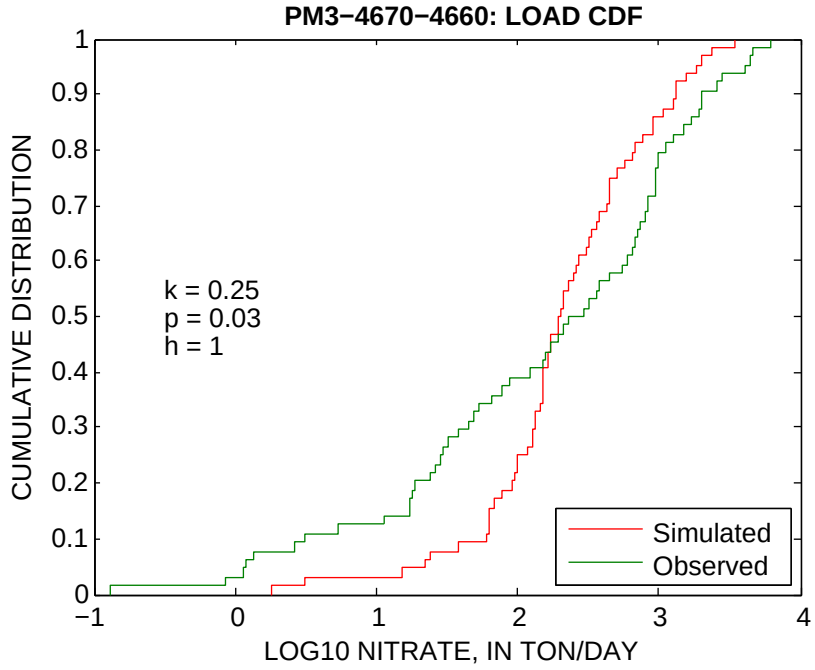


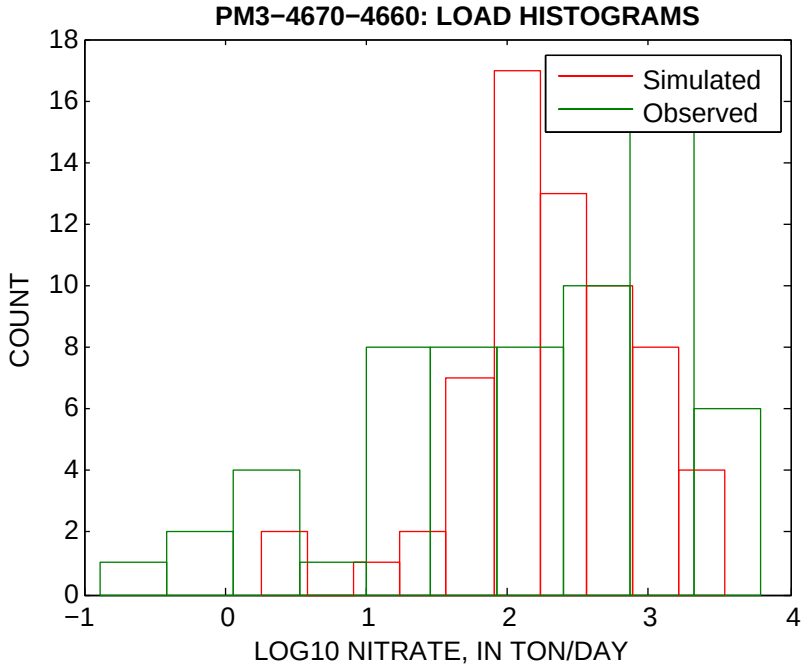


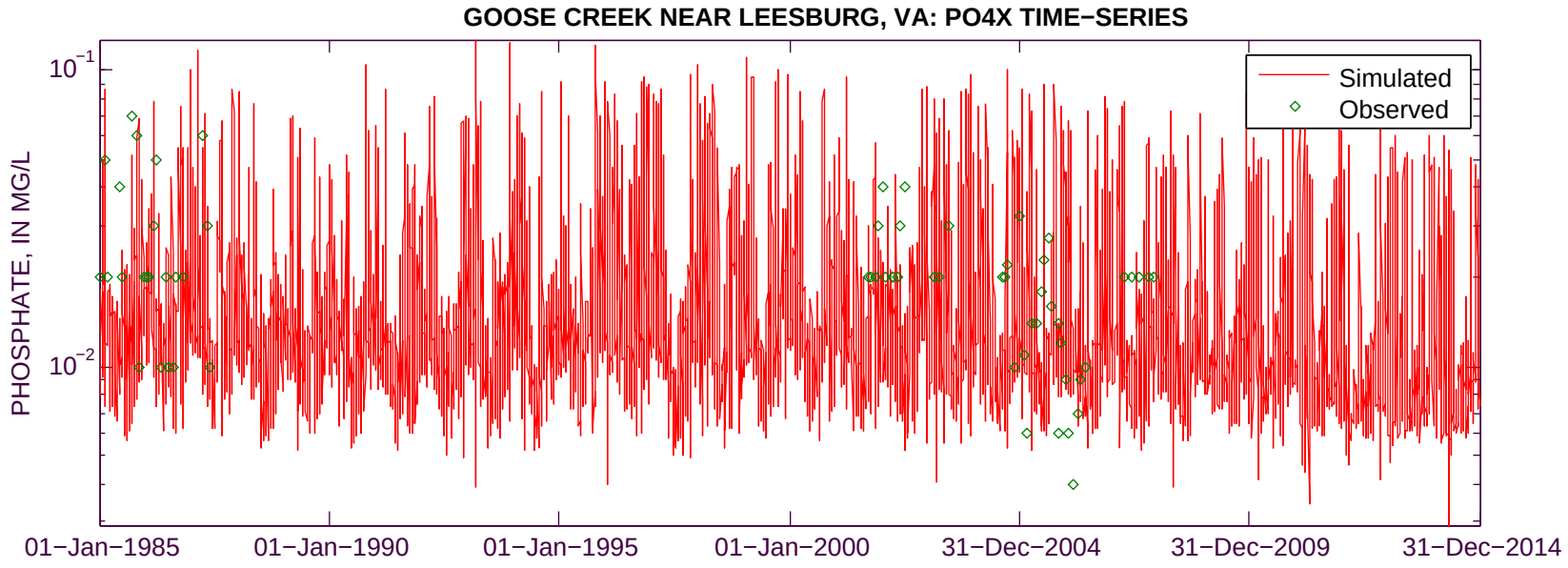
LOAD DATA
LOG10

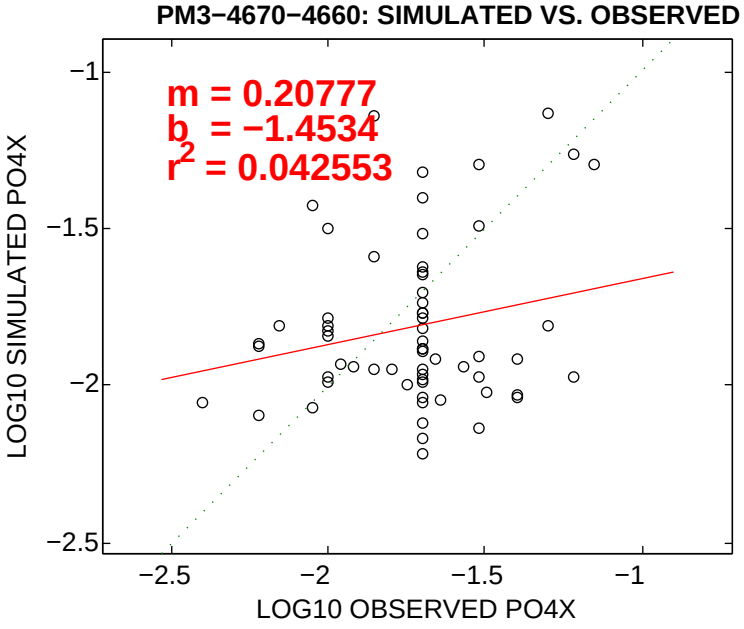


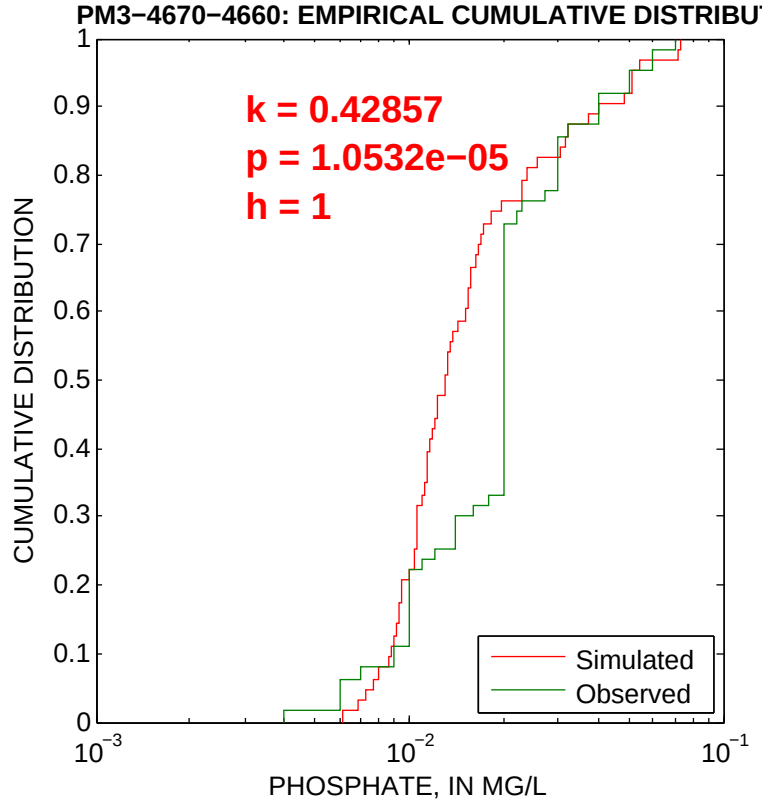












DATA SELECTION

scenario	file
P620171001WQ	PO4X.calib

plot: PO4X - phosphate

Dates: 1/1/1985 – 12/31/201

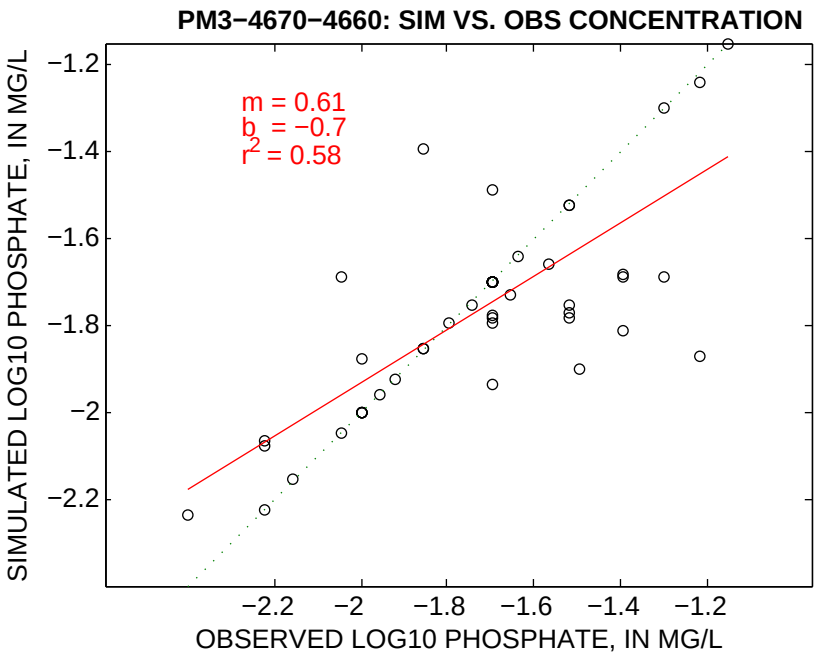
Drive	Directory	Observed
N/A	model	OBS20161101

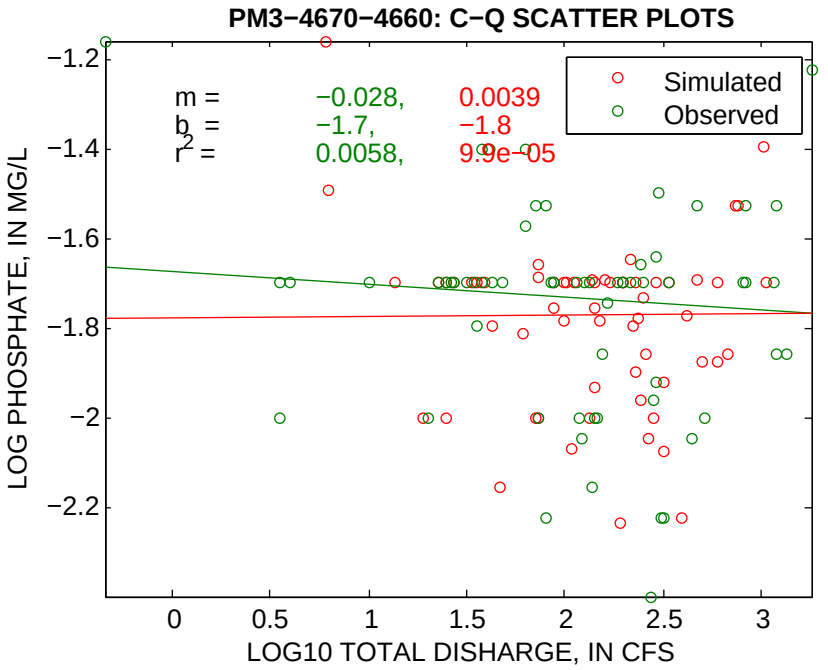
STATISTICS

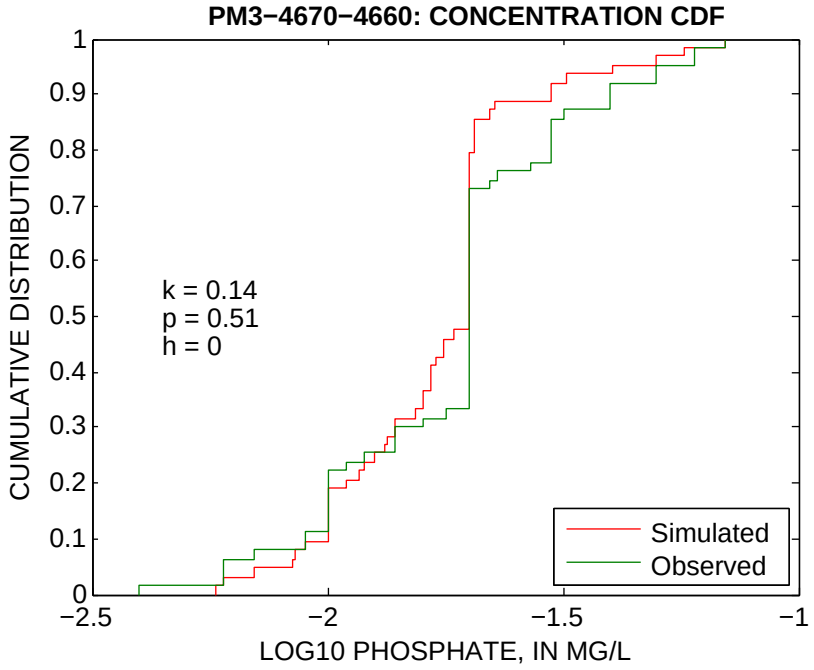
	n	63	63
		observe	simulate
min		0.004	0.0061125
		-2.39794	-2.21378
mean		0.0219048	0.0189279
		-1.73229	-1.81332
media		0.02	0.013025
		-1.69897	-1.88522
max		0.07	0.074001
		-1.1549	-1.13076
varian		0.00018395	0.00022912
		0.0658165	0.0667662
JB		0.001	0.001
		0.5	0.011884
		ra	log
%		-13.59	4.6777
err.va		0.00028798	0.111906
rel.std.err		1.56551	1.70027
mod.eff		-0.56551	-0.700267

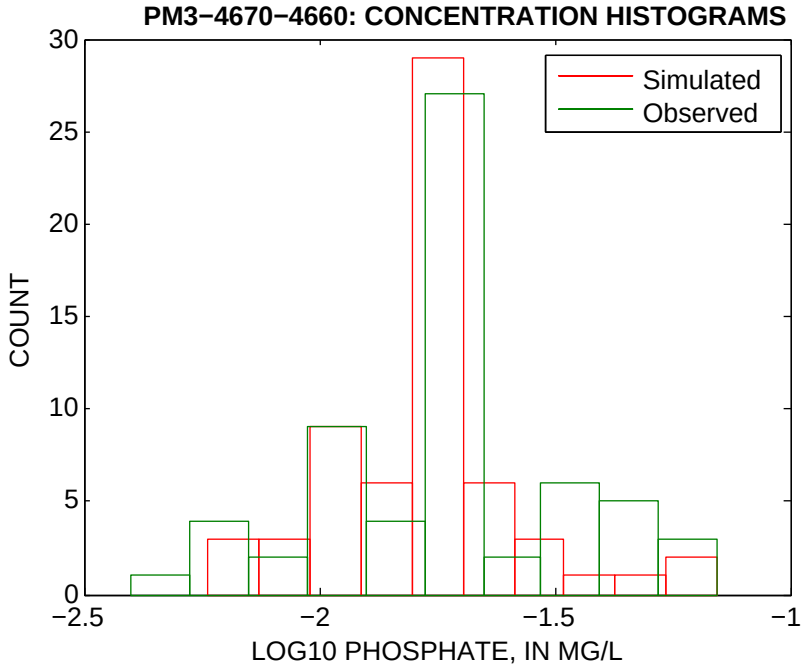
VERSION

ALL DATA
LOG10

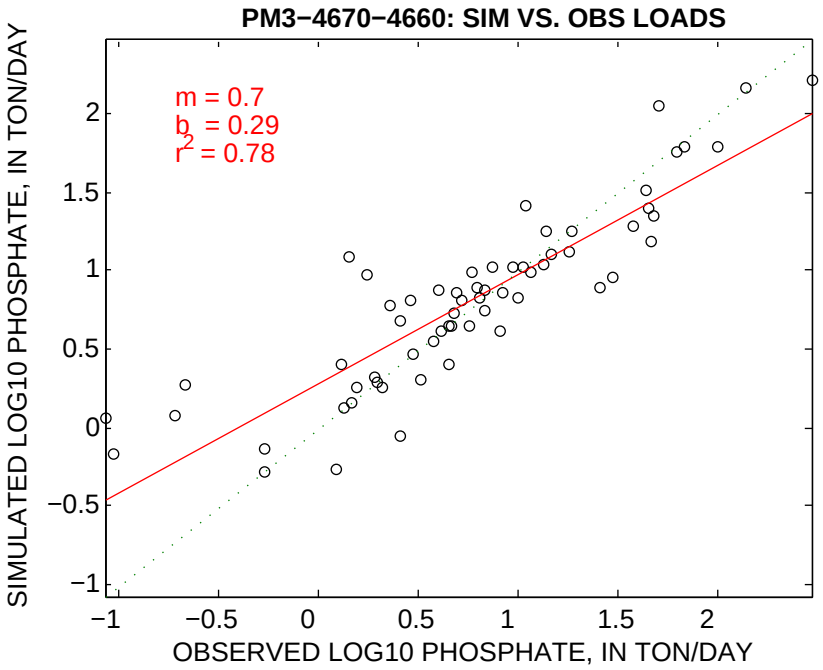


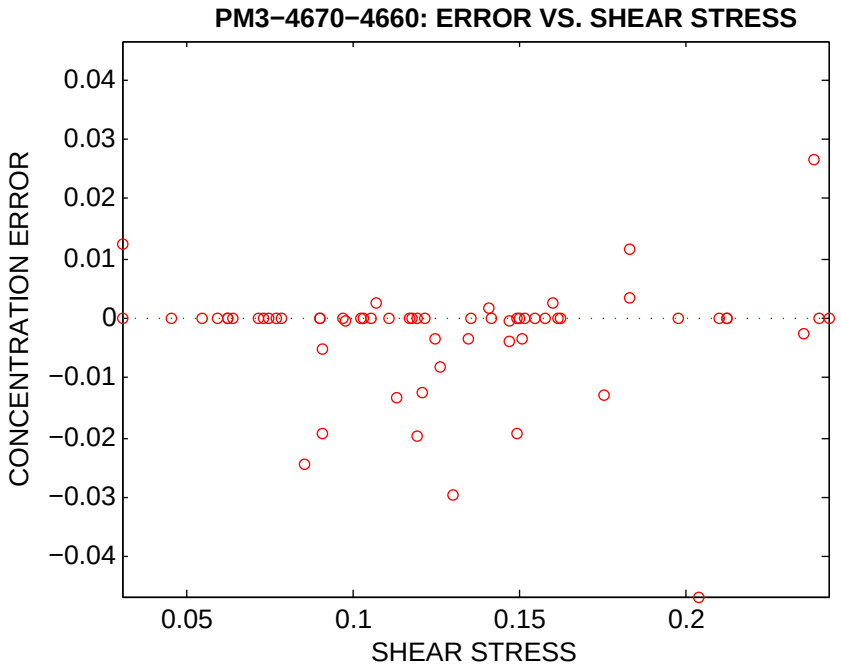


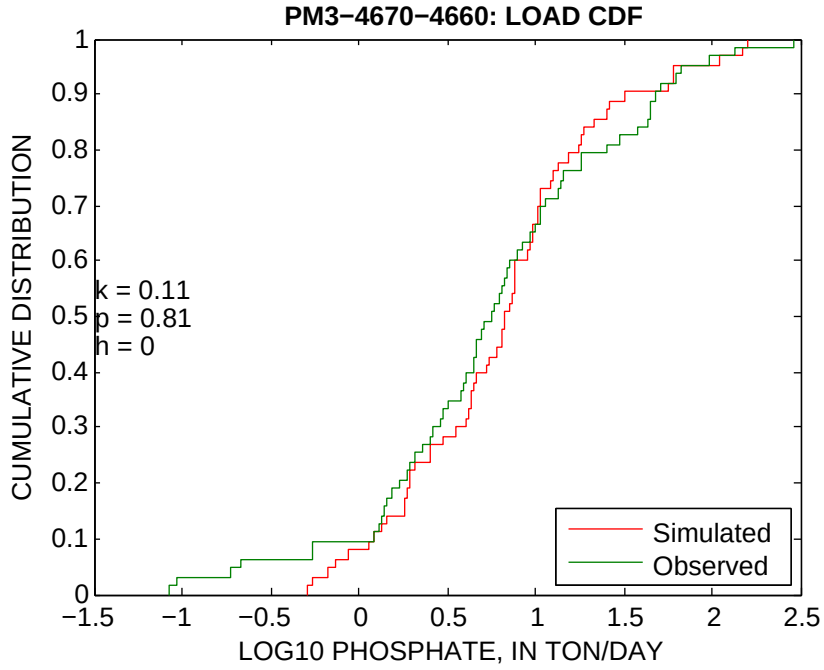


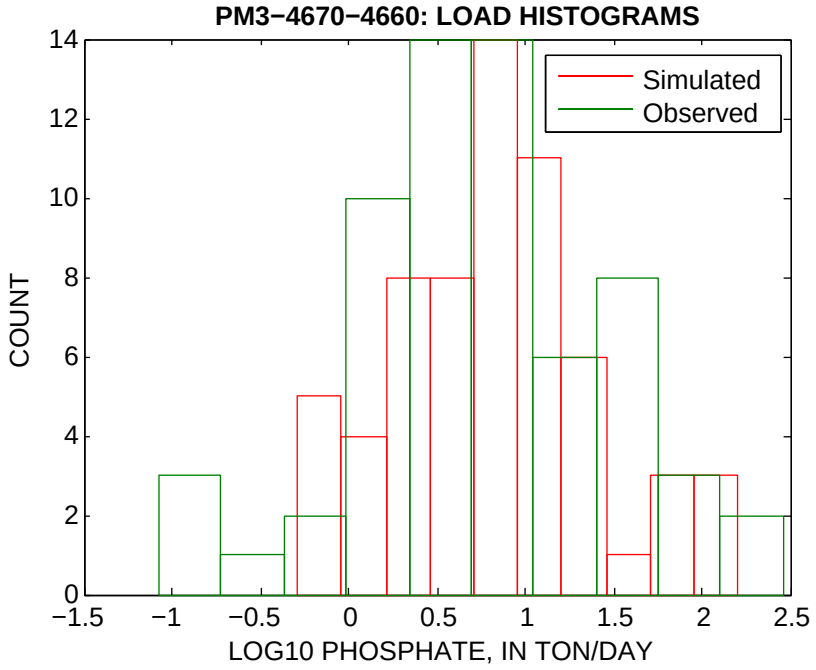


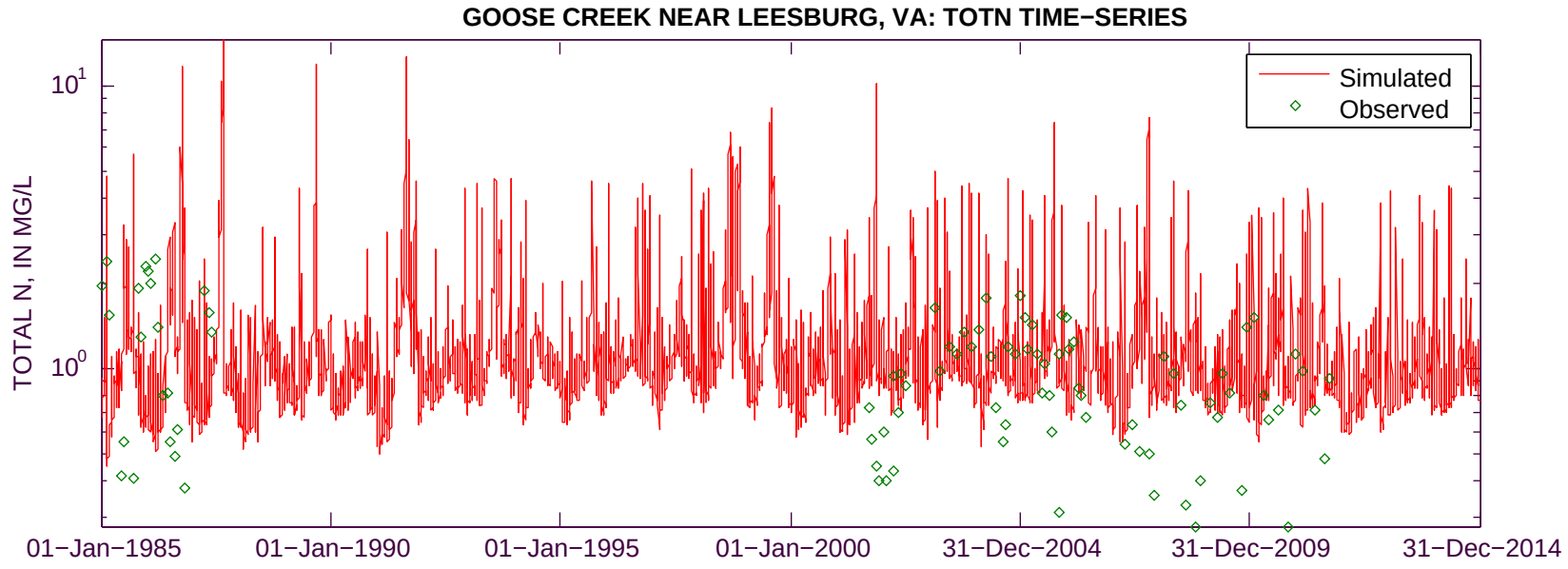
LOAD DATA
LOG10

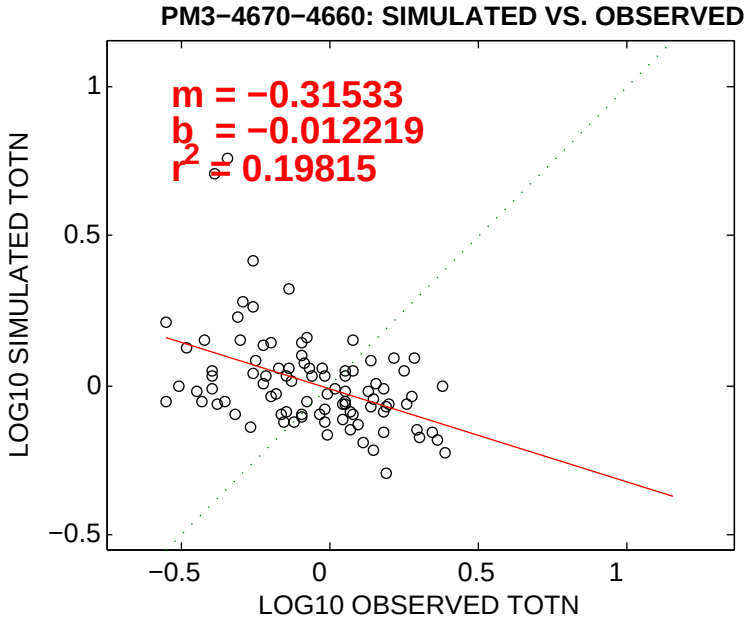


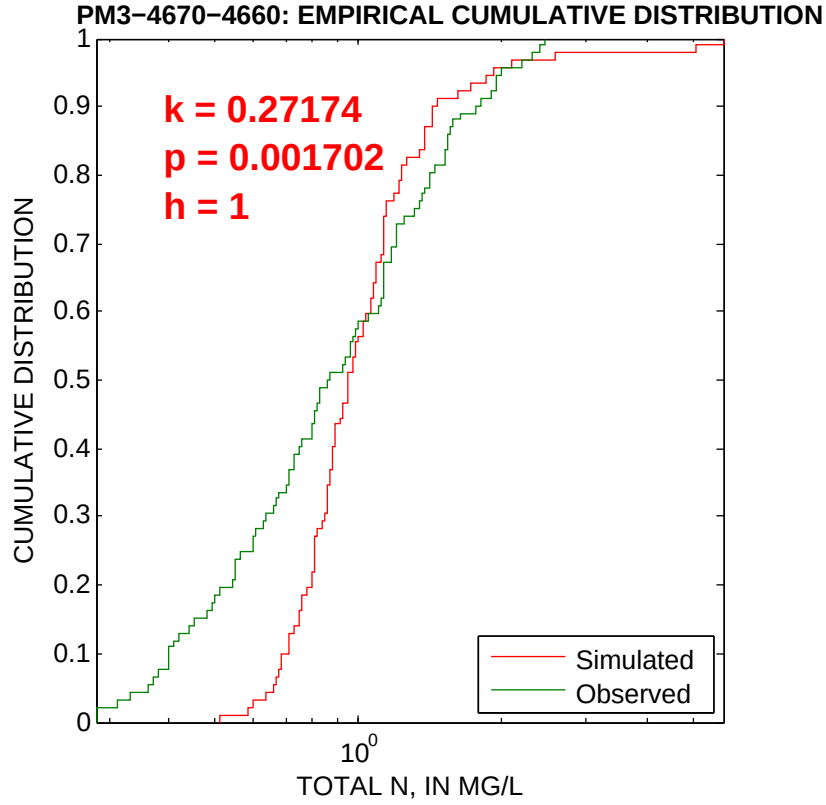












DATA SELECTION

scenario	file
P620171001WQ	TOTN.calib

plot: TOTN - total nitrogen

Dates: 1/1/1985 – 12/31/201

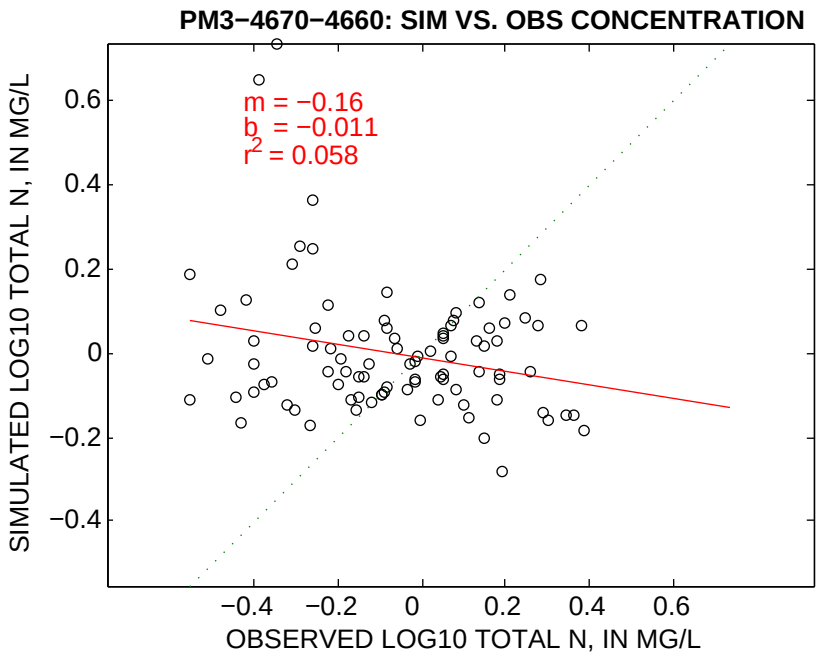
Drive	Directory	Observed
N/A	model	OBS20161101

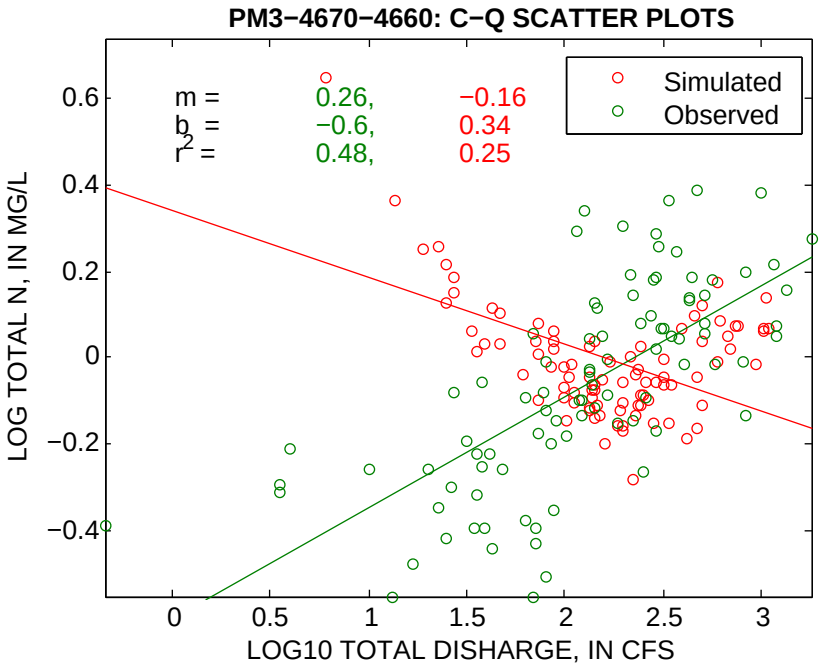
STATISTICS

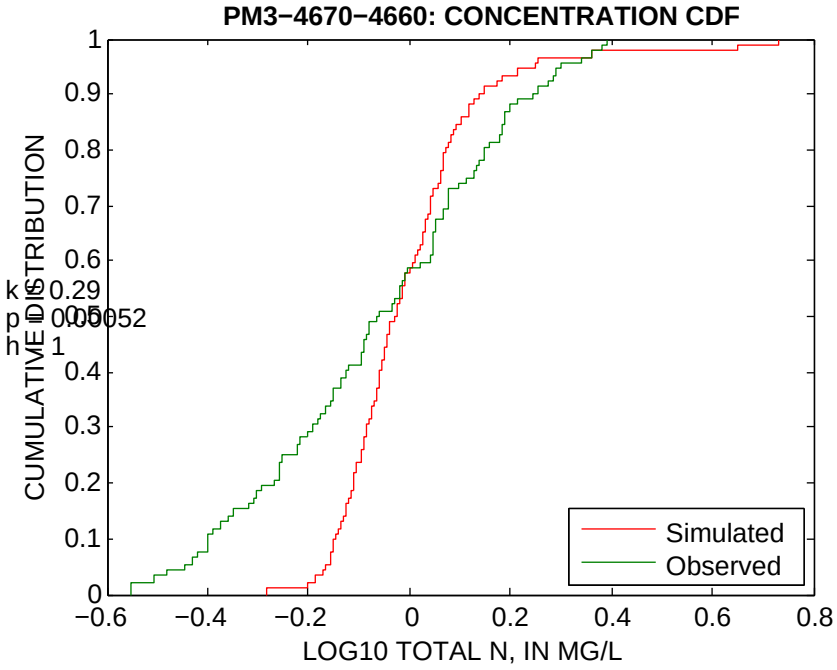
	n	92	92
		observe	simulate
min		0.28	0.50817
		-0.552842	-0.293991
mean		0.994565	1.12124
		-0.0624012	0.00745806
media		0.865	0.949985
		-0.0629911	-0.0222839
max		2.45	5.7933
		0.389166	0.762926
varian		0.273397	0.537179
		0.0548265	0.0275125
JB		0.012840	0.001
		0.191821	0.001
		ra	log
% err.va		12.7364	-111.952
		1.07276	0.12185
rel.std.err		3.92382	2.22246
mod.eff		-2.92382	-1.22246

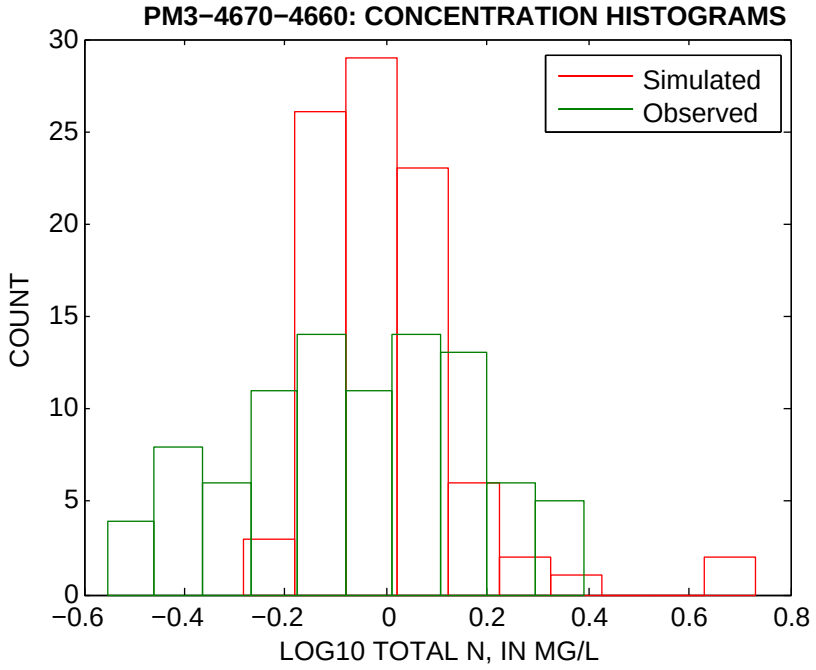
VERSION 2.1

ALL DATA
LOG10

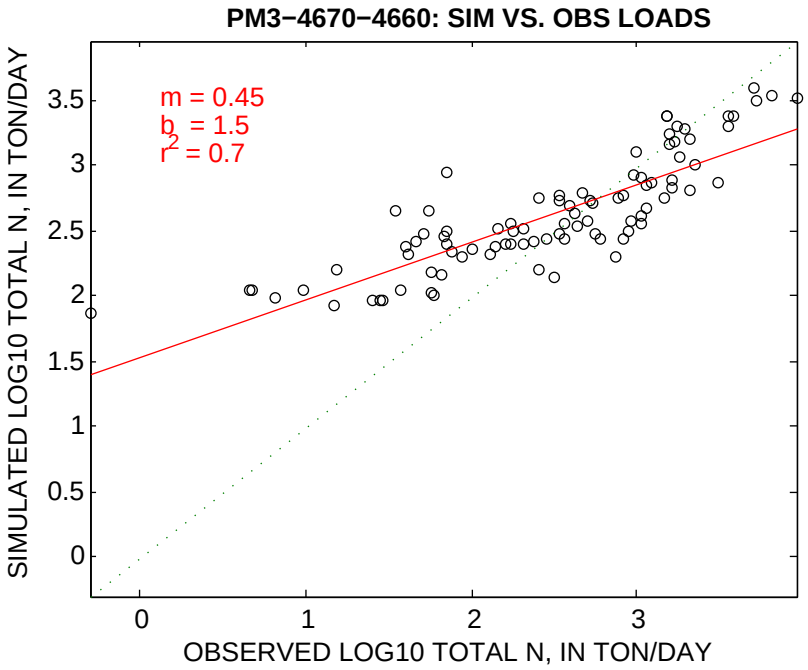


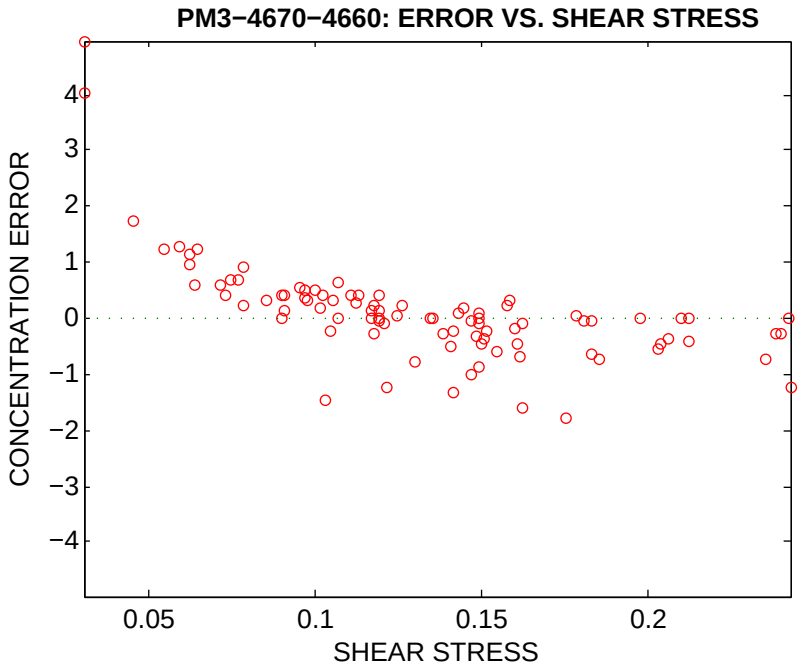


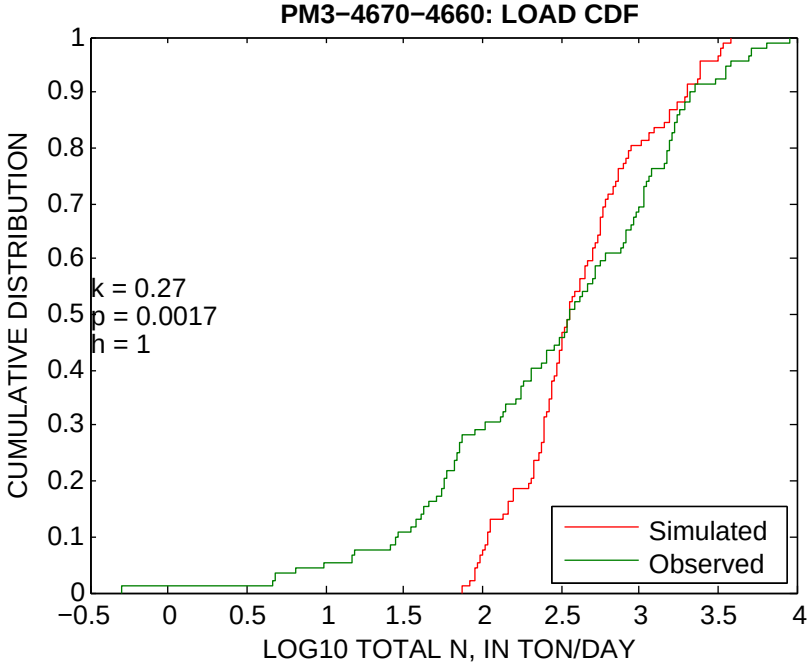


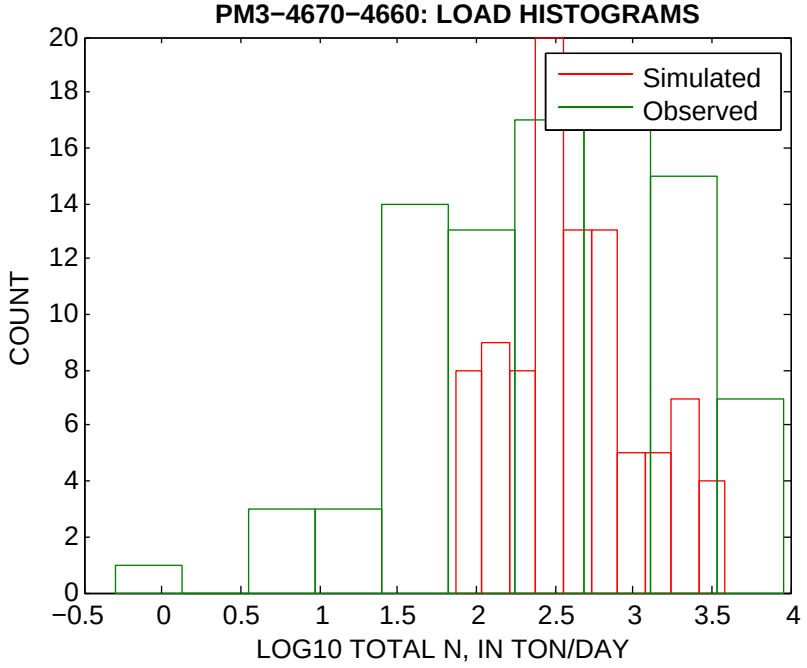


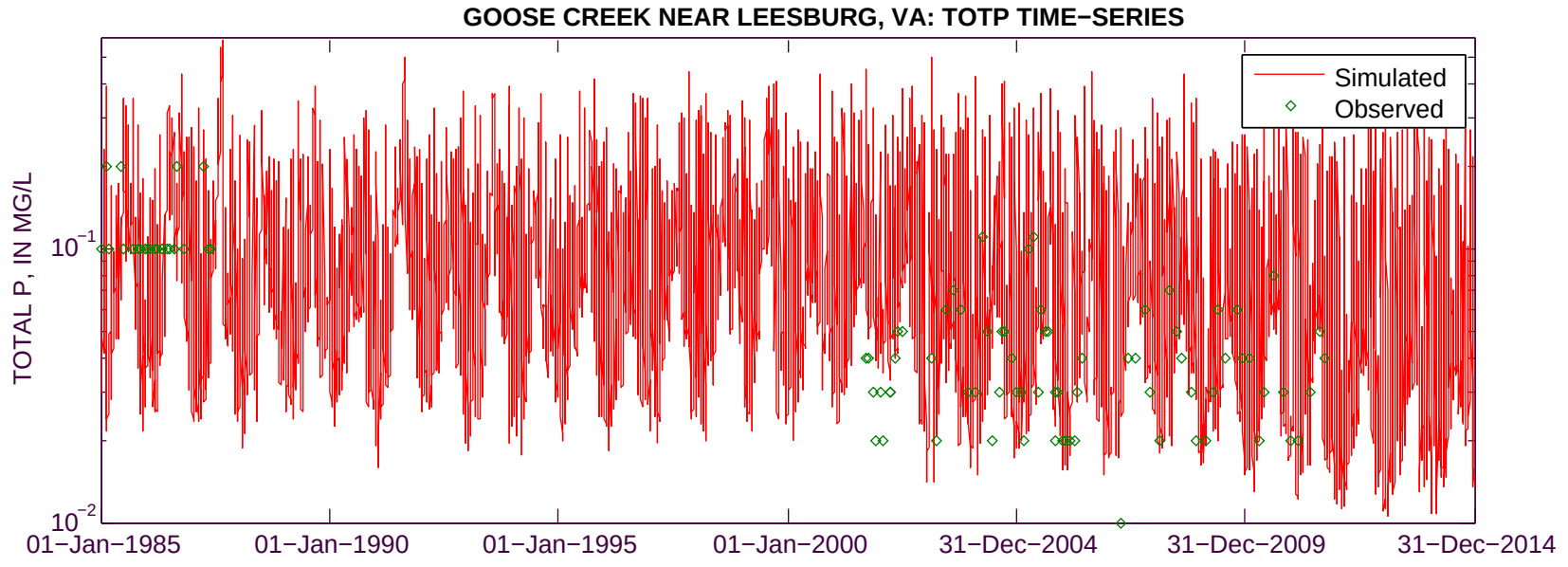
LOAD DATA
LOG10

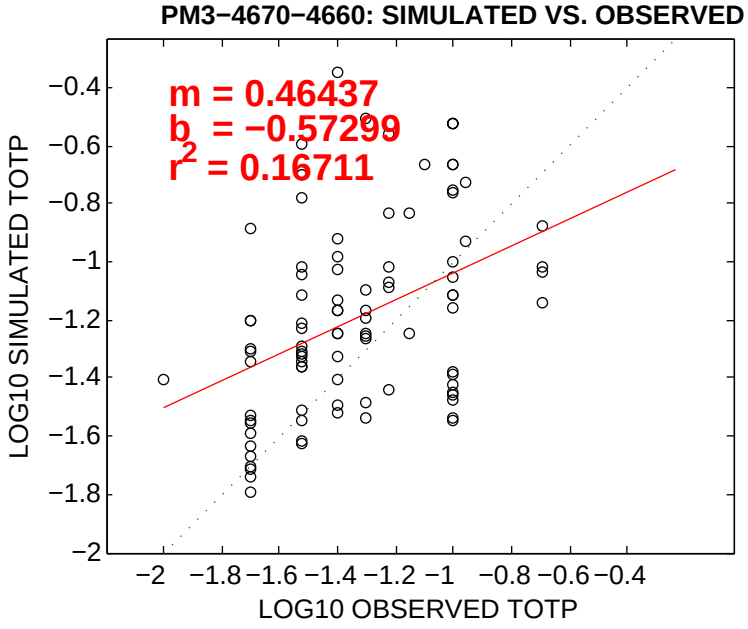


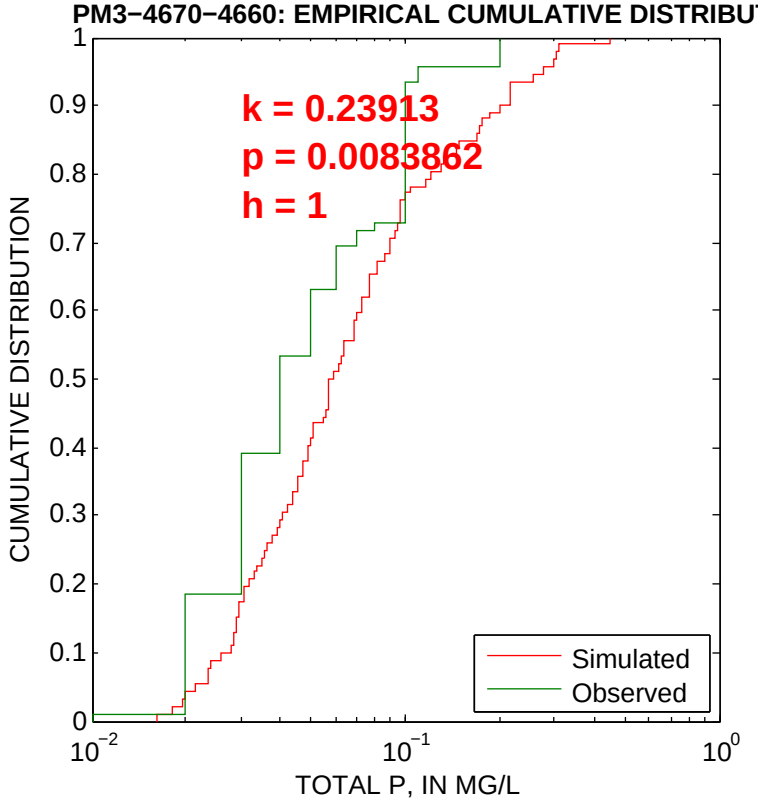












DATA SELECTION

scenario	file
P620171001WQ	TOTP.calib

plot: TOTP - total phosphorus

Dates: 1/1/1985 – 12/31/201

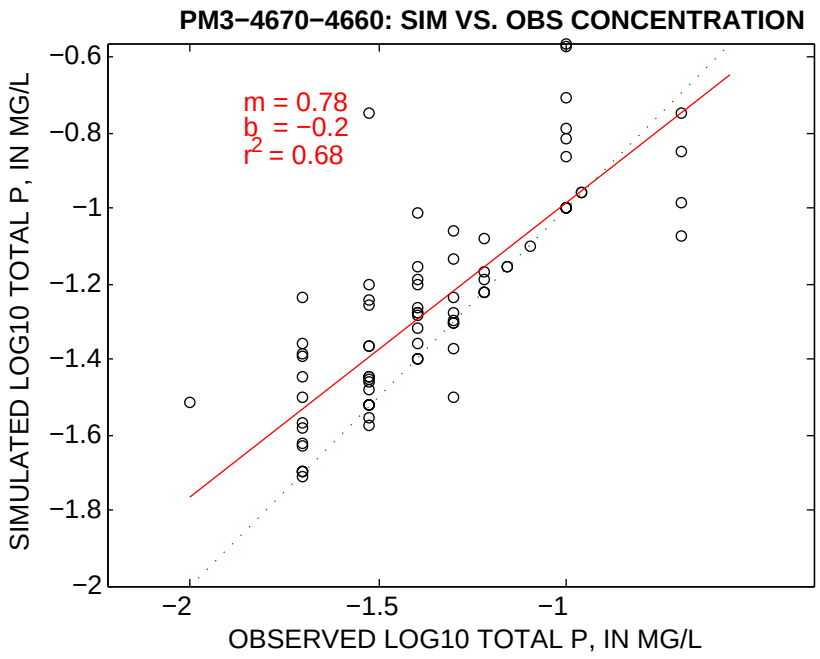
Drive	Directory	Observed
N/A	model	OBS20161101

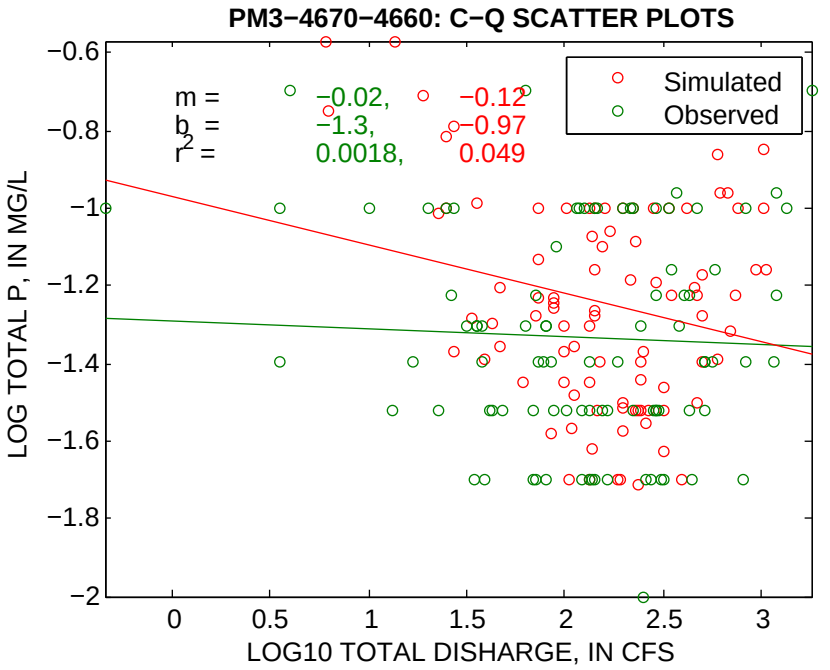
STATISTICS

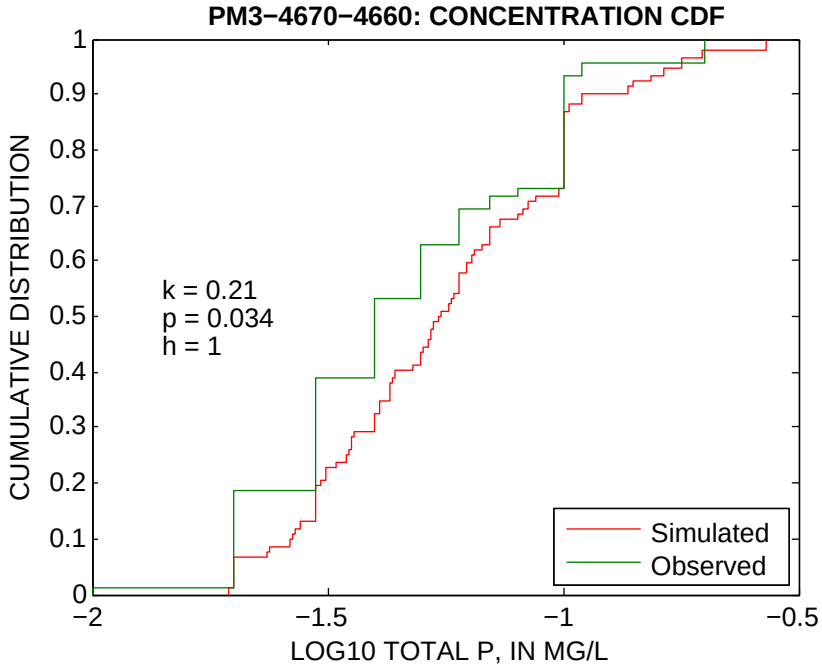
	n	92	92
		observe	simulate
min		0.01	0.016246
		-2	-1.78925
mean		0.0583696	0.087223
		-1.331	-1.19107
media		0.04	0.0578505
		-1.39794	-1.23778
max		0.2	0.45286
		-0.69897	-0.344036
varian		0.00181819	0.0062907
		0.0826926	0.106709
JB		0.001	0.001
		0.145442	0.084587
		ra	log
%		49.4324	-10.513
err.va		0.00741431	0.132396
rel.std.err		4.07785	1.60106
mod.eff		-3.07785	-0.601063

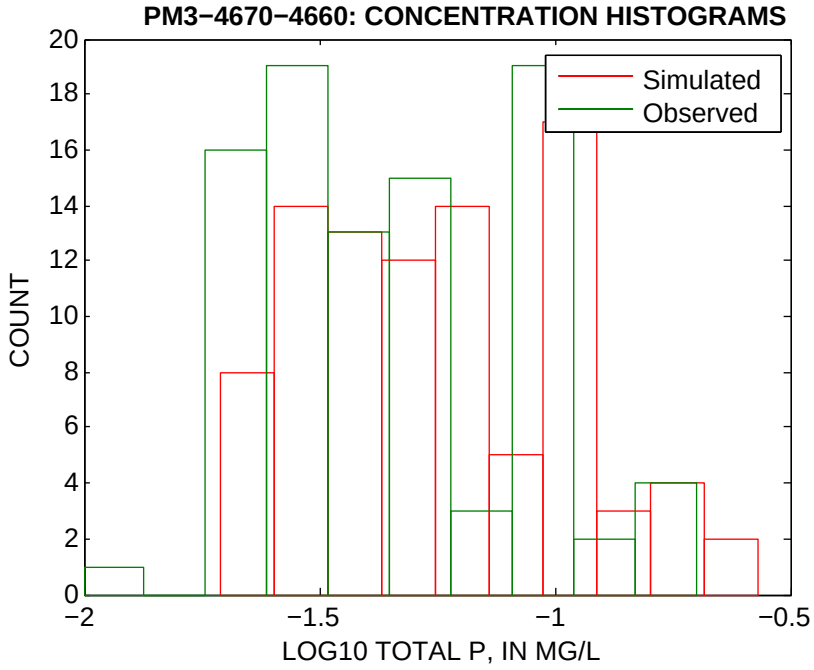
VERSION 2.1

ALL DATA
LOG10

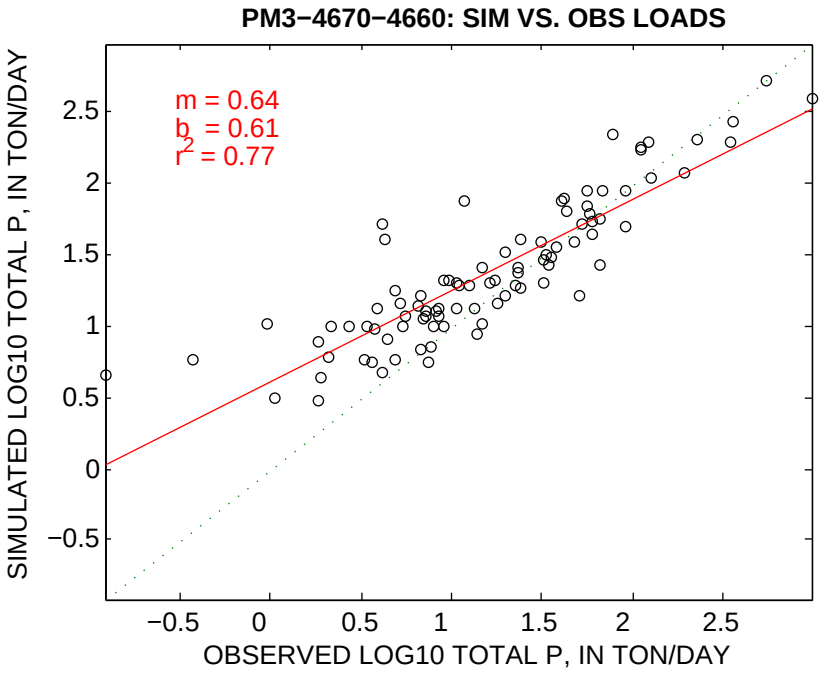


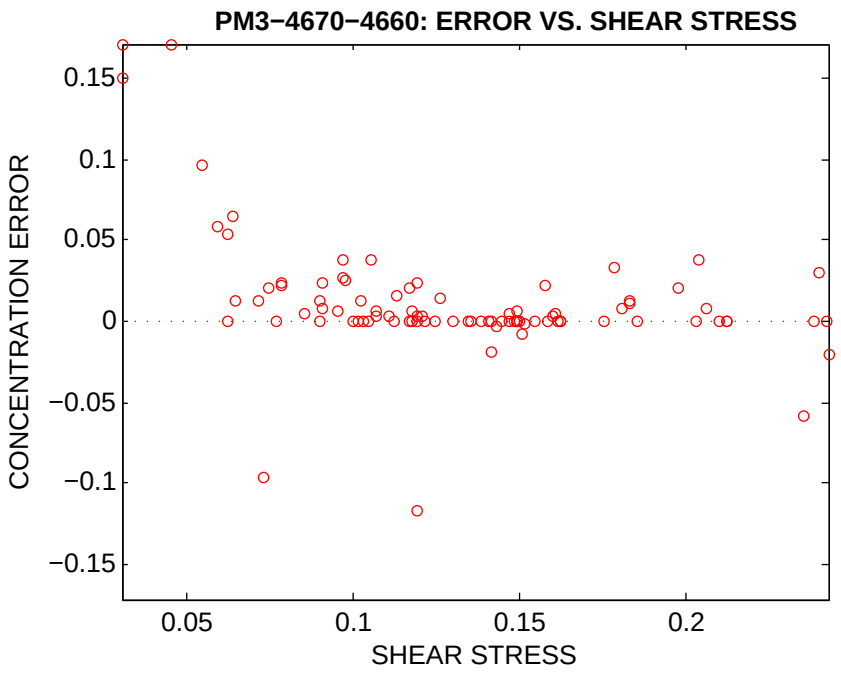


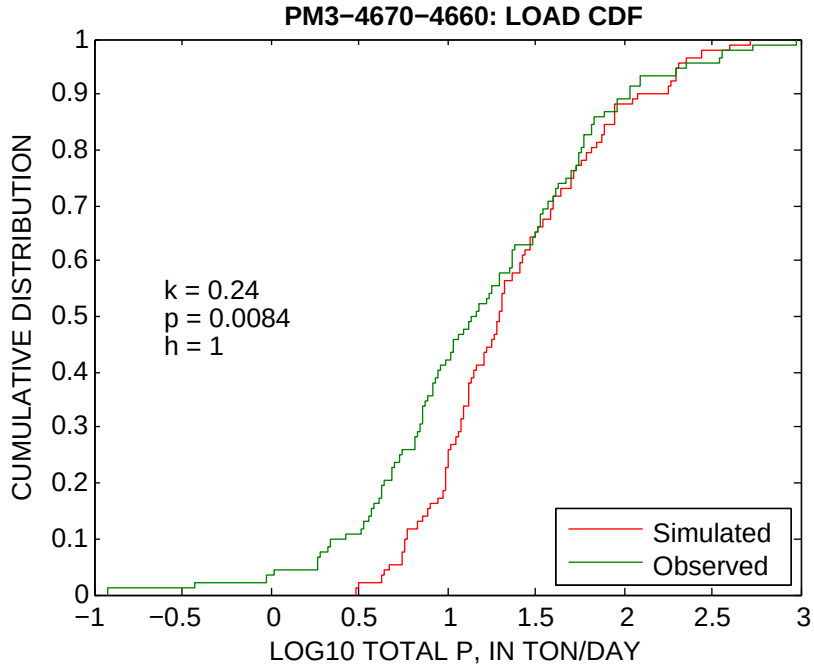


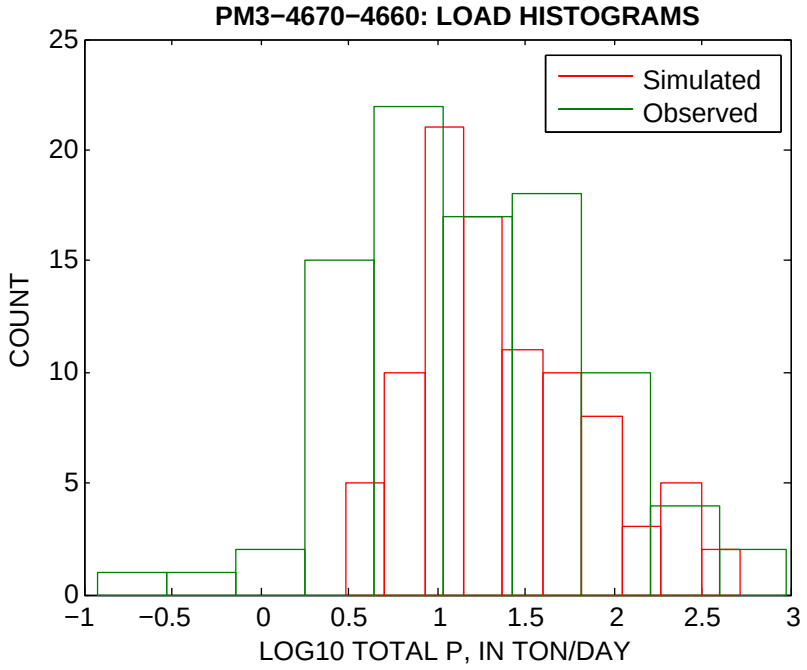


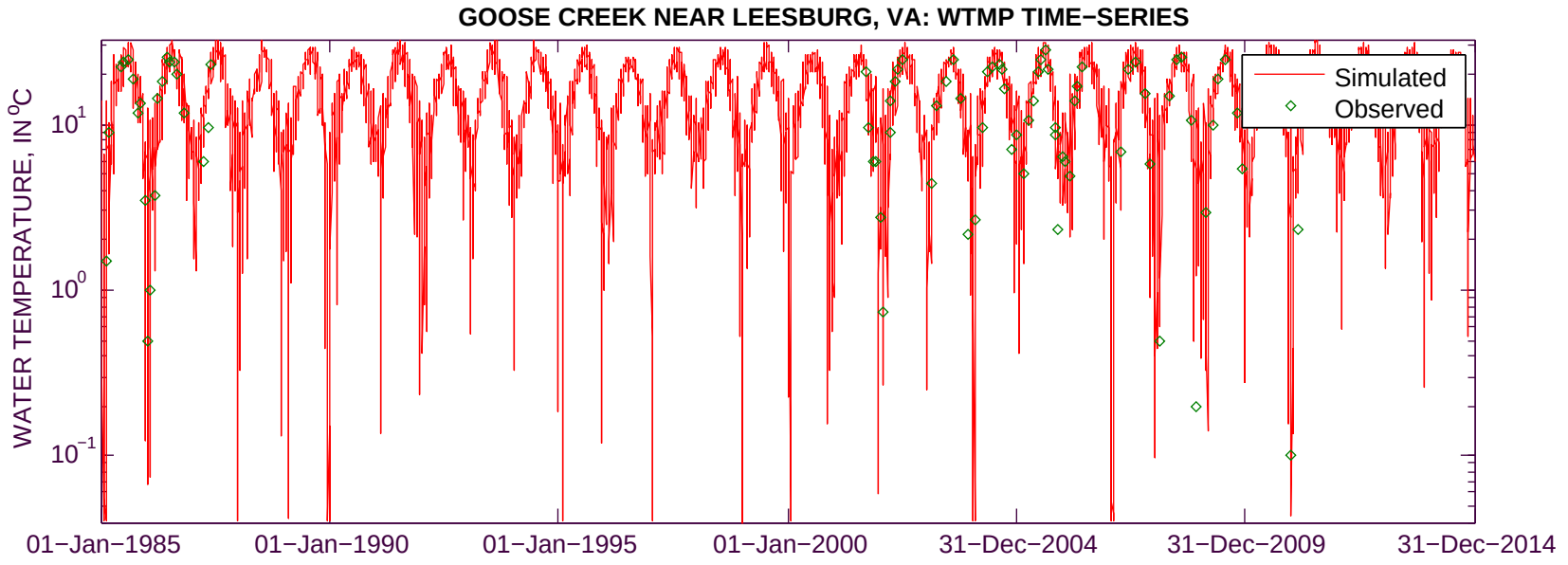
LOAD DATA
LOG10

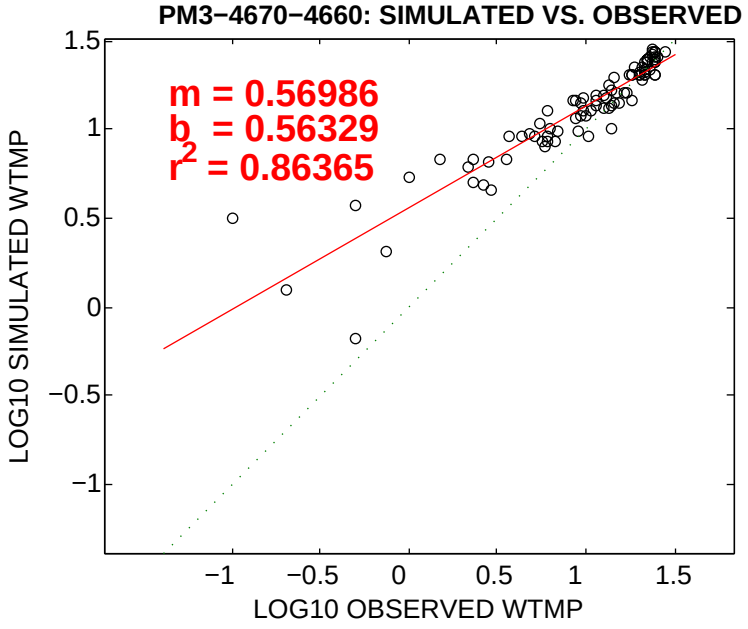


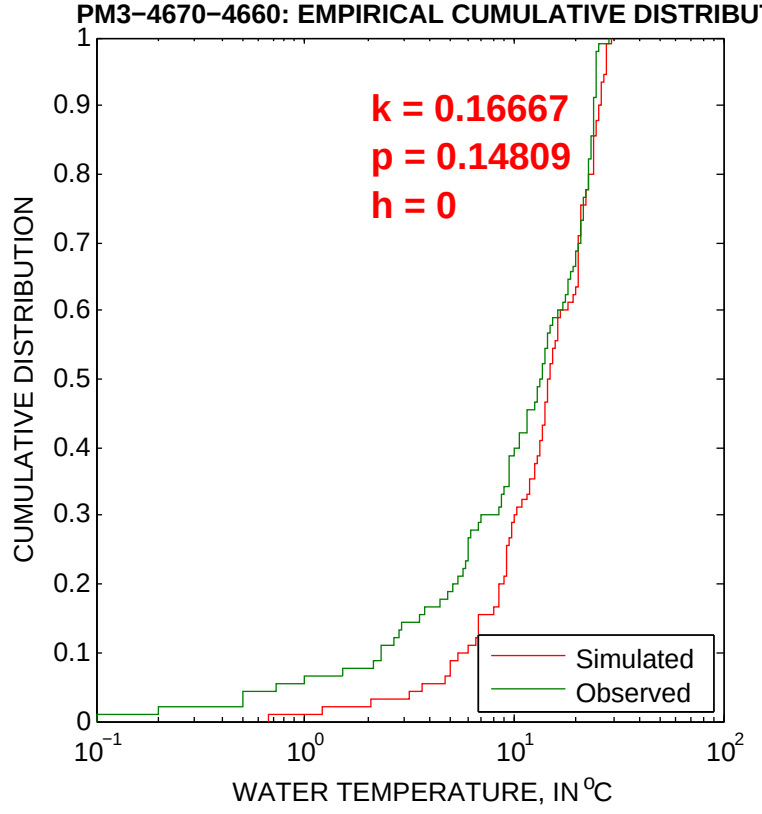












DATA SELECTION

scenario	file
P620171001WQ	WTMP.calib

plot: WTMP - water tempera...

Dates 1/1/1985 12/31/201

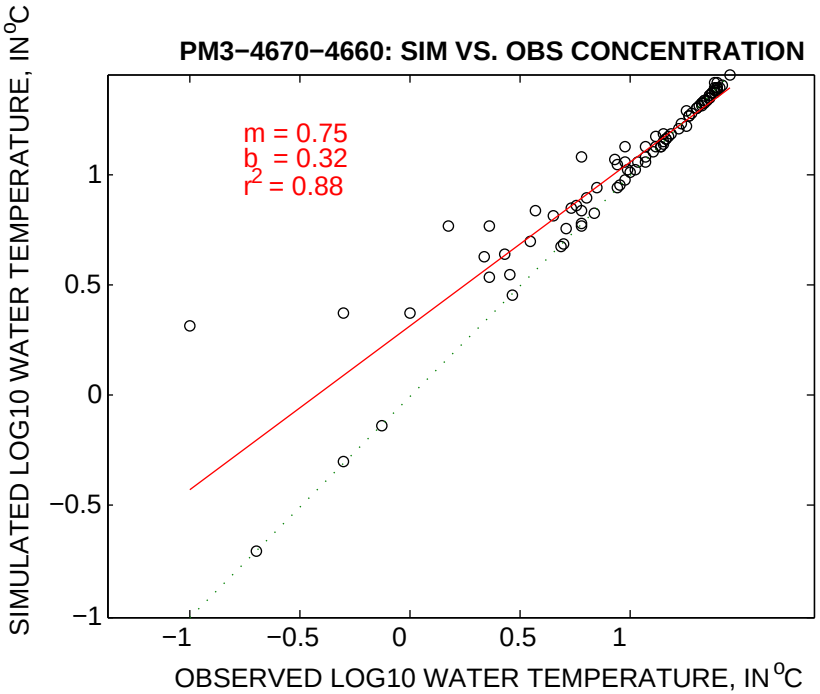
Drive	Directory	Observed
N/A	model	OBS20161101

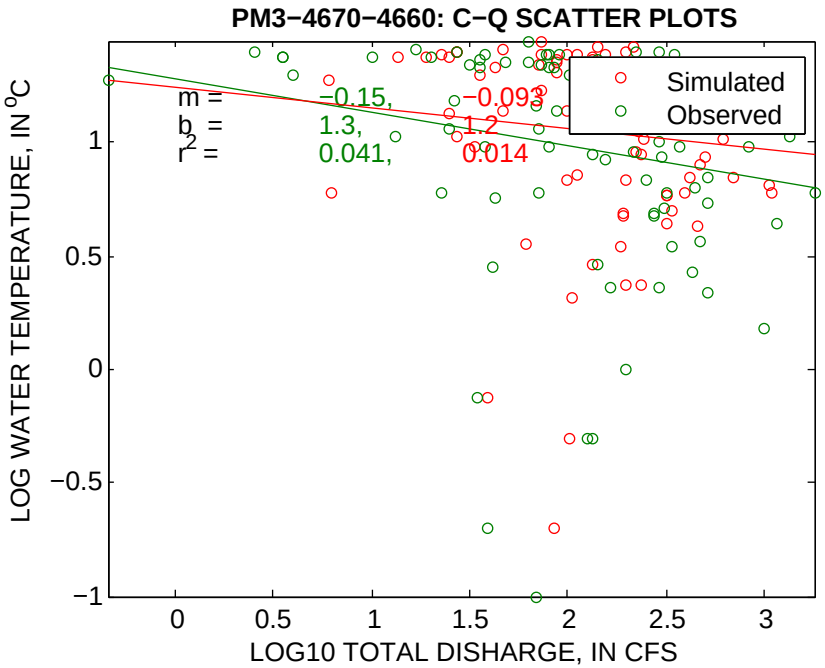
STATISTICS

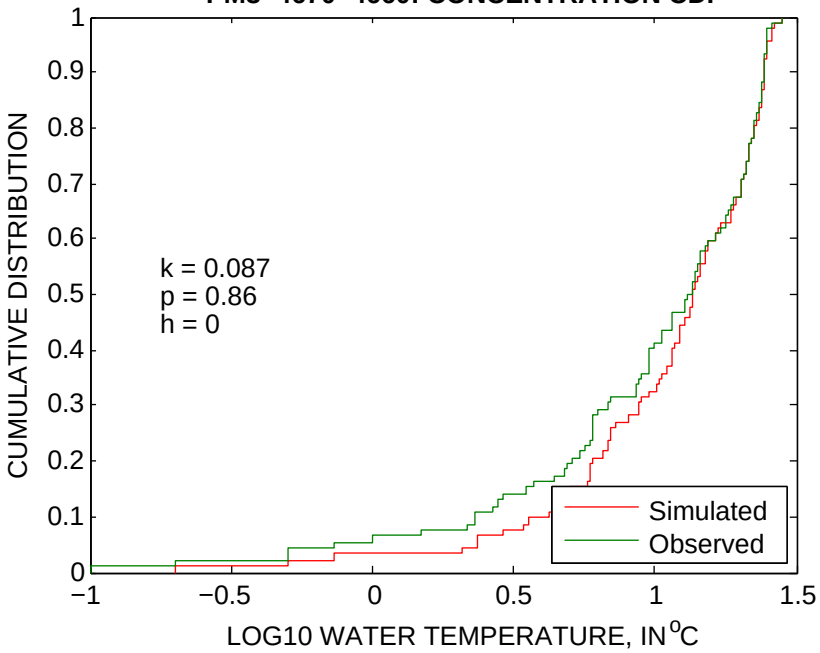
n	90	90
	observe	**simulate**
min	0.1	0.66622
	-1	-0.176382
mean	13.5587	15.5609
	0.973383	1.11797
media	13.56	14.751
	1.13226	1.16881
max	28.12	28.934
	1.44902	1.46141
varian	67.6444	55.5231
	0.238044	0.0895054
JB	0.033429	0.080903
	0.001	0.001
	ra	log
%	14.767	14.8545
err.va	9.54403	0.0773898
rel.std.err	0.141091	0.325107
mod.eff	0.858909	0.674893

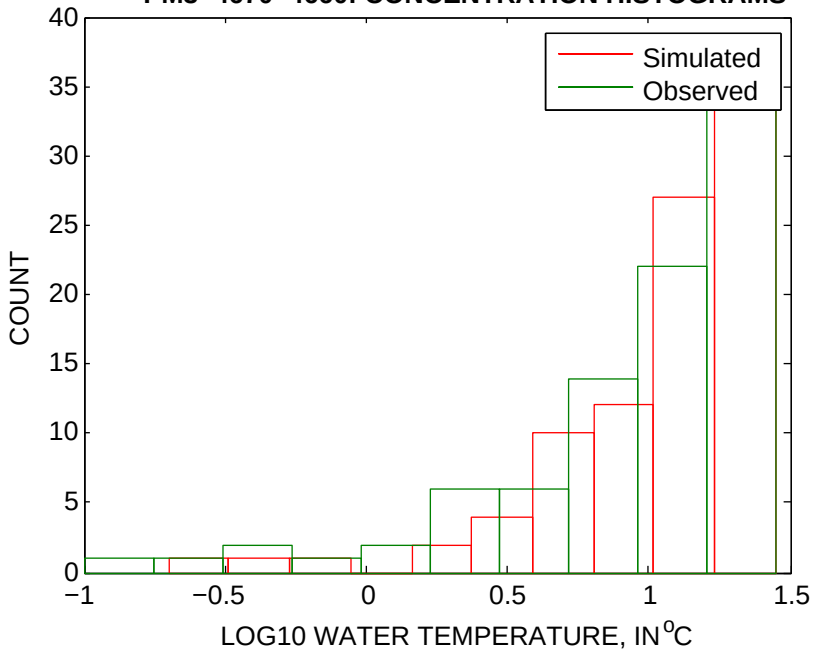
VERSION 2.1

ALL DATA
LOG10

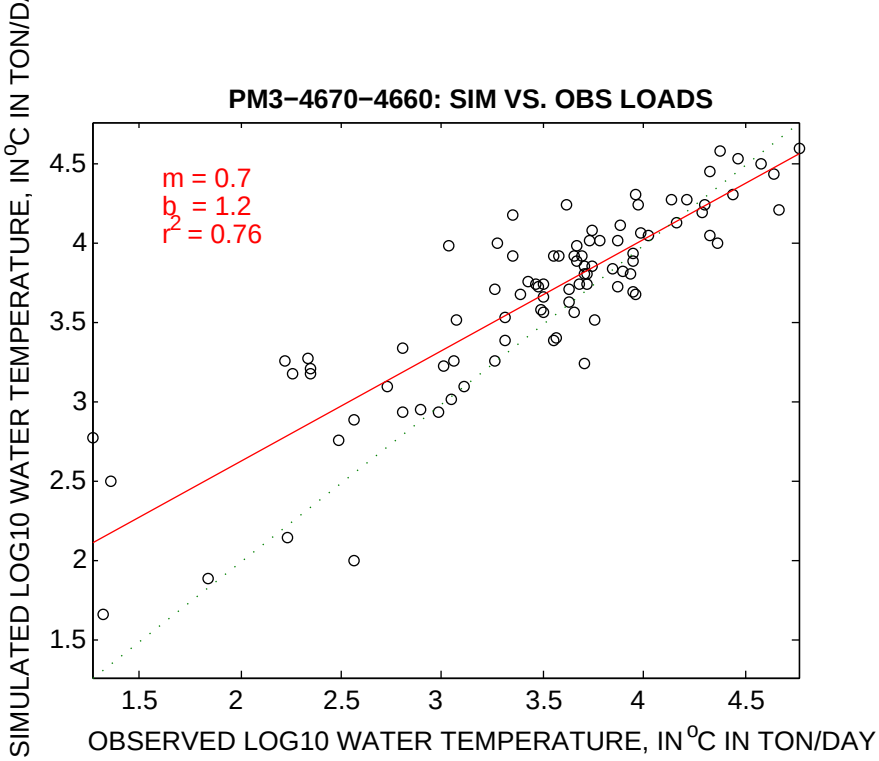


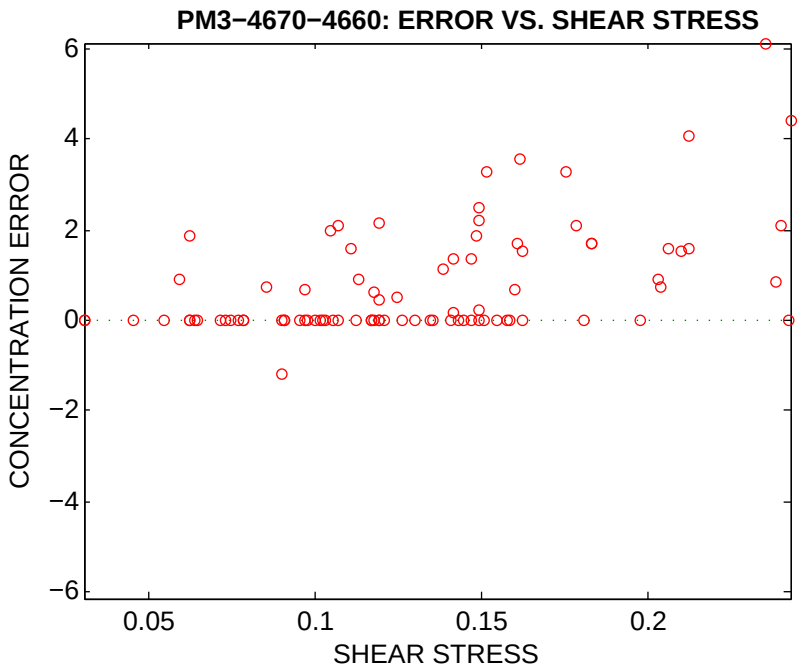


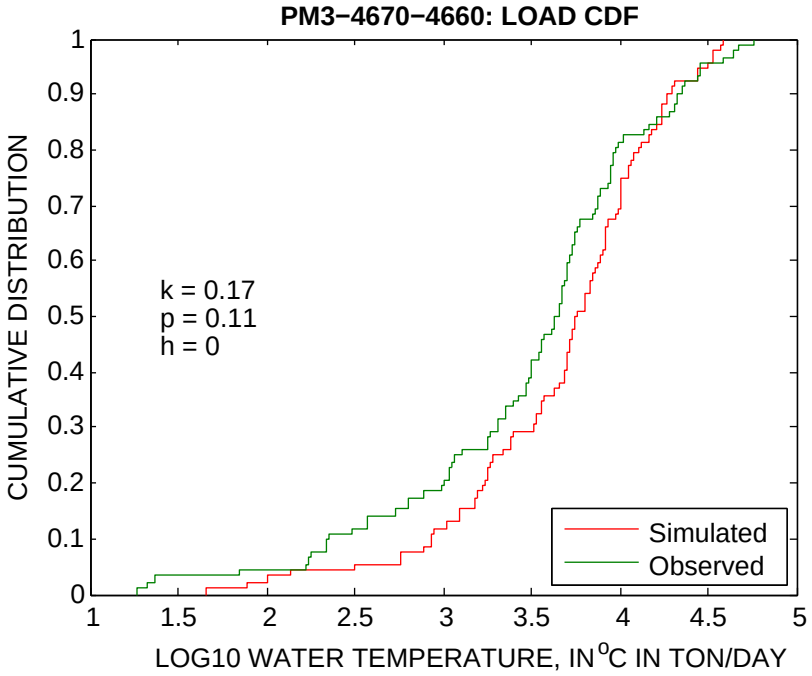


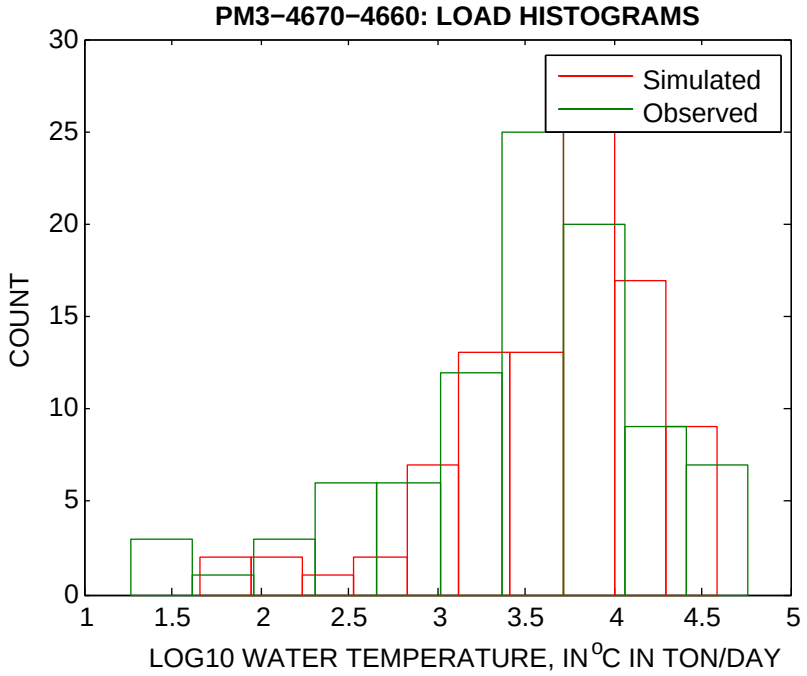


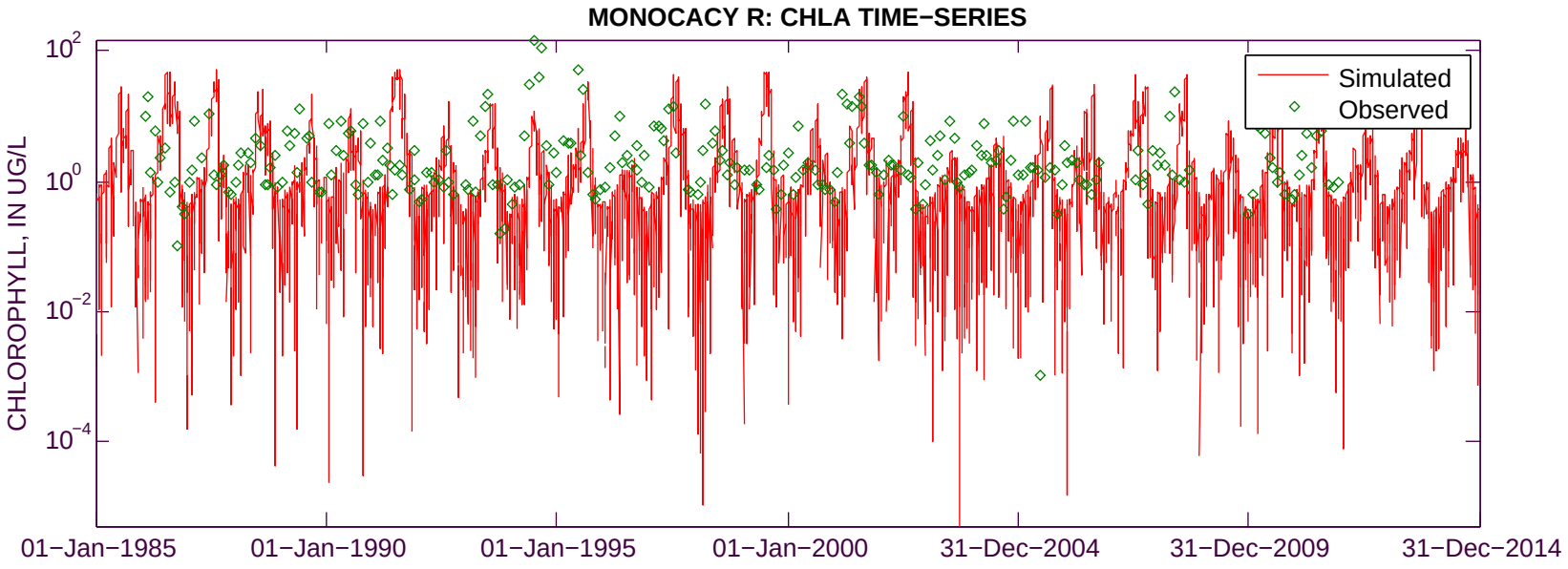
LOAD DATA
LOG10

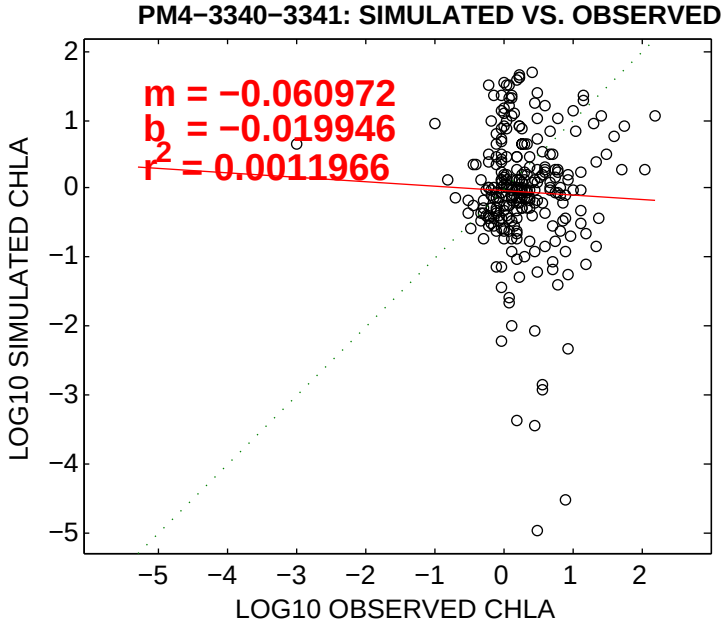


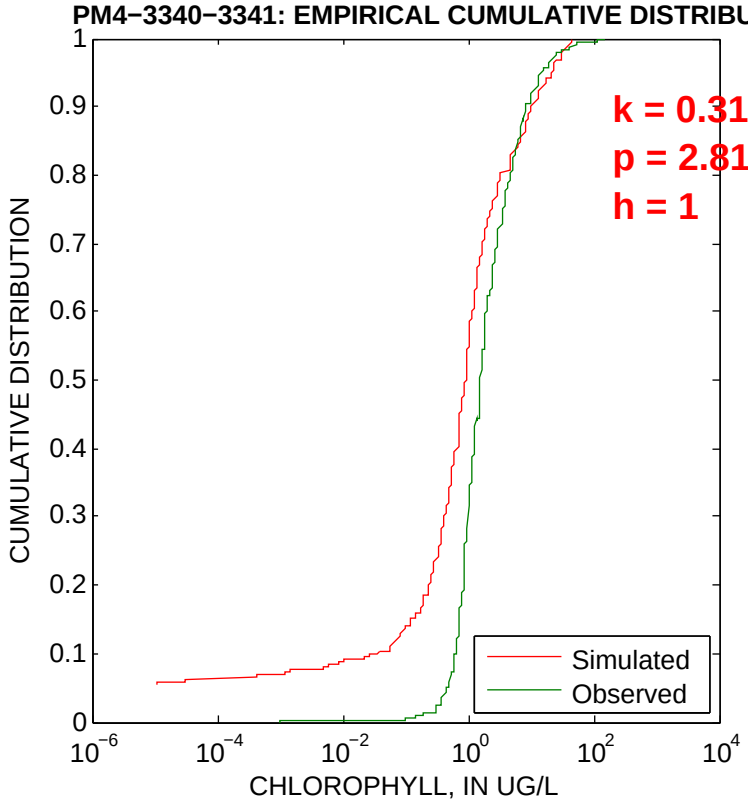












DATA SELECTION

scenario	file
P620171001WQ	CHLA.calib

plot: CHLA - chlorophyll A

Dates: 1/1/1985 – 12/31/201

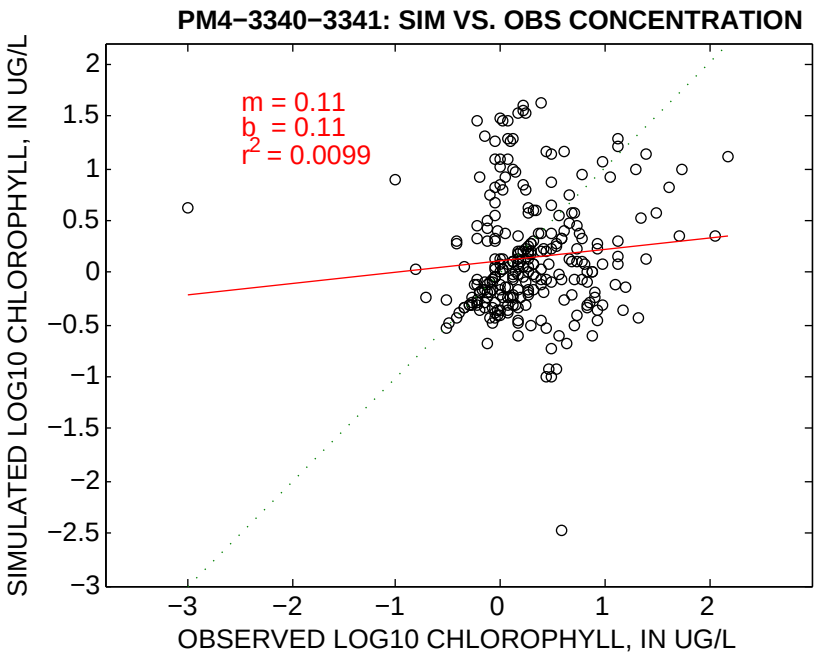
Drive	Directory	Observed
N/A	model	OBS20161101

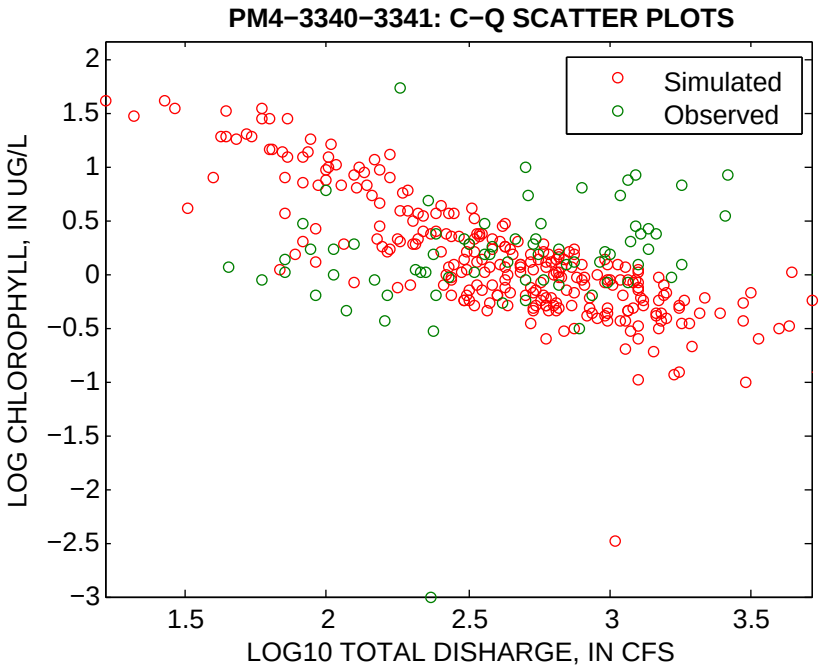
STATISTICS

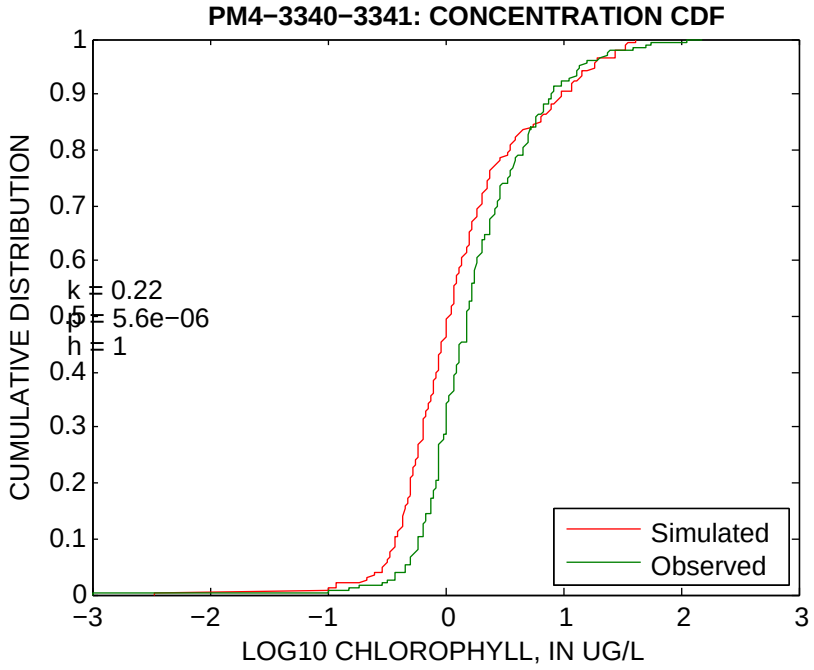
n	277	262
	observe	simulate
min	0.001	0
	-3	-4.96277
mean	4.67127	3.75744
	0.268054	-0.0362901
media	1.574	0.93987
	0.176091	-0.0112819
max	151.02	46.871
	2.17903	1.6709
varian	164.184	62.4335
	0.267924	0.832371
JB	0.001	0.001
	0.001	0.001
	ra	log
%	-19.5629	-113.538
err.va	221.734	1.22595
rel.std.err	1.35053	4.57573
mod.eff	-0.350526	-3.57573

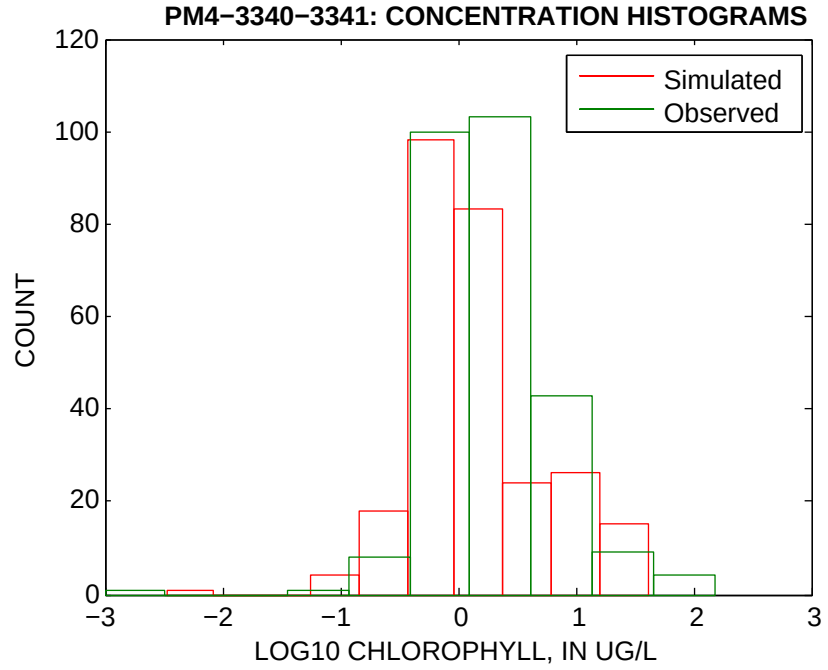
VERSION

ALL DATA
LOG10

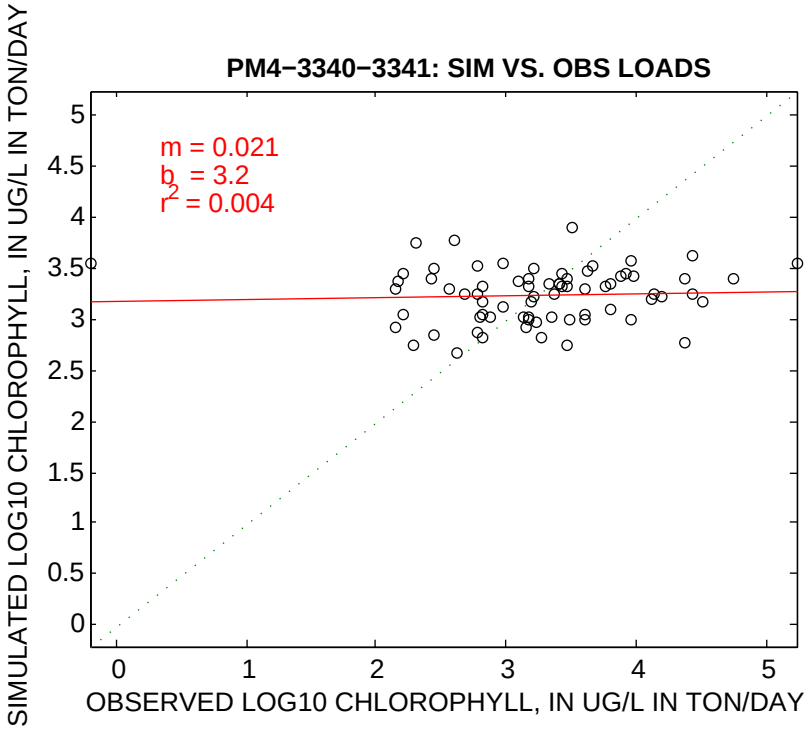


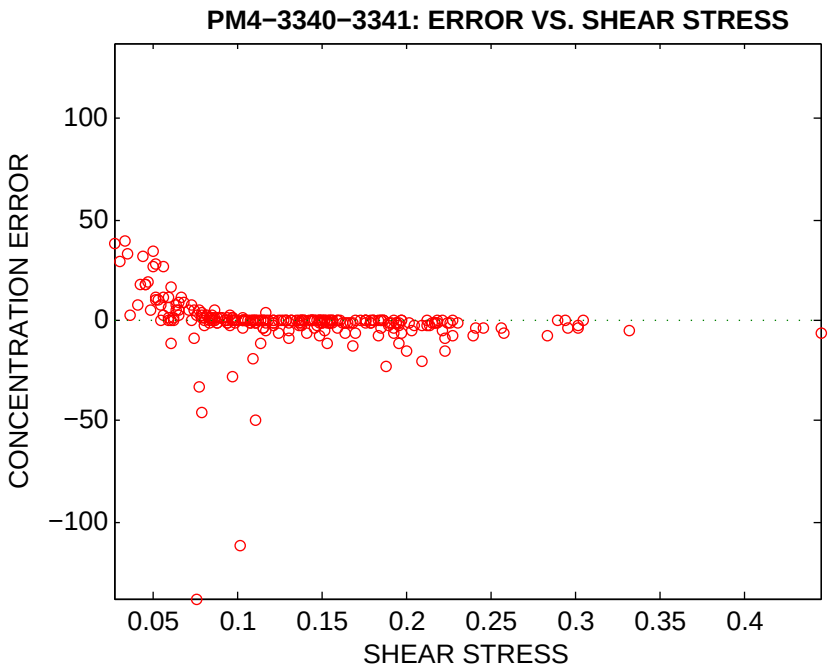


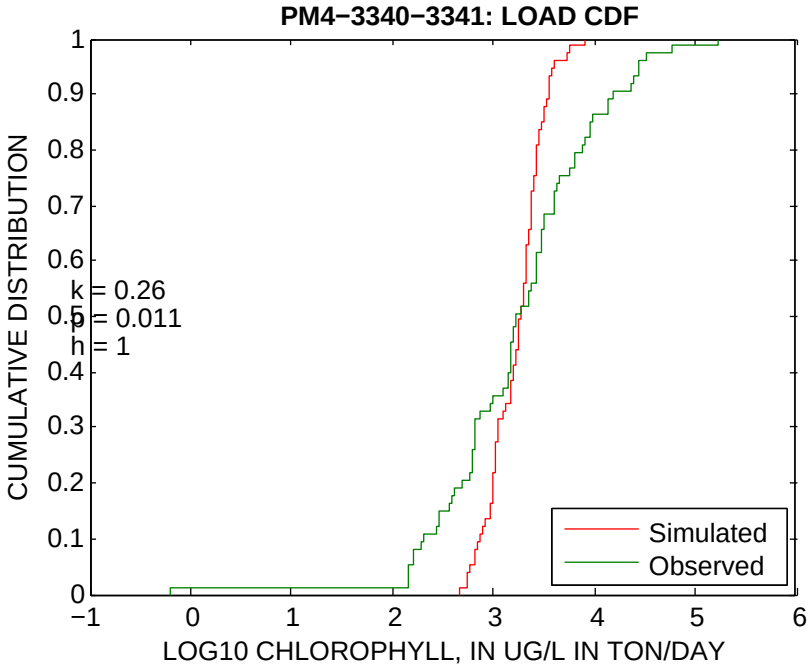


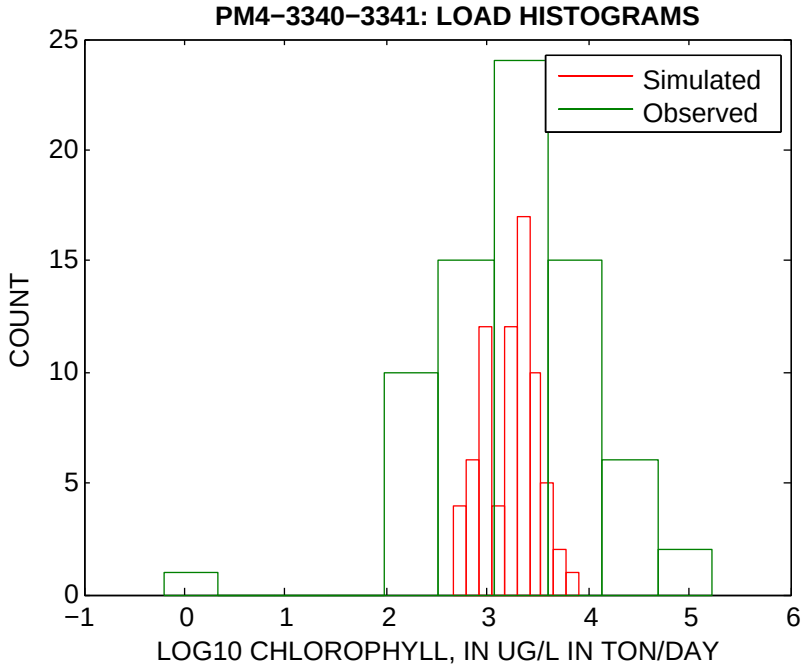


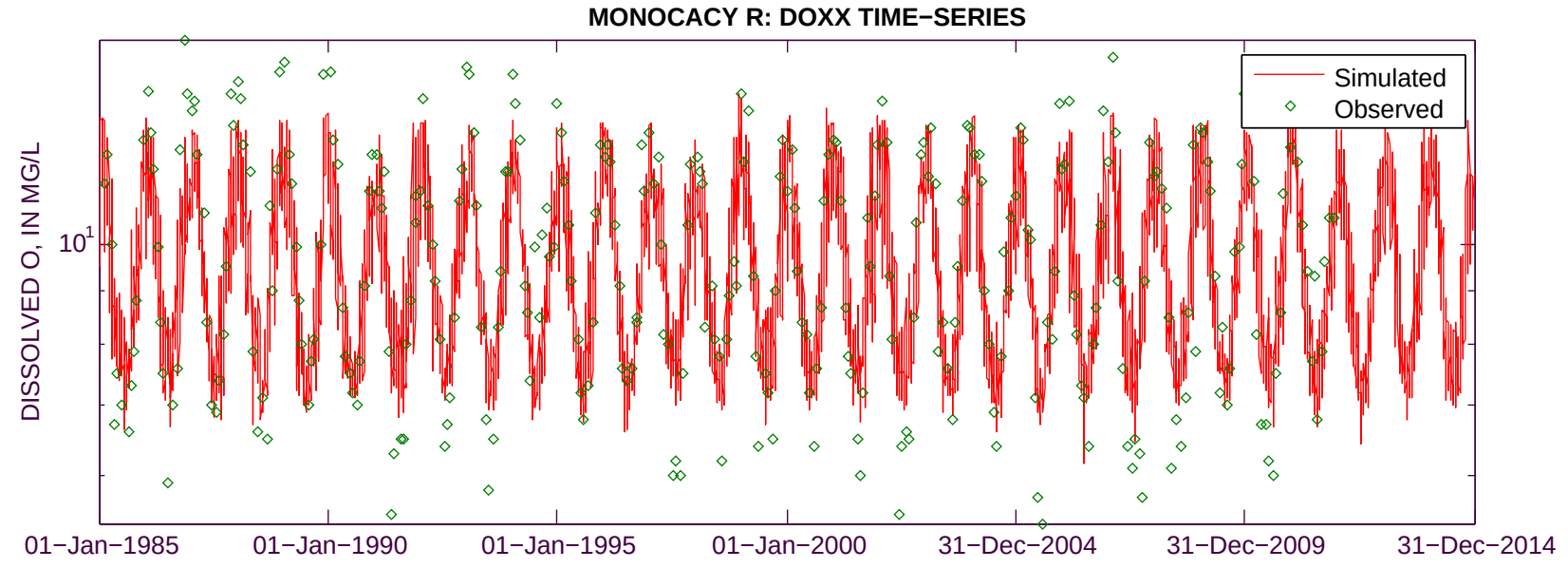
LOAD DATA
LOG10

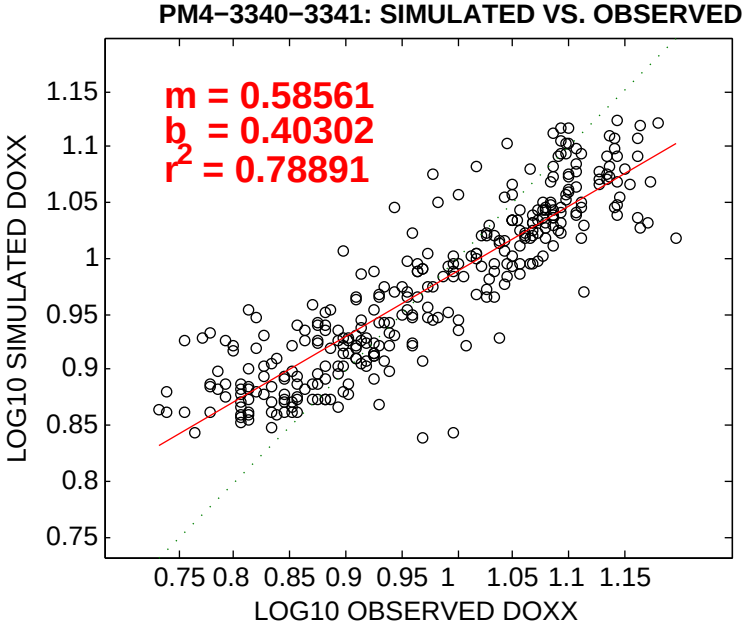


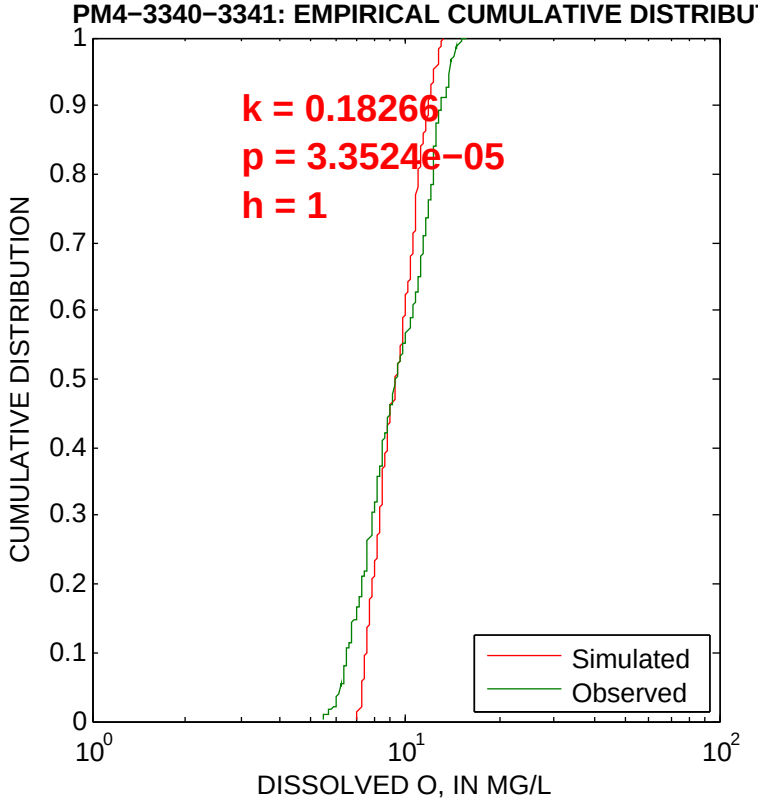












DATA SELECTION

scenario: P620171001WQ | file: DOXX.calib

plot: DOXX - dissolved oxygen

Dates: 1/1/1985 – 12/31/201

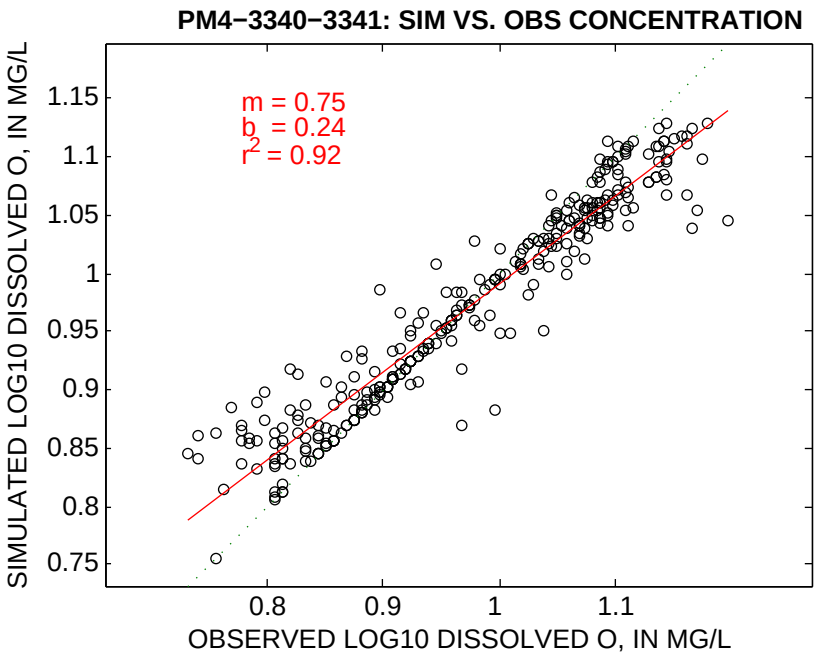
Drive: N/A | Directory: model | Observed: OBS20161101

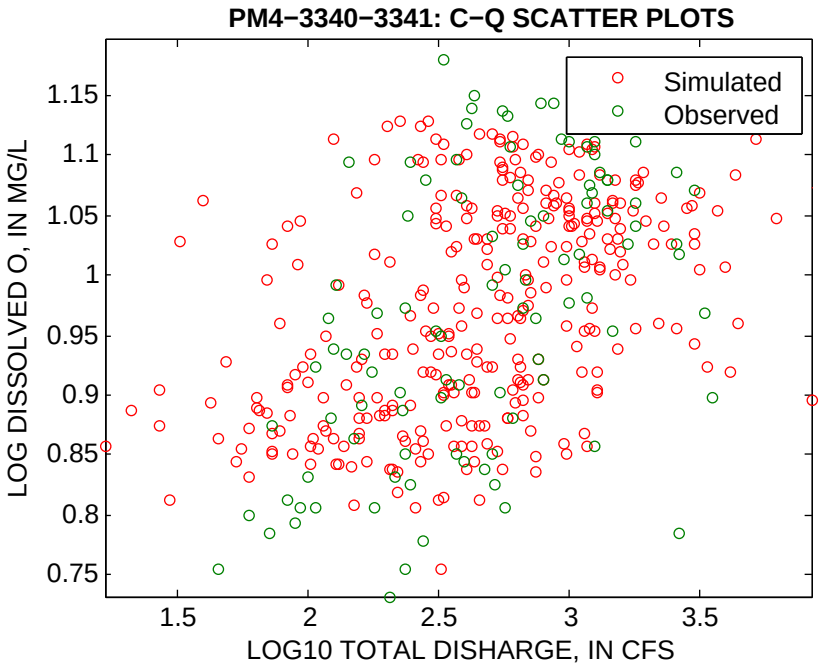
STATISTICS

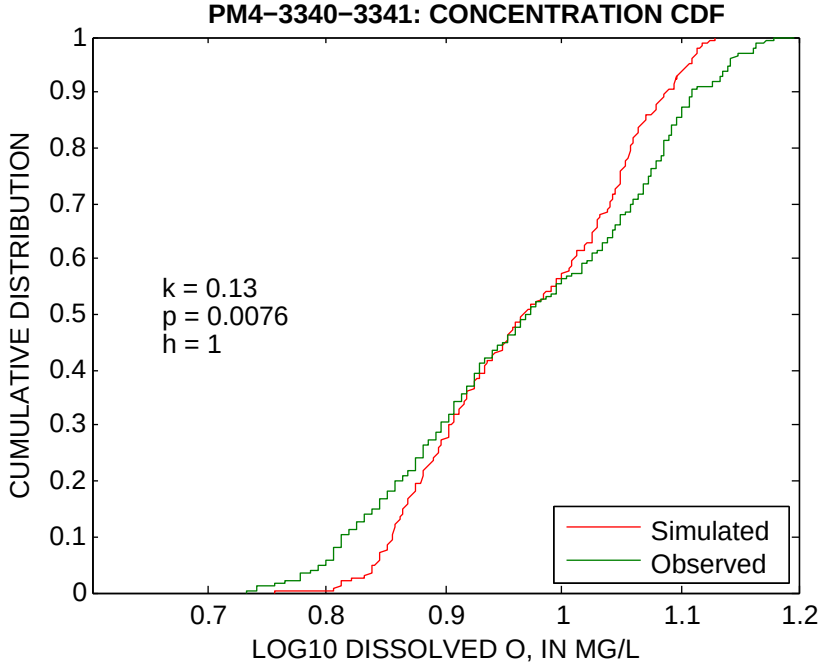
		observe	simulate
n		323	323
min		5.4	6.8886
		0.732394	0.838131
mean		9.71258	9.53138
		0.972931	0.972777
media		9.3	9.3179
		0.968483	0.969318
max		15.7	13.273
		1.1959	1.12297
varian		6.14966	2.70935
		0.0127302	0.00553382
JB		0.002436	0.002235
		0.002892	0.002595
		ra	log
%		-1.86561	-0.0158001
err.va		1.63304	0.00335414
rel.std.err		0.26555	0.263479
mod.eff		0.73445	0.736521

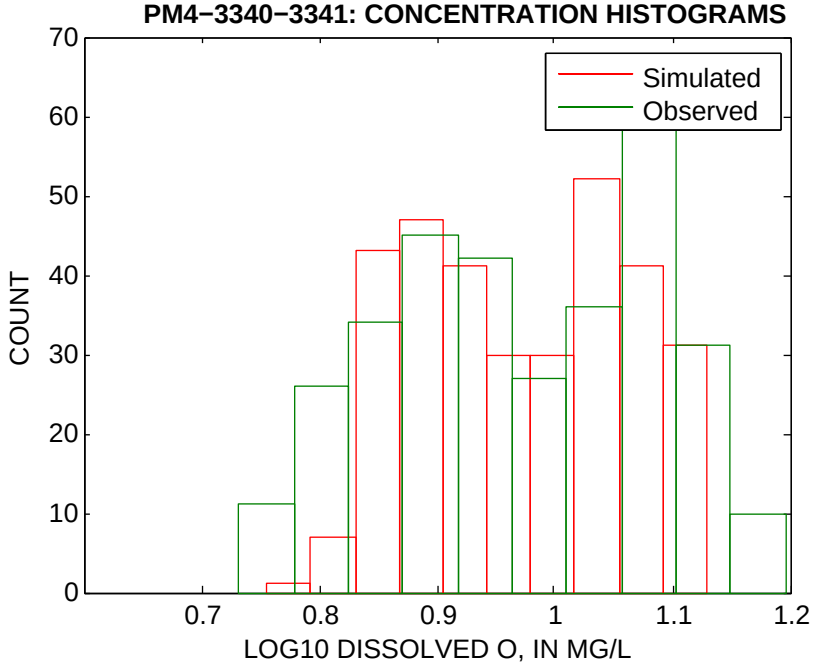
VERSION 2.1

ALL DATA
LOG10

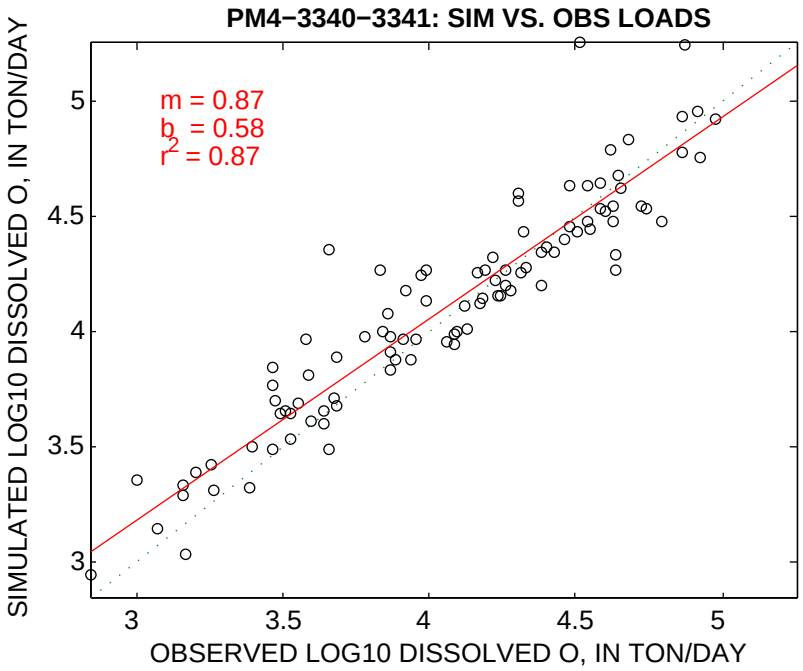


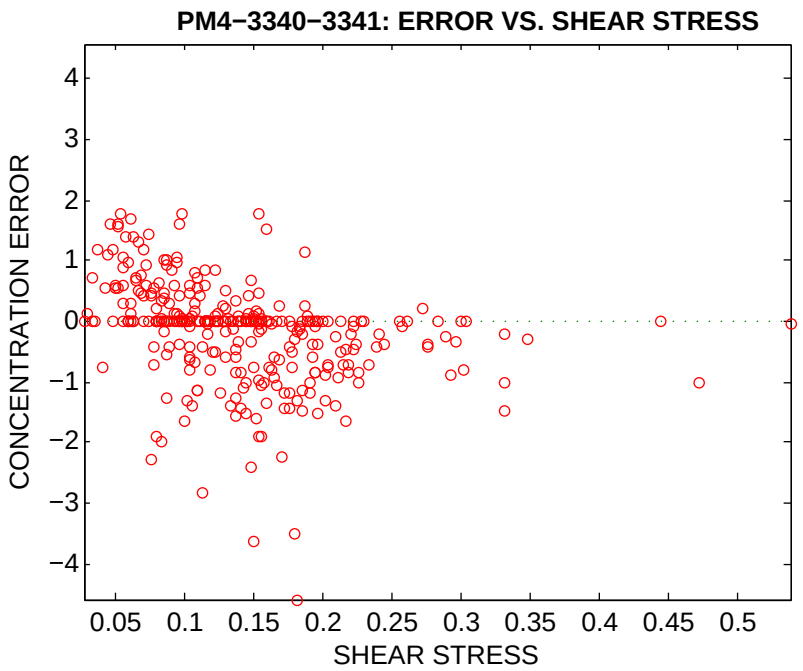


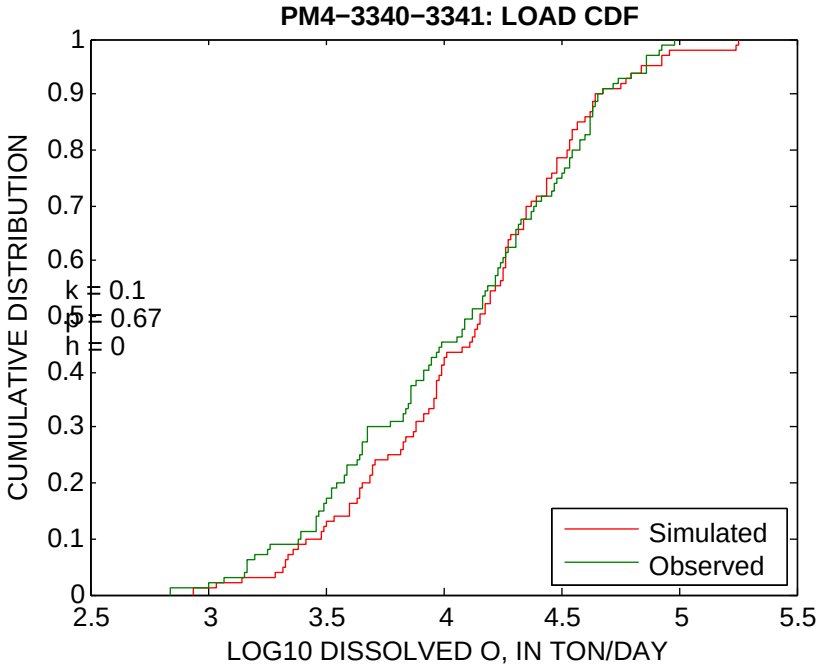


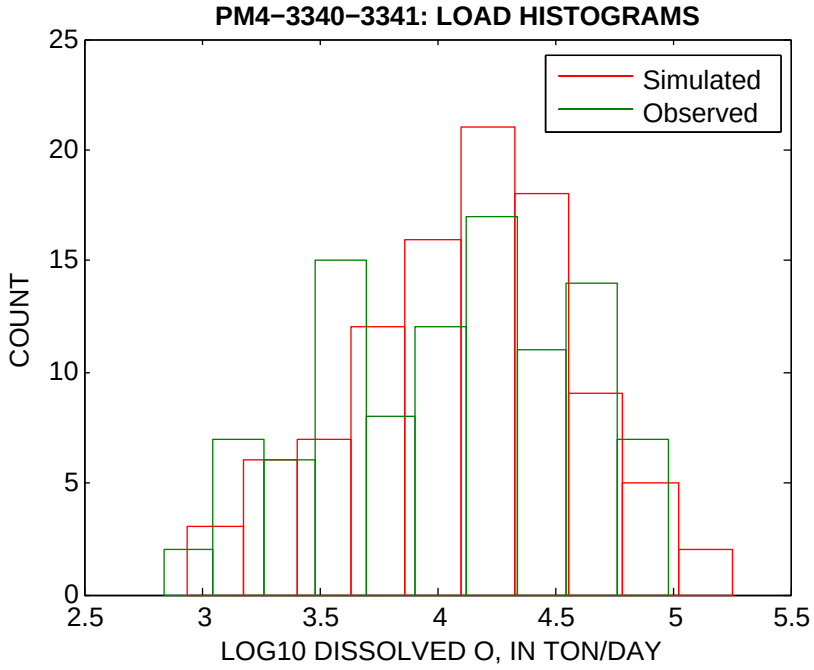


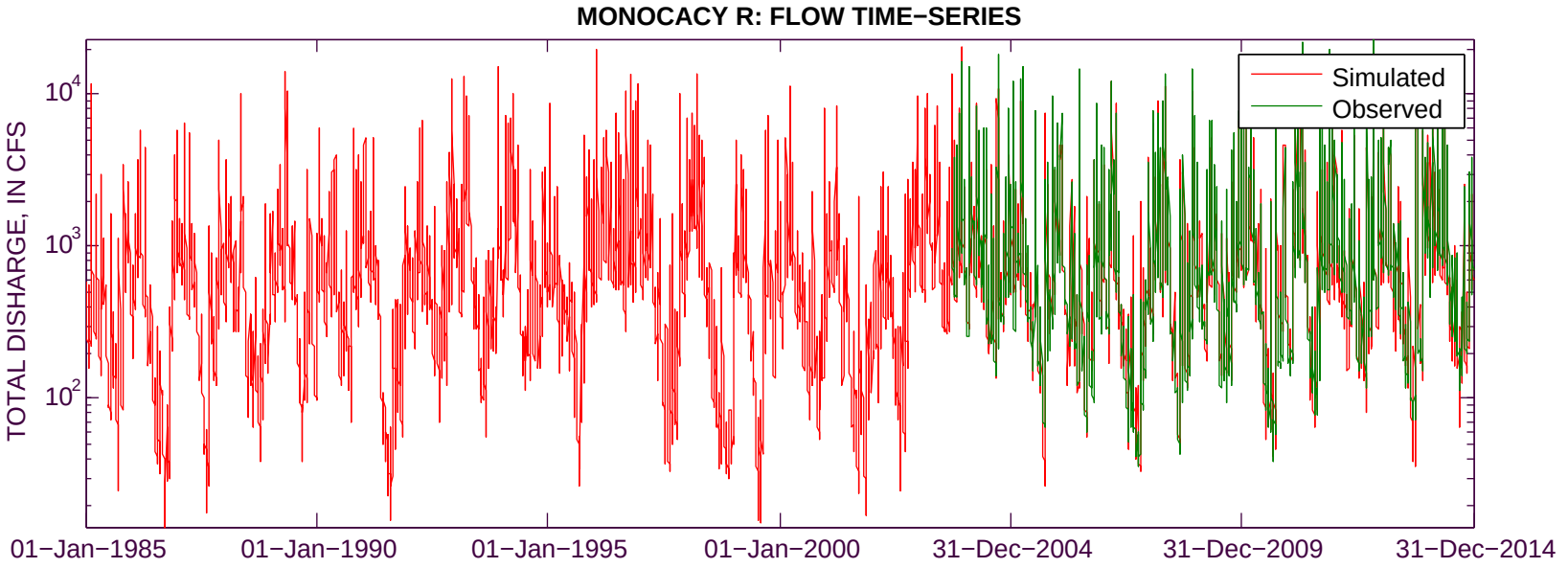
LOAD DATA
LOG10

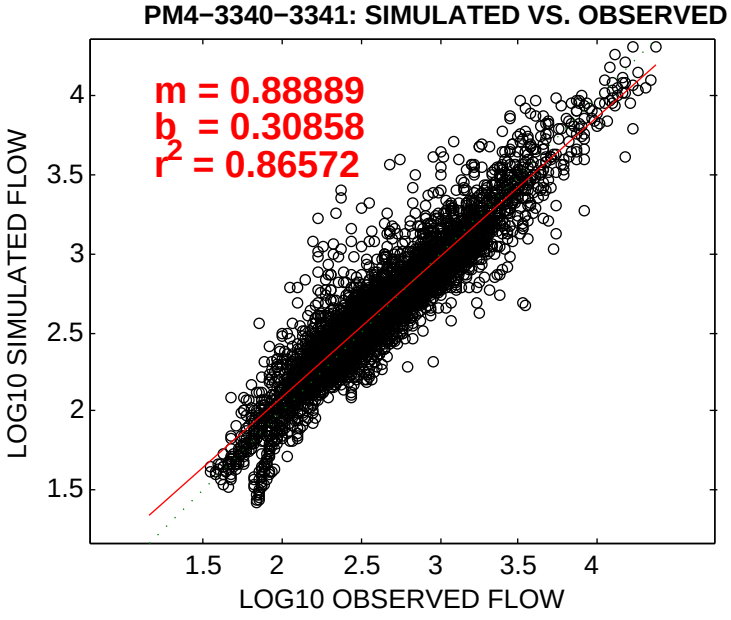


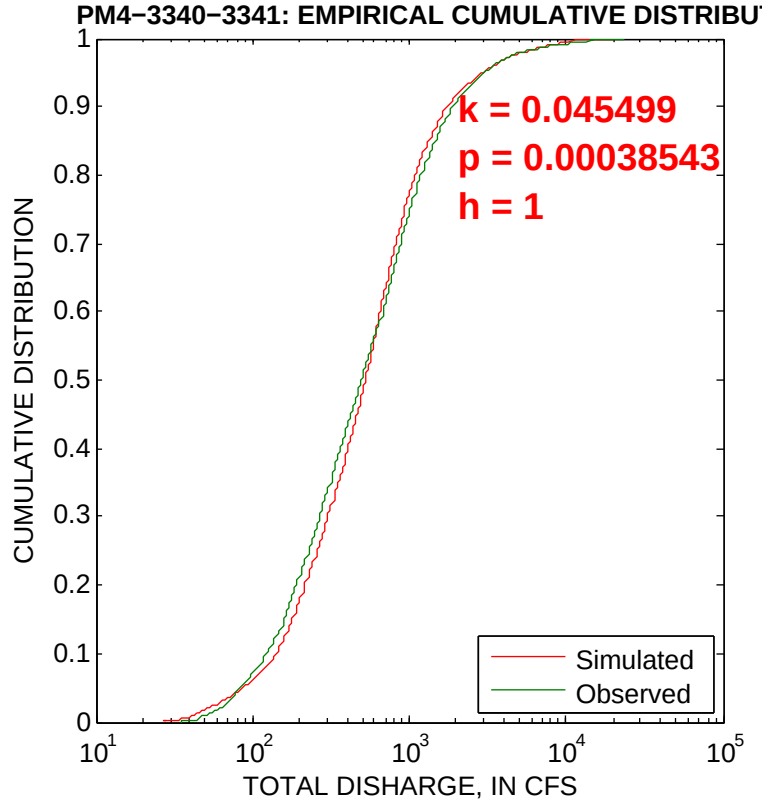












DATA SELECTION

scenario: P620171001WQ | file: FLOW.calib

plot: FLOW - total discharge

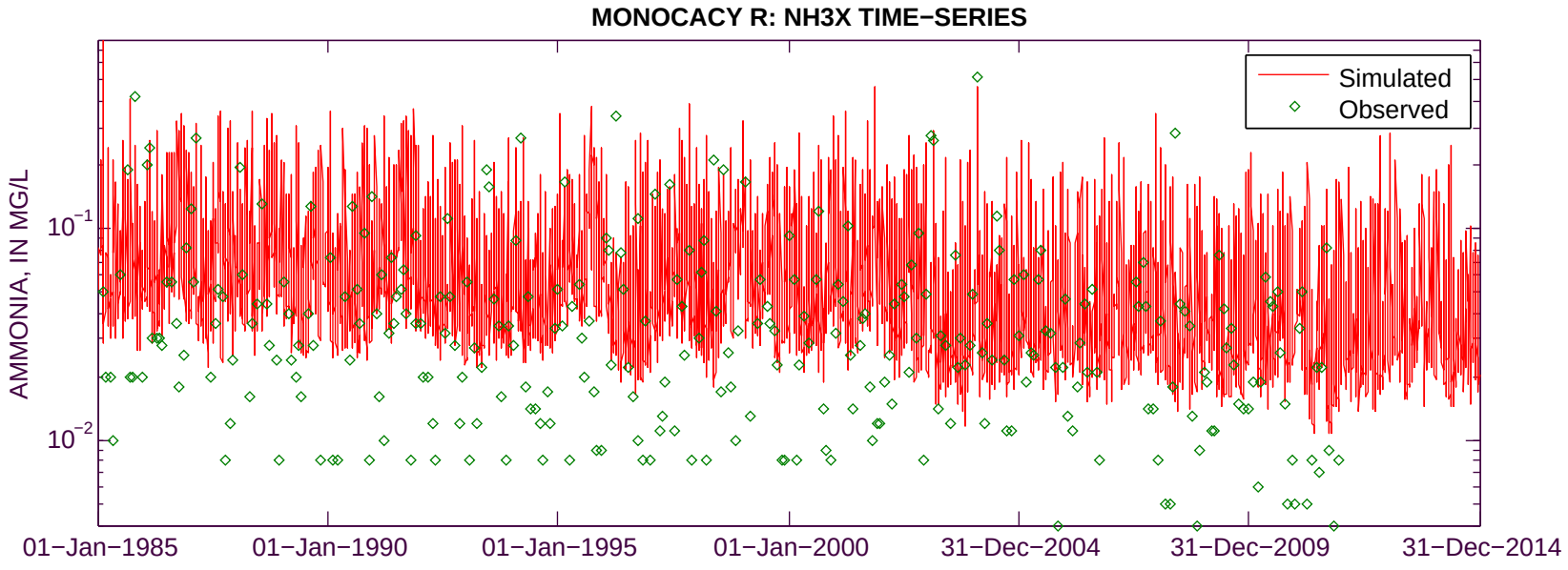
Dates: 1/1/1985 – 12/31/201

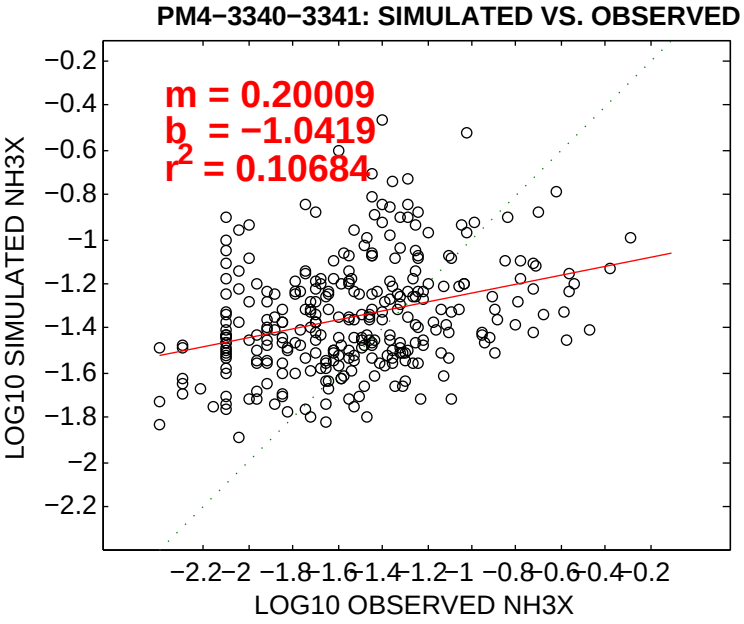
Drive: N/A | Directory: model | Observed: OBS20161101

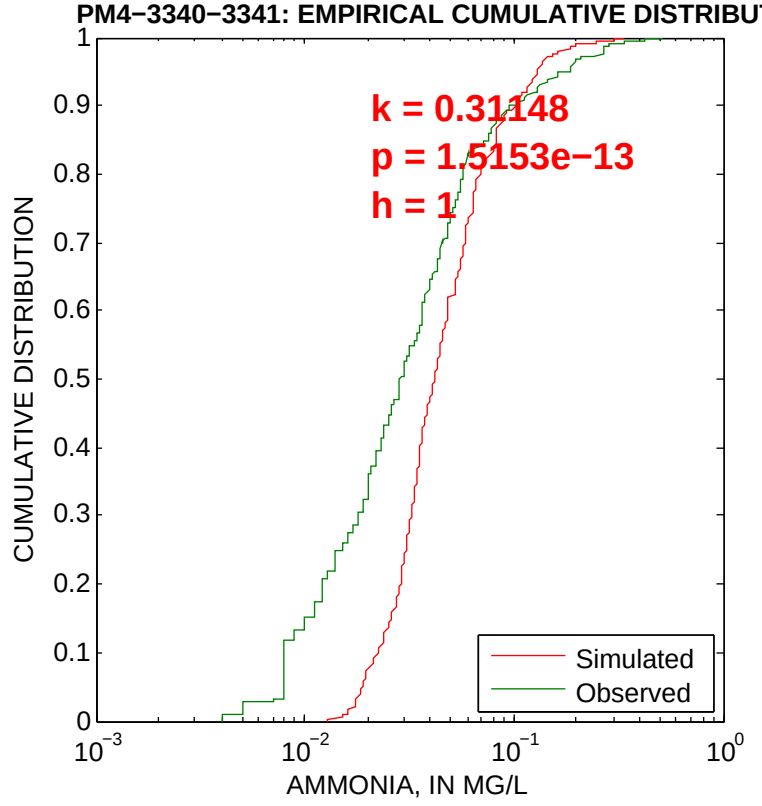
STATISTICS

	n	4110	4110
		observe	simulate
min		35	26.84
		1.54407	1.42878
mean		947.465	908.494
		2.69799	2.70681
media		497.5	525.015
		2.69679	2.72017
max		23400	20464
		4.36922	4.31099
varian		2.70766e+0	2.13852e+
		0.222202	0.2028
JB		0.001	0.001
		0.001	0.001
		ra	log
%		-4.11322	0.326768
err.va		483159	0.0300526
rel.std.err		0.178442	0.135249
mod.eff		0.821558	0.864751

VERSION 2.1







DATA SELECTION

scenario	file
P620171001WQ	NH3X.calib

plot: NH3X - ammonia

Dates: 1/1/1985 – 12/31/201

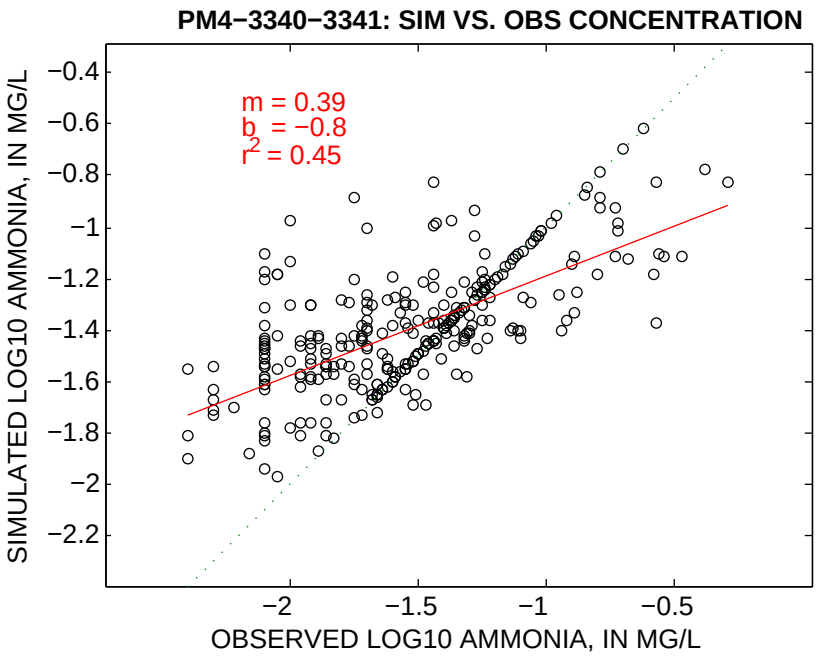
Drive: N/A Directory: model Observed: OBS20161101

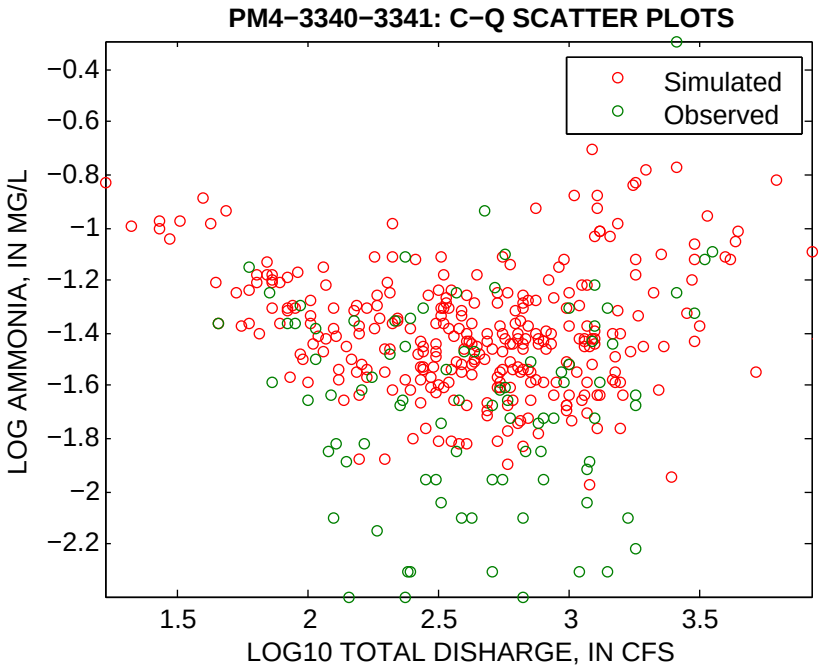
STATISTICS

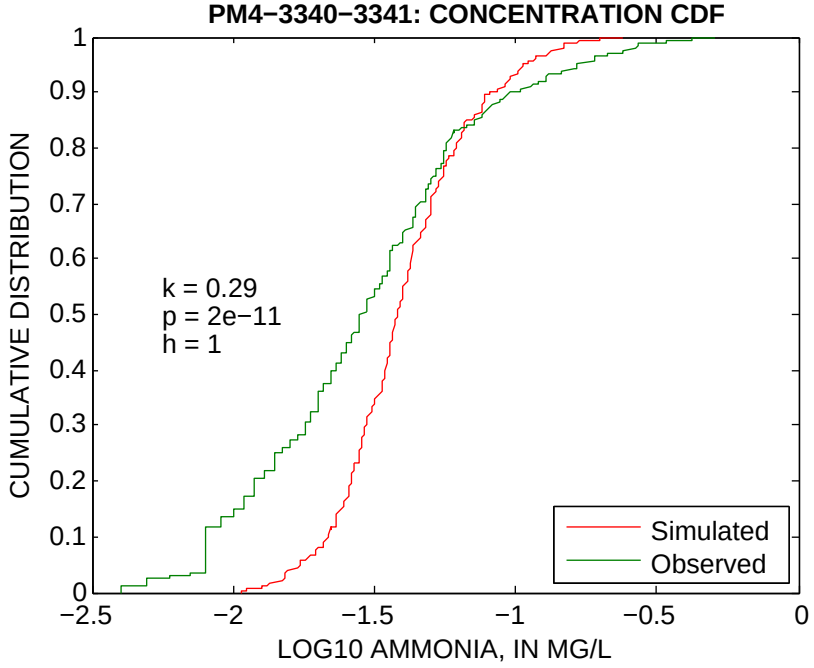
	n	observe	simulate
		305	305
min		0.004	0.012761
		-2.39794	-1.89412
mean		0.0476787	0.0539234
		-1.53108	-1.34823
media		0.029	0.041828
		-1.5376	-1.37853
max		0.512	0.33768
		-0.29073	-0.471495
varian		0.00385984	0.00162901
		0.166004	0.0622041
JB		0.001	0.001
		0.037114	0.002099
		ra	log
%		13.0974	-11.9427
err.va		0.0046137	0.195323
rel.std.err		1.19531	1.17661
mod.eff		-0.19531	-0.176611

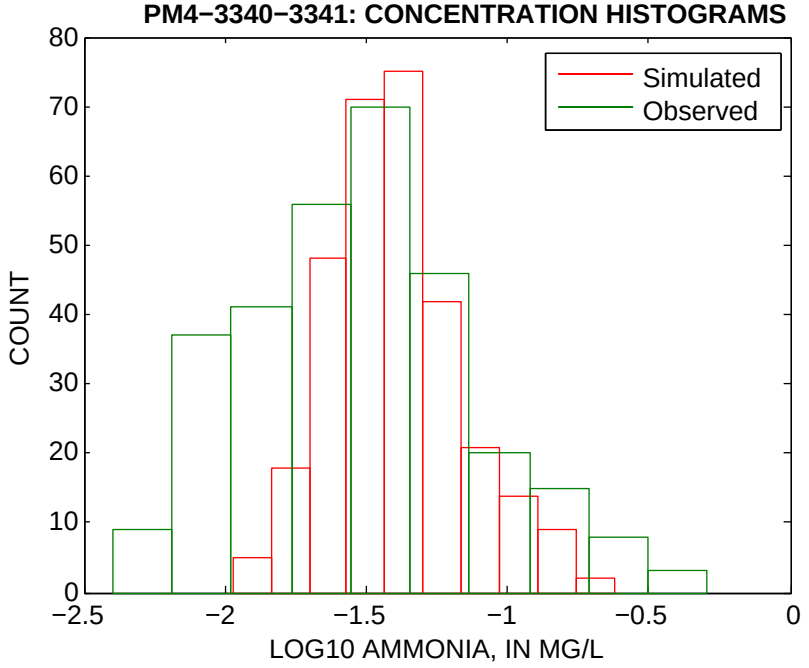
VERSION 2.1

ALL DATA
LOG10

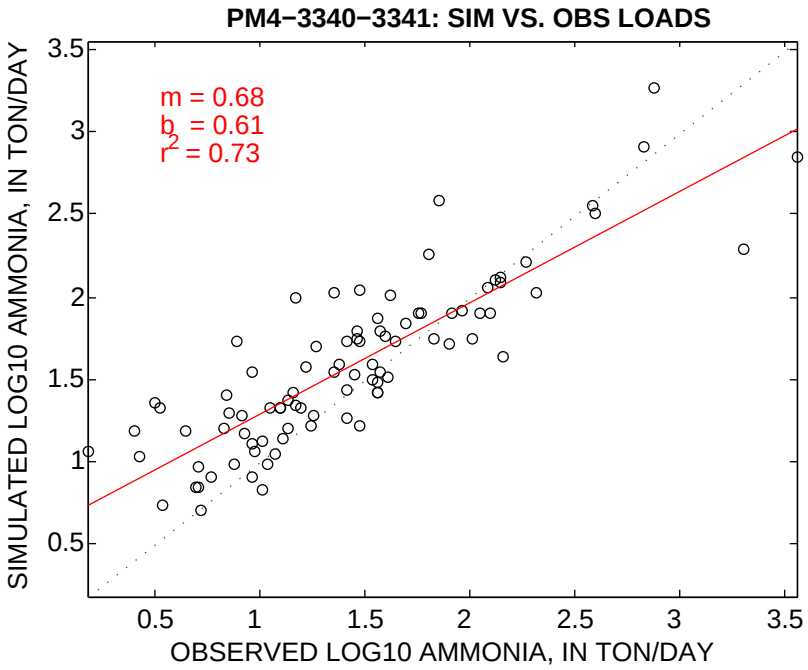


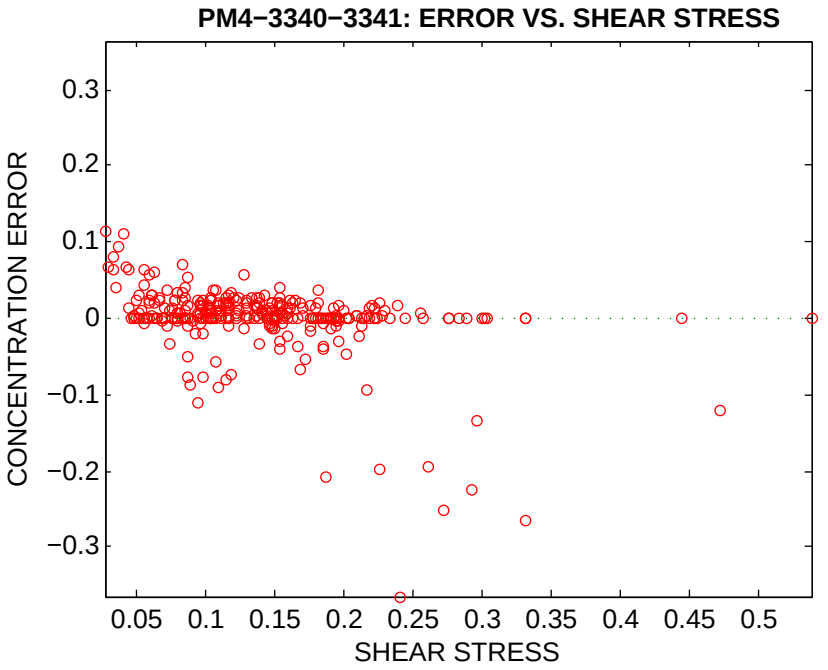


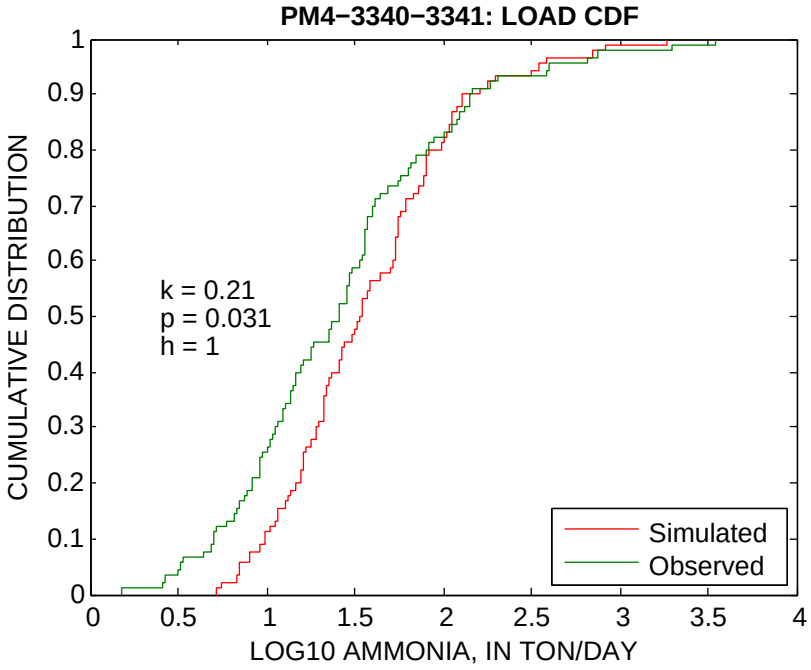


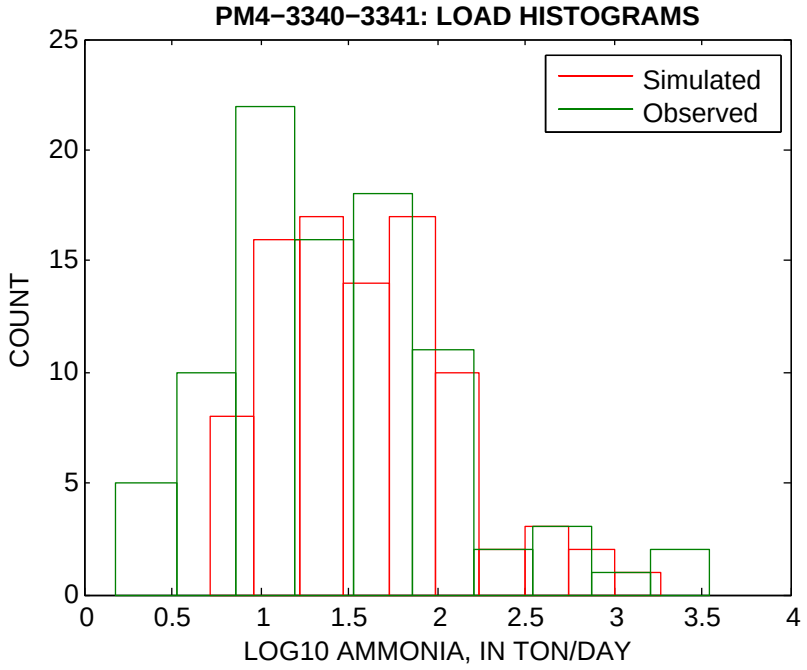


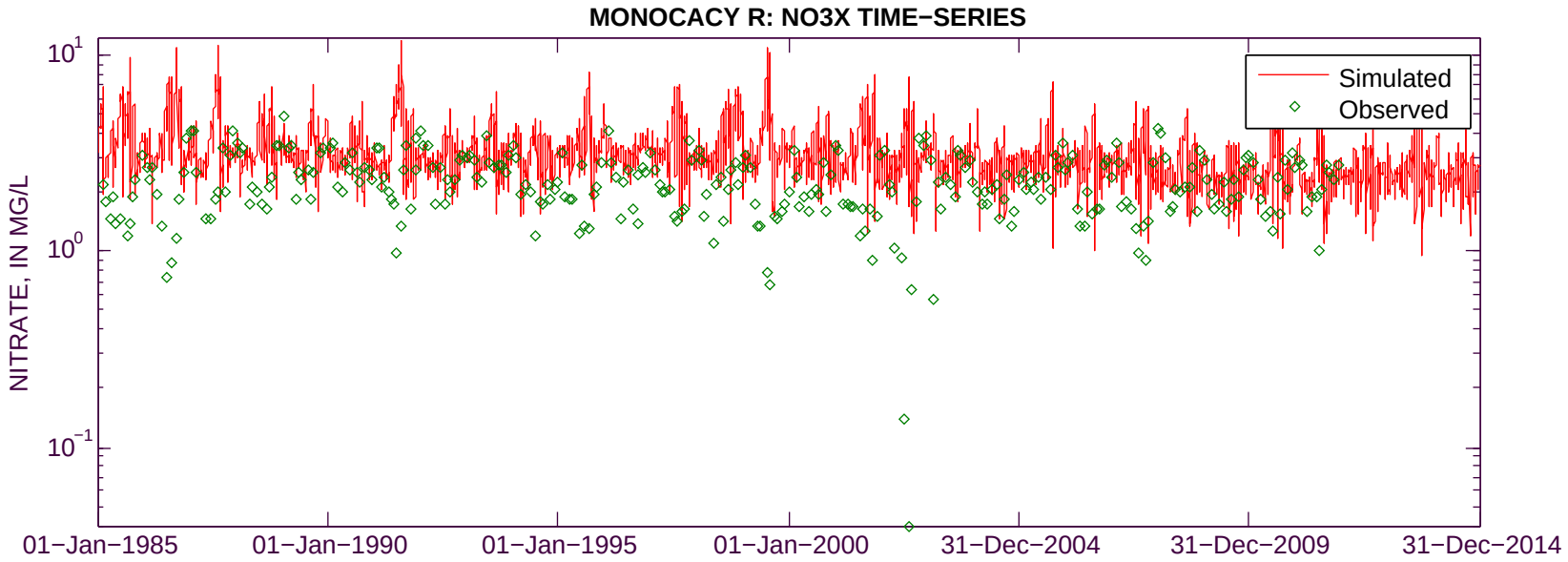
LOAD DATA
LOG10

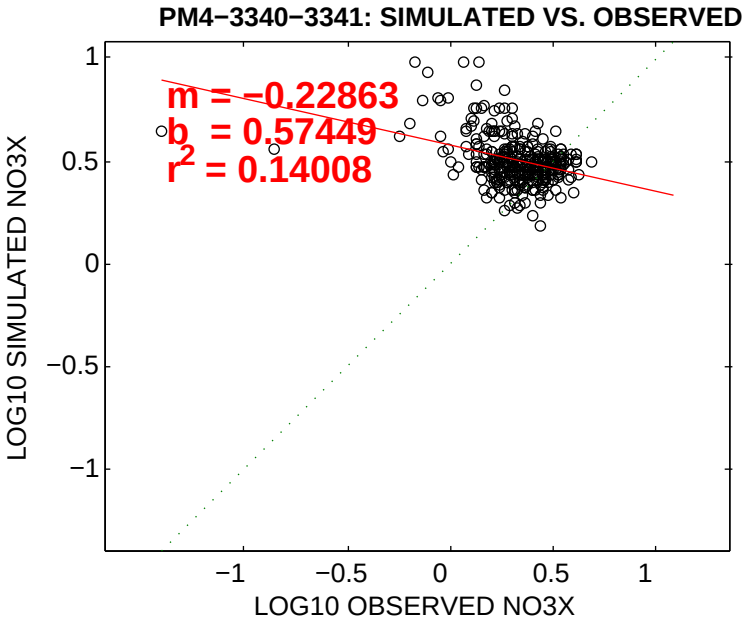


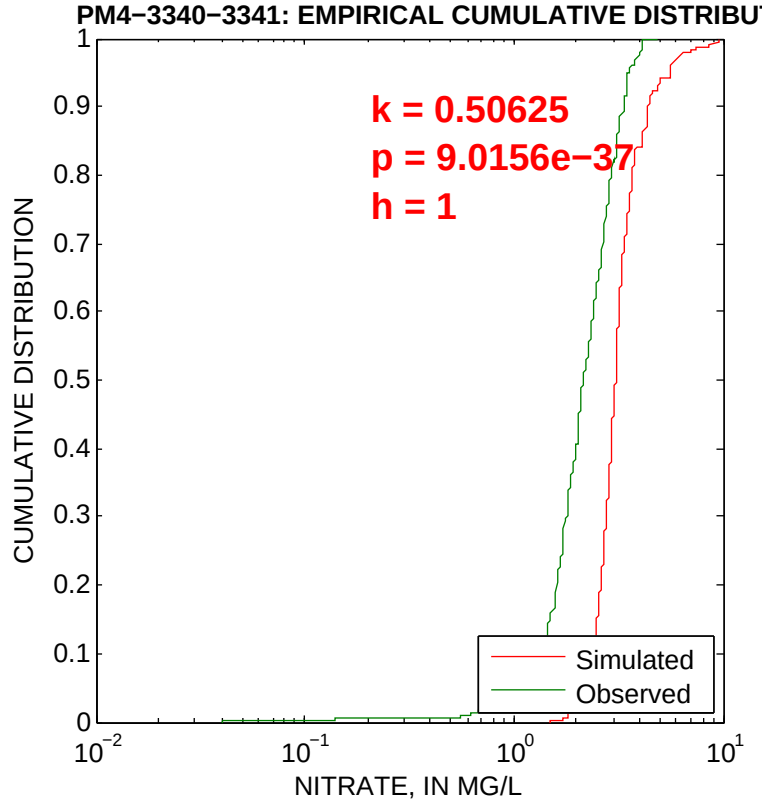












DATA SELECTION

scenario	file
P620171001WQ	NO3X.calib

plot: NO3X - nitrate

Dates: 1/1/1985 – 12/31/201

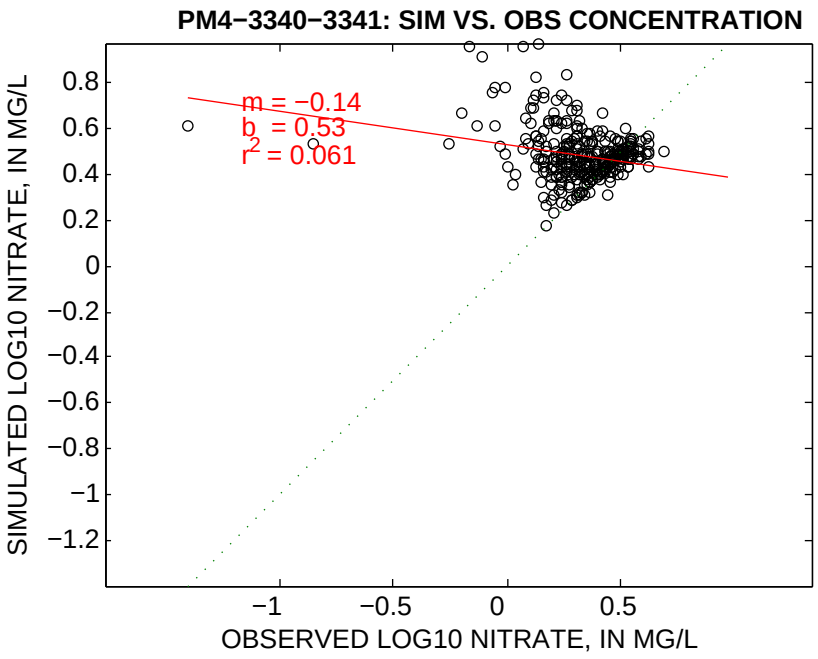
Drive	Directory	Observed
N/A	model	OBS20161101

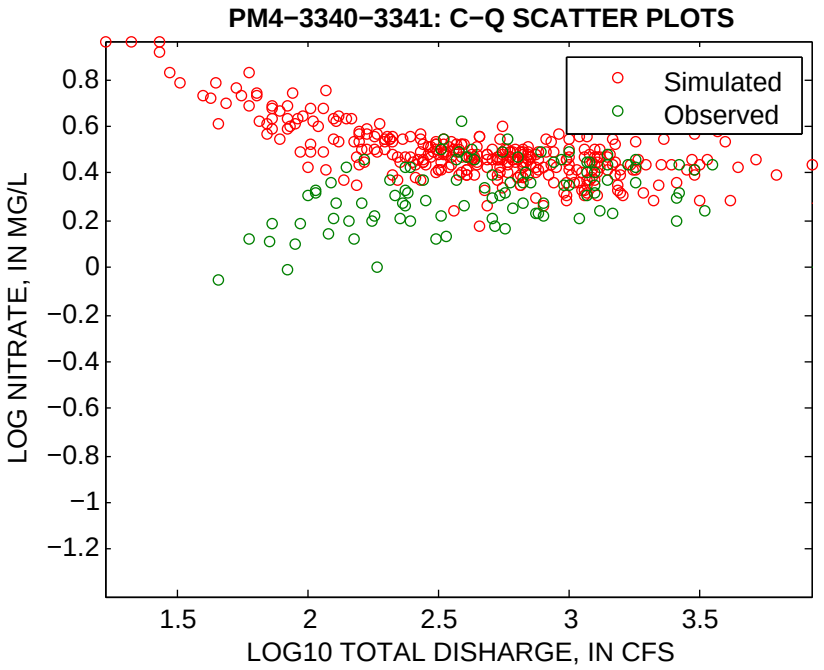
STATISTICS

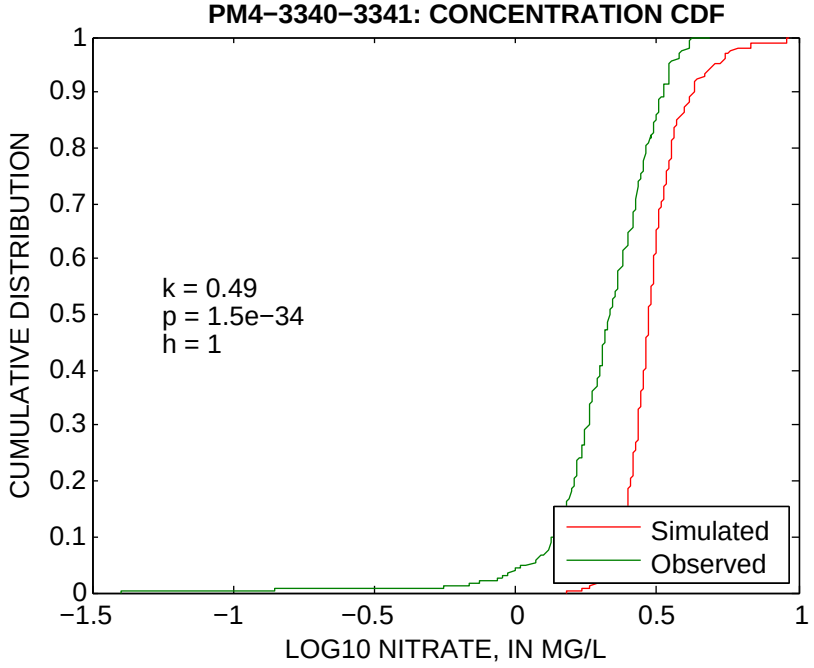
	n	320	320
		observe	simulate
min		0.04	1.5107
		-1.39794	0.179178
mean		2.26265	3.30522
		0.321793	0.500923
media		2.167	3.06795
		0.335858	0.486848
max		4.83	9.6523
		0.683947	0.984631
varian		0.611624	1.24571
		0.0381007	0.0142167
JB		0.091649	0.001
		0.001	0.001
		ra	log
%		46.0778	55.6662
err.va		3.59207	0.101927
rel.std.err		5.87301	2.67521
mod.eff		-4.87301	-1.67521

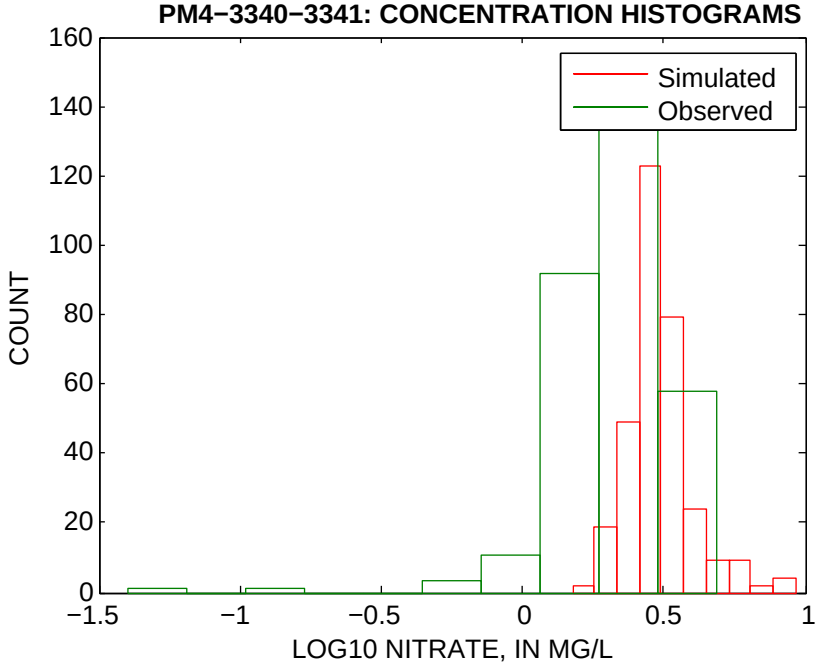
VERSION 2.1

ALL DATA
LOG10

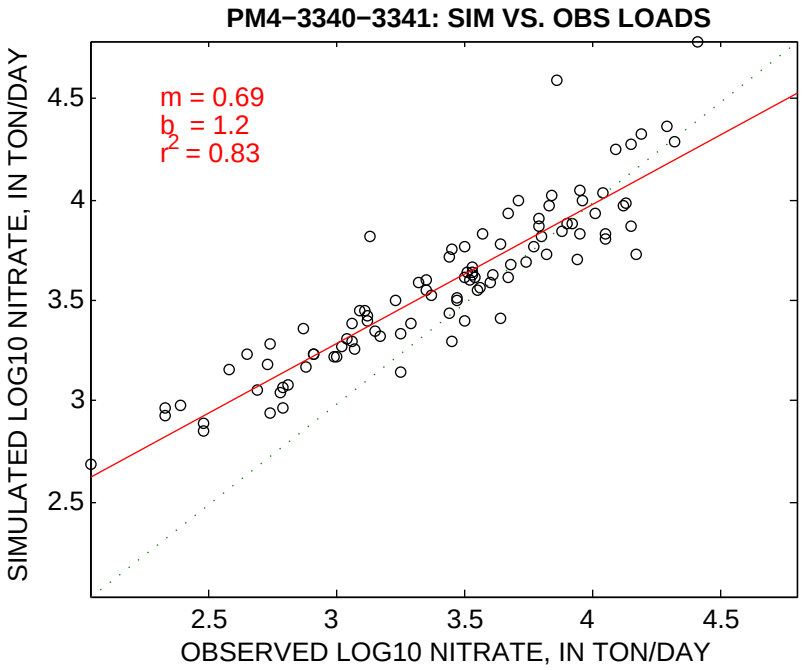


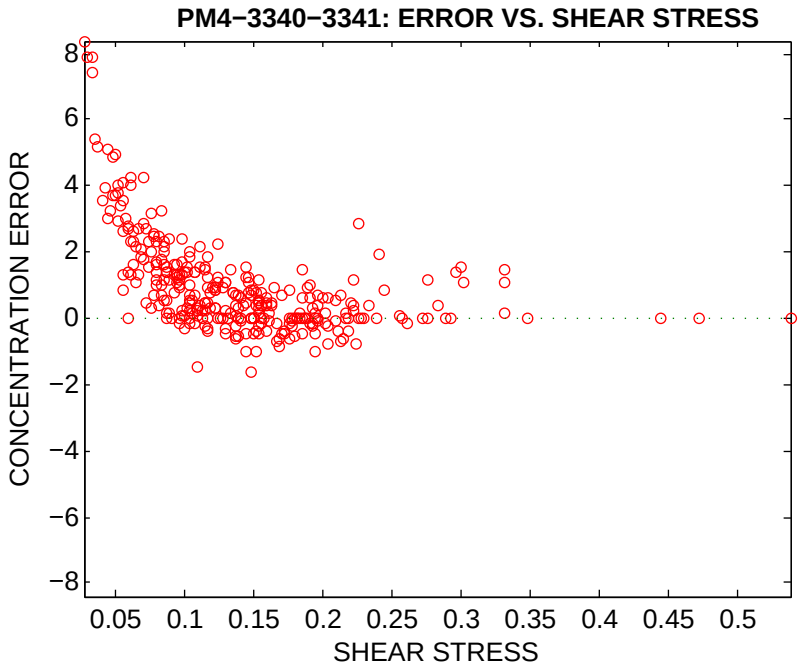


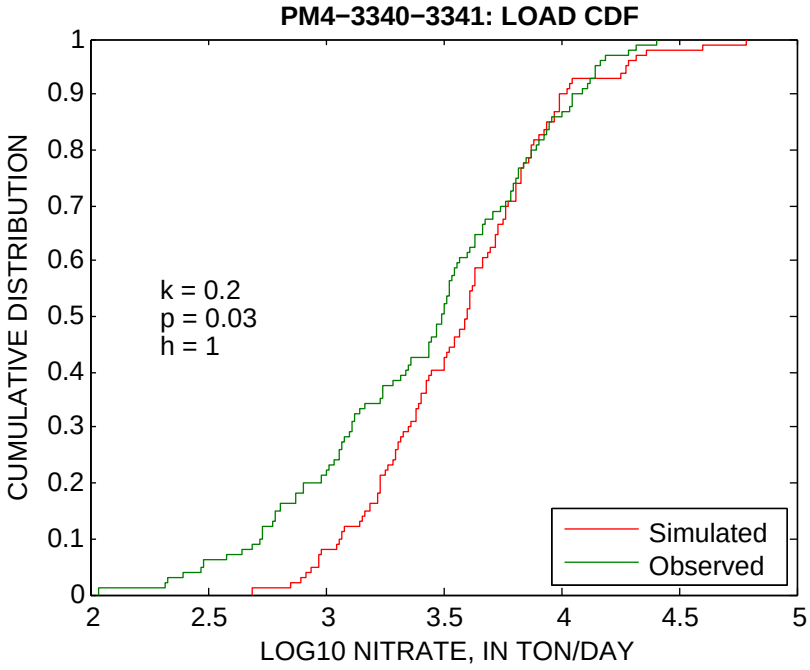


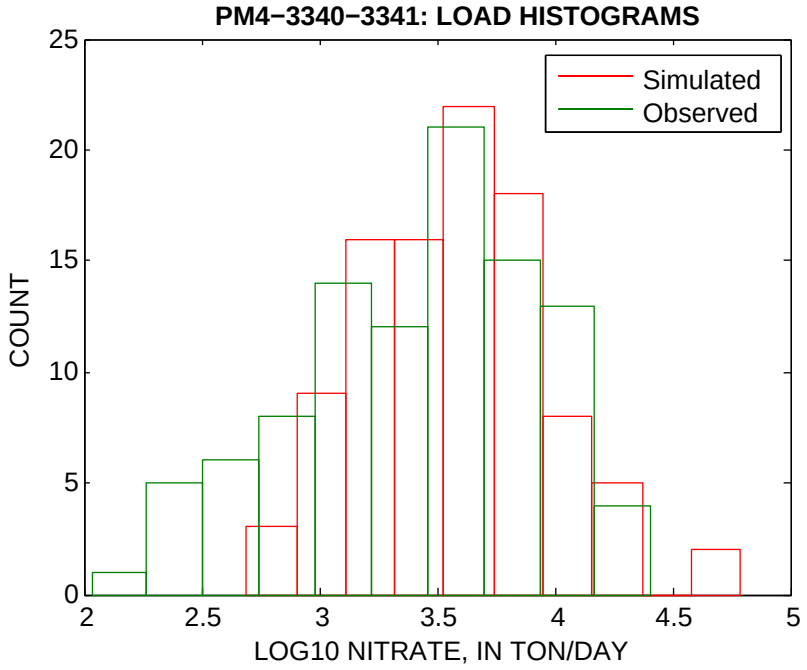


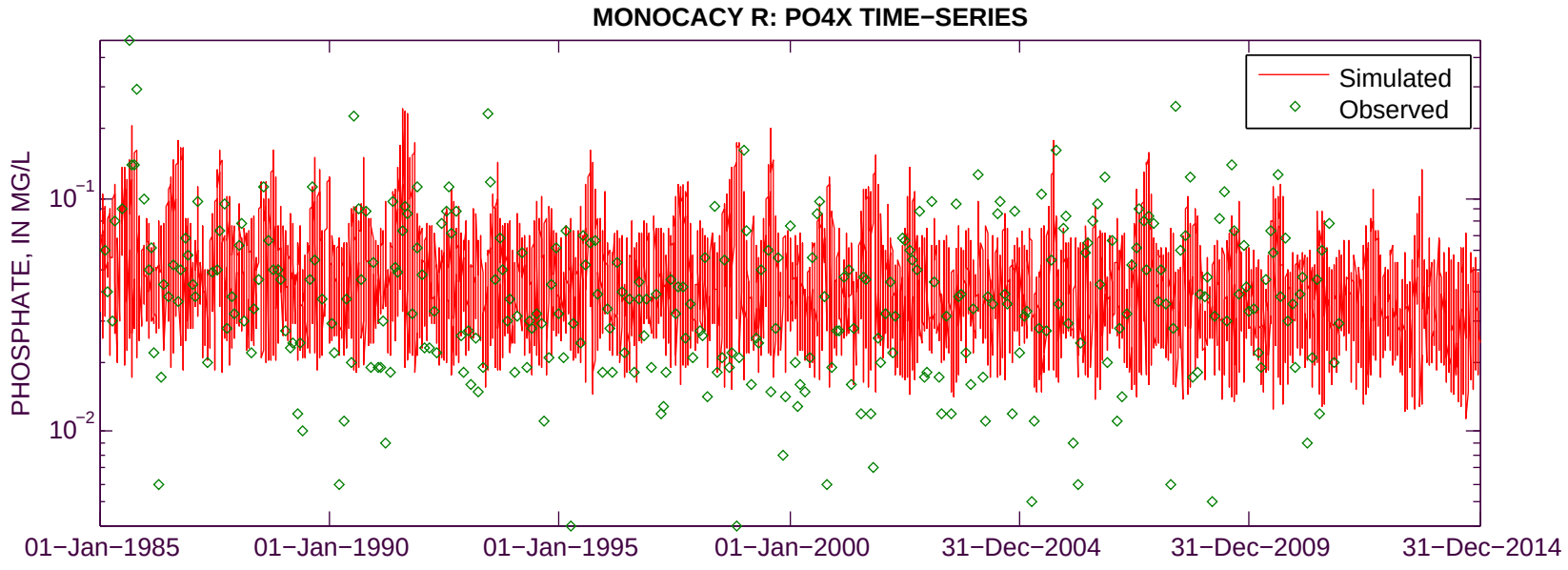
LOAD DATA
LOG10

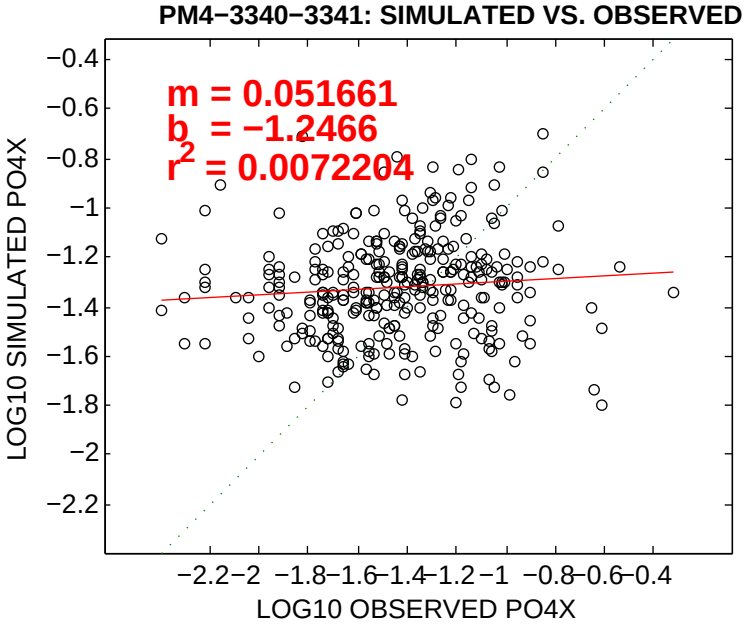


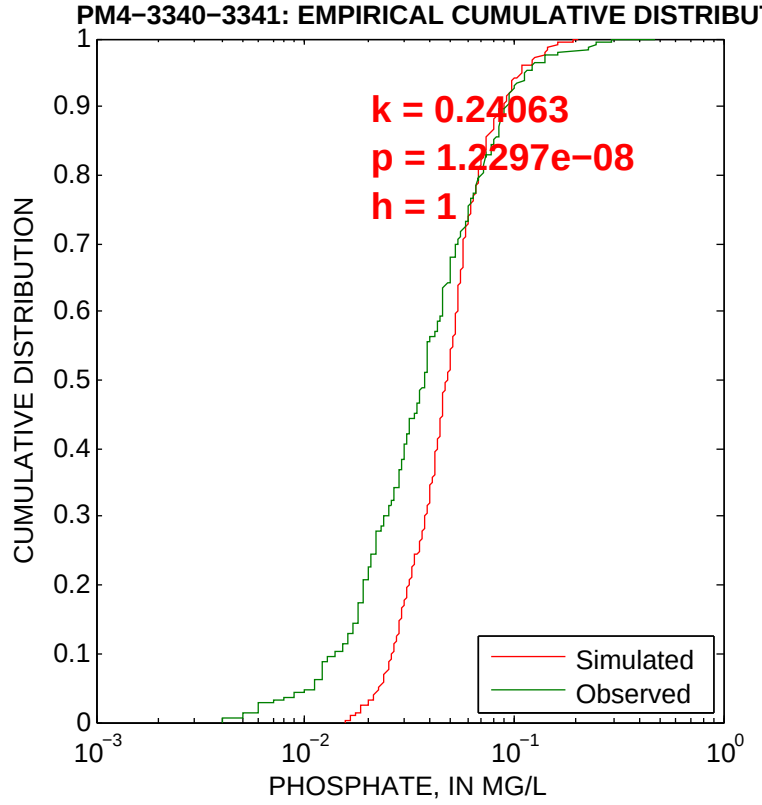












DATA SELECTION

scenario	file
P620171001WQ	PO4X.calib

plot: PO4X - phosphate

Dates: 1/1/1985 – 12/31/201

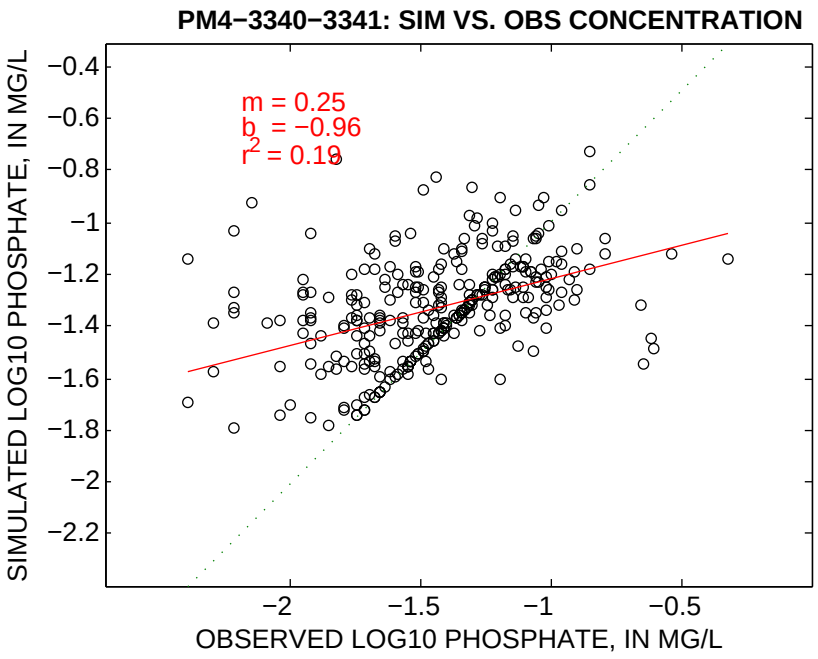
Drive	Directory	Observed
N/A	model	OBS20161101

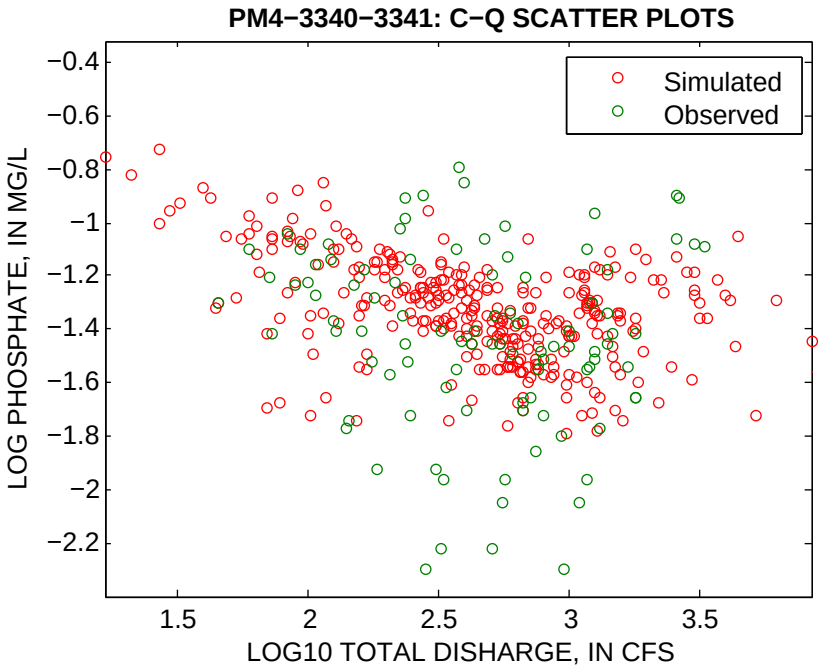
STATISTICS

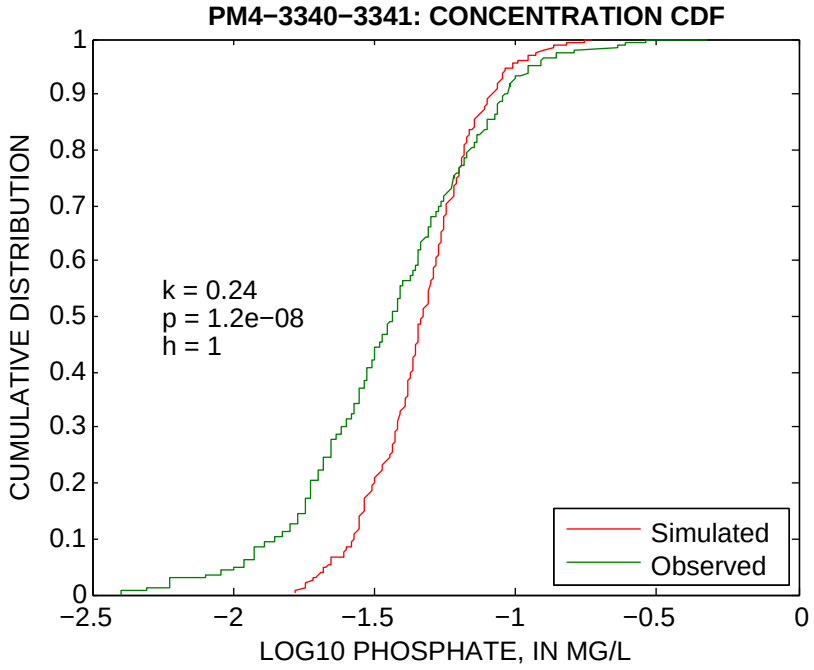
	n	320	320
		observe	simulate
min		0.004	0.015721
		-2.39794	-1.80352
mean		0.0486969	0.0534774
		-1.44069	-1.32104
media		0.037	0.0478115
		-1.4318	-1.32047
max		0.48	0.20096
		-0.318759	-0.69689
varian		0.00212036	0.00079264
		0.111481	0.041206
JB		0.001	0.001
		0.312254	0.145007
		ra	log
%		9.81686	-8.30505
err.va		0.00279557	0.155529
rel.std.err		1.31844	1.39512
mod.eff		-0.318444	-0.395122

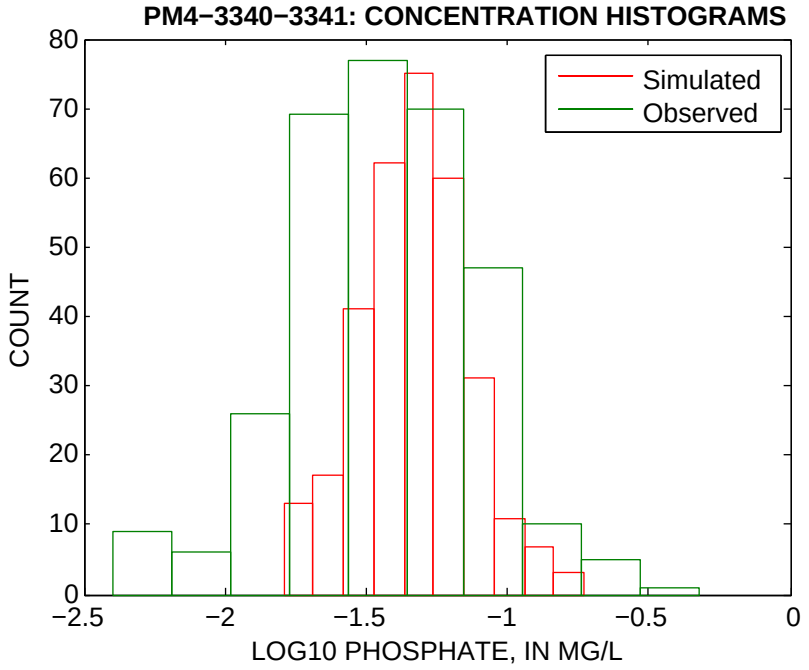
VERSION 2.1

ALL DATA
LOG10

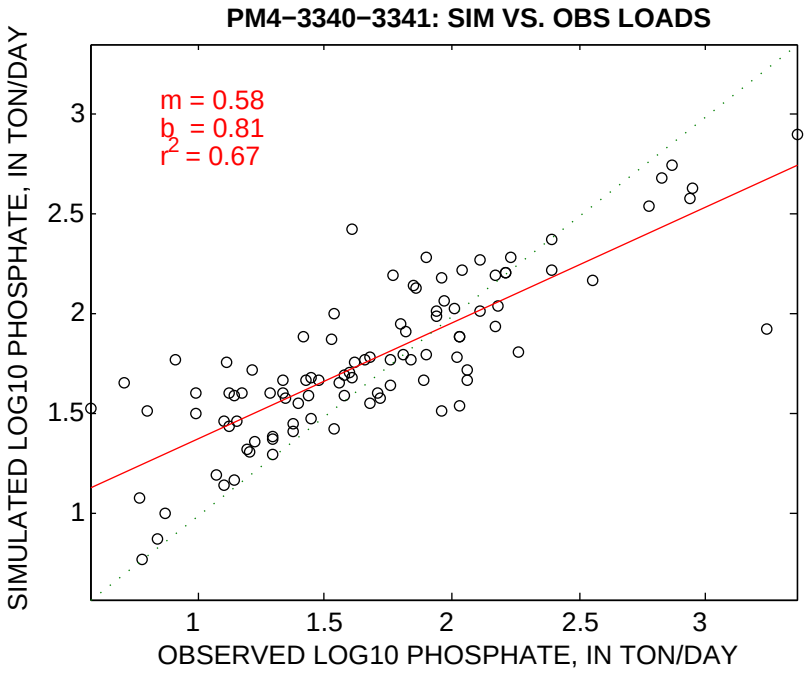


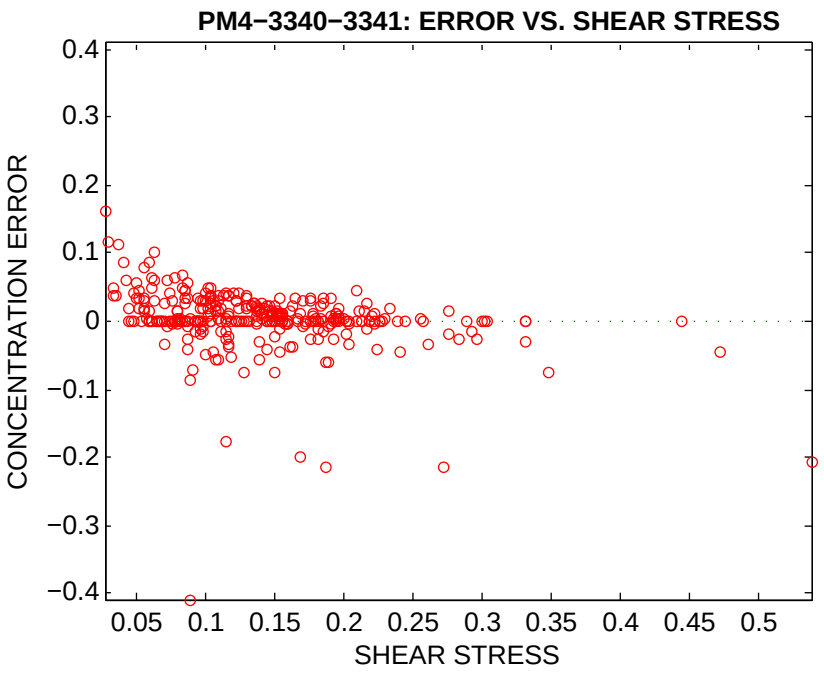


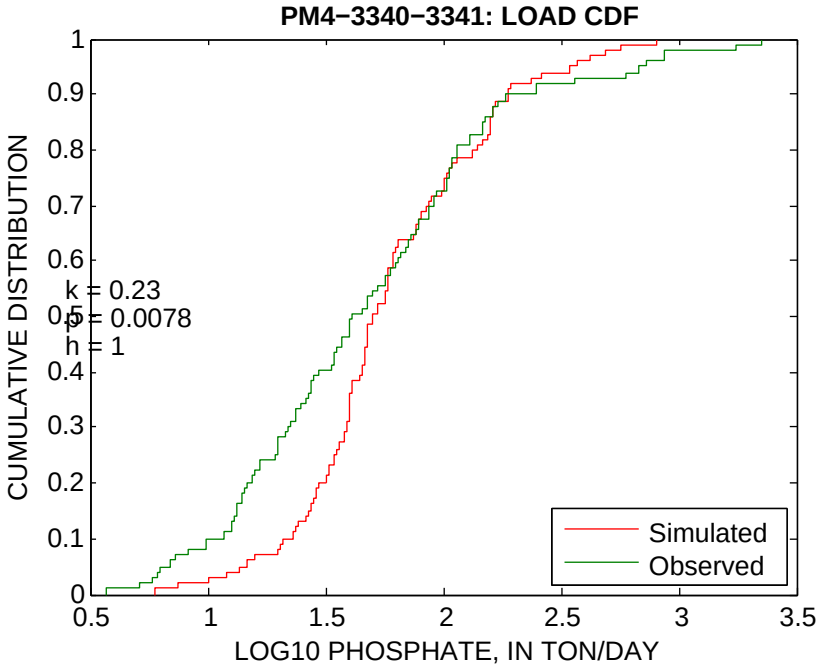


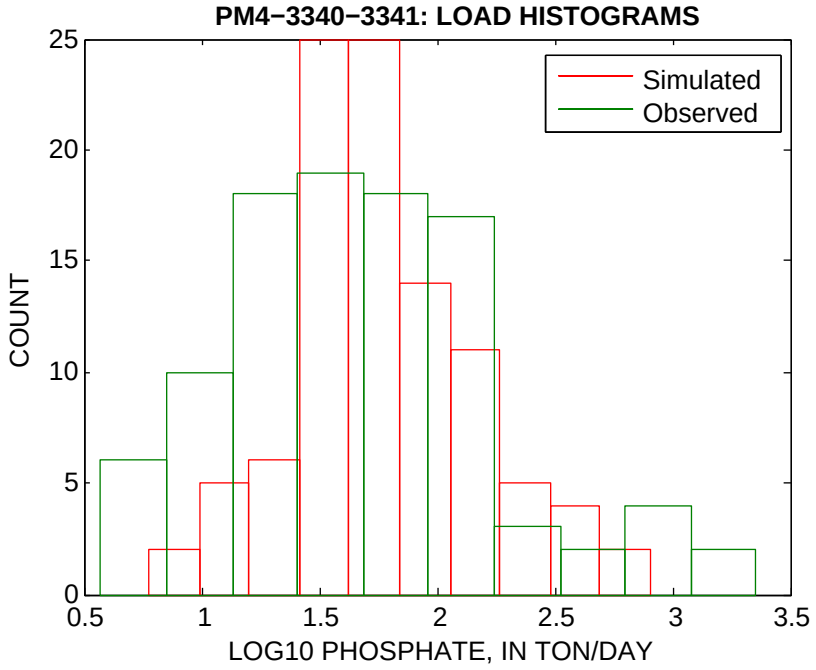


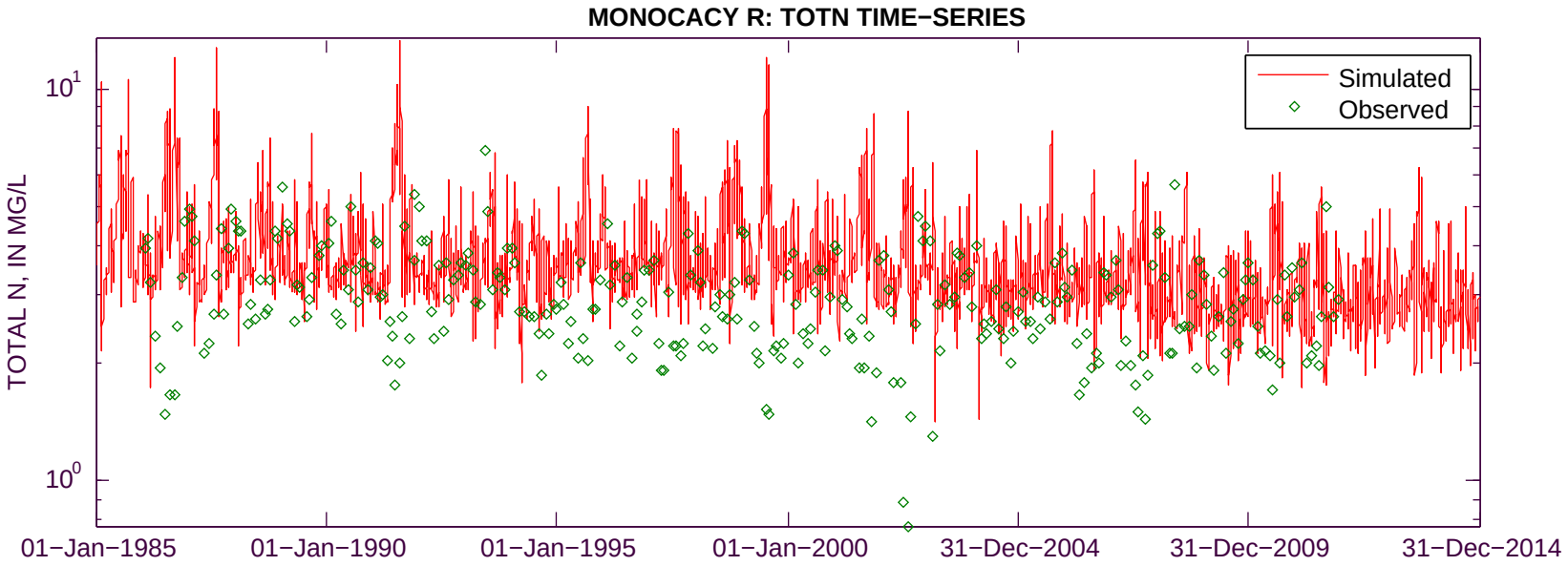
LOAD DATA
LOG10

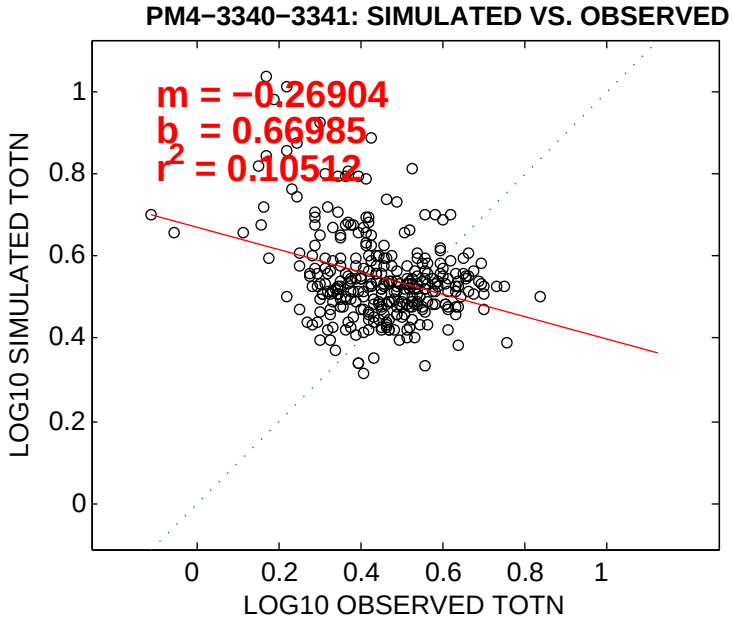


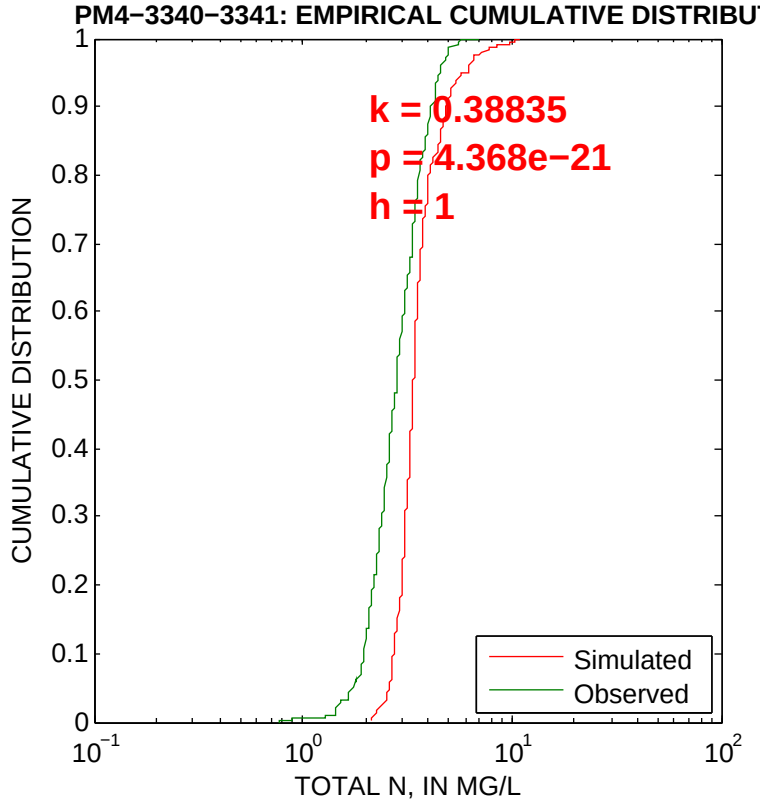












DATA SELECTION

scenario	file
P620171001WQ	TOTN.calib

plot: TOTN - total nitrogen

Dates: 1/1/1985 – 12/31/201

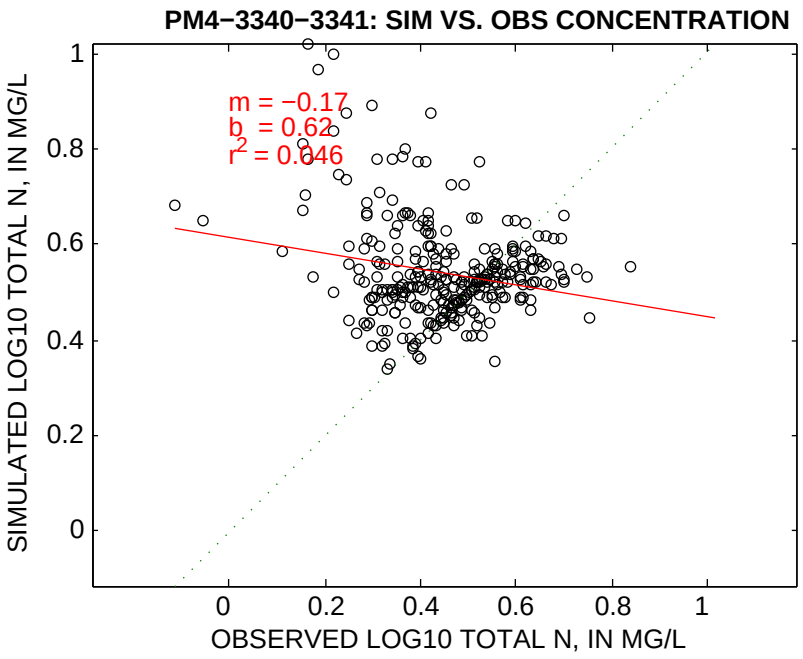
Drive	Directory	Observed
N/A	model	OBS20161101

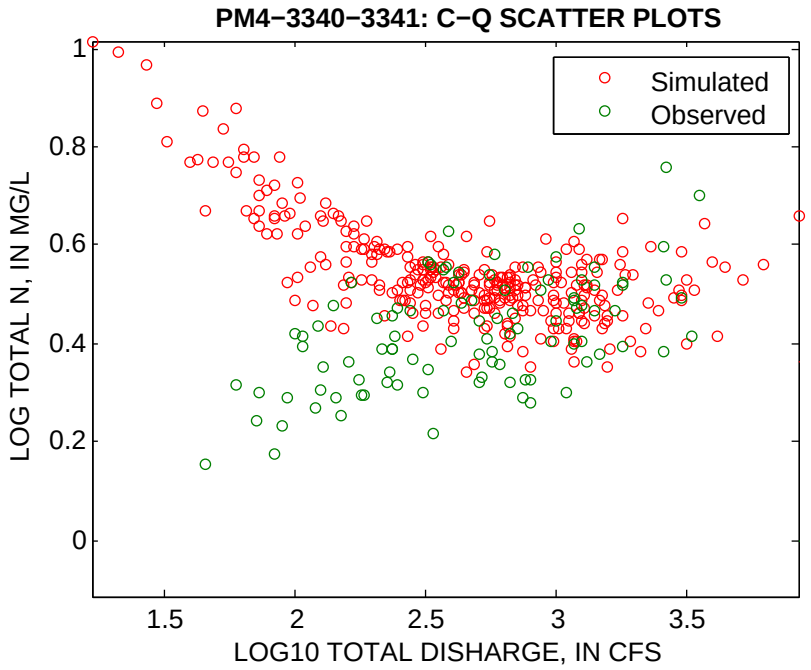
STATISTICS

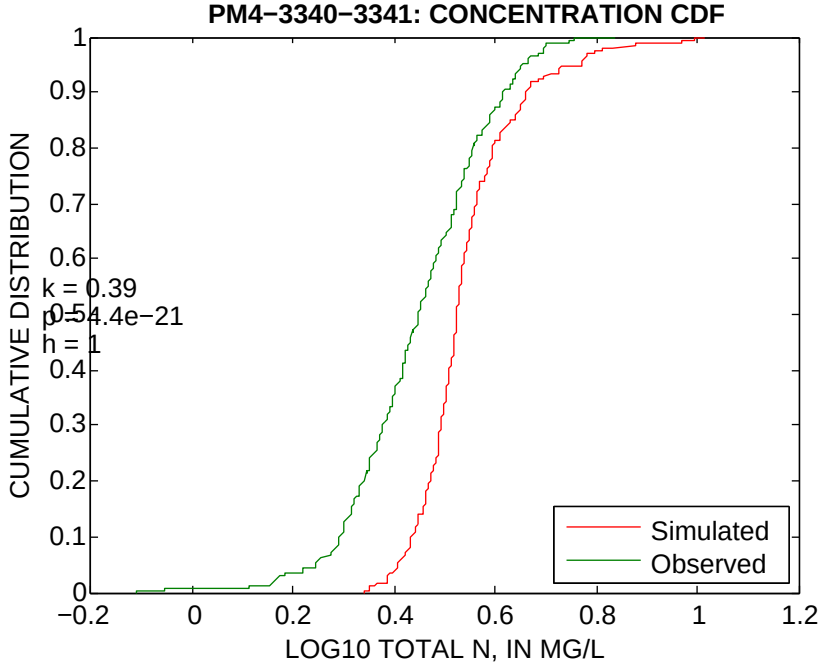
	n	observe	simulate
		309	309
min		0.77	2.0779
		-0.113509	0.317625
mean		2.93767	3.67318
		0.448343	0.549225
media		2.8	3.39
		0.447158	0.5302
max		6.9	10.957
		0.838849	1.03969
varian		0.786413	1.35376
		0.0176147	0.0121296
JB		0.001	0.001
		0.002828	0.001
		ra	log
%		25.037	22.5011
err.va		3.28883	0.0494328
rel.std.err		4.18206	2.80634
mod.eff		-3.18206	-1.80634

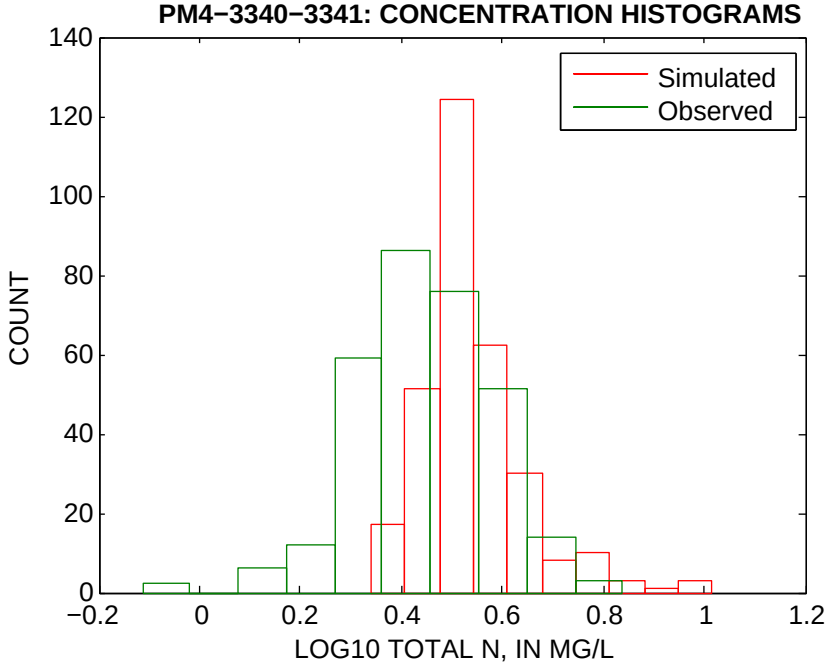
VERSION 2.1

ALL DATA
LOG10

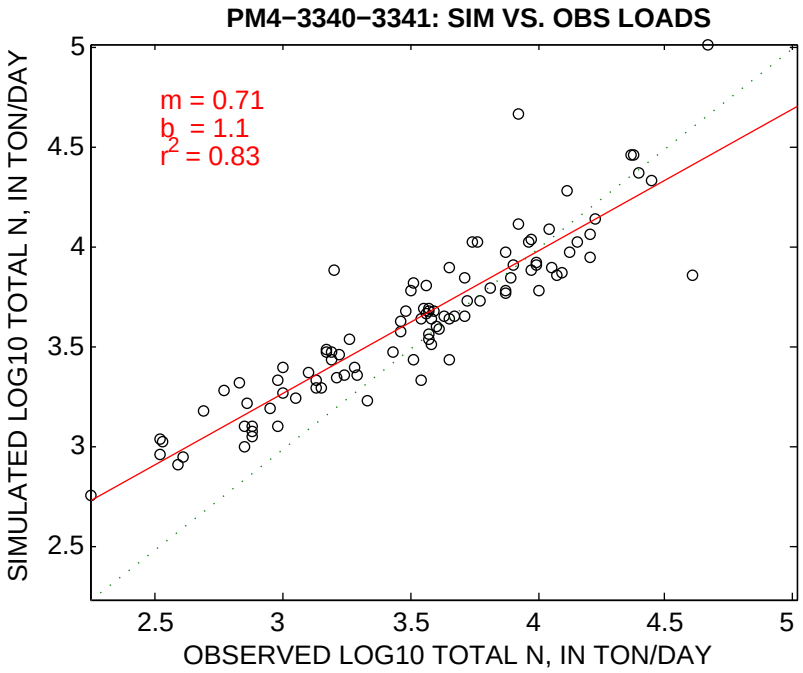


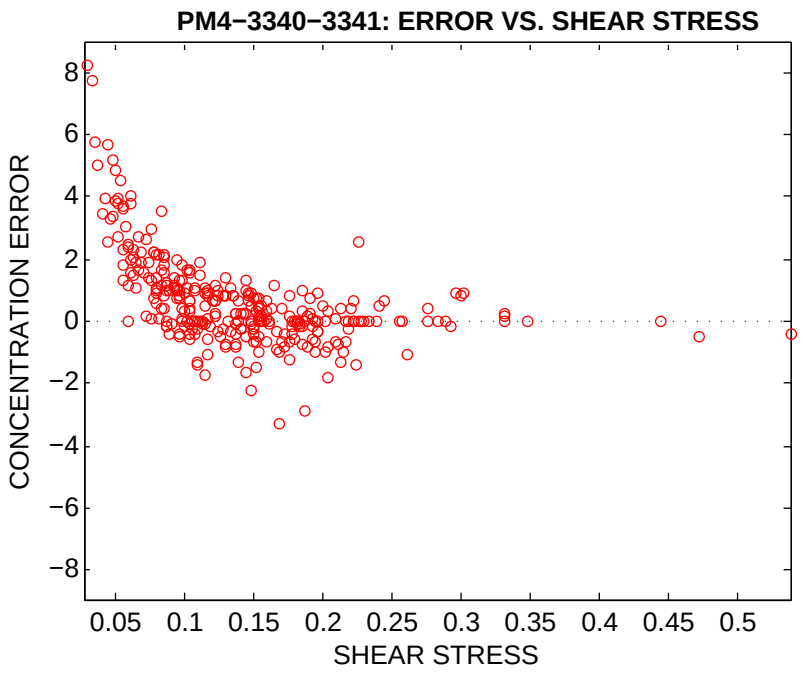


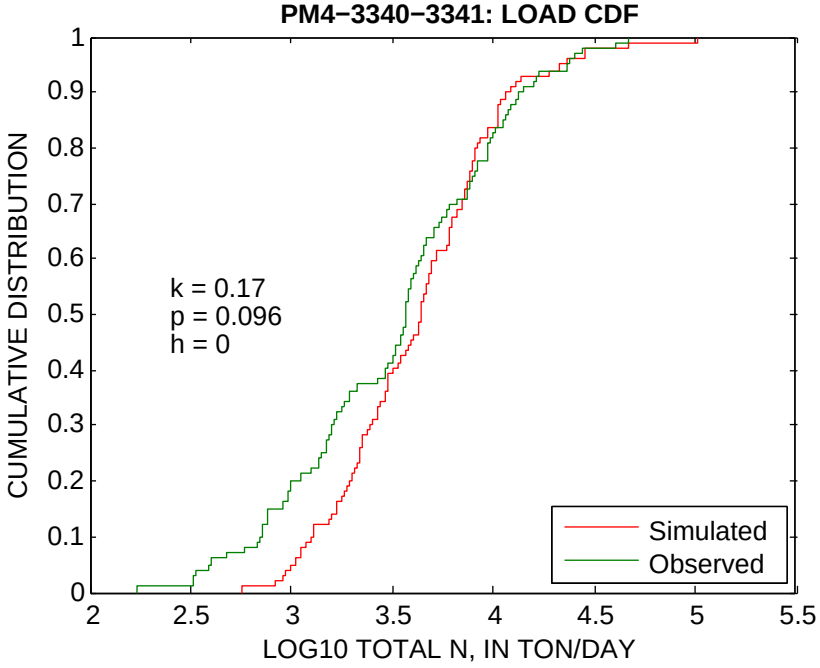


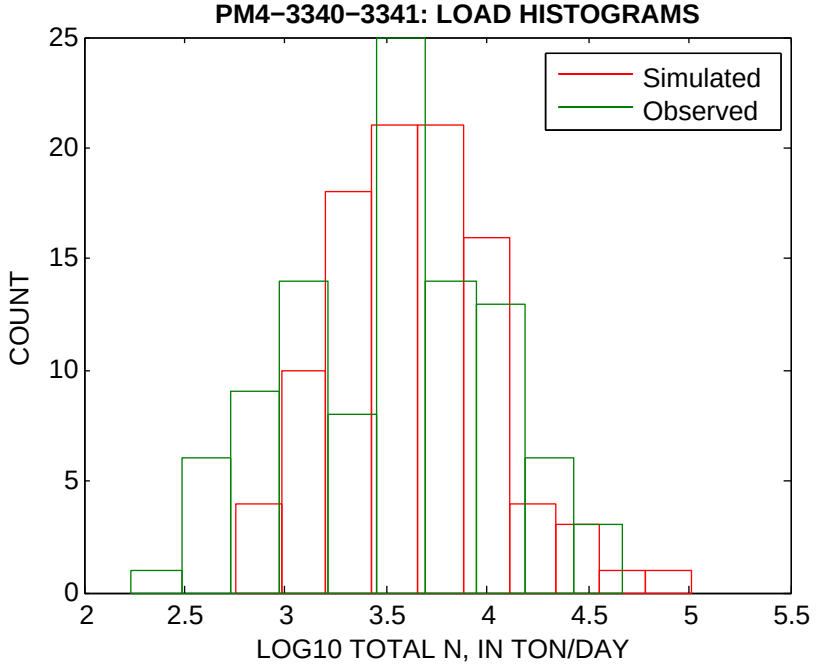


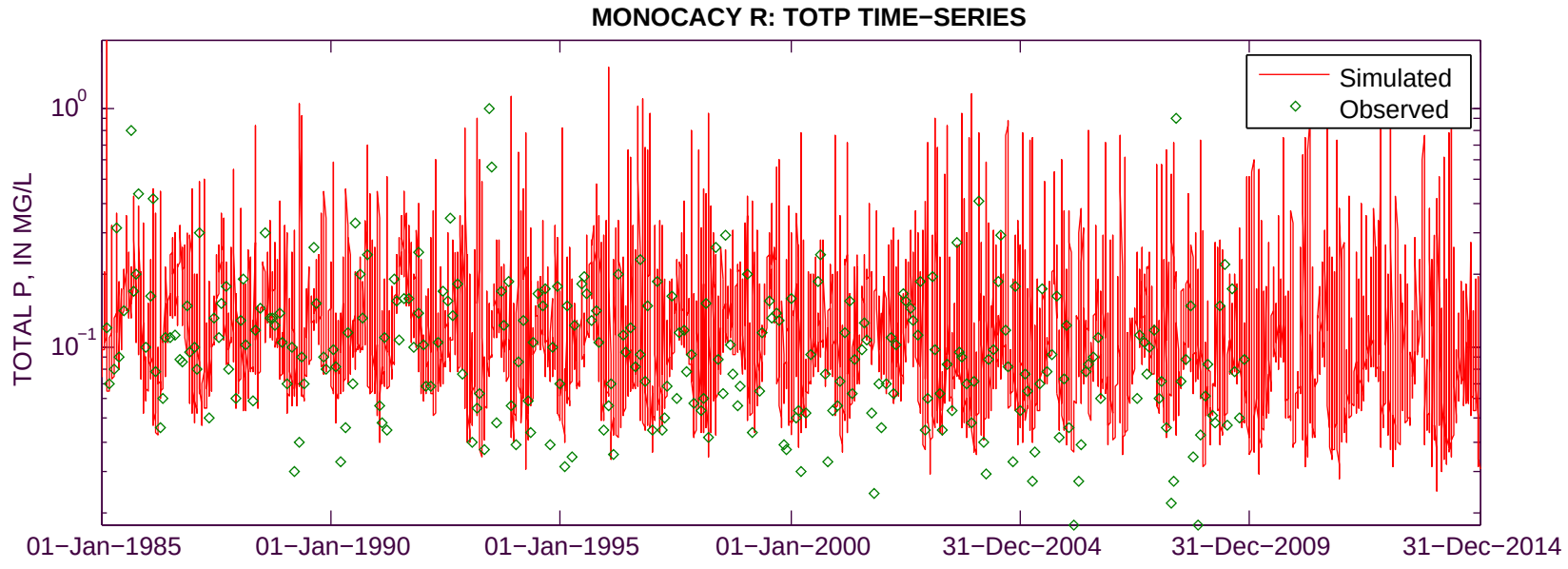
LOAD DATA
LOG10

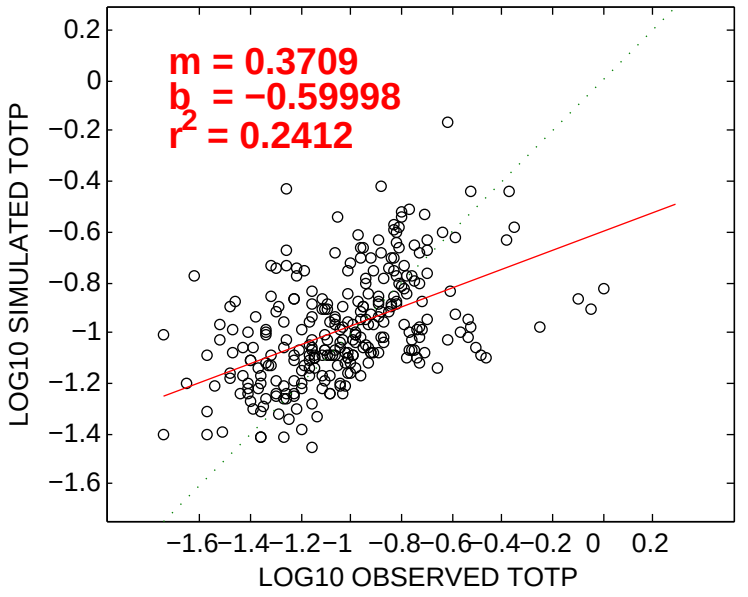


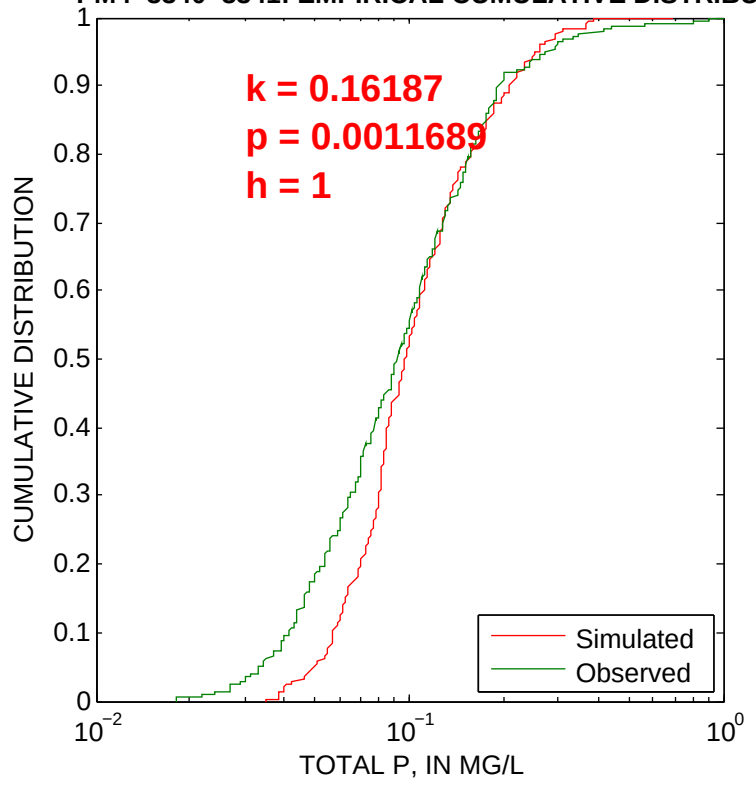












DATA SELECTION

scenario	file
P620171001WQ	TOTP.calib

plot: TOTP - total phosphorus

Dates: 1/1/1985 – 12/31/201

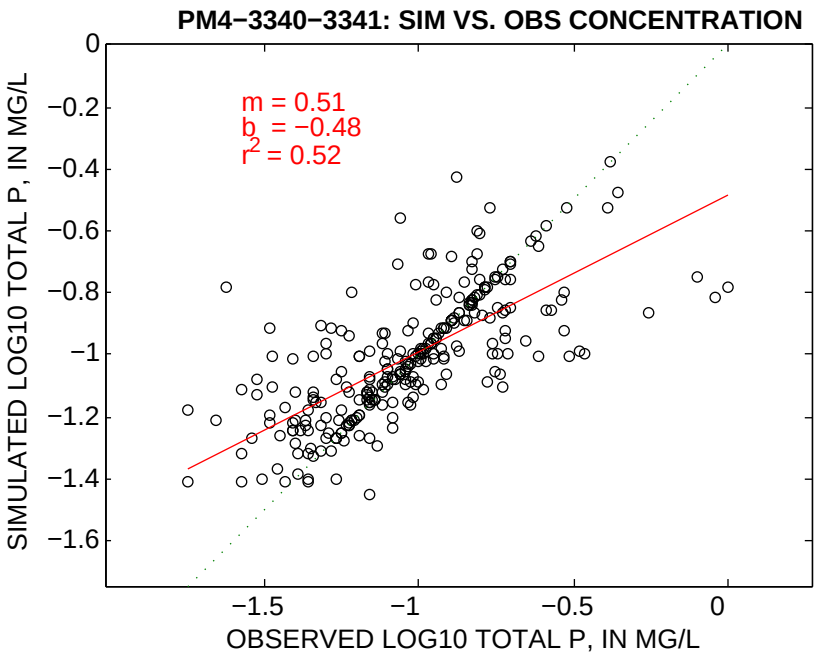
Drive	Directory	Observed
N/A	model	OBS20161101

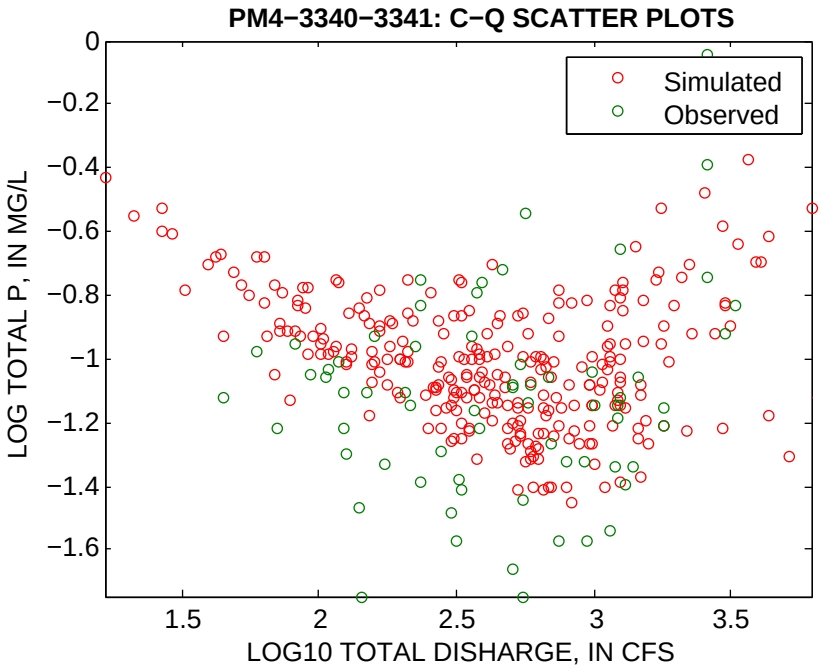
STATISTICS

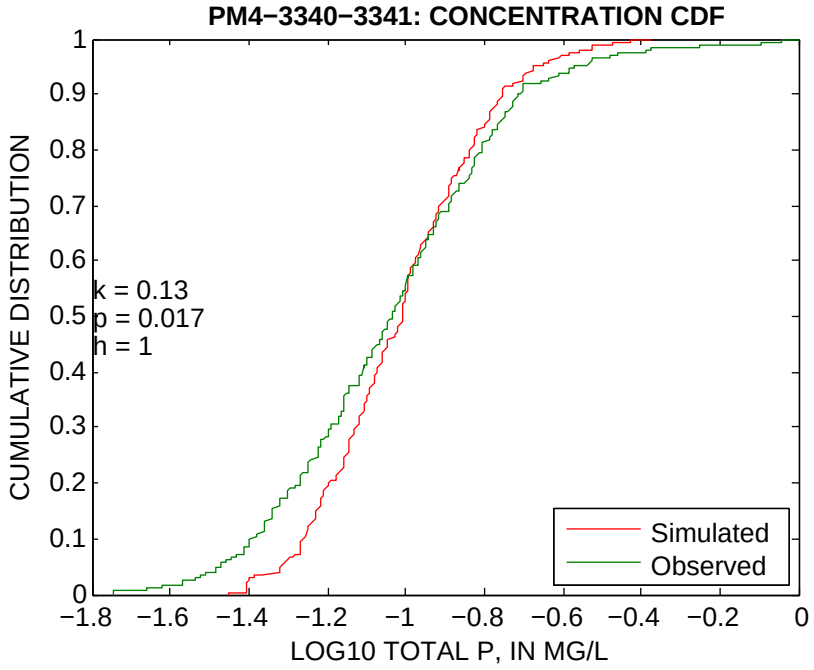
	n	278	278
		observe	simulate
min		0.018	0.034724
		-1.74473	-1.45937
mean		0.118079	0.118923
		-1.03269	-0.983002
media		0.092	0.0970905
		-1.03621	-1.01282
max		1	0.68938
		0	-0.161541
varian		0.0123438	0.00528922
		0.0815217	0.0464964
JB		0.001	0.001
		0.005850	0.005976
		ra	log
%		0.714294	-4.8113
err.va		0.0127814	0.0700224
rel.std.err		1.03545	0.858942
mod.eff		-0.0354529	0.141058

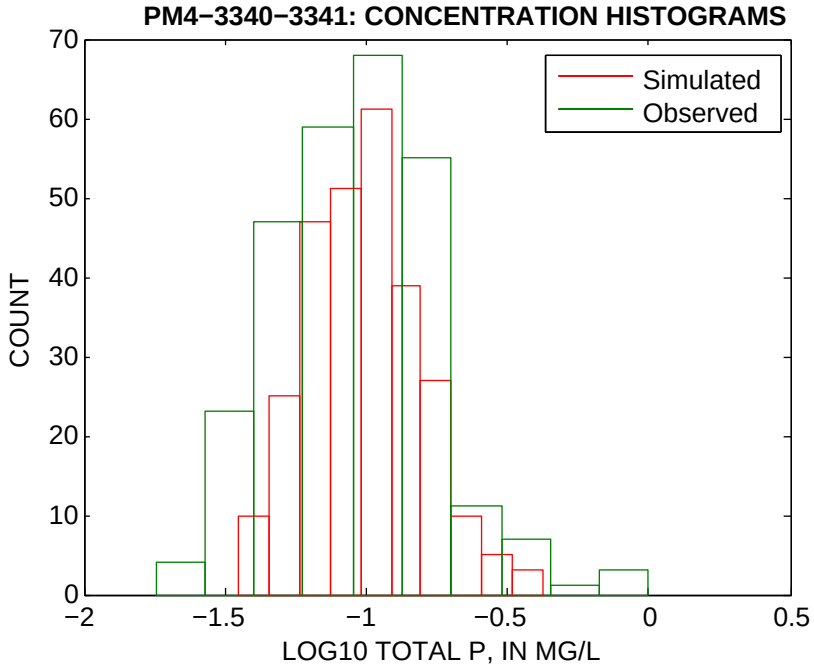
VERSION 2.1

ALL DATA
LOG10

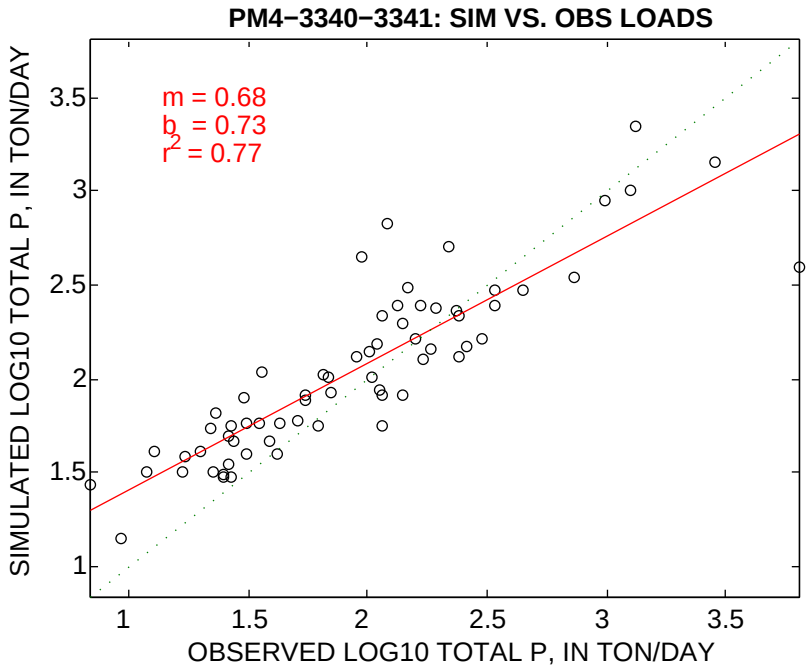


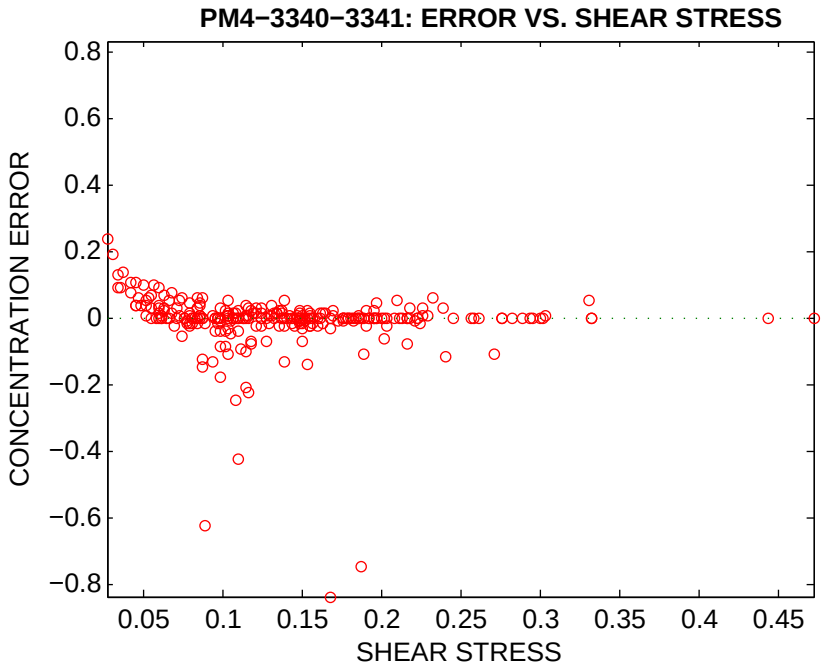


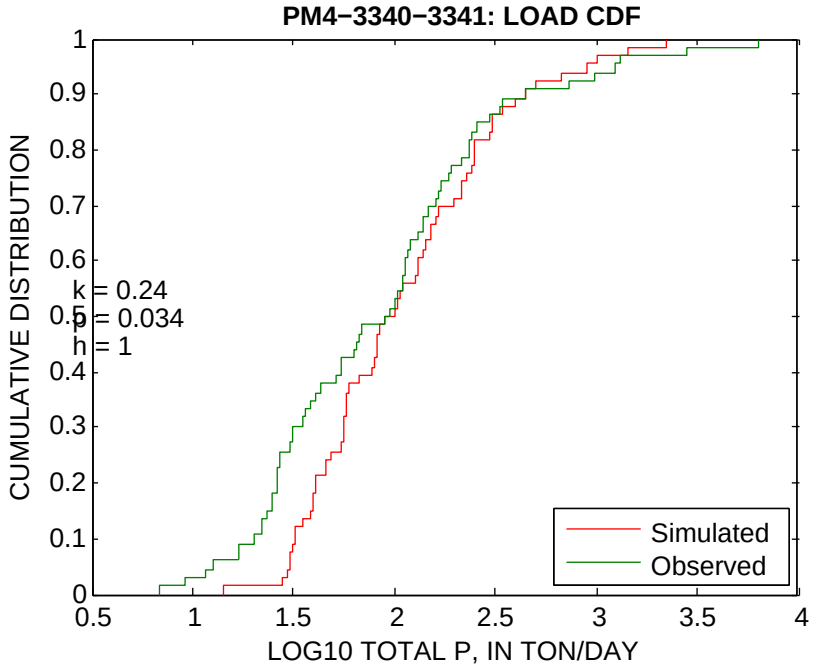


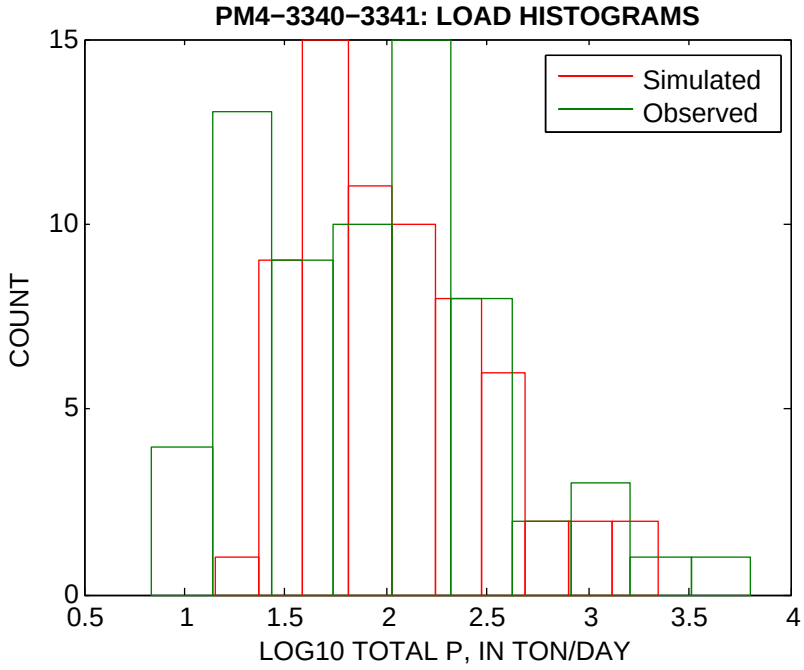


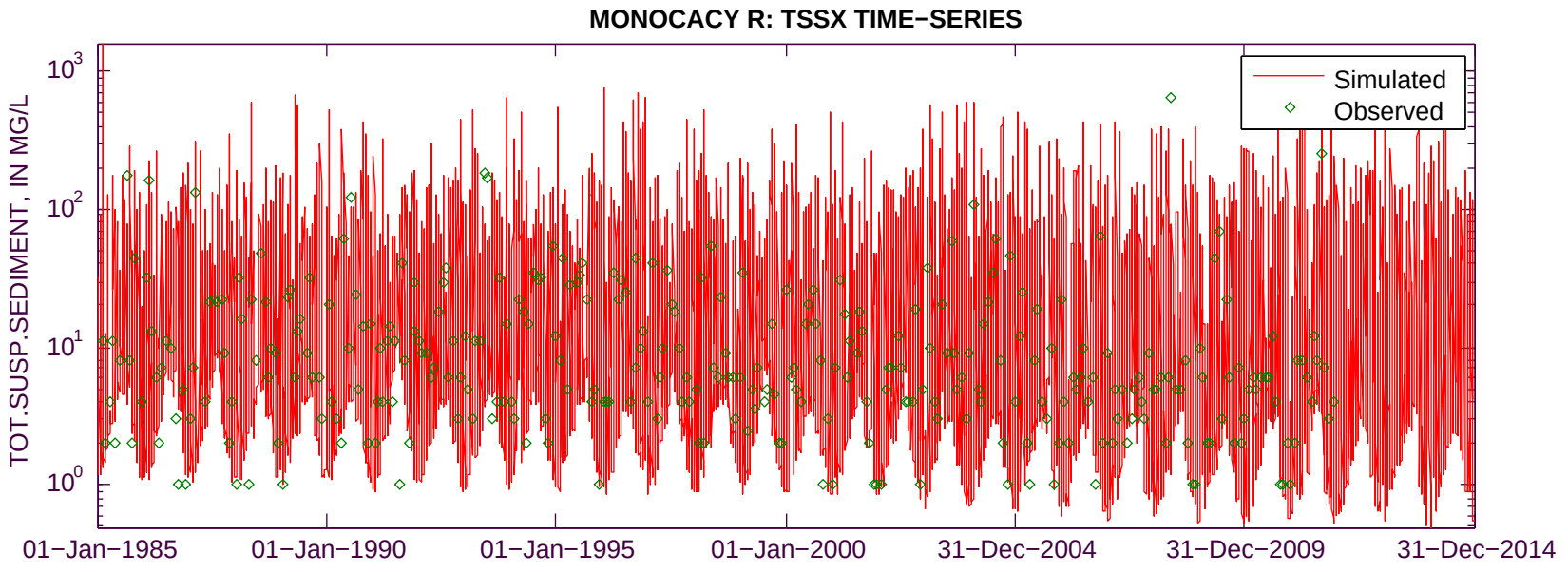
LOAD DATA
LOG10

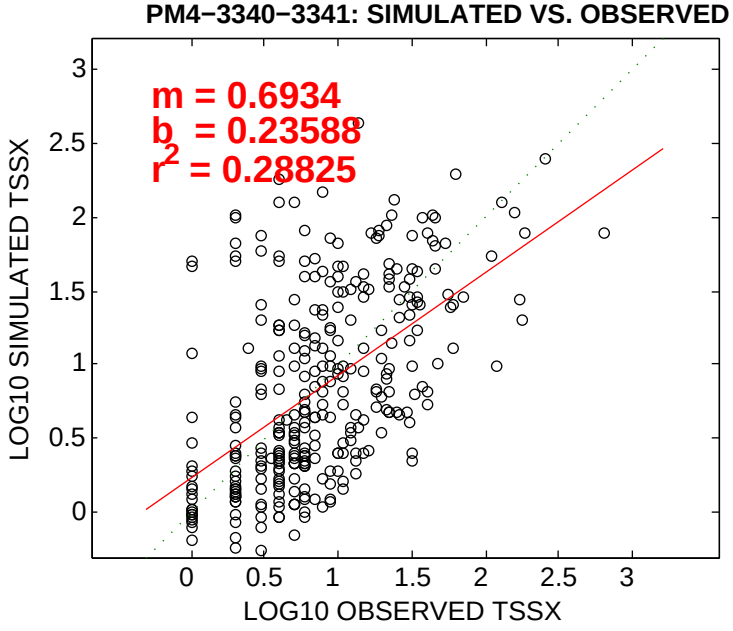


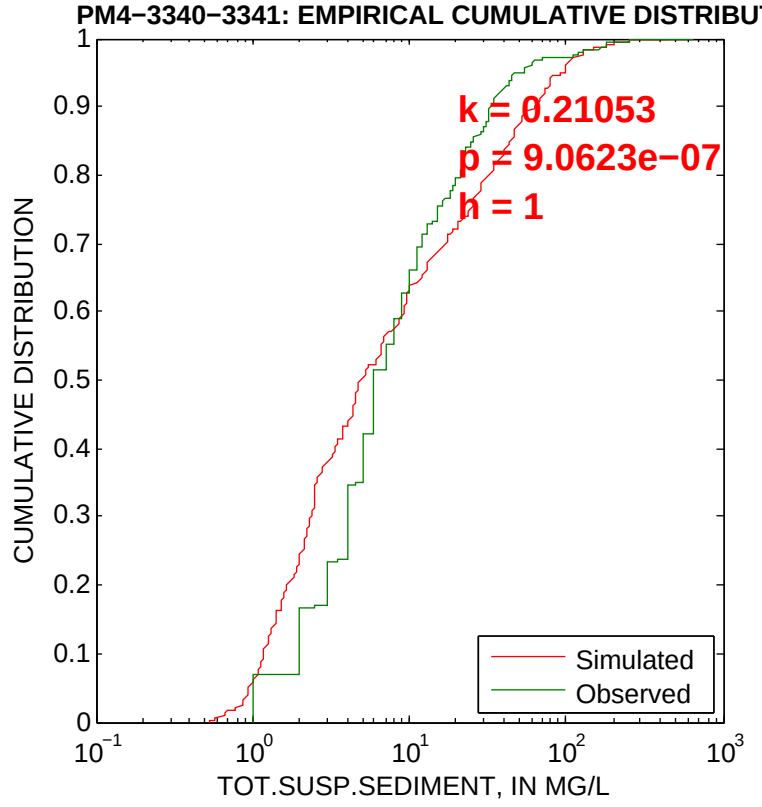












DATA SELECTION

scenario	file
P620171001WQ	TSSX.calib

plot: TSSX - total suspended ...

Dates: 1/1/1985 — 12/31/201

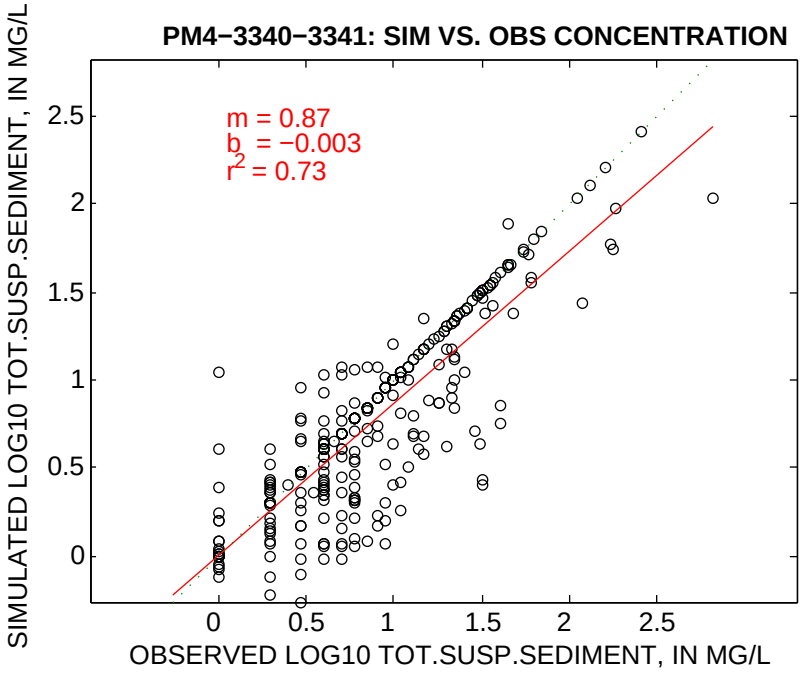
Drive	Directory	Observed
N/A	model	OBS20161101

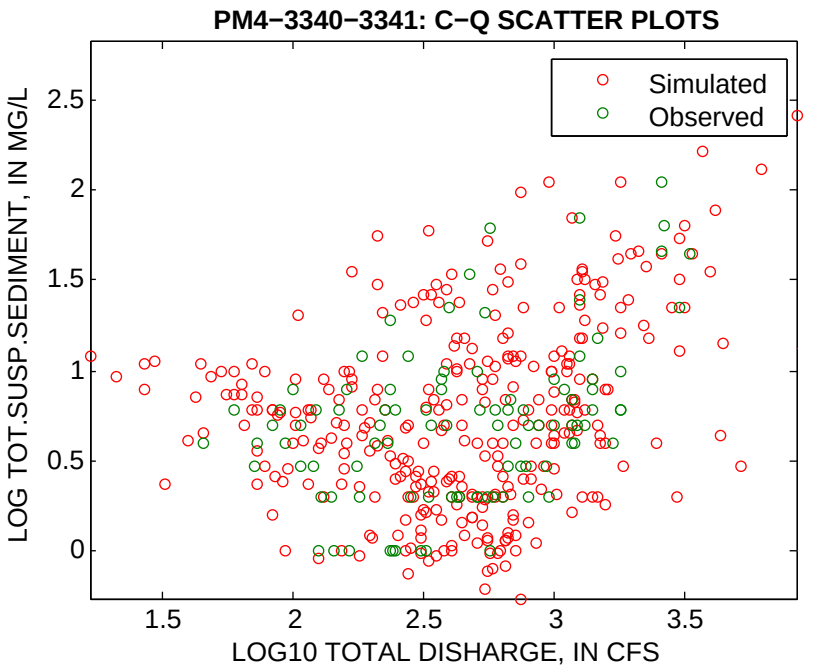
STATISTICS

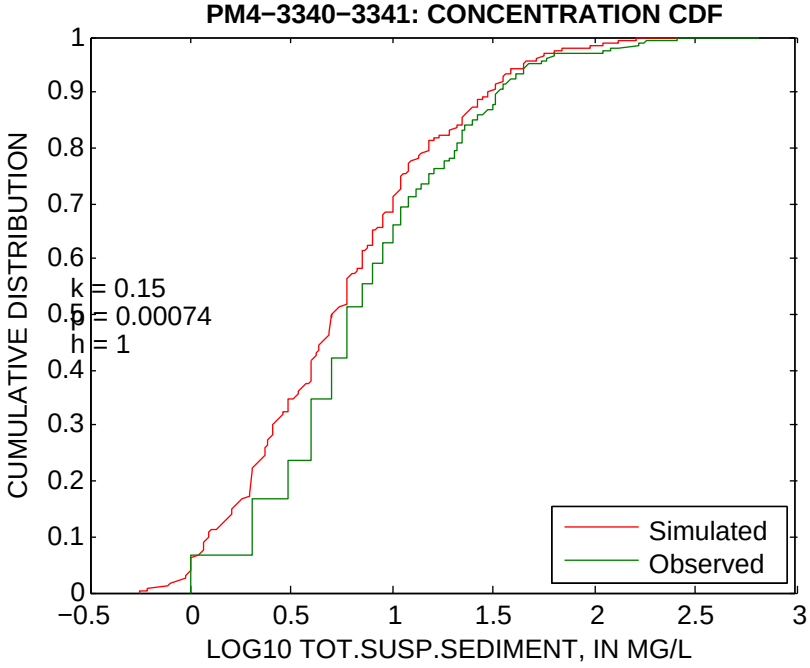
	n	323	323
		observe	simulate
min		1	0.53799
		0	-0.269226
mean		17.1316	21.3161
		0.872915	0.841158
media		6	4.9648
		0.778151	0.695902
max		653	438.23
		2.81491	2.6417
varian		2020.22	1649.21
		0.250403	0.417672
JB		0.001	0.001
		0.002318	0.001827
		ra	log
%		24.426	-3.63797
err.va		2608.53	0.321828
rel.std.err		1.29121	1.28524
mod.eff		-0.291213	-0.285242

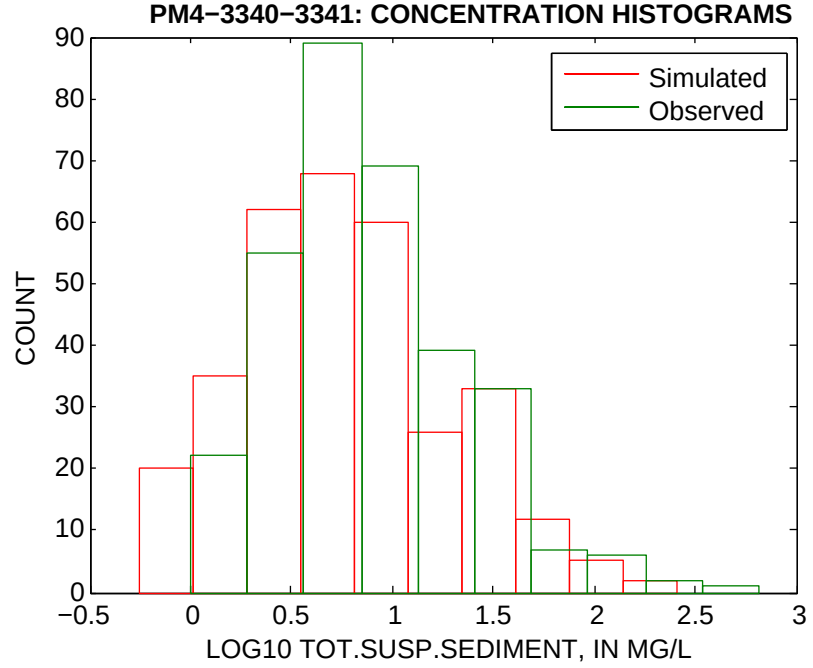
VERSION 2.1

ALL DATA
LOG10

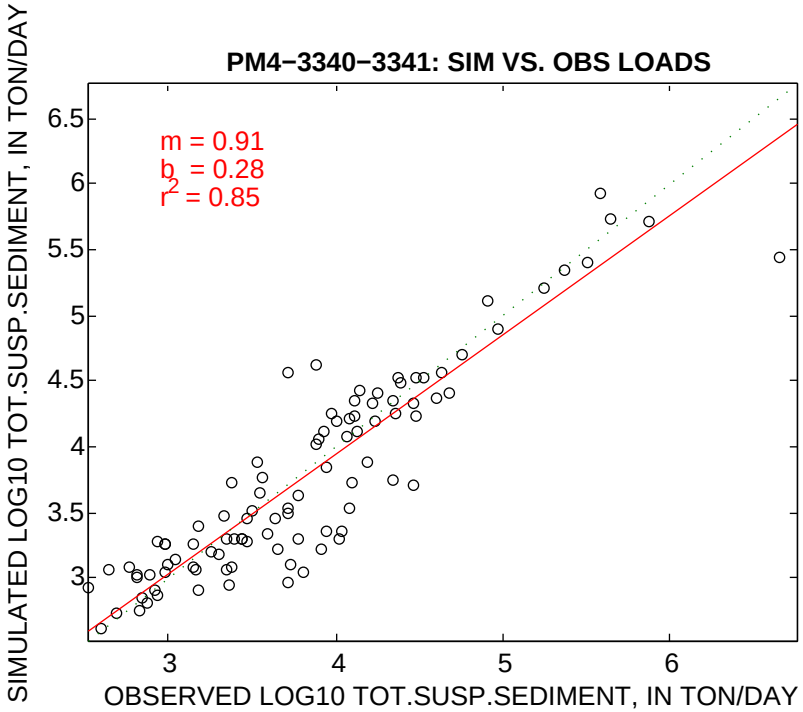


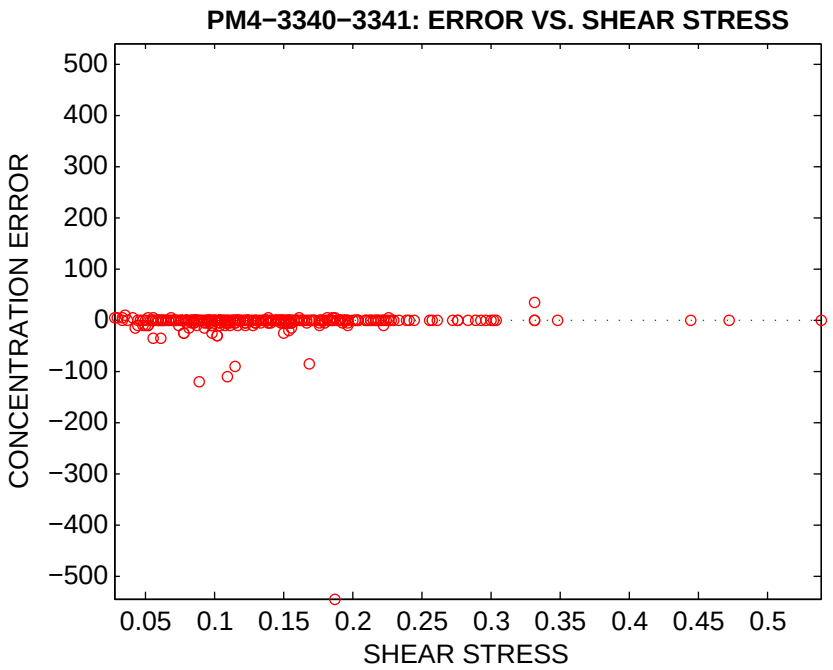


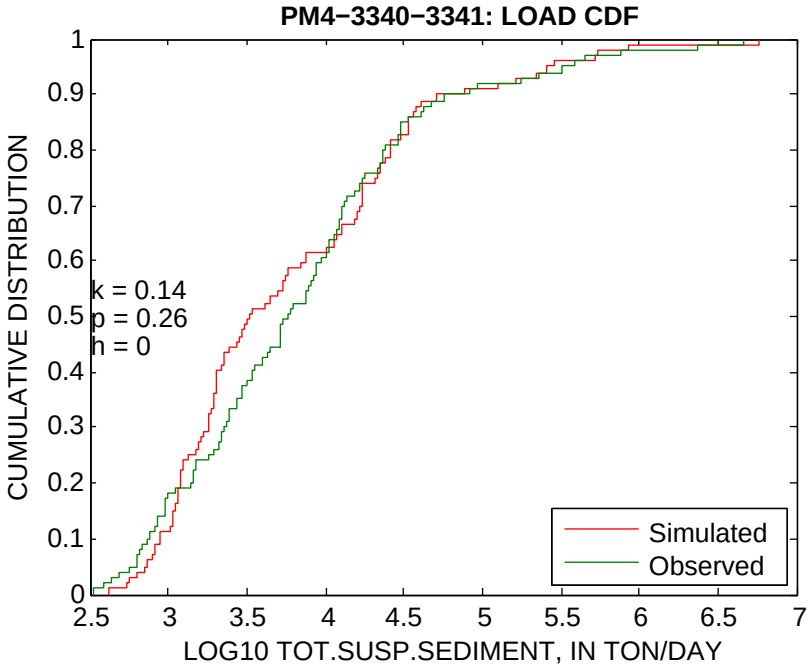


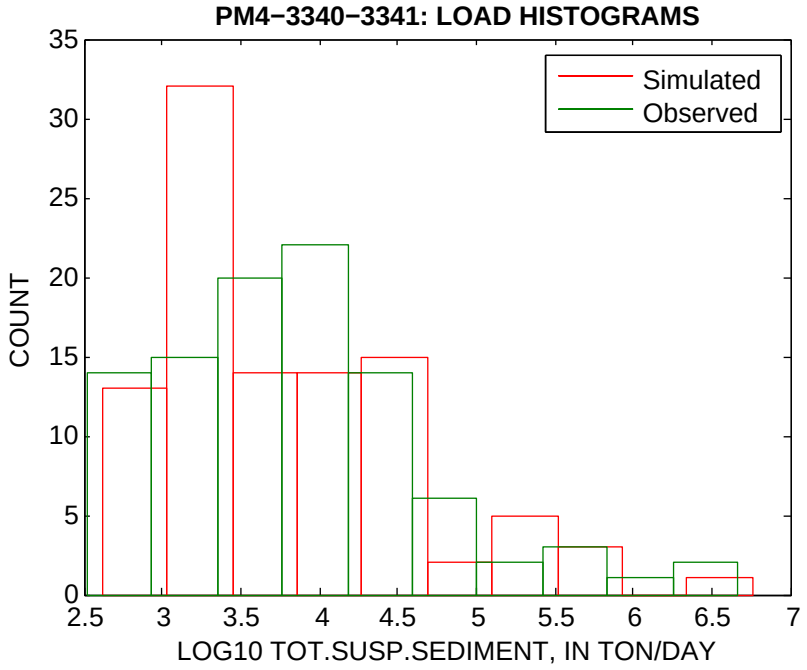


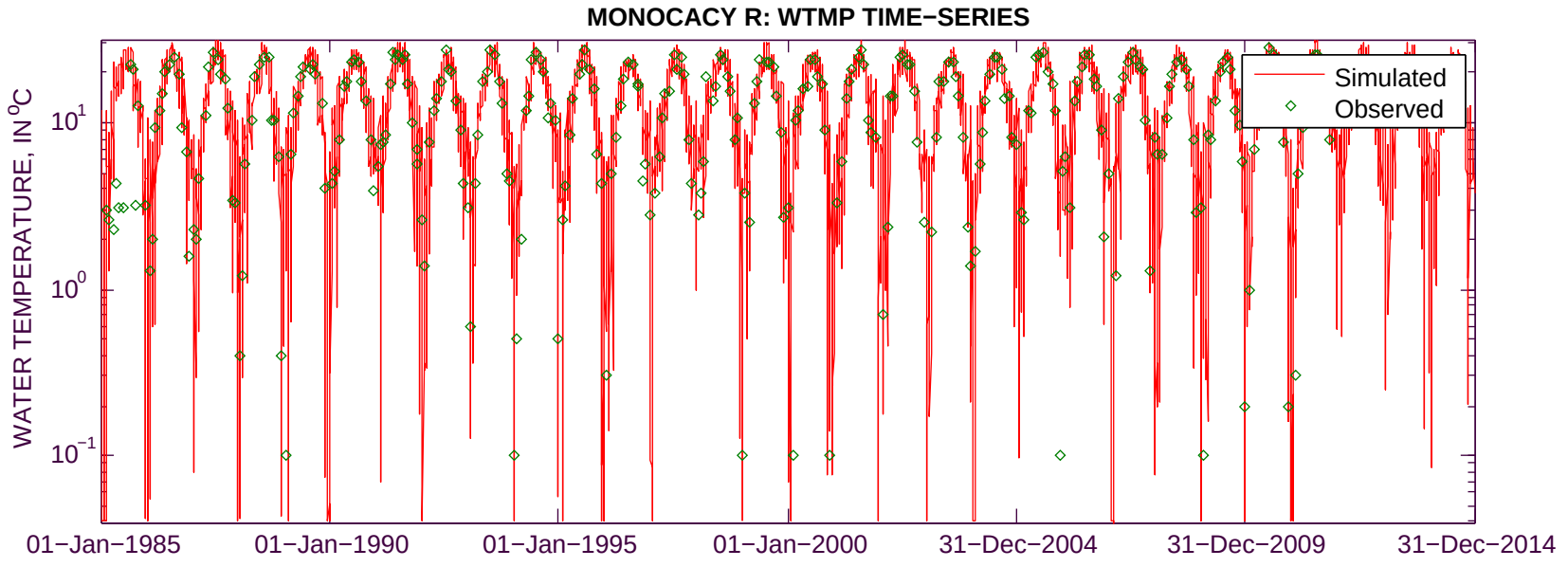
LOAD DATA
LOG10

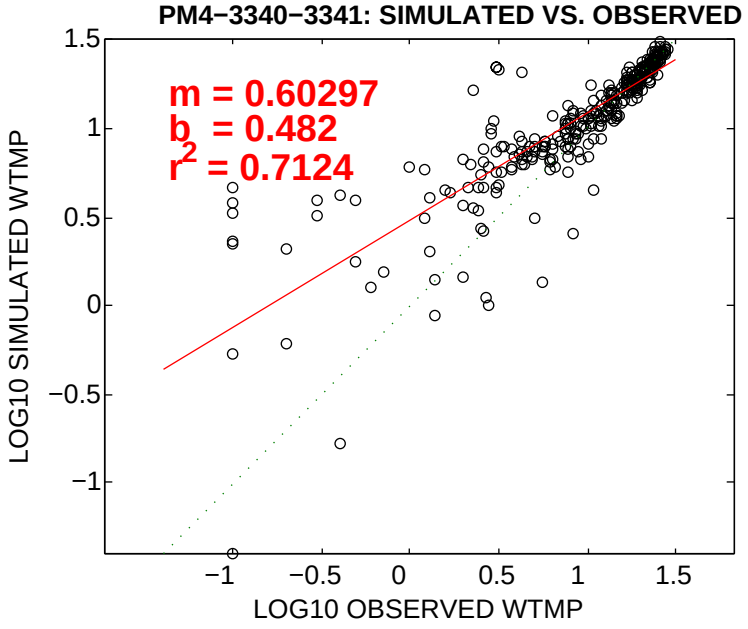


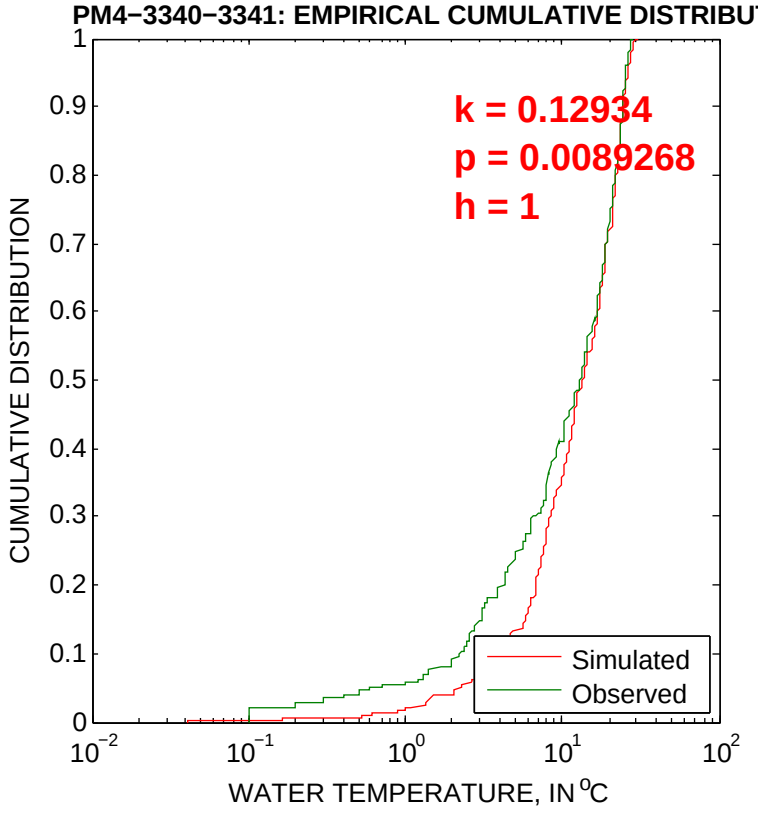












DATA SELECTION

scenario	file
P620171001WQ	WTMP.calib

plot: WTMP - water tempera...

Dates: 1/1/1985 – 12/31/201

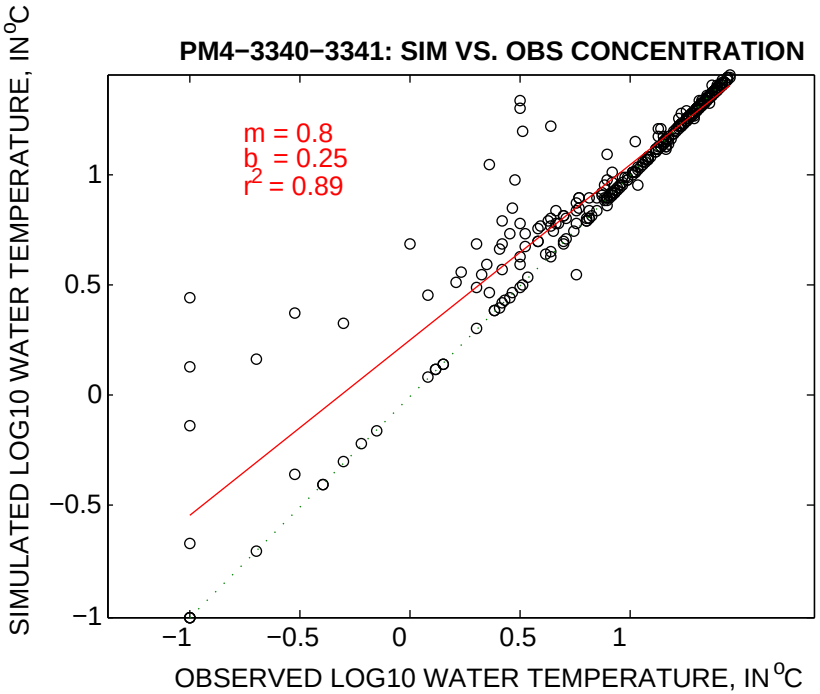
Drive	Directory	Observed
N/A	model	OBS20161101

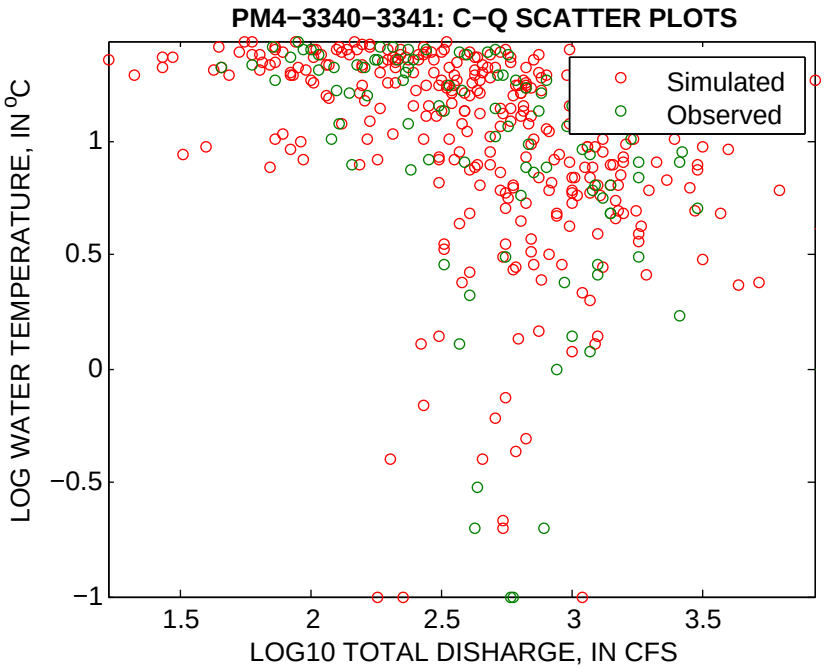
STATISTICS

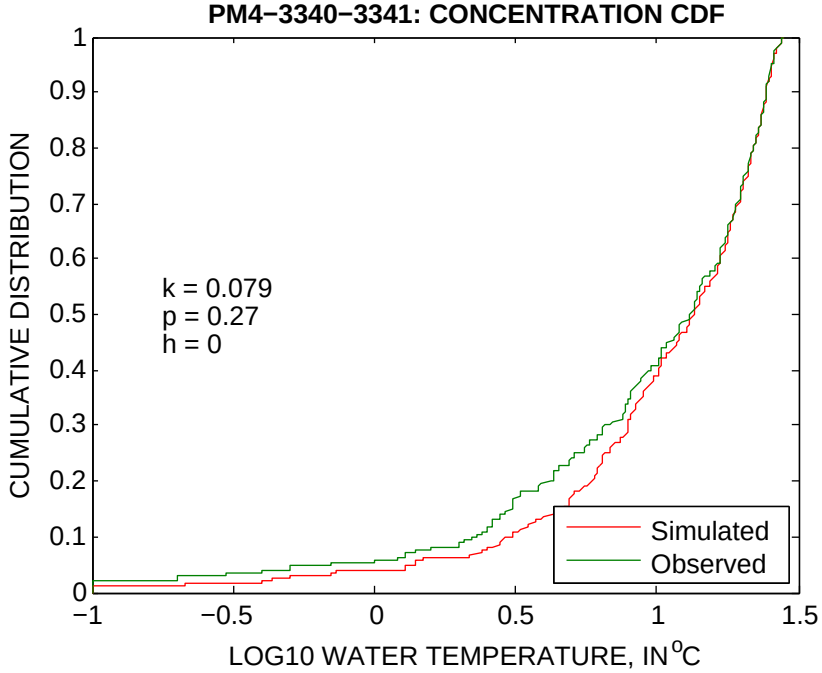
	n	observe	simulate
		317	317
min		0.1	0.040302
		-1	-1.39467
mean		13.0851	14.1892
		0.940242	1.04894
media		13.1	13.664
		1.11727	1.13558
max		28	30.922
		1.44716	1.49027
varian		69.529	59.4967
		0.267423	0.136478
JB		0.001100	0.002874
		0.001	0.001
		ra	log
%		8.43808	11.5601
err.va		10.4361	0.0932572
rel.std.err		0.150097	0.348725
mod.eff		0.849903	0.651275

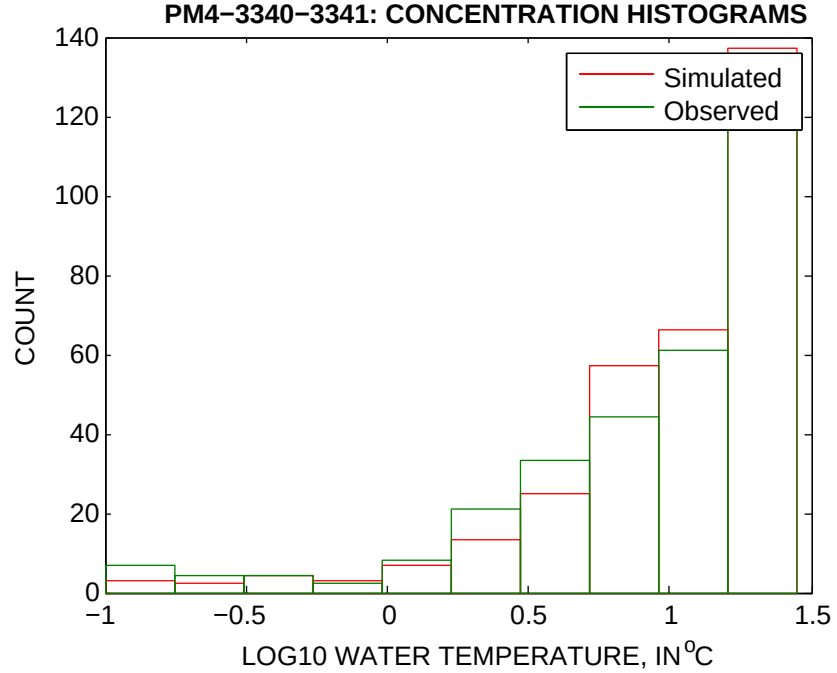
VERSION 2.1

ALL DATA
LOG10

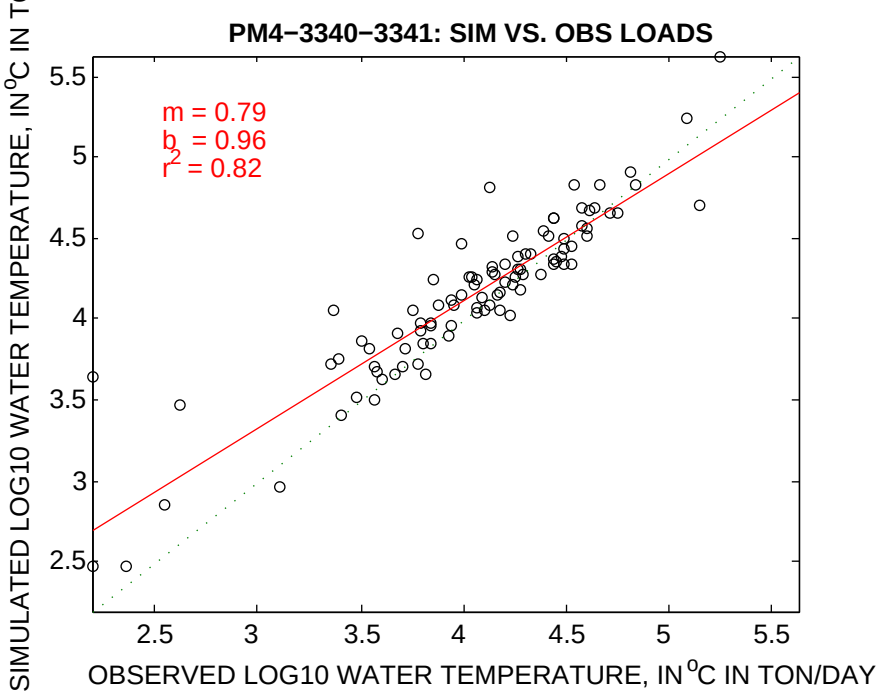


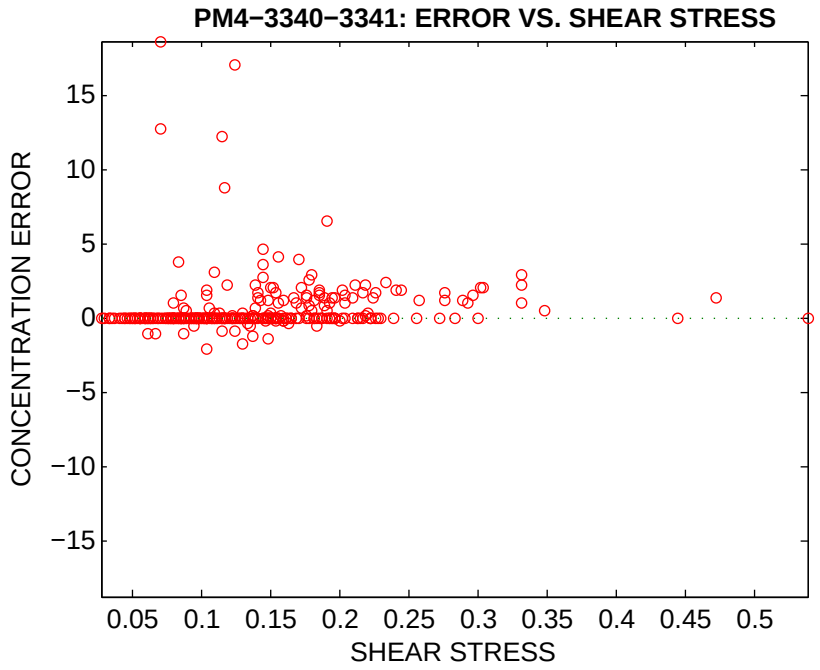


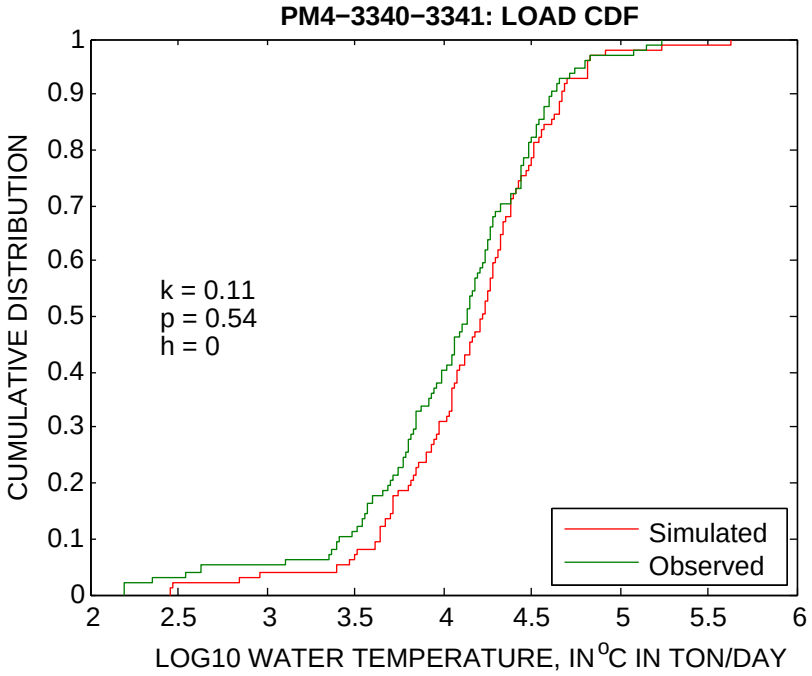


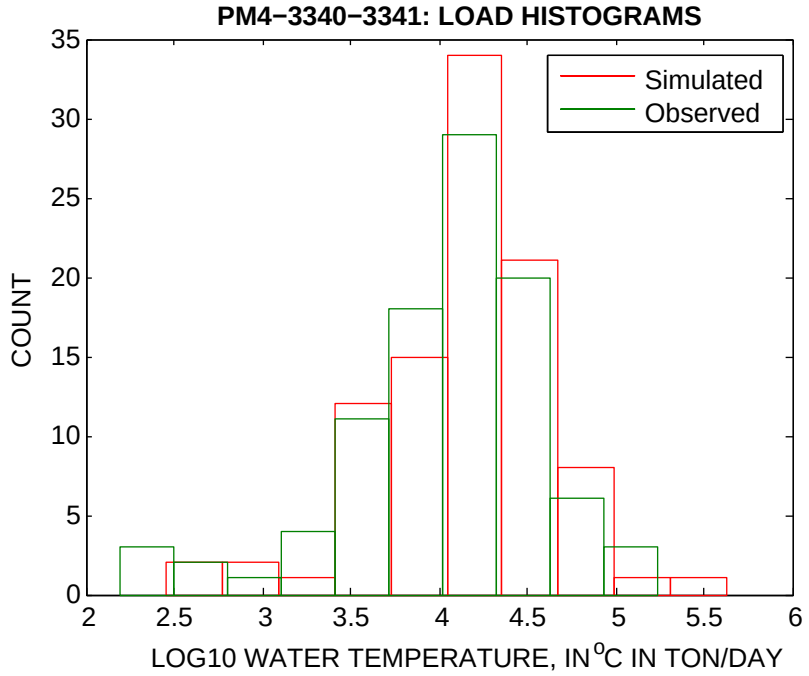


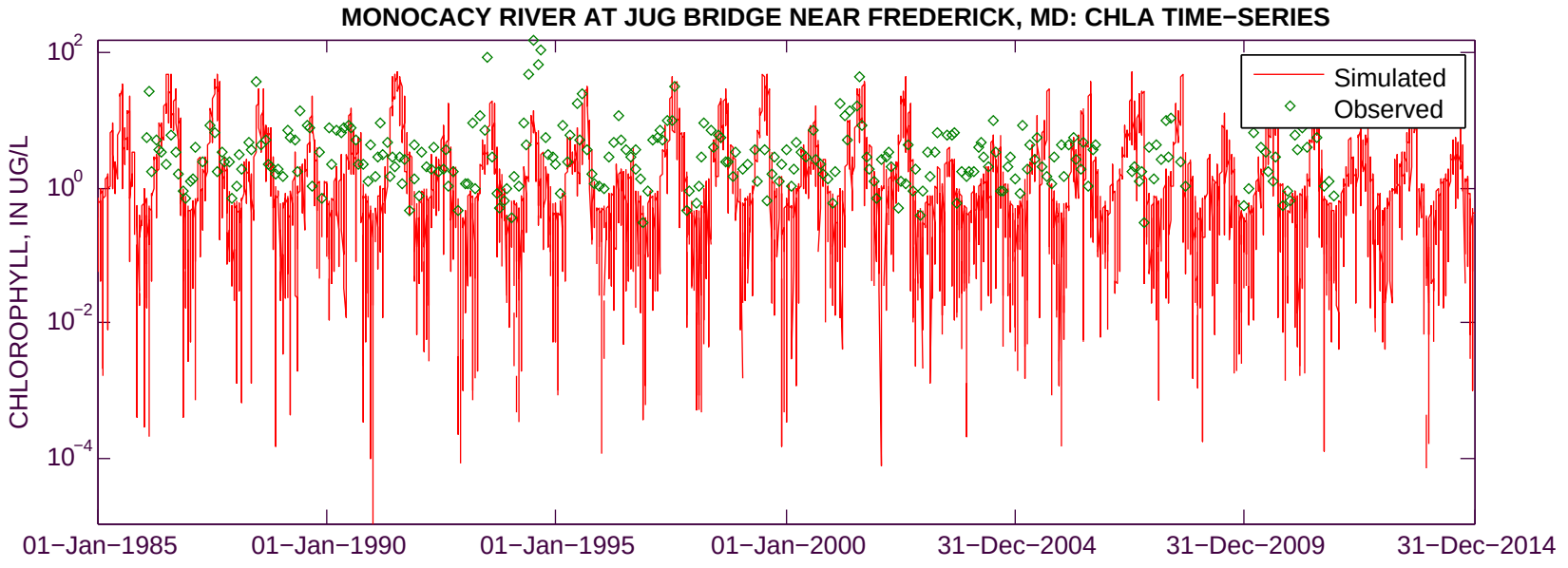
LOAD DATA
LOG10

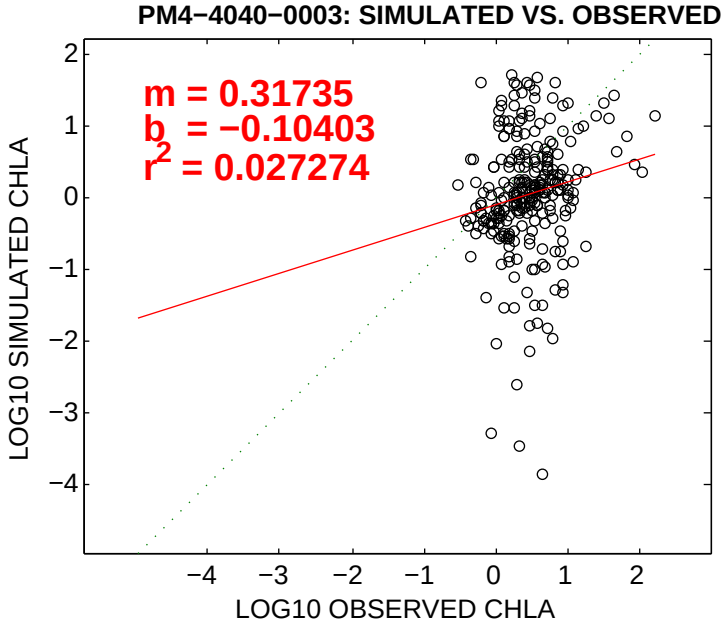


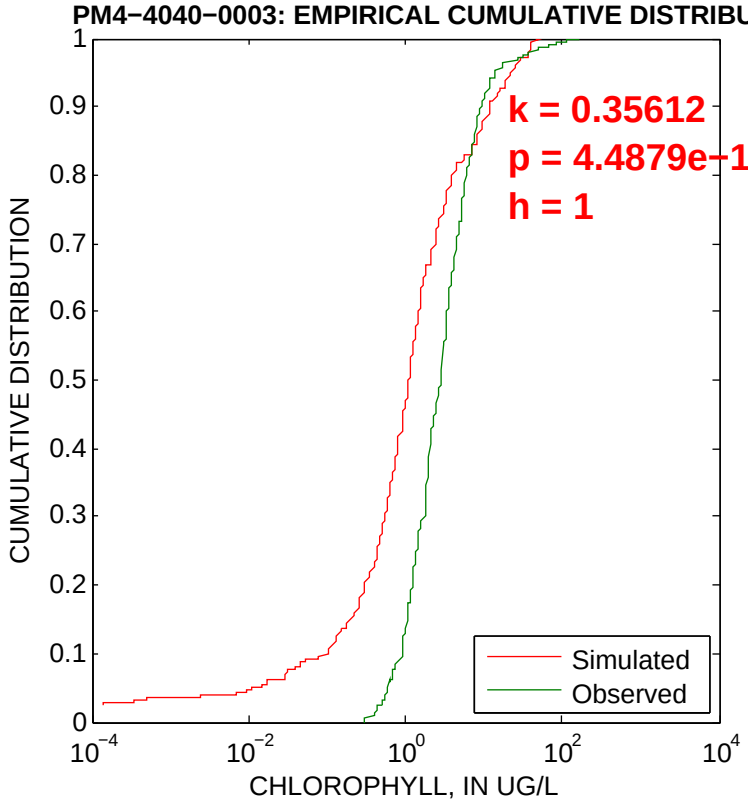












DATA SELECTION

scenario	file
P620171001WQ	CHLA.calib

plot: CHLA - chlorophyll A

Dates: 1/1/1985 – 12/31/201

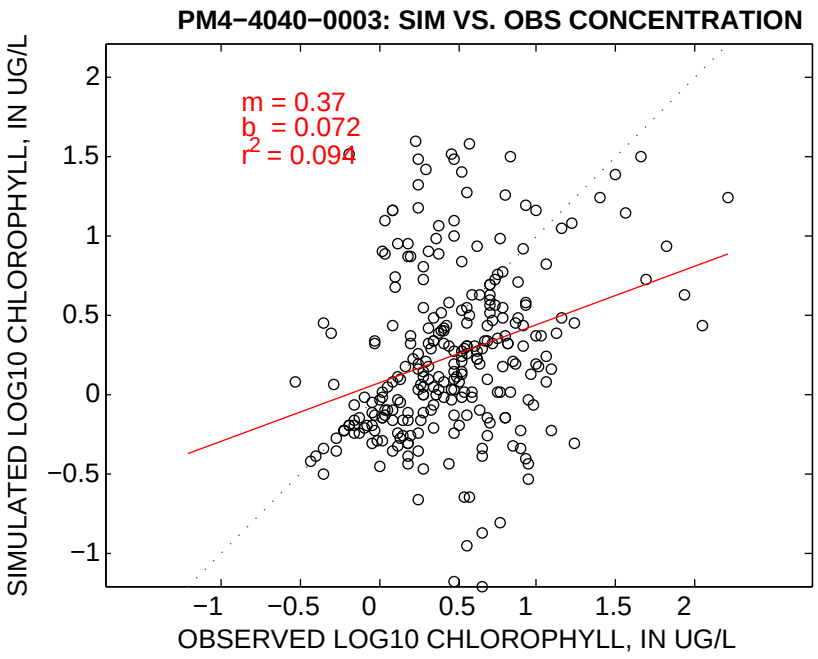
Drive	Directory	Observed
N/A	model	OBS20161101

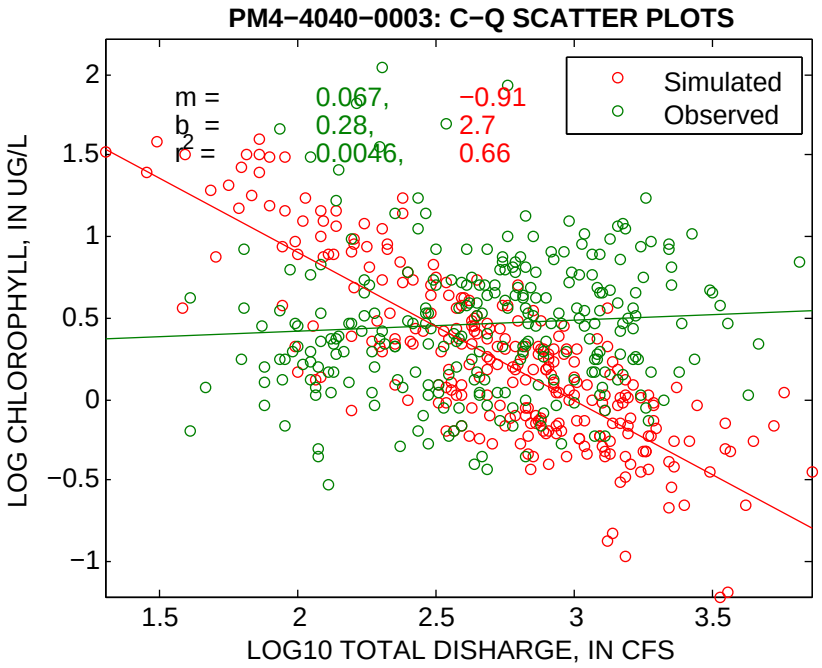
STATISTICS

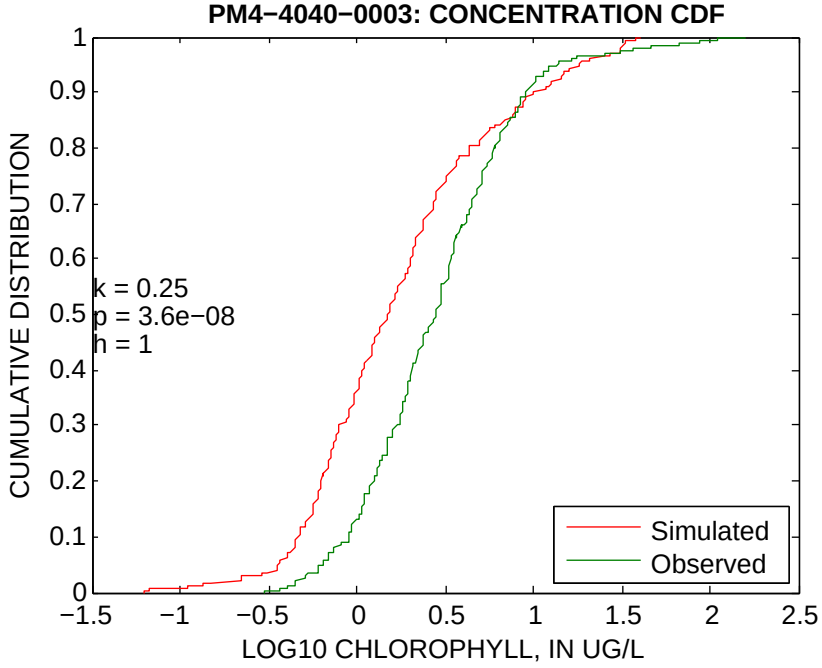
n	278	271
	observe	simulate
min	0.299	0
	-0.524329	-3.84875
mean	5.84238	4.21119
	0.459793	0.0418807
media	2.82	1.1213
	0.447158	0.0553401
max	161.48	49.084
	2.20812	1.69094
varian	200.519	68.7324
	0.190683	0.704089
JB	0.001	0.001
	0.001	0.001
	ra	log
%	-27.92	-90.8914
err.va	251.566	0.949044
rel.std.err	1.25457	4.97709
mod.eff	-0.254574	-3.97709

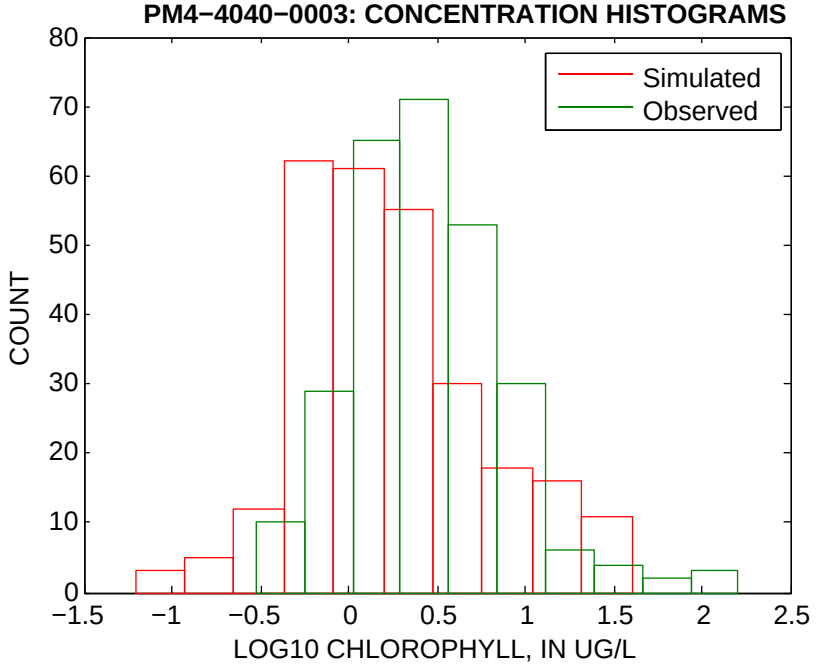
VERSION

ALL DATA
LOG10

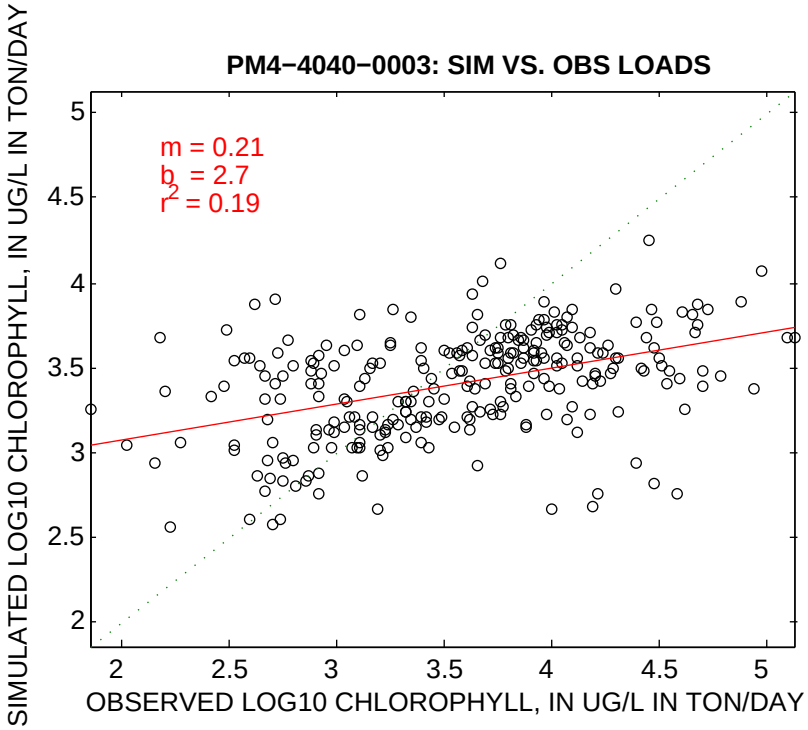


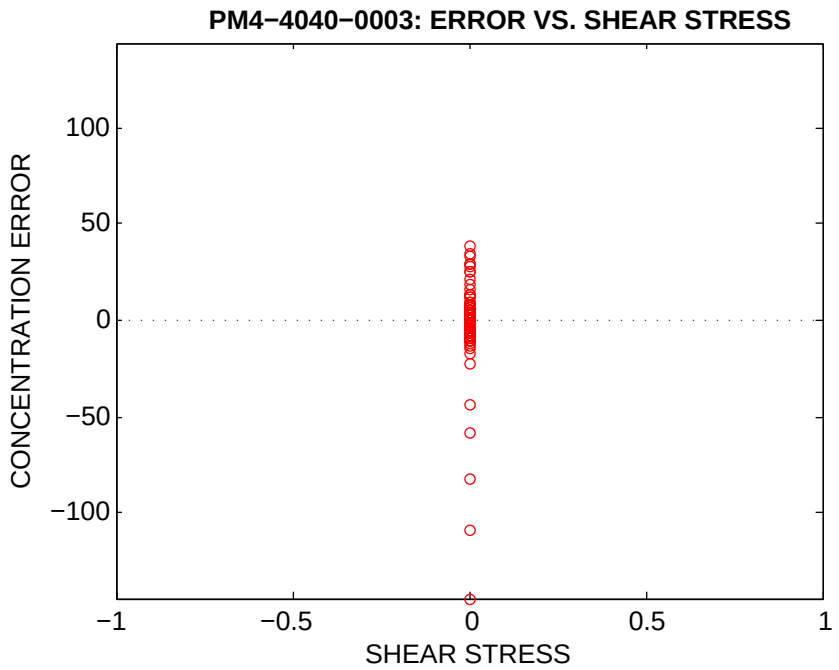


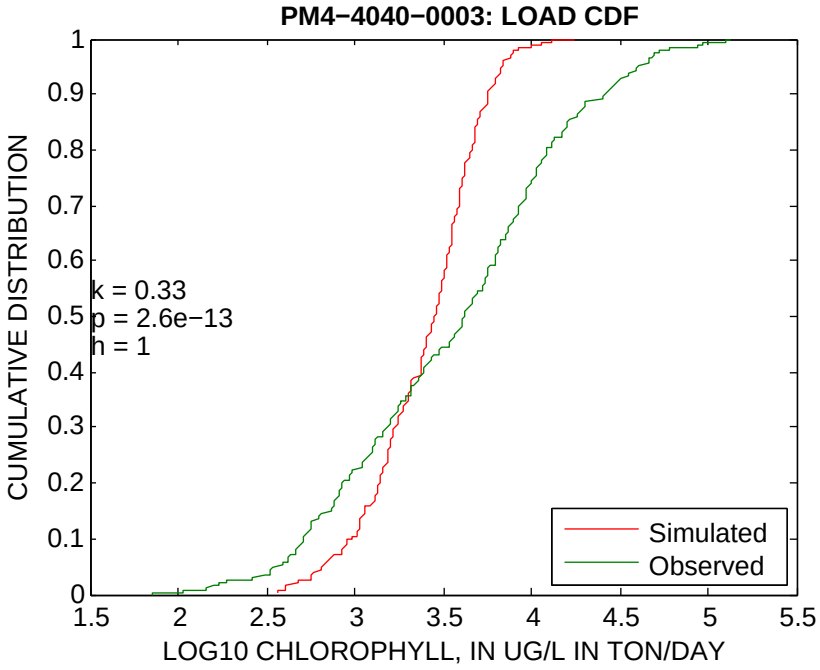


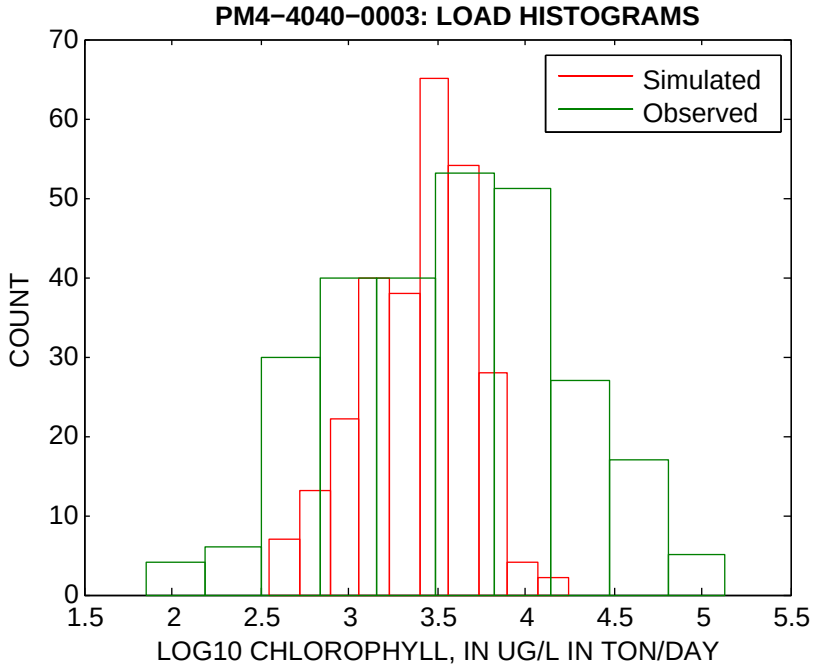


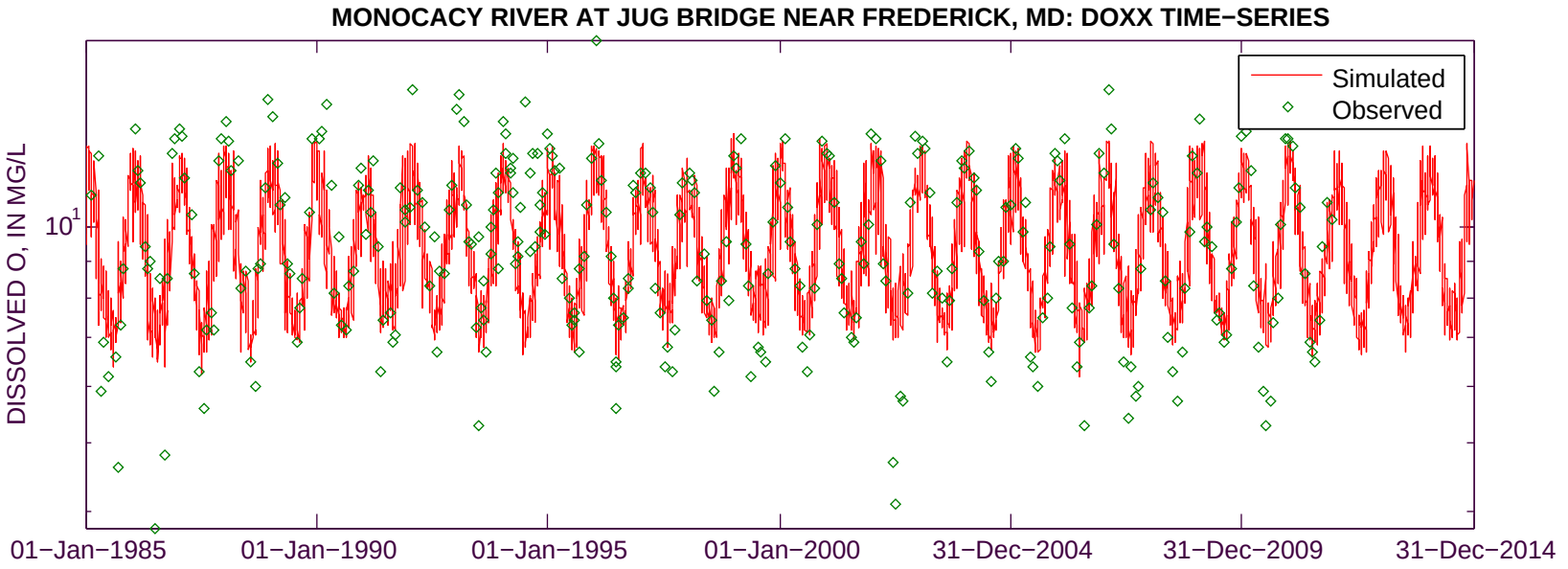
LOAD DATA
LOG10

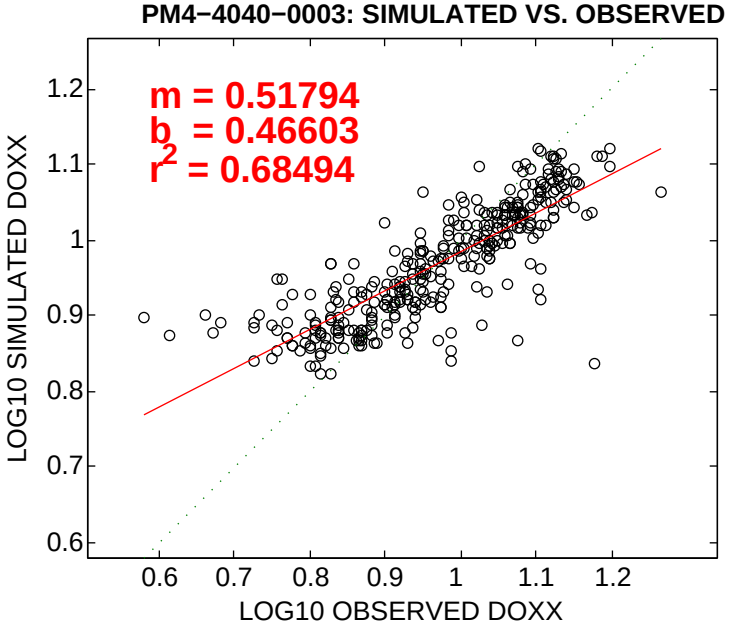


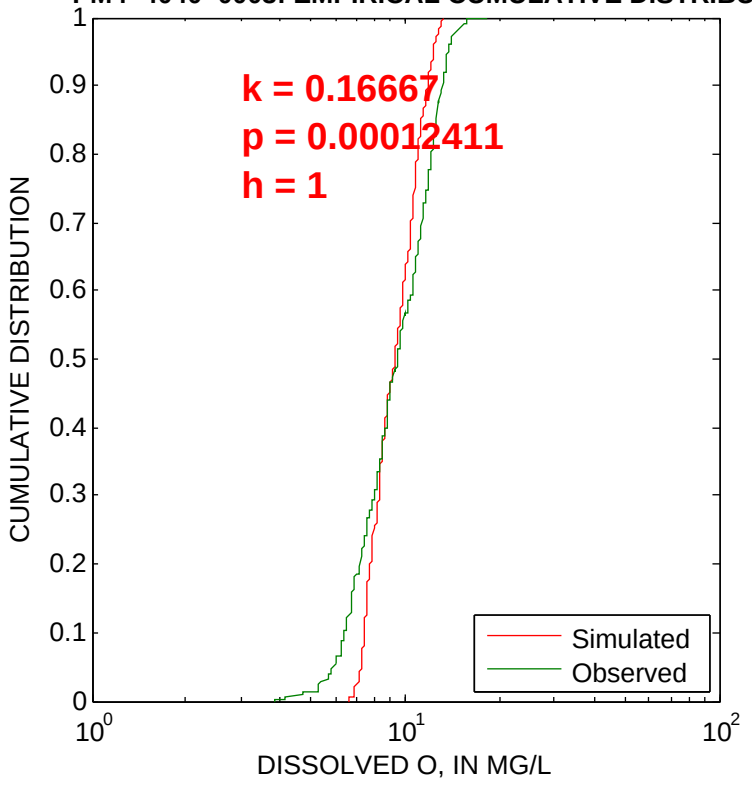












DATA SELECTION

scenario	file
P620171001WQ	DOXX.calib

plot: DOXX - dissolved oxygen

Dates: 1/1/1985 – 12/31/201

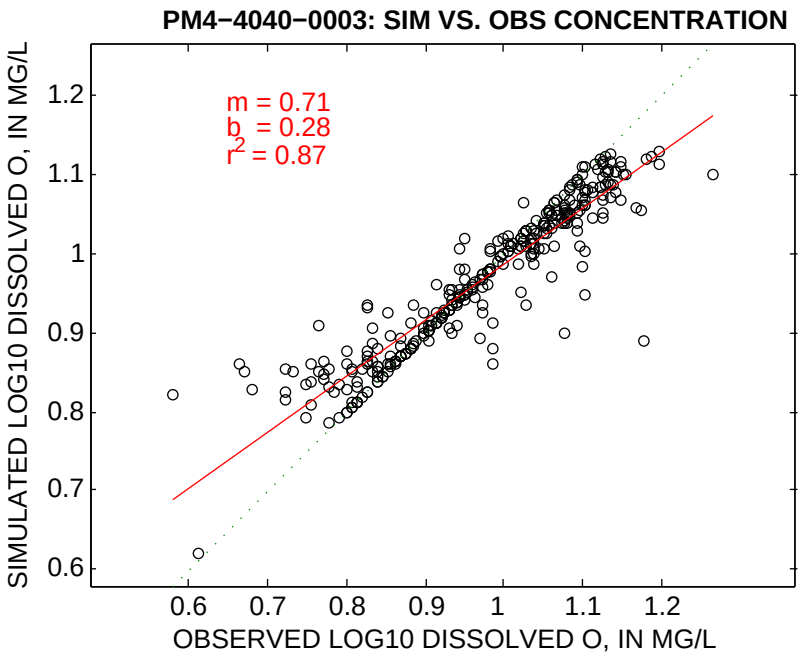
Drive	Directory	Observed
N/A	model	OBS20161101

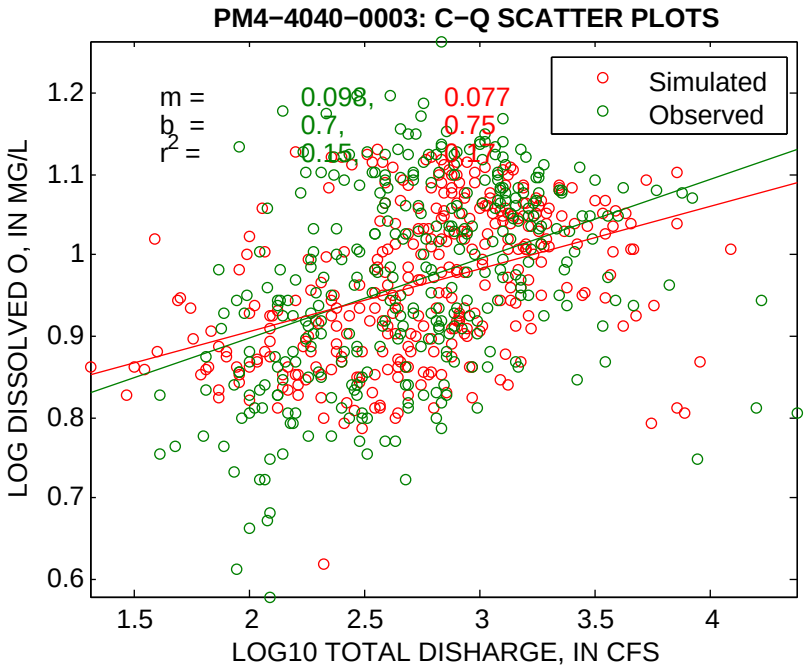
STATISTICS

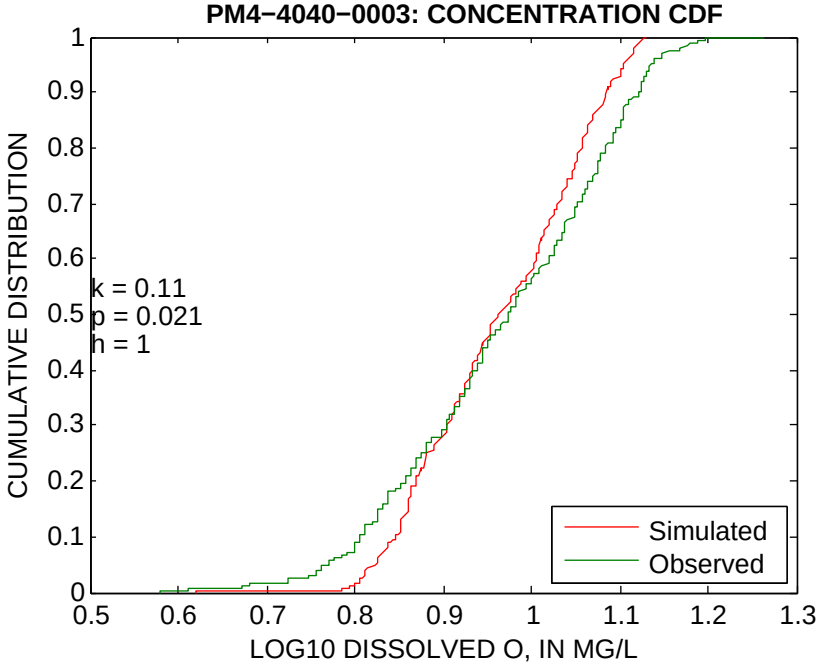
	n	observe	simulate
		342	342
min		3.8	6.6174
		0.579784	0.820687
mean		9.66266	9.42835
		0.968843	0.967836
media		9.4	9.2803
		0.973128	0.967562
max		18.4	13.242
		1.26482	1.12195
varian		6.70468	2.73759
		0.0146332	0.00573124
JB		0.019383	0.002143
		0.017146	0.002685
		ra	log
%		-2.42493	-0.103889
err.va		2.28366	0.00520713
rel.std.err		0.340606	0.355843
mod.eff		0.659394	0.644157

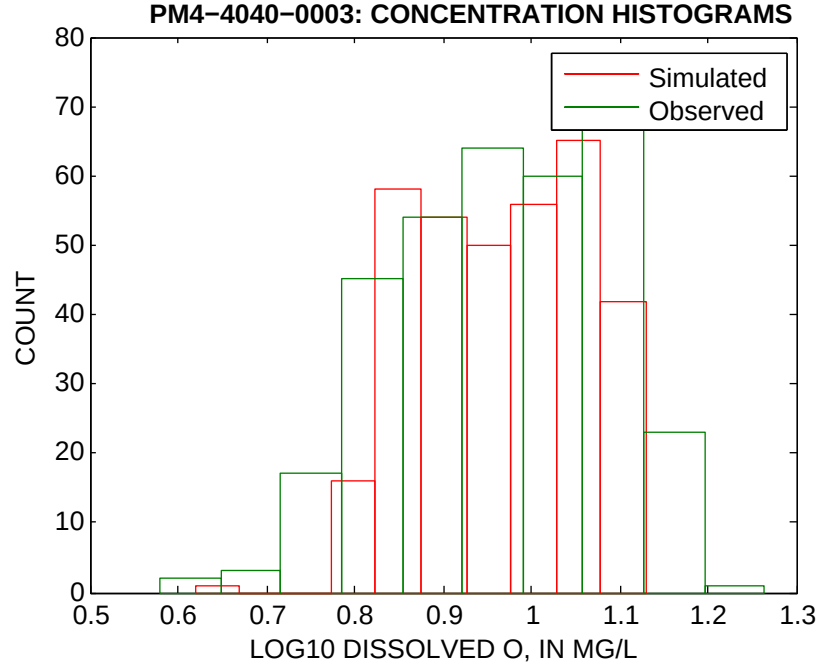
VERSION 2.1

ALL DATA
LOG10

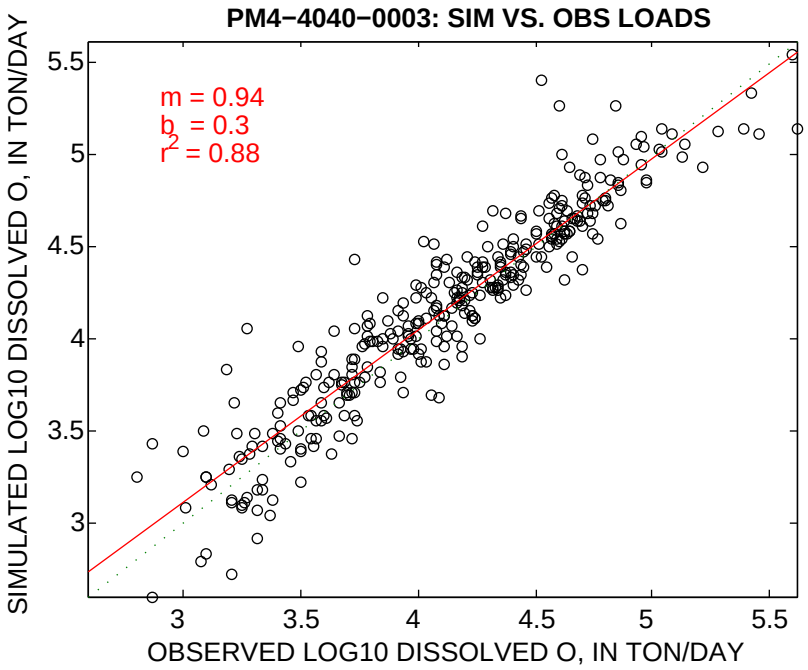


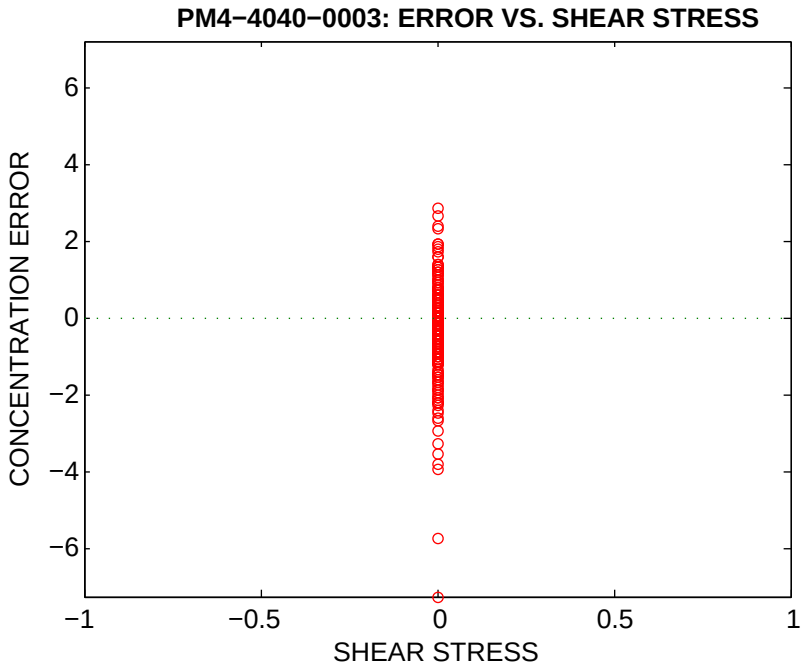


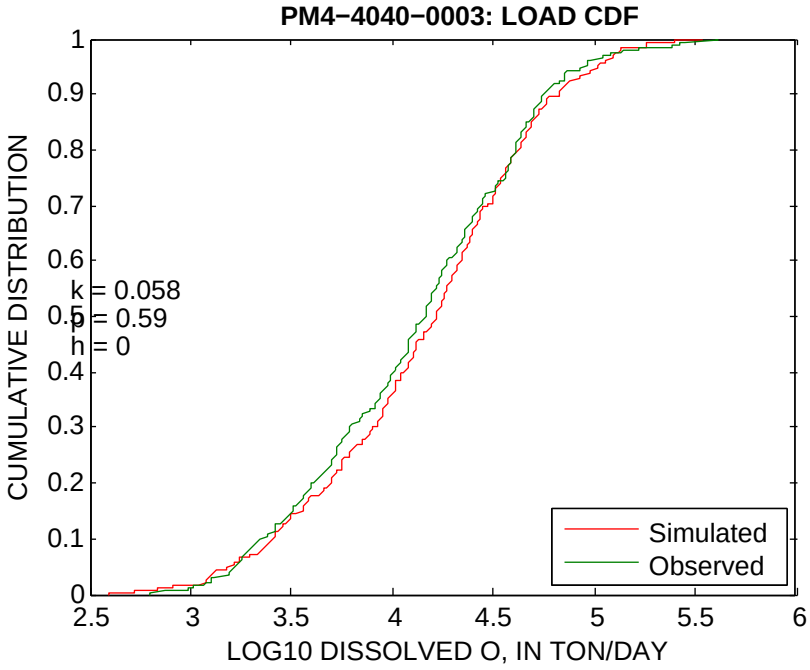


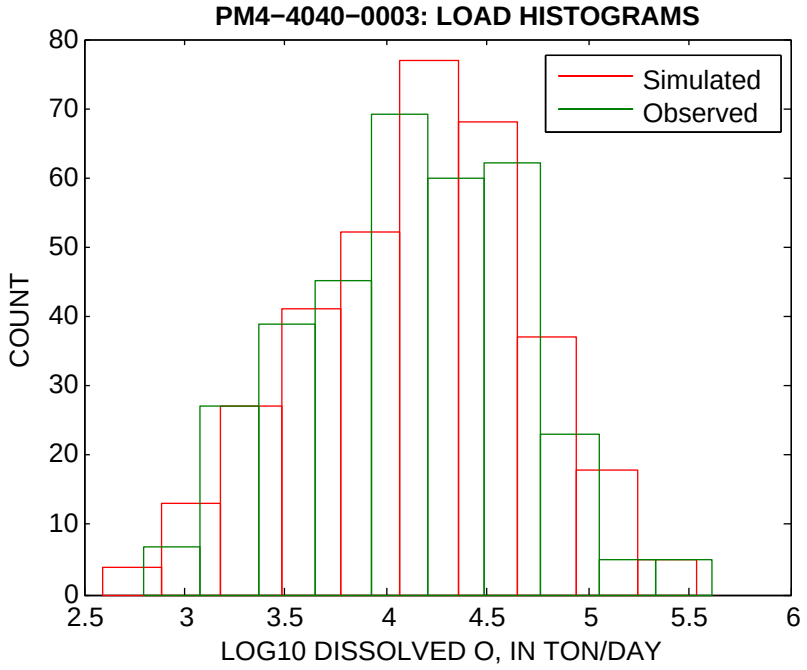


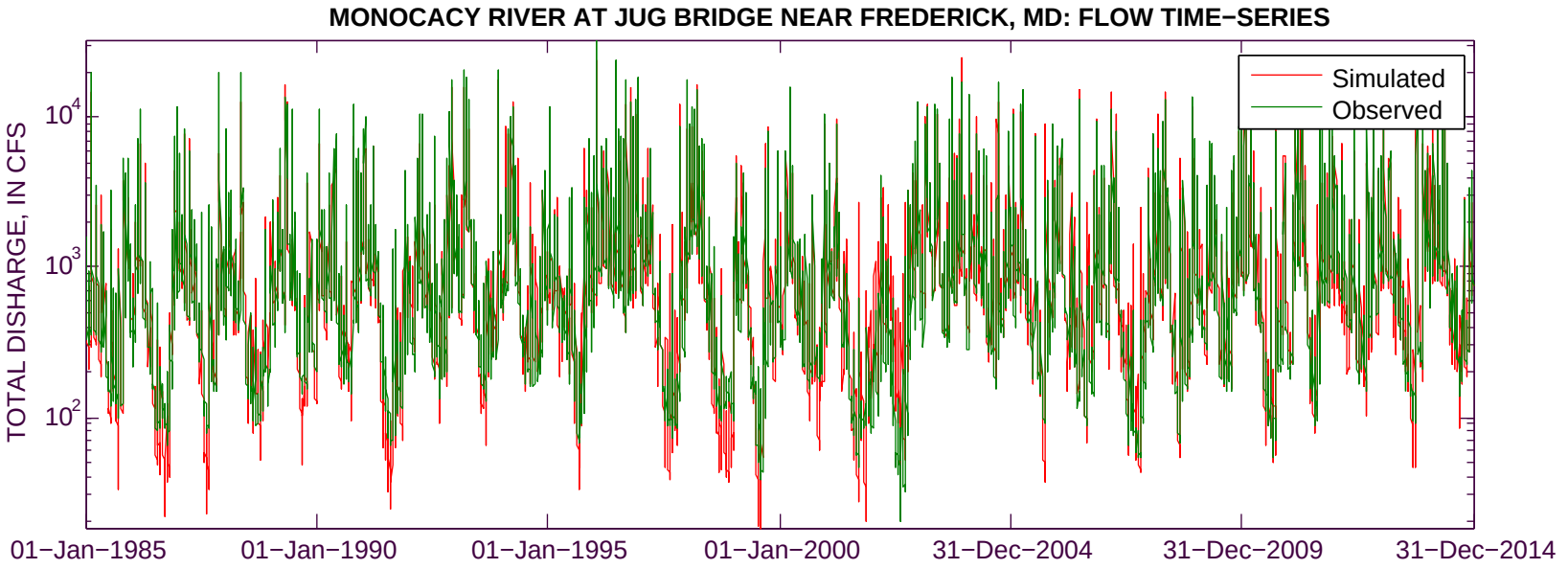
LOAD DATA
LOG10

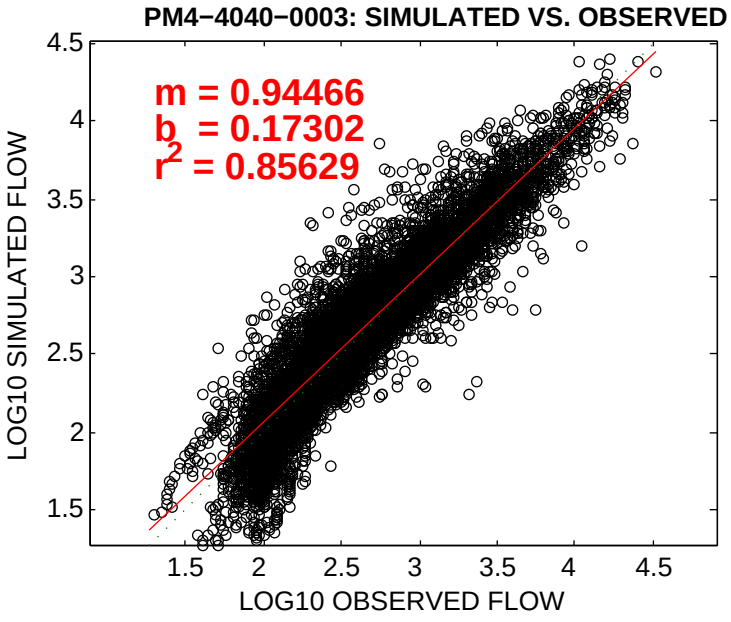


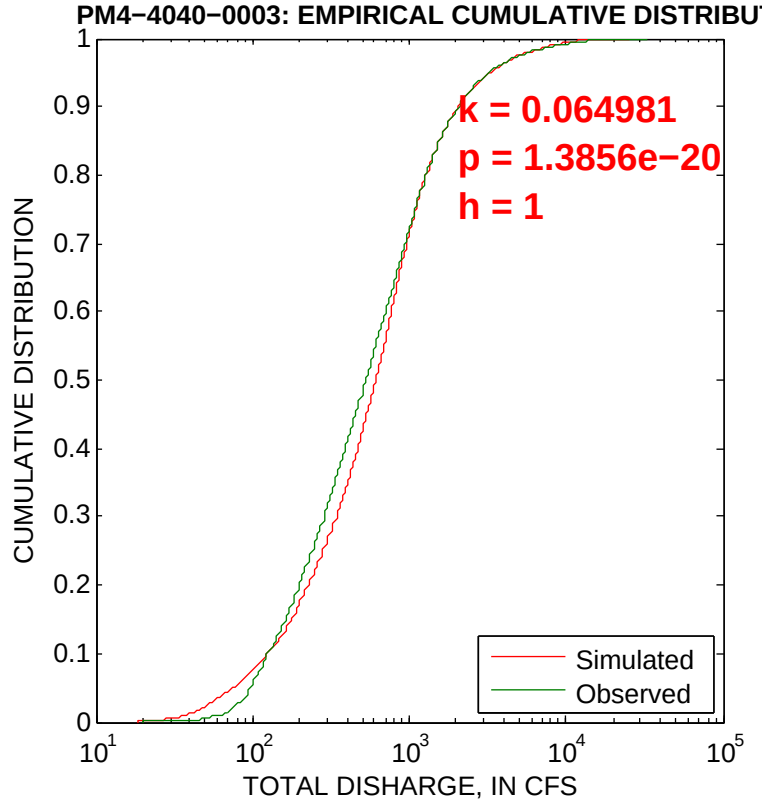












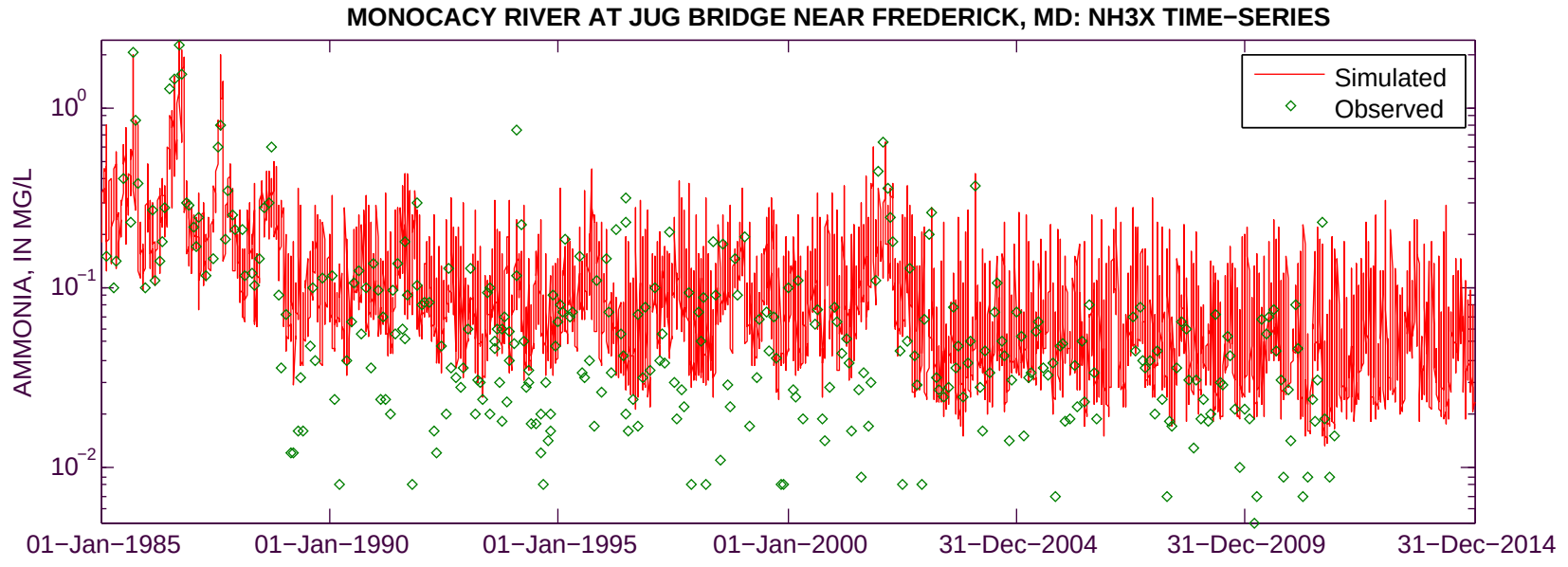
DATA SELECTION

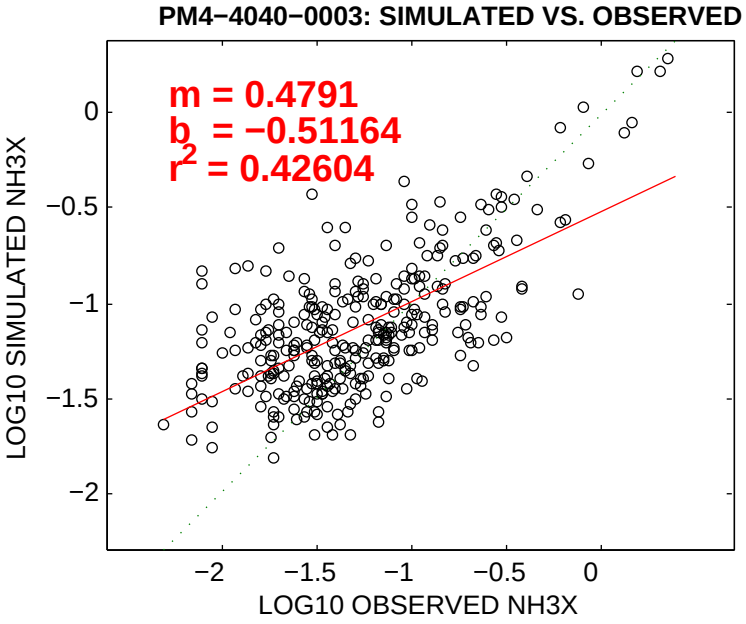
scenario: P620171001WQ
file: FLOW.calib
plot: FLOW - total discharge
Dates: 1/1/1985 12/31/201
Drive: N/A
Directory: model
Observed: OBS20161101

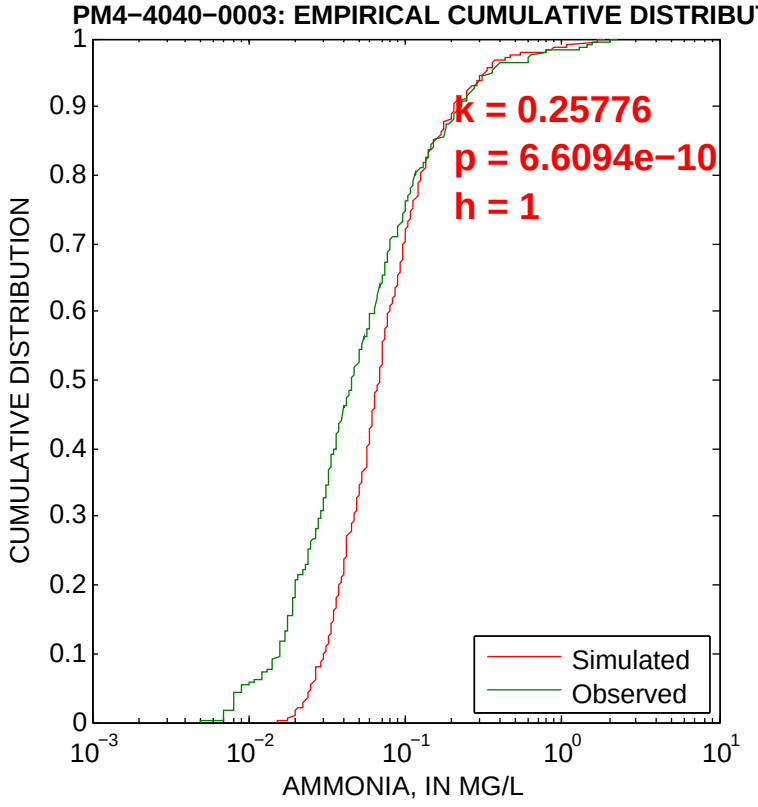
STATISTICS

		observe	simulate
n		10957	10957
min		20	18.372
		1.30103	1.26416
mean		1007.9	1024.58
		2.72604	2.7482
media		532	615.09
		2.72591	2.78894
max		33200	25393
		4.52114	4.40471
varian		2.9517e+06	2.5066e+0
		0.221669	0.231013
JB		0.001	0.001
		0.001	0.001
		ra	log
%		1.65503	0.813094
err.va		602552	0.03437
rel.std.err		0.204138	0.155051
mod.eff		0.795862	0.844949

VERSION 2.1







DATA SELECTION

scenario	file
P620171001WQ	NH3X.calib

plot: NH3X - ammonia

Dates: 1/1/1985 – 12/31/201

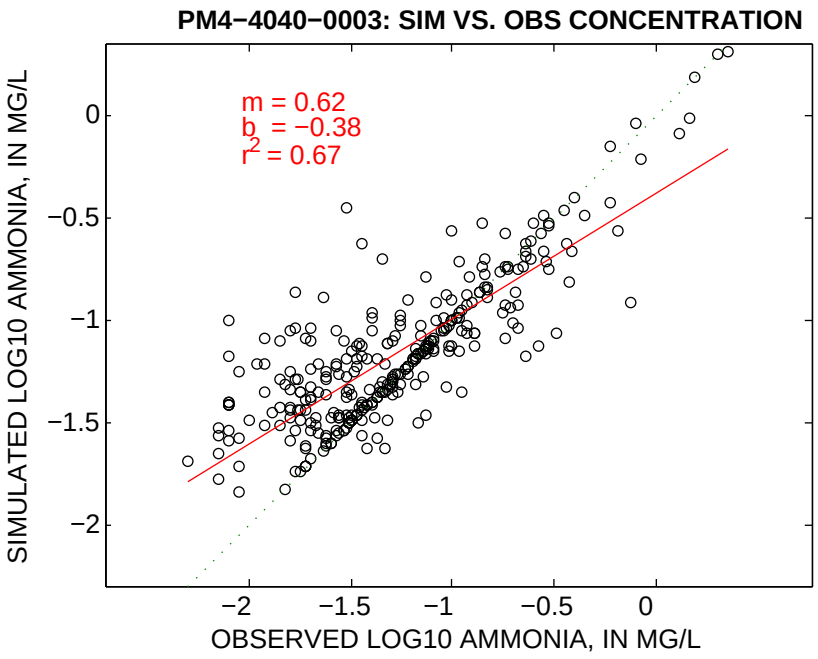
Drive	Directory	Observed
N/A	model	OBS20161101

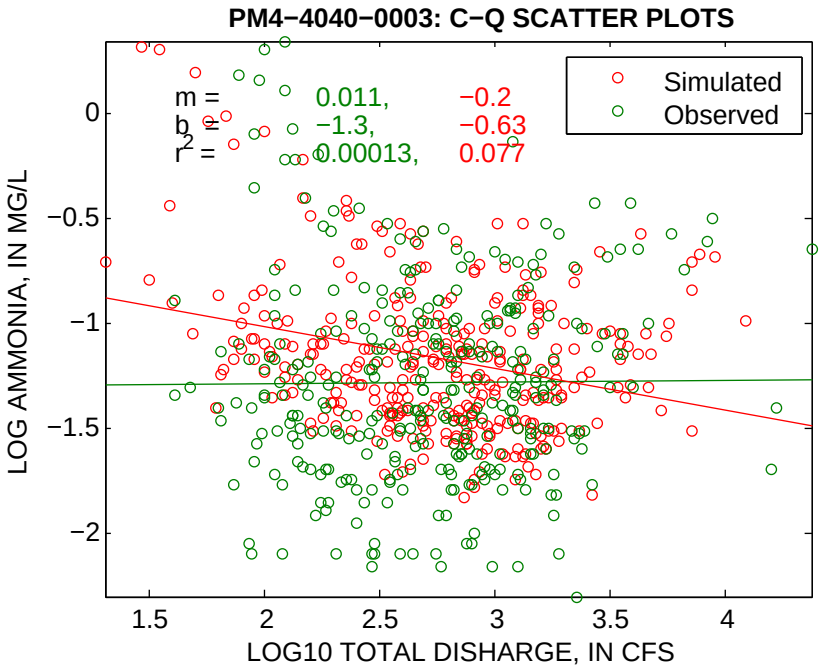
STATISTICS

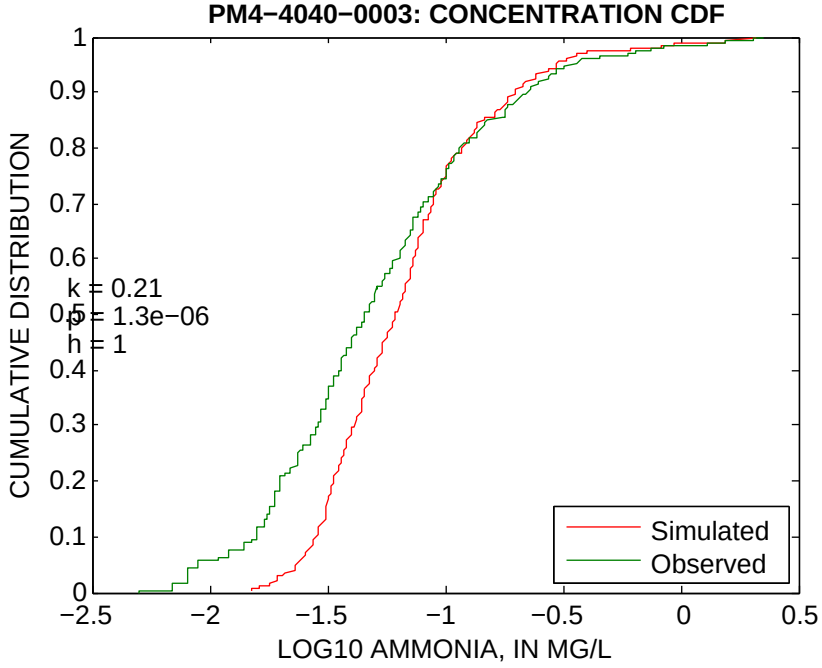
	n	322	322
		observe	simulate
min		0.005	0.015492
		-2.30103	-1.80989
mean		0.110964	0.11681
		-1.28224	-1.12596
media		0.046	0.0686905
		-1.33724	-1.1631
max		2.25	1.9041
		0.352183	0.27969
varian		0.0562867	0.0389246
		0.225401	0.121438
JB		0.001	0.001
		0.001	0.001
		ra	log
%		5.26826	-12.1882
err.va		0.0105464	0.155362
rel.std.err		0.18737	0.689269
mod.eff		0.81263	0.310731

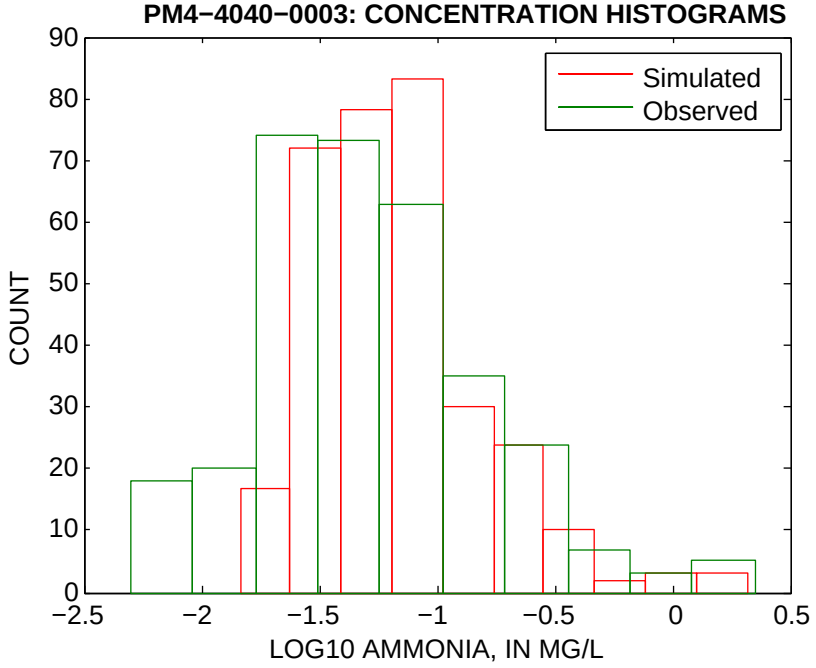
VERSION

ALL DATA
LOG10

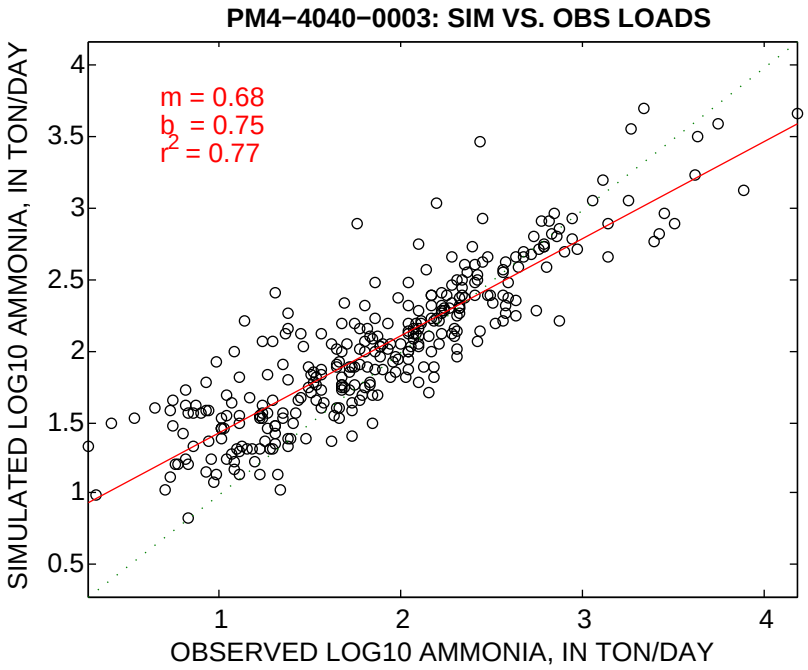


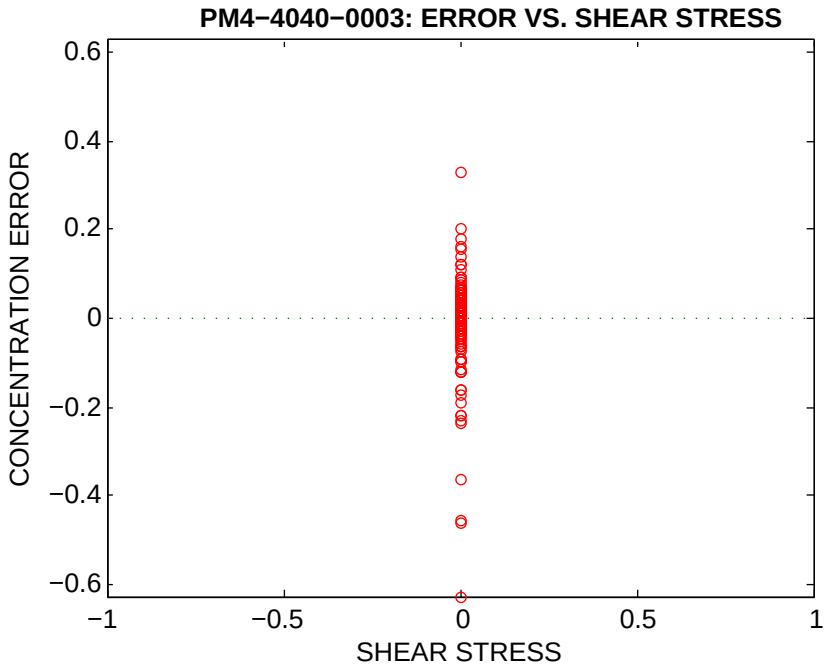


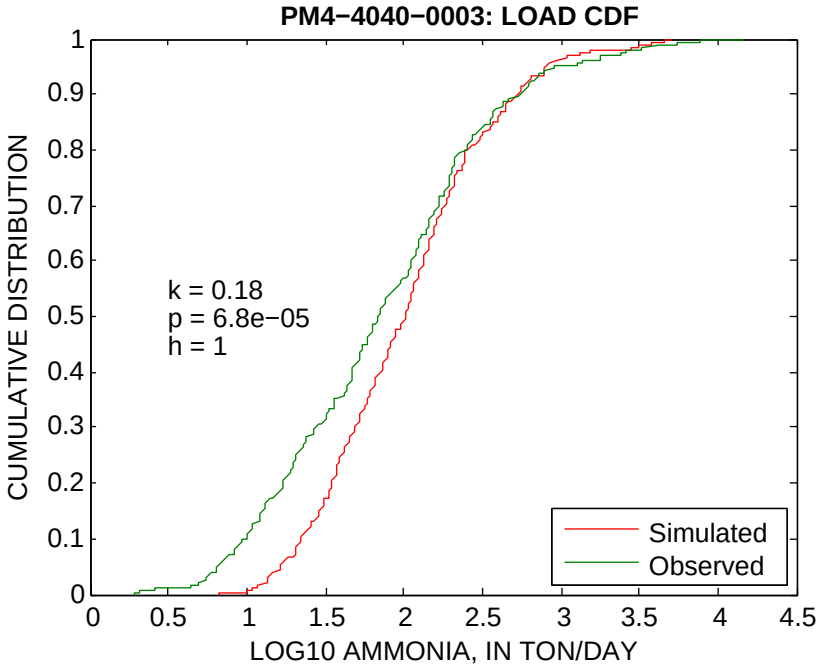


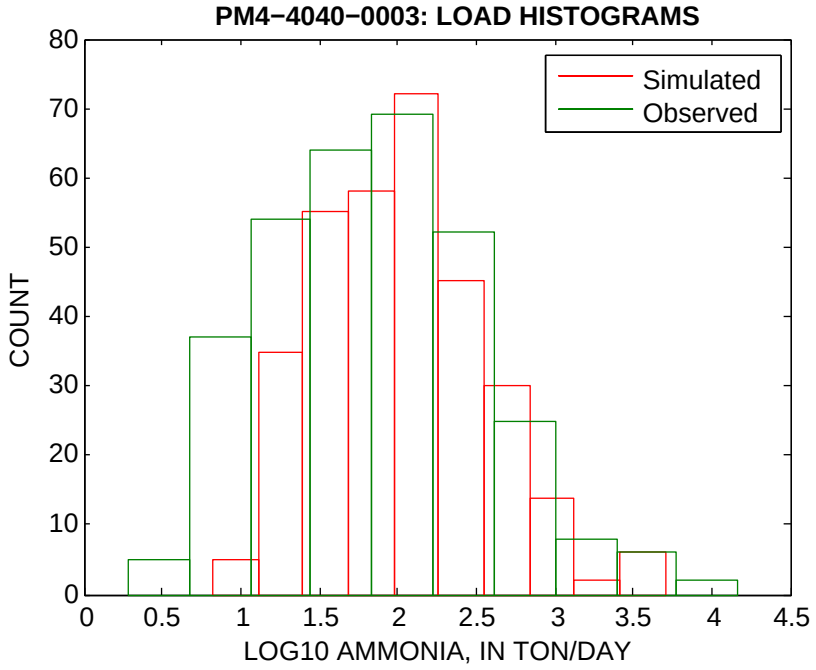


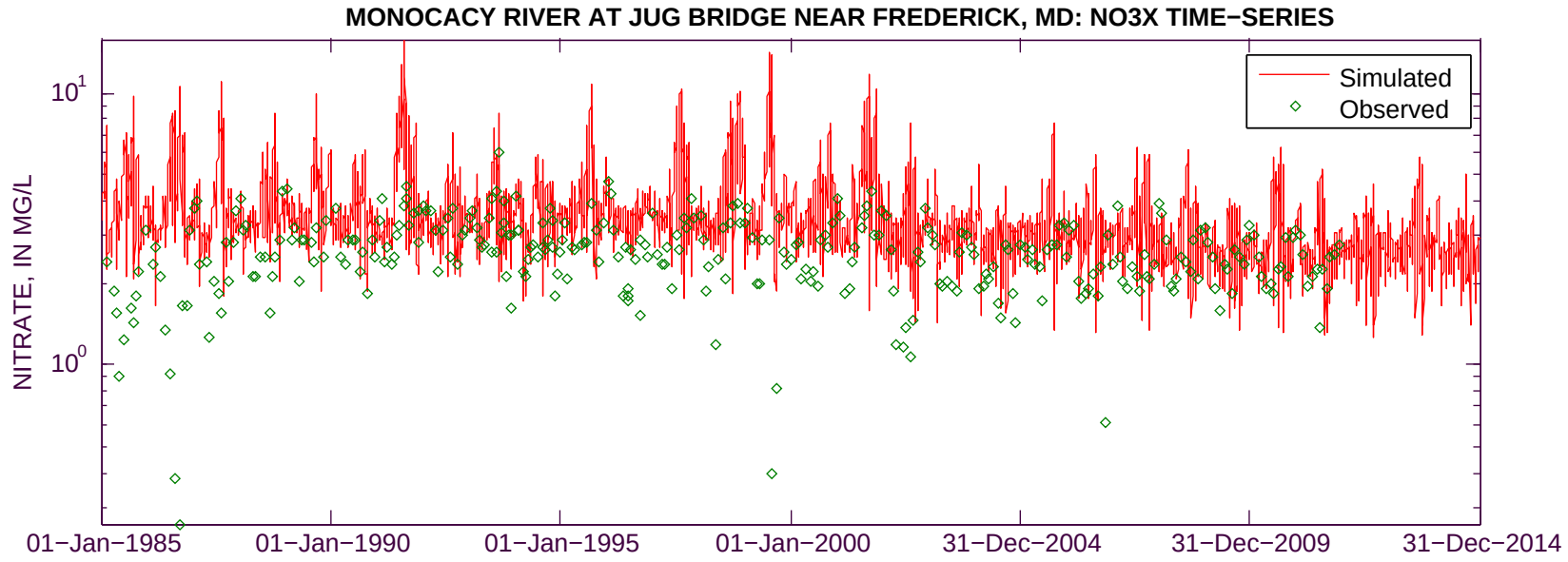
LOAD DATA
LOG10

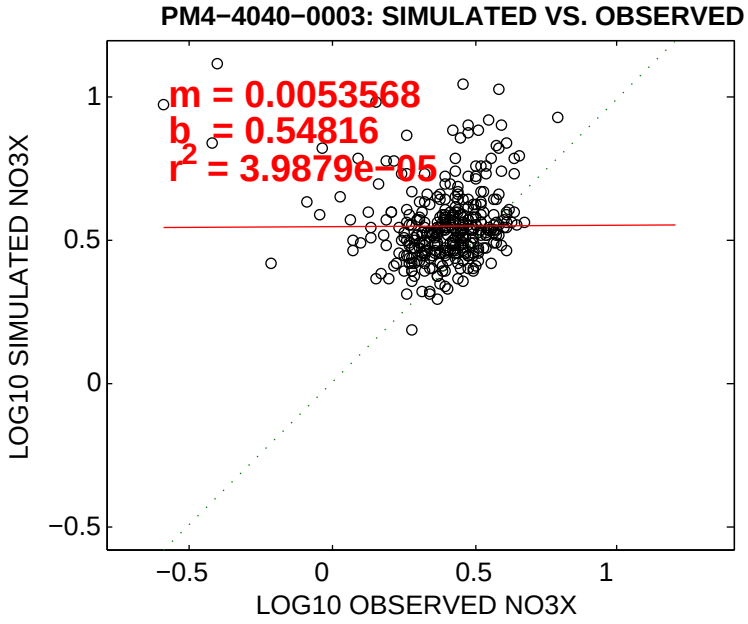


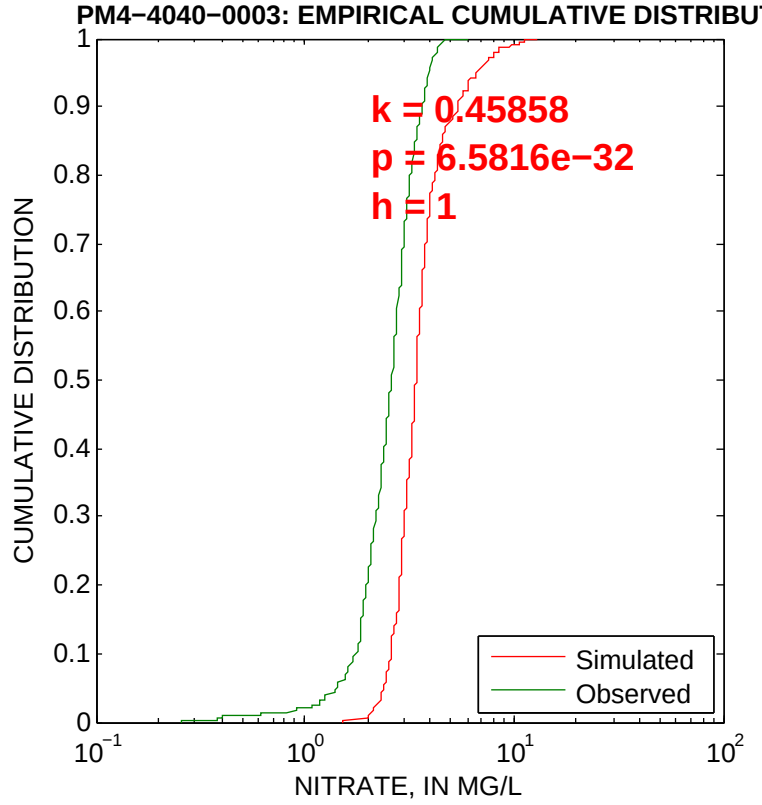












DATA SELECTION

scenario: P620171001WQ | file: NO3X.calib

plot: NO3X - nitrate

Dates: 1/1/1985 – 12/31/201

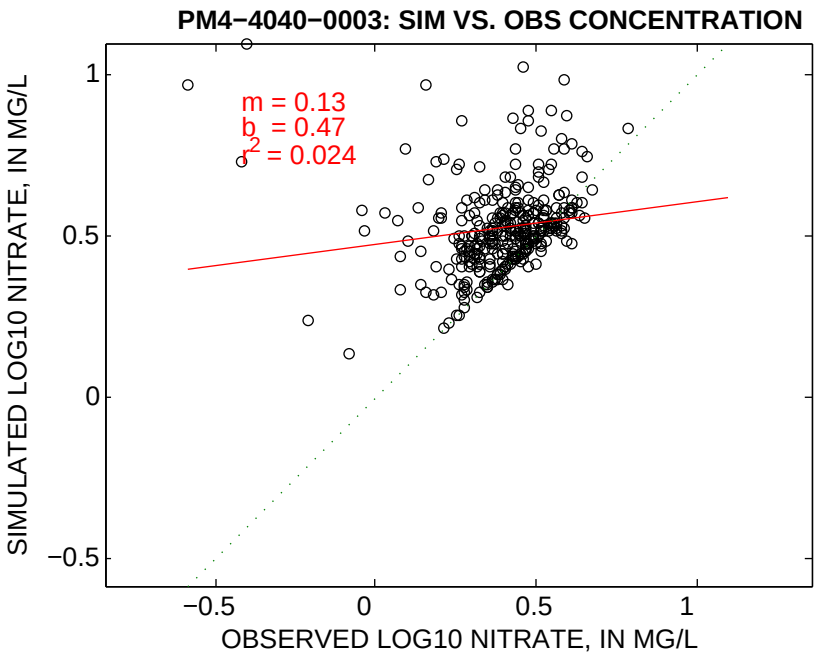
Drive: N/A | Directory: model | Observed: OBS20161101

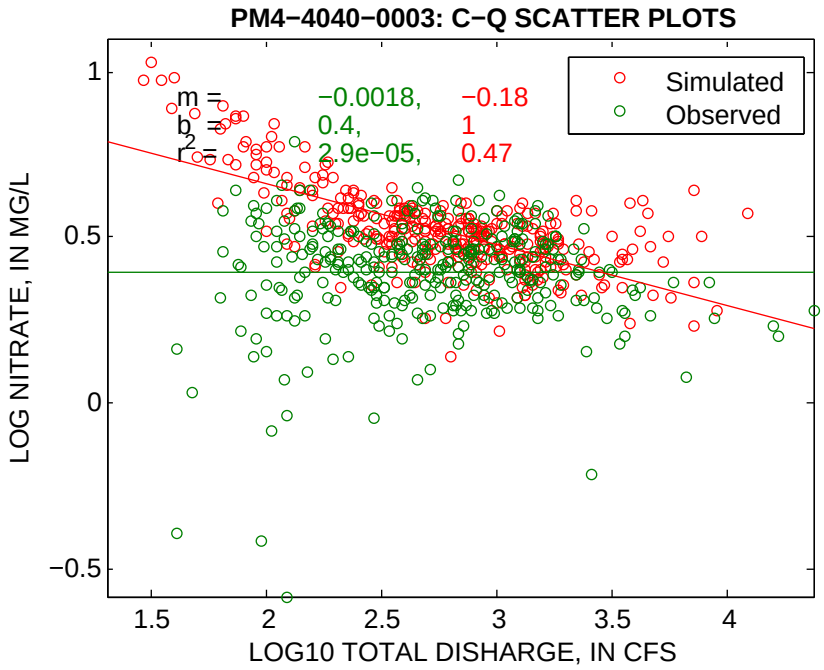
STATISTICS

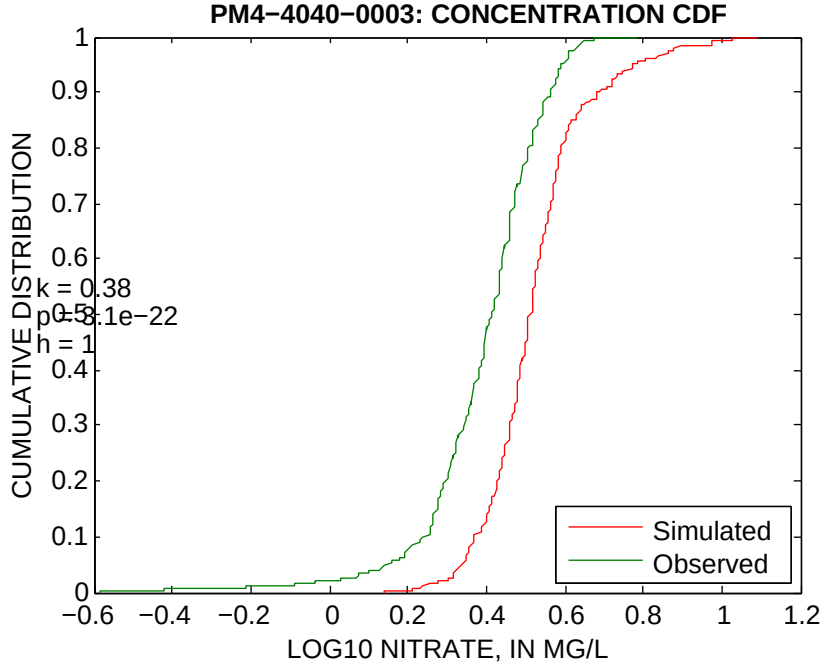
	n	observe	simulate
		338	338
min		0.26	1.5369
		-0.585027	0.186646
mean		2.62291	3.74314
		0.395354	0.550276
media		2.6	3.3994
		0.414973	0.531402
max		6.1	13.108
		0.78533	1.11754
varian		0.614216	2.07738
		0.02441	0.0175641
JB		0.002792	0.001
		0.001	0.001
		ra	log
%		42.7091	39.1854
err.va		3.71714	0.0657845
rel.std.err		6.05184	2.69498
mod.eff		-5.05184	-1.69498

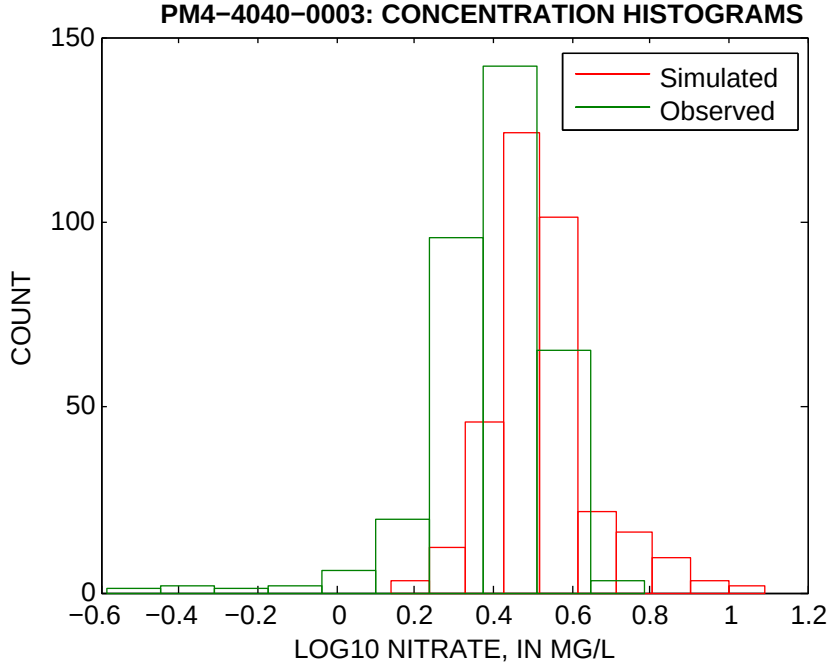
VERSION

ALL DATA
LOG10

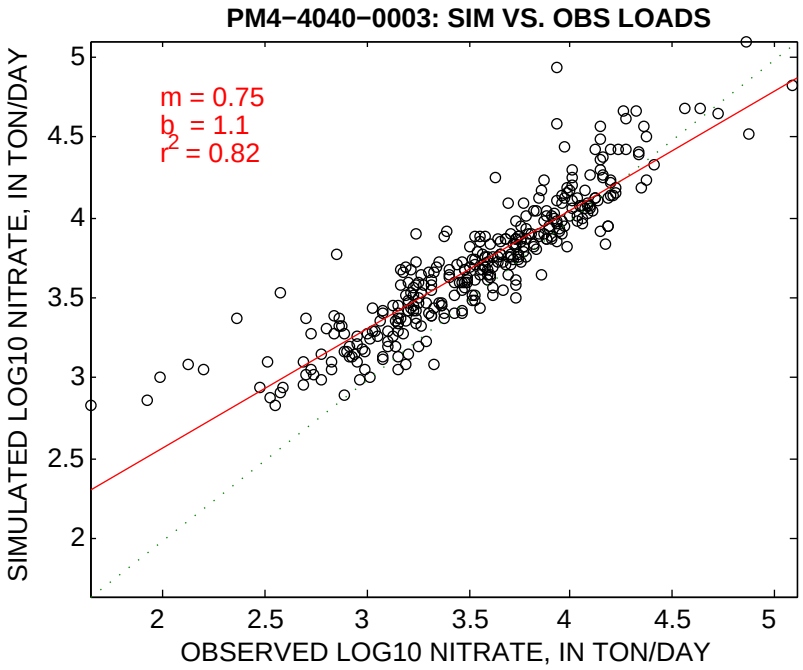


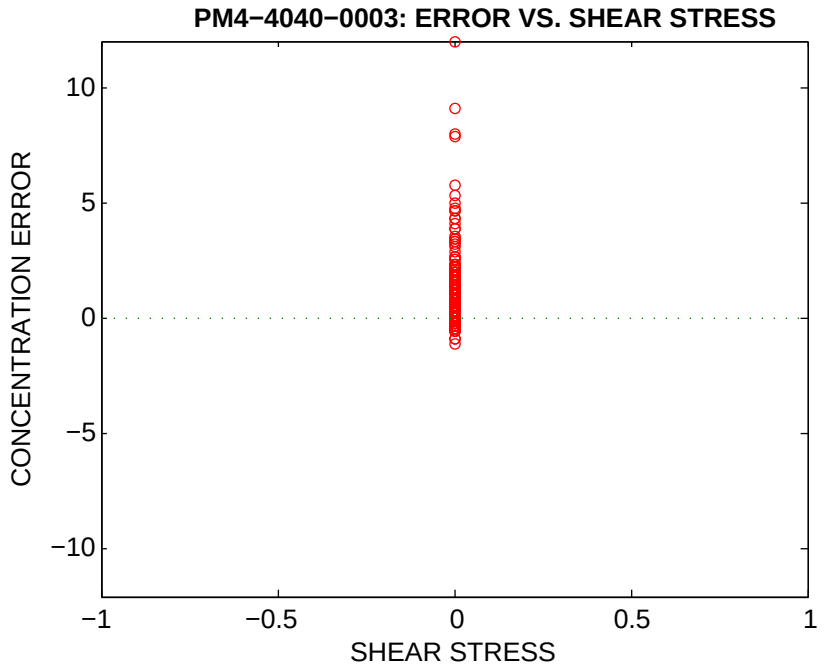


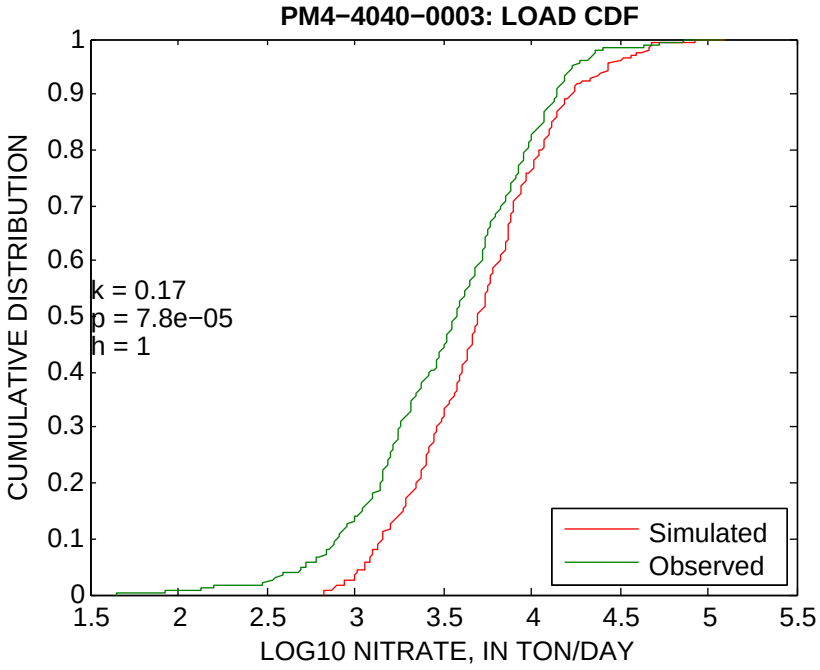


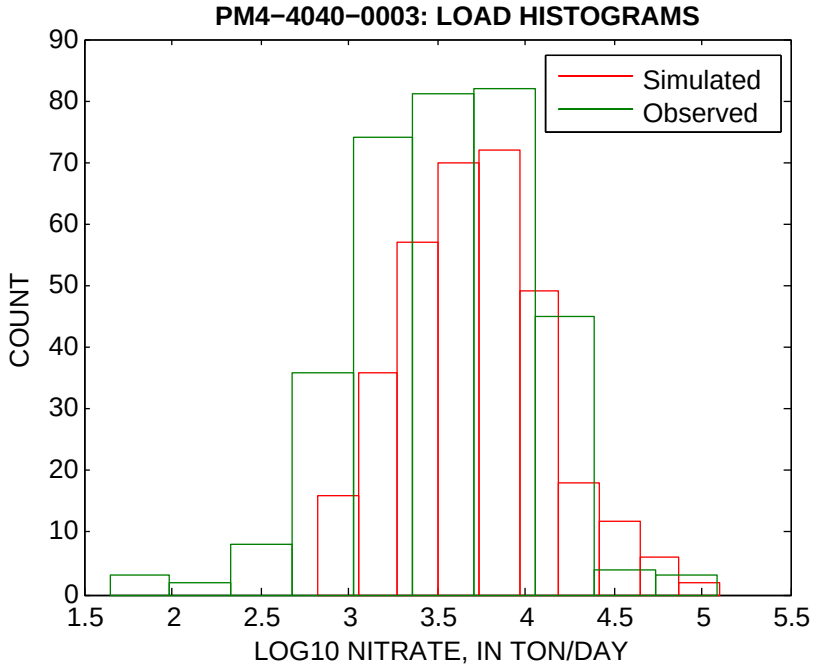


LOAD DATA
LOG10

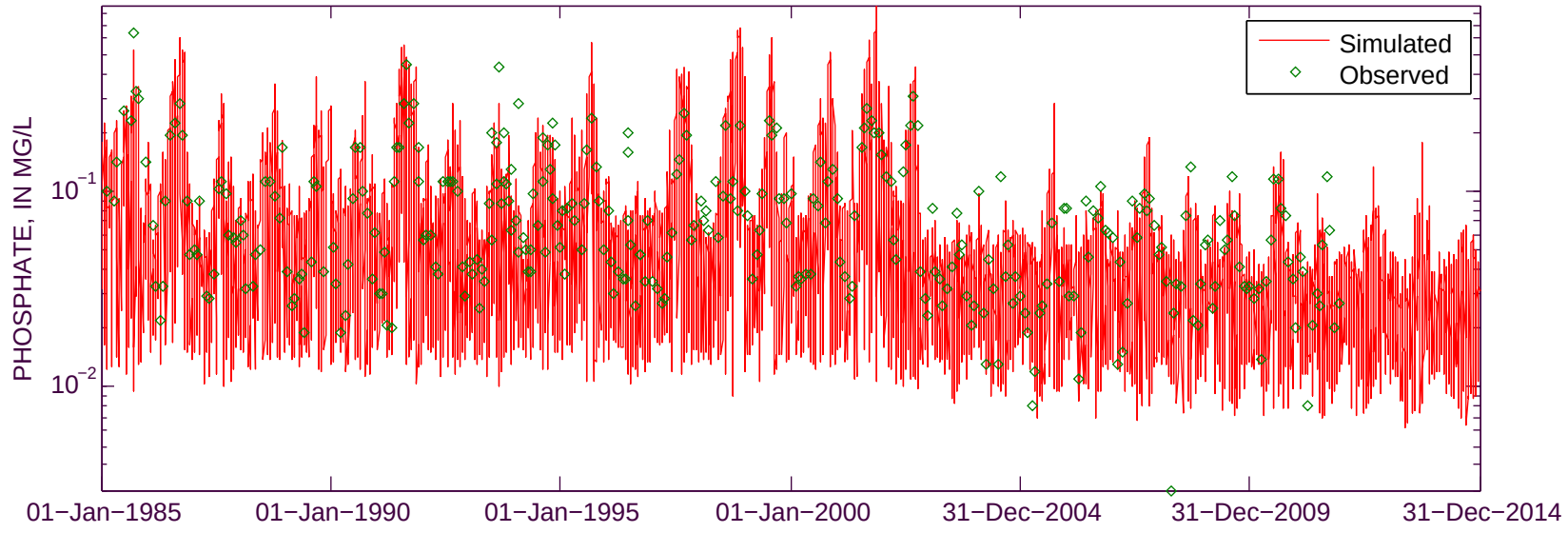




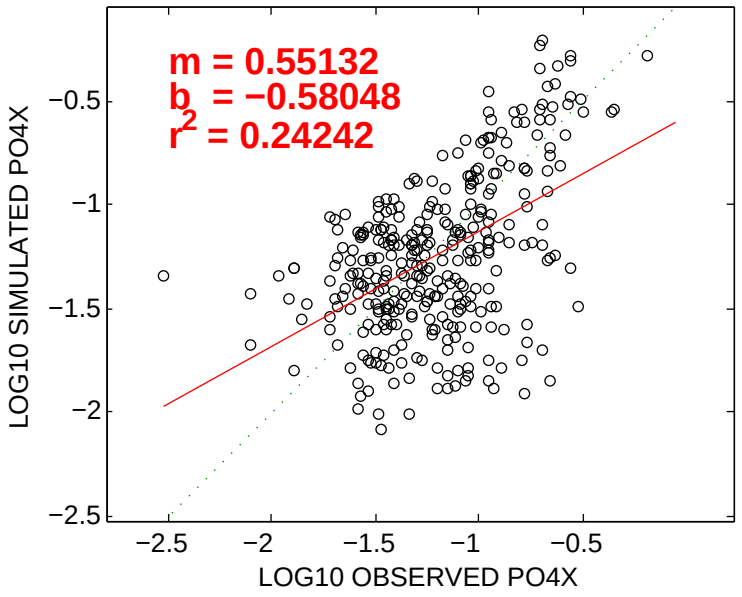




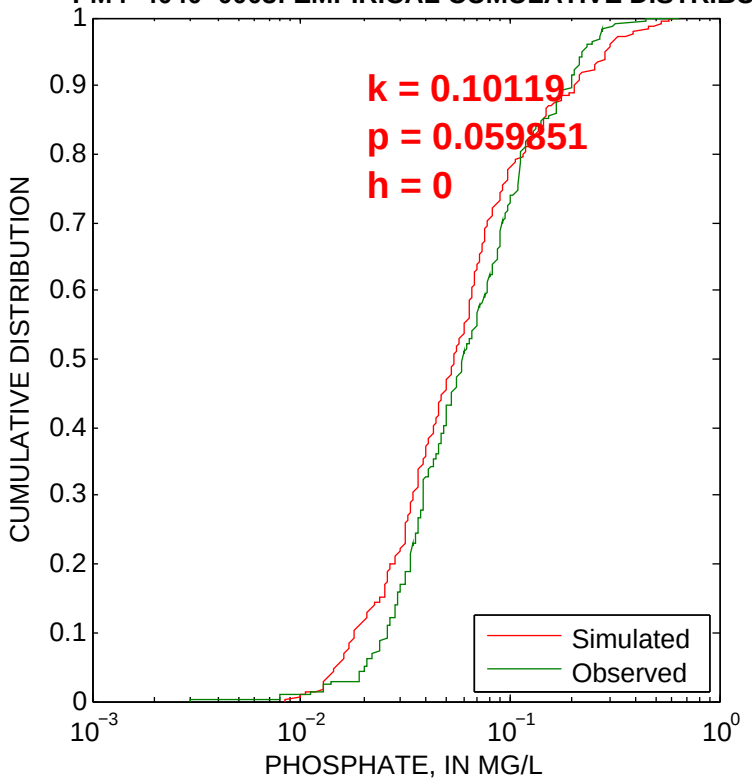
MONOCACY RIVER AT JUG BRIDGE NEAR FREDERICK, MD: PO4X TIME-SERIES



PM4-4040-0003: SIMULATED VS. OBSERVED



PM4-4040-0003: EMPIRICAL CUMULATIVE DISTRIBUTION



DATA SELECTION

scenario: P620171001WQ | file: PO4X.calib

plot: PO4X - phosphate

Dates: 1/1/1985 – 12/31/201

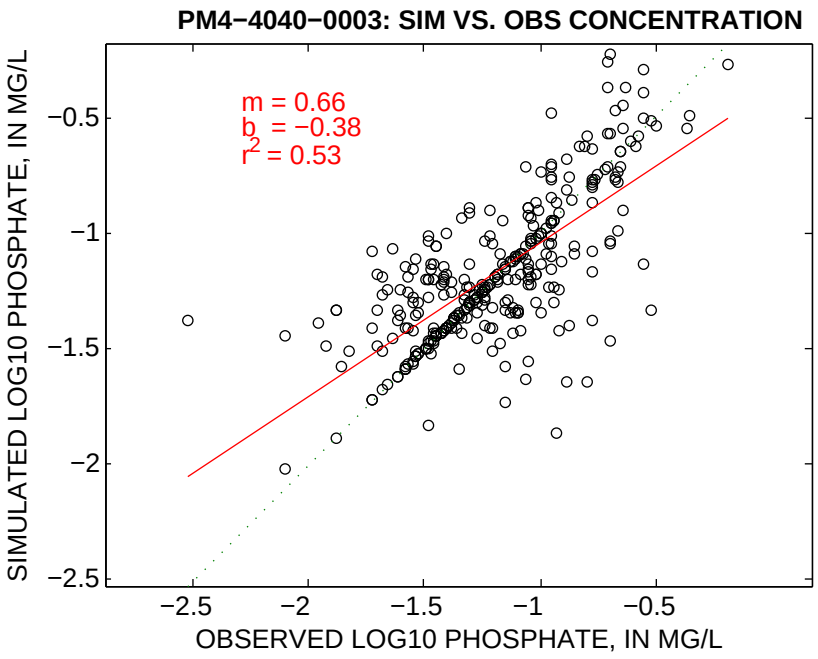
Drive: N/A | Directory: model | Observed: OBS20161101

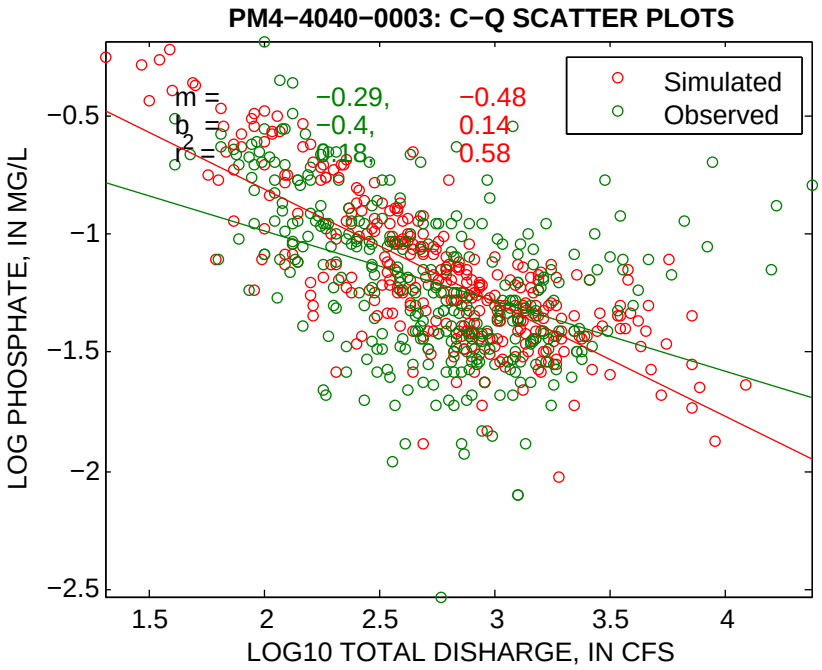
STATISTICS

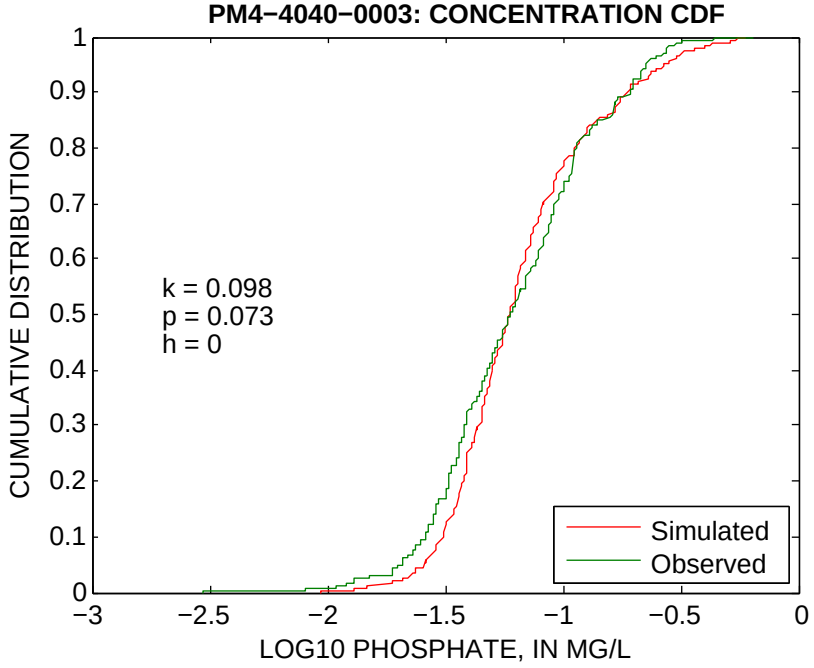
	n	observe	simulate
		336	336
min		0.003	0.0083095
		-2.52288	-2.08043
mean		0.0849114	0.0861309
		-1.2021	-1.24322
media		0.06	0.0544445
		-1.22185	-1.26405
max		0.65	0.61618
		-0.187087	-0.210292
varian		0.00569068	0.00925481
		0.113739	0.14261
JB		0.001	0.001
		0.5	0.016066
		ra	log
%		1.4363	3.42081
err.va		0.0054295	0.132631
rel.std.err		0.954104	1.1661
mod.eff		0.0458963	-0.166096

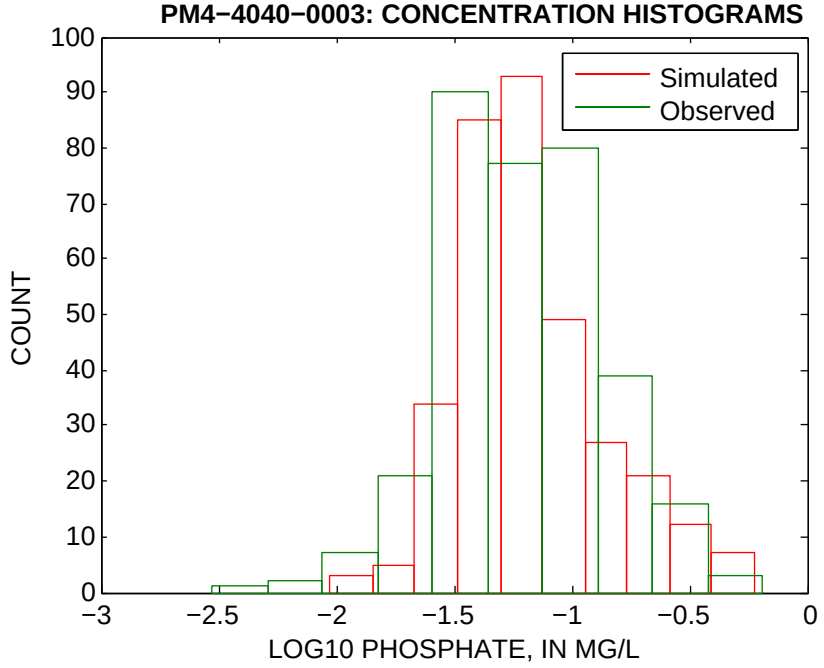
VERSION 2.1

ALL DATA
LOG10

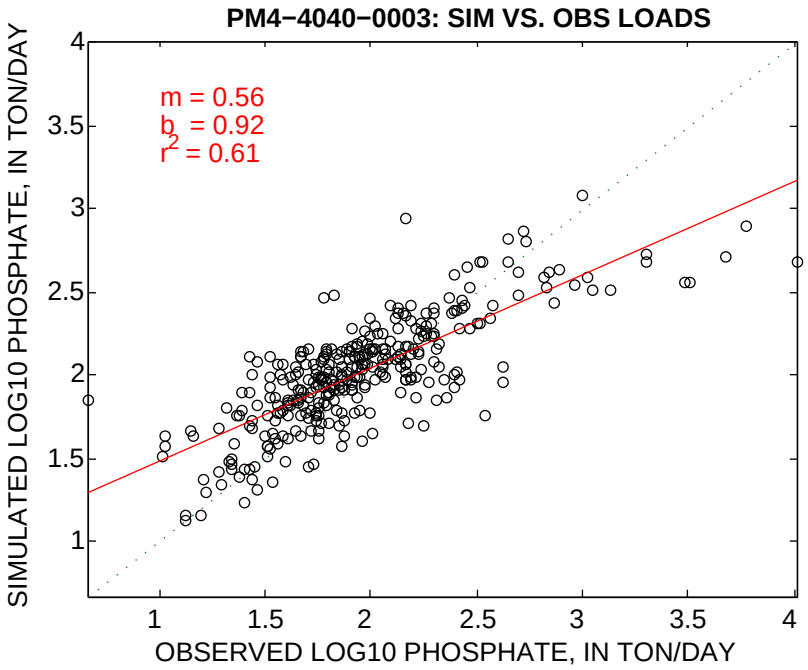


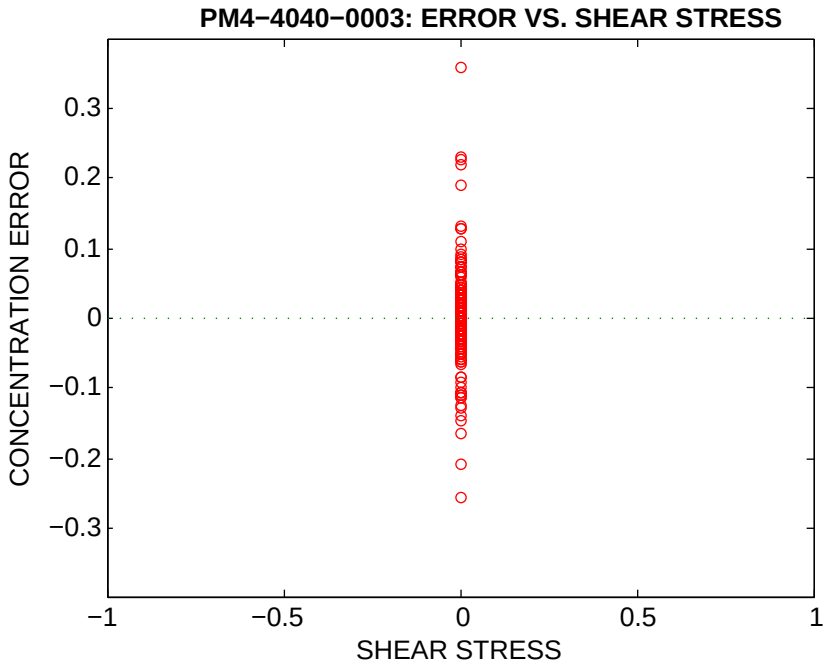


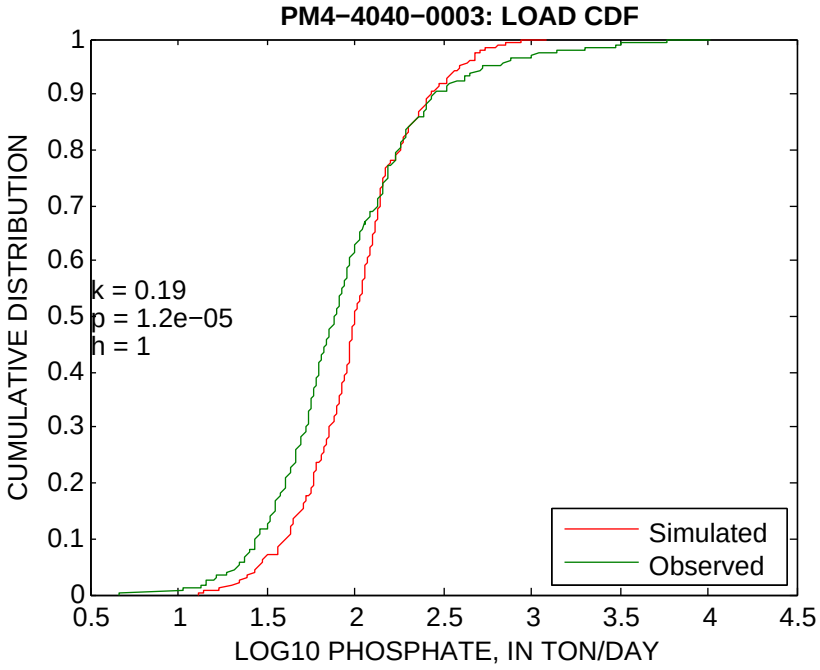


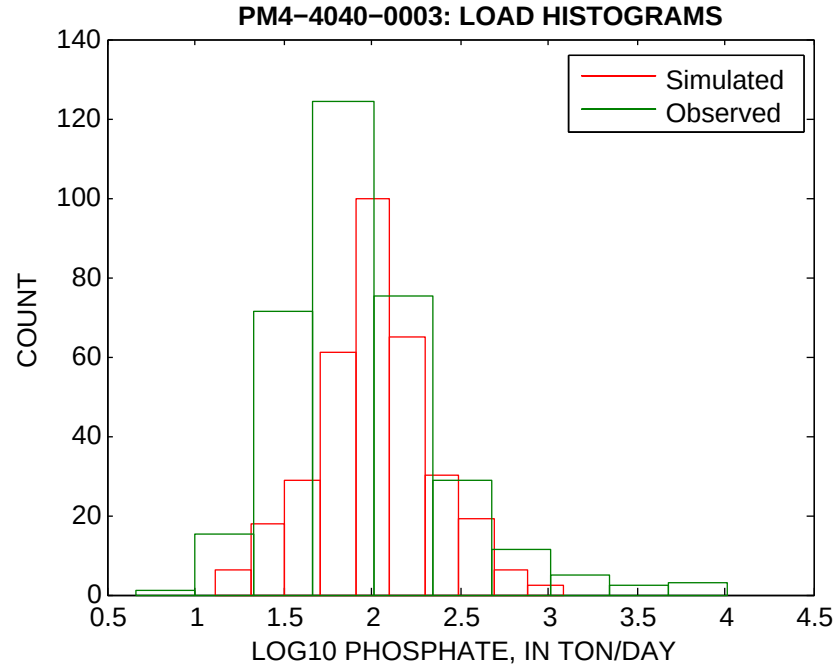


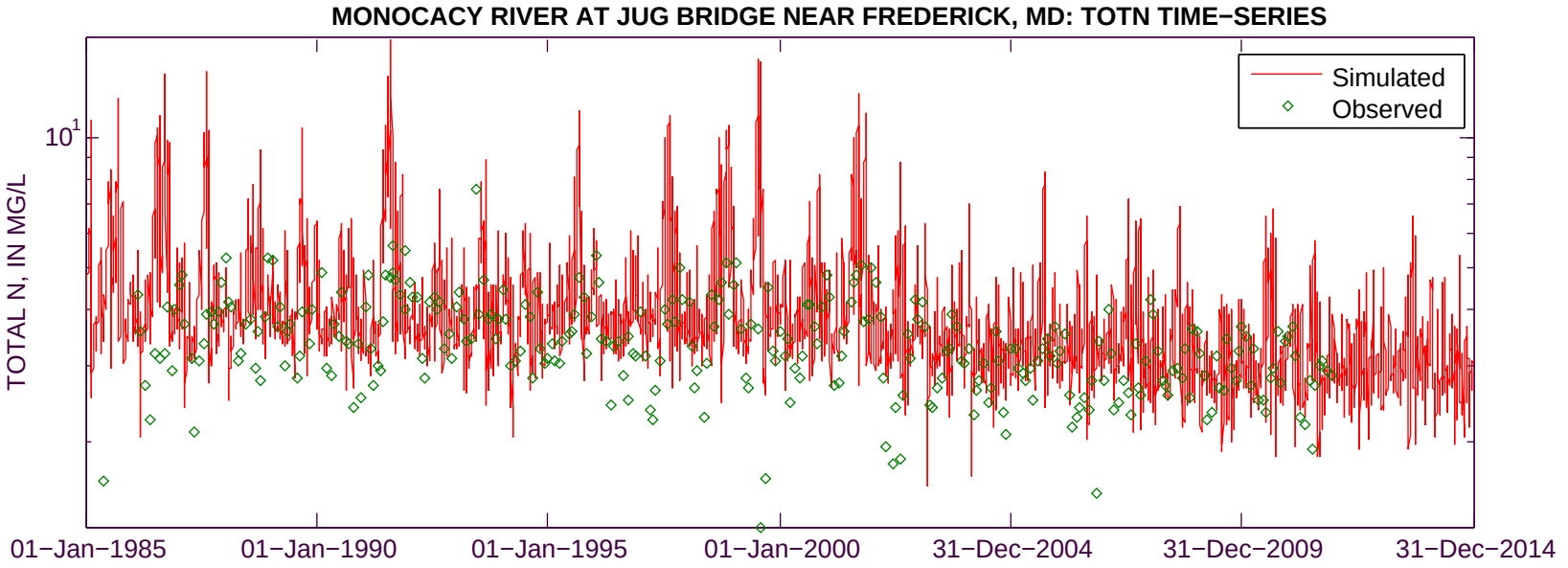
LOAD DATA
LOG10

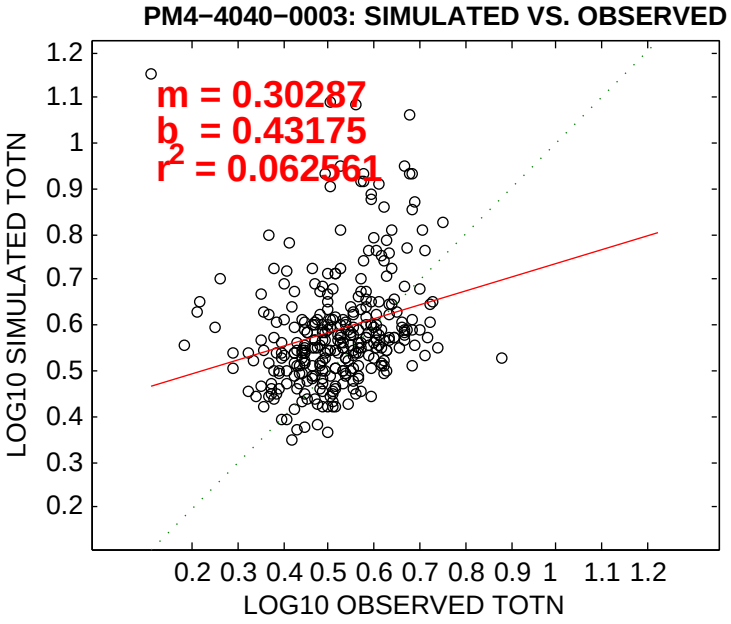


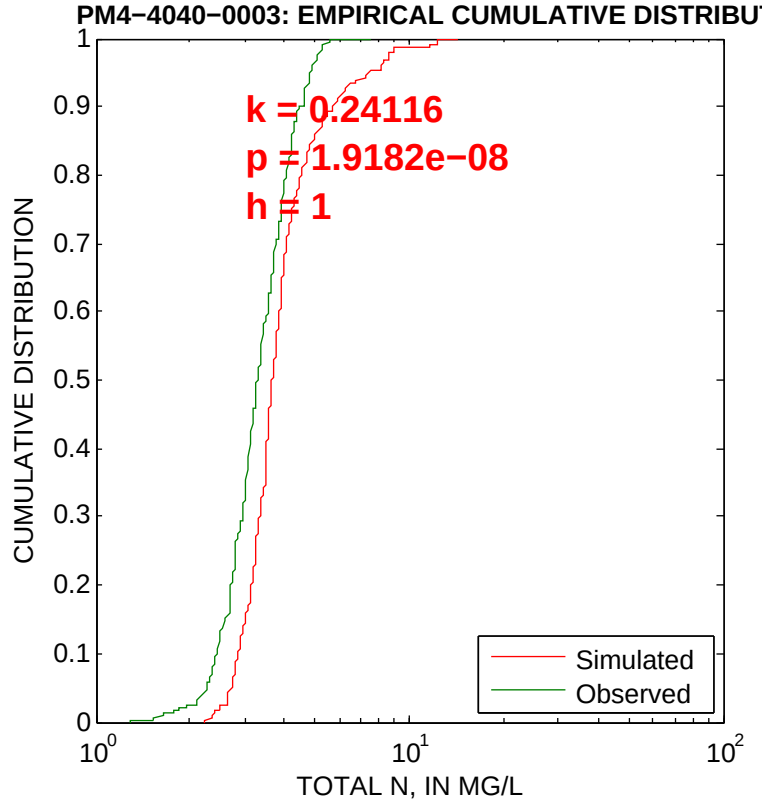












DATA SELECTION

scenario	file
P620171001WQ	TOTN.calib

plot: TOTN - total nitrogen

Dates: 1/1/1985 – 12/31/201

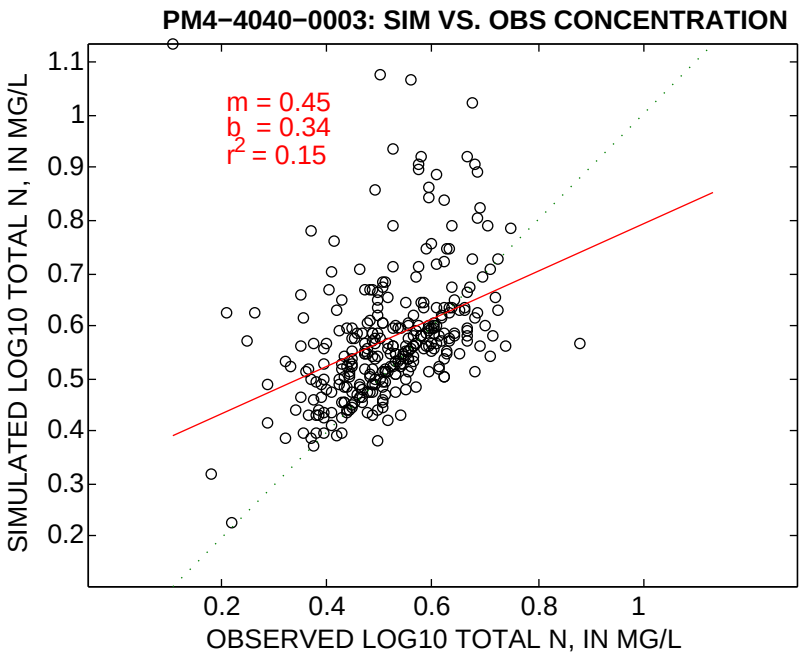
Drive	Directory	Observed
N/A	model	OBS20161101

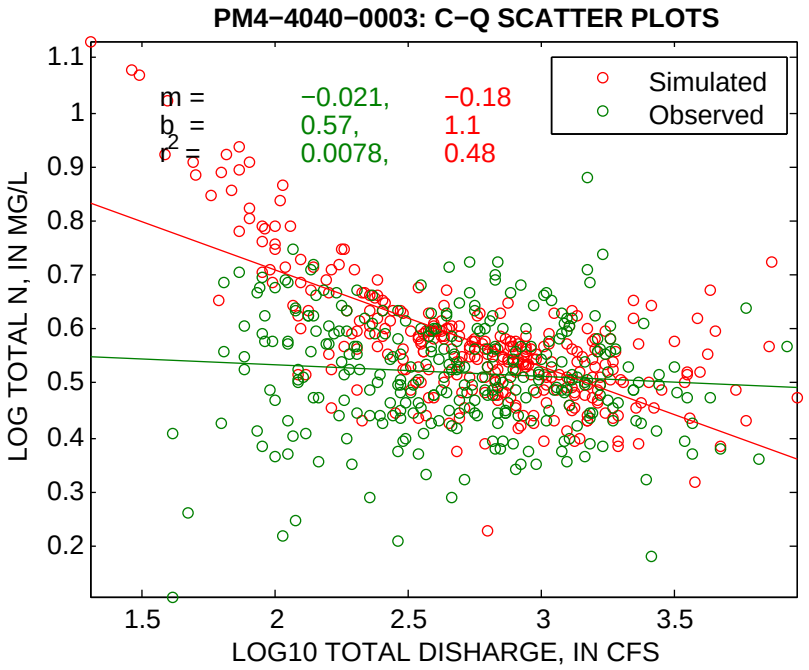
STATISTICS

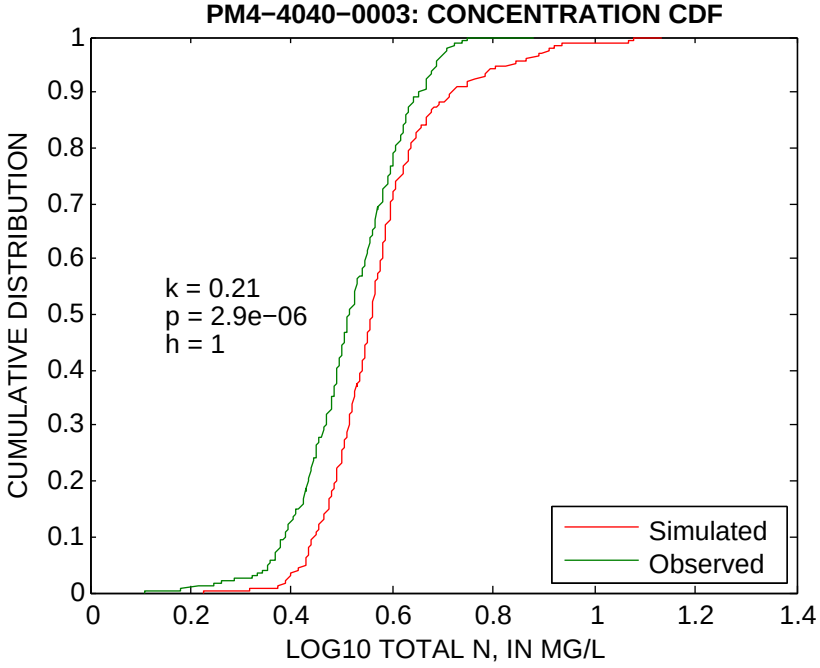
	observe	simulate
n	311	311
min	1.28	2.2274
	0.10721	0.347798
mean	3.39639	4.0829
	0.518271	0.588719
media	3.27	3.6785
	0.514548	0.565671
max	7.6	14.241
	0.880814	1.15354
varian	0.681315	2.50739
	0.0113163	0.0165922
JB	0.001	0.001
	0.011852	0.001
	ra	log
%	20.2129	13.5929
err.va	3.09066	0.0260327
rel.std.err	4.53631	2.30047
mod.eff	-3.53631	-1.30047

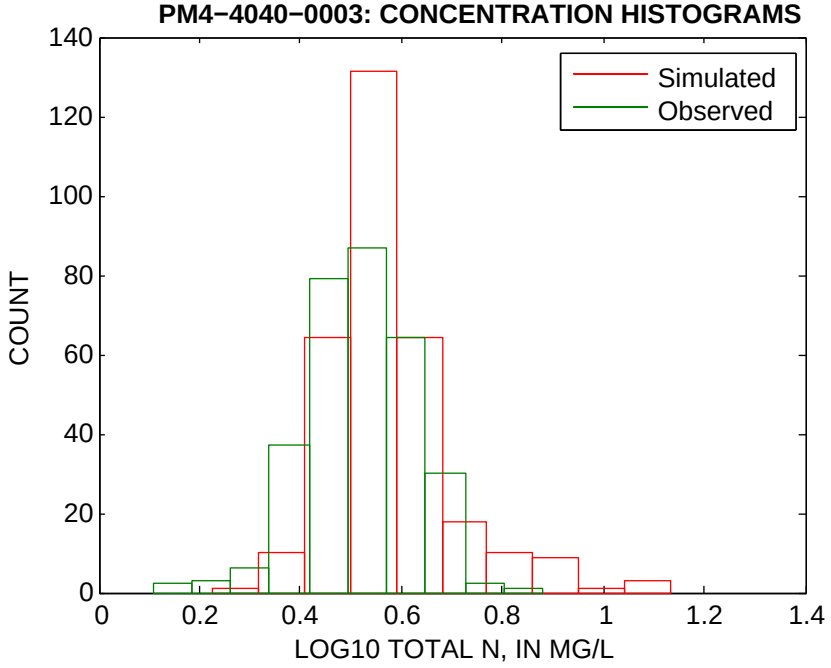
VERSION 2.1

ALL DATA
LOG10

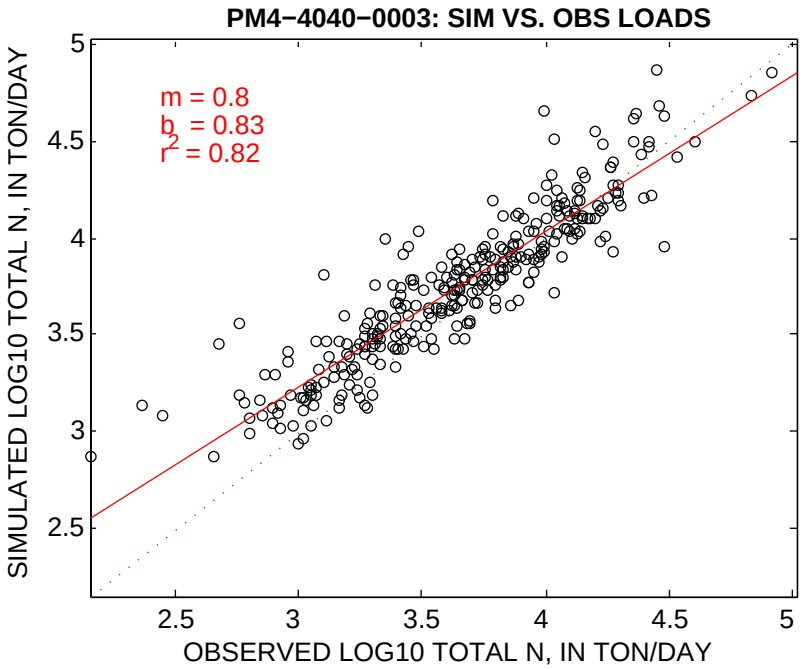


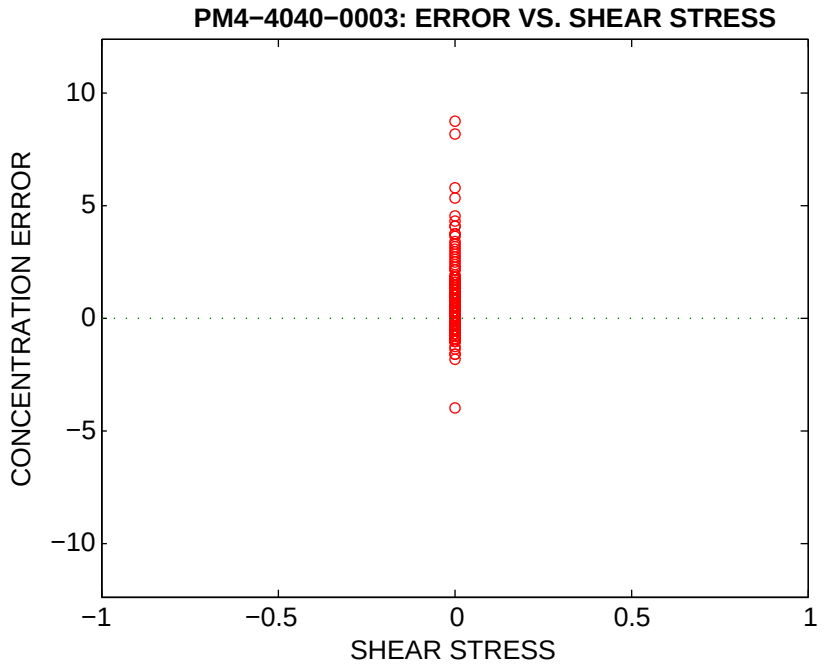


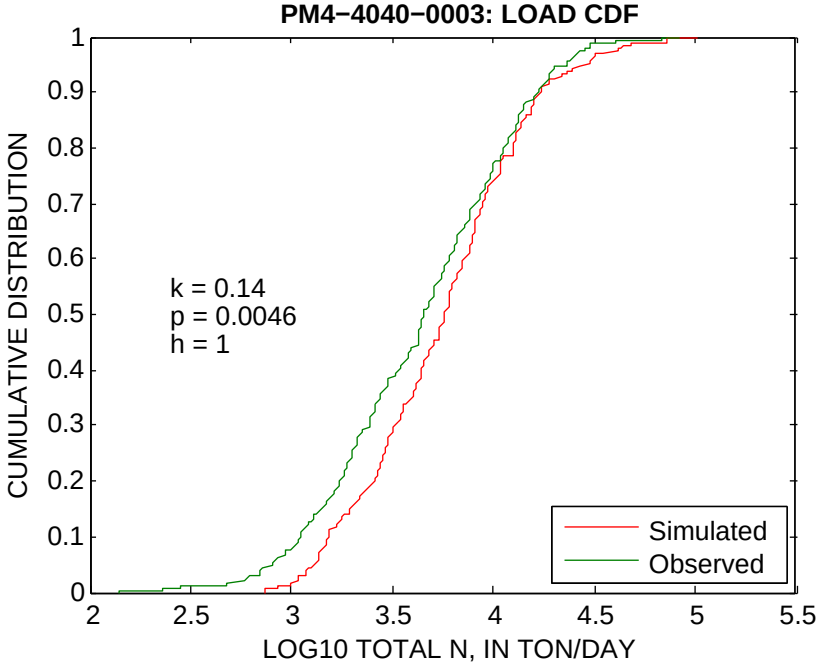


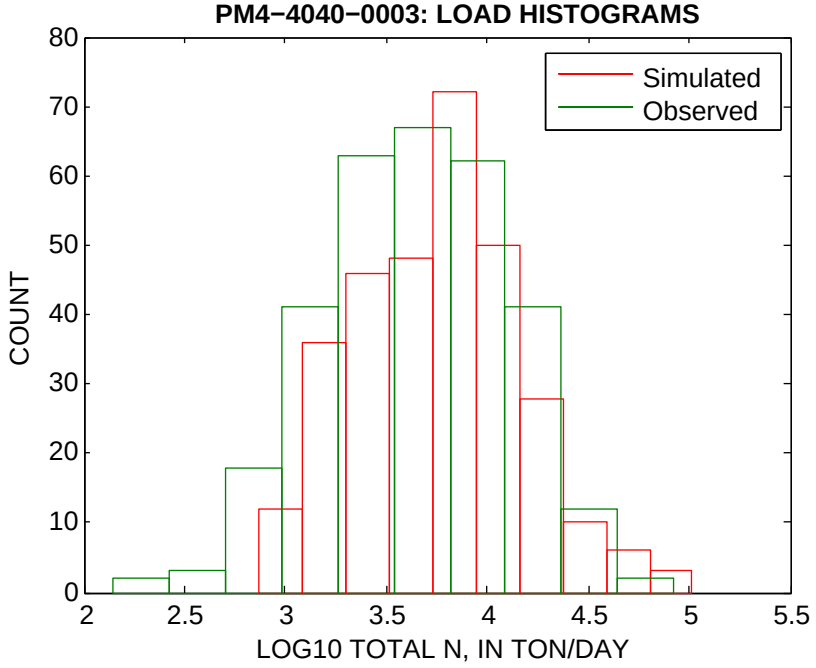


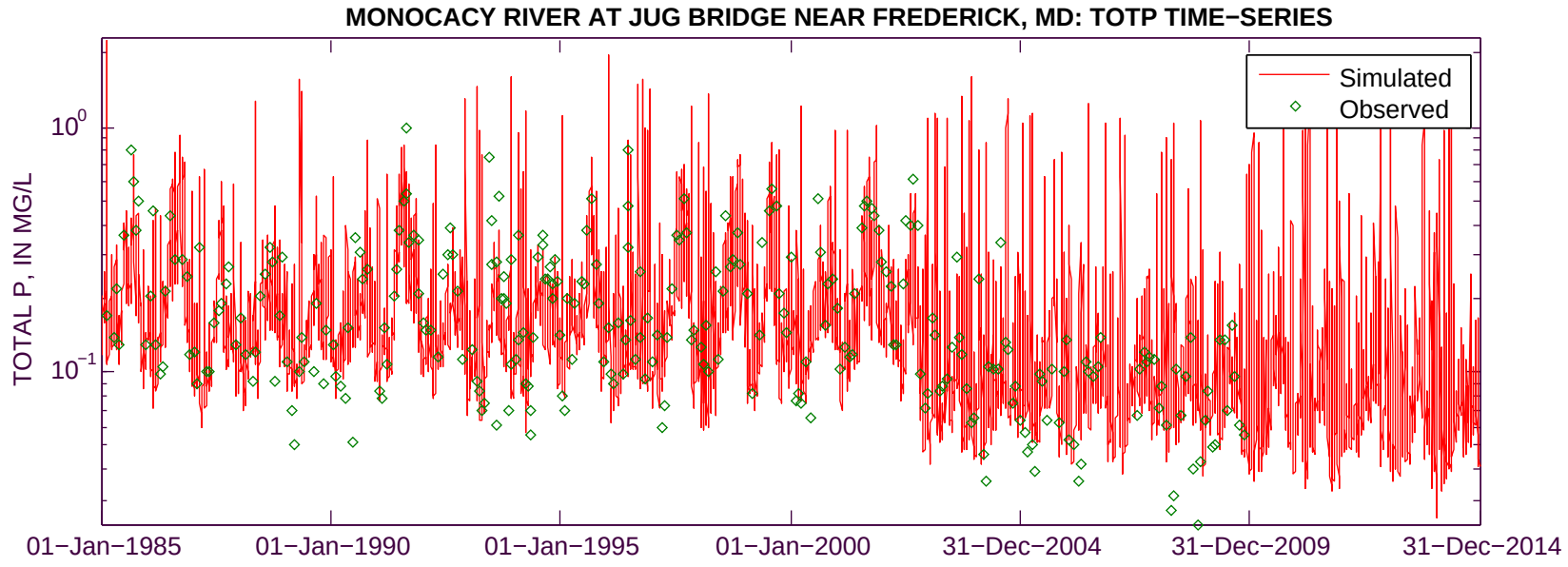
LOAD DATA
LOG10

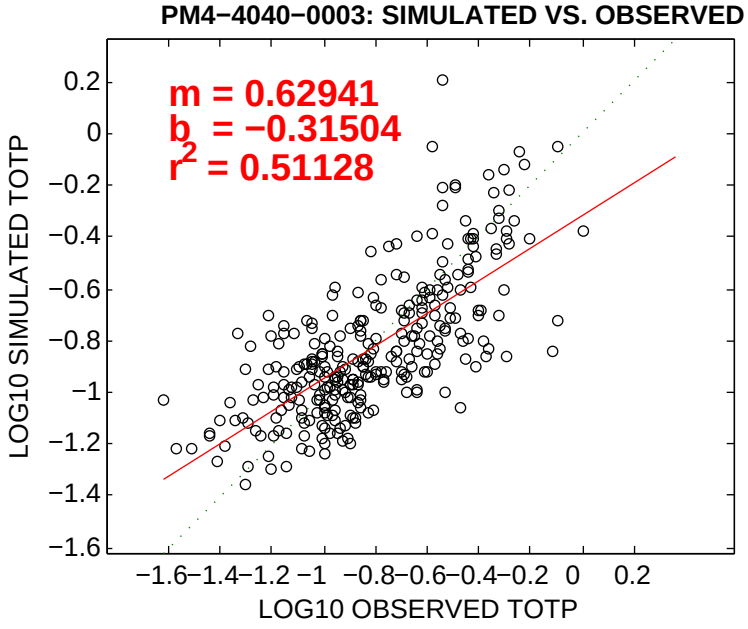


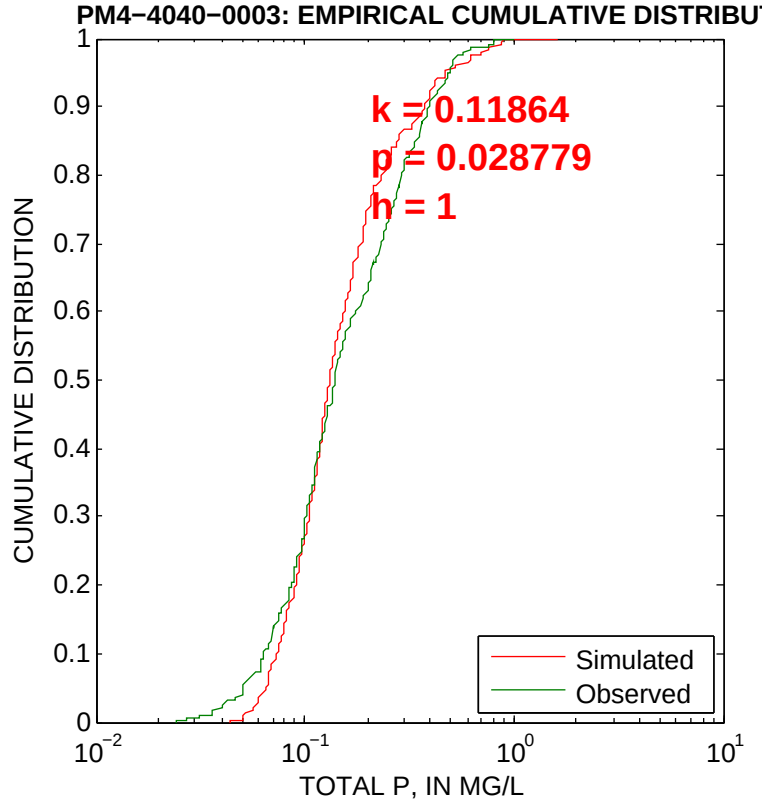












DATA SELECTION

scenario	file
P620171001WQ	TOTP.calib

plot: TOTP - total phosphorus

Dates	1/1/1985	12/31/201

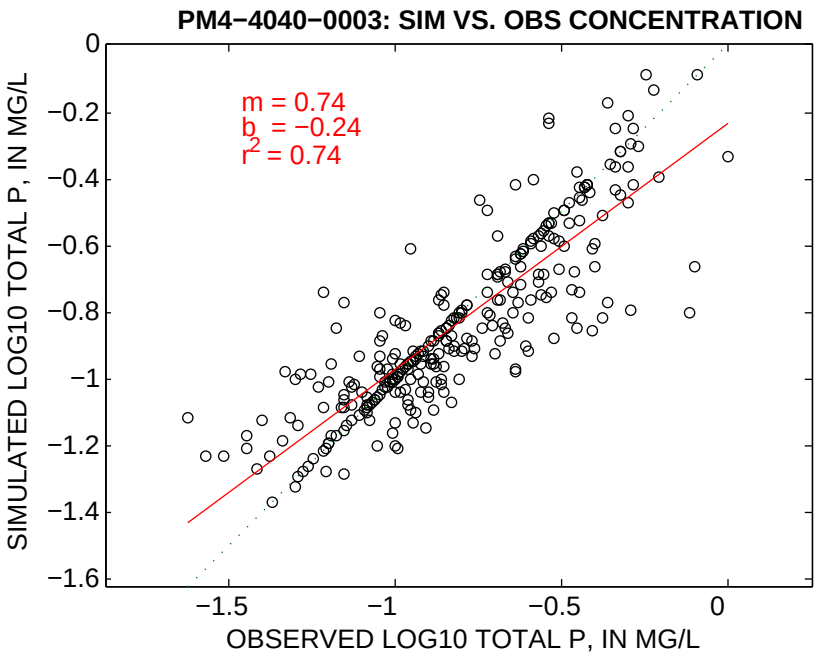
Drive	Directory	Observed
N/A	model	OBS20161101

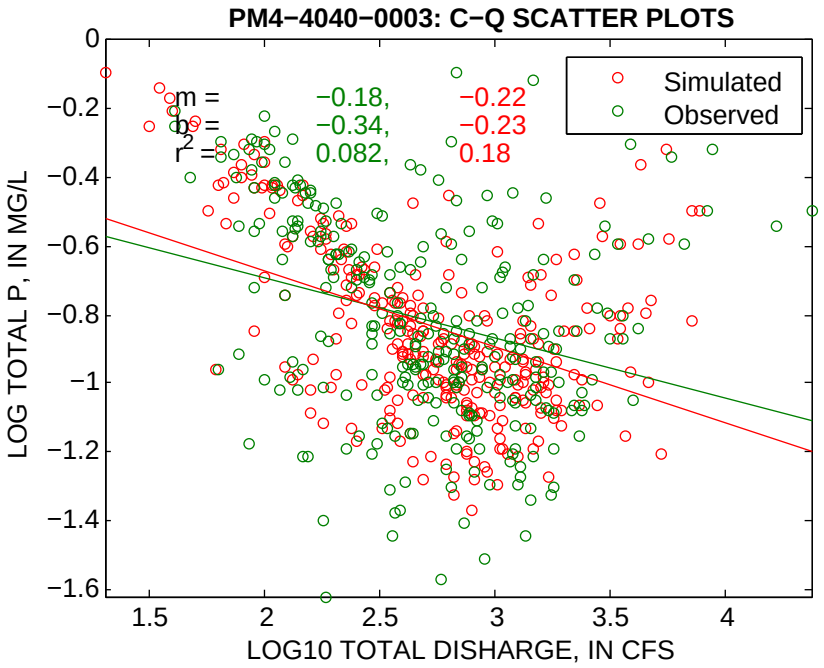
STATISTICS

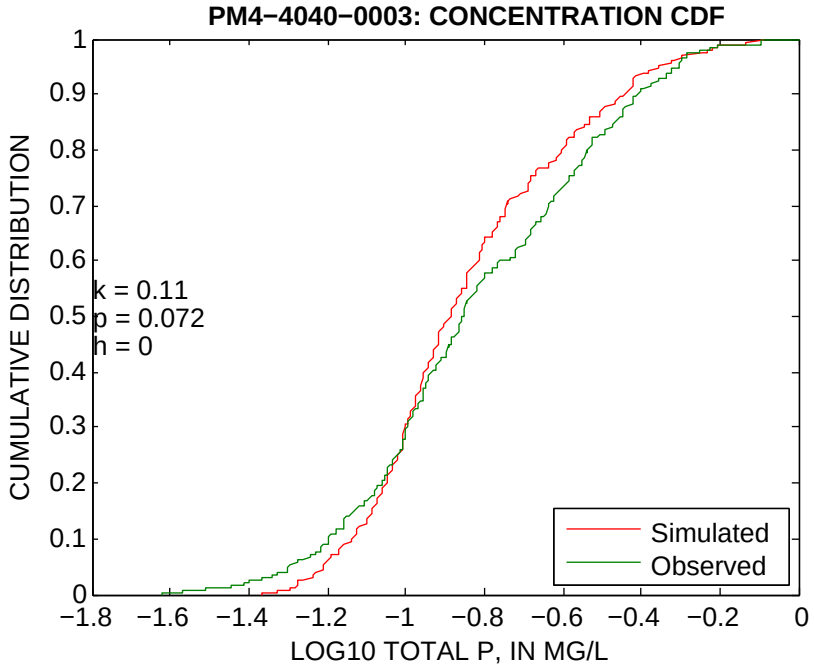
	n	295	295
		observe	simulate
min		0.024	0.043529
		-1.61979	-1.36122
mean		0.195134	0.185801
		-0.815807	-0.828514
media		0.14	0.13119
		-0.853872	-0.882099
max		1	1.616
		0	0.208441
varian		0.0218811	0.0273505
		0.0920764	0.0713436
JB		0.001	0.001
		0.165707	0.001
		ra	log
%		-4.78313	1.55755
err.va		0.019997	0.047675
rel.std.err		0.913893	0.517777
mod.eff		0.0861072	0.482223

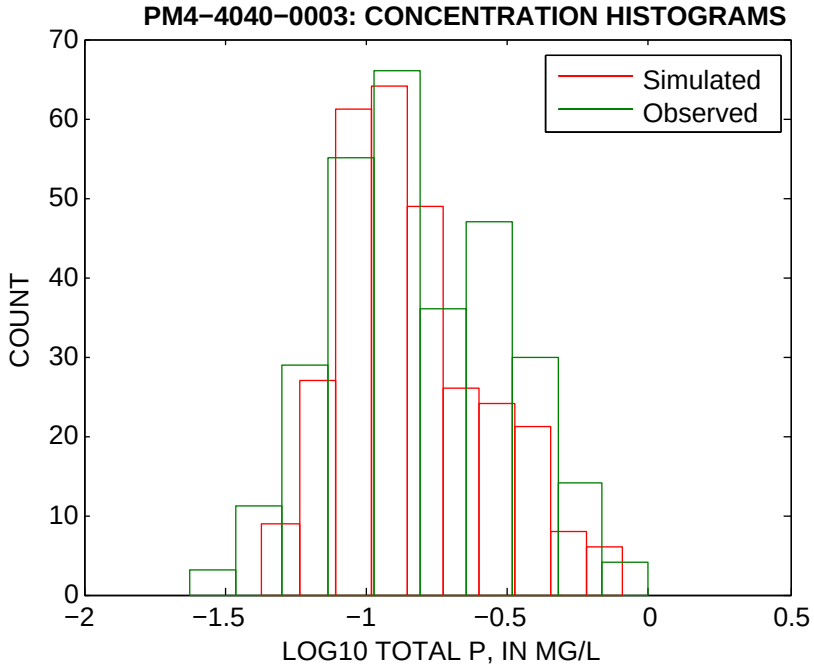
VERSION 2.1

ALL DATA
LOG10

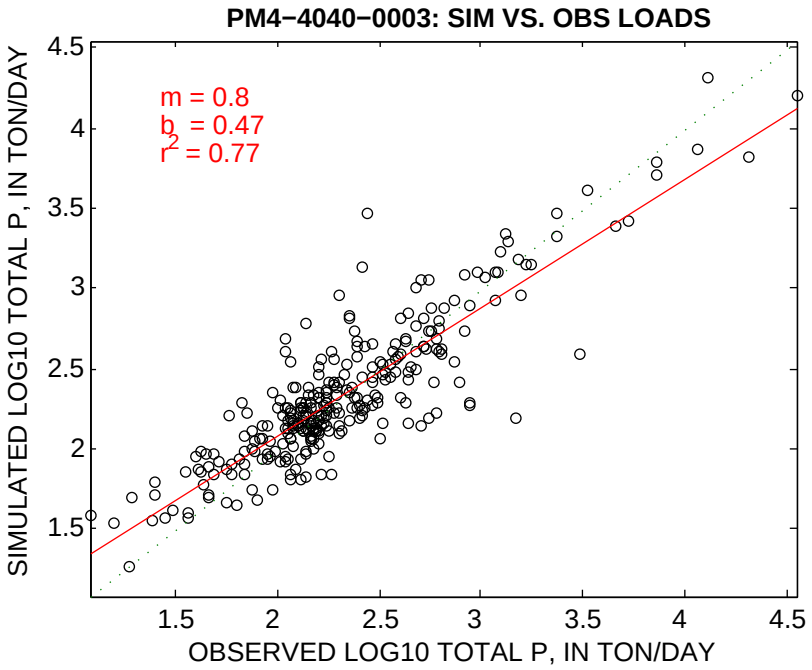


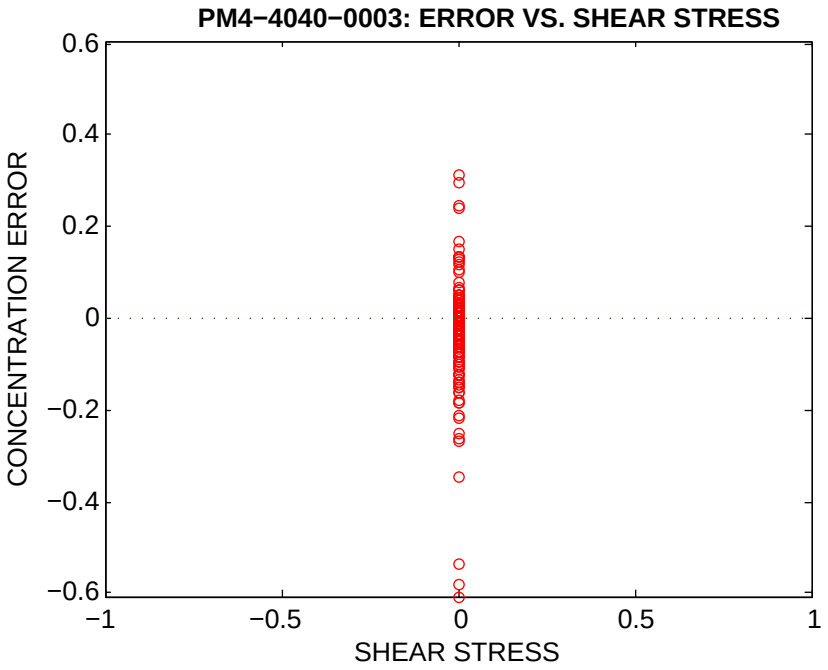


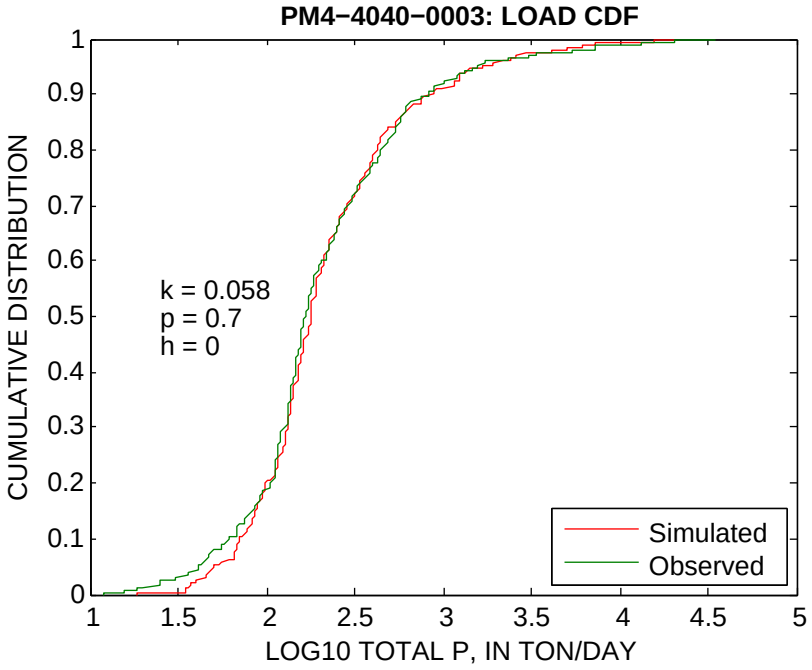


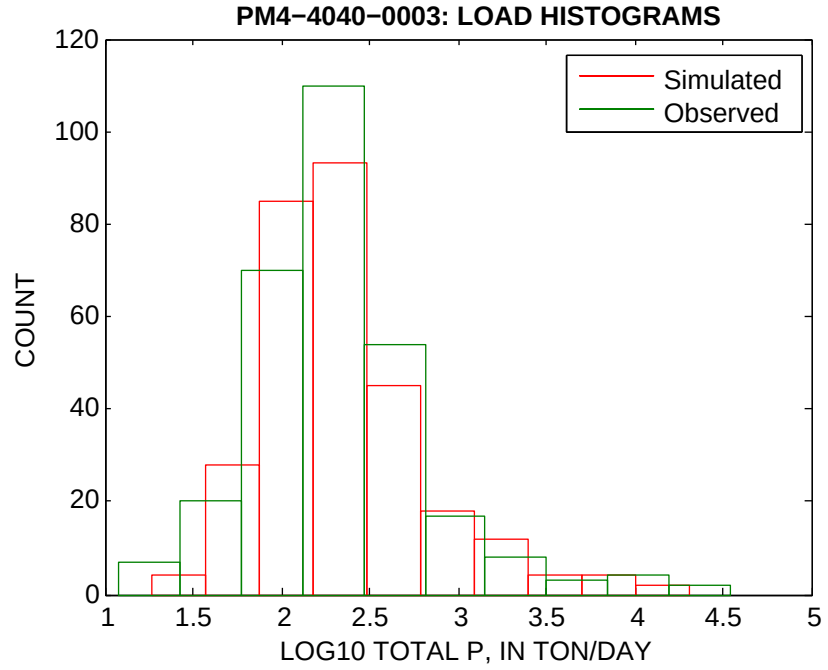


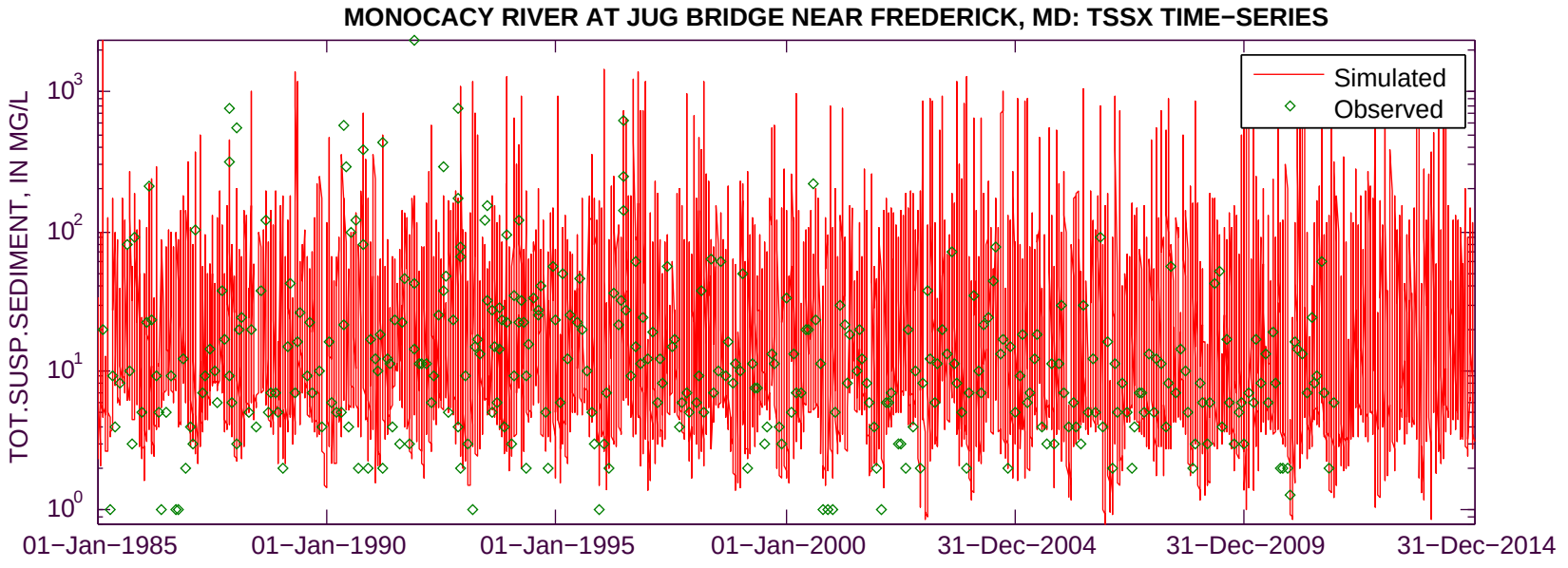
LOAD DATA
LOG10

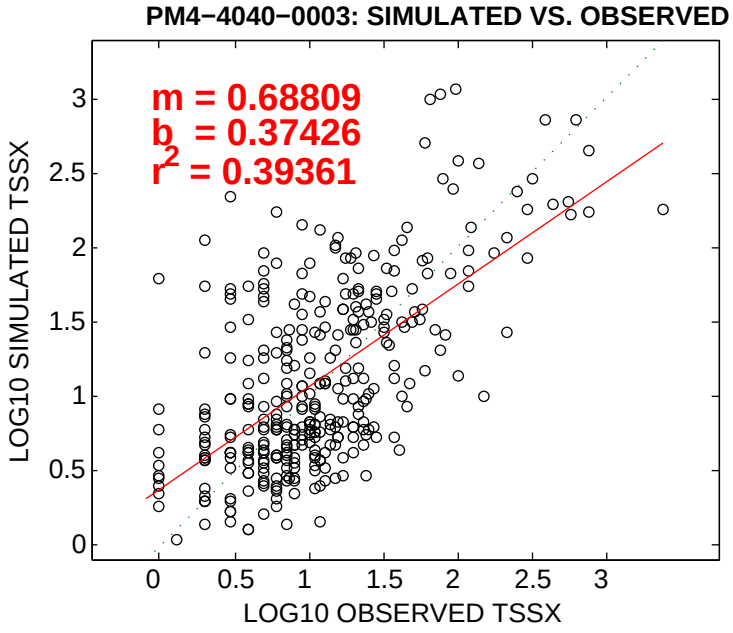


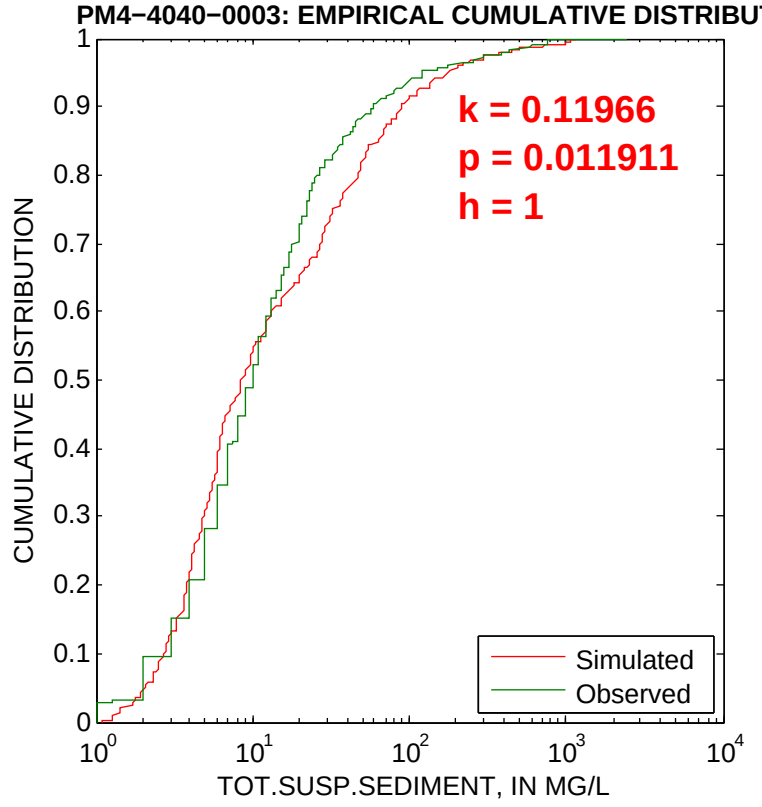












DATA SELECTION

scenario	file
P620171001WQ	TSSX.calib

plot: TSSX - total suspended ...

Dates: 1/1/1985 – 12/31/201

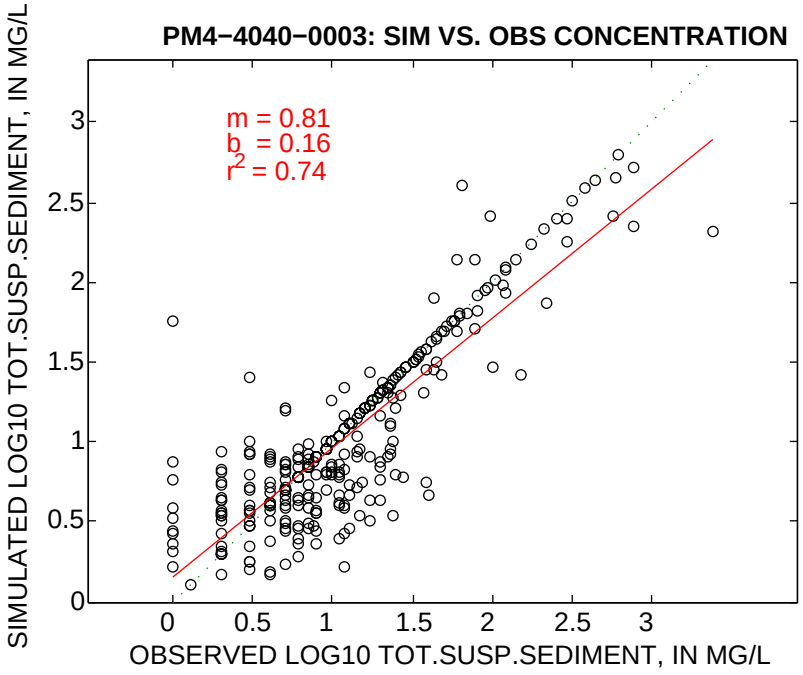
Drive	Directory	Observed
N/A	model	OBS20161101

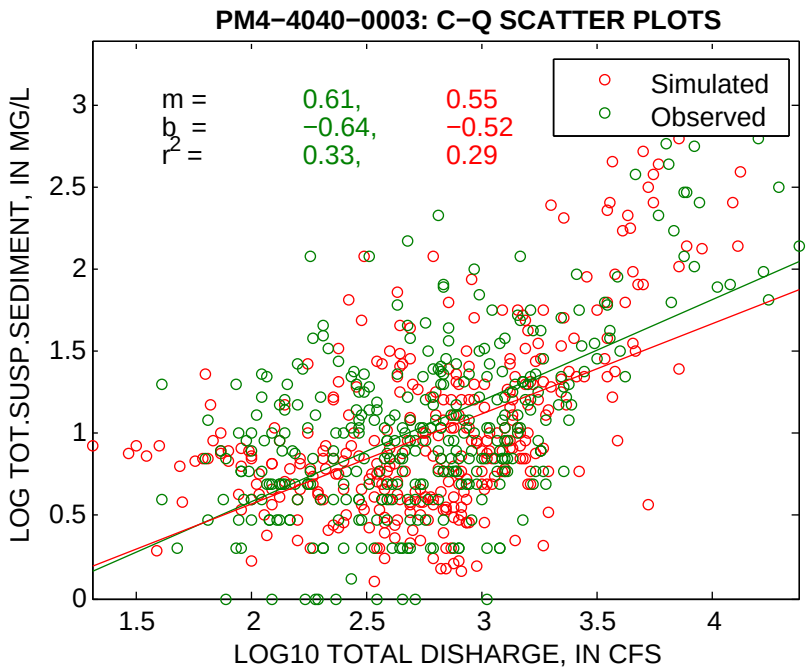
STATISTICS

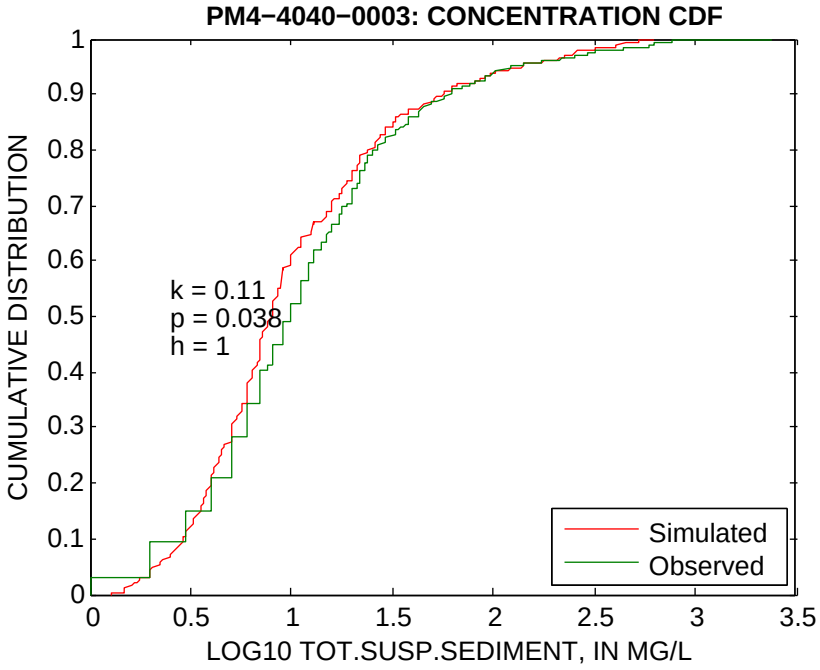
	n	observe	simulate
		351	351
min		1	1.0914
		0	0.0379839
mean		40.3789	45.2668
		1.06134	1.10455
media		10	8.5391
		1	0.931412
max		2410	1162.2
		3.38202	3.06528
varian		24402.5	15759.1
		0.31589	0.379973
JB		0.001	0.001
		0.001	0.001
		ra	log
%		12.1052	4.07116
err.va		27755.4	0.263017
rel.std.err		1.1374	0.832621
mod.eff		-0.137398	0.167379

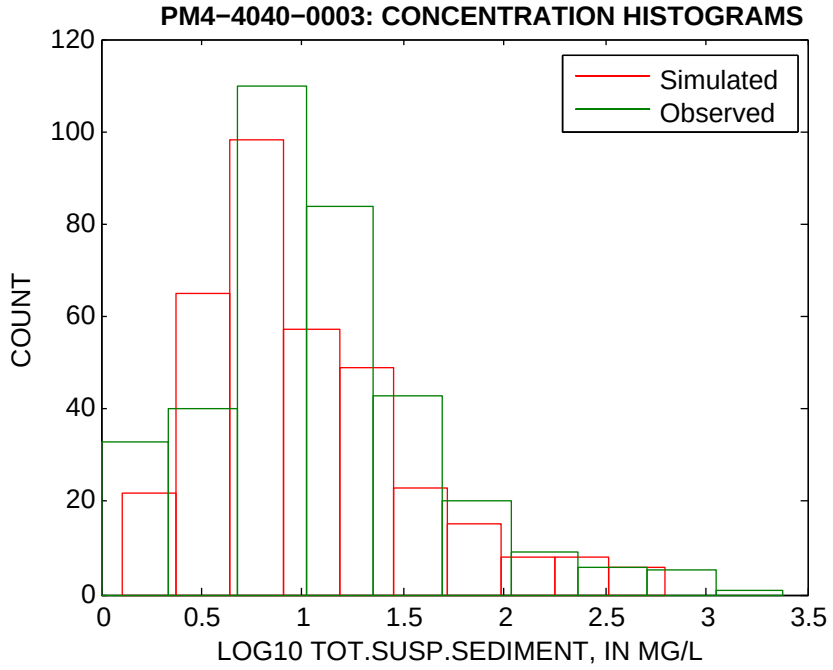
VERSION 2.1

ALL DATA
LOG10

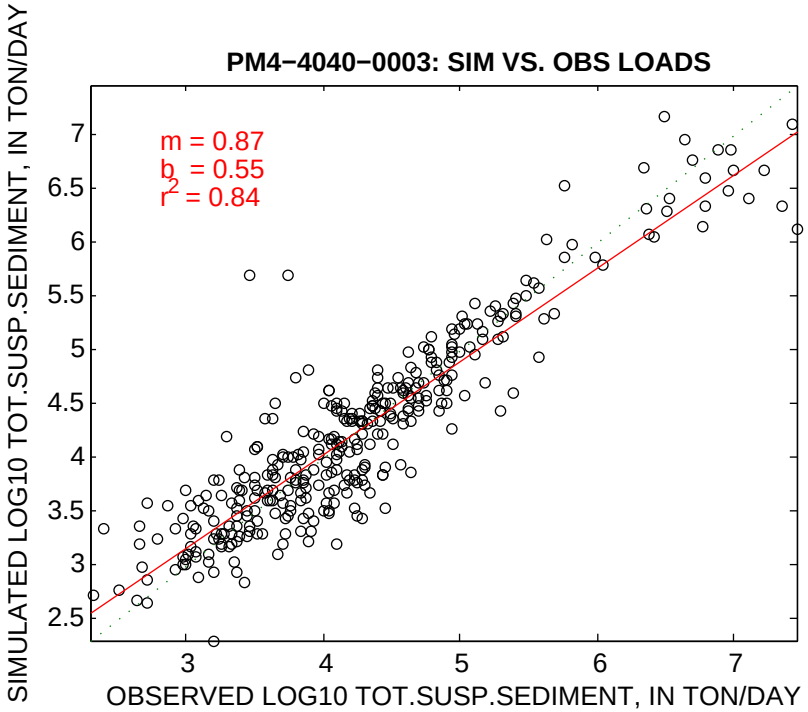


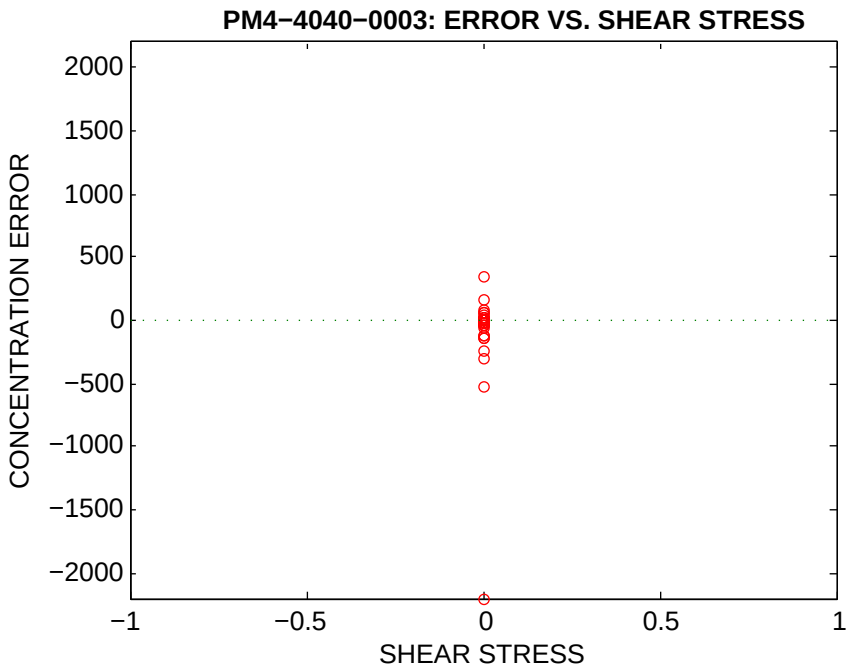


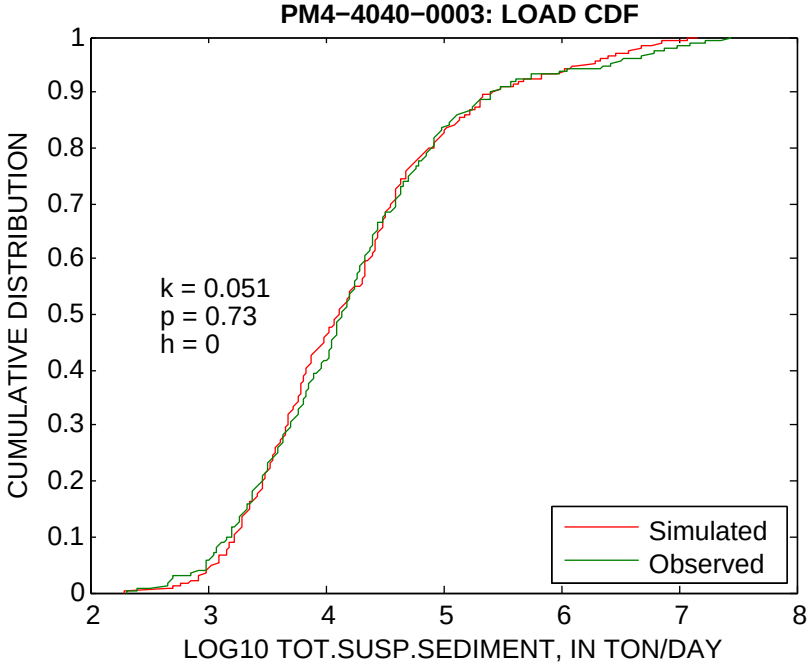


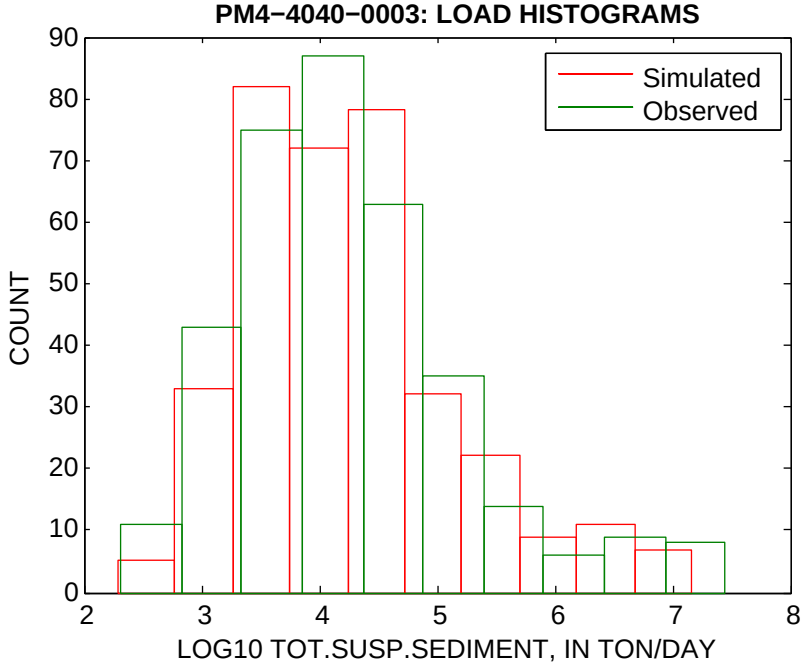


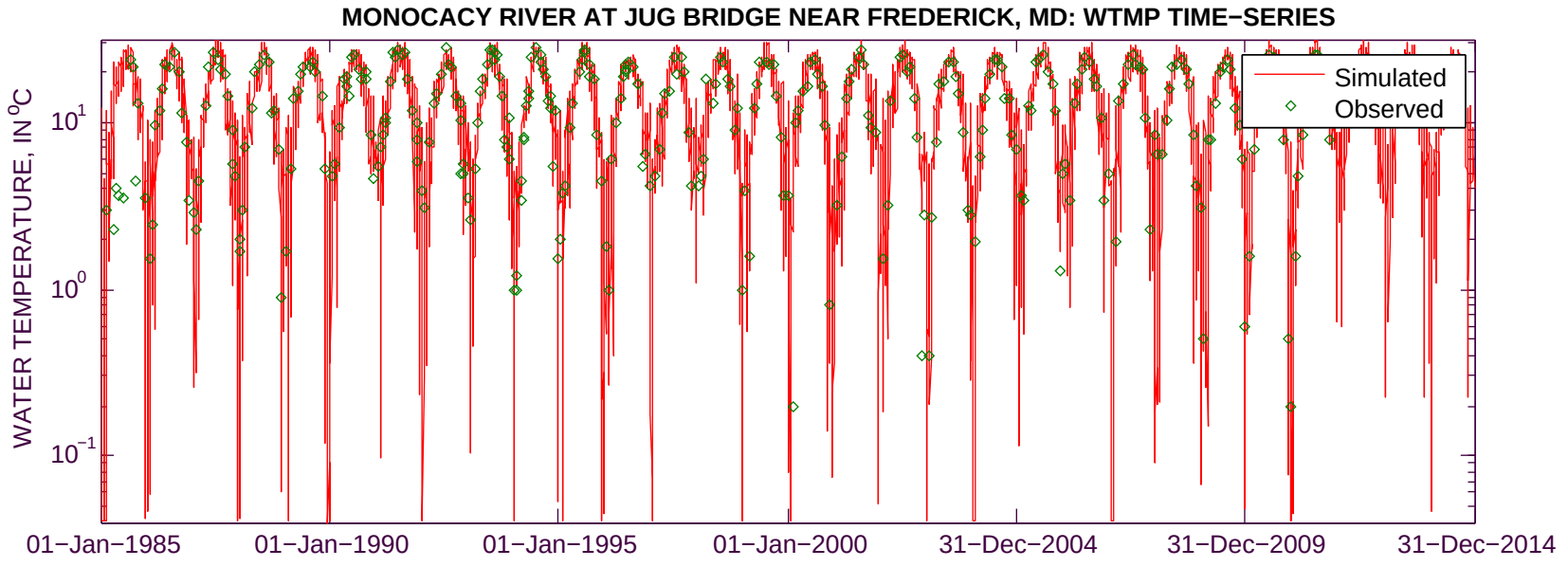
LOAD DATA
LOG10

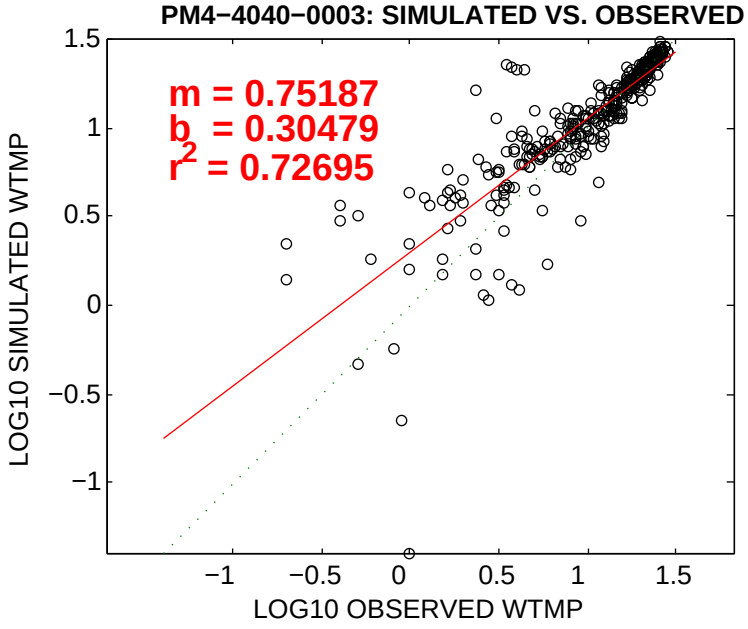


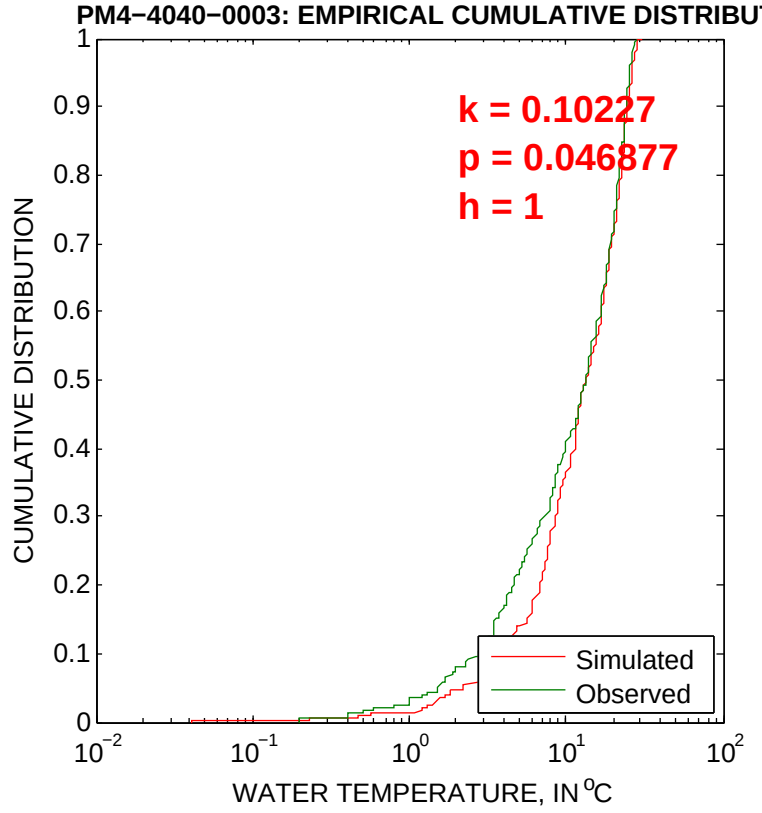












DATA SELECTION

scenario	file
P620171001WQ	WTMP.calib

plot: WTMP - water tempera...

Dates: 1/1/1985 – 12/31/201

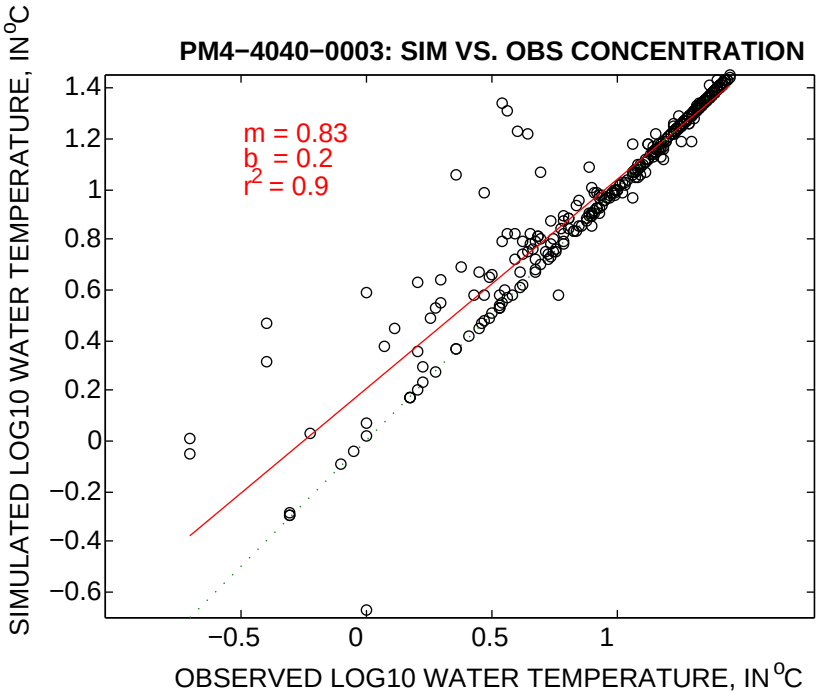
Drive	Directory	Observed
N/A	model	OBS20161101

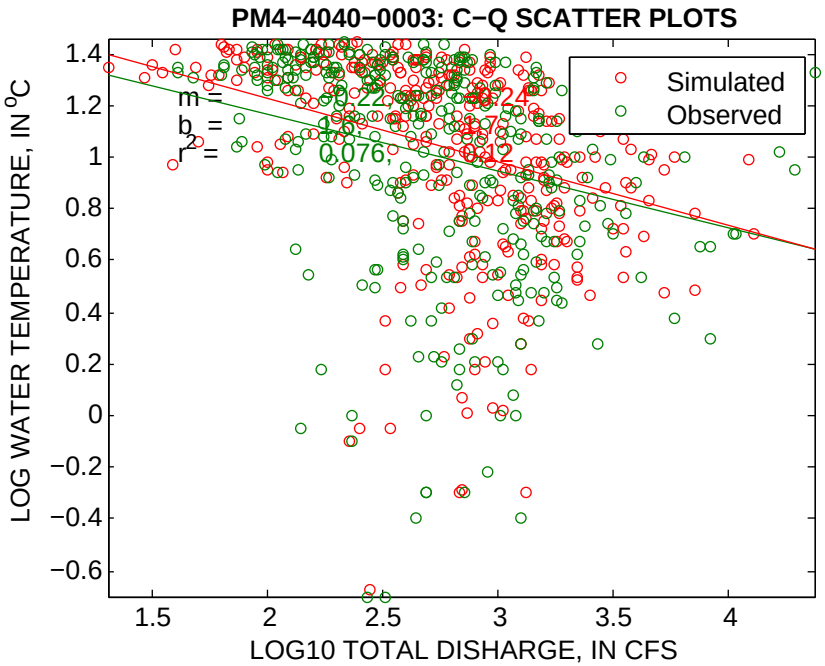
STATISTICS

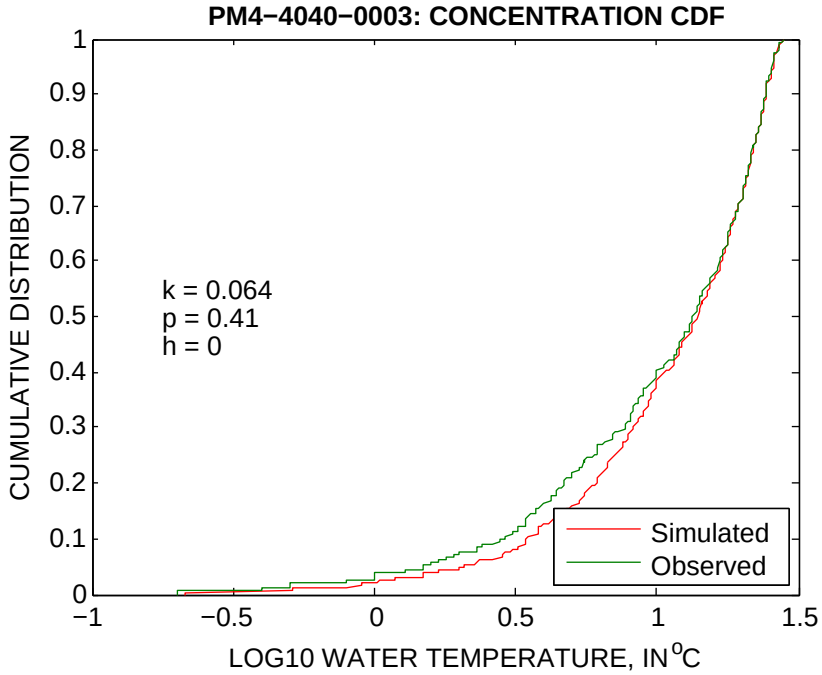
	n	observe	simulate
		352	352
min		0.2	0.040313
		-0.69897	-1.39455
mean		13.3442	14.1989
		0.991431	1.05022
media		13.25	13.5155
		1.12221	1.13083
max		28.2	31.096
		1.45025	1.4927
varian		64.9647	59.9824
		0.169841	0.132077
JB		0.001	0.001867
		0.001	0.001
		ra	log
%		6.40504	5.92956
err.va		9.07799	0.0499861
rel.std.err		0.139737	0.294312
mod.eff		0.860263	0.705688

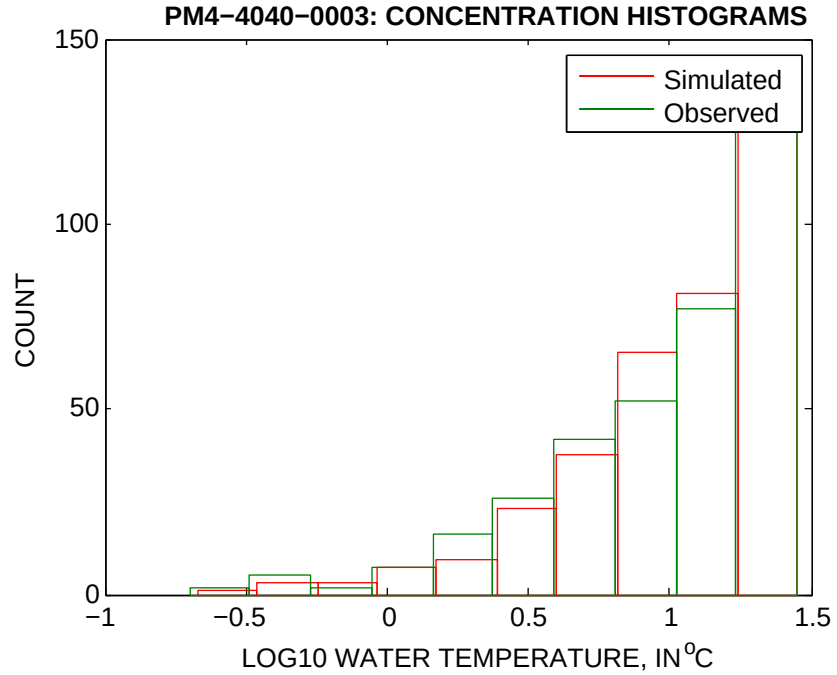
VERSION 2.1

ALL DATA
LOG10

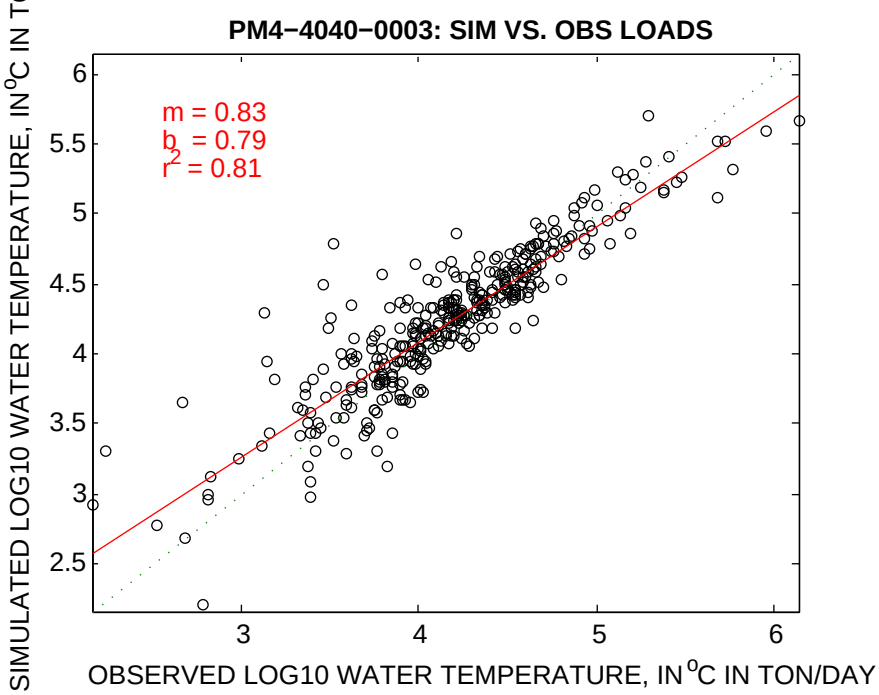


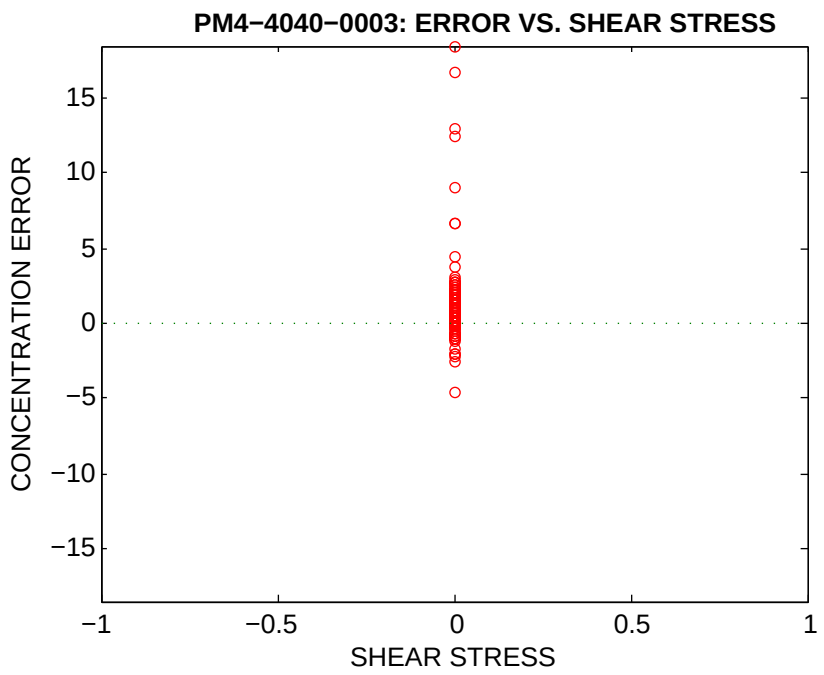


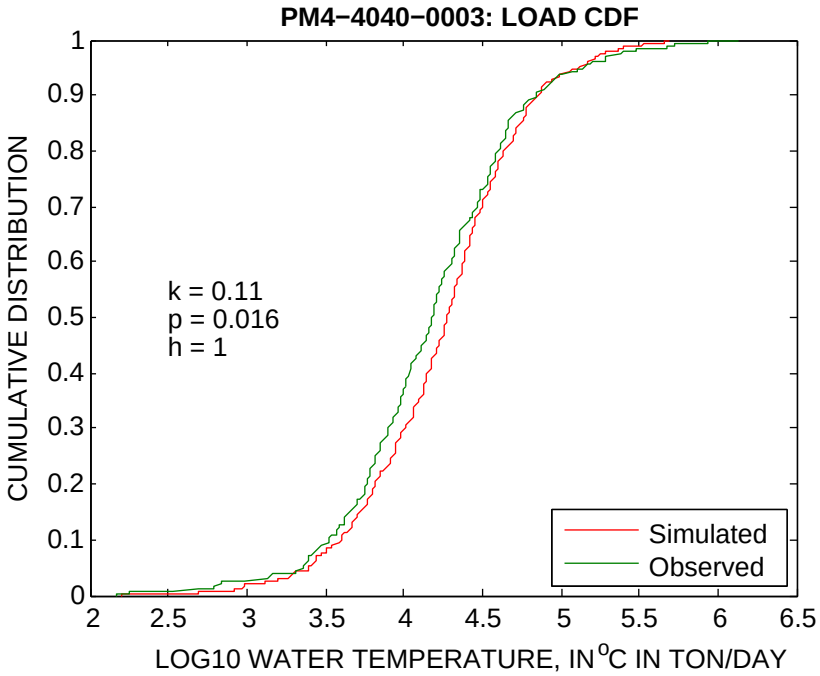


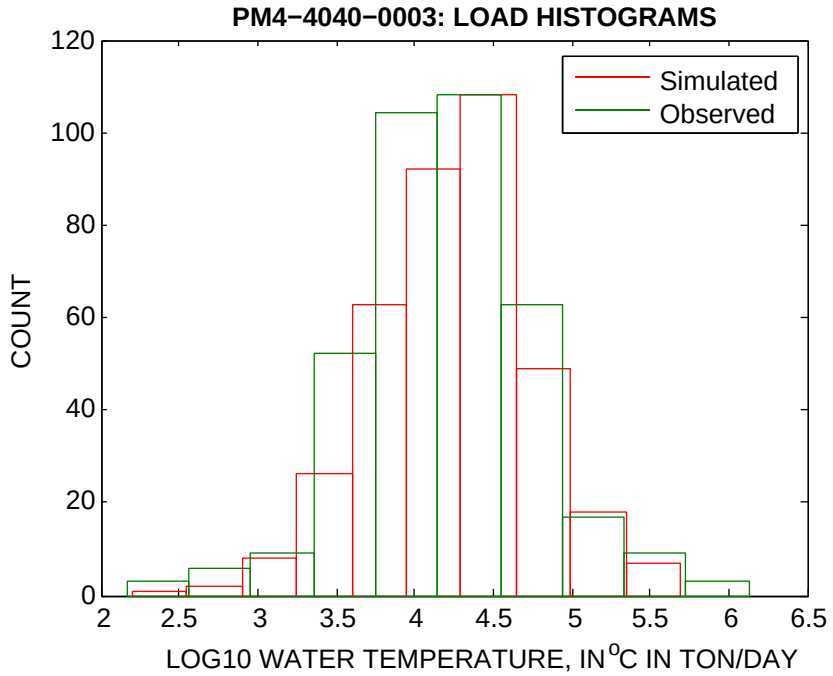


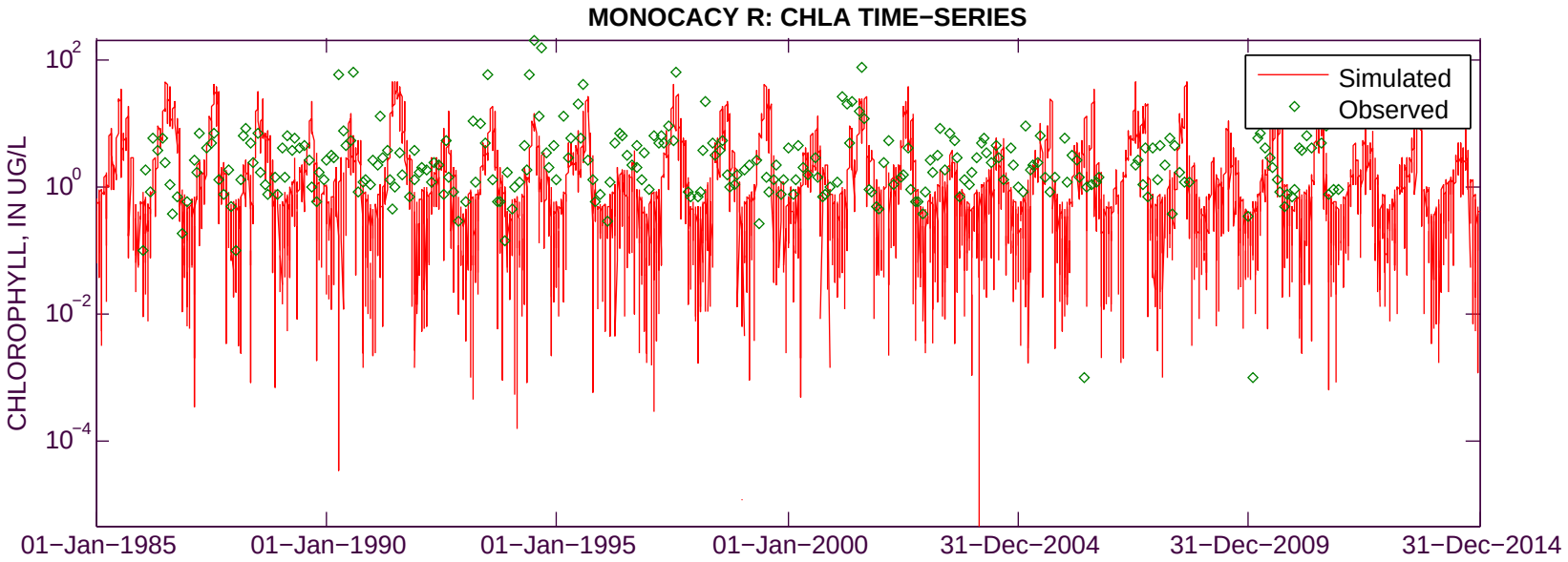
LOAD DATA
LOG10

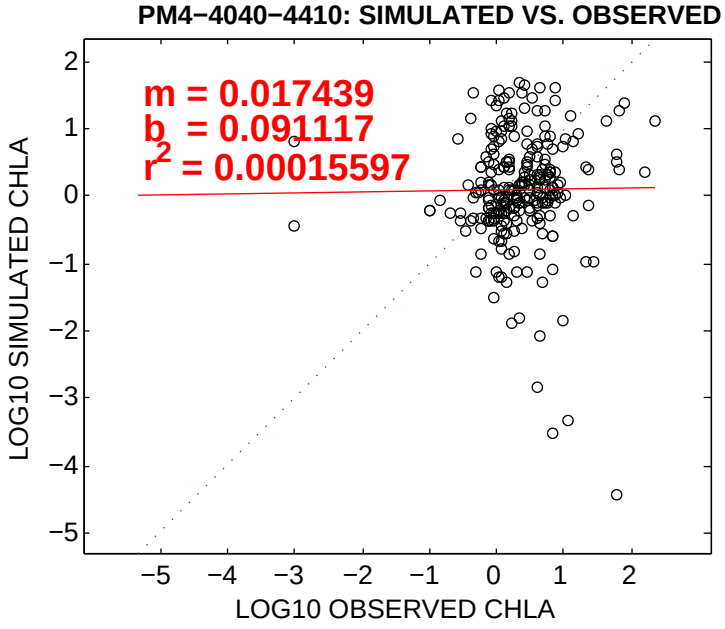


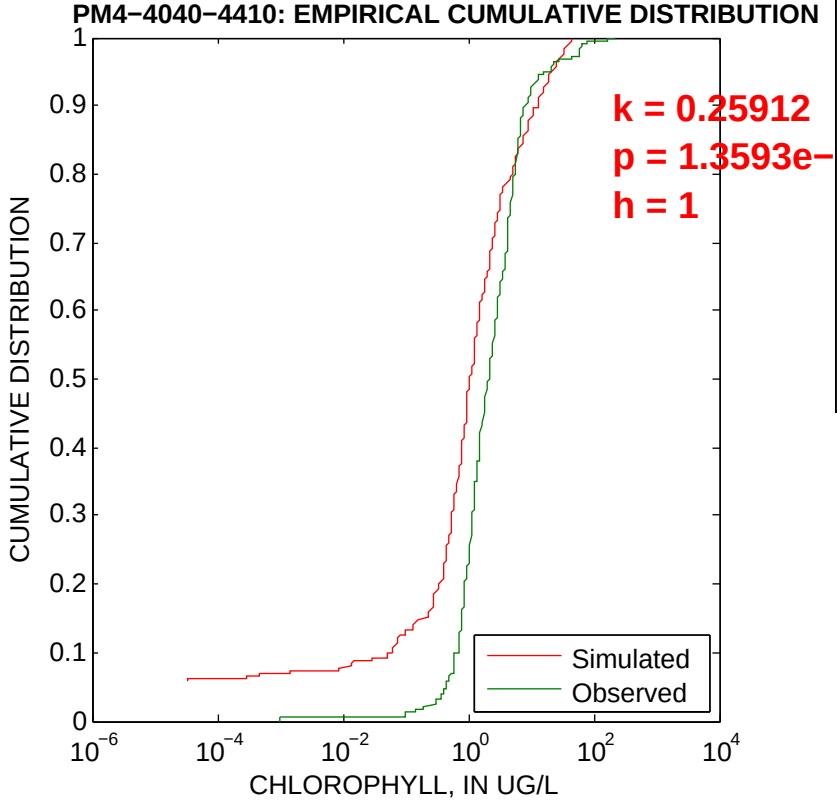












DATA SELECTION

scenario: P620171001WQ | file: CHLA.calib

plot: CHLA - chlorophyll A

Dates: 1/1/1985 – 12/31/201

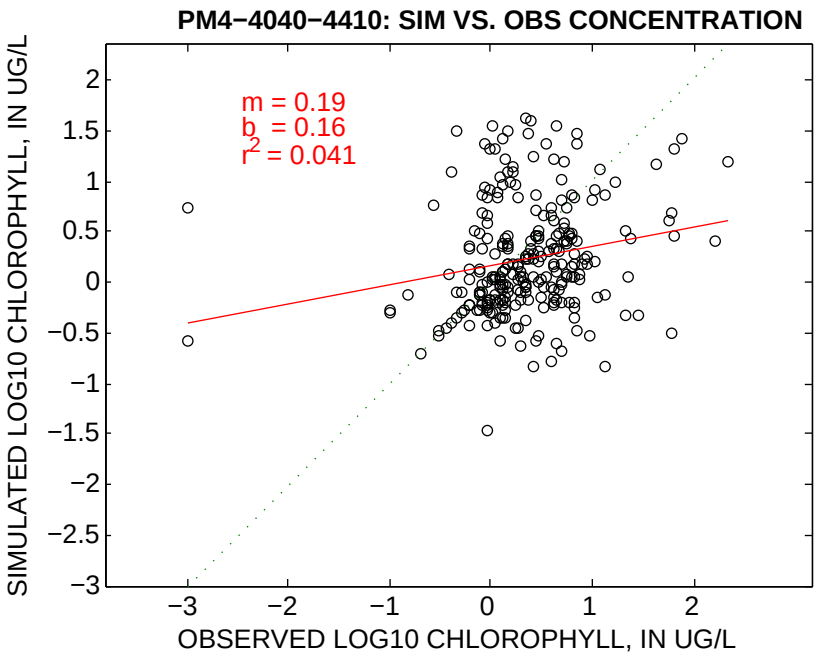
Drive: N/A | Directory: model | Observed: OBS20161101

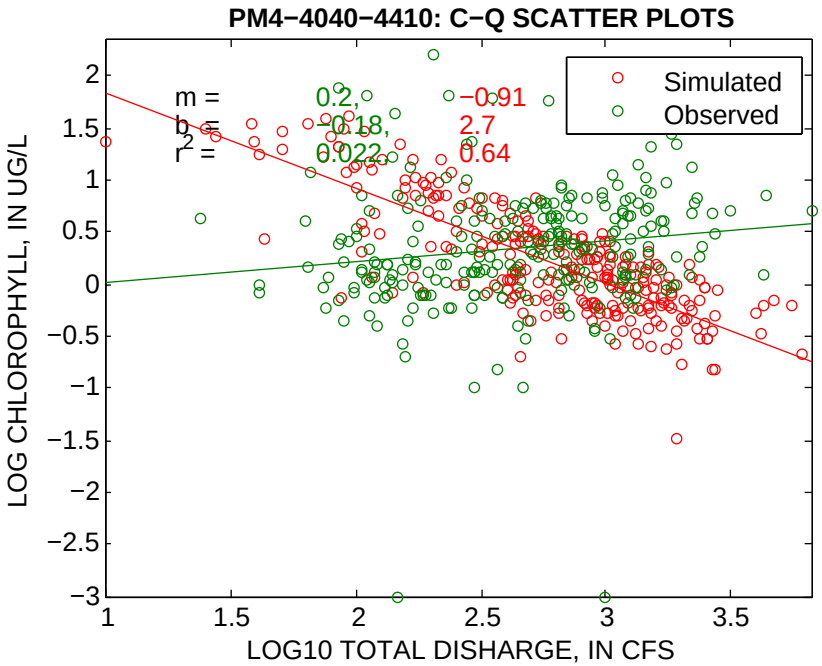
STATISTICS

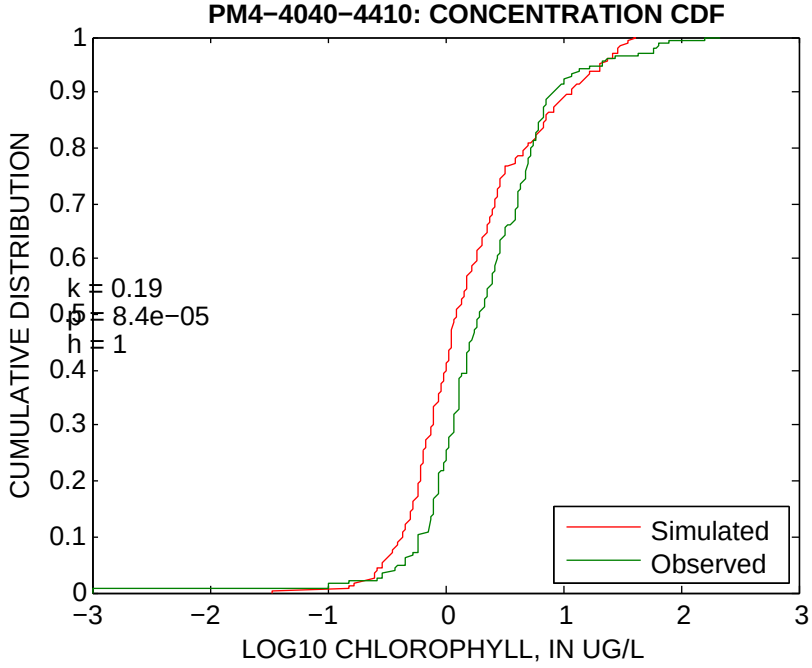
		observe	simulate
n		274	258
min		0.001	0
		-3	-4.45248
mean		6.23785	4.21265
		0.342268	0.097086
media		2.138	1.0821
		0.288249	0.0939603
max		219.79	46.553
		2.34201	1.66795
varian		359.435	65.4772
		0.351457	0.68528
JB		0.001	0.001
		0.001	0.001
		ra	log
%		-32.4663	-71.6345
err.va		401.282	1.08483
rel.std.err		1.11643	3.08666
mod.eff		-0.116425	-2.08666

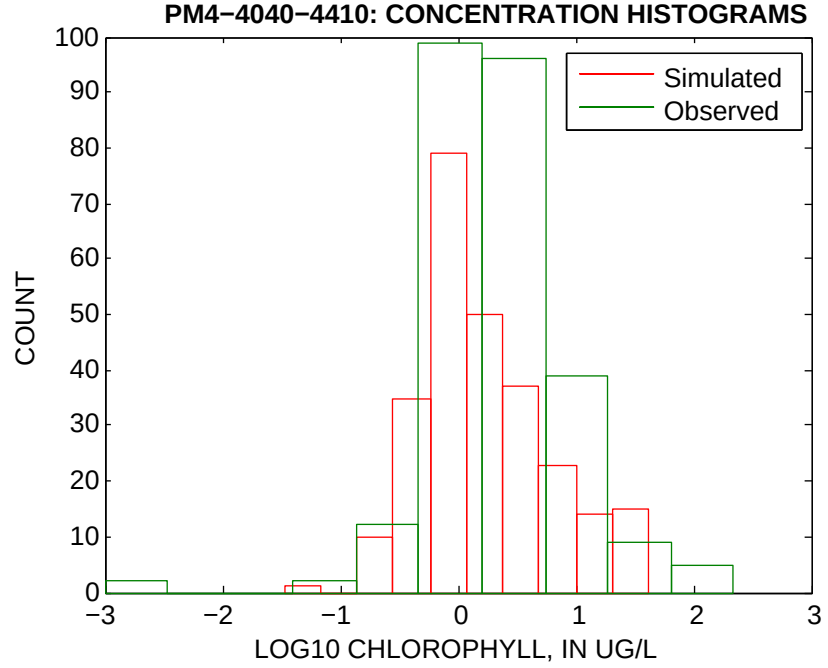
VERSION 2.1

ALL DATA
LOG10

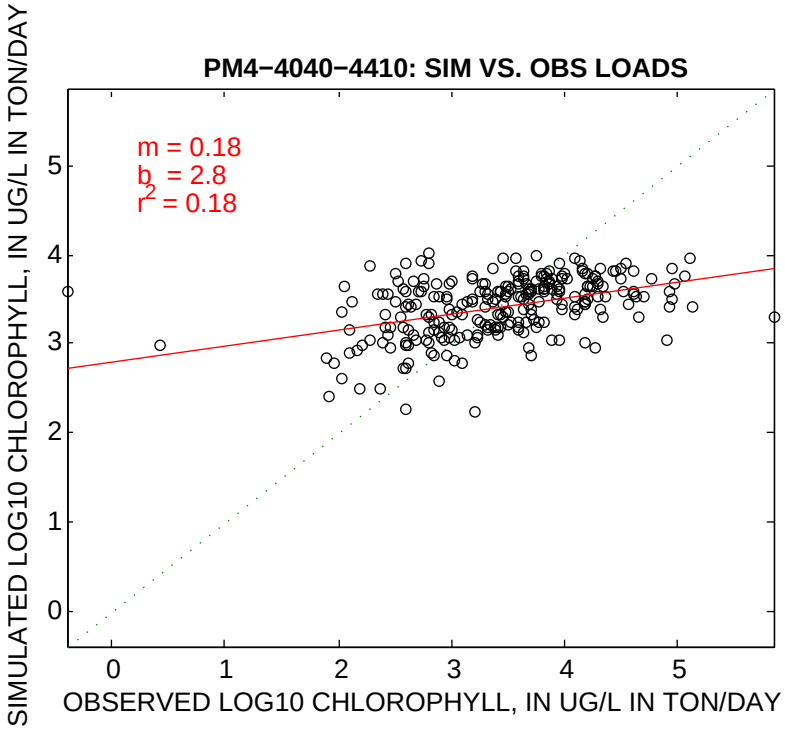


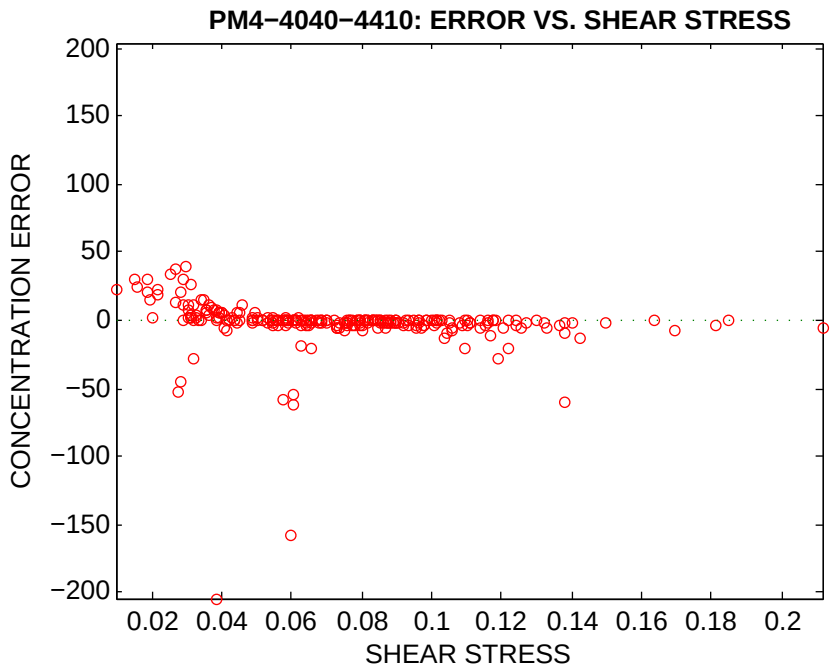


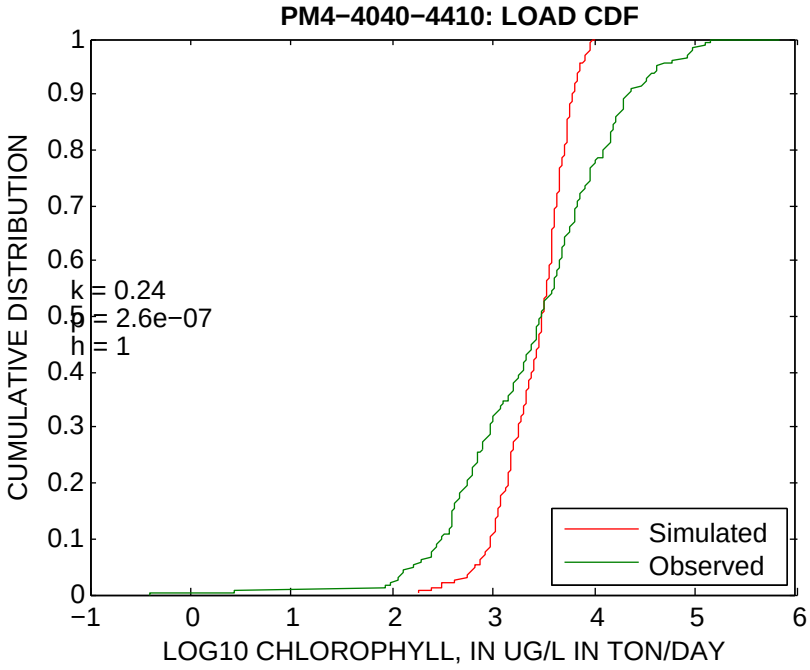


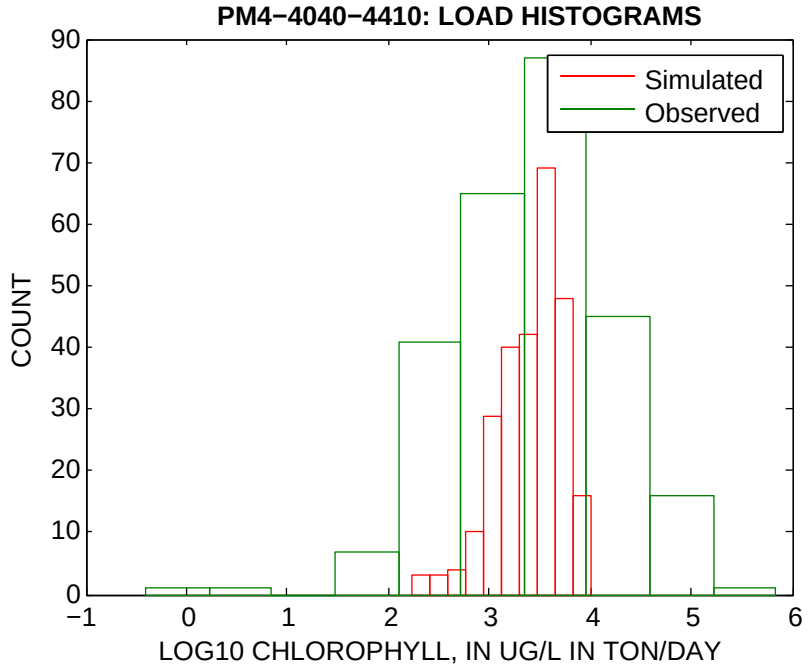


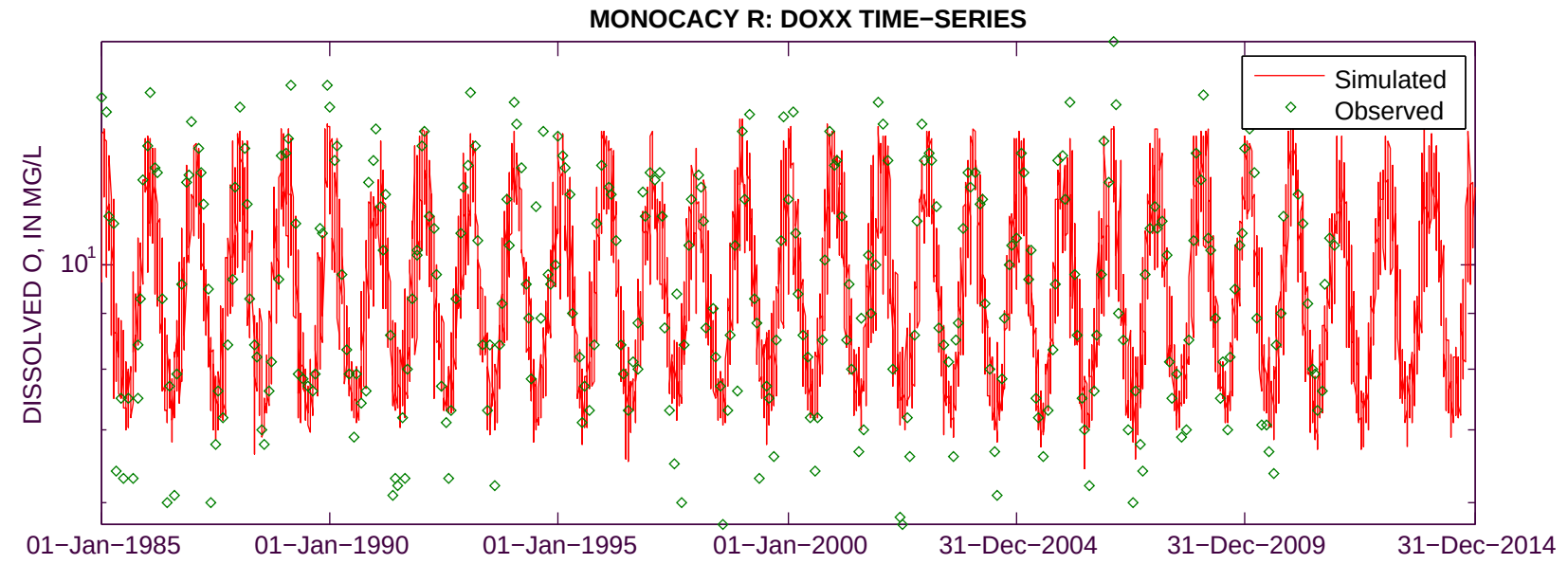
LOAD DATA
LOG10

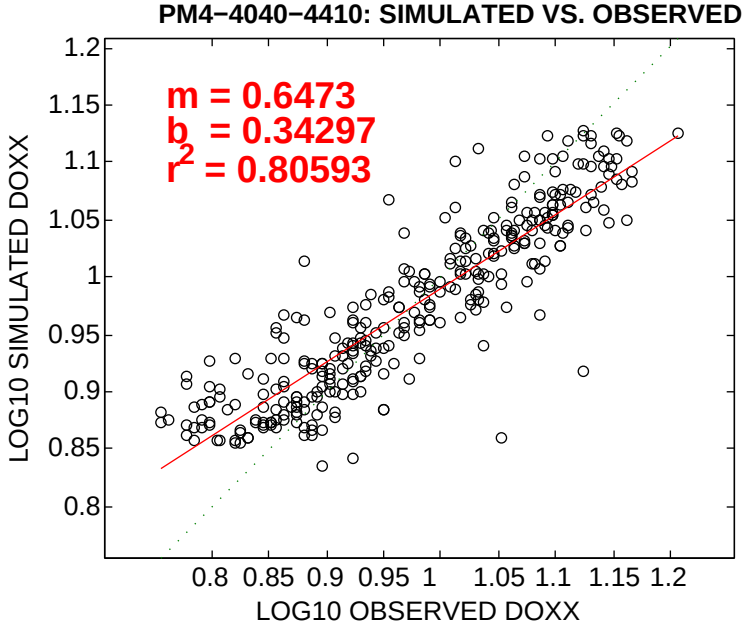


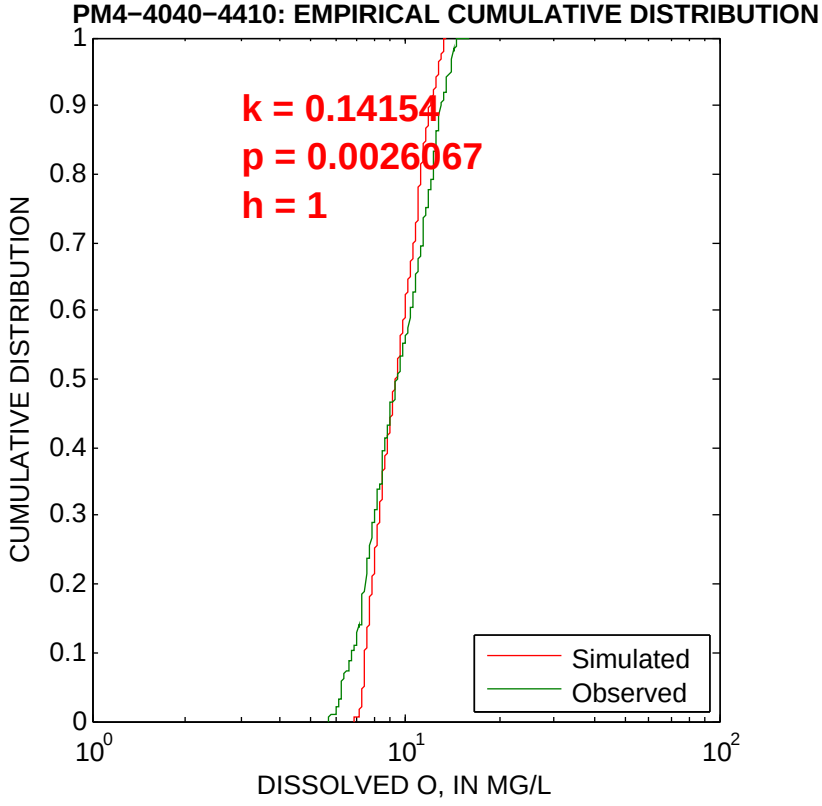












DATA SELECTION

scenario: P620171001WQ | file: DOXX.calib

plot: DOXX - dissolved oxygen

Dates: 1/1/1985 – 12/31/201

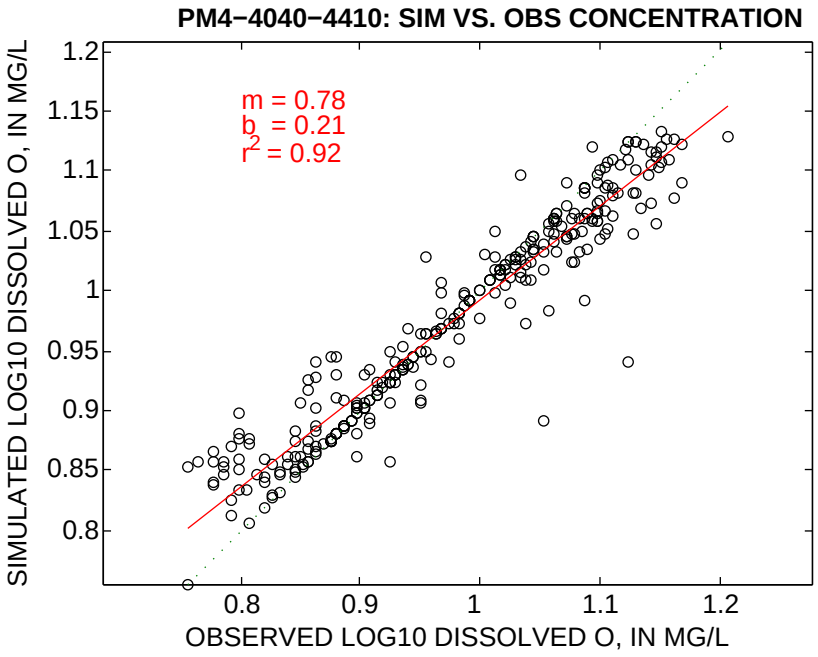
Drive: N/A | Directory: model | Observed: OBS20161101

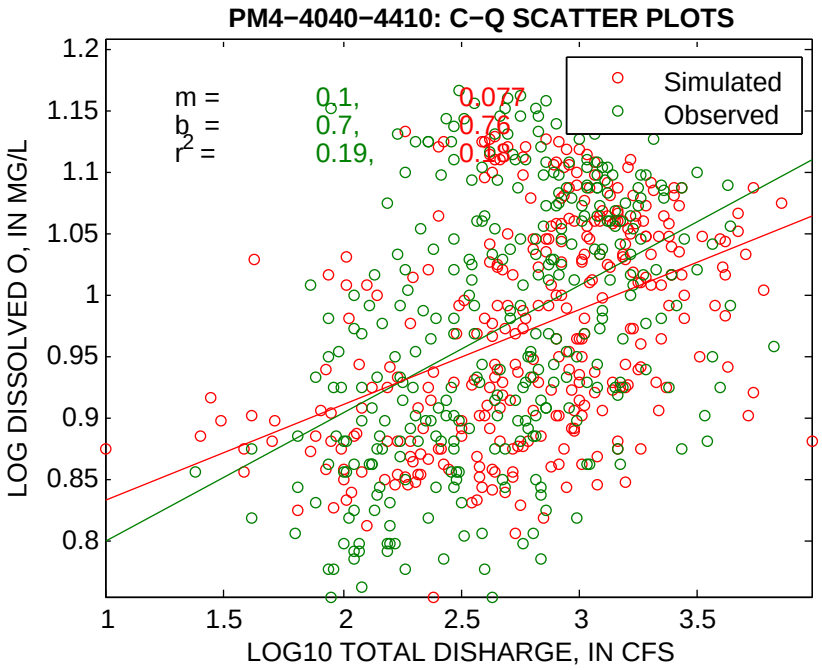
STATISTICS

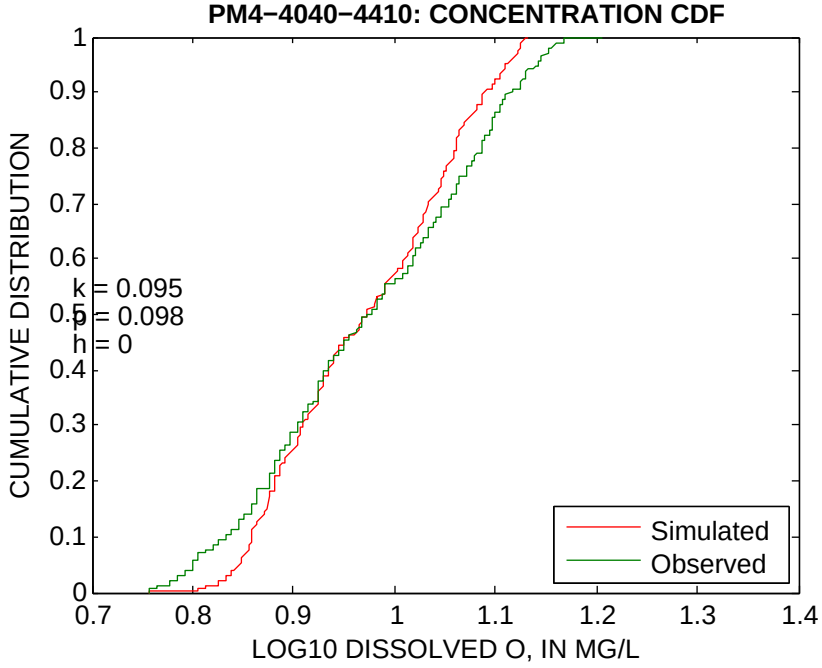
	n	observe	simulate
		325	325
min		5.7	6.8507
		0.755875	0.835735
mean		9.74074	9.57935
		0.975605	0.974472
media		9.4	9.354
		0.973128	0.970997
max		16.1	13.422
		1.20683	1.12782
varian		5.63234	2.96097
		0.0114238	0.00593907
JB		0.002881	0.001768
		0.004128	0.002193
		ra	log
%		-1.65681	-0.116106
err.va		1.25355	0.00257497
rel.std.err		0.222563	0.225405
mod.eff		0.777437	0.774595

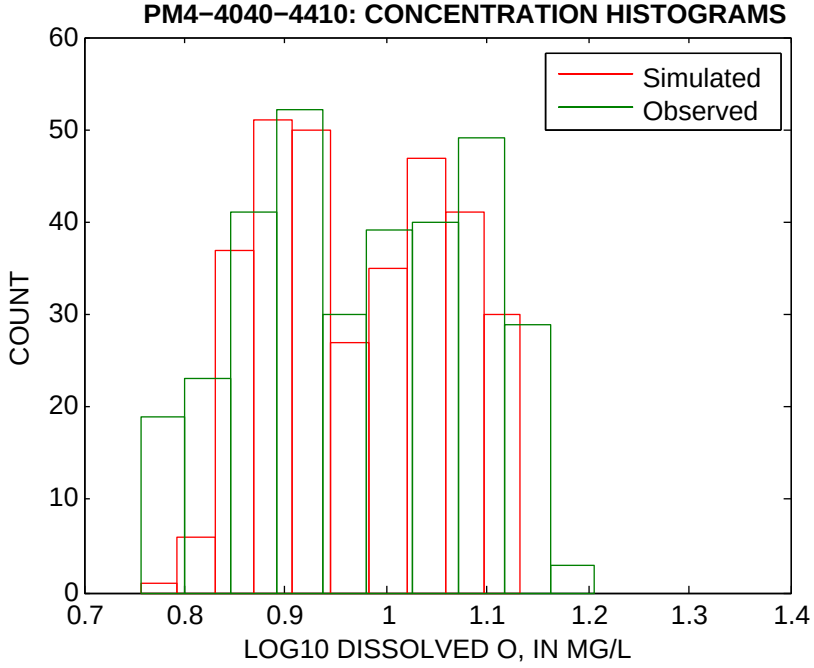
VERSION 2.1

ALL DATA
LOG10

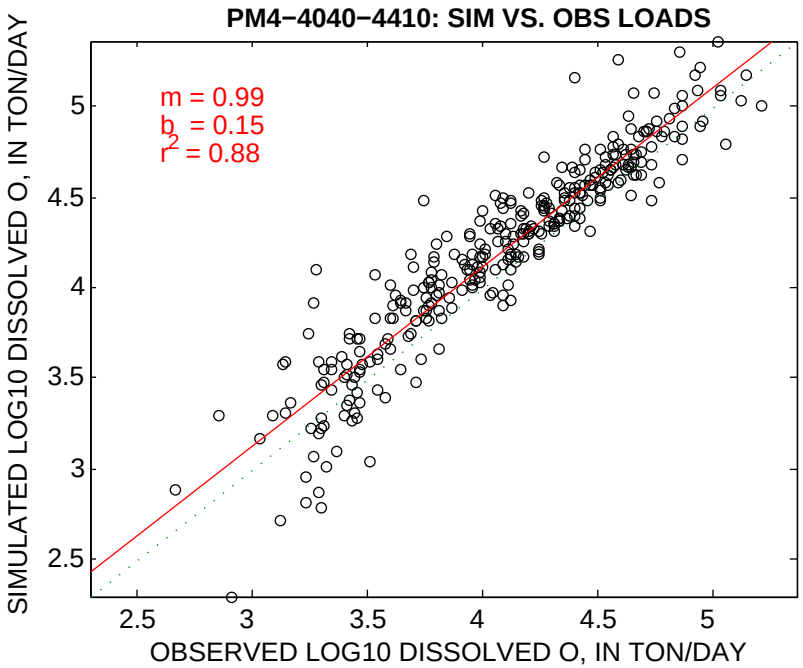


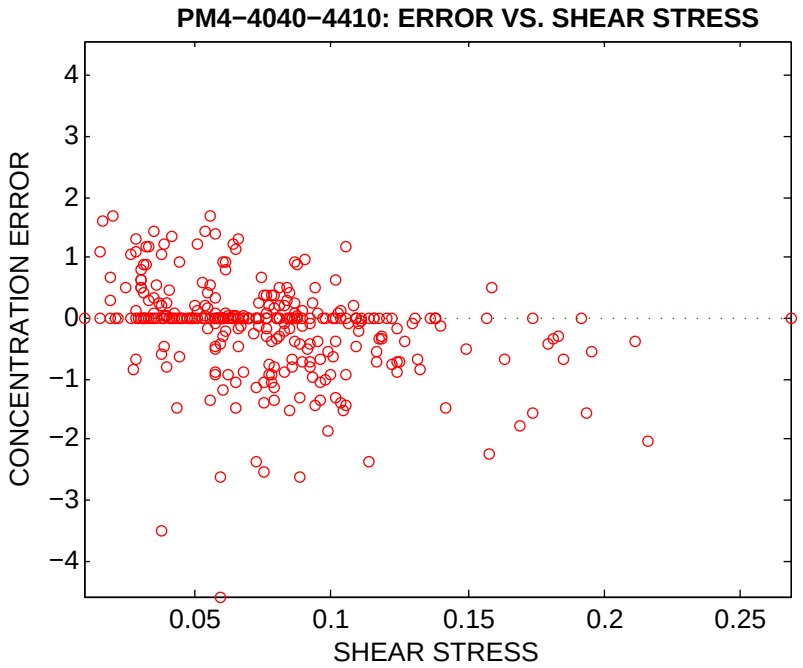


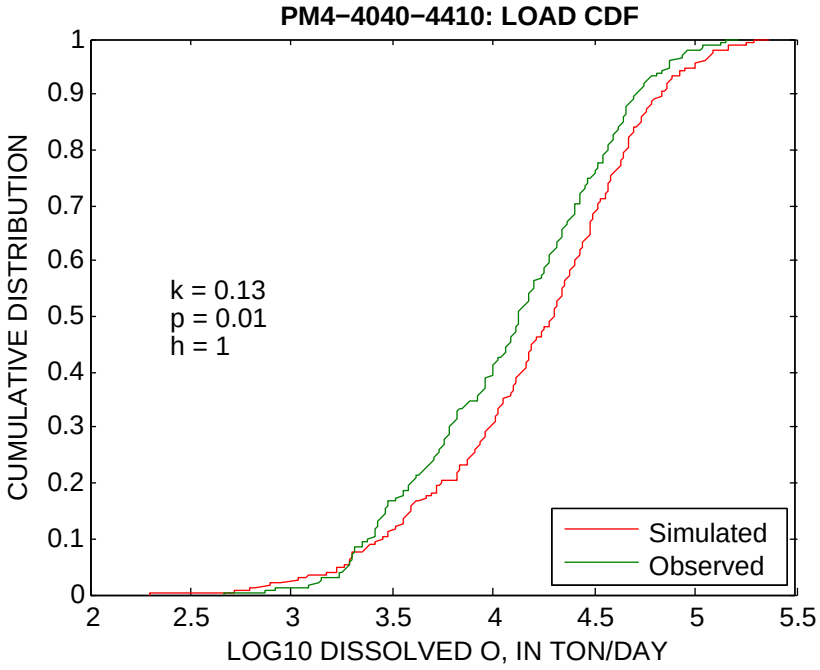


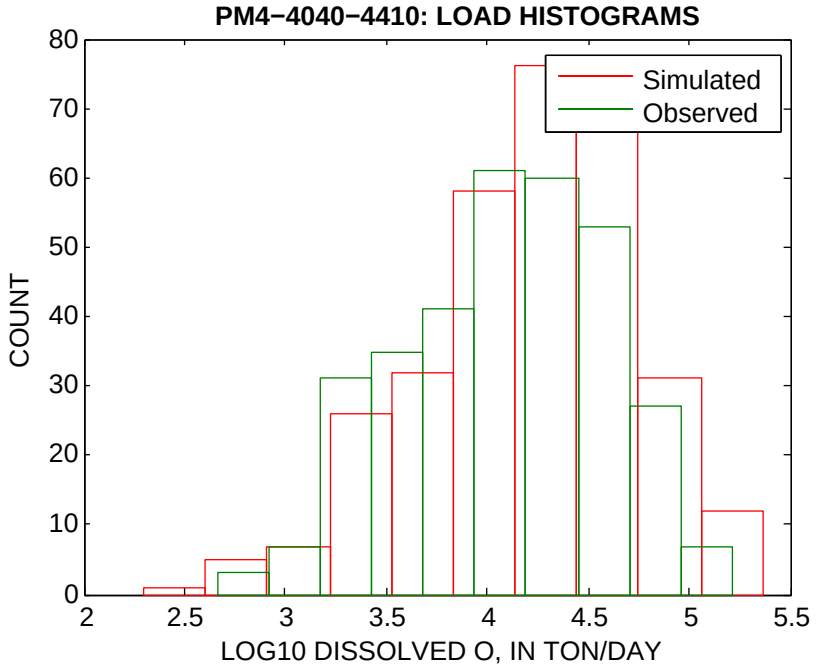


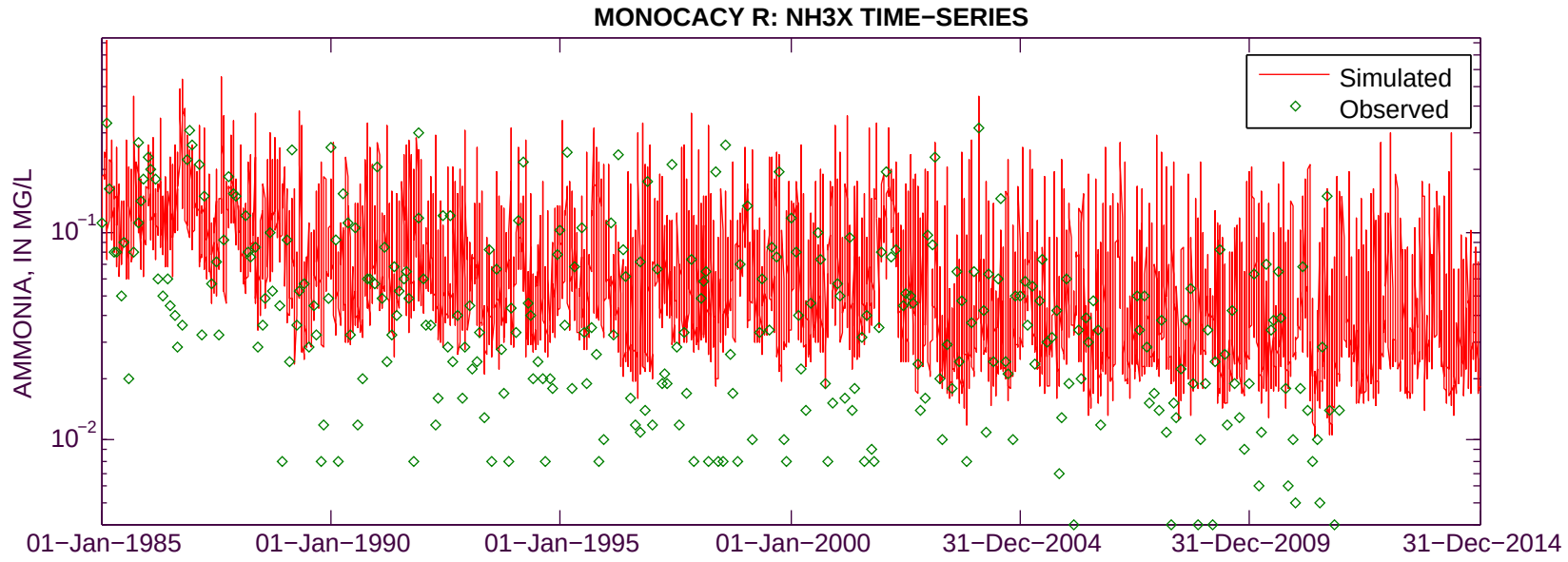
LOAD DATA
LOG10

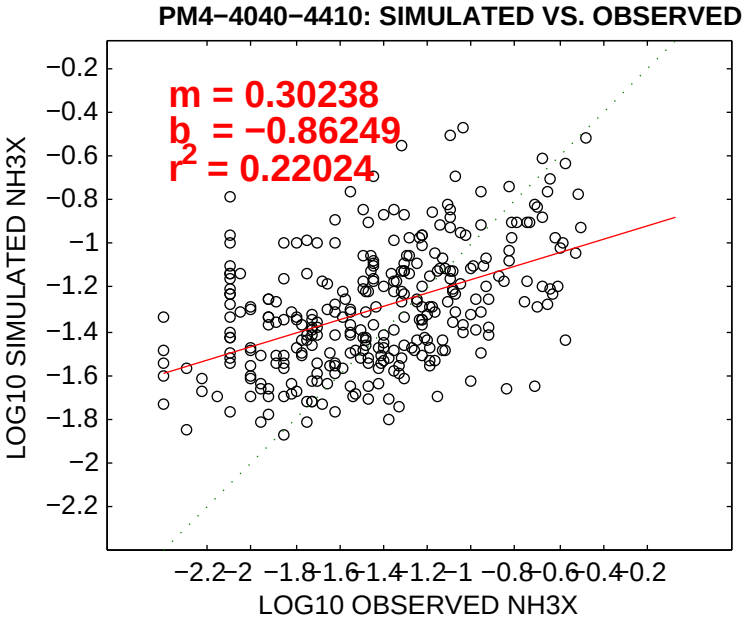


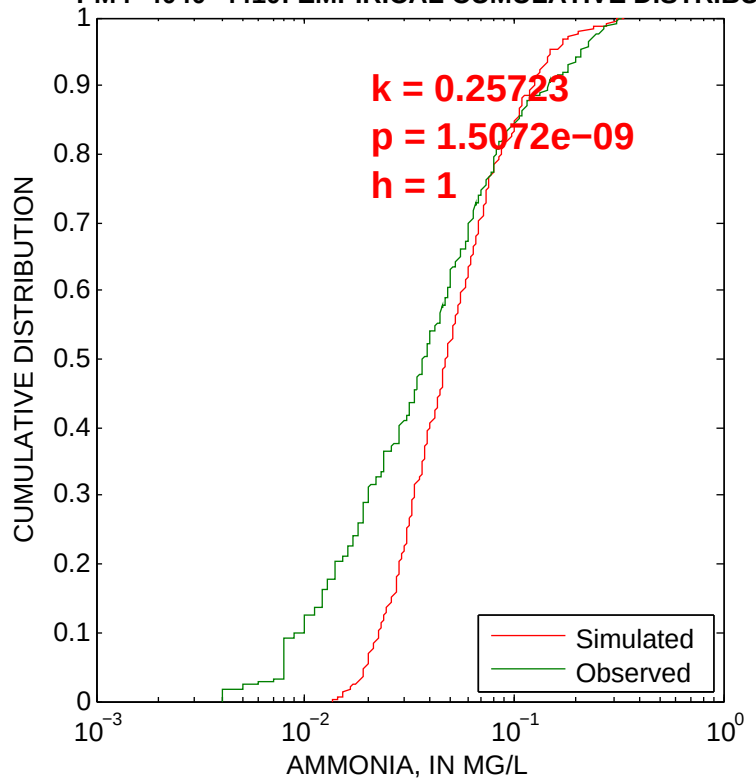












DATA SELECTION

scenario: P620171001WQ | file: NH3X.calib

plot: NH3X - ammonia

Dates: 1/1/1985 – 12/31/201

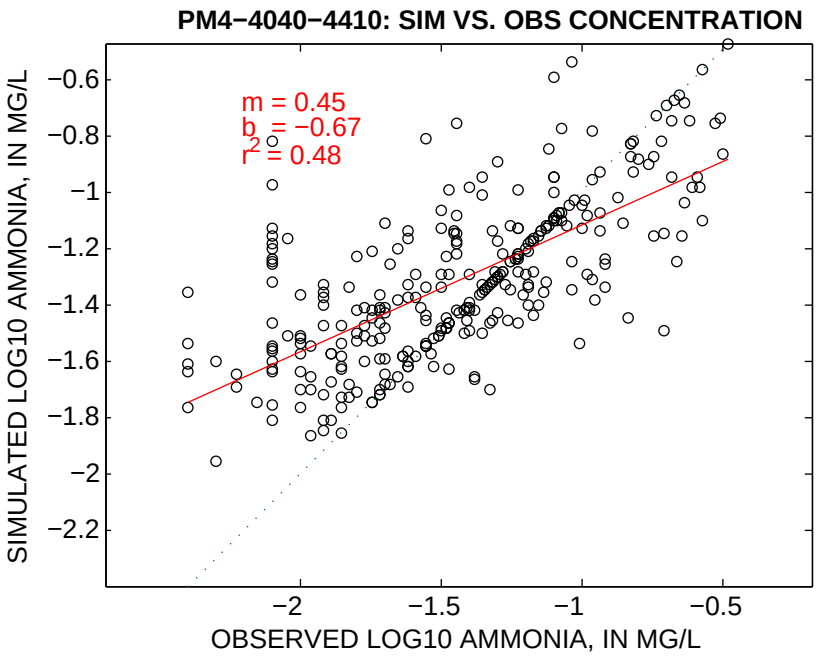
Drive: N/A | Directory: model | Observed: OBS20161101

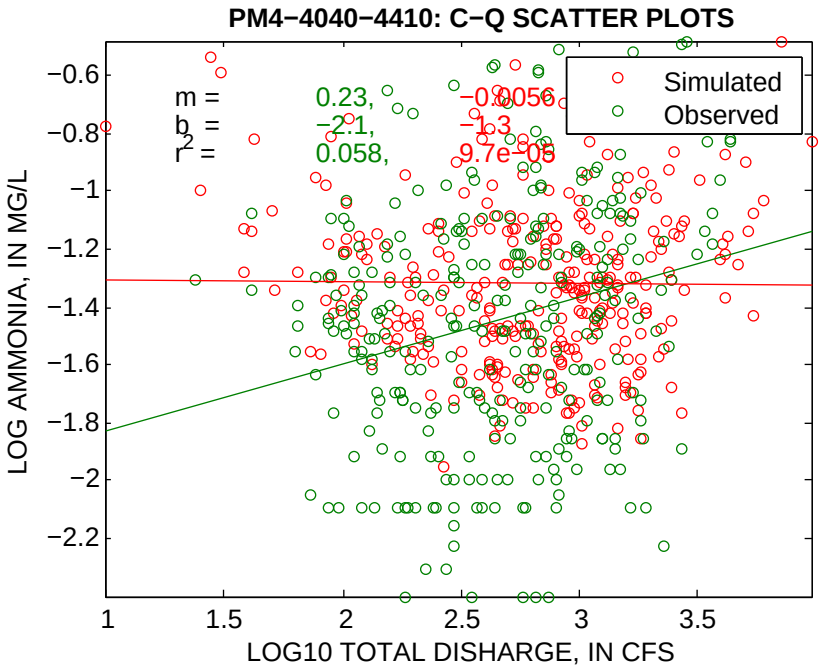
STATISTICS

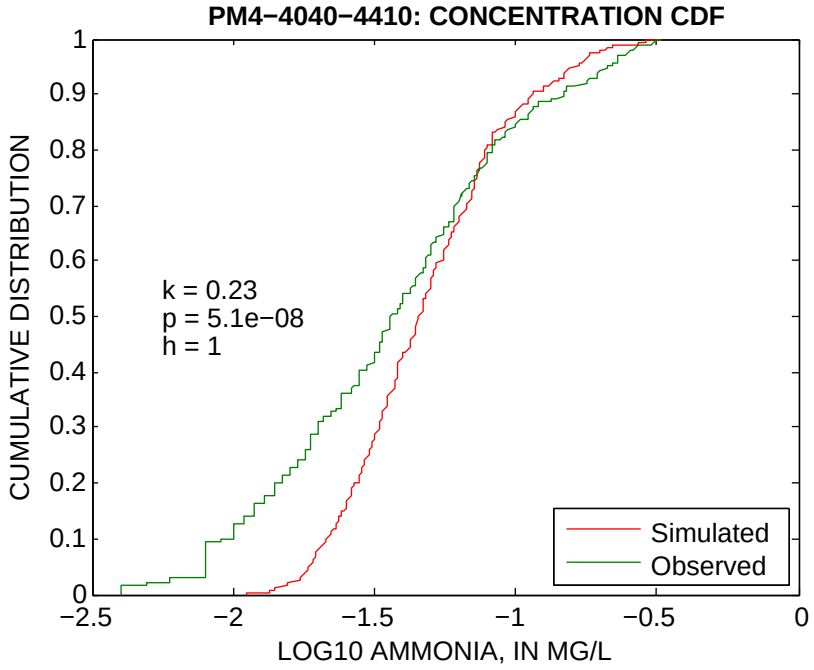
		observe	simulate
n		311	311
min		0.004	0.013576
		-2.39794	-1.86723
mean		0.0589325	0.0629549
		-1.43705	-1.29703
media		0.036	0.047714
		-1.4437	-1.32135
max		0.33	0.33699
		-0.481486	-0.472383
varian		0.00400065	0.0024118
		0.186814	0.0775578
JB		0.001	0.001
		0.1032	0.013505
		ra	log
%		6.82549	-9.74386
err.va		0.00358105	0.171065
rel.std.err		0.895117	0.915694
mod.eff		0.104883	0.0843058

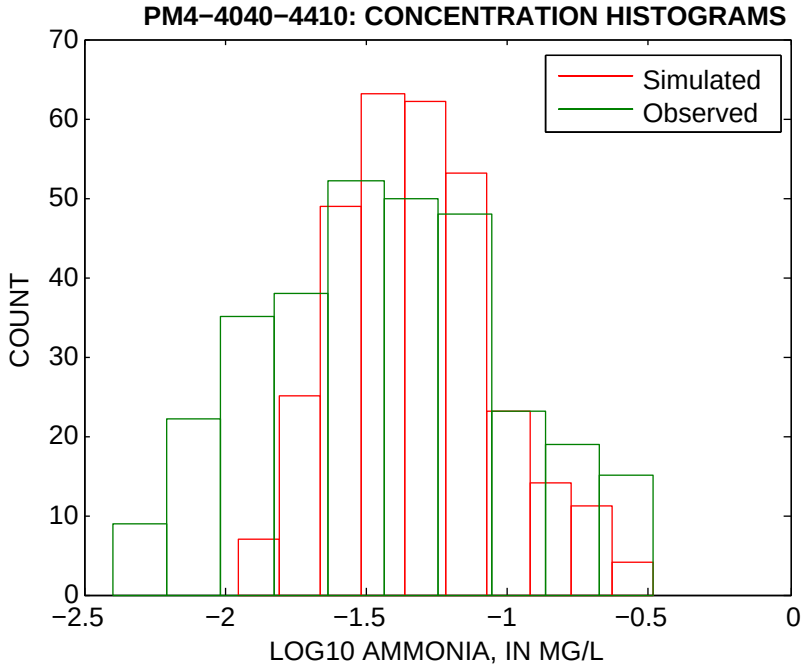
VERSION 2.1

ALL DATA
LOG10

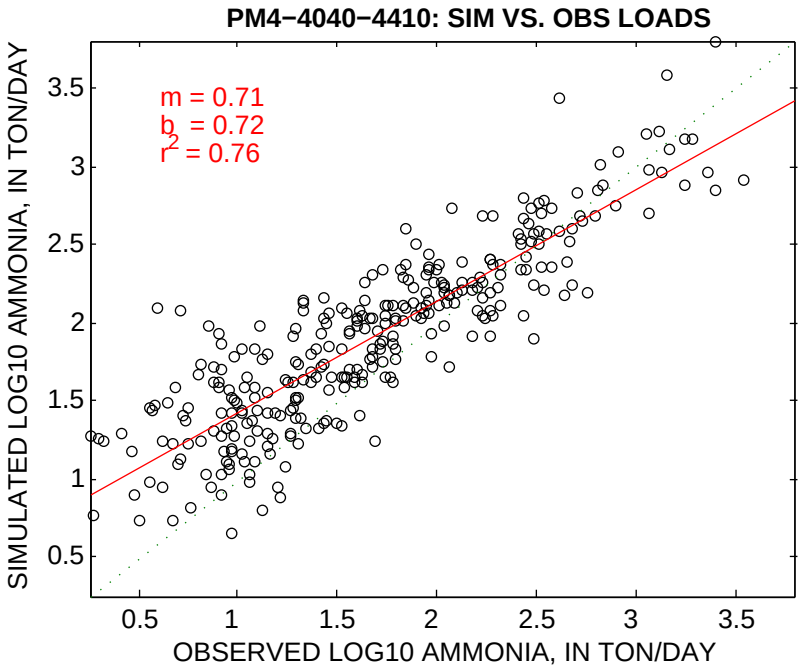


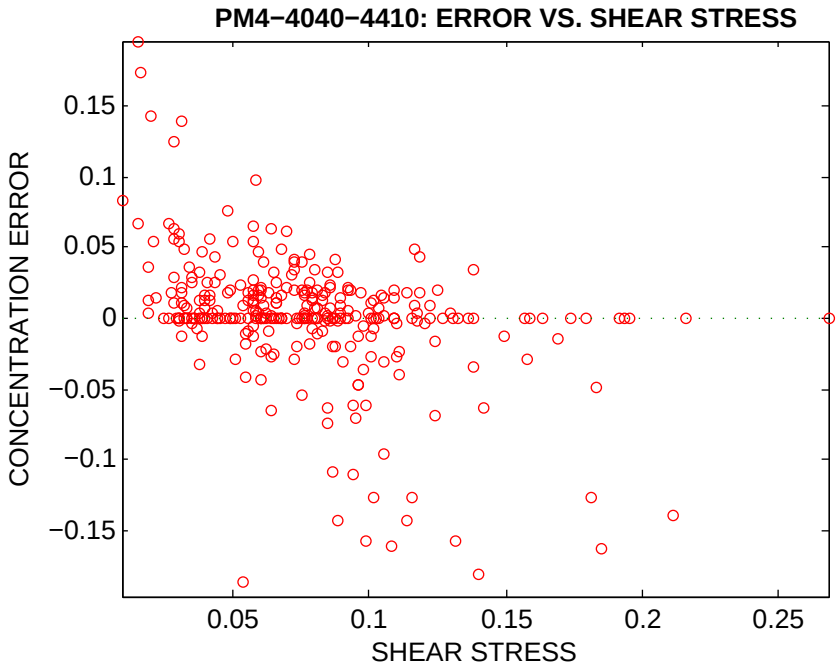


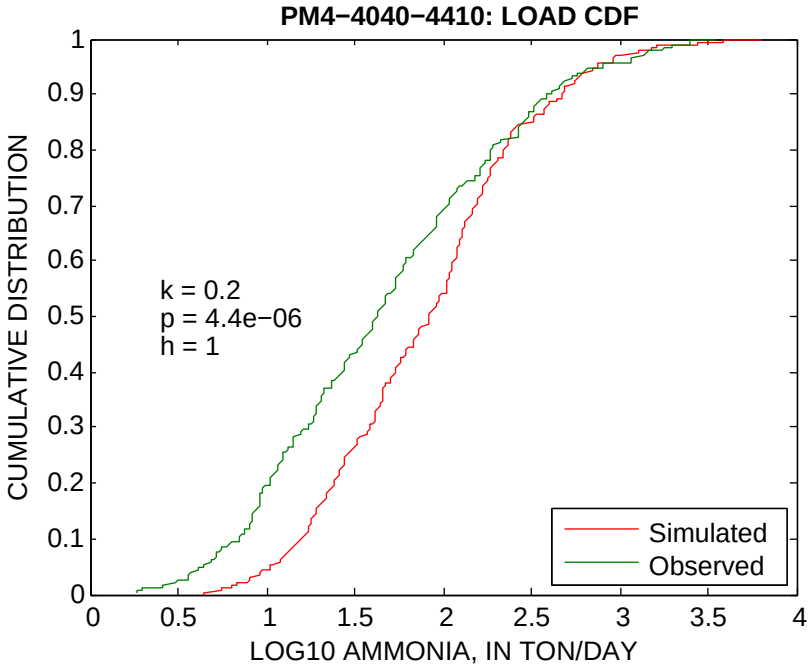


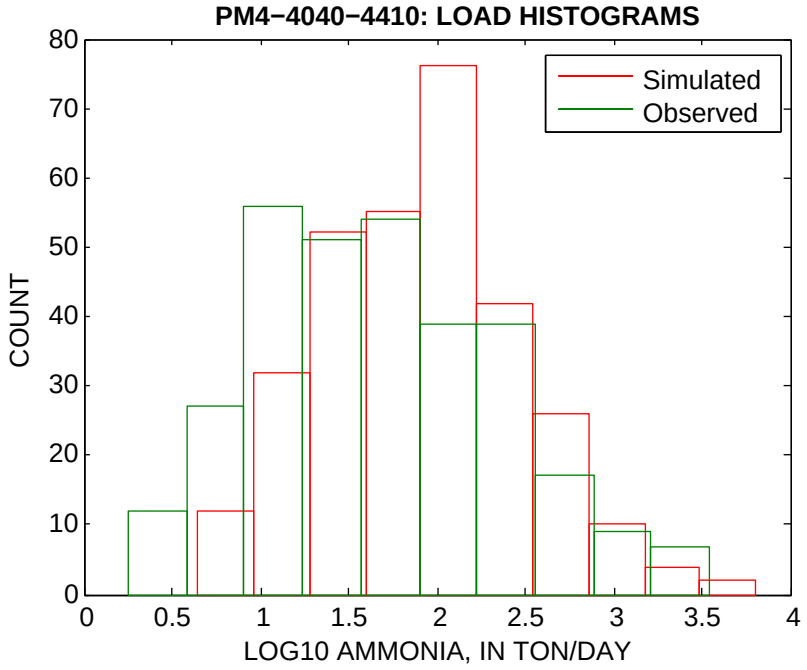


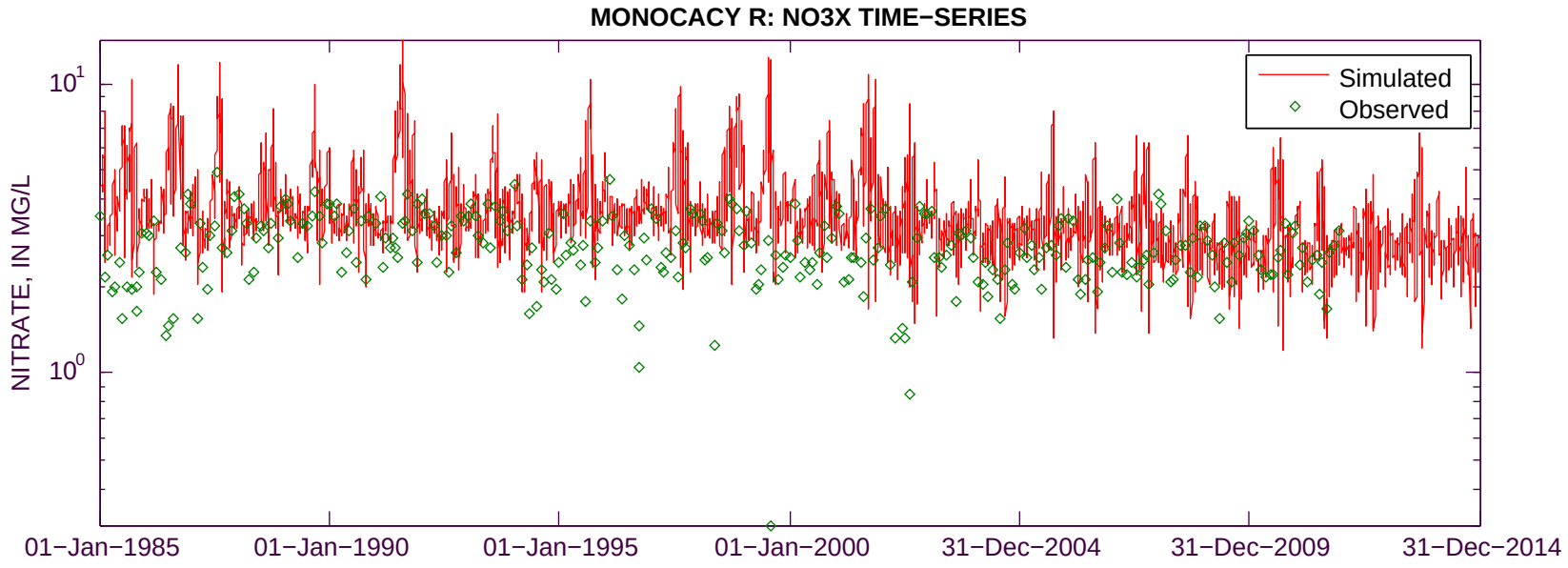
LOAD DATA
LOG10

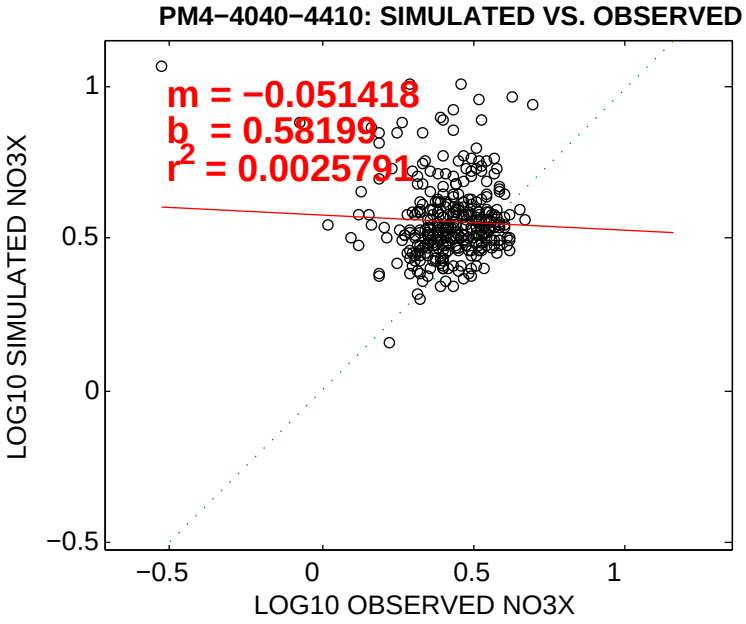


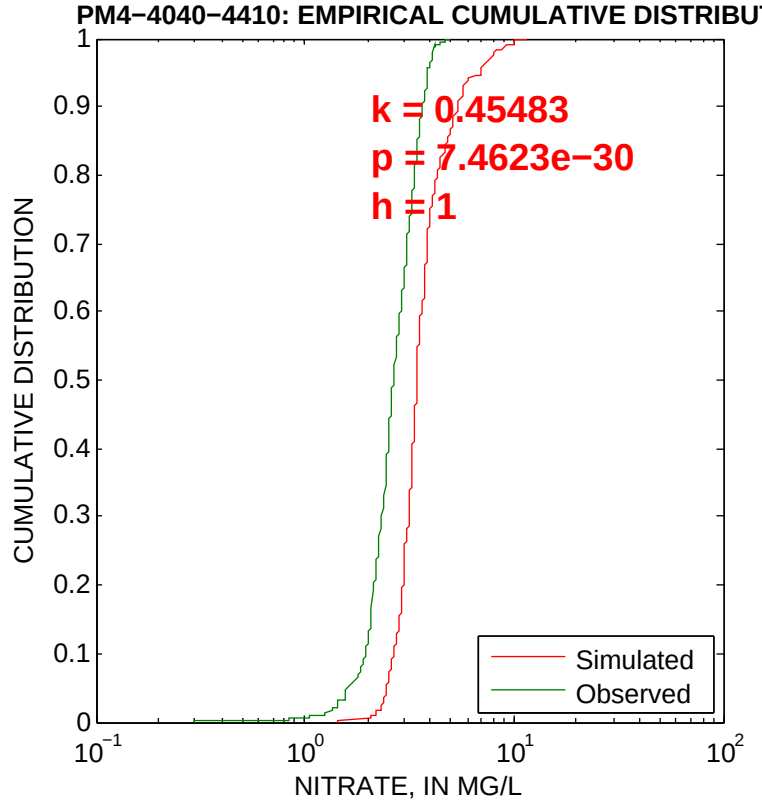












DATA SELECTION

scenario	file
P620171001WQ	NO3X.calib

plot: NO3X - nitrate

Dates: 1/1/1985 – 12/31/201

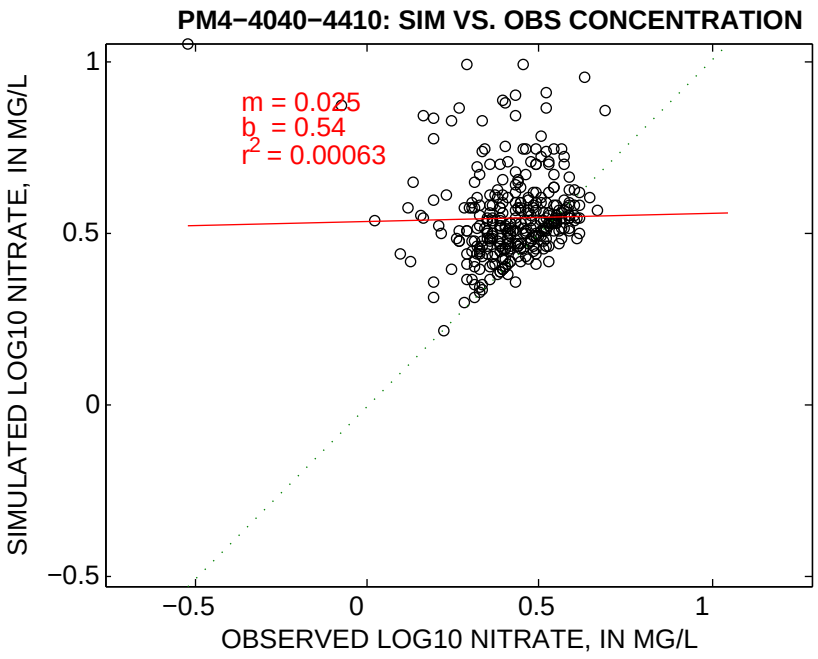
Drive	Directory	Observed
N/A	model	OBS20161101

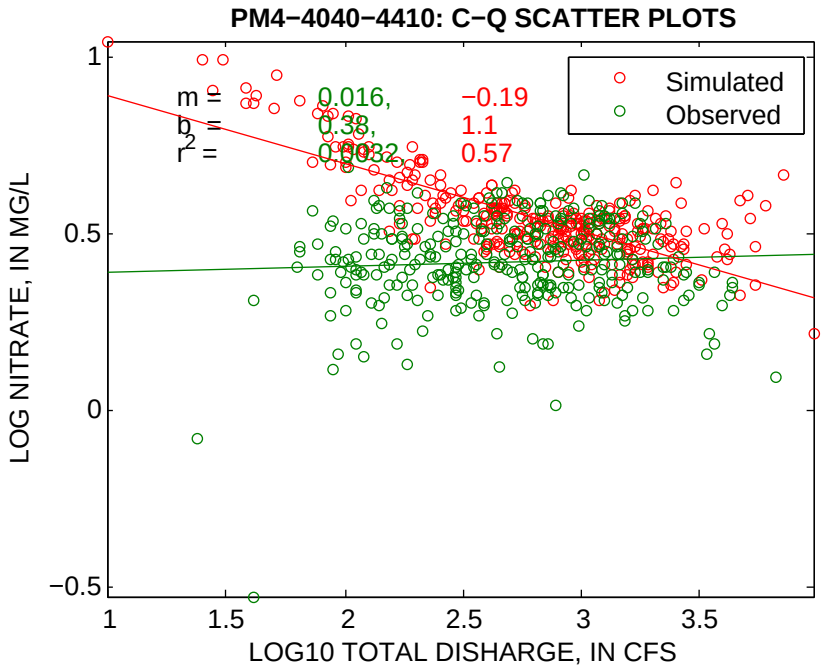
STATISTICS

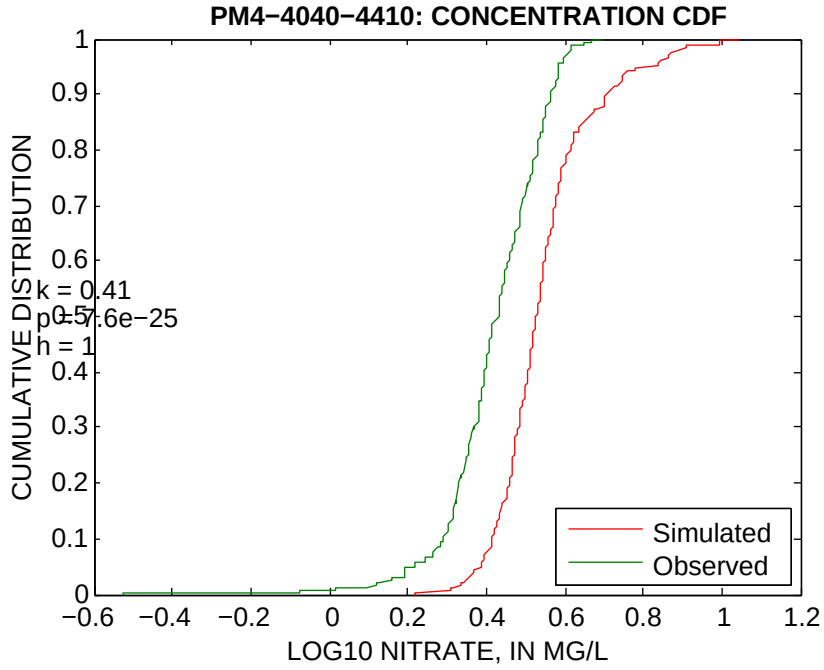
	n	observe	simulate
		321	321
min		0.3	1.428
		-0.522879	0.154728
mean		2.73938	3.81358
		0.42155	0.560318
media		2.698	3.443
		0.431042	0.536937
max		4.93	11.617
		0.692847	1.06509
varian		0.487288	1.8931
		0.0159224	0.0163218
JB	☑	0.5	0.001
		0.001	0.001
		ra	log
%		39.2134	32.9185
err.va		3.57625	0.0531984
rel.std.err		7.33909	3.3411
mod.eff		-6.33909	-2.3411

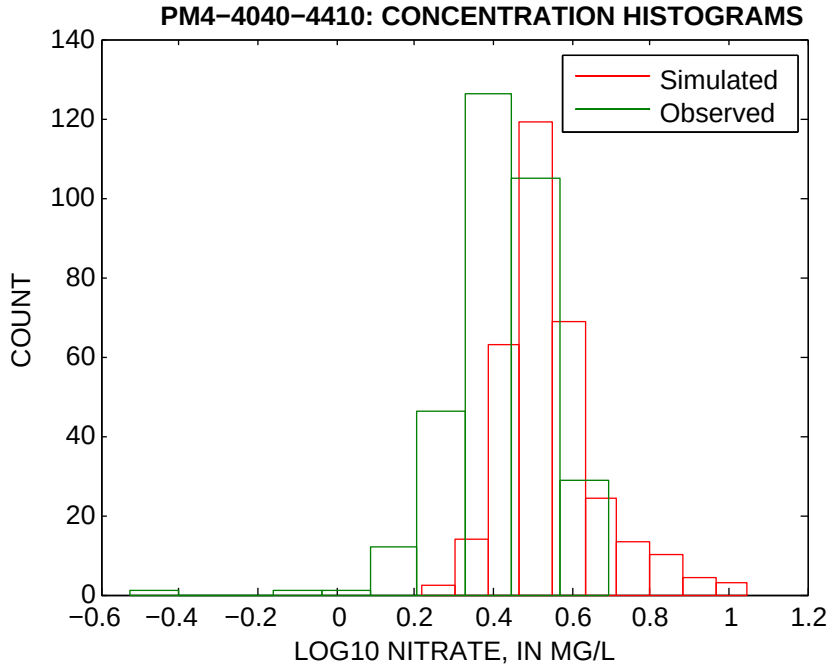
VERSION 2.1

ALL DATA
LOG10

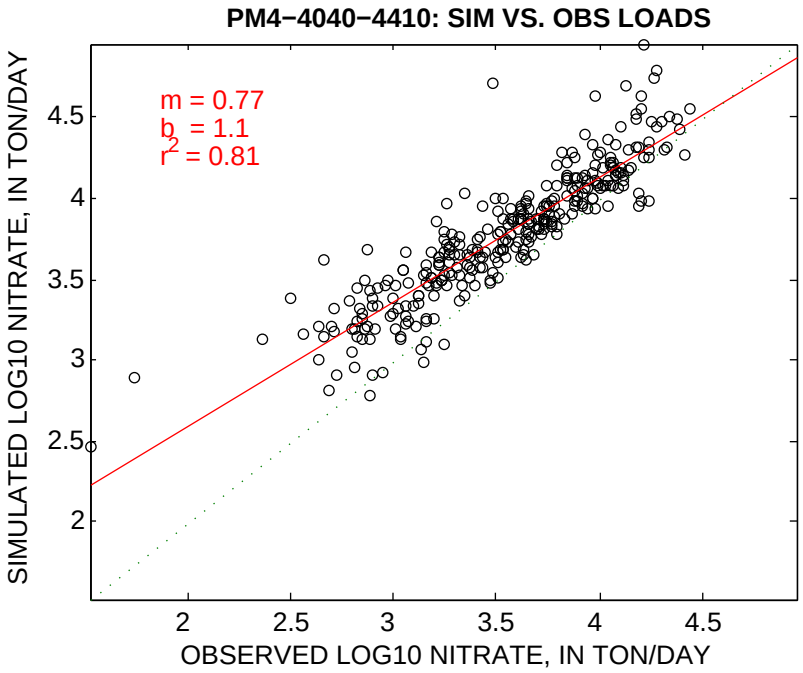


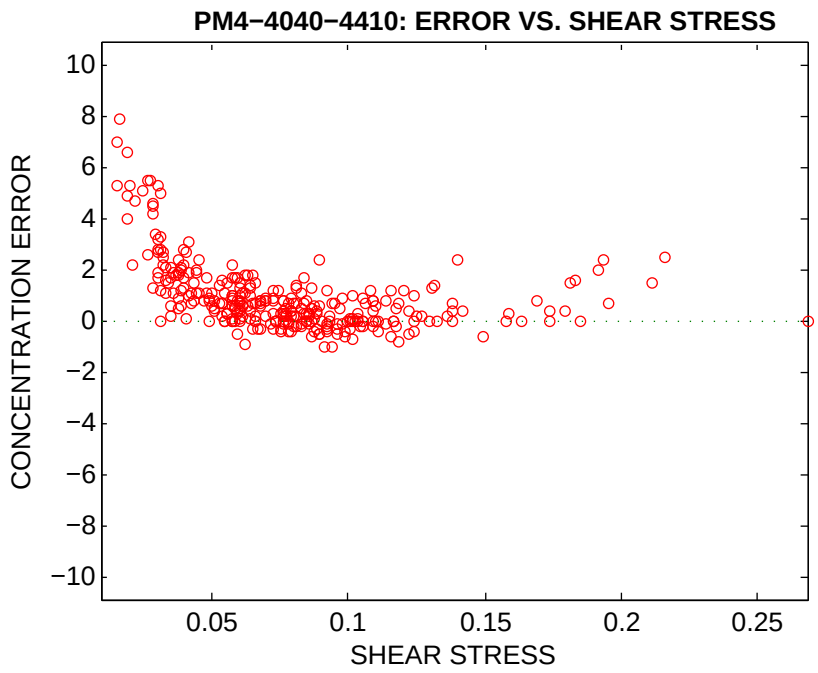


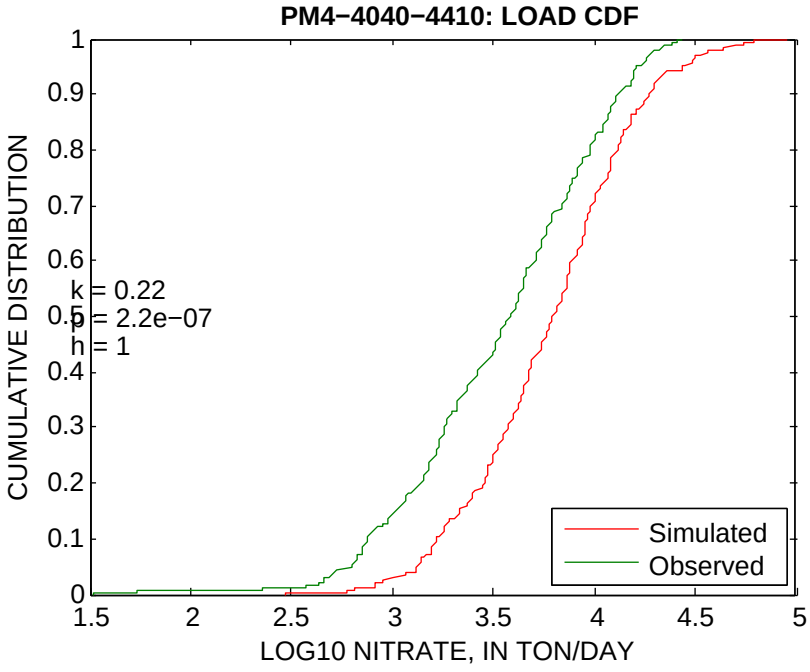


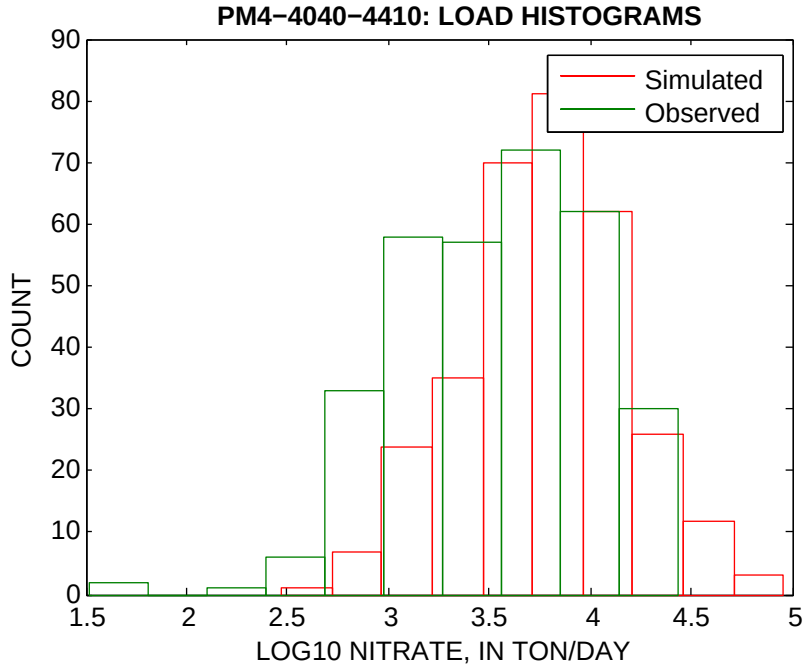


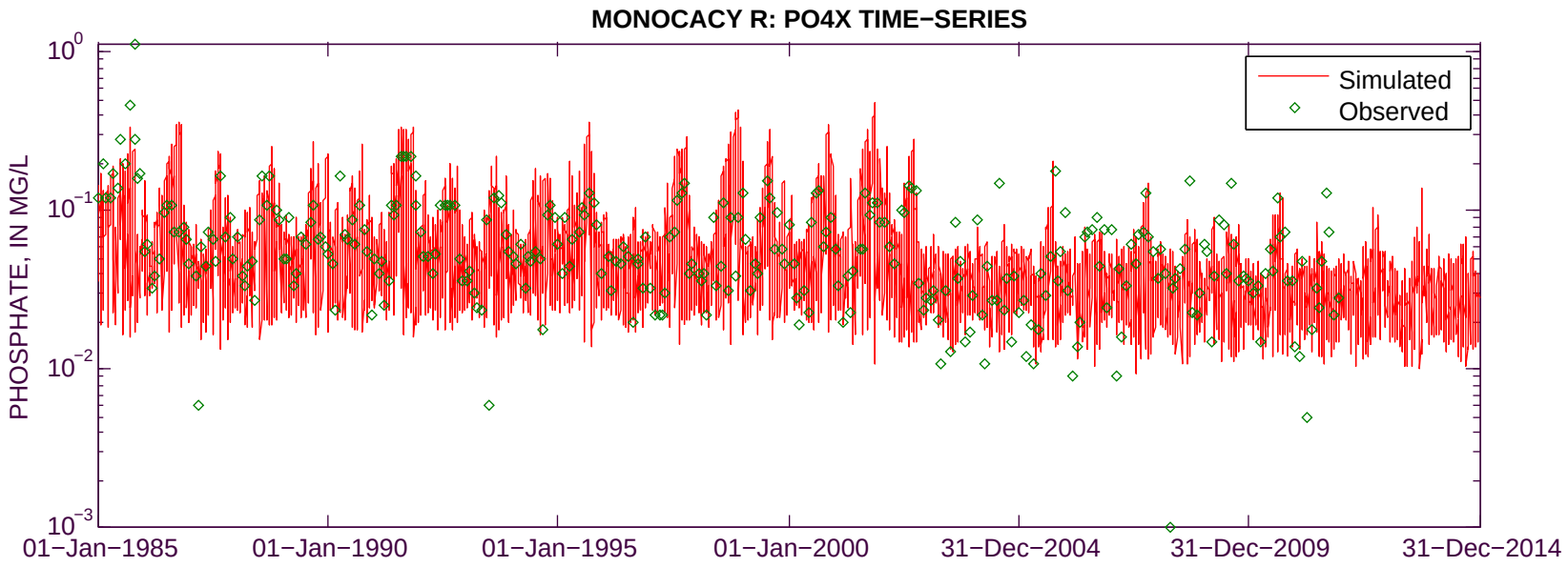
LOAD DATA
LOG10

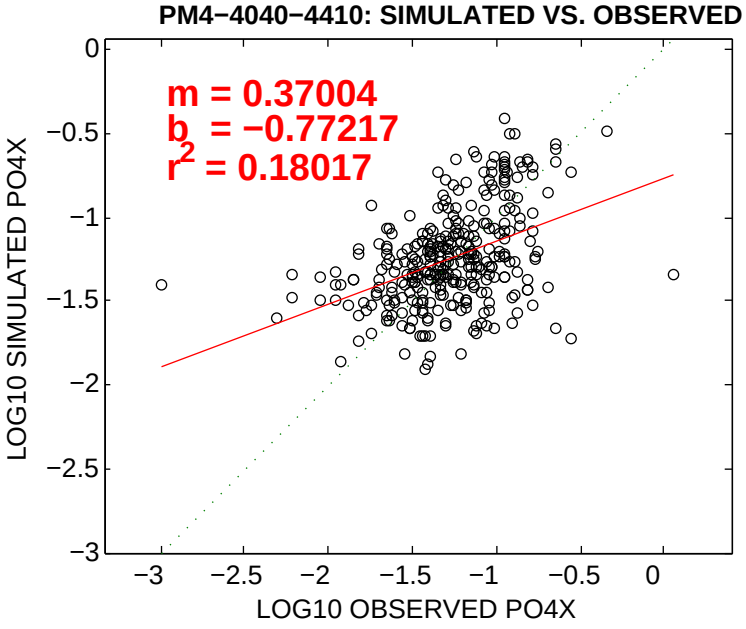


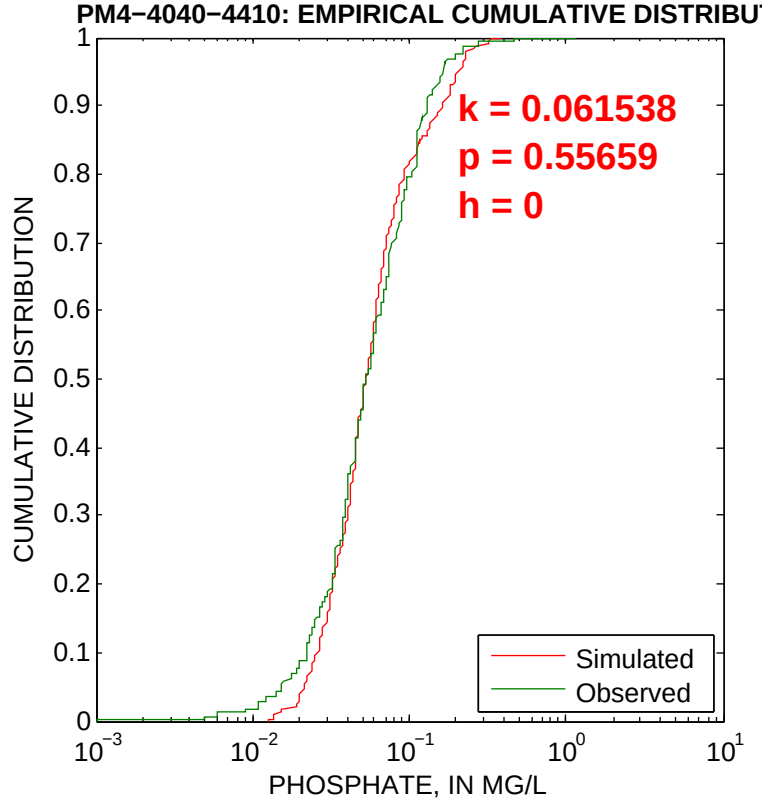












DATA SELECTION

scenario	file
P620171001WQ	PO4X.calib

plot: PO4X - phosphate

Dates: 1/1/1985 – 12/31/201

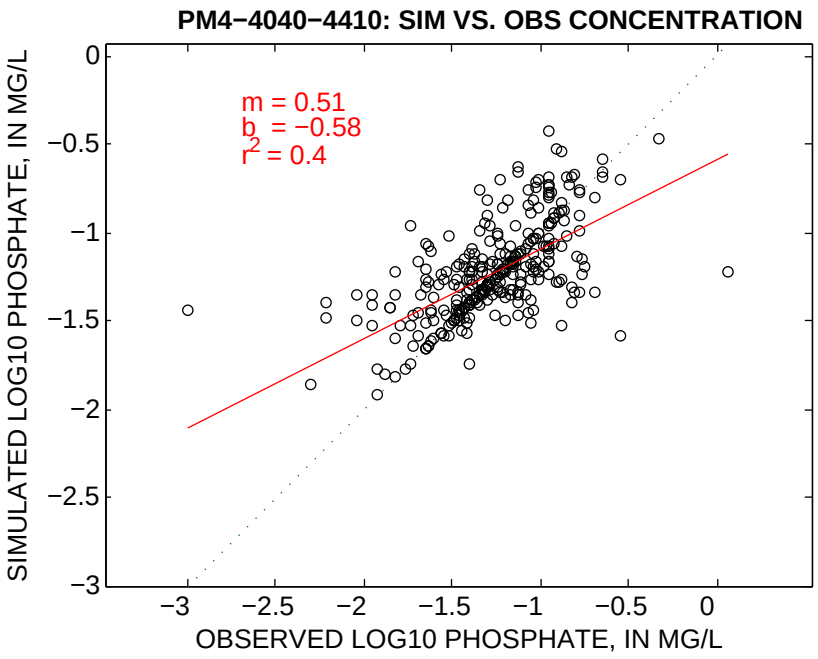
Drive	Directory	Observed
N/A	model	OBS20161101

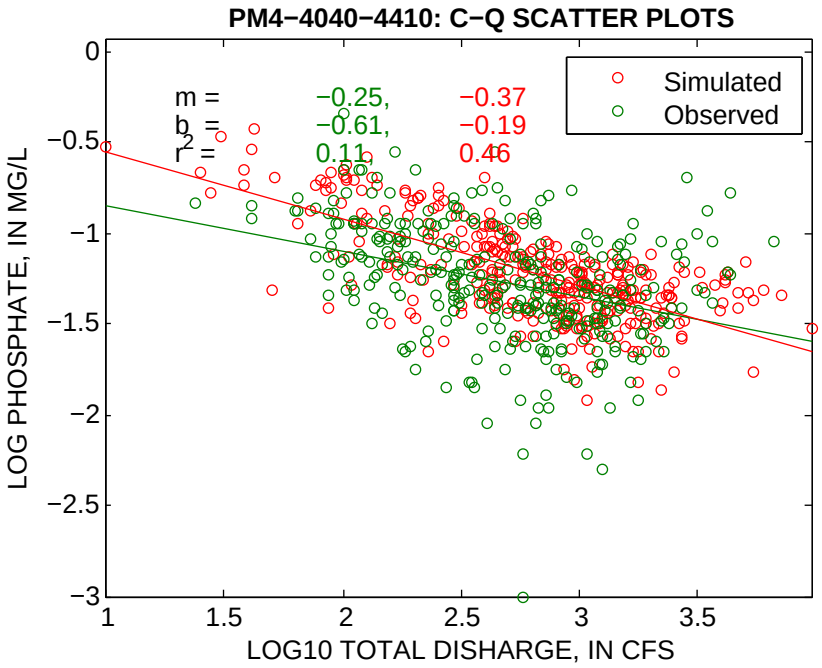
STATISTICS

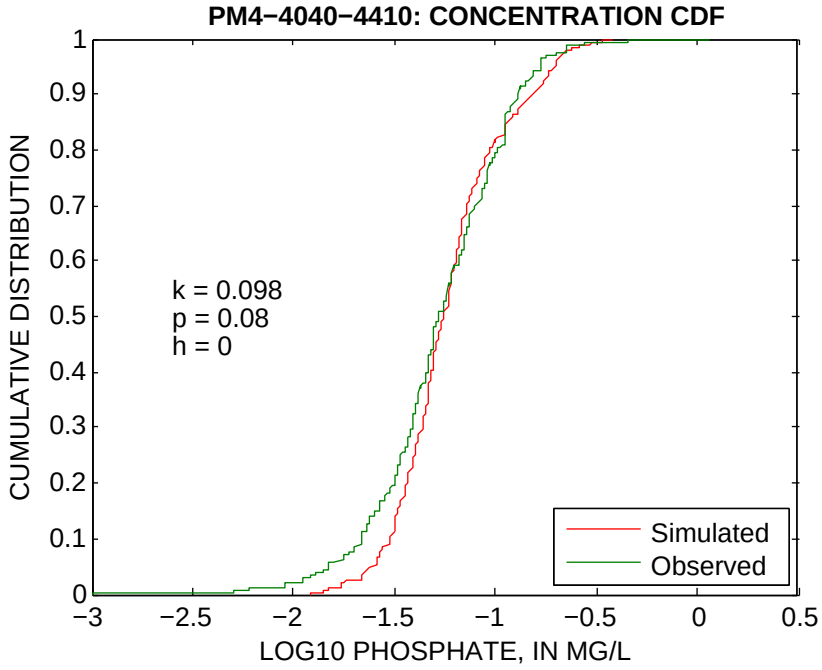
	n	325	325
		observe	simulate
min		0.001	0.012426
		-3	-1.90567
mean		0.0715092	0.0729414
		-1.27107	-1.24252
media		0.052	0.053119
		-1.284	-1.27475
max		1.15	0.38659
		0.0606978	-0.412749
varian		0.00624798	0.00357001
		0.110542	0.0840126
JB		0.001	0.001
		0.001	0.007441
		ra	log
%		2.00281	-2.24648
err.va		0.00690727	0.113562
rel.std.err		1.10552	1.02732
mod.eff		-0.105521	-0.0273185

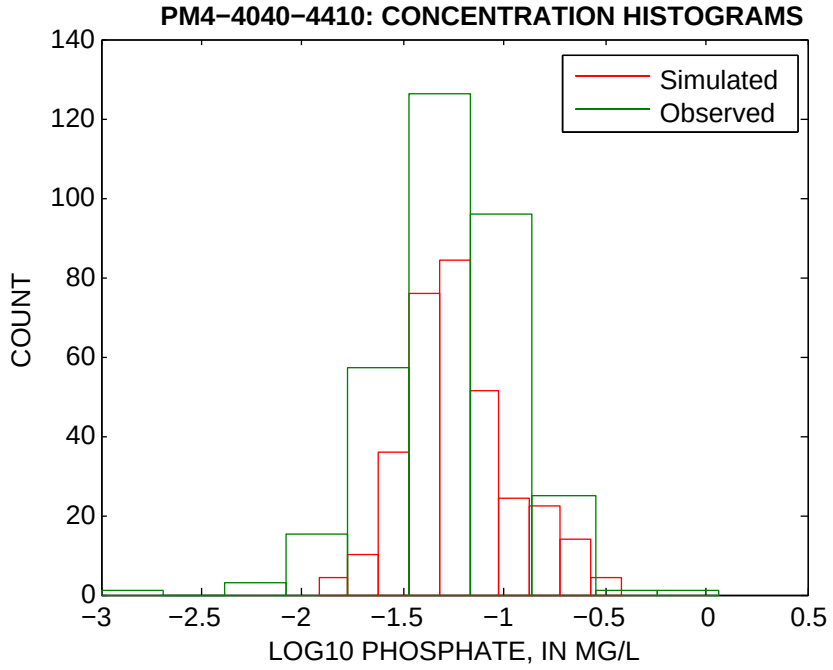
VERSION 2.1

ALL DATA
LOG10

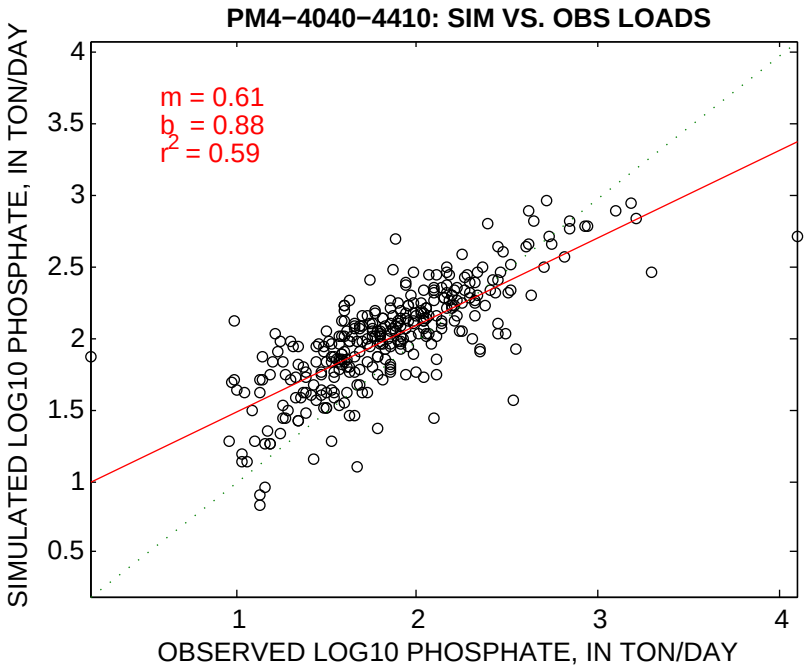


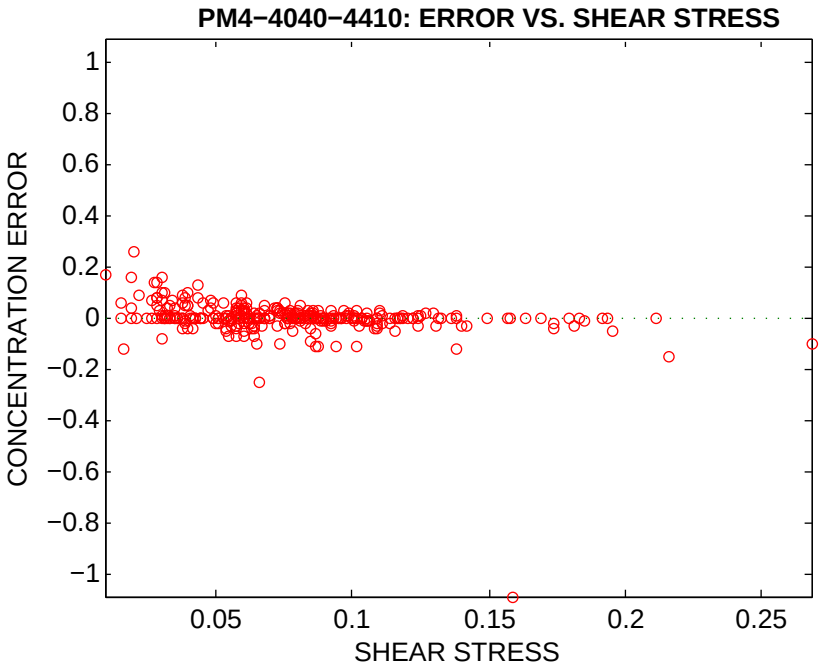


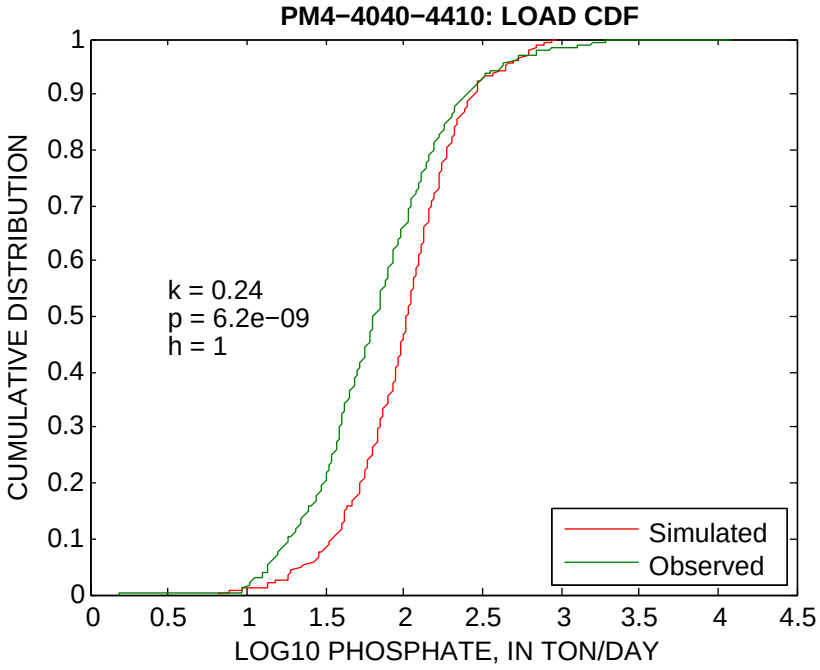


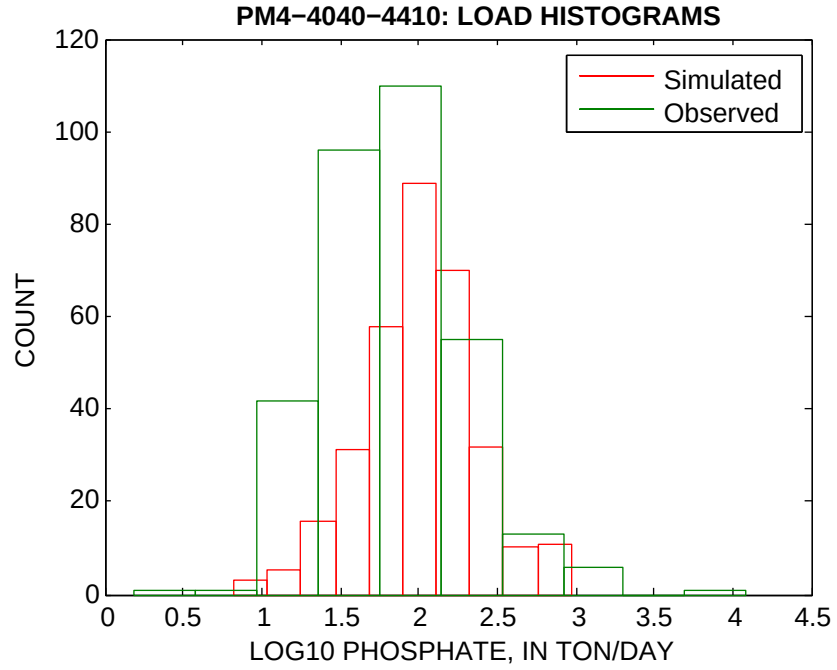


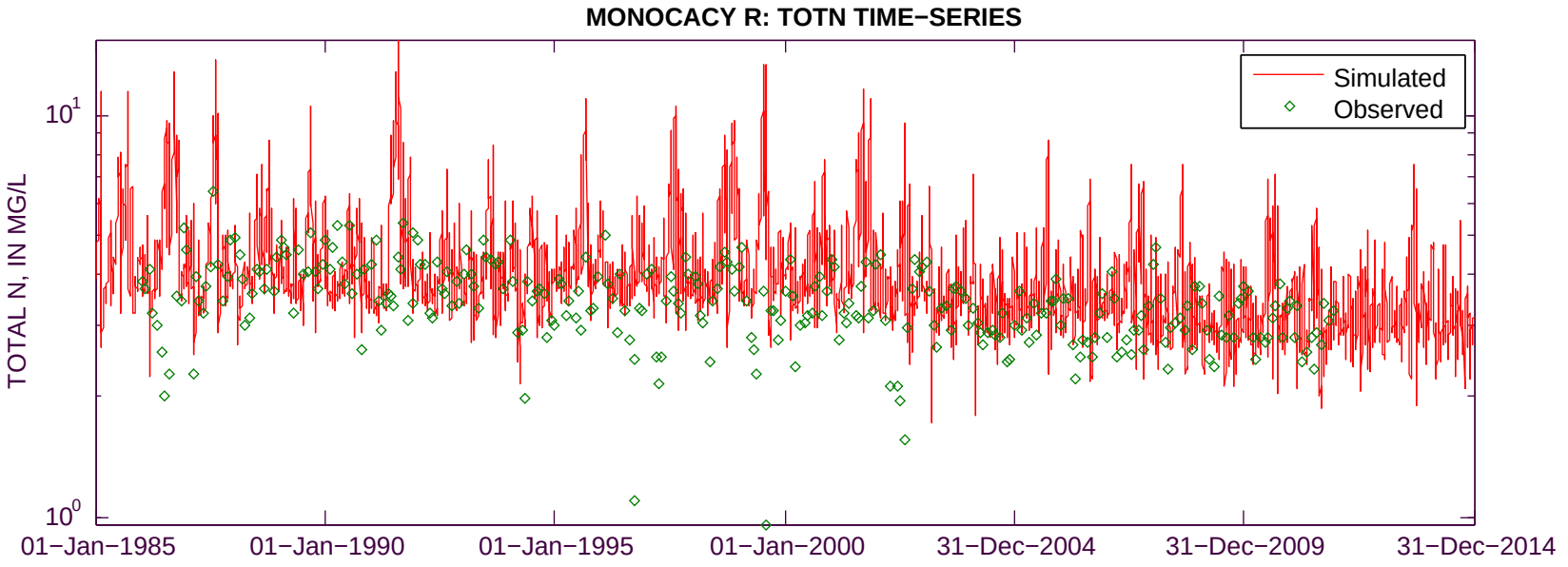
LOAD DATA
LOG10

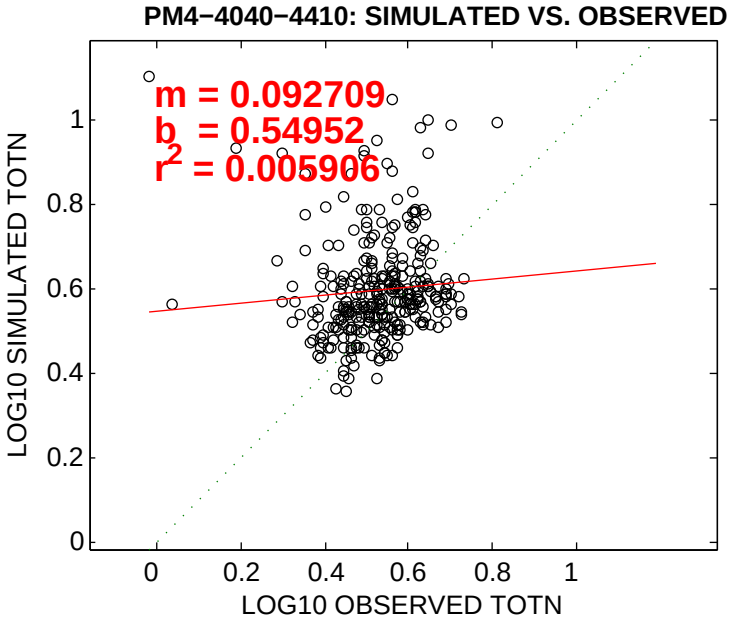


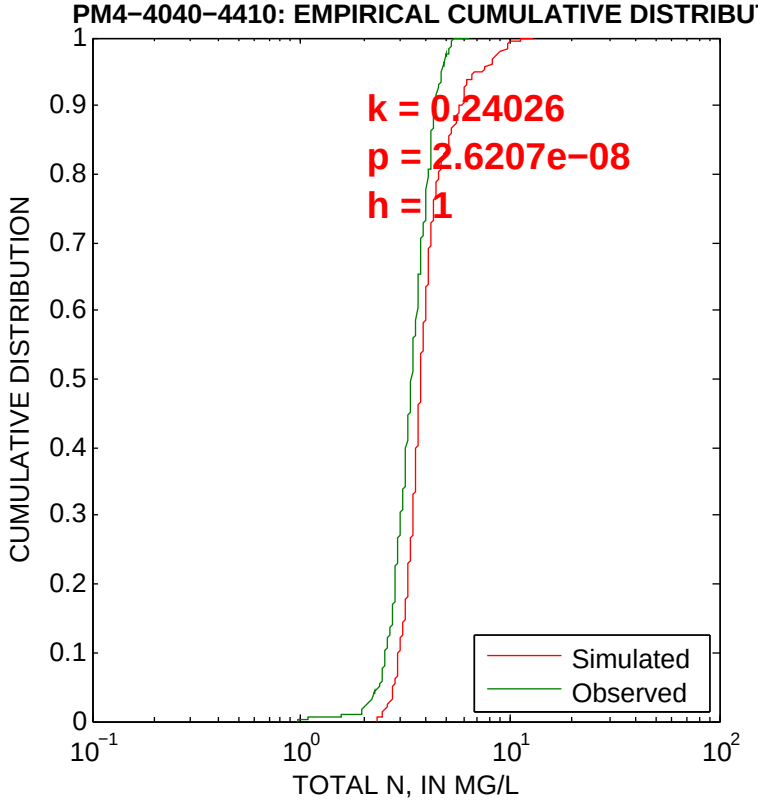












DATA SELECTION

scenario	file
P620171001WQ	TOTN.calib

plot: TOTN - total nitrogen

Dates: 1/1/1985 – 12/31/201

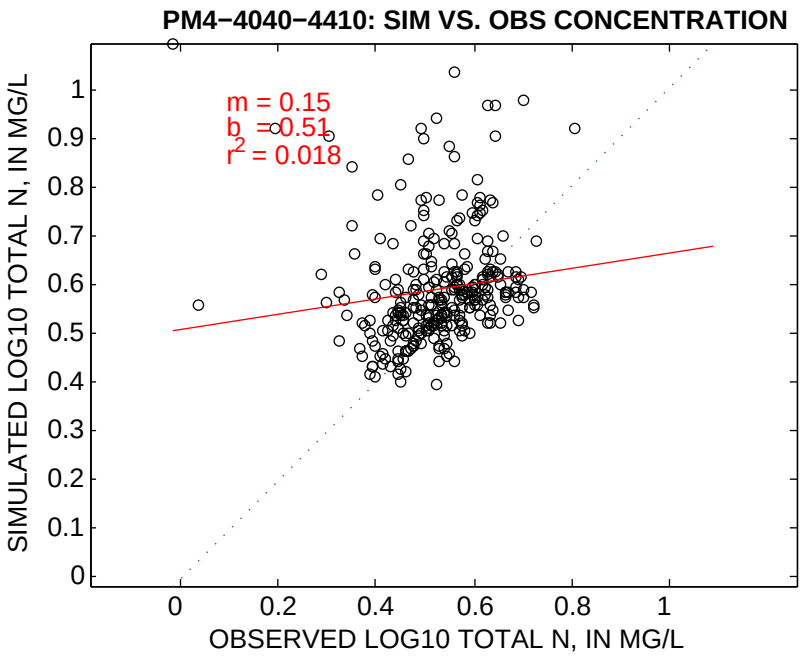
Drive	Directory	Observed
N/A	model	OBS20161101

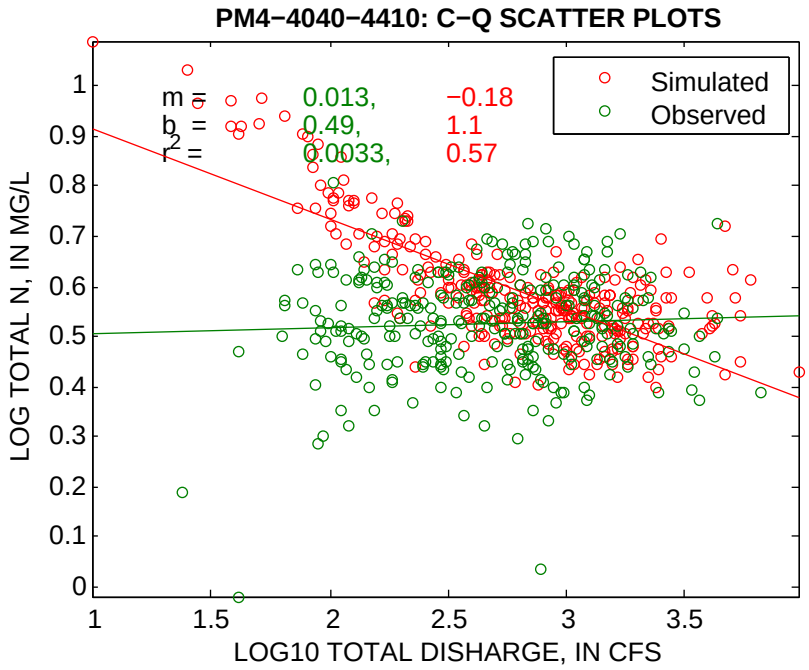
STATISTICS

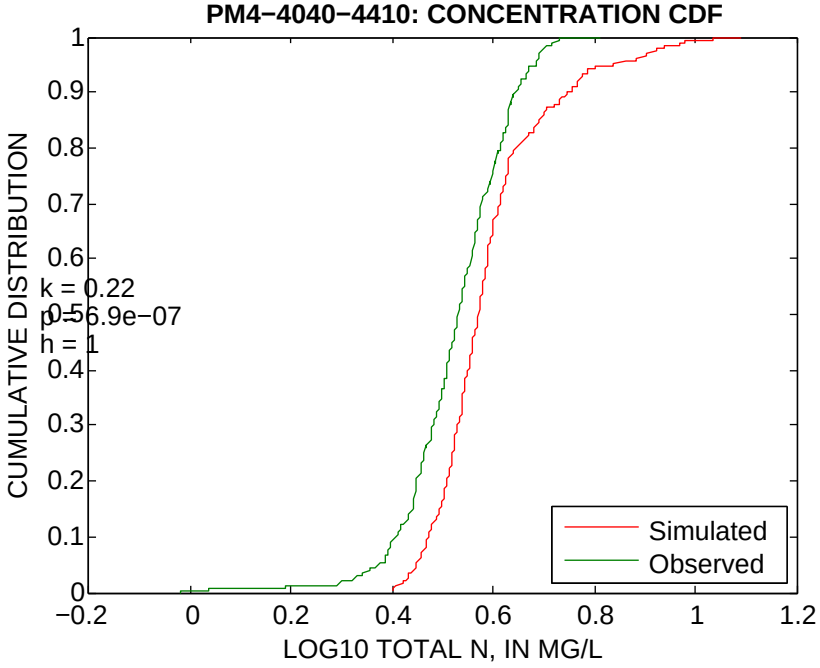
	n	observe	simulate
		308	308
min		0.96	2.2925
		-0.0177288	0.360309
mean		3.45247	4.14852
		0.527085	0.598385
media		3.4	3.7373
		0.531479	0.572558
max		6.45	12.776
		0.80956	1.10639
varian		0.569159	2.13202
		0.0102367	0.0148973
JB		0.019155	0.001
		0.001	0.001
		ra	log
%		20.1609	13.5271
err.va		2.98832	0.0283361
rel.std.err		5.25042	2.76809
mod.eff		-4.25042	-1.76809

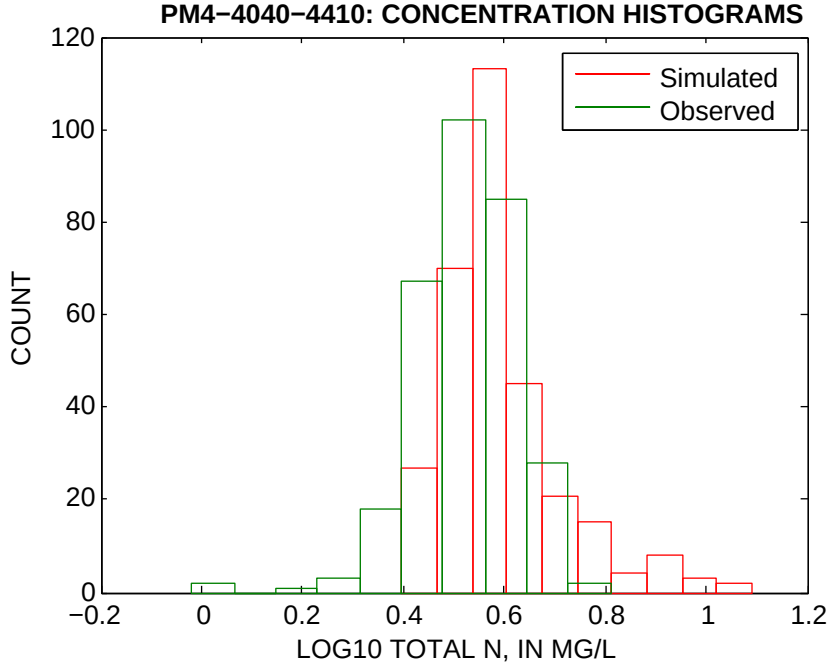
VERSION 2.1

ALL DATA
LOG10

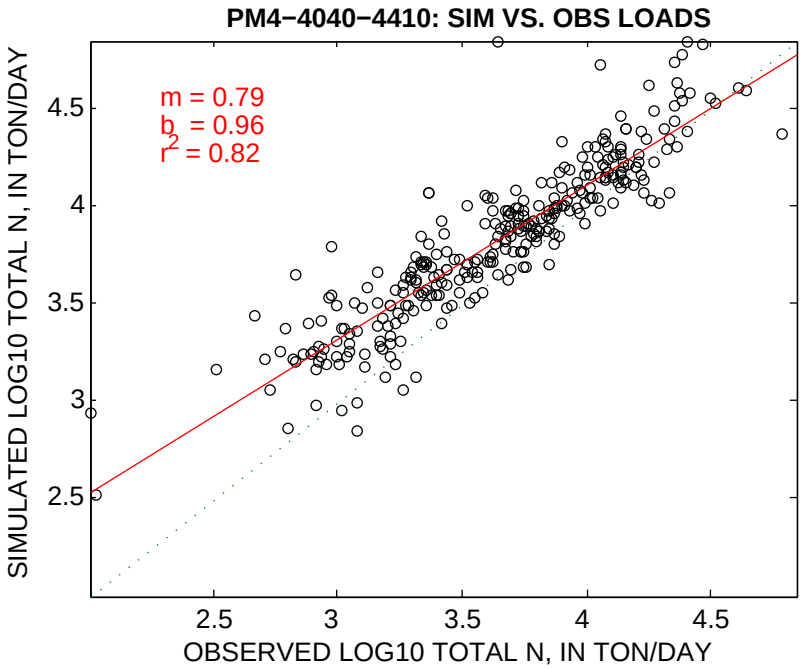


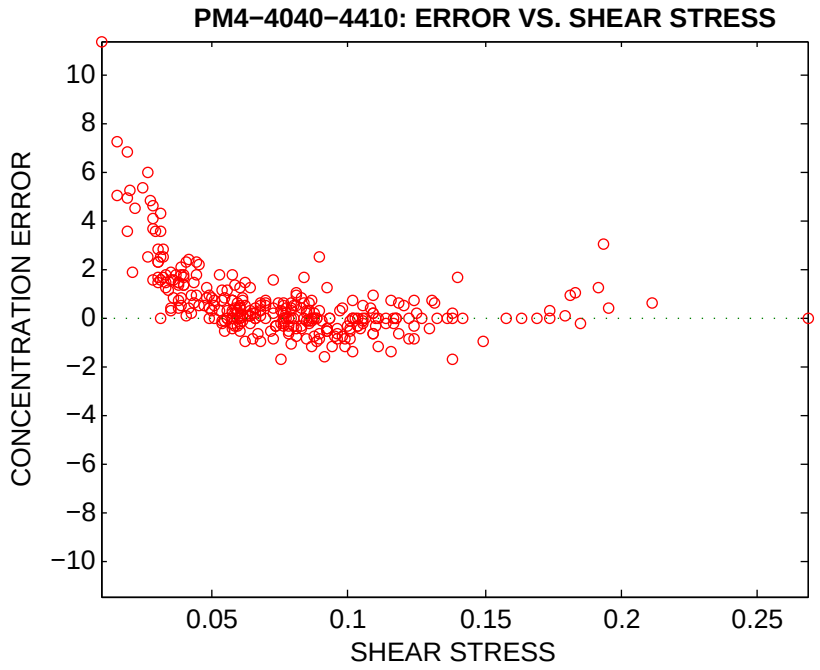


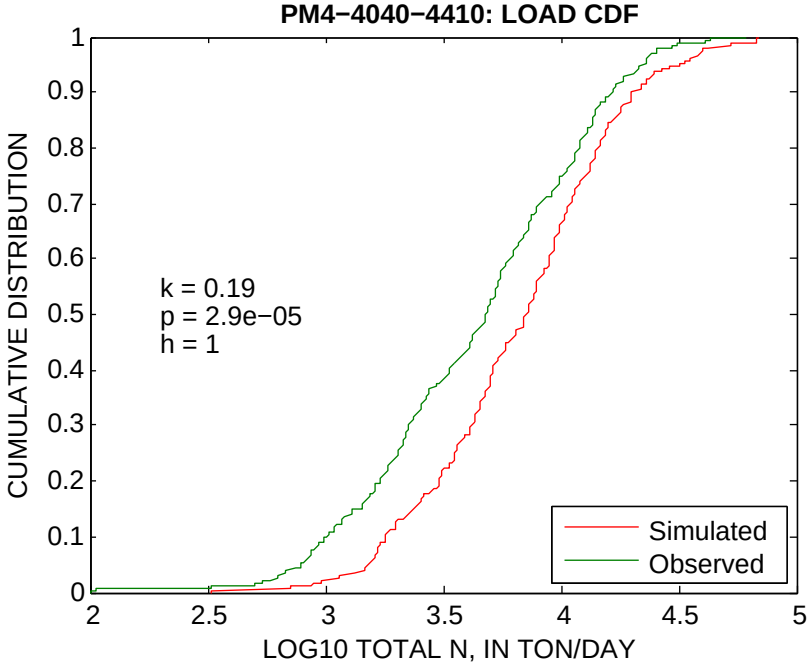


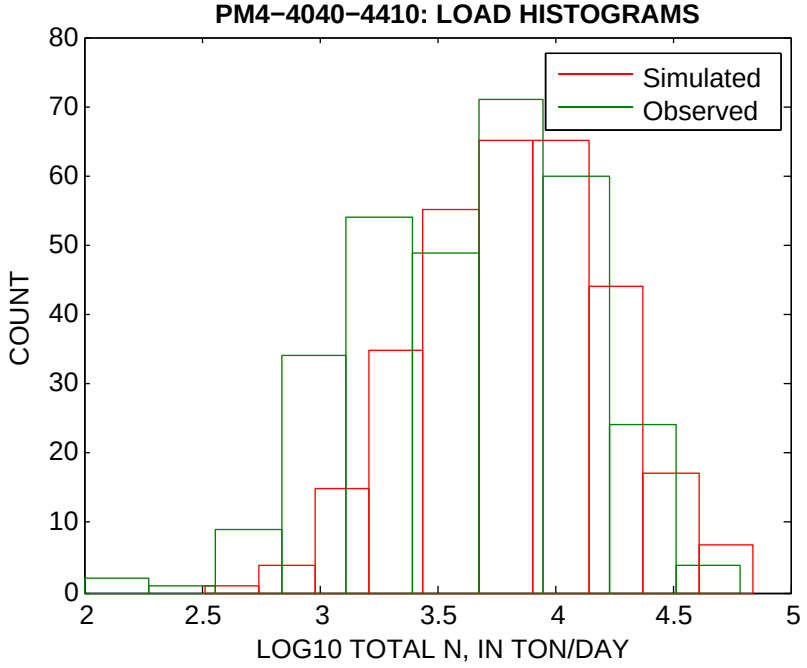


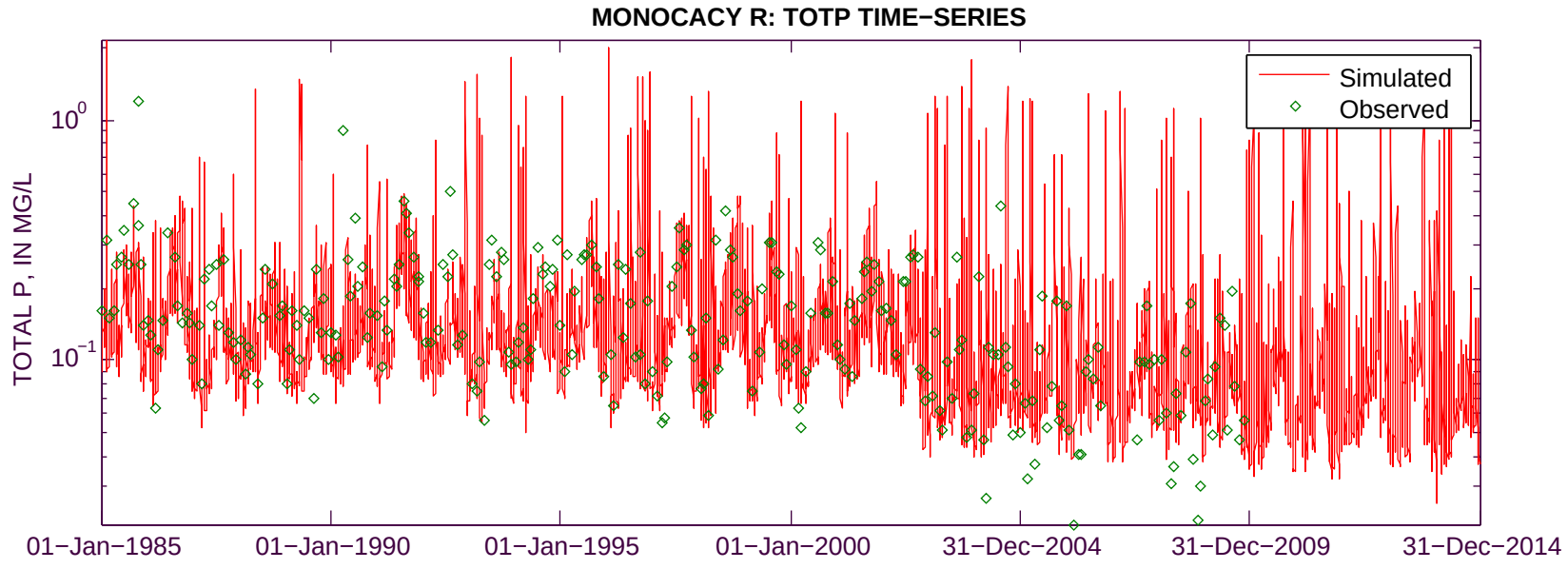
LOAD DATA
LOG10

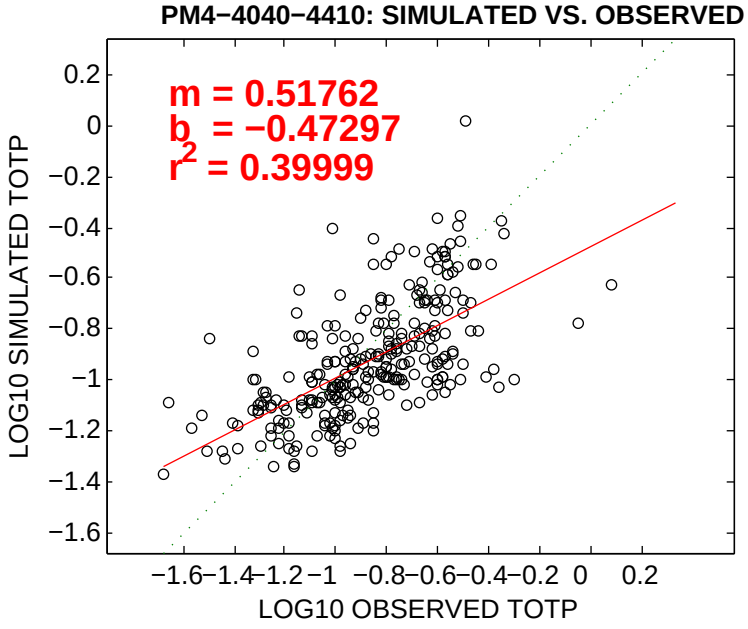


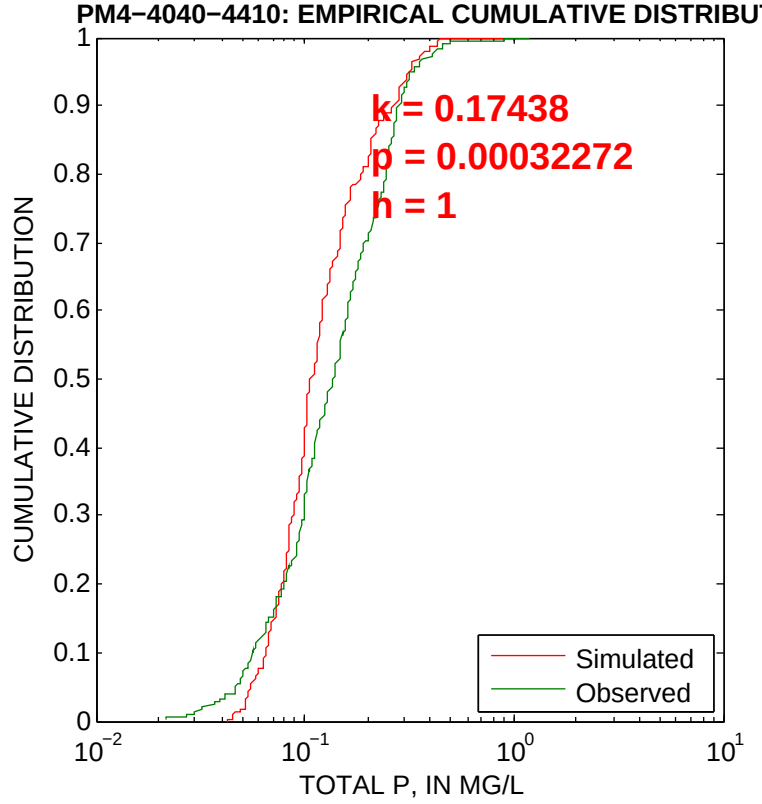












DATA SELECTION

scenario	file
P620171001WQ	TOTP.calib

plot: TOTP - total phosphorus

Dates: 1/1/1985 – 12/31/201

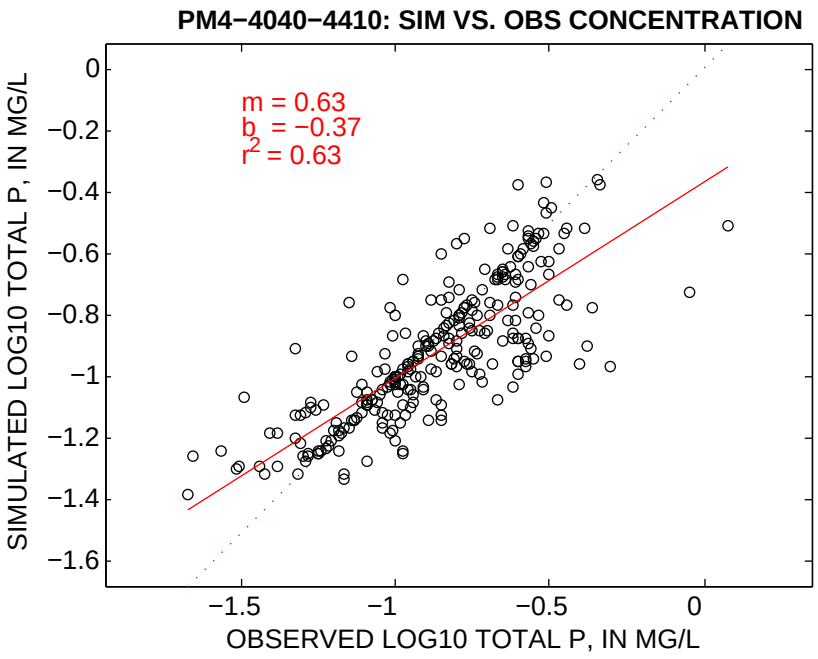
Drive	Directory	Observed
N/A	model	OBS20161101

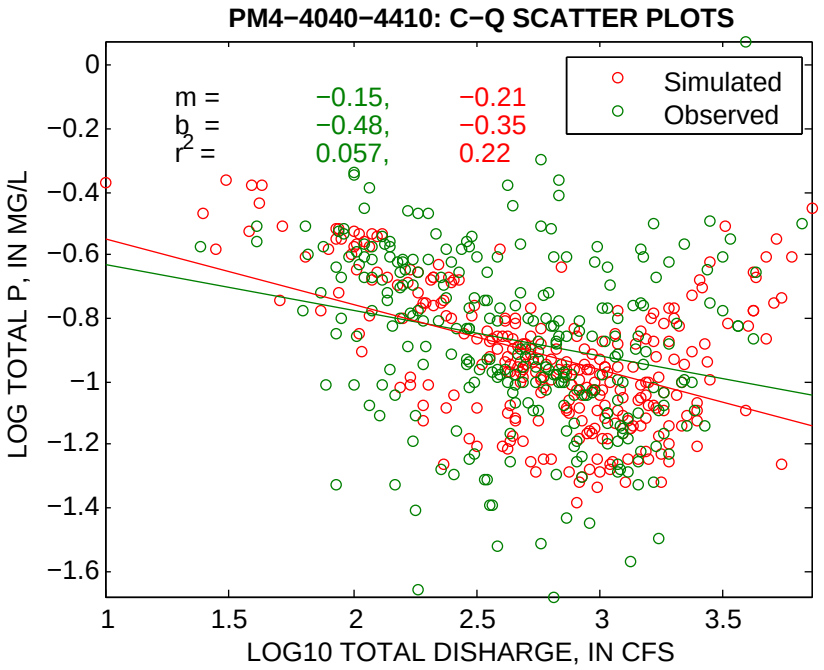
STATISTICS

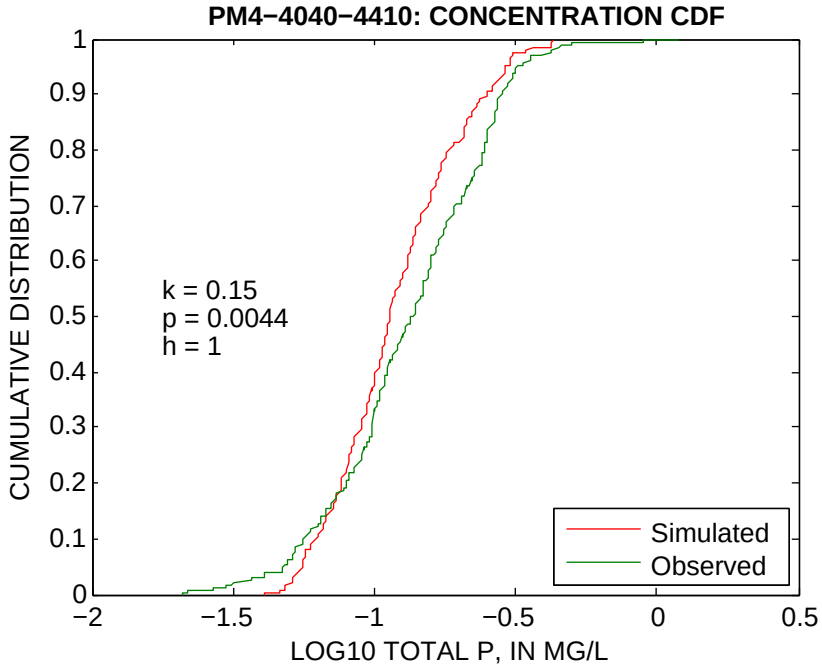
	n	281	281
		observe	simulate
min		0.021	0.042746
		-1.67778	-1.3691
mean		0.163815	0.138716
		-0.872287	-0.924489
media		0.138	0.10701
		-0.860121	-0.970576
max		1.2	1.0319
		0.0791812	0.0136376
varian		0.0140859	0.00917979
		0.0766424	0.0513391
JB		0.001	0.001
		0.5	0.001018
		ra	log
%		-15.3216	5.98448
err.va		0.0137194	0.0513726
rel.std.err		0.973987	0.670289
mod.eff		0.0260129	0.329711

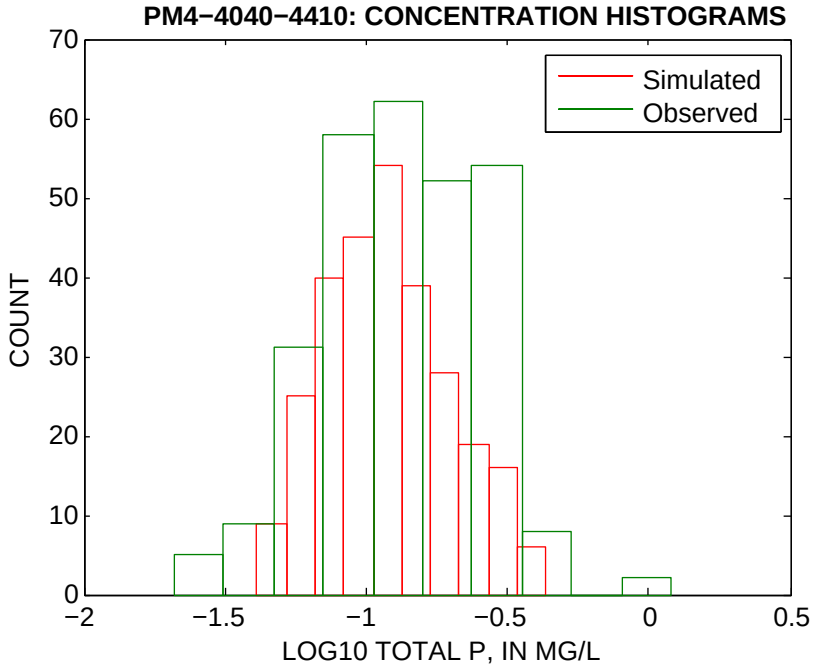
VERSION

ALL DATA
LOG10

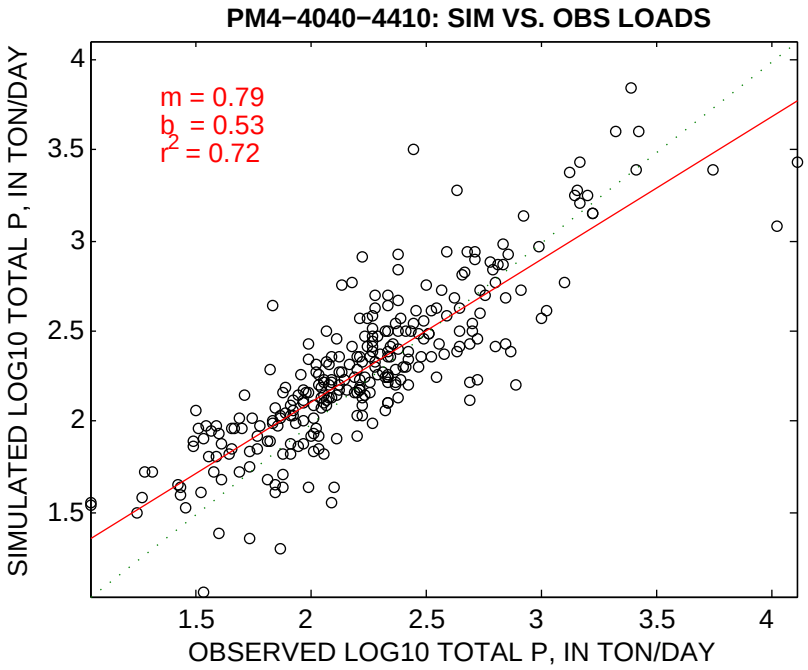


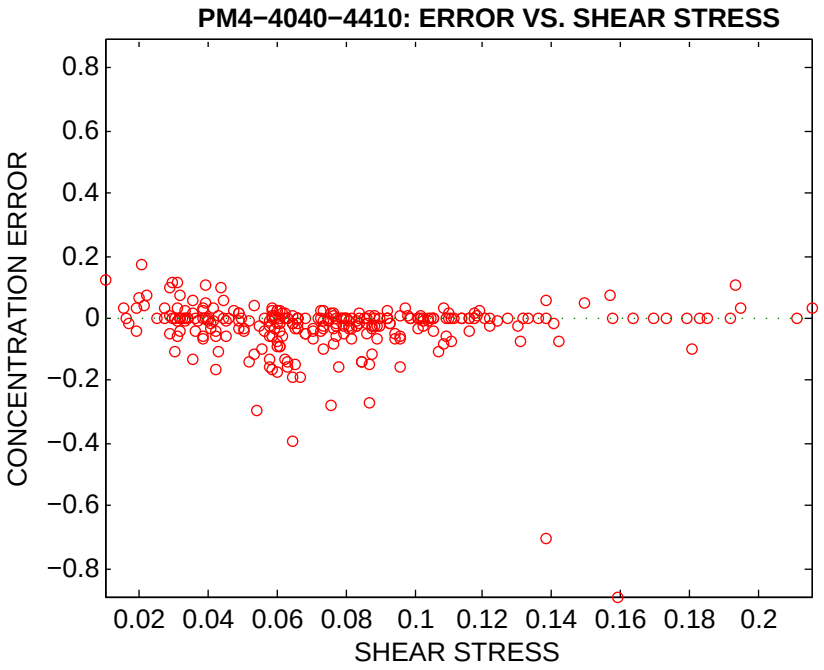


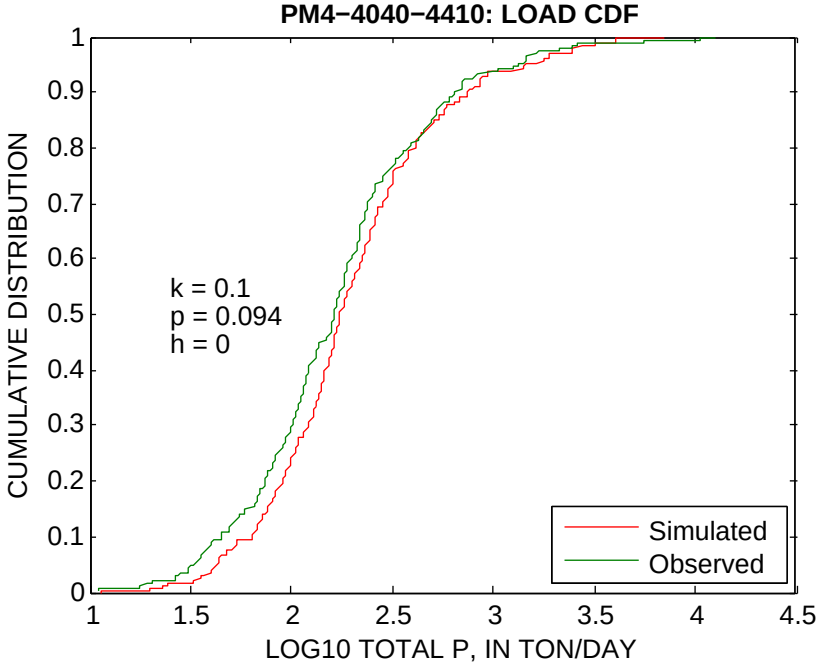


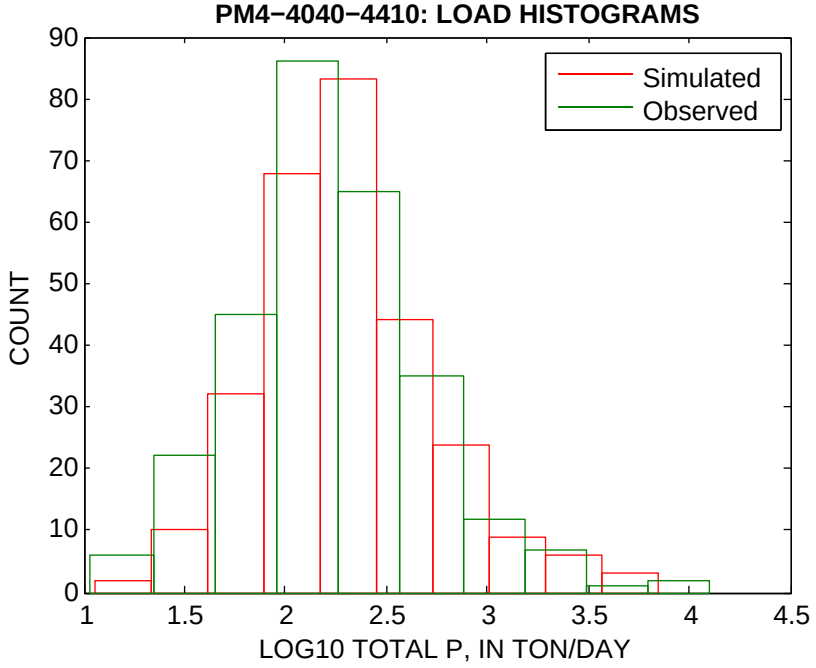


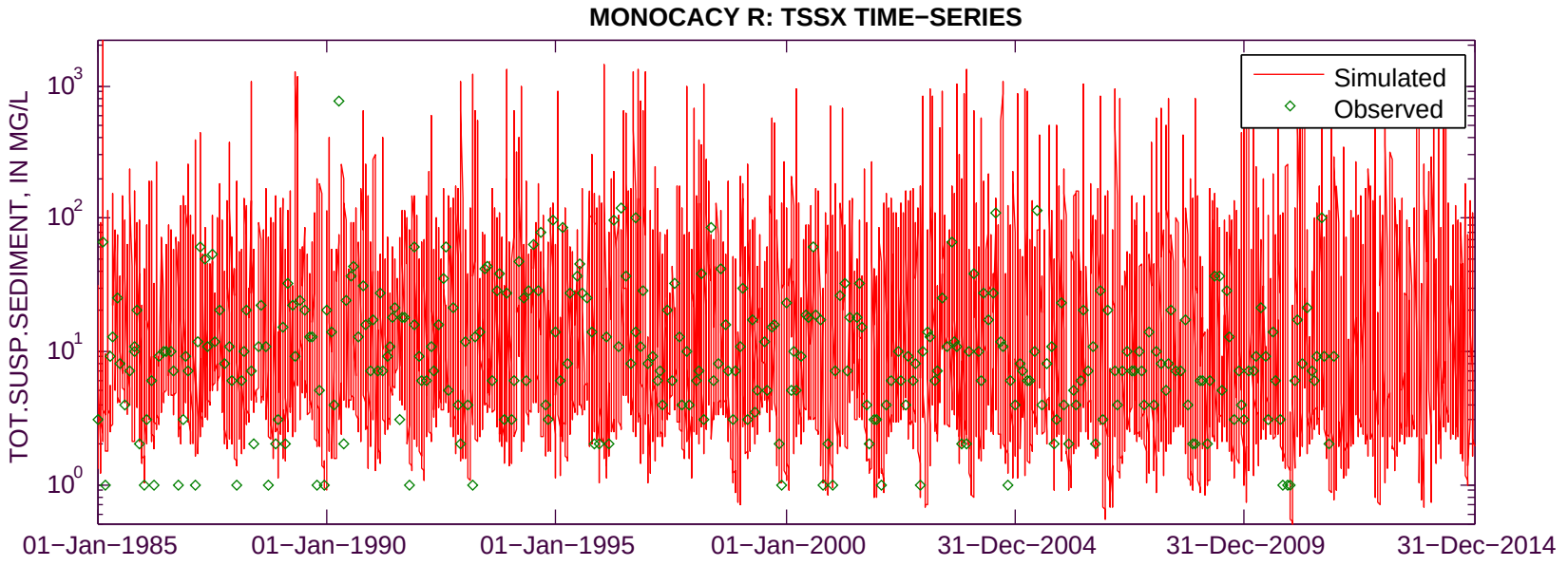
LOAD DATA
LOG10

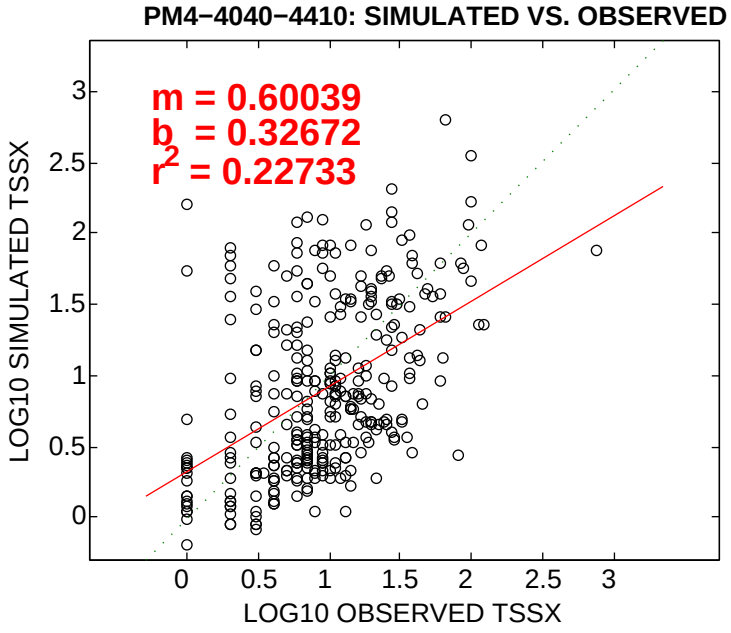


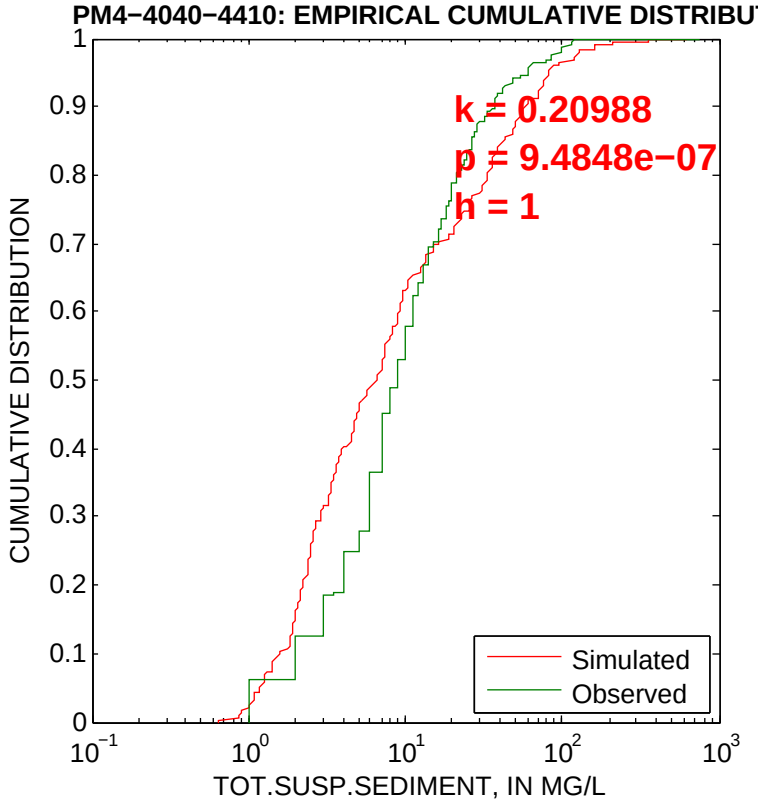












DATA SELECTION

scenario	file
P620171001WQ	TSSX.calib

plot: TSSX - total suspended ...

Dates: 1/1/1985 – 12/31/201

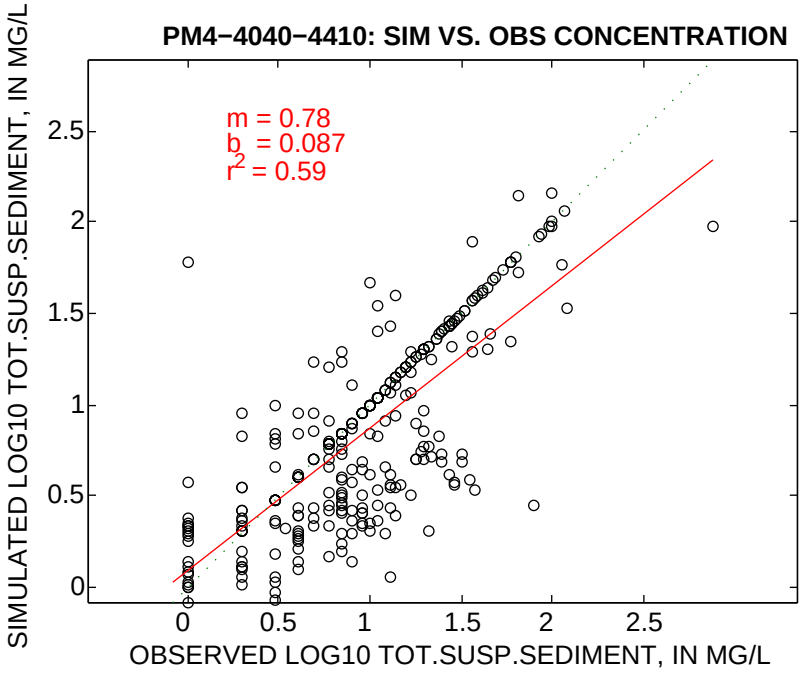
Drive	Directory	Observed
N/A	model	OBS20161101

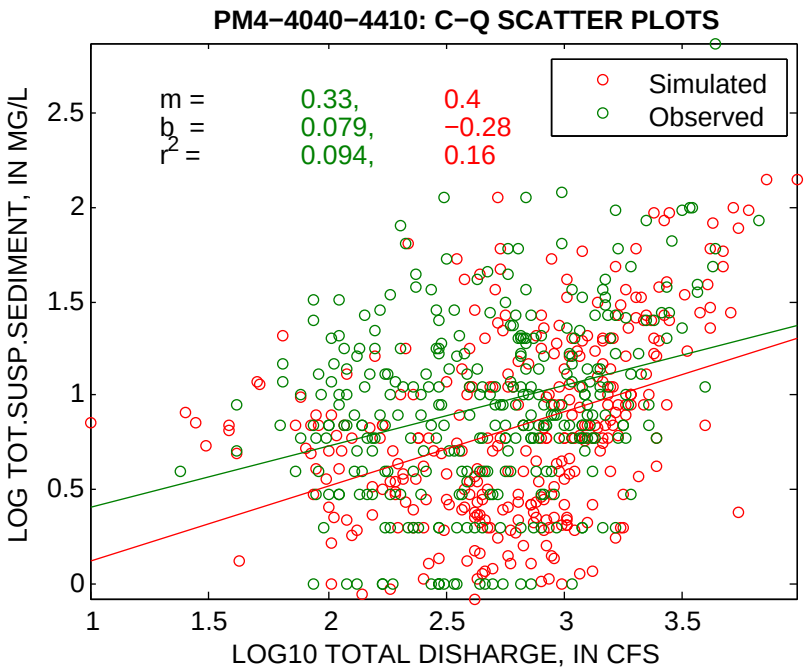
STATISTICS

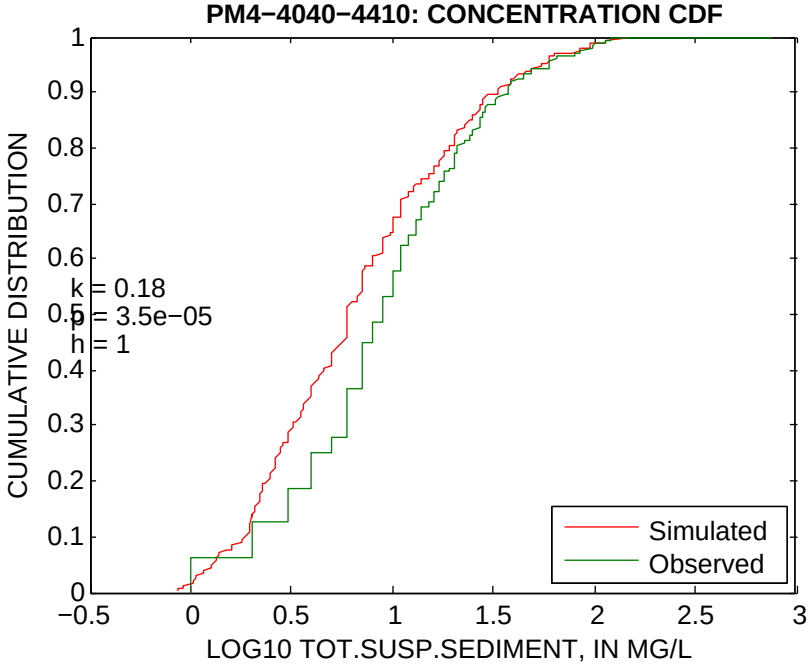
	n	observe	simulate
		324	324
min		1	0.64776
		0	-0.188586
mean		17.7855	22.3761
		0.952156	0.898378
media		9	6.4128
		0.954243	0.807
max		760	634.29
		2.88081	2.80229
varian		2096.75	2410.05
		0.227739	0.361112
JB		0.001	0.001
		0.161687	0.002309
		ra	log
%		25.8112	-5.64804
err.va		3555.51	0.318289
rel.std.err		1.69572	1.3976
mod.eff		-0.695723	-0.397603

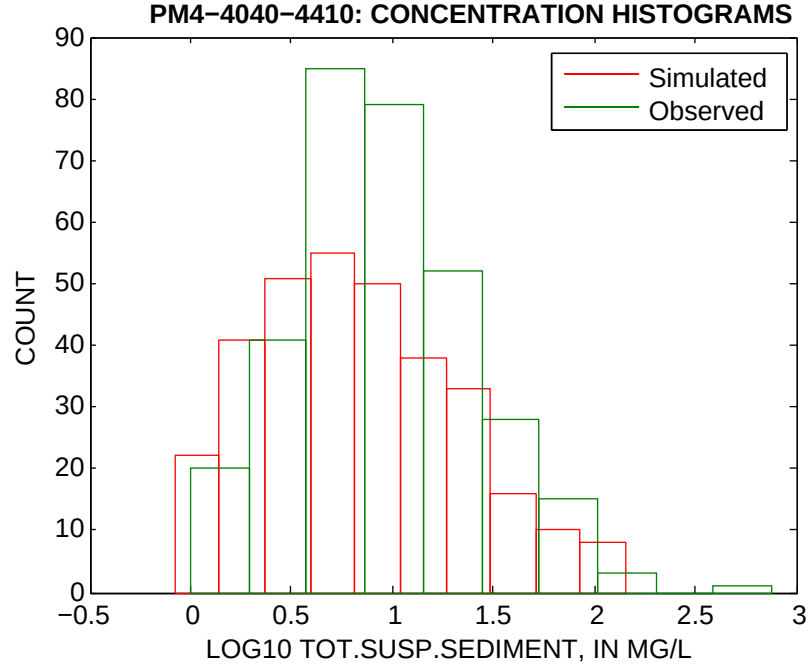
VERSION 2.1

ALL DATA
LOG10

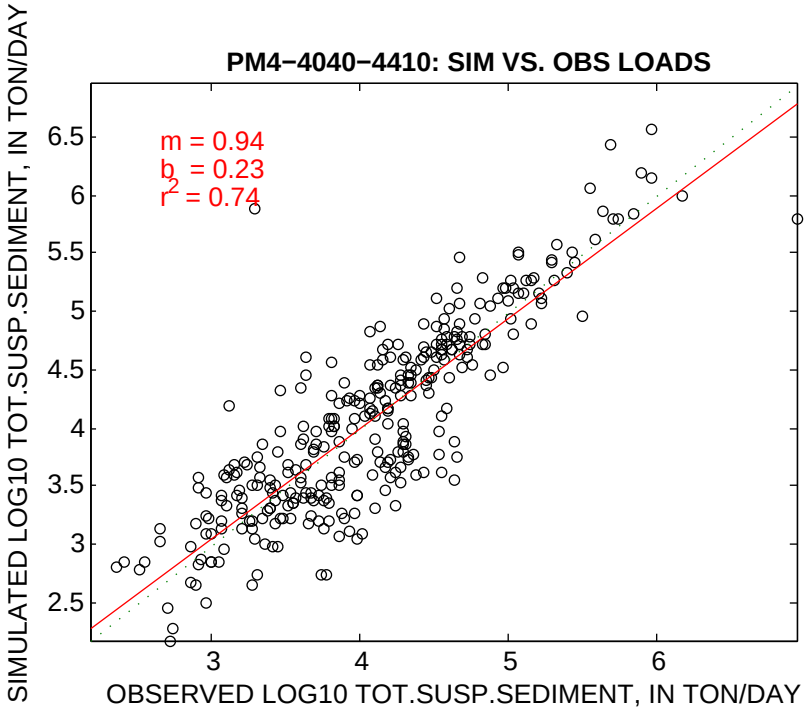


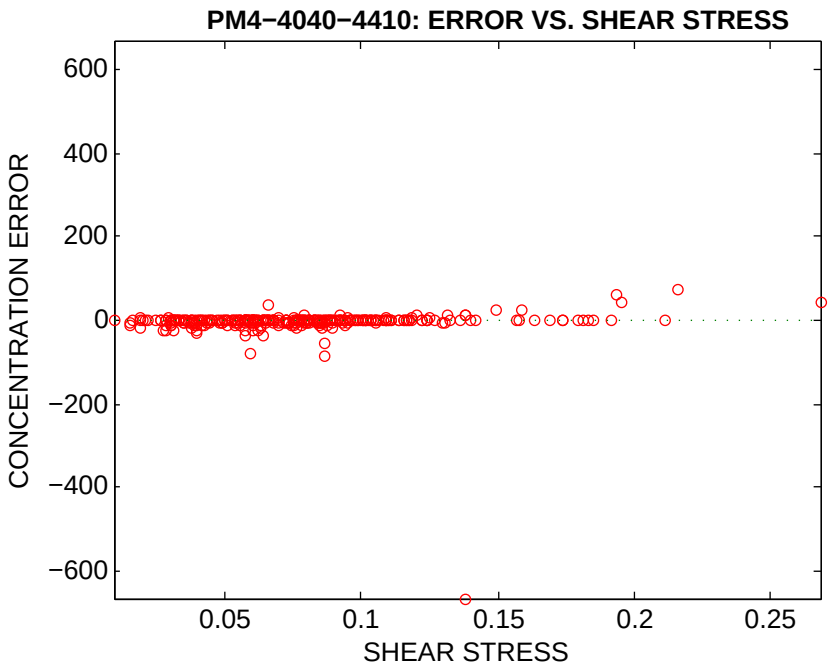


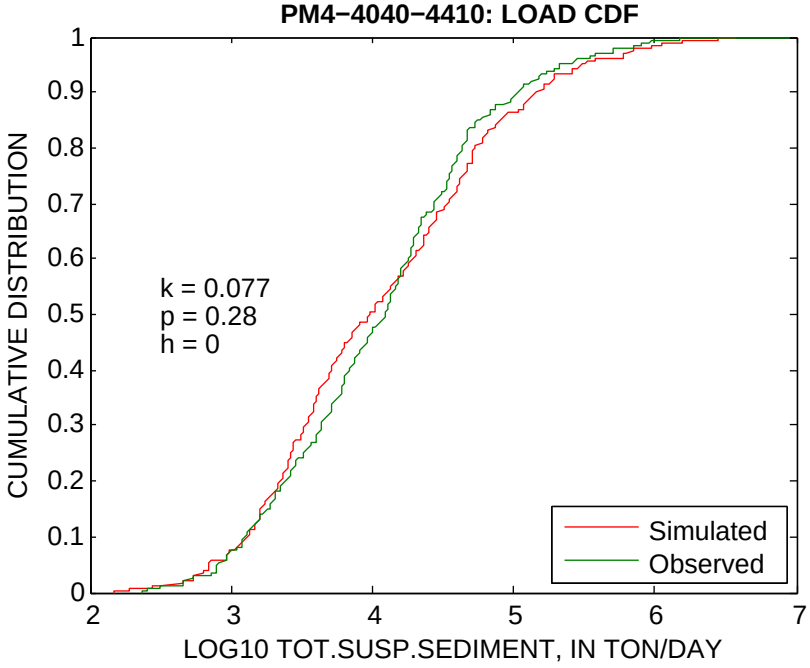


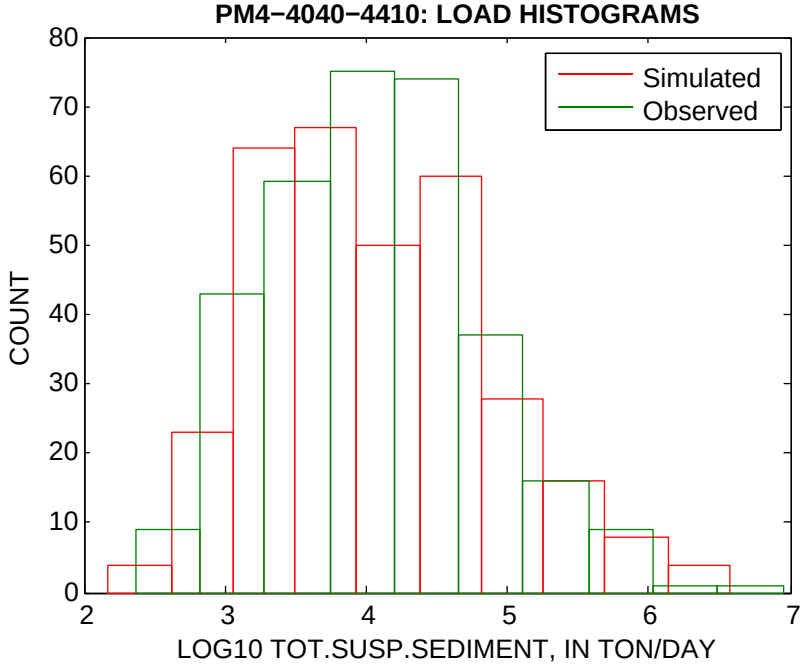


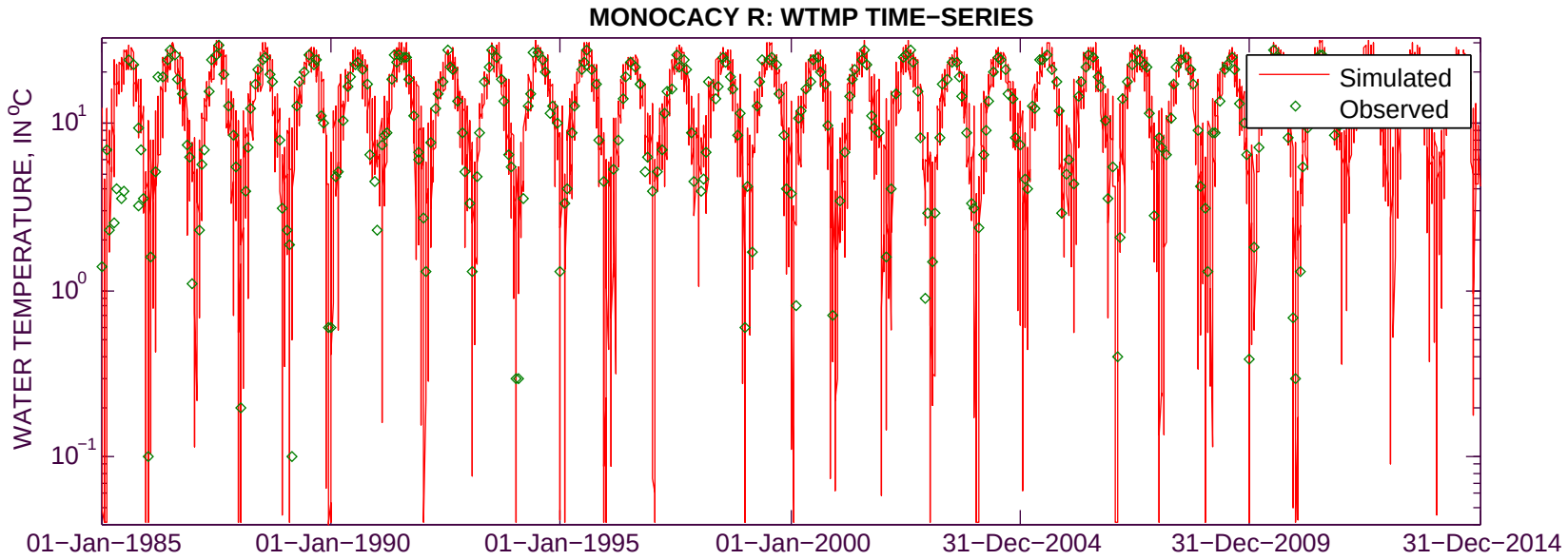
LOAD DATA
LOG10

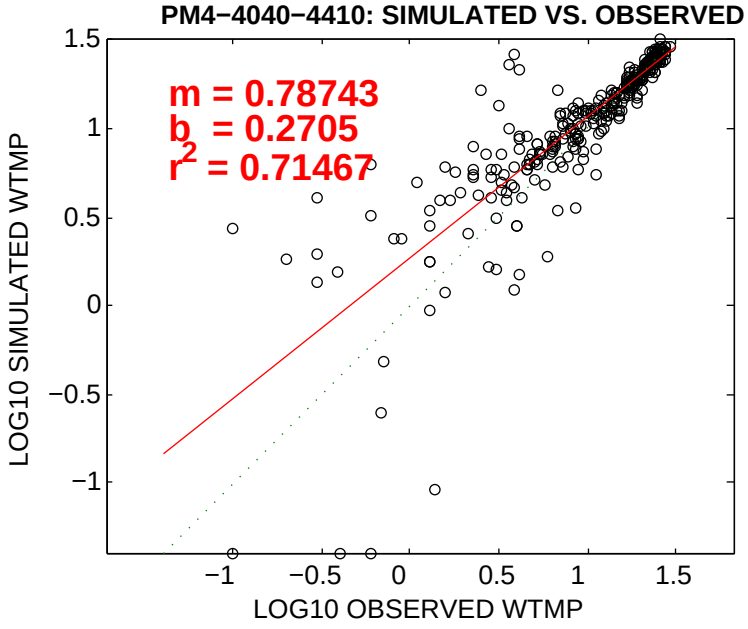


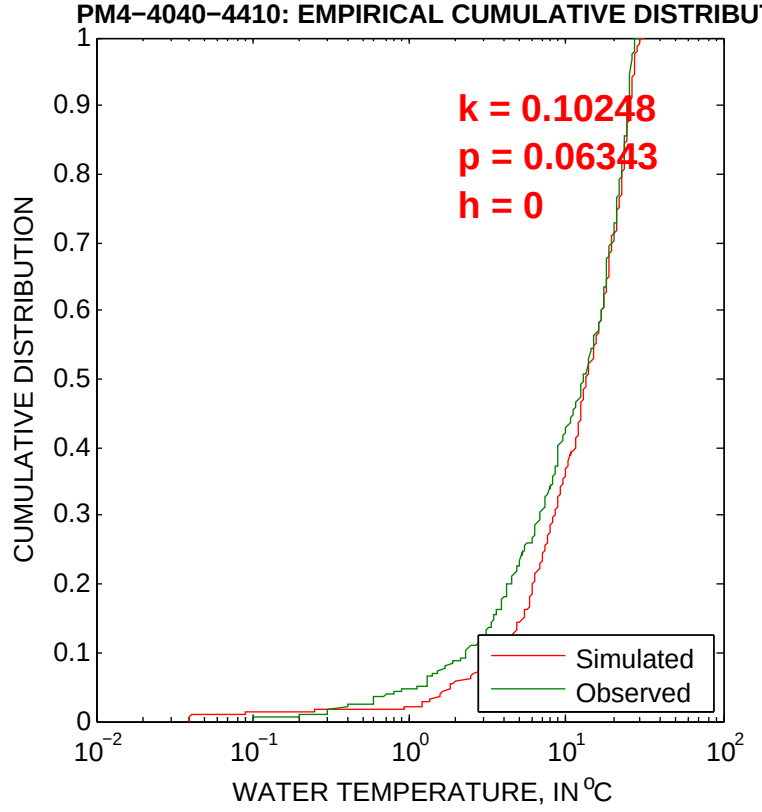












DATA SELECTION

scenario	file
P620171001WQ	WTMP.calib

plot: WTMP - water tempera...

Dates 1/1/1985 12/31/201

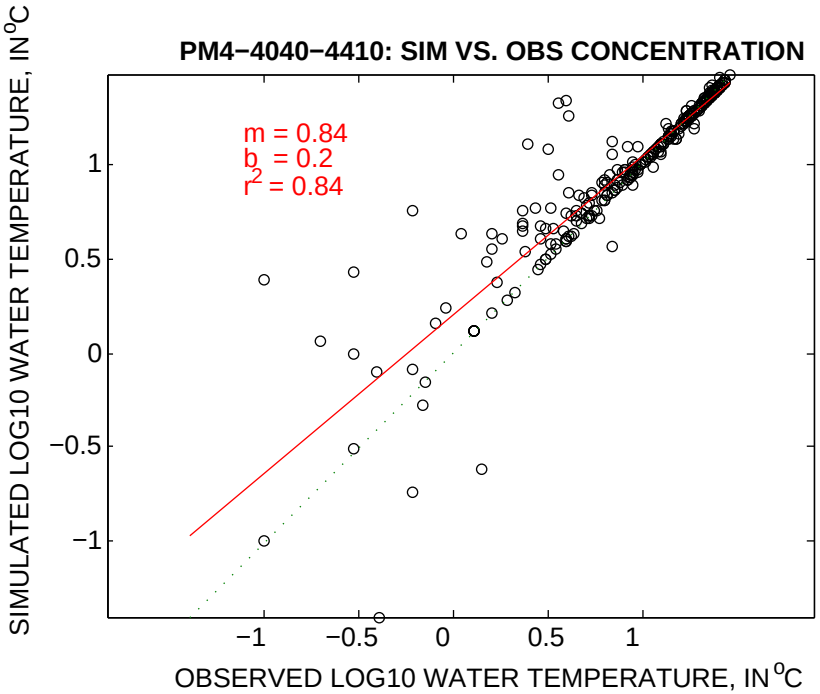
Drive	Directory	Observed
N/A	model	OBS20161101

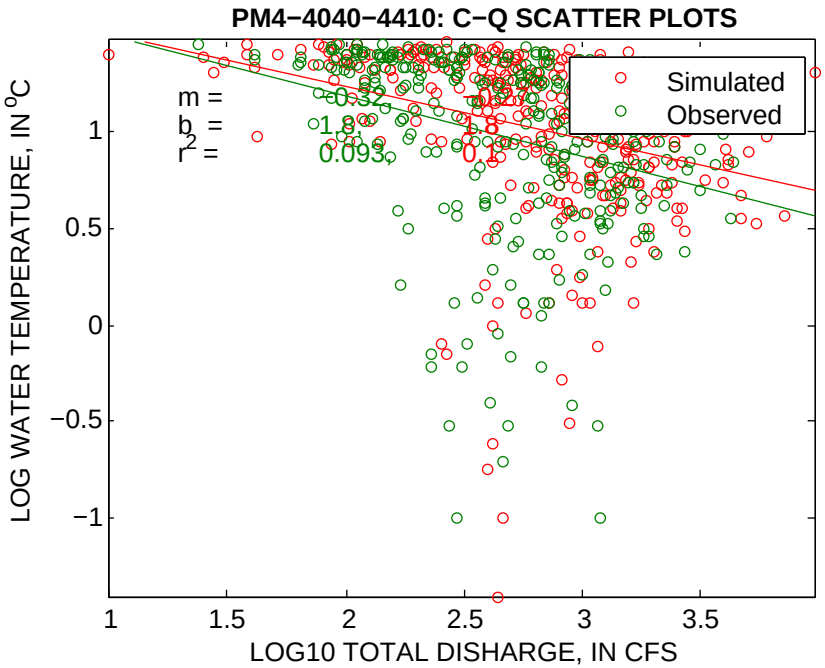
STATISTICS

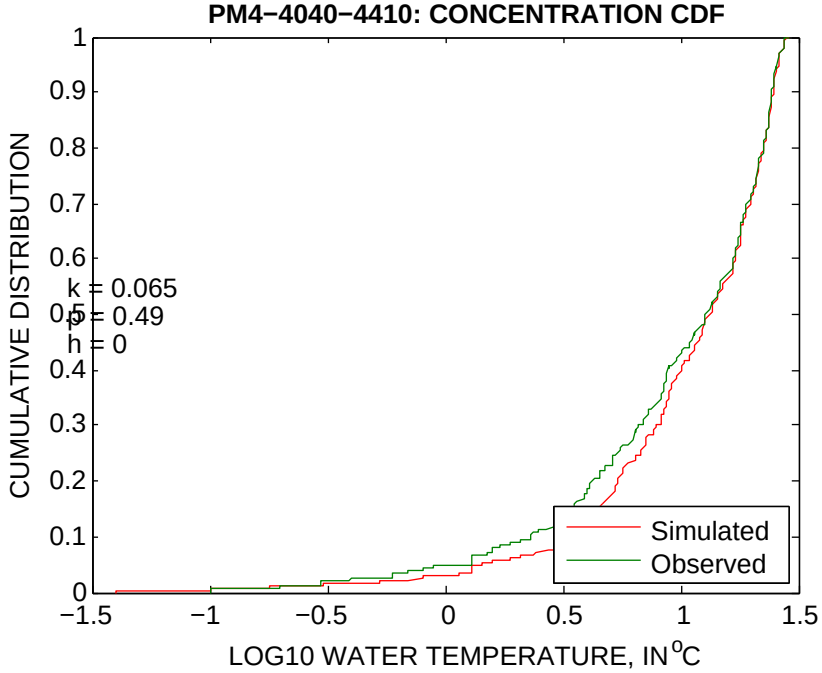
	n	observe	simulate
		322	322
min		0.1	0.040036
		-1	-1.39755
mean		13.3138	14.3184
		0.968198	1.03289
media		12.85	13.569
		1.1089	1.13255
max		29.2	31.568
		1.46538	1.49925
varian		70.5163	65.6351
		0.213334	0.185087
JB		0.001	0.002306
		0.001	0.001
		ra	log
%		7.54583	6.68154
err.va		9.53997	0.0666486
rel.std.err		0.135287	0.312414
mod.eff		0.864713	0.687586

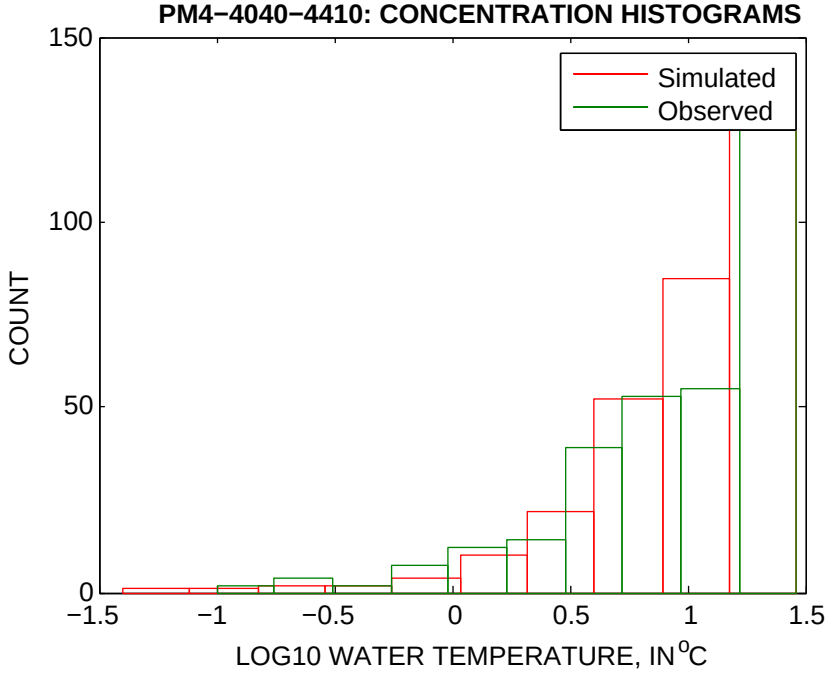
VERSION 2.1

ALL DATA
LOG10

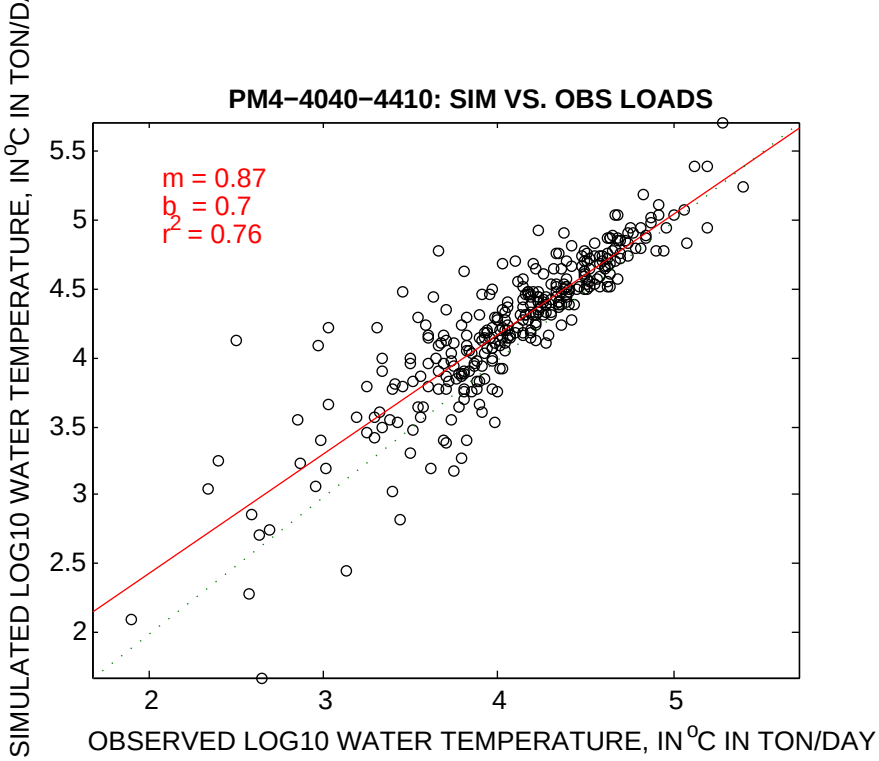


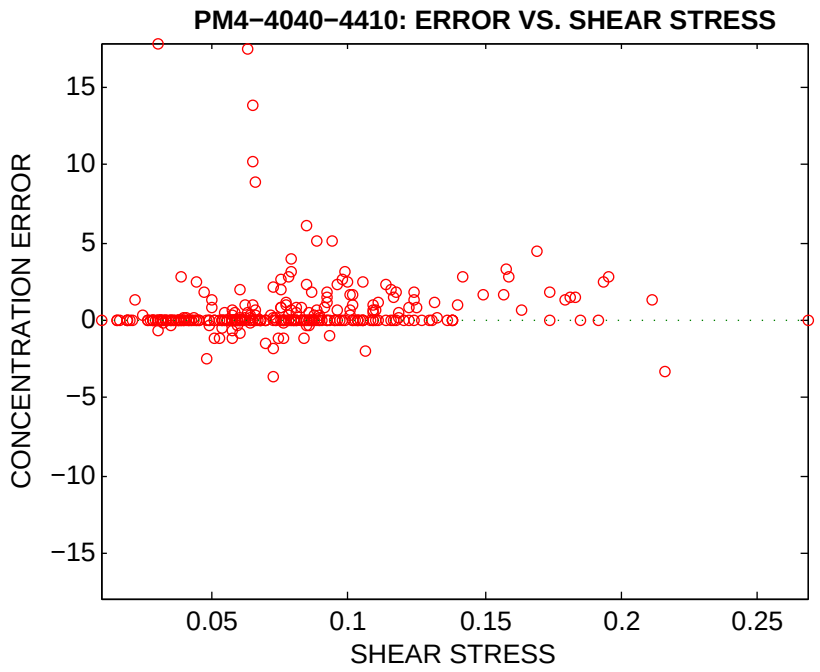


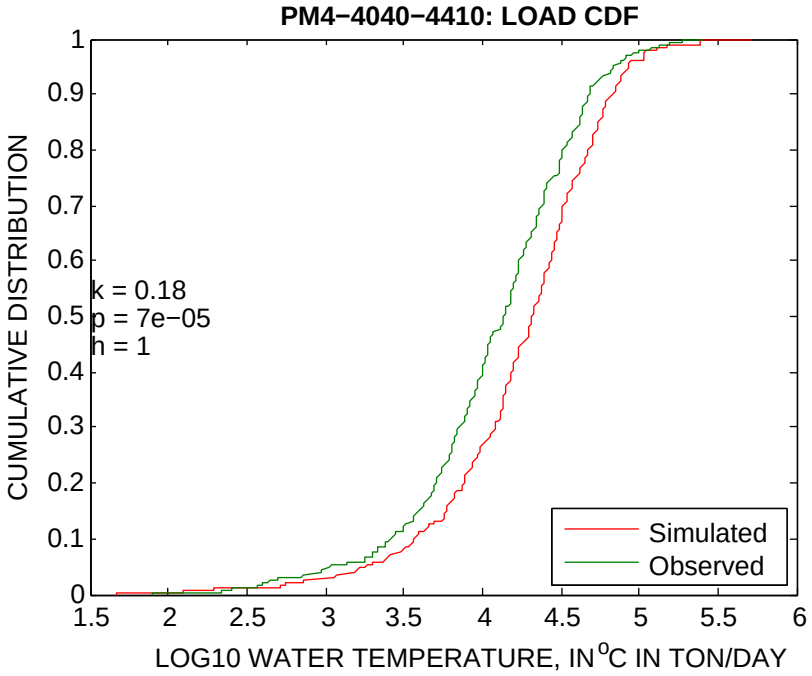


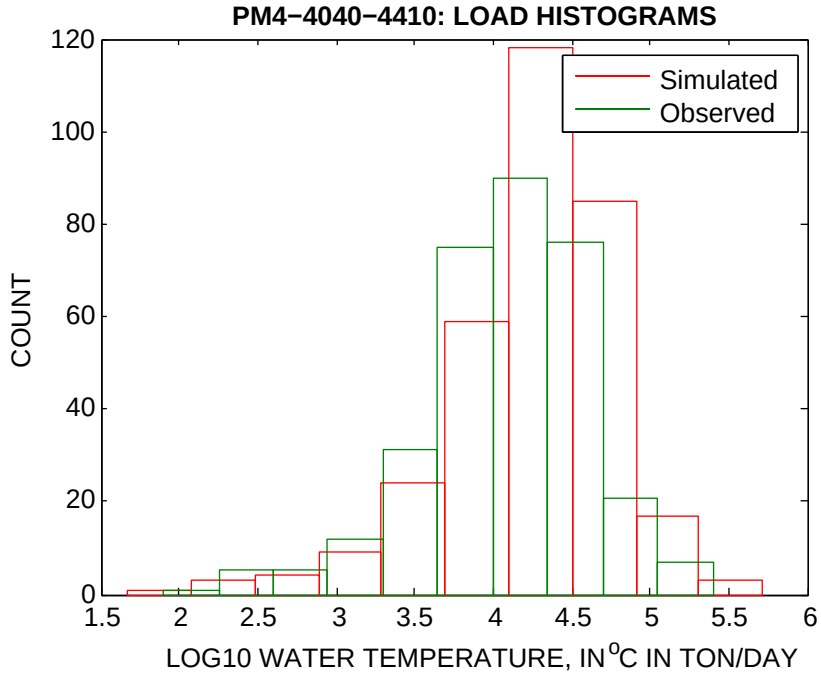


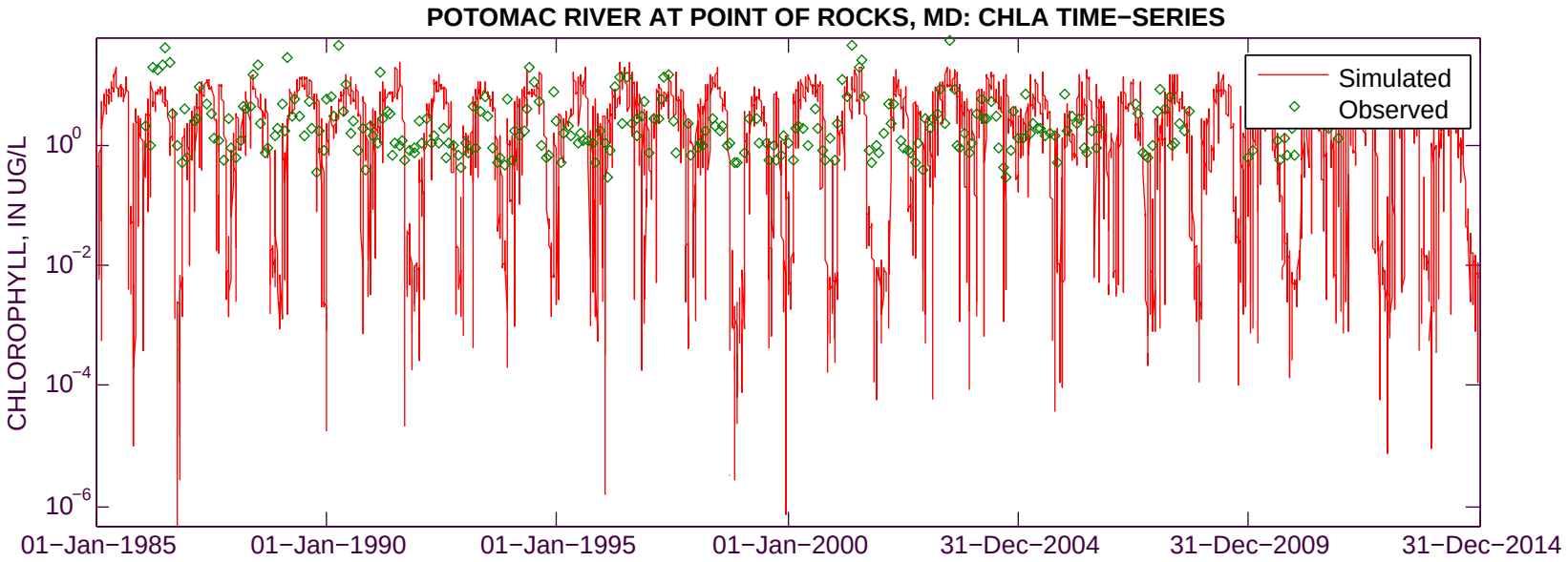
LOAD DATA
LOG10

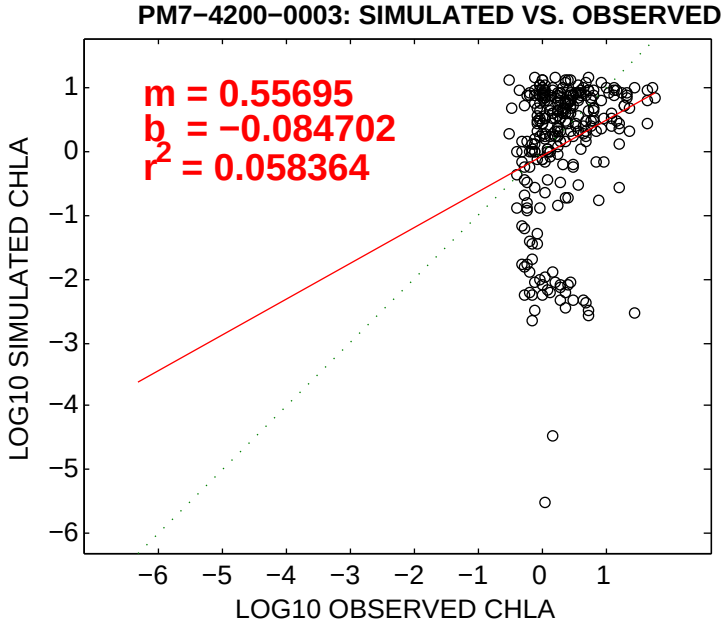


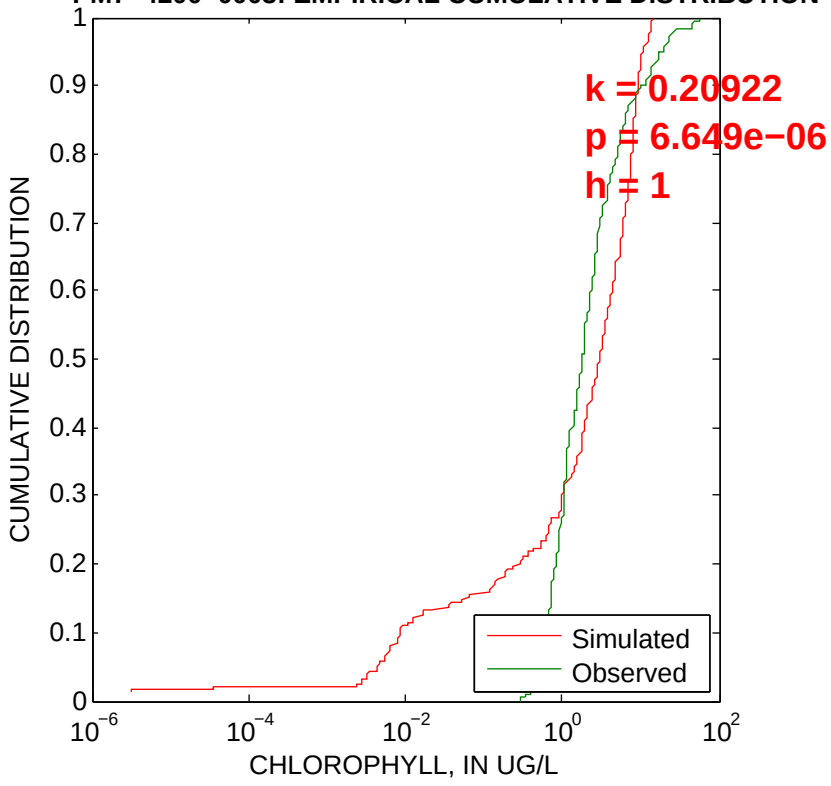












DATA SELECTION

scenario	file
P620171001WQ	CHLA.calib

plot: CHLA - chlorophyll A

Dates: 1/1/1985 – 12/31/201

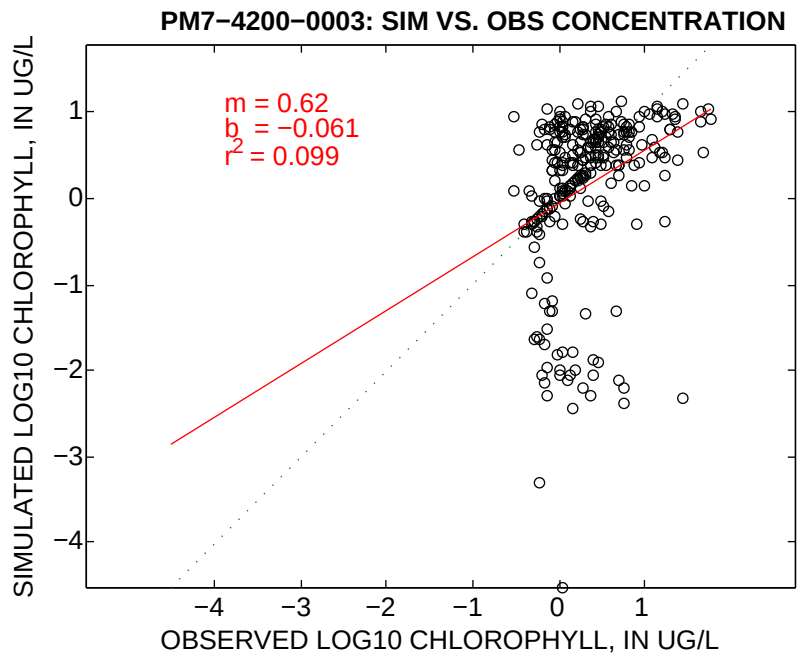
Drive	Directory	Observed
N/A	model	OBS20161101

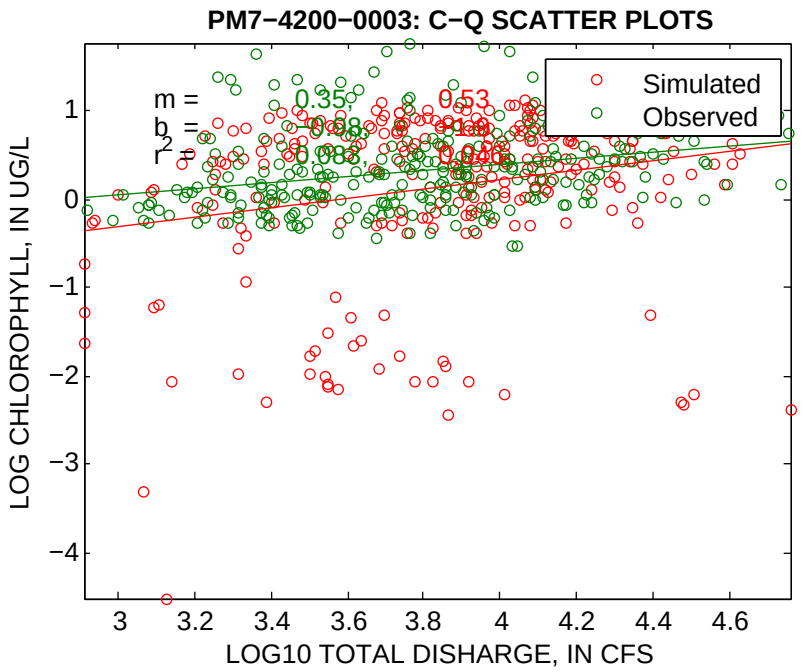
STATISTICS

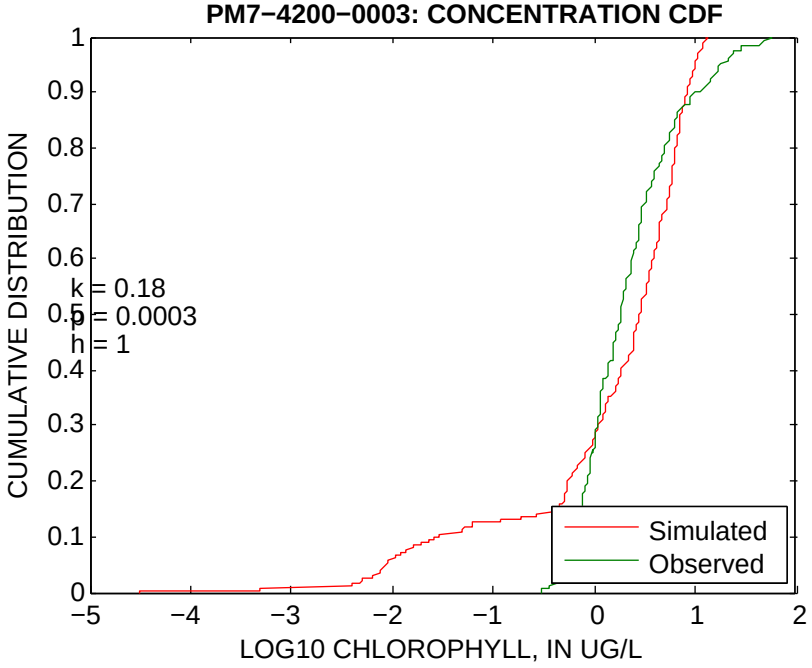
	observe	simulate
n	282	278
min	0.299	0
	-0.524329	-5.48971
mean	4.41029	4.03799
	0.334877	0.101807
media	1.81375	2.99615
	0.268685	0.490072
max	58.875	14.69
	1.76993	1.16702
varian	62.6457	14.0303
	0.220403	1.1714
JB	0.001	0.001
	0.001	0.001
	ra	log
%	-8.4416	-69.5987
err.va	66.0642	1.20082
rel.std.err	1.05457	5.44827
mod.eff	-0.0545687	-4.44827

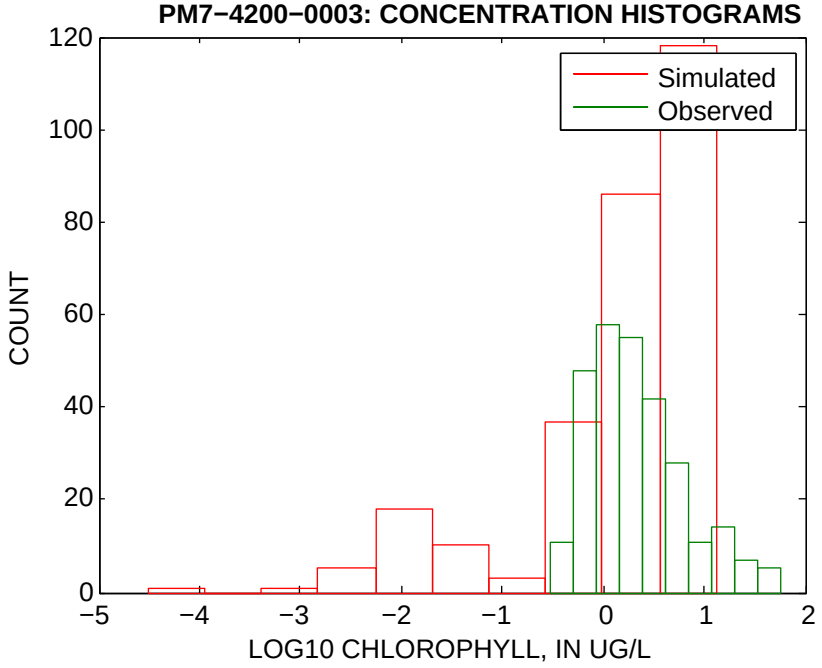
VERSION 3.1

ALL DATA
LOG10

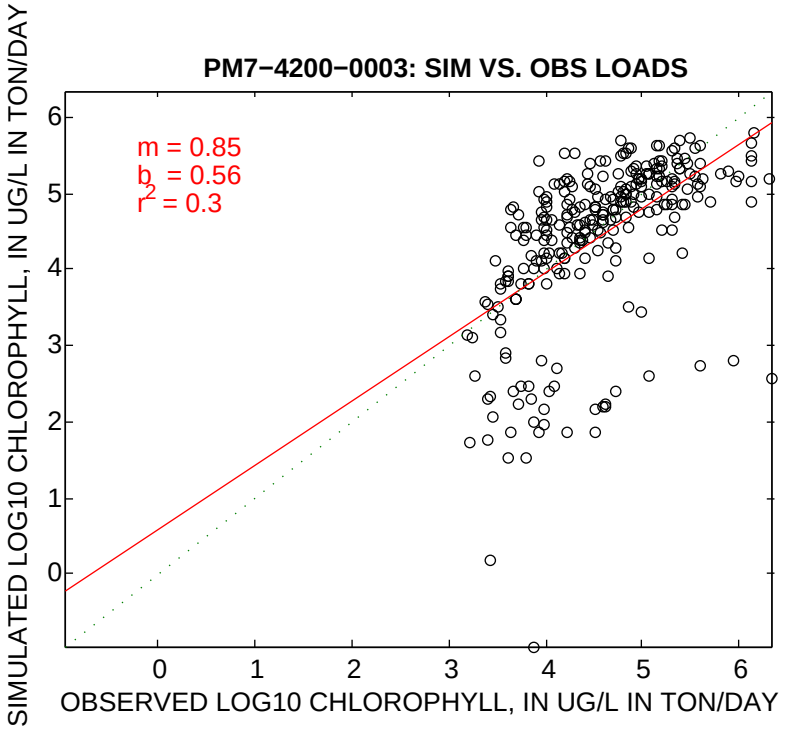


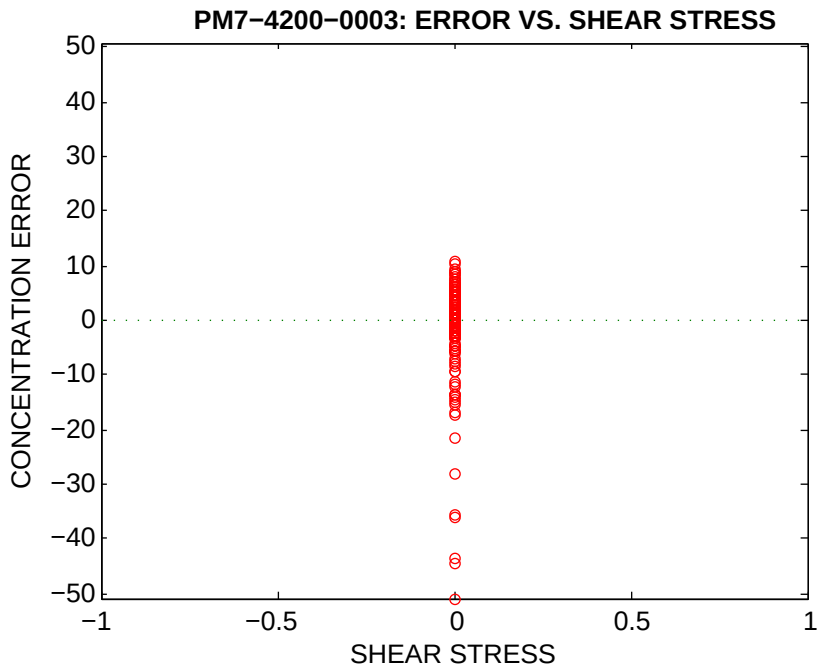


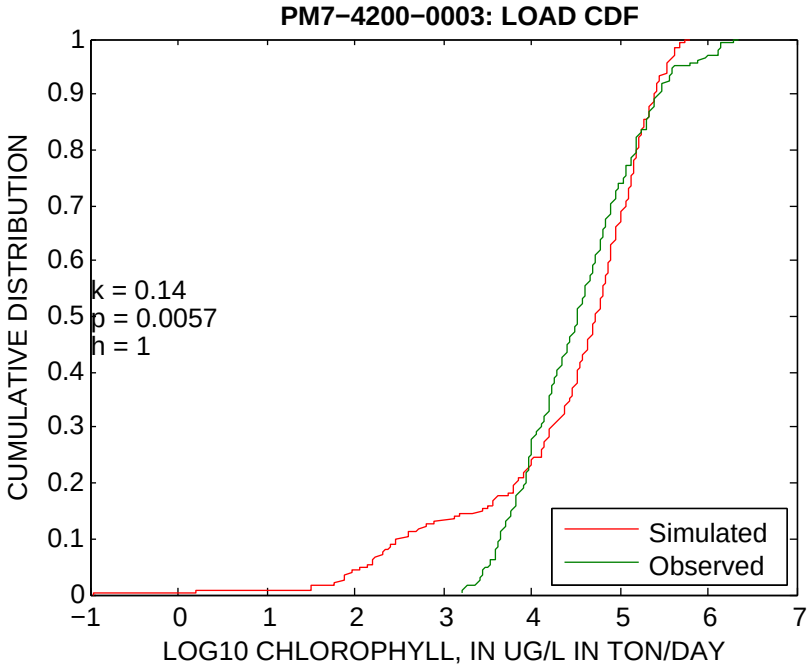


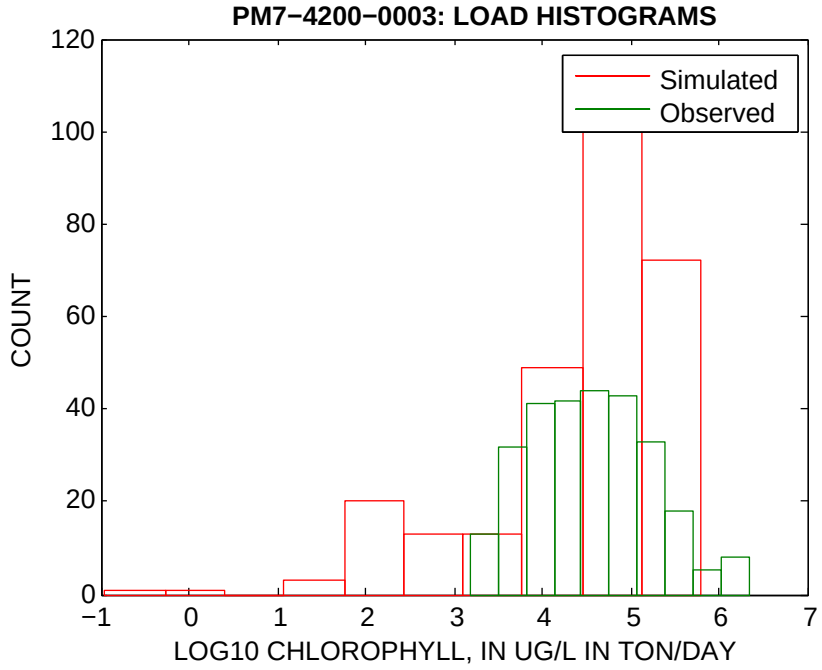


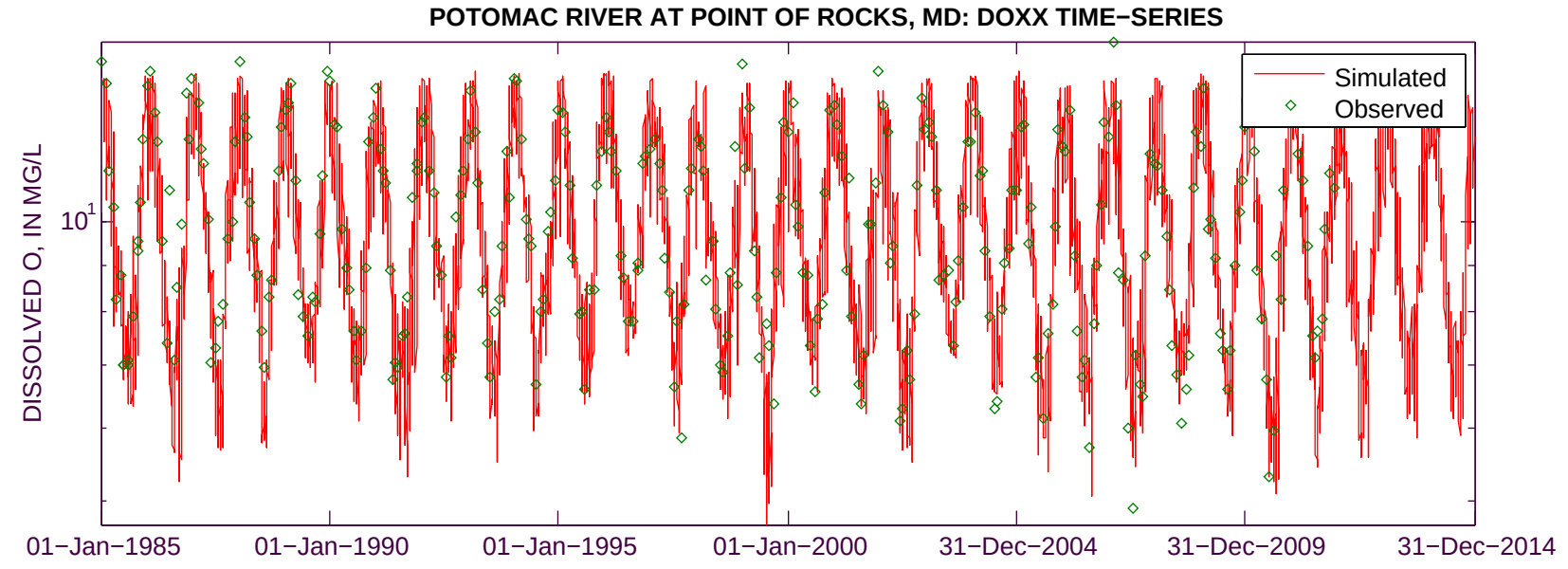
LOAD DATA
LOG10

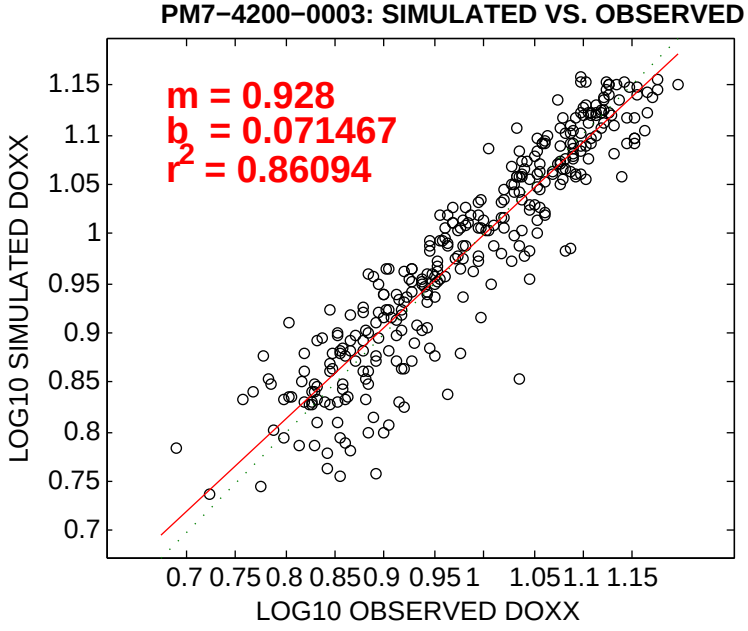


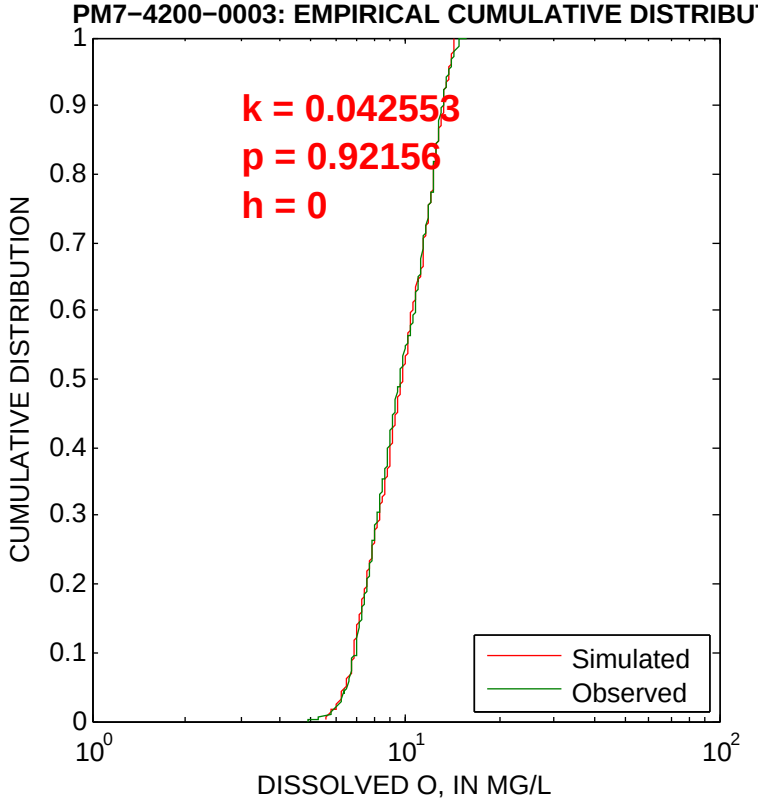












DATA SELECTION

scenario	file
P620171001WQ	DOXX.calib

plot: DOXX - dissolved oxygen

Dates: 1/1/1985 – 12/31/201

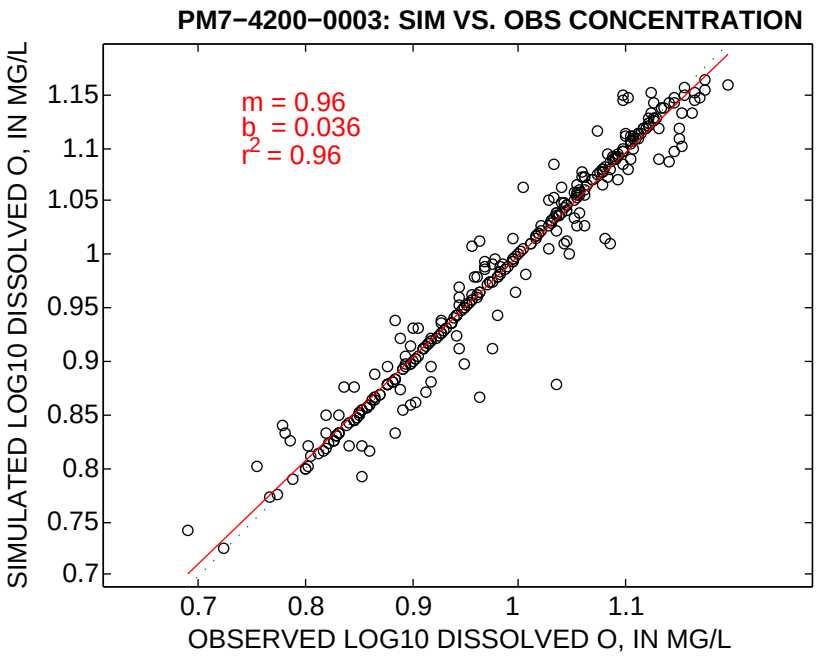
Drive	Directory	Observed
N/A	model	OBS20161101

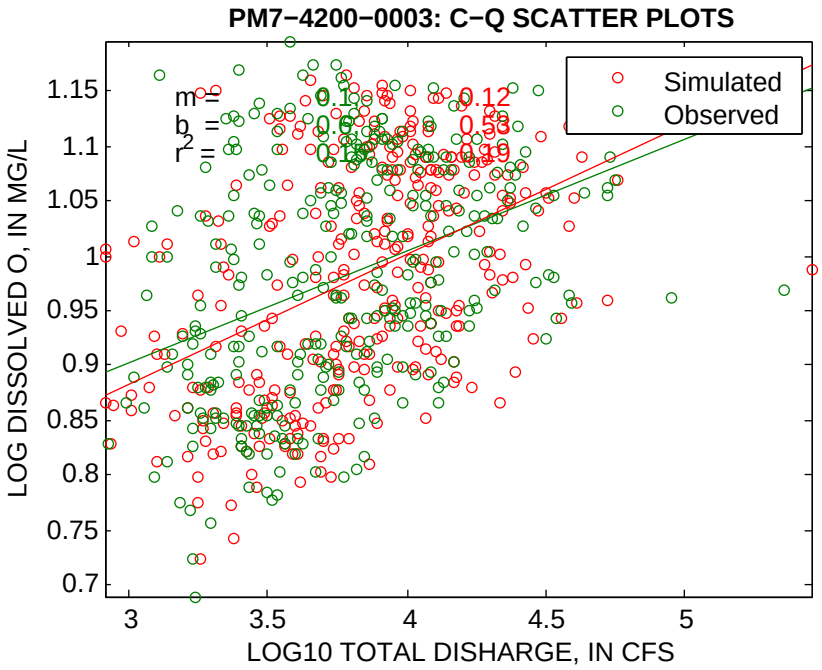
STATISTICS

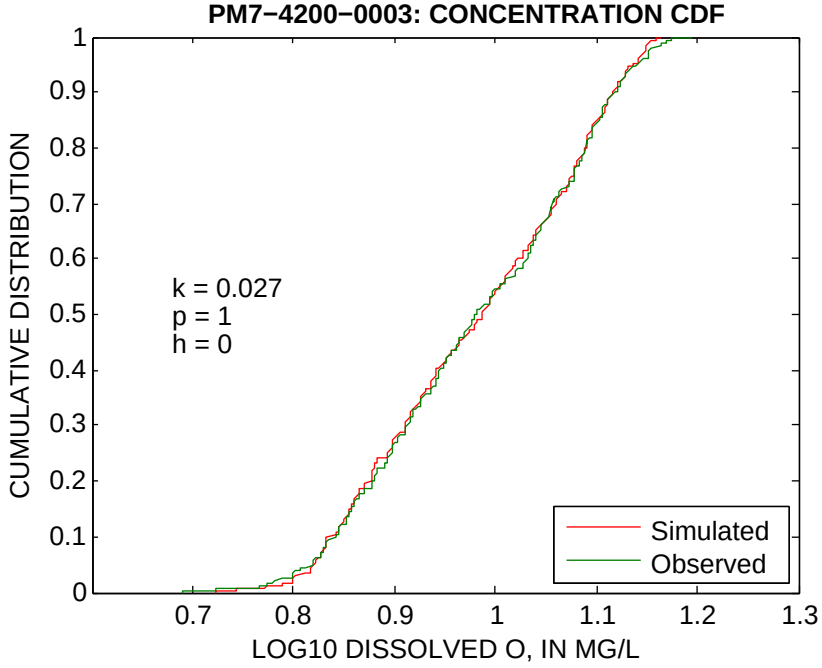
	n	observe	simulate
		329	329
min		4.9	5.4586
		0.690196	0.737081
mean		9.89854	9.91313
		0.982753	0.983458
media		9.6	9.7378
		0.982271	0.988461
max		15.7	14.391
		1.1959	1.15809
varian		5.65987	5.57902
		0.0113616	0.0113648
JB		0.003430	0.002620
		0.005564	0.003140
		ra	log
%		0.147388	0.0717858
err.va		0.739495	0.00163983
rel.std.err		0.130656	0.144331
mod.eff		0.869344	0.855669

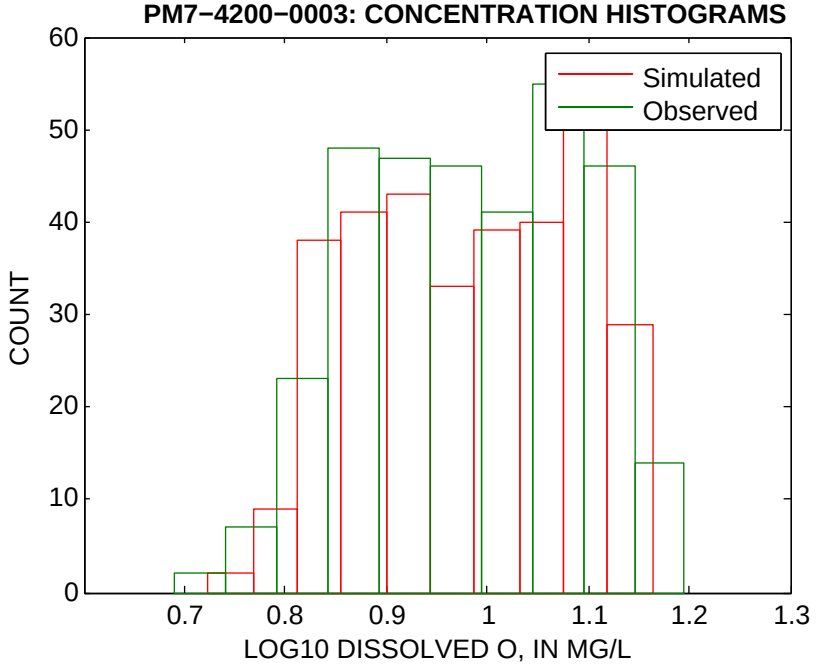
VERSION 2.1

ALL DATA
LOG10

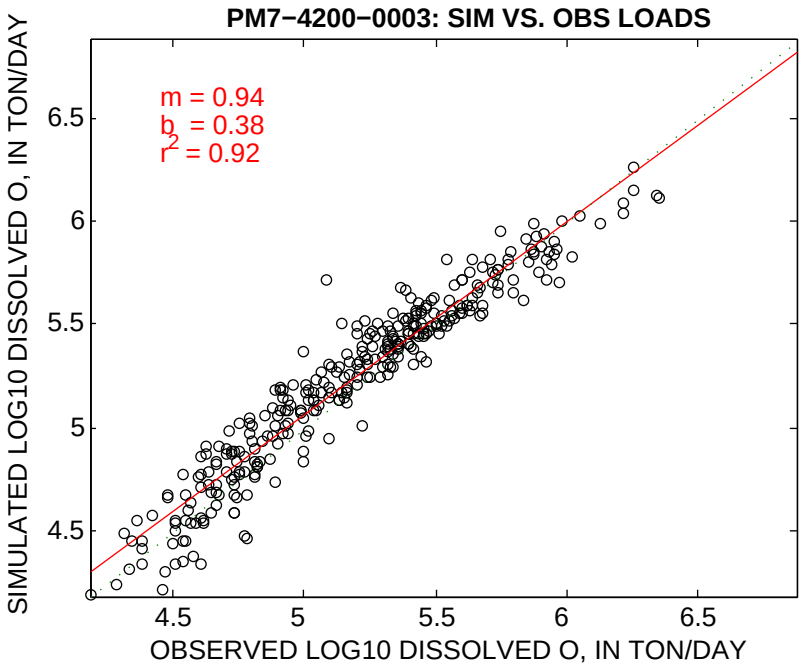




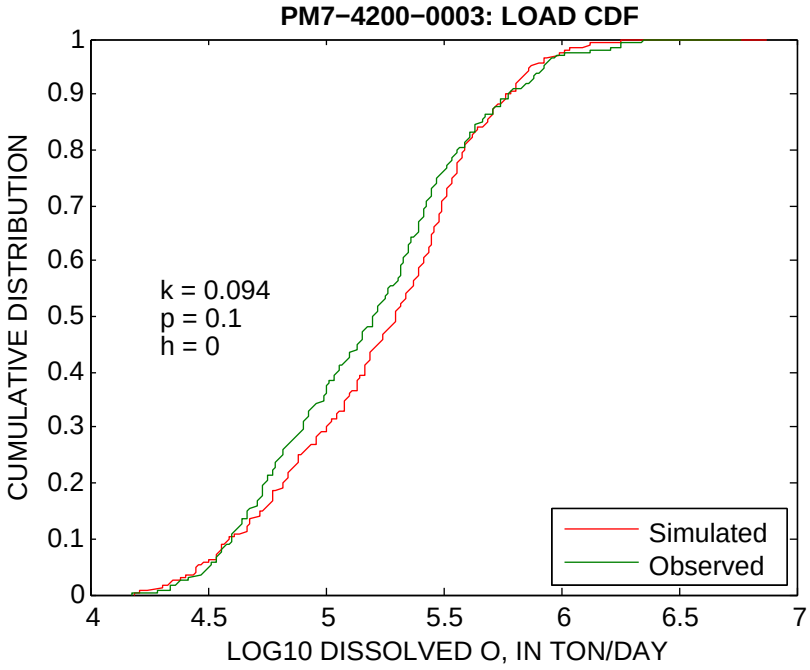


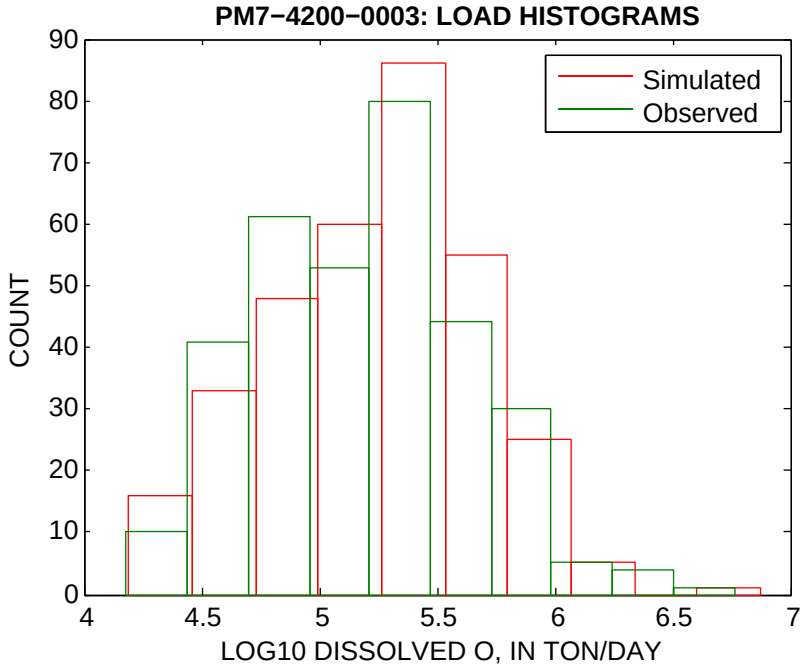


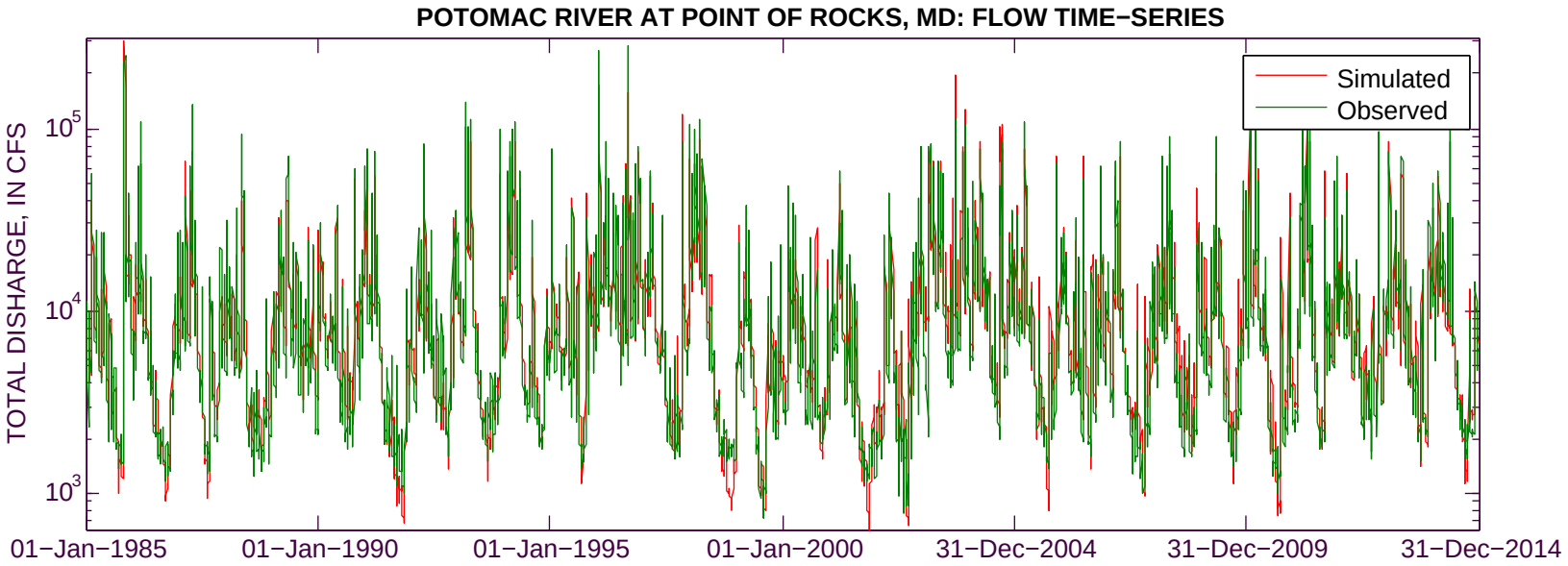
LOAD DATA
LOG10

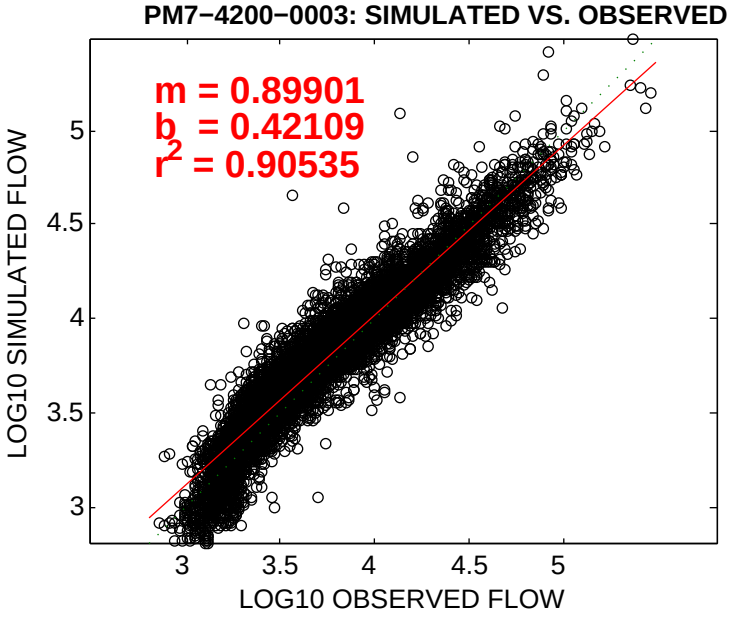


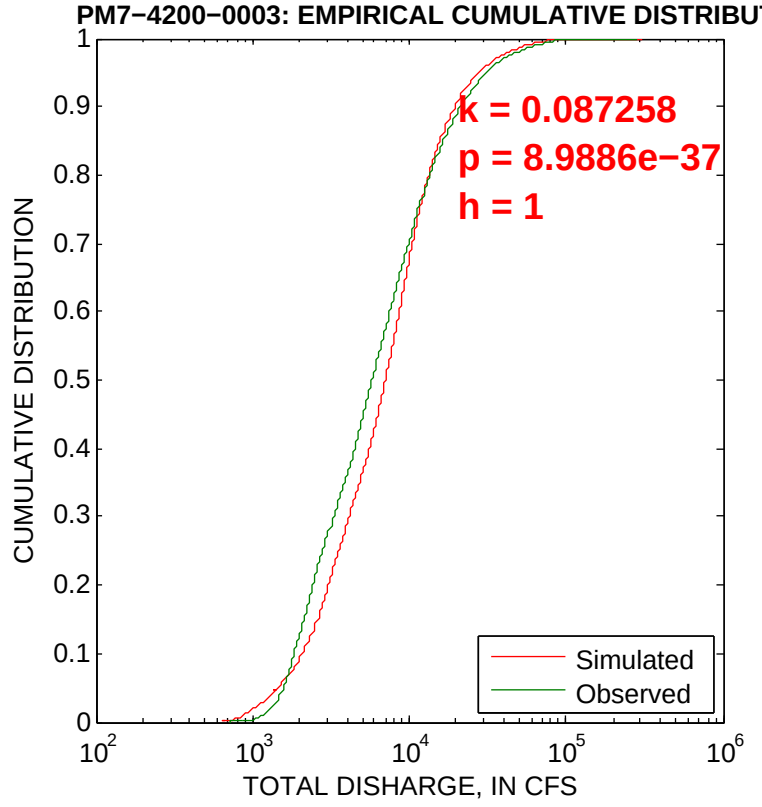












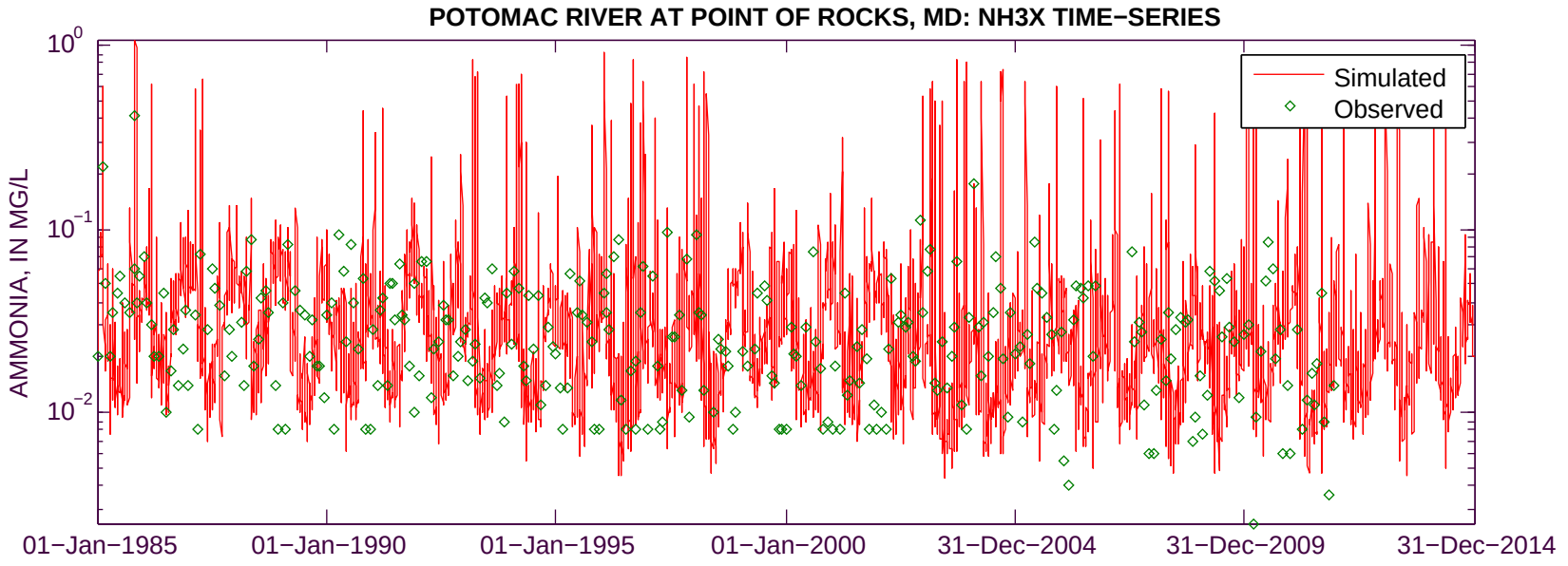
DATA SELECTION

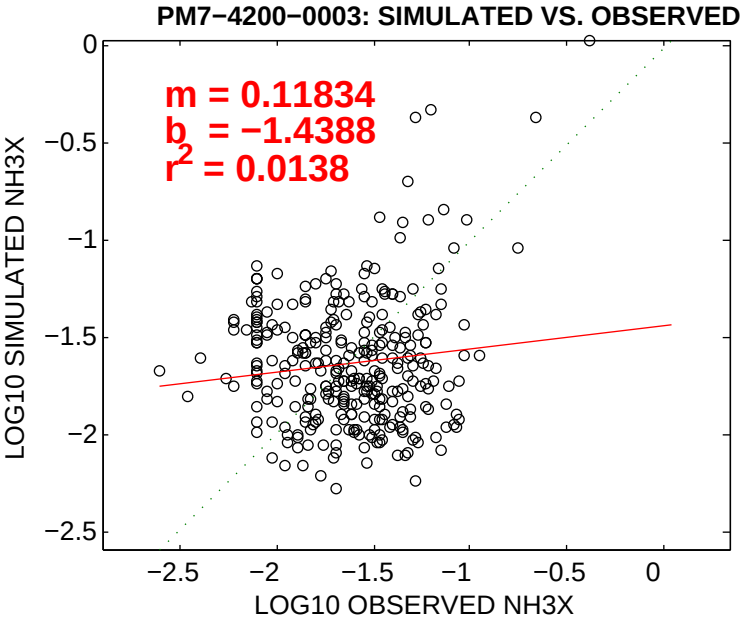
scenario: P620171001WQ
file: FLOW.calib
plot: FLOW - total discharge
Dates: 1/1/1985 12/31/201
Drive: N/A
Directory: model
Observed: OBS20161101

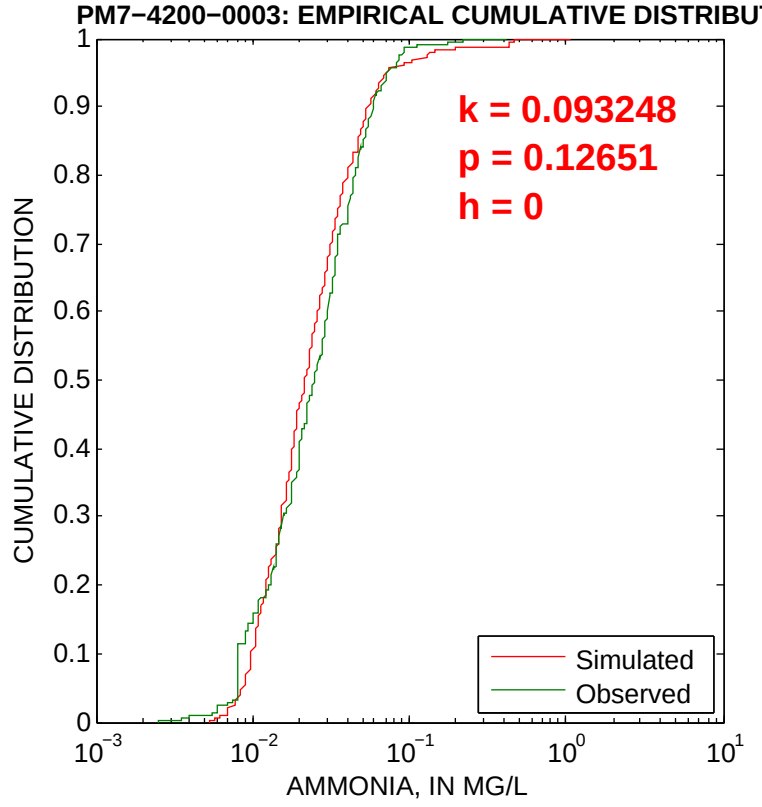
STATISTICS

		observe	simulate
n		10956	10956
min		721	633.66
		2.85794	2.80186
mean		9889.01	9936.18
		3.7847	3.82359
media		5810	7060
		3.76418	3.8488
max		288000	308700
		5.45939	5.48954
varian		1.81502e+0	1.39527e+
		0.165793	0.148007
JB		0.001	0.001
		0.001	0.385183
		ra	log
%		0.476953	1.02759
err.va		3.31509e+0	0.0172122
rel.std.err		0.182647	0.103817
mod.eff		0.817353	0.896183

VERSION 2.1







DATA SELECTION

scenario: P620171001WQ | file: NH3X.calib

plot: NH3X - ammonia

Dates: 1/1/1985 – 12/31/201

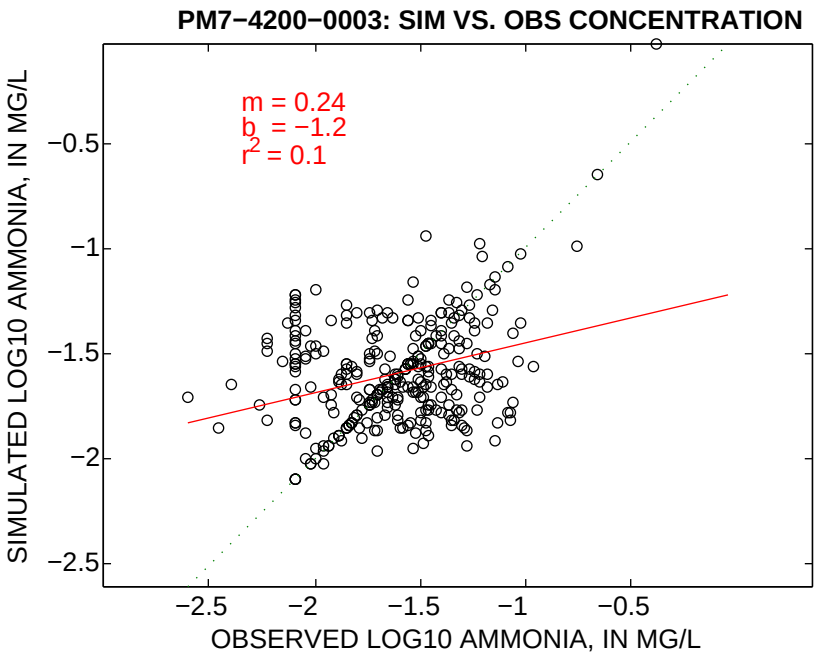
Drive | Directory | Observed: N/A | model | OBS20161101

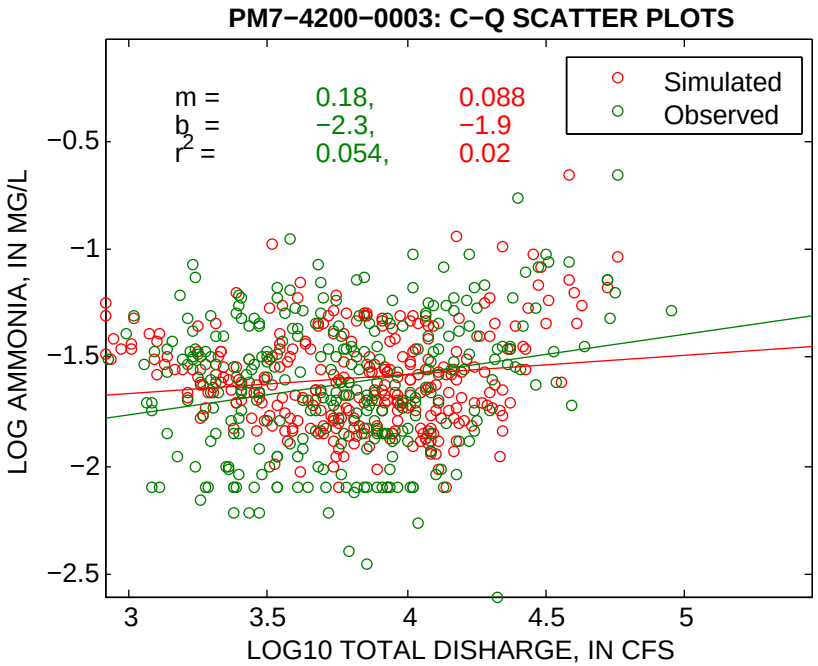
STATISTICS

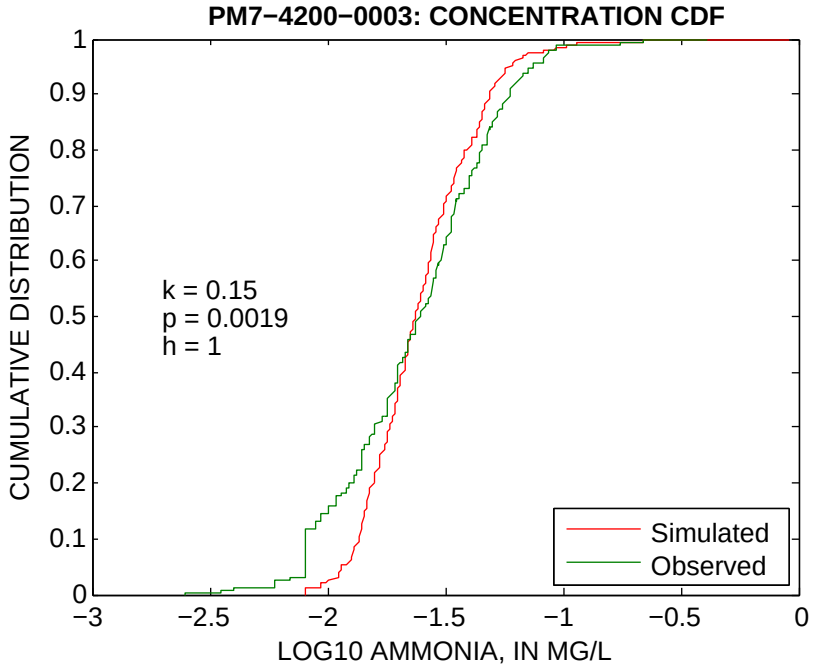
	n	observe	simulate
		311	311
min		0.0025	0.0052333
		-2.60206	-2.28122
mean		0.0318969	0.0357486
		-1.61956	-1.63042
media		0.0245	0.021596
		-1.61083	-1.66563
max		0.415	1.083
		-0.381952	0.0346285
varian		0.00105859	0.00573996
		0.103546	0.105086
JB		0.001	0.001
		0.5	0.001
		ra	log
%		12.0753	0.670872
err.va		0.00342289	0.184243
rel.std.err		3.23344	1.77934
mod.eff		-2.23344	-0.779337

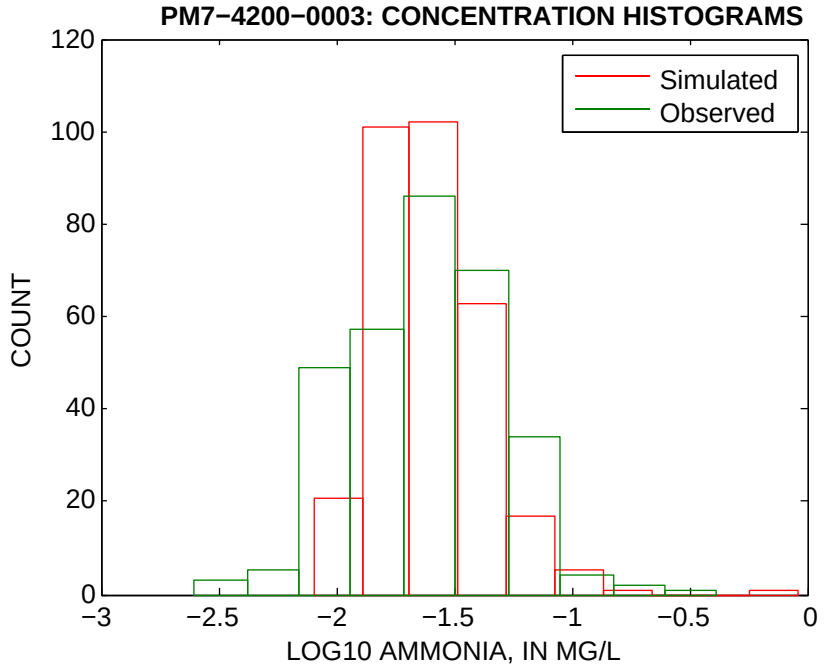
VERSION 2.1

ALL DATA
LOG10

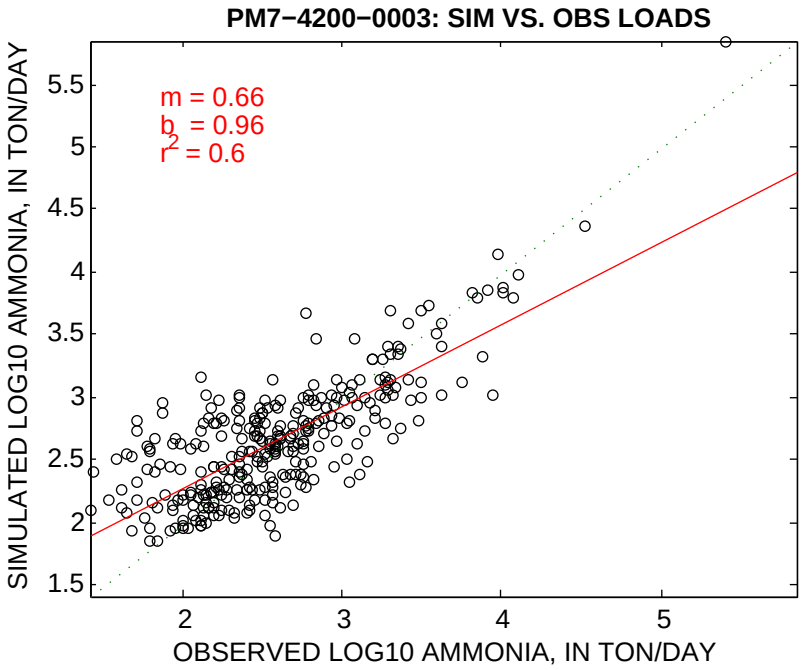


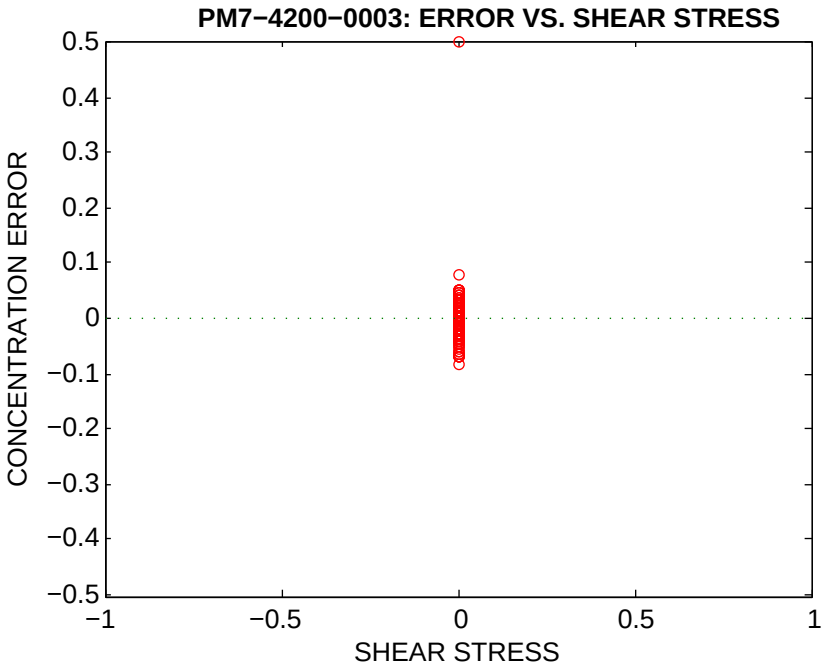


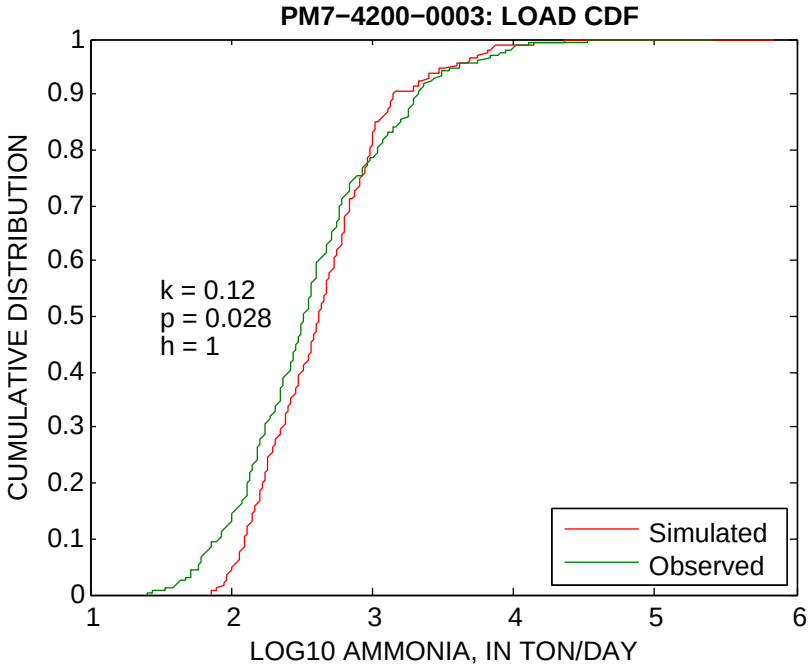


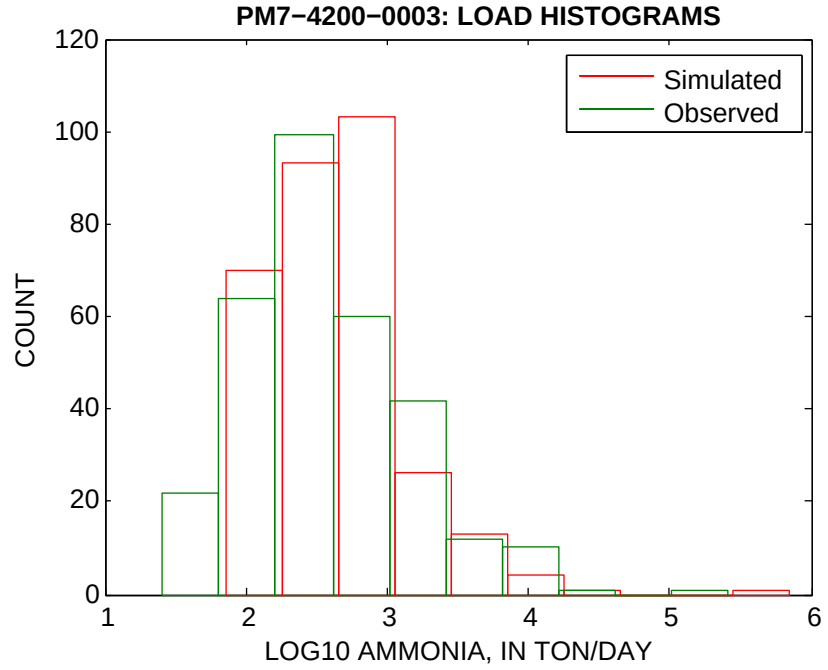


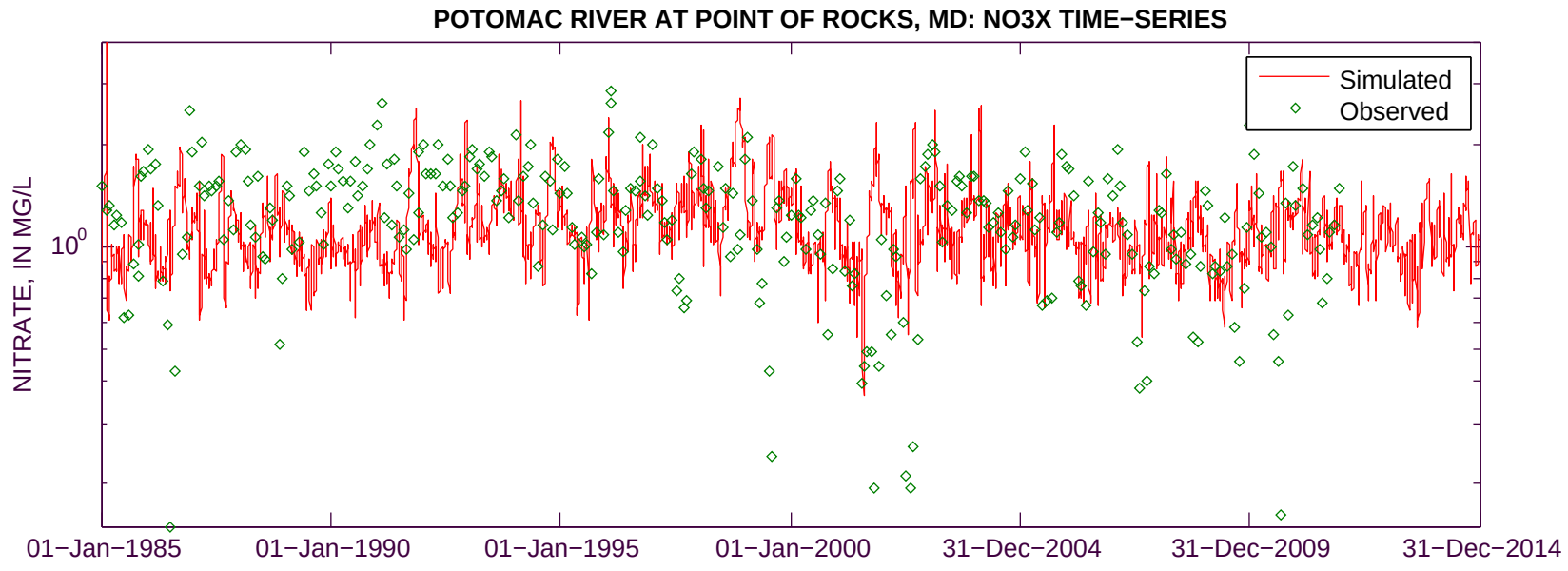
LOAD DATA
LOG10

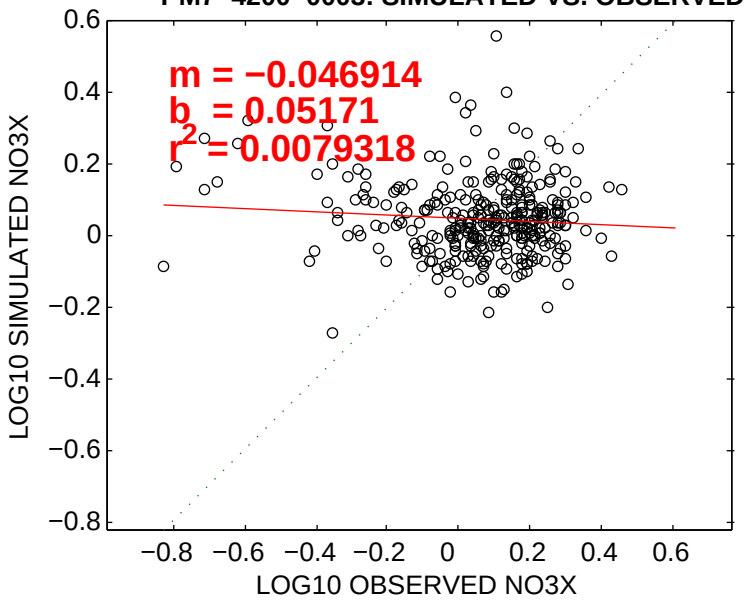


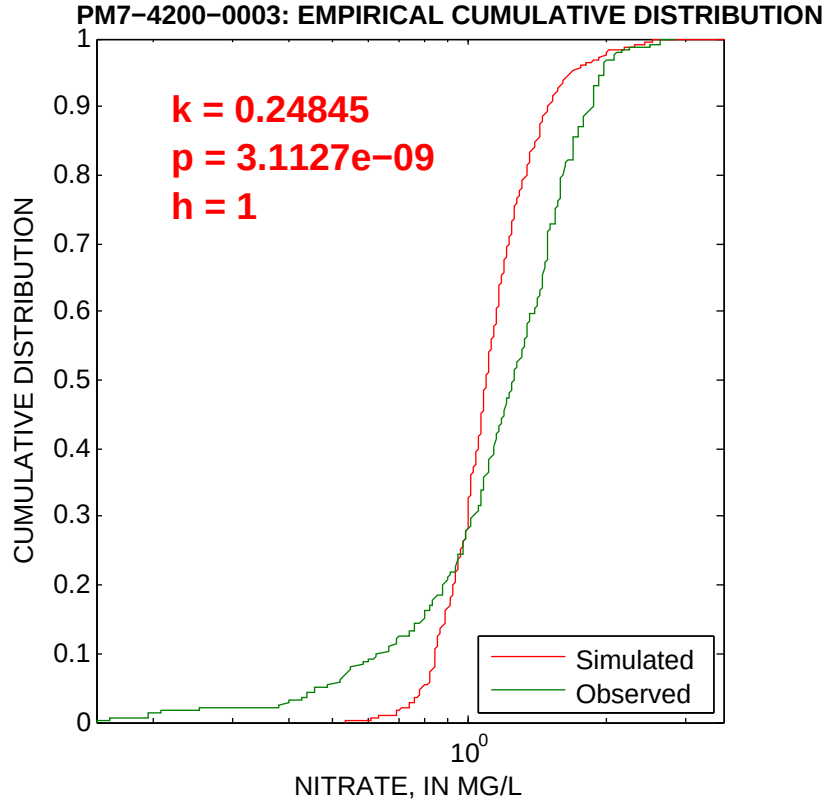












DATA SELECTION

scenario: P620171001WQ | file: NO3X.calib

plot: NO3X - nitrate

Dates: 1/1/1985 – 12/31/201

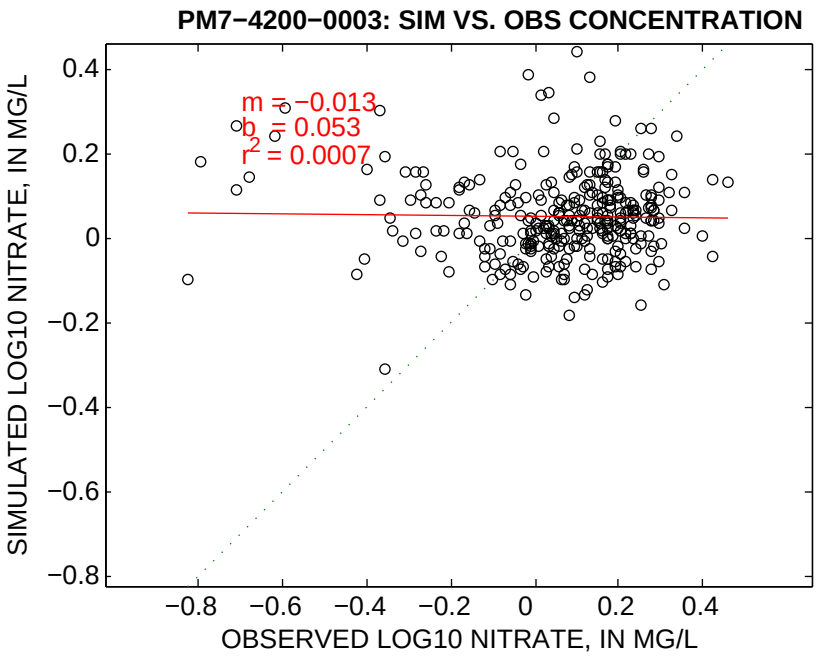
Drive: N/A | Directory: model | Observed: OBS20161101

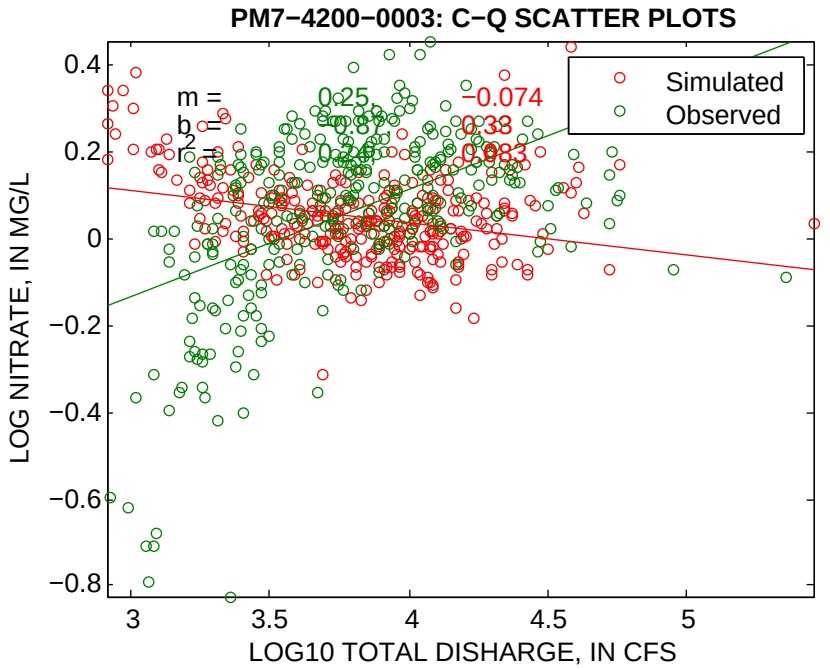
STATISTICS

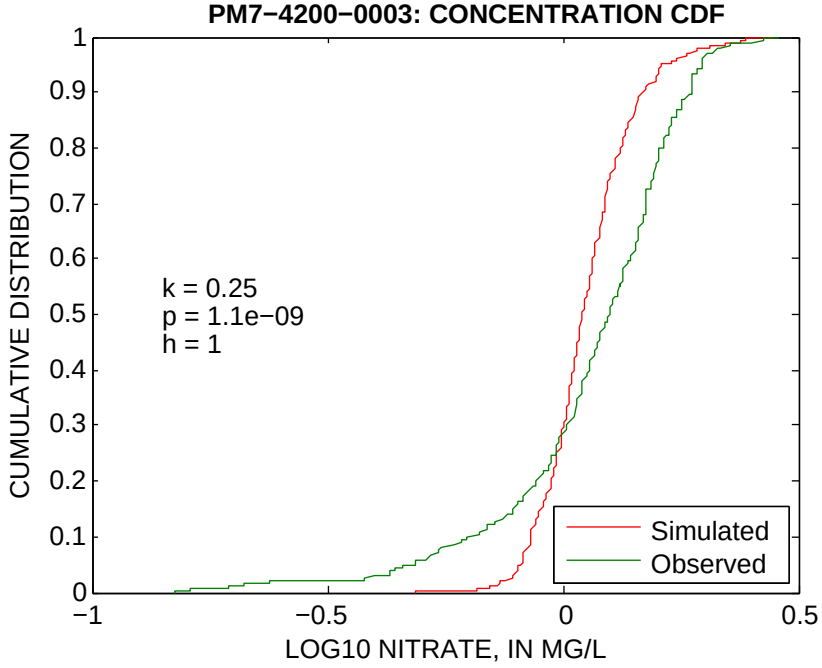
	n	observe	simulate
		322	322
min		0.15	0.53571
		-0.823909	-0.27107
mean		1.25816	1.15473
		0.0620633	0.0487983
media		1.2575	1.09085
		0.0995071	0.037765
max		2.877	3.6393
		0.45894	0.561018
varian		0.21346	0.104043
		0.0400679	0.0111181
JB		0.418213	0.001
		0.001	0.001
		ra	log
%		-8.2204	-21.3733
err.va		0.343548	0.0551219
rel.std.err		1.60943	1.37571
mod.eff		-0.609429	-0.375714

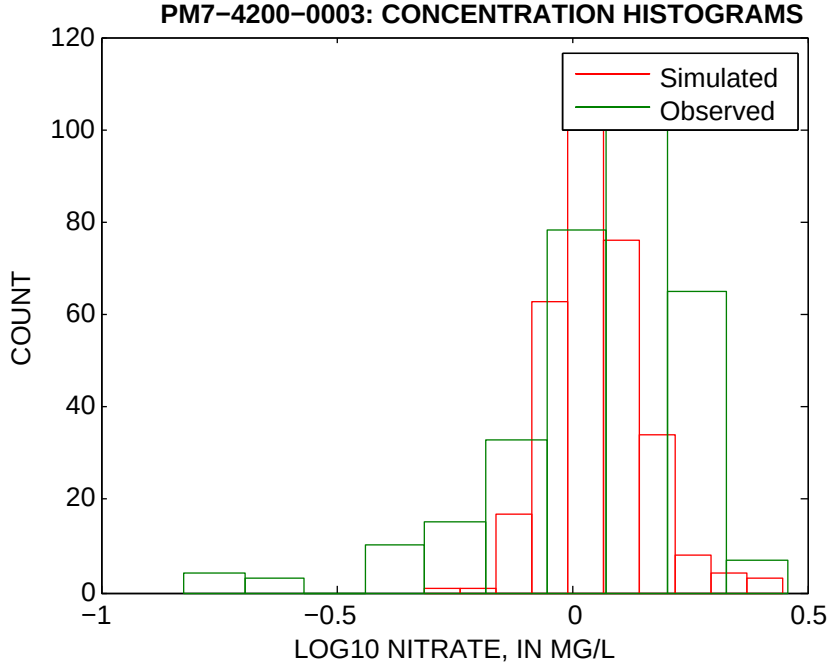
VERSION 2.1

ALL DATA
LOG10

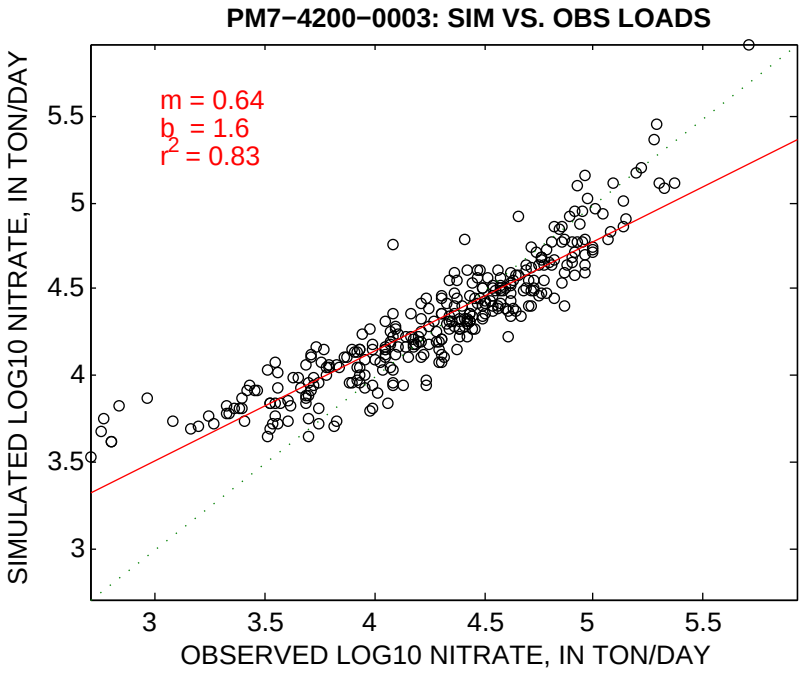


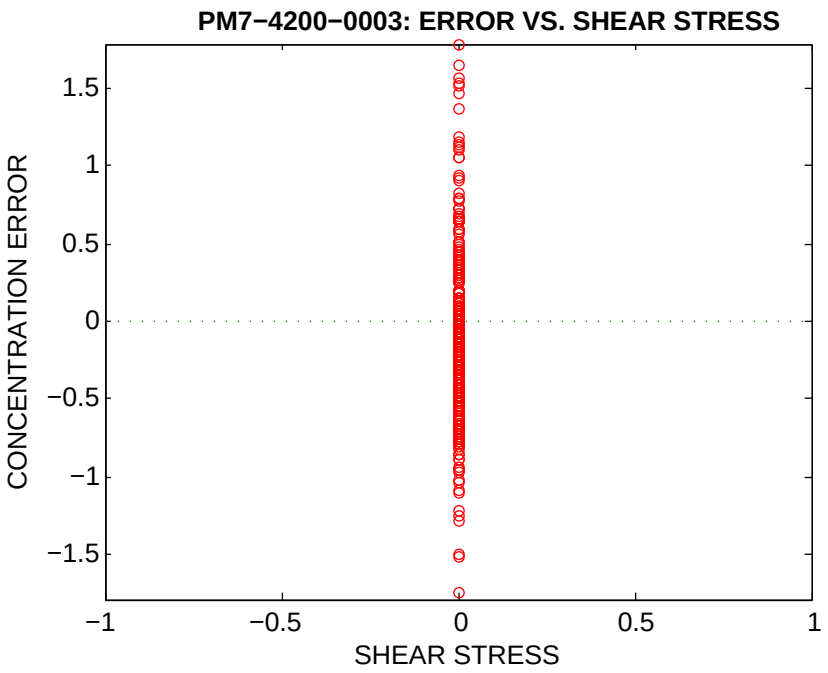


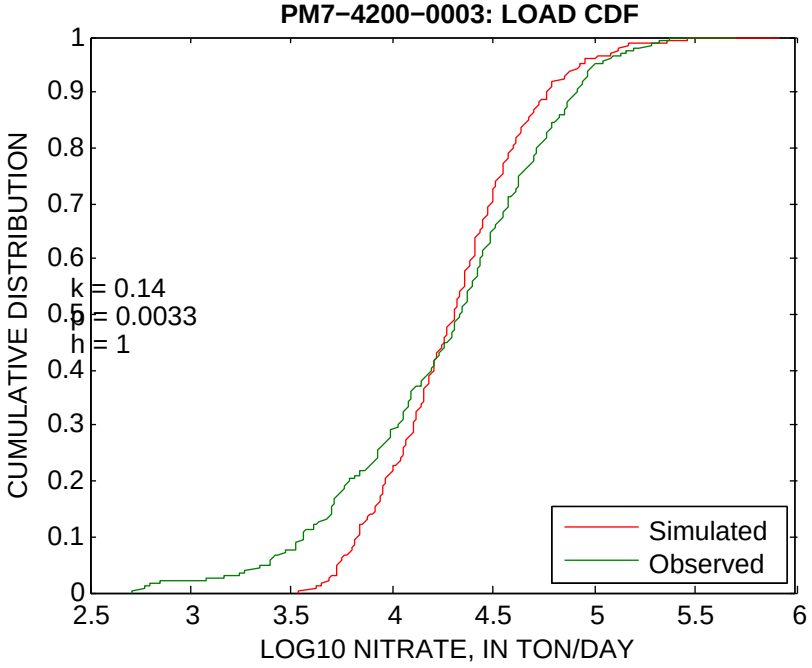


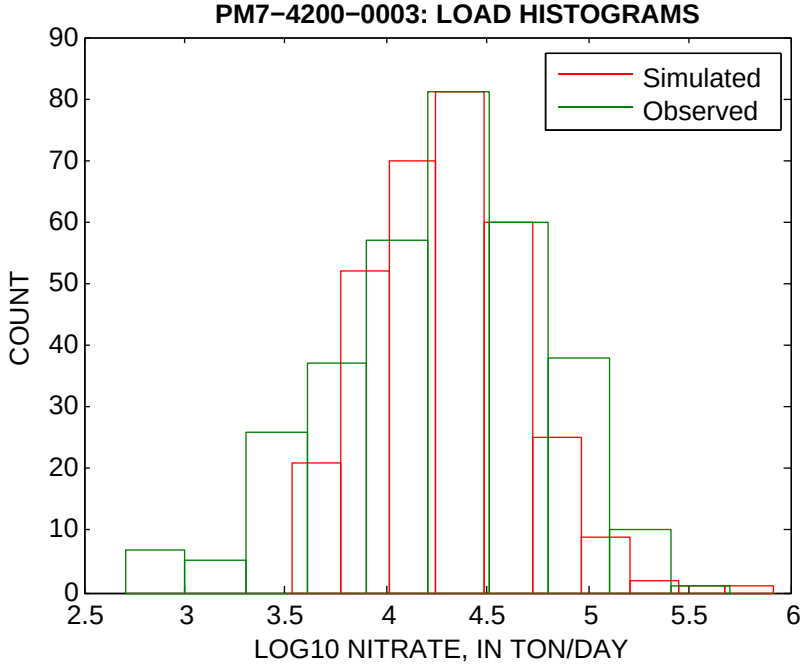


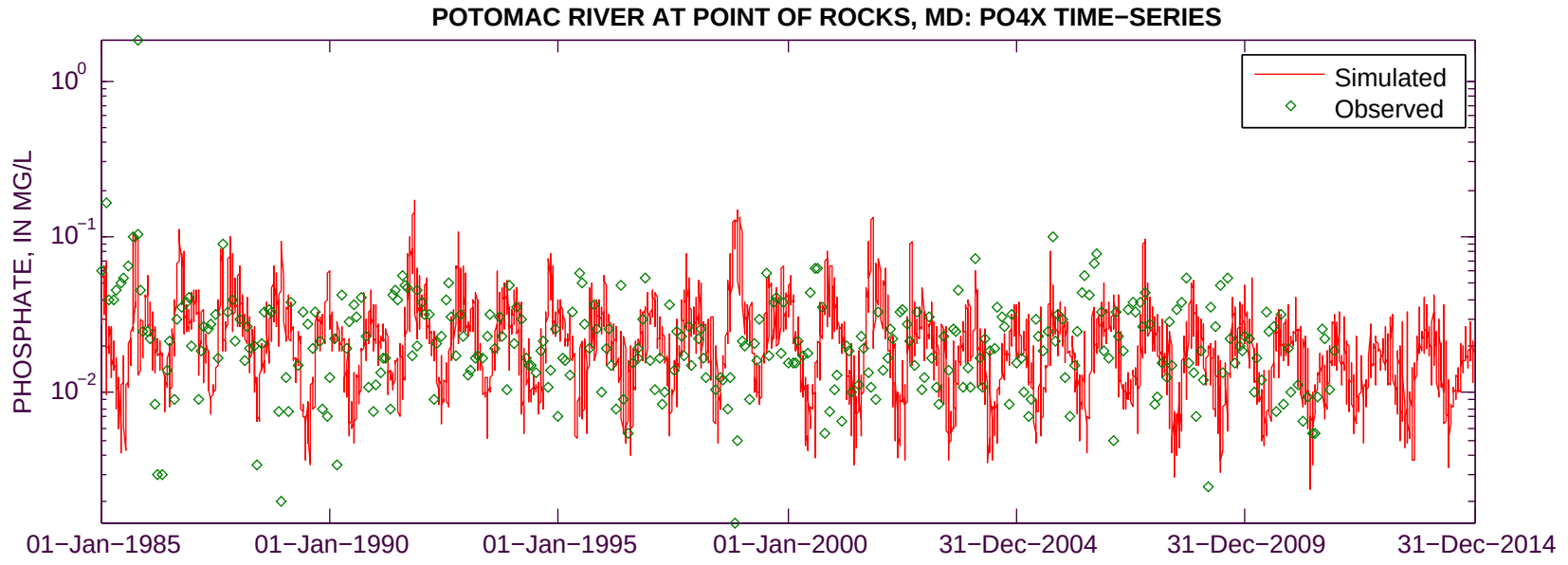
LOAD DATA
LOG10

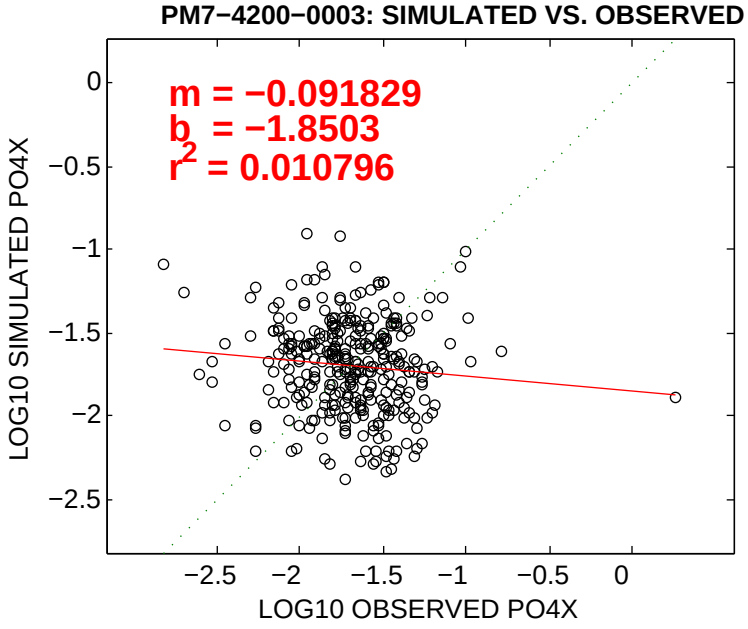


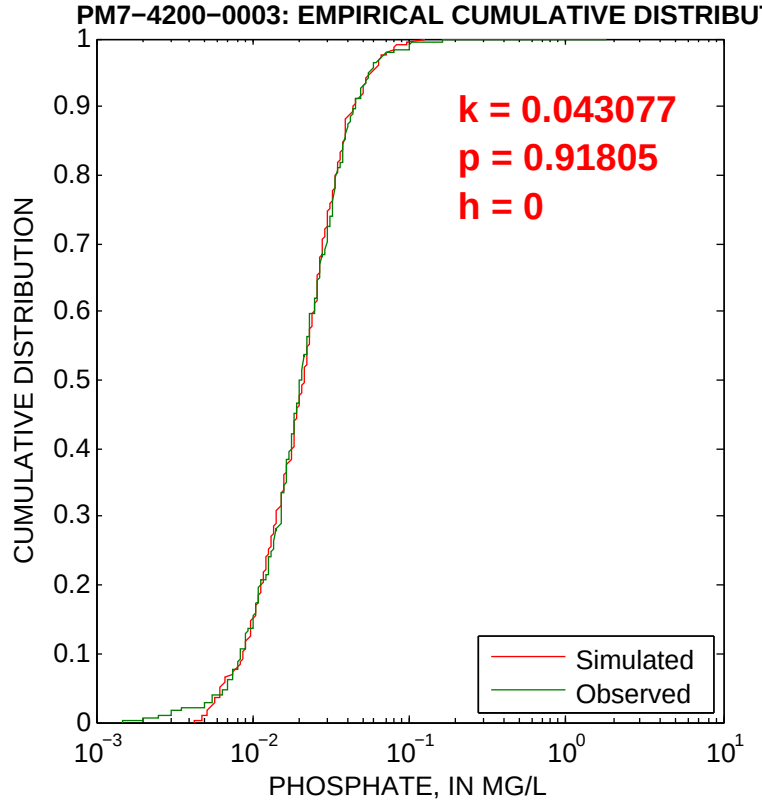












DATA SELECTION

scenario: P620171001WQ | file: PO4X.calib

plot: PO4X - phosphate

Dates: 1/1/1985 – 12/31/201

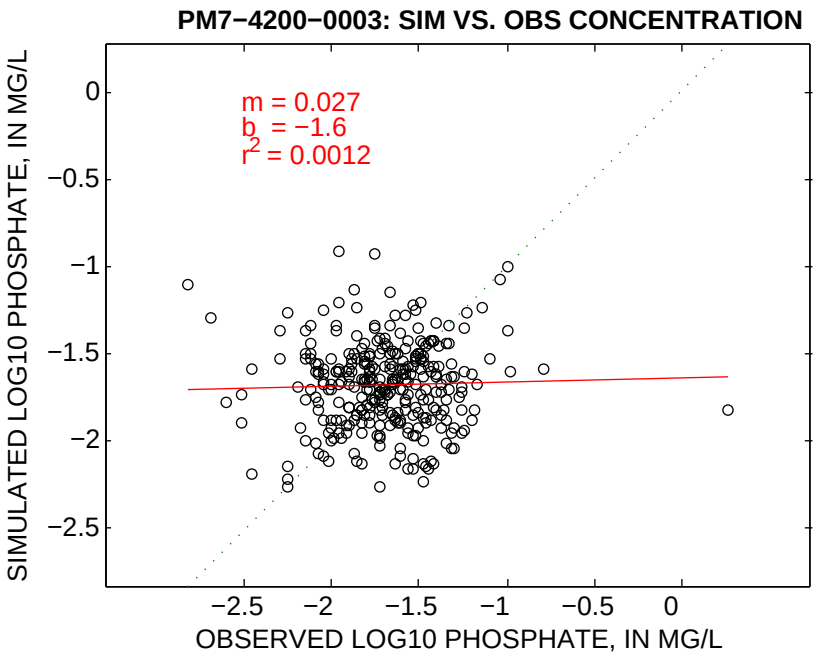
Drive: N/A | Directory: model | Observed: OBS20161101

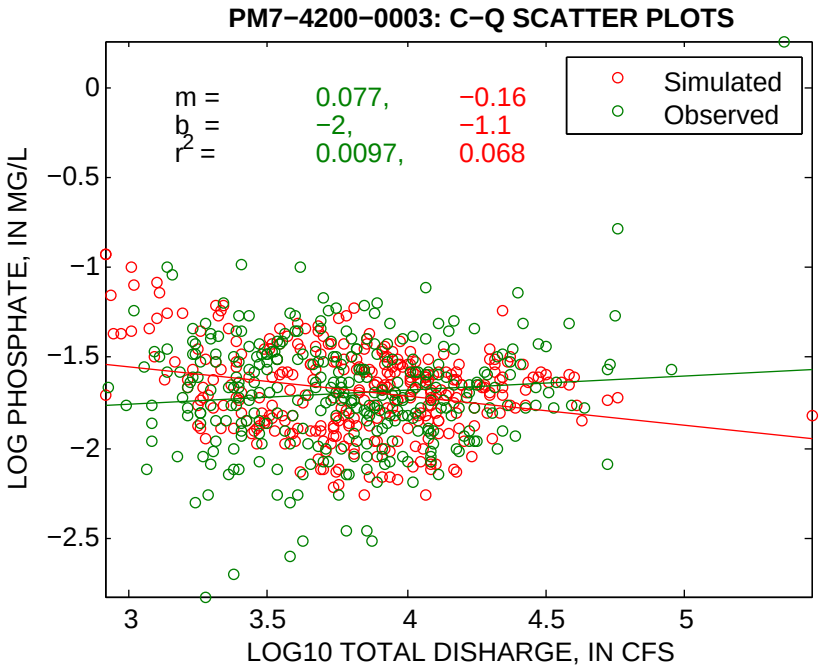
STATISTICS

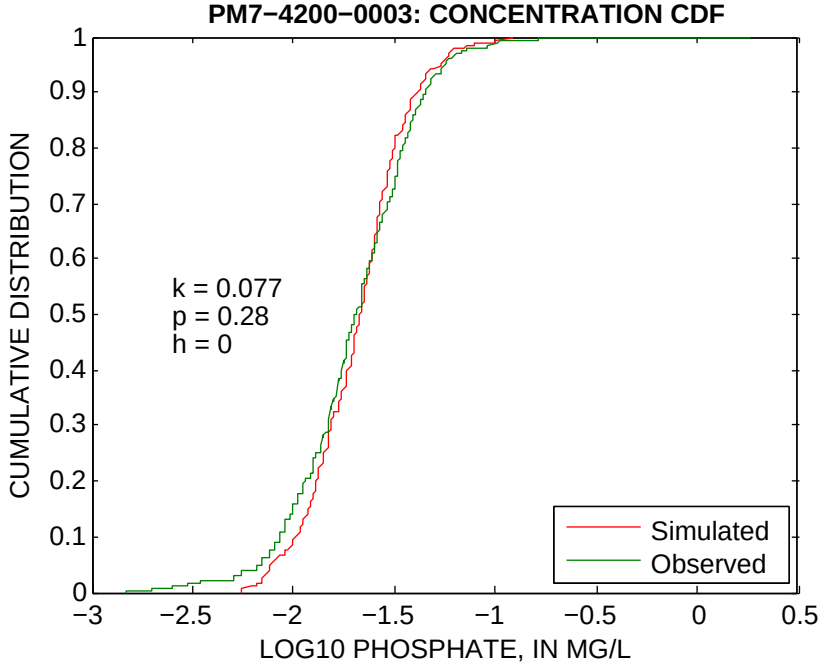
		observe	simulate
n		325	325
min		0.0015	0.0042062
		-2.82391	-2.37611
mean		0.0303592	0.0247339
		-1.69479	-1.69472
media		0.0200151	0.021296
		-1.69864	-1.6717
max		1.84	0.12628
		0.264818	-0.898665
varian		0.0104616	0.00029686
		0.099231	0.0775053
JB		0.001	0.001
		0.001	0.5
		ra	log
%		-18.5293	-0.0042159
err.va		0.0109167	0.194961
rel.std.err		1.0435	1.96472
mod.eff		-0.0434982	-0.964719

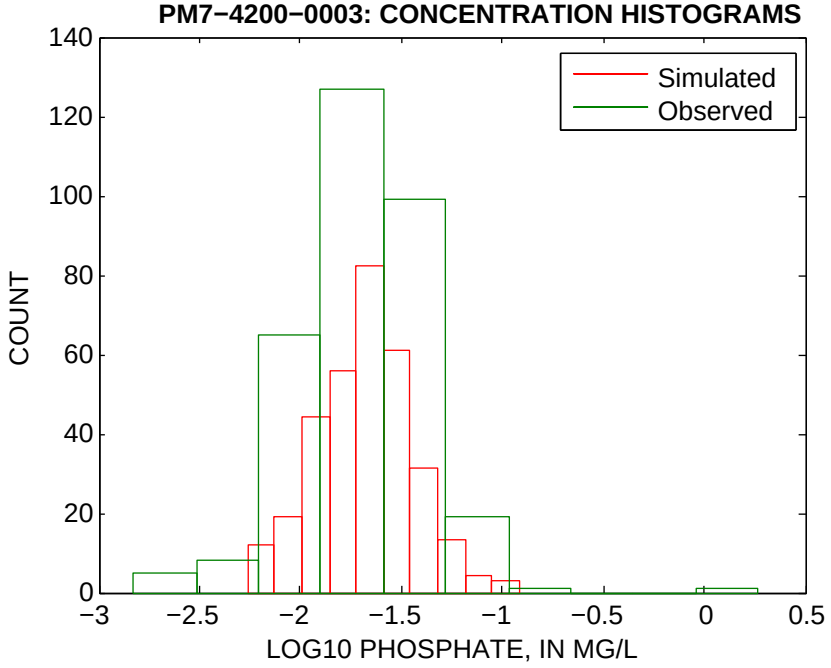
VERSION 2.1

ALL DATA
LOG10

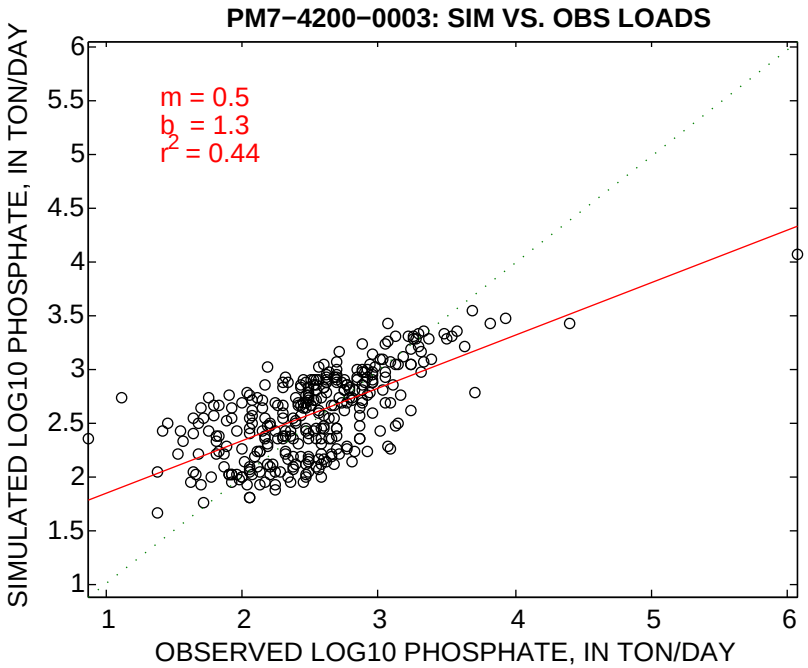


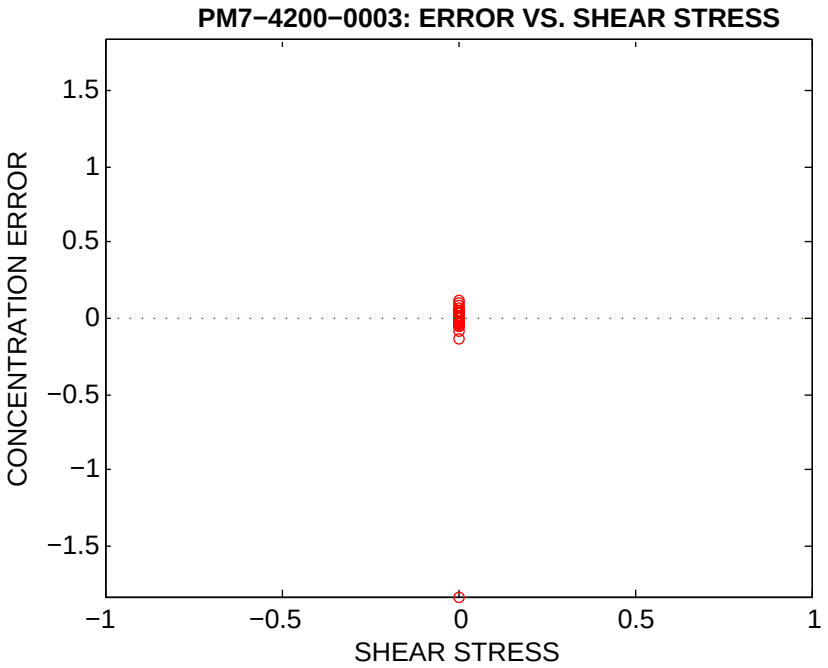


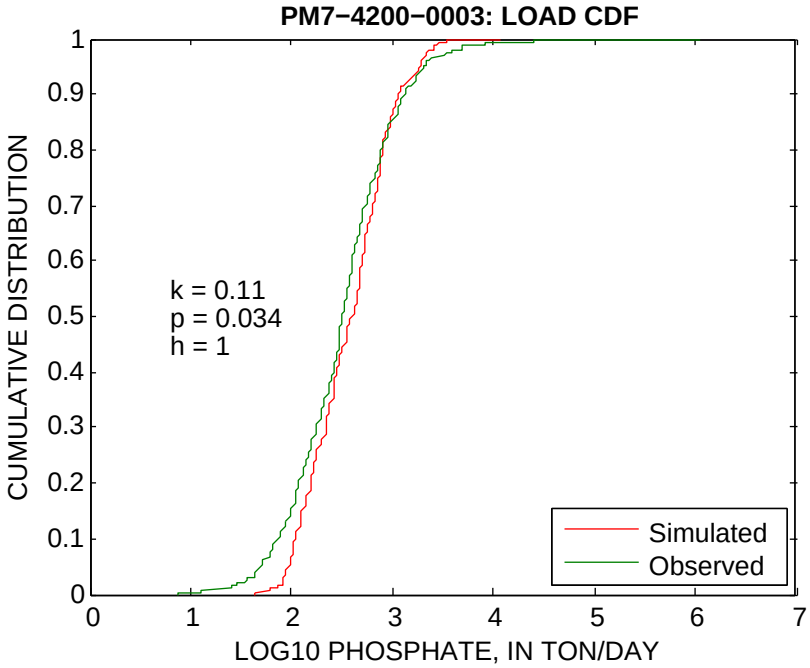


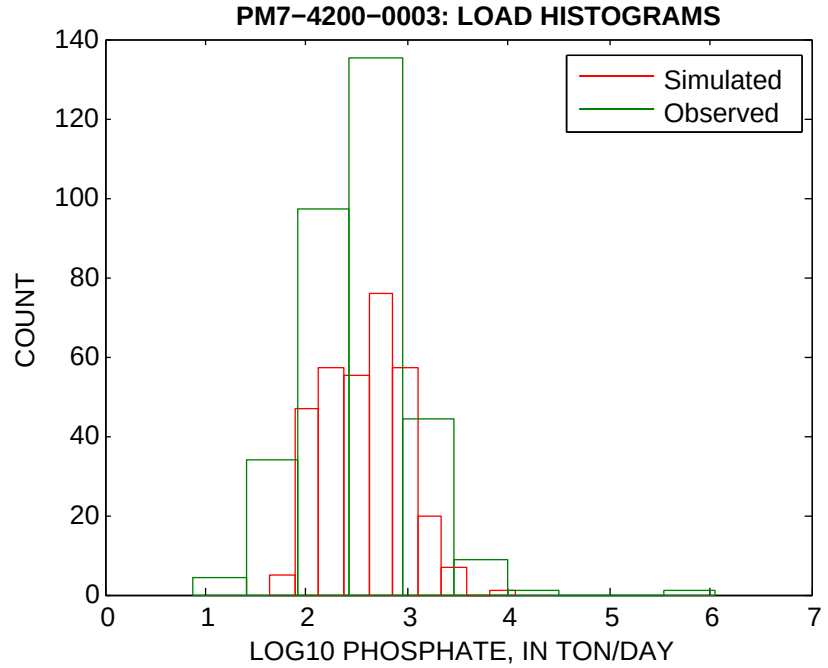


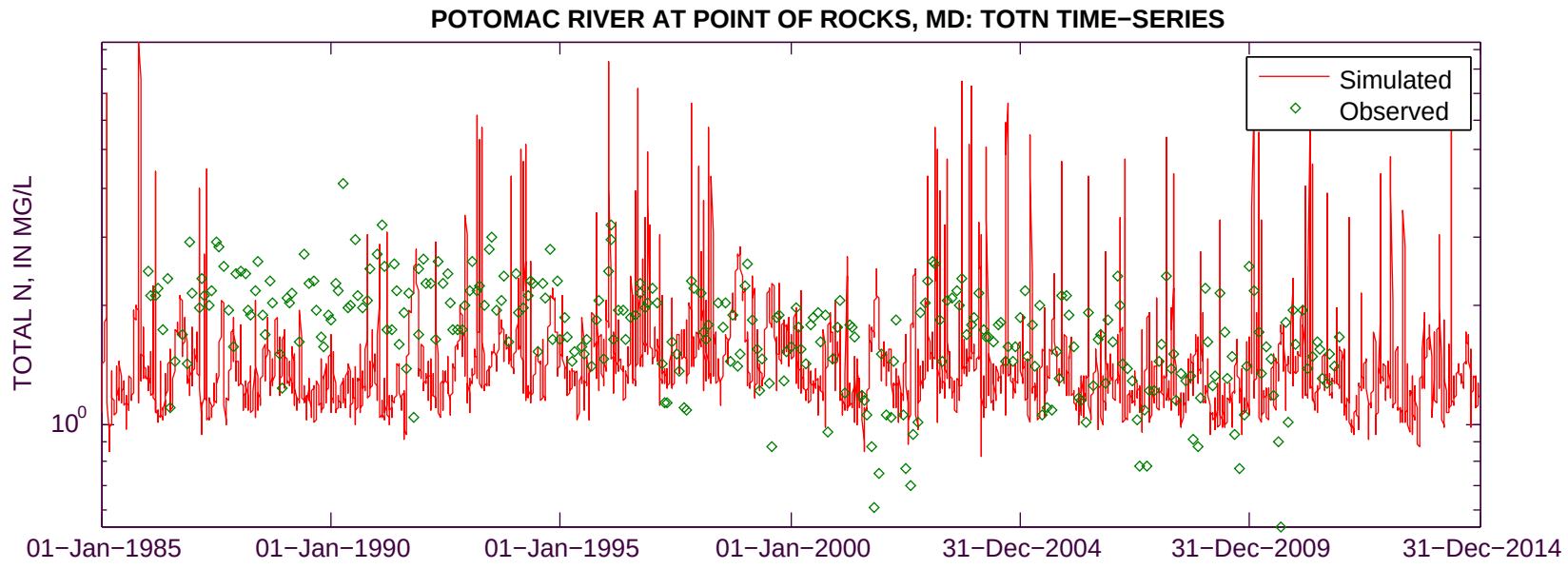
LOAD DATA
LOG10

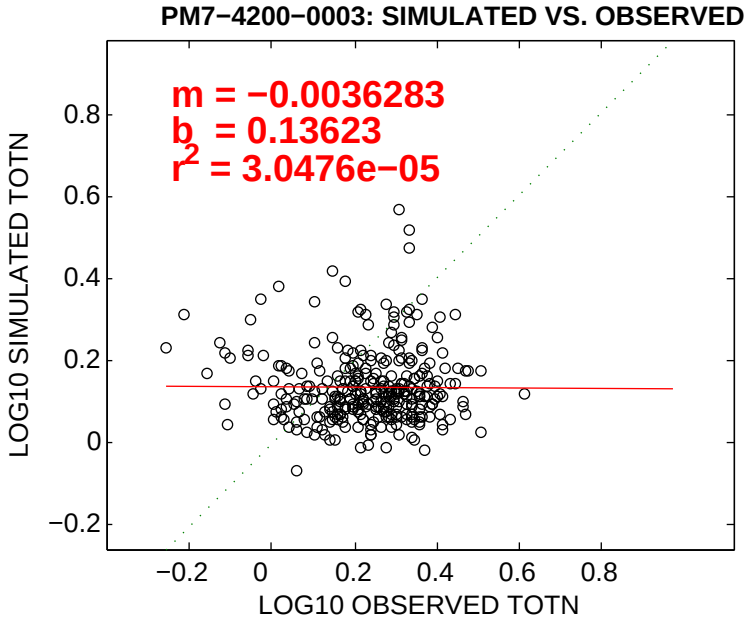


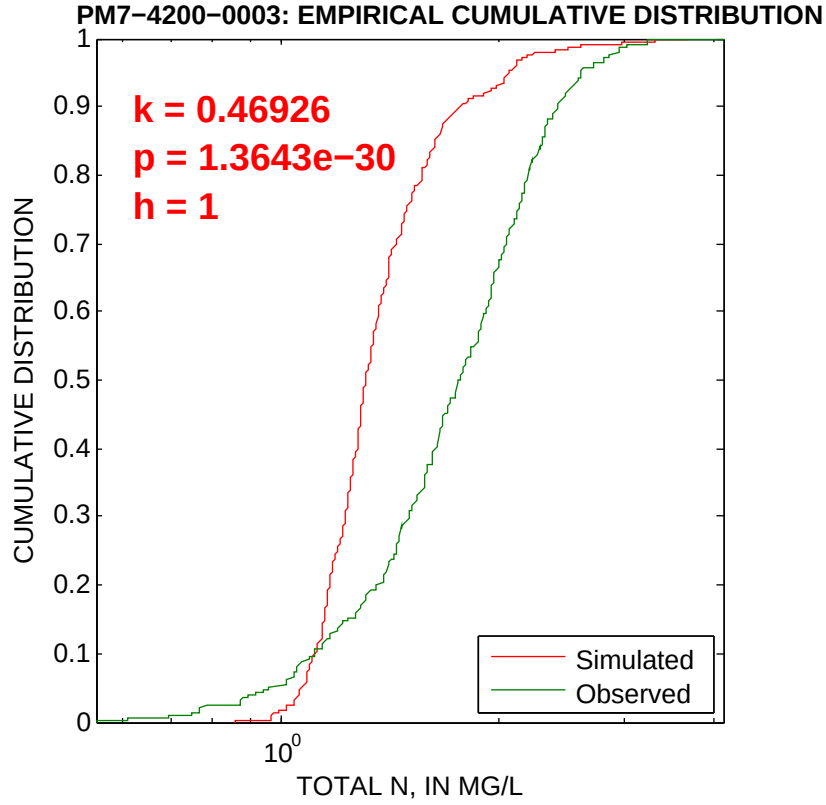












DATA SELECTION

scenario	file
P620171001WQ	TOTN.calib

plot: TOTN - total nitrogen

Dates: 1/1/1985 – 12/31/201

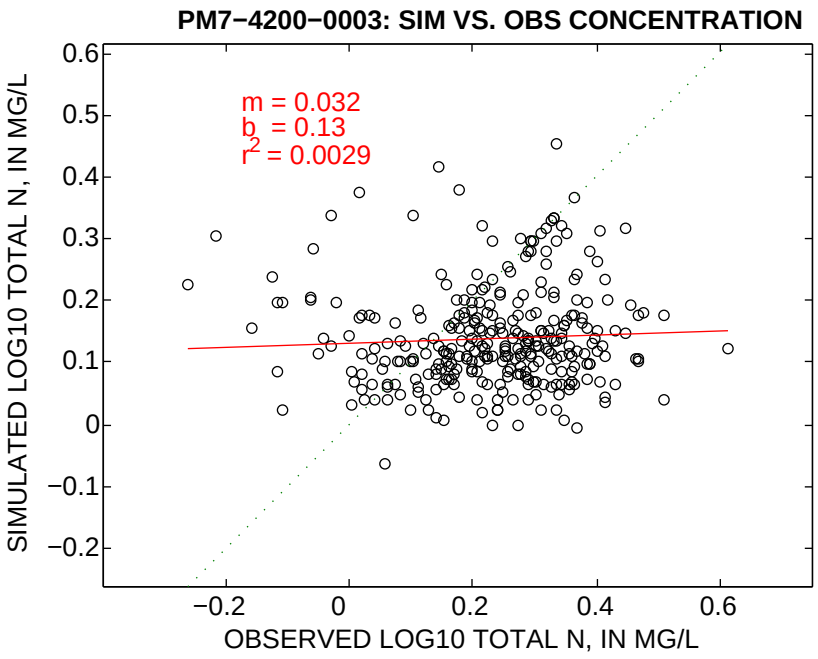
Drive	Directory	Observed
N/A	model	OBS20161101

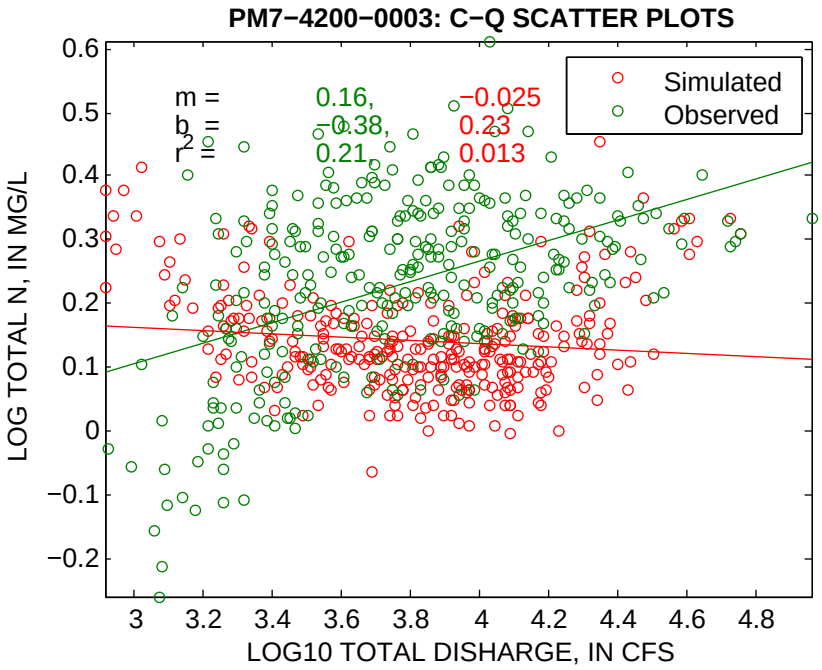
STATISTICS

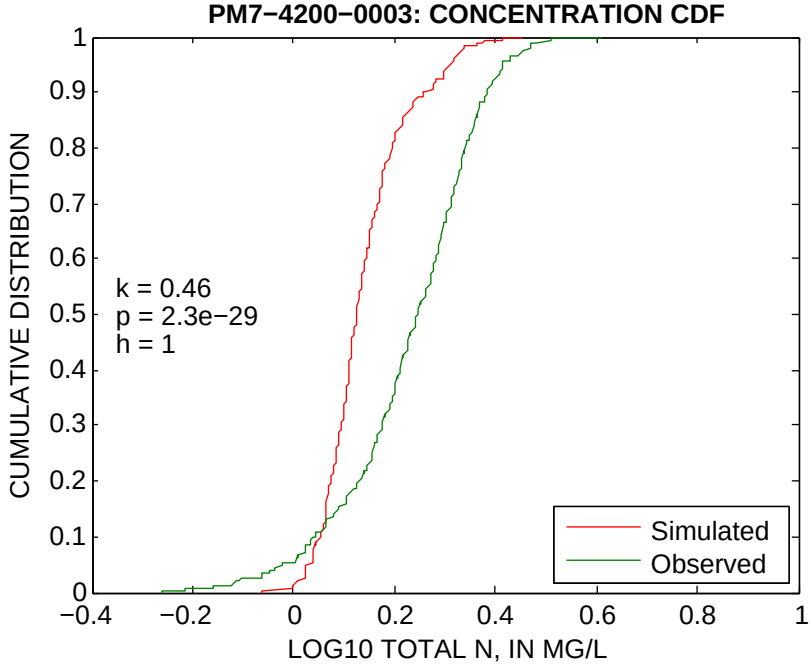
	n	309	309
		observe	simulate
min		0.549495	0.85712
		-0.260036	-0.0669584
mean		1.78361	1.39775
		0.231545	0.135386
media		1.765	1.3073
		0.246745	0.116375
max		4.1	3.6774
		0.612784	0.565541
varian		0.270339	0.115705
		0.0183183	0.00791278
JB		0.005347	0.001
		0.001	0.001
		ra	log
%		-21.6336	-41.5292
err.va		0.528781	0.0356406
rel.std.err		1.95599	1.94563
mod.eff		-0.95599	-0.945626

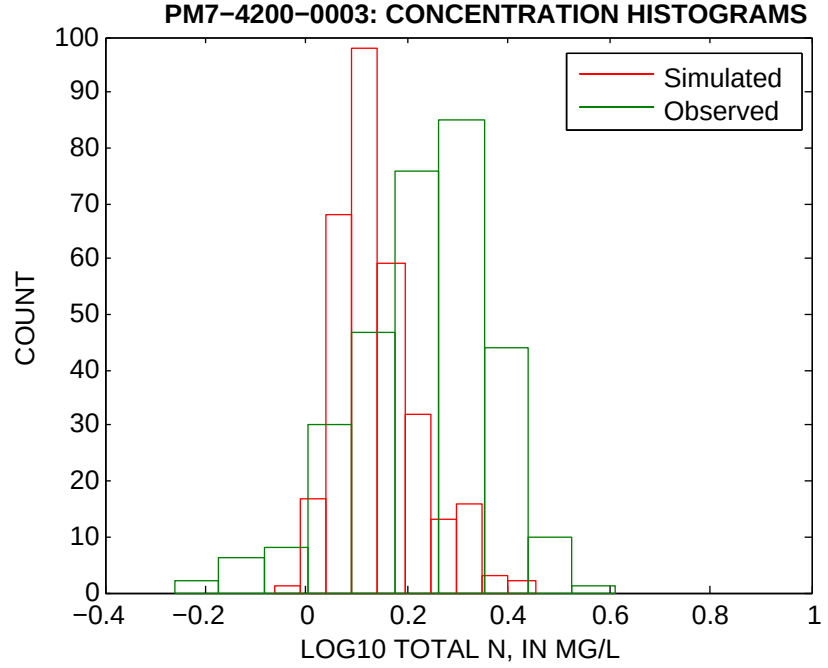
VERSION 2.1

ALL DATA
LOG10

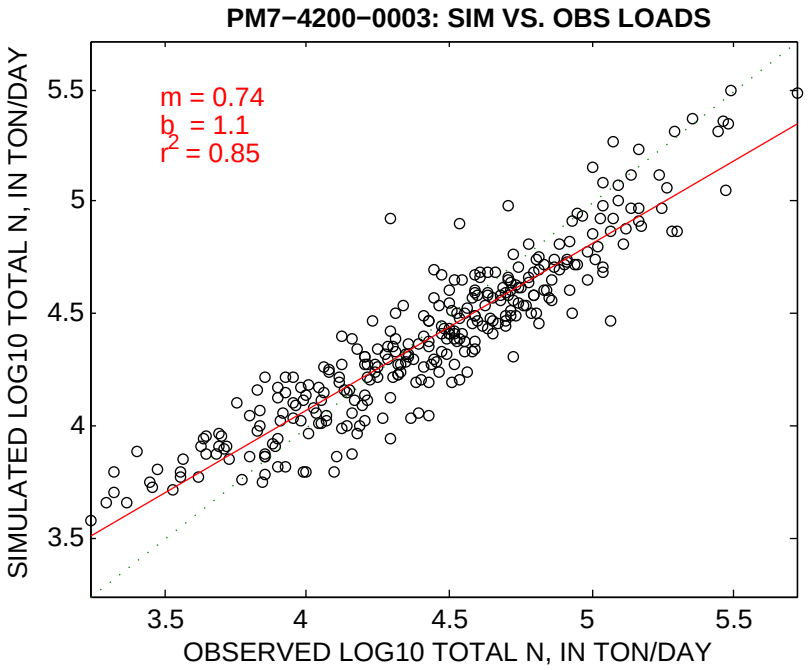


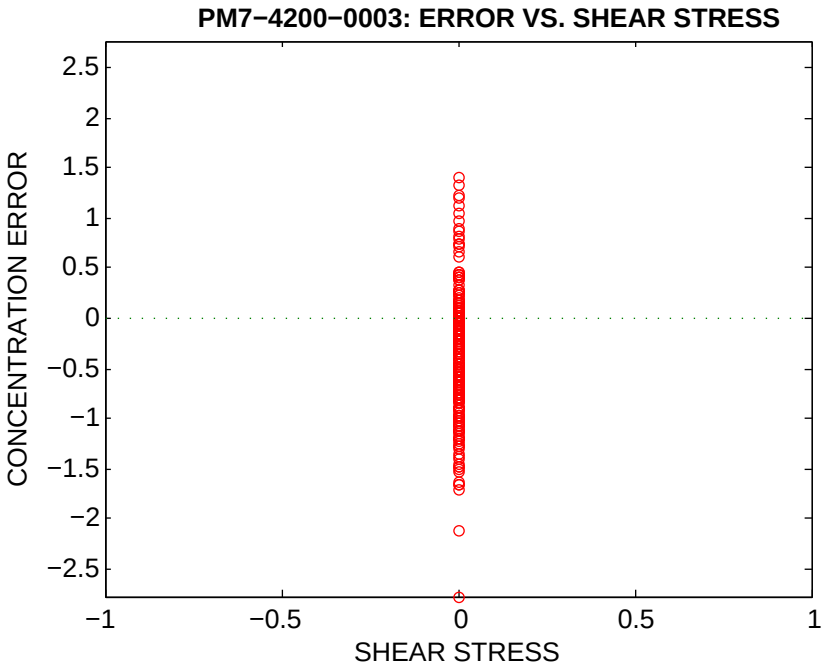


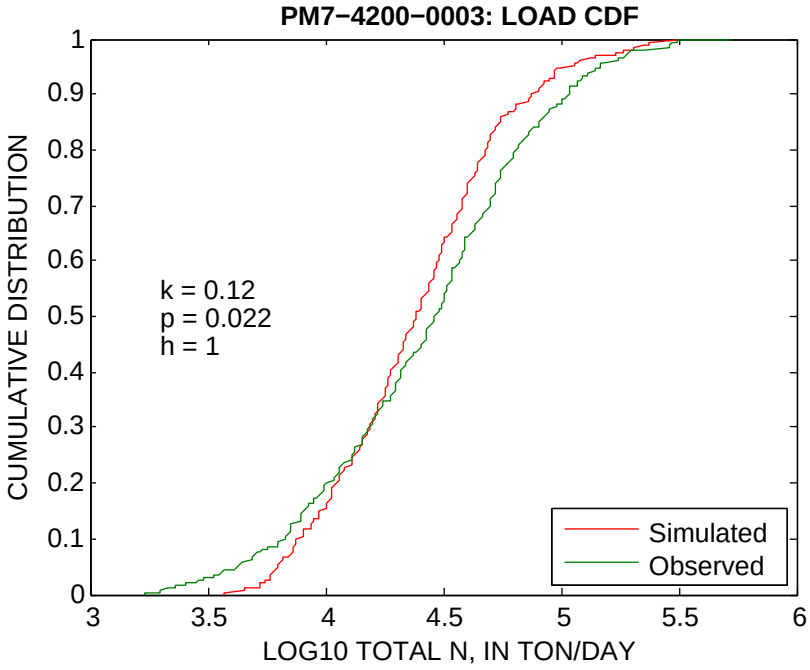


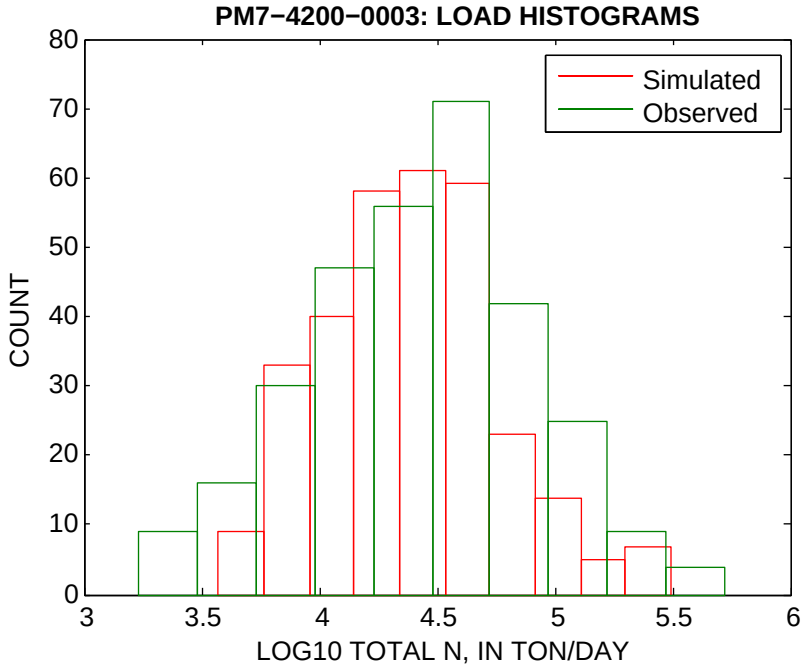


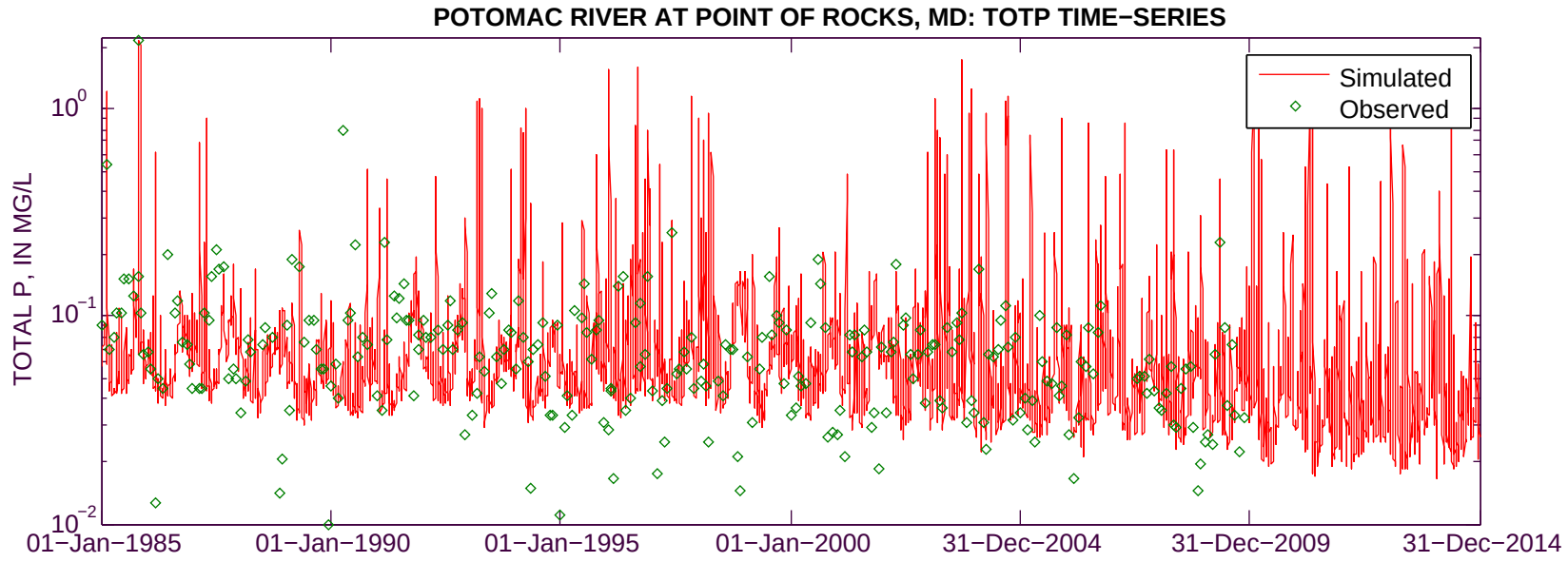
LOAD DATA
LOG10

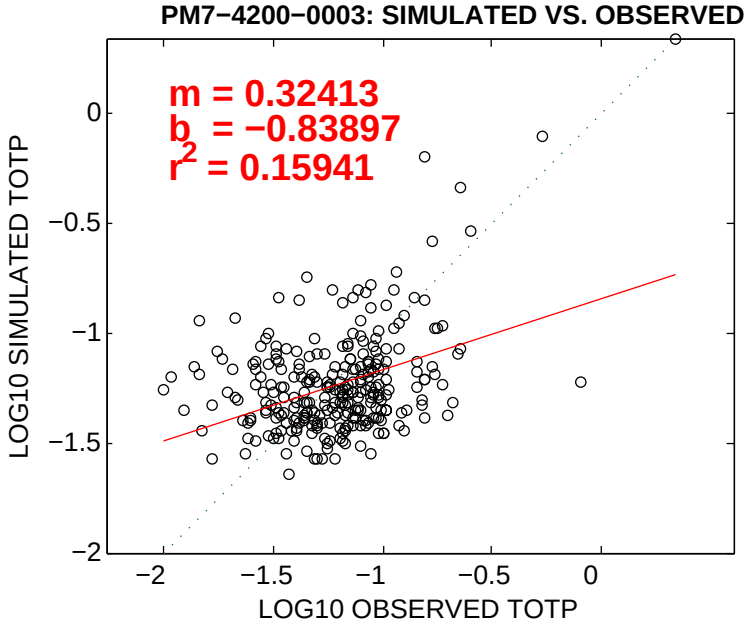


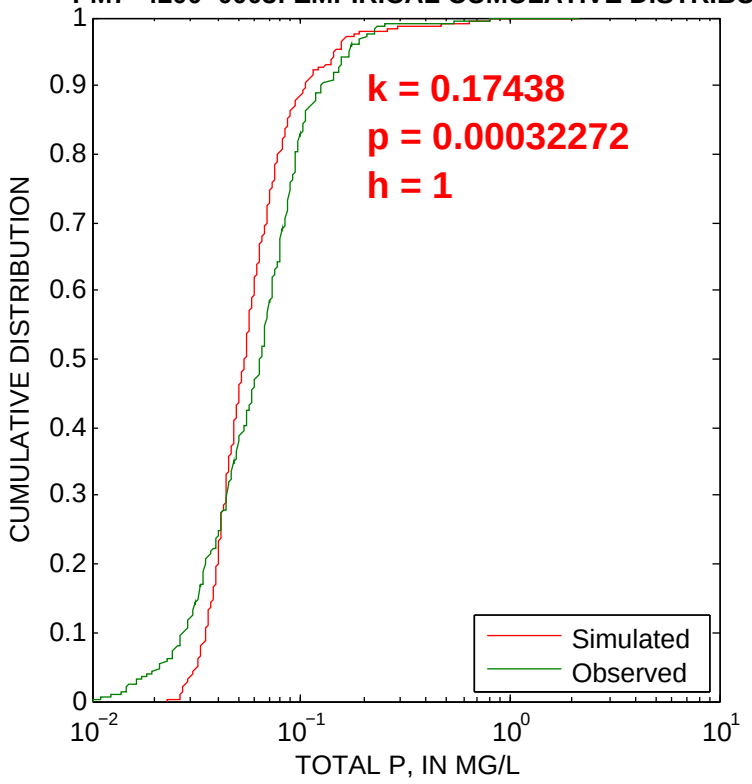












DATA SELECTION

scenario: P620171001WQ | file: TOTP.calib

plot: TOTP - total phosphorus

Dates: 1/1/1985 – 12/31/201

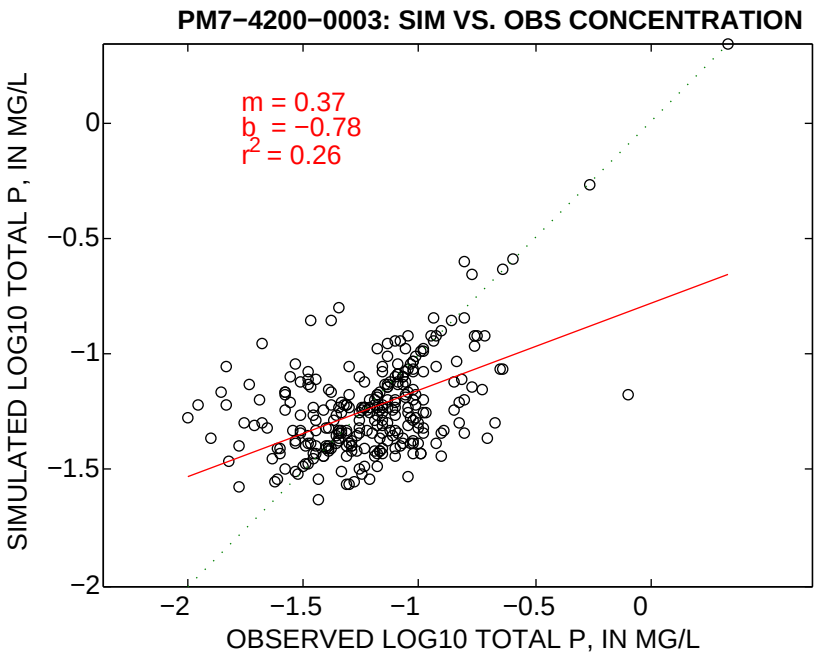
Drive: N/A | Directory: model | Observed: OBS20161101

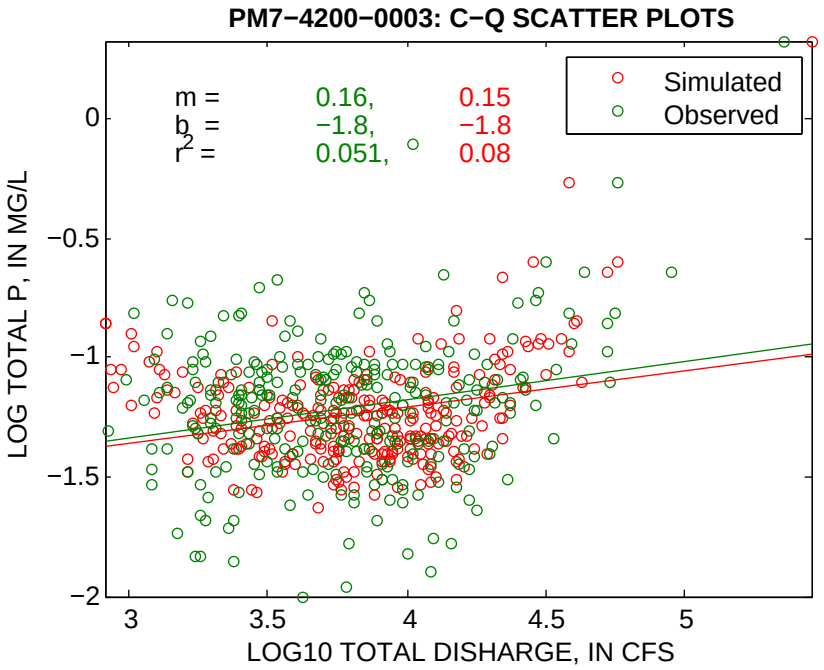
STATISTICS

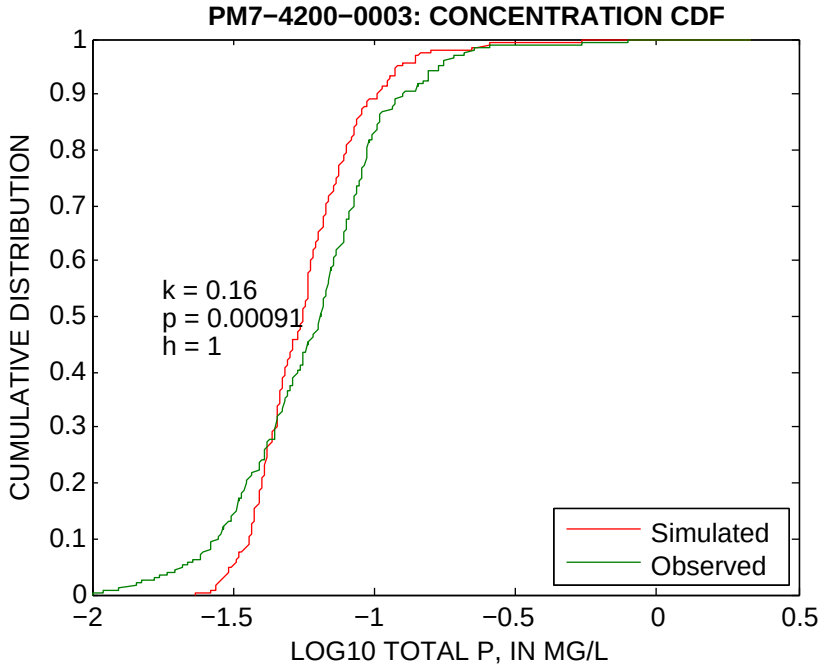
		observe	simulate
n		281	281
min		0.01	0.023034
		-2	-1.63763
mean		0.0823291	0.0763168
		-1.21179	-1.23175
media		0.065	0.053918
		-1.18709	-1.26827
max		2.15	2.1803
		0.332438	0.338516
varian		0.0197683	0.0207048
		0.0833736	0.0549505
JB		0.001	0.001
		0.001	0.001
		ra	log
%		-7.30269	1.64775
err.va		0.00521864	0.0846757
rel.std.err		0.263991	1.01562
mod.eff		0.736009	-0.0156169

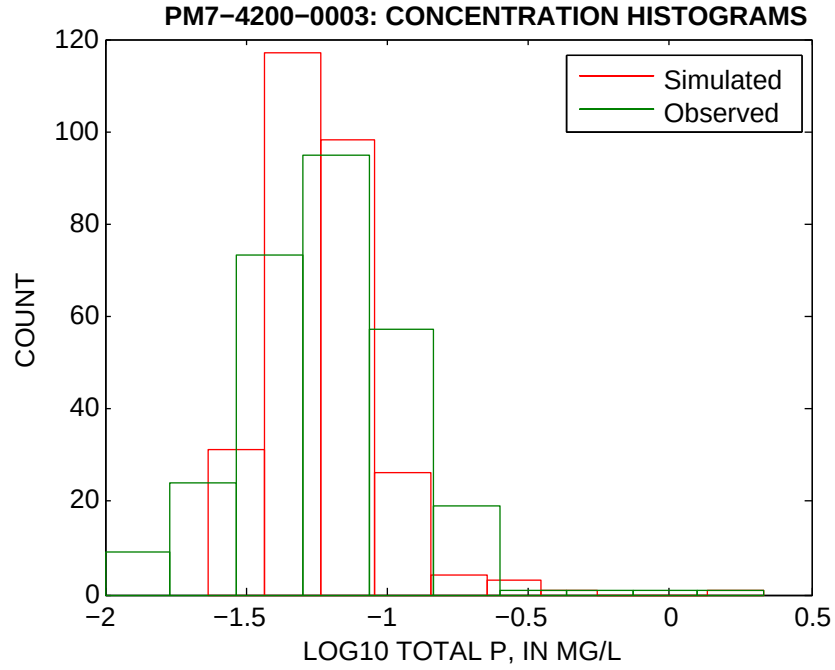
VERSION 2.1

ALL DATA
LOG10

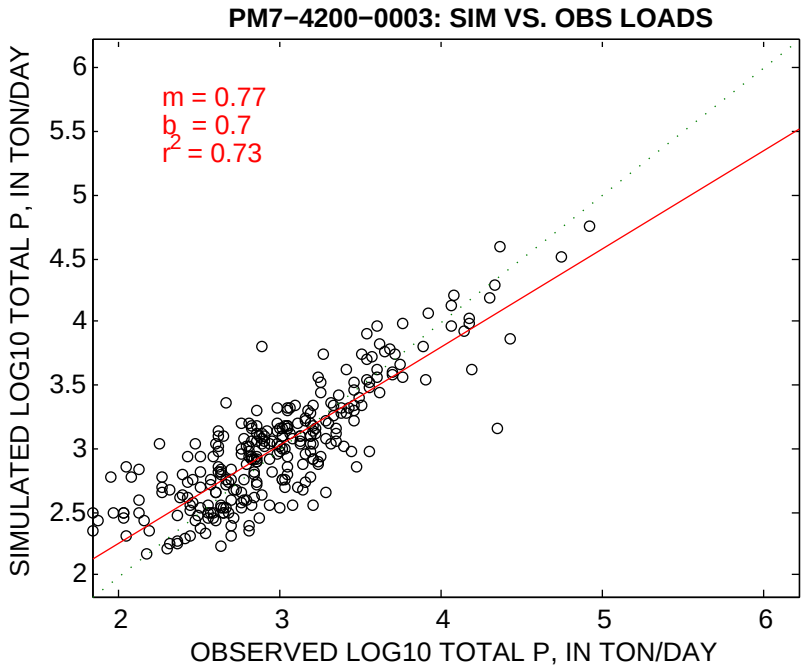


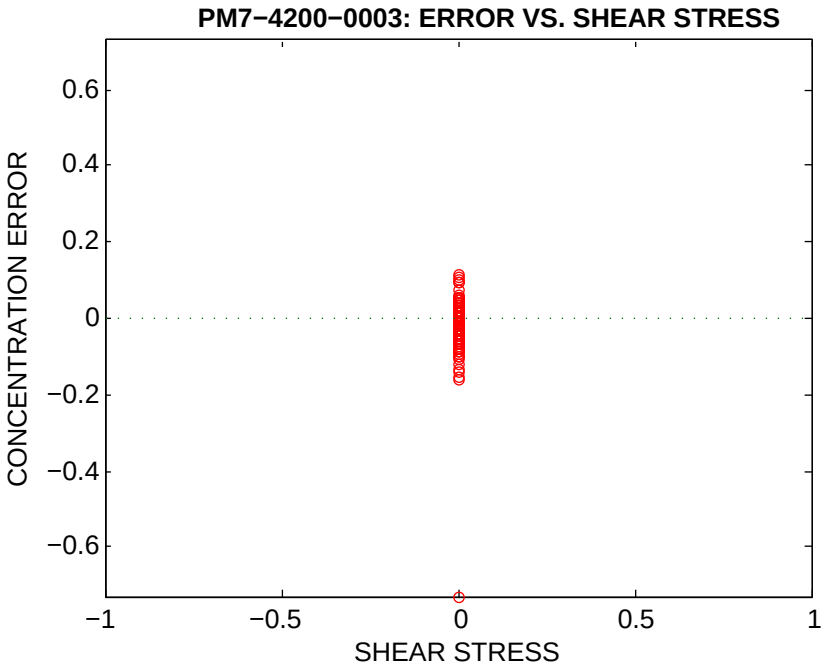


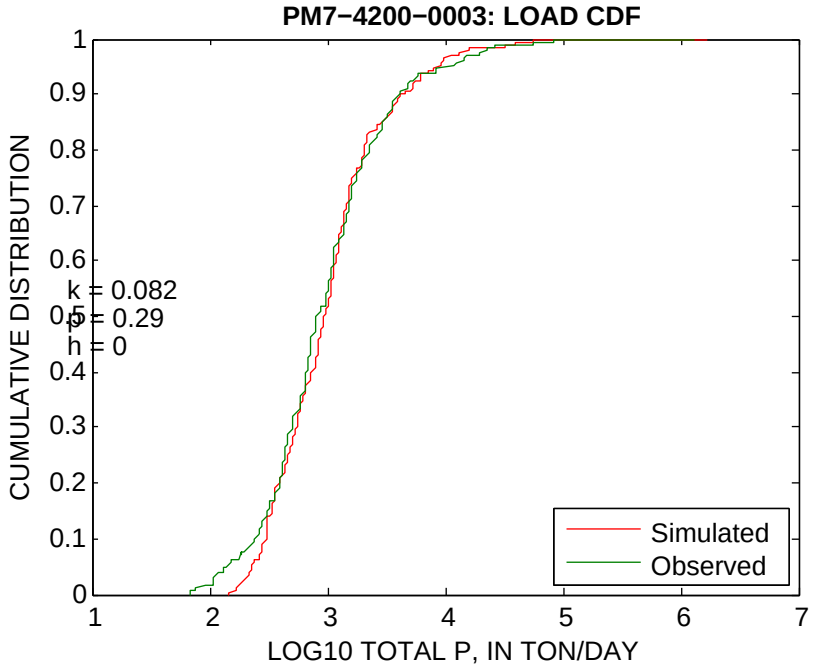


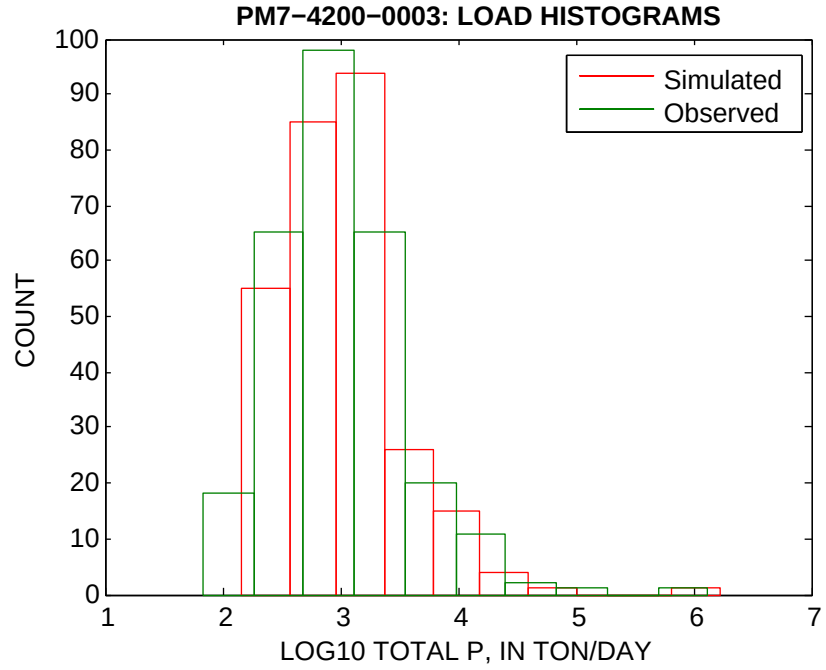


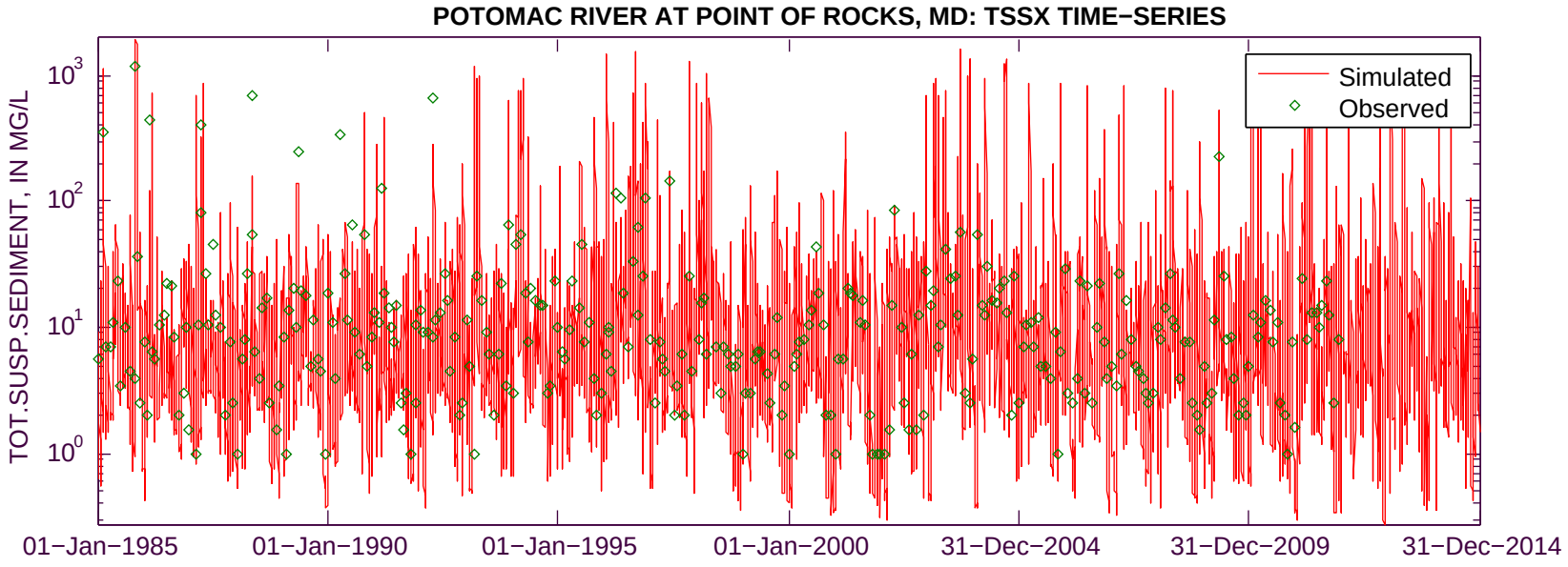
LOAD DATA
LOG10

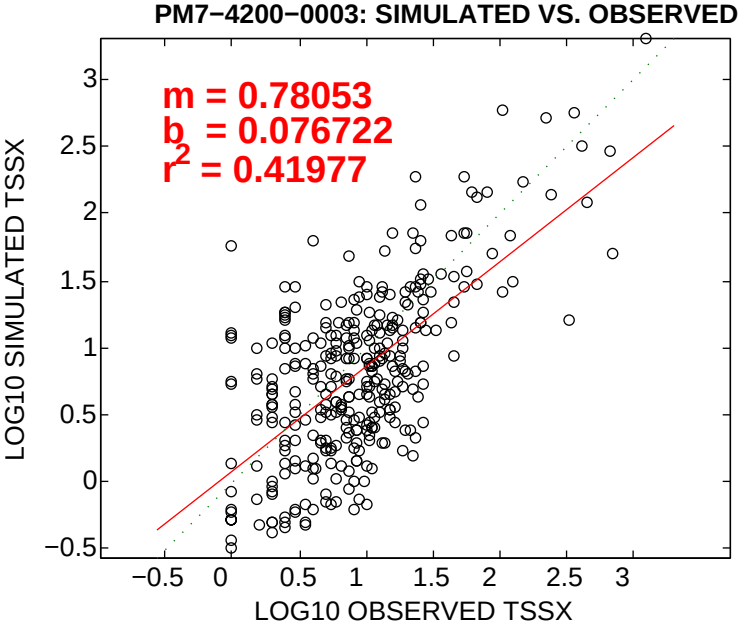


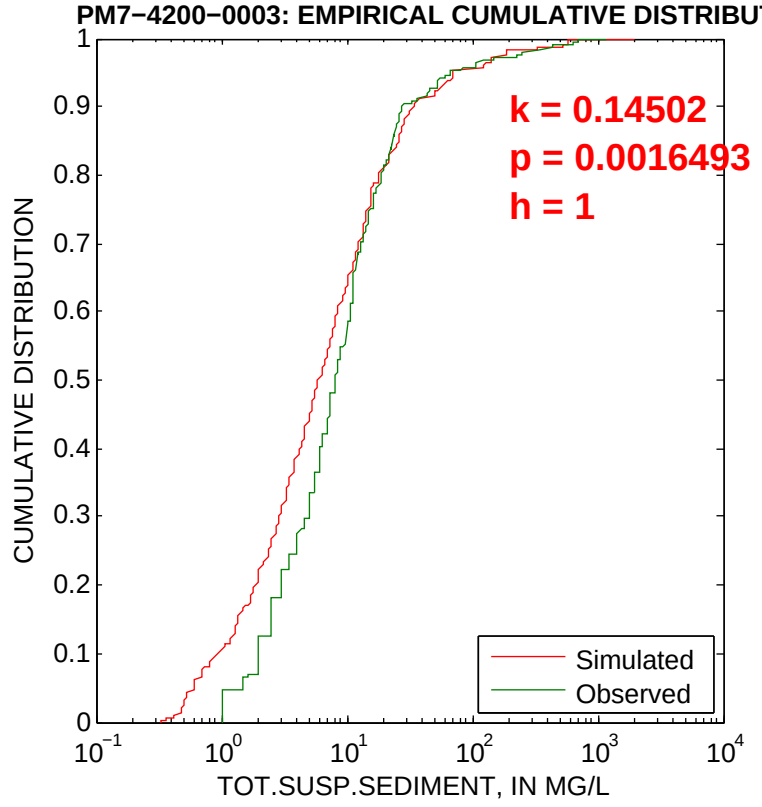












DATA SELECTION

scenario	file
P620171001WQ	TSSX.calib

plot: TSSX - total suspended ...

Dates: 1/1/1985 – 12/31/201

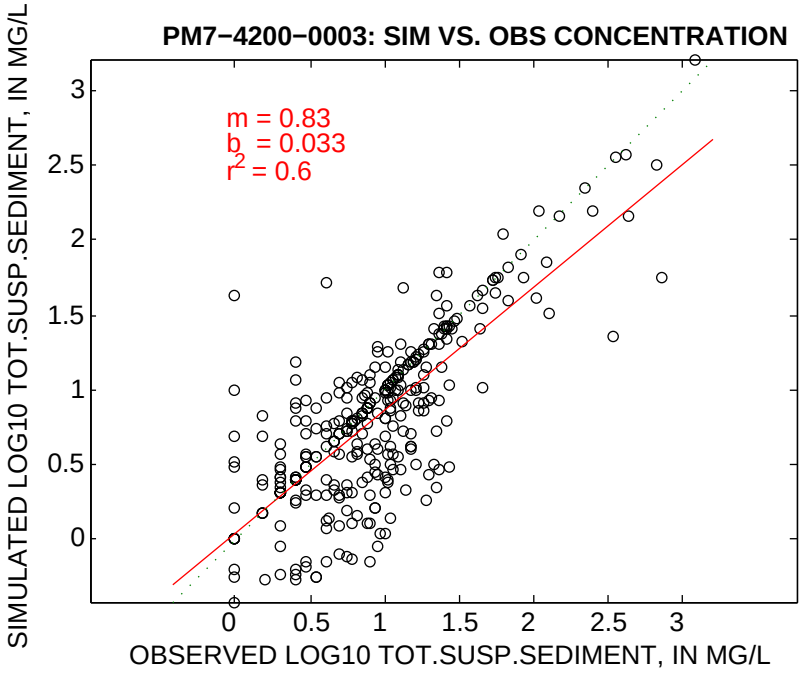
Drive	Directory	Observed
N/A	model	OBS20161101

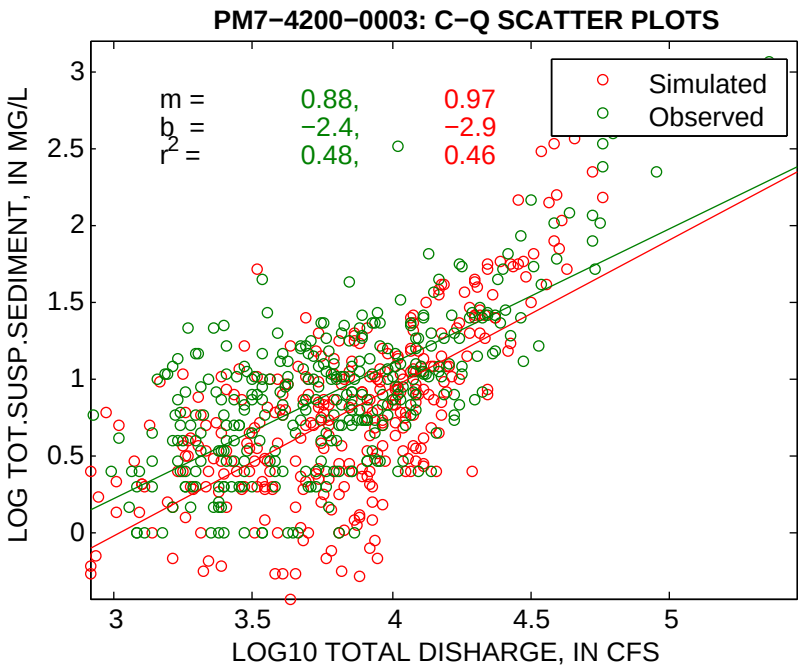
STATISTICS

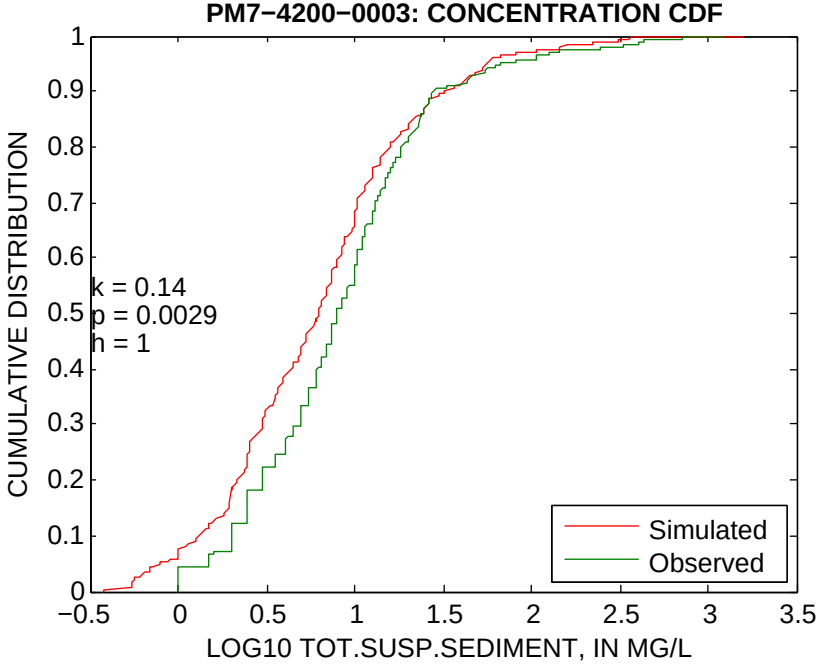
	n	observe	simulate
		331	331
min		1	0.32635
		0	-0.486316
mean		26.7045	27.2684
		0.931554	0.803826
media		8	5.9295
		0.90309	0.773018
max		1203.33	1989.1
		3.08038	3.29866
varian		9127.35	15651.6
		0.278042	0.403529
JB		0.001	0.001
		0.001	0.001383
		ra	log
%		2.11155	-13.7113
err.va		5776.51	0.263896
rel.std.err		0.632879	0.949122
mod.eff		0.367121	0.0508779

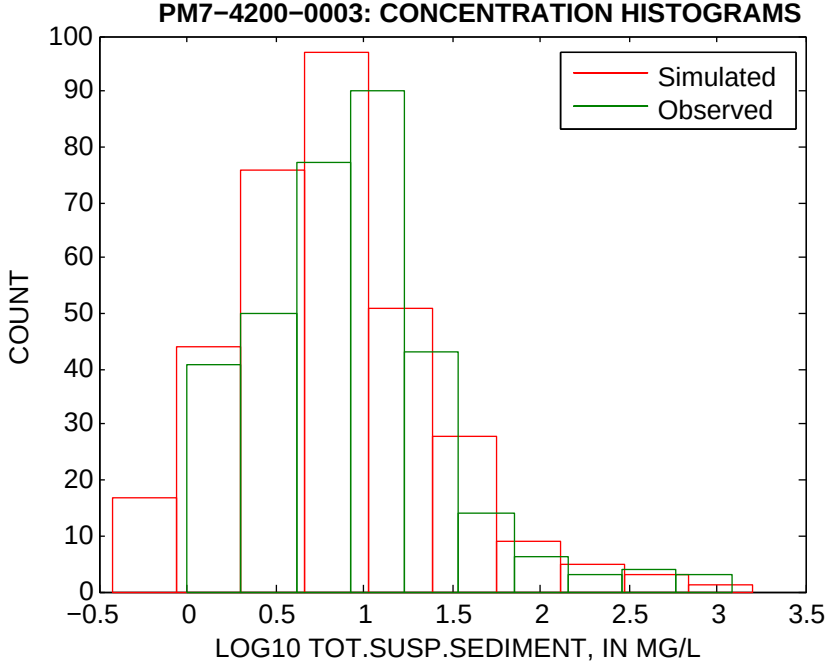
VERSION 3.1

ALL DATA
LOG10

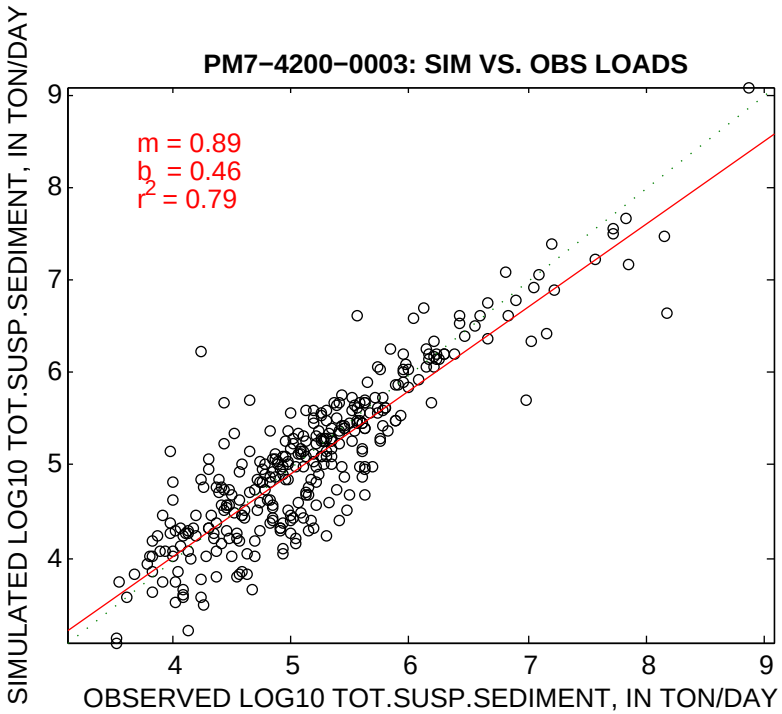


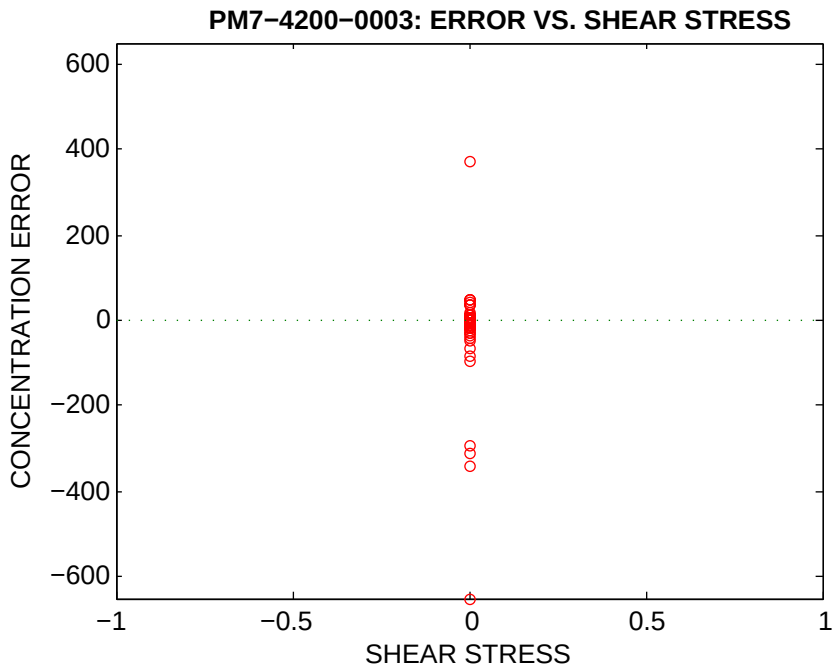


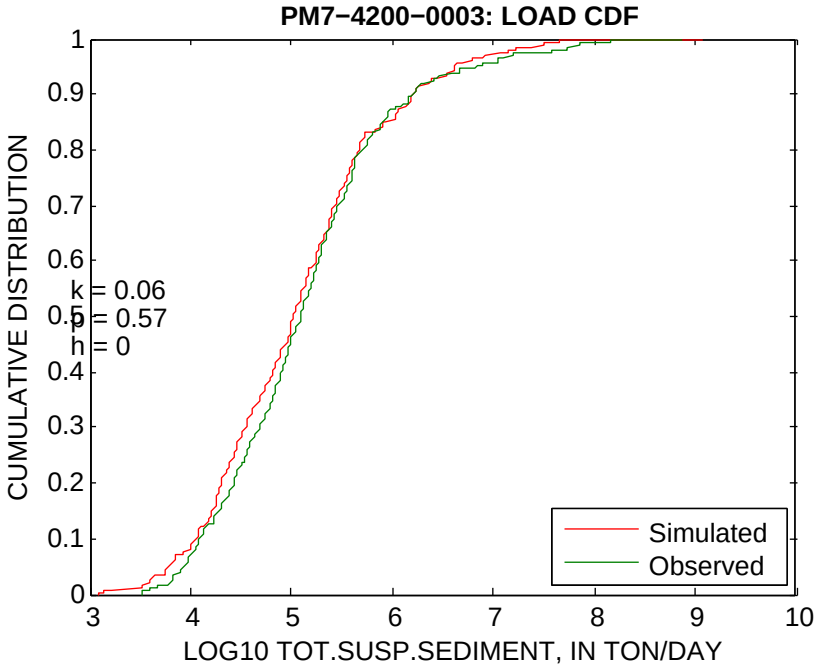


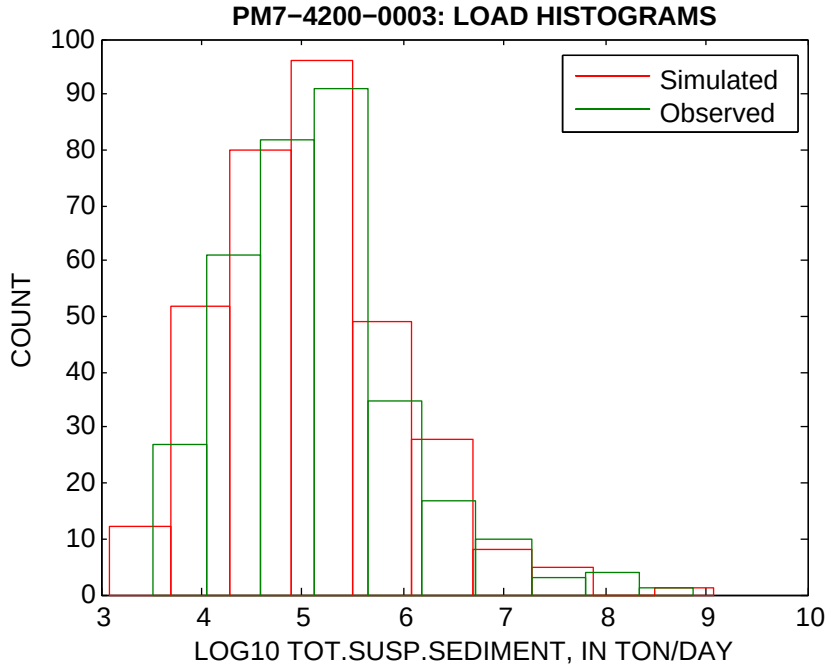


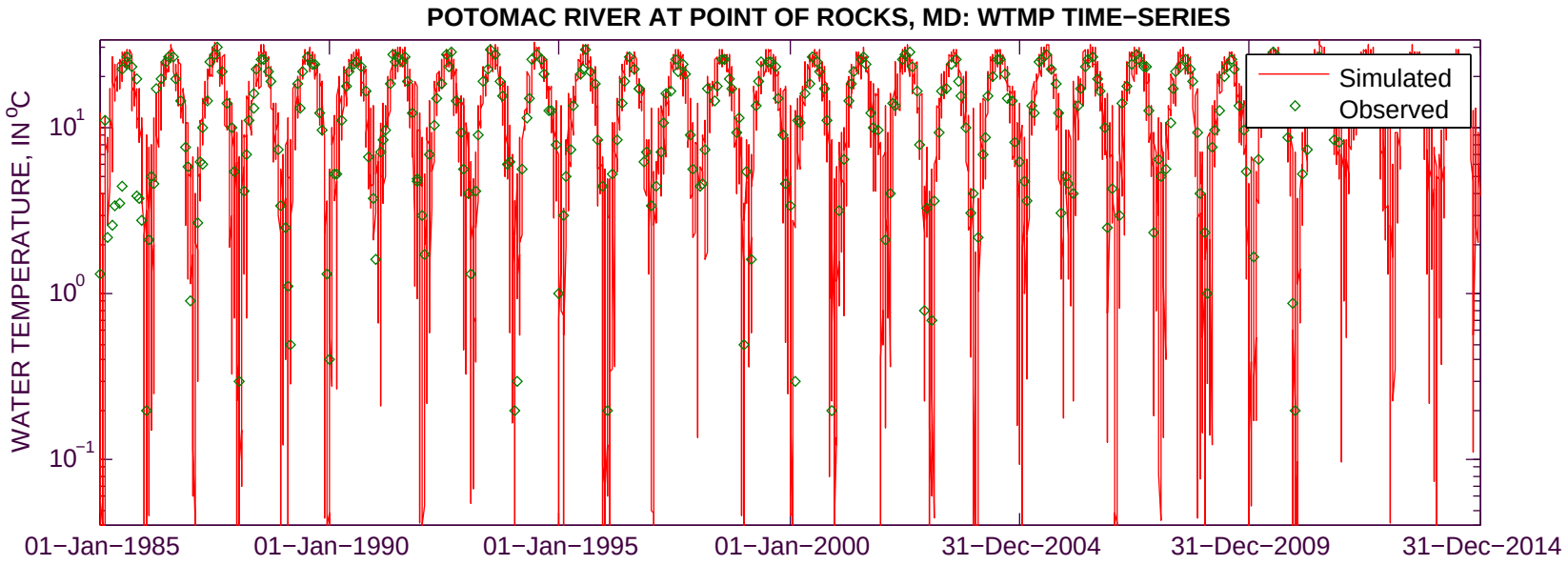
LOAD DATA
LOG10

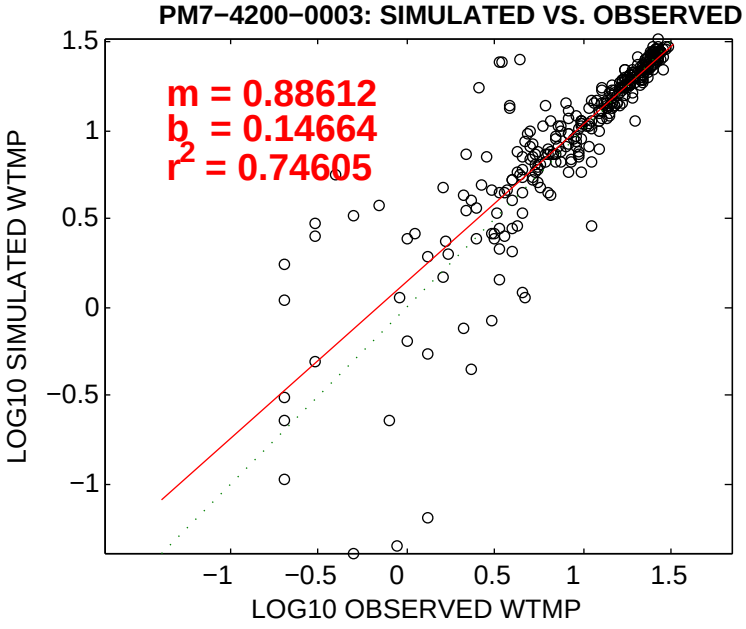


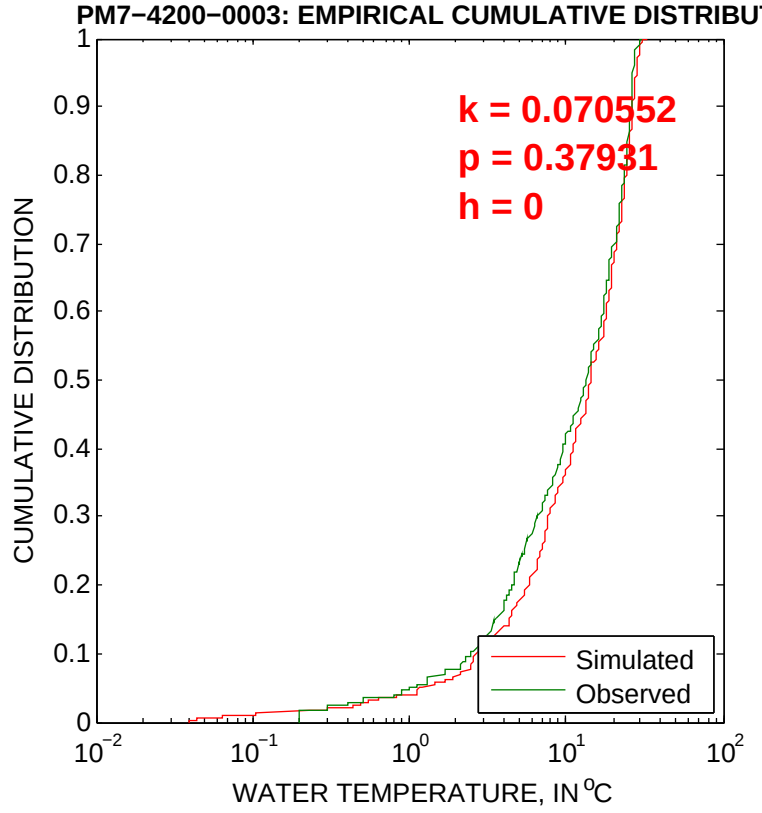












DATA SELECTION

scenario: P620171001WQ; file: WTMP.calib

plot: WTMP - water tempera...

Dates: 1/1/1985 – 12/31/201

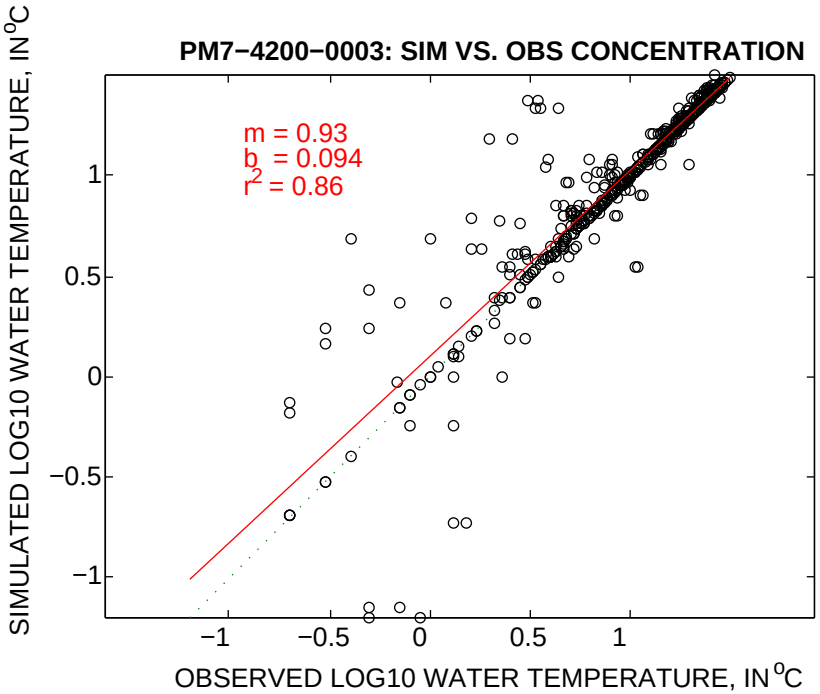
Drive: N/A Directory: model Observed: OBS20161101

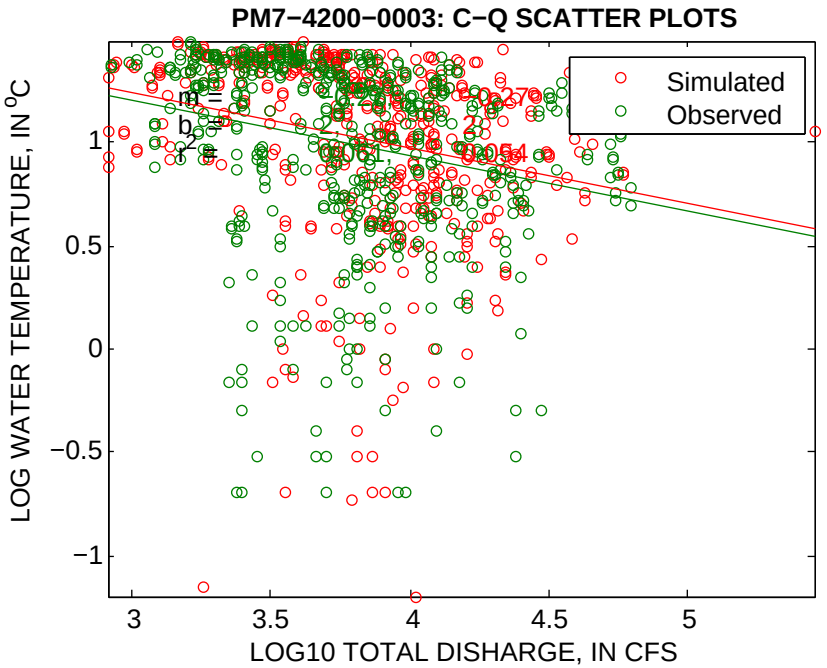
STATISTICS

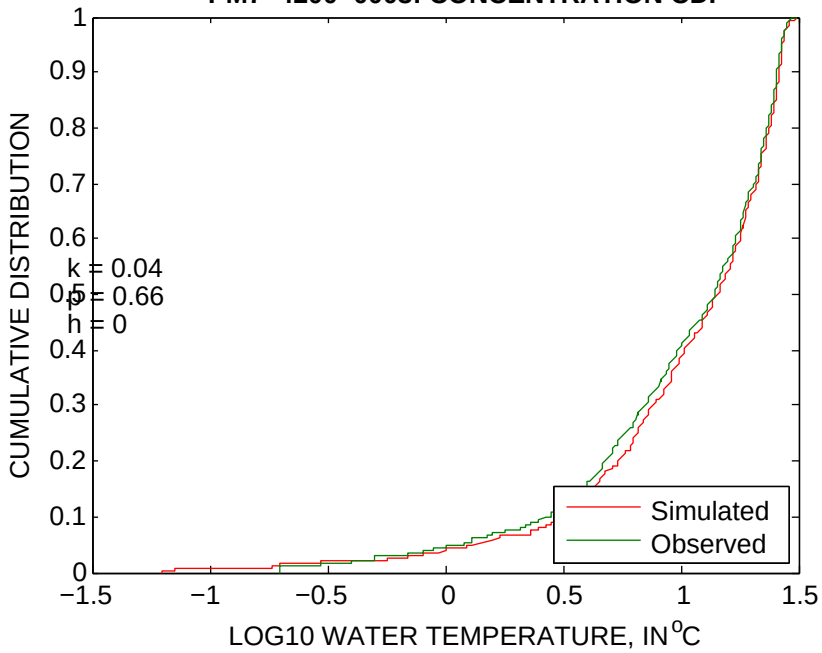
	n	observe	simulate
		326	326
min		0.2	0.039981
		-0.69897	-1.39815
mean		13.8023	14.6822
		0.98123	1.01612
media		13.65	14.227
		1.13513	1.15311
max		30.2	33.126
		1.48001	1.52017
varian		77.3081	78.2076
		0.216505	0.22787
JB		0.001	0.001426
		0.001	0.001
		ra	log
%		6.37502	3.55609
err.va		10.1052	0.0618977
rel.std.err		0.130714	0.285895
mod.eff		0.869286	0.714105

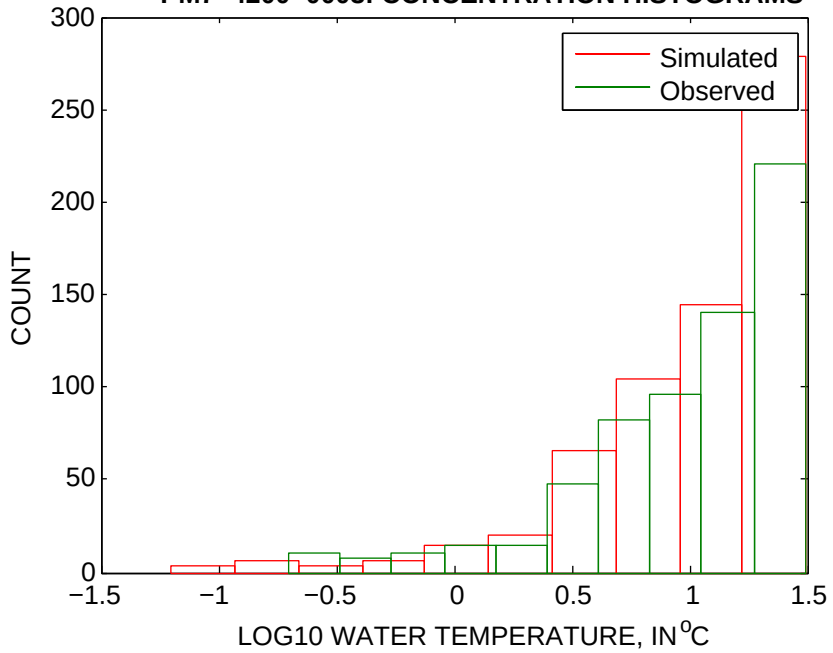
VERSION 2.1

ALL DATA
LOG10

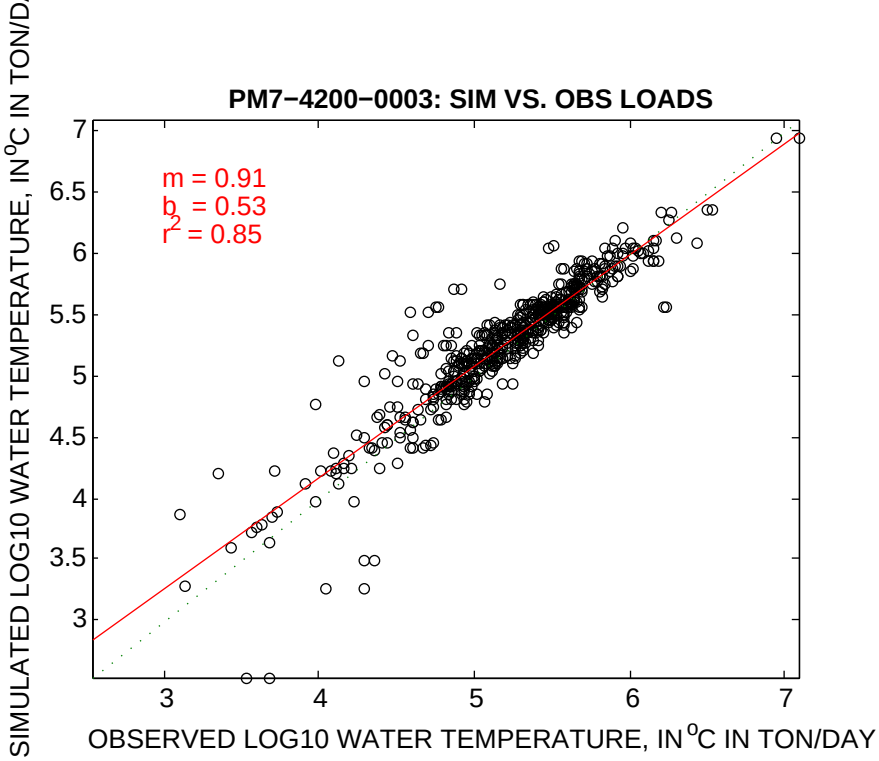


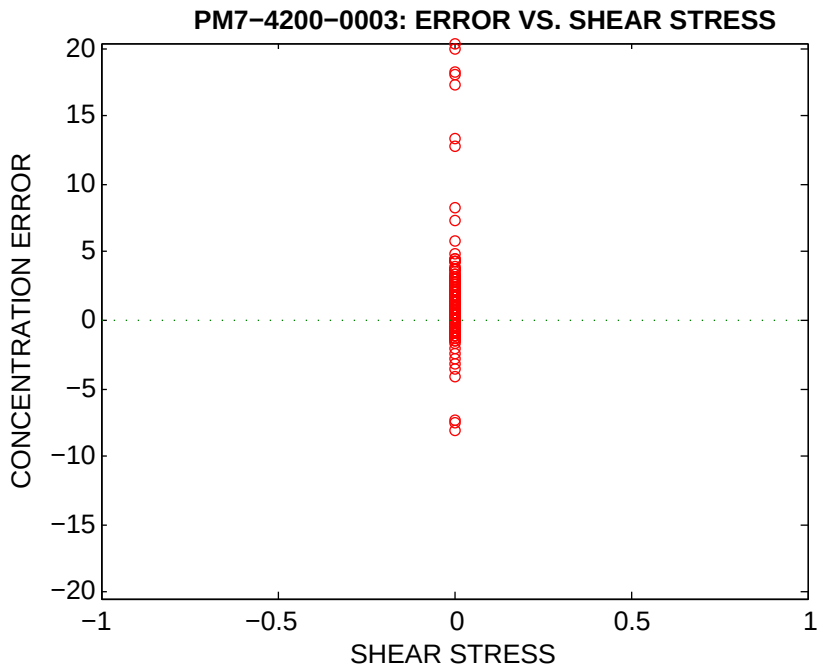


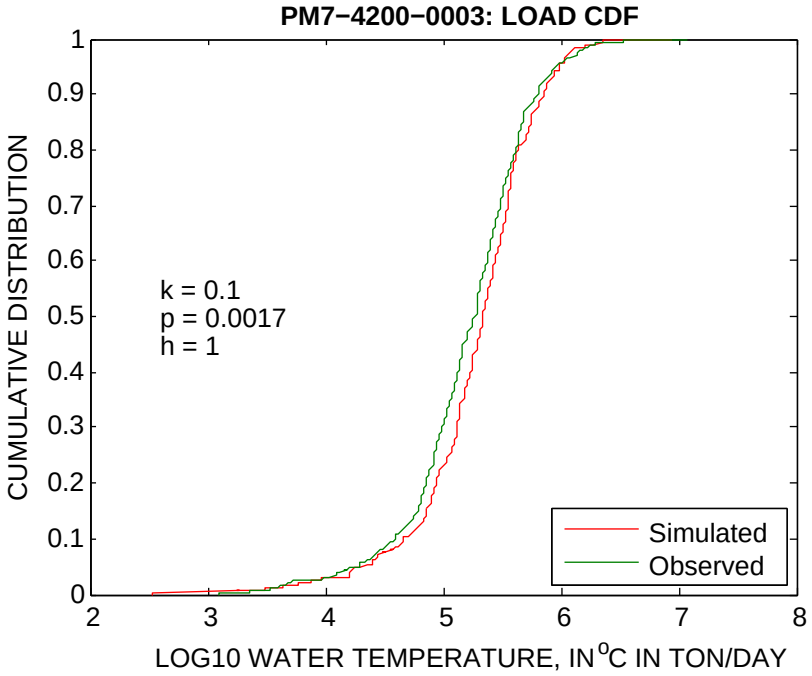


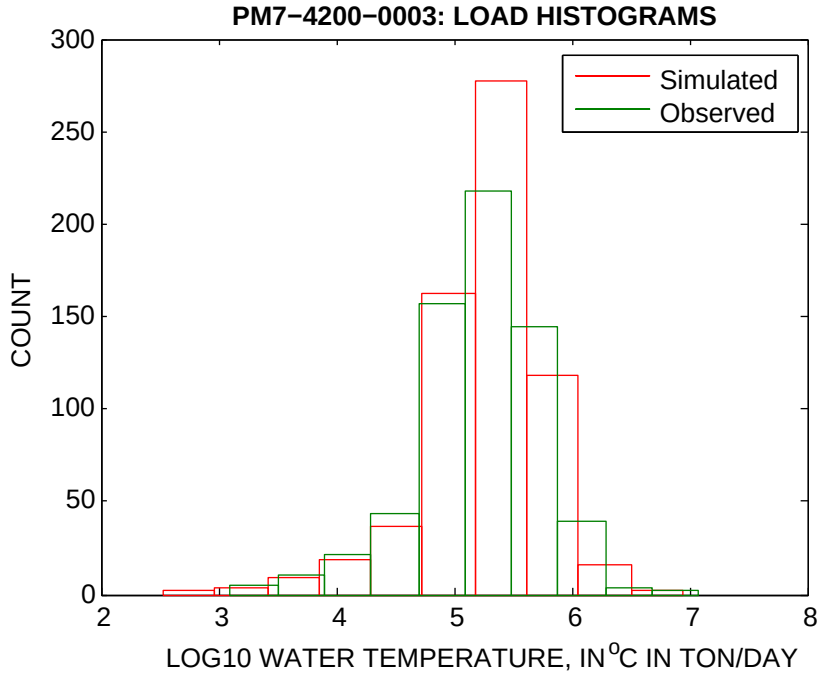


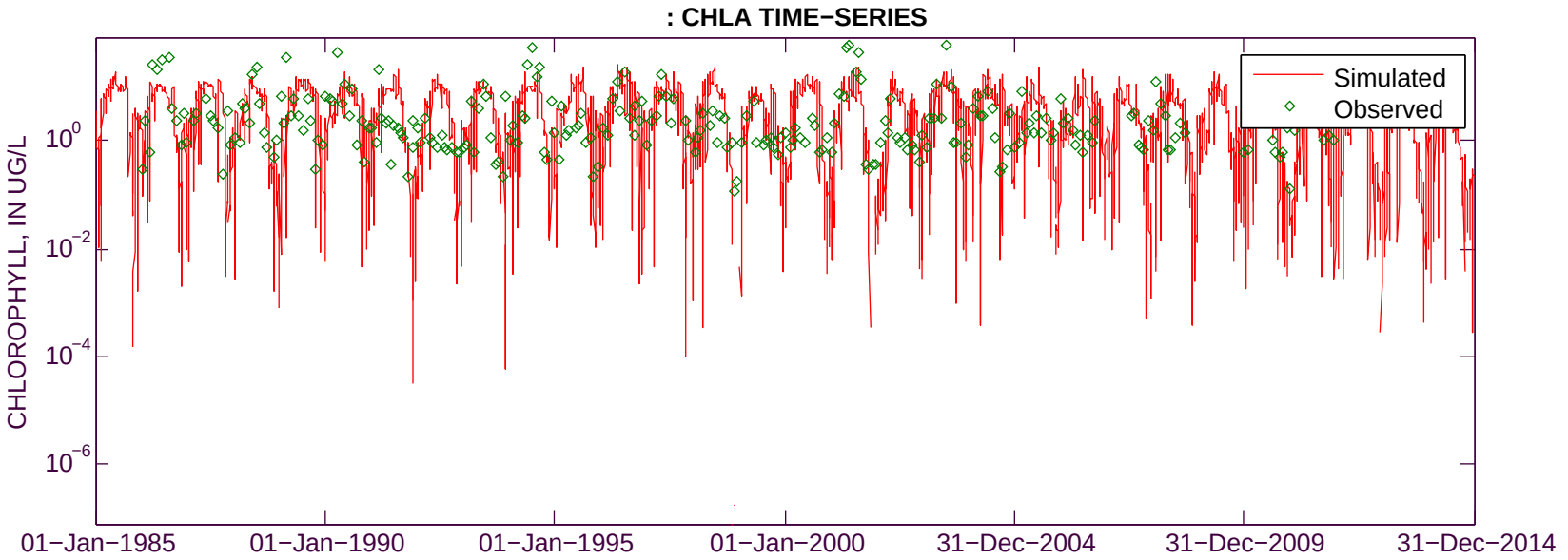
LOAD DATA
LOG10

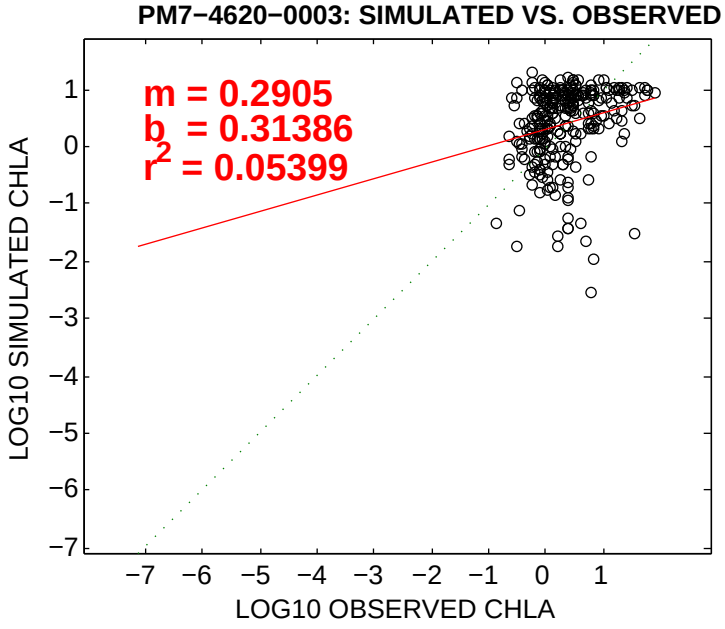


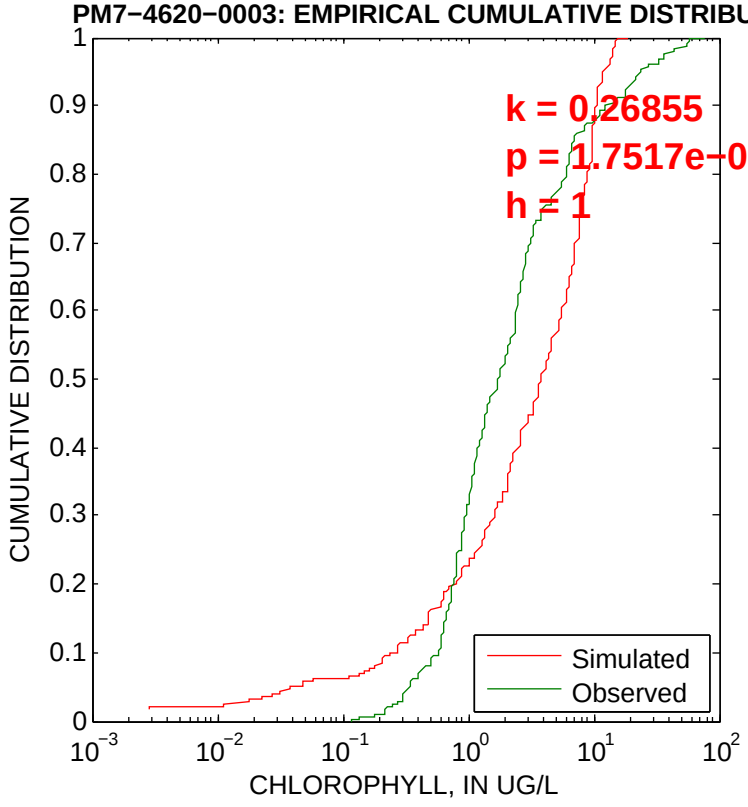












DATA SELECTION

scenario	file
P620171001WQ	CHLA.calib

plot: CHLA - chlorophyll A

Dates: 1/1/1985 – 12/31/201

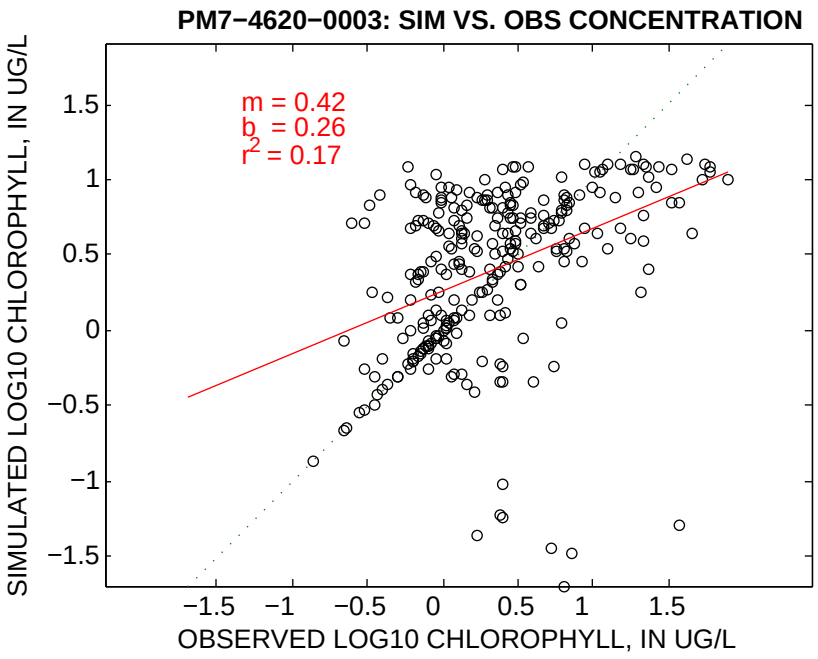
Drive	Directory	Observed
N/A	model	OBS20161101

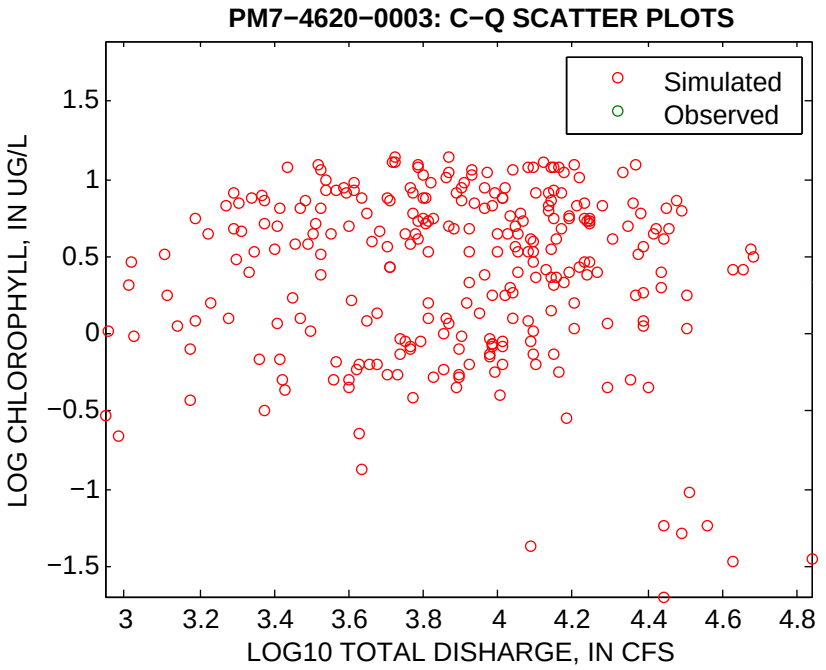
STATISTICS

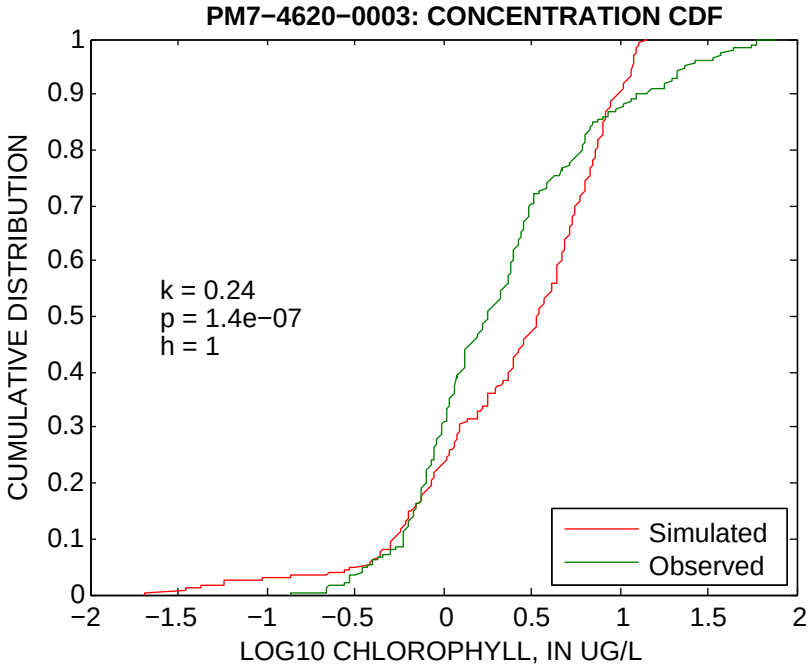
		observe	simulate
n		283	278
min		0.12	0
		-0.868061	-2.53945
mean		5.27485	4.90128
		0.33297	0.410583
media		1.7695	3.7744
		0.254064	0.595175
max		78.2	19.181
		1.89321	1.28287
varian		106.308	17.3486
		0.287348	0.449144
JB		0.001	0.001291
		0.001746	0.001
		ra	log
%		-7.08211	23.3094
err.va		104.657	0.575588
rel.std.err		0.984467	2.00311
mod.eff		0.0155332	-1.00311

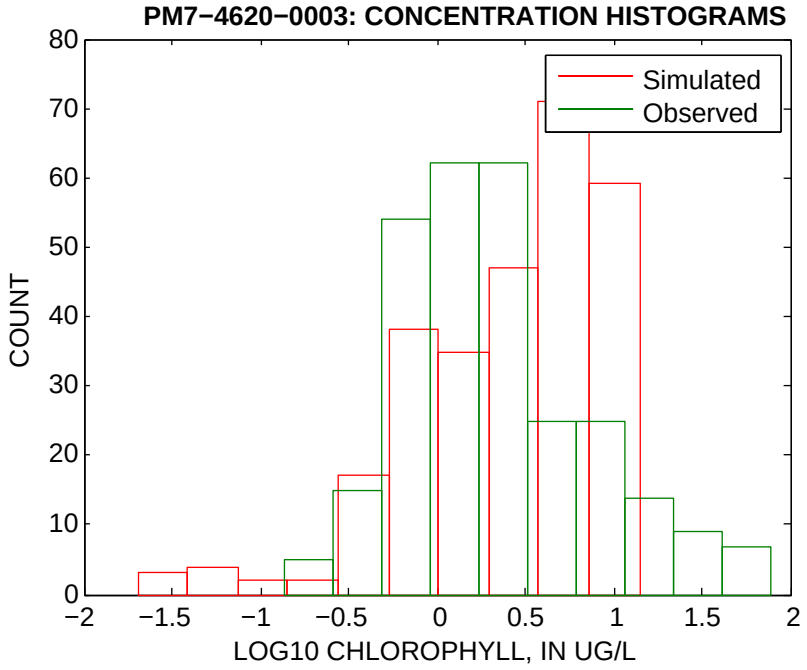
VERSION 2.1

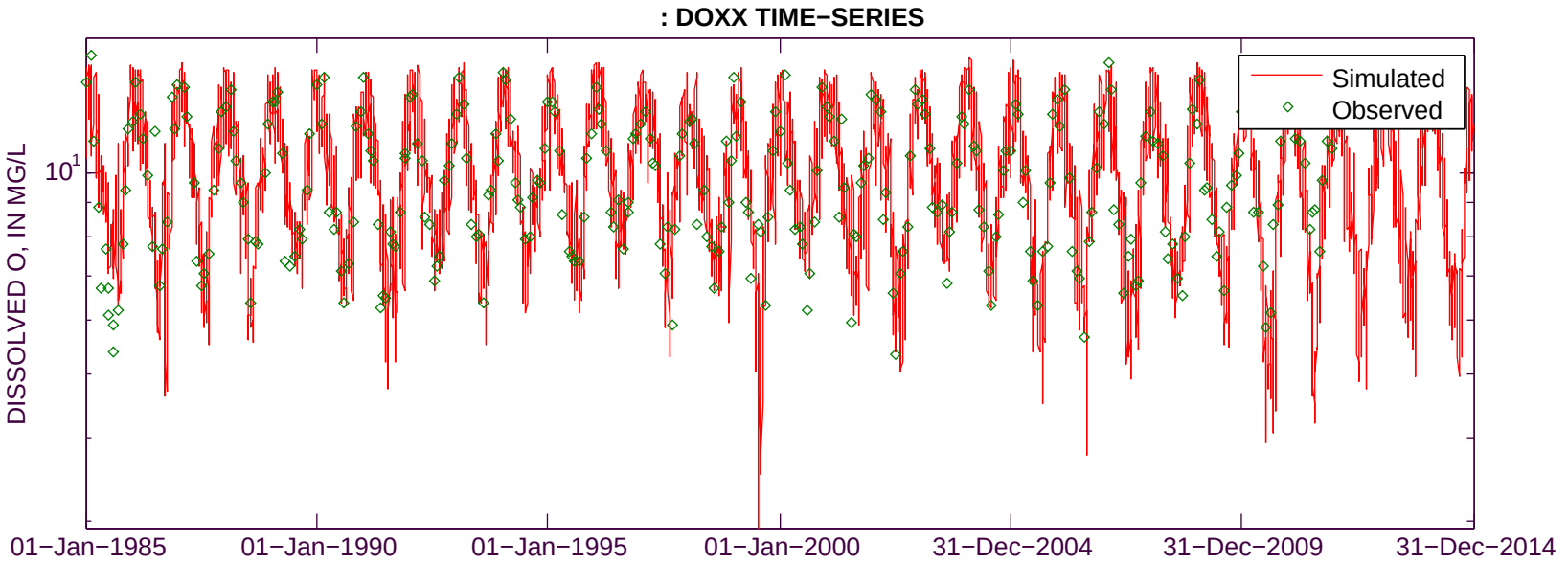
ALL DATA
LOG10











DATA SELECTION

scenario	file
P620171001WQ	DOXX.calib

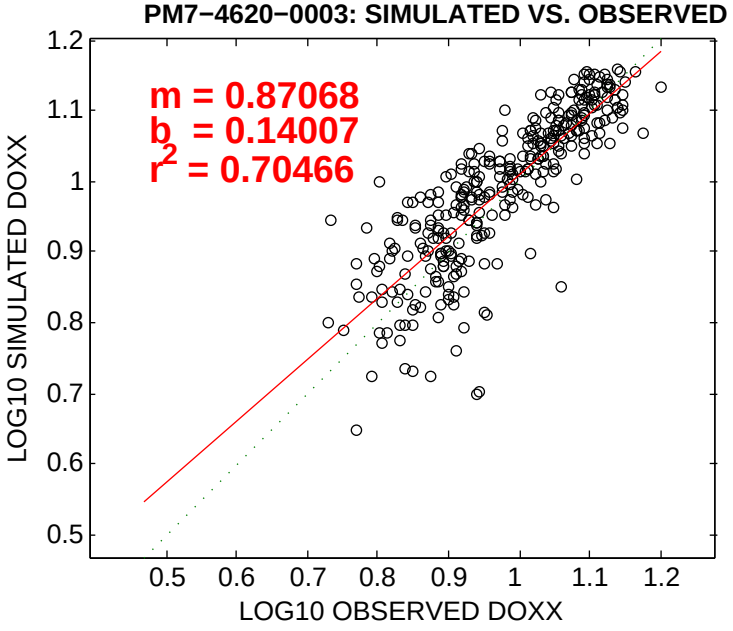
plot: DOXX - dissolved oxygen

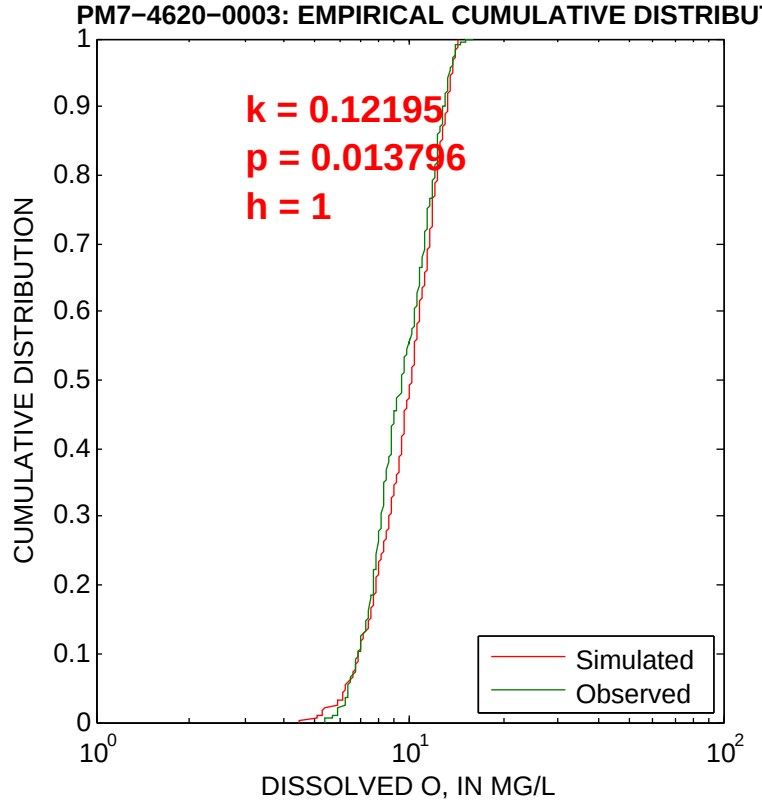
Dates: 1/1/1985 – 12/31/201

Drive	Directory	Observed
N/A	model	OBS20161101

STATISTICS

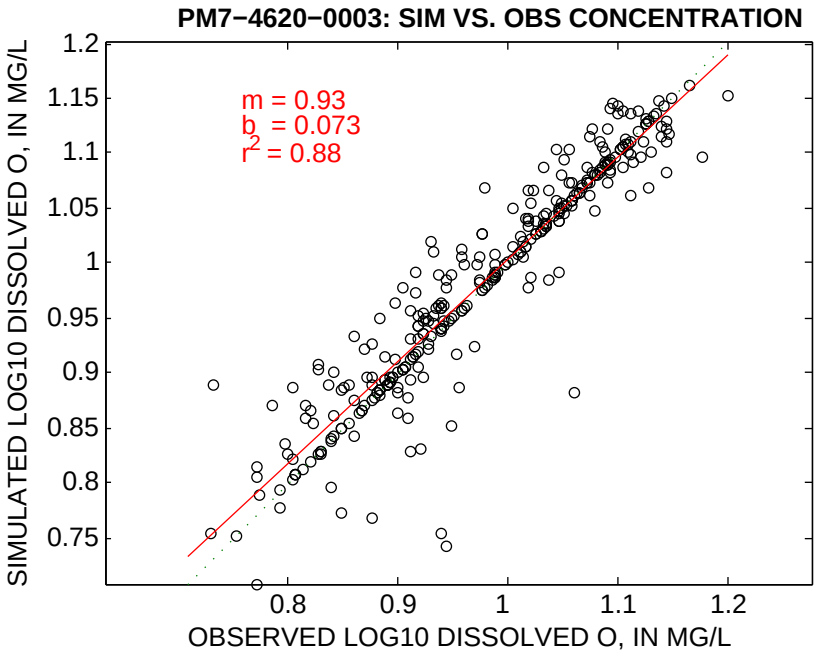
		observe	simulate
n		328	328
min		5.35	4.4596
		0.728354	0.649296
mean		9.74355	10.0677
		0.976921	0.990659
media		9.45	10.151
		0.975432	1.00651
max		15.85	14.369
		1.20003	1.15743
varian		5.07763	5.30228
		0.0104253	0.0112157
JB		0.004747	0.010446
		0.007868	0.002344
		ra	log
%		3.32659	1.40626
err.va		1.51549	0.00367604
rel.std.err		0.298464	0.352607
mod.eff		0.701536	0.647393

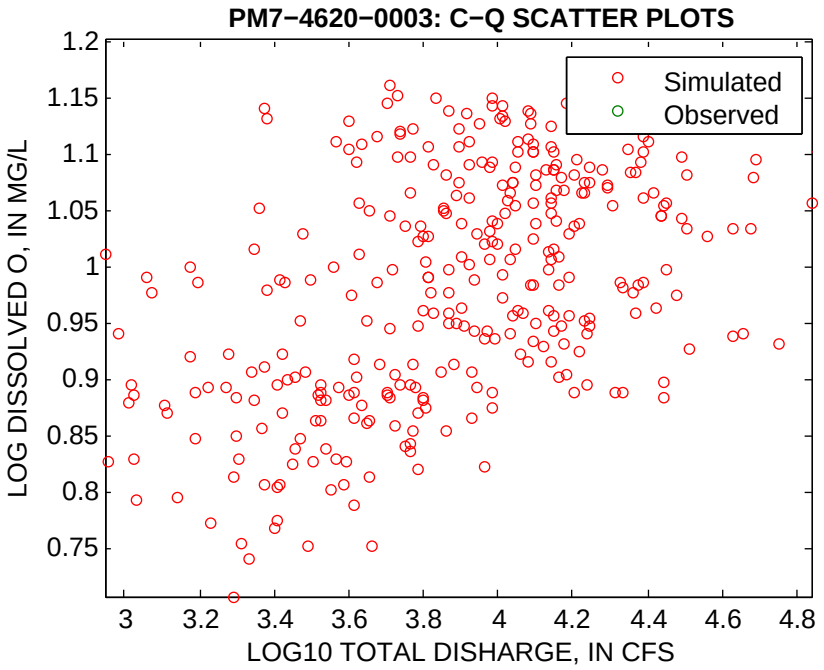


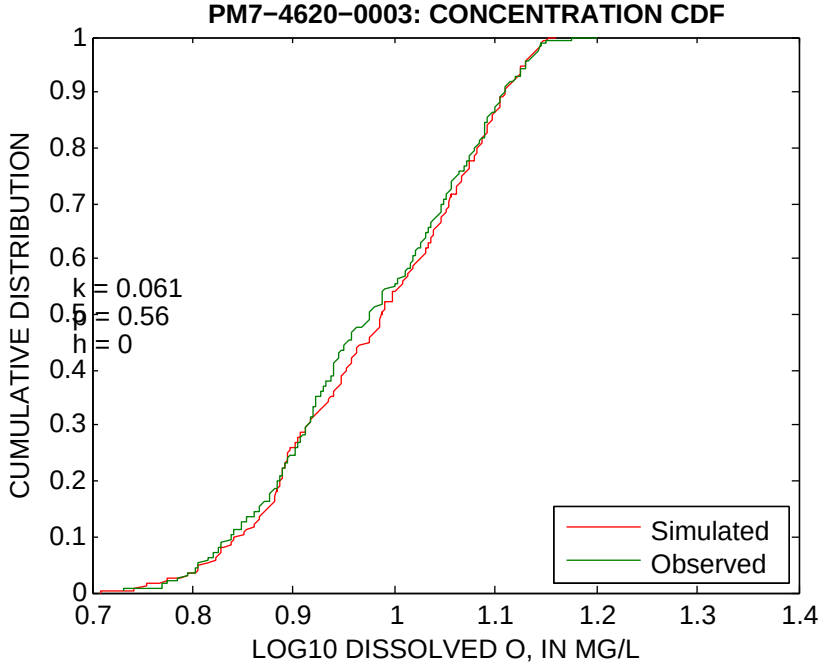


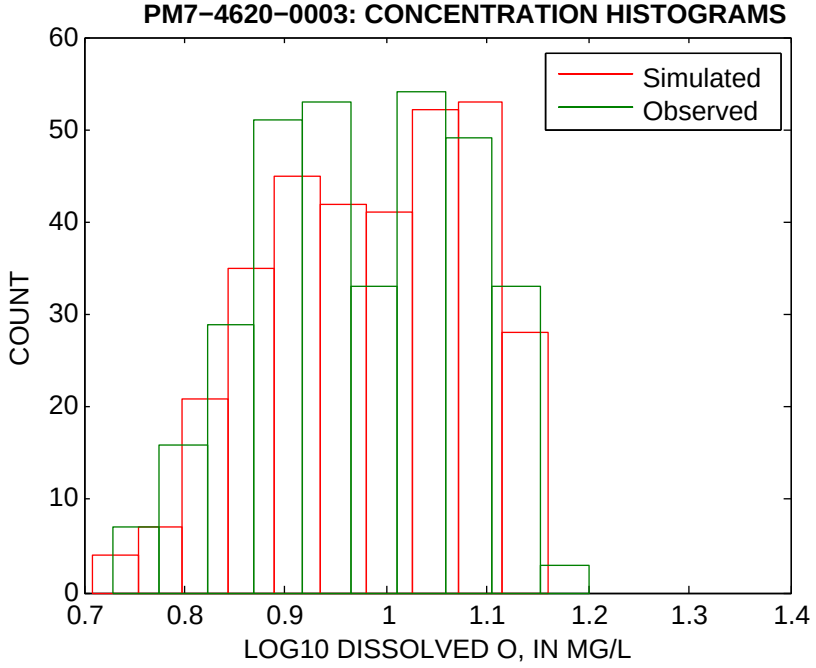
VERSION 2.1

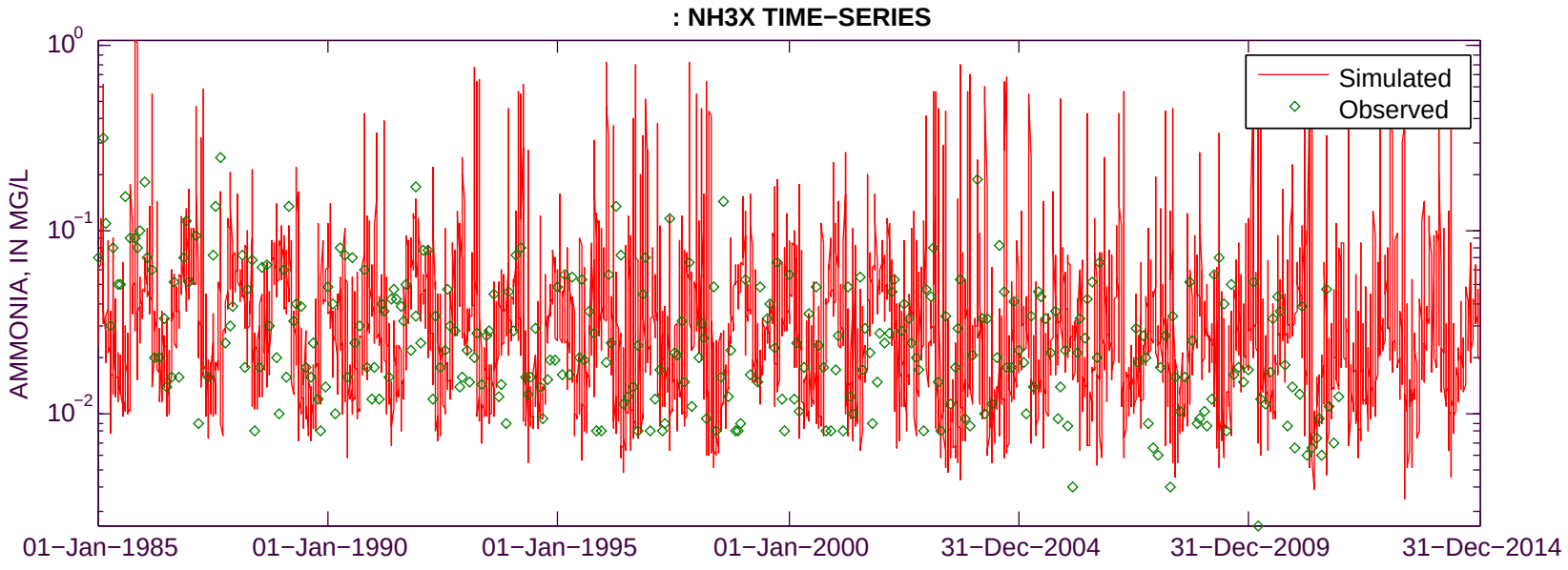
ALL DATA
LOG10

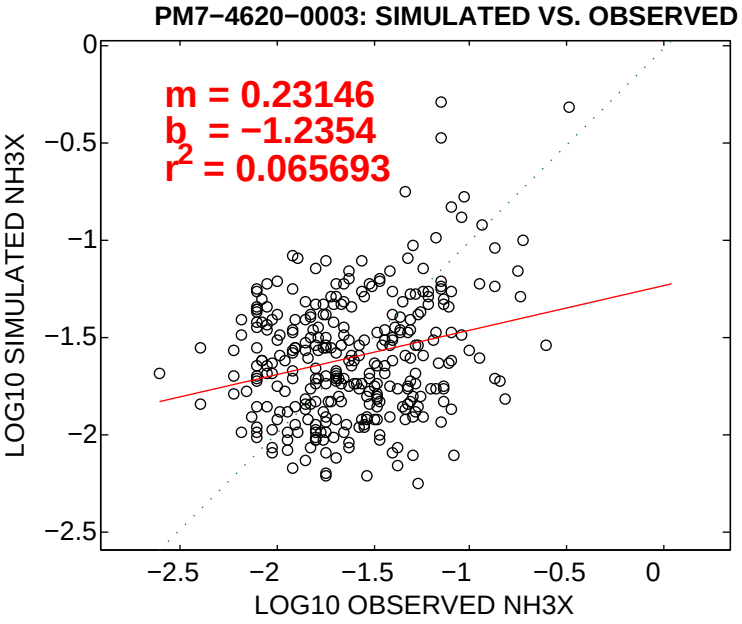


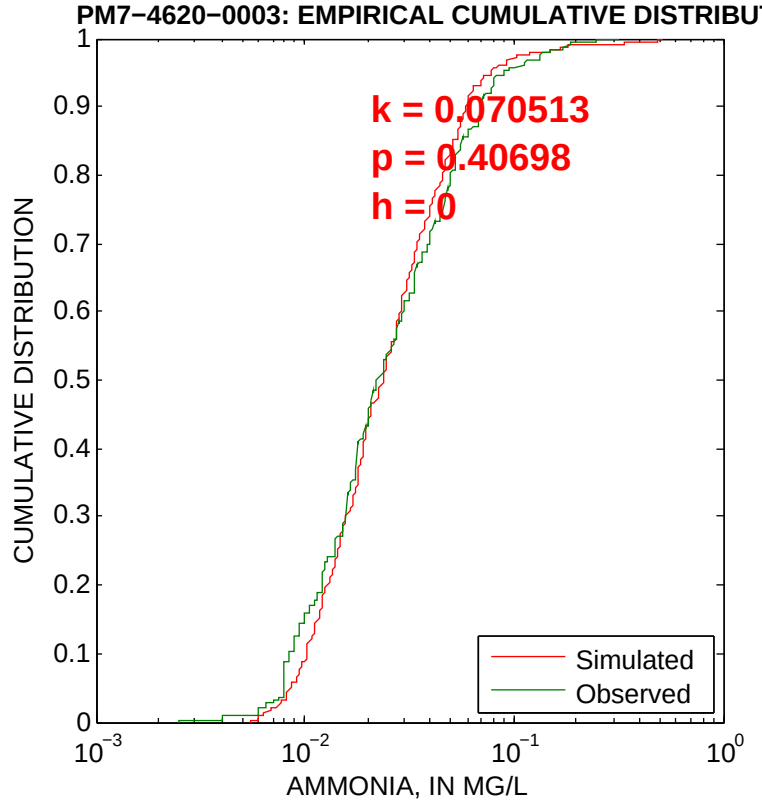












DATA SELECTION

scenario	file
P620171001WQ	NH3X.calib

plot: NH3X - ammonia

Dates: 1/1/1985 – 12/31/201

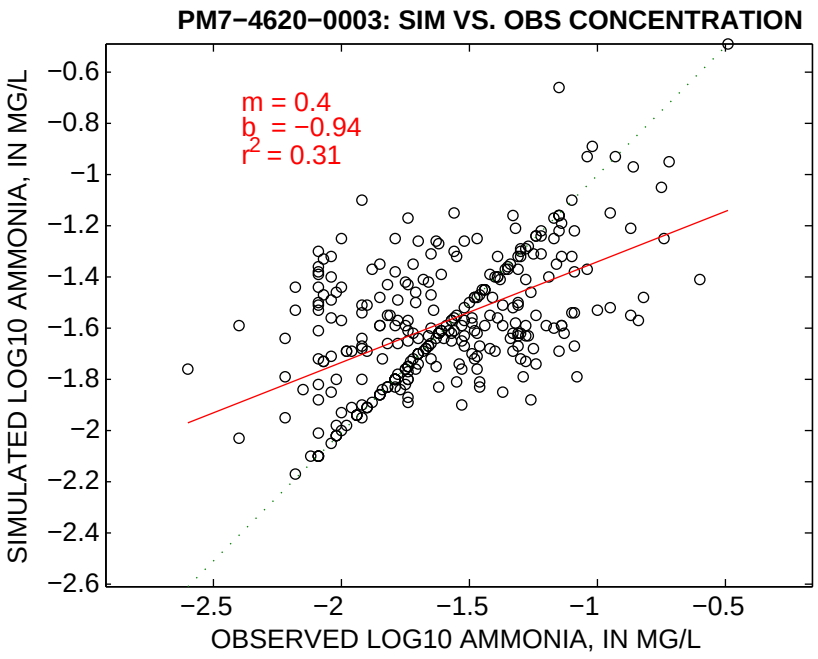
Drive	Directory	Observed
N/A	model	OBS20161101

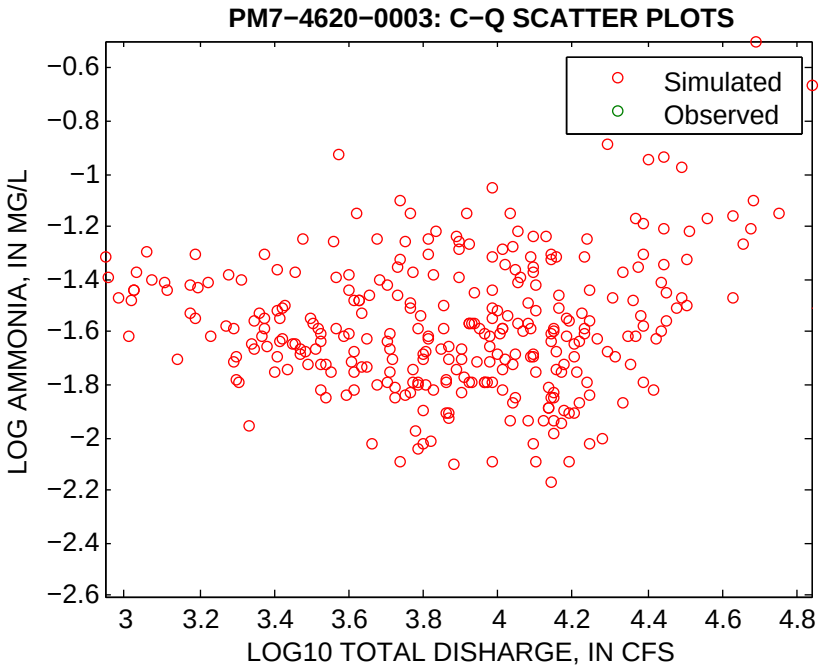
STATISTICS

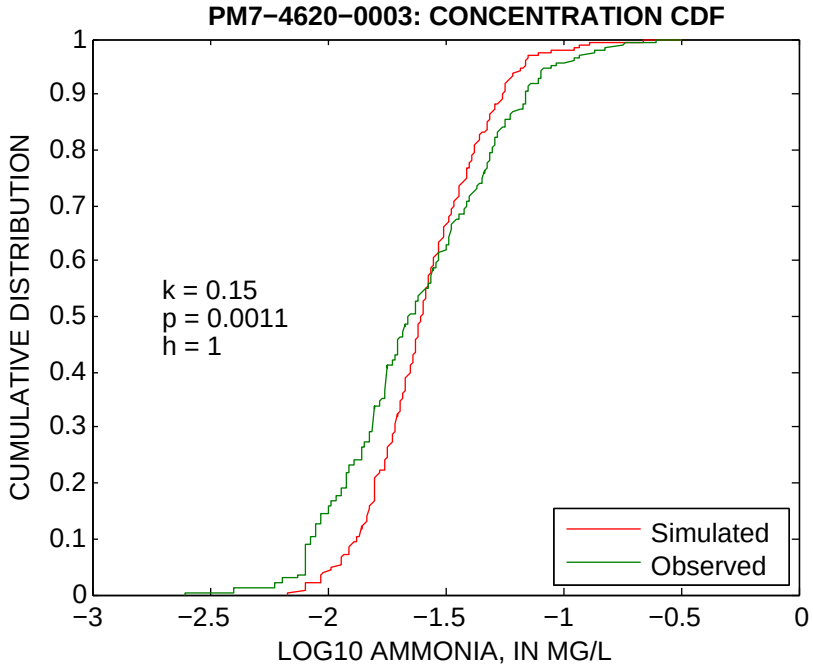
n	312	312
	observe	**simulate**
min	0.0025	0.0055593
	-2.60206	-2.25498
mean	0.0348107	0.0344531
	-1.60877	-1.60776
media	0.02225	0.0237305
	-1.6527	-1.6247
max	0.32	0.51299
	-0.49485	-0.289891
varian	0.00129104	0.00228968
	0.123402	0.100639
JB	0.001	0.001
	0.079798	0.001
	ra	log
%	-1.0274	-0.0628569
err.va	0.00210384	0.166916
rel.std.err	1.62958	1.35262
mod.eff	-0.629575	-0.35262

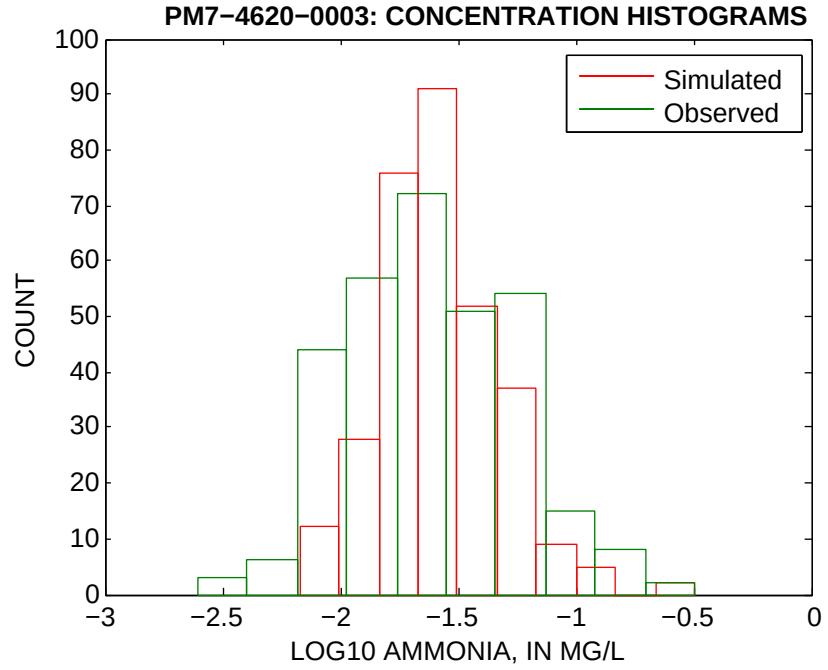
VERSION 3.1

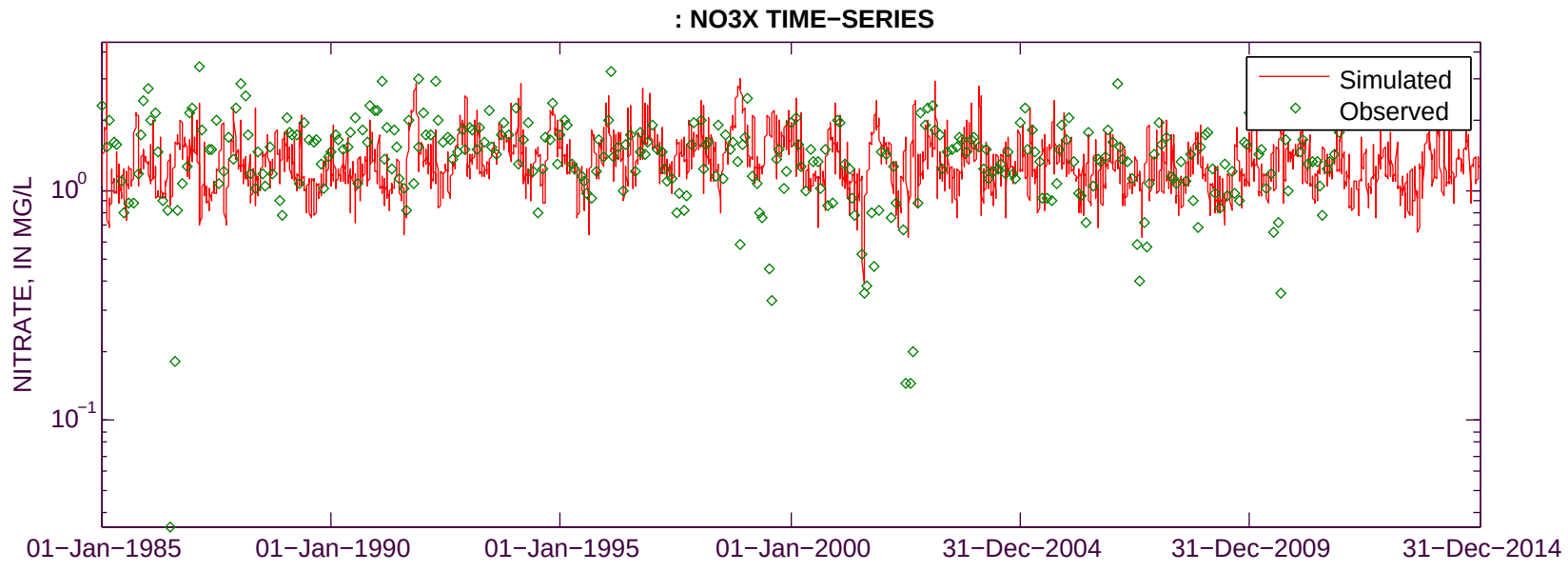
ALL DATA
LOG10

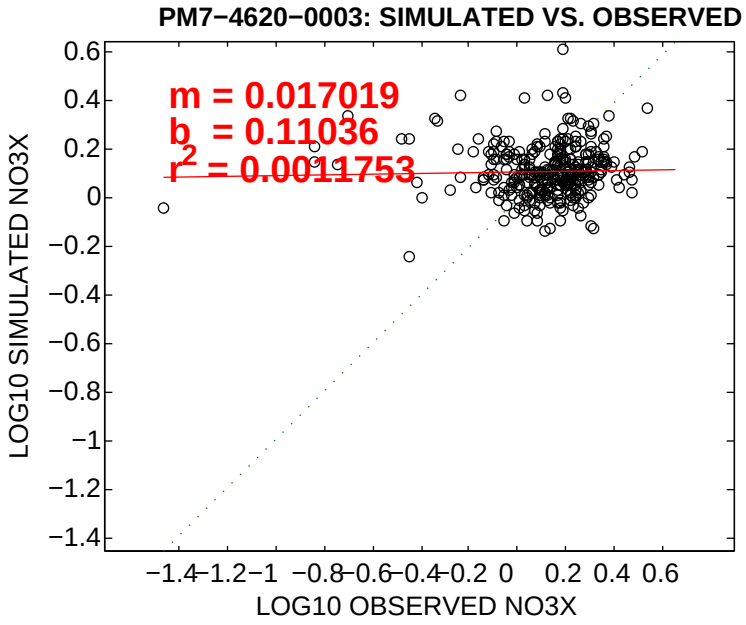


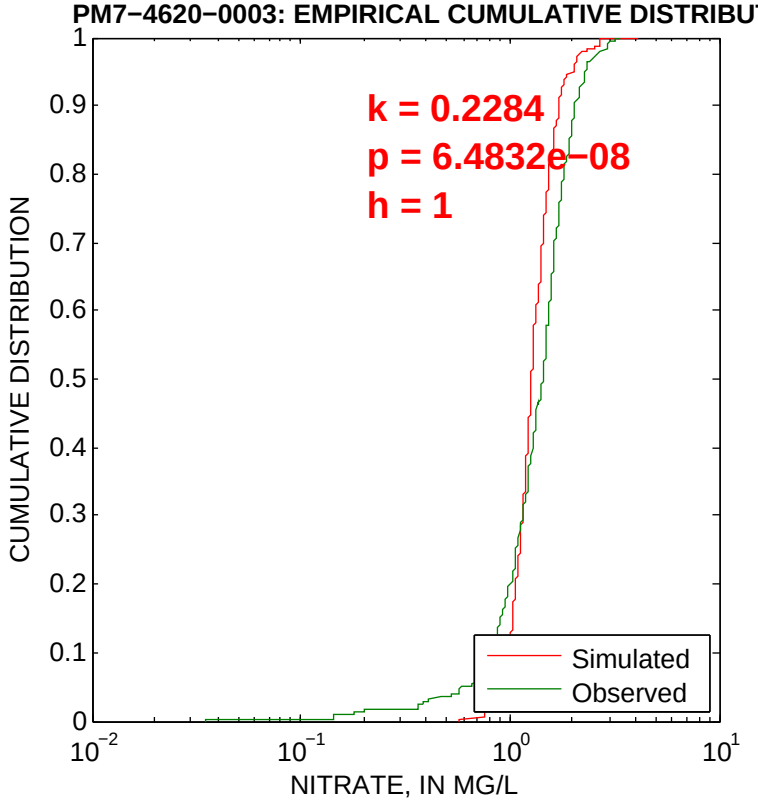












DATA SELECTION

scenario	file
P620171001WQ	NO3X.calib

plot: NO3X - nitrate

Dates: 1/1/1985 – 12/31/201

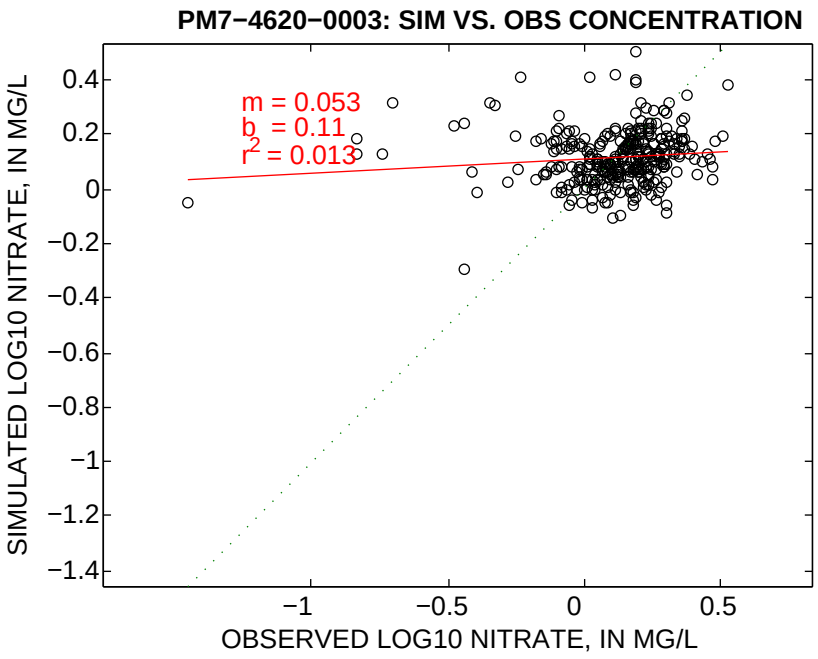
Drive	Directory	Observed
N/A	model	OBS20161101

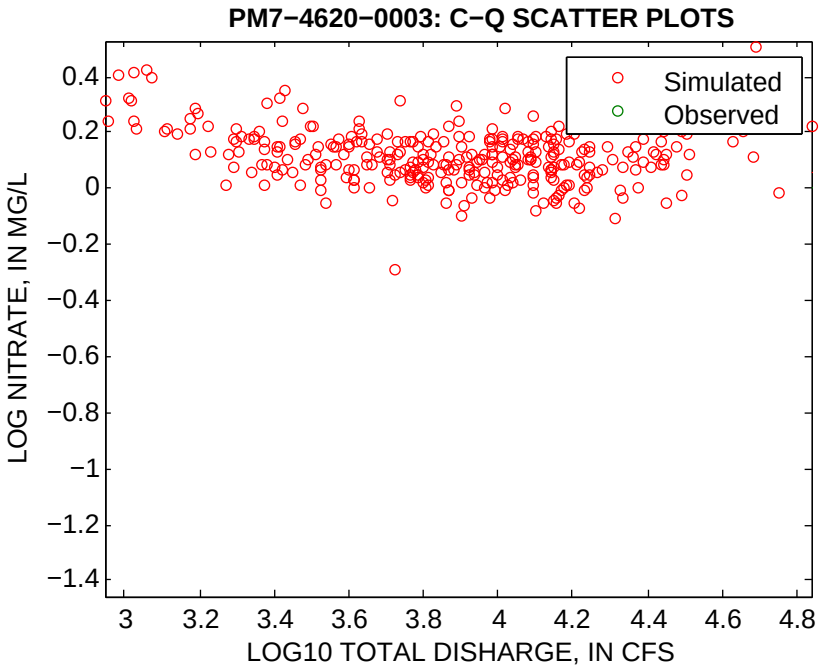
STATISTICS

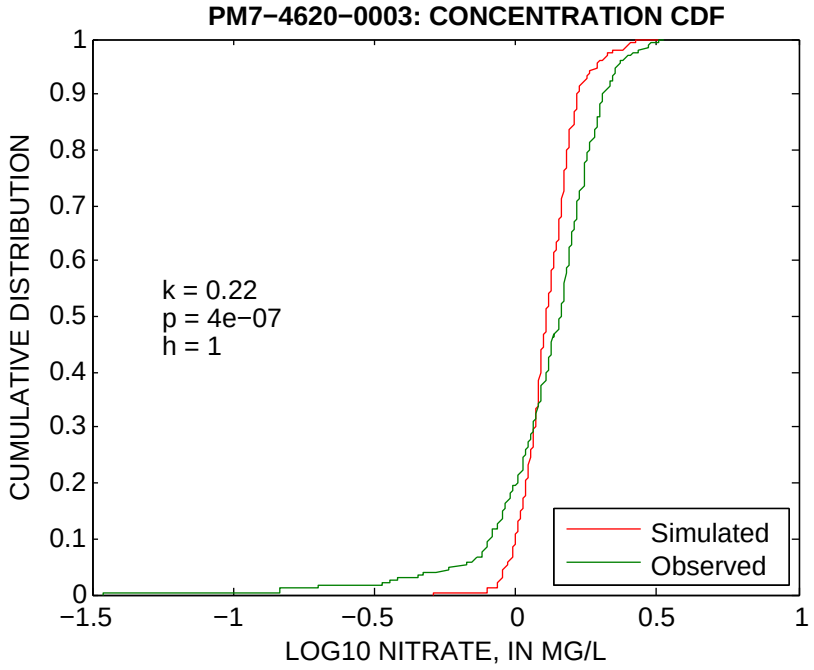
	n	observe	simulate
		324	324
min		0.035	0.57616
		-1.45593	-0.239457
mean		1.43468	1.3359
		0.11785	0.112362
media		1.4475	1.26125
		0.160618	0.100801
max		3.38	4.0874
		0.528917	0.611447
varian		0.282851	0.132209
		0.0448939	0.0110637
JB		0.001655	0.001
		0.001	0.001
		ra	log
% err.va		-6.88533	-4.65675
		0.402378	0.0544597
rel.std.err		1.42258	1.21308
mod.eff		-0.422577	-0.213076

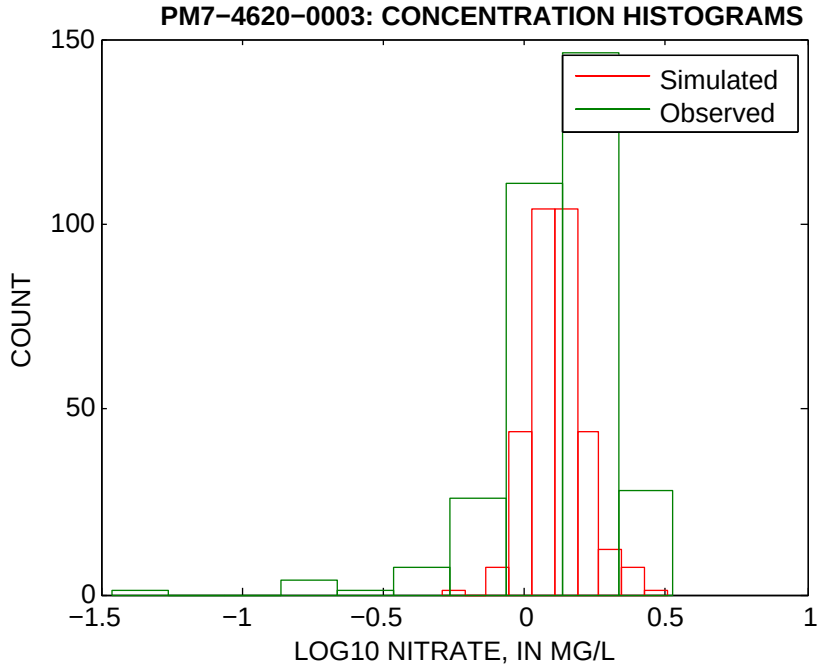
VERSION 2.1

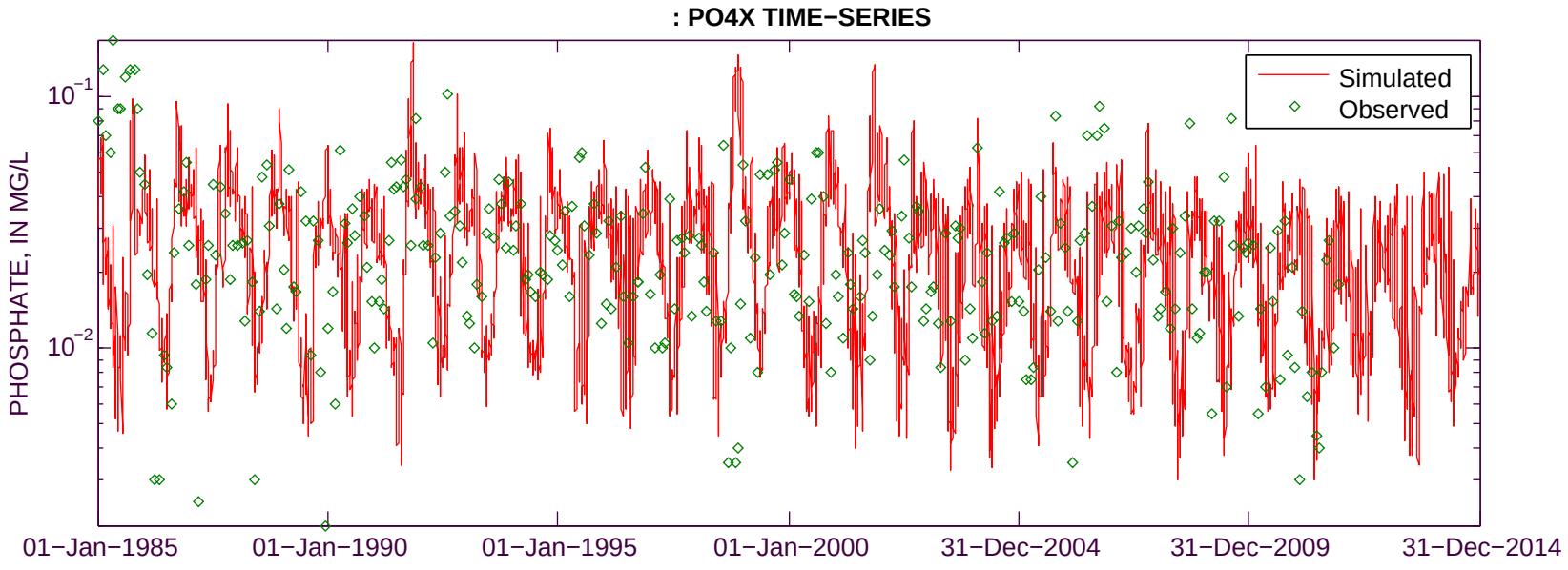
ALL DATA
LOG10

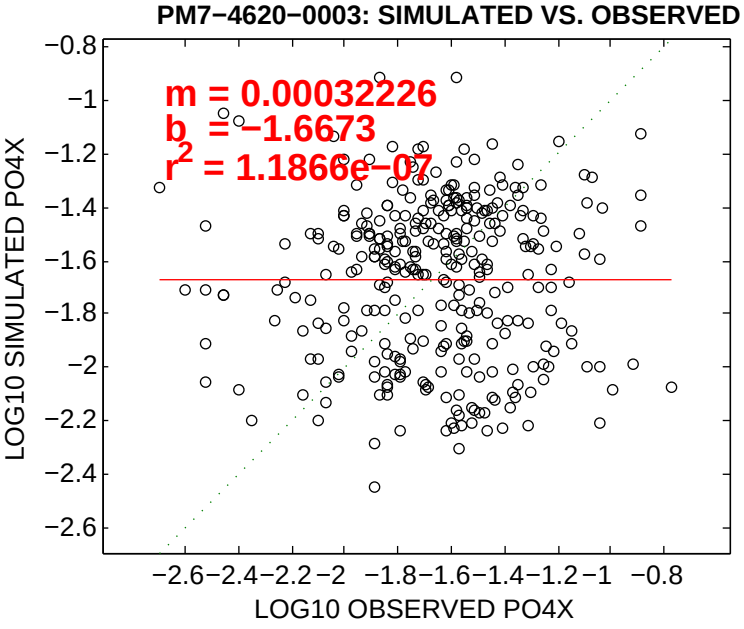


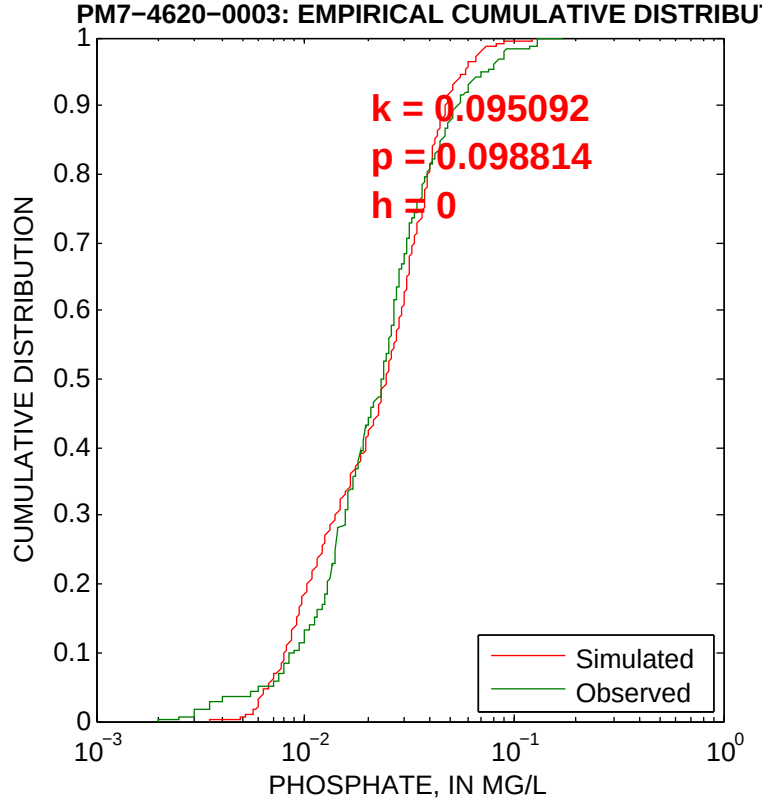












DATA SELECTION

scenario	file
P620171001WQ	PO4X.calib

plot: PO4X - phosphate

Dates: 1/1/1985 – 12/31/201

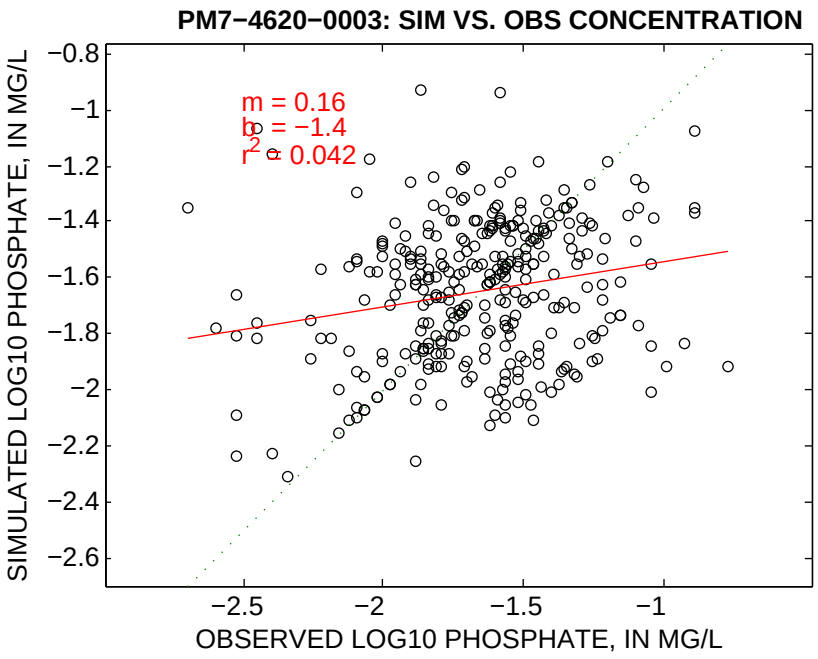
Drive	Directory	Observed
N/A	model	OBS20161101

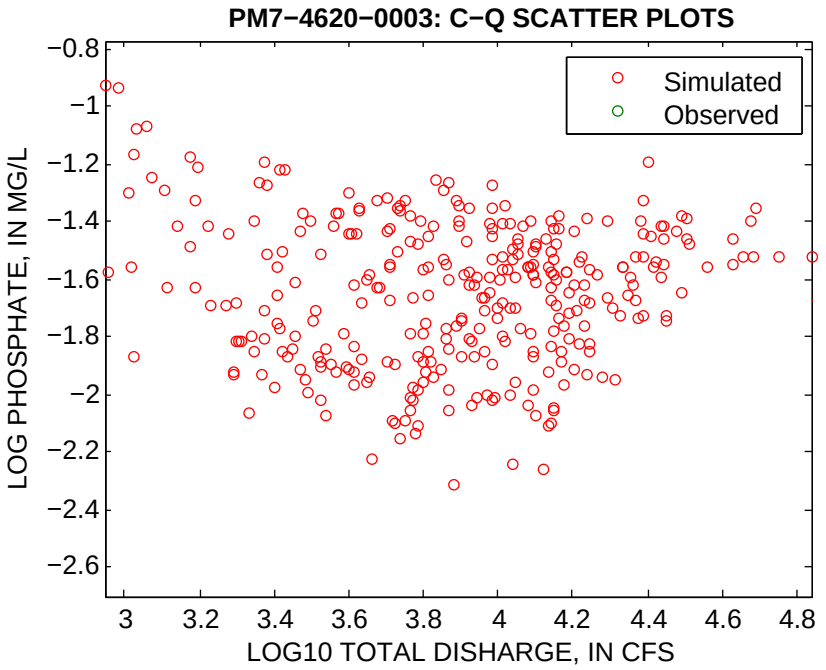
STATISTICS

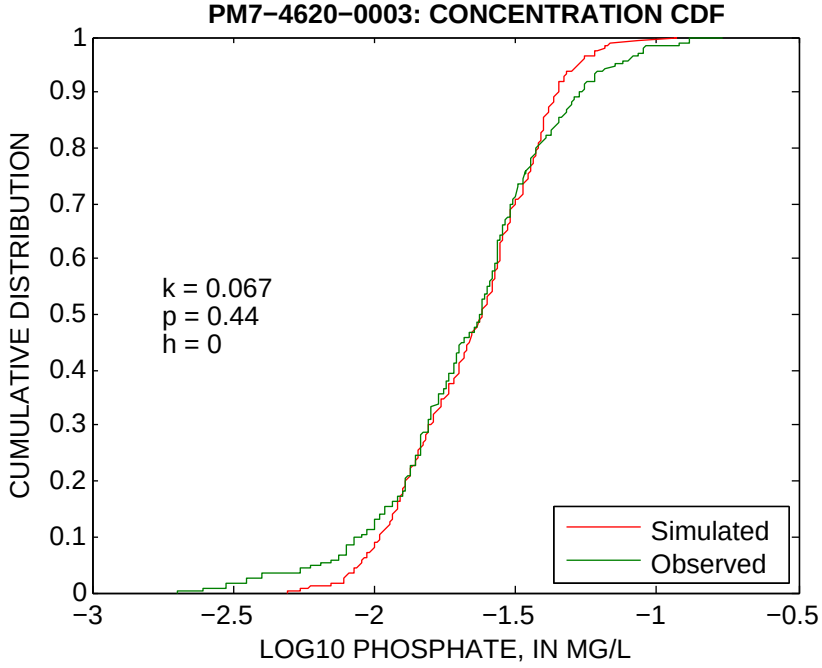
	n	326	326
		observe	simulate
min		0.002	0.0035084
		-2.69897	-2.45489
mean		0.0283919	0.0267247
		-1.65791	-1.66787
media		0.02375	0.024262
		-1.62436	-1.61507
max		0.17	0.12362
		-0.769551	-0.907911
varian		0.00050930	0.00031398
		0.101663	0.0889773
JB		0.001	0.001
		0.012499	0.012818
		ra	log
%		-5.87217	0.60109
err.va		0.00082365	0.190675
rel.std.err		1.61721	1.87555
mod.eff		-0.617211	-0.875549

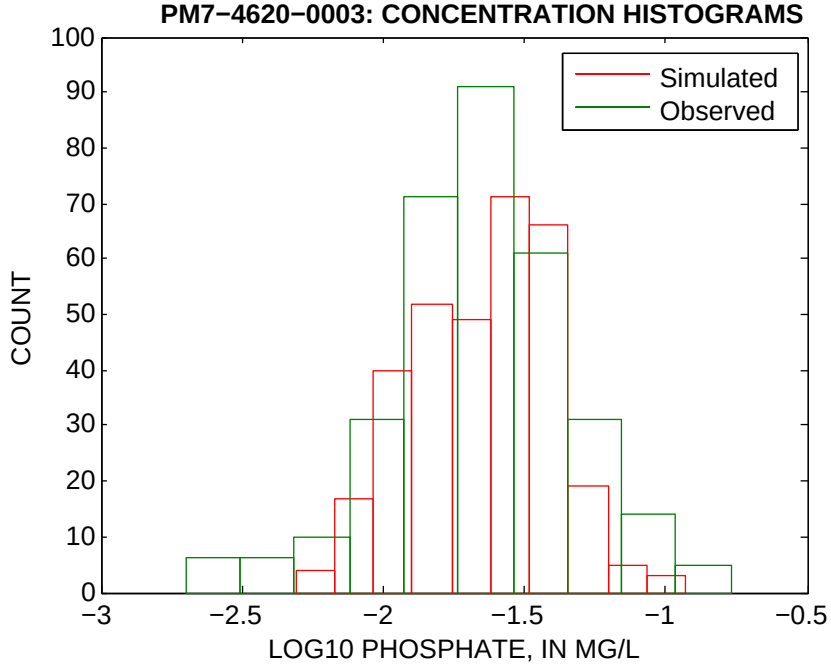
VERSION 2.1

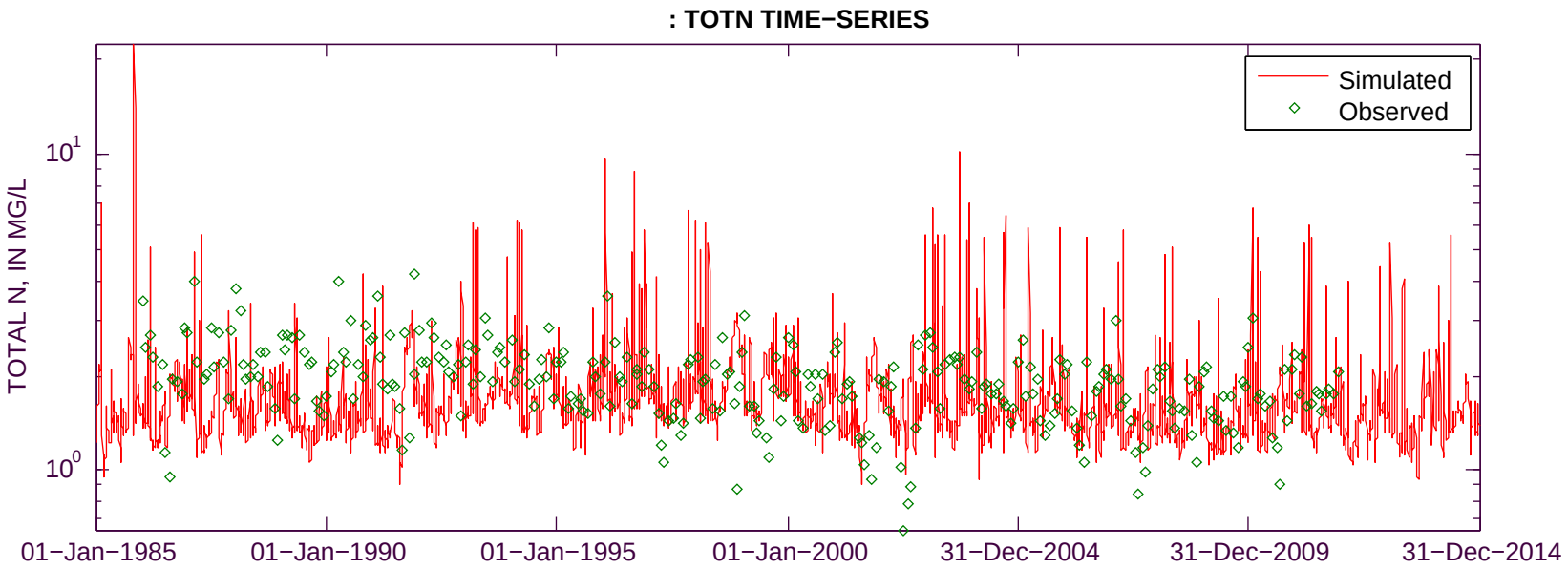
ALL DATA
LOG10

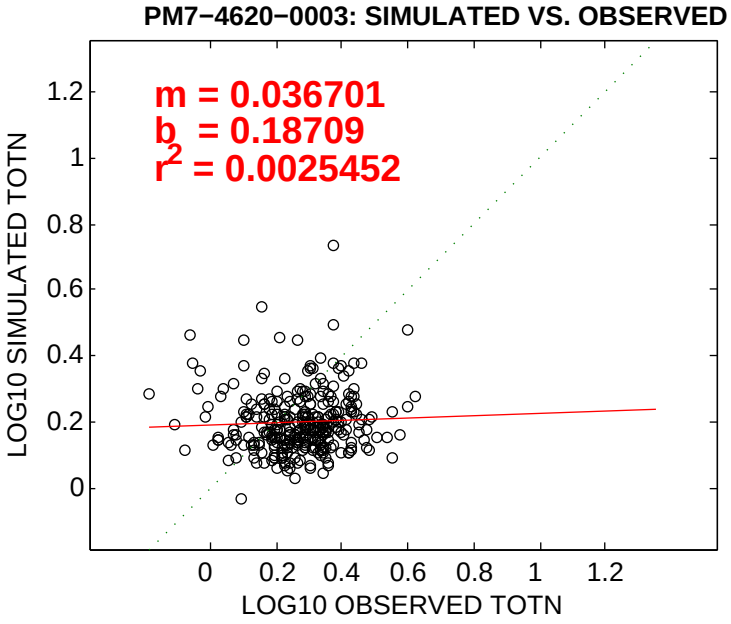


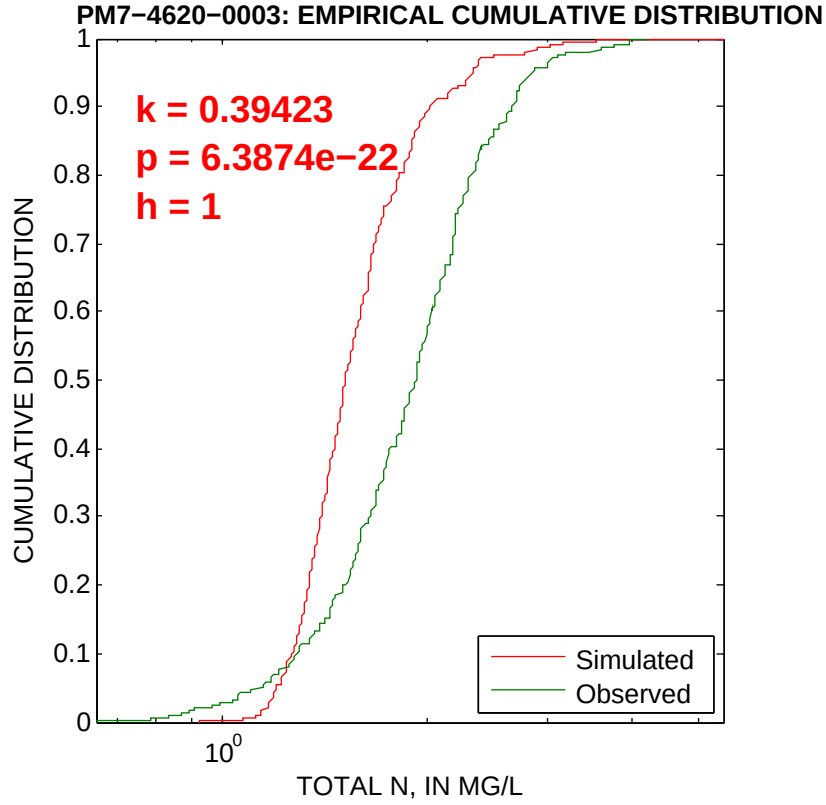












DATA SELECTION

scenario	file
P620171001WQ	TOTN.calib

plot: TOTN - total nitrogen

Dates: 1/1/1985 – 12/31/201

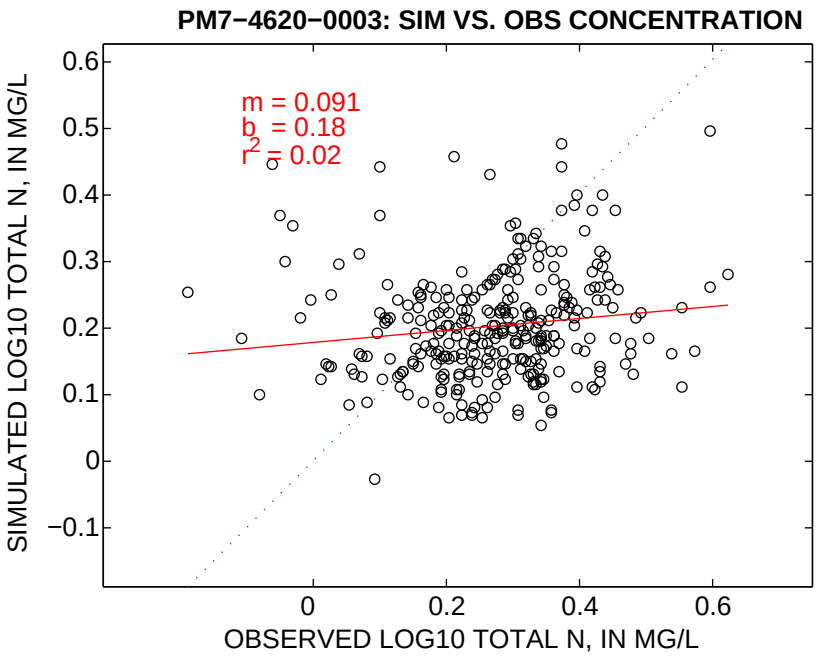
Drive	Directory	Observed
N/A	model	OBS20161101

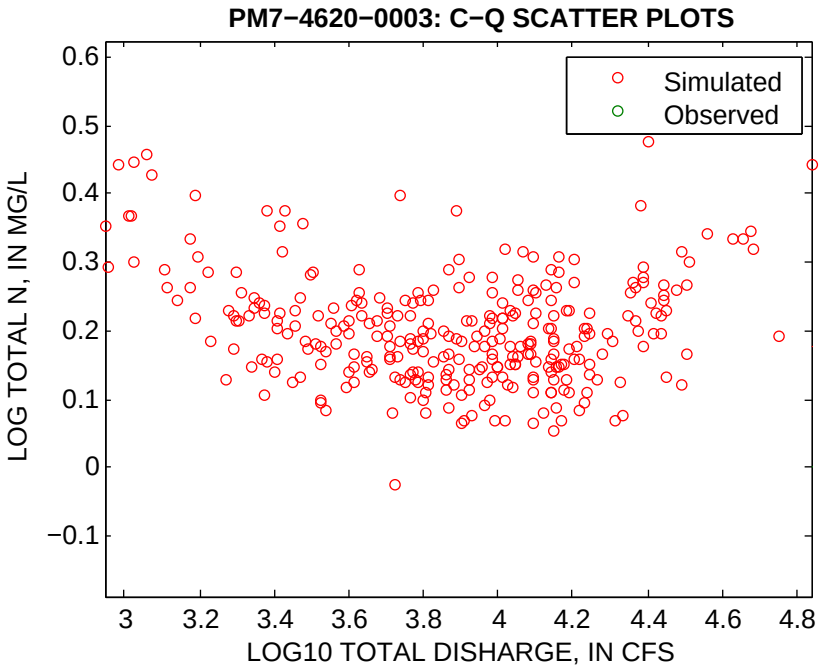
STATISTICS

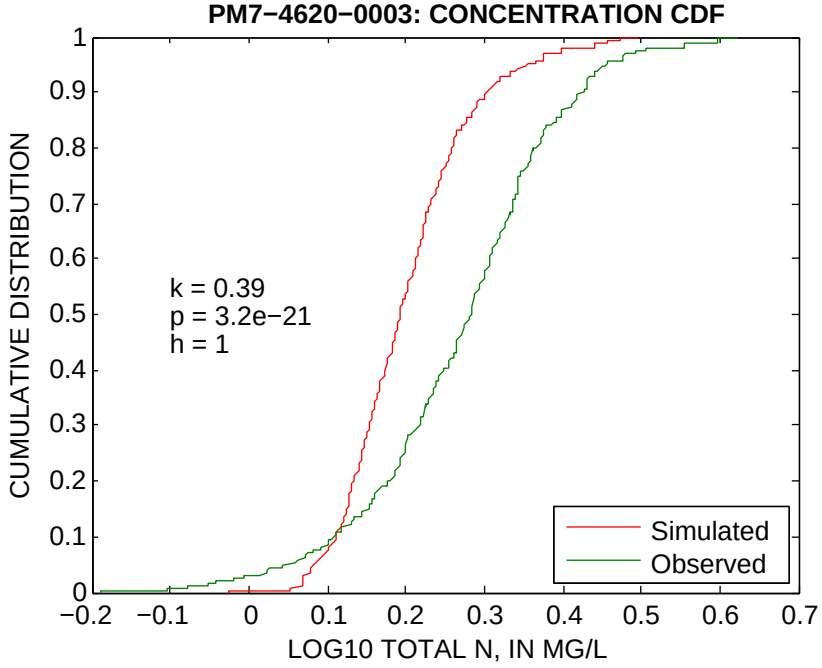
		observe	simulate
n		312	312
min		0.65	0.9258
		-0.187087	-0.0334828
mean		1.94575	1.6136
		0.271434	0.197048
media		1.9275	1.51355
		0.284994	0.179997
max		4.2	5.4295
		0.623249	0.73476
varian		0.308494	0.174157
		0.0158265	0.00837546
JB		0.001	0.001
		0.007879	0.001
		ra	log
%		-17.0707	-27.4048
err.va		0.557554	0.0285914
rel.std.err		1.80734	1.80655
mod.eff		-0.807339	-0.806548

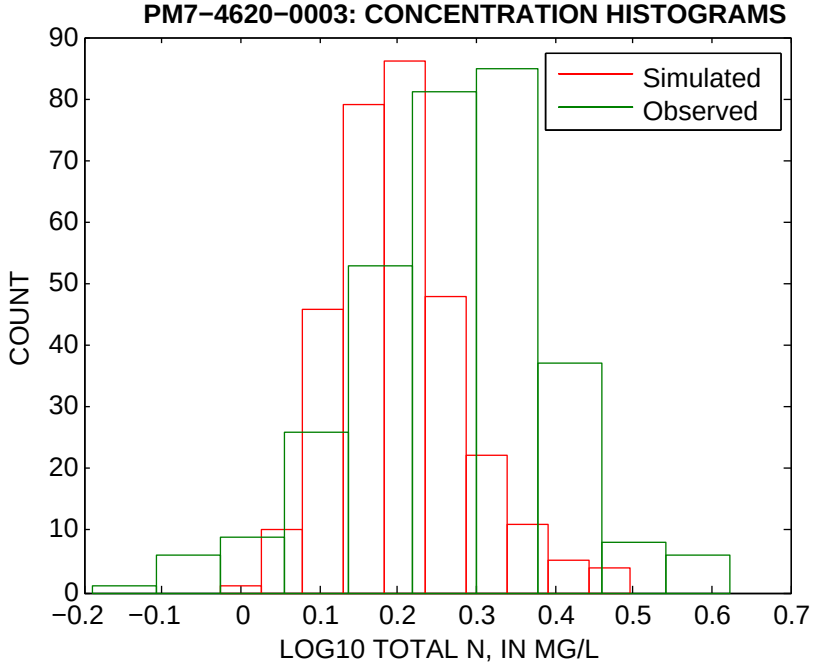
VERSION 2.1

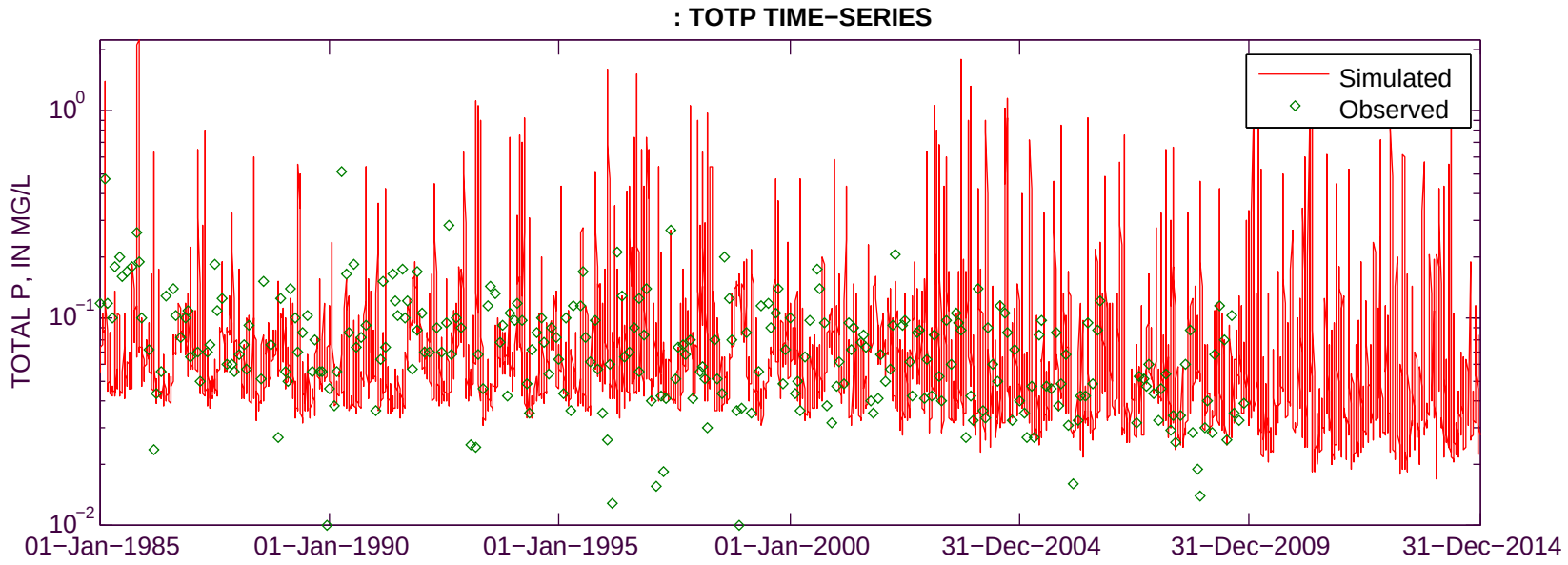
ALL DATA
LOG10

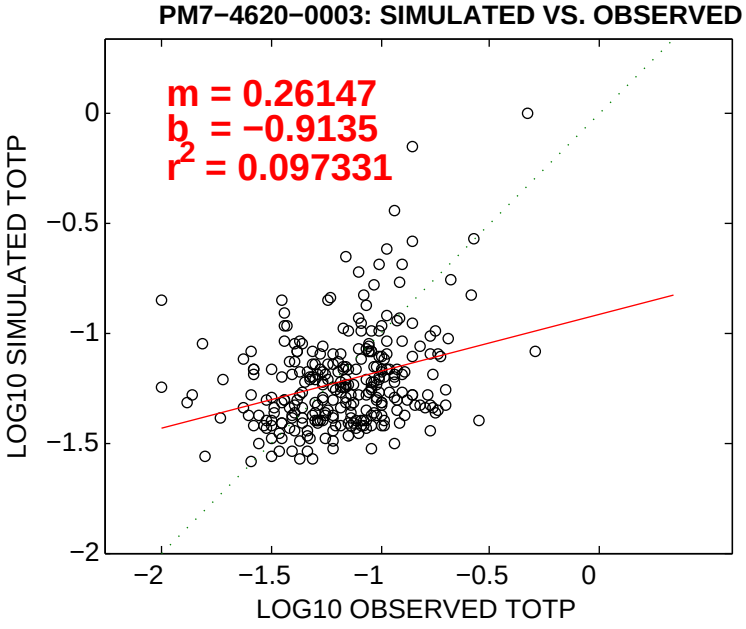


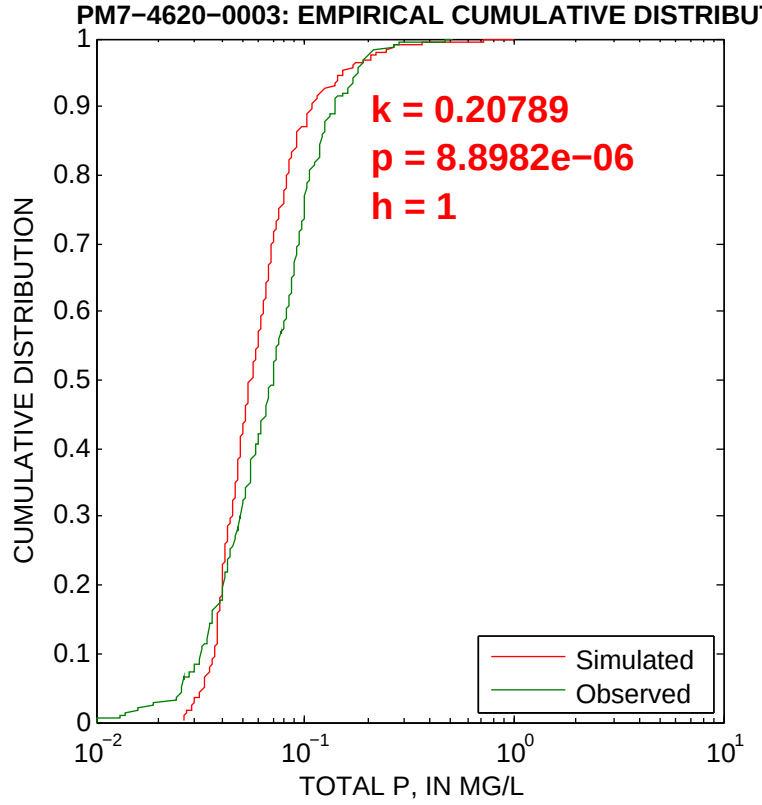












DATA SELECTION

scenario	file
P620171001WQ	TOTP.calib

plot: TOTP - total phosphorus

Dates: 1/1/1985 – 12/31/201

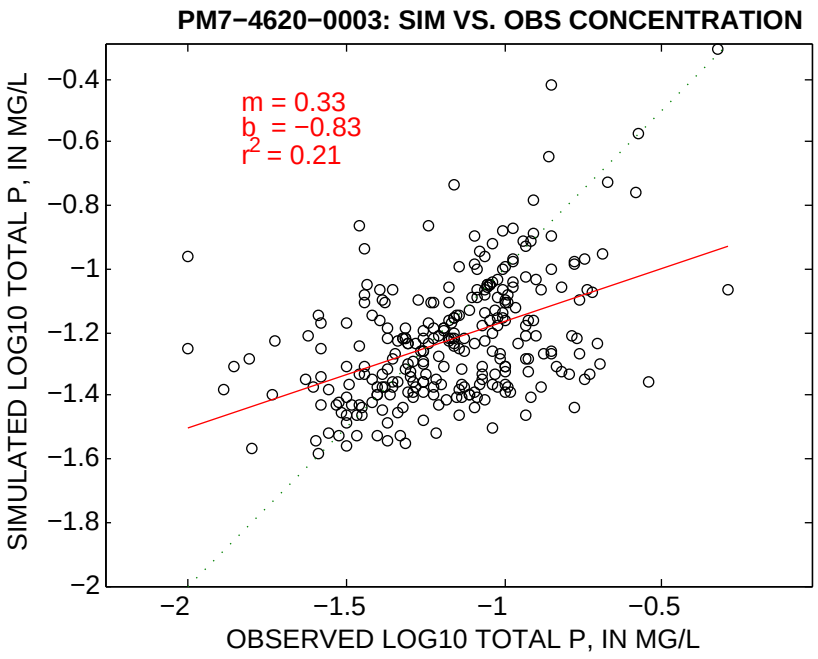
Drive	Directory	Observed
N/A	model	OBS20161101

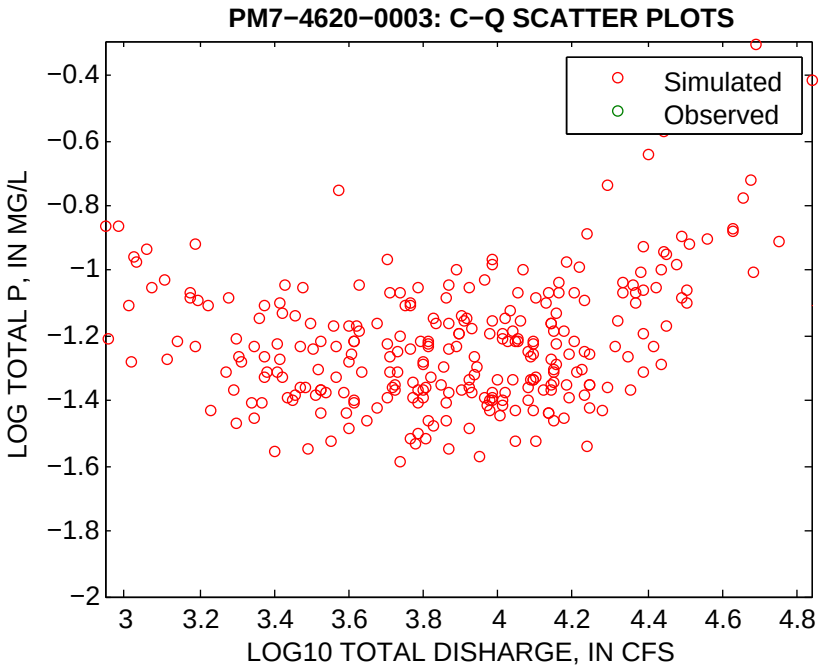
STATISTICS

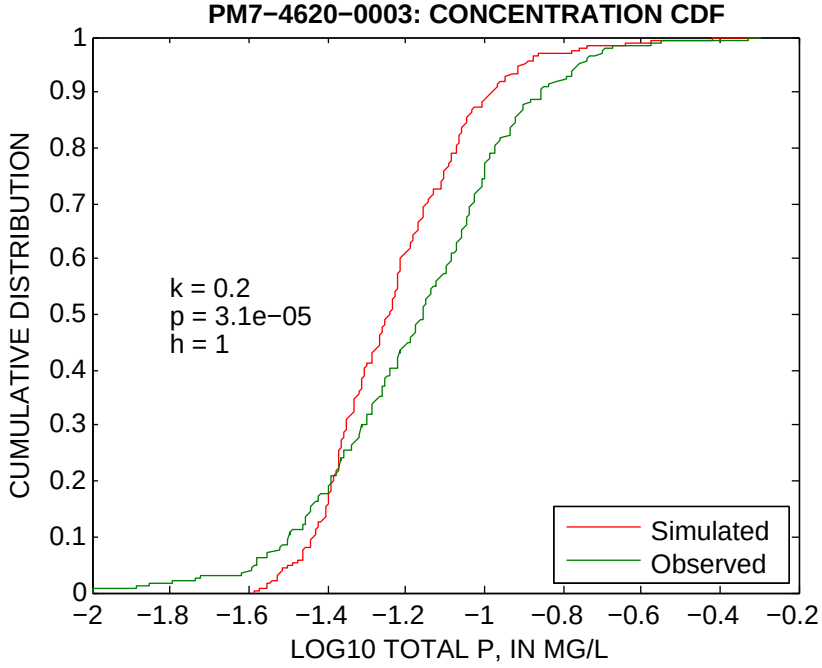
	n	279	279
		observe	simulate
min		0.01	0.025848
		-2	-1.58757
mean		0.0812319	0.0726549
		-1.17061	-1.21958
media		0.07	0.055004
		-1.1549	-1.25961
max		0.5095	1.0186
		-0.292856	0.00800367
varian		0.00328618	0.00646931
		0.069859	0.0490696
JB		0.001	0.001
		0.069508	0.001
		ra	log
%		-10.5587	4.18262
err.va		0.00580491	0.0848025
rel.std.err		1.76646	1.21391
mod.eff		-0.766462	-0.21391

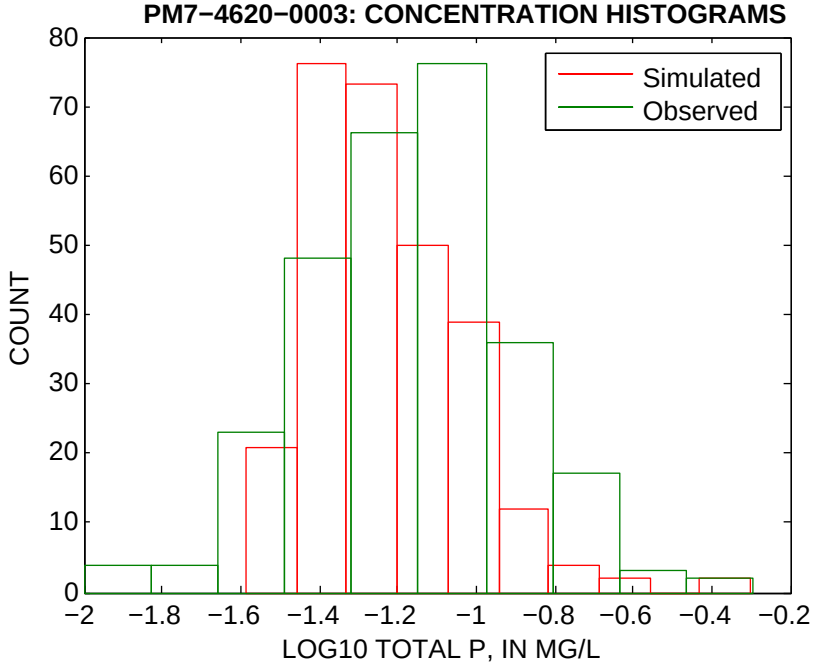
VERSION 2.1

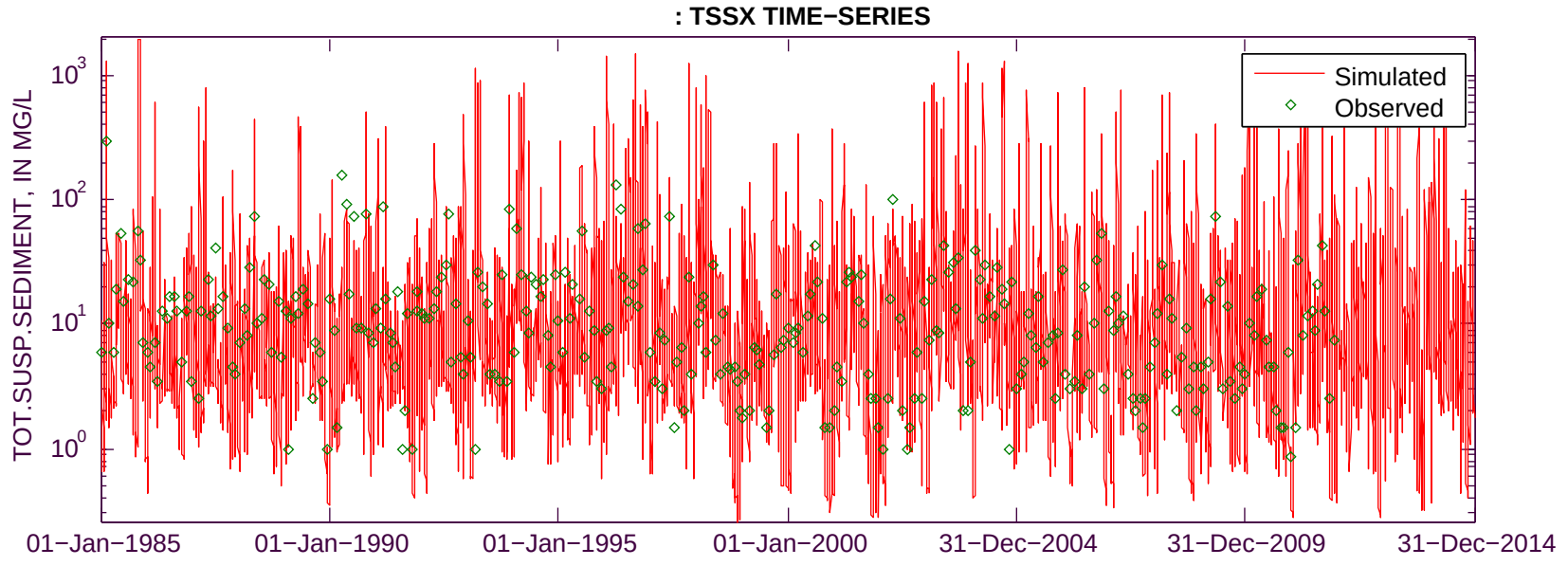
ALL DATA
LOG10

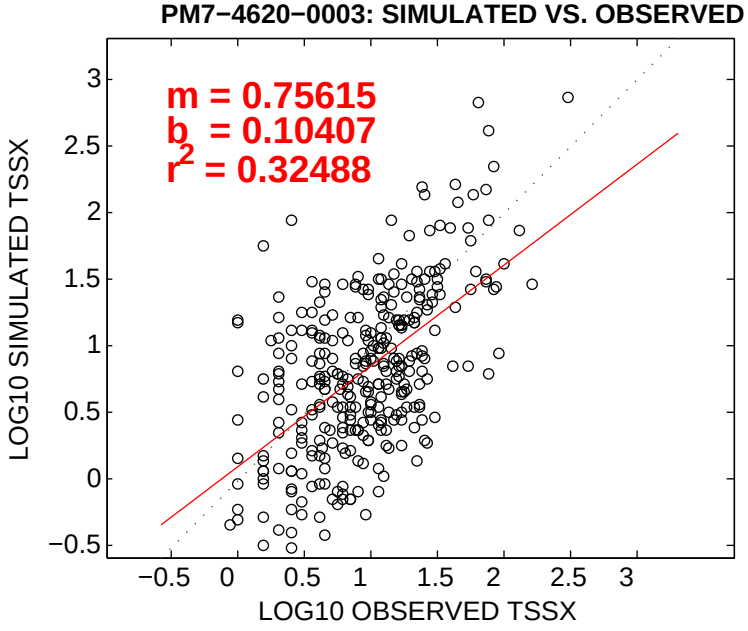


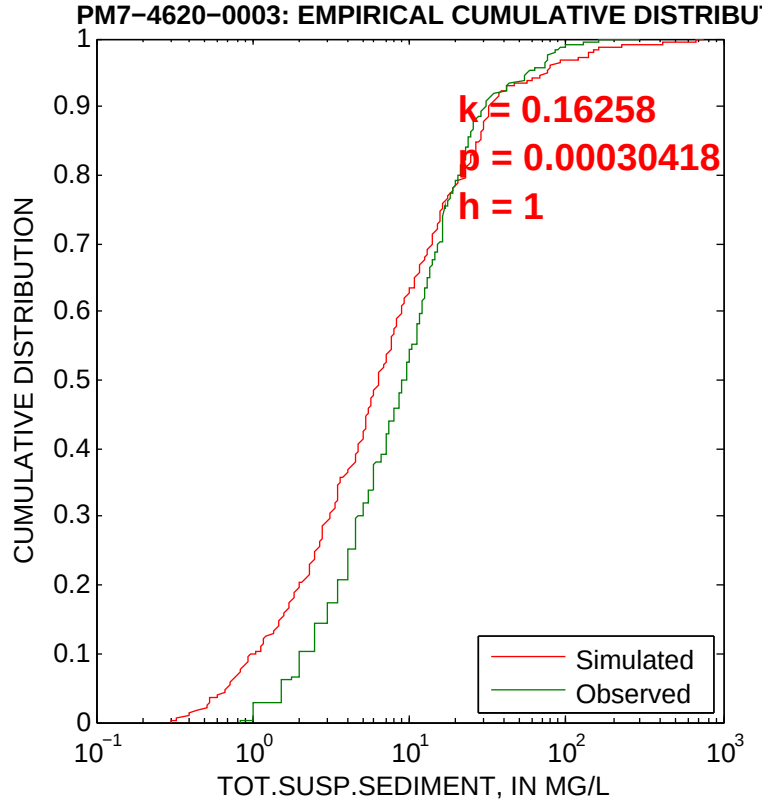












DATA SELECTION

scenario	file
P620171001WQ	TSSX.calib

plot: TSSX - total suspended ...

Dates: 1/1/1985 – 12/31/201

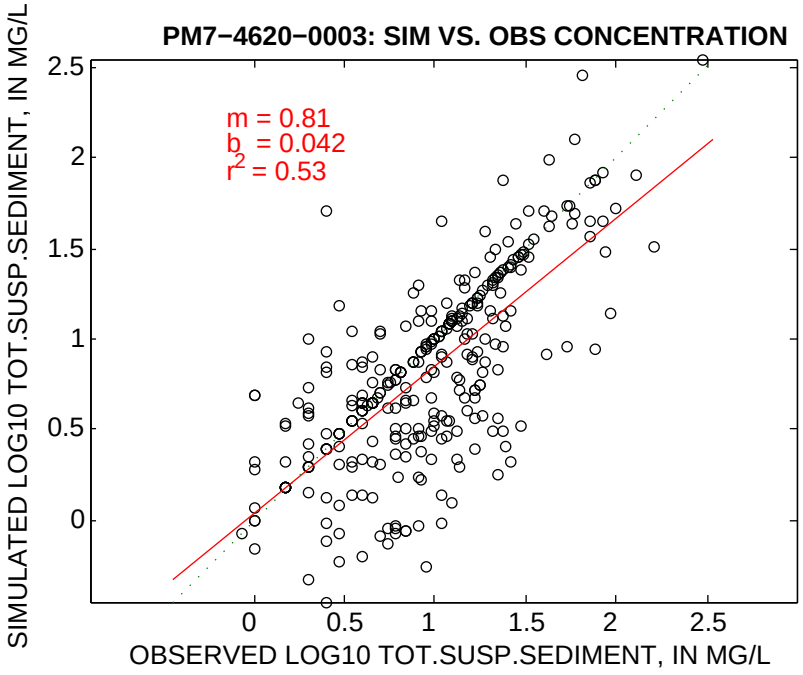
Drive	Directory	Observed
N/A	model	OBS20161101

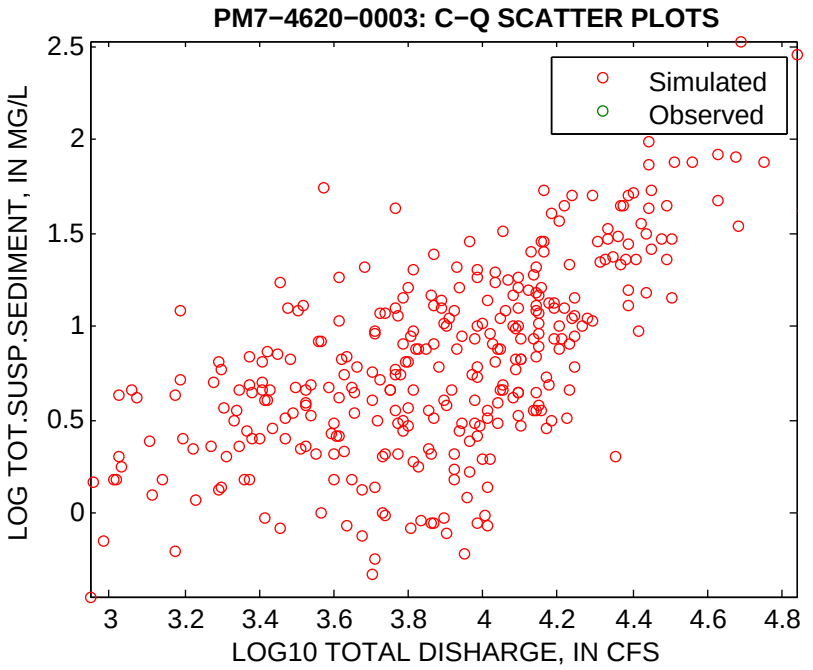
STATISTICS

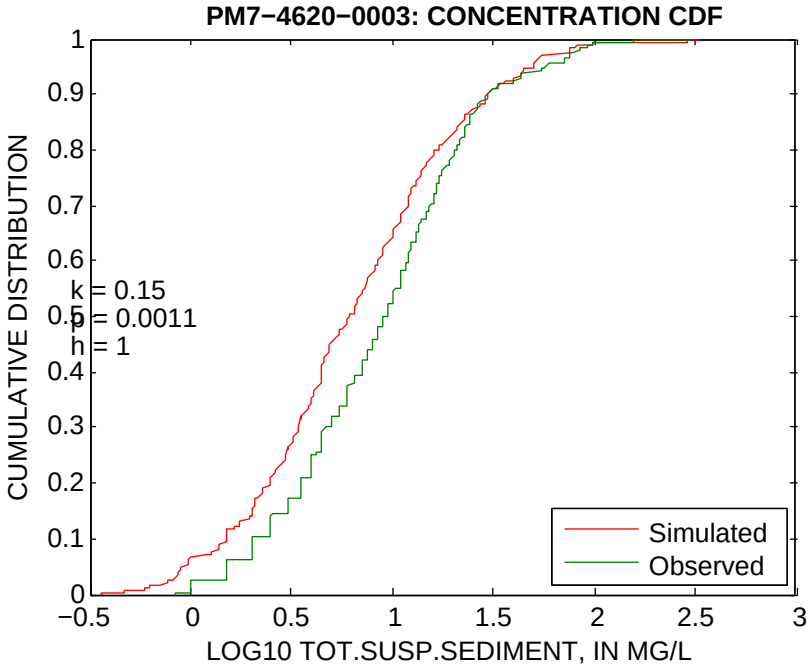
	n	observe	simulate
		326	326
min		0.85	0.30766
		-0.0705811	-0.511929
mean		15.8802	20.6172
		0.946966	0.820121
media		9.25	6.43665
		0.965983	0.808659
max		296	740.59
		2.47129	2.86958
varian		622.636	4146.97
		0.208438	0.366828
JB		0.001	0.001
		0.401349	0.062775
		ra	log
%		29.8291	-13.3949
err.va		2704.05	0.276185
rel.std.err		4.34291	1.32502
mod.eff		-3.34291	-0.325024

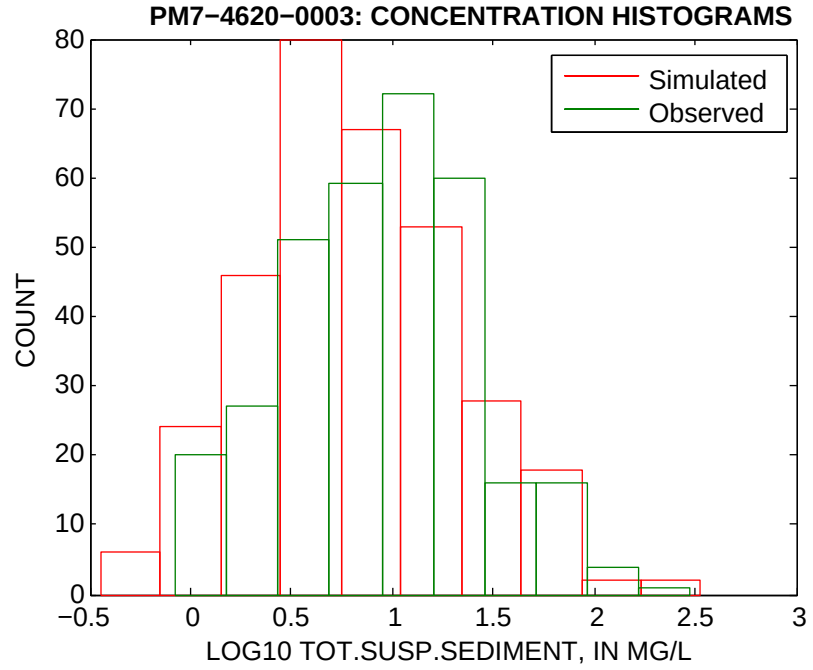
VERSION 2.1

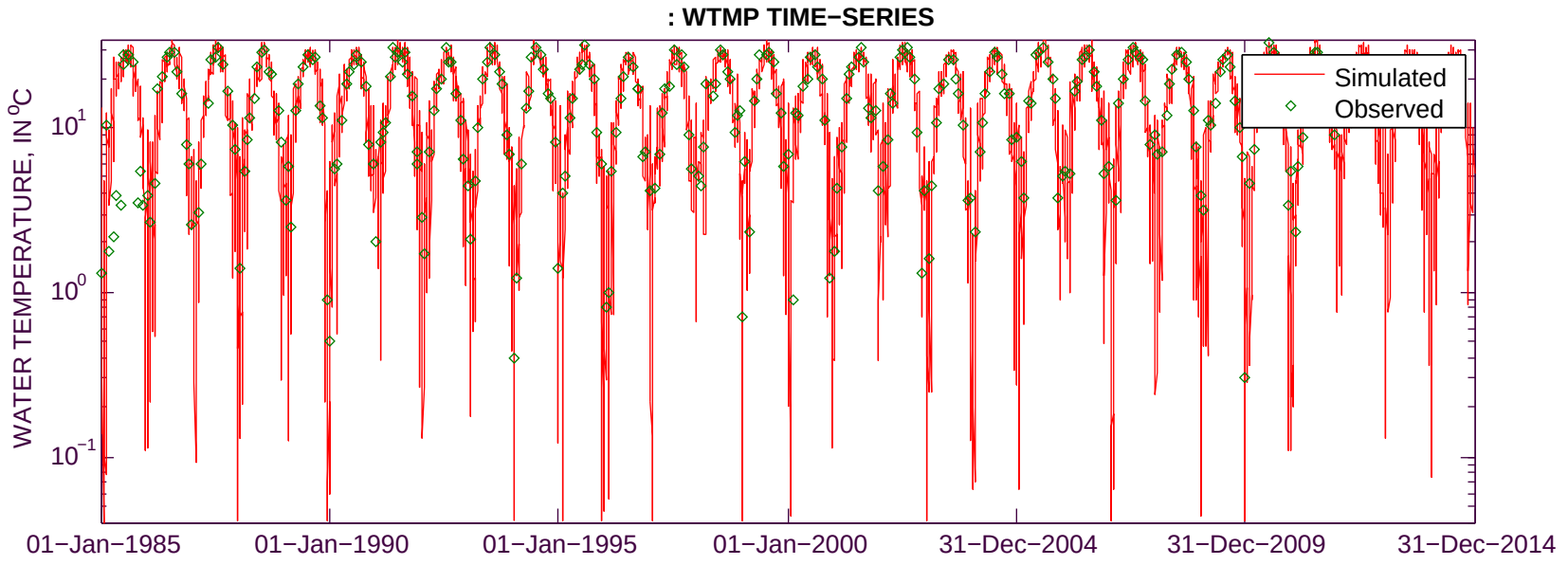
ALL DATA
LOG10

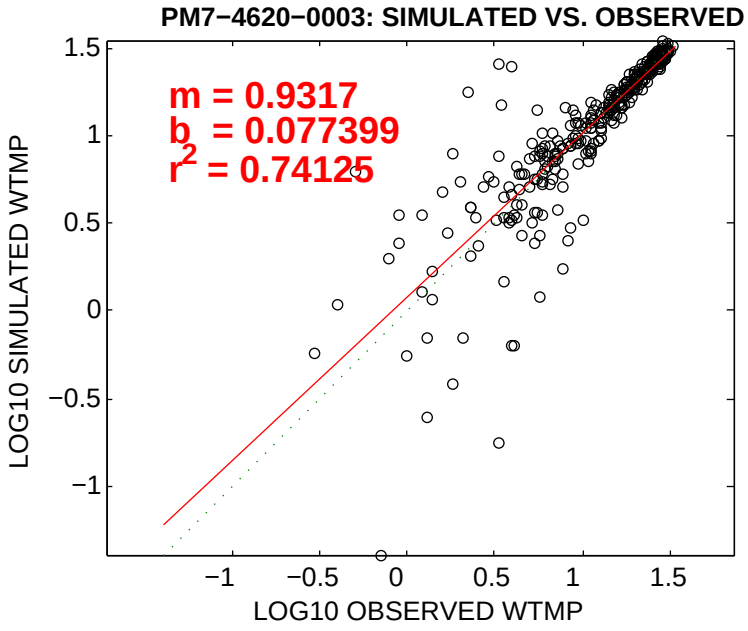


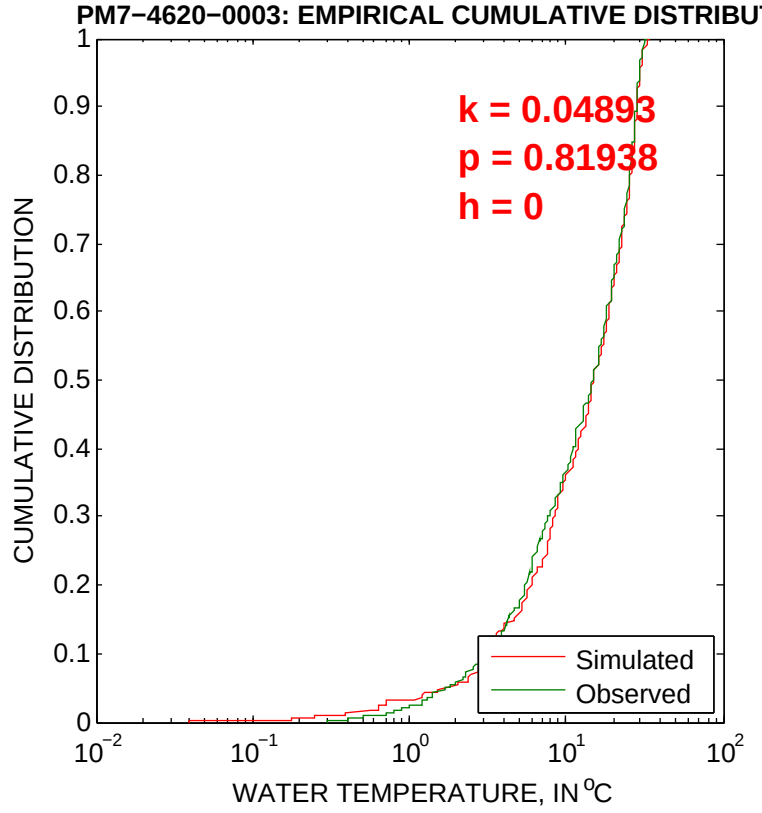












DATA SELECTION

scenario	file
P620171001WQ	WTMP.calib

plot: WTMP - water tempera...

Dates: 1/1/1985 – 12/31/201

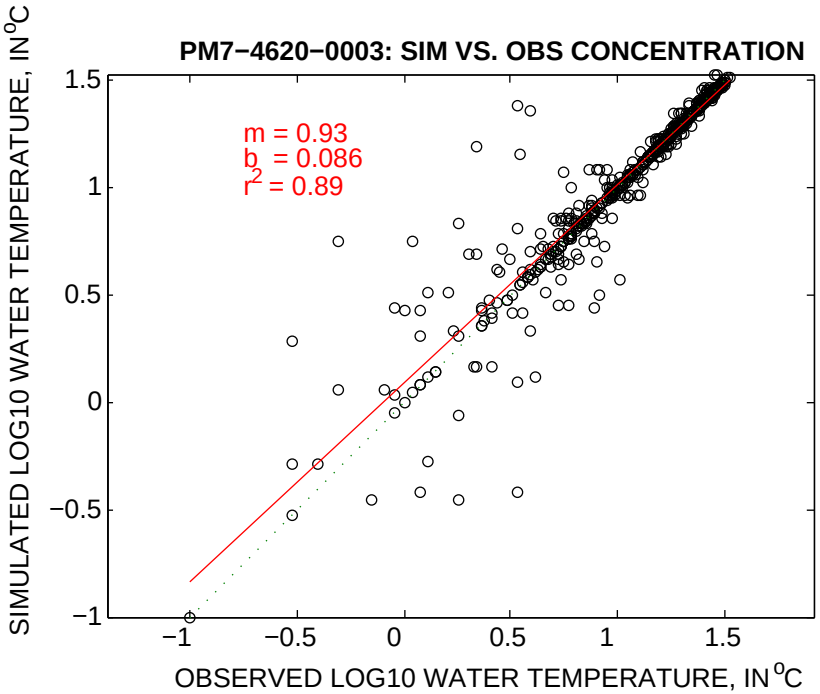
Drive	Directory	Observed
N/A	model	OBS20161101

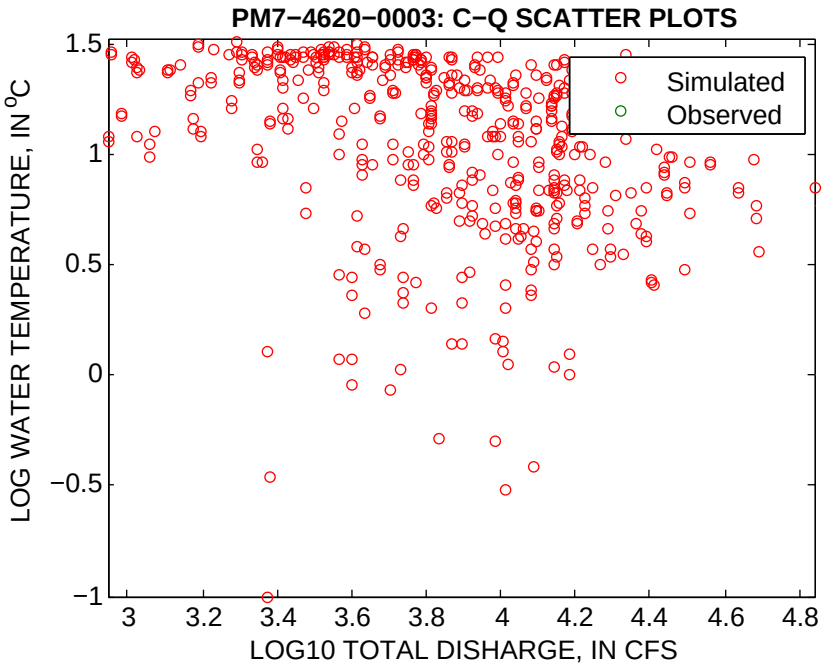
STATISTICS

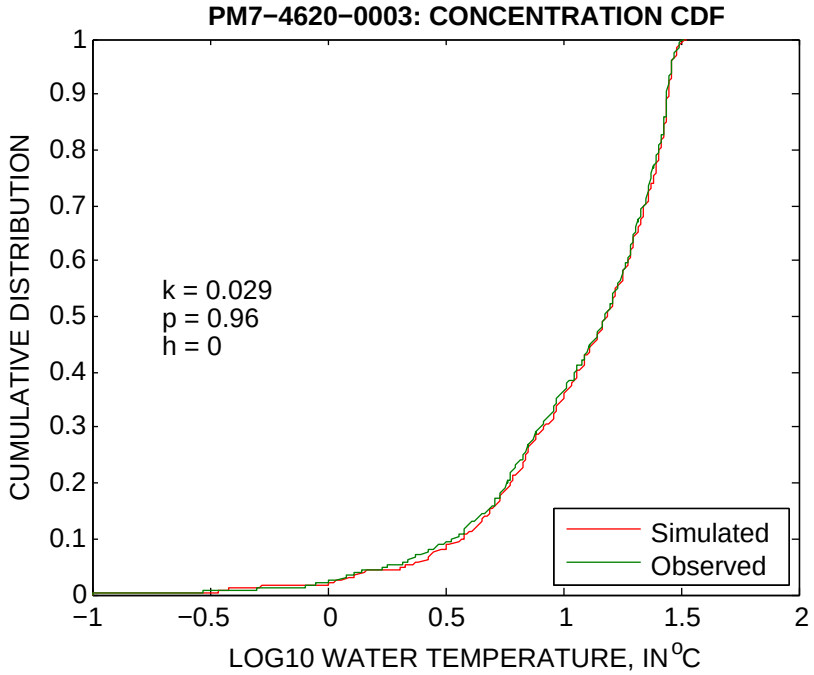
	n	327	327
		observe	simulate
min		0.3	0.040064
		-0.522879	-1.39725
mean		15.238	15.641
		1.05343	1.05888
media		14.9	14.849
		1.17319	1.1717
max		32.8	34.599
		1.51587	1.53906
varian		86.5678	87.7875
		0.157835	0.184837
JB		0.001	0.001314
		0.001	0.001
		ra	log
%		2.64451	0.517151
err.va		8.41687	0.0485931
rel.std.err		0.0972286	0.307873
mod.eff		0.902771	0.692127

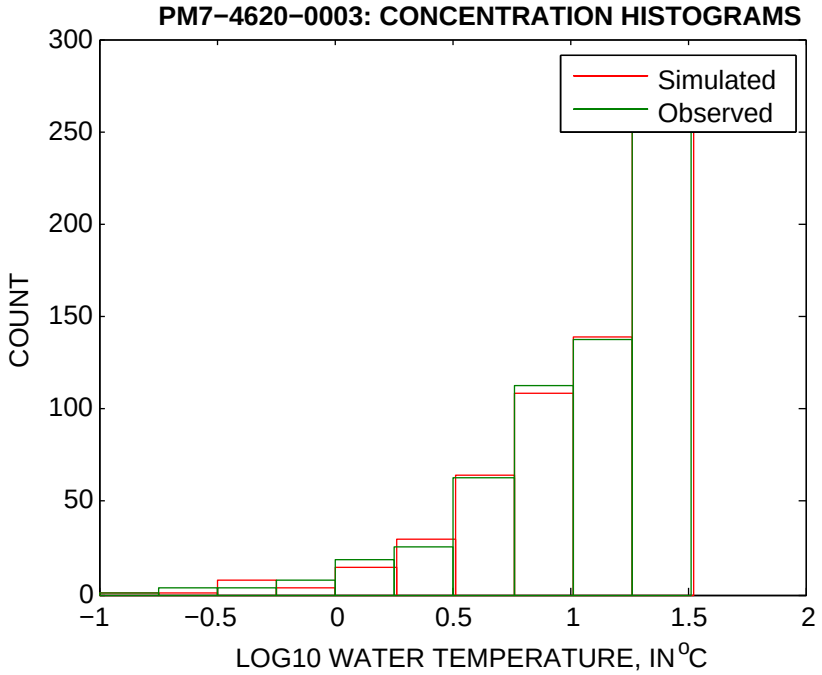
VERSION

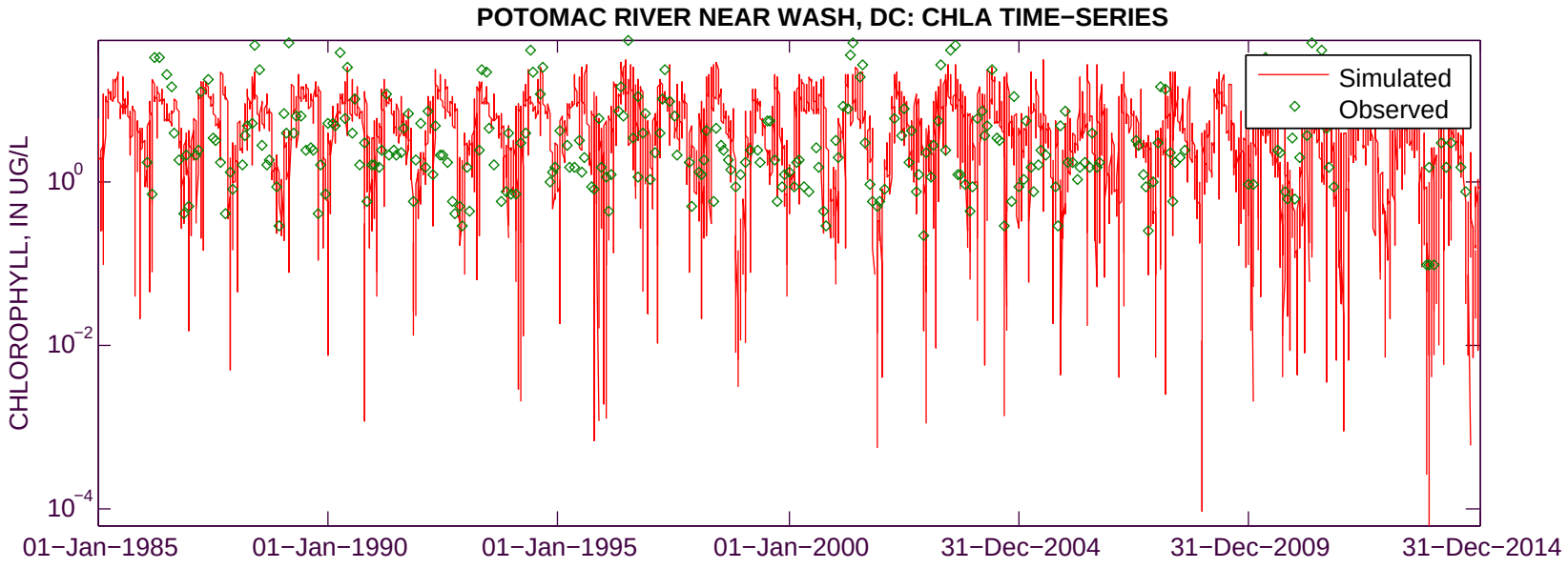
ALL DATA
LOG10

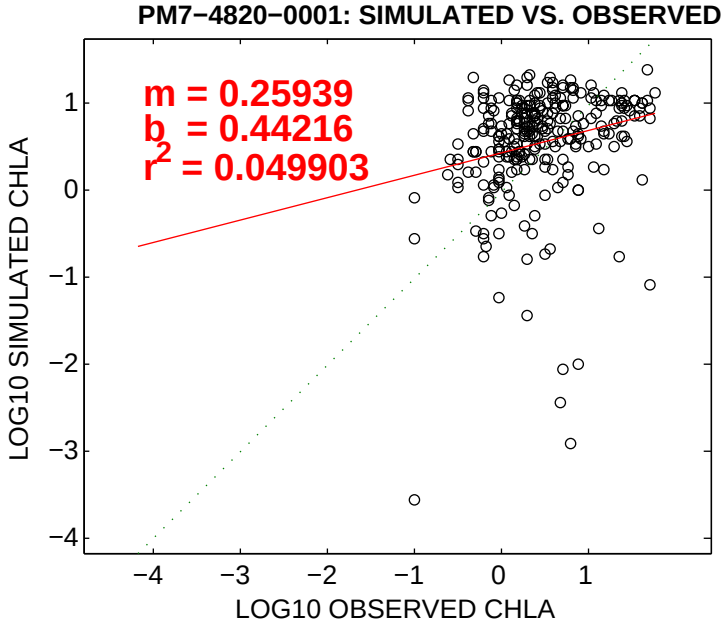


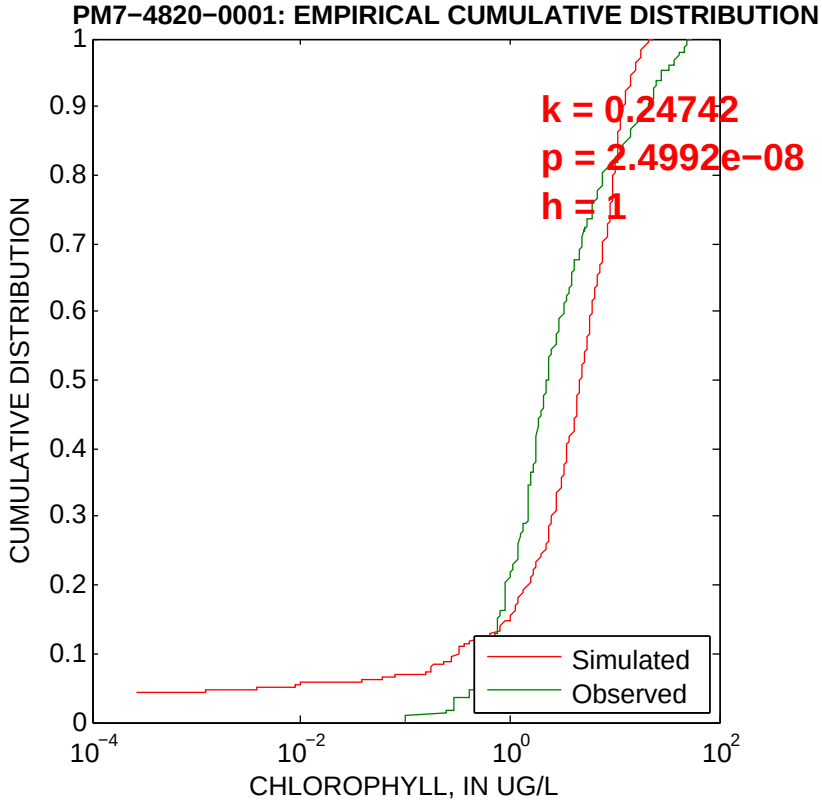












DATA SELECTION

scenario	file
P620171001WQ	CHLA.calib

plot: CHLA - chlorophyll A

Dates: 1/1/1985 – 12/31/201

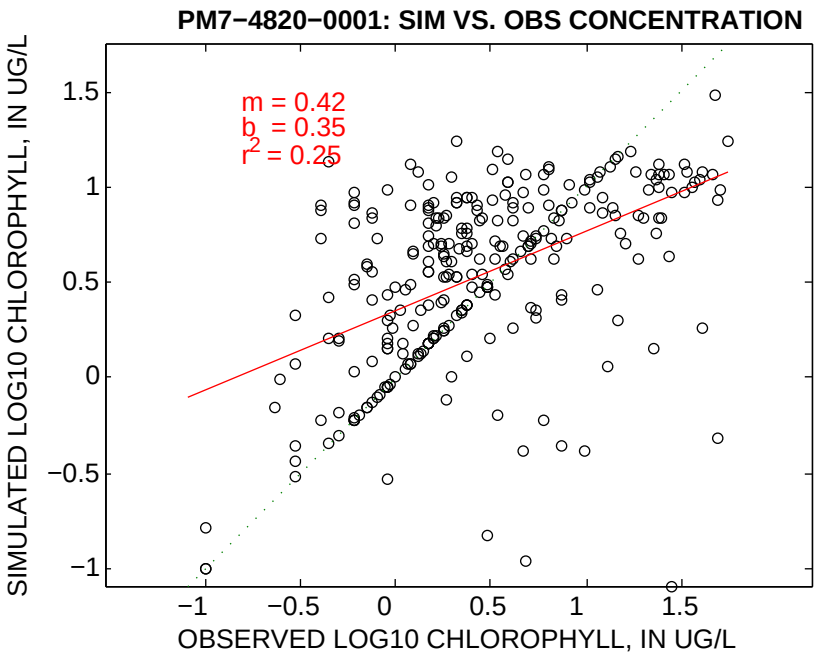
Drive	Directory	Observed
N/A	model	OBS20161101

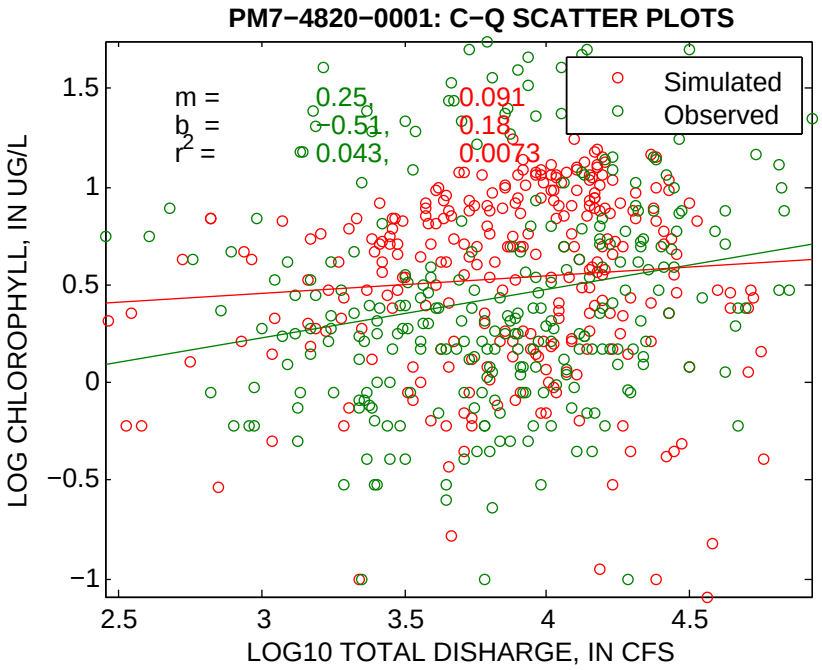
STATISTICS

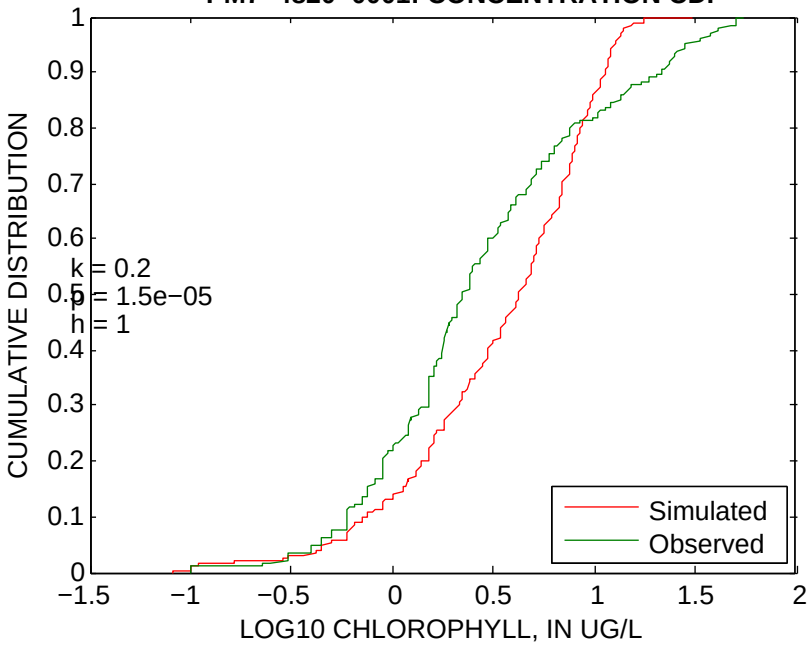
	n	observe	simulate
		291	279
min		0.1	0
		-1	-3.5697
mean		6.57281	5.86975
		0.433652	0.554648
media		2.35	4.7544
		0.350248	0.693366
max		55.621	23.787
		1.74524	1.37634
varian		104.989	23.1643
		0.31333	0.422468
JB		0.001	0.001
		0.054393	0.001
		ra	log
%		-10.6965	27.9018
err.va		110.001	0.587939
rel.std.err		1.04774	1.87642
mod.eff		-0.0477432	-0.876419

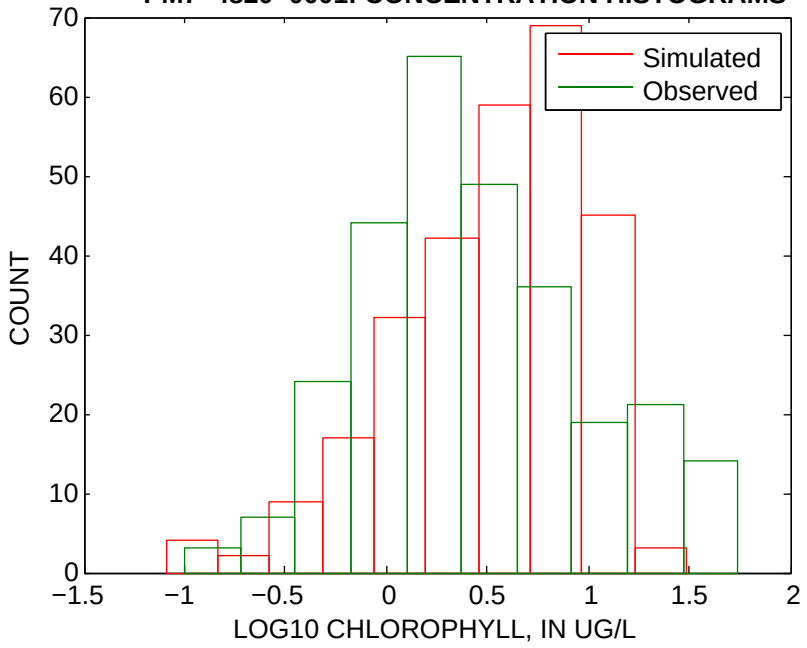
VERSION 3.1

ALL DATA
LOG10

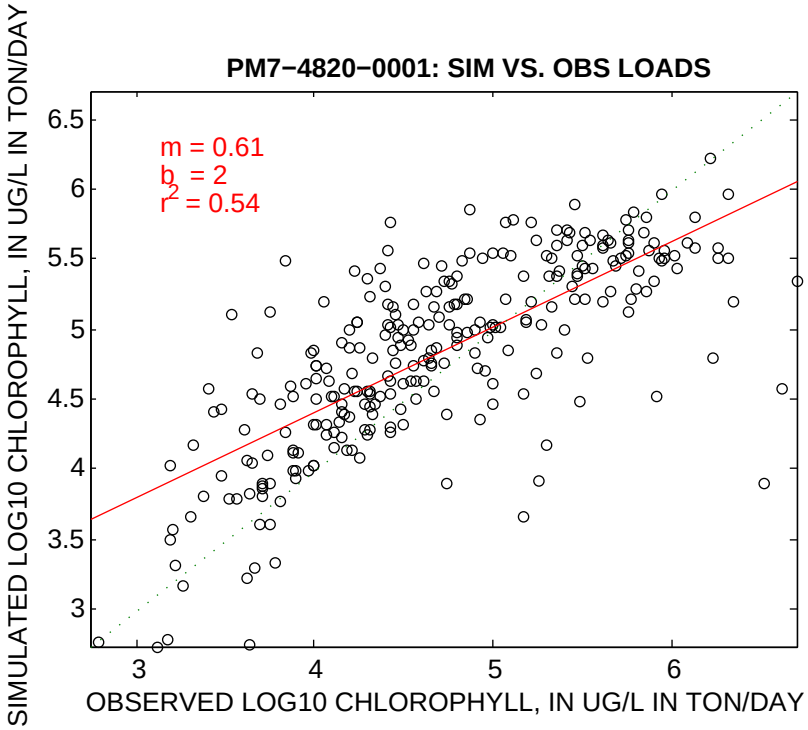


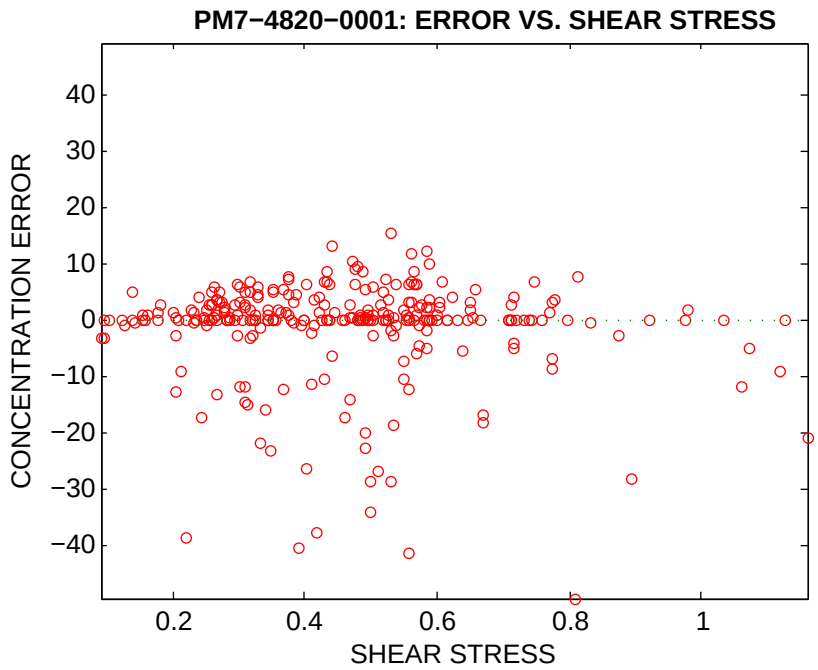


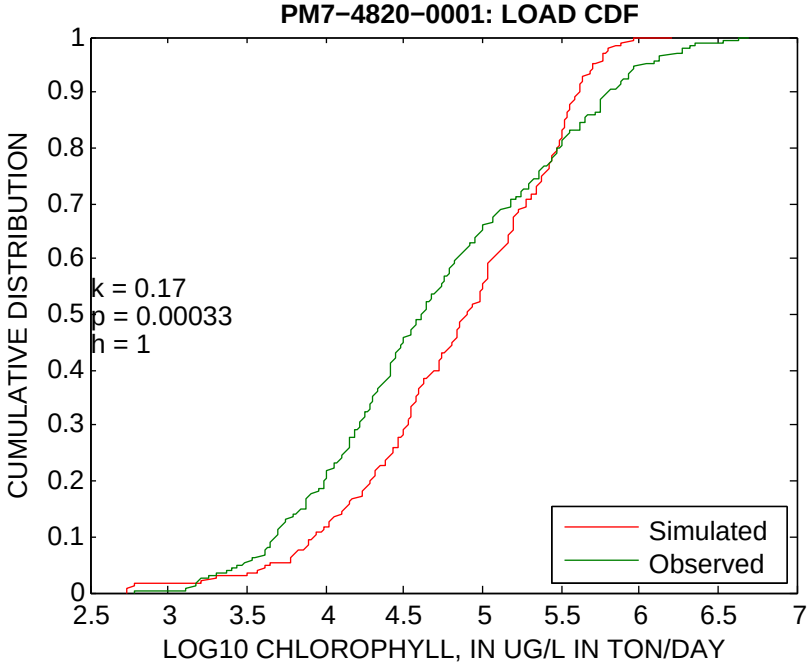


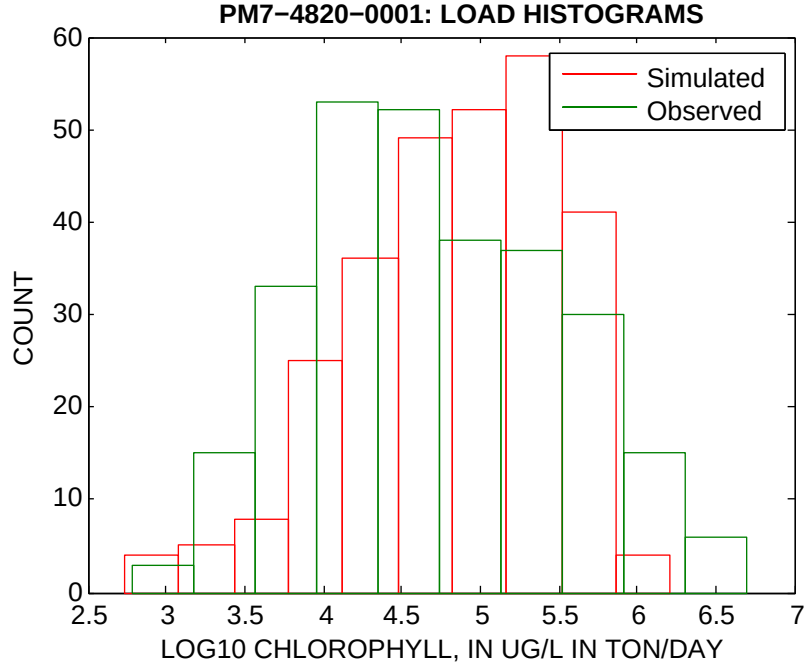


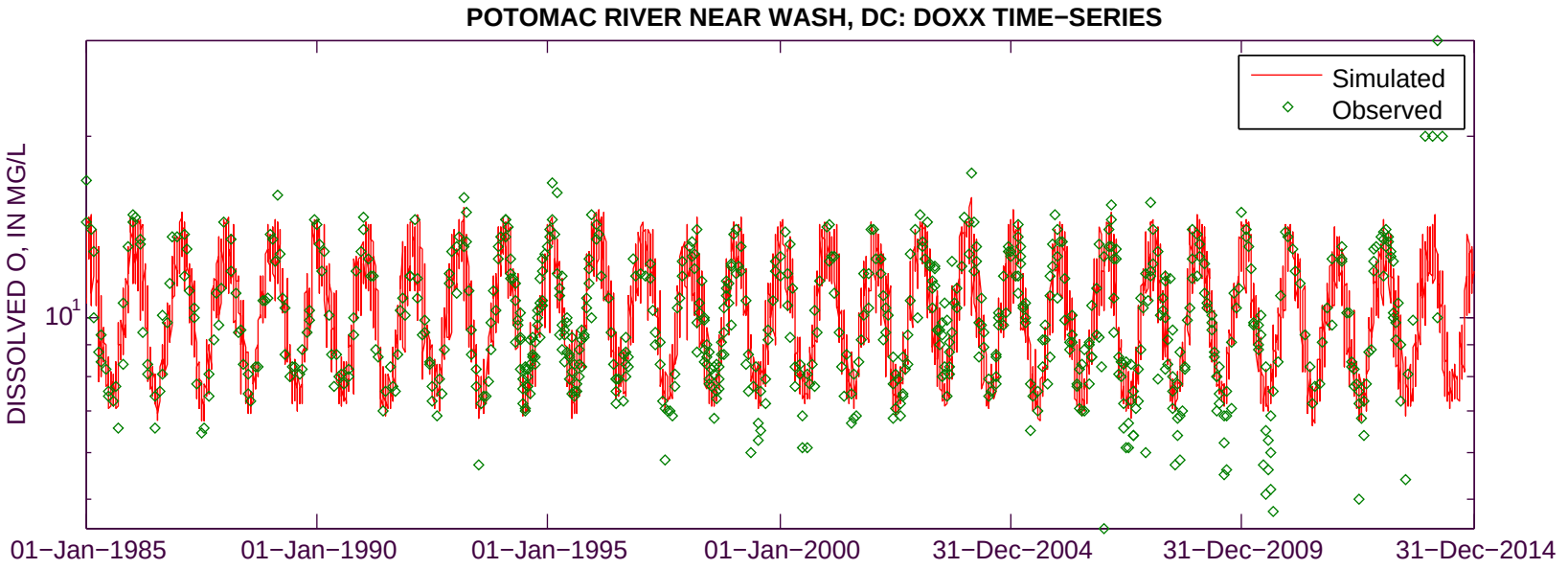
LOAD DATA
LOG10

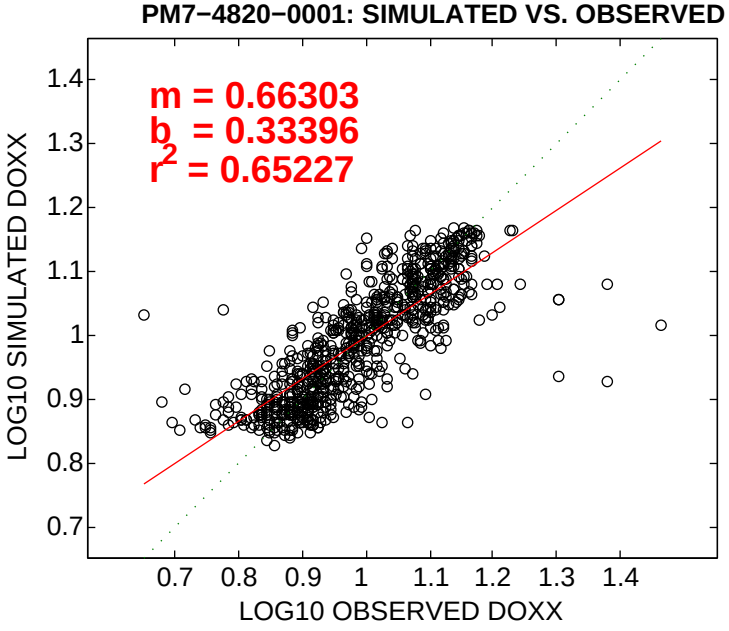


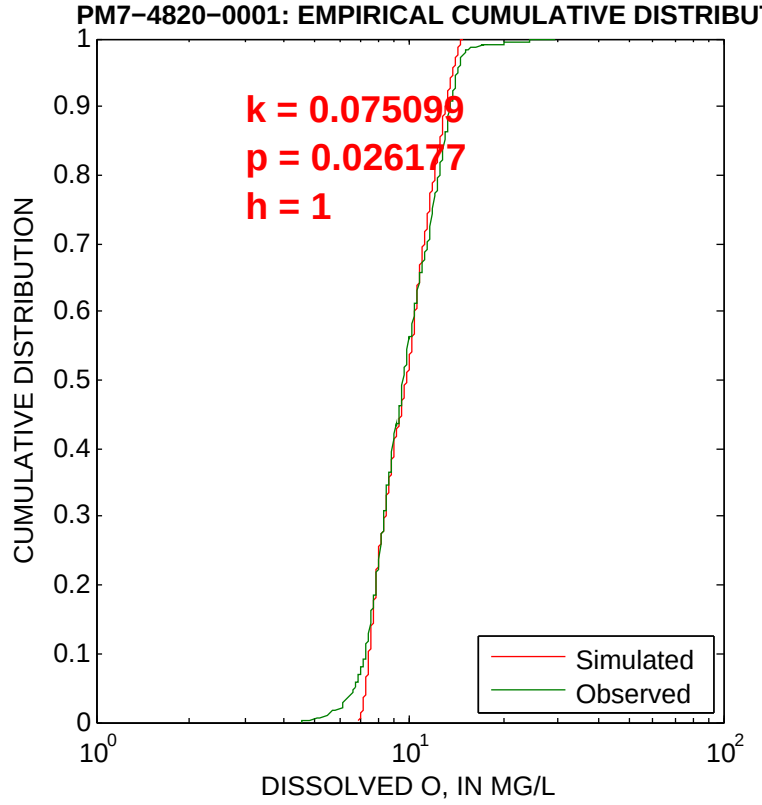












DATA SELECTION

scenario	file
P620171001WQ	DOXX.calib

plot: DOXX - dissolved oxygen

Dates: 1/1/1985 – 12/31/201

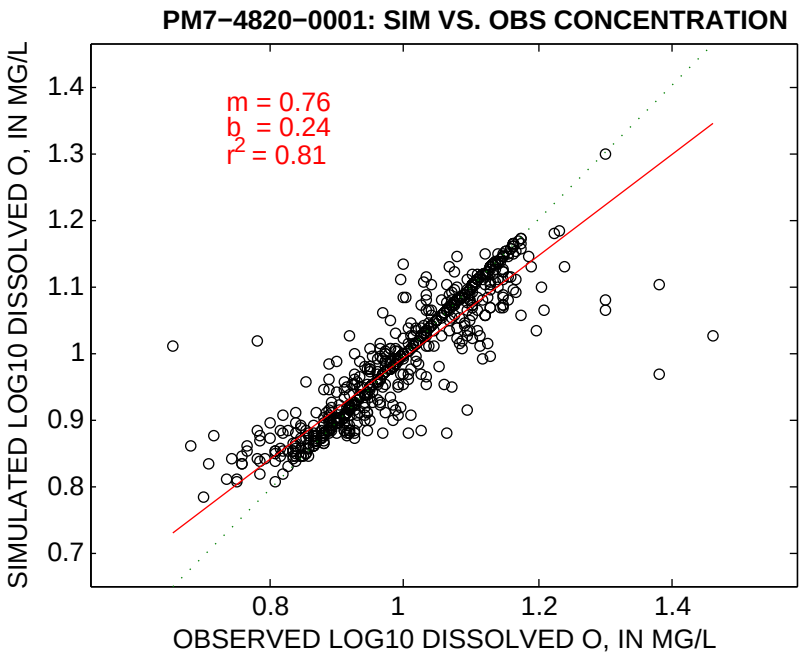
Drive	Directory	Observed
N/A	model	OBS20161101

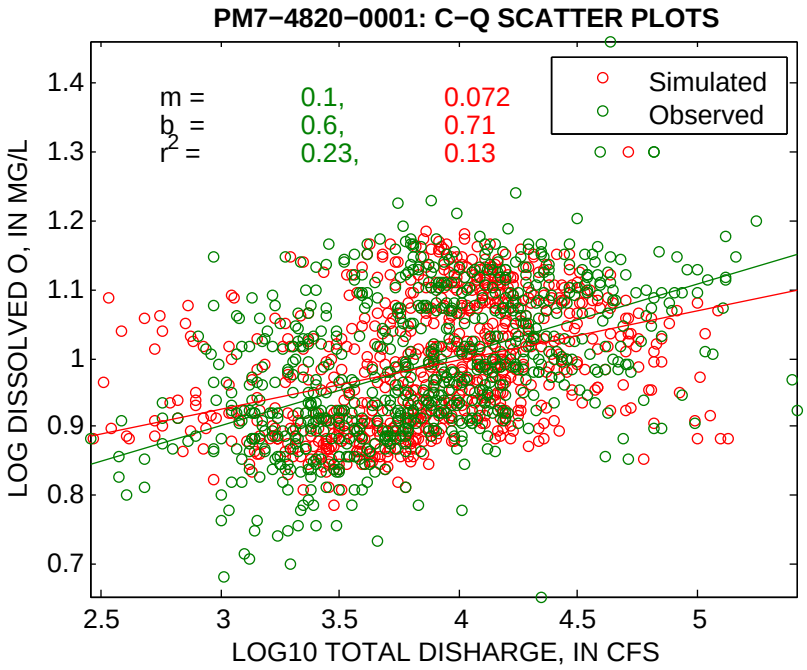
STATISTICS

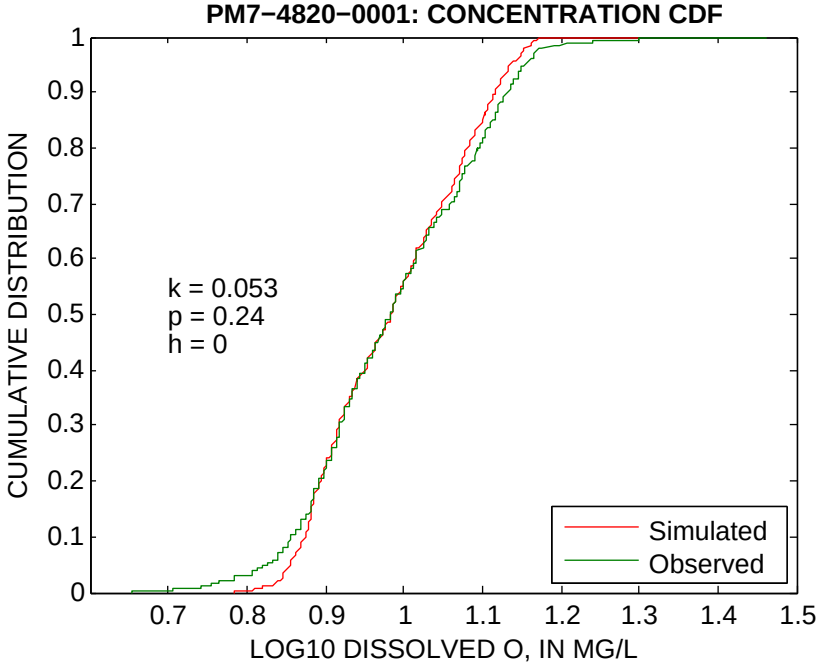
	n	observe	simulate
		759	759
min		4.5	6.7041
		0.653213	0.82634
mean		10.0858	9.98866
		0.98961	0.990104
media		9.6	9.7804
		0.982271	0.990357
max		29	14.762
		1.4624	1.16915
varian		7.12414	4.39931
		0.0120622	0.00812962
JB		0.001	0.001
		0.077204	0.001
		ra	log
%		-0.962854	0.0498949
err.va		2.96559	0.00419679
rel.std.err		0.416274	0.347928
mod.eff		0.583726	0.652072

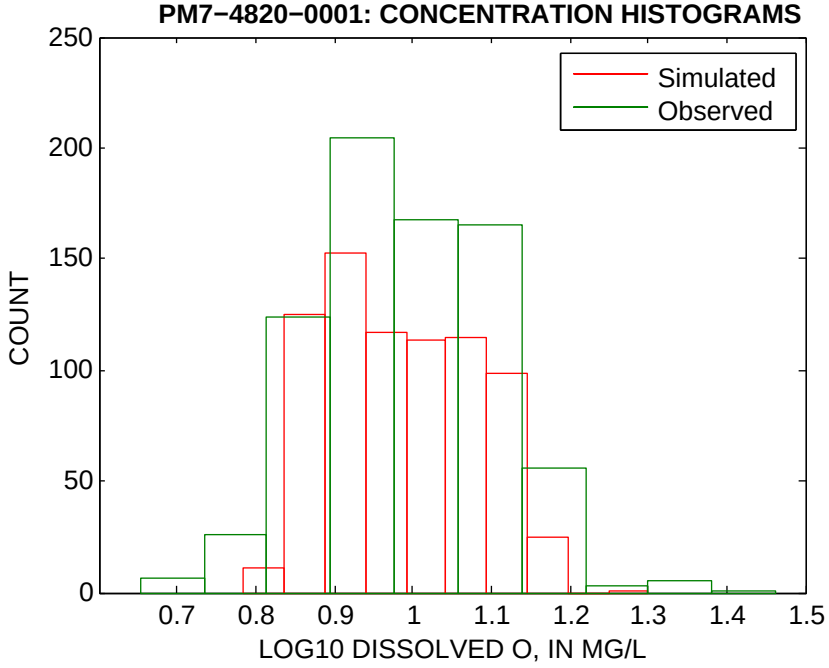
VERSION 2.1

ALL DATA
LOG10

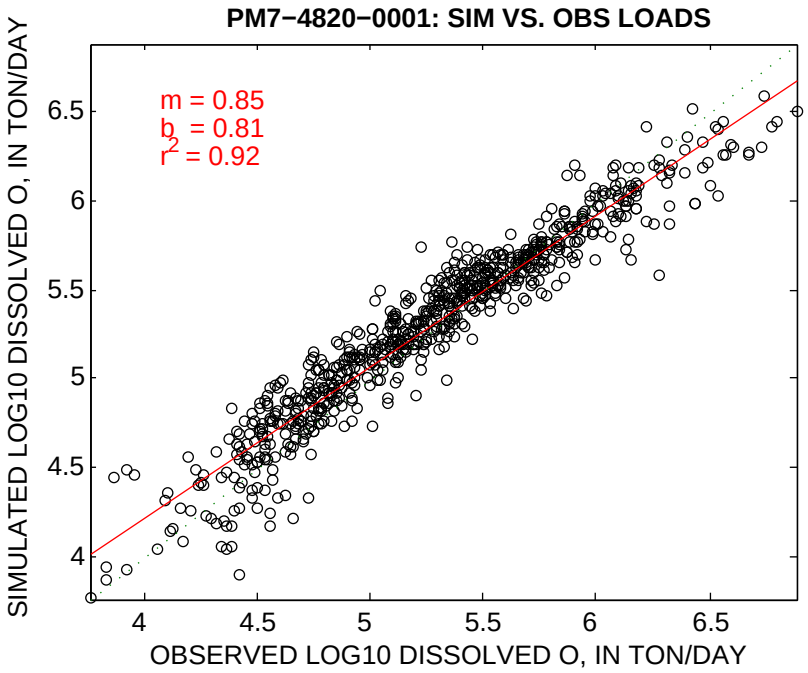


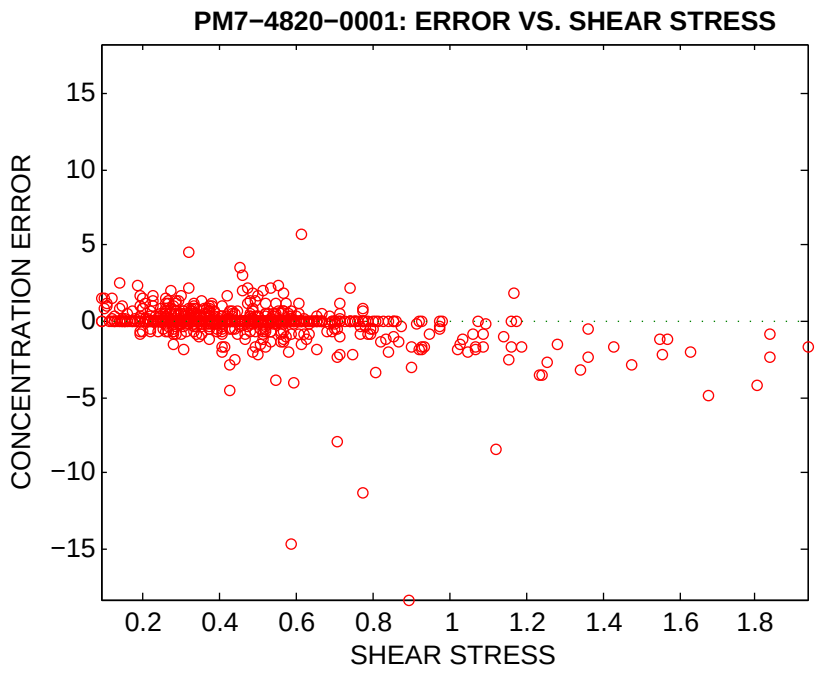


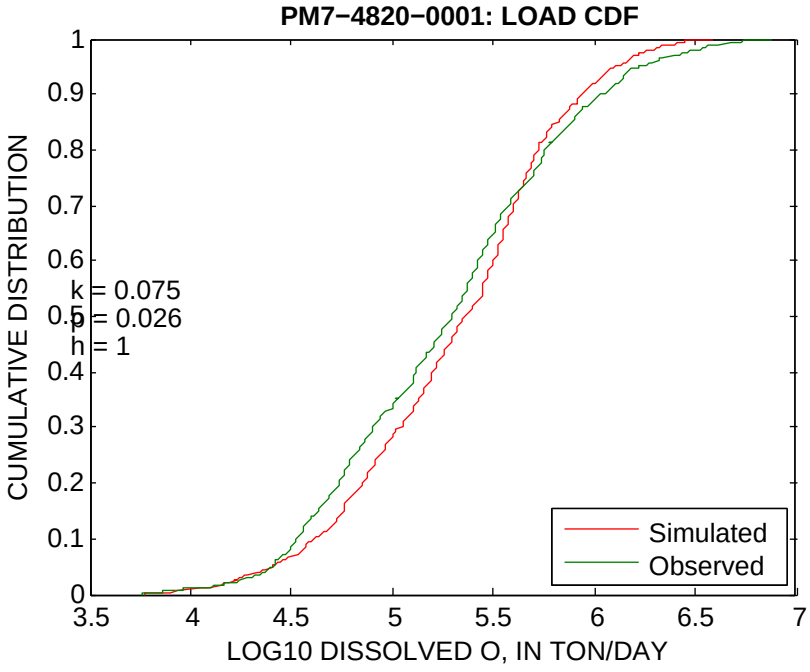


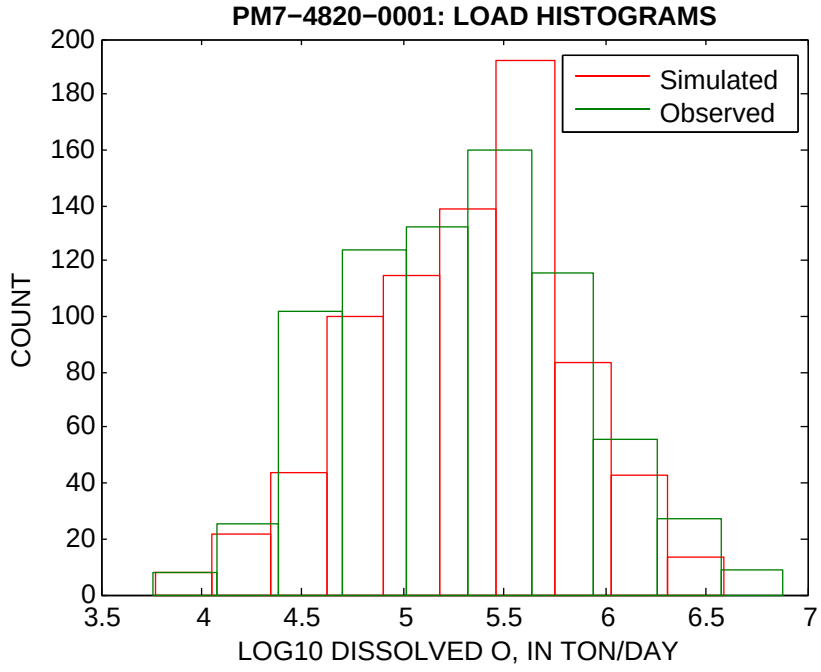


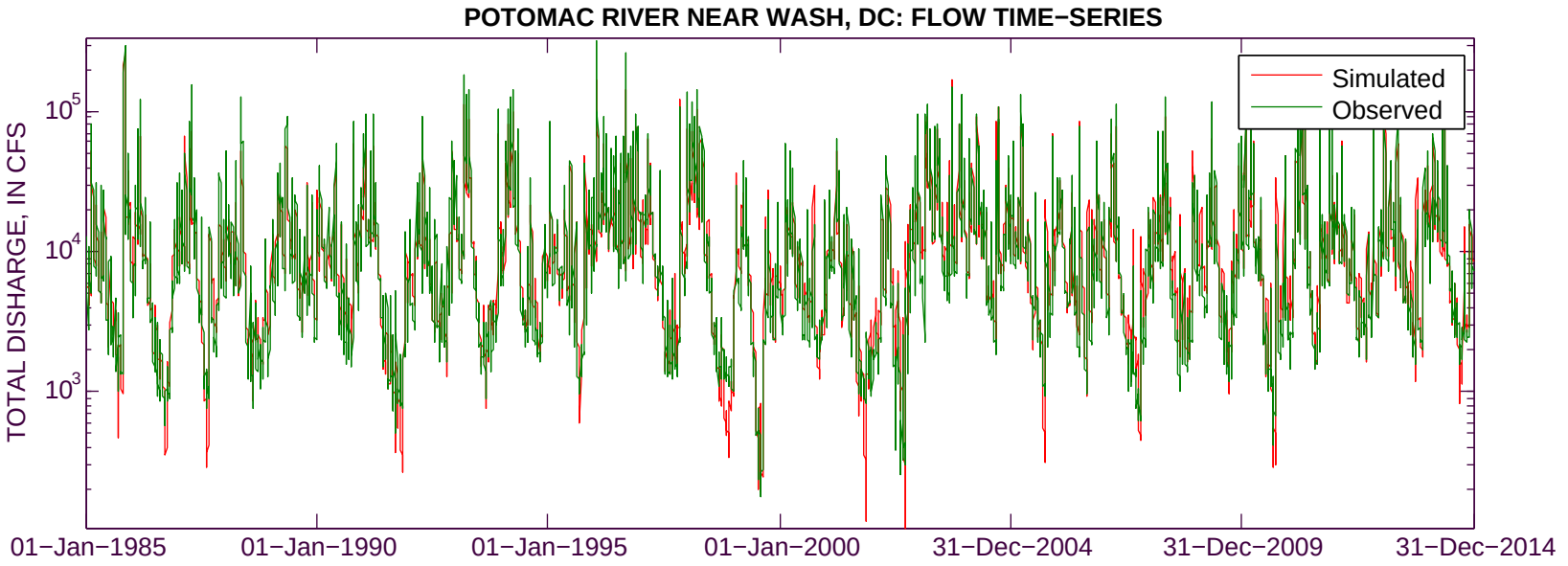
LOAD DATA
LOG10

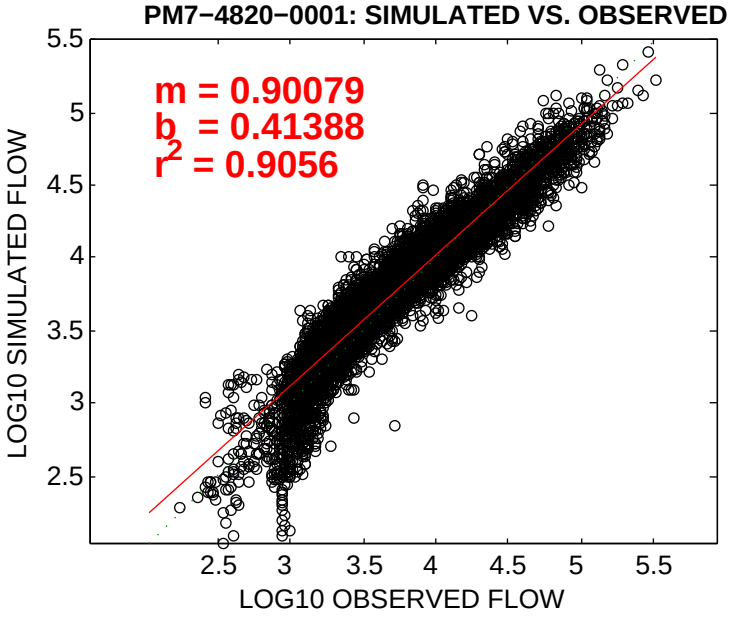


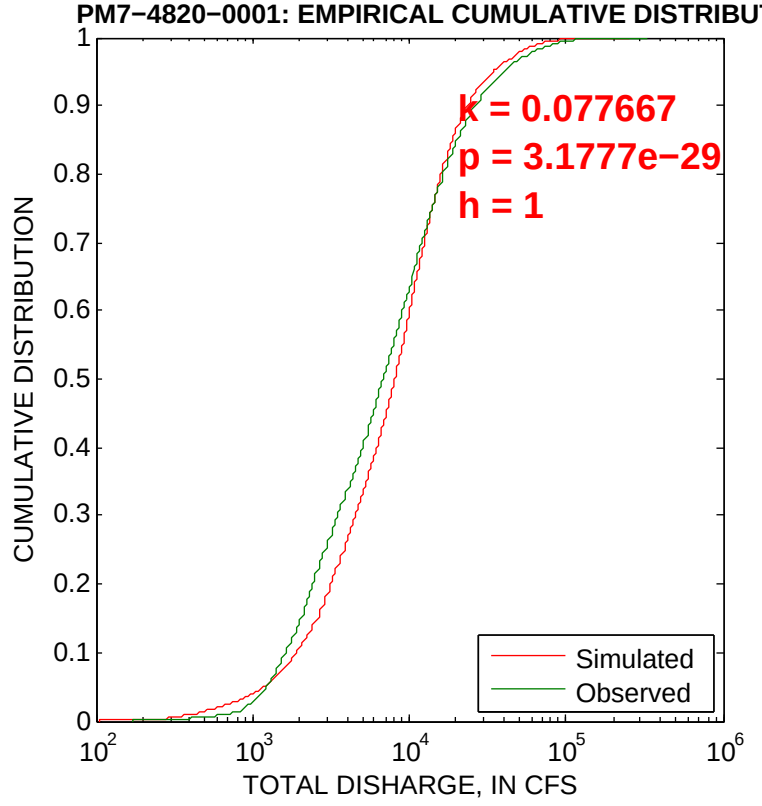












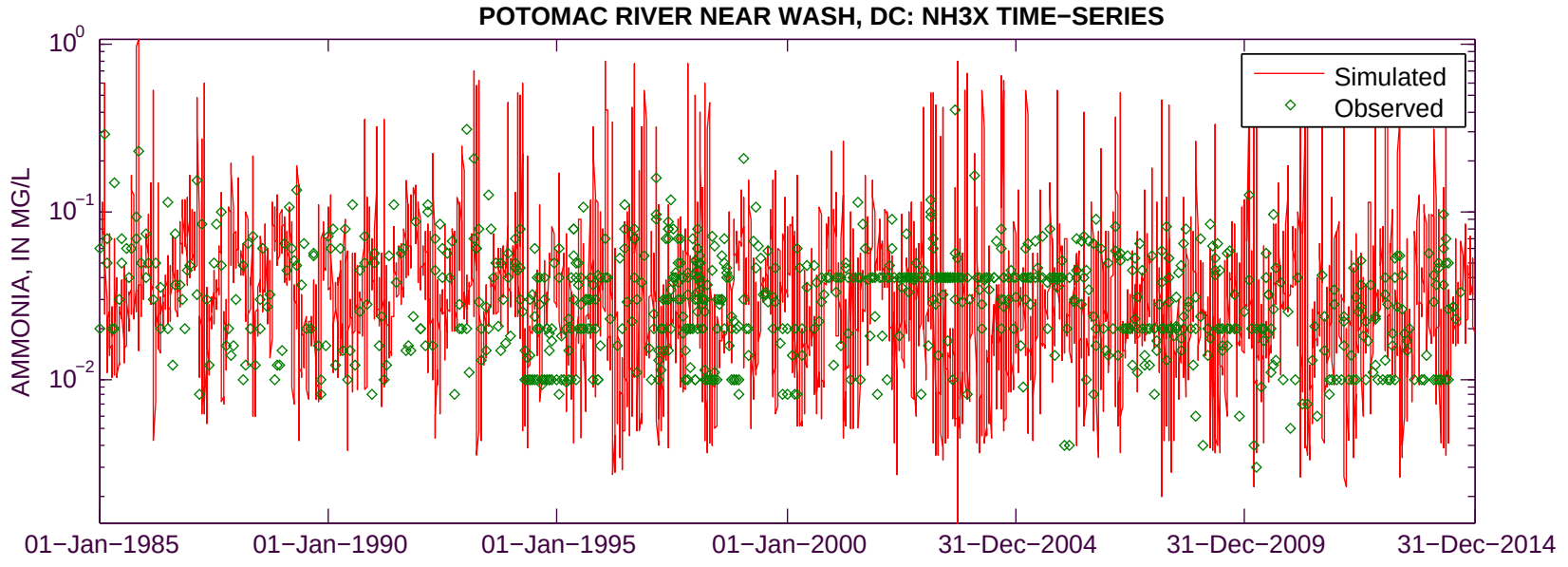
DATA SELECTION

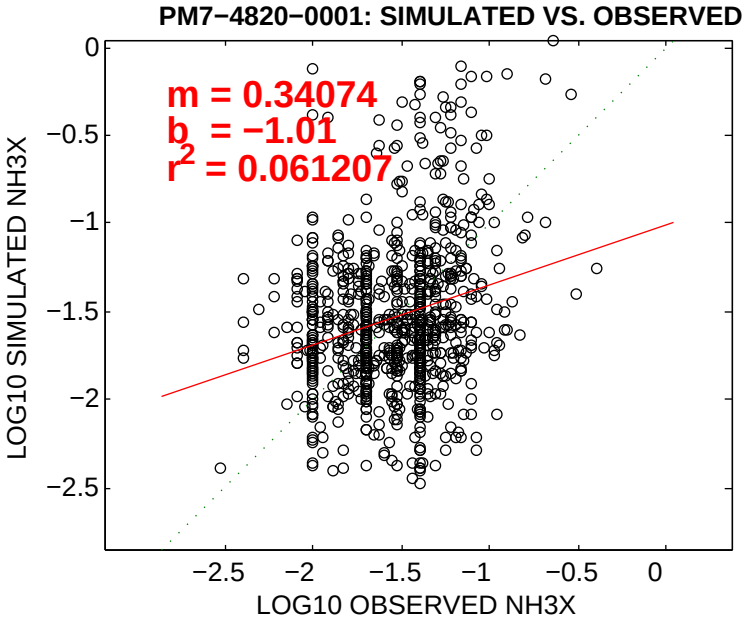
scenario: P620171001WQ
file: FLOW.calib
plot: FLOW - total discharge
Dates: 1/1/1985 12/31/201
Drive: N/A
Directory: model
Observed: OBS20161101

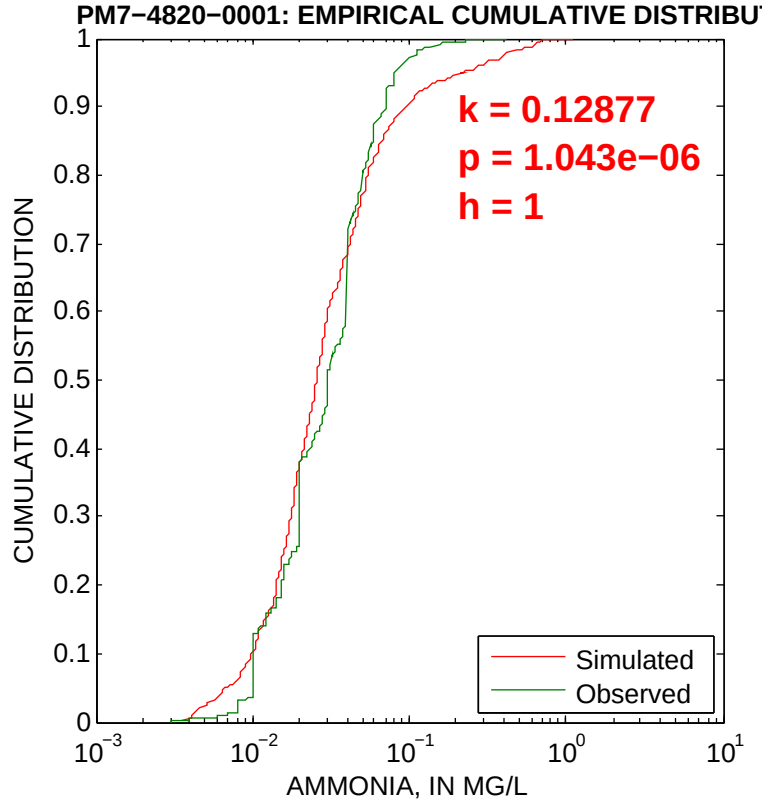
STATISTICS

n	10957	10957
	observe	simulate
min	174	106.75
	2.24055	2.02837
mean	12026.2	11593.5
	3.82447	3.85891
media	6800	8125.2
	3.83251	3.90983
max	326000	256640
	5.51322	5.40932
varian	2.89035e+0	1.83649e+
	0.220475	0.197545
JB	0.001	0.001
	0.001	0.001
	ra	log
%	-3.59796	0.90054
err.va	4.52043e+0	0.0220049
rel.std.err	0.156397	0.099807
mod.eff	0.843603	0.900193

VERSION 2.1







DATA SELECTION

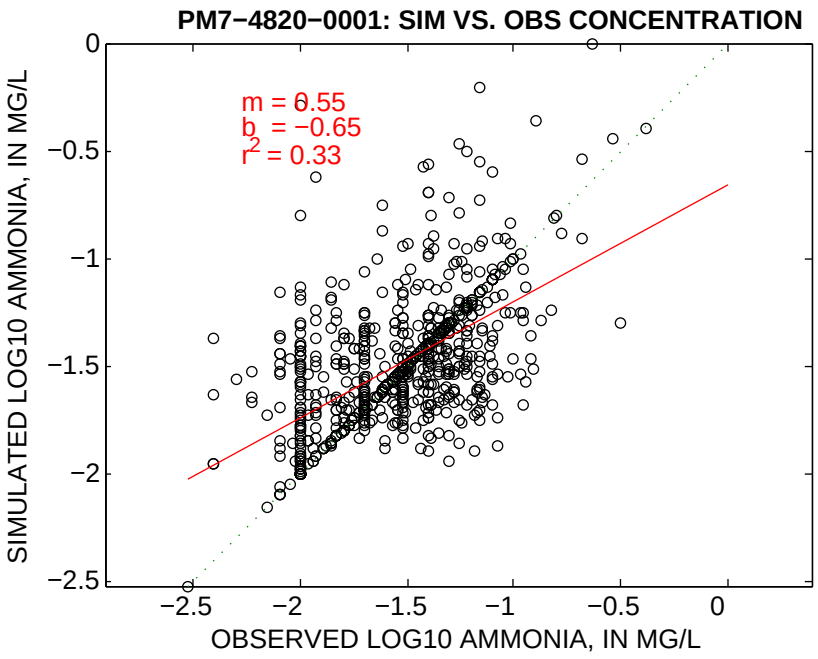
scenario: P620171001WQ
file: NH3X.calib
plot: NH3X - ammonia
Dates: 1/1/1985 – 12/31/201
Drive: N/A
Directory: model
Observed: OBS20161101

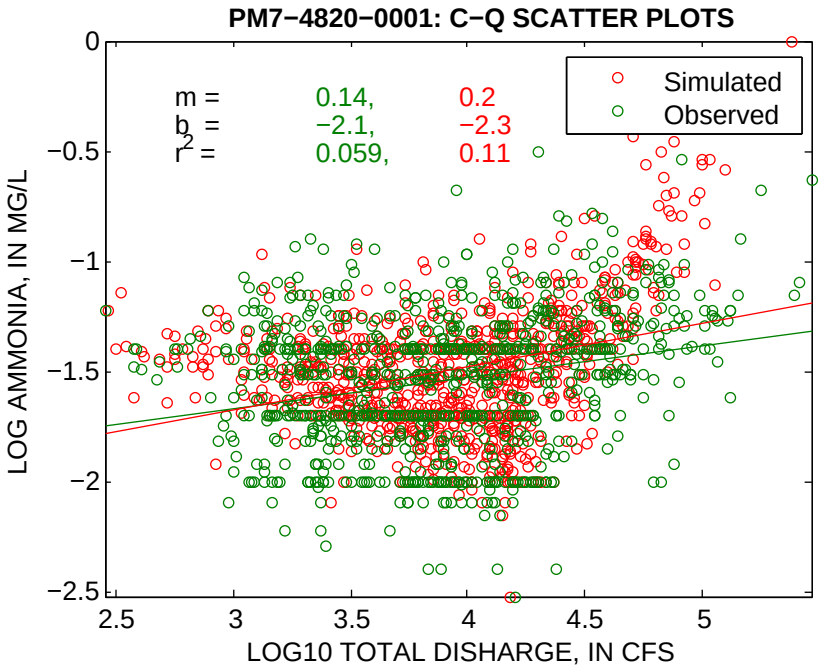
STATISTICS

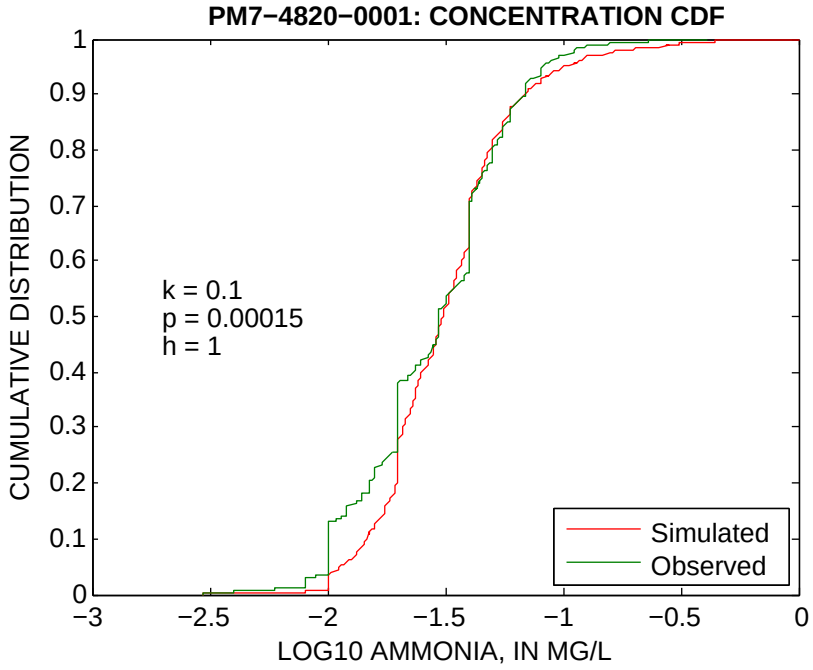
		observe	simulate
n		862	862
min		0.003	0.0034021
		-2.52288	-2.46825
mean		0.0369884	0.0555392
		-1.54203	-1.53546
media		0.03	0.0256995
		-1.52288	-1.59008
max		0.41	1.0996
		-0.387216	0.0412347
varian		0.0010172	0.0111152
		0.0952339	0.180646
JB		0.001	0.001
		0.5	0.001
		ra	log
%		50.153	-0.42644
err.va		0.0104382	0.211023
rel.std.err		10.2617	2.21584
mod.eff		-9.26166	-1.21584

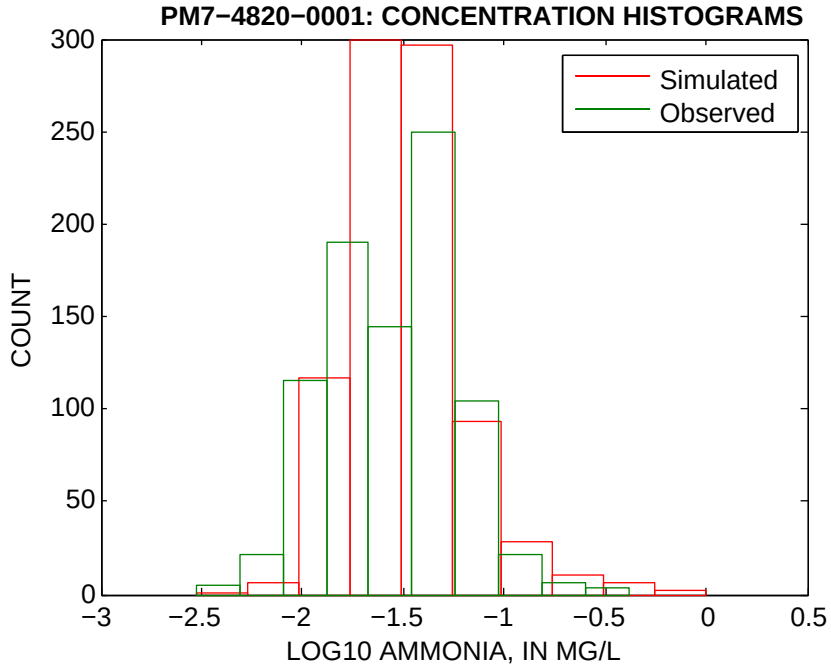
VERSION 2.1

ALL DATA
LOG10

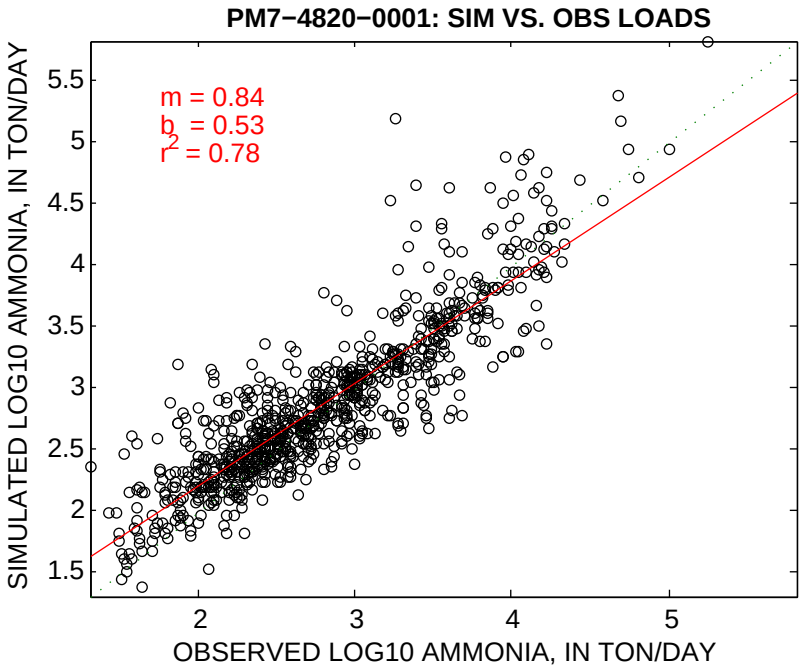


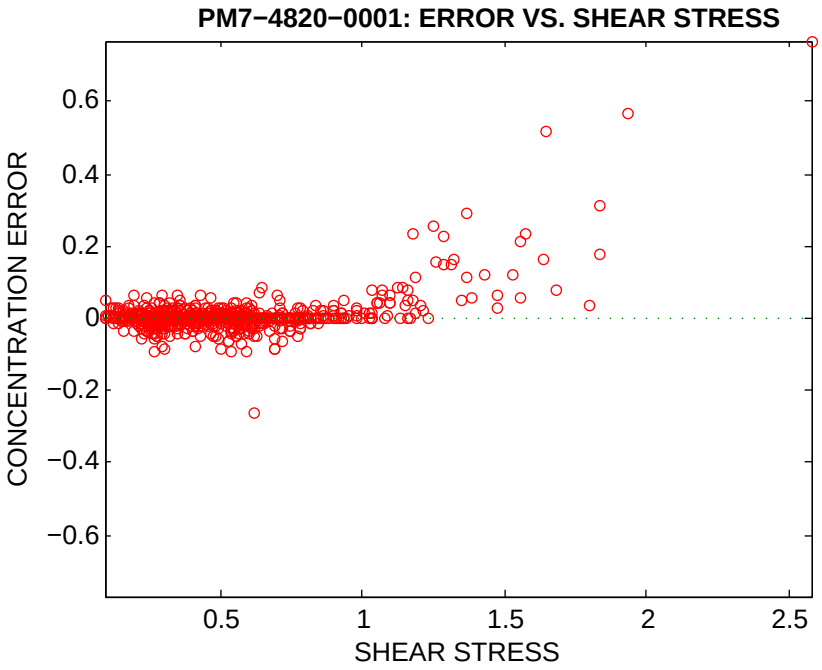


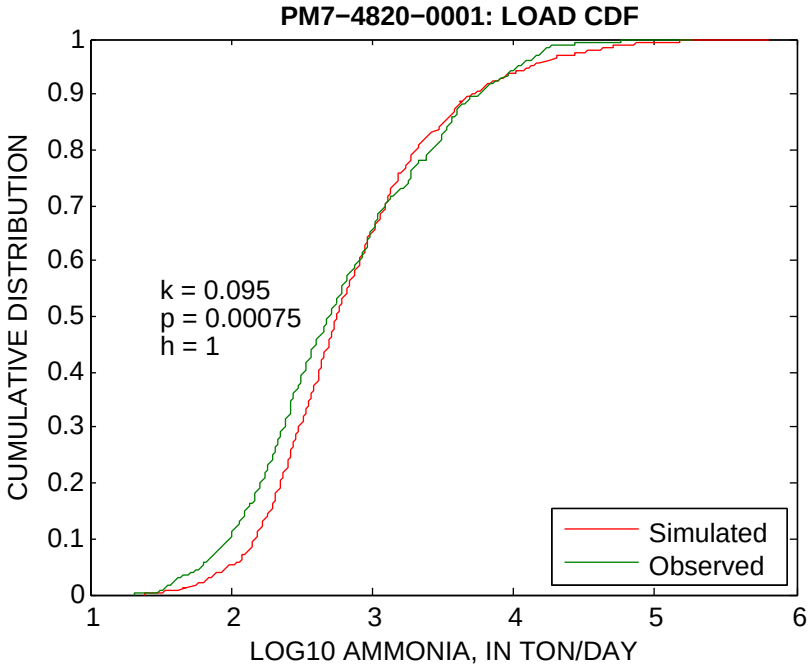


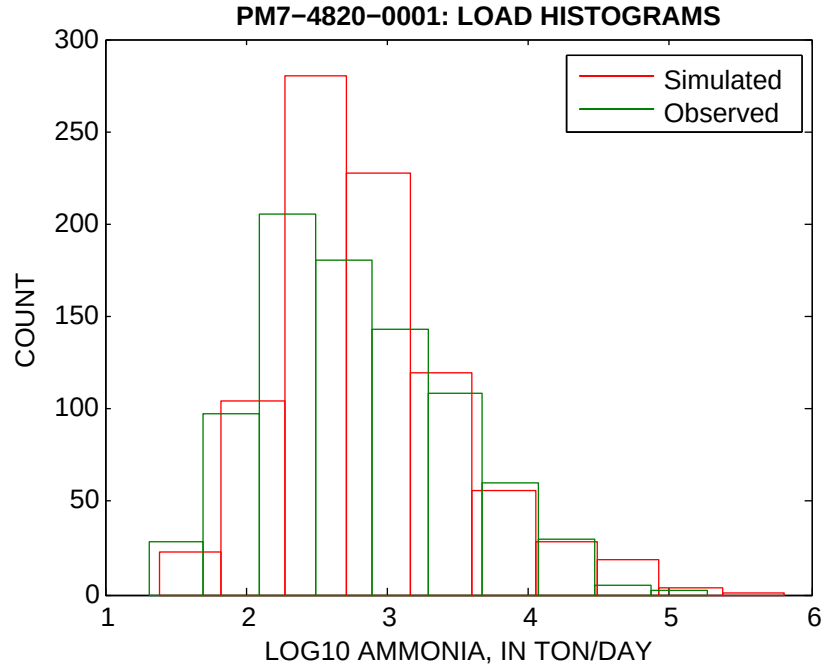


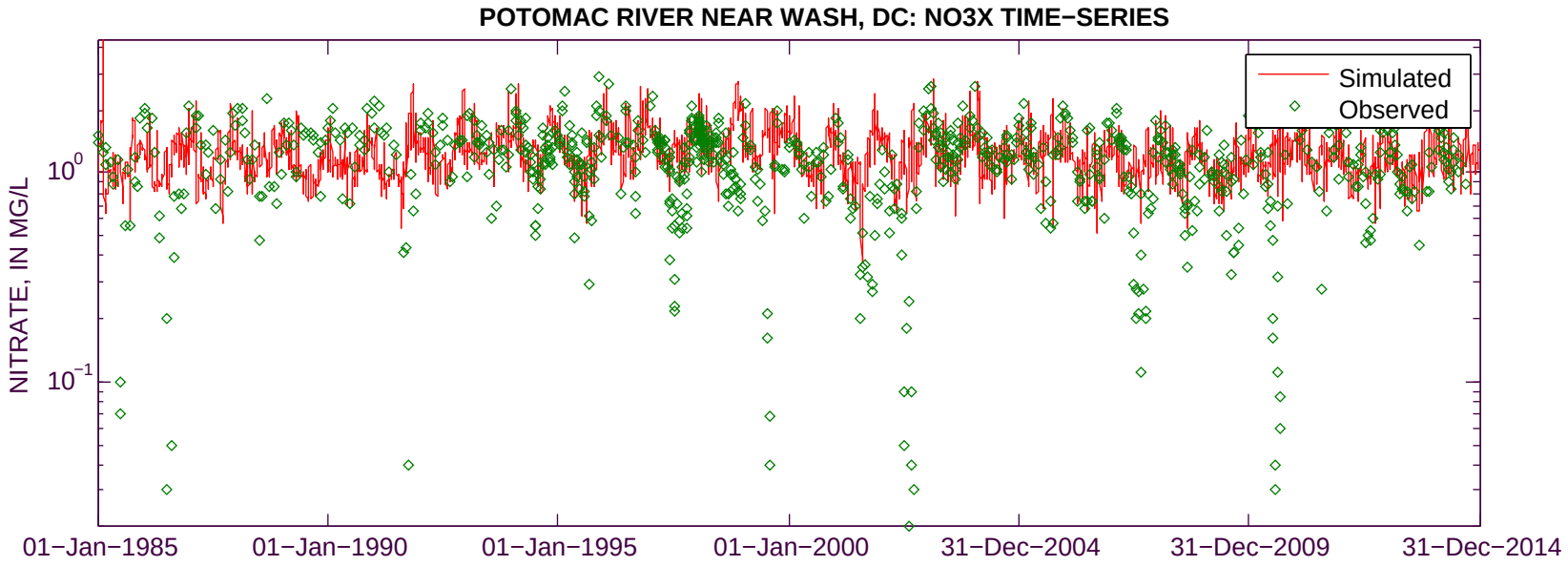
LOAD DATA
LOG10

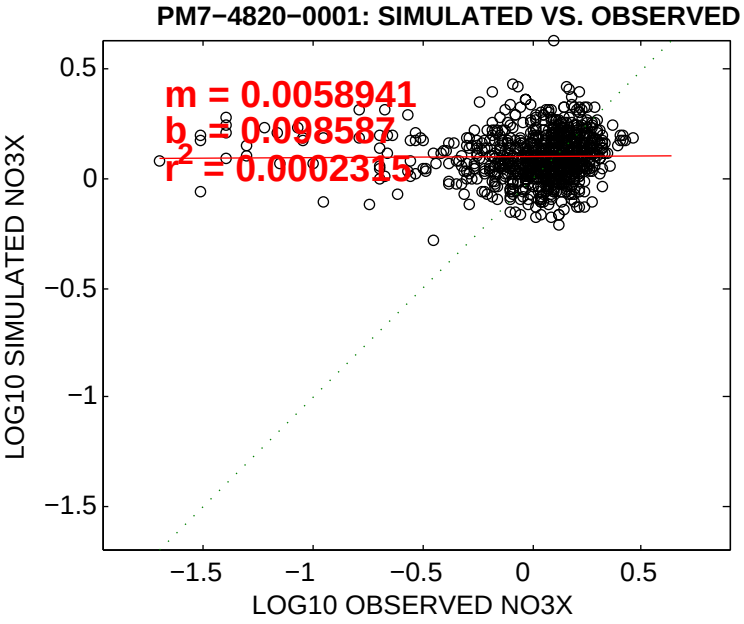


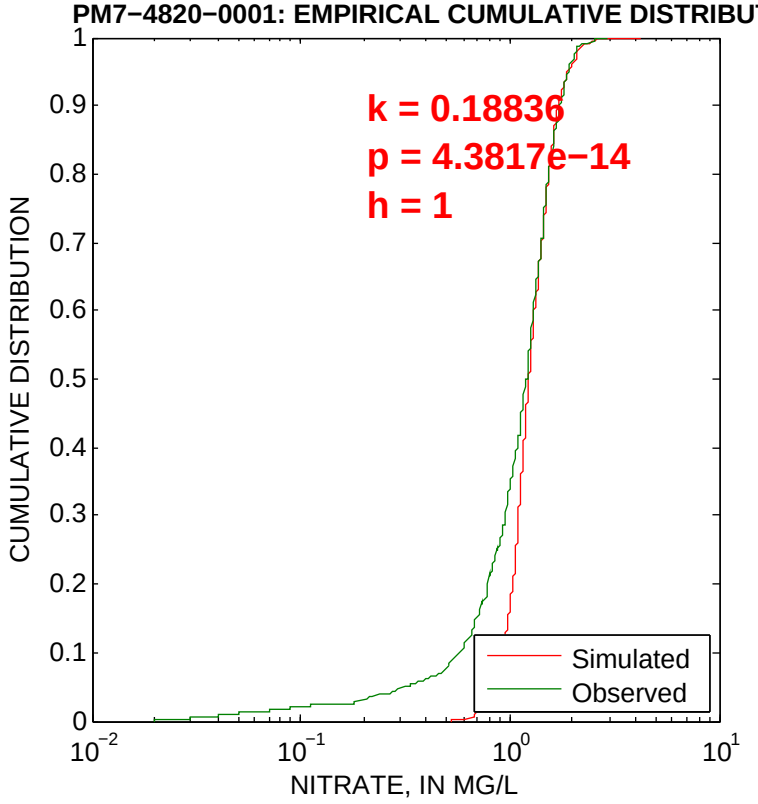












DATA SELECTION

scenario	file
P620171001WQ	NO3X.calib

plot: NO3X - nitrate

Dates: 1/1/1985 – 12/31/201

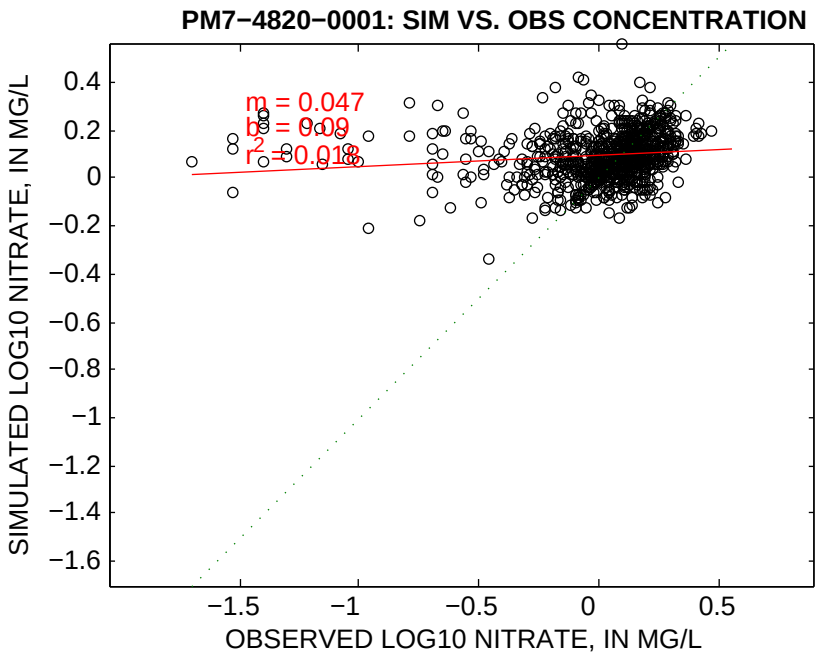
Drive	Directory	Observed
N/A	model	OBS20161101

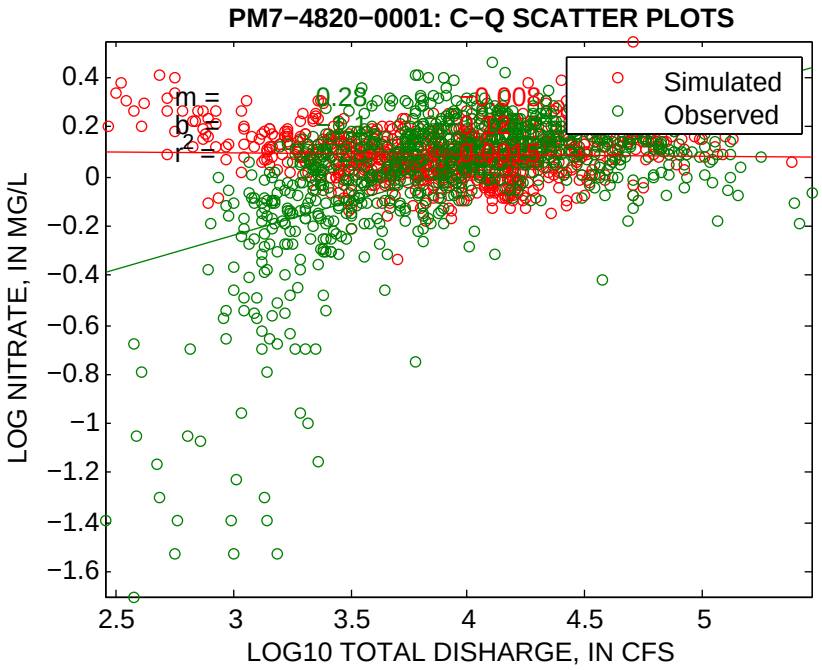
STATISTICS

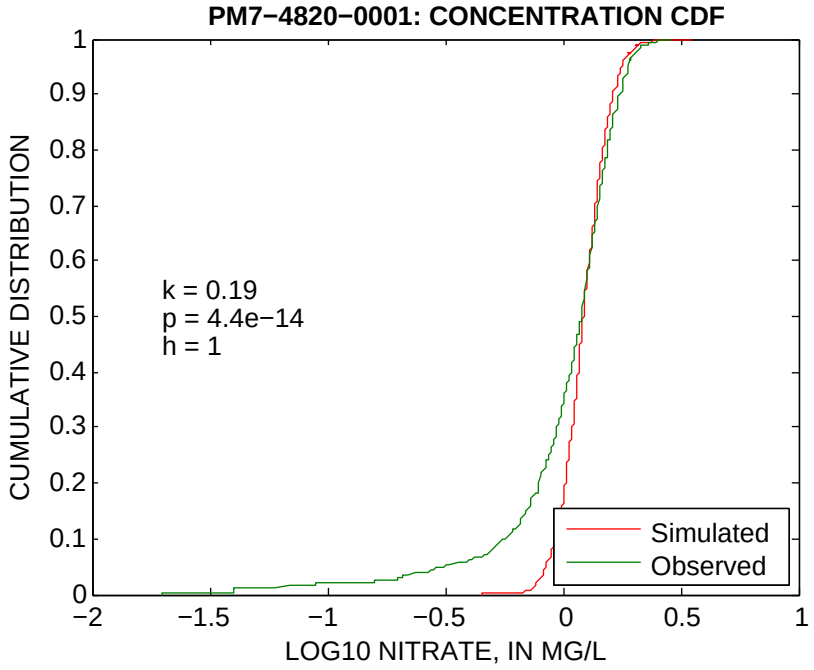
	n	876	876
		observe	simulate
min		0.02	0.52731
		-1.69897	-0.277934
mean		1.1755	1.29523
		0.0127299	0.098662
media		1.20507	1.23335
		0.0810098	0.0910863
max		2.9	4.2728
		0.462398	0.630713
varian		0.218145	0.116682
		0.0775047	0.0116307
JB		0.259793	0.001
		0.001	0.001
		ra	log
%		10.1854	675.041
err.va		0.320495	0.0956146
rel.std.err		1.46919	1.23366
mod.eff		-0.469187	-0.233661

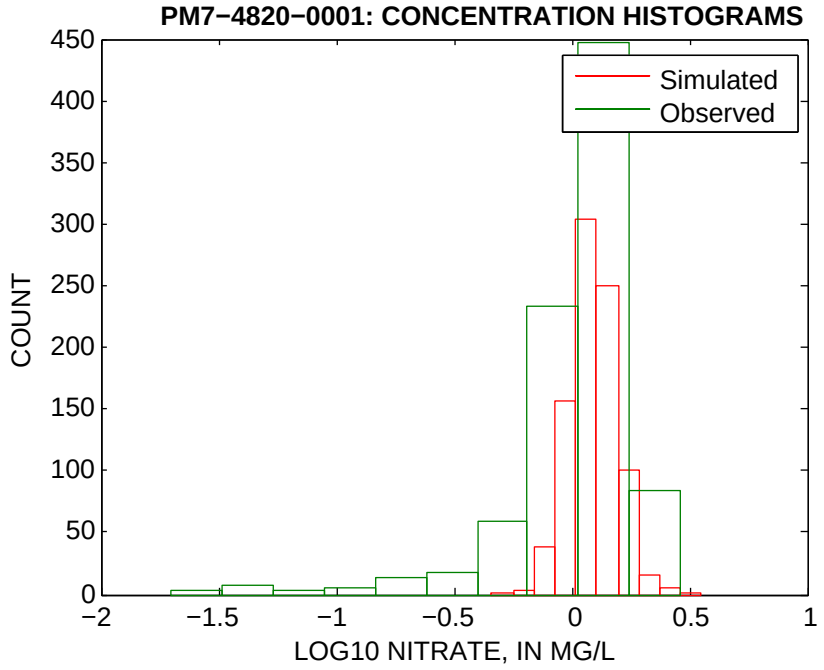
VERSION 2.1

ALL DATA
LOG10

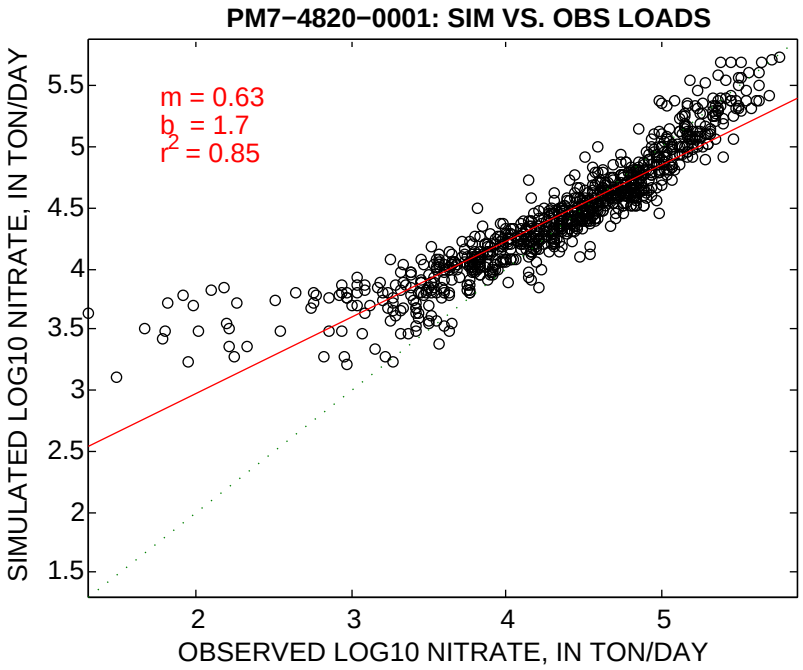


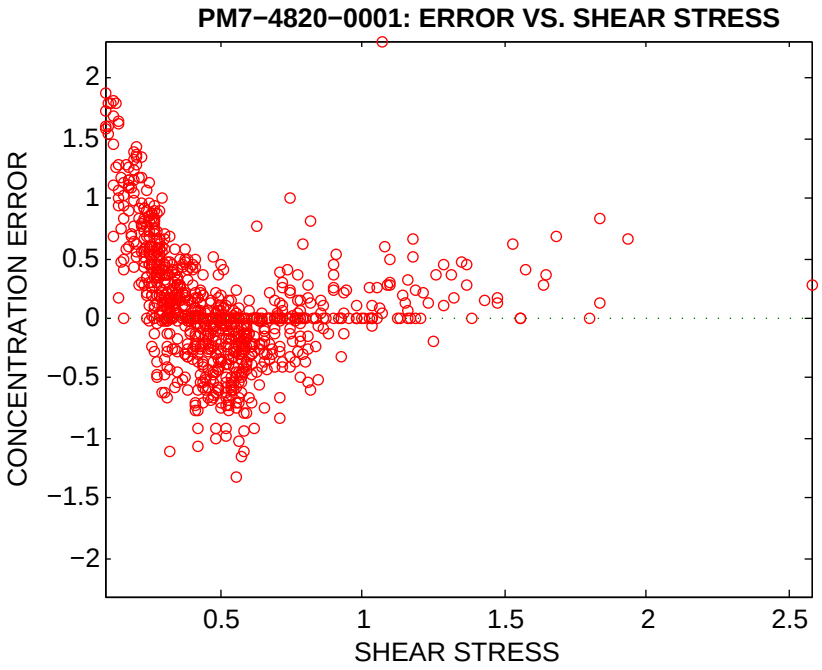


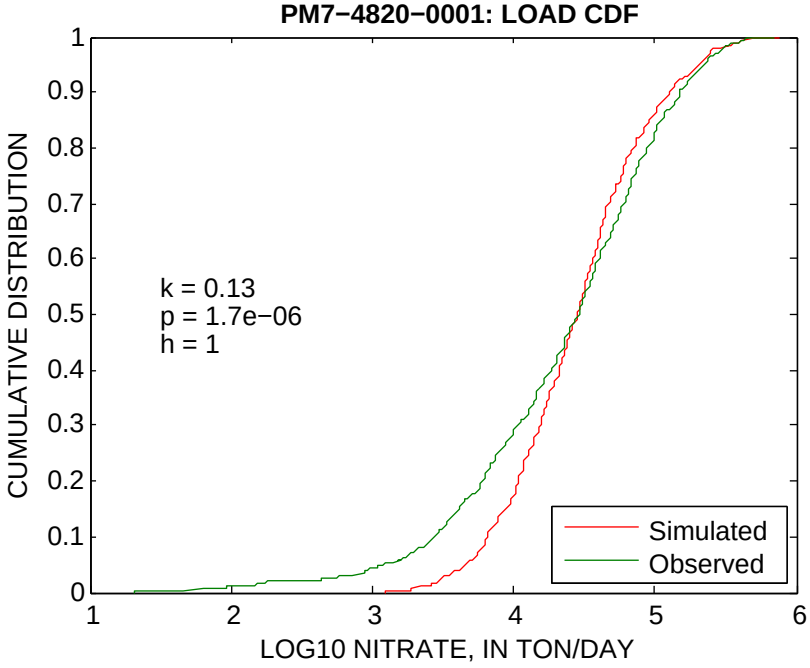


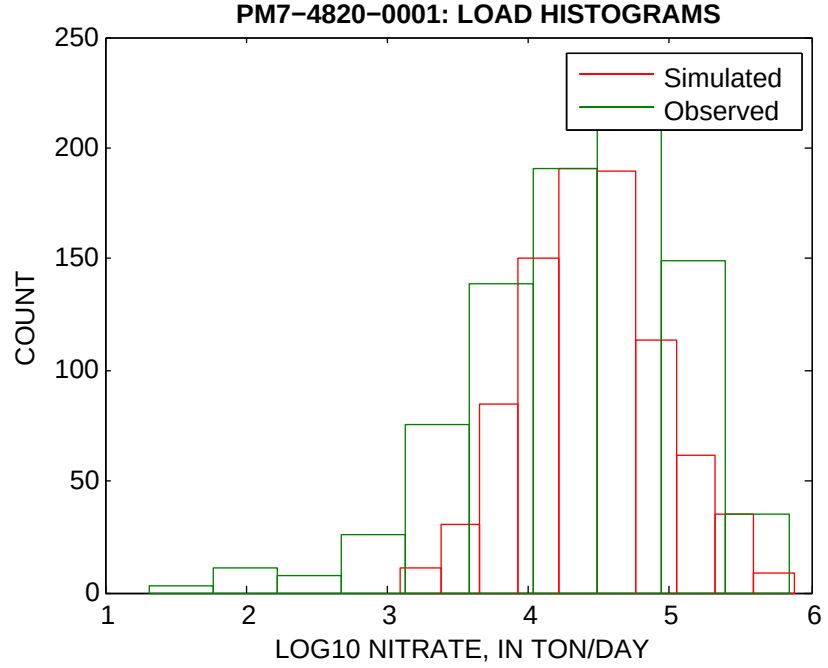


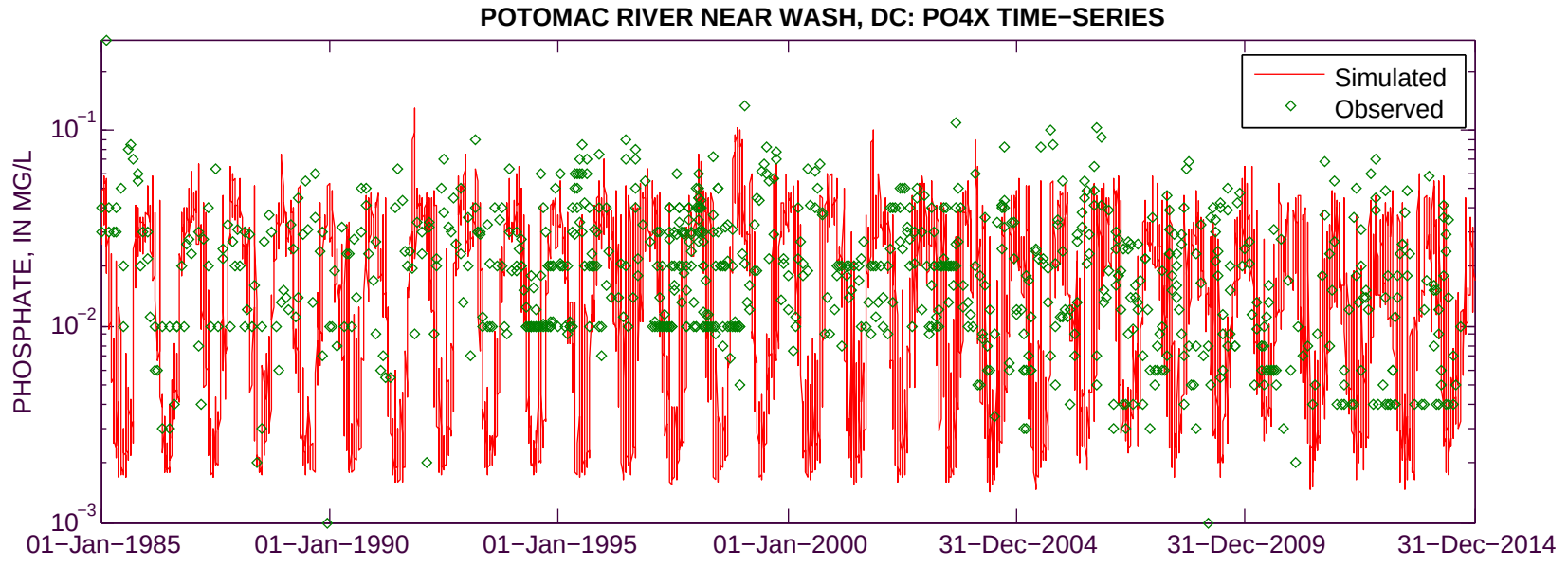
LOAD DATA
LOG10

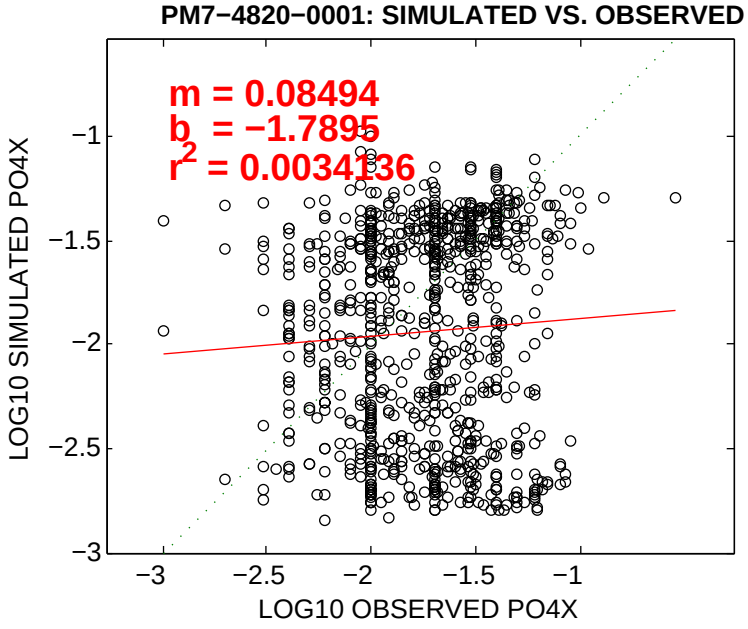


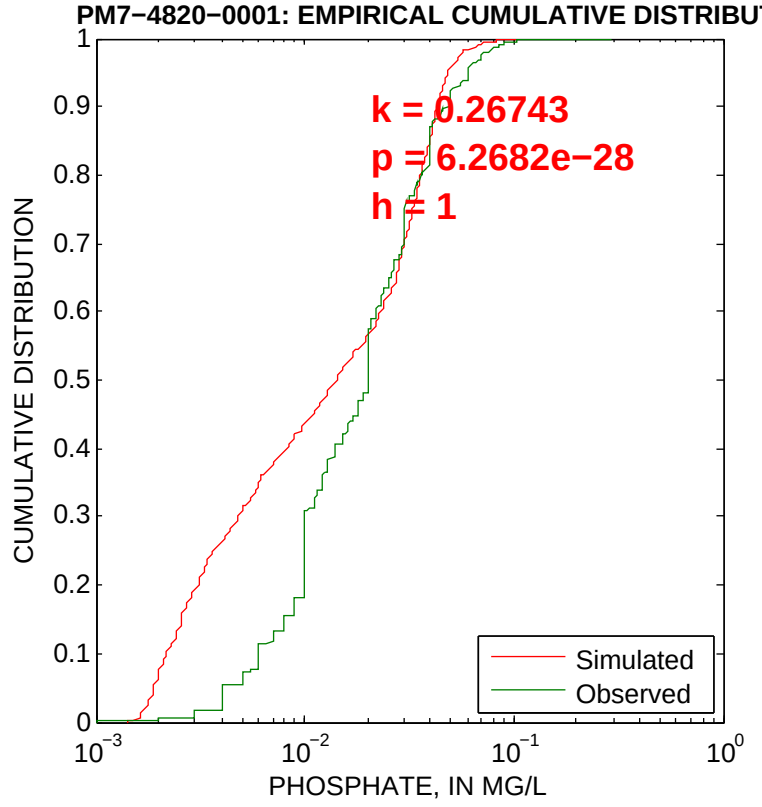












DATA SELECTION

scenario	file
P620171001WQ	PO4X.calib

plot: PO4X - phosphate

Dates: 1/1/1985 – 12/31/201

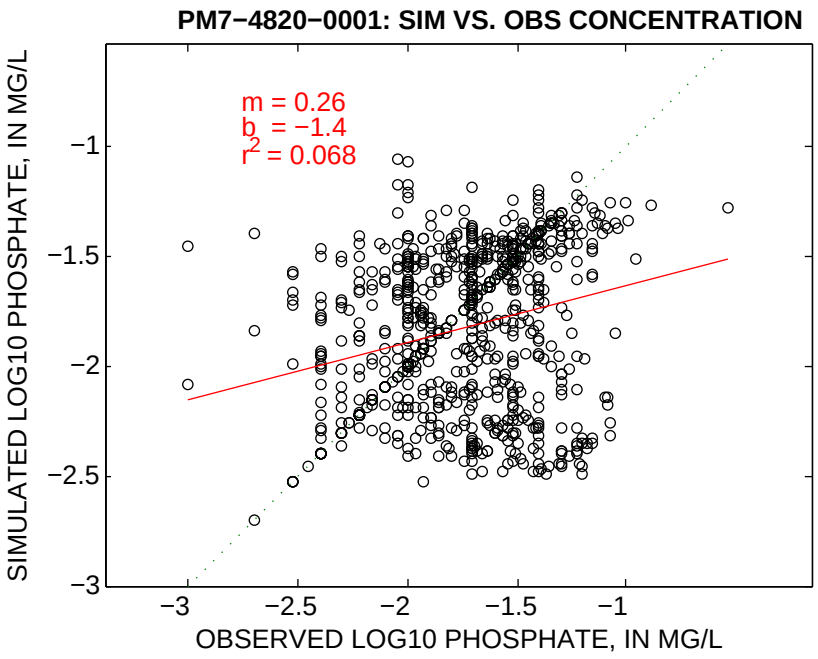
Drive	Directory	Observed
N/A	model	OBS20161101

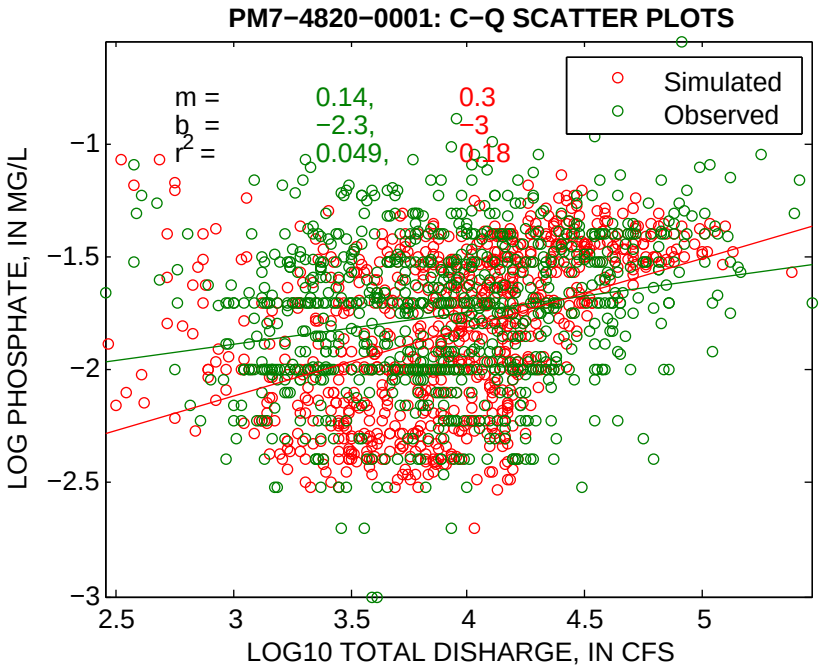
STATISTICS

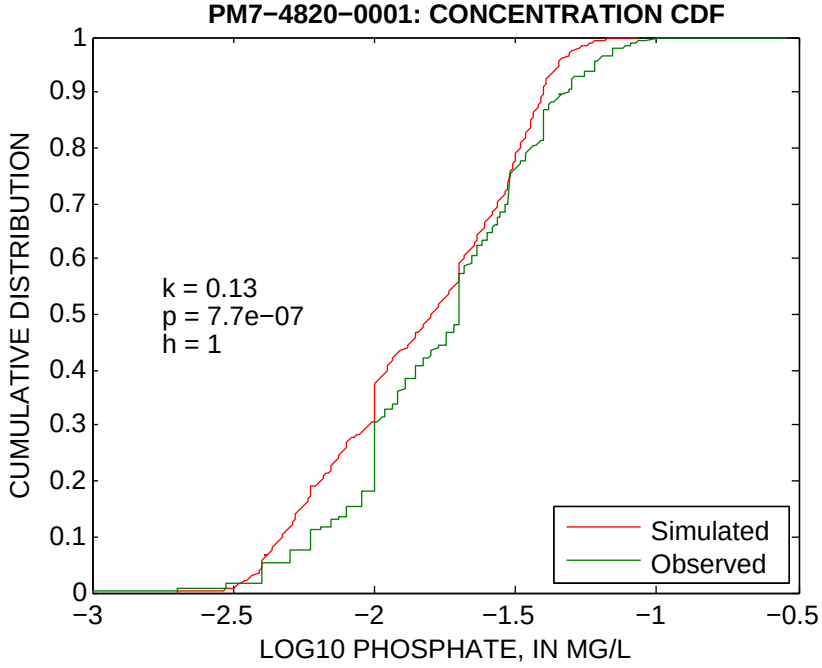
	n	observe	simulate
		875	875
min		0.001	0.0014414
		-3	-2.84122
mean		0.0237191	0.0196961
		-1.75226	-1.93829
media		0.02	0.014136
		-1.69897	-1.84967
max		0.29	0.10458
		-0.537602	-0.980551
varian		0.00040402	0.00030379
		0.117529	0.248405
JB		0.001	0.001
		0.031348	0.001
		ra	log
%		-16.961	10.6165
err.va		0.00062326	0.380614
rel.std.err		1.54264	3.23847
mod.eff		-0.542638	-2.23847

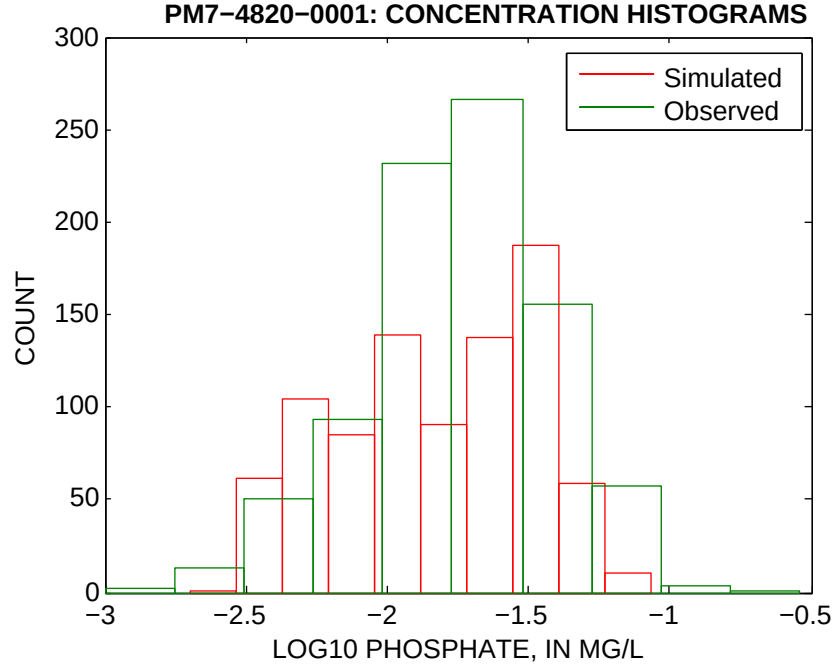
VERSION 2.1

ALL DATA
LOG10

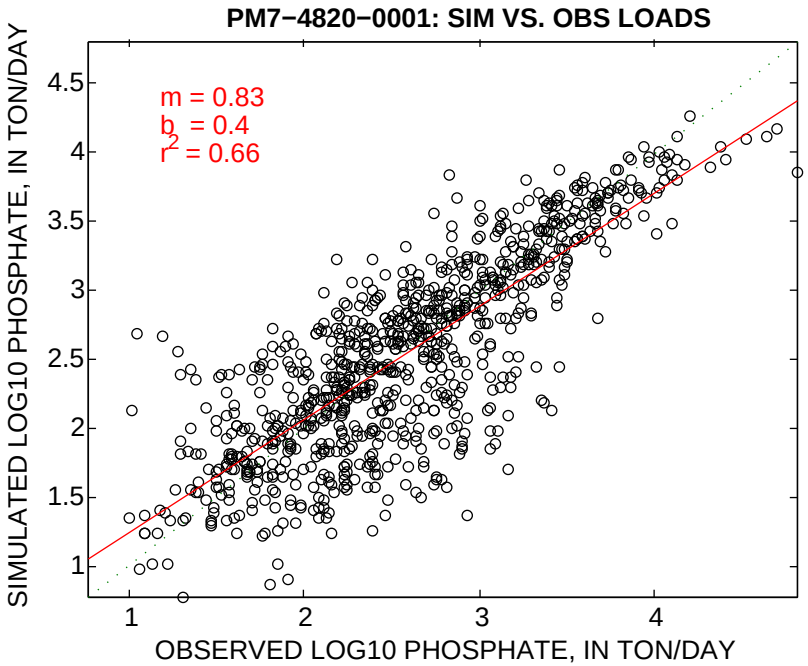


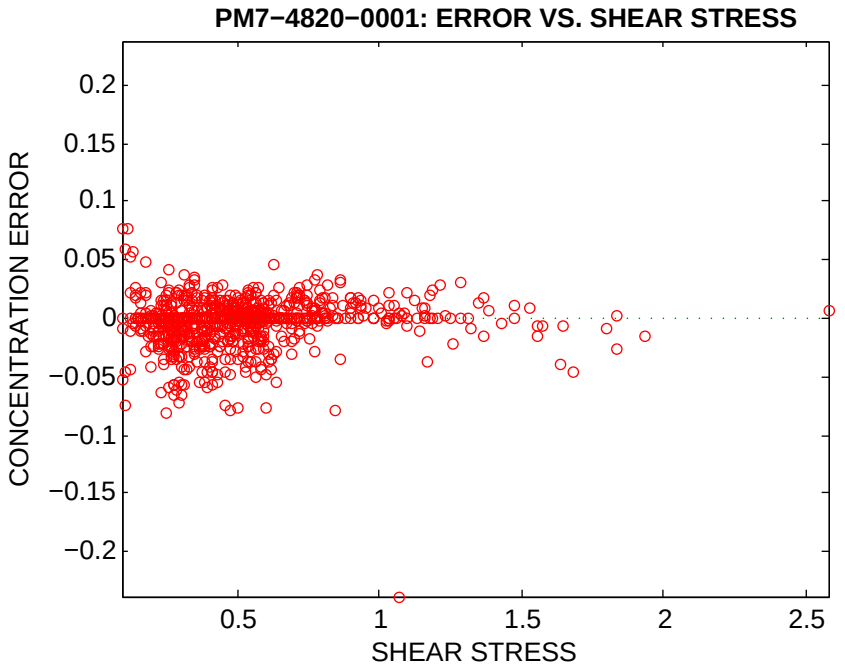


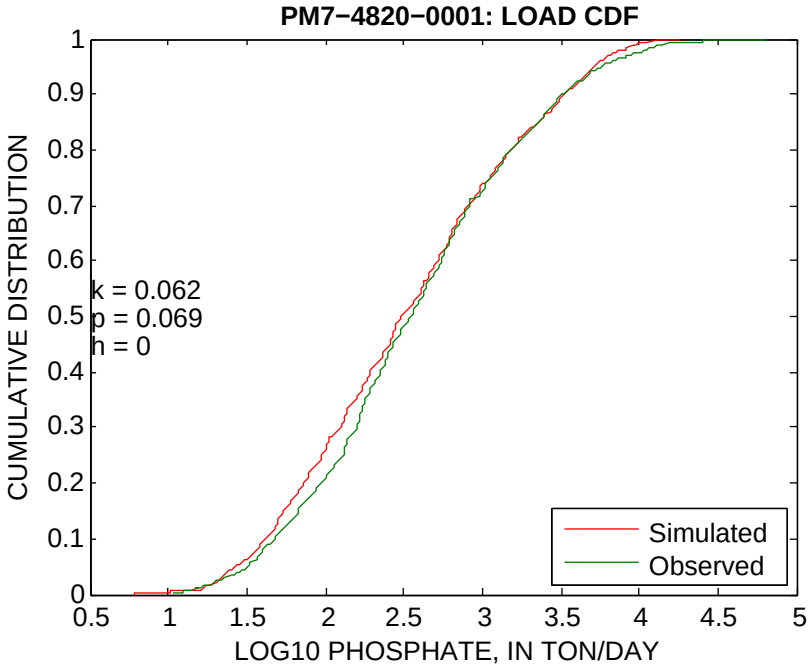


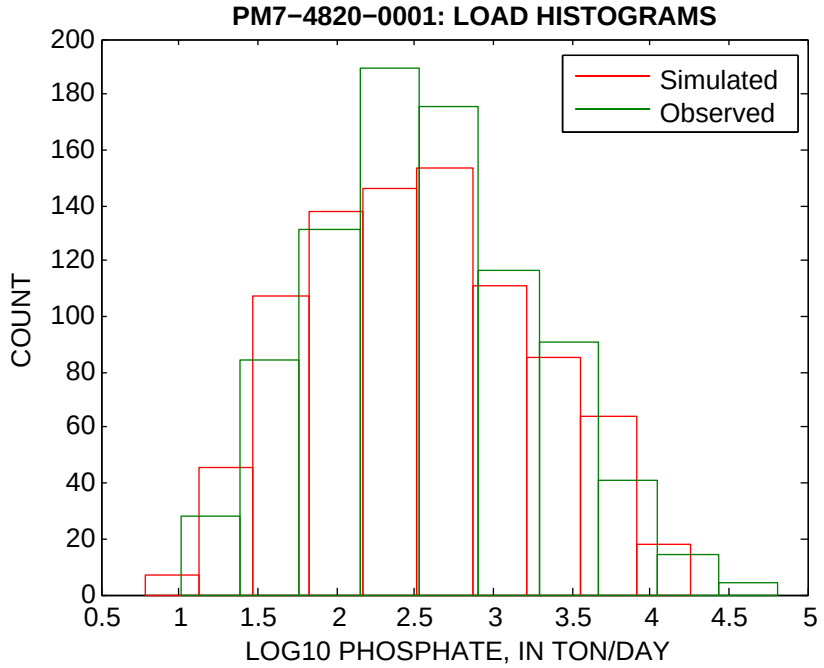


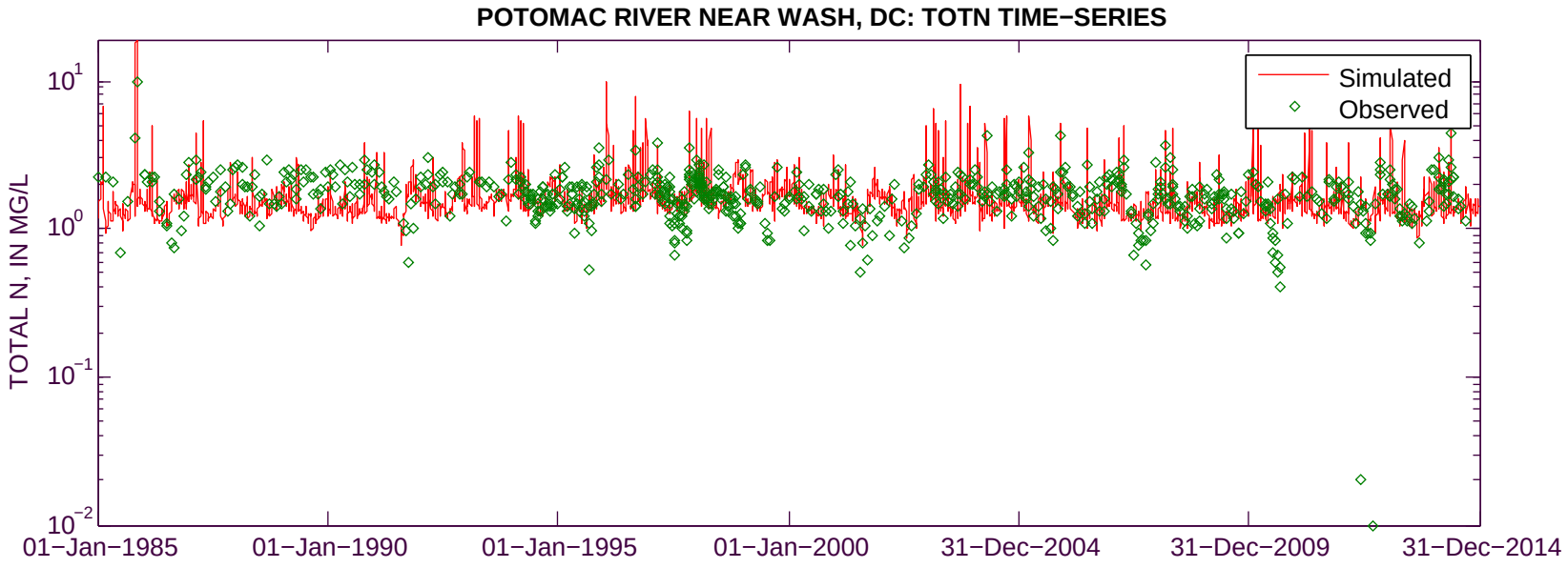
LOAD DATA
LOG10

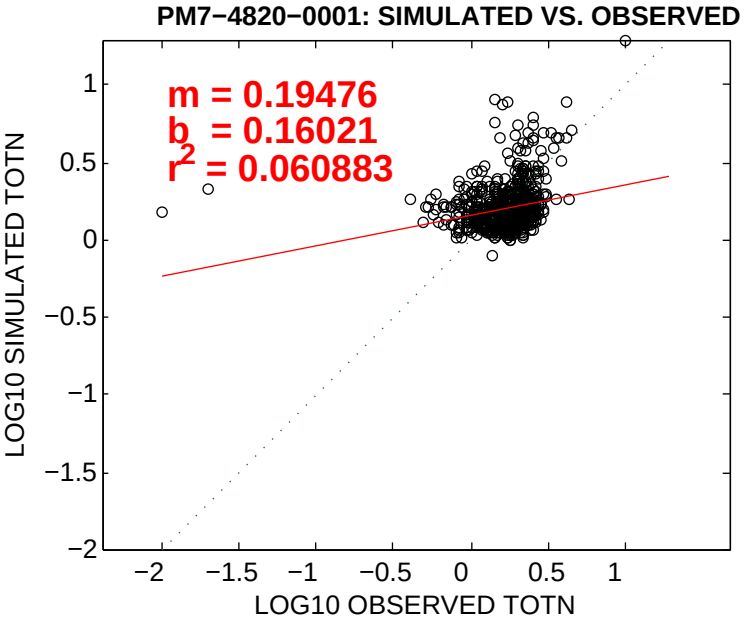


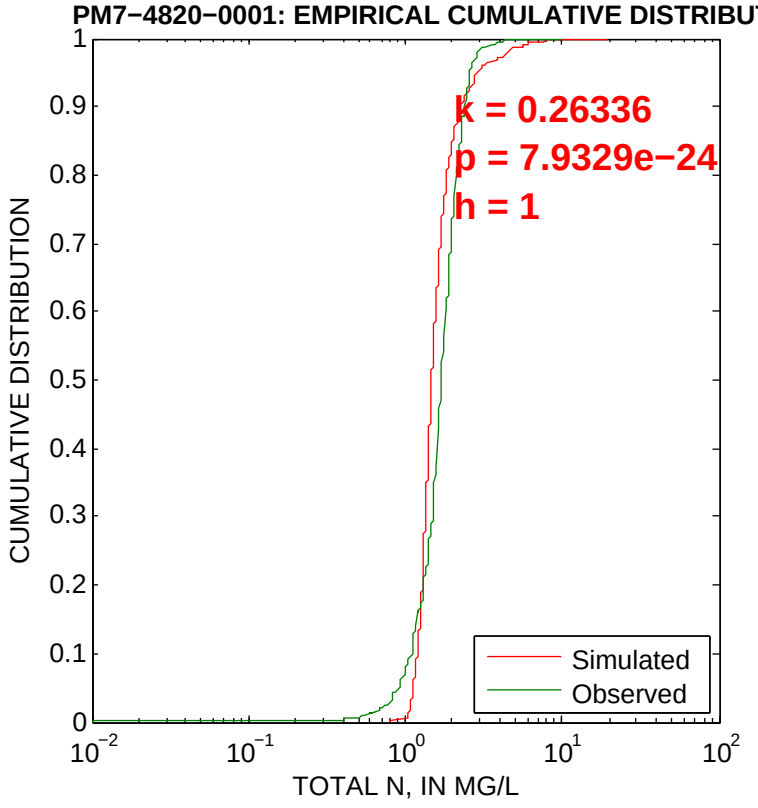












DATA SELECTION

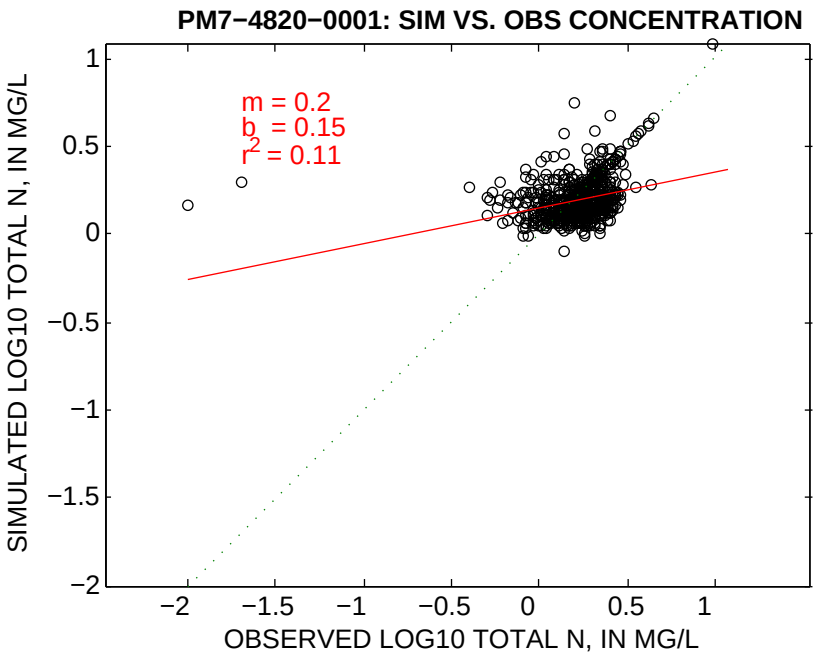
scenario: P620171001WQ
file: TOTN.calib
plot: TOTN - total nitrogen
Dates: 1/1/1985 – 12/31/201
Drive: N/A
Directory: model
Observed: OBS20161101

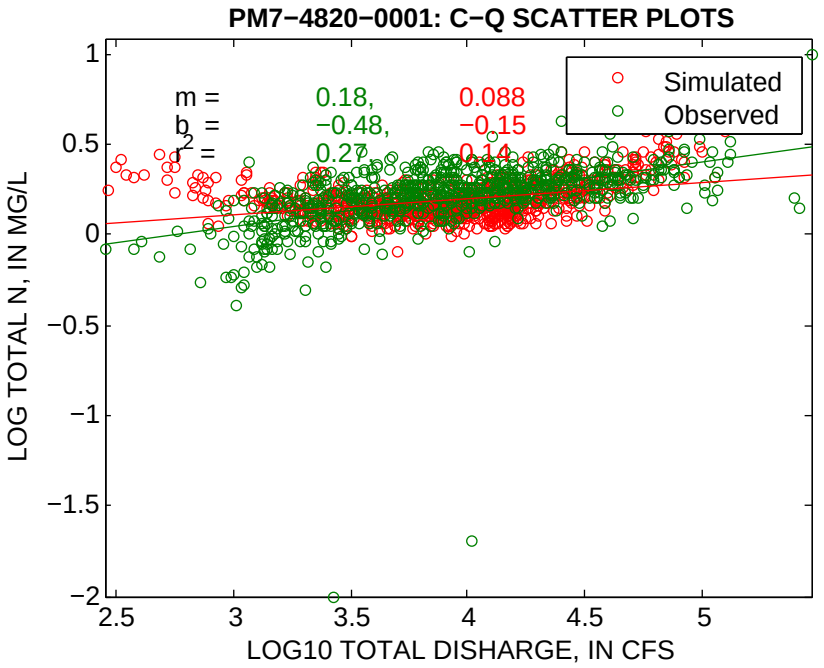
STATISTICS

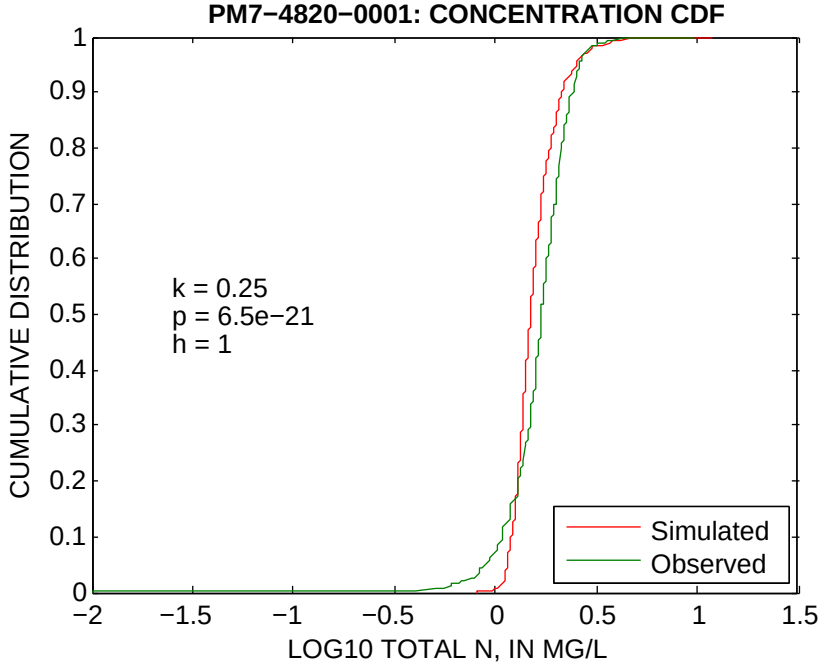
n	767	767
	observe	simulate
min	0.01	0.78839
	-2	-0.103259
mean	1.74853	1.7112
	0.21506	0.202099
media	1.7	1.4709
	0.230449	0.167583
max	9.8	19.152
	0.991226	1.28221
varian	0.38423	1.02356
	0.032001	0.0199374
JB	0.001	0.001
	0.001	0.001
	ra	log
%	-2.13539	-6.02668
err.va	0.756692	0.0396415
rel.std.err	1.96937	1.23876
mod.eff	-0.969369	-0.238758

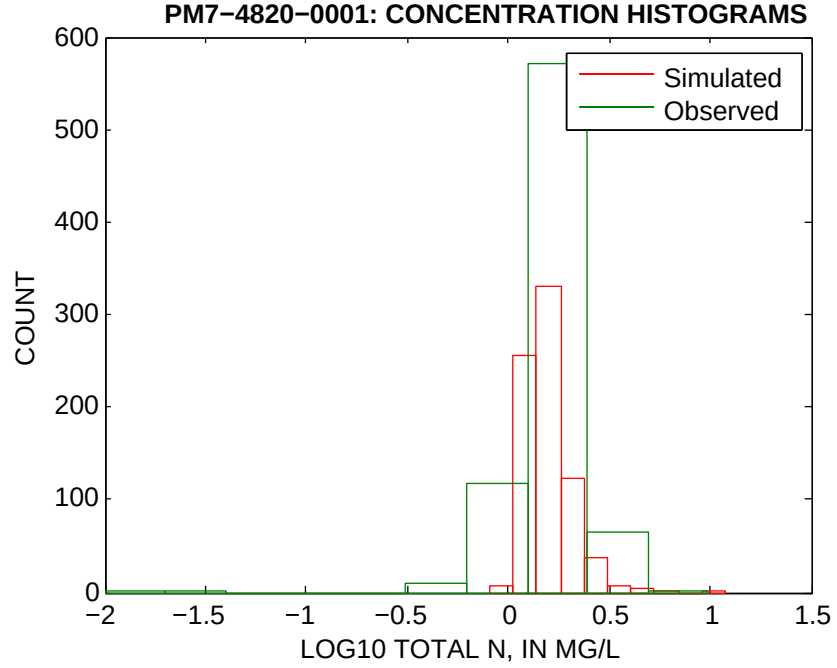
VERSION 2.1

ALL DATA
LOG10

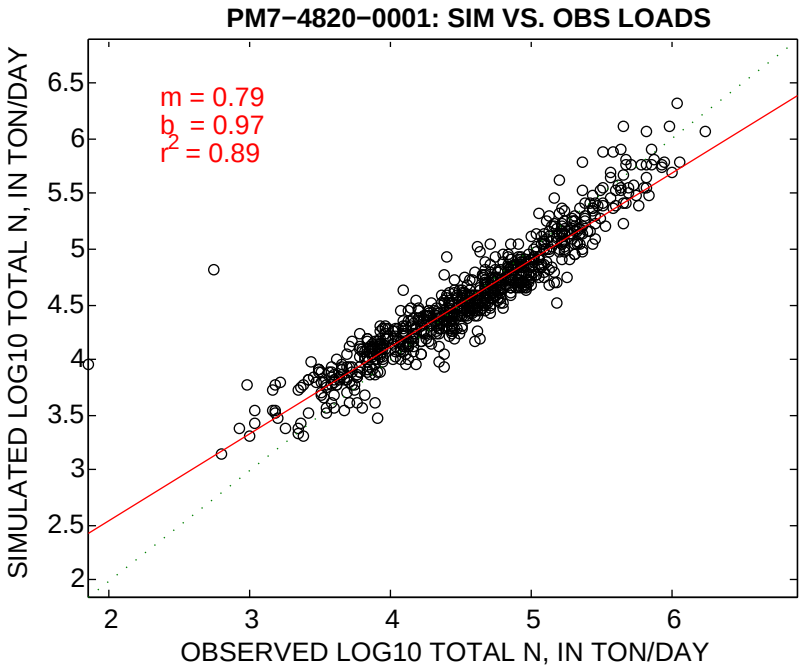


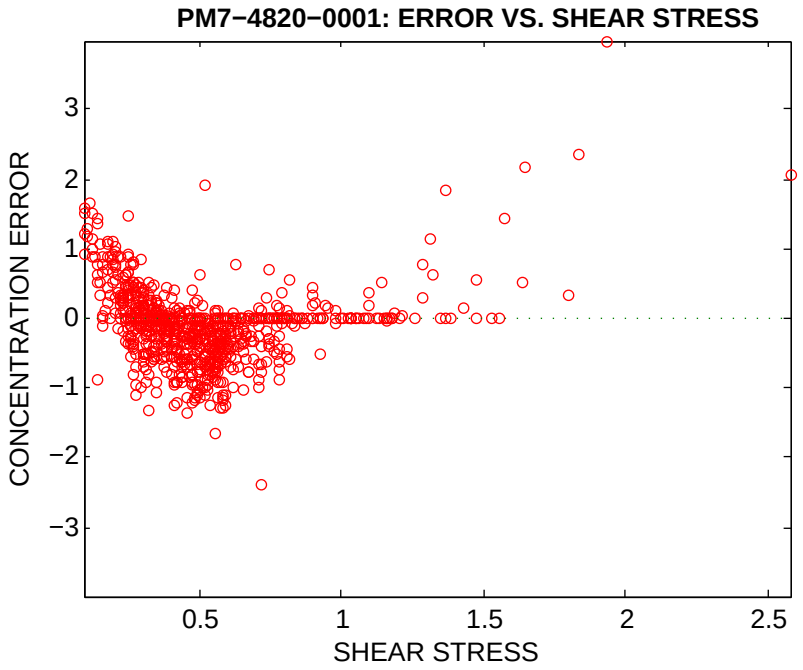


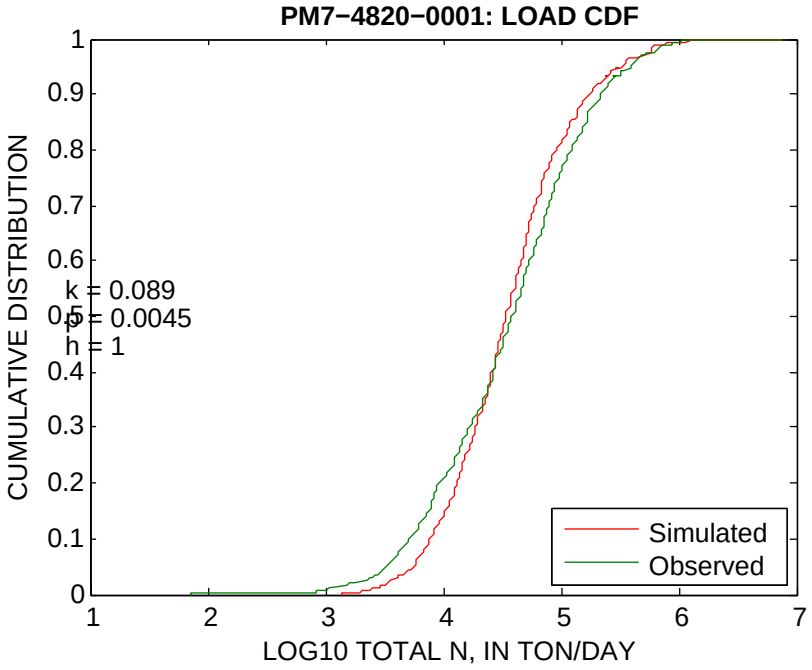


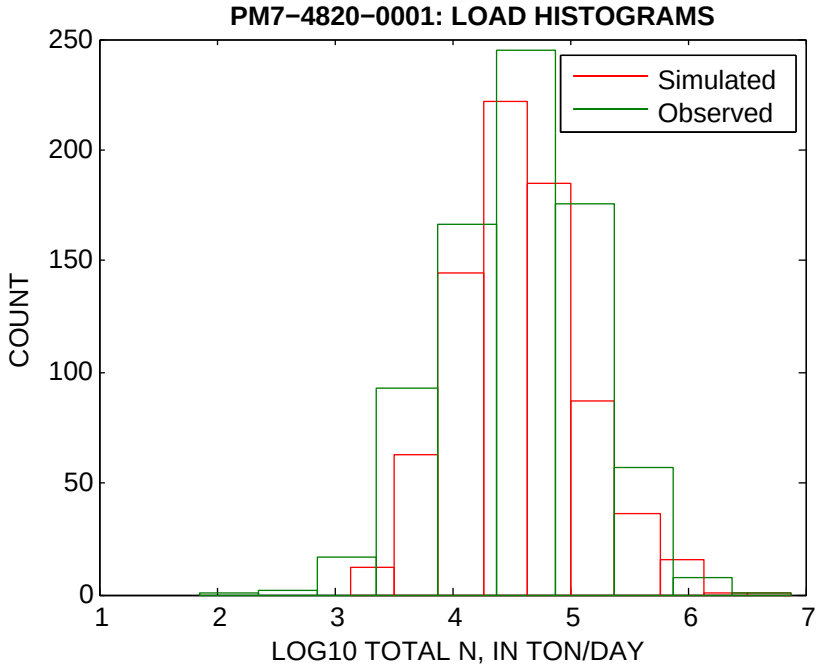


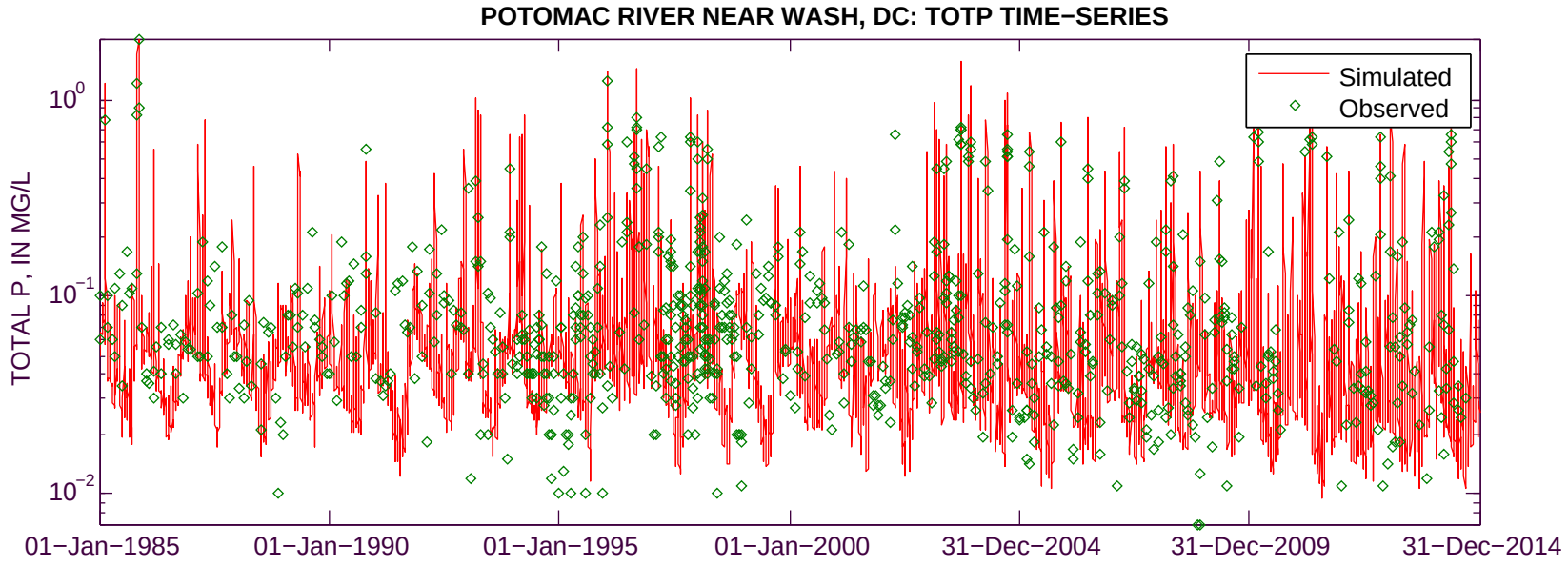
LOAD DATA
LOG10

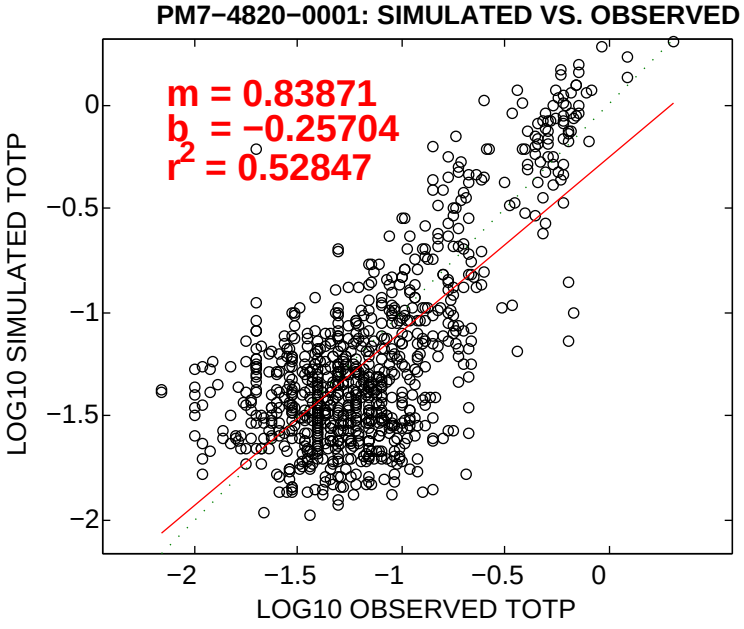


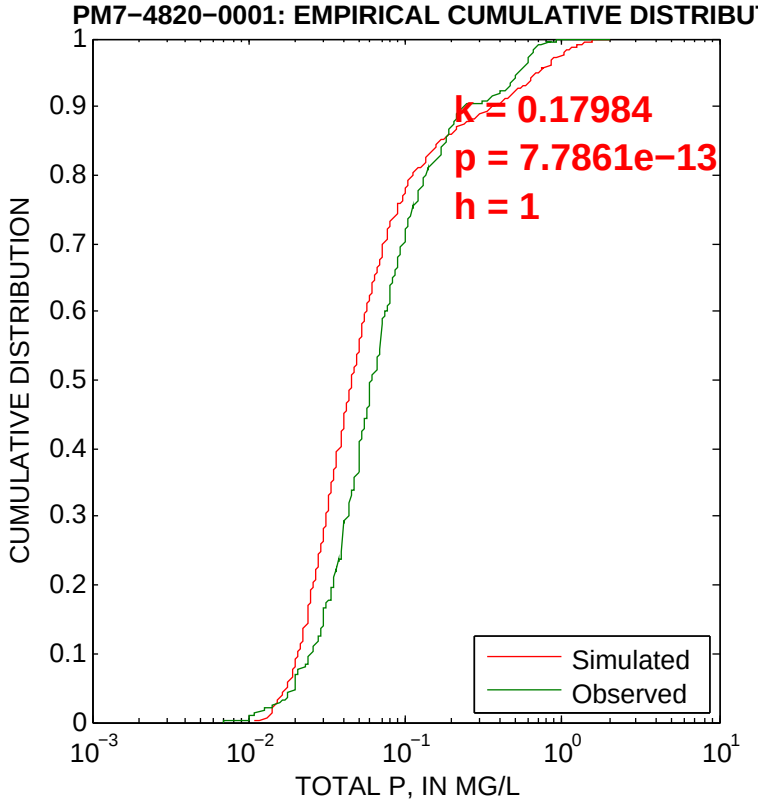












DATA SELECTION

scenario	file
P620171001WQ	TOTP.calib

plot: TOTP - total phosphorus

Dates: 1/1/1985 – 12/31/201

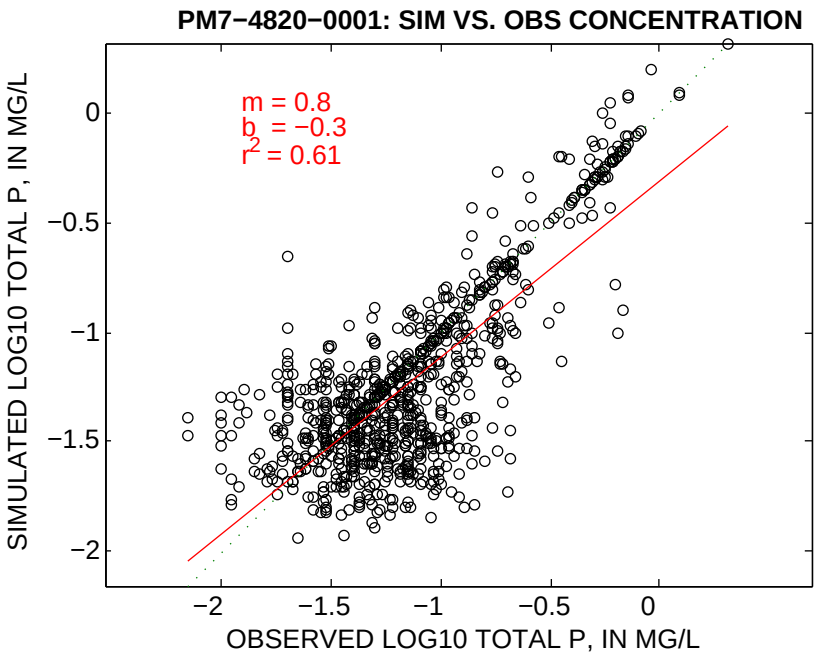
Drive	Directory	Observed
N/A	model	OBS20161101

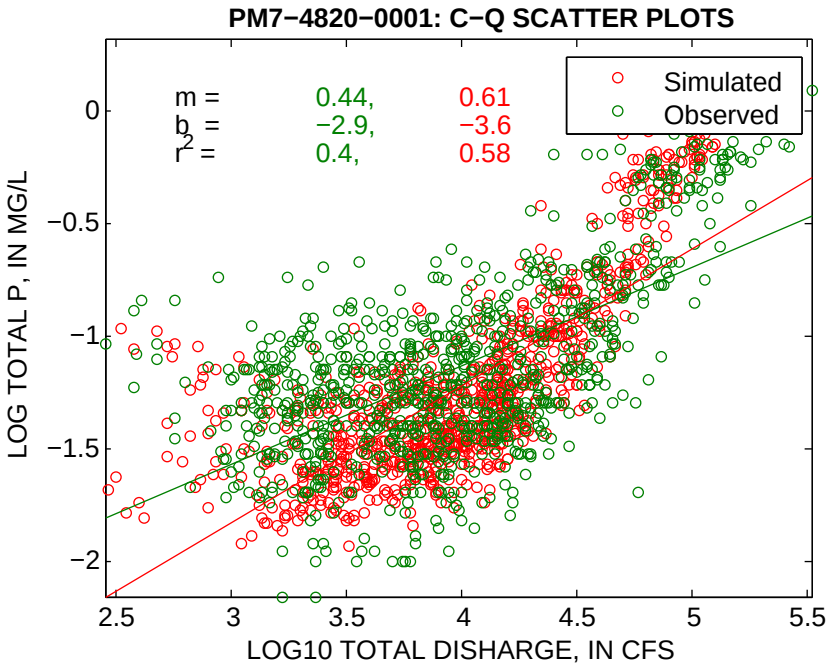
STATISTICS

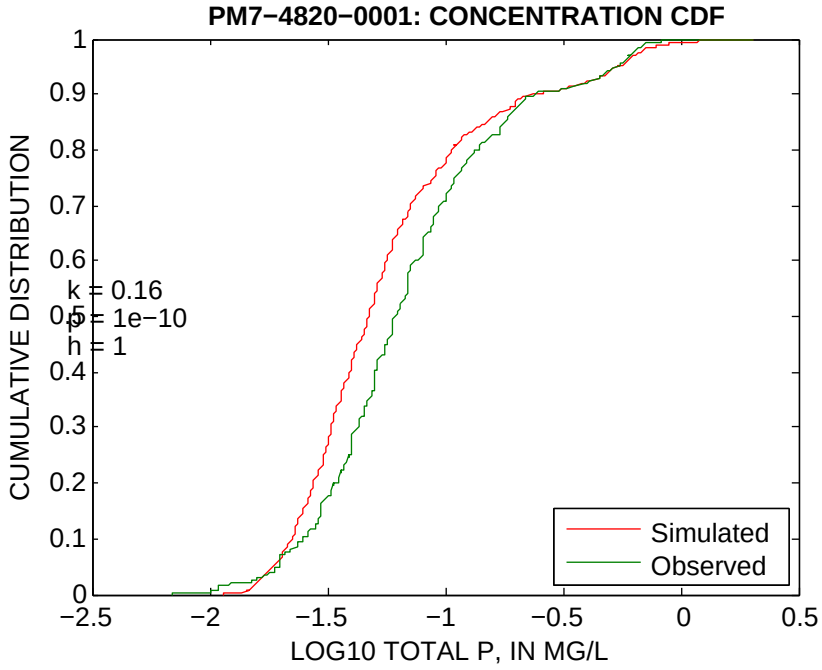
	n	observe	simulate
		873	873
min		0.007	0.010593
		-2.1549	-1.97498
mean		0.119851	0.134362
		-1.14774	-1.21966
media		0.0619864	0.04565
		-1.2077	-1.34056
max		2.04127	2.0359
		0.3099	0.308756
varian		0.0291674	0.0641818
		0.16375	0.217963
JB		0.001	0.001
		0.001	0.001
		ra	log
%		12.1076	6.26608
err.va		0.0178066	0.112215
rel.std.err		0.610496	0.685285
mod.eff		0.389504	0.314715

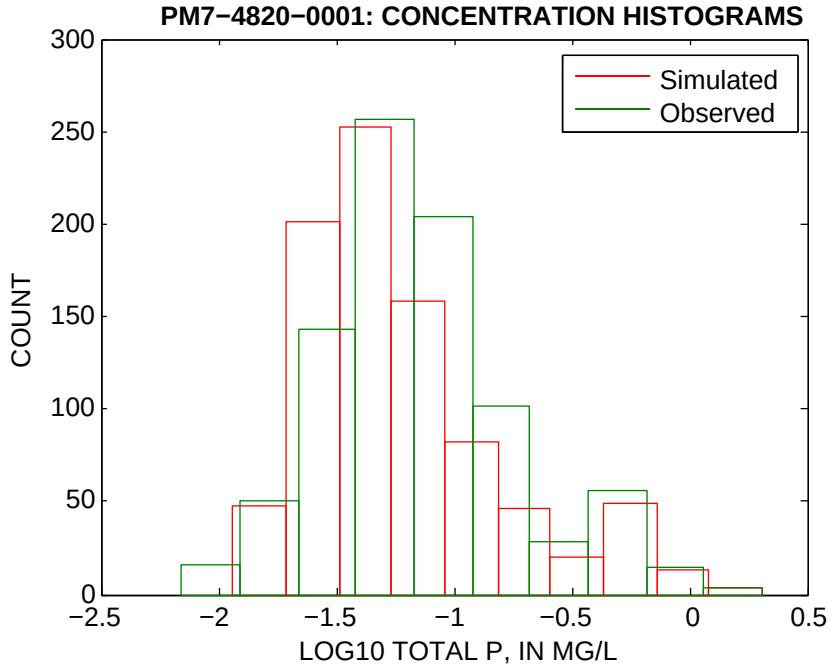
VERSION

ALL DATA
LOG10

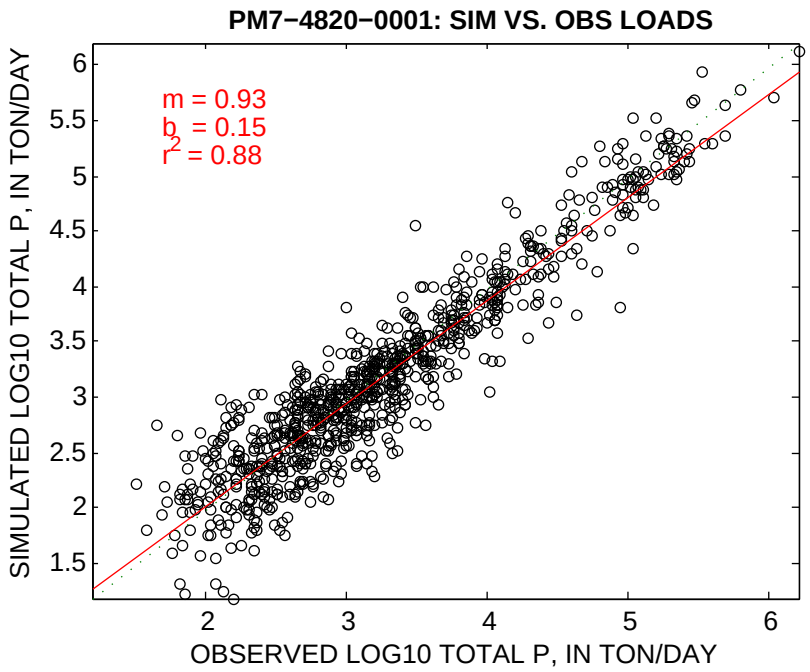


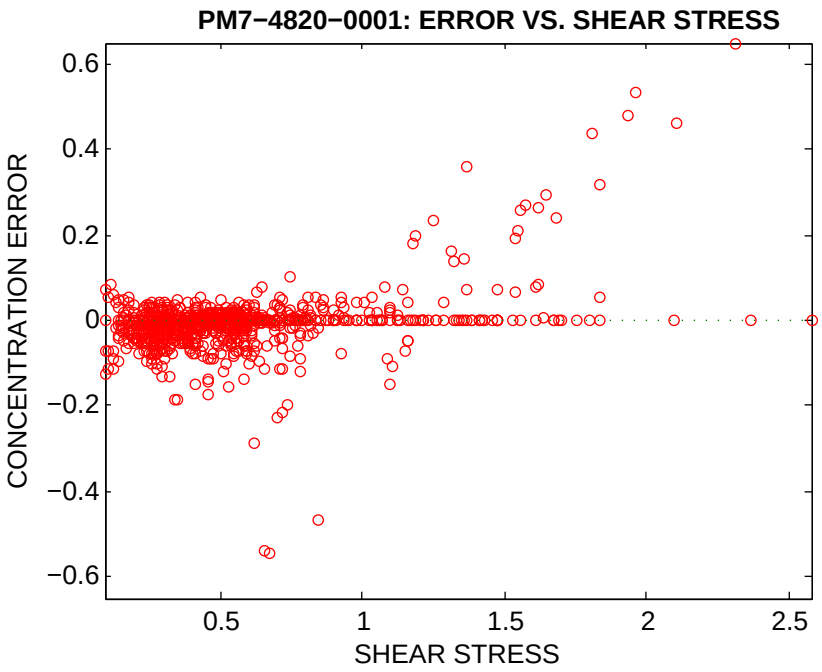


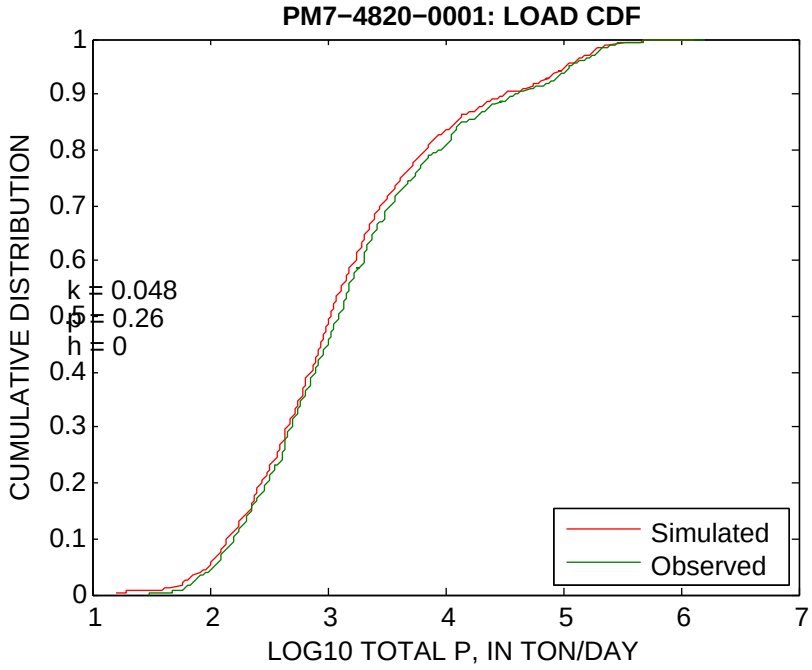


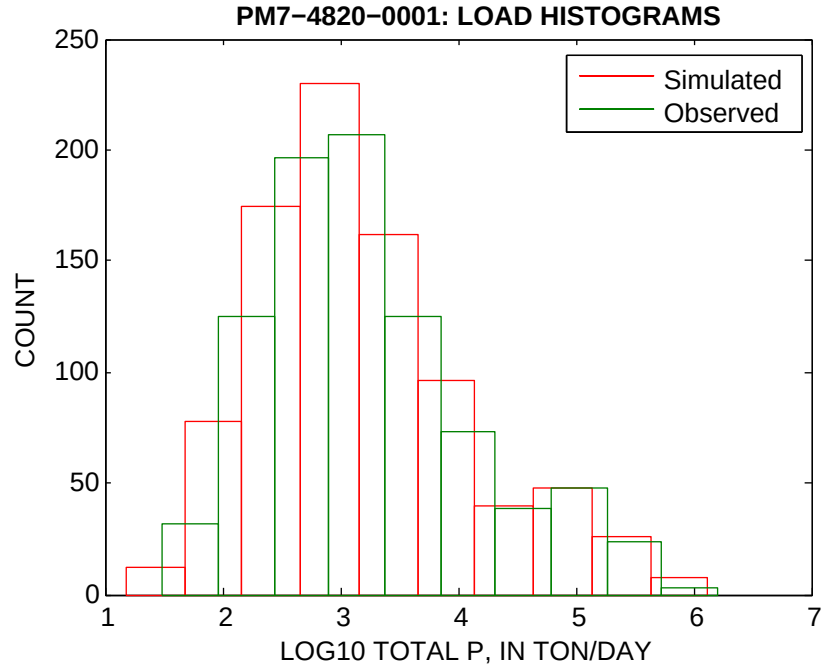


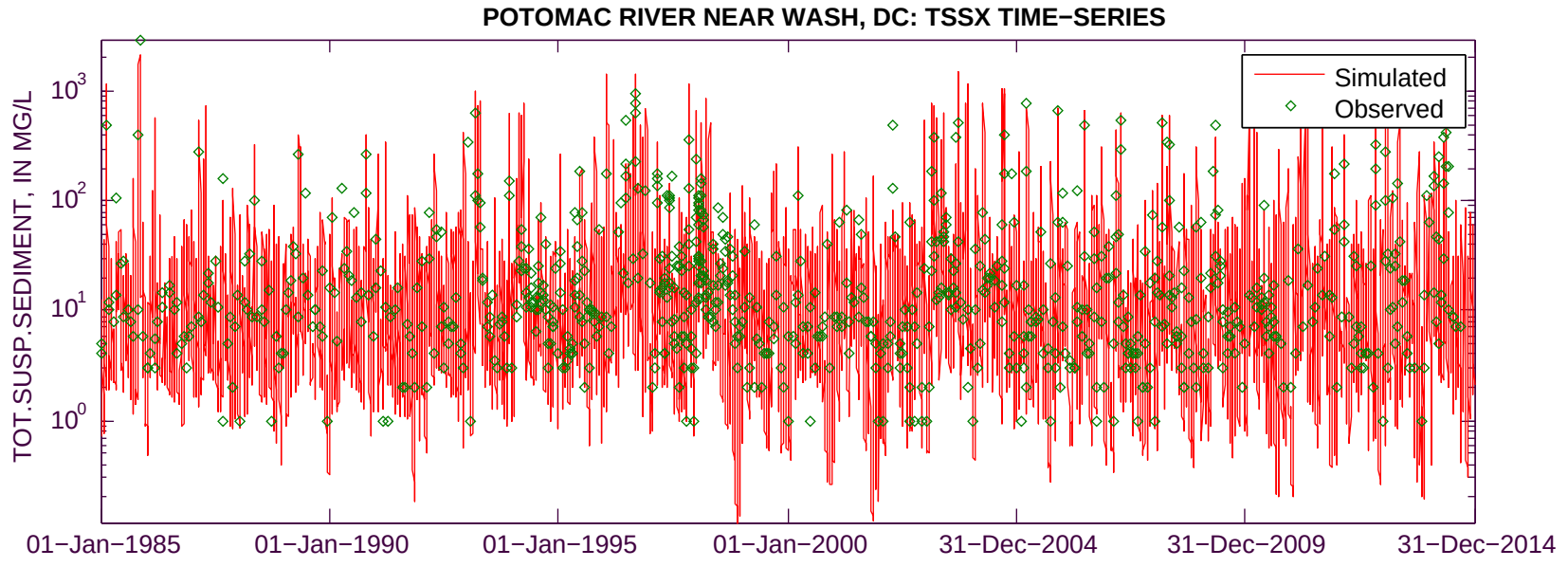
LOAD DATA
LOG10

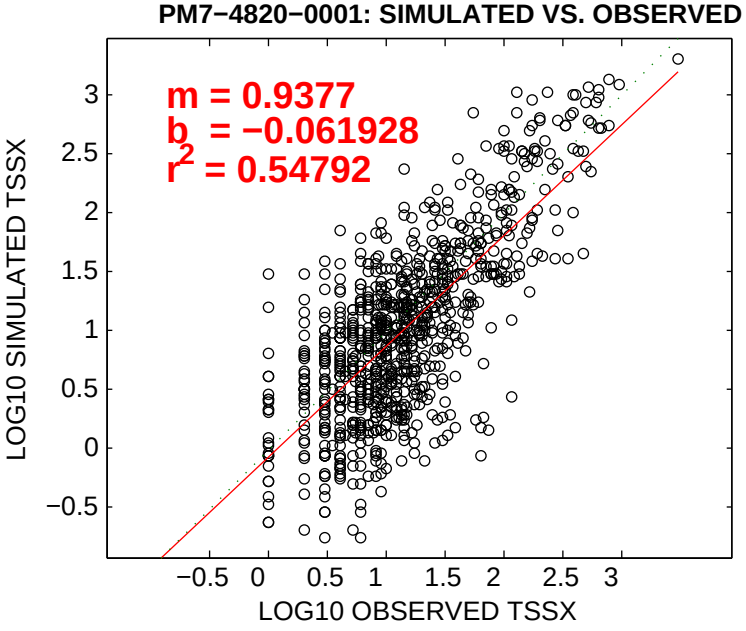


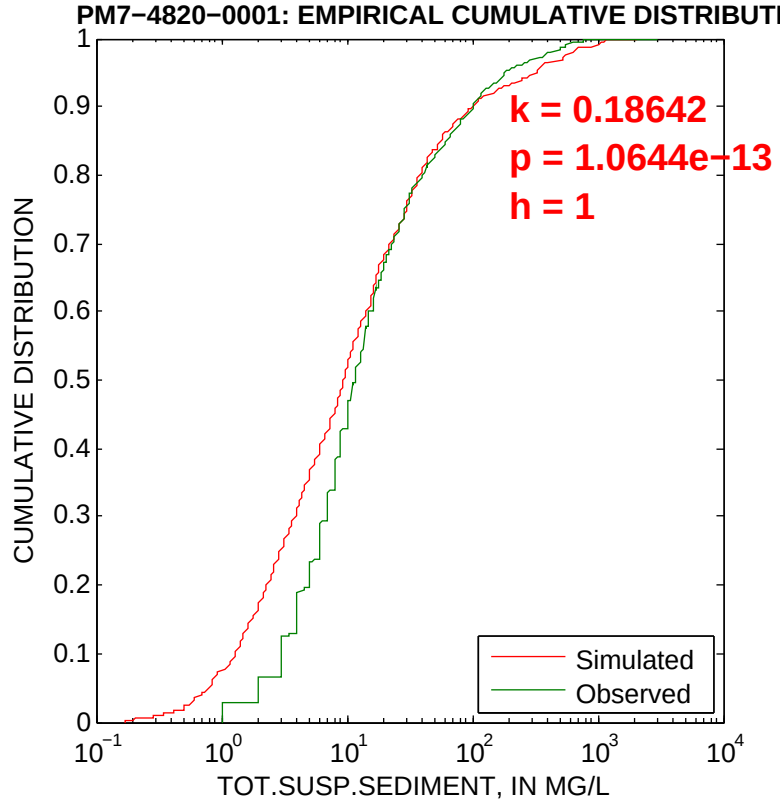












DATA SELECTION

scenario	file
P620171001WQ	TSSX.calib

plot: TSSX - total suspended ...

Dates: 1/1/1985 — 12/31/201

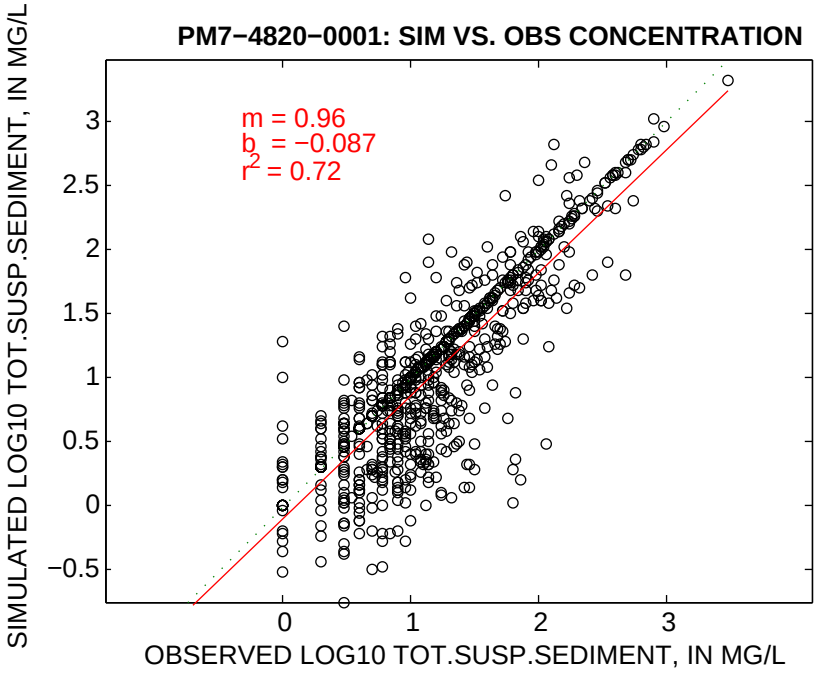
Drive	Directory	Observed
N/A	model	OBS20161101

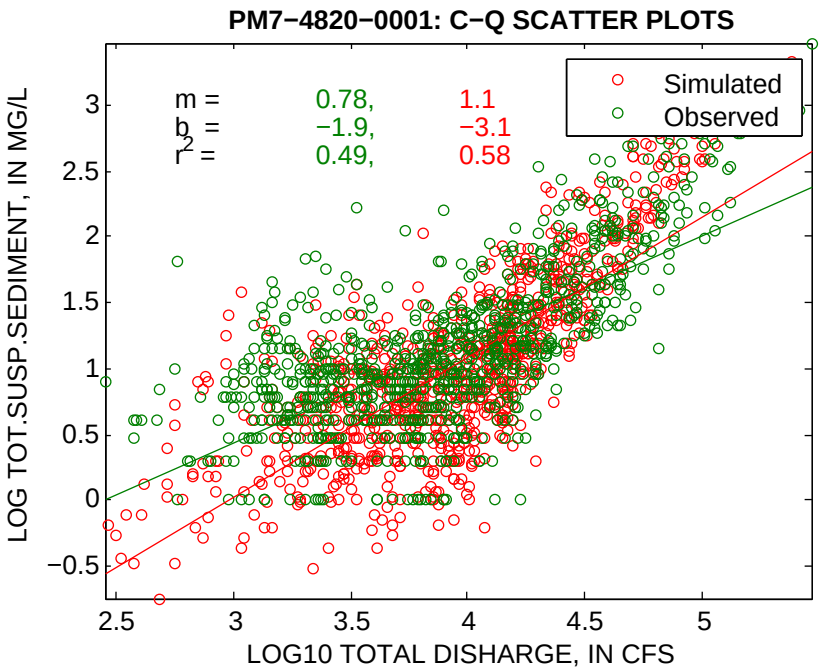
STATISTICS

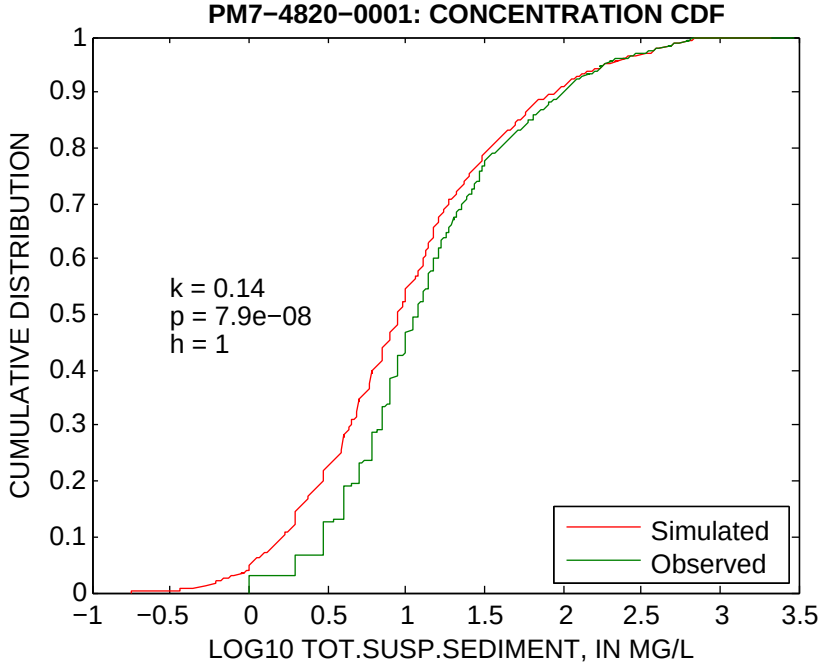
	n	observe	simulate
		869	869
min		1	0.17023
		0	-0.768964
mean		46.1244	57.3849
		1.1532	1.01942
media		12	9.4845
		1.07918	0.977014
max		2990	2096.9
		3.47567	3.32158
varian		19628.6	29401.3
		0.351985	0.564849
JB		0.001	0.001
		0.001	0.001
		ra	log
%		24.4132	-11.6006
err.va		10904.2	0.274641
rel.std.err		0.555527	0.780264
mod.eff		0.444473	0.219736

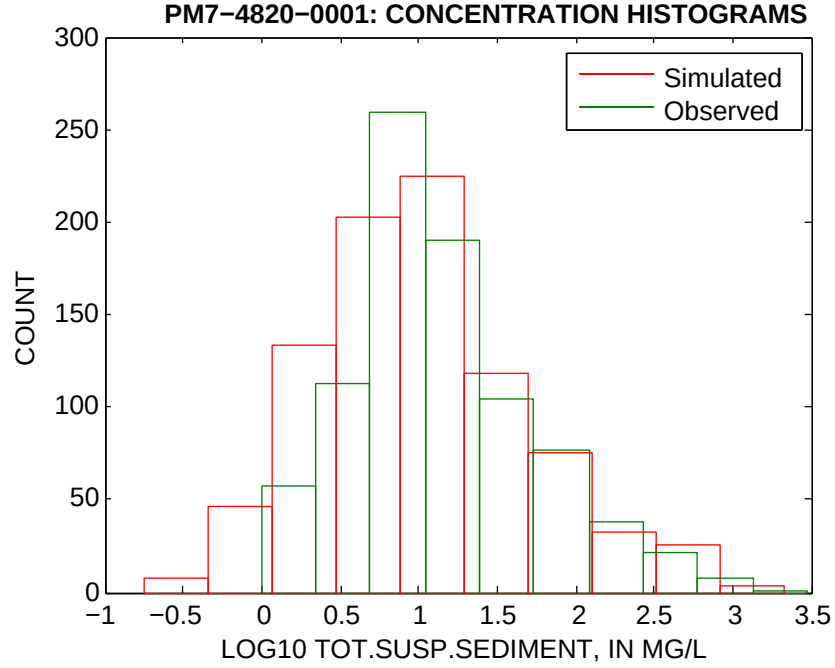
VERSION 2.1

ALL DATA
LOG10

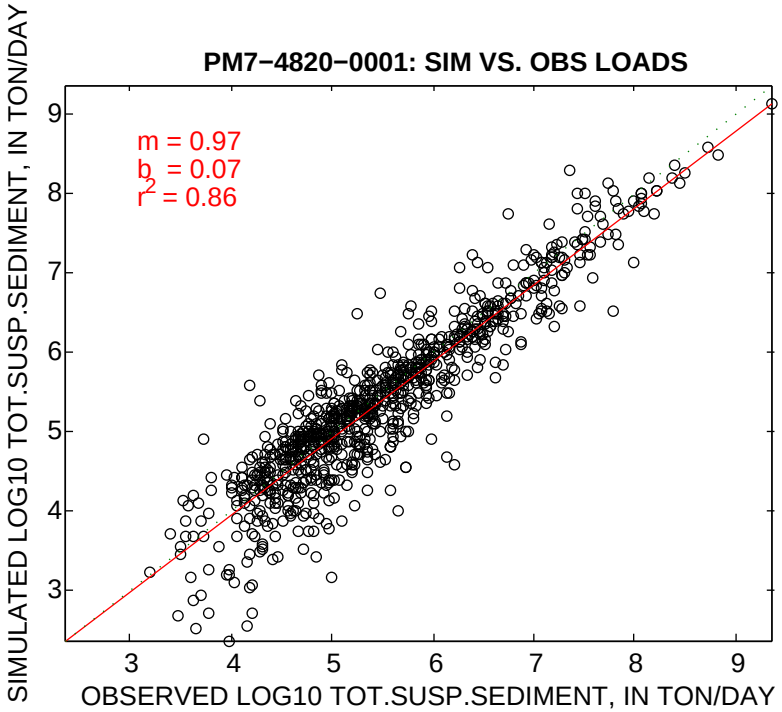


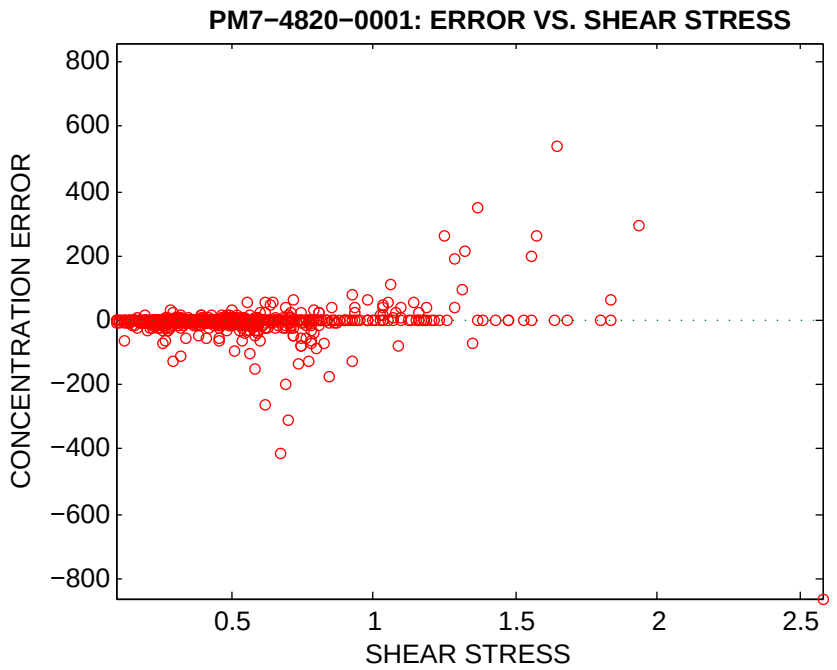


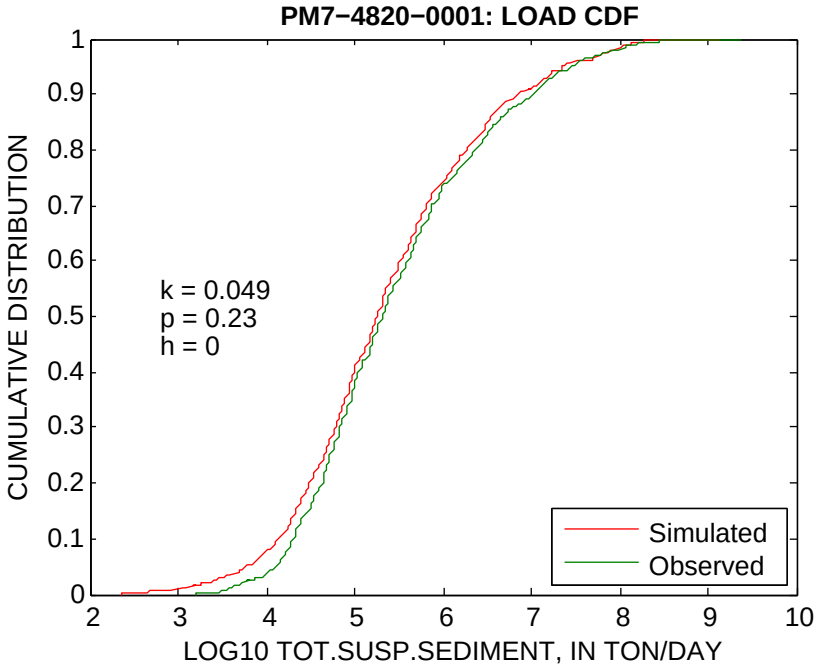


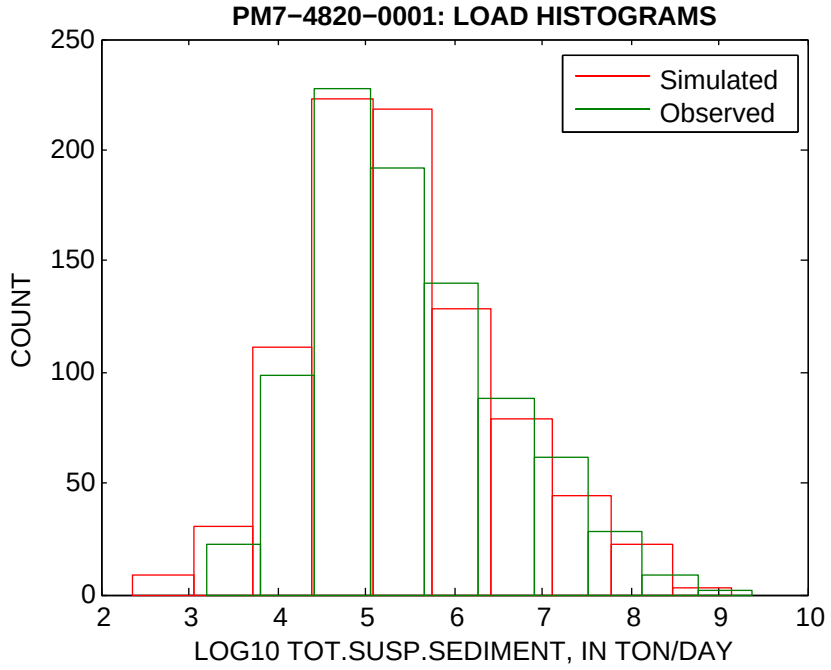


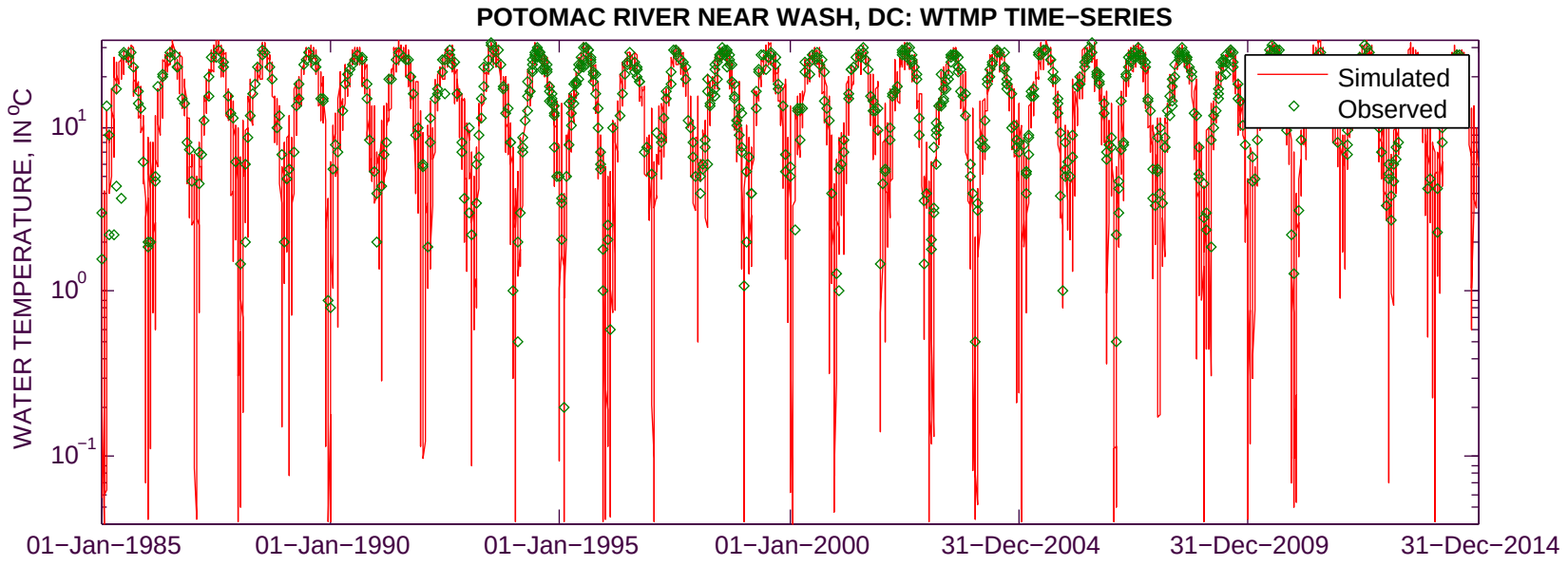
LOAD DATA
LOG10

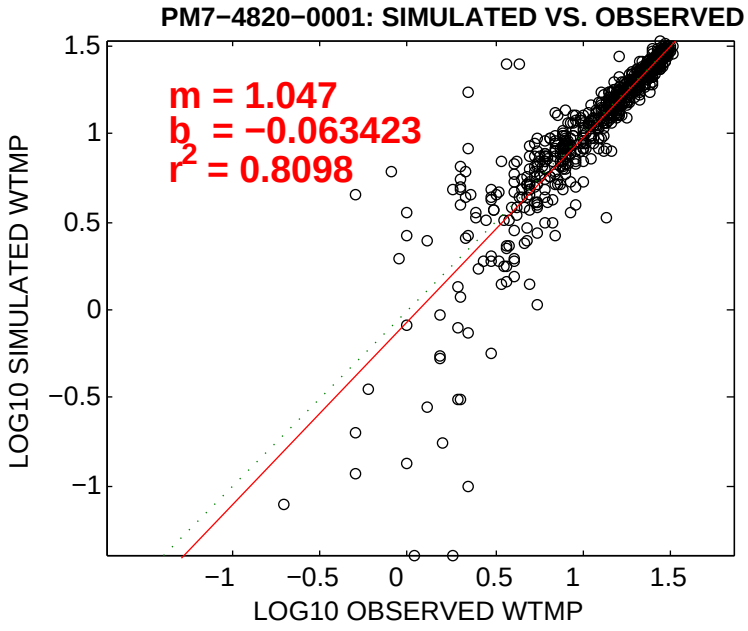


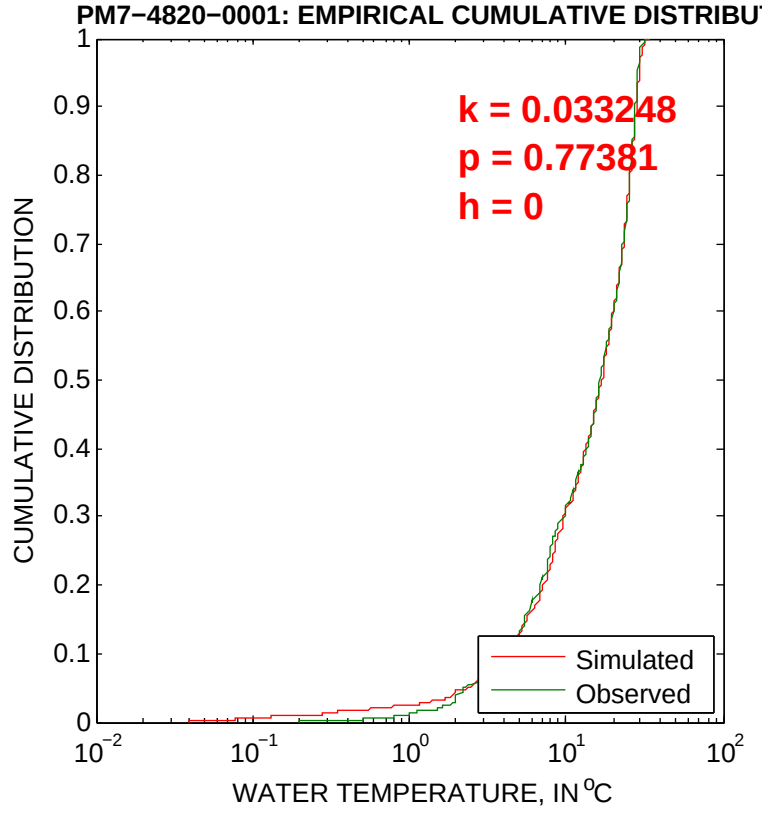












DATA SELECTION

scenario	file
P620171001WQ	WTMP.calib

plot: WTMP - water tempera...

Dates: 1/1/1985 — 12/31/201

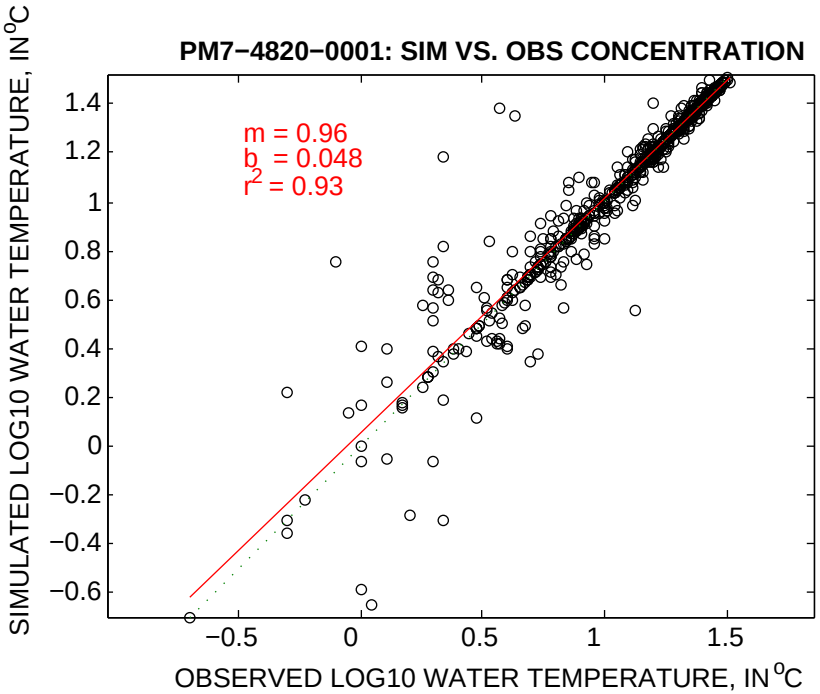
Drive	Directory	Observed
N/A	model	OBS20161101

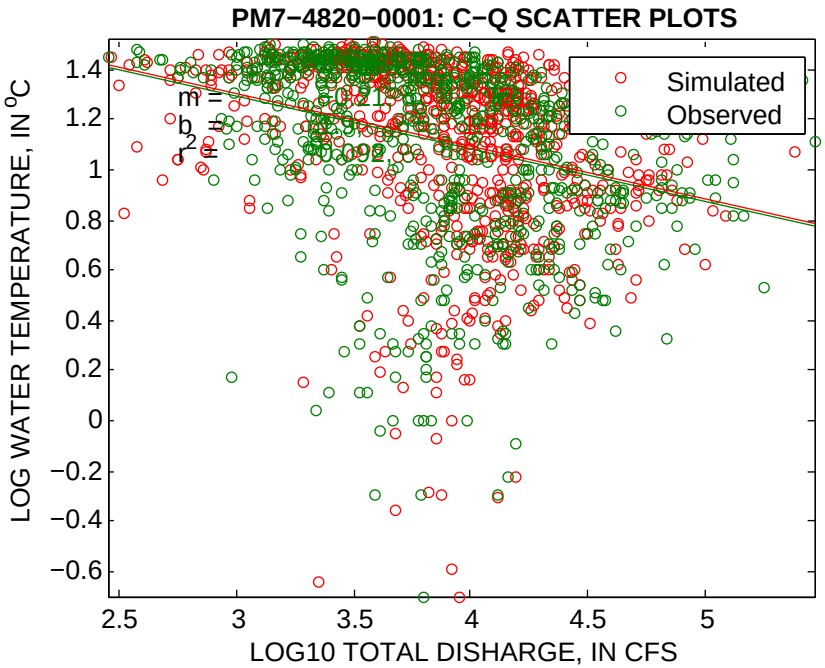
STATISTICS

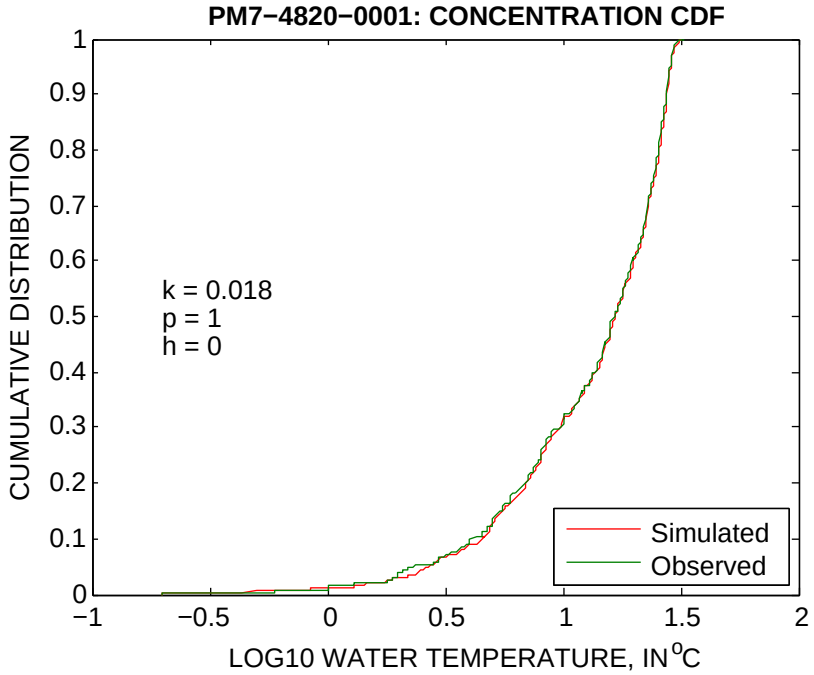
n	782	782
	observe	**simulate**
min	0.2	0.040128
	-0.69897	-1.39655
mean	16.3581	16.4495
	1.11108	1.09986
media	16.5	17.1115
	1.21748	1.23329
max	32.7	33.629
	1.51455	1.52671
varian	78.0899	79.3011
	0.124355	0.168333
JB	0.001	0.001
	0.001	0.001
	ra	log
%	0.558362	-1.00951
err.va	5.53985	0.0324176
rel.std.err	0.0709419	0.260685
mod.eff	0.929058	0.739315

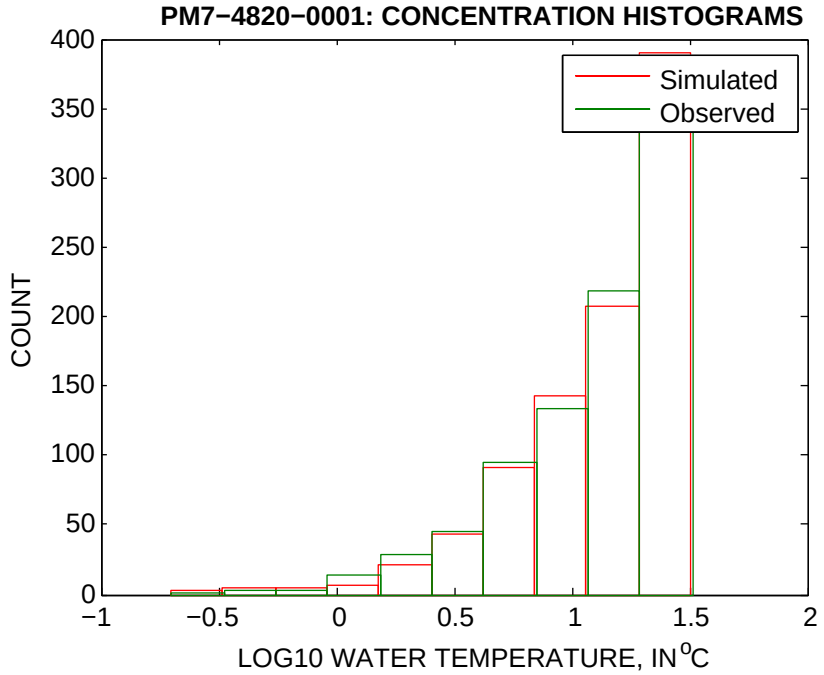
VERSION

ALL DATA
LOG10

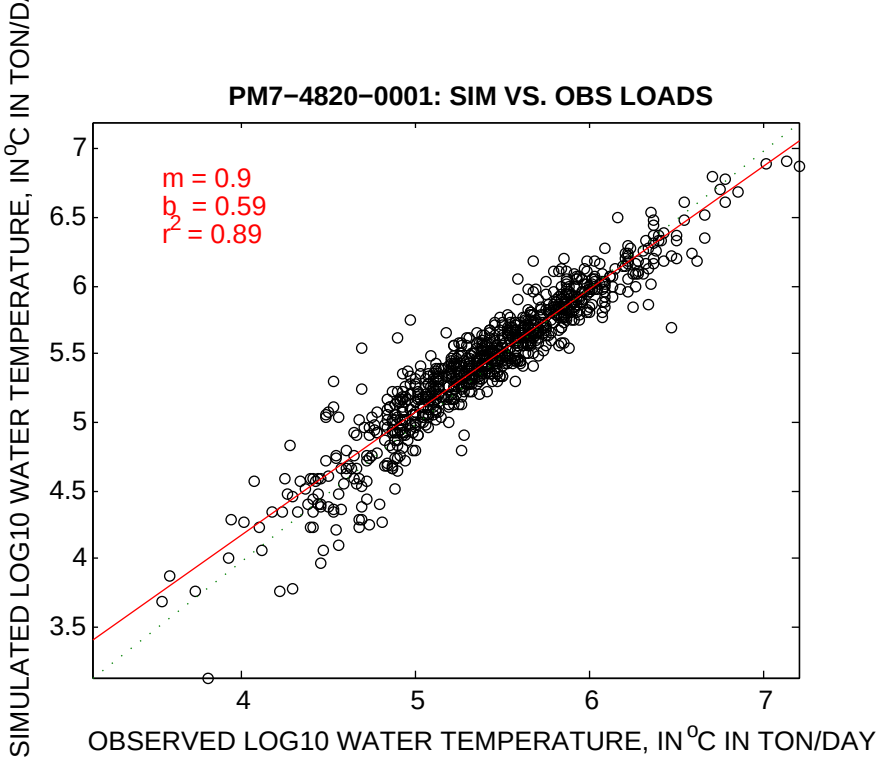


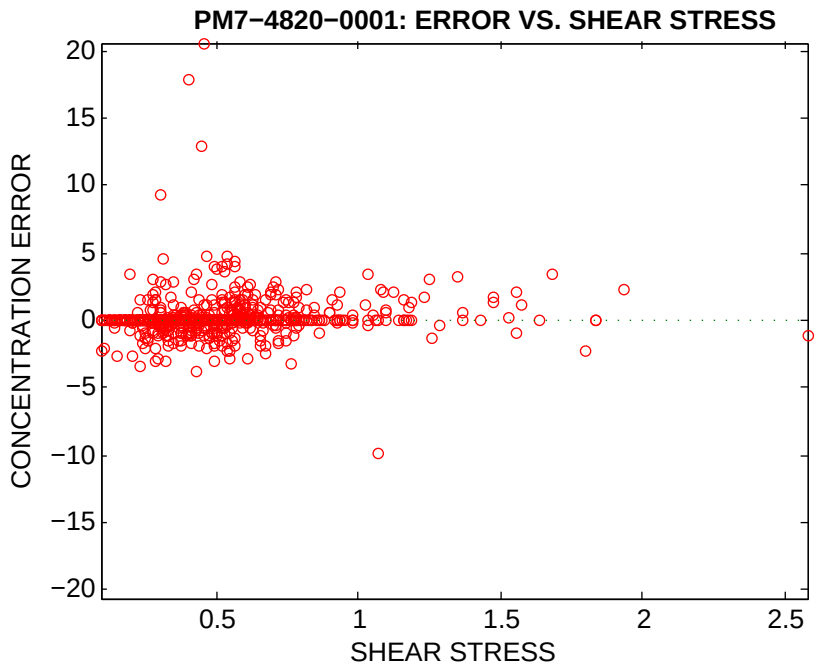


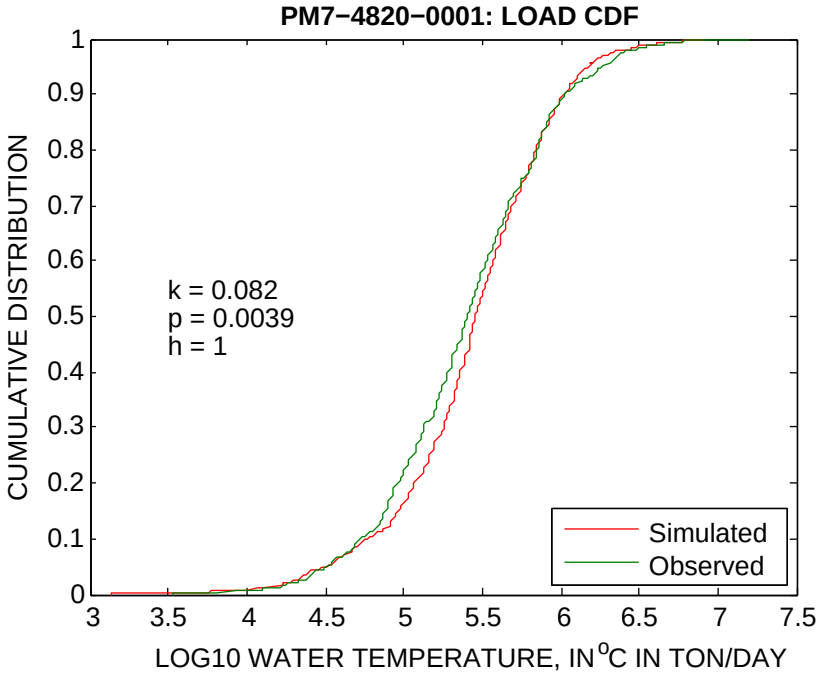


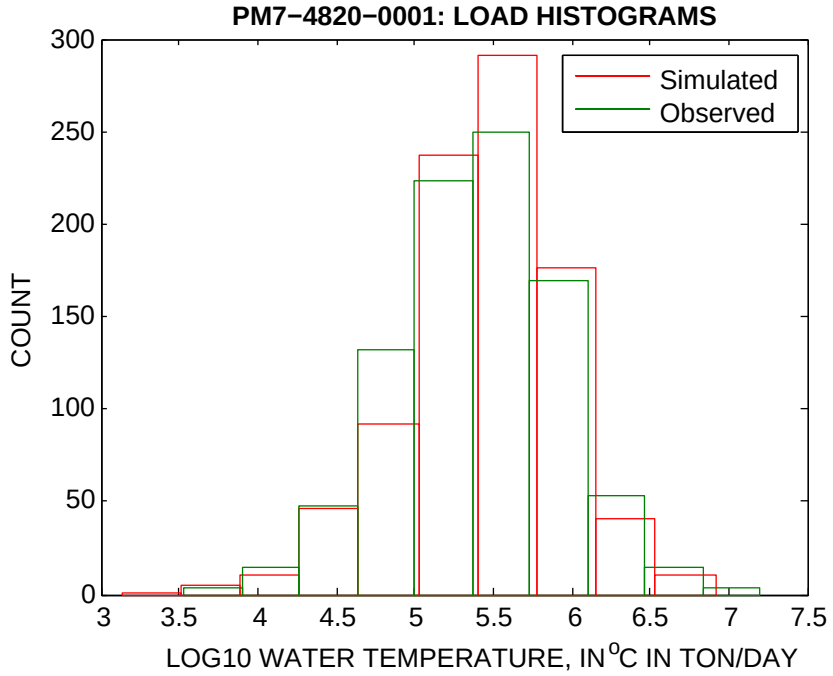


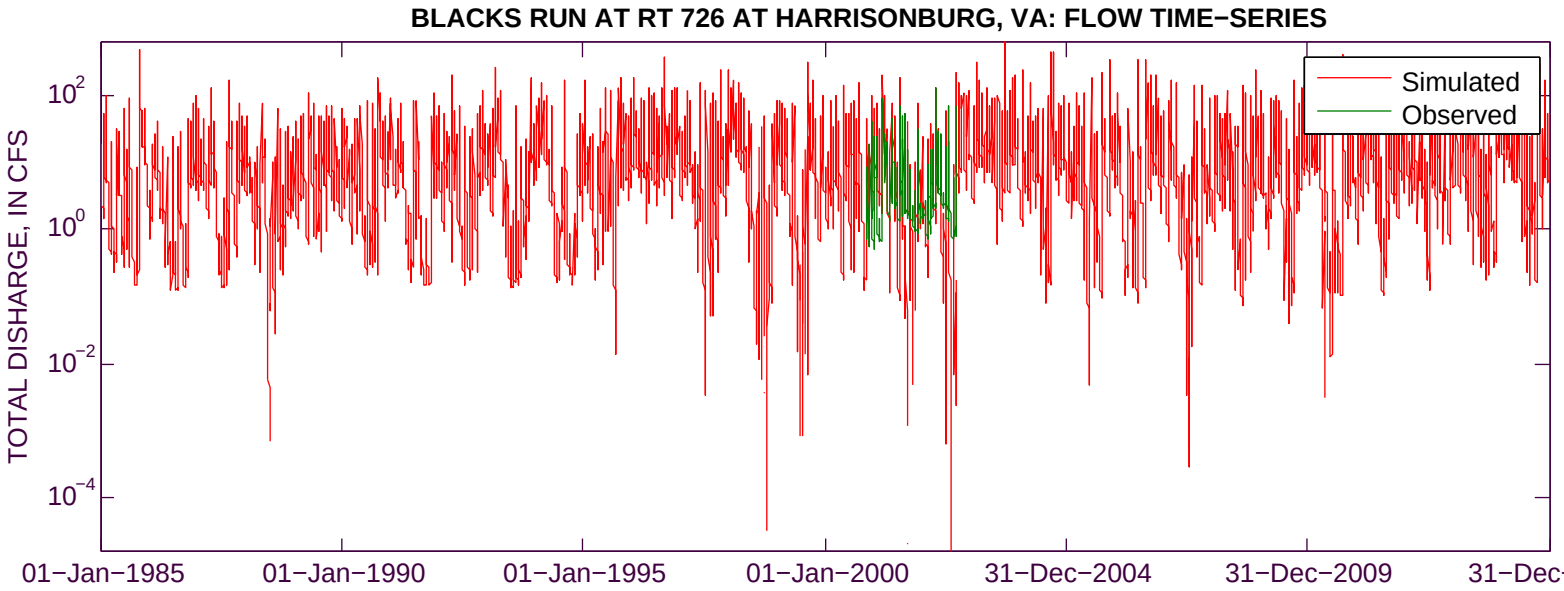
LOAD DATA
LOG10

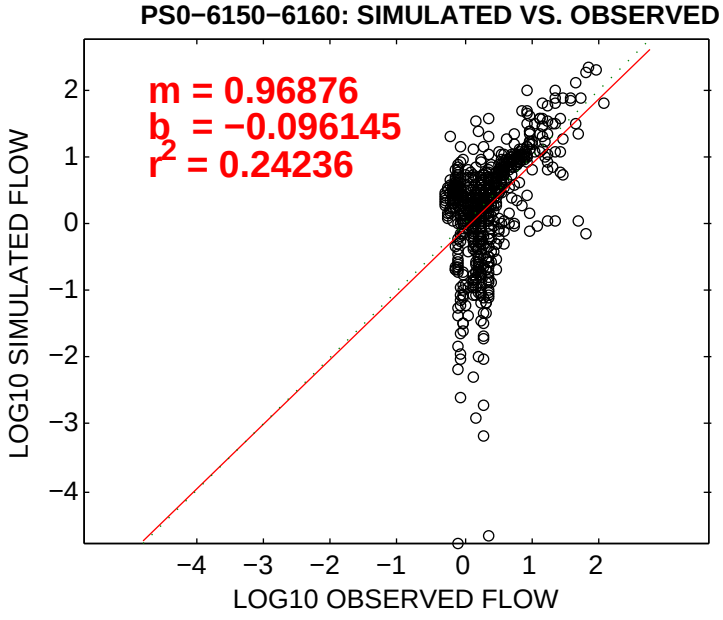


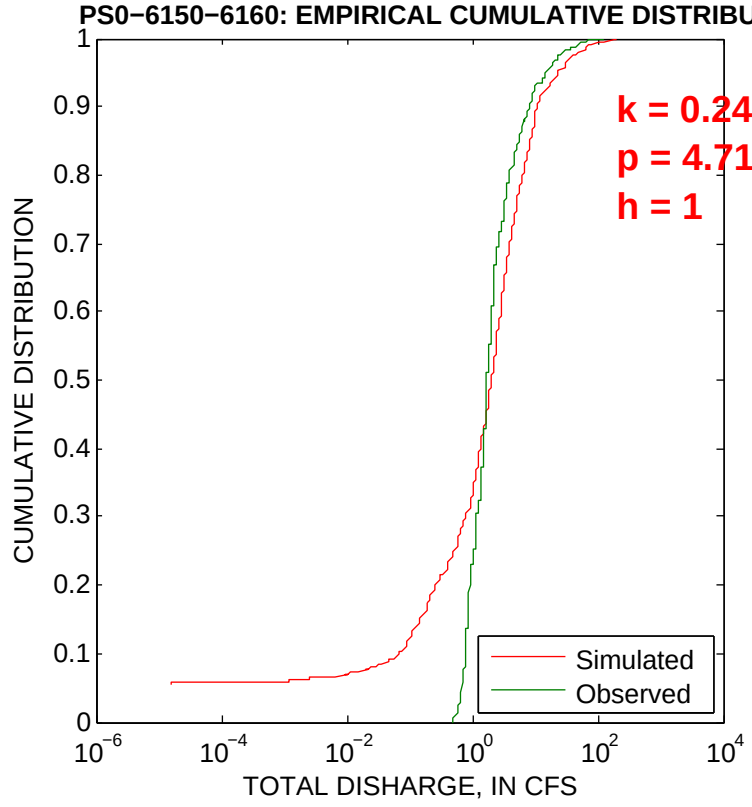












DATA SELECTION

scenario	file
P620171001WQ	FLOW.calib

plot: FLOW - total discharge

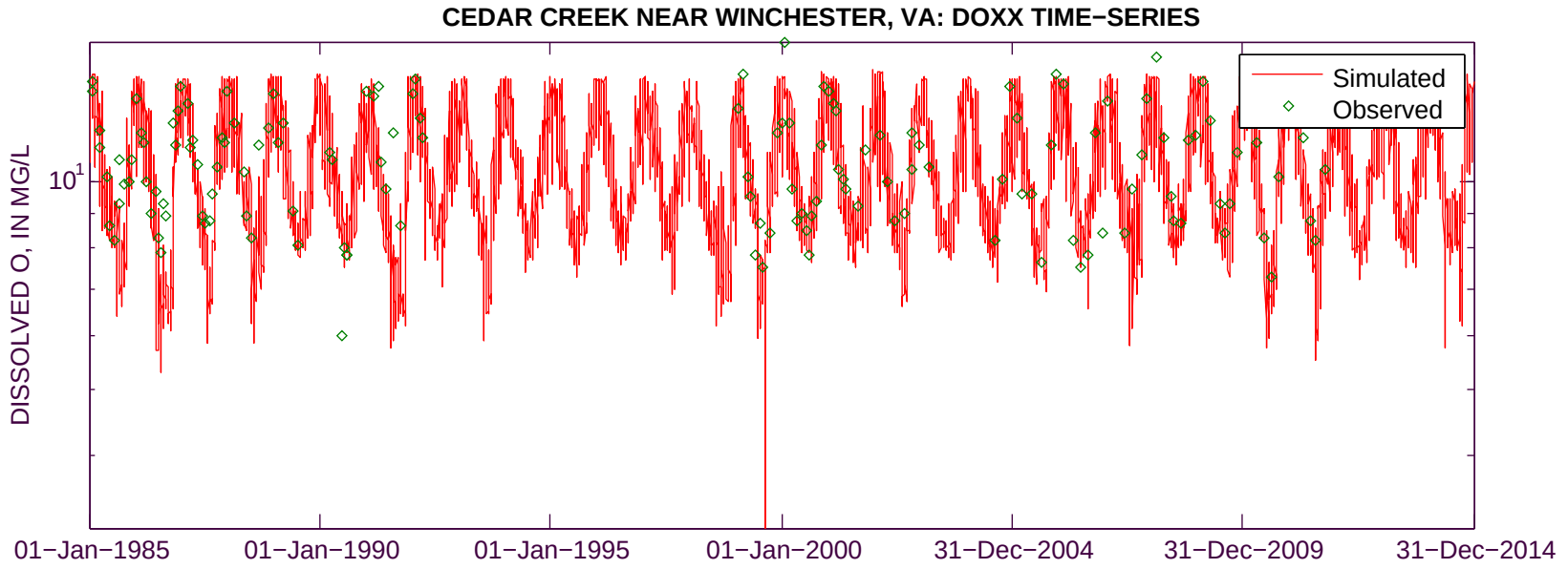
Dates 1/1/1985 12/31/201

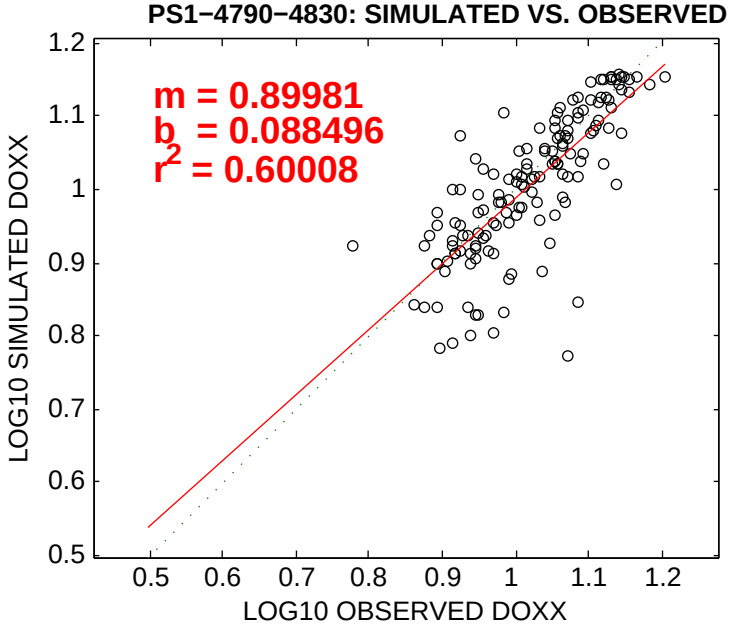
Drive	Directory	Observed
N/A	model	OBS20161101

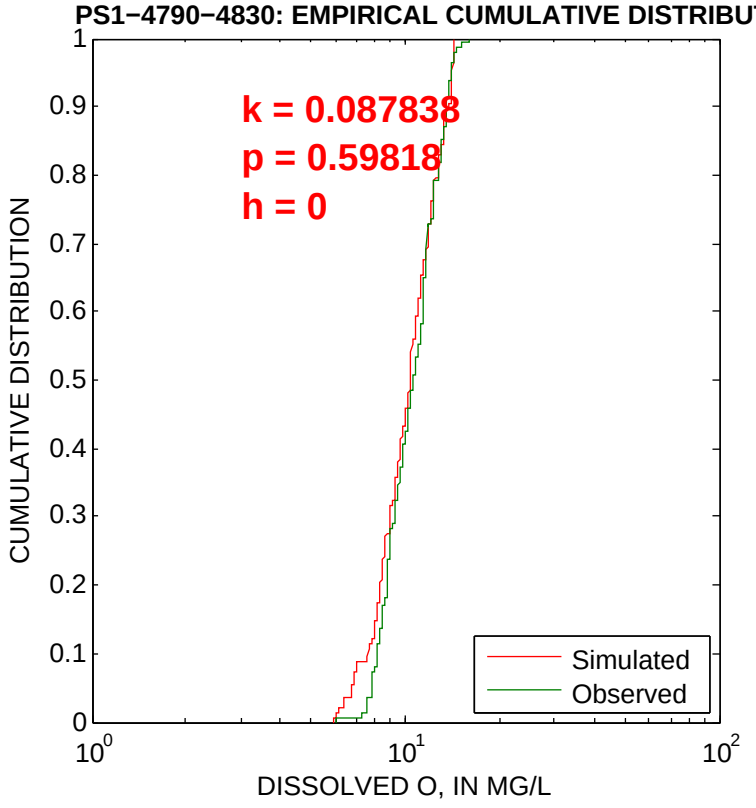
STATISTICS

n	691	653
	observe	simulate
min	0.5	0
	-0.30103	-4.79882
mean	4.21452	6.25822
	0.346226	0.239264
media	1.7	2.0258
	0.255273	0.357058
max	123	208.82
	2.08991	2.31977
varian	86.7423	290.551
	0.176663	0.684093
JB	0.001	0.001
	0.001	0.001
	ra	log
%	48.492	-30.8937
err.va	150.325	0.529927
rel.std.err	1.733	2.99964
mod.eff	-0.733001	-1.99964

VERSION







DATA SELECTION

scenario	file
P620171001WQ	DOXX.calib

plot: DOXX - dissolved oxygen

Dates: 1/1/1985 – 12/31/201

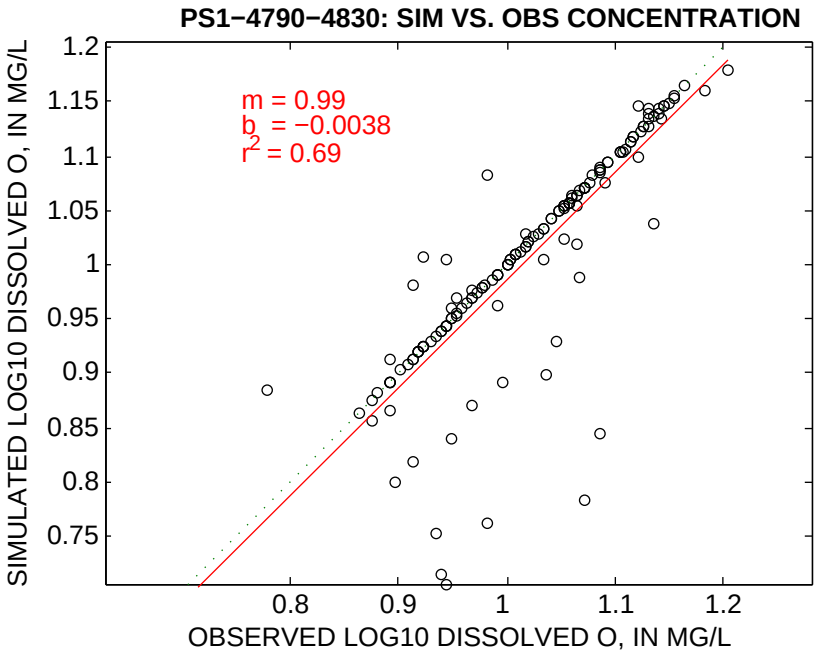
Drive	Directory	Observed
N/A	model	OBS20161101

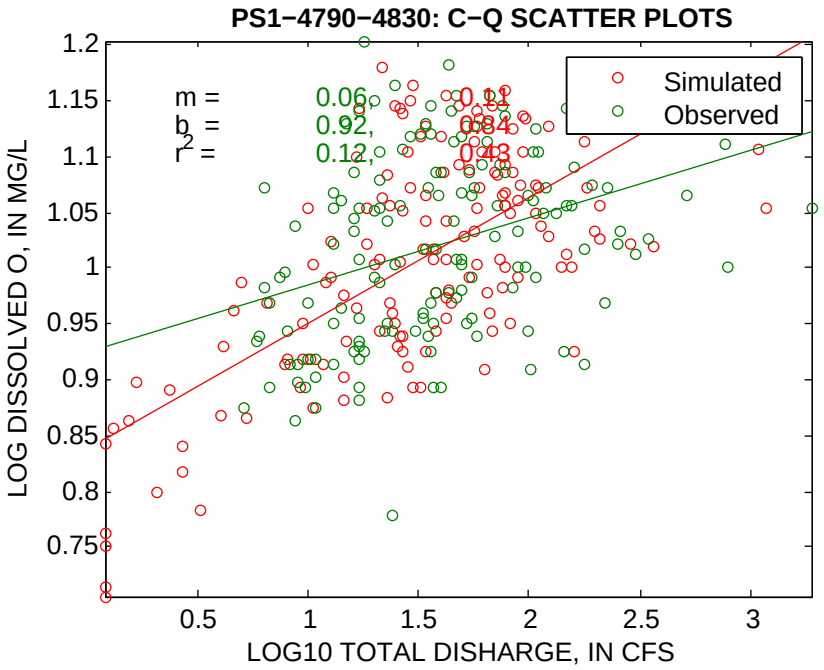
STATISTICS

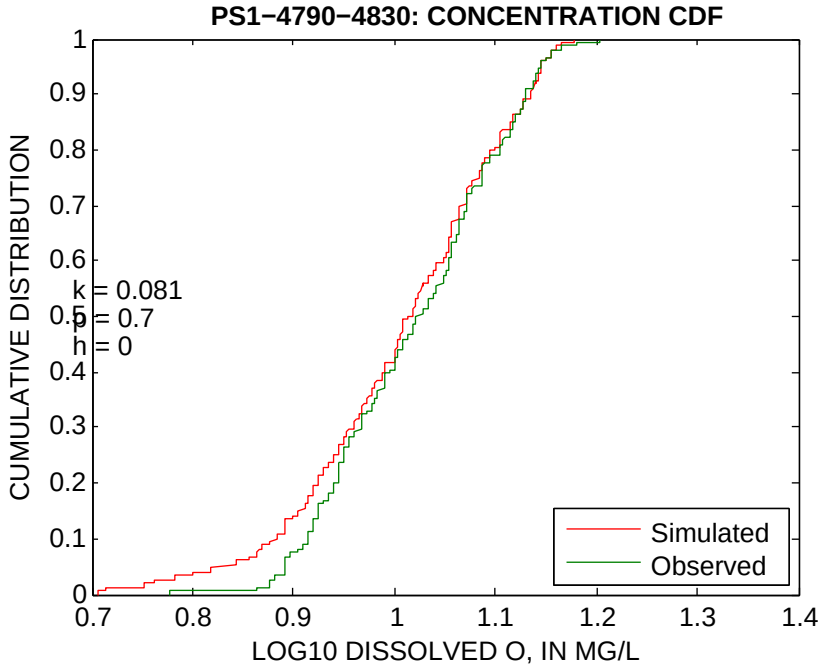
	n	148	148
		observe	simulate
min		6	5.9063
		0.778151	0.771316
mean		10.6842	10.4115
		1.02089	1.0071
media		10.55	10.397
		1.02325	1.01691
max		16	14.309
		1.20412	1.15561
varian		4.11112	5.00959
		0.0069374	0.00936032
JB		✓ 0.060582	0.057514 ✓
		✓ 0.107595	0.056335 ✓
		ra	log
%		-2.55272	-1.35048
err.va		1.83825	0.0040044
rel.std.err		0.44714	0.577219
mod.eff		0.55286	0.422781

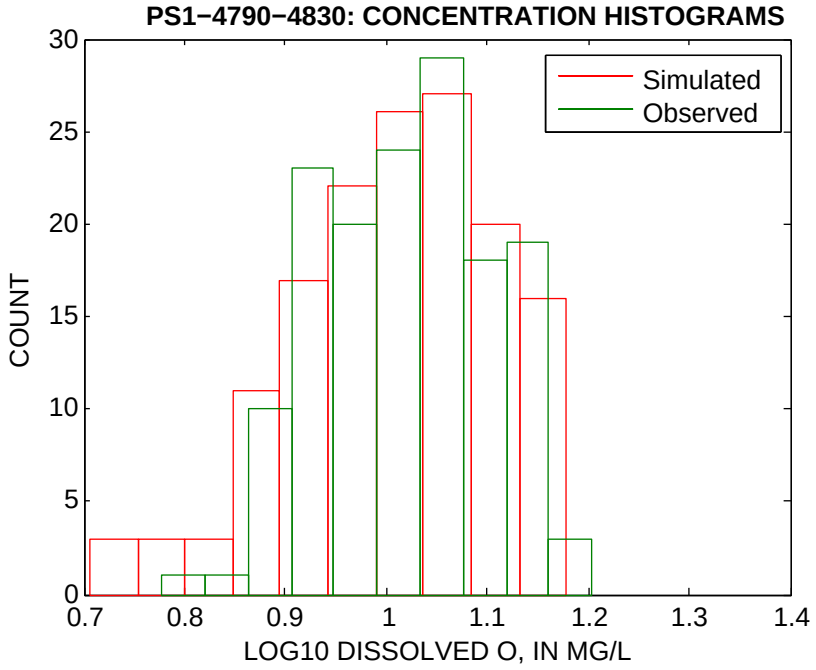
VERSION 2.1

ALL DATA
LOG10

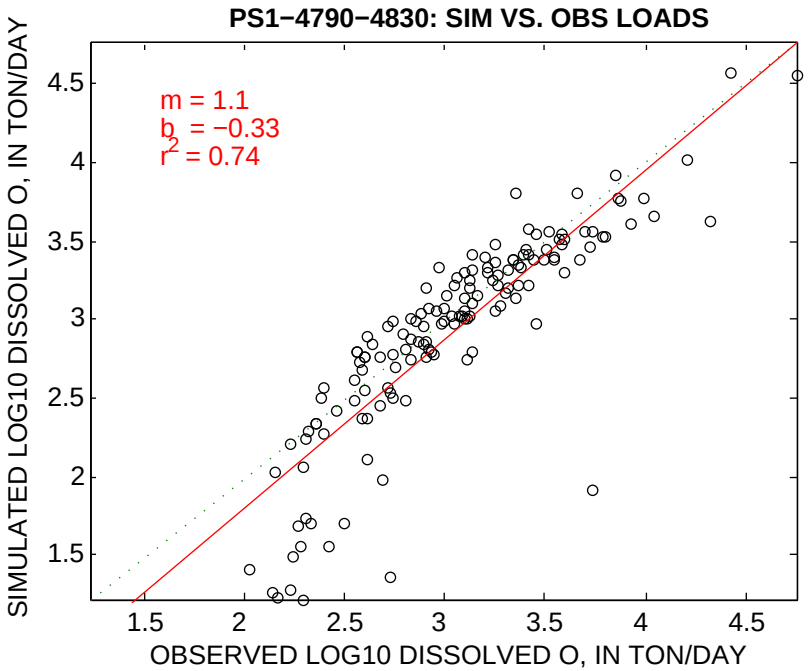


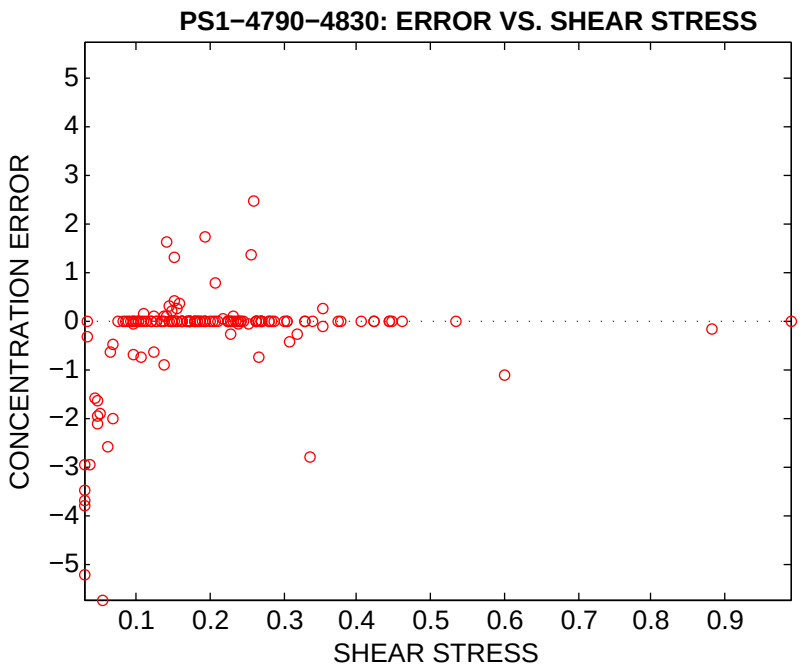


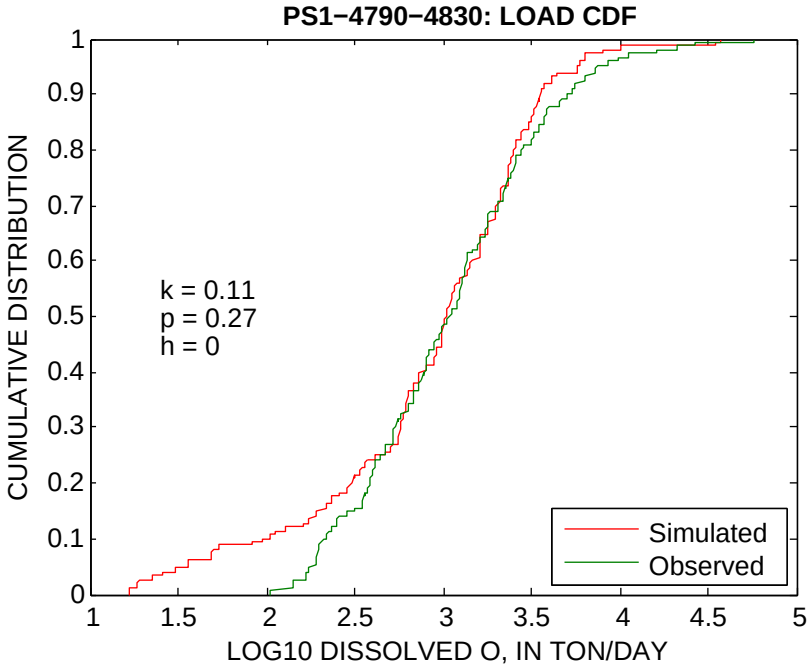


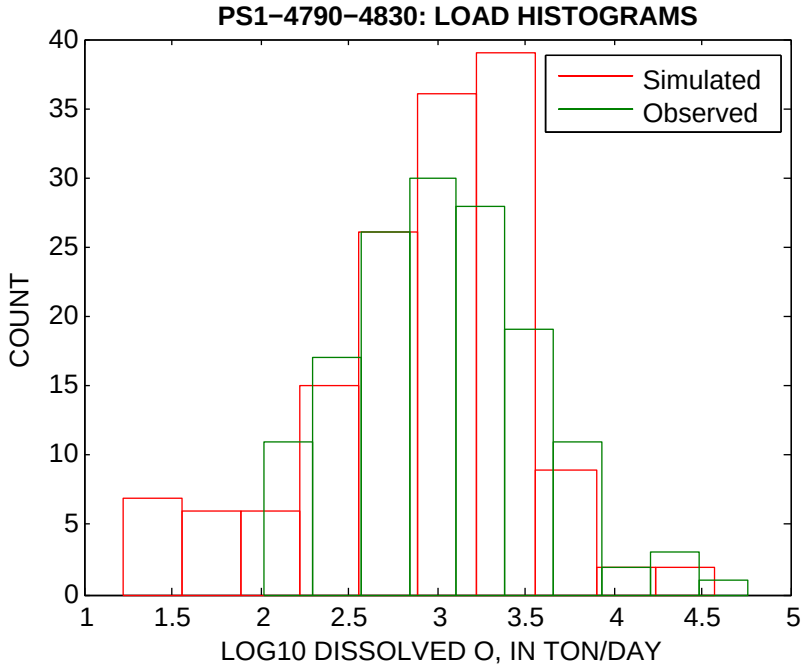


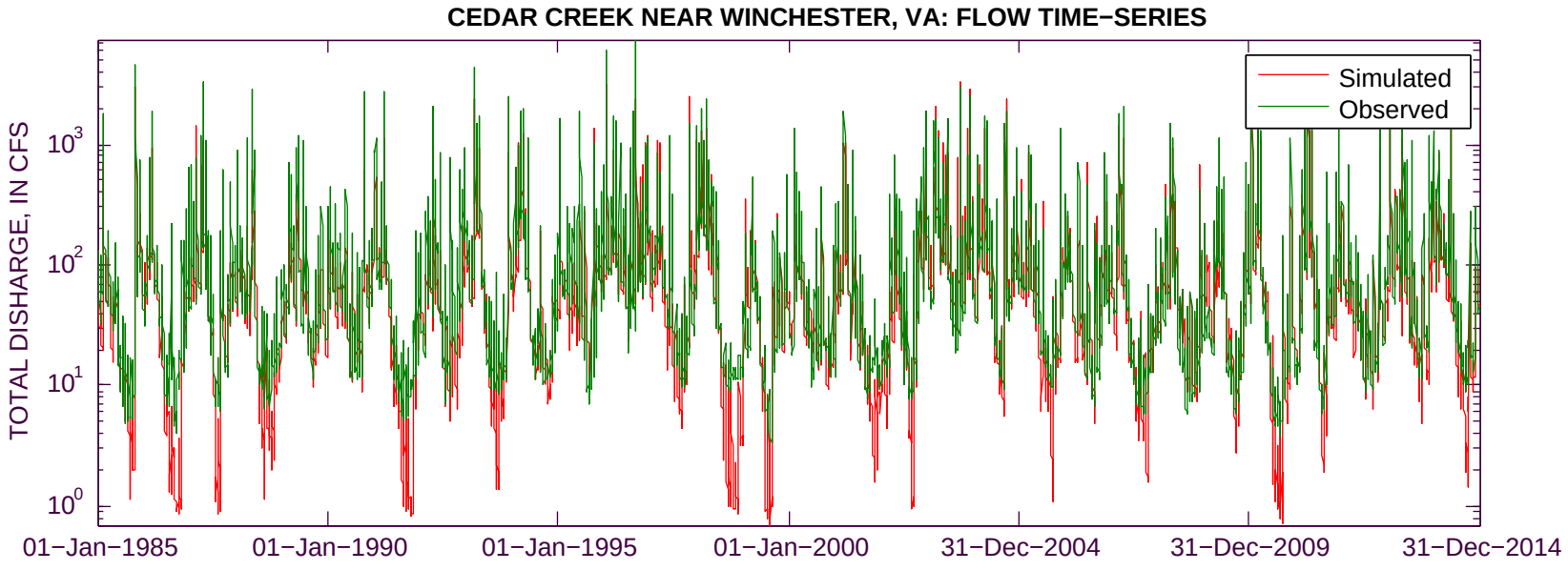
LOAD DATA
LOG10

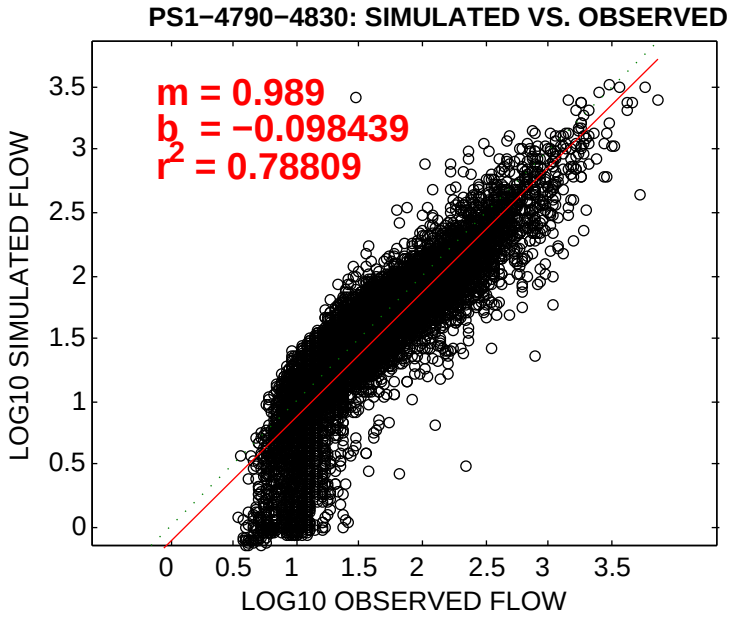


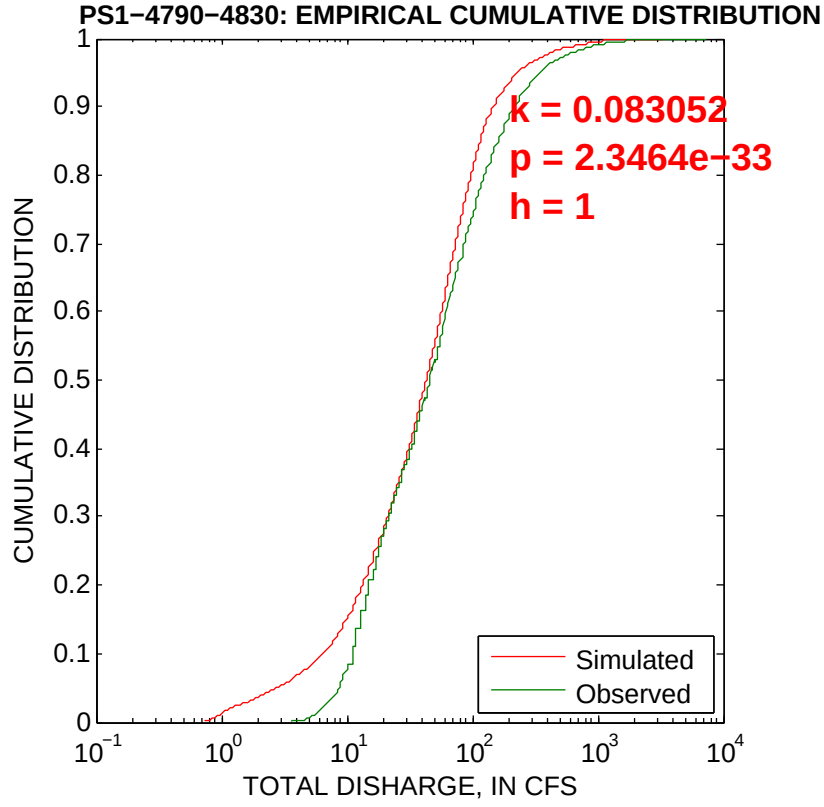












DATA SELECTION

scenario	file
P620171001WQ	FLOW.calib

plot: FLOW - total discharge

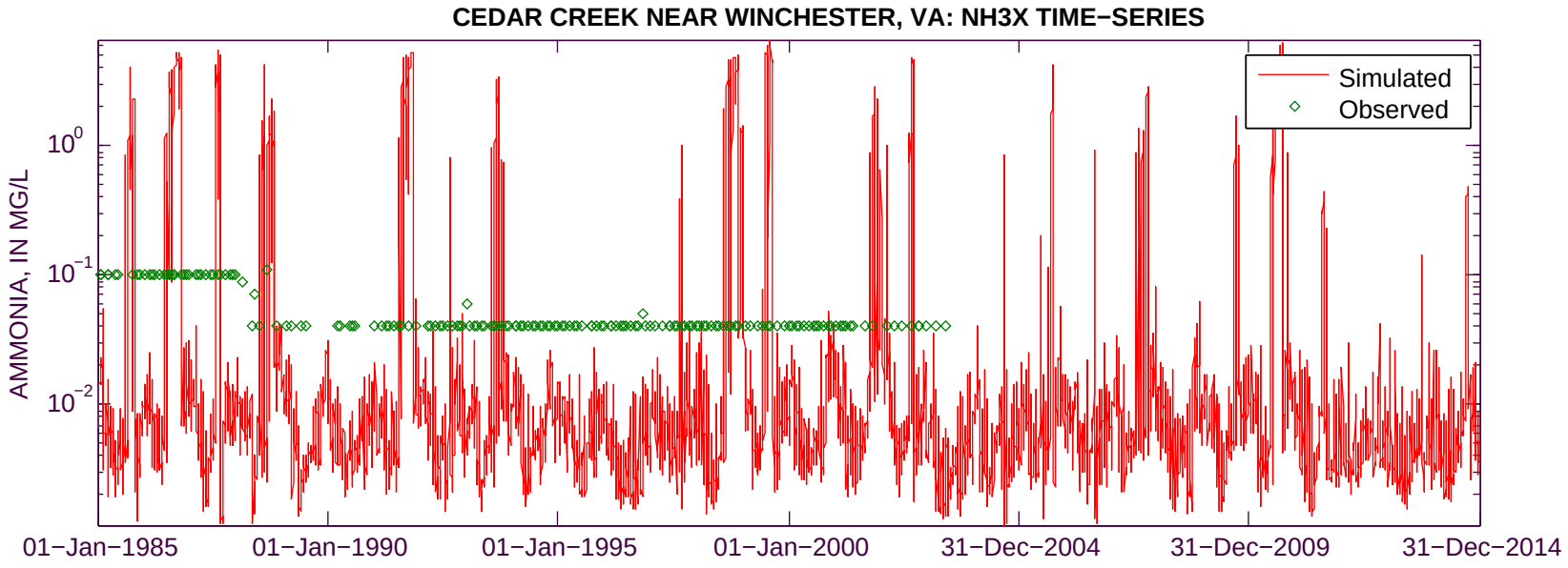
Dates: 1/1/1985 – 12/31/201

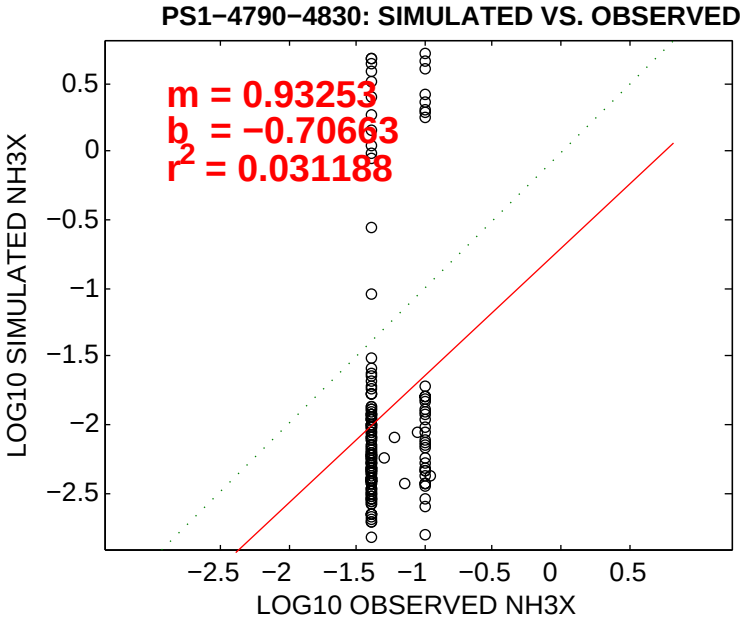
Drive	Directory	Observed
N/A	model	OBS20161101

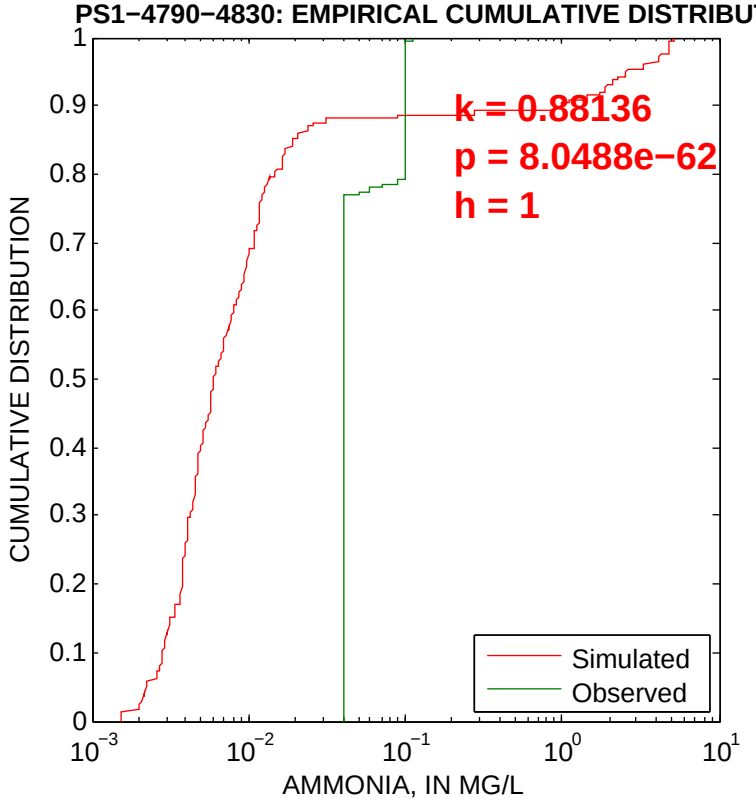
STATISTICS

n	10957	10957
	observe	simulate
min	3.4	0.70449
	0.531479	-0.152125
mean	104.606	77.6691
	1.67645	1.55958
media	47	43.17
	1.6721	1.63518
max	7400	3283.3
	3.86923	3.51631
varian	55293.2	22927.8
	0.259655	0.322269
JB	0.001	0.001
	0.001	0.001
	ra	log
%	-25.7505	-6.97148
err.va	20199.4	0.0819853
rel.std.err	0.365314	0.315747
mod.eff	0.634686	0.684253

VERSION 2.1







DATA SELECTION

scenario	file
P620171001WQ	NH3X.calib

plot: NH3X - ammonia

Dates: 1/1/1985 – 12/31/201

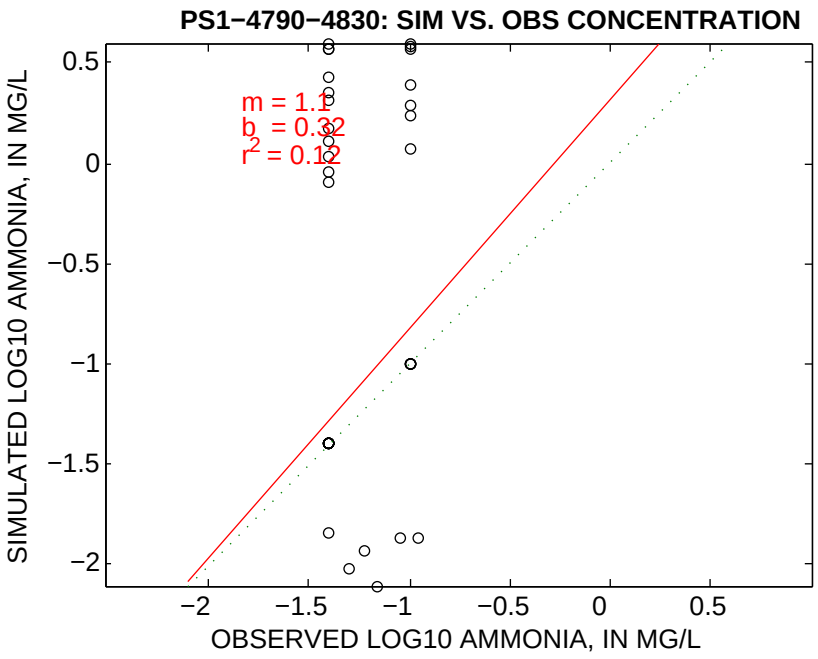
Drive	Directory	Observed
N/A	model	OBS20161101

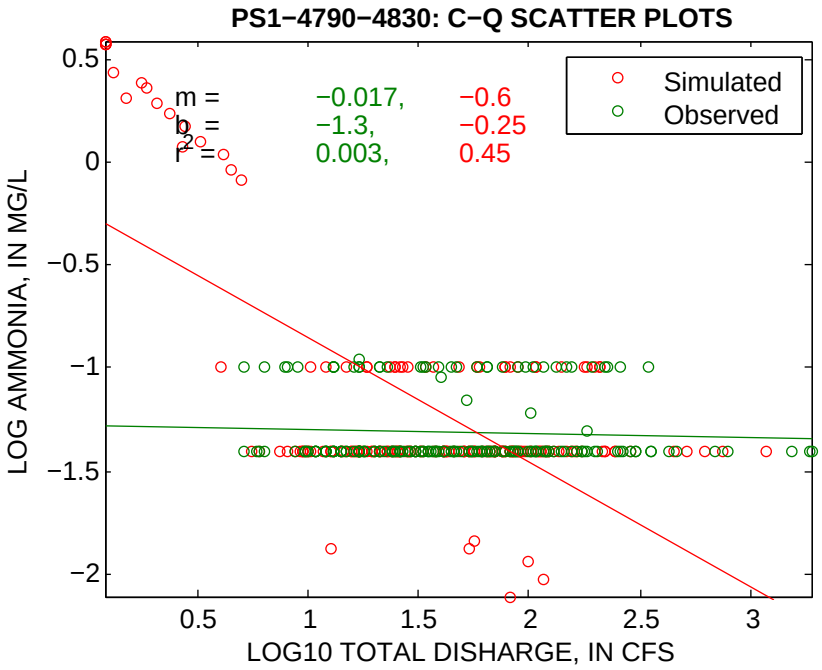
STATISTICS

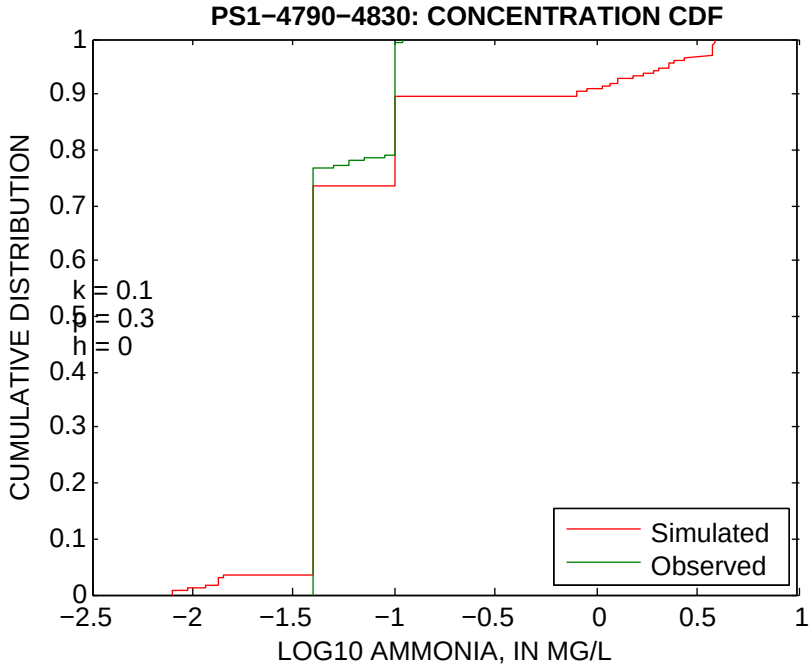
	observe	simulate
n	177	177
min	0.04 -1.39794	0.0015128 -2.82022
mean	0.0532203 -1.30962	0.318118 -1.92789
media	0.04 -1.39794	0.0060448 -2.21862
max	0.11 -0.958607	5.2566 0.720705
varian	0.00061059 0.0269121	1.01551 0.750371
JB	0.001 0.001	0.001 0.001
	ra	log
%	497.737	47.2101
err.va	1.07809	1.11152
rel.std.err	1765.65	41.3019
mod.eff	-1764.65	-40.3019

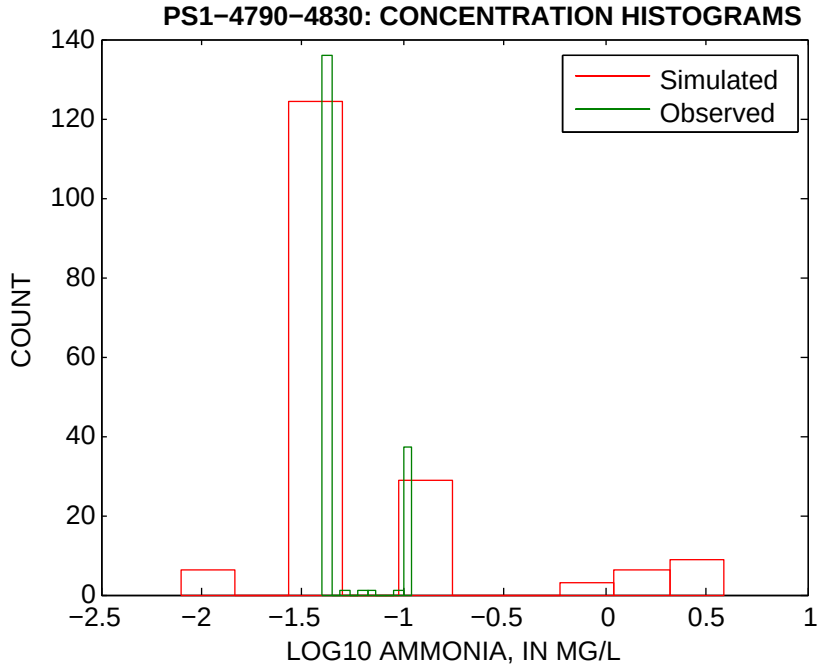
VERSION 2.1

ALL DATA
LOG10

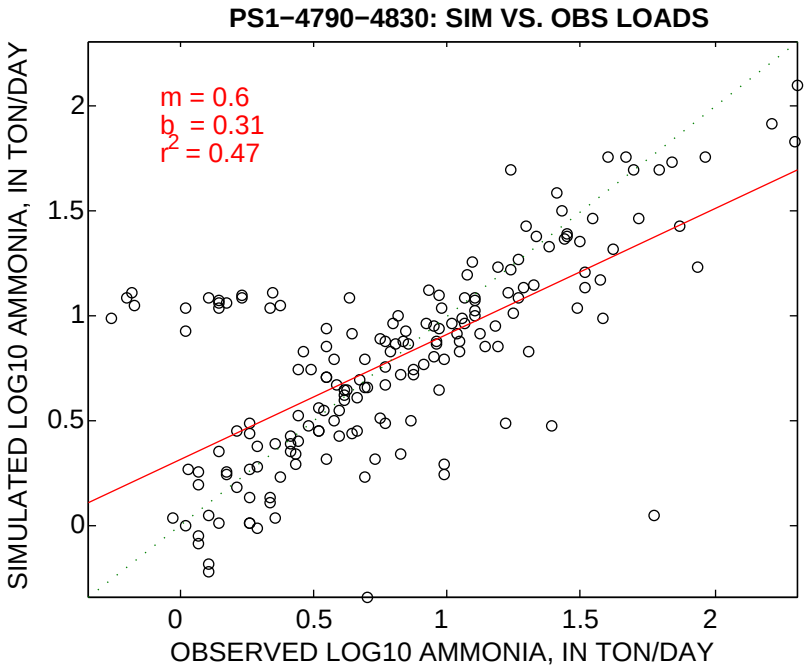


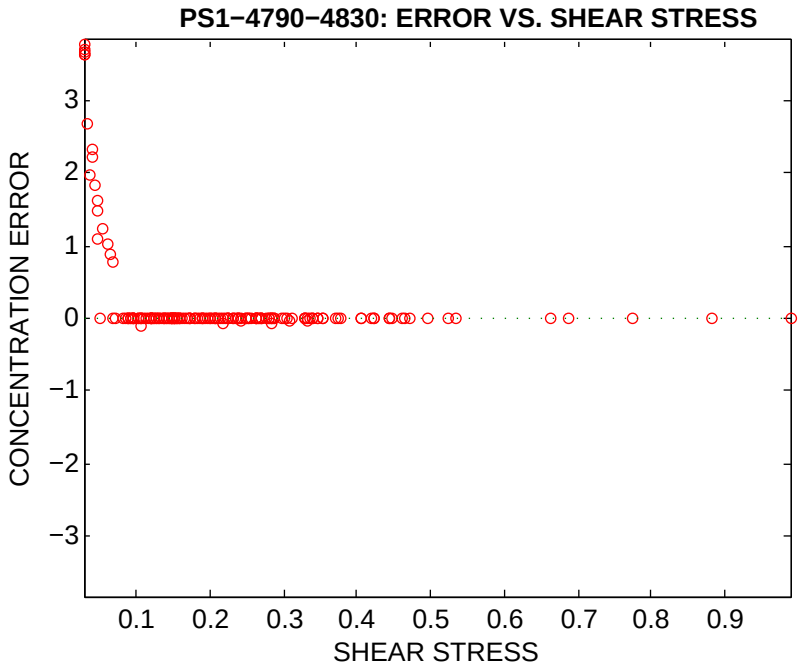


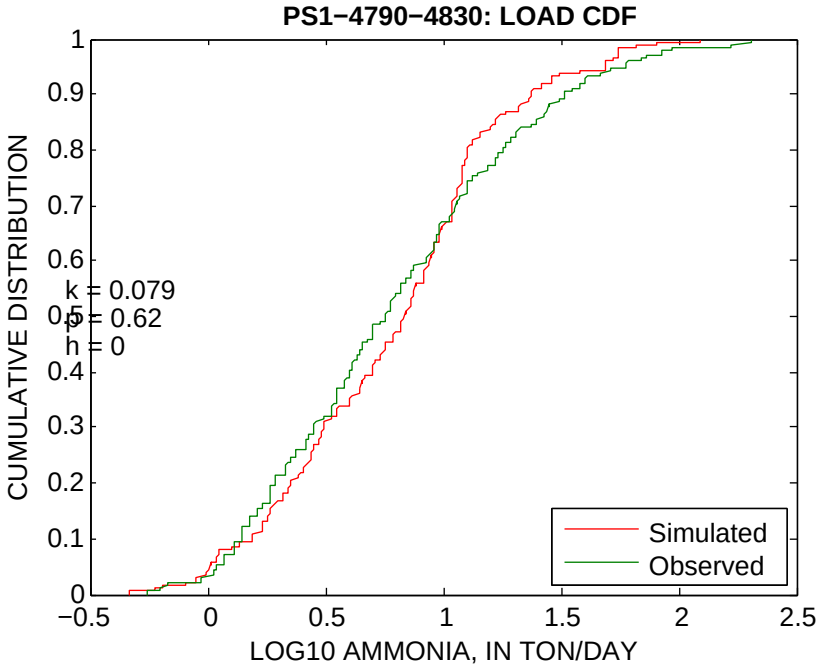


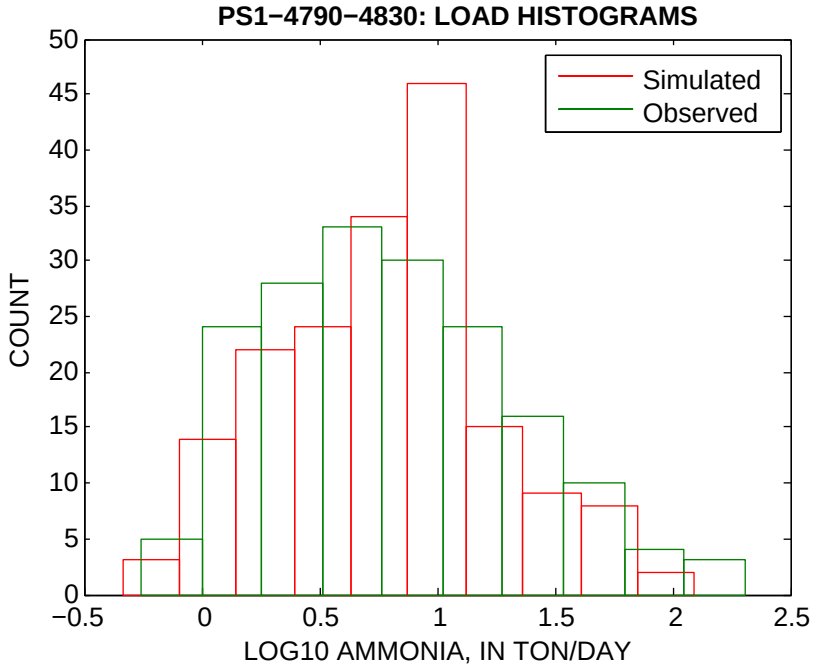


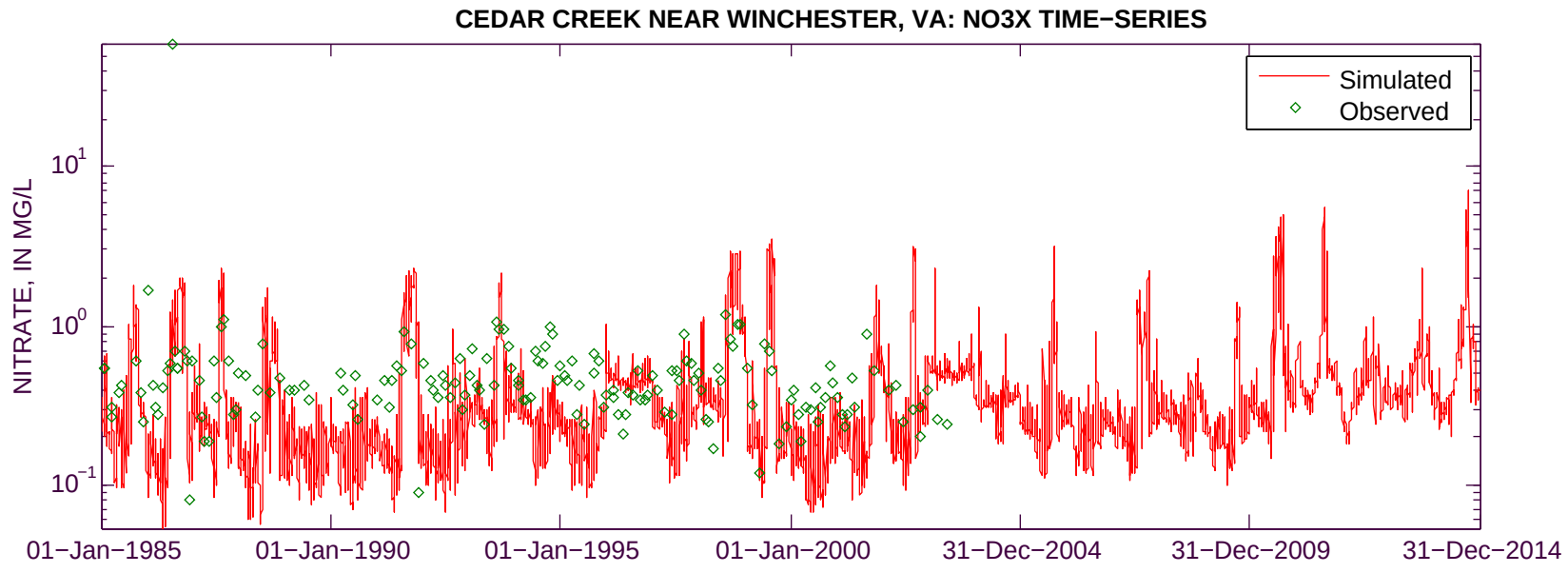
LOAD DATA
LOG10

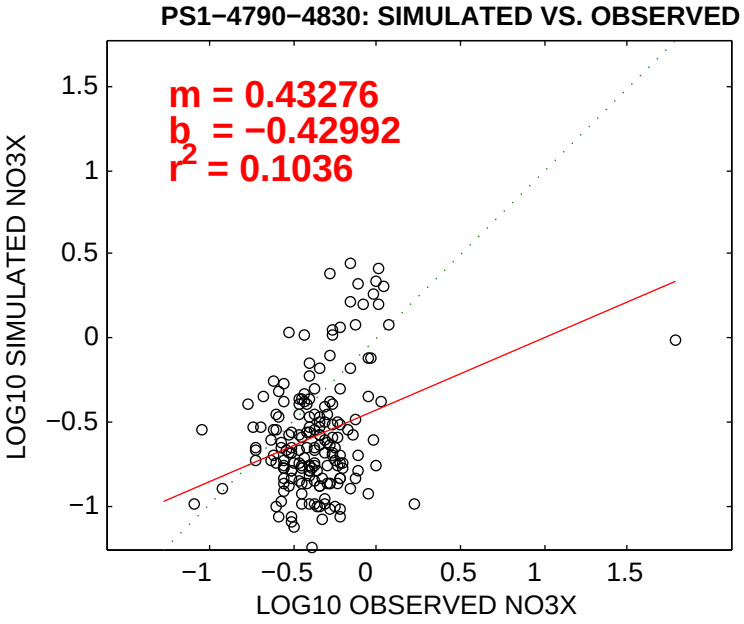


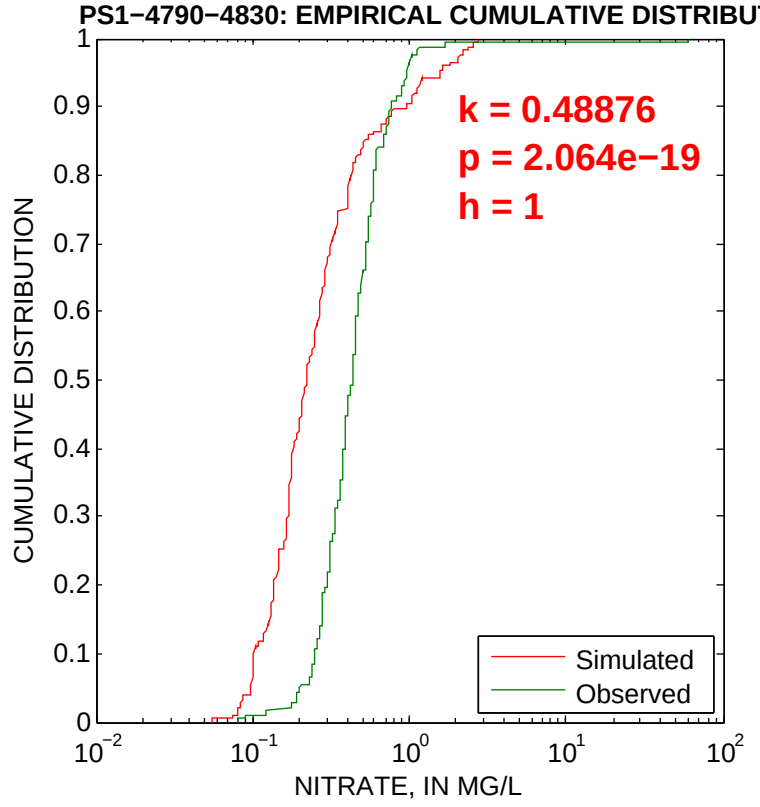












DATA SELECTION

scenario	file
P620171001WQ	NO3X.calib

plot: NO3X - nitrate

Dates: 1/1/1985 – 12/31/201

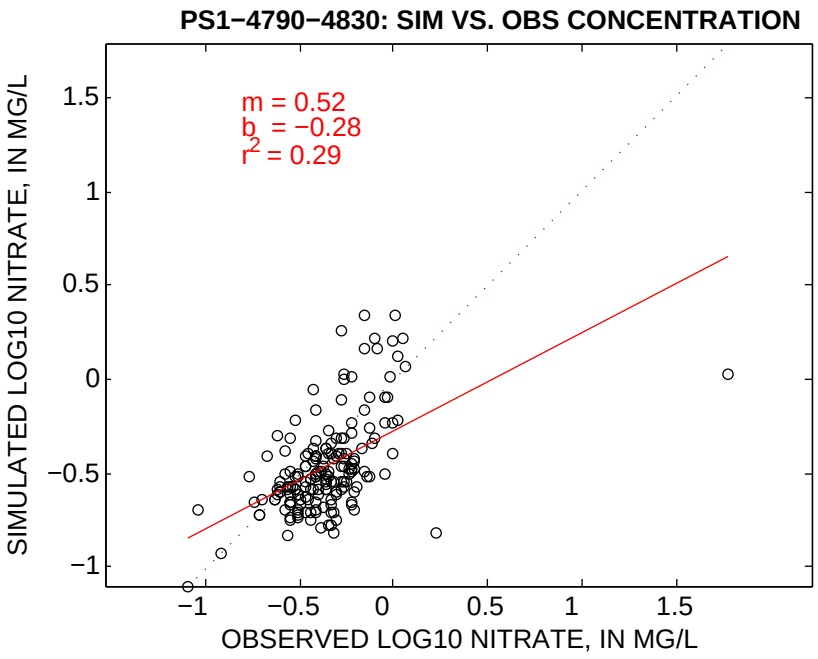
Drive	Directory	Observed
N/A	model	OBS20161101

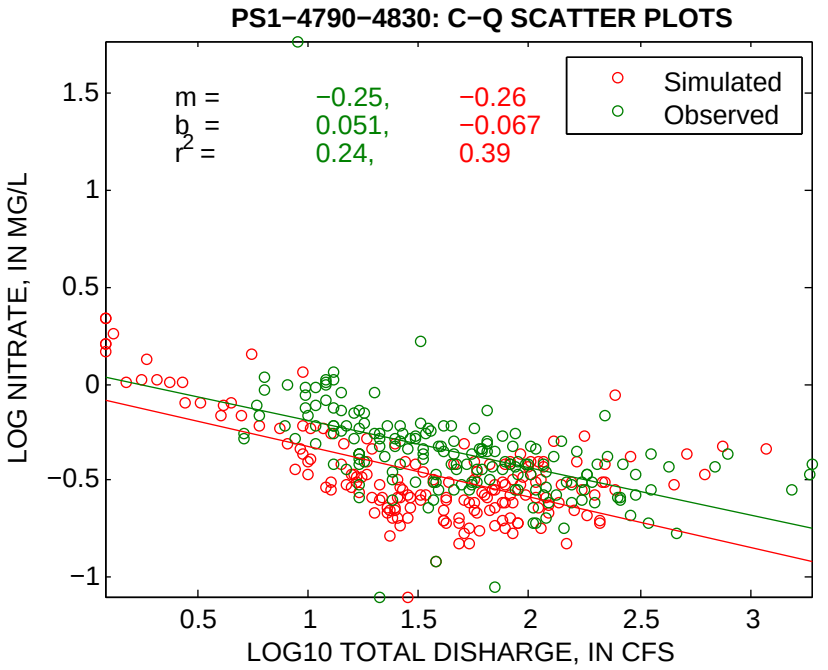
STATISTICS

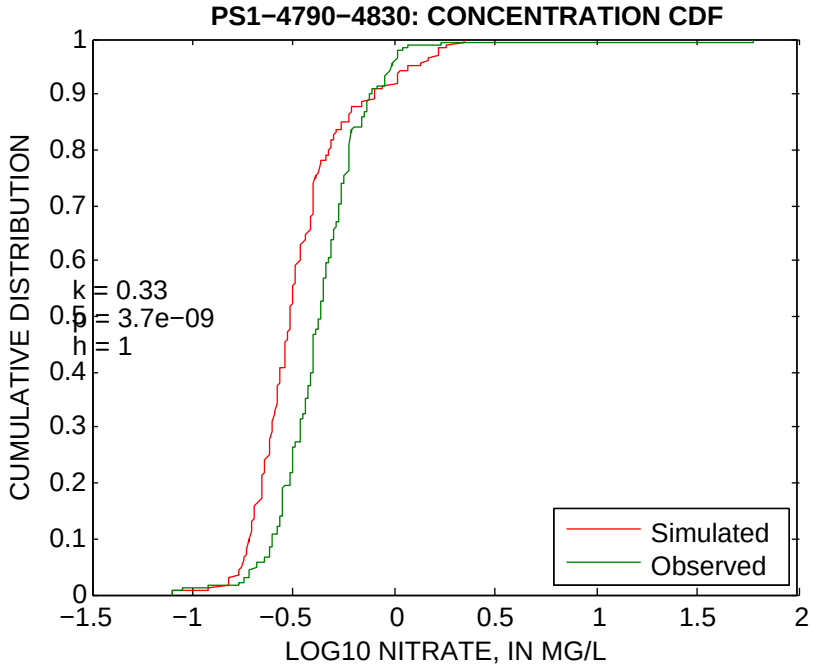
		observe	simulate
n		178	178
min		0.08	0.055461
		-1.09691	-1.25601
mean		0.805837	0.387698
		-0.360047	-0.585732
media		0.43	0.218865
		-0.366532	-0.659824
max		60	2.7828
		1.77815	0.444482
varian		19.96	0.230251
		0.0662594	0.119776
JB		0.001	0.001
		0.001	0.001
		ra	log
%		-51.8888	62.6822
err.va		19.8849	0.179908
rel.std.err		3.996238	2.71521
mod.eff		0.00376219	-1.71521

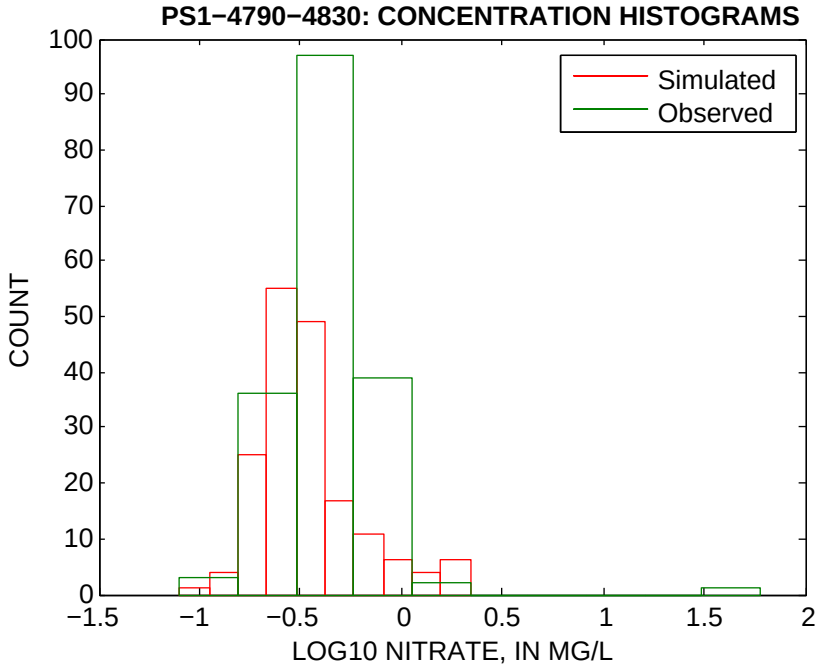
VERSION 2.1

ALL DATA
LOG10

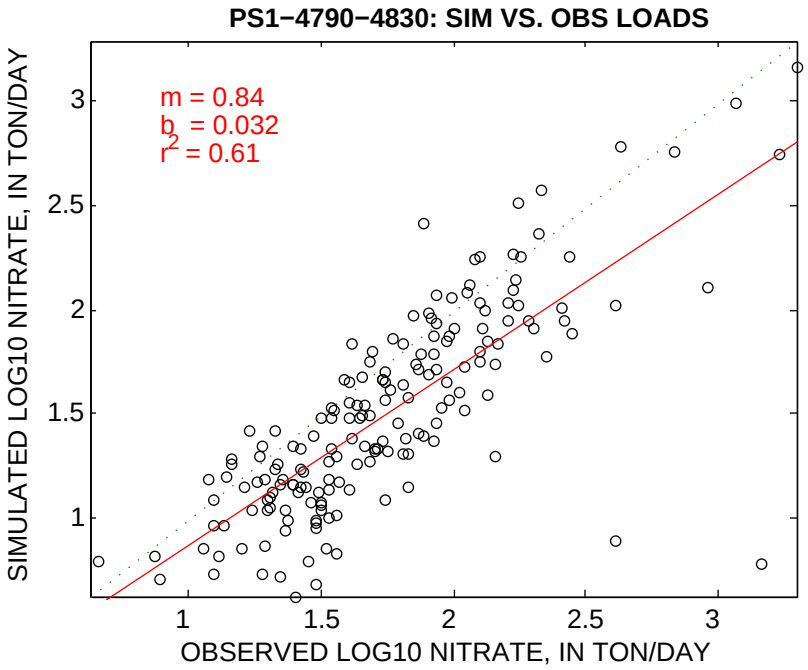


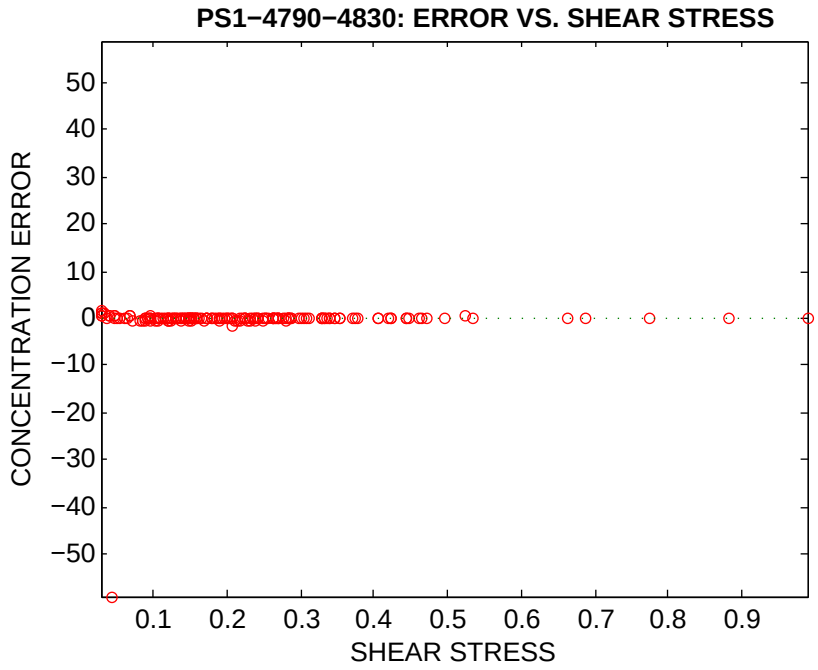


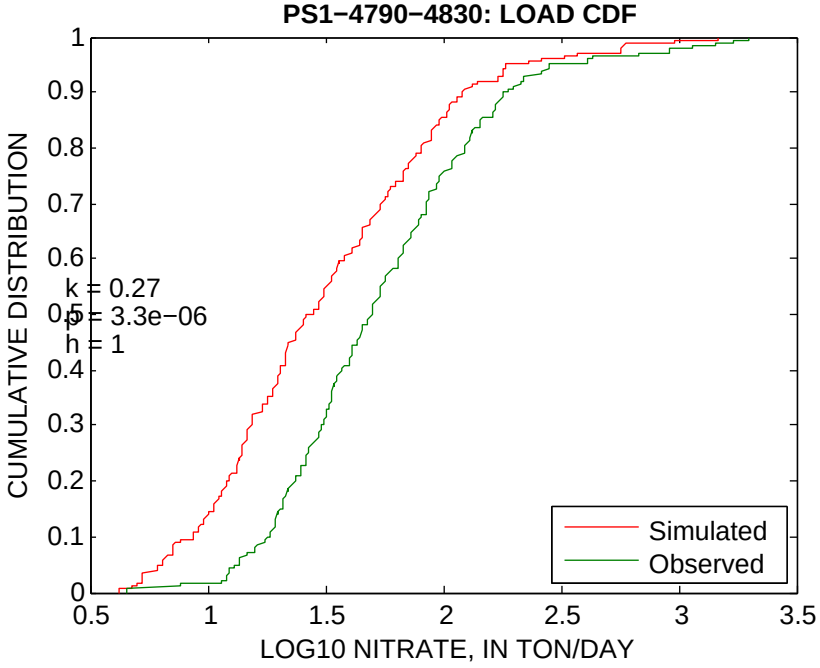


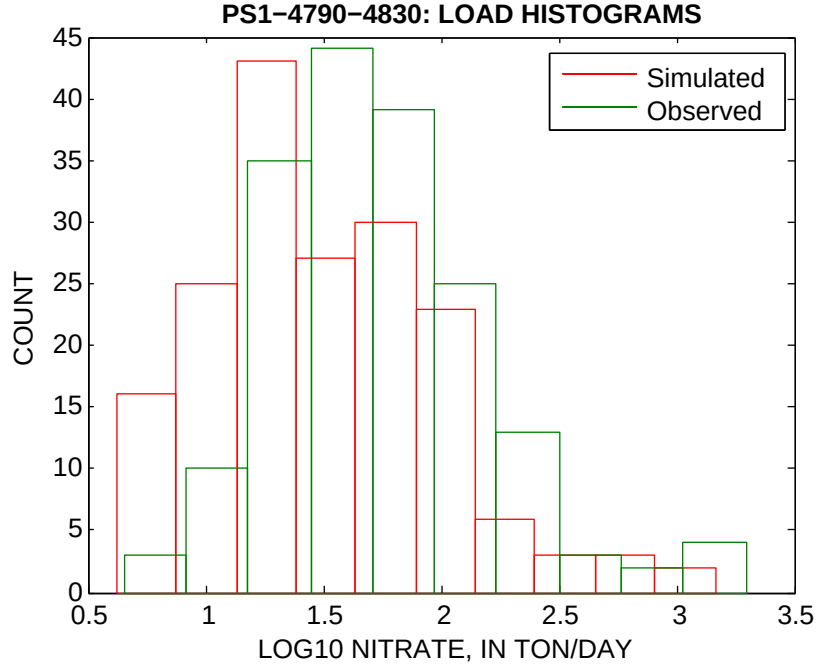


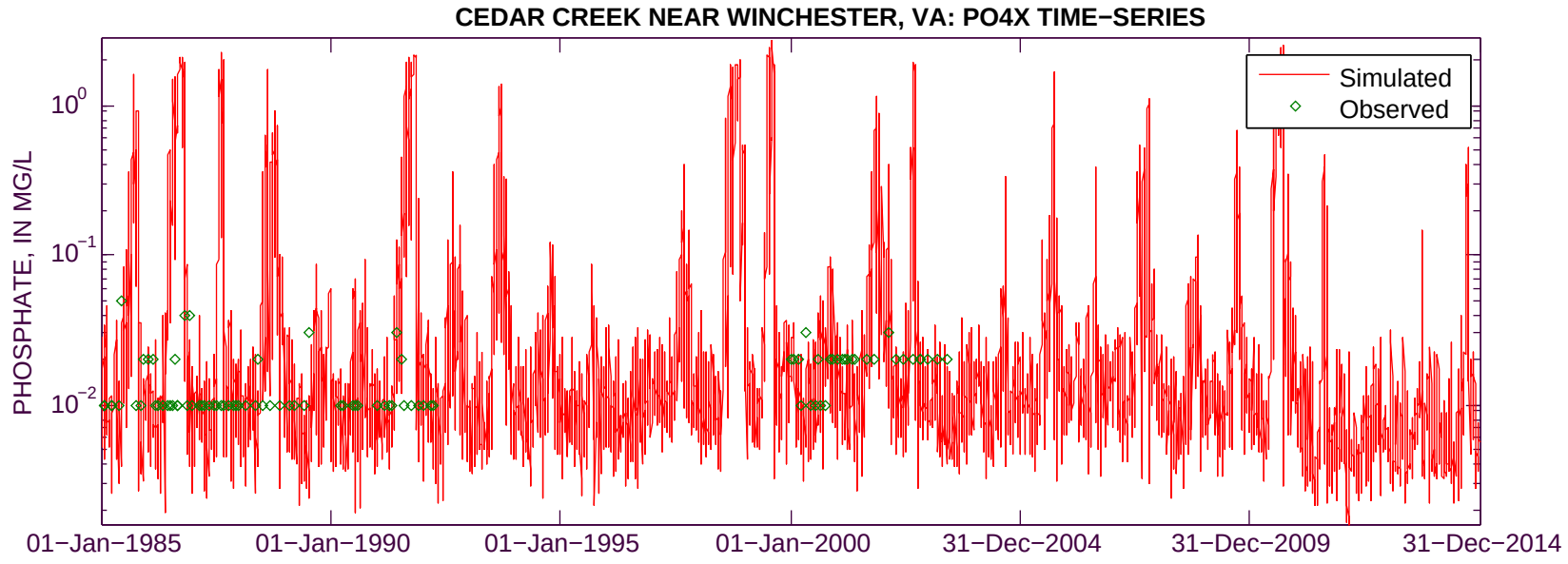
LOAD DATA
LOG10

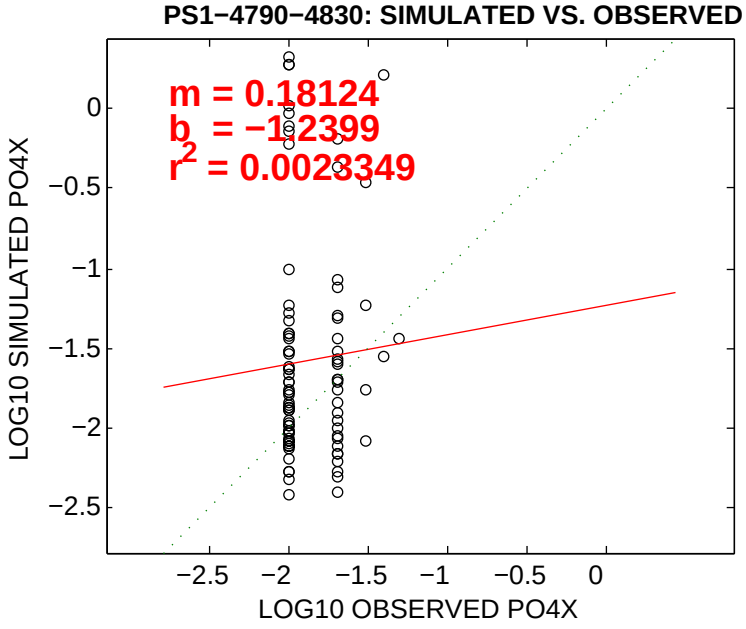


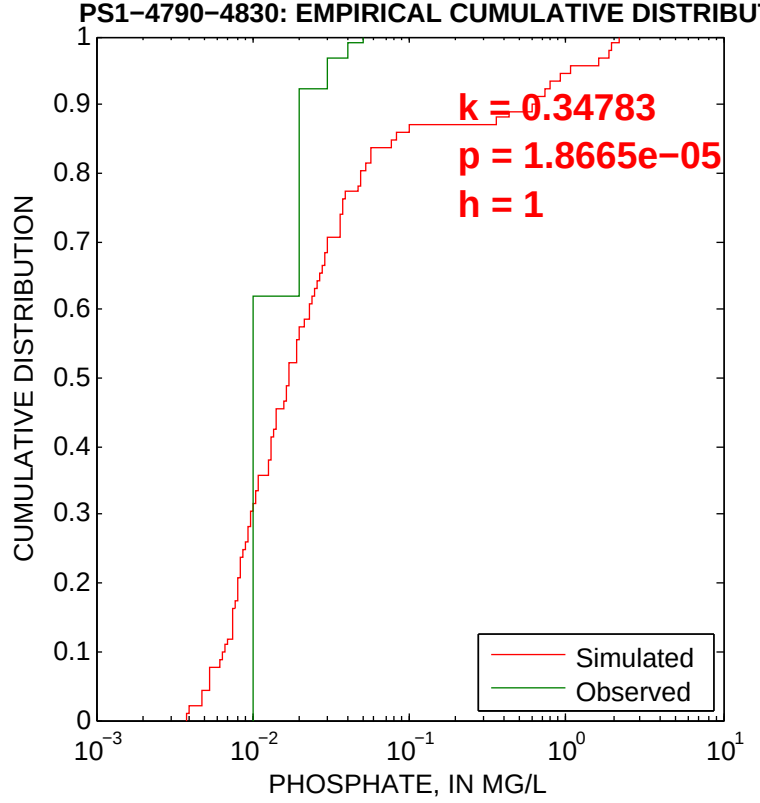












DATA SELECTION

scenario: P620171001WQ | file: PO4X.calib

plot: PO4X - phosphate

Dates: 1/1/1985 – 12/31/201

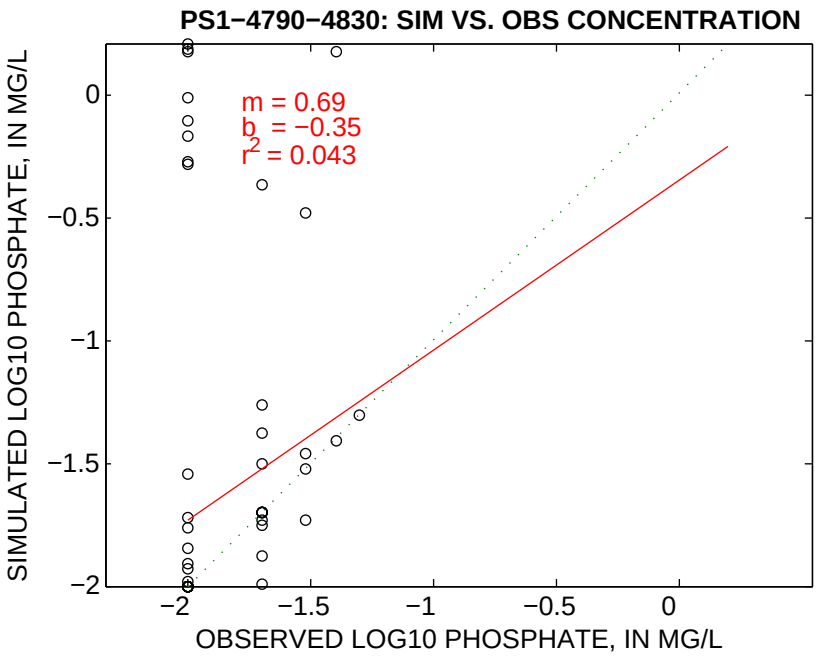
Drive: N/A | Directory: model | Observed: OBS20161101

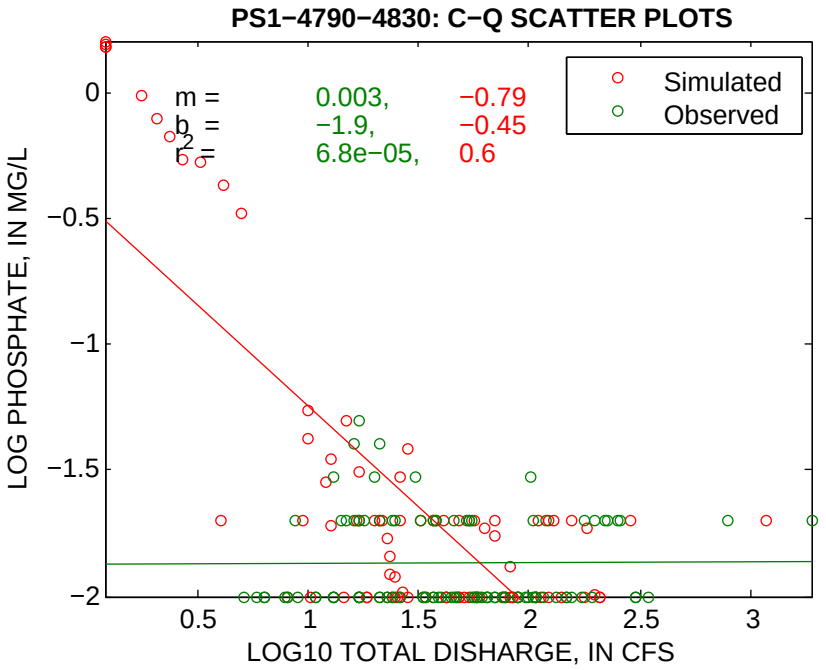
STATISTICS

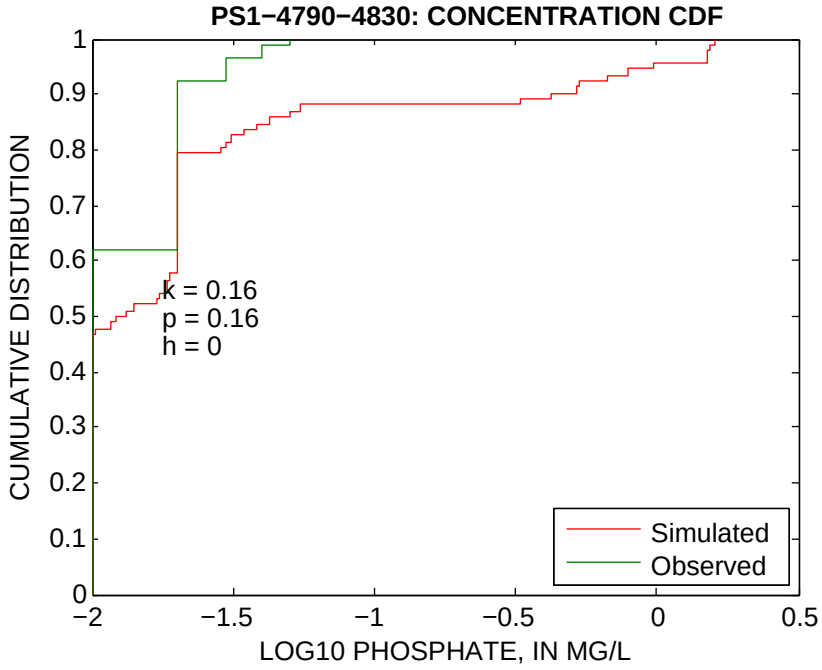
	n	observe	simulate
		92	92
min		0.01	0.0037702
		-2	-2.42364
mean		0.015	0.161686
		-1.86695	-1.57829
media		0.01	0.016987
		-2	-1.76989
max		0.05	2.1712
		-1.30103	0.3367
varian		6.04396e-0	0.182871
		0.0333281	0.468859
JB		0.001	0.001
		0.006509	0.001
		ra	log
%		977.904	-15.4615
err.va		0.204626	0.574346
rel.std.err		3385.63	17.2331
mod.eff		-3384.63	-16.2331

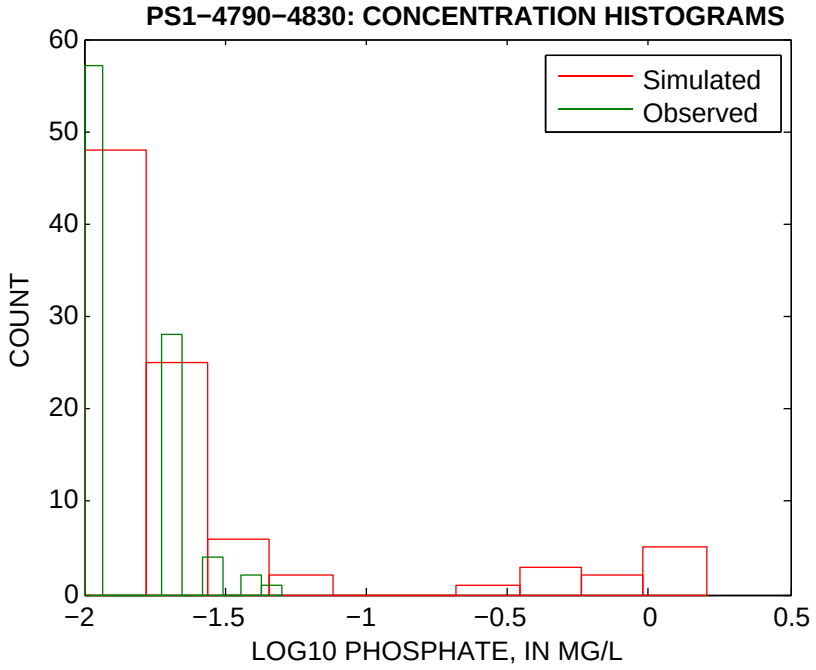
VERSION 2.1

ALL DATA
LOG10

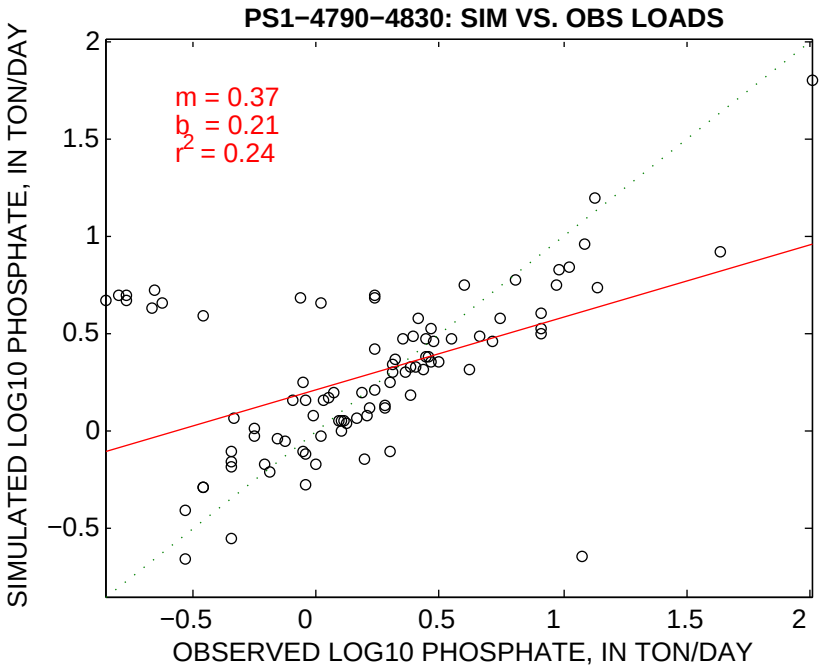


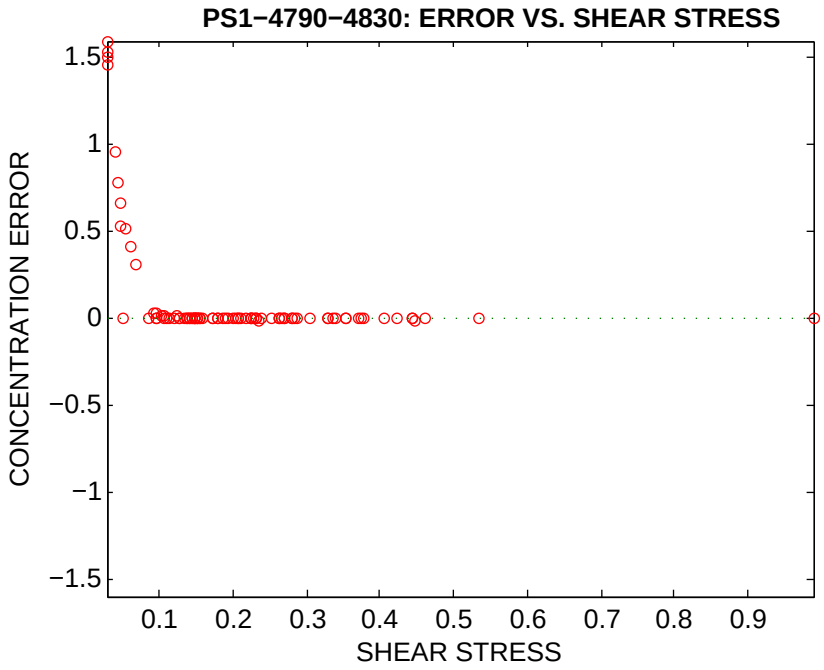


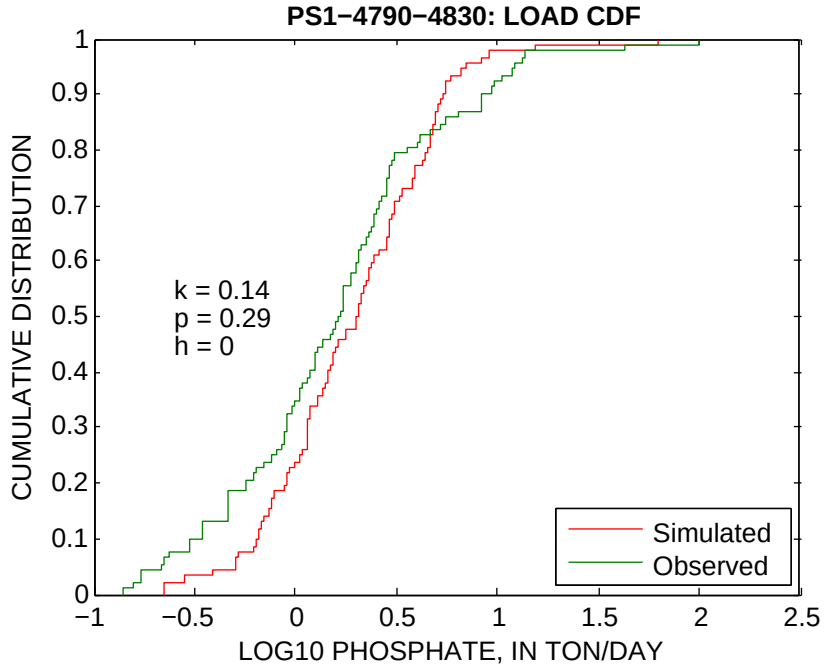


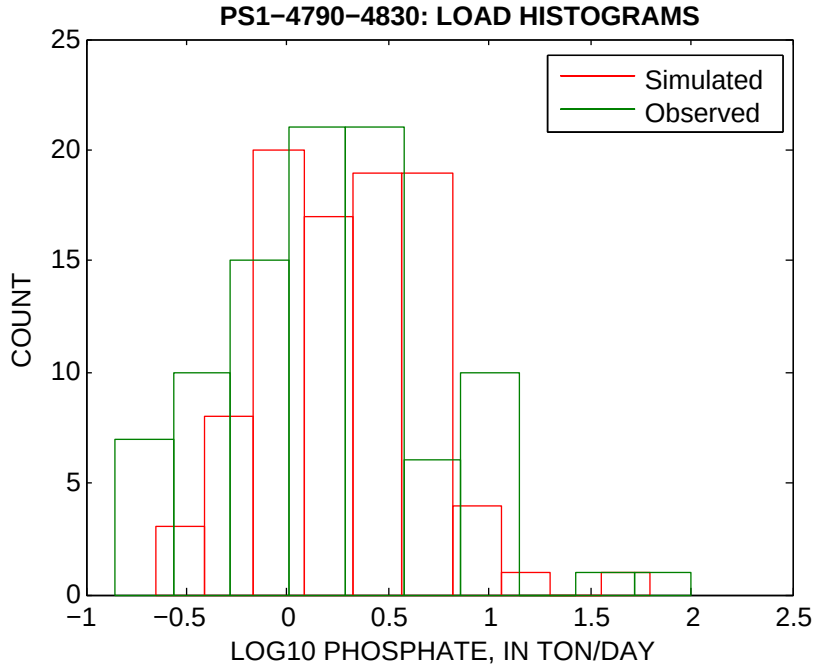


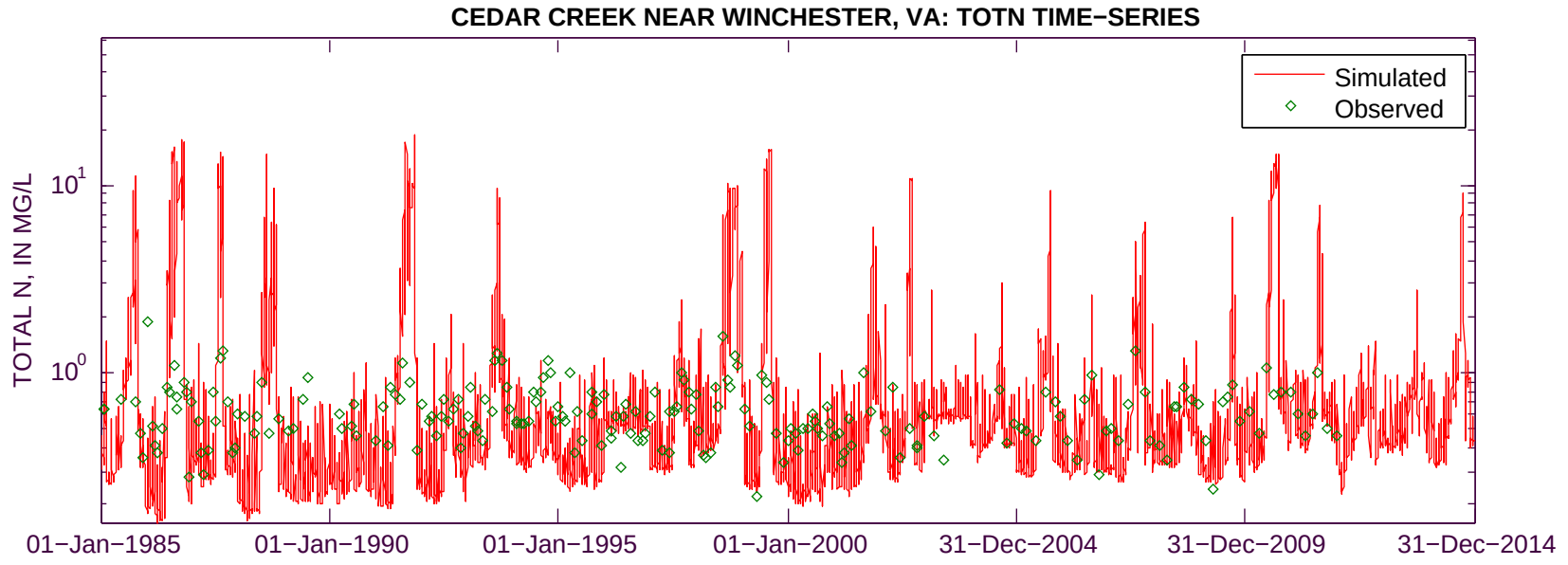
LOAD DATA
LOG10

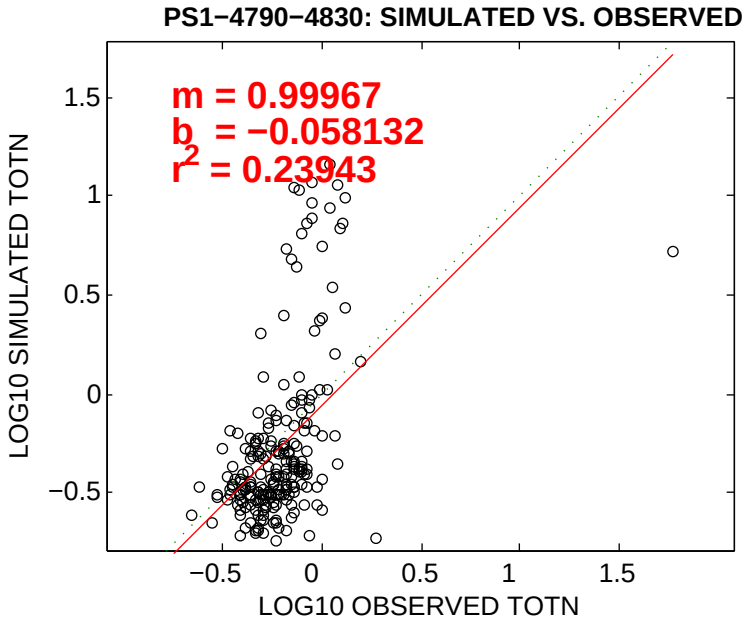


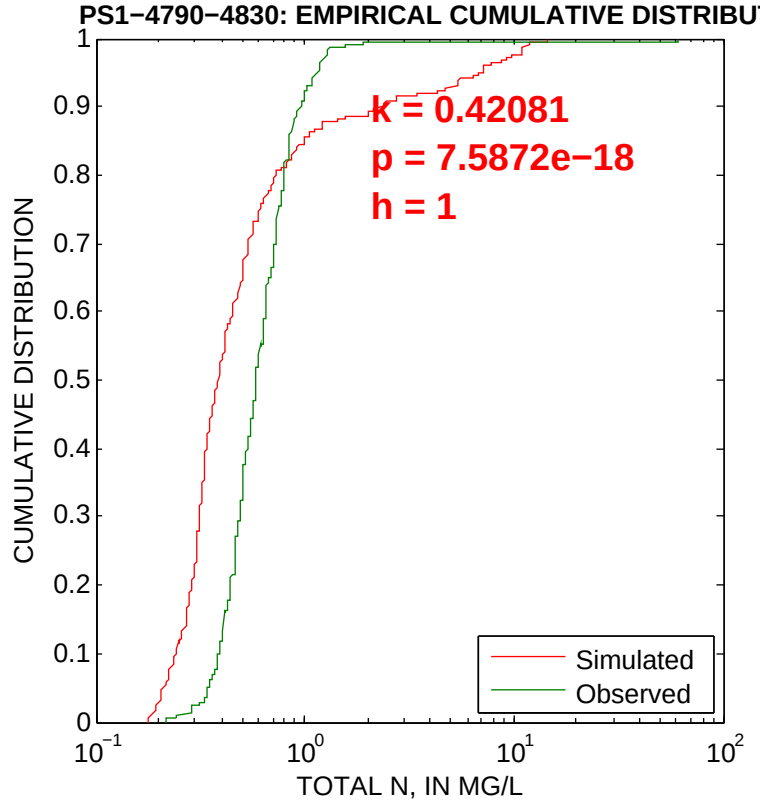












DATA SELECTION

scenario: P620171001WQ | file: TOTN.calib

plot: TOTN - total nitrogen

Dates: 1/1/1985 – 12/31/201

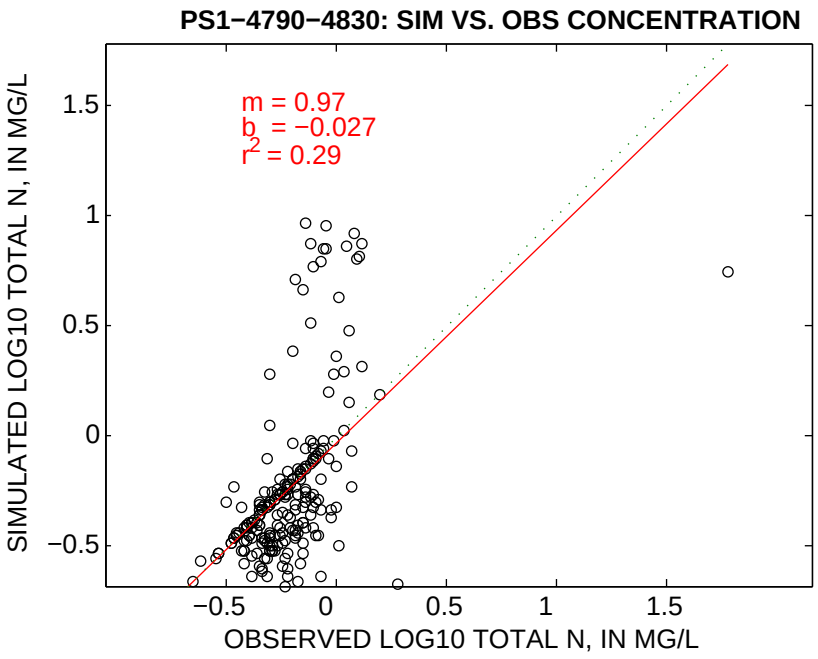
Drive | Directory | Observed: N/A | model | OBS20161101

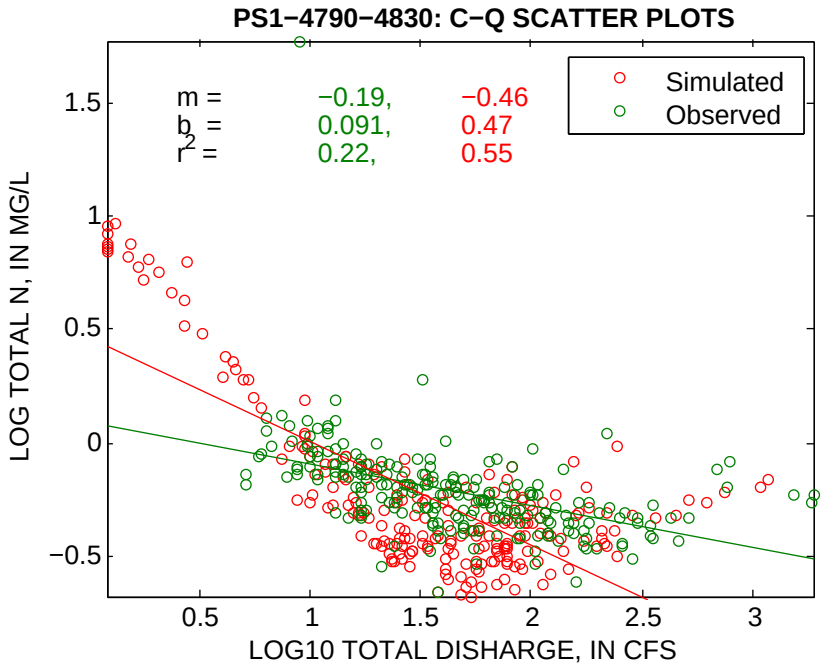
STATISTICS

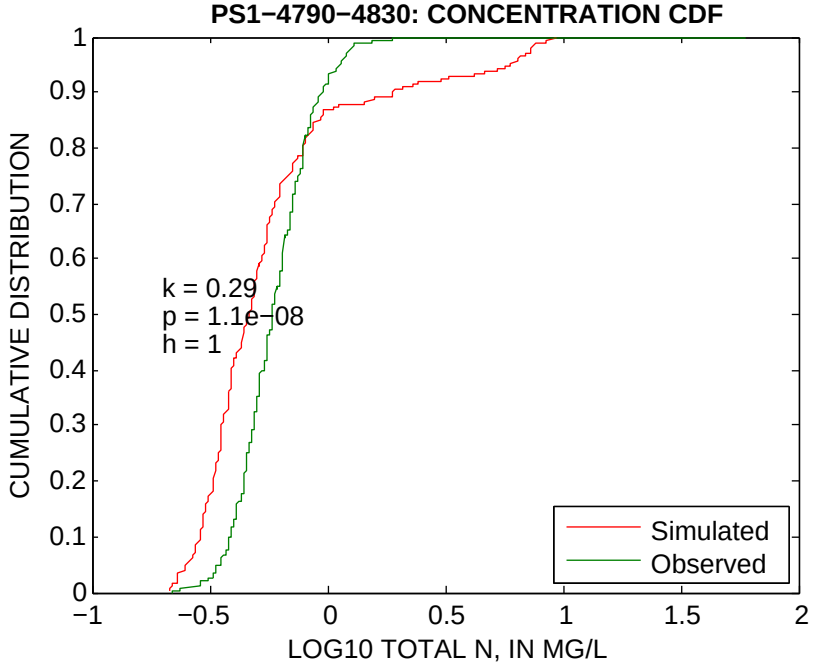
n	221	221
	observe	**simulate**
min	0.22	0.1785
	-0.657577	-0.748362
mean	0.903388	1.13638
	-0.216815	-0.274875
media	0.59	0.38726
	-0.229148	-0.411997
max	60.2	14.384
	1.7796	1.15788
varian	16.113	5.28238
	0.0418112	0.174511
JB	0.001	0.001
	0.001	0.001
	ra	log
%	25.7907	26.7783
err.va	18.7493	0.136114
rel.std.err	1.16362	3.25545
mod.eff	-0.163618	-2.25545

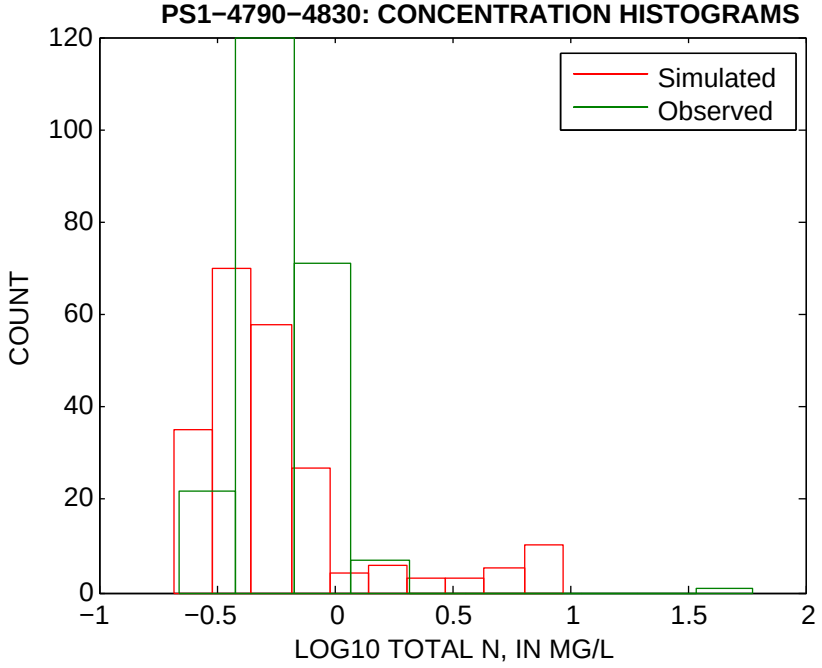
VERSION 2.1

ALL DATA
LOG10

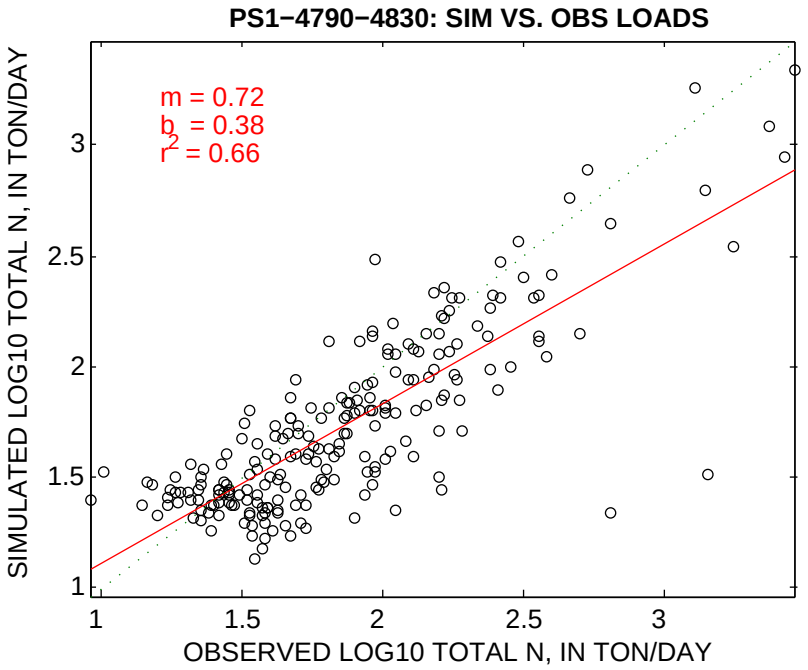


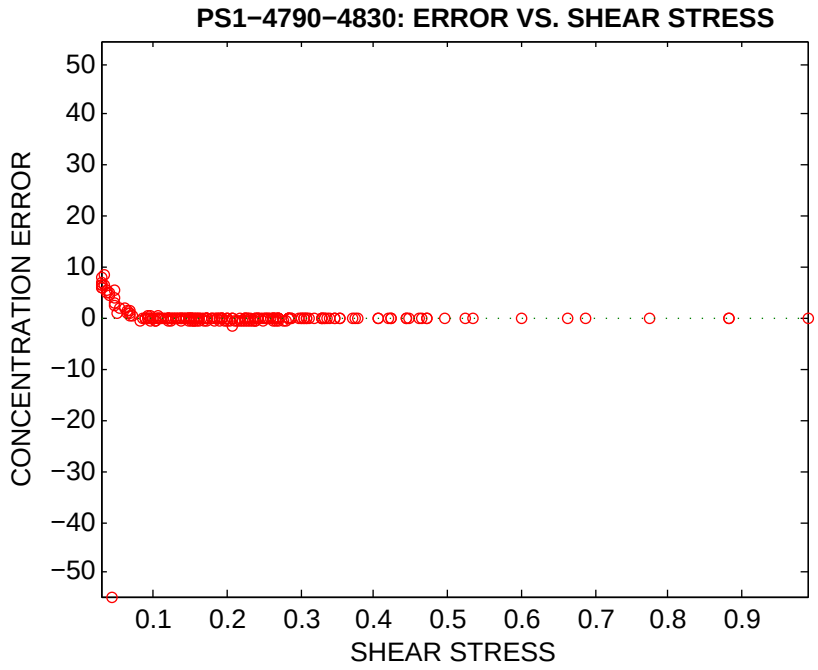


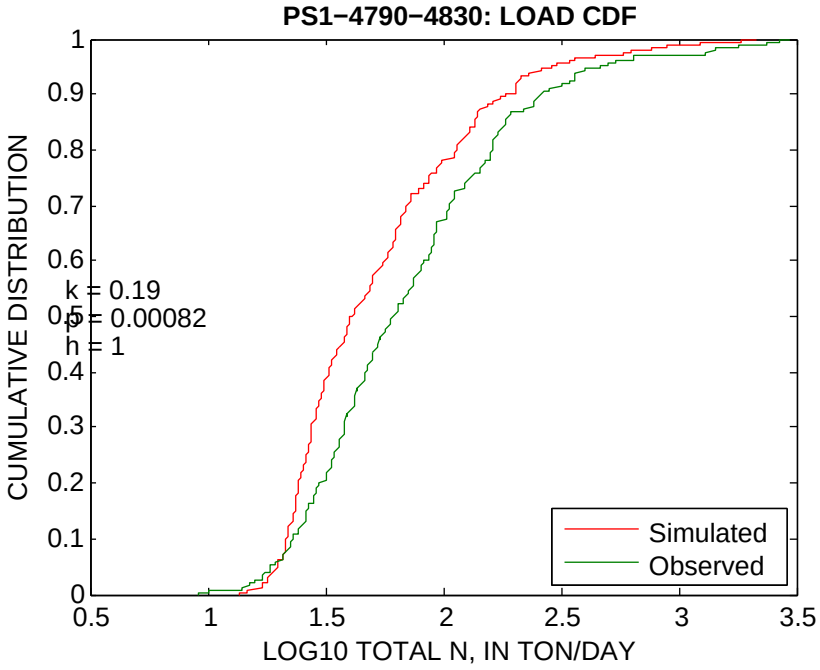


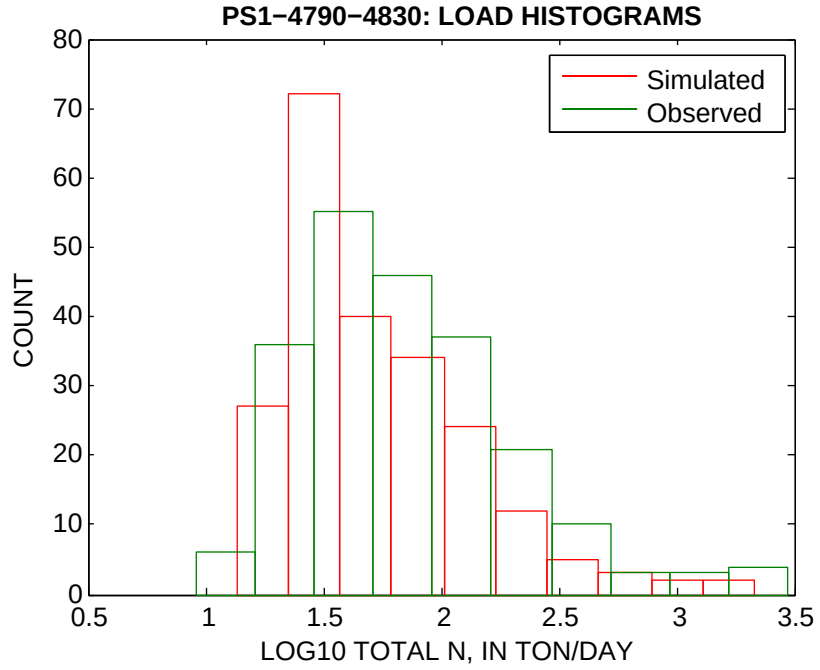


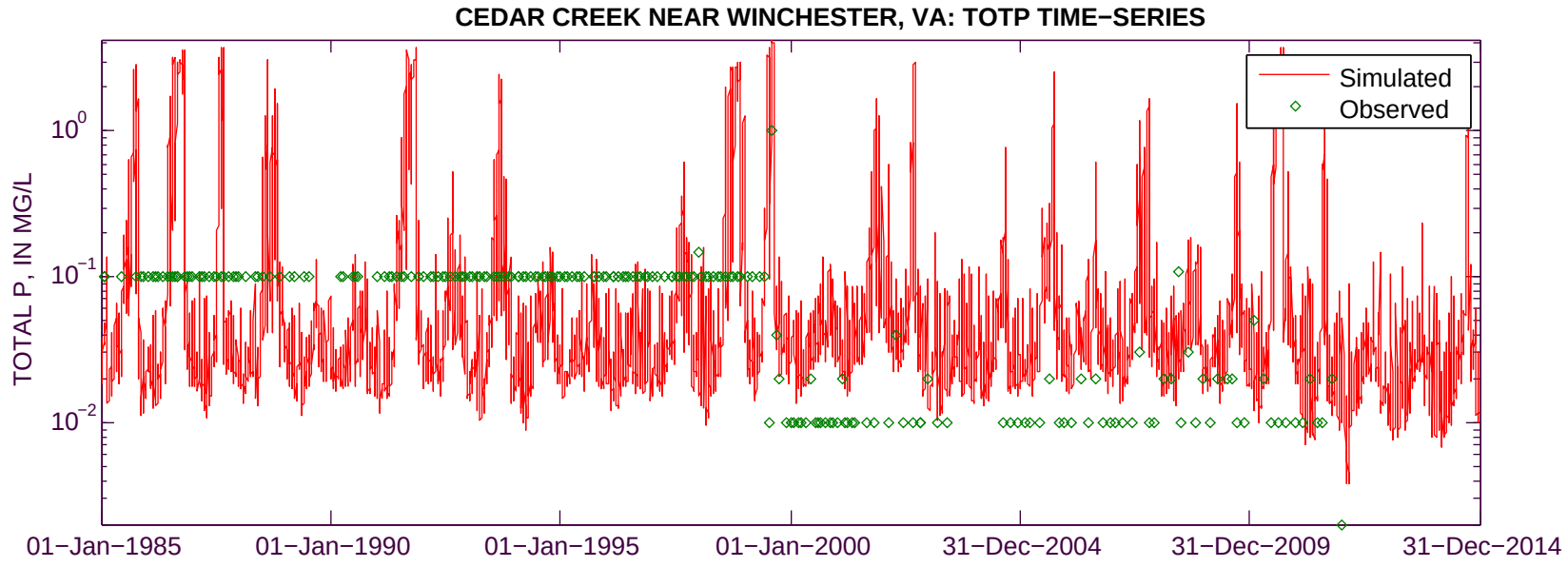
LOAD DATA
LOG10

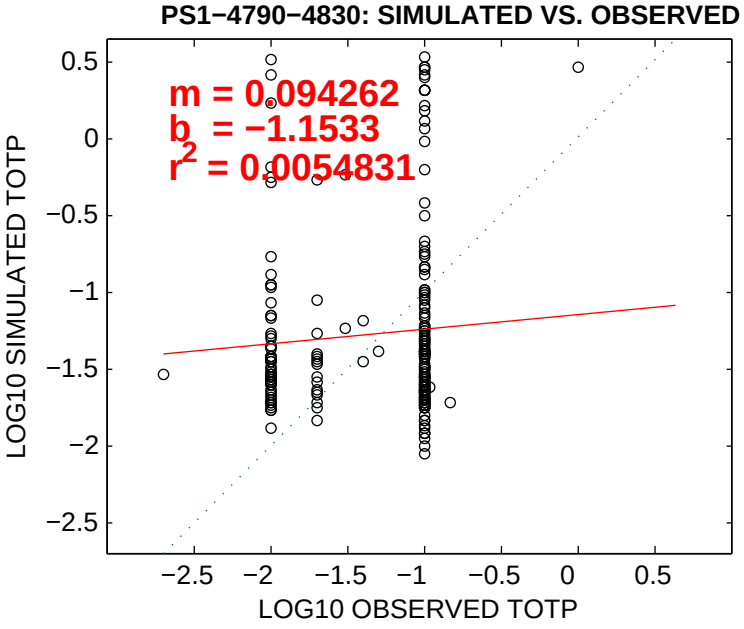


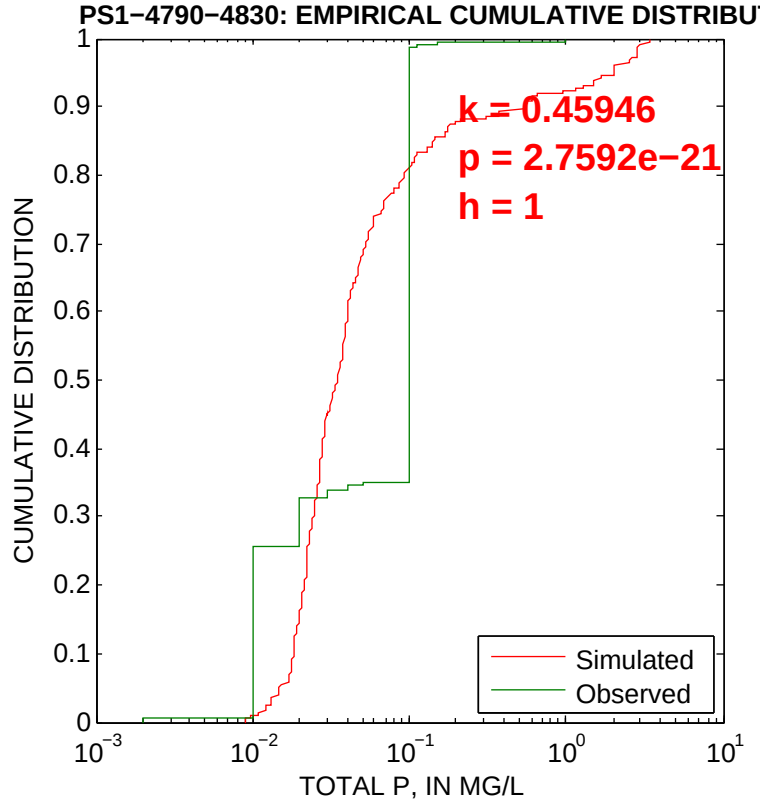












DATA SELECTION

scenario	file
P620171001WQ	TOTP.calib

plot: TOTP - total phosphorus

Dates: 1/1/1985 – 12/31/201

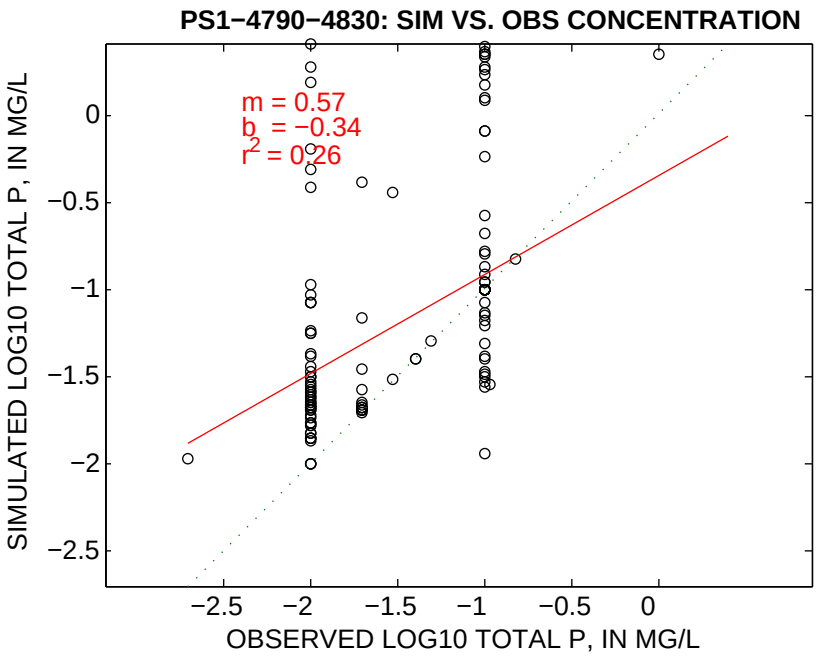
Drive	Directory	Observed
N/A	model	OBS20161101

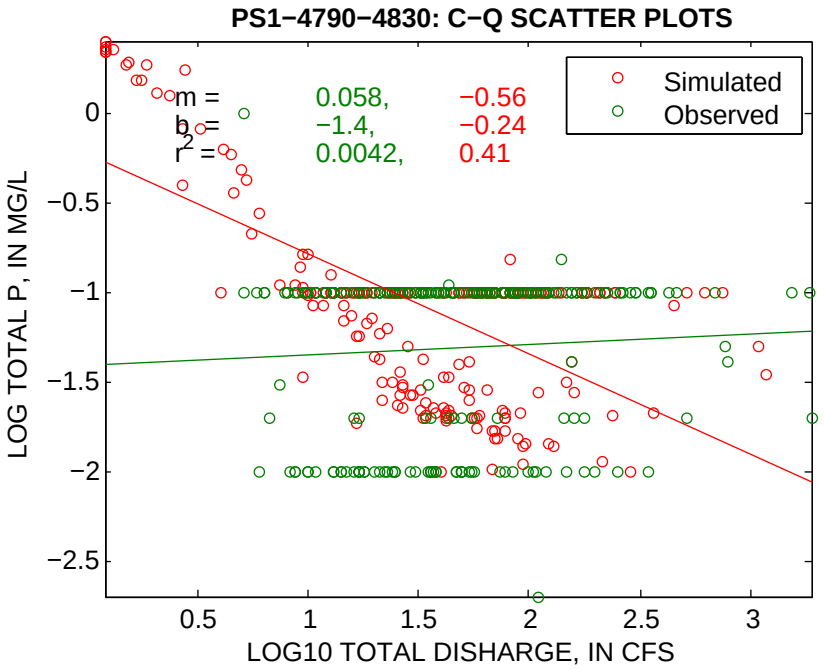
STATISTICS

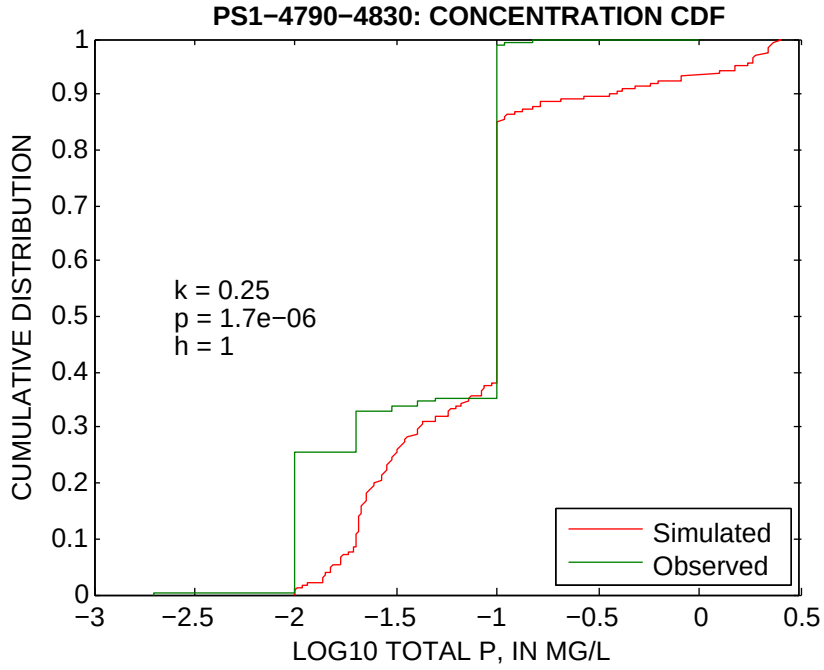
	n	observe	simulate
		222	222
min		0.002	0.0088748
		-2.69897	-2.05184
mean		0.0740172	0.236488
		-1.31445	-1.27718
media		0.1	0.0349215
		-1	-1.45691
max		1	3.4022
		0	0.53176
varian		0.00564621	0.399043
		0.211488	0.342716
JB		0.001	0.001
		0.001276	0.001
		ra	log
%		219.504	-2.83513
err.va		0.406329	0.515728
rel.std.err		71.9648	2.43857
mod.eff		-70.9648	-1.43857

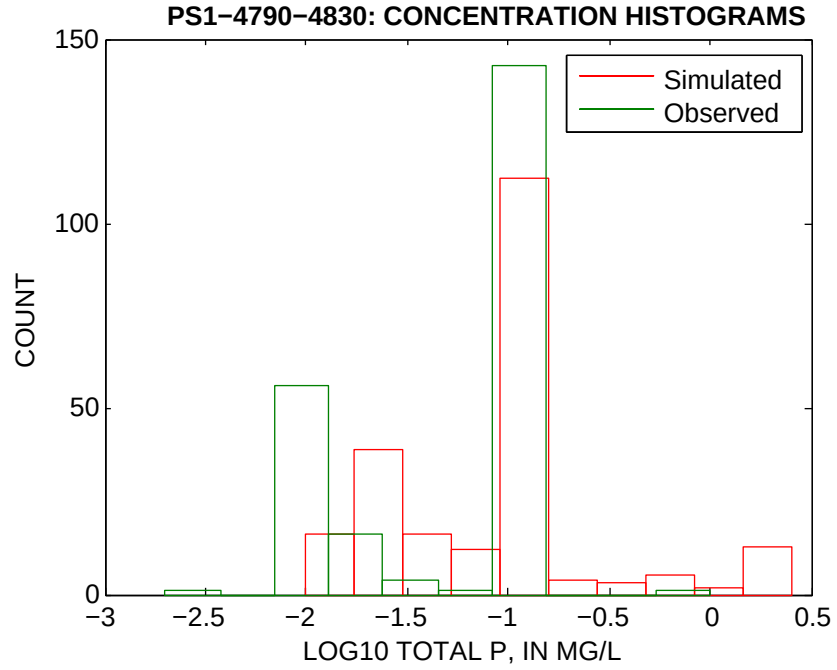
VERSION 2.1

ALL DATA
LOG10

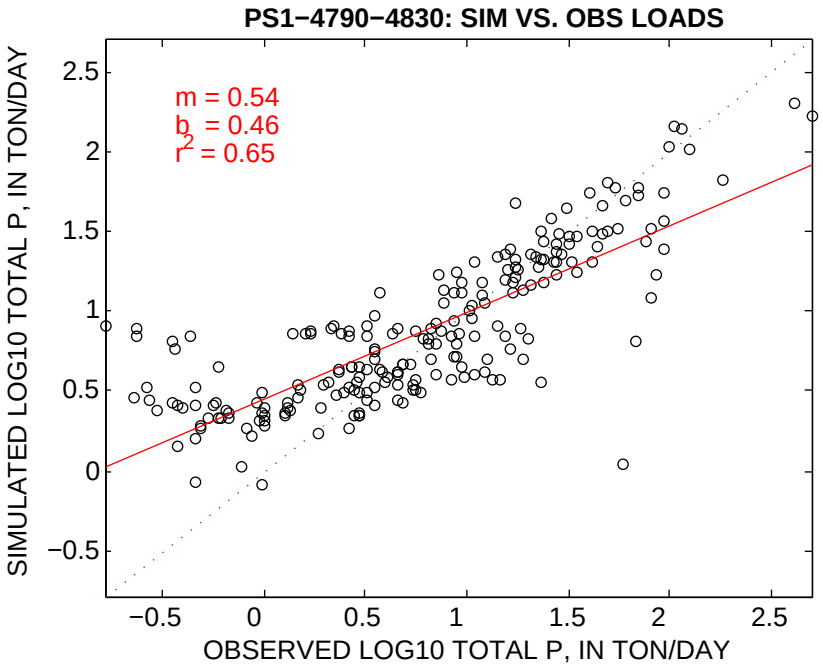


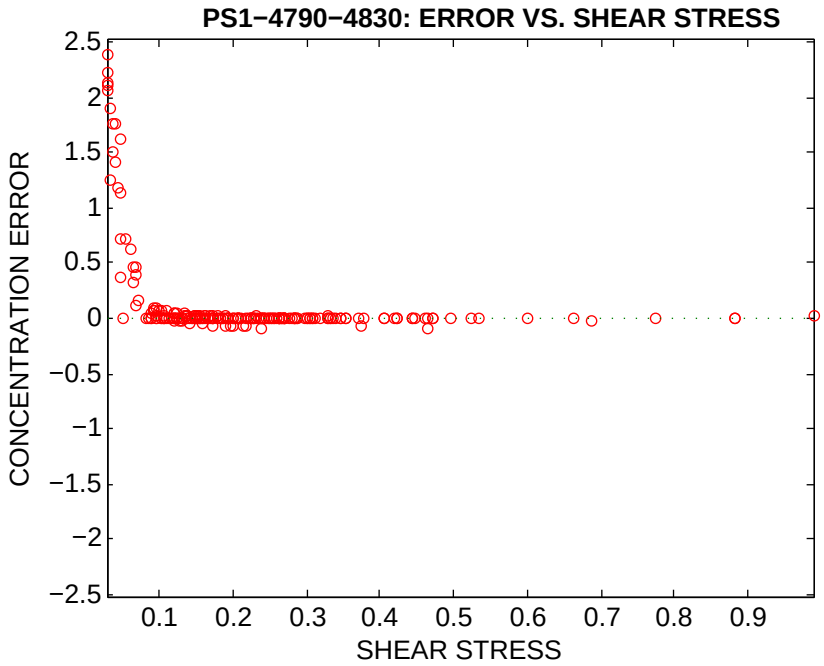


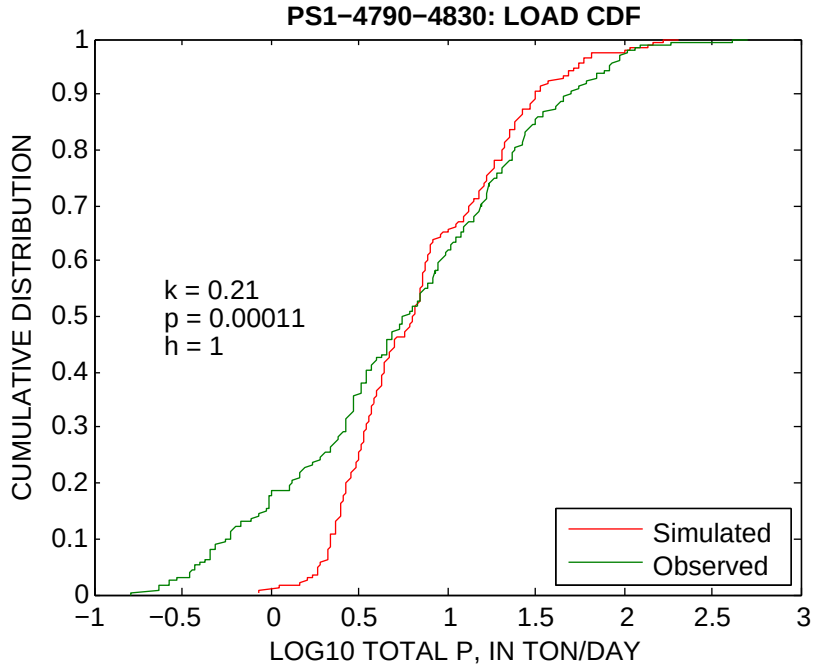


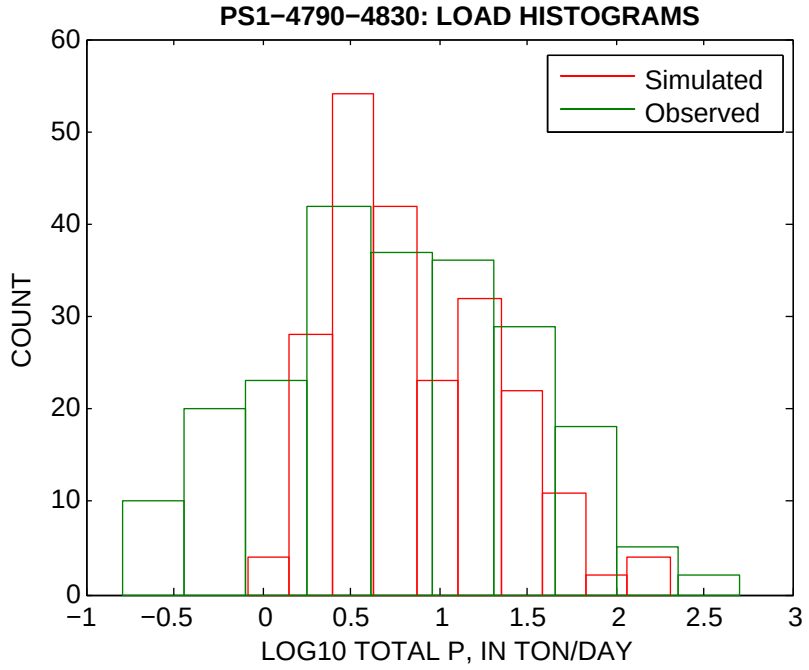


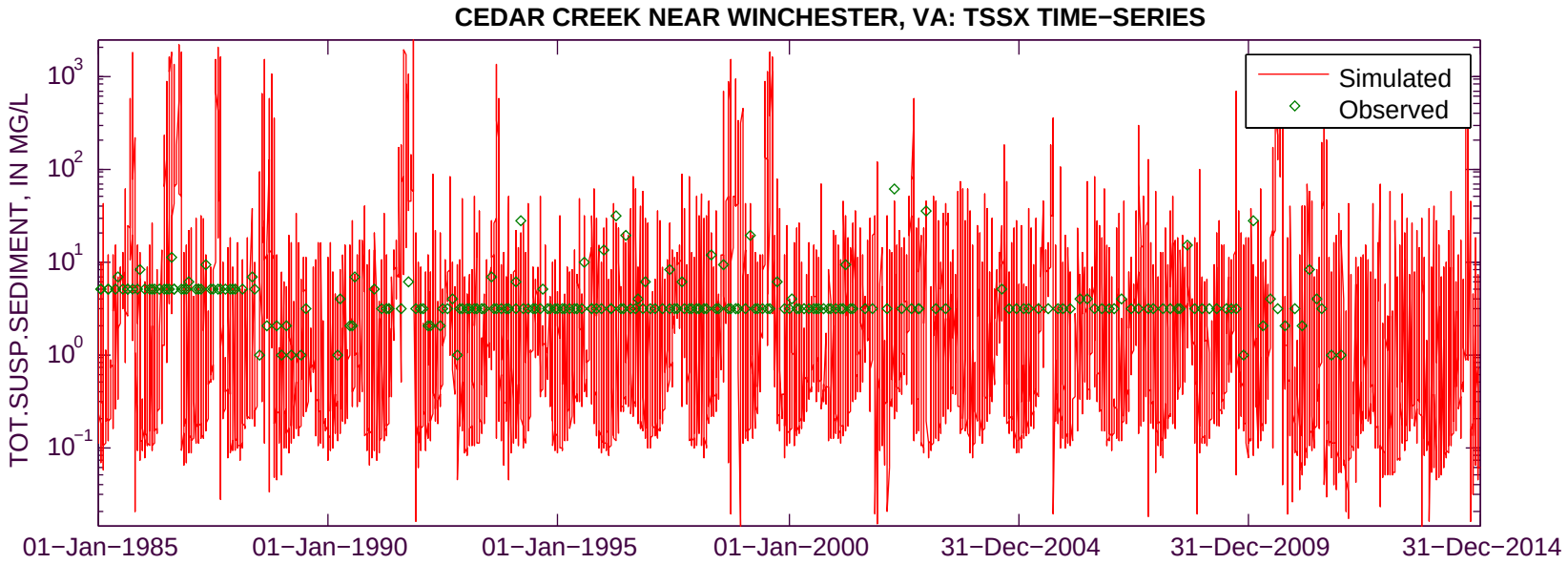
LOAD DATA
LOG10

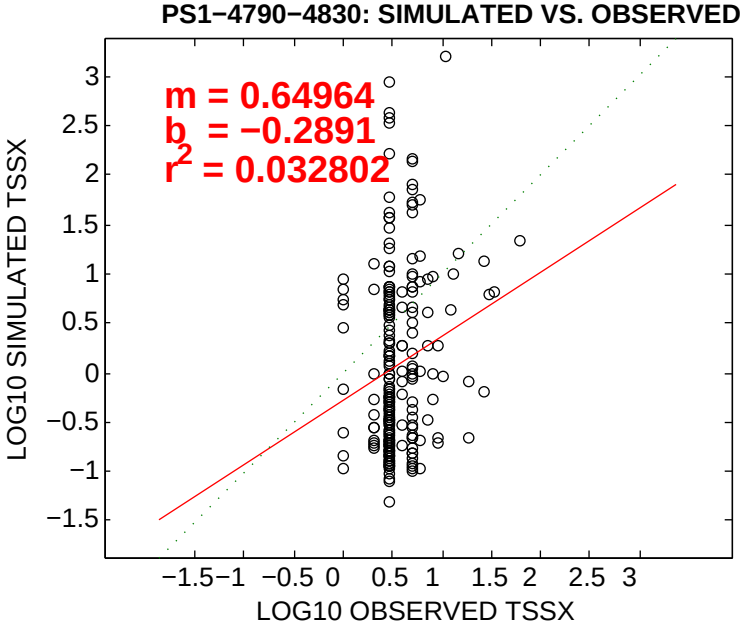


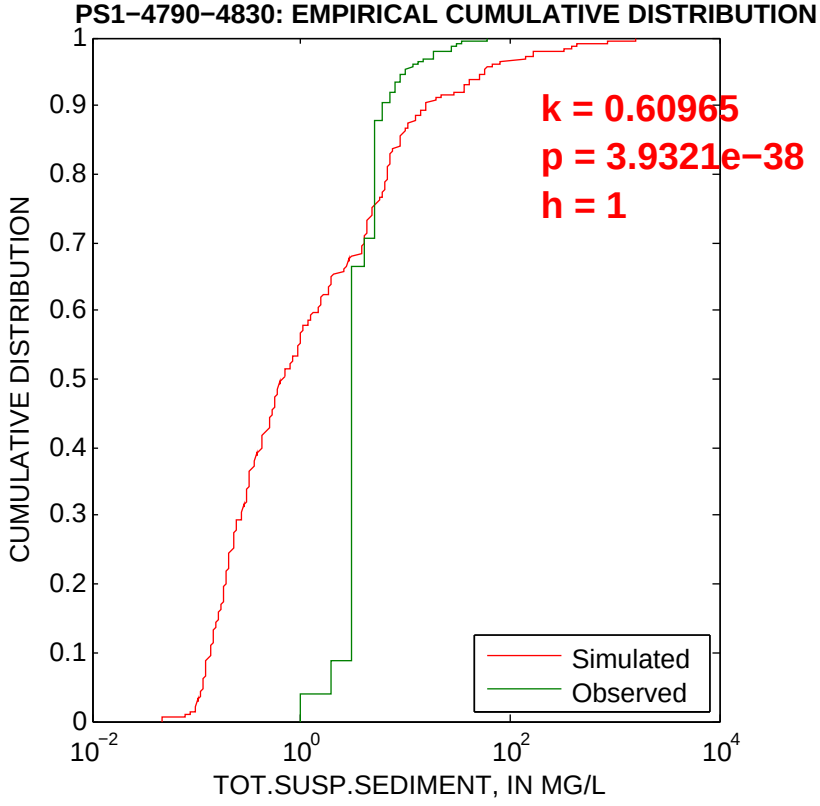












DATA SELECTION

scenario	file
P620171001WQ	TSSX.calib

plot: TSSX - total suspended ...

Dates: 1/1/1985 – 12/31/201

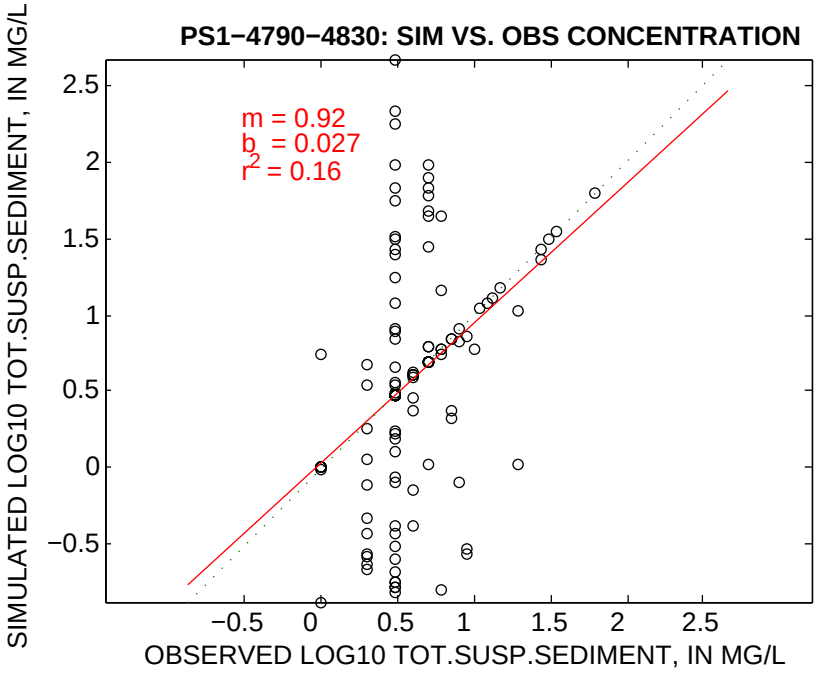
Drive	Directory	Observed
N/A	model	OBS20161101

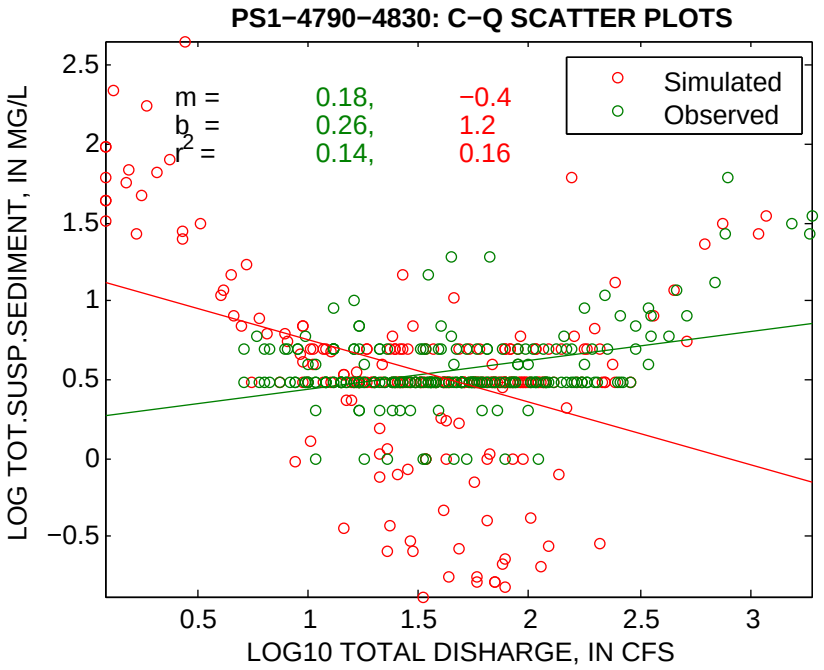
STATISTICS

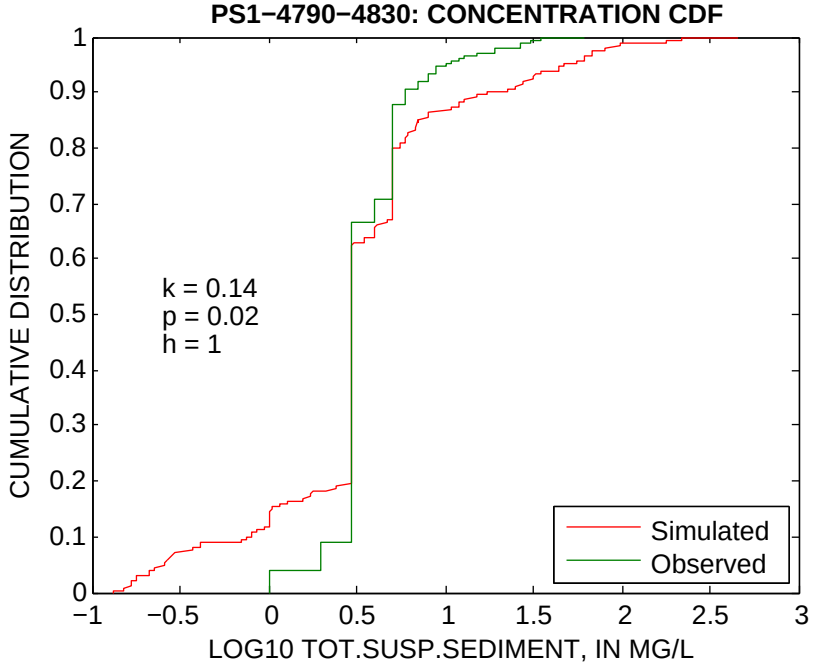
n	228	228
	observe	simulate
min	1	0.048342
	0	-1.31568
mean	4.62281	22.6586
	0.562499	0.076321
media	3	0.67486
	0.477121	-0.170845
max	62	1594.9
	1.79239	3.20273
varian	32.1743	16579.2
	0.0614637	0.790786
JB	0.001	0.001
	0.001	0.001
	ra	log
%	390.147	-86.4318
err.va	16864.5	1.0098
rel.std.err	524.16	16.4292
mod.eff	-523.16	-15.4292

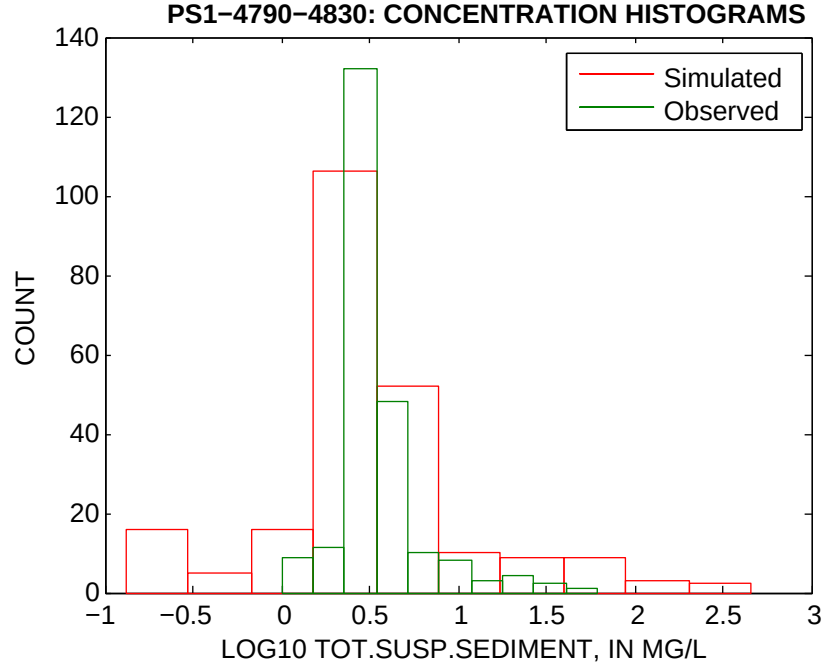
VERSION 2.1

ALL DATA
LOG10

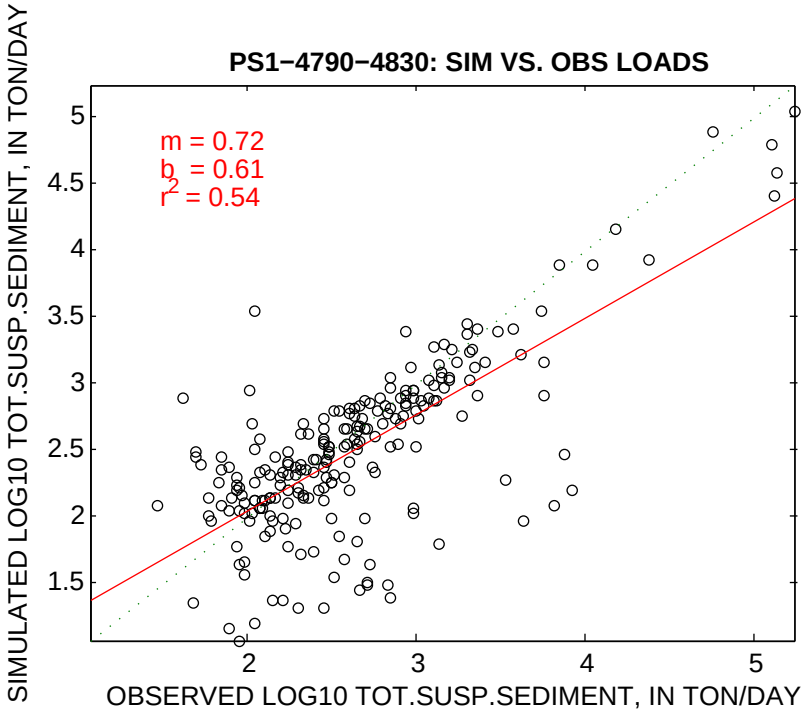




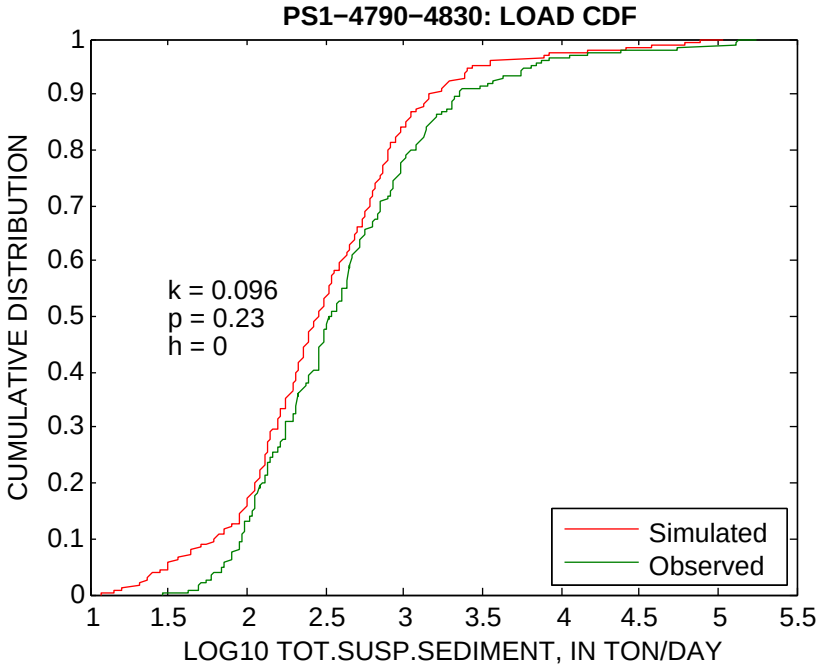


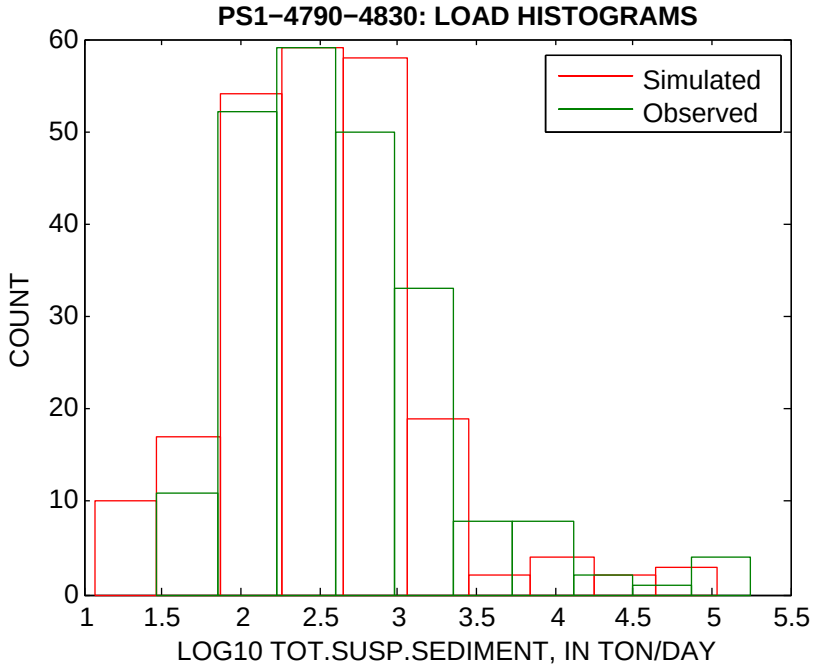


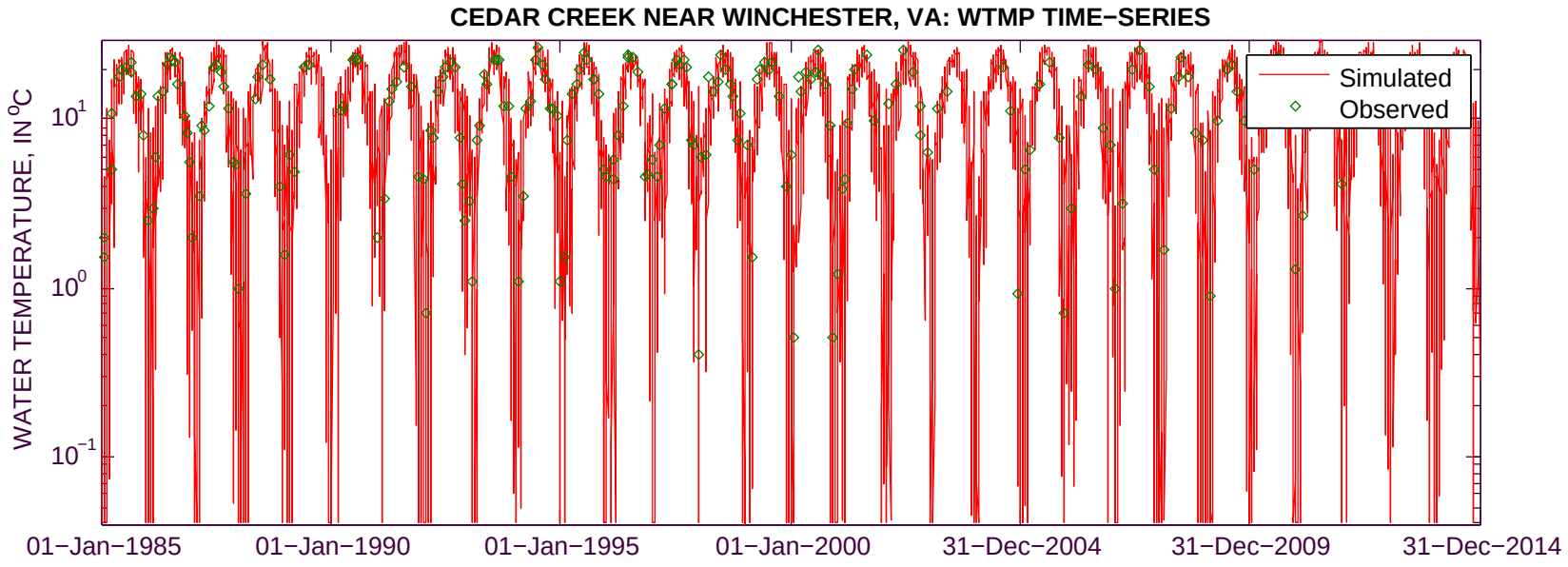
LOAD DATA
LOG10

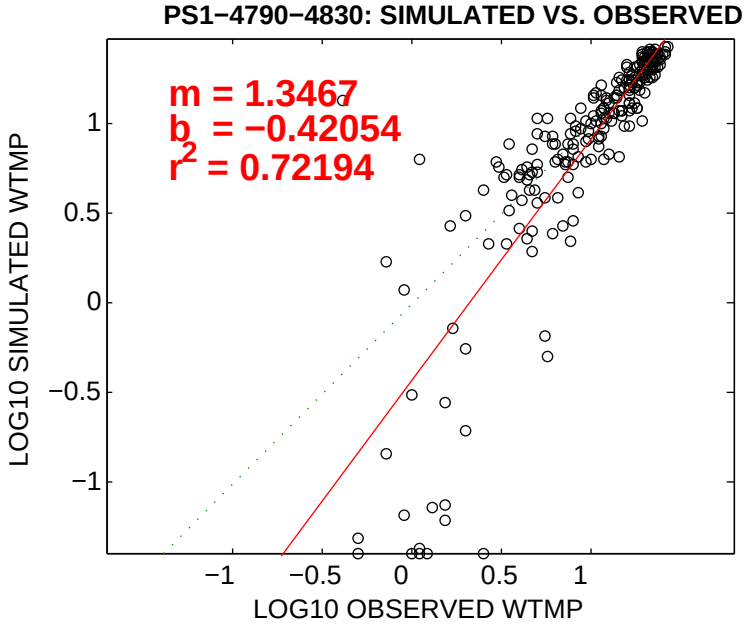


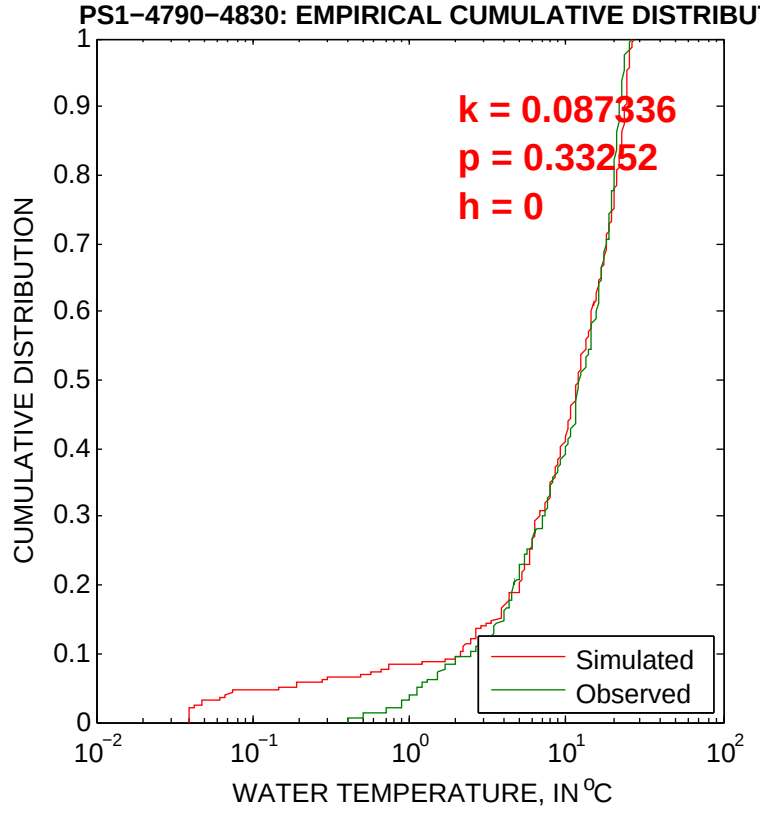












DATA SELECTION

scenario	file
P620171001WQ	WTMP.calib

plot: WTMP - water tempera...

Dates 1/1/1985 12/31/201

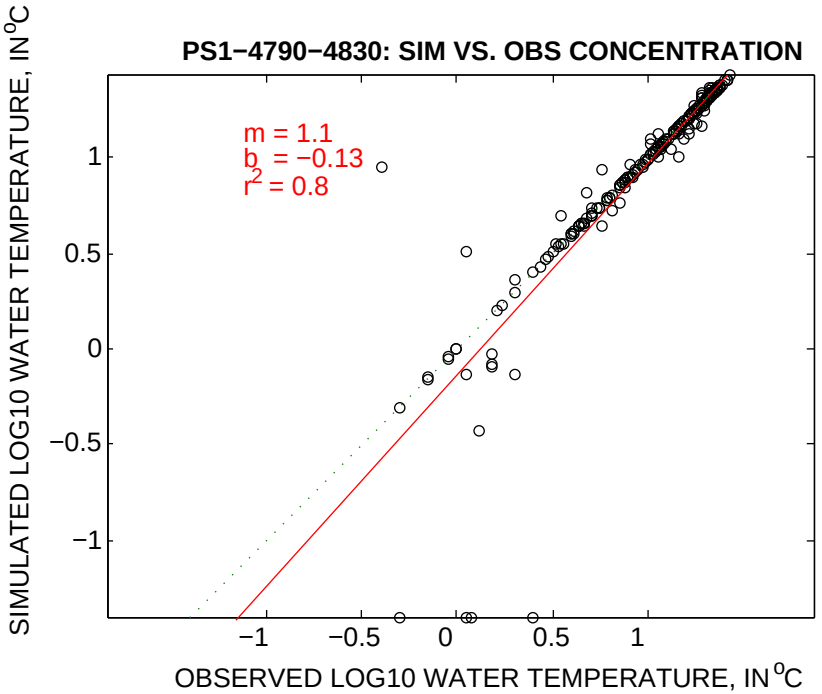
Drive	Directory	Observed
N/A	model	OBS20161101

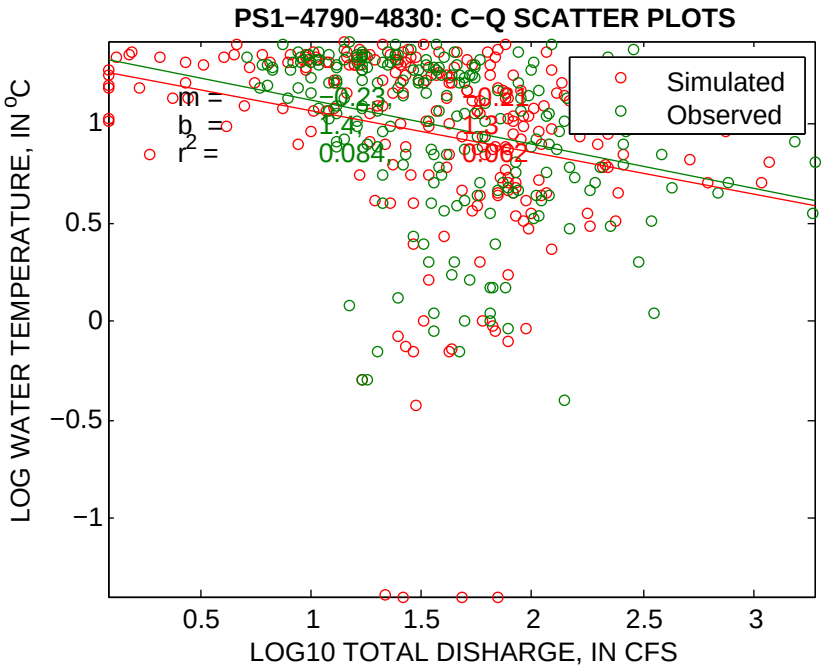
STATISTICS

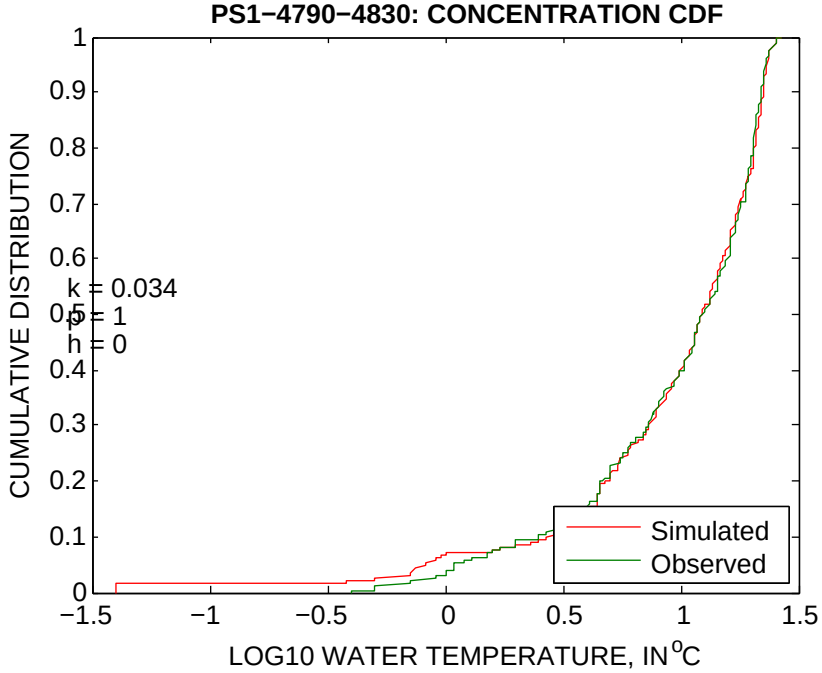
	n	observe	simulate
		229	229
min		0.4	0.040013
		-0.39794	-1.3978
mean		12.5647	12.5994
		0.971718	0.8881
media		12.3	11.807
		1.08991	1.07214
max		26.7	27.28
		1.42651	1.43584
varian		54.1251	63.1813
		0.160567	0.403381
JB		0.004677	0.005791
		0.001	0.001
		ra	log
%		0.27646	-8.6052
err.va		8.09043	0.138492
rel.std.err		0.149477	0.862519
mod.eff		0.850523	0.137481

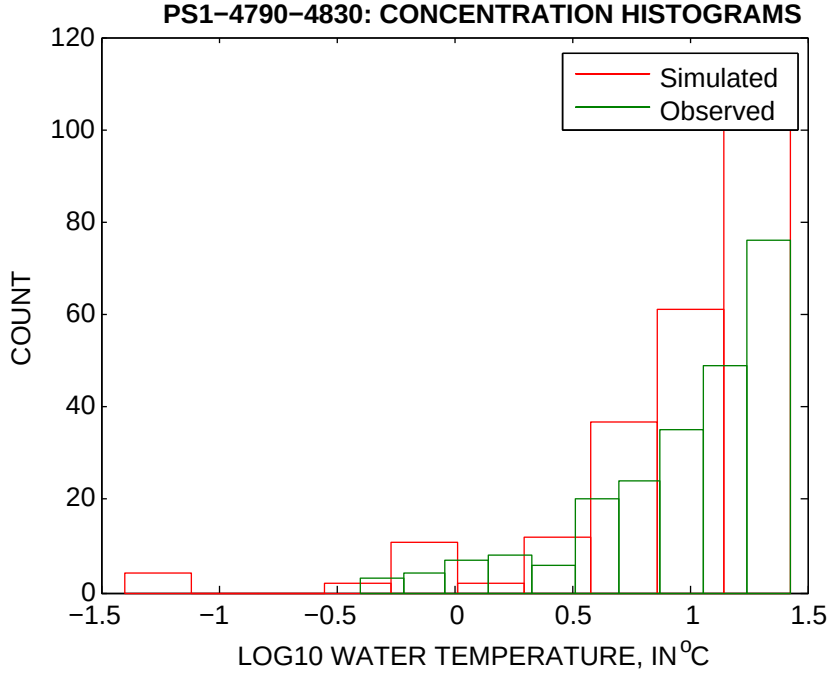
VERSION

ALL DATA
LOG10

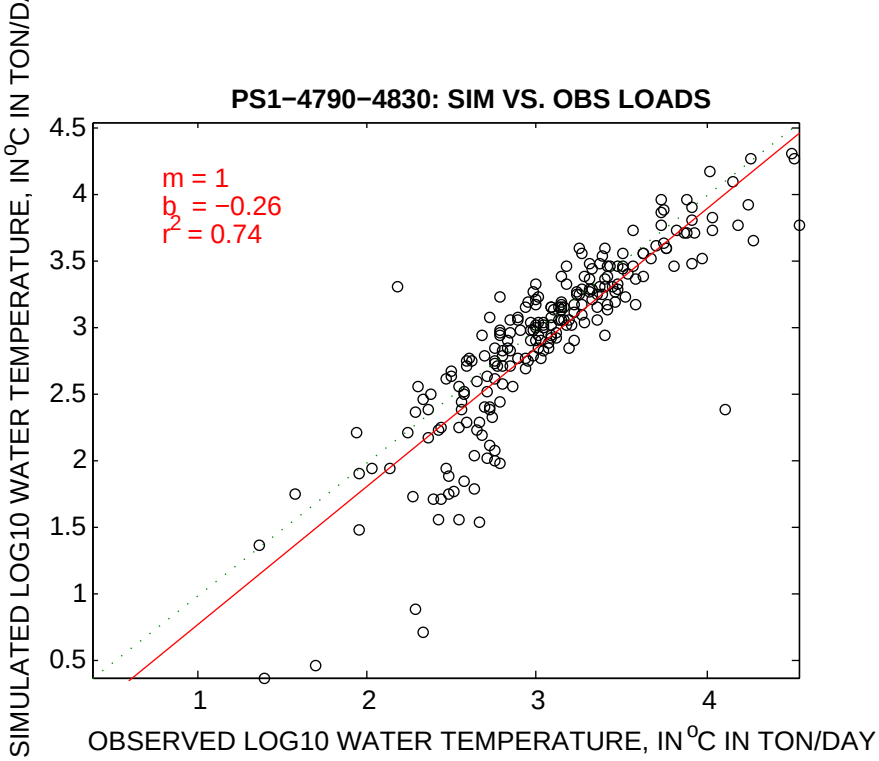


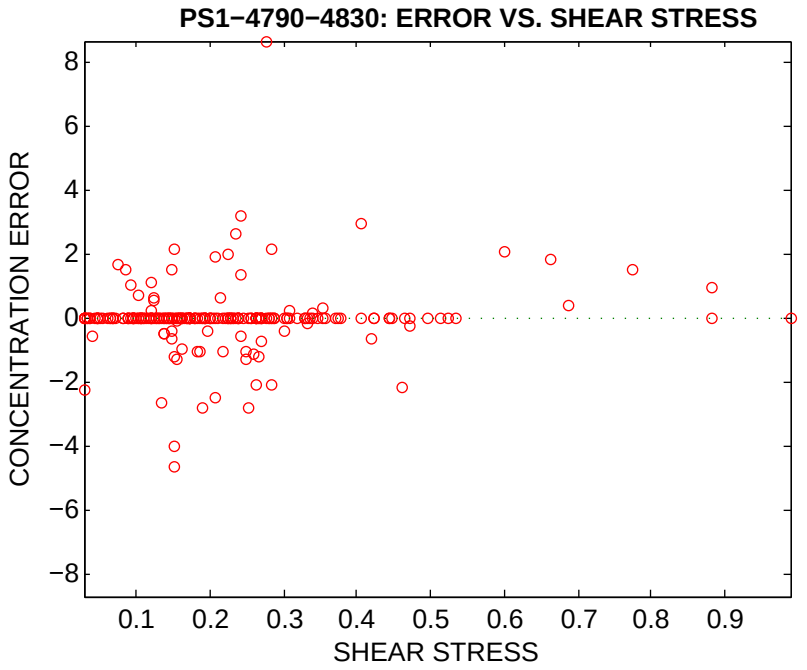


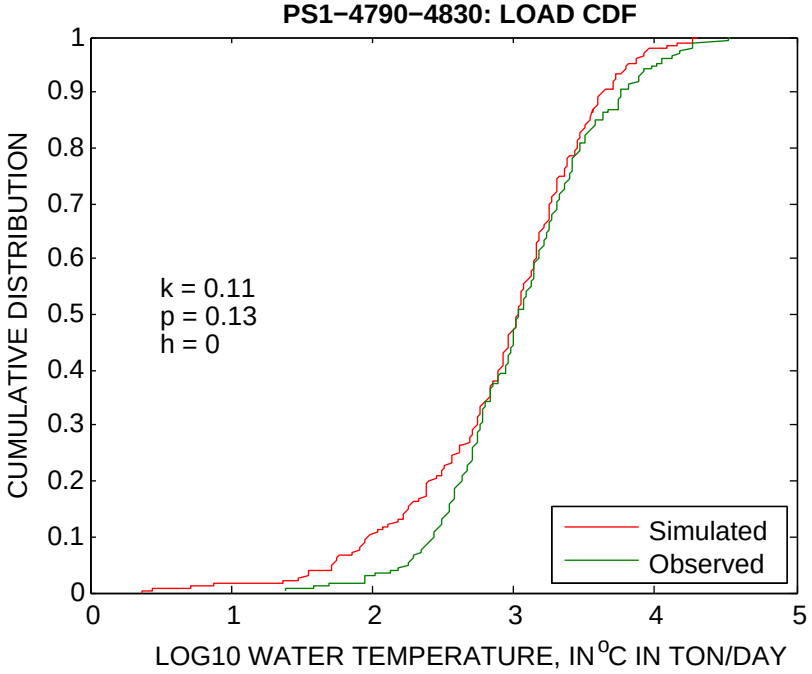


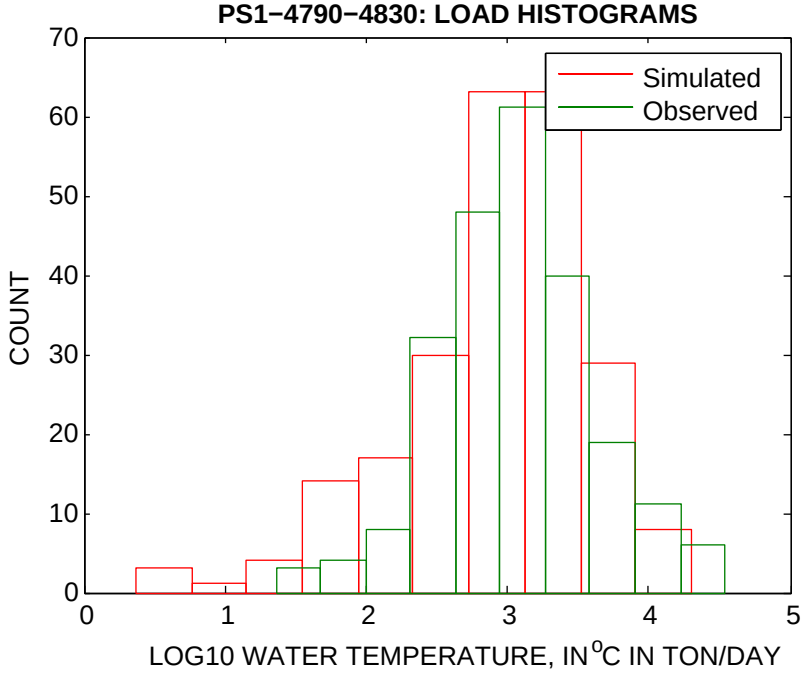


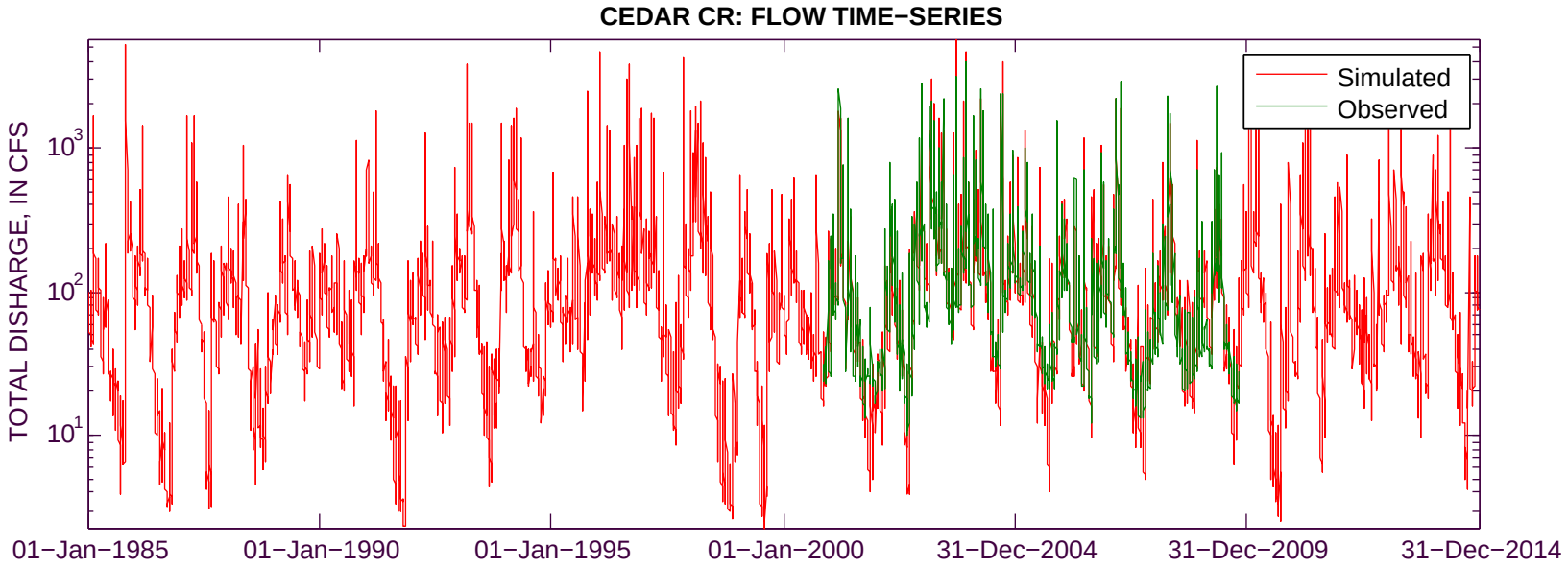
LOAD DATA
LOG10

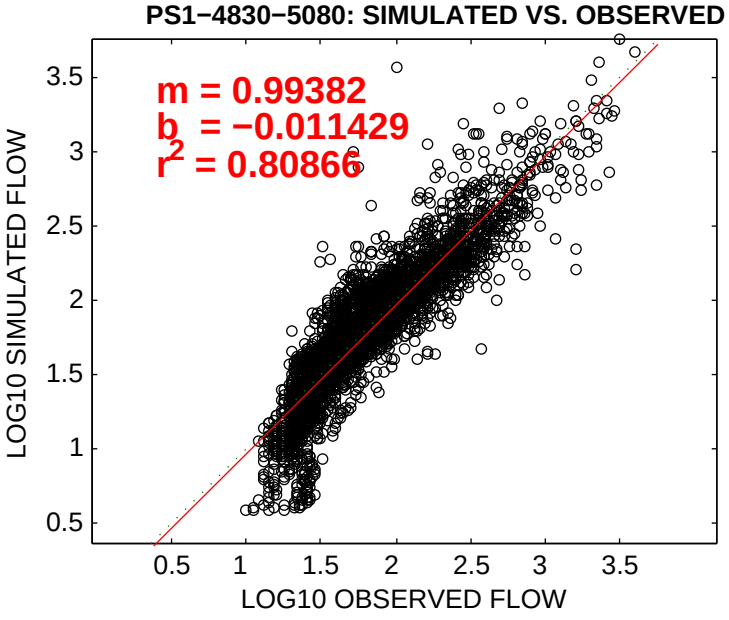


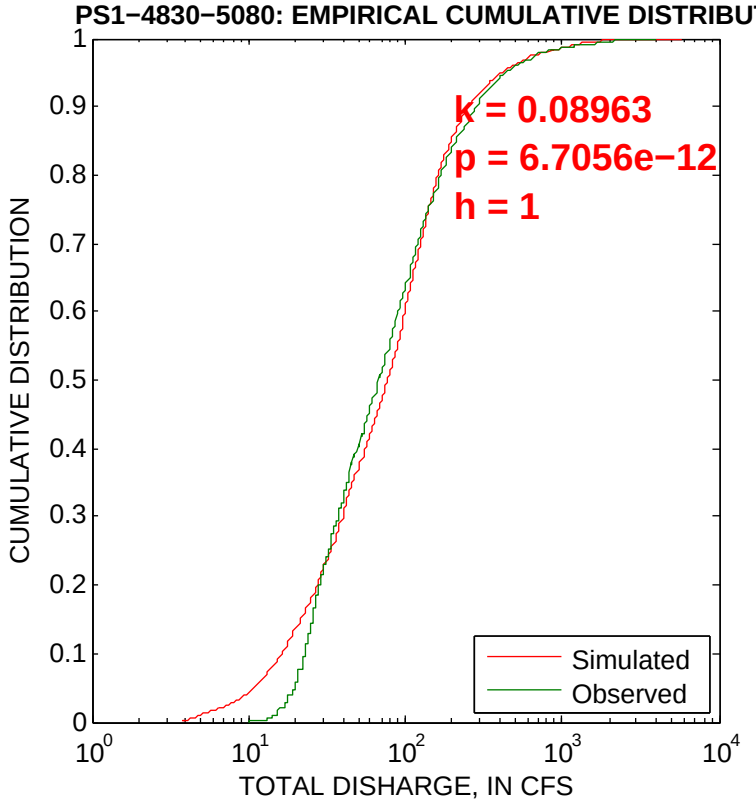












DATA SELECTION

scenario	file
P620171001WQ	FLOW.calib

plot: FLOW - total discharge

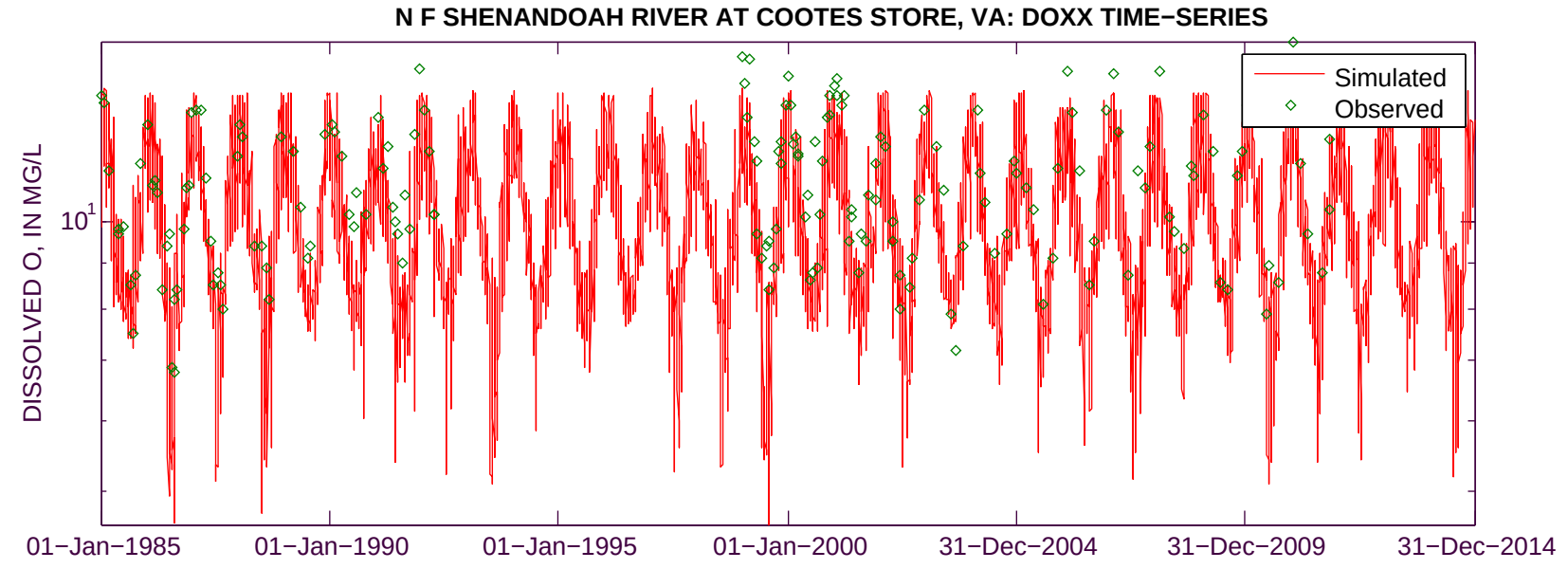
Dates 1/1/1985 12/31/201

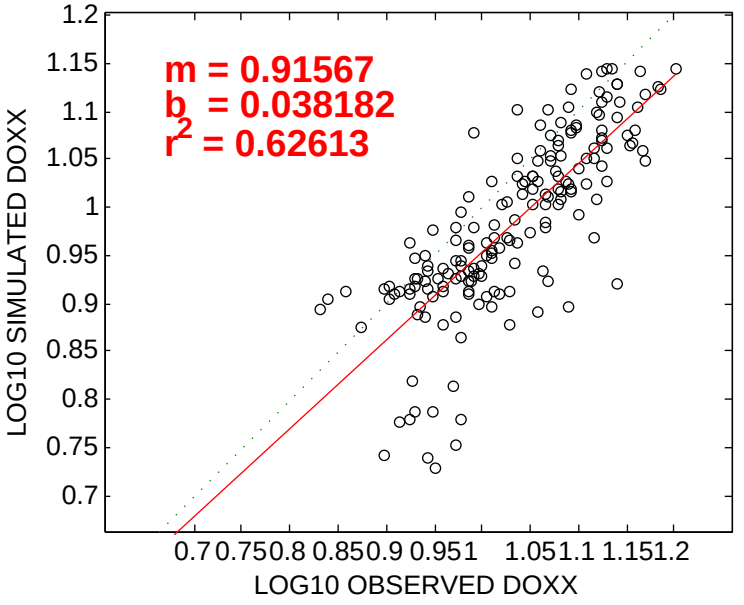
Drive	Directory	Observed
N/A	model	OBS20161101

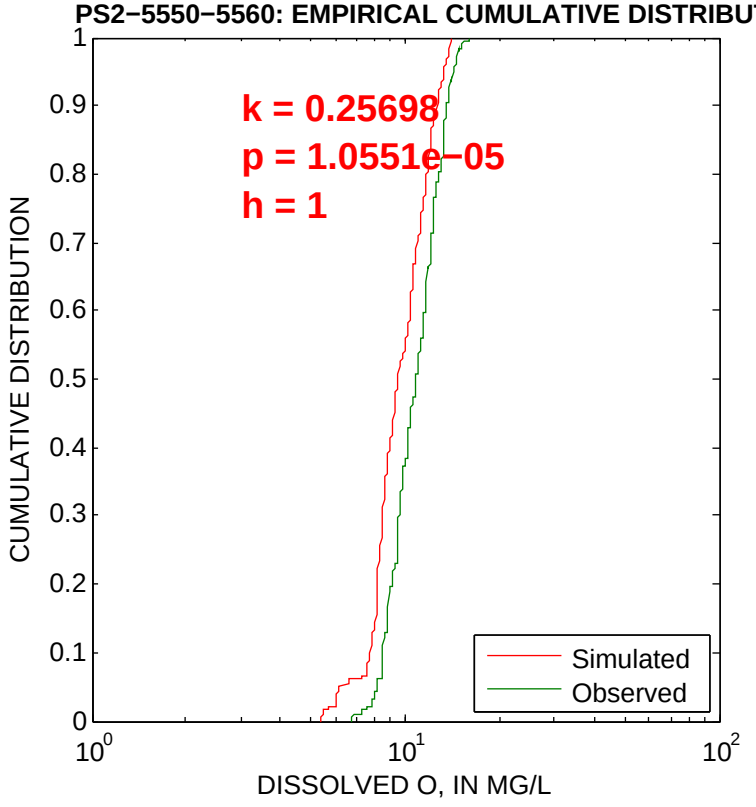
STATISTICS

	observe	simulate
n	3269	3269
min	10 1	3.8505 0.585517
mean	137.749 1.87112	134.965 1.84812
media	68 1.83251	77.645 1.89011
max	3970 3.59879	5726.2 3.75787
varian	63262 0.189991	66023.1 0.232051
JB	0.001 0.001	0.001 0.015667
	ra	log
%	-2.02131	-1.2292
err.va	24659.6	0.044938
rel.std.err	0.389802	0.236527
mod.eff	0.610198	0.763473

VERSION 2.1







DATA SELECTION

scenario: P620171001WQ | file: DOXX.calib

plot: DOXX - dissolved oxygen

Dates: 1/1/1985 – 12/31/201

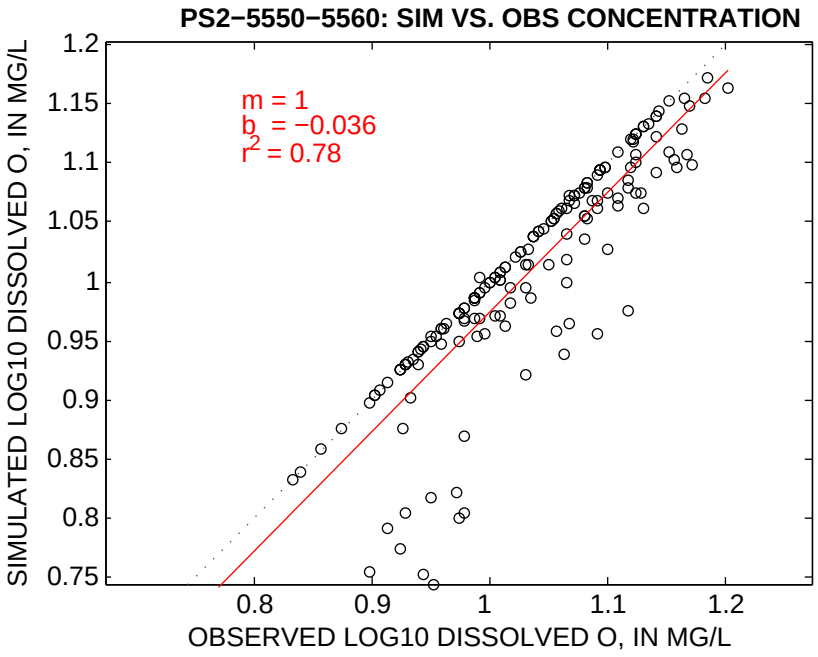
Drive: N/A | Directory: model | Observed: OBS20161101

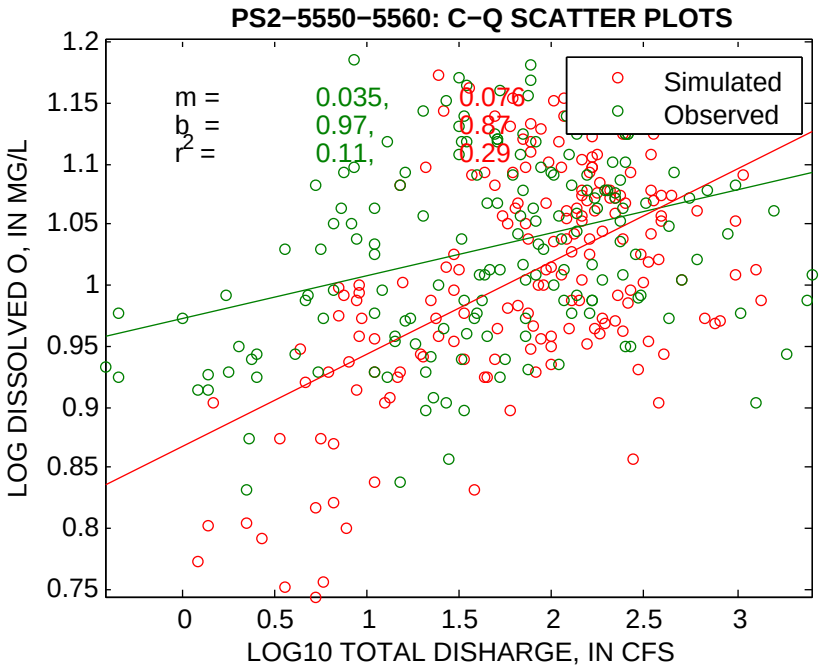
STATISTICS

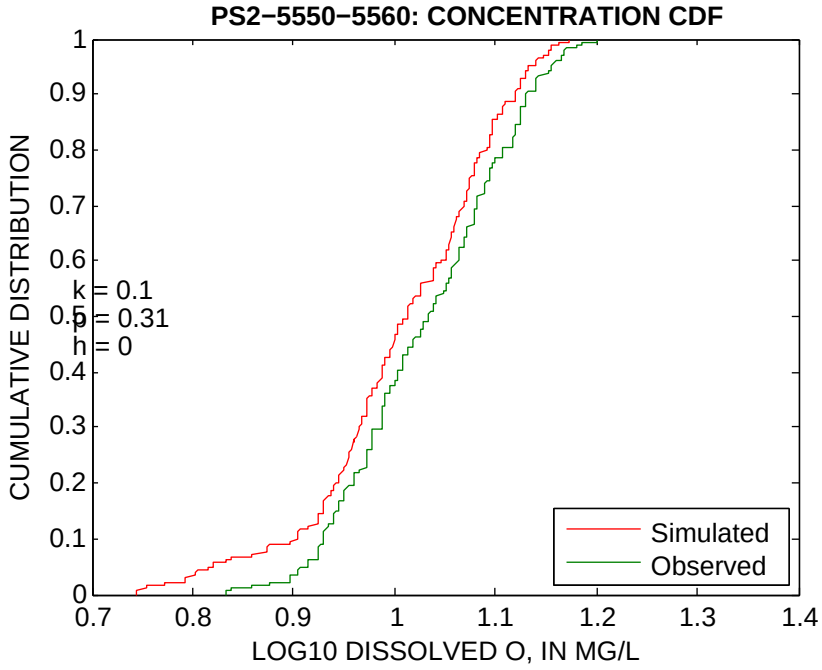
		observe	simulate
n		179	179
min		6.8	5.3628
		0.832509	0.729392
mean		10.9468	9.83217
		1.0322	0.983333
media		10.8	9.529
		1.03342	0.979047
max		15.9	13.963
		1.2014	1.14498
varian		3.902	4.02226
		0.00624022	0.00835627
JB		0.044460	0.153917
		0.079085	0.092969
		ra	log
%		-10.1826	-4.73434
err.va		2.71981	0.00557007
rel.std.err		0.697031	0.892607
mod.eff		0.302969	0.107393

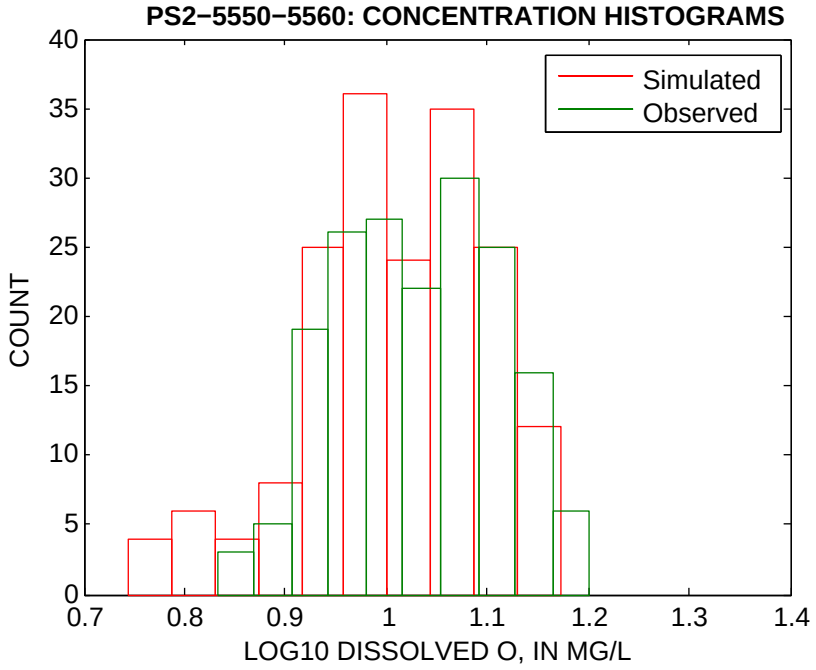
VERSION 2.1

ALL DATA
LOG10

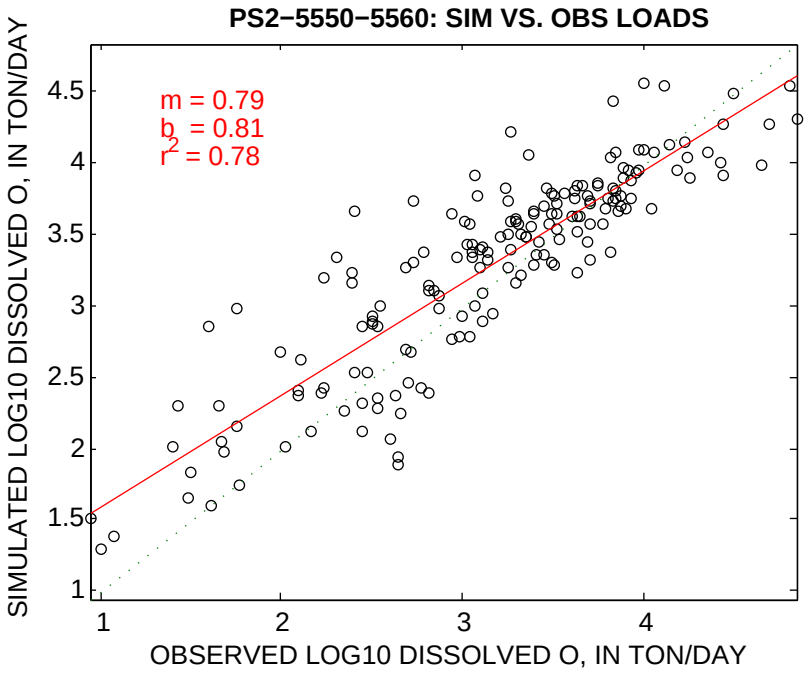


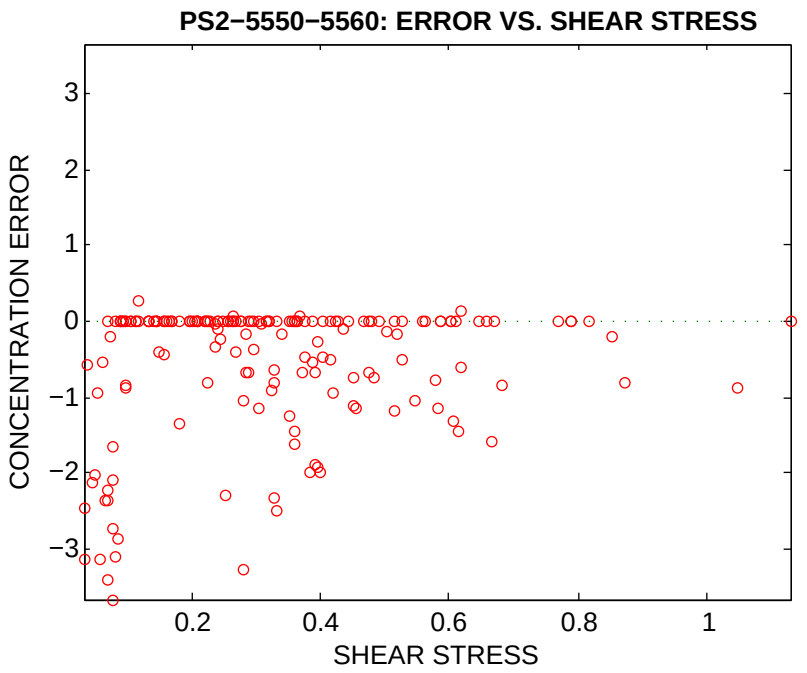


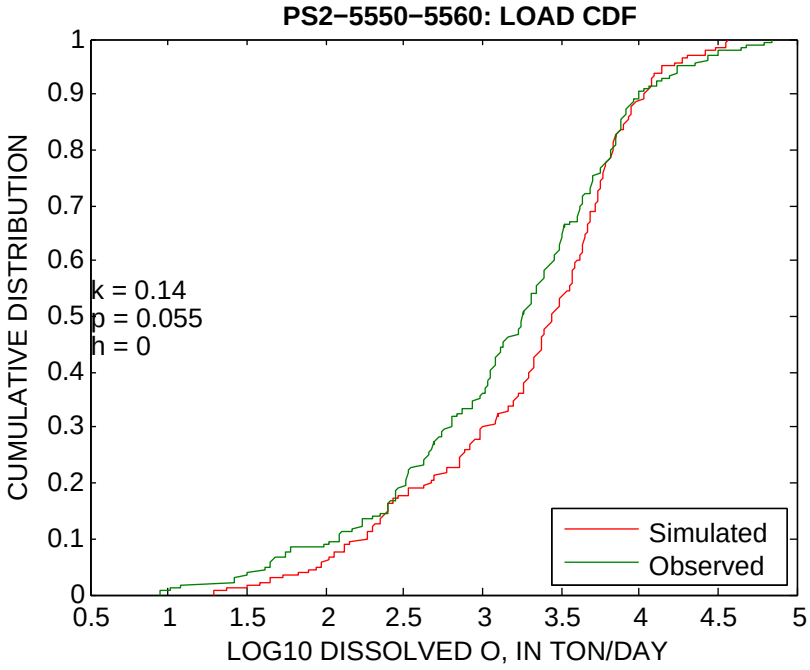


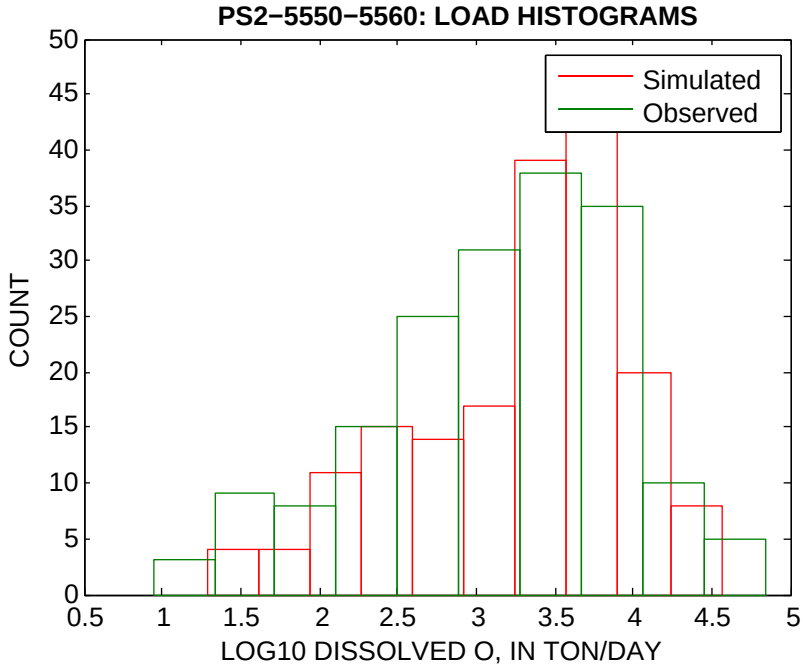


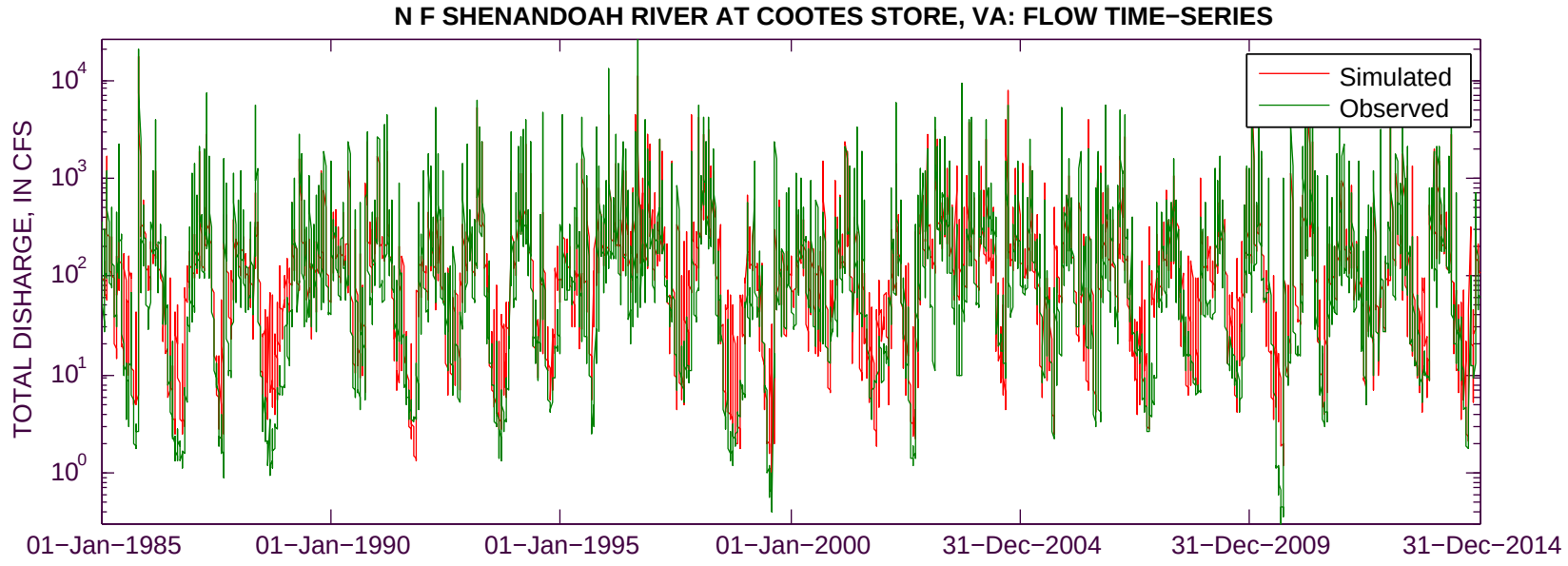
LOAD DATA
LOG10

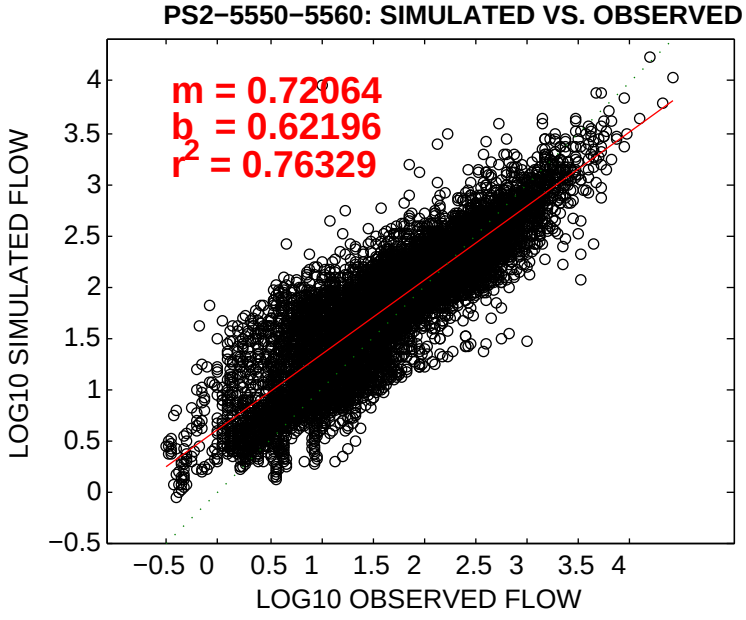


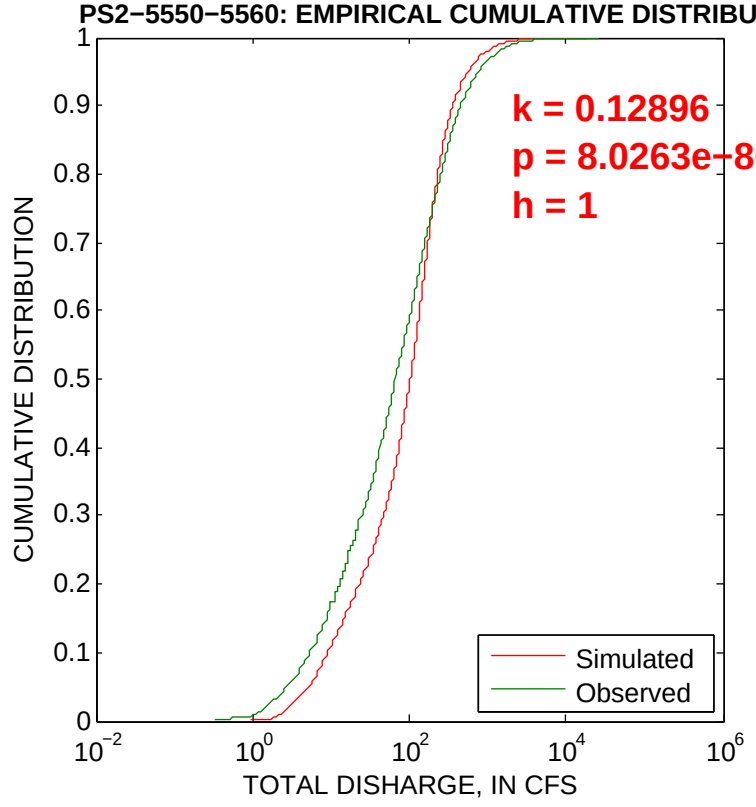












DATA SELECTION

scenario	file
P620171001WQ	FLOW.calib

plot: FLOW - total discharge

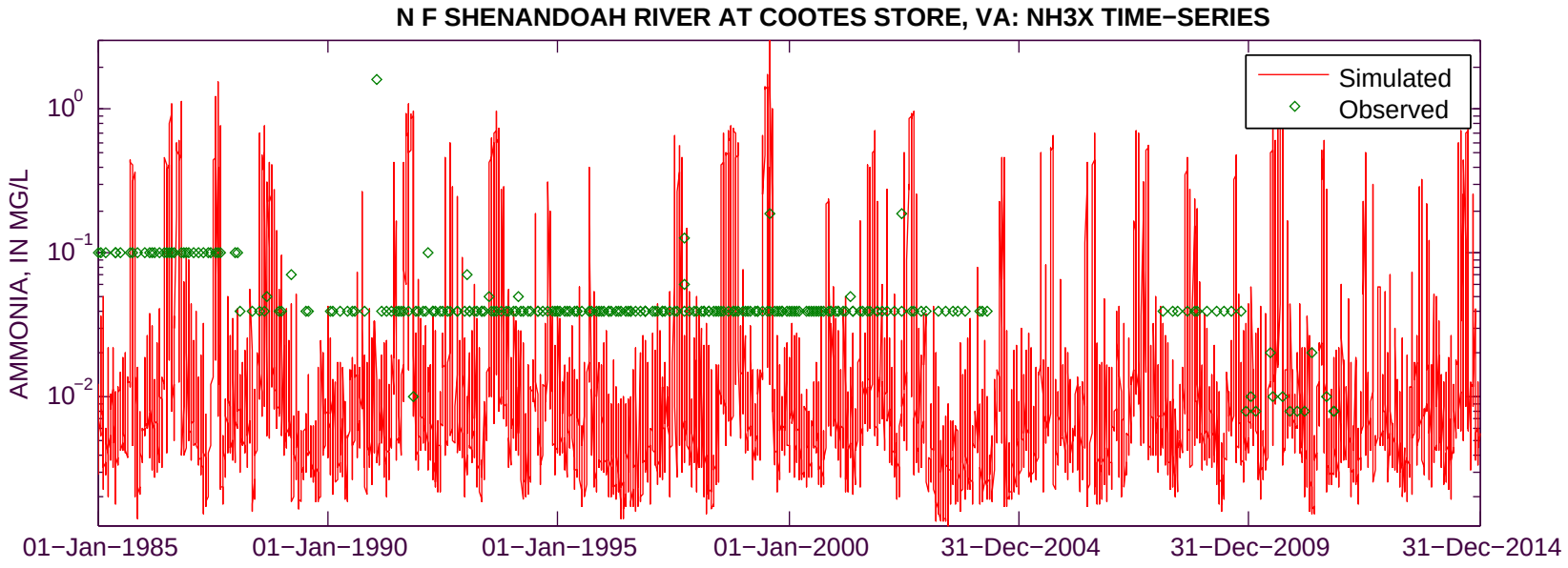
Dates 1/1/1985 12/31/201

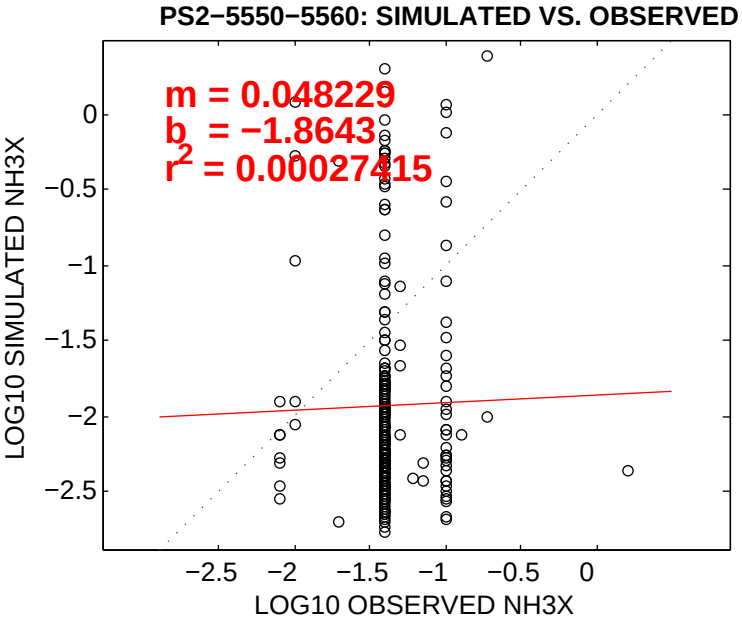
Drive	Directory	Observed
N/A	model	OBS20161101

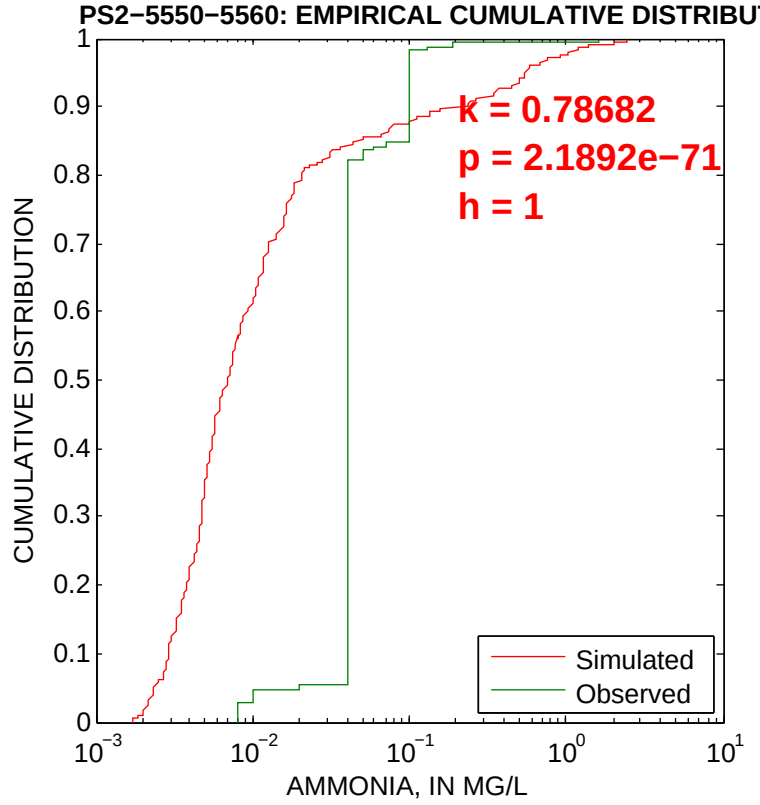
STATISTICS

n	10957	10957
	observe	simulate
min	0.31	0.89402
	-0.508638	-0.0486528
mean	208.507	181.543
	1.76674	1.89514
media	67	103.97
	1.82607	2.01691
max	26400	17516
	4.4216	4.24343
varian	359184	150933
	0.552859	0.376152
JB	0.001	0.001
	0.001	0.001
	ra	log
%	-12.932	7.26787
err.va	142266	0.148676
rel.std.err	0.396082	0.268922
mod.eff	0.603918	0.731078

VERSION 2.1







DATA SELECTION

scenario	file
P620171001WQ	NH3X.calib

plot: NH3X - ammonia

Dates: 1/1/1985 – 12/31/201

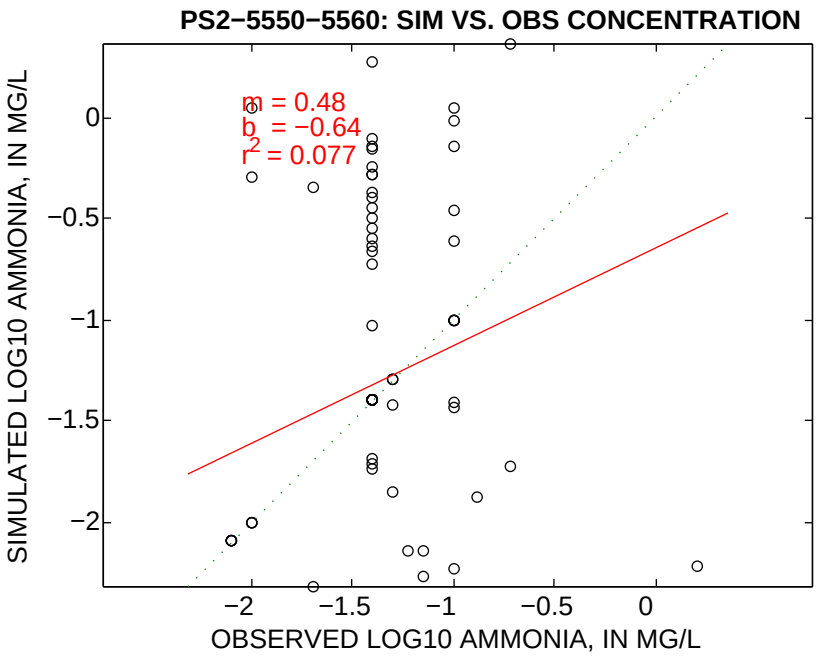
Drive	Directory	Observed
N/A	model	OBS20161101

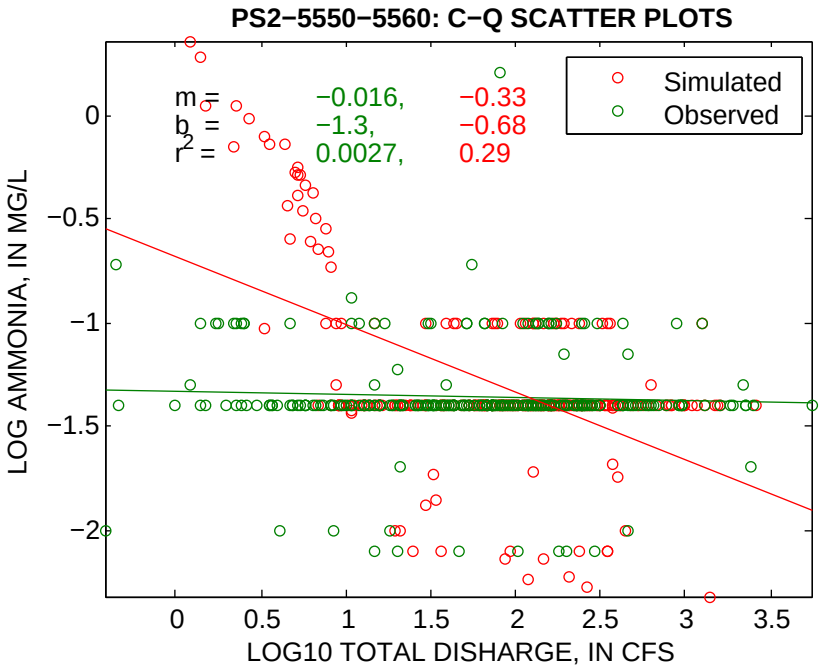
STATISTICS

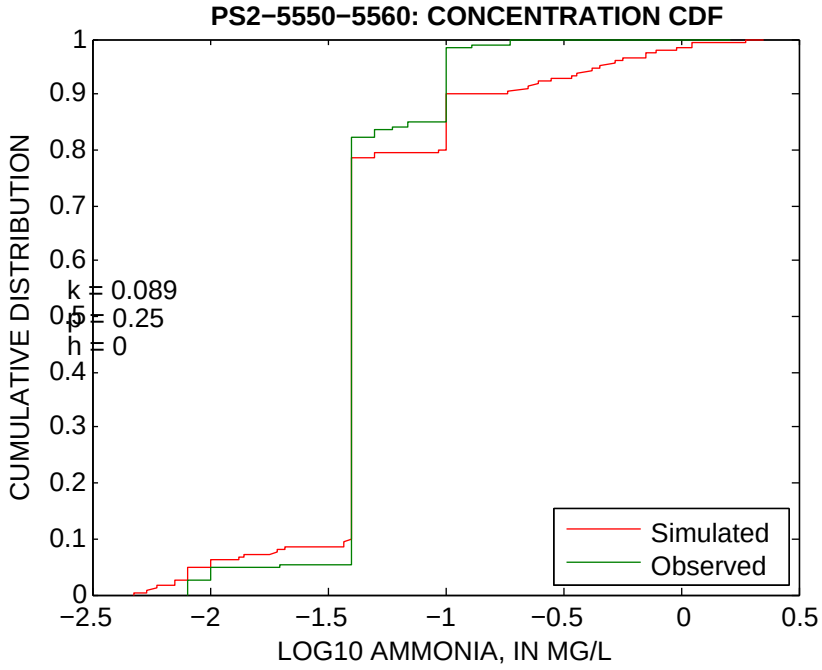
n	258	258
	observe	**simulate**
min	0.008	0.0017443
	-2.09691	-2.75838
mean	0.0546357	0.0866103
	-1.35939	-1.92988
media	0.04	0.0069957
	-1.39794	-2.15517
max	1.62	2.4284
	0.209515	0.38532
varian	0.0102541	0.0761263
	0.0565024	0.479391
JB	0.001	0.001
	0.001	0.001
	ra	log
%	58.5235	41.9666
err.va	0.0856639	0.857168
rel.std.err	8.35411	15.1705
mod.eff	-7.35411	-14.1705

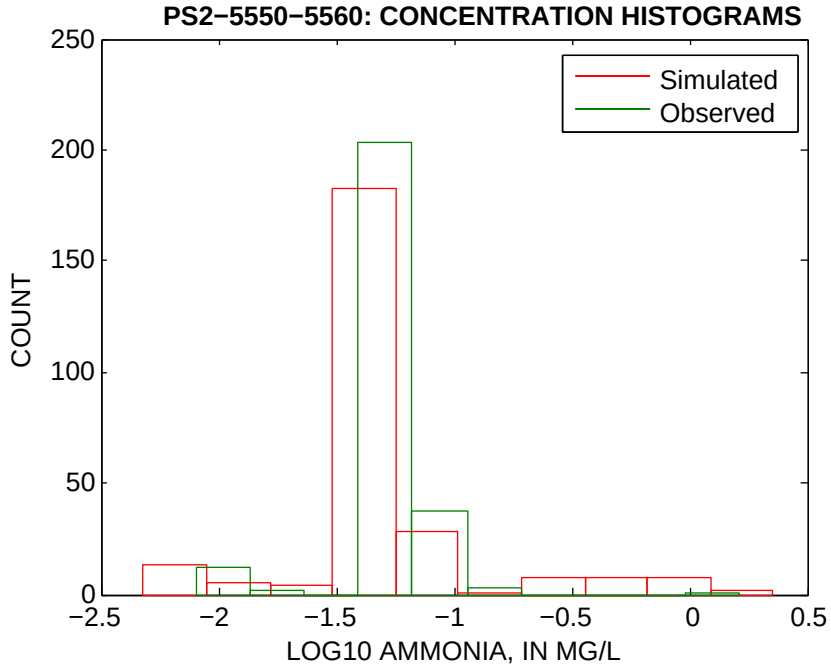
VERSION 2.1

ALL DATA
LOG10

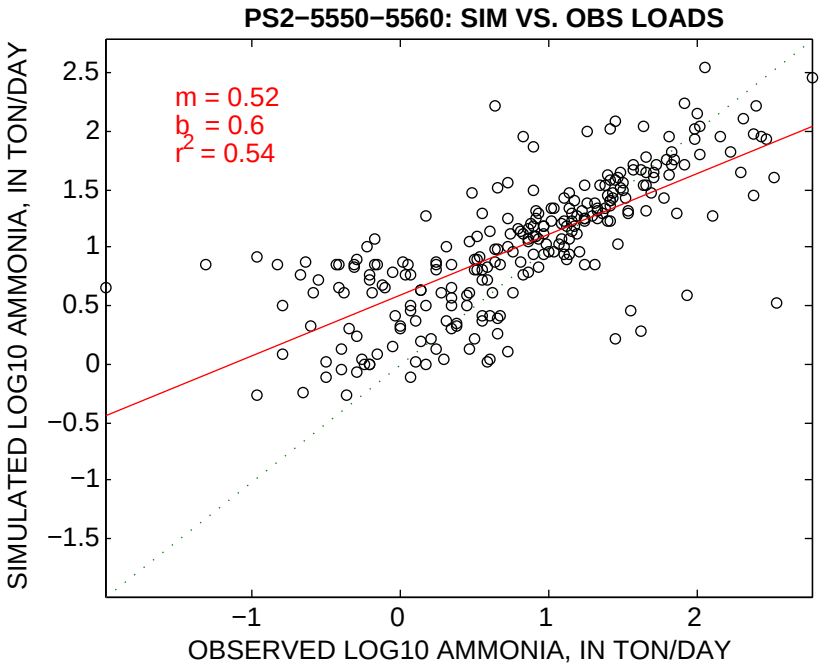


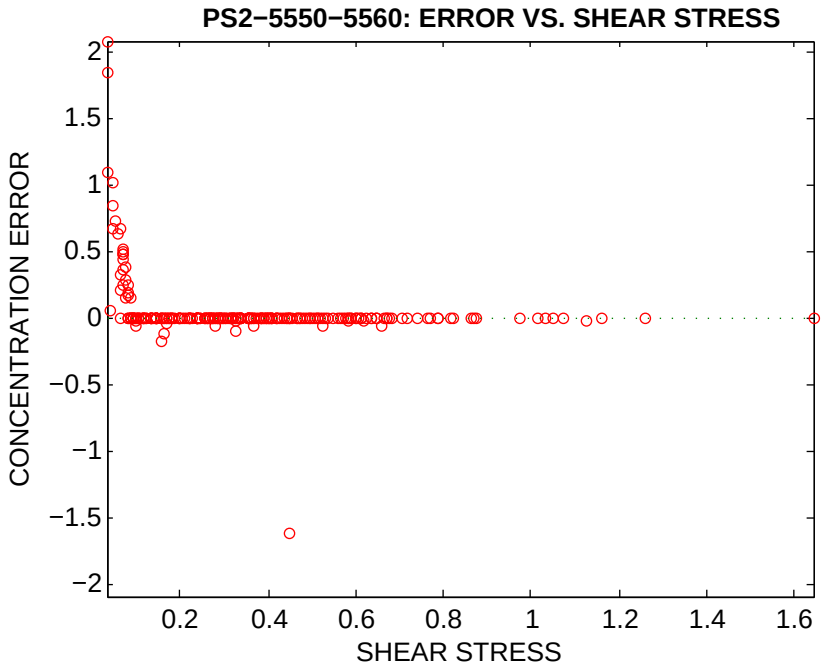


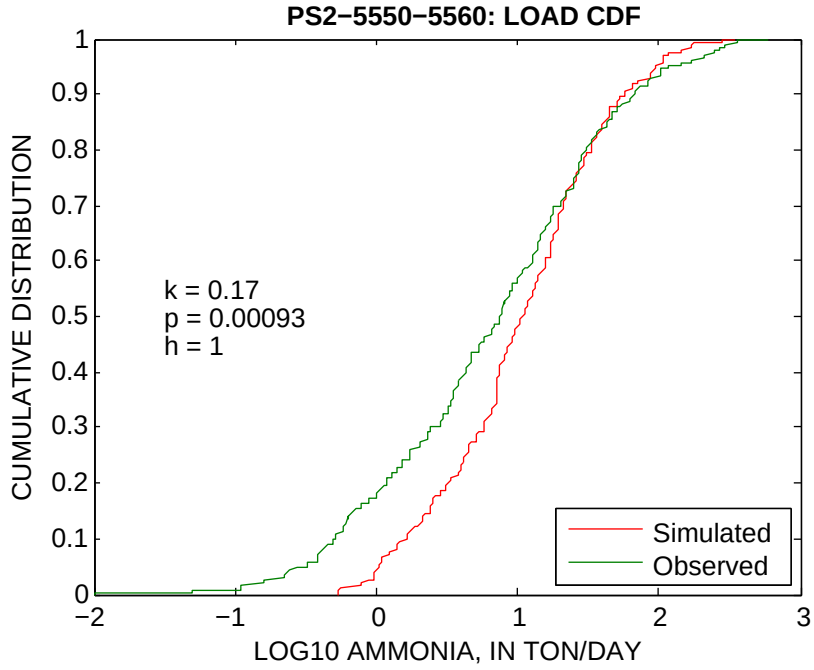


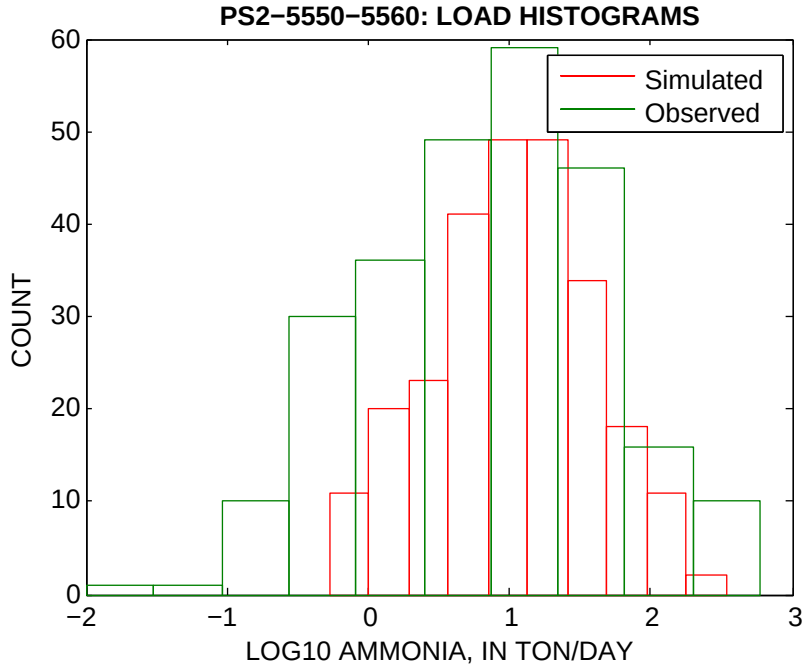


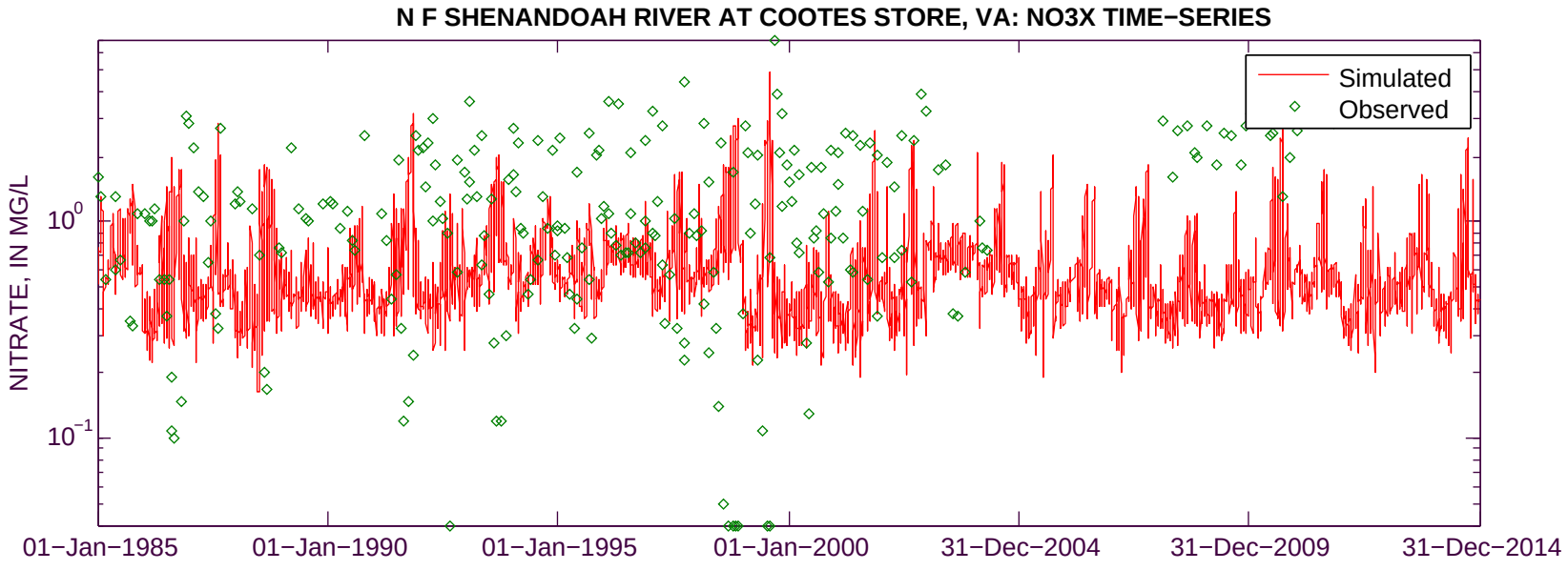
LOAD DATA
LOG10

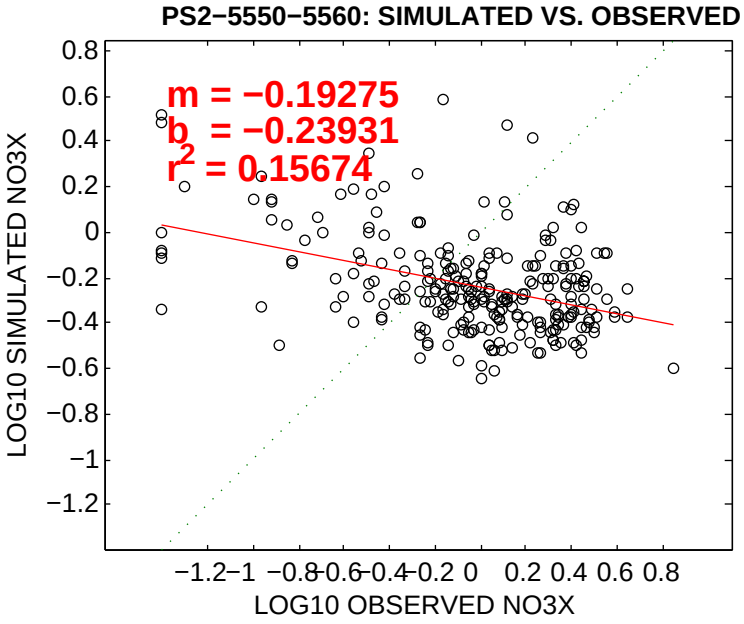


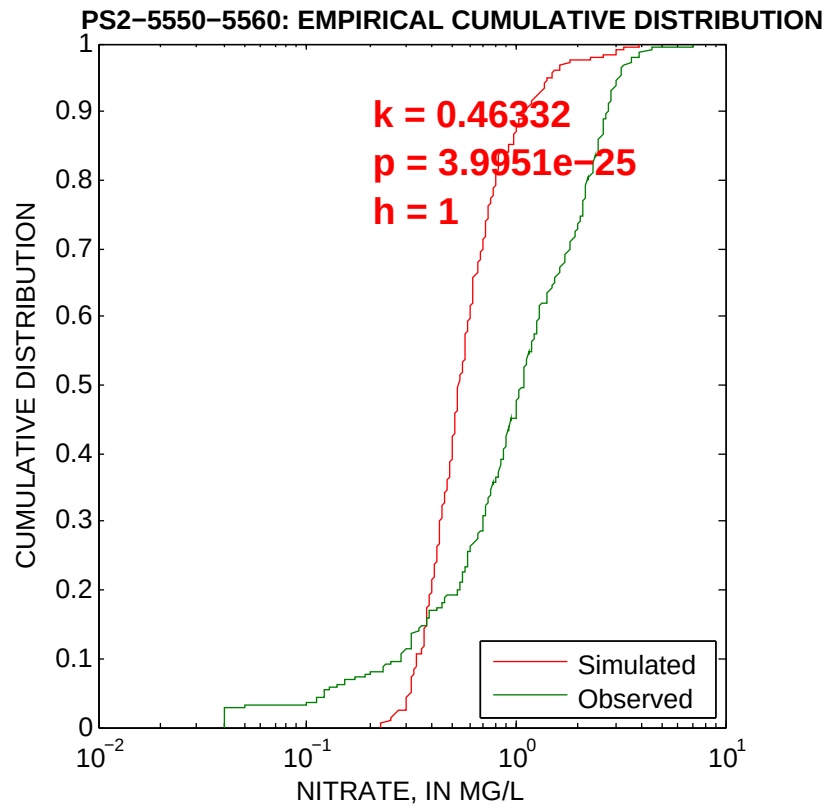












DATA SELECTION

scenario	file
P620171001WQ	NO3X.calib

plot: NO3X - nitrate

Dates: 1/1/1985 – 12/31/201

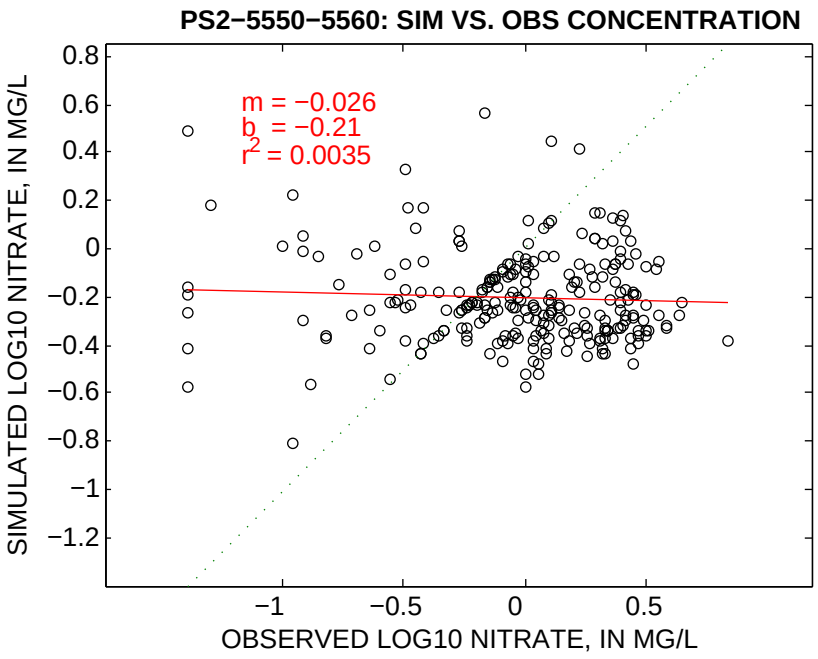
Drive	Directory	Observed
N/A	model	OBS20161101

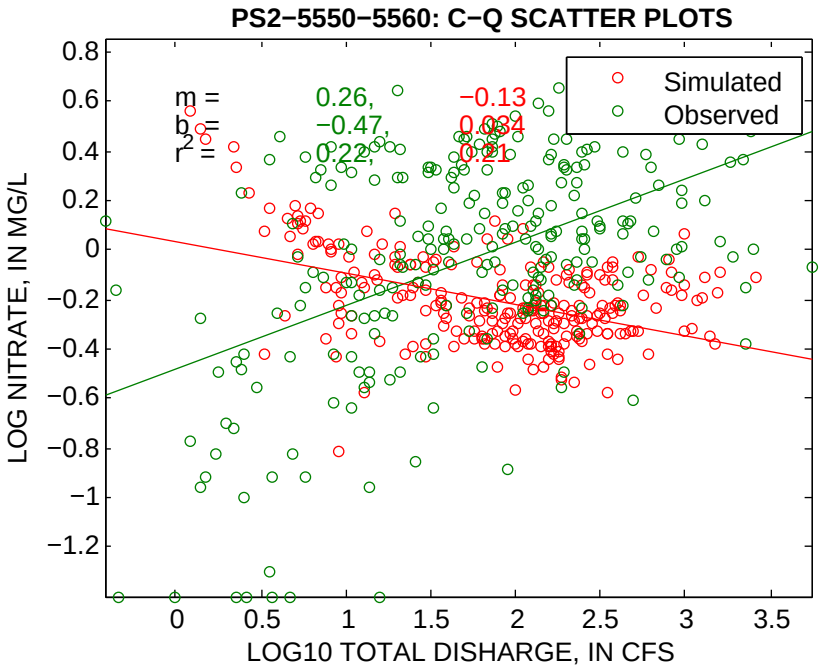
STATISTICS

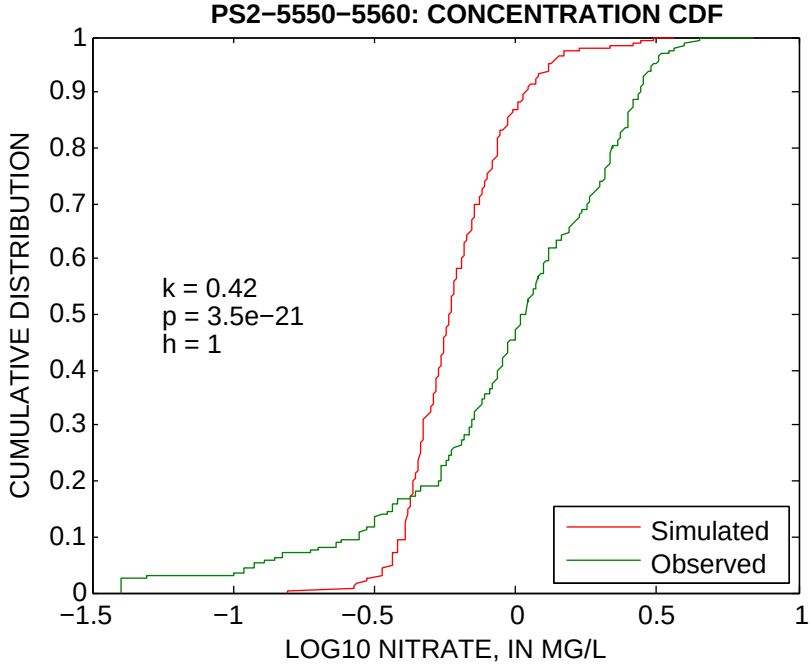
n	259	259
	observe	**simulate**
min	0.04 -1.39794	0.22792 -0.642218
mean	1.34776 -0.0281062	0.672412 -0.233888
media	1.09 0.0374265	0.53433 -0.27219
max	7 0.845098	3.884 0.589279
varian	1.03279 0.187395	0.222546 0.044418
JB	0.001 0.001	0.001 0.001
	ra	log
%	-50.1089	732.16
err.va	1.94727	0.346563
rel.std.err	1.88545	1.84937
mod.eff	-0.885447	-0.849371

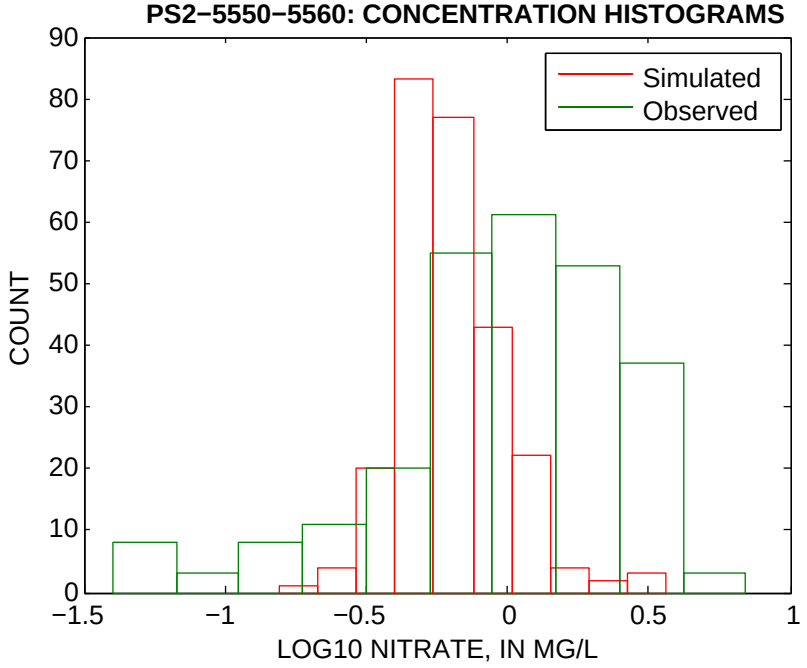
VERSION 2.1

ALL DATA
LOG10

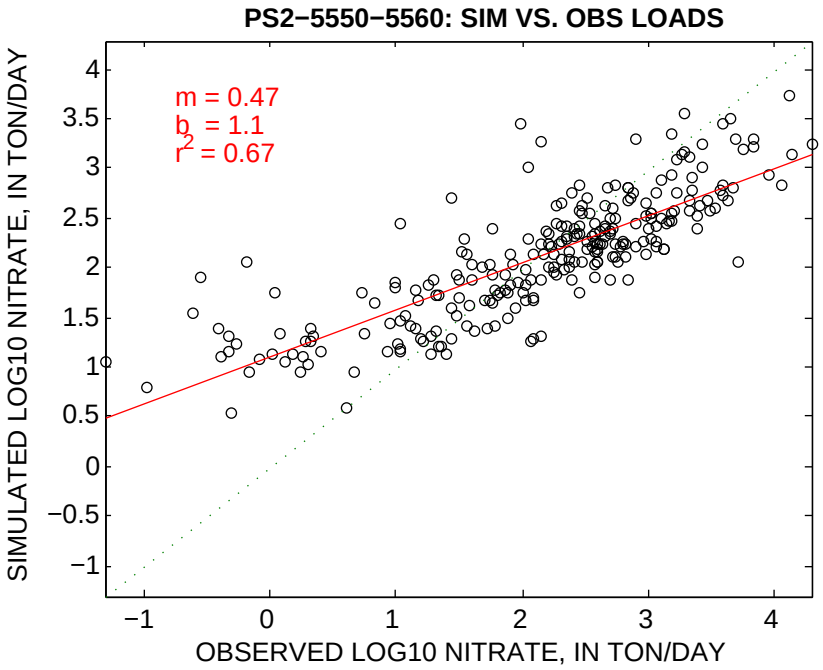


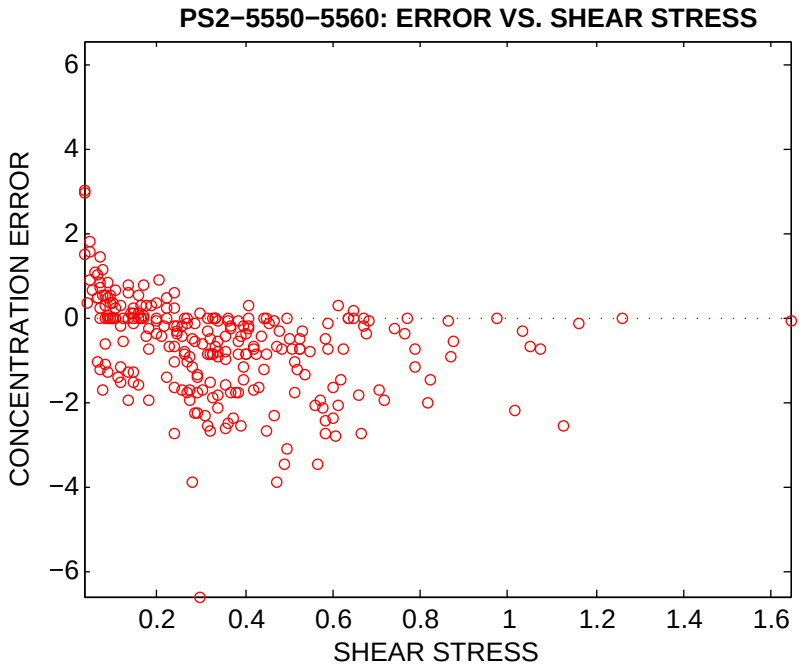


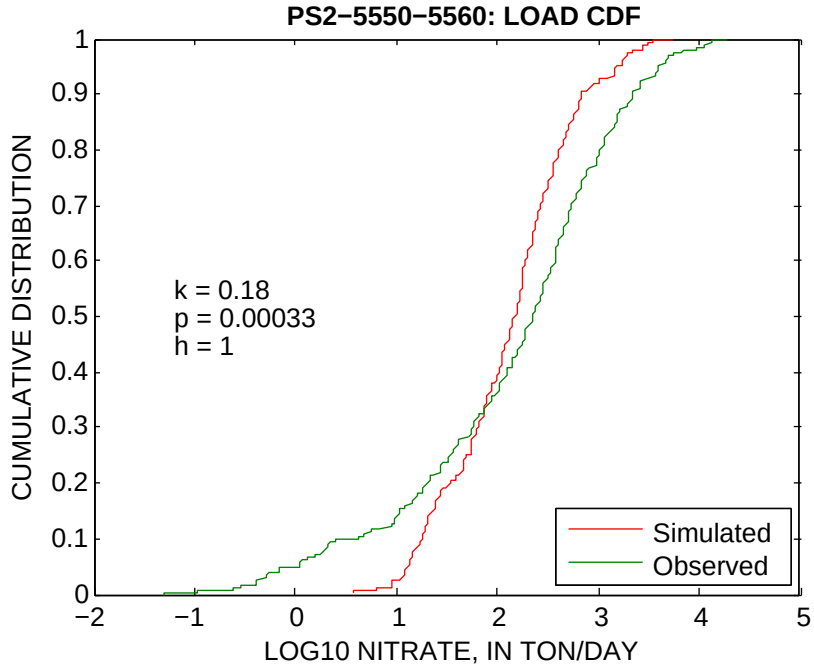


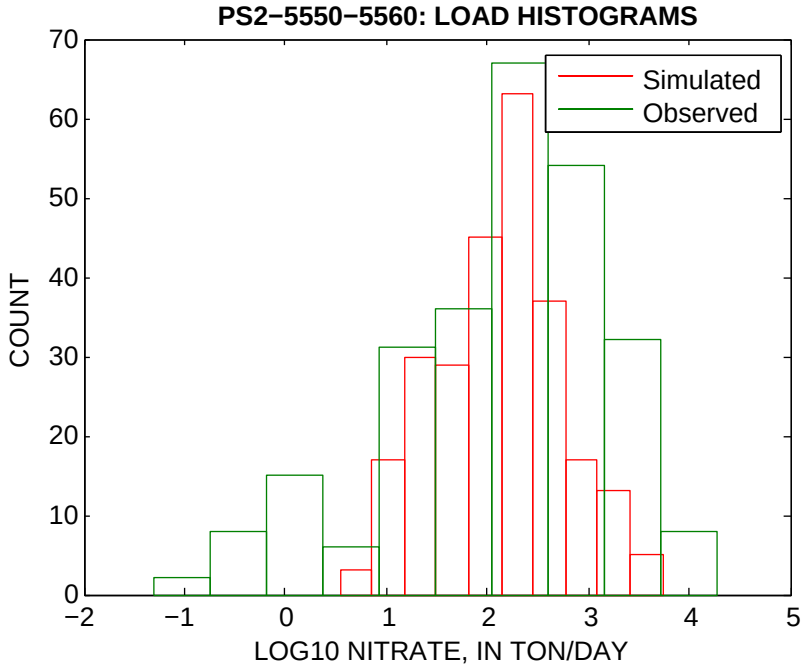


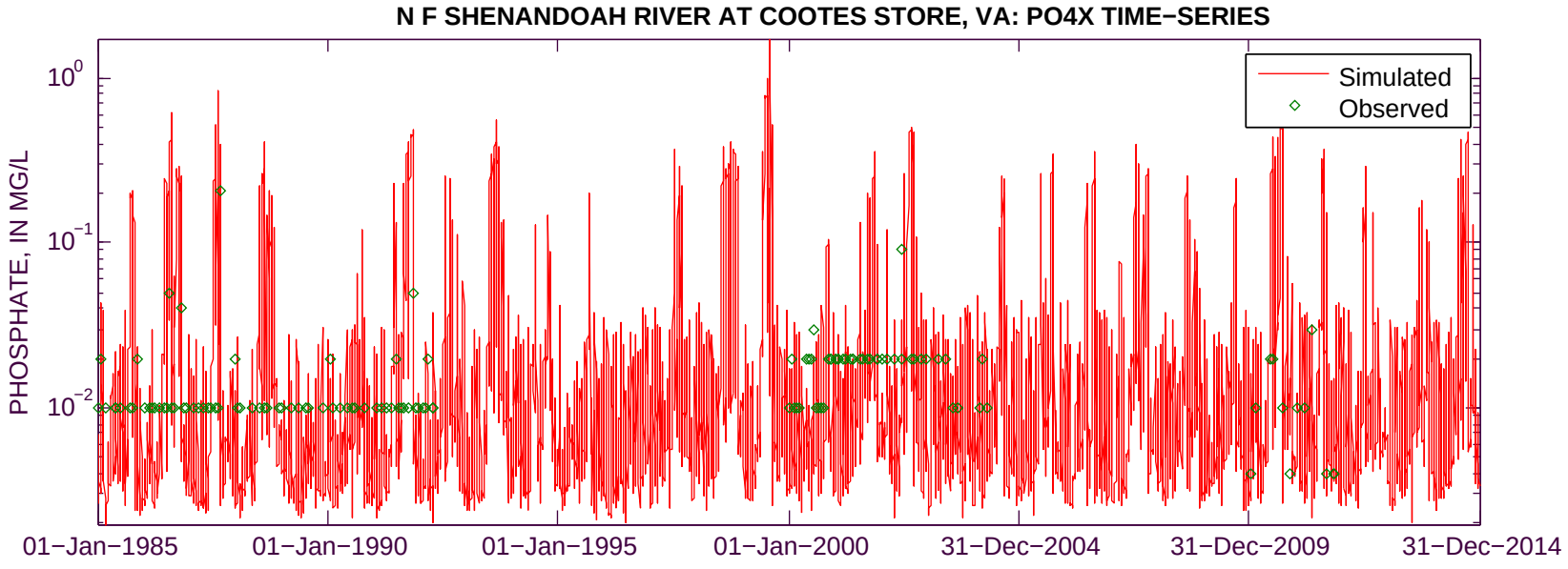
LOAD DATA
LOG10

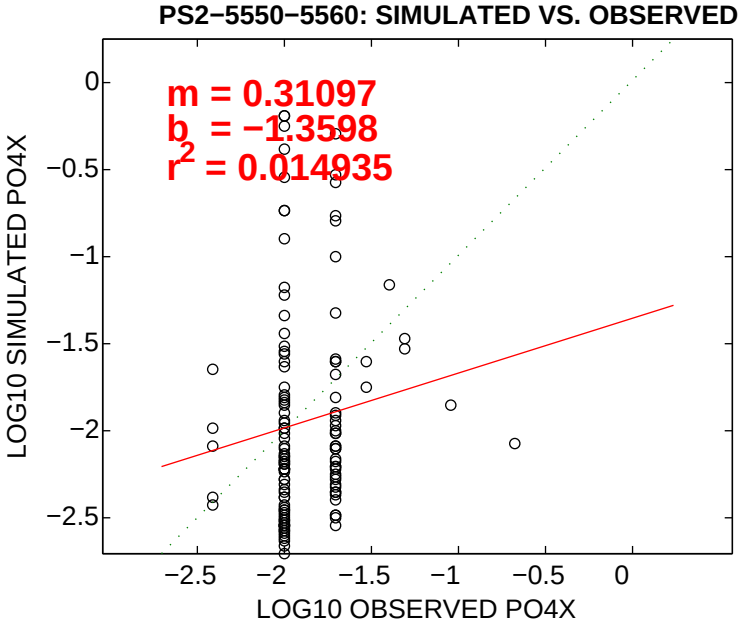


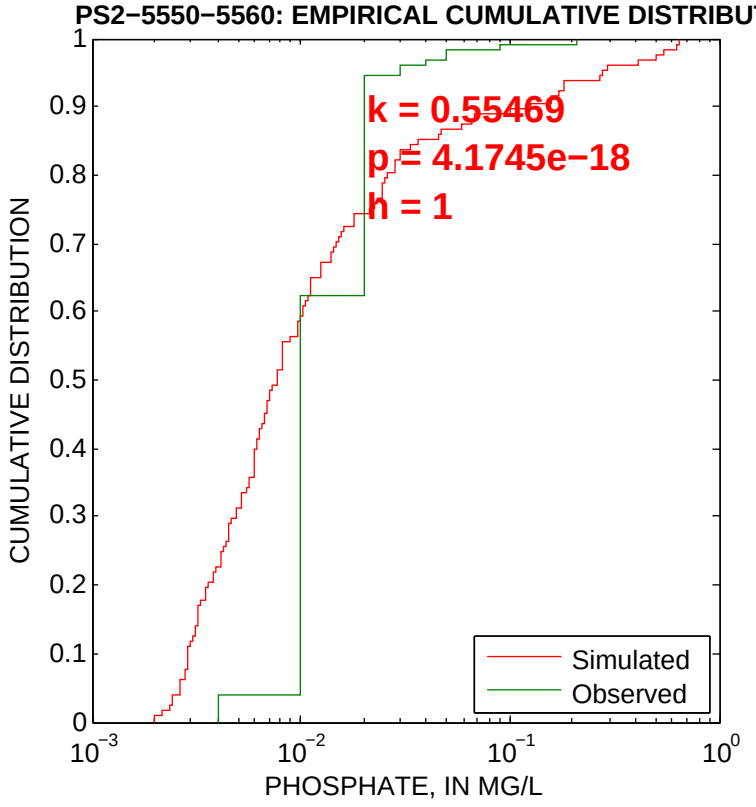












DATA SELECTION

scenario: P620171001WQ | file: PO4X.calib

plot: PO4X - phosphate

Dates: 1/1/1985 – 12/31/201

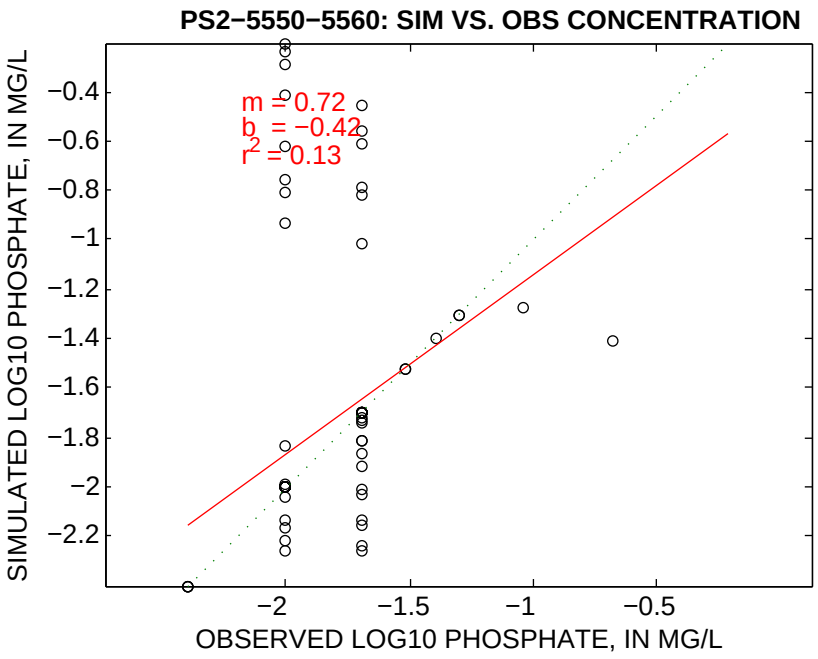
Drive: N/A | Directory: model | Observed: OBS20161101

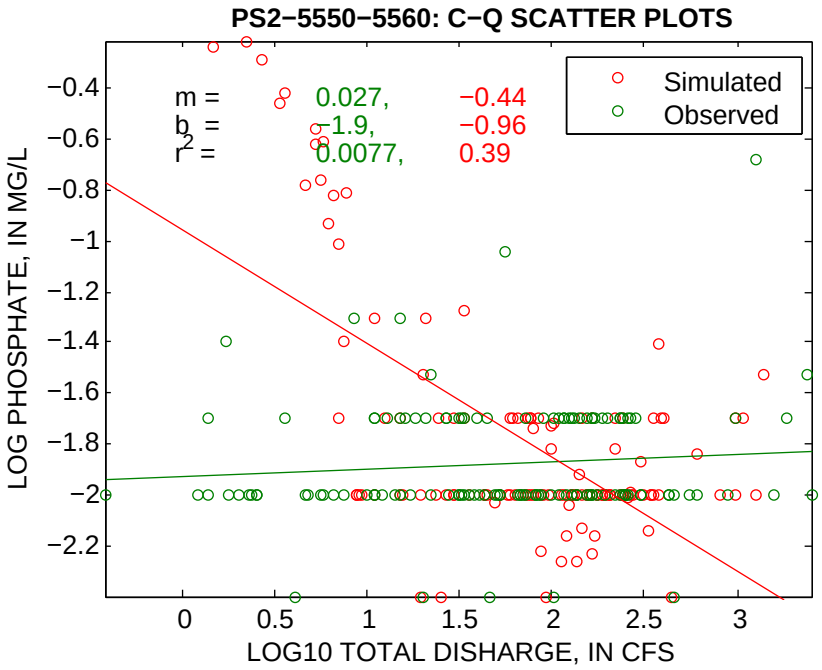
STATISTICS

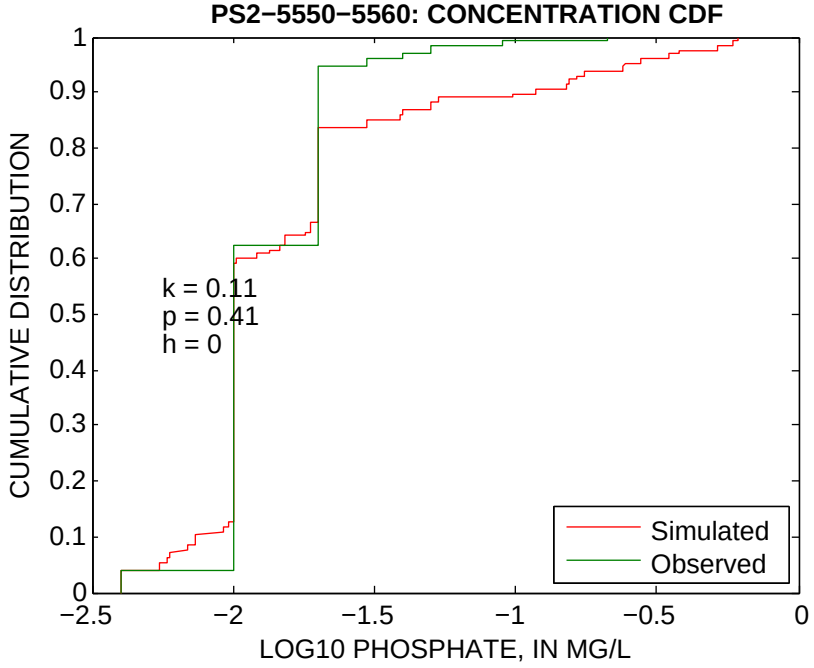
		observe	simulate
n		128	128
min		0.004	0.0019834
		-2.39794	-2.70259
mean		0.0163281	0.0452753
		-1.87826	-1.9439
media		0.01	0.00776555
		-2	-2.10983
max		0.21	0.63805
		-0.677781	-0.195145
varian		0.00039727	0.0132014
		0.0556199	0.360136
JB		0.001	0.001
		0.001	0.001
		ra	log
%		177.284	3.49505
err.va		0.0146043	0.385507
rel.std.err		36.7611	6.9311
mod.eff		-35.7611	-5.9311

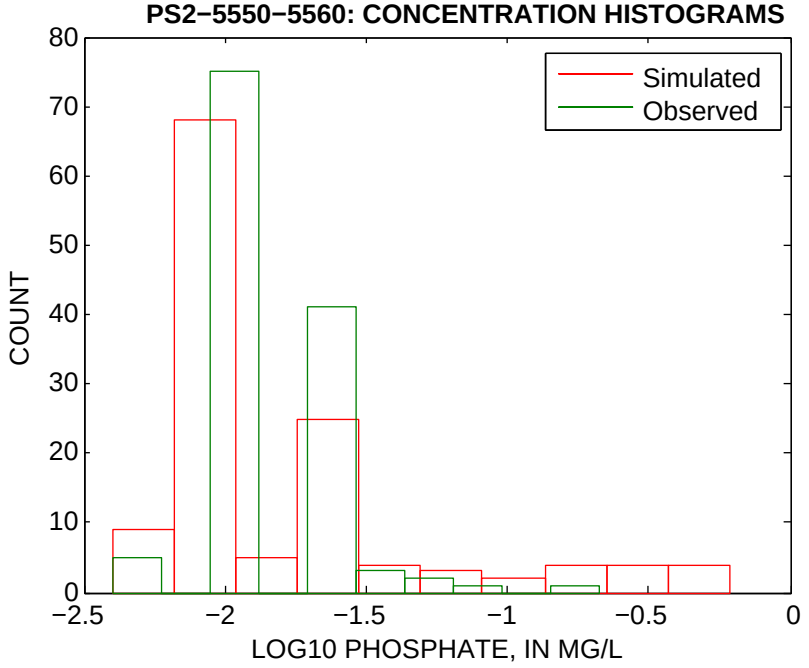
VERSION 2.1

ALL DATA
LOG10

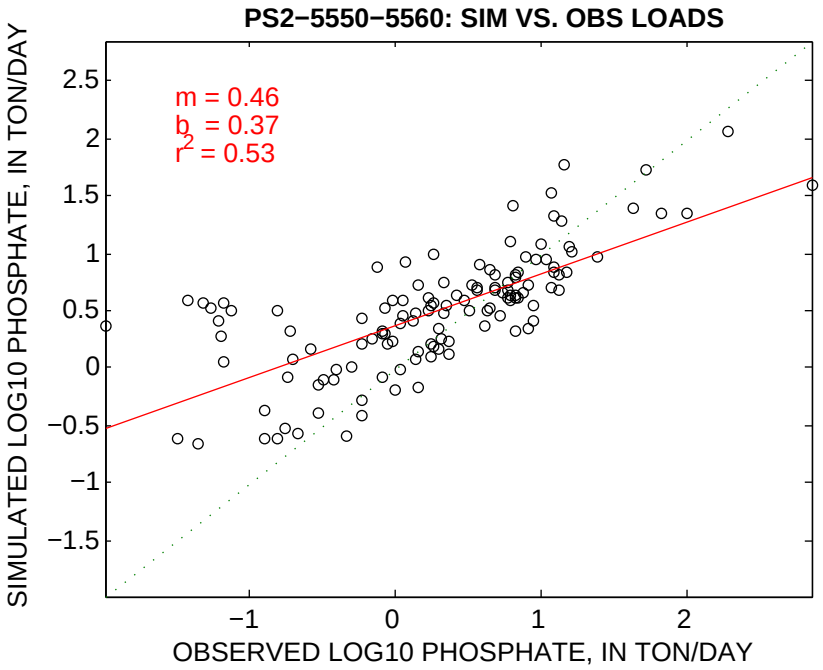


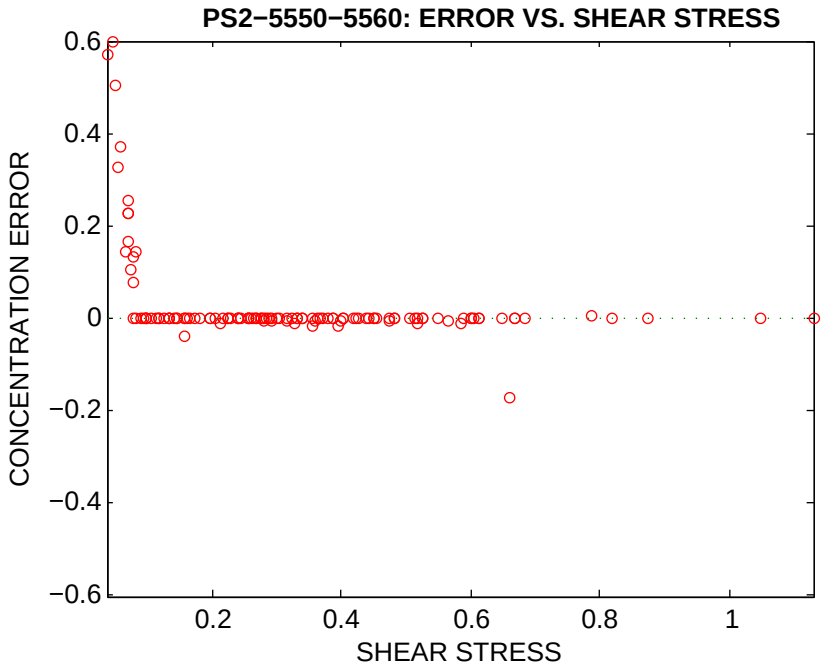


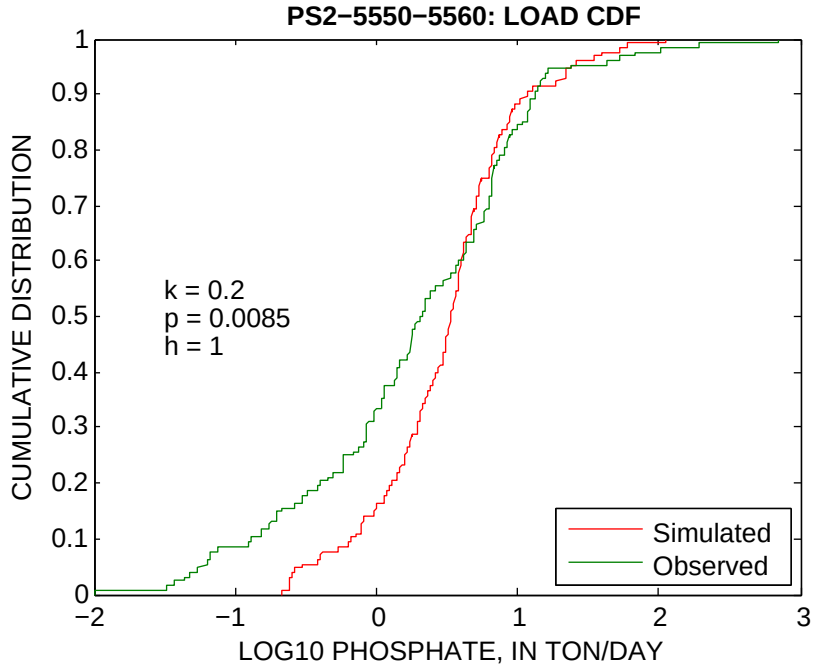


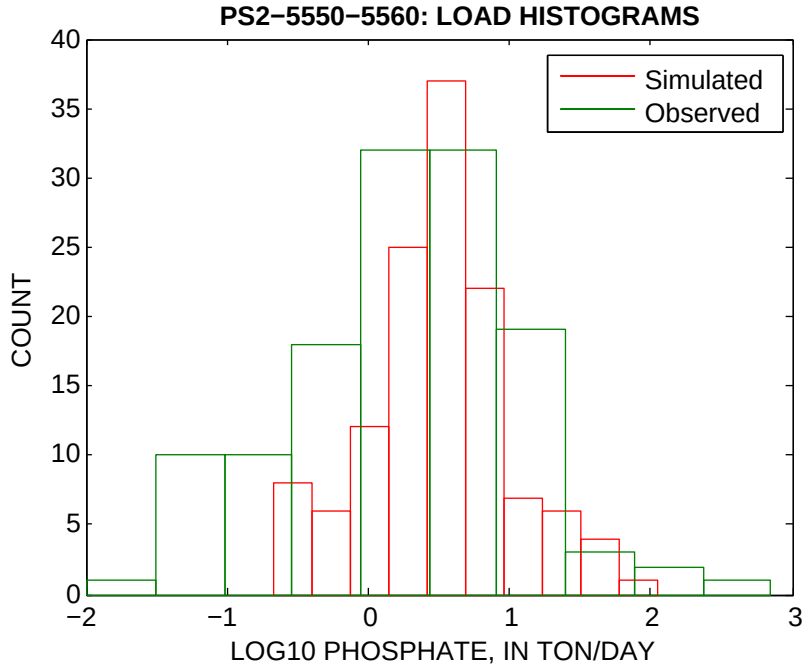


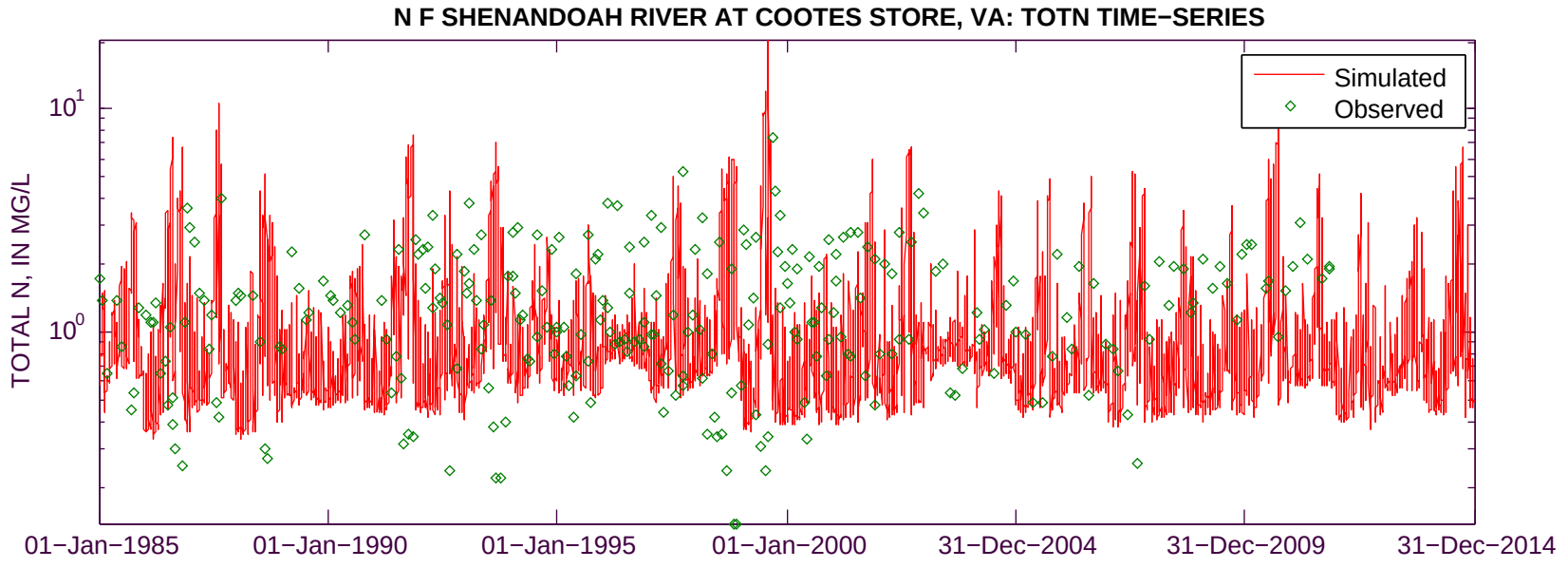
LOAD DATA
LOG10

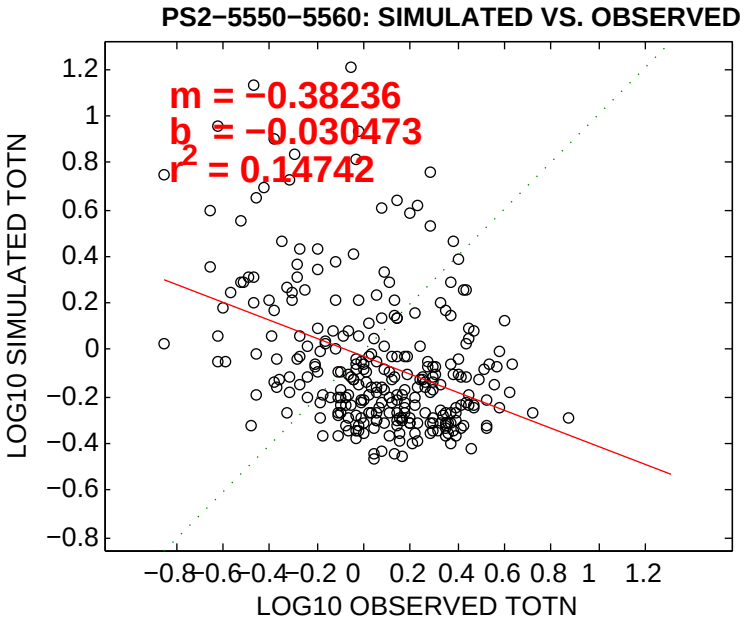


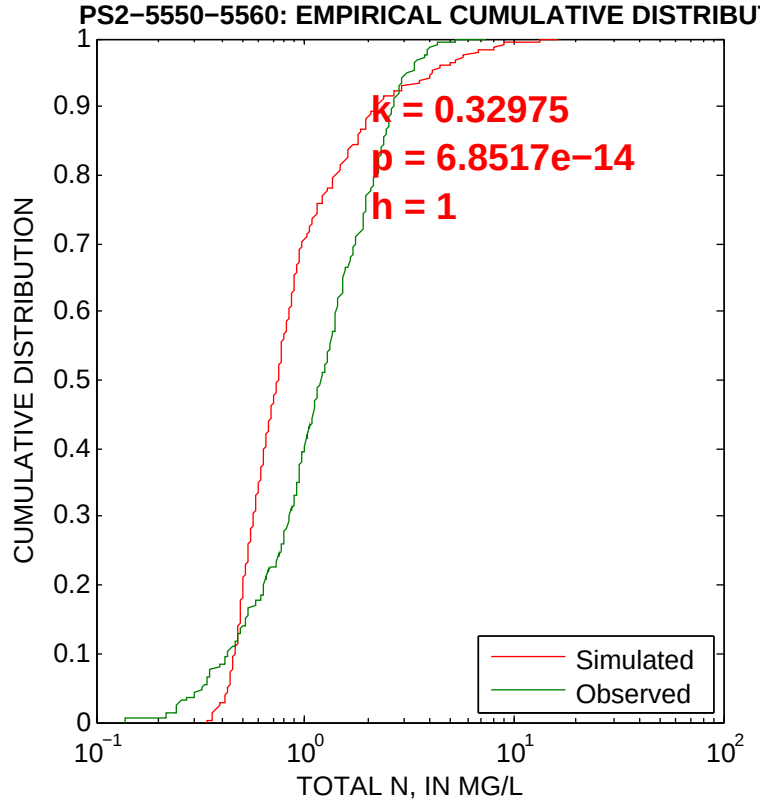












DATA SELECTION

scenario	file
P620171001WQ	TOTN.calib

plot: TOTN - total nitrogen

Dates: 1/1/1985 – 12/31/201

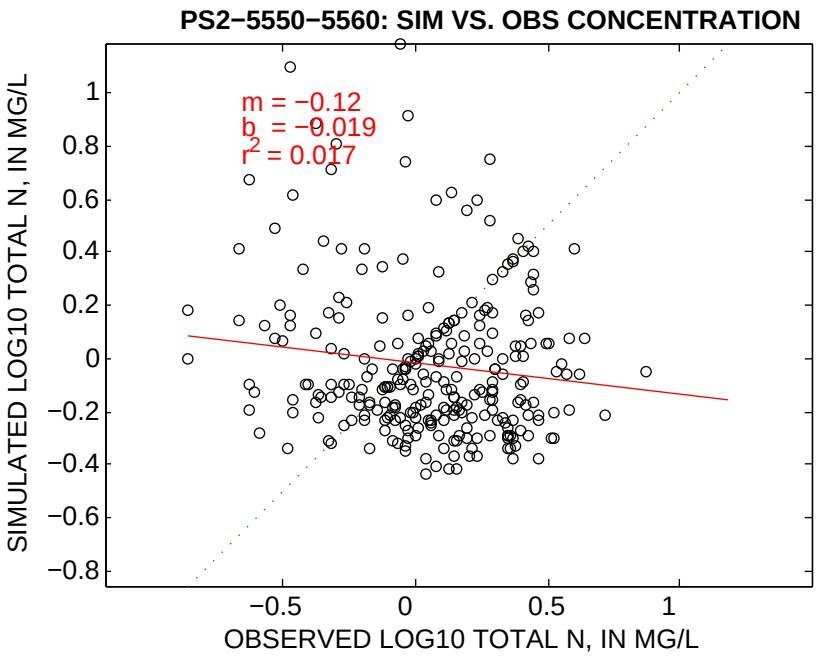
Drive	Directory	Observed
N/A	model	OBS20161101

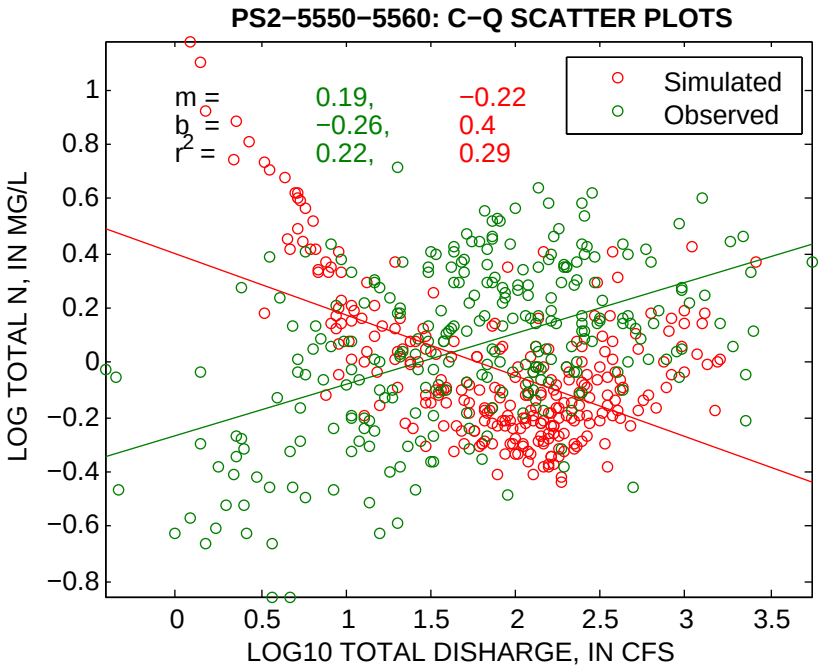
STATISTICS

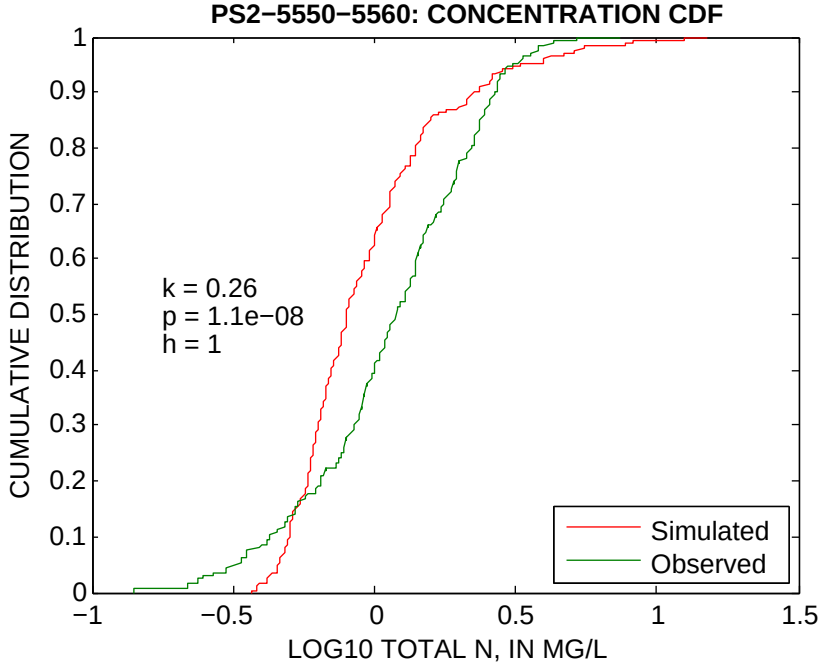
	n	279	279
		observe	simulate
min		0.14	0.34483
		-0.853872	-0.462395
mean		1.43104	1.25429
		0.0592145	-0.0531142
media		1.2	0.74457
		0.0791812	-0.128094
max		7.4	16.064
		0.869232	1.20585
varian		0.920344	2.94446
		0.0925185	0.0917534
JB		0.001	0.001
		0.027745	0.001
		ra	log
%		-12.3509	-189.698
err.va		4.61553	0.267686
rel.std.err		5.01501	2.89332
mod.eff		-4.01501	-1.89332

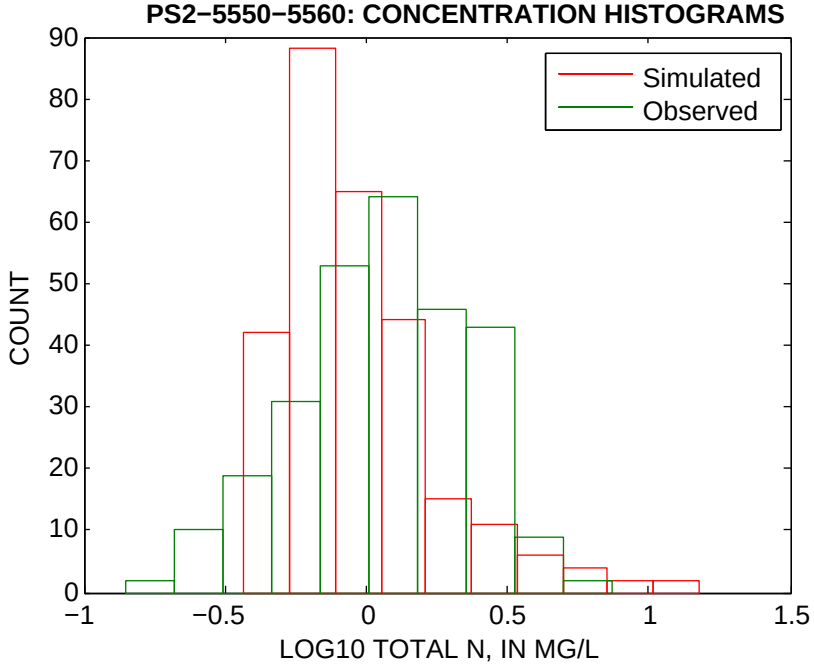
VERSION 2.1

ALL DATA
LOG10

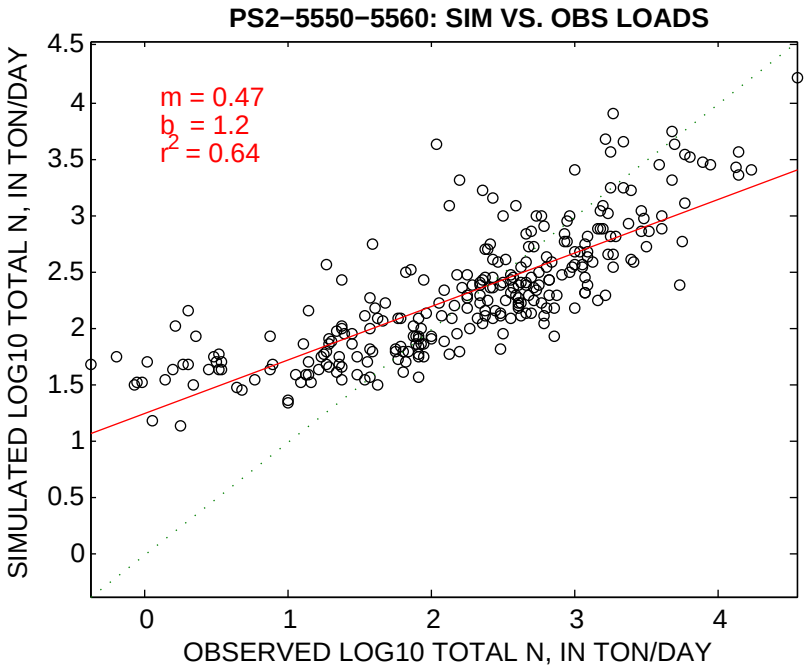


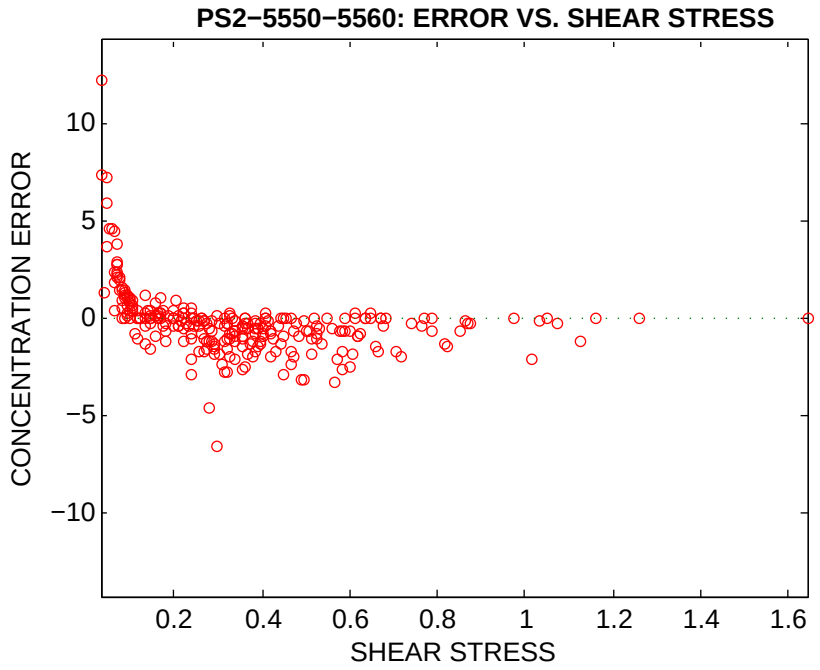


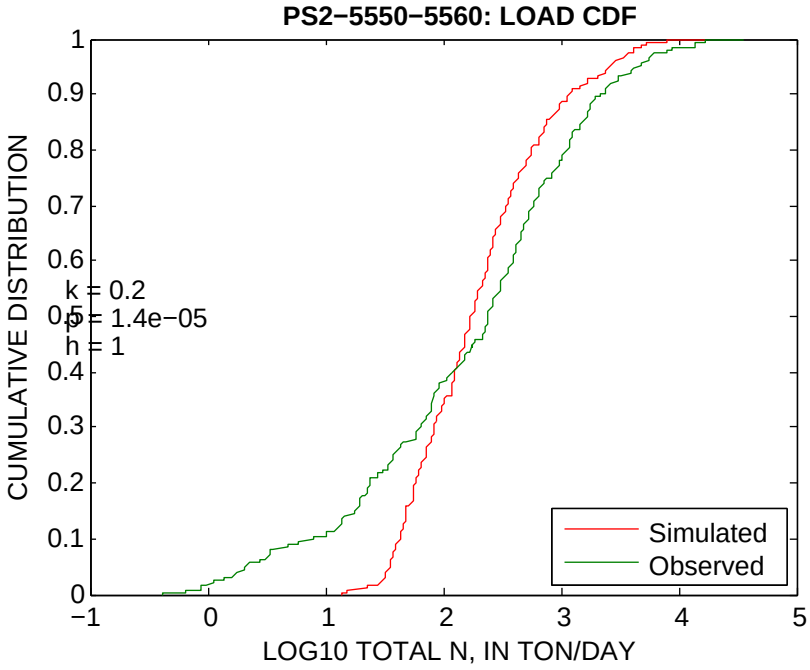


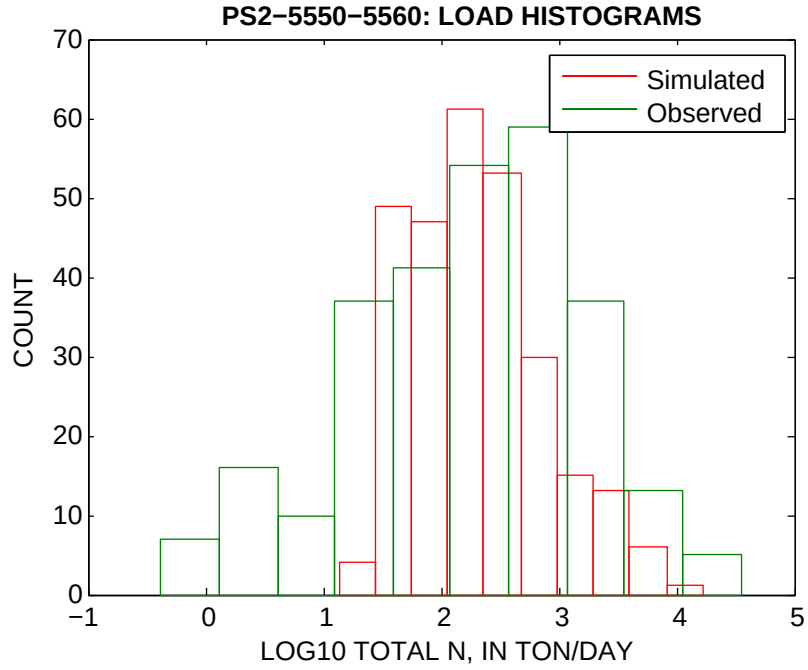


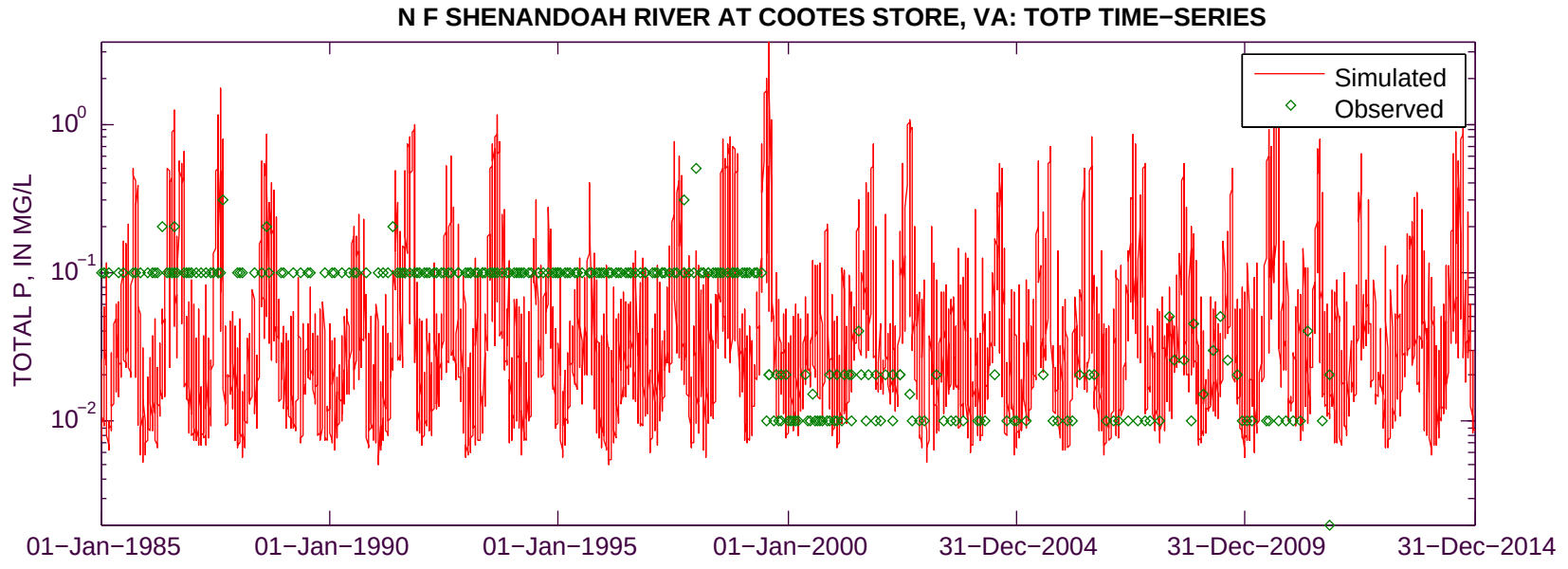
LOAD DATA
LOG10

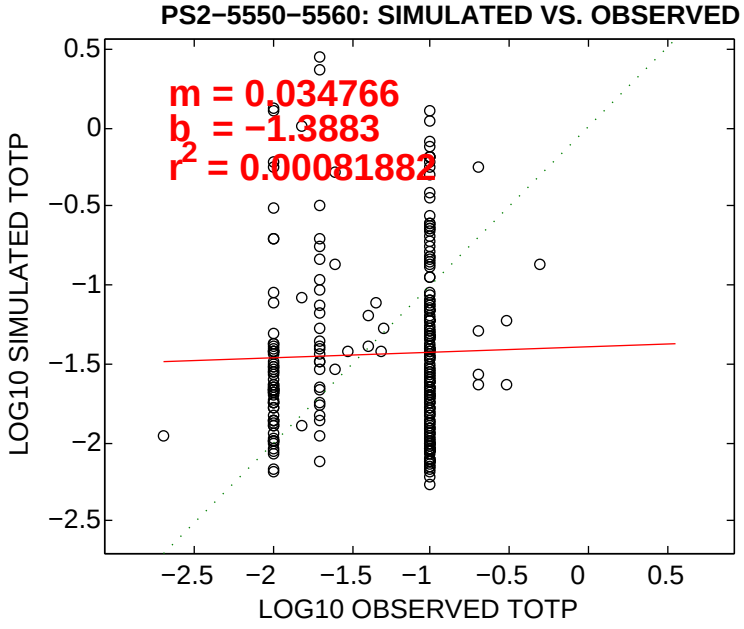


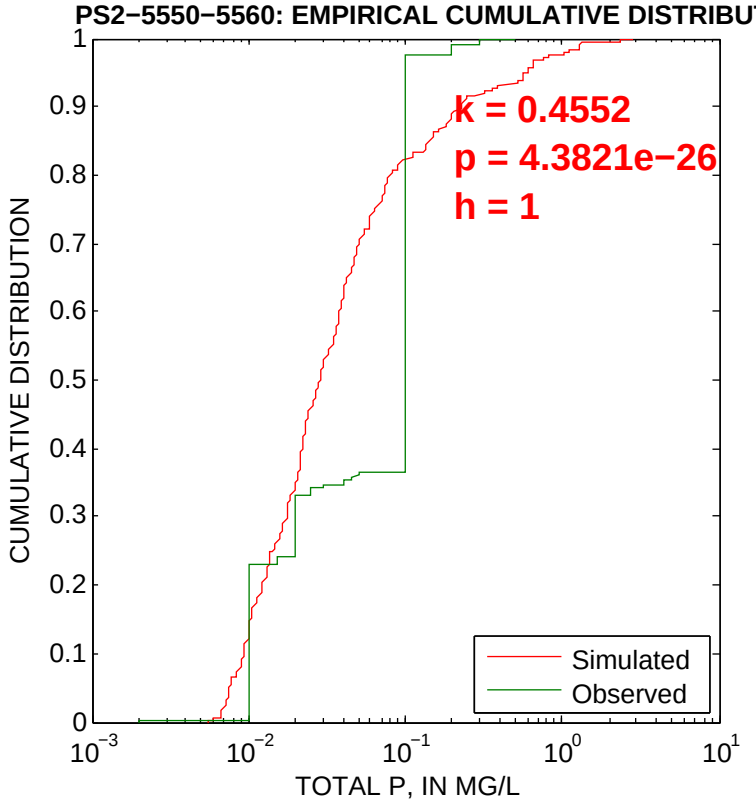












DATA SELECTION

scenario	file
P620171001WQ	TOTP.calib

plot: TOTP - total phosphorus

Dates: 1/1/1985 – 12/31/201

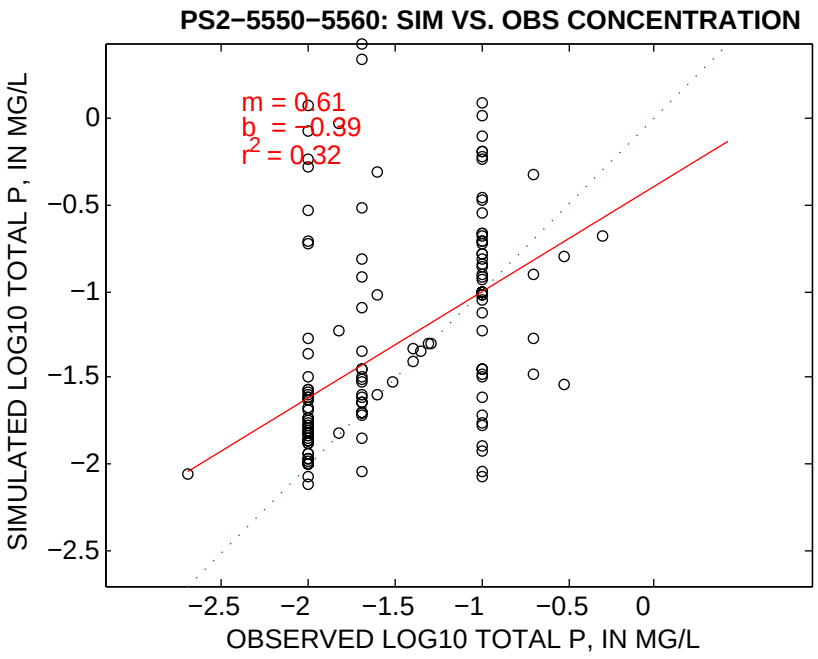
Drive	Directory	Observed
N/A	model	OBS20161101

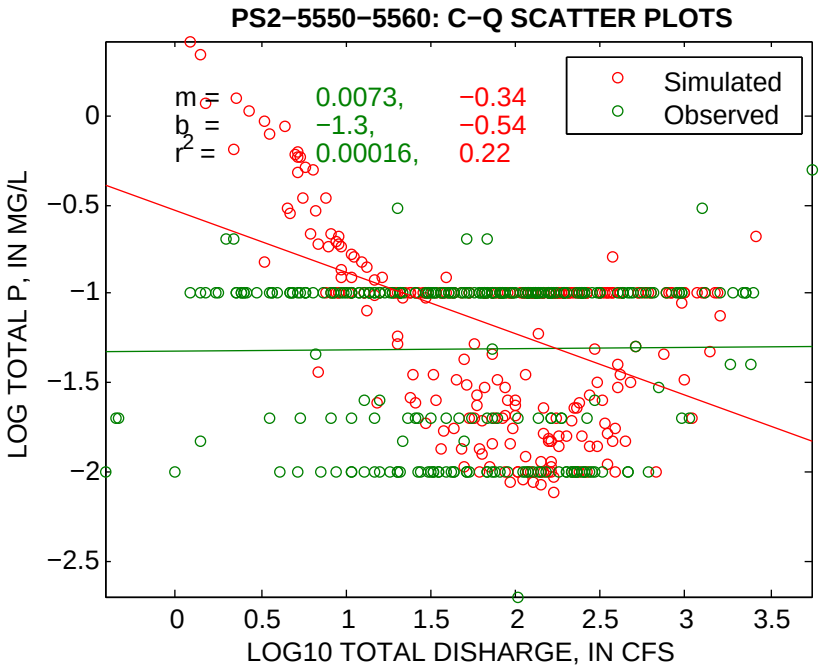
STATISTICS

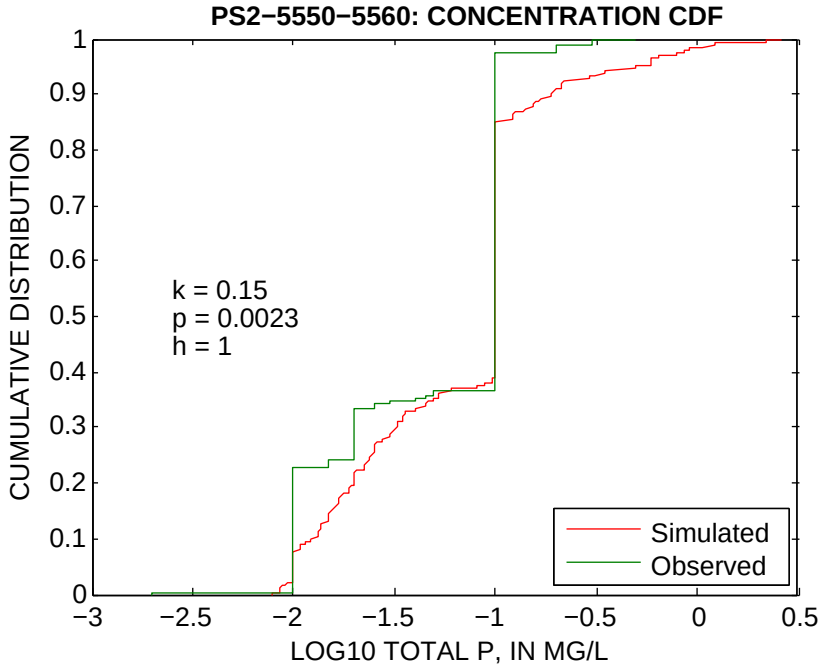
	n	279	279
		observe	simulate
min		0.002	0.0054694
		-2.69897	-2.26206
mean		0.0732124	0.11295
		-1.31027	-1.4339
media		0.1	0.02857
		-1	-1.54409
max		0.5	2.8118
		-0.30103	0.448984
varian		0.00296708	0.0849789
		0.205233	0.30295
JB		0.001	0.001
		0.001	0.001
		ra	log
%		54.2773	9.43515
err.va		0.0913455	0.509251
rel.std.err		30.7864	2.48133
mod.eff		-29.7864	-1.48133

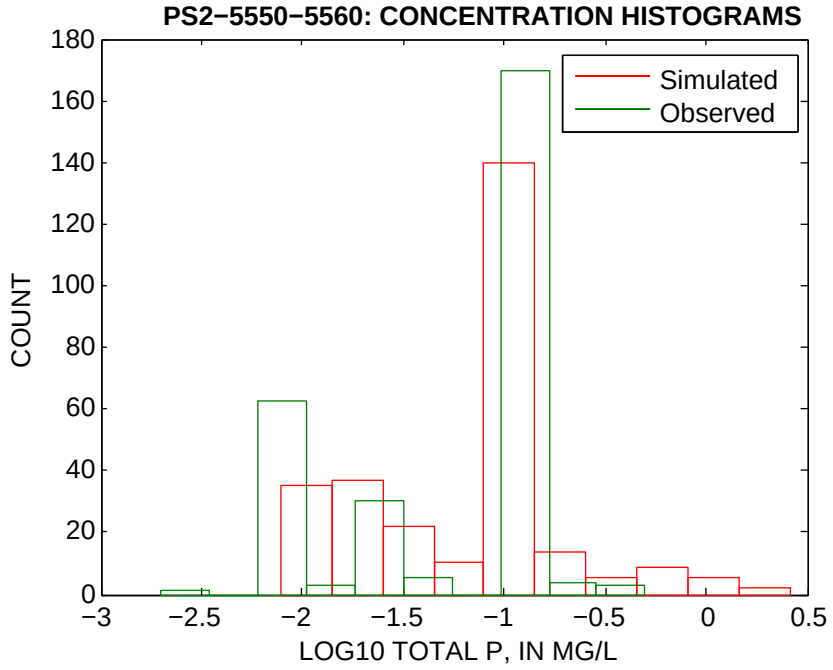
VERSION 2.1

ALL DATA
LOG10

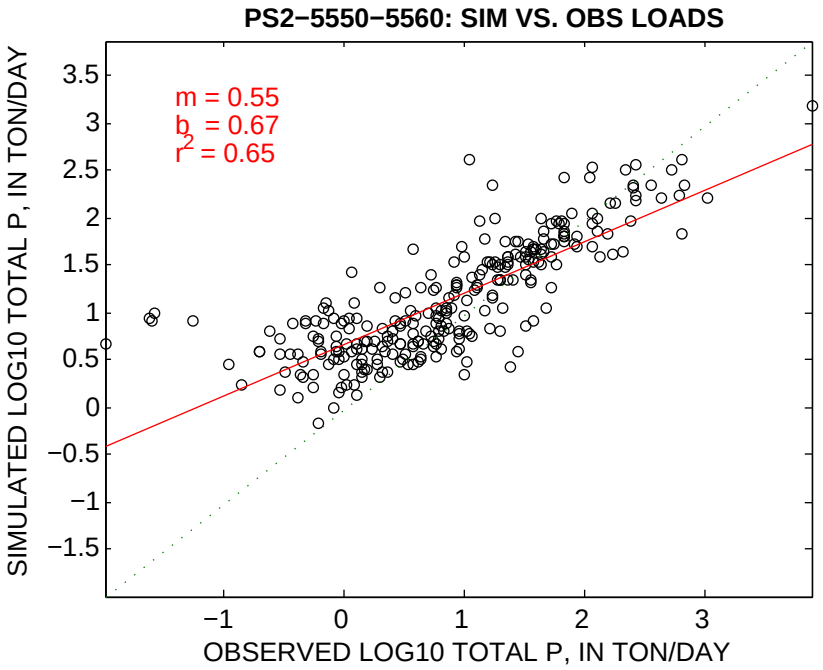


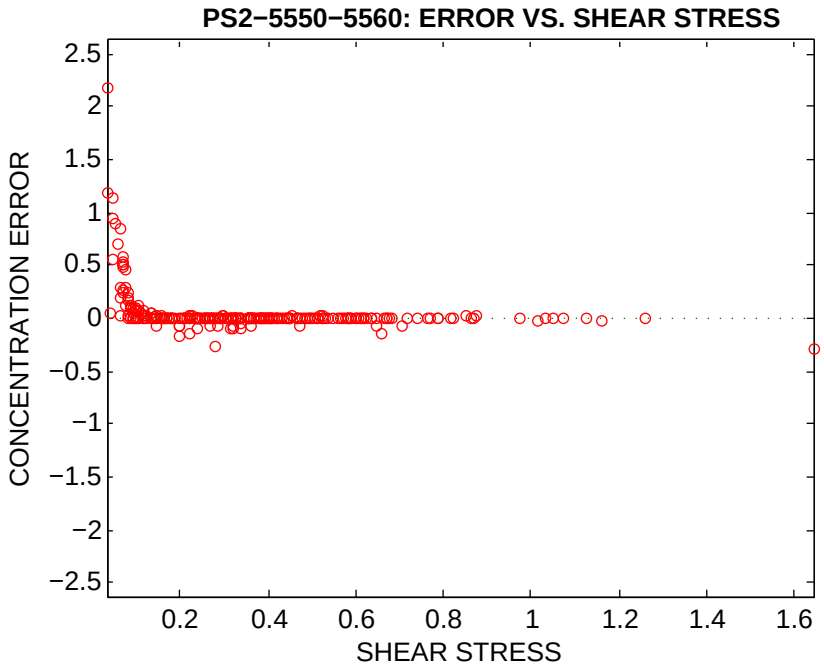


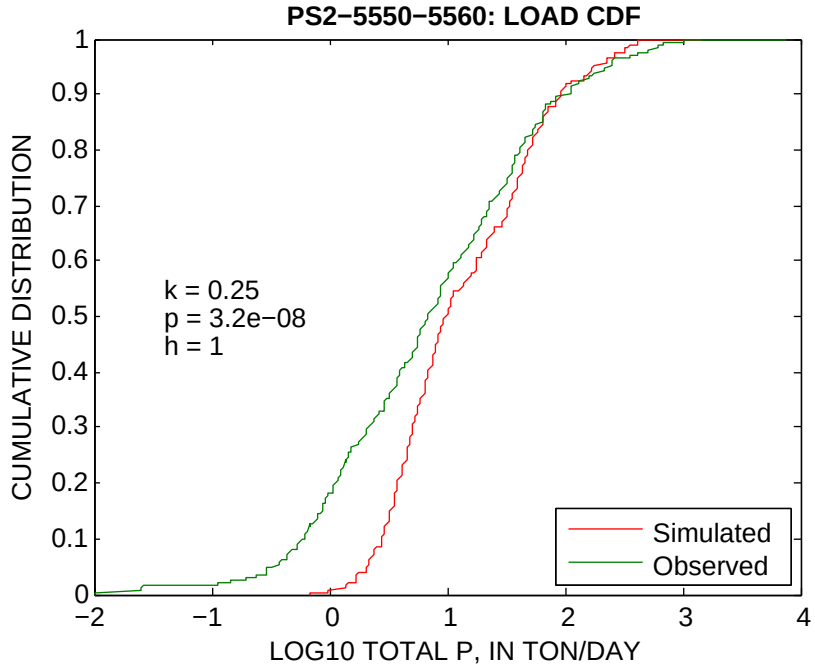


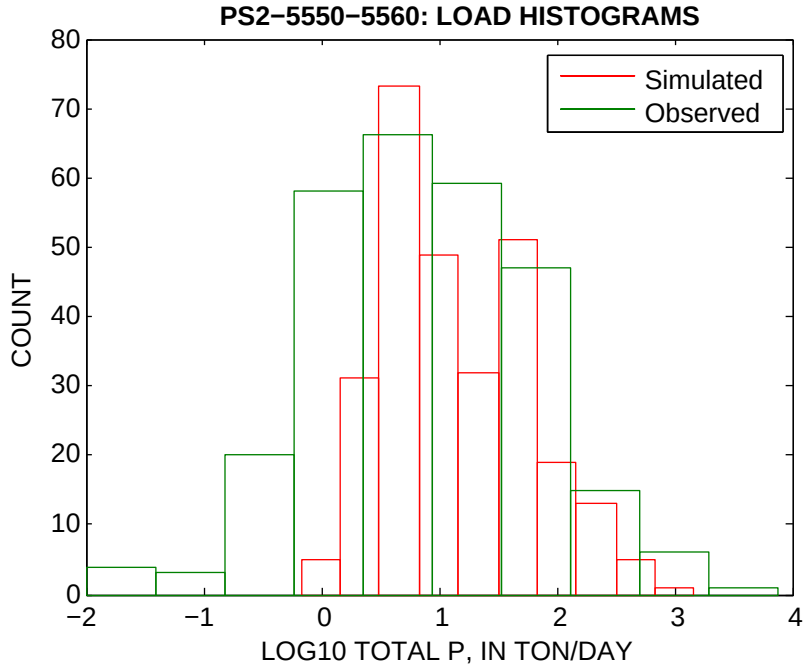


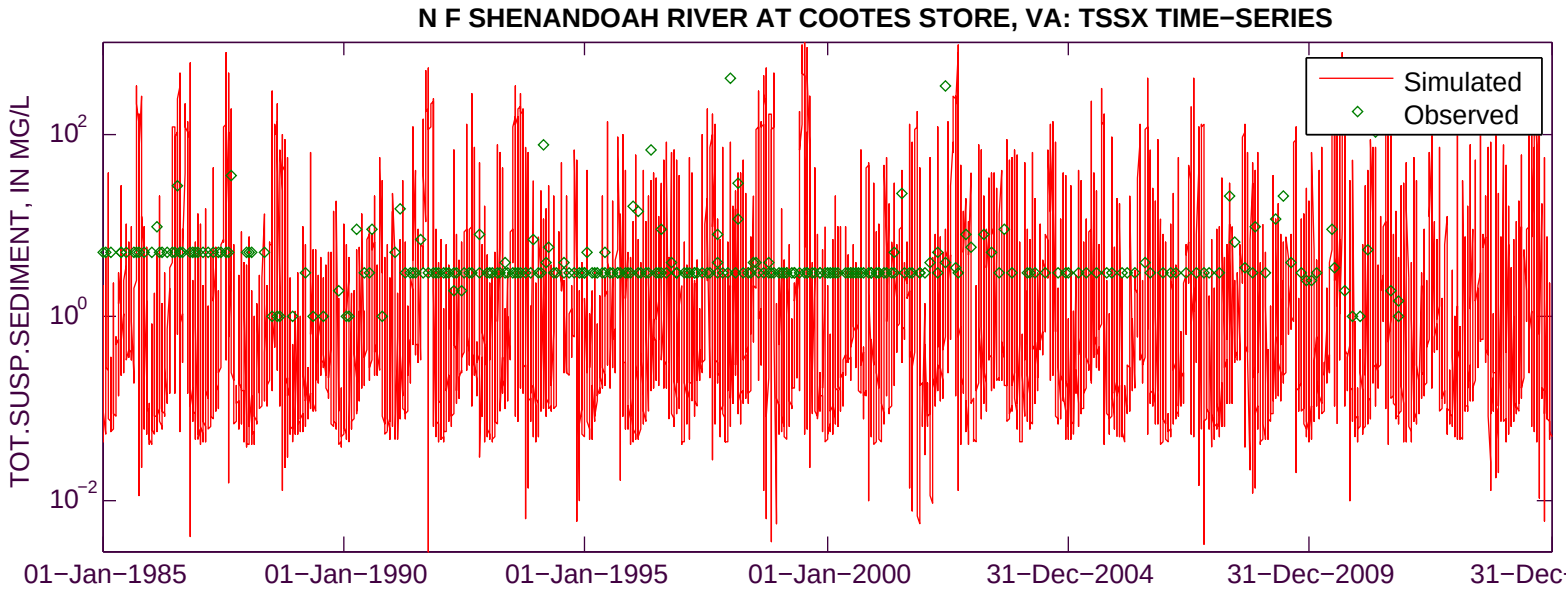
LOAD DATA
LOG10

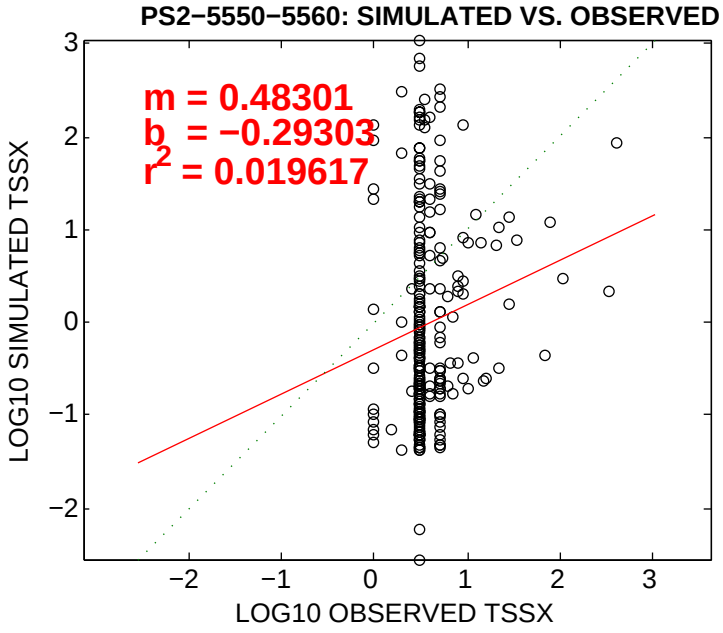


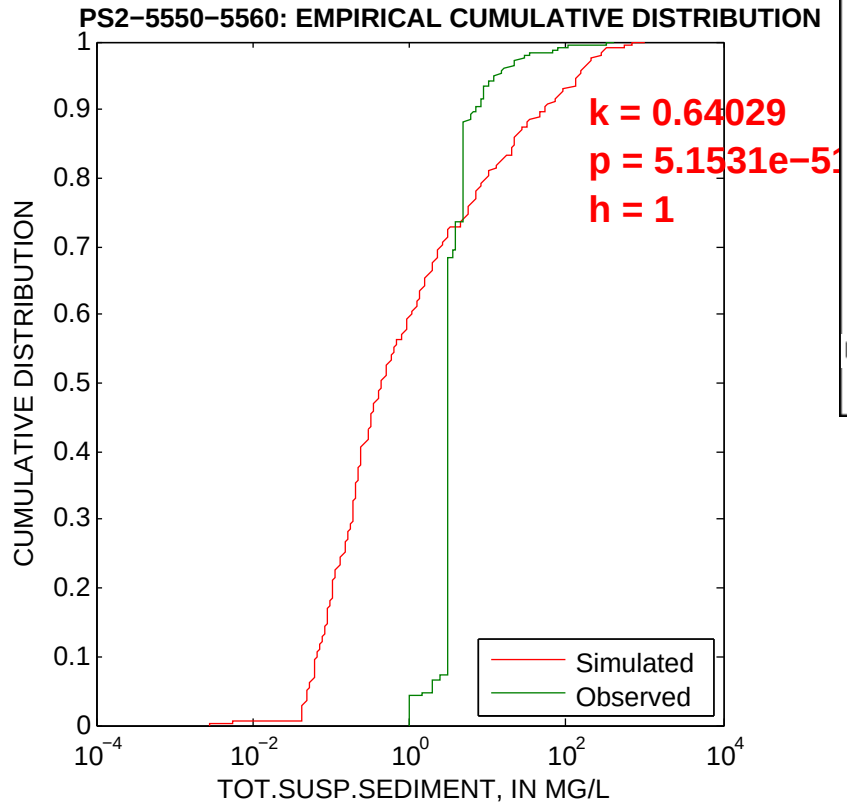












DATA SELECTION

scenario	file
P620171001WQ	TSSX.calib

plot: TSSX - total suspended ...

Dates: 1/1/1985 – 12/31/201

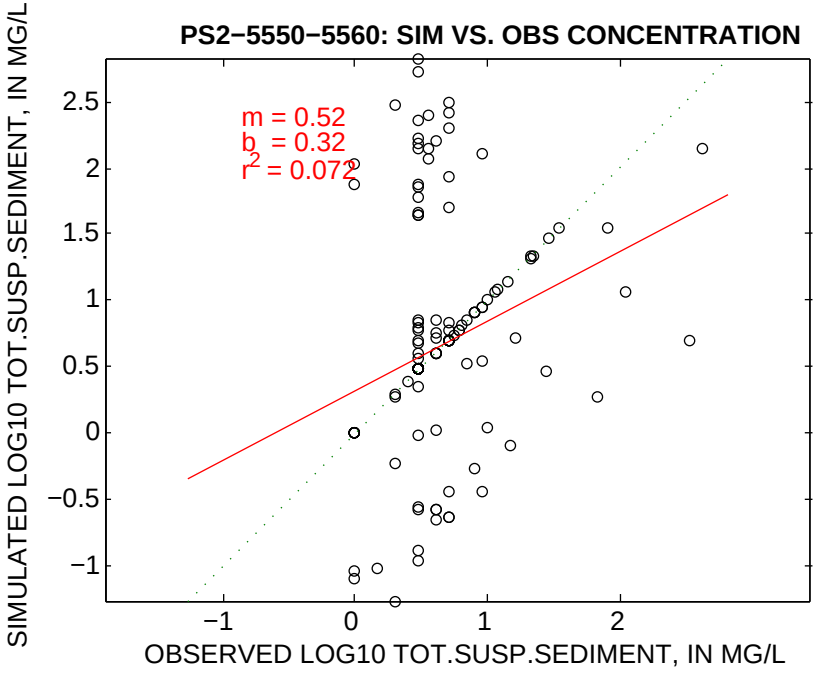
Drive	Directory	Observed
N/A	model	OBS20161101

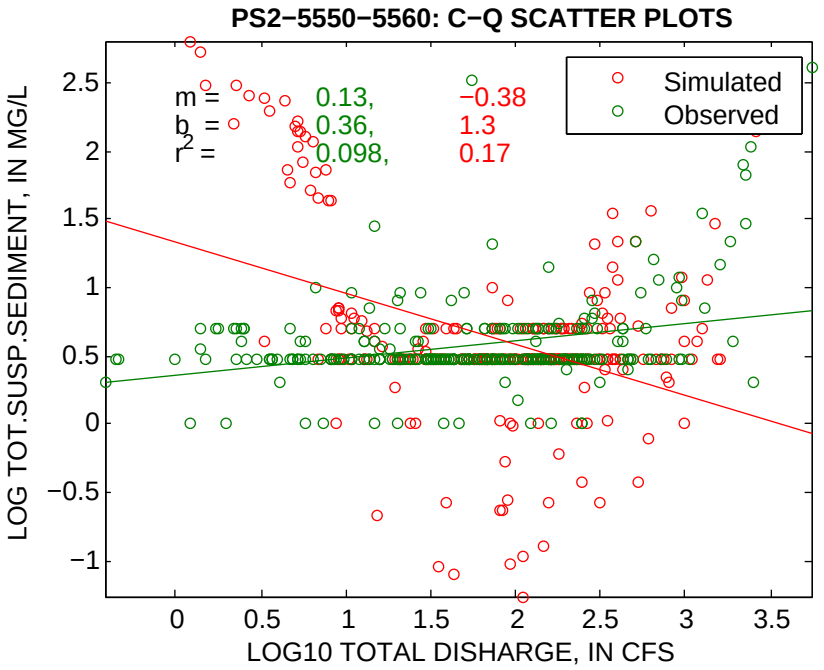
STATISTICS

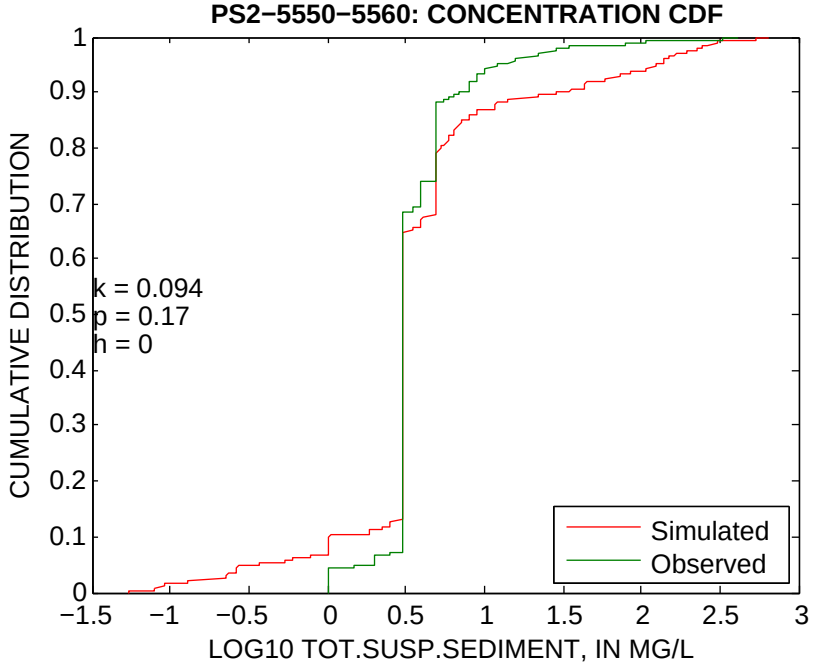
n	278	278
	observe	simulate
min	1	0.0028408
	0	-2.54656
mean	7.73283	24.9509
	0.577689	-0.0140027
media	3	0.44698
	0.477121	-0.349723
max	408	1046.3
	2.61066	3.01966
varian	1048.01	8825.57
	0.10036	1.19357
JB	0.001	0.001
	0.001	0.001
	ra	log
%	222.662	-102.424
err.va	10122.4	1.54834
rel.std.err	9.65866	15.4278
mod.eff	-8.65866	-14.4278

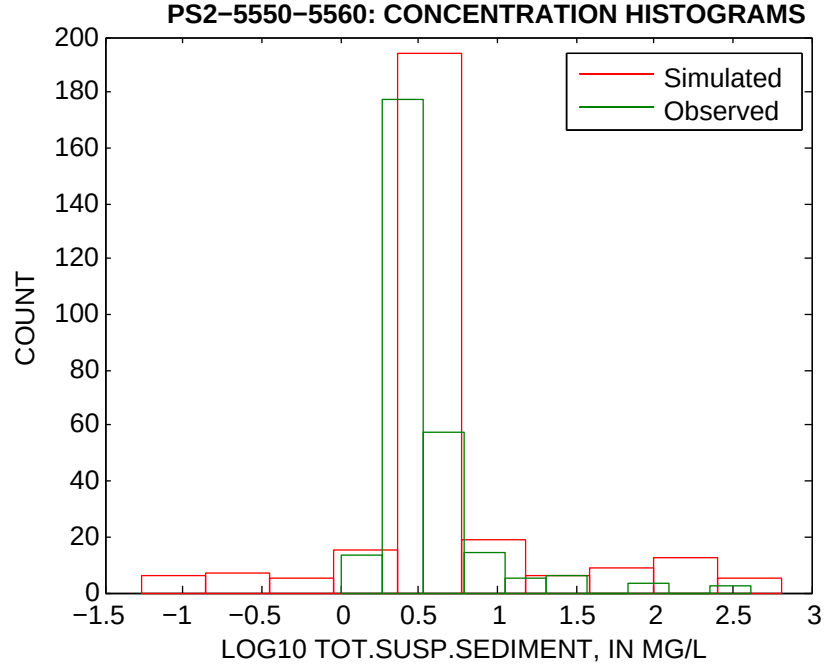
VERSION 2.1

ALL DATA
LOG10

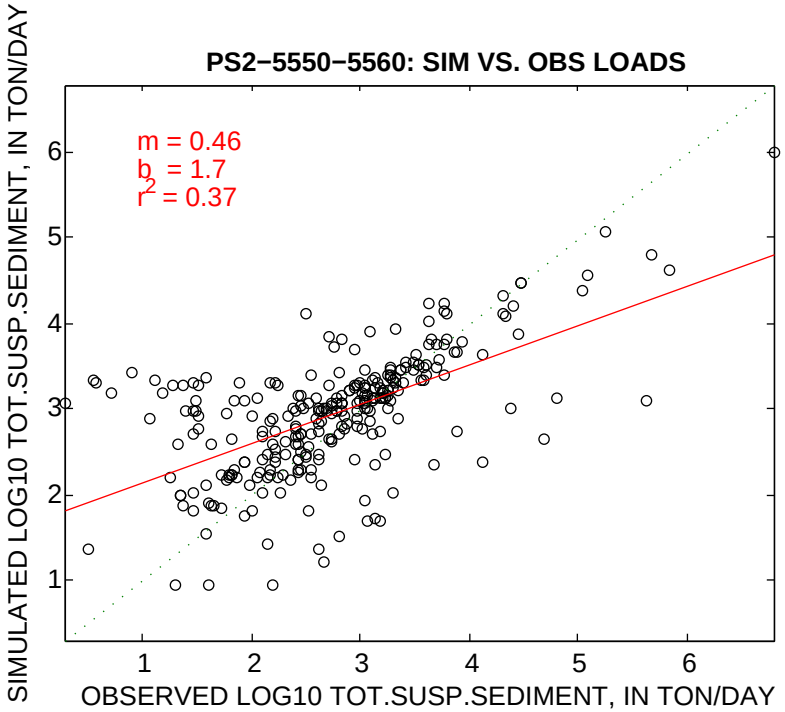


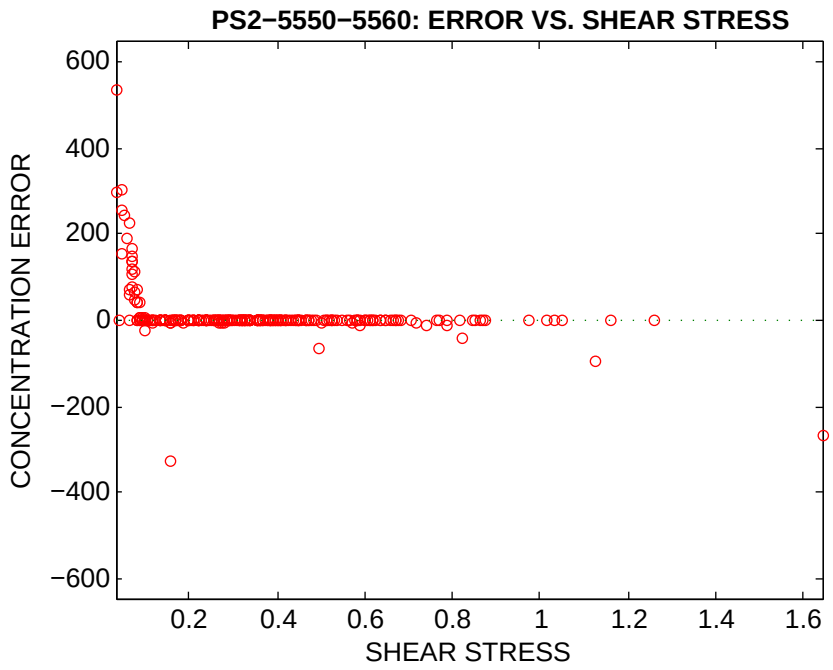


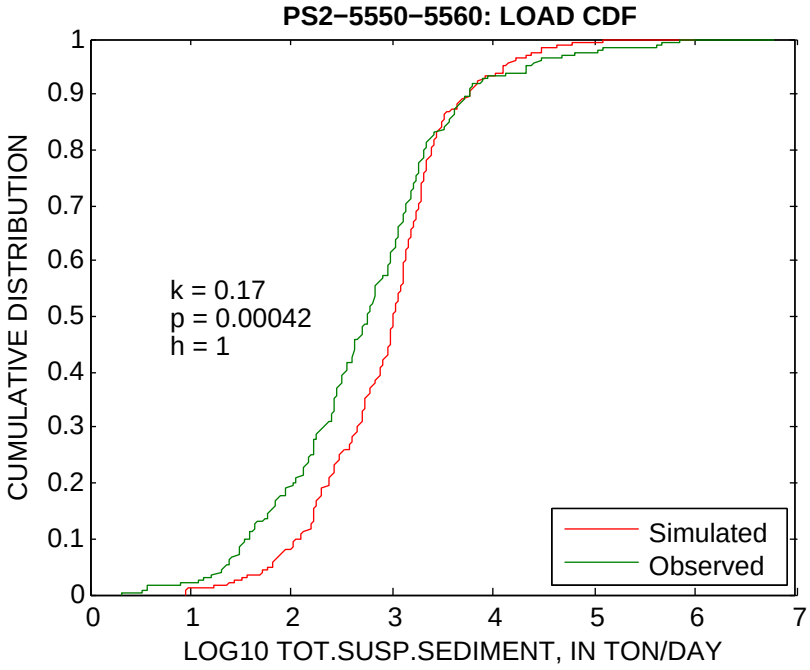


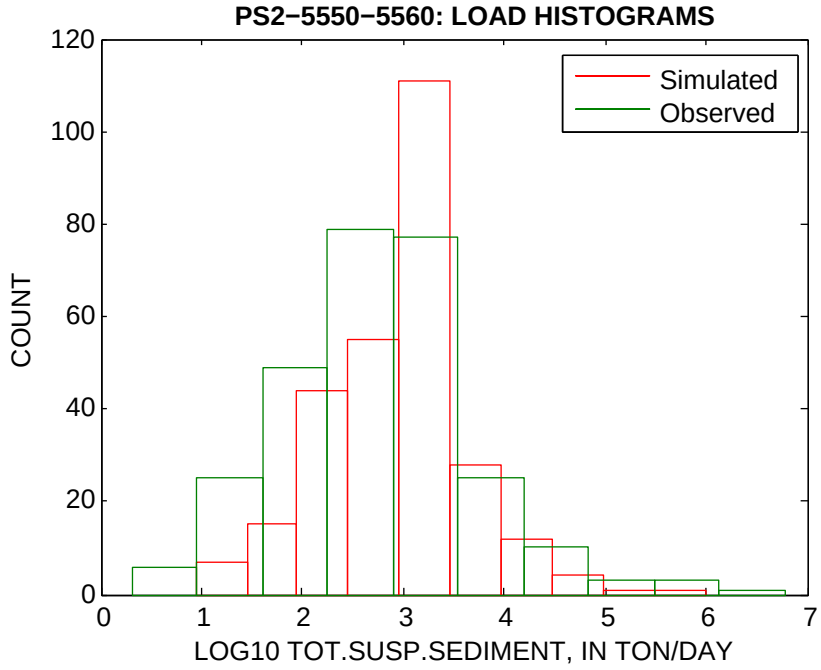


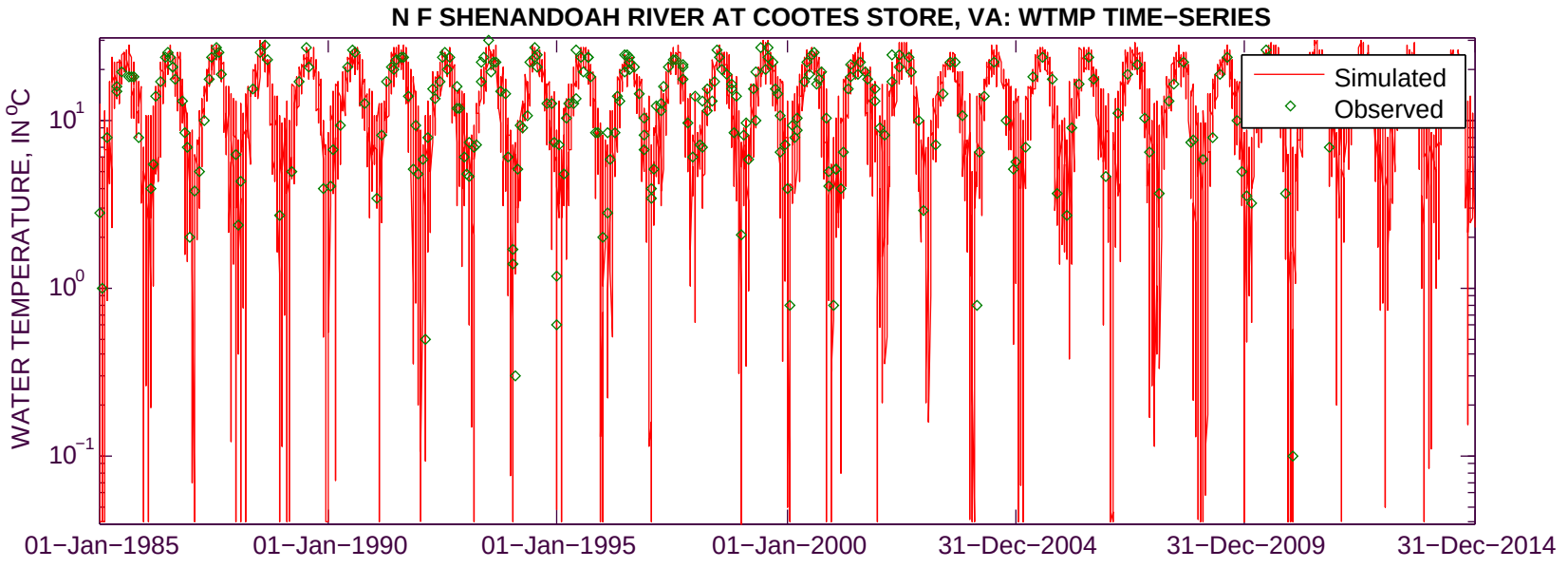
LOAD DATA
LOG10

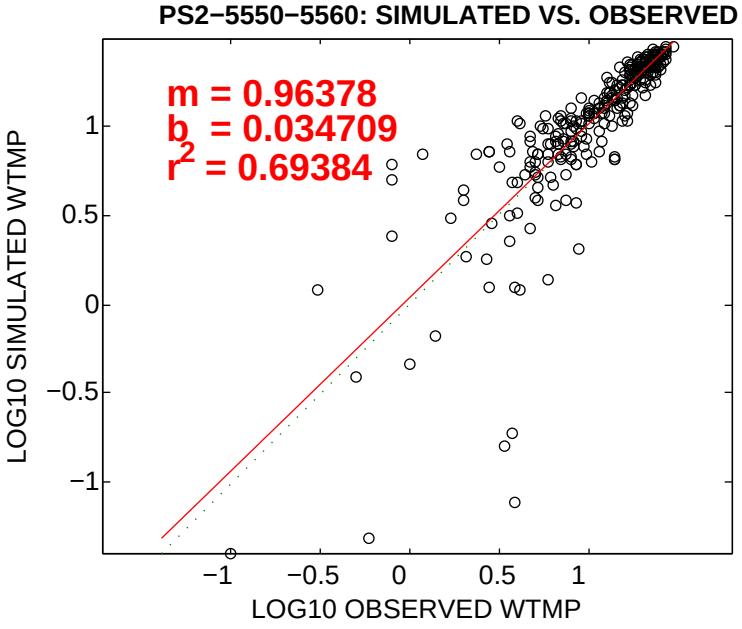


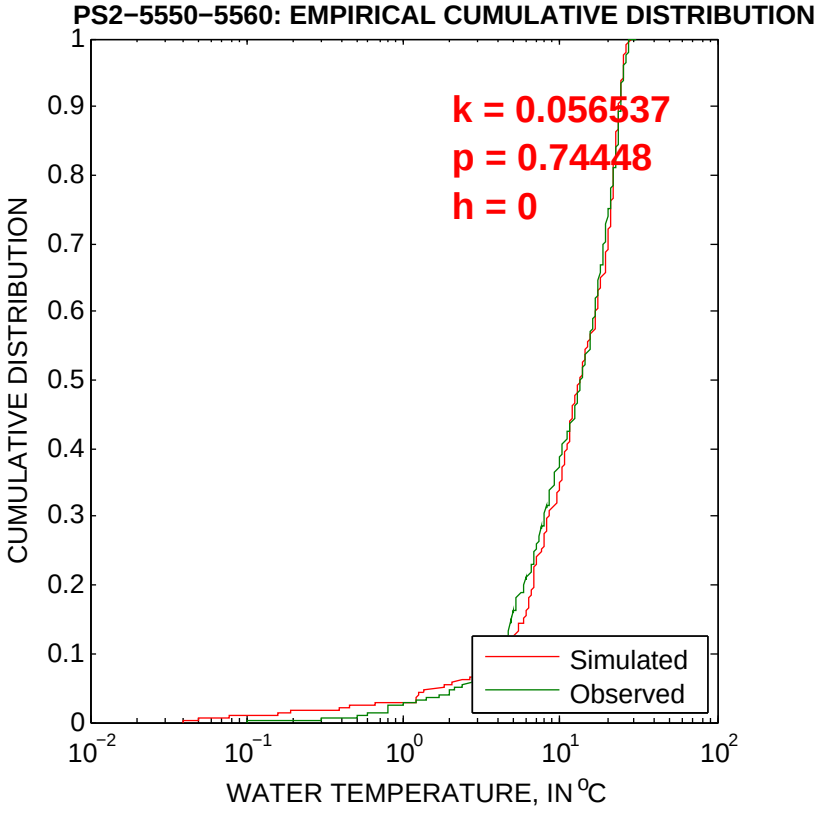












DATA SELECTION

scenario	file
P620171001WQ	WTMP.calib

plot: WTMP - water tempera...

Dates: 1/1/1985 – 12/31/201

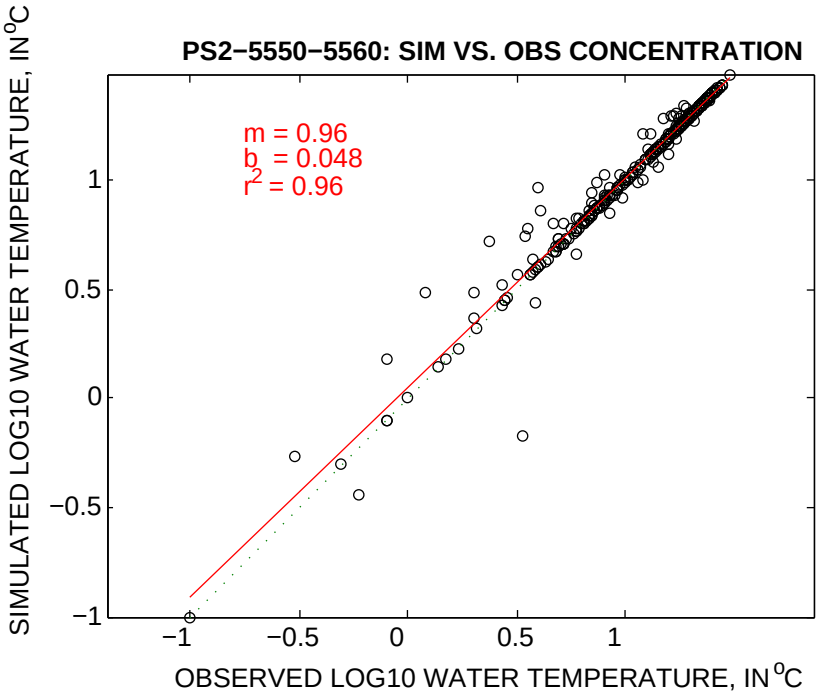
Drive	Directory	Observed
N/A	model	OBS20161101

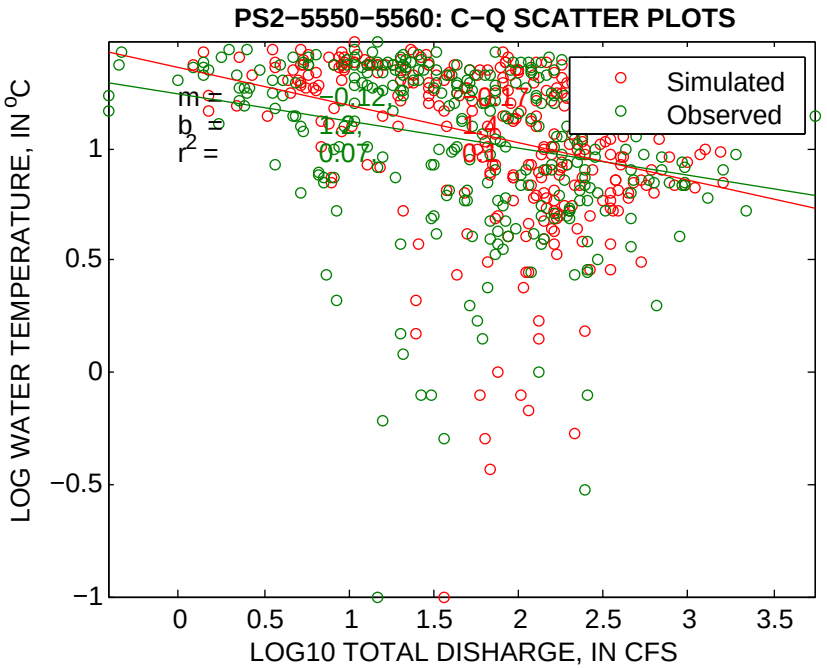
STATISTICS

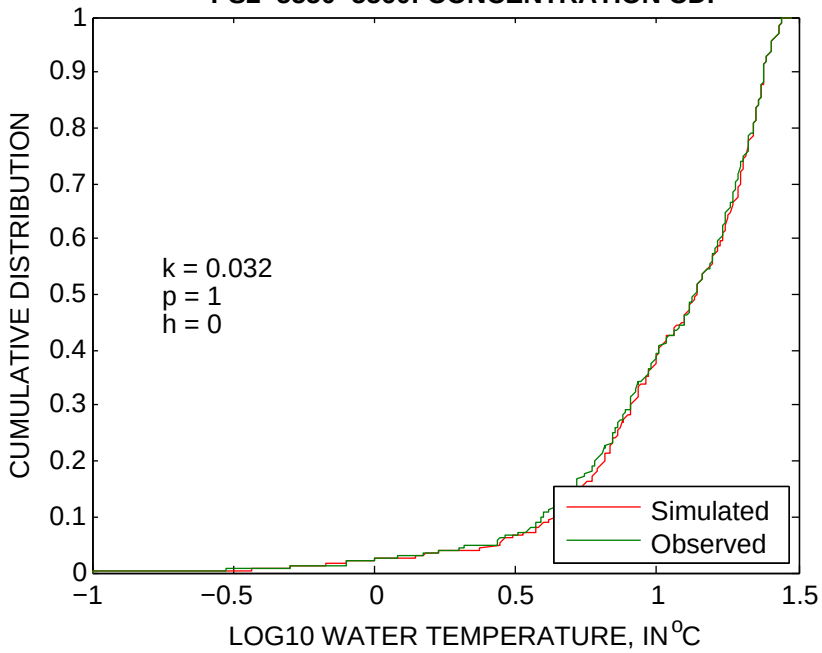
	n	observe	simulate
		283	283
min		0.1	0.040031
		-1	-1.3976
mean		13.7888	14.0273
		1.03115	1.02851
media		13.7	13.453
		1.13672	1.12882
max		30.3	28.191
		1.48144	1.45011
varian		59.1435	56.7399
		0.138443	0.185341
JB		0.002954	0.003197
		0.001	0.001
		ra	log
%		1.73002	-0.255839
err.va		7.44525	0.0569332
rel.std.err		0.125885	0.41124
mod.eff		0.874115	0.58876

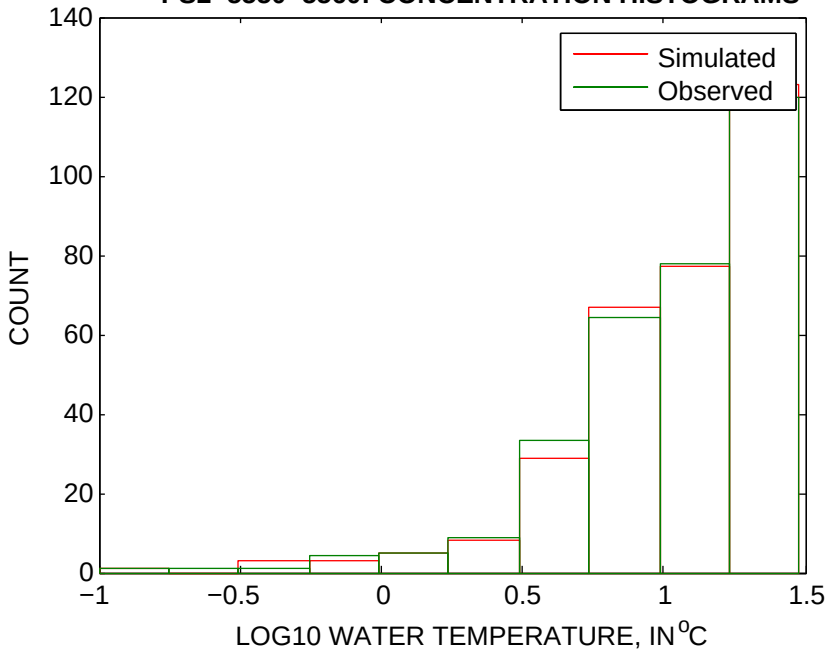
VERSION 2.1

ALL DATA
LOG10

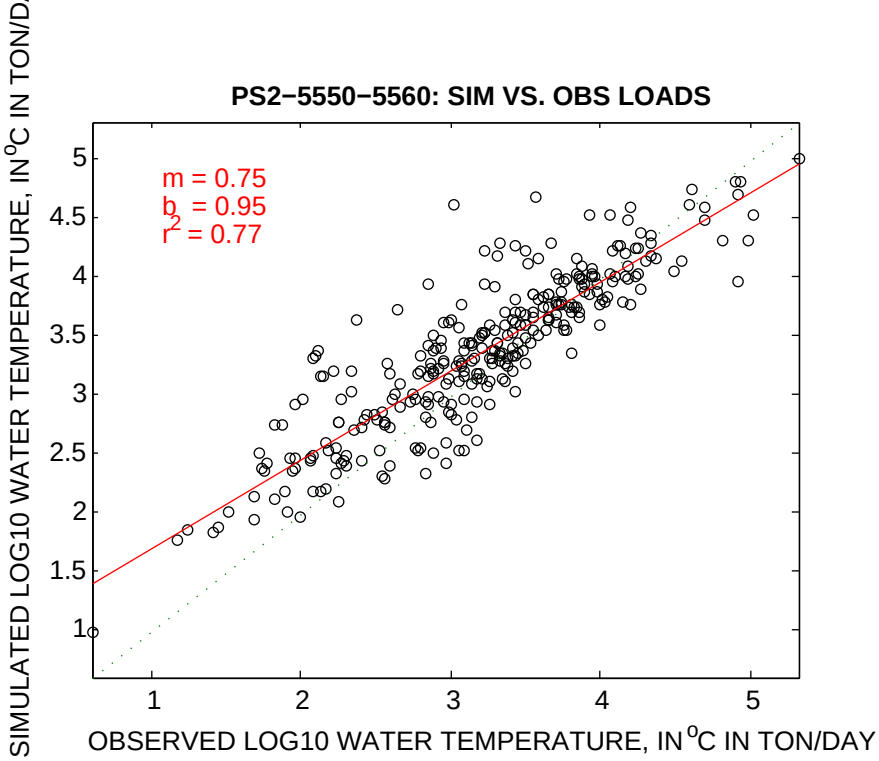


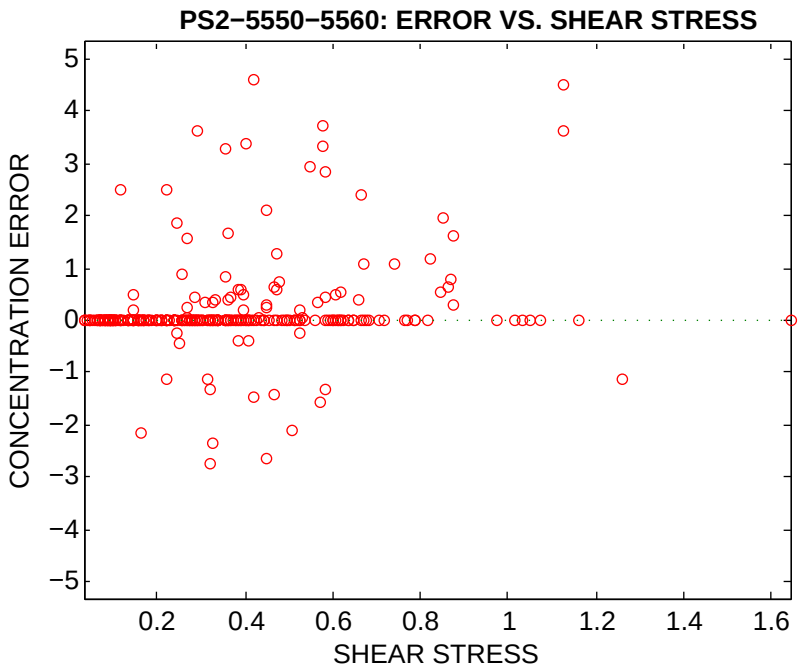


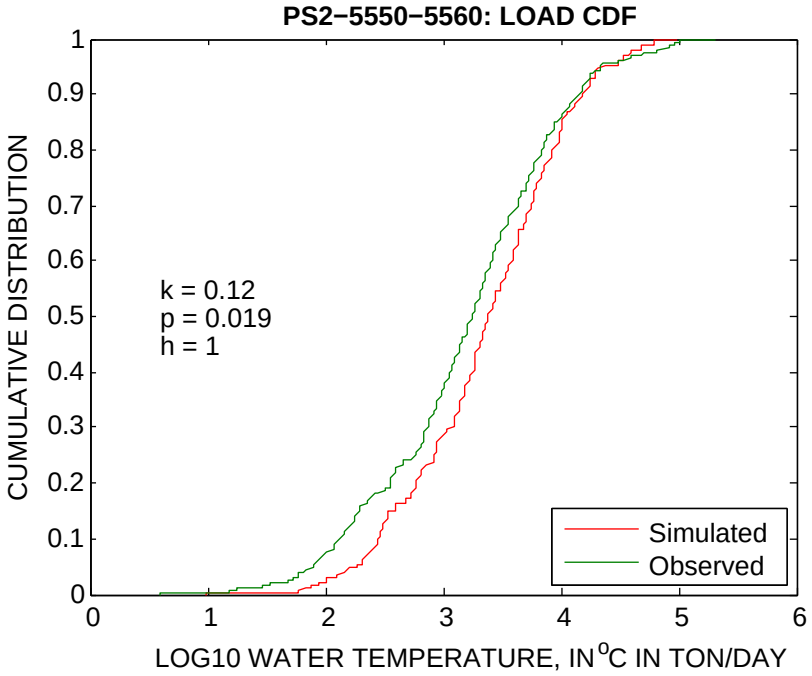


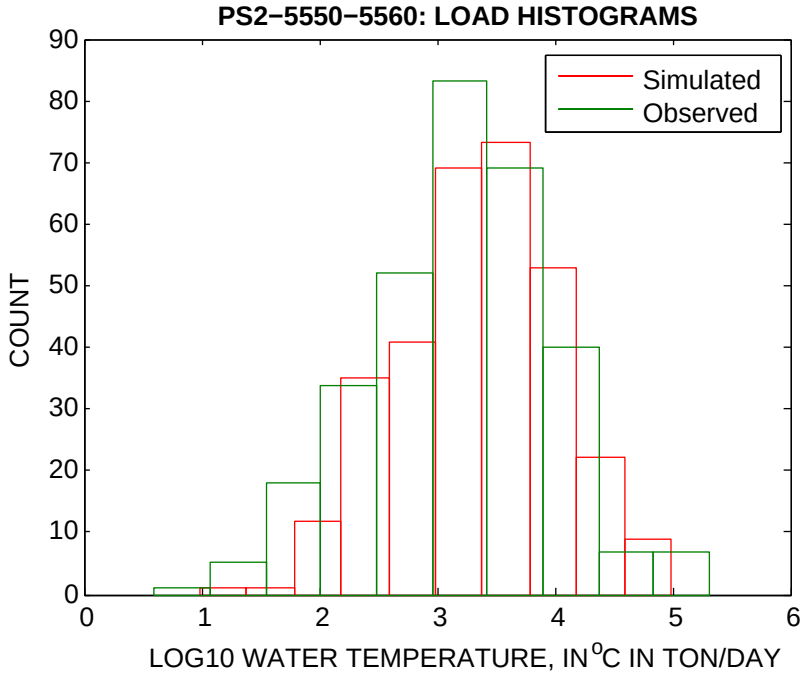


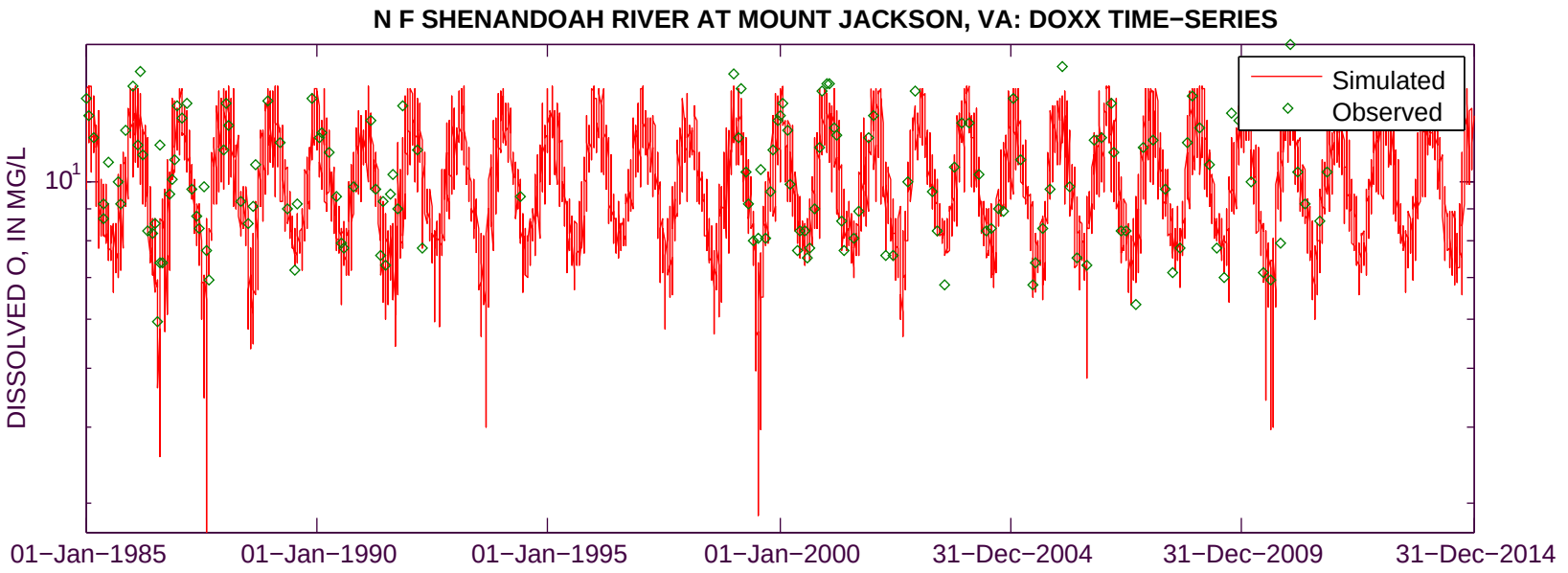
LOAD DATA
LOG10

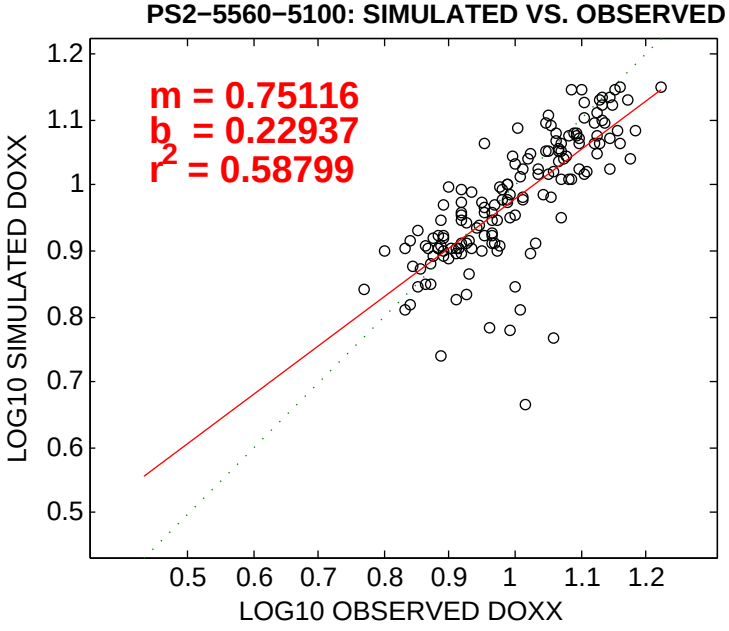


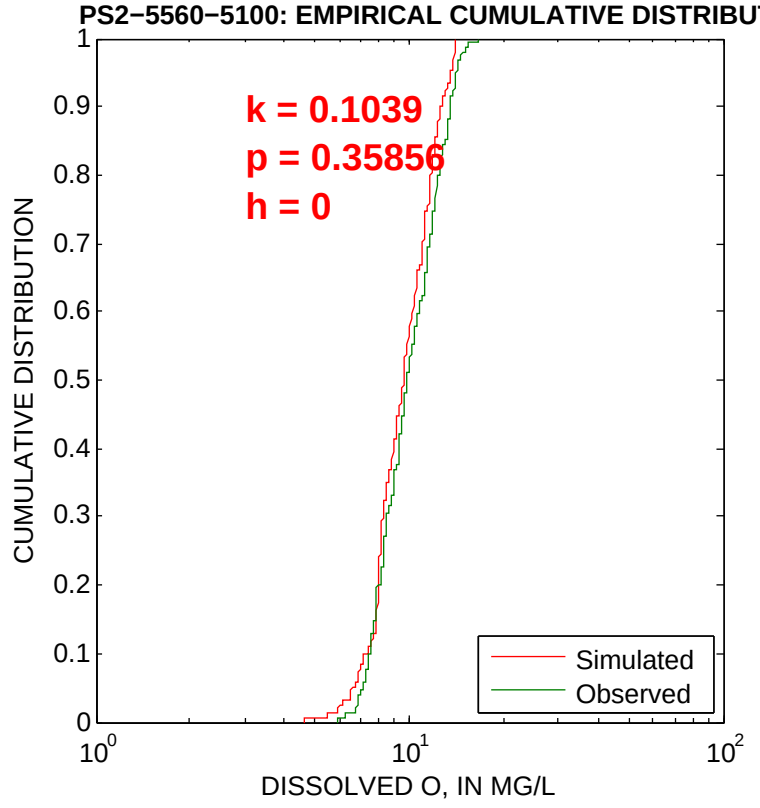












DATA SELECTION

scenario	file
P620171001WQ	DOXX.calib

plot: DOXX - dissolved oxygen

Dates: 1/1/1985 – 12/31/201

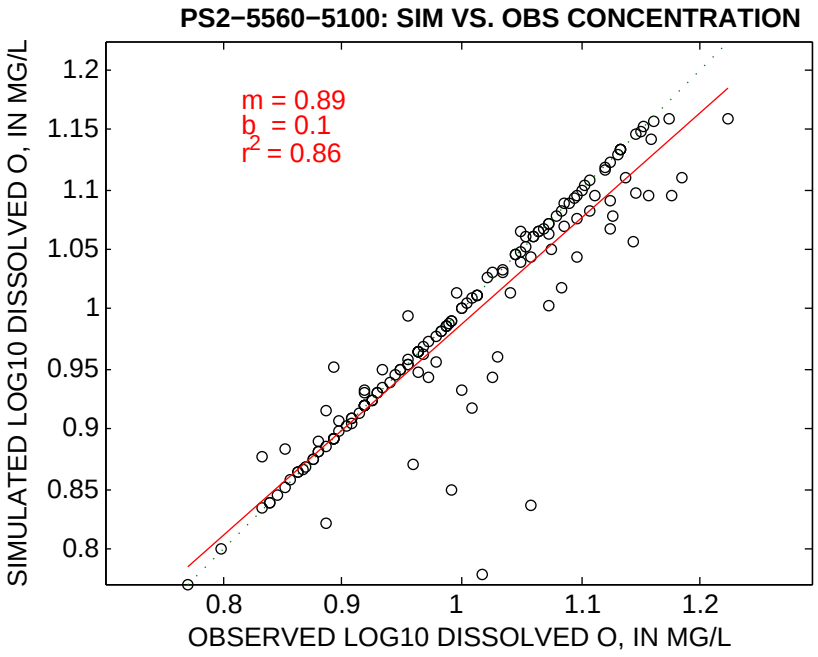
Drive	Directory	Observed
N/A	model	OBS20161101

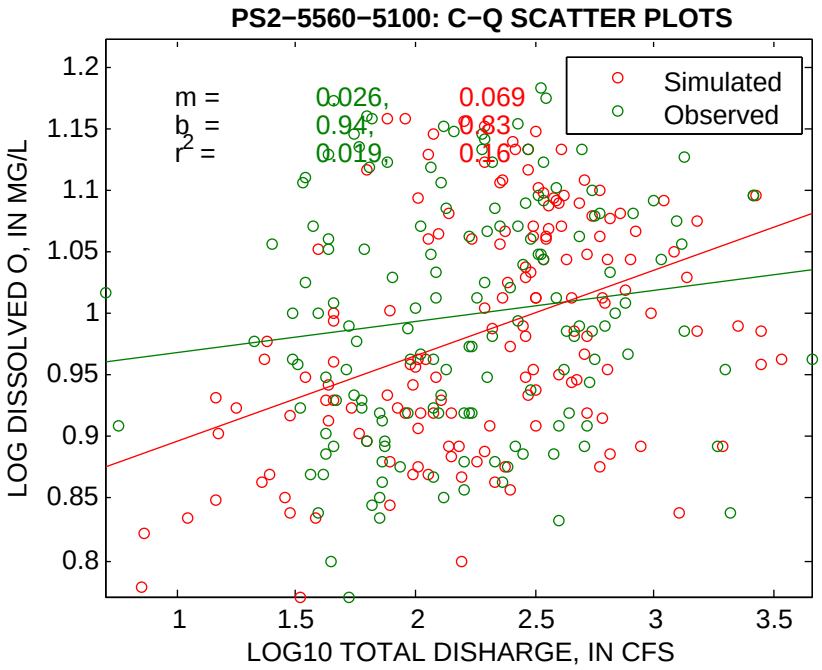
STATISTICS

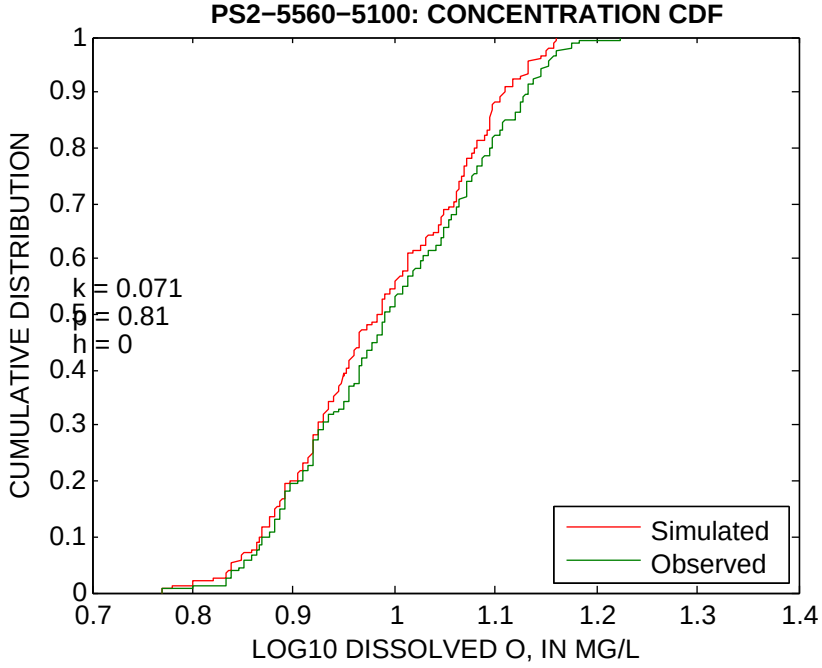
	n	154	154
		observe	simulate
min		5.9	4.6129
		0.770852	0.663974
mean		10.2312	9.773
		0.999031	0.979804
media		9.8	9.5496
		0.991226	0.979985
max		16.7	14.151
		1.22272	1.15079
varian		5.3264	4.39114
		0.00953602	0.00915092
JB		0.028131	0.105125
		0.050237	0.202854
		ra	log
%		-4.47881	-1.92456
err.va		2.11836	0.0047328
rel.std.err		0.397709	0.496307
mod.eff		0.602291	0.503693

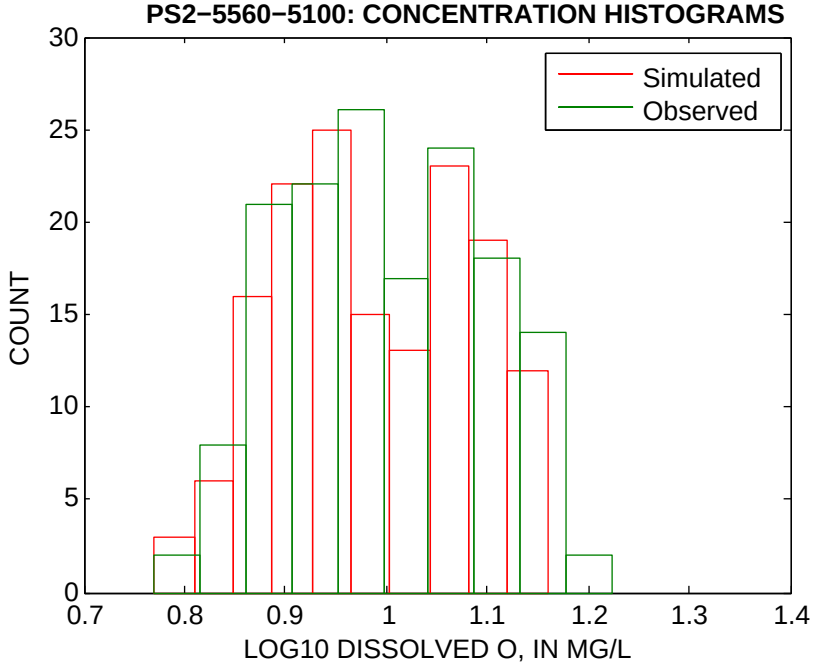
VERSION 2.1

ALL DATA
LOG10

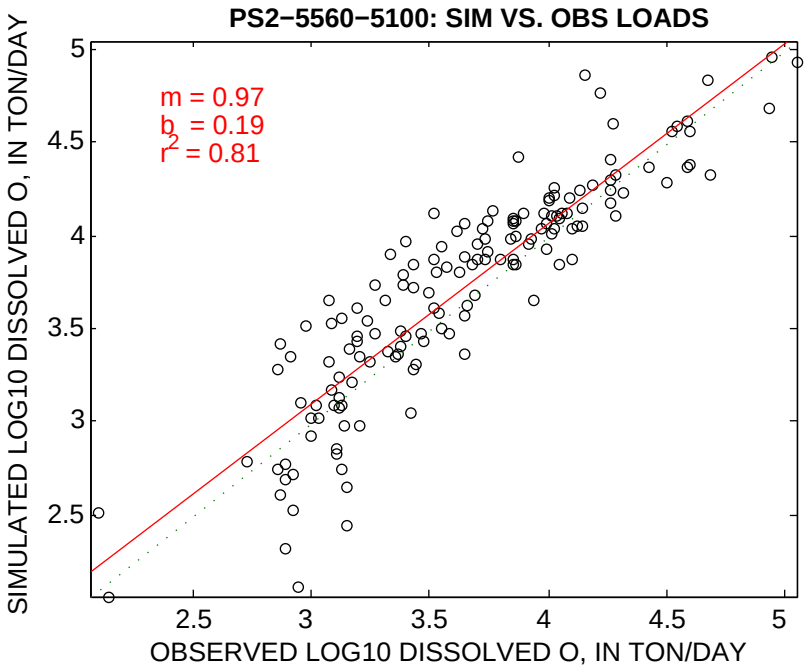


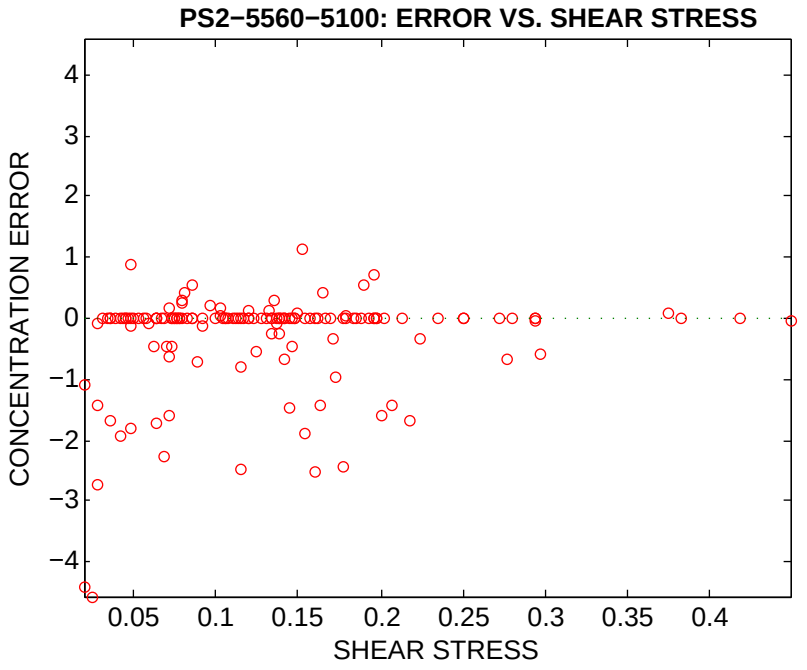


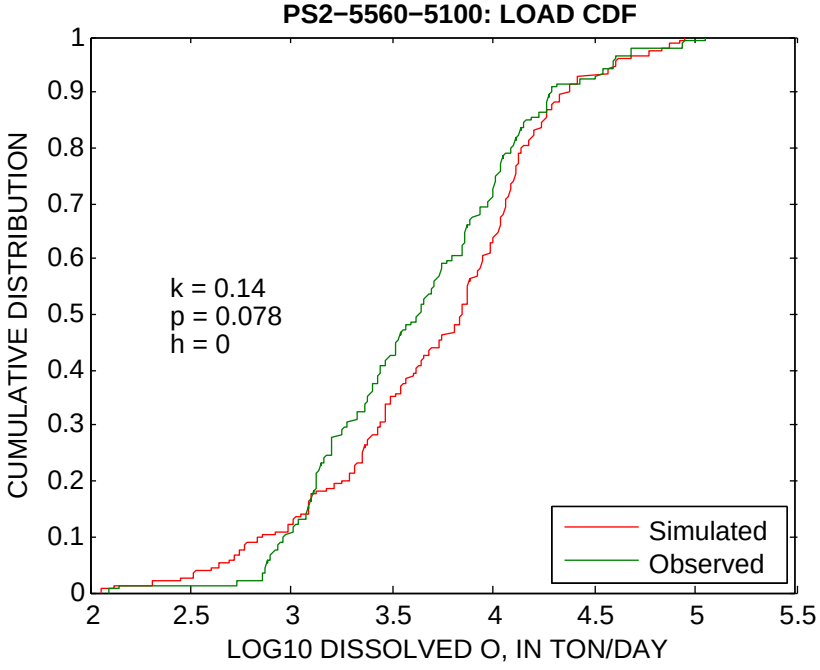


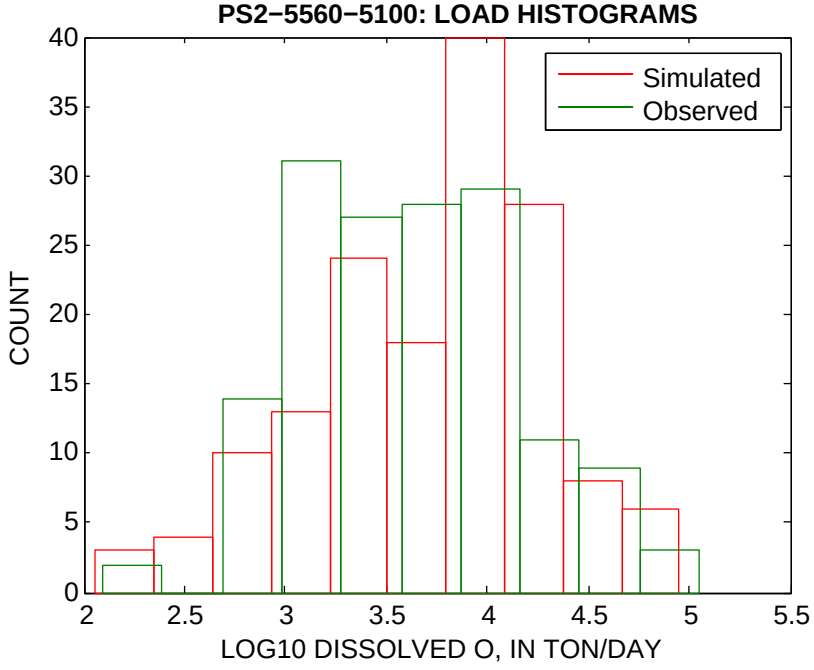


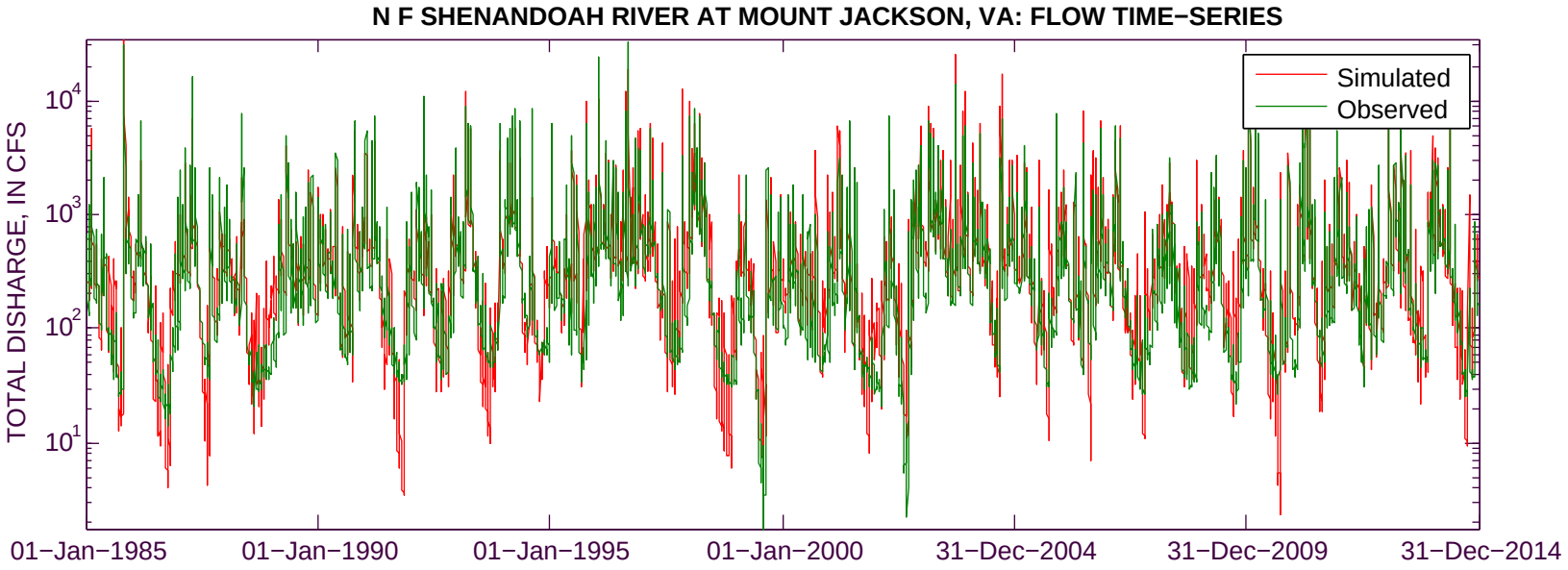
LOAD DATA
LOG10

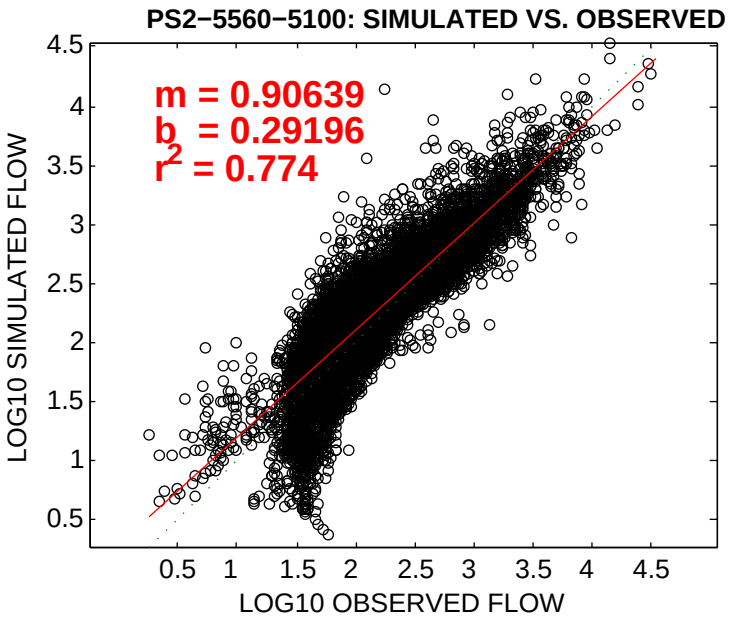


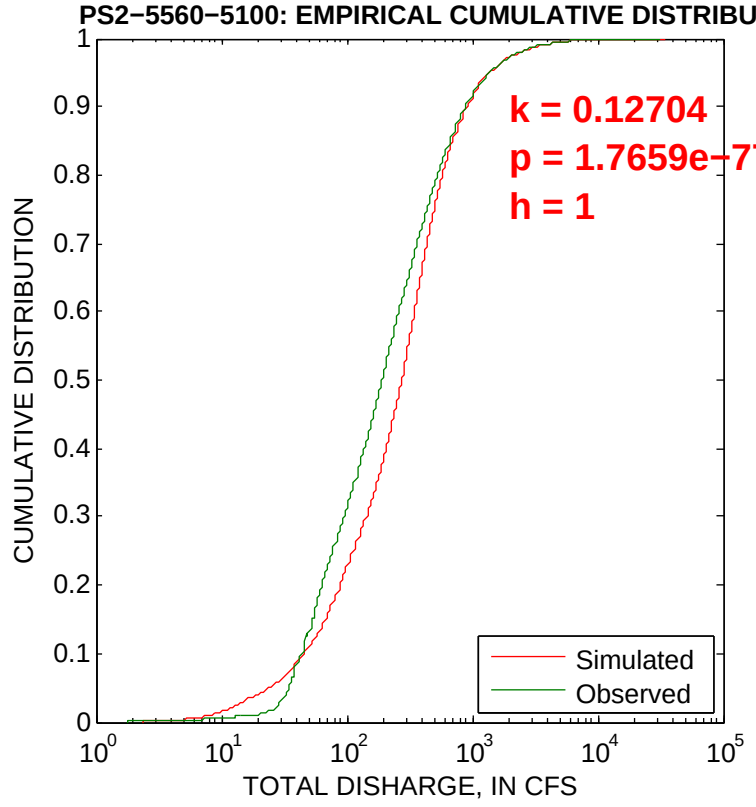












DATA SELECTION

scenario	file
P620171001WQ	FLOW.calib

plot: FLOW - total discharge

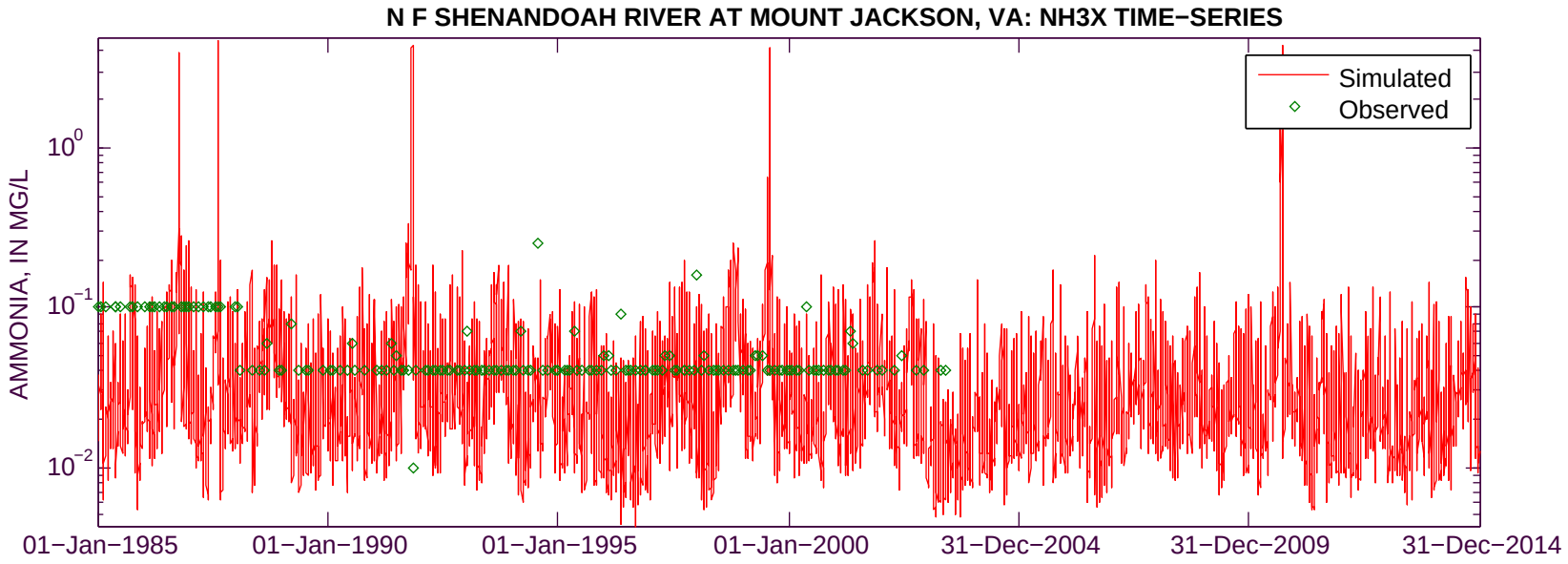
Dates: 1/1/1985 – 12/31/201

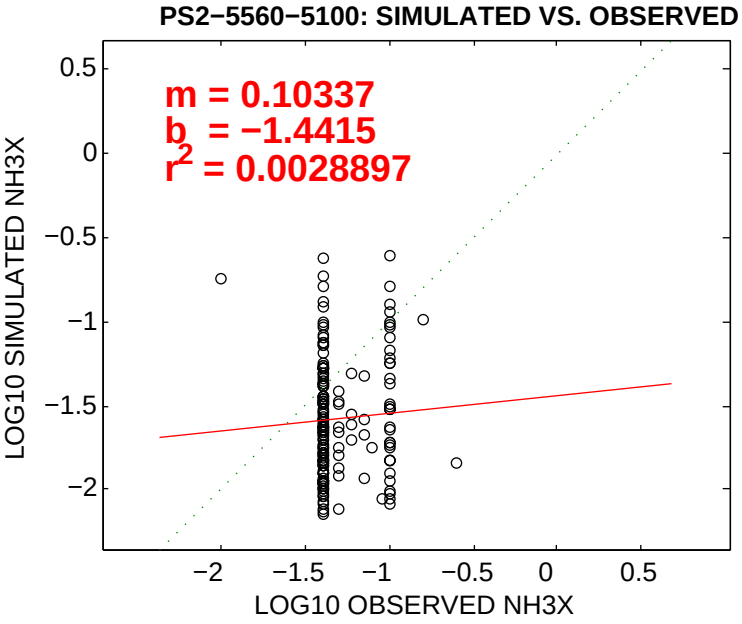
Drive	Directory	Observed
N/A	model	OBS20161101

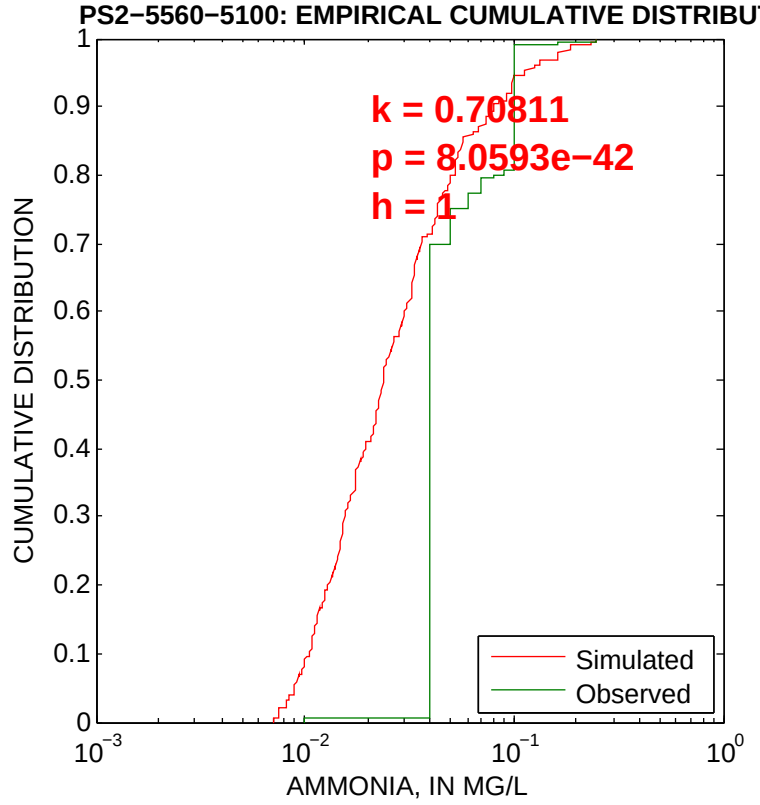
STATISTICS

n	10957	10957
	observe	simulate
min	1.8	2.3834
	0.255273	0.377197
mean	418.255	465.349
	2.29113	2.36862
media	193	277.38
	2.28556	2.44308
max	32200	34663
	4.50786	4.53987
varian	851171	853940
	0.264886	0.281156
JB	0.001	0.001
	0.001	0.001
	ra	log
%	11.2595	3.38205
err.va	341676	0.0718664
rel.std.err	0.401419	0.27131
mod.eff	0.598581	0.72869

VERSION 2.1







DATA SELECTION

scenario	file
P620171001WQ	NH3X.calib

plot: NH3X - ammonia

Dates: 1/1/1985 – 12/31/201

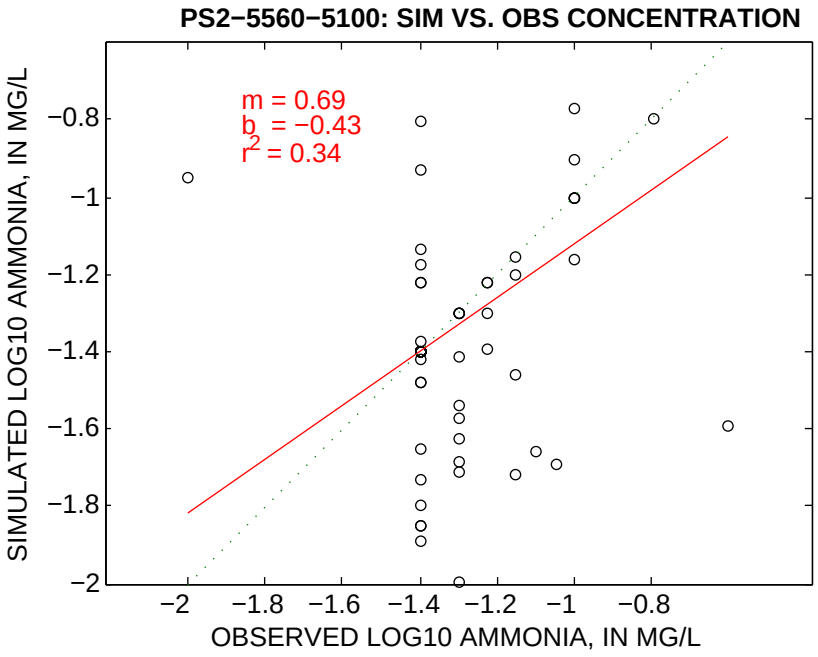
Drive	Directory	Observed
N/A	model	OBS20161101

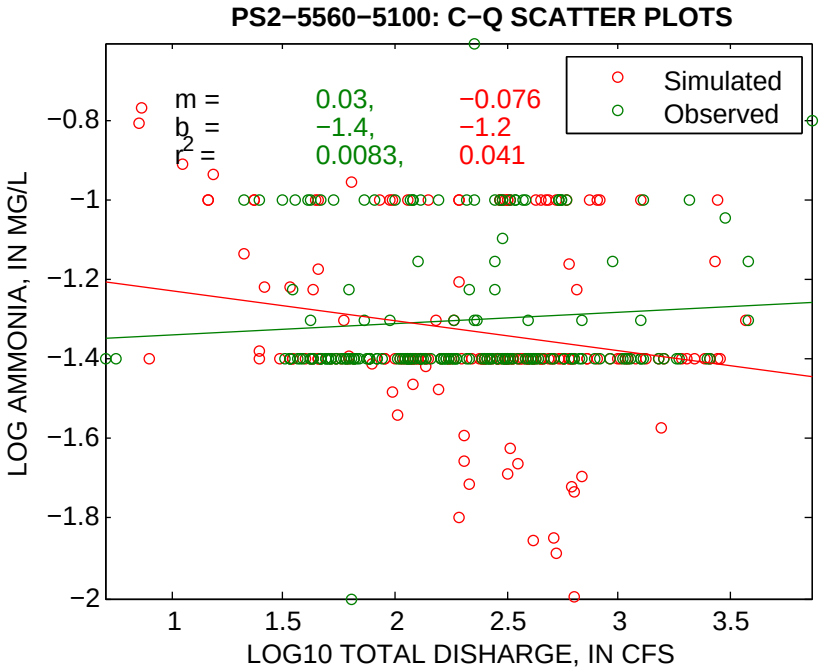
STATISTICS

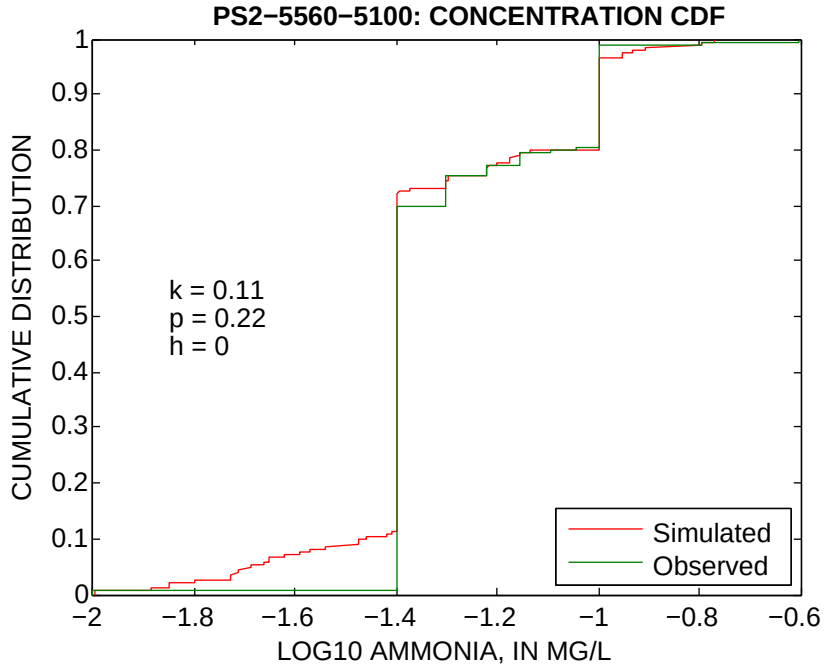
	n	185	185
		observe	simulate
min		0.01	0.0071477
		-2	-2.14583
mean		0.0547568	0.0374568
		-1.30267	-1.5762
media		0.04	0.023818
		-1.39794	-1.62309
max		0.25	0.24666
		-0.60206	-0.607901
varian		0.00082507	0.00152805
		0.0311537	0.115197
JB		0.001	0.001
		0.001	0.010911
		ra	log
%		-31.5942	20.9978
err.va		0.00243552	0.215137
rel.std.err		2.95187	6.90566
mod.eff		-1.95187	-5.90566

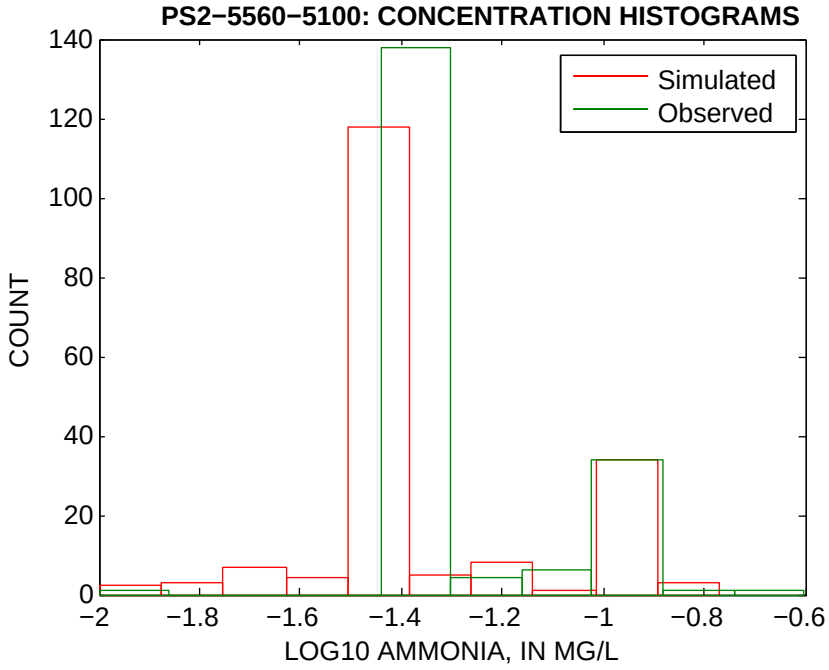
VERSION 2.1

ALL DATA
LOG10

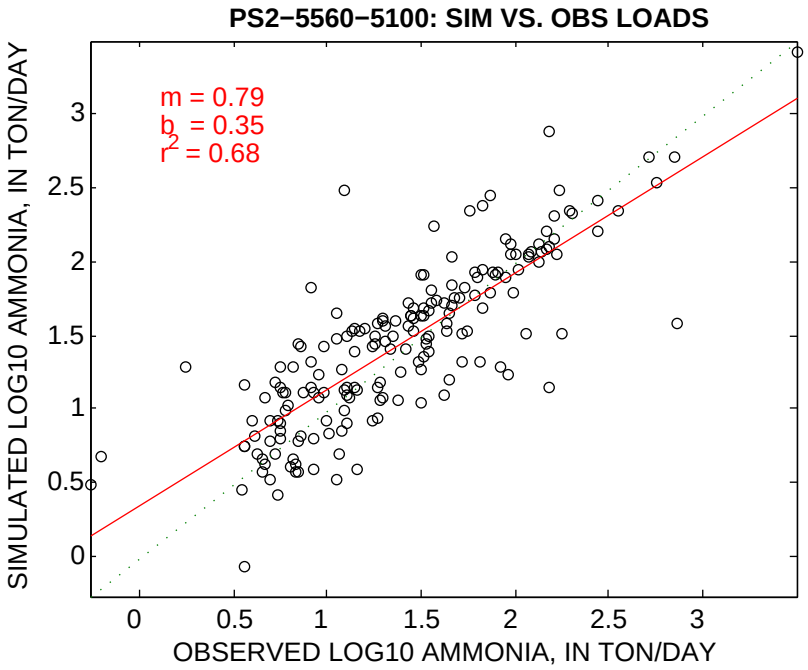


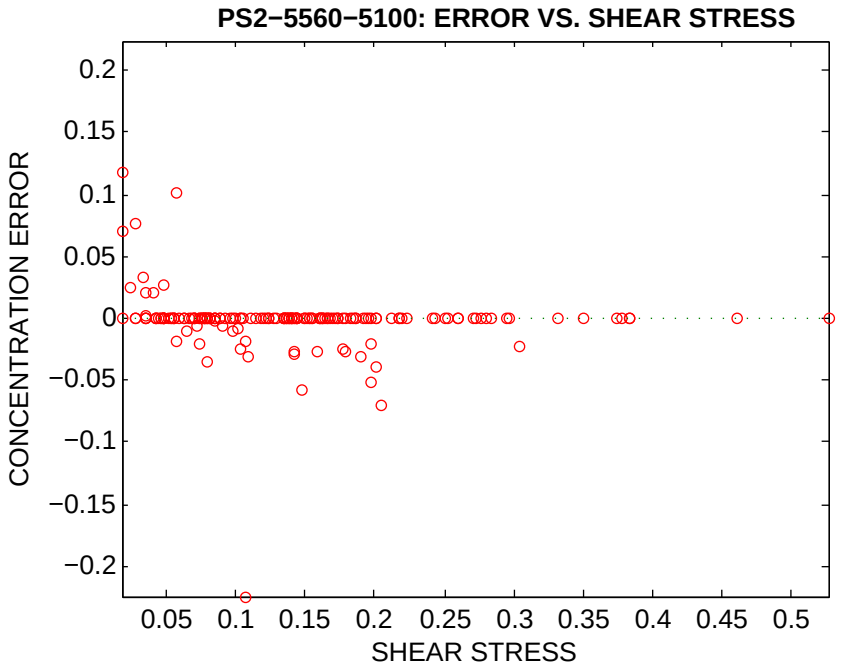


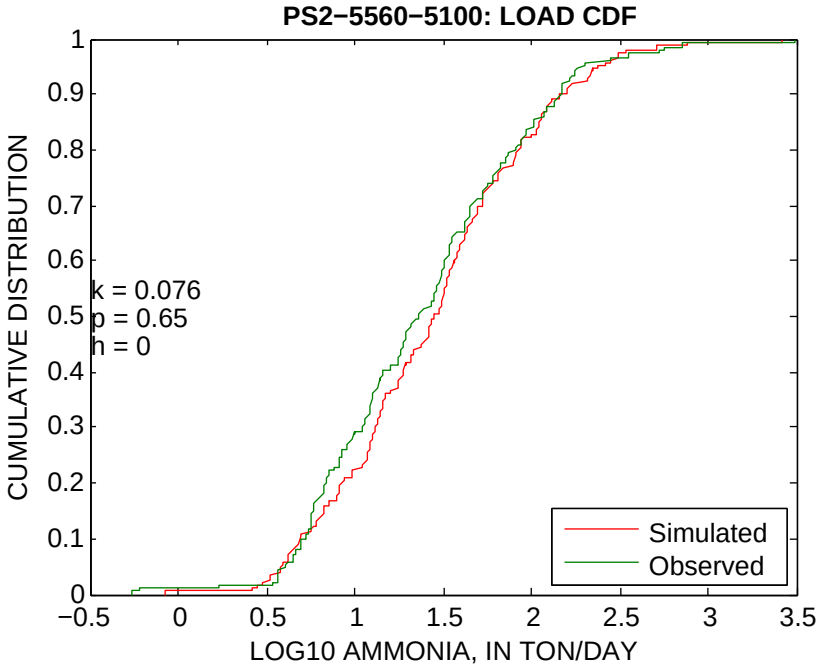


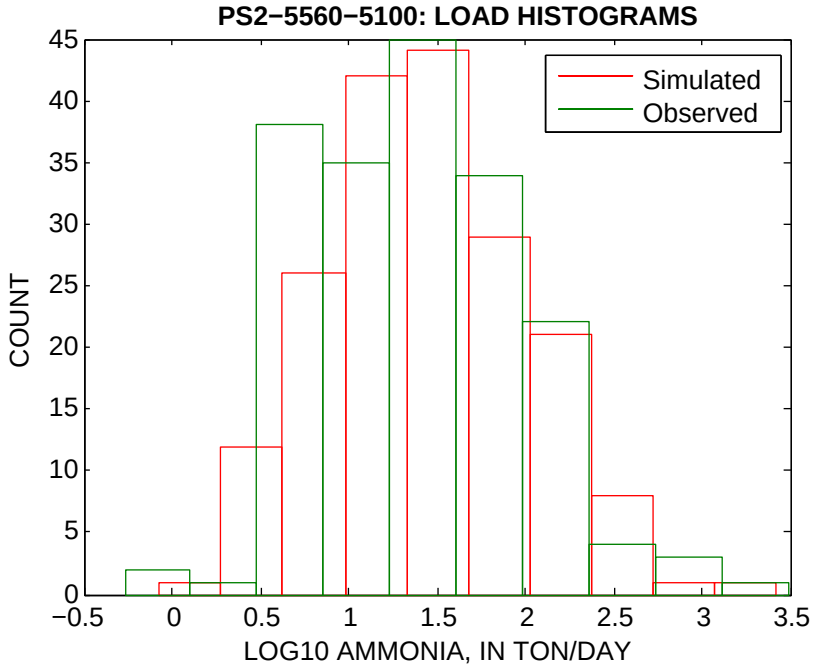


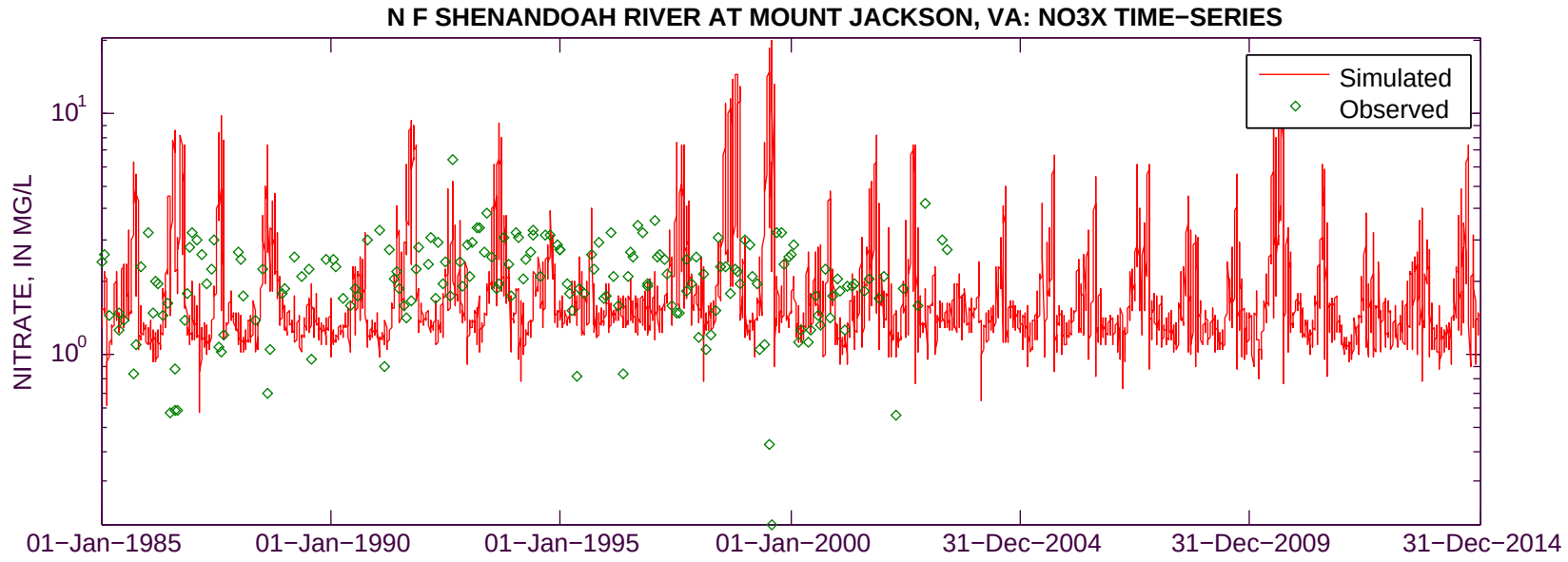
LOAD DATA
LOG10

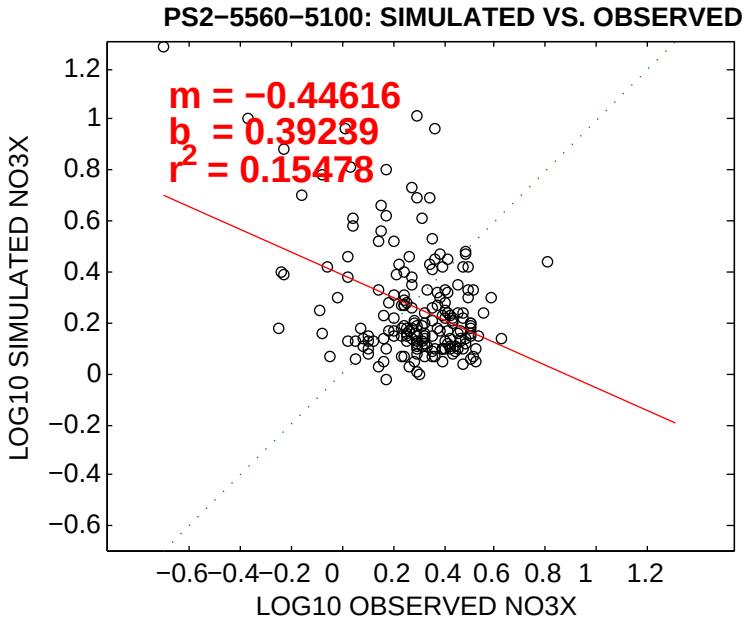


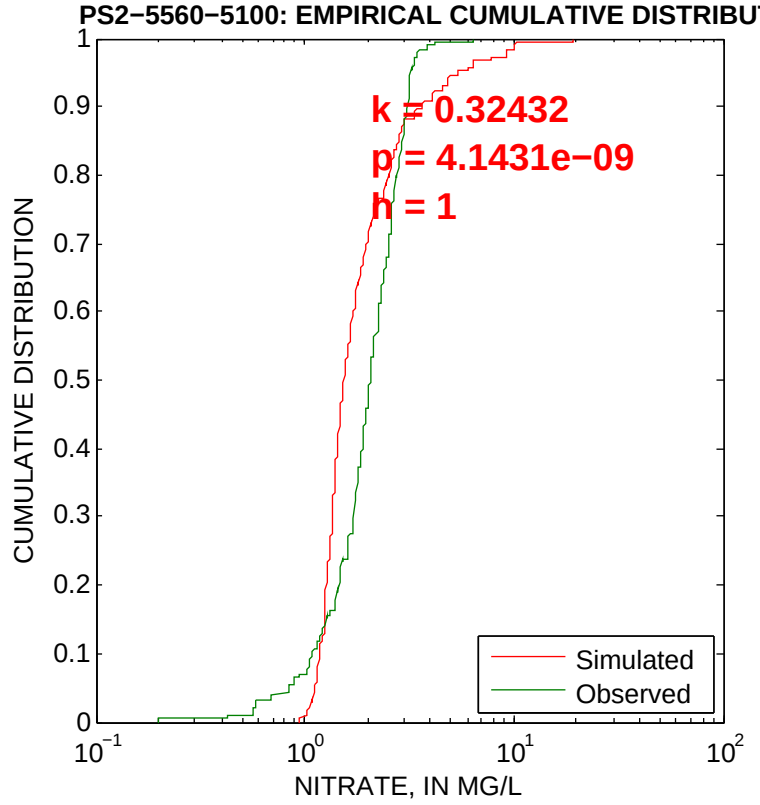












DATA SELECTION

scenario	file
P620171001WQ	NO3X.calib

plot: NO3X - nitrate

Dates 1/1/1985 12/31/201

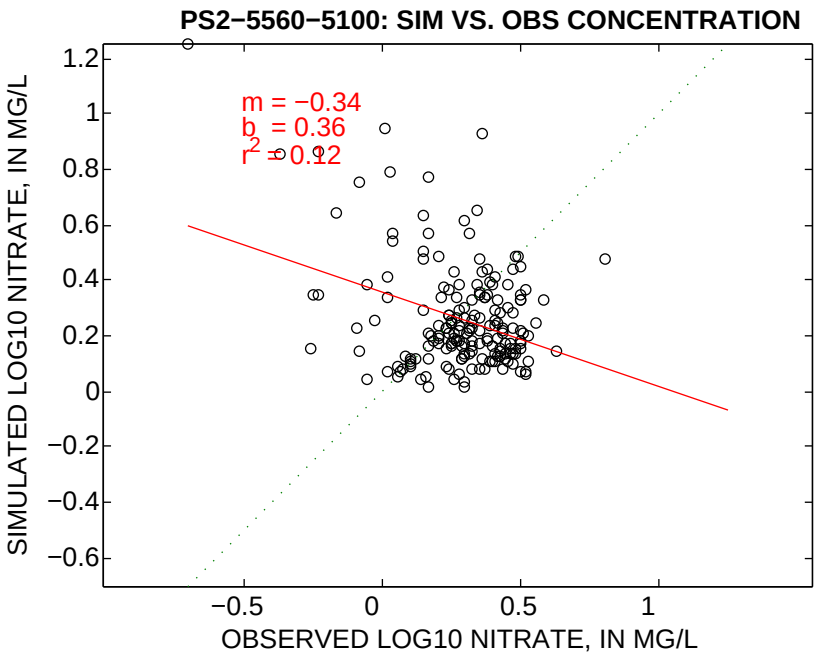
Drive	Directory	Observed
N/A	model	OBS20161101

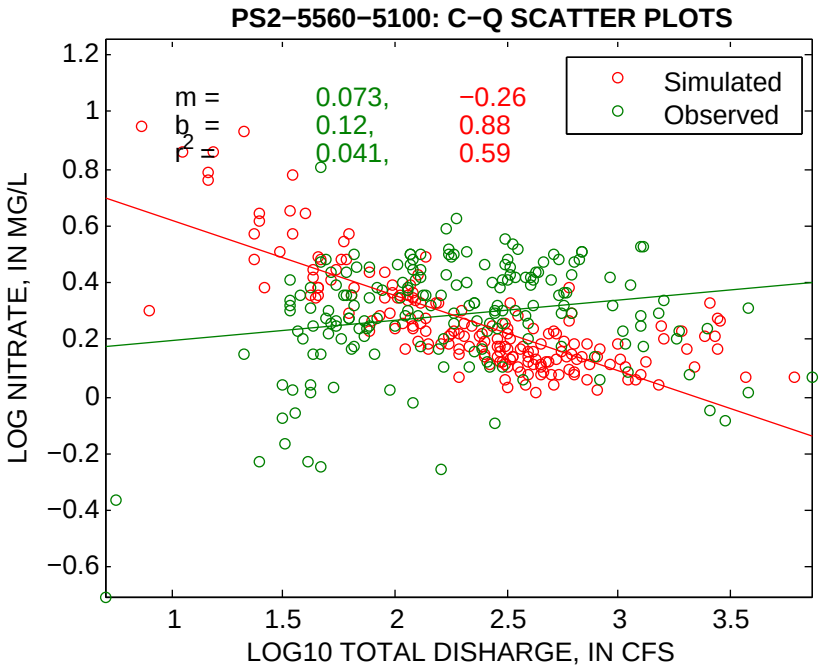
STATISTICS

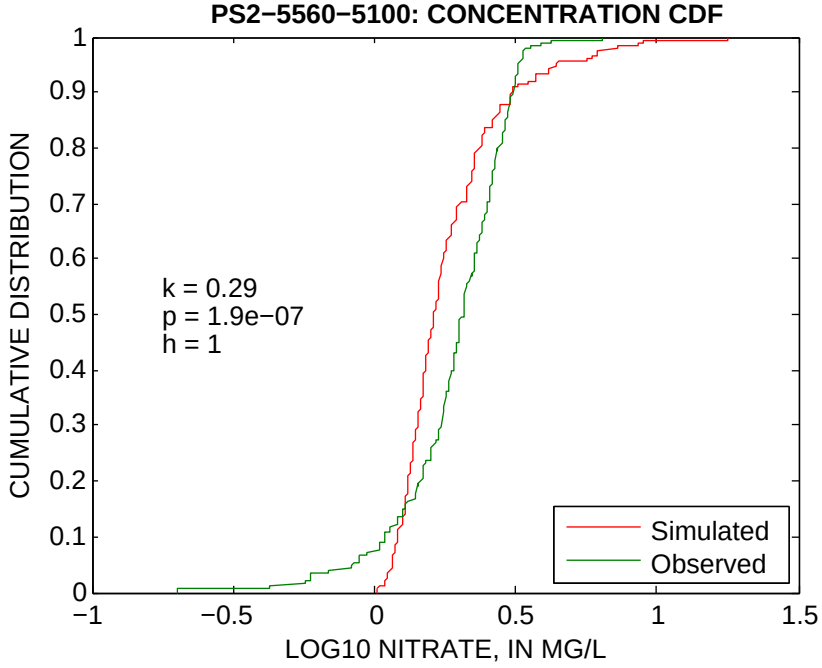
	n	185	185
		observe	simulate
min		0.2	0.94129
		-0.69897	-0.0262766
mean		2.10692	2.20174
		0.286537	0.264551
media		2.06	1.5482
		0.313867	0.189827
max		6.39	19.437
		0.805501	1.28863
varian		0.650846	4.08766
		0.0381926	0.0491173
JB		0.001	0.001
		0.001	0.001
		ra	log
%		4.50025	-7.6731
err.va		5.75009	0.121876
rel.std.err		8.83479	3.19109
mod.eff		-7.83479	-2.19109

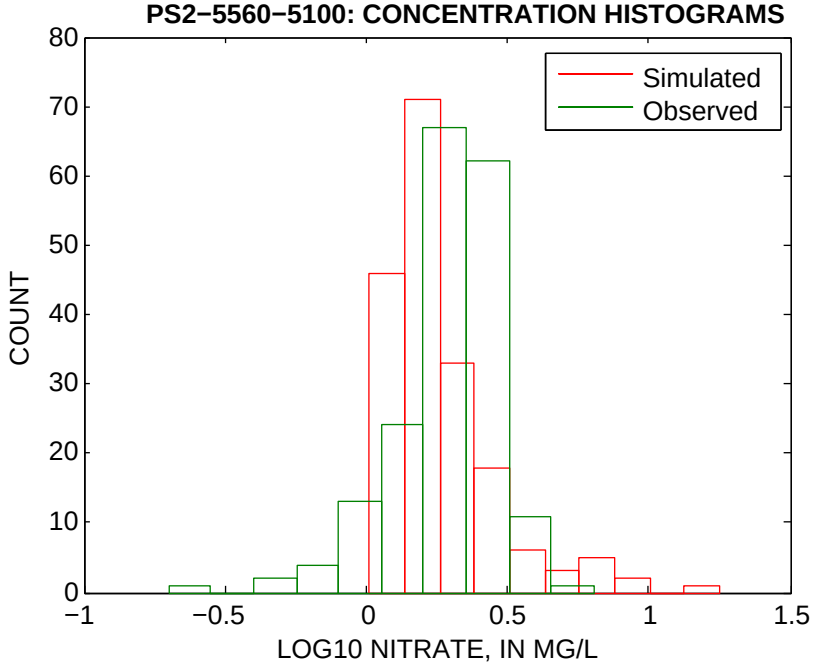
VERSION 2.1

ALL DATA
LOG10

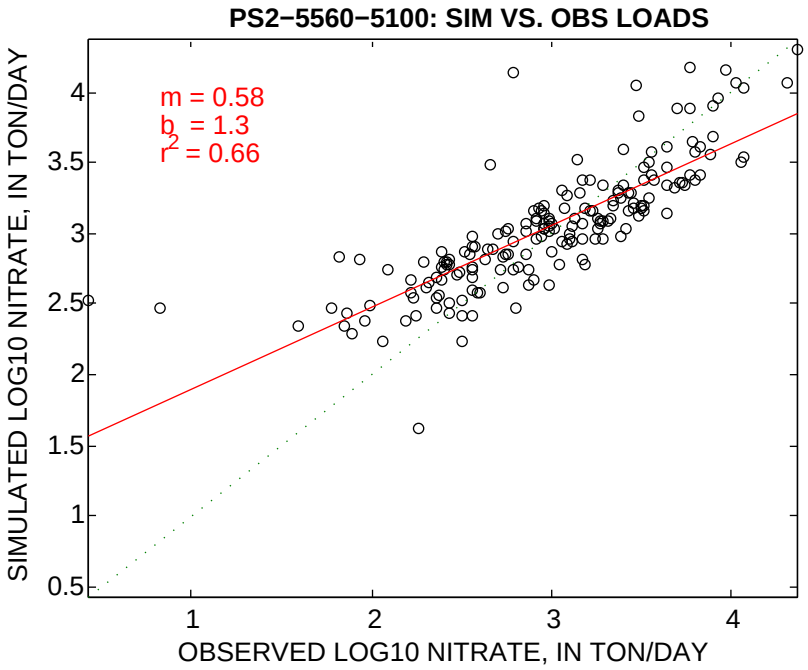


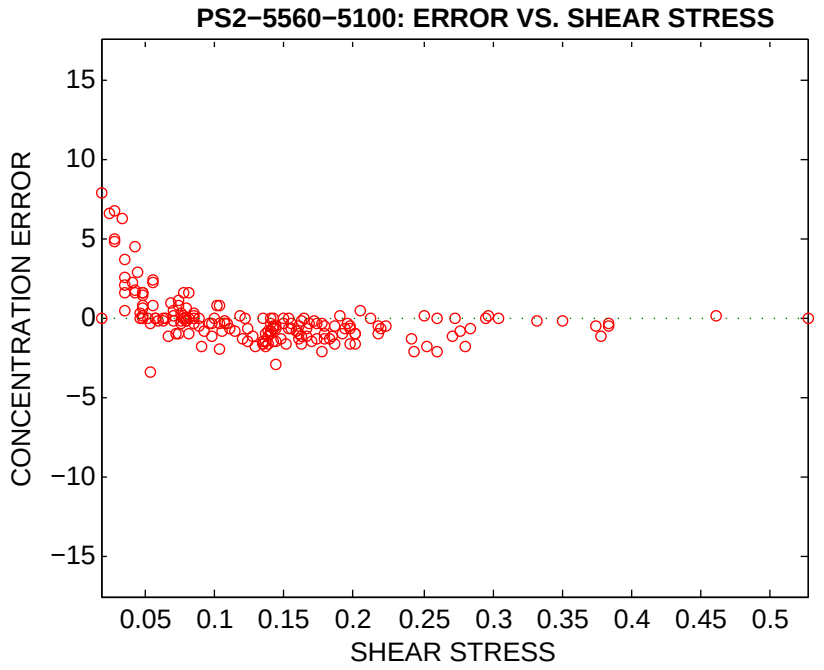


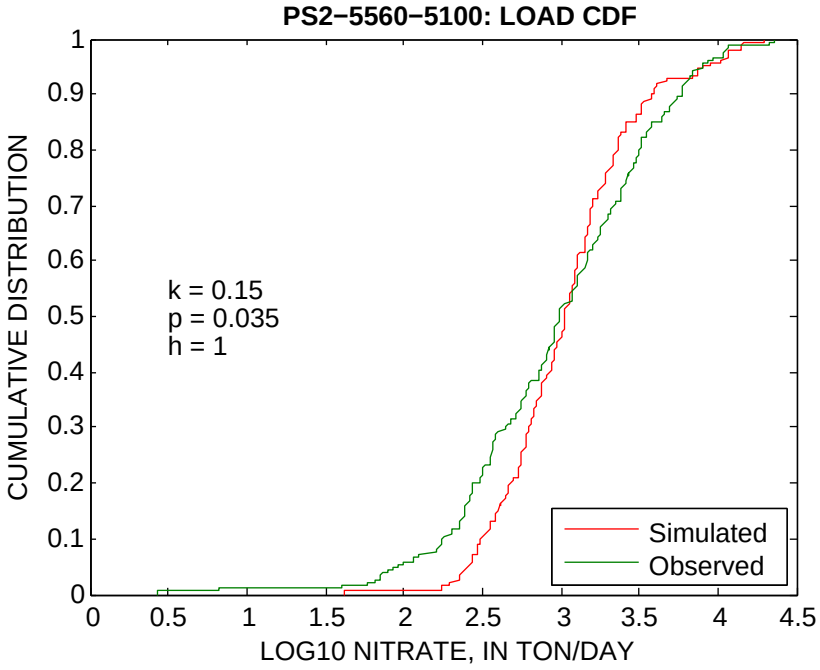


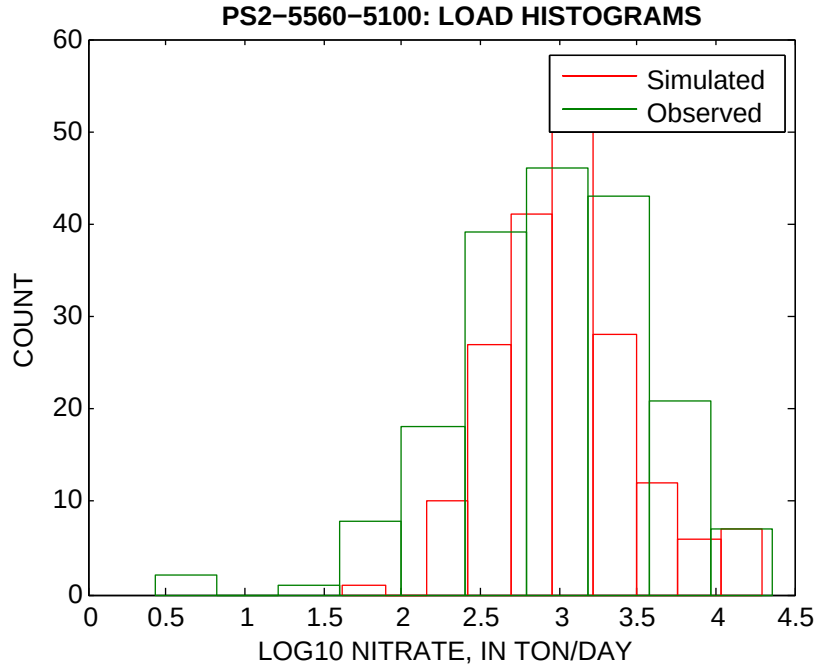


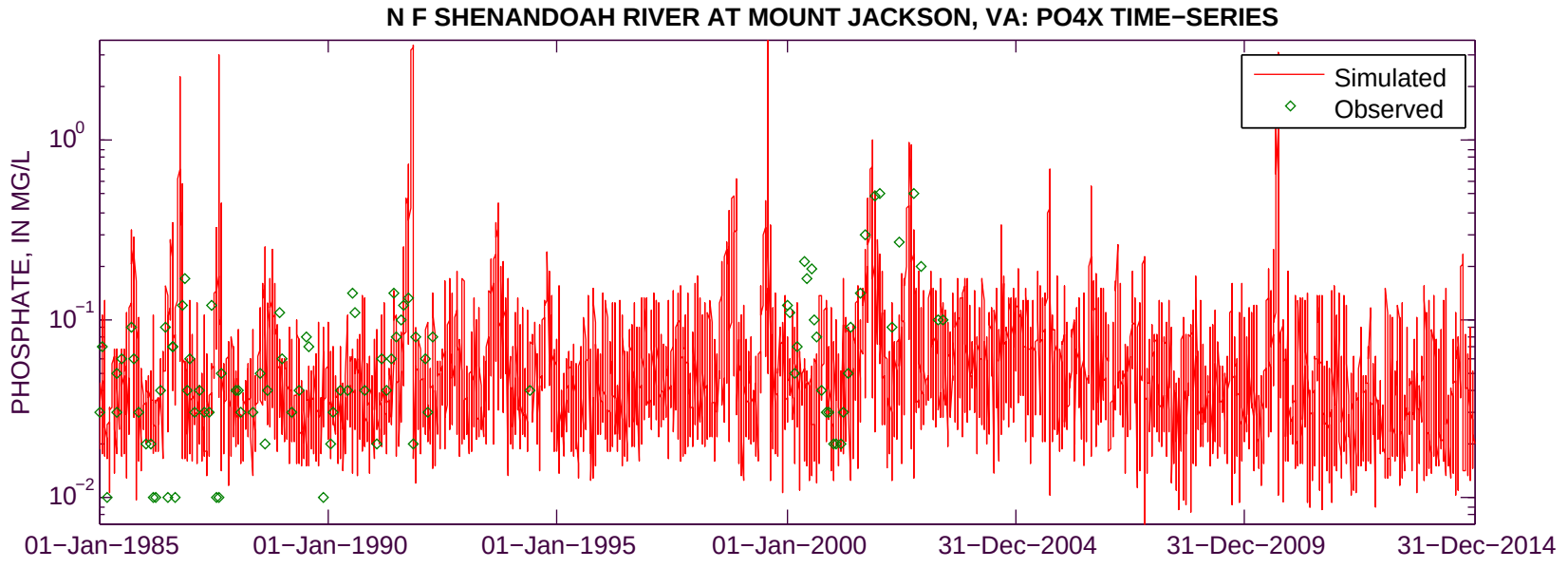
LOAD DATA
LOG10

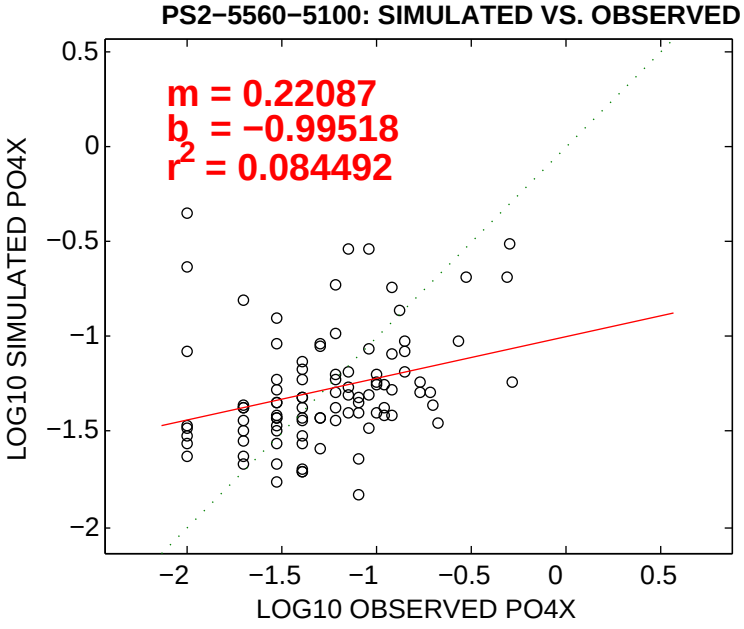


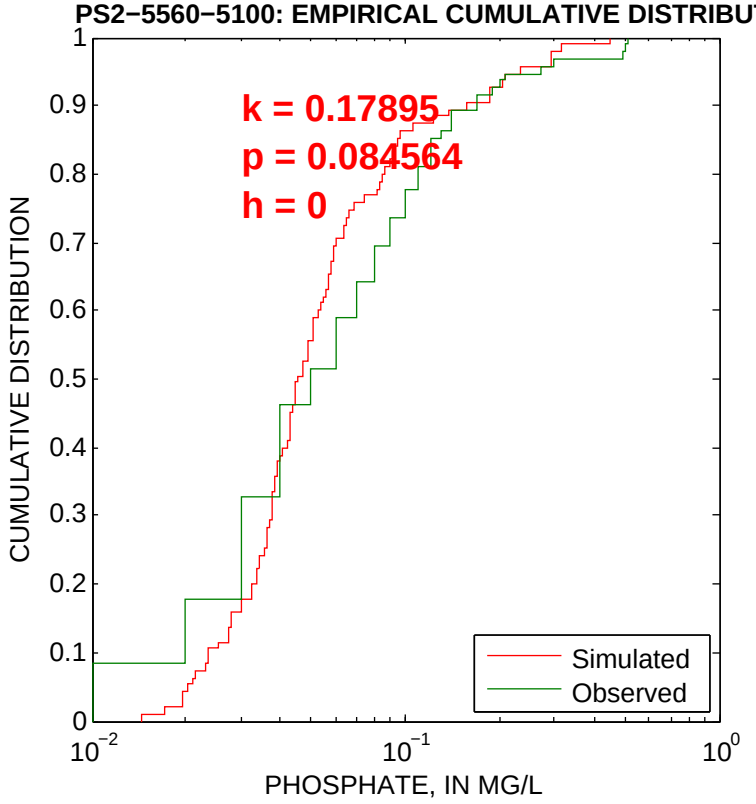












DATA SELECTION

scenario: P620171001WQ | file: PO4X.calib

plot: PO4X - phosphate

Dates: 1/1/1985 – 12/31/201

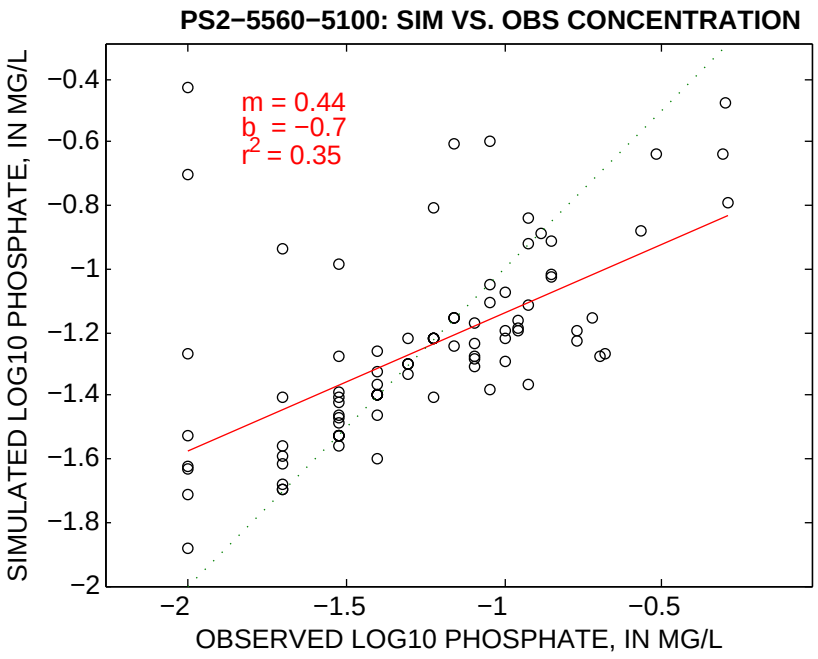
Drive: N/A | Directory: model | Observed: OBS20161101

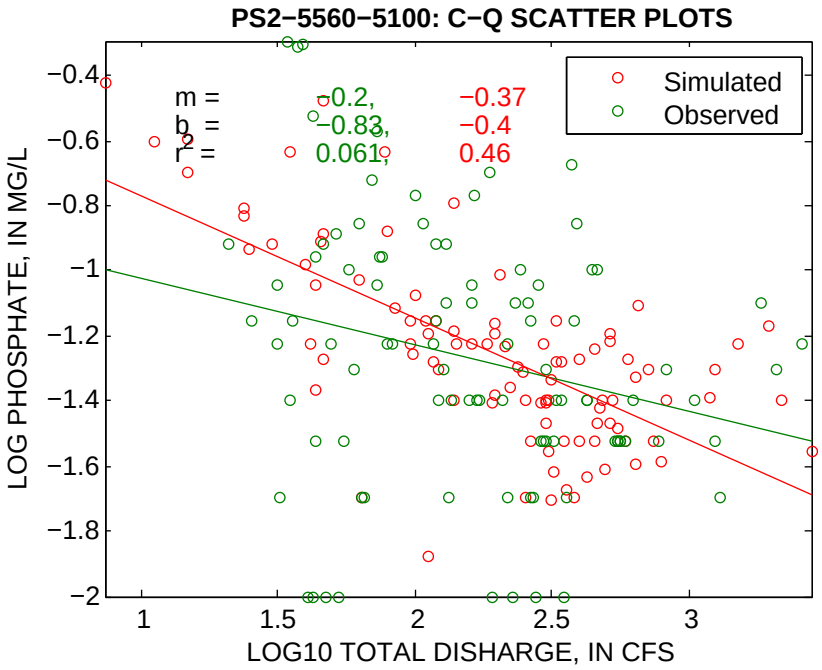
STATISTICS

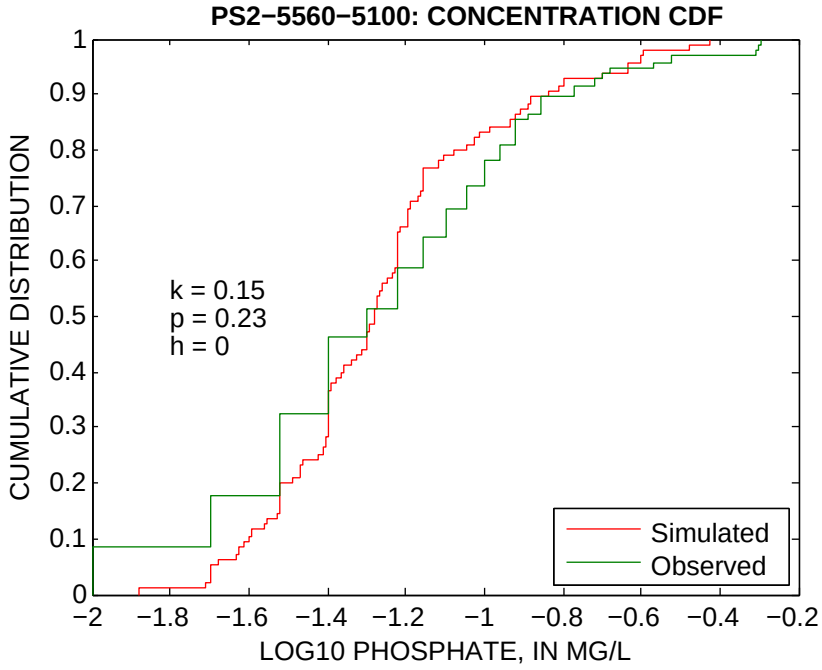
		observe	simulate
n		95	95
min		0.01	0.014559
		-2	-1.83687
mean		0.0815789	0.0706345
		-1.27287	-1.27632
media		0.05	0.045193
		-1.30103	-1.34493
max		0.51	0.45065
		-0.29243	-0.346161
varian		0.00886025	0.00516078
		0.154759	0.0893534
JB		0.001	0.001
		0.5	0.004791
		ra	log
%		-13.4157	0.270505
err.va		0.00990851	0.175762
rel.std.err		1.11831	1.13571
mod.eff		-0.118311	-0.135708

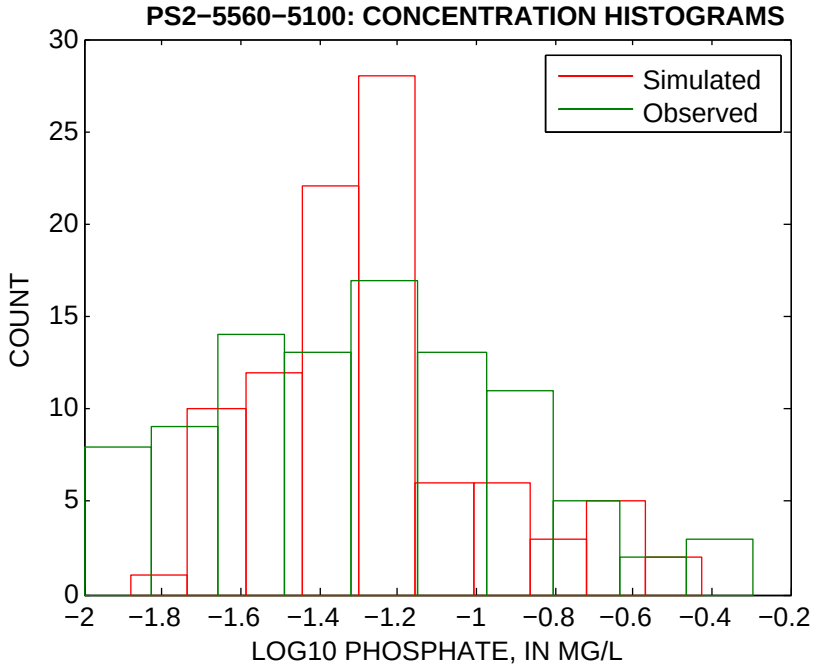
VERSION 2.1

ALL DATA
LOG10

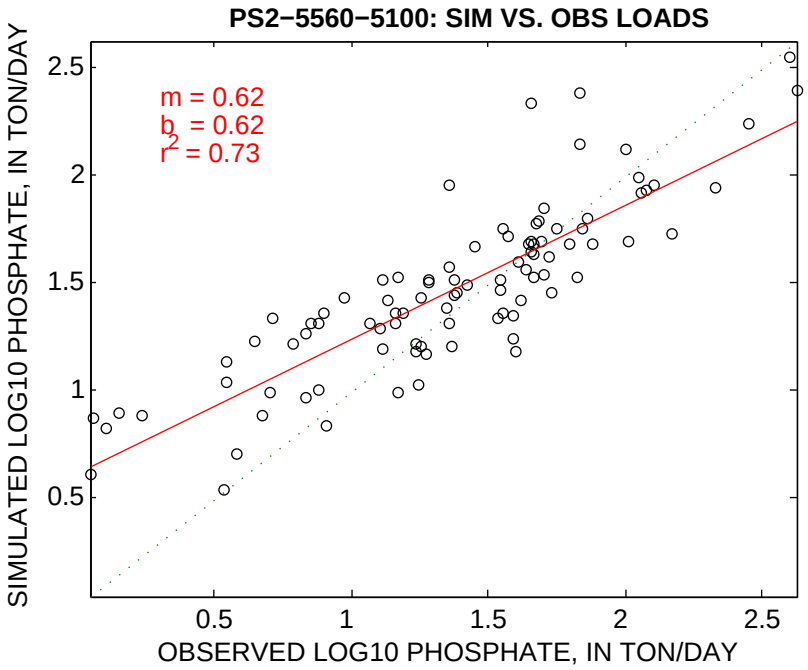


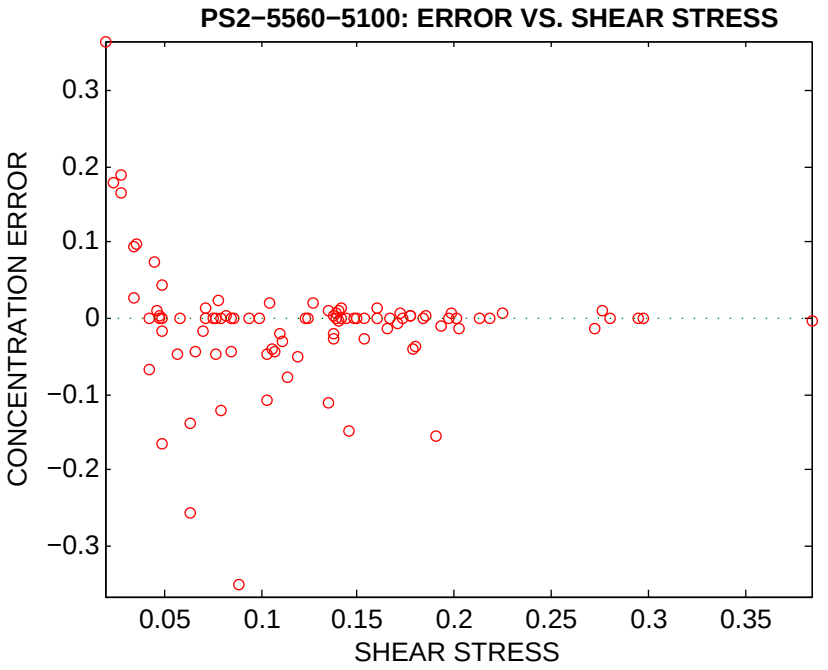


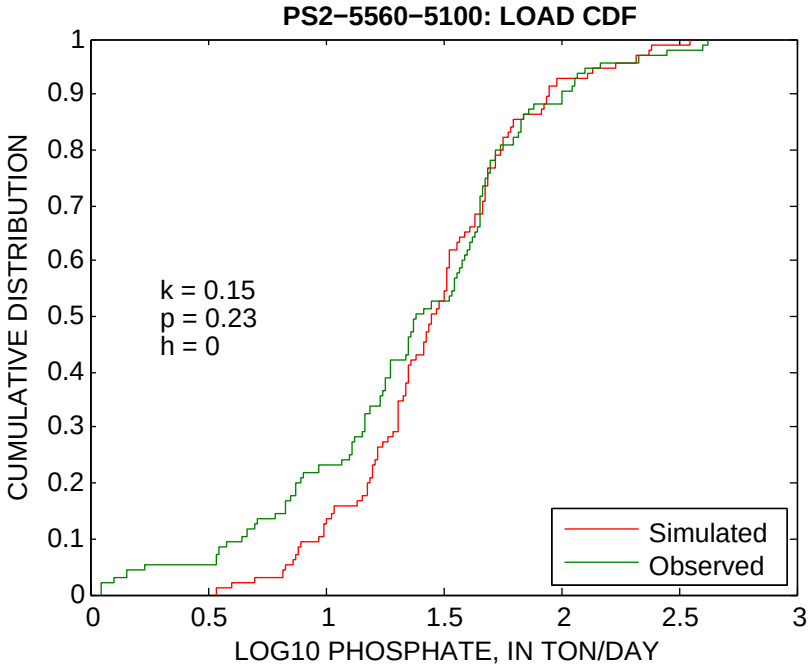


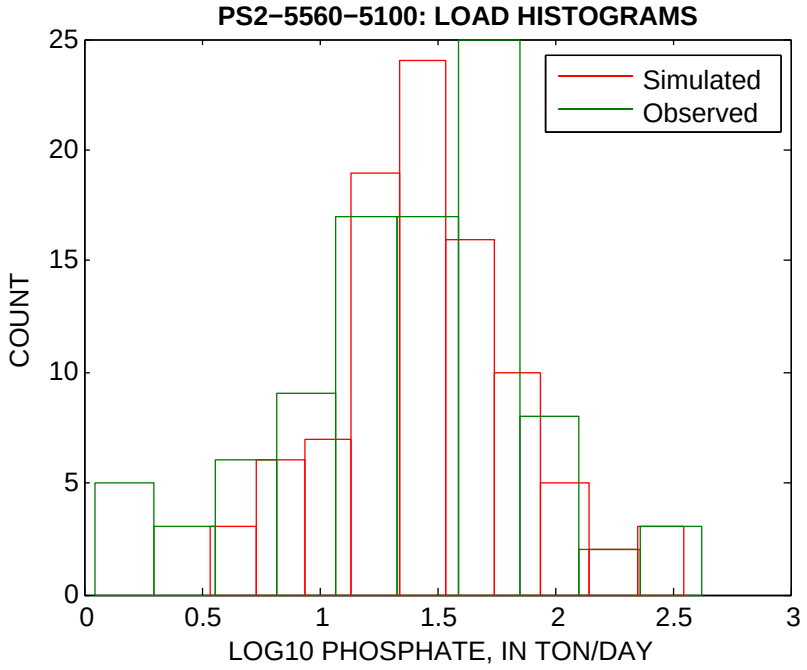


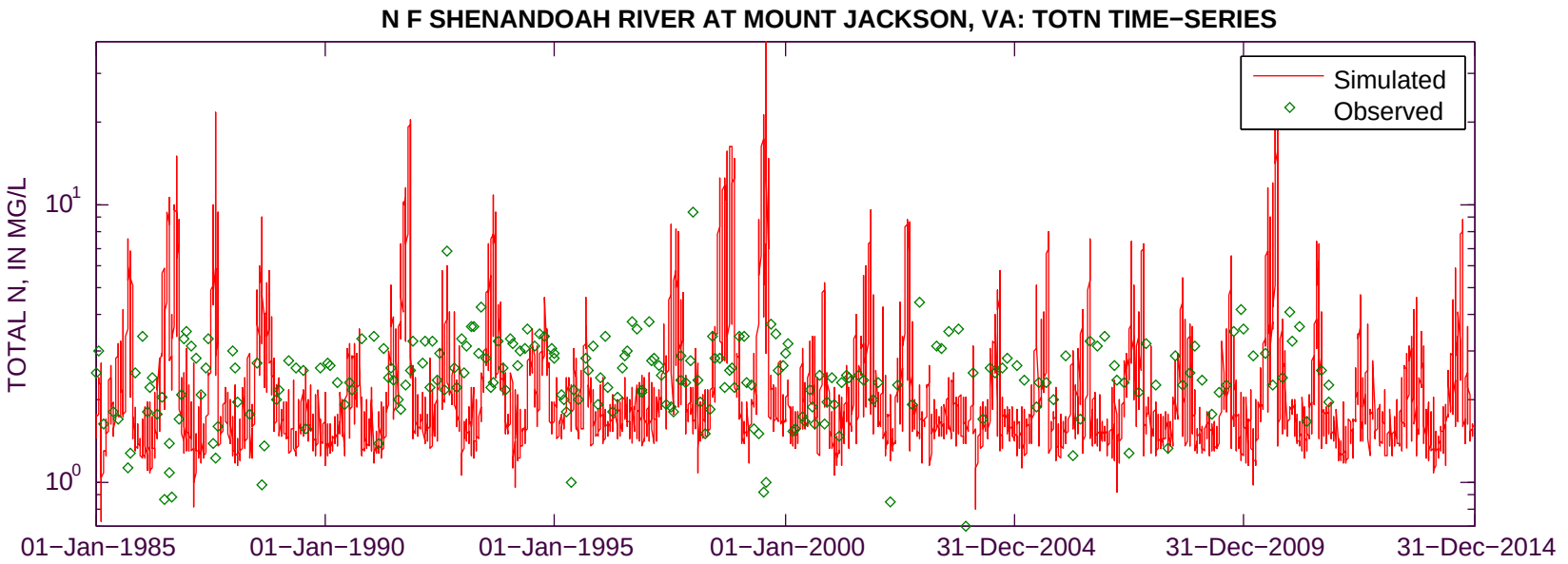
LOAD DATA
LOG10

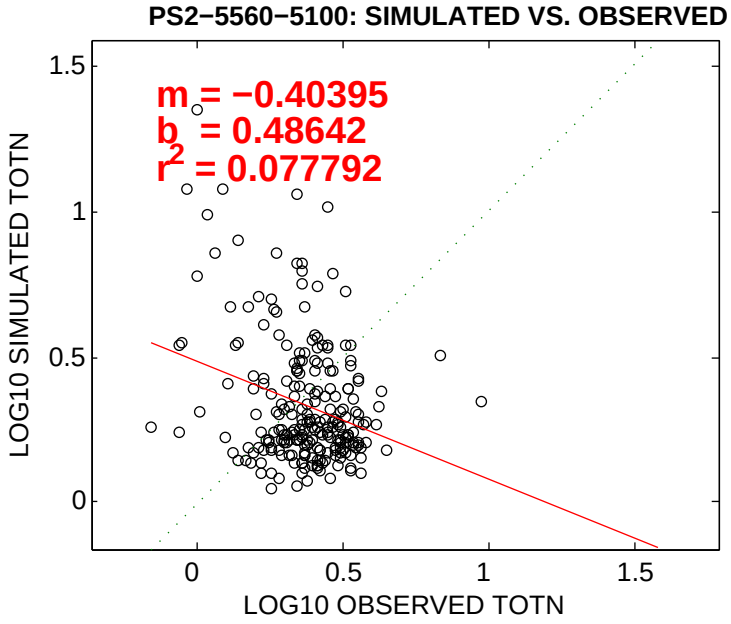


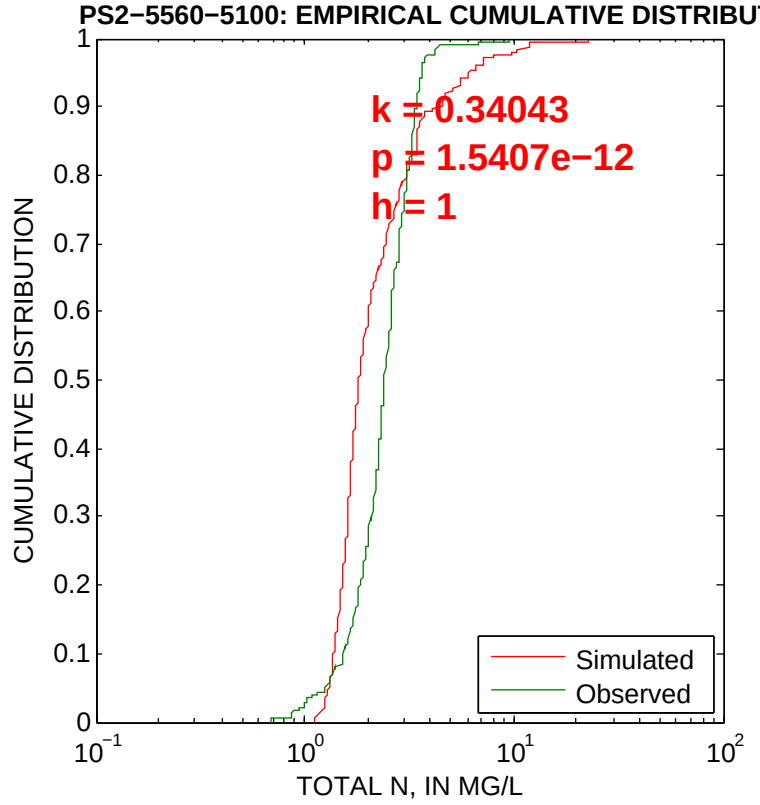












DATA SELECTION

scenario	file
P620171001WQ	TOTN.calib

plot: TOTN - total nitrogen

Dates: 1/1/1985 – 12/31/201

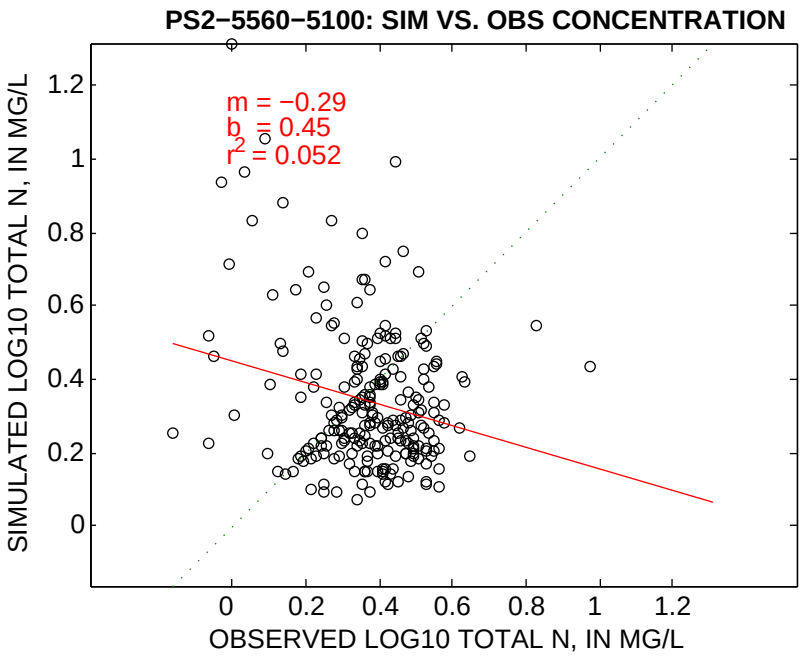
Drive	Directory	Observed
N/A	model	OBS20161101

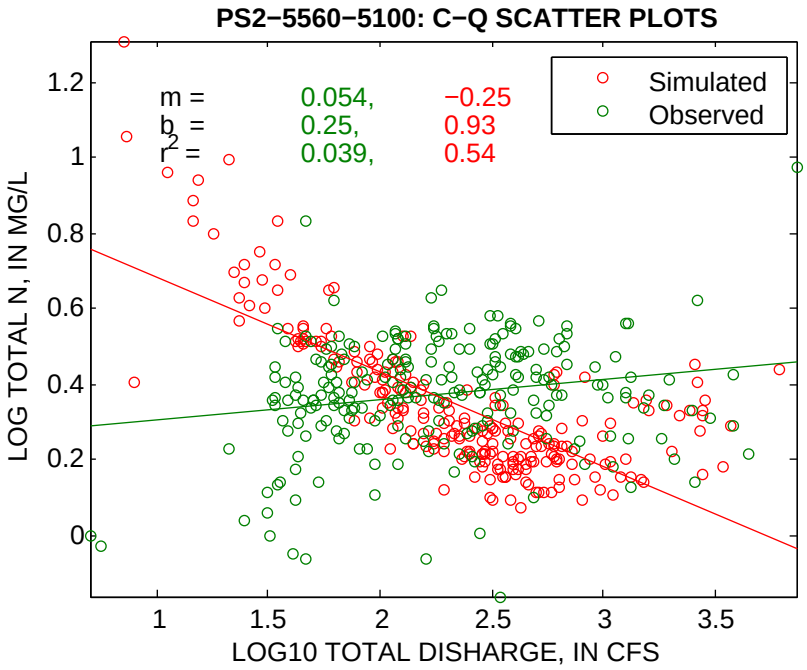
STATISTICS

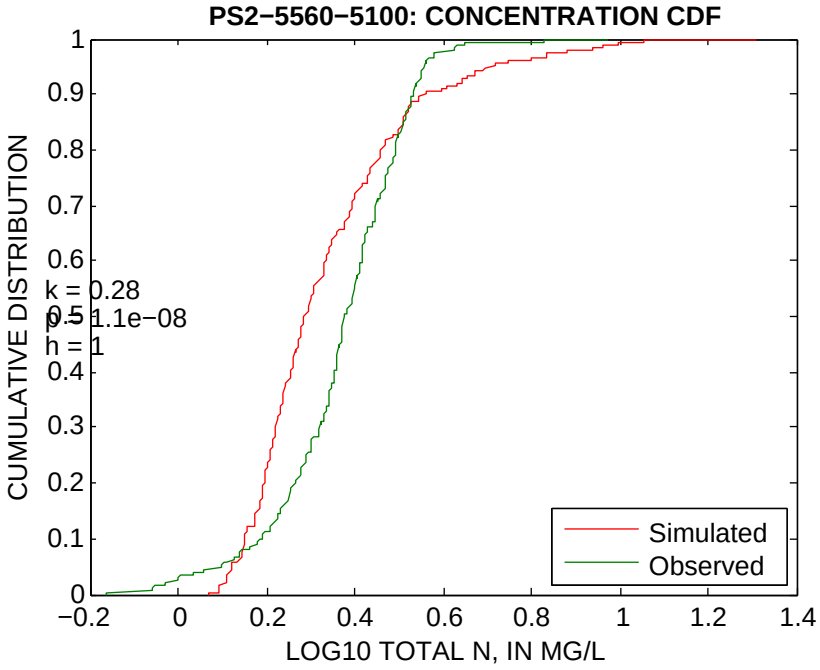
	n	235	235
		observe	simulate
min		0.69	1.111
		-0.161151	0.0457141
mean		2.4917	2.56383
		0.371495	0.336356
media		2.38	1.8194
		0.376577	0.259928
max		9.48	22.443
		0.976808	1.35108
varian		0.795722	4.81724
		0.0224721	0.0471363
JB		0.001	0.001
		0.001	0.001
		ra	log
%		2.89477	-9.45861
err.va		6.53533	0.0890034
rel.std.err		8.21308	3.96062
mod.eff		-7.21308	-2.96062

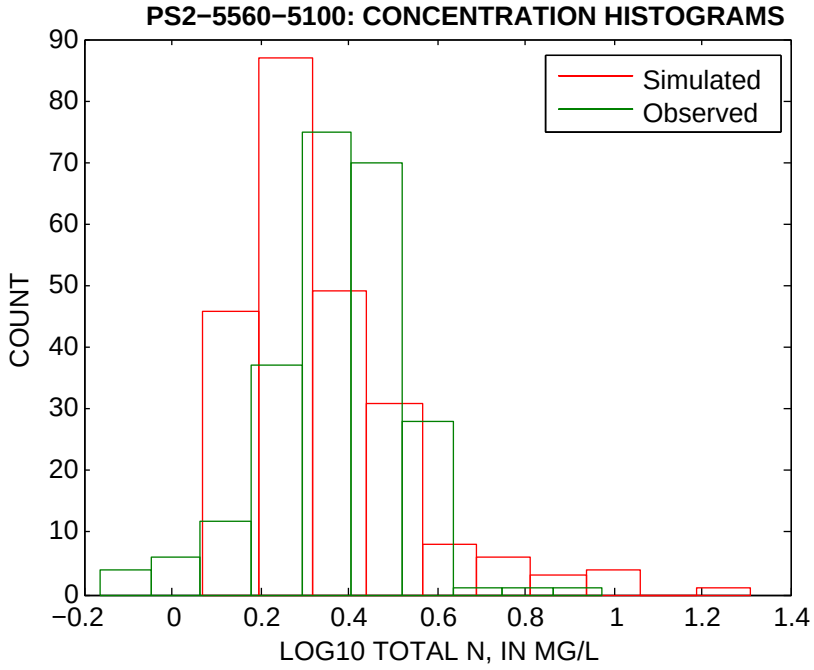
VERSION 2.1

ALL DATA
LOG10

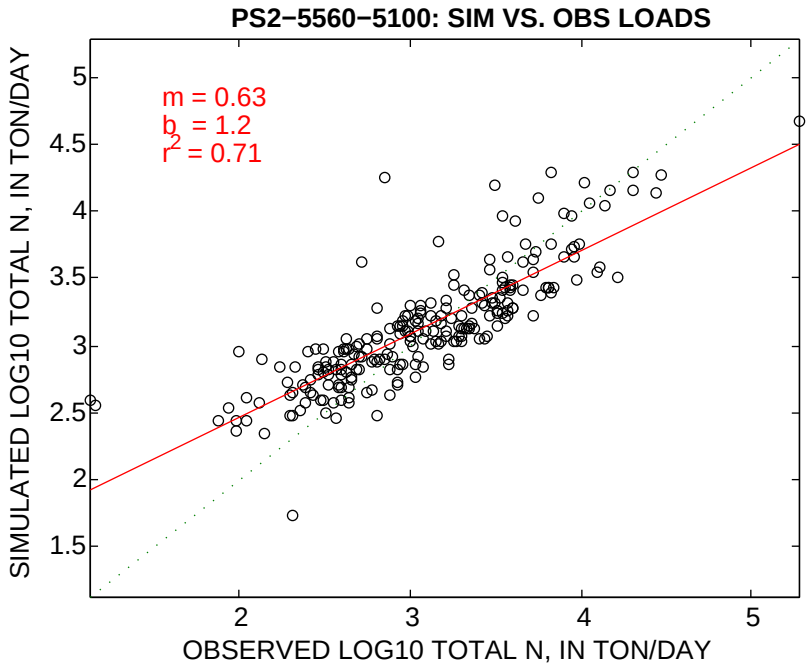


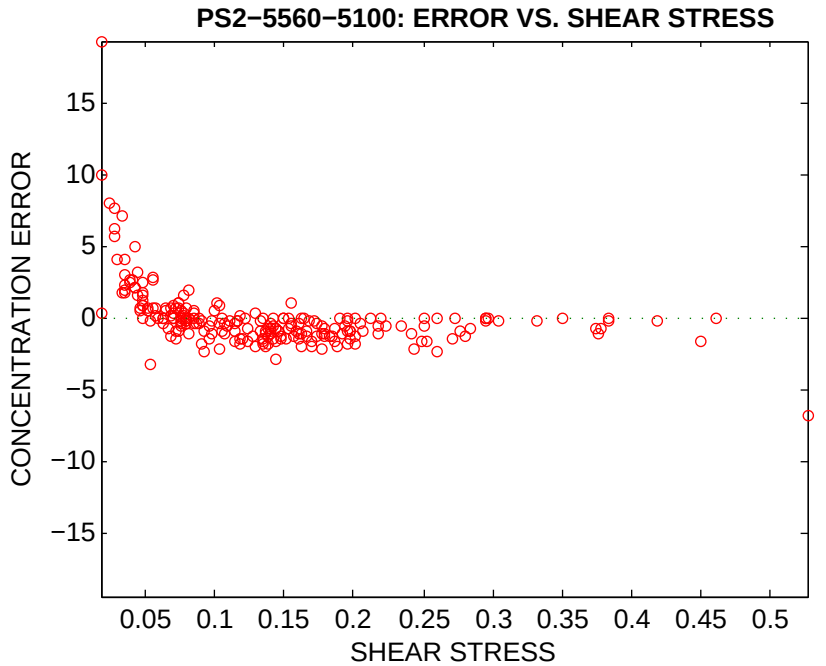


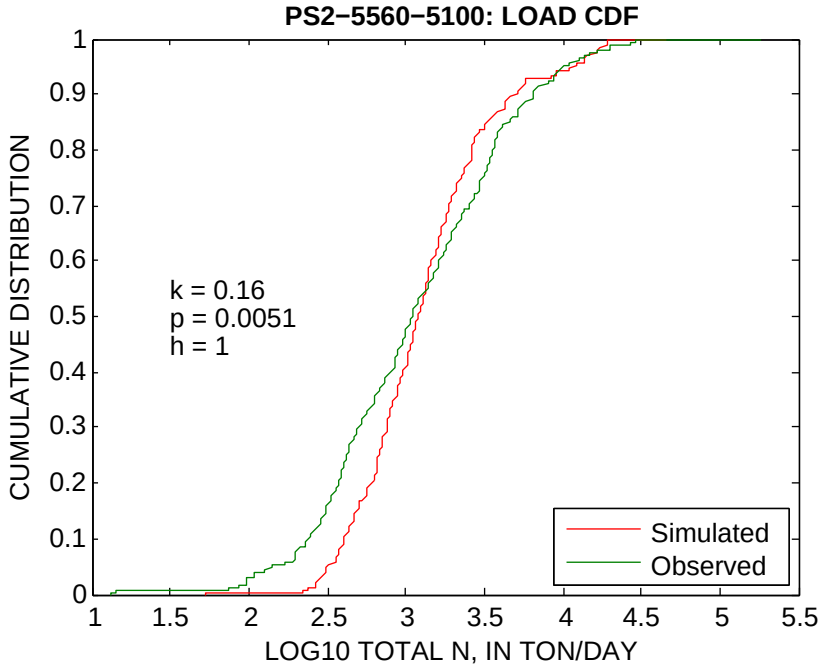


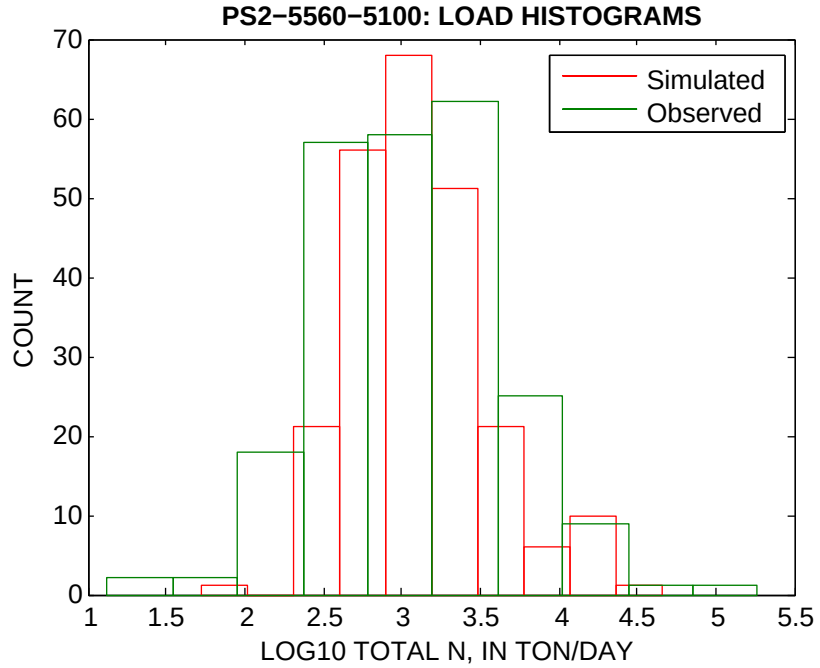


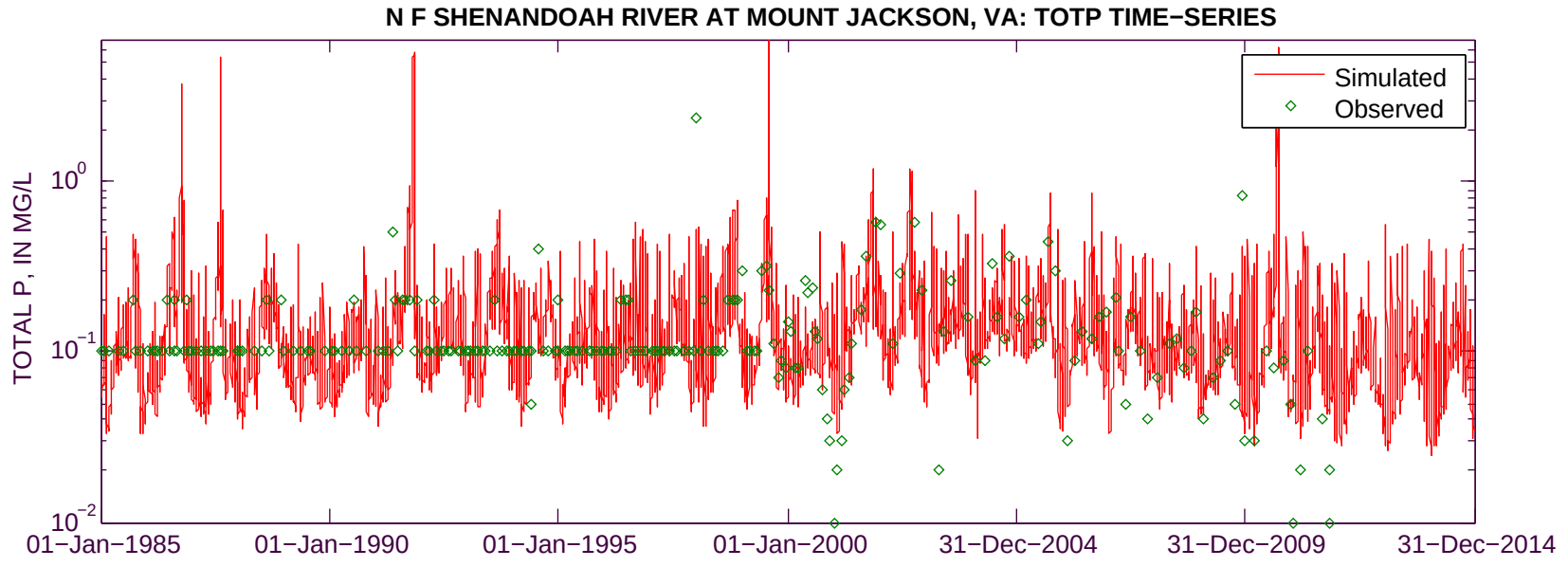
LOAD DATA
LOG10

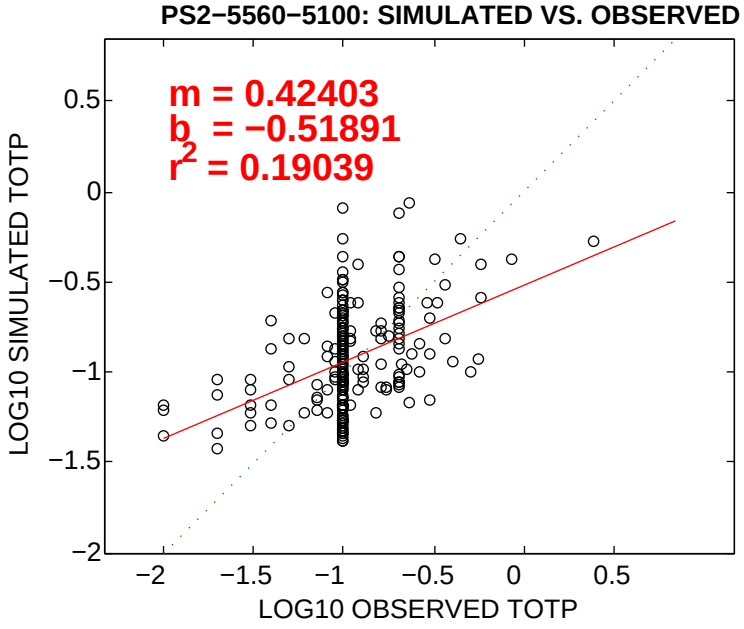


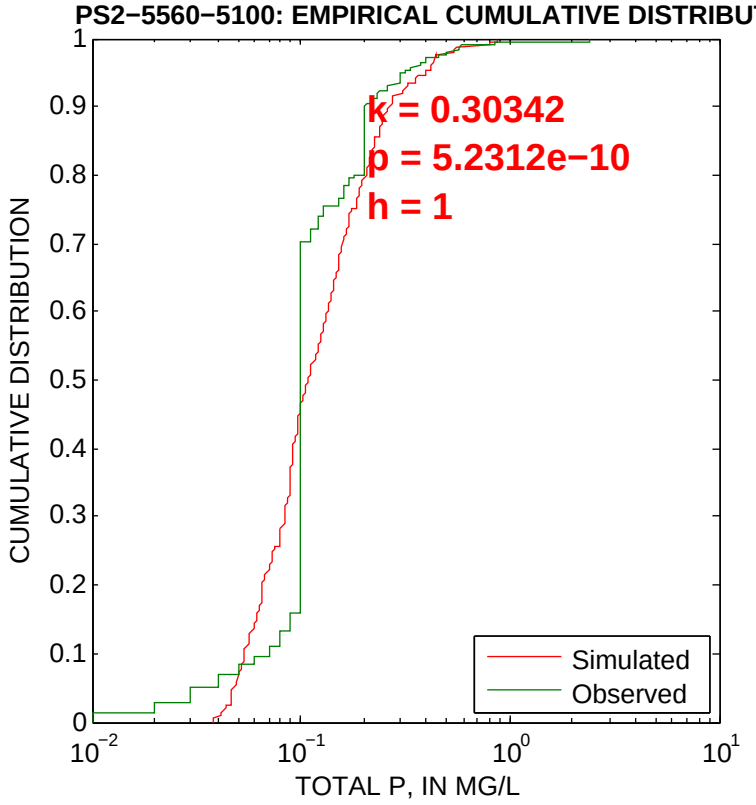












DATA SELECTION

scenario	file
P620171001WQ	TOTP.calib

plot: TOTP - total phosphorus

Dates: 1/1/1985 – 12/31/201

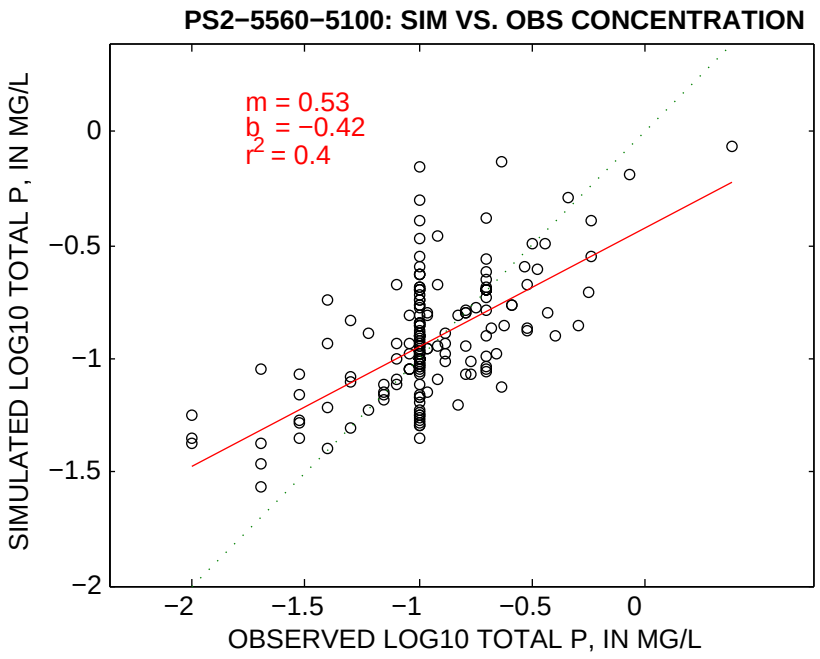
Drive	Directory	Observed
N/A	model	OBS20161101

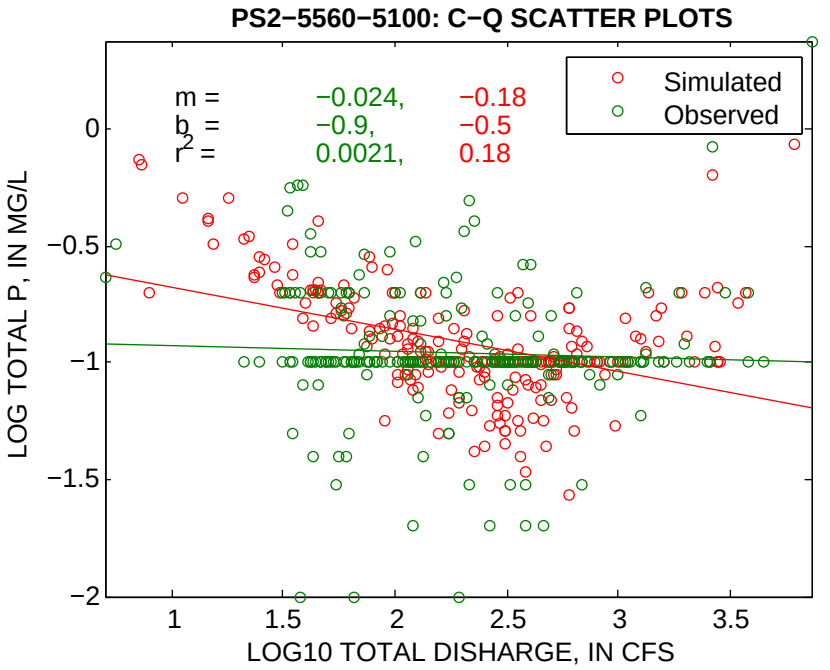
STATISTICS

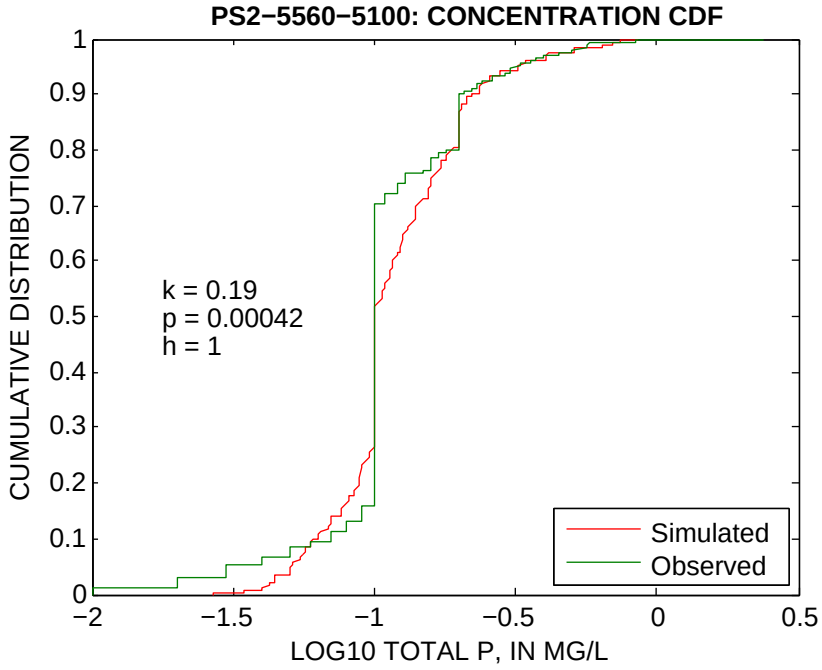
	n	observe	simulate
		234	234
min		0.01	0.037658
		-2	-1.42414
mean		0.141667	0.148876
		-0.955423	-0.924041
media		0.1	0.109325
		-1	-0.961283
max		2.4	0.86935
		0.380211	-0.0608053
varian		0.0317118	0.0150463
		0.0797599	0.0753242
JB		0.001	0.001
		0.001	0.006677
		ra	log
%		5.08873	-3.28468
err.va		0.0312598	0.0884322
rel.std.err		0.985747	1.10873
mod.eff		0.0142525	-0.10873

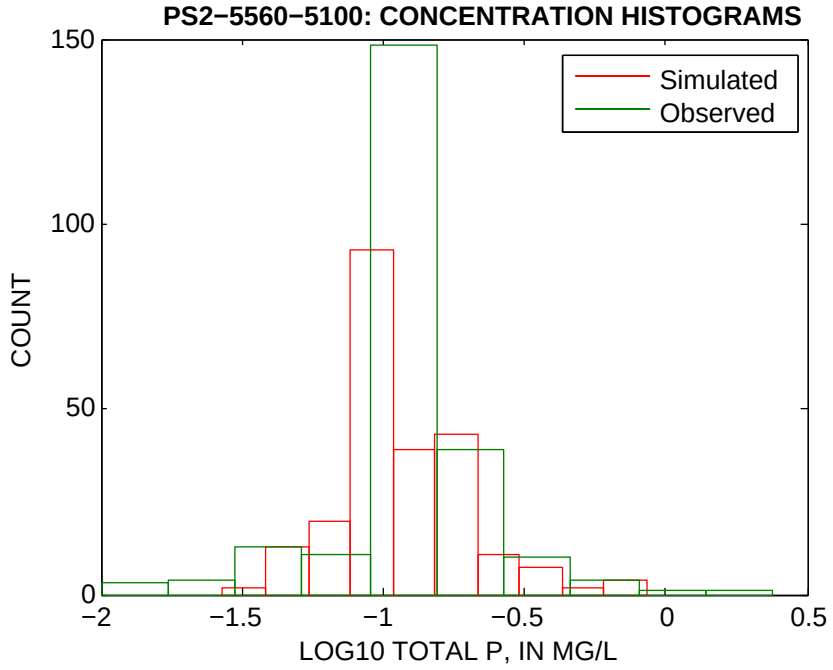
VERSION 2.1

ALL DATA
LOG10

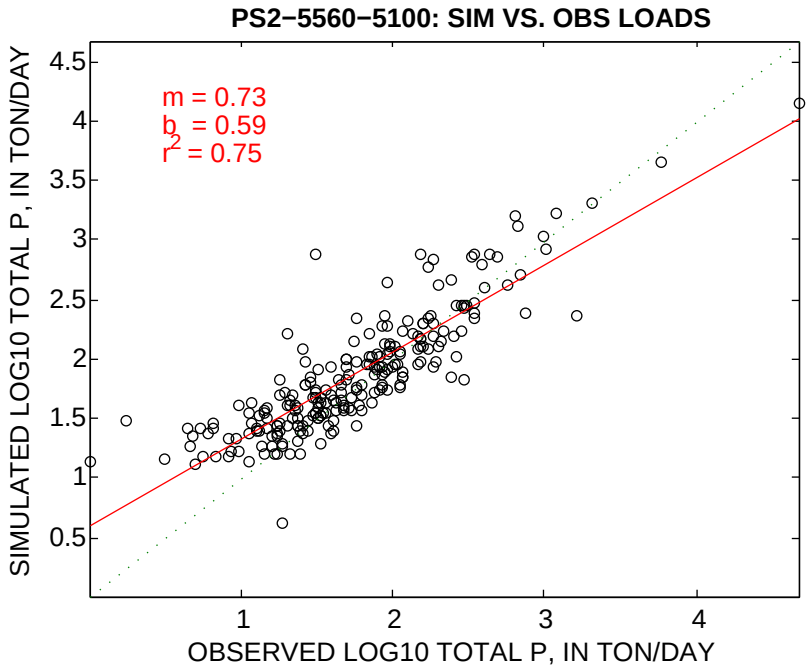


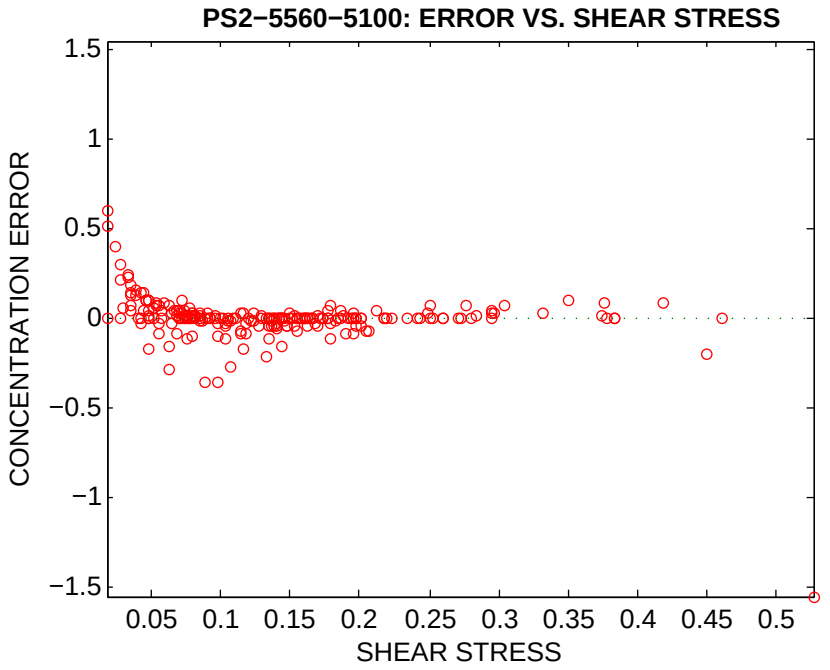


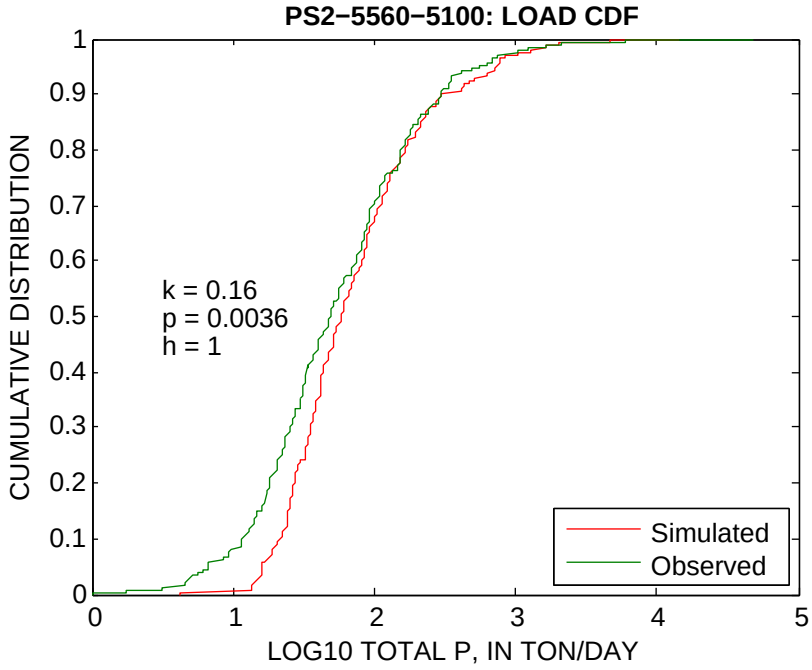


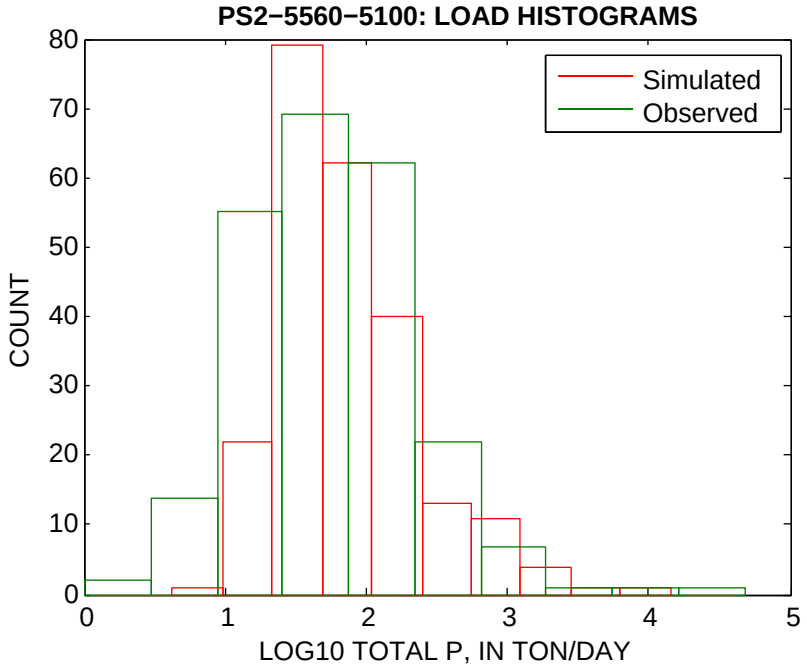


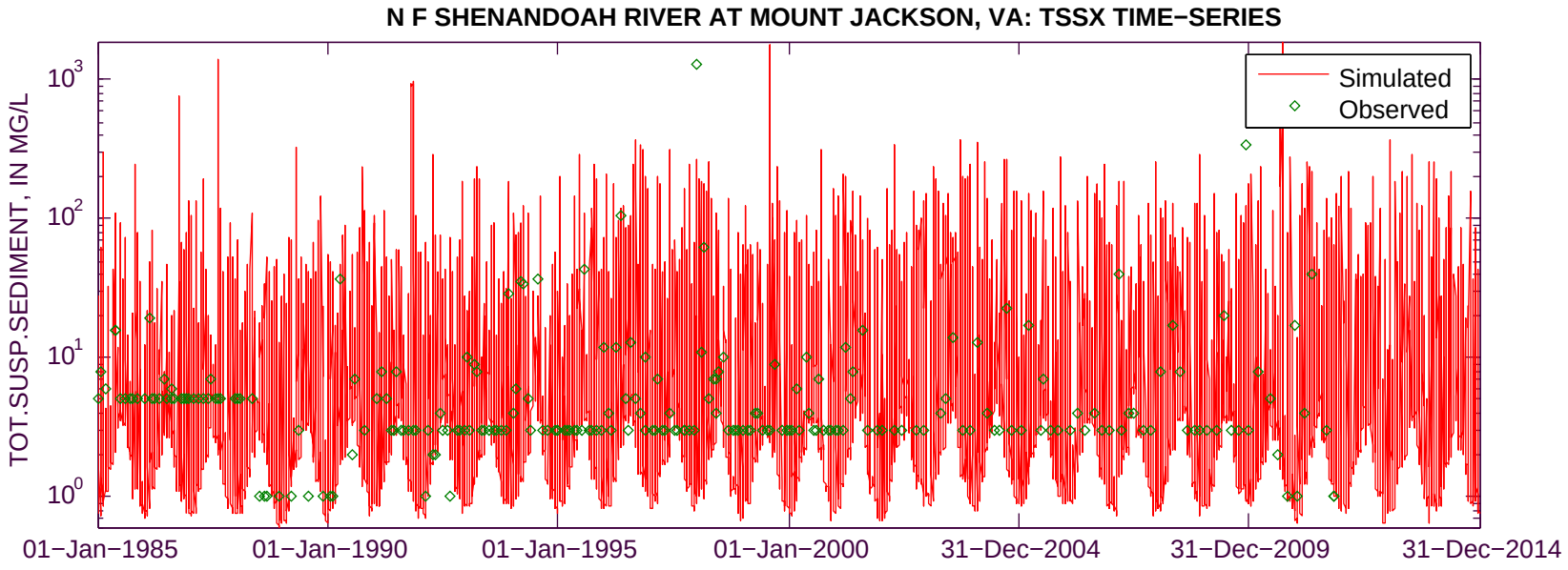
LOAD DATA
LOG10

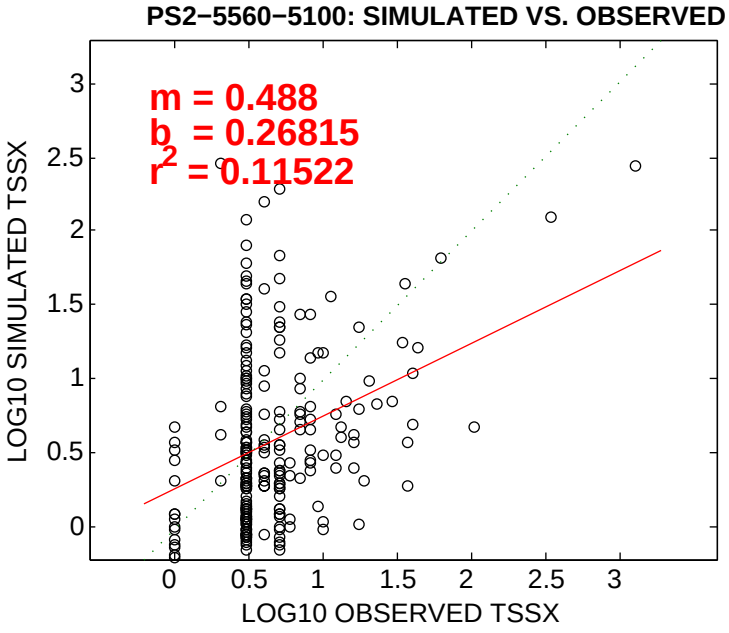


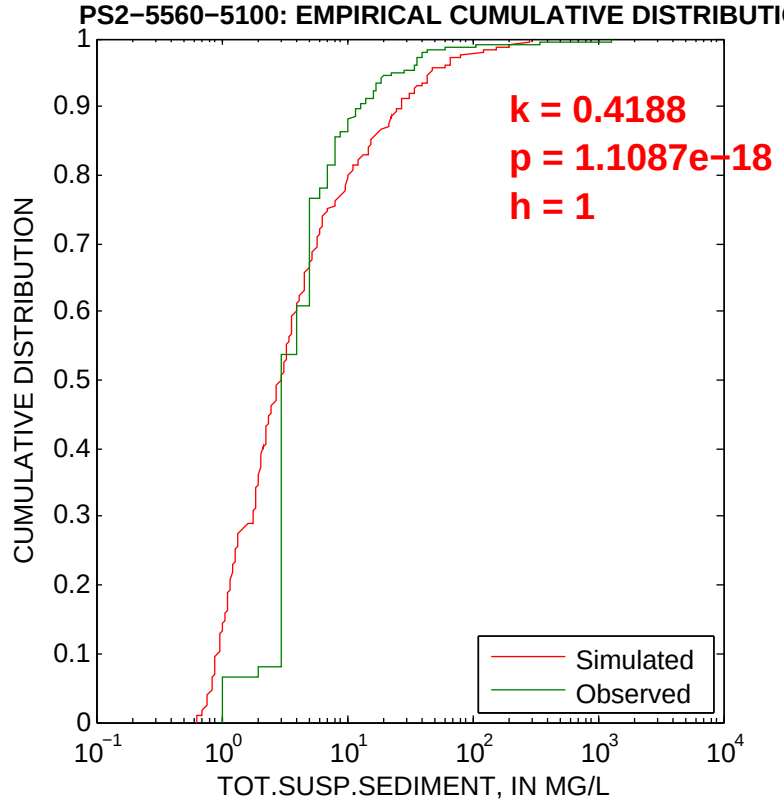












DATA SELECTION

scenario	file
P620171001WQ	TSSX.calib

plot: TSSX - total suspended ...

Dates 1/1/1985 12/31/201

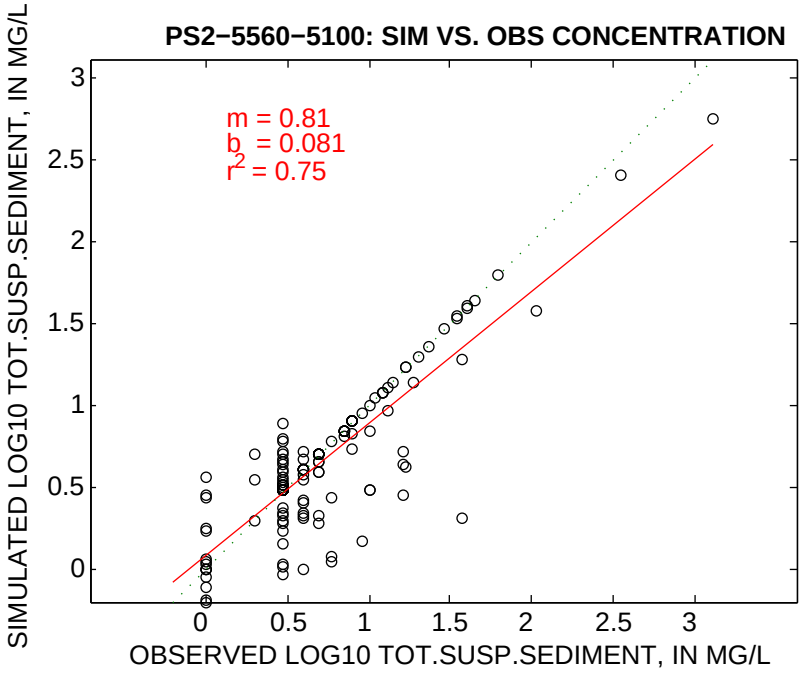
Drive	Directory	Observed
N/A	model	OBS20161101

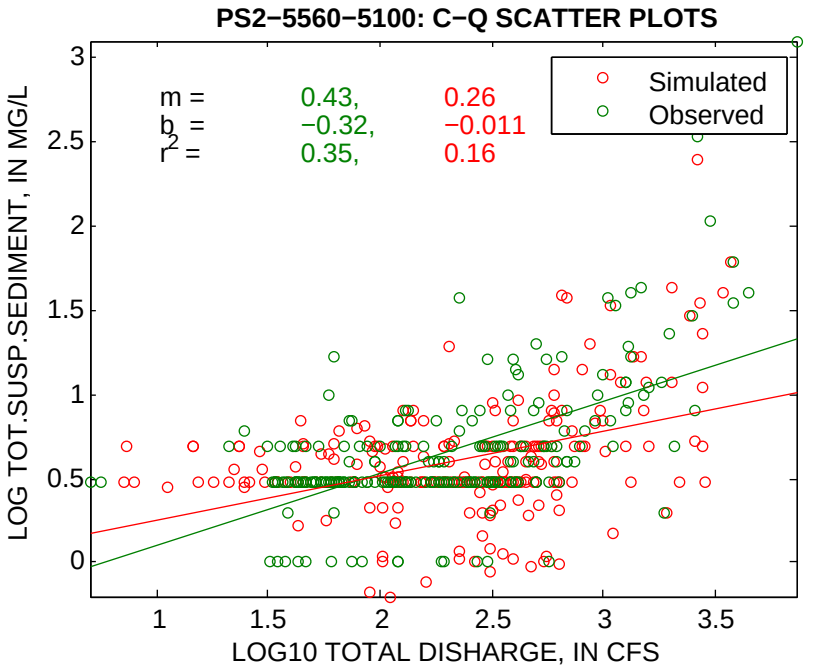
STATISTICS

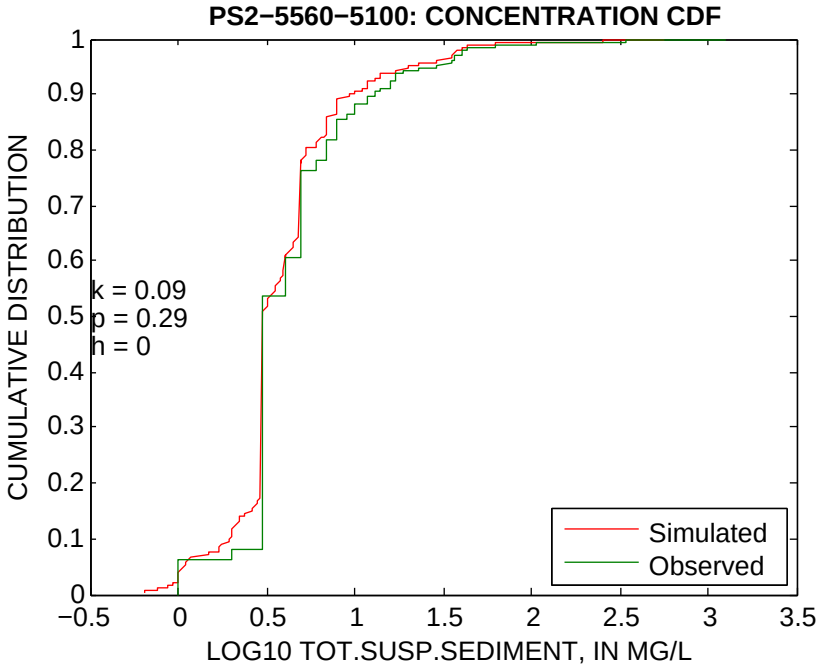
	n	observe	simulate
		234	234
min		1	0.62638
		0	-0.203162
mean		13.406	12.3765
		0.651899	0.586278
media		3	2.9558
		0.477121	0.470527
max		1275	289.74
		3.10551	2.46201
varian		7459.3	1132.42
		0.154209	0.318736
JB		0.001	0.001
		0.001	0.001
		ra	log
%		-7.67964	-10.0661
err.va		5420.04	0.326763
rel.std.err		0.726616	2.11896
mod.eff		0.273384	-1.11896

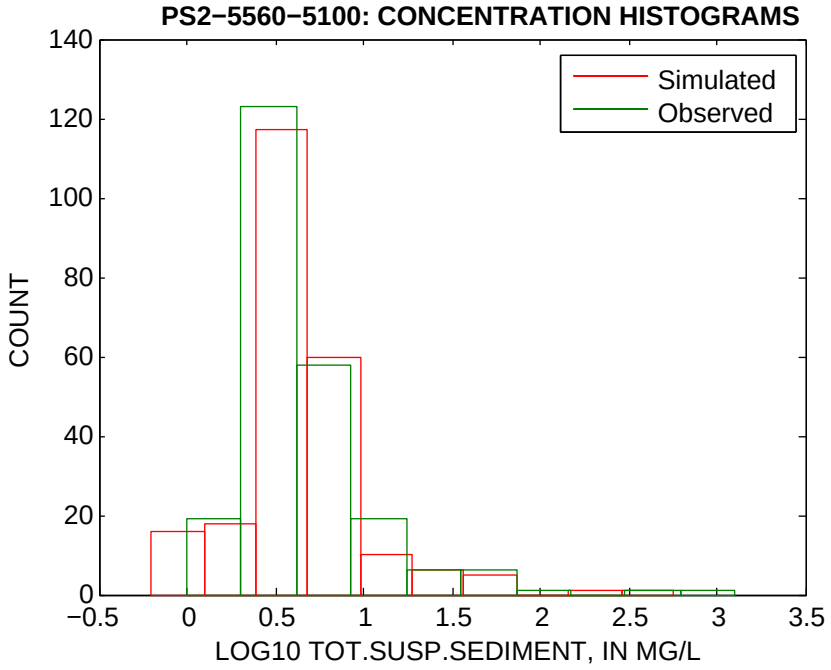
VERSION 2.1

ALL DATA
LOG10

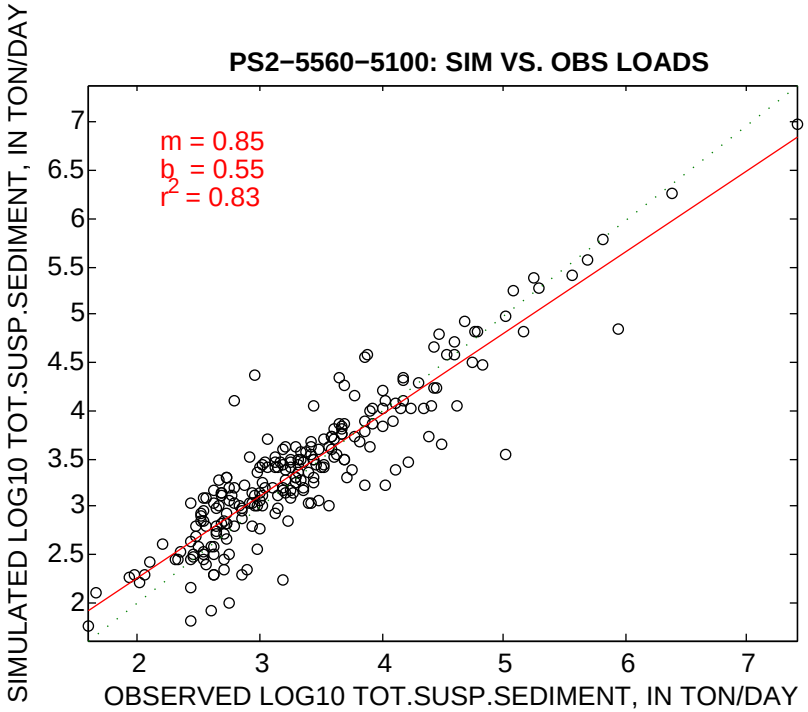


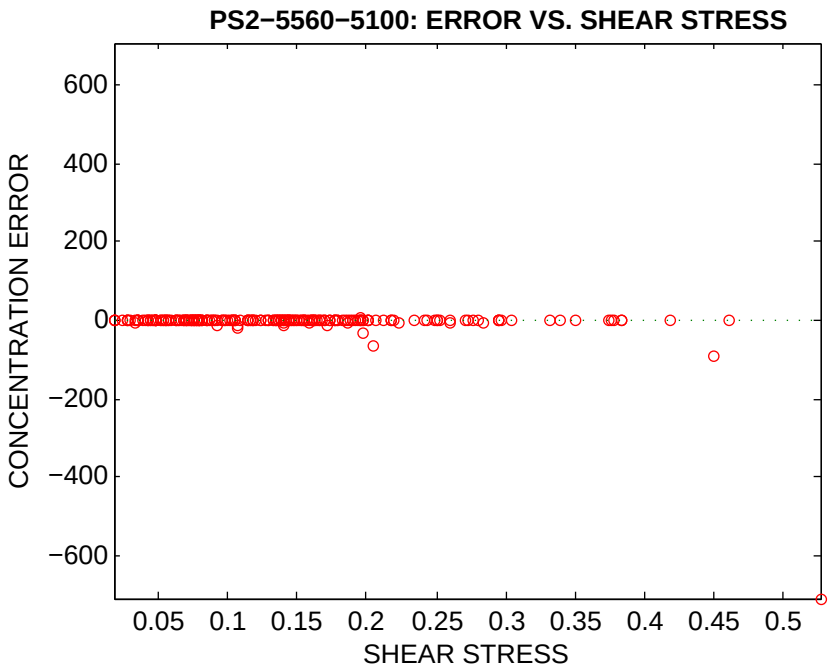


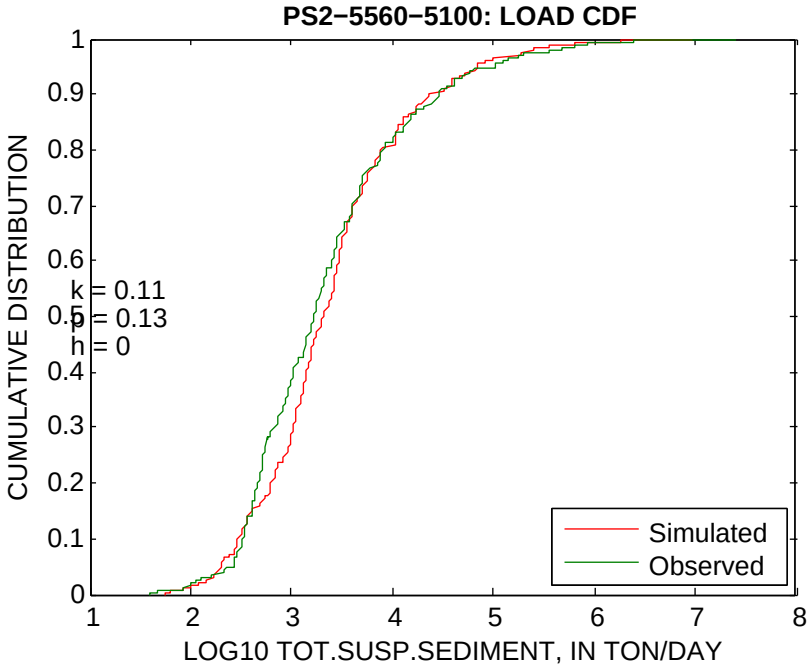


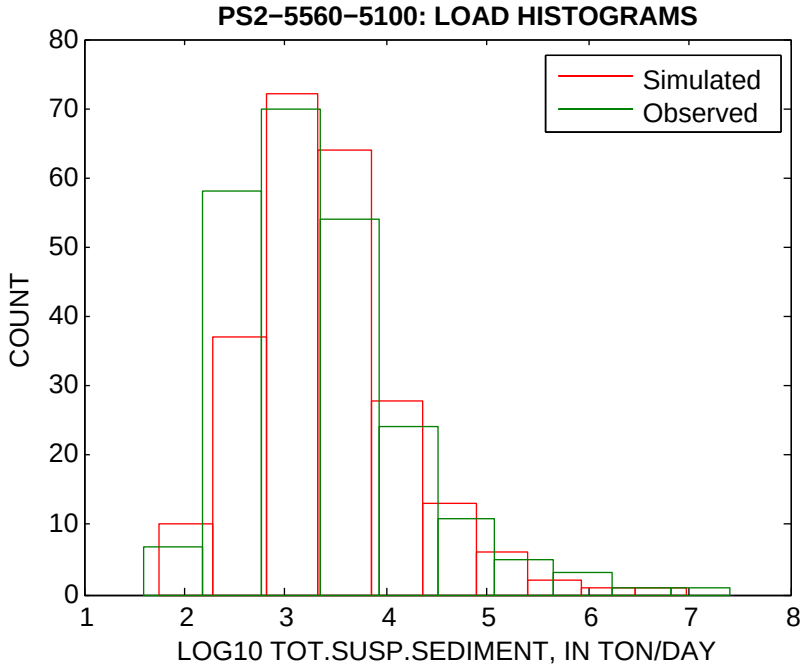


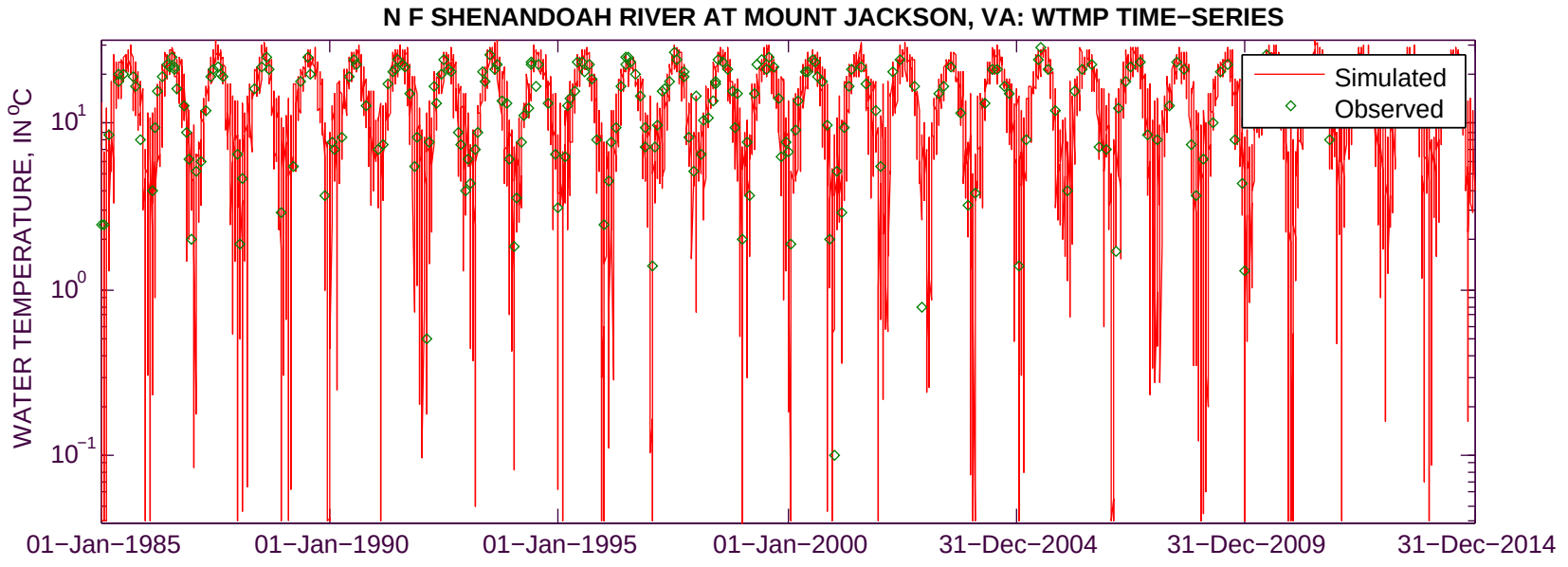
LOAD DATA
LOG10

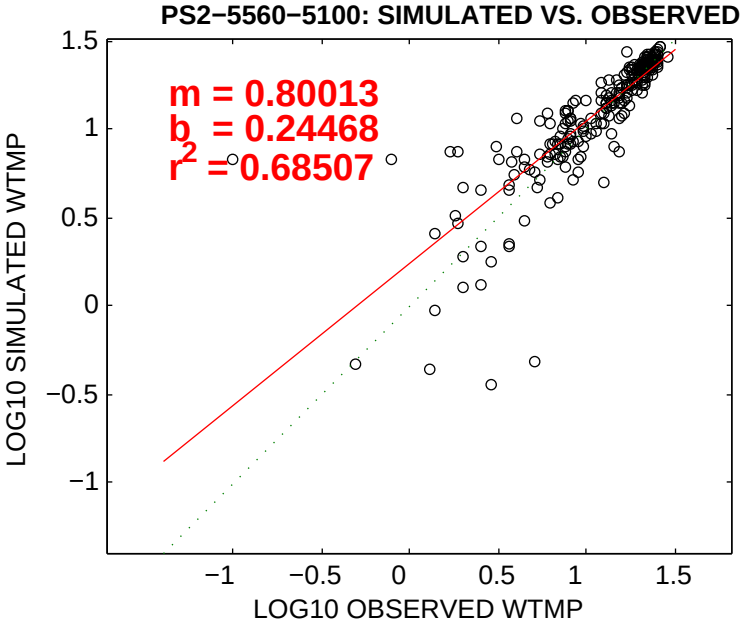


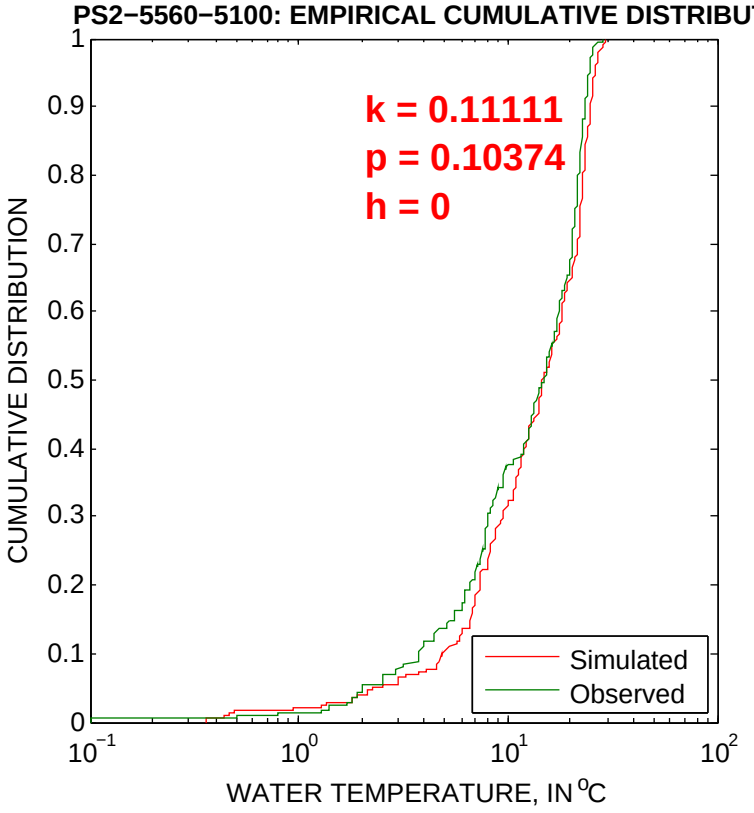












DATA SELECTION

scenario	file
P620171001WQ	WTMP.calib

plot: WTMP - water tempera...

Dates: 1/1/1985 – 12/31/201

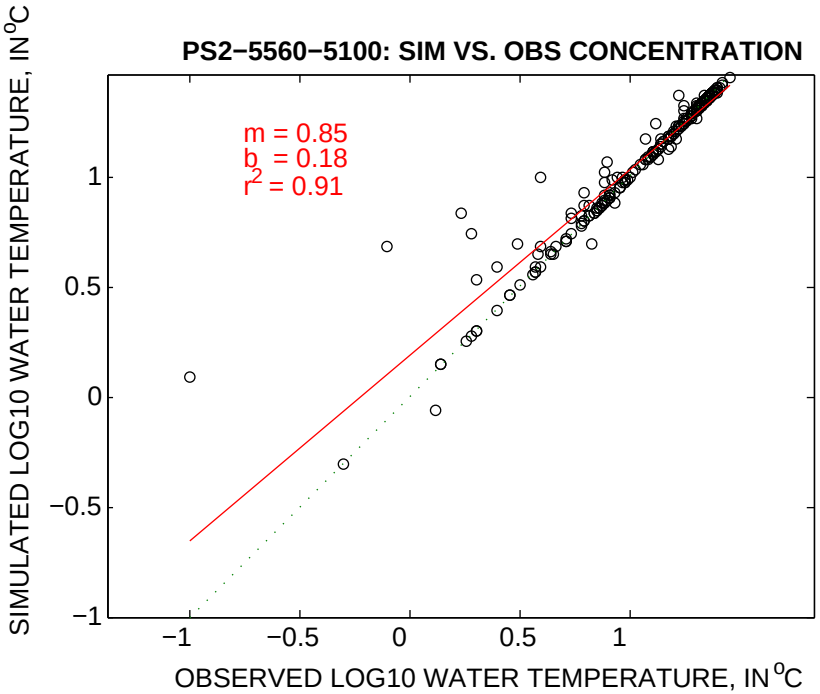
Drive	Directory	Observed
N/A	model	OBS20161101

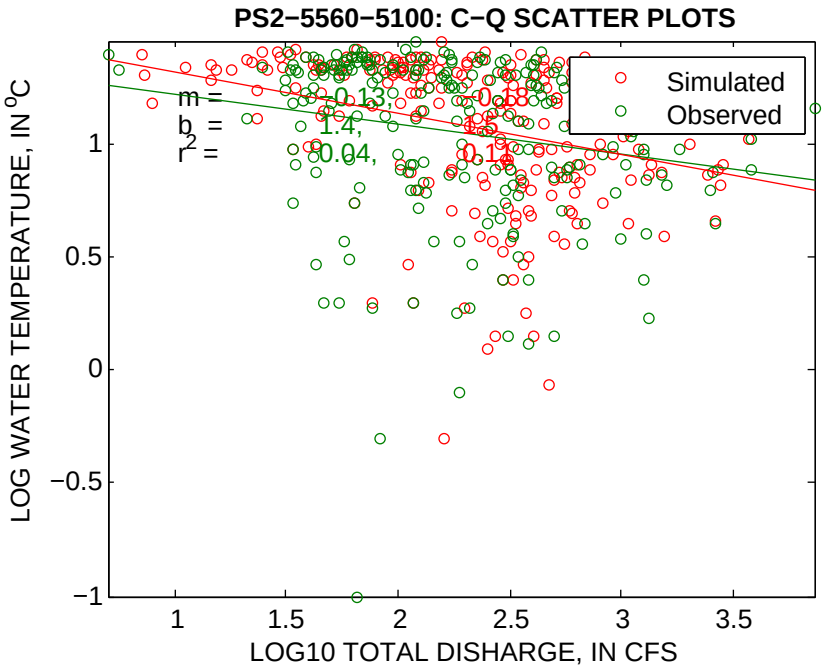
STATISTICS

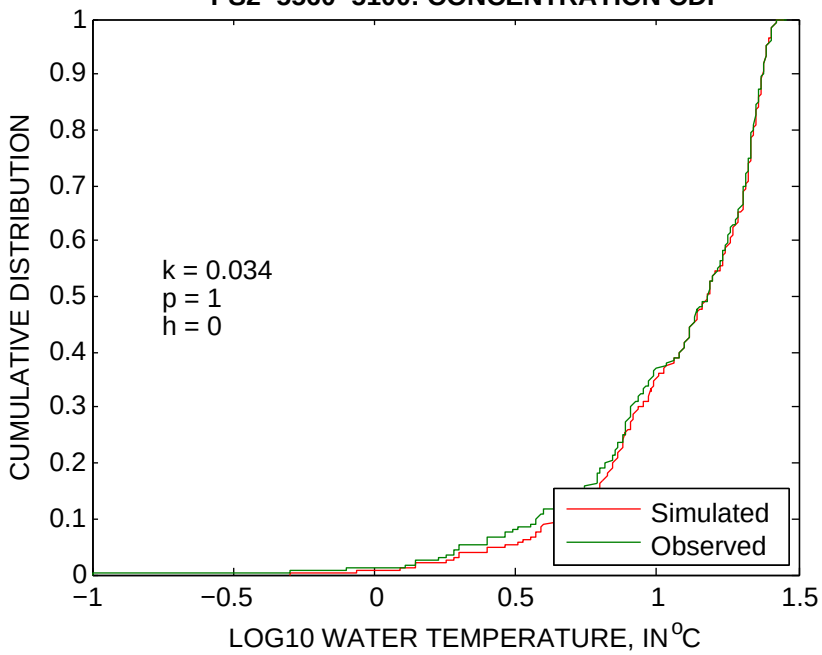
	n	observe	simulate
		234	234
min		0.1	0.36444
		-1	-0.438374
mean		14.1914	15.1046
		1.05128	1.08584
media		15	14.6625
		1.17609	1.16618
max		28.8	29.555
		1.45939	1.47063
varian		56.4696	59.5724
		0.128363	0.119957
JB		0.003654	0.005766
		0.001	0.001
		ra	log
%		6.43506	3.28752
err.va		7.65966	0.0441061
rel.std.err		0.135642	0.343604
mod.eff		0.864358	0.656396

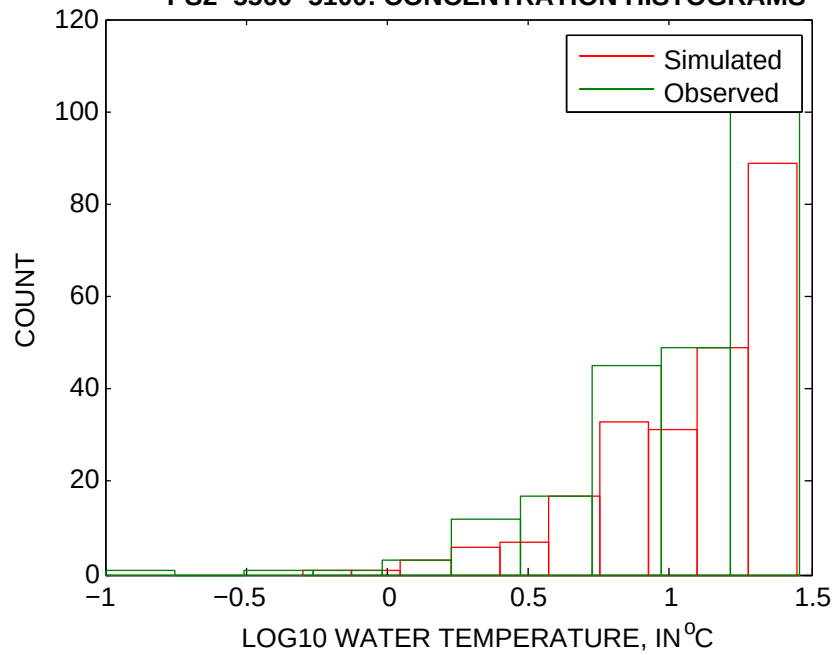
VERSION 2.1

ALL DATA
LOG10

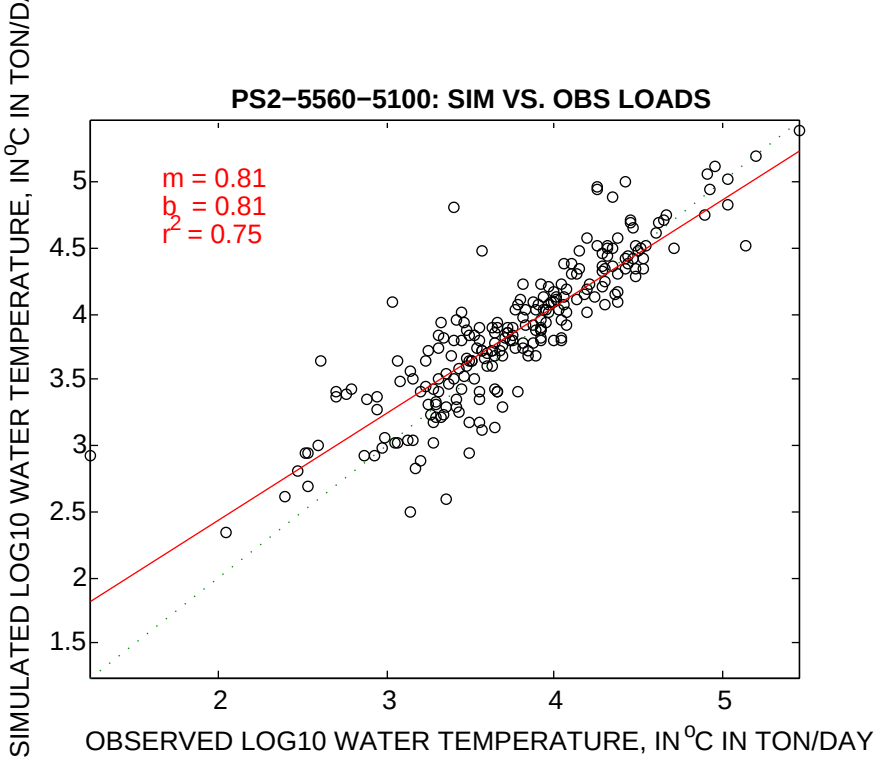


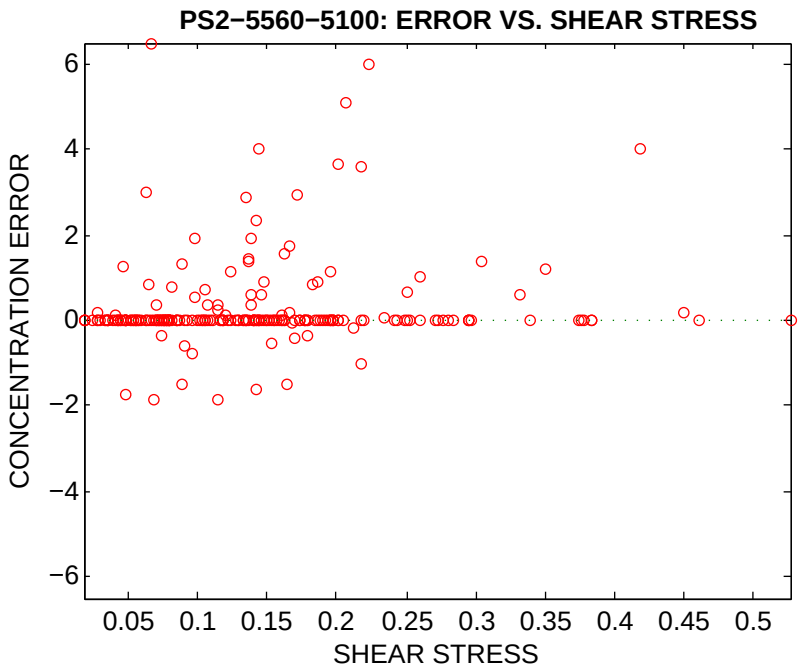


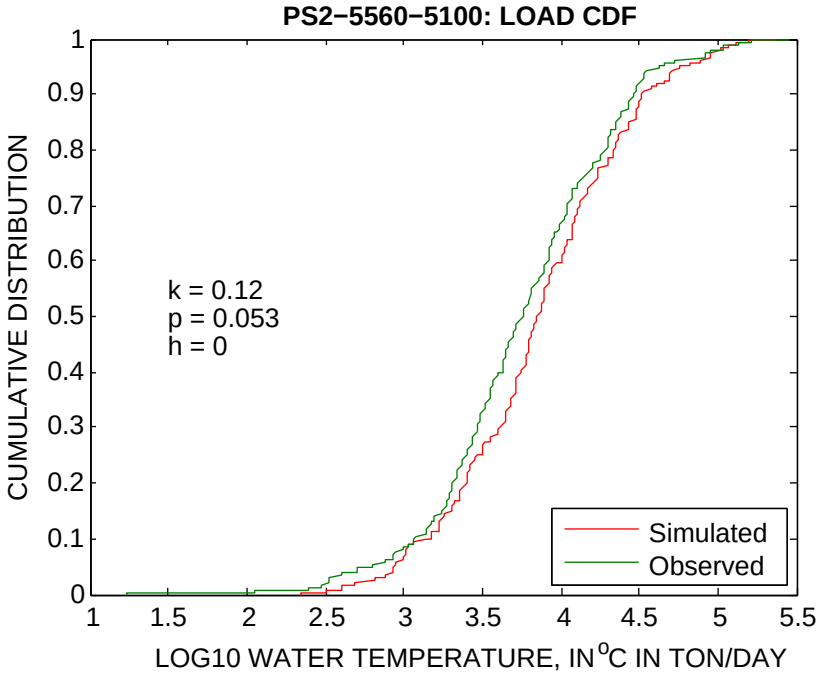


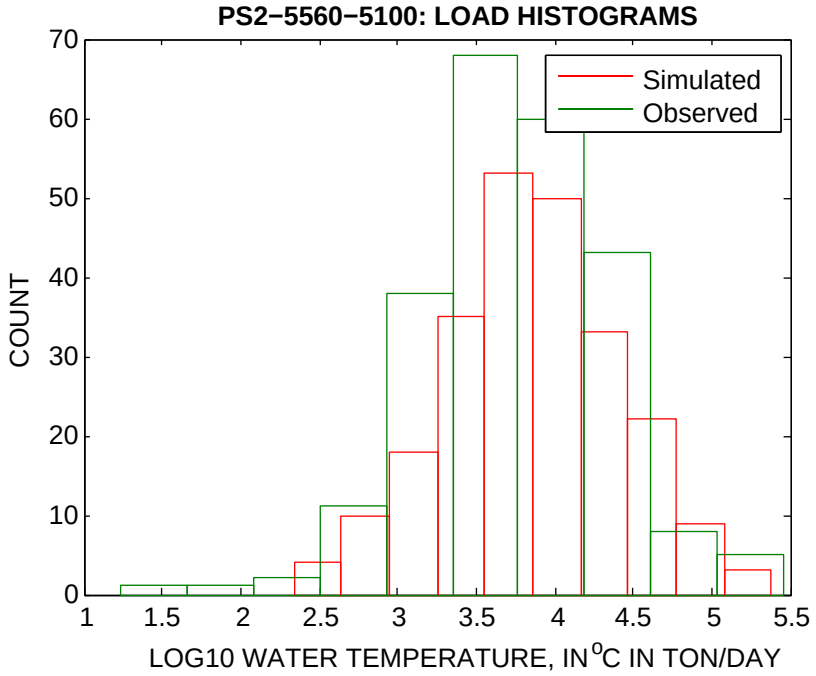


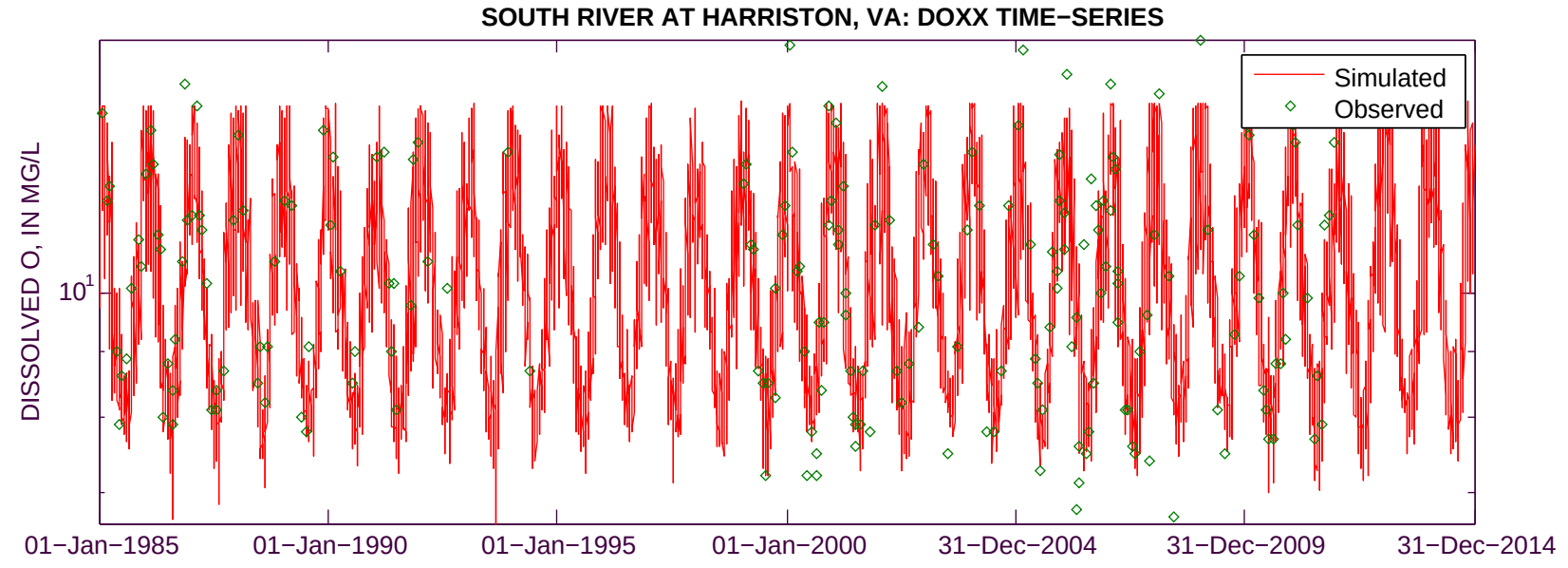
LOAD DATA
LOG10

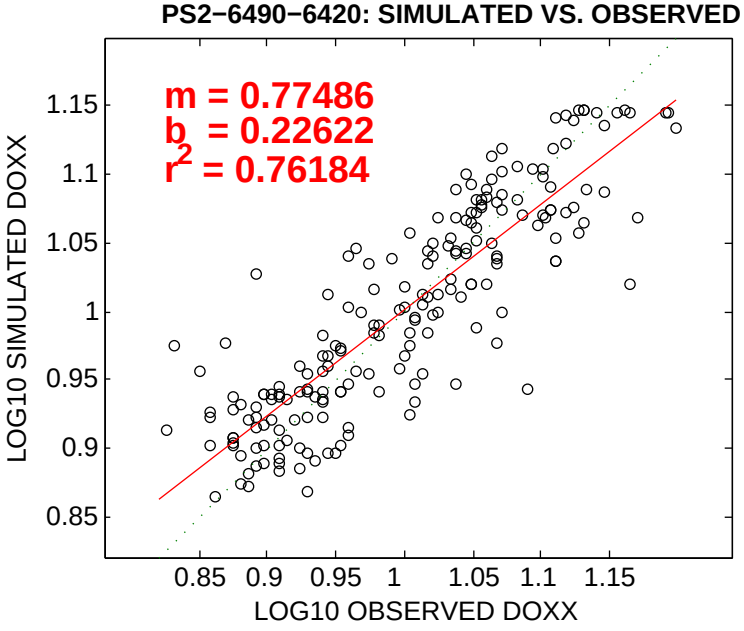


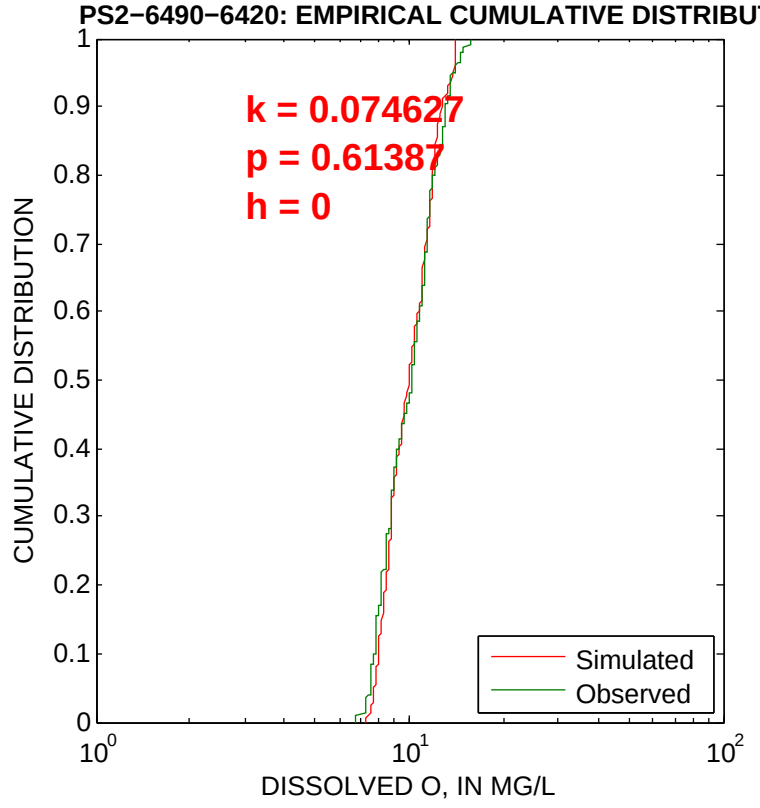












DATA SELECTION

scenario: P620171001WQ | file: DOXX.calib

plot: DOXX - dissolved oxygen

Dates: 1/1/1985 – 12/31/201

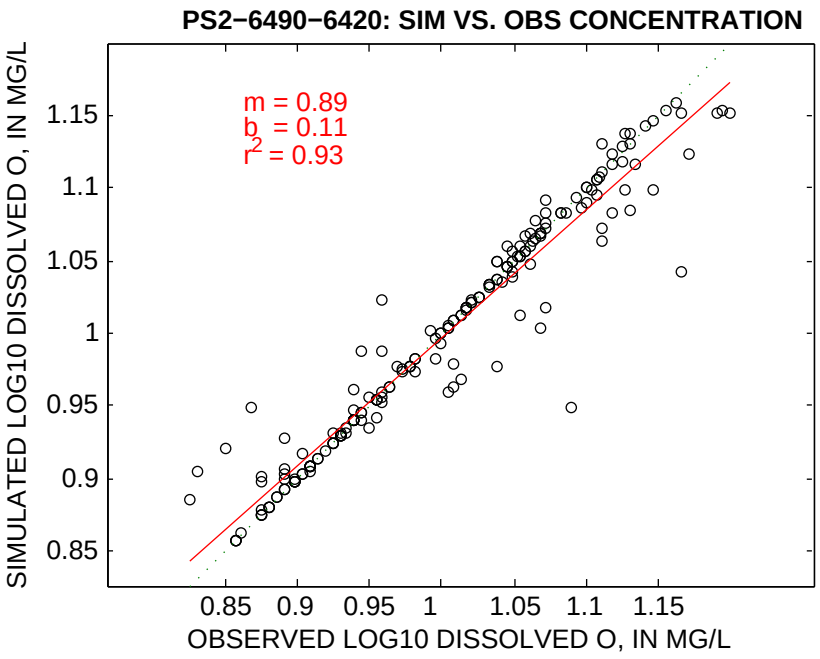
Drive: N/A | Directory: model | Observed: OBS20161101

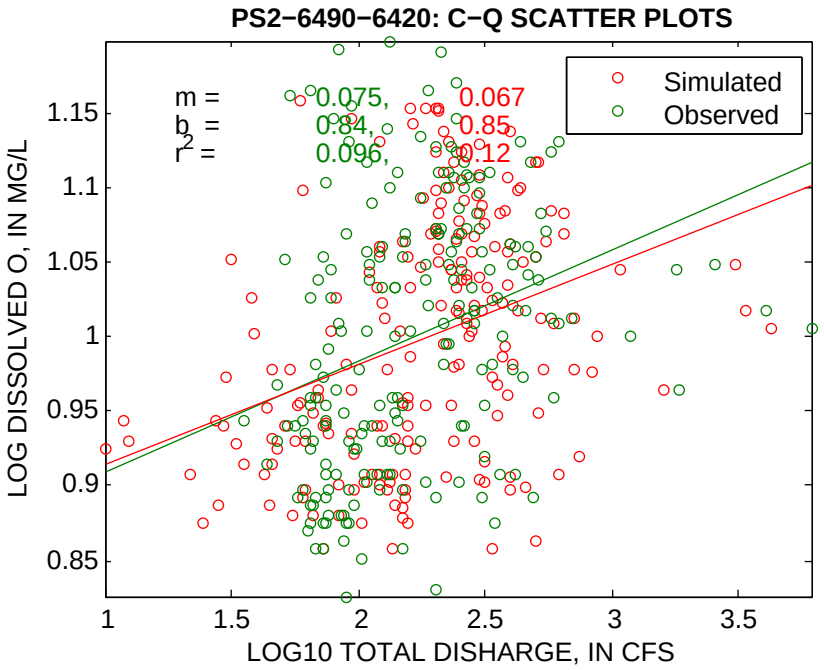
STATISTICS

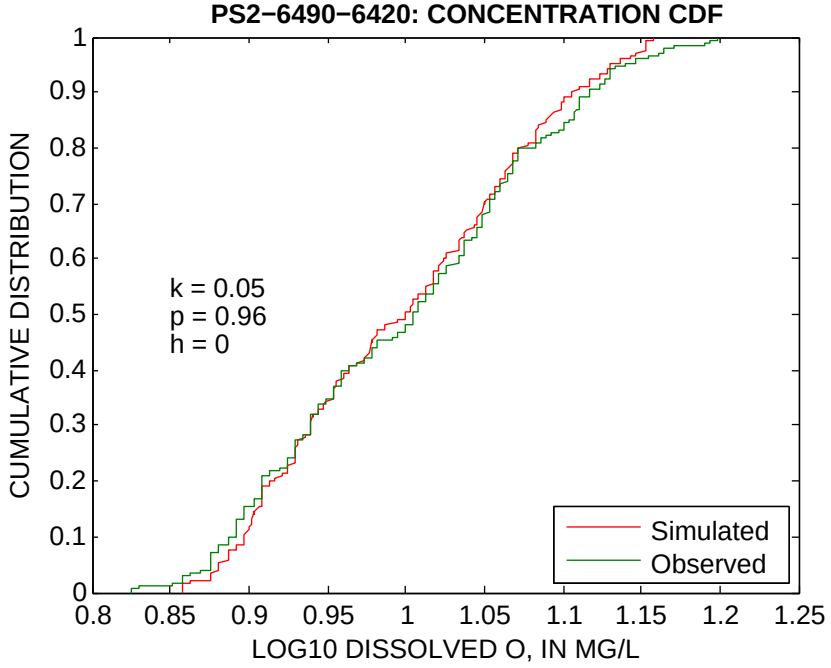
		observe	simulate
n		201	201
min		6.7	7.3175
		0.826075	0.864363
mean		10.2284	10.2048
		1.00104	1.00188
media		10.11	9.9701
		1.00475	0.9987
max		15.8	14.047
		1.19866	1.14758
varian		4.32085	3.39742
		0.00761292	0.00599977
JB		0.015280	0.009448
		0.024609	0.011985
		ra	log
%		-0.230182	0.0842456
err.va		1.01941	0.00181553
rel.std.err		0.235929	0.23848
mod.eff		0.764071	0.76152

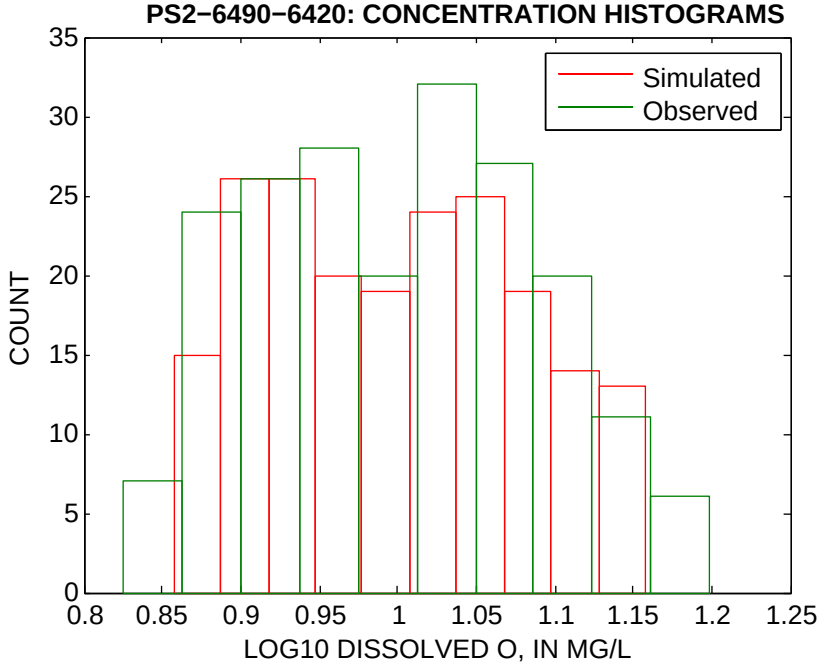
VERSION 2.1

ALL DATA
LOG10

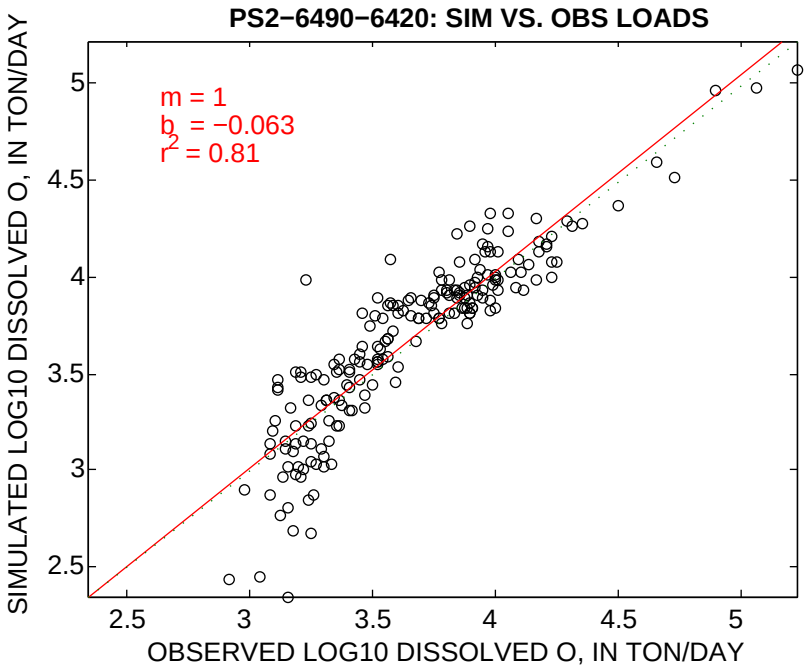


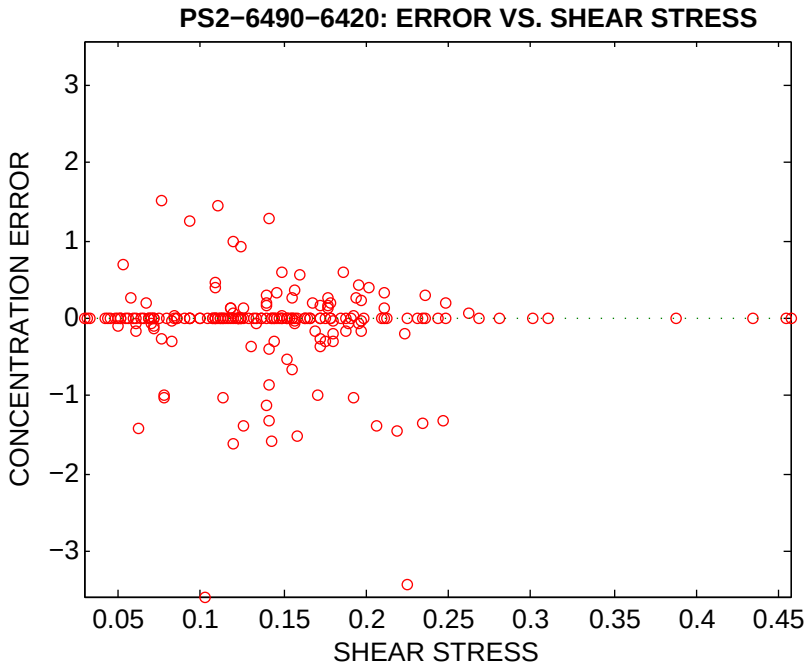


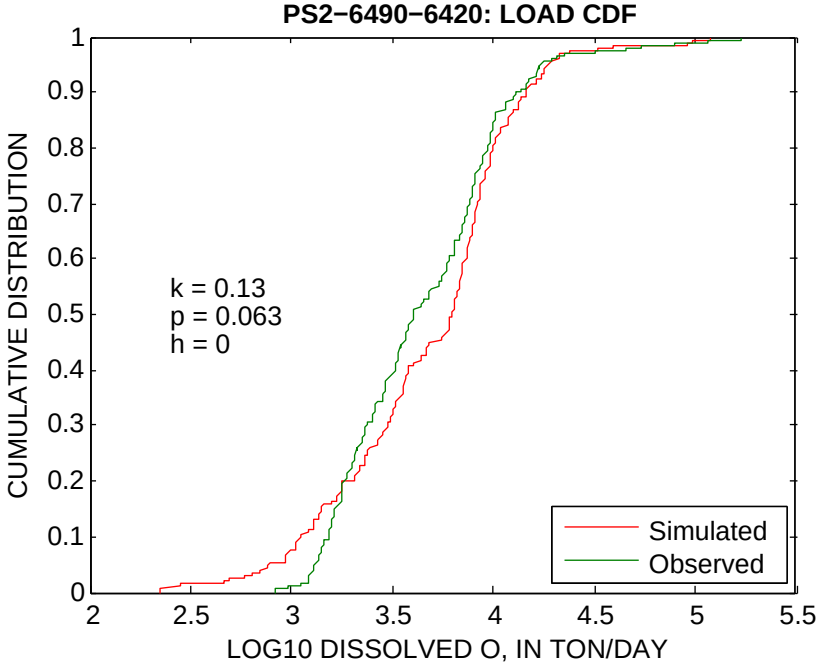


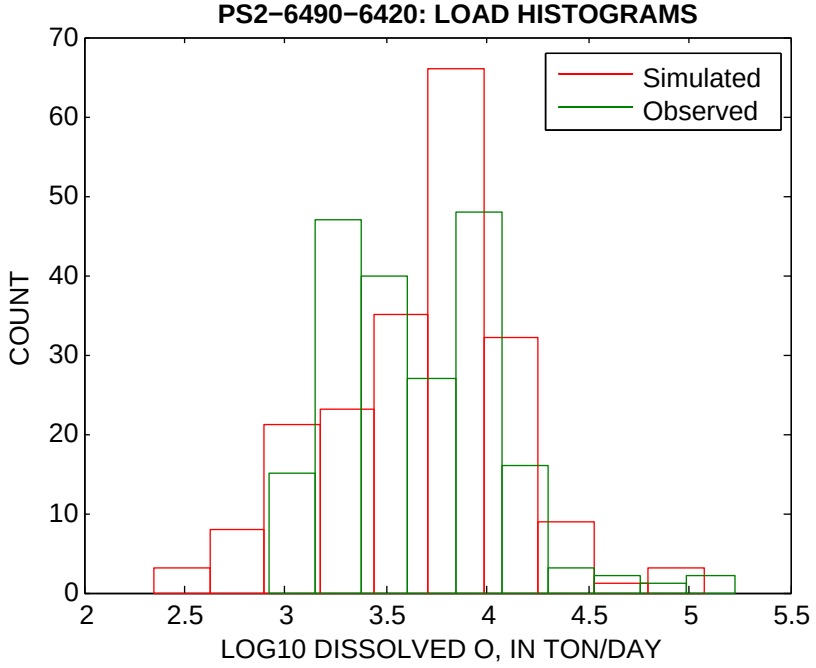


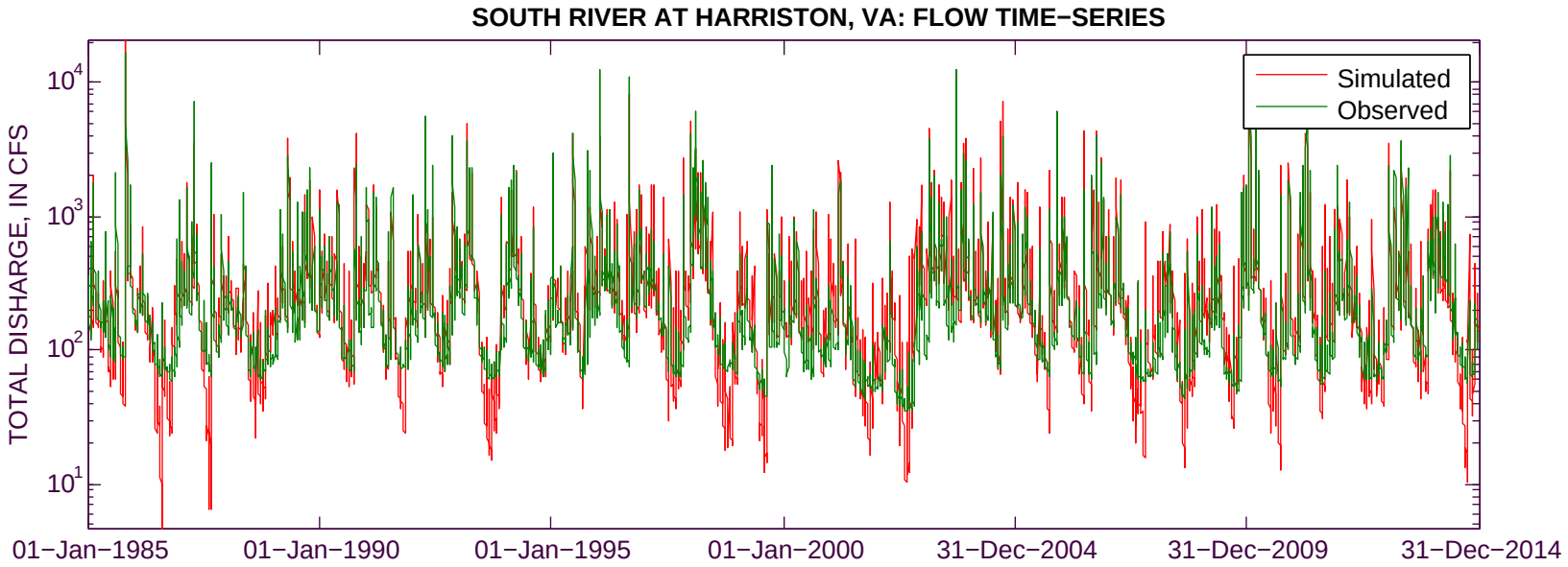
LOAD DATA
LOG10

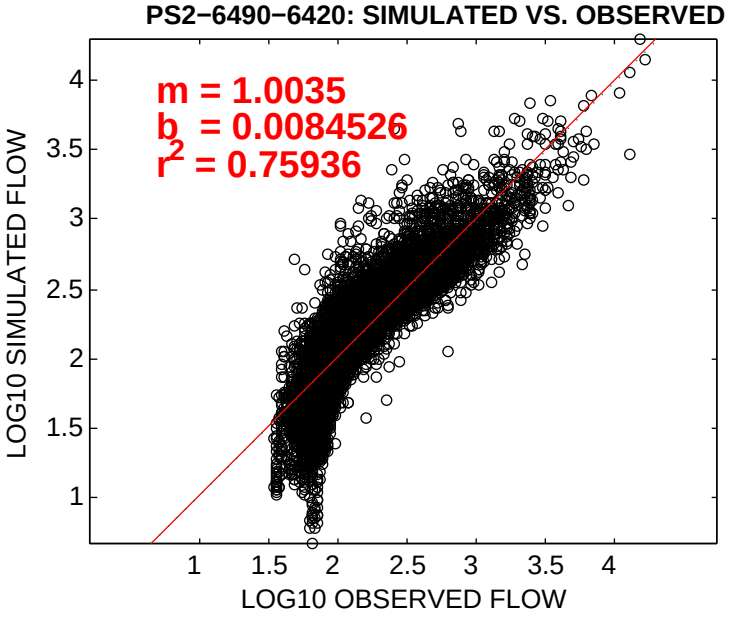


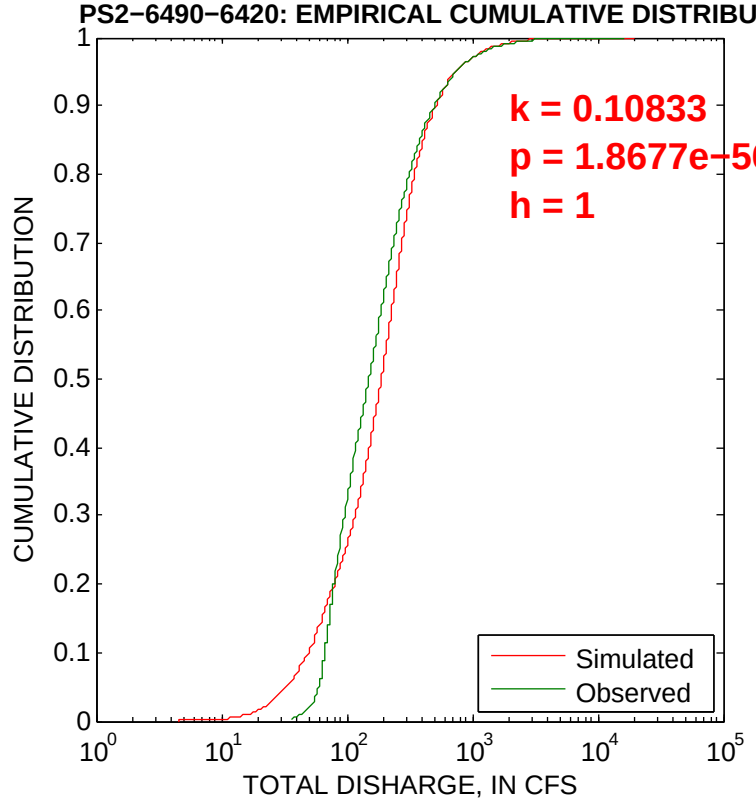












DATA SELECTION

scenario: P620171001WQ | file: FLOW.calib

plot: FLOW - total discharge

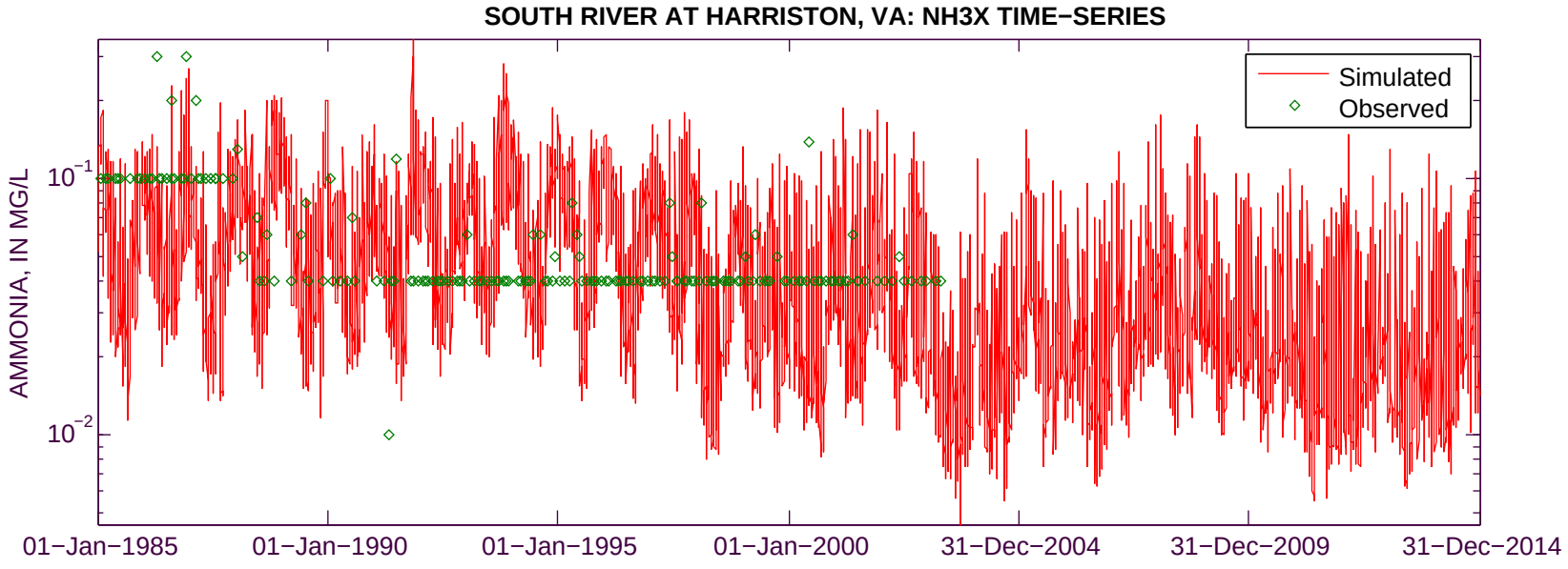
Dates: 1/1/1985 – 12/31/201

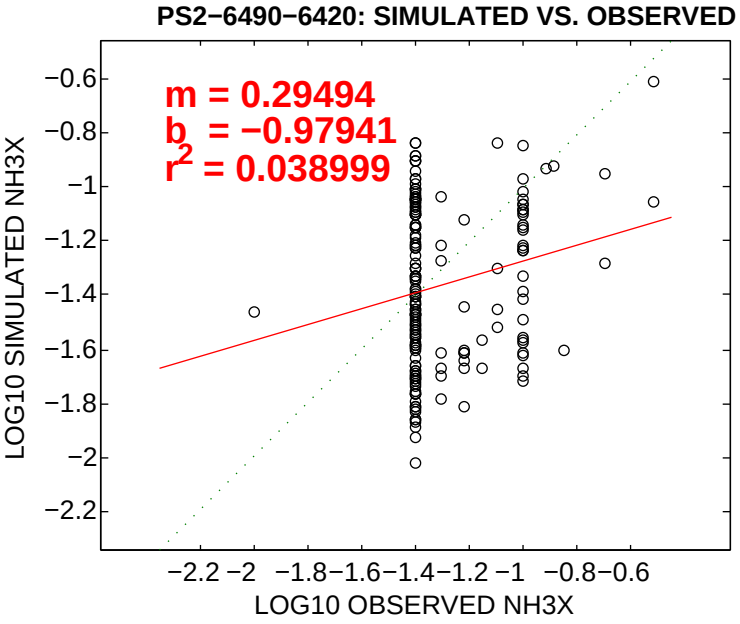
Drive: N/A | Directory: model | Observed: OBS20161101

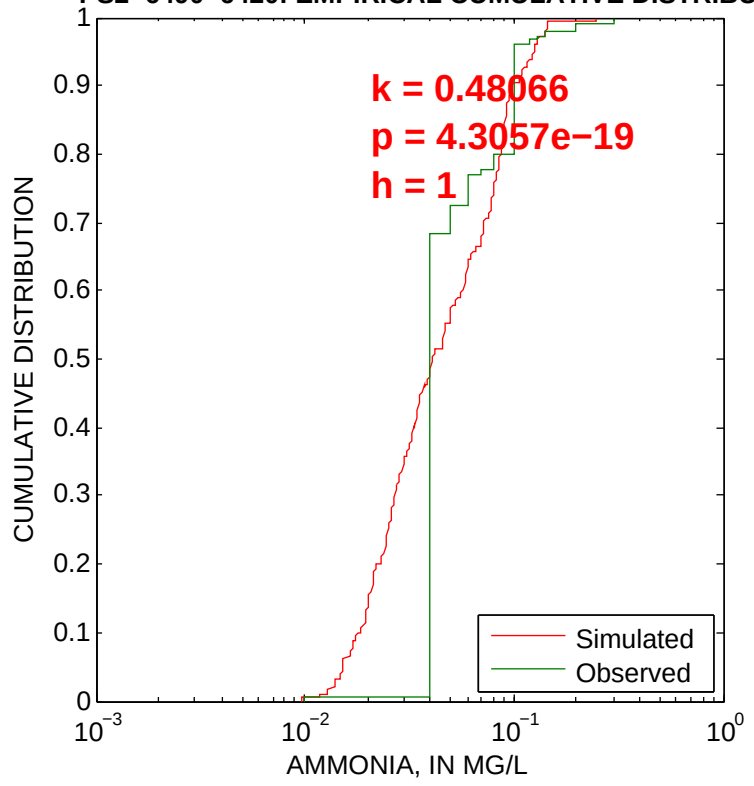
STATISTICS

		observe	simulate
n		10957	10957
min		35	4.5624
		1.54407	0.659193
mean		261.271	276.847
		2.22531	2.24165
media		151	189.64
		2.17898	2.27793
max		16400	20231
		4.21484	4.30602
varian		225799	211279
		0.126648	0.167967
JB		0.001	0.001
		0.001	0.001
		ra	log
%		5.96155	0.734303
err.va		64054.3	0.040688
rel.std.err		0.283678	0.321268
mod.eff		0.716322	0.678732

VERSION 2.1







DATA SELECTION

scenario	file
P620171001WQ	NH3X.calib

plot: NH3X - ammonia

Dates: 1/1/1985 – 12/31/201

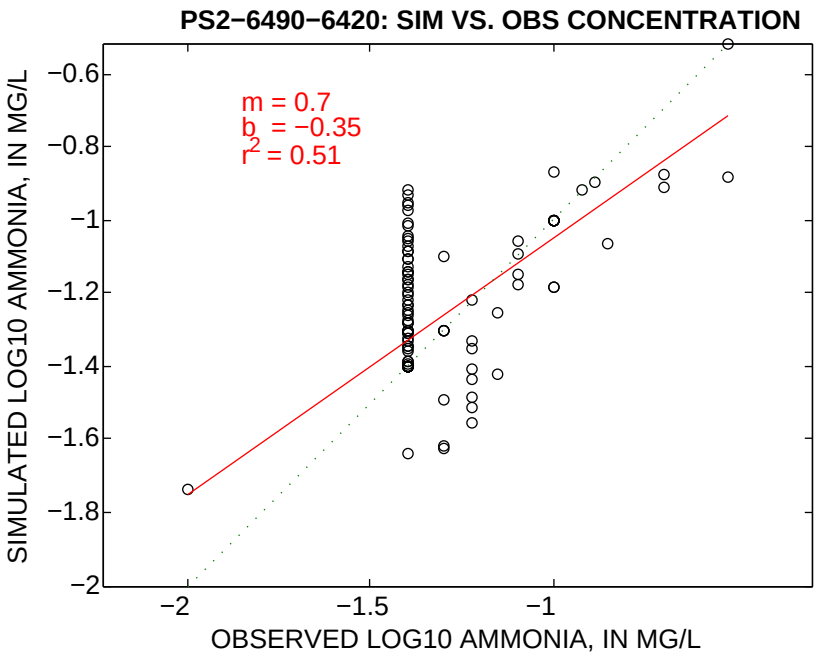
Drive	Directory	Observed
N/A	model	OBS20161101

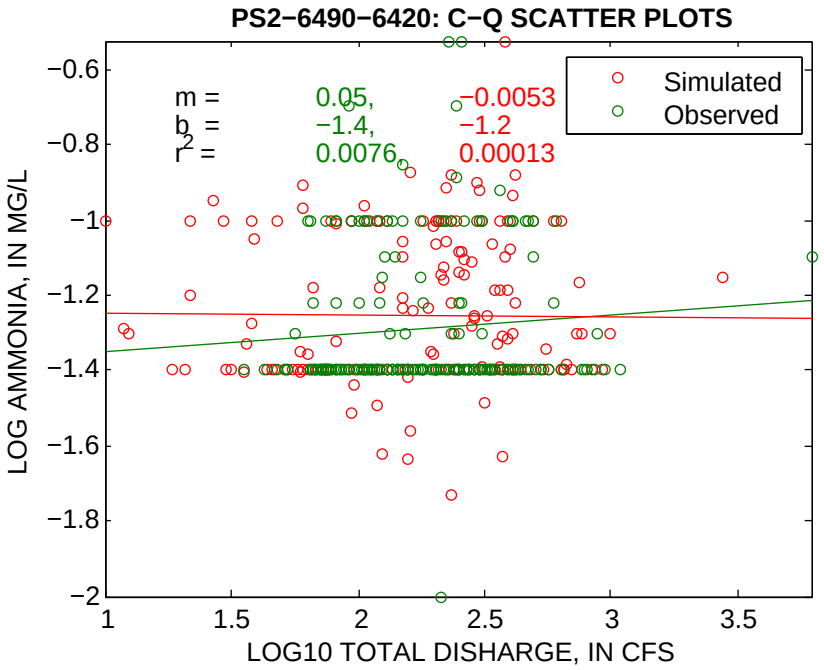
STATISTICS

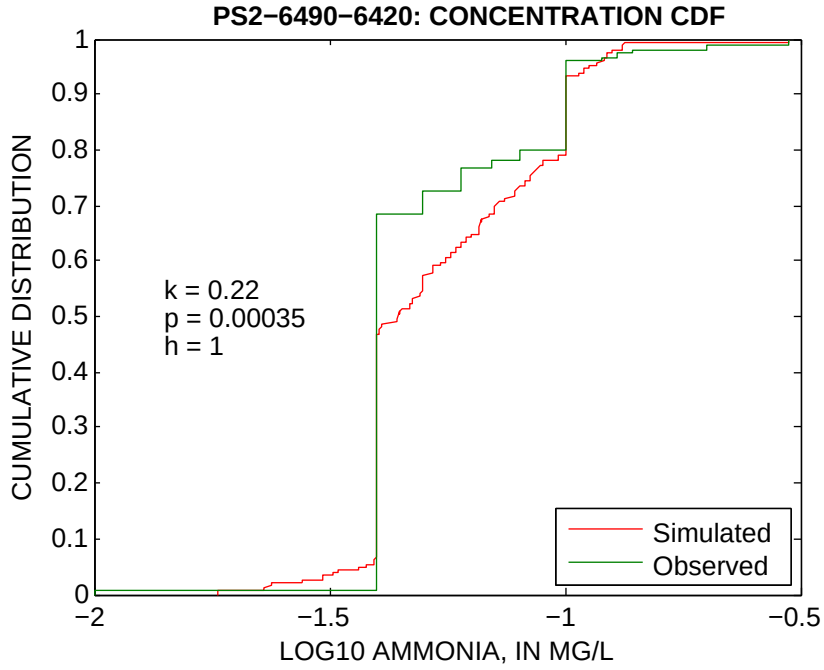
	n	observe	simulate
		181	181
min		0.01	0.0095625
		-2	-2.01943
mean		0.0580663	0.0544328
		-1.29078	-1.36012
media		0.04	0.041102
		-1.39794	-1.38614
max		0.3	0.24583
		-0.522879	-0.609365
varian		0.00149568	0.00136006
		0.0386937	0.0863113
JB		0.001	0.001
		0.001	0.027448
		ra	log
%		-6.25748	5.37208
err.va		0.00197838	0.107015
rel.std.err		1.32272	2.76569
mod.eff		-0.322723	-1.76569

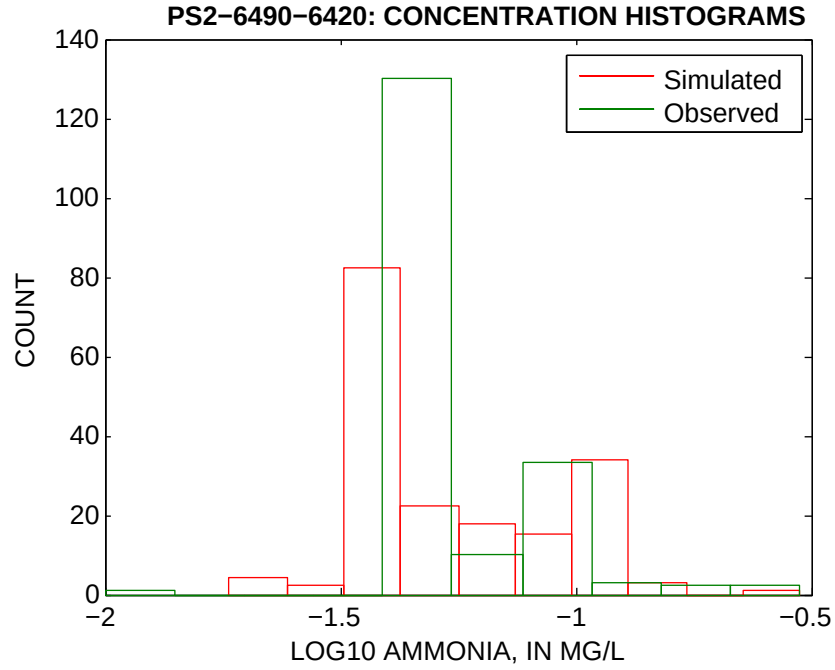
VERSION 2.1

ALL DATA
LOG10

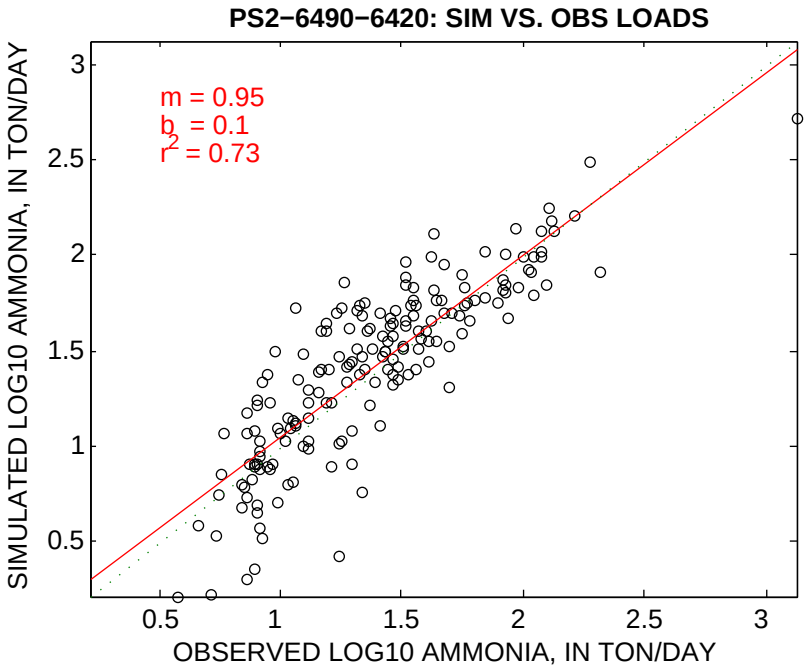


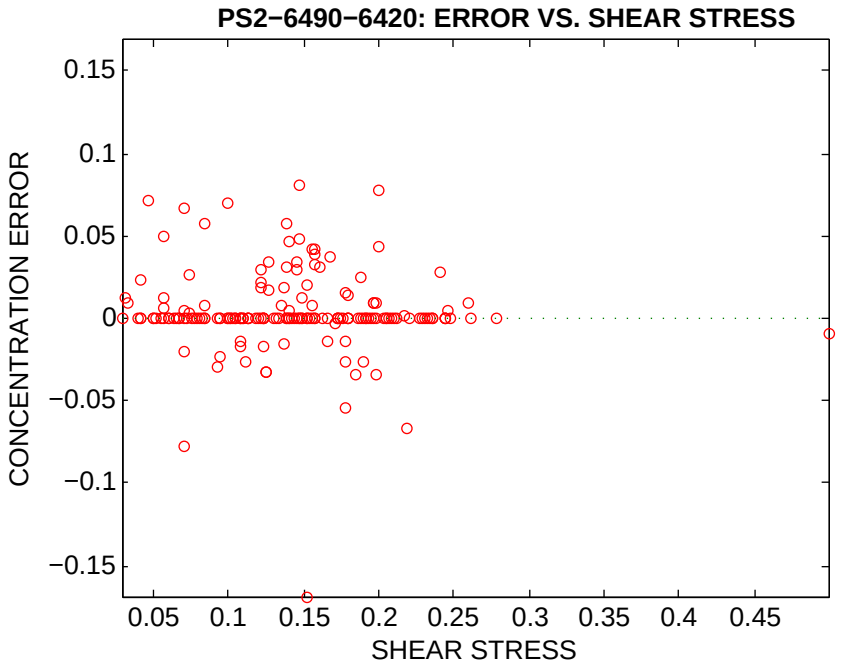


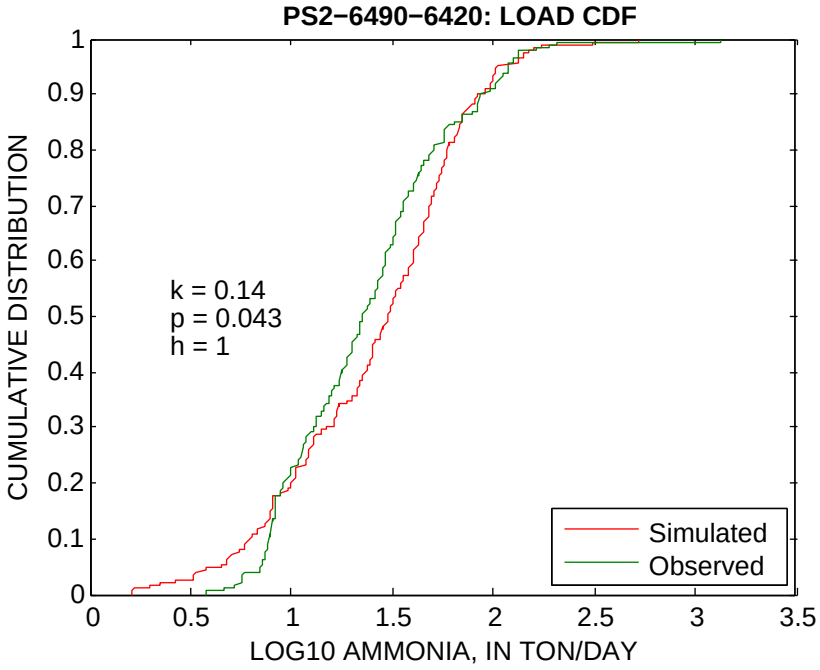


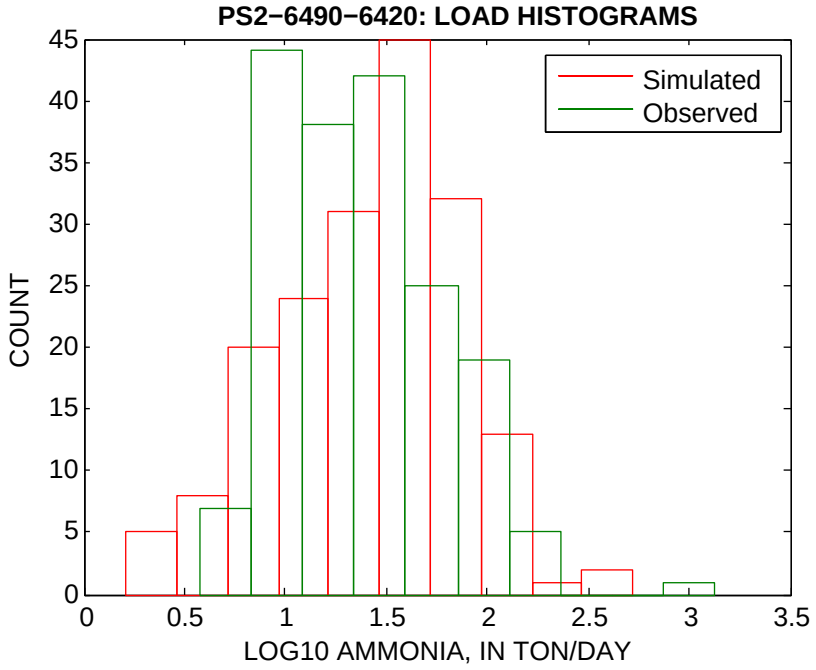


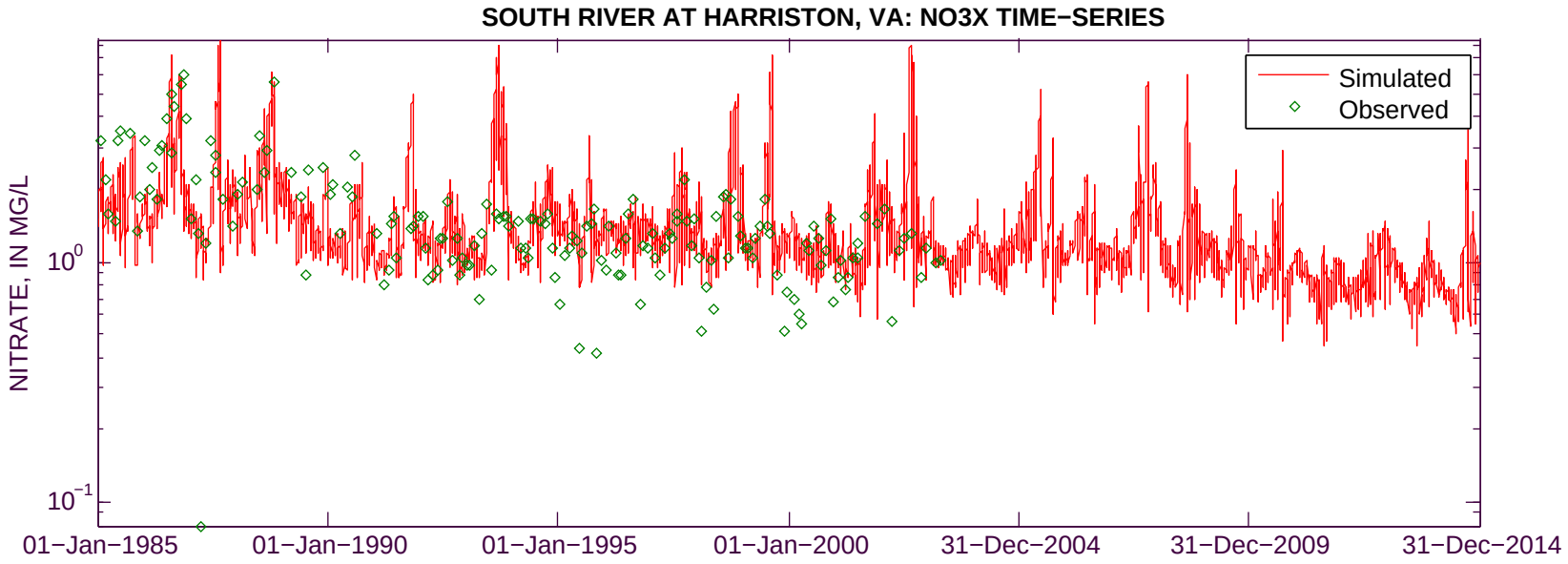
LOAD DATA
LOG10

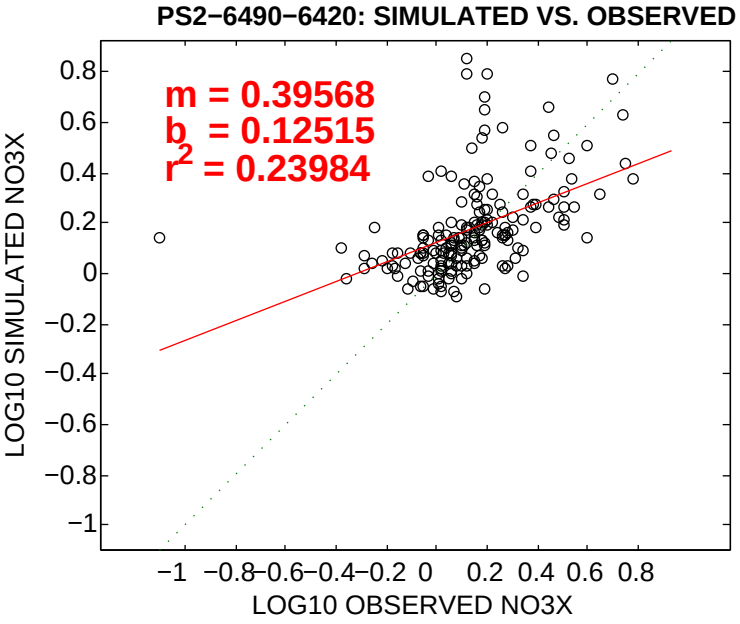


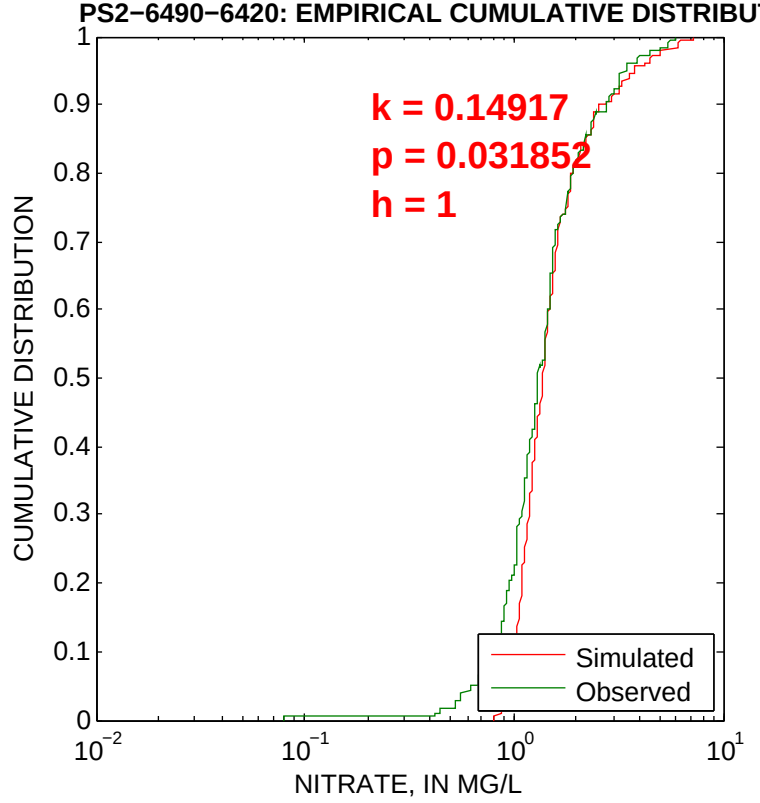












DATA SELECTION

scenario: P620171001WQ | file: NO3X.calib

plot: NO3X - nitrate

Dates: 1/1/1985 – 12/31/201

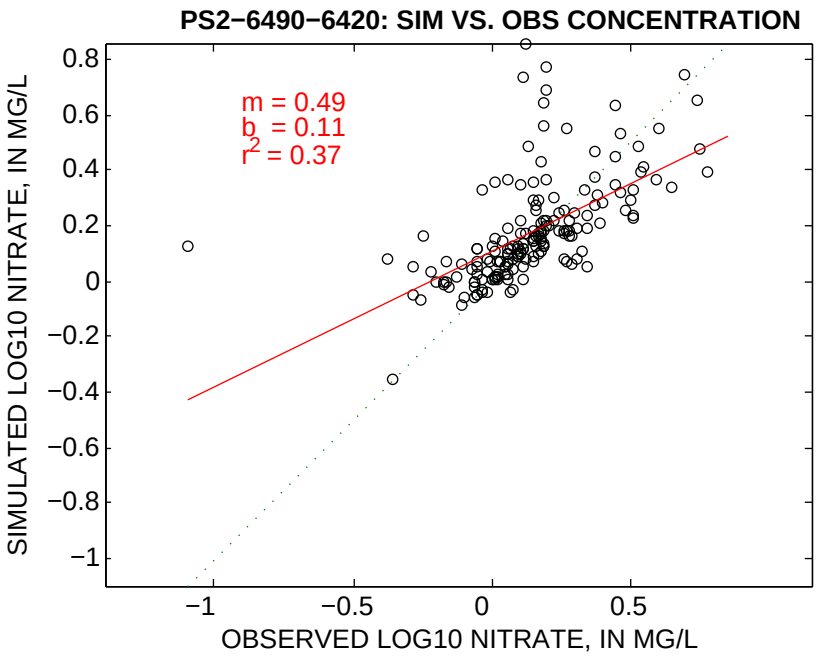
Drive Directory: N/A | model | Observed: OBS20161101

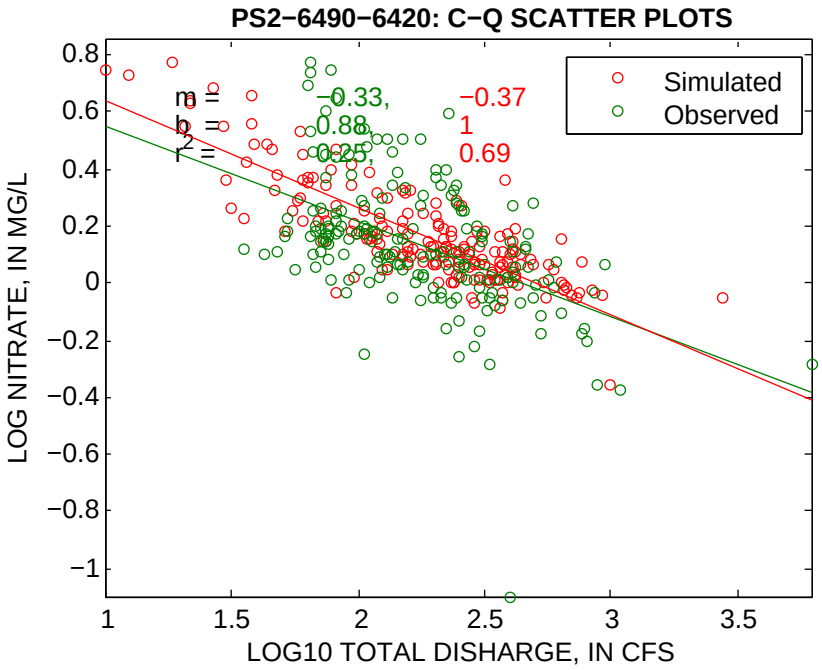
STATISTICS

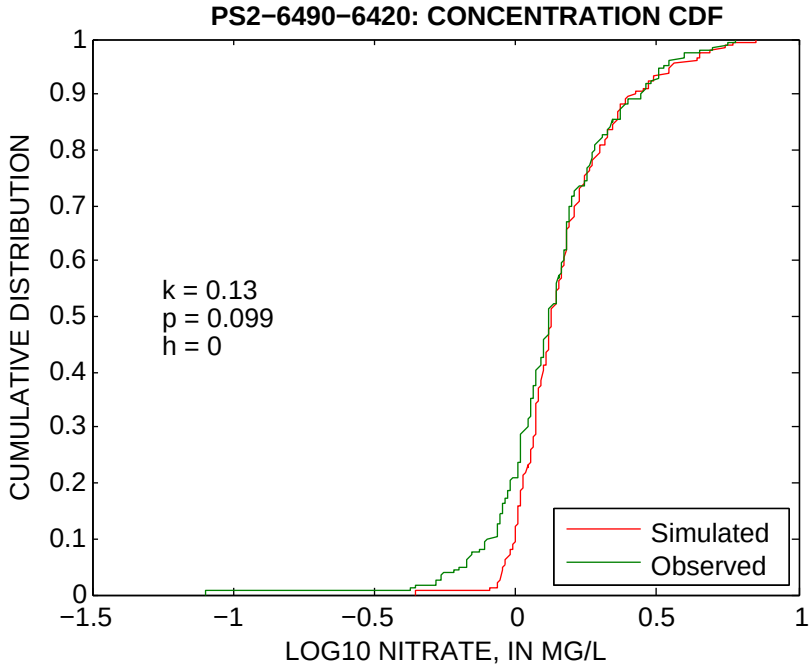
	n	181	181
		observe	simulate
min		0.08	0.80384
		-1.09691	-0.0948304
mean		1.57	1.68728
		0.136008	0.178963
media		1.3	1.3787
		0.113943	0.13947
max		6	7.2159
		0.778151	0.858291
varian		0.880306	1.05156
		0.0523841	0.0341945
JB		0.001	0.001
		0.001	0.001
		ra	log
%		7.46985	31.5826
err.va		1.14578	0.0469794
rel.std.err		1.30157	0.896824
mod.eff		-0.301569	0.103176

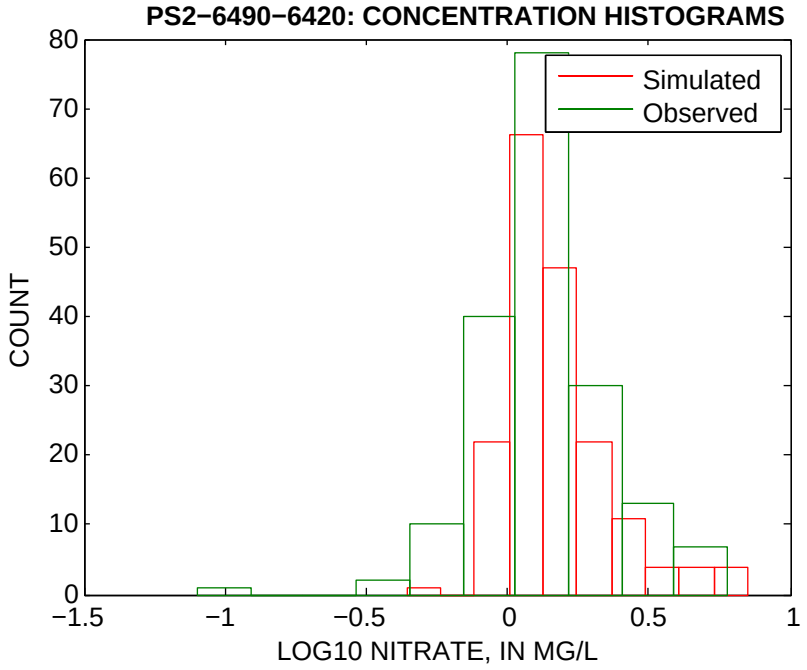
VERSION 2.1

ALL DATA
LOG10

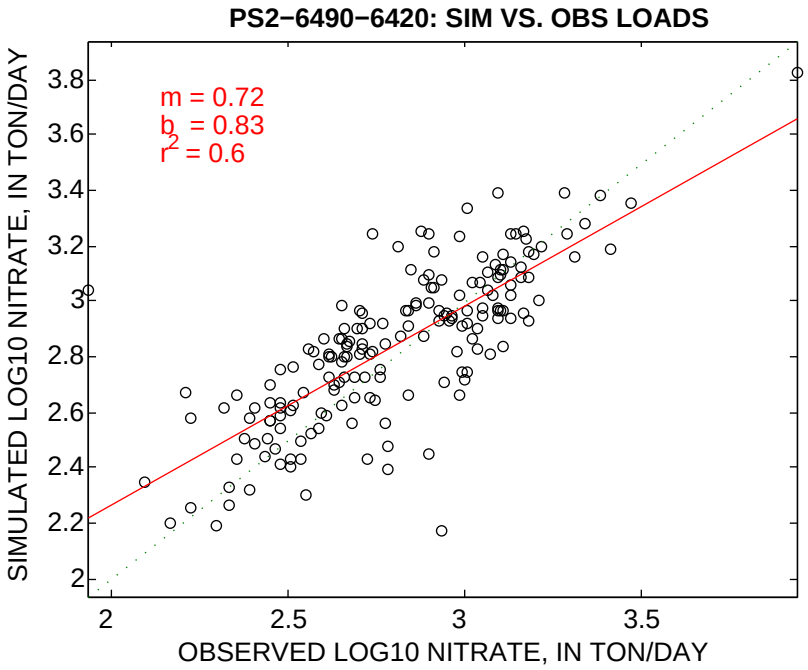


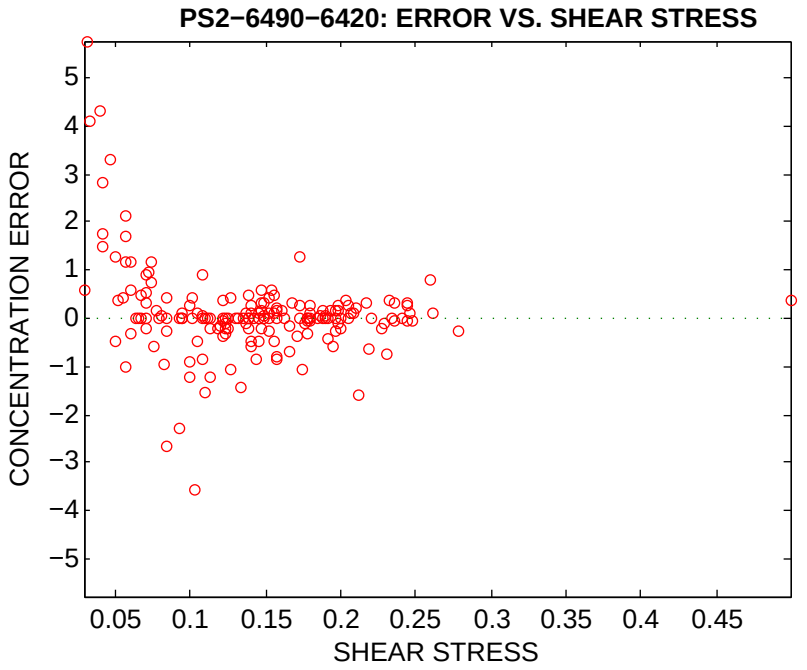


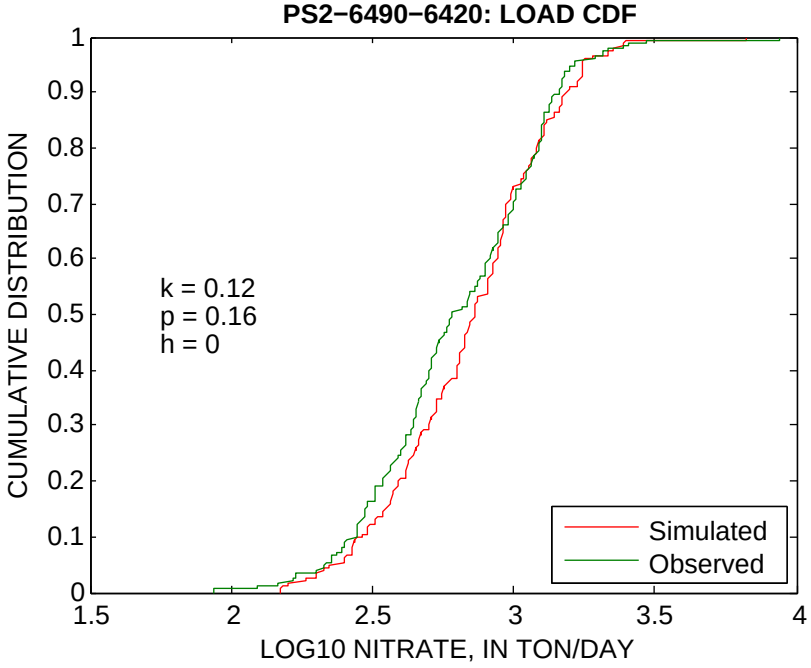


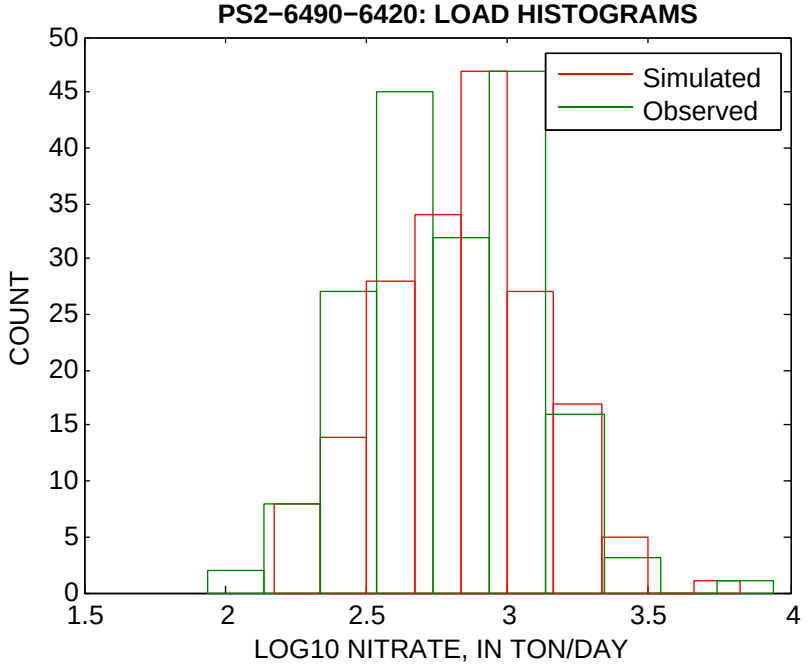


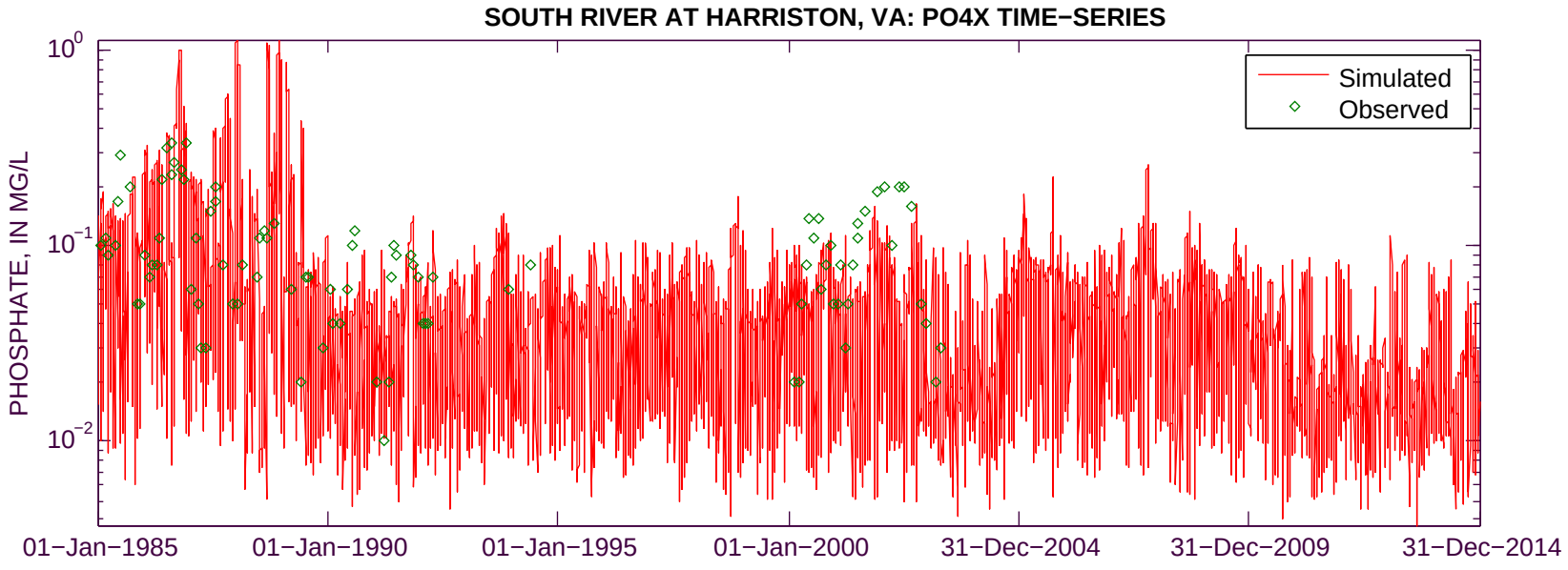
LOAD DATA
LOG10

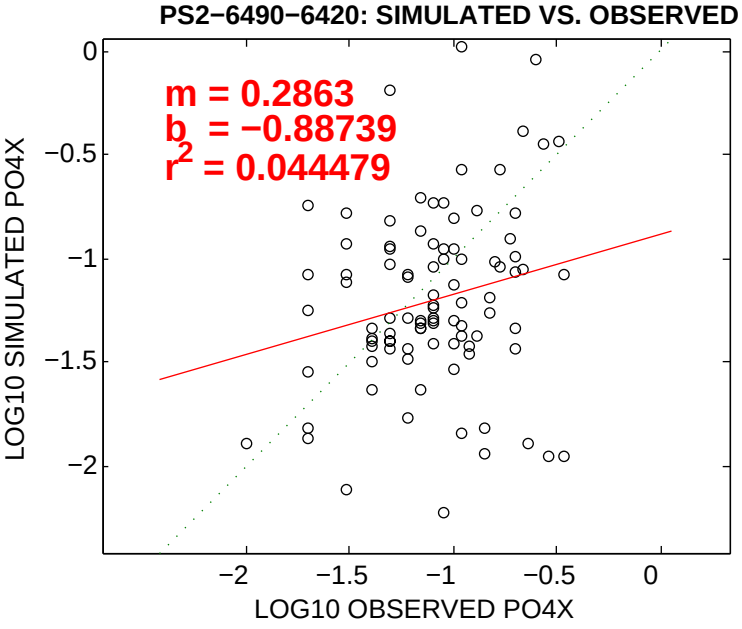


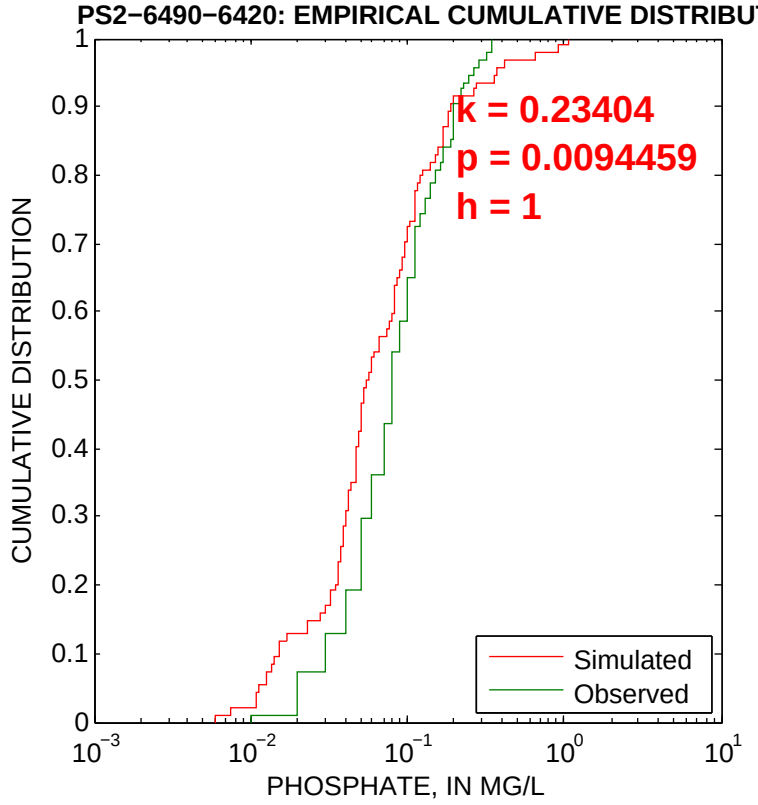












DATA SELECTION

scenario: P620171001WQ | file: PO4X.calib

plot: PO4X - phosphate

Dates: 1/1/1985 – 12/31/201

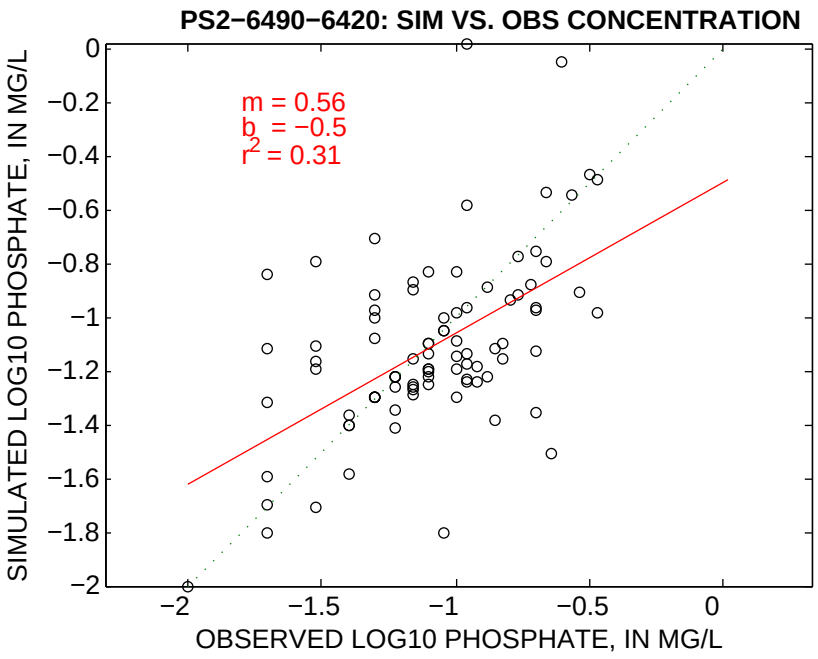
Drive: N/A | Directory: model | Observed: OBS20161101

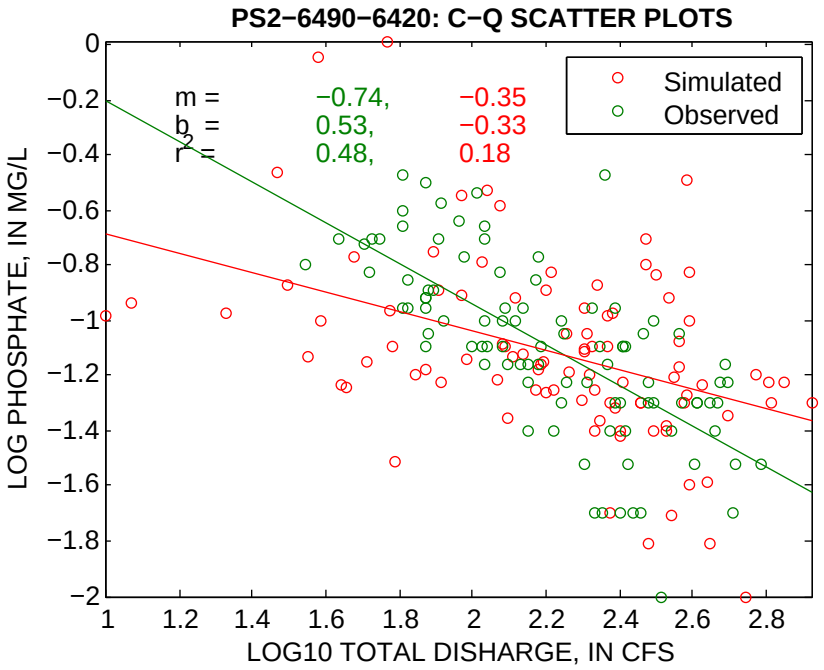
STATISTICS

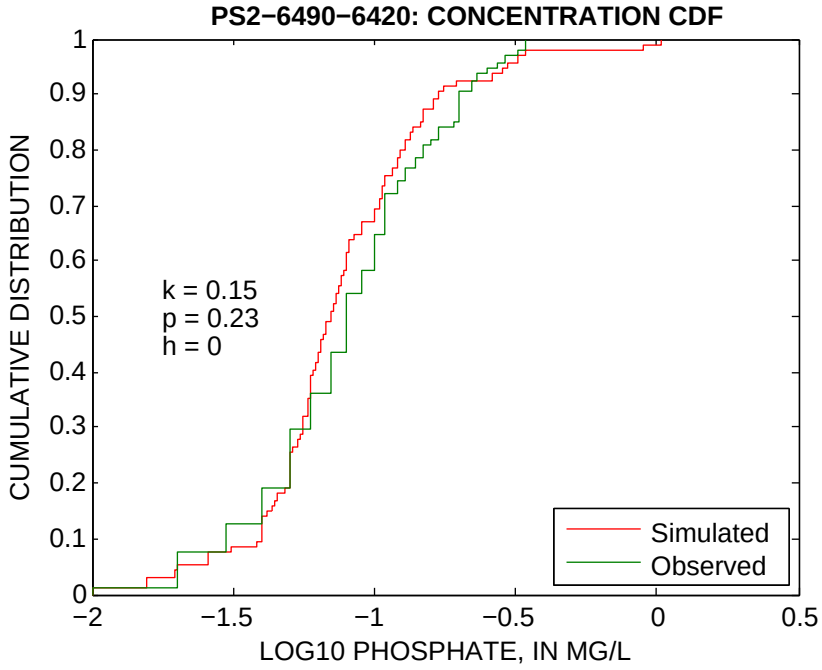
	n	observe	simulate
		94	94
min		0.01	0.0059649
		-2	-2.2244
mean		0.10266	0.108631
		-1.09679	-1.2014
media		0.08	0.055136
		-1.09691	-1.25862
max		0.34	1.0623
		-0.468521	0.0262472
varian		0.00555952	0.026817
		0.101261	0.186603
JB		0.001	0.001
		0.5	0.256377
		ra	log
%		5.81676	9.53816
err.va		0.0266904	0.240945
rel.std.err		4.80085	2.37944
mod.eff		-3.80085	-1.37944

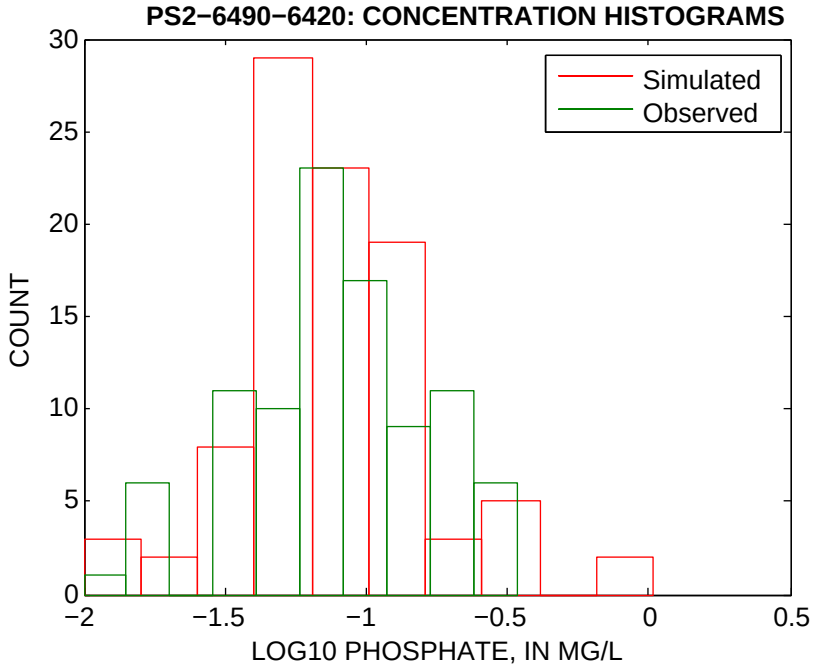
VERSION 2.1

ALL DATA
LOG10

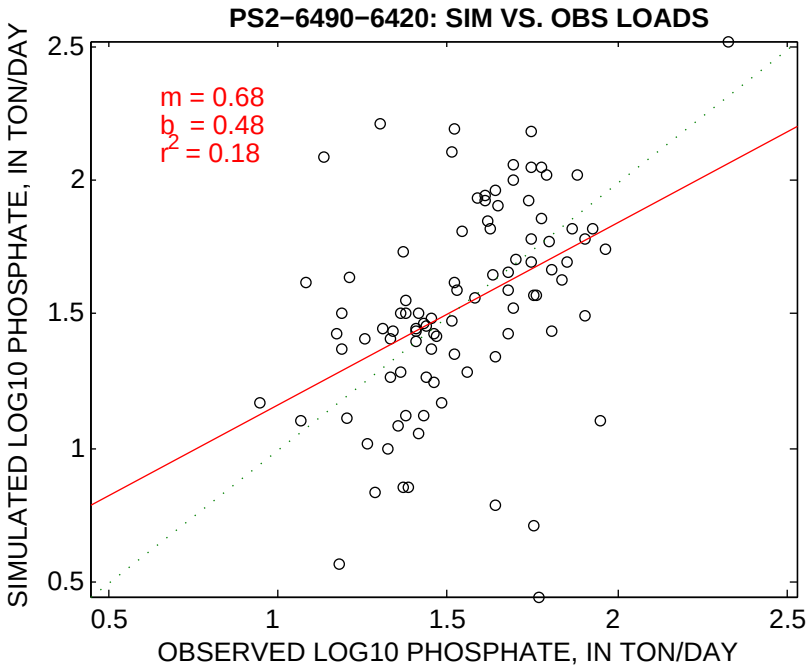


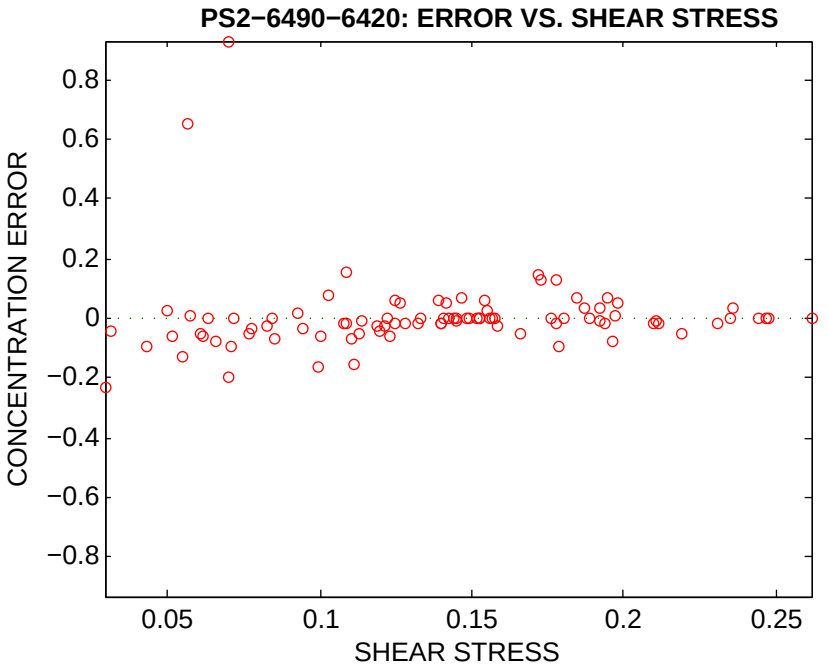


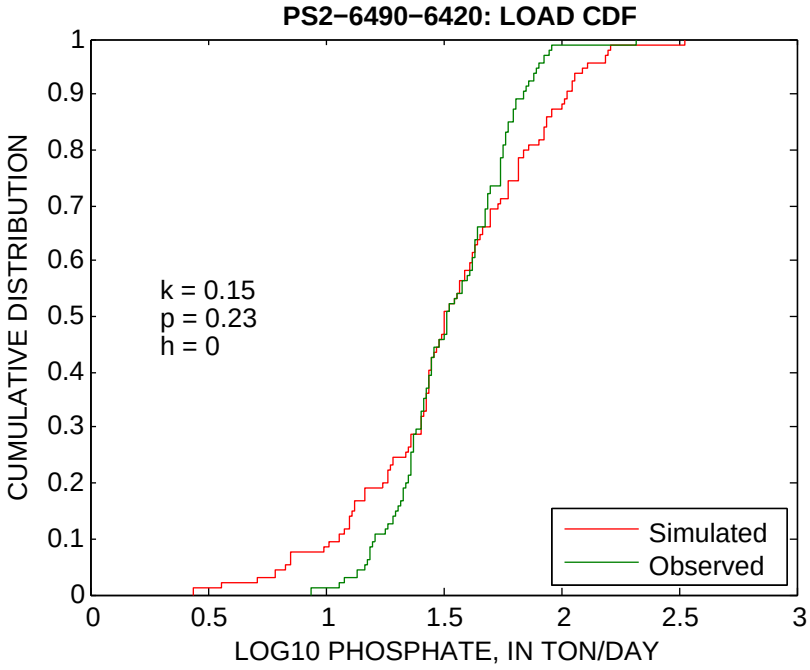


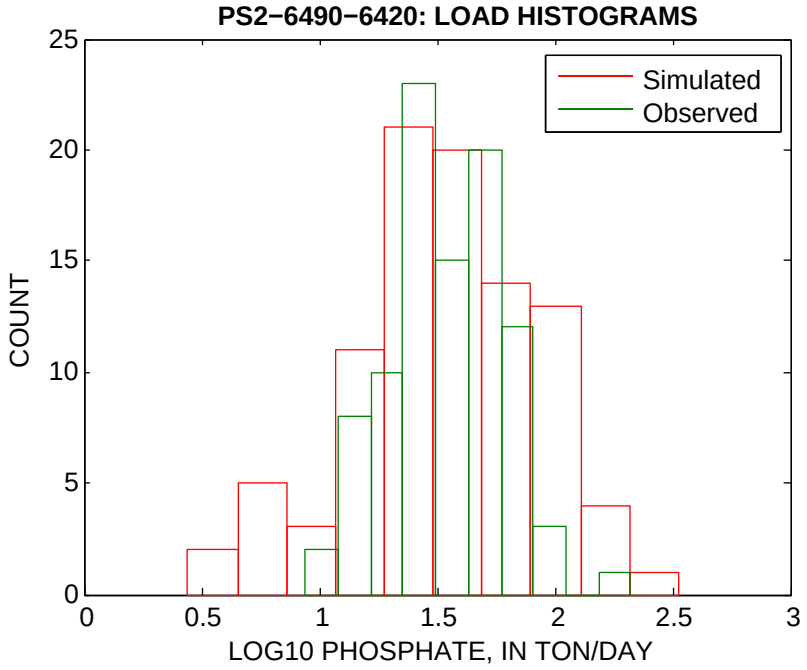


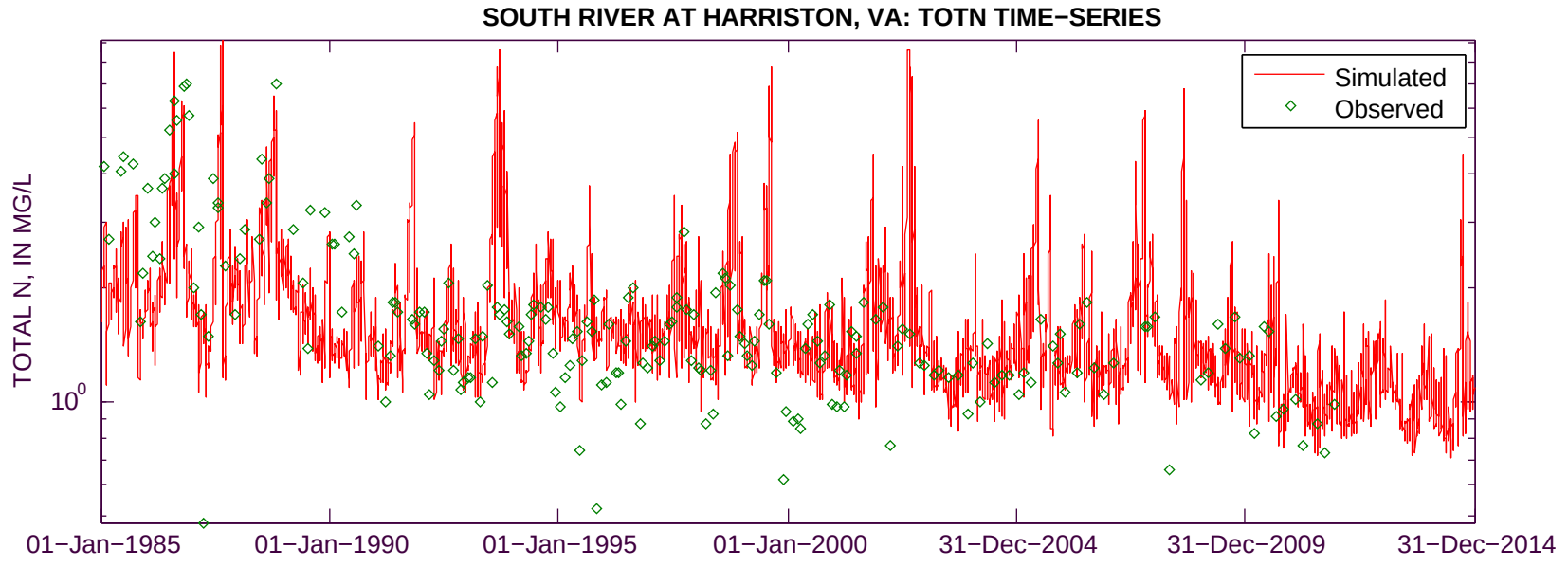
LOAD DATA
LOG10

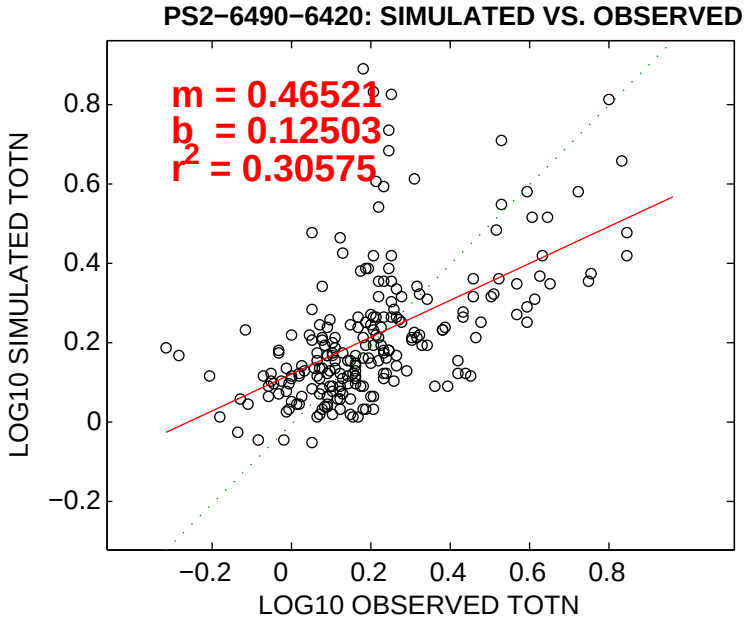


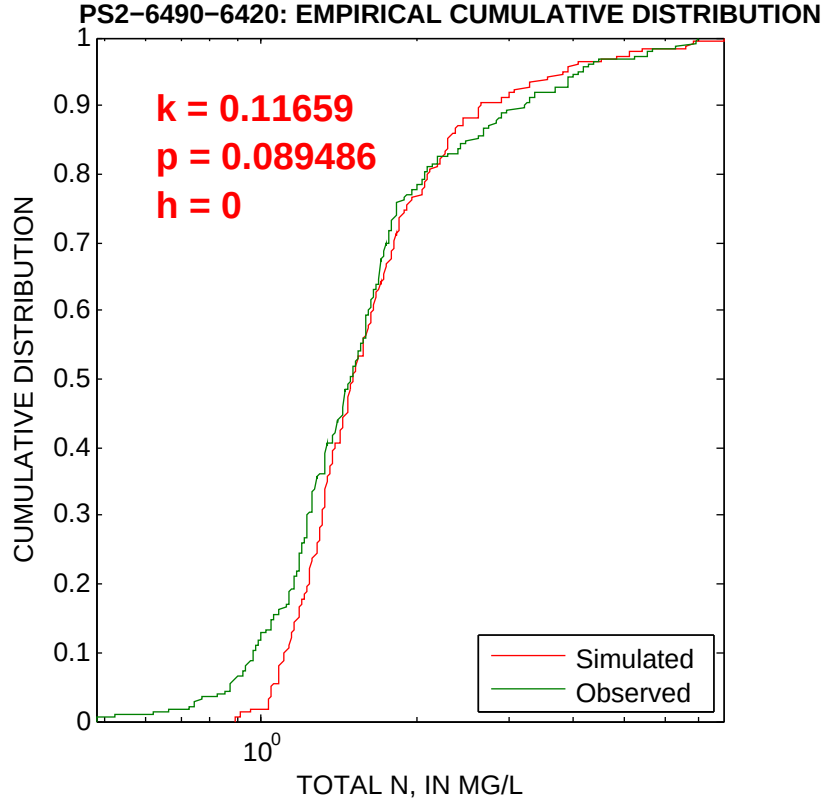












DATA SELECTION

scenario	file
P620171001WQ	TOTN.calib

plot: TOTN - total nitrogen

Dates: 1/1/1985 – 12/31/201

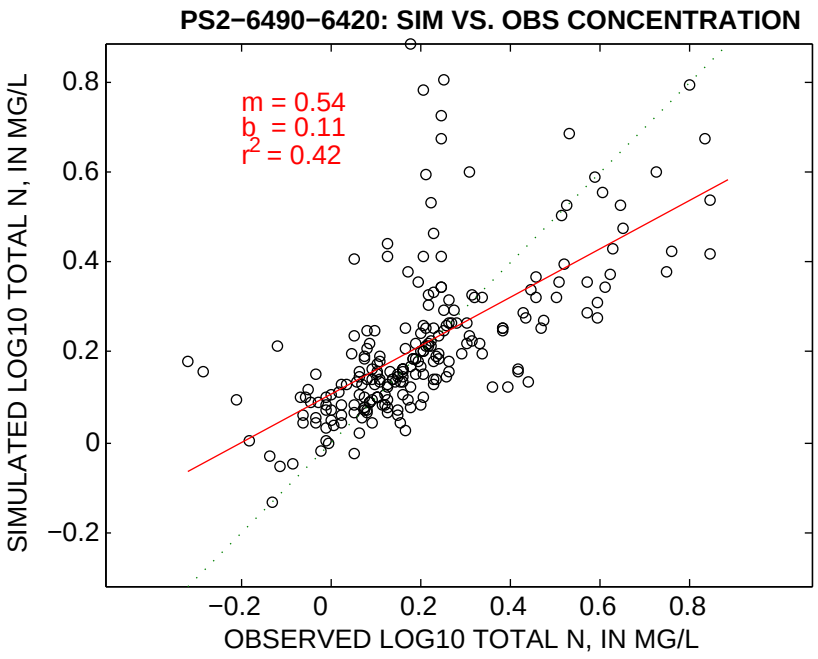
Drive	Directory	Observed
N/A	model	OBS20161101

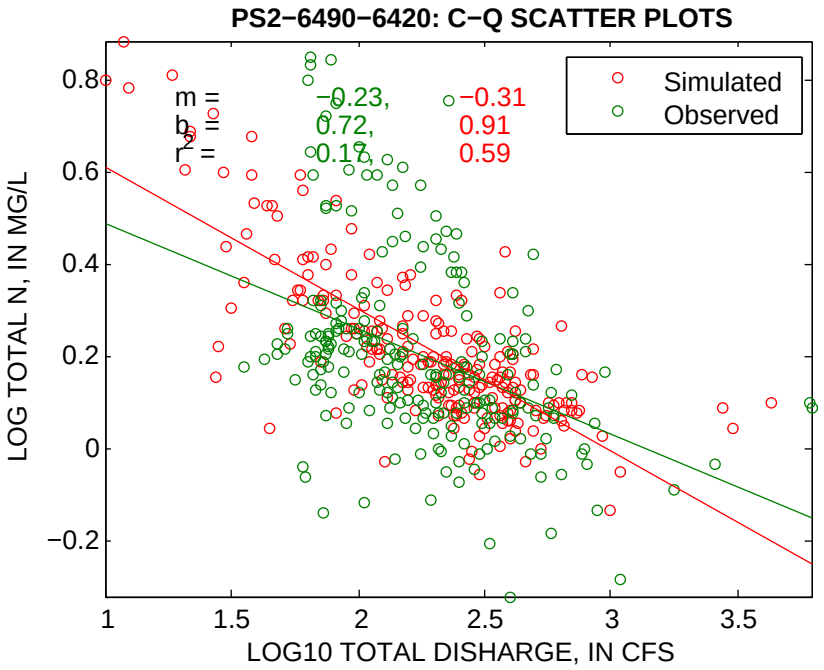
STATISTICS

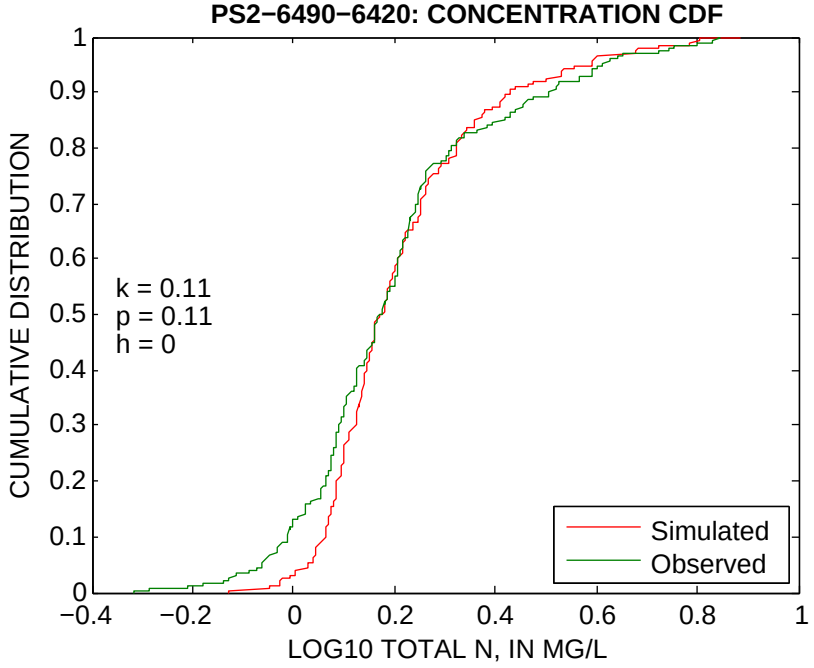
	n	223	223
		observe	simulate
min		0.48	0.88874
		-0.318759	-0.0512253
mean		1.80623	1.82087
		0.201815	0.218914
media		1.49	1.5026
		0.173186	0.176843
max		7	7.7714
		0.845098	0.890499
varian		1.23717	1.05005
		0.0415321	0.0293983
JB		0.001	0.001
		0.001	0.001
		ra	log
%		0.810271	8.47234
err.va		1.27044	0.0325815
rel.std.err		1.02689	0.784489
mod.eff		-0.0268854	0.215511

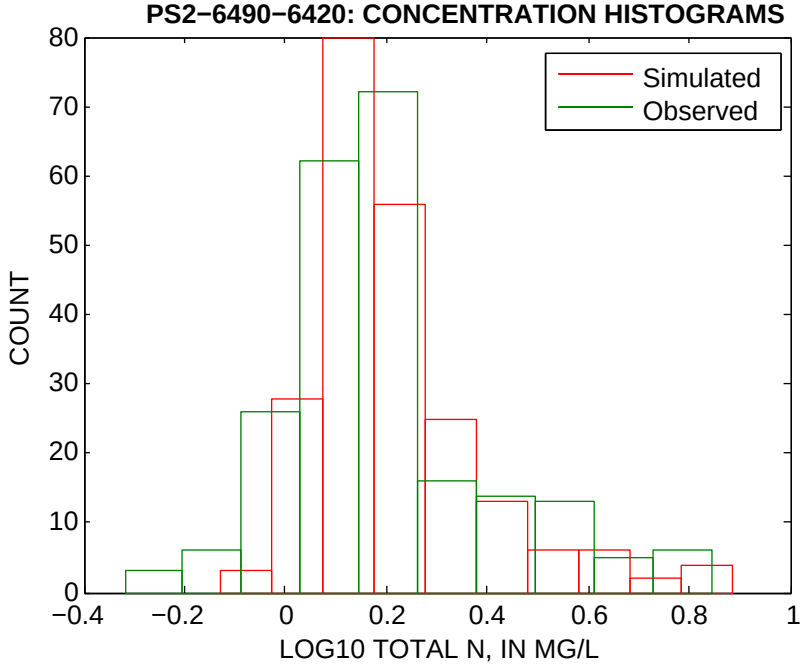
VERSION 2.1

ALL DATA
LOG10

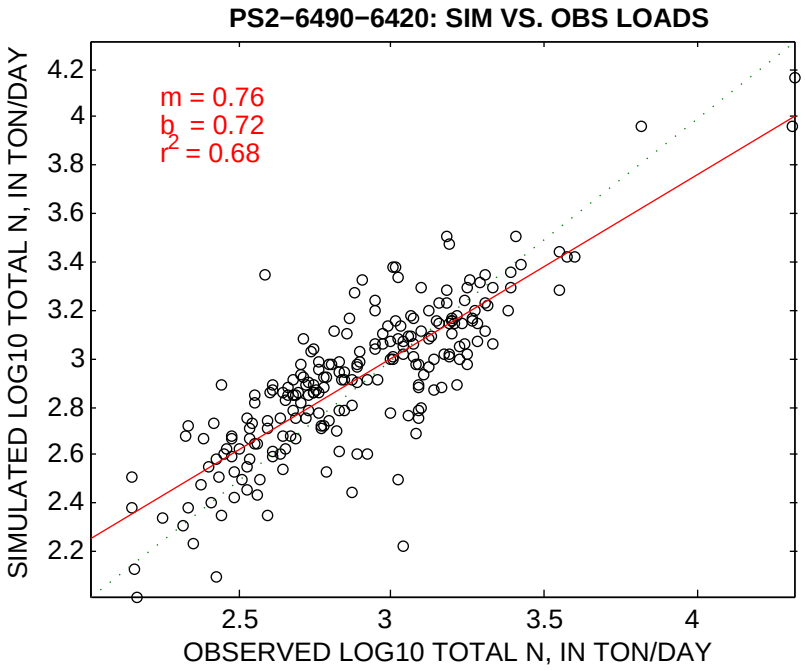


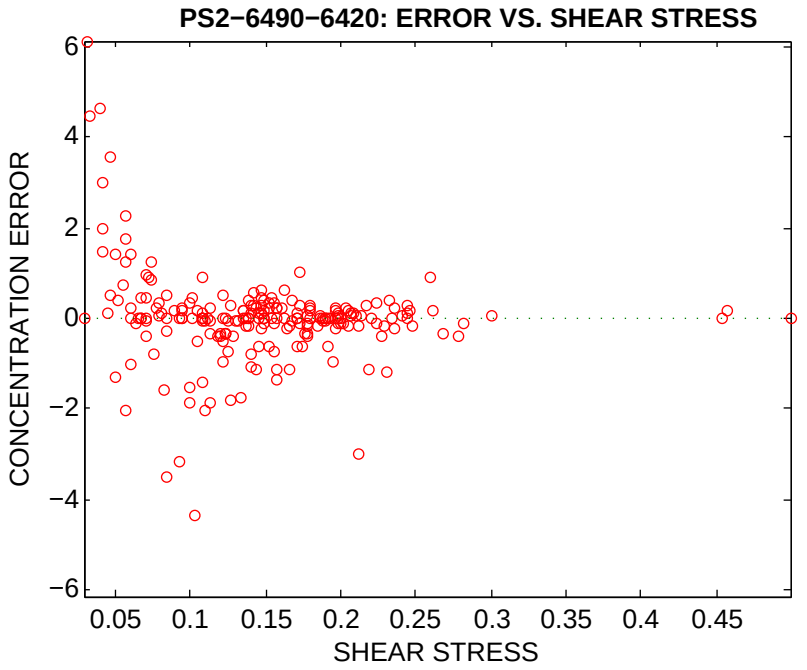


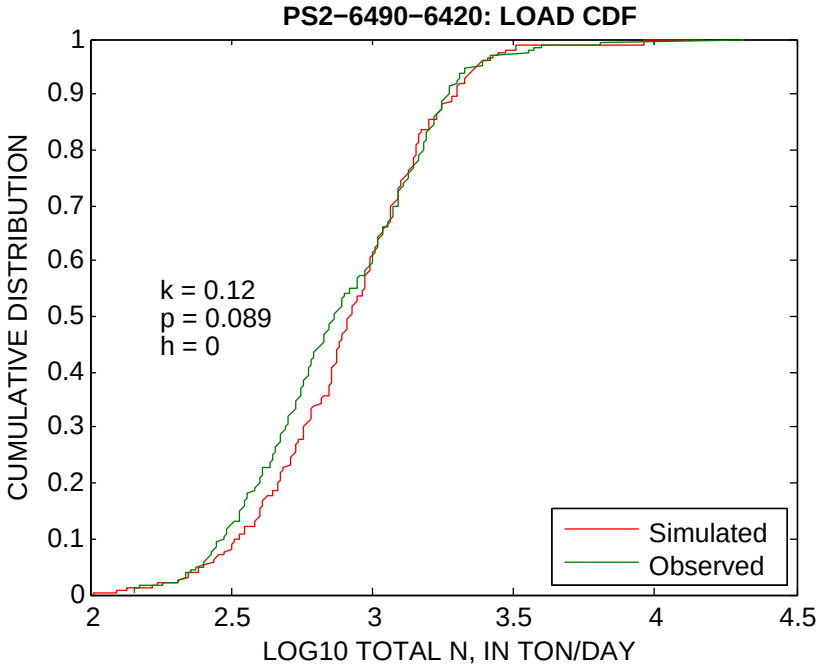


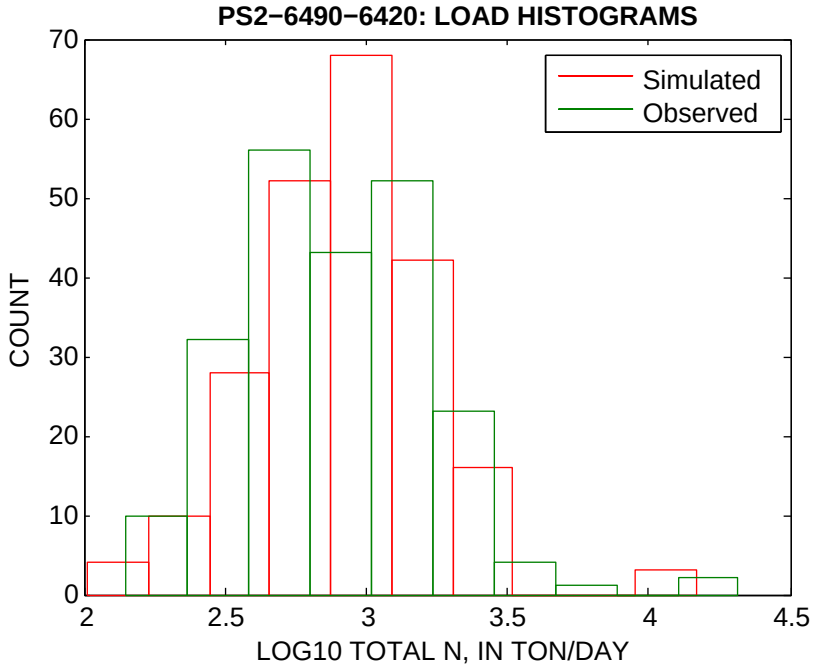


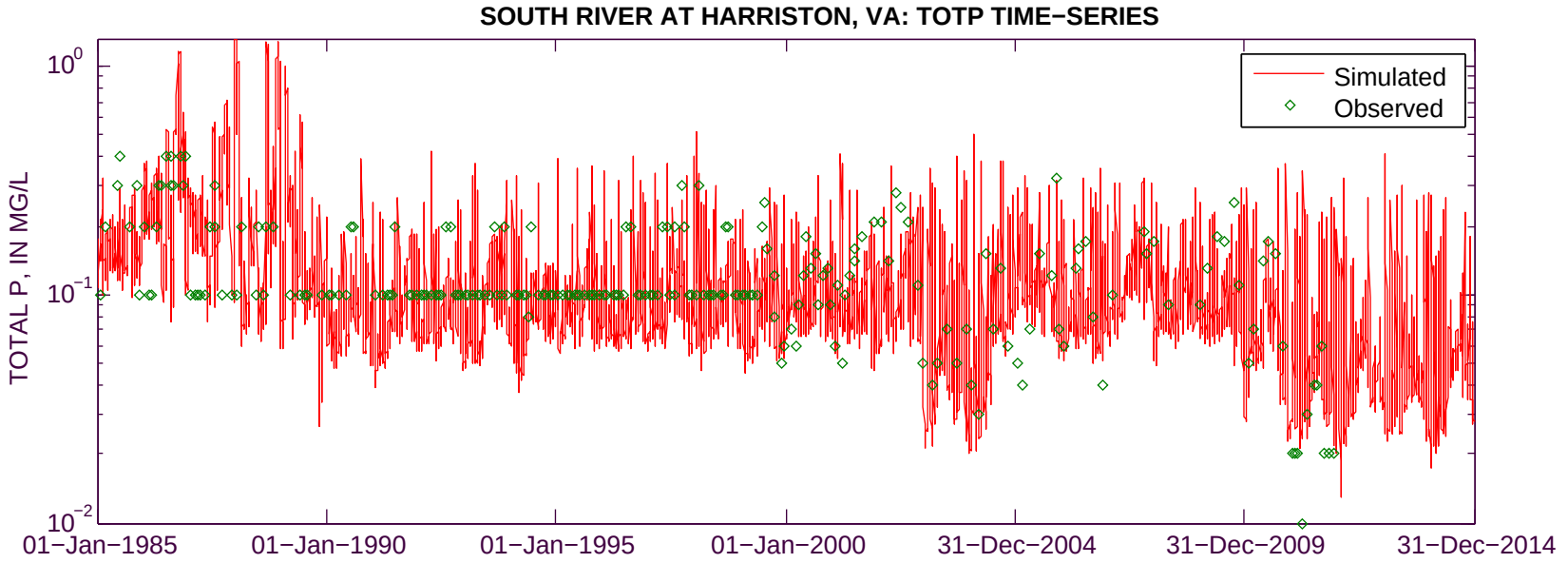
LOAD DATA
LOG10

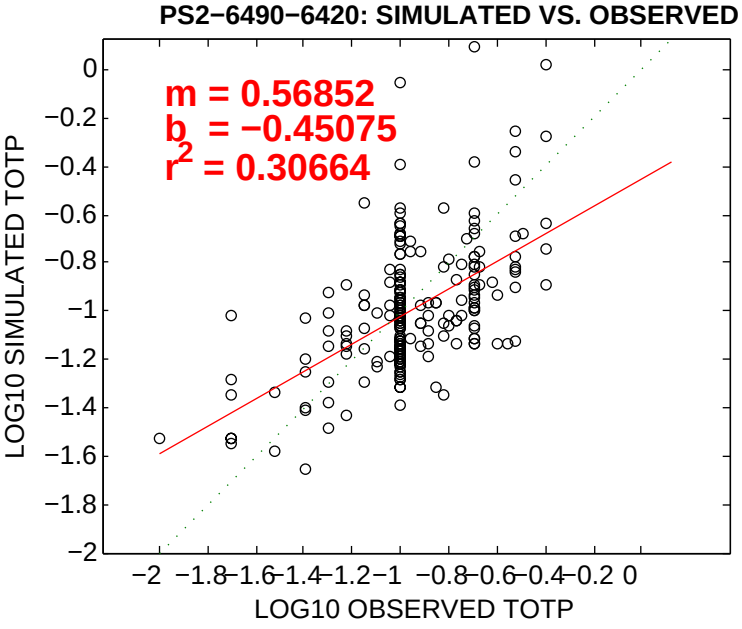


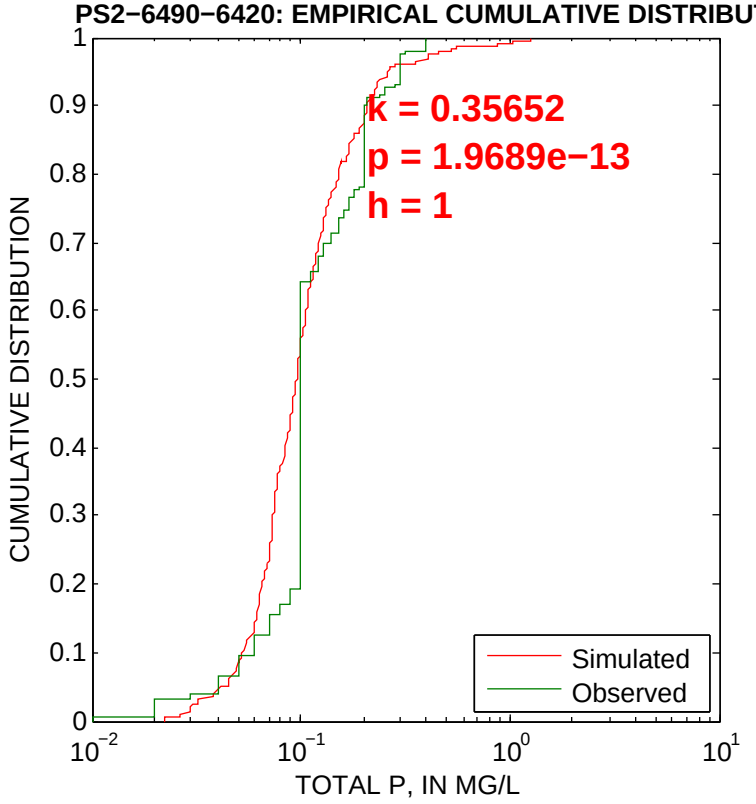












DATA SELECTION

scenario	file
P620171001WQ	TOTP.calib

plot: TOTP - total phosphorus

Dates: 1/1/1985 – 12/31/201

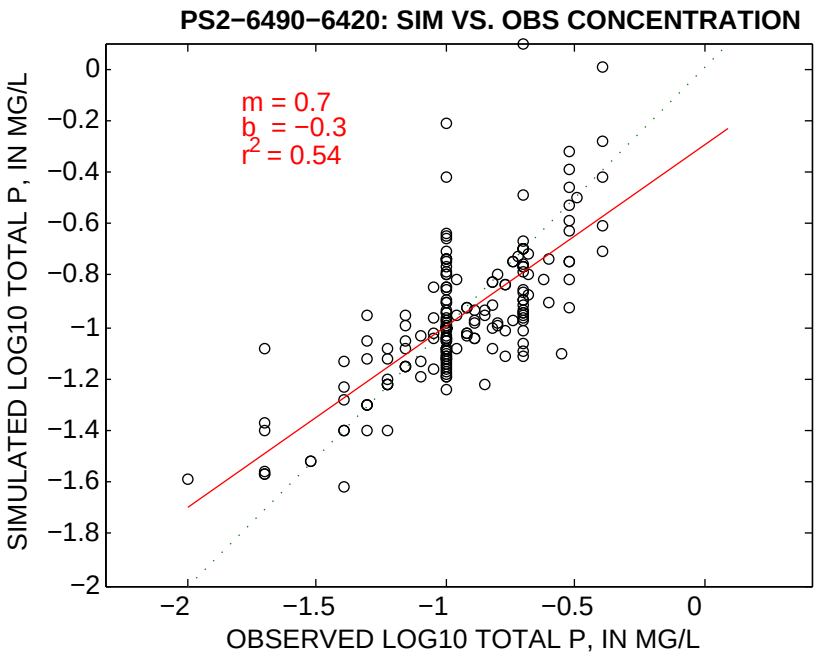
Drive	Directory	Observed
N/A	model	OBS20161101

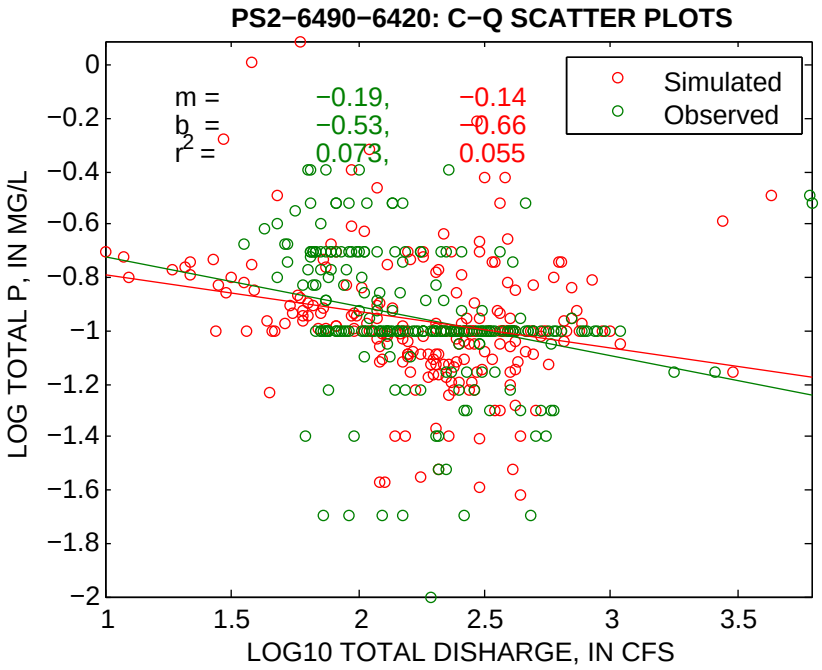
STATISTICS

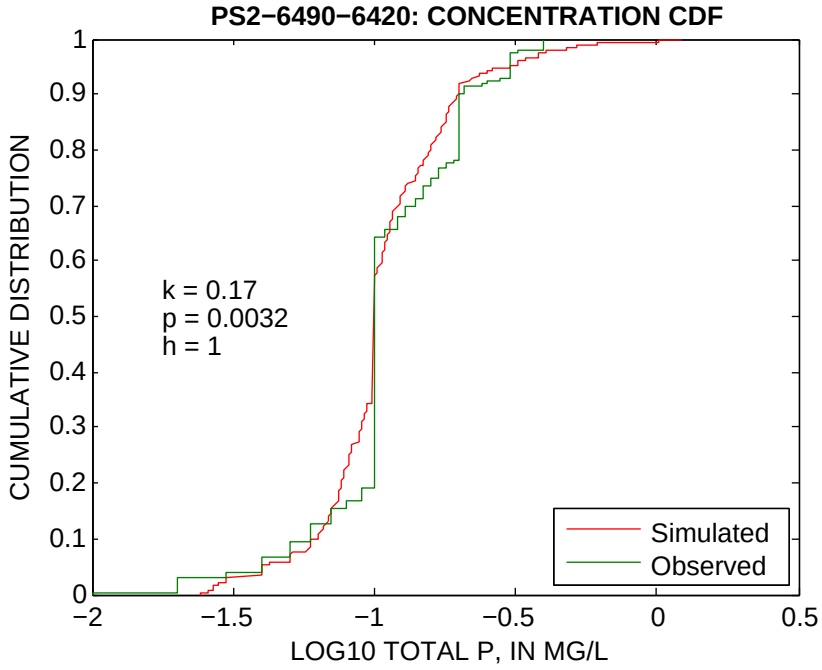
	n	observe	simulate
		230	230
min		0.01	0.022234
		-2	-1.65298
mean		0.129522	0.127323
		-0.956085	-0.99431
media		0.1	0.095537
		-1	-1.01983
max		0.4	1.2509
		-0.39794	0.0972226
varian		0.00566658	0.01767
		0.0649115	0.0684206
JB		0.001	0.001
		0.001	0.001
		ra	log
%		-1.69747	3.99812
err.va		0.0151737	0.0609922
rel.std.err		2.67775	0.939622
mod.eff		-1.67775	0.0603779

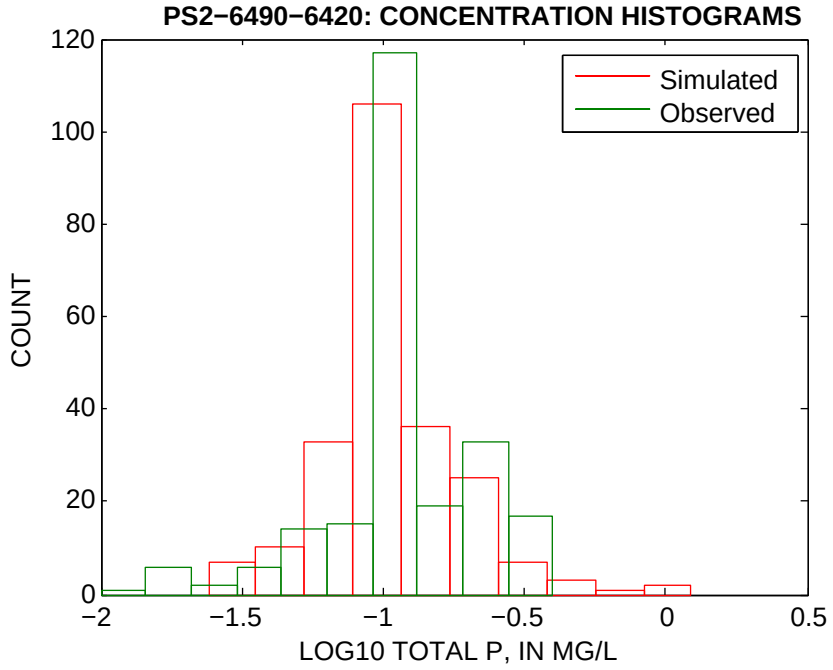
VERSION 2.1

ALL DATA
LOG10

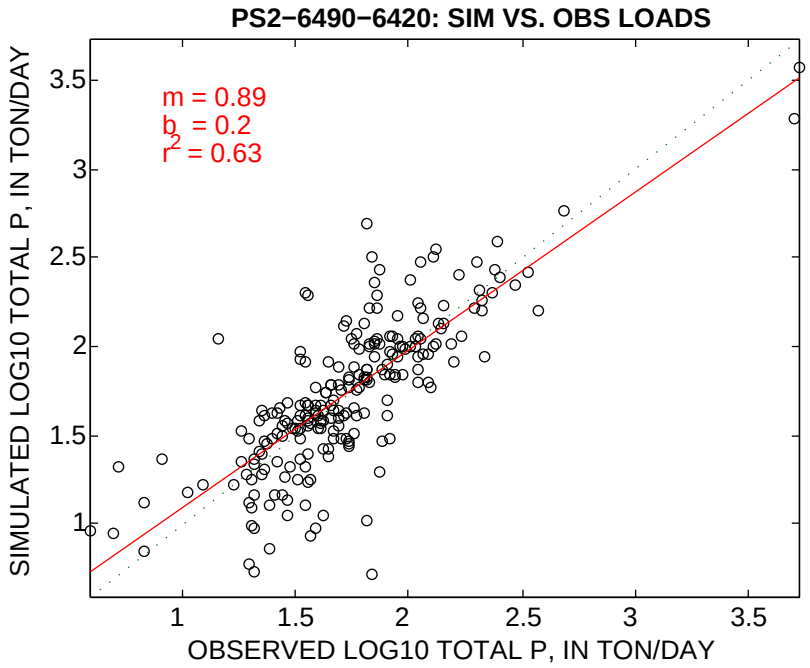


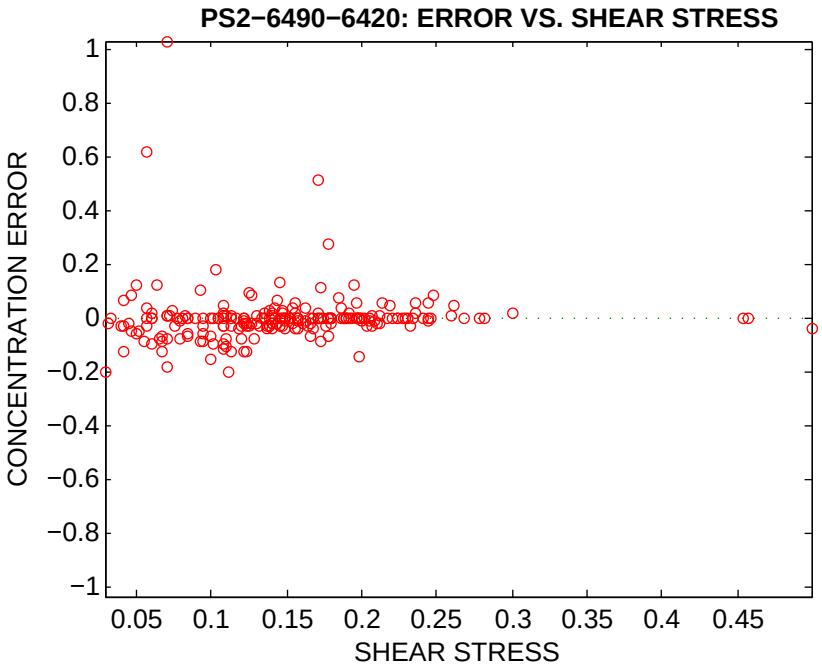


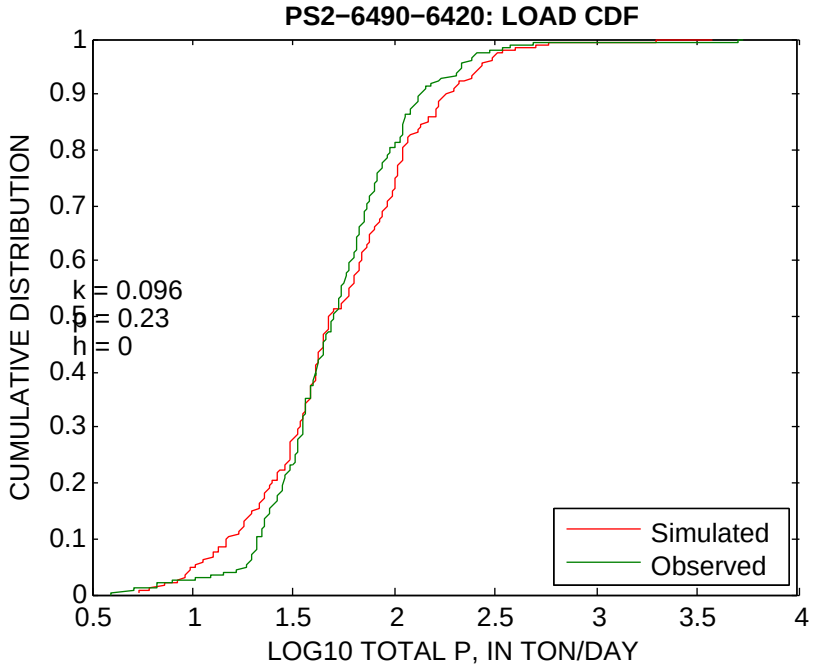


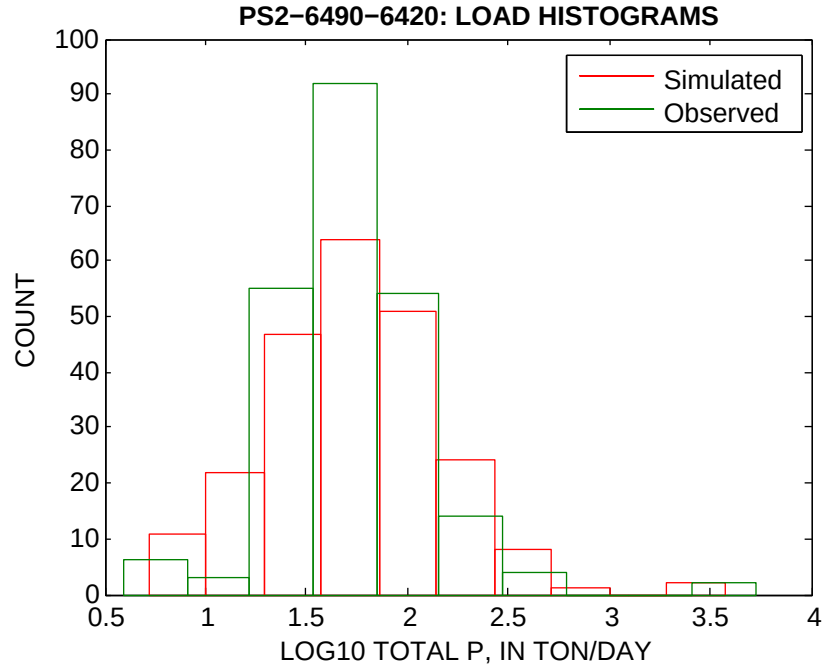


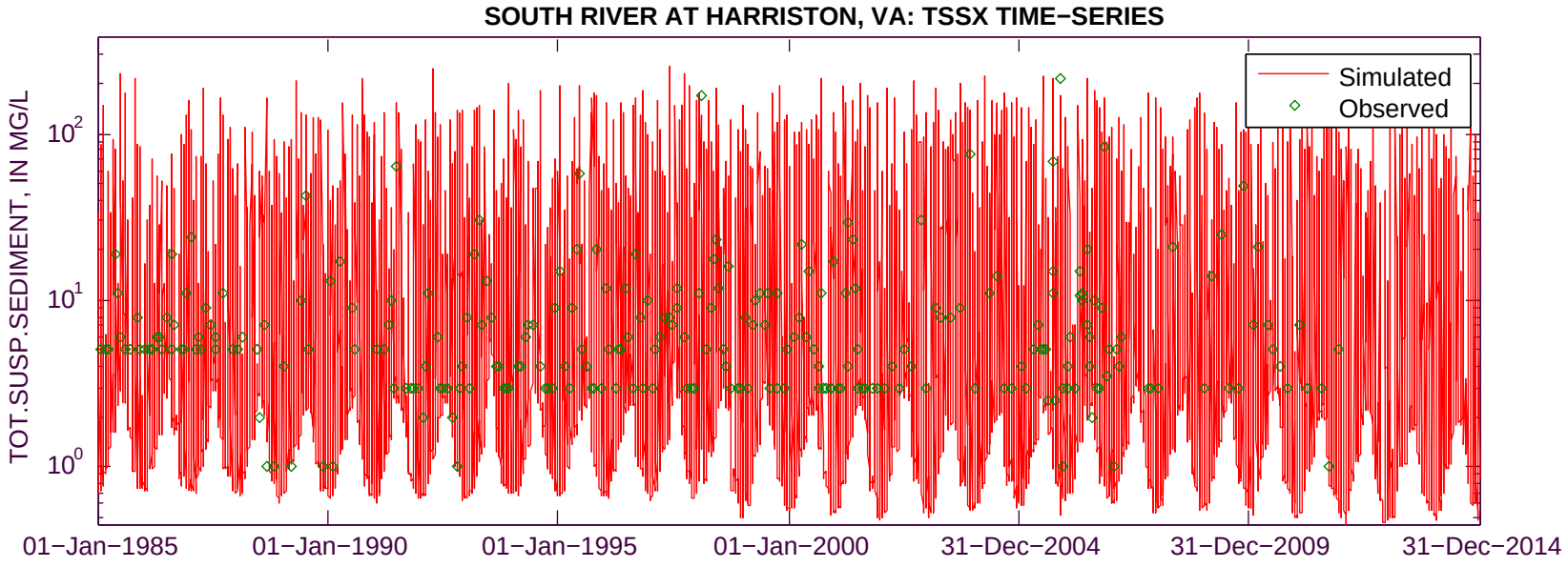
LOAD DATA
LOG10

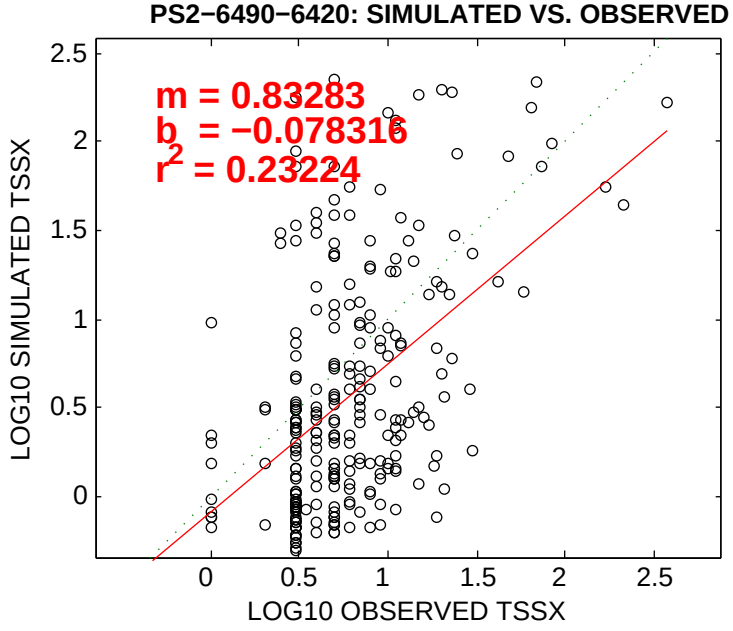


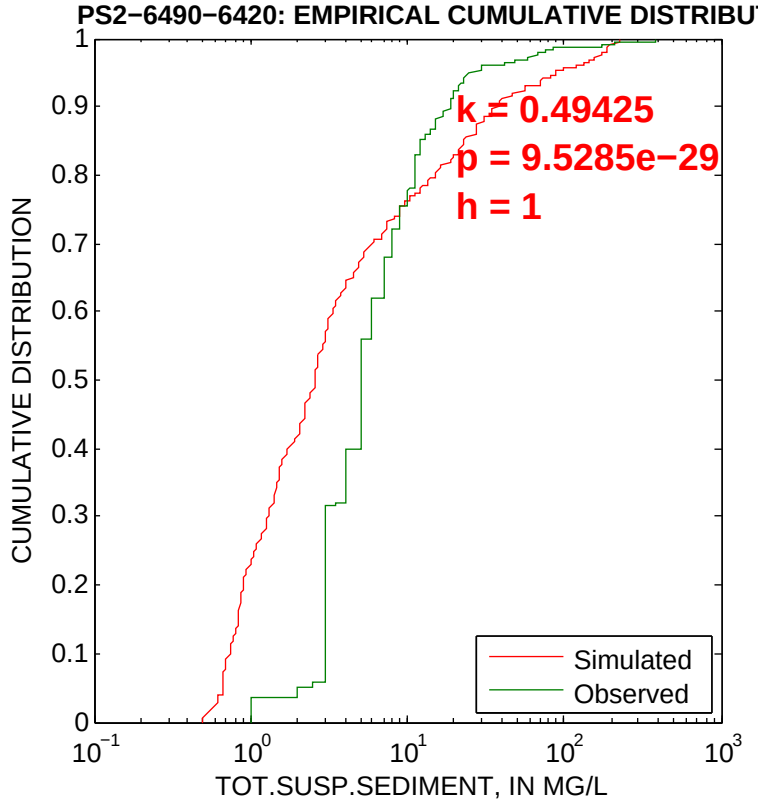












DATA SELECTION

scenario	file
P620171001WQ	TSSX.calib

plot: TSSX - total suspended ...

Dates: 1/1/1985 — 12/31/201

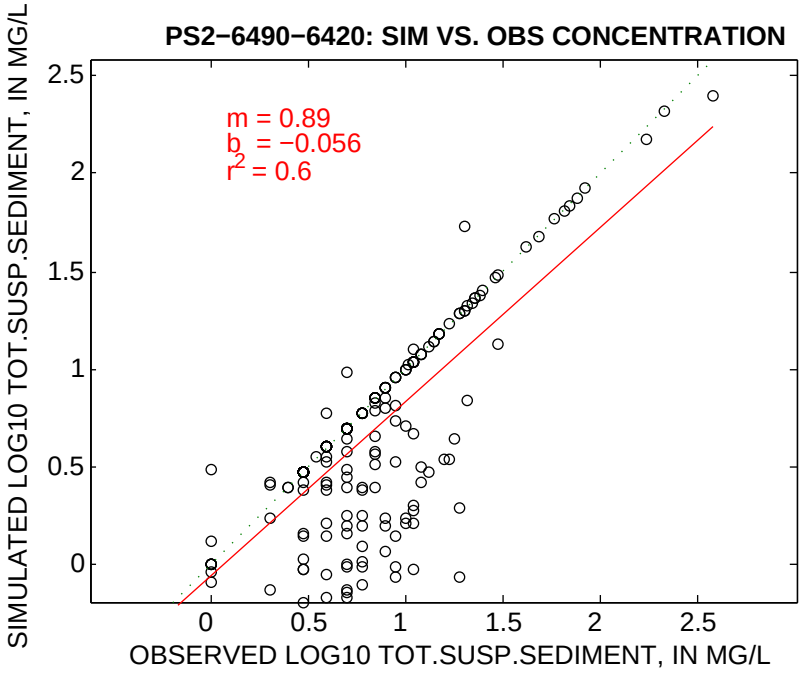
Drive	Directory	Observed
N/A	model	OBS20161101

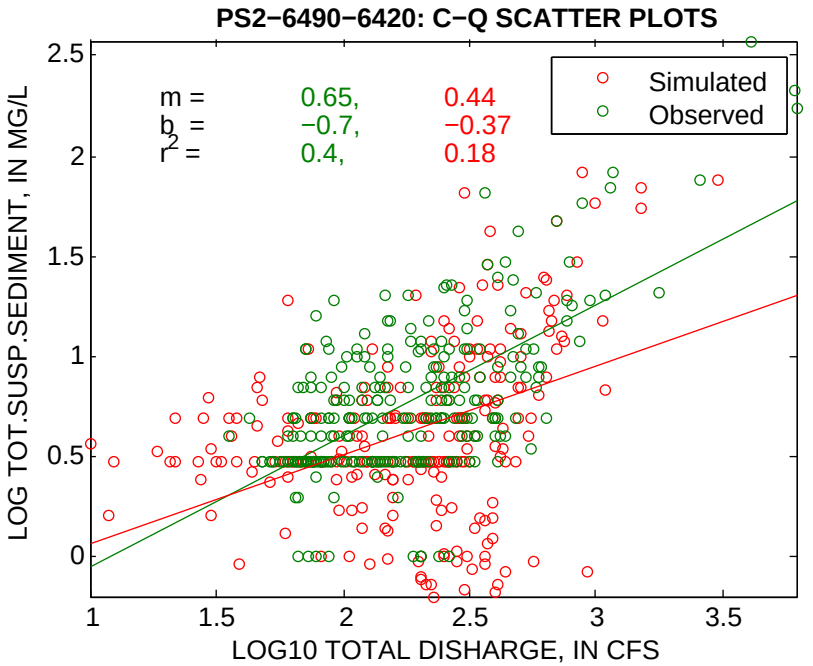
STATISTICS

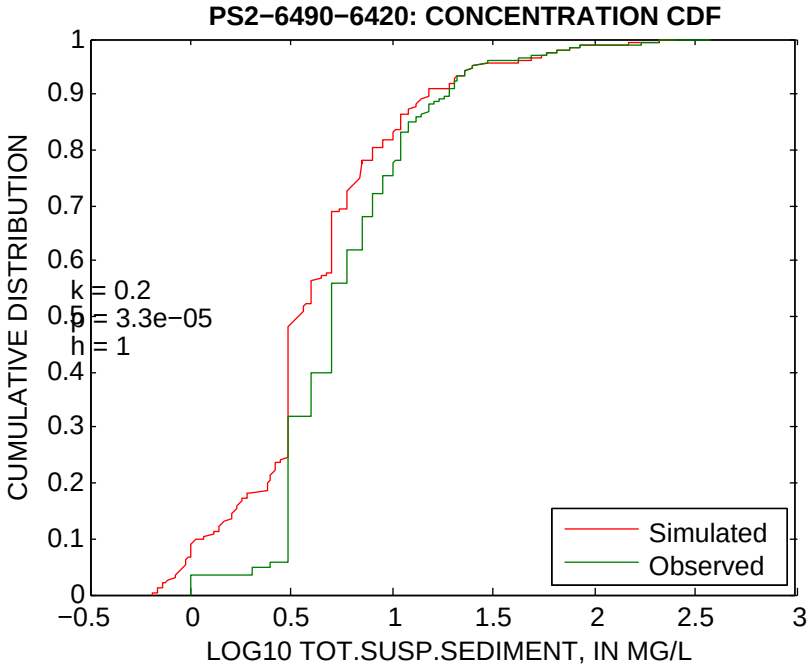
n	261	261
	observe	simulate
min	1	0.50034
	0	-0.300735
mean	11.227	15.7571
	0.776676	0.568526
media	5	2.5856
	0.69897	0.412561
max	377	226.51
	2.57634	2.35509
varian	892.781	1405.94
	0.148038	0.442127
JB	0.001	0.001
	0.001	0.001
	ra	log
%	40.3498	-26.8002
err.va	1452.34	0.387076
rel.std.err	1.62676	2.6147
mod.eff	-0.626762	-1.6147

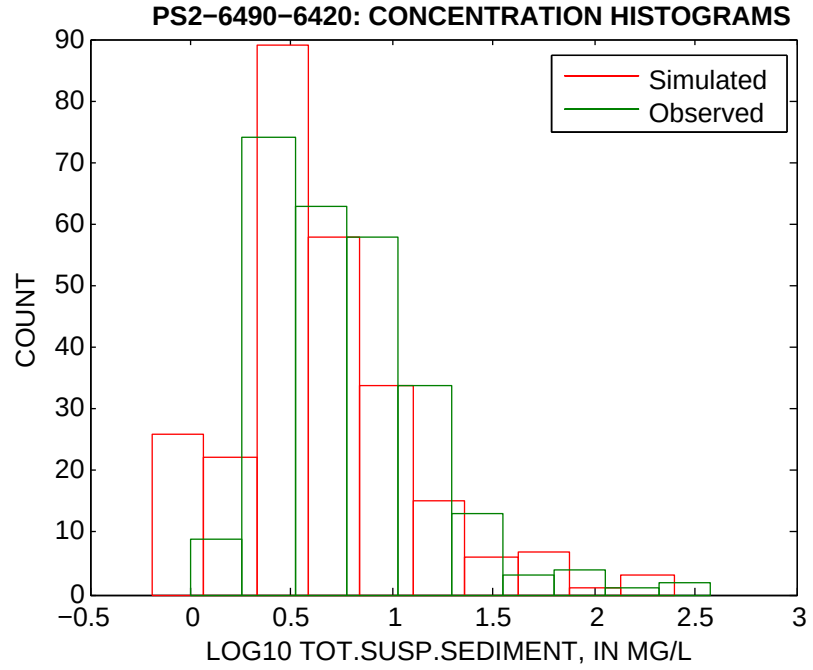
VERSION 2.1

ALL DATA
LOG10

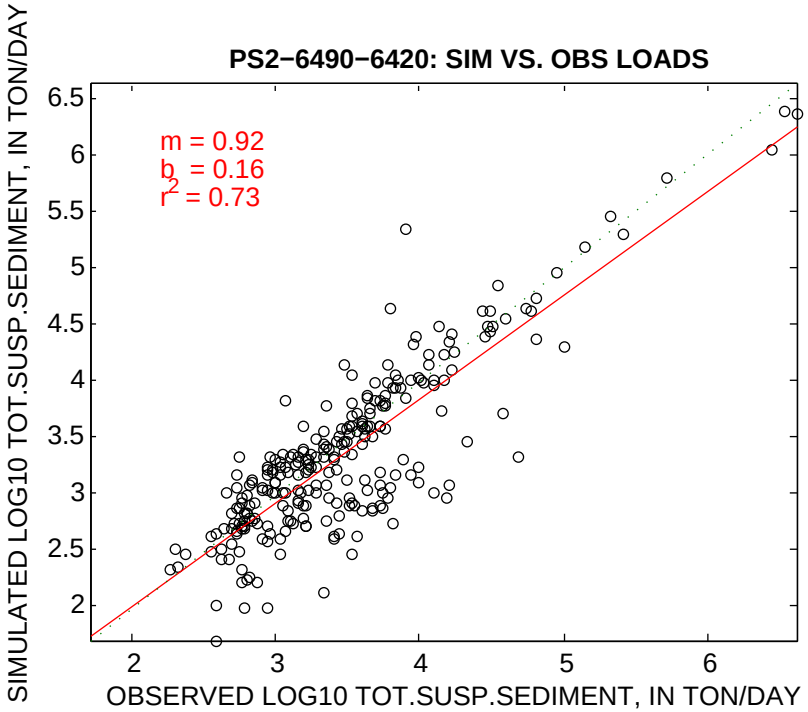


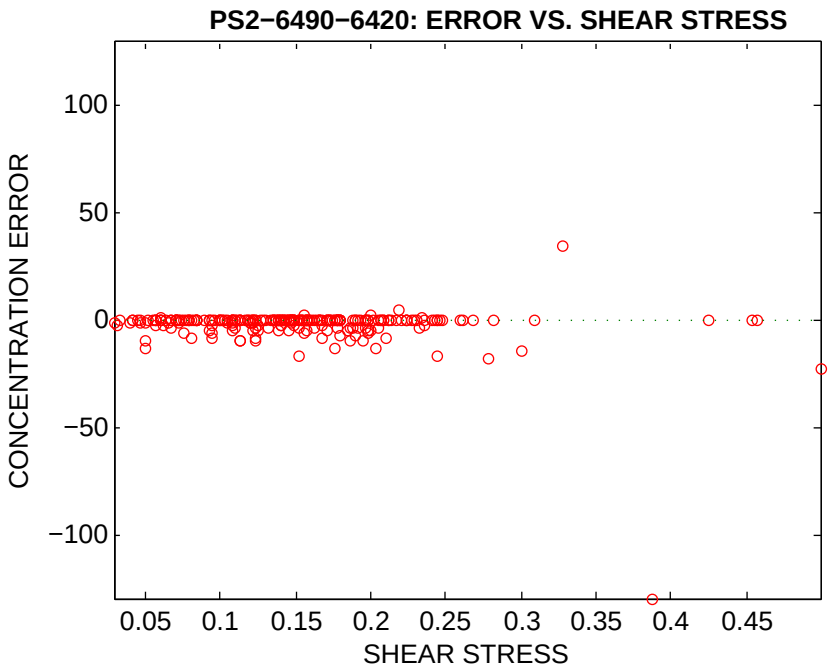


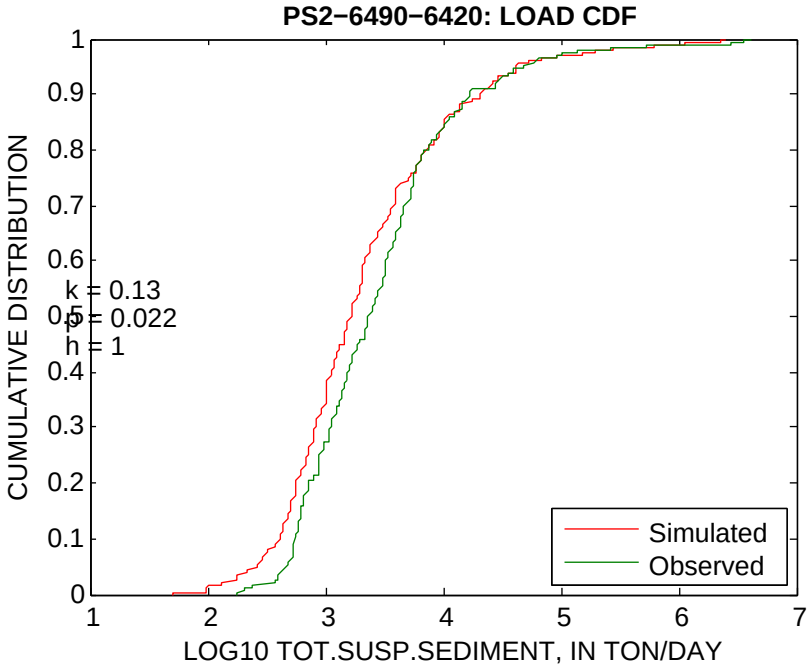


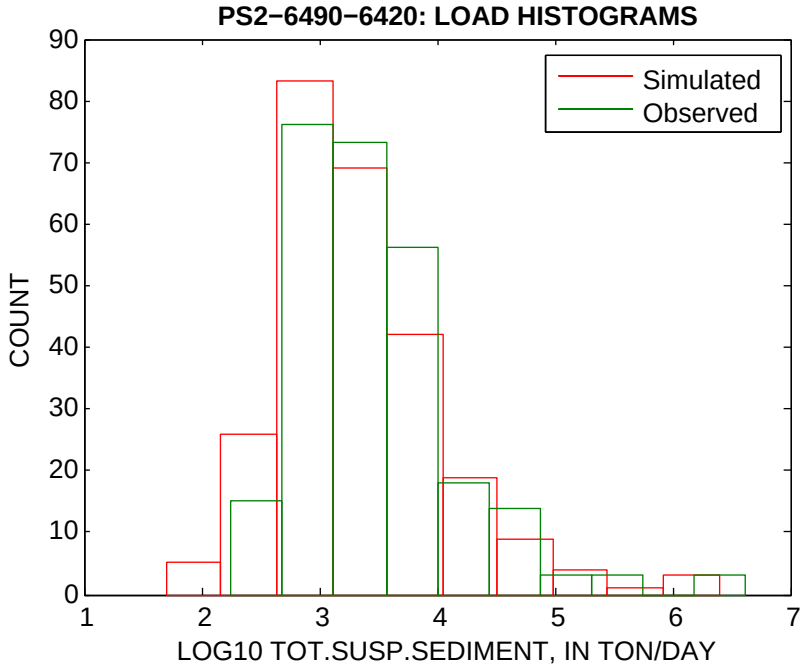


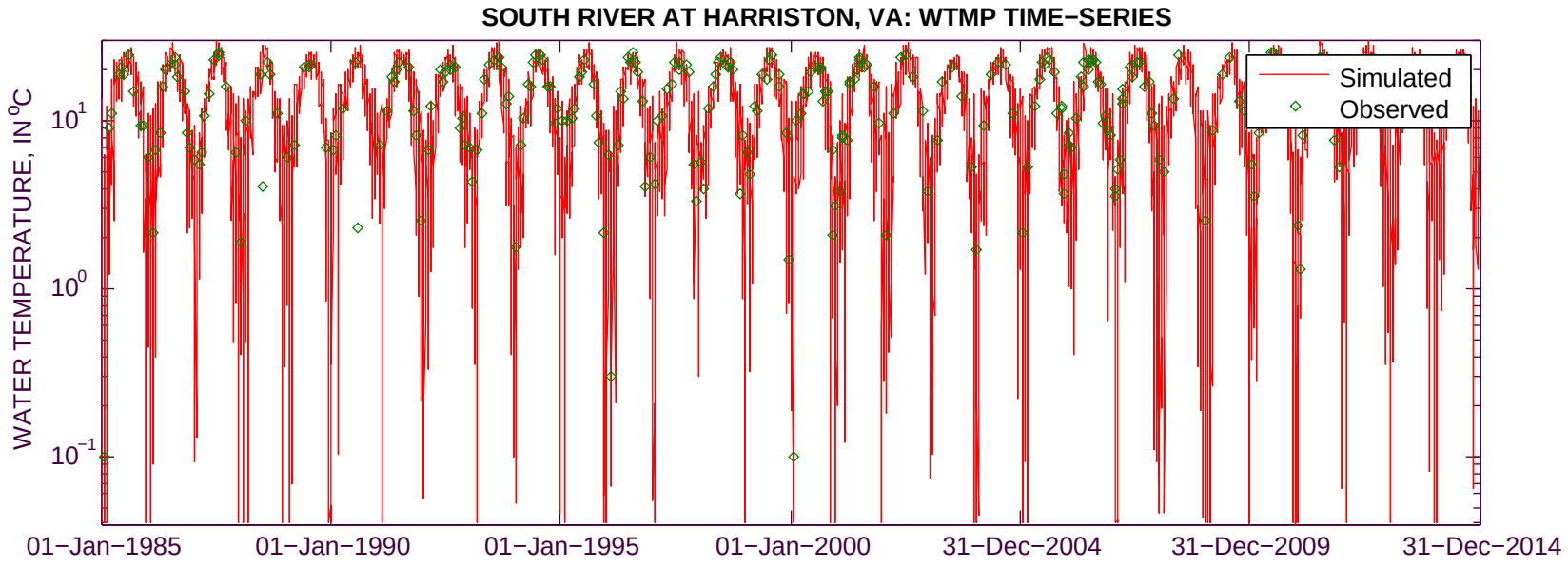
LOAD DATA
LOG10

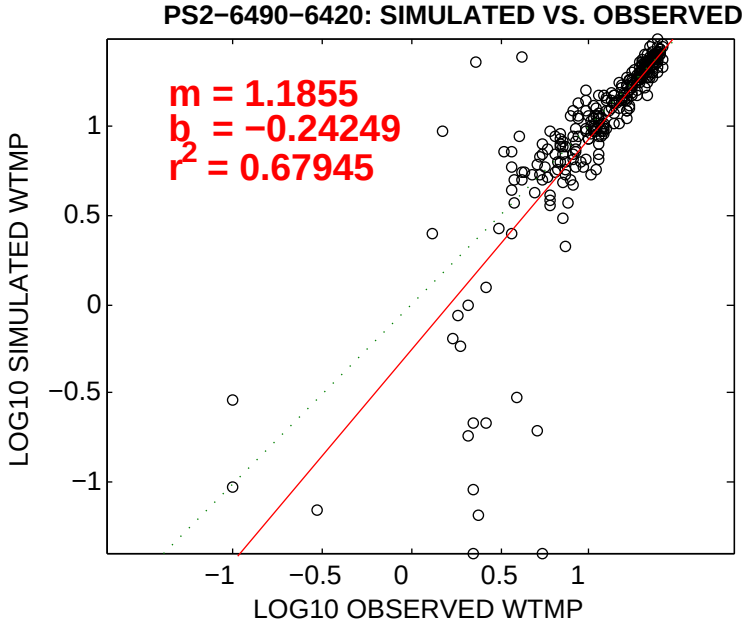


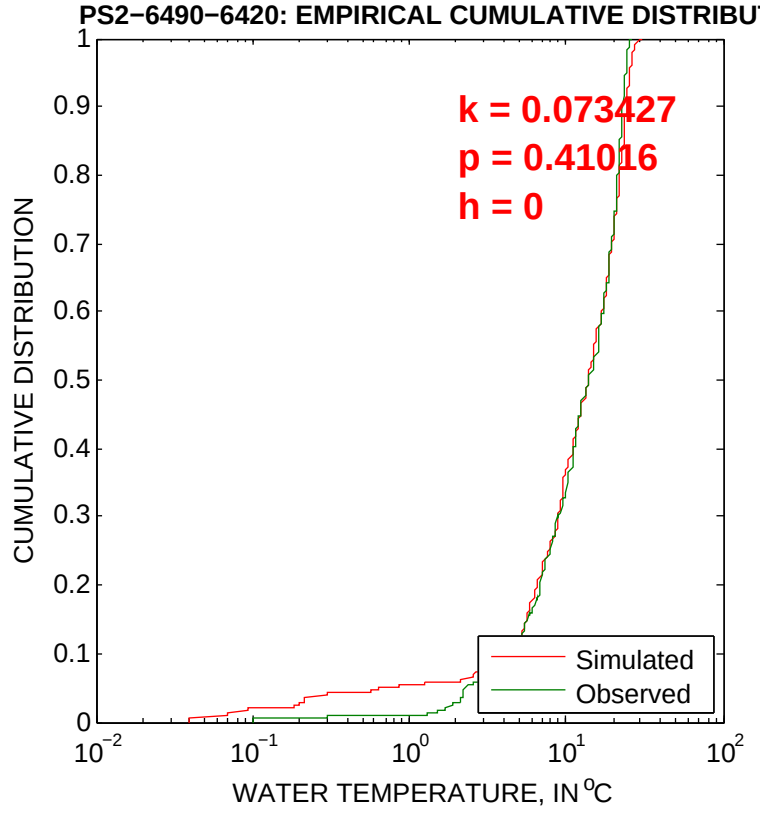












DATA SELECTION

scenario	file
P620171001WQ	WTMP.calib

plot: WTMP - water tempera...

Dates: 1/1/1985 – 12/31/201

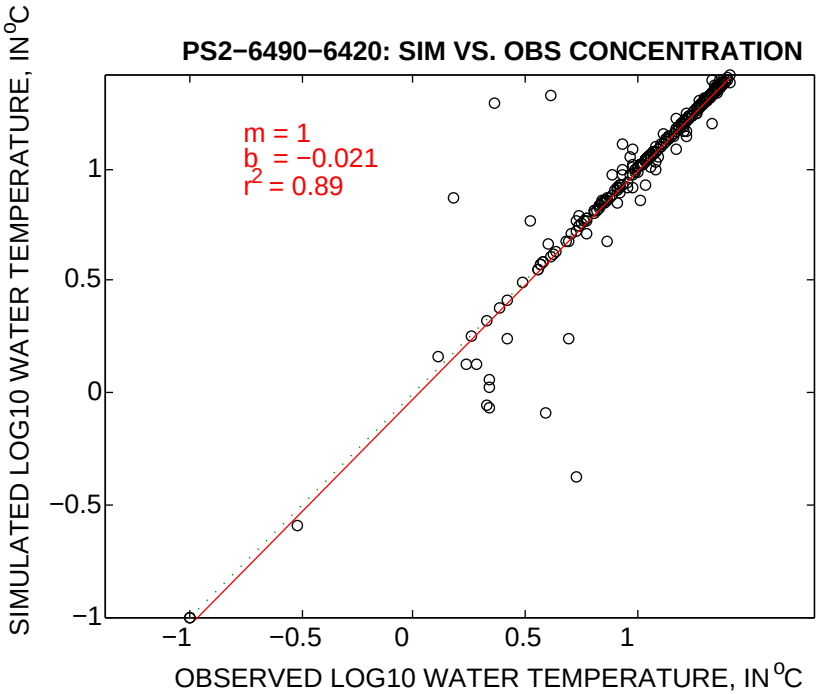
Drive	Directory	Observed
N/A	model	OBS20161101

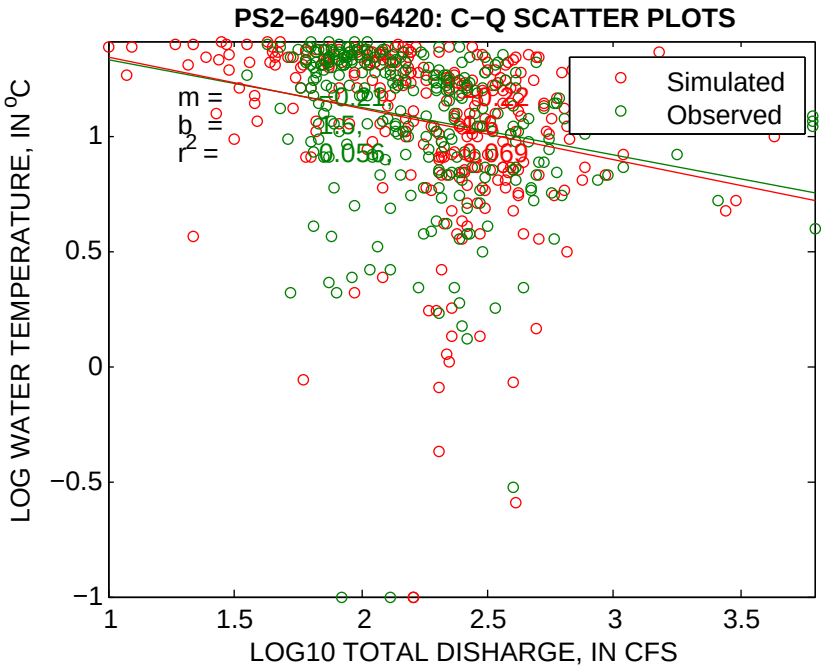
STATISTICS

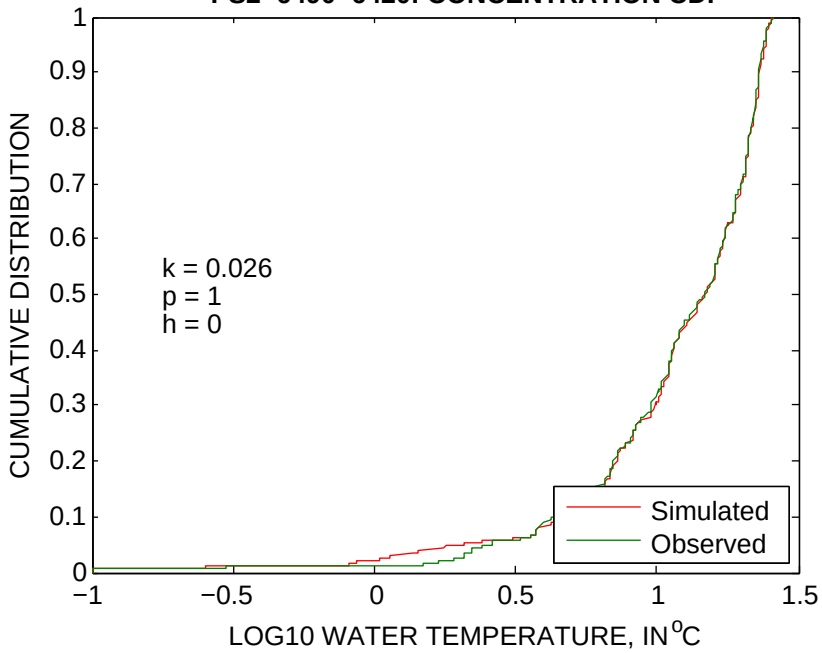
	n	286	286
		observe	simulate
min		0.1	0.040013
		-1	-1.3978
mean		13.9967	14.1214
		1.05494	1.00815
media		13.9	13.8195
		1.14301	1.14049
max		26	30.757
		1.41497	1.48794
varian		49.9853	59.464
		0.121095	0.250482
JB		0.002312	0.005445
		0.001	0.001
		ra	log
%		0.89083	-4.43504
err.va		8.28516	0.086655
rel.std.err		0.165752	0.715594
mod.eff		0.834248	0.284406

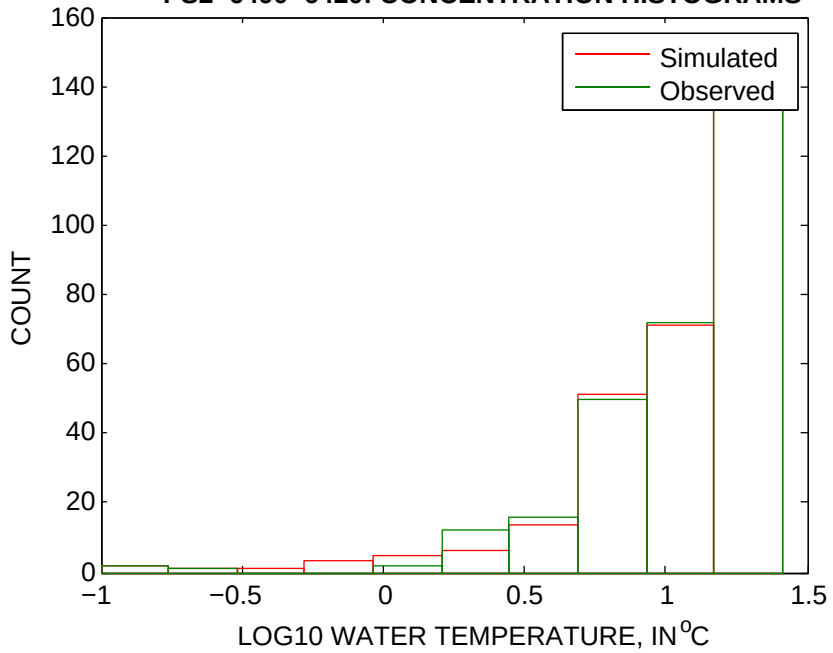
VERSION 2.1

ALL DATA
LOG10

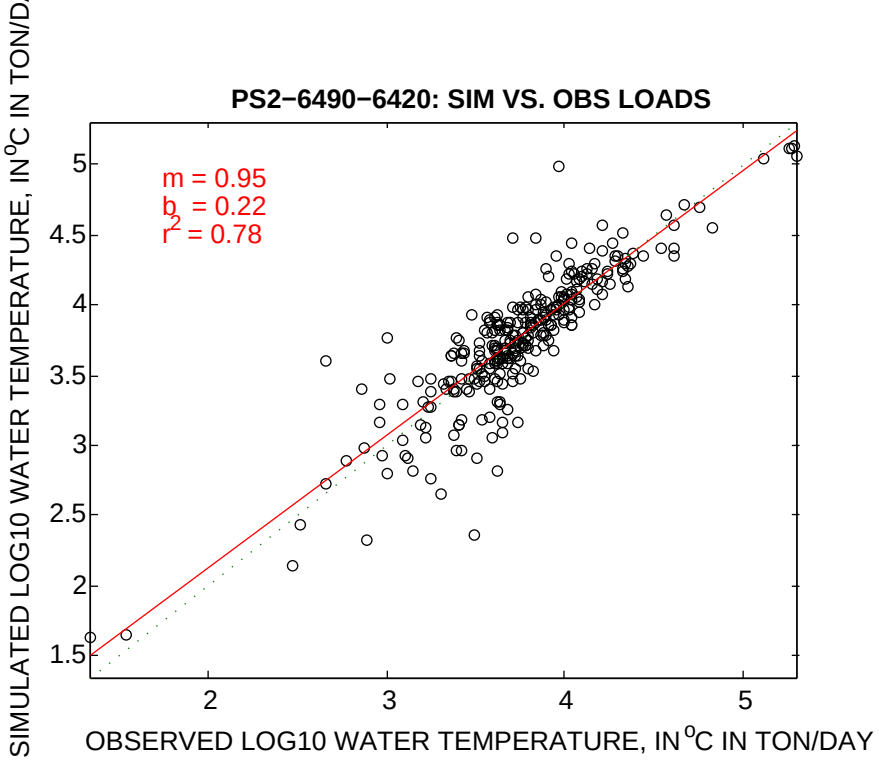


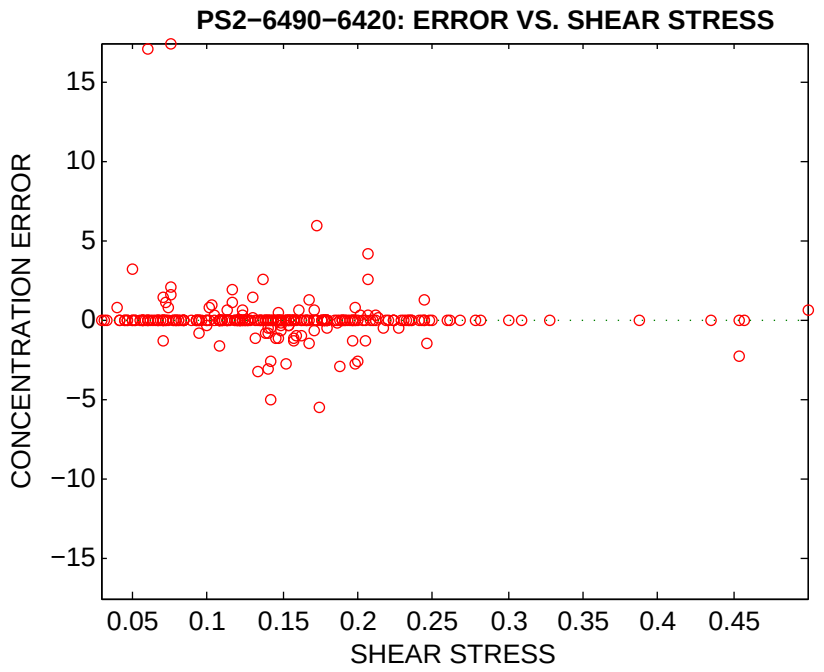


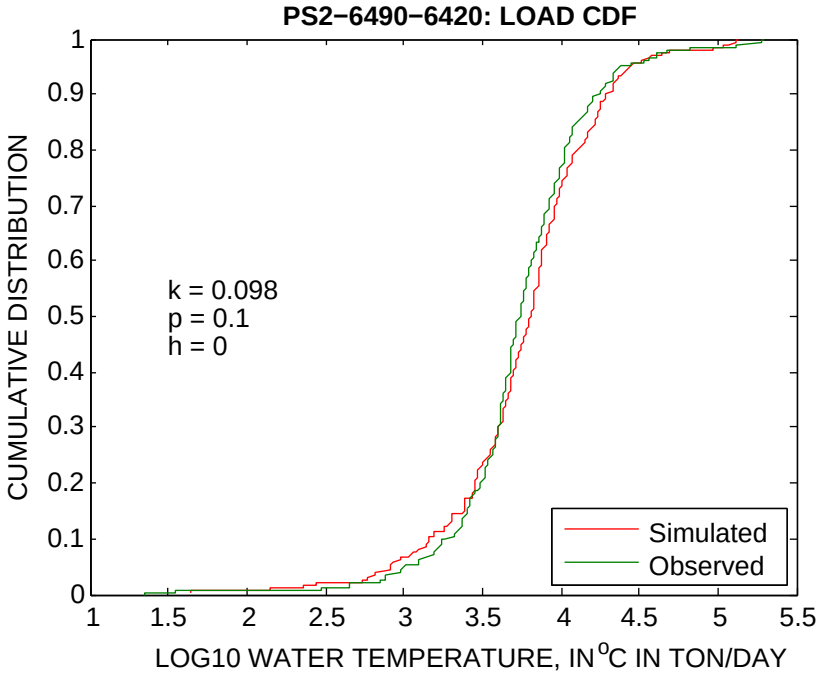


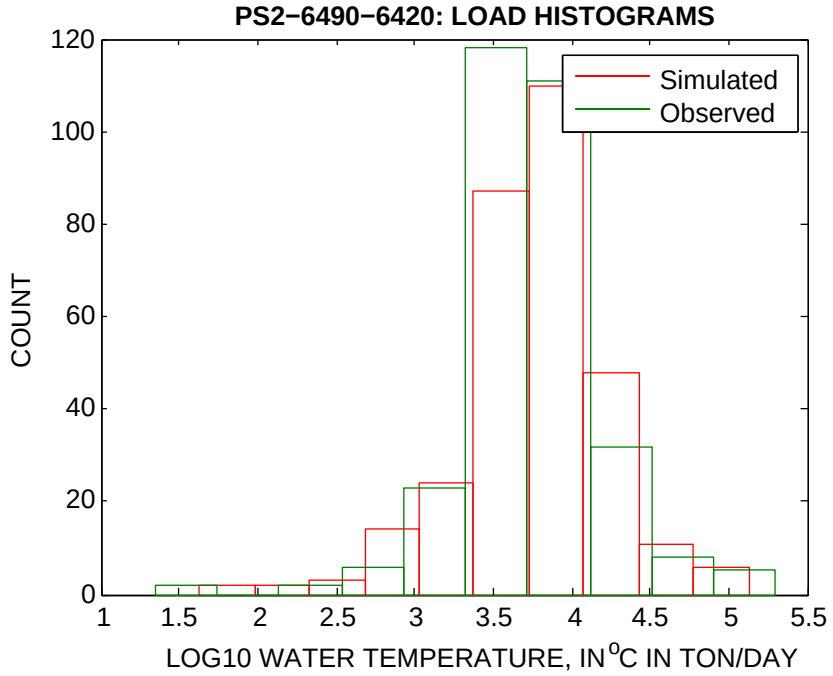


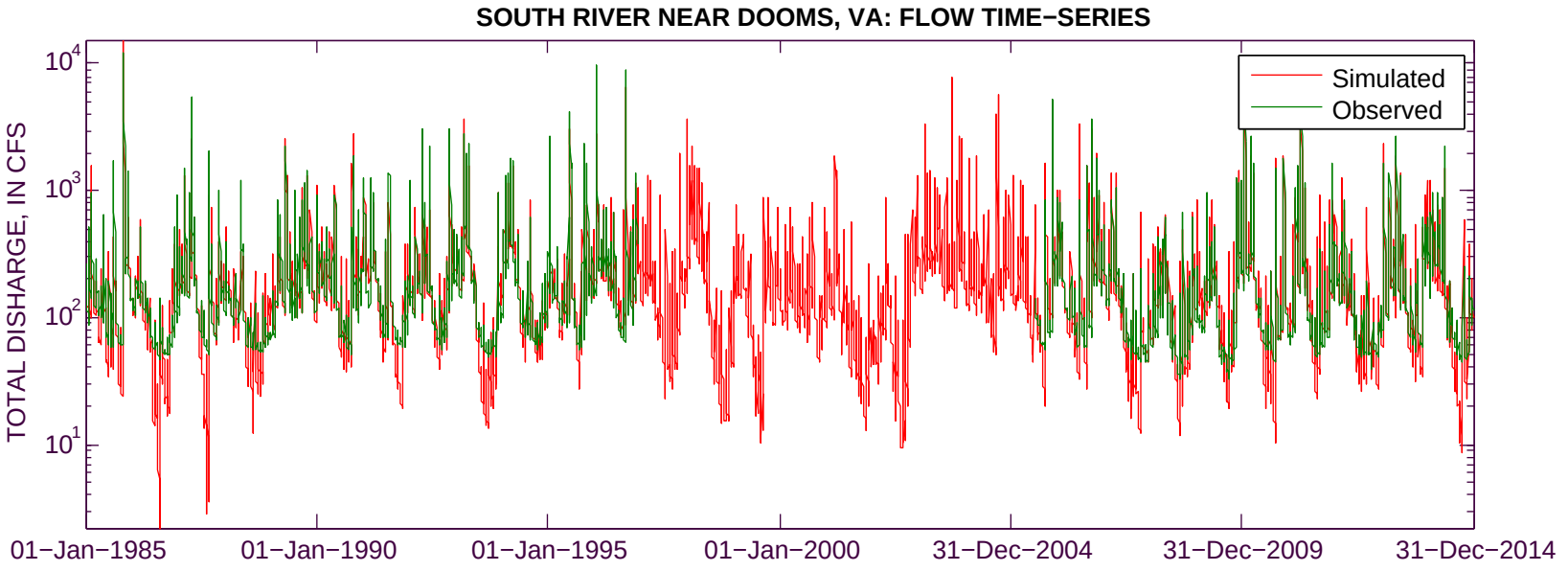
LOAD DATA
LOG10

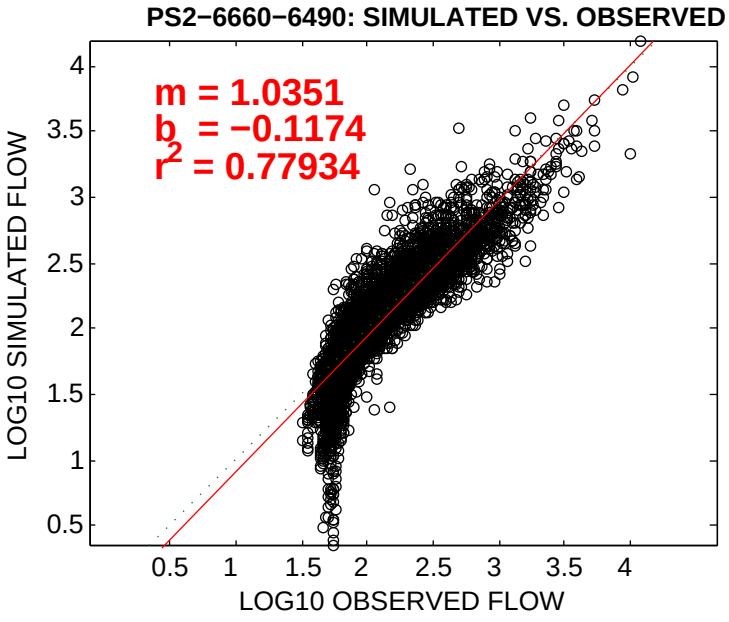


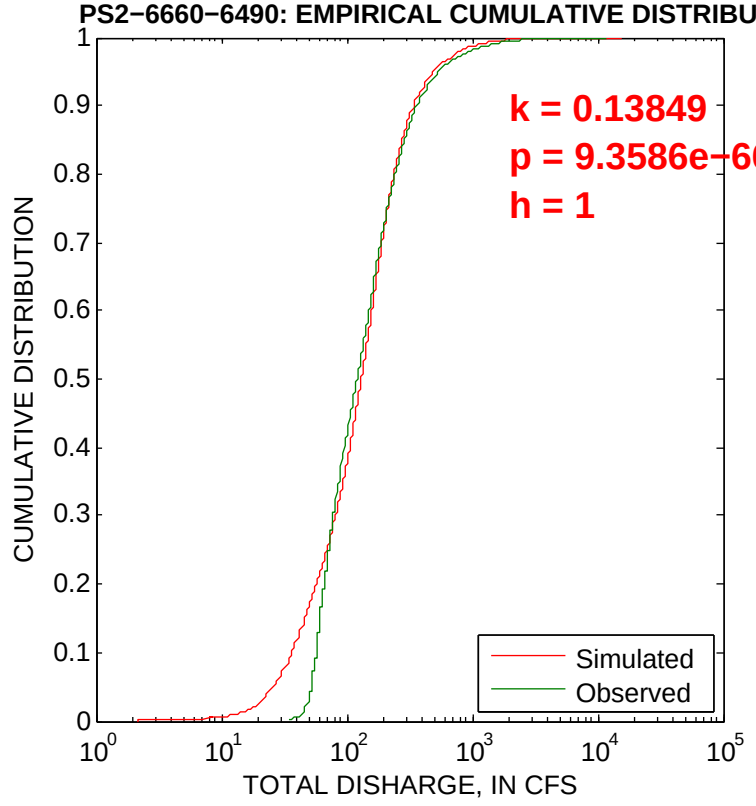












DATA SELECTION

scenario	file
P620171001WQ	FLOW.calib

plot: FLOW - total discharge

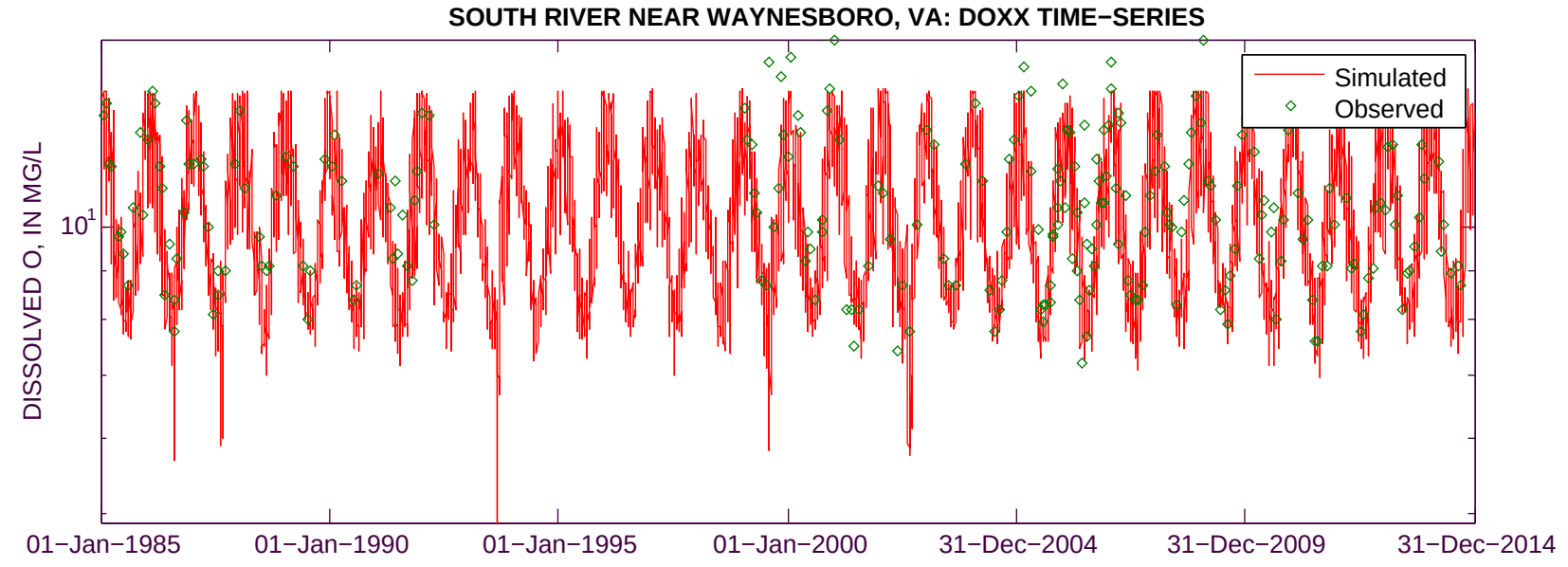
Dates: 1/1/1985 – 12/31/201

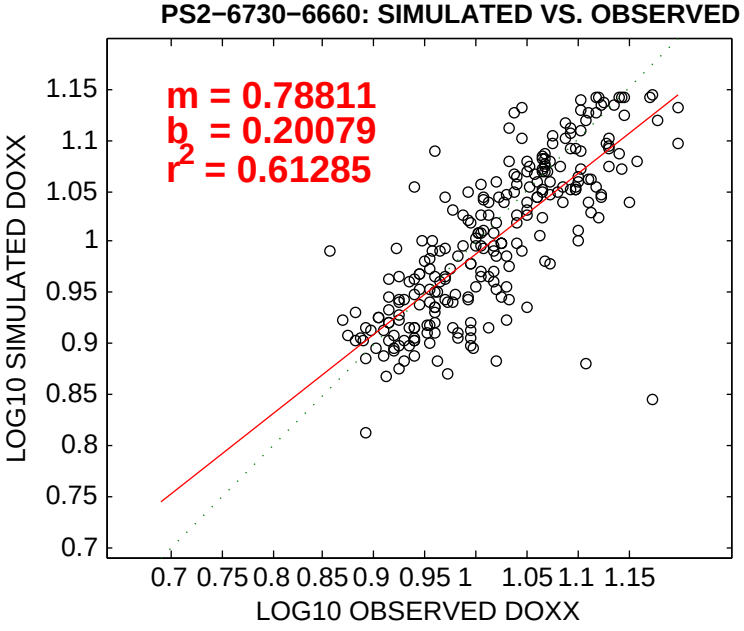
Drive	Directory	Observed
N/A	model	OBS20161101

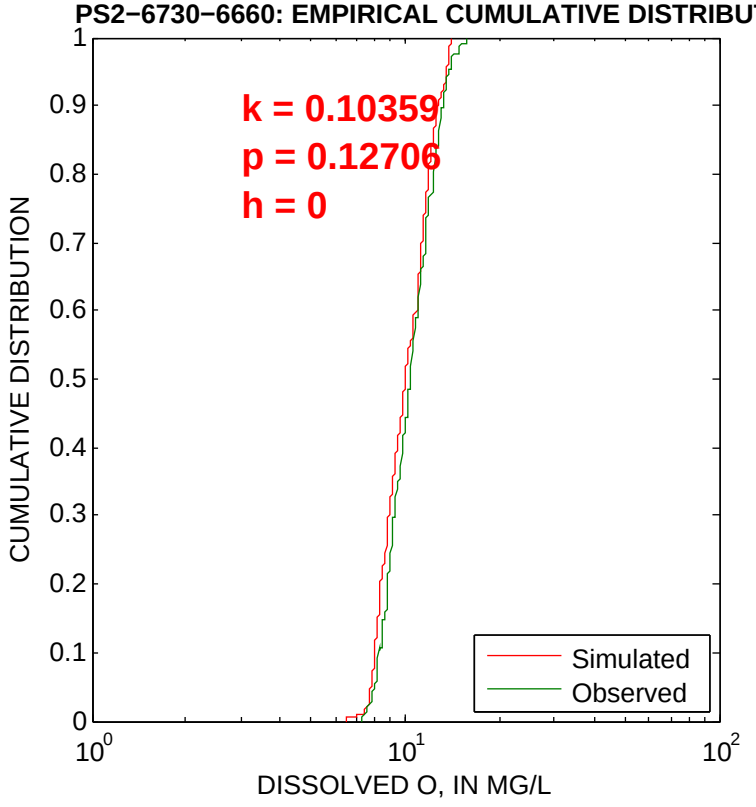
STATISTICS

n	7813	7813
	observe	simulate
min	33	2.2009
	1.51851	0.3426
mean	203.289	189.104
	2.13042	2.08781
media	122	131.46
	2.08636	2.11879
max	12000	15610
	4.07918	4.1934
varian	140347	105722
	0.113116	0.155513
JB	0.001	0.001
	0.001	0.001
	ra	log
%	-6.97762	-2.00017
err.va	34603.1	0.0362714
rel.std.err	0.246554	0.320655
mod.eff	0.753446	0.679345

VERSION 2.1







DATA SELECTION

scenario	file
P620171001WQ	DOXX.calib

plot: DOXX - dissolved oxygen

Dates: 1/1/1985 – 12/31/201

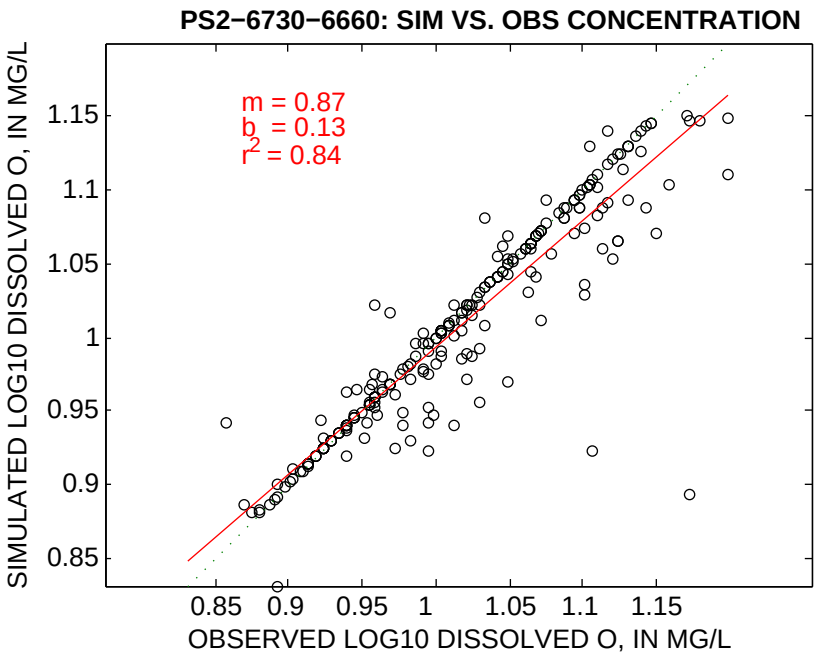
Drive	Directory	Observed
N/A	model	OBS20161101

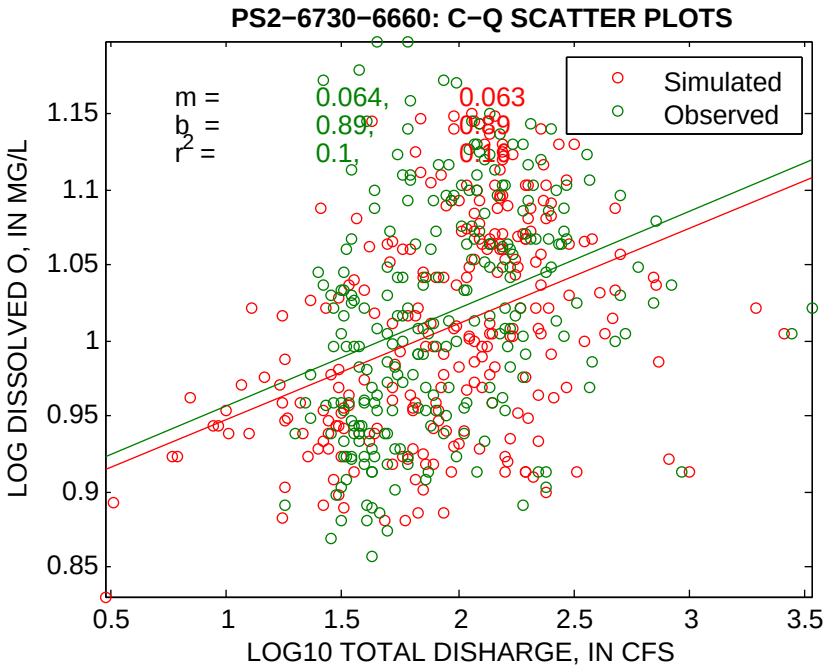
STATISTICS

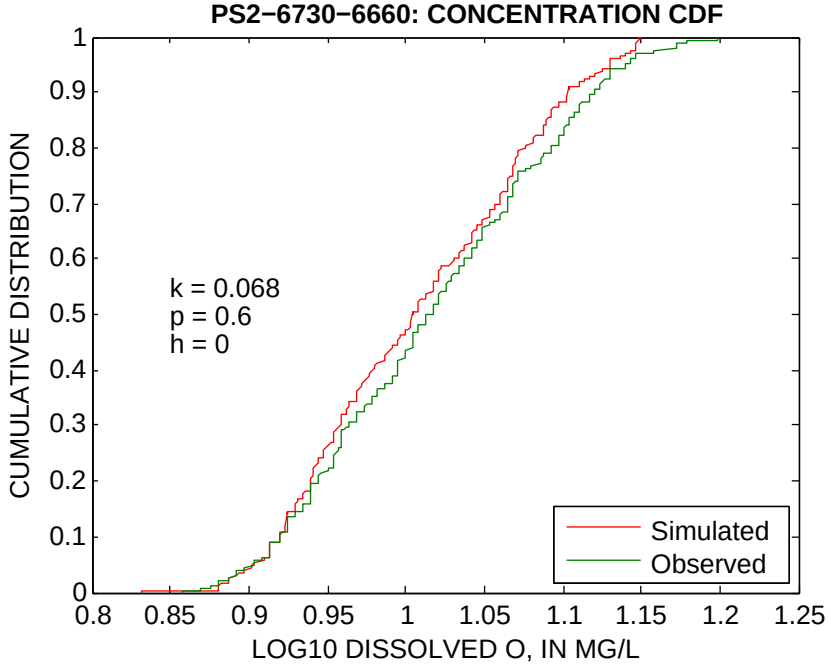
	n	251	251
		observe	simulate
min		7.2	6.4795
		0.857332	0.811541
mean		10.5732	10.2196
		1.01759	1.00277
media		10.4	9.995
		1.01703	0.999783
max		15.8	13.912
		1.19866	1.14339
varian		3.48102	3.23157
		0.00573466	0.00581213
JB		0.010669	0.008071
		0.024570	0.011758
		ra	log
%		-3.34401	-1.45646
err.va		1.57023	0.00272819
rel.std.err		0.451084	0.475737
mod.eff		0.548916	0.524263

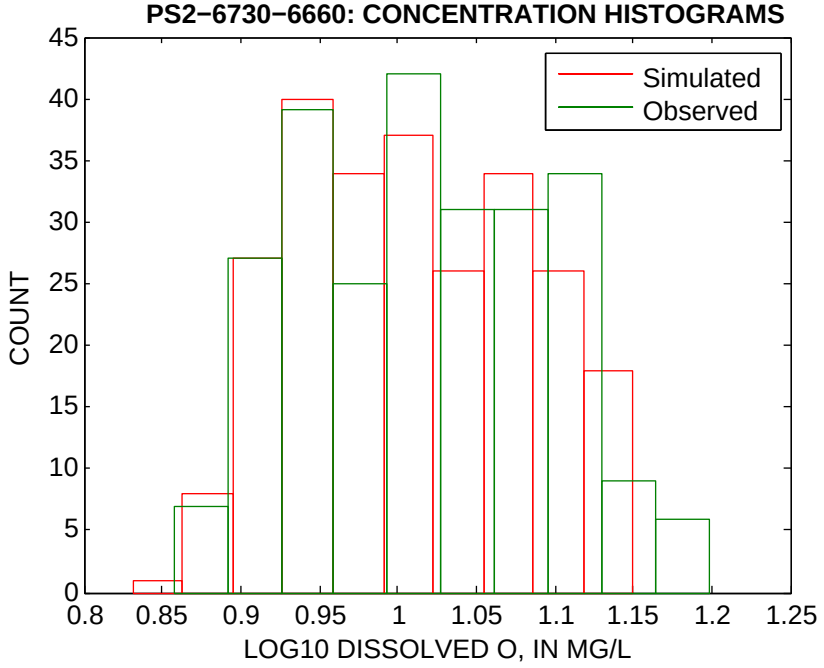
VERSION 2.1

ALL DATA
LOG10

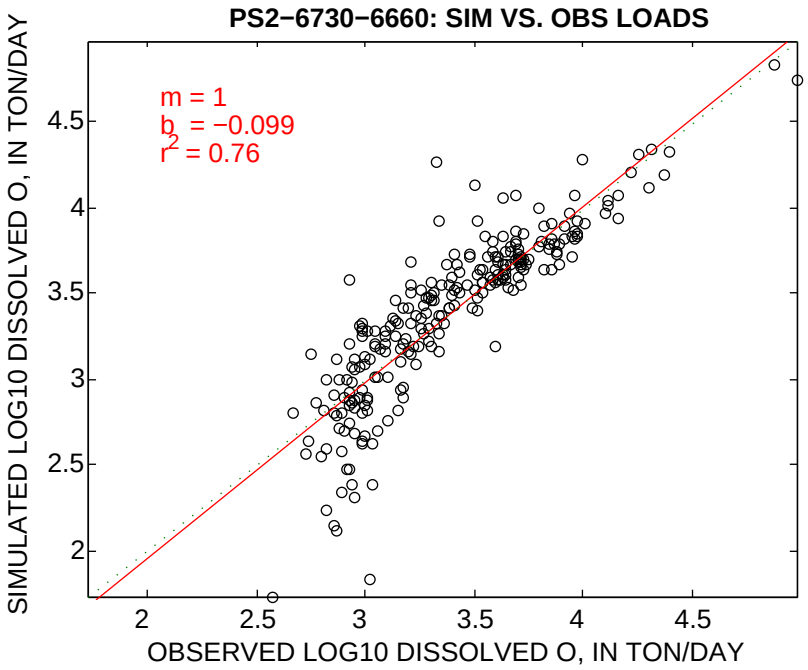


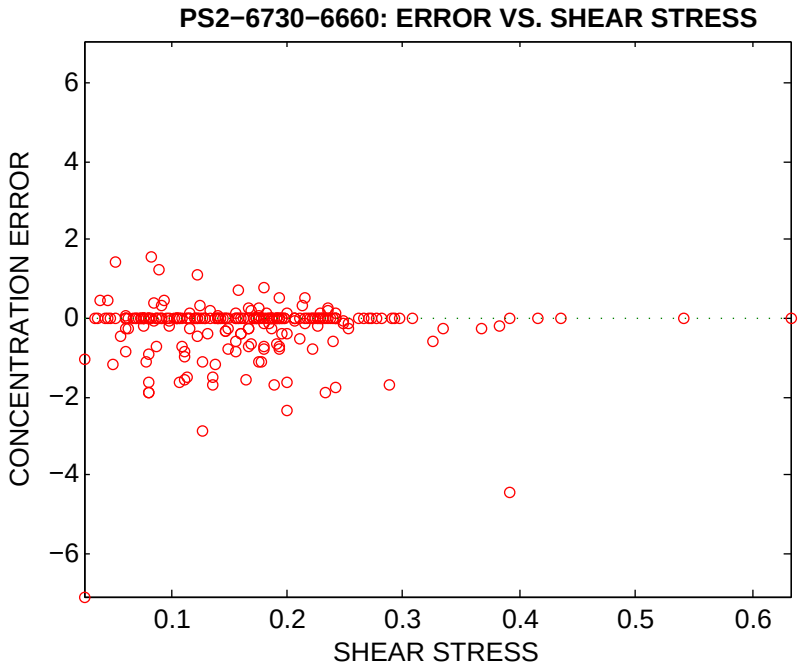


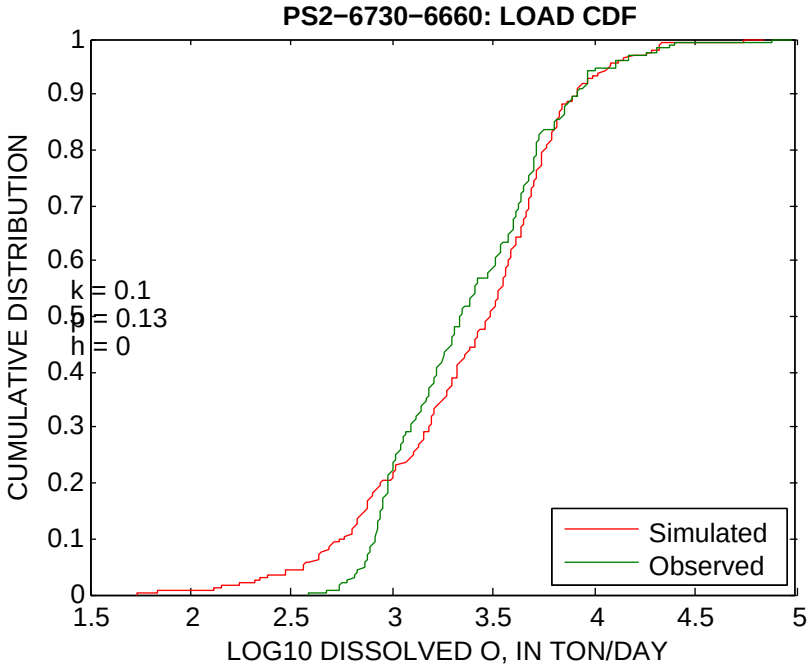


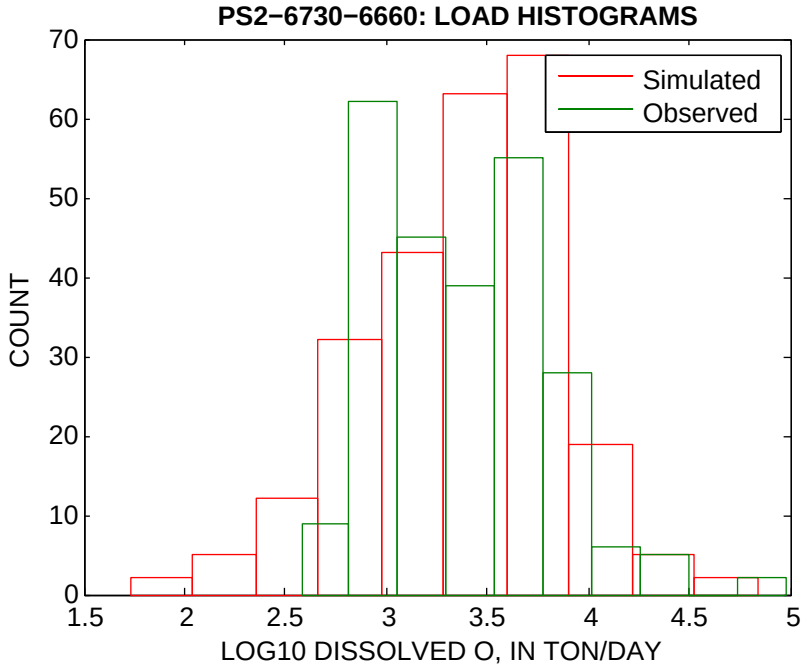


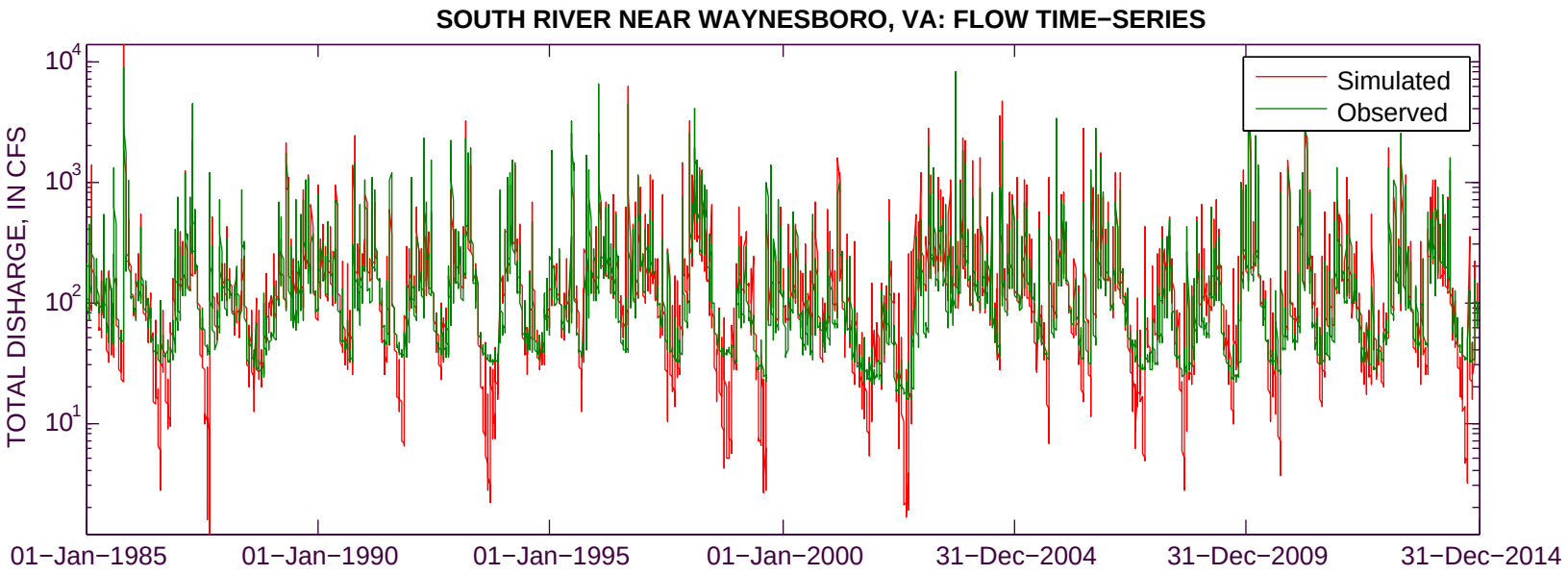
LOAD DATA
LOG10

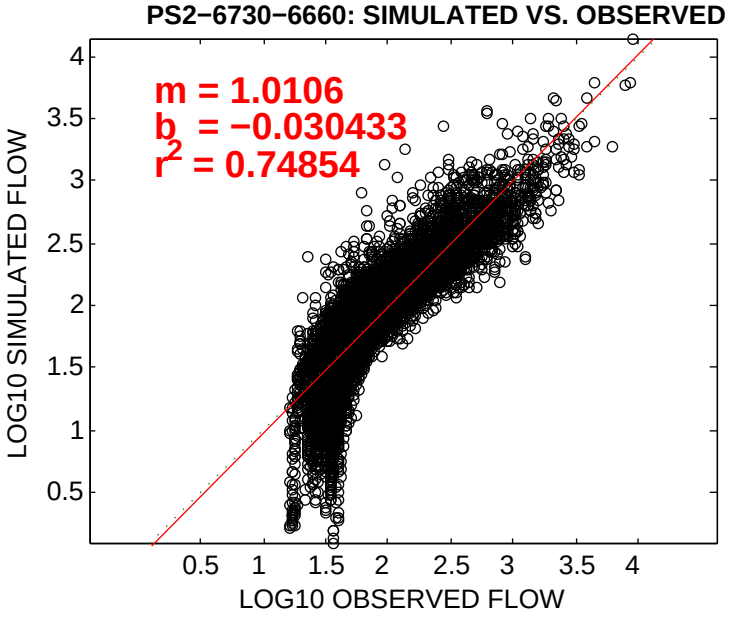


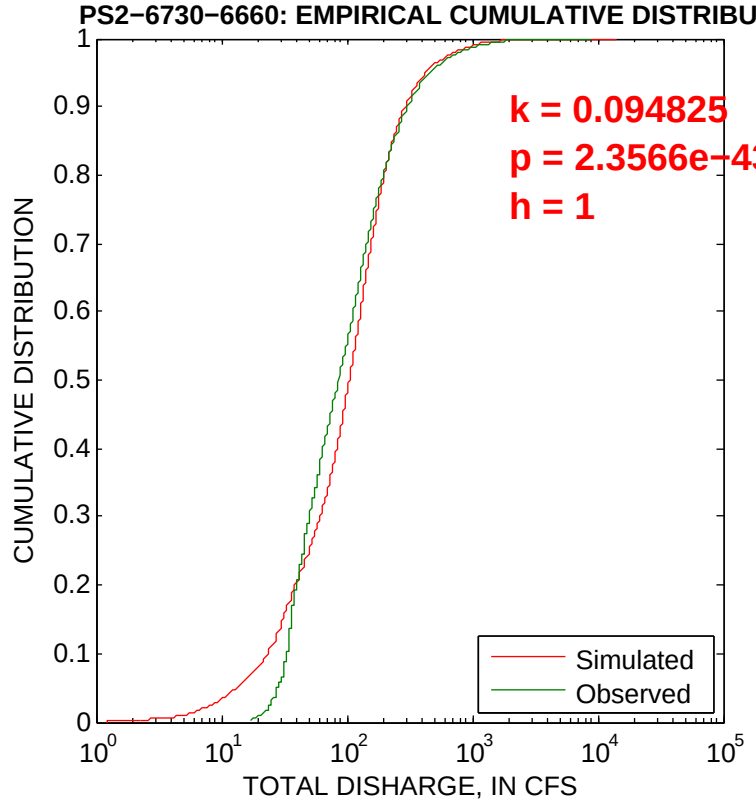












DATA SELECTION

scenario	file
P620171001WQ	FLOW.calib

plot: FLOW - total discharge

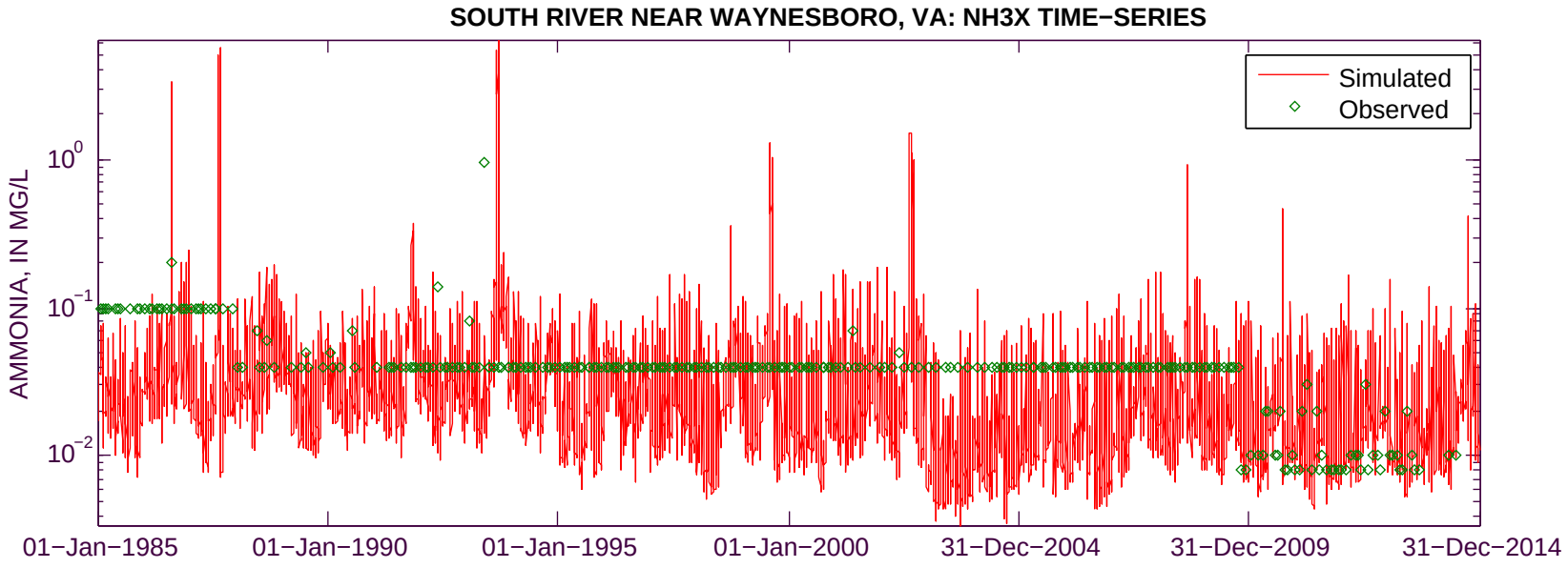
Dates: 1/1/1985 – 12/31/201

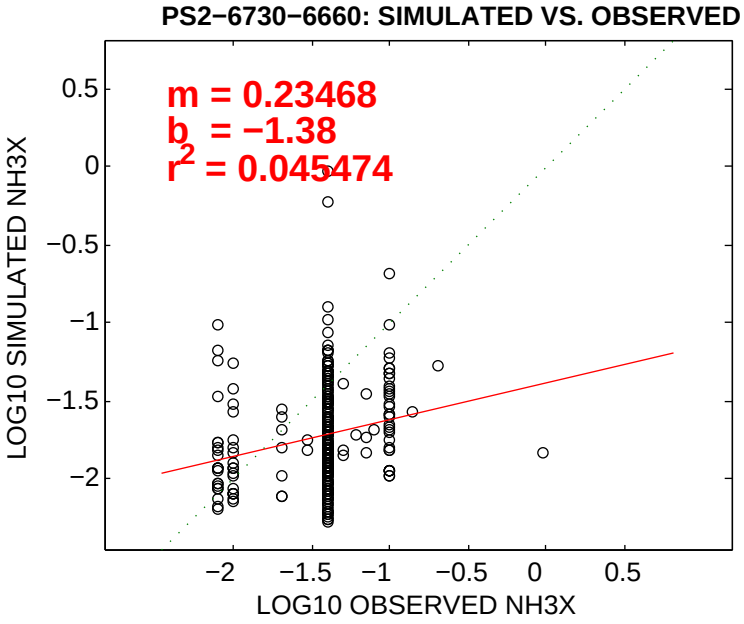
Drive	Directory	Observed
N/A	model	OBS20161101

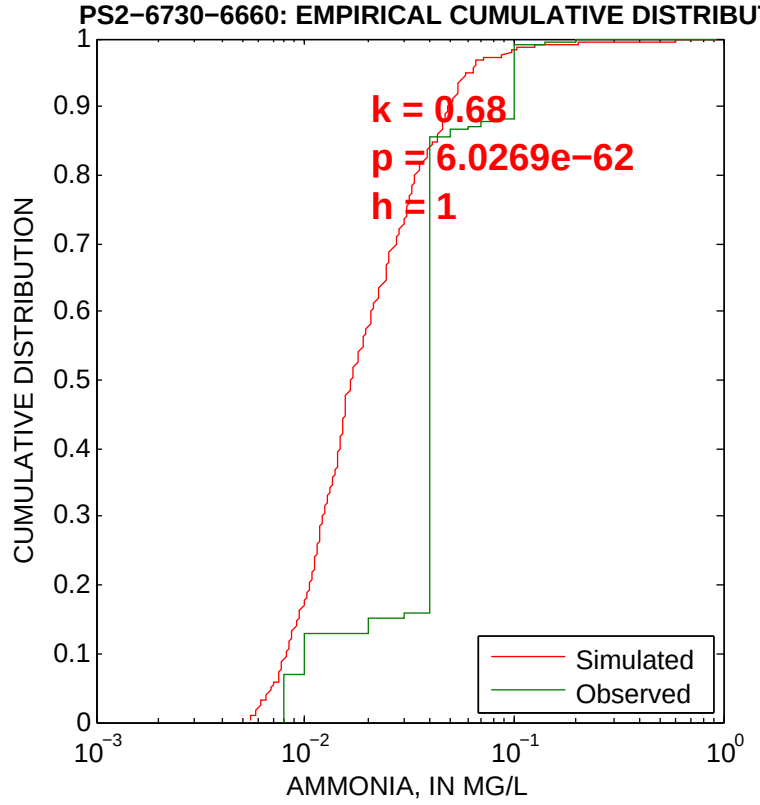
STATISTICS

	observe	simulate
n	10957	10957
min	16	1.2105
	1.20412	0.0829648
mean	156.441	156.608
	1.97469	1.96519
media	87	105.65
	1.93952	2.02387
max	9070	13953
	3.95761	4.14467
varian	81311.3	75900.2
	0.153692	0.209698
JB	0.001	0.001
	0.001	0.001
	ra	log
%	0.106652	-0.480902
err.va	26051.4	0.0528375
rel.std.err	0.320391	0.343788
mod.eff	0.679609	0.656212

VERSION 2.1







DATA SELECTION

scenario	file
P620171001WQ	NH3X.calib

plot: NH3X - ammonia

Dates: 1/1/1985 – 12/31/201

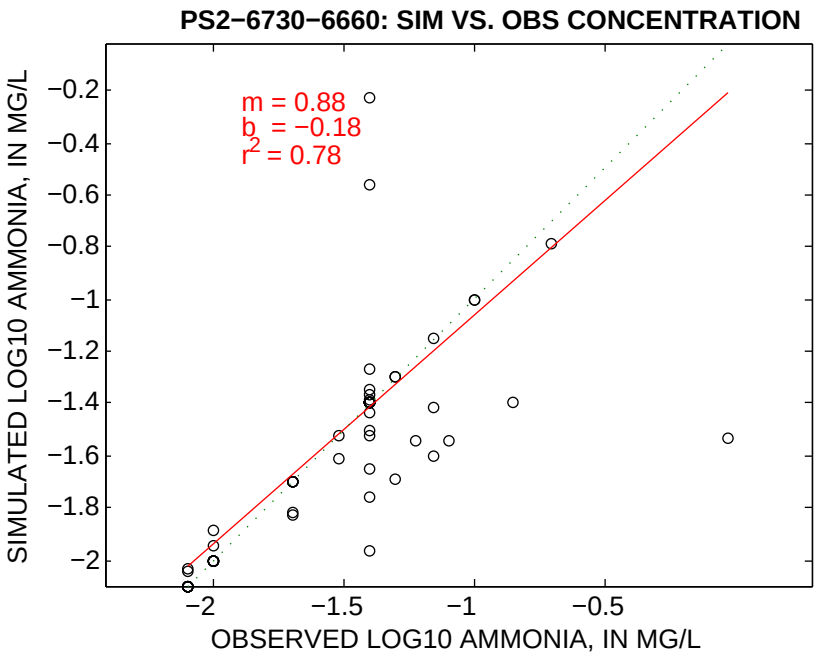
Drive	Directory	Observed
N/A	model	OBS20161101

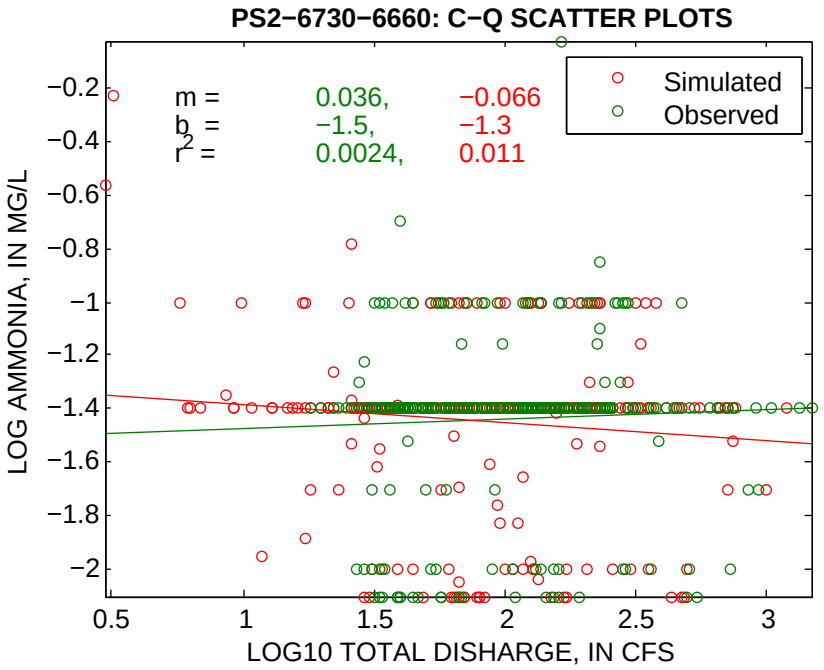
STATISTICS

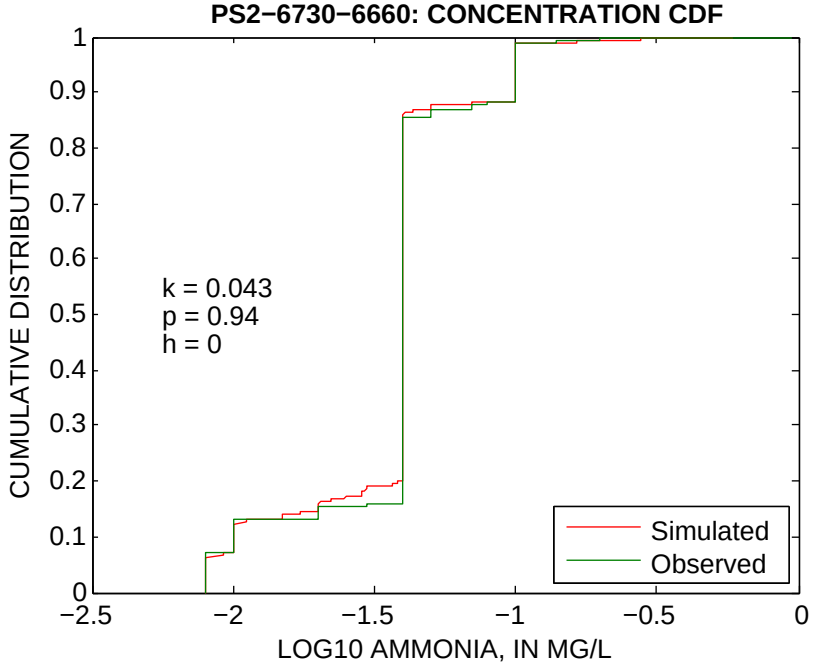
	n	300	300
		observe	simulate
min		0.008	0.0053489
		-2.09691	-2.27174
mean		0.0462933	0.0288883
		-1.4347	-1.7167
media		0.04	0.016734
		-1.39794	-1.7764
max		0.94	0.93486
		-0.0268721	-0.0292534
varian		0.0033265	0.00424152
		0.0839576	0.10168
JB		0.001	0.001
		0.001	0.001
		ra	log
%		-37.5973	19.6556
err.va		0.0077457	0.226021
rel.std.err		2.32849	2.69209
mod.eff		-1.32849	-1.69209

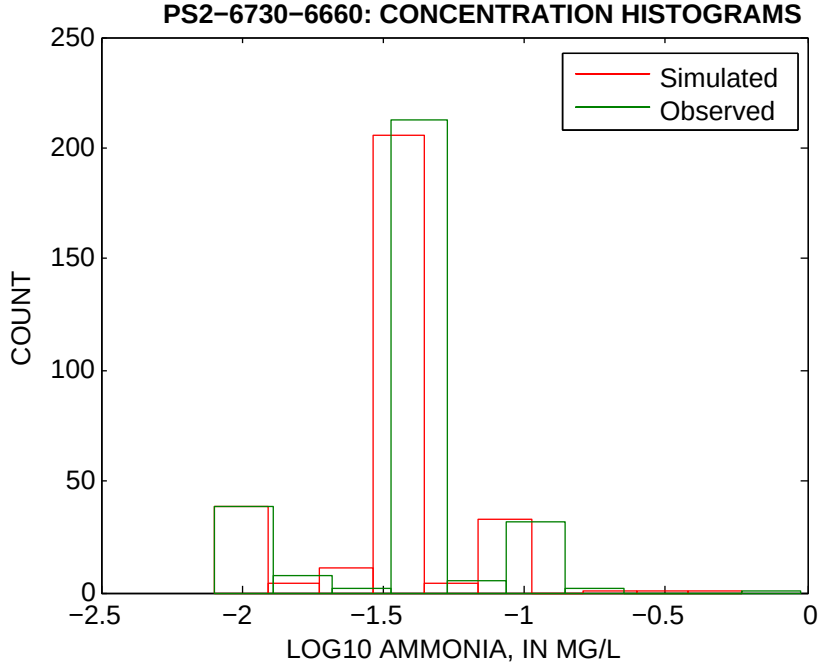
VERSION 2.1

ALL DATA
LOG10

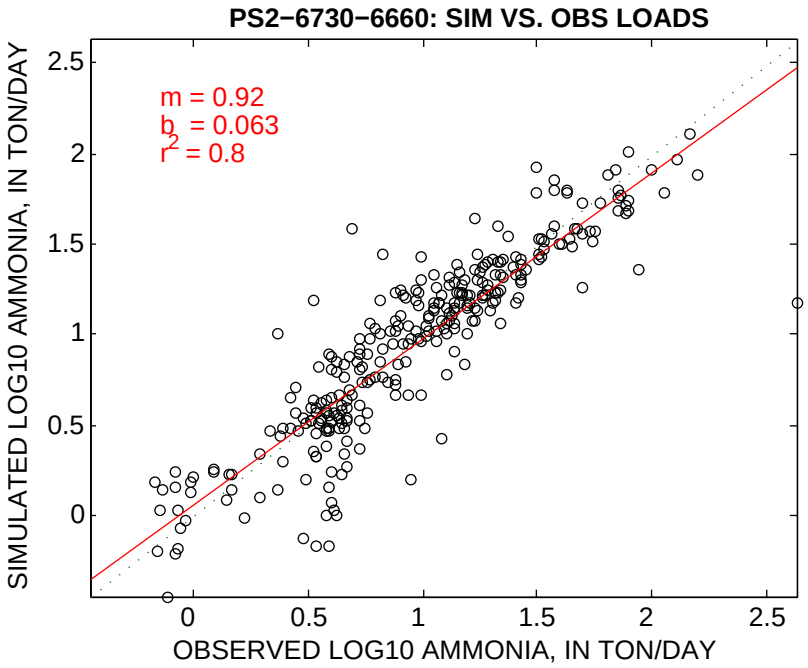


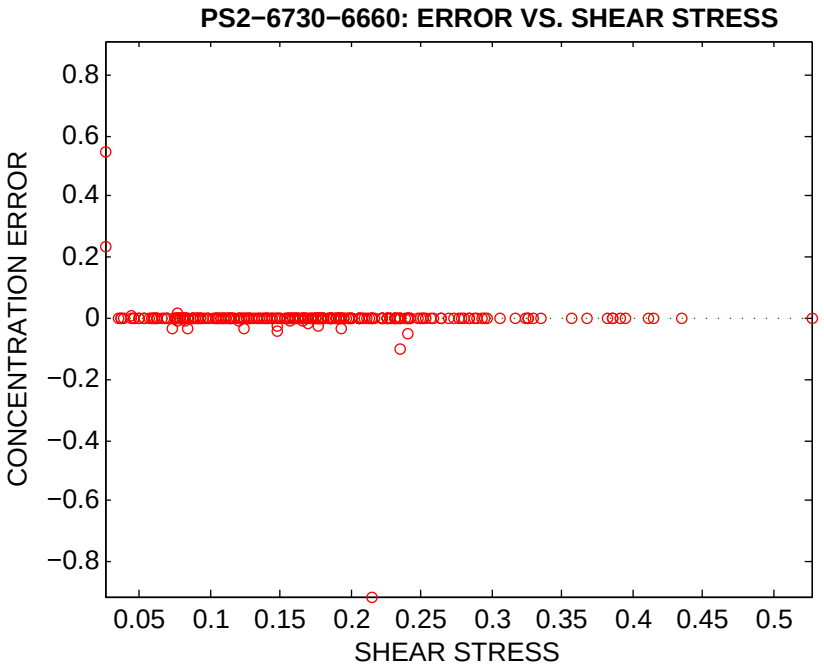


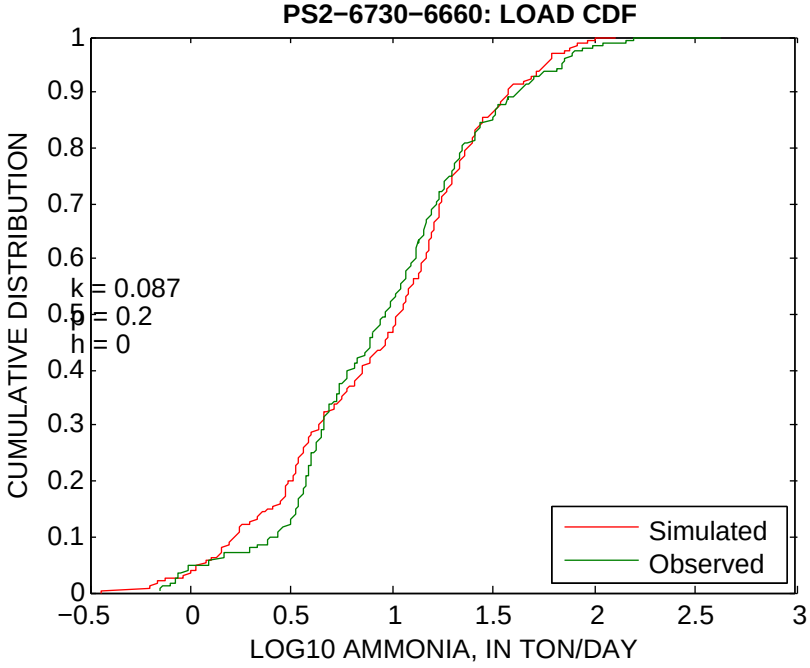


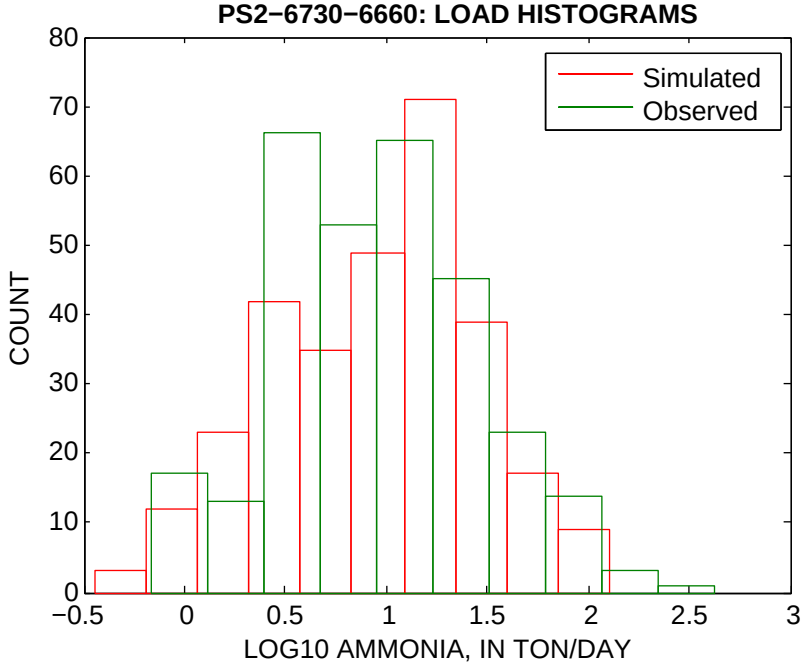


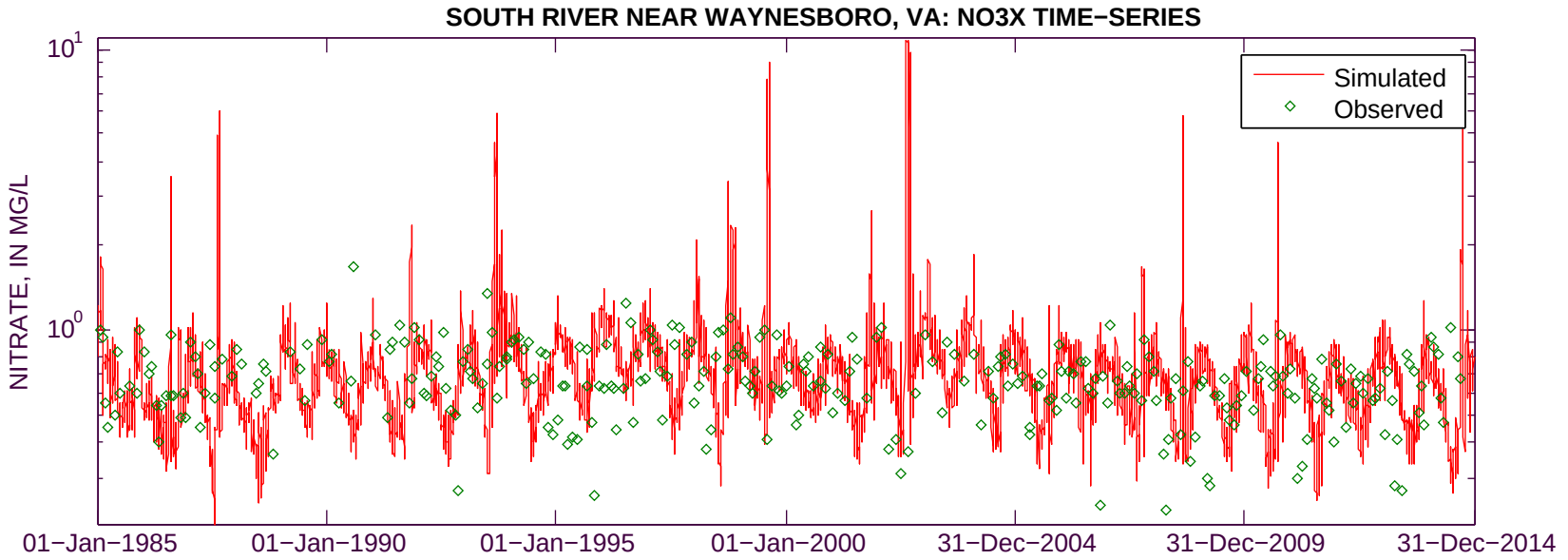
LOAD DATA
LOG10

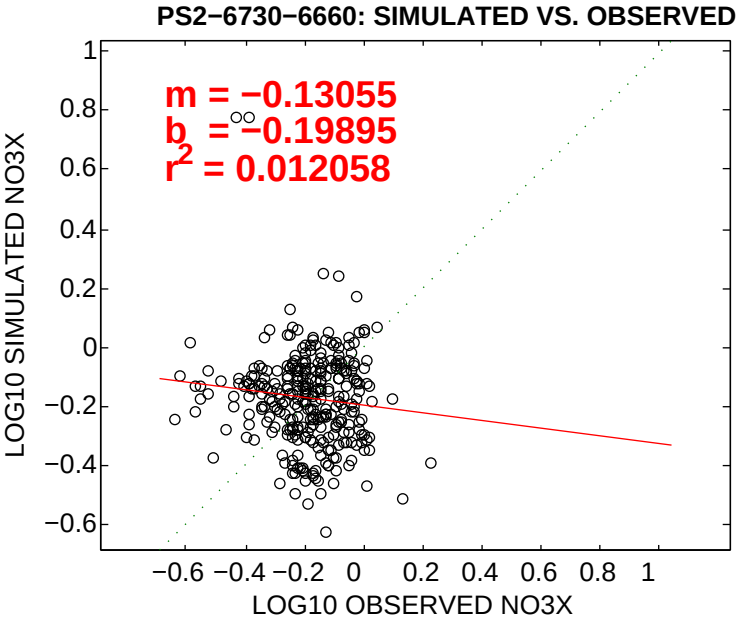


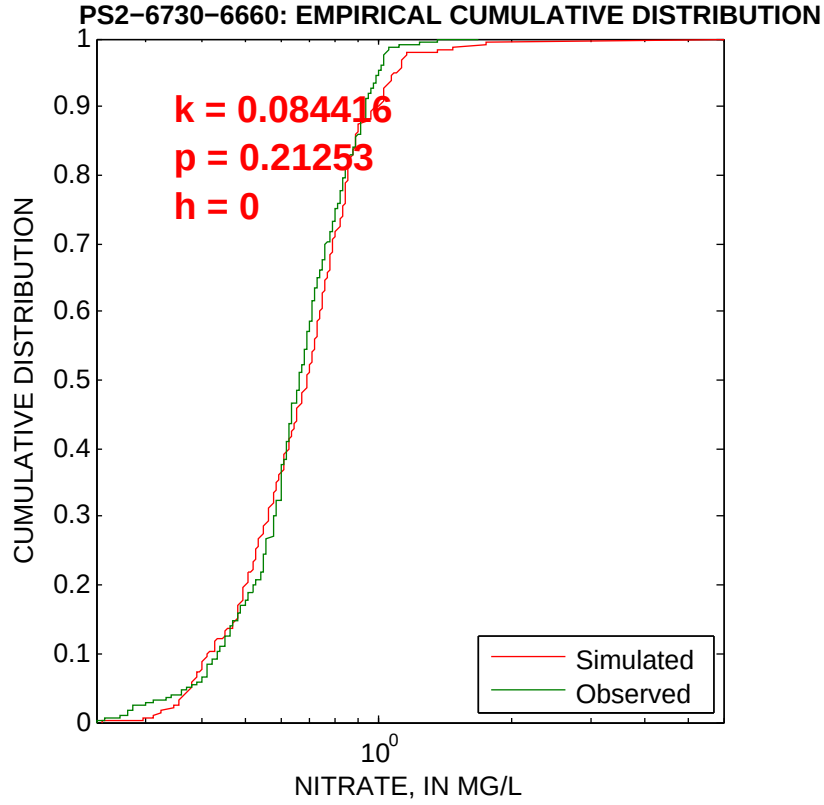












DATA SELECTION

scenario	file
P620171001WQ	NO3X.calib

plot: NO3X - nitrate

Dates: 1/1/1985 – 12/31/201

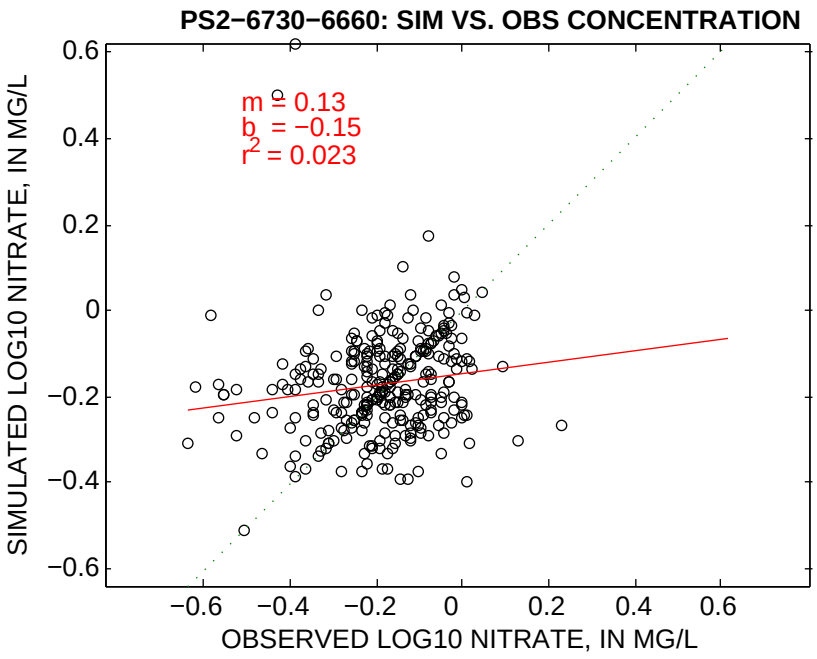
Drive	Directory	Observed
N/A	model	OBS20161101

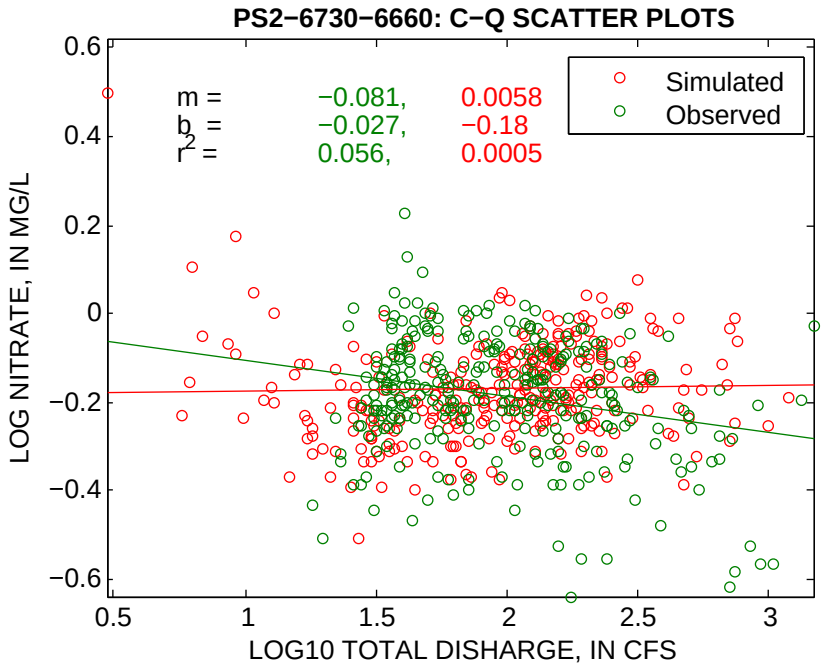
STATISTICS

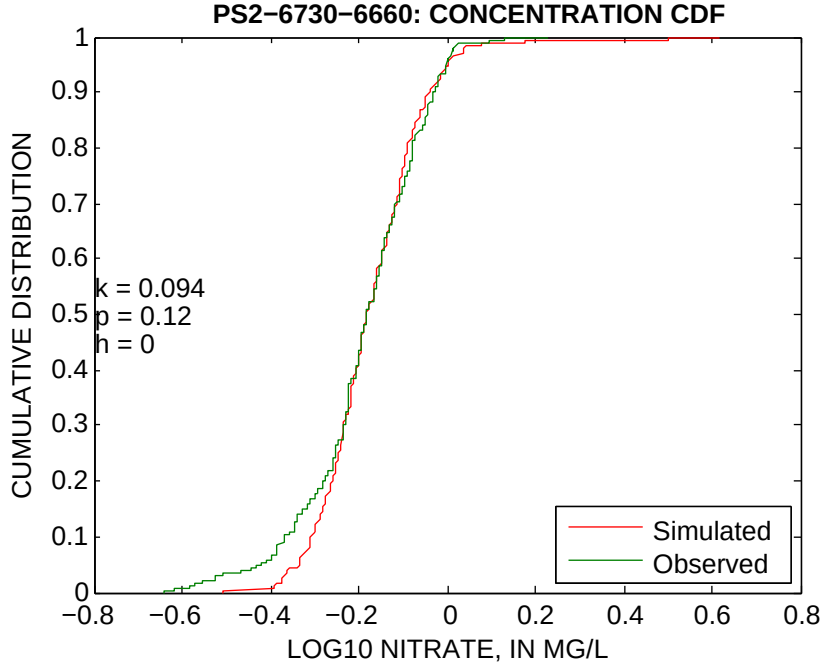
	n	observe	simulate
		308	308
min		0.23	0.23851
		-0.638272	-0.622493
mean		0.678961	0.727843
		-0.187436	-0.17448
media		0.66	0.69165
		-0.180456	-0.160114
max		1.69	5.9796
		0.227887	0.776672
varian		0.0389058	0.228686
		0.0178095	0.0251714
JB		0.001	0.001
		0.001	0.001
		ra	log
%		7.19958	-6.91248
err.va		0.29084	0.0477993
rel.std.err		7.4755	2.68392
mod.eff		-6.4755	-1.68392

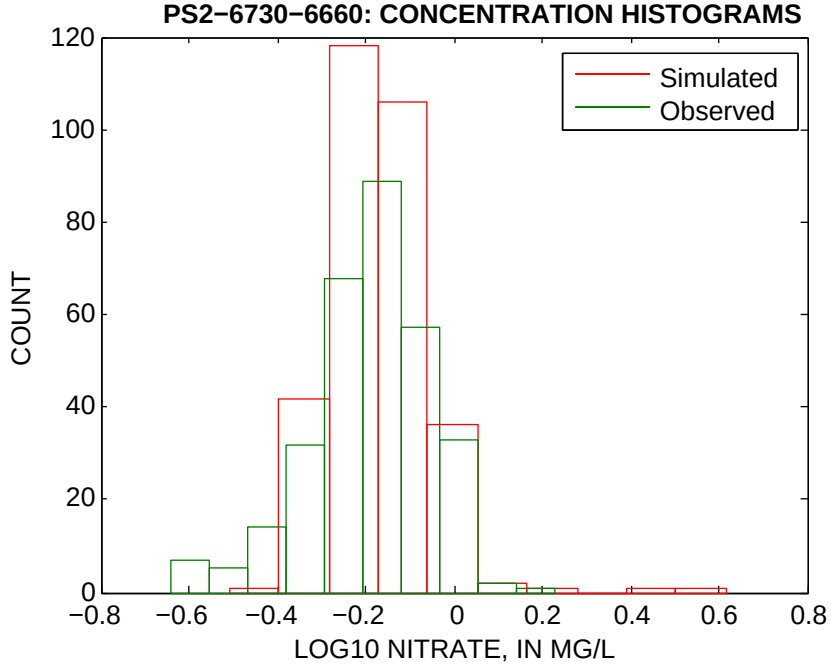
VERSION 2.1

ALL DATA
LOG10

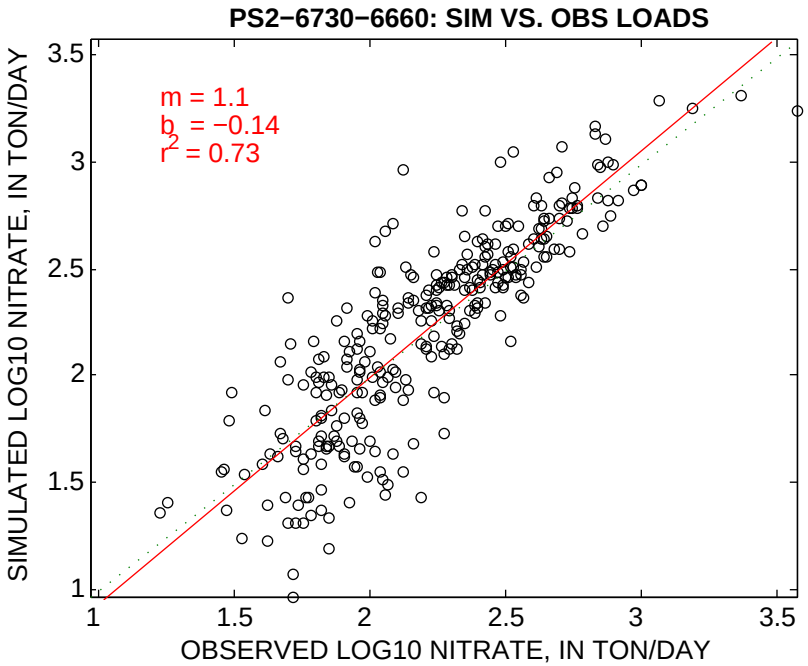


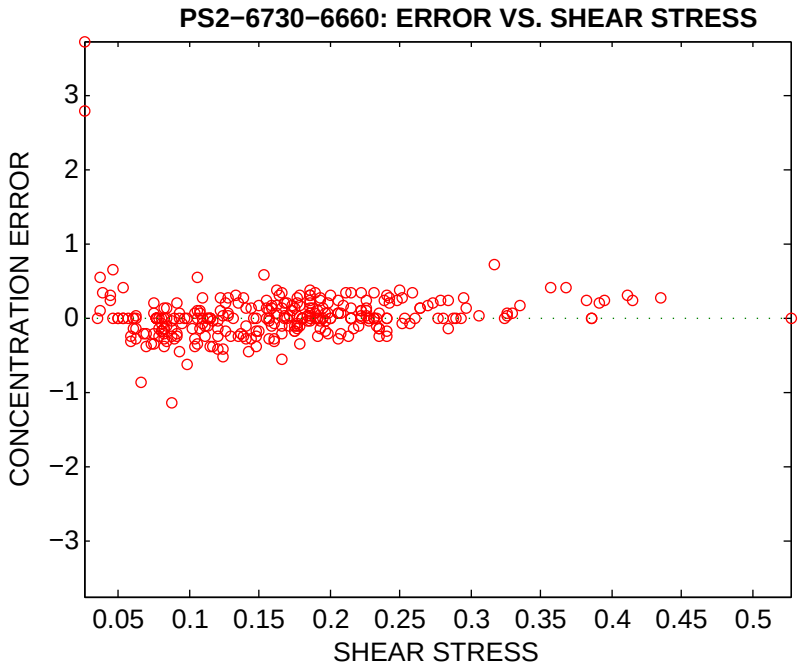


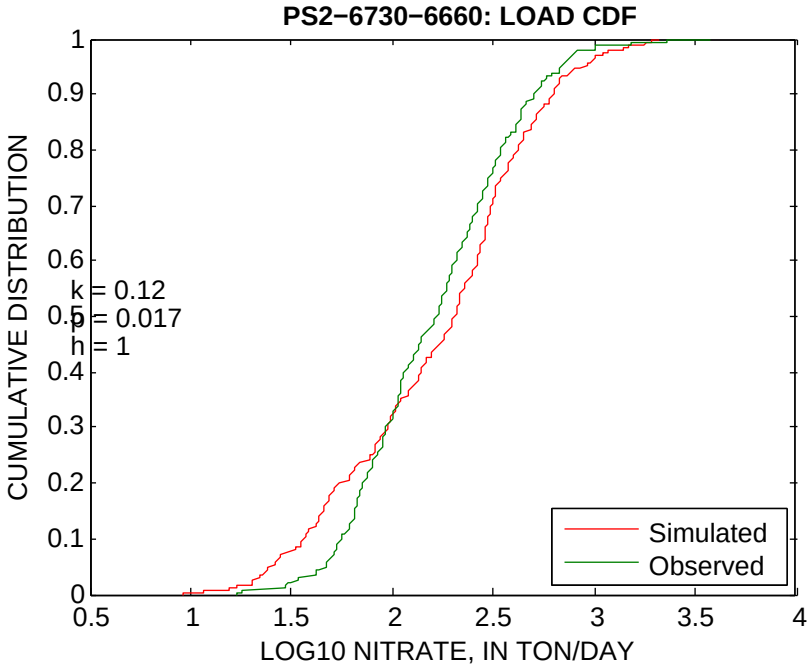


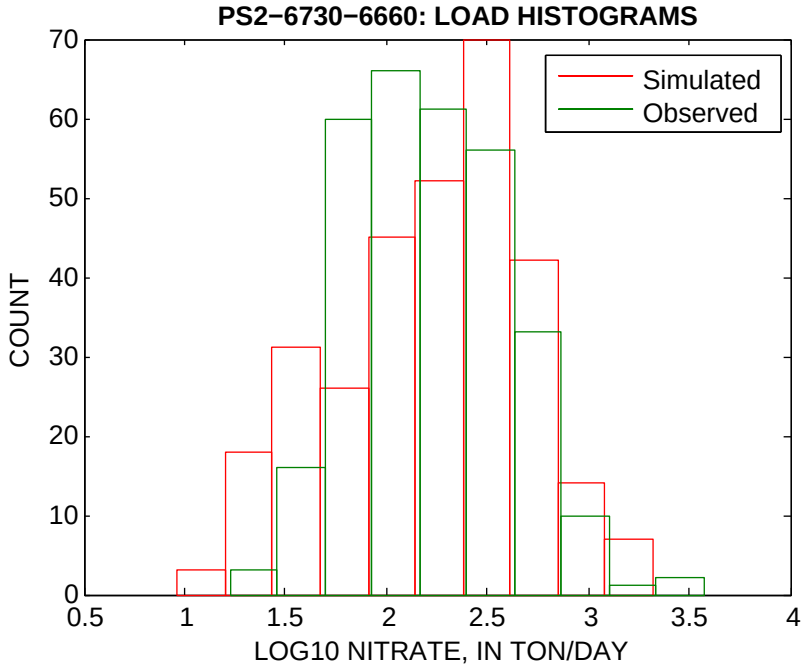


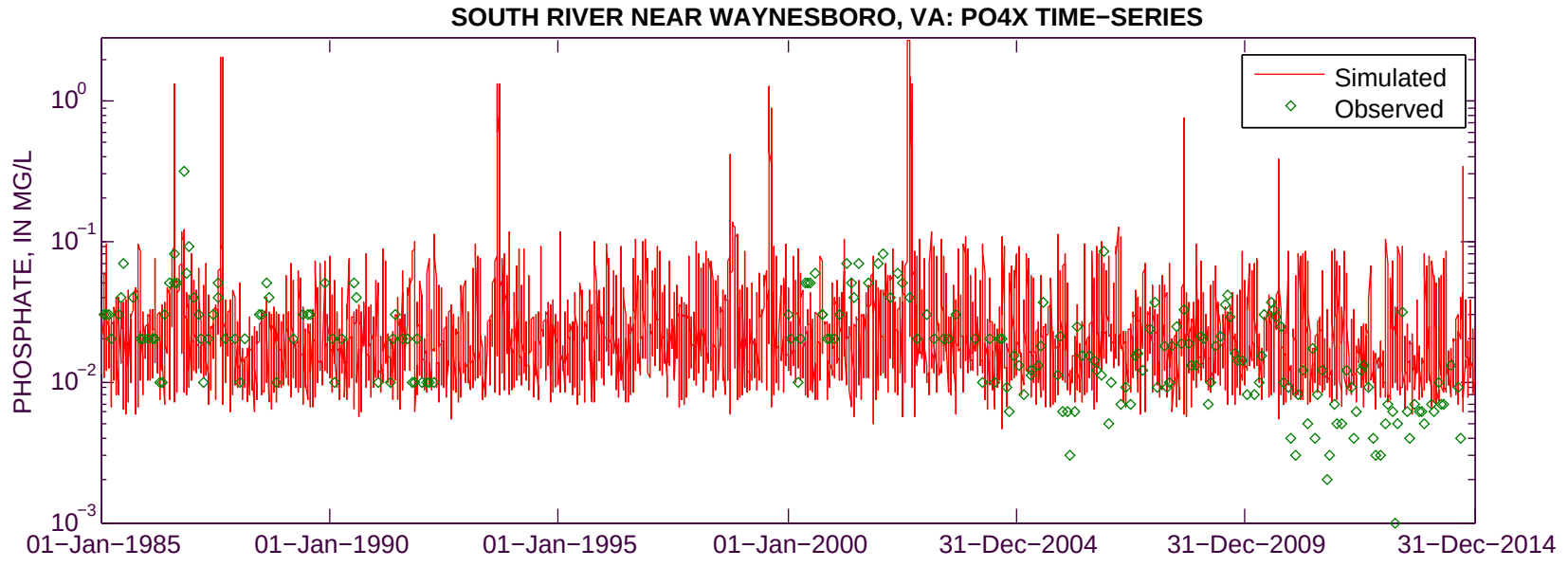
LOAD DATA
LOG10

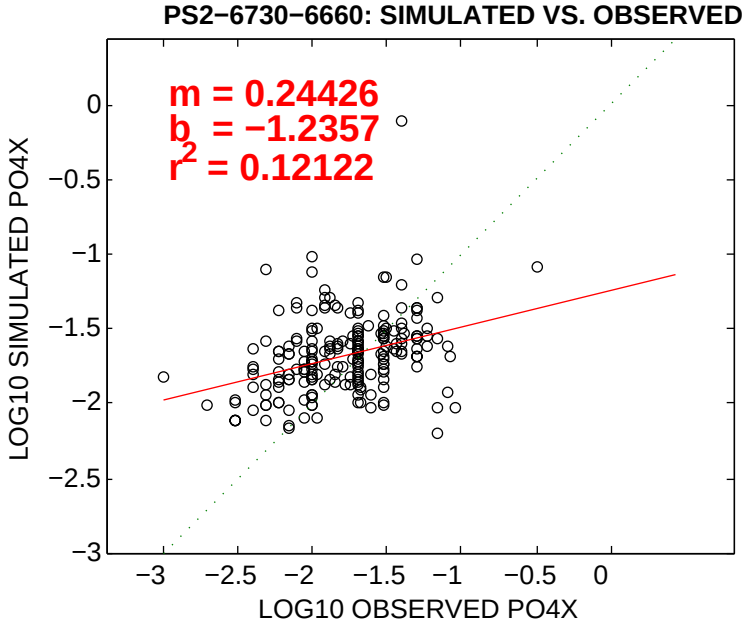


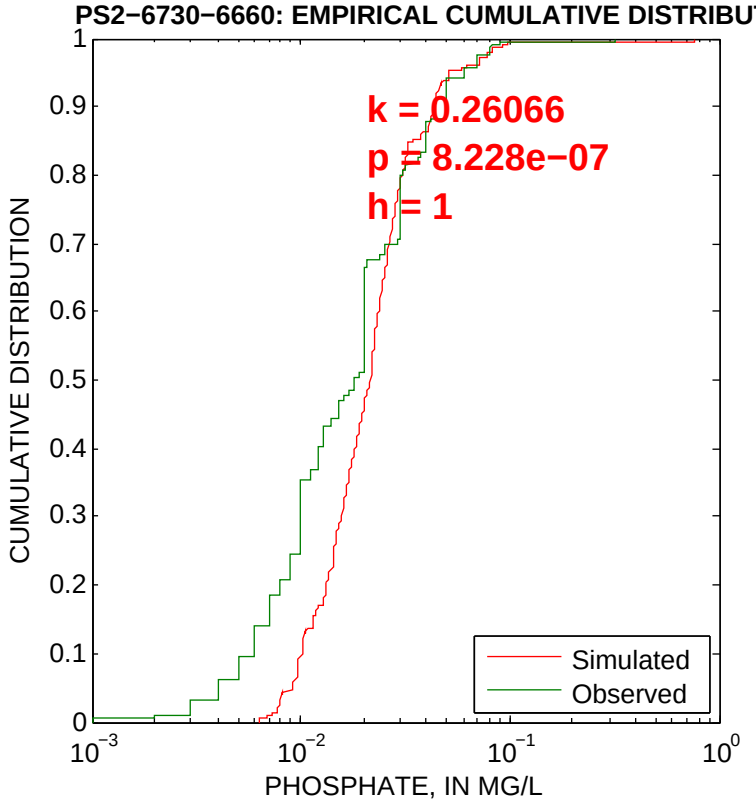












DATA SELECTION

scenario	file
P620171001WQ	PO4X.calib

plot: PO4X - phosphate

Dates: 1/1/1985 – 12/31/201

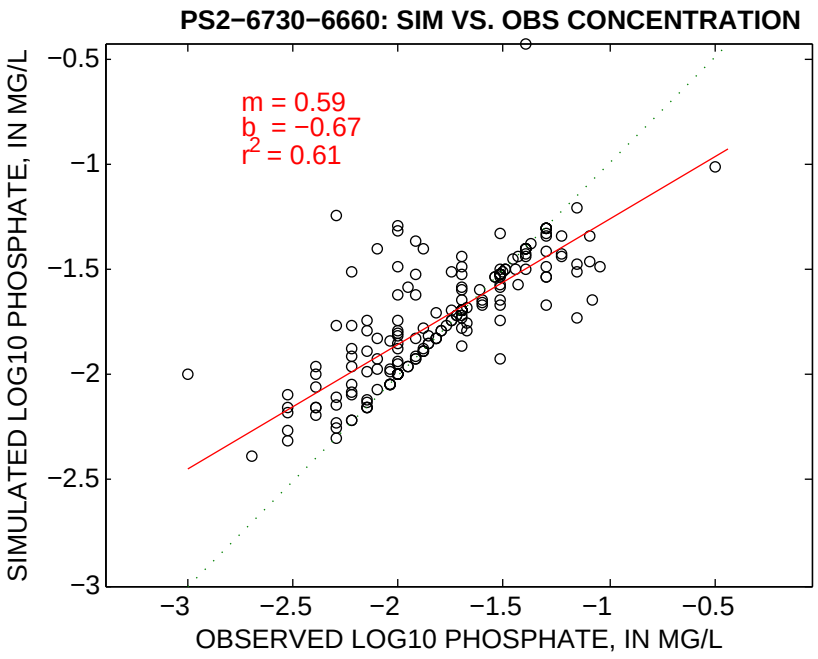
Drive	Directory	Observed
N/A	model	OBS20161101

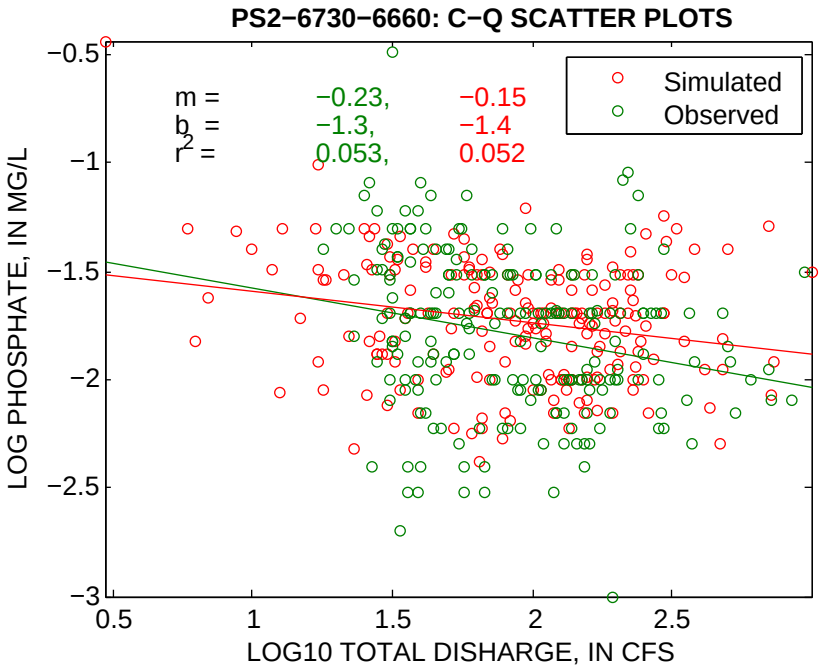
STATISTICS

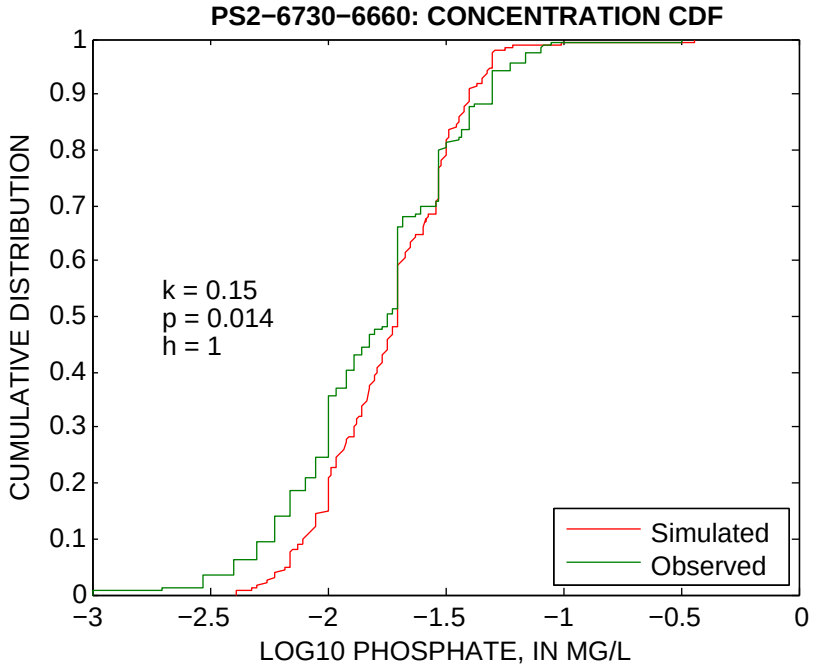
	n	211	211
		observe	simulate
min		0.001	0.0063632
		-3	-2.19632
mean		0.0231185	0.027809
		-1.79131	-1.67326
media		0.018	0.021811
		-1.74473	-1.66132
max		0.32	0.77327
		-0.49485	-0.111669
varian		0.00072529	0.0028861
		0.133631	0.0657737
JB		0.001	0.001
		0.5	0.001
		ra	log
%		20.2888	-6.58997
err.va		0.00326637	0.148123
rel.std.err		4.50351	1.10845
mod.eff		-3.50351	-0.108452

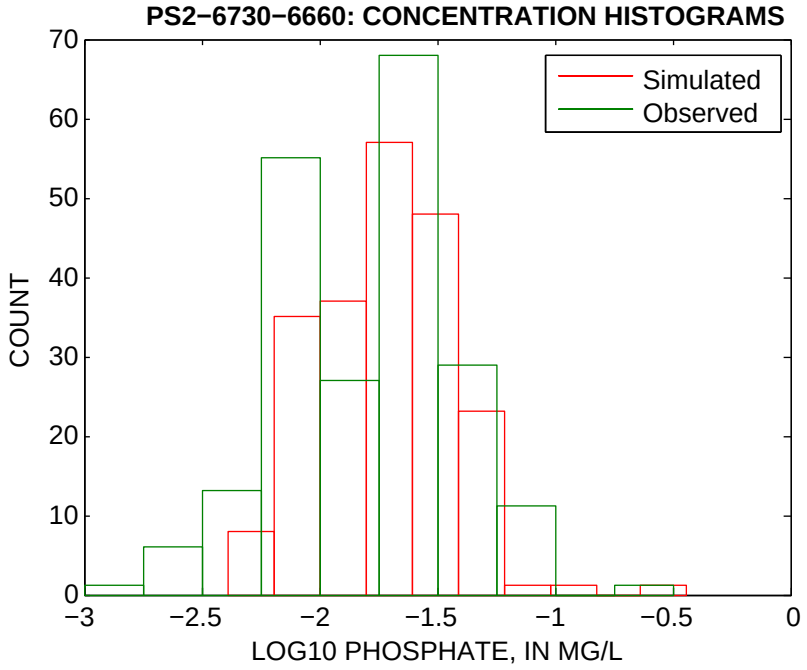
VERSION 2.1

ALL DATA
LOG10

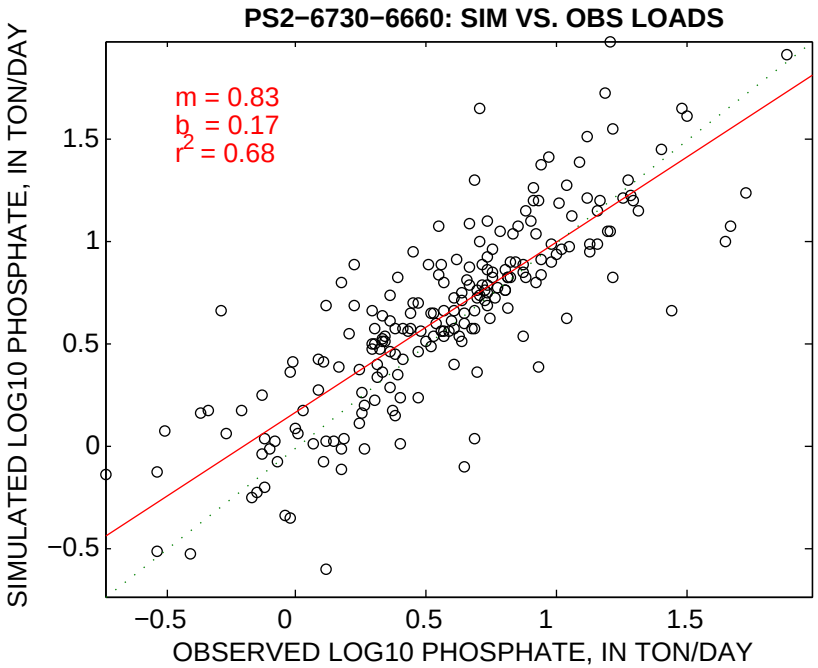


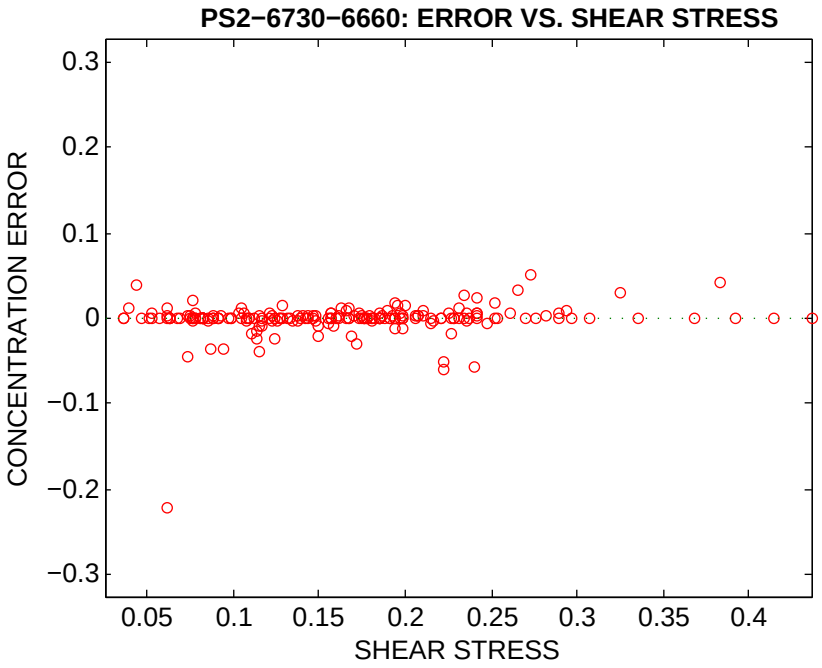


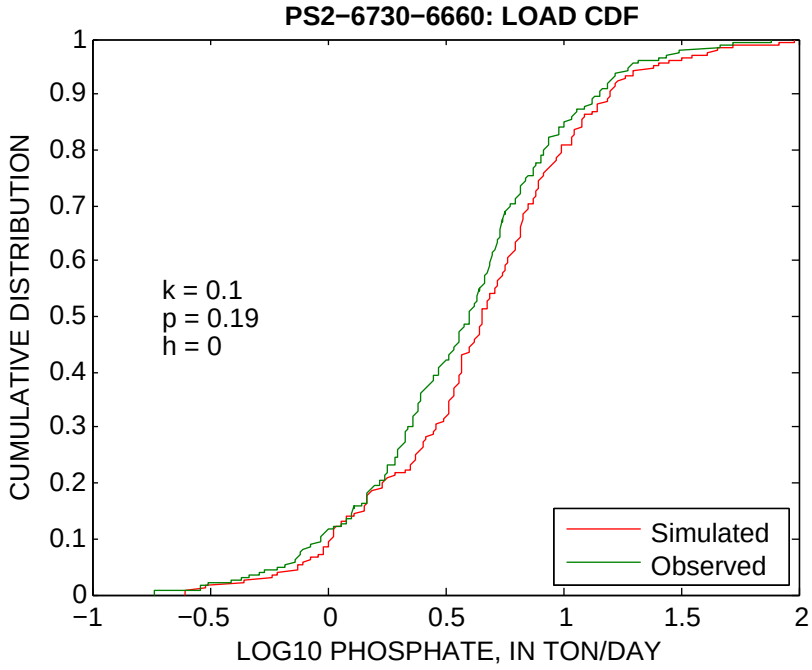


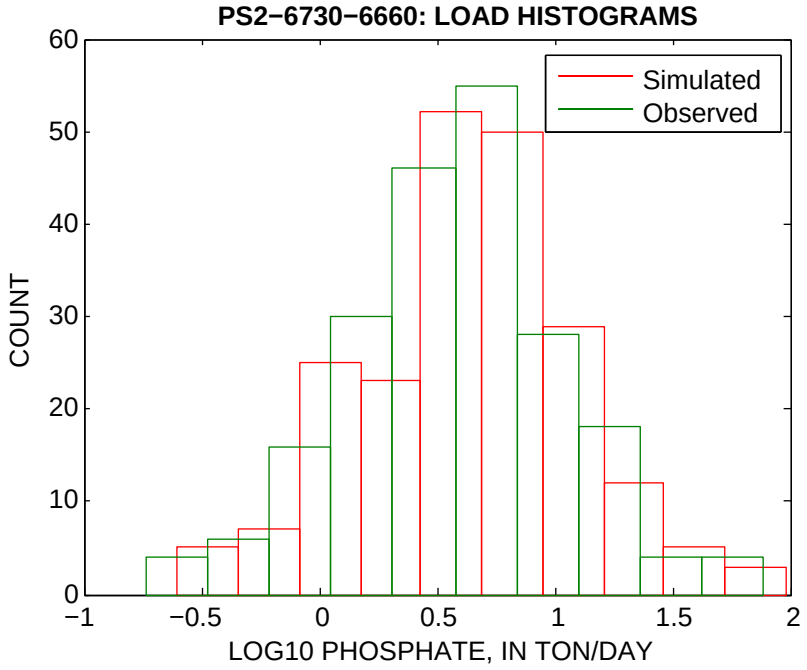


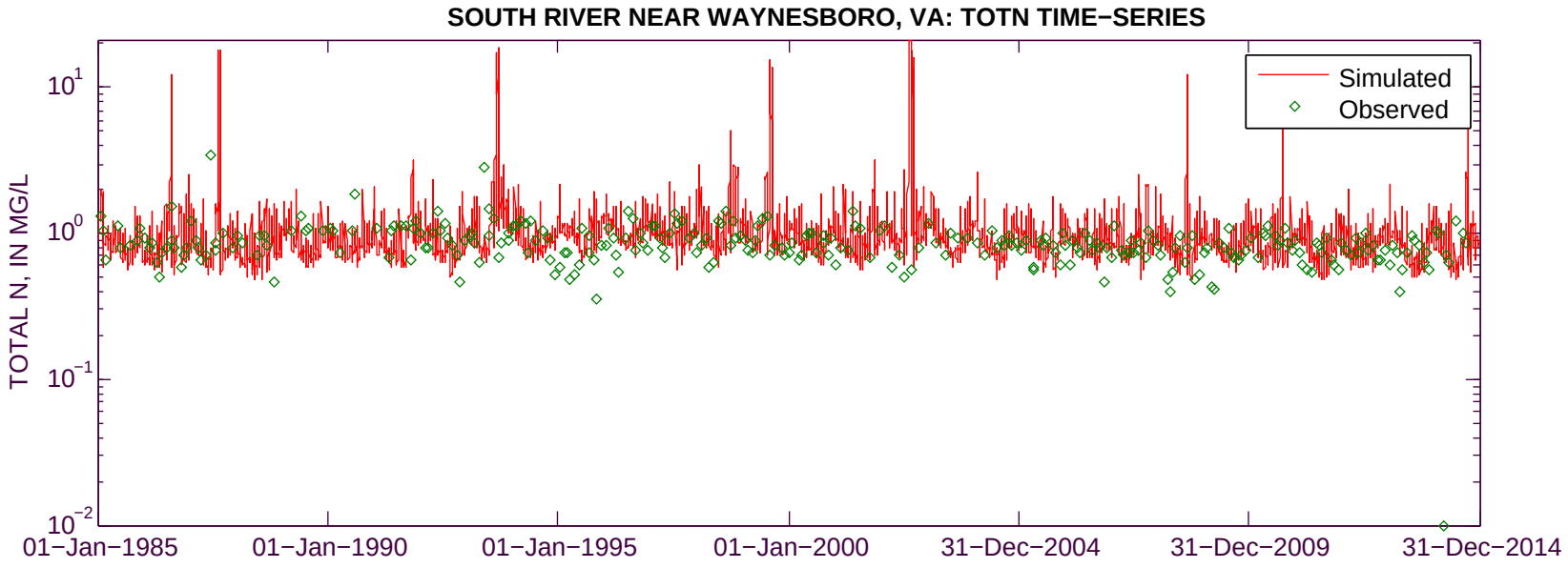
LOAD DATA
LOG10

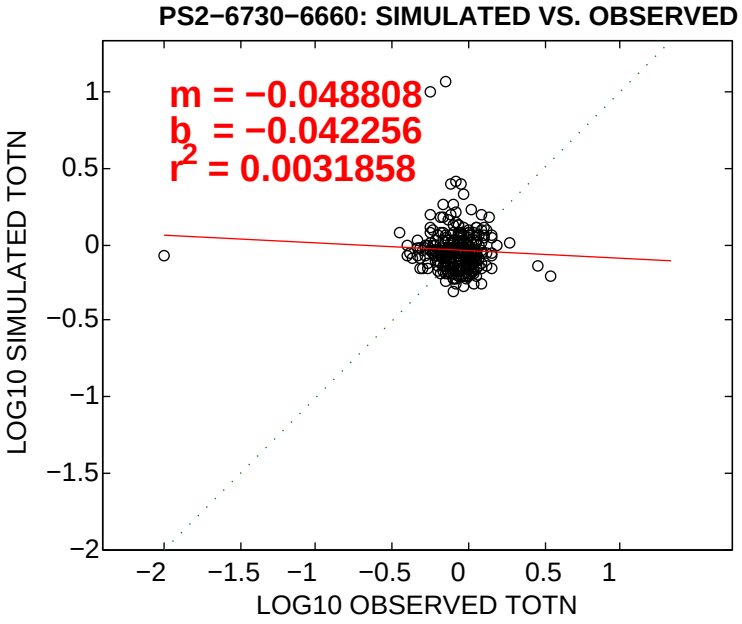


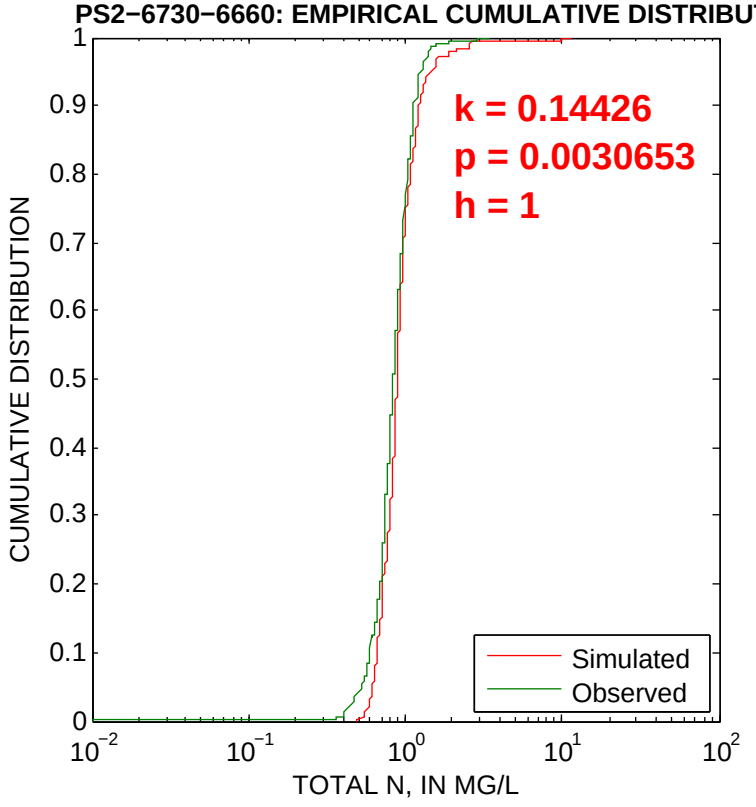












DATA SELECTION

scenario	file
P620171001WQ	TOTN.calib

plot: TOTN - total nitrogen

Dates: 1/1/1985 – 12/31/201

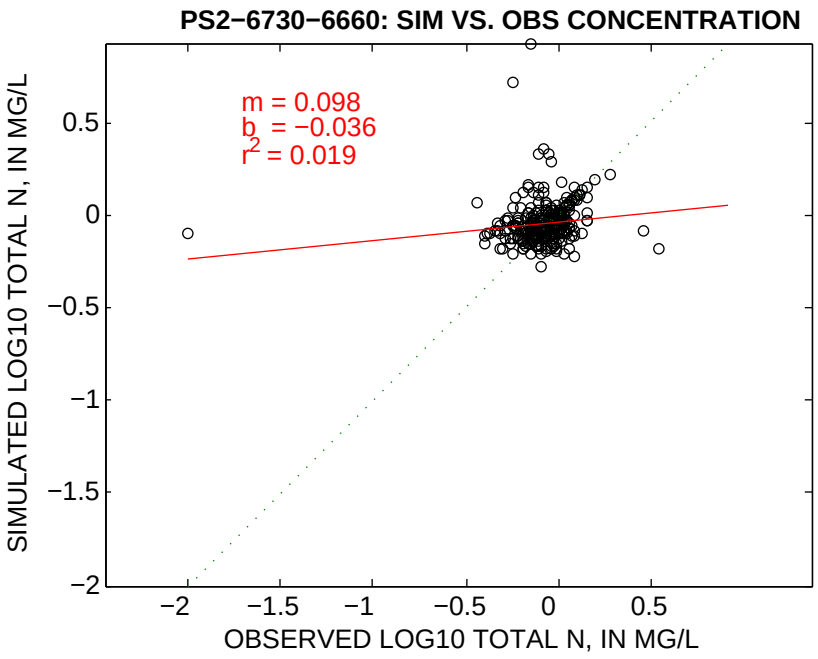
Drive	Directory	Observed
N/A	model	OBS20161101

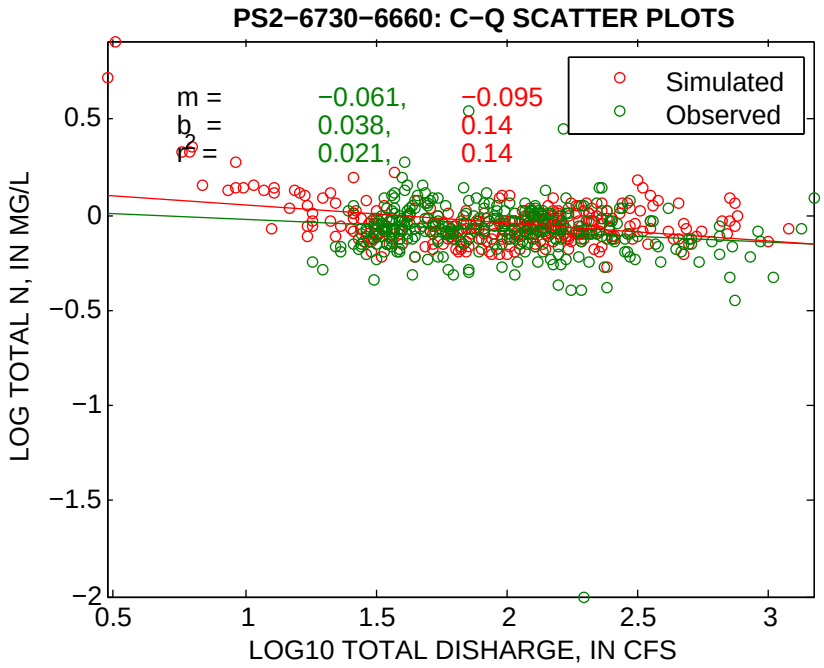
STATISTICS

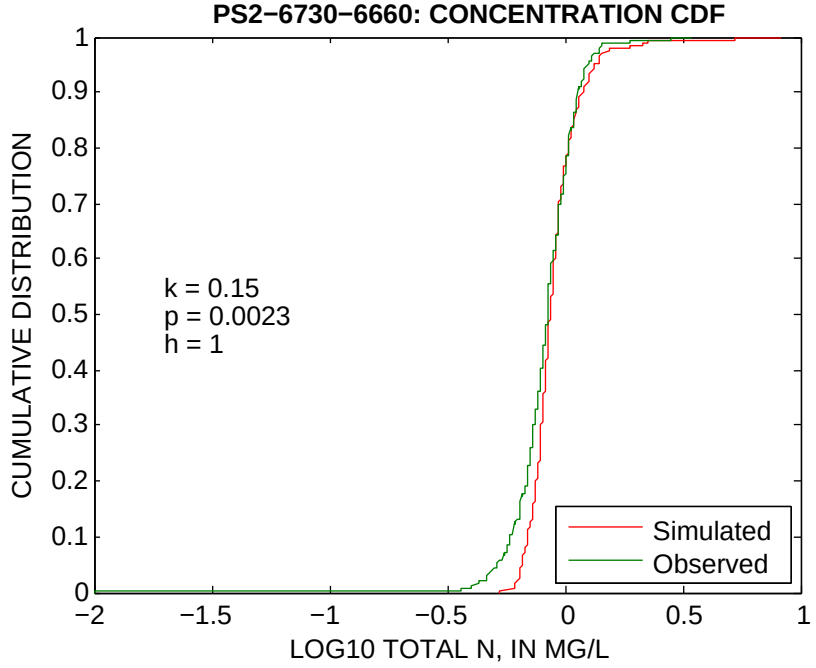
	n	observe	simulate
		305	305
min		0.01	0.49038
		-2	-0.309467
mean		0.874295	0.998832
		-0.0811422	-0.0382953
media		0.84	0.88779
		-0.0757207	-0.0516898
max		3.49	11.623
		0.542825	1.06532
varian		0.0857983	0.724673
		0.0267911	0.0200332
JB		0.001	0.001
		0.001	0.001
		ra	log
%		14.2443	-52.8046
err.va		0.862847	0.0512814
rel.std.err		10.0567	1.91412
mod.eff		-9.0567	-0.91412

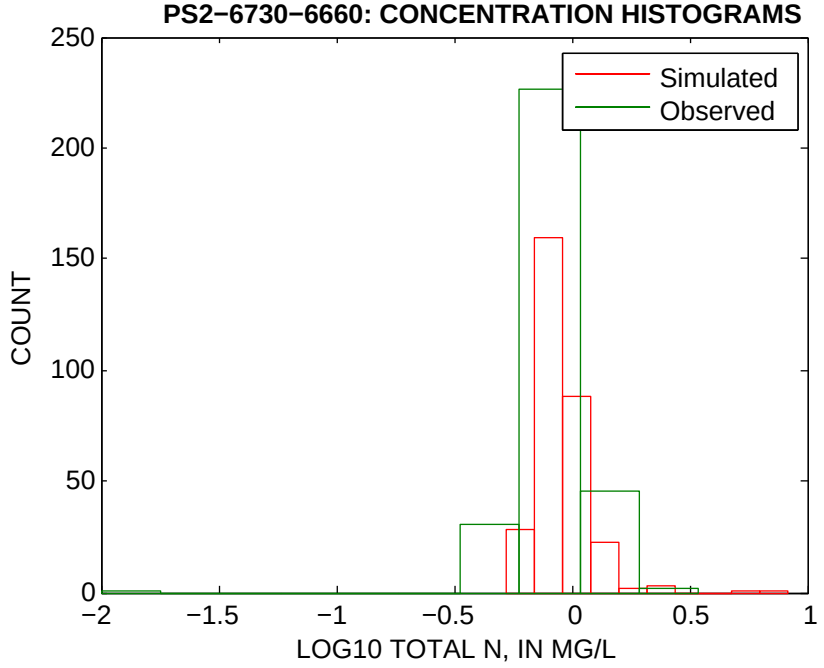
VERSION 2.1

ALL DATA
LOG10

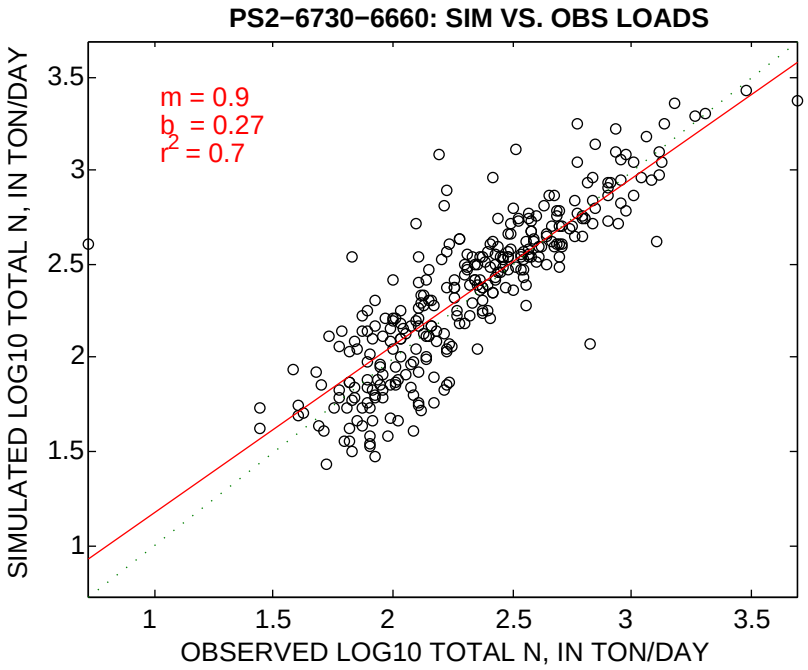


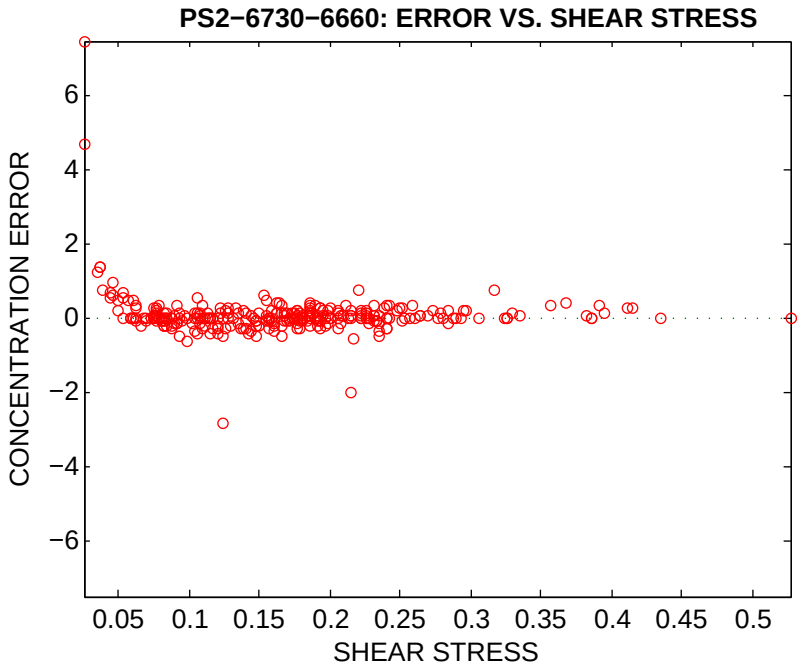


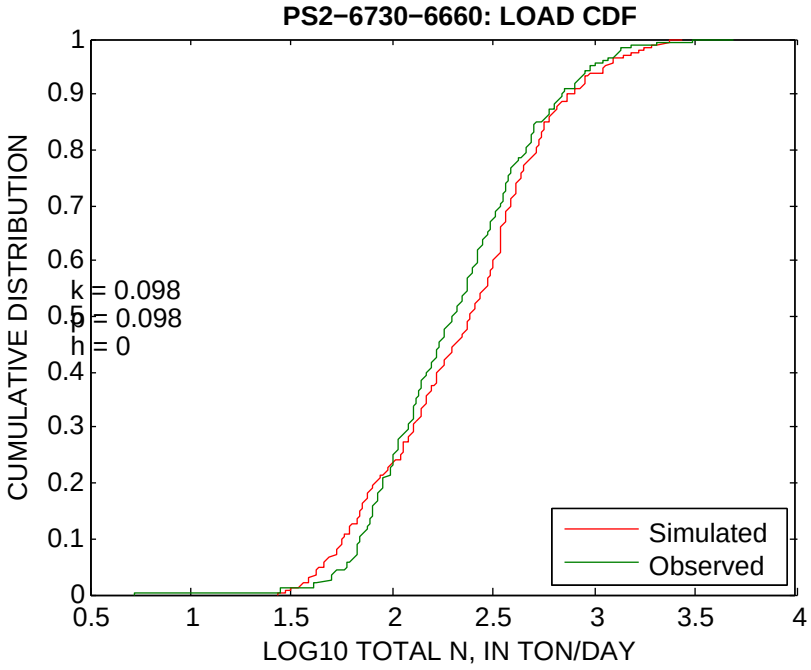


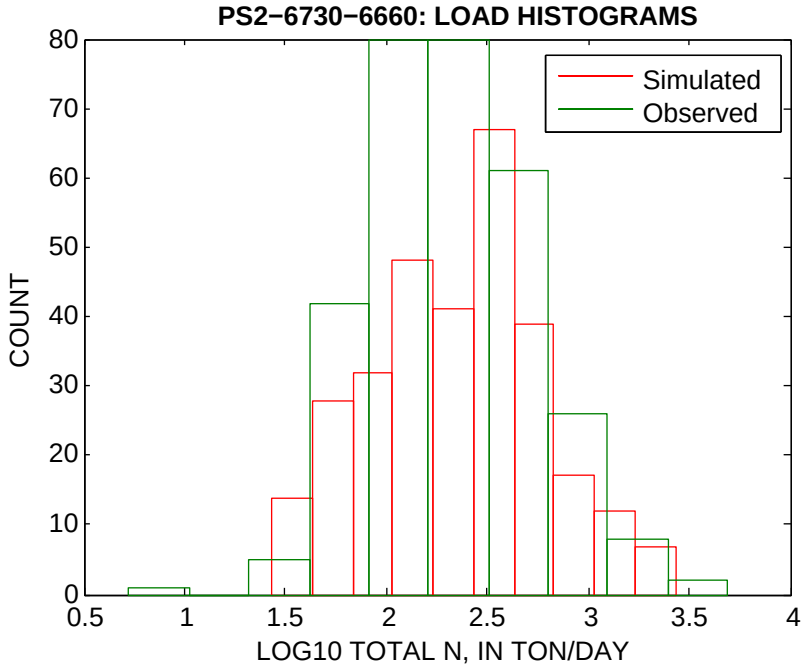


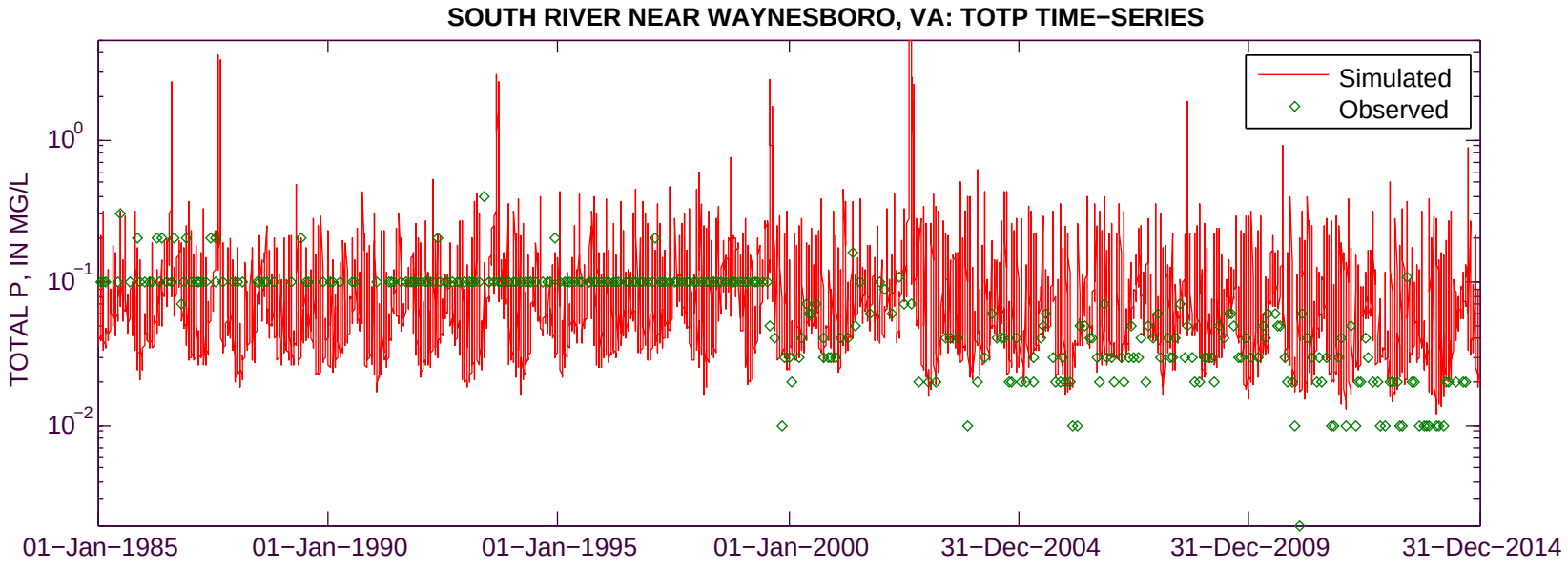
LOAD DATA
LOG10

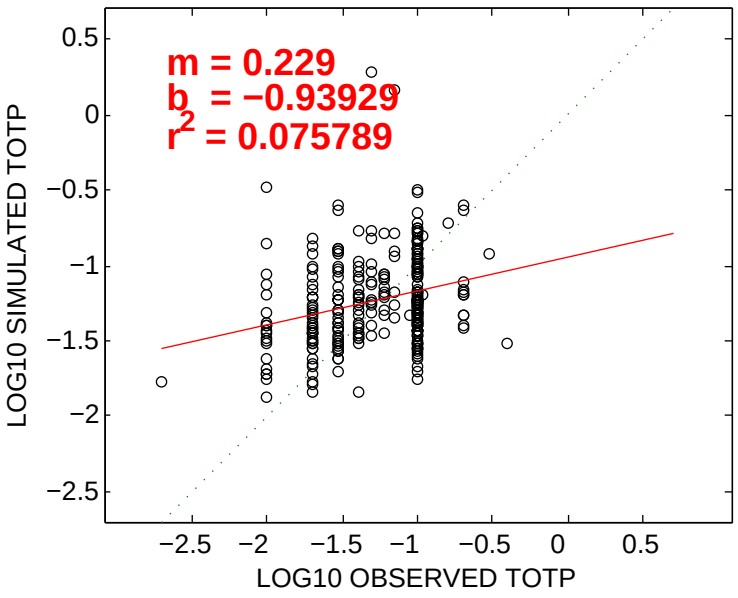


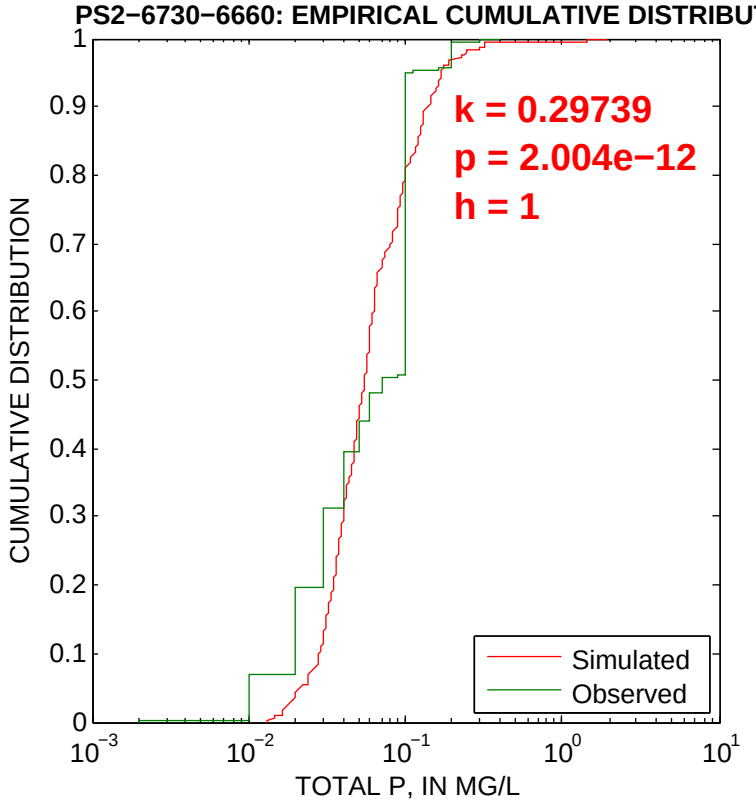












DATA SELECTION

scenario	file
P620171001WQ	TOTP.calib

plot: TOTP - total phosphorus

Dates: 1/1/1985 – 12/31/201

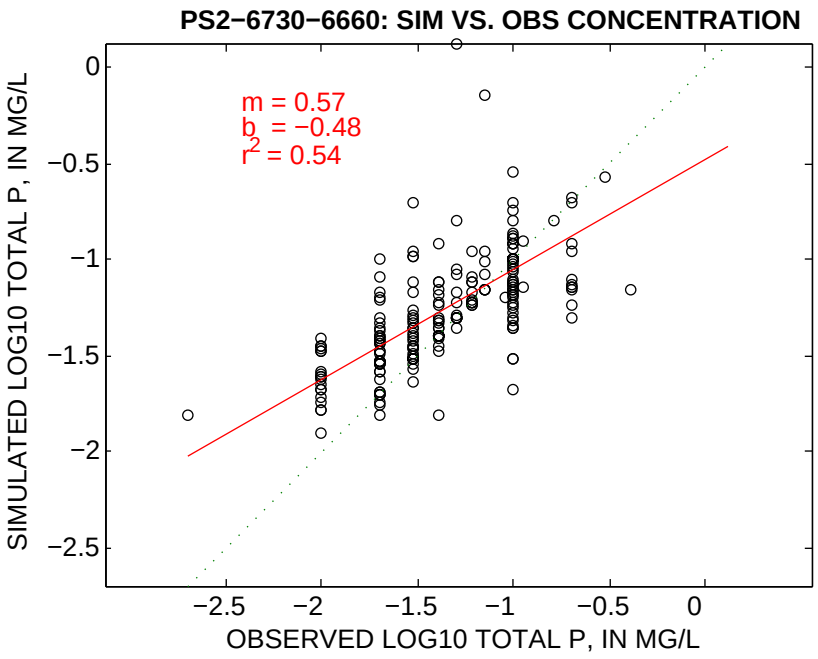
Drive	Directory	Observed
N/A	model	OBS20161101

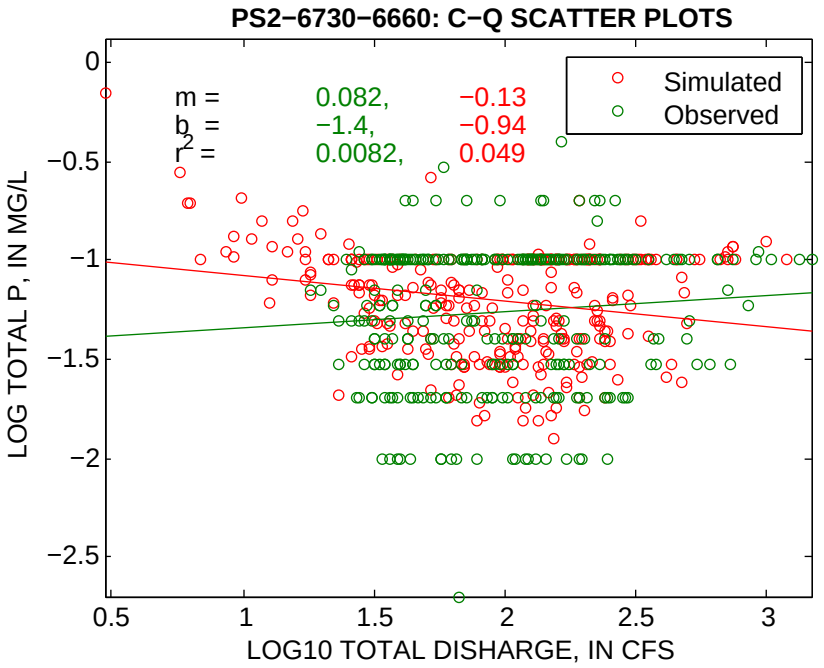
STATISTICS

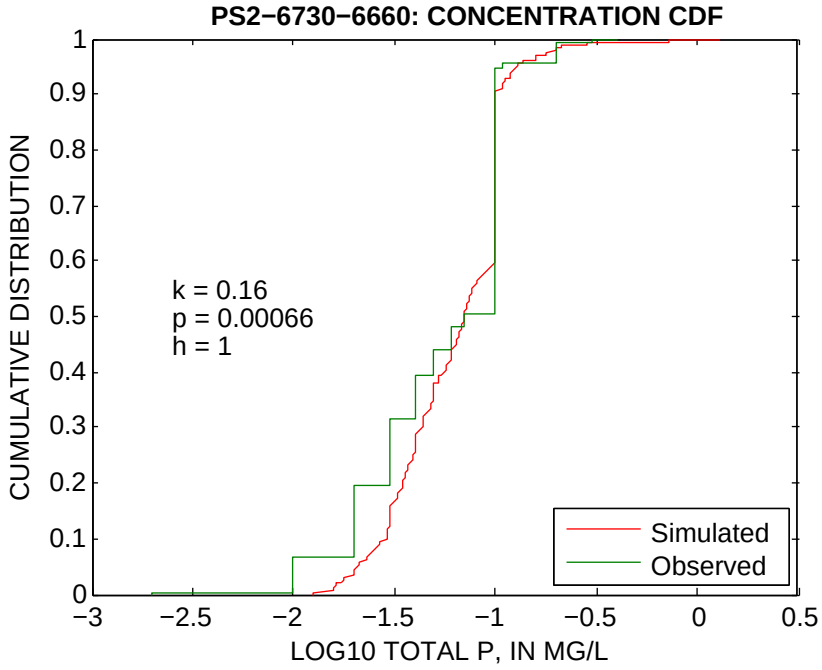
	n	observe	simulate
		306	306
min		0.002	0.013256
		-2.69897	-1.87759
mean		0.0713791	0.0813395
		-1.2649	-1.22895
media		0.07	0.05541
		-1.1549	-1.25642
max		0.4	1.9573
		-0.39794	0.291657
varian		0.00243063	0.0204869
		0.124361	0.0860507
JB		0.001	0.001
		0.001224	0.001
		ra	log
%		13.9543	-2.84204
err.va		0.022417	0.15475
rel.std.err		9.22272	1.24437
mod.eff		-8.22272	-0.244368

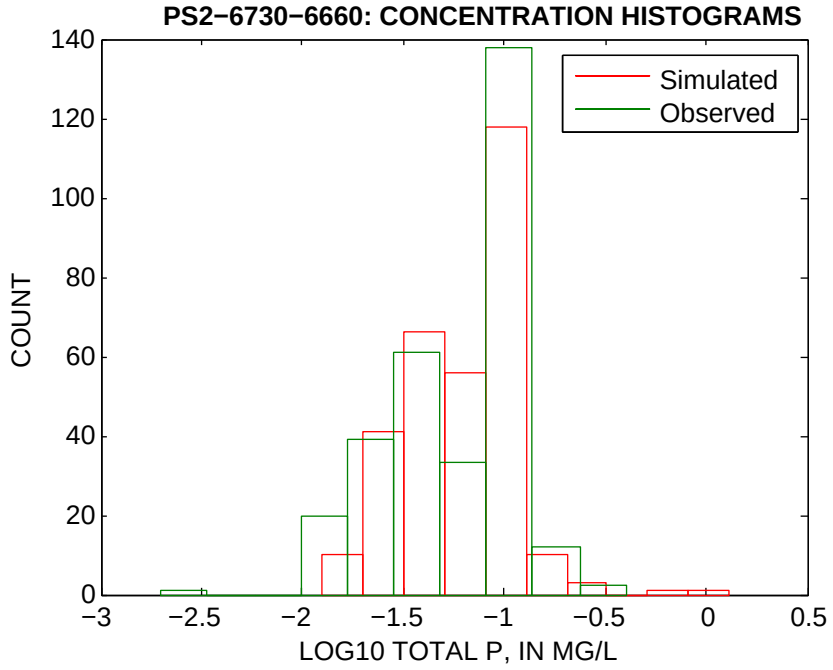
VERSION 2.1

ALL DATA
LOG10

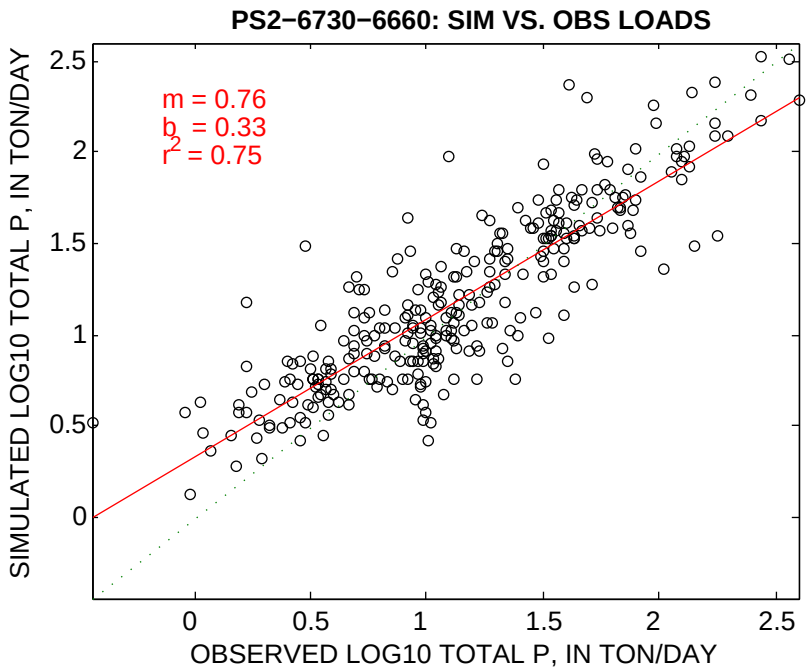


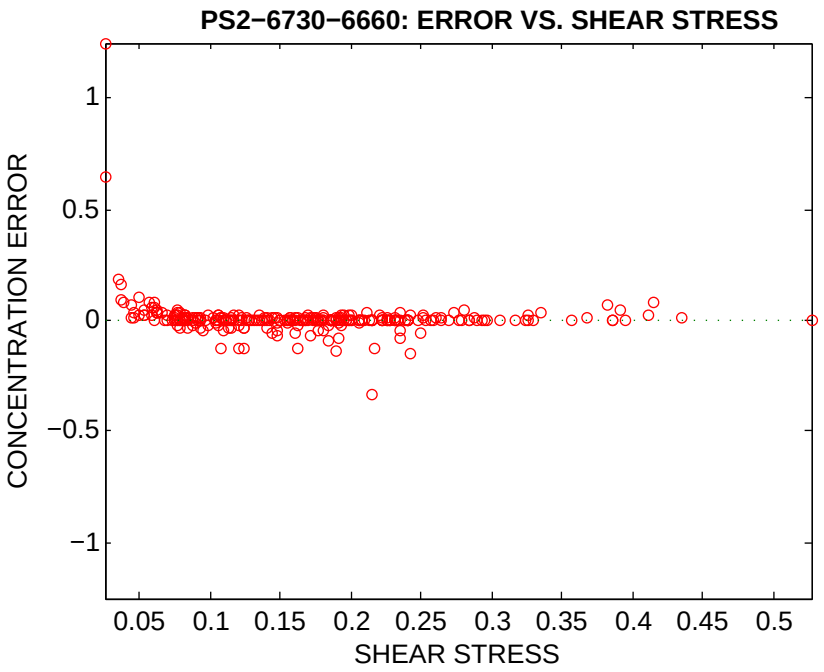


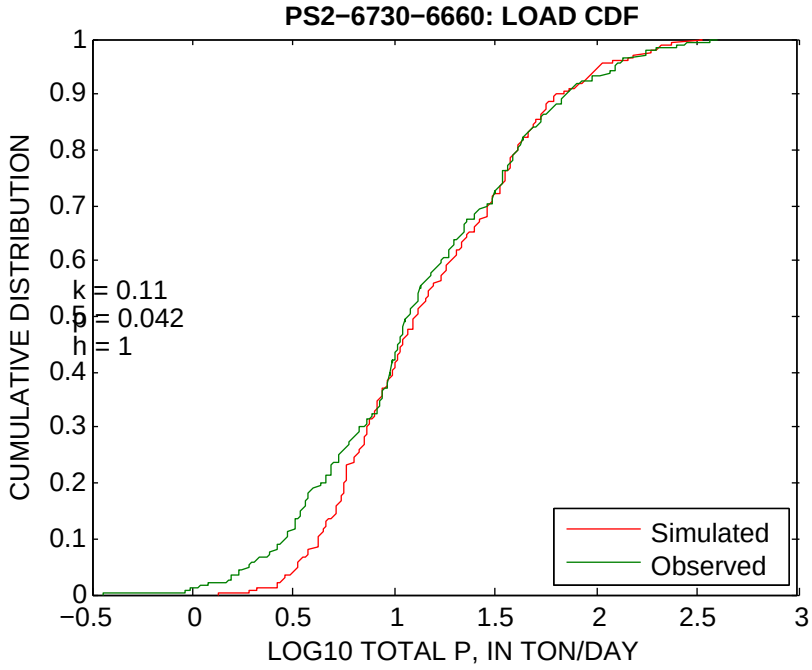


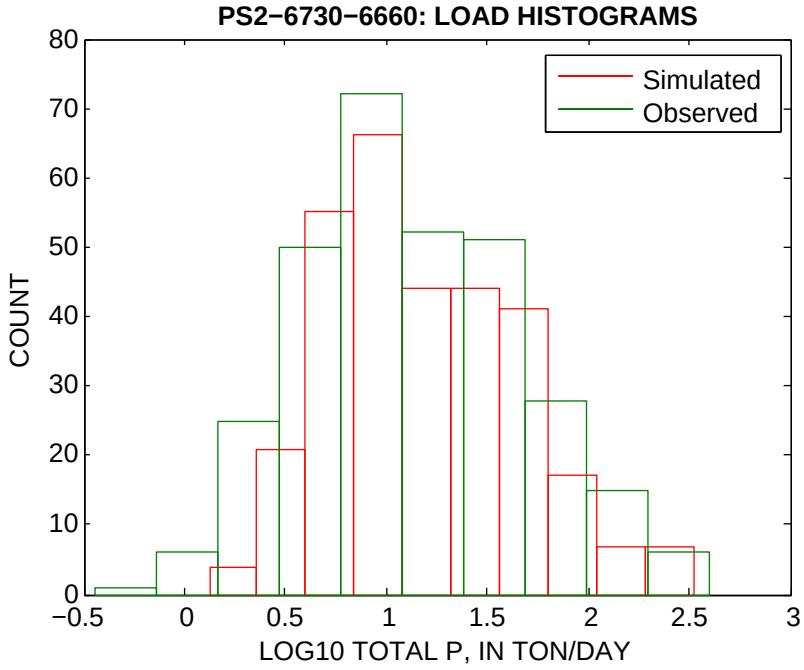


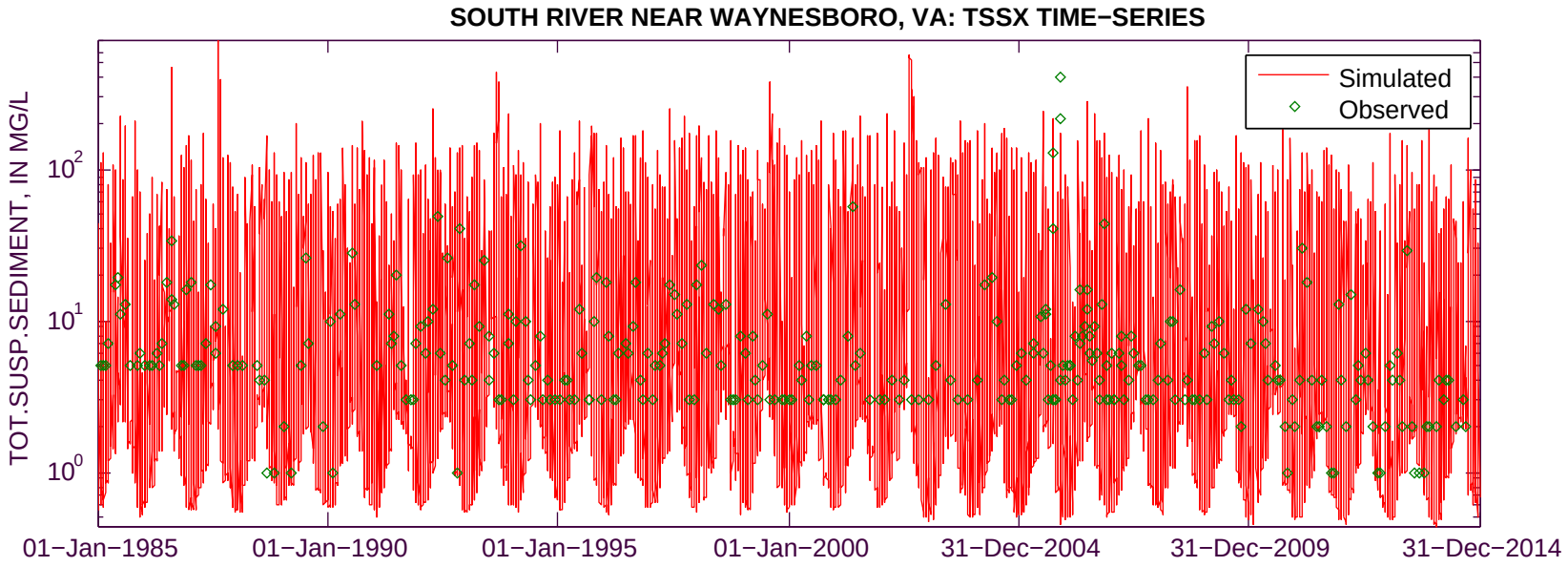
LOAD DATA
LOG10

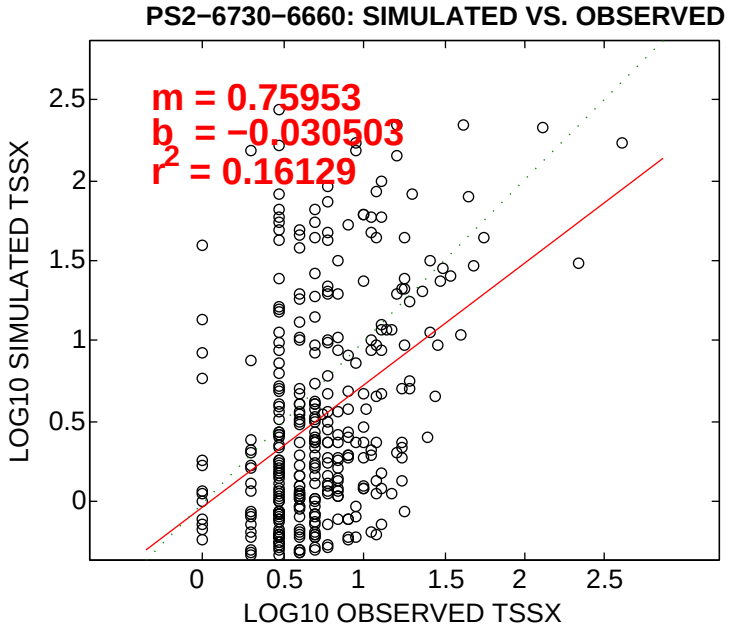


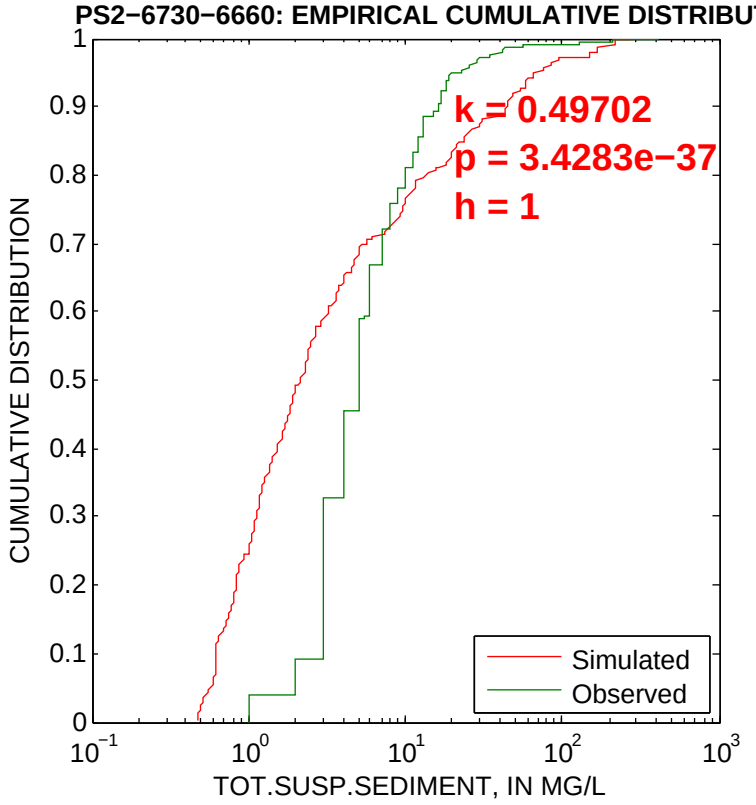












DATA SELECTION

scenario: P620171001WQ | file: TSSX.calib

plot: TSSX - total suspended ...

Dates: 1/1/1985 – 12/31/201

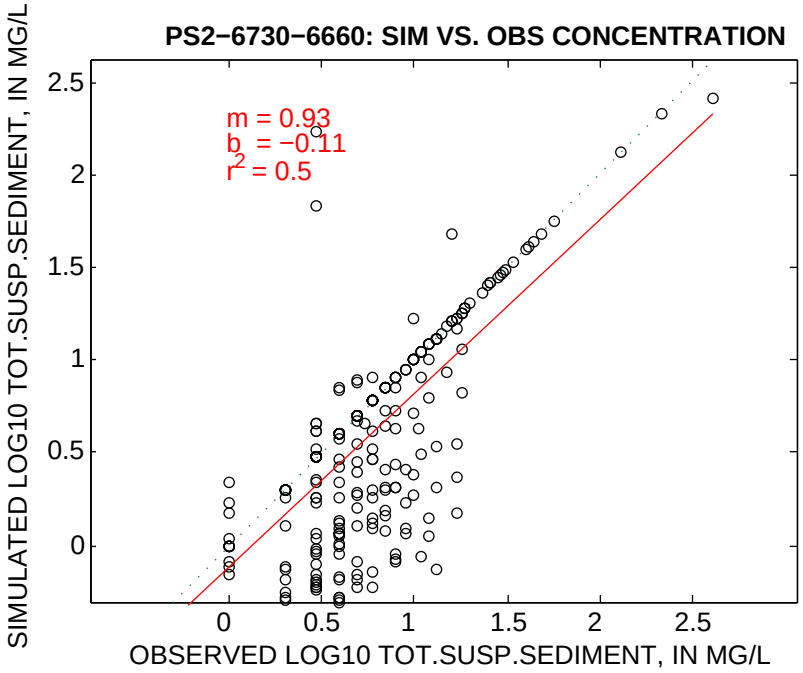
Drive: N/A | Directory: model | Observed: OBS20161101

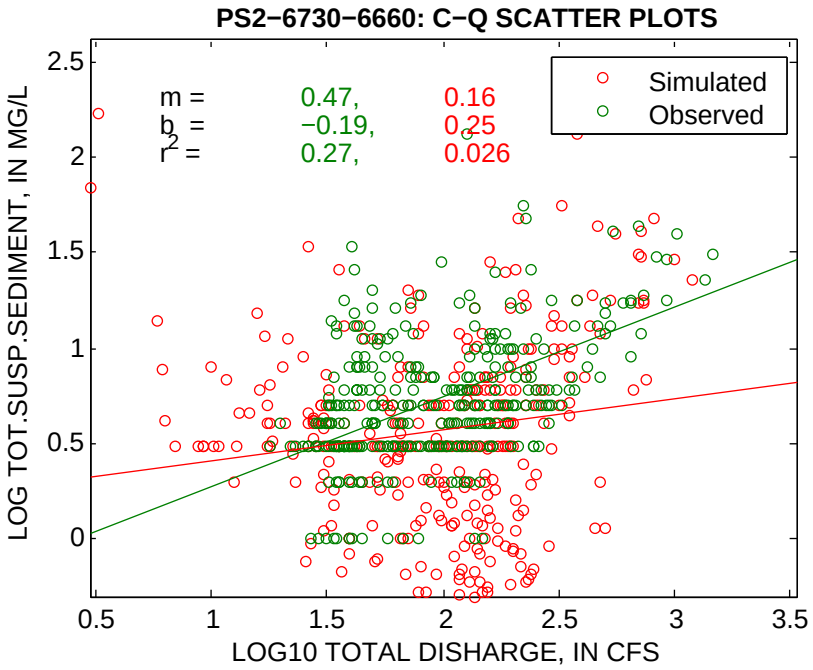
STATISTICS

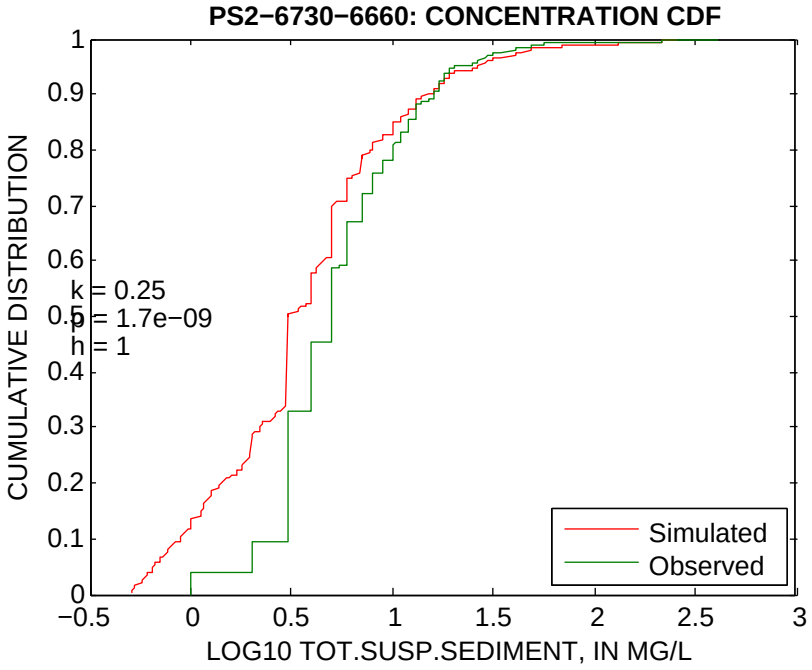
n	336	336
	observe	simulate
min	1	0.46433
	0	-0.333173
mean	9.34873	14.7336
	0.734034	0.527018
media	5	2.1637
	0.69897	0.335195
max	408.232	270.17
	2.61091	2.43164
varian	700.417	1253.15
	0.1295	0.463172
JB	0.001	0.001
	0.001	0.001
	ra	log
%	57.6002	-28.2025
err.va	1326.88	0.438938
rel.std.err	1.89442	3.38949
mod.eff	-0.894421	-2.38949

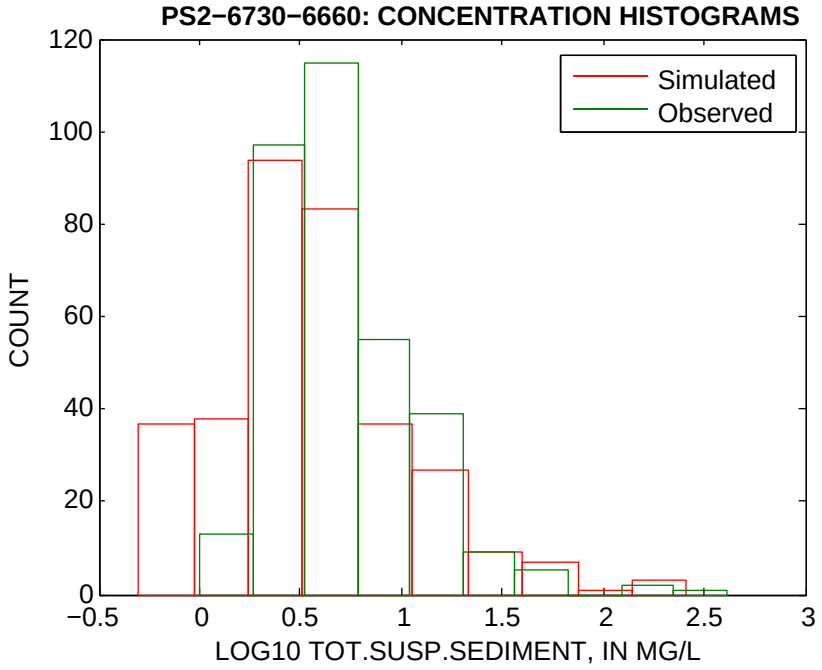
VERSION 2.1

ALL DATA
LOG10

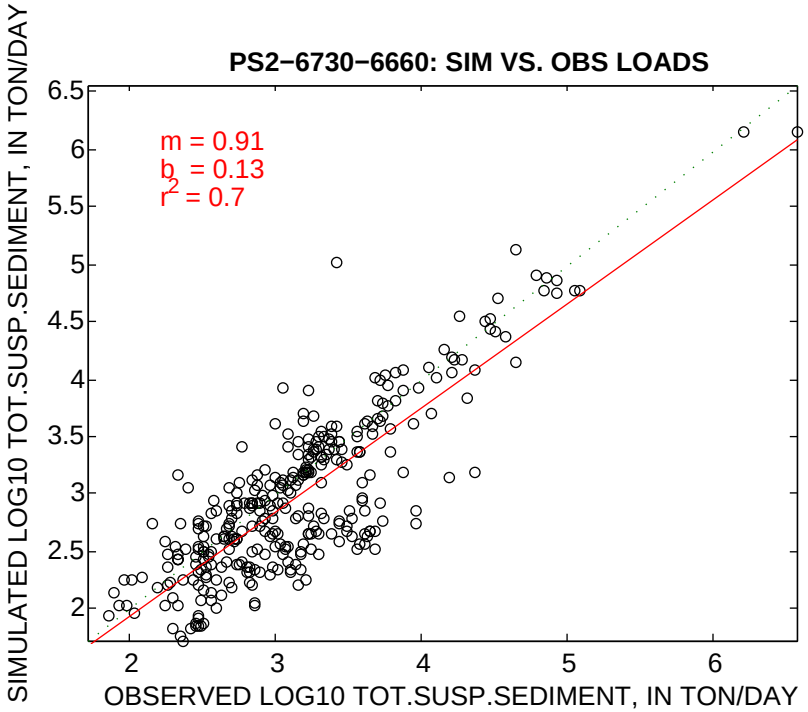


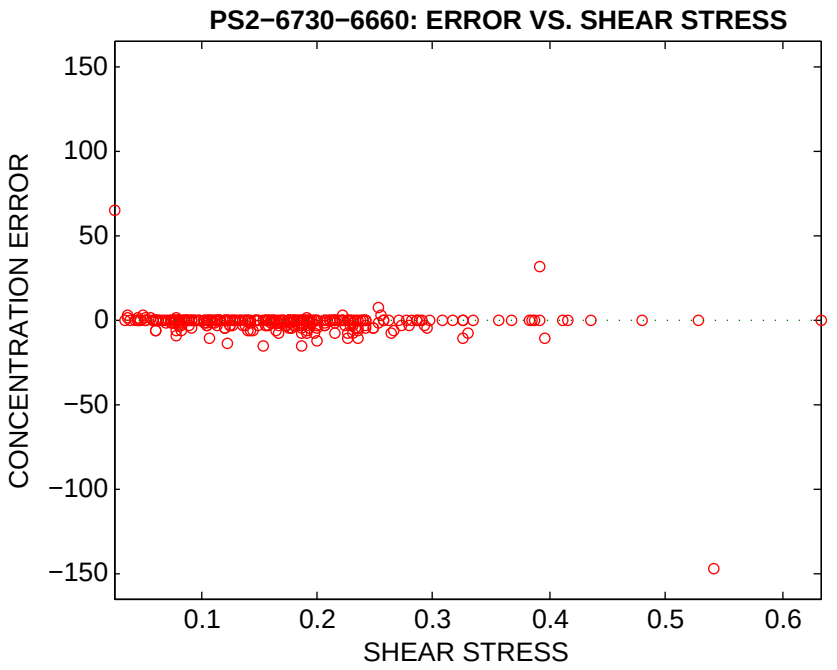


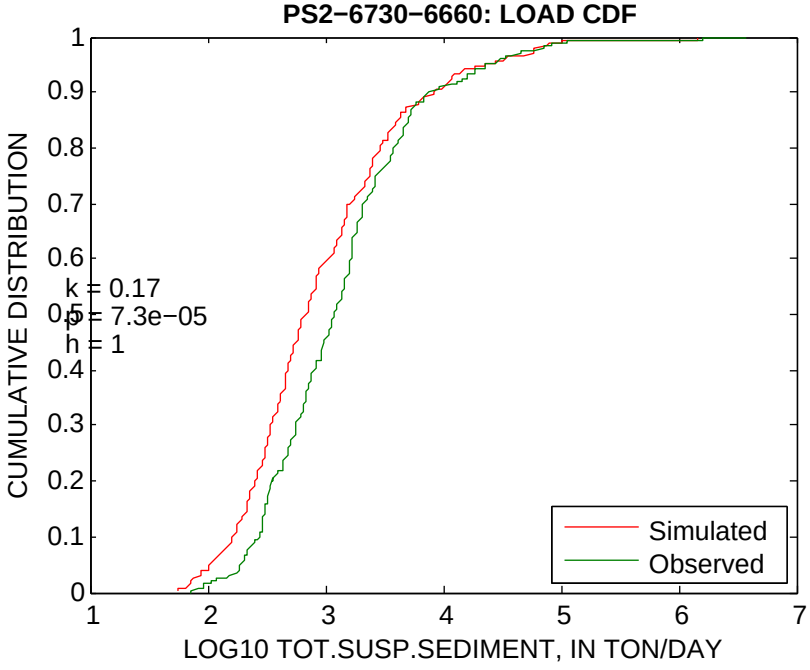


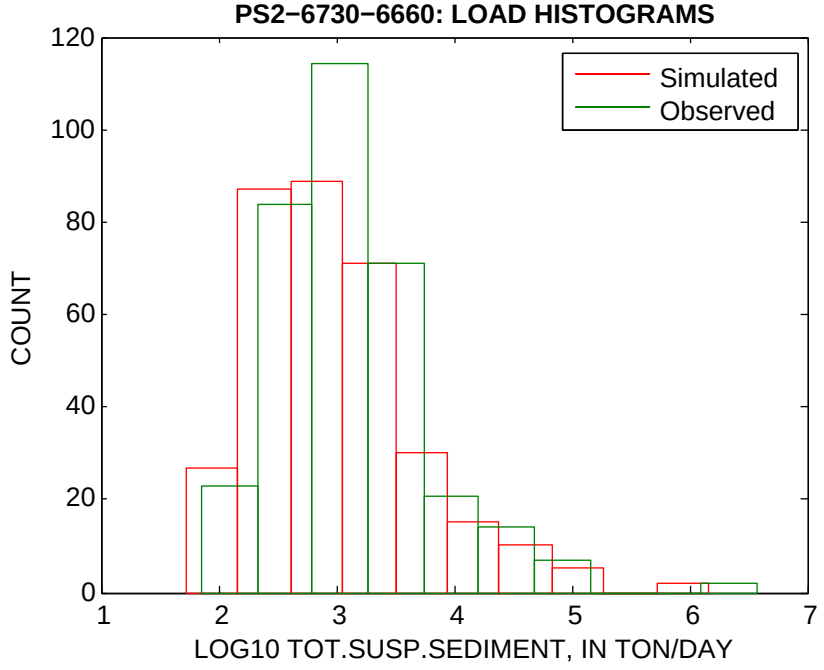


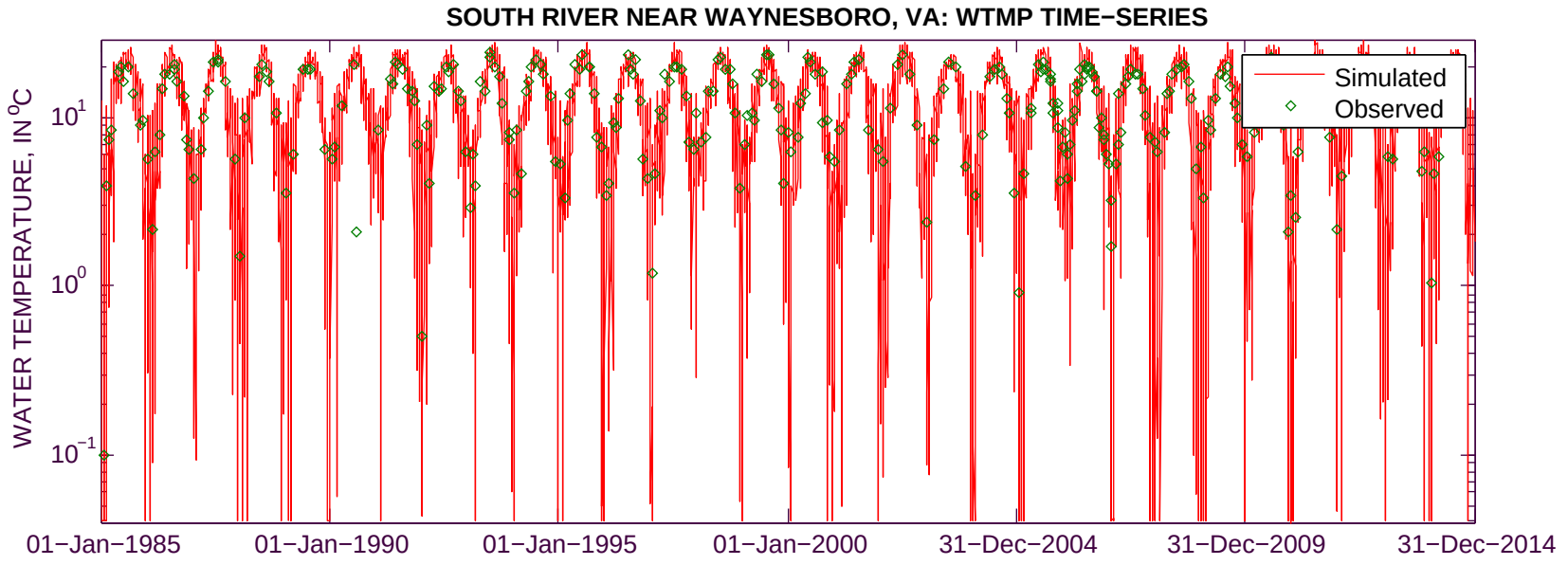
LOAD DATA
LOG10

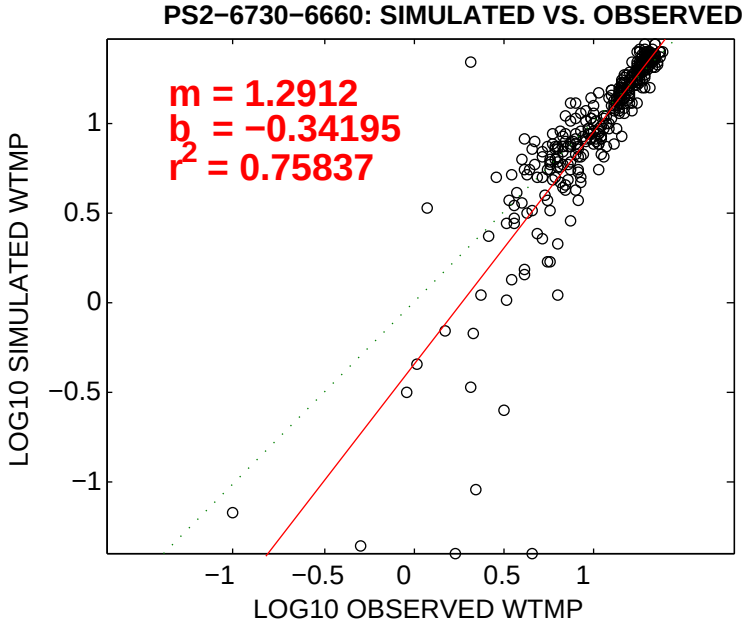


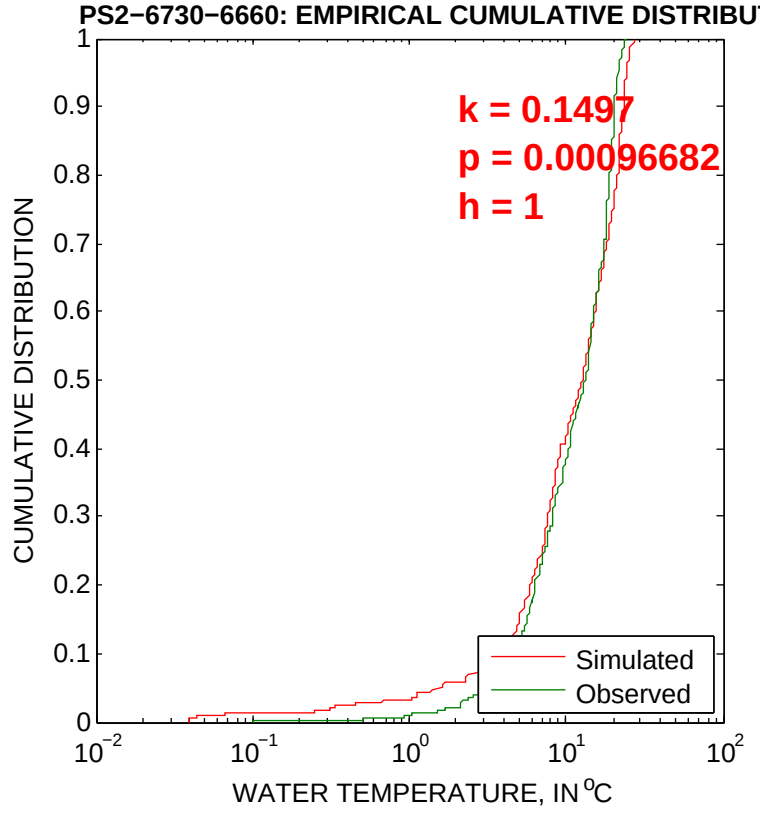












DATA SELECTION

scenario	file
P620171001WQ	WTMP.calib

plot: WTMP - water tempera...

Dates: 1/1/1985 – 12/31/201

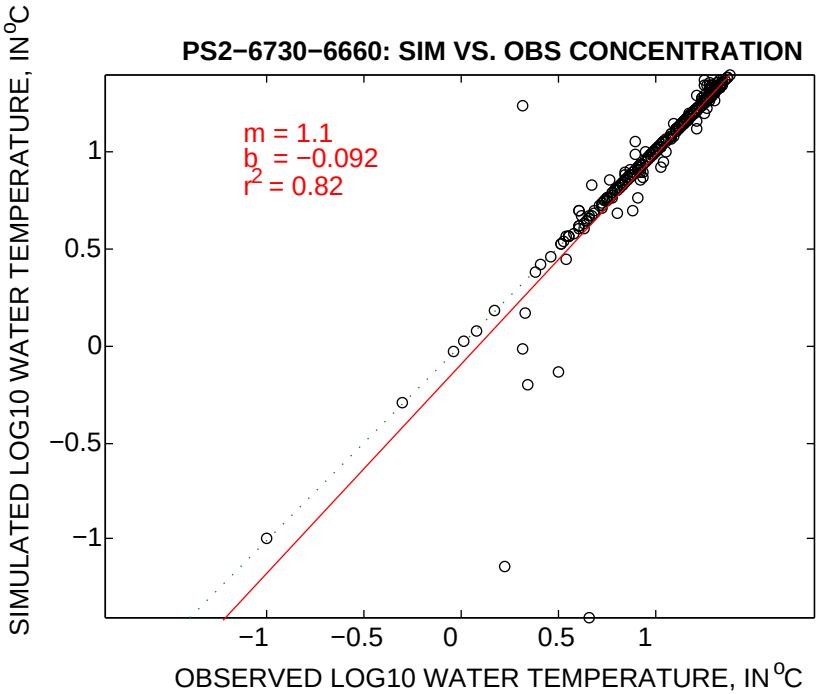
Drive	Directory	Observed
N/A	model	OBS20161101

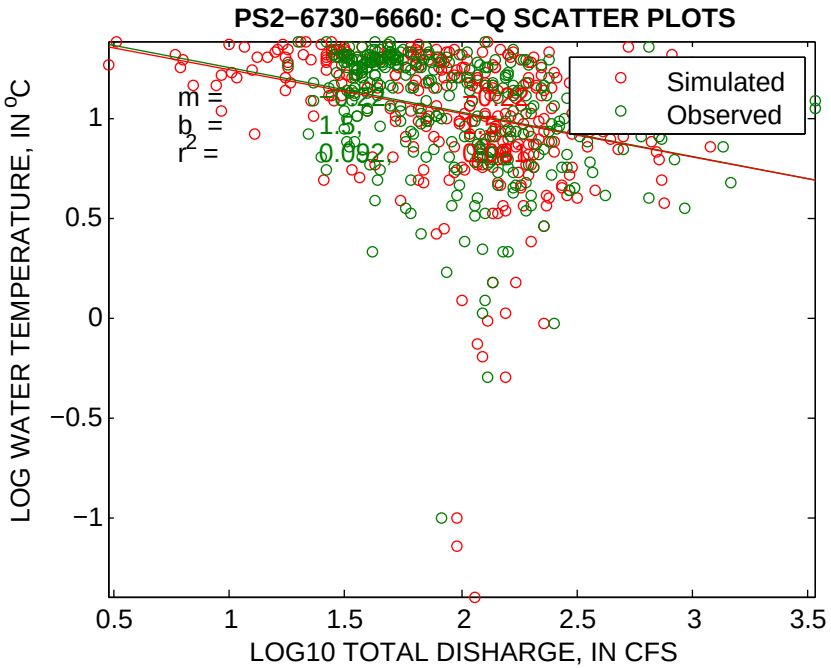
STATISTICS

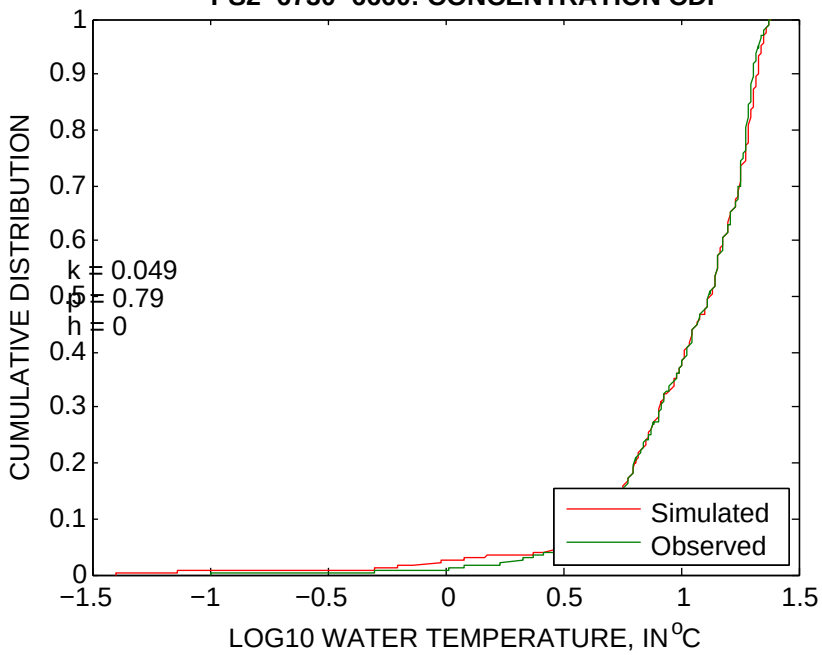
	n	334	334
		observe	simulate
min		0.1	0.039973
		-1	-1.39823
mean		12.7332	13.0436
		1.02939	0.987222
media		13.3	12.8205
		1.12384	1.1079
max		24.3	27.365
		1.38561	1.4372
varian		37.6007	54.3318
		0.0913014	0.200722
JB		0.001672	0.001729
		0.001	0.001
		ra	log
%		2.43785	-4.09642
err.va		7.40928	0.0580265
rel.std.err		0.197052	0.635549
mod.eff		0.802948	0.364451

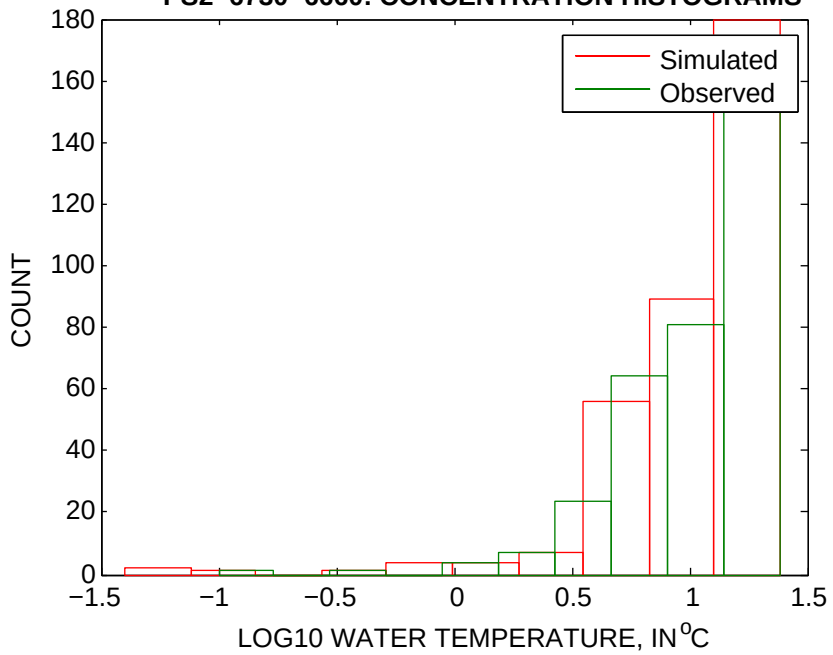
VERSION 2.1

ALL DATA
LOG10

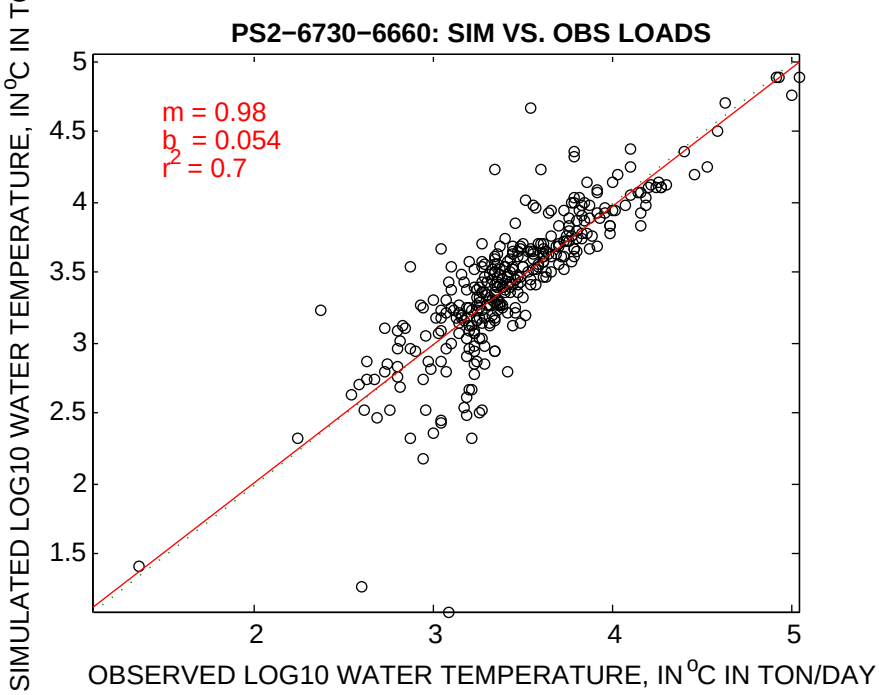


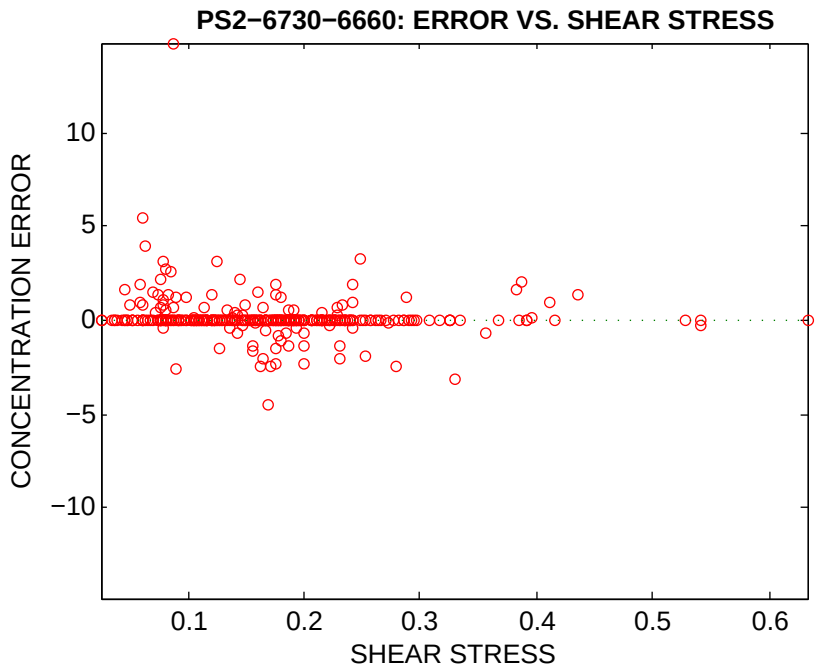


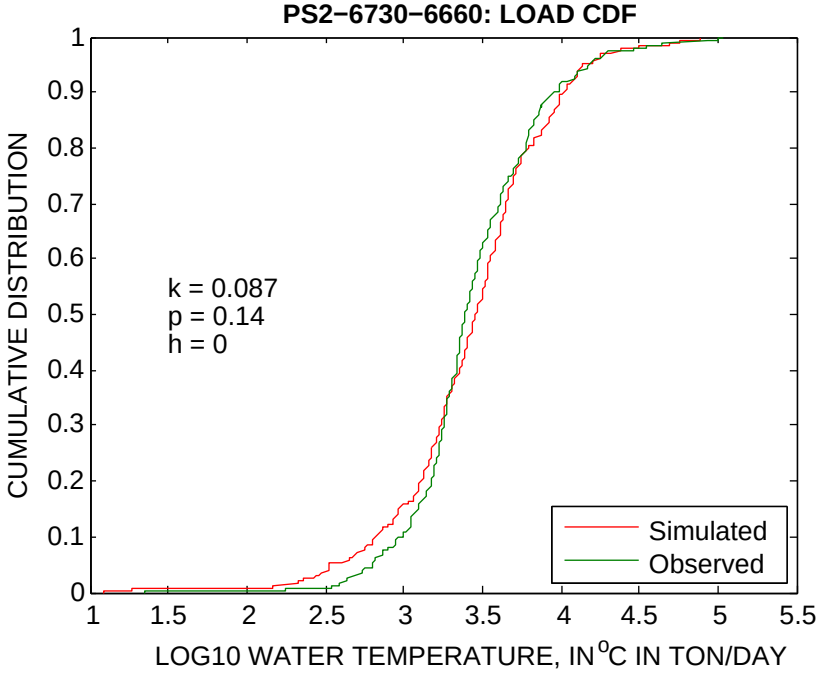


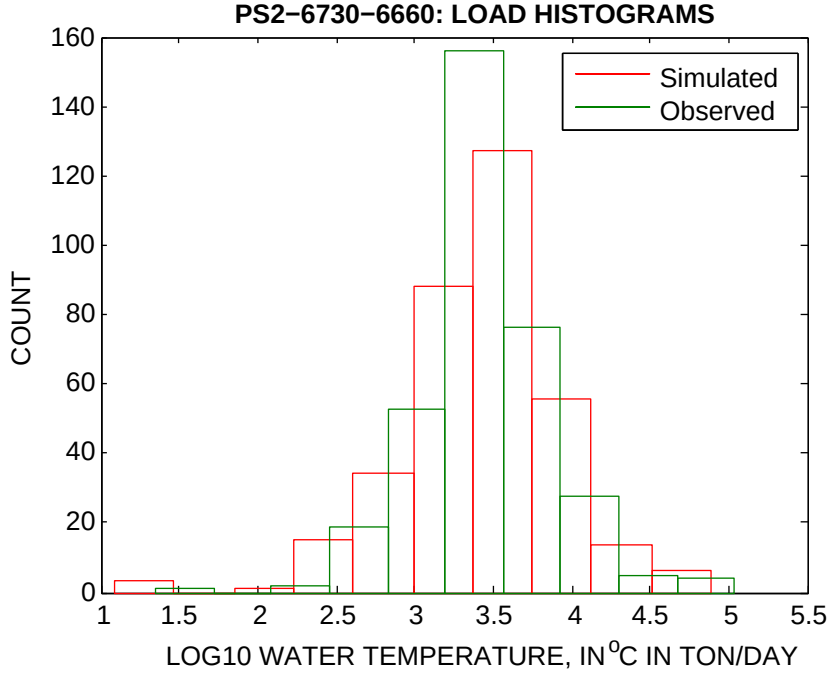


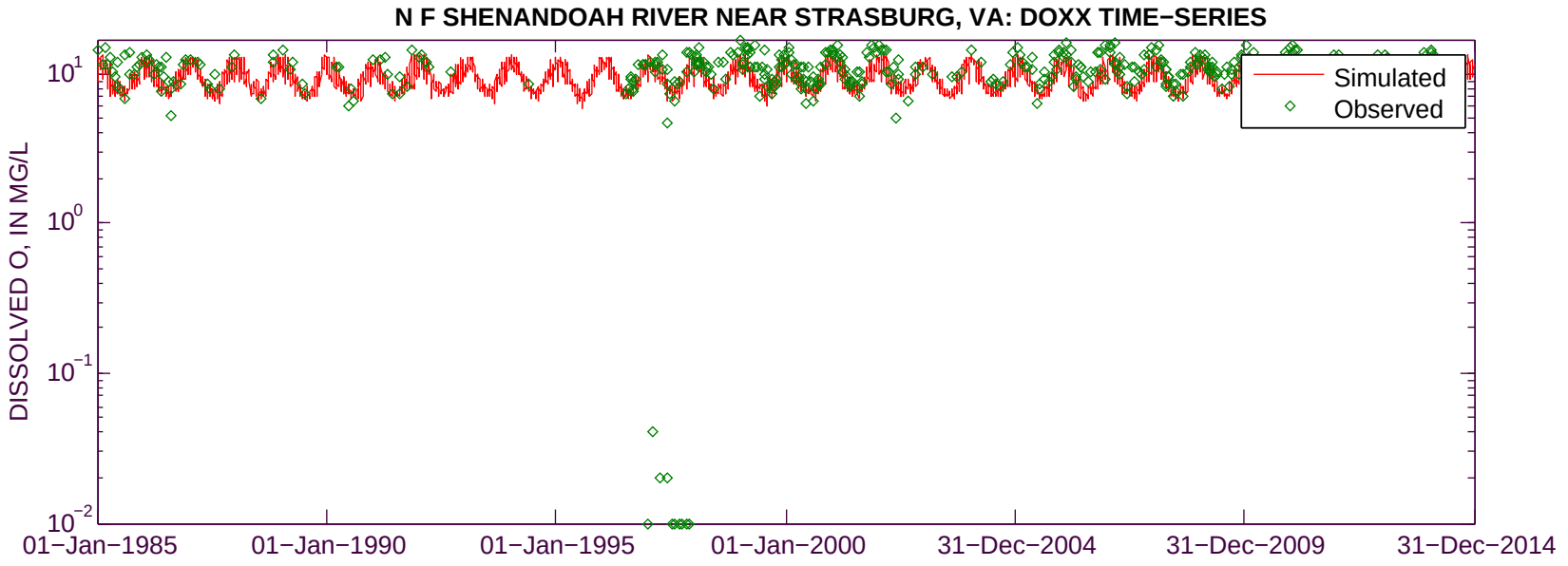
LOAD DATA
LOG10

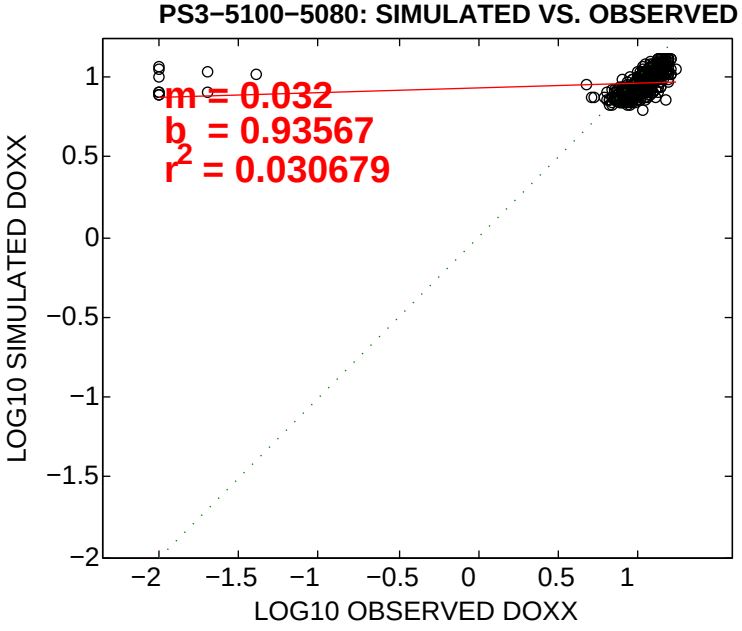


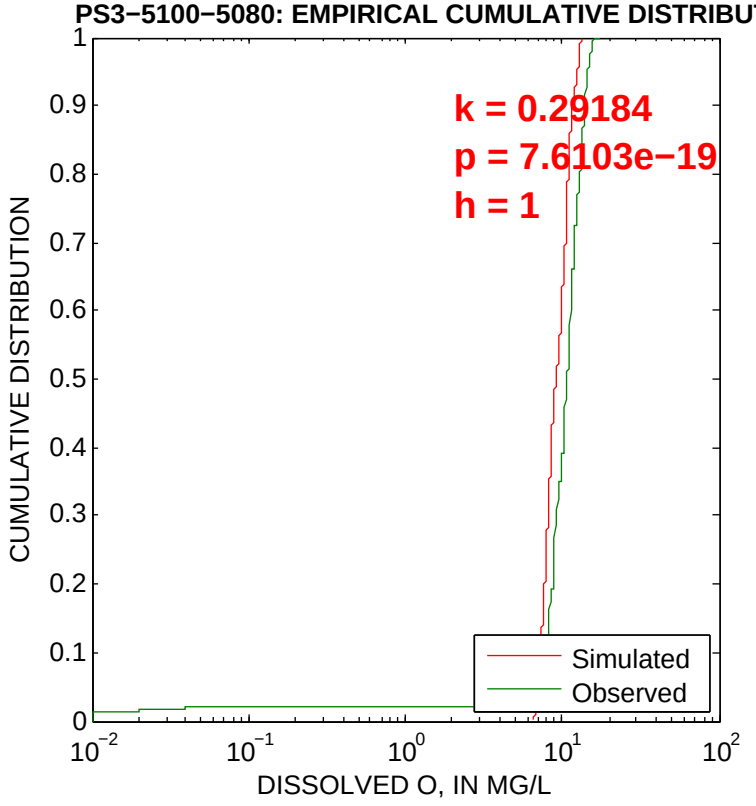












DATA SELECTION

scenario	file
P620171001WQ	DOXX.calib

plot: DOXX - dissolved oxygen

Dates: 1/1/1985 – 12/31/201

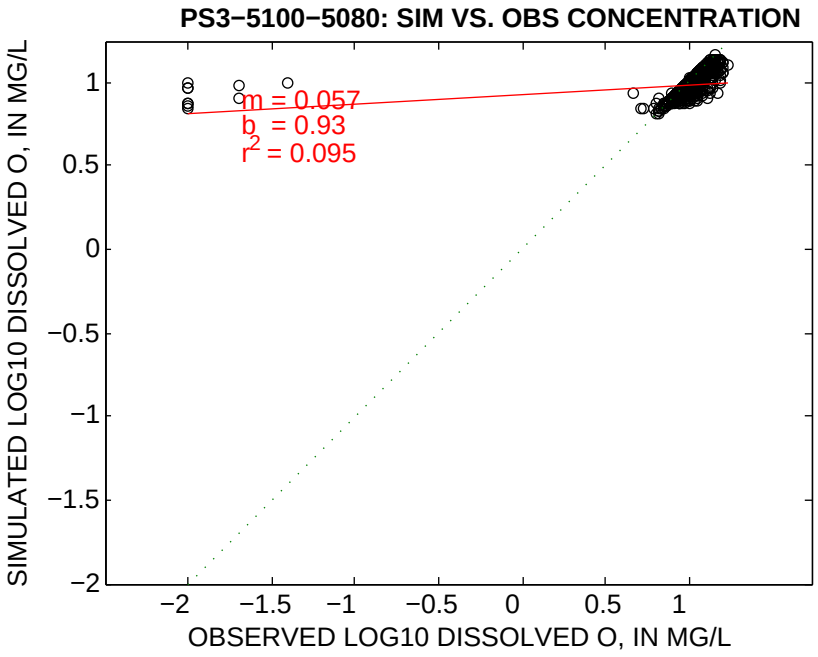
Drive	Directory	Observed
N/A	model	OBS20161101

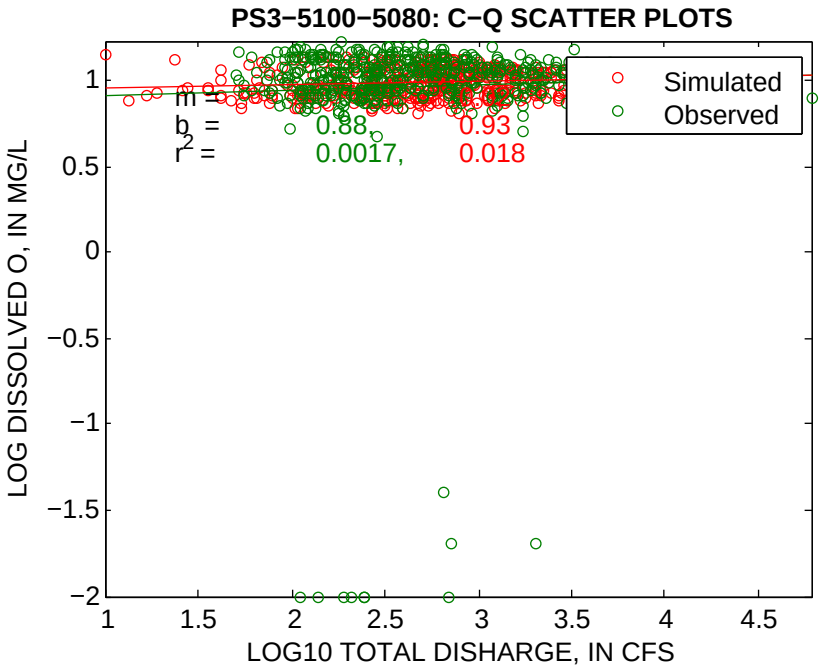
STATISTICS

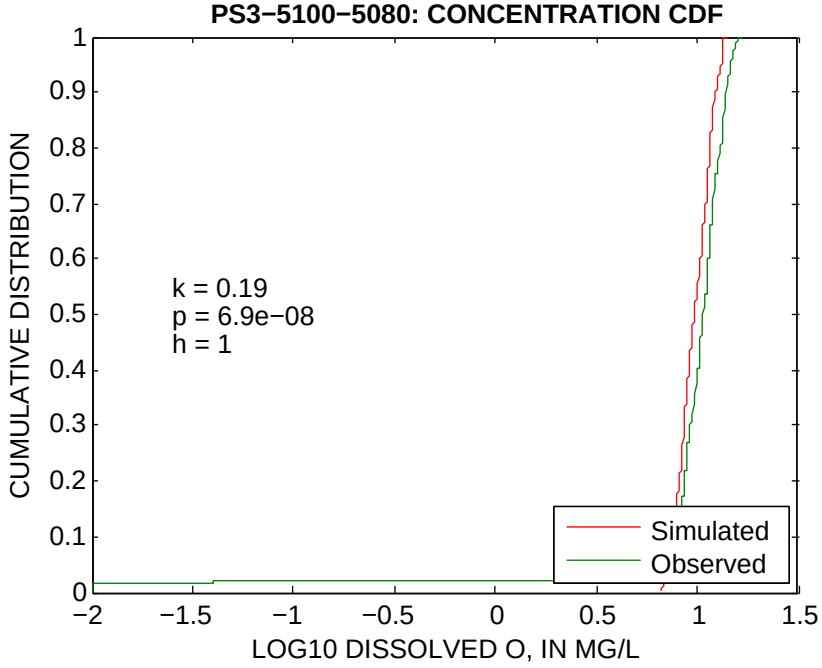
	n	490	490
		observe	simulate
min		0.01	6.199
		-2	0.792322
mean		10.6523	9.4081
		0.967083	0.966612
media		10.72	9.227
		1.03019	0.96506
max		17.1	13.165
		1.233	1.11942
varian		7.48649	2.85486
		0.178762	0.0059666
JB		0.001	0.001
		0.001	0.001
		ra	log
%		-11.6797	-0.0486581
err.va		5.88431	0.173288
rel.std.err		0.785991	0.969379
mod.eff		0.214009	0.0306207

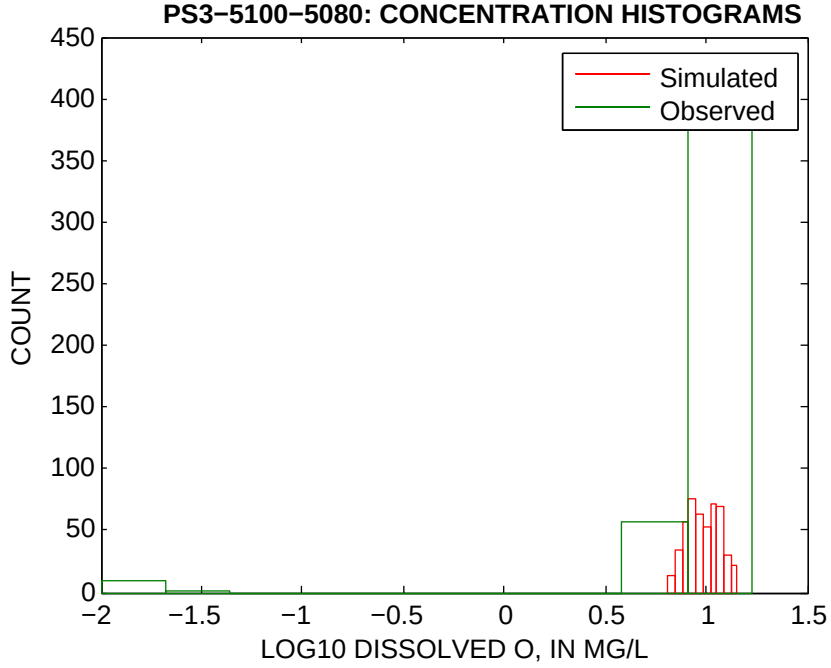
VERSION 2.1

ALL DATA
LOG10

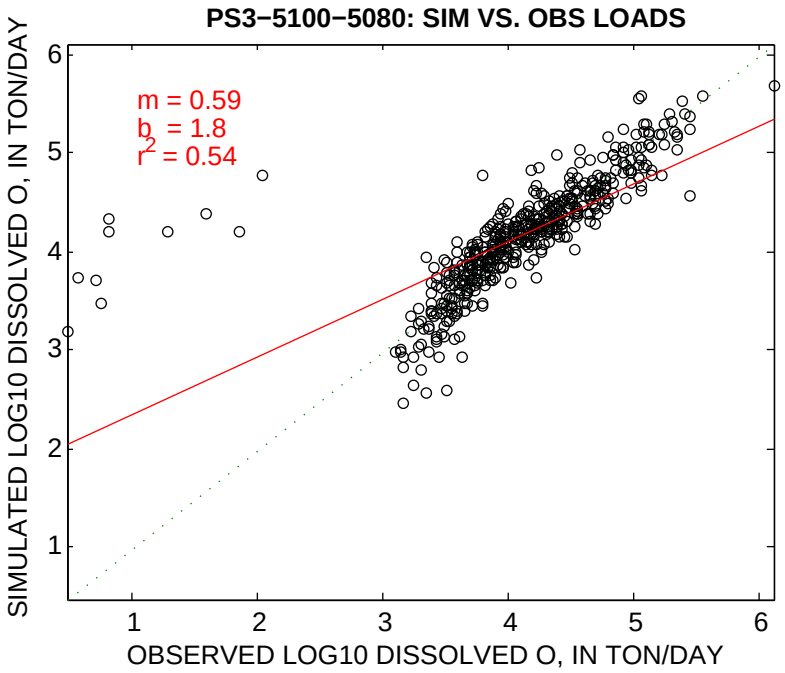


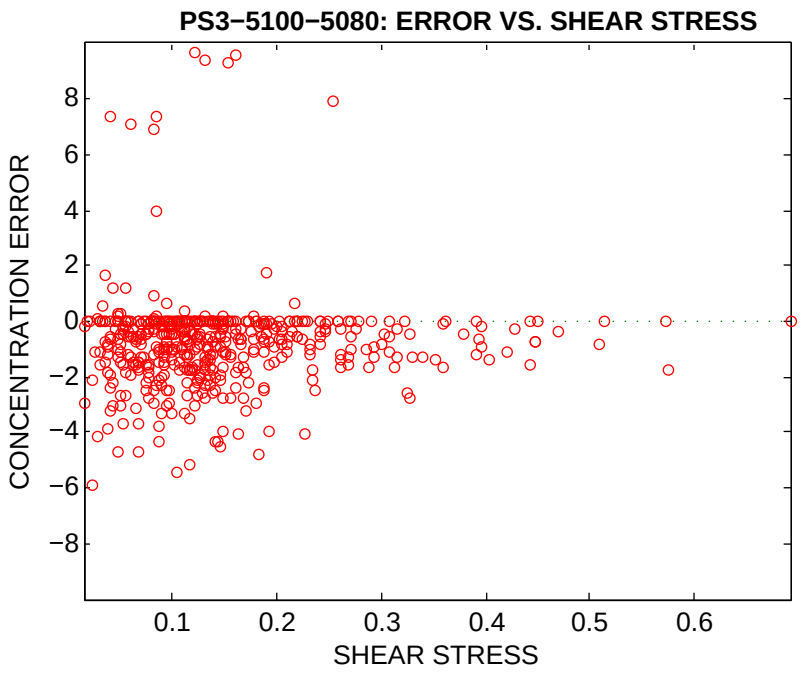


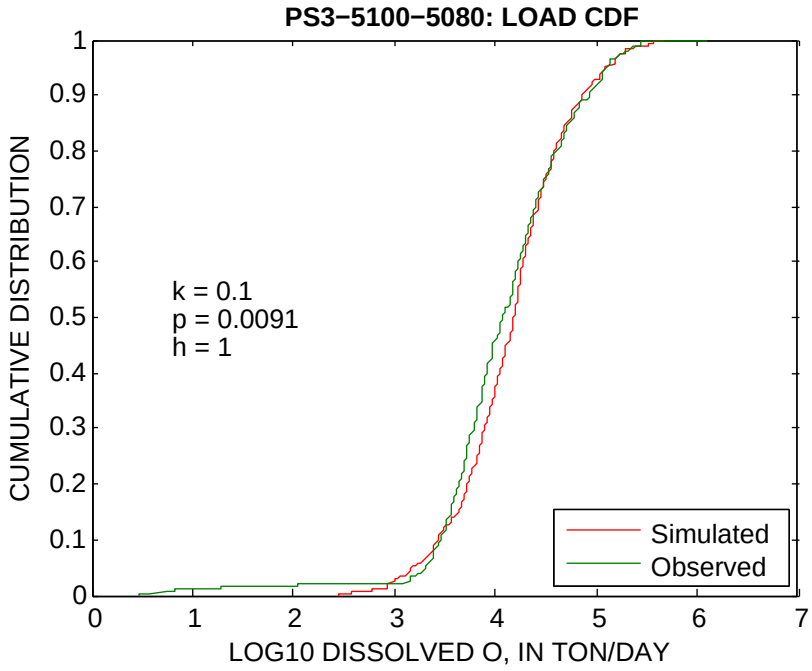


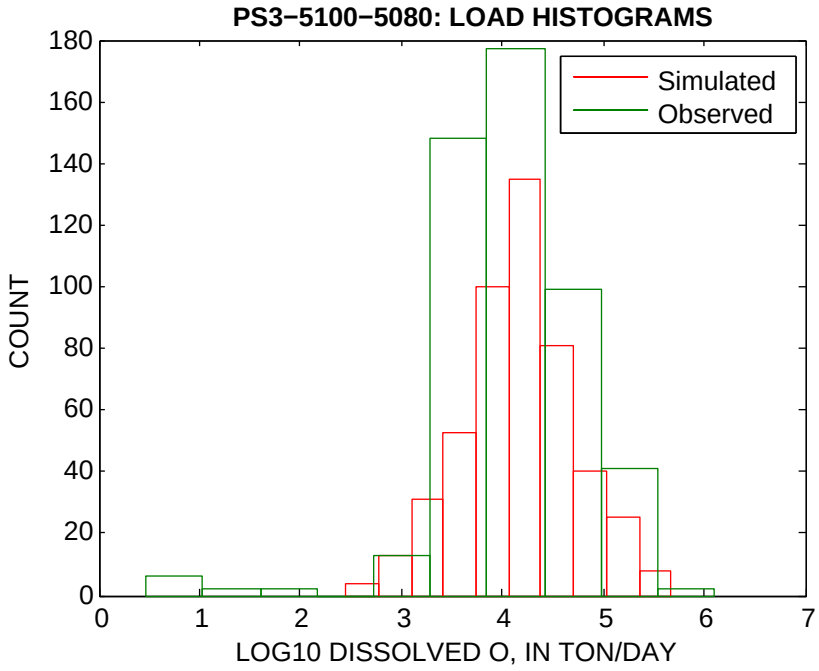


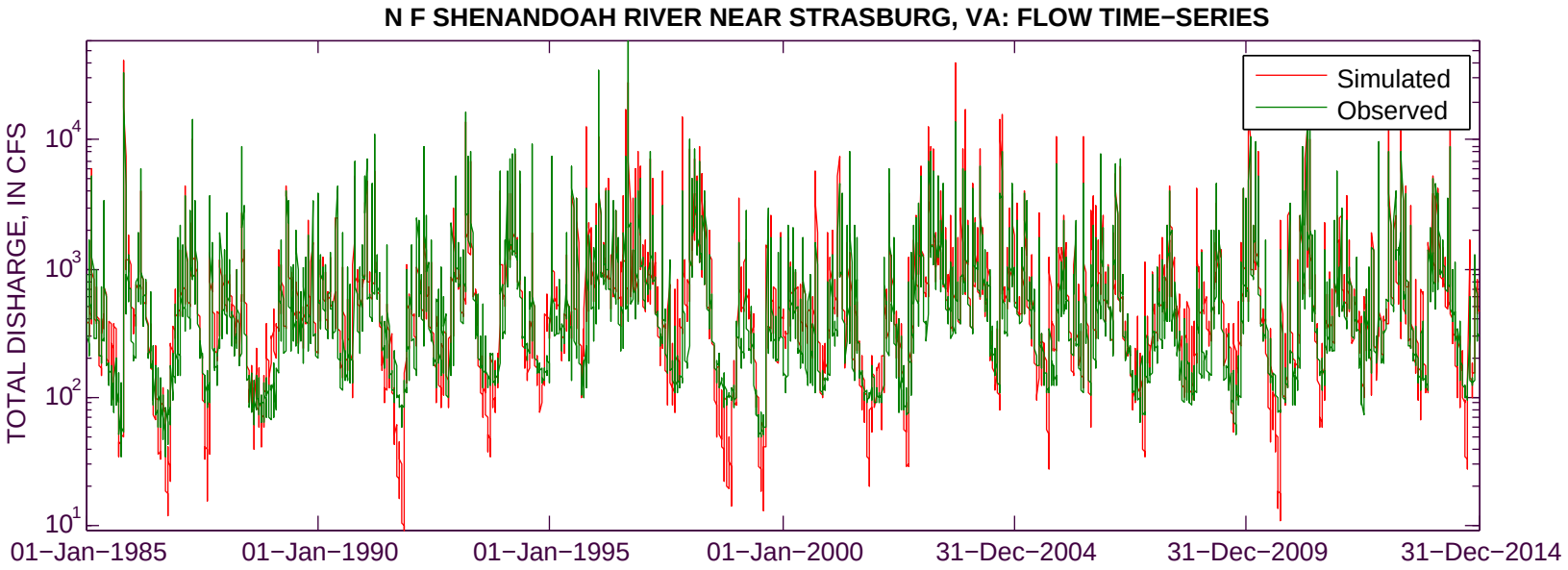
LOAD DATA
LOG10

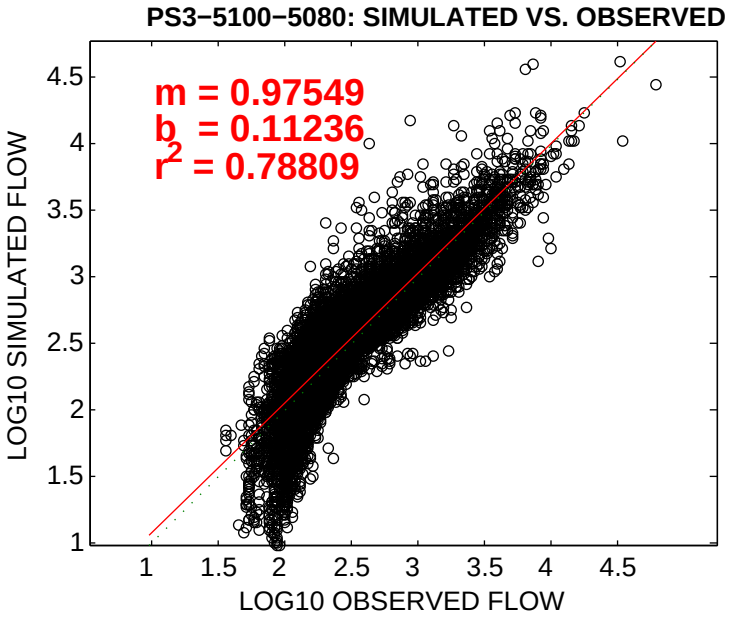


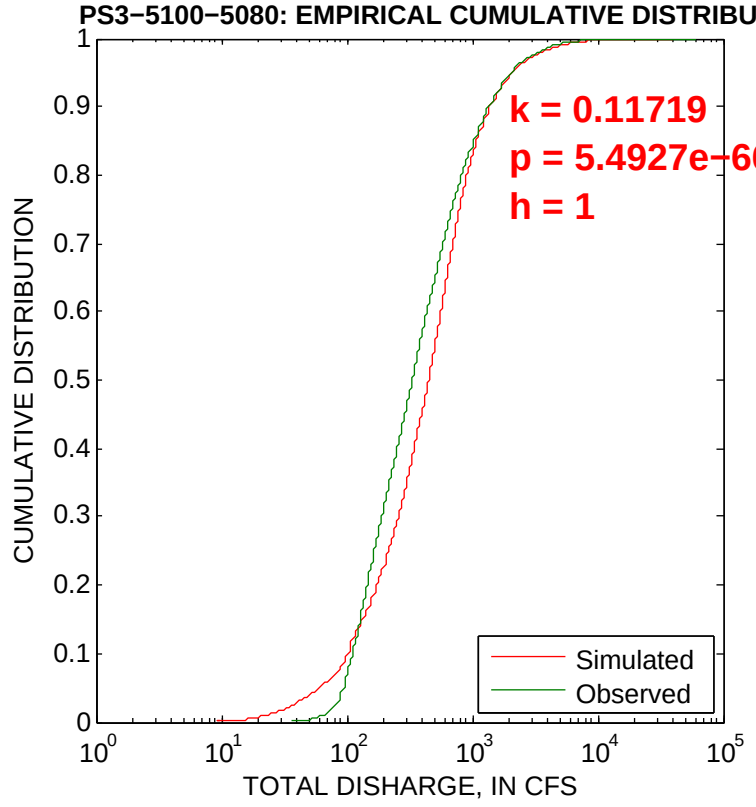












DATA SELECTION

scenario	file
P620171001WQ	FLOW.calib

plot: FLOW - total discharge

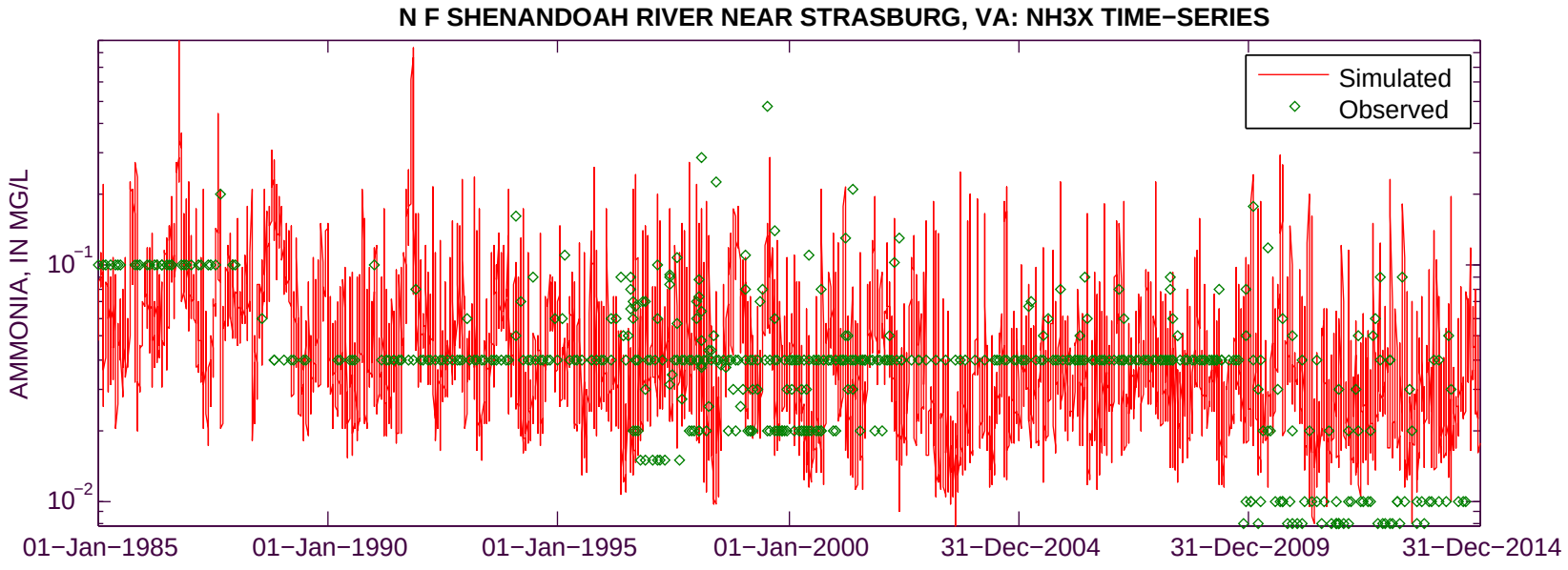
Dates: 1/1/1985 – 12/31/201

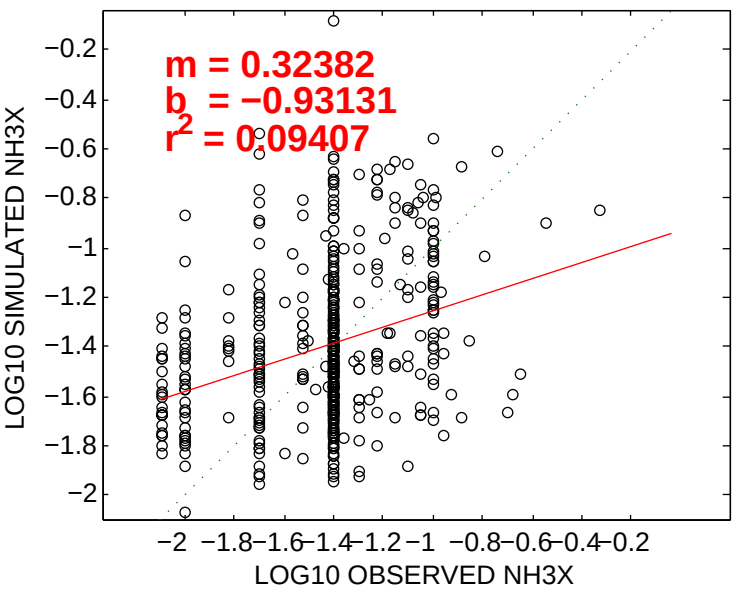
Drive	Directory	Observed
N/A	model	OBS20161101

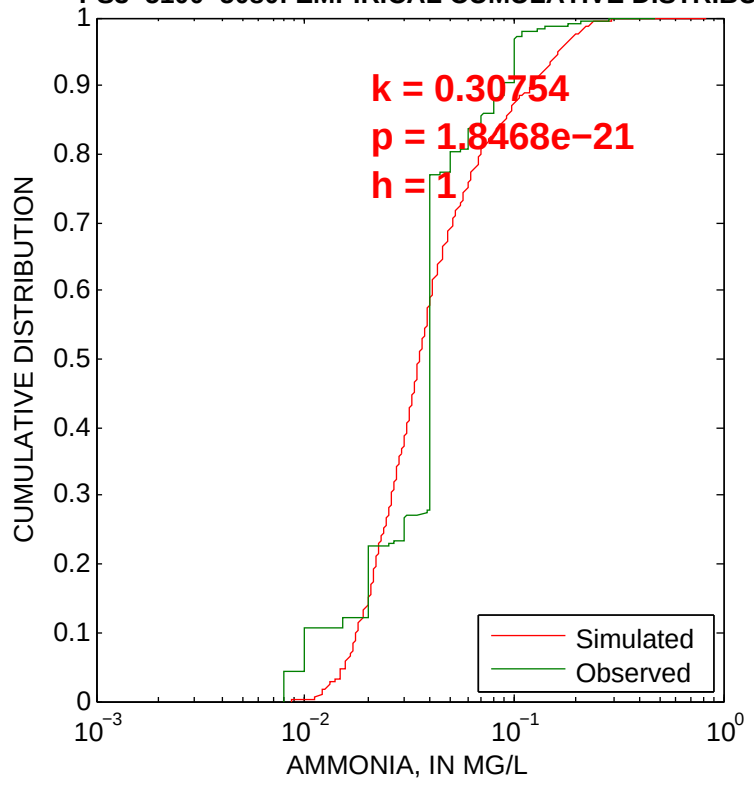
STATISTICS

n	10957	10957
	observe	simulate
min	35	9.4339
	1.54407	0.974691
mean	641.269	723.563
	2.56274	2.6123
media	335	453.88
	2.52504	2.65694
max	60700	40904
	4.78319	4.61177
varian	1.47215e+0	1.62612e+
	0.17986	0.217173
JB	0.001	0.001
	0.001	0.001
	ra	log
%	12.833	1.93373
err.va	725804	0.0485844
rel.std.err	0.493024	0.270123
mod.eff	0.506976	0.729877

VERSION







DATA SELECTION

scenario	file
P620171001WQ	NH3X.calib

plot: NH3X - ammonia

Dates: 1/1/1985 – 12/31/201

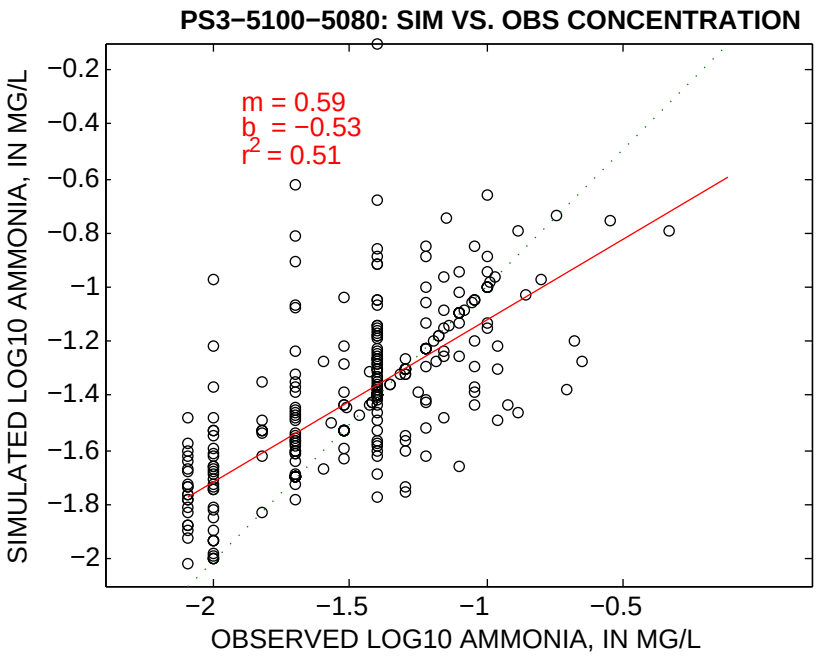
Drive	Directory	Observed
N/A	model	OBS20161101

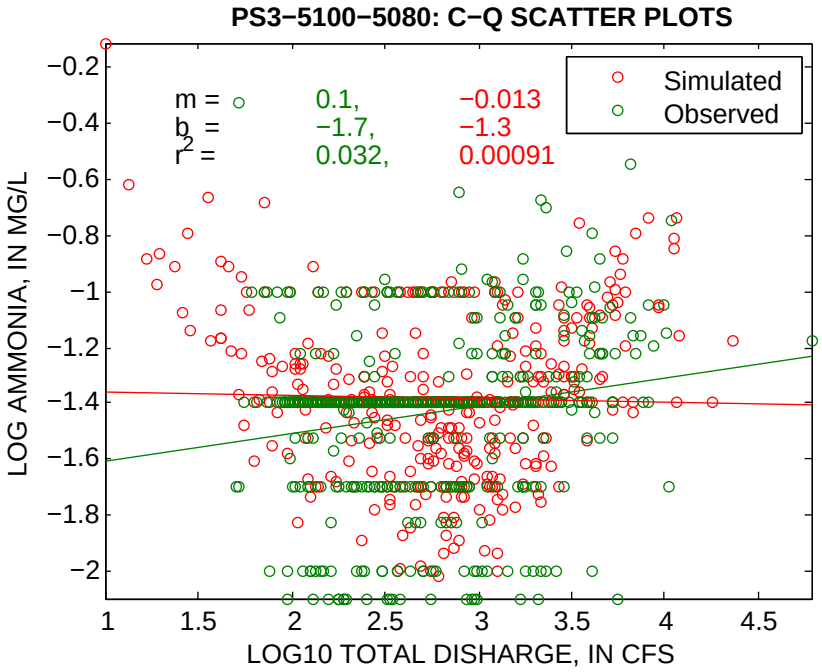
STATISTICS

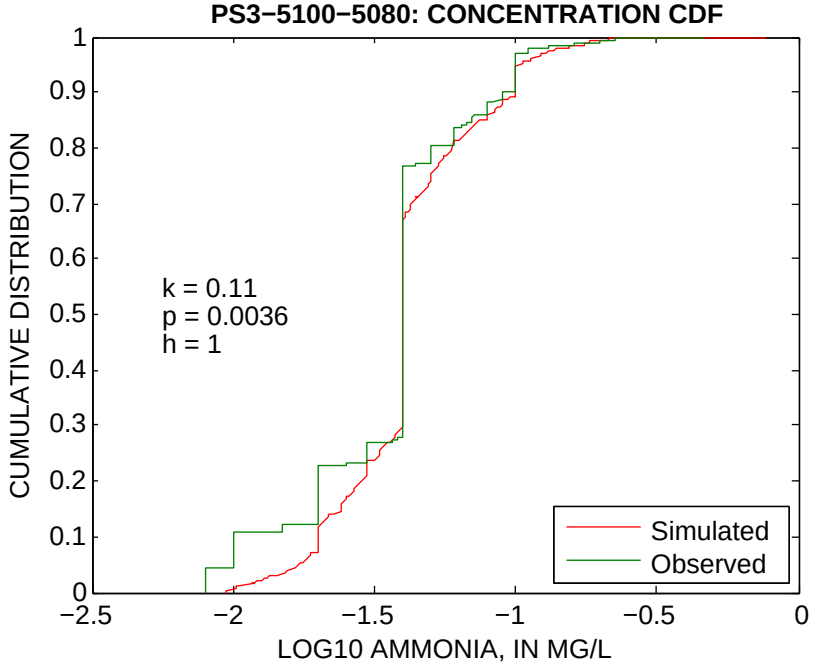
	n	504	504
		observe	simulate
min		0.008	0.0085841
		-2.09691	-2.06631
mean		0.0454811	0.0541722
		-1.43774	-1.39688
media		0.04	0.035475
		-1.39794	-1.45008
max		0.47	0.82316
		-0.327902	-0.0845157
varian		0.0013308	0.00341348
		0.0859455	0.0958056
JB		0.001	0.001
		0.001925	0.001
		ra	log
%		19.1093	-2.84165
err.va		0.00388174	0.127761
rel.std.err		2.91686	1.48654
mod.eff		-1.91686	-0.486536

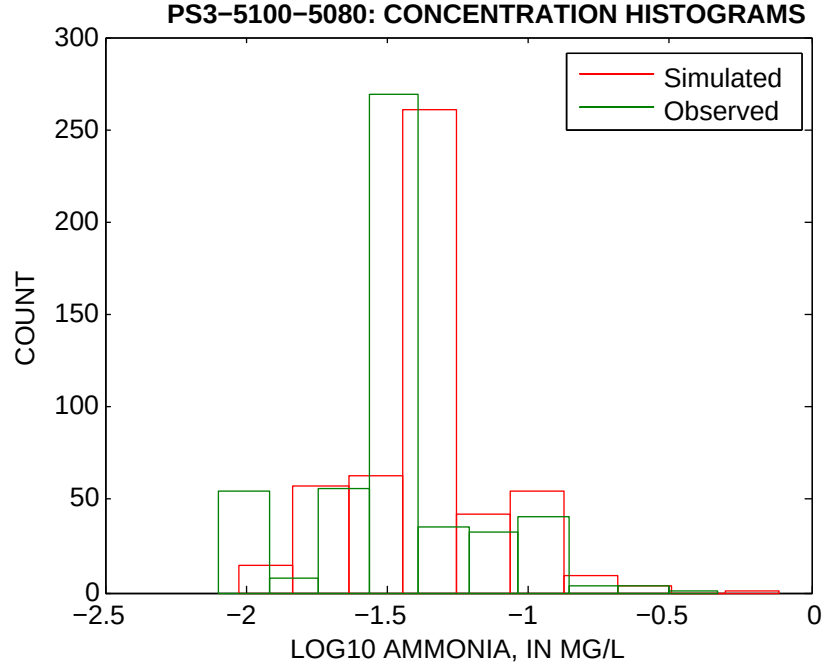
VERSION

ALL DATA
LOG10

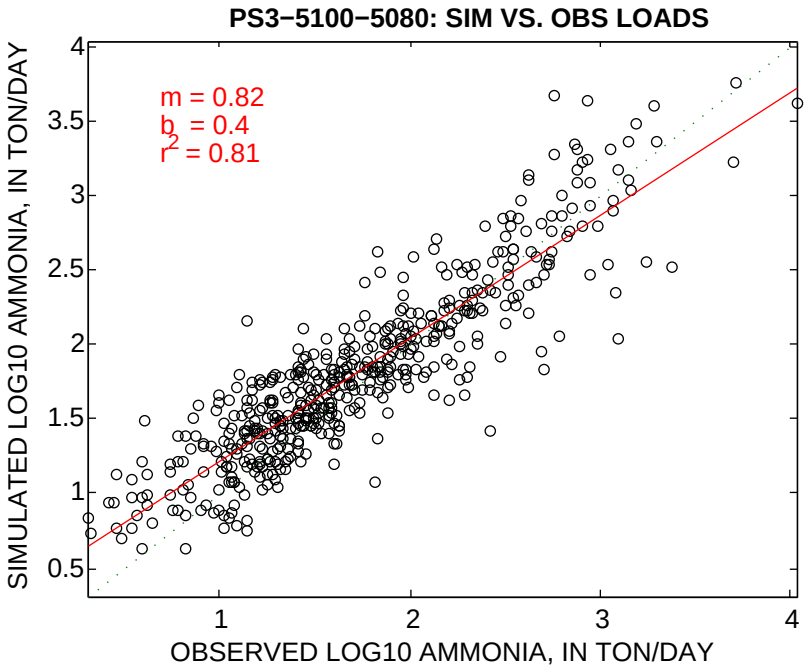


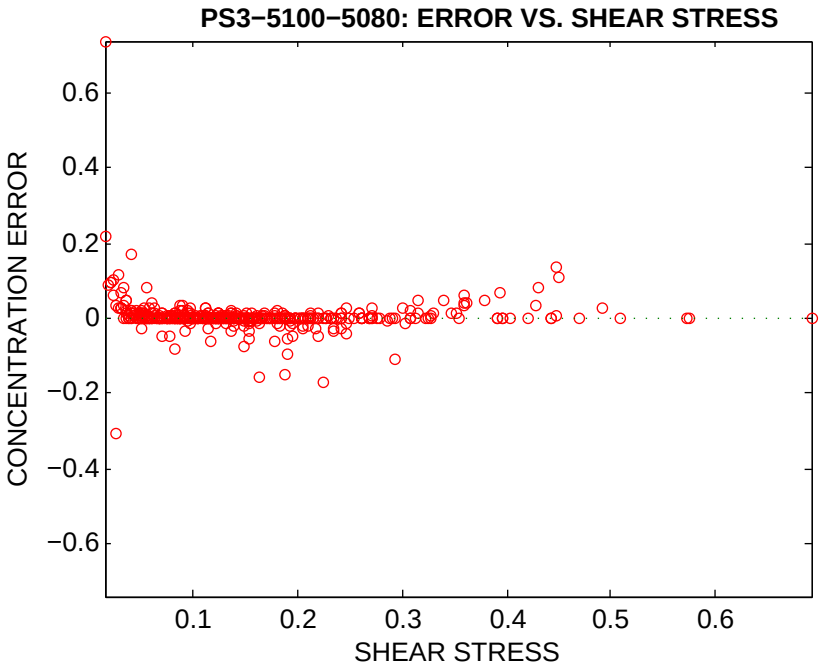


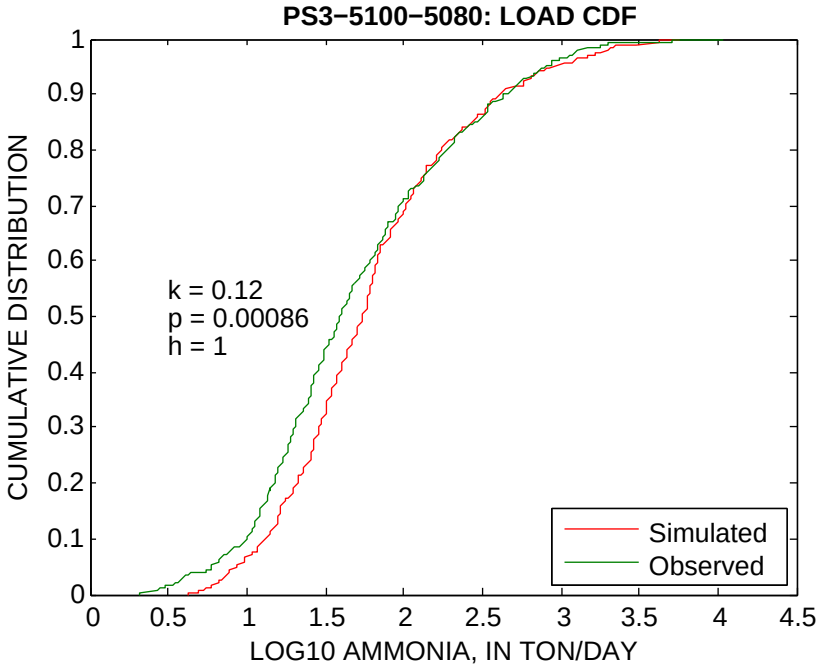


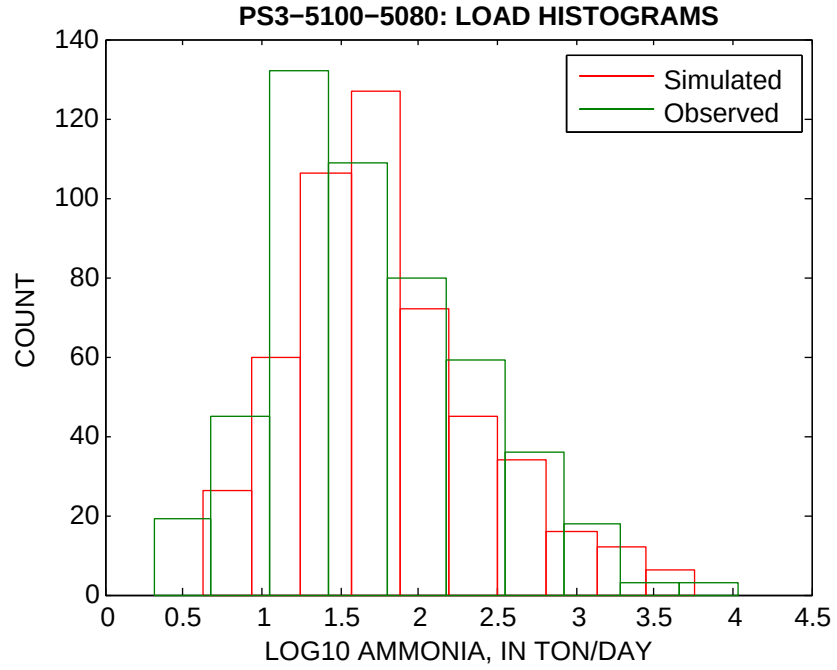


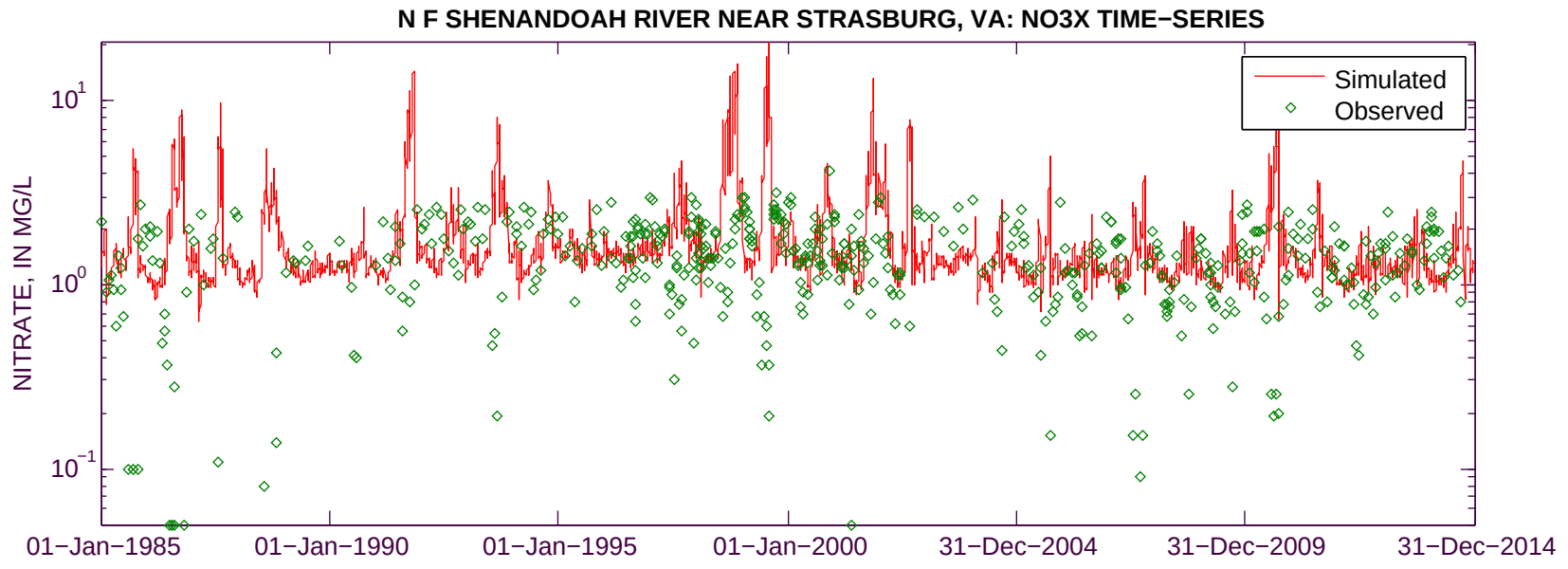
LOAD DATA
LOG10

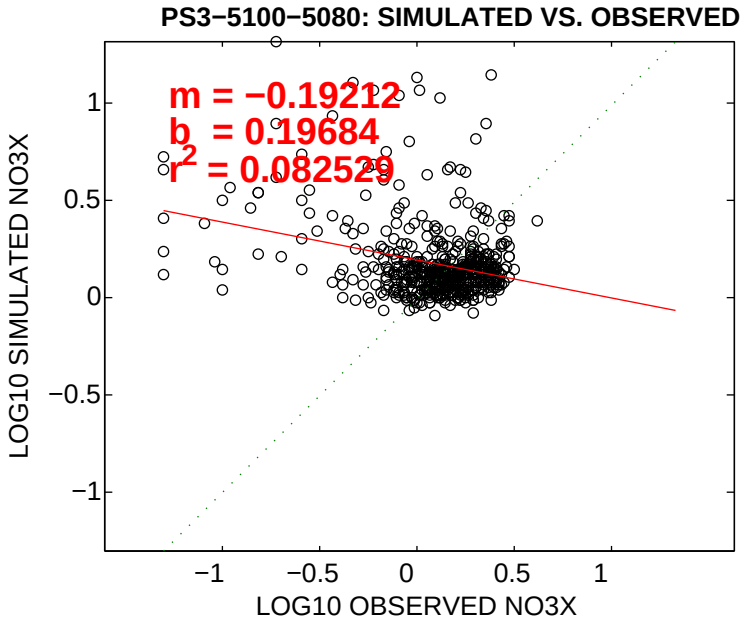


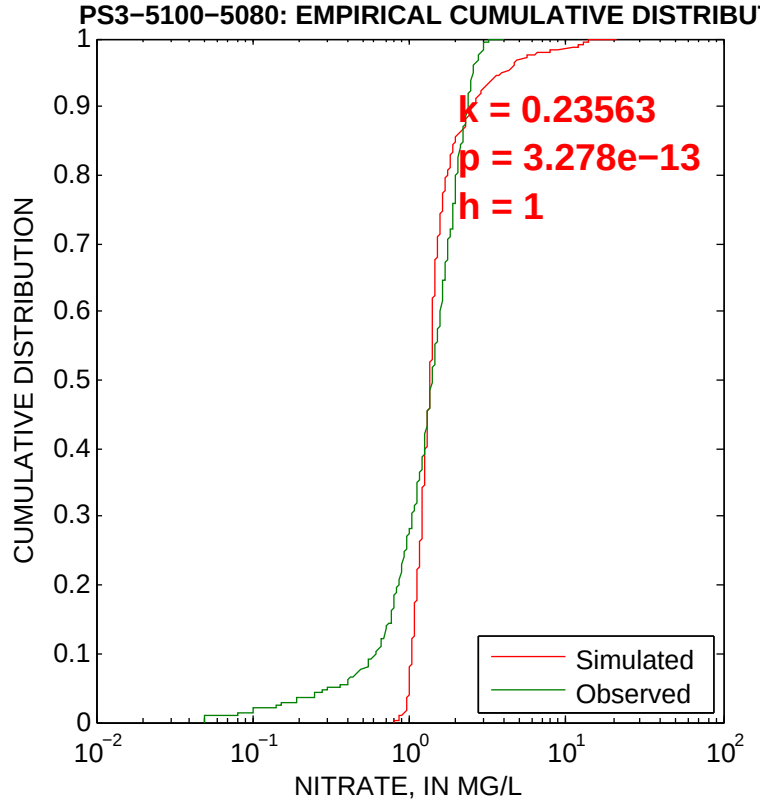












DATA SELECTION

scenario: P620171001WQ | file: NO3X.calib

plot: NO3X - nitrate

Dates: 1/1/1985 – 12/31/201

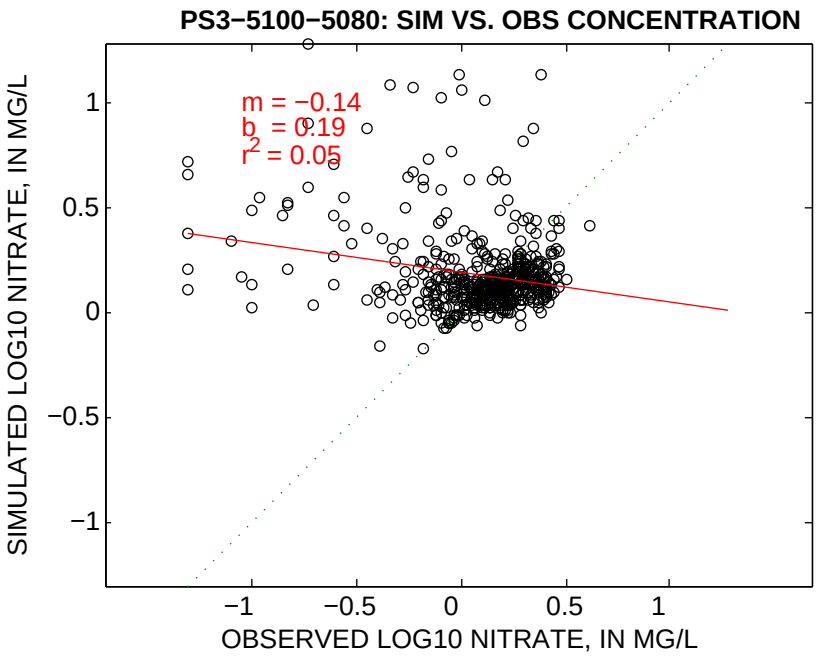
Drive: N/A | Directory: model | Observed: OBS20161101

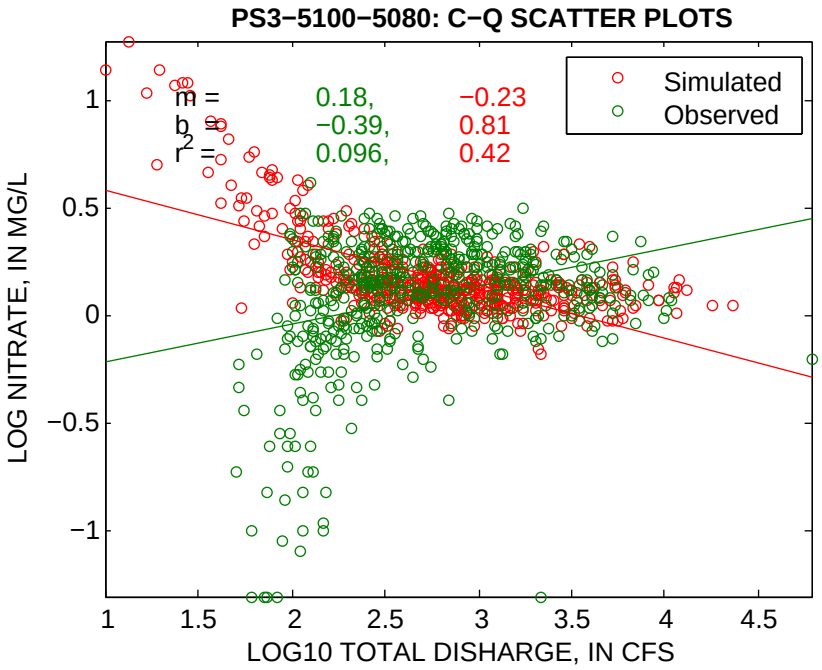
STATISTICS

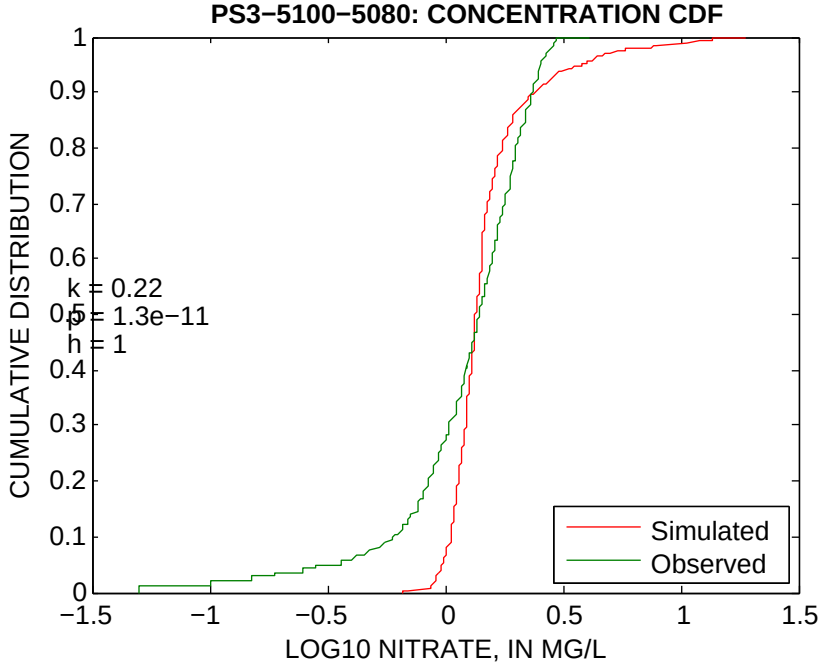
	n	observe	simulate
		522	522
min		0.05	0.81158
		-1.30103	-0.0906687
mean		1.43946	1.78344
		0.0869662	0.180133
media		1.4	1.358
		0.146128	0.1329
max		4.08	20.929
		0.61066	1.32075
varian		0.449979	3.10663
		0.0888392	0.0397309
JB		0.081774	0.001
		0.001	0.001
		ra	log
%		23.896	107.13
err.va		4.08996	0.171402
rel.std.err		9.08922	1.92935
mod.eff		-8.08922	-0.929348

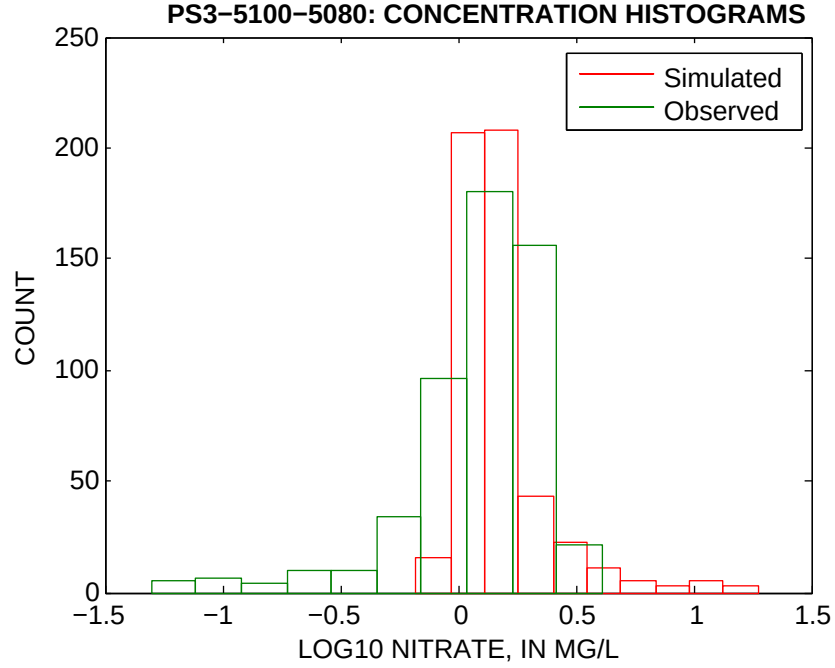
VERSION 2.1

ALL DATA
LOG10

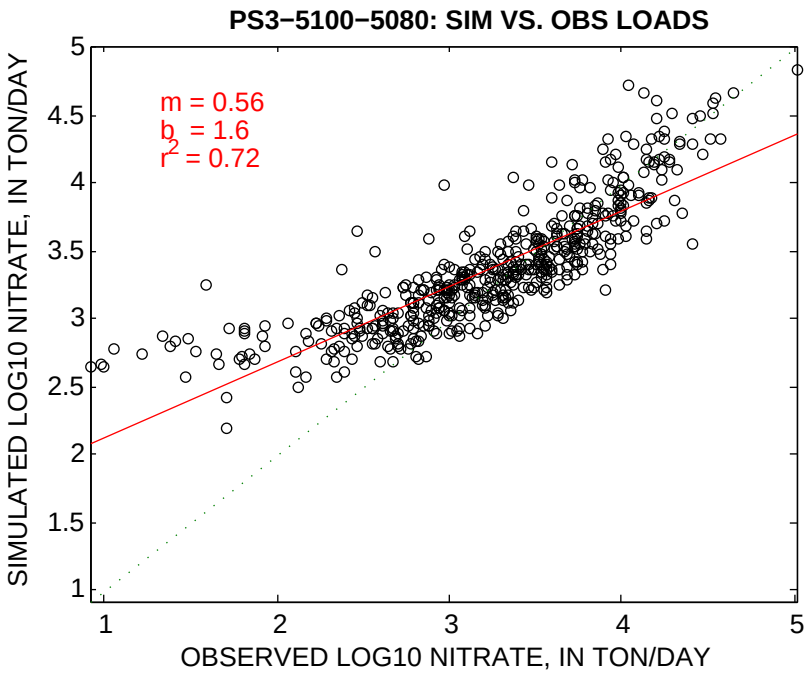


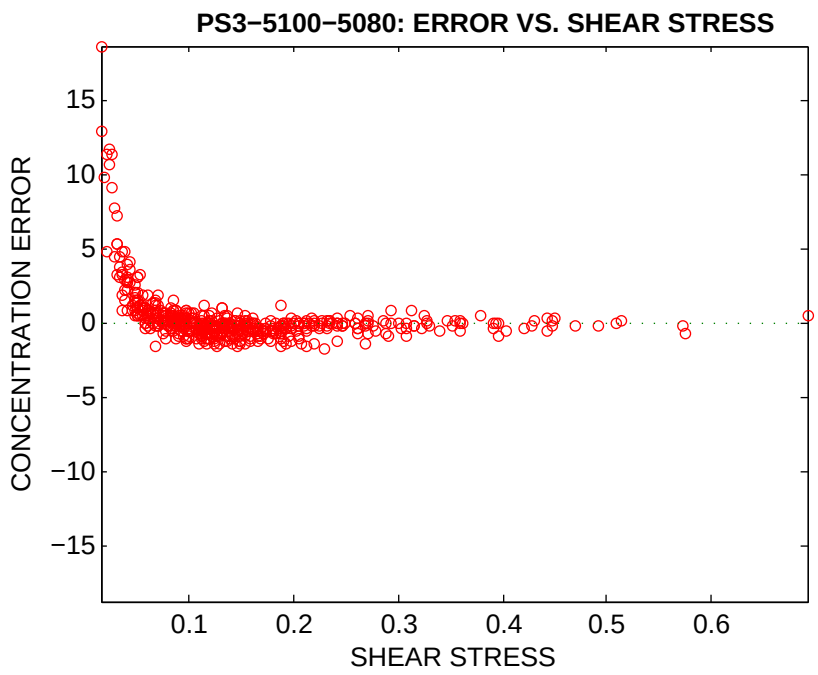


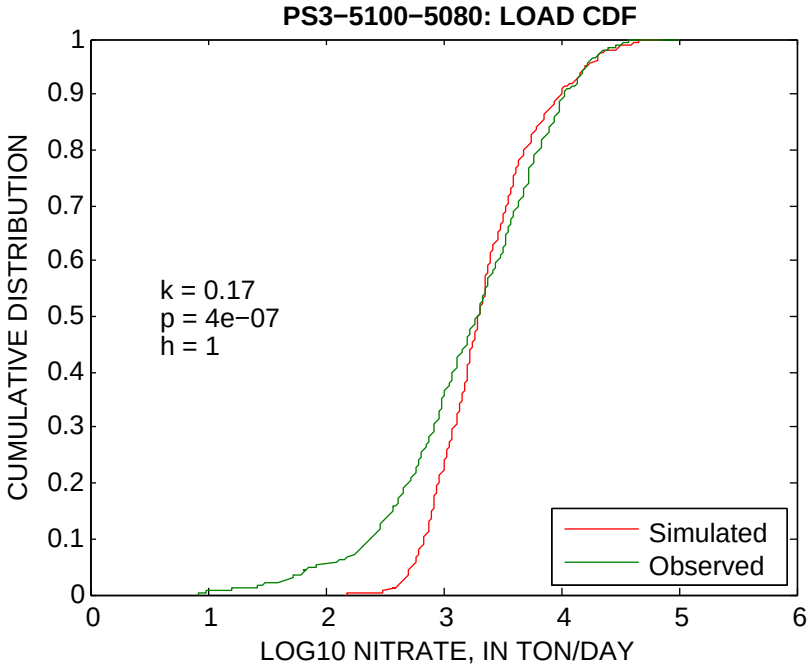


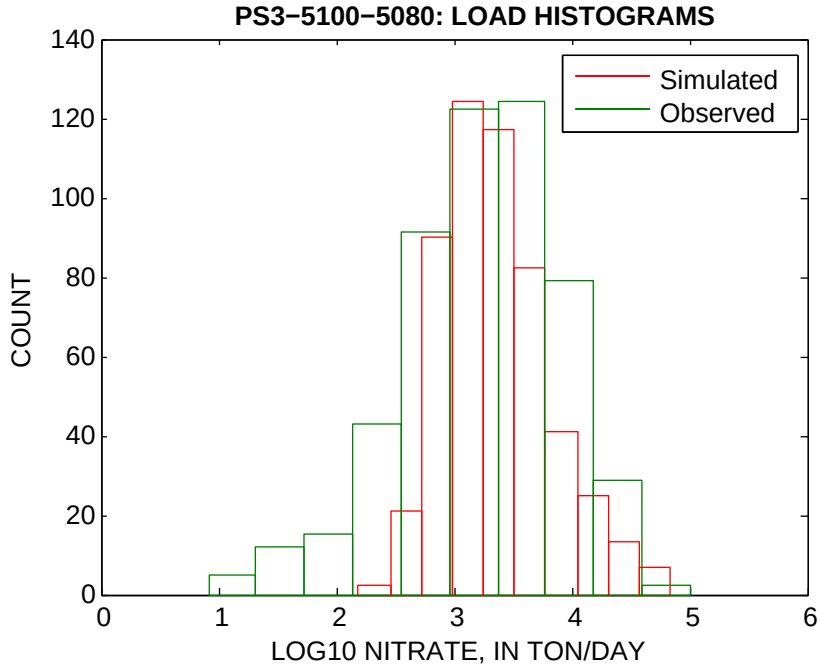


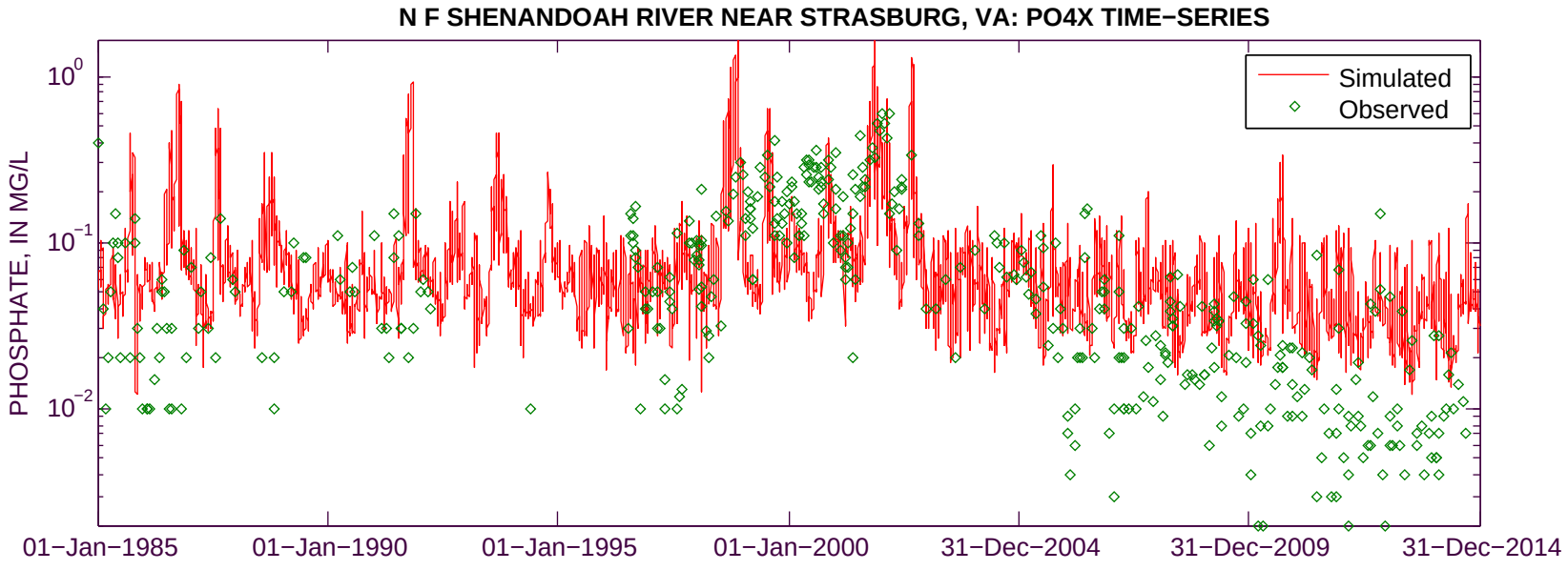
LOAD DATA
LOG10

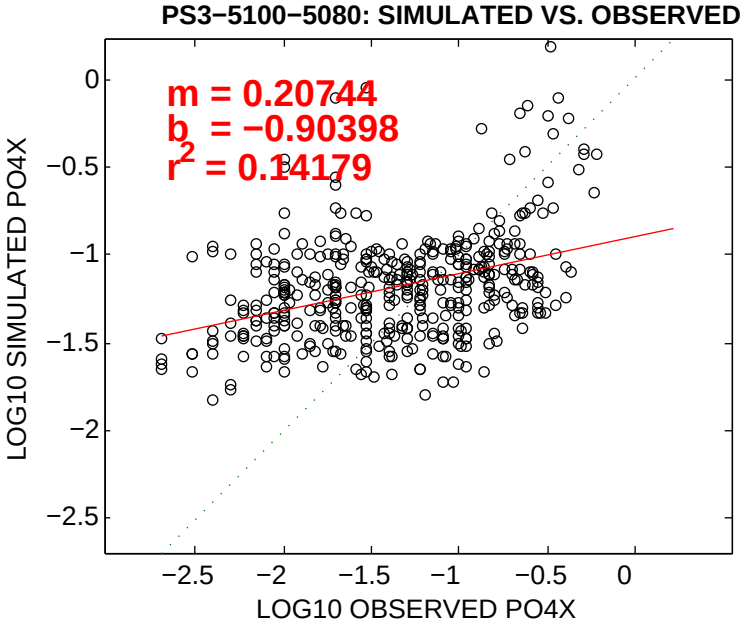


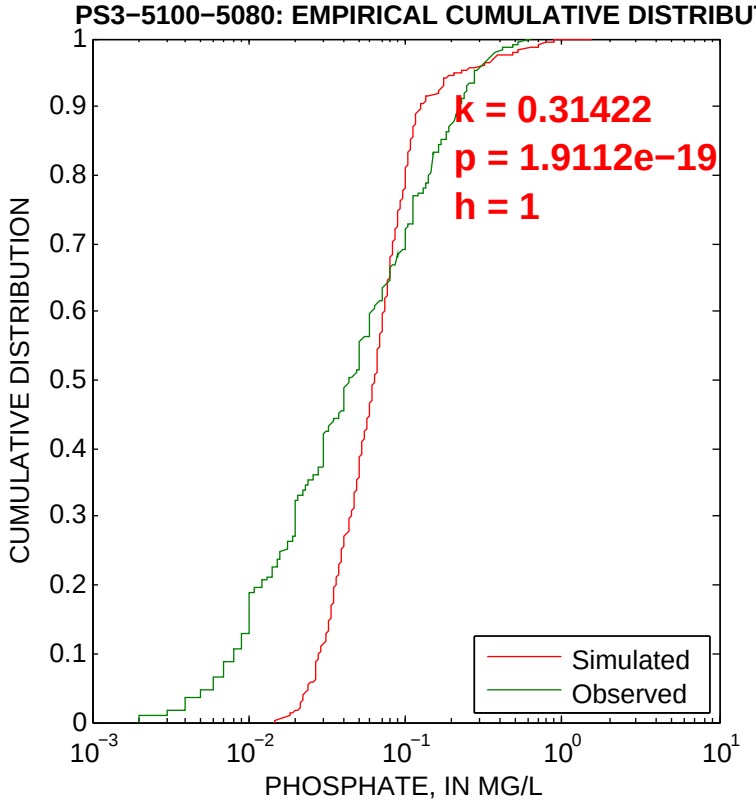












DATA SELECTION

scenario: P620171001WQ | file: PO4X.calib

plot: PO4X - phosphate

Dates: 1/1/1985 – 12/31/201

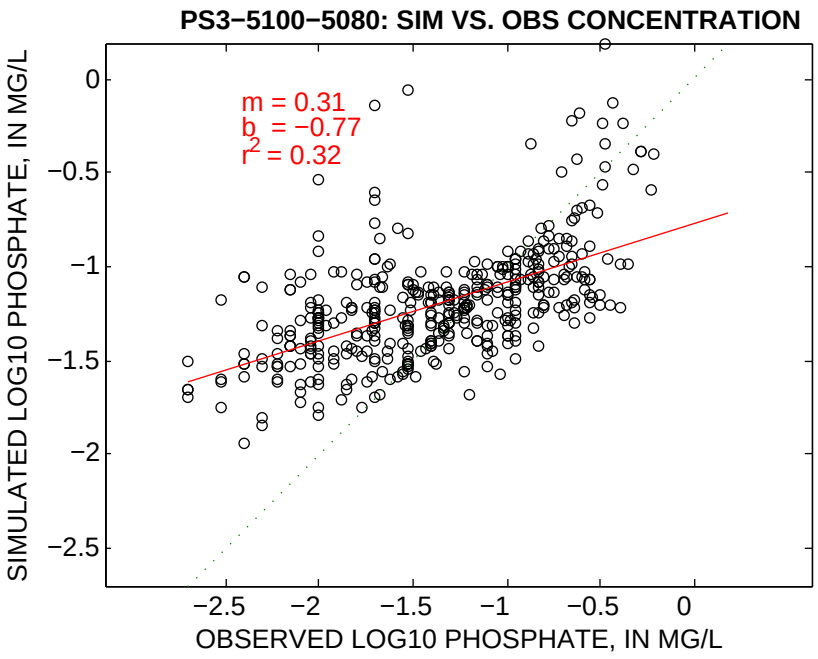
Drive: N/A | Directory: model | Observed: OBS20161101

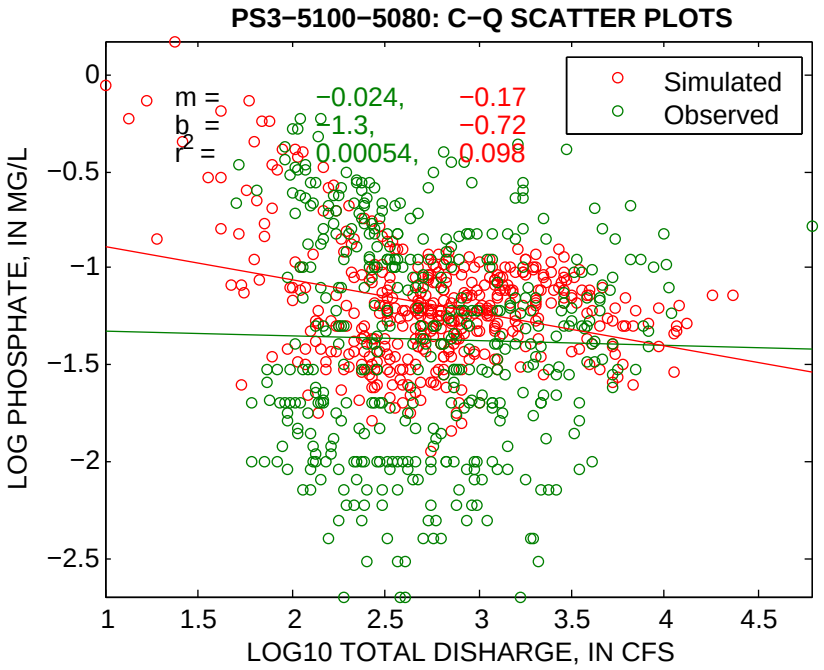
STATISTICS

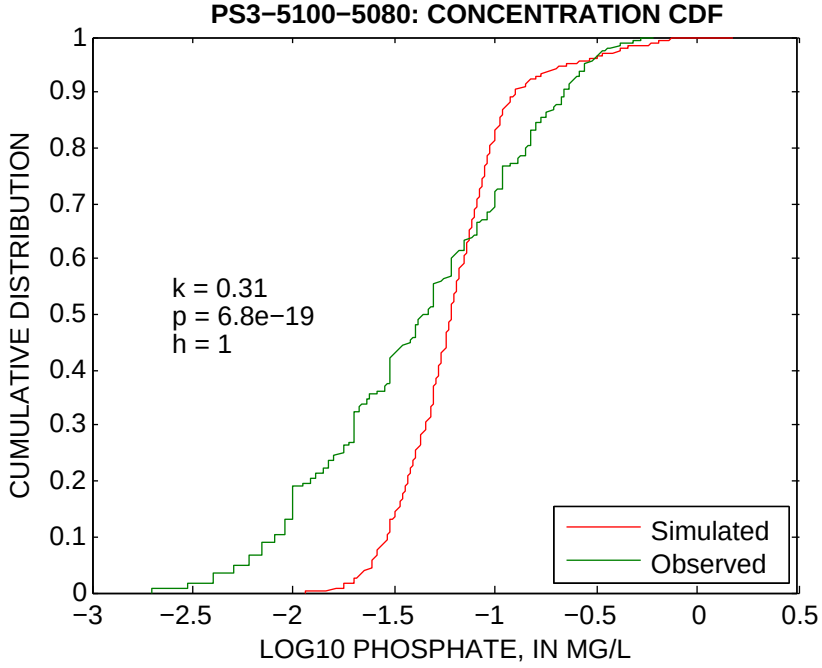
		observe	simulate
n		436	436
min		0.002	0.014813
		-2.69897	-1.82936
mean		0.0840325	0.0895084
		-1.37333	-1.18887
media		0.044	0.0637225
		-1.35655	-1.19571
max		0.6	1.5506
		-0.221849	0.1905
varian		0.0100009	0.015378
		0.297328	0.0902422
JB		0.001	0.001
		0.007412	0.001
		ra	log
%		6.51629	-13.4313
err.va		0.0156702	0.298314
rel.std.err		1.56688	1.00332
mod.eff		-0.566877	-0.0033166

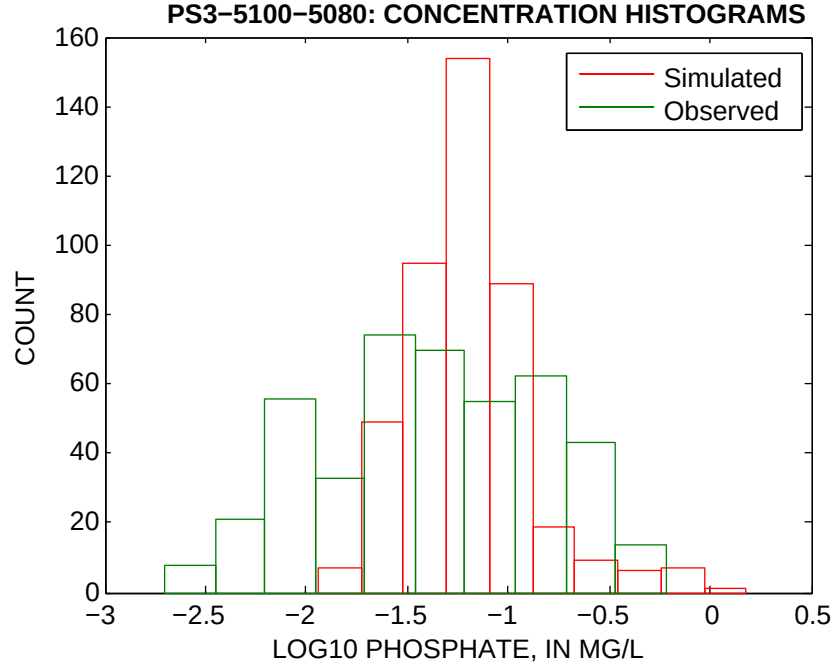
VERSION 2.1

ALL DATA
LOG10

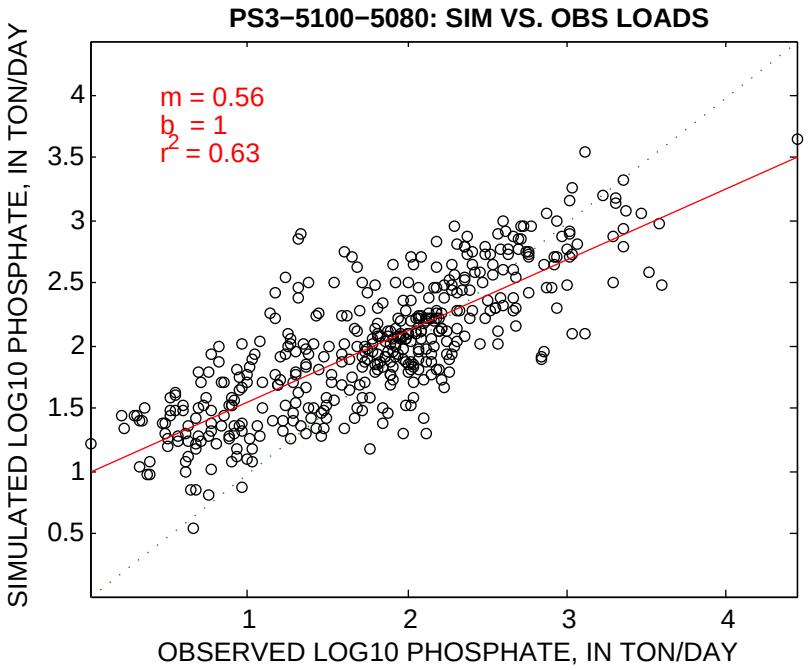


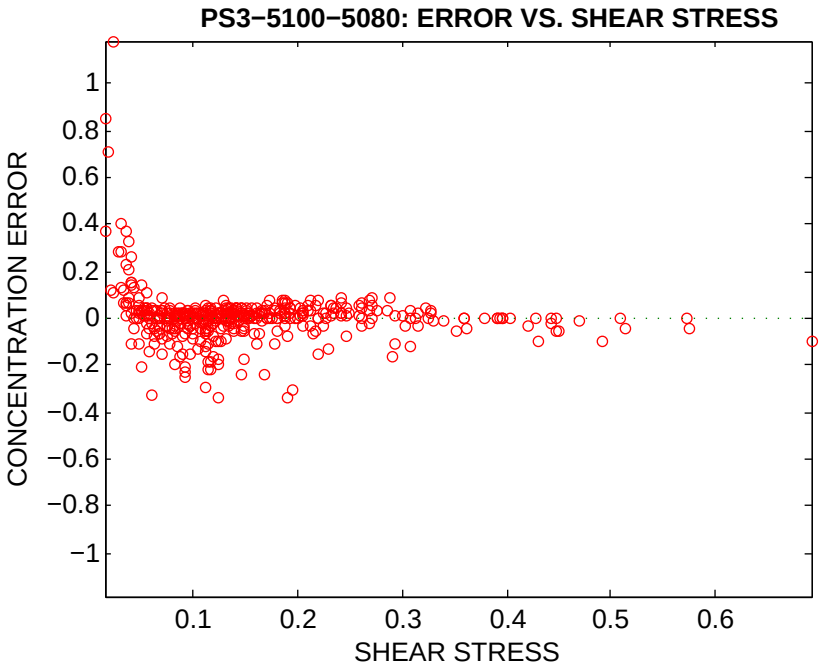


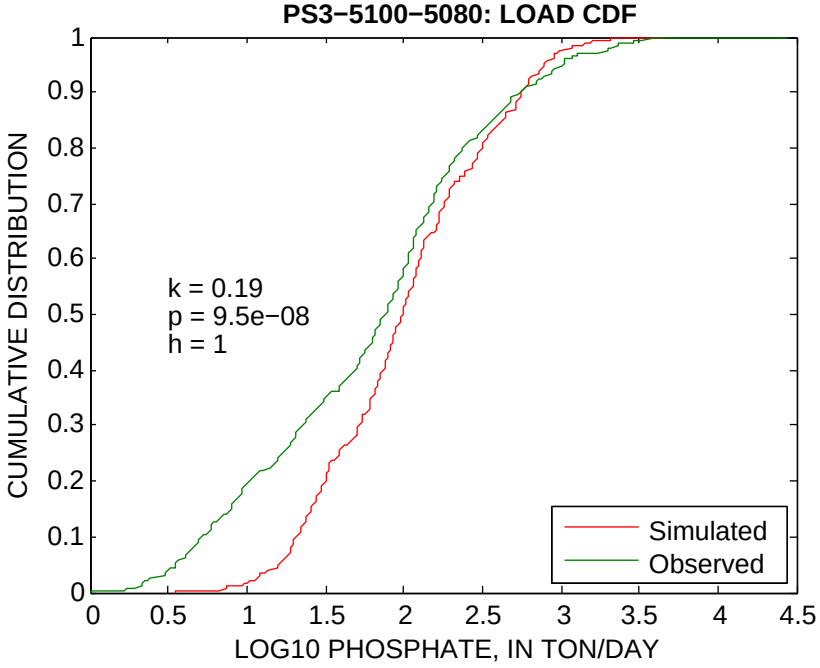


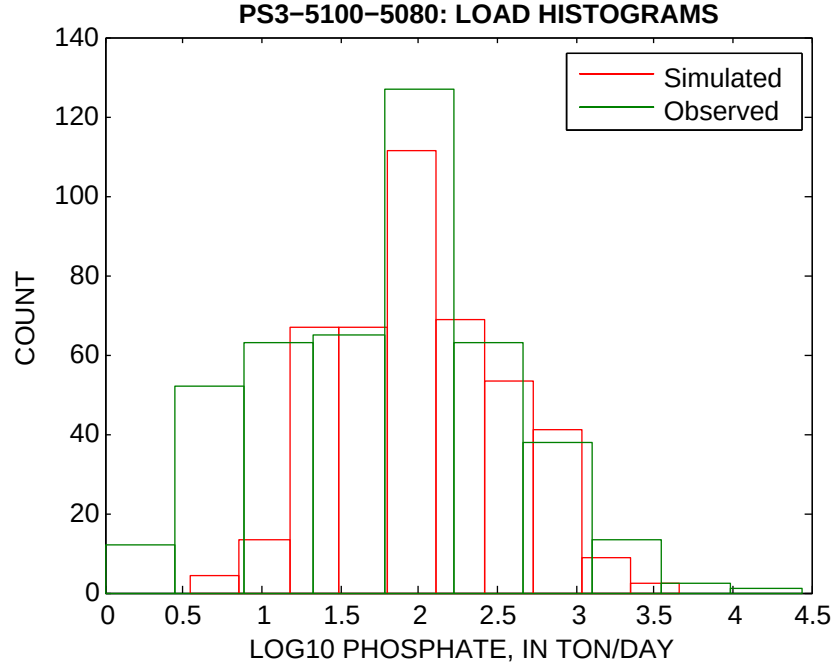


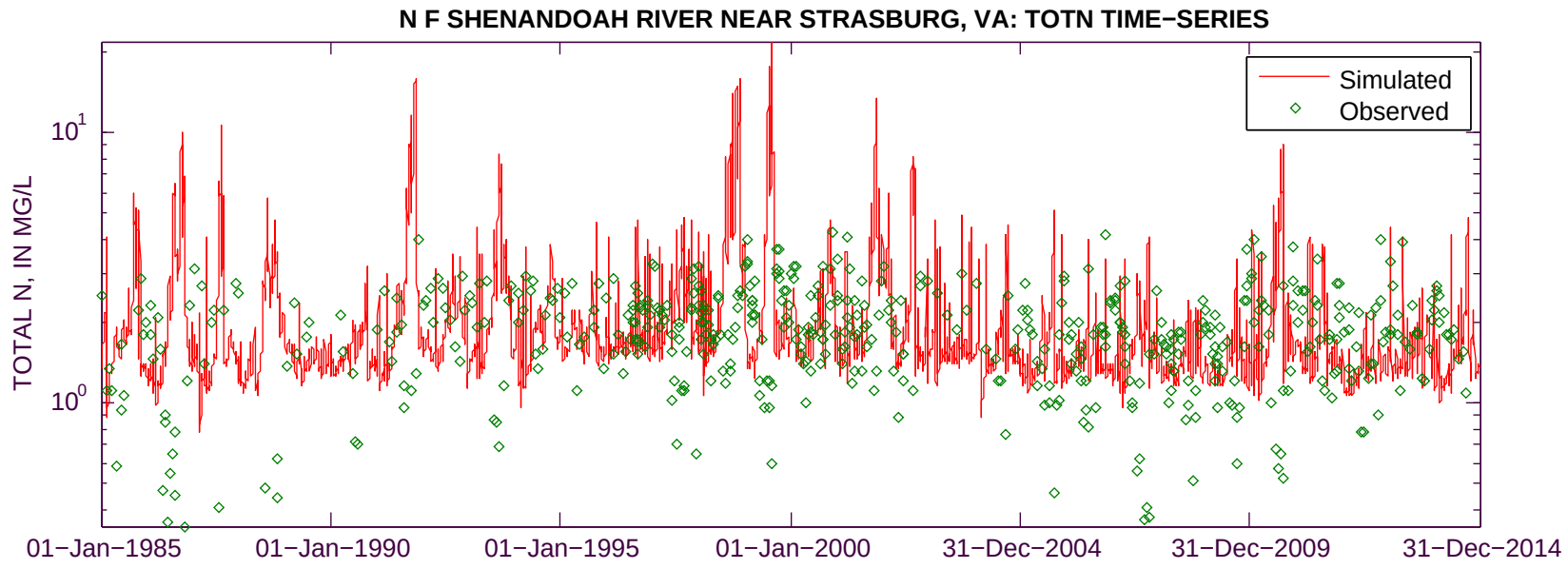
LOAD DATA
LOG10

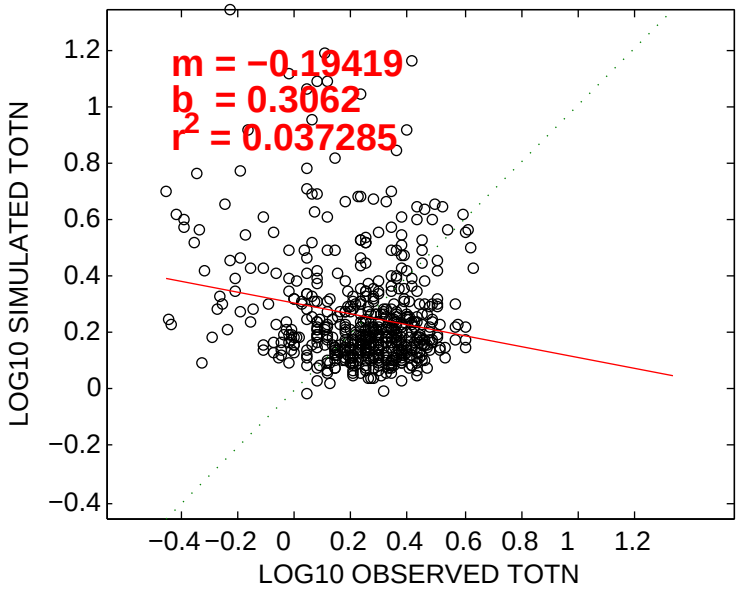


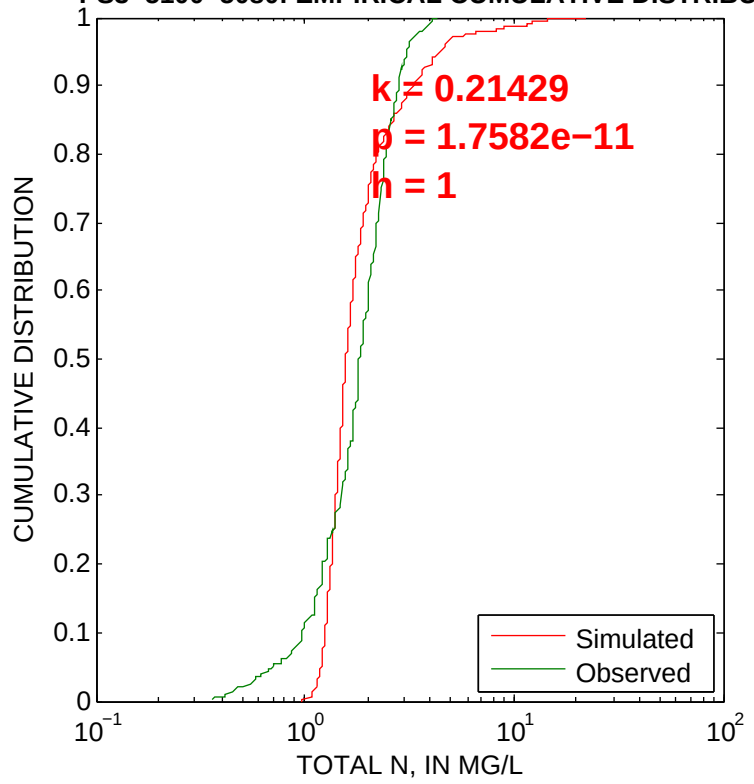












DATA SELECTION

scenario	file
P620171001WQ	TOTN.calib

plot: TOTN - total nitrogen

Dates: 1/1/1985 – 12/31/201

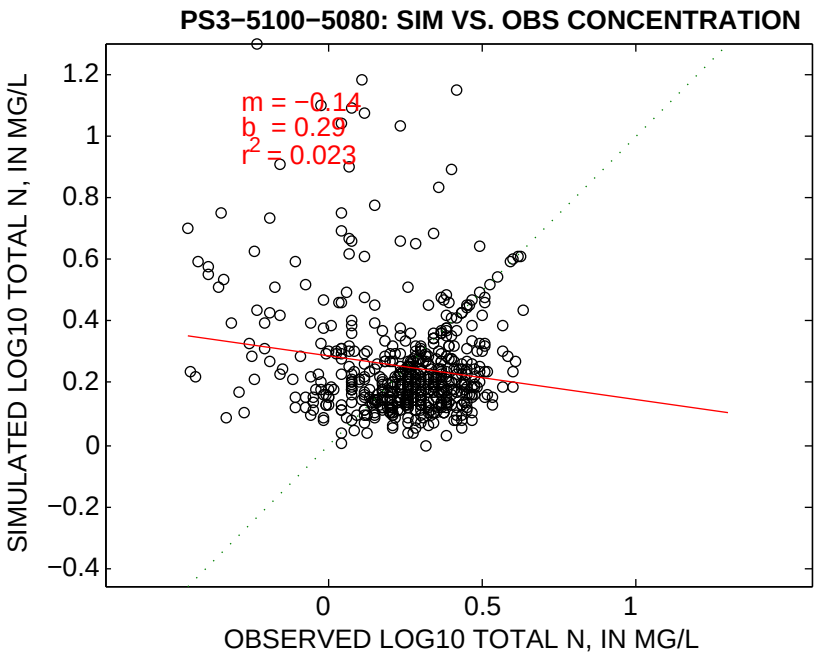
Drive	Directory	Observed
N/A	model	OBS20161101

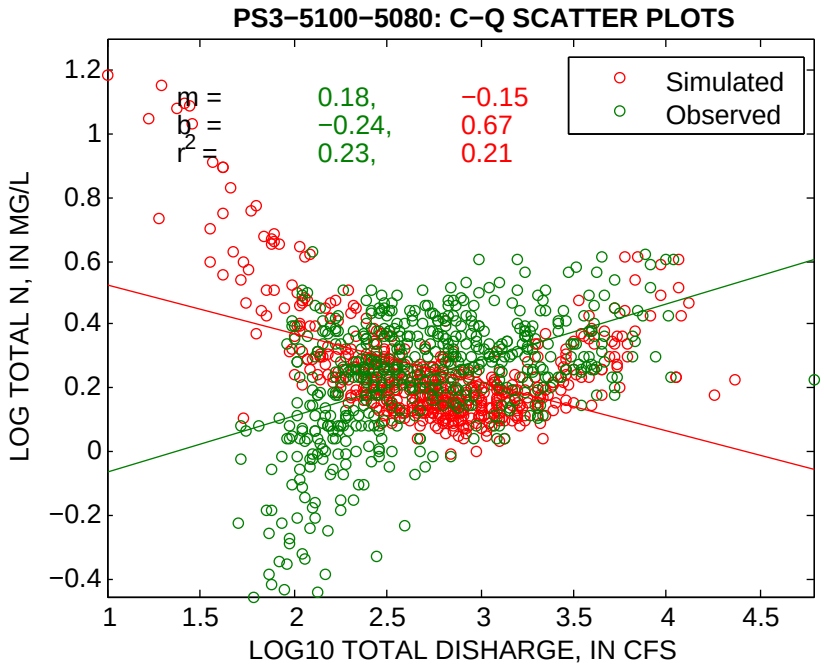
STATISTICS

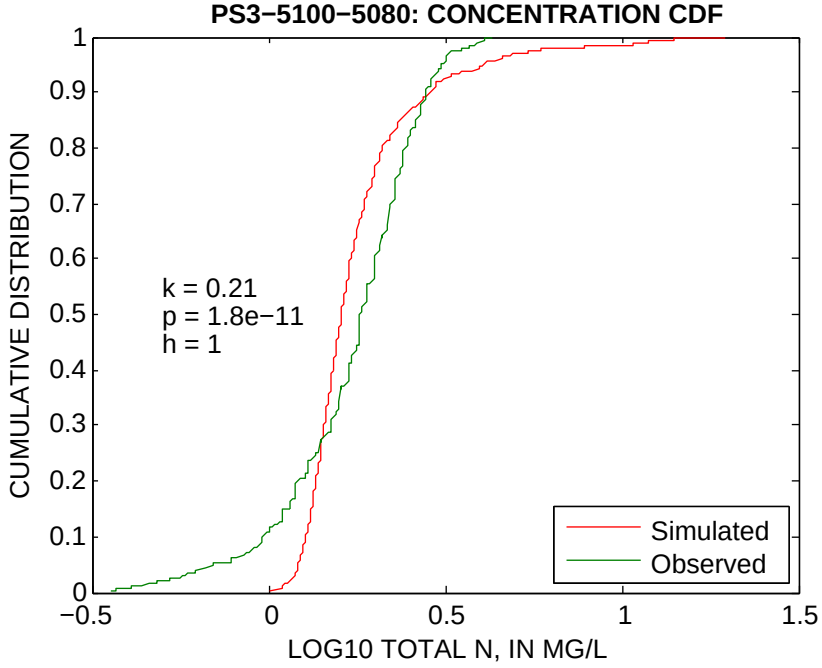
	n	observe	simulate
		546	546
min		0.35	0.9637
		-0.455932	-0.0160581
mean		1.88686	2.10127
		0.238002	0.259981
media		1.825	1.5761
		0.261261	0.197584
max		4.28	21.848
		0.631444	1.33941
varian		0.530995	3.26835
		0.0373725	0.0377997
JB		0.004337	0.001
		0.001	0.001
		ra	log
%		11.3635	9.23498
err.va		4.18921	0.0901712
rel.std.err		7.88936	2.41277
mod.eff		-6.88936	-1.41277

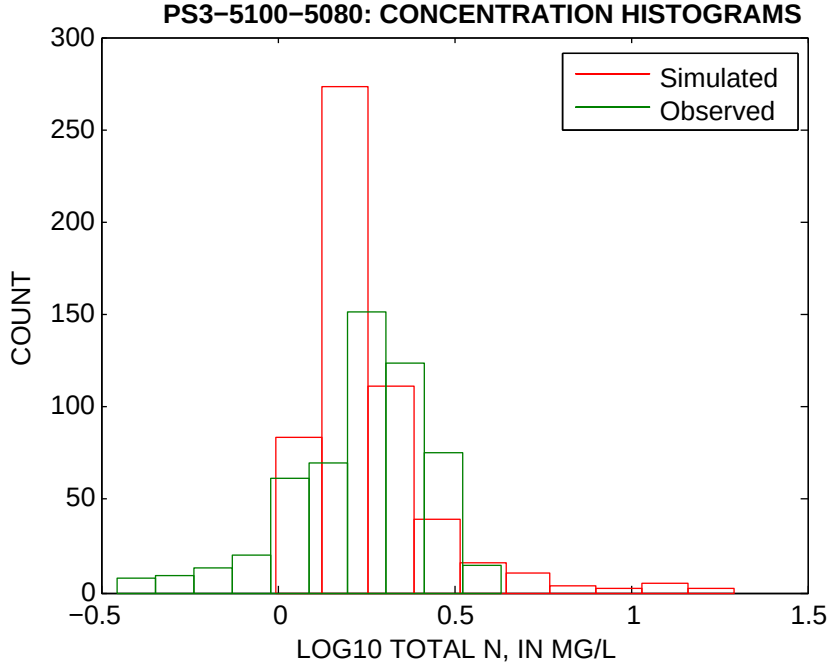
VERSION 2.1

ALL DATA
LOG10

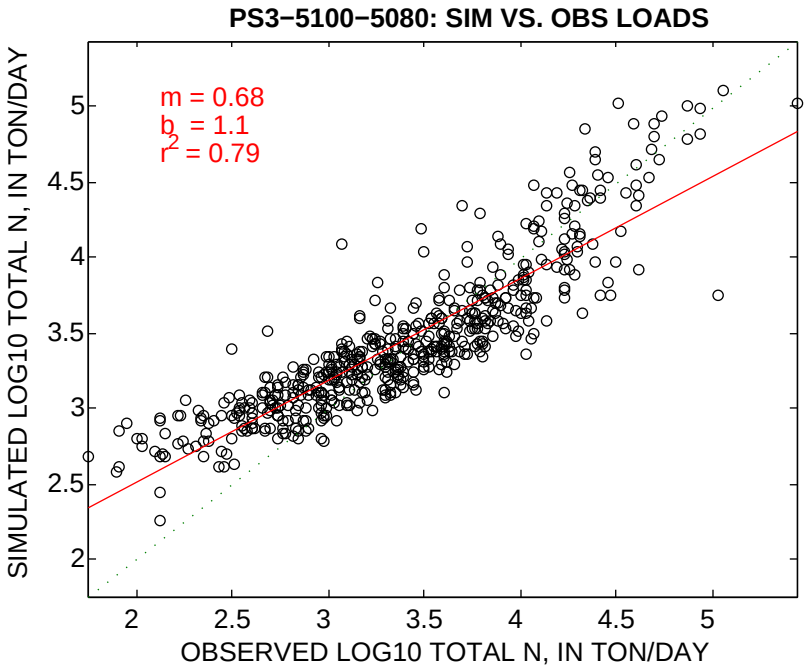


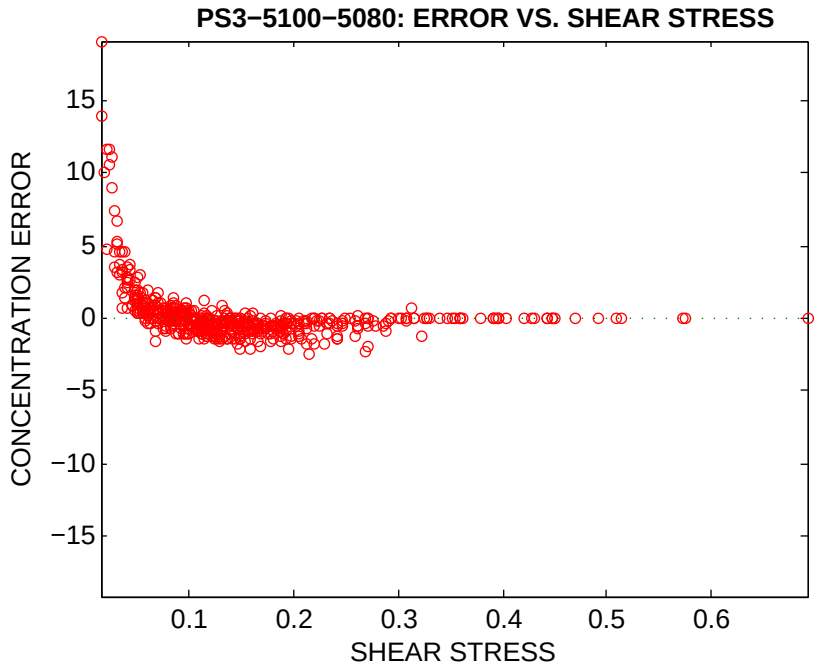


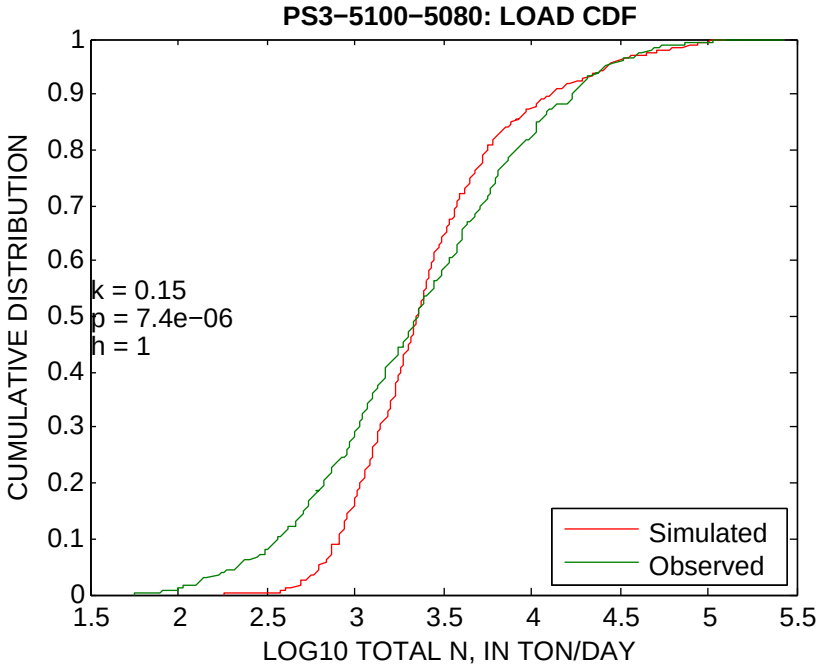


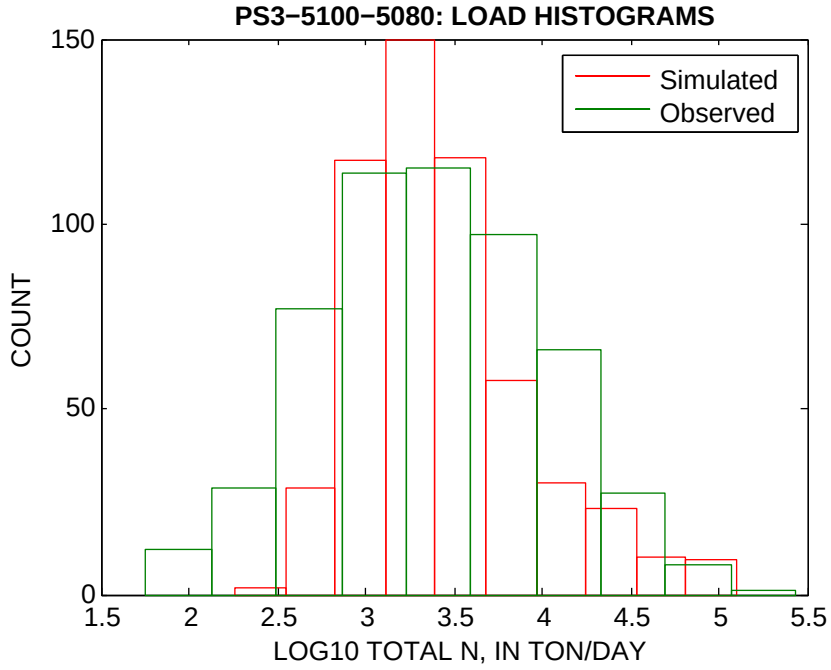


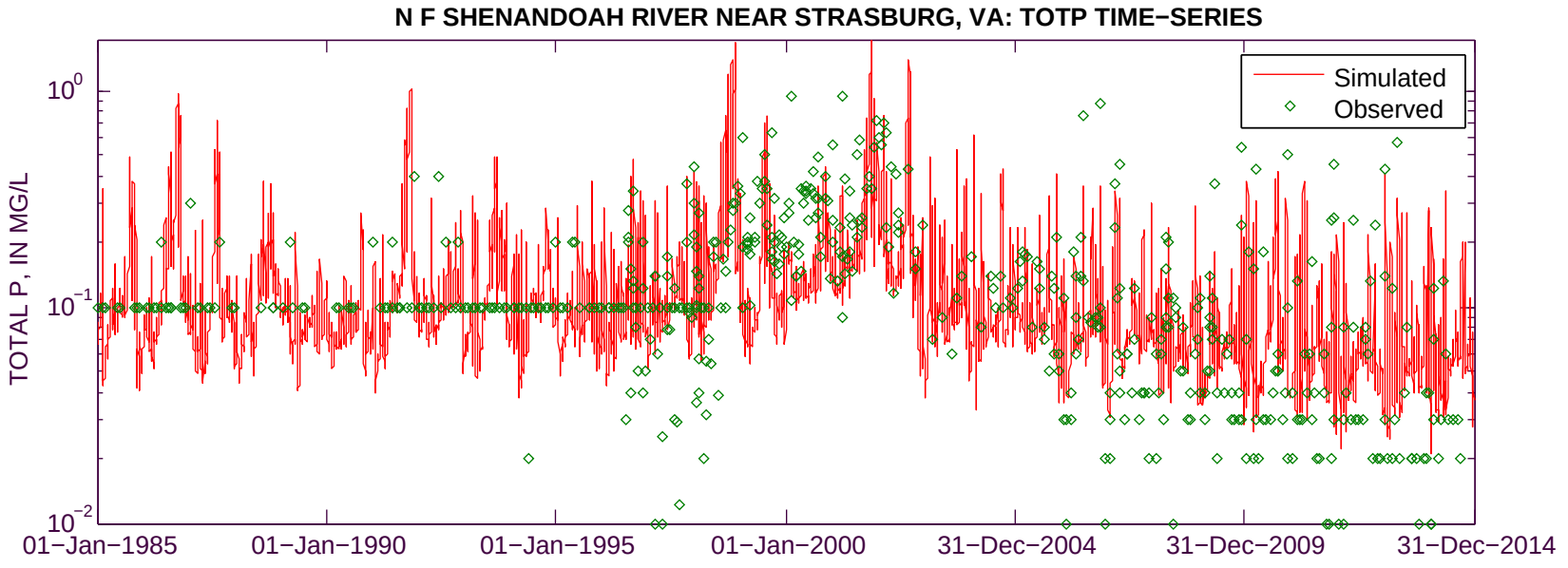
LOAD DATA
LOG10

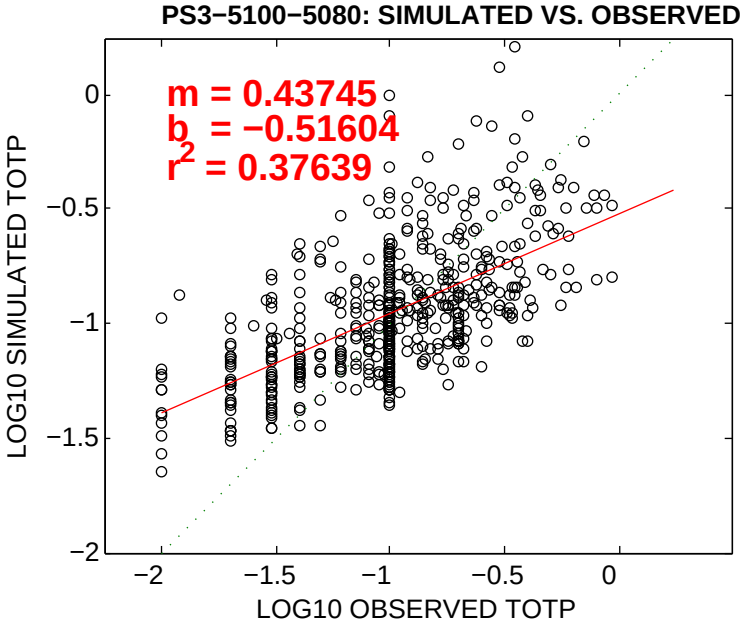


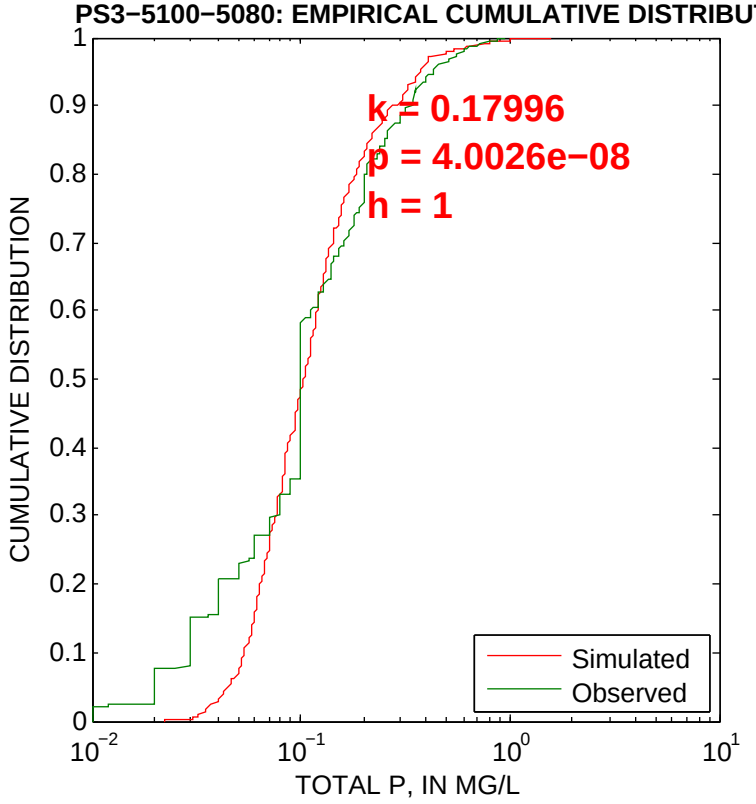












DATA SELECTION

scenario	file
P620171001WQ	TOTP.calib

plot: TOTP - total phosphorus

Dates: 1/1/1985 – 12/31/201

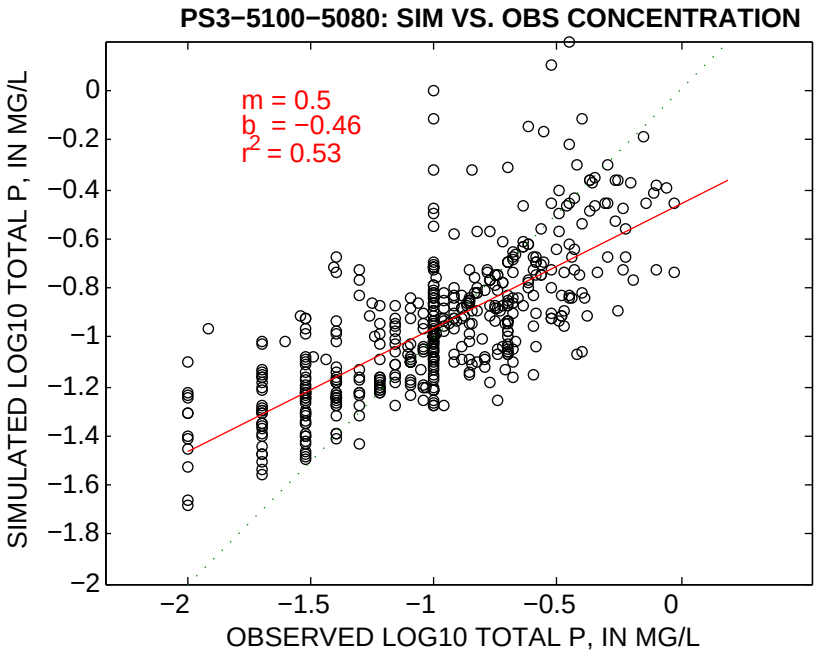
Drive	Directory	Observed
N/A	model	OBS20161101

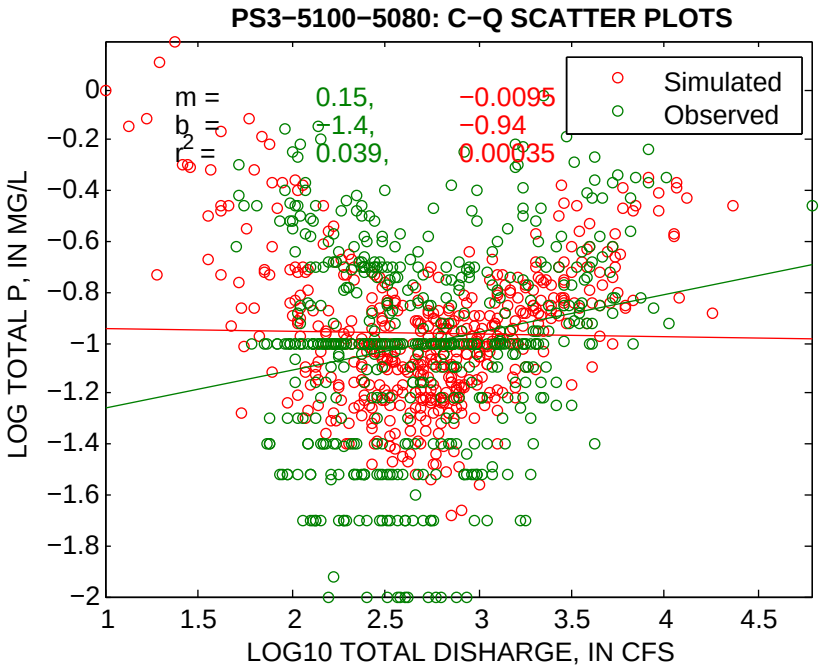
STATISTICS

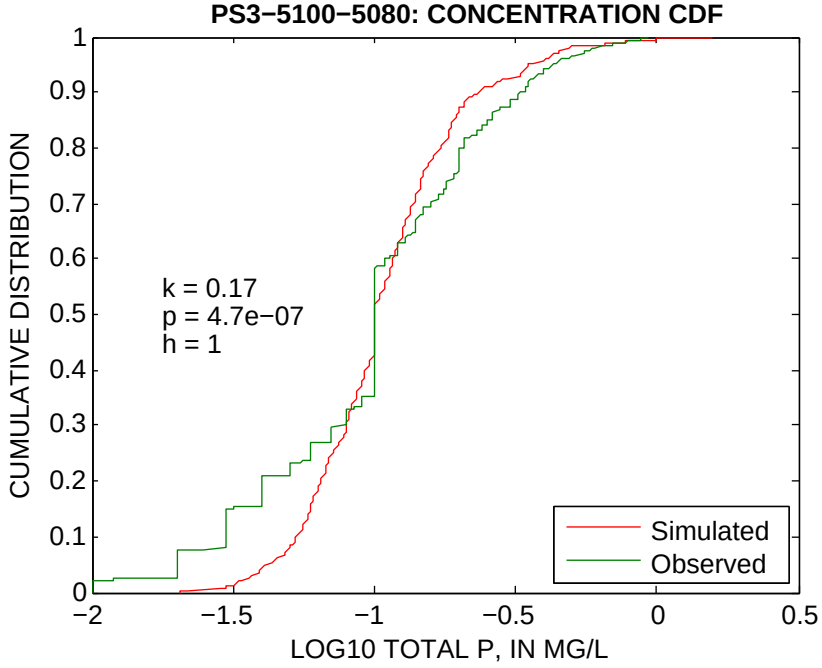
	n	observe	simulate
		539	539
min		0.01	0.022423
		-2	-1.64931
mean		0.148253	0.143688
		-0.997995	-0.95261
media		0.1	0.10508
		-1	-0.97848
max		0.94	1.5943
		-0.0268721	0.20257
varian		0.0207152	0.0202774
		0.158153	0.0804085
JB		0.001	0.001
		0.074537	0.001
		ra	log
%		-3.07916	-4.54759
err.va		0.0235706	0.102256
rel.std.err		1.13784	0.646567
mod.eff		-0.13784	0.353433

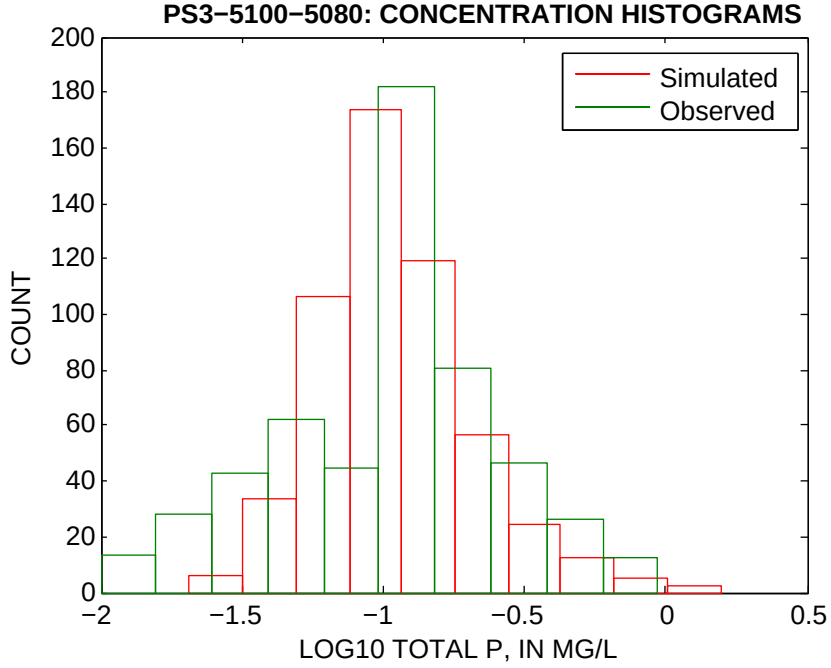
VERSION 2.1

ALL DATA
LOG10

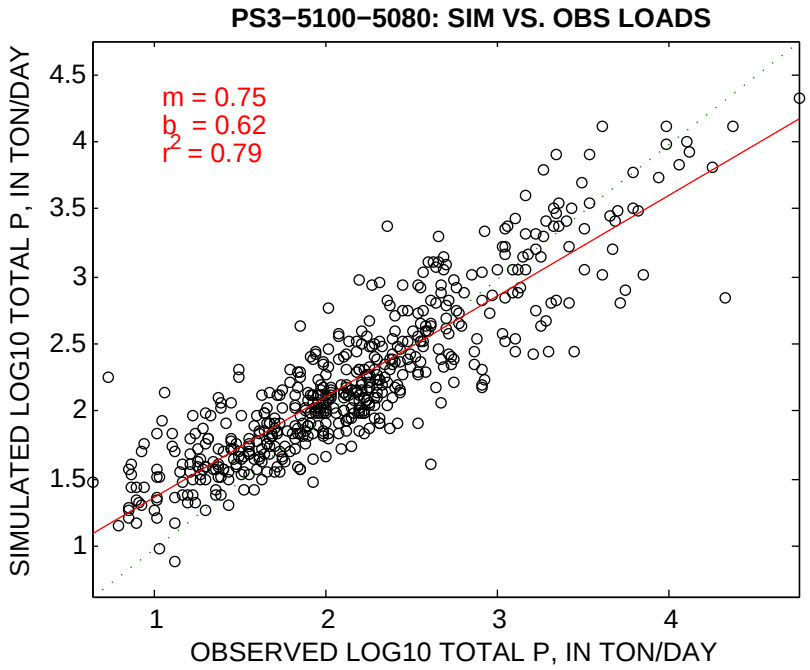


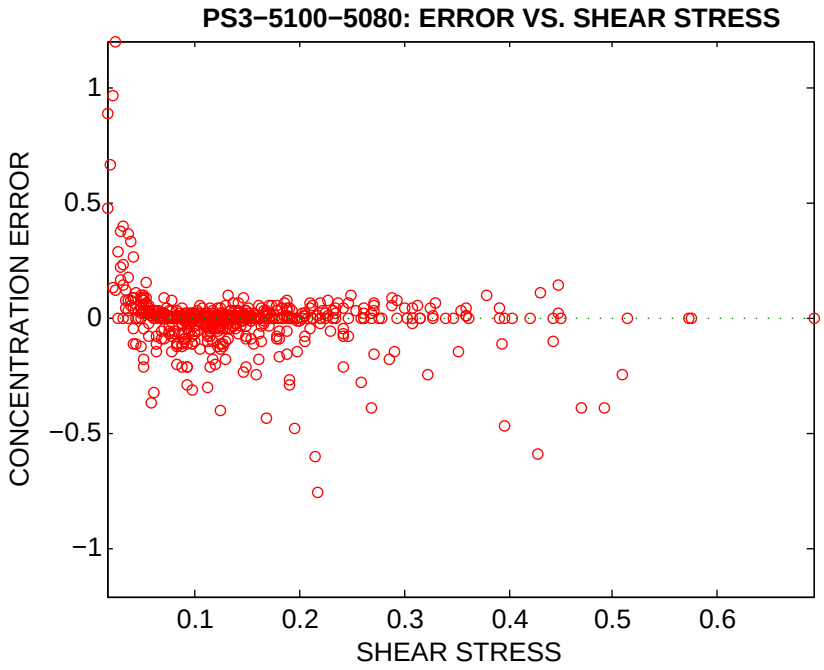


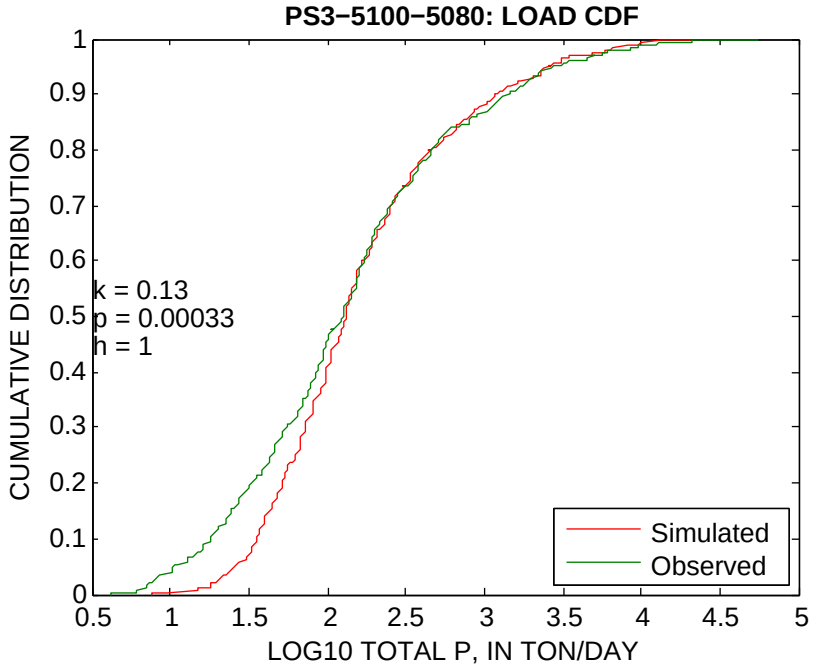


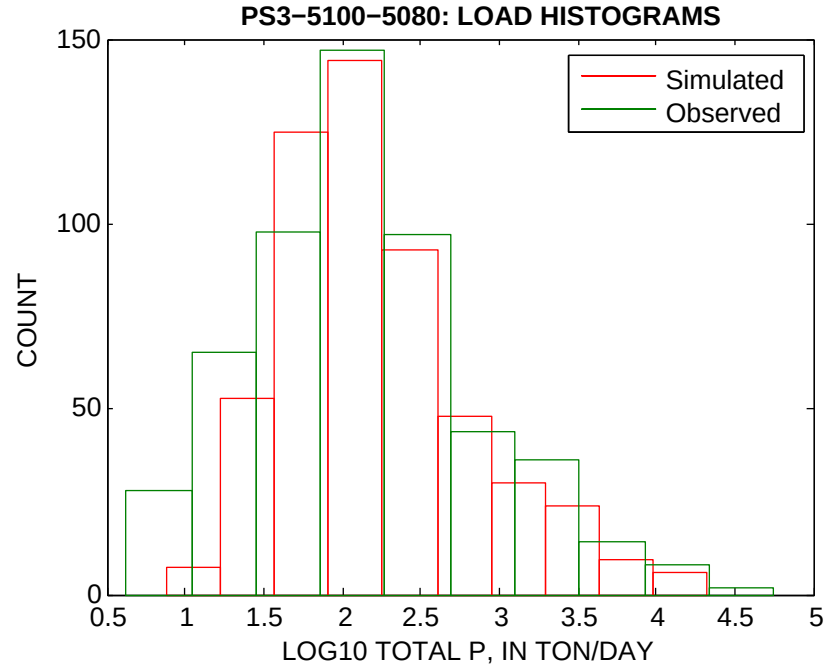


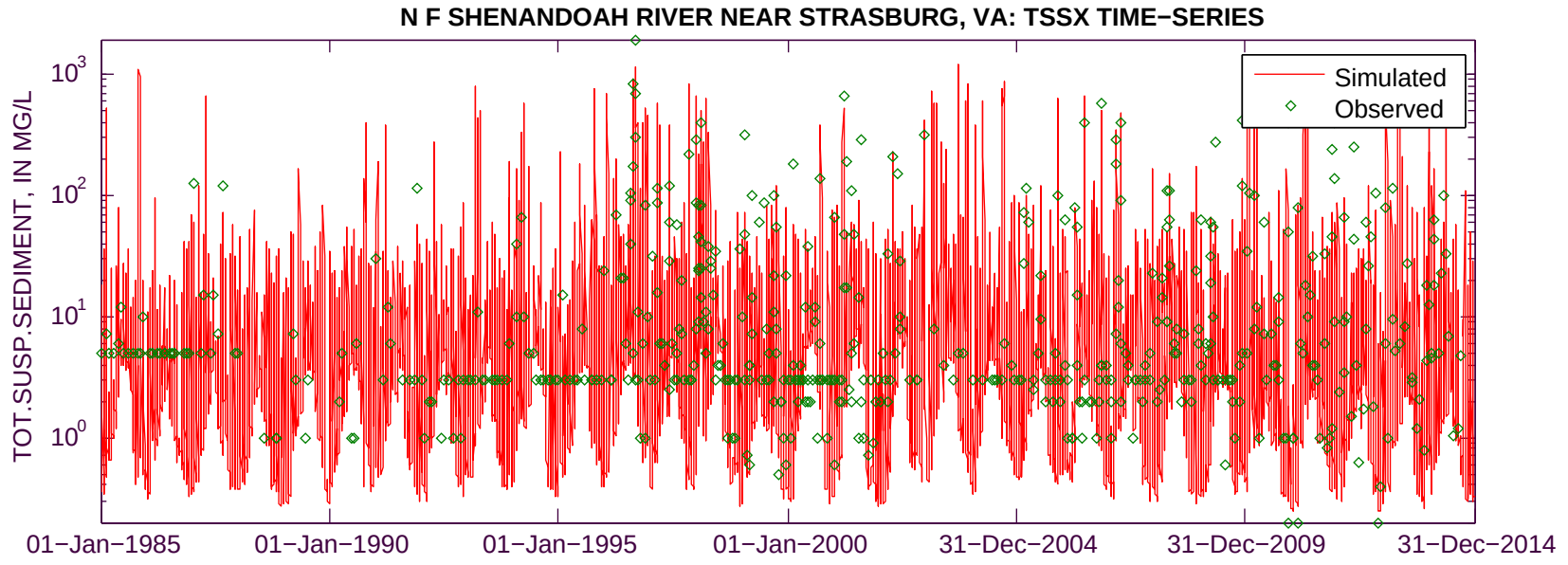
LOAD DATA
LOG10

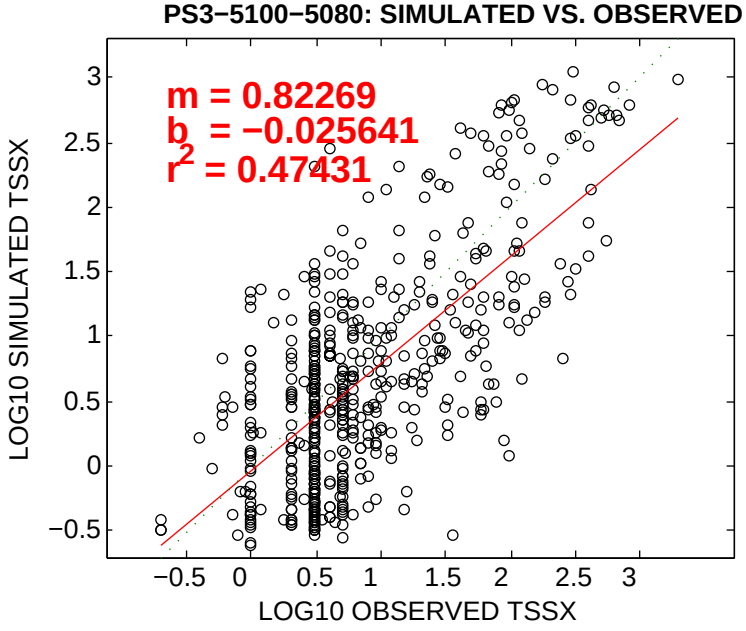


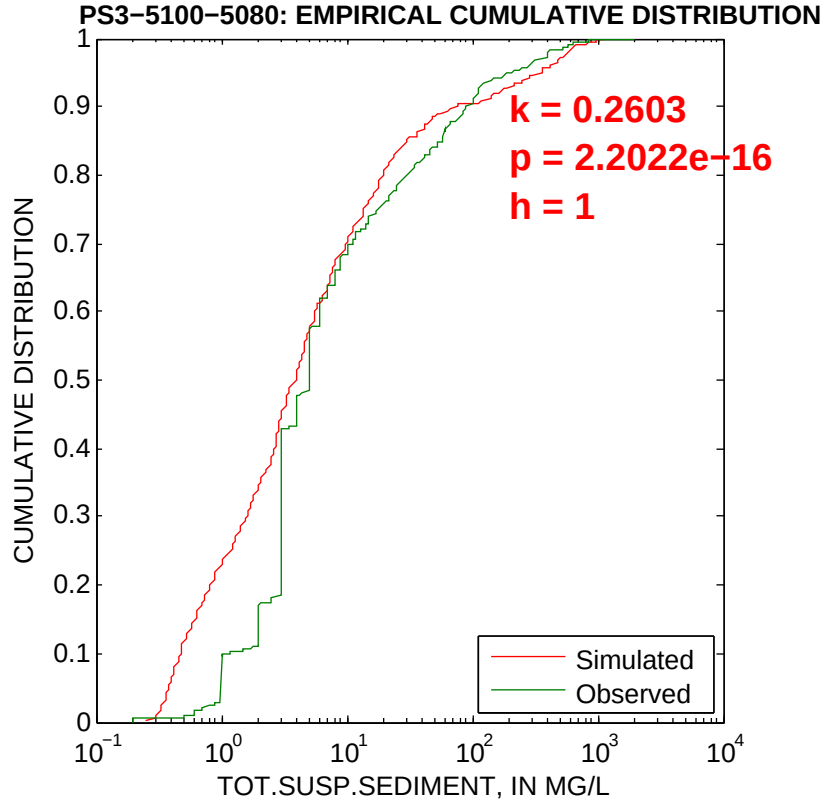












DATA SELECTION

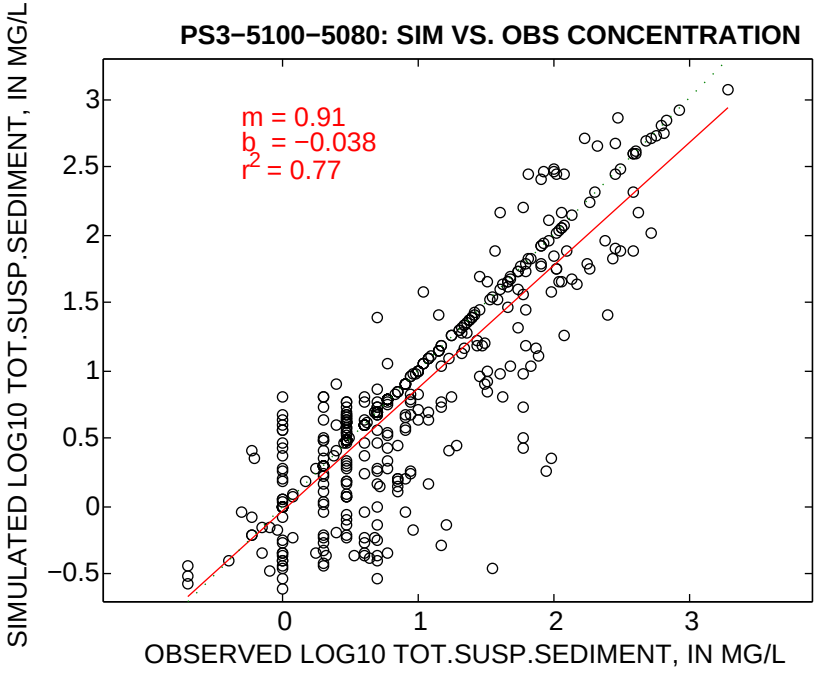
scenario: P620171001WQ
file: TSSX.calib
plot: TSSX - total suspended ...
Dates: 1/1/1985 12/31/201
Drive: N/A
Directory: model
Observed: OBS20161101

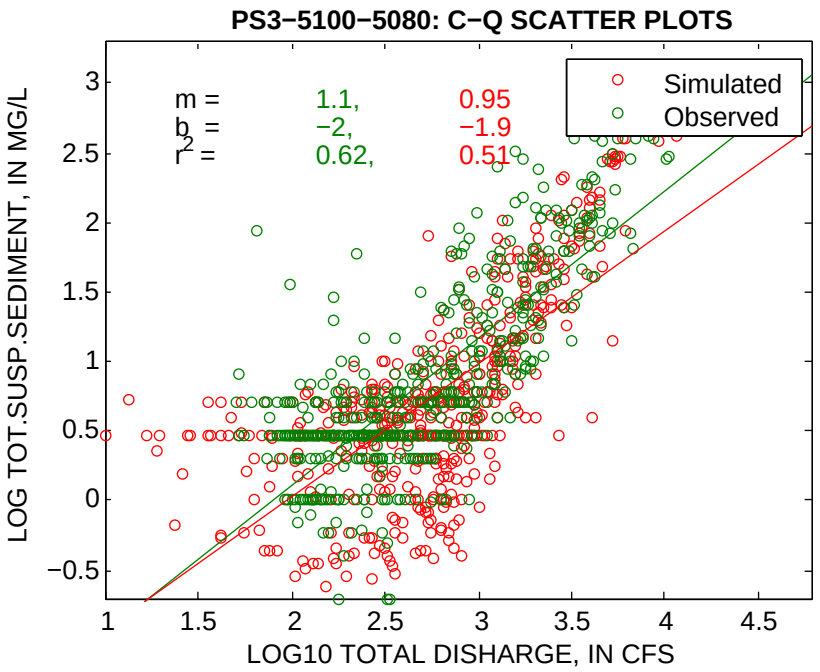
STATISTICS

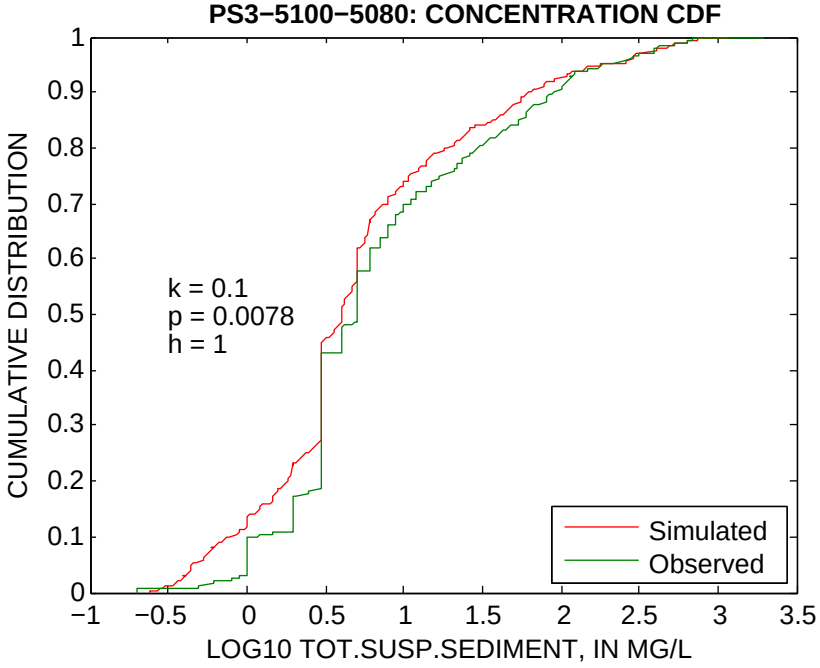
n	534	534
	observe	simulate
min	0.2	0.24416
	-0.69897	-0.612325
mean	39.9732	45.8215
	0.87207	0.691801
media	5	3.8447
	0.69897	0.584845
max	1953.33	1122.7
	3.29078	3.05026
varian	16280	19340.3
	0.489413	0.698366
JB	0.001	0.001
	0.001	0.001
	ra	log
%	14.6303	-20.6713
err.va	12146.6	0.415067
rel.std.err	0.746109	0.848091
mod.eff	0.253891	0.151909

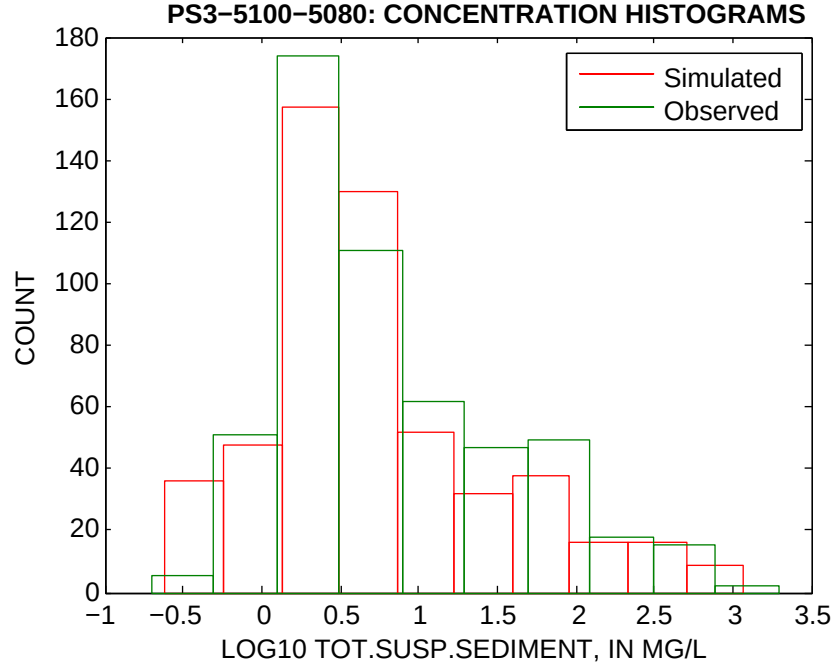
VERSION 2.1

ALL DATA
LOG10

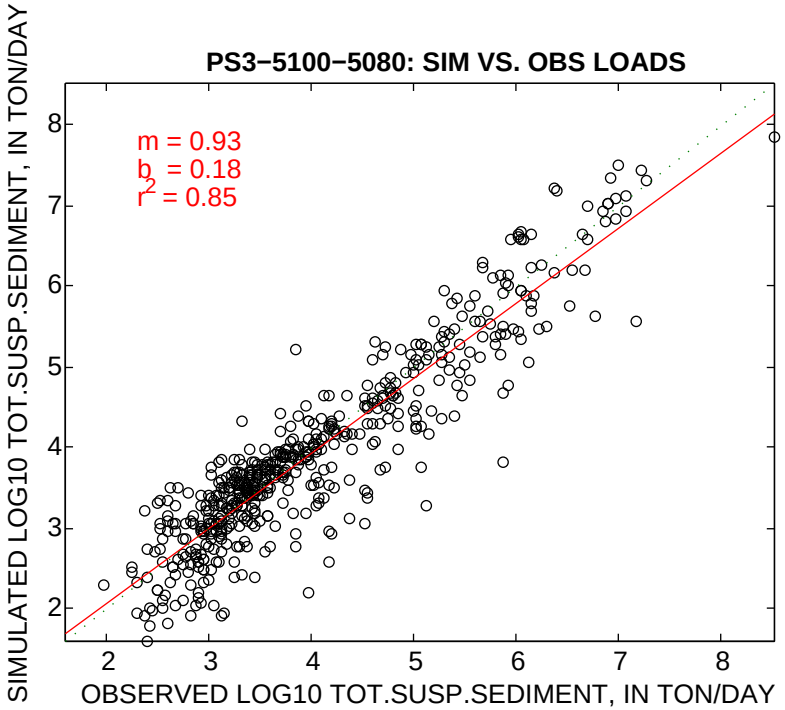


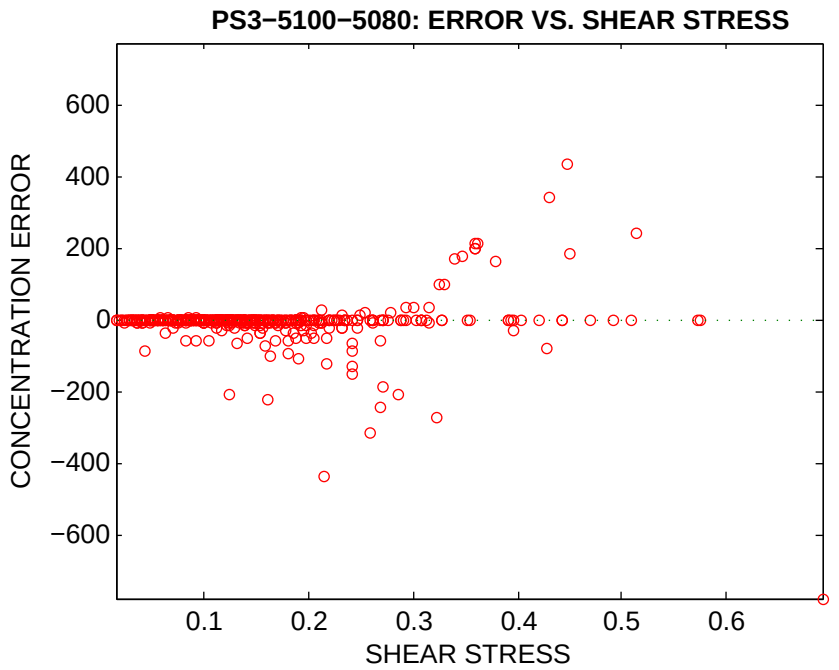


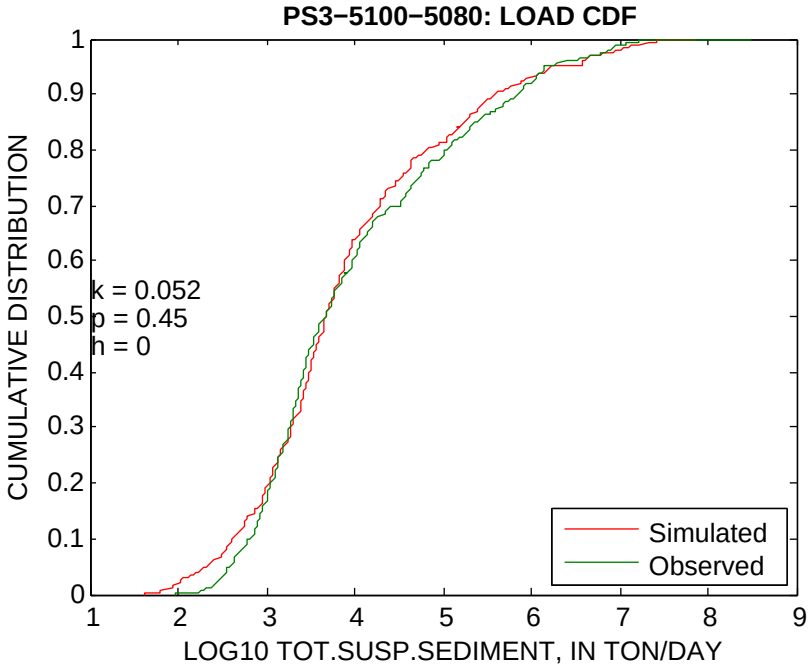


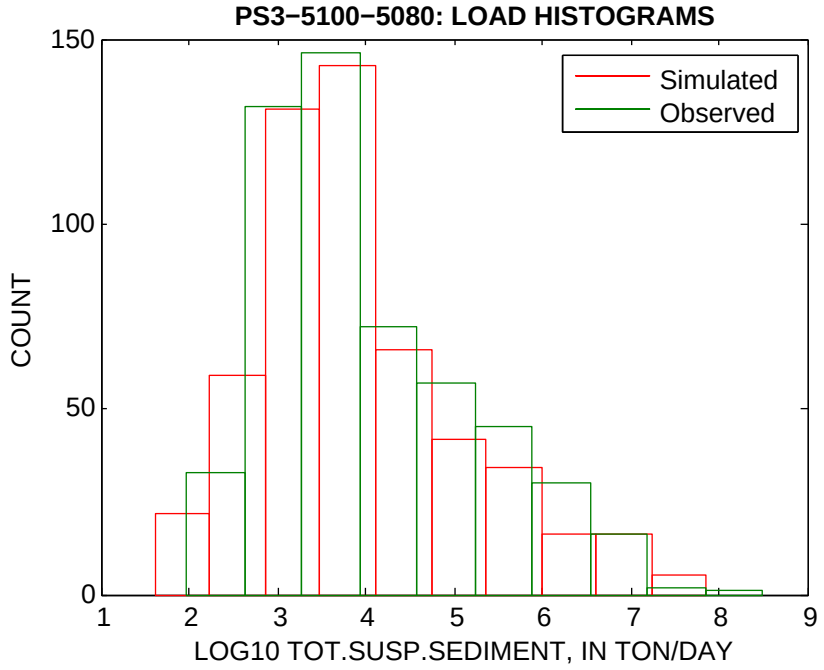


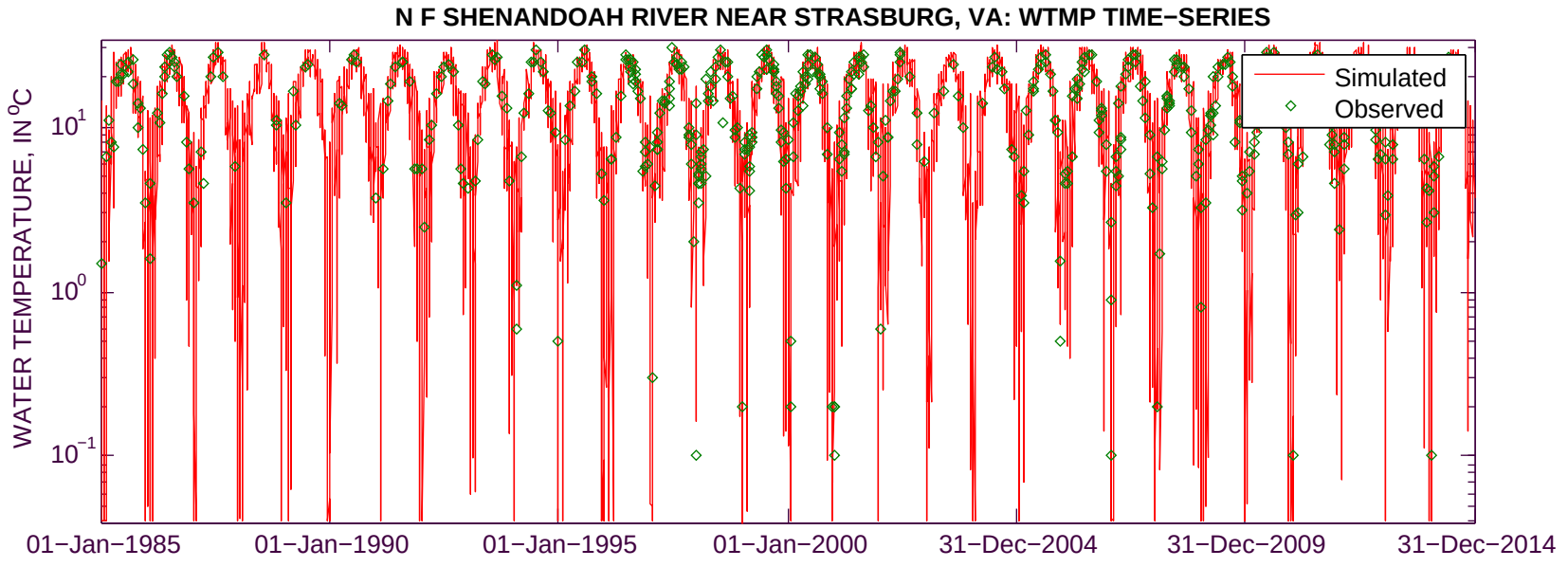
LOAD DATA
LOG10

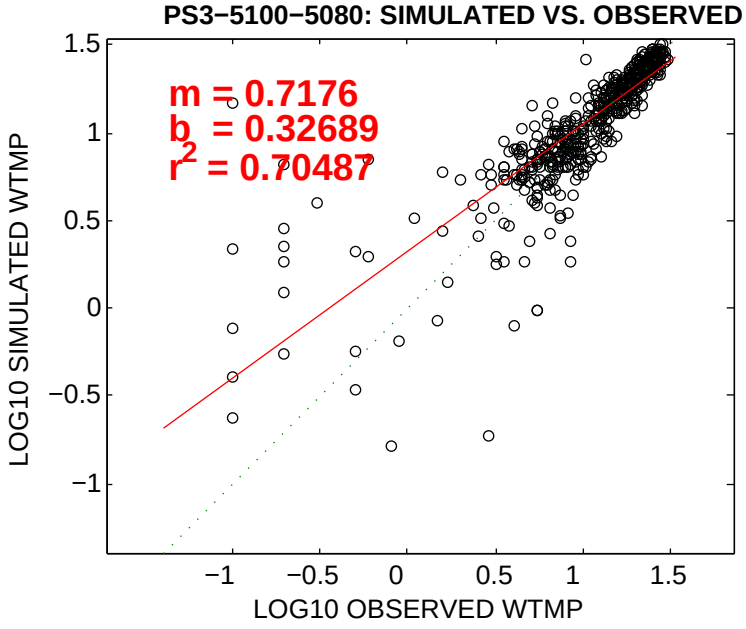


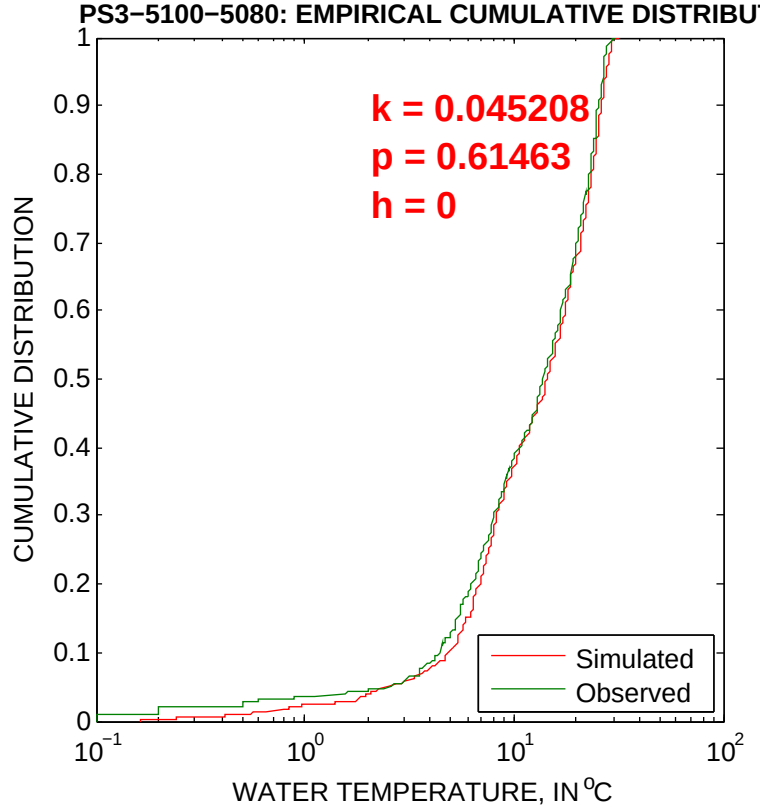












DATA SELECTION

scenario	file
P620171001WQ	WTMP.calib

plot: WTMP - water tempera...

Dates: 1/1/1985 – 12/31/201

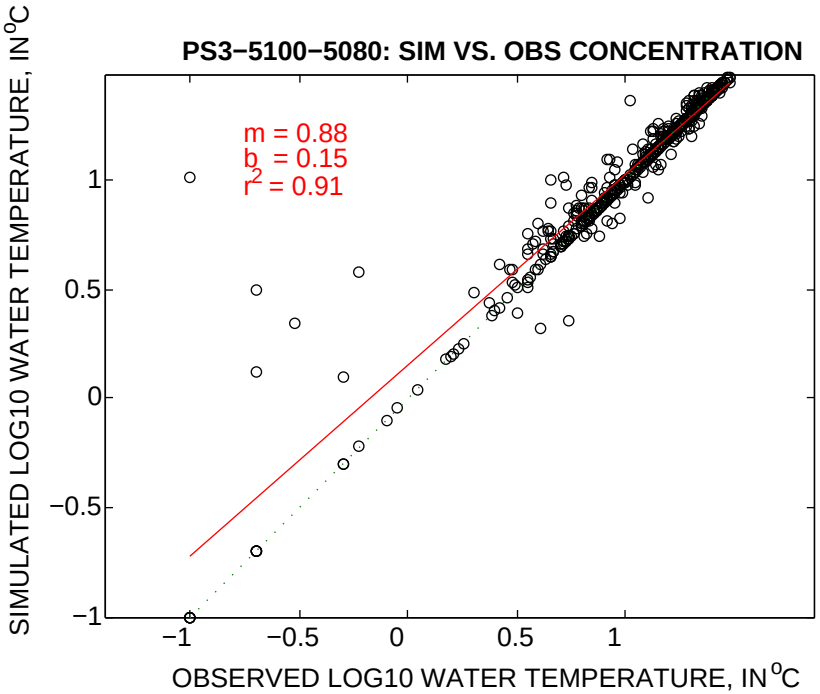
Drive	Directory	Observed
N/A	model	OBS20161101

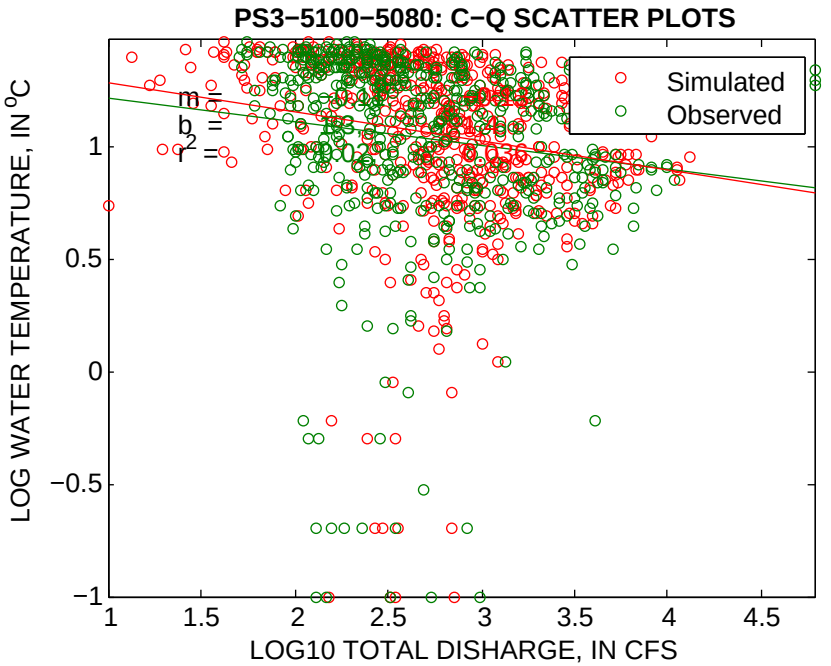
STATISTICS

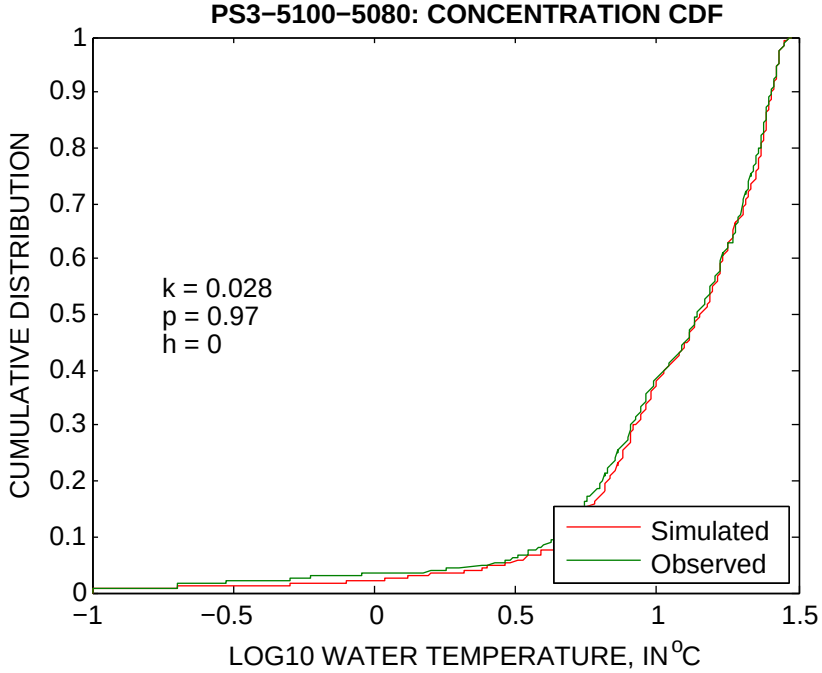
	n	observe	simulate
		553	553
min		0.1	0.16238
		-1	-0.789467
mean		14.3428	14.8798
		1.03618	1.07046
media		13.82	14.496
		1.14051	1.16125
max		30	32.287
		1.47712	1.50903
varian		65.1614	67.5844
		0.175211	0.128004
JB		0.001	0.001
		0.001	0.001
		ra	log
%		3.74418	3.3081
err.va		7.72062	0.0529279
rel.std.err		0.118485	0.302081
mod.eff		0.881515	0.697919

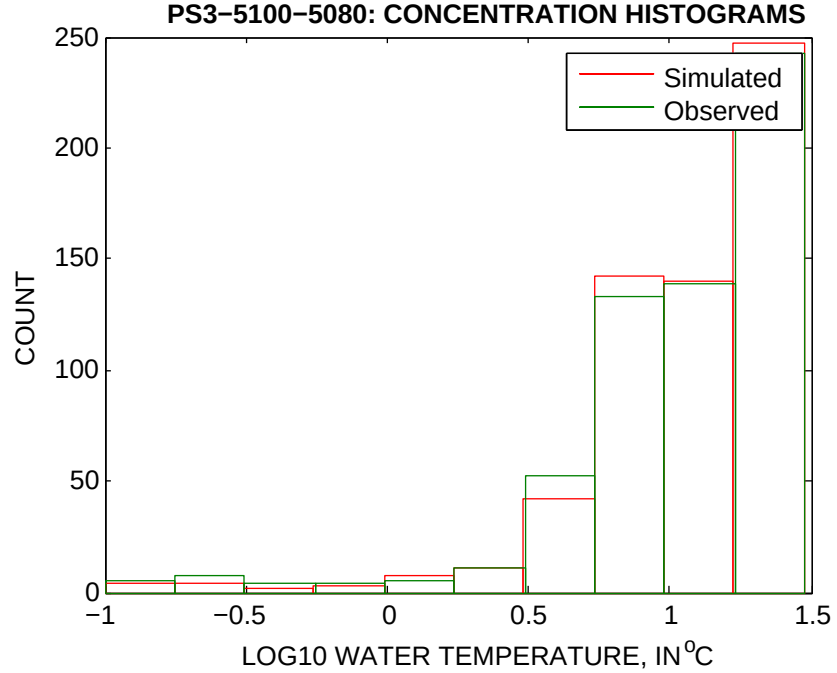
VERSION 2.1

ALL DATA
LOG10

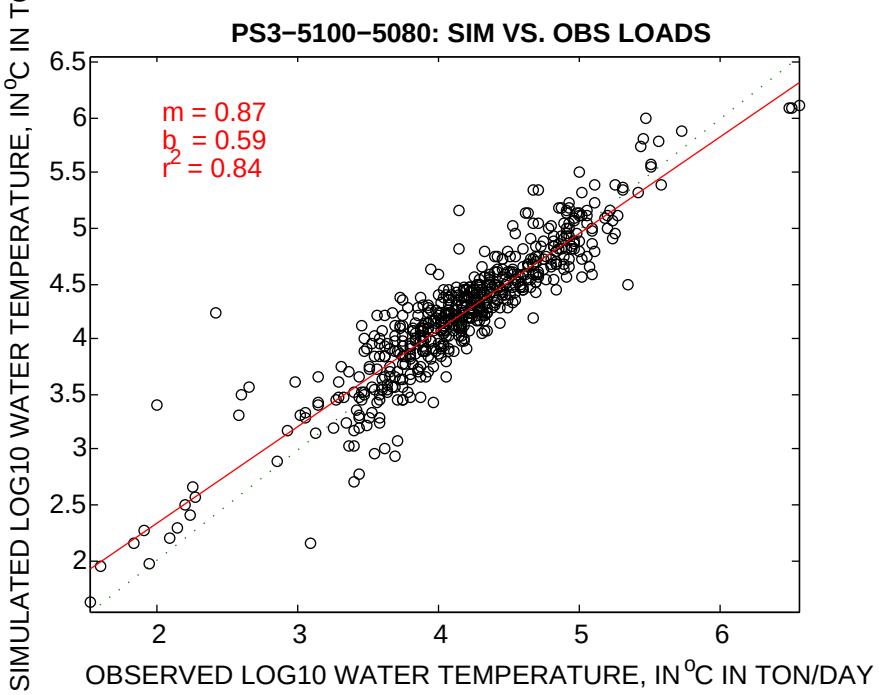


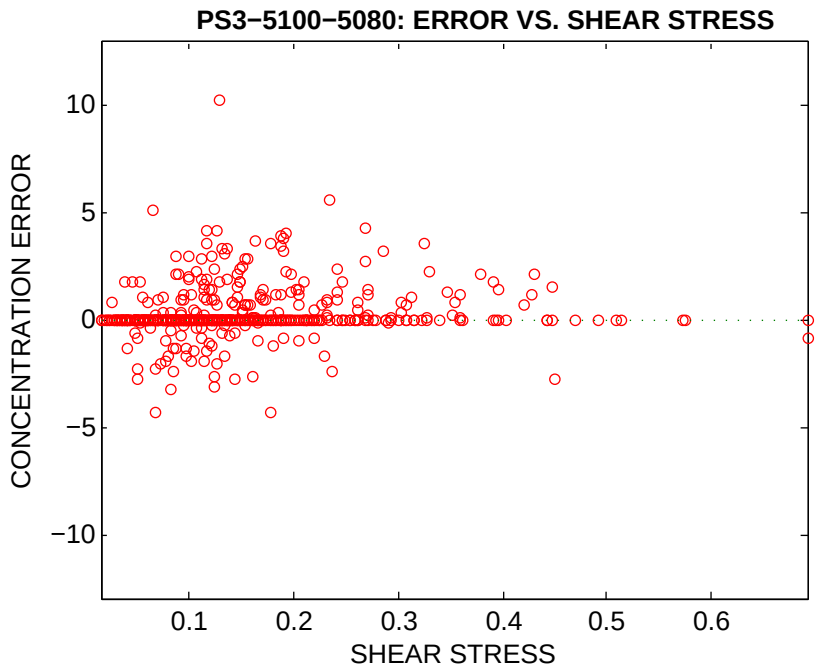


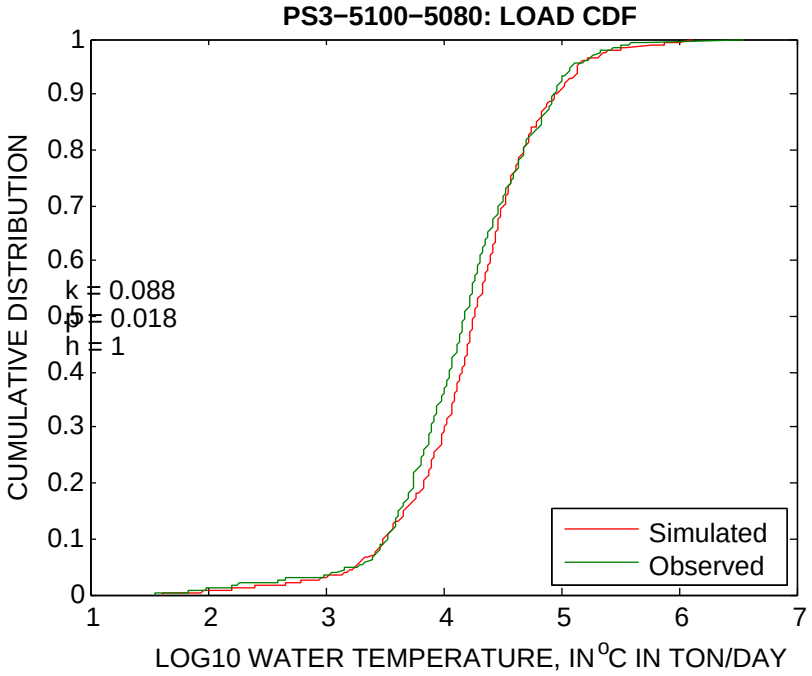


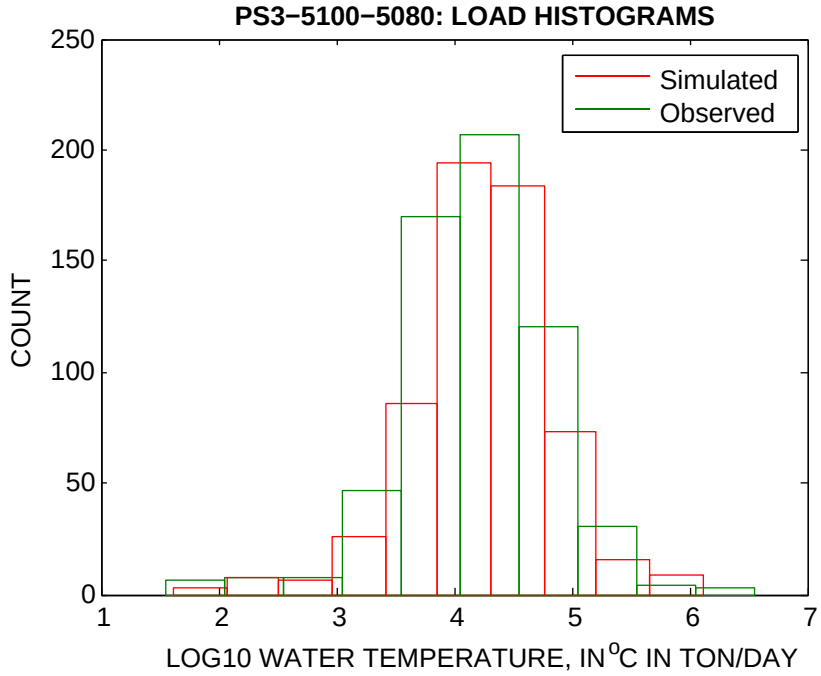


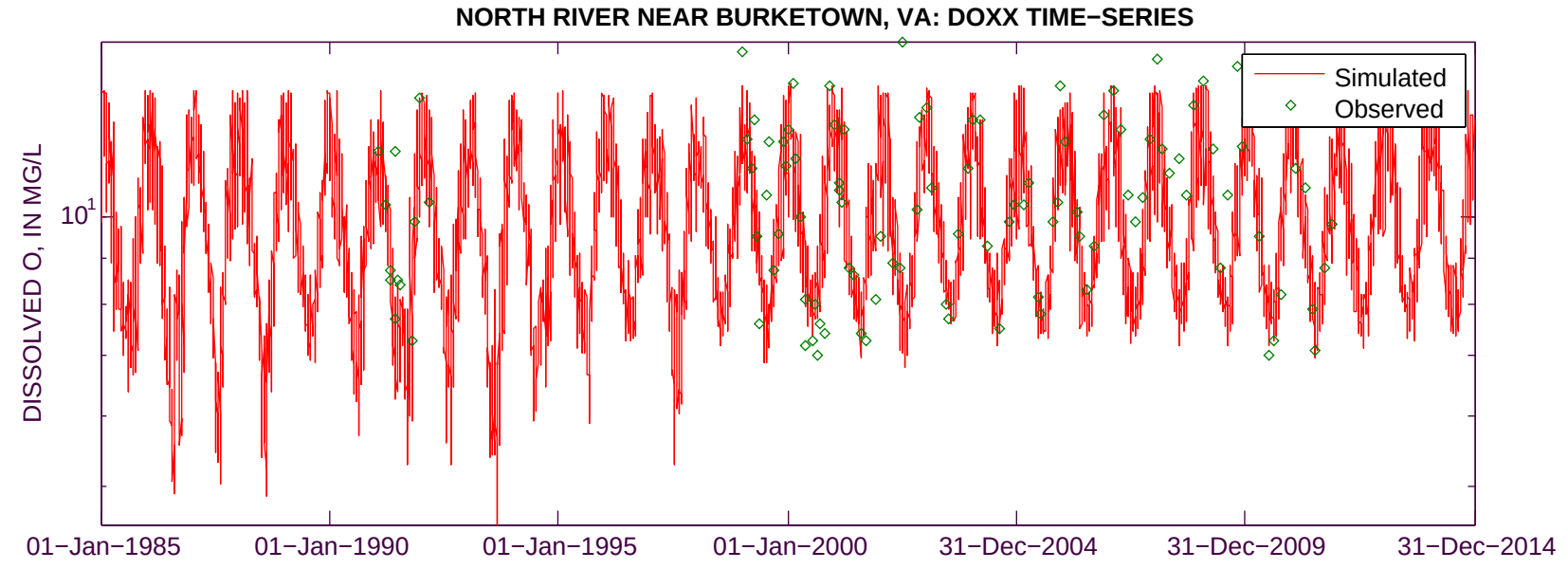
LOAD DATA
LOG10

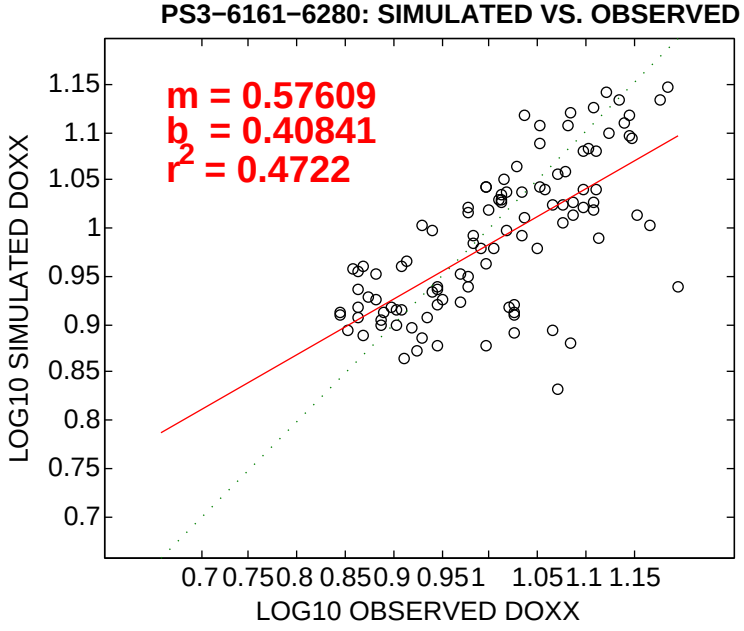


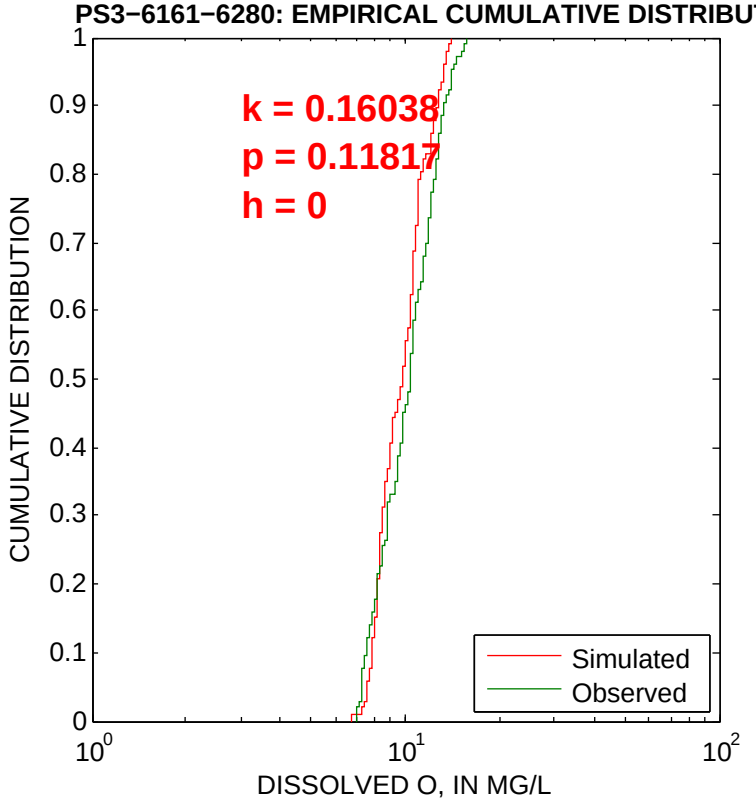












DATA SELECTION

scenario	file
P620171001WQ	DOXX.calib

plot: DOXX - dissolved oxygen

Dates: 1/1/1985 – 12/31/201

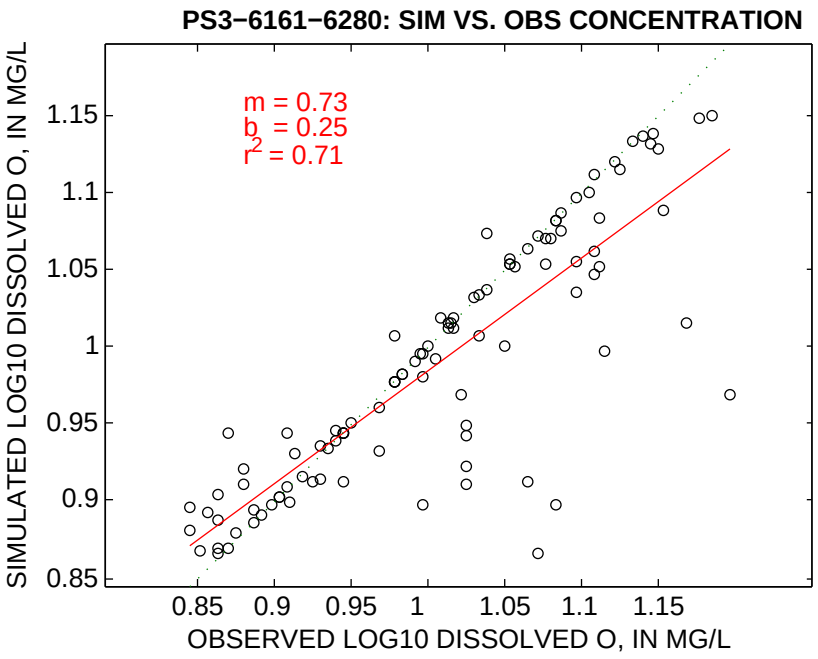
Drive	Directory	Observed
N/A	model	OBS20161101

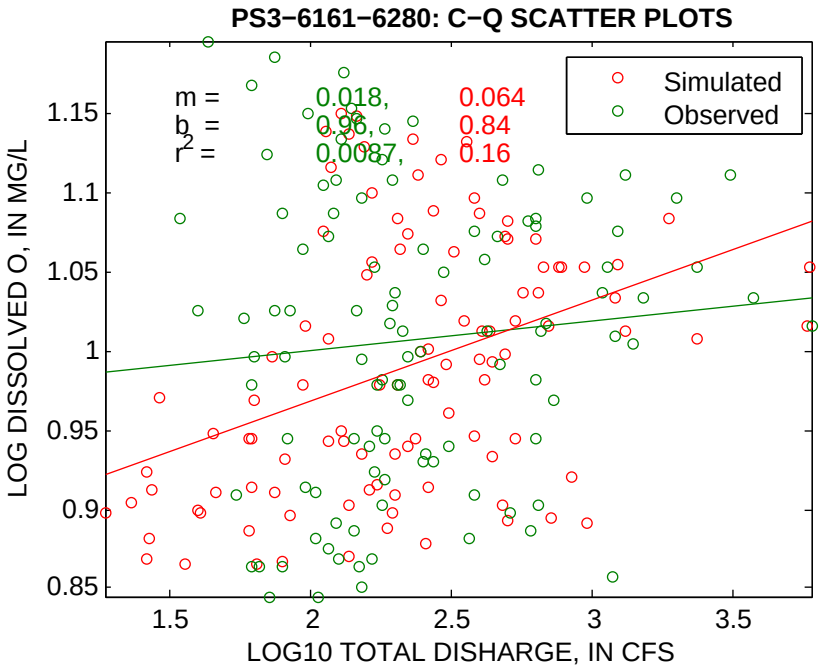
STATISTICS

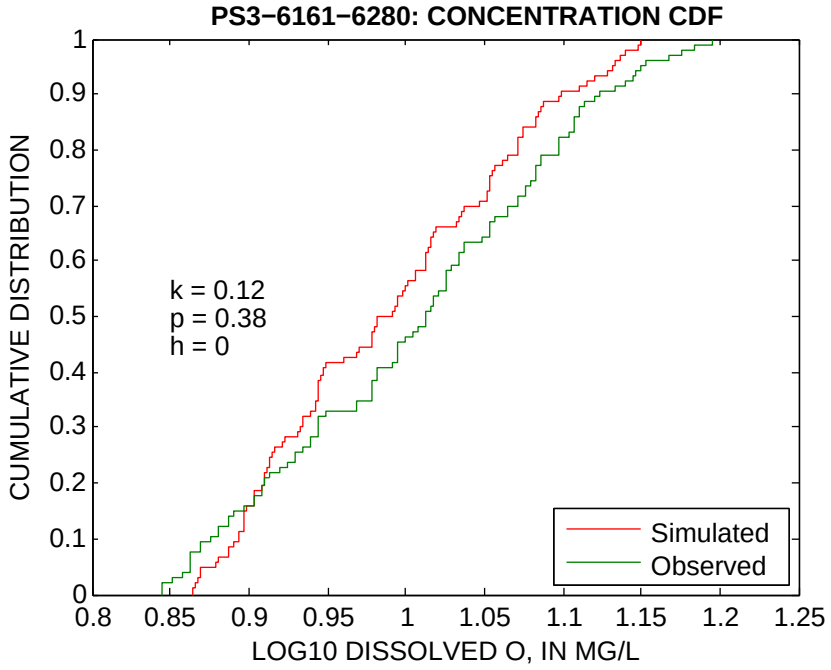
	n	106	106
		observe	simulate
min		7	6.7902
		0.845098	0.831883
mean		10.3869	9.89268
		1.00692	0.988485
media		10.3	9.783
		1.01284	0.990471
max		15.7	14.025
		1.1959	1.1469
varian		4.79019	3.19436
		0.00842367	0.00592048
JB		0.076117	0.035134
		0.077457	0.060017
		ra	log
%		-4.75803	-1.83115
err.va		2.79	0.0049818
rel.std.err		0.582441	0.591405
mod.eff		0.417559	0.408595

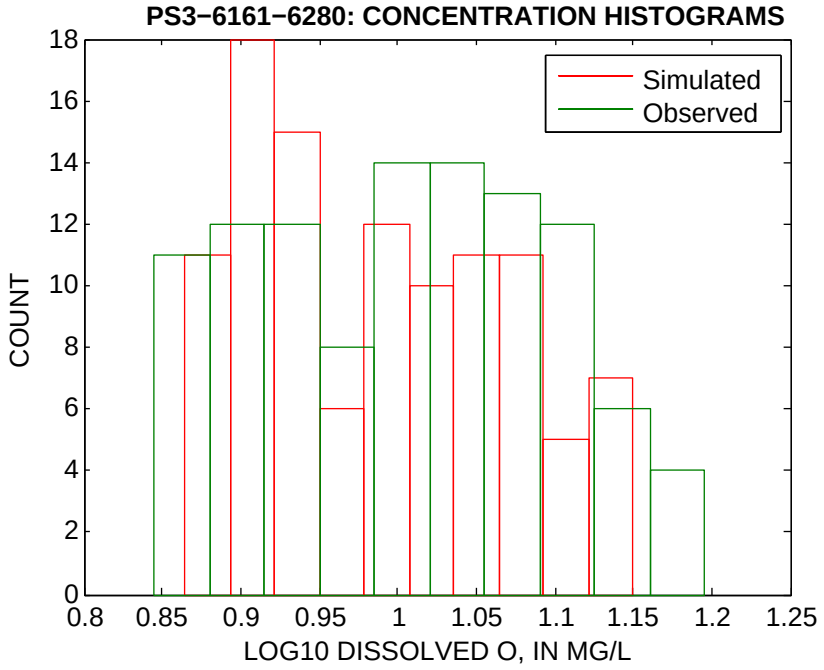
VERSION 2.1

ALL DATA
LOG10

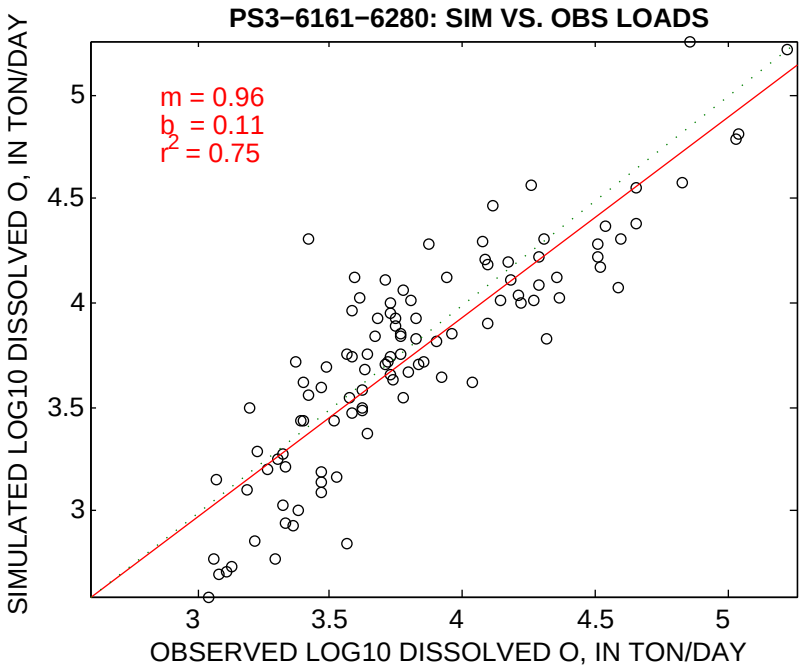


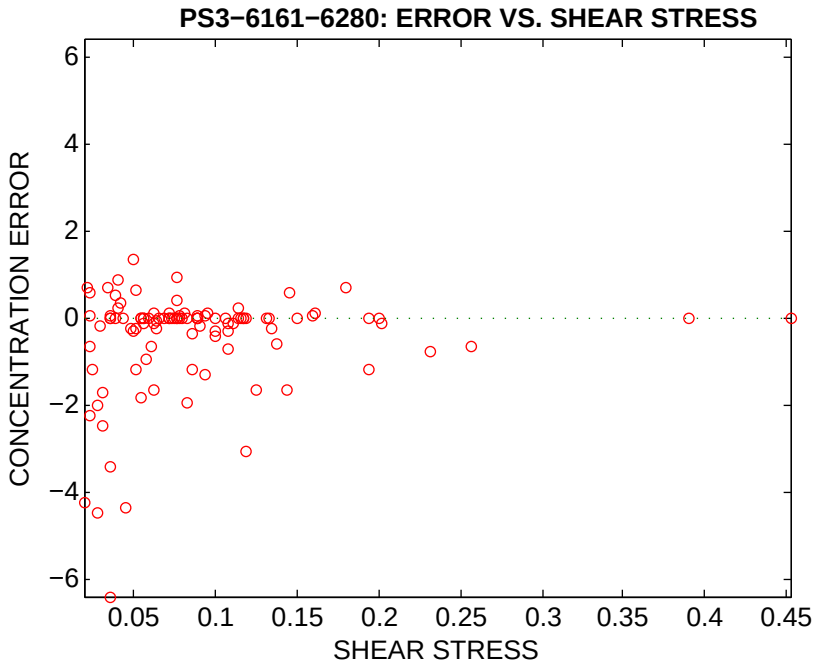


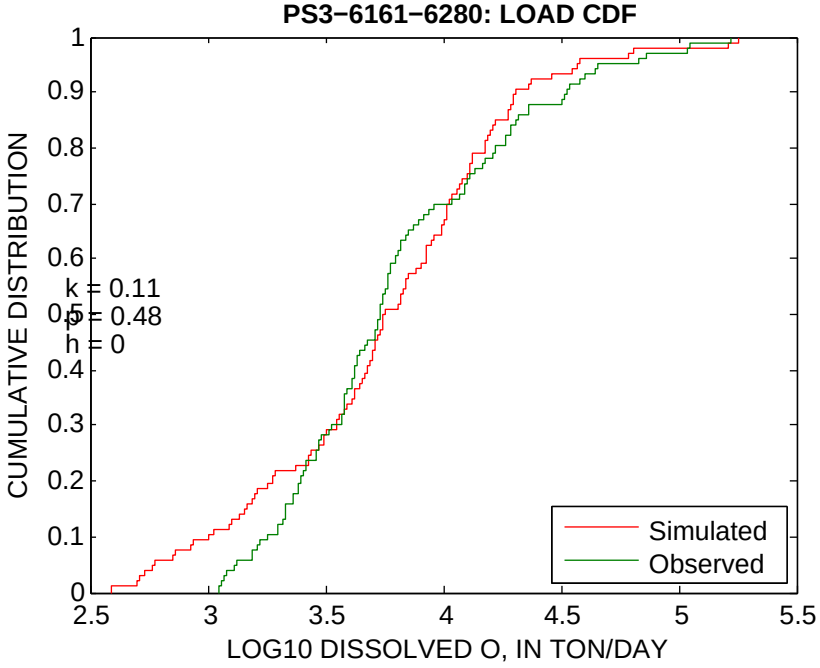


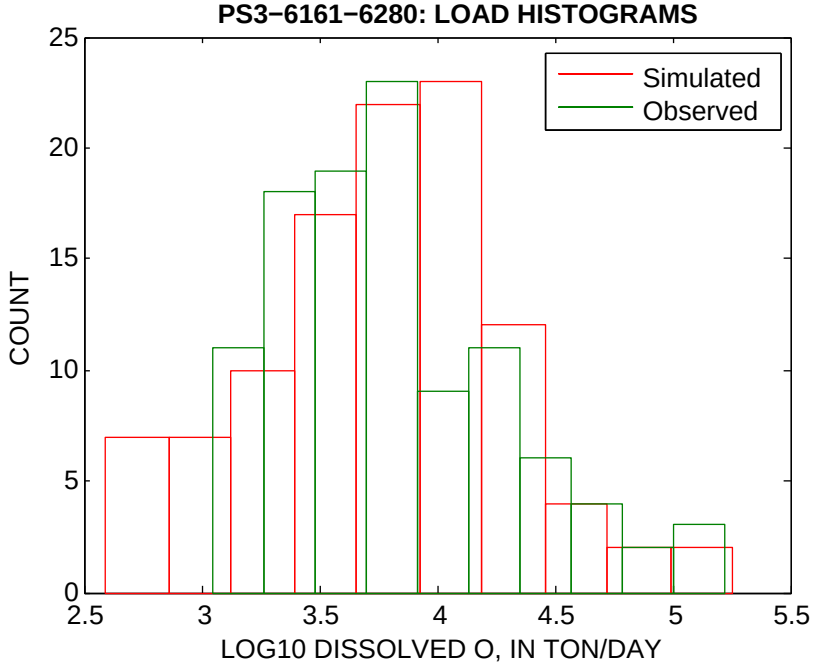


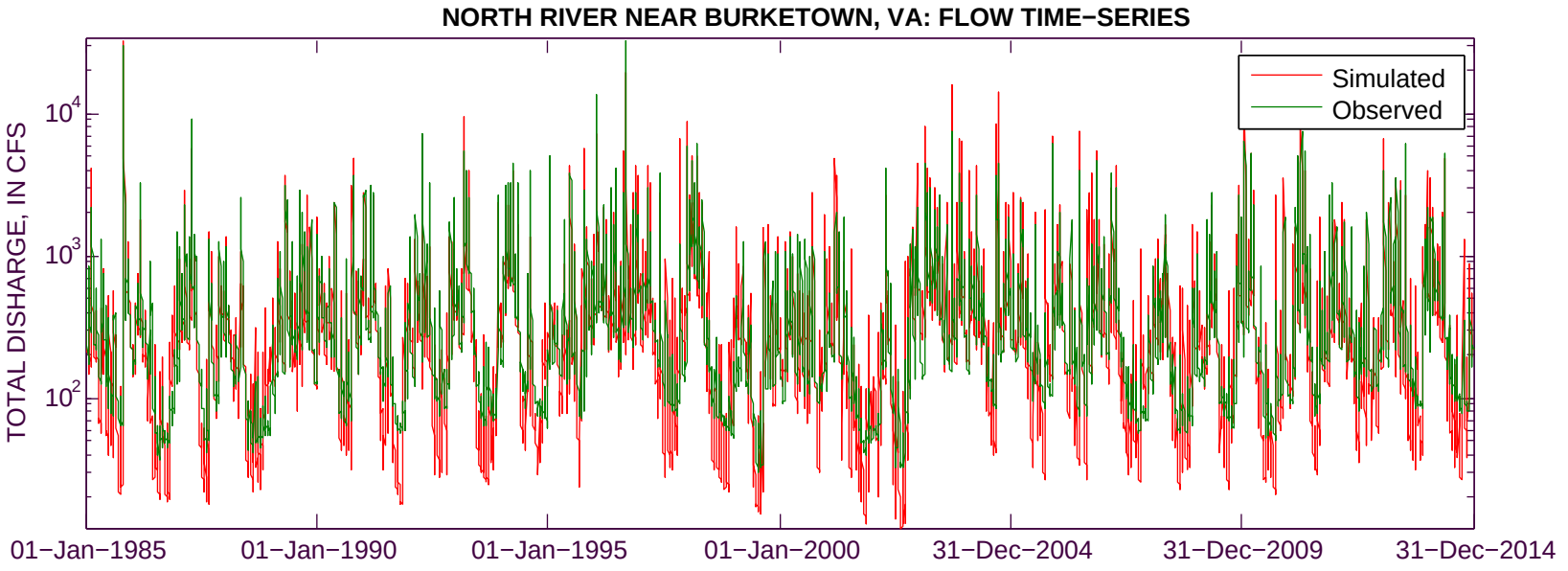
LOAD DATA
LOG10

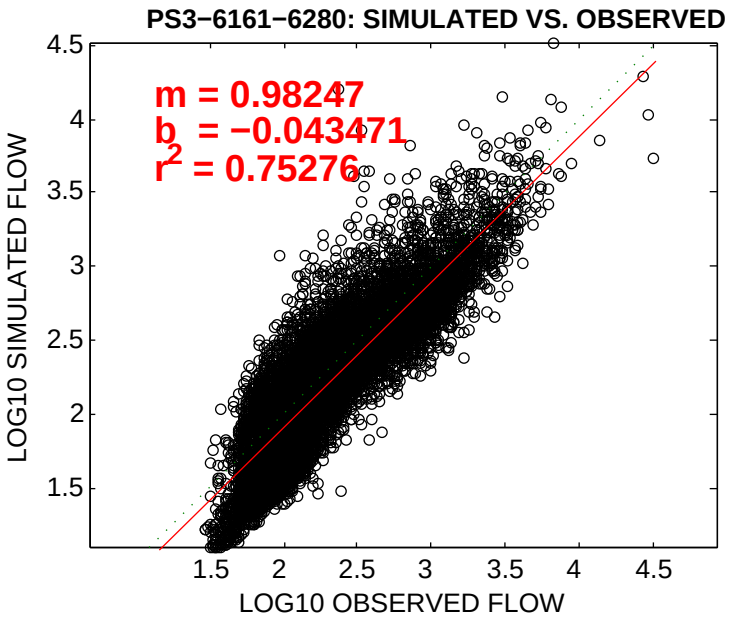


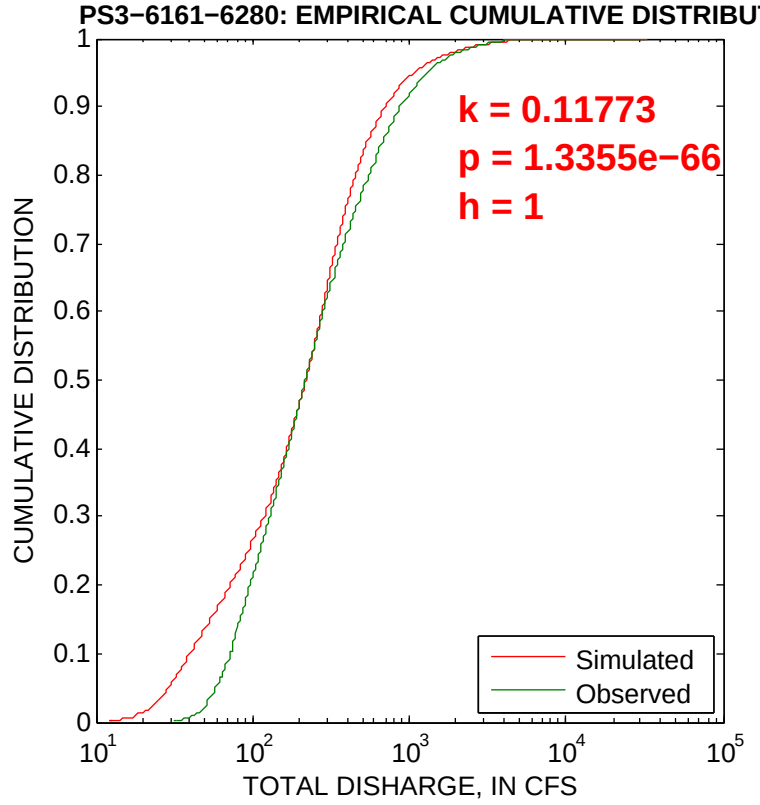












DATA SELECTION

scenario	file
P620171001WQ	FLOW.calib

plot: FLOW - total discharge

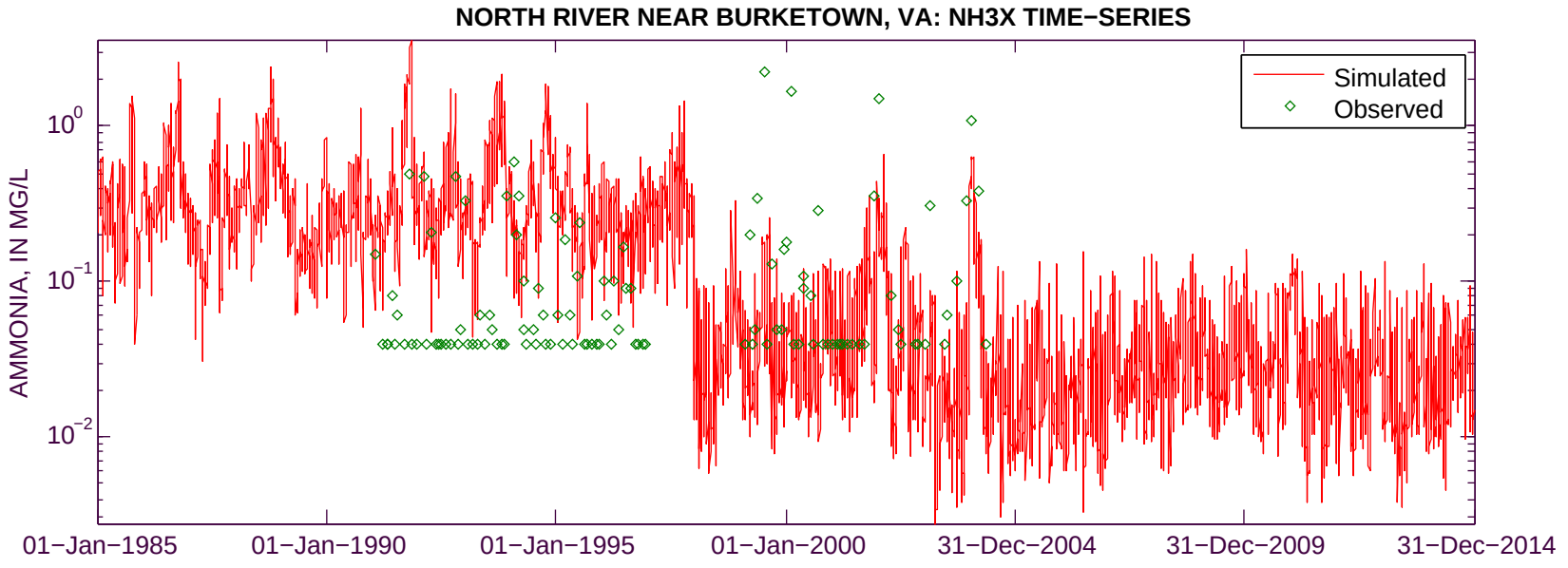
Dates: 1/1/1985 – 12/31/201

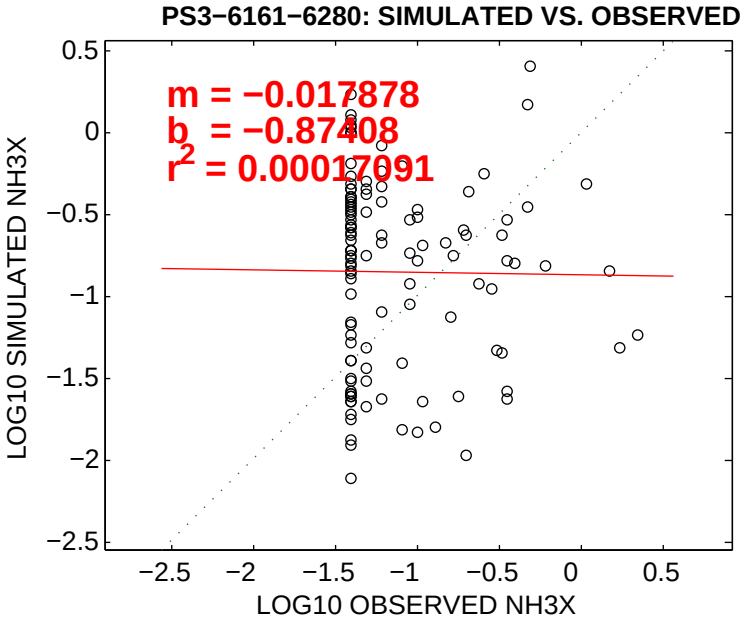
Drive	Directory	Observed
N/A	model	OBS20161101

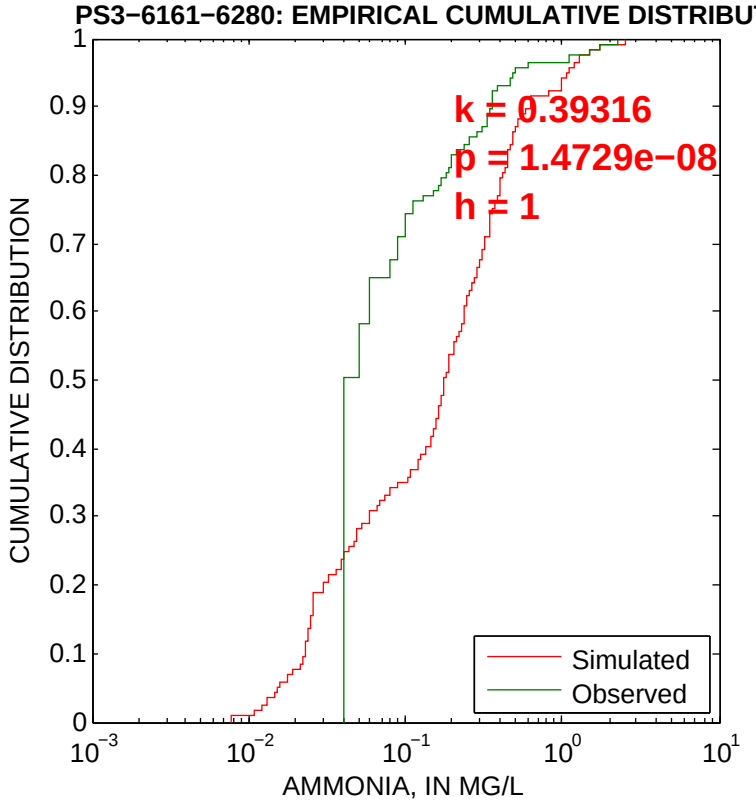
STATISTICS

		observe	simulate
n		10957	10957
min		30	12.309
		1.47712	1.09022
mean		408.437	362.809
		2.3767	2.29157
media		219	221.14
		2.34044	2.34467
max		32000	33218
		4.50515	4.52137
varian		559793	511184
		0.176697	0.226574
JB		0.001	0.001
		0.001	0.5
		ra	log
%		-11.1713	-3.58207
err.va		354945	0.0633208
rel.std.err		0.634065	0.358359
mod.eff		0.365935	0.641641

VERSION 2.1







DATA SELECTION

scenario	file
P620171001WQ	NH3X.calib

plot: NH3X - ammonia

Dates: 1/1/1985 – 12/31/201

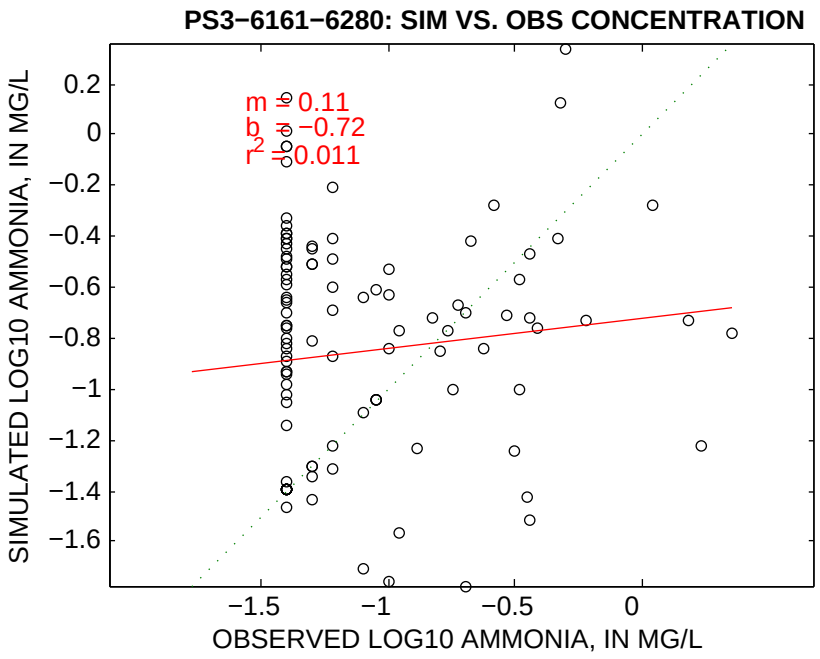
Drive	Directory	Observed
N/A	model	OBS20161101

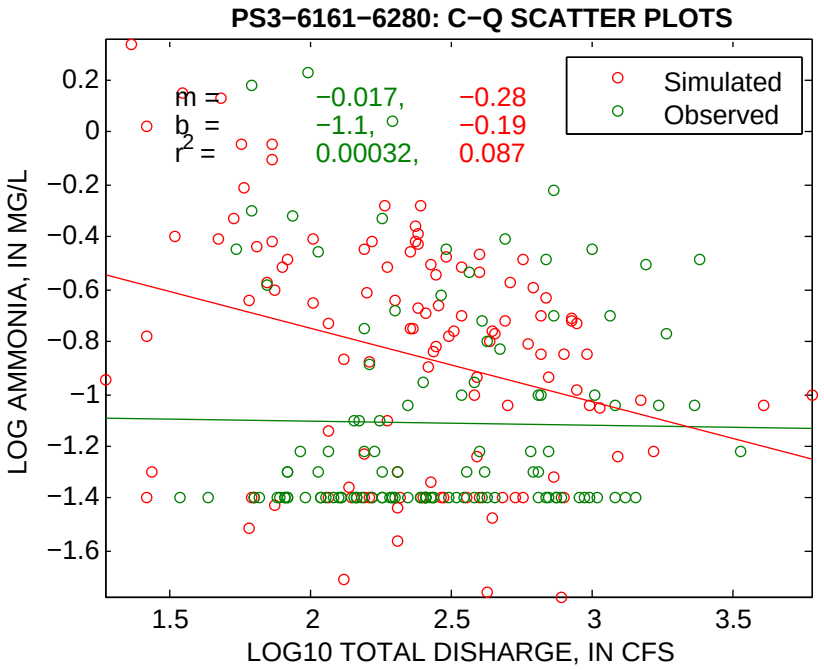
STATISTICS

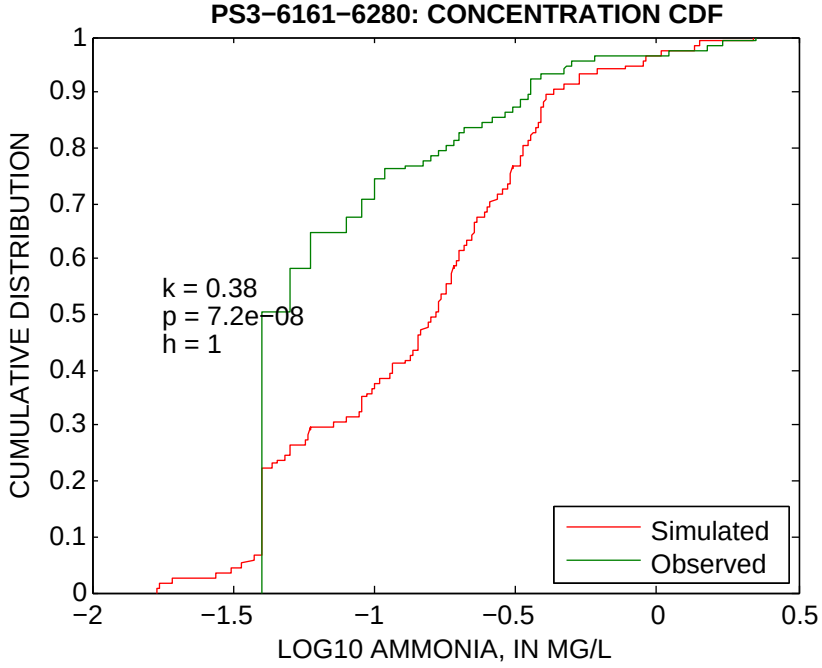
	n	117	117
		observe	simulate
min		0.04	0.0077303
		-1.39794	-2.1118
mean		0.156496	0.291225
		-1.11061	-0.854221
media		0.04	0.17725
		-1.39794	-0.751414
max		2.25	2.5512
		0.352183	0.406745
varian		0.0985988	0.145905
		0.1763	0.329688
JB		0.001	0.001
		0.001	0.076783
		ra	log
%		86.0915	-23.0856
err.va		0.26399	0.578595
rel.std.err		2.67741	3.28188
mod.eff		-1.67741	-2.28188

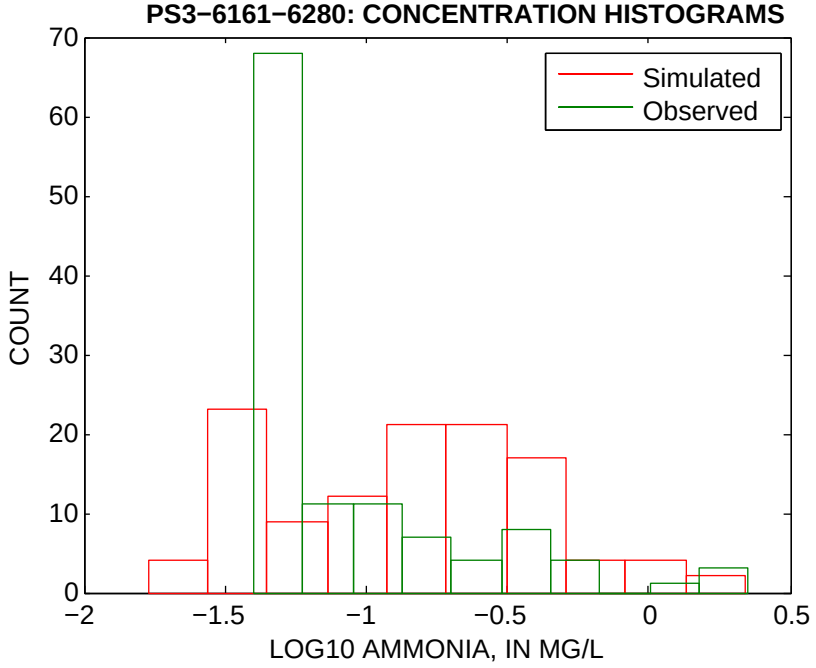
VERSION 2.1

ALL DATA
LOG10

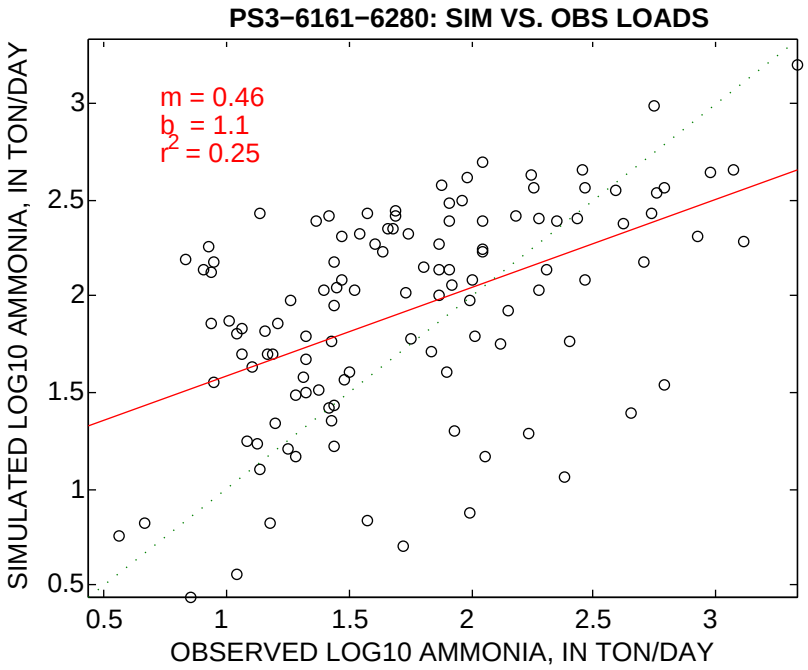


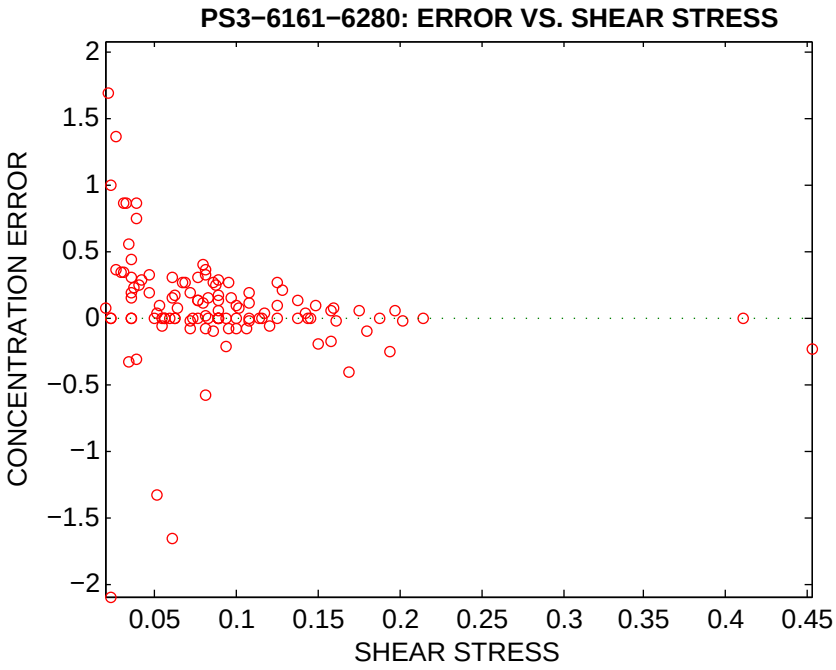


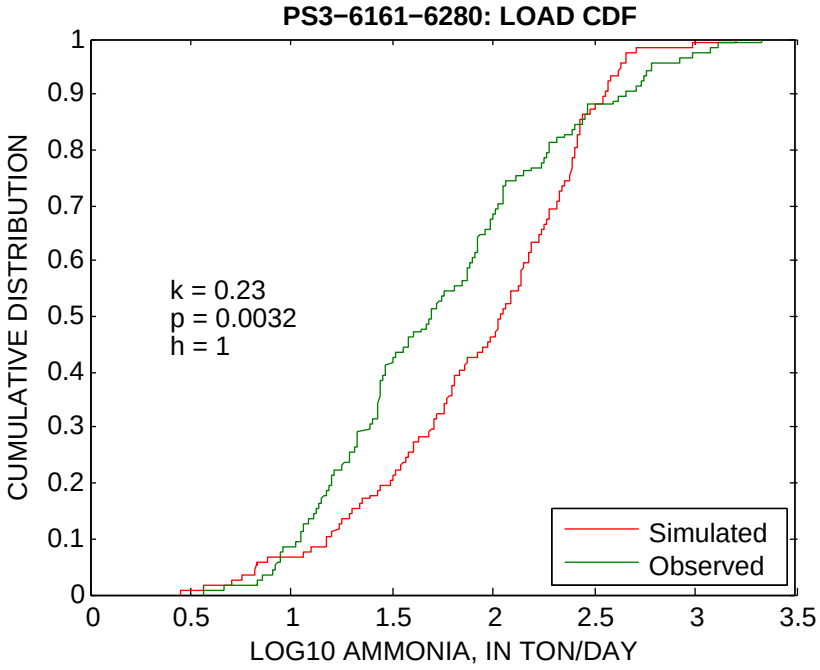


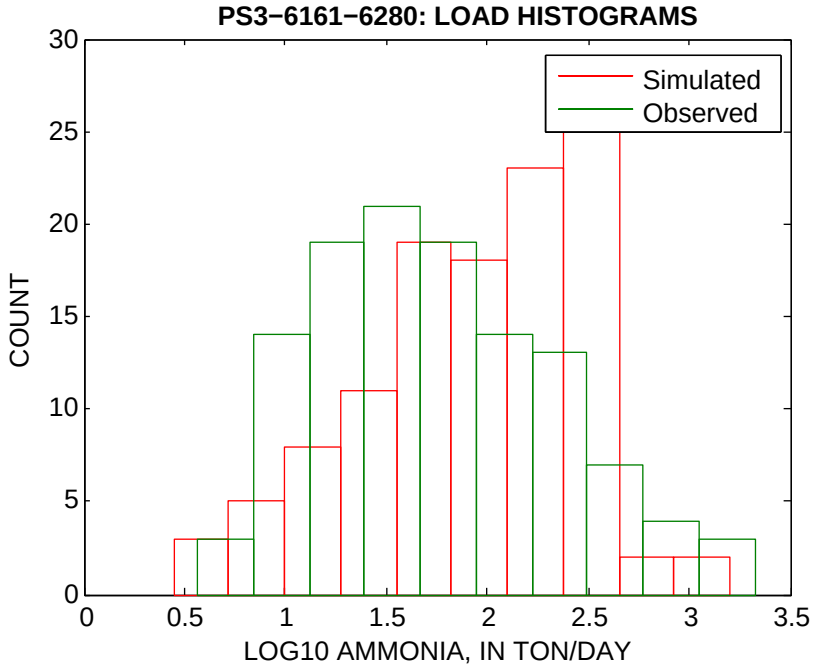


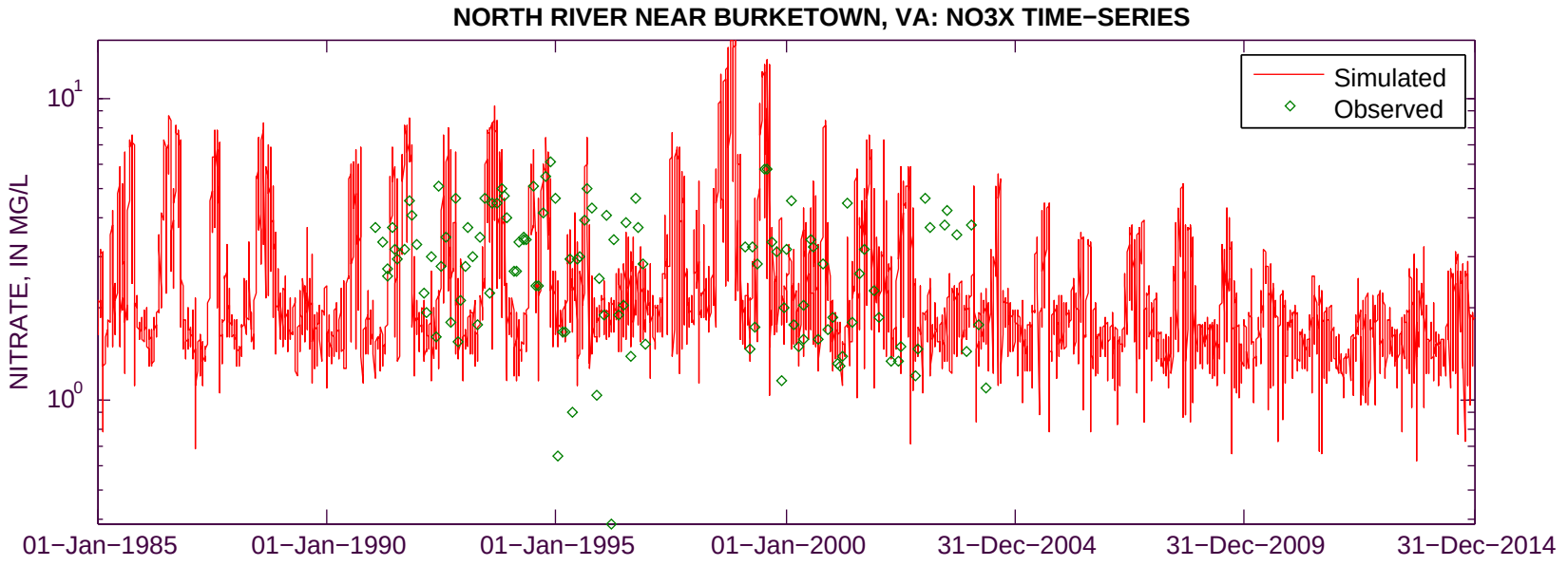
LOAD DATA
LOG10

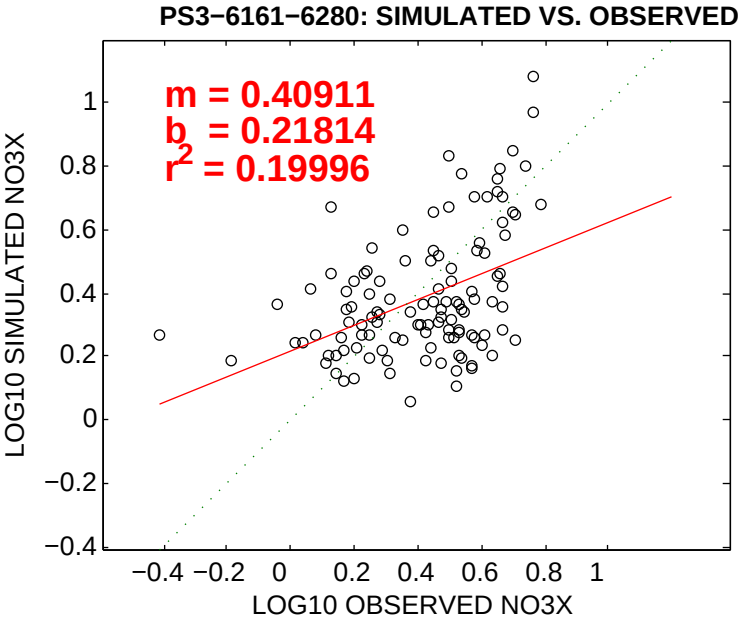


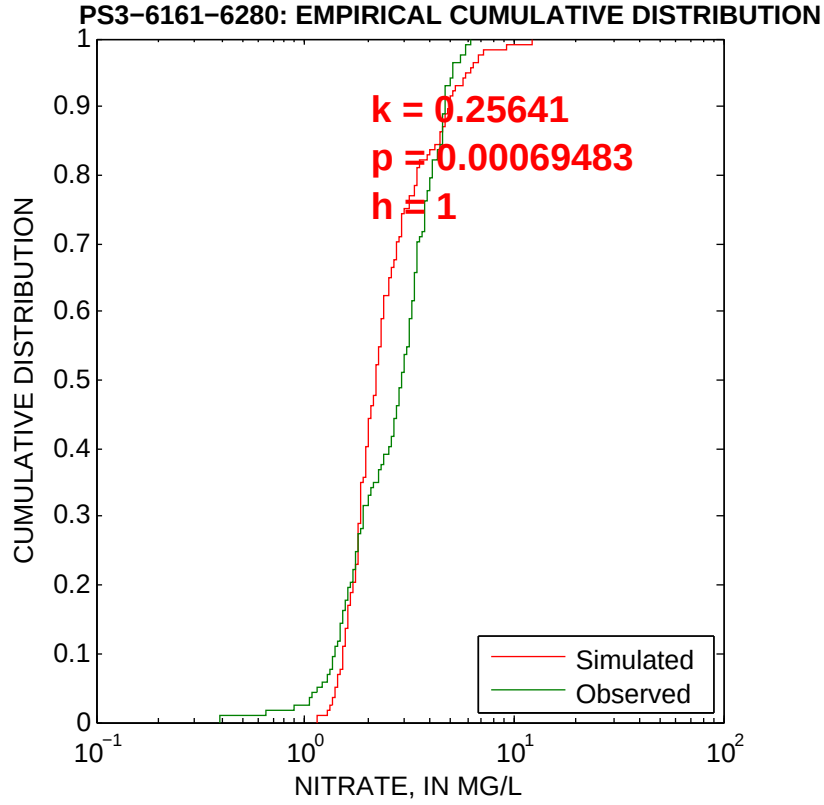












DATA SELECTION

scenario	file
P620171001WQ	NO3X.calib

plot: NO3X - nitrate

Dates: 1/1/1985 – 12/31/201

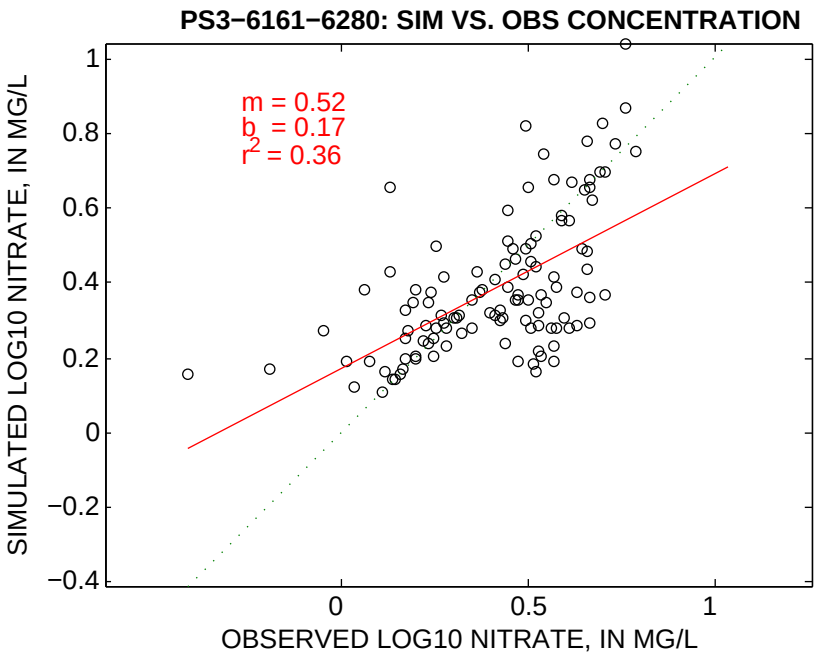
Drive	Directory	Observed
N/A	model	OBS20161101

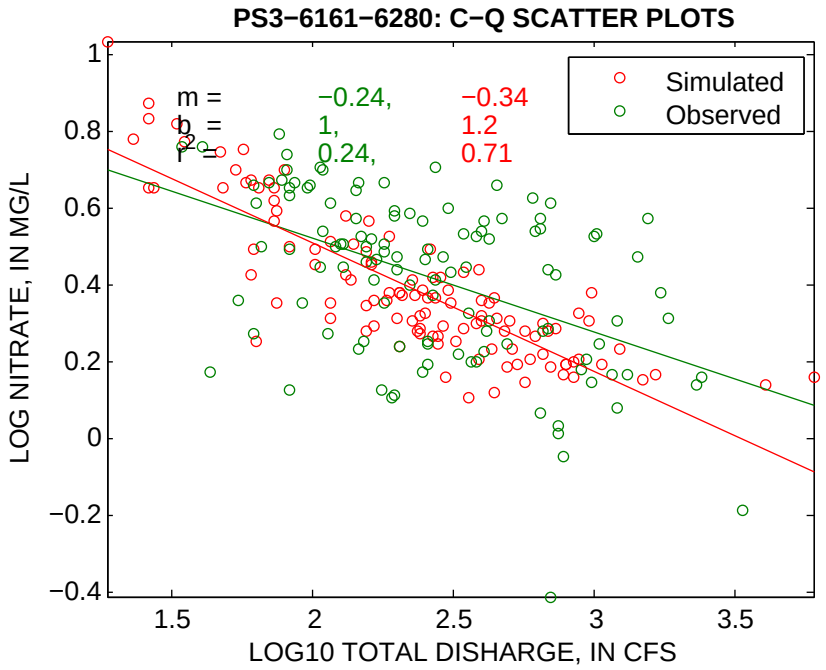
STATISTICS

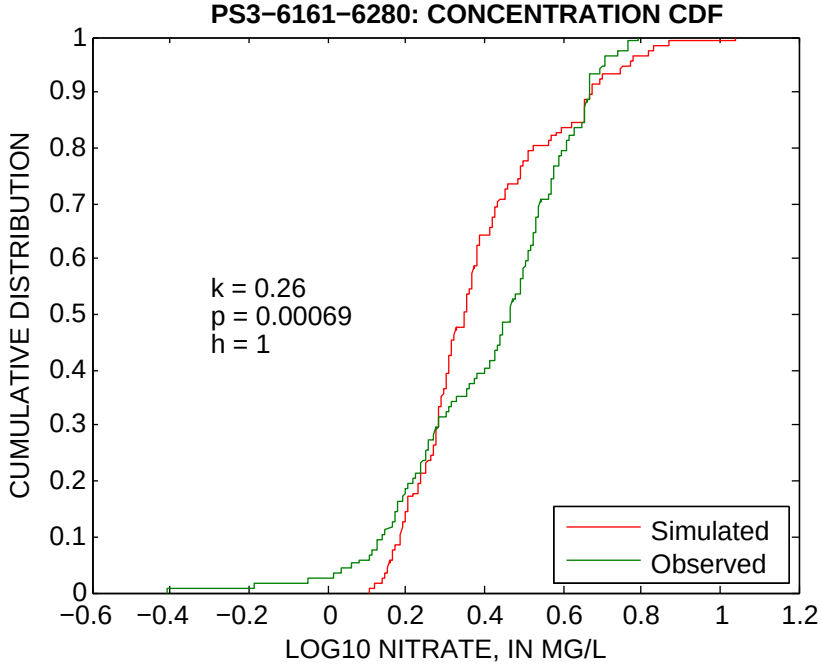
	n	117	117
		observe	simulate
min		0.39	1.1445
		-0.408935	0.0586158
mean		2.91444	2.76231
		0.41684	0.38868
media		2.93	2.2016
		0.466868	0.342738
max		6.18	12.082
		0.790988	1.08214
varian		1.62028	2.78141
		0.0471069	0.0394305
JB		0.087219	0.001
		0.008260	0.001933
		ra	log
%		-5.22012	-6.75577
err.va		2.14318	0.0487931
rel.std.err		1.32272	1.0358
mod.eff		-0.322721	-0.0357958

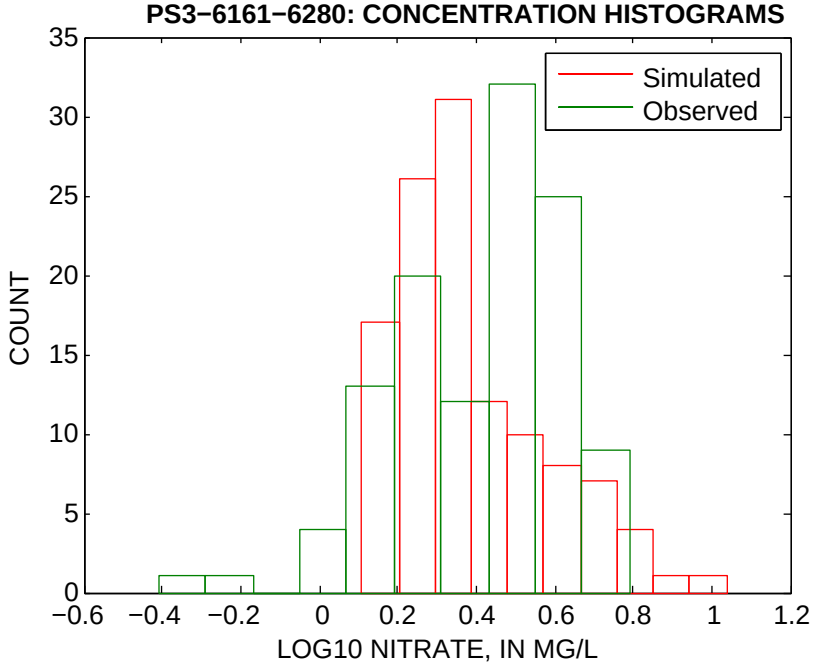
VERSION 2.1

ALL DATA
LOG10

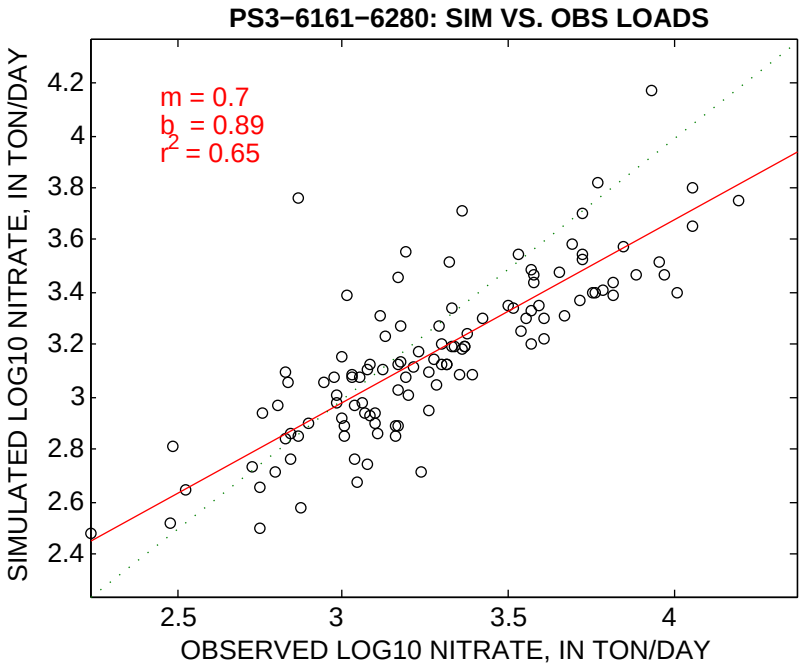


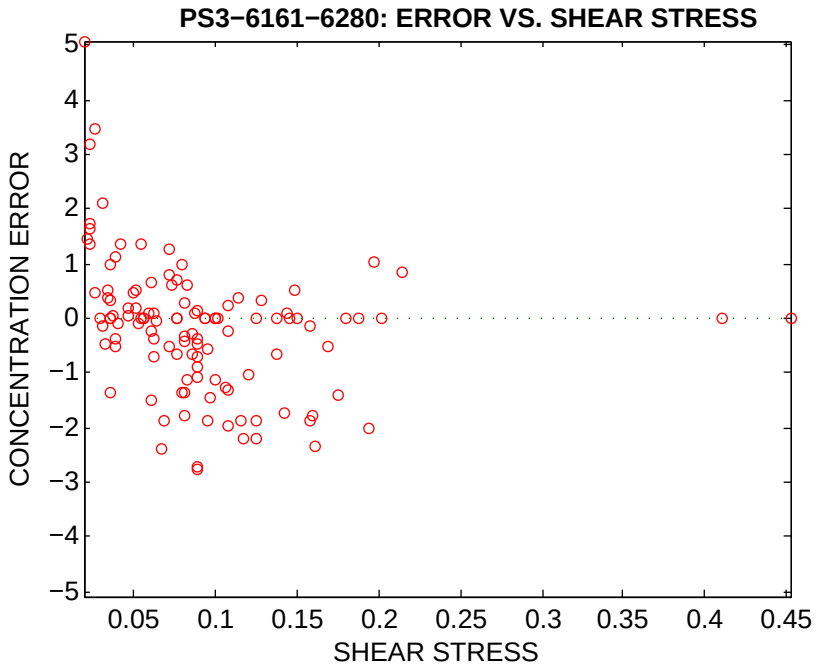


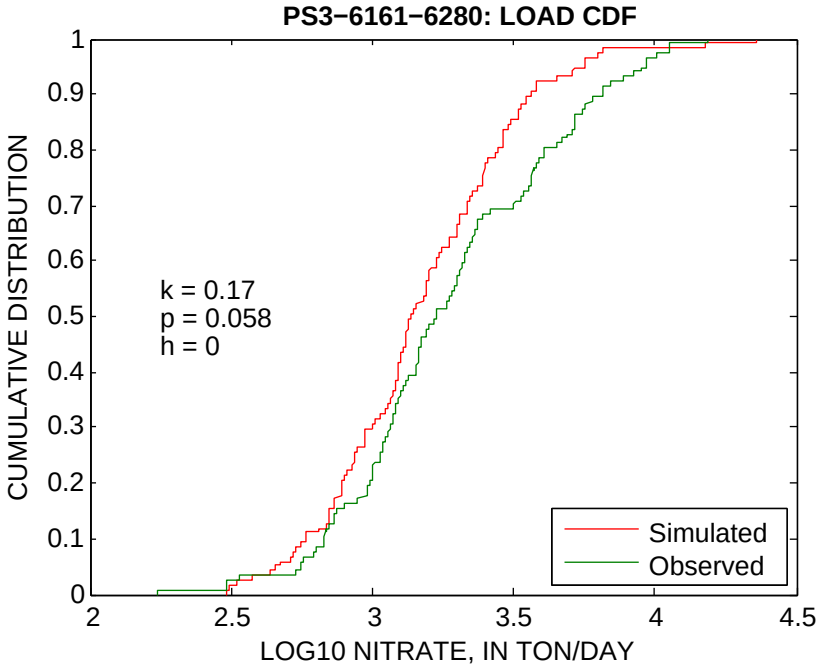


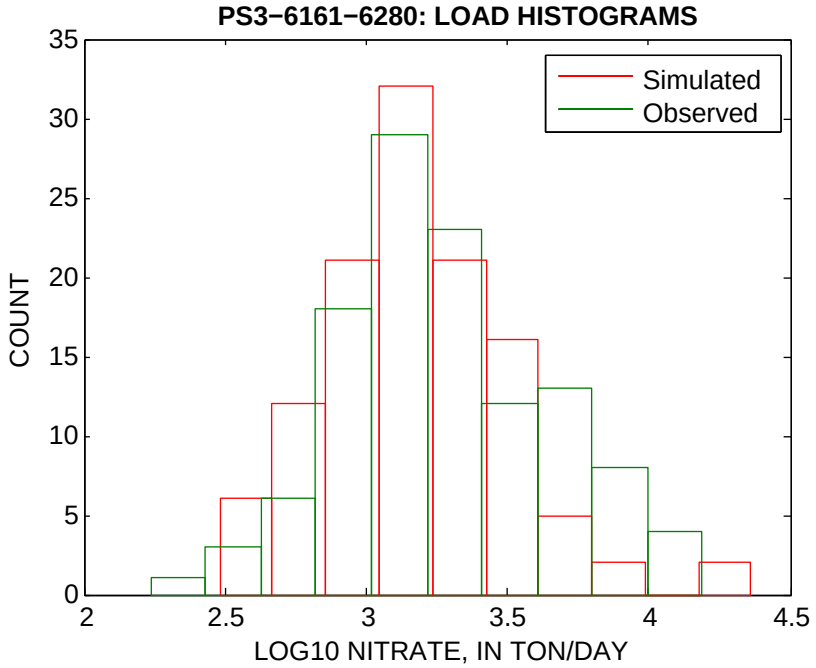


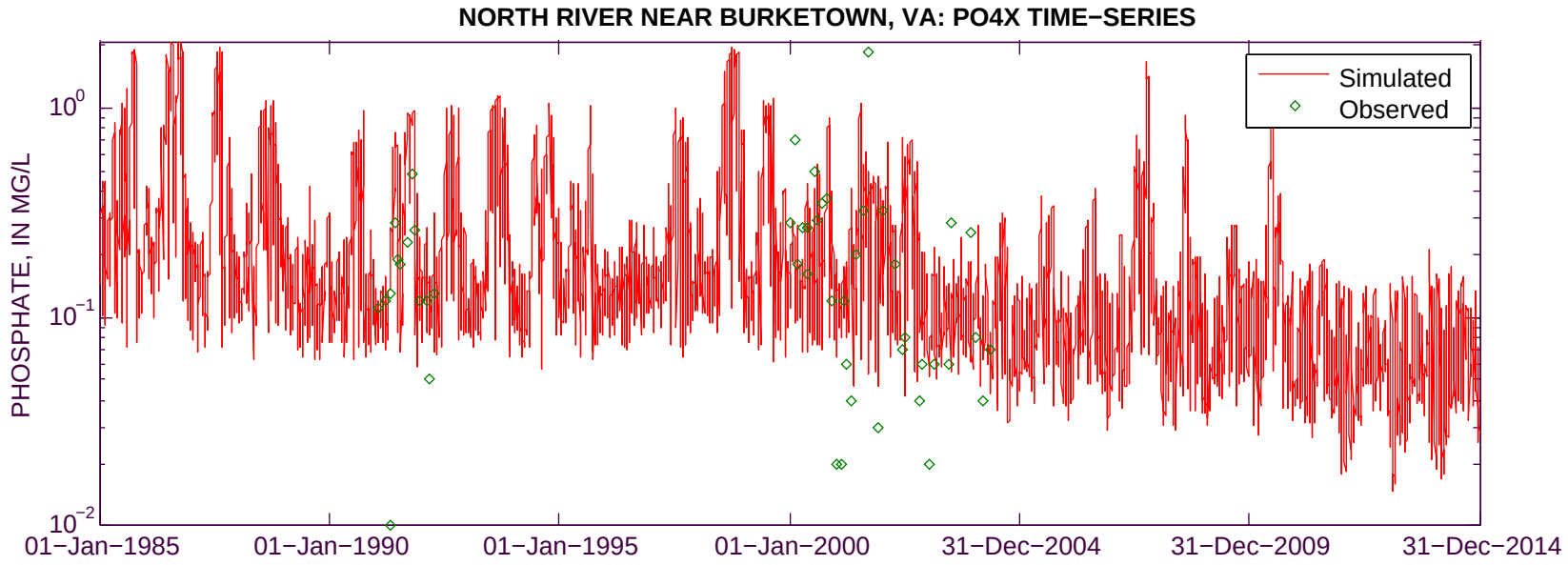
LOAD DATA
LOG10

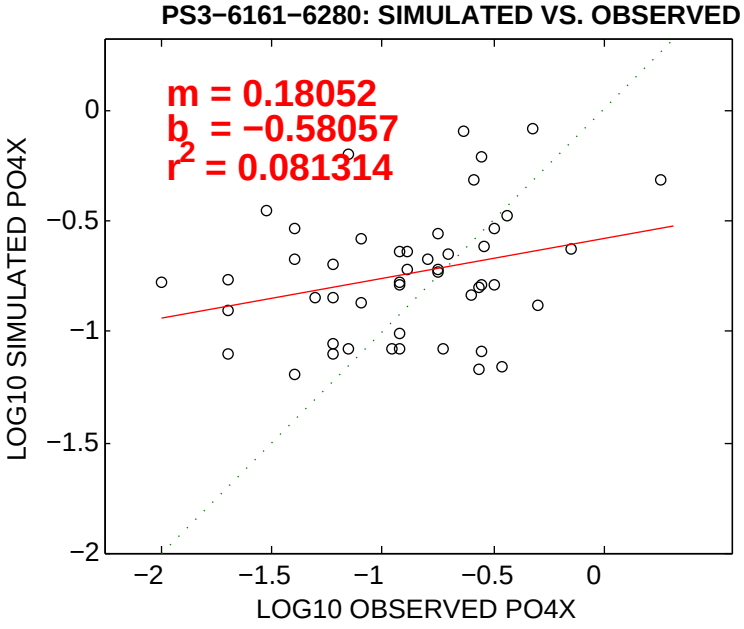


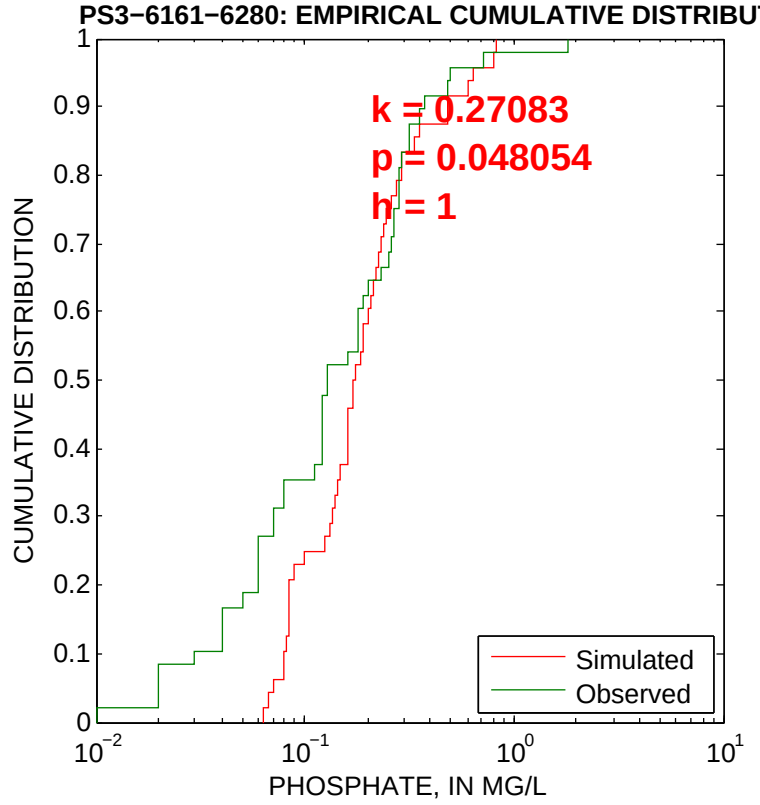












DATA SELECTION

scenario	file
P620171001WQ	PO4X.calib

plot: PO4X - phosphate

Dates: 1/1/1985 – 12/31/201

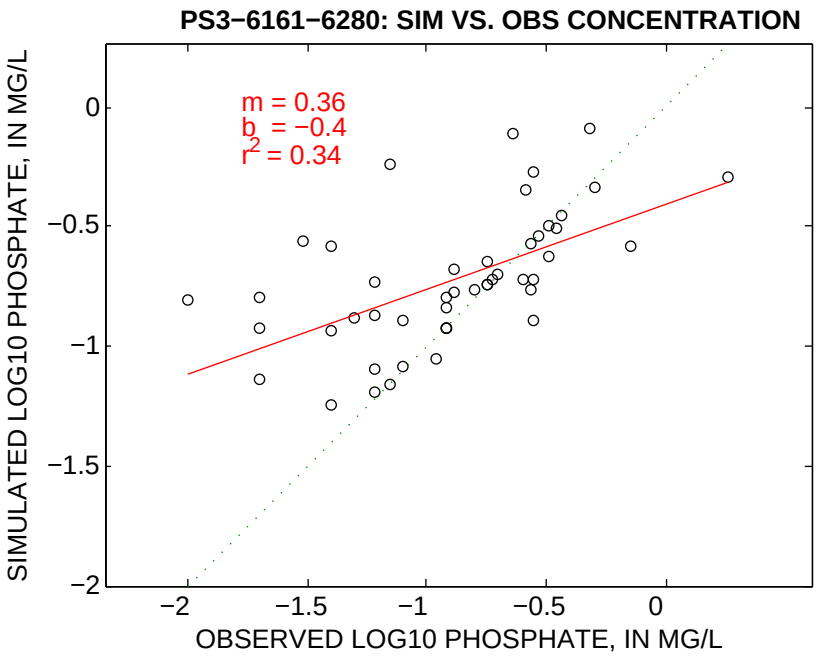
Drive: N/A | Directory: model | Observed: OBS20161101

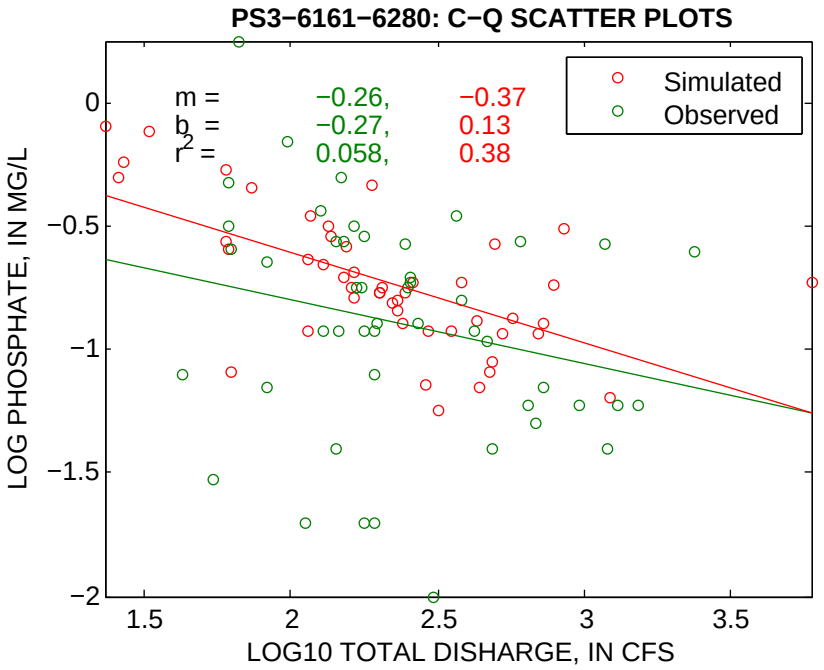
STATISTICS

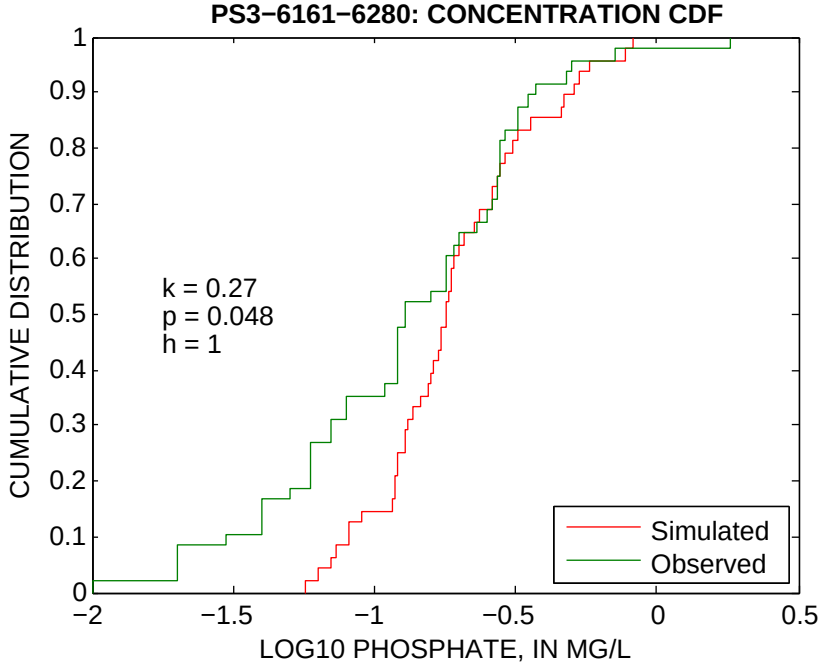
	n	observe	simulate
		48	48
min		0.01	0.06394
		-2	-1.19423
mean		0.211458	0.227787
		-0.892404	-0.741663
media		0.13	0.170935
		-0.886057	-0.767214
max		1.82	0.82991
		0.260071	-0.080969
varian		0.0771531	0.0321732
		0.202526	0.081161
JB		0.001	0.001
		0.5	0.239419
		ra	log
%		7.72202	-16.8916
err.va		0.0783697	0.233775
rel.std.err		1.01577	1.1543
mod.eff		-0.0157675	-0.154295

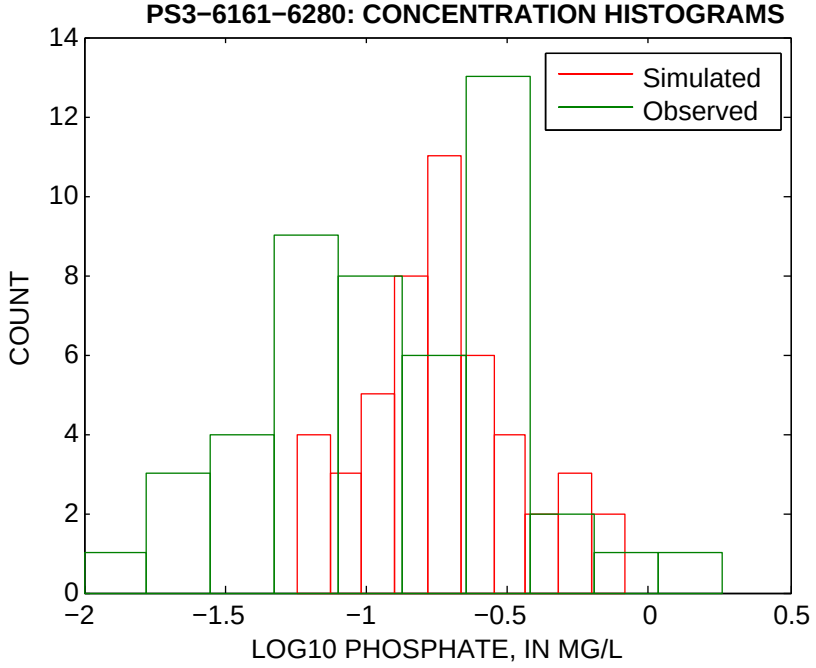
VERSION 2.1

ALL DATA
LOG10

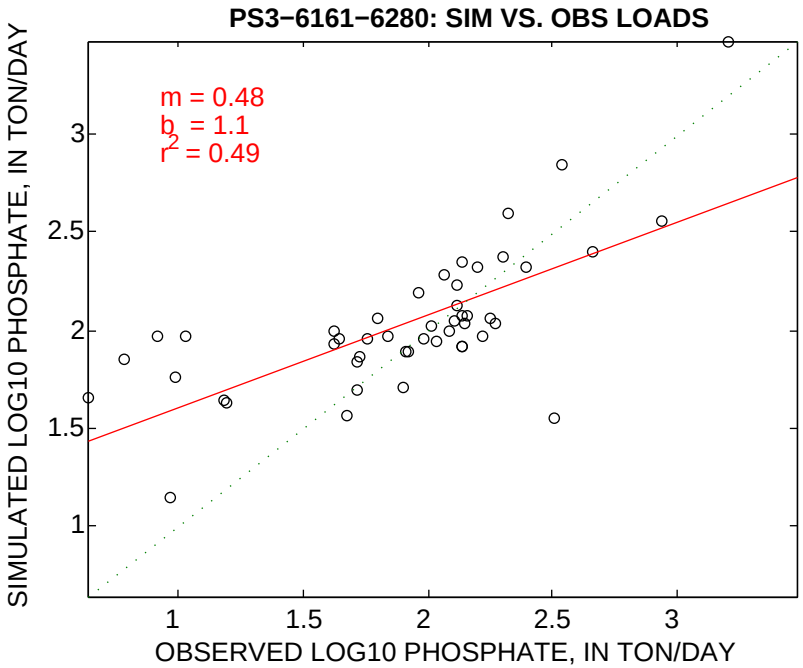


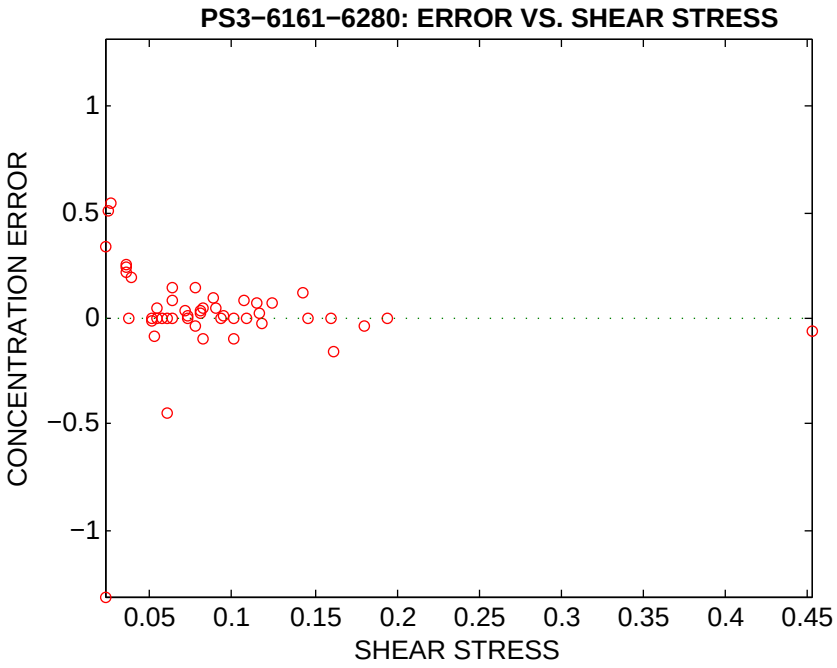


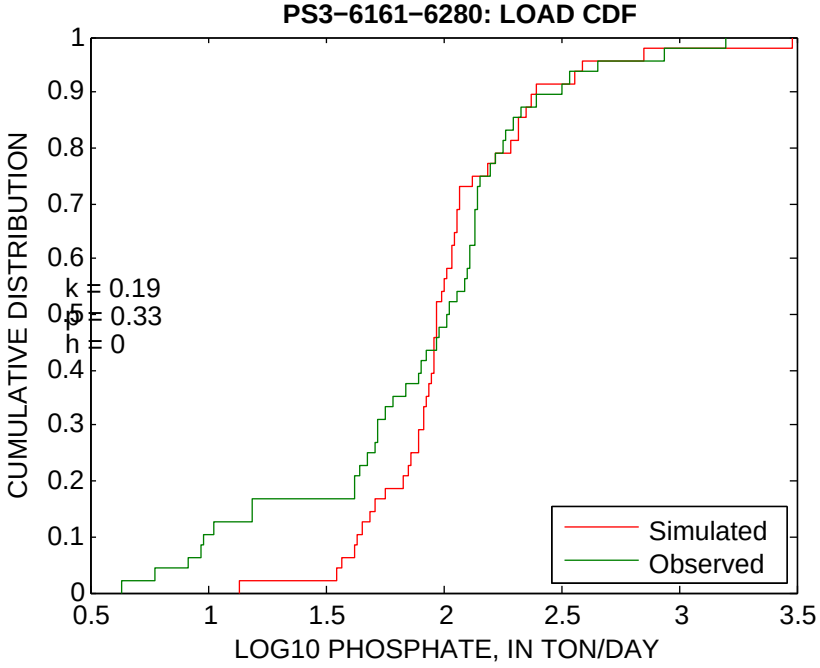


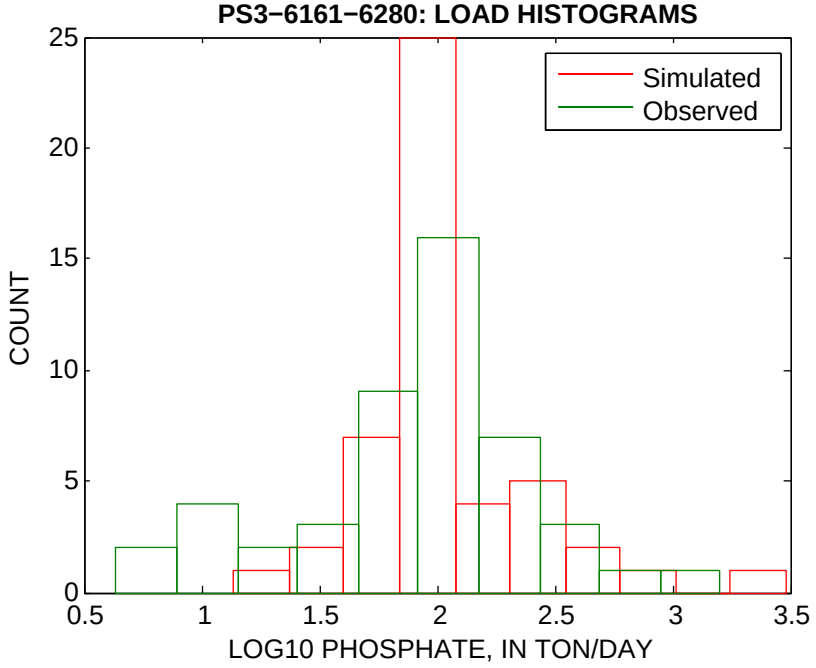


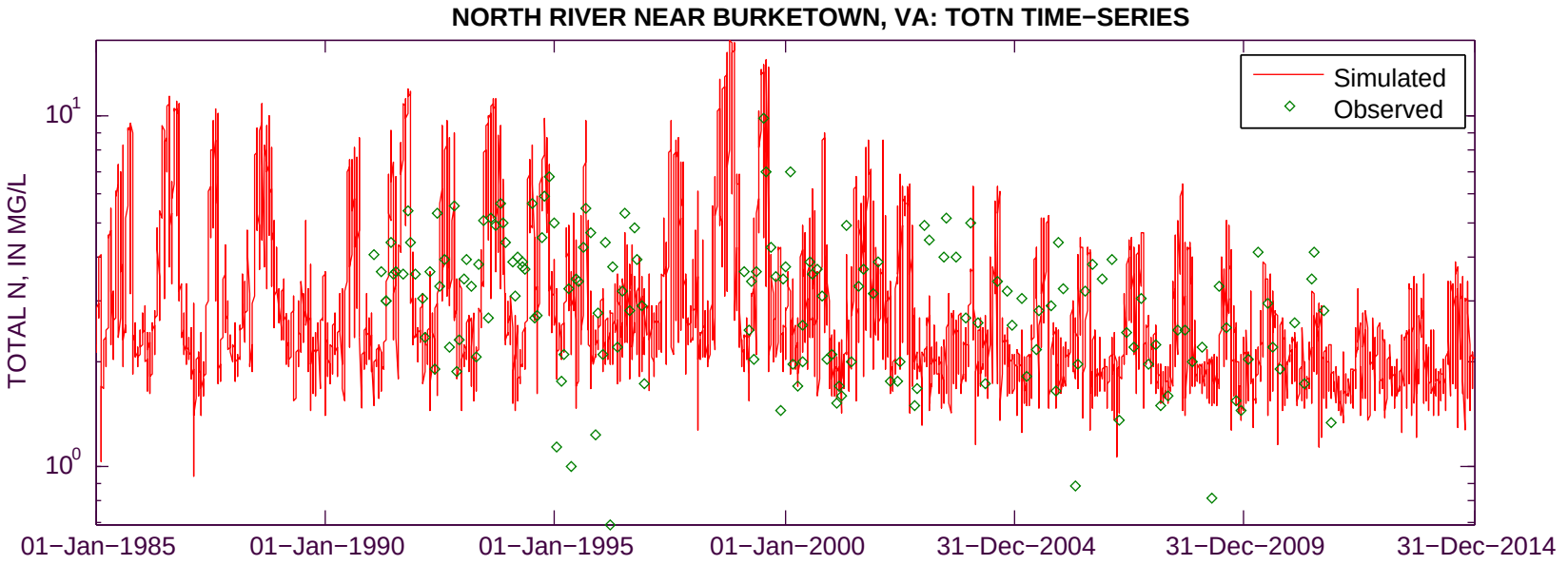
LOAD DATA
LOG10

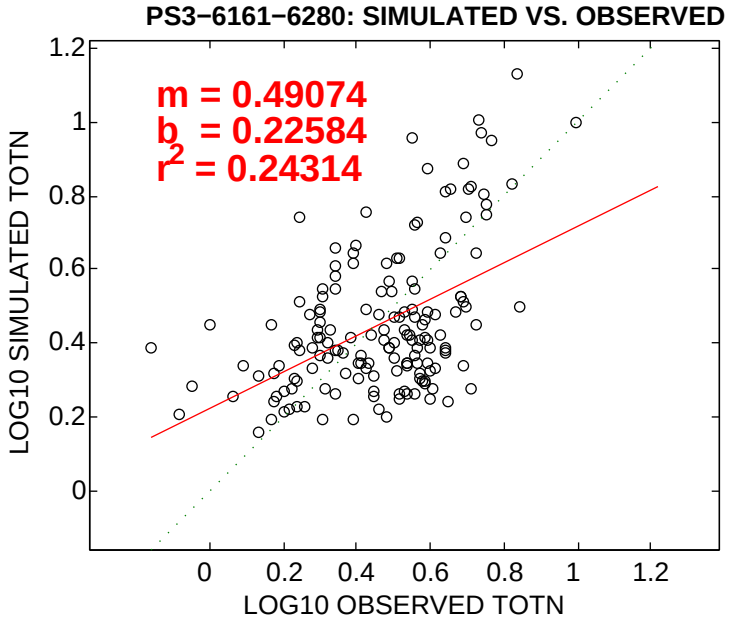


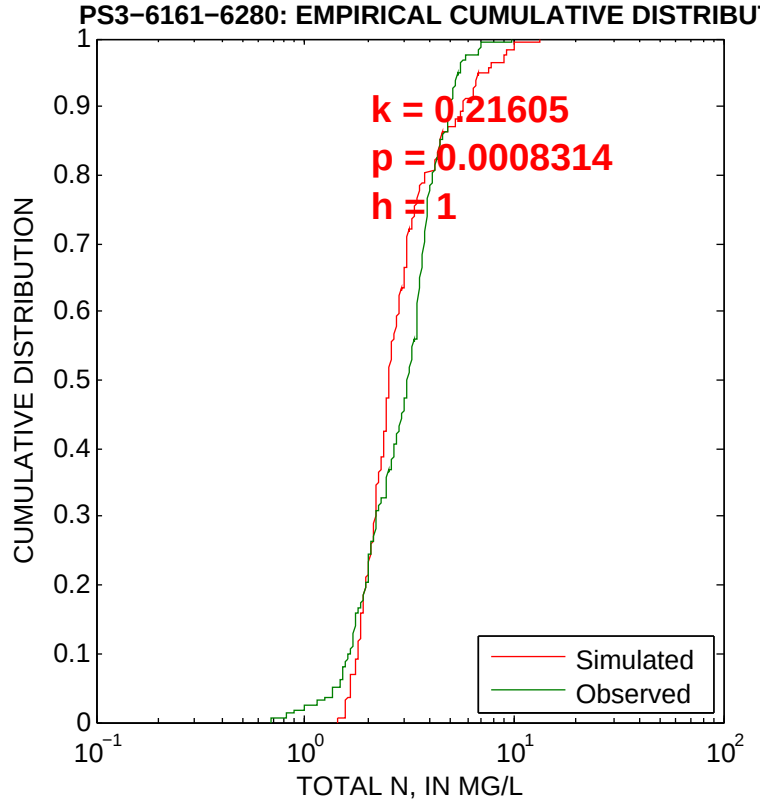












DATA SELECTION

scenario	file
P620171001WQ	TOTN.calib

plot: TOTN - total nitrogen

Dates: 1/1/1985 – 12/31/201

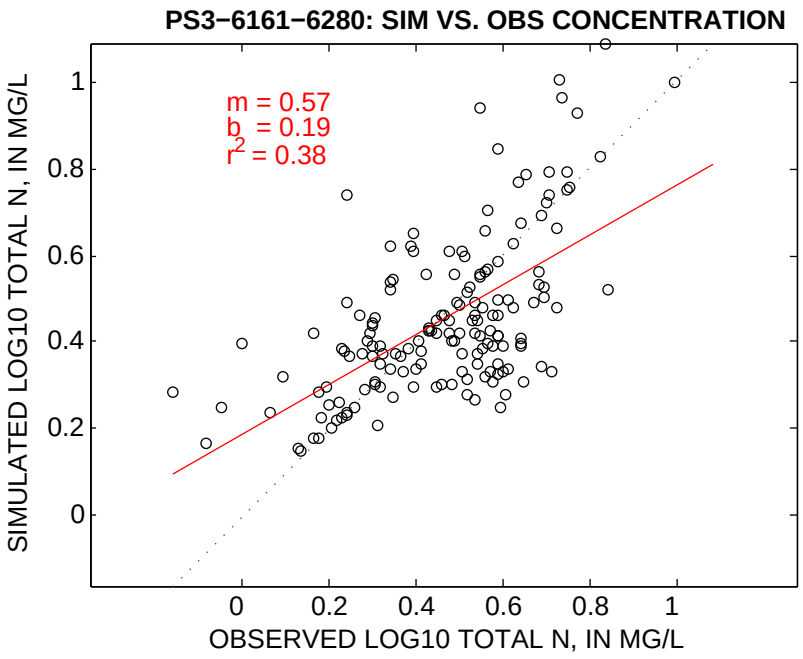
Drive	Directory	Observed
N/A	model	OBS20161101

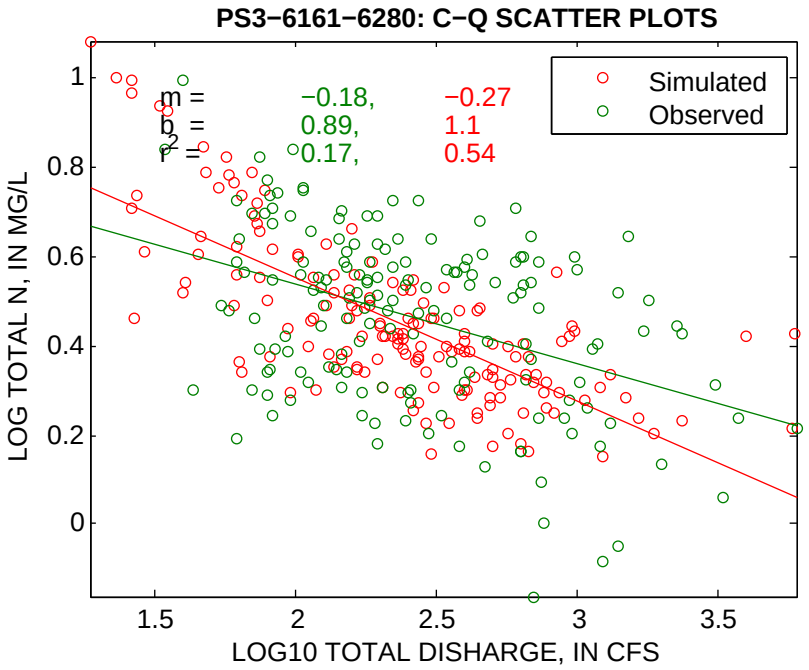
STATISTICS

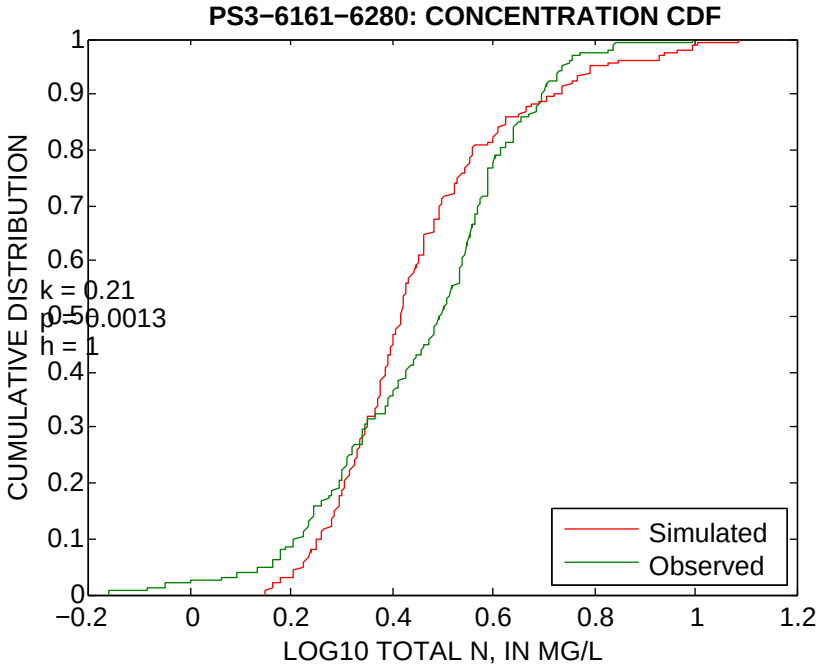
	n	162	162
		observe	simulate
min		0.69	1.4419
		-0.161151	0.158935
mean		3.18611	3.19062
		0.461889	0.452506
media		3.135	2.54335
		0.496224	0.405406
max		9.9	13.488
		0.995635	1.12995
varian		1.91678	3.6421
		0.0383342	0.0379693
JB		0.001	0.001
		0.069257	0.001
		ra	log
%		0.141471	-2.03145
err.va		2.49585	0.0387682
rel.std.err		1.30211	1.01132
mod.eff		-0.302106	-0.0113212

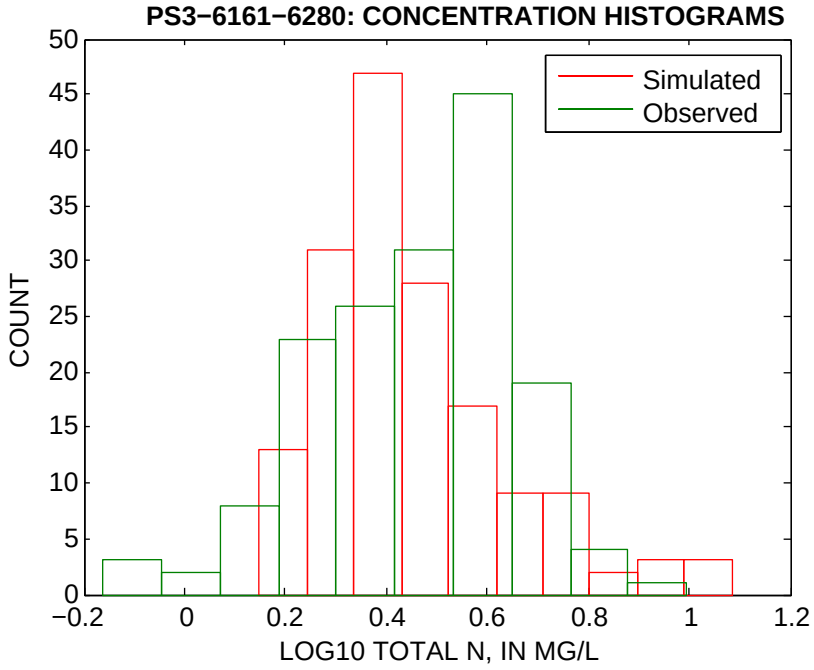
VERSION 2.1

ALL DATA
LOG10

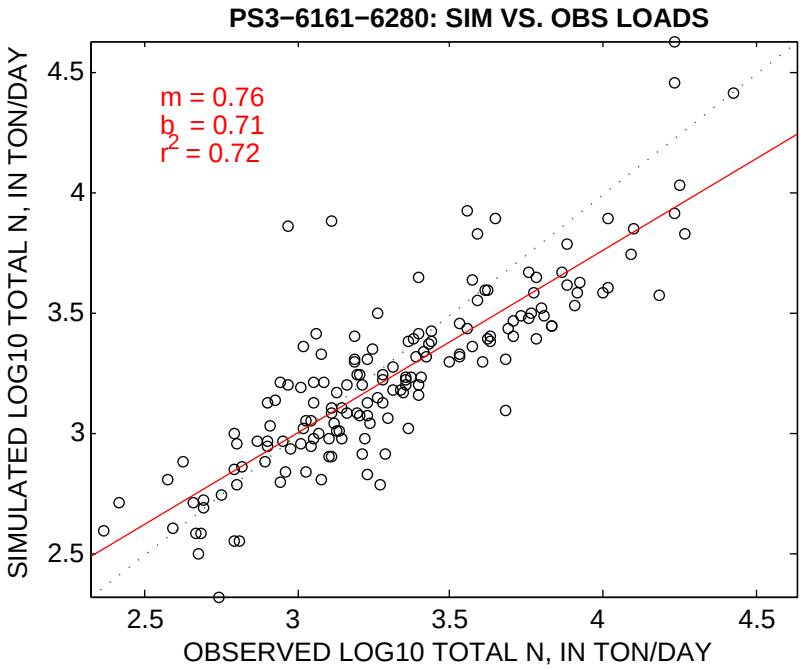


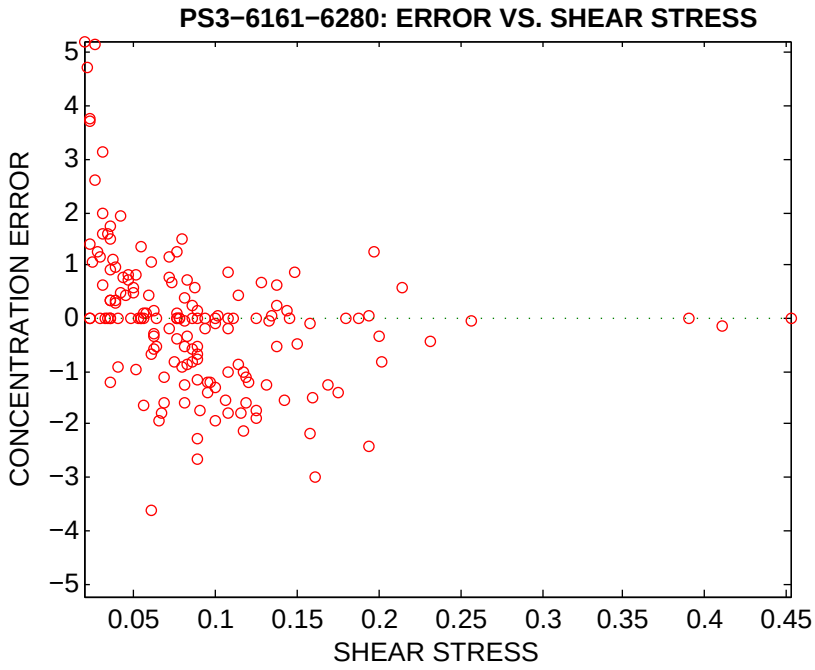


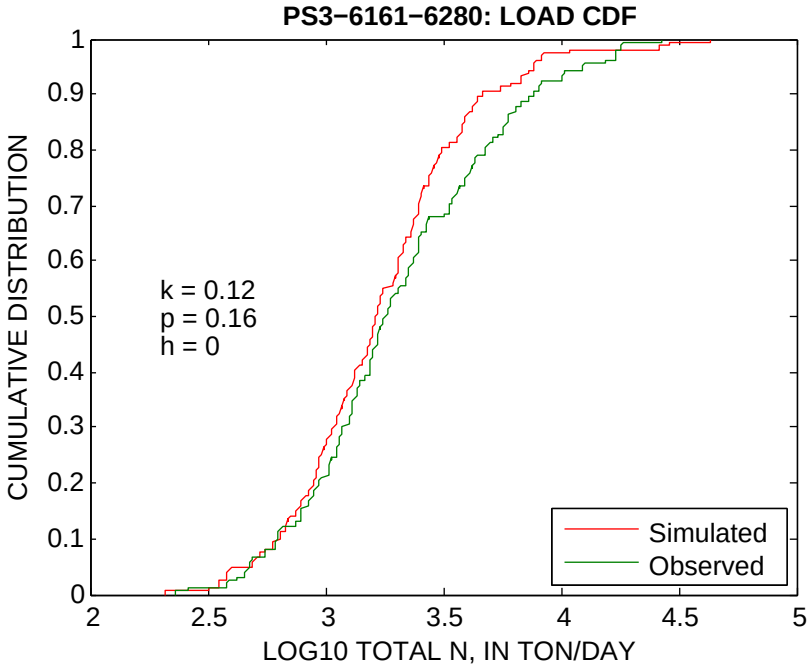


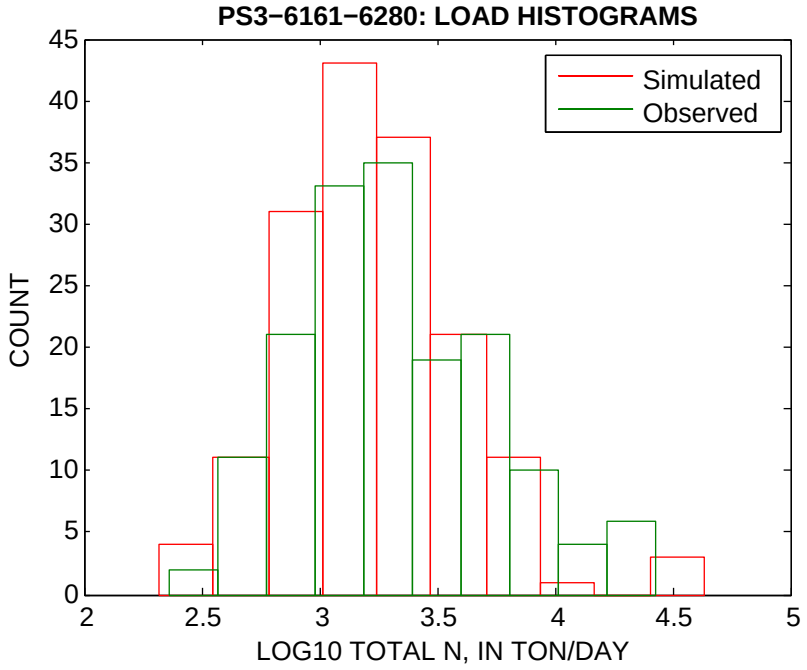


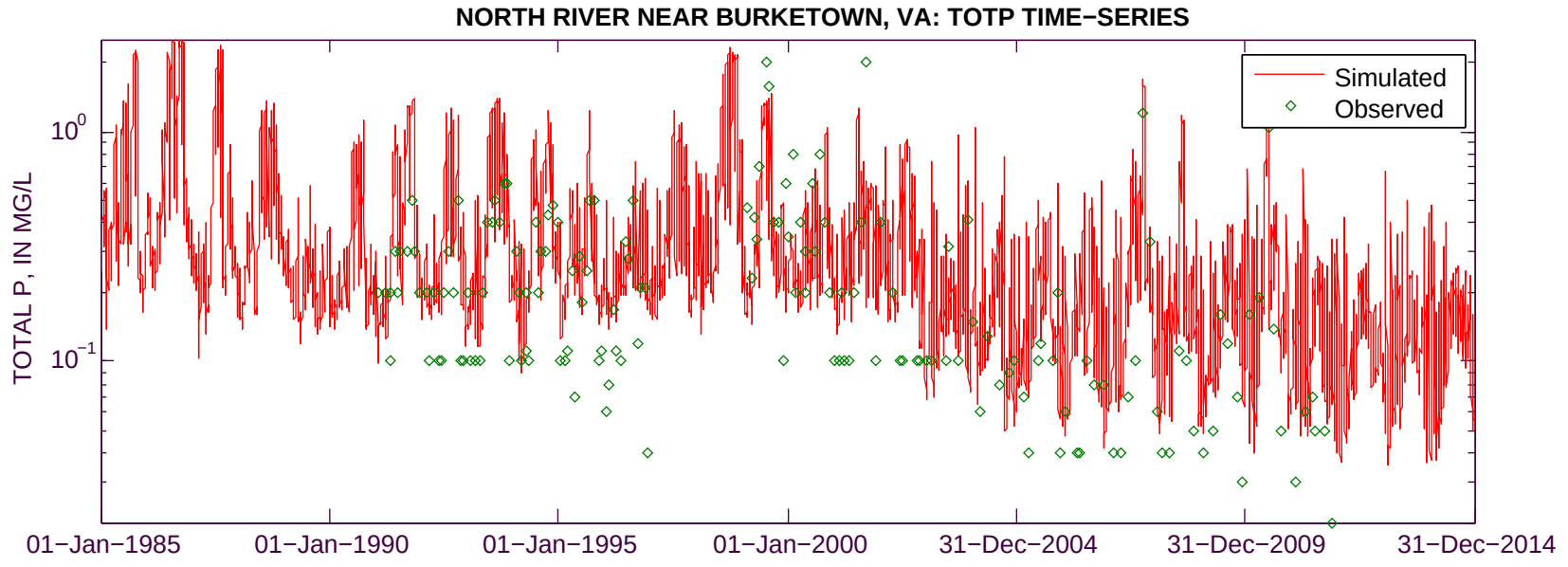
LOAD DATA
LOG10

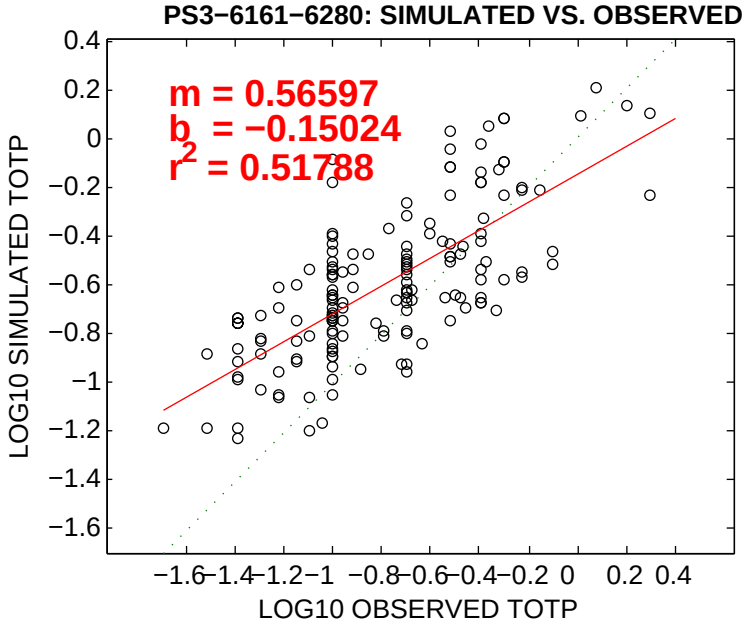


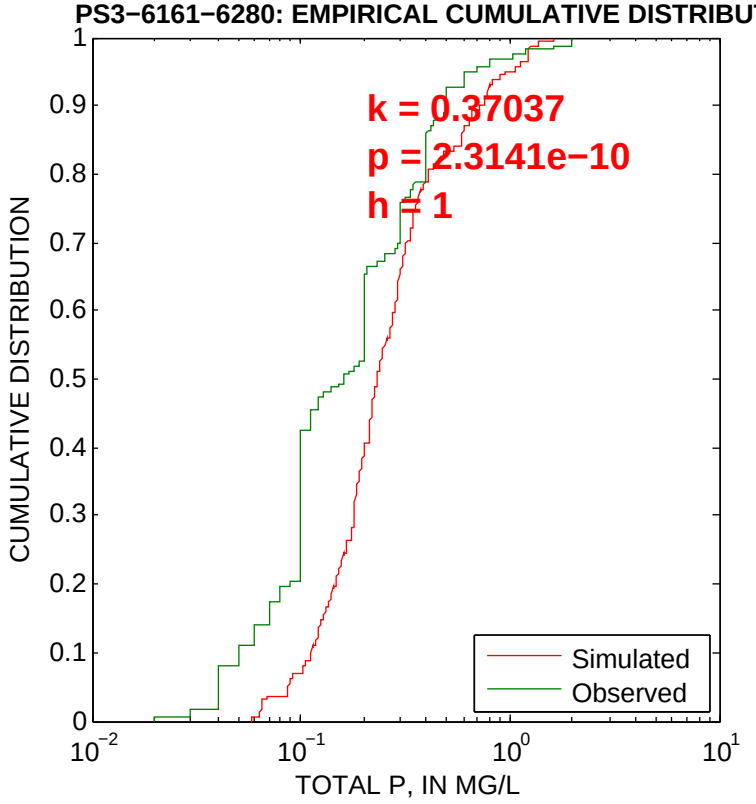












DATA SELECTION

scenario	file
P620171001WQ	TOTP.calib

plot: TOTP - total phosphorus

Dates: 1/1/1985 – 12/31/201

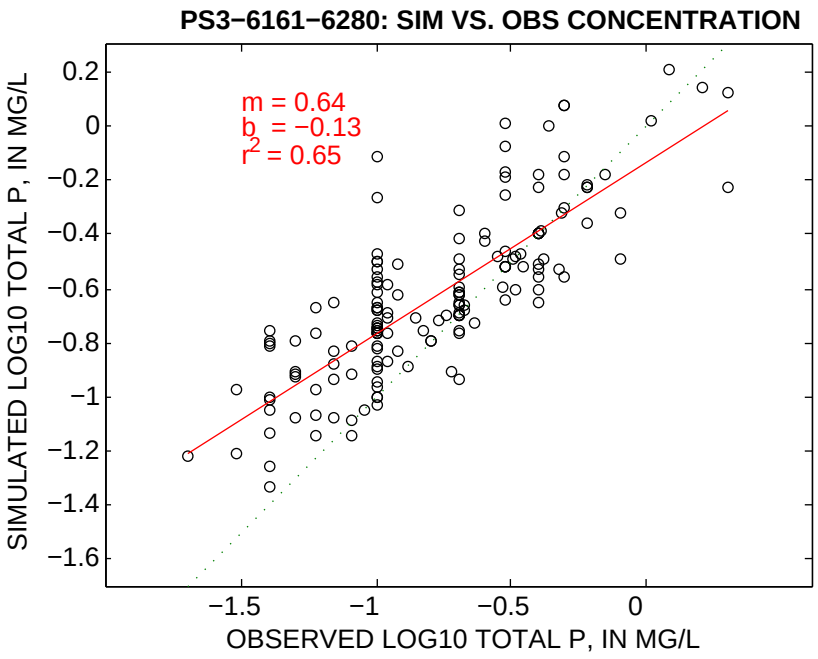
Drive	Directory	Observed
N/A	model	OBS20161101

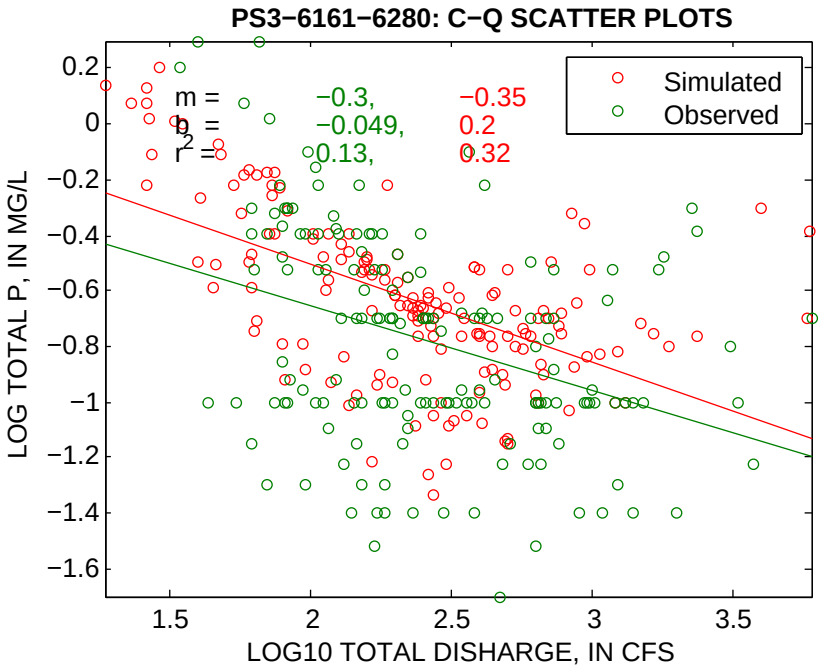
STATISTICS

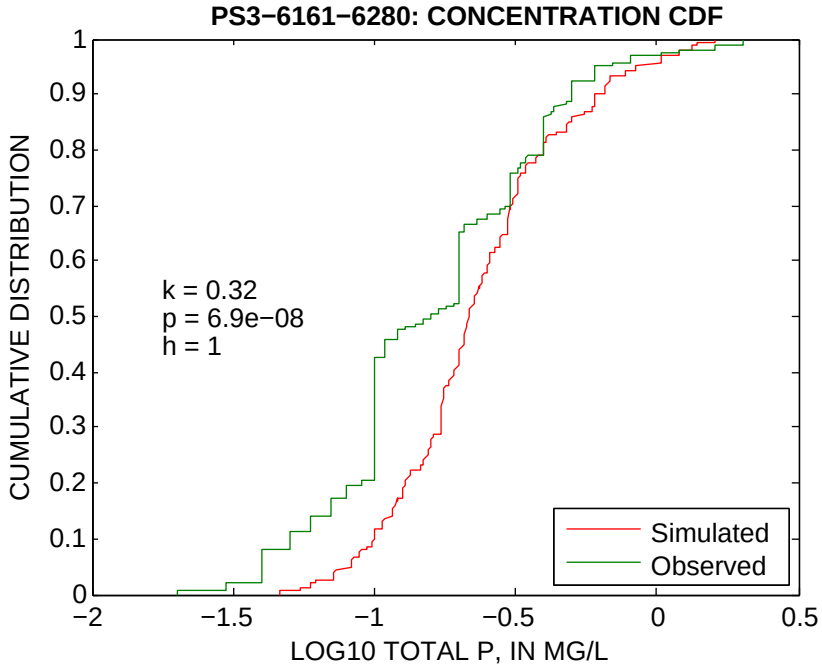
	n	162	162
		observe	simulate
min		0.02	0.05814
		-1.69897	-1.23552
mean		0.248889	0.330478
		-0.786205	-0.595204
media		0.16	0.23107
		-0.79588	-0.636257
max		2	1.6314
		0.30103	0.21256
varian		0.0869702	0.0805016
		0.148237	0.0916872
JB		0.001	0.001
		0.21614	0.058519
		ra	log
%		32.7815	-24.294
err.va		0.0627854	0.108838
rel.std.err		0.721918	0.734214
mod.eff		0.278082	0.265786

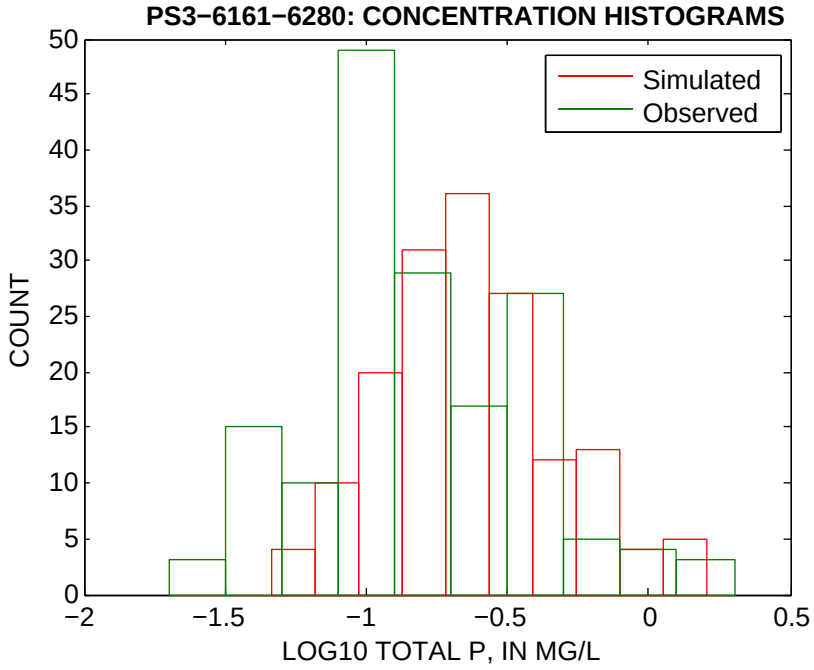
VERSION 2.1

ALL DATA
LOG10

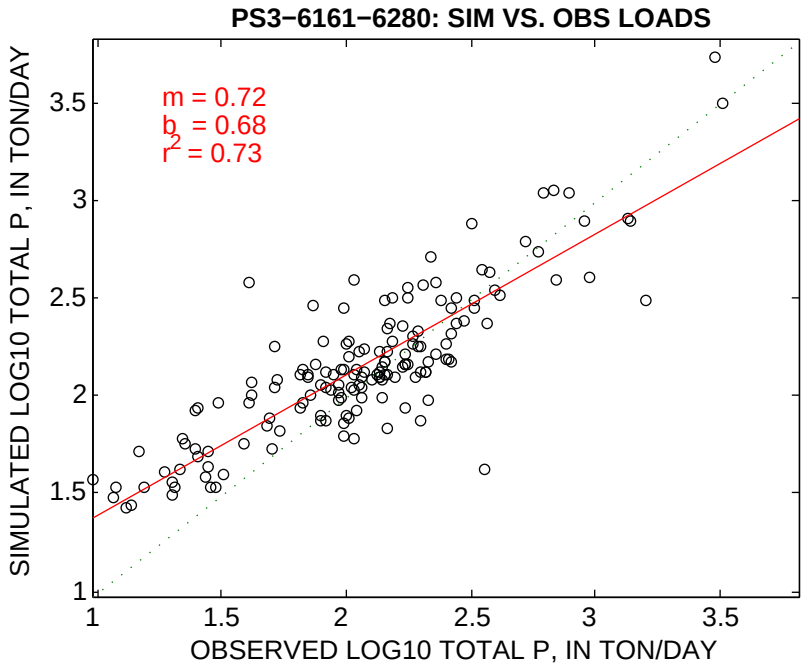


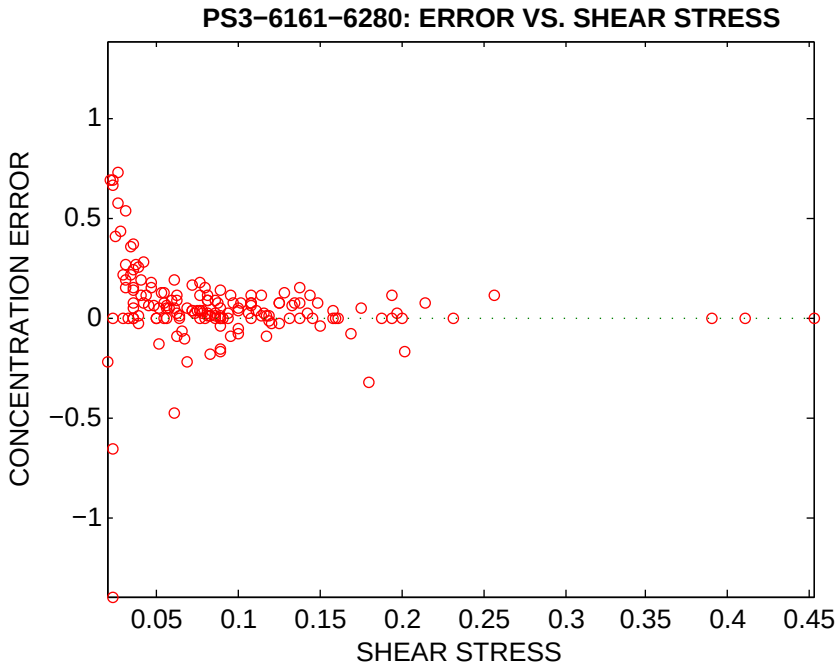


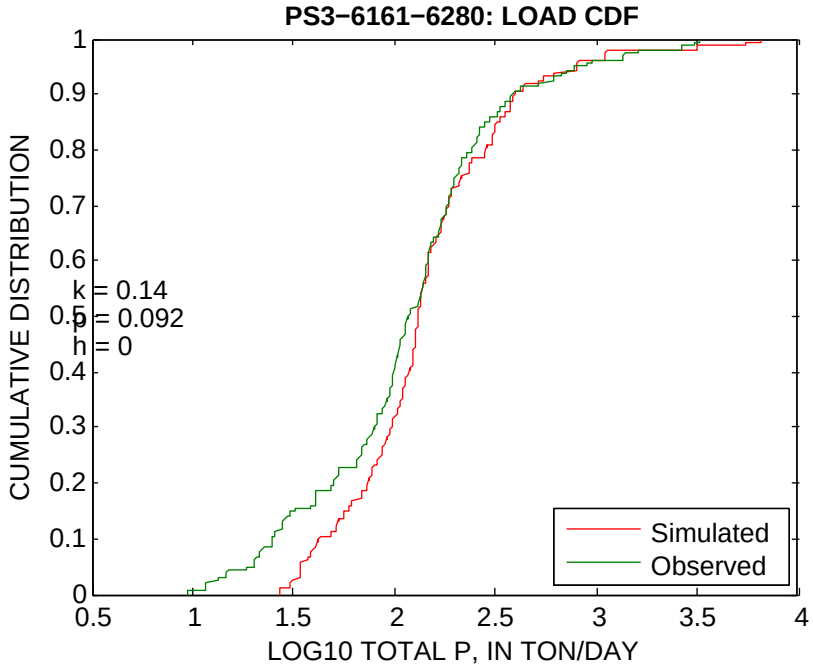


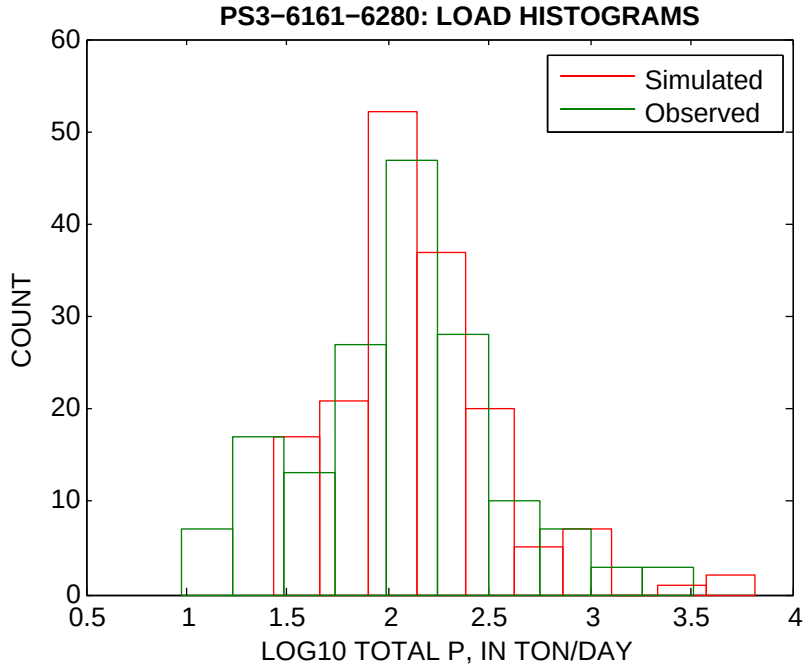


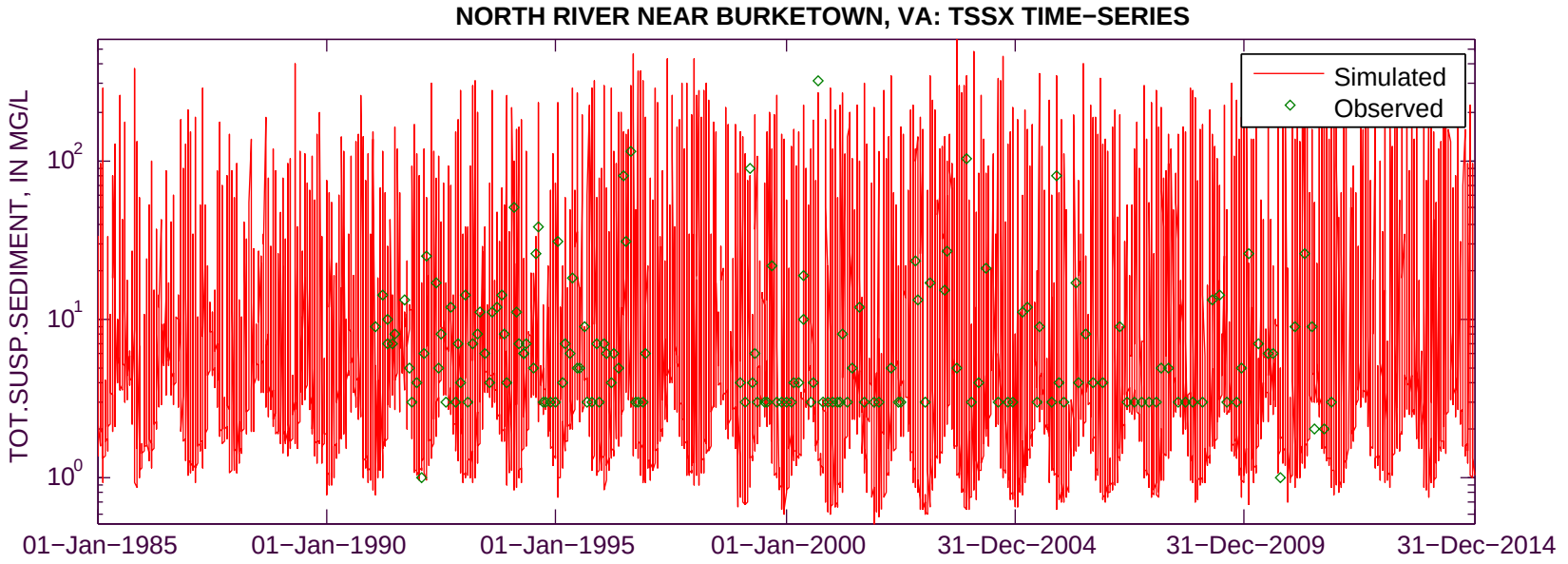
LOAD DATA
LOG10

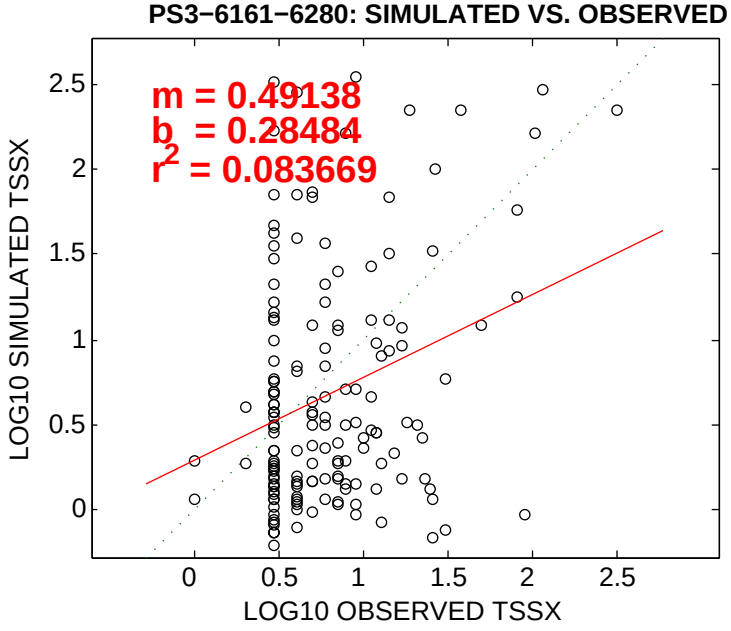


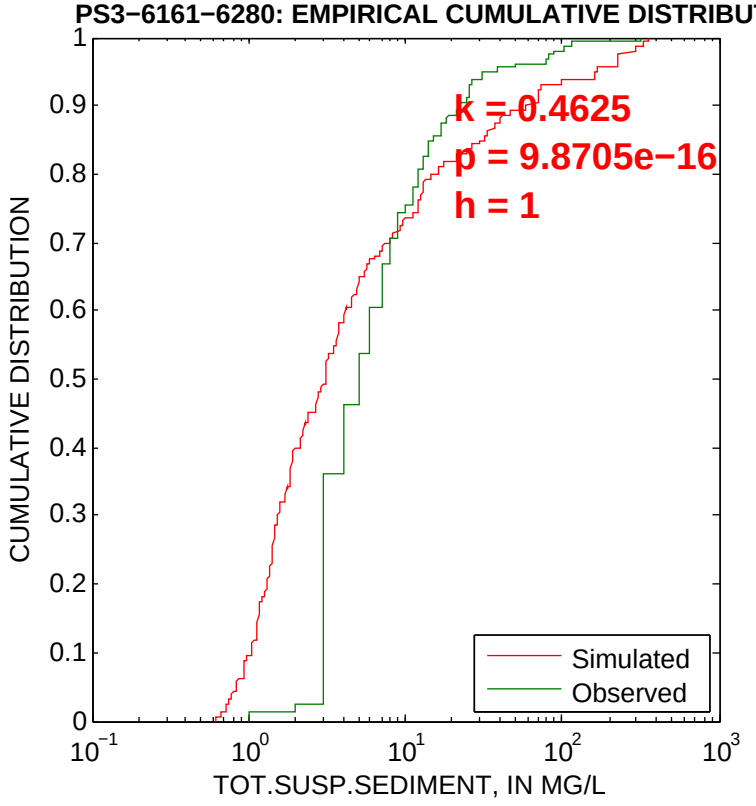












DATA SELECTION

scenario	file
P620171001WQ	TSSX.calib

plot: TSSX - total suspended ...

Dates: 1/1/1985 – 12/31/201

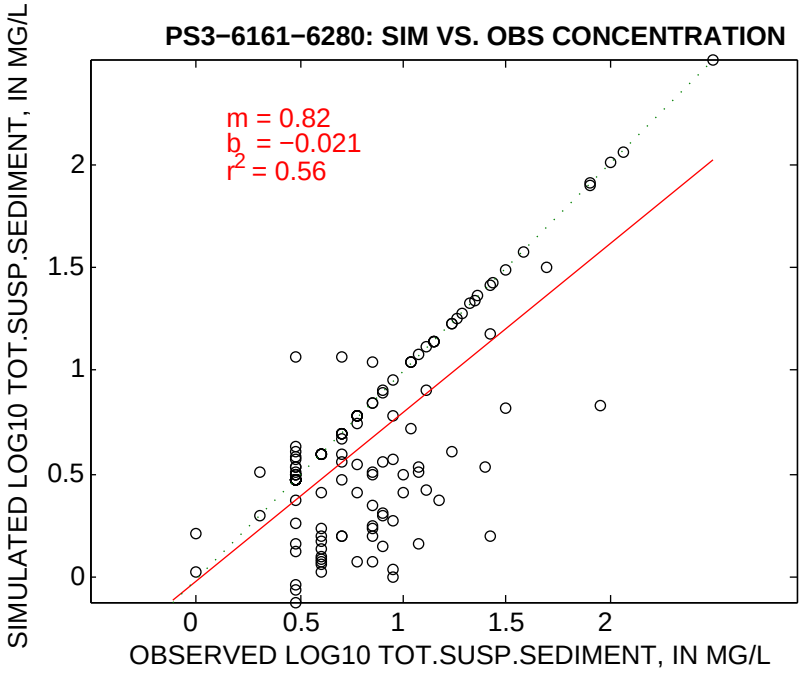
Drive	Directory	Observed
N/A	model	OBS20161101

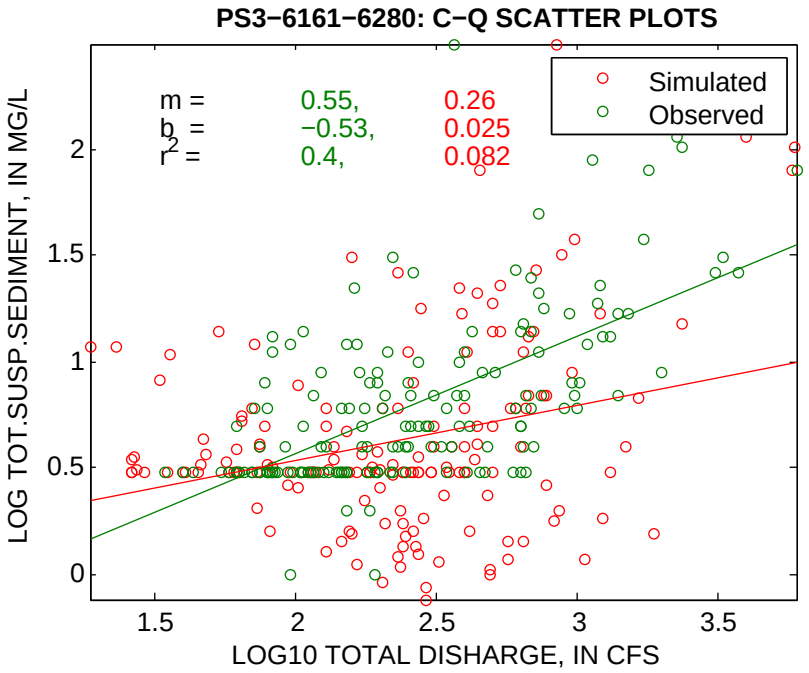
STATISTICS

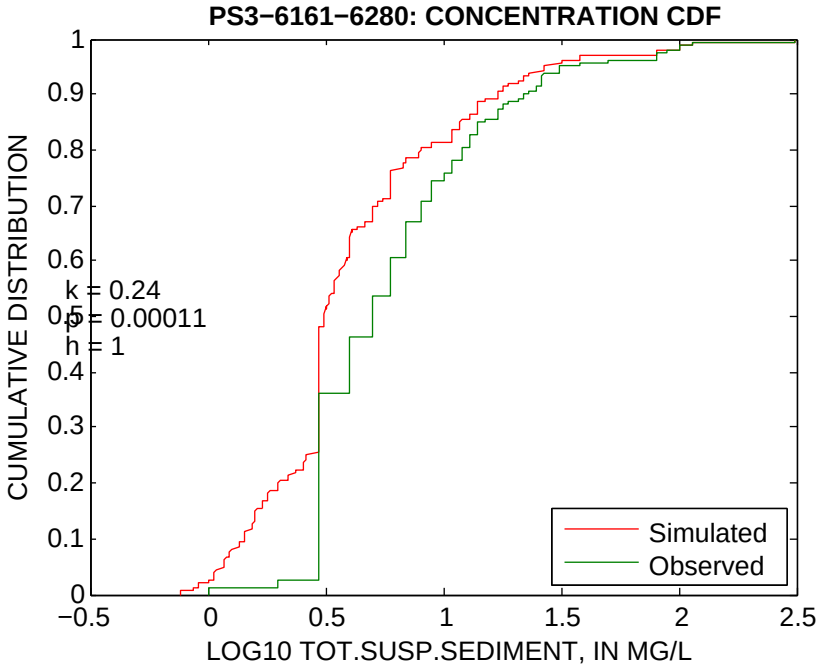
	n	160	160
		observe	simulate
min		1	0.61102
		0	-0.213945
mean		12.3063	24.0511
		0.800275	0.678082
media		5	3.1032
		0.69897	0.49181
max		316	351.3
		2.49969	2.54568
varian		867.761	3792.37
		0.162097	0.467788
JB		0.001	0.001
		0.001	0.001
		ra	log
%		95.4378	-15.2689
err.va		3384.67	0.485607
rel.std.err		3.90047	2.99577
mod.eff		-2.90047	-1.99577

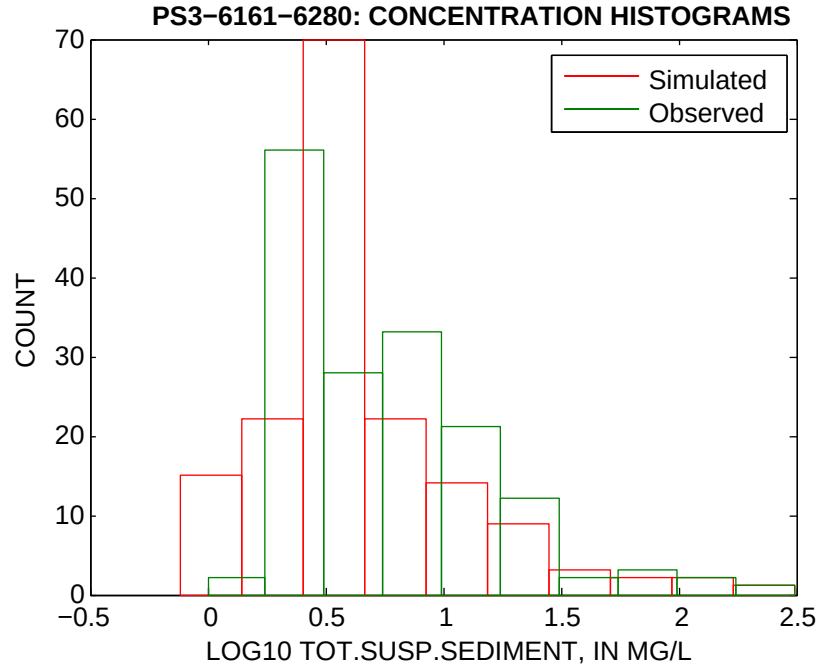
VERSION 2.1

ALL DATA
LOG10

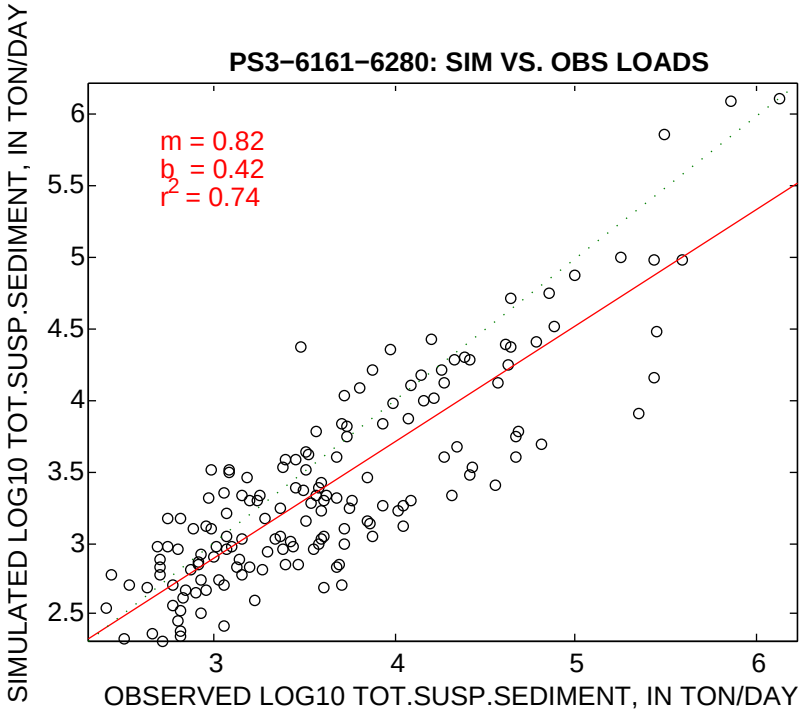


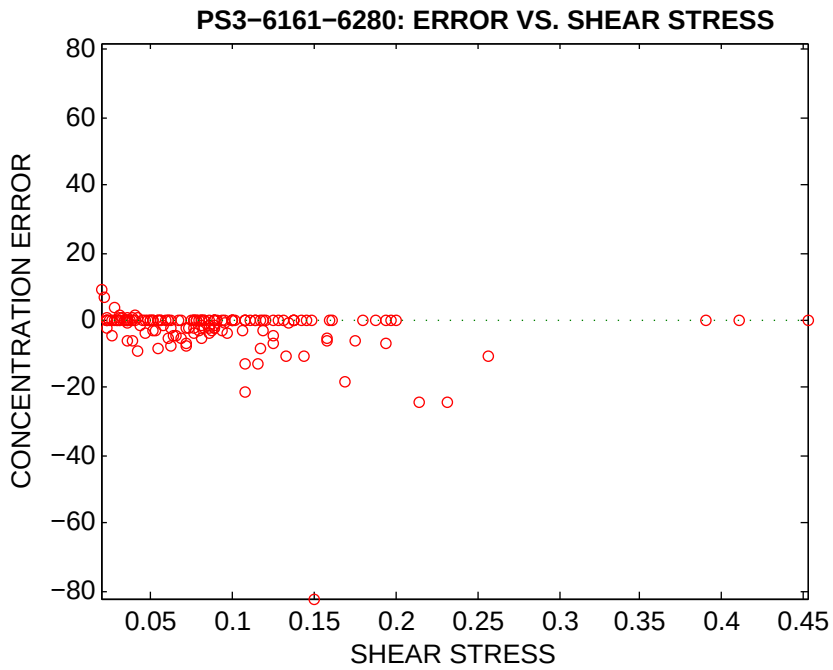


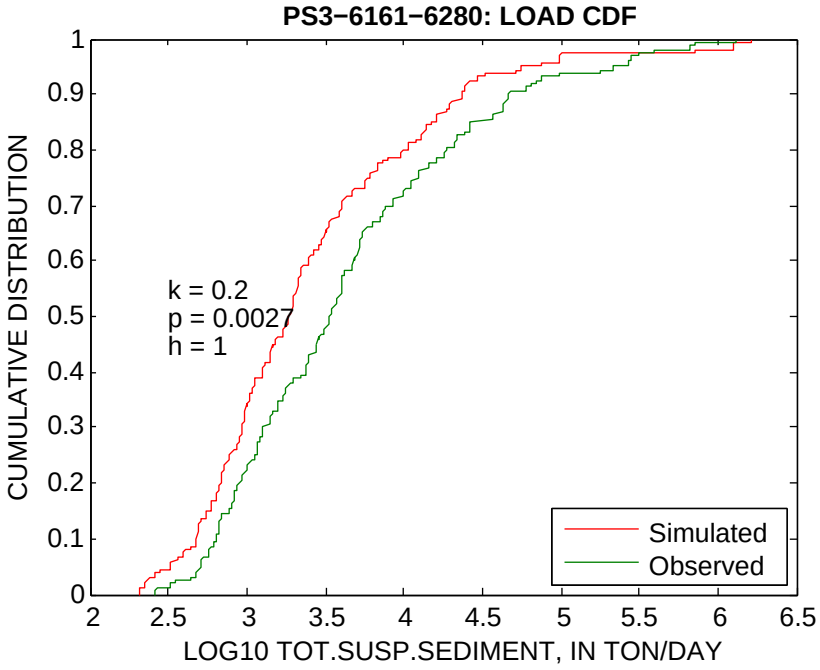


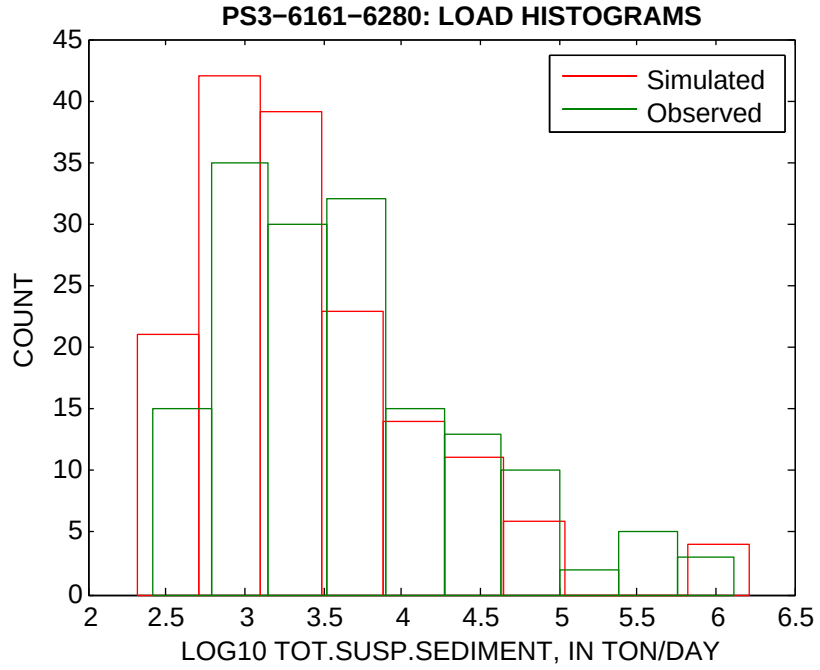


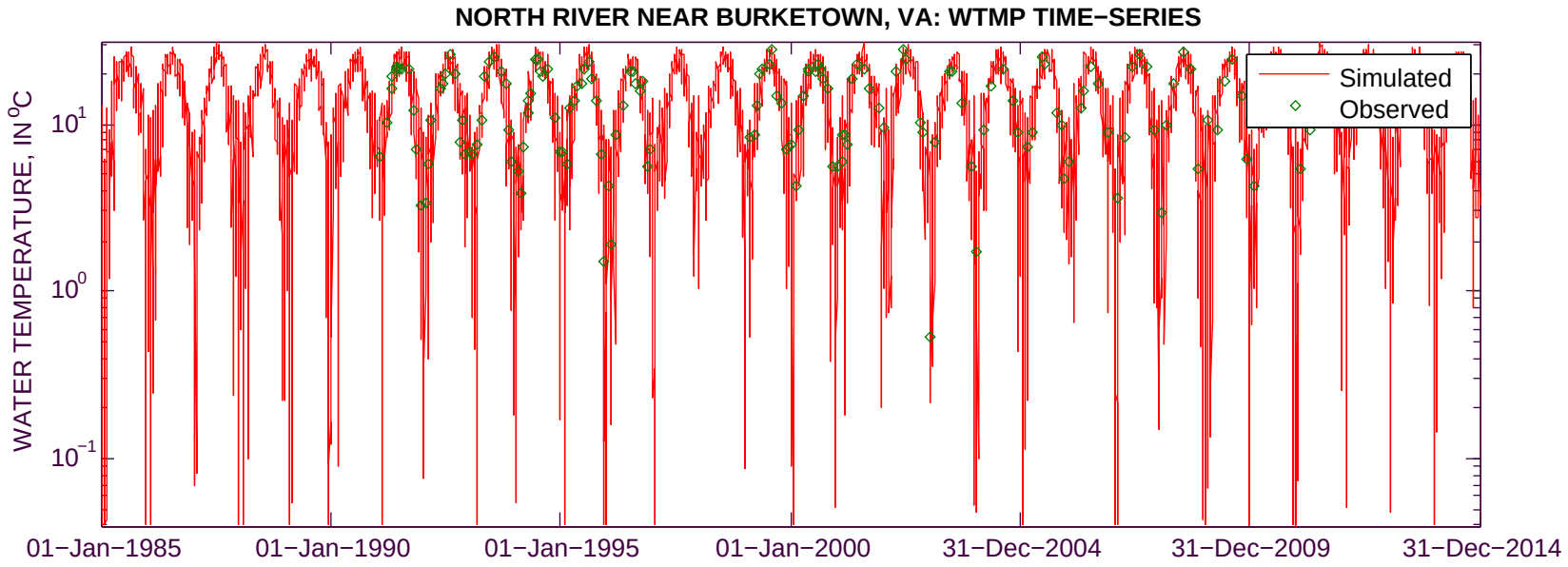
LOAD DATA
LOG10

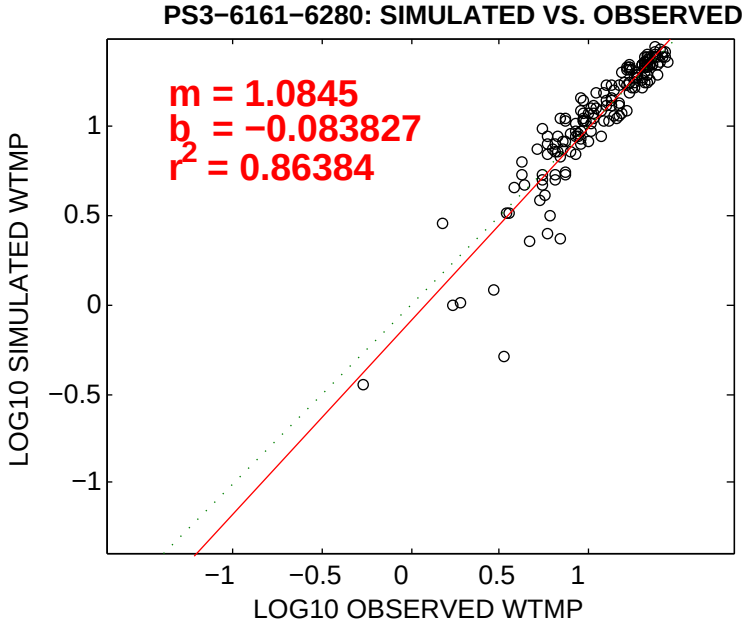


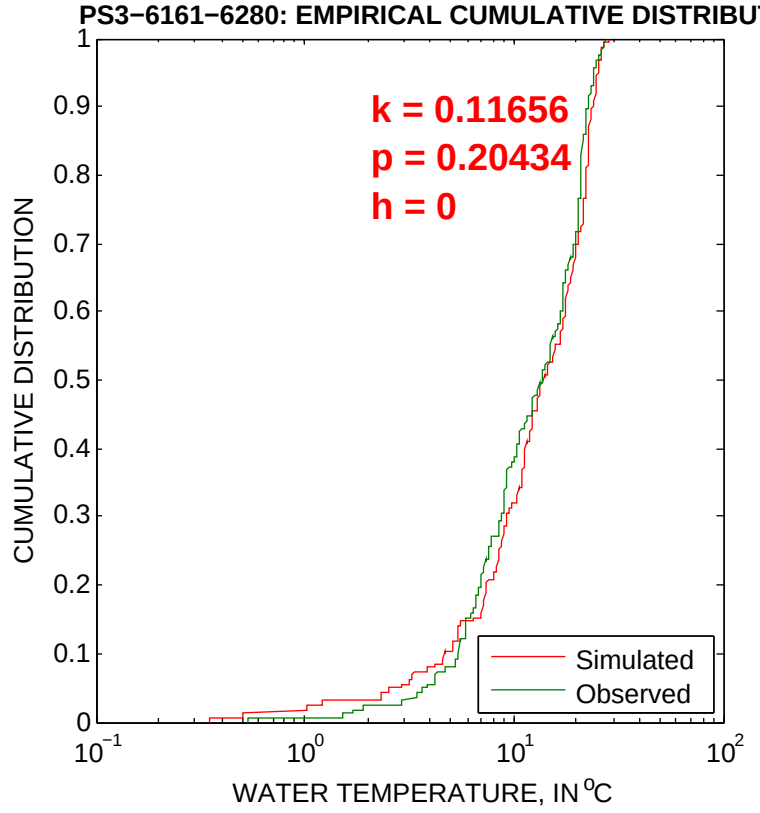












DATA SELECTION

scenario	file
P620171001WQ	WTMP.calib

plot: WTMP - water tempera...

Dates: 1/1/1985 – 12/31/201

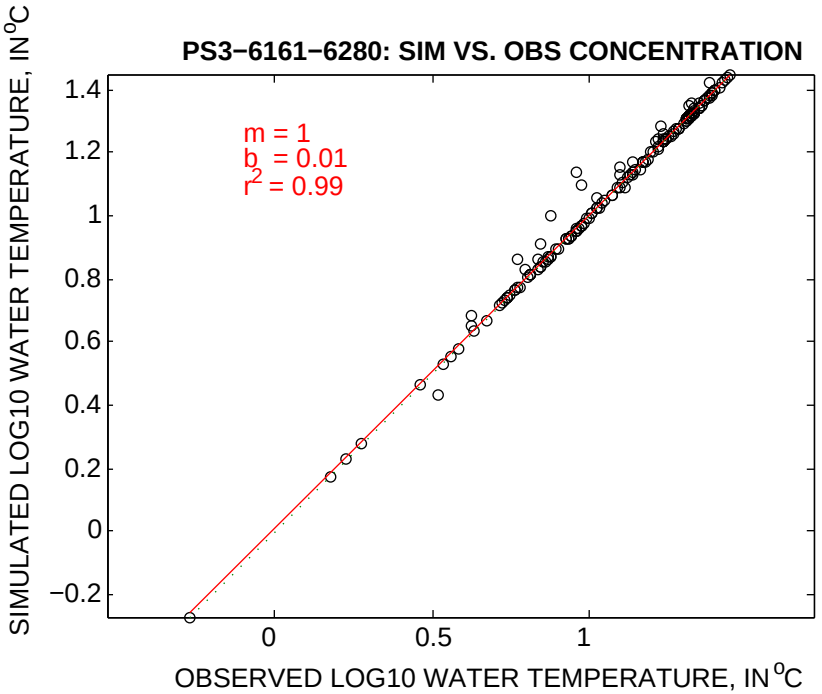
Drive	Directory	Observed
N/A	model	OBS20161101

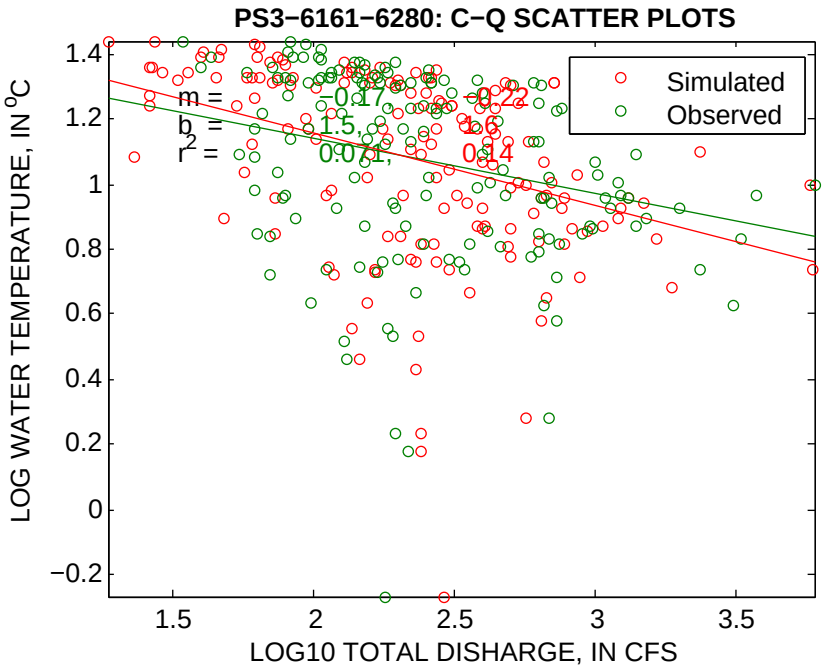
STATISTICS

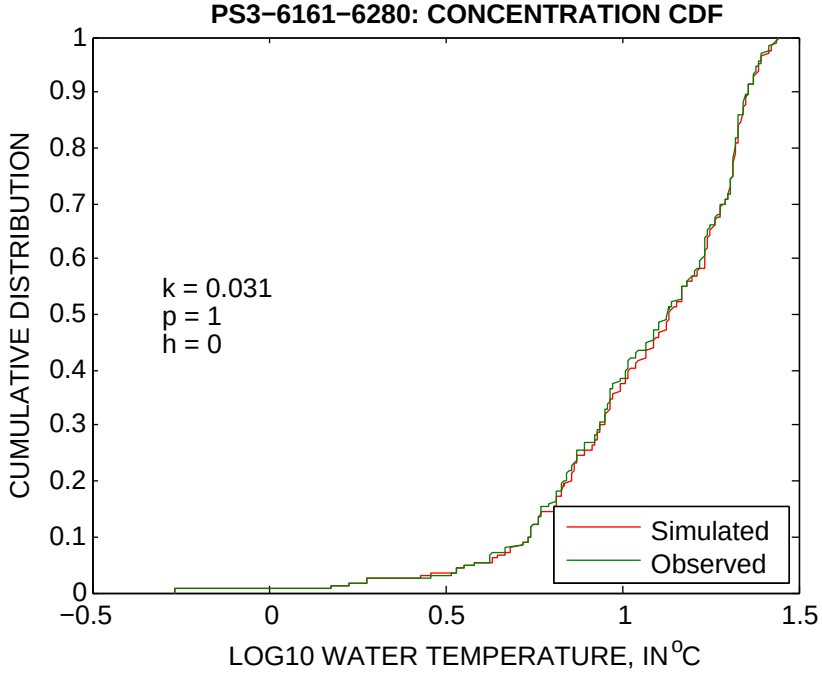
	n	163	163
		observe	simulate
min		0.54	0.35088
		-0.267606	-0.454841
mean		13.8556	14.5256
		1.06783	1.07427
media		13.6	14.014
		1.13354	1.14656
max		27.7	28.567
		1.44248	1.45586
varian		48.1353	53.3636
		0.081472	0.110935
JB		0.013701	0.018044
		0.001	0.001
		ra	log
%		4.83564	0.603664
err.va		5.56873	0.0157293
rel.std.err		0.115689	0.193064
mod.eff		0.884311	0.806936

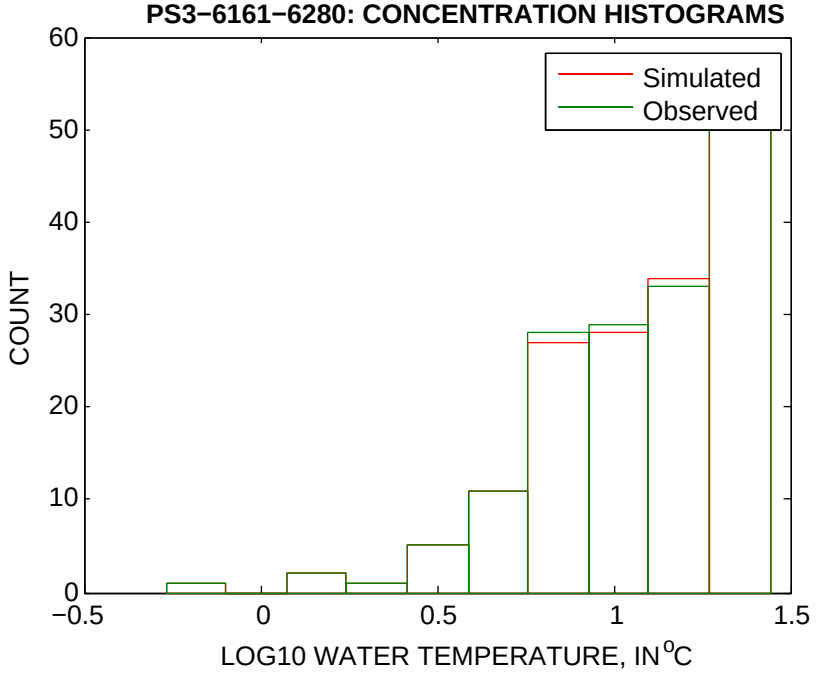
VERSION 2.1

ALL DATA
LOG10

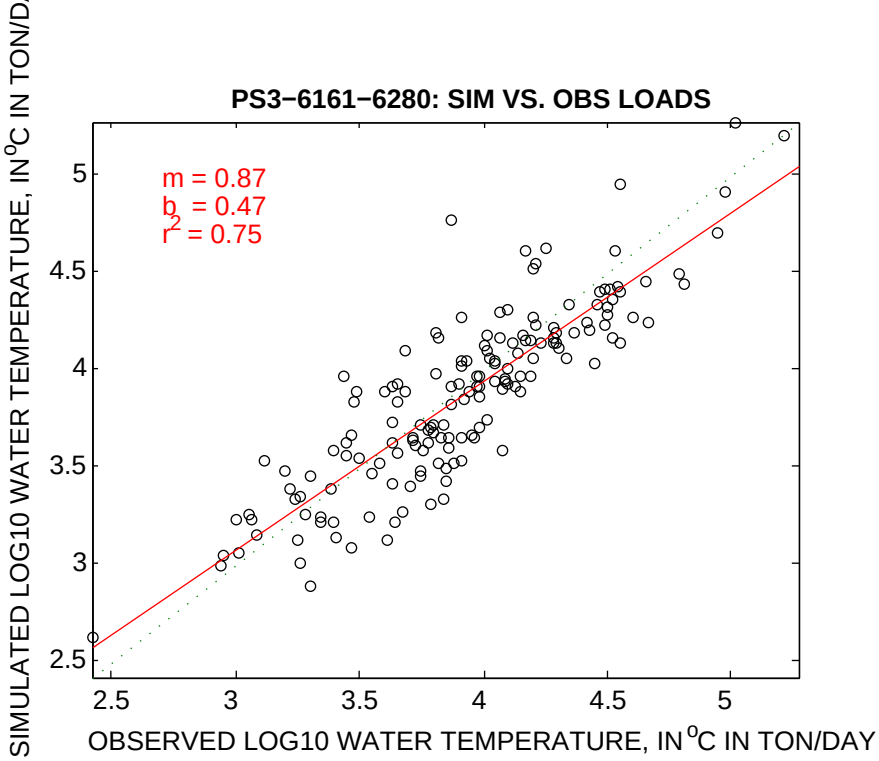


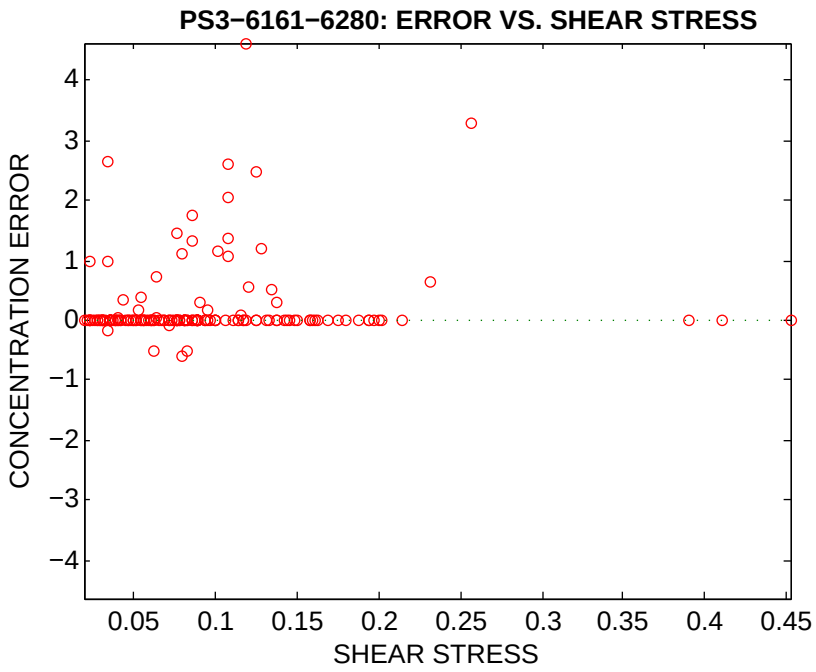


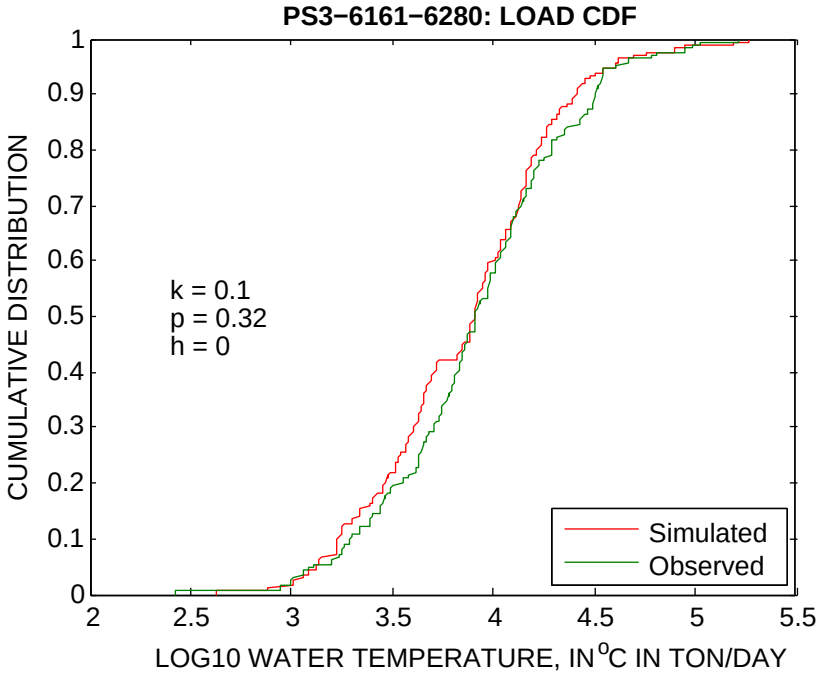


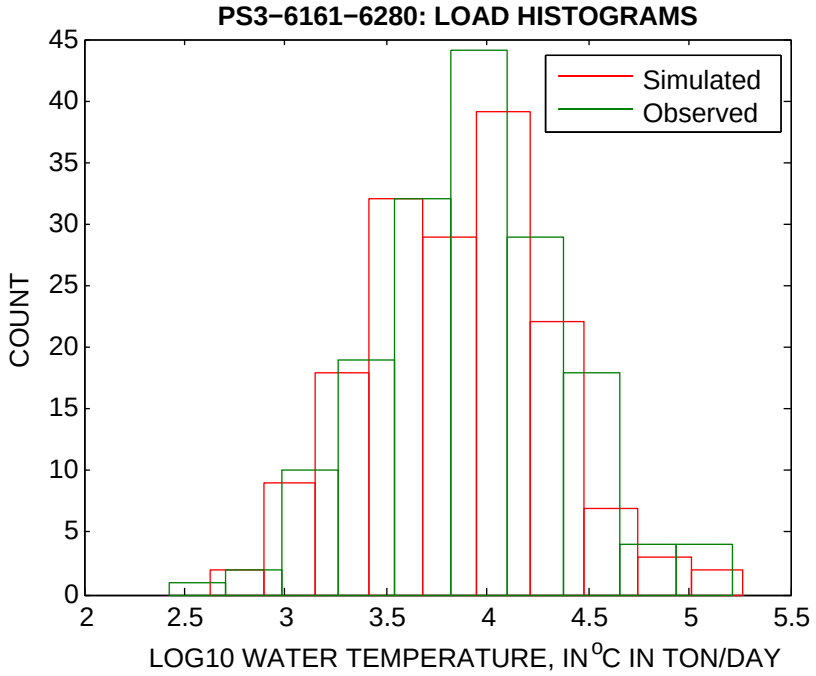


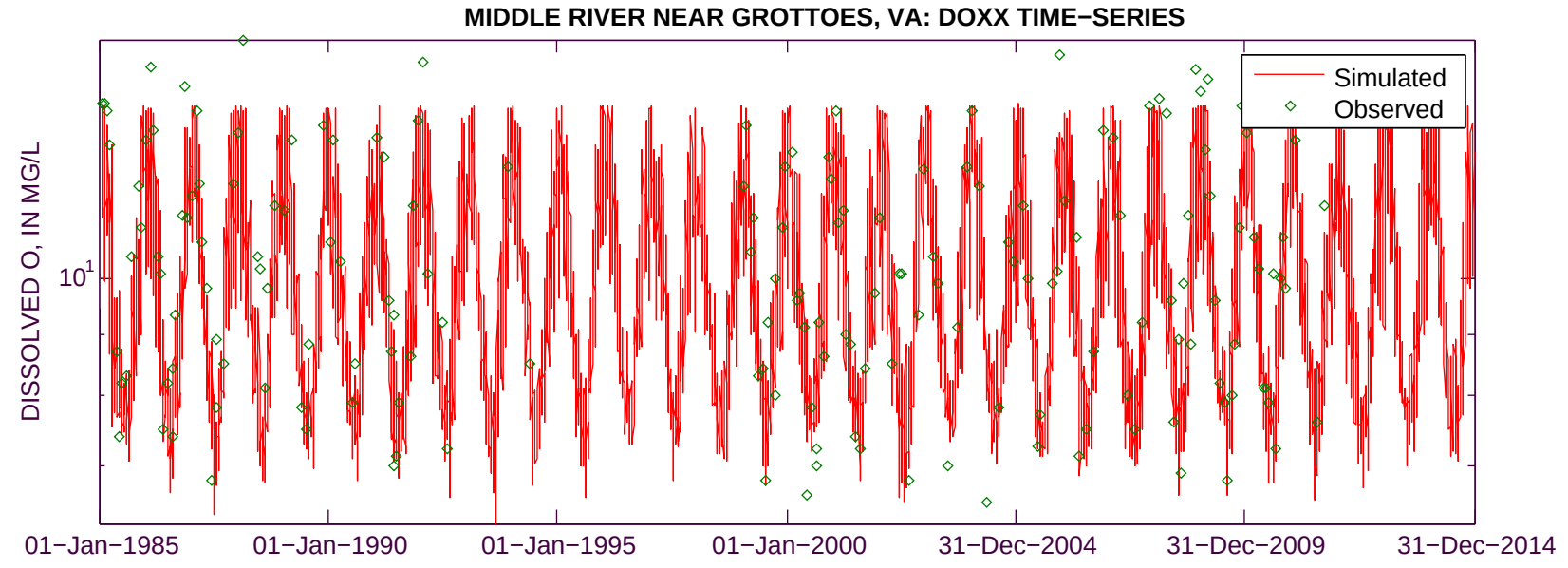
LOAD DATA
LOG10

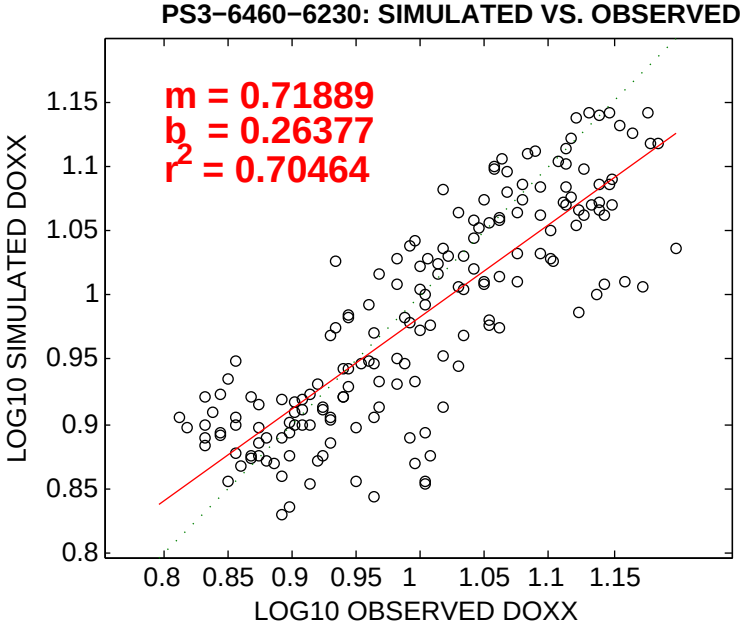


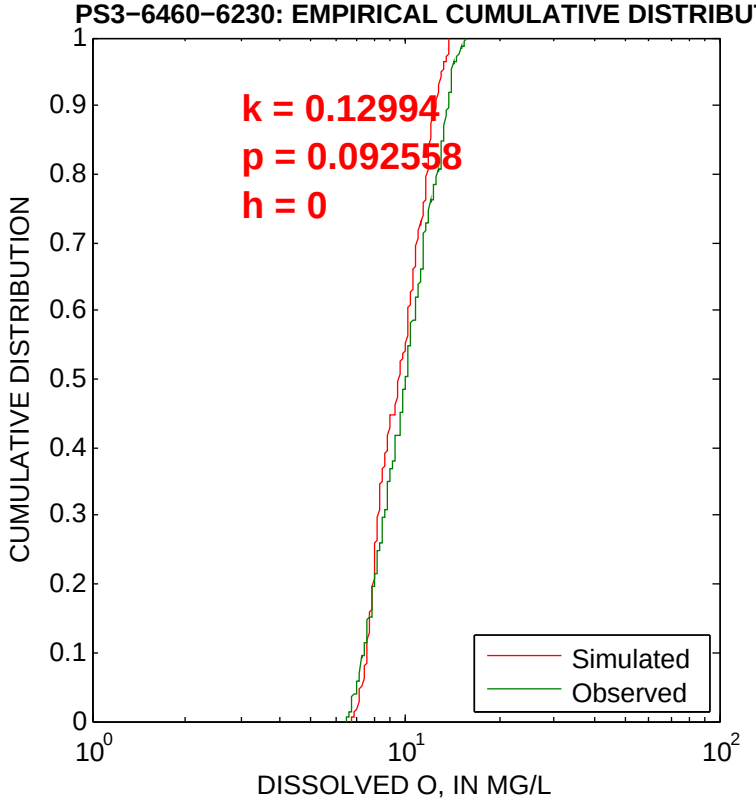












DATA SELECTION

scenario	file
P620171001WQ	DOXX.calib

plot: DOXX - dissolved oxygen

Dates: 1/1/1985 – 12/31/201

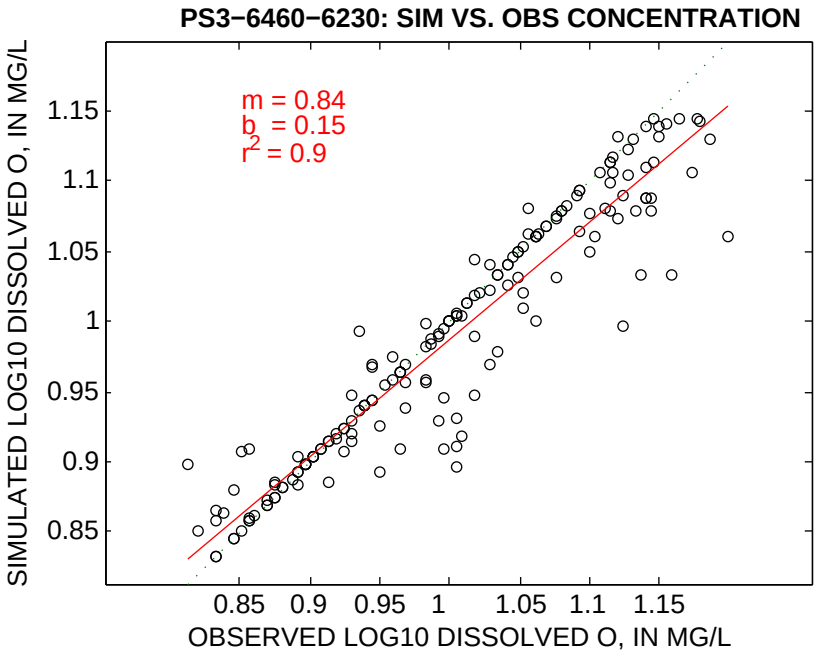
Drive	Directory	Observed
N/A	model	OBS20161101

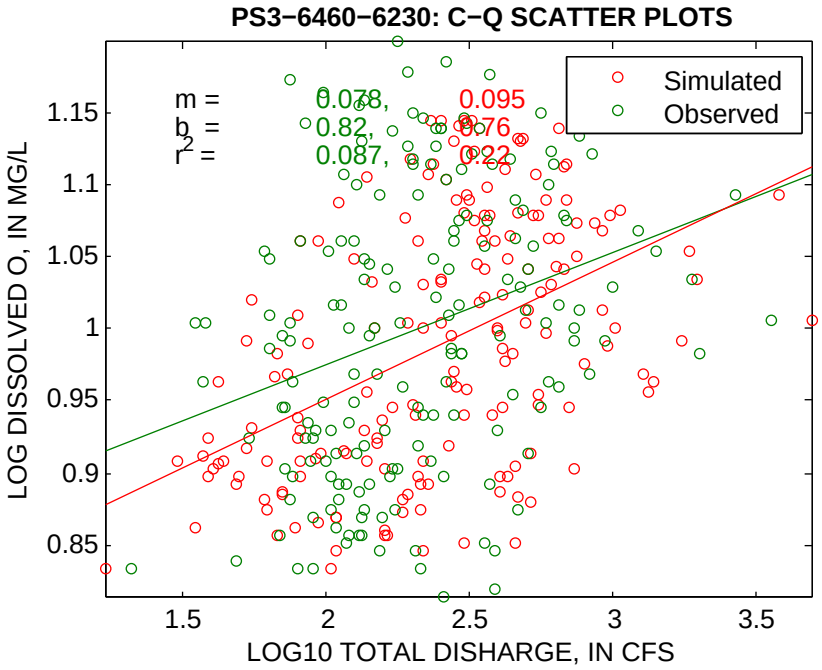
STATISTICS

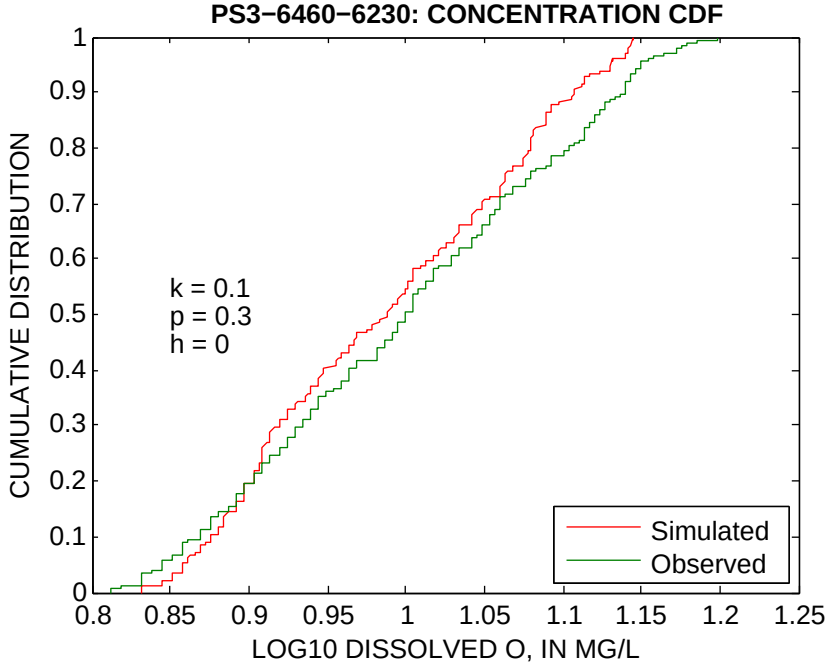
	n	177	177
		observe	simulate
min		6.5	6.7433
		0.812913	0.828872
mean		10.2603	9.79261
		1.00006	0.982702
media		10	9.558
		1	0.980367
max		15.8	13.864
		1.19866	1.14189
varian		5.42856	3.6877
		0.00971591	0.00712583
JB		0.015549	0.010259
		0.021849	0.011298
		ra	log
%		-4.55864	-1.73593
err.va		1.81833	0.00317557
rel.std.err		0.334956	0.326842
mod.eff		0.665044	0.673158

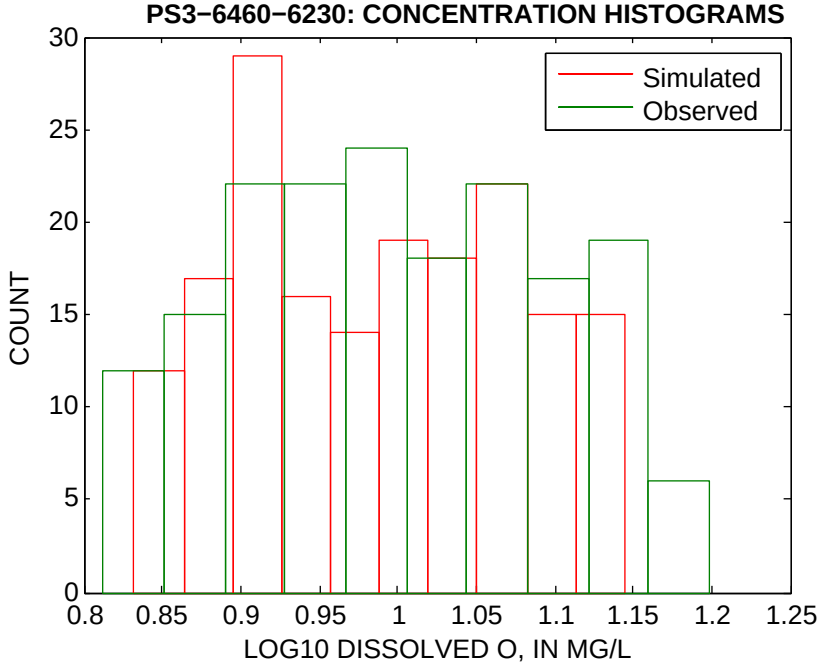
VERSION 2.1

ALL DATA
LOG10

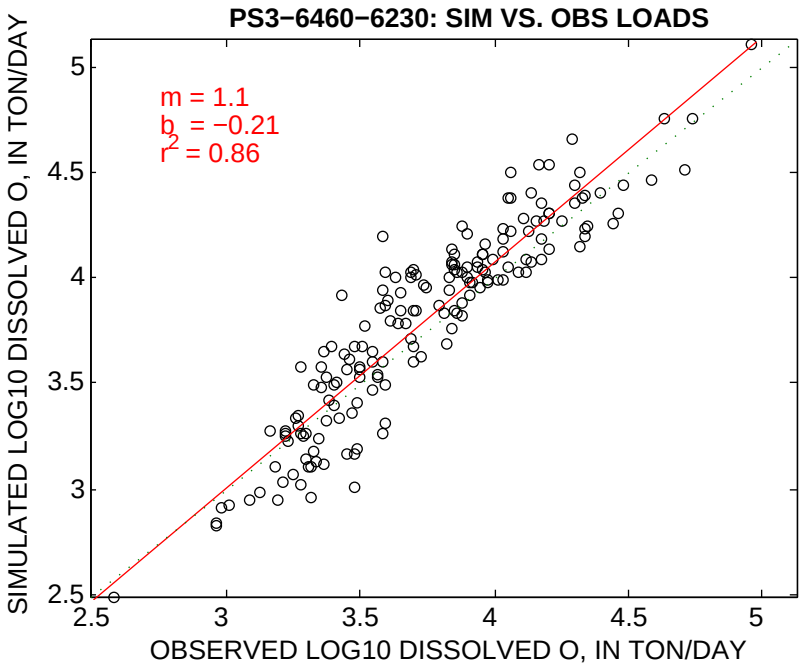


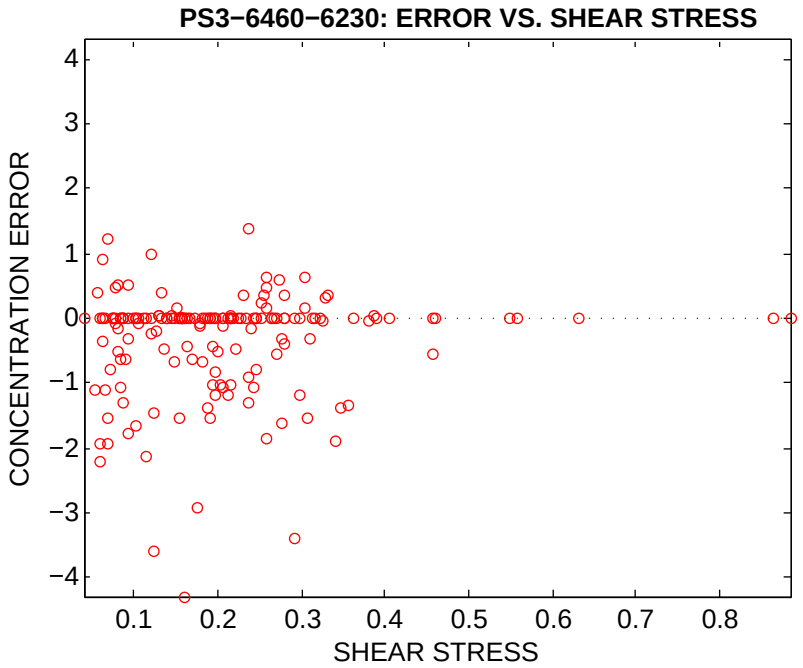


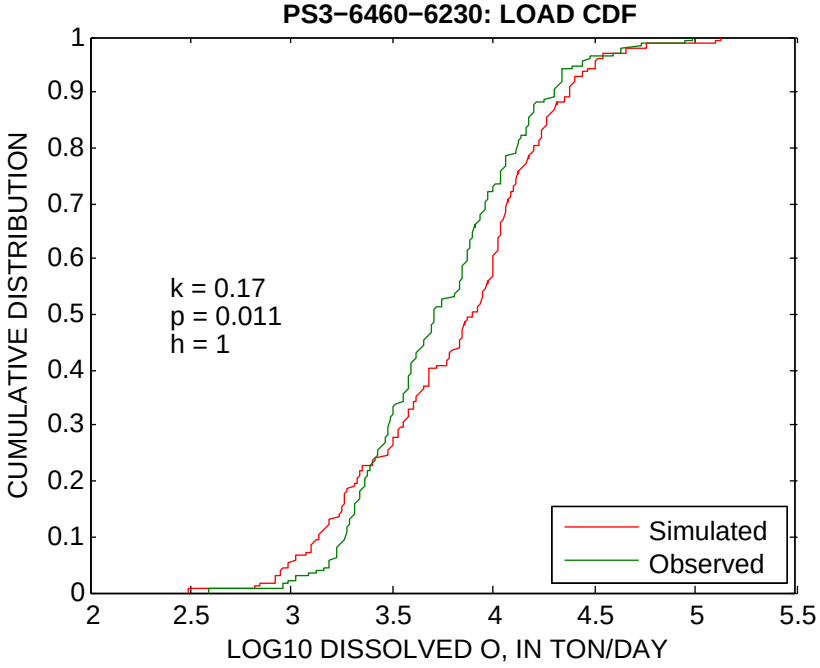


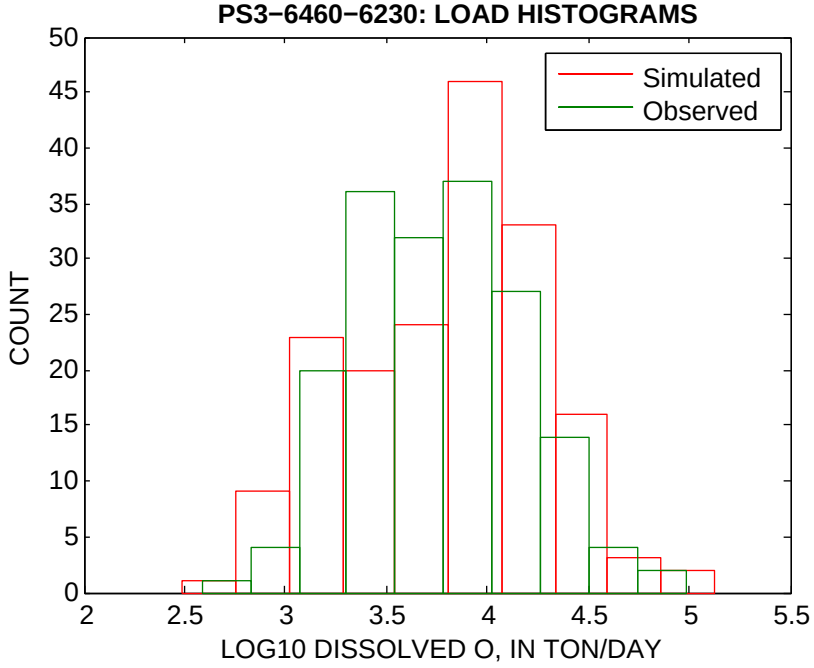


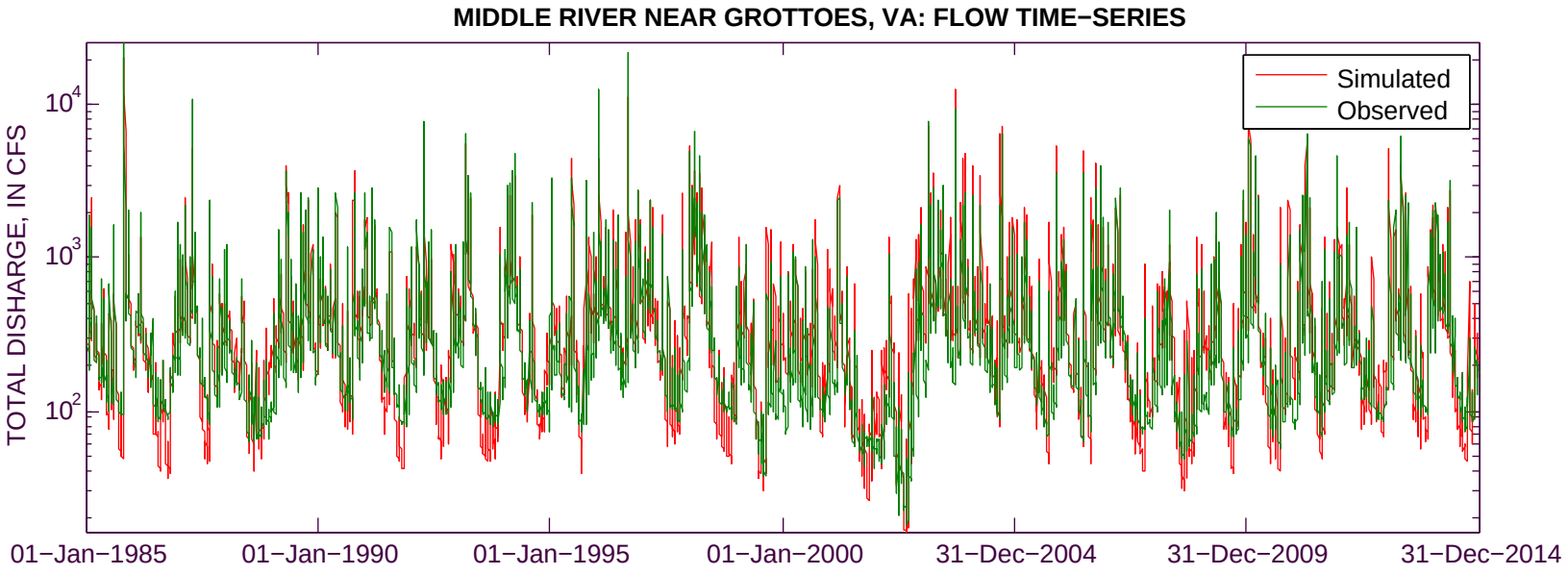
LOAD DATA
LOG10

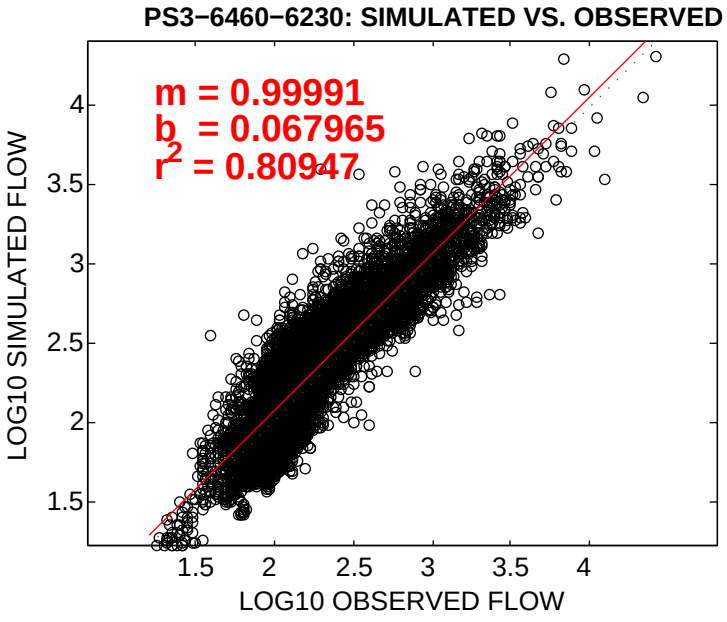


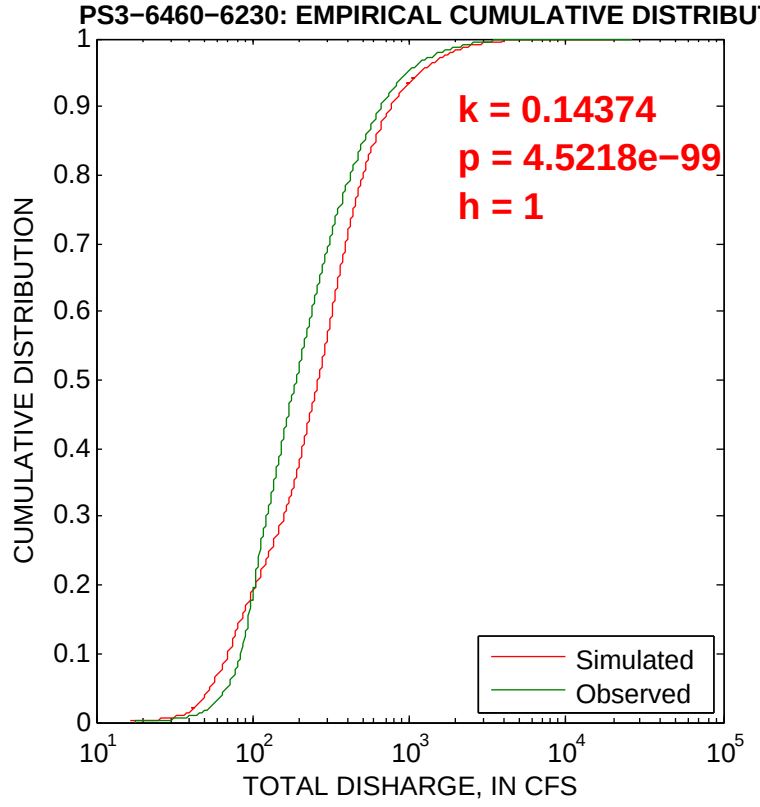












DATA SELECTION

scenario	file
P620171001WQ	FLOW.calib

plot: FLOW - total discharge

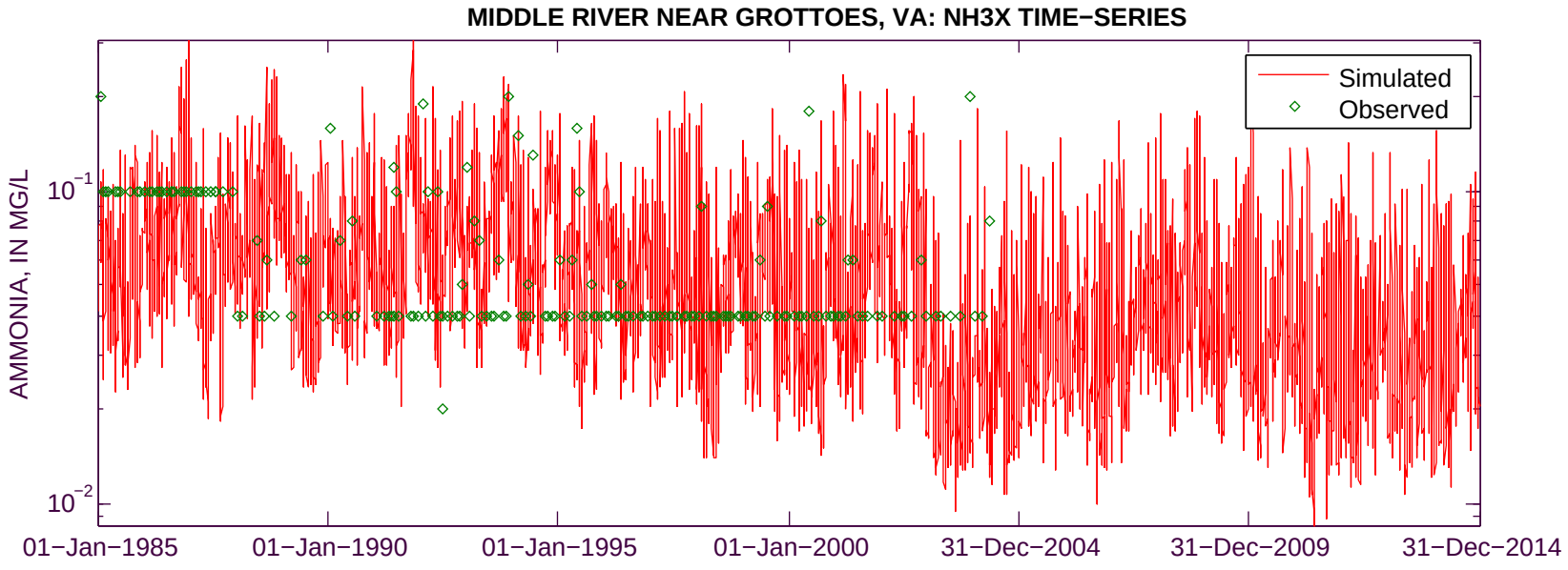
Dates: 1/1/1985 – 12/31/201

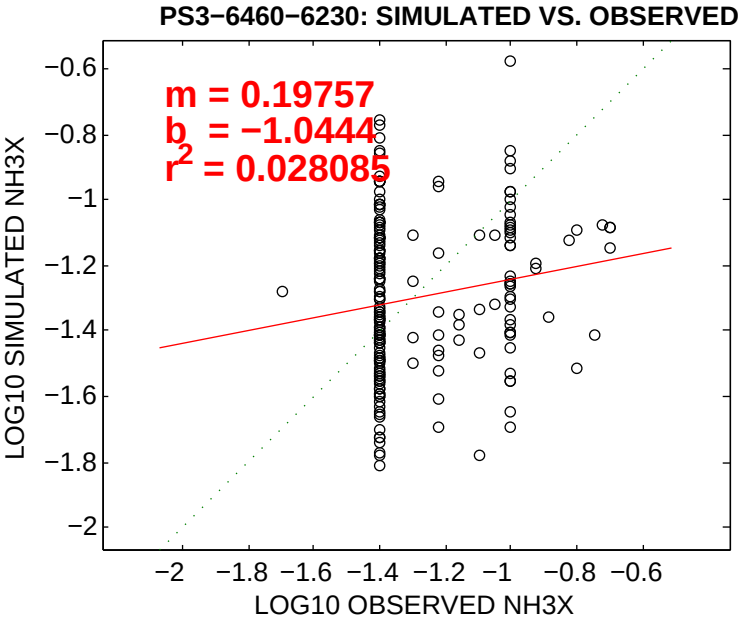
Drive	Directory	Observed
N/A	model	OBS20161101

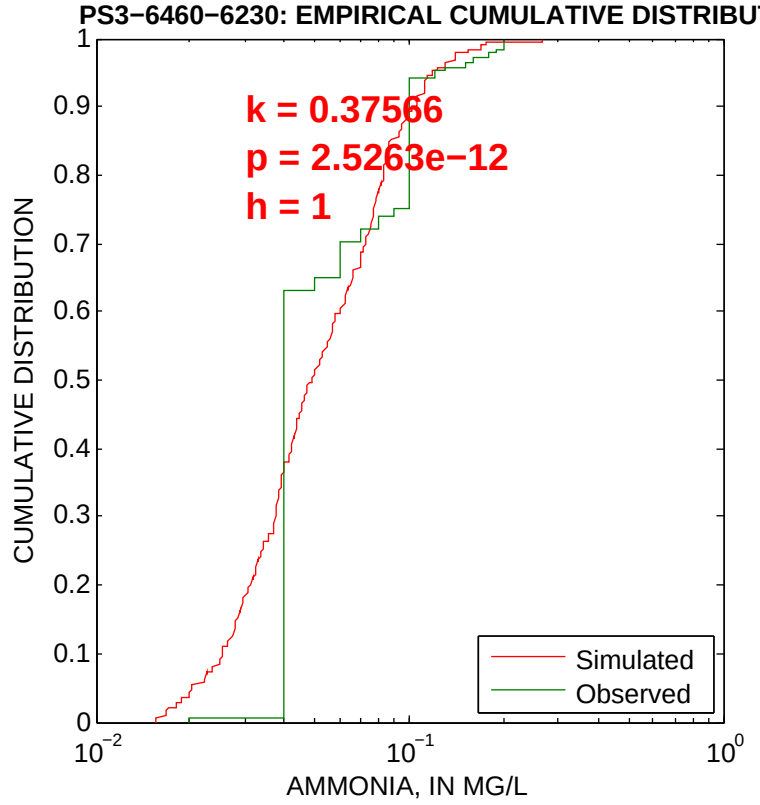
STATISTICS

	observe	simulate
n	10957	10957
min	18 1.25527	16.263 1.2112
mean	332.434 2.32891	399.262 2.39666
media	191 2.28103	263.95 2.42152
max	26000 4.41497	20309 4.30769
varian	347295 0.134138	376358 0.165681
JB	0.001 0.001	0.001 0.001
	ra	log
%	20.1026	2.90904
err.va	116779	0.0361577
rel.std.err	0.336253	0.269556
mod.eff	0.663747	0.730444

VERSION 2.1







DATA SELECTION

scenario	file
P620171001WQ	NH3X.calib

plot: NH3X - ammonia

Dates: 1/1/1985 – 12/31/201

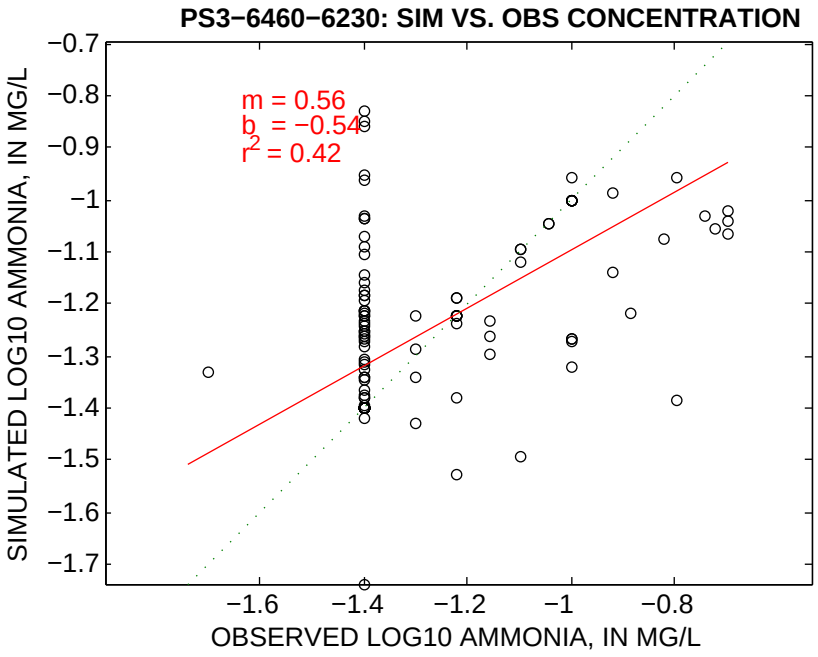
Drive	Directory	Observed
N/A	model	OBS20161101

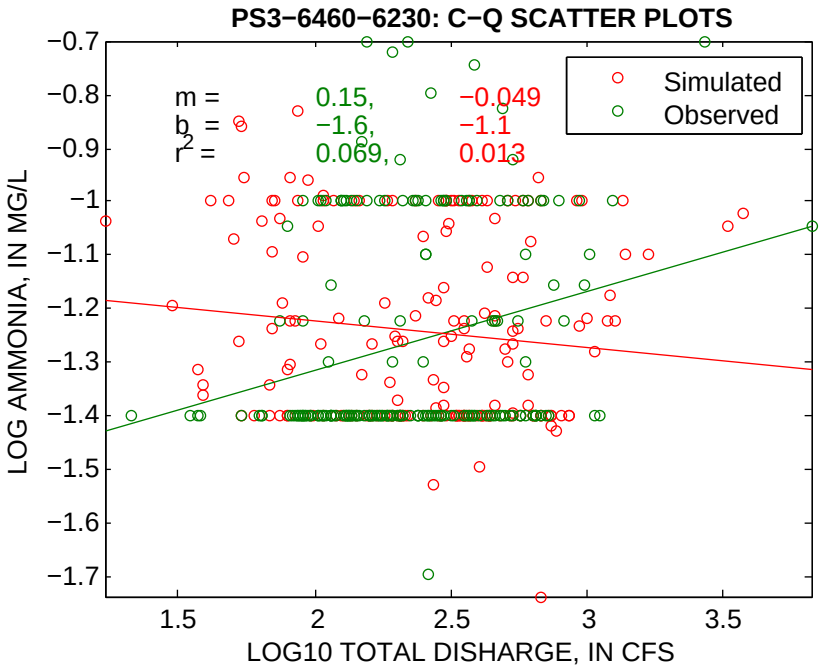
STATISTICS

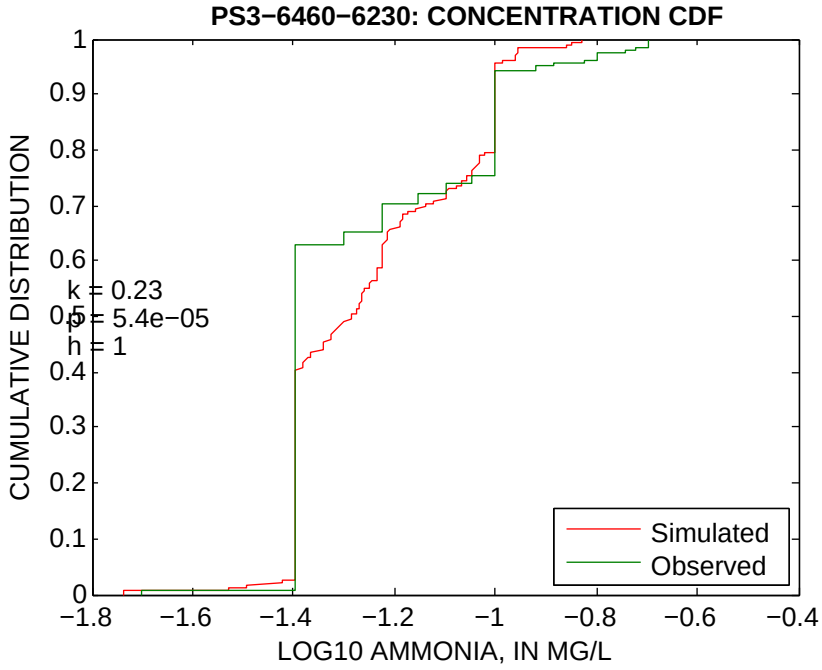
	n	189	189
		observe	simulate
min		0.02	0.015467
		-1.69897	-1.81059
mean		0.0616931	0.0590518
		-1.26311	-1.29399
media		0.04	0.049368
		-1.39794	-1.30655
max		0.2	0.26346
		-0.69897	-0.579285
varian		0.00127797	0.00121912
		0.040496	0.0562844
JB		0.001	0.001
		0.001	0.312682
		ra	log
%		-4.28145	2.44409
err.va		0.00215428	0.0817369
rel.std.err		1.68571	2.01839
mod.eff		-0.685707	-1.01839

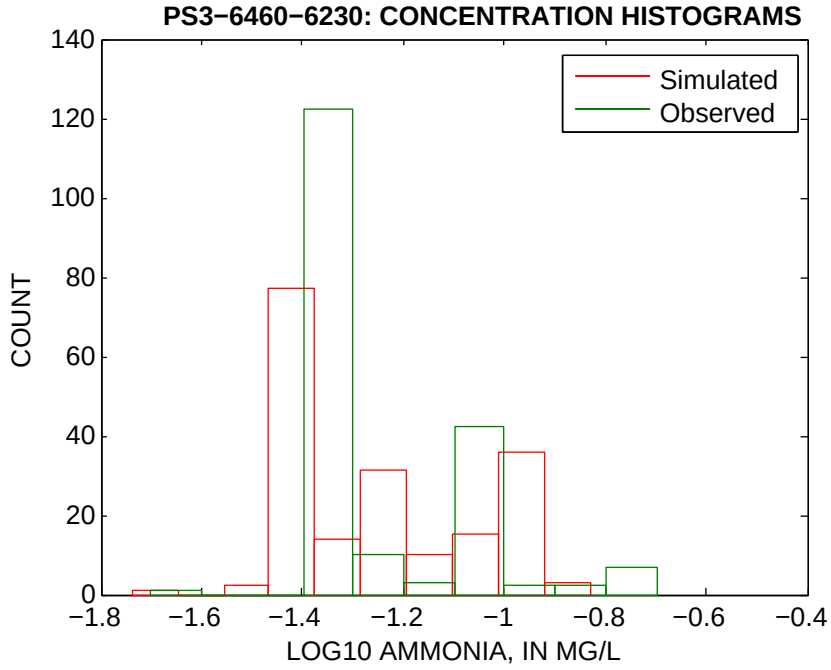
VERSION 2.1

ALL DATA
LOG10

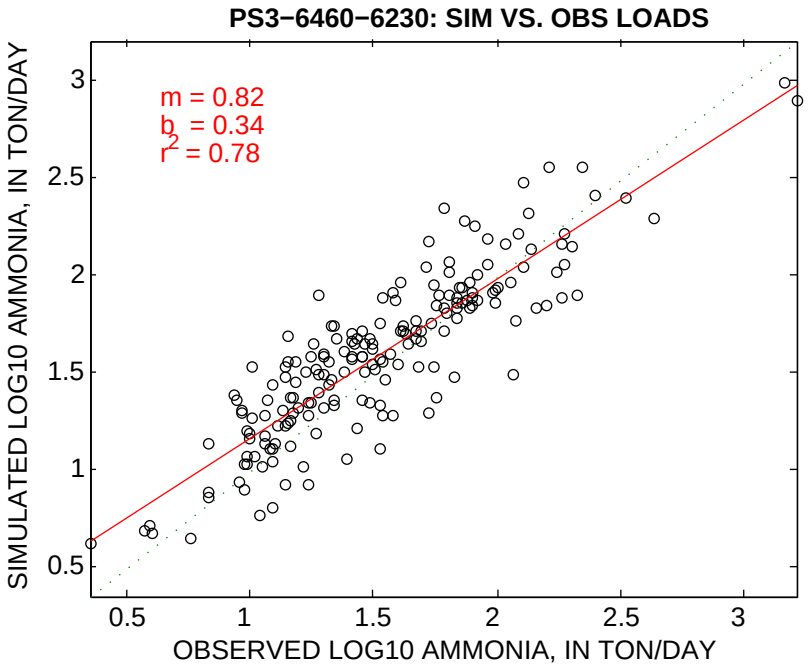


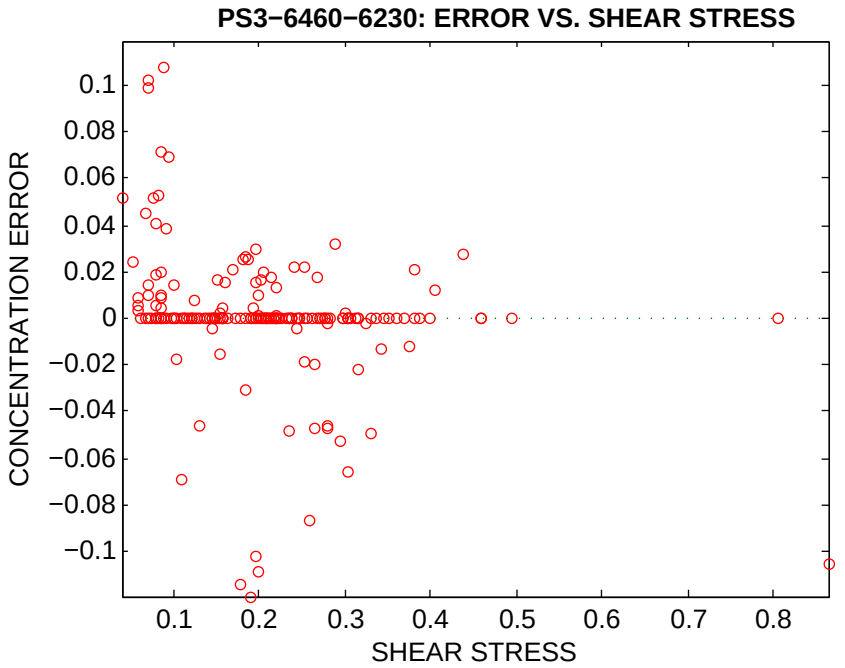


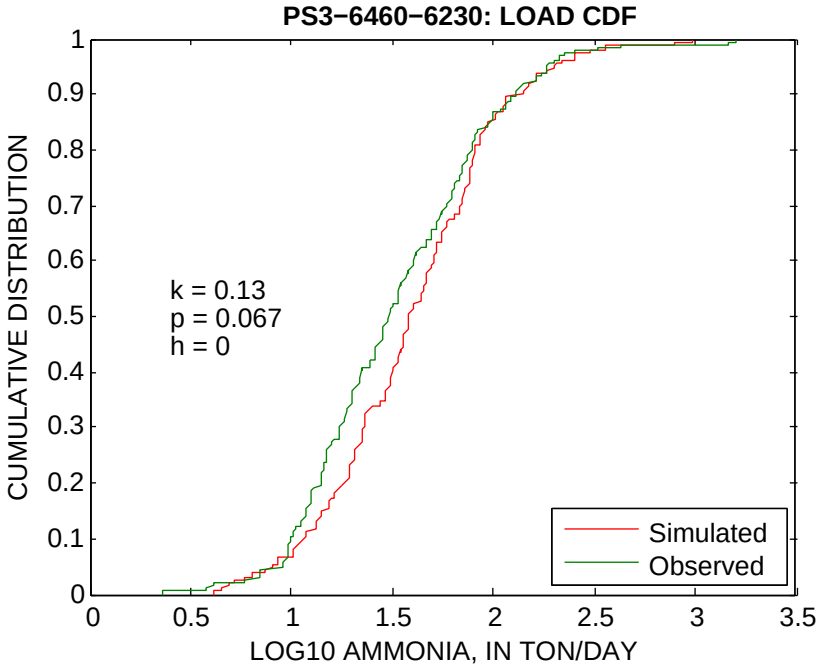


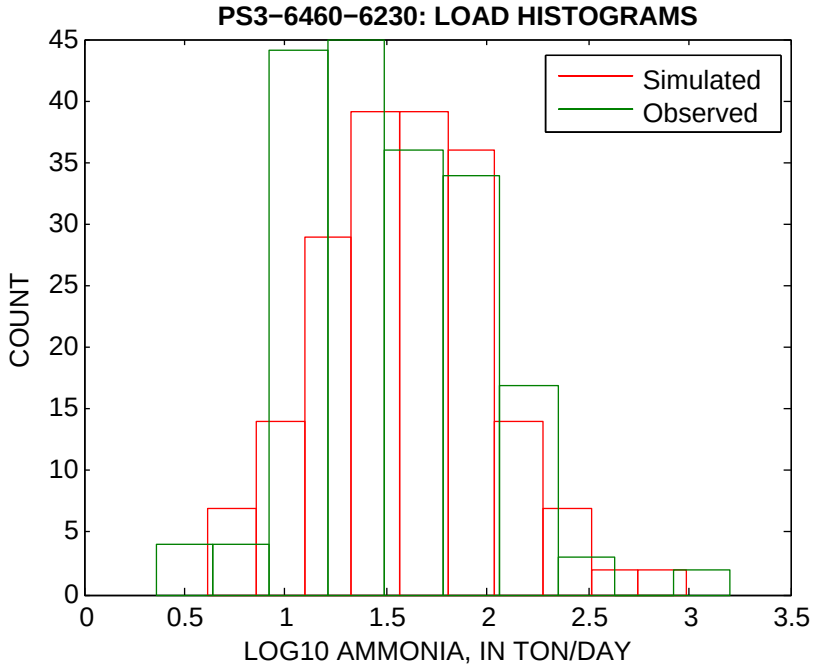


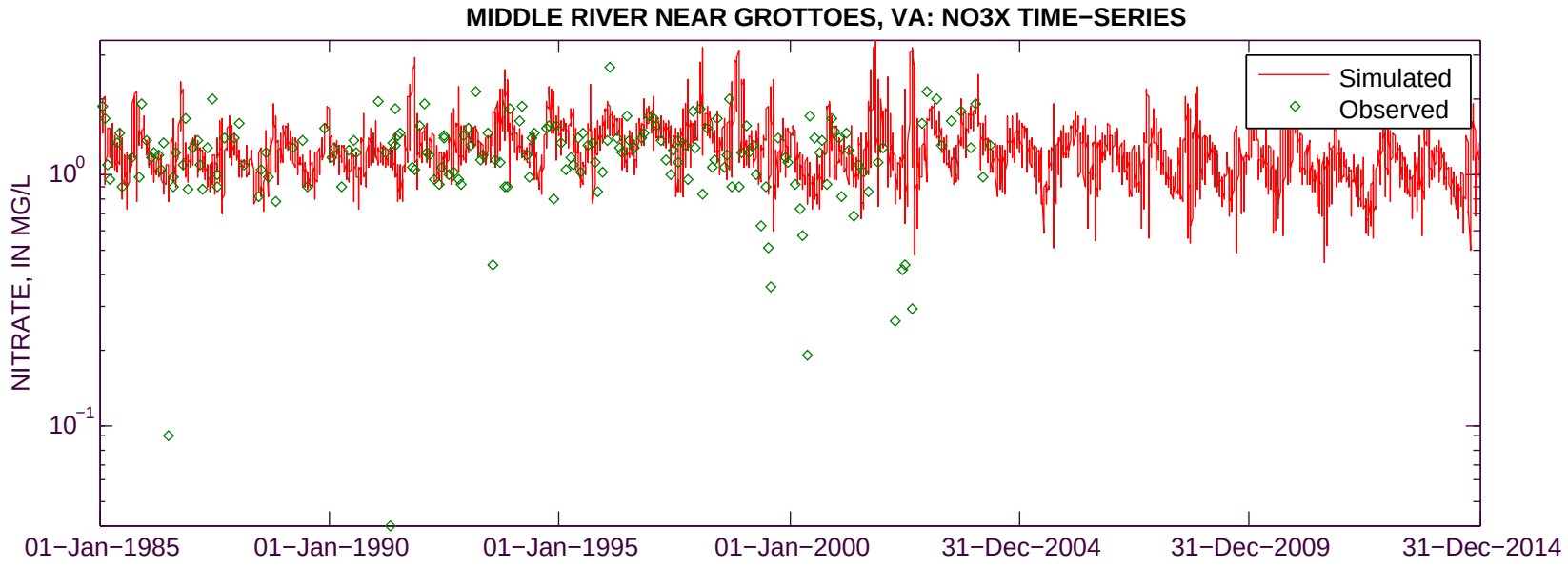
LOAD DATA
LOG10

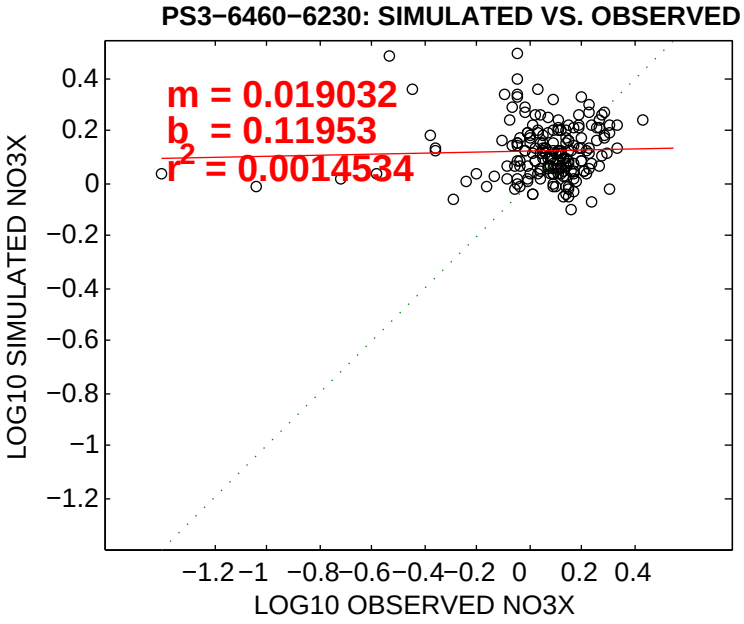


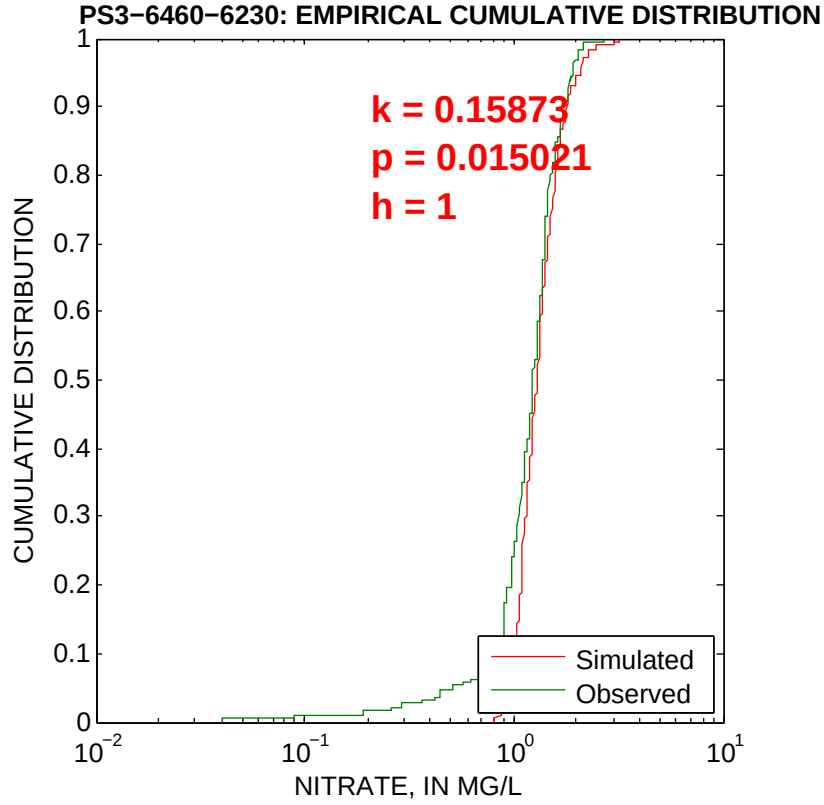












DATA SELECTION

scenario	file
P620171001WQ	NO3X.calib

plot: NO3X - nitrate

Dates: 1/1/1985 – 12/31/201

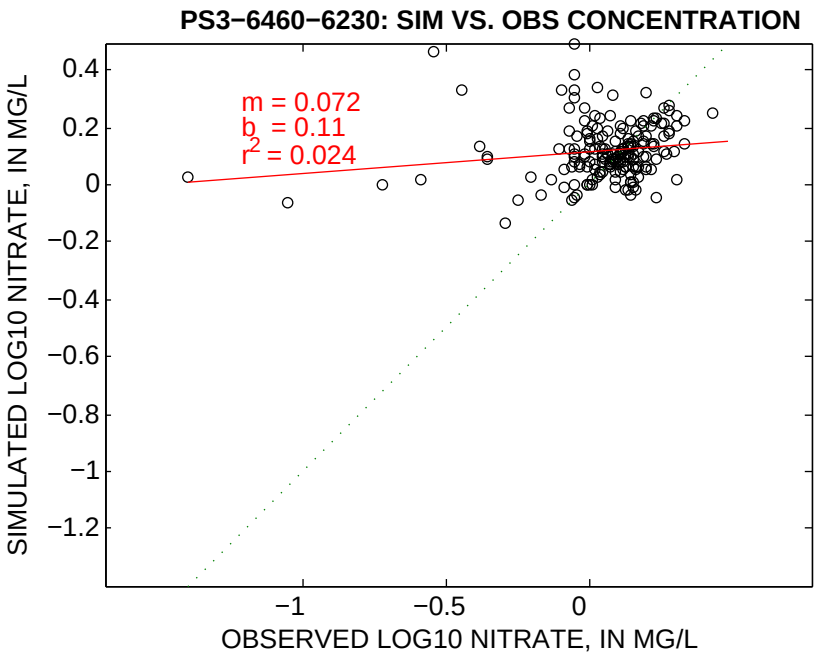
Drive	Directory	Observed
N/A	model	OBS20161101

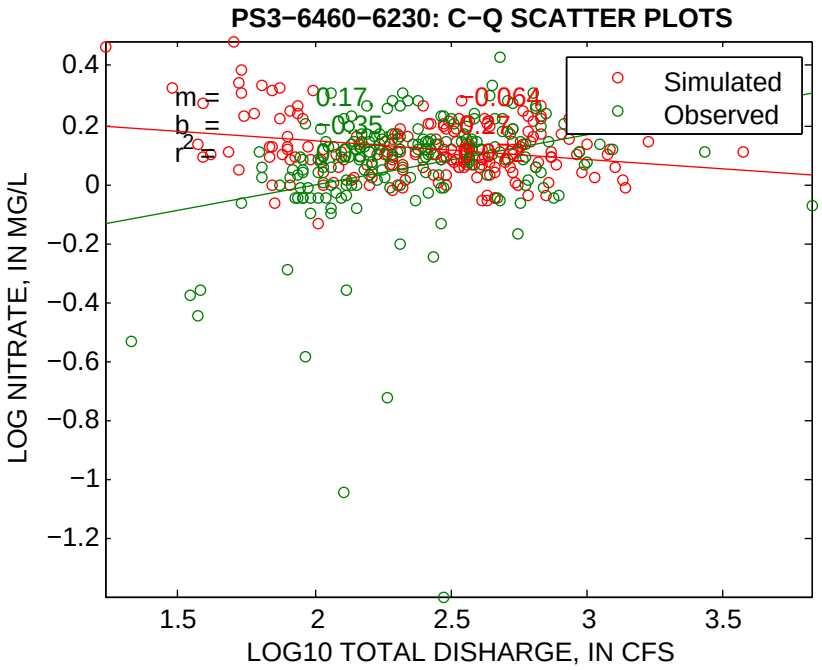
STATISTICS

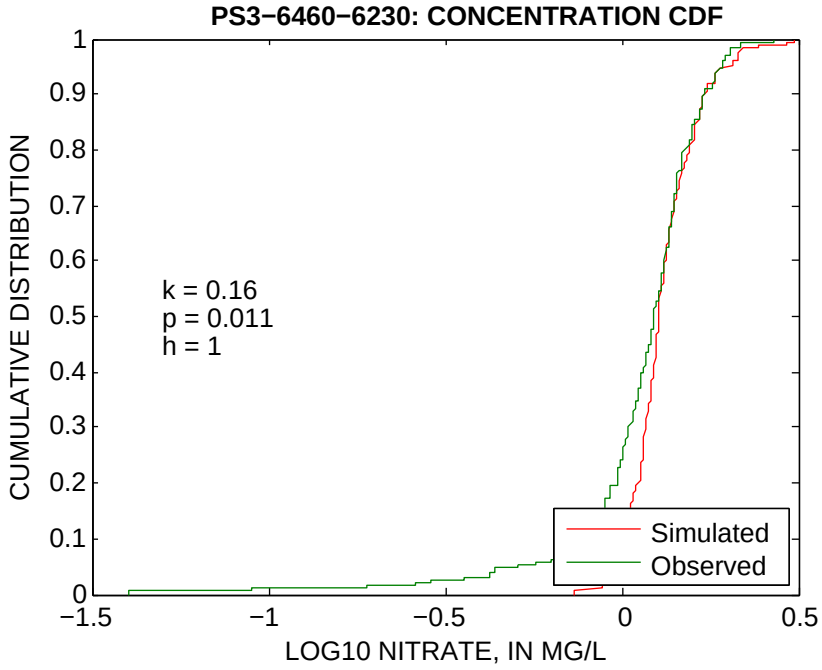
	n	189	189
		observe	simulate
min		0.04	0.79427
		-1.39794	-0.100032
mean		1.24005	1.36063
		0.0596734	0.120664
media		1.24	1.3
		0.0934217	0.113943
max		2.7	3.1527
		0.431364	0.498683
varian		0.157504	0.131298
		0.0431525	0.0107553
JB		0.009343	0.001
		0.001	0.001959
		ra	log
%		9.72343	102.207
err.va		0.306276	0.0560048
rel.std.err		1.94456	1.29783
mod.eff		-0.944563	-0.297833

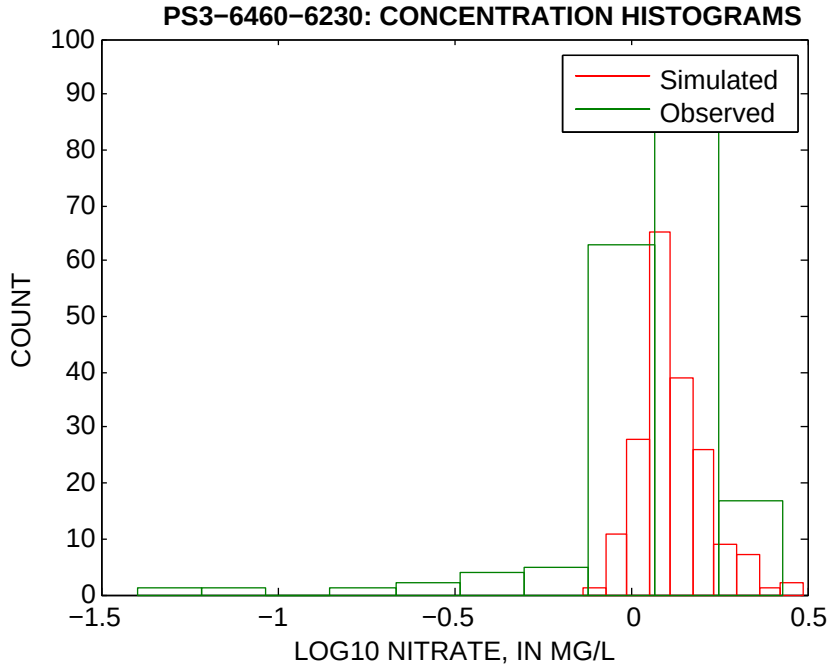
VERSION 2.1

ALL DATA
LOG10

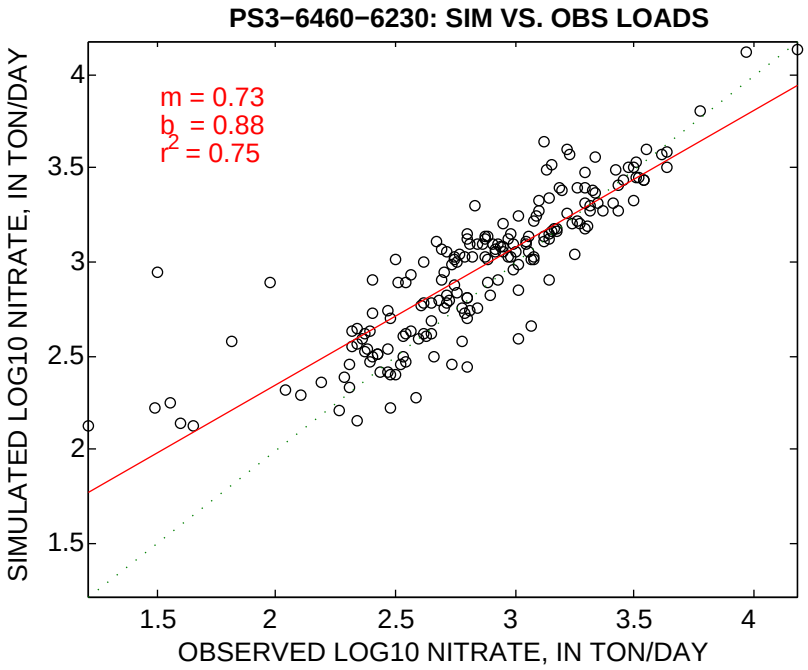


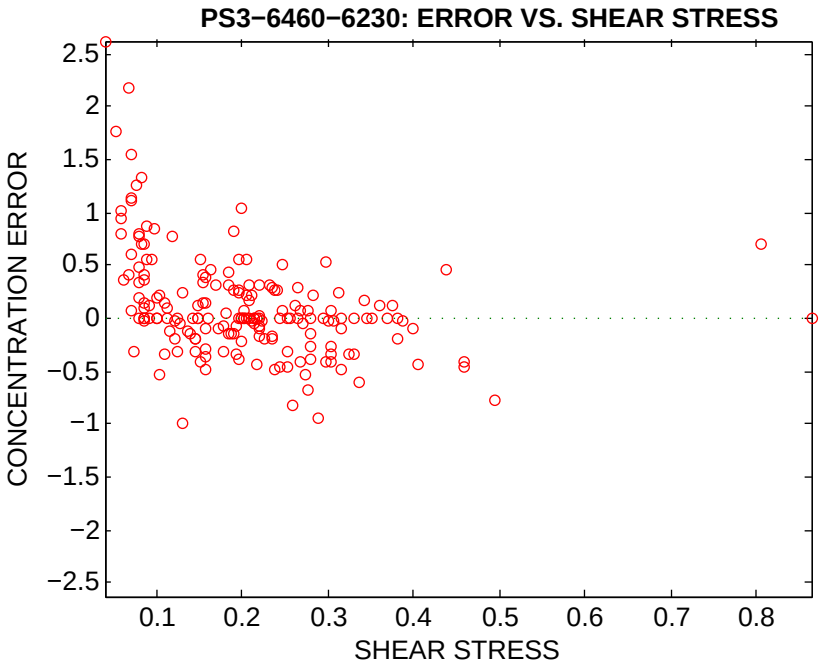


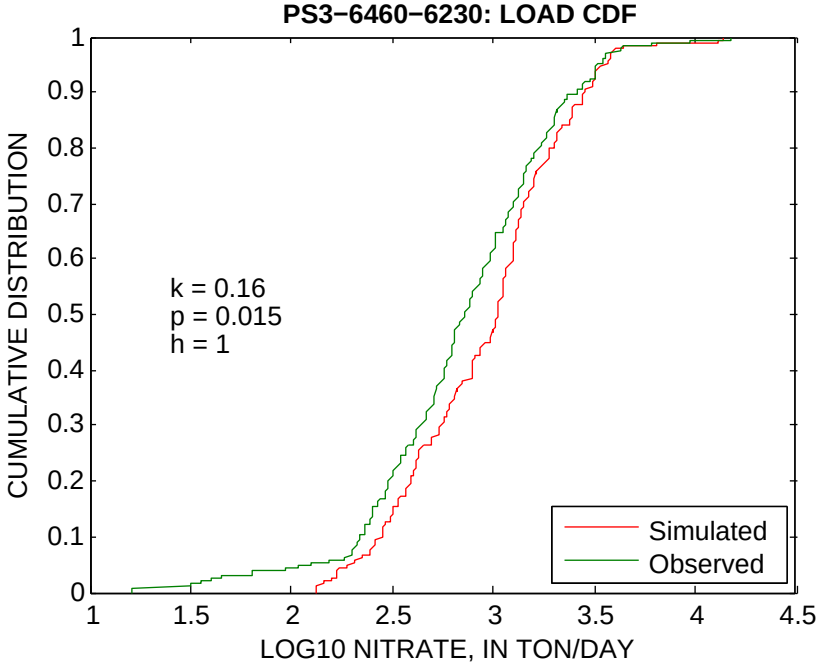


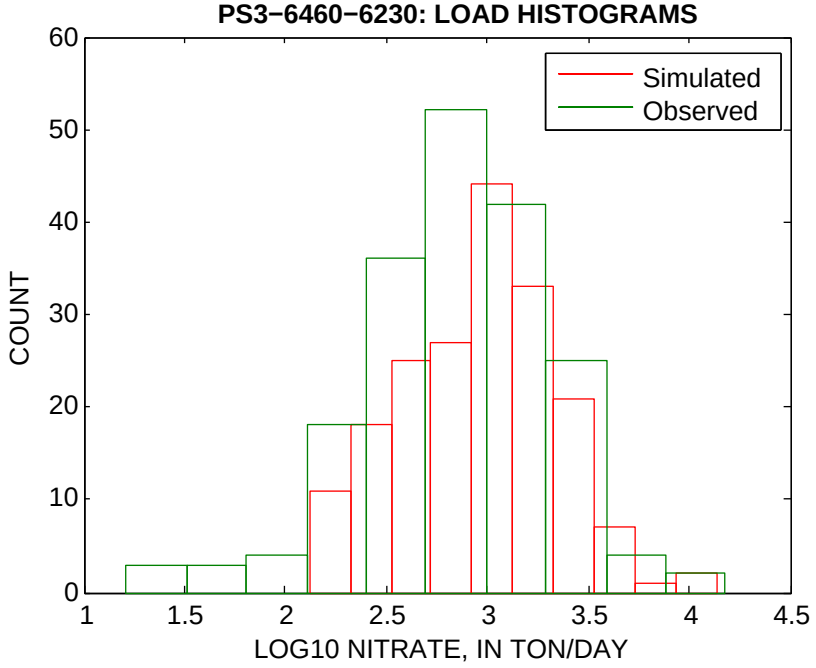


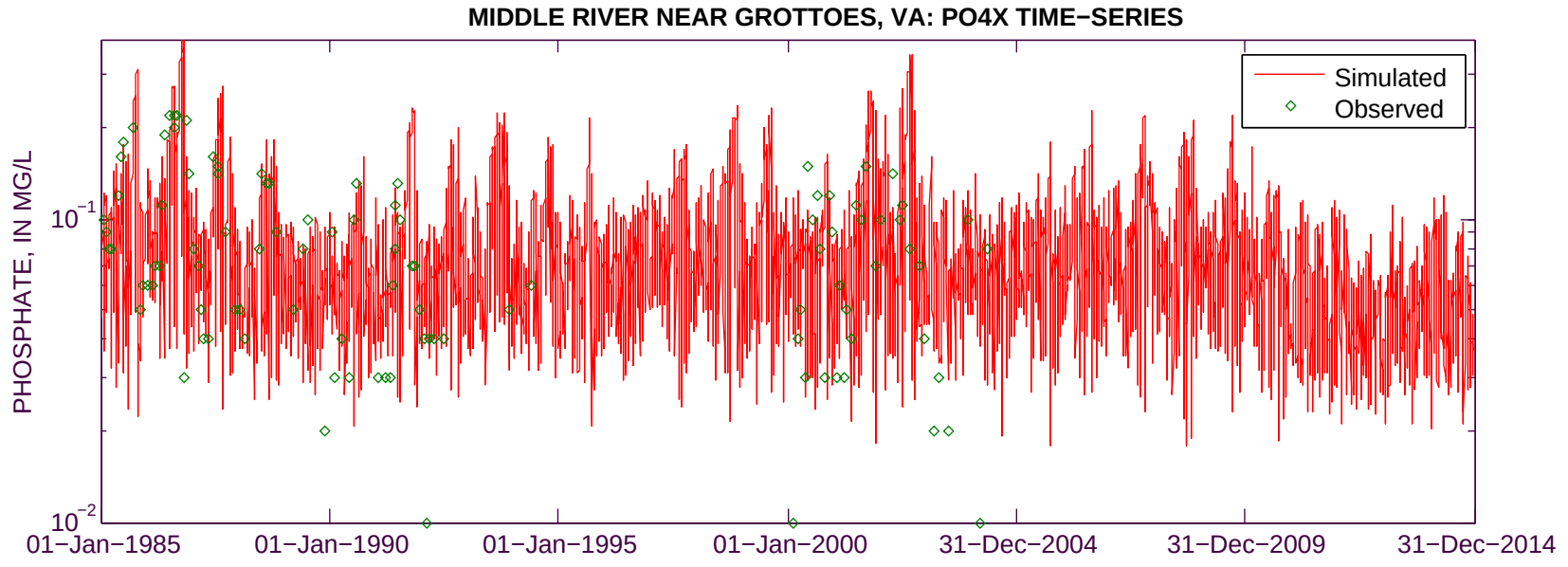
LOAD DATA
LOG10

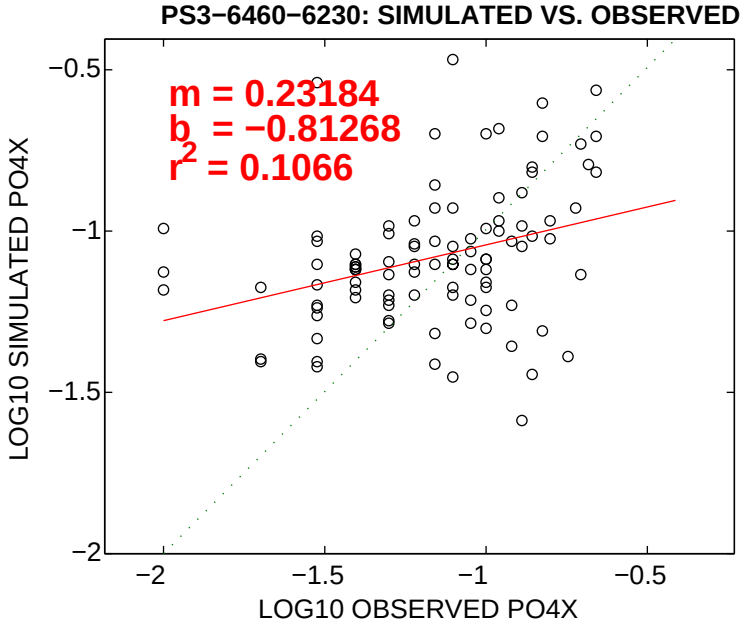


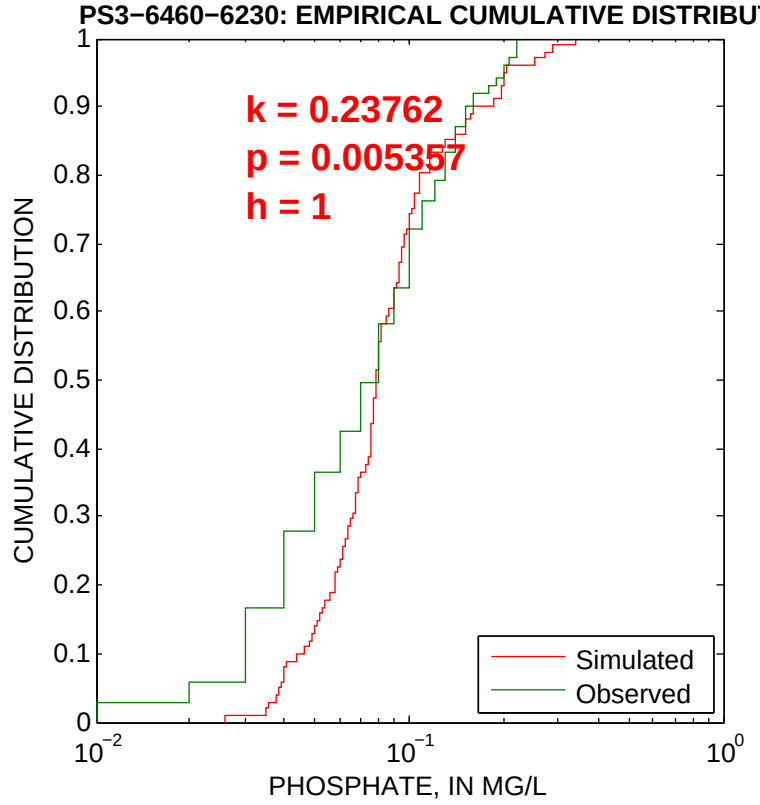












DATA SELECTION

scenario	file
P620171001WQ	PO4X.calib

plot: PO4X - phosphate

Dates: 1/1/1985 – 12/31/201

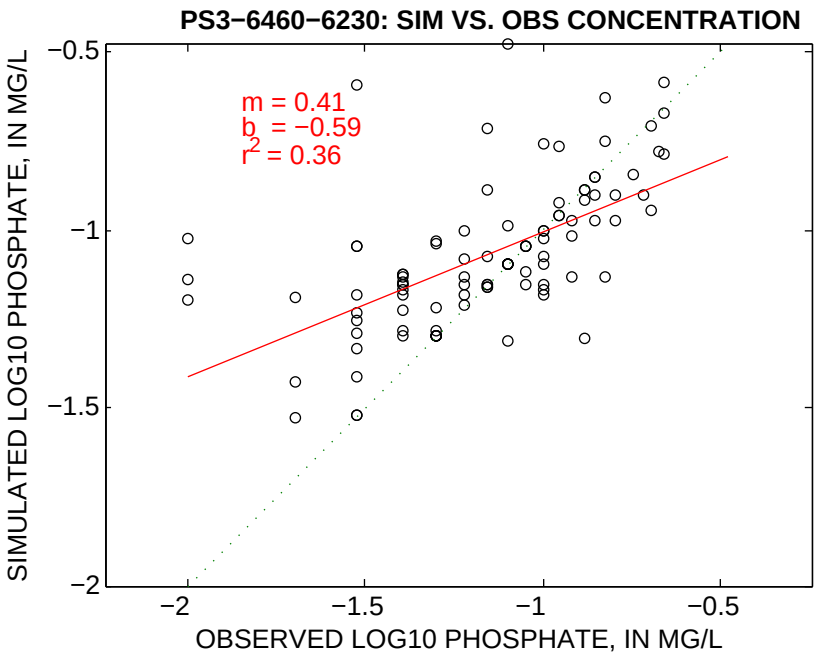
Drive	Directory	Observed
N/A	model	OBS20161101

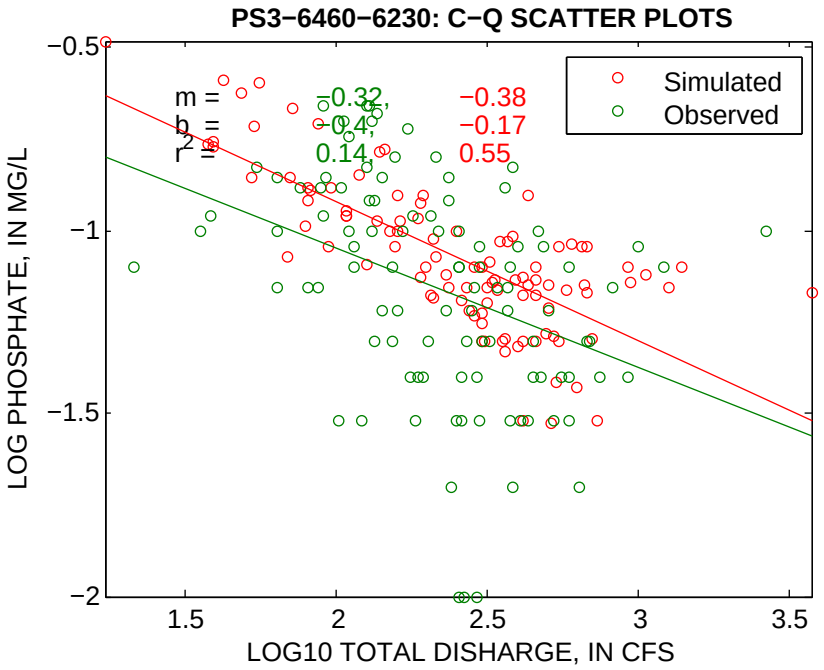
STATISTICS

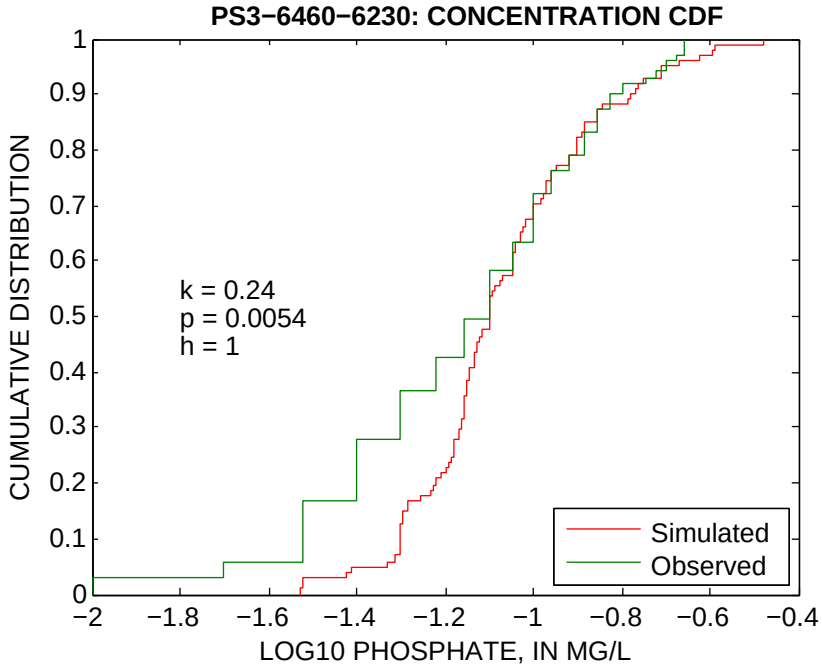
	n	observe	simulate
		101	101
min		0.01	0.025671
		-2	-1.59056
mean		0.0843564	0.0941565
		-1.16422	-1.0826
media		0.08	0.078649
		-1.09691	-1.10431
max		0.22	0.33932
		-0.657577	-0.469391
varian		0.00270883	0.0031173
		0.0898416	0.0453015
JB		0.008724	0.001
		0.056086	0.044522
		ra	log
%		11.6174	-7.01052
err.va		0.00370438	0.100213
rel.std.err		1.36752	1.11544
mod.eff		-0.367519	-0.115437

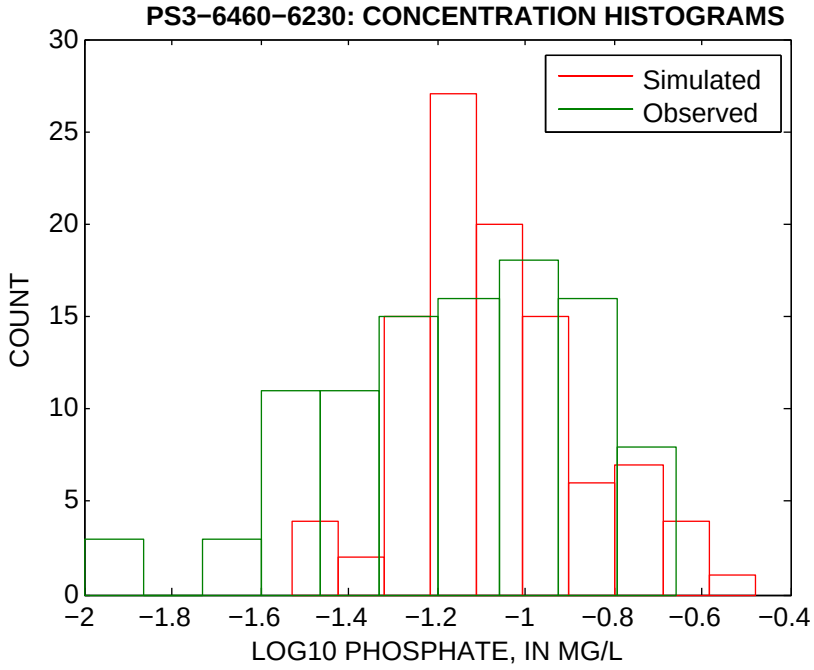
VERSION 2.1

ALL DATA
LOG10

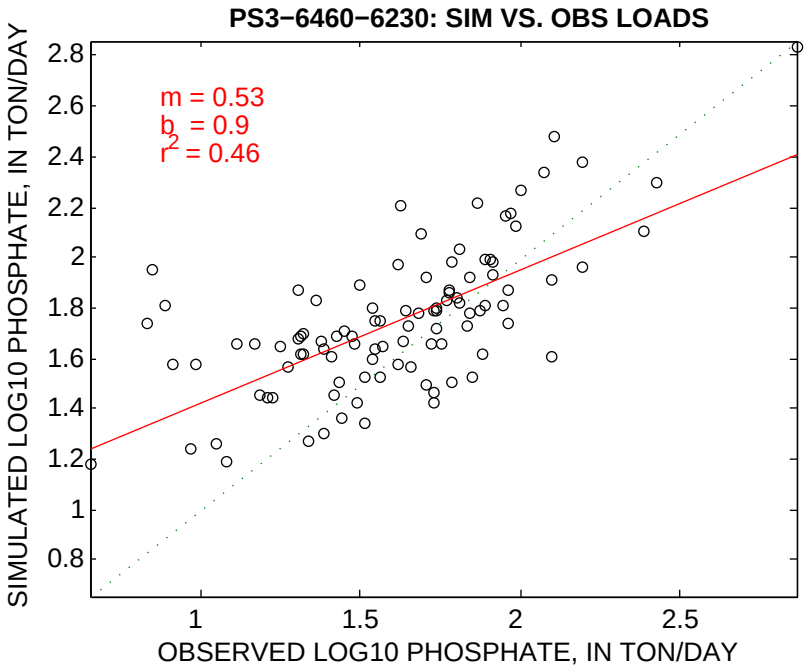


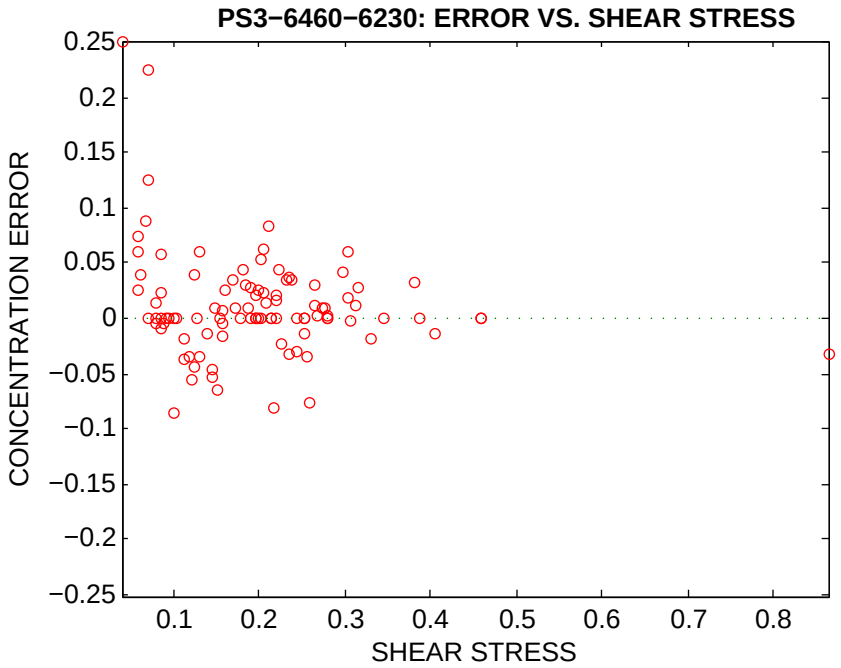


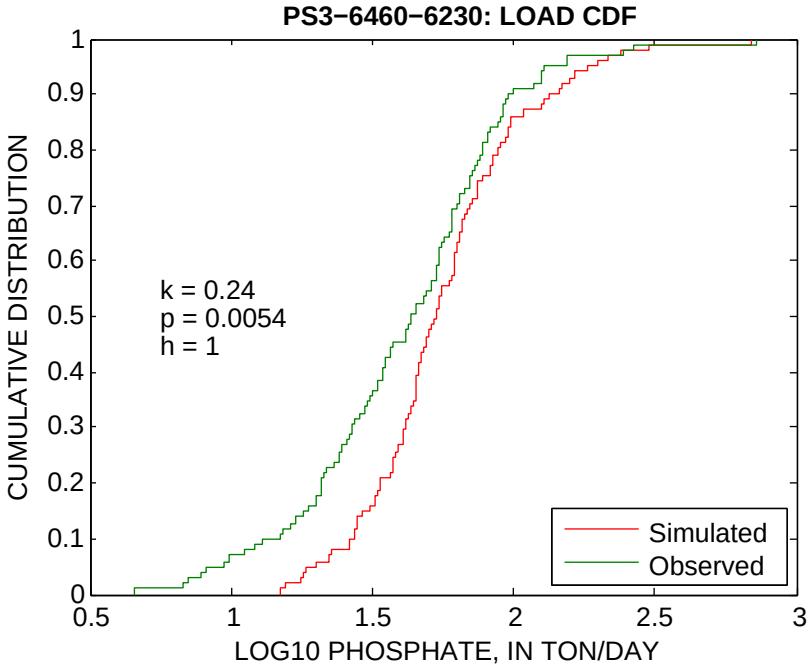


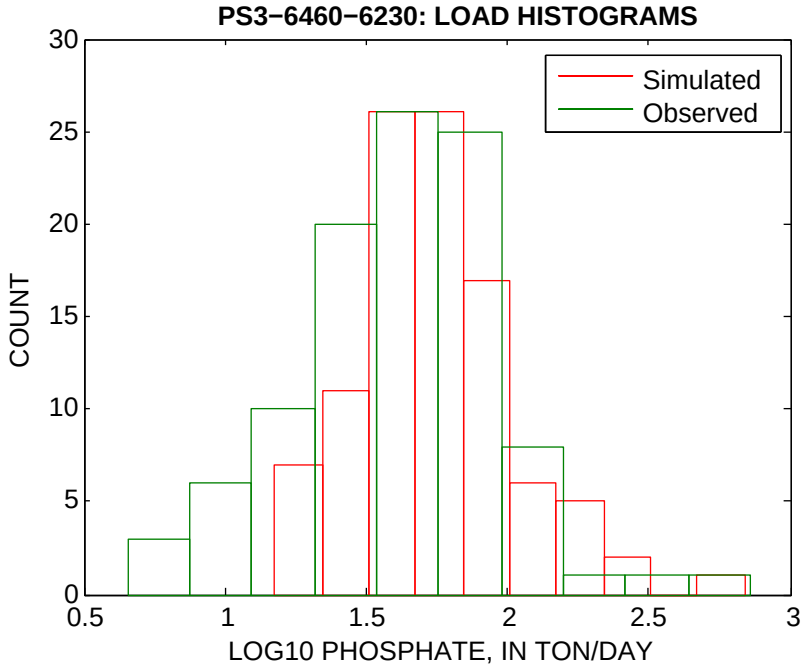


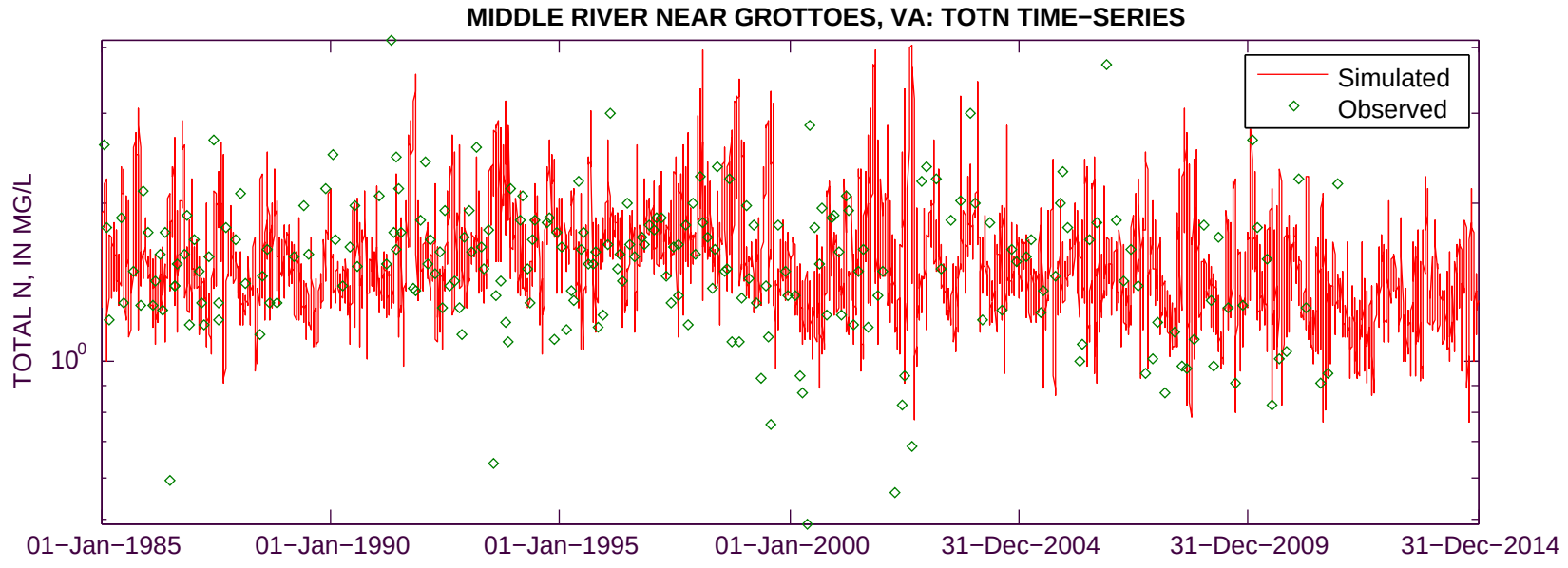
LOAD DATA
LOG10

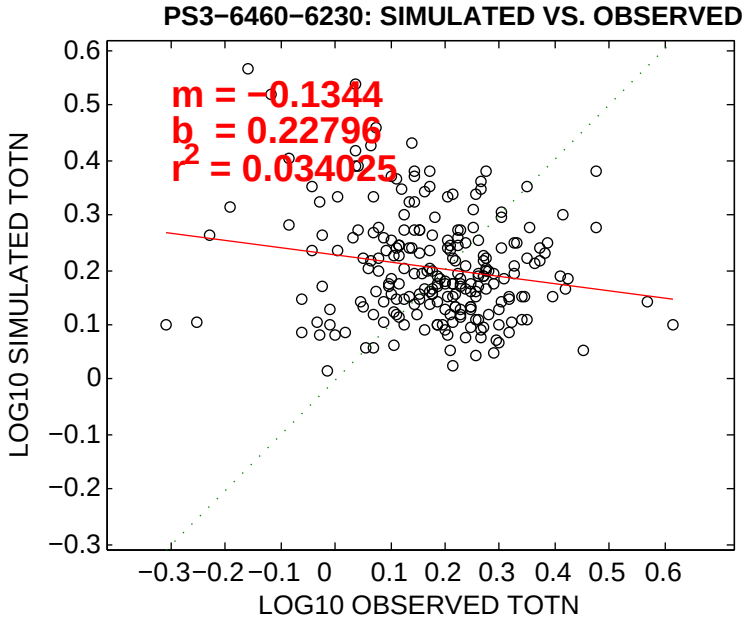


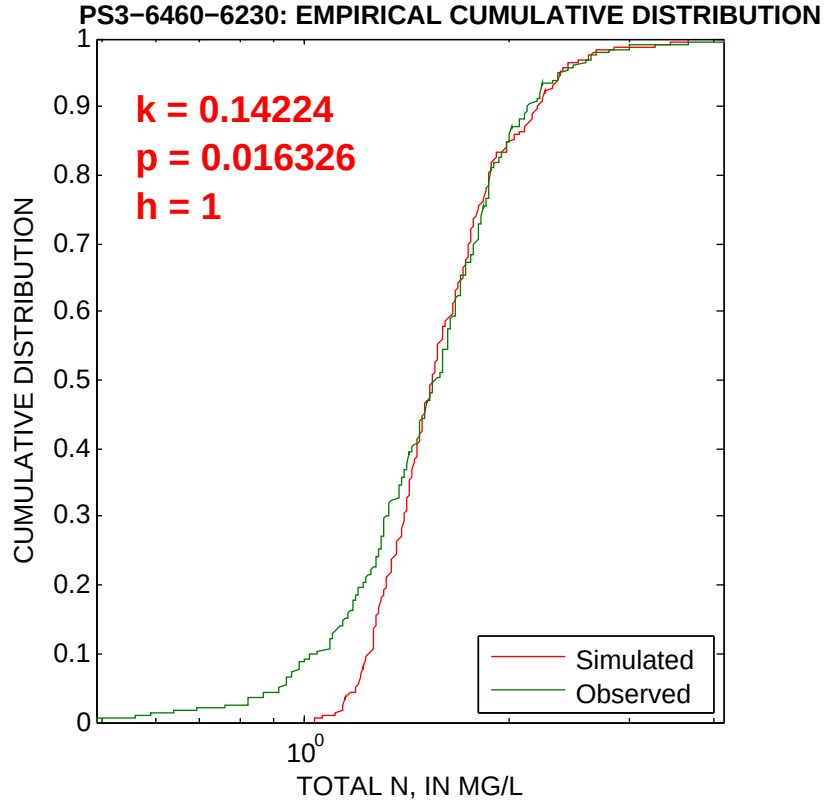












DATA SELECTION

scenario: P620171001WQ | file: TOTN.calib

plot: TOTN - total nitrogen

Dates: 1/1/1985 – 12/31/201

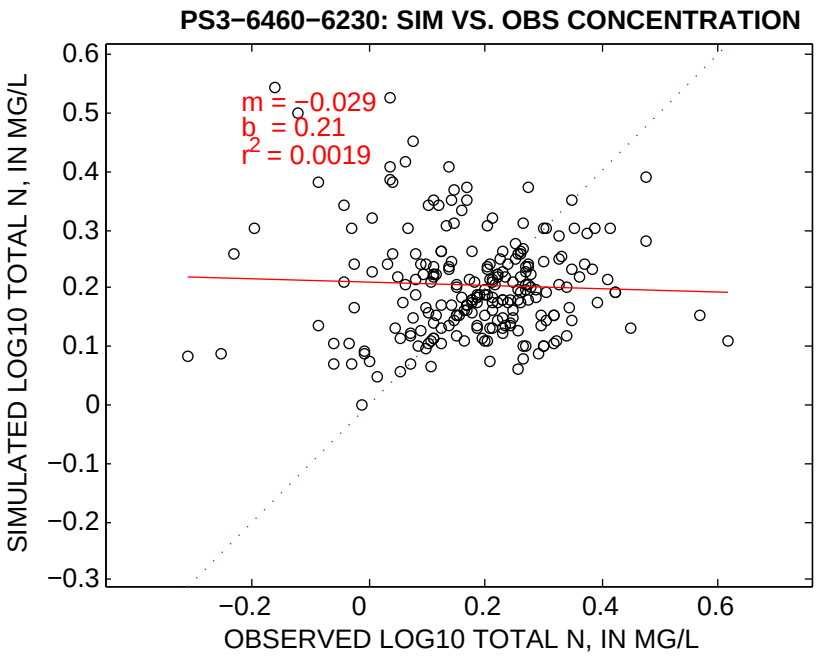
Drive | Directory: N/A | model | Observed: OBS20161101

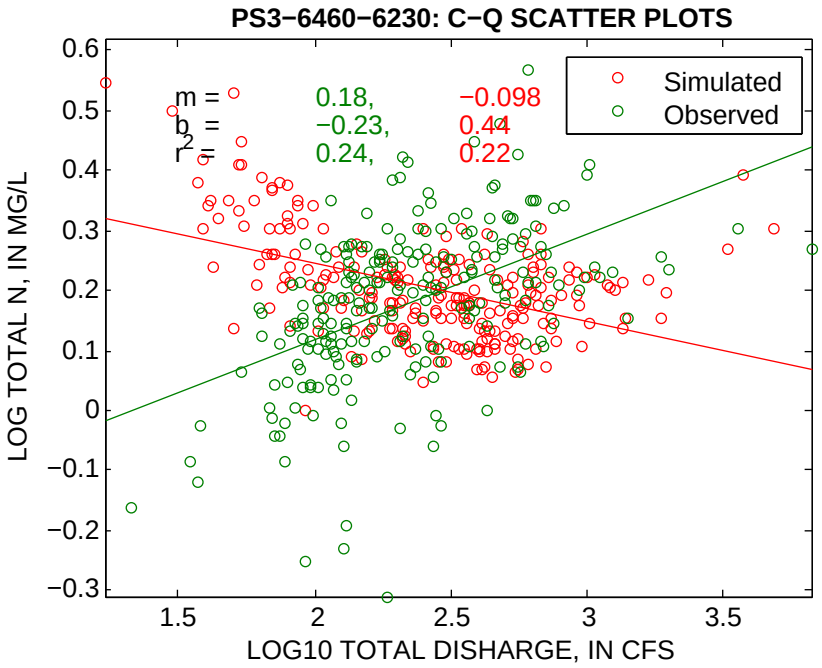
STATISTICS

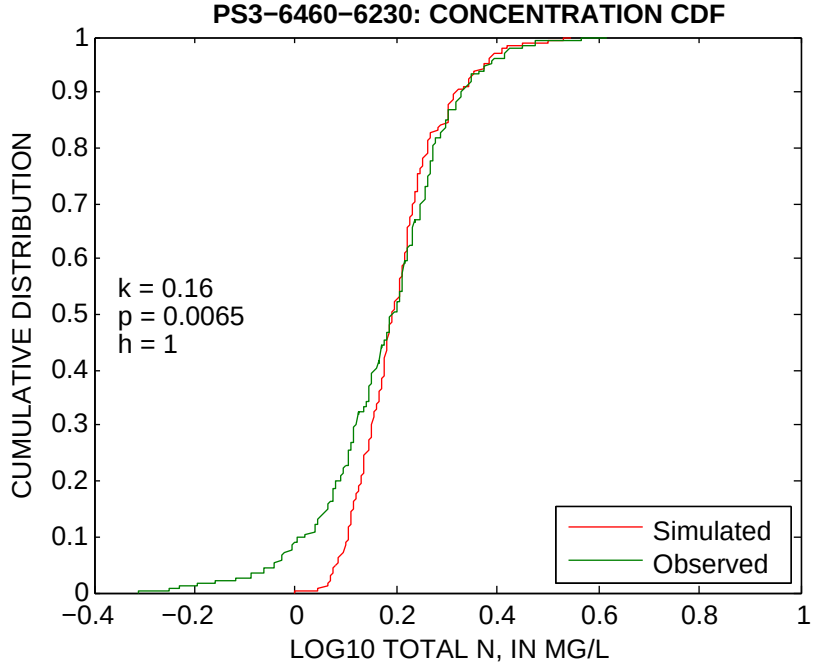
n	232	232
	observe	simulate
min	0.49	1.0357
	-0.309804	0.015234
mean	1.58961	1.64113
	0.181458	0.20357
media	1.56	1.54015
	0.193116	0.187563
max	4.14	3.6707
	0.617	0.564749
varian	0.23808	0.169185
	0.0178201	0.00946116
JB	0.001	0.001
	0.001182	0.001
	ra	log
%	3.24106	12.1858
err.va	0.486931	0.0325626
rel.std.err	2.04524	1.82729
mod.eff	-1.04524	-0.827293

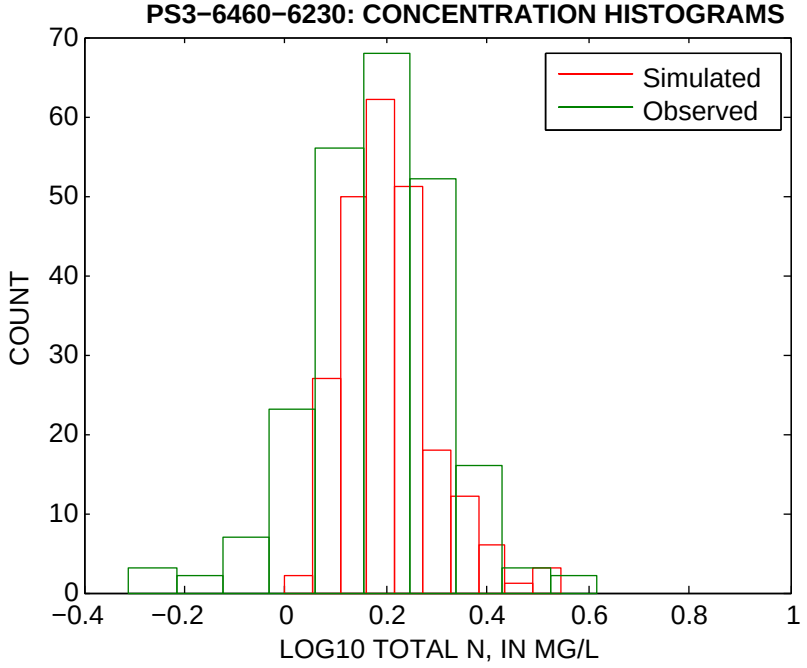
VERSION 2.1

ALL DATA
LOG10

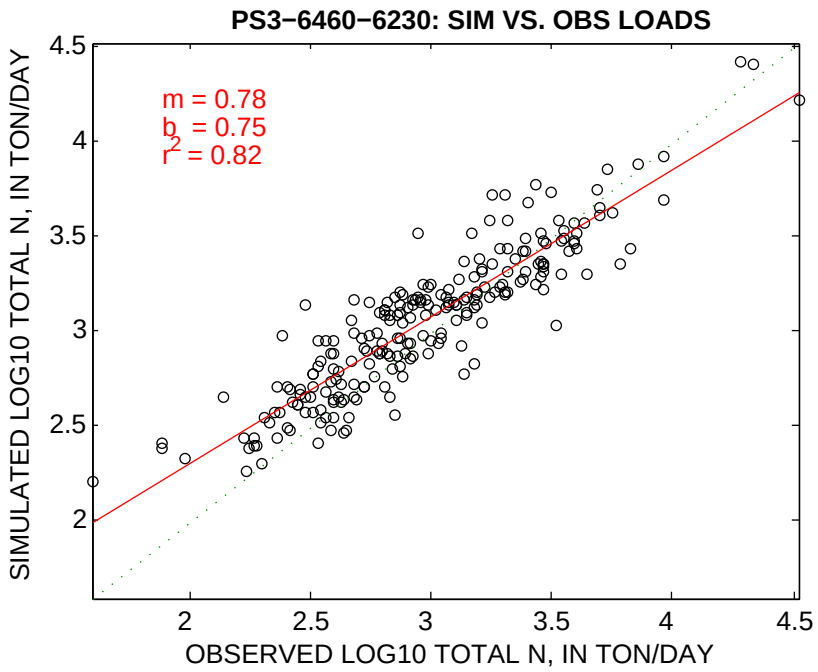


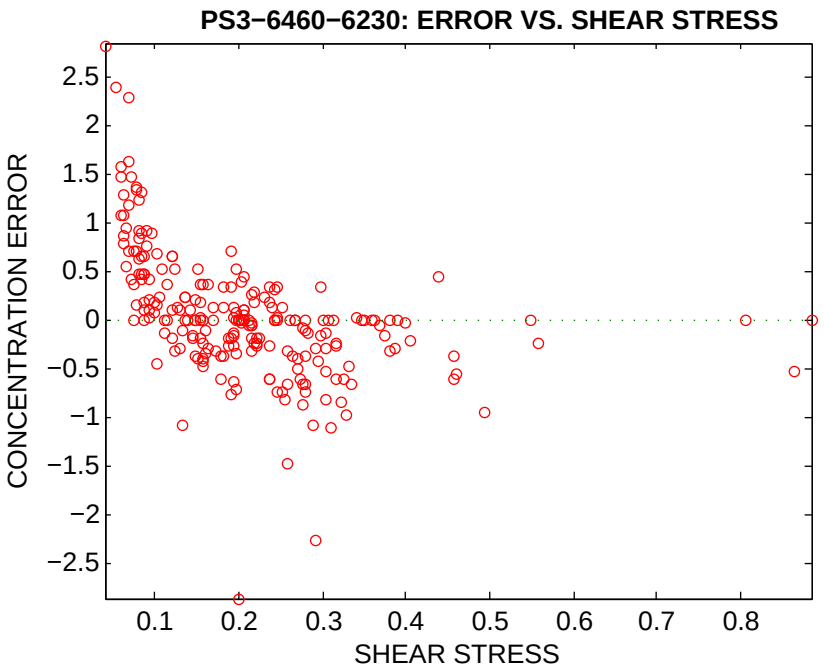


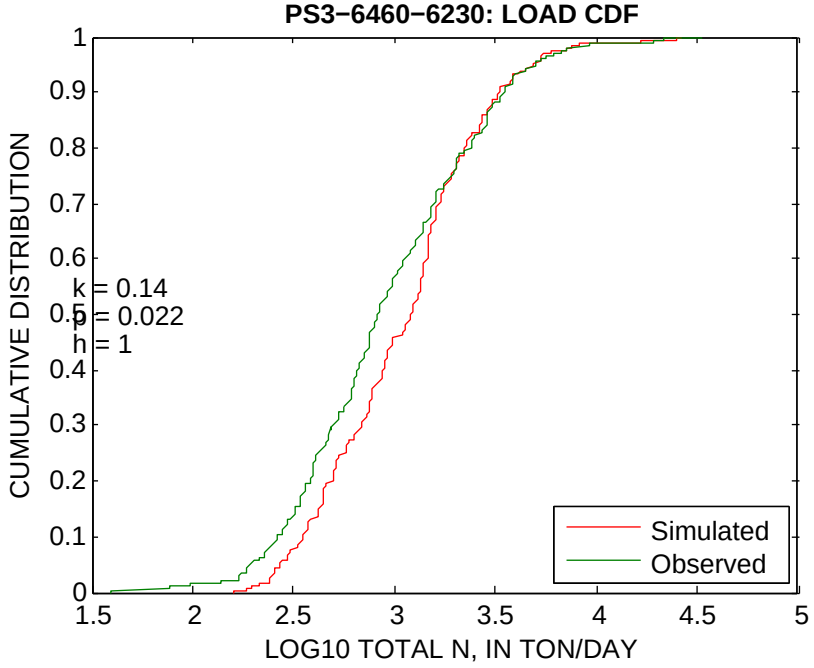


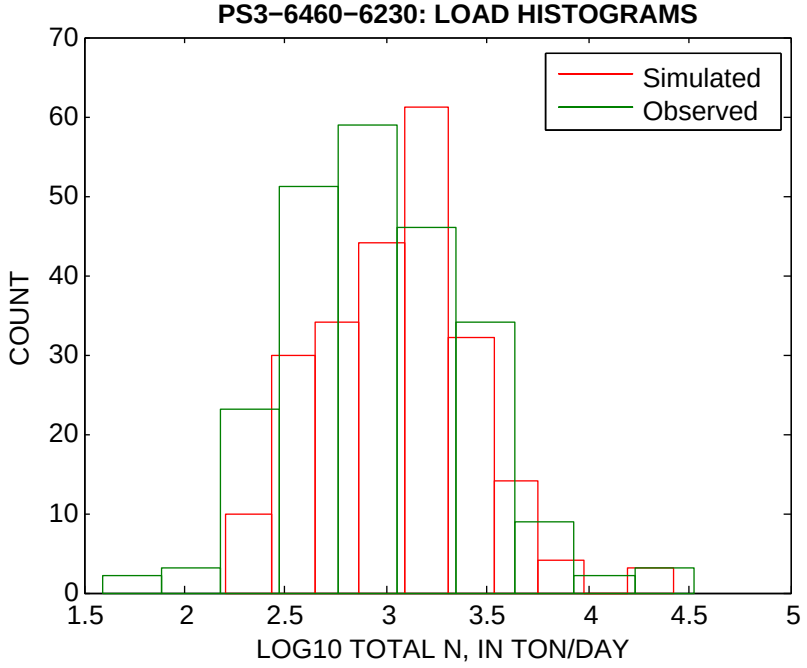


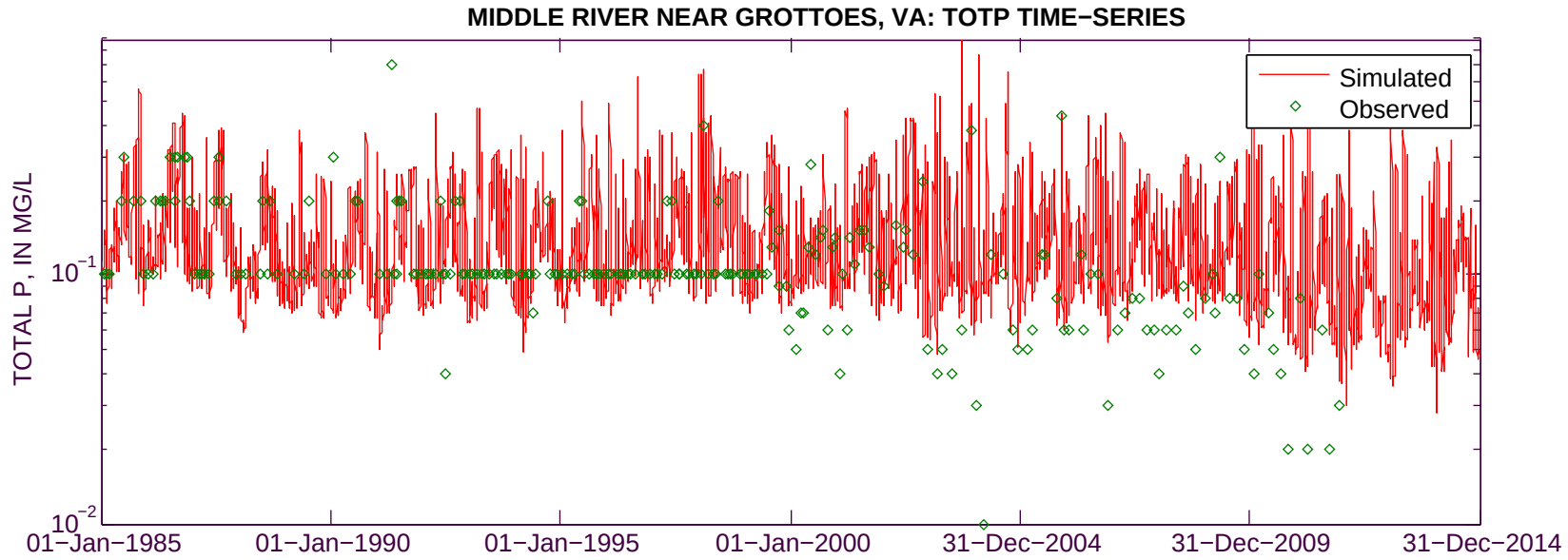
LOAD DATA
LOG10

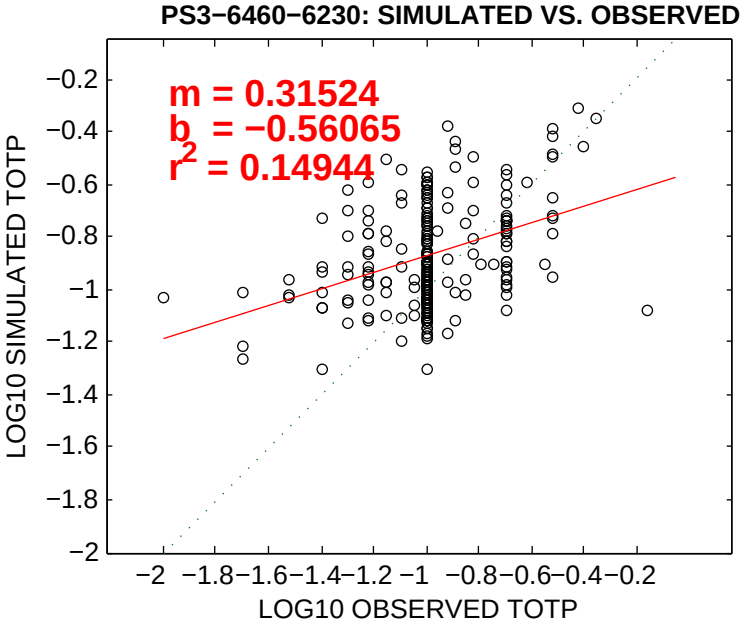


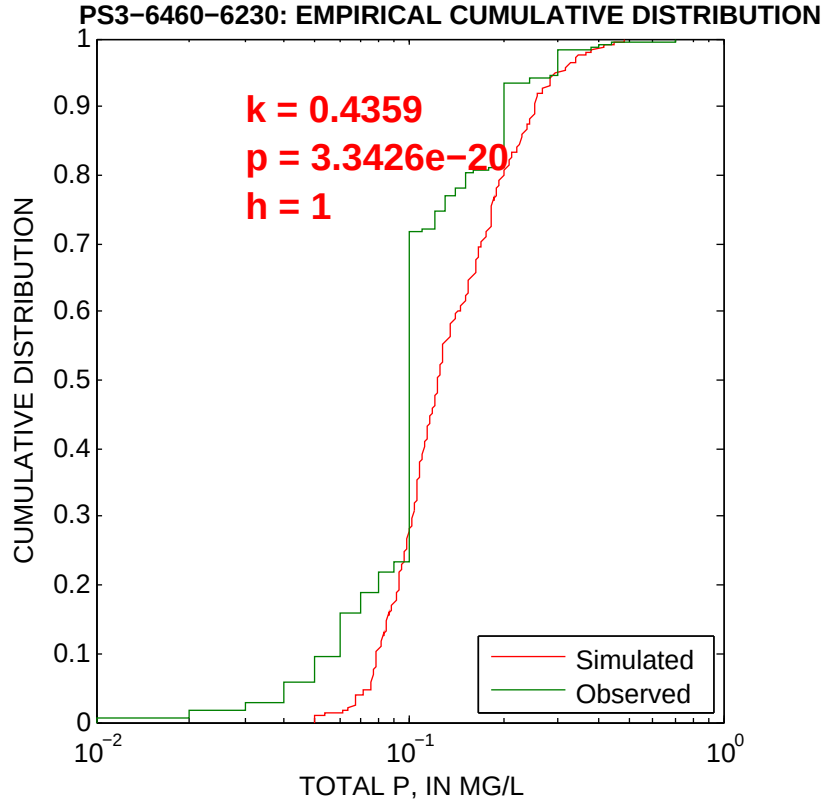












DATA SELECTION

scenario	file
P620171001WQ	TOTP.calib

plot: TOTP - total phosphorus

Dates: 1/1/1985 – 12/31/201

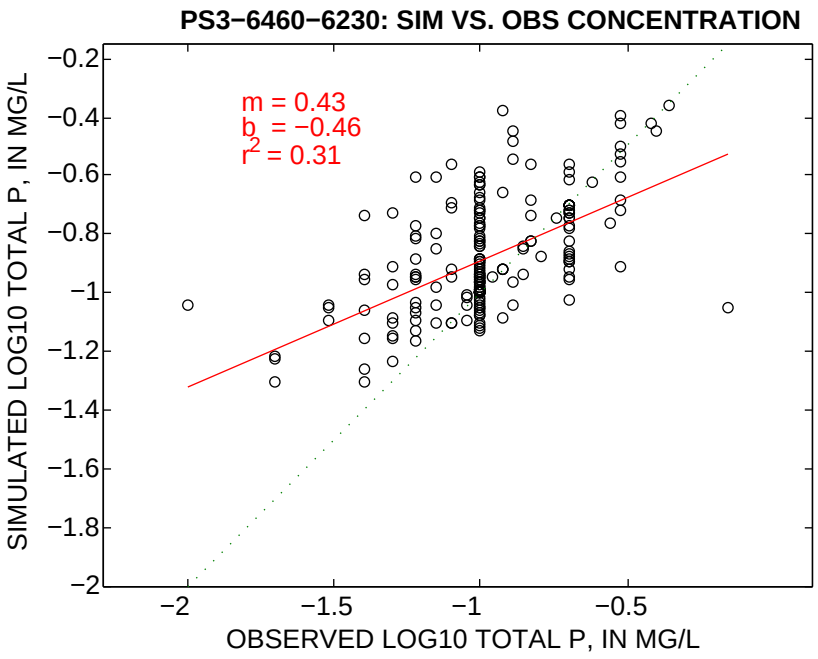
Drive	Directory	Observed
N/A	model	OBS20161101

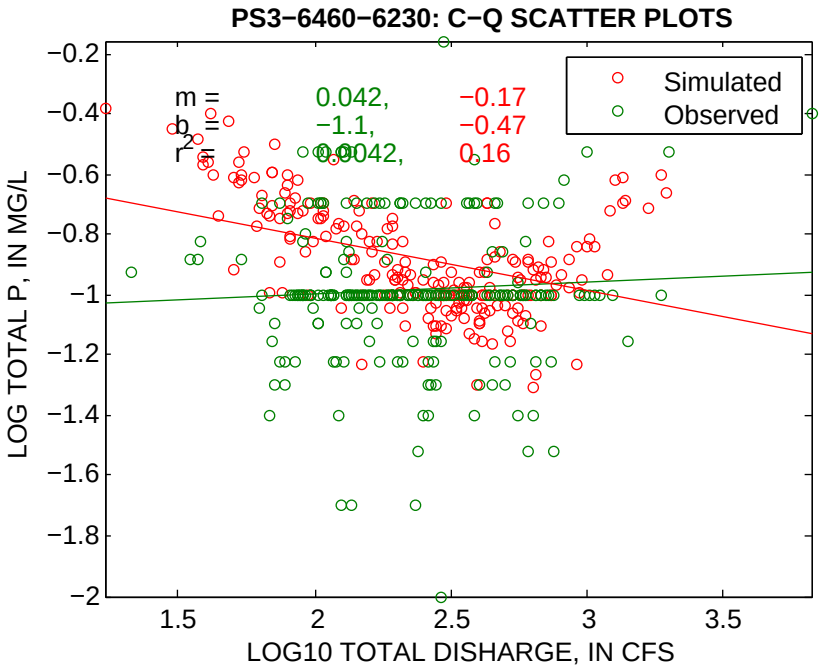
STATISTICS

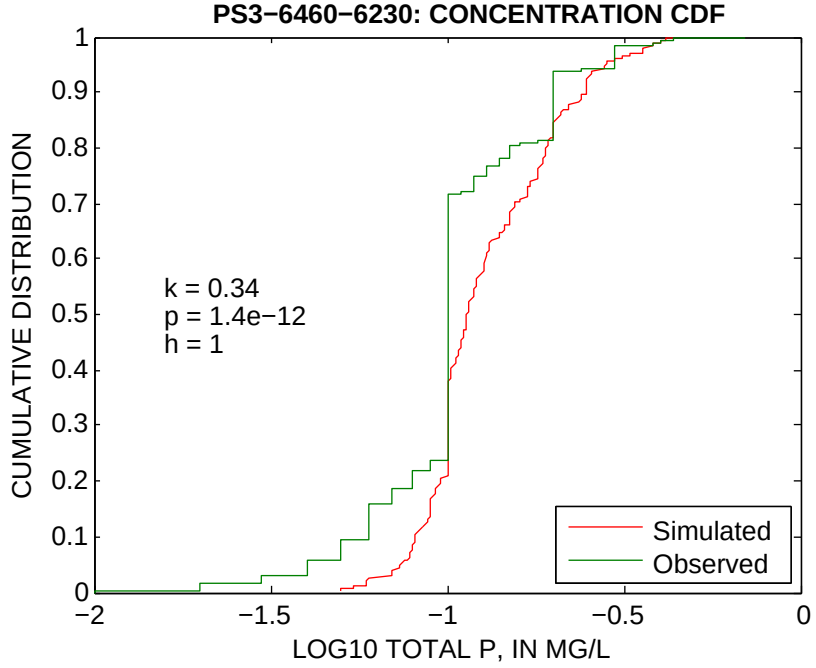
	n	234	234
		observe	simulate
min		0.01	0.049757
		-2	-1.30315
mean		0.121282	0.150001
		-0.981823	-0.870165
media		0.1	0.124025
		-1	-0.906491
max		0.7	0.48476
		-0.154902	-0.314473
varian		0.00598719	0.00581682
		0.0570843	0.037962
JB		0.001	0.001
		0.001	0.017906
		ra	log
%		23.6794	-11.3725
err.va		0.00789189	0.0715766
rel.std.err		1.31813	1.25388
mod.eff		-0.318129	-0.253875

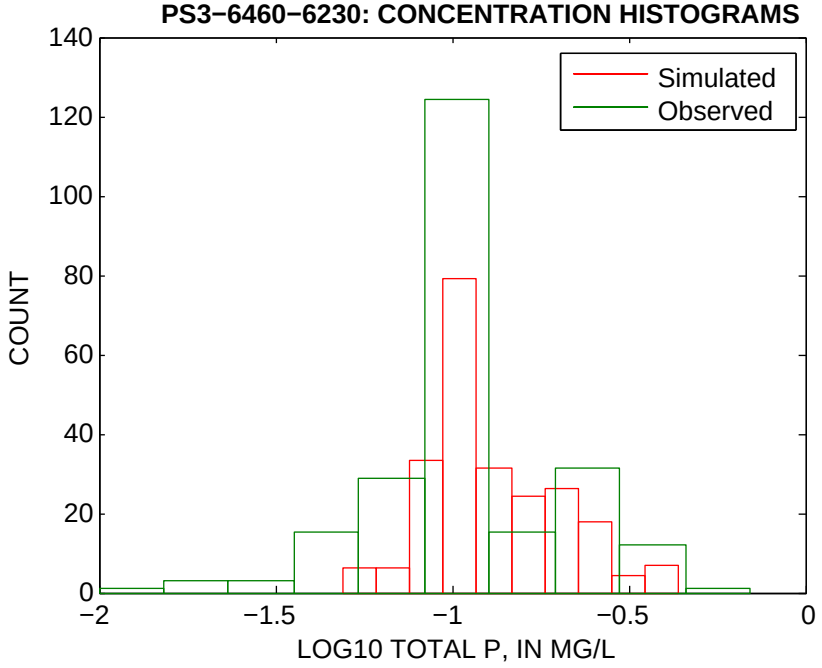
VERSION 2.1

ALL DATA
LOG10

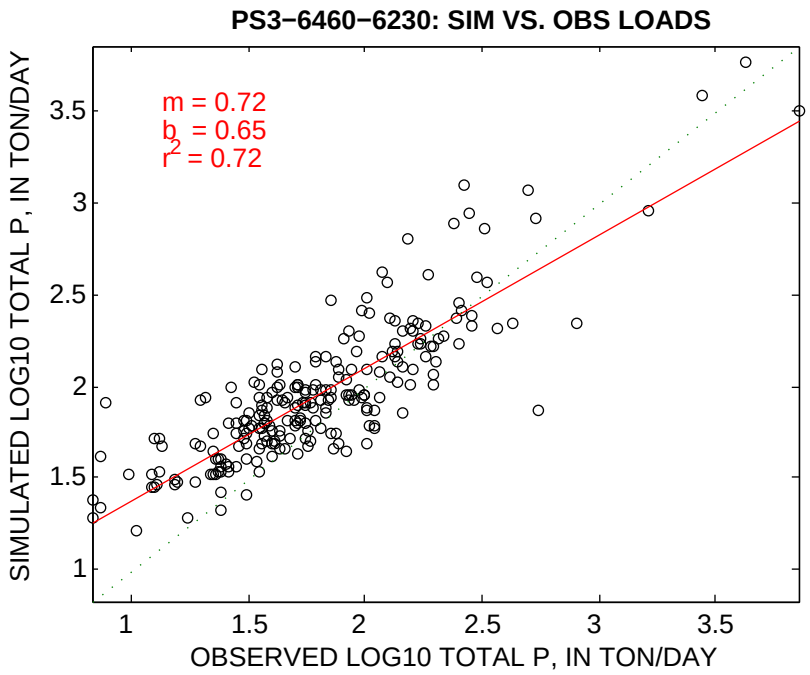


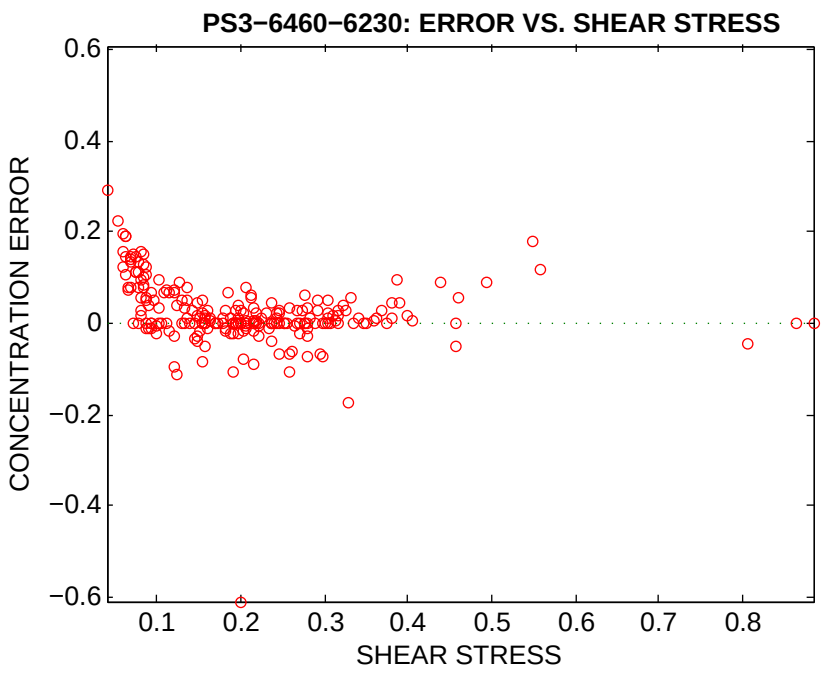


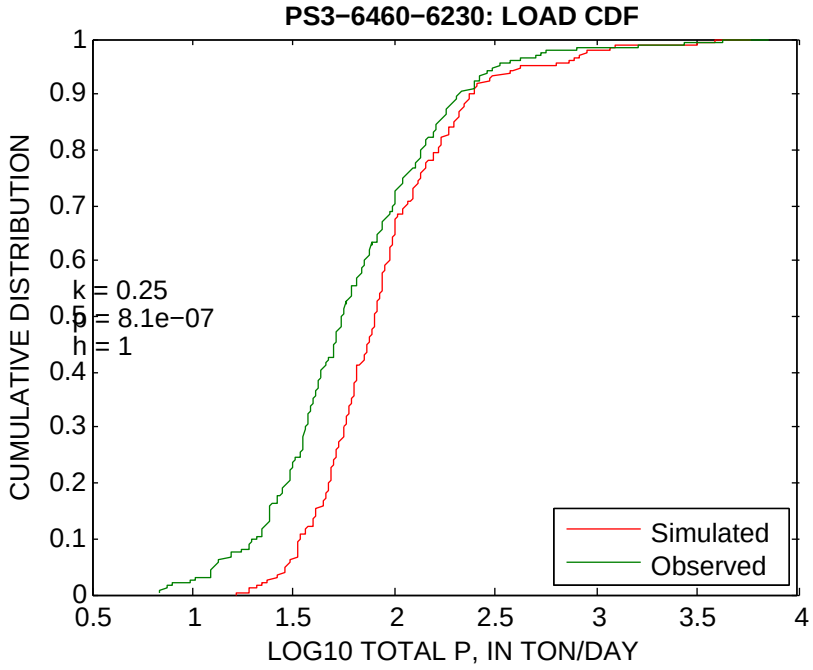


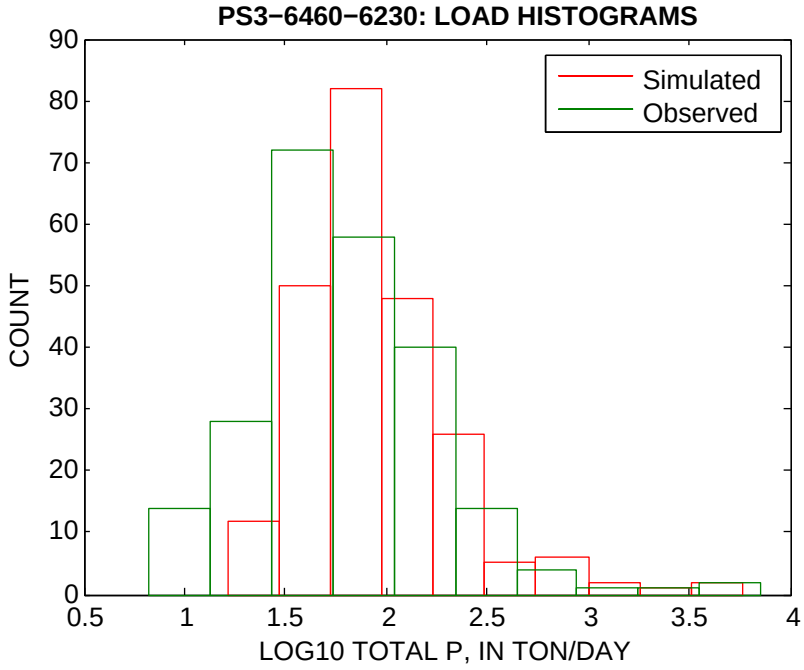


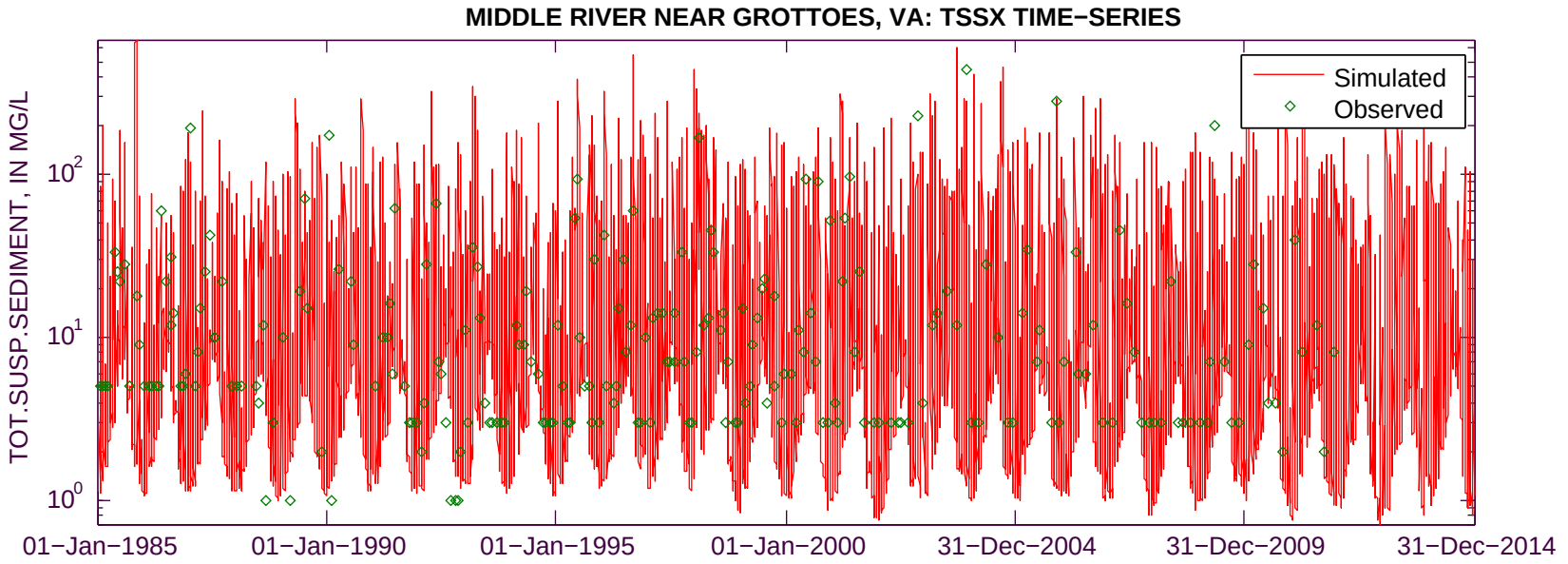
LOAD DATA
LOG10

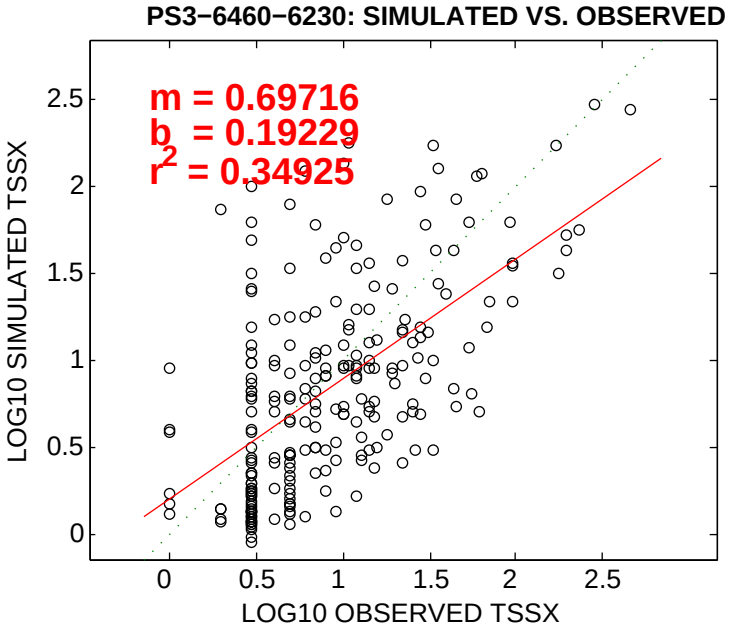


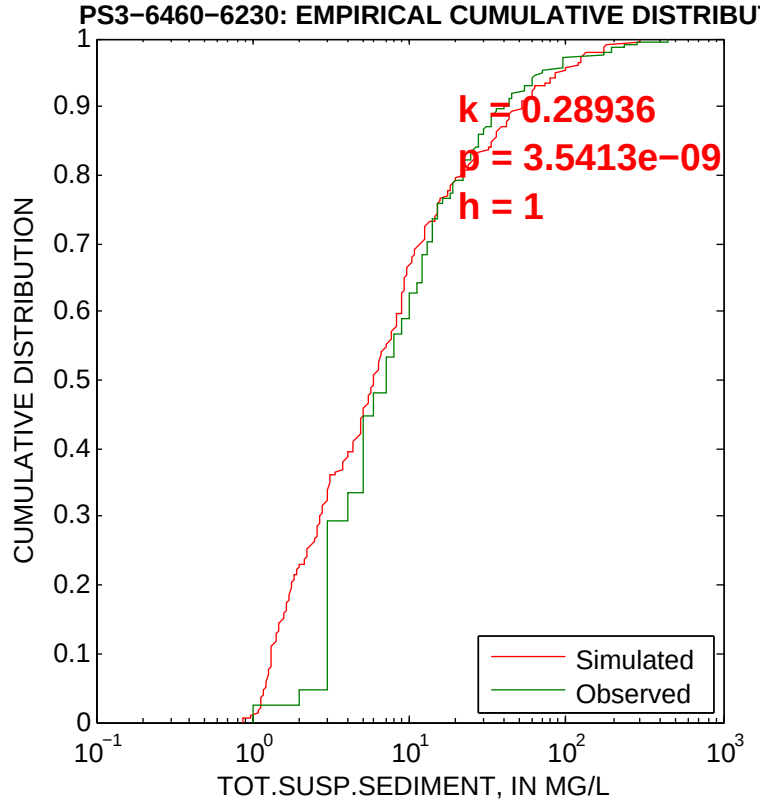












DATA SELECTION

scenario	file
P620171001WQ	TSSX.calib

plot: TSSX - total suspended ...

Dates: 1/1/1985 – 12/31/201

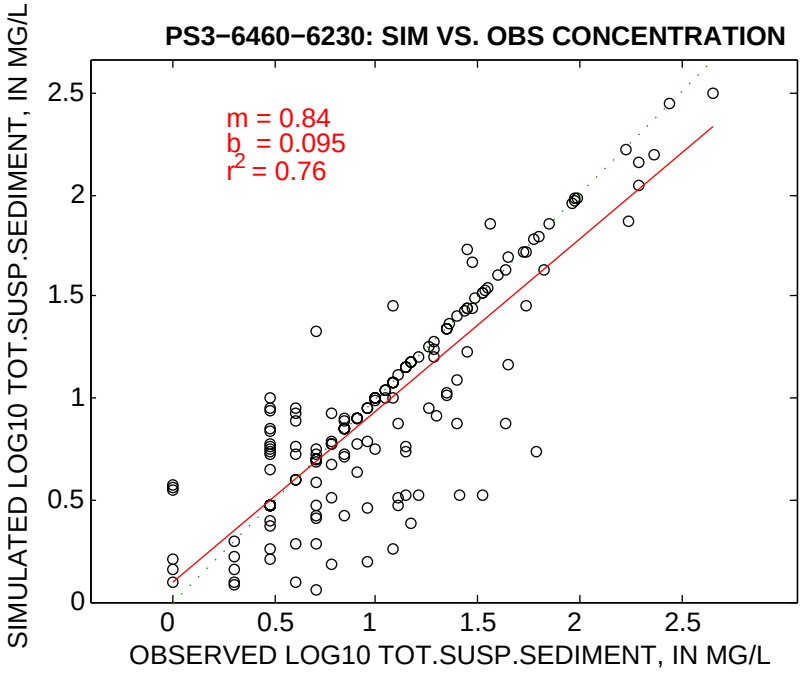
Drive	Directory	Observed
N/A	model	OBS20161101

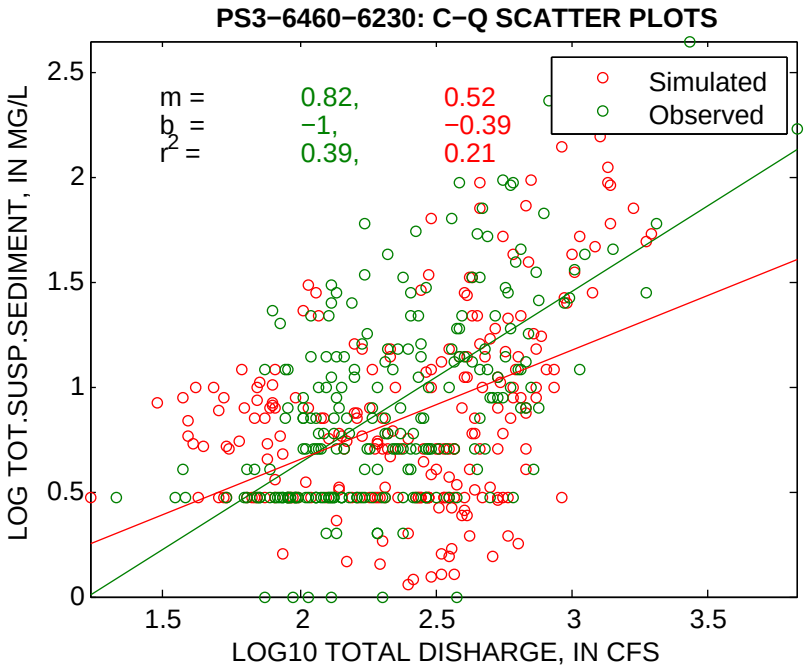
STATISTICS

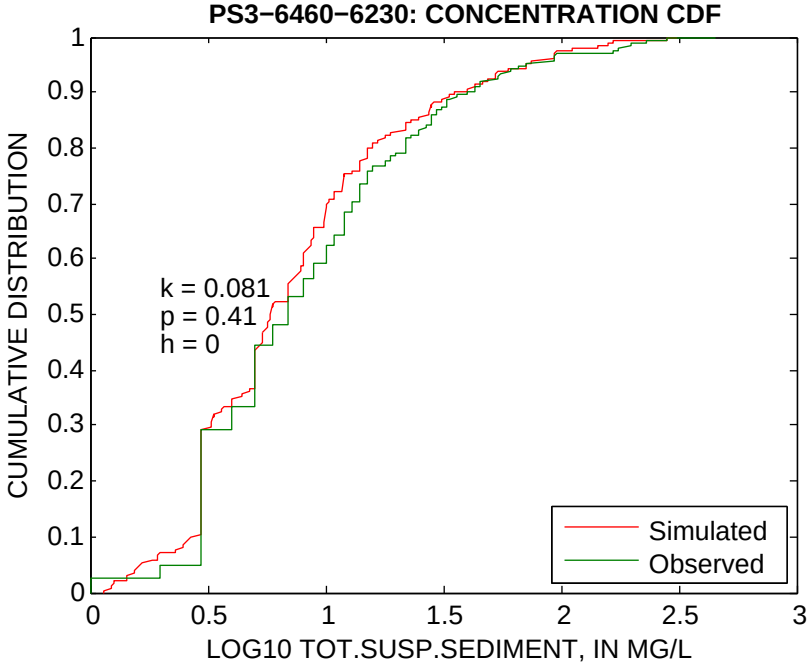
	n	observe	simulate
		235	235
min		1	0.88051
		0	-0.0552657
mean		20.0426	19.4399
		0.92735	0.838797
media		7	5.9574
		0.845098	0.775057
max		453	299.33
		2.6561	2.47615
varian		2080.01	1538.72
		0.245388	0.34149
JB		0.001	0.001
		0.001	0.004298
		ra	log
%		-3.0068	-9.549
err.va		1307.66	0.252604
rel.std.err		0.628681	1.02941
mod.eff		0.371319	-0.0294091

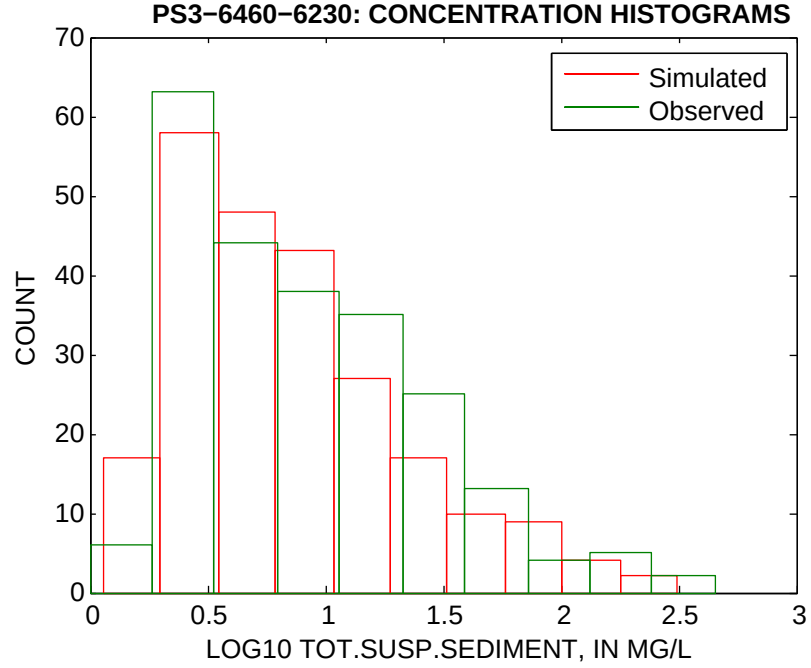
VERSION 2.1

ALL DATA
LOG10

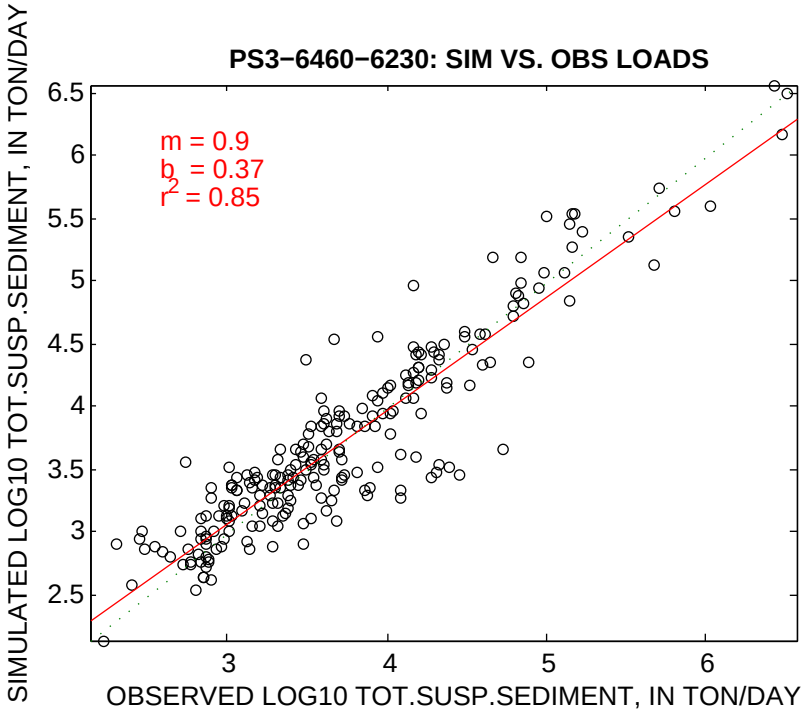


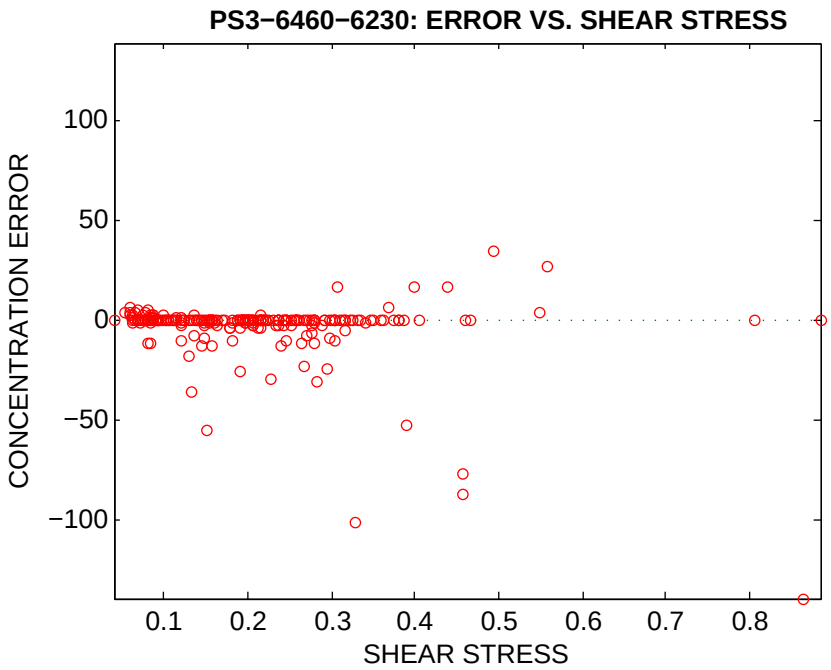


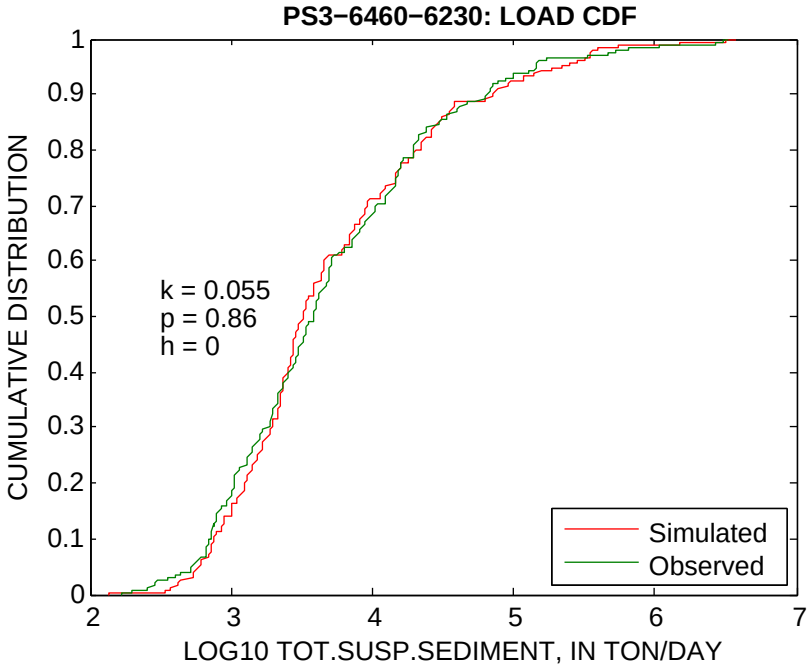


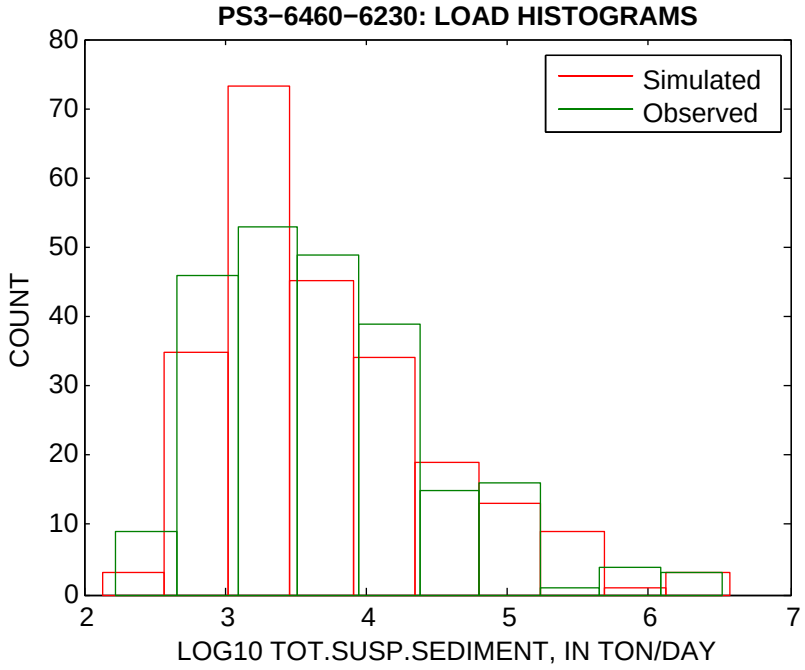


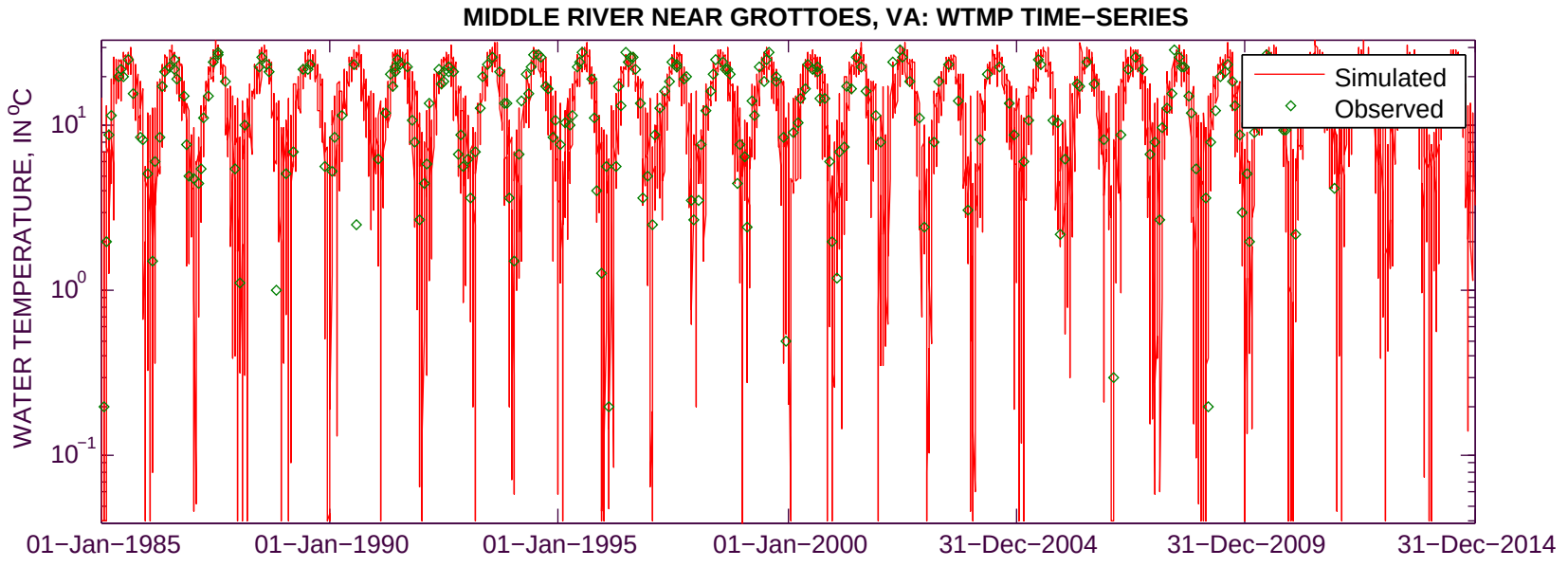
LOAD DATA
LOG10

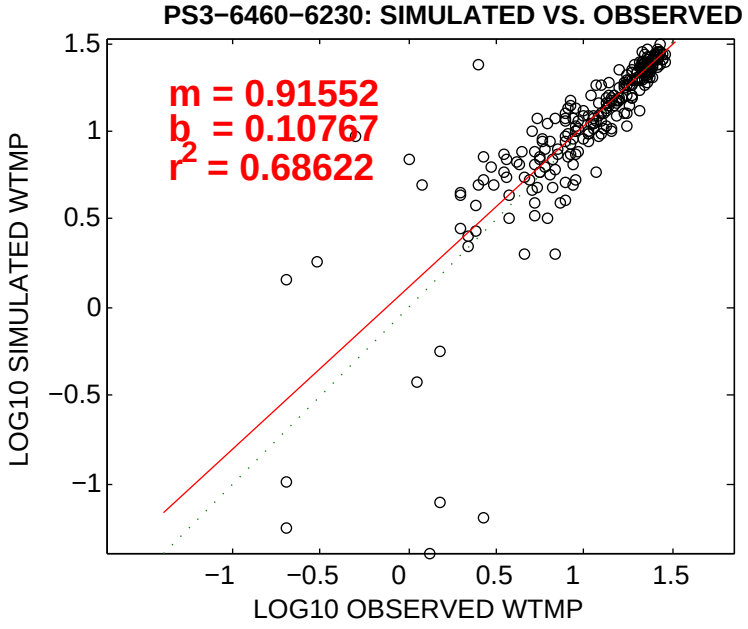


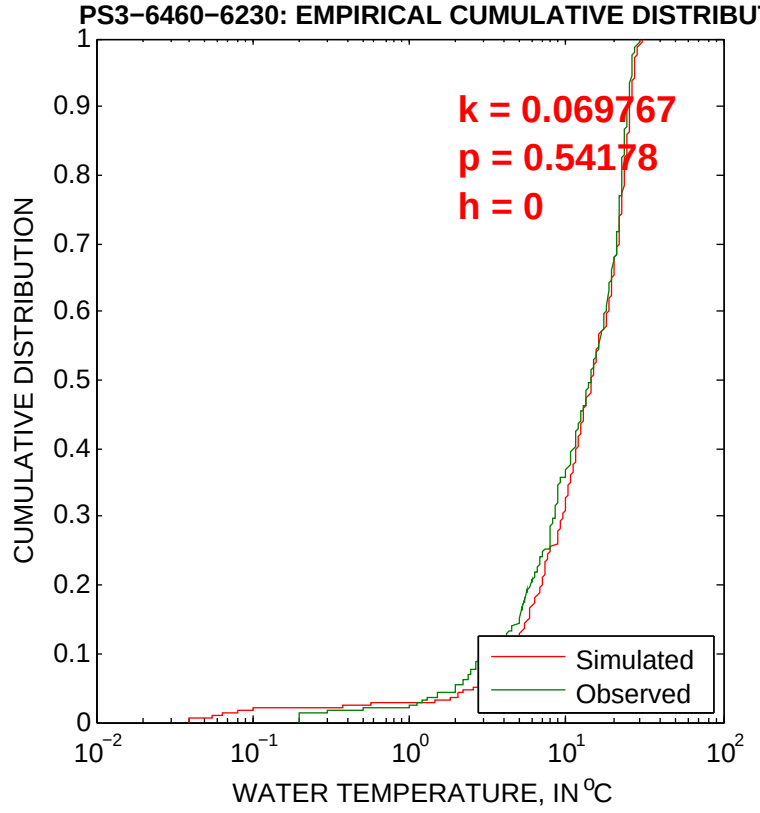












DATA SELECTION

scenario	file
P620171001WQ	WTMP.calib

plot: WTMP - water tempera...

Dates: 1/1/1985 – 12/31/201

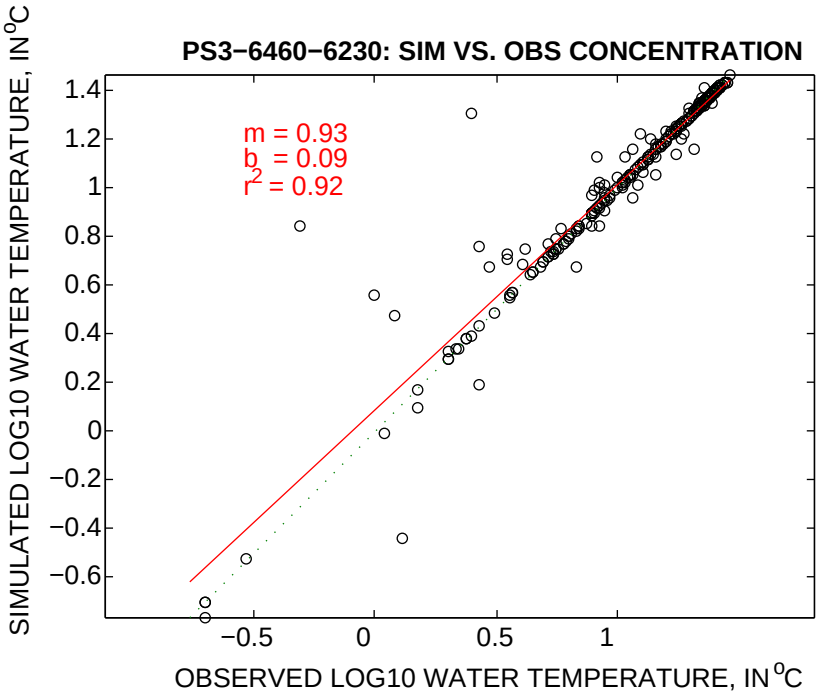
Drive	Directory	Observed
N/A	model	OBS20161101

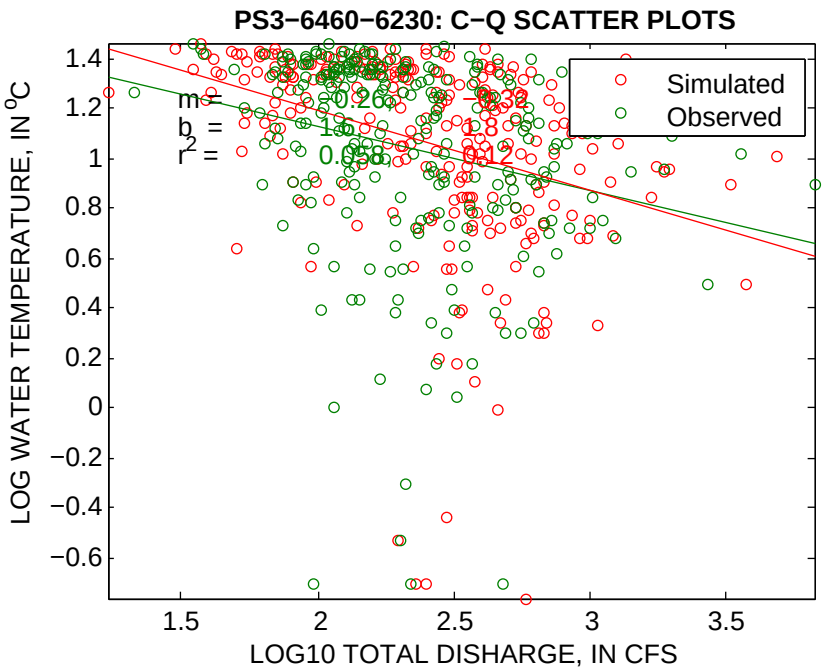
STATISTICS

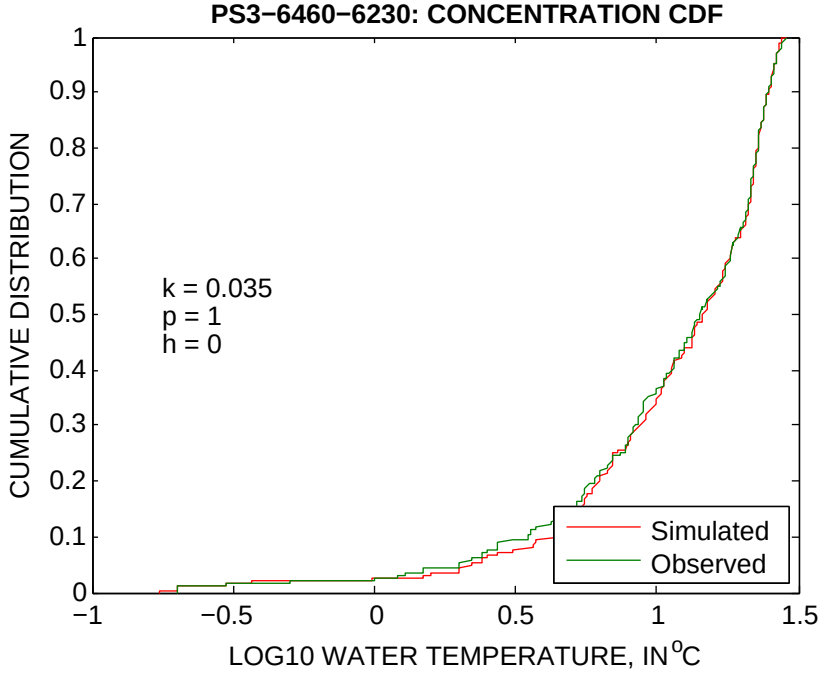
	n	observe	simulate
		258	258
min		0.2	0.040038
		-0.69897	-1.39753
mean		14.3652	15.0382
		1.03816	1.05812
media		14.3	14.631
		1.15534	1.16527
max		29	30.849
		1.4624	1.48924
varian		65.3722	65.1693
		0.159263	0.194529
JB		0.002753	0.004233
		0.001	0.001
		ra	log
%		4.68436	1.92317
err.va		8.65037	0.0625752
rel.std.err		0.132325	0.392906
mod.eff		0.867675	0.607094

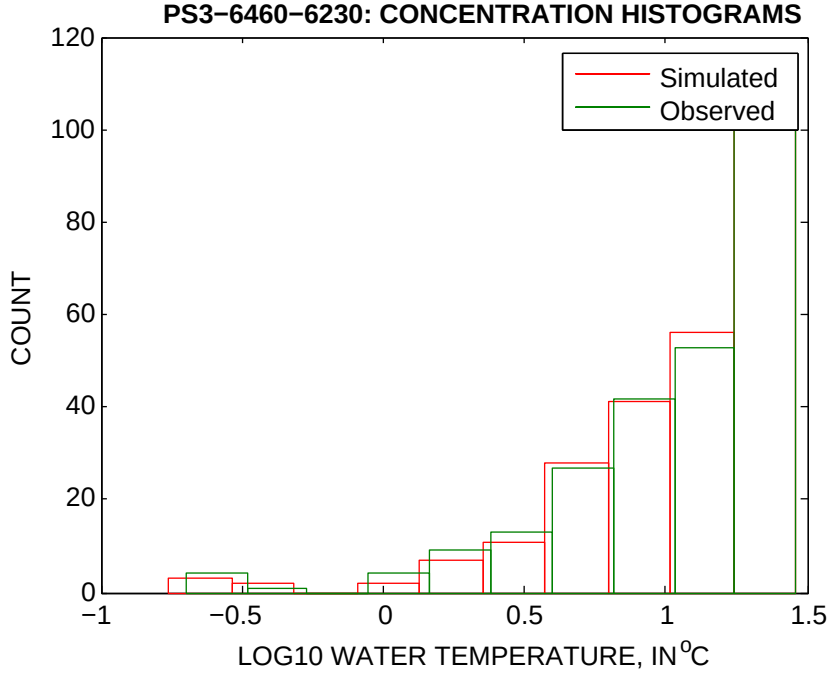
VERSION 3.1

ALL DATA
LOG10

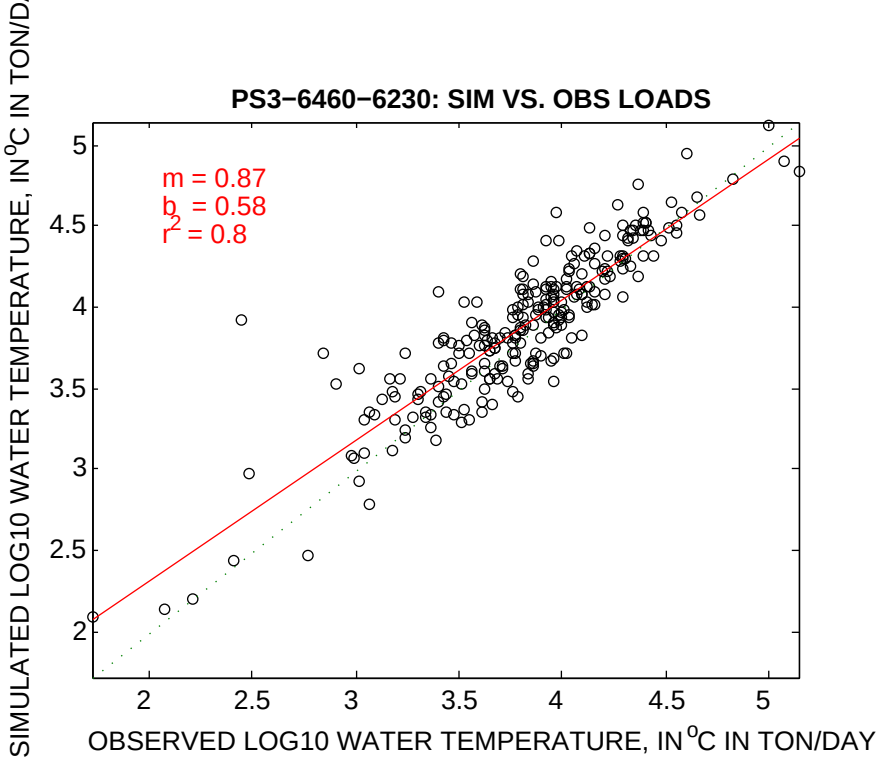


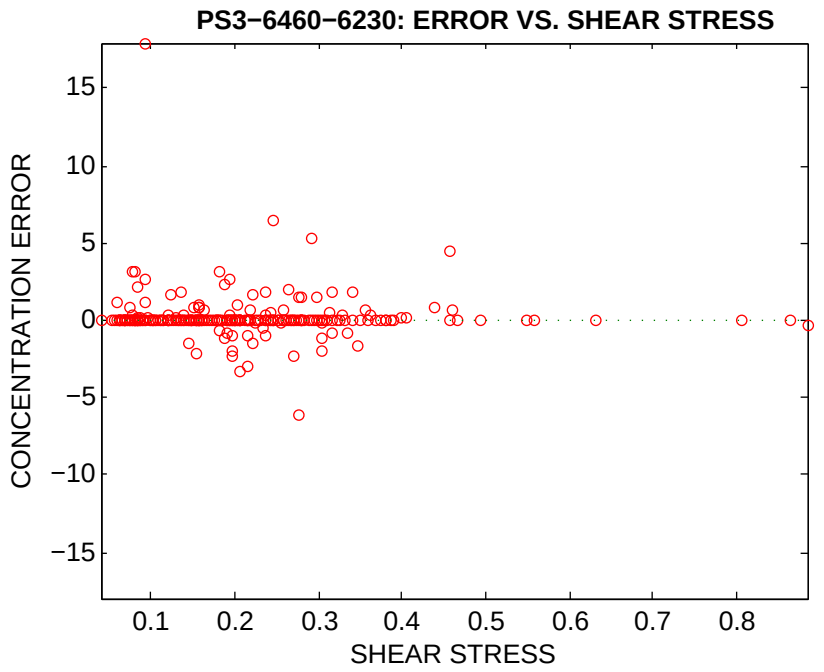


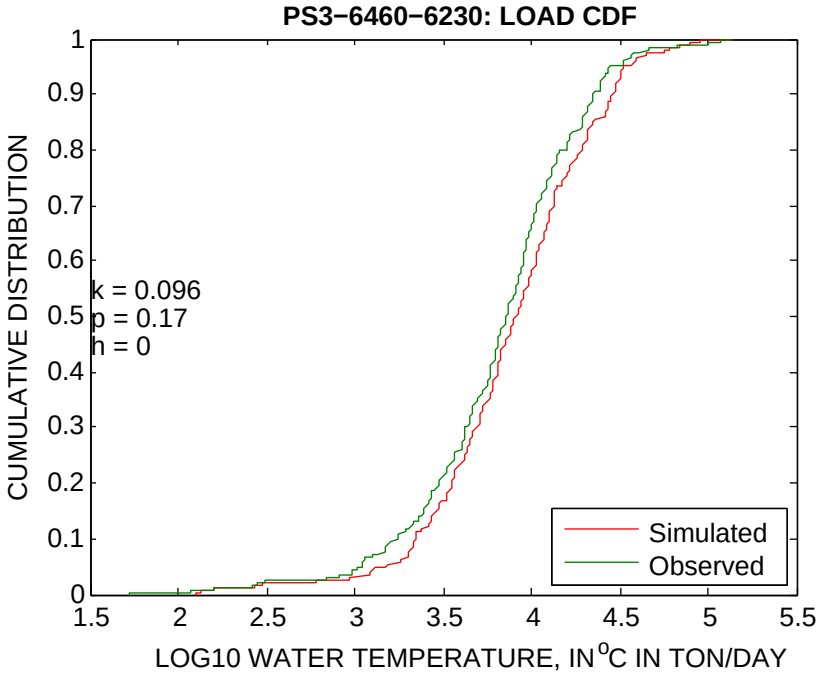


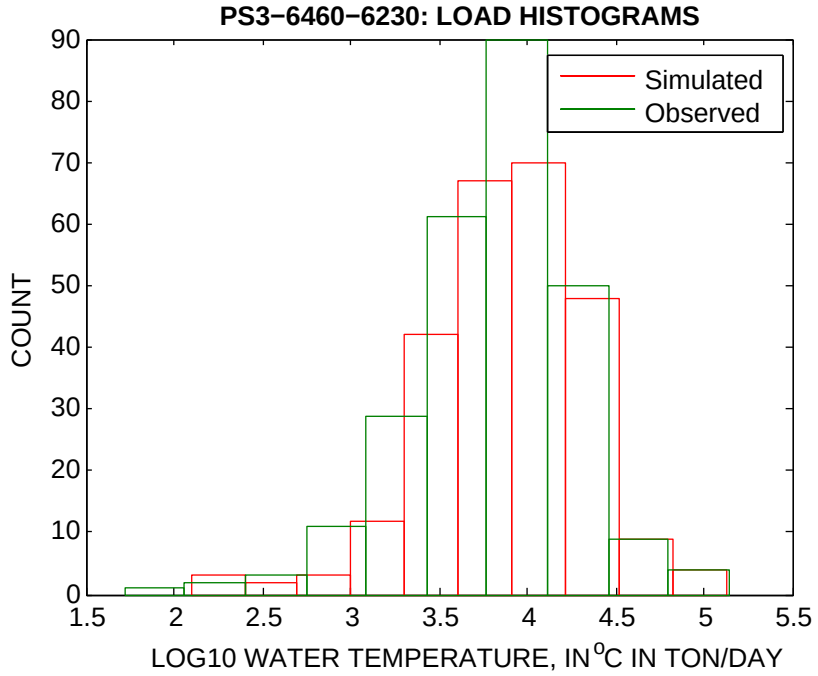


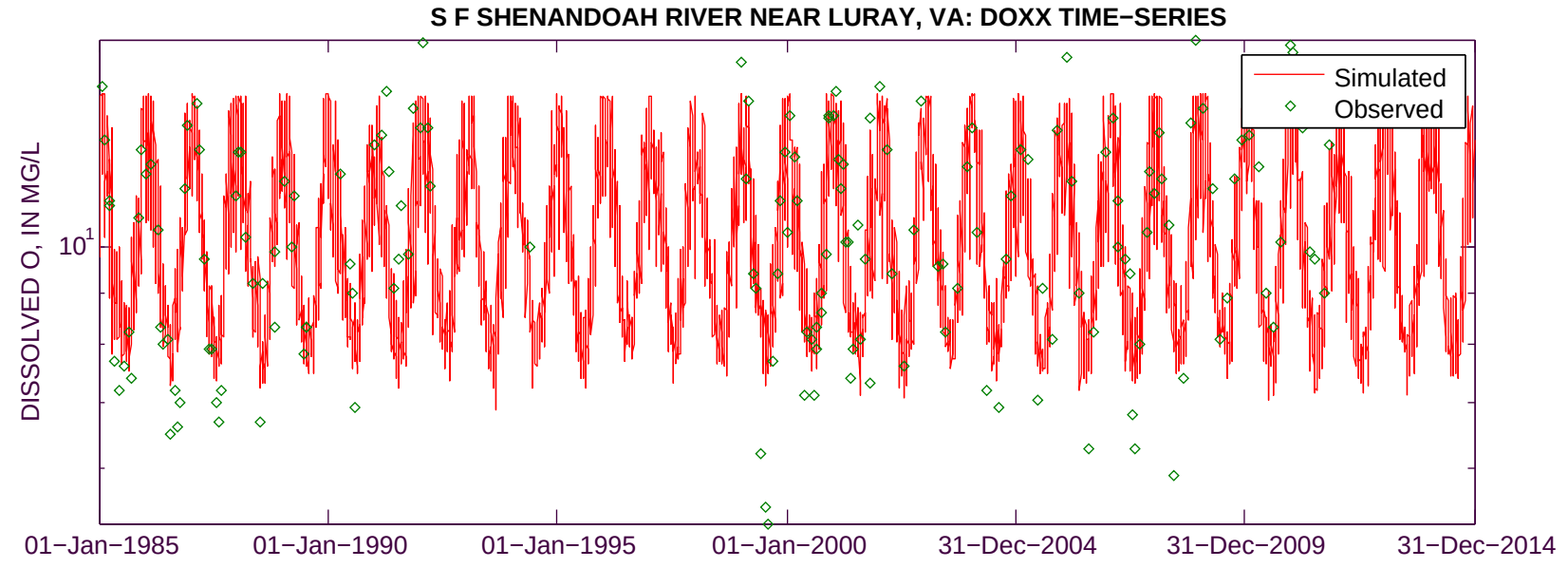
LOAD DATA
LOG10

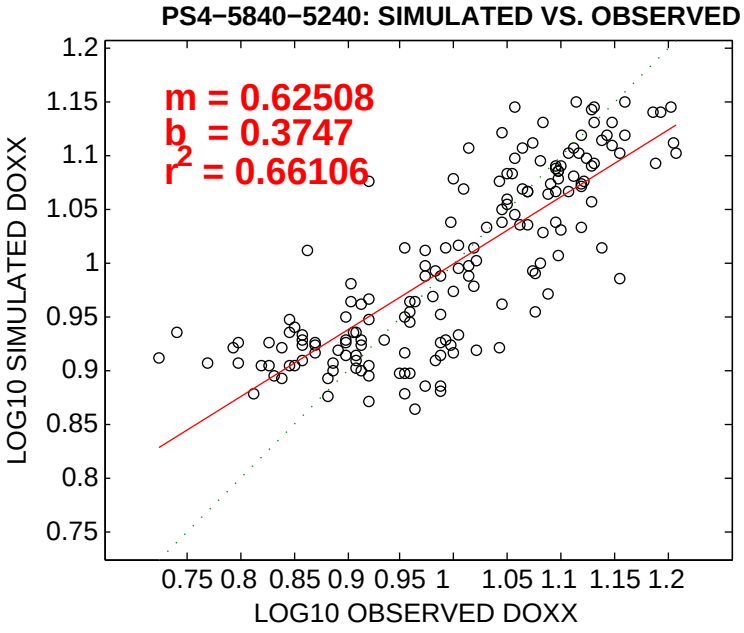


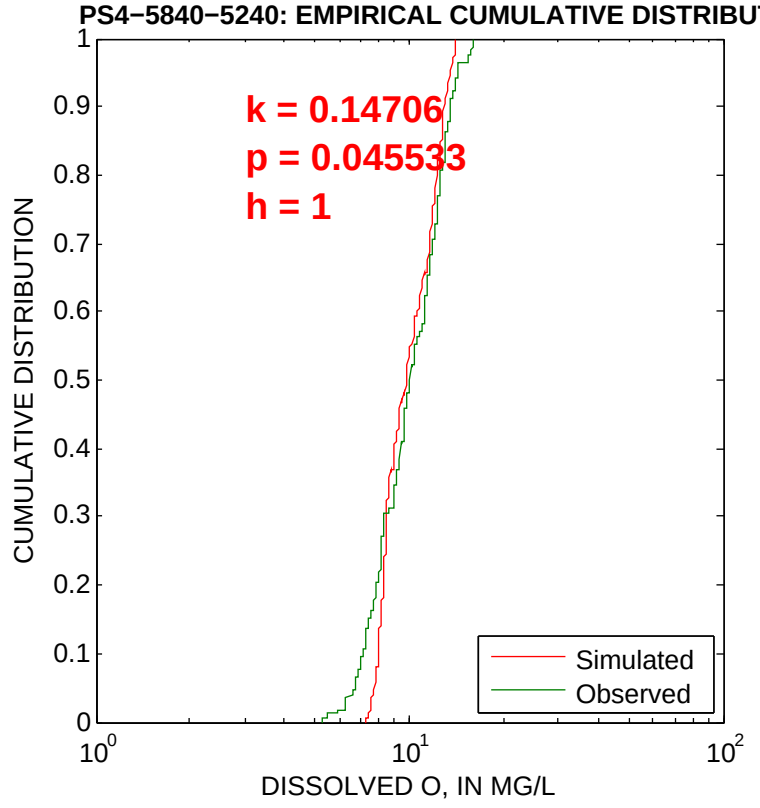












DATA SELECTION

scenario	file
P620171001WQ	DOXX.calib

plot: DOXX - dissolved oxygen

Dates: 1/1/1985 – 12/31/201

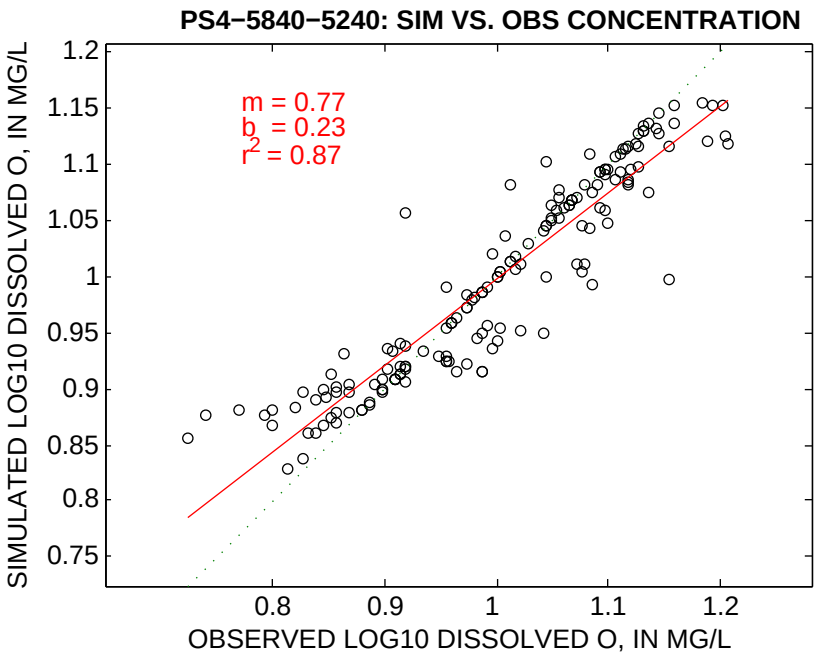
Drive	Directory	Observed
N/A	model	OBS20161101

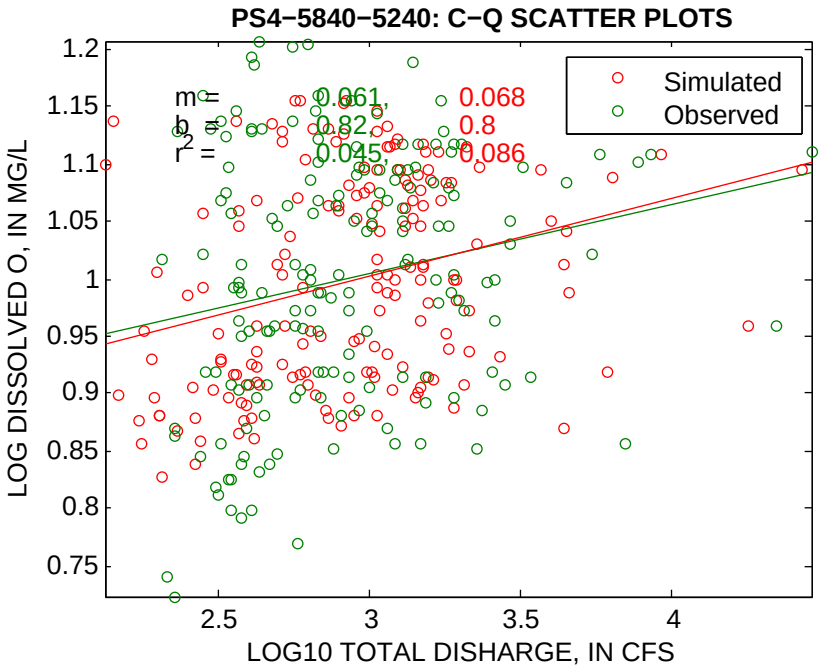
STATISTICS

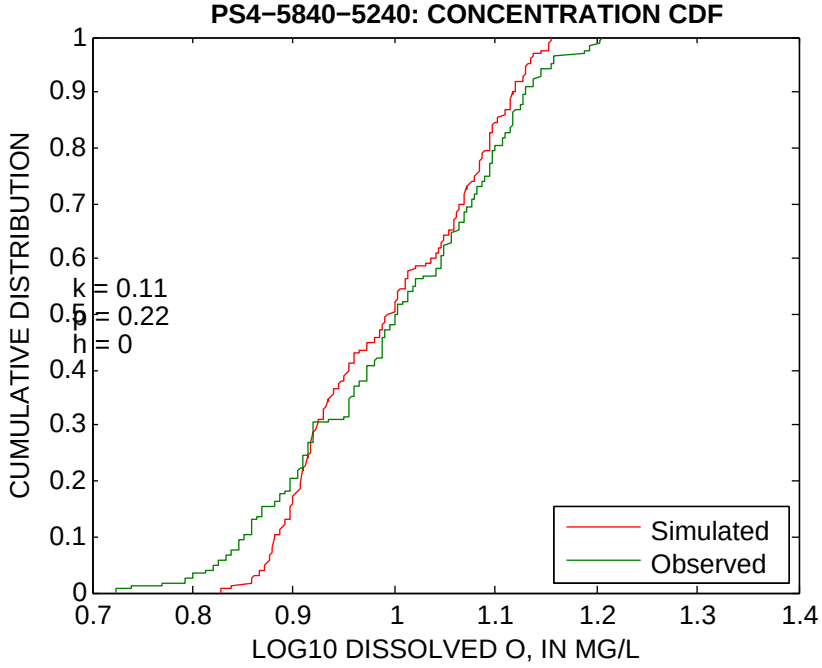
	n	170	170
		observe	simulate
min		5.3	7.3077
		0.724276	0.863781
mean		10.2985	10.1758
		0.999684	0.999581
media		10.05	9.7475
		1.00216	0.988893
max		16.1	14.152
		1.20683	1.15082
varian		6.22647	3.90833
		0.0116999	0.00691534
JB		0.047987	0.006265
		0.047761	0.006718
		ra	log
%		-1.19107	-0.0103367
err.va		1.98094	0.0039885
rel.std.err		0.318148	0.340901
mod.eff		0.681852	0.659099

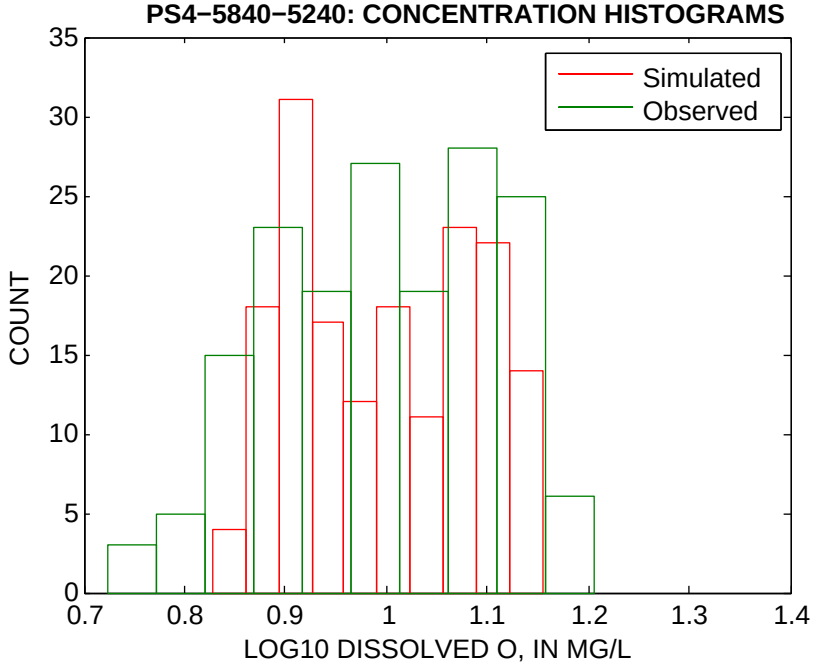
VERSION 2.1

ALL DATA
LOG10

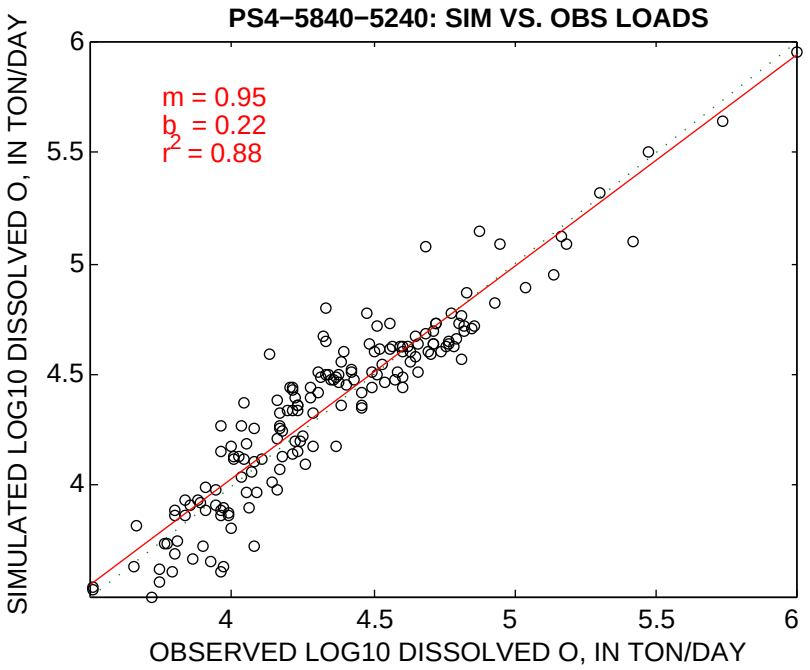


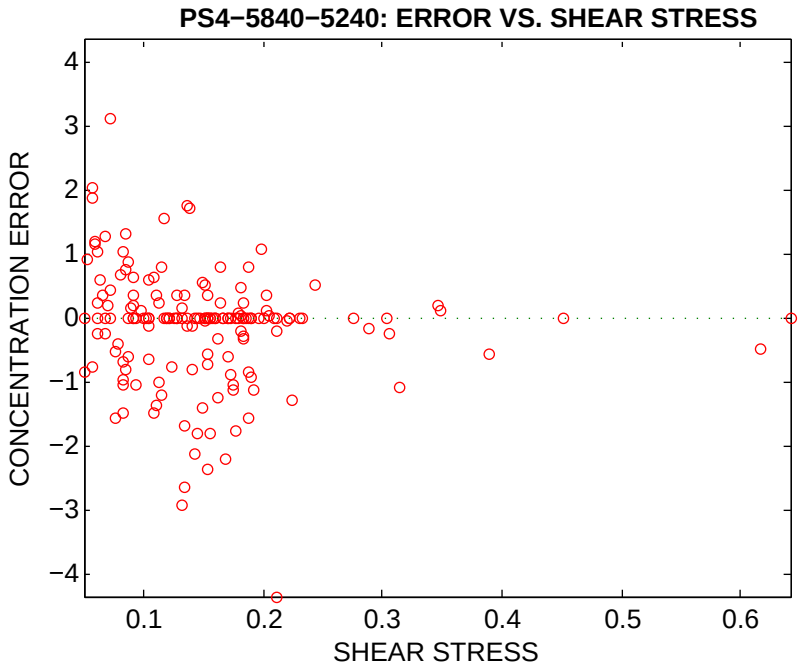


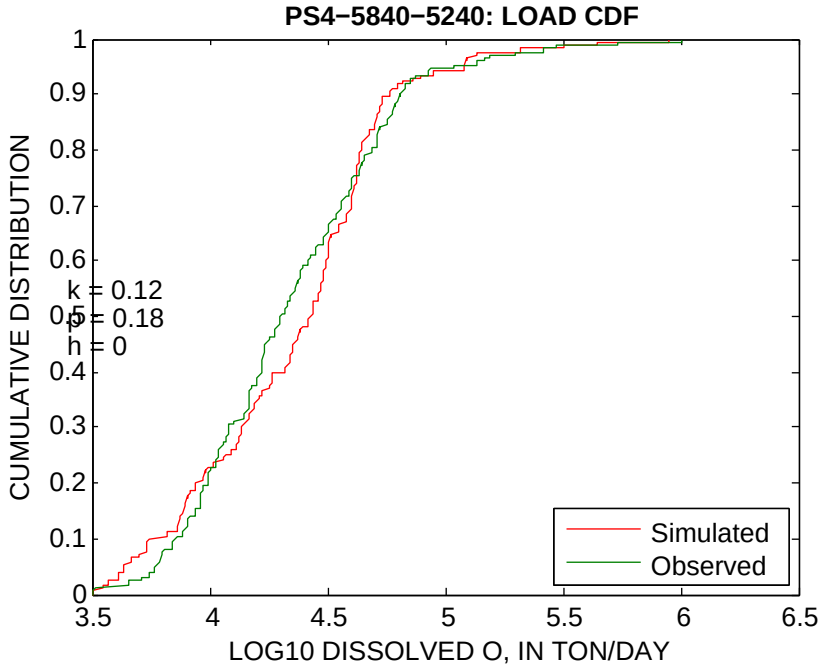


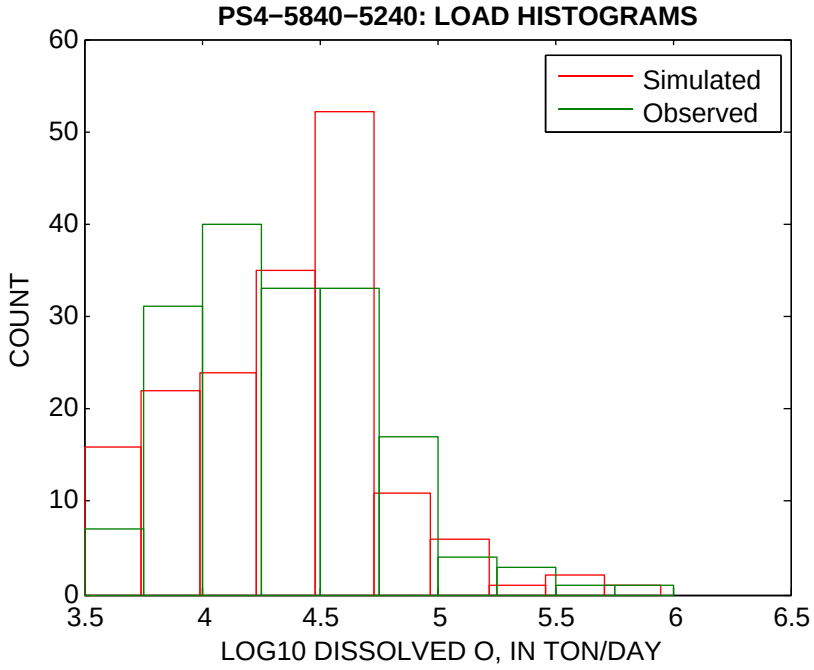


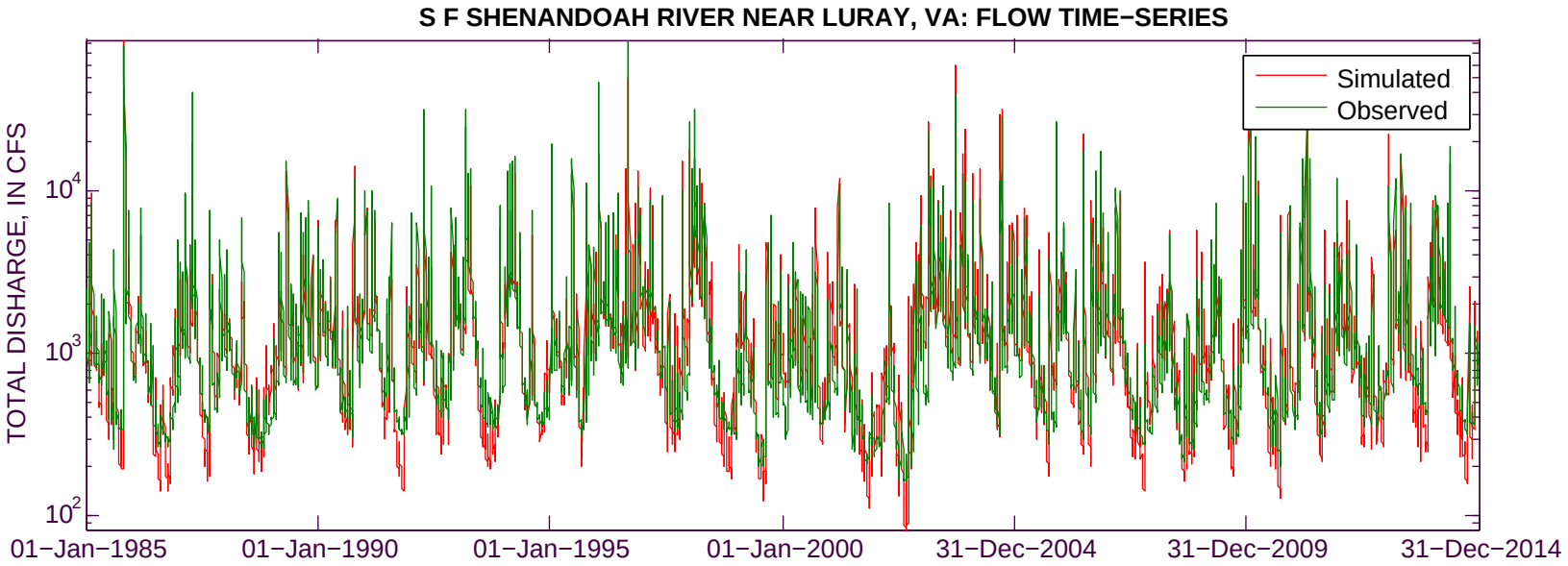
LOAD DATA
LOG10

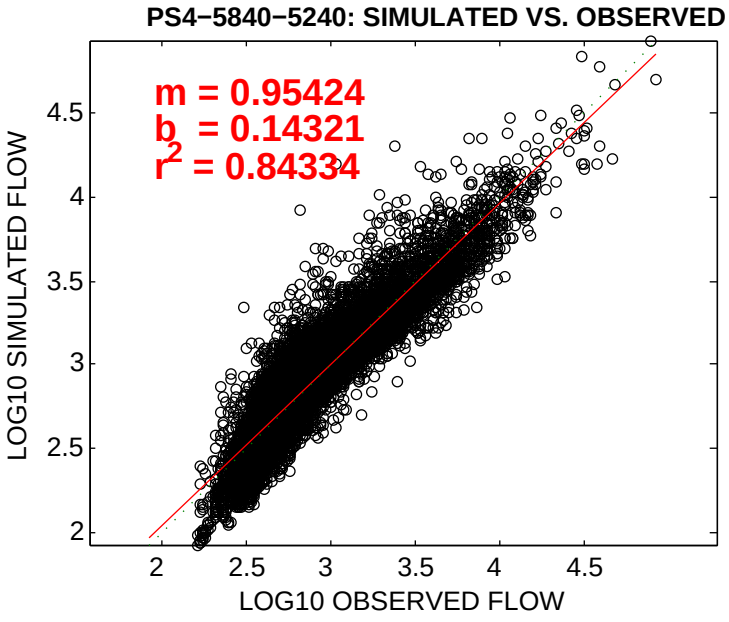


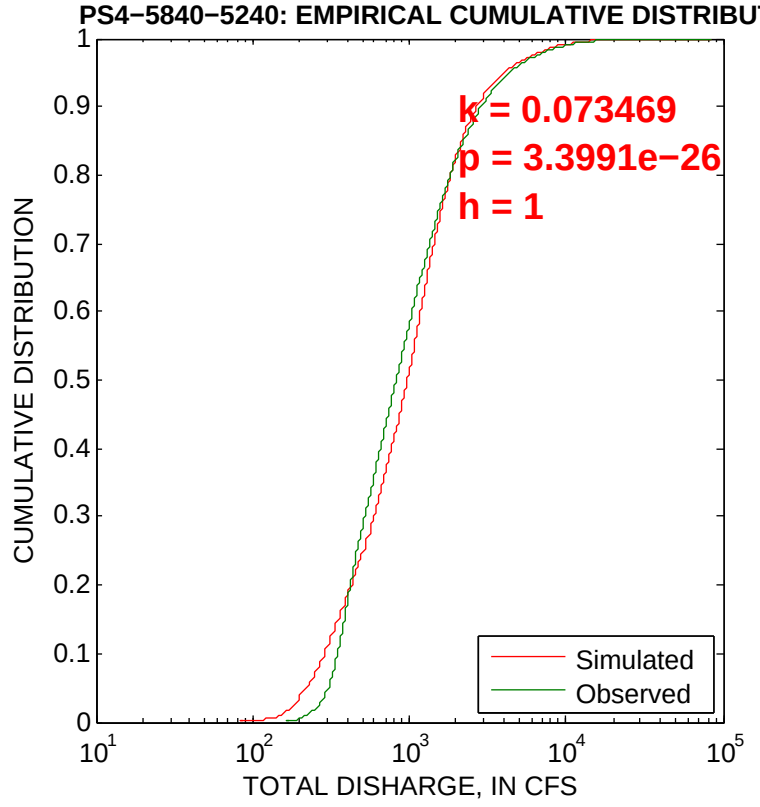












DATA SELECTION

scenario	file
P620171001WQ	FLOW.calib

plot: FLOW - total discharge

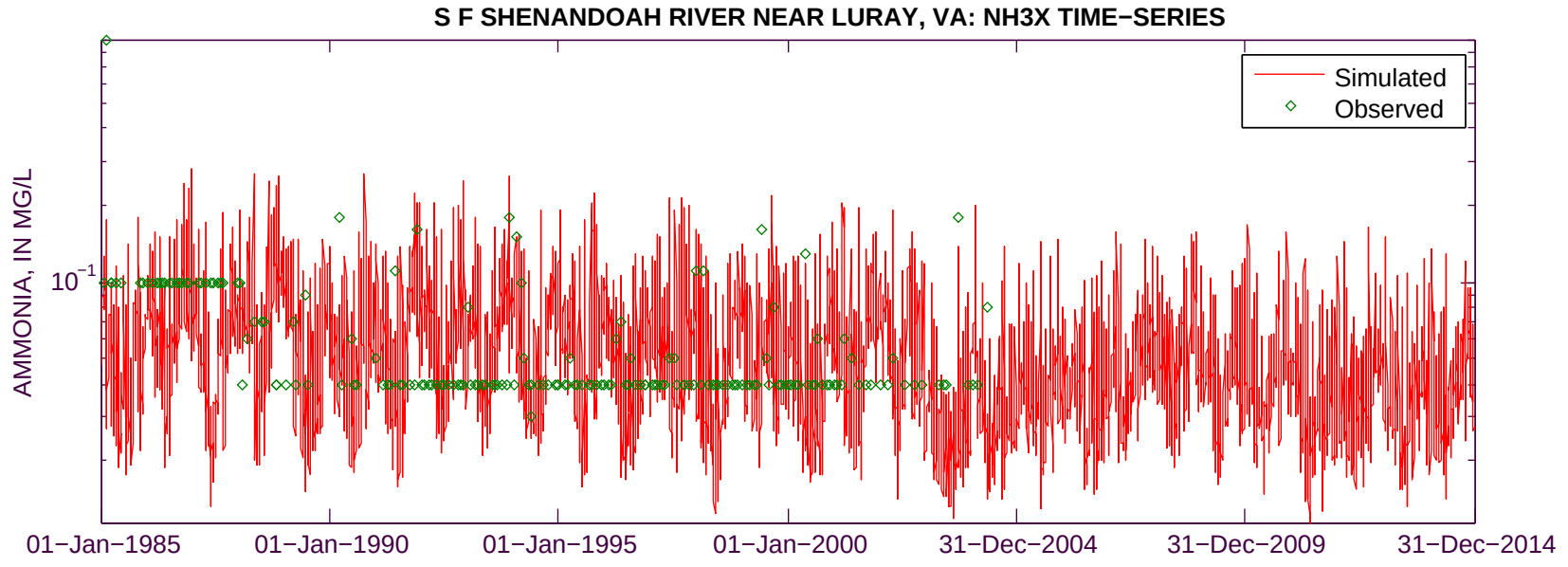
Dates 1/1/1985 12/31/201

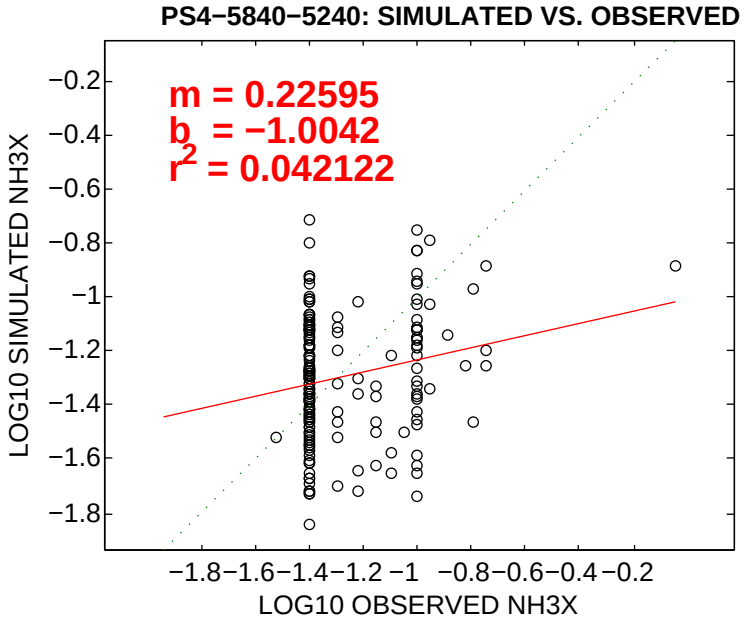
Drive	Directory	Observed
N/A	model	OBS20161101

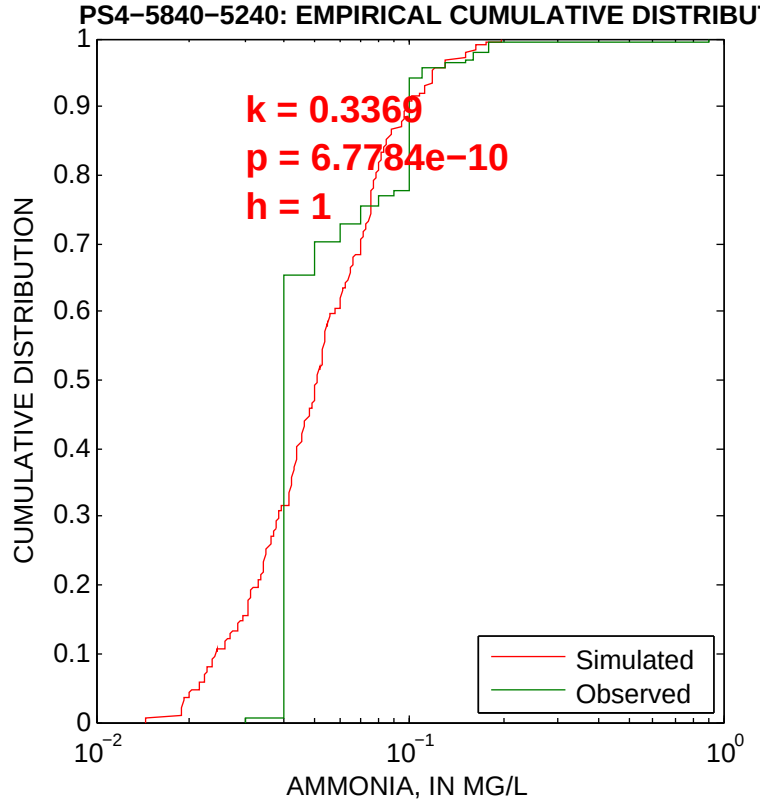
STATISTICS

	observe	simulate
n	10957	10957
min	163 2.21219	83.306 1.92068
mean	1457.64 2.96527	1455.45 2.97279
media	830 2.91908	976.71 2.98977
max	84400 4.92634	85312 4.93101
varian	6.10143e+0 0.136779	5.31569e+ 0.147684
JB	0.001 0.001	0.001 0.001
	ra	log
%	-0.150237	0.253822
err.va	1.38154e+0	0.0234789
rel.std.err	0.226428	0.171656
mod.eff	0.773572	0.828344

VERSION 2.1







DATA SELECTION

scenario	file
P620171001WQ	NH3X.calib

plot: NH3X - ammonia

Dates: 1/1/1985 – 12/31/201

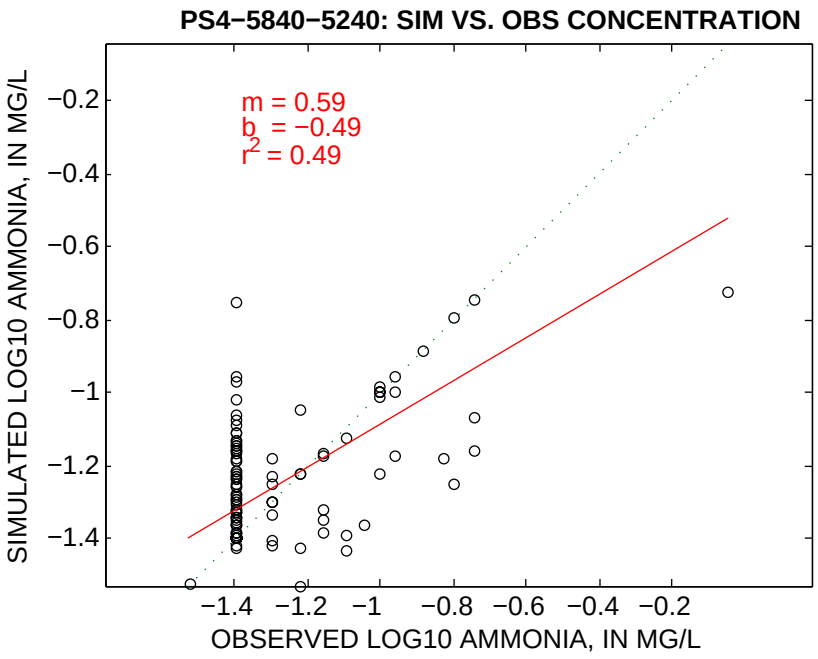
Drive	Directory	Observed
N/A	model	OBS20161101

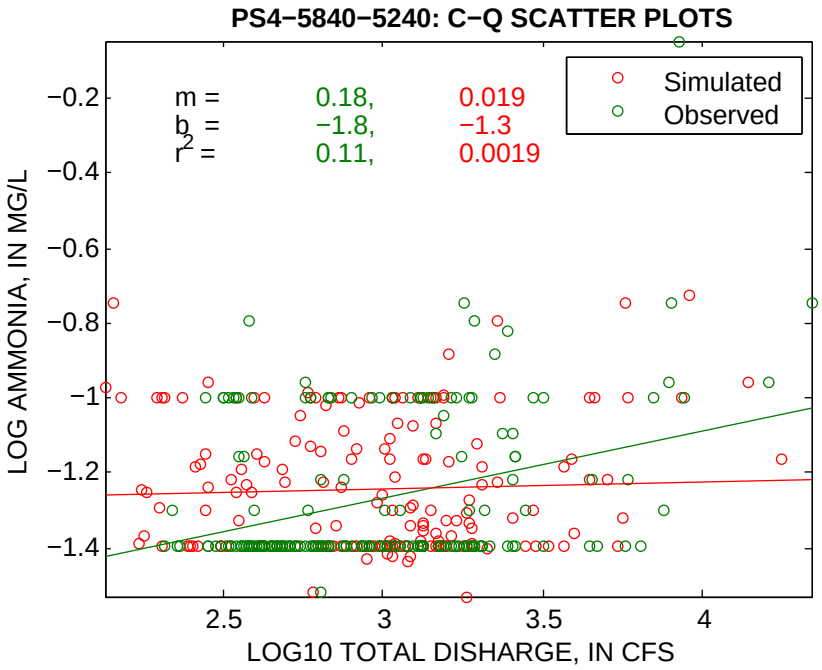
STATISTICS

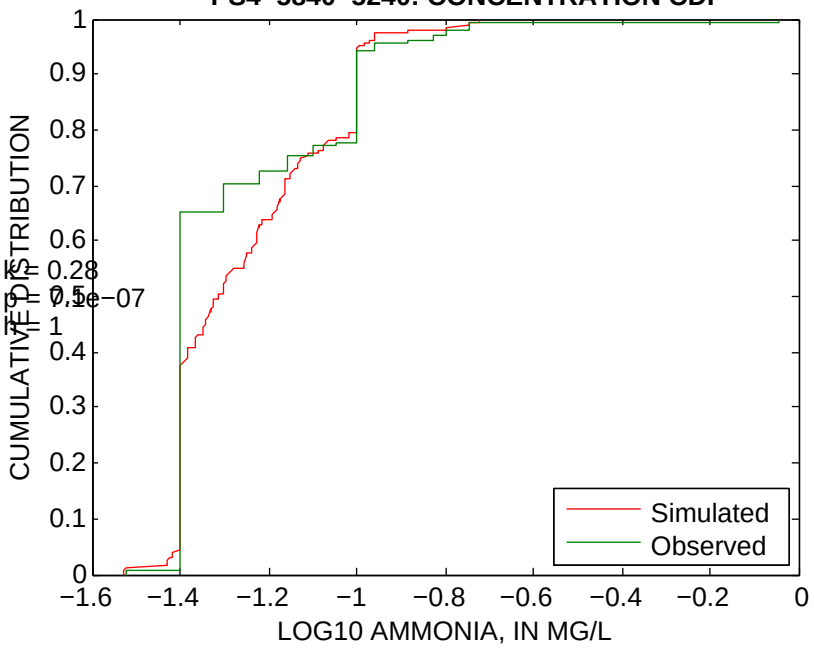
		observe	simulate
n		187	187
min		0.03	0.014425
		-1.52288	-1.84088
mean		0.0629412	0.0585346
		-1.27305	-1.29189
media		0.04	0.050719
		-1.39794	-1.29483
max		0.9	0.19521
		-0.0457575	-0.709498
varian		0.00478539	0.0010444
		0.042703	0.0517598
JB		0.001	0.001
		0.001	0.485339
		ra	log
%		-7.00104	1.47986
err.va		0.00478558	0.0755217
rel.std.err		1.00004	1.76853
mod.eff		-4.02847e-	-0.768534

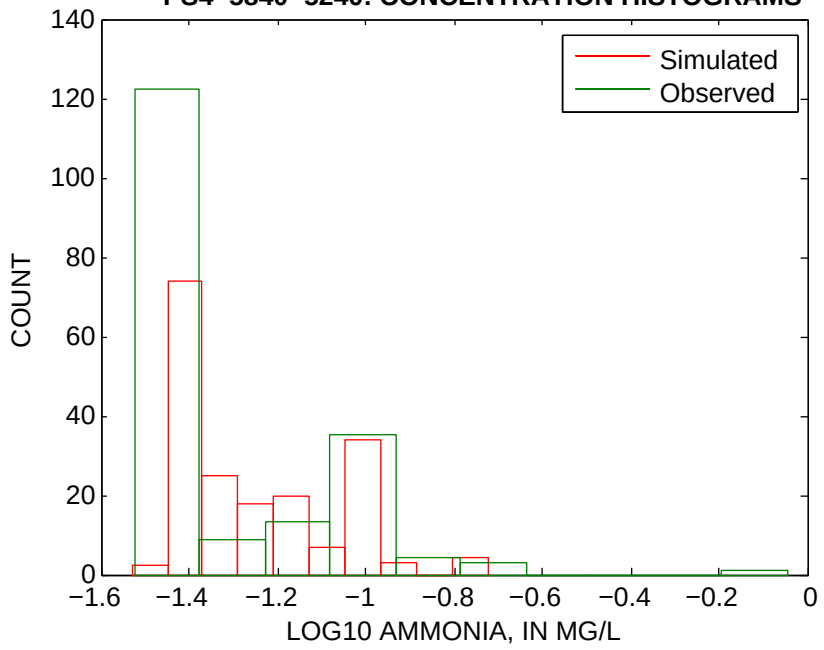
VERSION 2.1

ALL DATA
LOG10

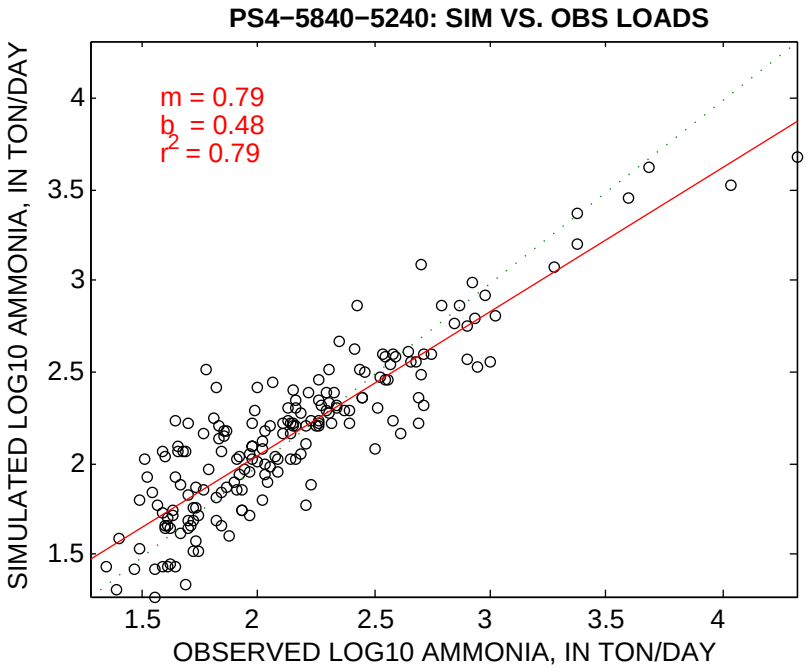


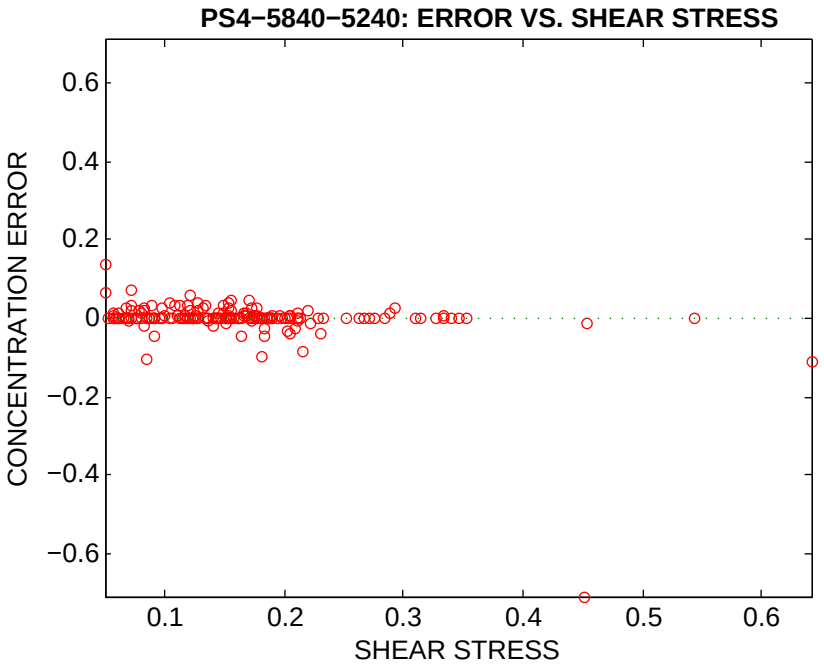


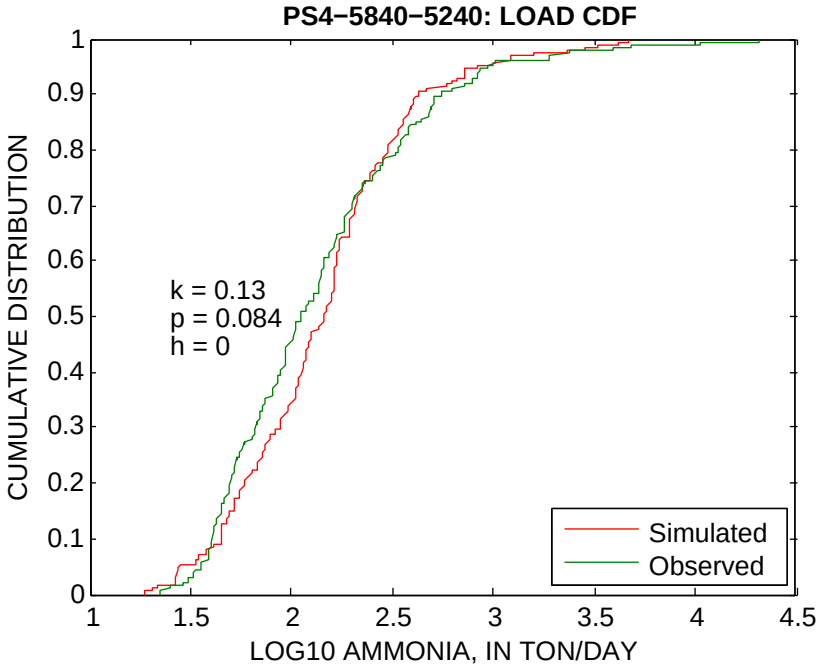


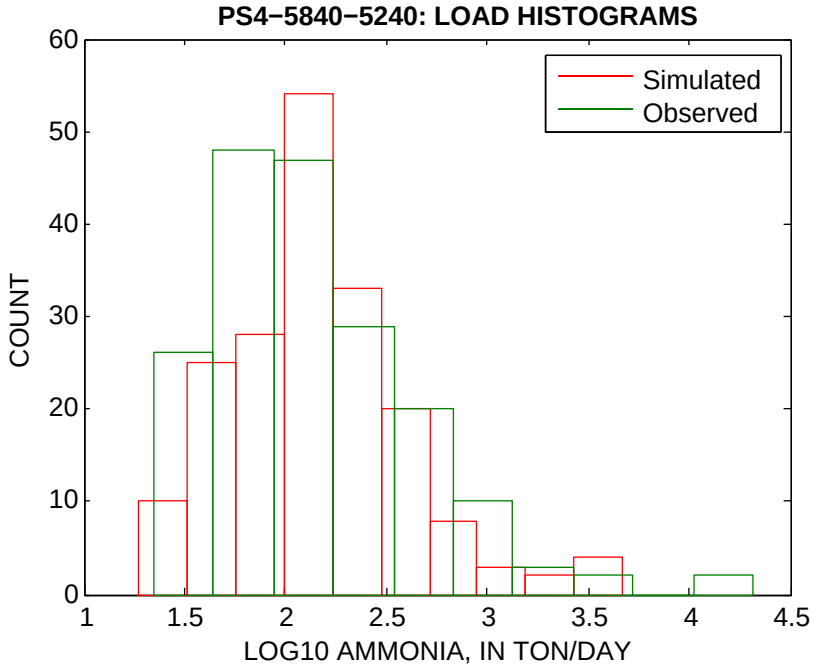


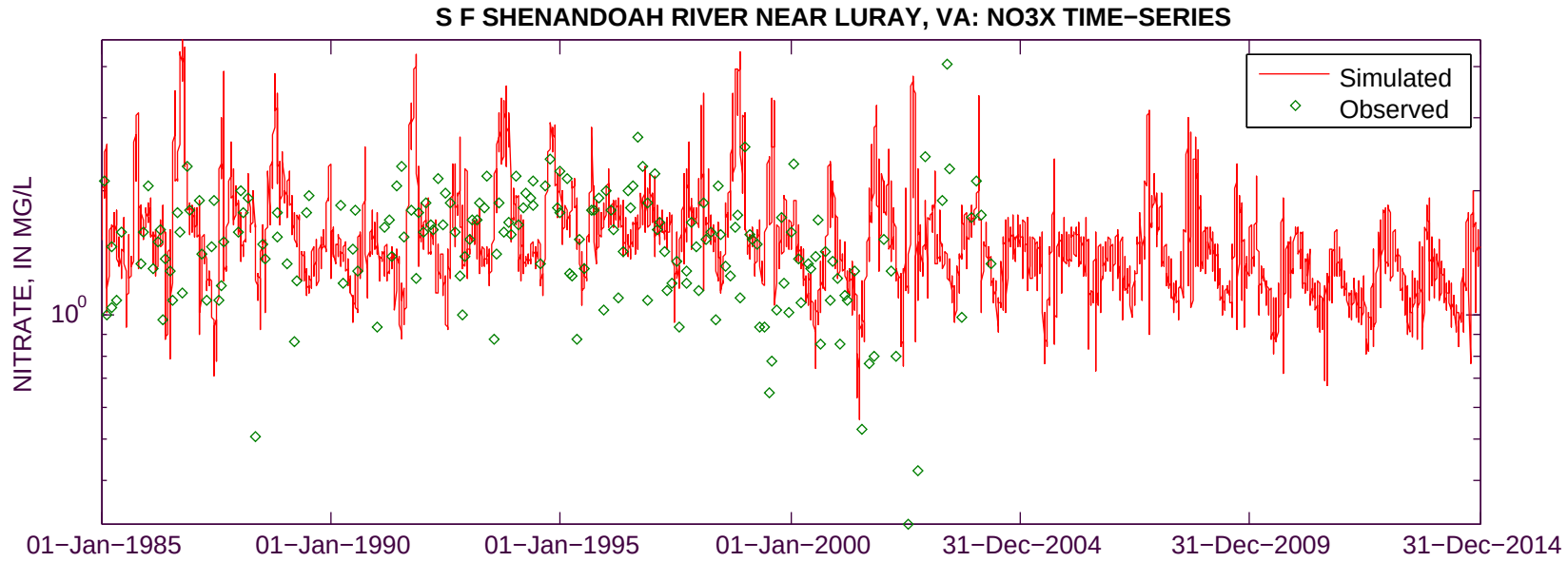
LOAD DATA
LOG10

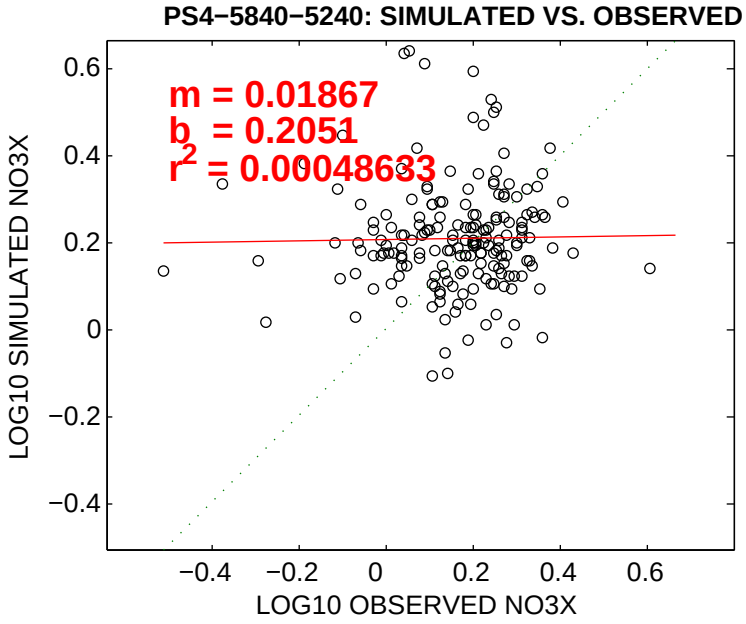


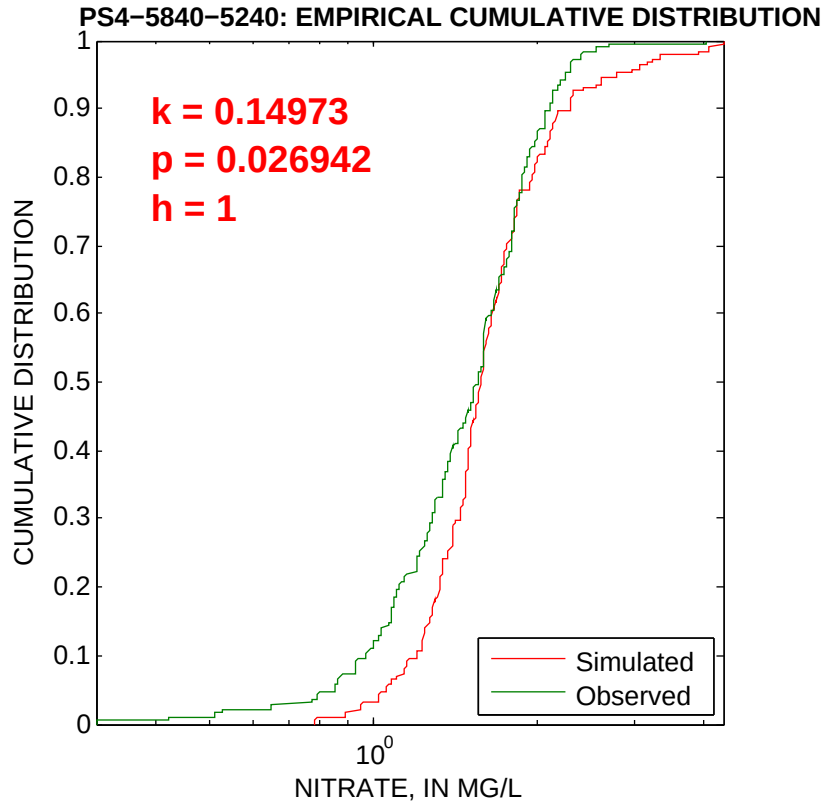












DATA SELECTION

scenario	file
P620171001WQ	NO3X.calib

plot: NO3X - nitrate

Dates: 1/1/1985 – 12/31/201

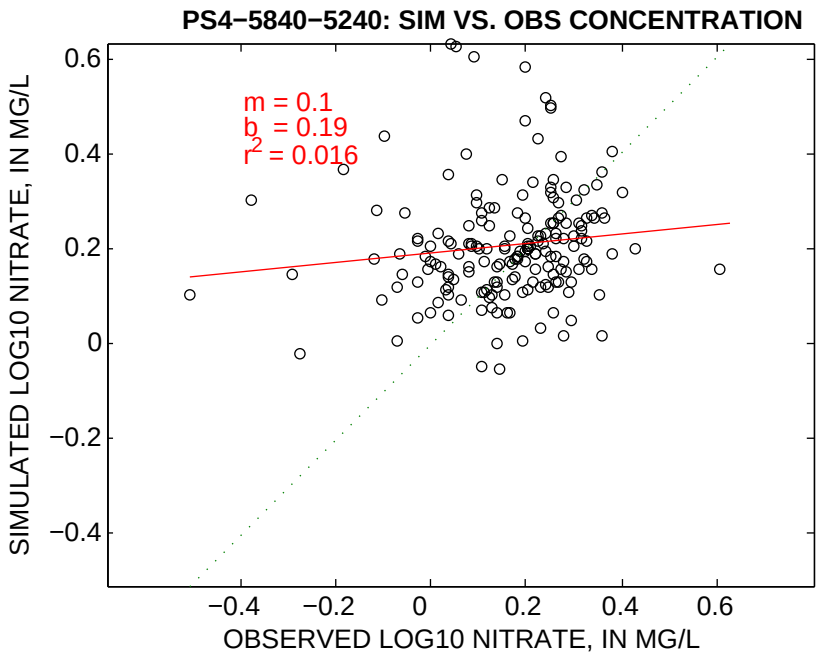
Drive	Directory	Observed
N/A	model	OBS20161101

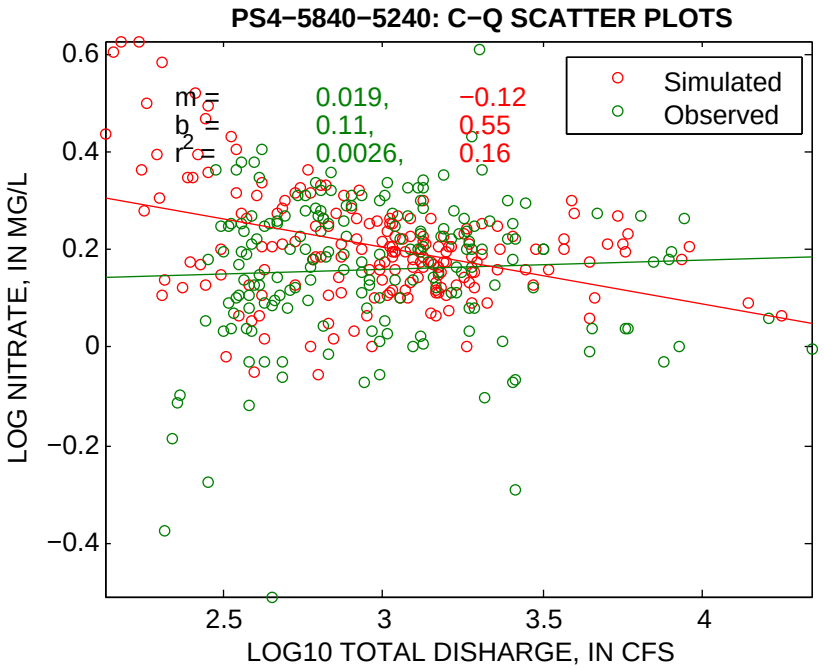
STATISTICS

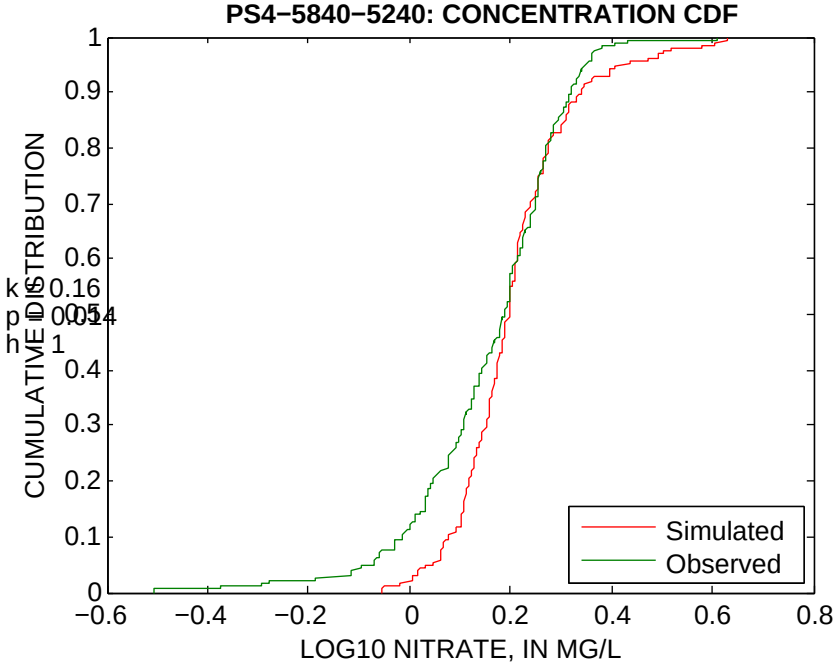
	n	187	187
		observe	simulate
min		0.31	0.78121
		-0.508638	-0.107232
mean		1.52936	1.68807
		0.162101	0.208125
media		1.55	1.5667
		0.190332	0.194986
max		4.07	4.3476
		0.609594	0.63825
varian		0.222348	0.322988
		0.0215929	0.0154768
JB		0.001	0.001
		0.001	0.001
		ra	log
%		10.3778	28.392
err.va		0.572253	0.0383929
rel.std.err		2.57368	1.77804
mod.eff		-1.57368	-0.778038

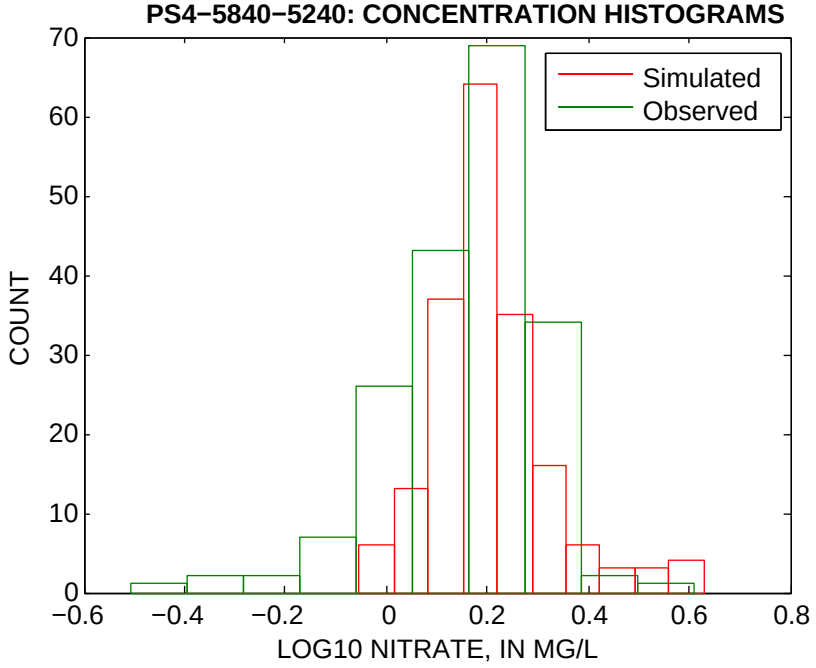
VERSION 2.1

ALL DATA
LOG10

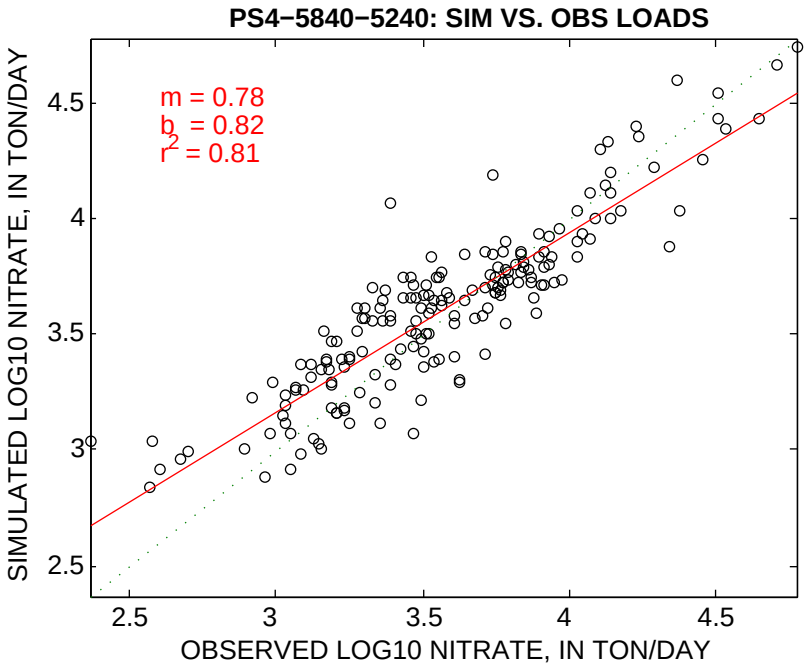


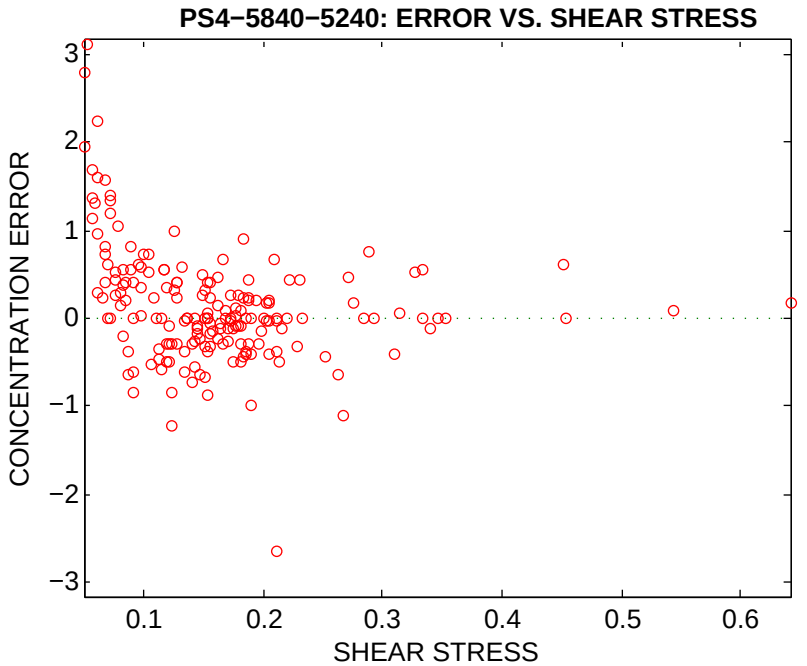


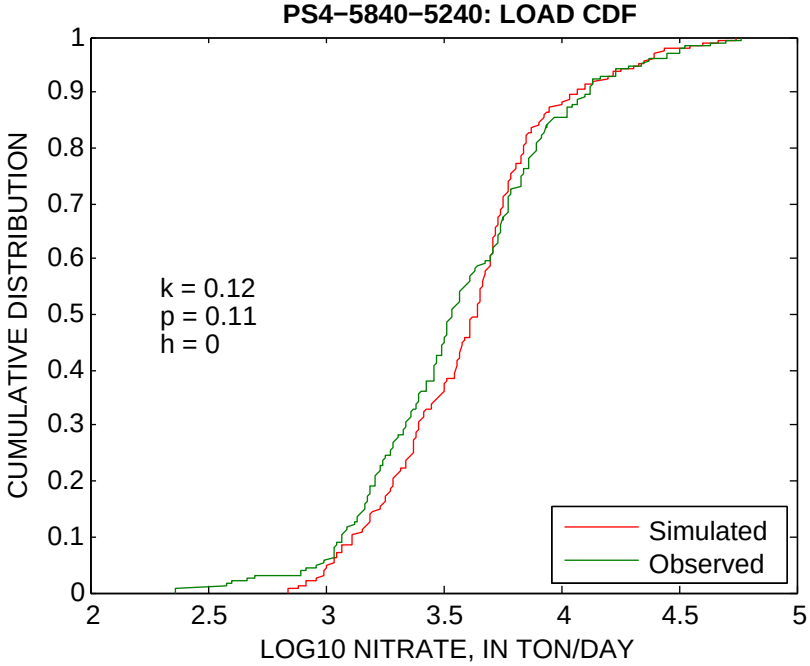


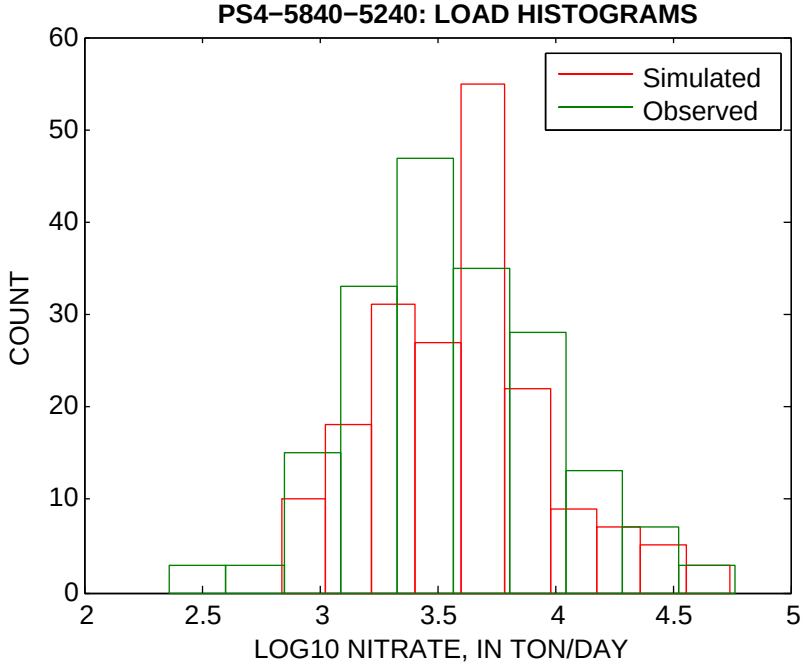


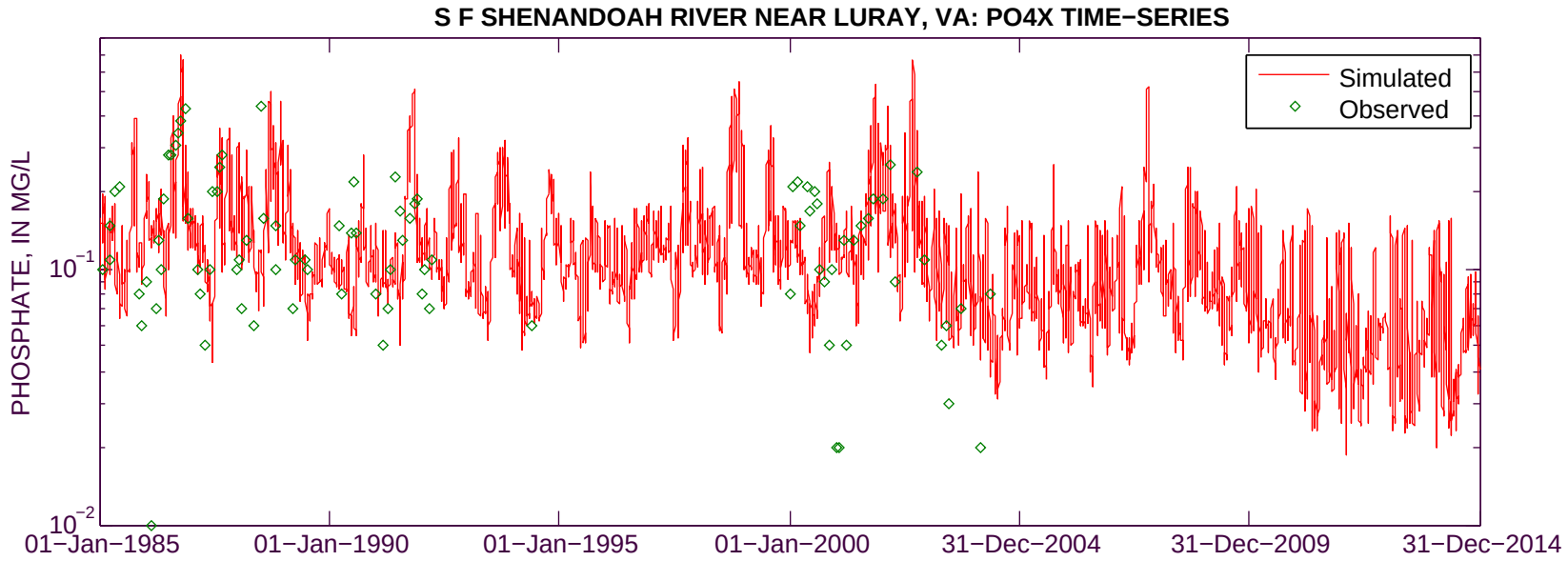
LOAD DATA
LOG10

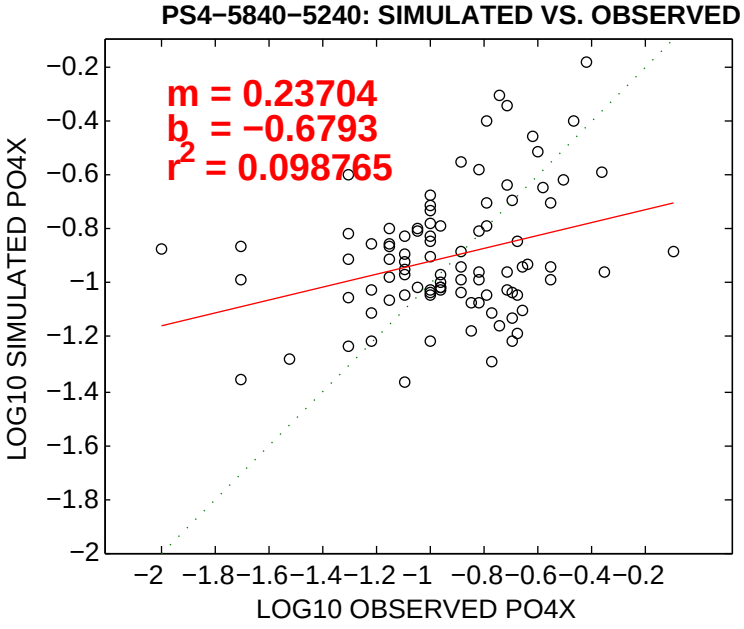


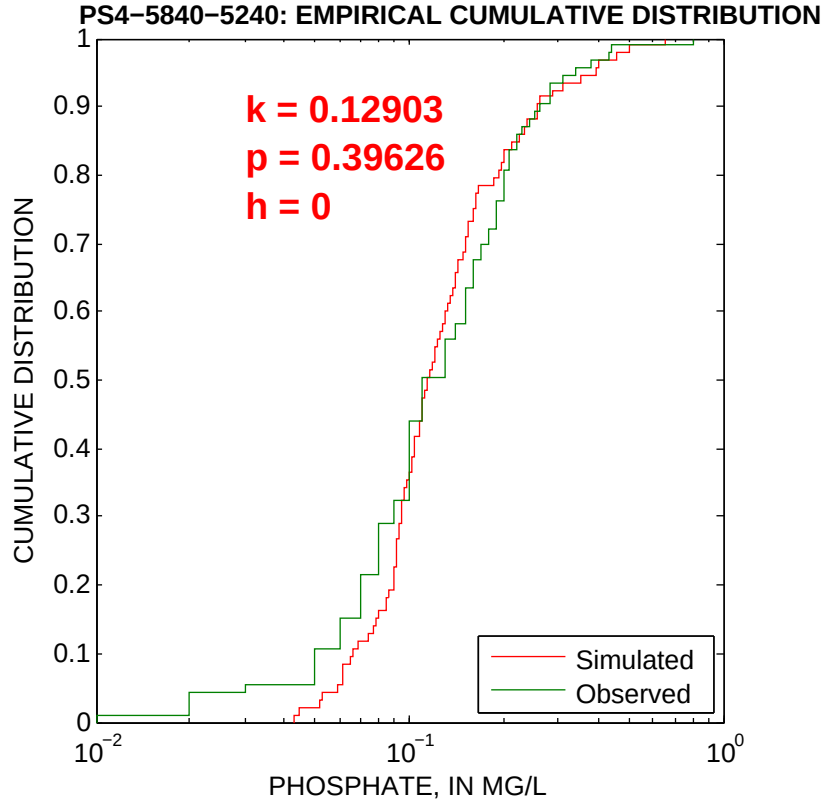












DATA SELECTION

scenario	file
P620171001WQ	PO4X.calib

plot: PO4X - phosphate

Dates: 1/1/1985 – 12/31/201

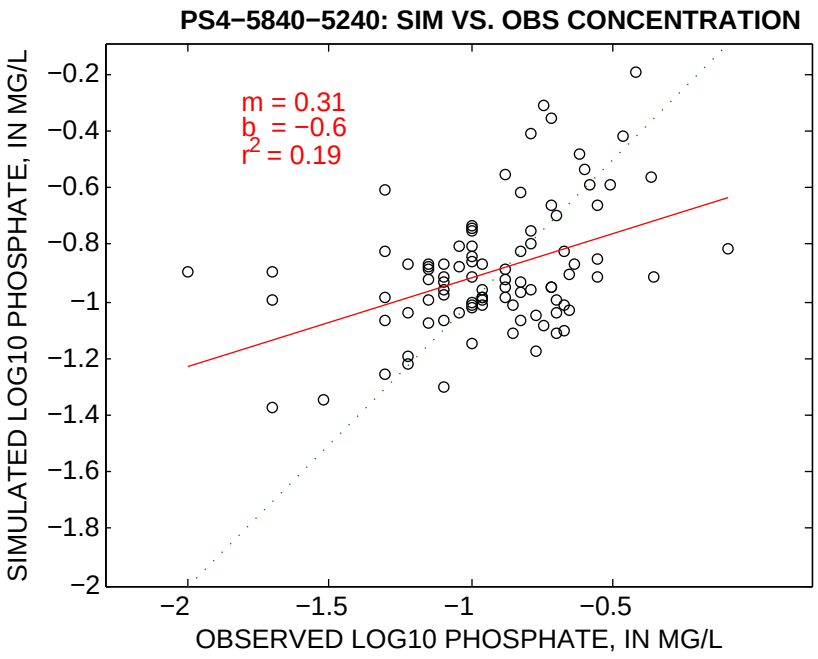
Drive	Directory	Observed
N/A	model	OBS20161101

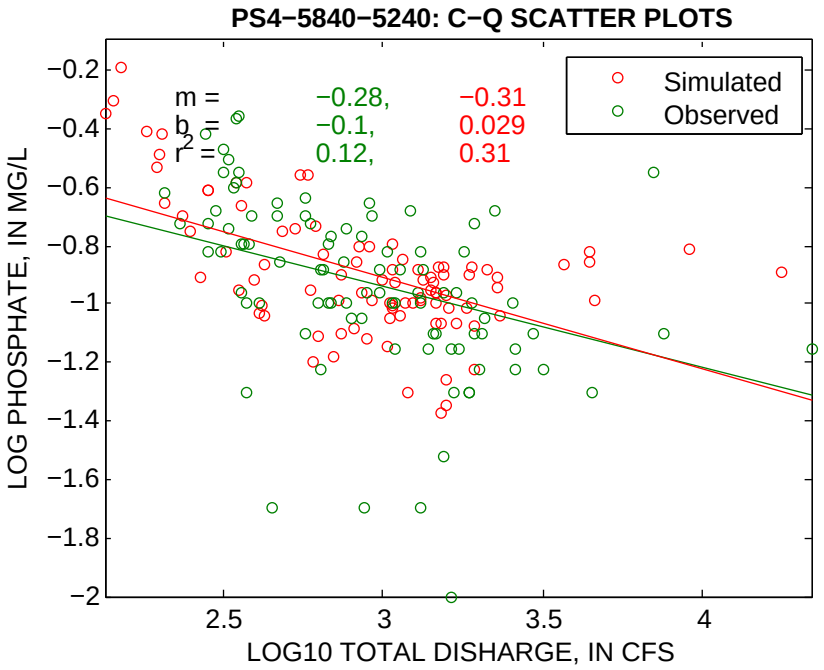
STATISTICS

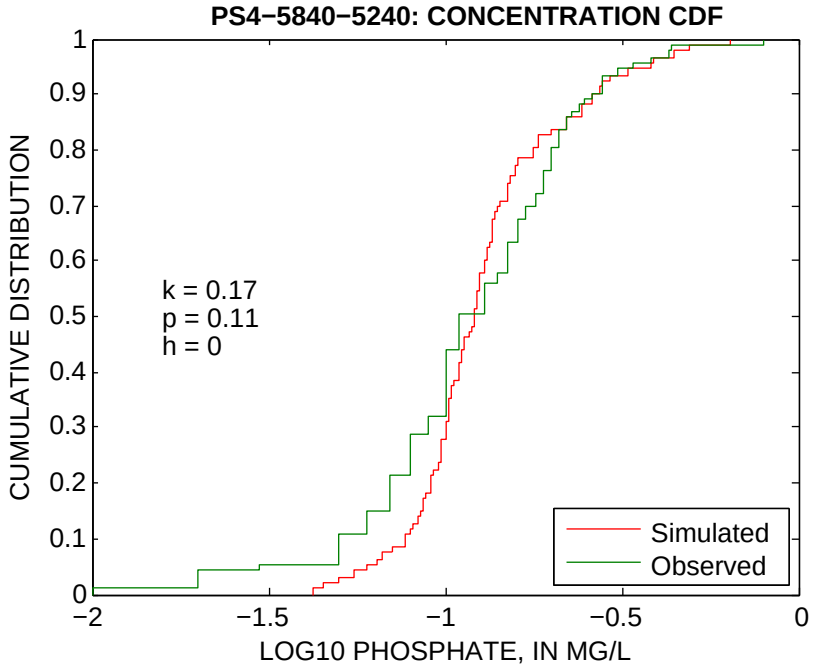
	n	93	93
		observe	simulate
min		0.01	0.043251
		-2	-1.364
mean		0.148065	0.147994
		-0.92827	-0.899341
media		0.11	0.11438
		-0.958607	-0.94165
max		0.8	0.65814
		-0.09691	-0.181682
varian		0.0121353	0.0104416
		0.0947685	0.0539147
JB		0.001	0.001
		0.008929	0.019636
		ra	log
%		0.0479521	-3.11641
err.va		0.015397	0.104601
rel.std.err		1.26877	1.10376
mod.eff		-0.268773	-0.103755

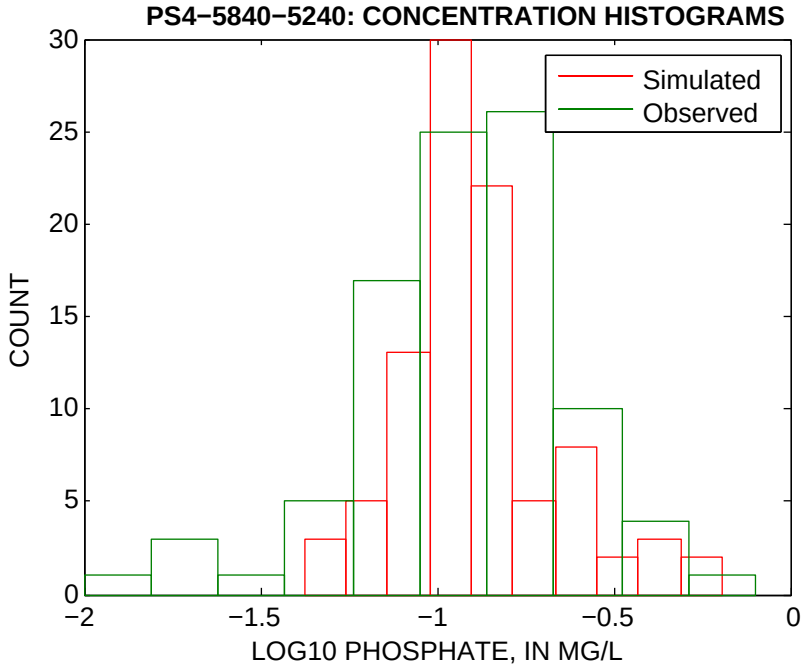
VERSION 2.1

ALL DATA
LOG10

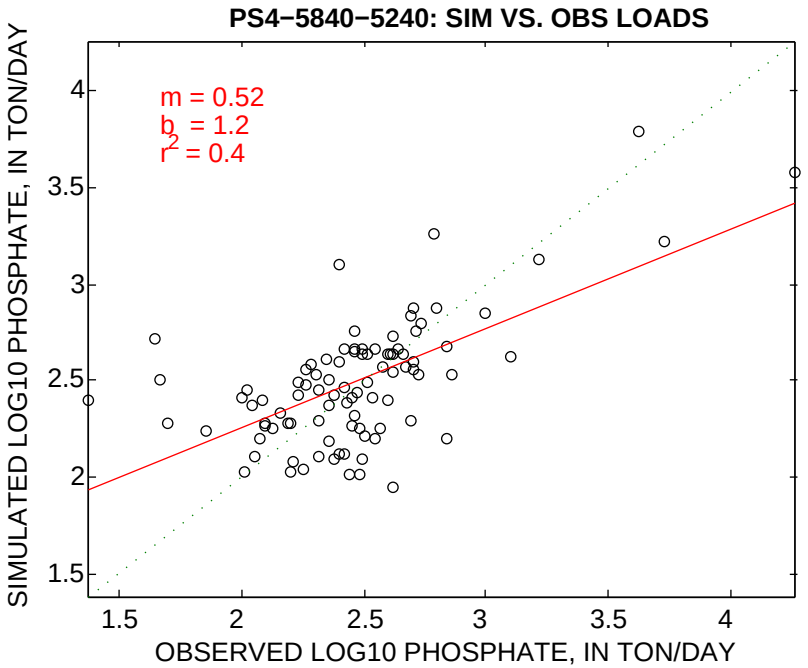


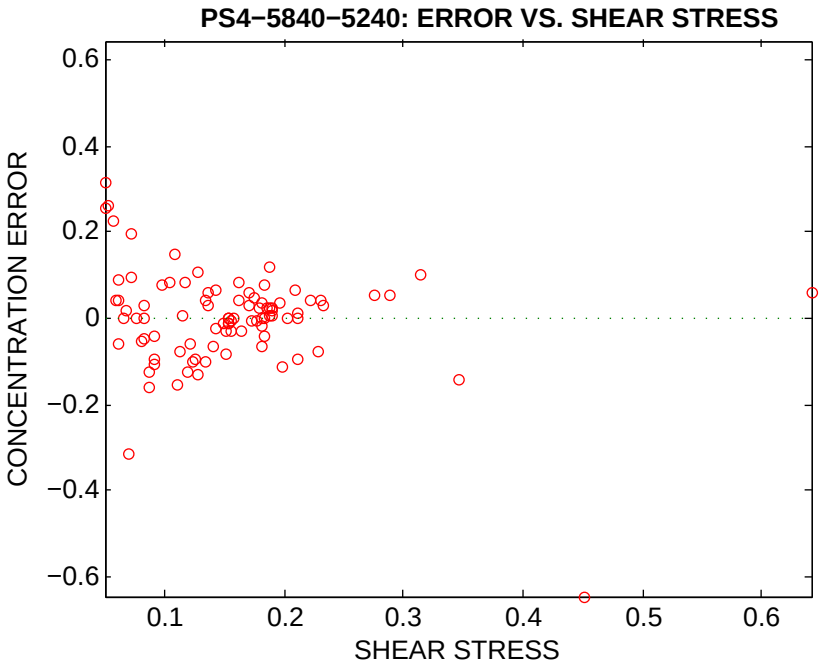


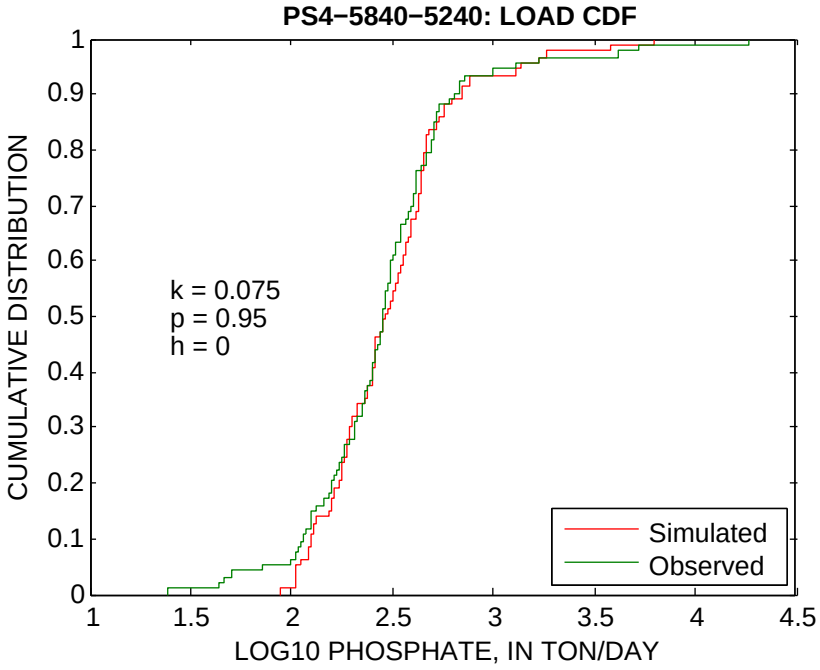


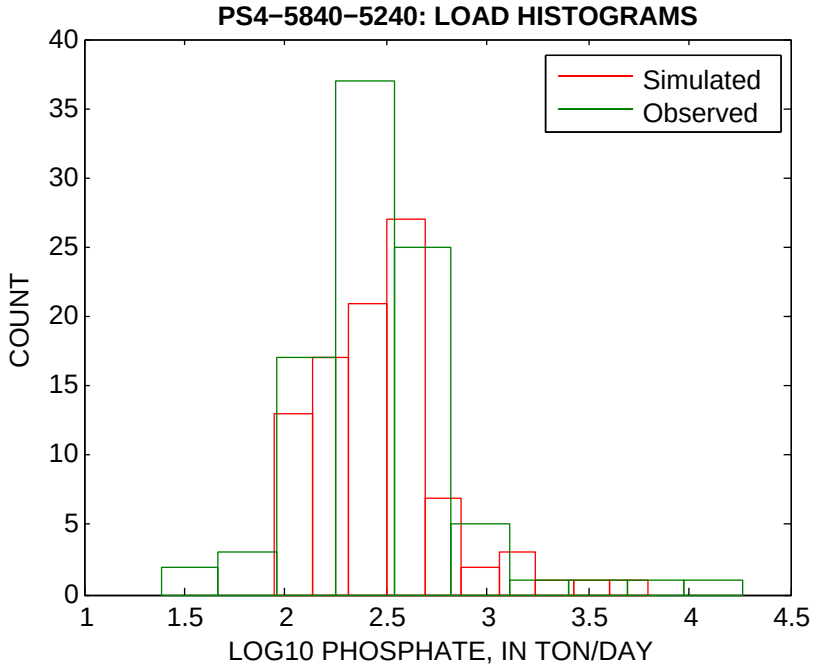


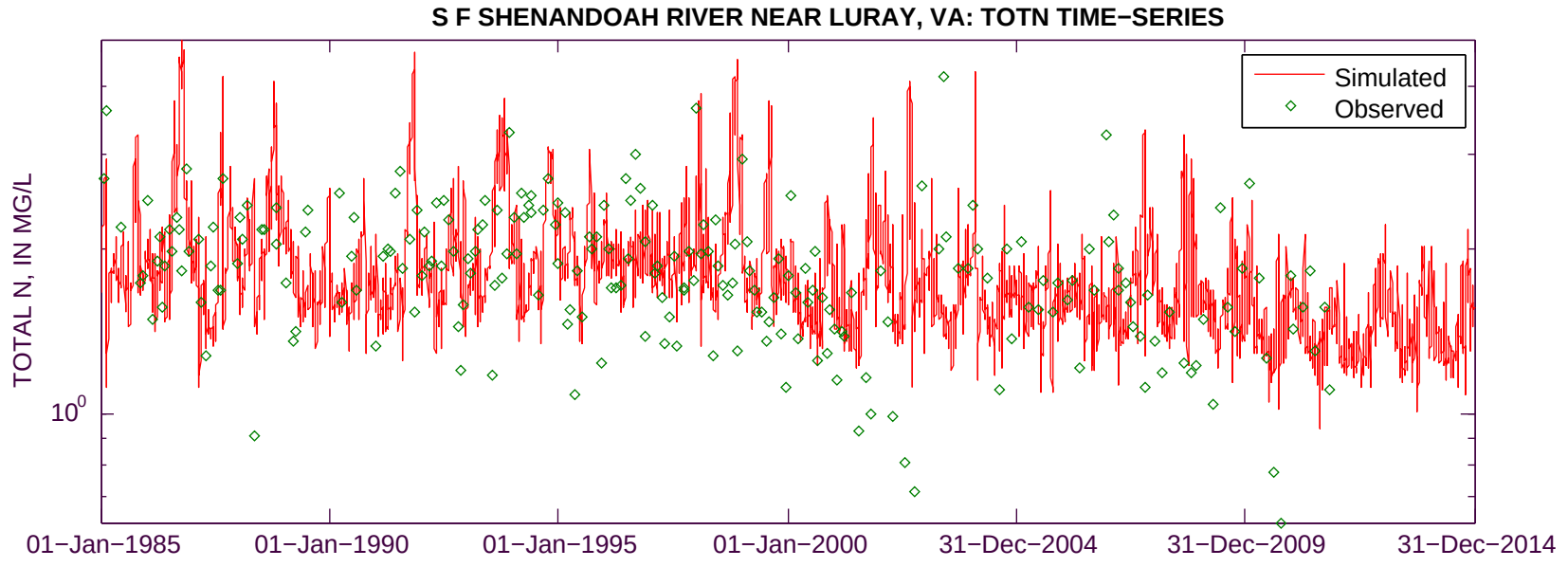
LOAD DATA
LOG10

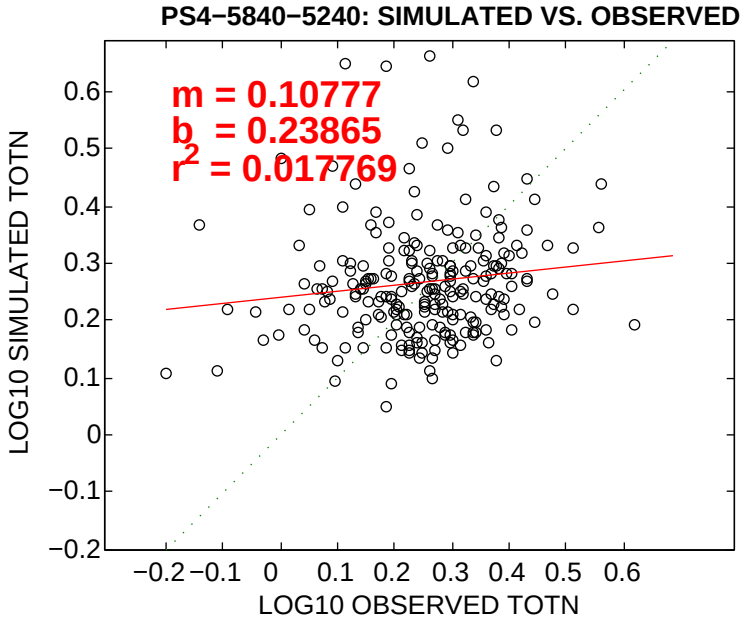


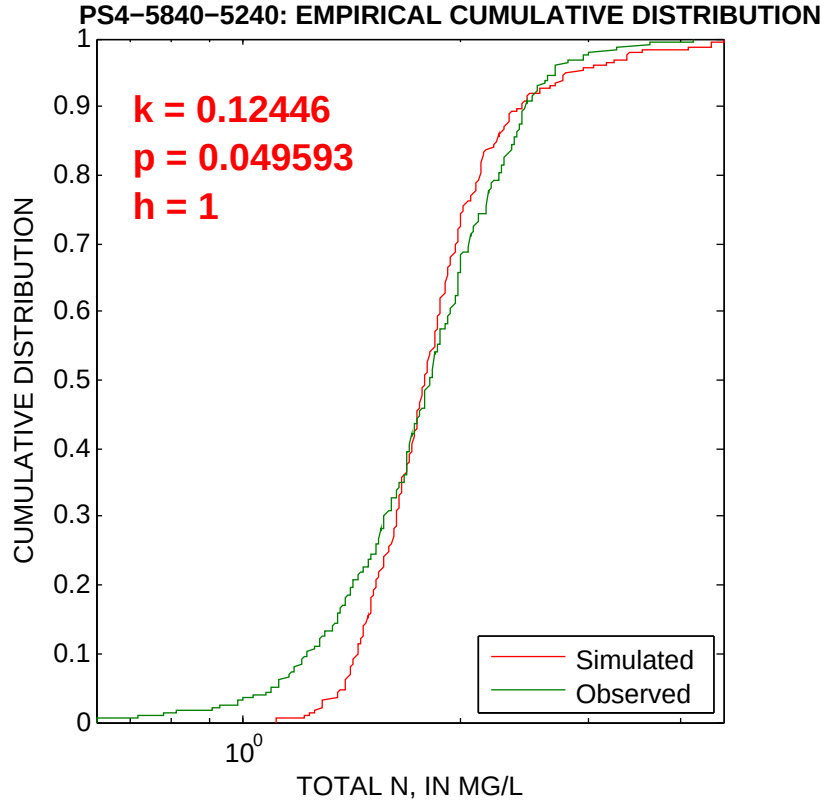












DATA SELECTION

scenario: P620171001WQ | file: TOTN.calib

plot: TOTN - total nitrogen

Dates: 1/1/1985 – 12/31/201

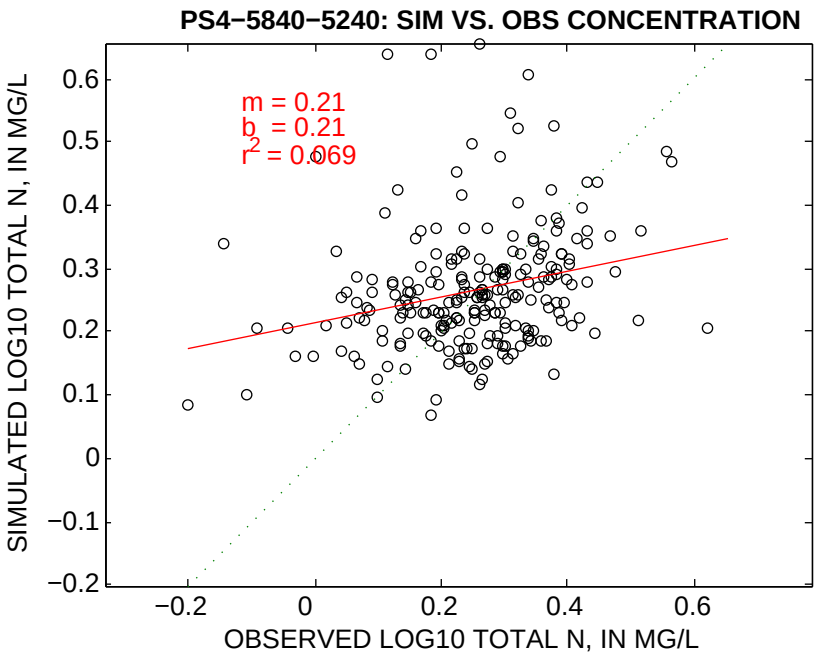
Drive | Directory: N/A | model | Observed: OBS20161101

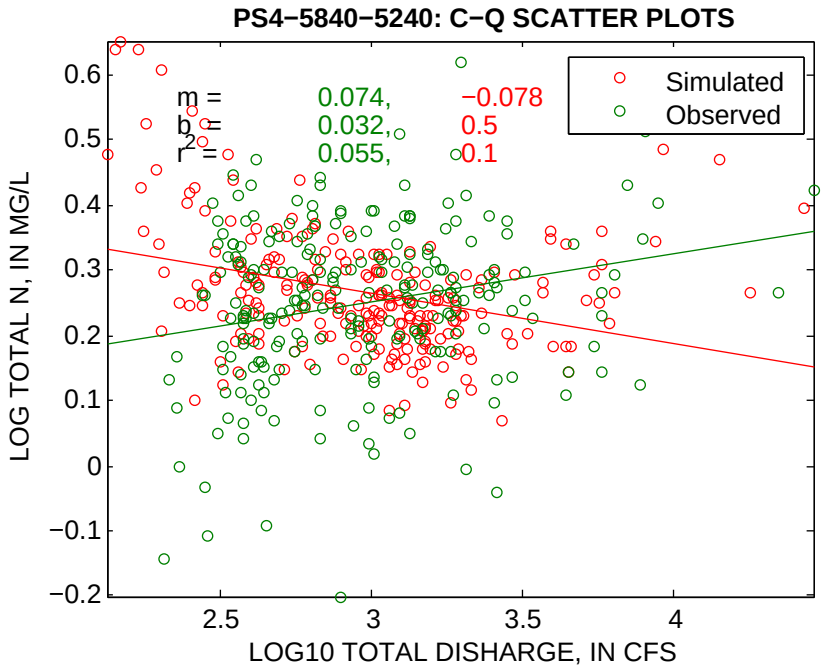
STATISTICS

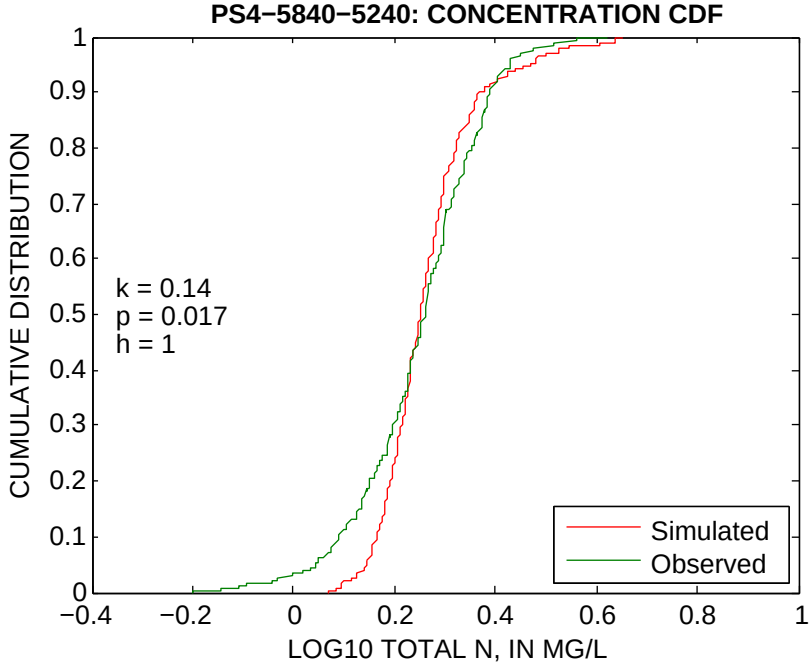
	n	observe	simulate
		233	233
min		0.63	1.1154
		-0.200659	0.0474306
mean		1.85335	1.89865
		0.250936	0.265689
media		1.82	1.79
		0.260071	0.252853
max		4.17	4.5866
		0.620136	0.661491
varian		0.268533	0.274045
		0.0153527	0.0100354
JB		0.001	0.001
		0.004428	0.001
		ra	log
%		2.44446	5.87926
err.va		0.490159	0.0222975
rel.std.err		1.82532	1.45235
mod.eff		-0.825323	-0.452349

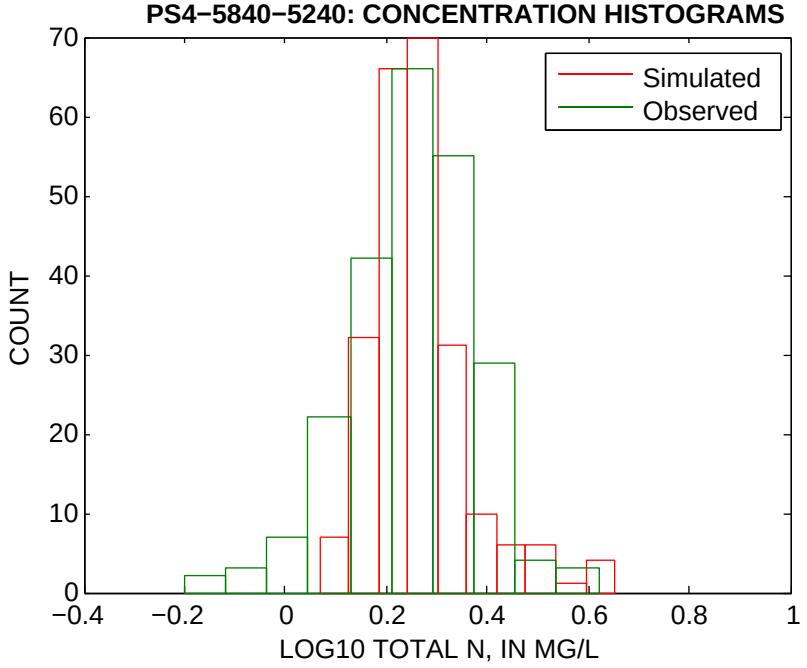
VERSION 2.1

ALL DATA
LOG10

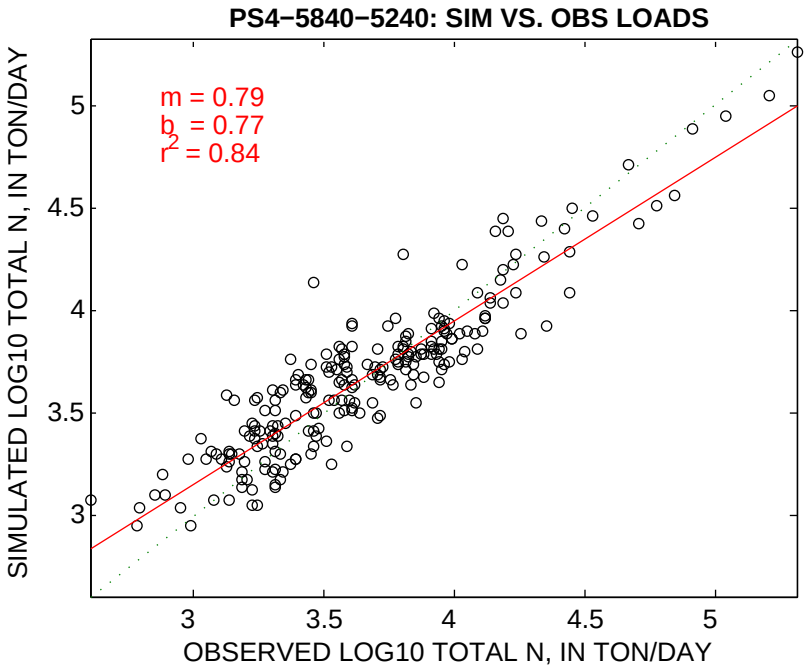


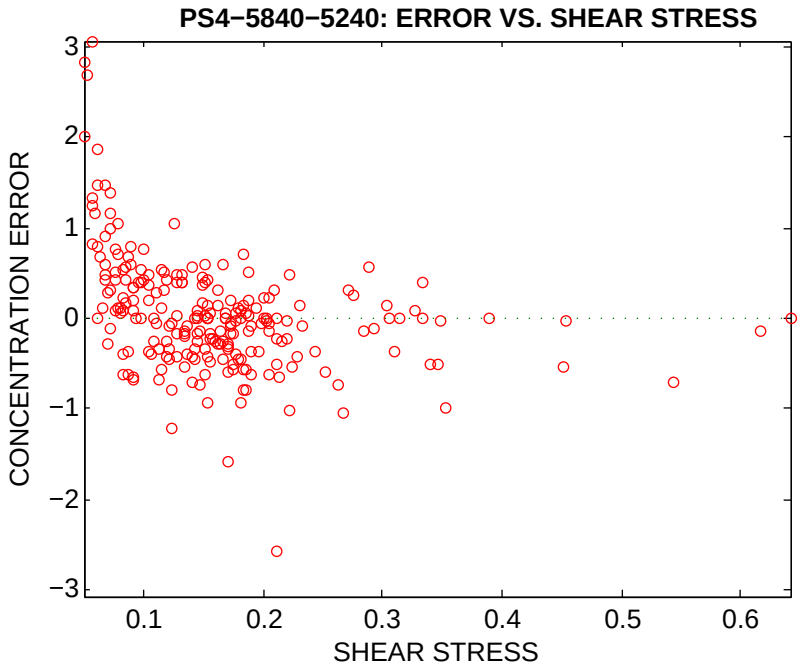


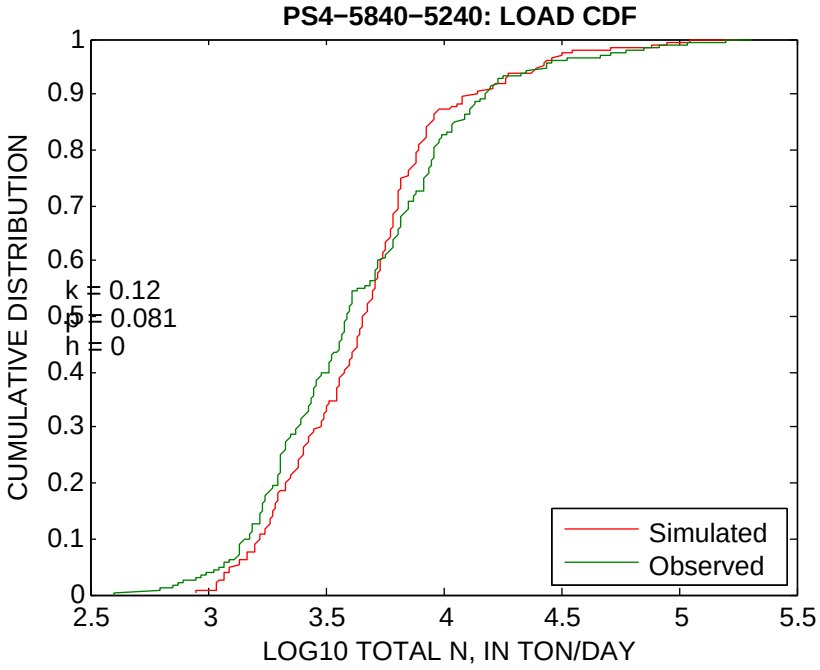


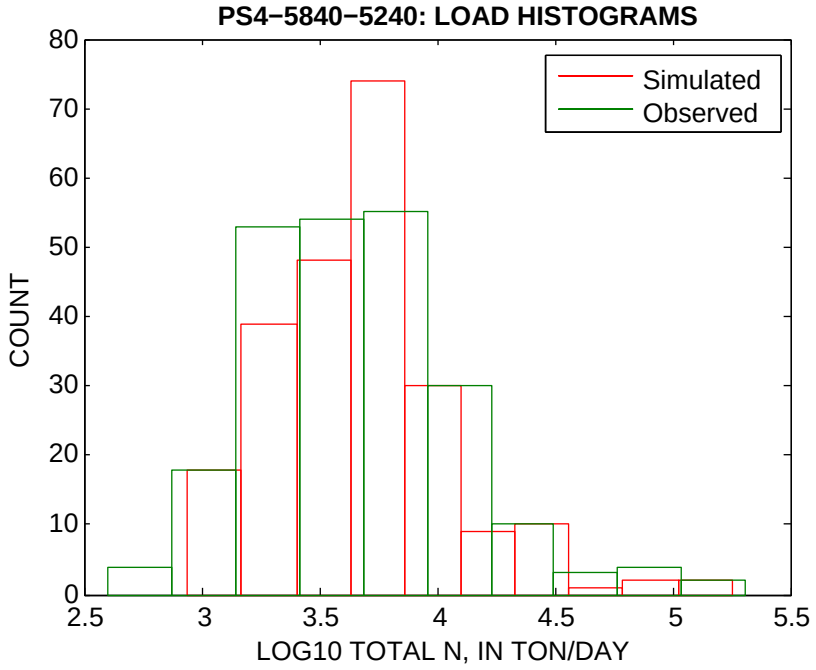


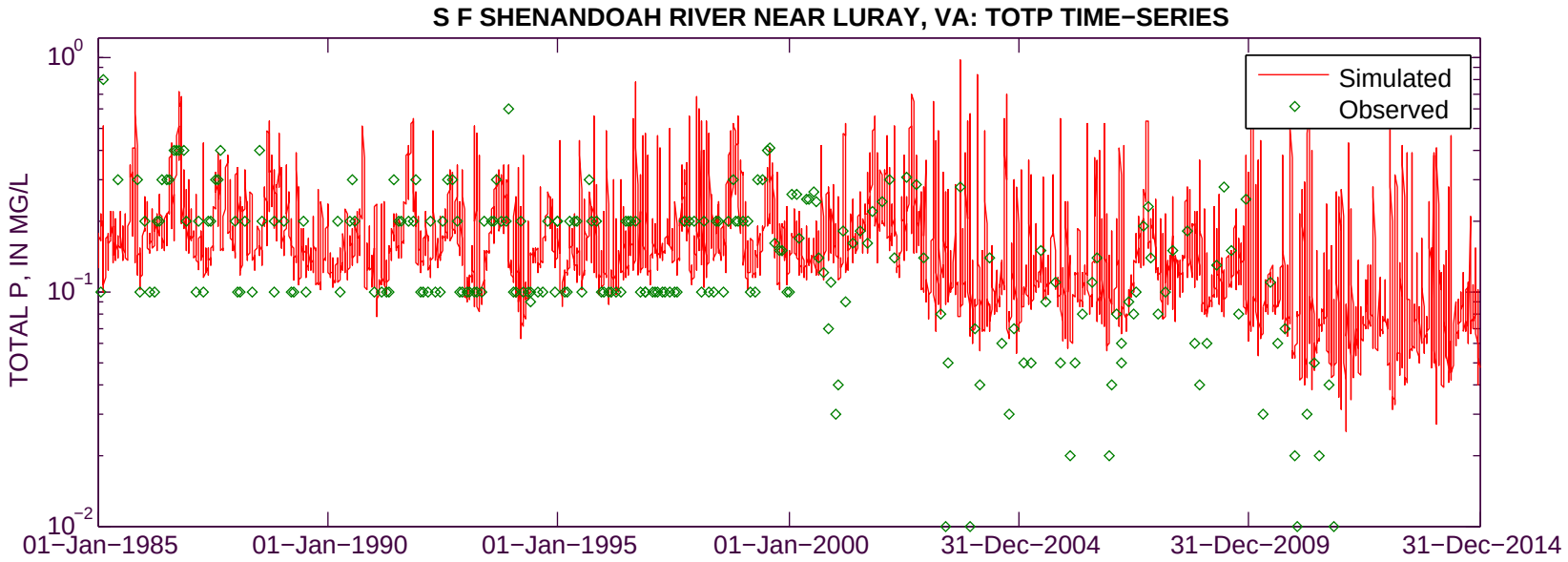
LOAD DATA
LOG10

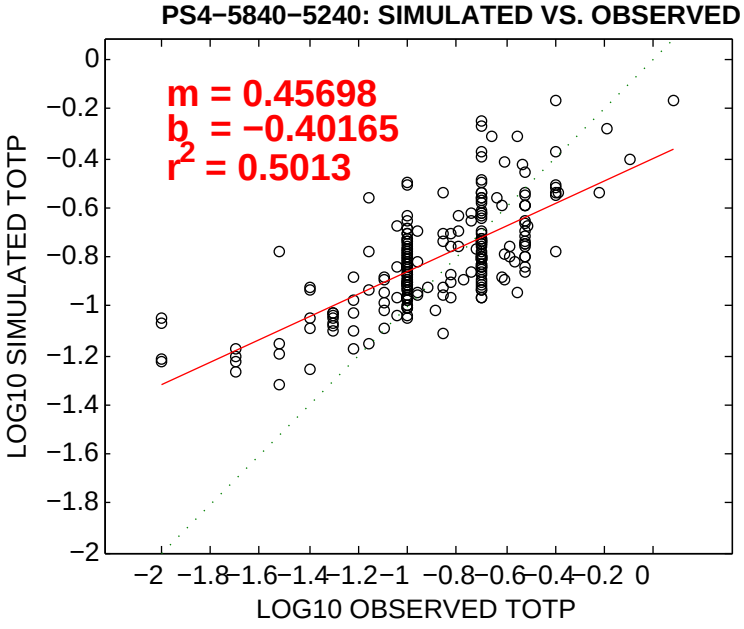


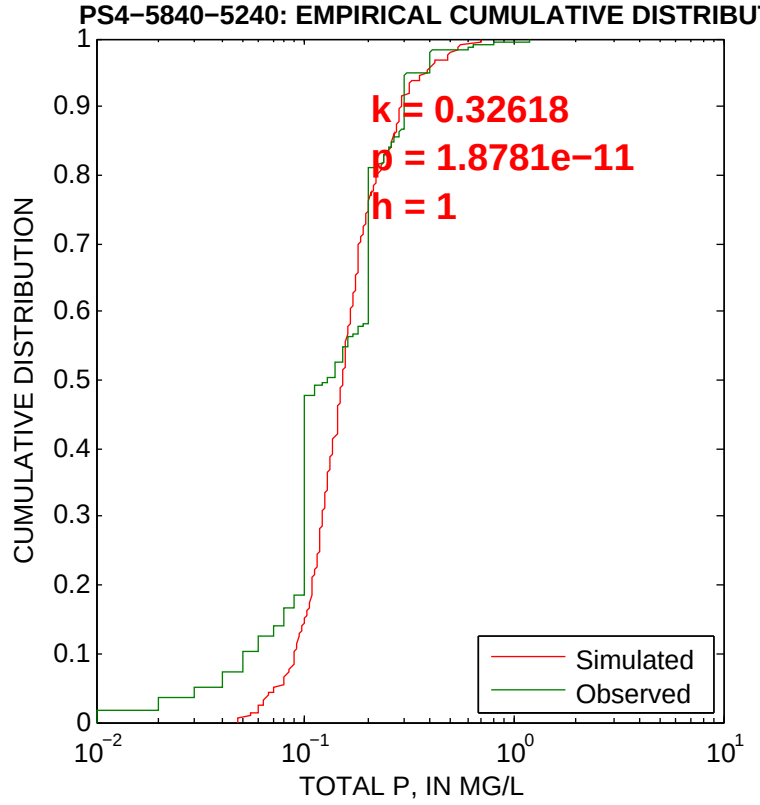












DATA SELECTION

scenario: P620171001WQ | file: TOTP.calib

plot: TOTP - total phosphorus

Dates: 1/1/1985 – 12/31/201

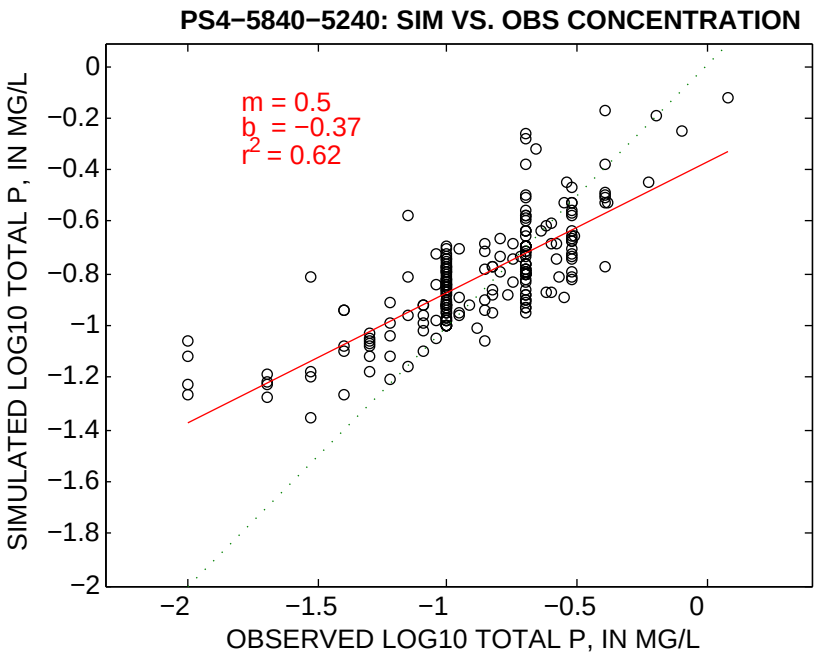
Drive: N/A | Directory: model | Observed: OBS20161101

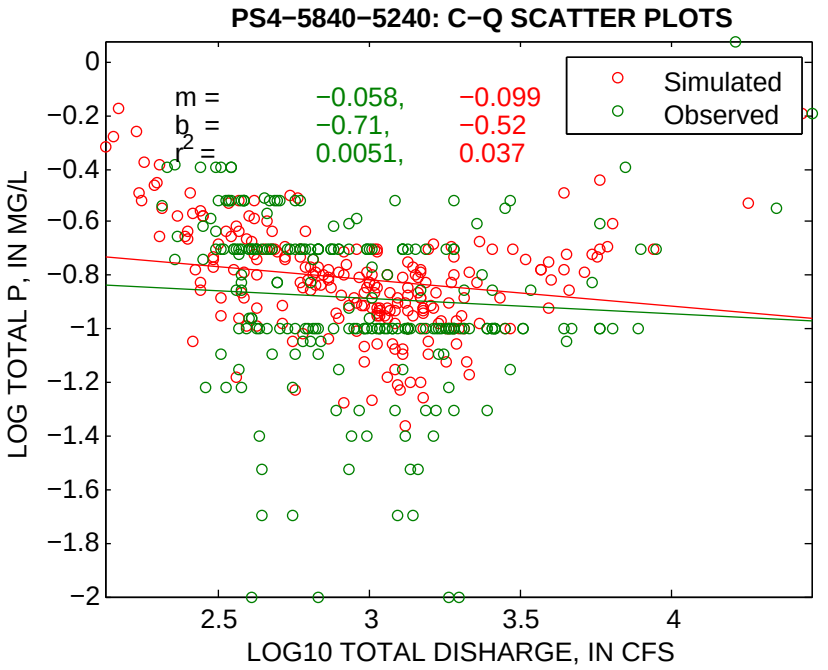
STATISTICS

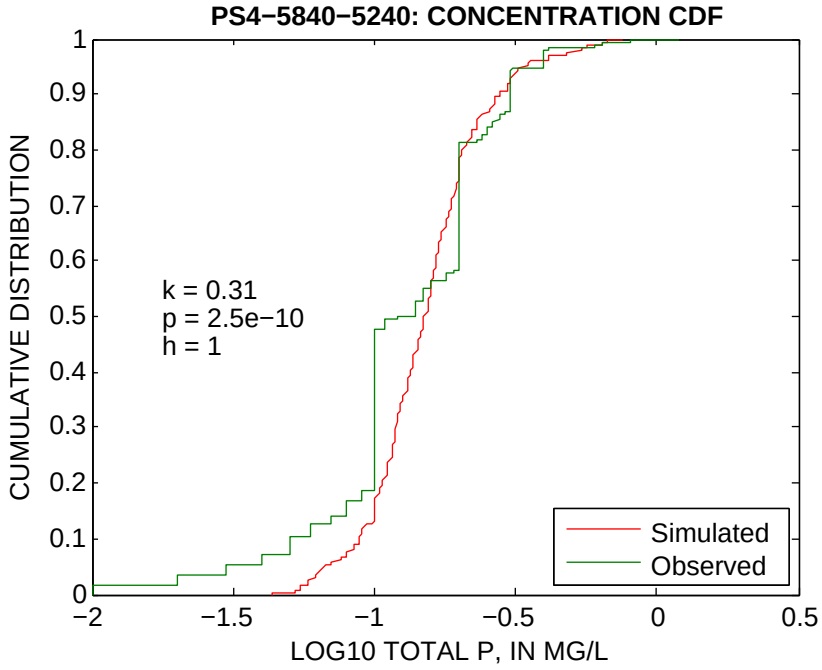
		observe	simulate
n		233	233
min		0.01	0.04802
		-2	-1.31858
mean		0.166309	0.176915
		-0.883133	-0.805226
media		0.13	0.15116
		-0.886057	-0.820563
max		1.2	0.68736
		0.0791812	-0.162816
varian		0.0161665	0.010157
		0.103042	0.042926
JB		0.001	0.001
		0.001	0.015182
		ra	log
%		6.37733	-8.8217
err.va		0.00944333	0.0578868
rel.std.err		0.58413	0.561777
mod.eff		0.41587	0.438223

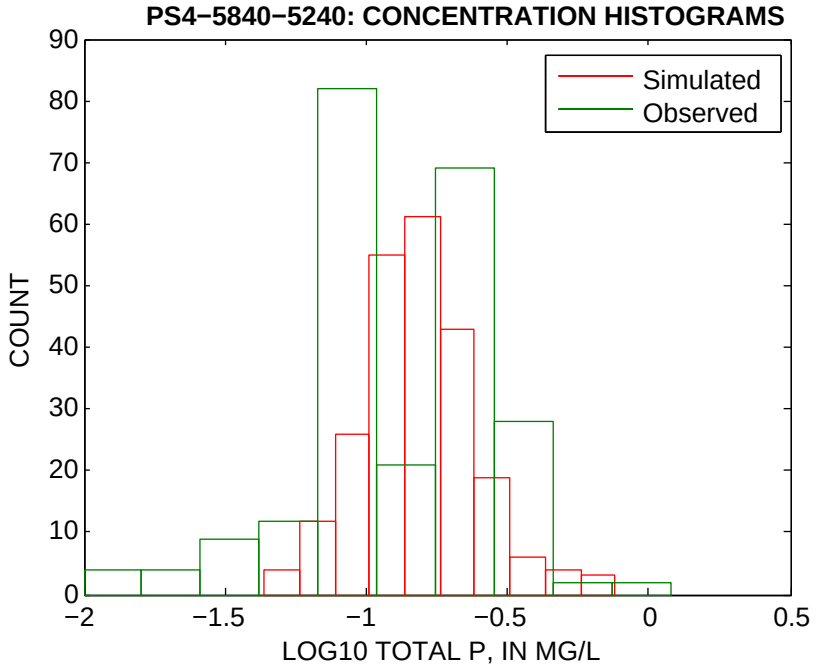
VERSION 2.1

ALL DATA
LOG10

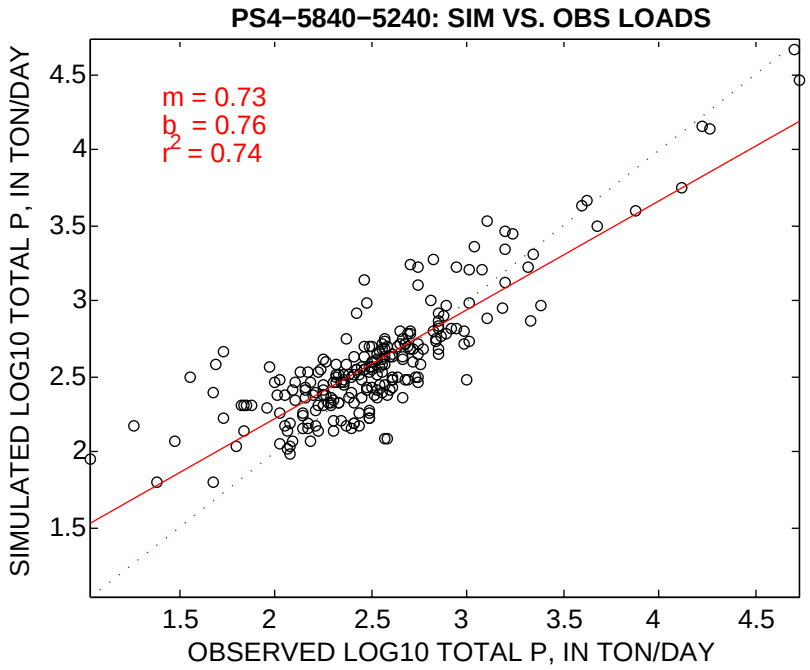


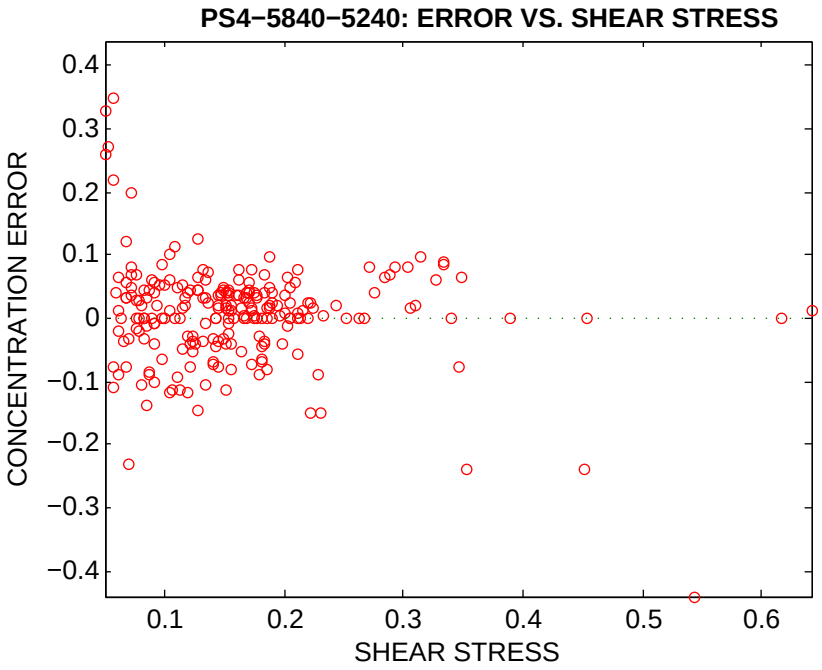


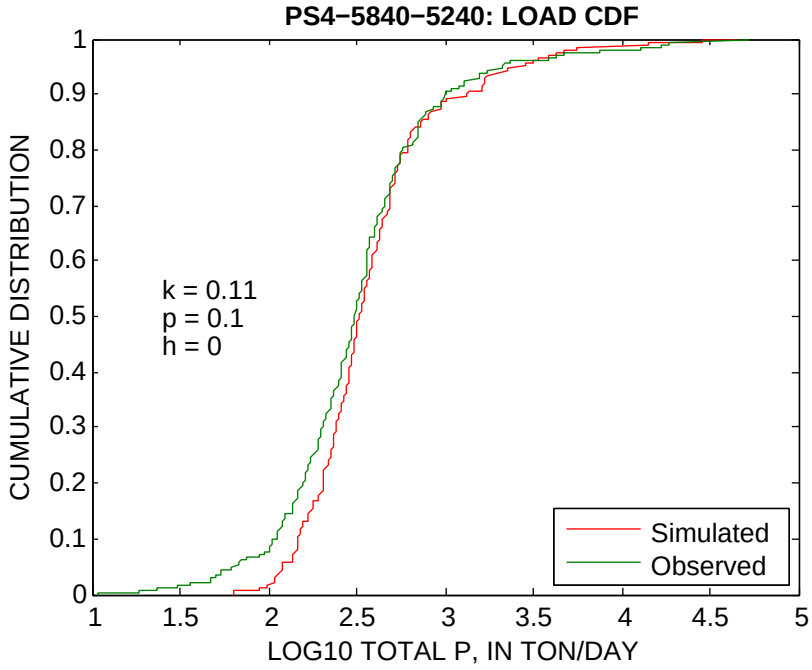


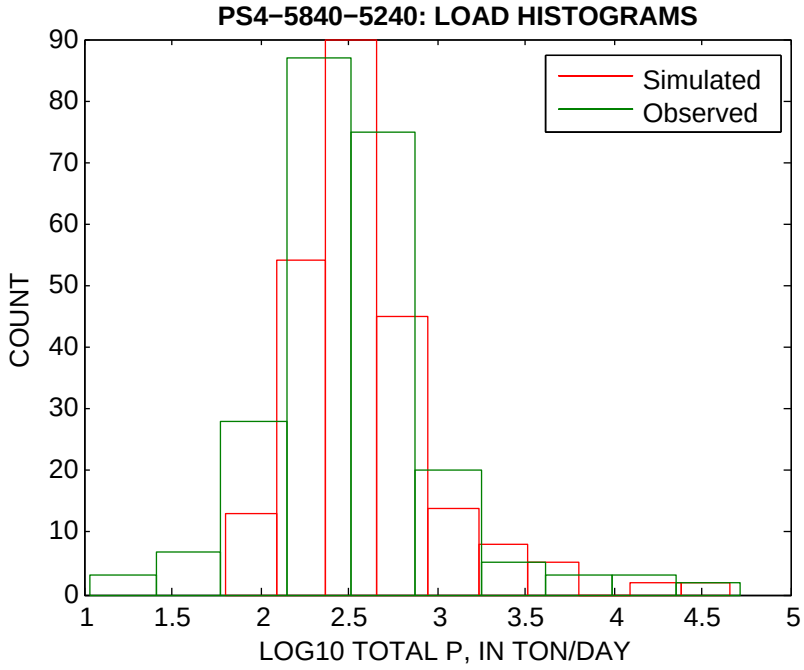


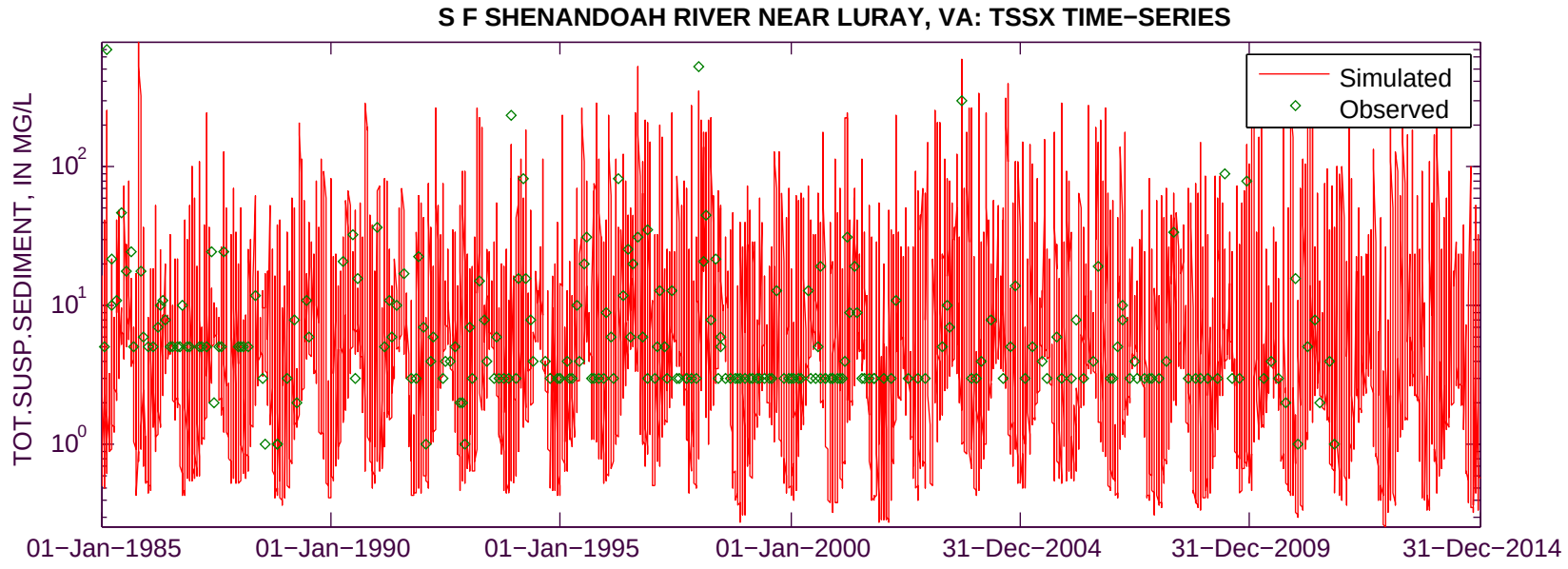
LOAD DATA
LOG10

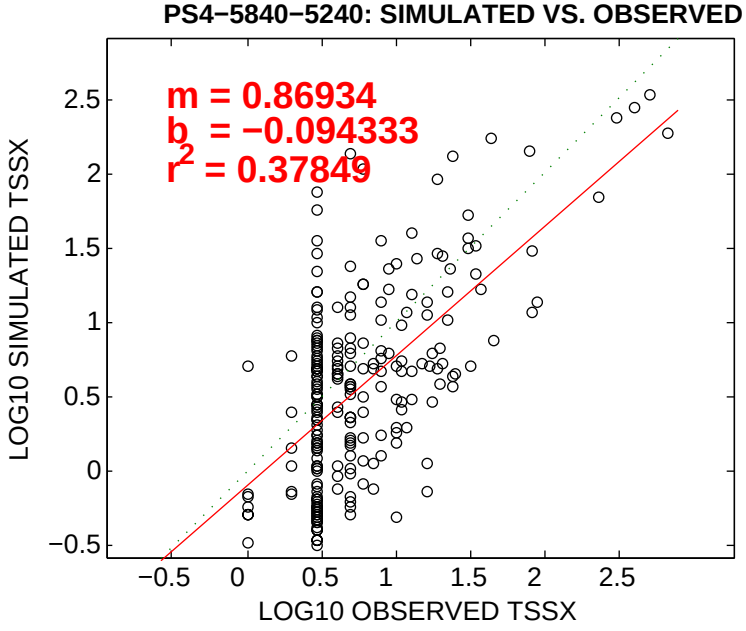


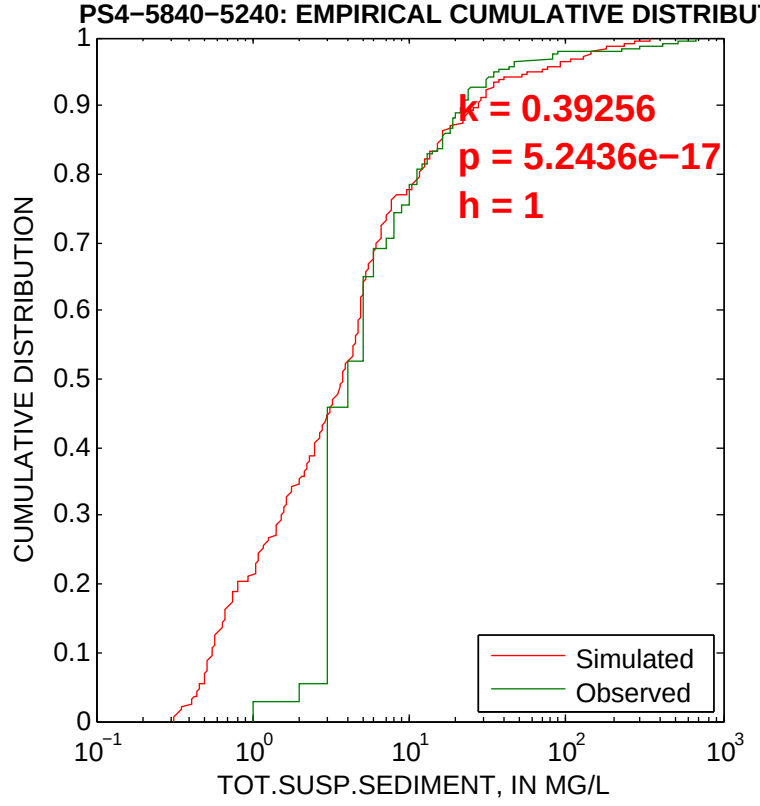












DATA SELECTION

scenario	file
P620171001WQ	TSSX.calib

plot: TSSX - total suspended ...

Dates: 1/1/1985 – 12/31/201

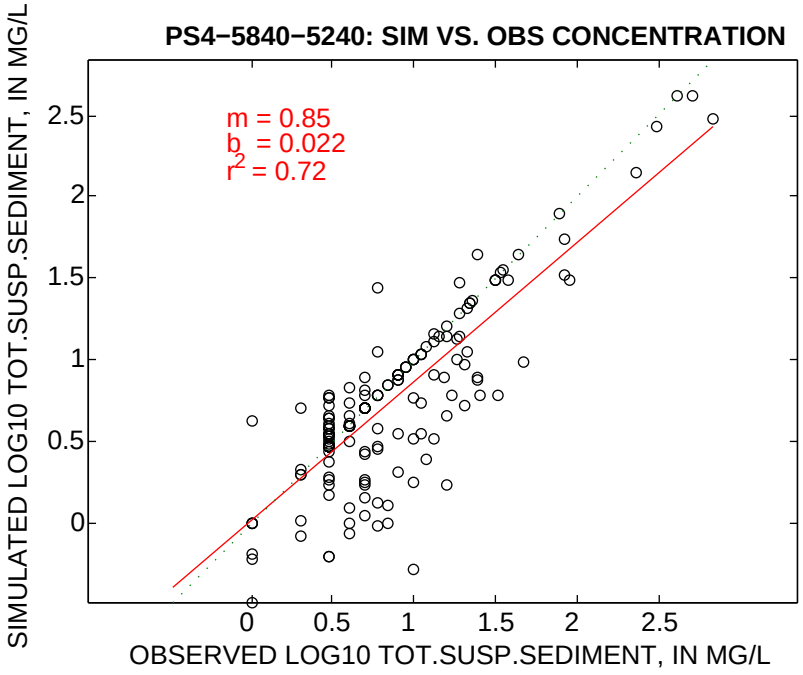
Drive	Directory	Observed
N/A	model	OBS20161101

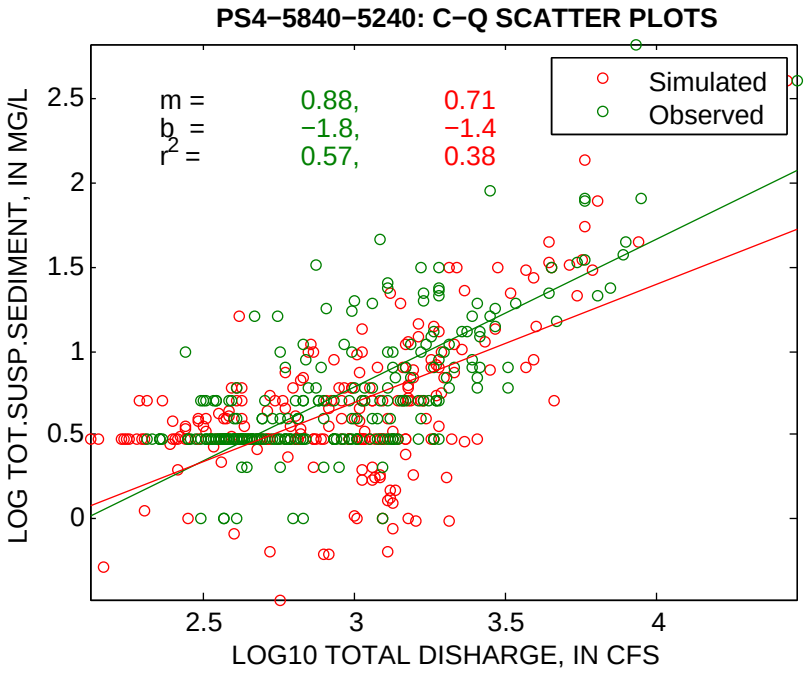
STATISTICS

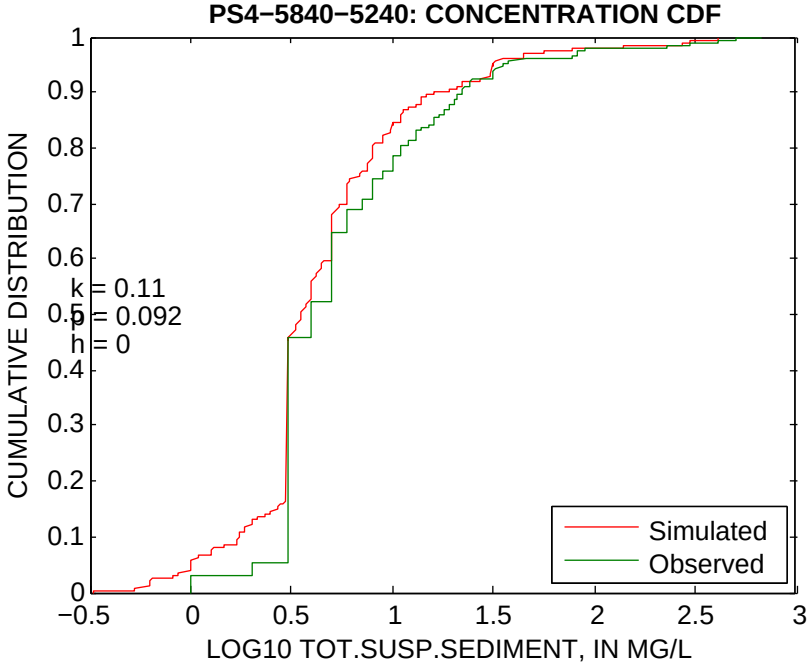
	n	242	242
		observe	simulate
min		1	0.31087
		0	-0.507421
mean		17.1157	14.1925
		0.761475	0.56765
media		4	3.73545
		0.60206	0.572343
max		676	342.56
		2.82995	2.53474
varian		4194.97	1564
		0.207253	0.413839
JB		0.001	0.001
		0.001	0.005245
		ra	log
%		-17.0793	-25.4538
err.va		1742.17	0.298468
rel.std.err		0.415298	1.44011
mod.eff		0.584702	-0.440115

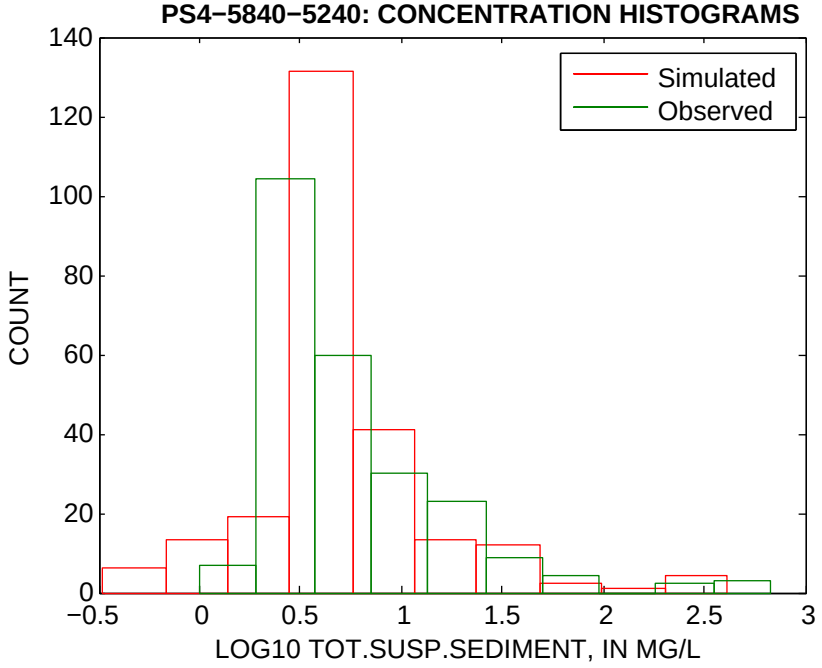
VERSION 2.1

ALL DATA
LOG10

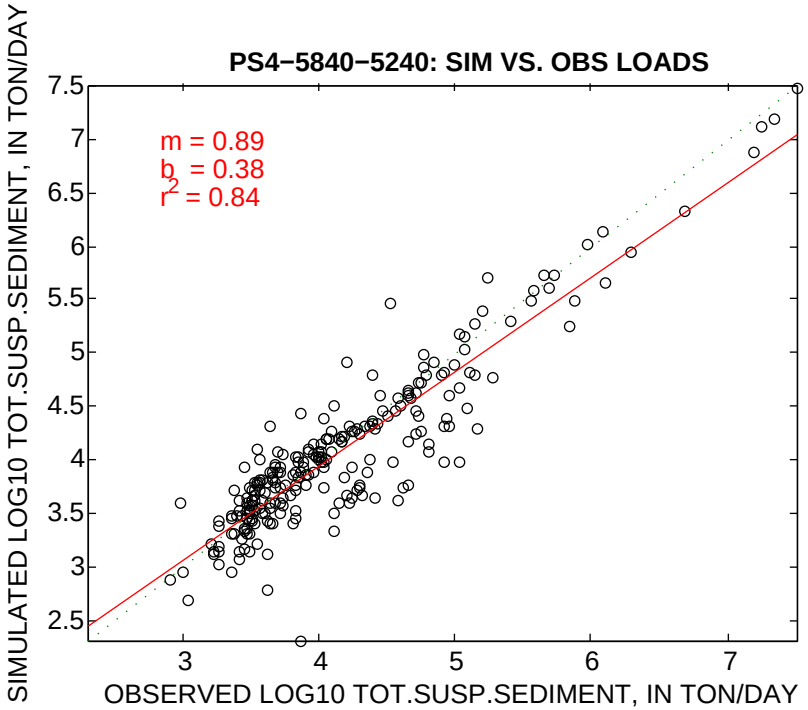


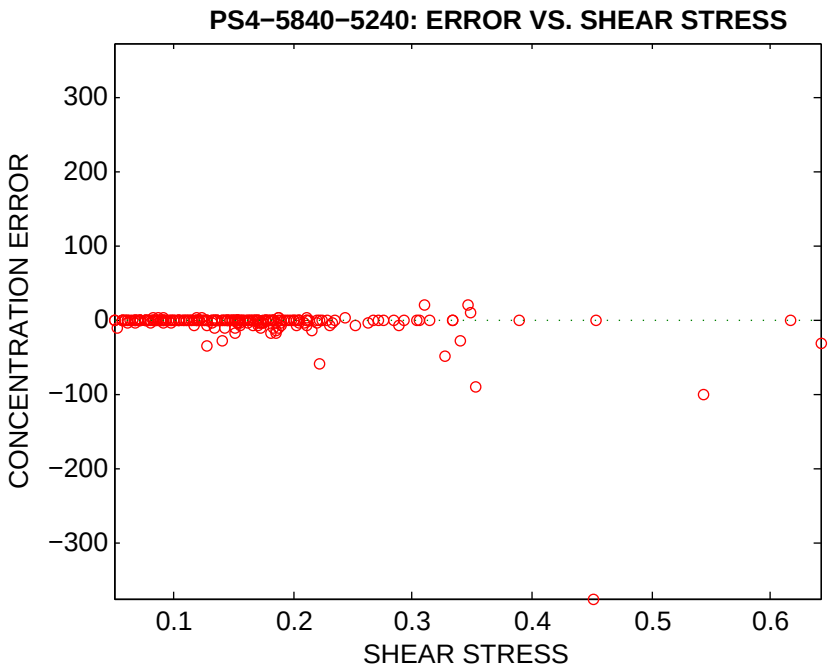


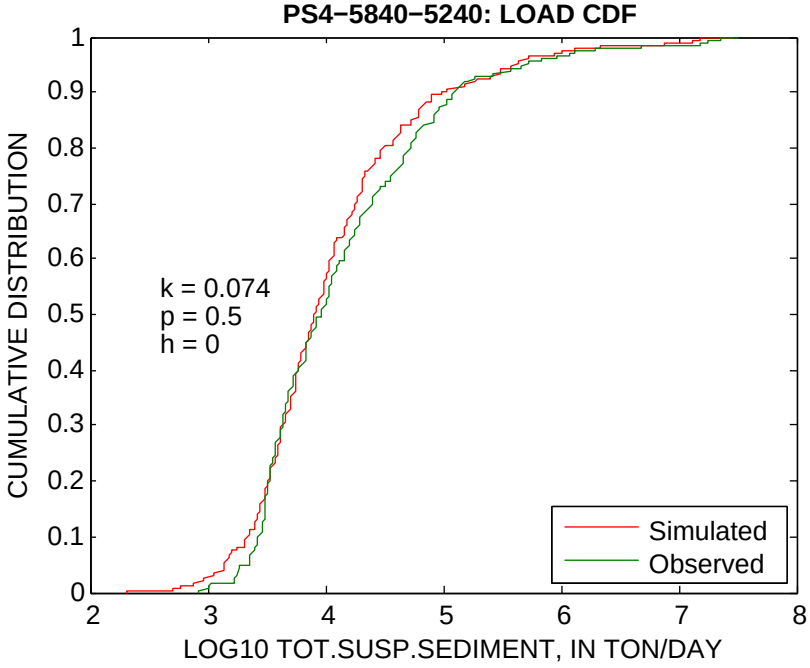


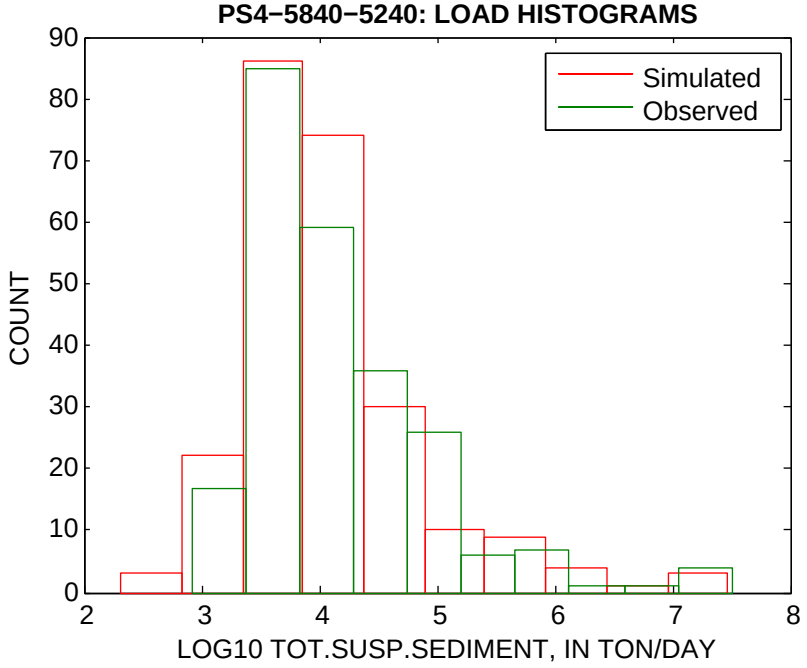


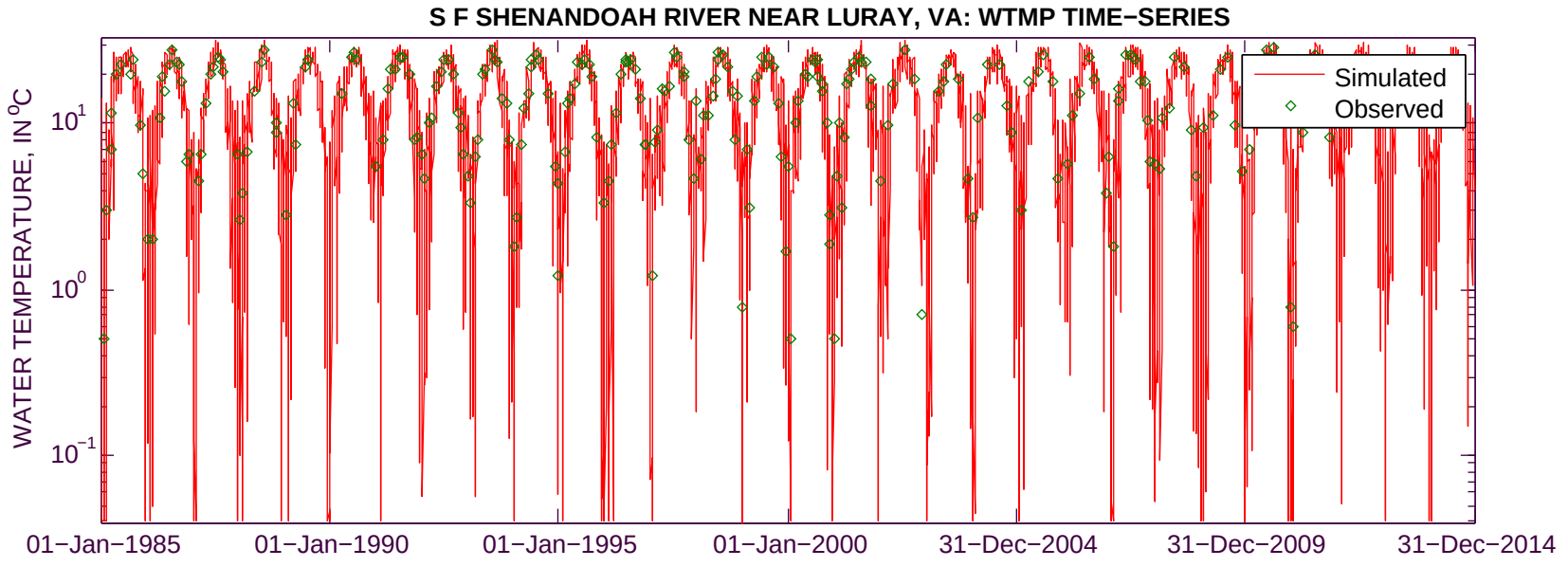
LOAD DATA
LOG10

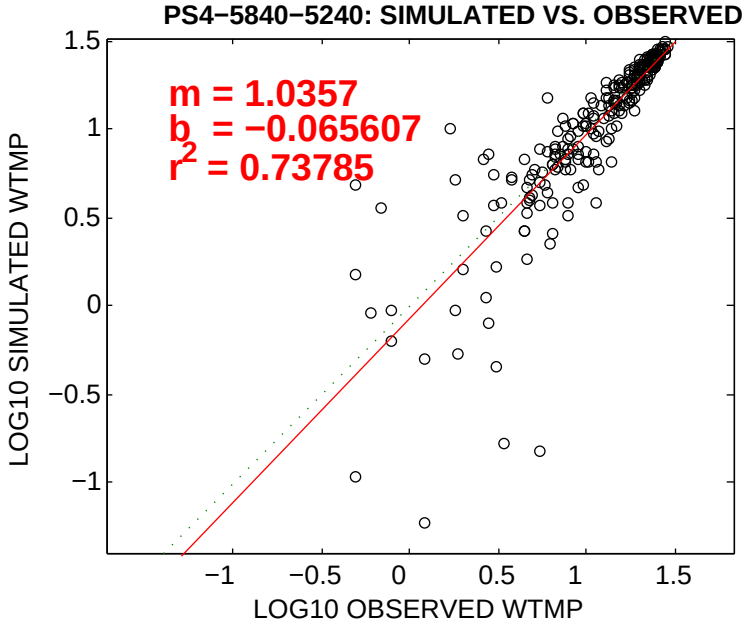


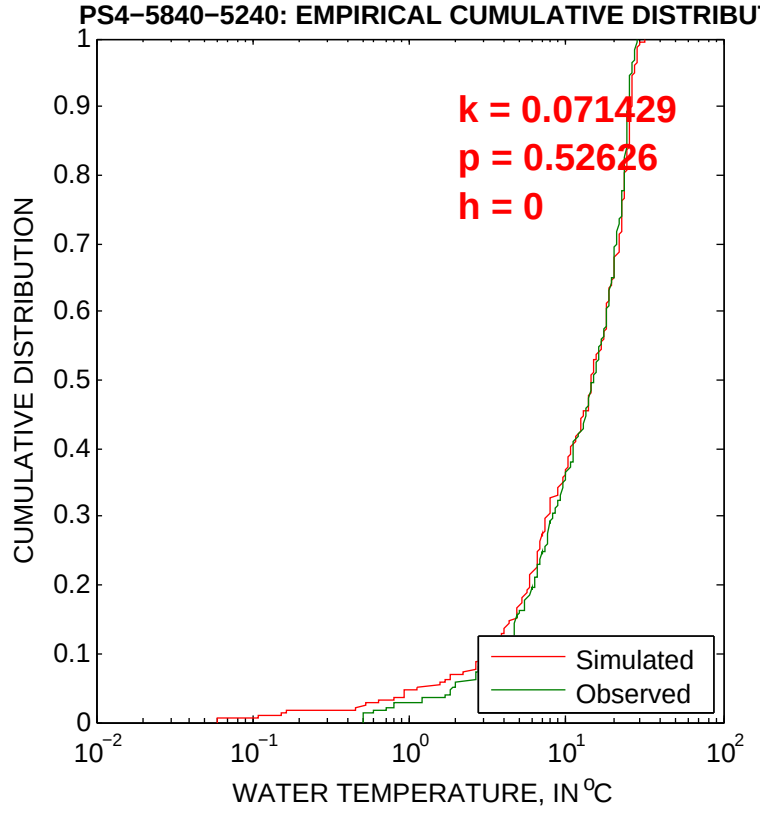












DATA SELECTION

scenario	file
P620171001WQ	WTMP.calib

plot: WTMP - water tempera...

Dates: 1/1/1985 – 12/31/201

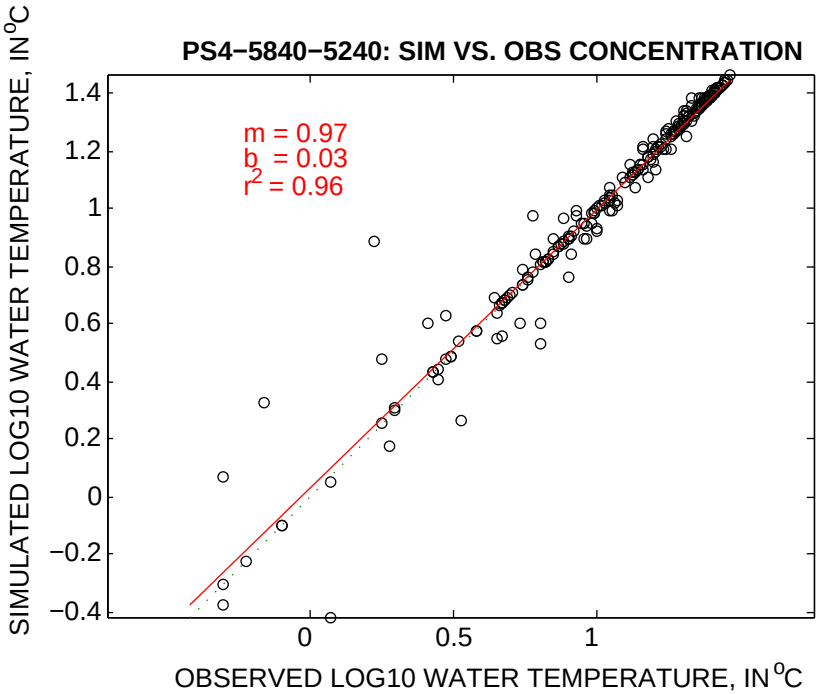
Drive	Directory	Observed
N/A	model	OBS20161101

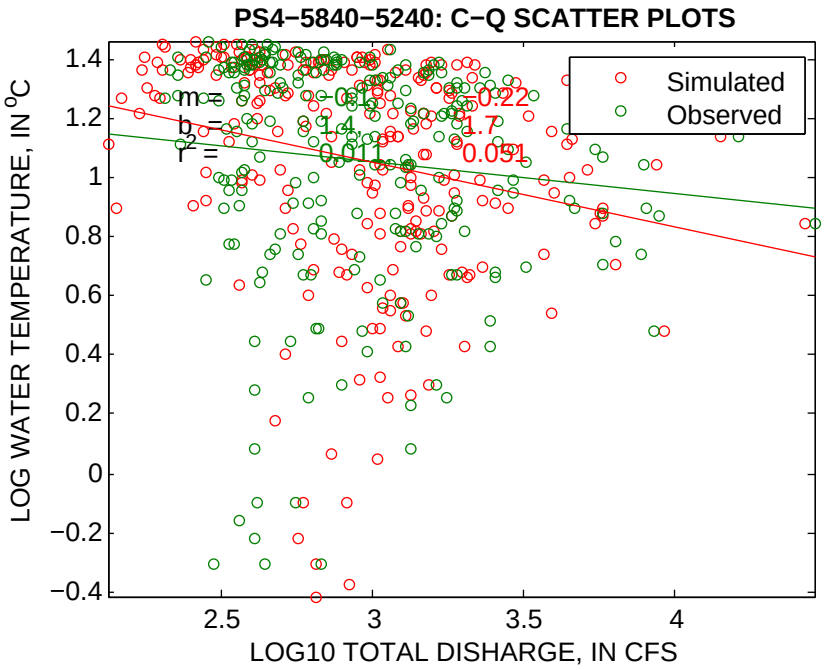
STATISTICS

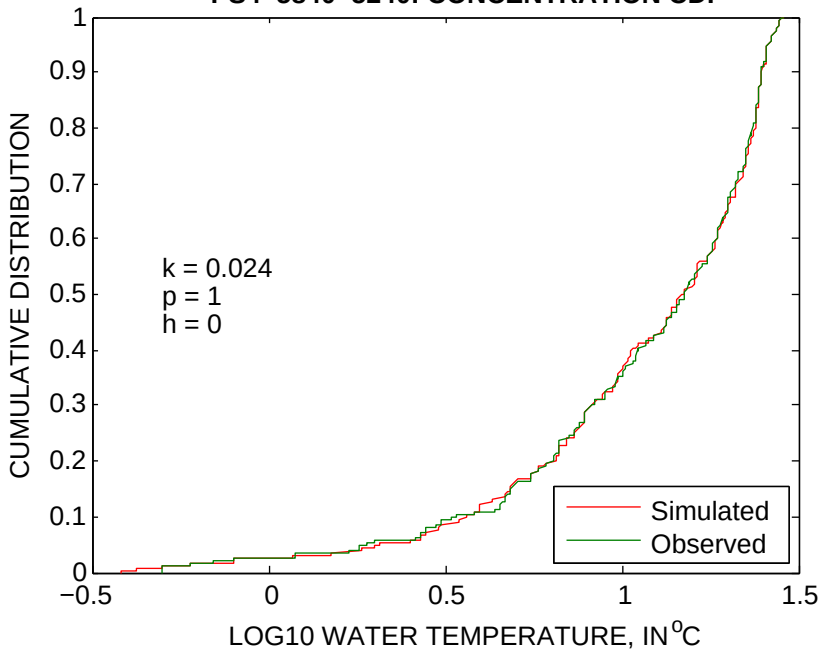
	n	252	252
		observe	simulate
min		0.5	0.059852
		-0.30103	-1.22292
mean		14.6376	14.6627
		1.05265	1.02462
media		15.1	14.601
		1.17898	1.16438
max		28.9	31.411
		1.4609	1.49708
varian		66.5222	75.0051
		0.141814	0.206163
JB		0.002692	0.002716
		0.001	0.001
		ra	log
%		0.171373	-2.66336
err.va		5.94023	0.0550147
rel.std.err		0.089297	0.387935
mod.eff		0.910703	0.612065

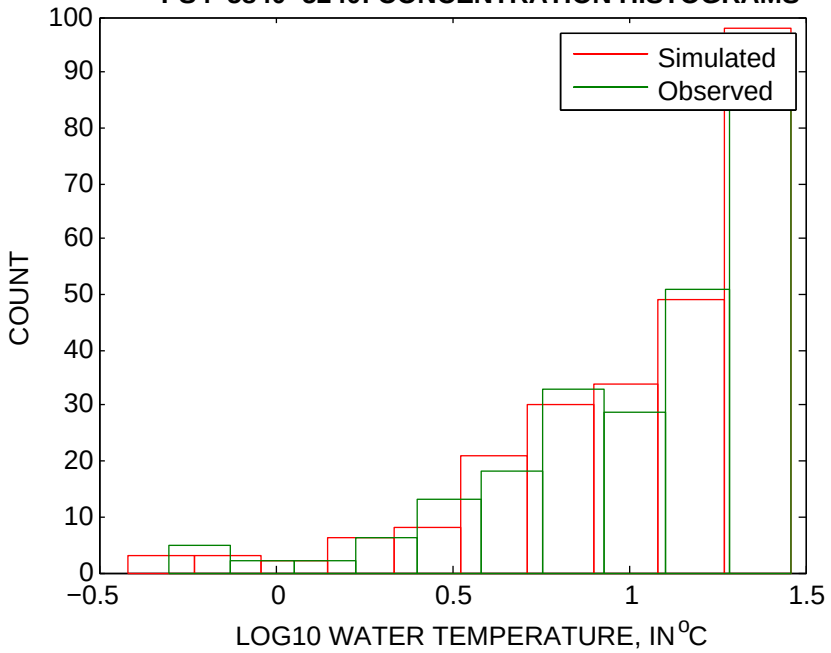
VERSION 2.1

ALL DATA
LOG10

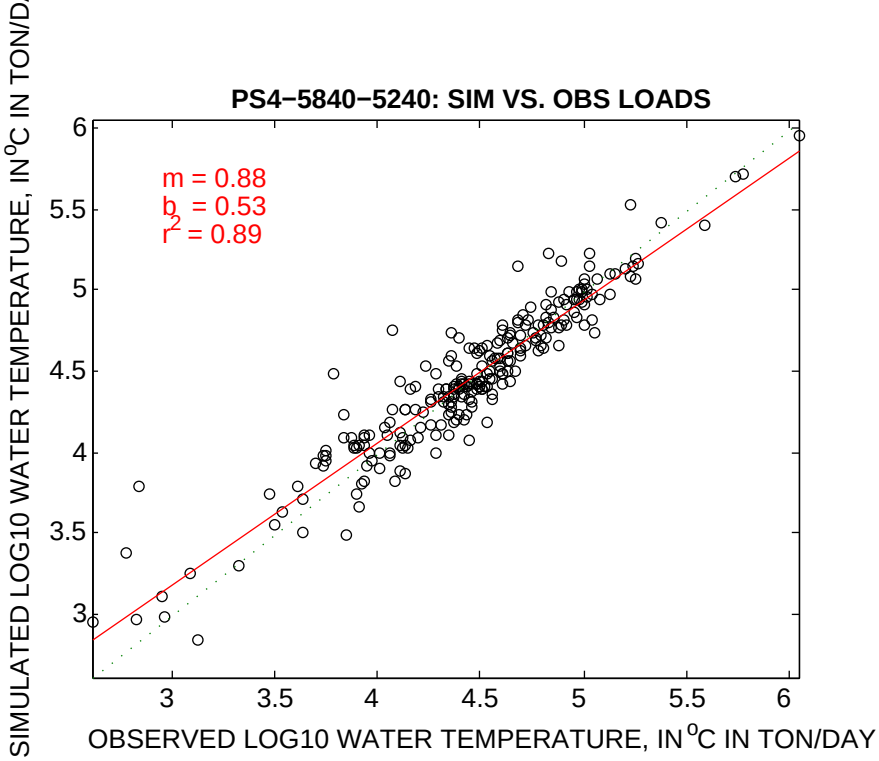


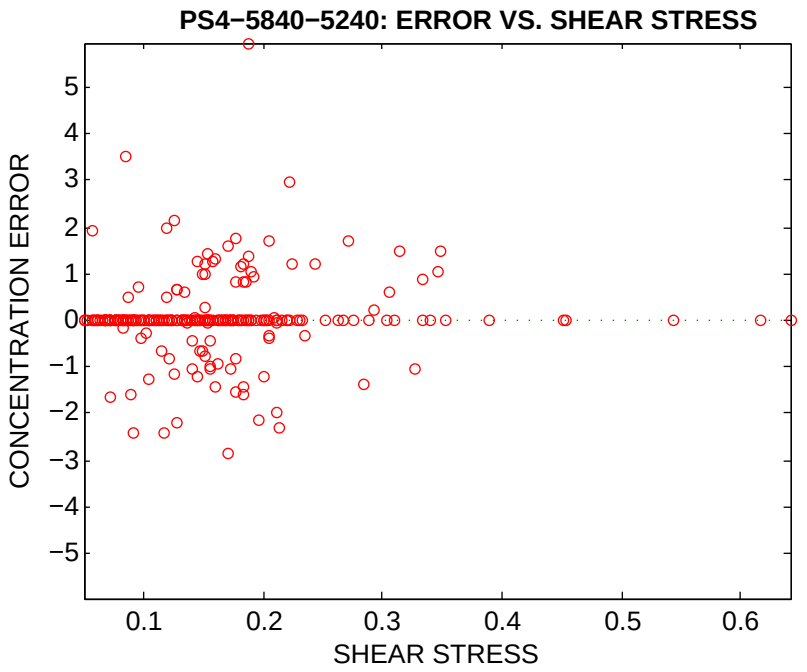


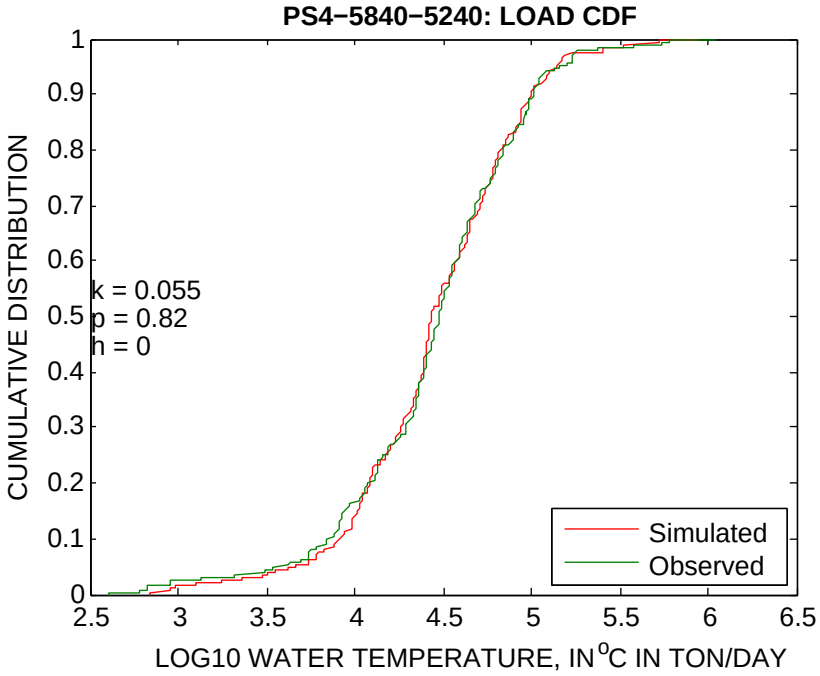


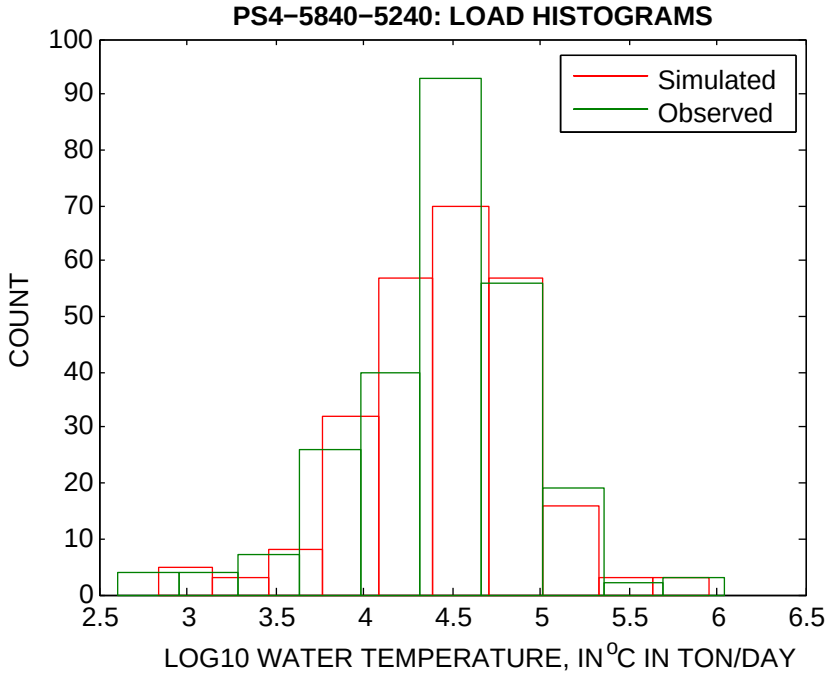


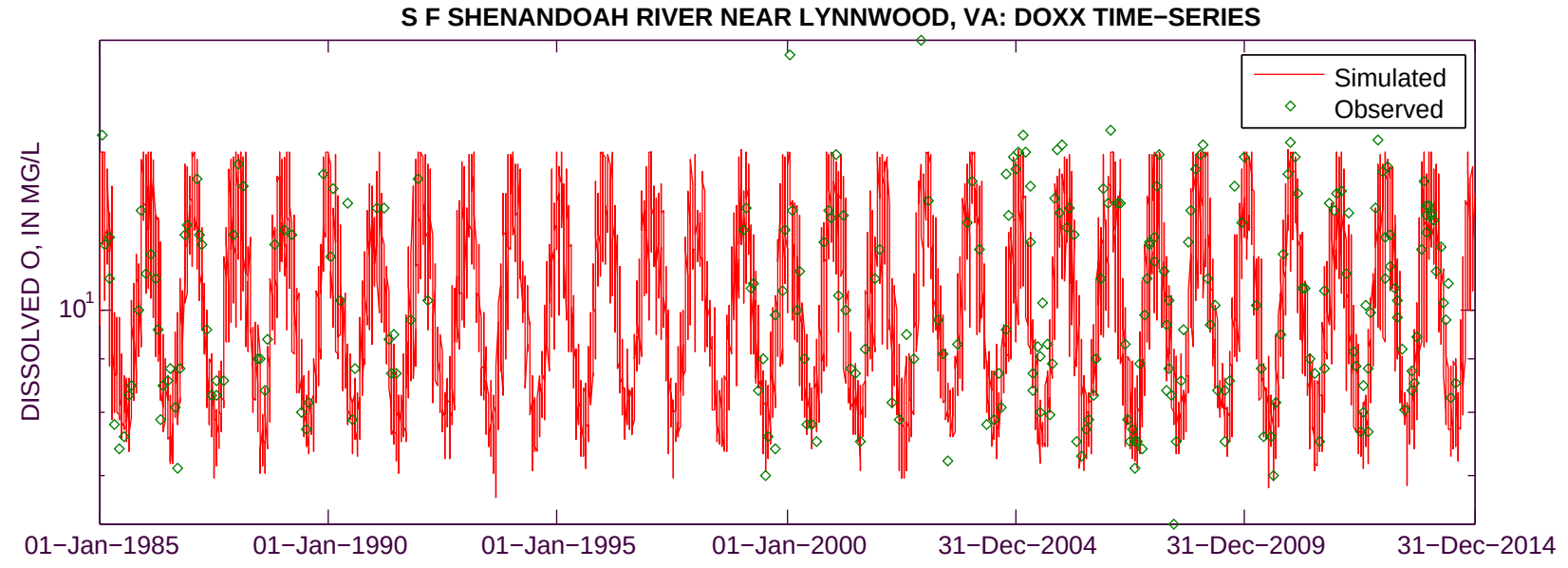
LOAD DATA
LOG10

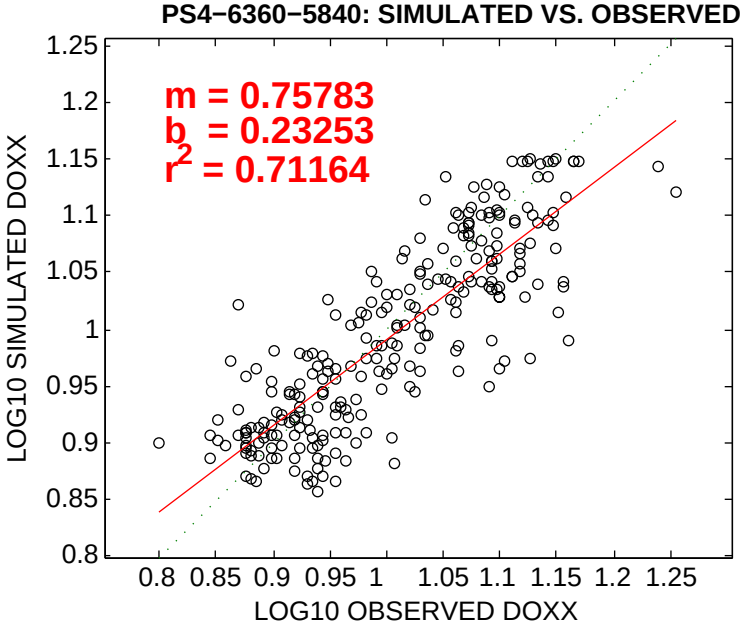


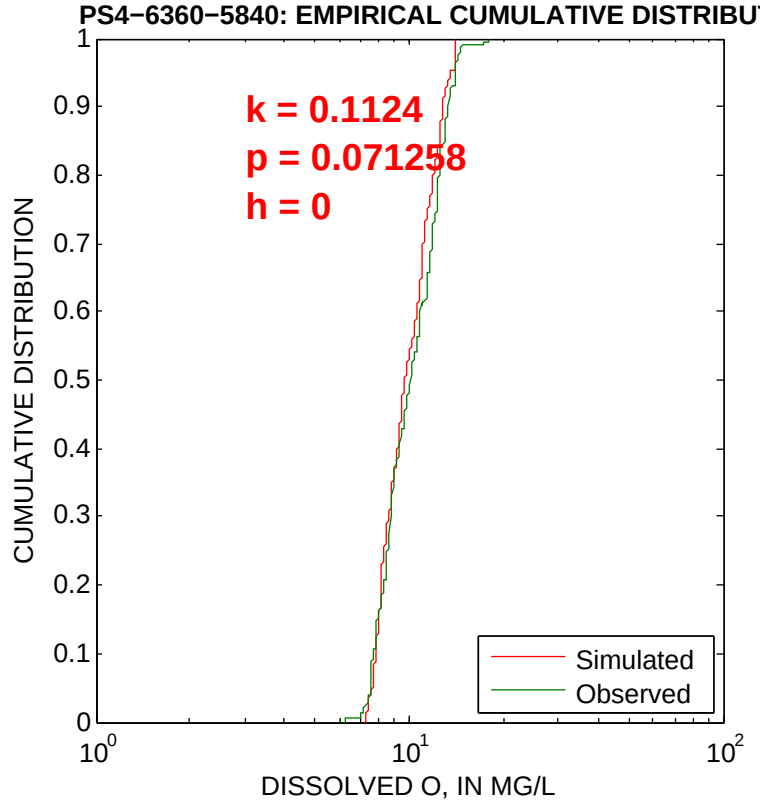












DATA SELECTION

scenario	file
P620171001WQ	DOXX.calib

plot: DOXX - dissolved oxygen

Dates: 1/1/1985 – 12/31/201

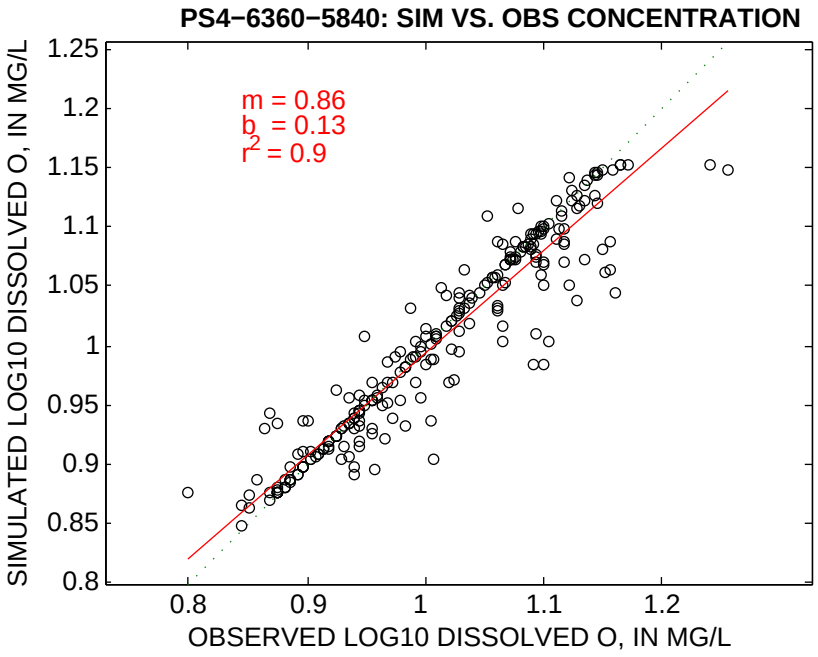
Drive	Directory	Observed
N/A	model	OBS20161101

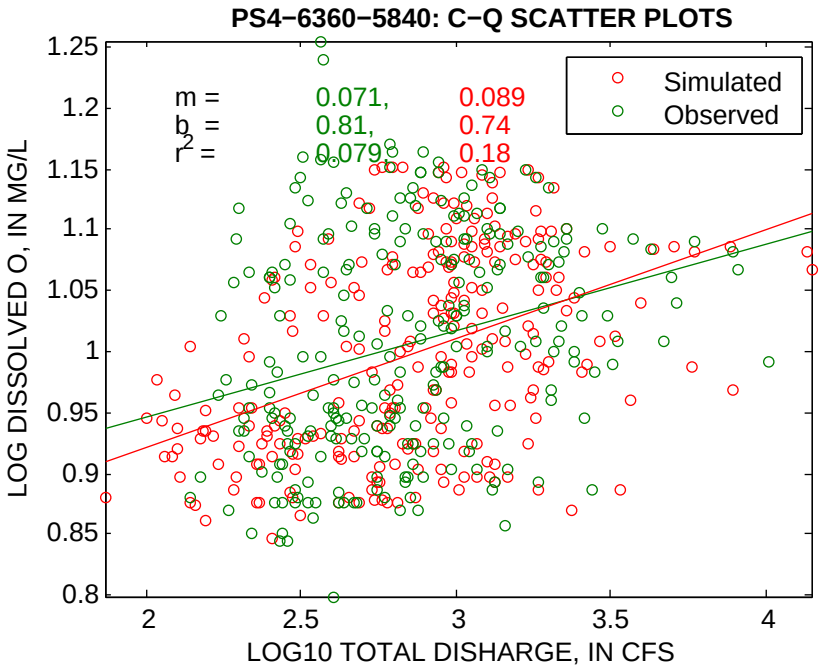
STATISTICS

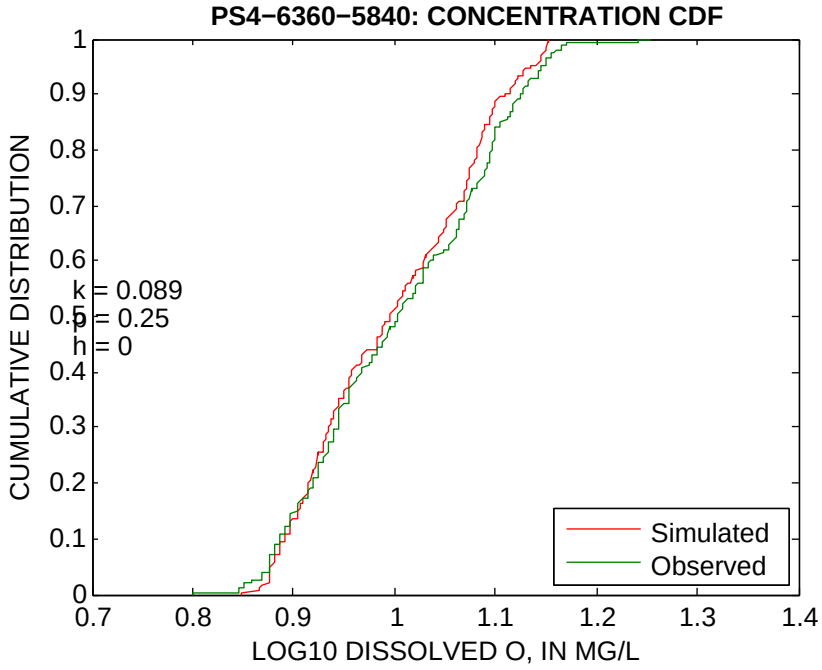
	n	observe	simulate
		258	258
min		6.3	7.1992
		0.799341	0.857284
mean		10.3822	10.0742
		1.00681	0.995517
media		10.1	9.69095
		1.00432	0.986366
max		18	14.145
		1.25527	1.1506
varian		4.79825	3.68958
		0.00823779	0.00664793
JB		0.011439	0.003361
		0.012826	0.004598
		ra	log
%		-2.96714	-1.12169
err.va		1.52805	0.00252813
rel.std.err		0.318459	0.306895
mod.eff		0.681541	0.693105

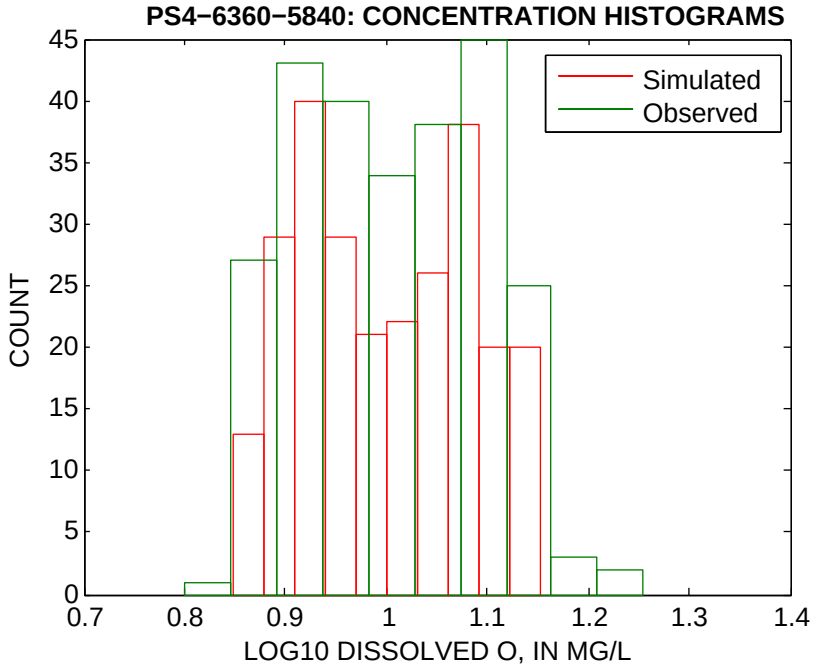
VERSION 2.1

ALL DATA
LOG10

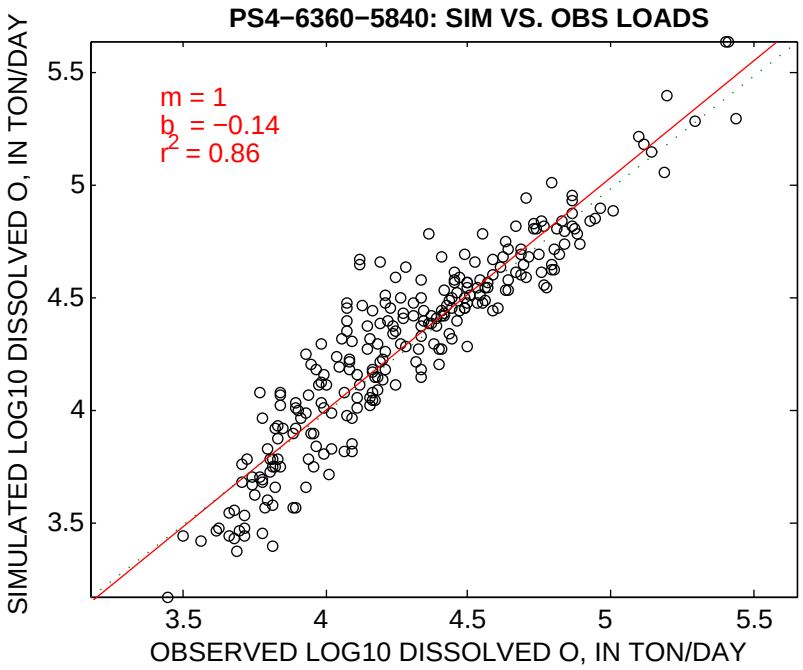


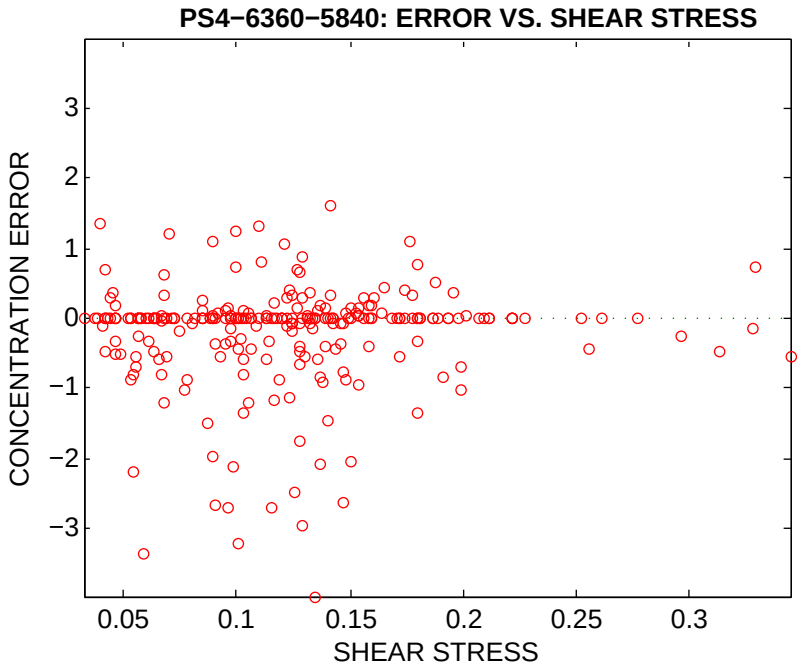


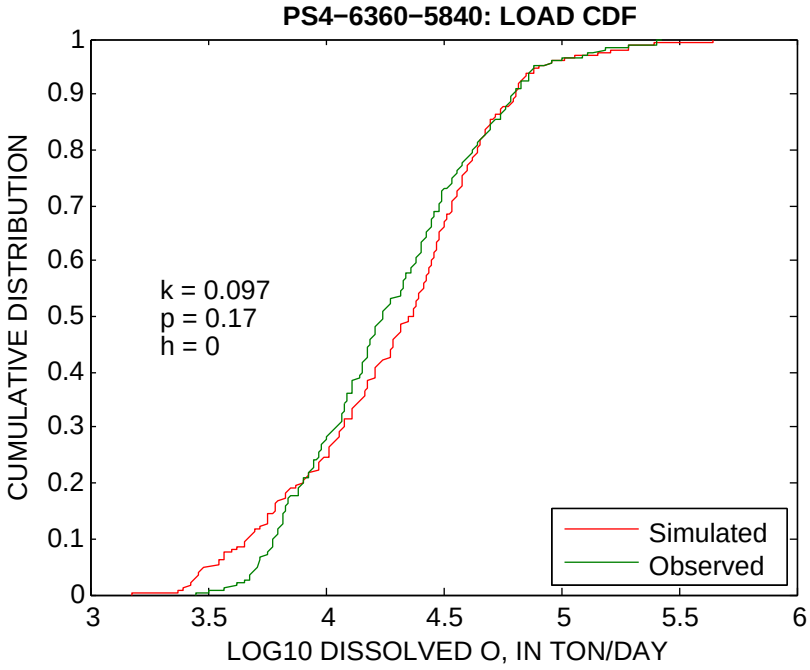


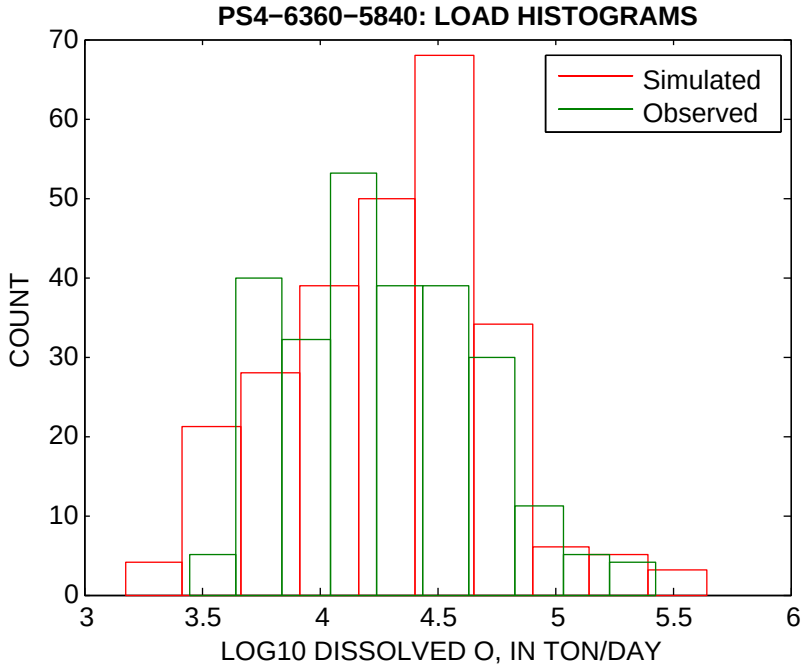


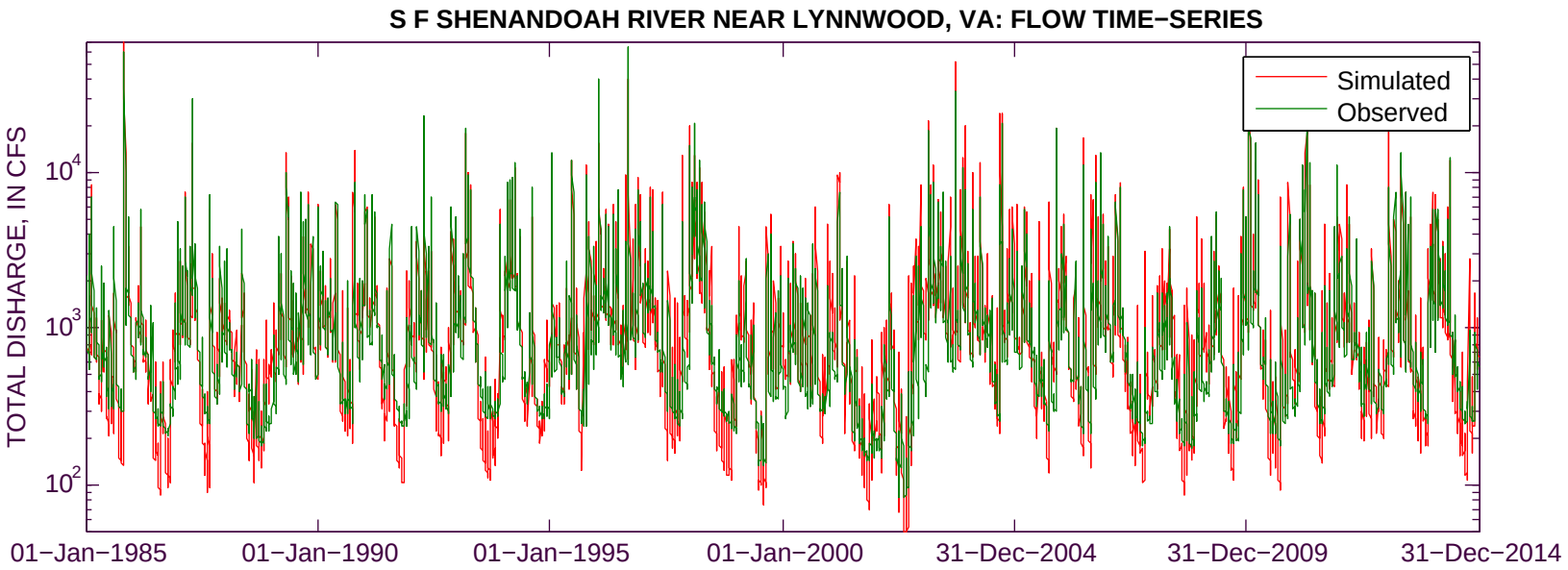
LOAD DATA
LOG10

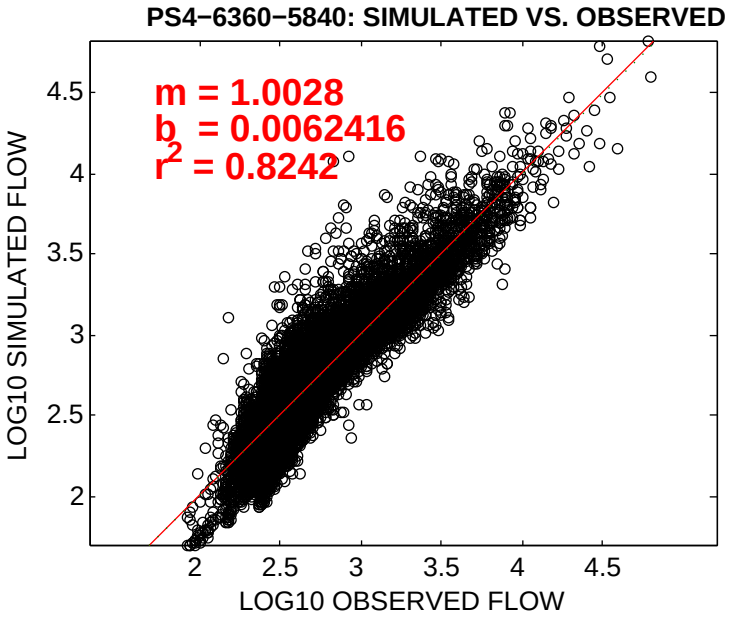


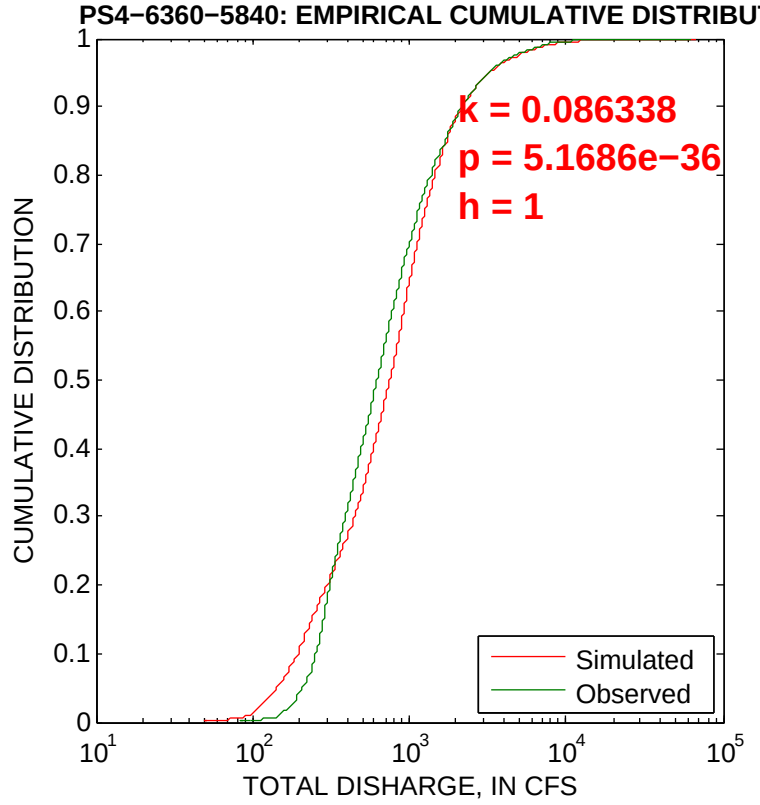












DATA SELECTION

scenario: P620171001WQ | file: FLOW.calib

plot: FLOW - total discharge

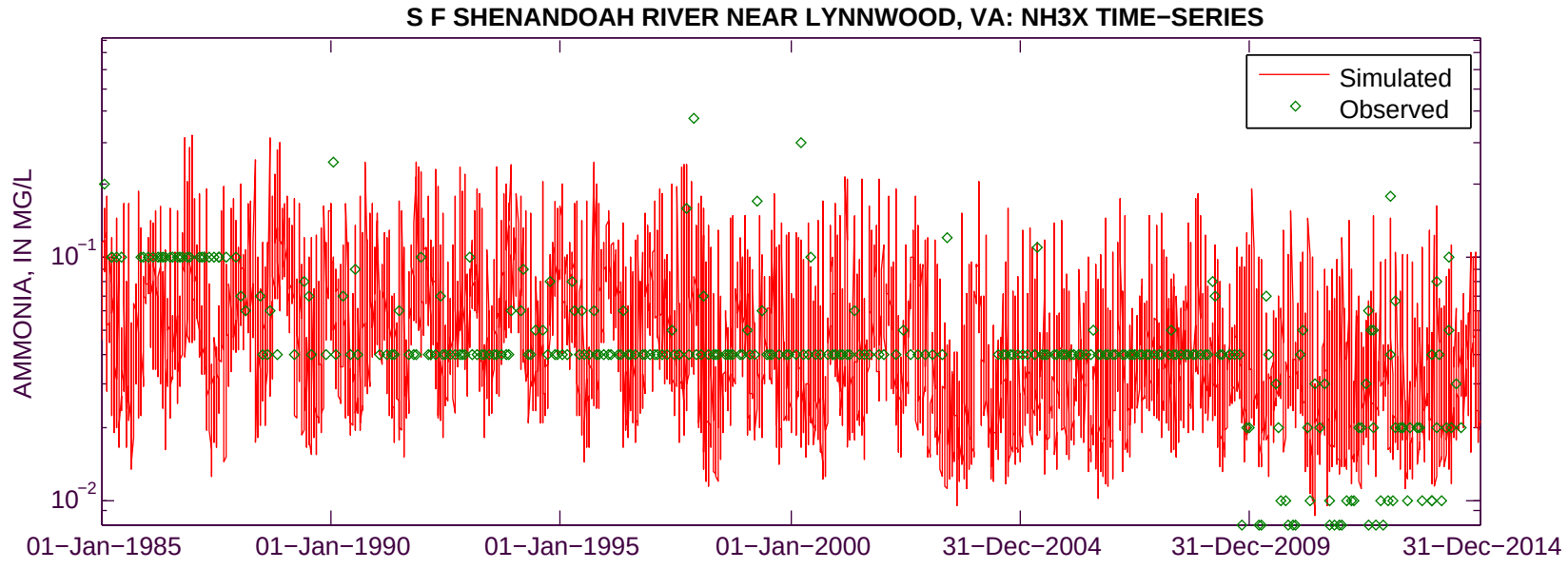
Dates: 1/1/1985 – 12/31/201

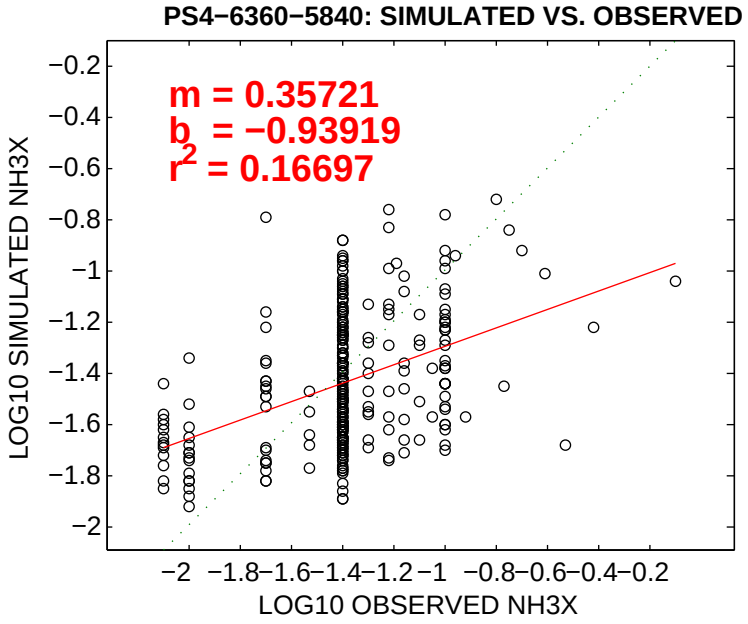
Drive: N/A | Directory: model | Observed: OBS20161101

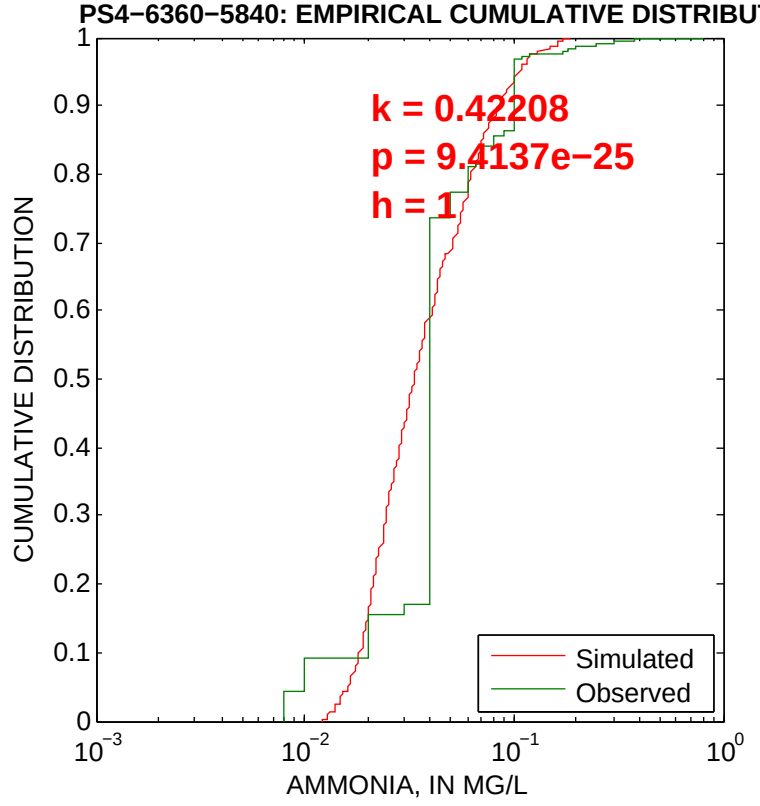
STATISTICS

		observe	simulate
n		10957	10957
min		84	48.76
		1.92428	1.68806
mean		1076.47	1150.23
		2.83482	2.84906
media		627	753.16
		2.79727	2.87689
max		63500	67614
		4.80277	4.83004
varian		3.26008e+0	3.61741e+
		0.139768	0.170537
JB		0.001	0.001
		0.001	0.001
		ra	log
%		6.85237	0.50229
err.va		874522	0.0301836
rel.std.err		0.268252	0.215955
mod.eff		0.731748	0.784045

VERSION 2.1







DATA SELECTION

scenario	file
P620171001WQ	NH3X.calib

plot: NH3X - ammonia

Dates: 1/1/1985 – 12/31/201

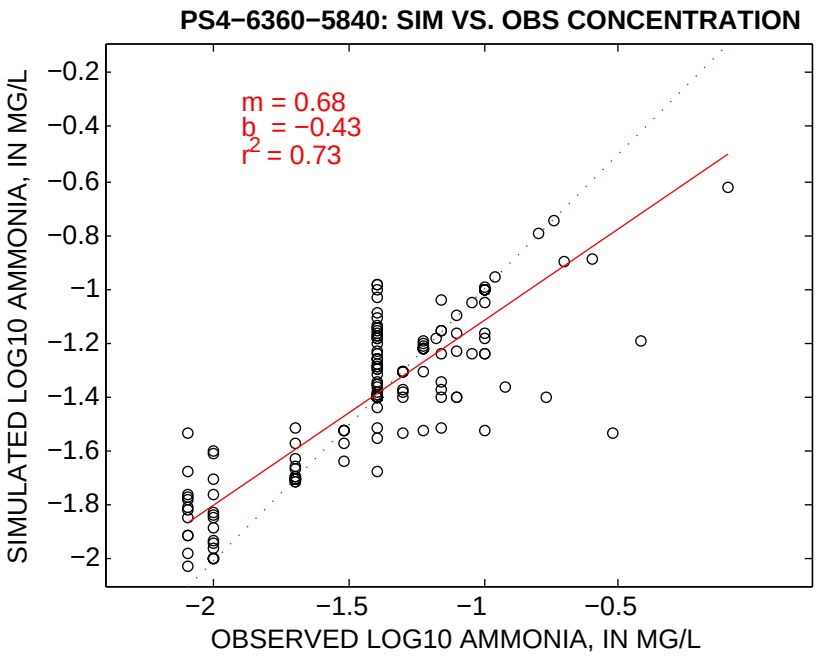
Drive	Directory	Observed
N/A	model	OBS20161101

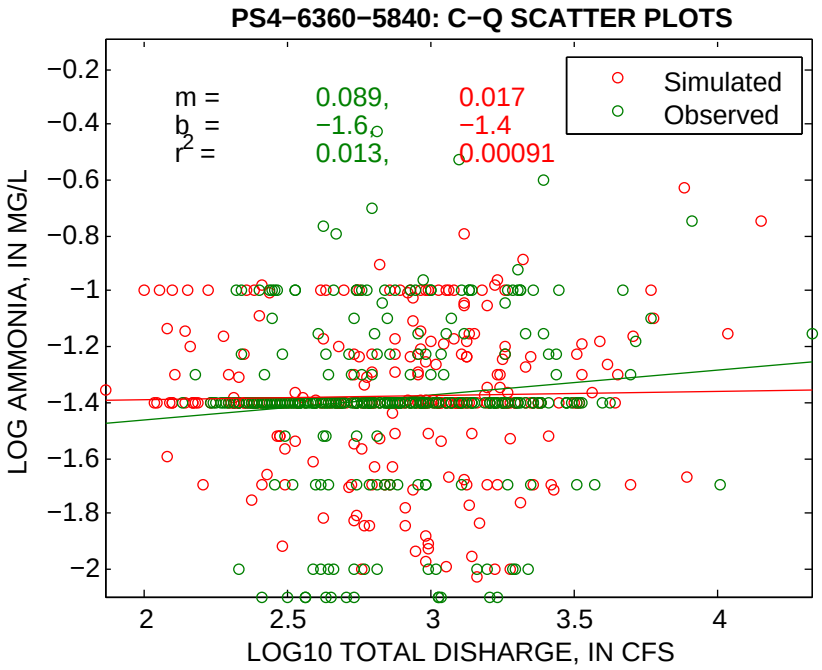
STATISTICS

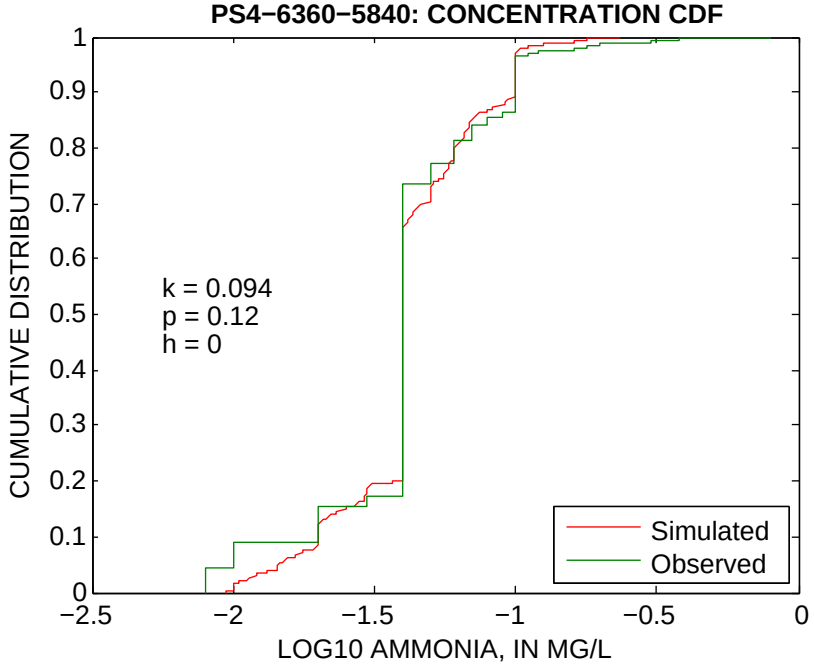
n	308	308
	observe	**simulate**
min	0.008 -2.09691	0.012015 -1.92028
mean	0.0523043 -1.3883	0.0442857 -1.43511
media	0.04 -1.39794	0.033646 -1.47307
max	0.8 -0.09691	0.18935 -0.722735
varian	0.00333337 0.0864961	0.00093096 0.0661027
JB	0.001 0.001	0.001 0.004898
	ra	log
%	-15.3307	3.37178
err.va	0.00339725	0.093002
rel.std.err	1.01917	1.07522
mod.eff	-0.0191653	-0.0752154

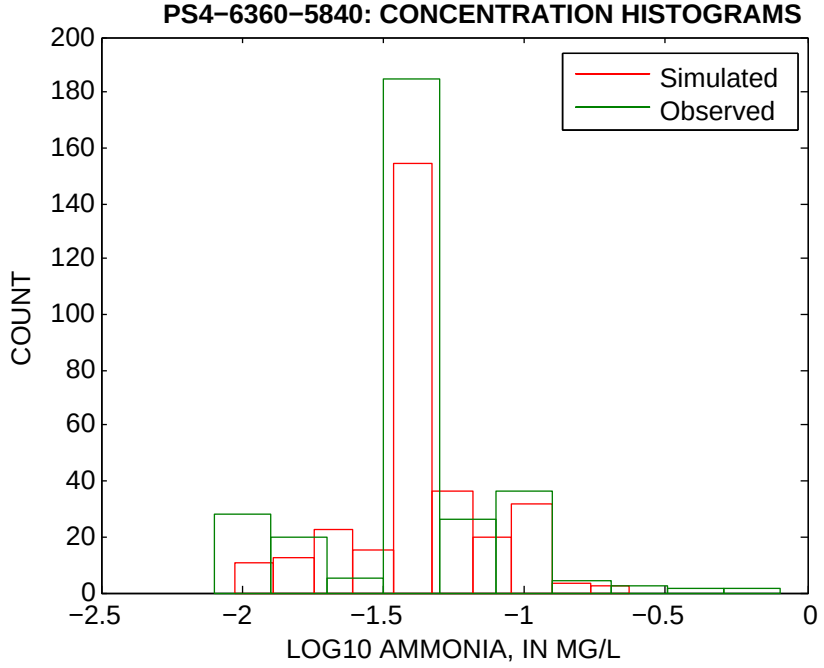
VERSION 2.1

ALL DATA
LOG10

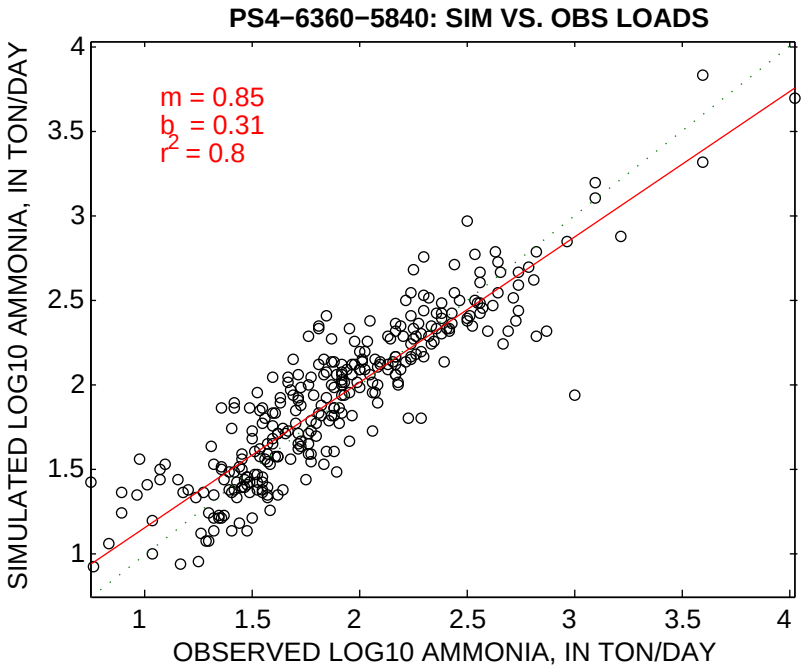


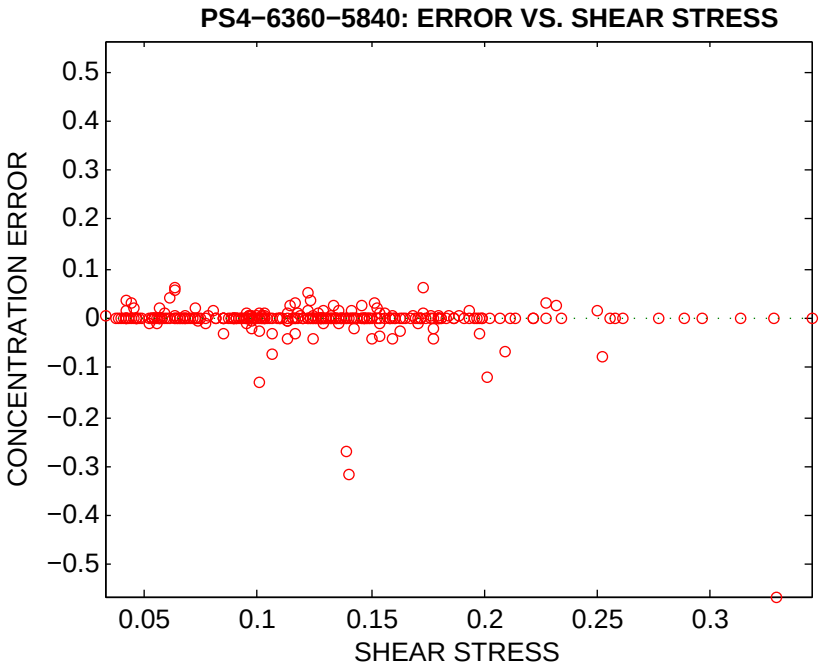


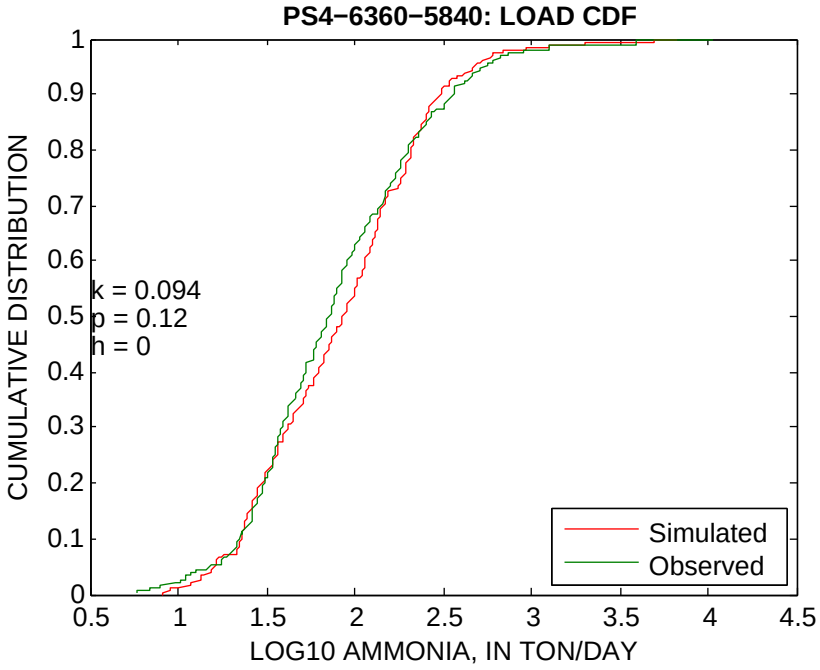


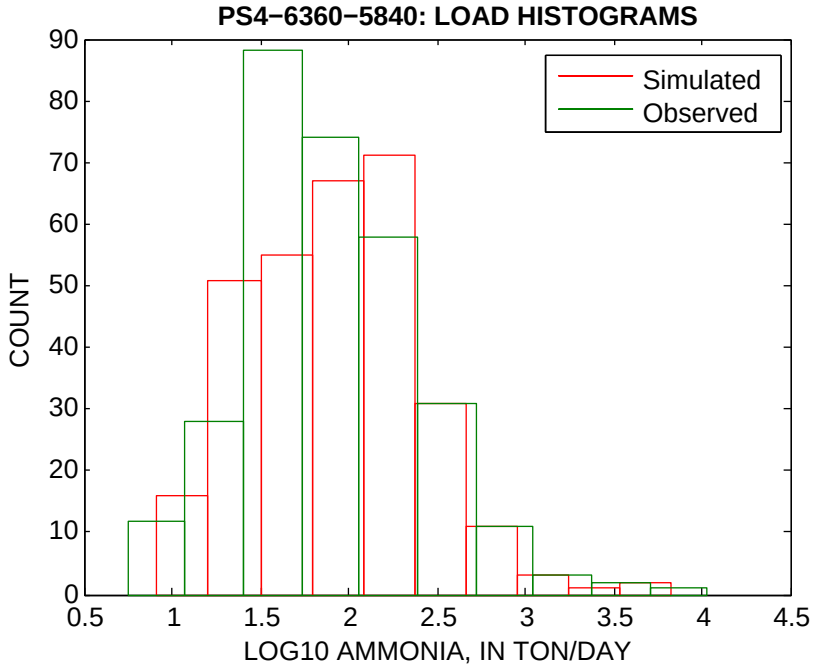


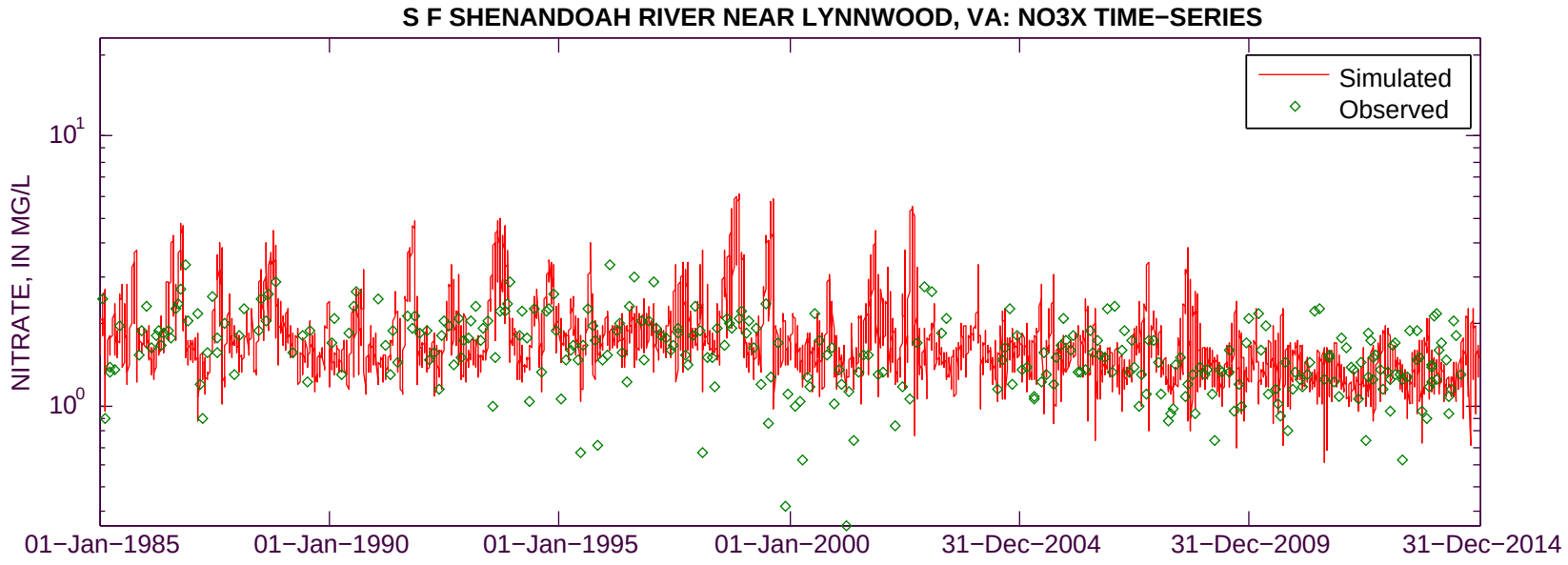
LOAD DATA
LOG10

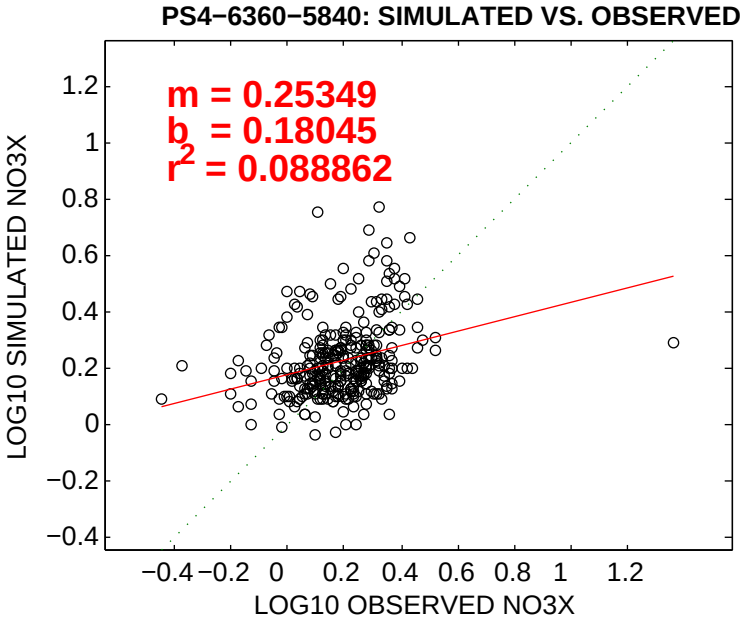


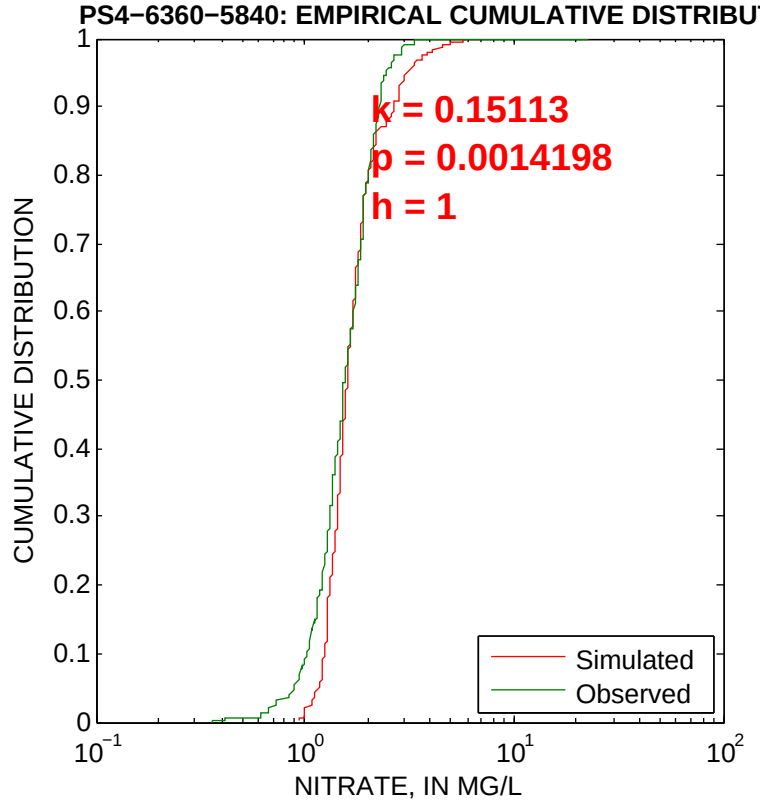












DATA SELECTION

scenario	file
P620171001WQ	NO3X.calib

plot: NO3X - nitrate

Dates: 1/1/1985 – 12/31/201

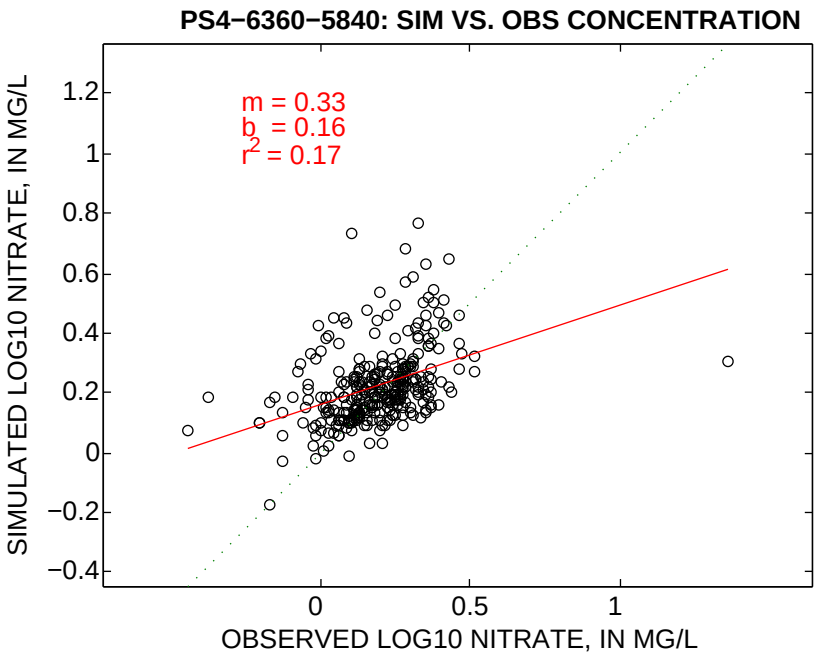
Drive	Directory	Observed
N/A	model	OBS20161101

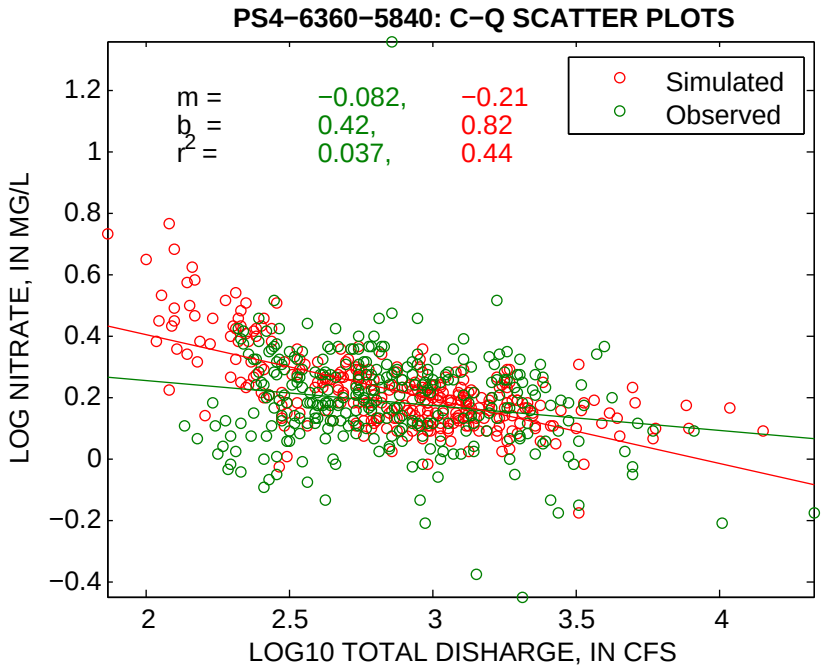
STATISTICS

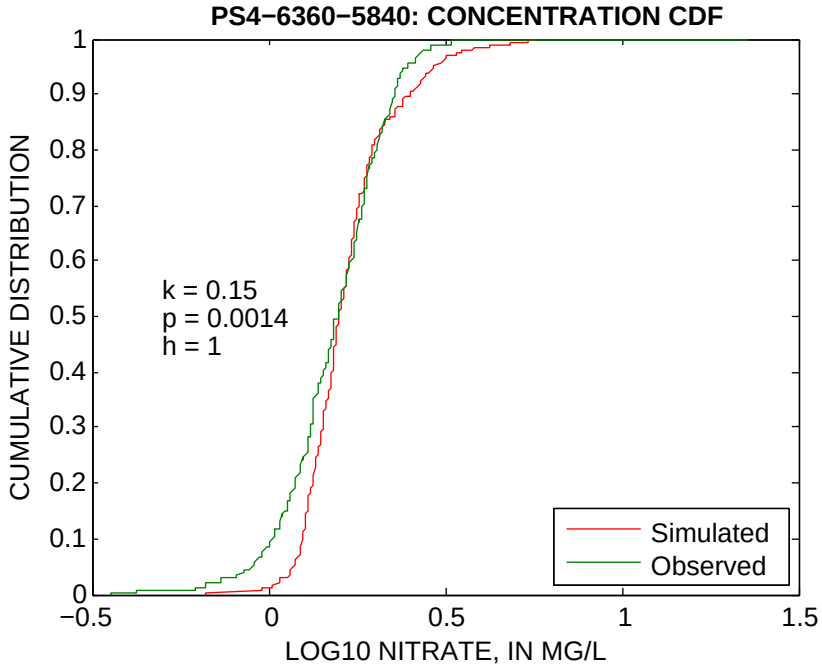
	n	311	311
		observe	simulate
min		0.36	0.9262
		-0.443697	-0.0332952
mean		1.68091	1.78582
		0.189373	0.228455
media		1.57	1.5966
		0.1959	0.203196
max		22.99	5.9728
		1.36154	0.776178
varian		1.71526	0.481423
		0.0246569	0.0178304
JB		0.001	0.001
		0.001	0.001
		ra	log
%		6.24099	20.6374
err.va		1.97039	0.0315188
rel.std.err		1.14874	1.2783
mod.eff		-0.148741	-0.278297

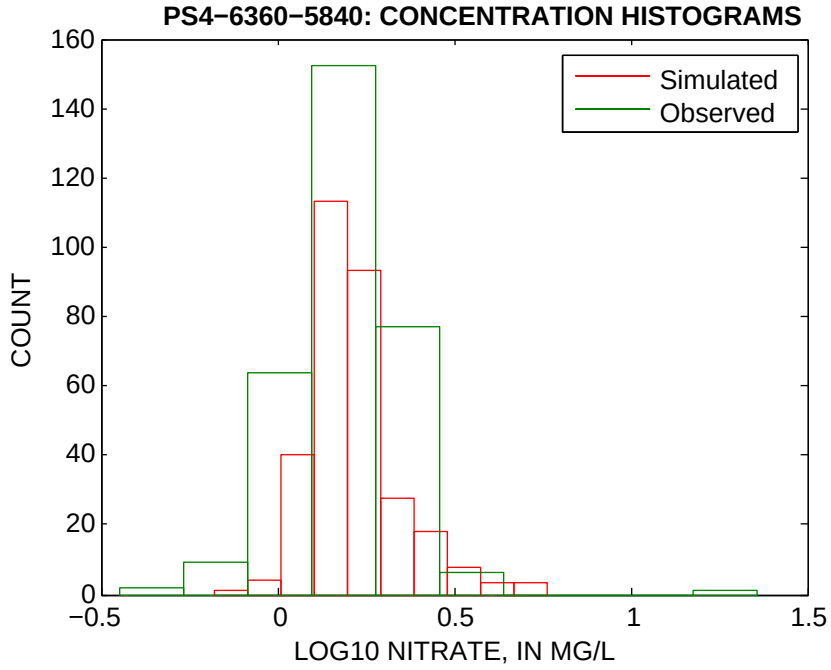
VERSION 2.1

ALL DATA
LOG10

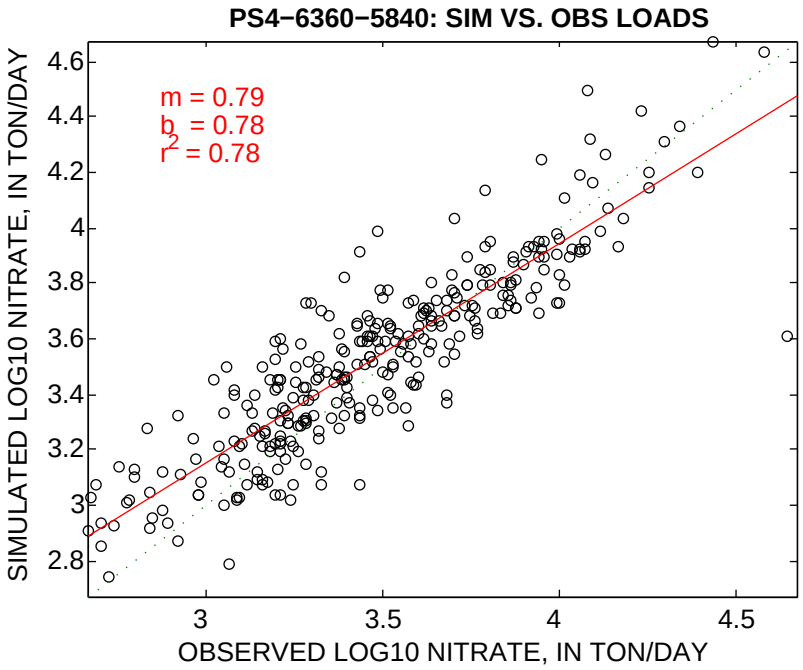


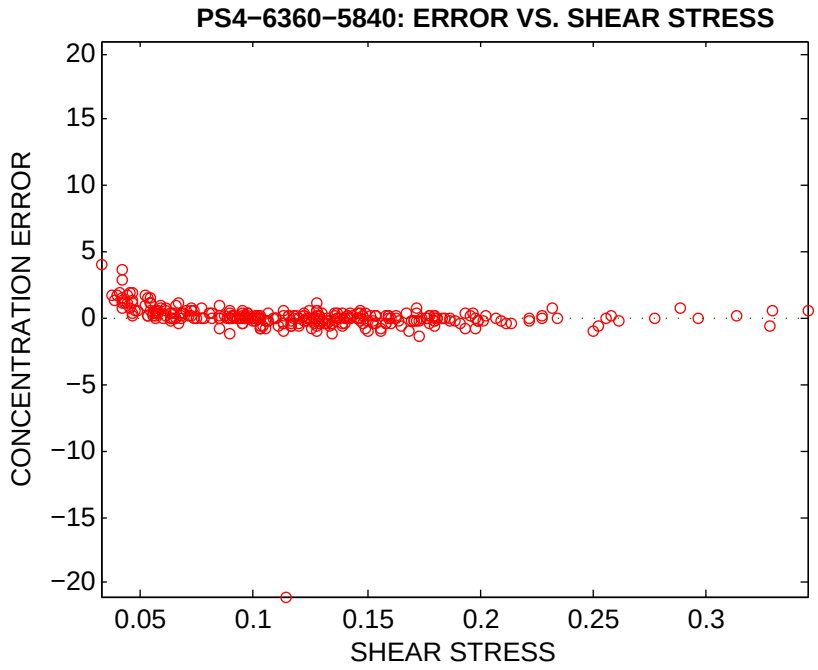


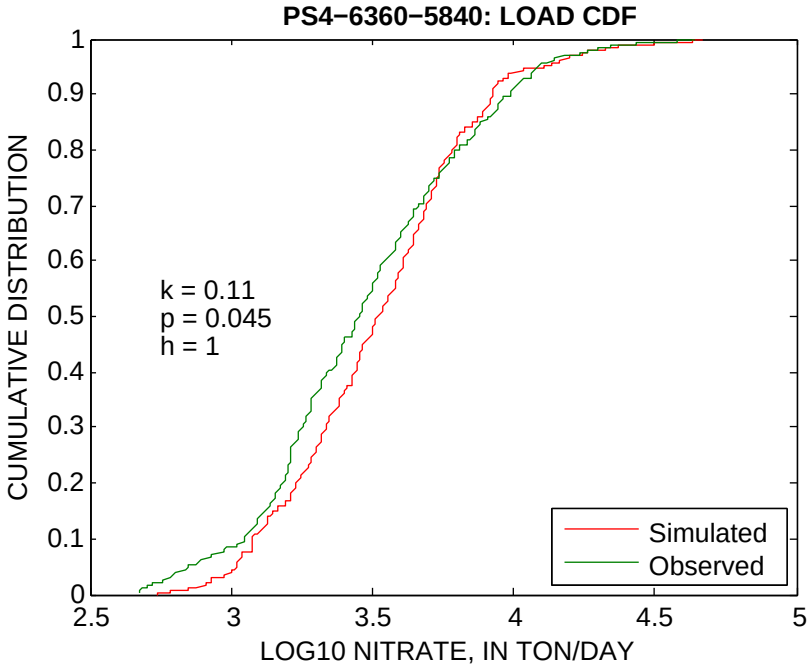


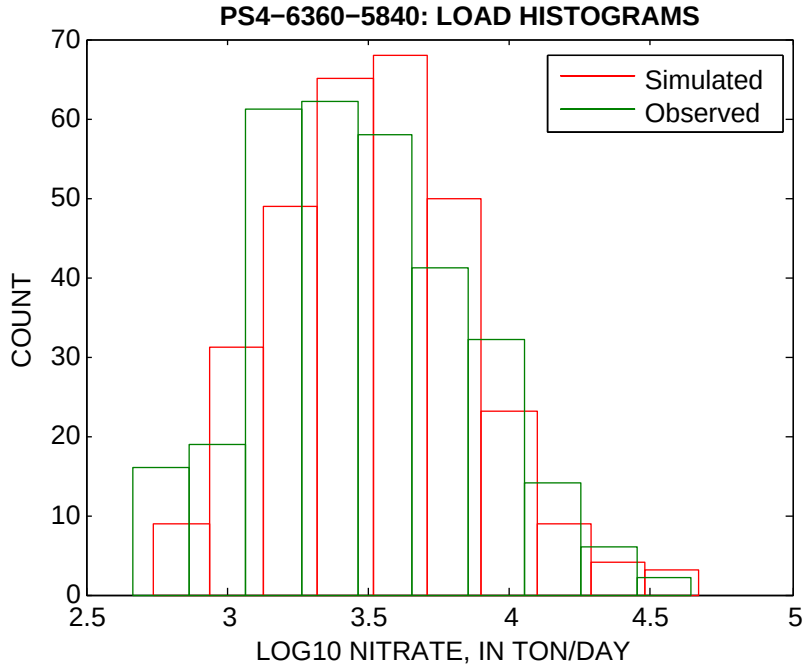


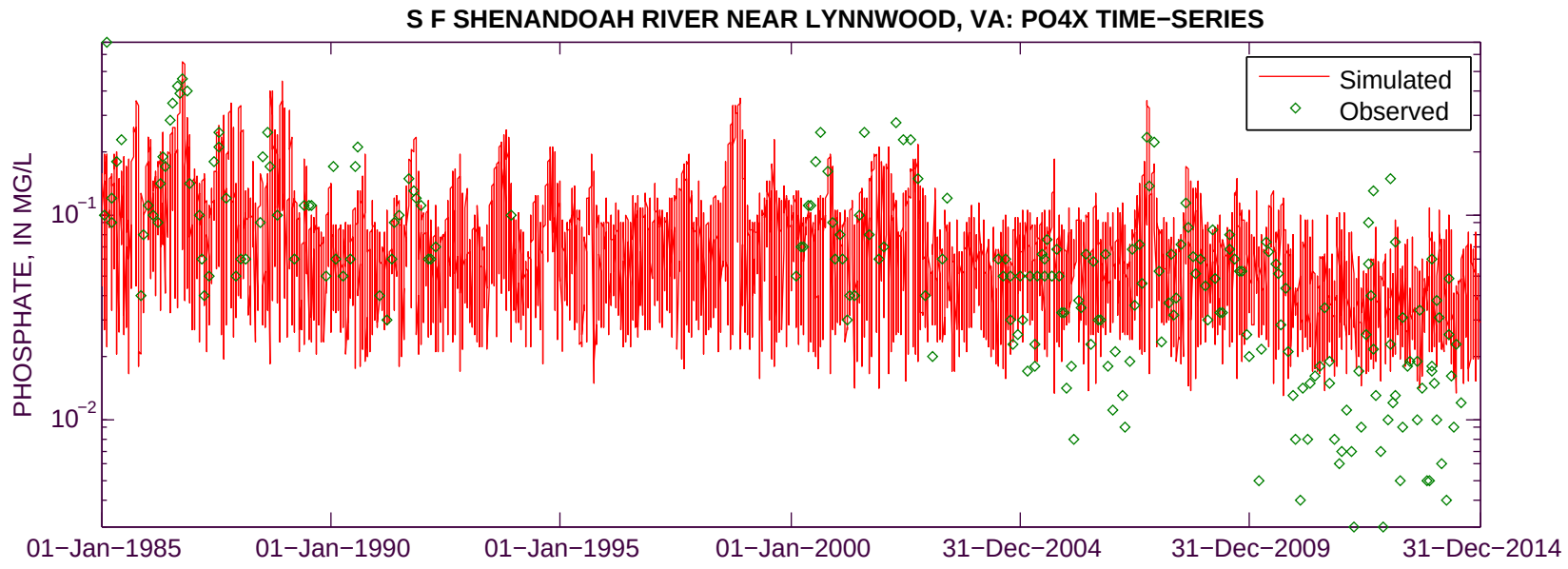
LOAD DATA
LOG10

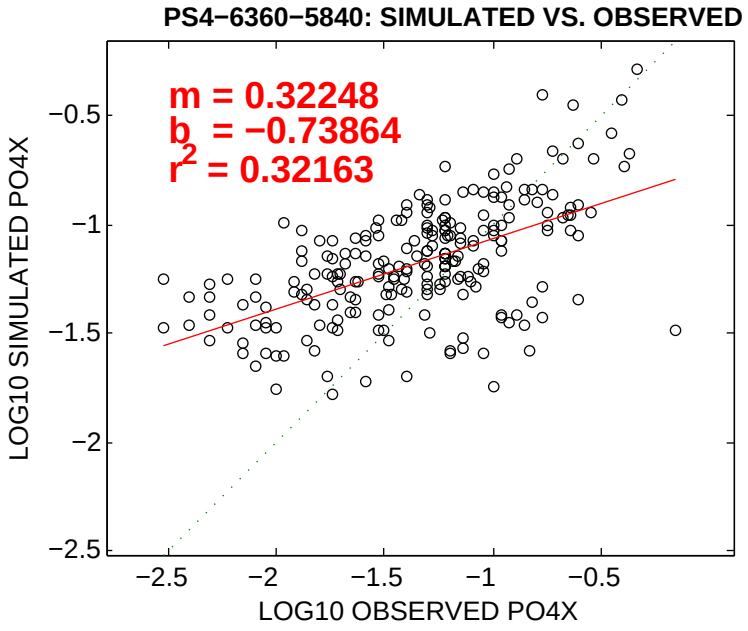


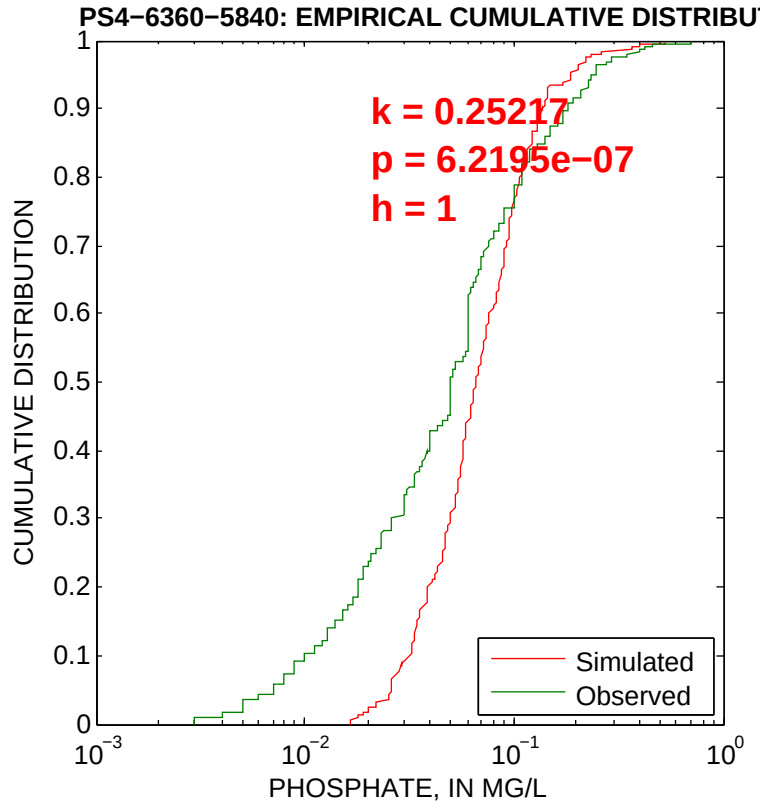












DATA SELECTION

scenario	file
P620171001WQ	PO4X.calib

plot: PO4X - phosphate

Dates 1/1/1985 12/31/201

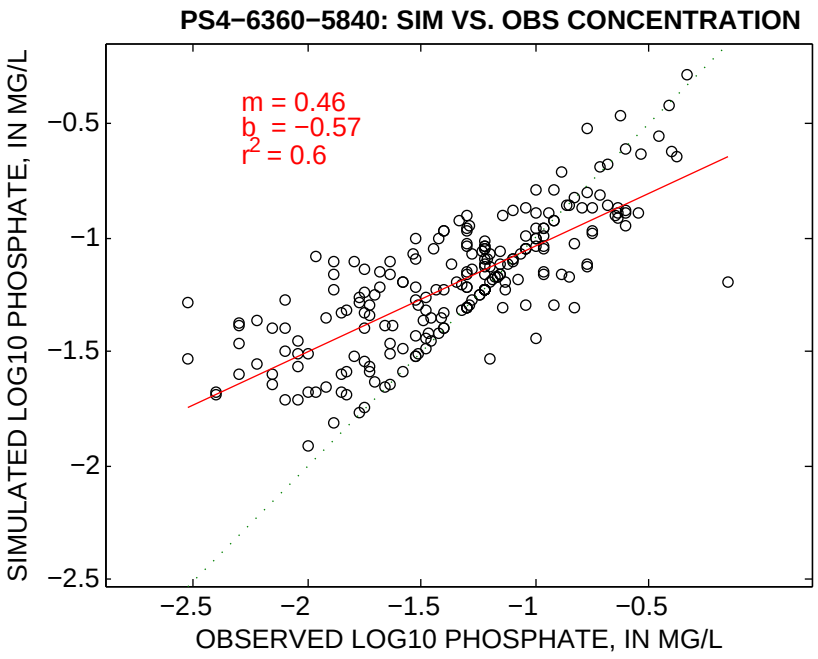
Drive Directory: N/A | Observed: model | OBS20161101

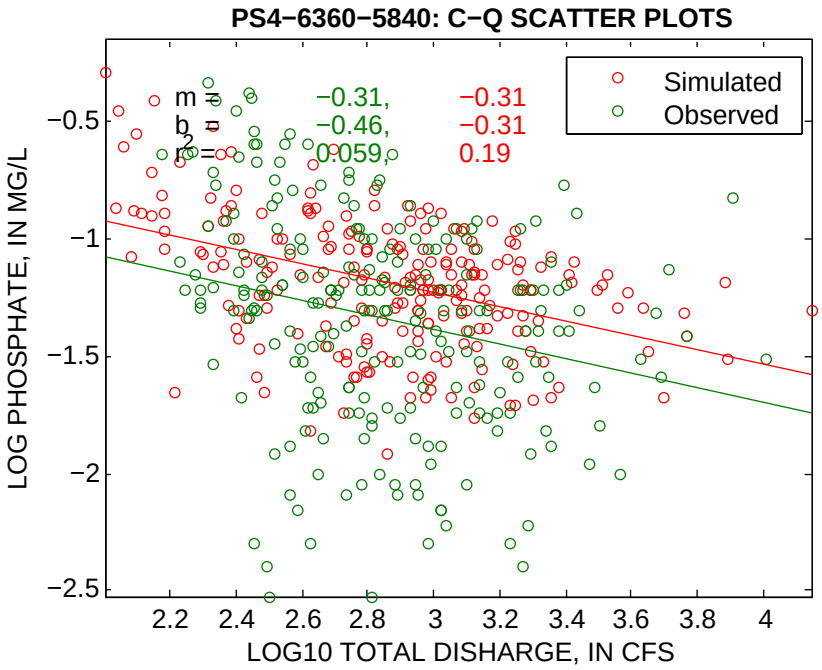
STATISTICS

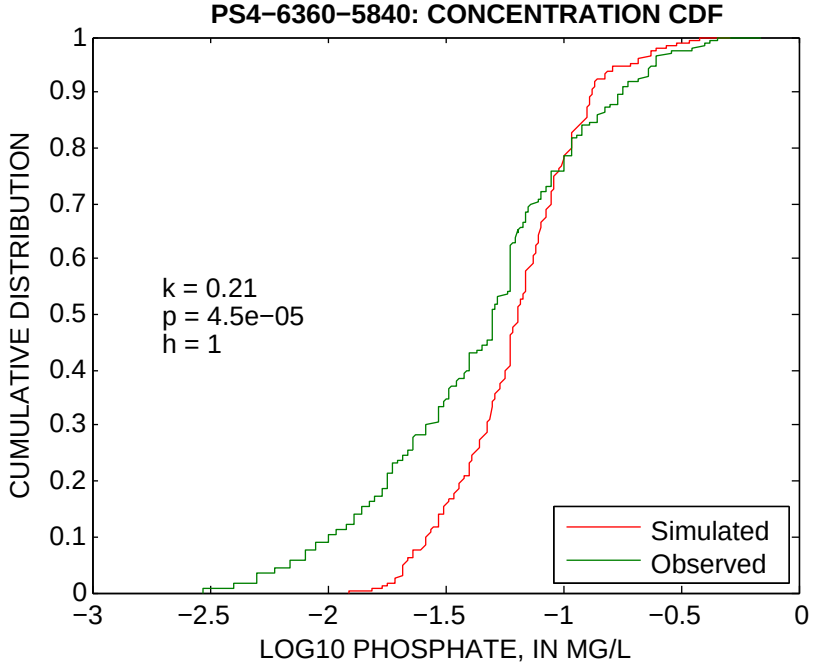
	n	230	230
		observe	simulate
min		0.003	0.016684
		-2.52288	-1.7777
mean		0.0762839	0.0818815
		-1.34301	-1.17173
media		0.05	0.065638
		-1.30103	-1.18284
max		0.7	0.52538
		-0.154902	-0.279526
varian		0.00783993	0.00390977
		0.213895	0.0691562
JB		0.001	0.001
		0.306928	0.085352
		ra	log
%		7.33783	-12.7539
err.va		0.00528077	0.174567
rel.std.err		0.673573	0.816133
mod.eff		0.326427	0.183867

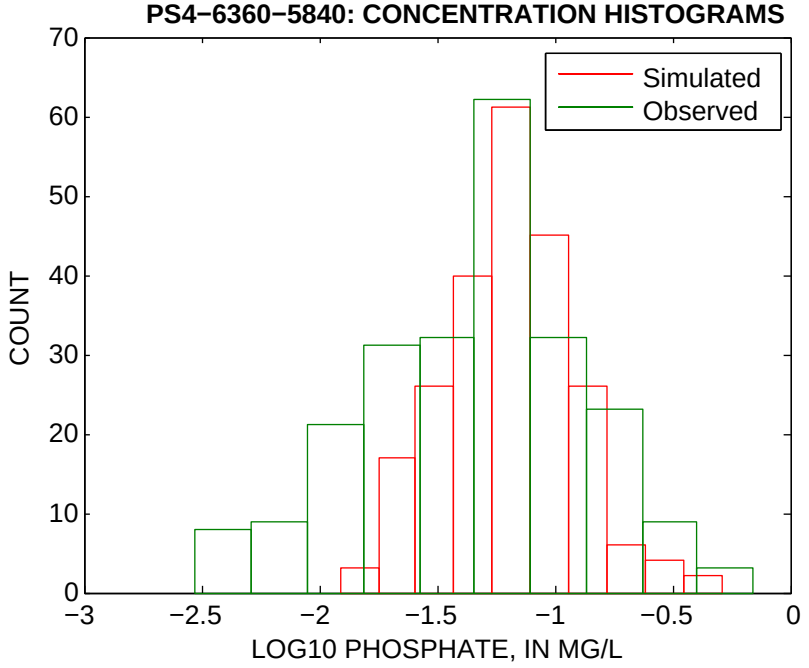
VERSION 2.1

ALL DATA
LOG10

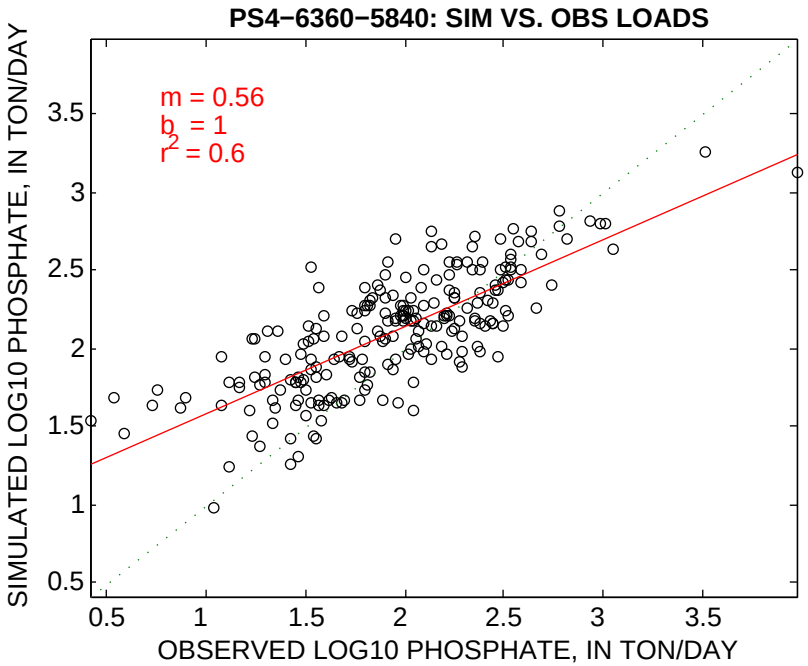


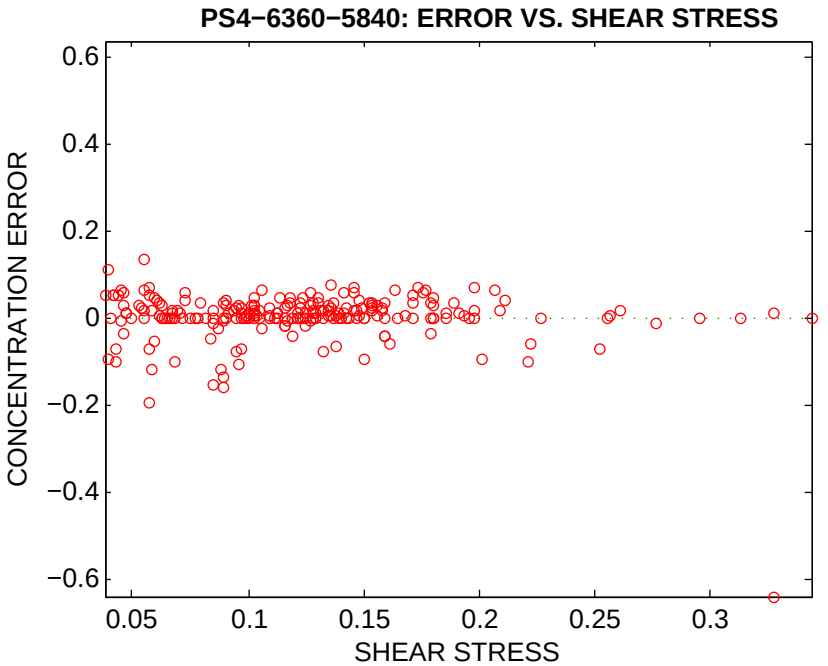


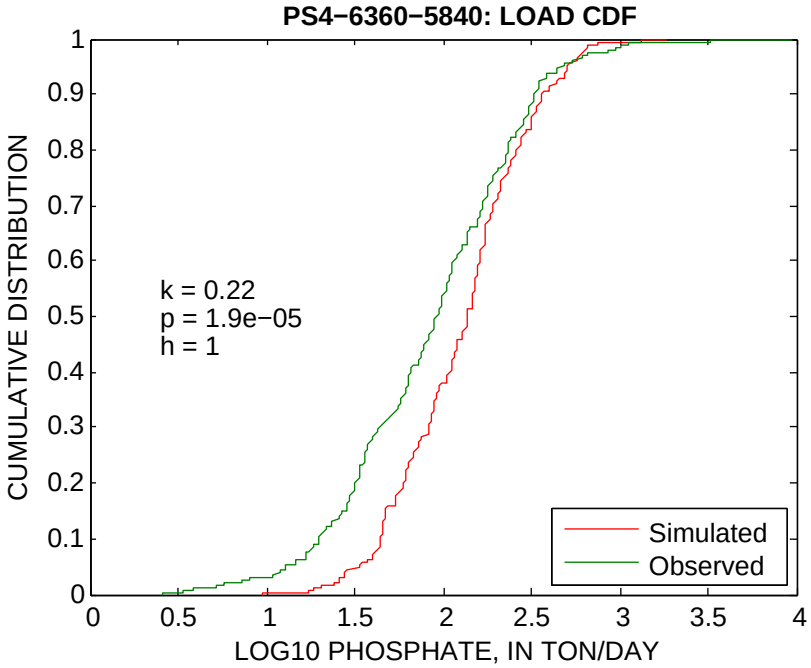


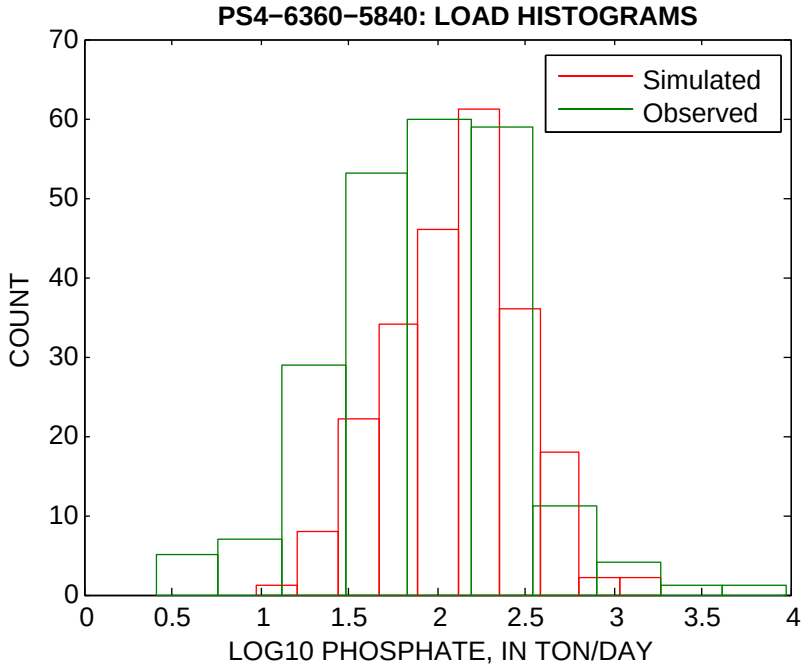


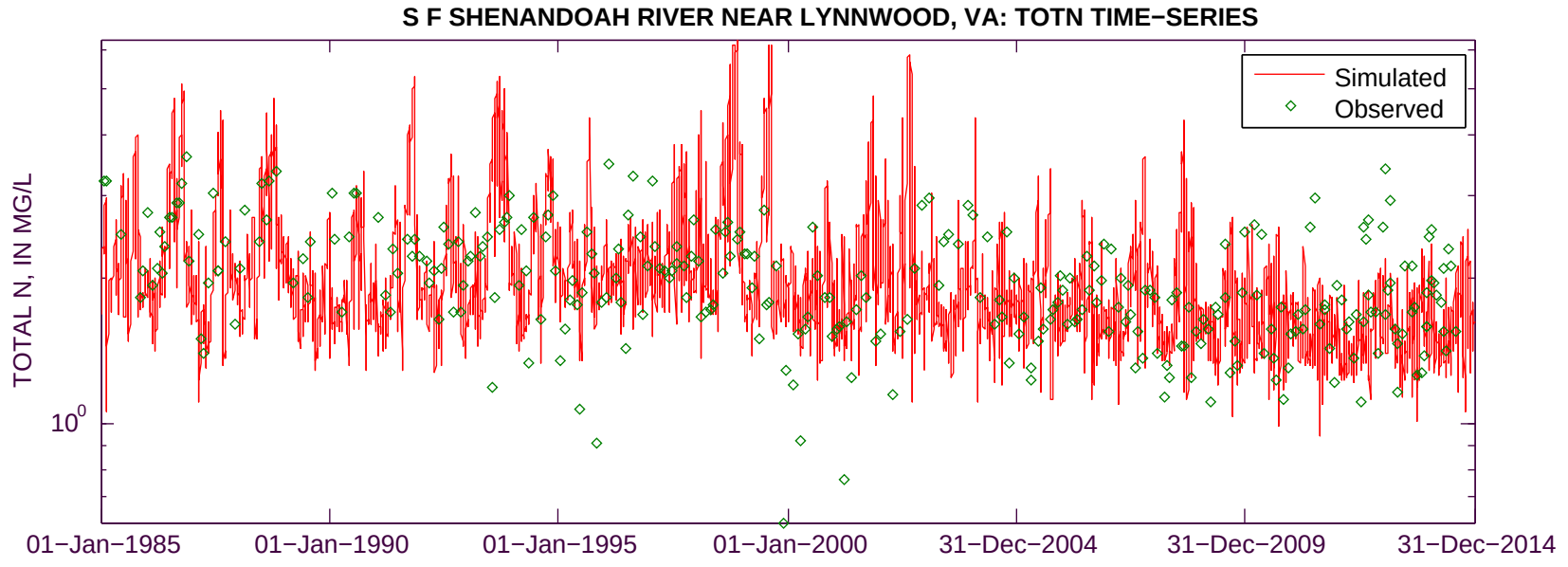
LOAD DATA
LOG10

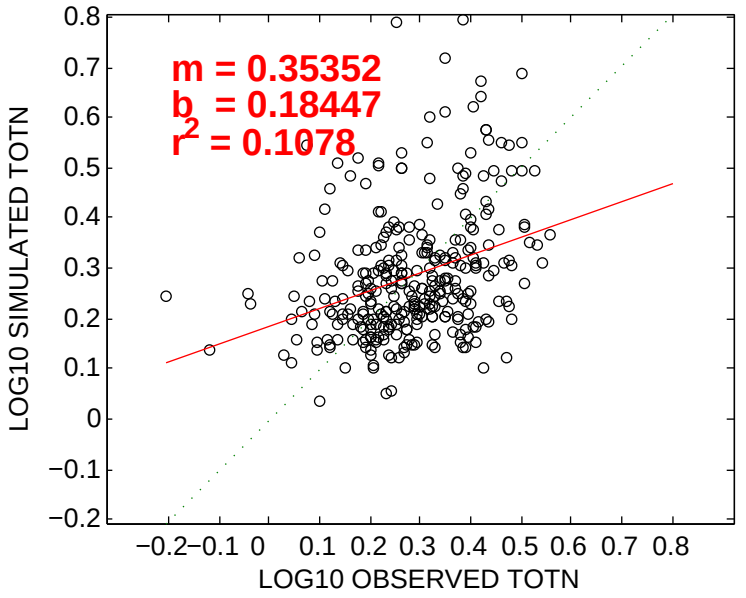


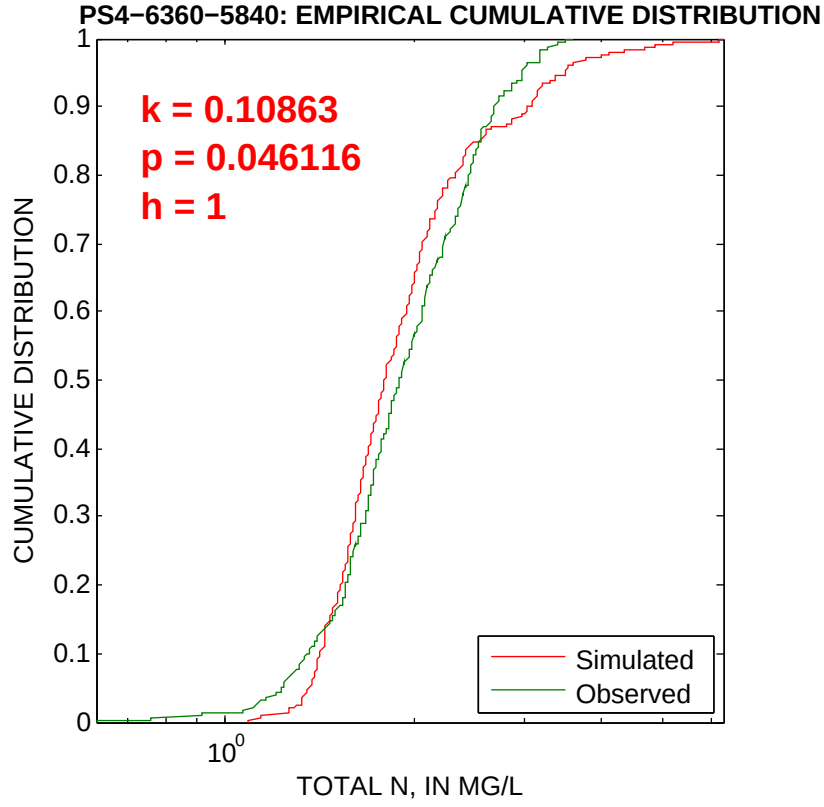












DATA SELECTION

scenario	file
P620171001WQ	TOTN.calib

plot: TOTN - total nitrogen

Dates: 1/1/1985 – 12/31/201

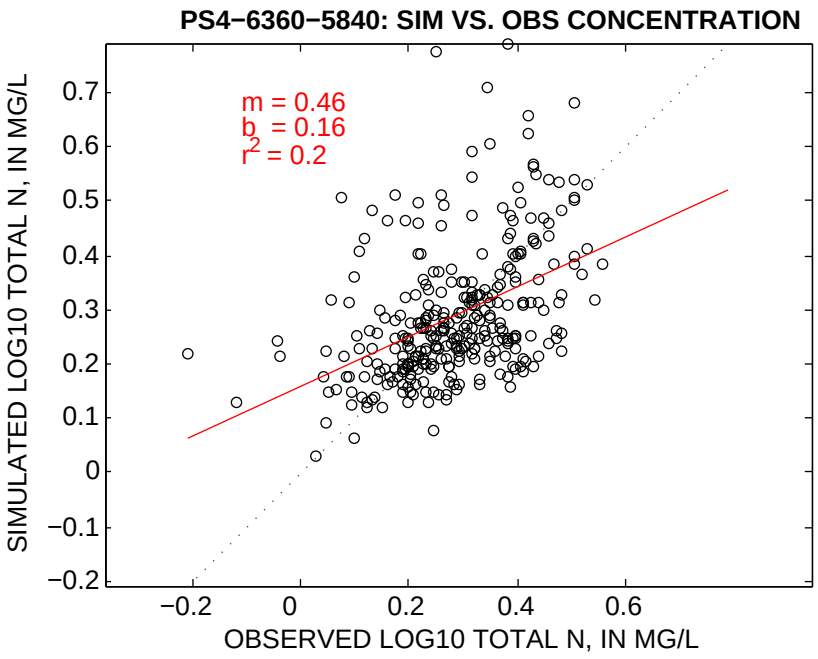
Drive	Directory	Observed
N/A	model	OBS20161101

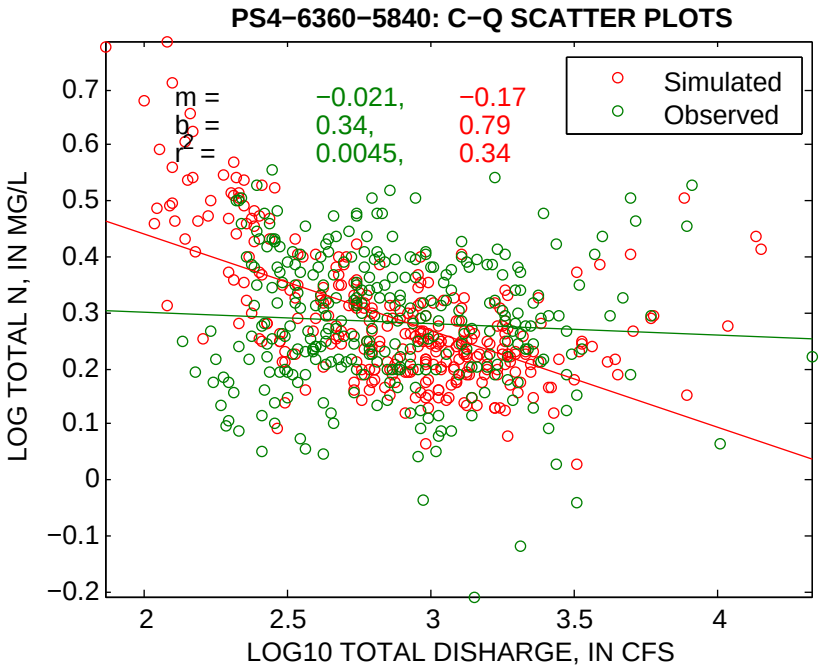
STATISTICS

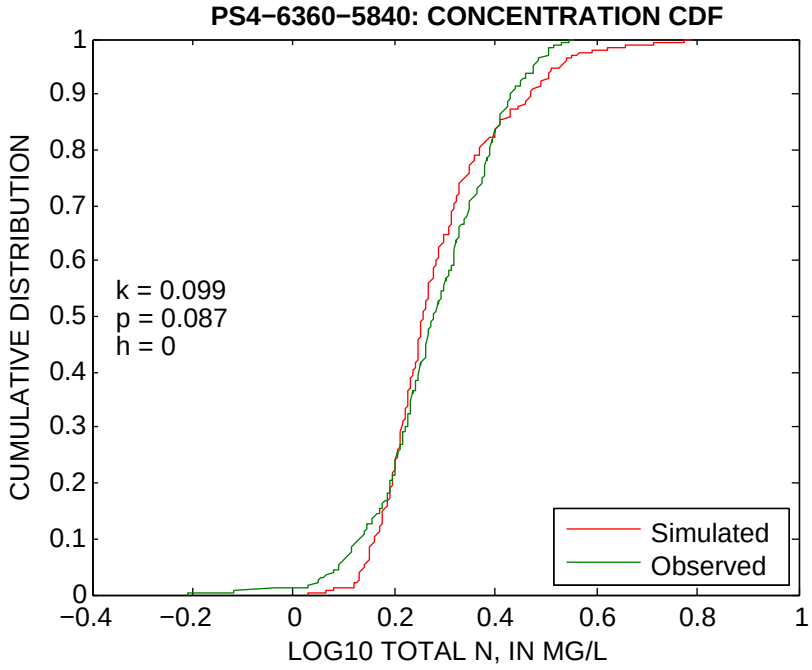
	n	observe	simulate
		313	313
min		0.62	1.0873
		-0.207608	0.0363494
mean		1.99081	2.02287
		0.283174	0.284573
media		1.9	1.8005
		0.278754	0.255393
max		3.6	6.2535
		0.556303	0.796123
varian		0.285208	0.546589
		0.0142135	0.016478
JB		0.008875	0.001
		0.014846	0.001
		ra	log
%		1.61038	0.494339
err.va		0.584463	0.0206441
rel.std.err		2.04925	1.45242
mod.eff		-1.04925	-0.452424

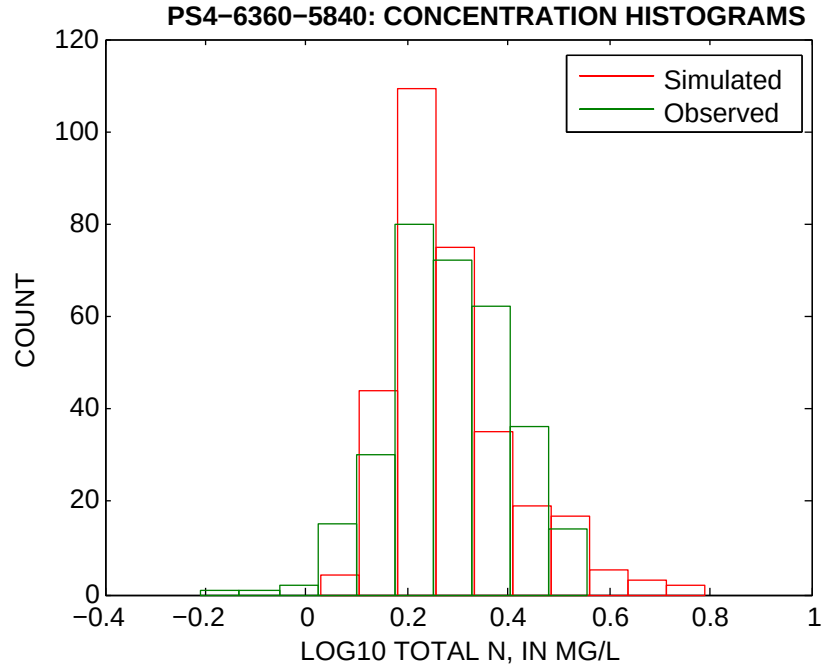
VERSION 2.1

ALL DATA
LOG10

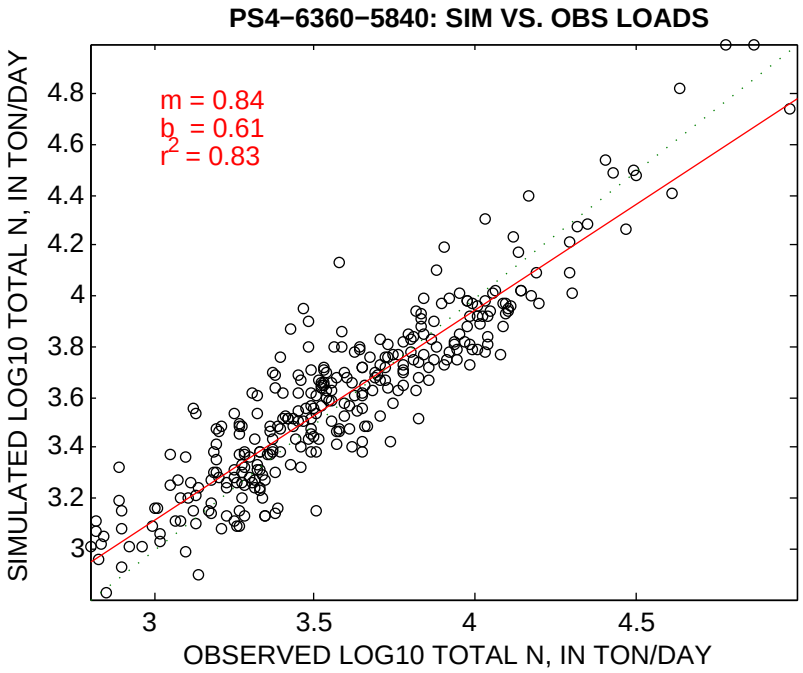


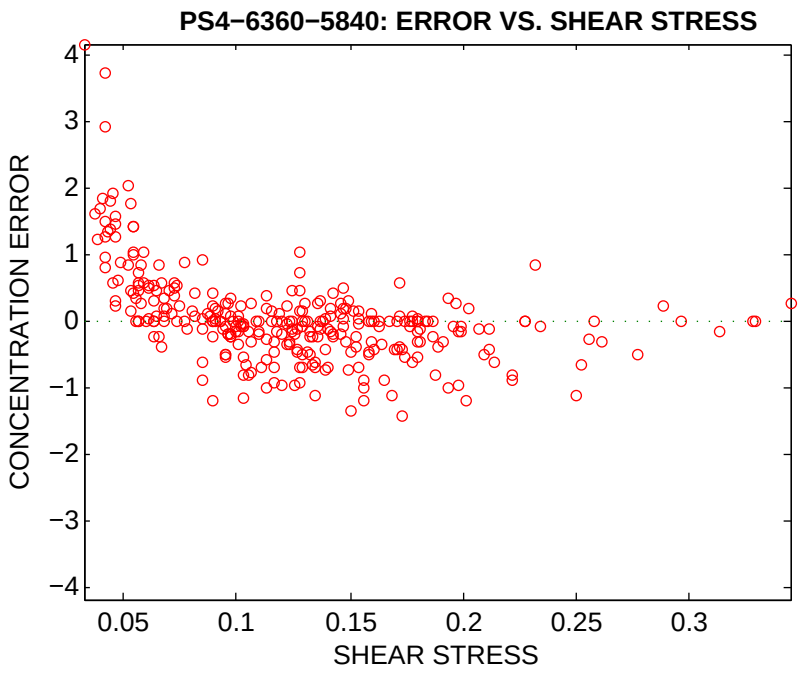


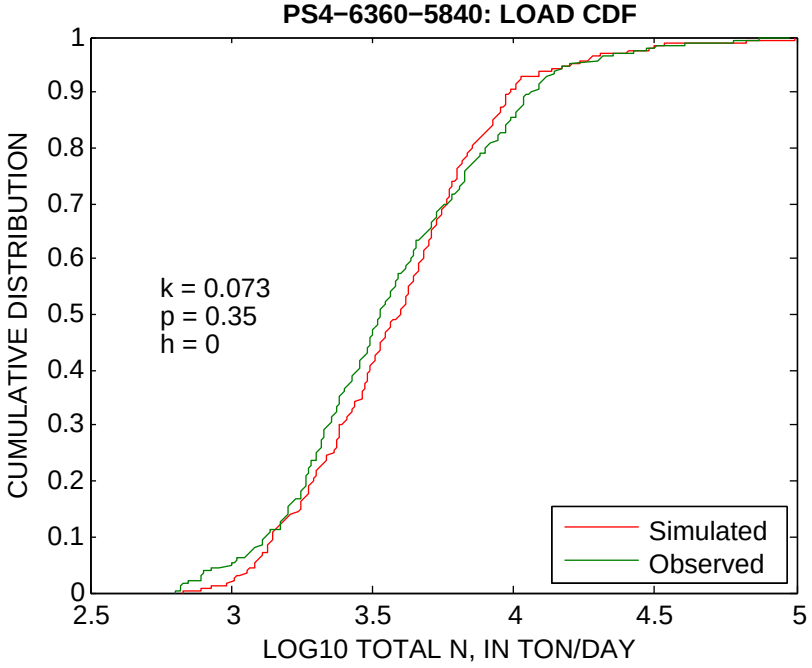


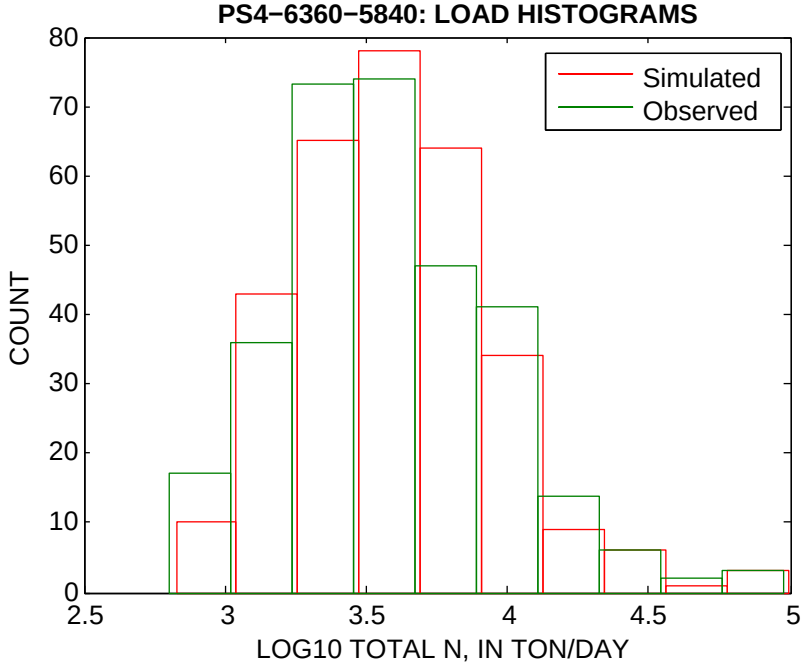


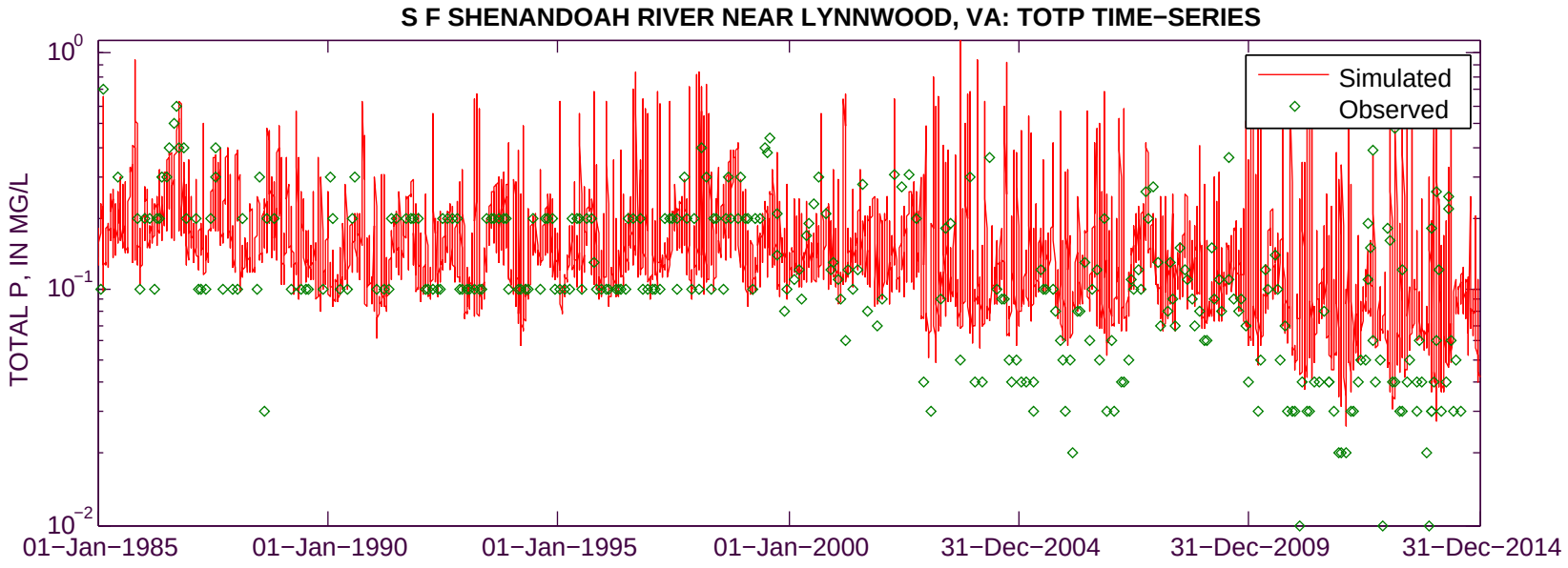
LOAD DATA
LOG10

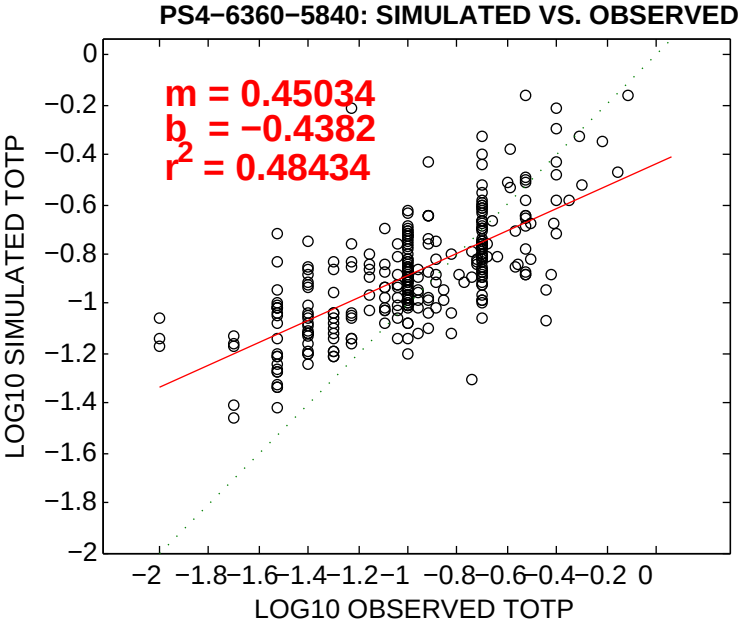


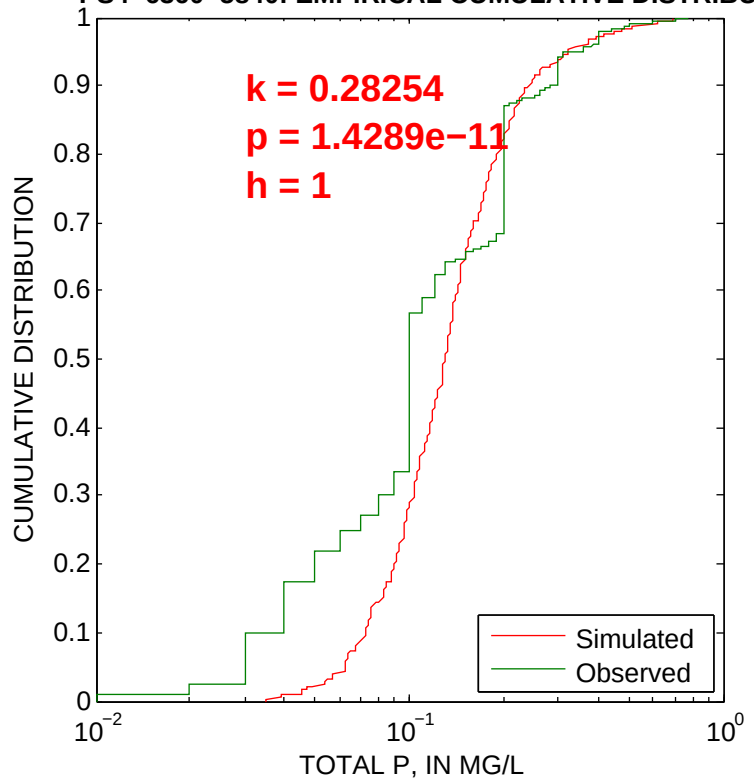












DATA SELECTION

scenario: P620171001WQ | file: TOTP.calib

plot: TOTP - total phosphorus

Dates: 1/1/1985 – 12/31/201

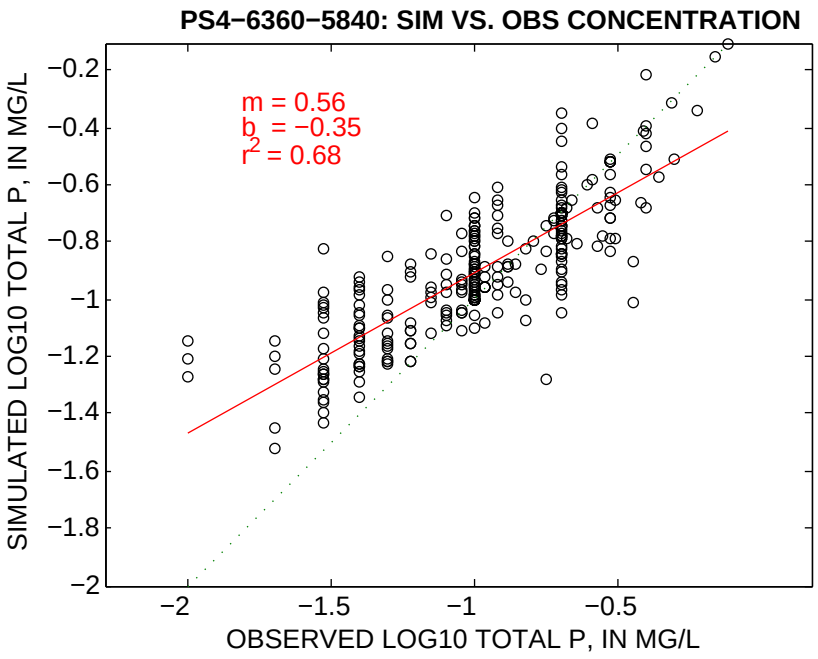
Drive: N/A | Directory: model | Observed: OBS20161101

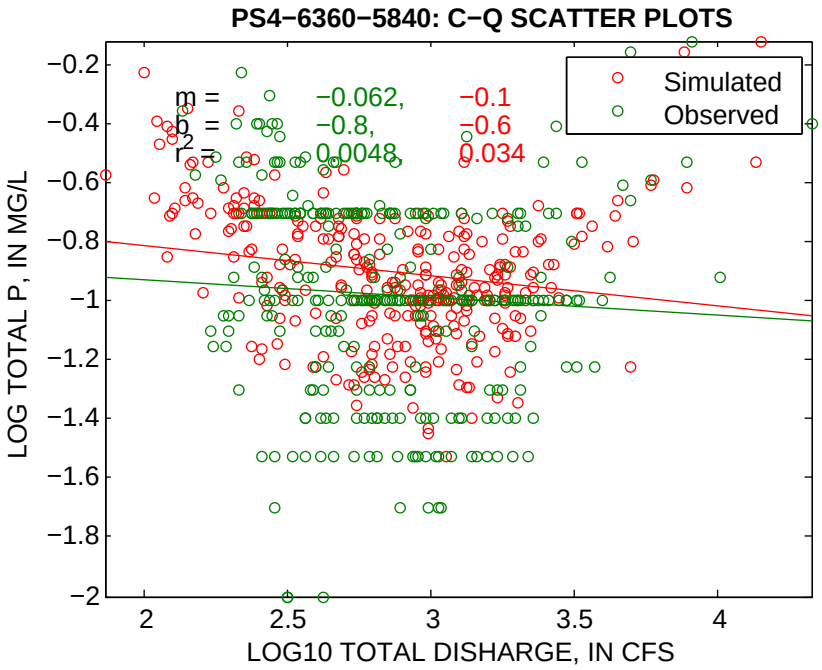
STATISTICS

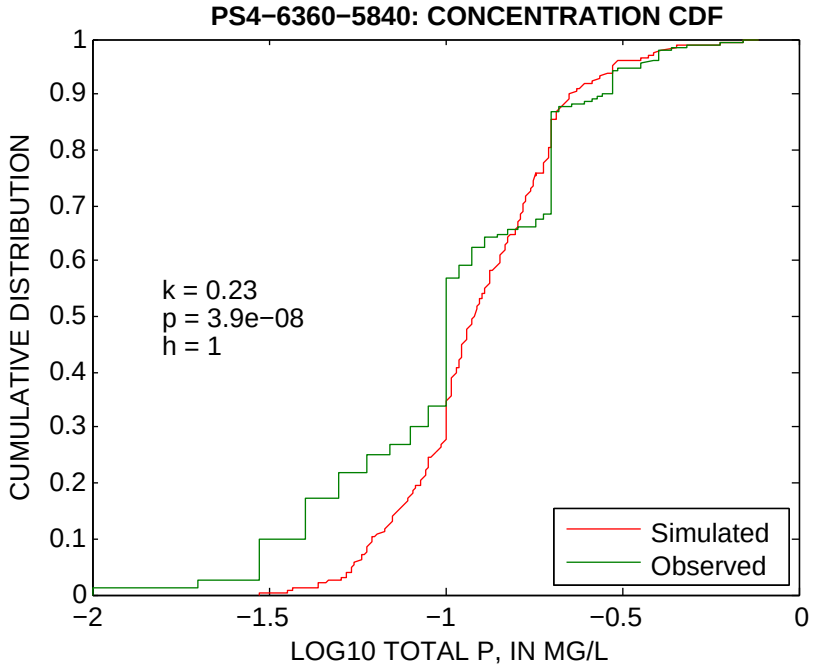
		observe	simulate
n		315	315
min		0.01	0.034892
		-2	-1.45727
mean		0.138621	0.151592
		-0.977943	-0.878607
media		0.1	0.13002
		-1	-0.88599
max		0.77	0.69452
		-0.113509	-0.158315
varian		0.0116495	0.0089657
		0.113003	0.0473185
JB		0.001	0.001
	☑	0.075639	0.002180
		ra	log
%		9.35677	-10.1576
err.va		0.00720942	0.0684399
rel.std.err		0.618862	0.605644
mod.eff		0.381138	0.394356

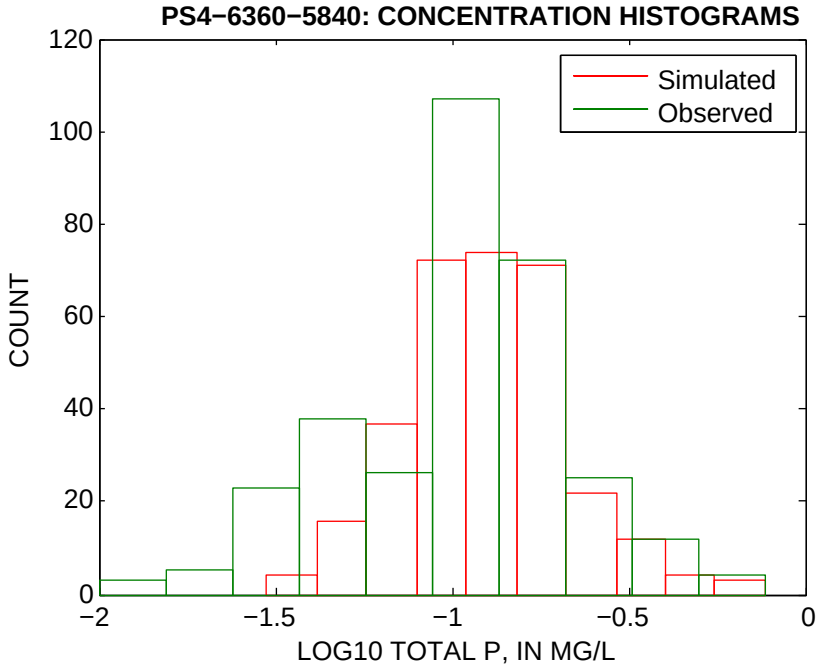
VERSION 2.1

ALL DATA
LOG10

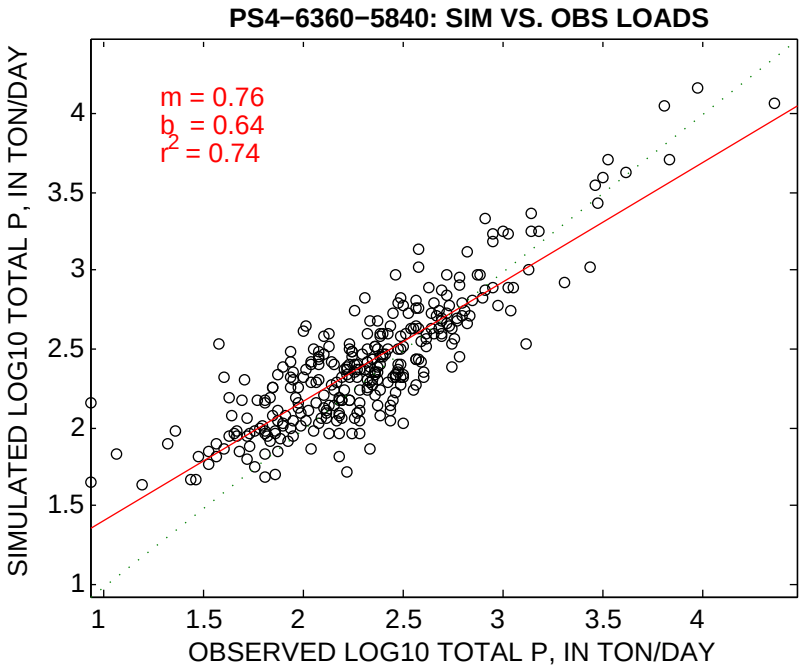


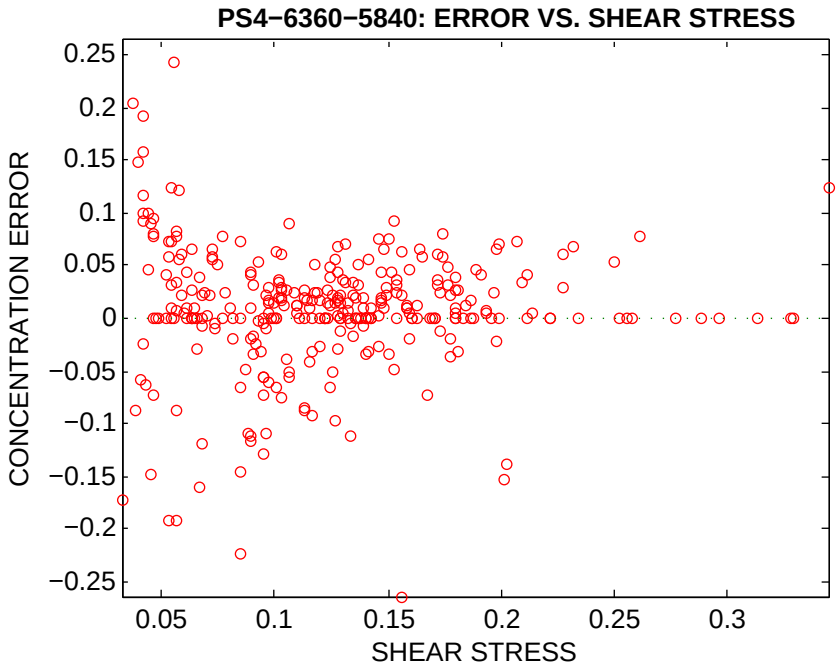


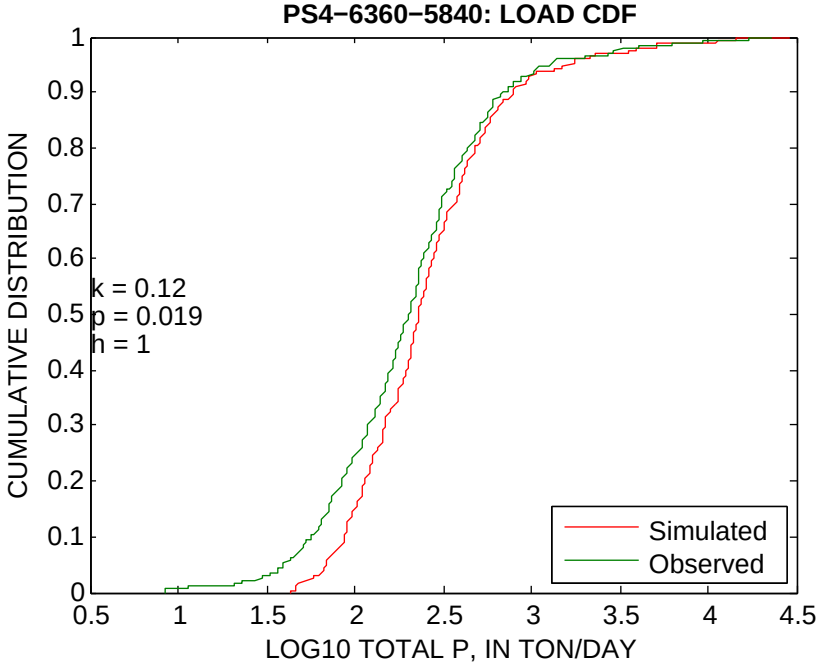


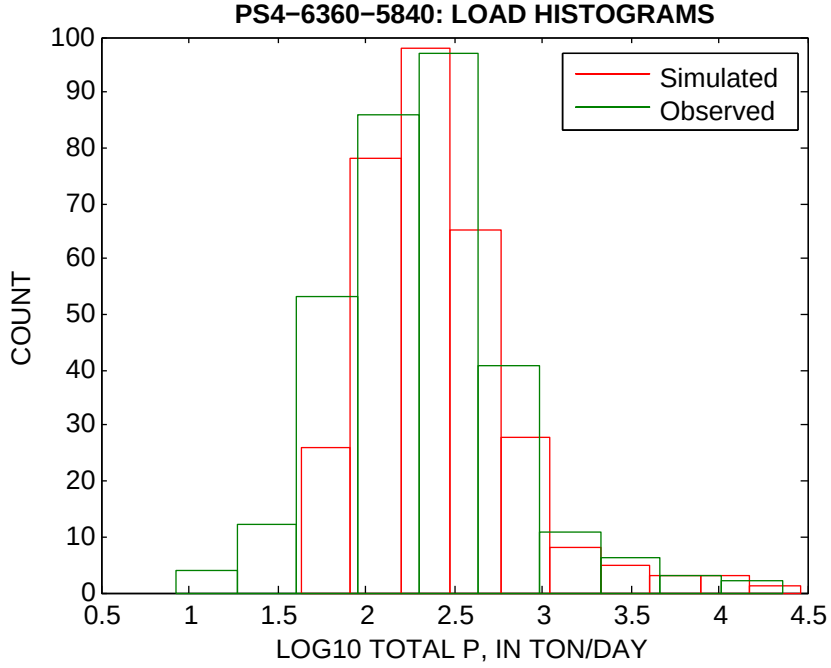


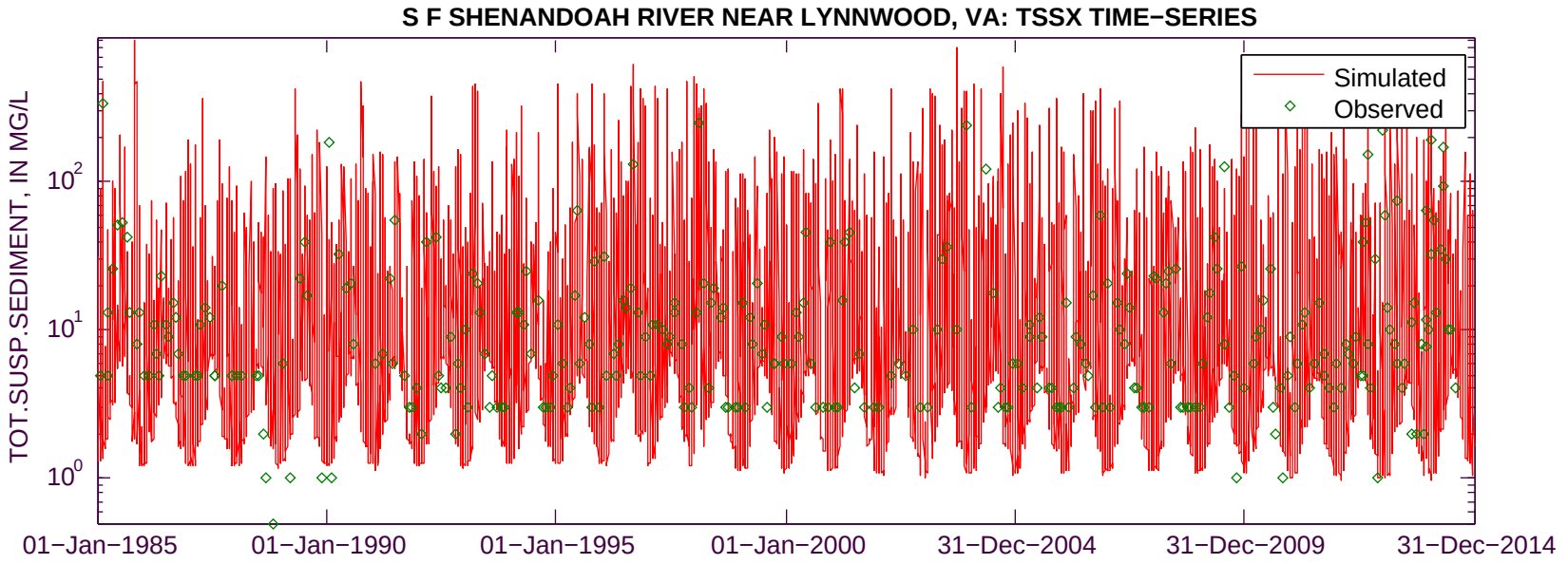
LOAD DATA
LOG10

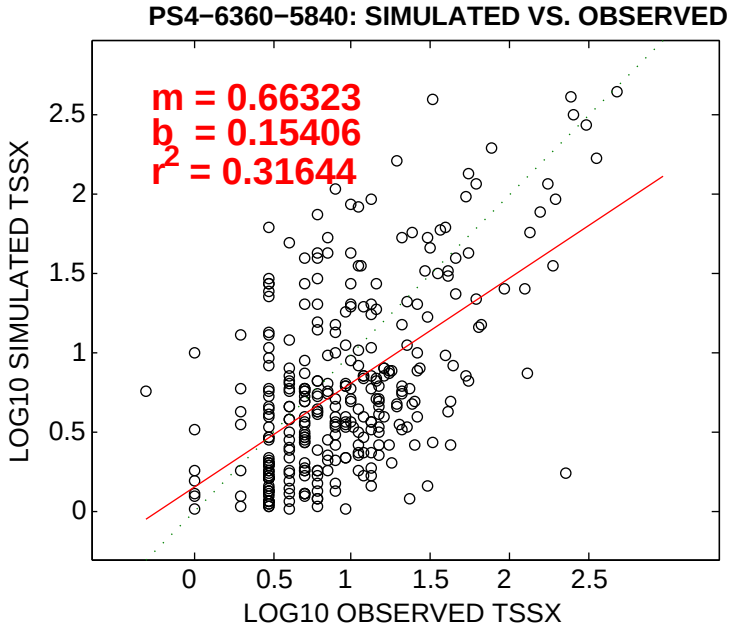


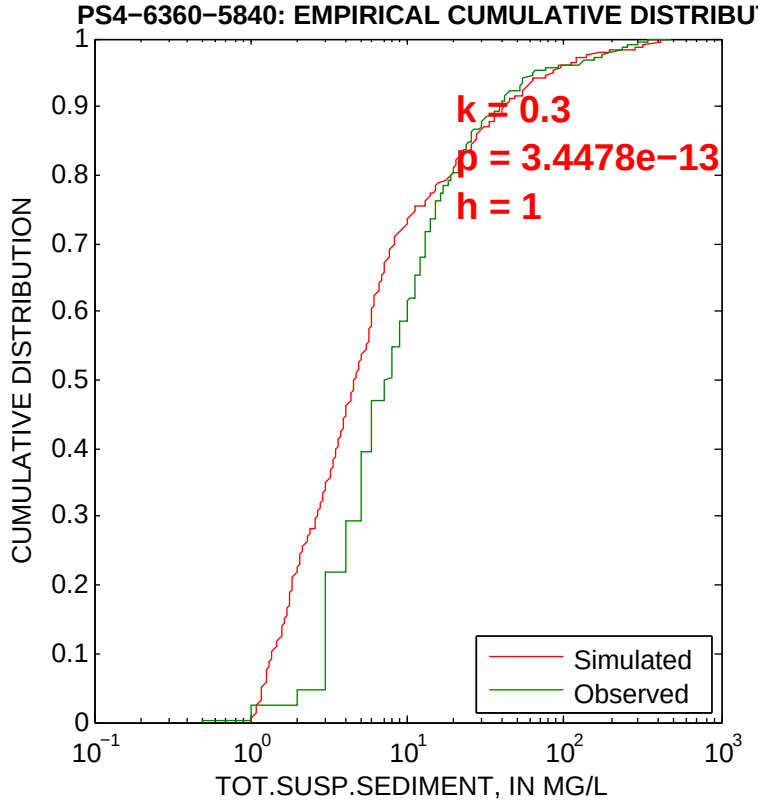












DATA SELECTION

scenario	file
P620171001WQ	TSSX.calib

plot: TSSX - total suspended ...

Dates: 1/1/1985 – 12/31/201

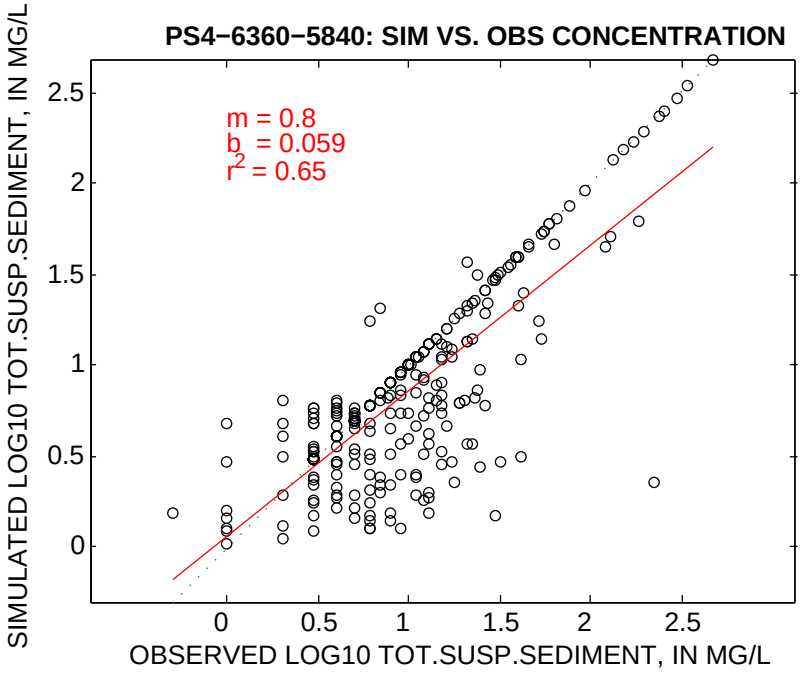
Drive	Directory	Observed
N/A	model	OBS20161101

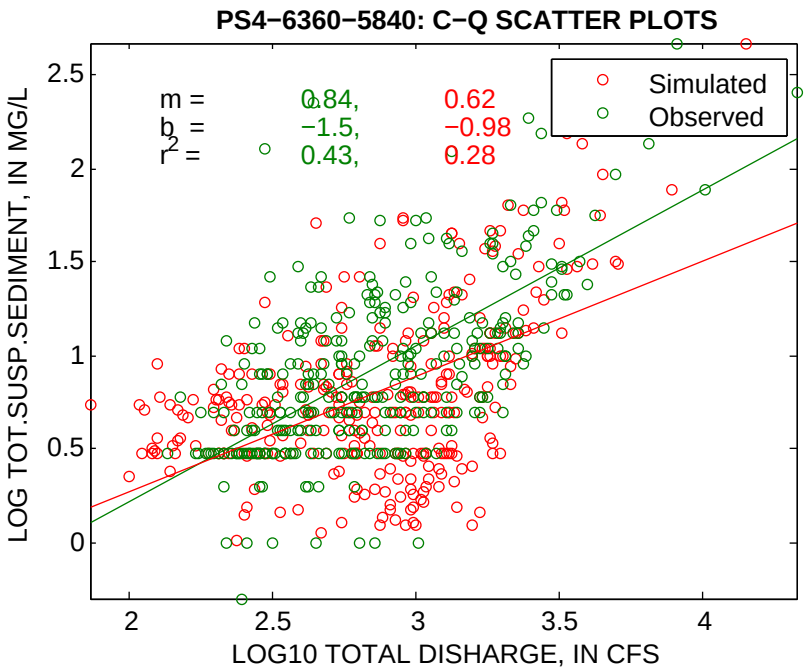
STATISTICS

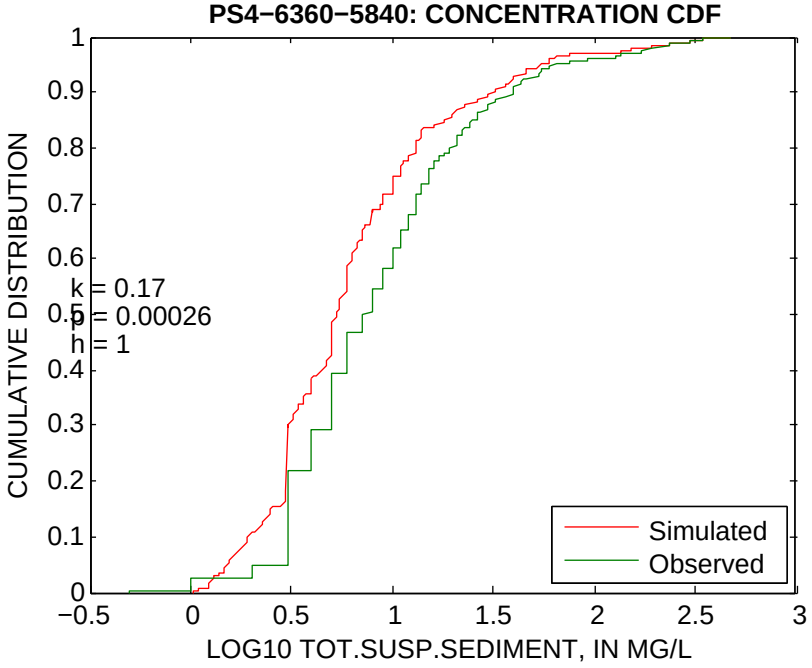
	n	320	320
		observe	simulate
min		0.5	1.0219
		-0.30103	0.0094084
mean		20.5909	19.4517
		0.943224	0.779638
media		7.36	4.6301
		0.866358	0.665578
max		473	450.84
		2.67486	2.65402
varian		2323.75	2708.38
		0.233314	0.324332
JB		0.001	0.001
		0.001	0.001
		ra	log
%		-5.53259	-17.3433
err.va		1436.15	0.275007
rel.std.err		0.618033	1.1787
mod.eff		0.381967	-0.178697

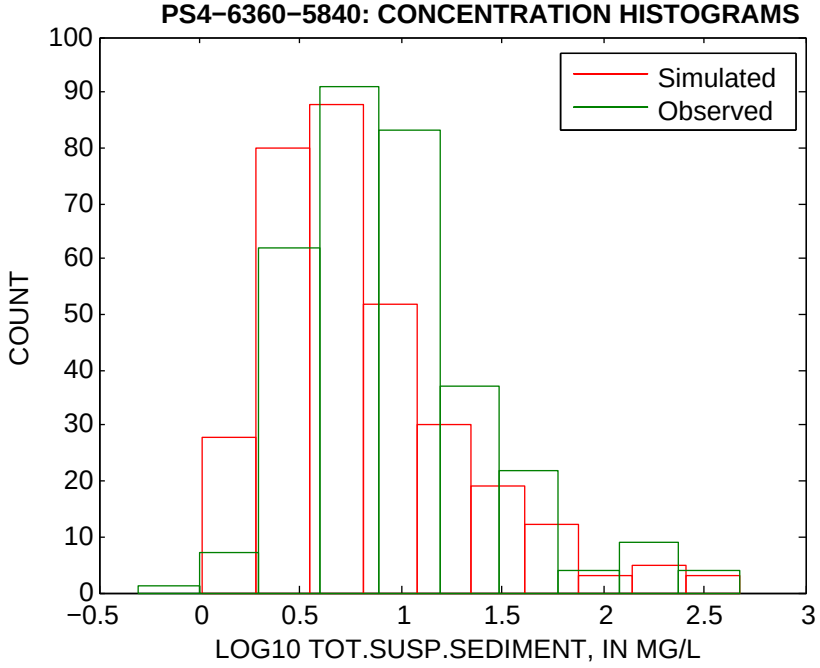
VERSION 2.1

ALL DATA
LOG10

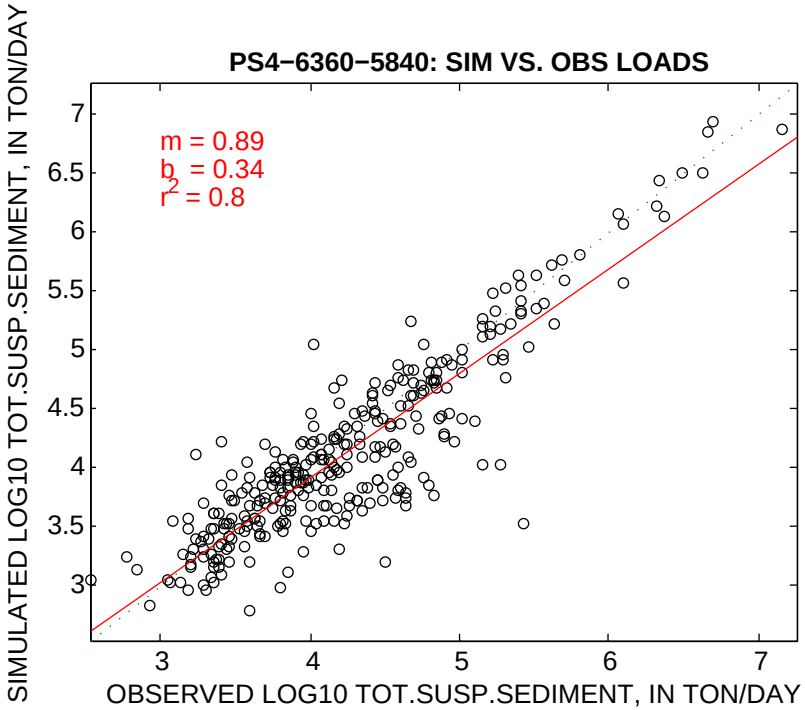


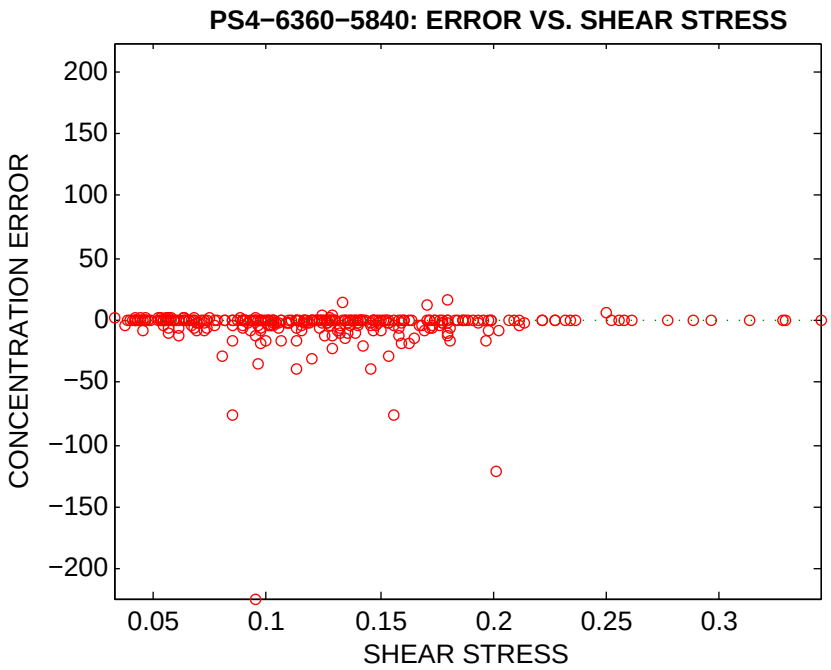


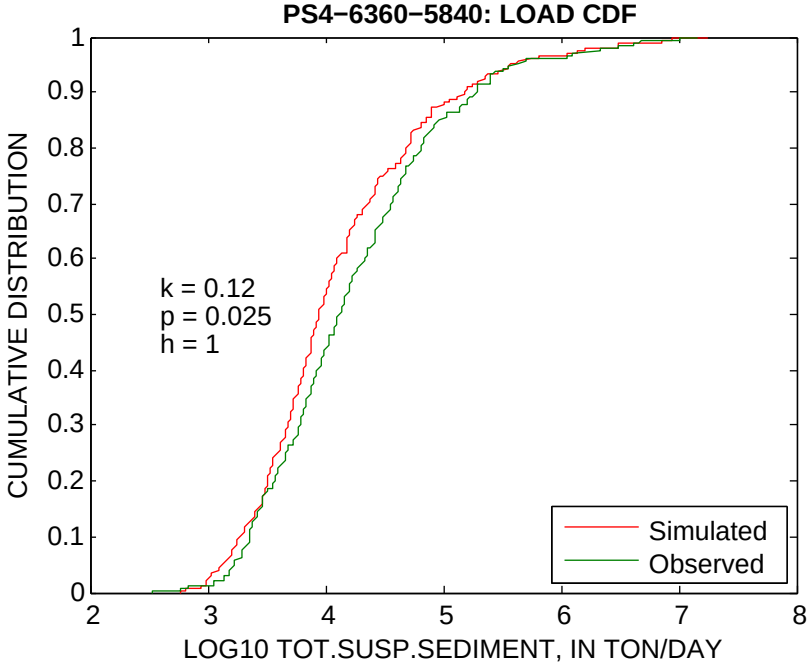


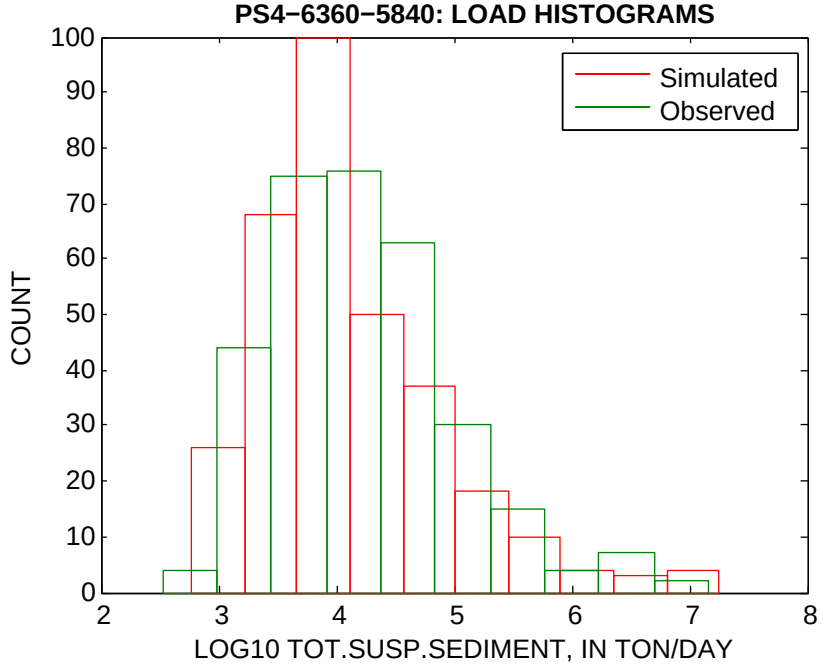


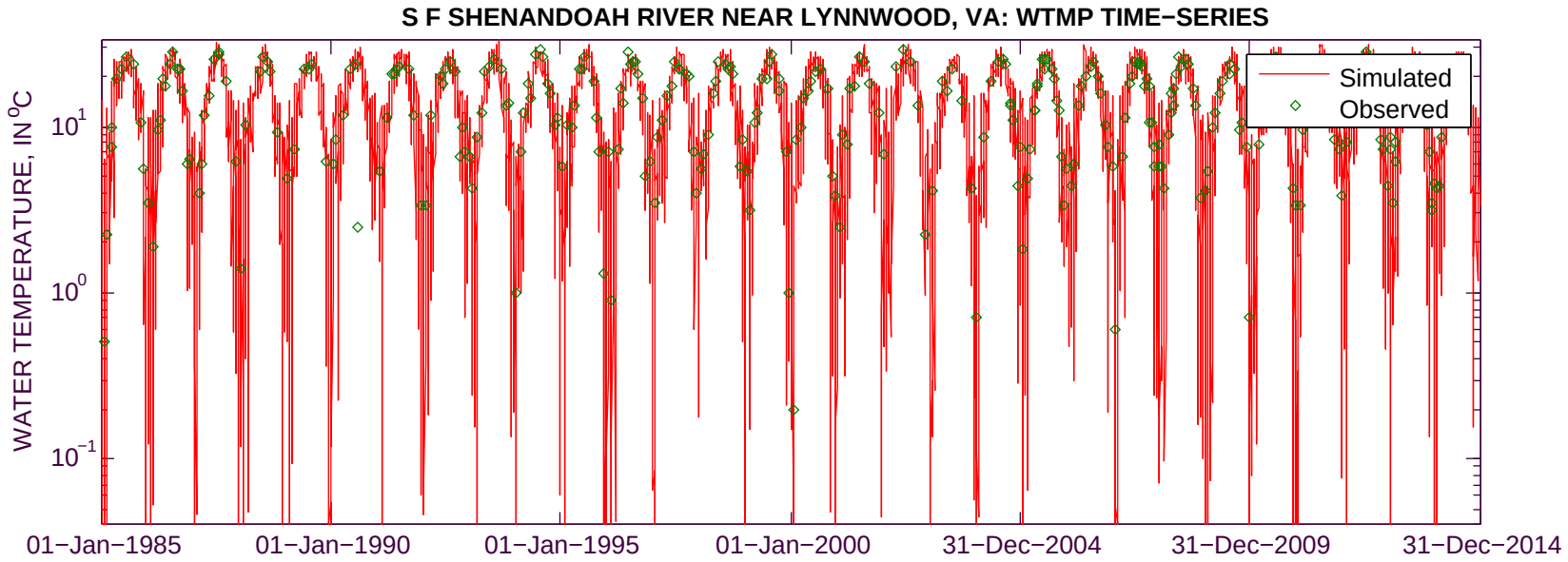
LOAD DATA
LOG10

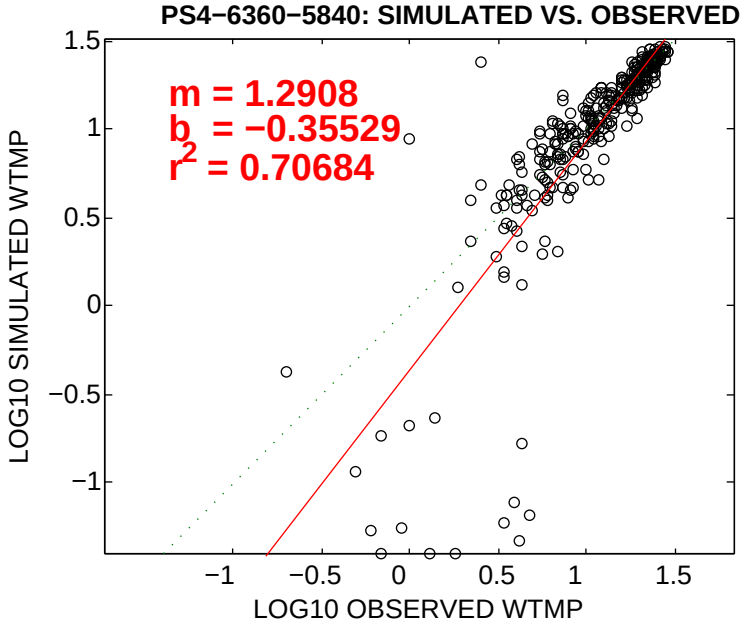


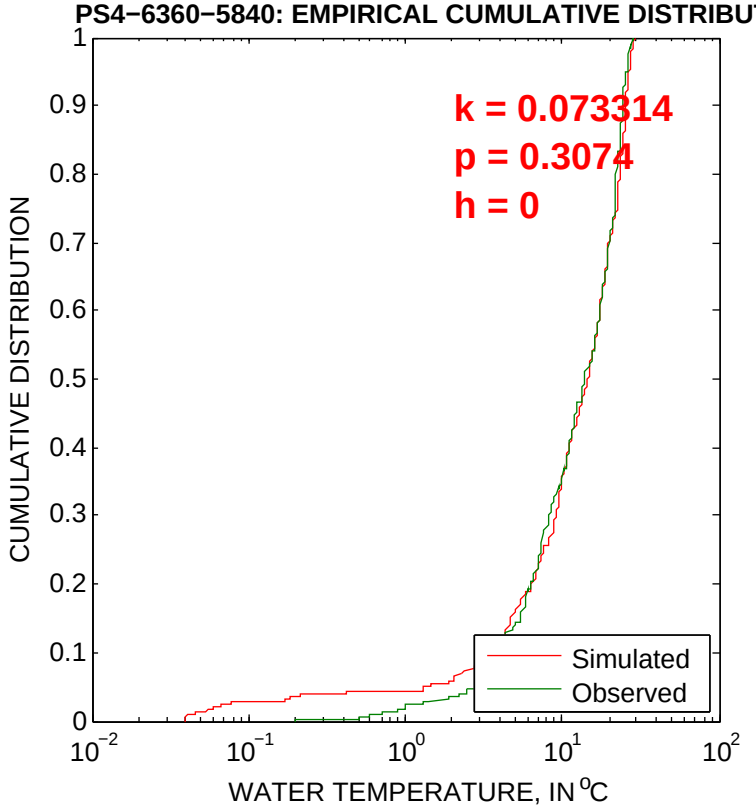












DATA SELECTION

scenario	file
P620171001WQ	WTMP.calib

plot: WTMP - water tempera...

Dates: 1/1/1985 – 12/31/201

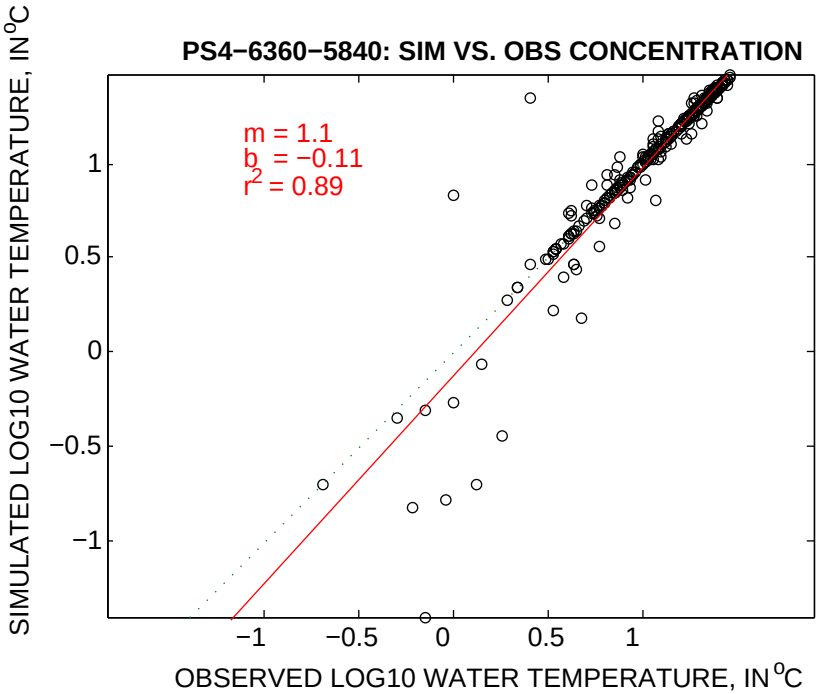
Drive	Directory	Observed
N/A	model	OBS20161101

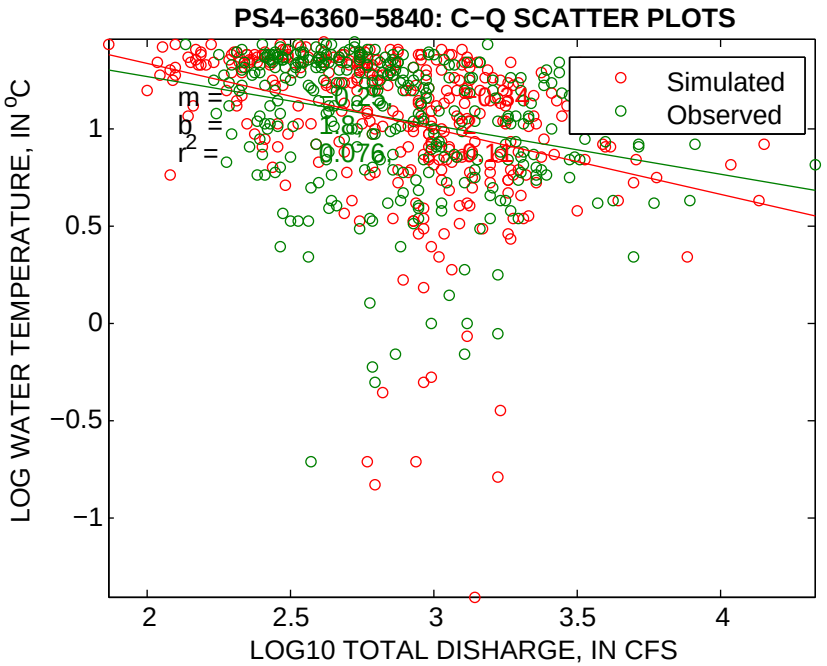
STATISTICS

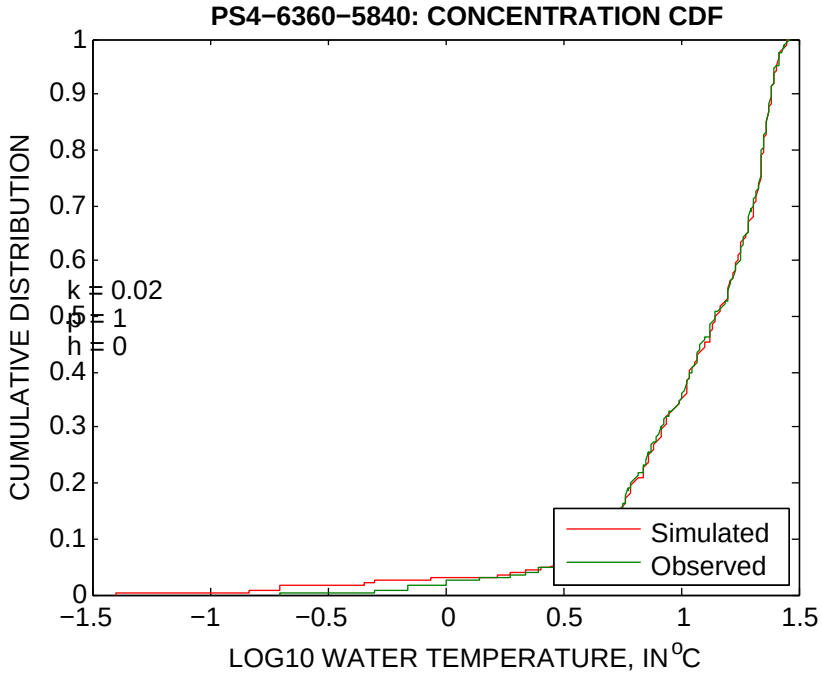
	n	341	341
		observe	simulate
min		0.2	0.04004
		-0.69897	-1.39751
mean		14.2829	14.5563
		1.05616	1.00804
media		13.9	14.77
		1.14301	1.16938
max		28.9	29.945
		1.4609	1.47632
varian		59.6628	67.5059
		0.12	0.28288
JB		0.001113	0.001907
		0.001	0.001
		ra	log
%		1.91428	-4.55604
err.va		7.70169	0.0954016
rel.std.err		0.129087	0.795016
mod.eff		0.870913	0.204984

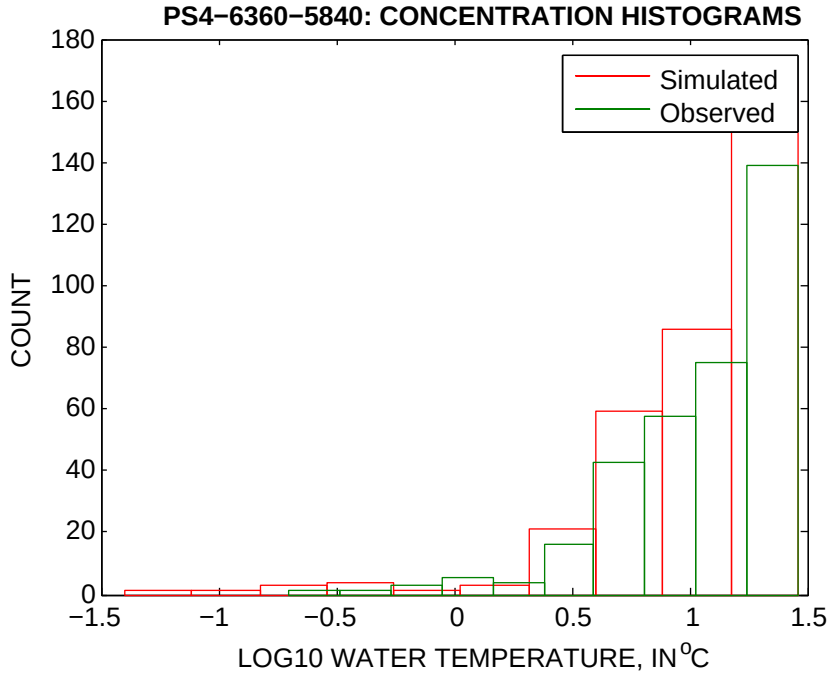
VERSION 2.1

ALL DATA
LOG10

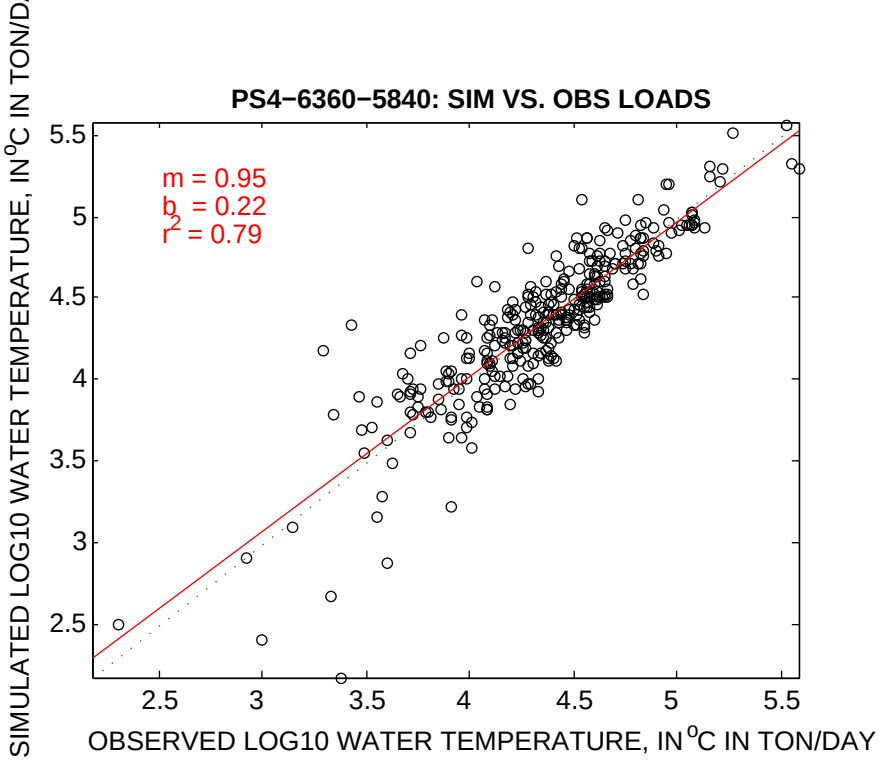


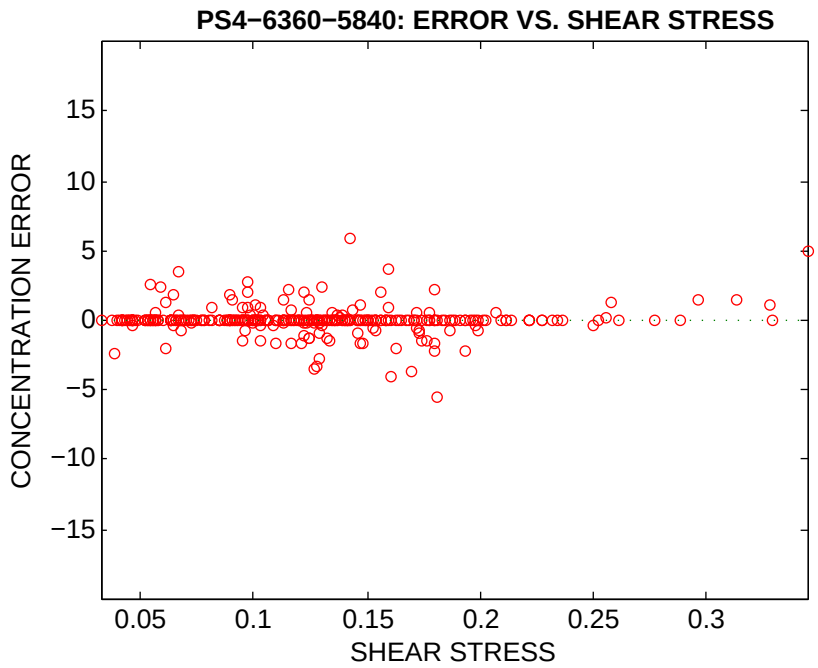


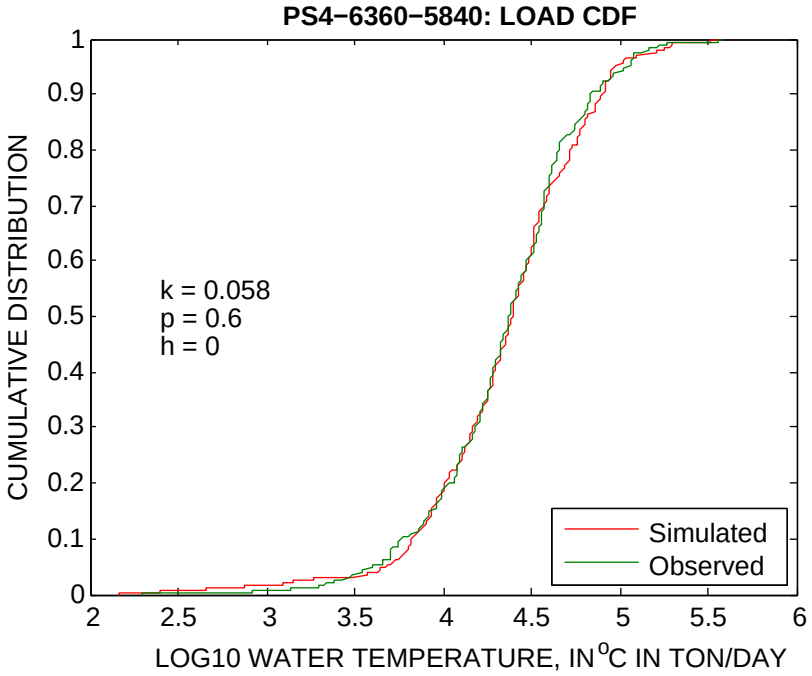


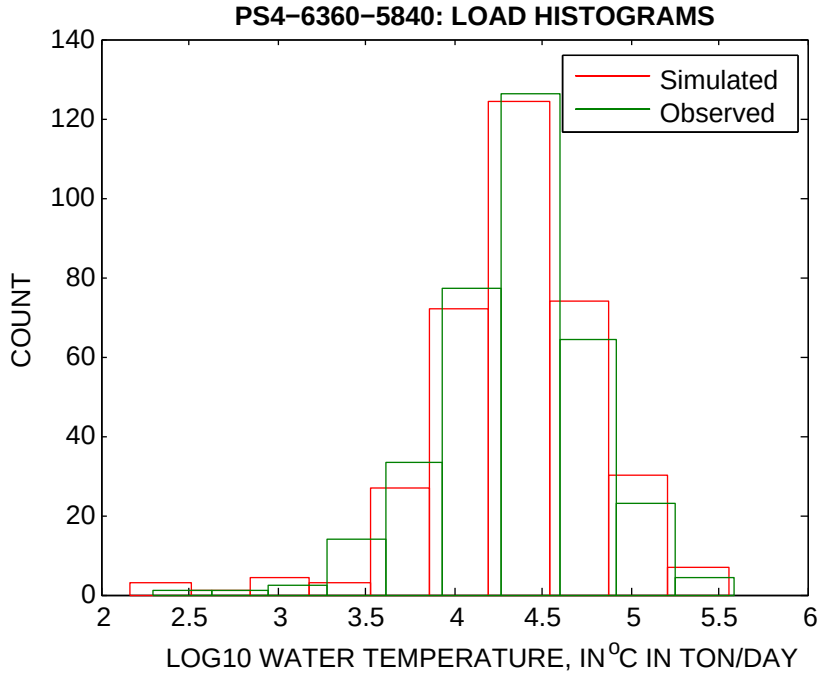


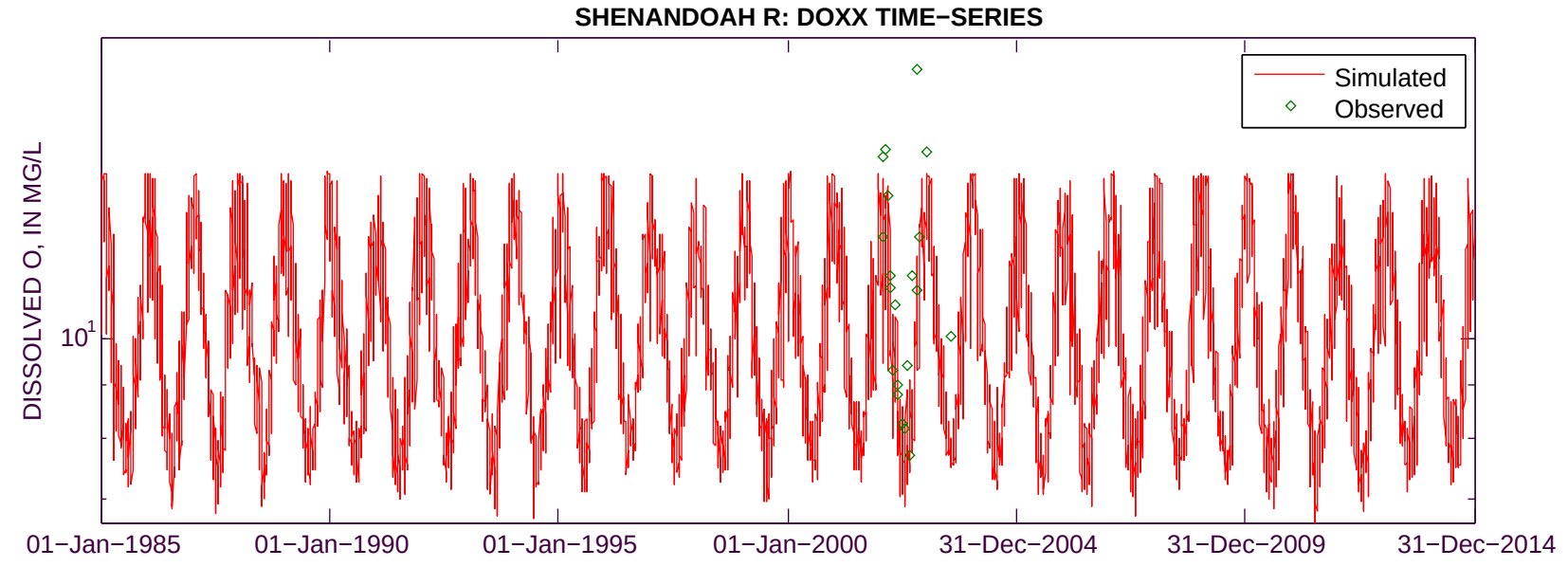
LOAD DATA
LOG10

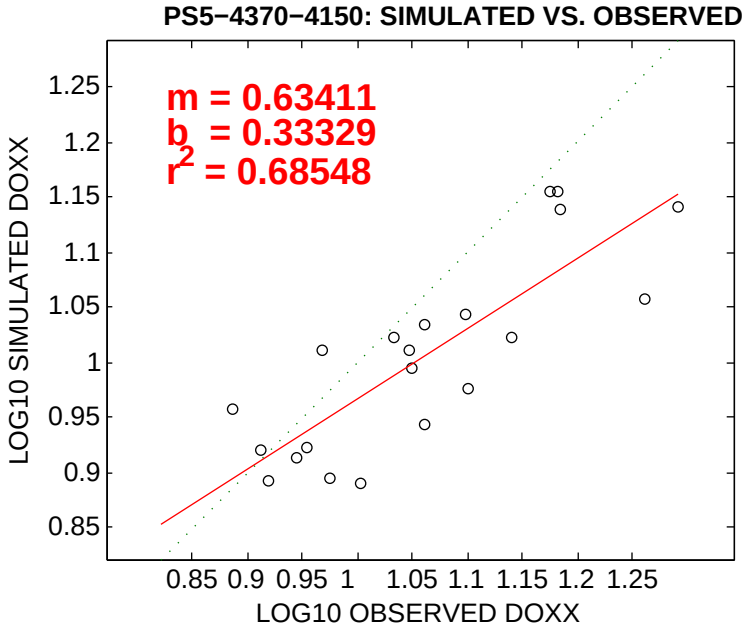


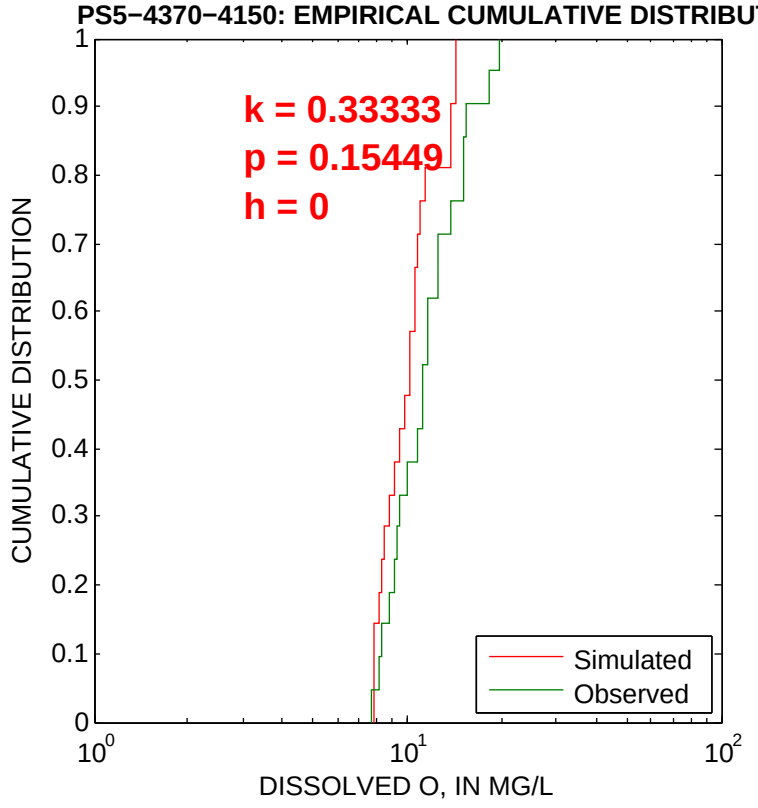












DATA SELECTION

scenario	file
P620171001WQ	DOXX.calib

plot: DOXX - dissolved oxygen

Dates: 1/1/1985 – 12/31/201

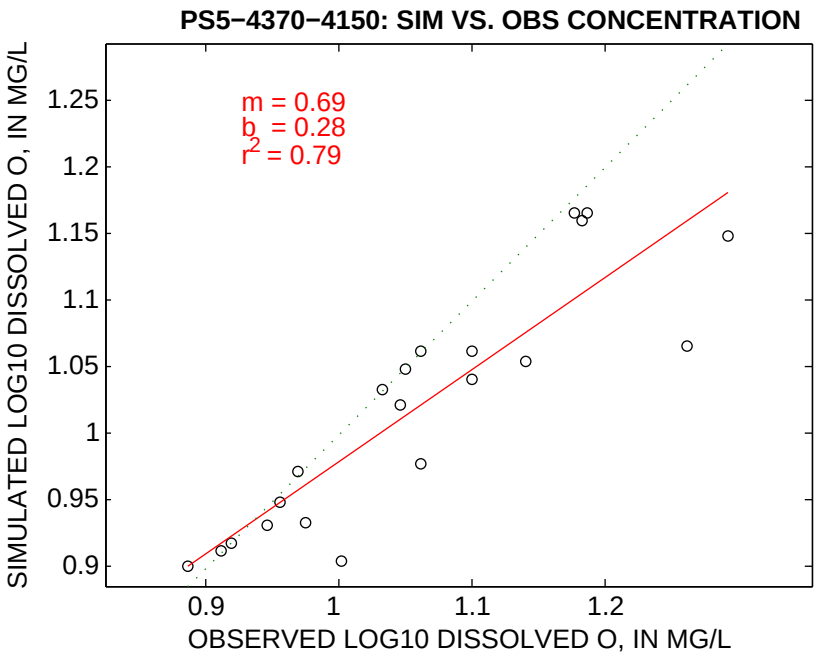
Drive	Directory	Observed
N/A	model	OBS20161101

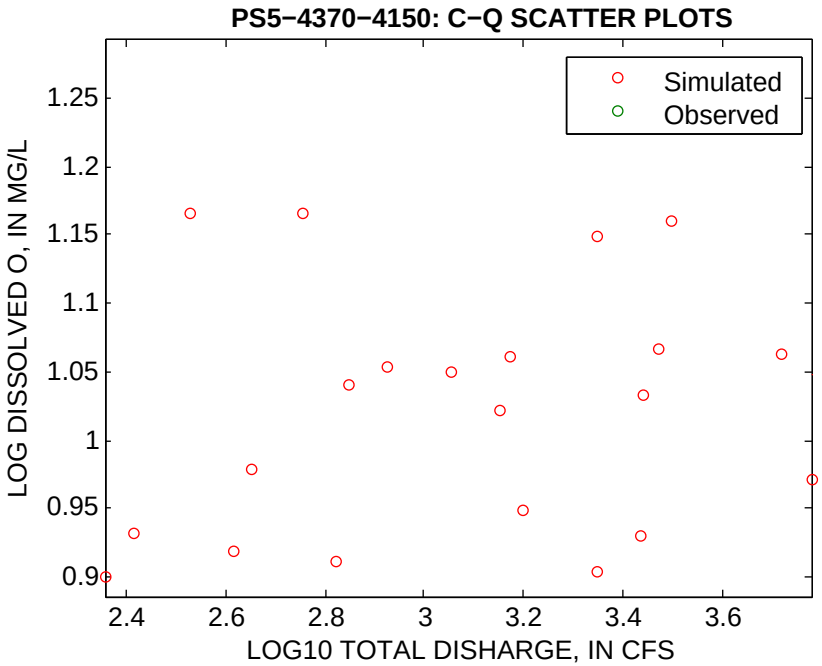
STATISTICS

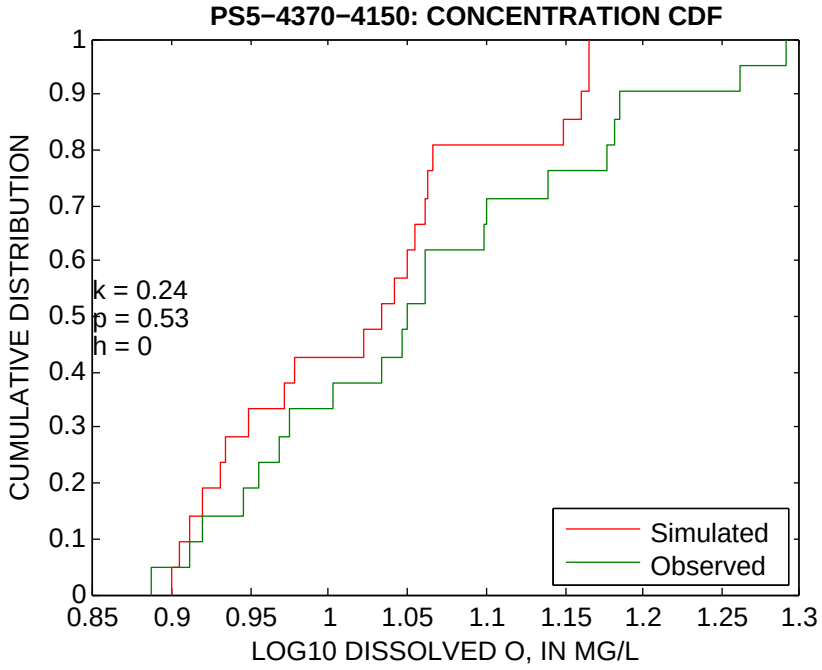
	n	21	21
		observe	simulate
min		7.7	7.7714
		0.886491	0.890499
mean		11.8724	10.3259
		1.05964	1.00523
media		11.2	10.246
		1.04922	1.01055
max		19.58	14.323
		1.29181	1.15603
varian		10.8789	4.72677
		0.013211	0.0077495
JB		0.101552	0.131146
		0.418376	0.278454
		ra	log
%		-13.0255	-5.13498
err.va		6.37165	0.00731467
rel.std.err		0.58569	0.553681
mod.eff		0.41431	0.446319

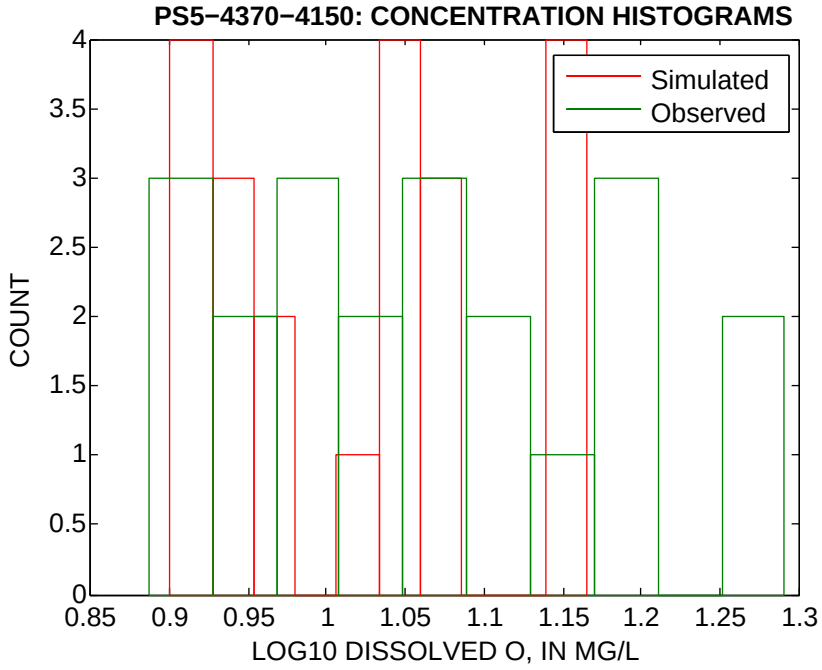
VERSION 2.1

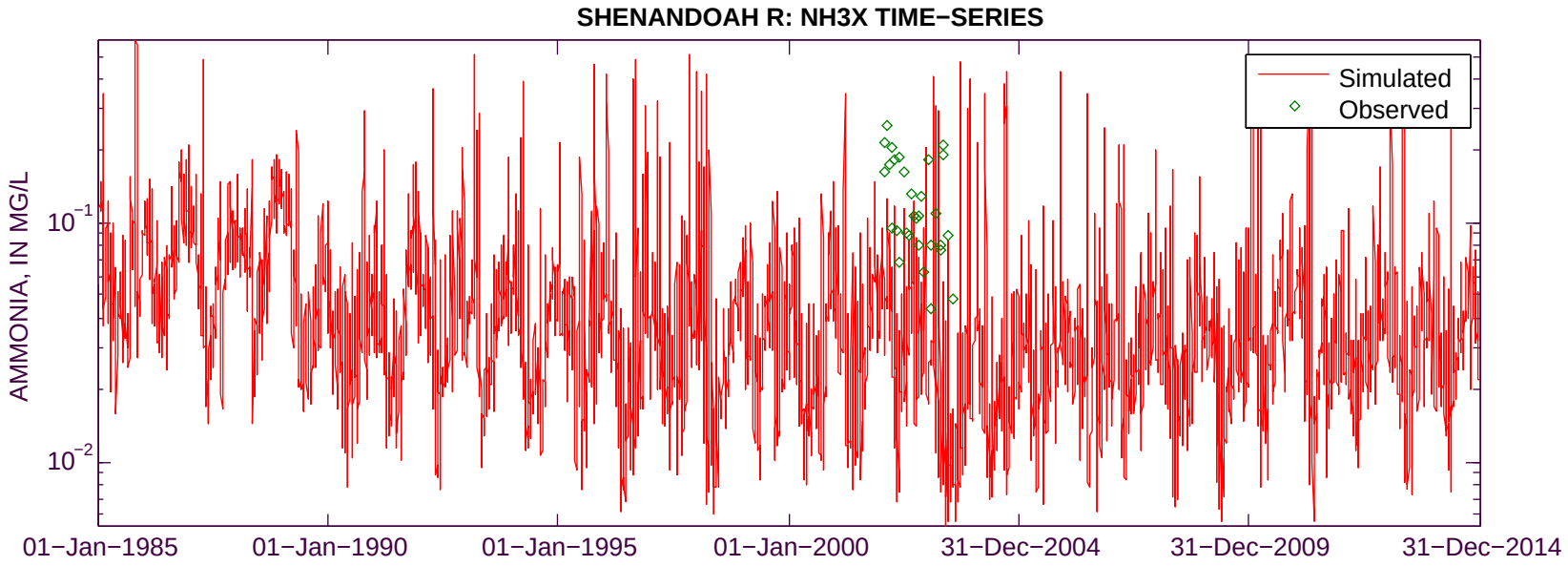
ALL DATA
LOG10

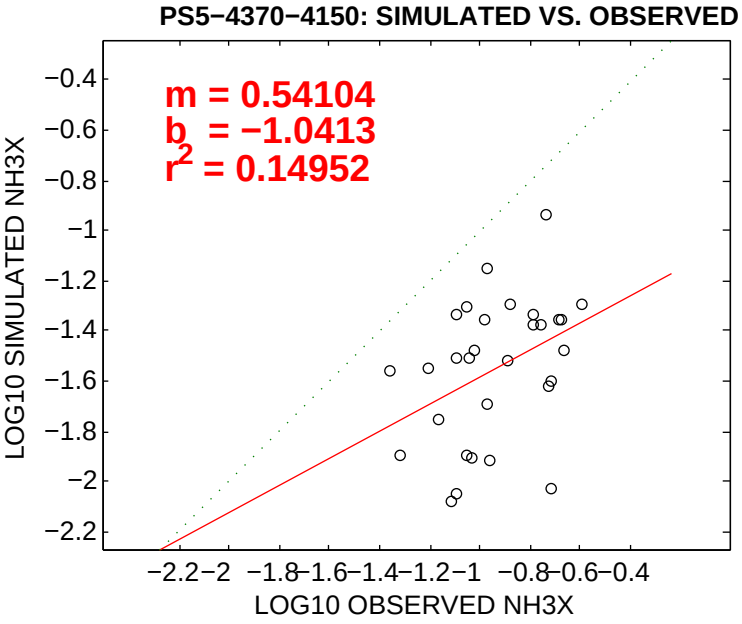


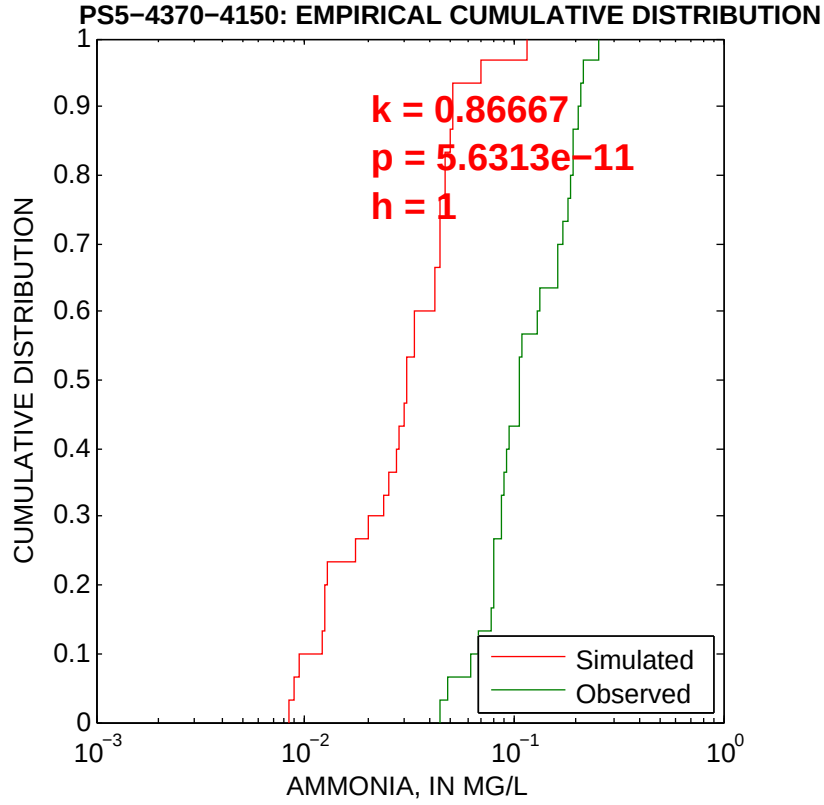












DATA SELECTION

scenario	file
P620171001WQ	NH3X.calib

plot: NH3X - ammonia

Dates: 1/1/1985 – 12/31/201

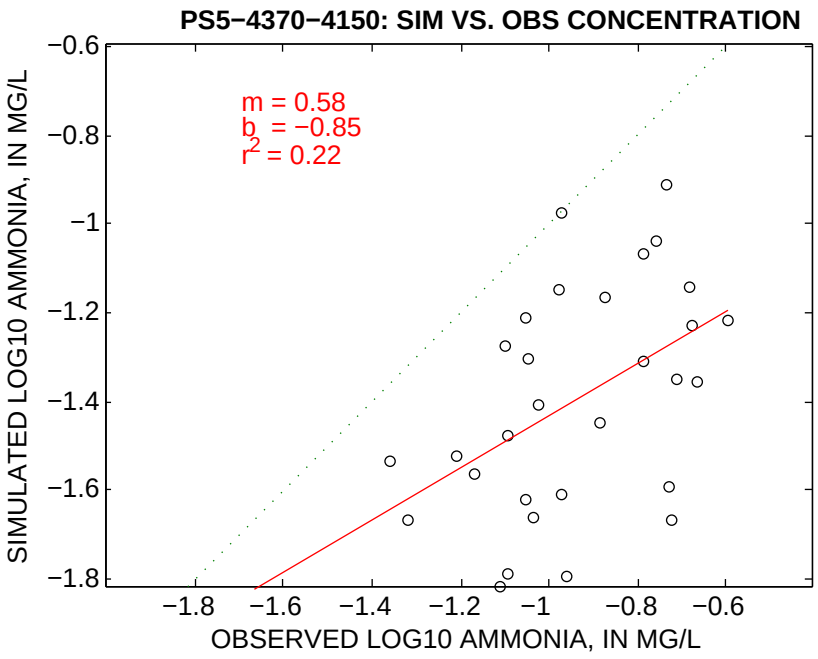
Drive	Directory	Observed
N/A	model	OBS20161101

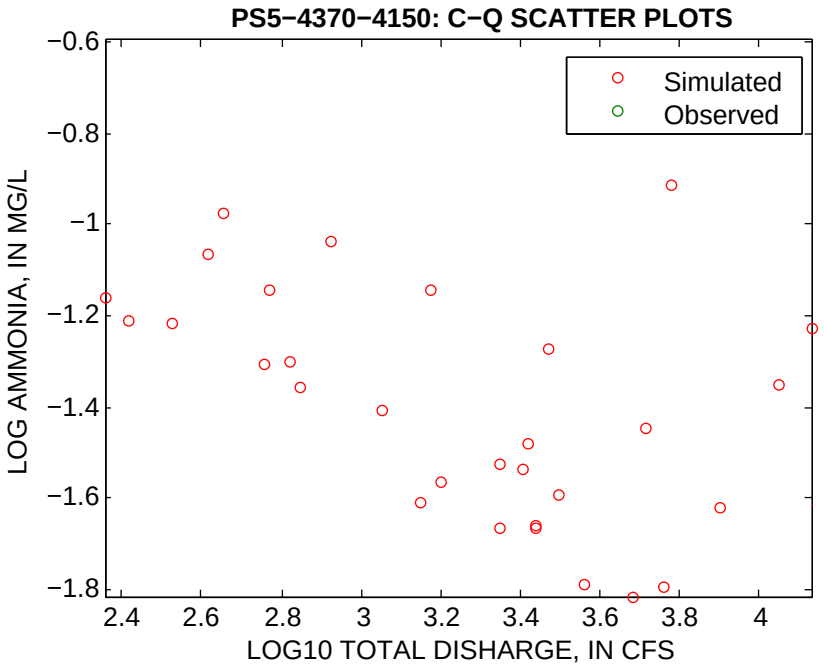
STATISTICS

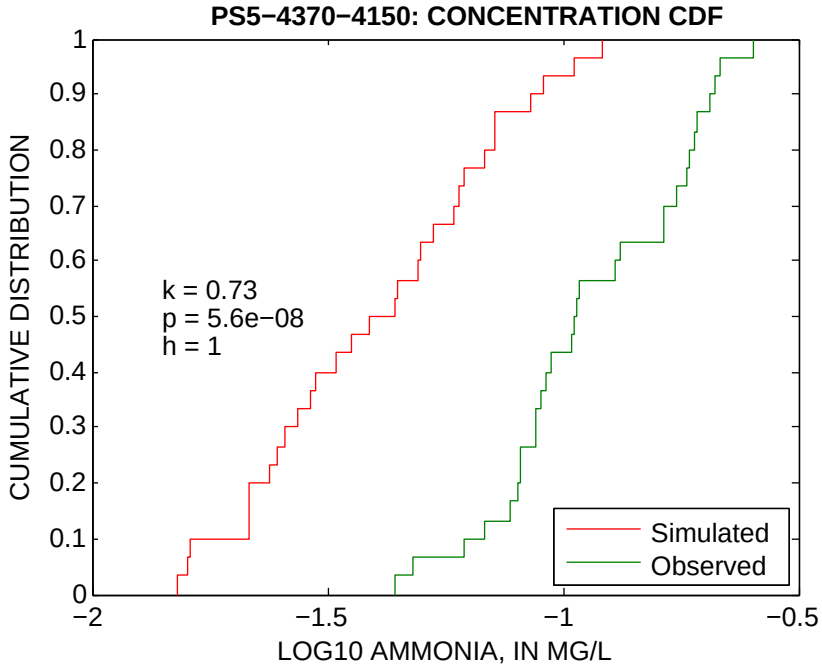
	n	30	30
		observe	simulate
min		0.044	0.0084109
		-1.35655	-2.07516
mean		0.127467	0.0342677
		-0.938882	-1.5493
media		0.1065	0.0310665
		-0.972655	-1.50771
max		0.253	0.11694
		-0.596879	-0.932037
varian		0.00328322	0.00049243
		0.0413029	0.0808641
JB		0.1308	0.001
		0.437248	0.5
		ra	log
%		-73.1163	65.0155
err.va		0.0118503	0.462933
rel.std.err		3.60934	11.2082
mod.eff		-2.60934	-10.2082

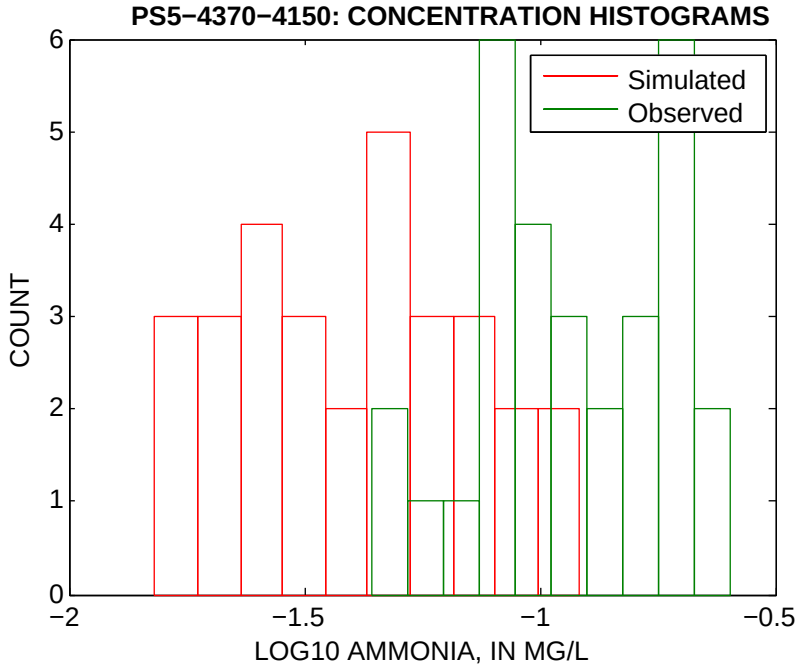
VERSION 2.1

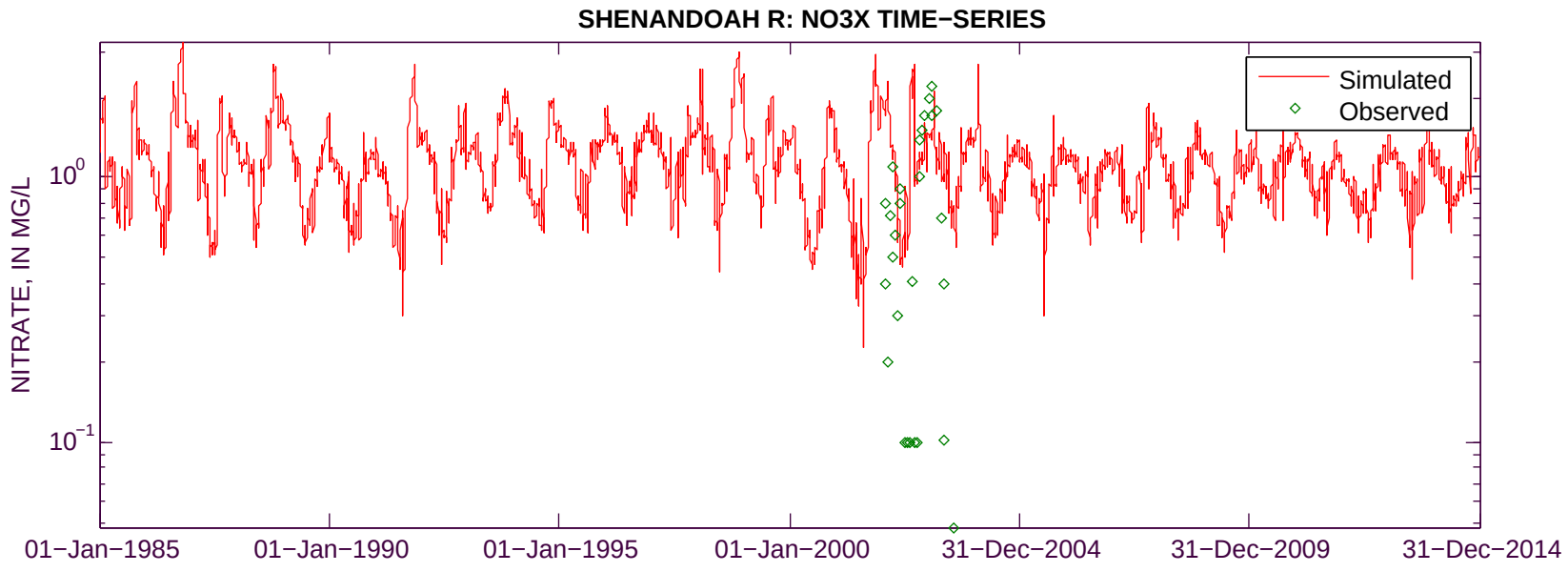
ALL DATA
LOG10

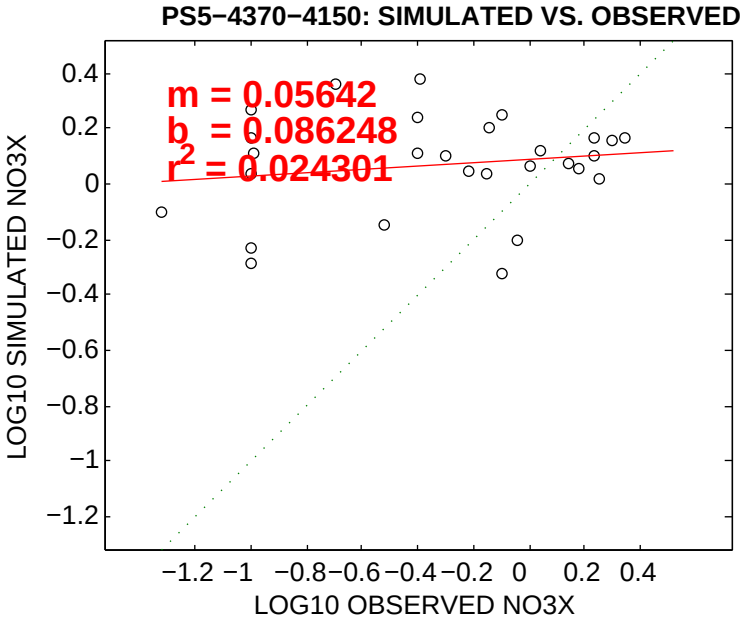


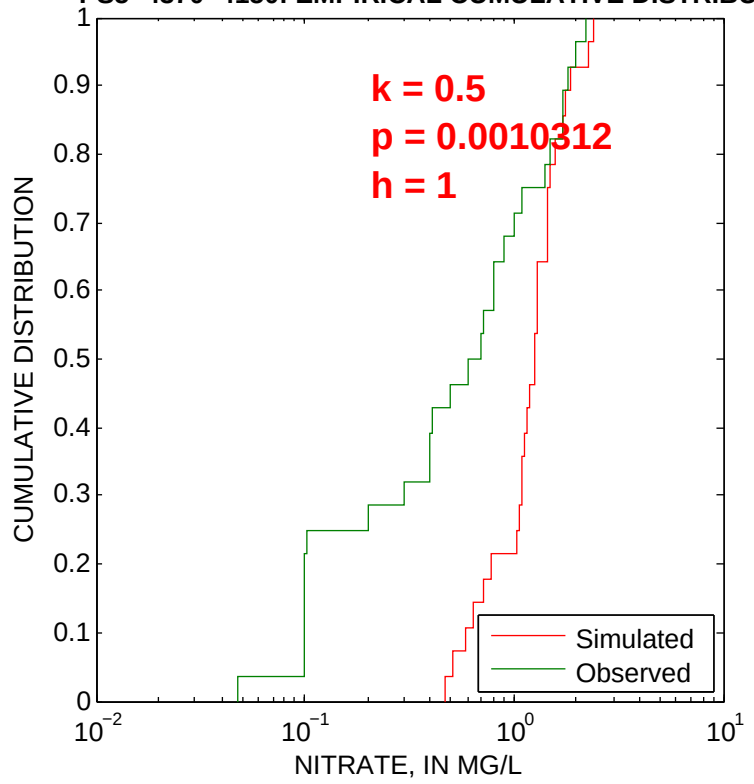












DATA SELECTION

scenario	file
P620171001WQ	NO3X.calib

plot: NO3X - nitrate

Dates: 1/1/1985 – 12/31/201

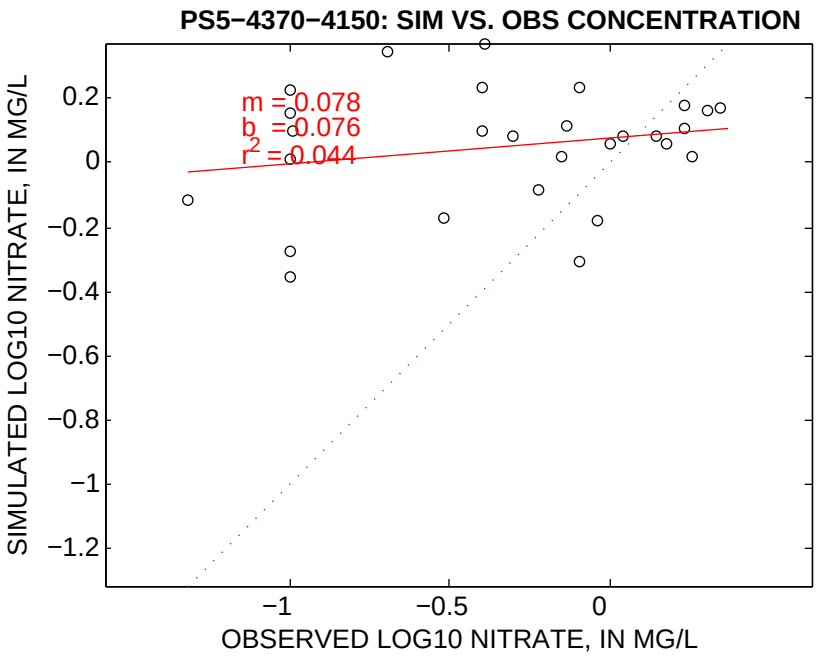
Drive	Directory	Observed
N/A	model	OBS20161101

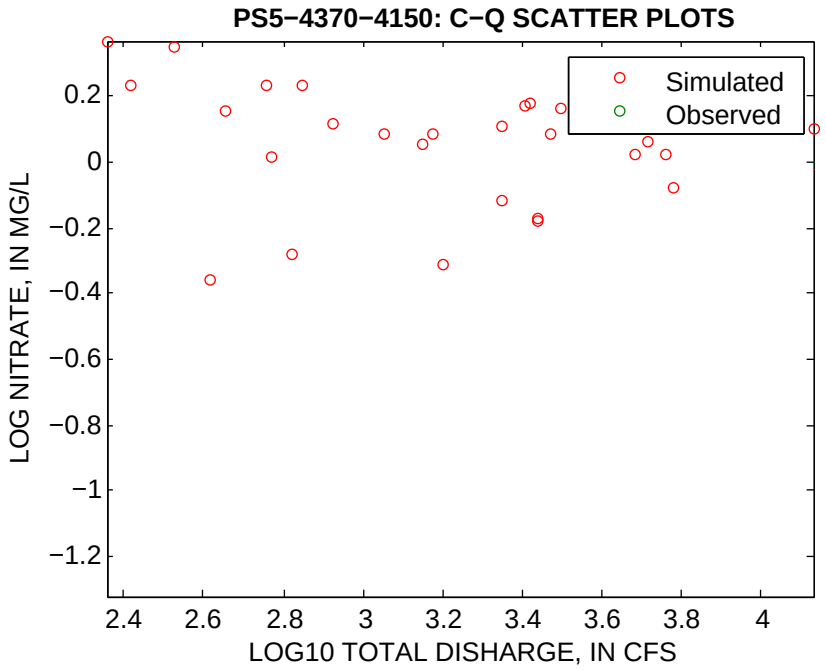
STATISTICS

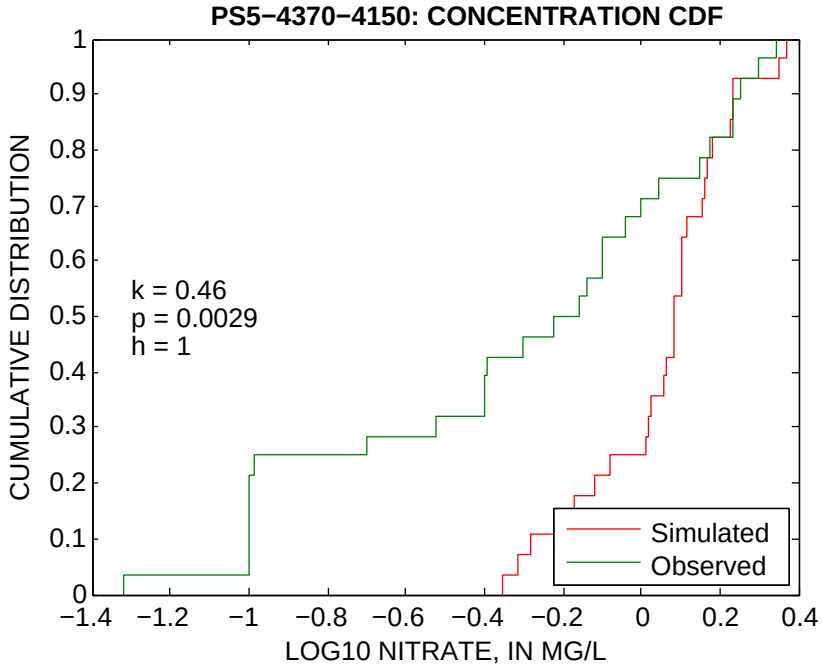
	n	28	28
		observe	simulate
min		0.048	0.47068
		-1.31876	-0.327274
mean		0.778286	1.26198
		-0.322962	0.0680266
media		0.65	1.25955
		-0.188375	0.100205
max		2.2	2.376
		0.342423	0.375846
varian		0.43441	0.226569
		0.246687	0.0323149
JB		✓ 0.089653	0.5 ✓
		✓ 0.127906	0.226885 ✓
		ra	log
%		62.1483	-121.063
err.va		0.887901	0.4097
rel.std.err		2.04392	1.66081
mod.eff		-1.04392	-0.660807

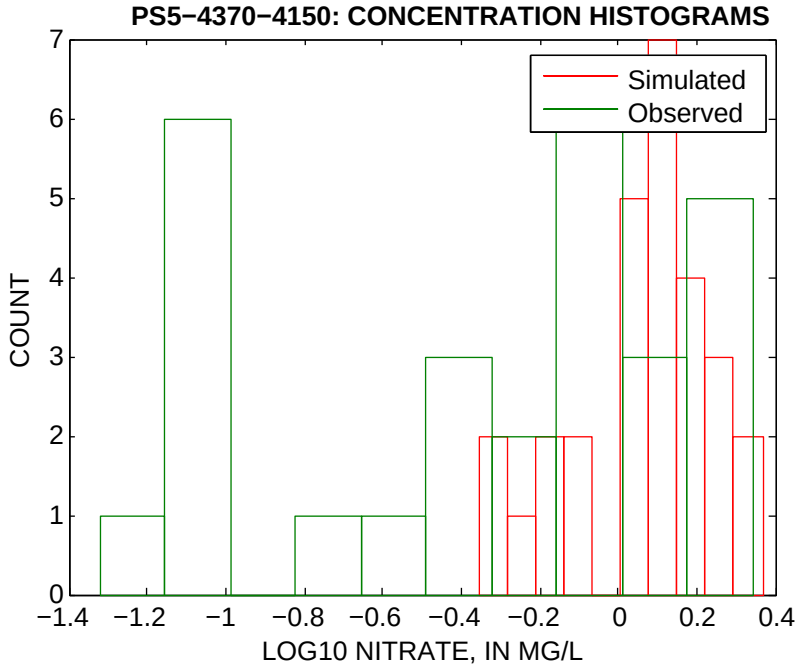
VERSION 2.1

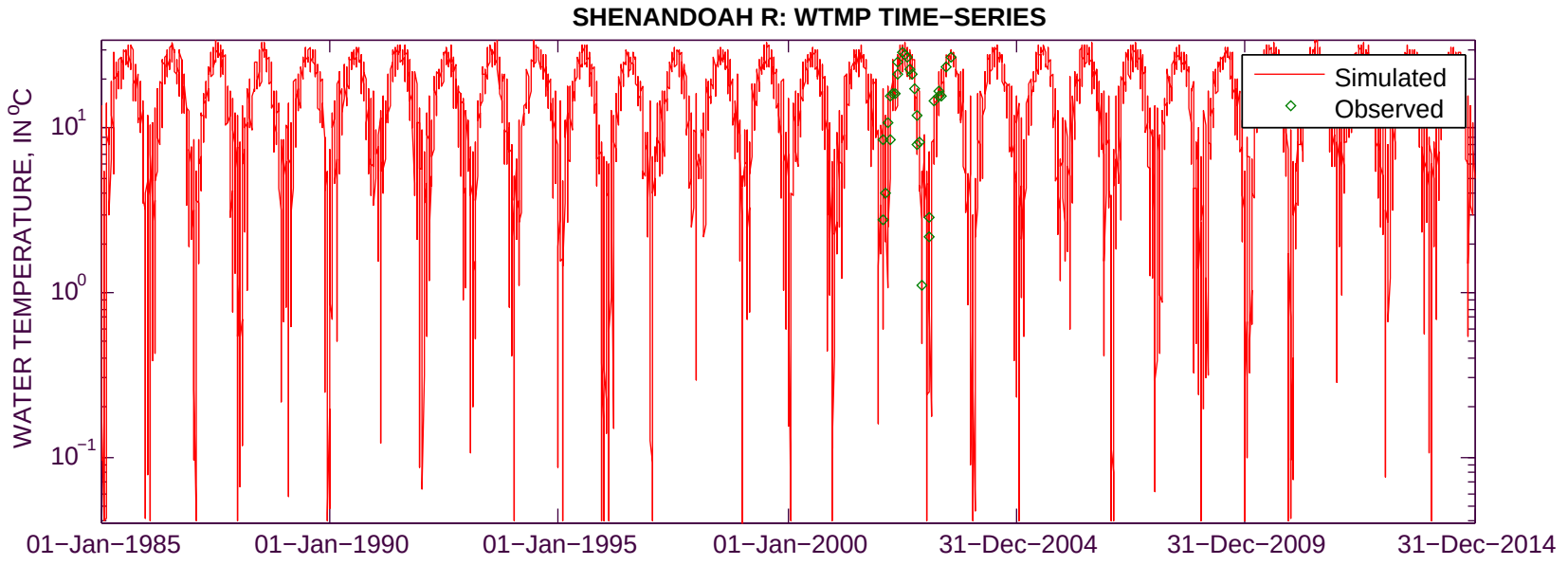
ALL DATA
LOG10

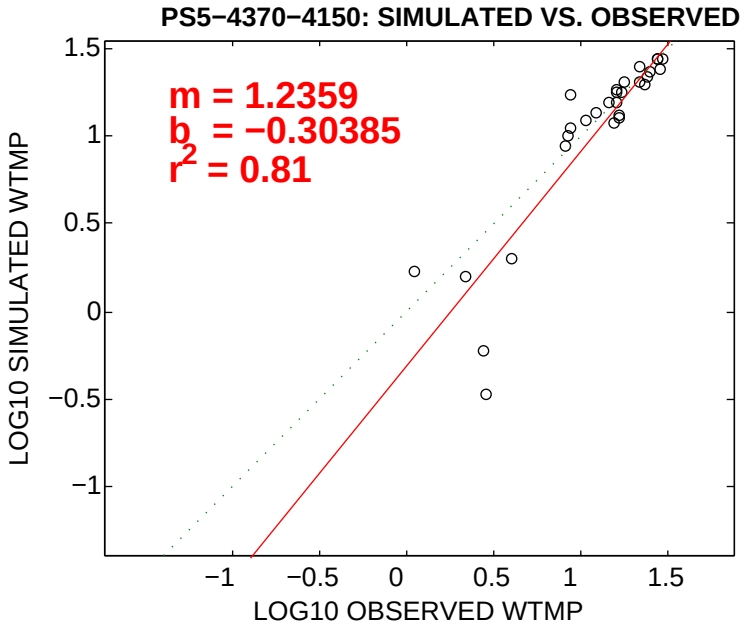


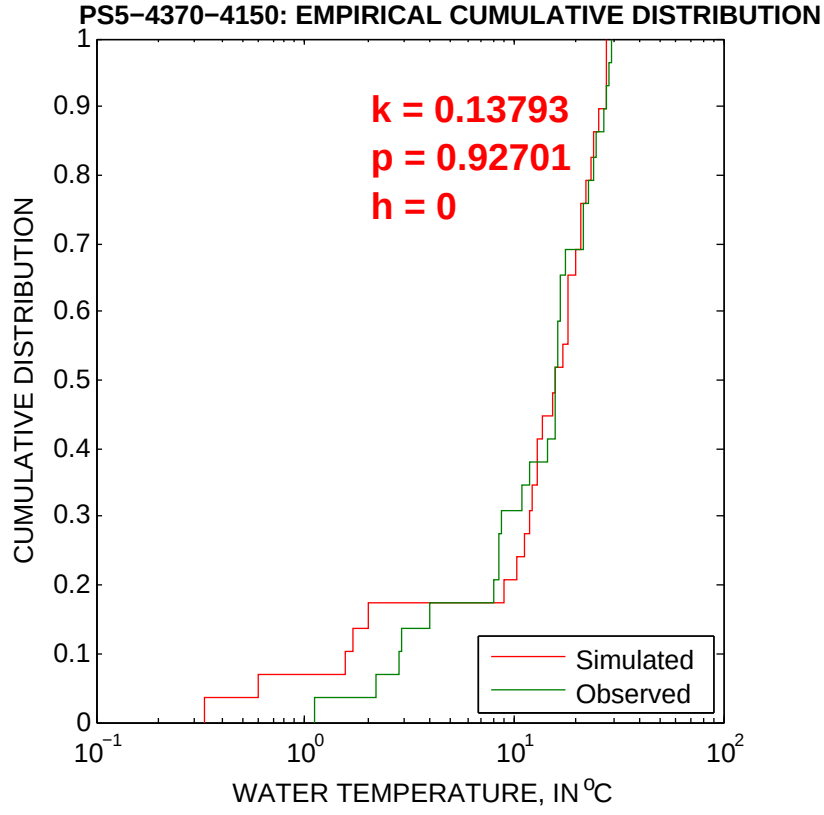












DATA SELECTION

scenario	file
P620171001WQ	WTMP.calib

plot: WTMP - water tempera...

Dates: 1/1/1985 – 12/31/201

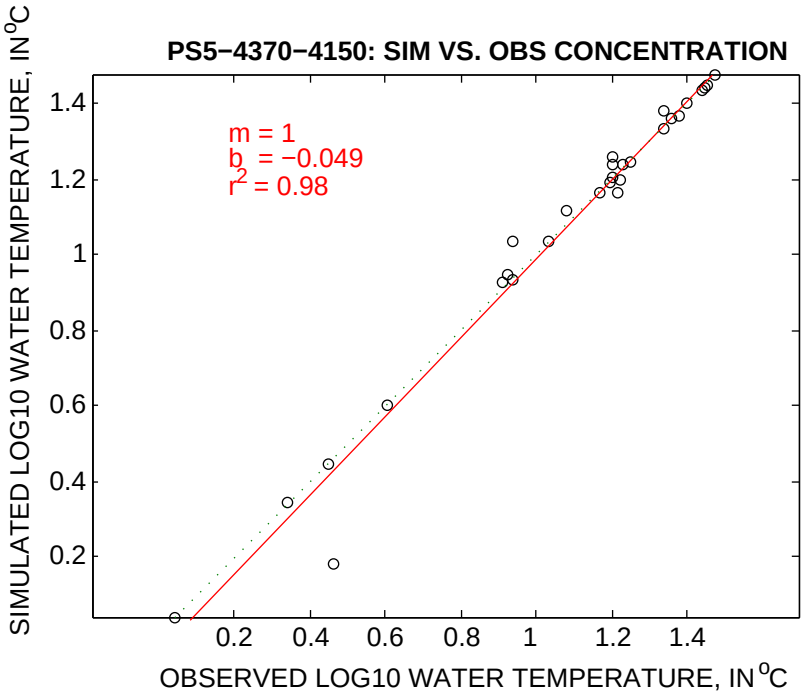
Drive	Directory	Observed
N/A	model	OBS20161101

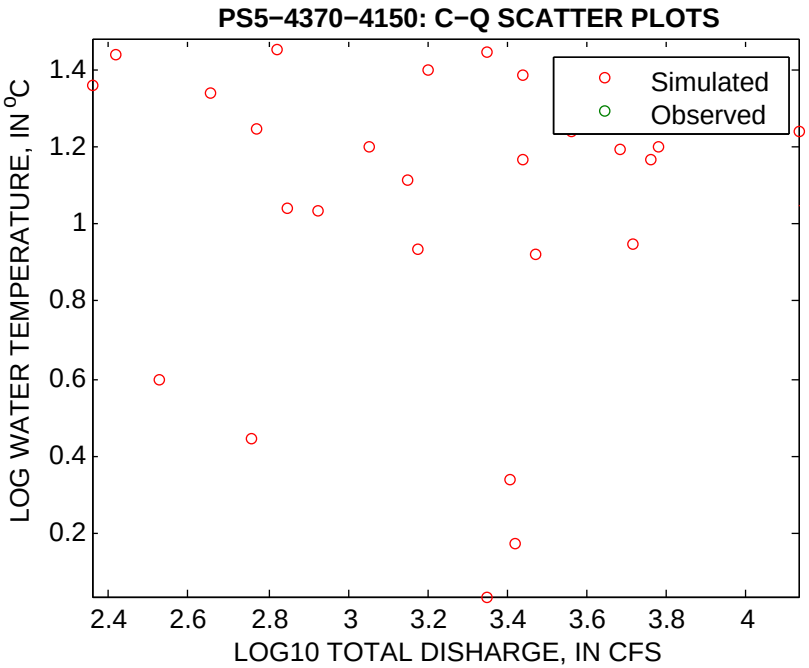
STATISTICS

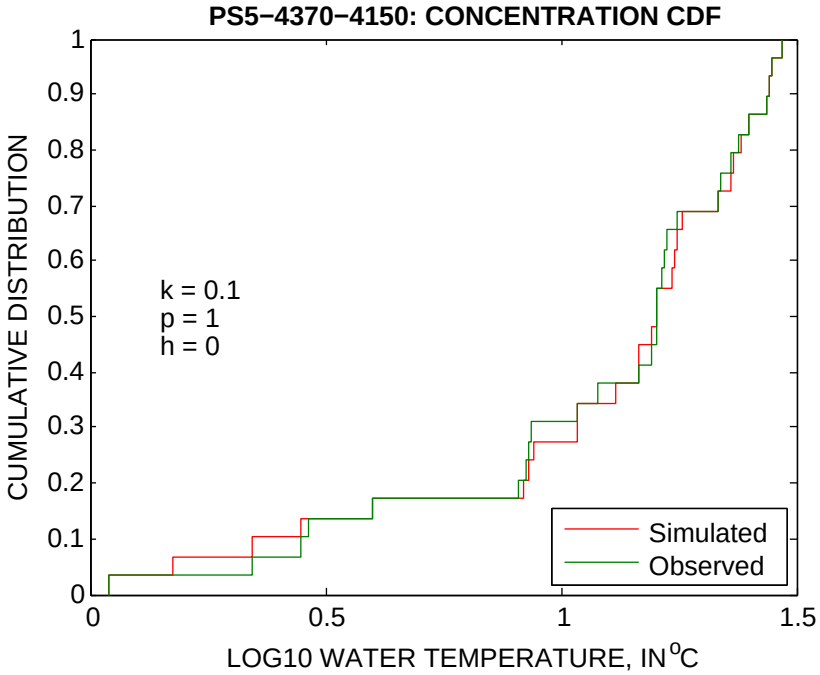
	n	29	29
		observe	simulate
min		1.1	0.33491
		0.0413927	-0.475072
mean		15.2828	15.2914
		1.07577	1.02573
media		15.9	15.58
		1.2014	1.19257
max		29.7	27.768
		1.47276	1.44354
varian		72.2693	70.3514
		0.136826	0.258032
JB		0.361137	0.323819
		0.017512	0.003233
		ra	log
%		1.0564282	-4.65123
err.va		7.65928	0.0592348
rel.std.err		0.105982	0.432921
mod.eff		0.894018	0.567079

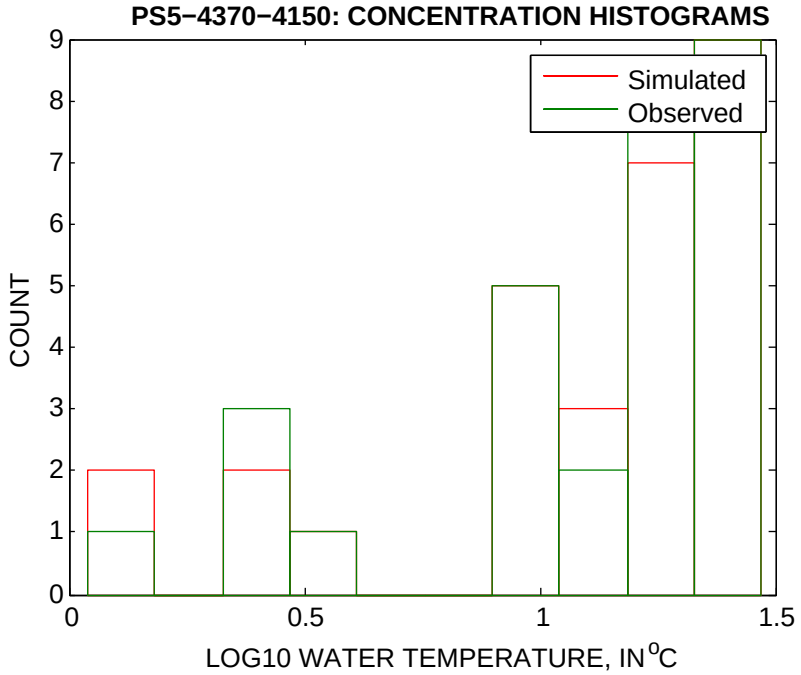
VERSION 2.1

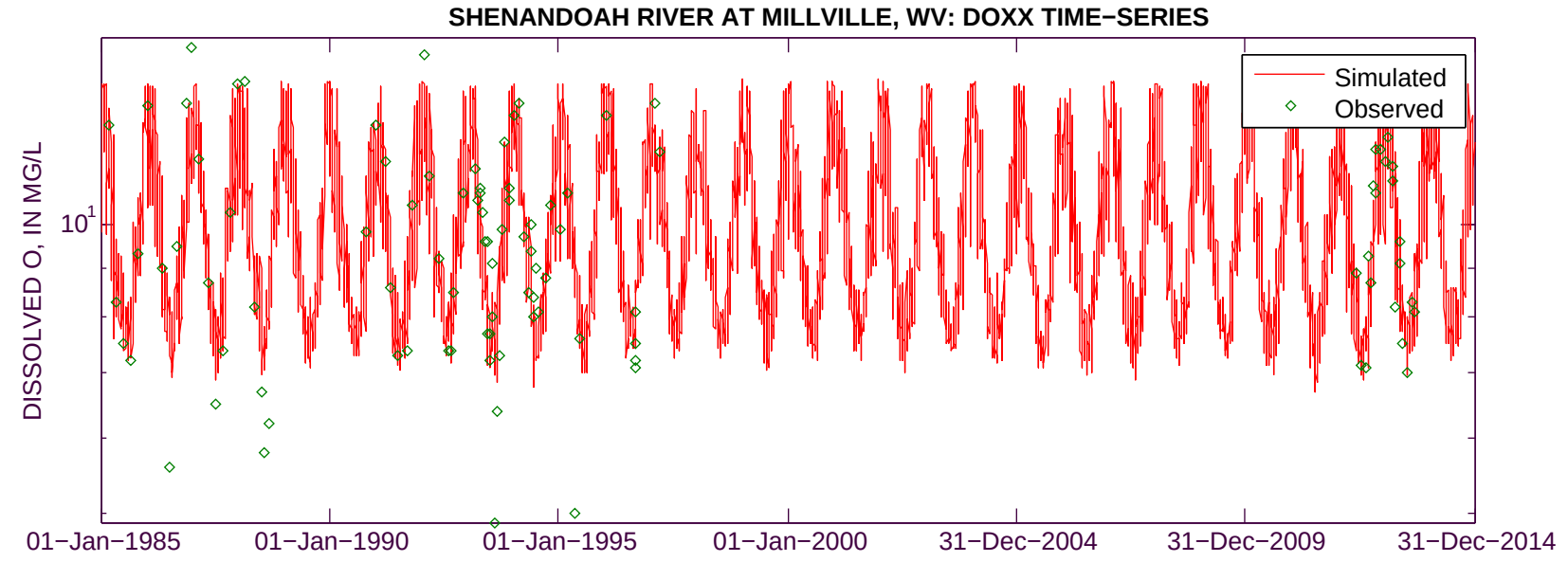
ALL DATA
LOG10

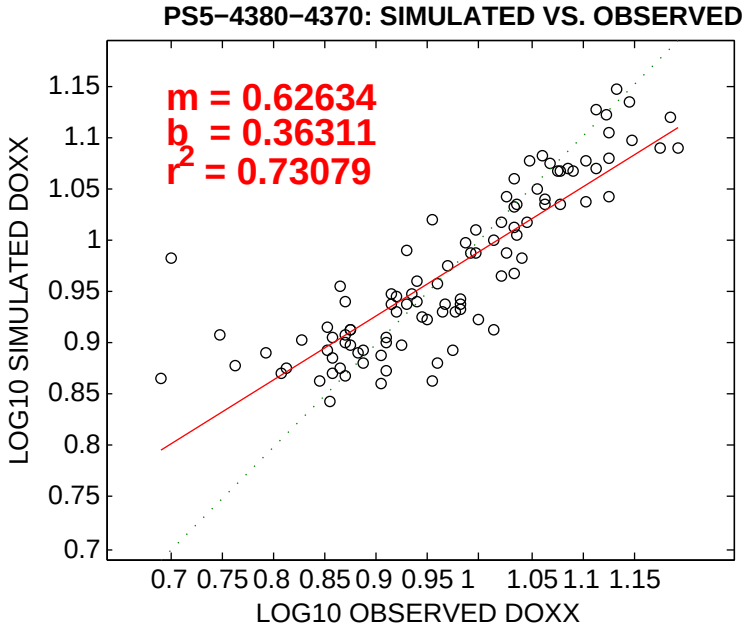


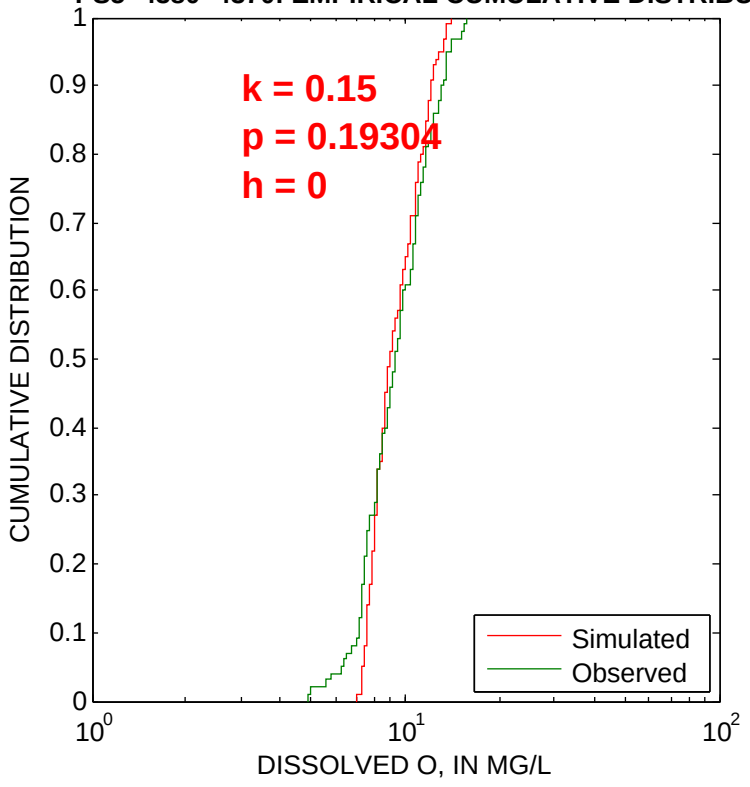












DATA SELECTION

scenario	file
P620171001WQ	DOXX.calib

plot: DOXX - dissolved oxygen

Dates: 1/1/1985 – 12/31/201

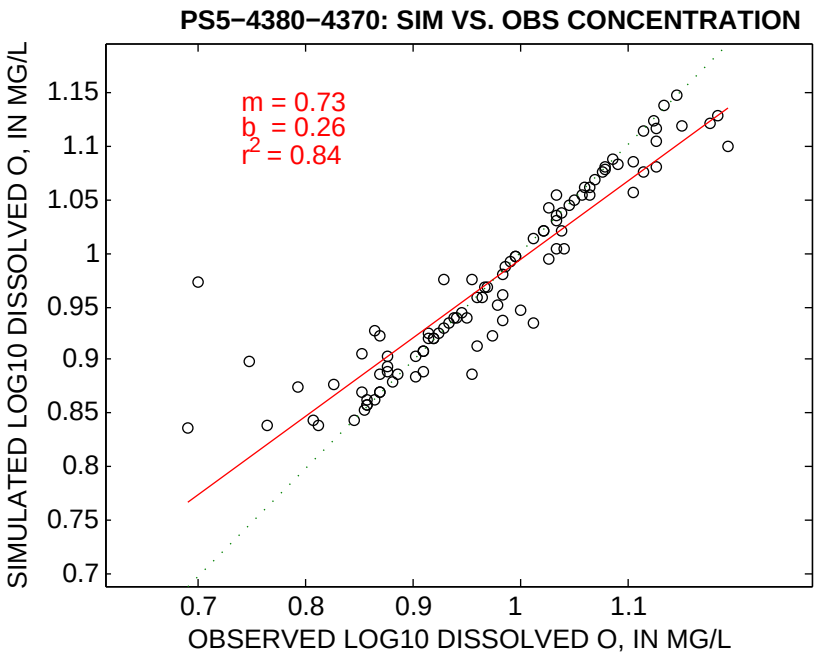
Drive	Directory	Observed
N/A	model	OBS20161101

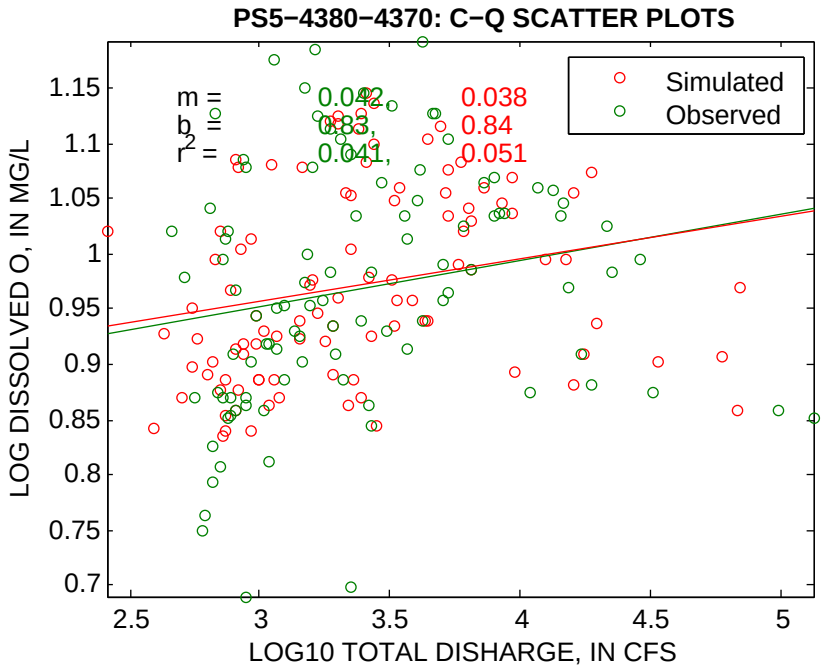
STATISTICS

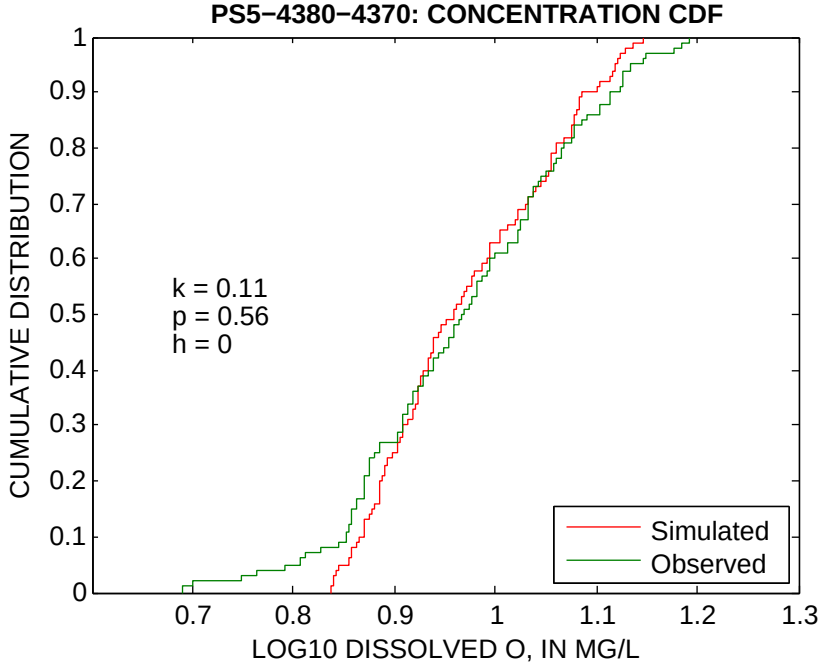
	n	100	100
		observe	simulate
min		4.9	6.9668
		0.690196	0.843033
mean		9.6192	9.50497
		0.969871	0.970578
media		9.285	8.8861
		0.967781	0.948711
max		15.6	13.99
		1.19312	1.14582
varian		5.6813	3.24794
		0.0117903	0.00632918
JB		0.099932	0.020297
		0.5	0.030986
		ra	log
%		-1.18747	0.0729236
err.va		1.32072	0.00335058
rel.std.err		1.232467	0.284181
mod.eff		0.767533	0.715819

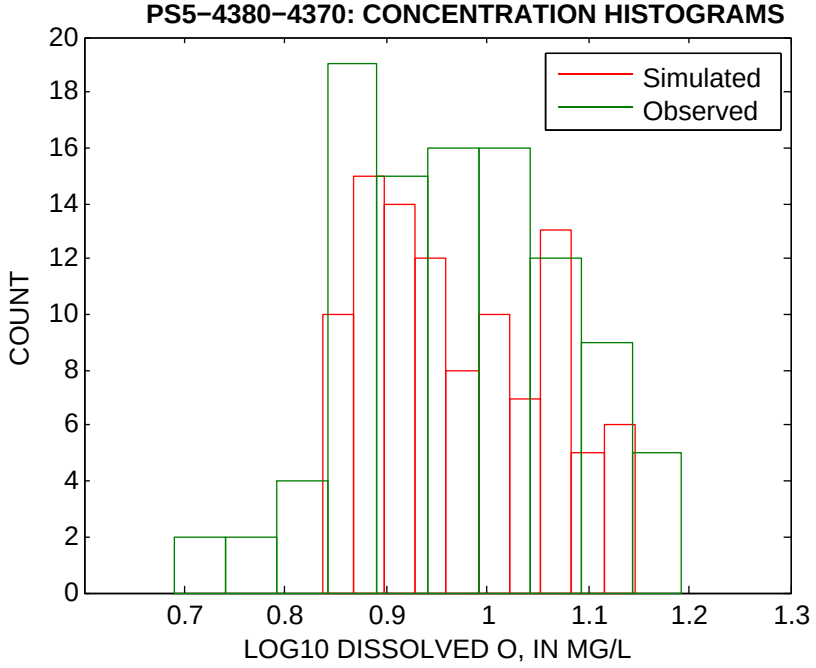
VERSION 2.1

ALL DATA
LOG10

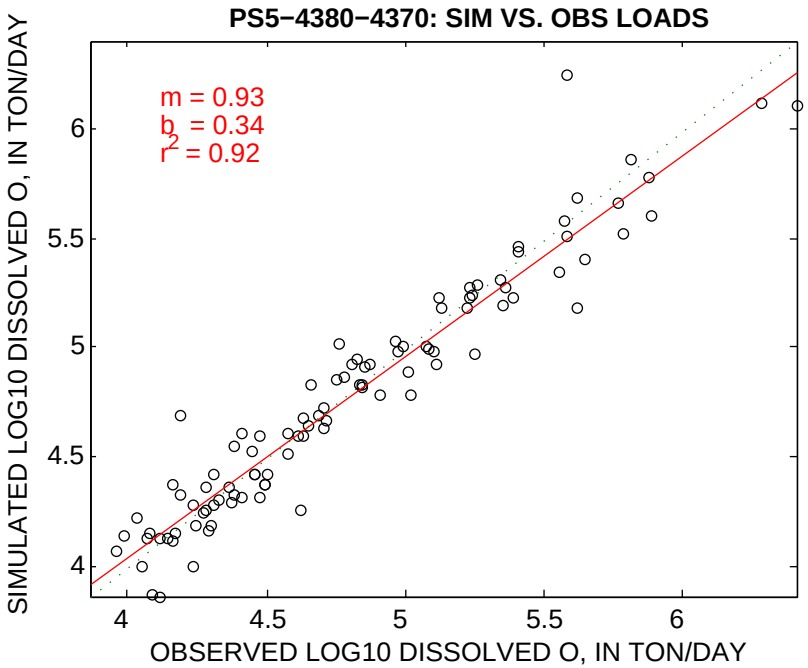


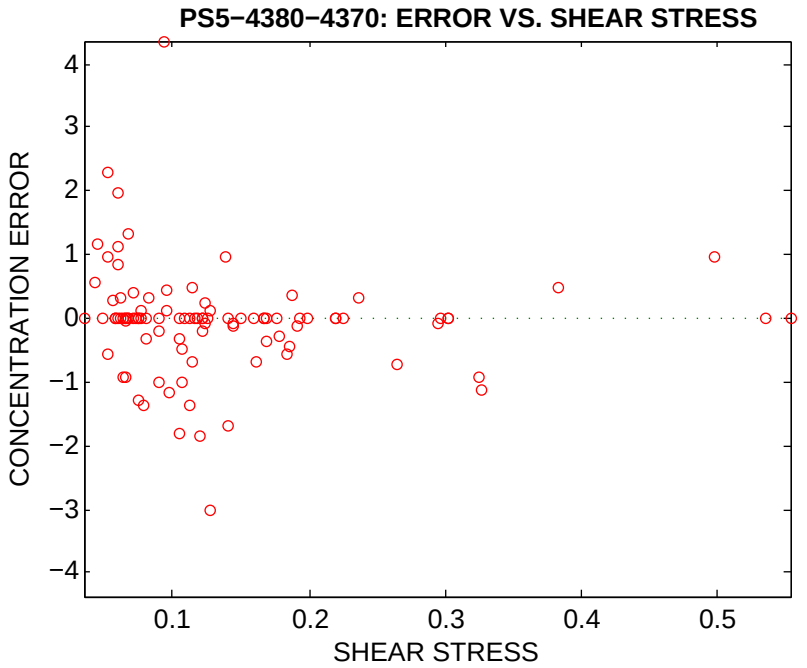


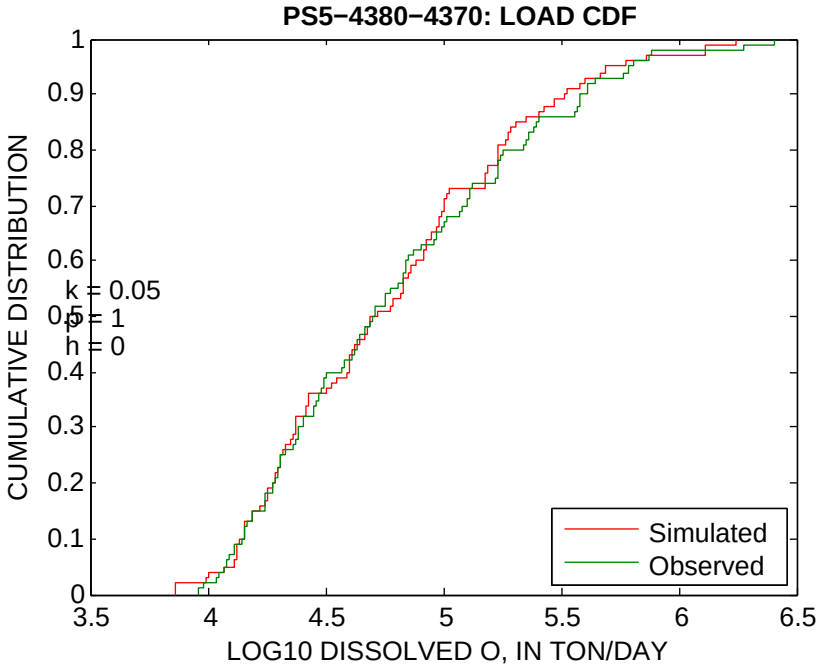


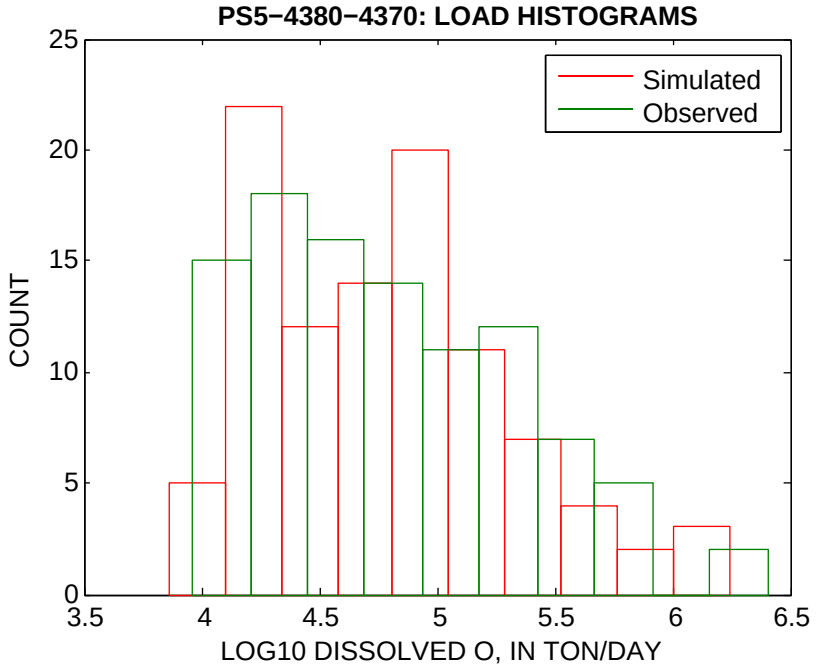


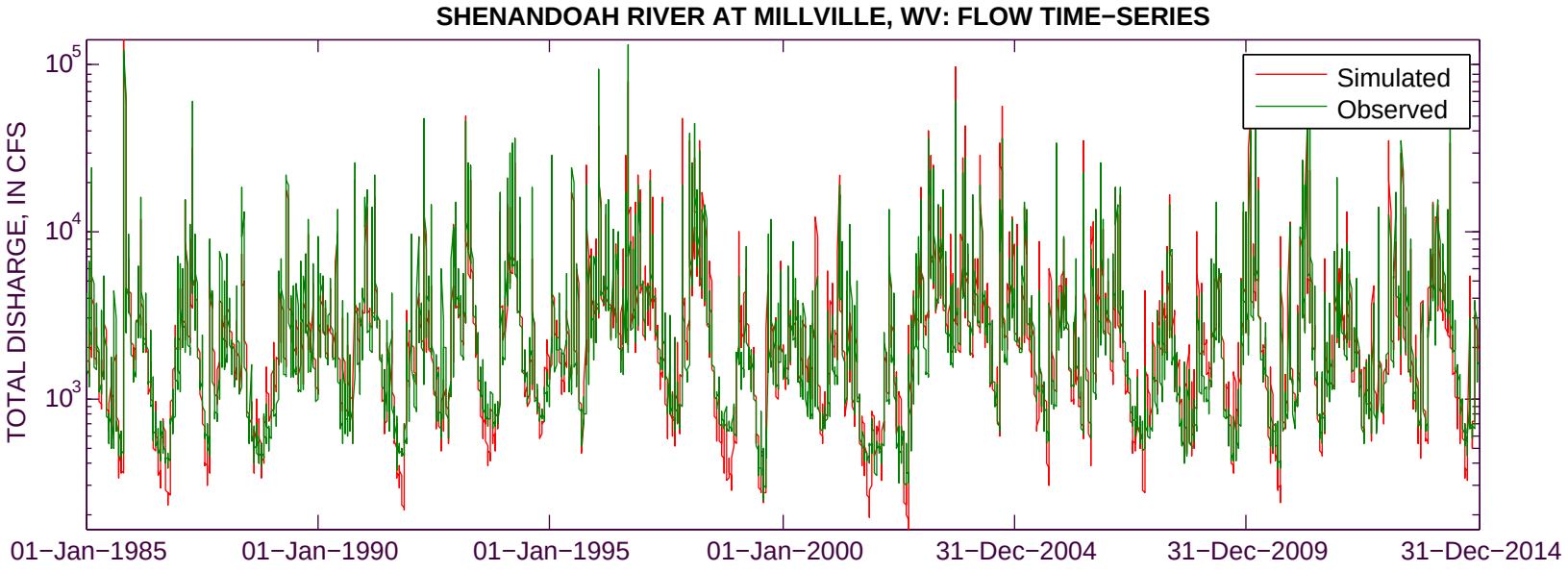
LOAD DATA
LOG10

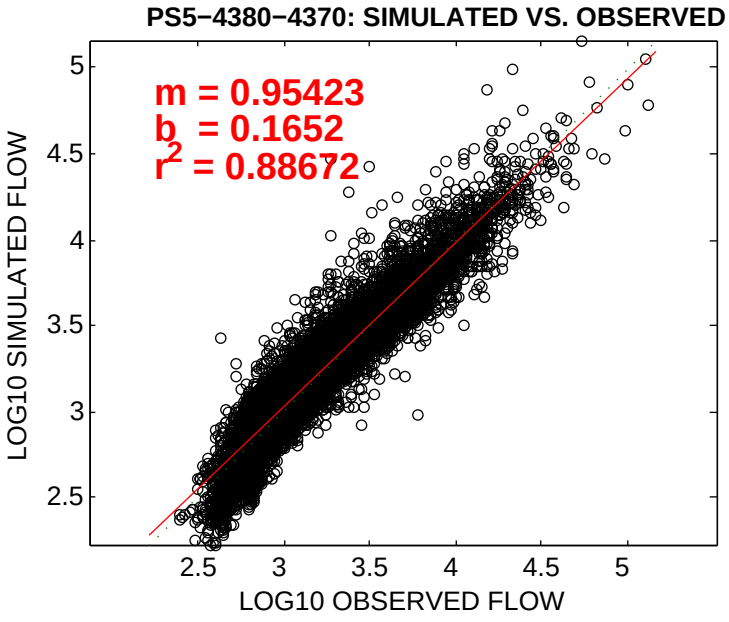


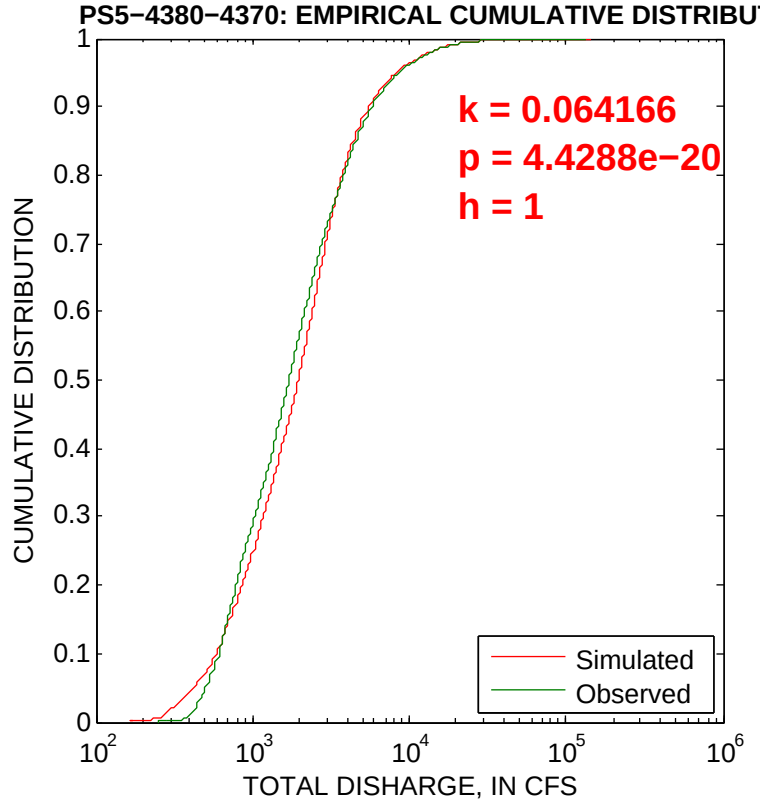












DATA SELECTION

scenario: P620171001WQ | file: FLOW.calib

plot: FLOW - total discharge

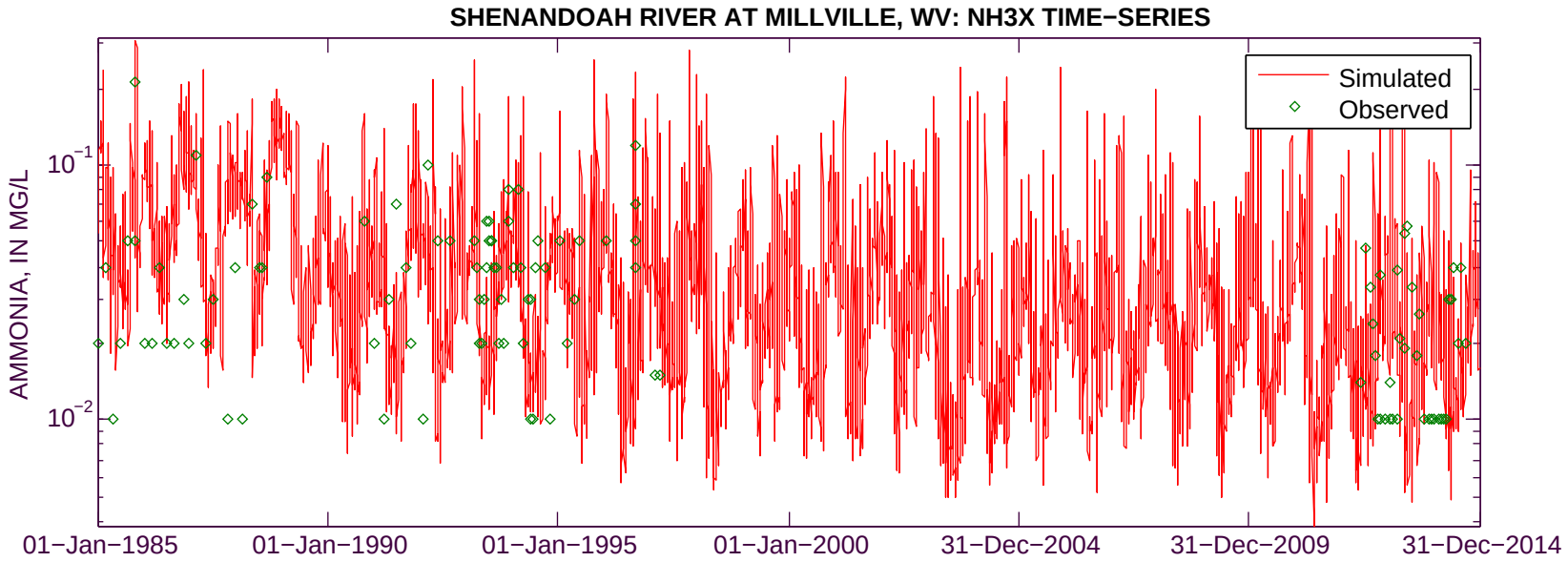
Dates: 1/1/1985 – 12/31/201

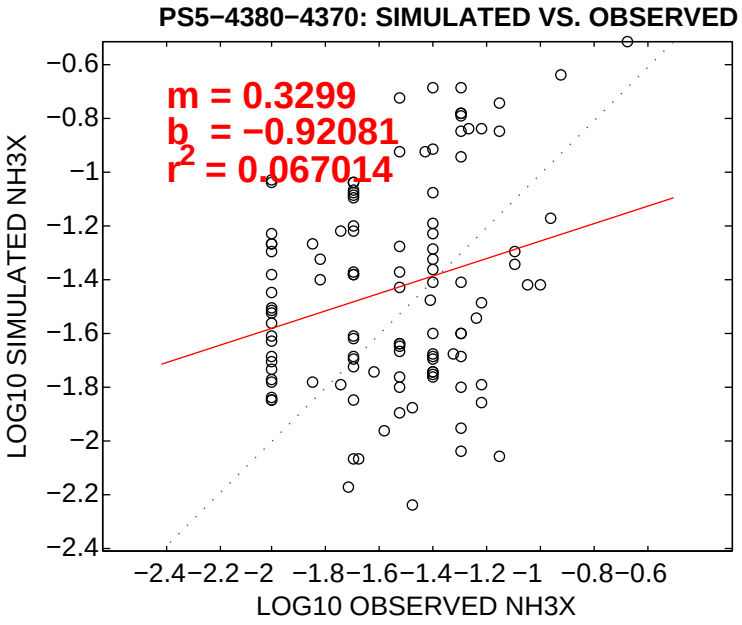
Drive: N/A | Directory: model | Observed: OBS20161101

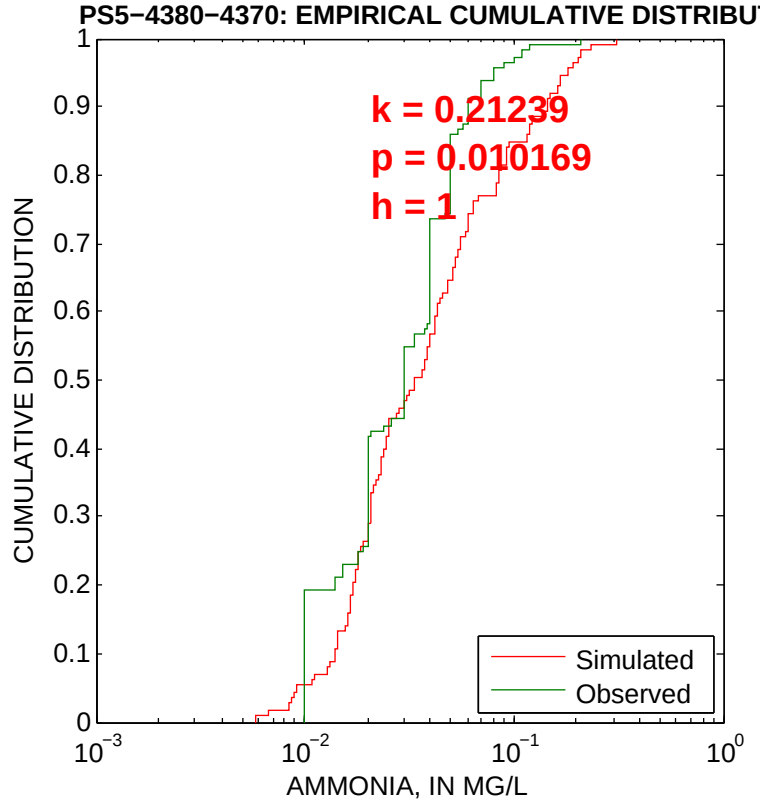
STATISTICS

		observe	simulate
n		10956	10956
min		248	164.87
		2.39445	2.21714
mean		2872.51	2925.6
		3.2598	3.2758
media		1710	1970.6
		3.233	3.2946
max		133000	145230
		5.12385	5.16206
varian		1.93376e+0	1.87601e+
		0.14757	0.151538
JB		0.001	0.001
		0.001	0.001
		ra	log
%		1.84802	0.490859
err.va		5.60276e+0	0.0177314
rel.std.err		0.289734	0.120156
mod.eff		0.710266	0.879844

VERSION 2.1







DATA SELECTION

scenario	file
P620171001WQ	NH3X.calib

plot: NH3X - ammonia

Dates: 1/1/1985 – 12/31/201

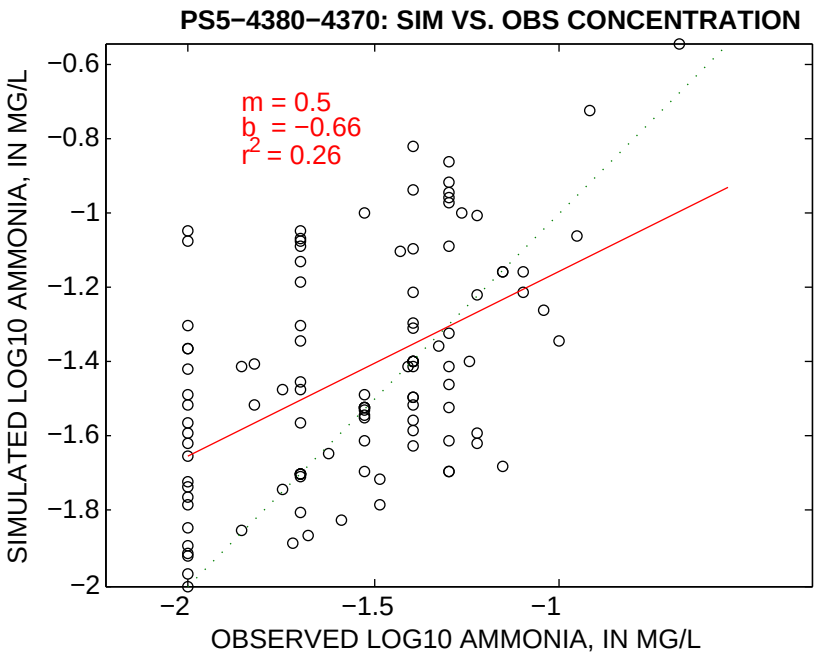
Drive	Directory	Observed
N/A	model	OBS20161101

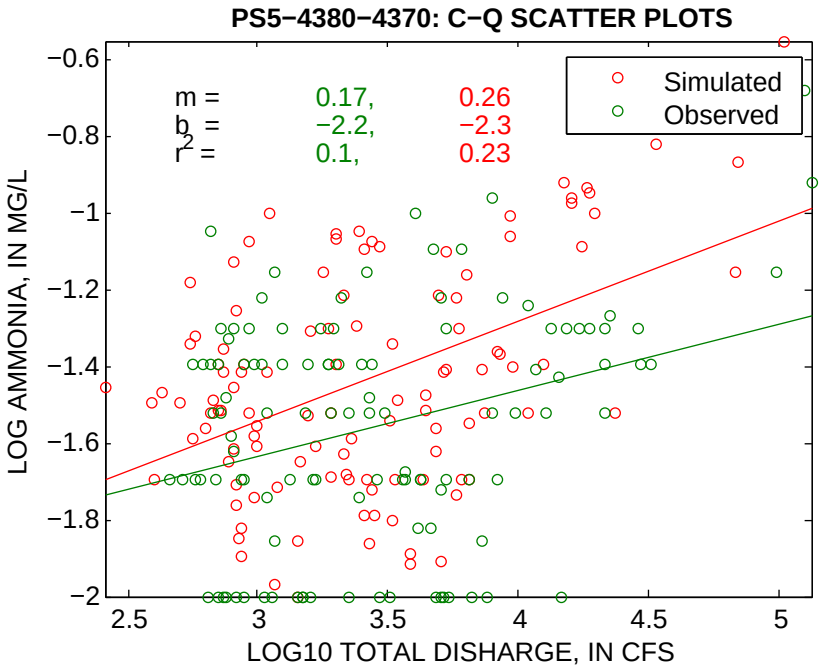
STATISTICS

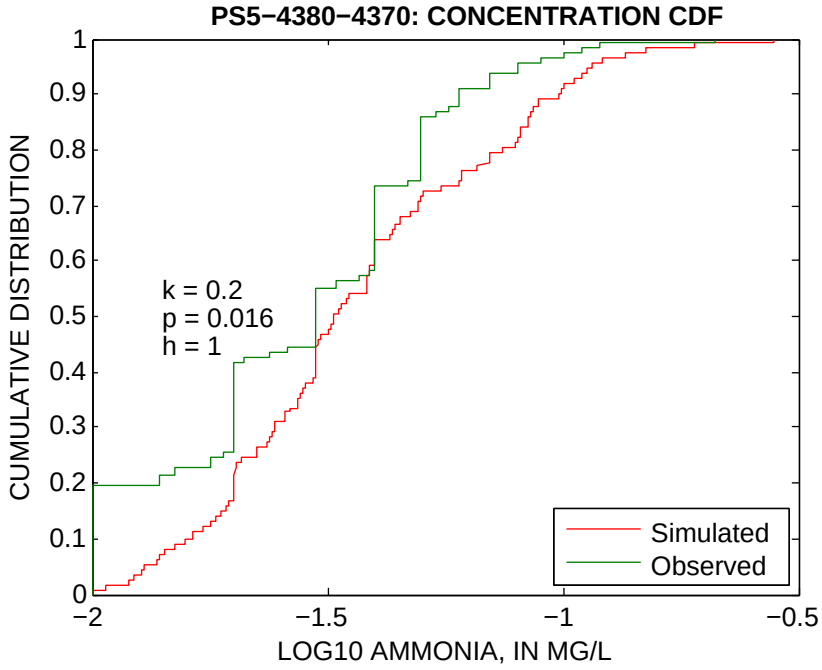
	n	113	113
		observe	simulate
min		0.01	0.0057473
		-2	-2.24054
mean		0.0353451	0.0551991
		-1.55554	-1.43397
media		0.03	0.033231
		-1.52288	-1.47846
max		0.21	0.31146
		-0.677781	-0.506598
varian		0.00077069	0.00315983
		0.0907115	0.147317
JB		0.001	0.001
		0.39652	0.088560
		ra	log
%		56.1718	-7.81483
err.va		0.00277454	0.193087
rel.std.err		3.60006	2.12858
mod.eff		-2.60006	-1.12858

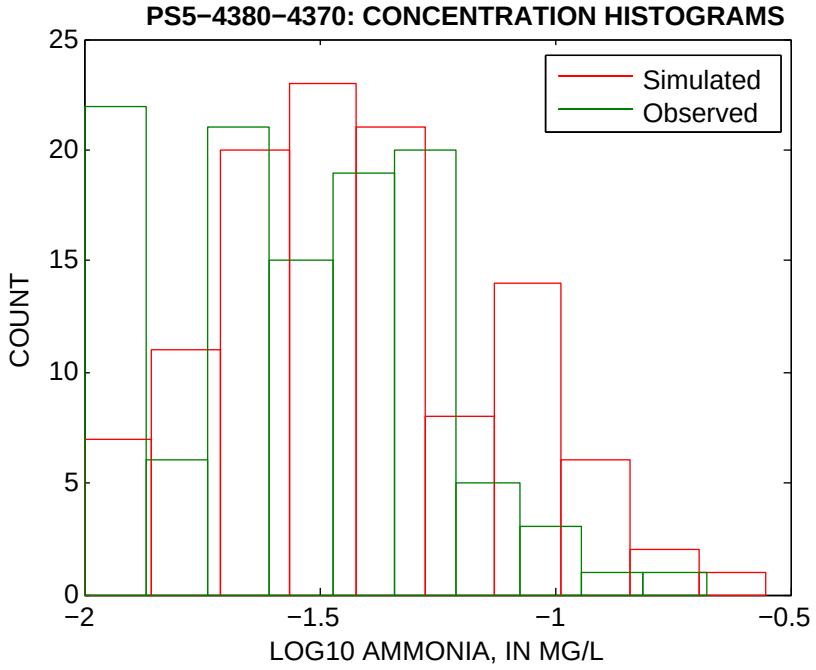
VERSION 2.1

ALL DATA
LOG10

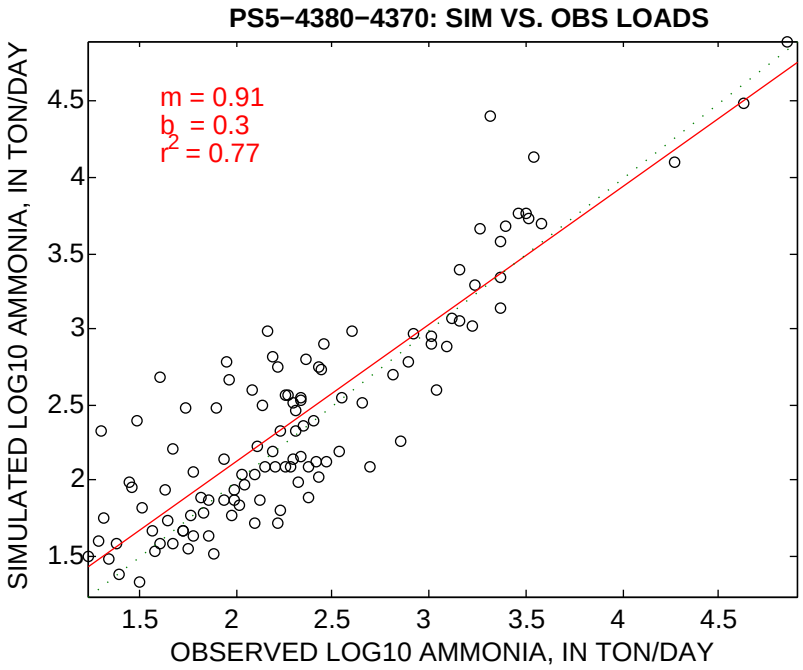


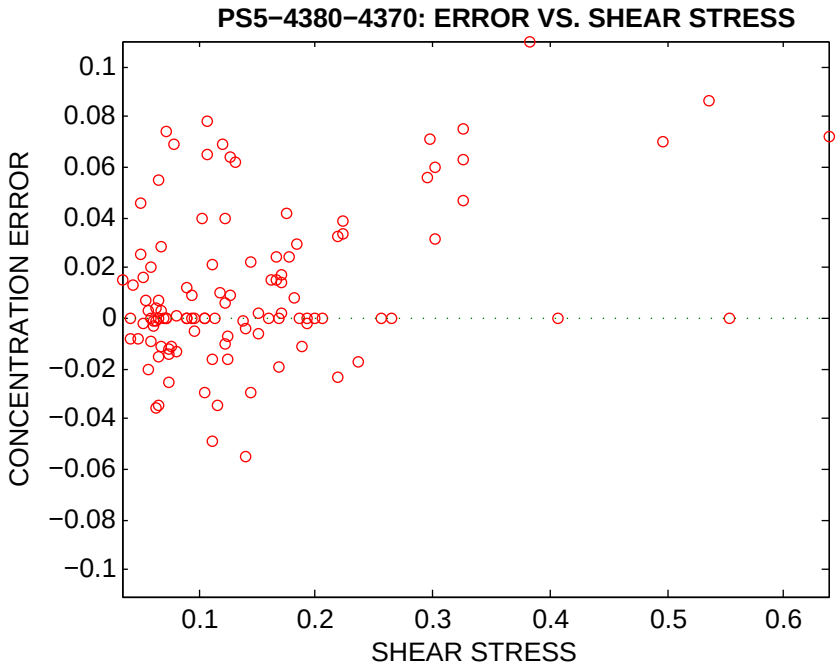


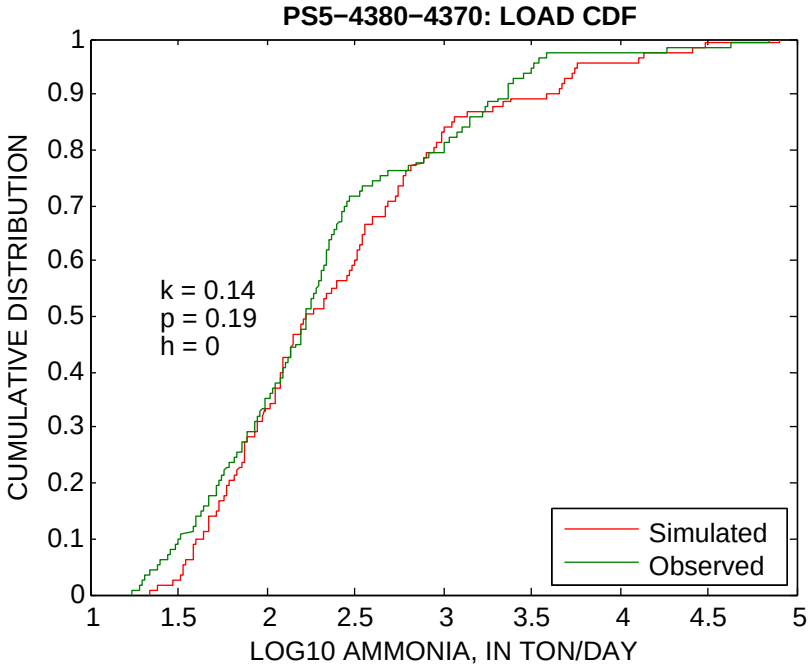


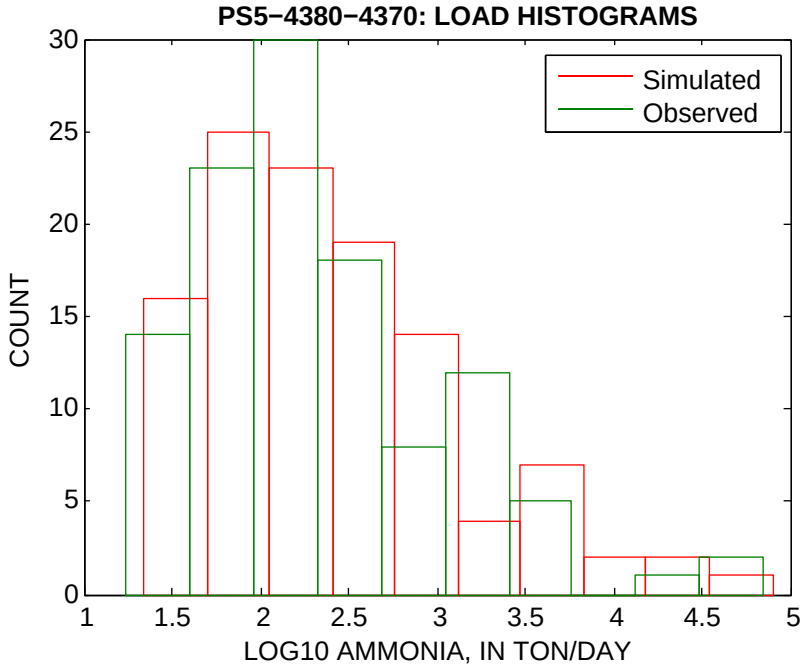


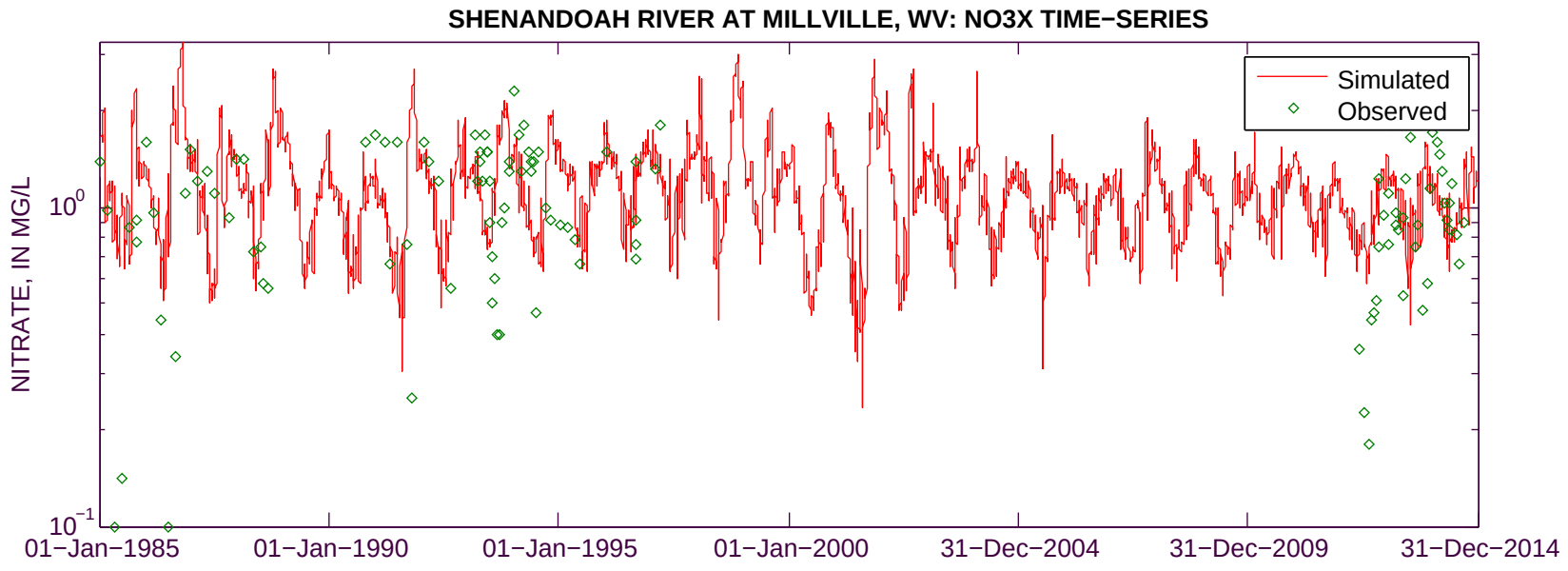
LOAD DATA
LOG10

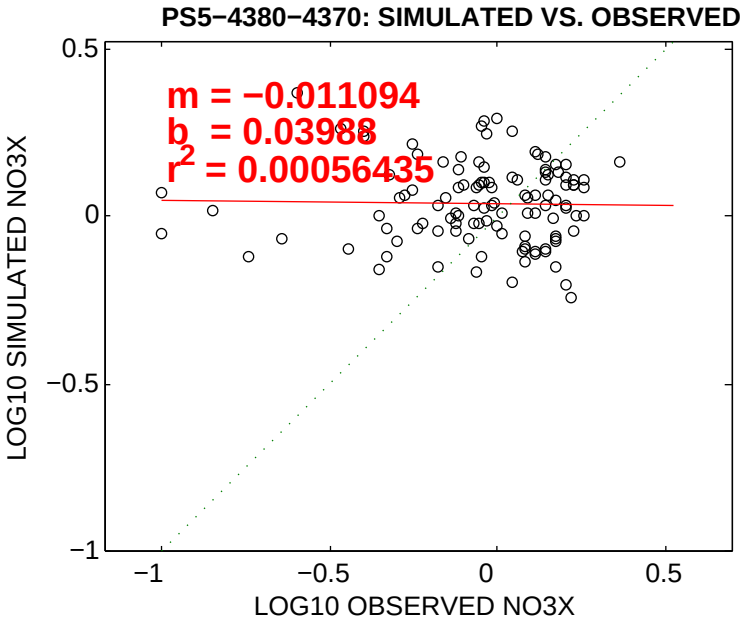


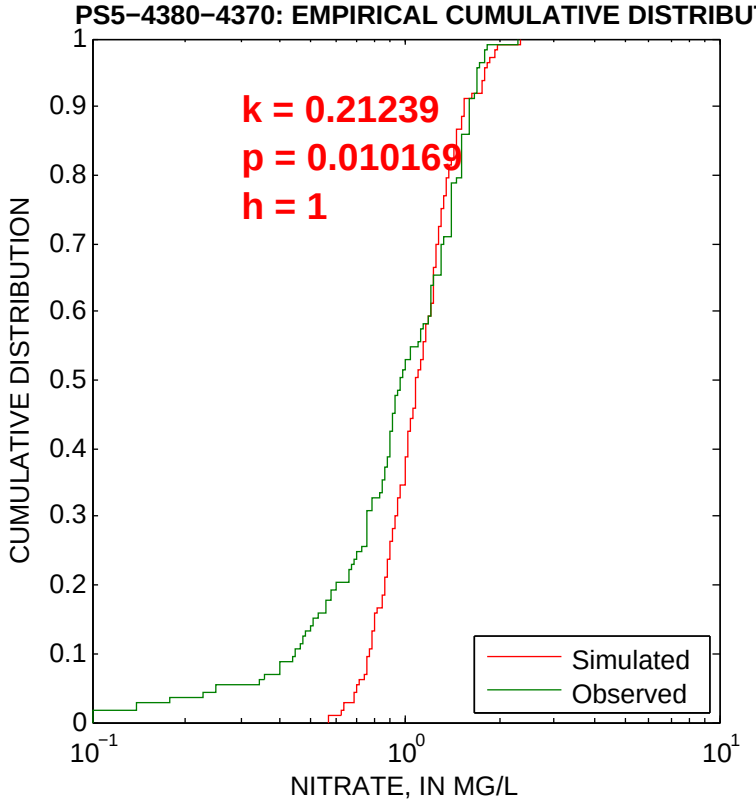












DATA SELECTION

scenario	file
P620171001WQ	NO3X.calib

plot: NO3X - nitrate

Dates: 1/1/1985 – 12/31/201

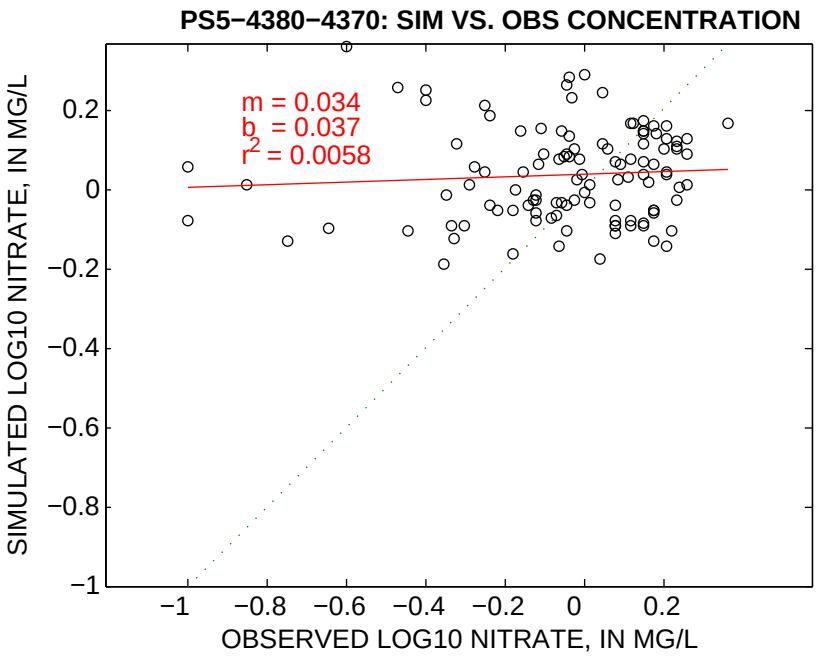
Drive: N/A | Directory: model | Observed: OBS20161101

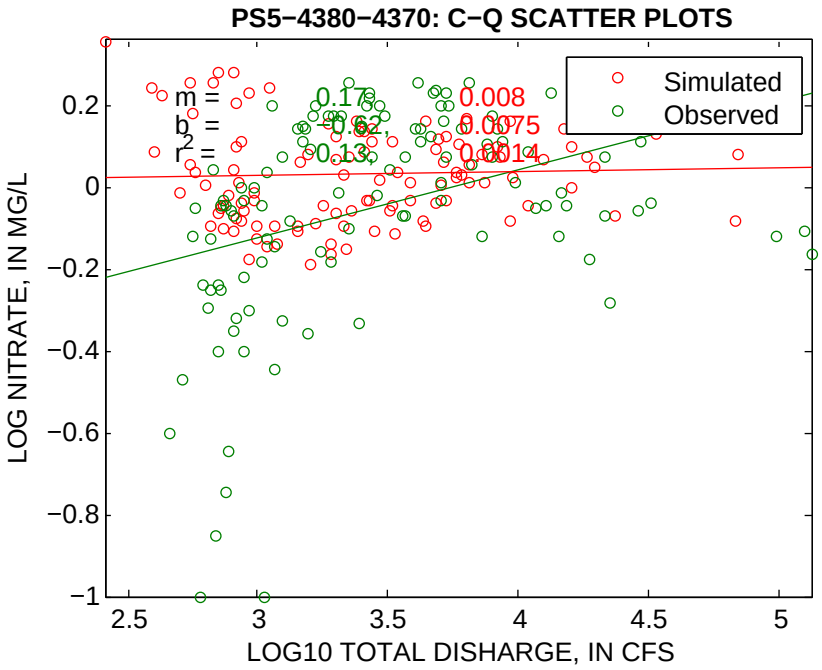
STATISTICS

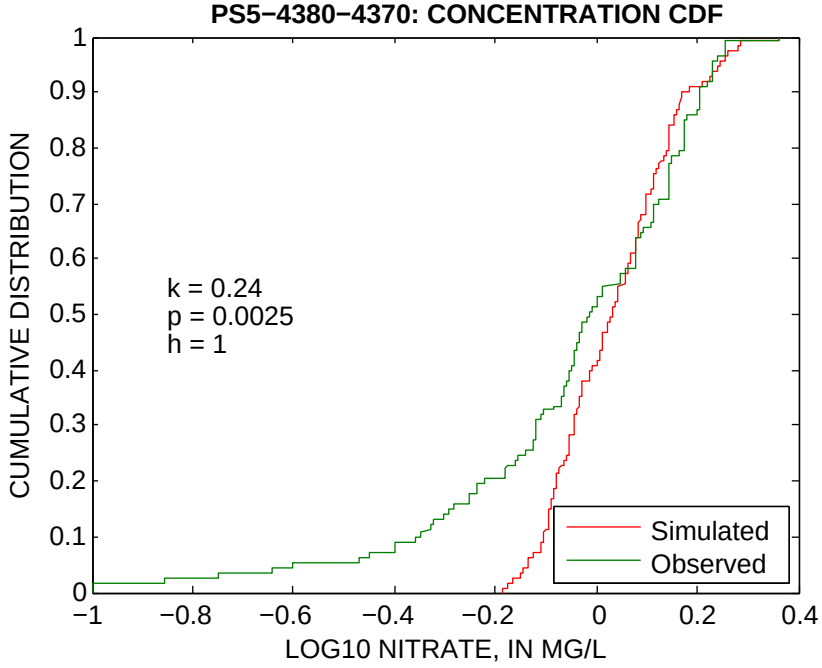
	n	113	113
		observe	simulate
min		0.1	0.57329
		-1	-0.241626
mean		1.03035	1.14072
		-0.045931	0.0403892
media		0.97	1.0798
		-0.0132283	0.0333433
max		2.3	2.3264
		0.361728	0.366684
varian		0.206298	0.10683
		0.066773	0.014563
JB		0.356682	0.004506
		0.001	0.5
		ra	log
%		10.711	-187.935
err.va		0.345025	0.0903353
rel.std.err		1.67245	1.35287
mod.eff		-0.672454	-0.352871

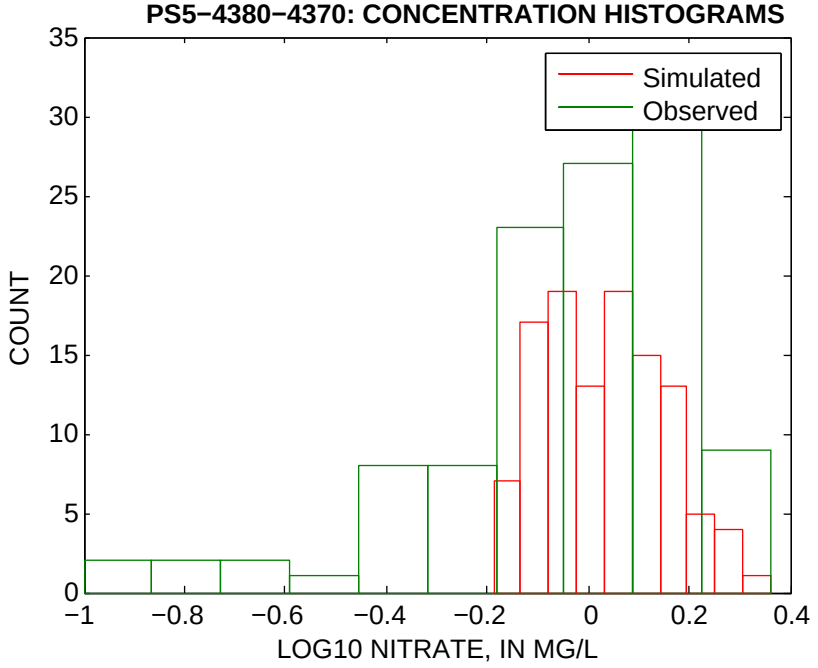
VERSION 2.1

ALL DATA
LOG10

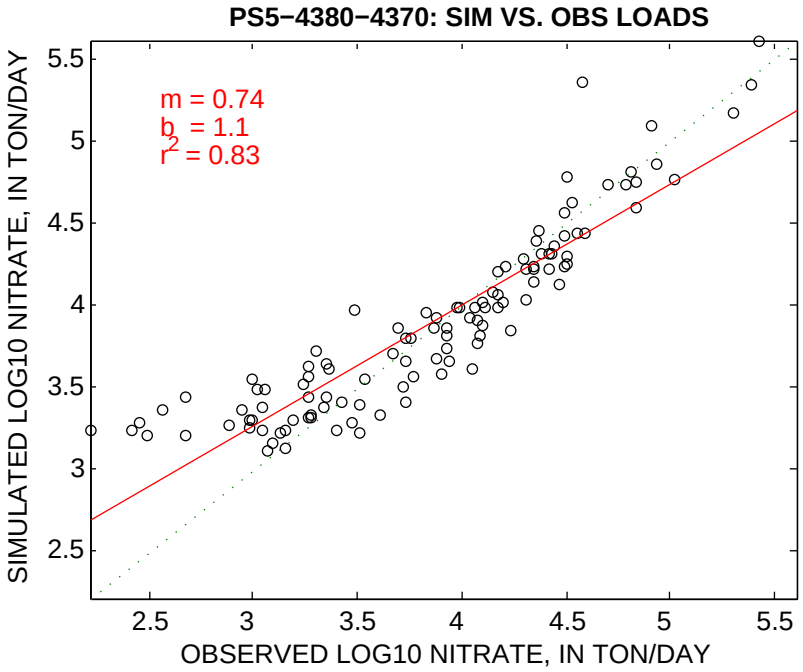


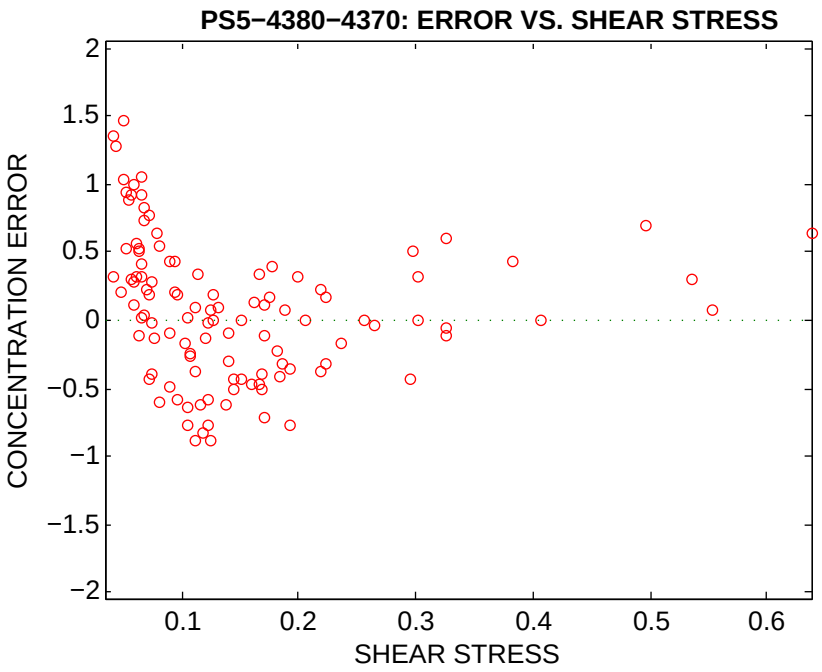


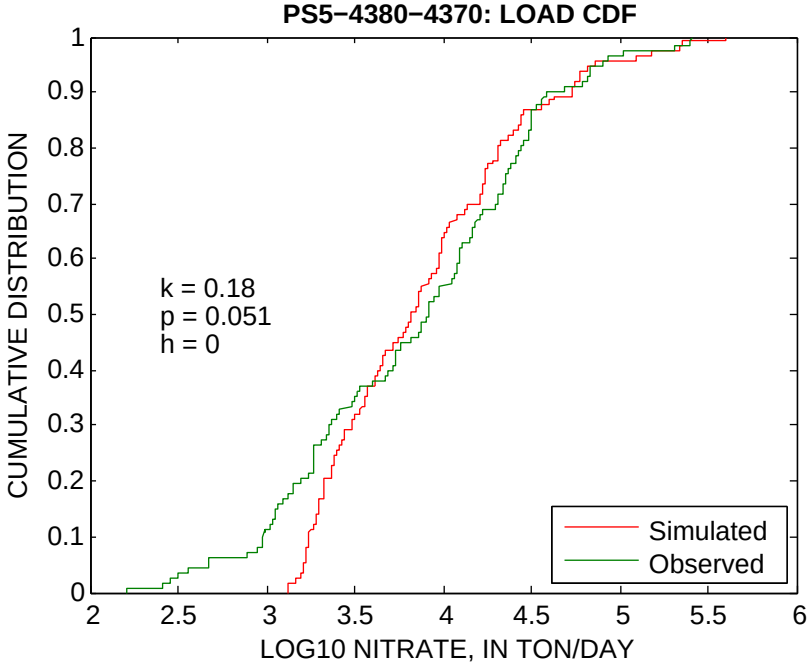


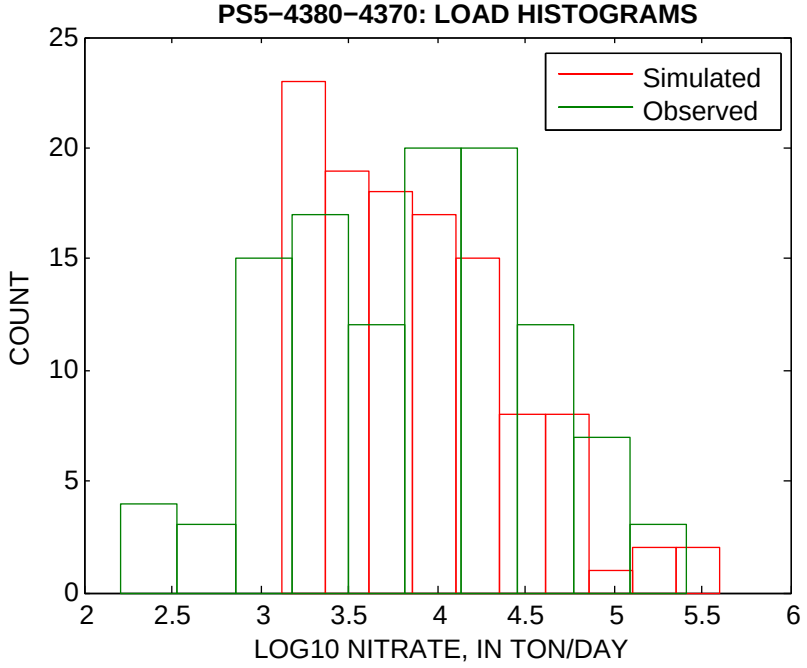


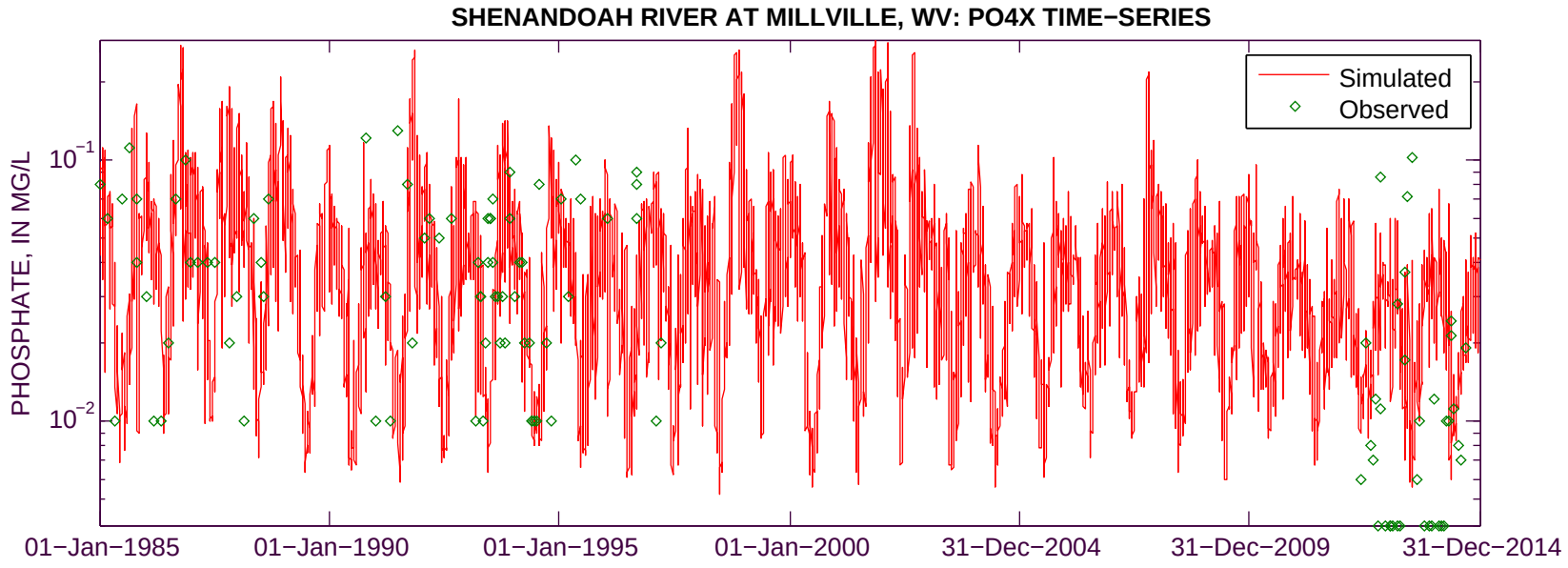
LOAD DATA
LOG10

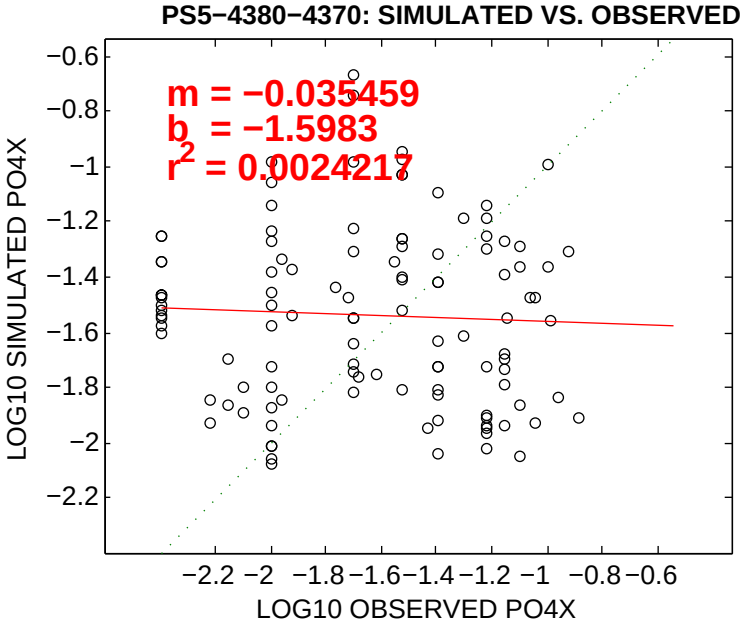


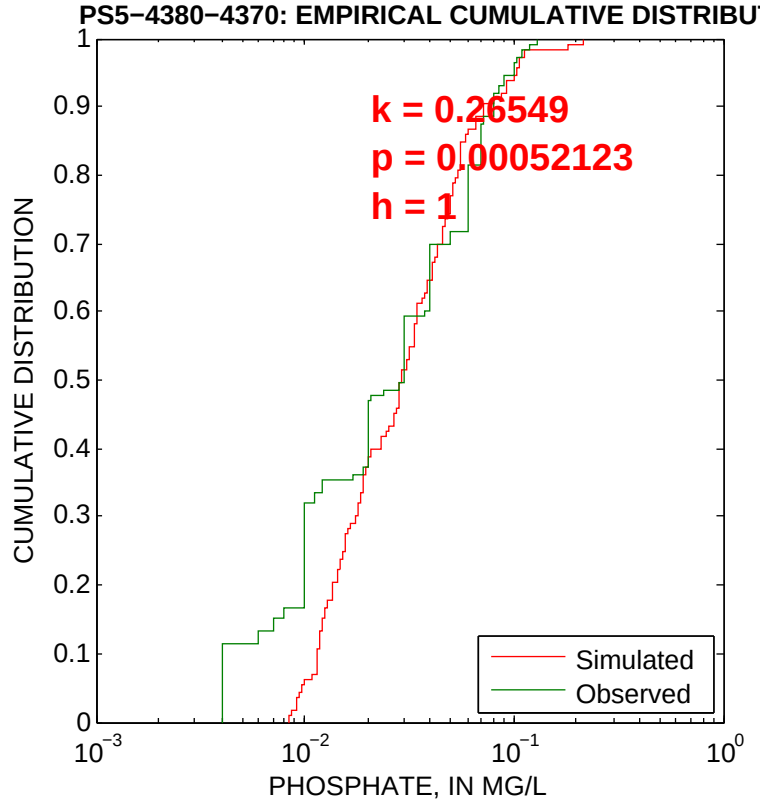












DATA SELECTION

scenario: P620171001WQ | file: PO4X.calib

plot: PO4X - phosphate

Dates: 1/1/1985 – 12/31/201

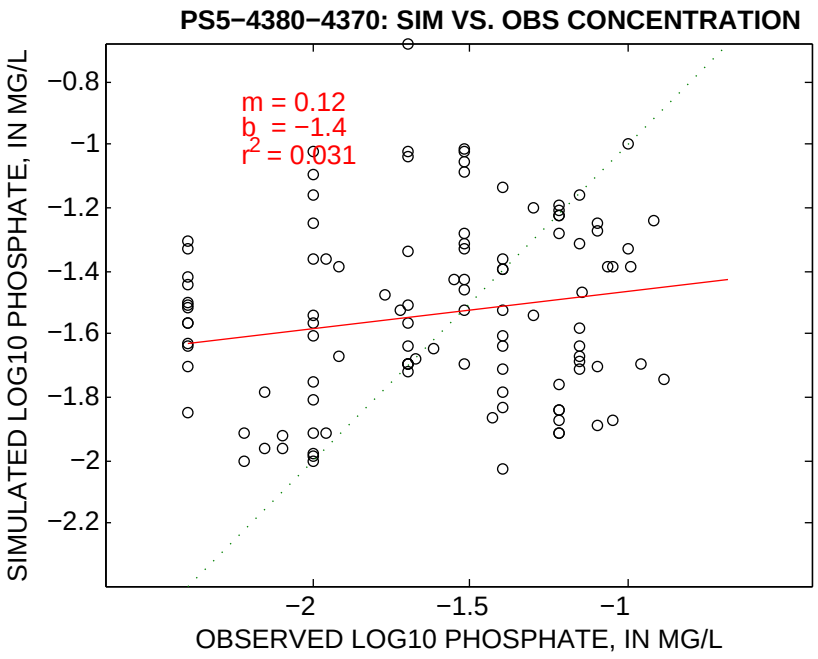
Drive: N/A | Directory: model | Observed: OBS20161101

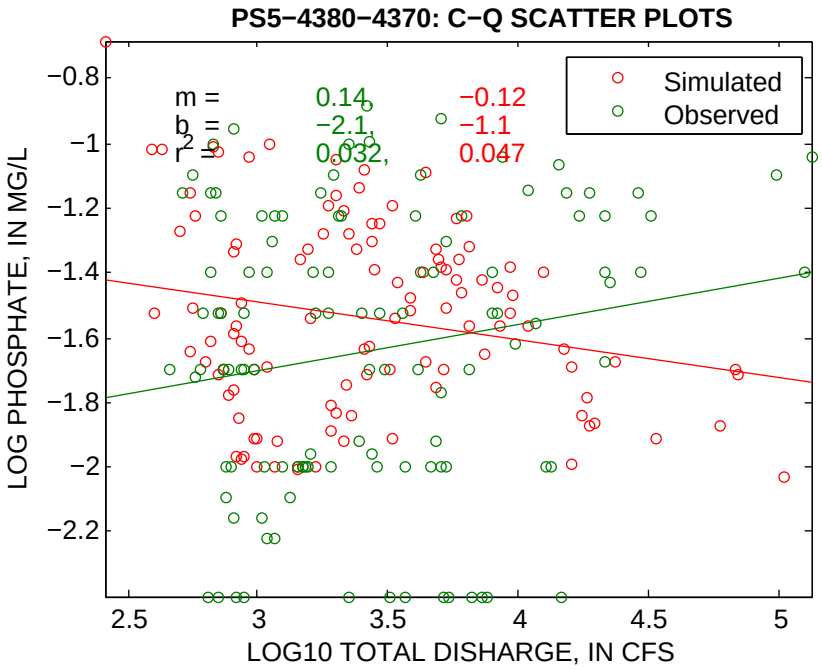
STATISTICS

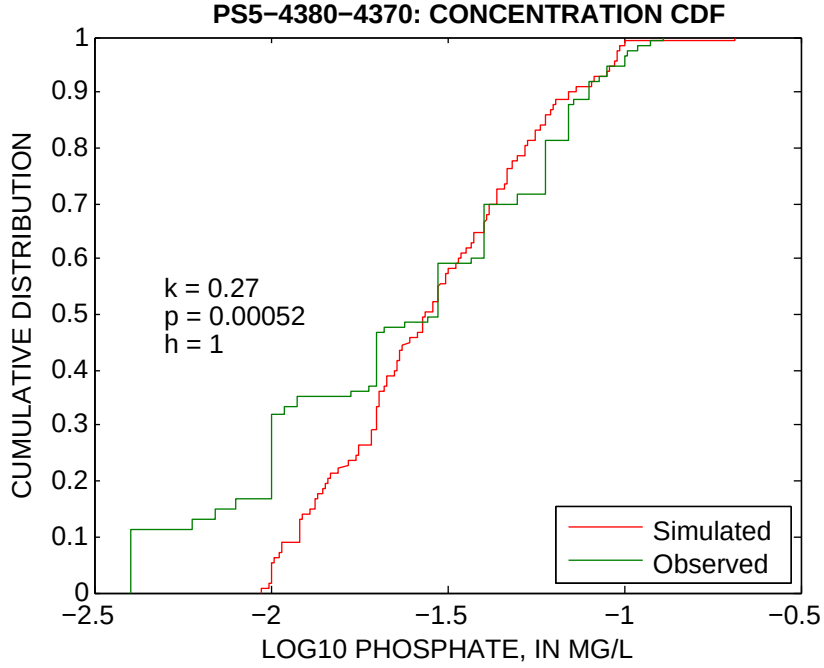
	n	113	113
		observe	simulate
min		0.004	0.0083917
		-2.39794	-2.07615
mean		0.0355398	0.0380122
		-1.63753	-1.54027
media		0.03	0.029048
		-1.52288	-1.53688
max		0.13	0.21608
		-0.886057	-0.665385
varian		0.00091796	0.00108583
		0.193034	0.100224
JB		0.004057	0.001
		0.035012	0.131355
		ra	log
%		6.95658	-5.93944
err.va		0.0021636	0.316491
rel.std.err		2.35696	1.63957
mod.eff		-1.35696	-0.639566

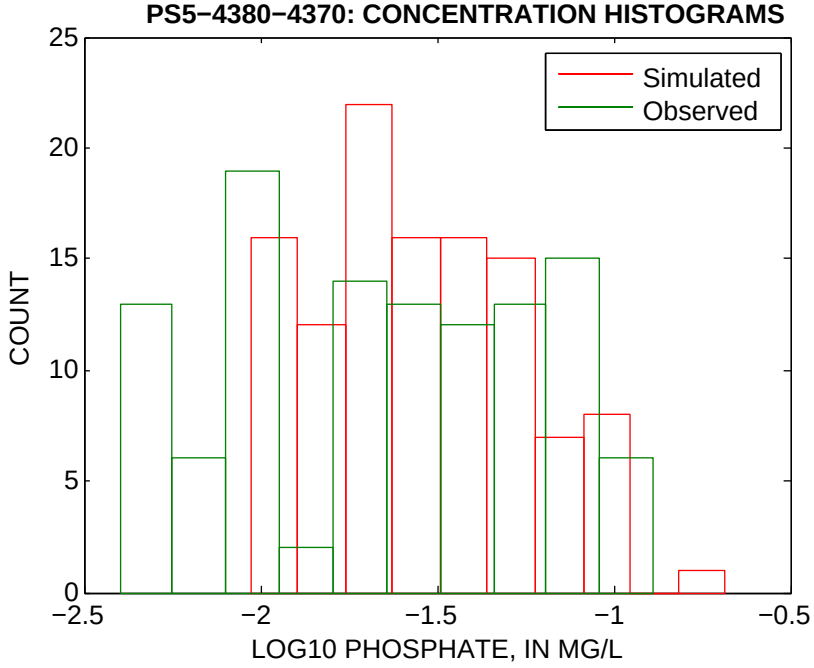
VERSION 2.1

ALL DATA
LOG10

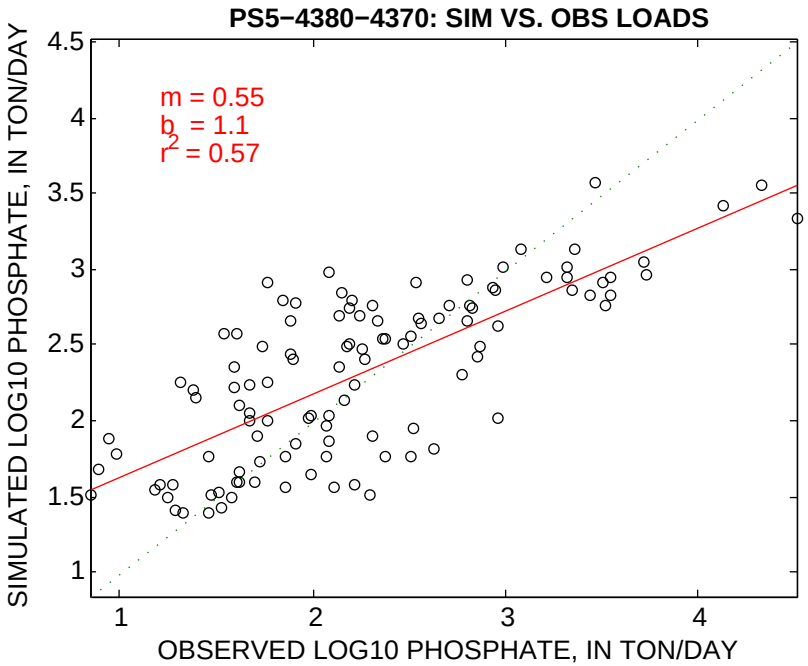


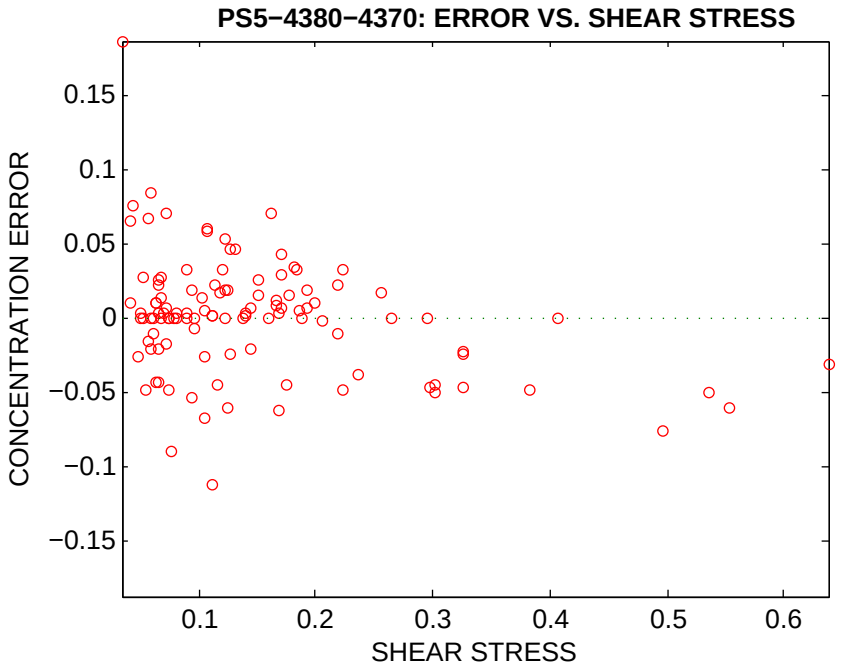


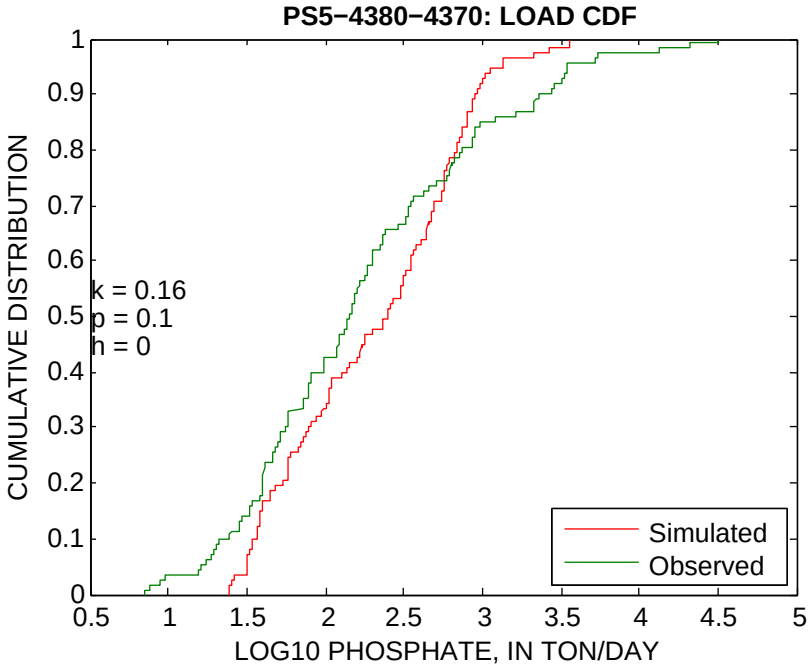


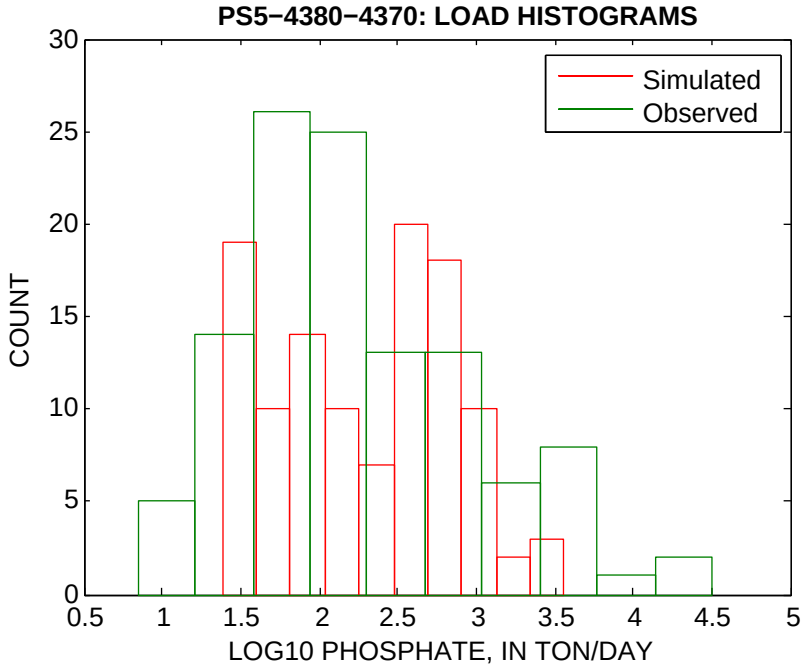


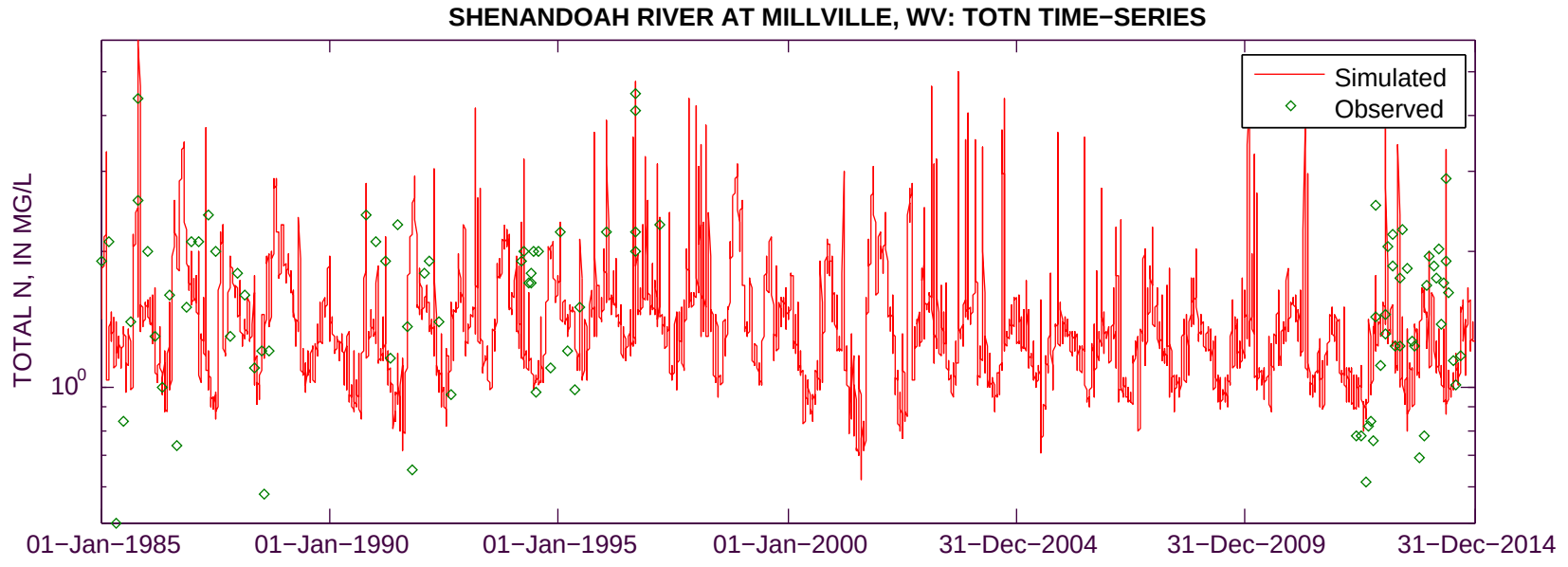
LOAD DATA
LOG10

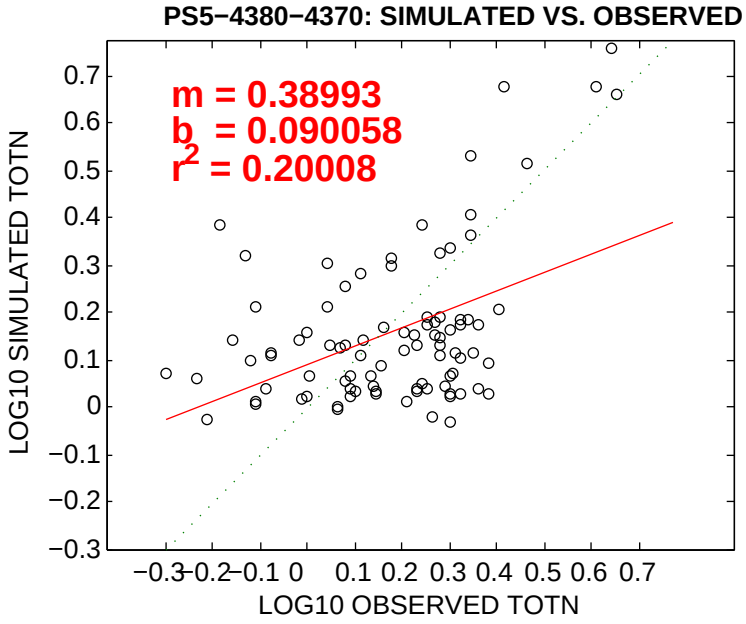


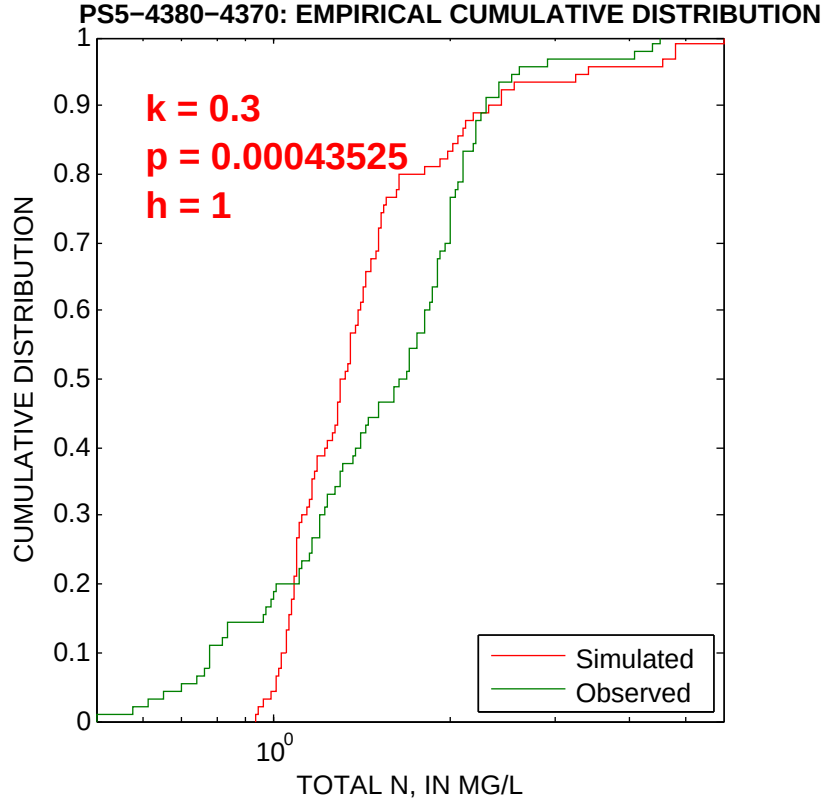












DATA SELECTION

scenario	file
P620171001WQ	TOTN.calib

plot: TOTN - total nitrogen

Dates: 1/1/1985 – 12/31/201

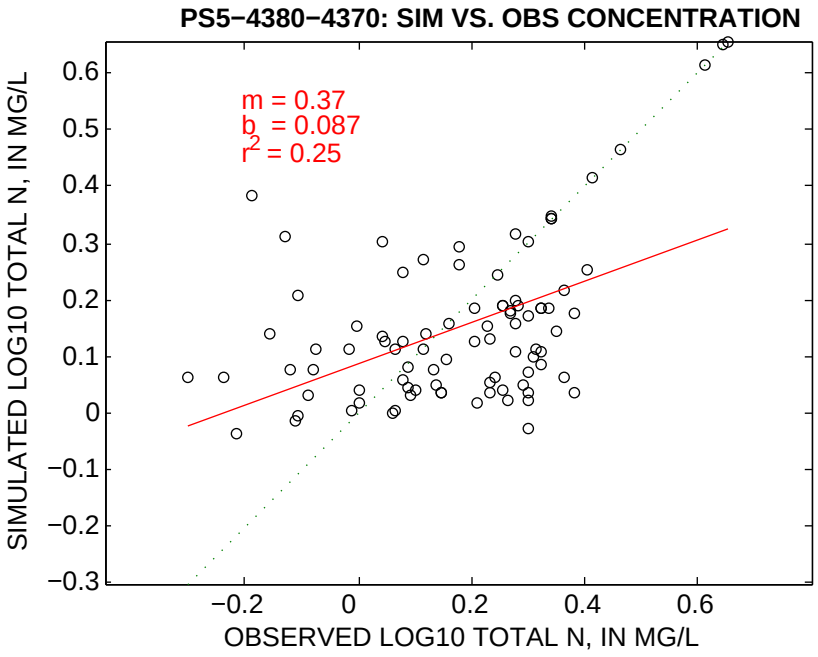
Drive	Directory	Observed
N/A	model	OBS20161101

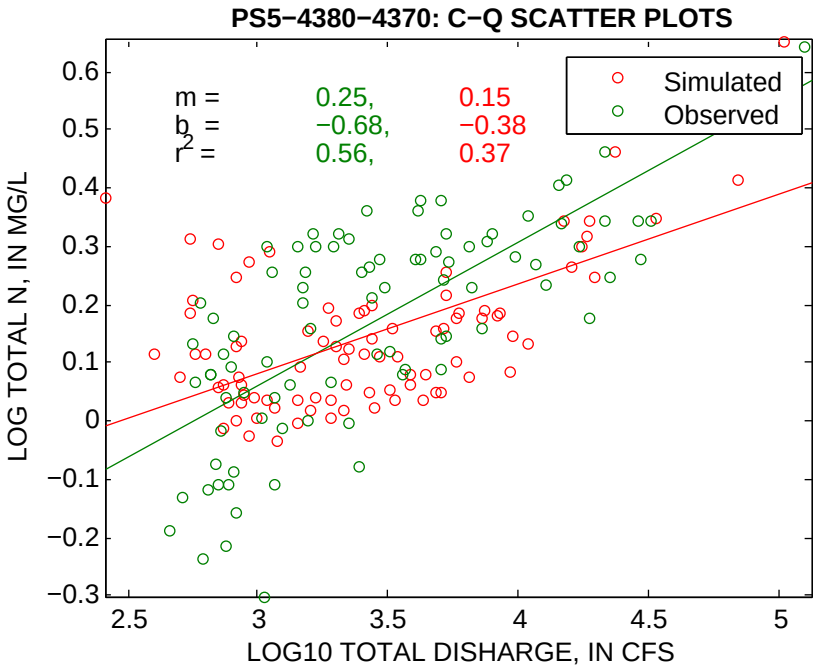
STATISTICS

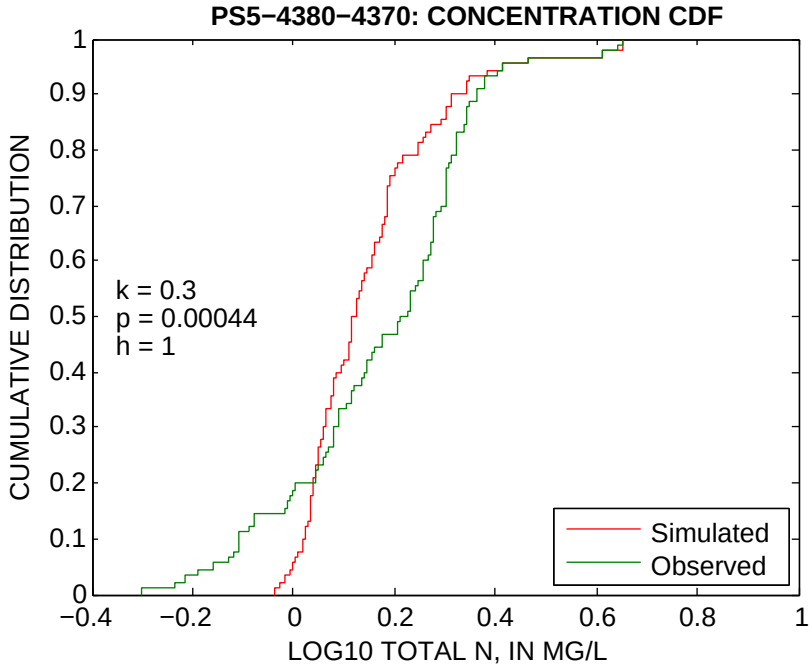
	n	90	90
		observe	simulate
min		0.5	0.93433
		-0.30103	-0.0294997
mean		1.64971	1.57948
		0.177325	0.159202
media		1.6555	1.3132
		0.218851	0.118312
max		4.5	5.7635
		0.653213	0.760686
varian		0.541658	0.766646
		0.0361098	0.0274406
JB		0.001	0.001
		0.5	0.001
		ra	log
%		-4.25742	-10.2201
err.va		0.461881	0.0357221
rel.std.err		0.852716	0.989265
mod.eff		0.147284	0.0107348

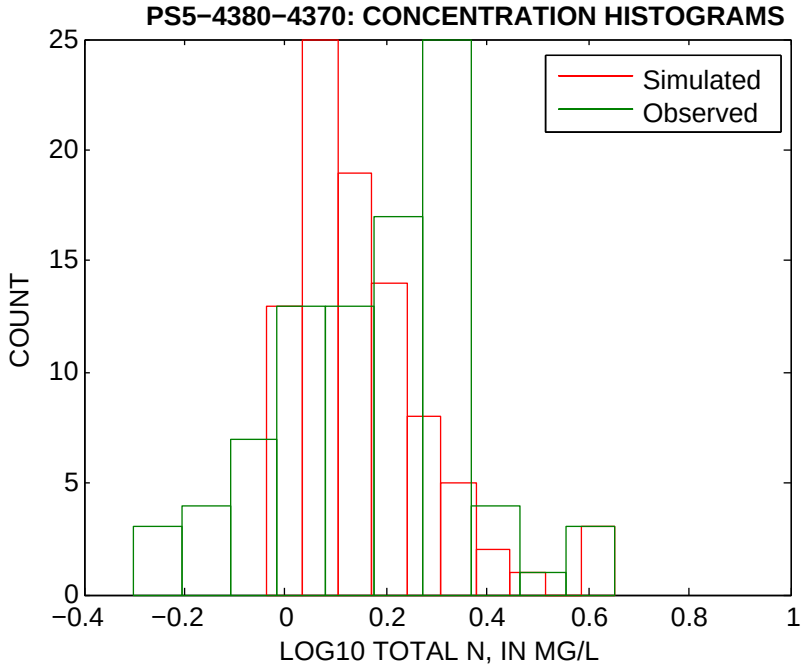
VERSION

ALL DATA
LOG10

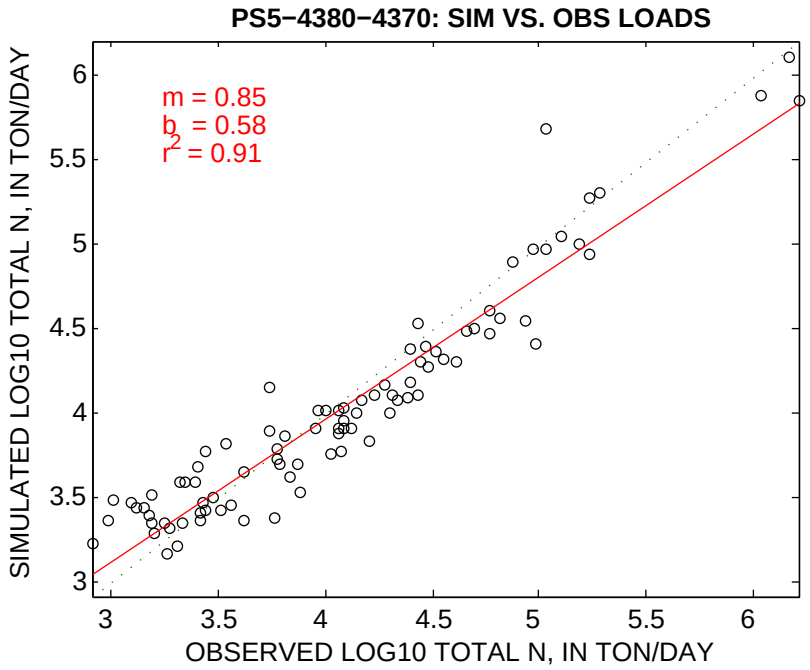


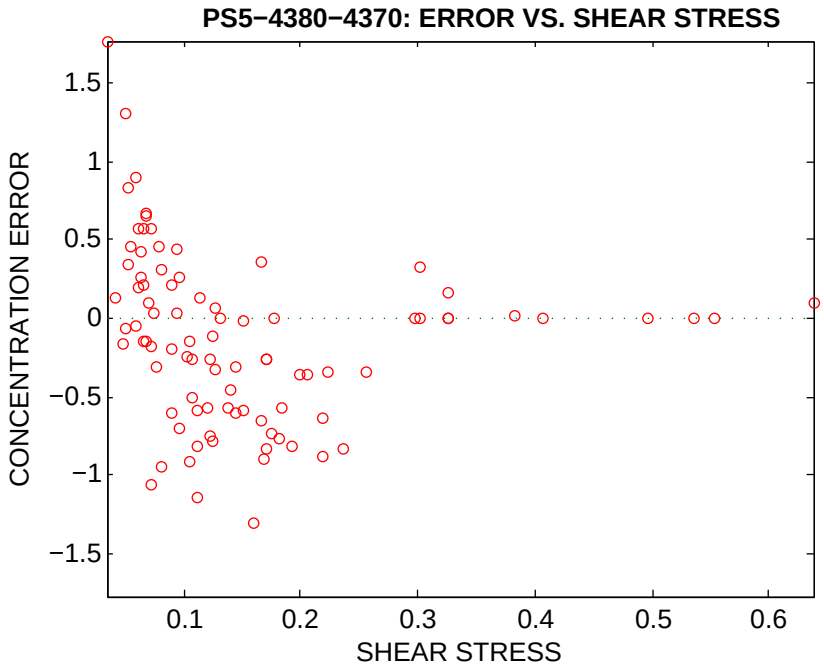


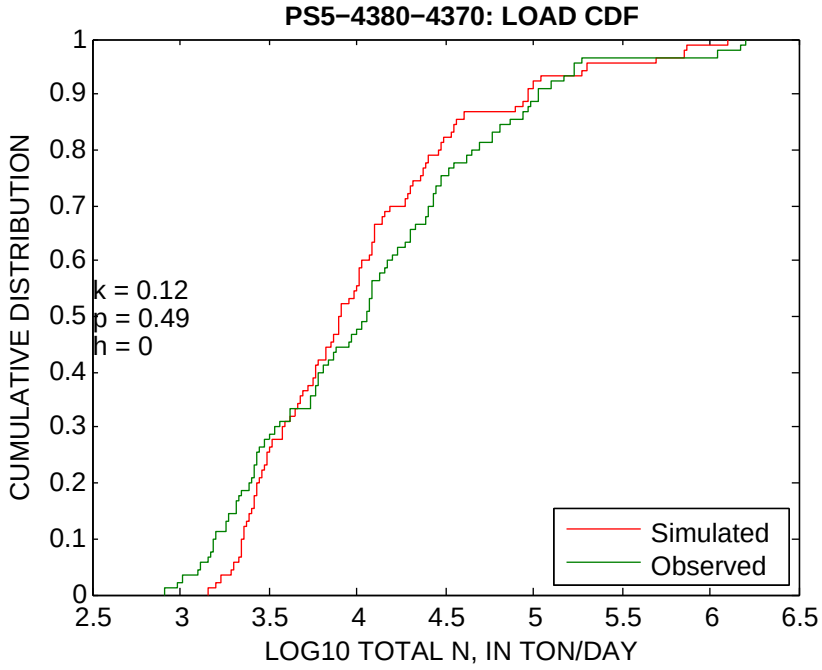


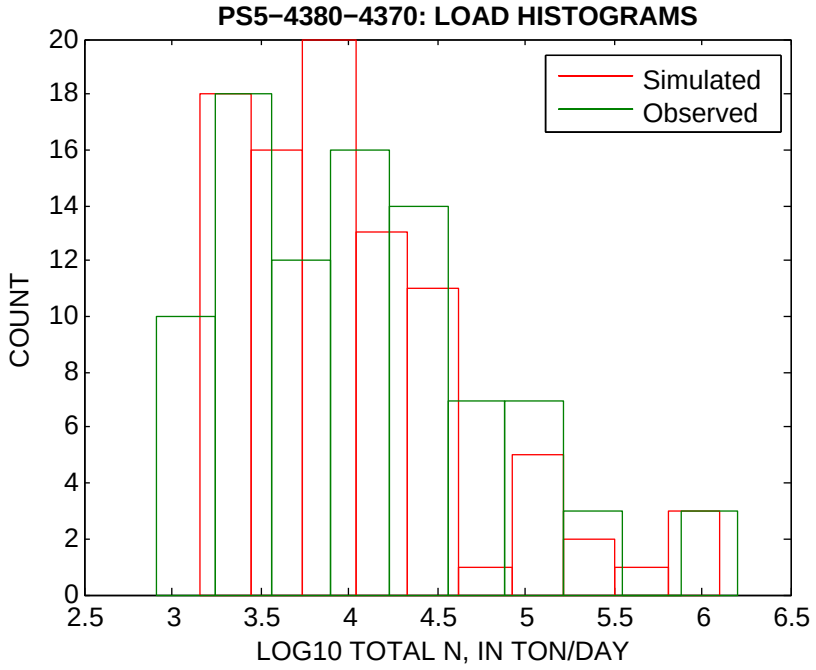


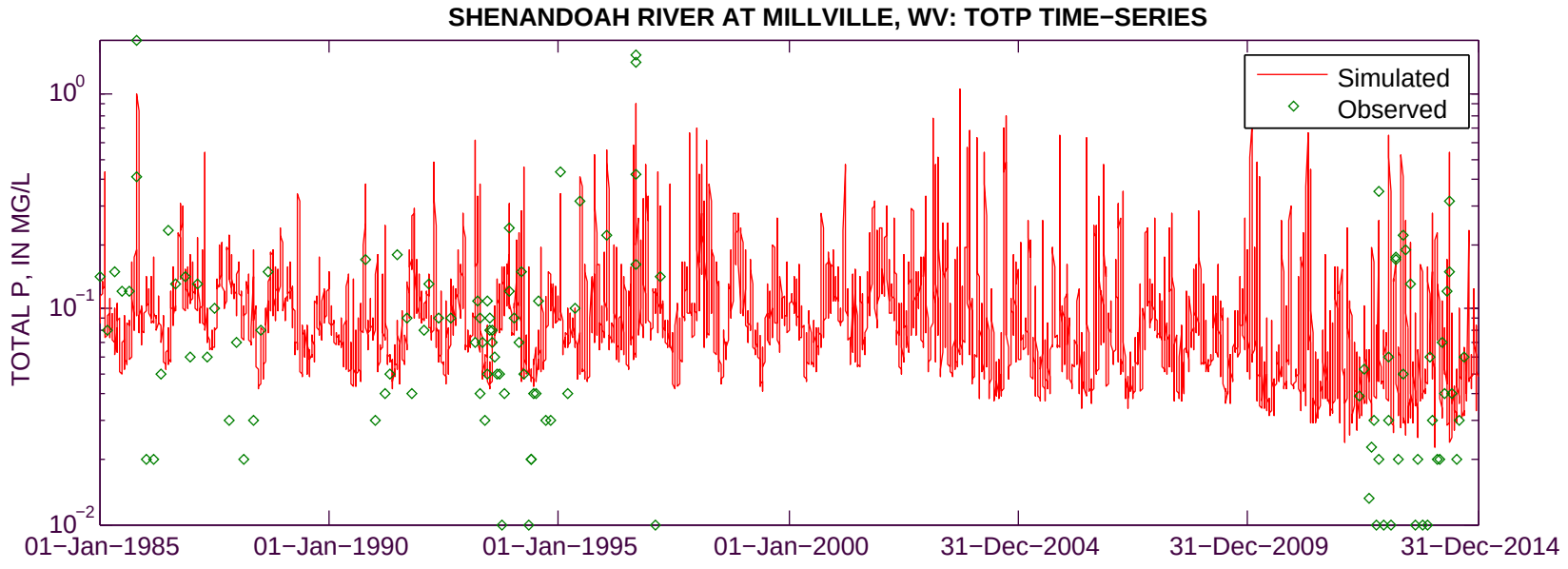
LOAD DATA
LOG10

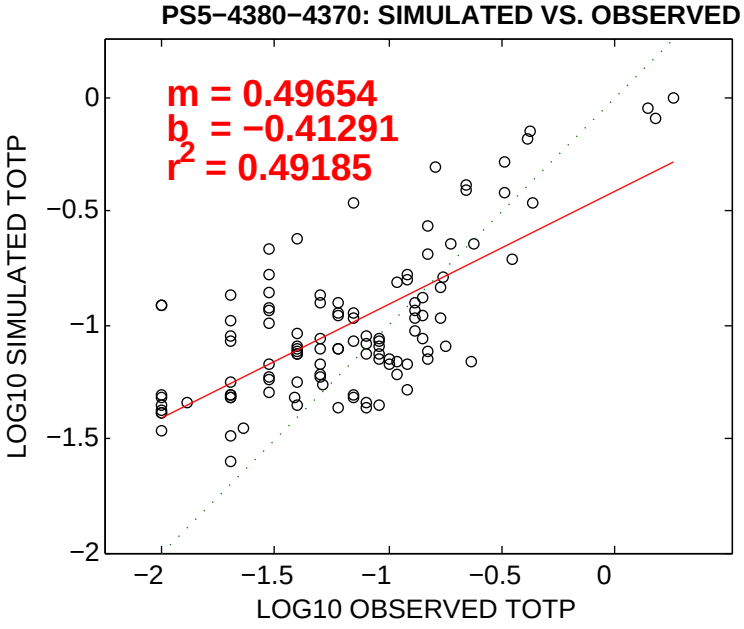


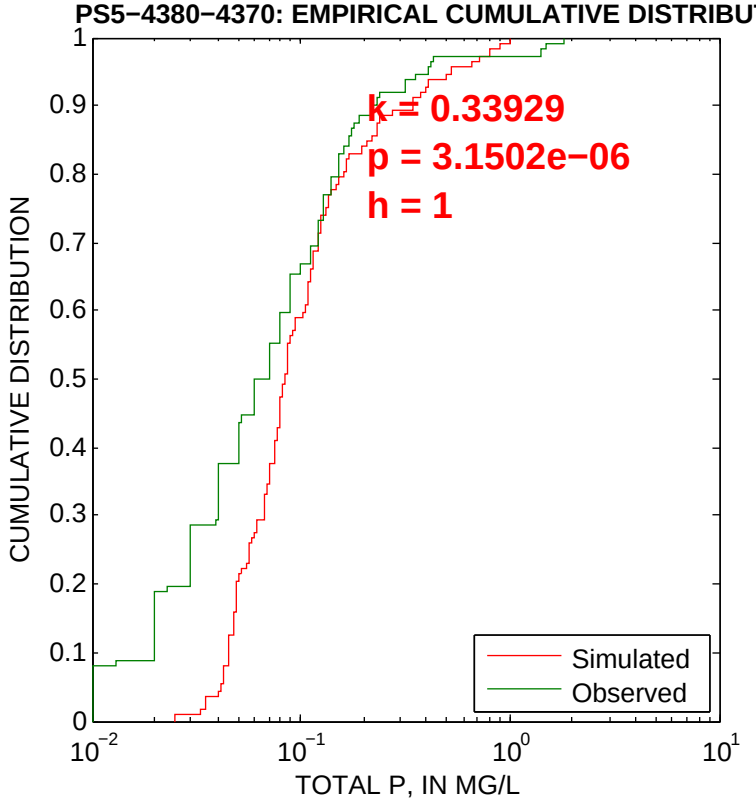












DATA SELECTION

scenario: P620171001WQ | file: TOTP.calib

plot: TOTP - total phosphorus

Dates: 1/1/1985 – 12/31/201

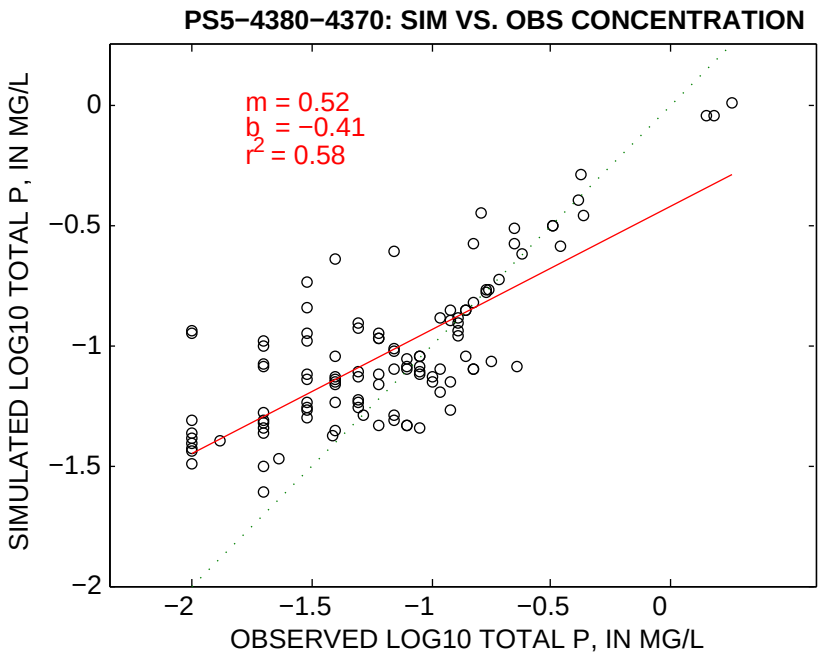
Drive | Directory | Observed: N/A | model | OBS20161101

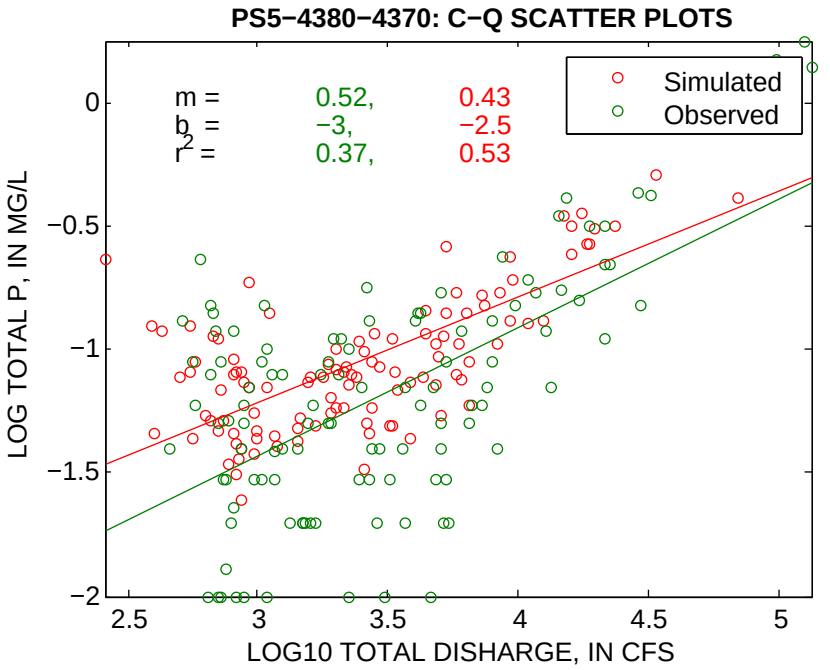
STATISTICS

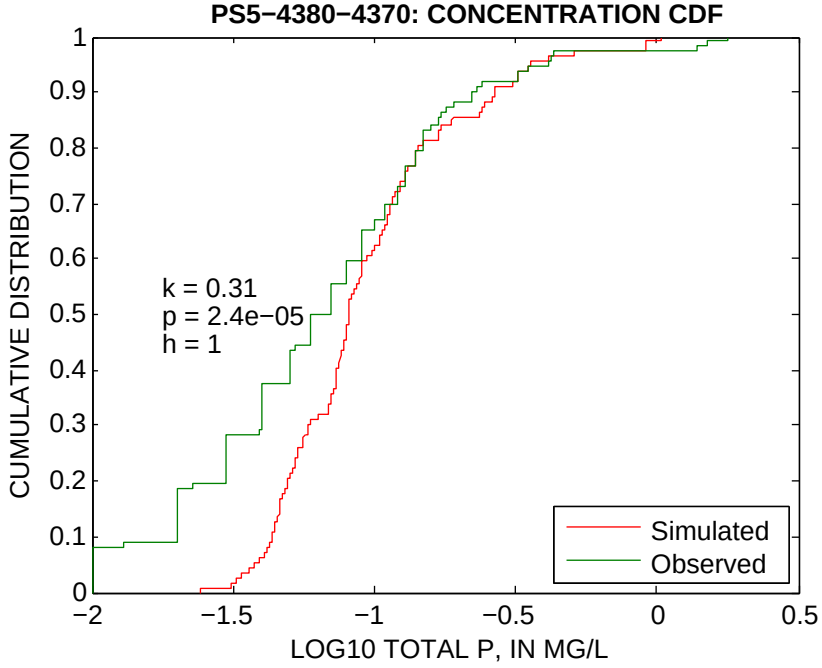
		observe	simulate
n		112	112
min		0.01	0.025194
		-2	-1.5987
mean		0.130545	0.144851
		-1.18693	-1.00227
media		0.065	0.083945
		-1.18838	-1.07601
max		1.8	1.007
		0.255273	0.00302947
varian		0.0657703	0.0307643
		0.221318	0.110942
JB		0.001	0.001
	☑	0.067389	0.001579
		ra	log
%		10.9589	-15.5572
err.va		0.0198795	0.146876
rel.std.err		0.302256	0.663645
mod.eff		0.697744	0.336355

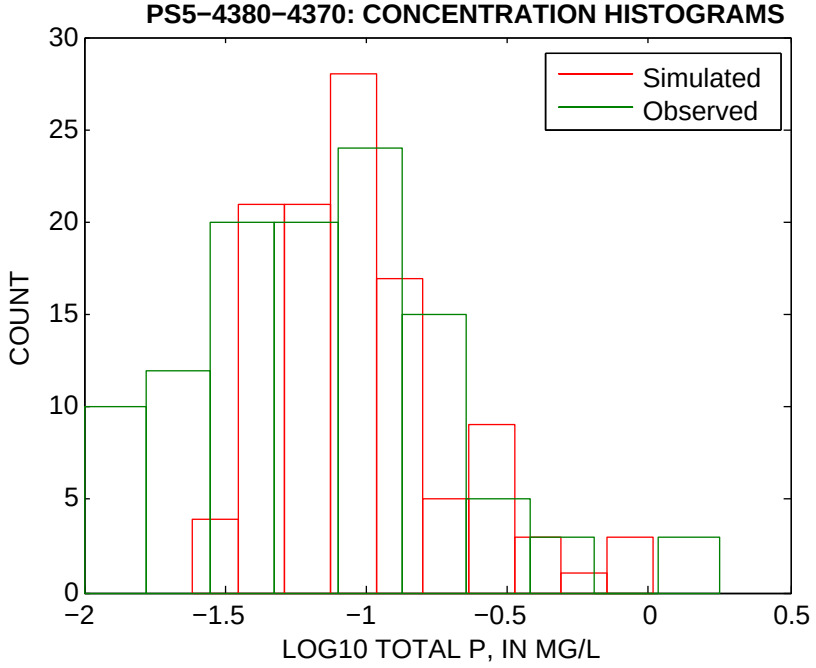
VERSION 2.1

ALL DATA
LOG10

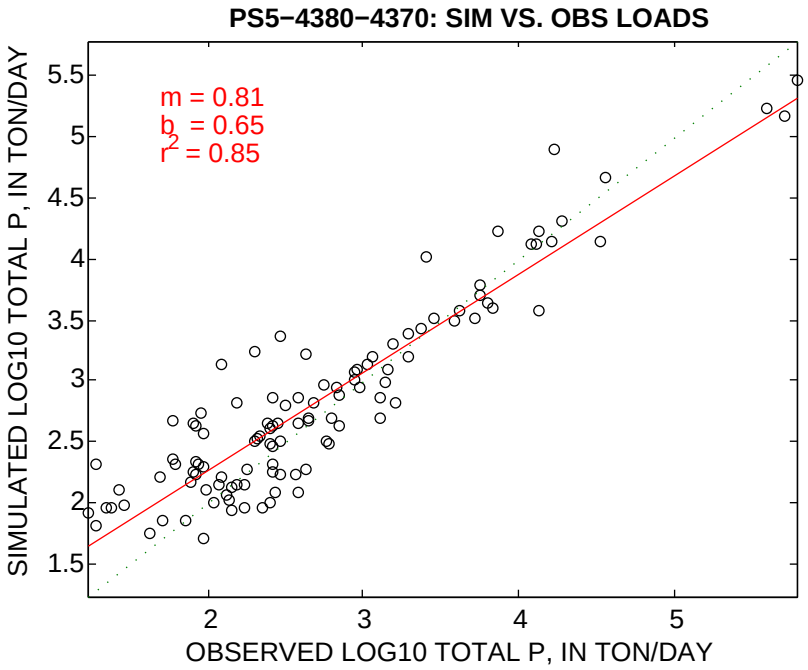


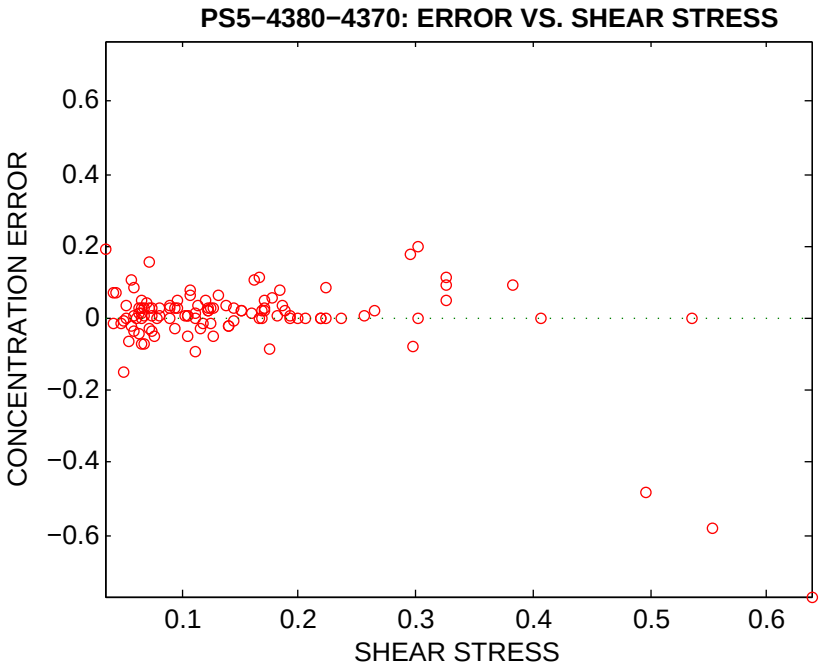


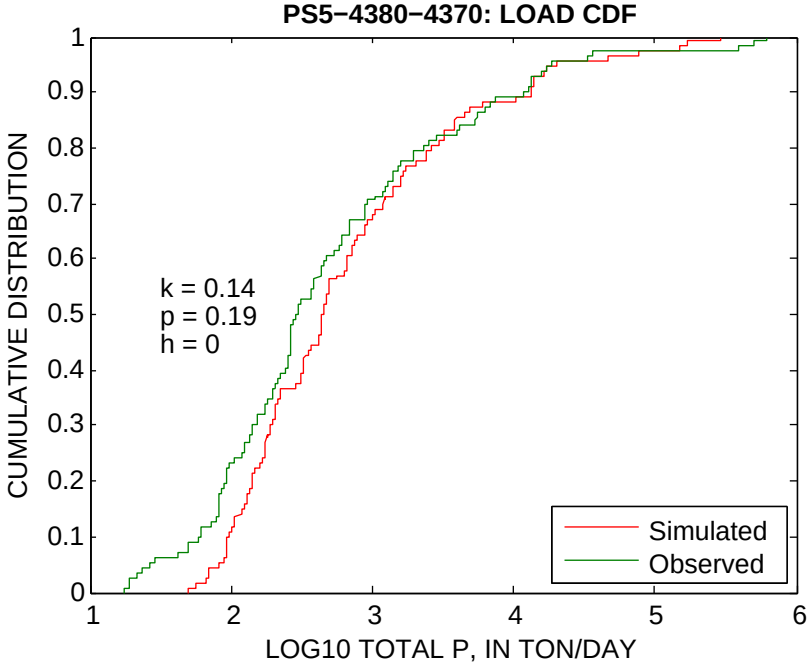


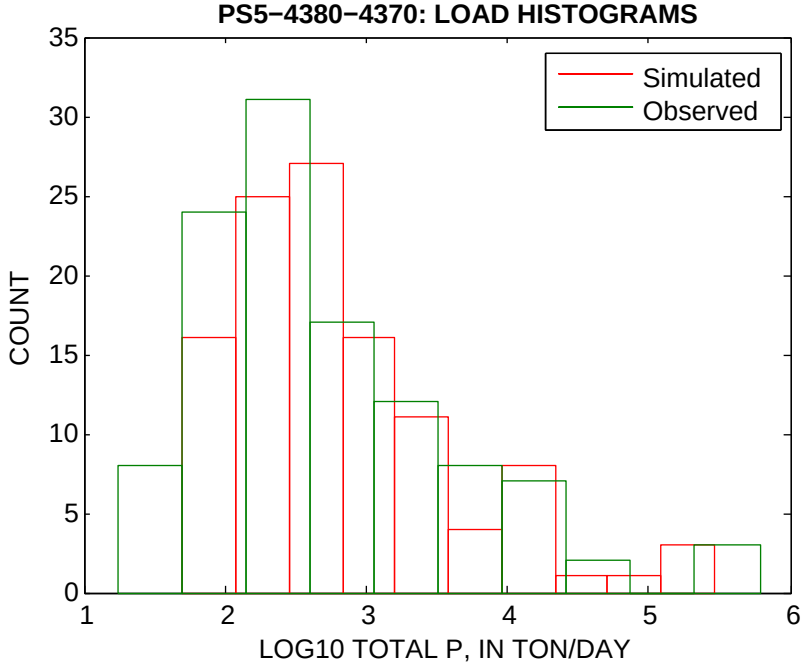


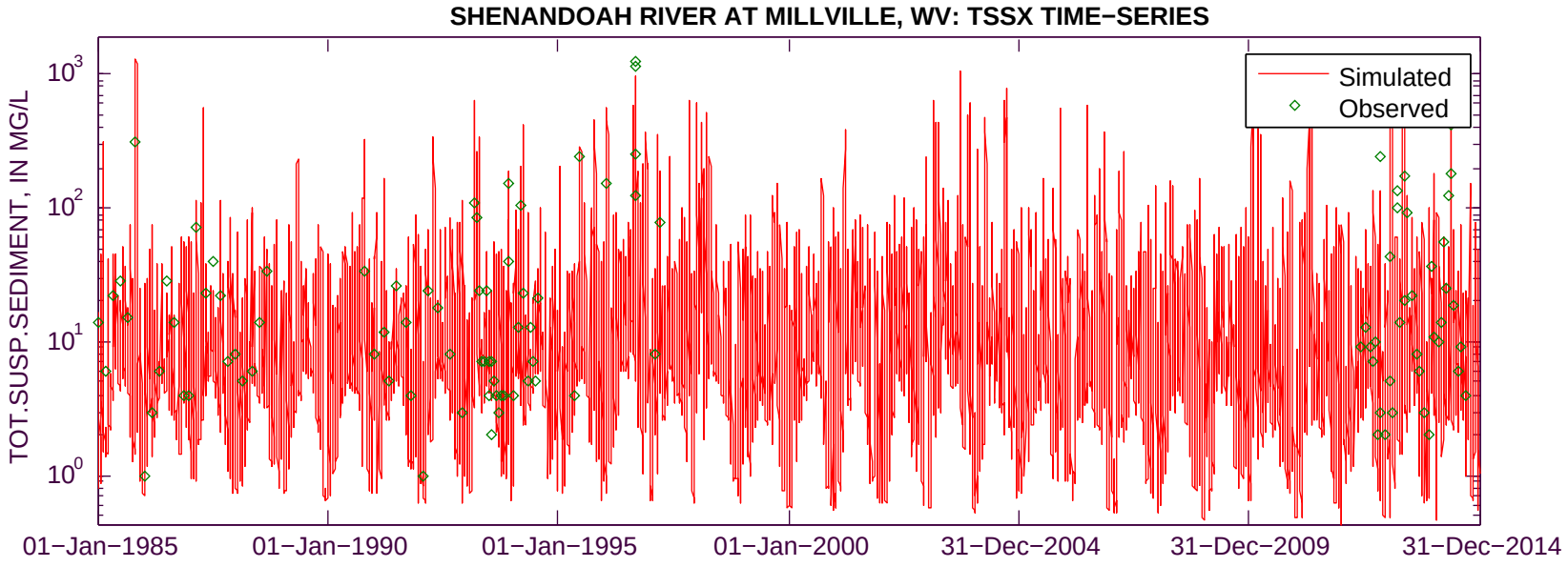
LOAD DATA
LOG10

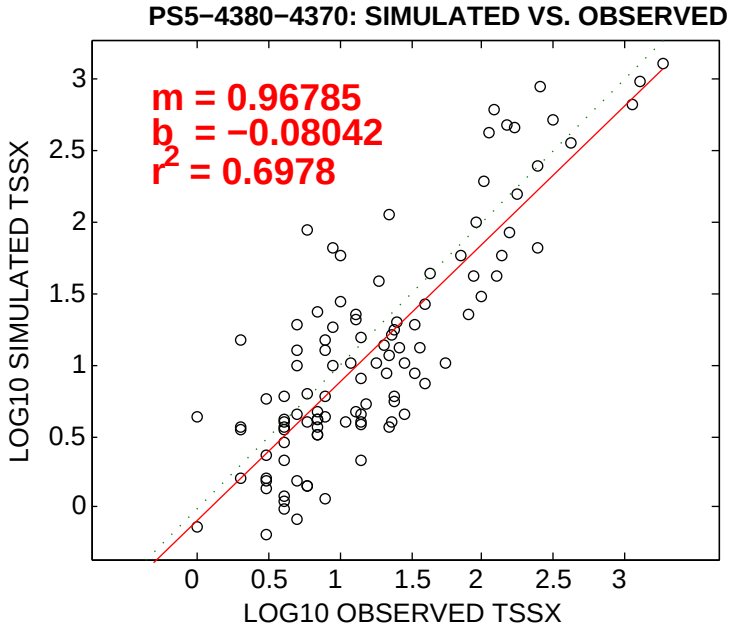


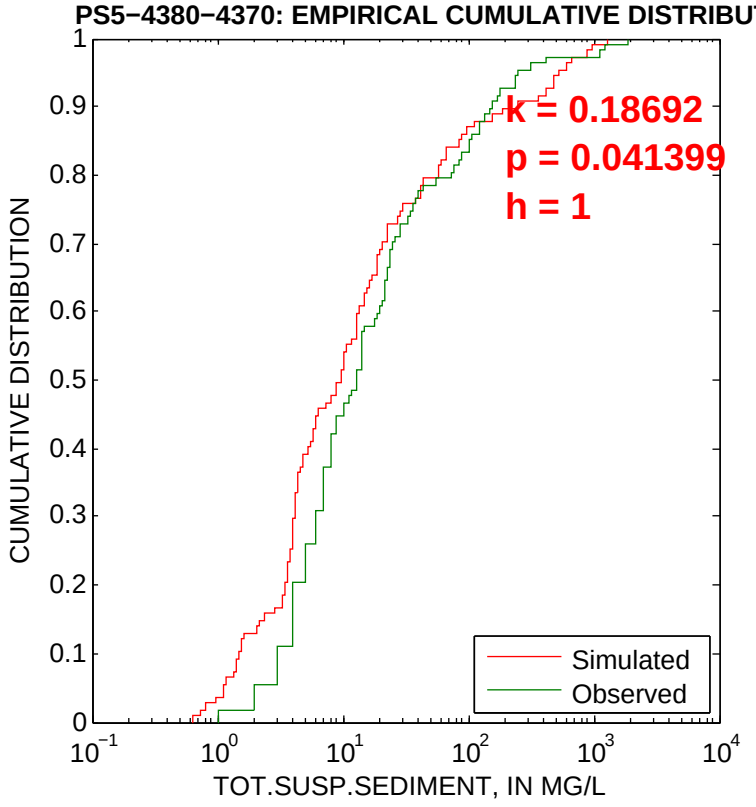












DATA SELECTION

scenario	file
P620171001WQ	TSSX.calib

plot: TSSX - total suspended ...

Dates: 1/1/1985 – 12/31/201

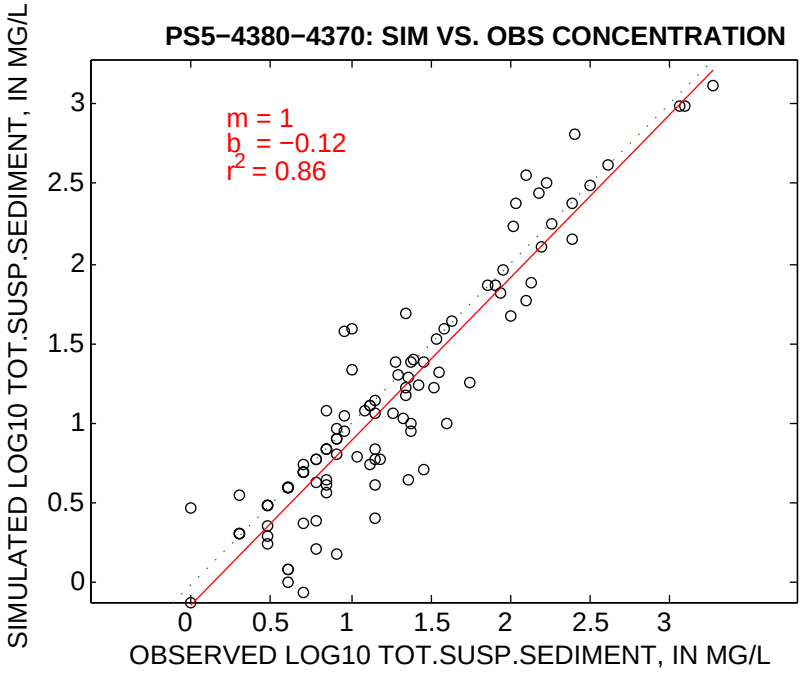
Drive	Directory	Observed
N/A	model	OBS20161101

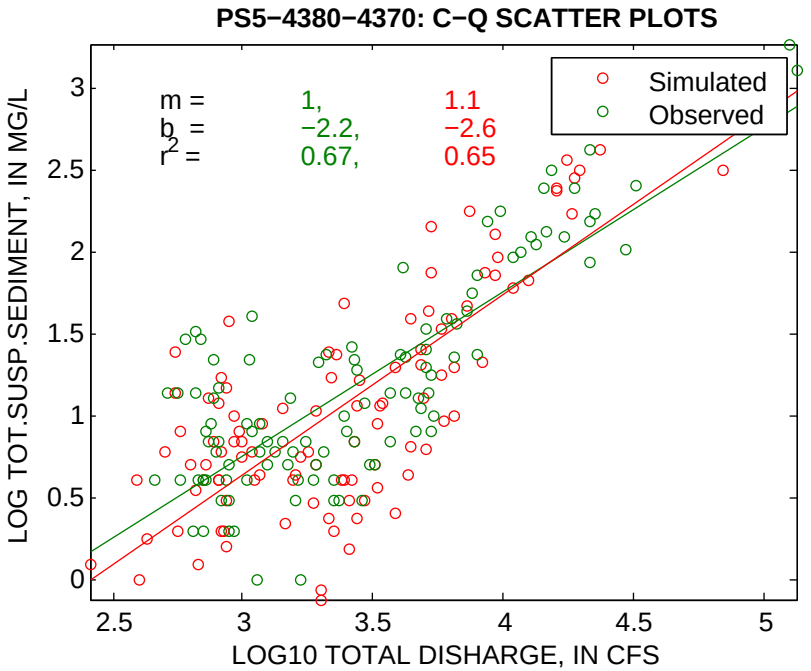
STATISTICS

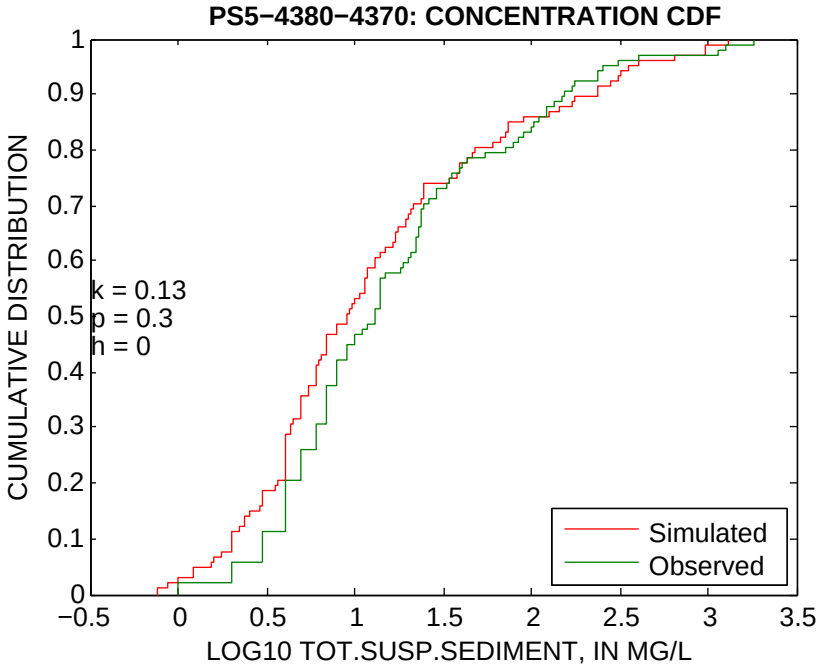
	n	observe	simulate
		107	107
min		1	0.63547
		0	-0.196905
mean		79	82.3563
		1.21965	1.10002
media		13	9.9203
		1.11394	0.996525
max		1850	1295.8
		3.26717	3.11254
varian		59483.4	44449.4
		0.455503	0.611478
JB		0.001	0.001
		0.009414	0.013551
		ra	log
%		4.24847	-9.80844
err.va		15881	0.199708
rel.std.err		0.266981	0.438434
mod.eff		0.733019	0.561566

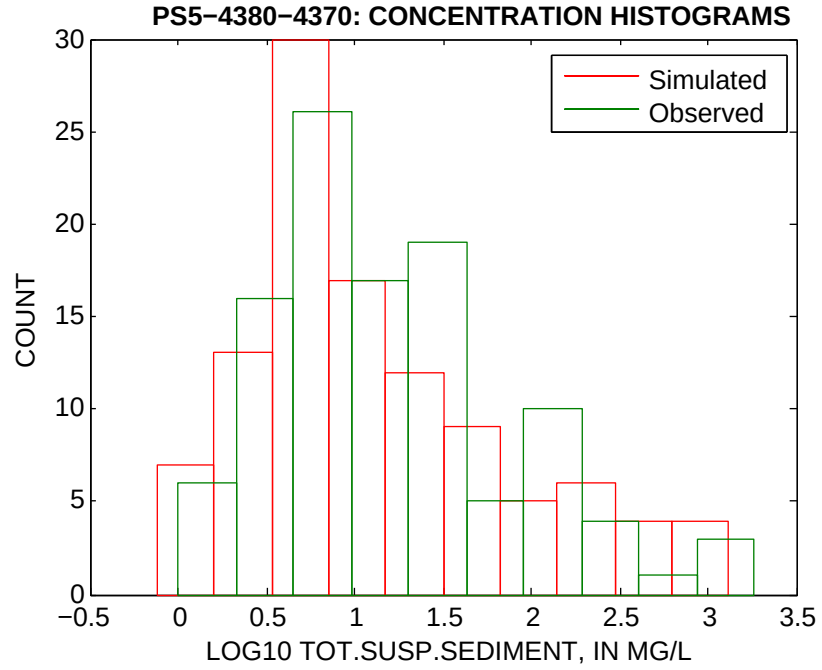
VERSION 2.1

ALL DATA
LOG10

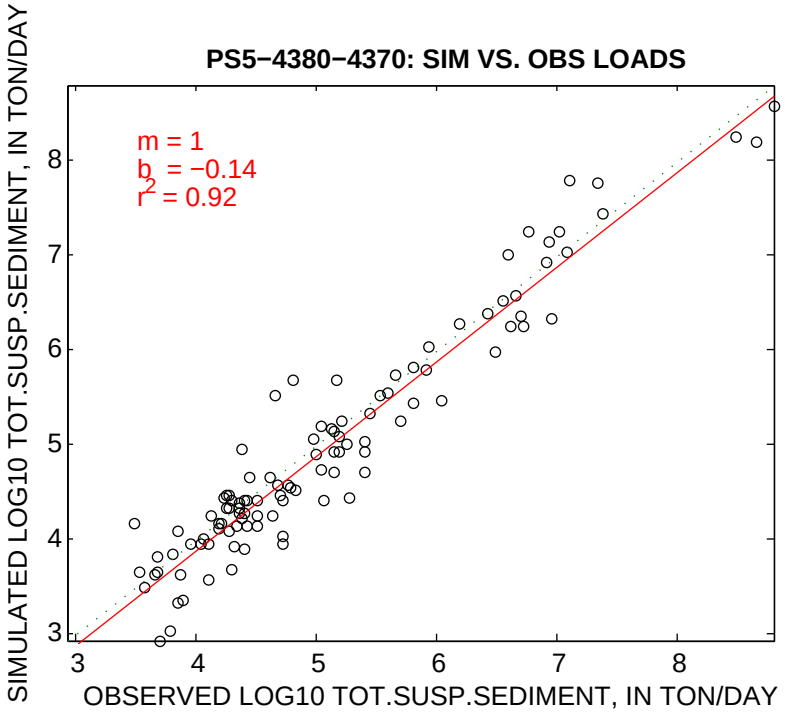


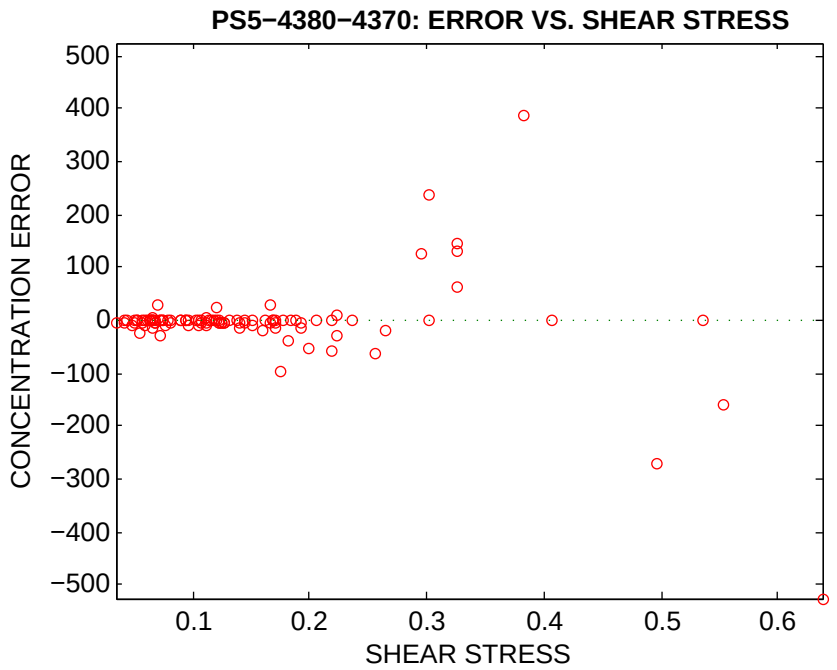


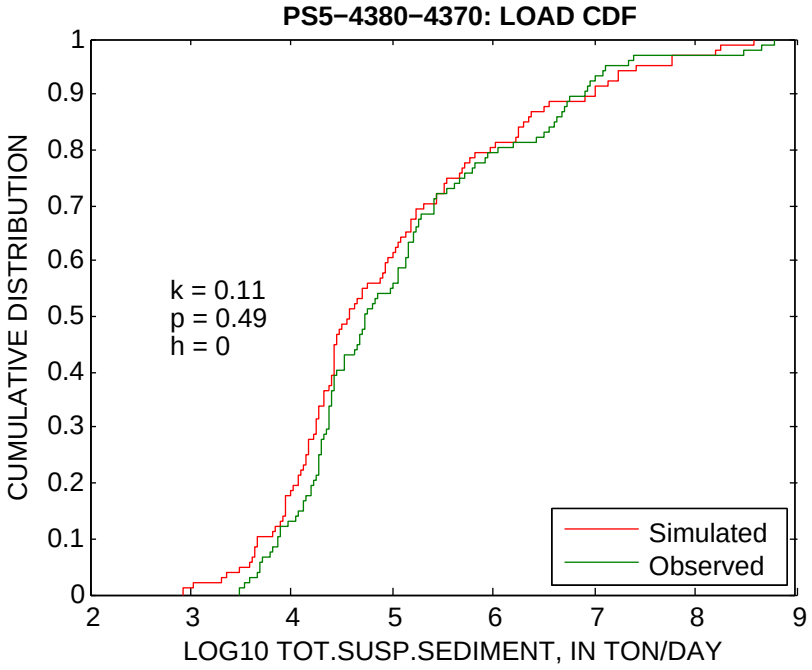


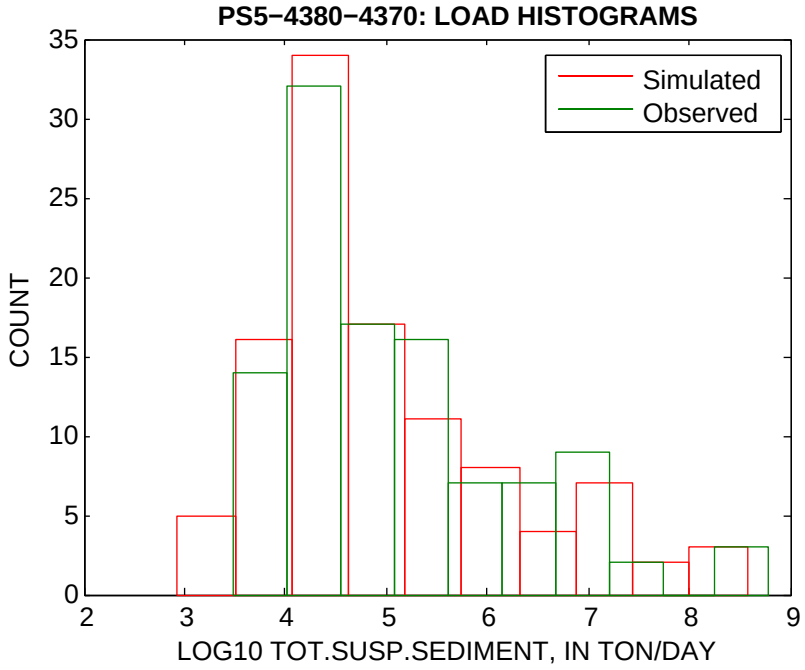


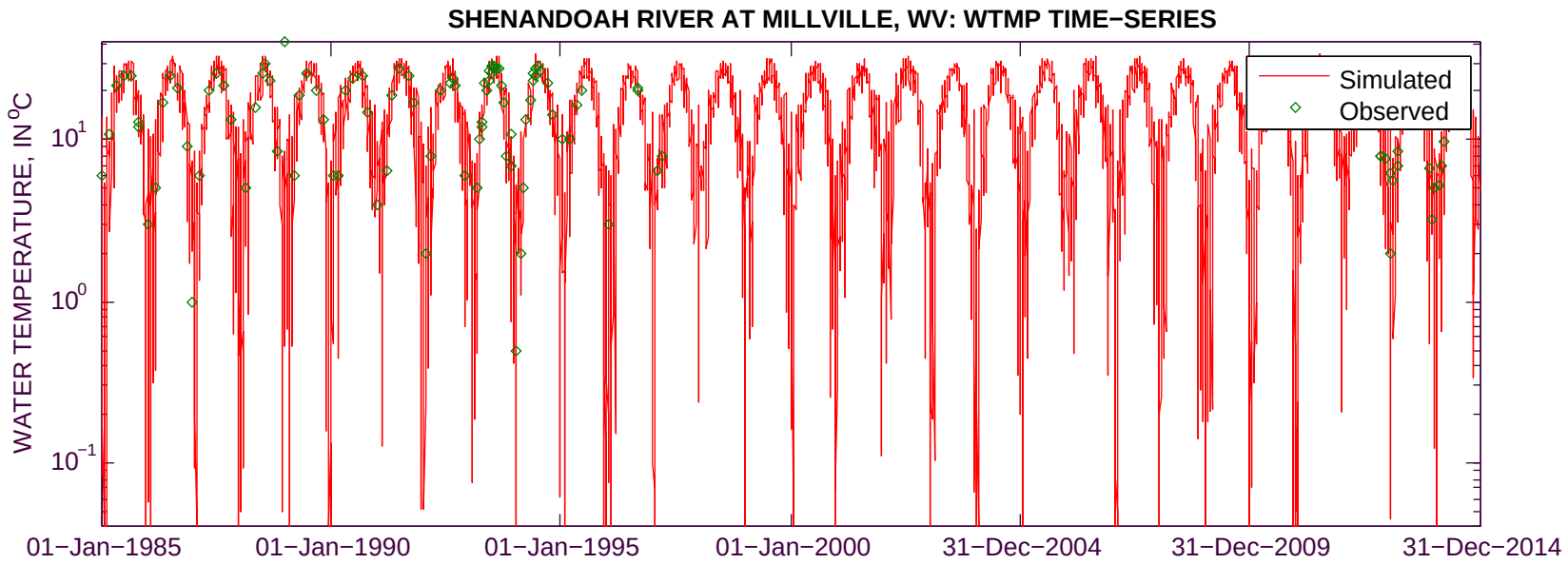
LOAD DATA
LOG10

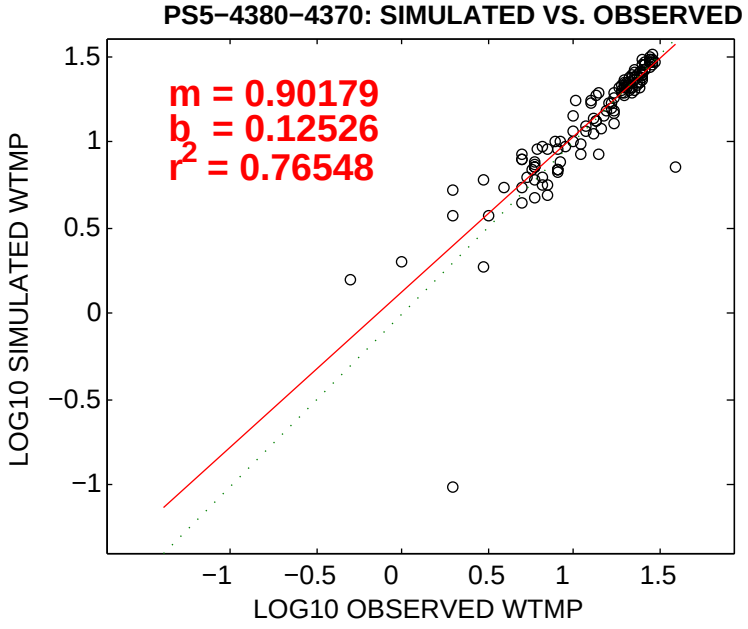


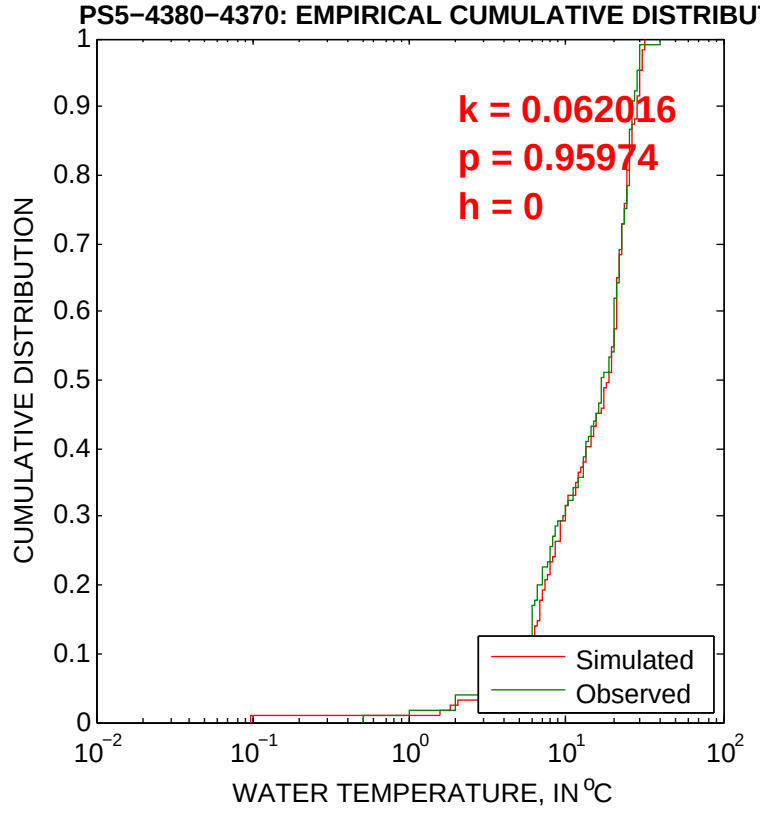












DATA SELECTION

scenario	file
P620171001WQ	WTMP.calib

plot: WTMP - water tempera...

Dates: 1/1/1985 – 12/31/201

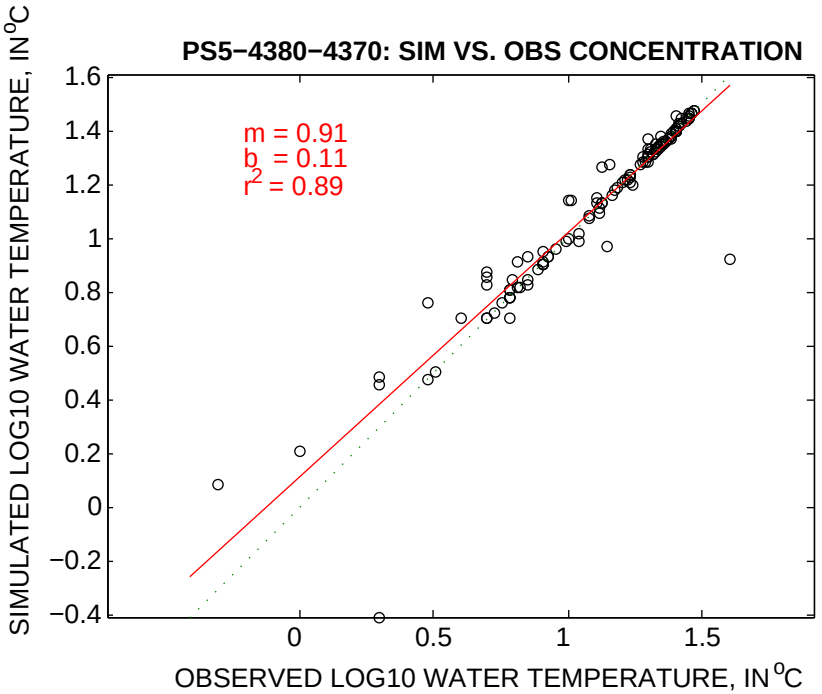
Drive	Directory	Observed
N/A	model	OBS20161101

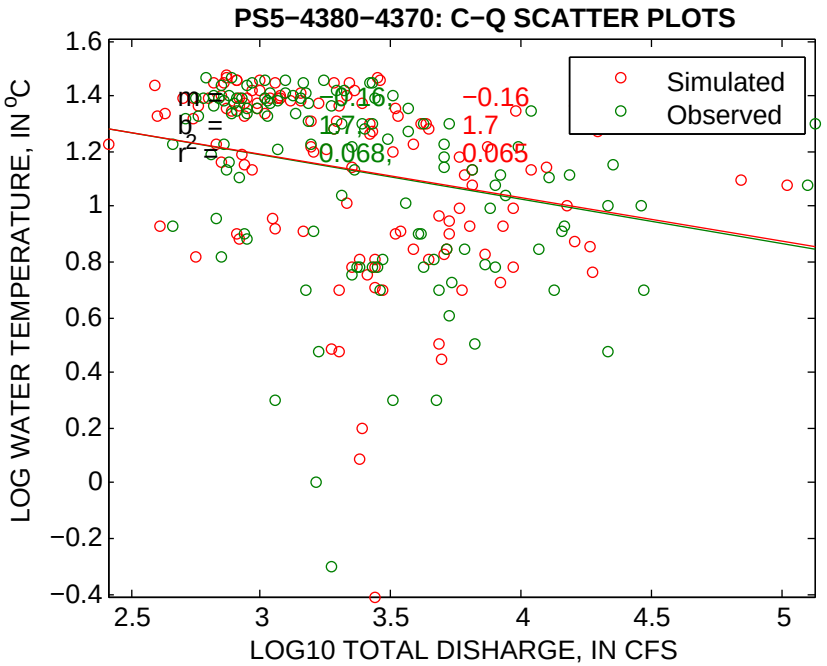
STATISTICS

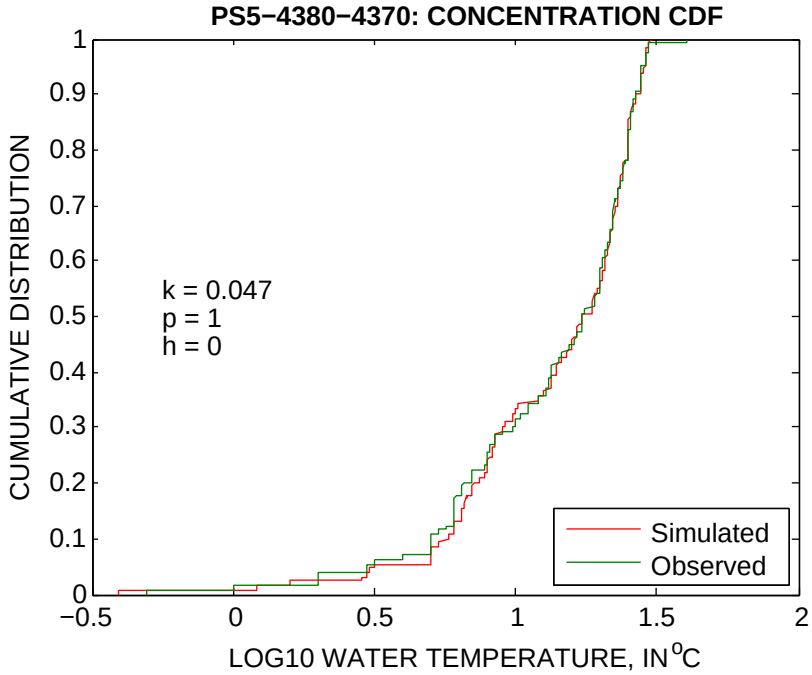
	n	129	129
		observe	simulate
min		0.5	0.098351
		-0.30103	-1.00722
mean		16.3831	16.8272
		1.12184	1.13692
media		17	18.605
		1.23045	1.26963
max		40	32.171
		1.60206	1.50746
varian		73.8844	73.5342
		0.110847	0.117759
JB		0.045454	0.021984
		0.001	0.001
		ra	log
%		2.71029	1.34451
err.va		13.2447	0.0289149
rel.std.err		0.179262	0.260854
mod.eff		0.820738	0.739146

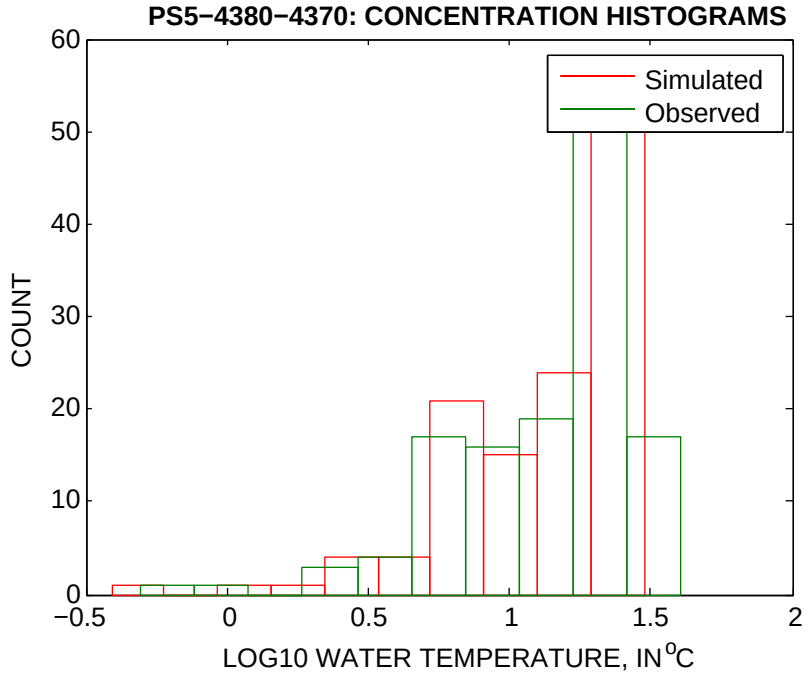
VERSION 2.1

ALL DATA
LOG10

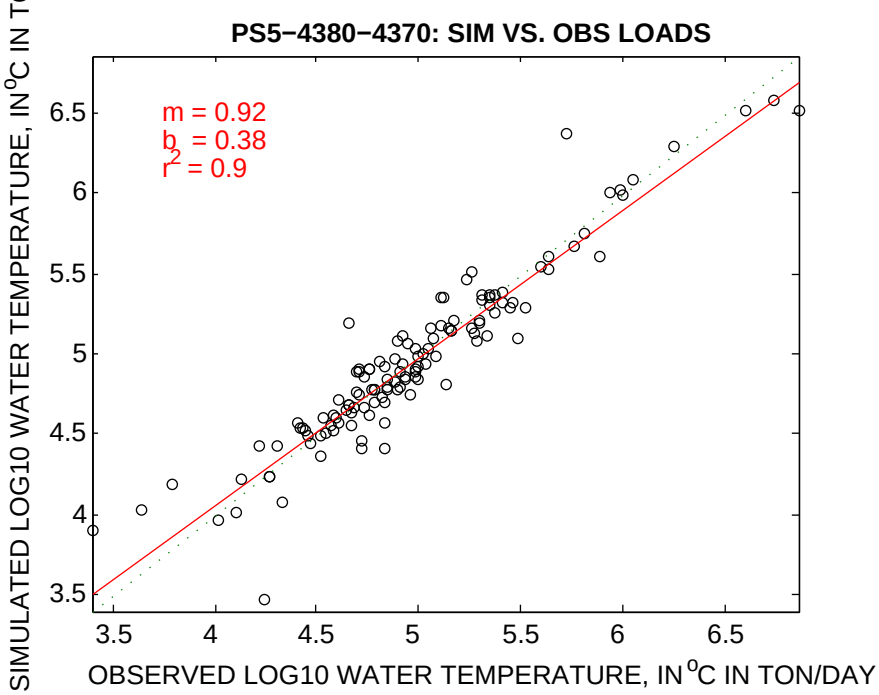


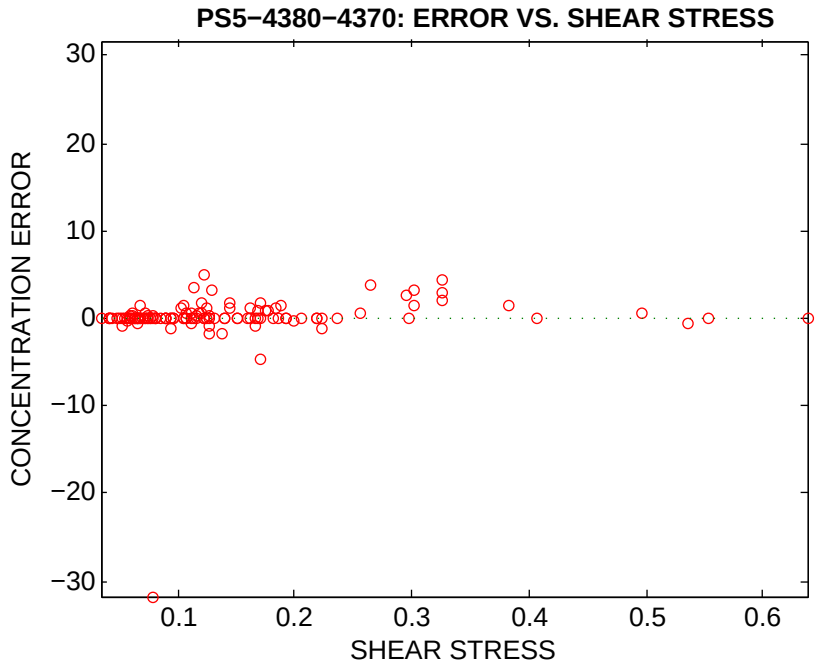


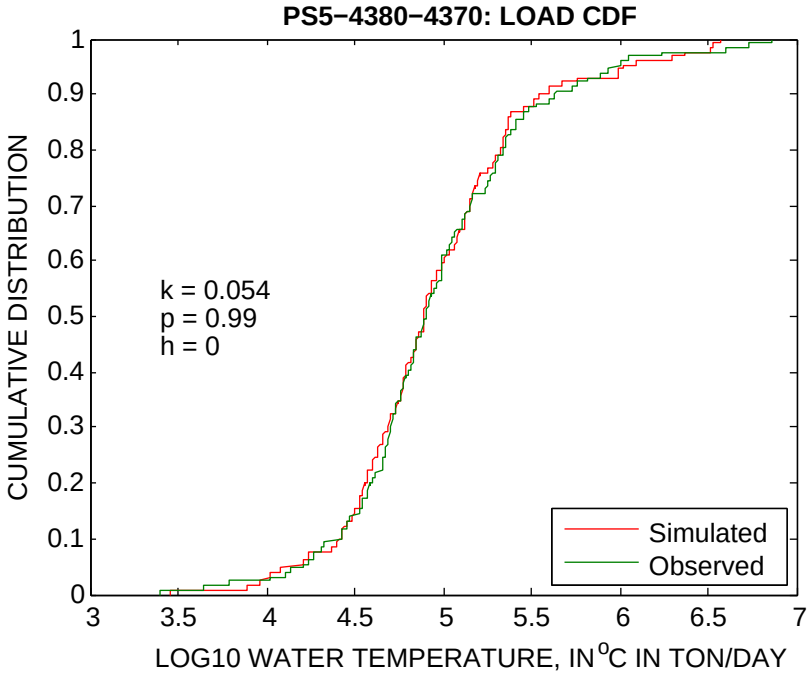


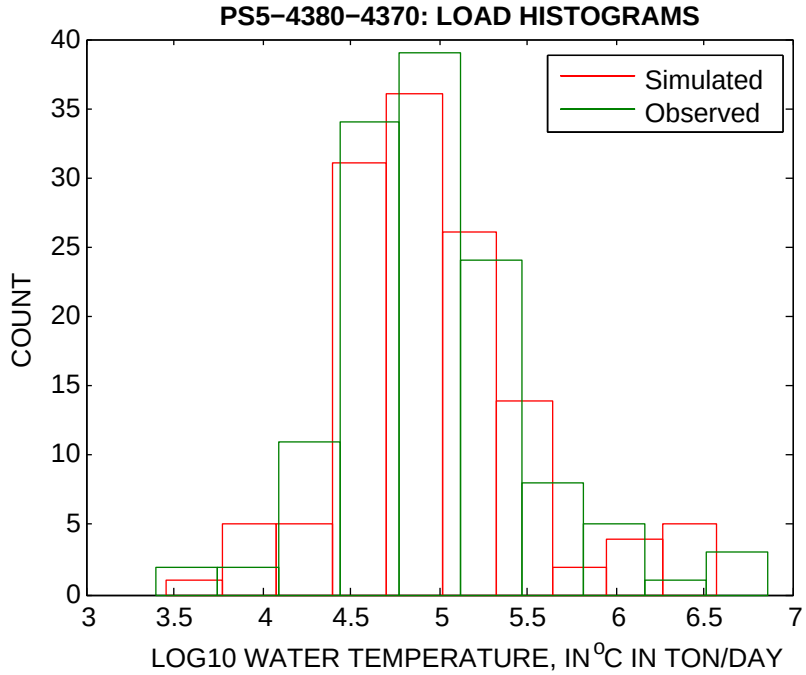


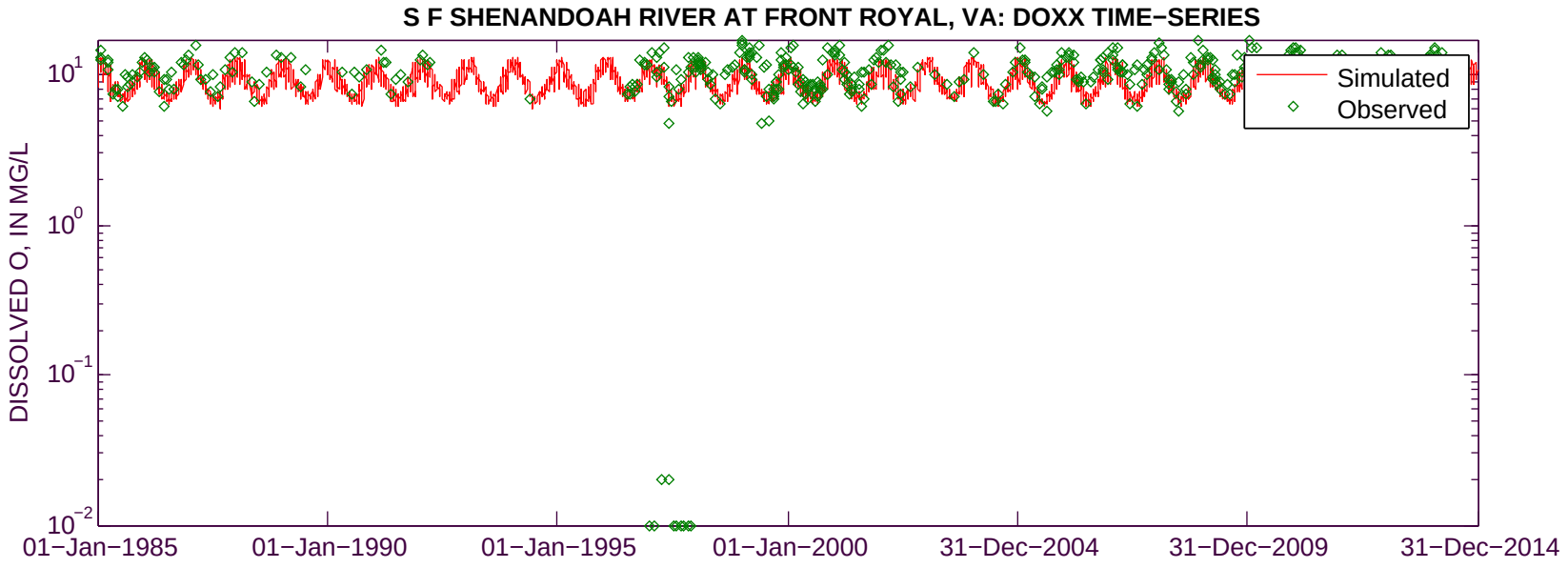
LOAD DATA
LOG10

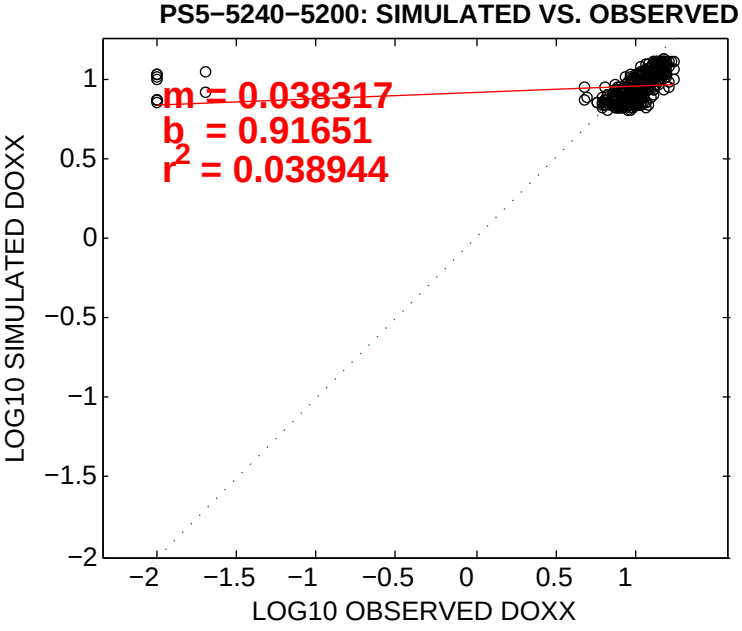


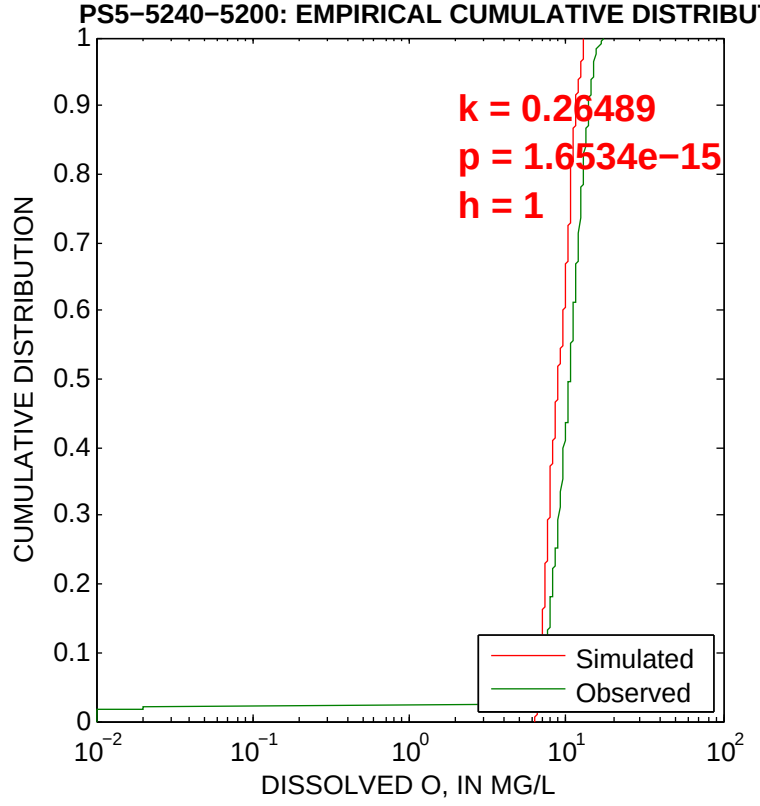












DATA SELECTION

scenario	file
P620171001WQ	DOXX.calib

plot: DOXX - dissolved oxygen

Dates: 1/1/1985 – 12/31/201

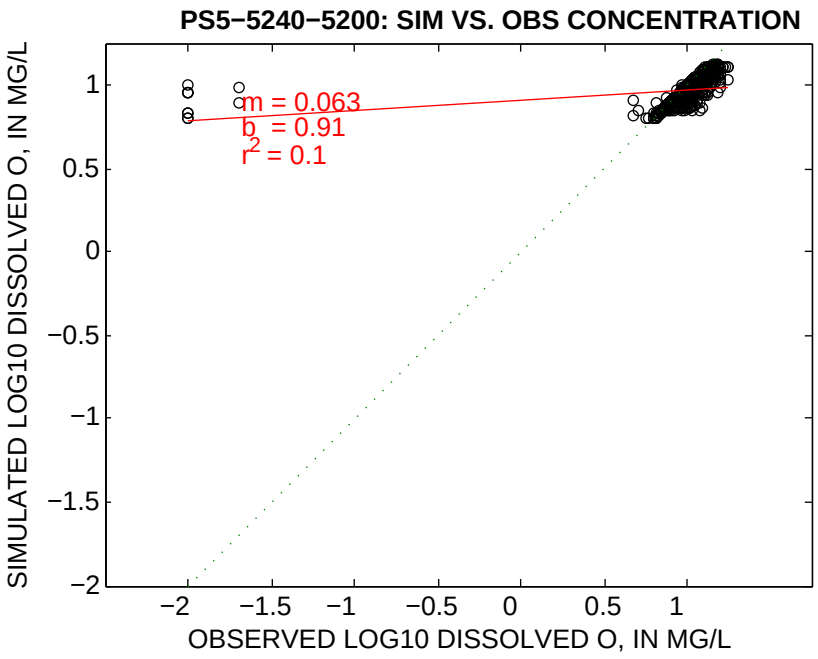
Drive | Directory | Observed: N/A | model | OBS20161101

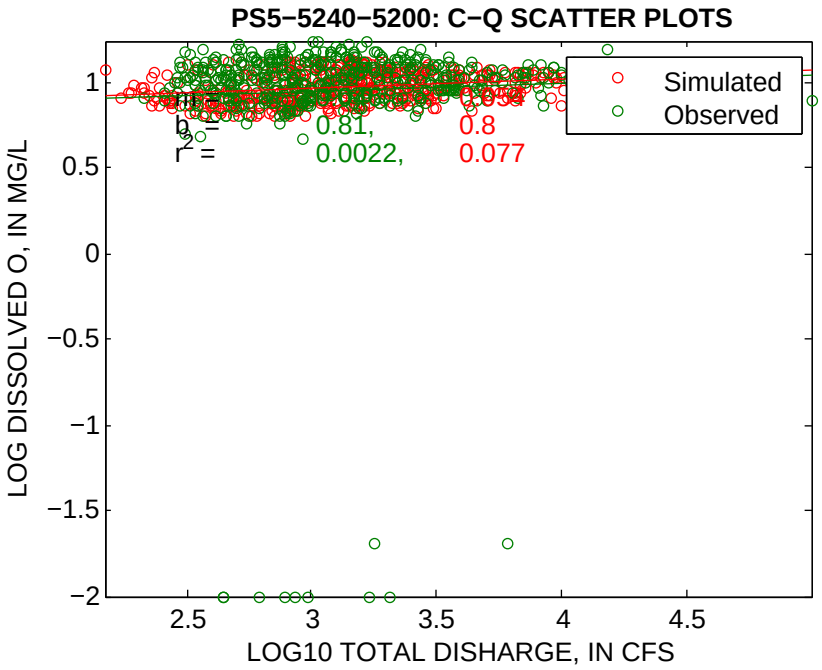
STATISTICS

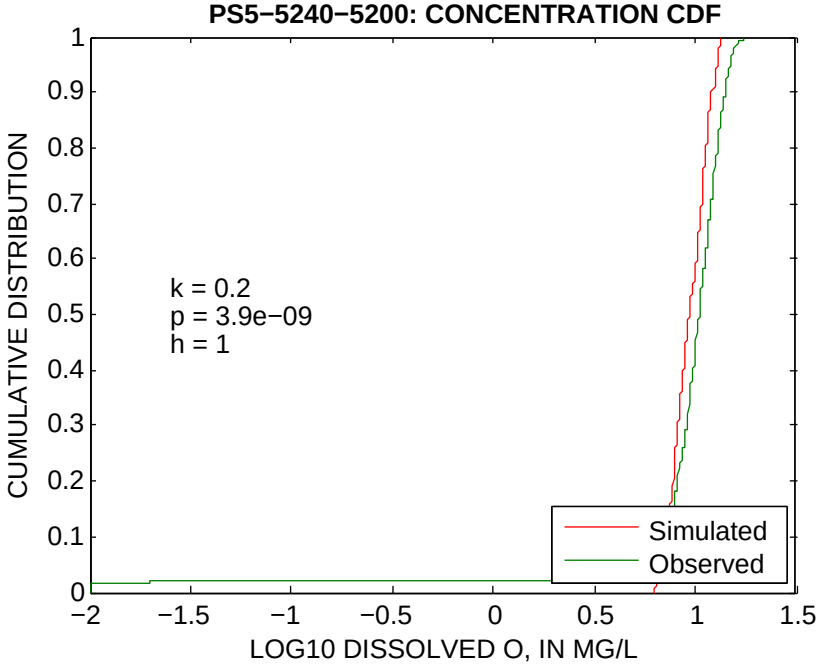
	n	487	487
		observe	simulate
min		0.01	6.3536
		-2	0.80302
mean		10.4652	9.14684
		0.955988	0.953142
media		10.5	8.8399
		1.02119	0.946447
max		17.5	13.075
		1.24304	1.11644
varian		8.30483	3.17355
		0.187014	0.00705049
JB		0.001	0.001
		0.001	0.001
		ra	log
%		-12.5979	-0.297624
err.va		6.28091	0.179741
rel.std.err		0.756297	0.96111
mod.eff		0.243703	0.0388903

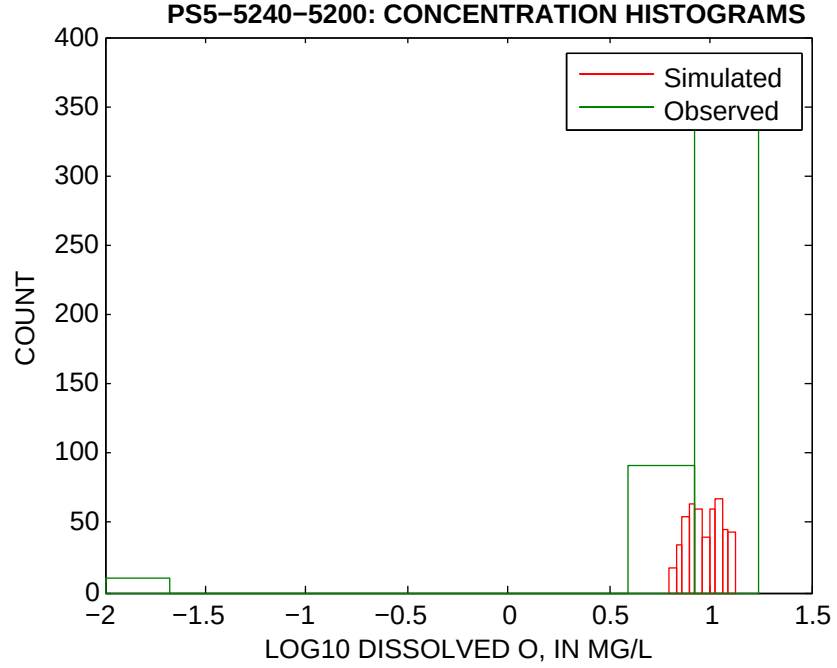
VERSION 2.1

ALL DATA
LOG10

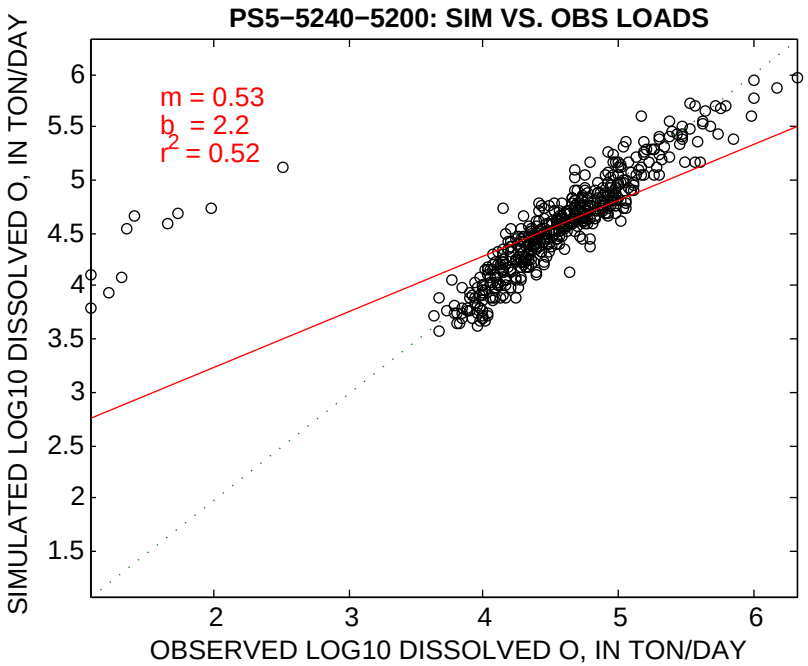


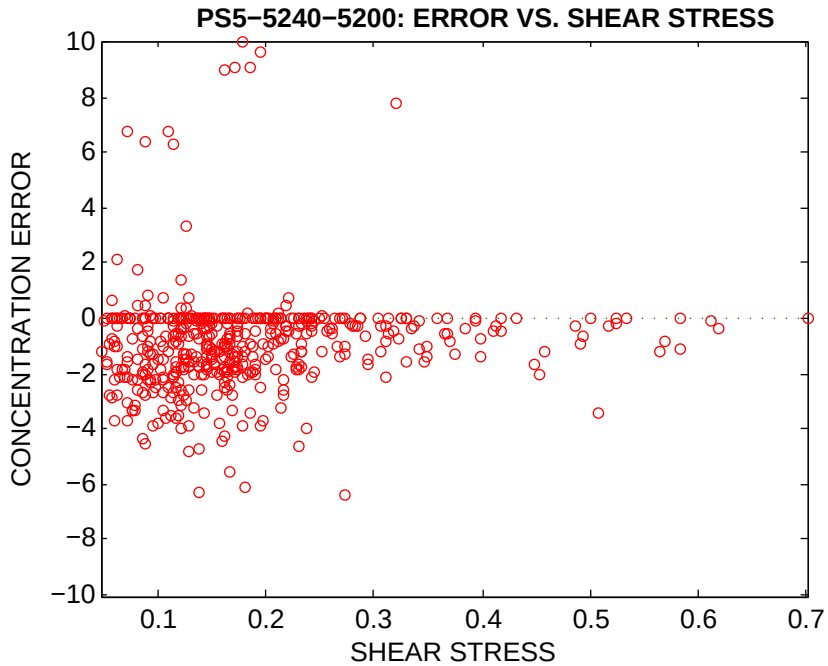


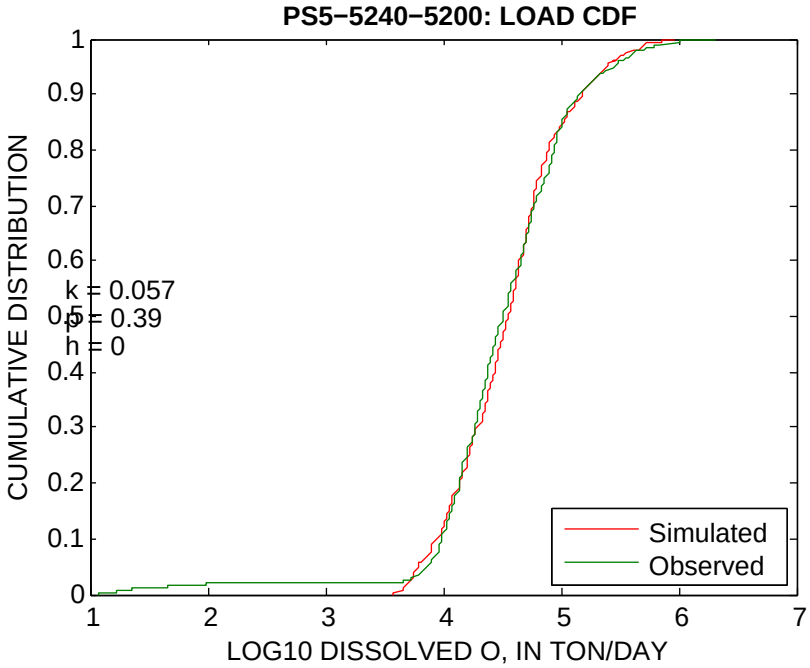


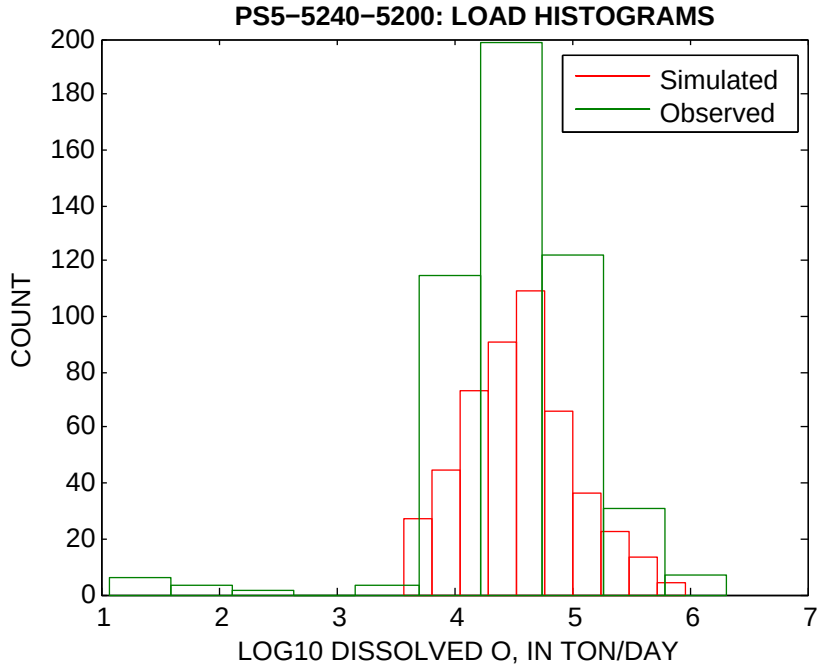


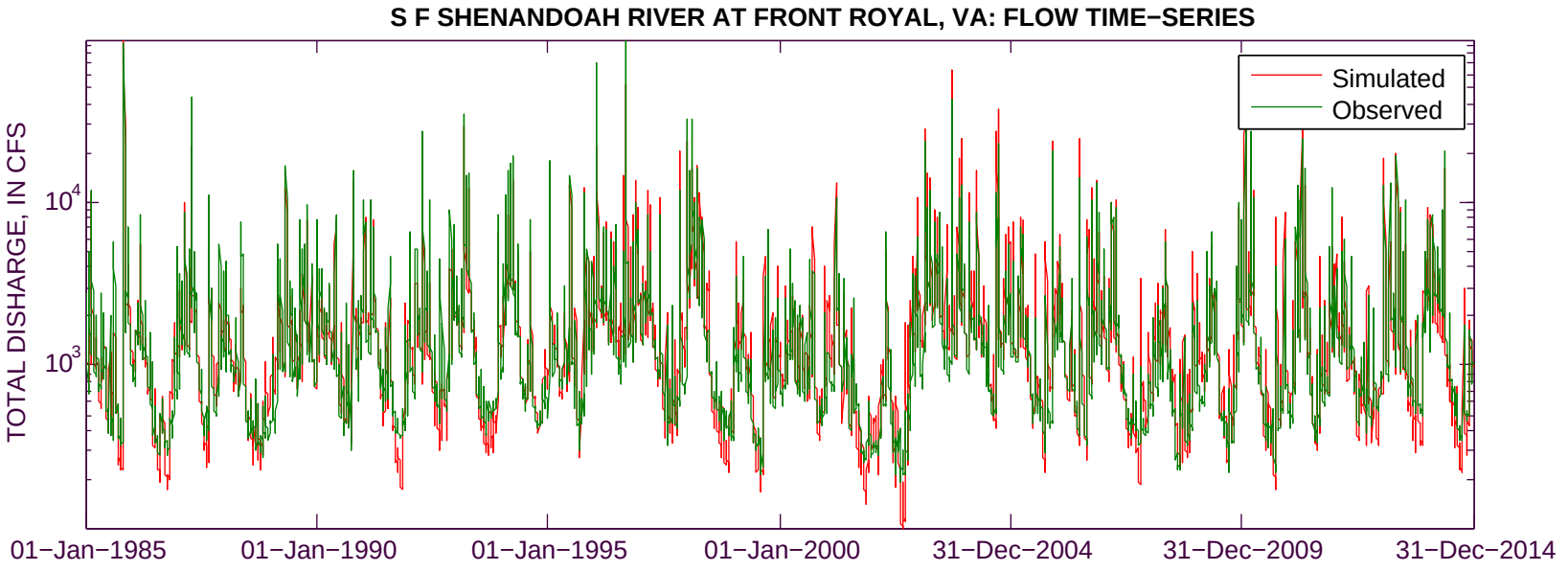
LOAD DATA
LOG10

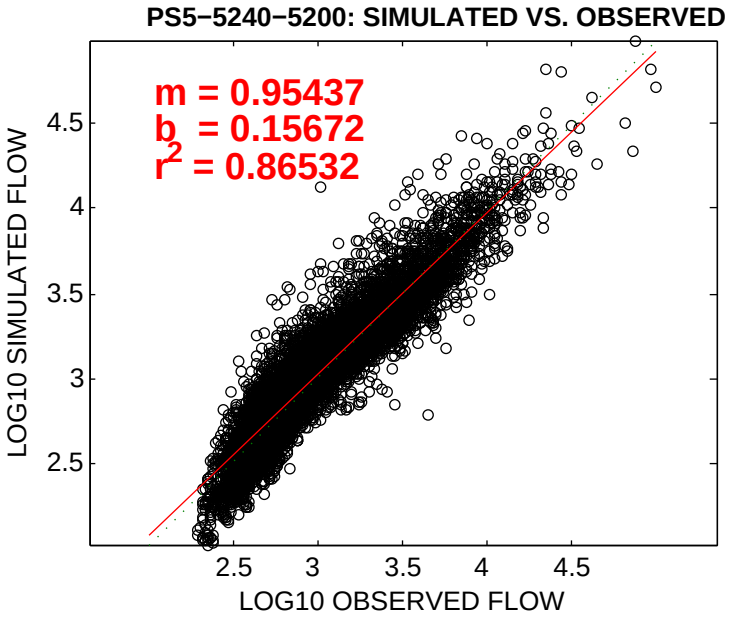


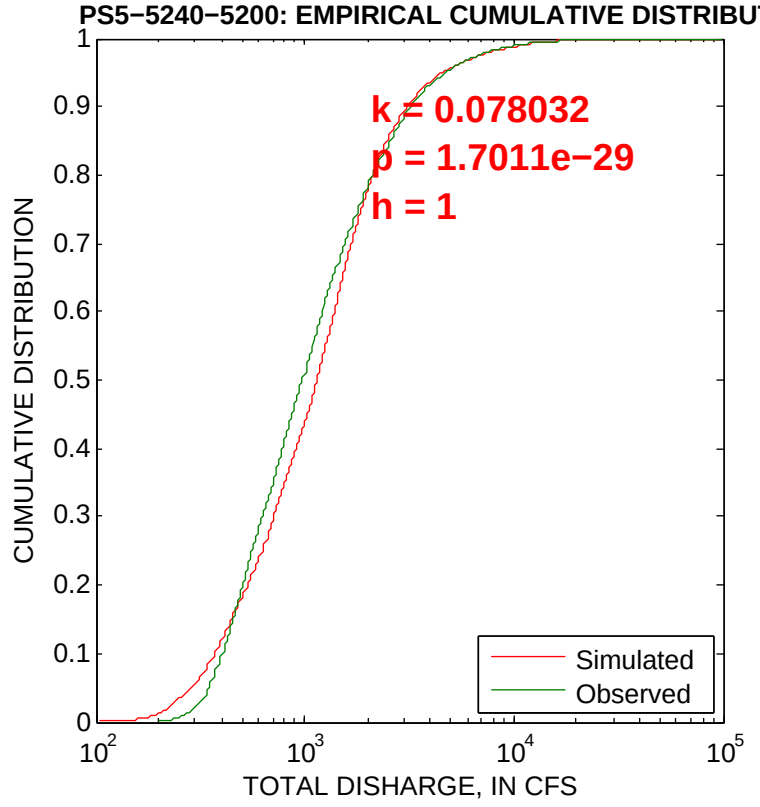












DATA SELECTION

scenario: P620171001WQ | file: FLOW.calib

plot: FLOW - total discharge

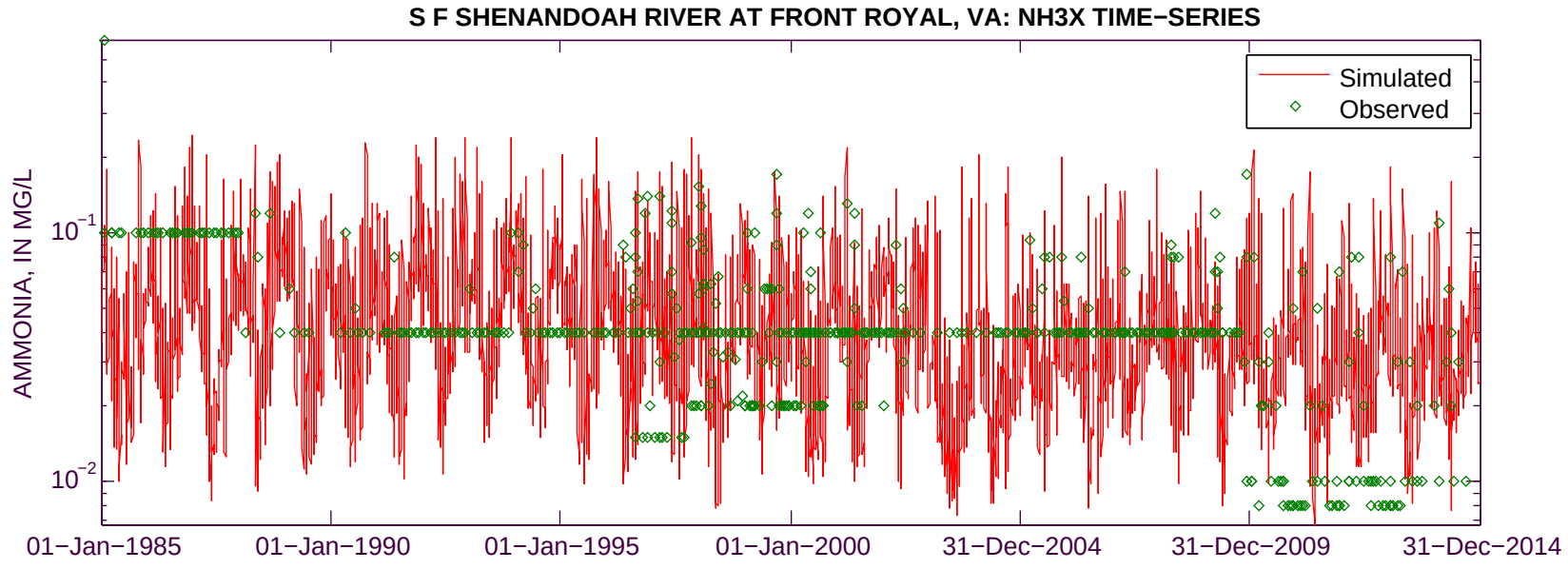
Dates: 1/1/1985 – 12/31/201

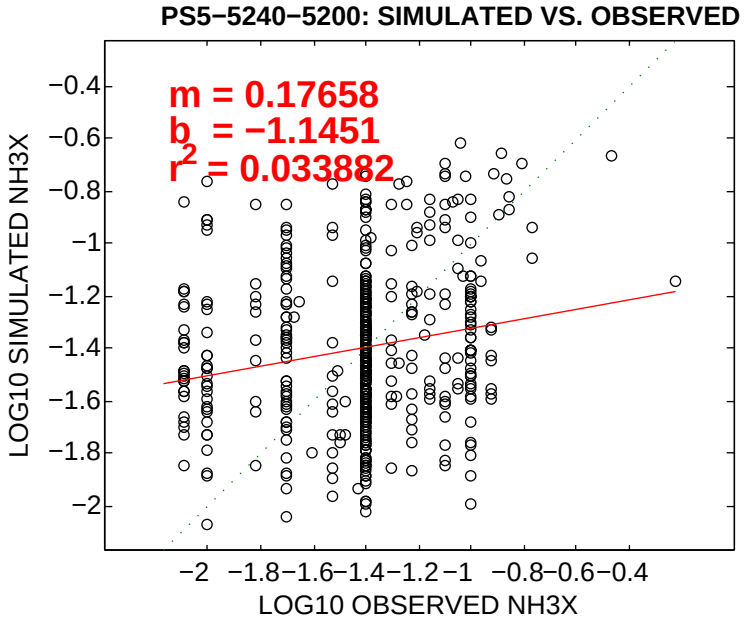
Drive | Directory | Observed: N/A | model | OBS20161101

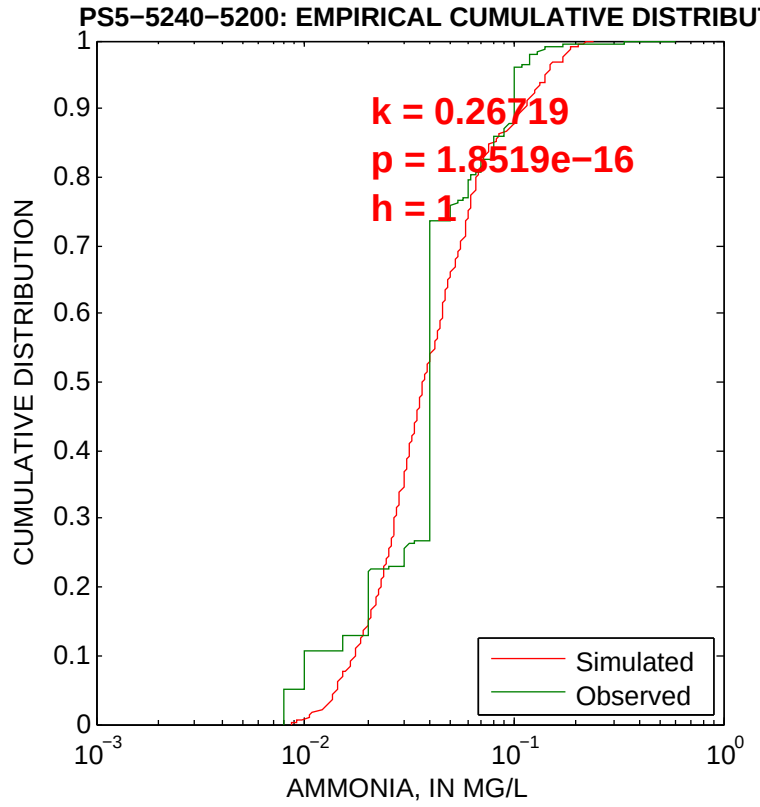
STATISTICS

n	10957	10957
	observe	simulate
min	196	102.49
	2.29226	2.01068
mean	1638.49	1682.85
	3.03057	3.04899
media	973	1147.7
	2.98811	3.05983
max	98200	95961
	4.99211	4.98209
varian	7.64577e+0	6.61314e+
	0.128476	0.13523
JB	0.001	0.001
	0.001	0.001
	ra	log
%	2.7074	0.607901
err.va	2.00216e+0	0.0188195
rel.std.err	0.261866	0.146483
mod.eff	0.738134	0.853517

VERSION 2.1







DATA SELECTION

scenario	file
P620171001WQ	NH3X.calib

plot: NH3X - ammonia

Dates 1/1/1985 12/31/201

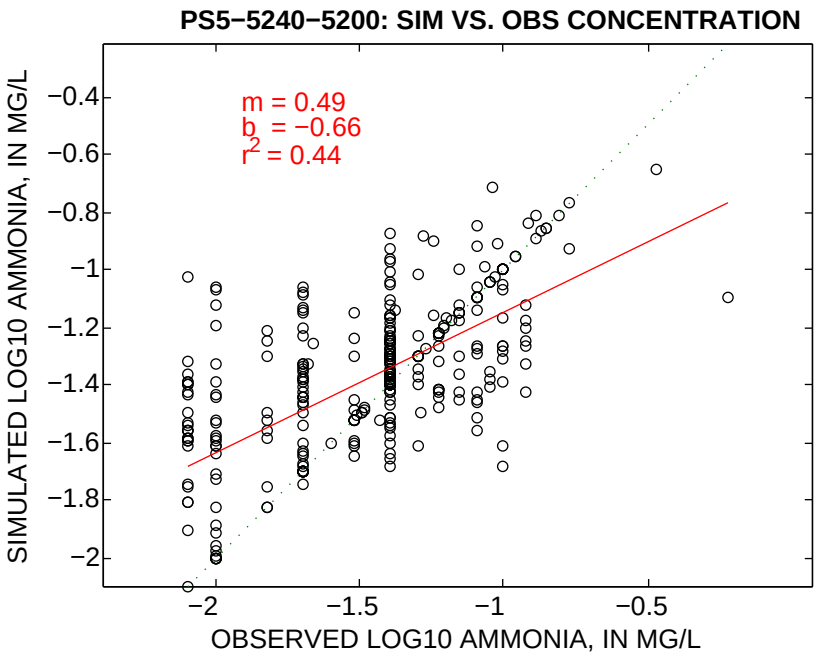
Drive	Directory	Observed
N/A	model	OBS20161101

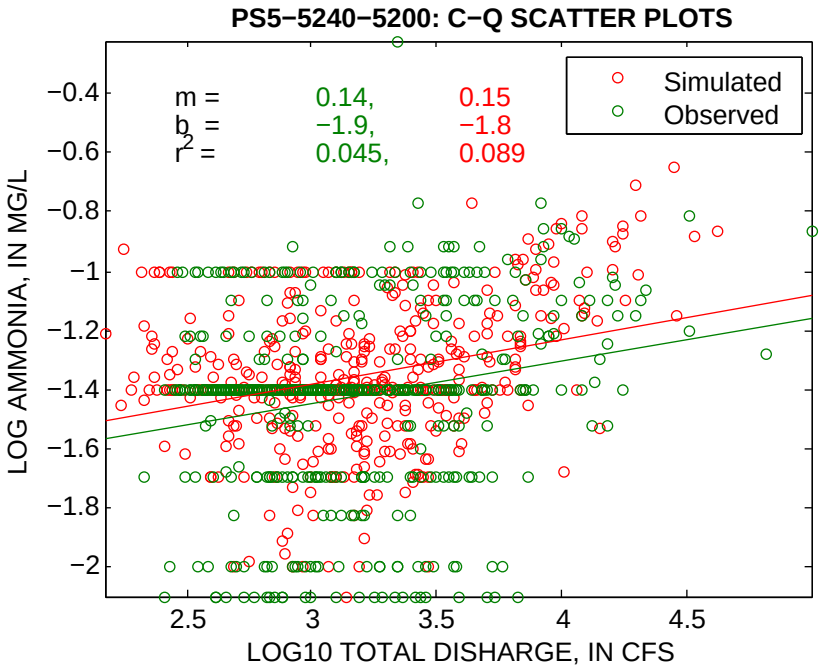
STATISTICS

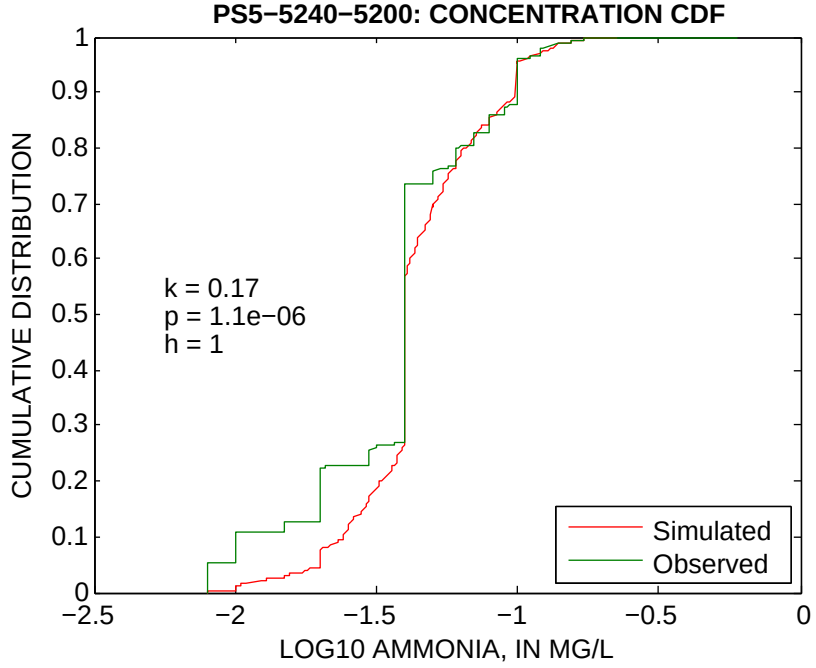
	n	509	509
		observe	simulate
min		0.008	0.0086025
		-2.09691	-2.06538
mean		0.0476793	0.0510585
		-1.42416	-1.3966
media		0.04	0.037243
		-1.39794	-1.42896
max		0.6	0.24366
		-0.221849	-0.613216
varian		0.00163715	0.0016221
		0.093353	0.0859089
JB		0.001	0.001
		0.003653	0.006579
		ra	log
%		7.08735	-1.93511
err.va		0.00242221	0.147054
rel.std.err		1.47953	1.57525
mod.eff		-0.479533	-0.57525

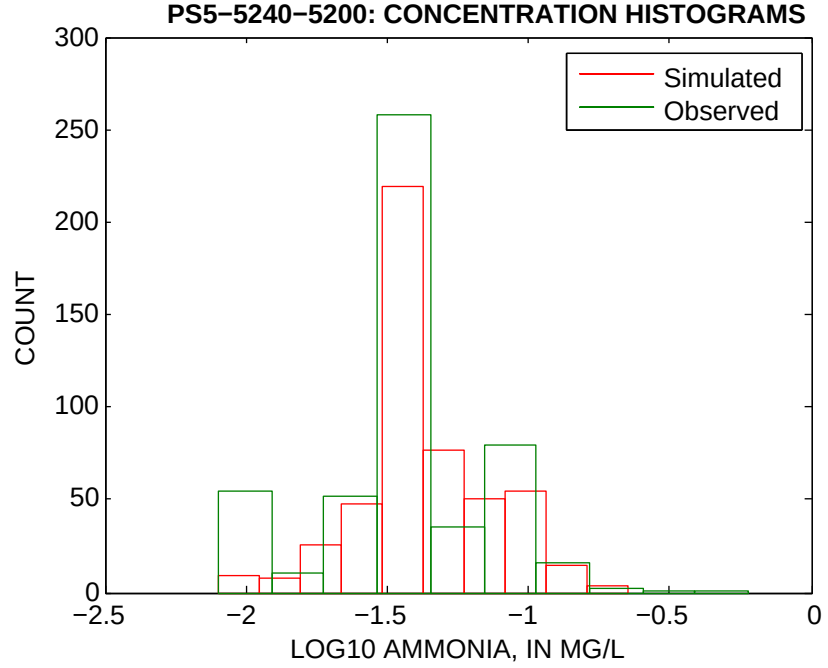
VERSION 3.1

ALL DATA
LOG10

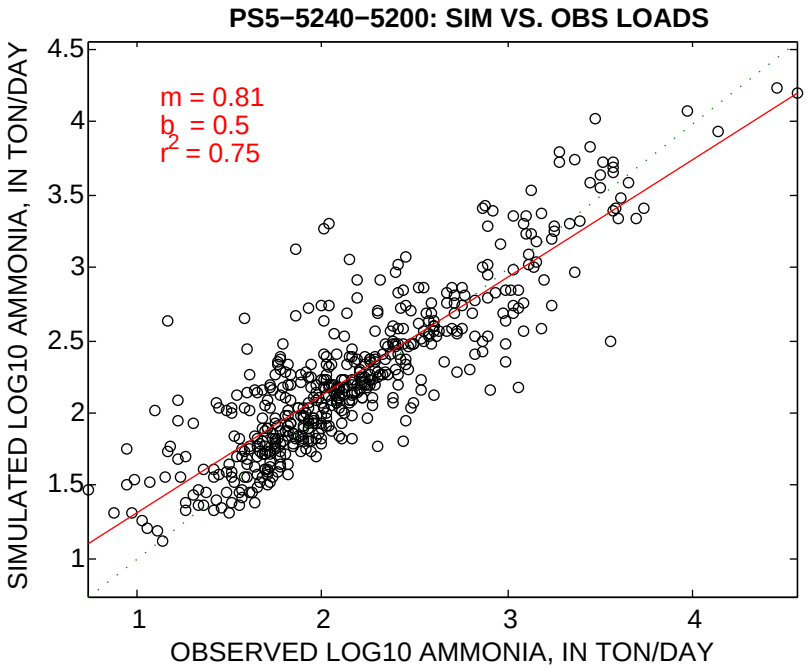


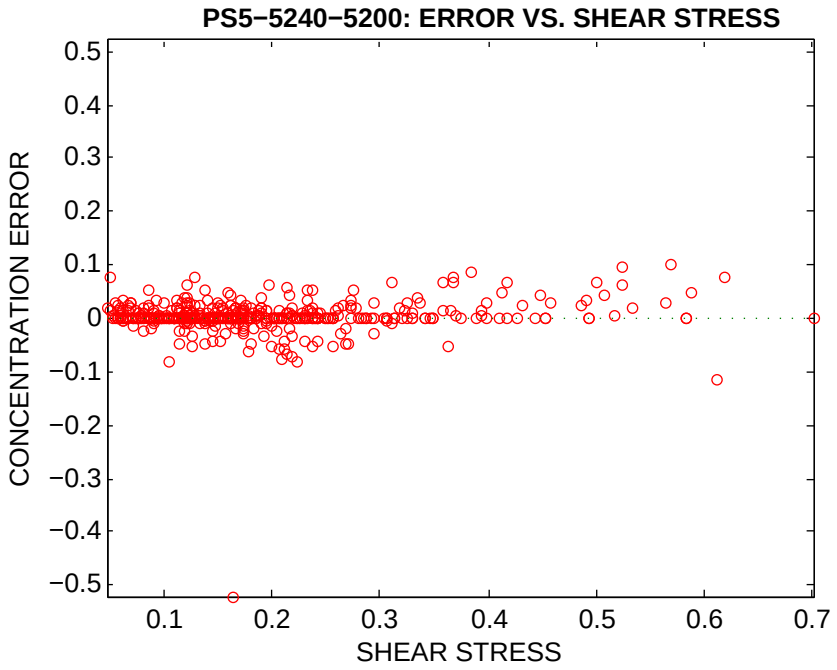


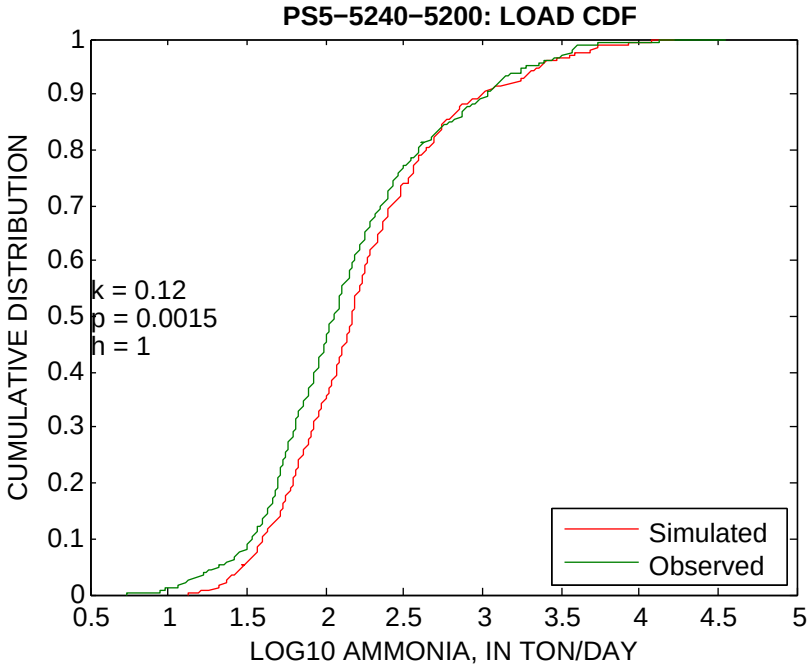


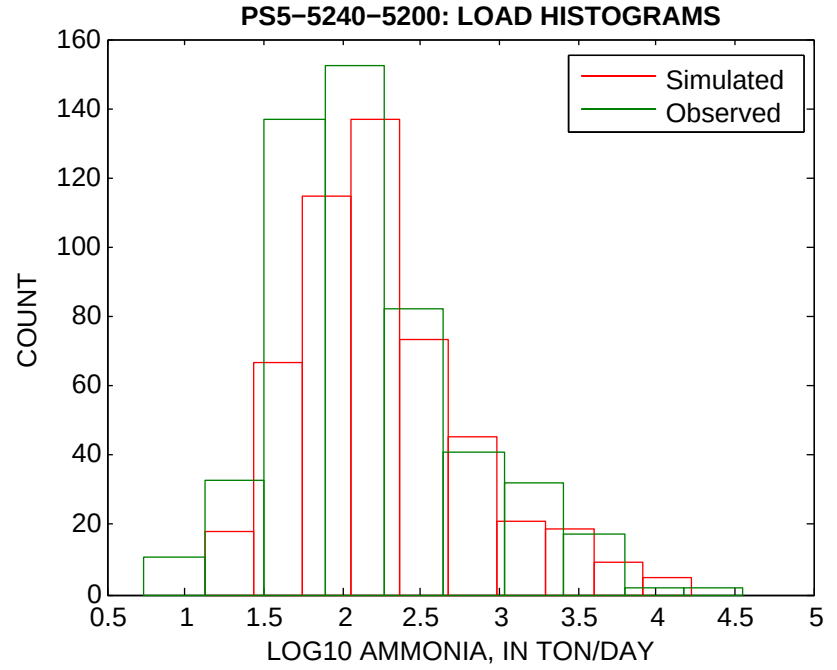


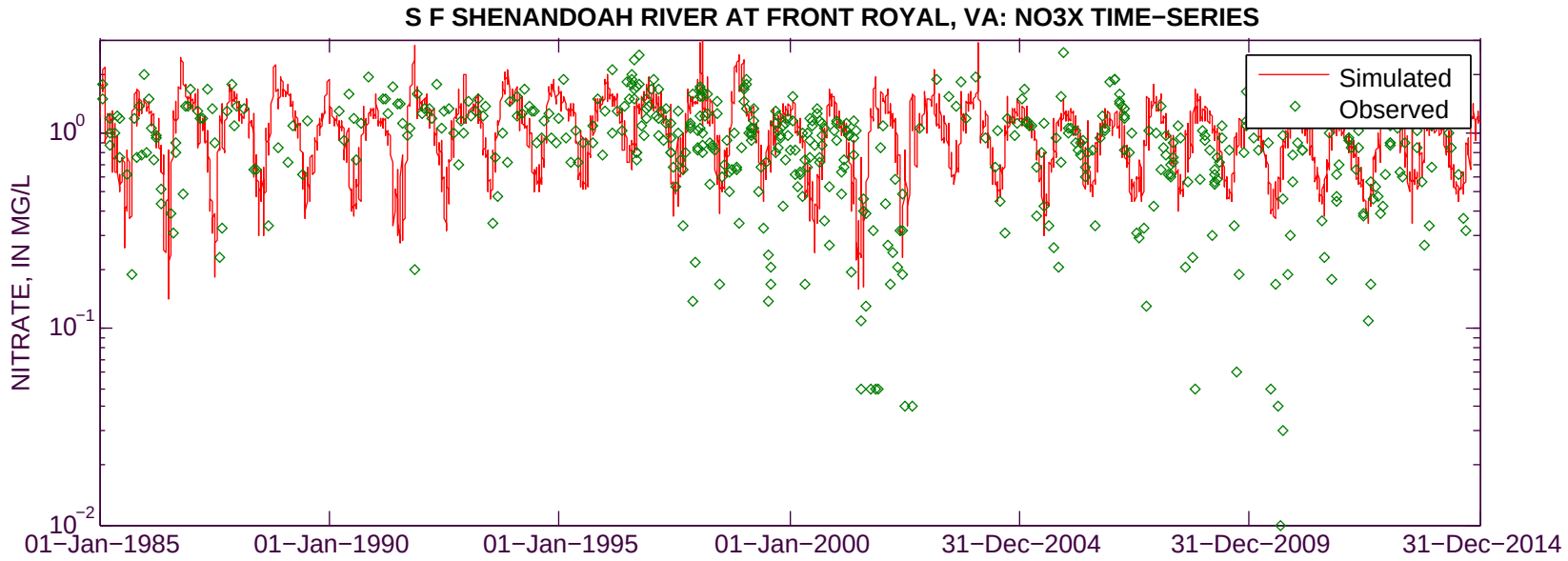
LOAD DATA
LOG10

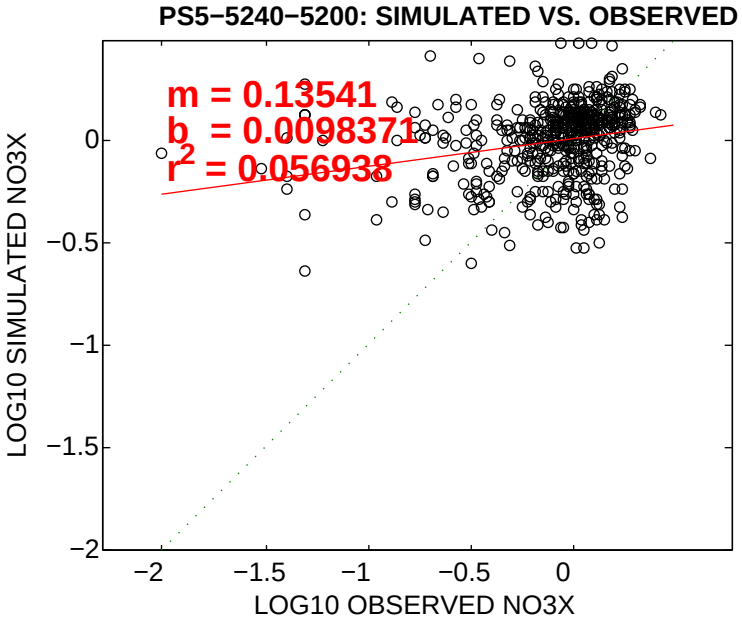


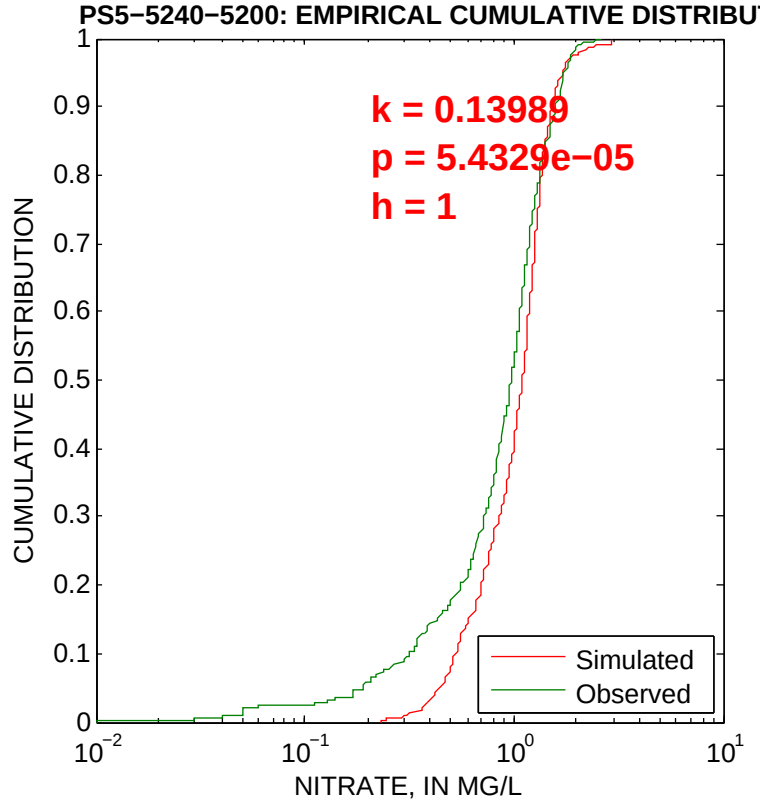












DATA SELECTION

scenario	file
P620171001WQ	NO3X.calib

plot: NO3X - nitrate

Dates 1/1/1985 12/31/201

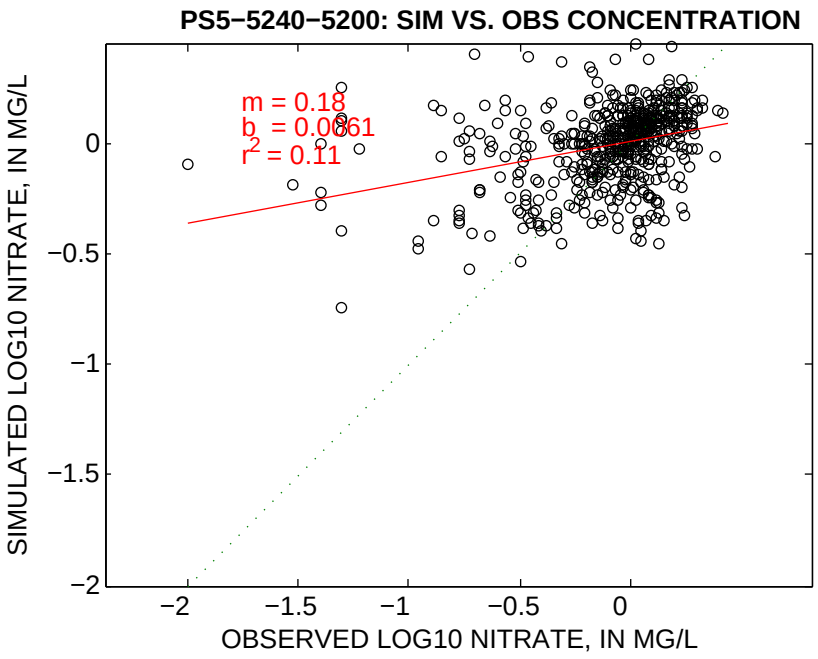
Drive	Directory	Observed
N/A	model	OBS20161101

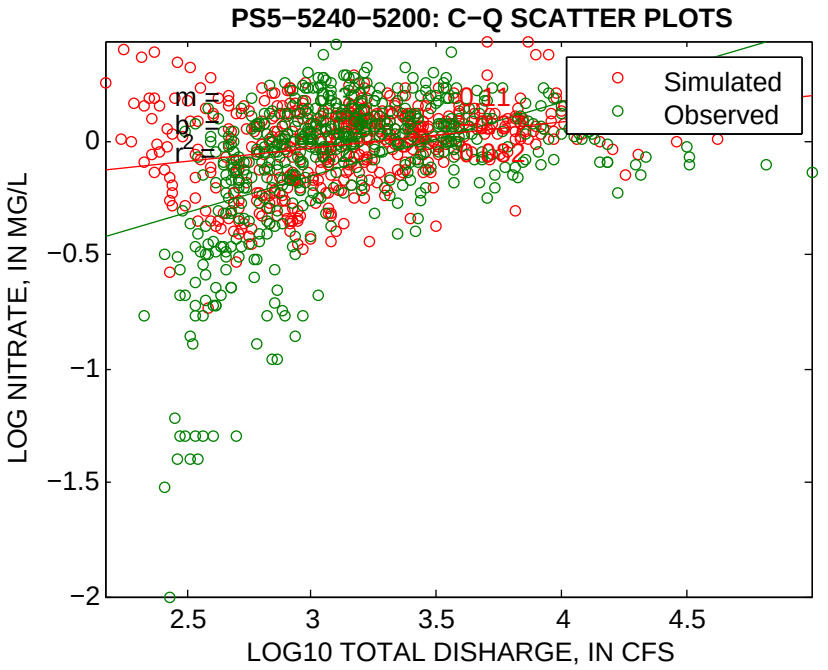
STATISTICS

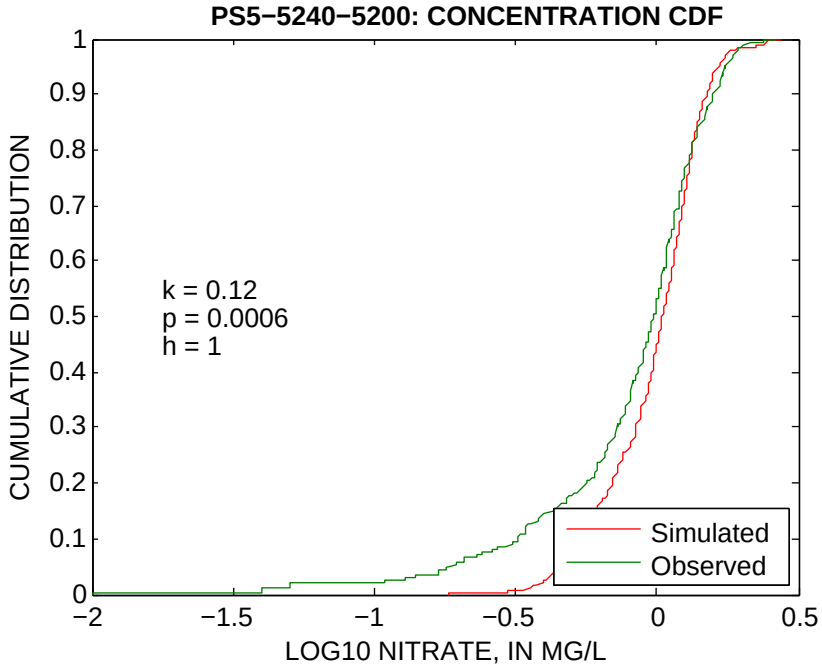
		observe	simulate
n		529	529
min		0.01	0.23203
		-2	-0.634456
mean		0.964835	1.07613
		-0.0963581	-0.0032104
media		0.98	1.1031
		-0.0087739	0.0426149
max		2.64	2.9607
		0.421604	0.471394
varian		0.220016	0.174424
		0.103263	0.0332526
JB		0.117413	0.001
		0.001	0.001
		ra	log
%		11.5354	-96.6683
err.va		0.311803	0.117244
rel.std.err		1.41718	1.13539
mod.eff		-0.417183	-0.135387

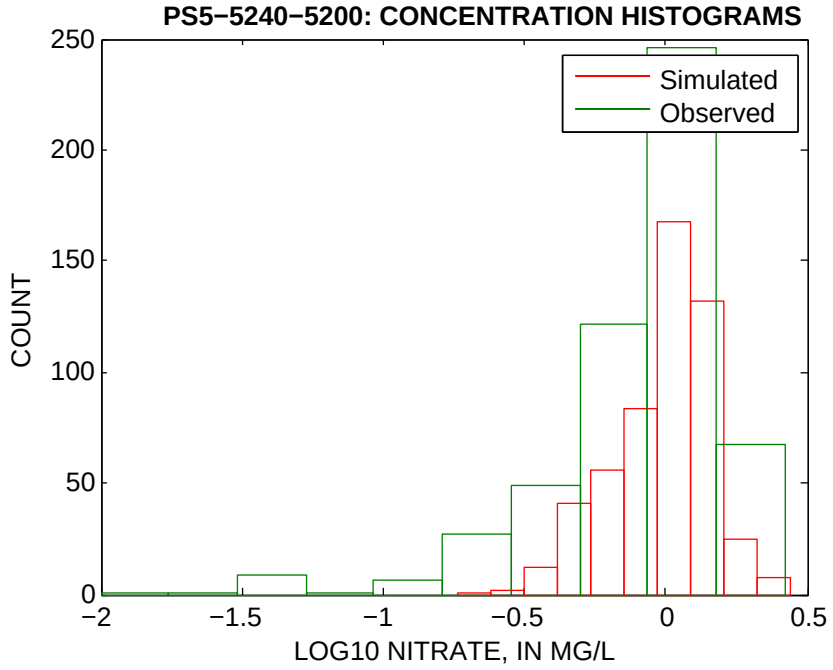
VERSION 2.1

ALL DATA
LOG10

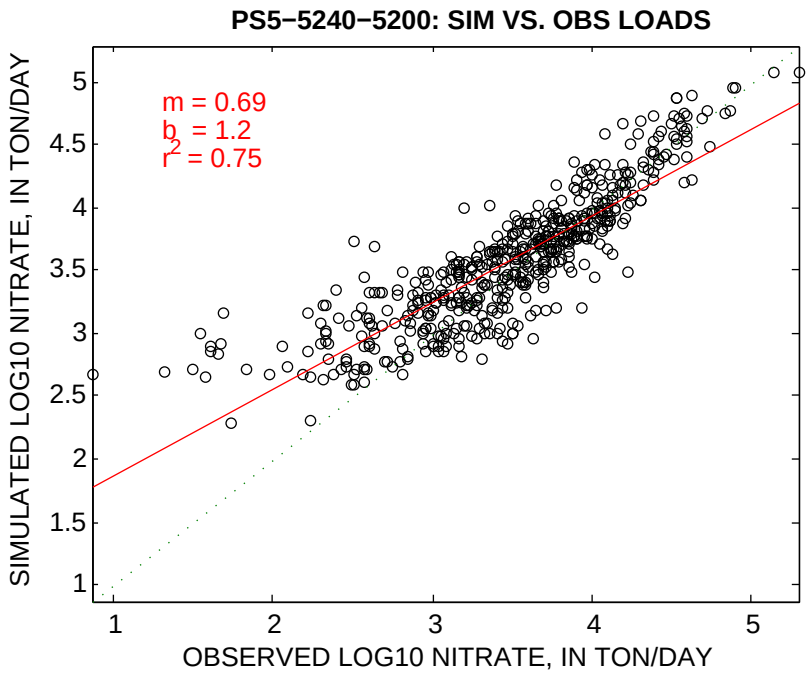


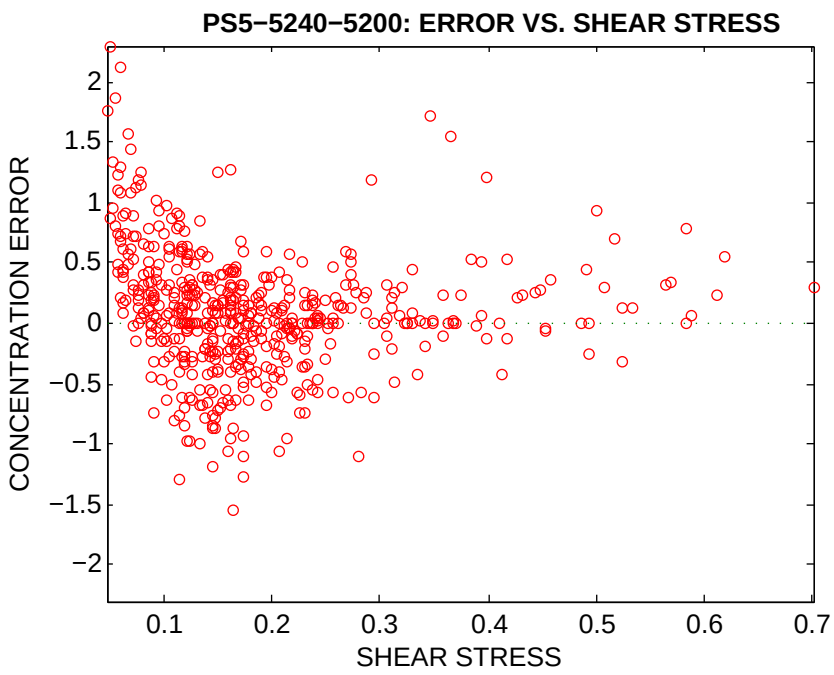


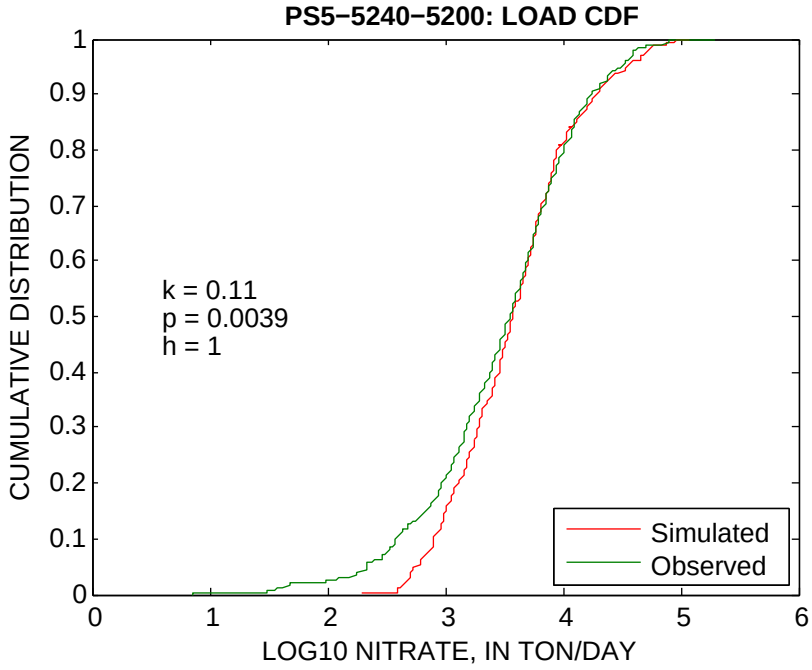


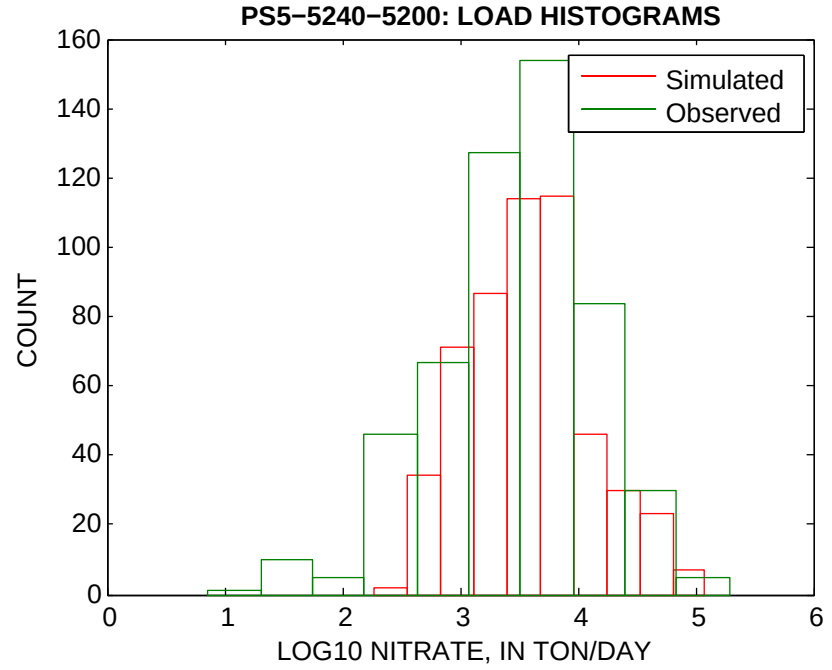


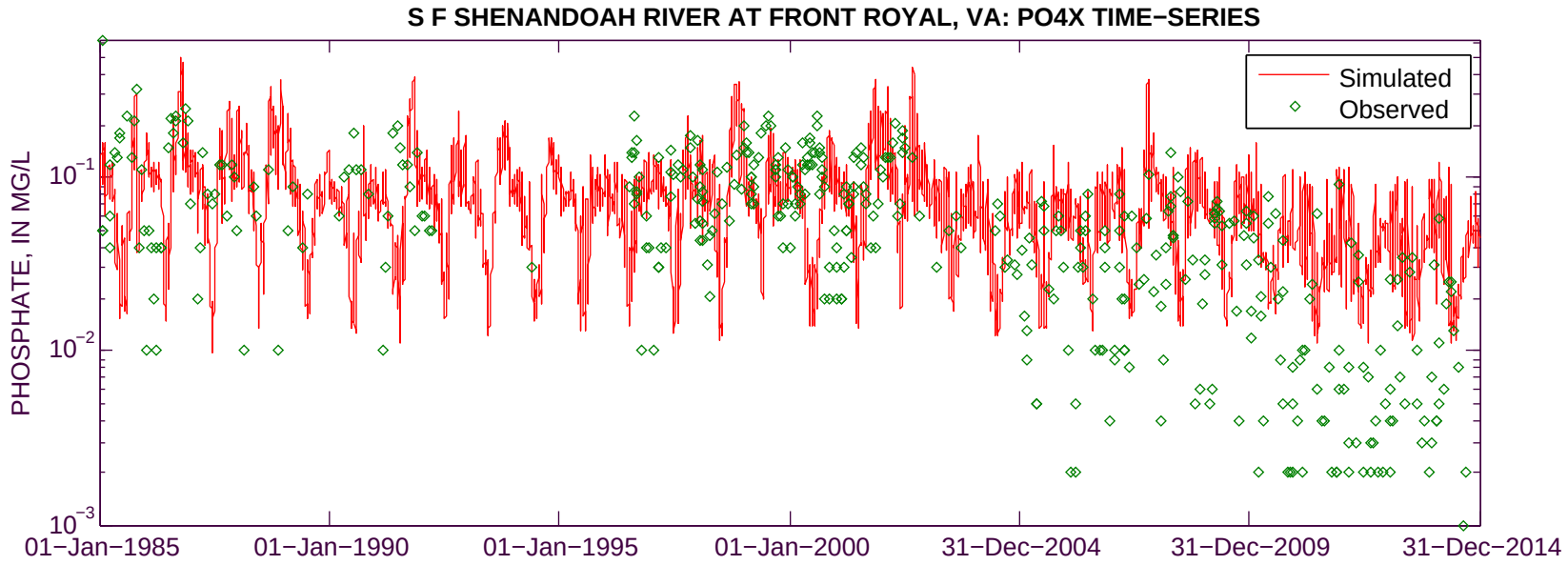
LOAD DATA
LOG10

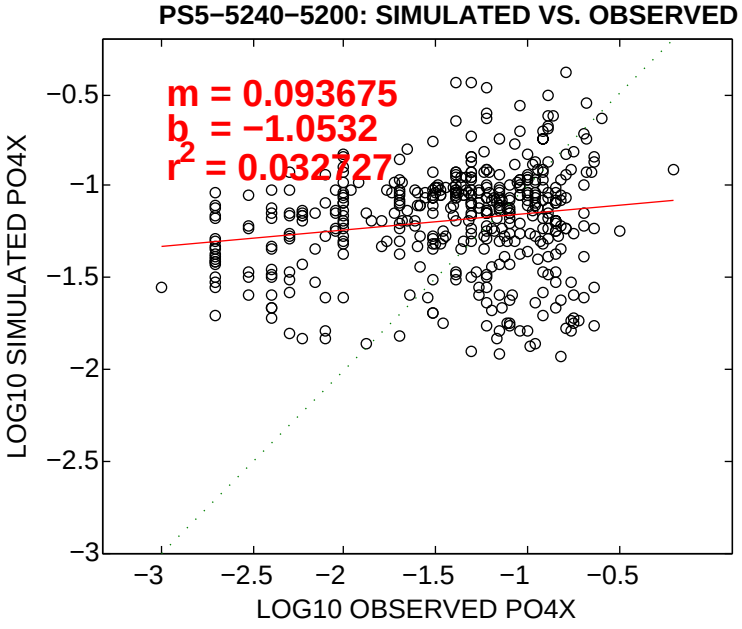


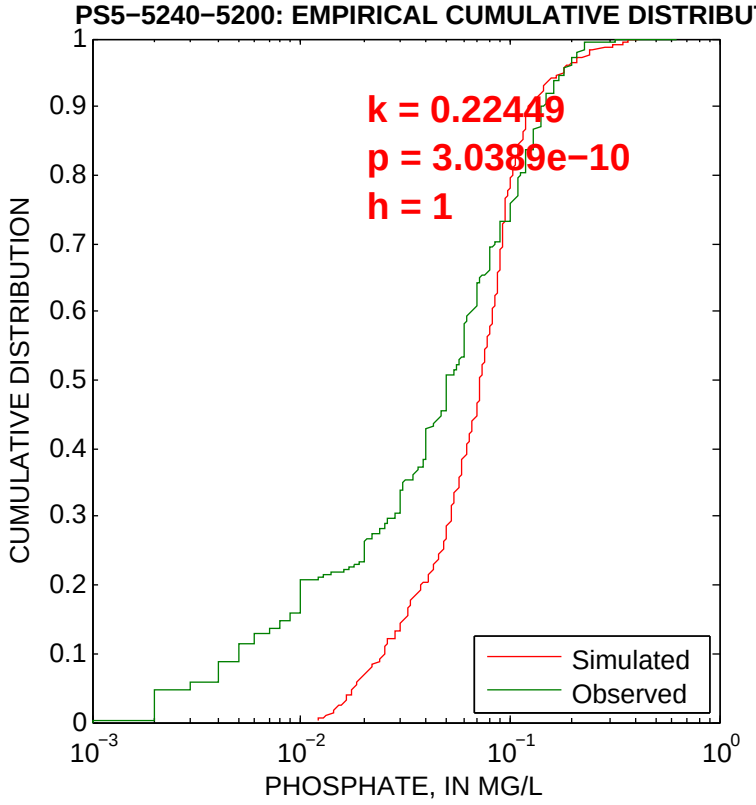












DATA SELECTION

scenario	file
P620171001WQ	PO4X.calib

plot: PO4X - phosphate

Dates 1/1/1985 12/31/201

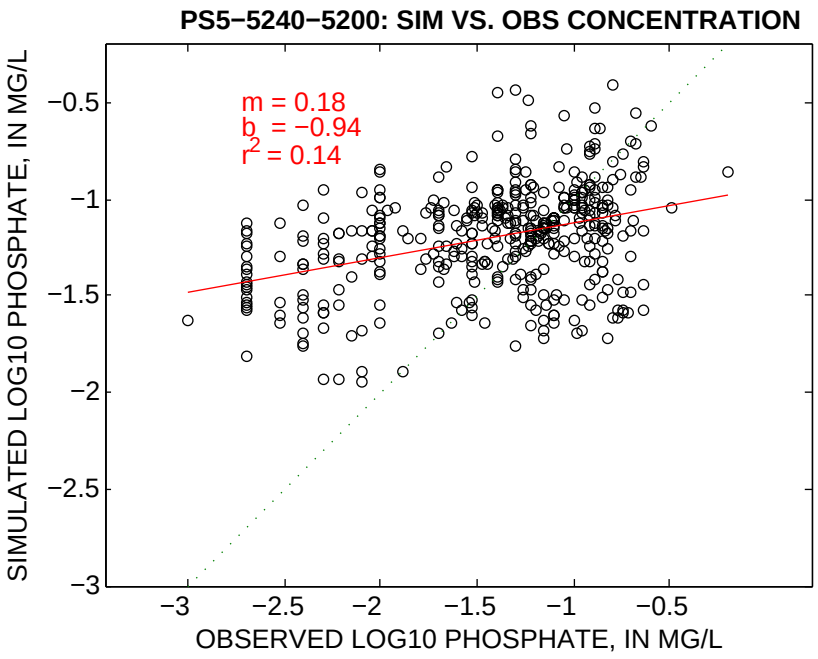
Drive	Directory	Observed
N/A	model	OBS20161101

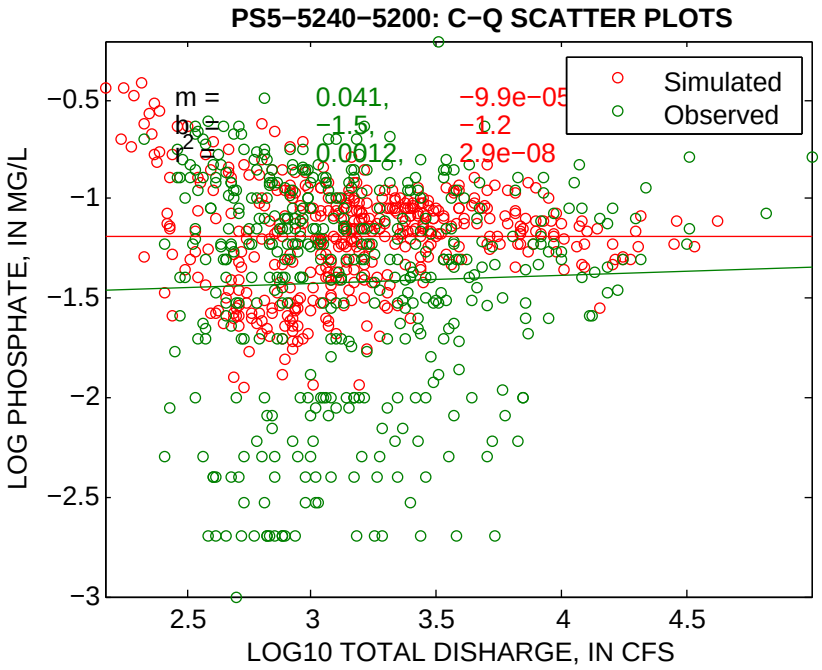
STATISTICS

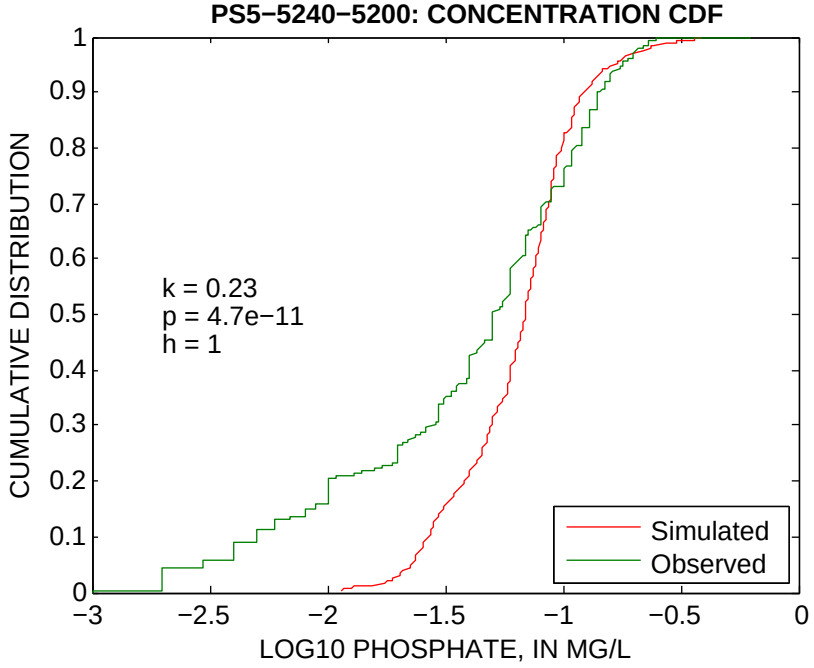
	n	441	441
		observe	simulate
min		0.001	0.011778
		-3	-1.92893
mean		0.0669379	0.0794521
		-1.41666	-1.1859
media		0.05	0.072327
		-1.30103	-1.1407
max		0.63	0.41653
		-0.200659	-0.380354
varian		0.00391405	0.00288361
		0.298196	0.0799552
JB		0.001	0.001
		0.001	0.010870
		ra	log
%		18.6954	-16.2893
err.va		0.00585163	0.375657
rel.std.err		1.49503	1.25976
mod.eff		-0.495031	-0.259765

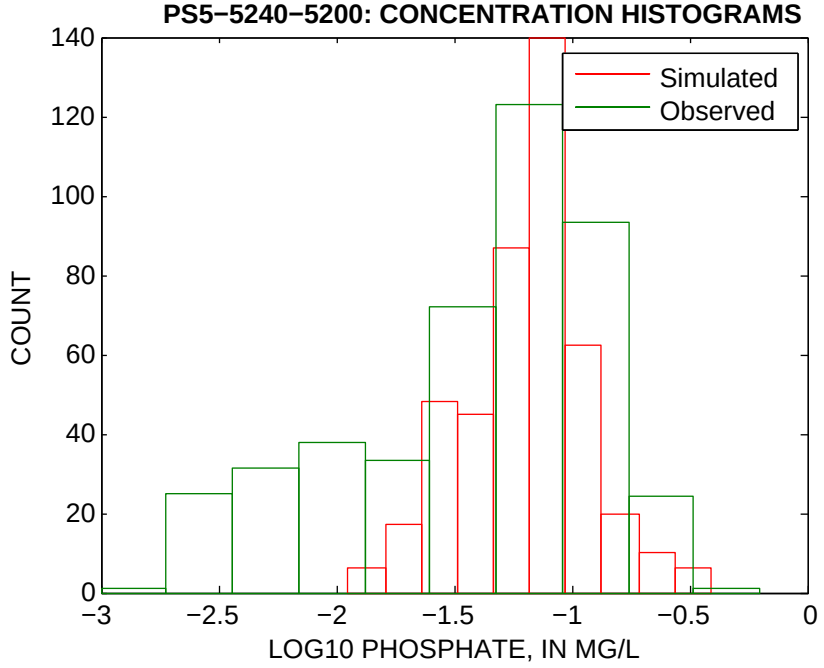
VERSION 2.1

ALL DATA
LOG10

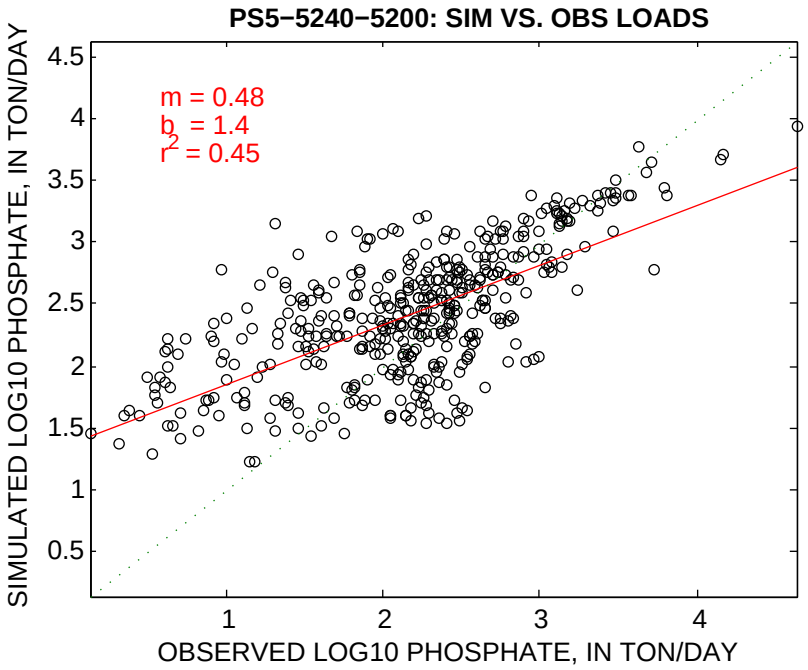


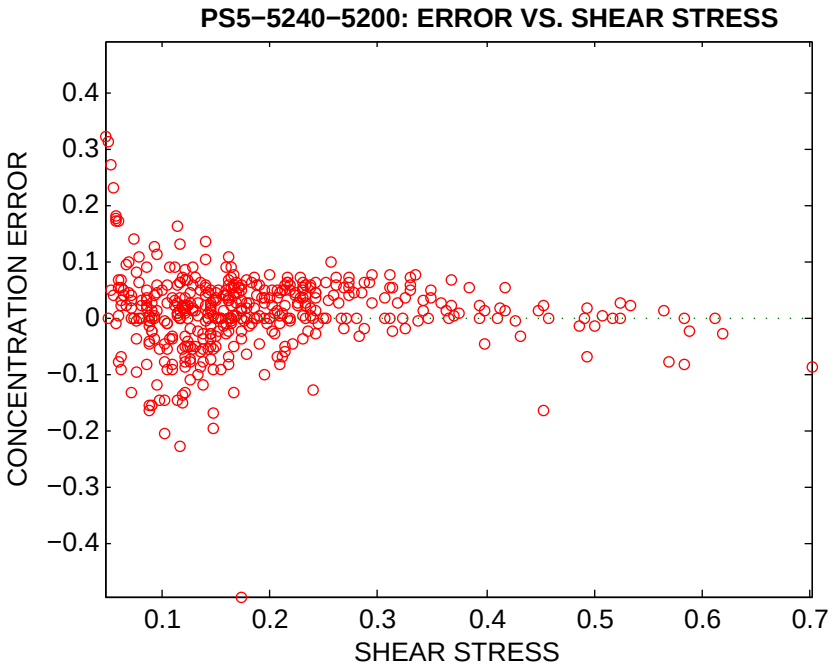


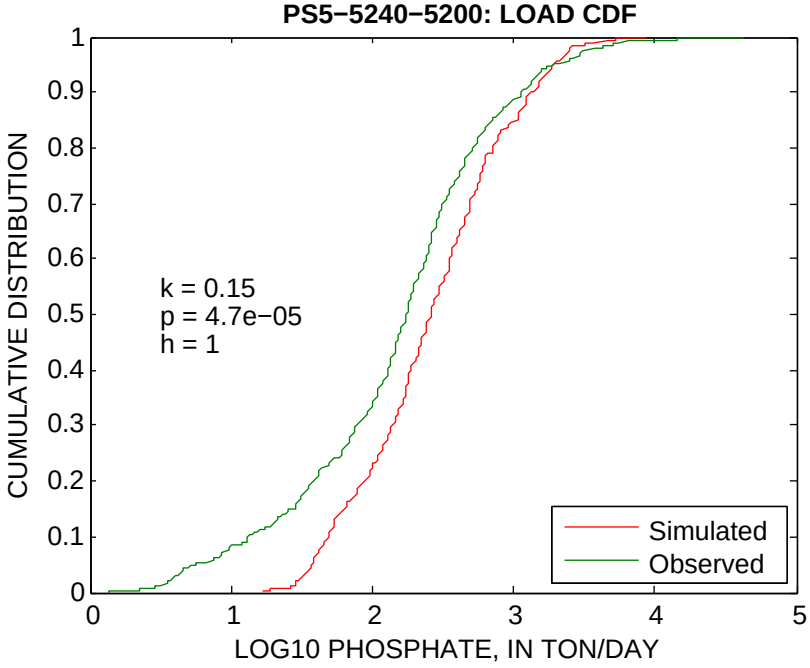


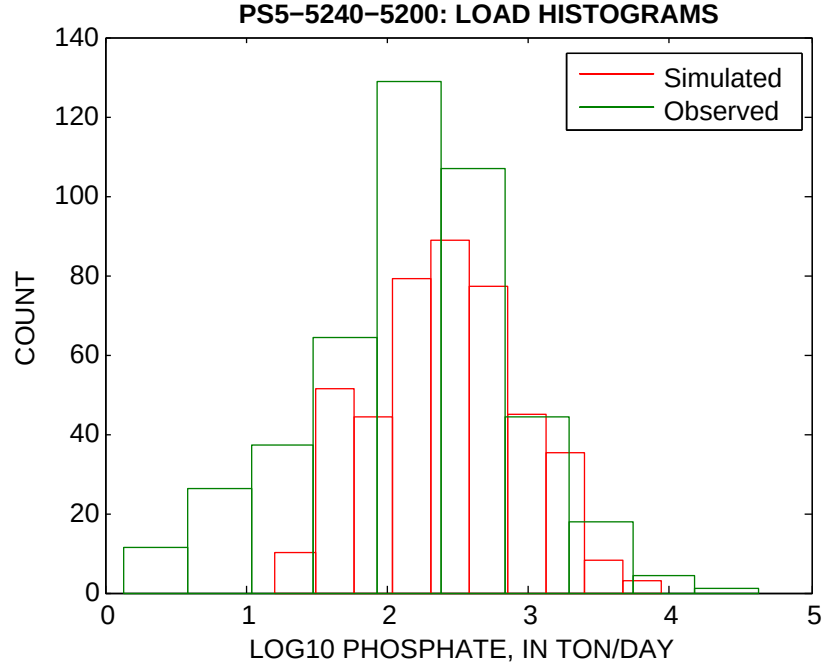


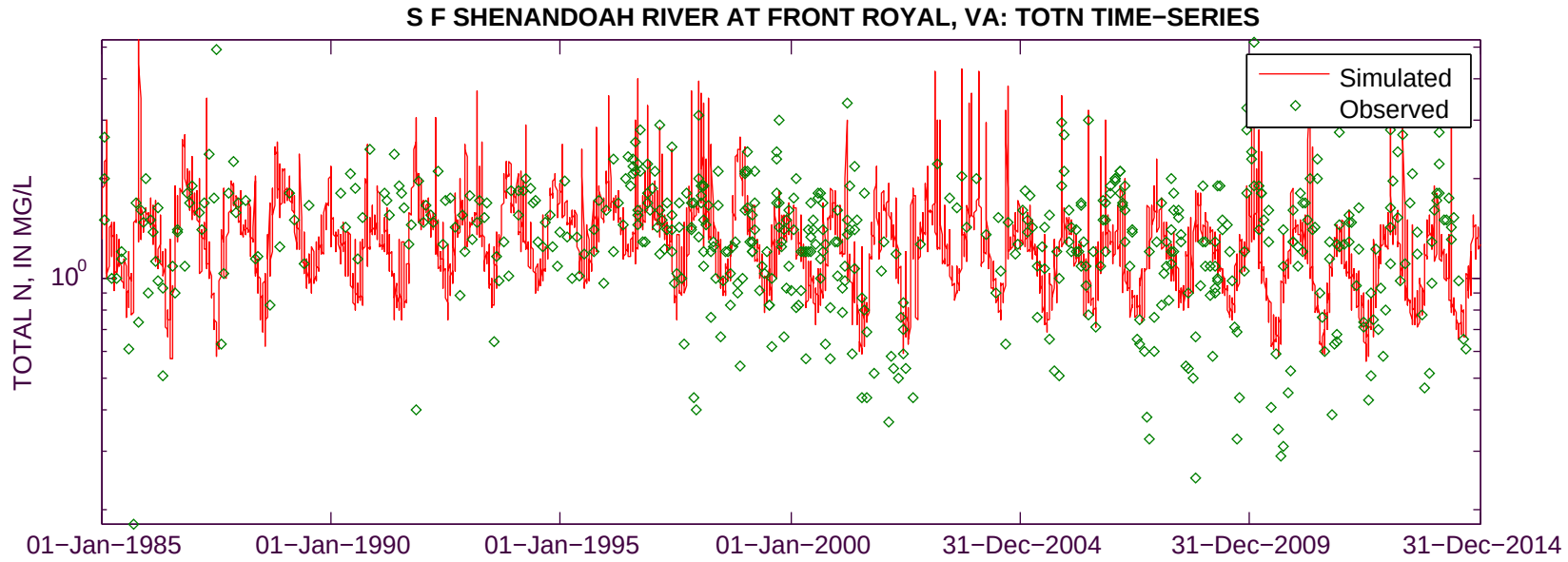
LOAD DATA
LOG10

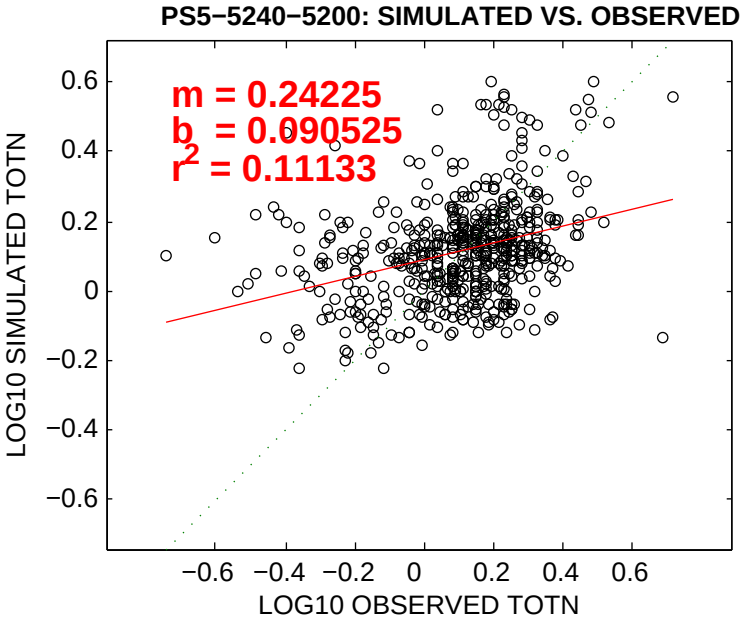


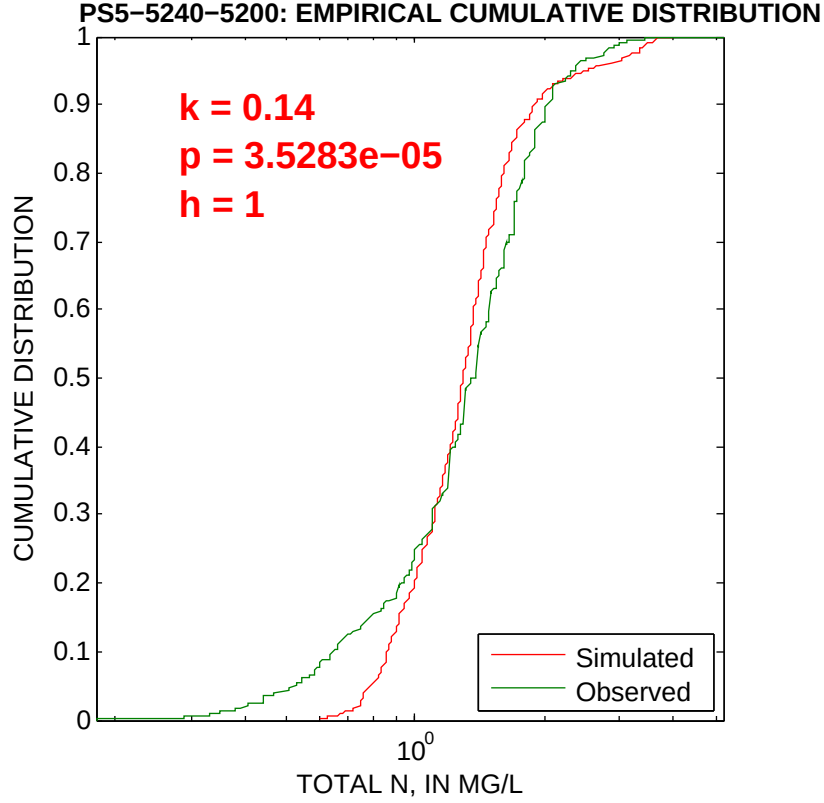












DATA SELECTION

scenario	file
P620171001WQ	TOTN.calib

plot: TOTN - total nitrogen

Dates: 1/1/1985 – 12/31/201

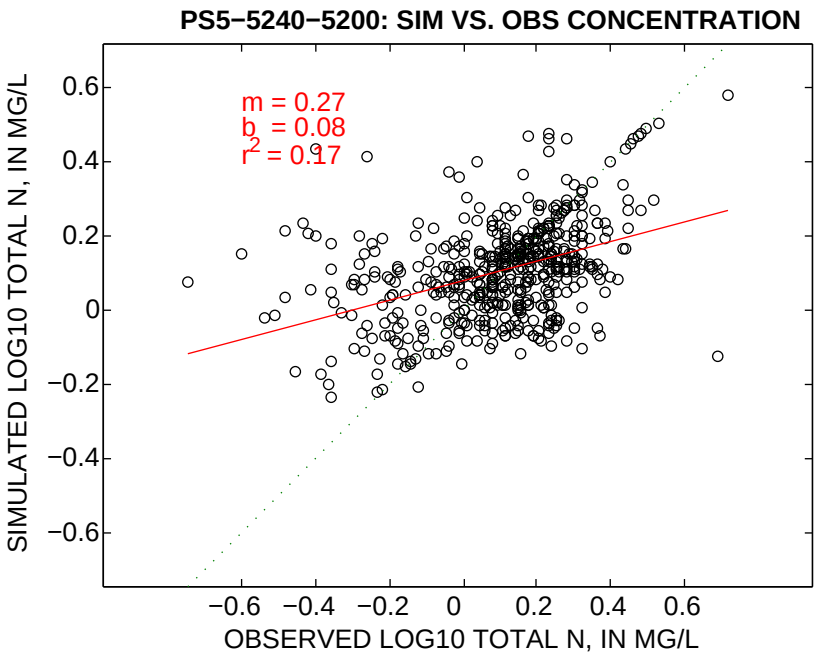
Drive	Directory	Observed
N/A	model	OBS20161101

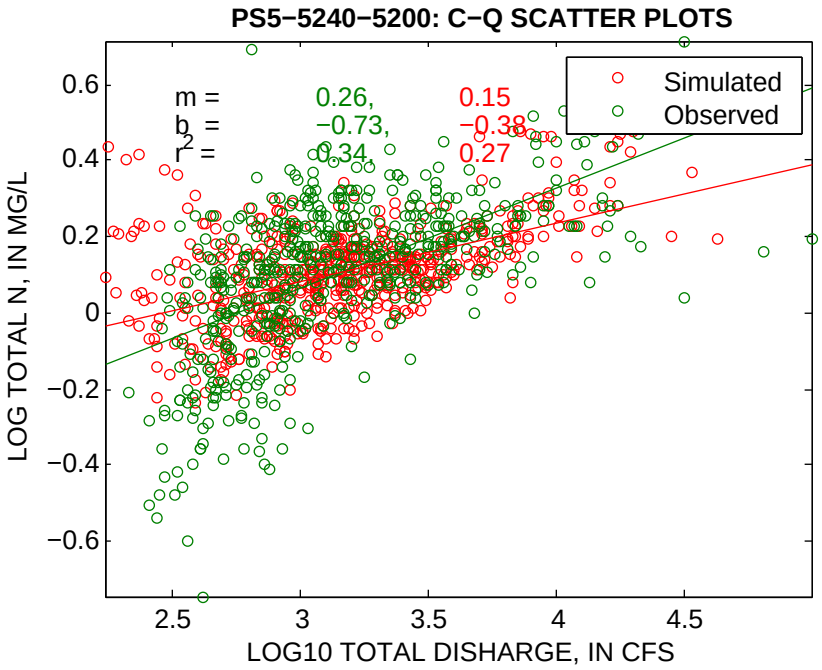
STATISTICS

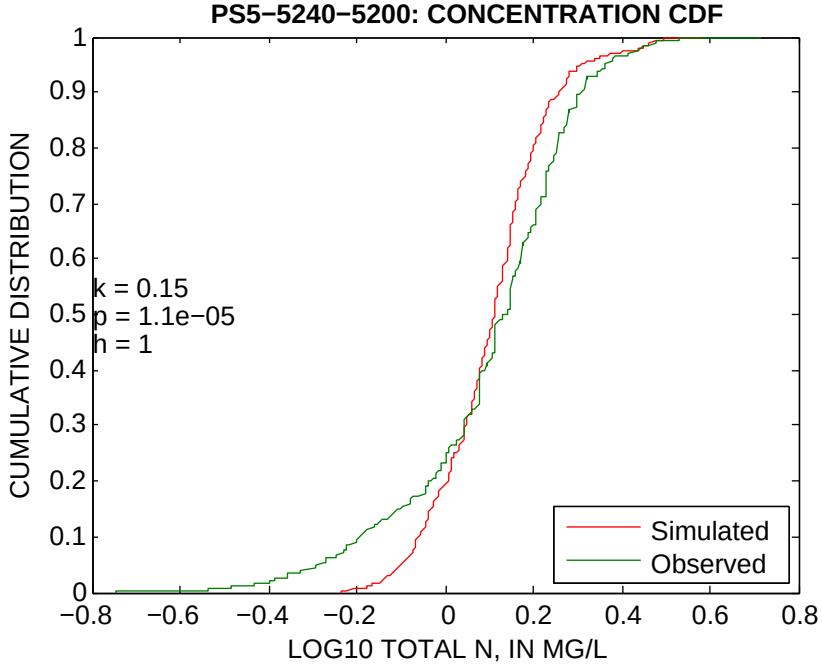
	n	550	550
		observe	simulate
min		0.18	0.59356
		-0.744727	-0.226535
mean		1.39185	1.38507
		0.102687	0.115401
media		1.385	1.28975
		0.141447	0.110506
max		5.2	3.9935
		0.716003	0.601354
varian		0.34279	0.294847
		0.0395762	0.0208613
JB		0.001	0.001
		0.001	0.001
		ra	log
%		-0.487311	12.3808
err.va		0.406632	0.0414248
rel.std.err		1.18624	1.04671
mod.eff		-0.186242	-0.04671

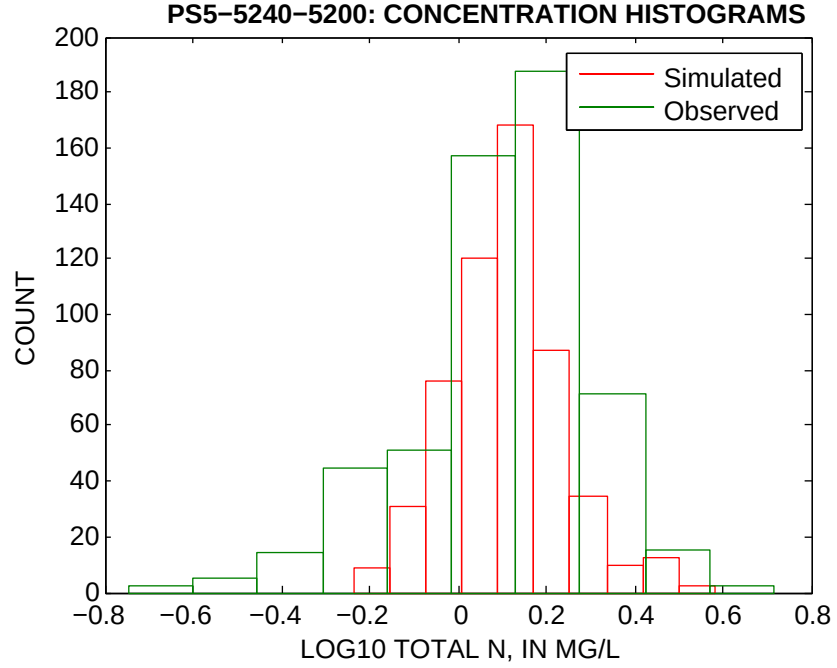
VERSION 2.1

ALL DATA
LOG10

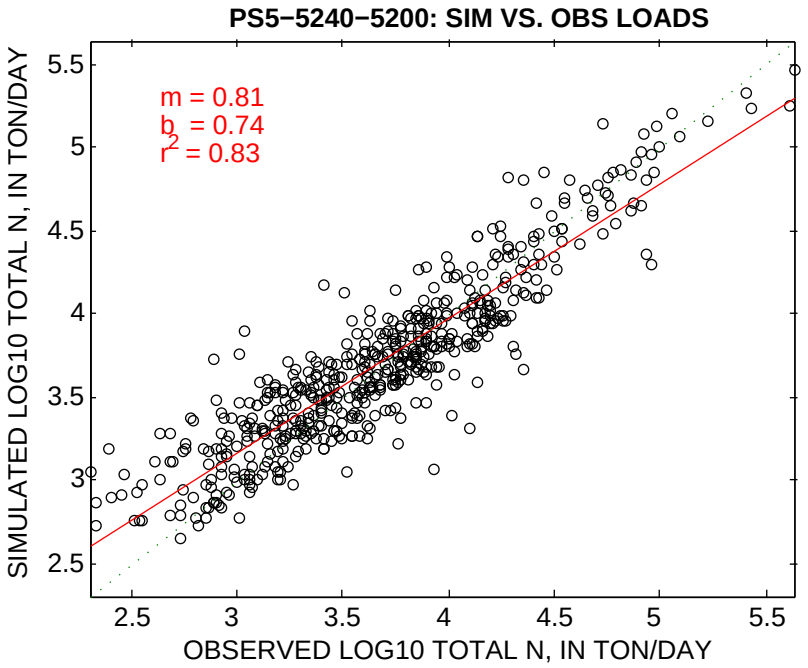


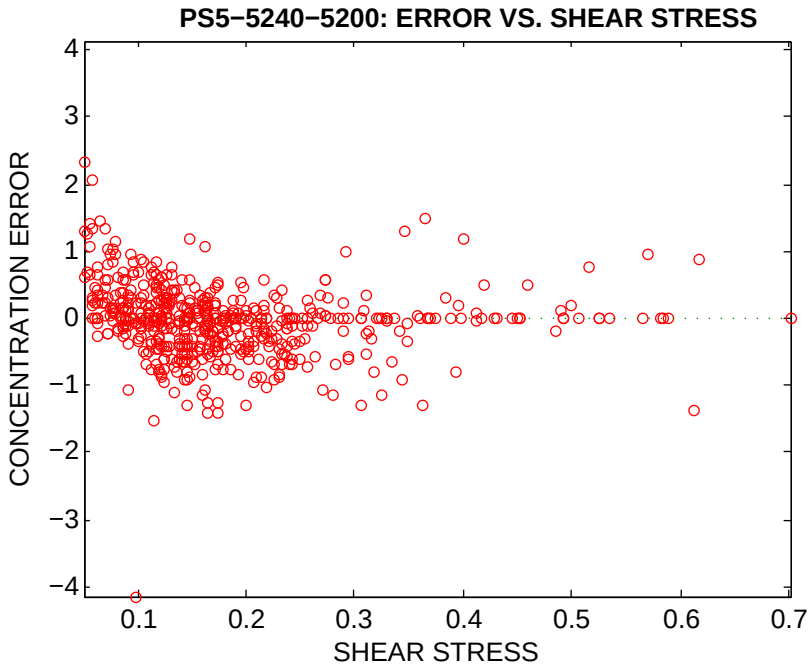


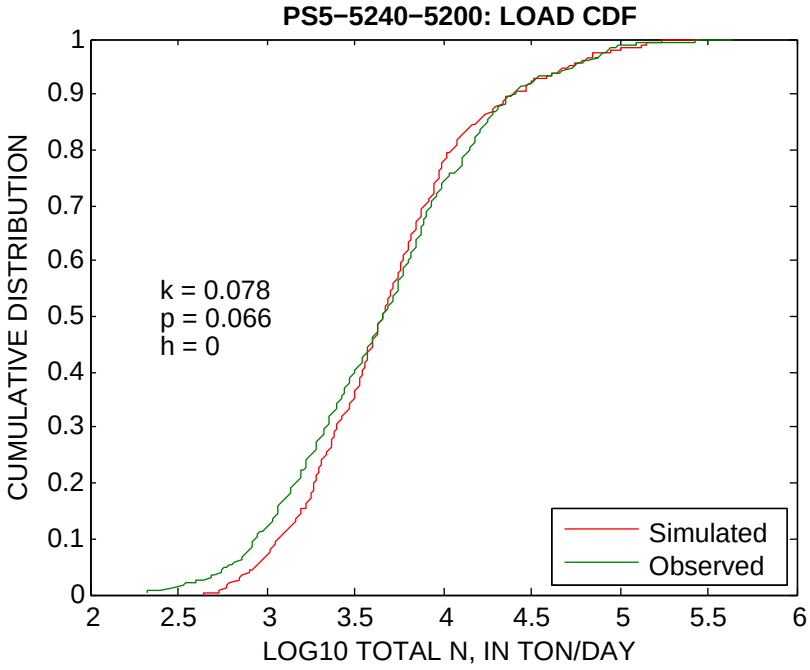


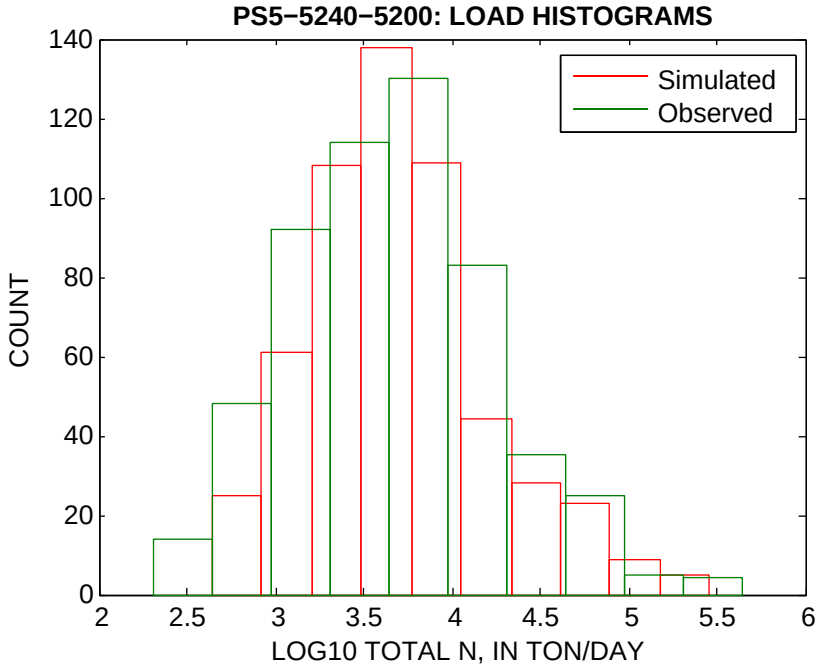


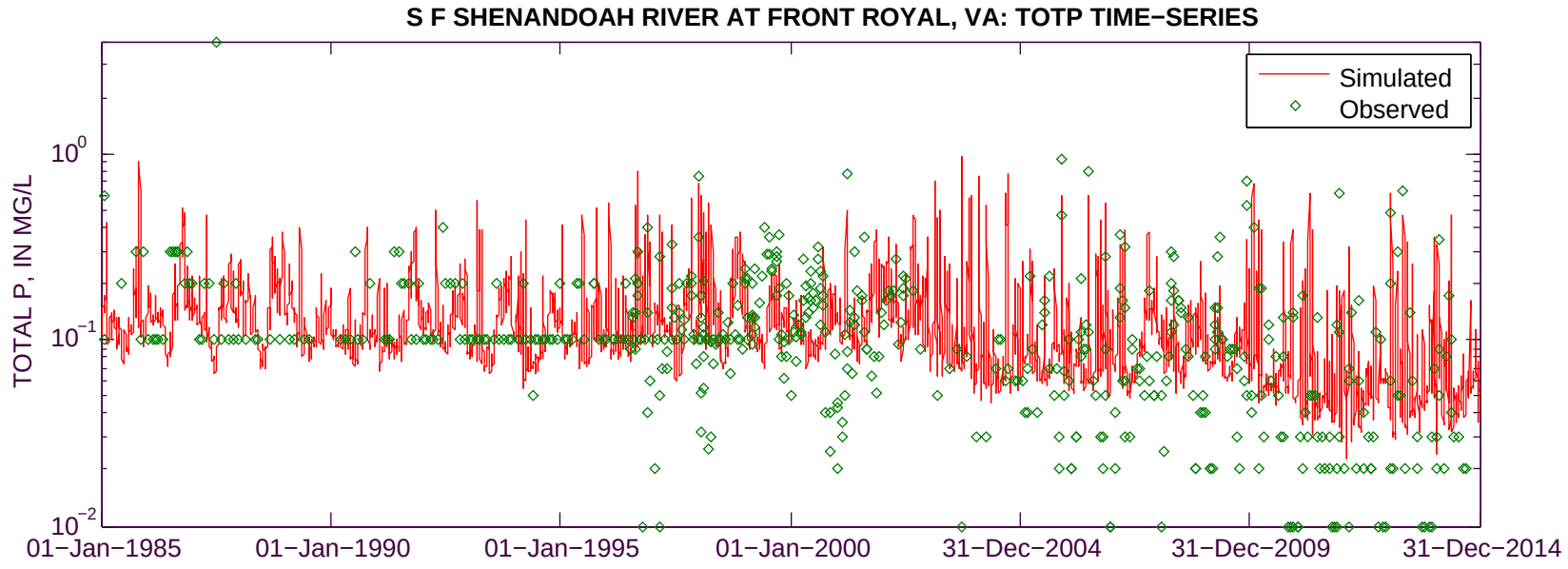
LOAD DATA
LOG10

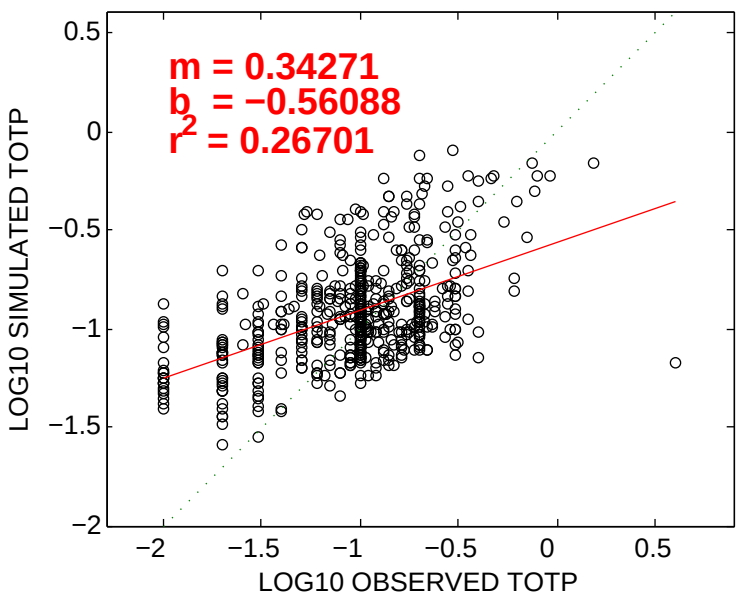


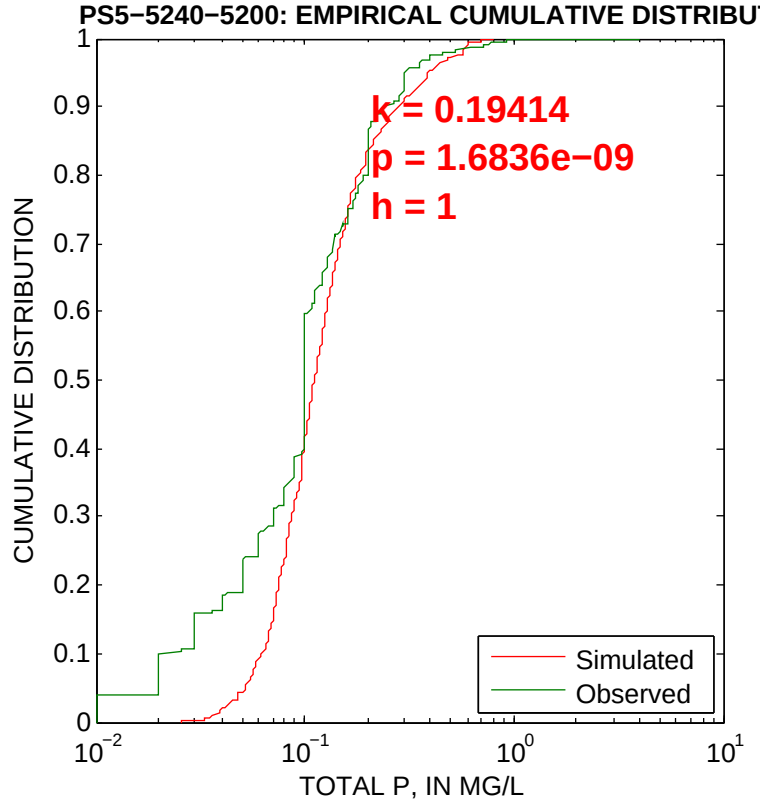












DATA SELECTION

scenario	file
P620171001WQ	TOTP.calib

plot: TOTP - total phosphorus

Dates: 1/1/1985 – 12/31/201

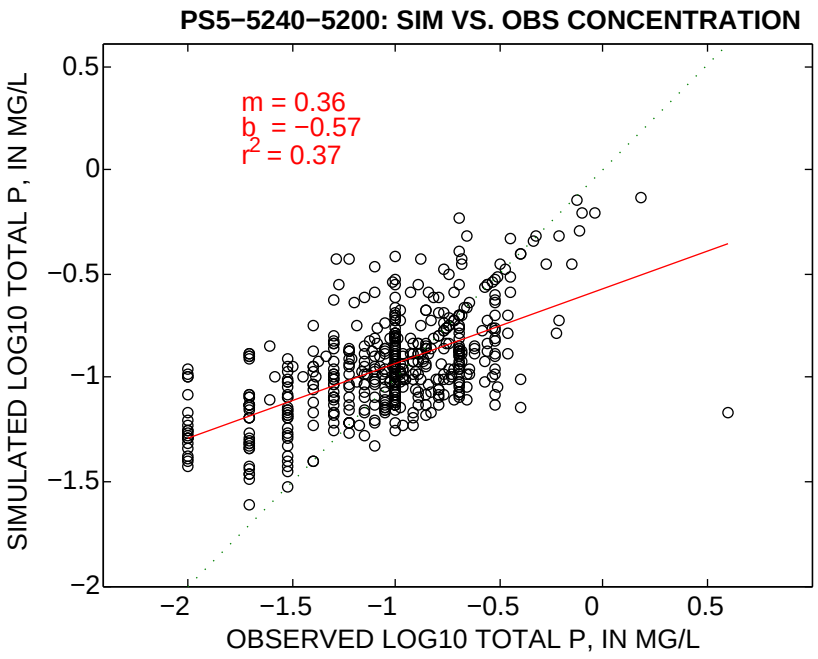
Drive	Directory	Observed
N/A	model	OBS20161101

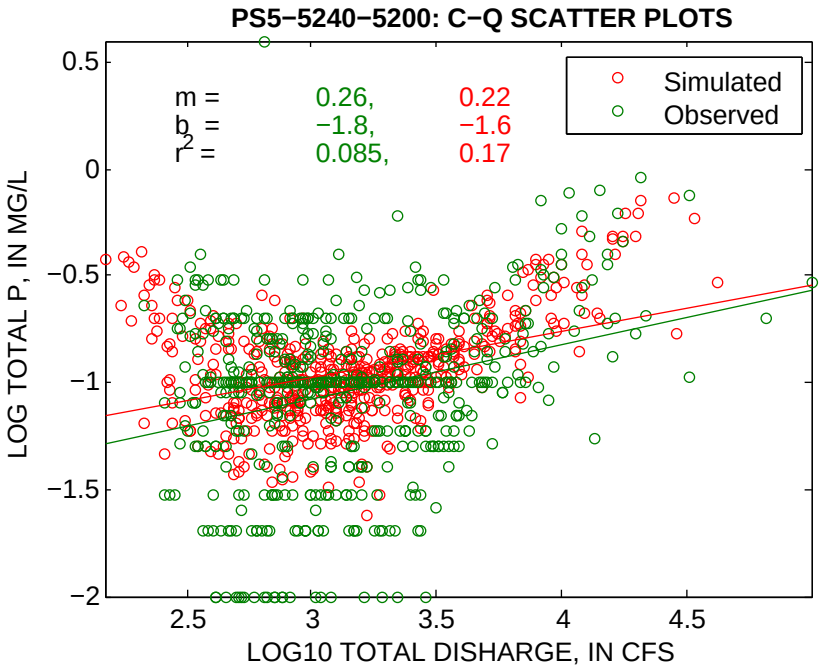
STATISTICS

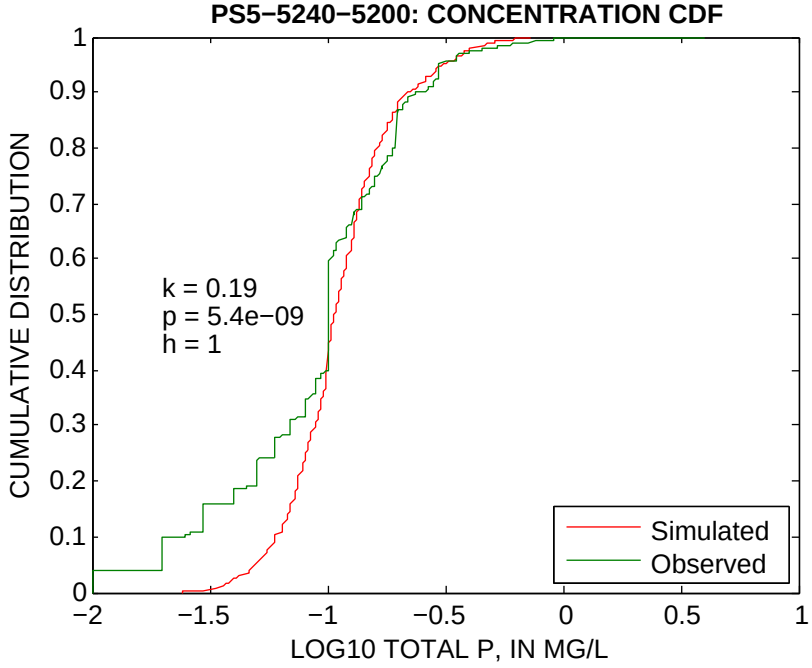
	n	546	546
		observe	simulate
min		0.01	0.026053
		-2	-1.58414
mean		0.135828	0.148052
		-1.04025	-0.917387
media		0.1	0.11155
		-1	-0.952531
max		4	0.8102
		0.60206	-0.0914078
varian		0.0436791	0.0134842
		0.152343	0.0670126
JB		0.001	0.001
		0.001	0.001
		ra	log
%		8.9995	-11.8109
err.va		0.0423906	0.130058
rel.std.err		0.970502	0.853721
mod.eff		0.0294984	0.146279

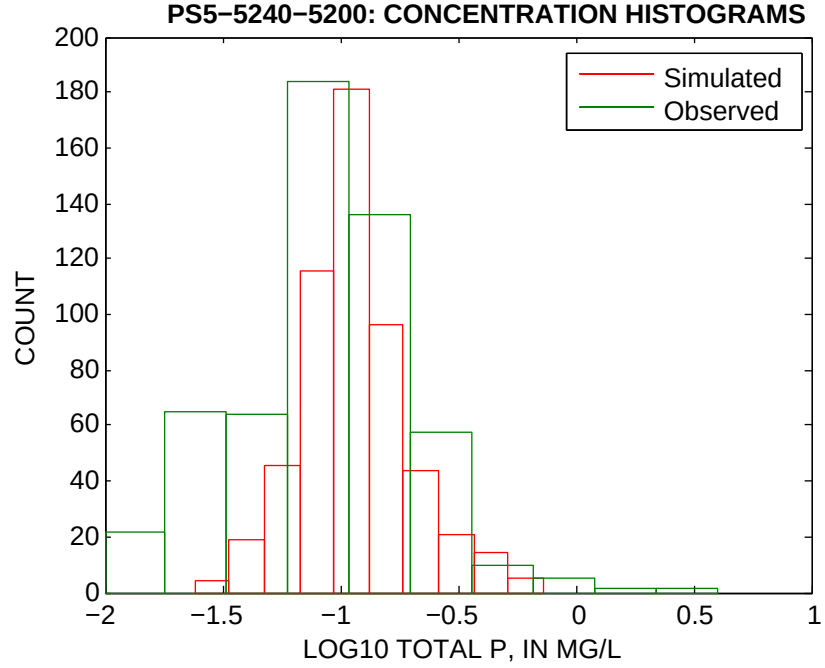
VERSION

ALL DATA
LOG10

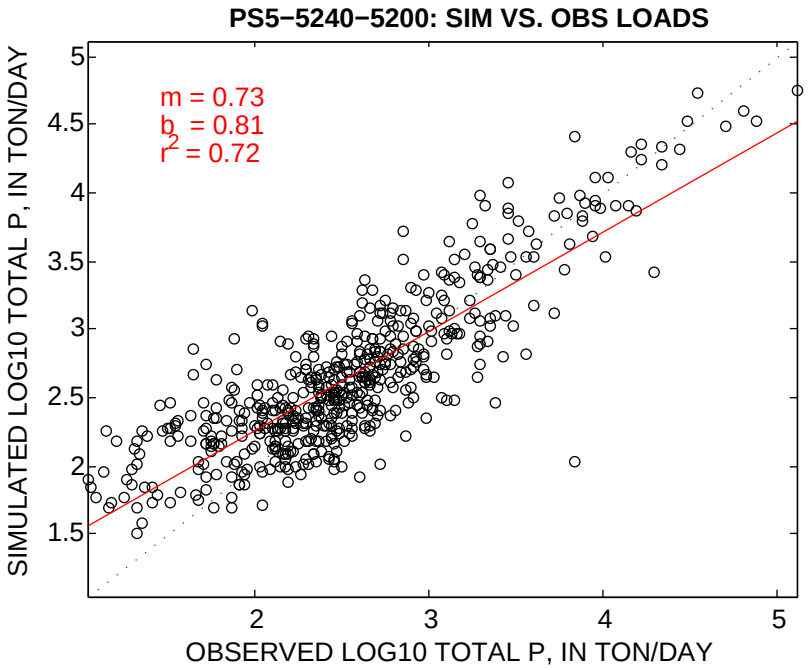


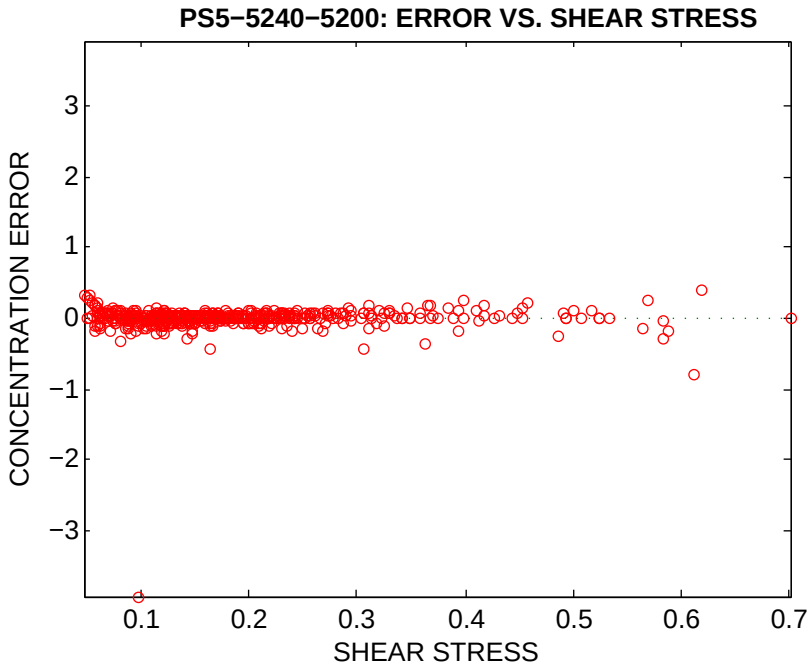


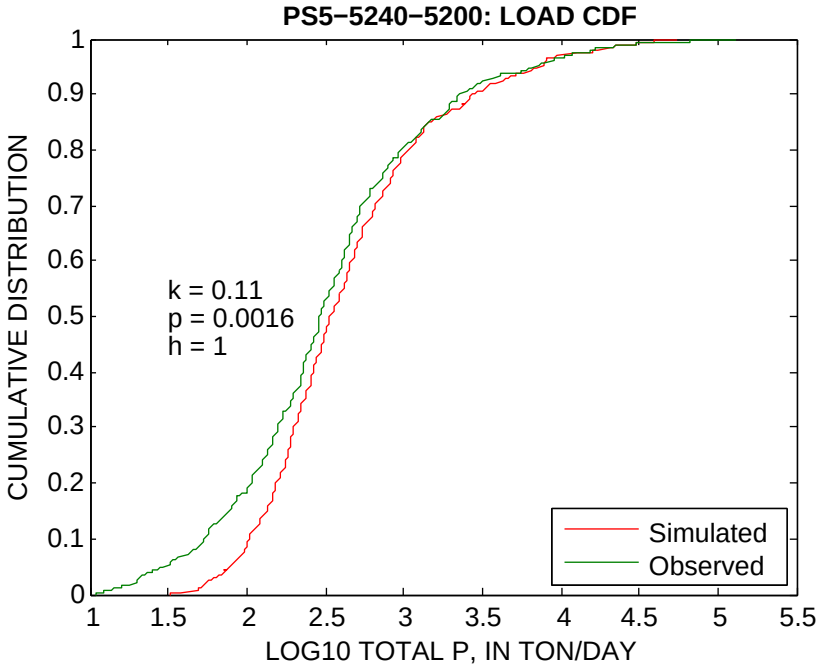


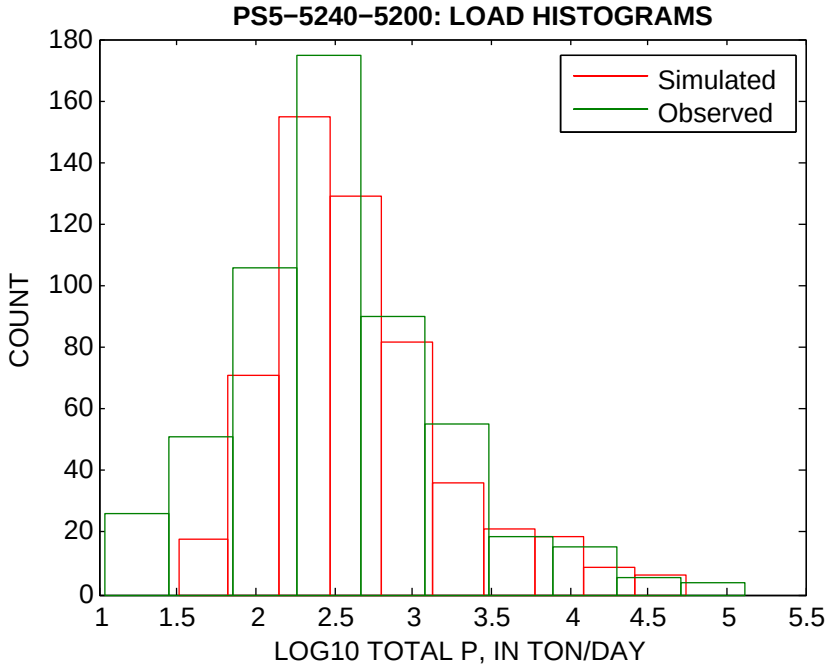


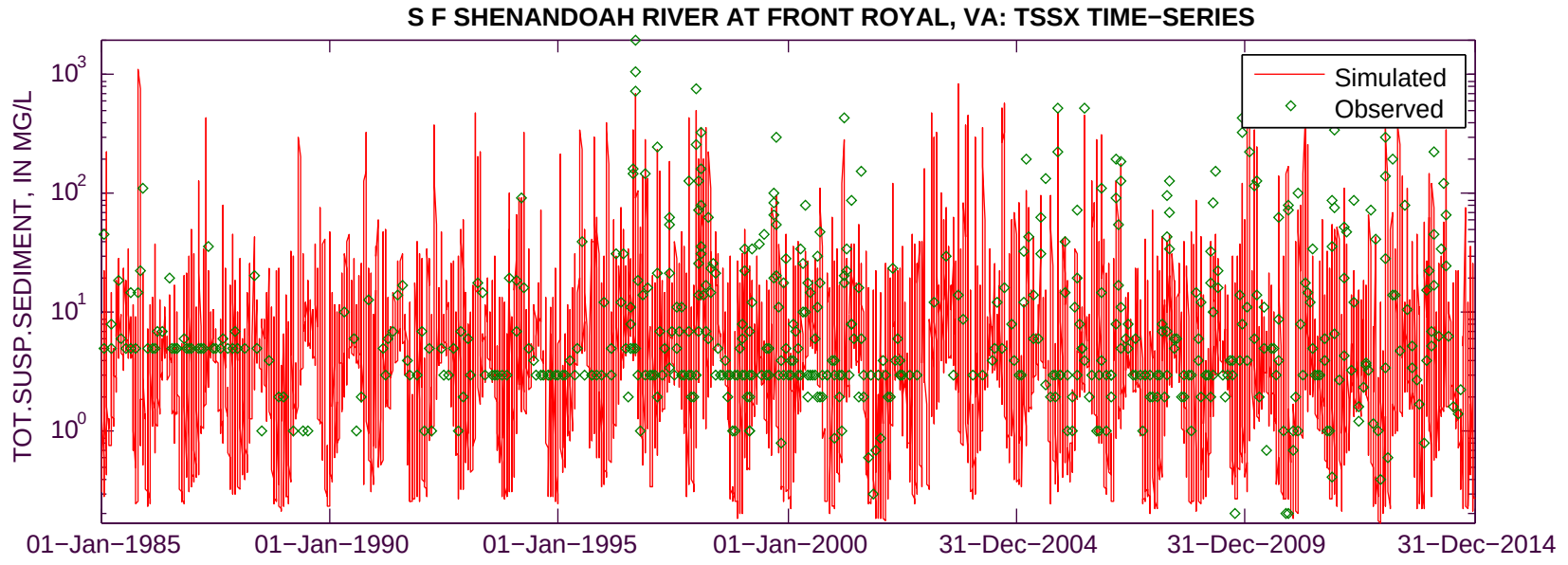
LOAD DATA
LOG10

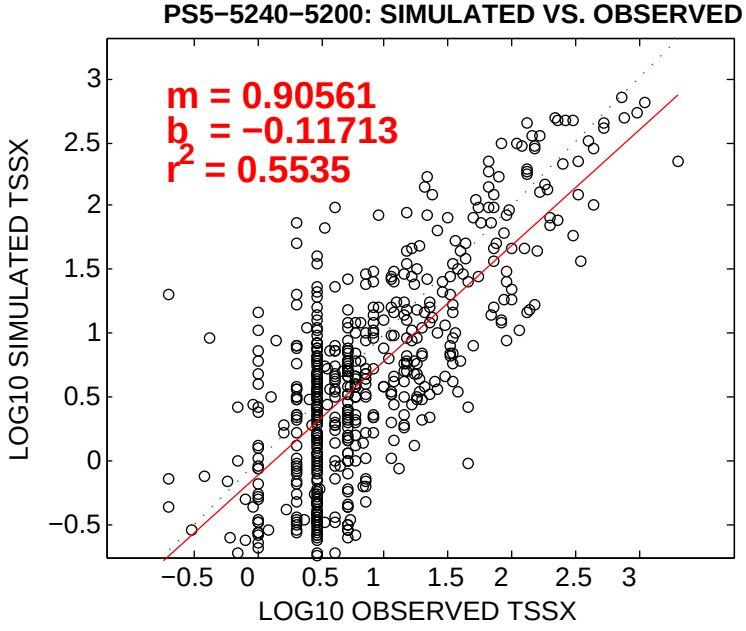


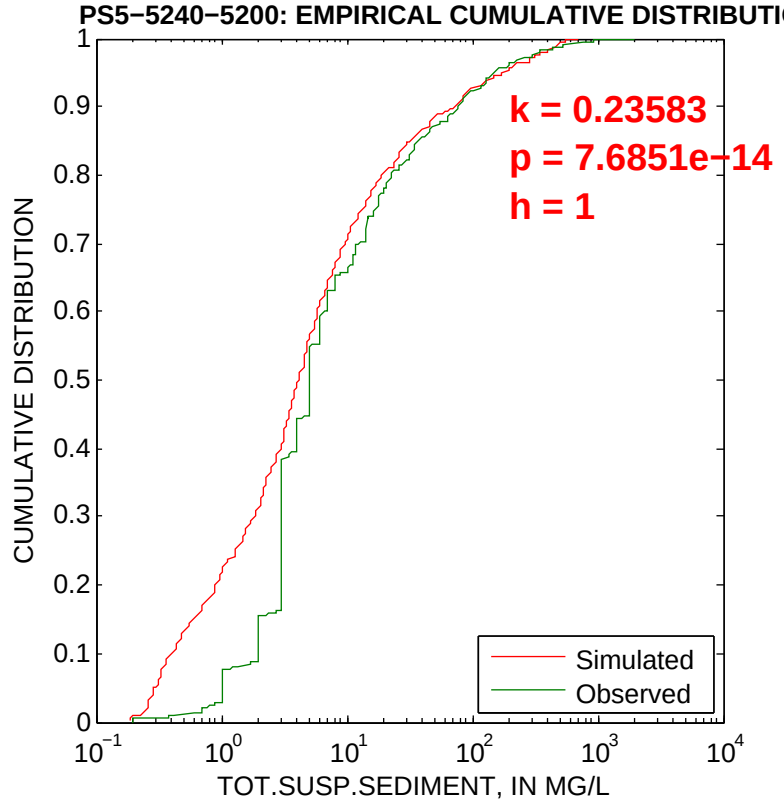












DATA SELECTION

scenario	file
P620171001WQ	TSSX.calib

plot: TSSX - total suspended ...

Dates: 1/1/1985 – 12/31/201

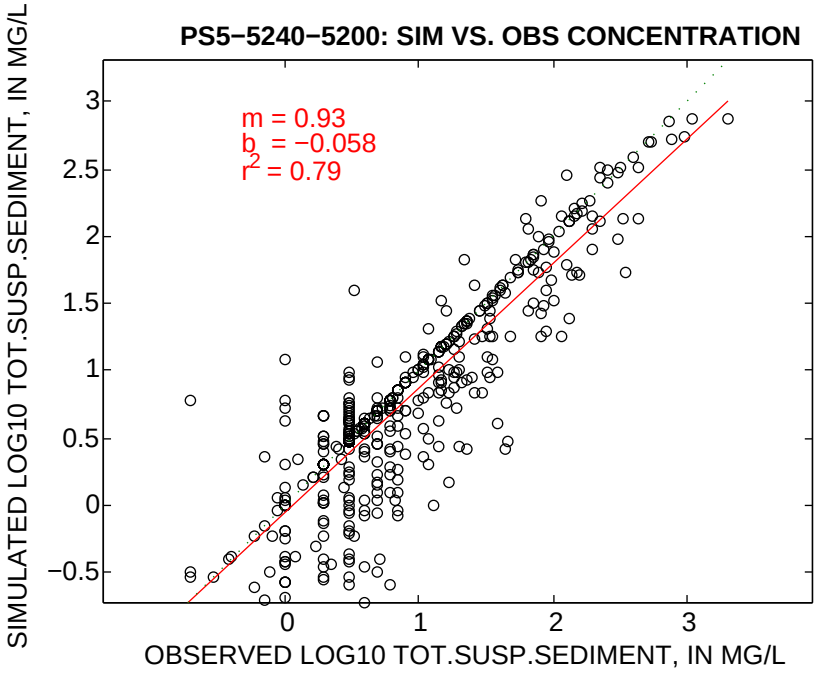
Drive	Directory	Observed
N/A	model	OBS20161101

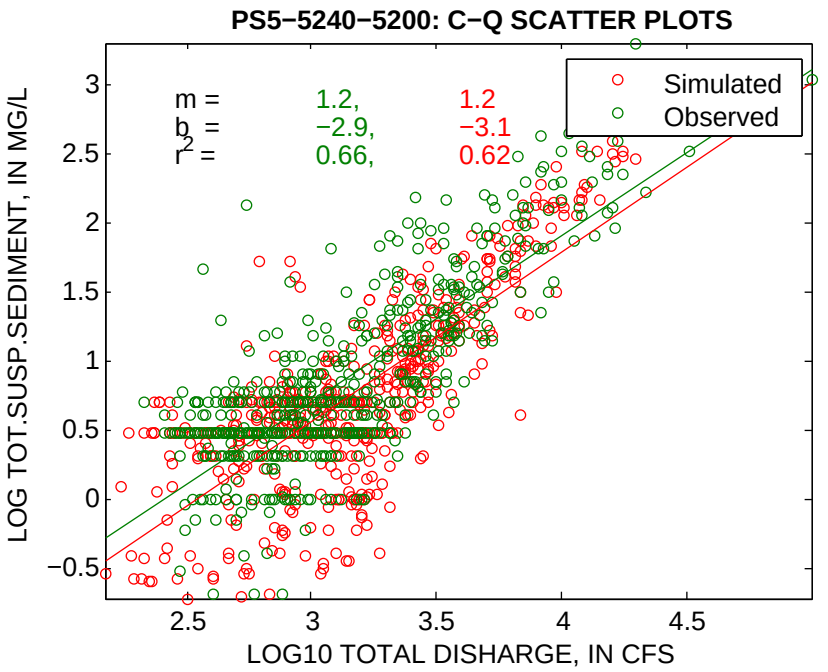
STATISTICS

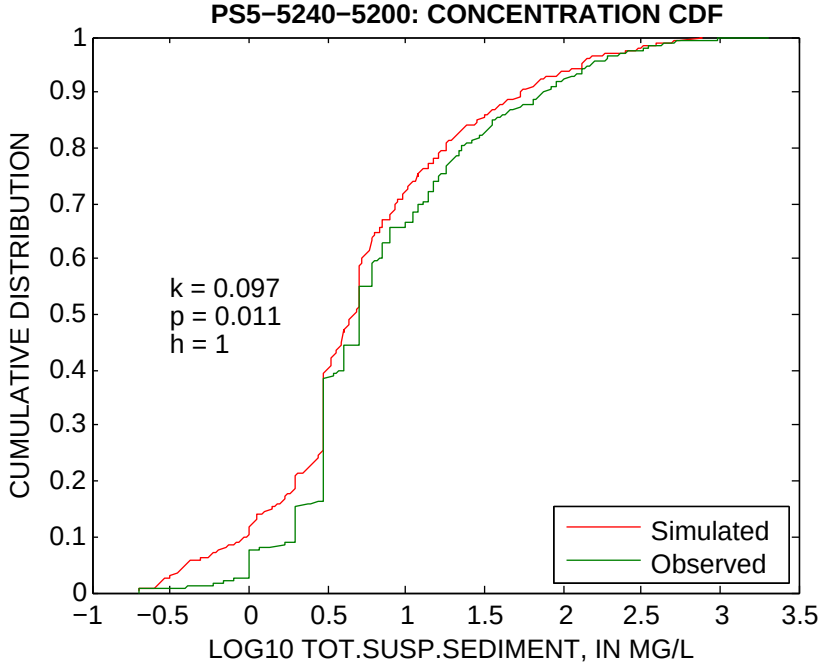
	n	547	547
		observe	simulate
min		0.2	0.18076
		-0.69897	-0.742898
mean		36.3627	30.7545
		0.878311	0.678279
media		5	4.154
		0.69897	0.618466
max		2020	717.01
		3.30535	2.85553
varian		16795	7474.94
		0.432245	0.640455
JB		0.001	0.001
		0.001	0.001
		ra	log
%		-15.4229	-22.7747
err.va		9100.46	0.329898
rel.std.err		0.541855	0.76322
mod.eff		0.458145	0.23678

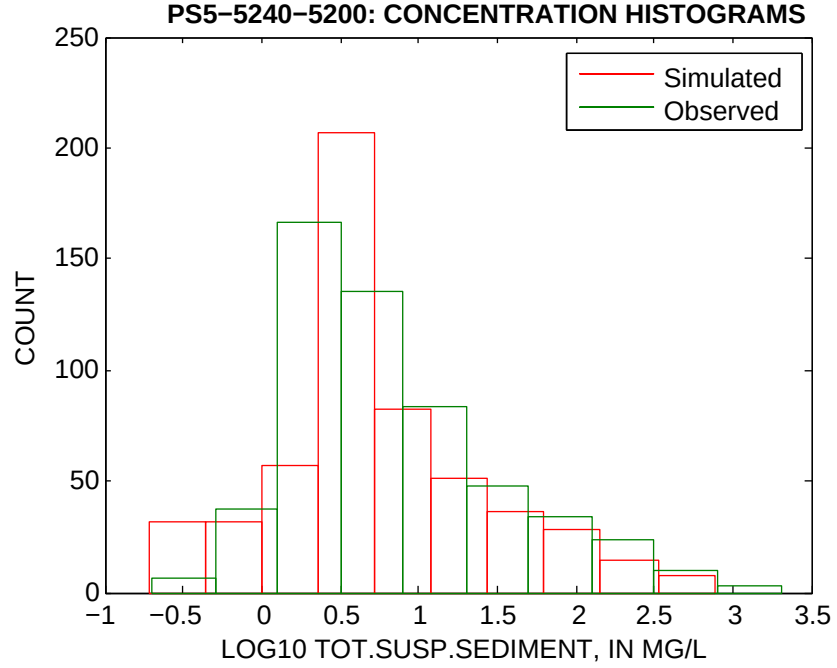
VERSION 2.1

ALL DATA
LOG10

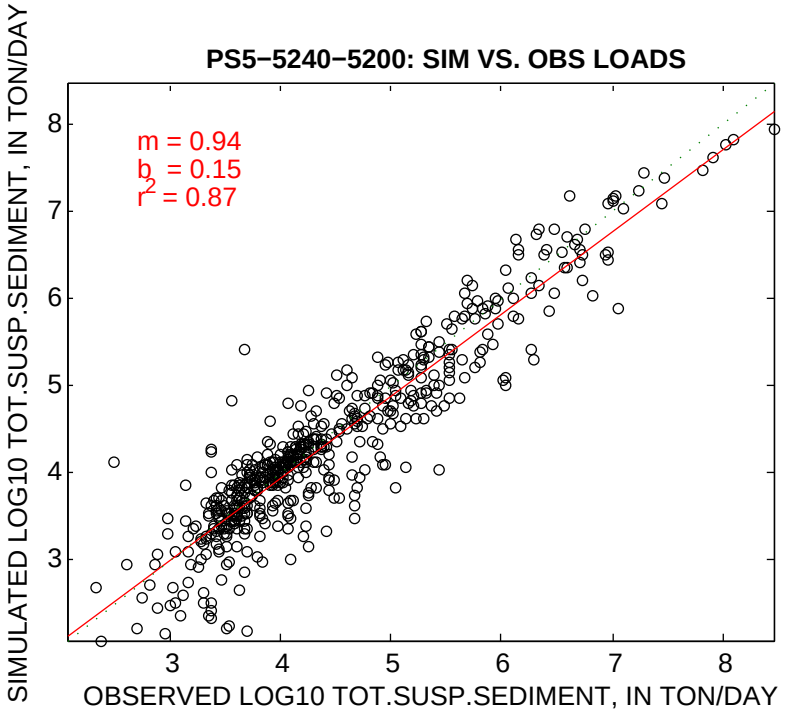


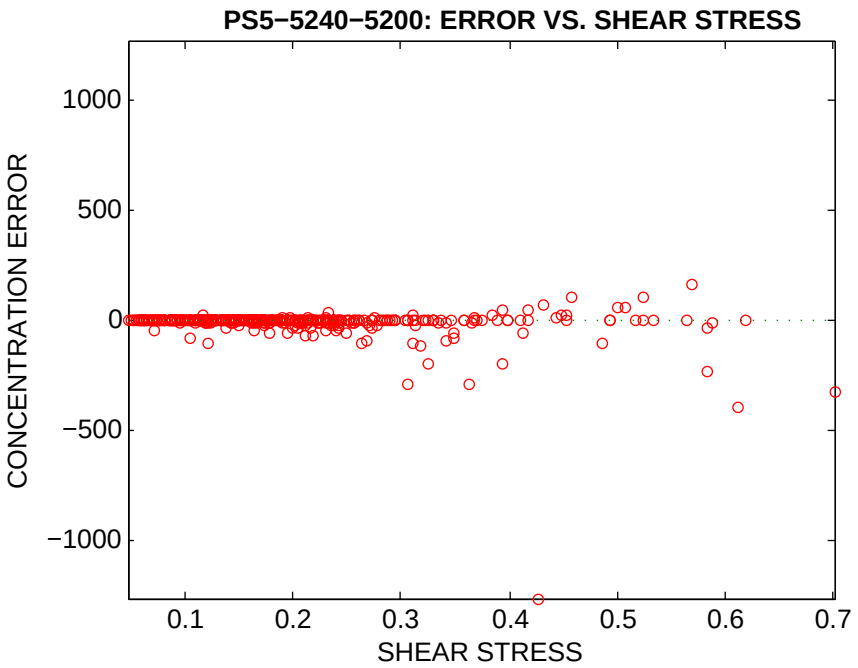


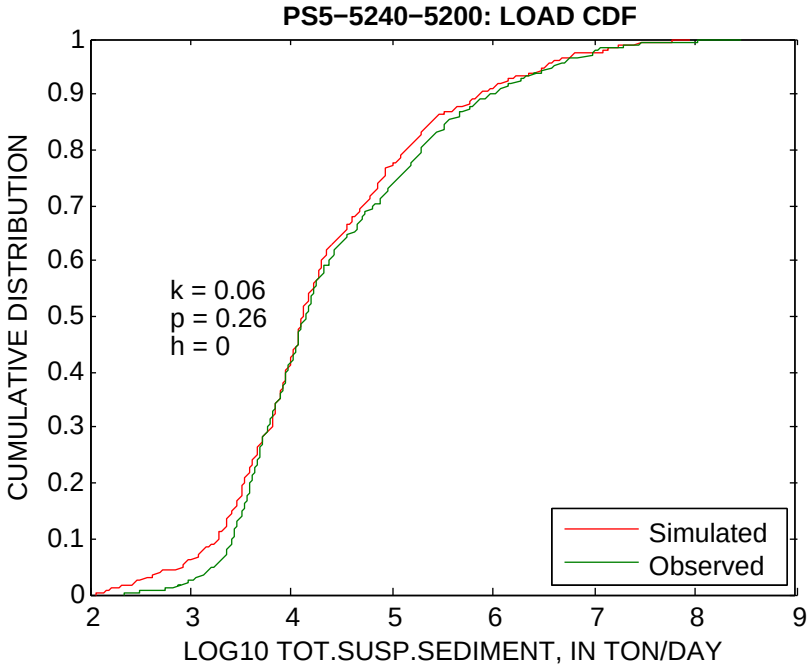


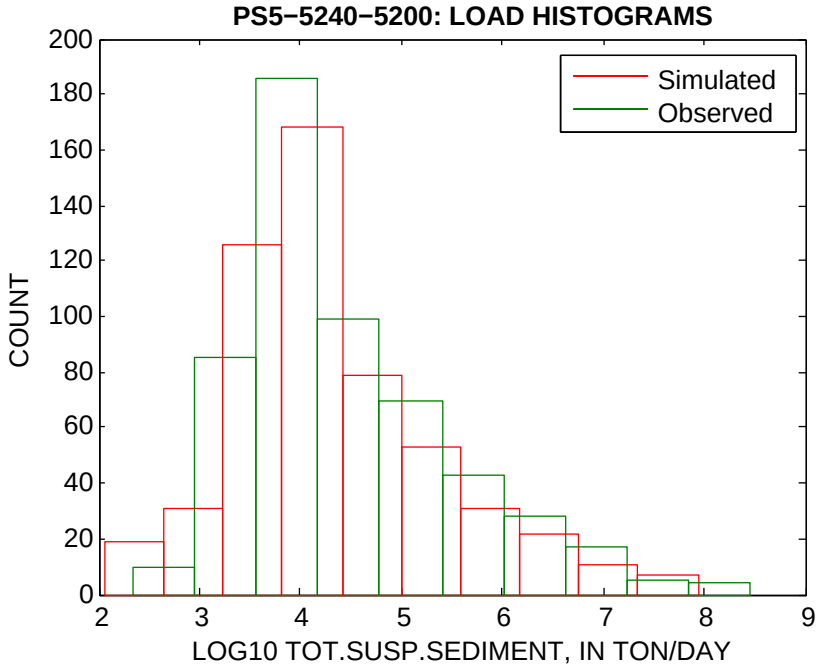


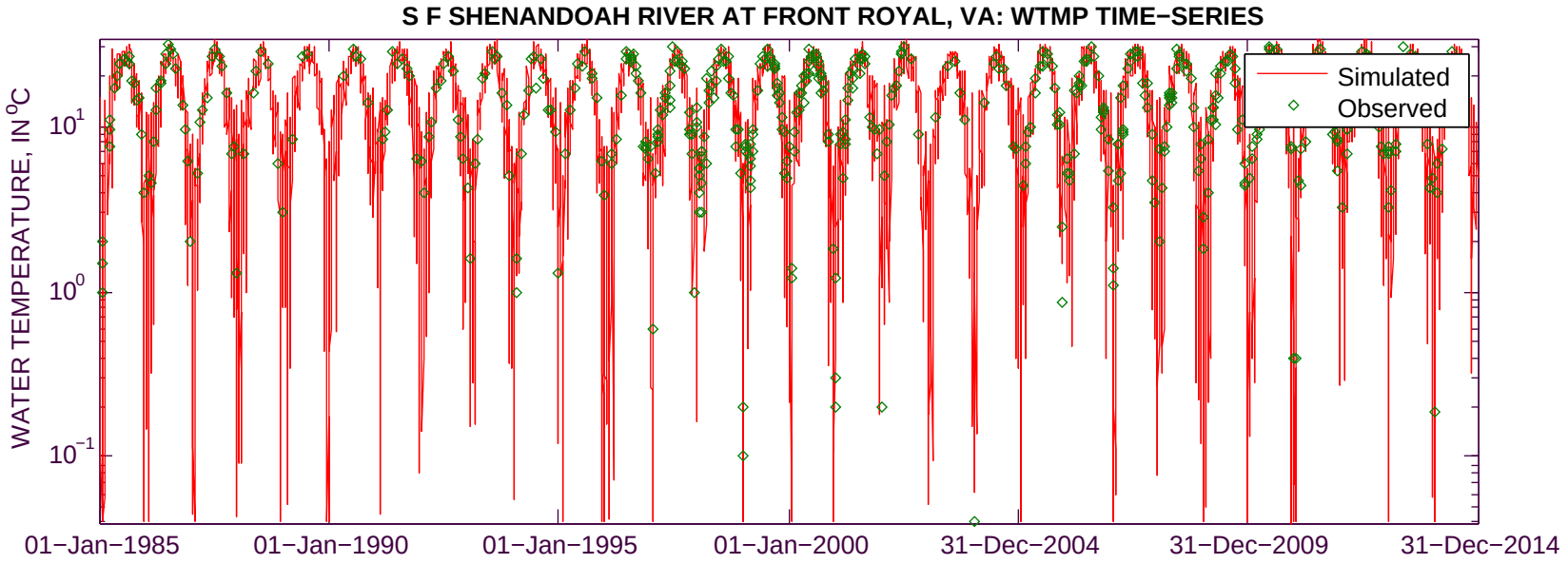
LOAD DATA
LOG10

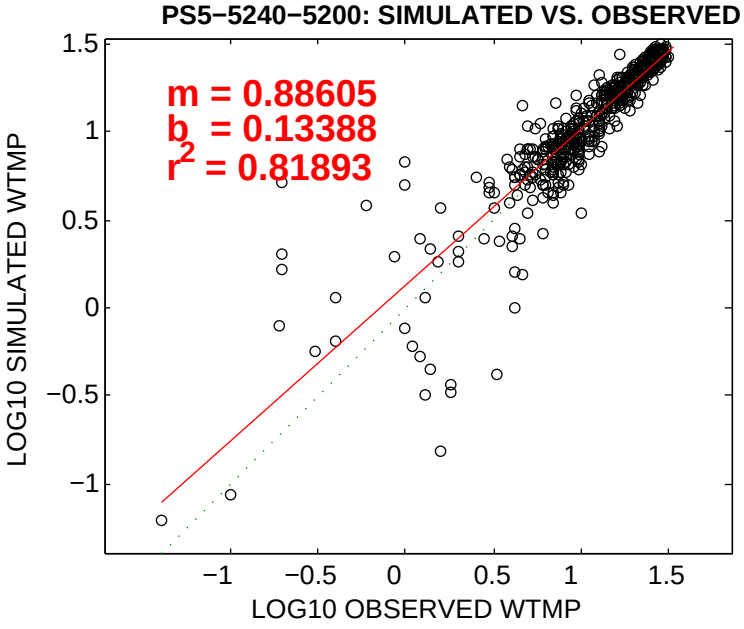


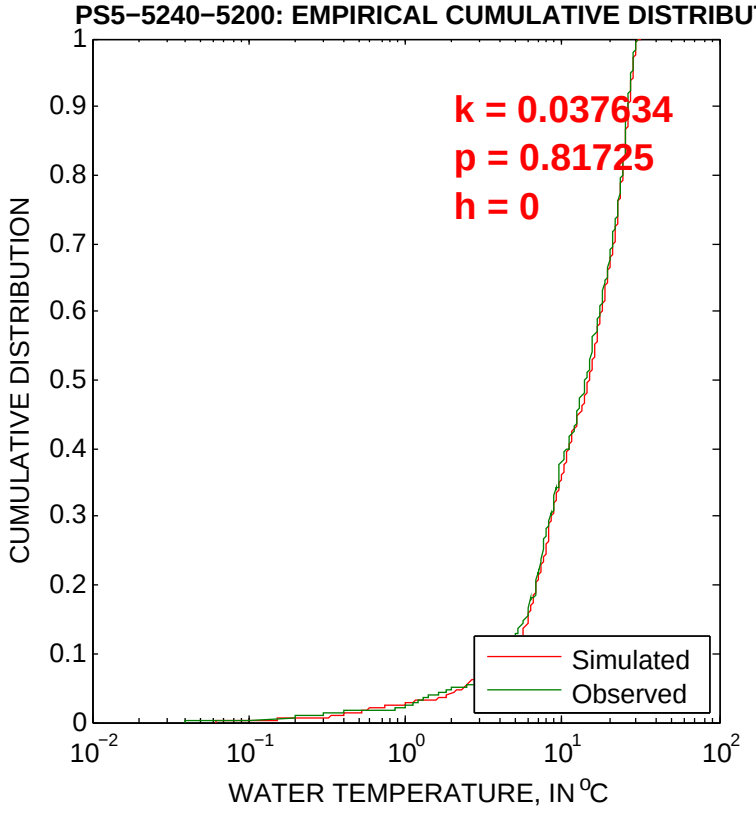












DATA SELECTION

scenario	file
P620171001WQ	WTMP.calib

plot: WTMP - water tempera...

Dates: 1/1/1985 – 12/31/201

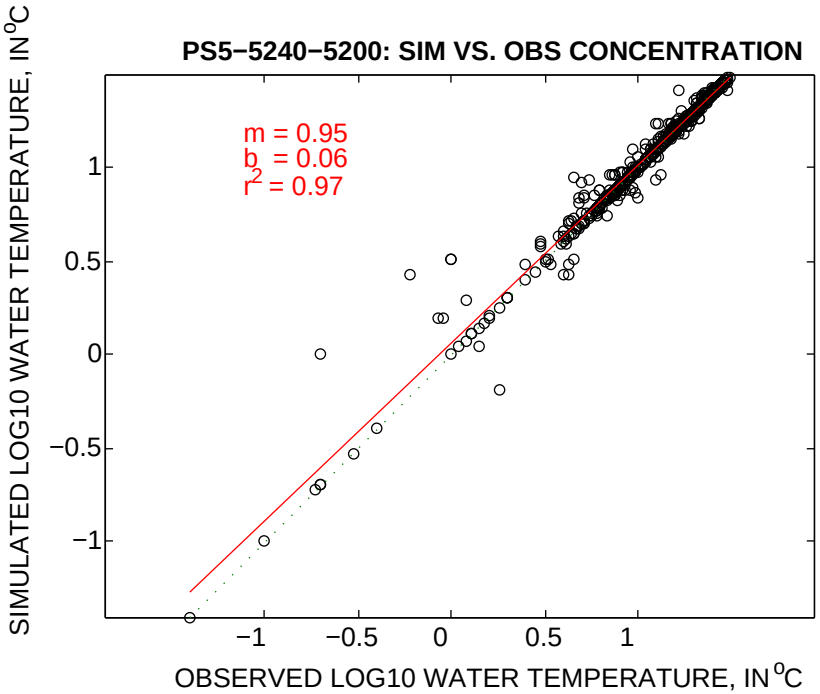
Drive	Directory	Observed
N/A	model	OBS20161101

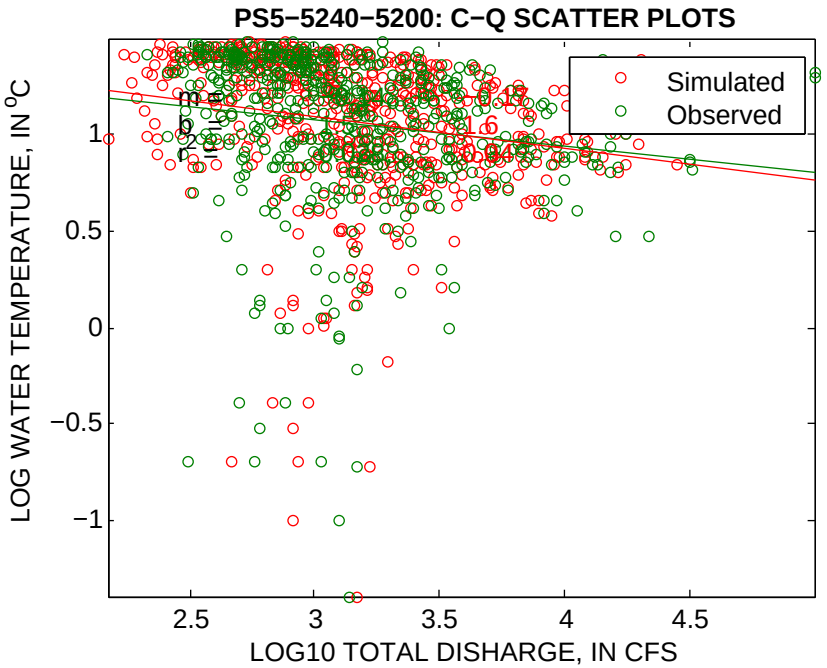
STATISTICS

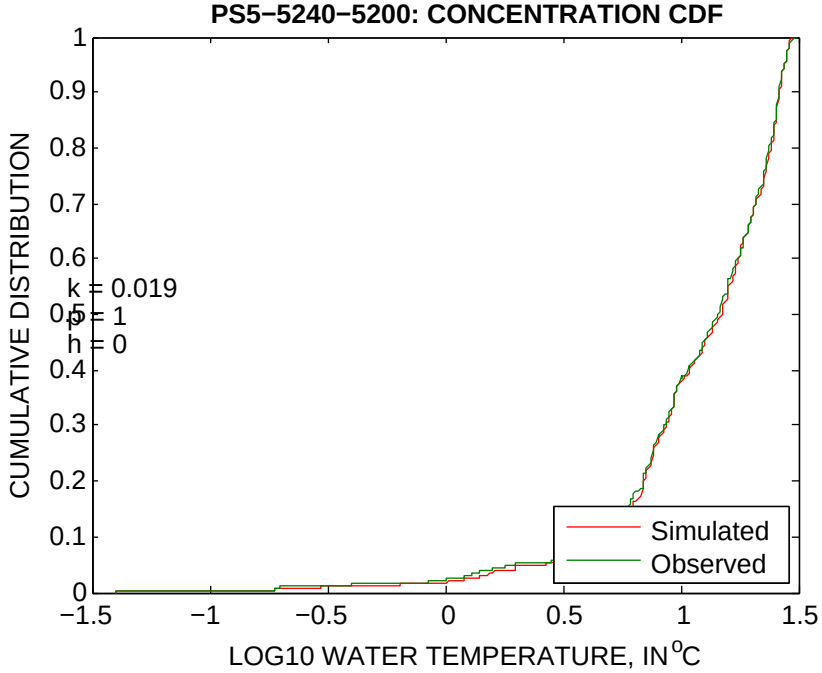
	n	observe	simulate
		558	558
min		0.04	0.061124
		-1.39794	-1.21379
mean		14.8438	15.1775
		1.059	1.07221
media		14.15	14.9245
		1.15073	1.1739
max		31	32.217
		1.49136	1.50809
varian		69.705	70.5439
		0.153109	0.14678
JB		0.001	0.001
		0.001	0.001
		ra	log
%		2.24774	1.24707
err.va		5.28322	0.0287396
rel.std.err		0.075794	0.187707
mod.eff		0.924206	0.812293

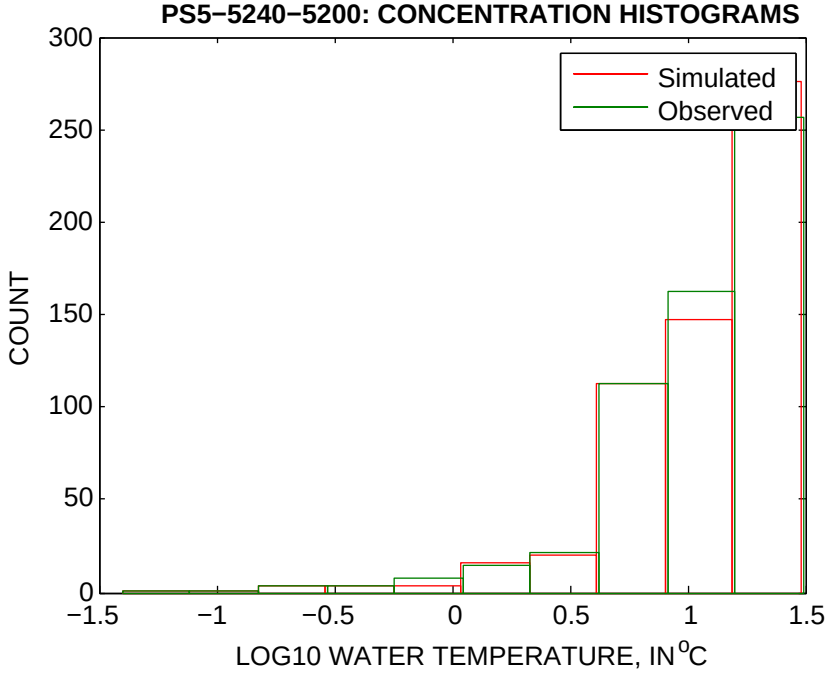
VERSION 2.1

ALL DATA
LOG10

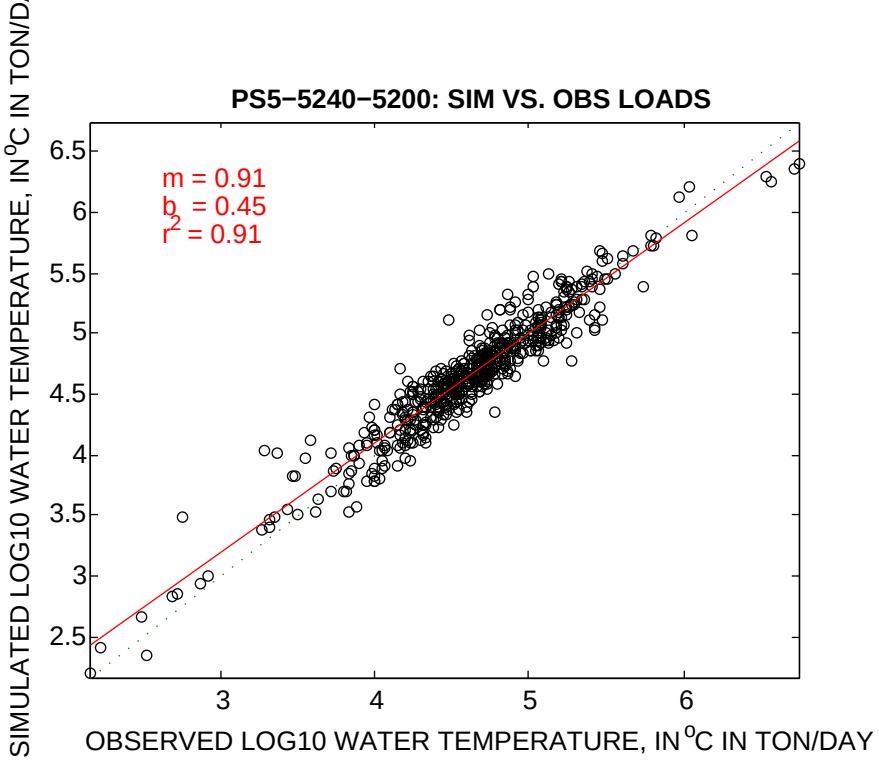


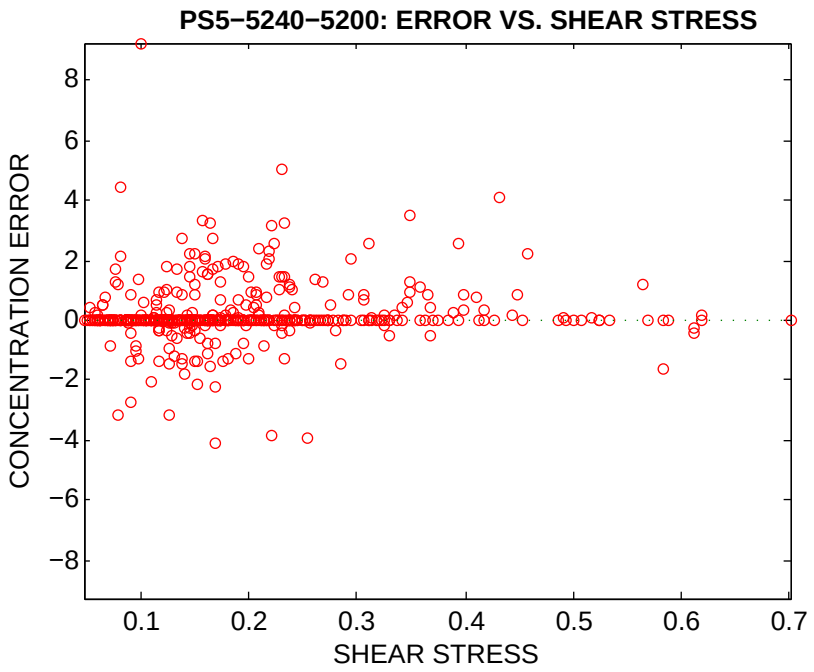


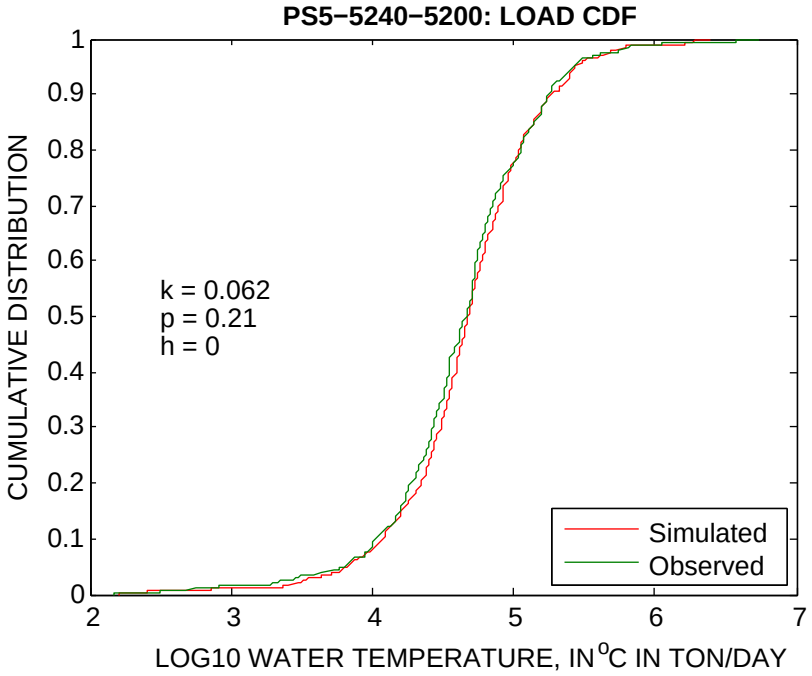


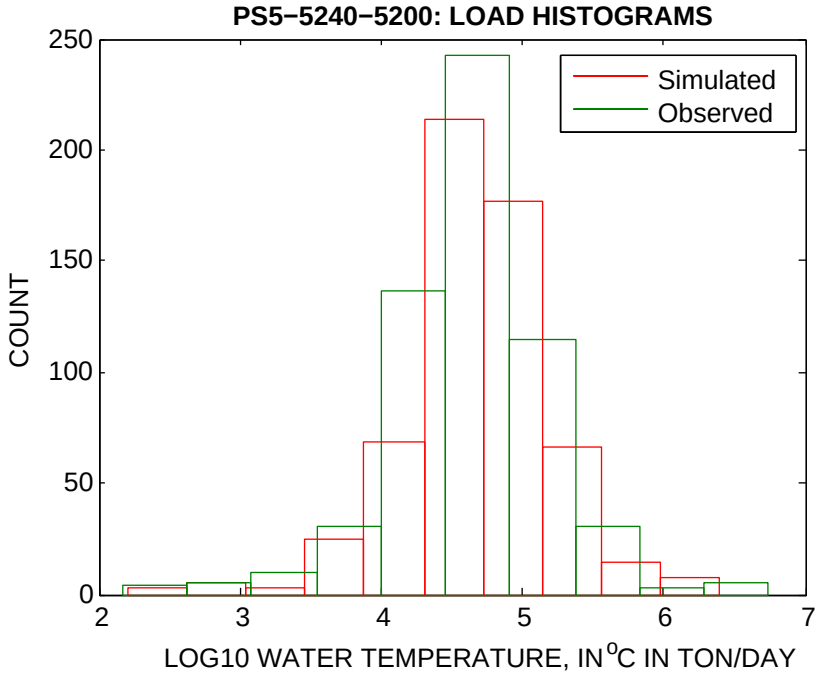


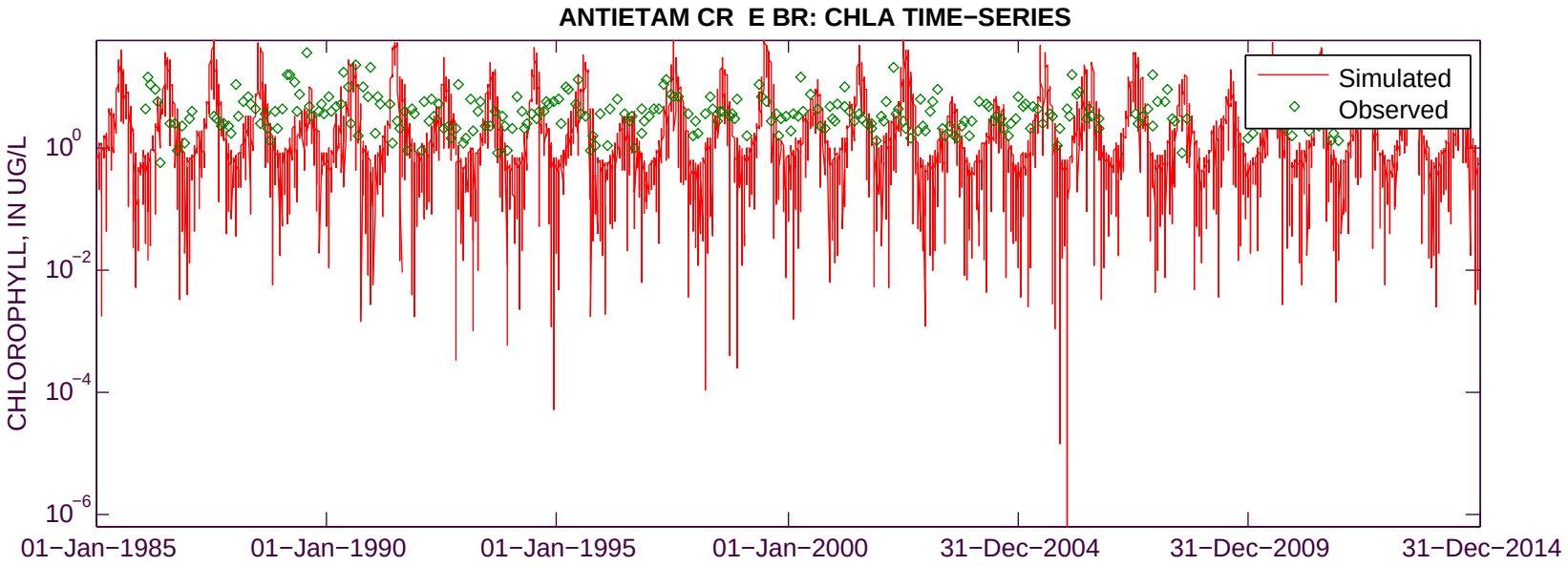
LOAD DATA
LOG10

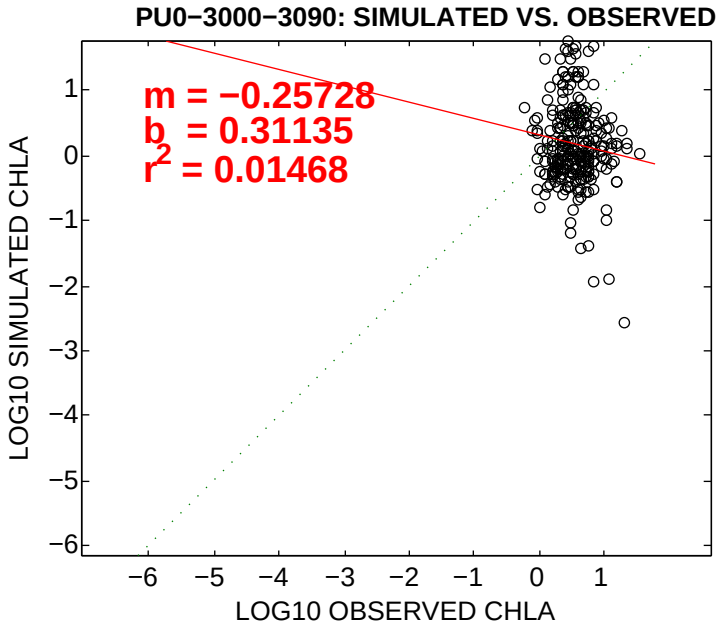


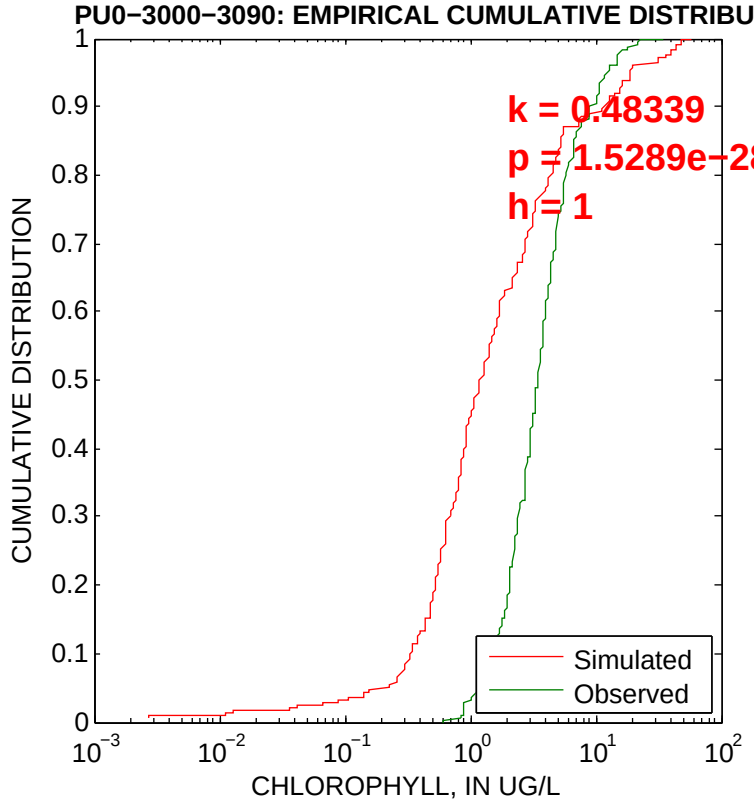












DATA SELECTION

scenario	file
P620171001WQ	CHLA.calib

plot: CHLA - chlorophyll A

Dates: 1/1/1985 – 12/31/201

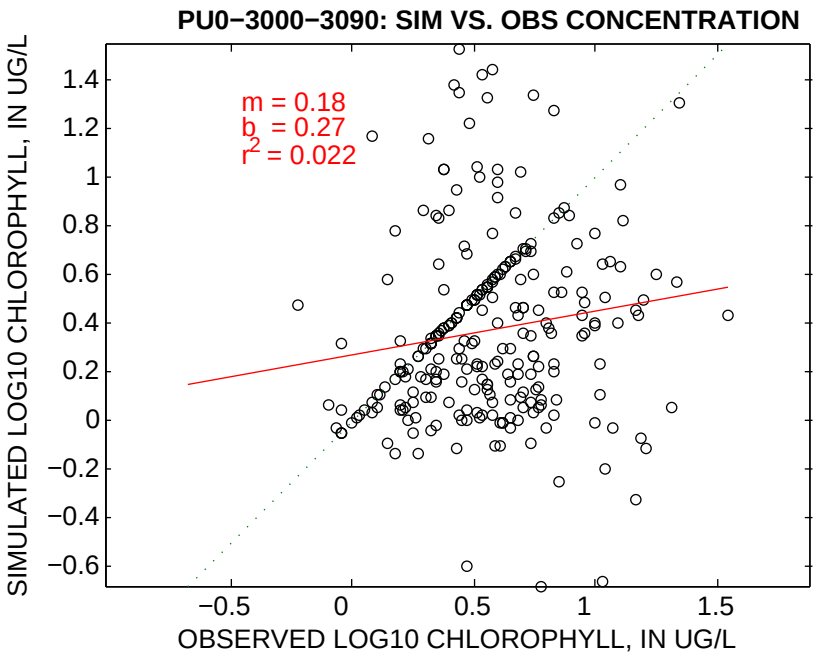
Drive	Directory	Observed
N/A	model	OBS20161101

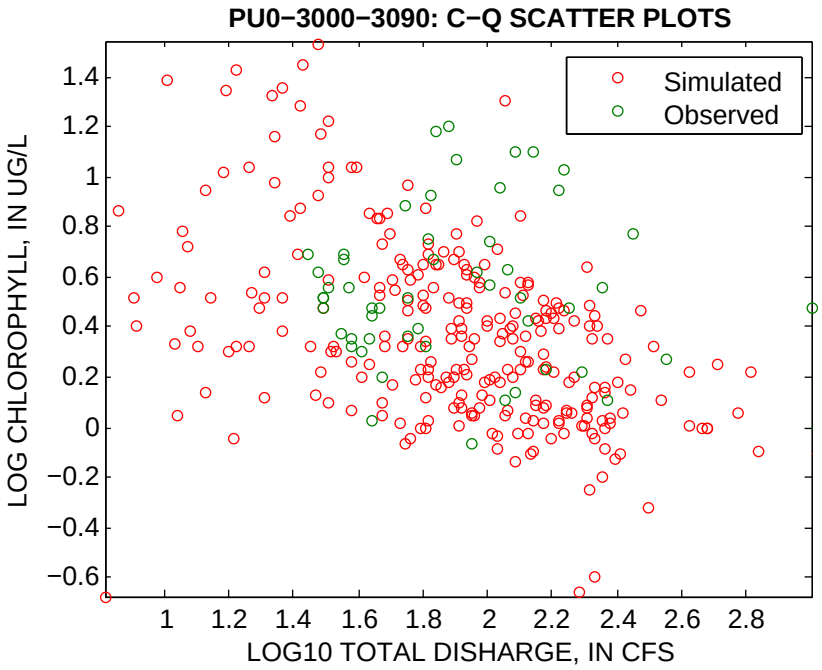
STATISTICS

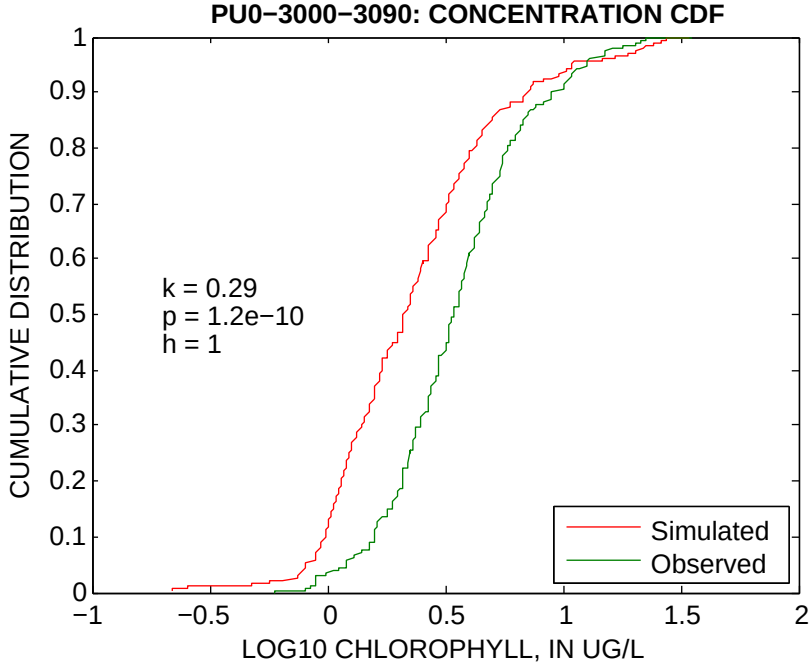
		observe	simulate
n		271	269
min		0.6	0
		-0.221849	-2.56288
mean		4.61383	4.28437
		0.549754	0.169906
media		3.439	1.2275
		0.536432	0.0975349
max		35.1	59.149
		1.54531	1.77195
varian		16.399	76.7946
		0.0873722	0.393947
JB		0.001	0.001
		0.039344	0.001
		ra	log
%		-7.14059	-69.0941
err.va		100.563	0.6711
rel.std.err		6.13225	7.68093
mod.eff		-5.13225	-6.68093

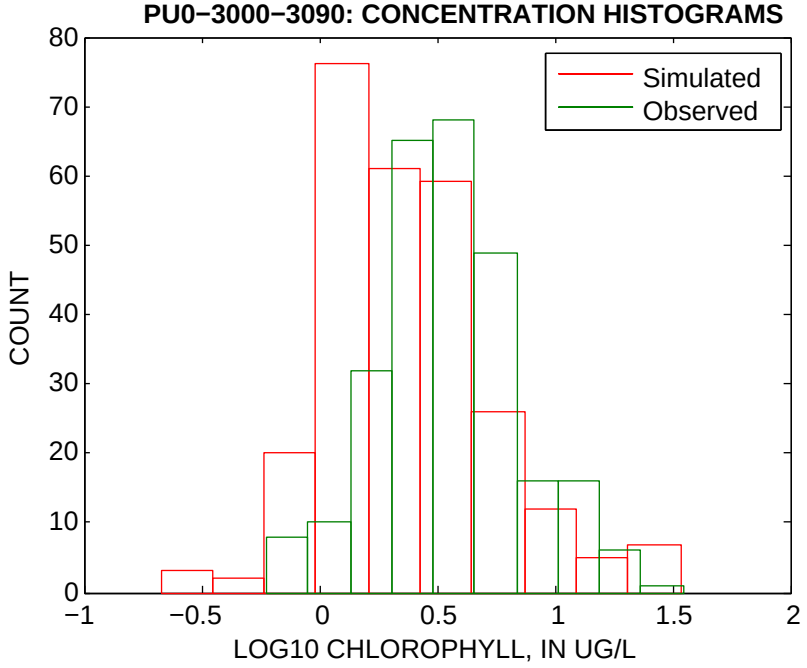
VERSION 2.1

ALL DATA
LOG10

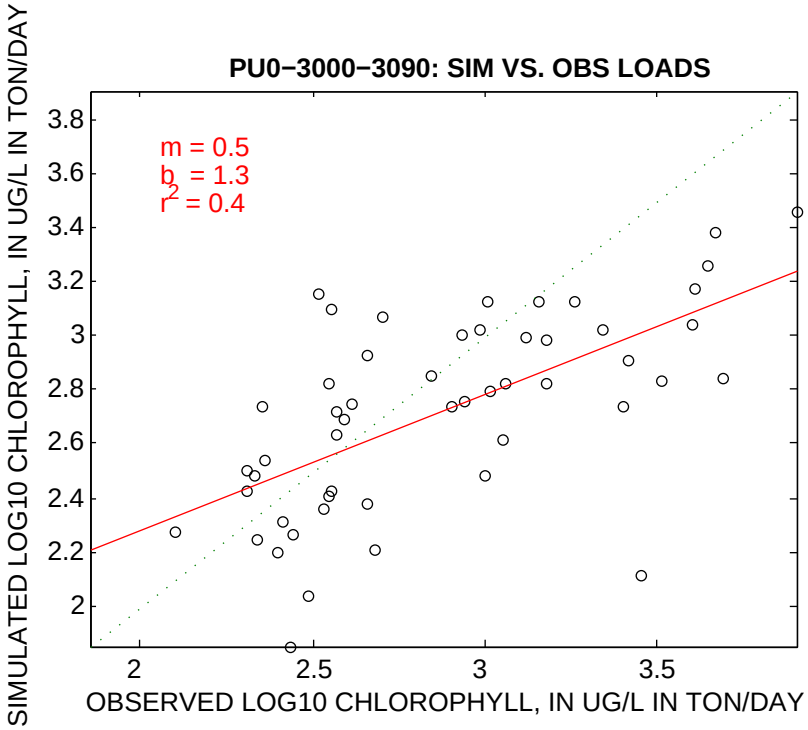


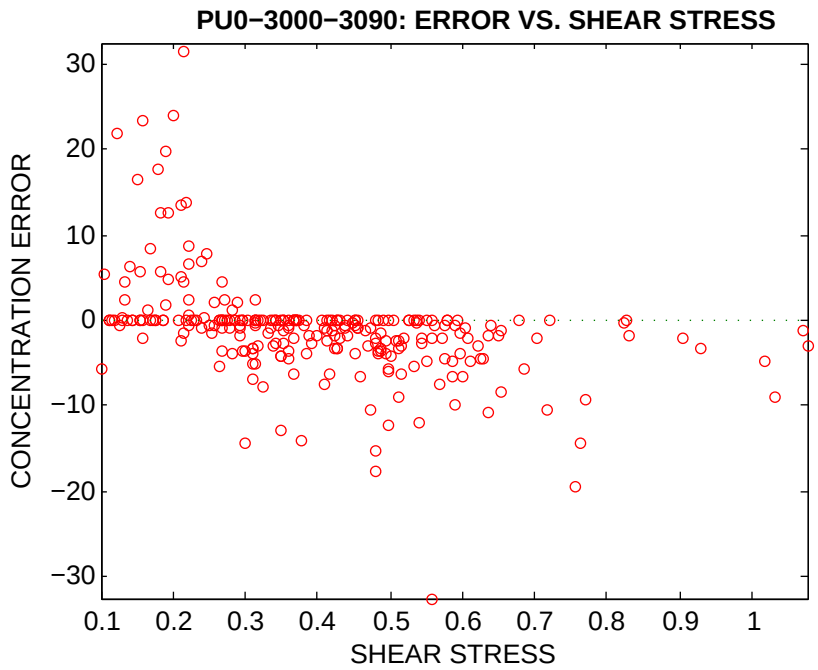


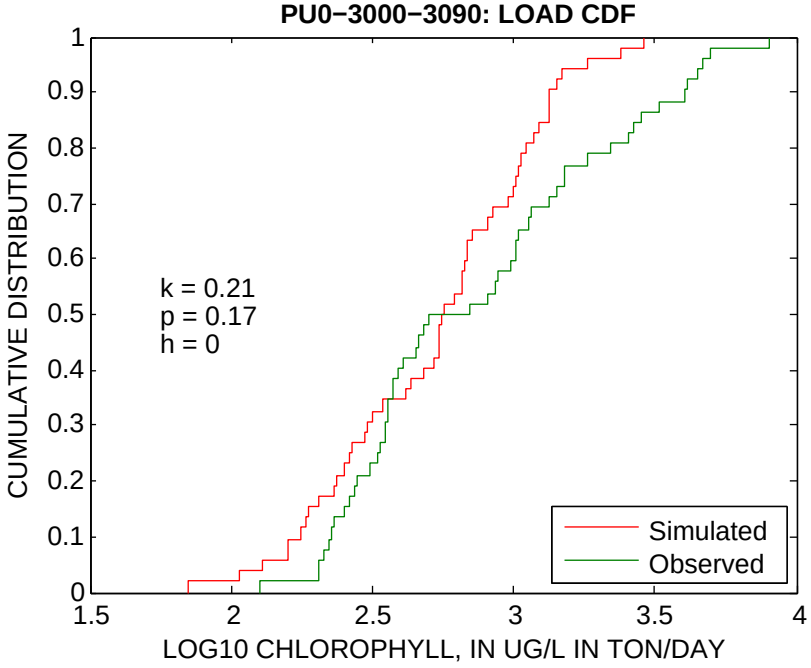


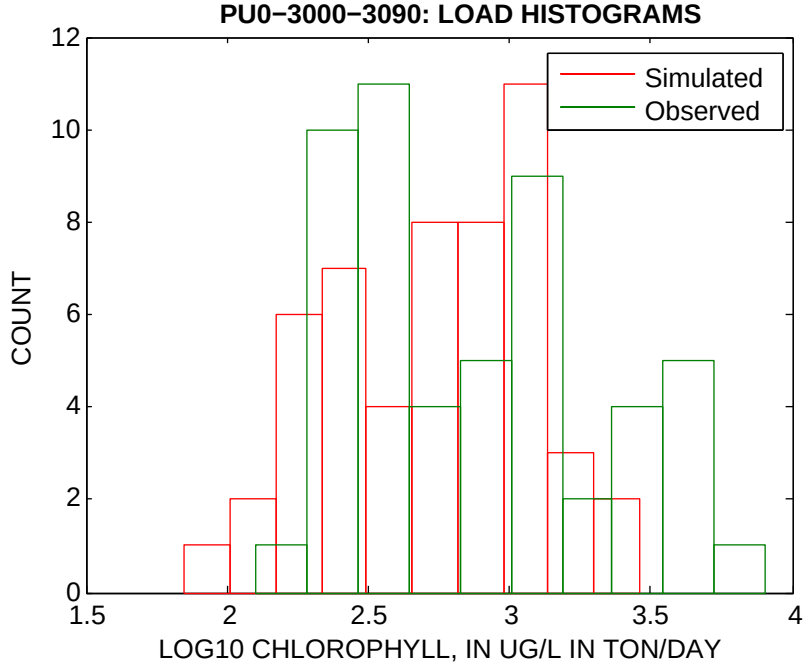


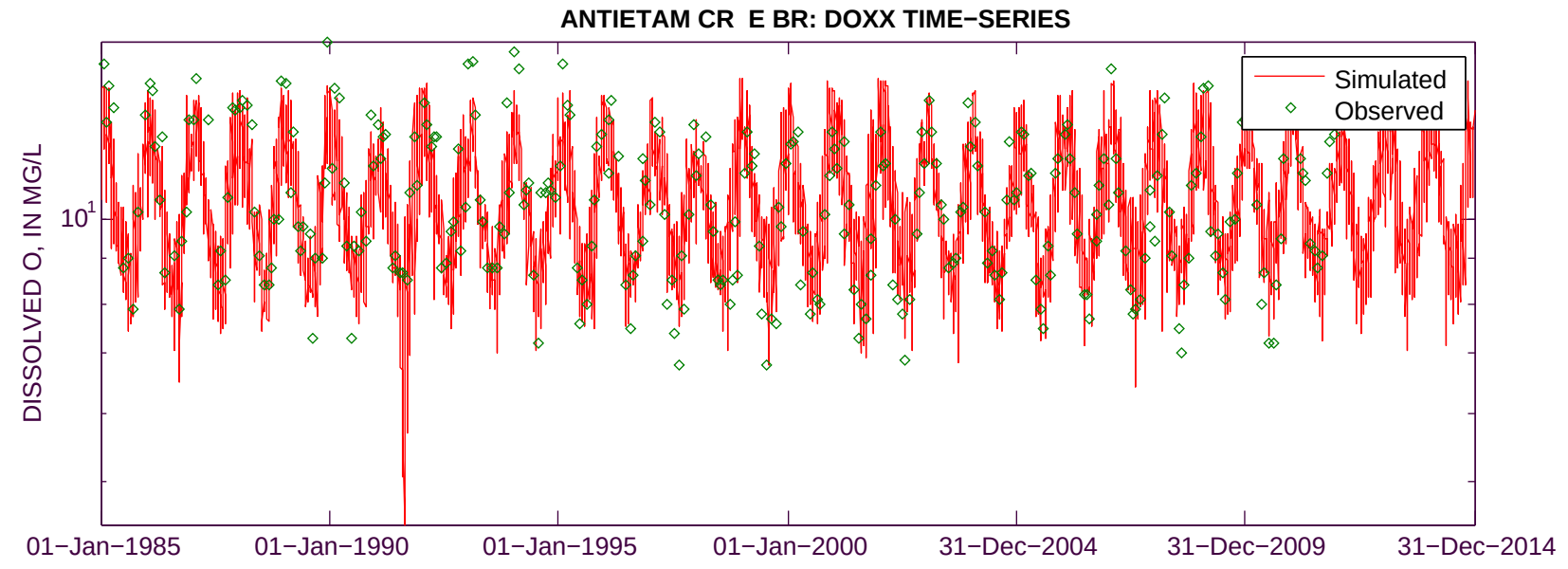
LOAD DATA
LOG10

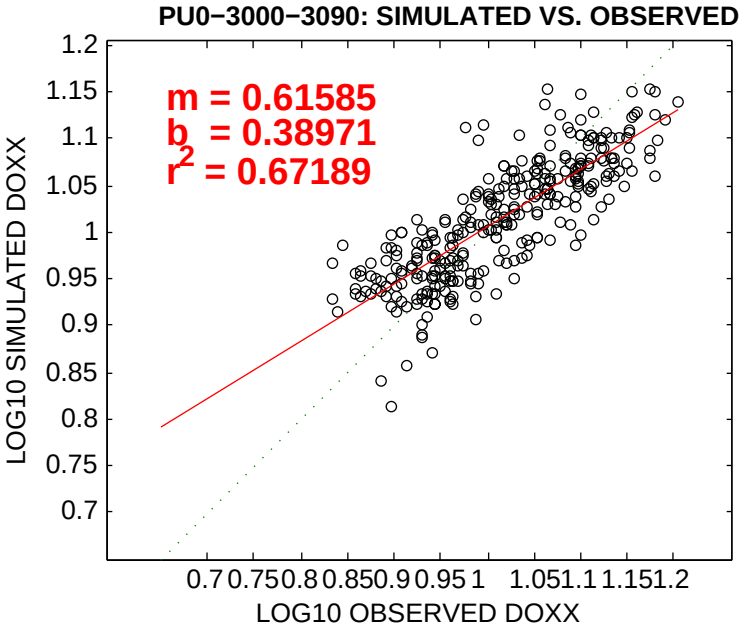


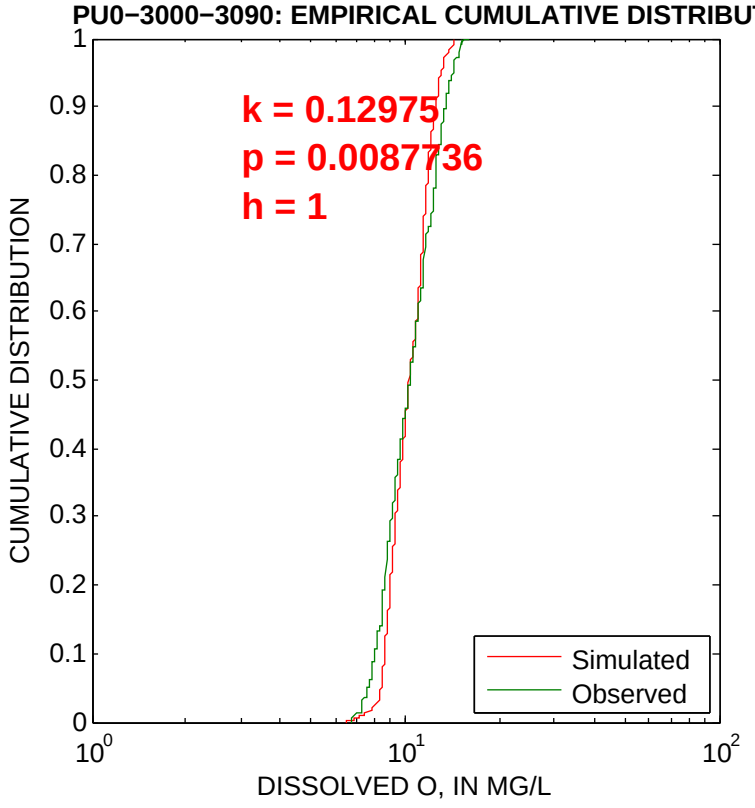












DATA SELECTION

scenario: P620171001WQ | file: DOXX.calib

plot: DOXX - dissolved oxygen

Dates: 1/1/1985 – 12/31/201

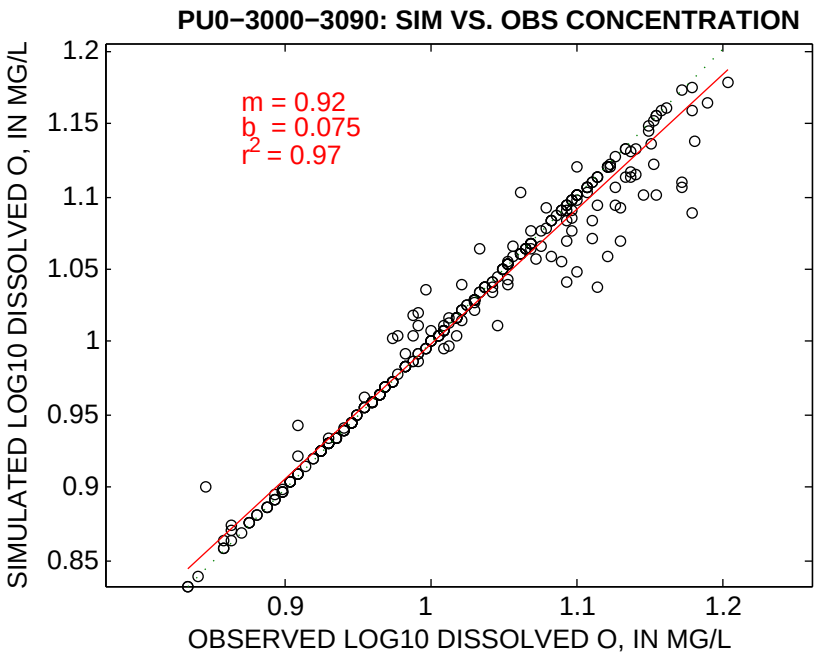
Drive: N/A | Directory: model | Observed: OBS20161101

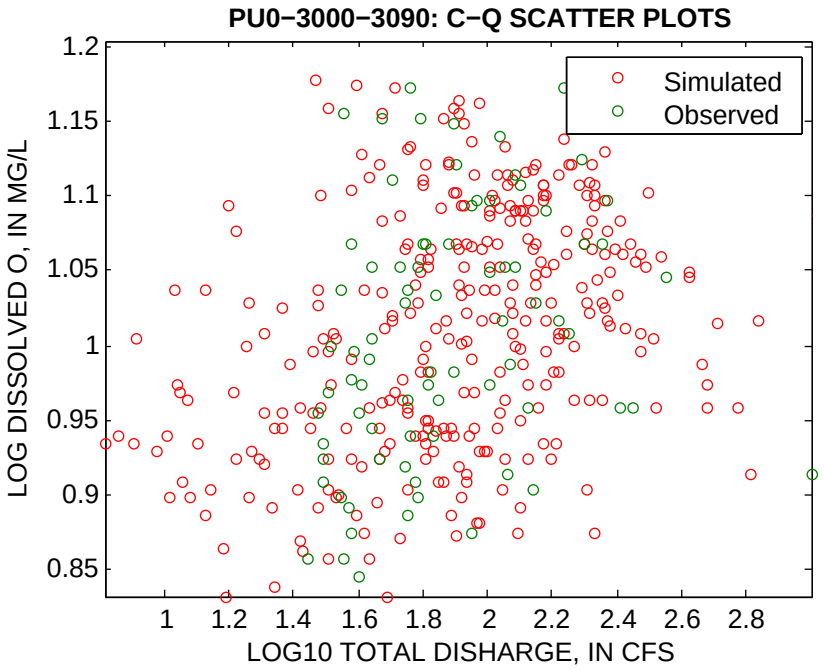
STATISTICS

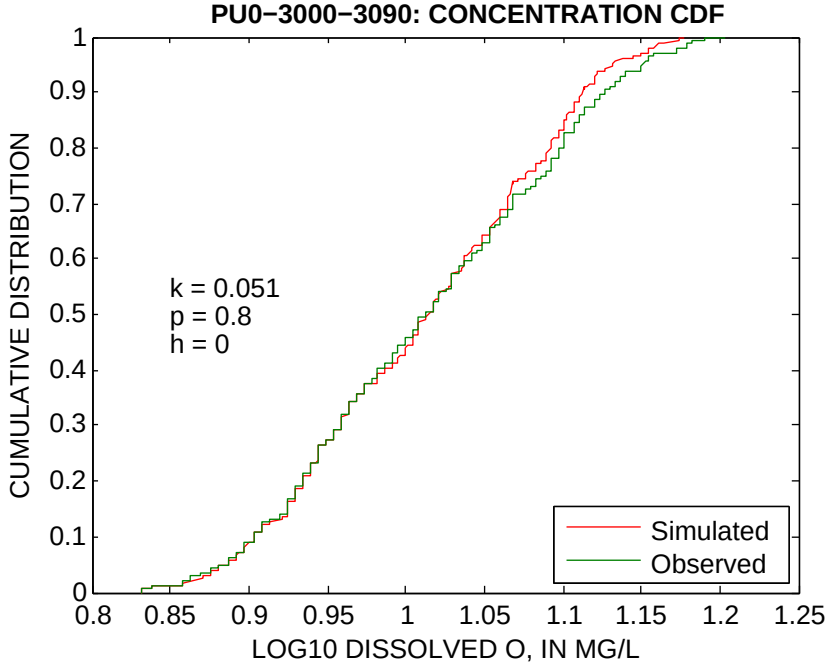
		observe	simulate
n		316	316
min		6.8	6.5185
		0.832509	0.814148
mean		10.536	10.4491
		1.01443	1.01444
media		10.3	10.312
		1.01284	1.01334
max		16	14.252
		1.20412	1.15388
varian		4.25433	2.33592
		0.00718424	0.00405537
JB		0.005300	0.024935
		0.010438	0.107074
		ra	log
%		-0.824086	0.00114362
err.va		1.4114	0.00239081
rel.std.err		0.331757	0.332785
mod.eff		0.668243	0.667215

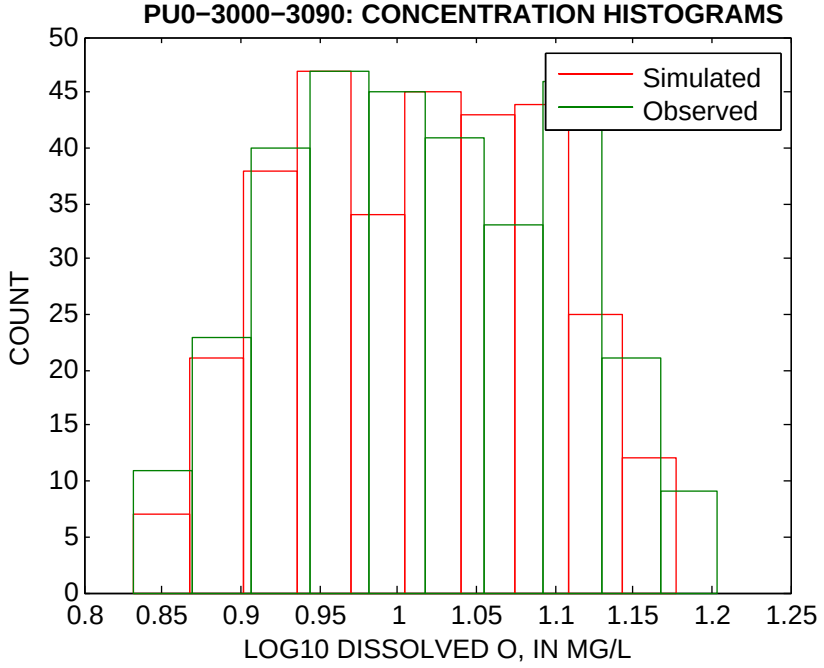
VERSION 2.1

ALL DATA
LOG10

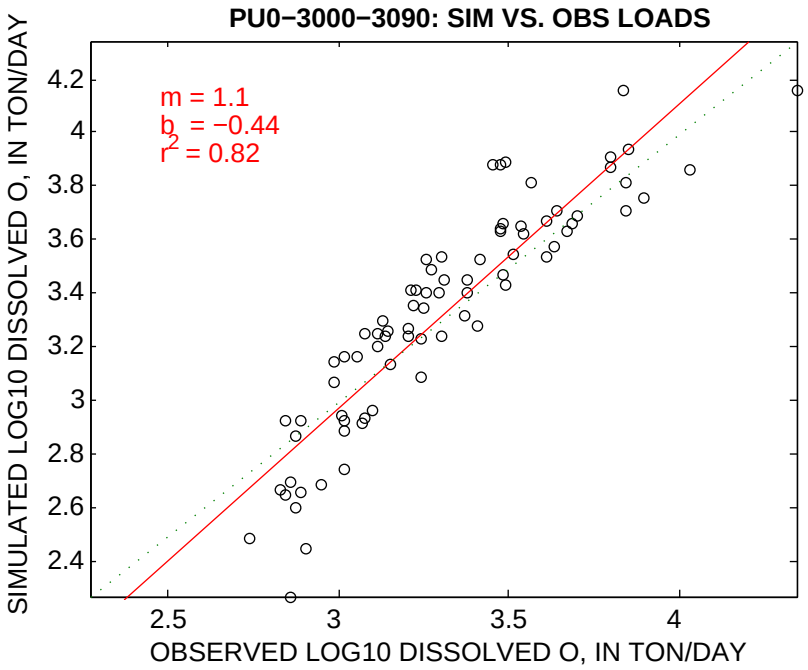




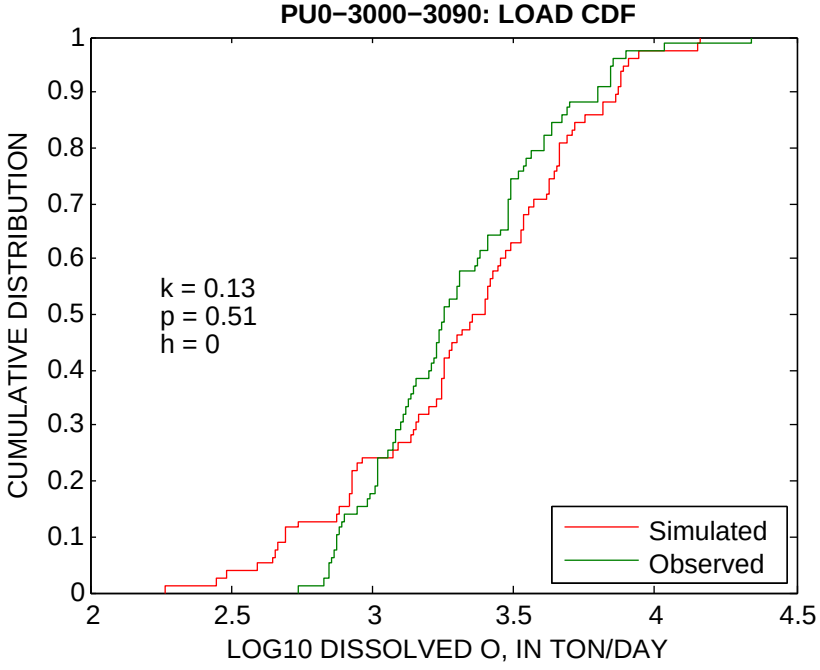


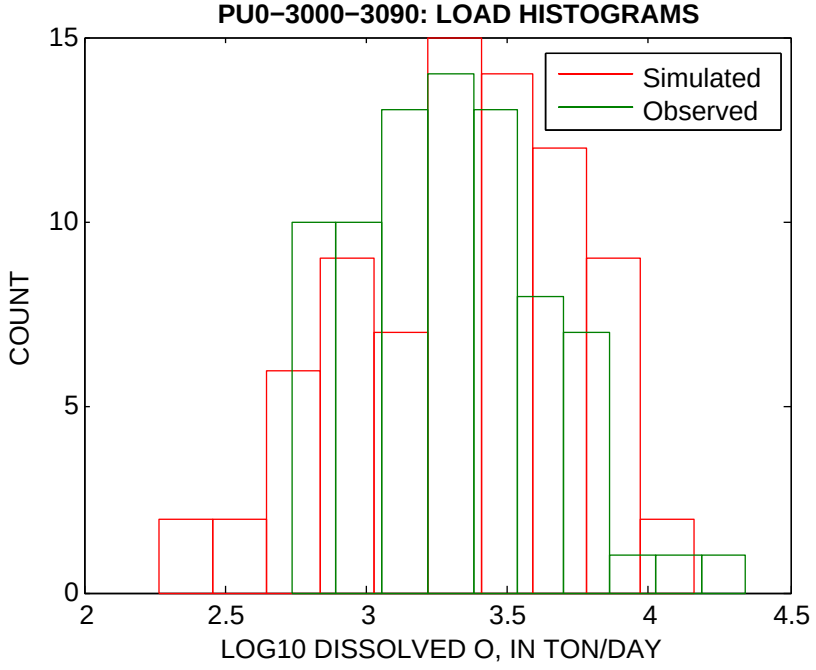


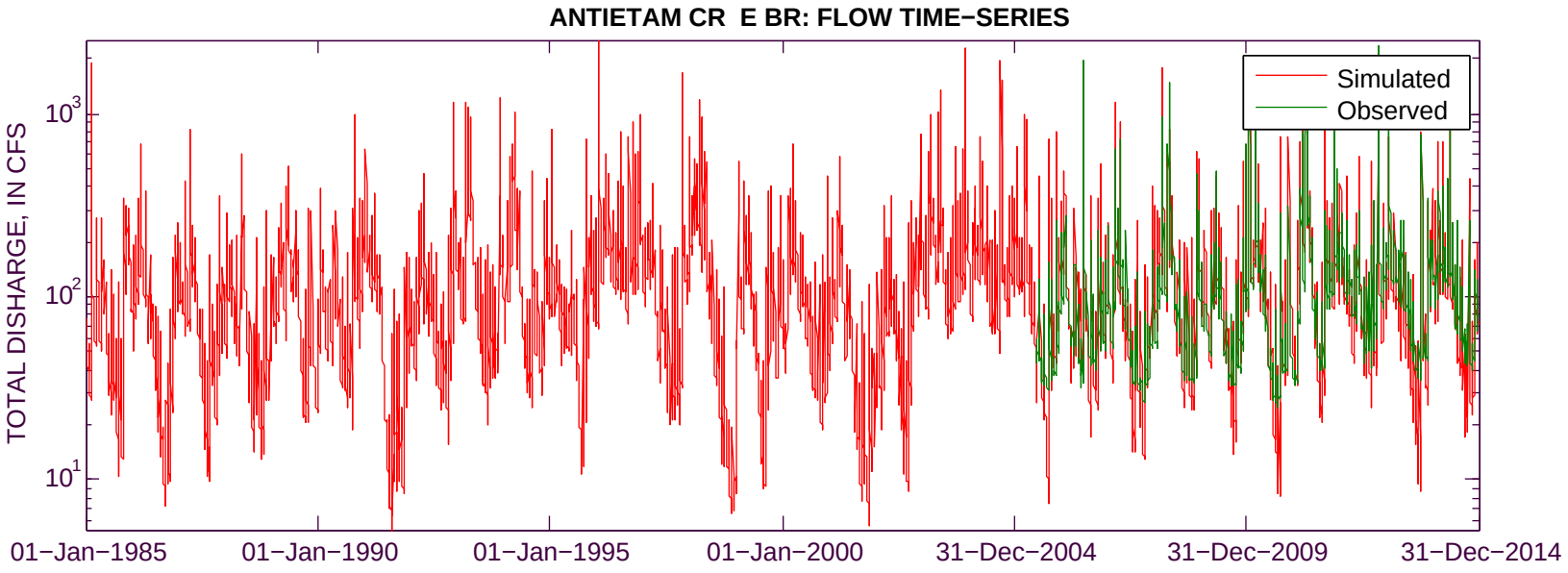
LOAD DATA
LOG10

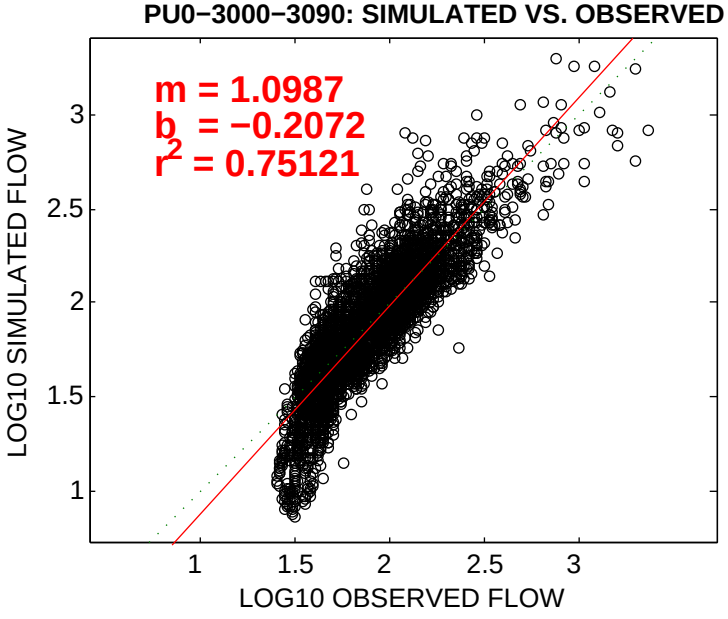


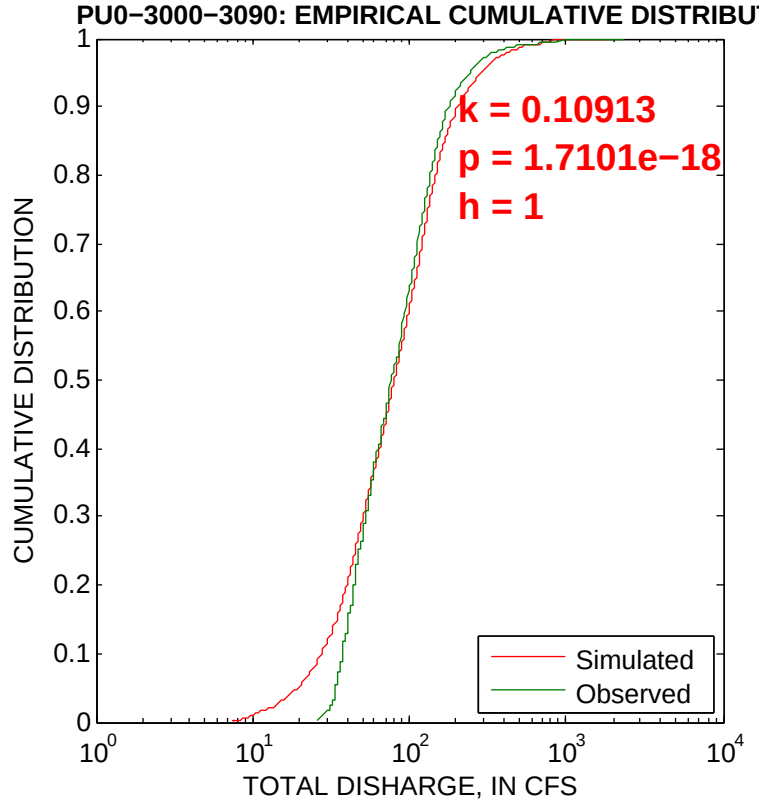












DATA SELECTION

scenario: P620171001WQ | file: FLOW.calib

plot: FLOW - total discharge

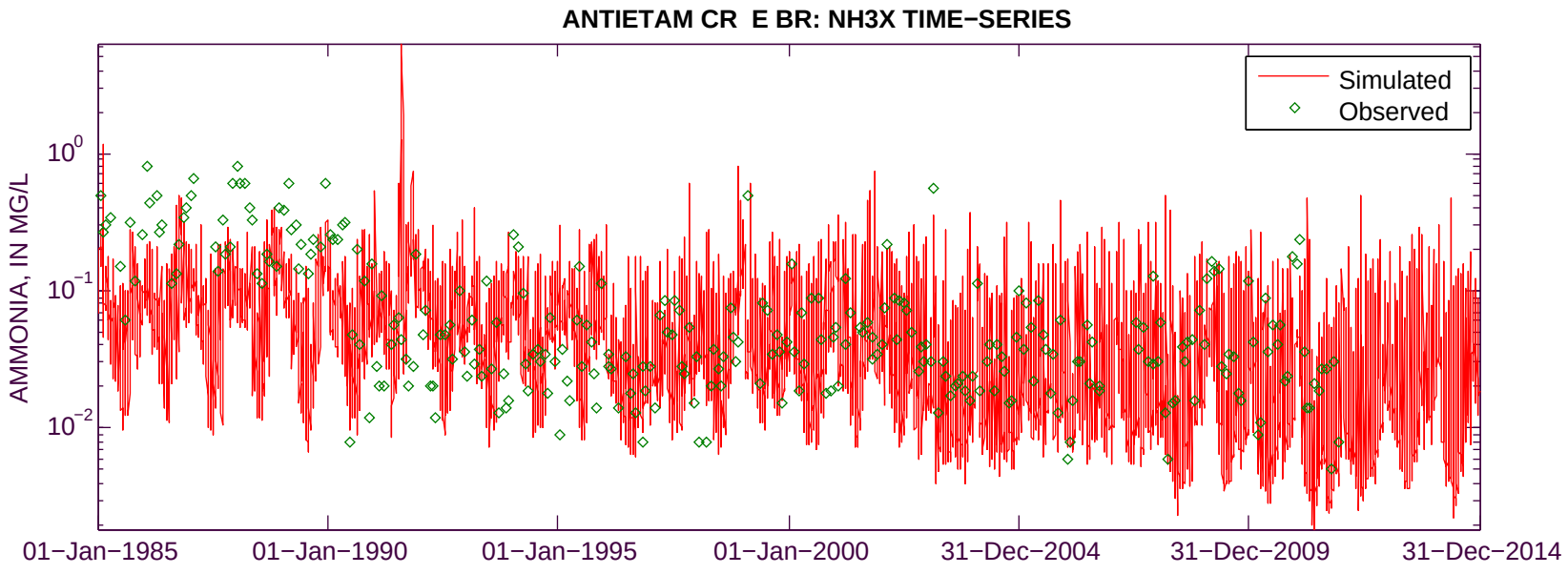
Dates: 1/1/1985 – 12/31/201

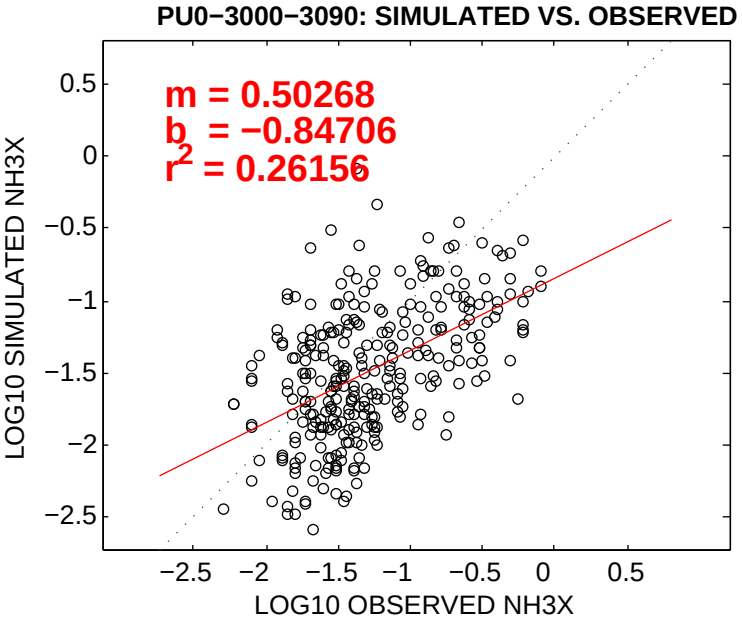
Drive: N/A | Directory: model | Observed: OBS20161101

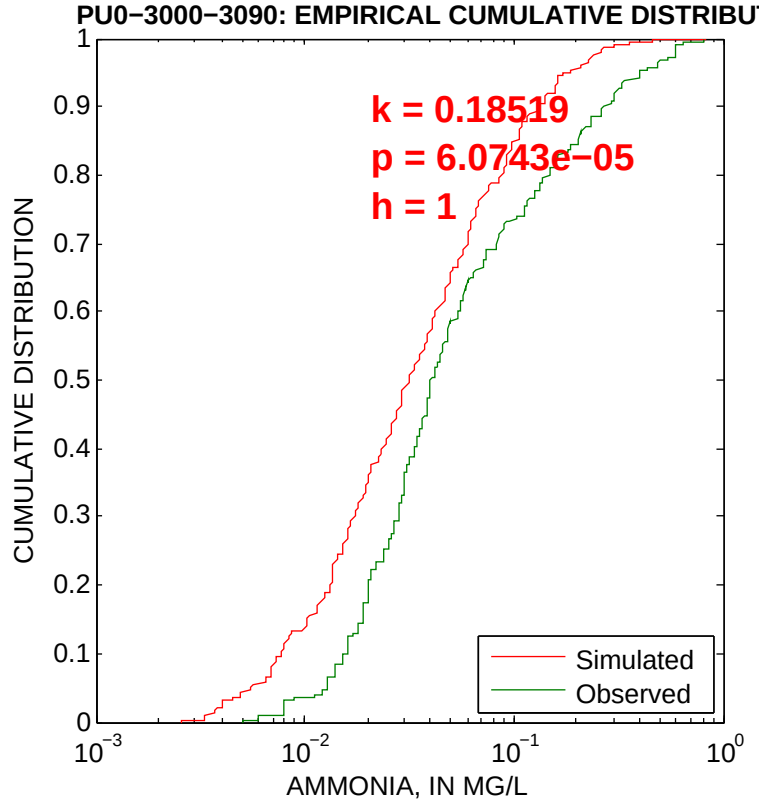
STATISTICS

	n	observe	simulate
		3473	3473
min		25	7.3719
		1.39794	0.867579
mean		105.239	110.193
		1.91088	1.89231
media		77	80.751
		1.88649	1.90715
max		2330	1973.9
		3.36736	3.29533
varian		14608.1	15077.3
		0.0787663	0.126576
JB		0.001	0.001
		0.001	0.001
		ra	log
%		4.70684	-0.971668
err.va		6340.45	0.0326036
rel.std.err		0.434036	0.413928
mod.eff		0.565964	0.586072

VERSION 2.1







DATA SELECTION

scenario	file
P620171001WQ	NH3X.calib

plot: NH3X - ammonia

Dates: 1/1/1985 – 12/31/201

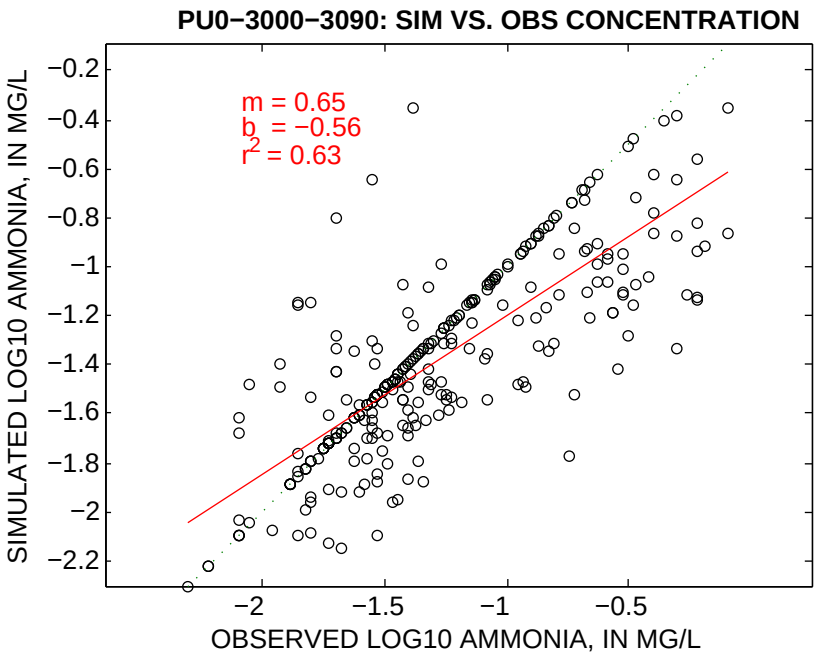
Drive	Directory	Observed
N/A	model	OBS20161101

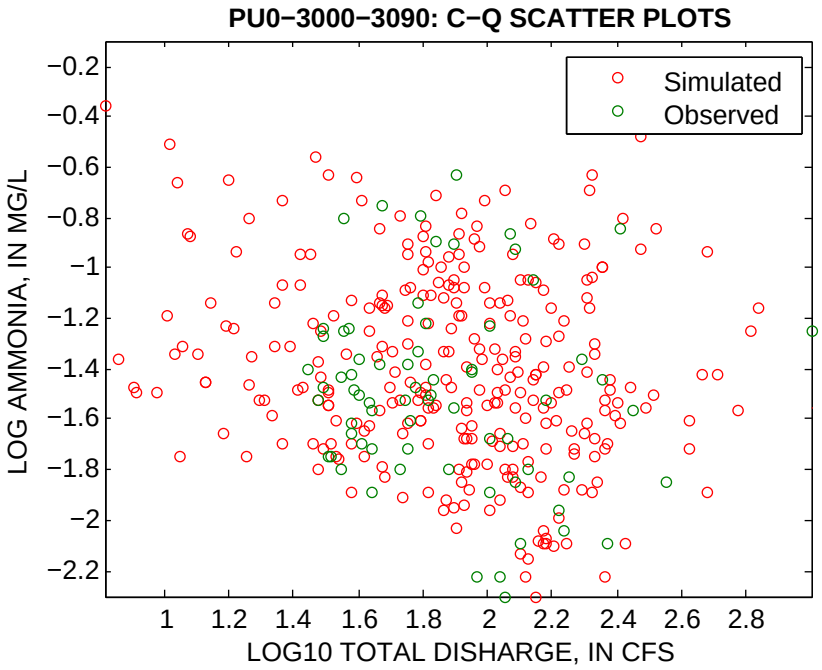
STATISTICS

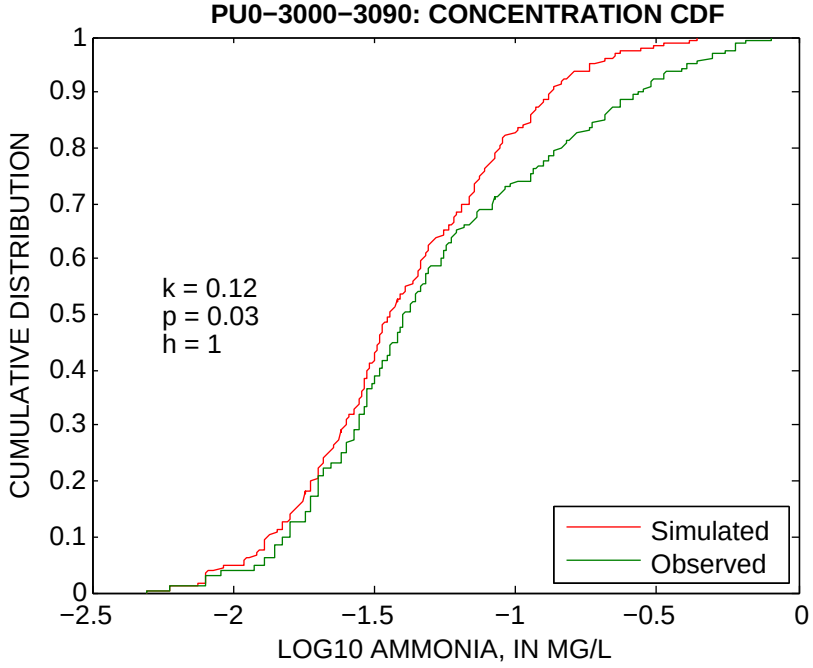
	n	297	297
		observe	simulate
min		0.005	0.002597
		-2.30103	-2.58553
mean		0.0998182	0.0565577
		-1.28278	-1.4919
media		0.041	0.03156
		-1.38722	-1.50086
max		0.8	0.82378
		-0.09691	-0.0841888
varian		0.0192646	0.00583368
		0.222192	0.214654
JB		0.001	0.001
		0.003978	0.282189
		ra	log
%		-43.3393	16.3016
err.va		0.0205336	0.257339
rel.std.err		1.06587	1.15818
mod.eff		-0.0658738	-0.158182

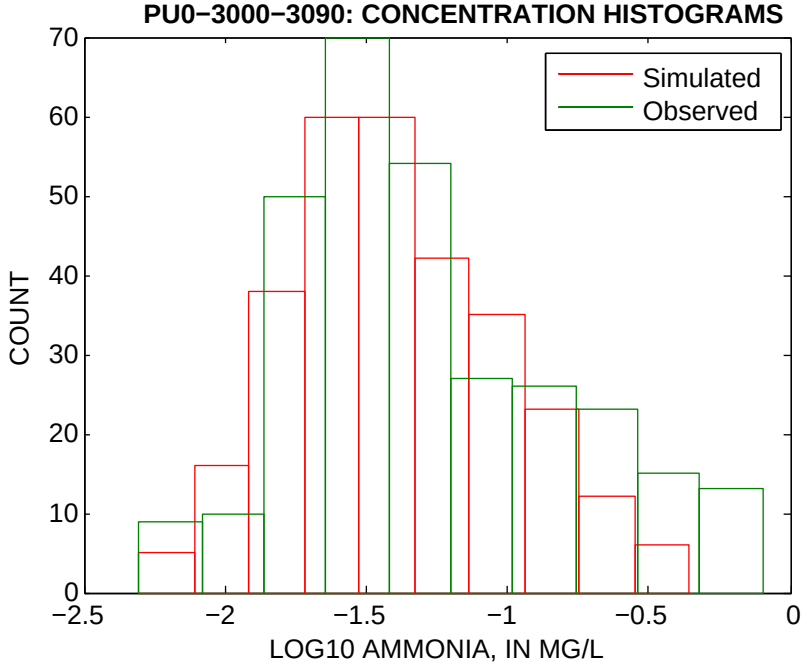
VERSION 2.1

ALL DATA
LOG10

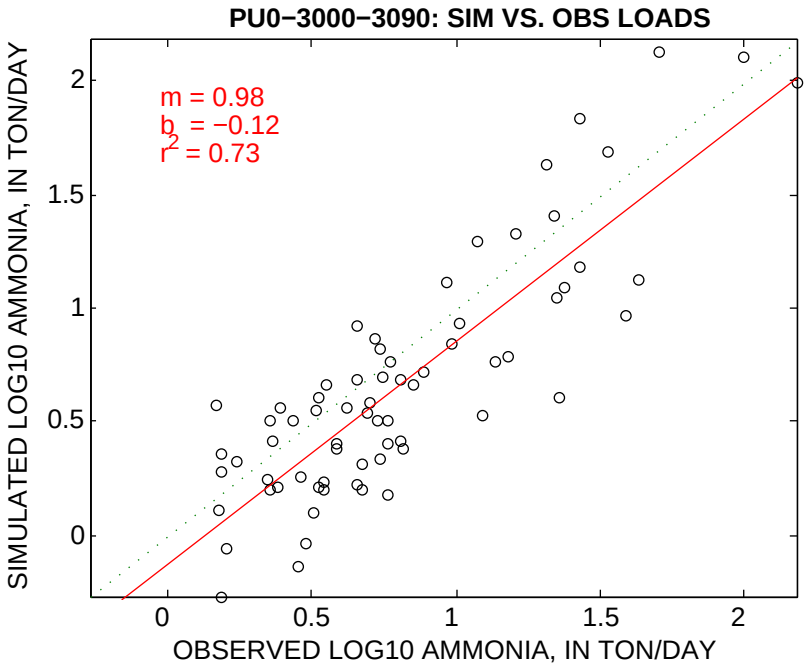


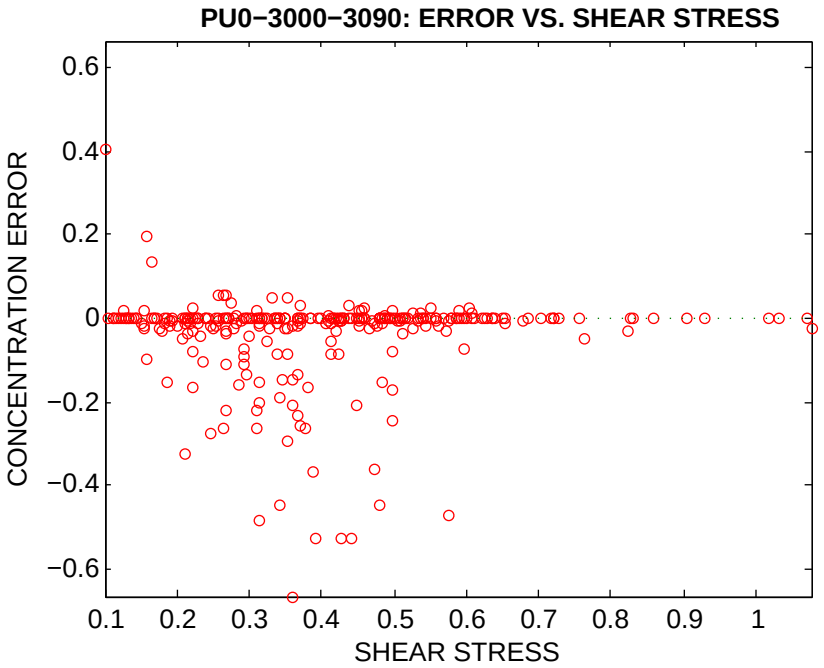


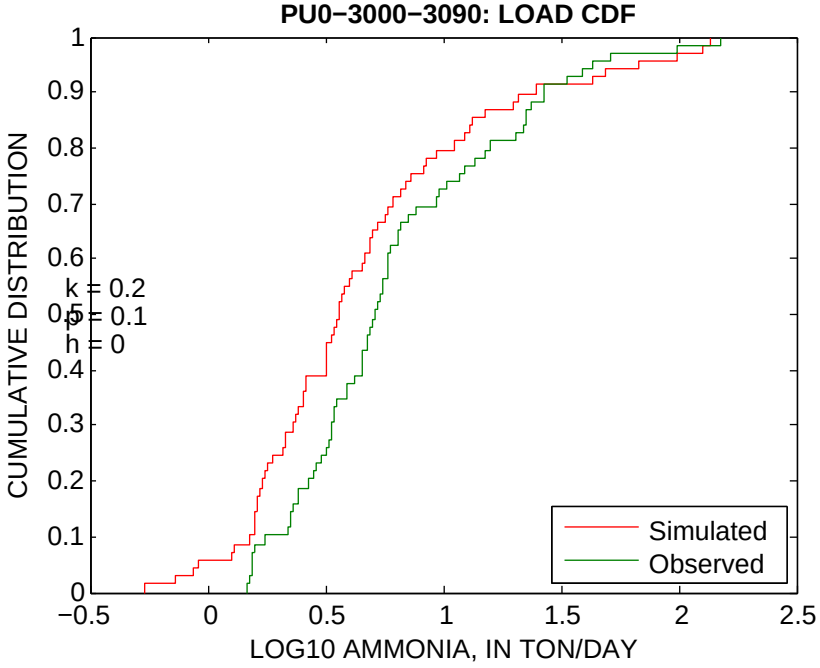


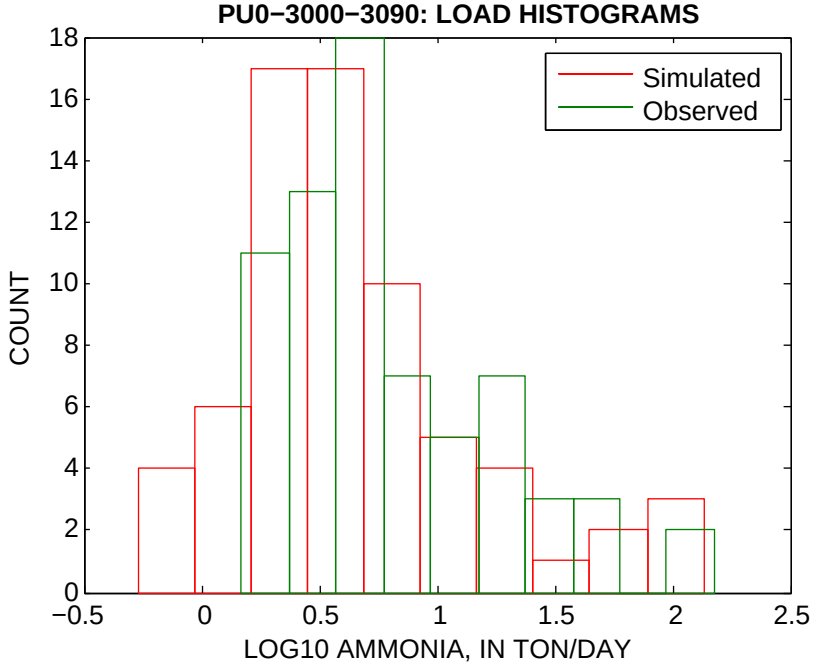


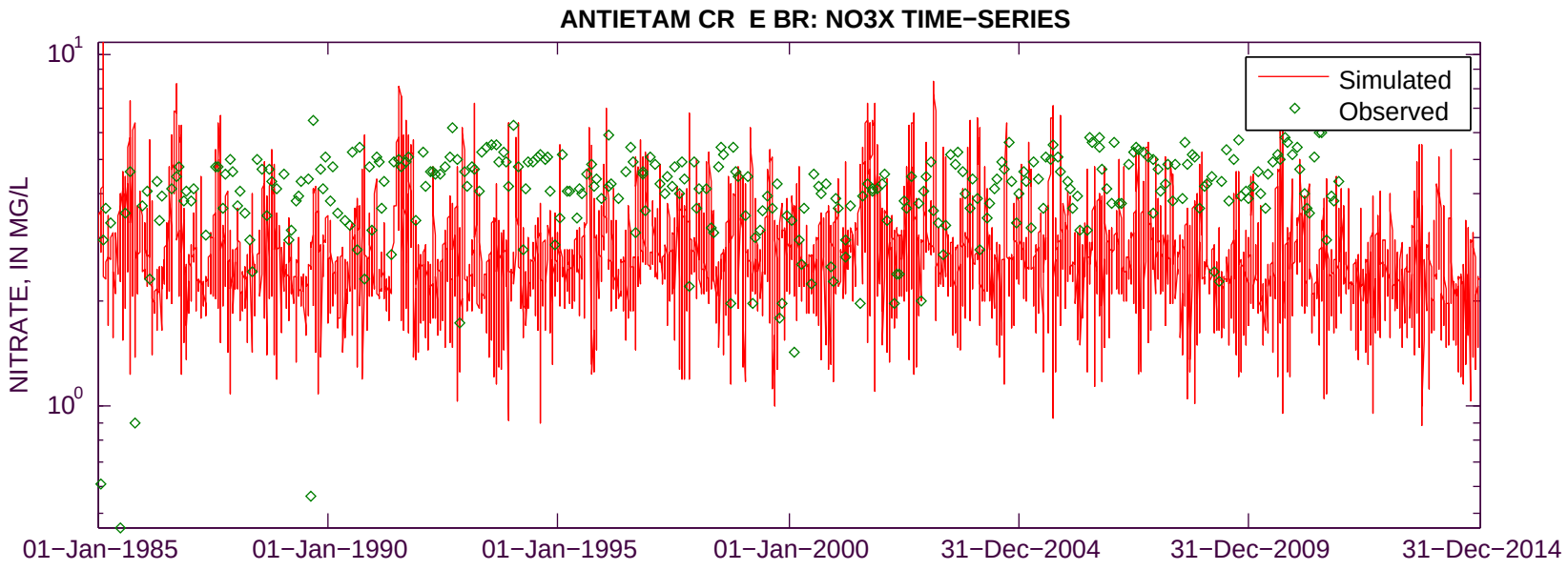
LOAD DATA
LOG10

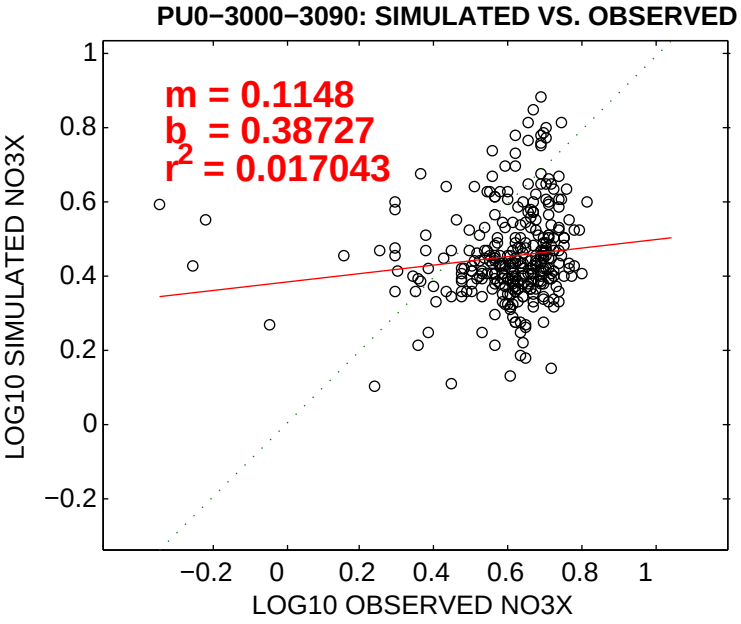


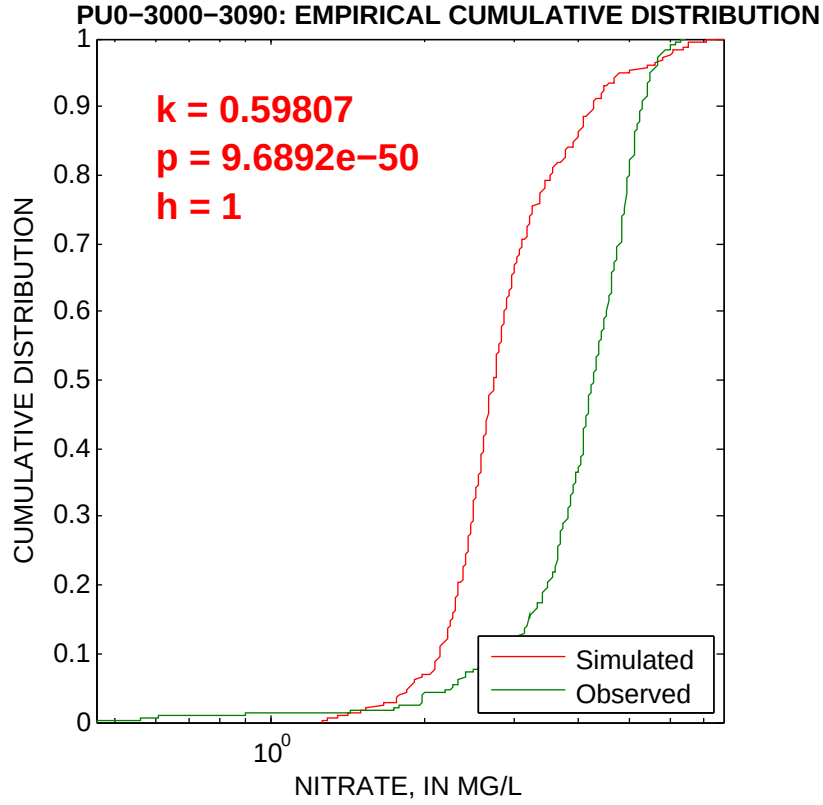












DATA SELECTION

scenario	file
P620171001WQ	NO3X.calib

plot: NO3X - nitrate

Dates: 1/1/1985 – 12/31/201

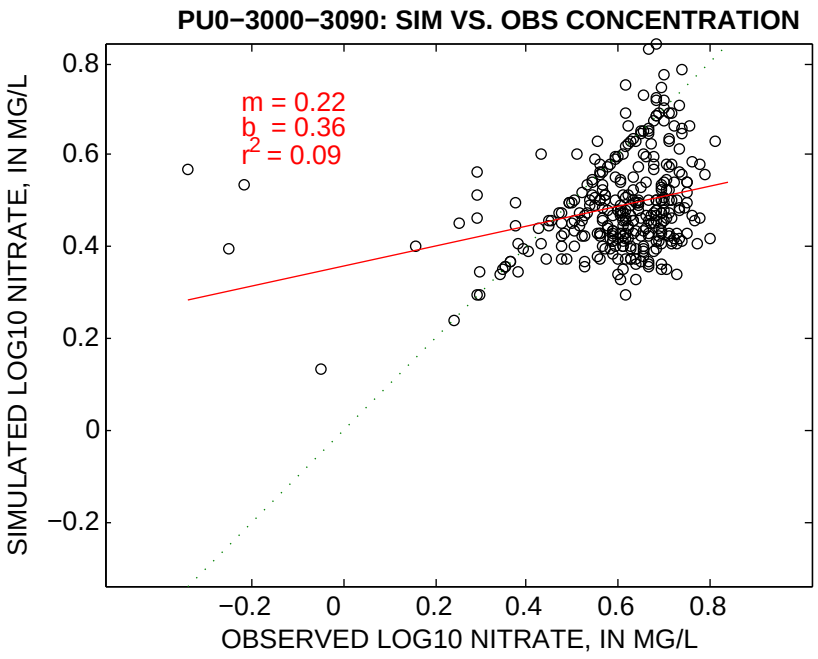
Drive	Directory	Observed
N/A	model	OBS20161101

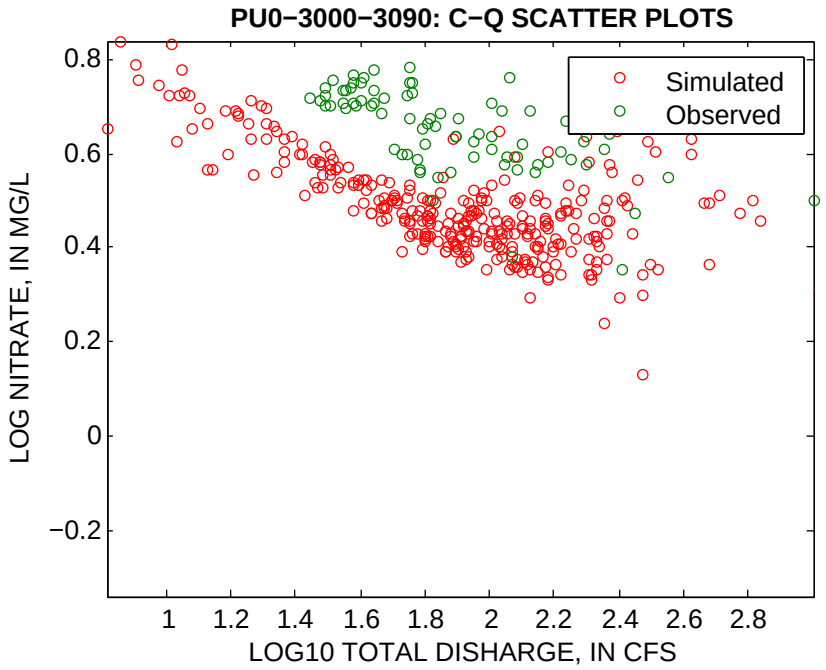
STATISTICS

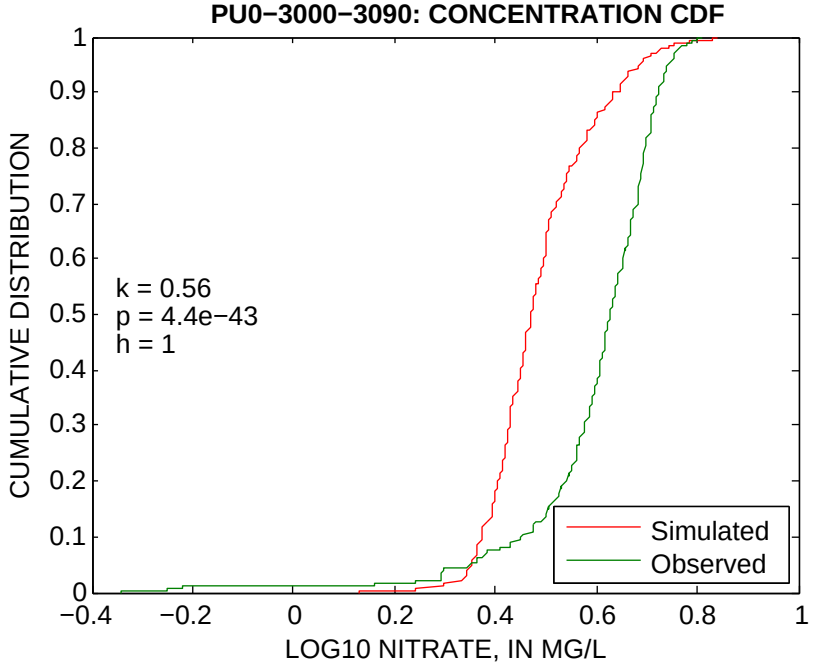
	n	observe	simulate
		311	311
min		0.458	1.2678
		-0.339135	0.103051
mean		4.16551	2.99102
		0.601397	0.456314
media		4.25	2.7335
		0.628389	0.436719
max		6.47	7.6054
		0.810904	0.881122
varian		1.01661	0.966954
		0.0206389	0.0159608
JB		0.001	0.001
		0.001	0.001
		ra	log
%		-28.1957	-24.1244
err.va		3.03032	0.0529779
rel.std.err		2.9808	2.5669
mod.eff		-1.9808	-1.5669

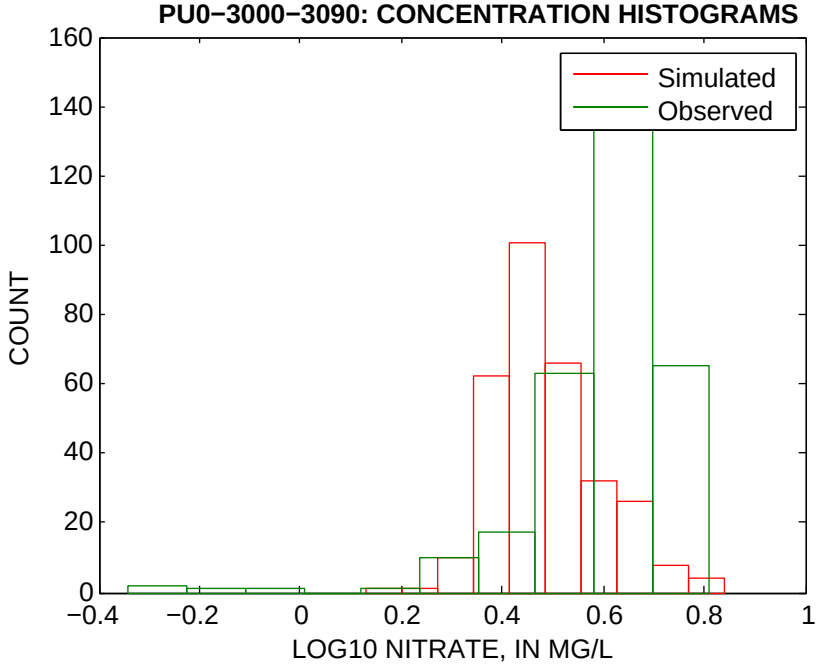
VERSION 2.1

ALL DATA
LOG10

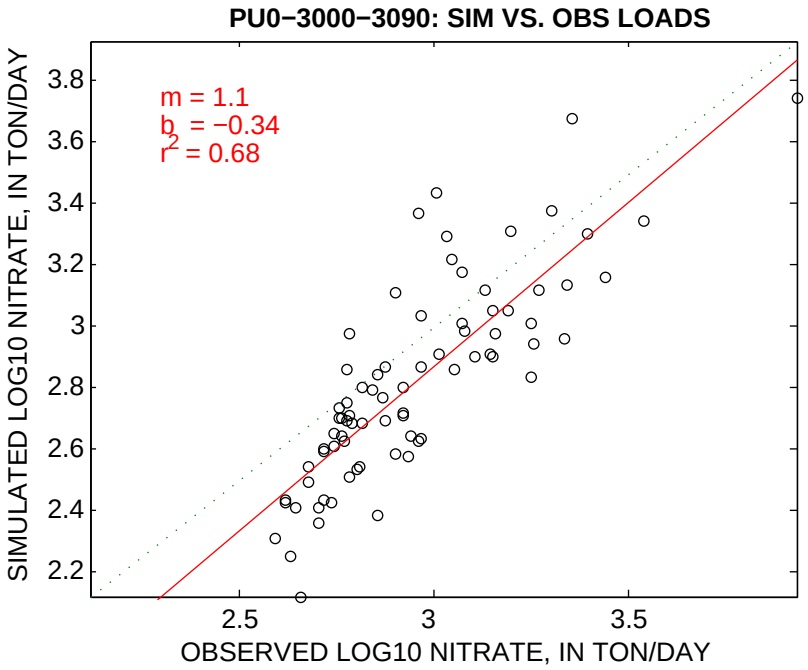


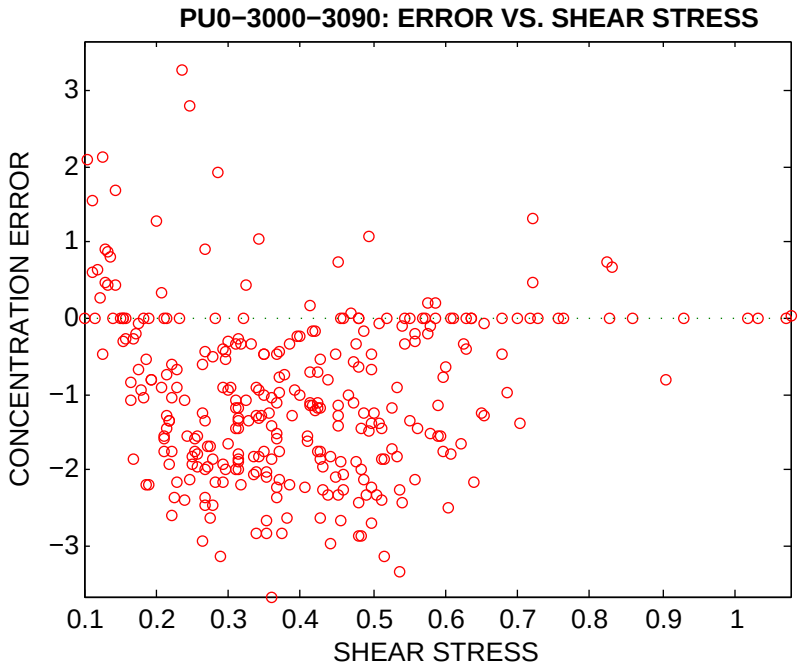


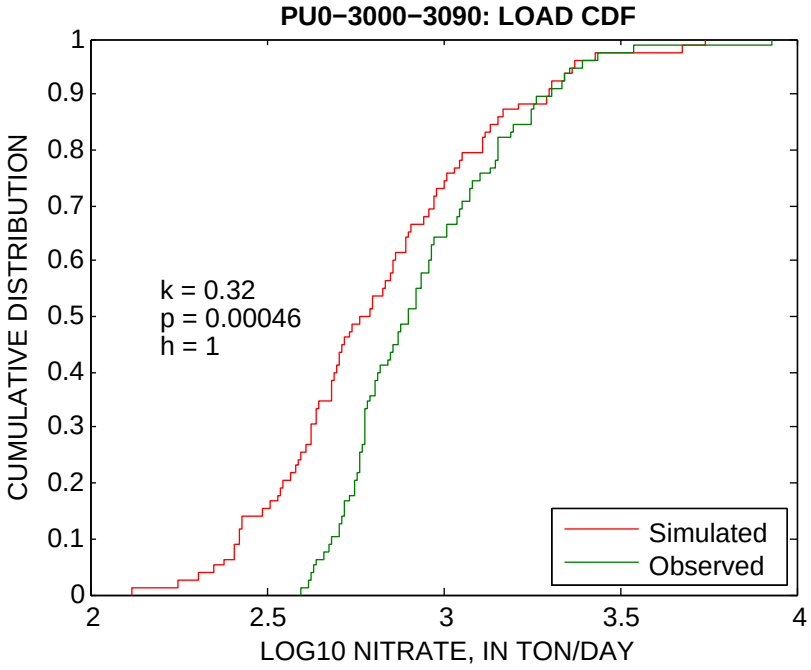


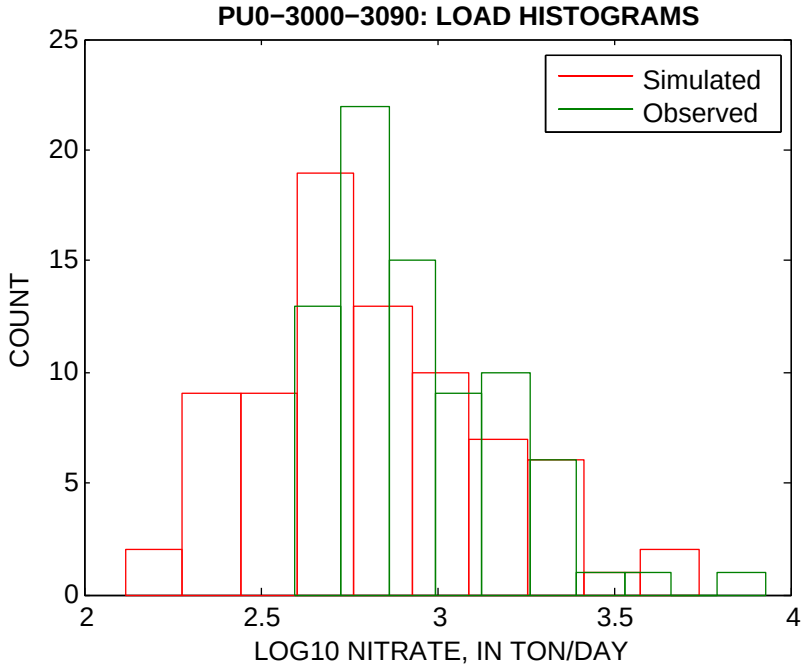


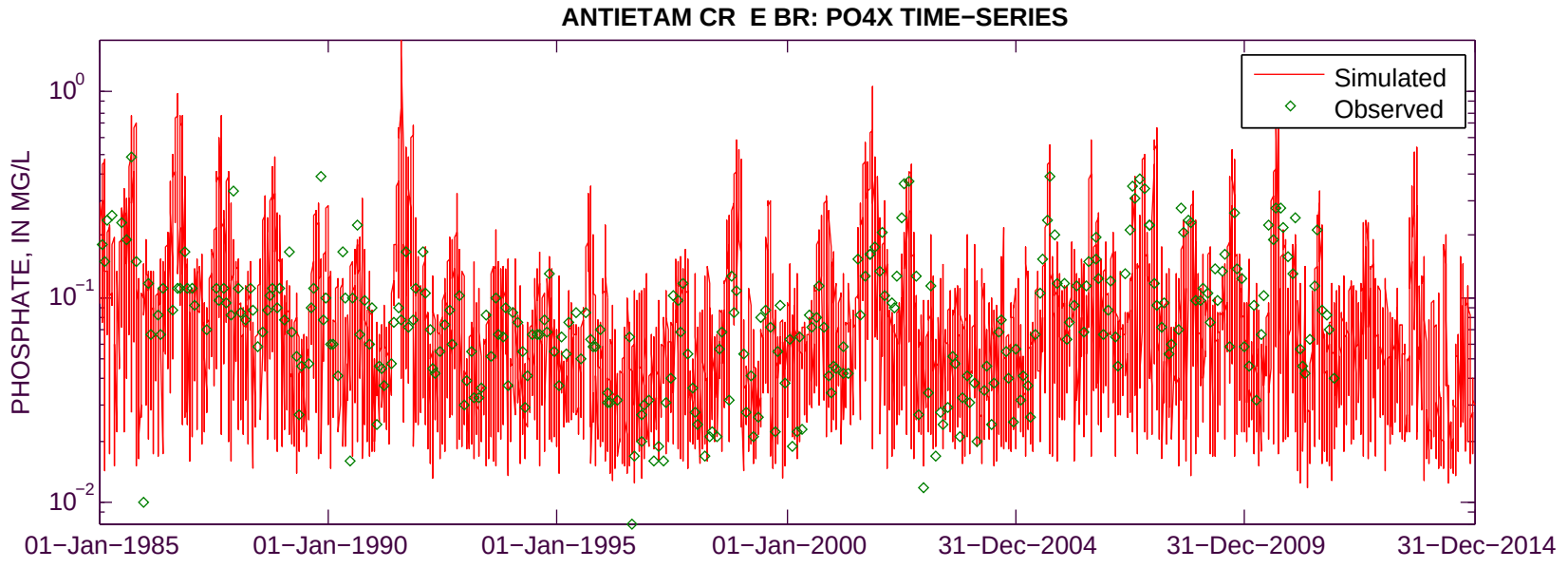
LOAD DATA
LOG10

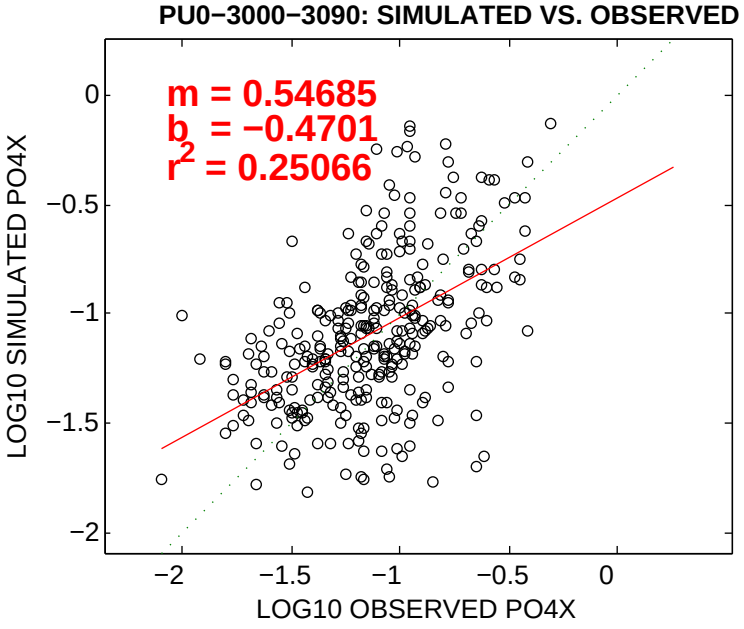


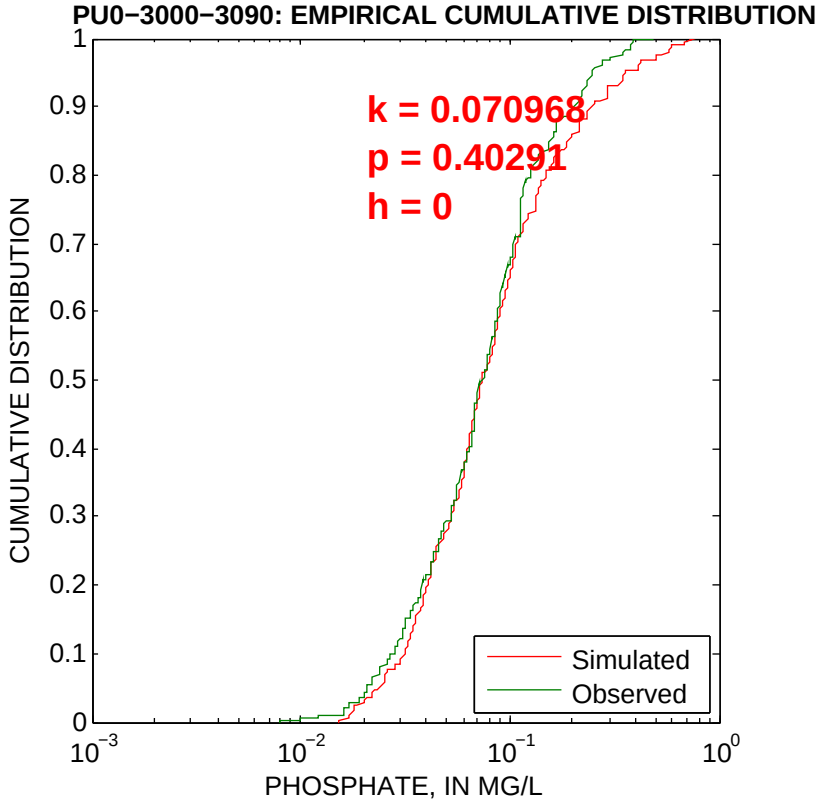












DATA SELECTION

scenario: P620171001WQ | file: PO4X.calib

plot: PO4X - phosphate

Dates: 1/1/1985 – 12/31/201

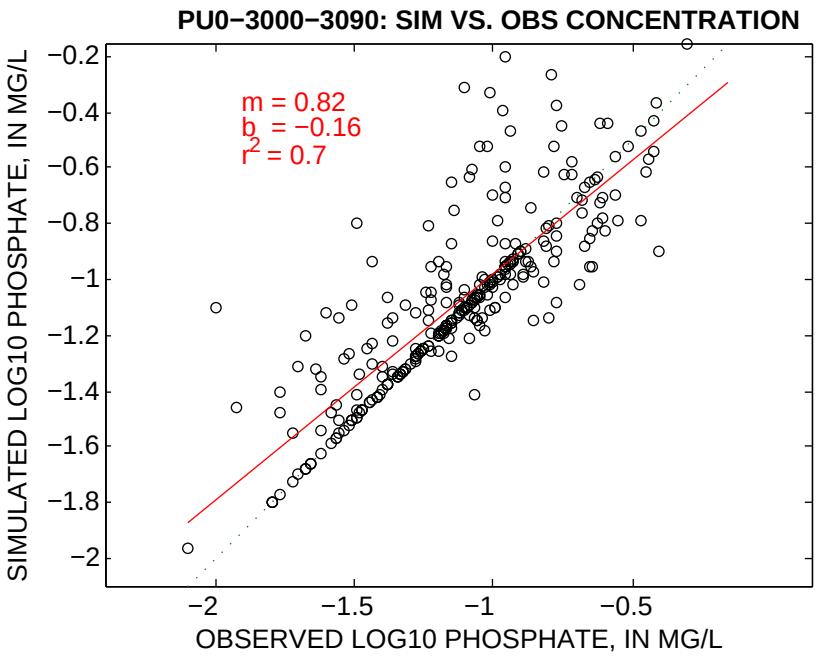
Drive: N/A | Directory: model | Observed: OBS20161101

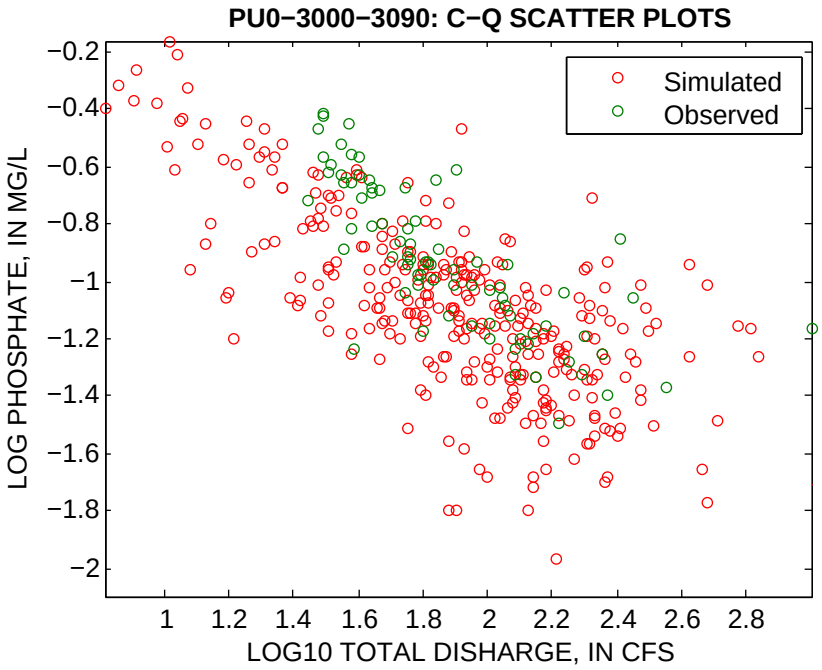
STATISTICS

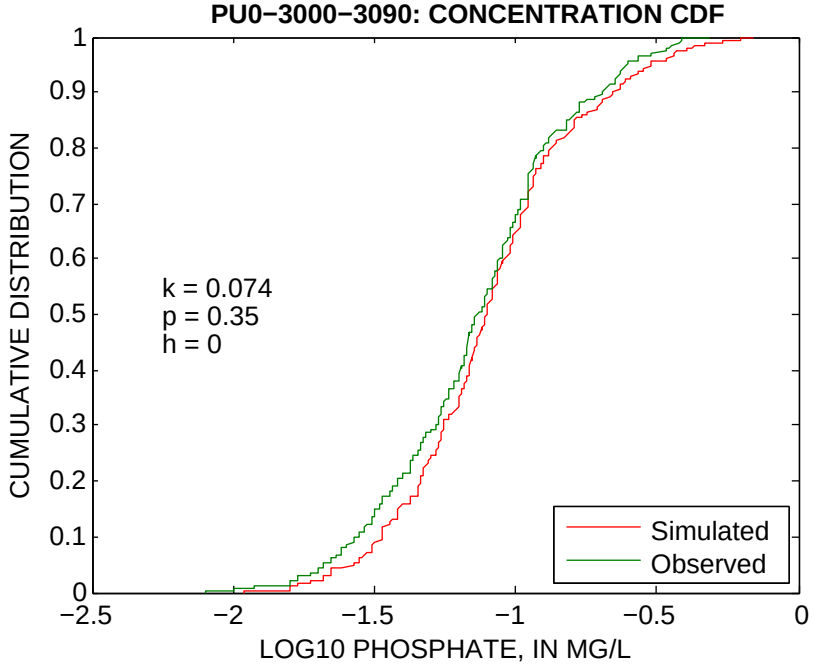
	n	310	310
		observe	simulate
min		0.008	0.015363
		-2.09691	-1.81352
mean		0.0950419	0.115585
		-1.1379	-1.09236
media		0.074	0.073702
		-1.13081	-1.13252
max		0.49	0.75067
		-0.309804	-0.124551
varian		0.00581291	0.0146707
		0.102478	0.12226
JB		0.001	0.001
		0.5	0.010915
		ra	log
%		21.6147	-4.00205
err.va		0.0120968	0.114738
rel.std.err		2.08103	1.11963
mod.eff		-1.08103	-0.119635

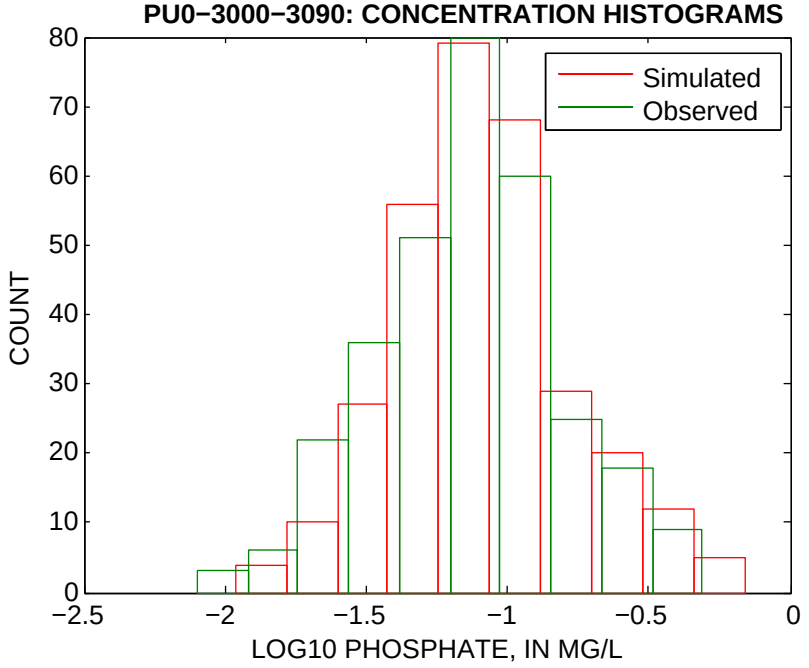
VERSION 2.1

ALL DATA
LOG10

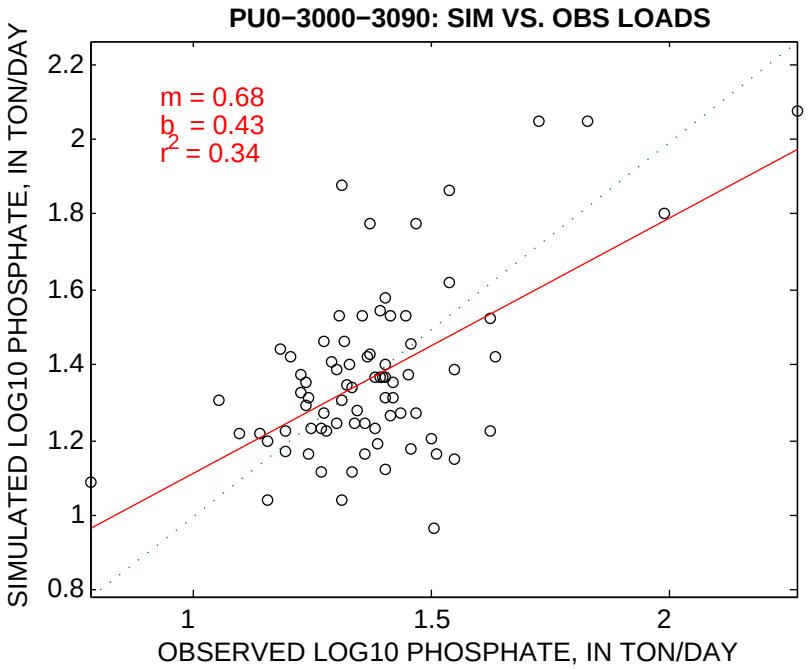




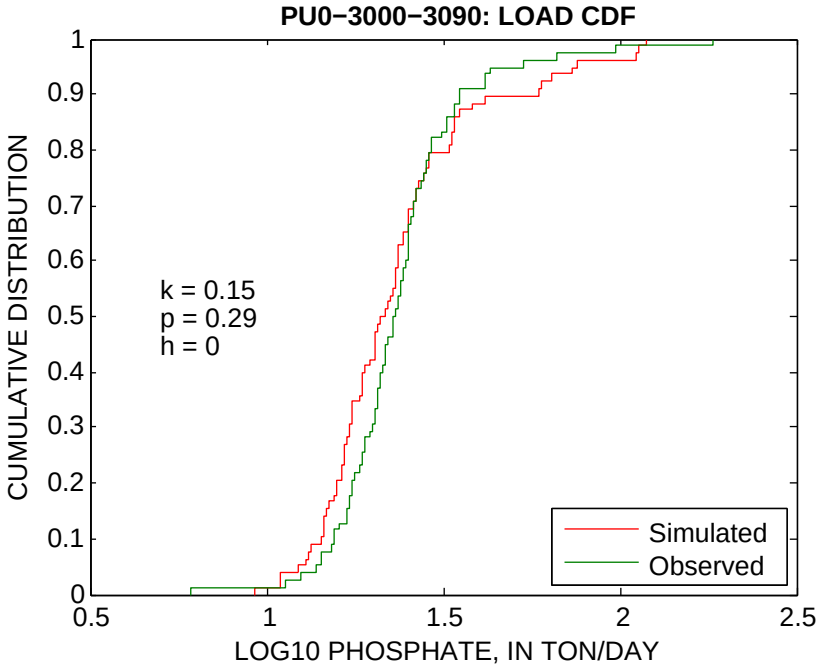


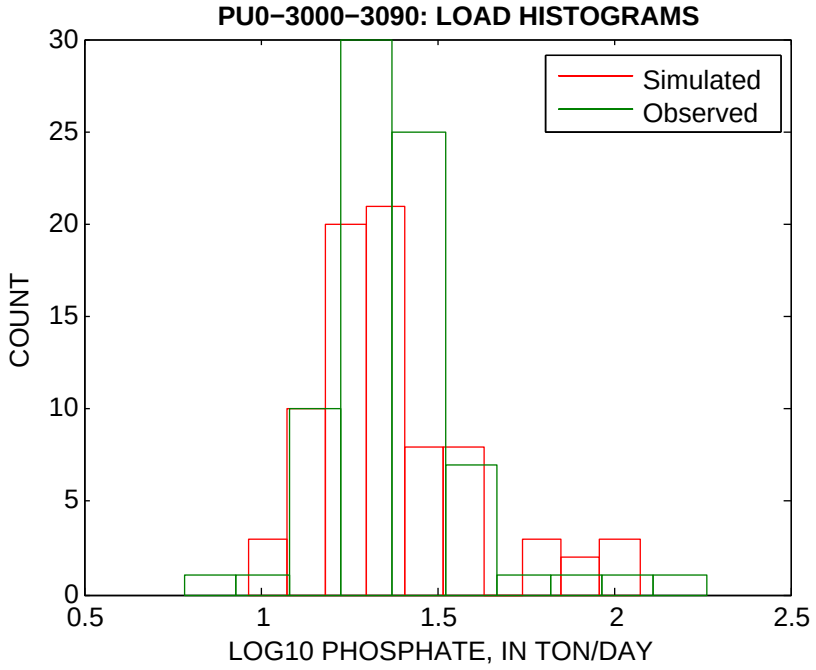


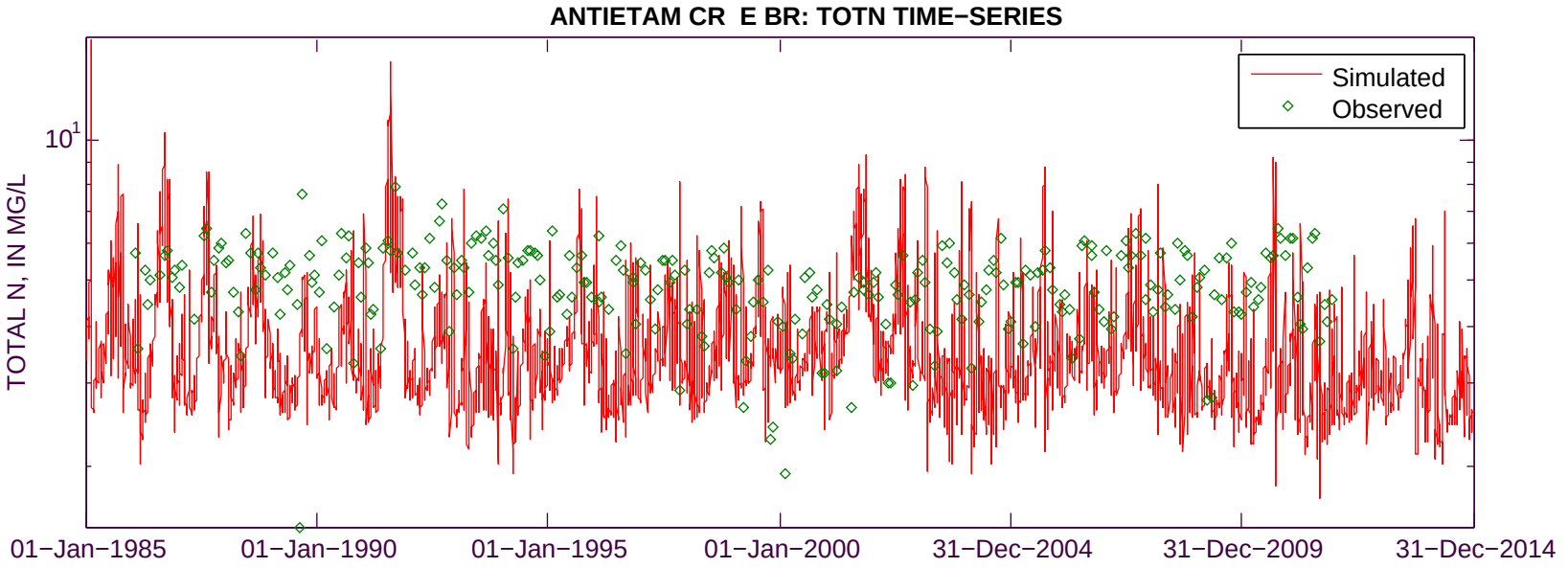
LOAD DATA
LOG10

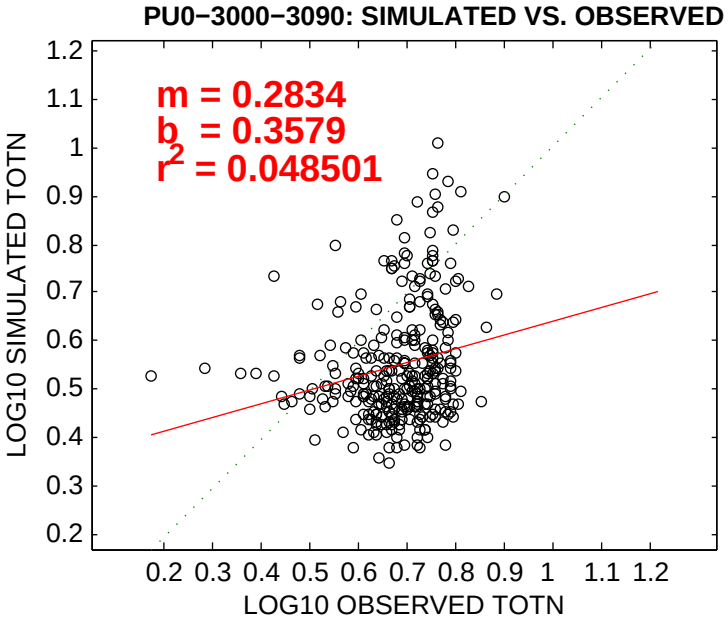


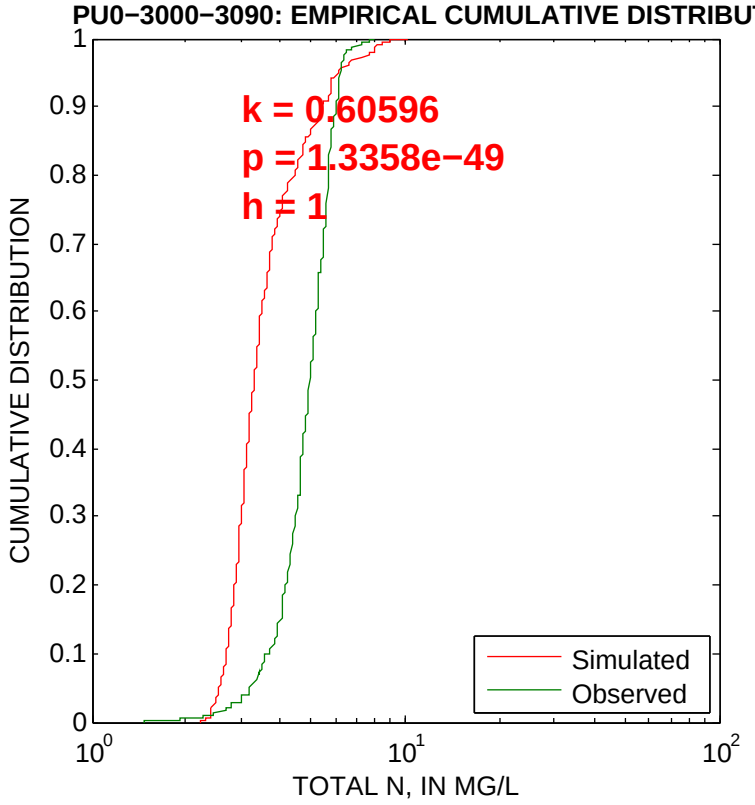












DATA SELECTION

scenario	file
P620171001WQ	TOTN.calib

plot: TOTN - total nitrogen

Dates: 1/1/1985 – 12/31/201

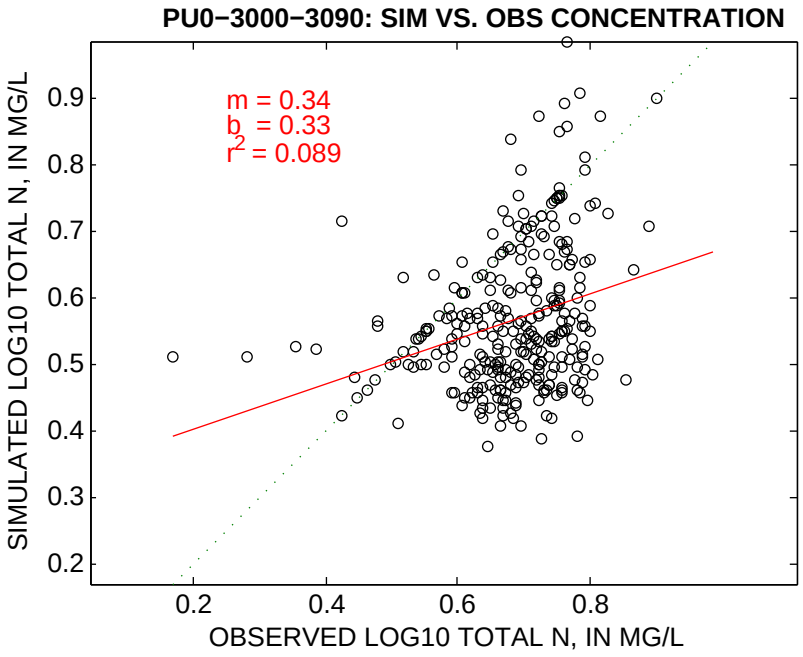
Drive	Directory	Observed
N/A	model	OBS20161101

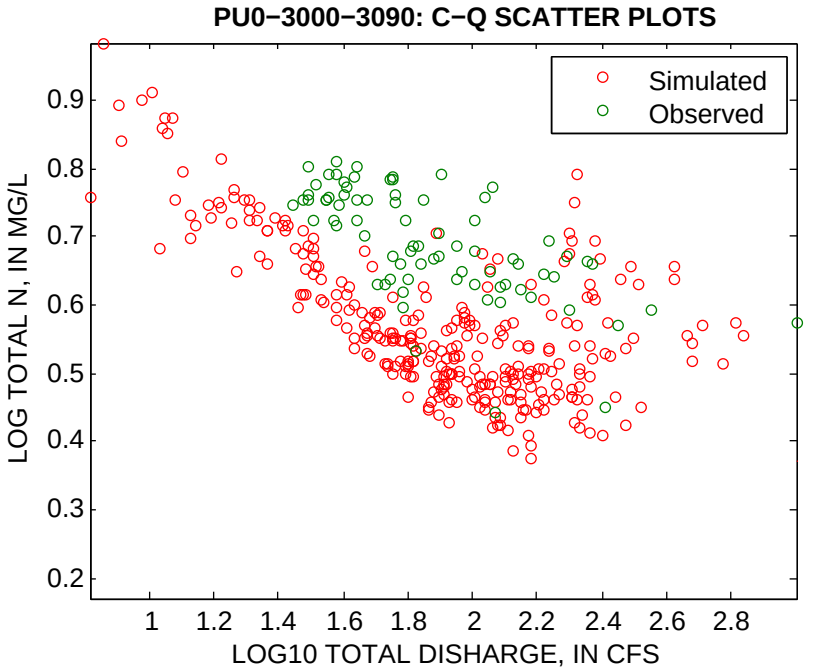
STATISTICS

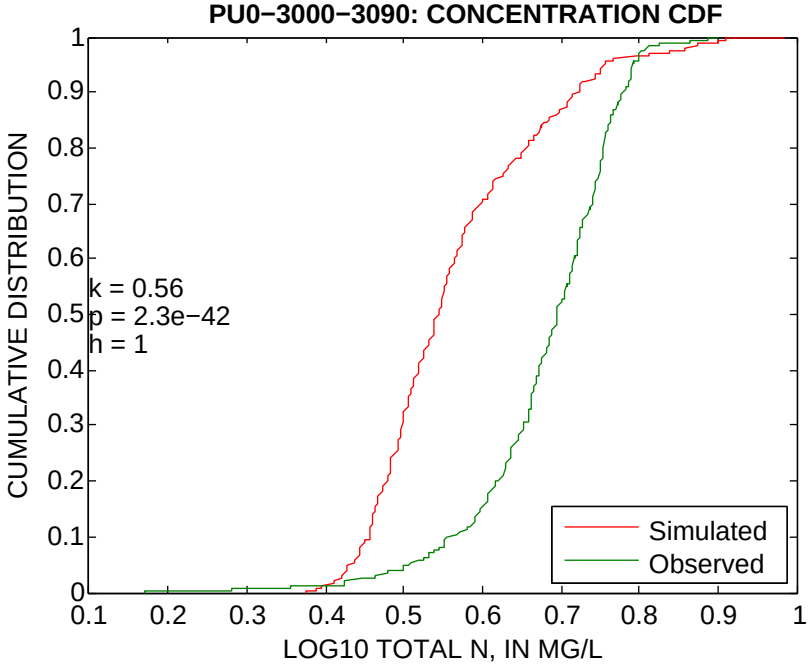
	n	302	302
		observe	simulate
min		1.48	2.2382
		0.170262	0.349899
mean		4.90992	3.7142
		0.681794	0.551119
media		4.95047	3.31205
		0.694646	0.520095
max		7.95	10.164
		0.900367	1.00706
varian		0.902593	1.53632
		0.00884492	0.0146471
JB		0.006919	0.001
		0.001	0.001
		ra	log
%		-24.3531	-19.1665
err.va		3.25032	0.0356116
rel.std.err		3.60109	4.02622
mod.eff		-2.60109	-3.02622

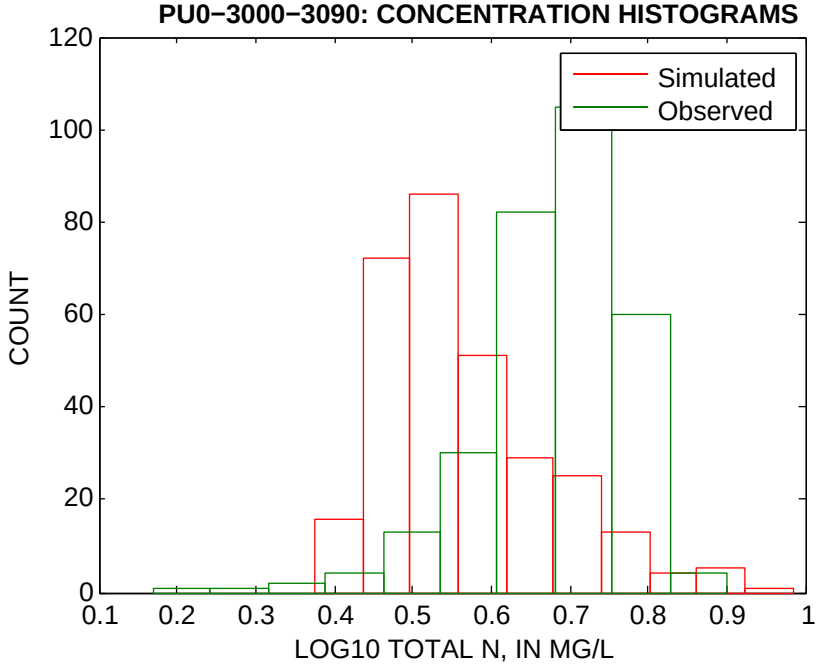
VERSION 2.1

ALL DATA
LOG10

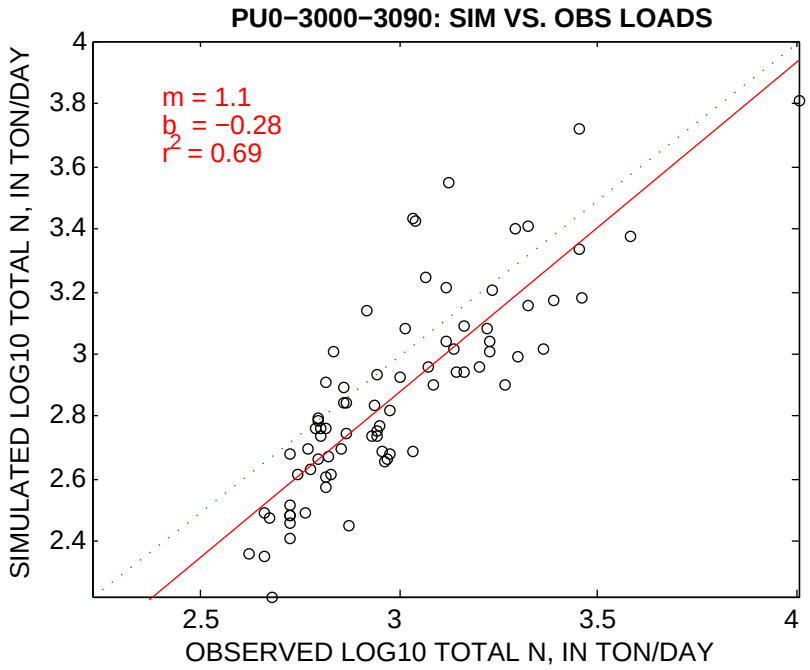


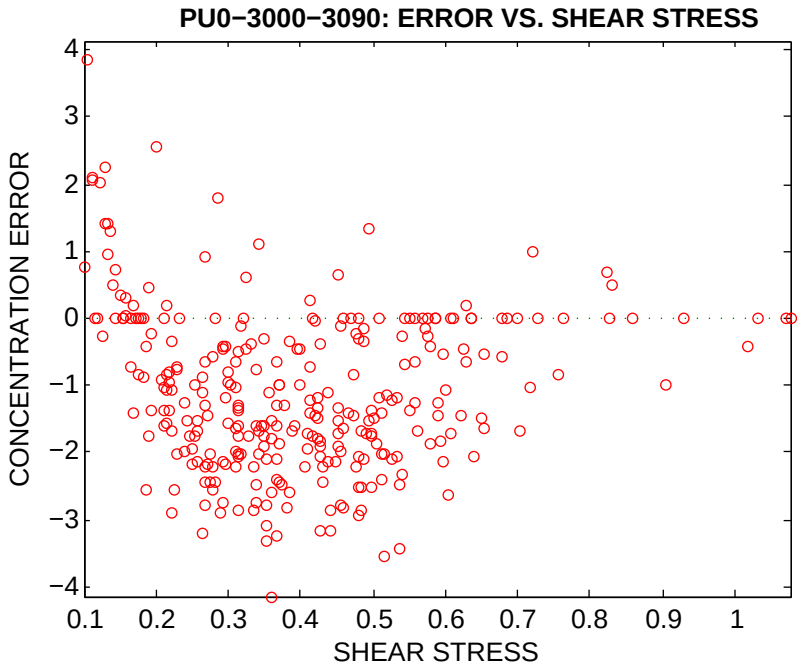


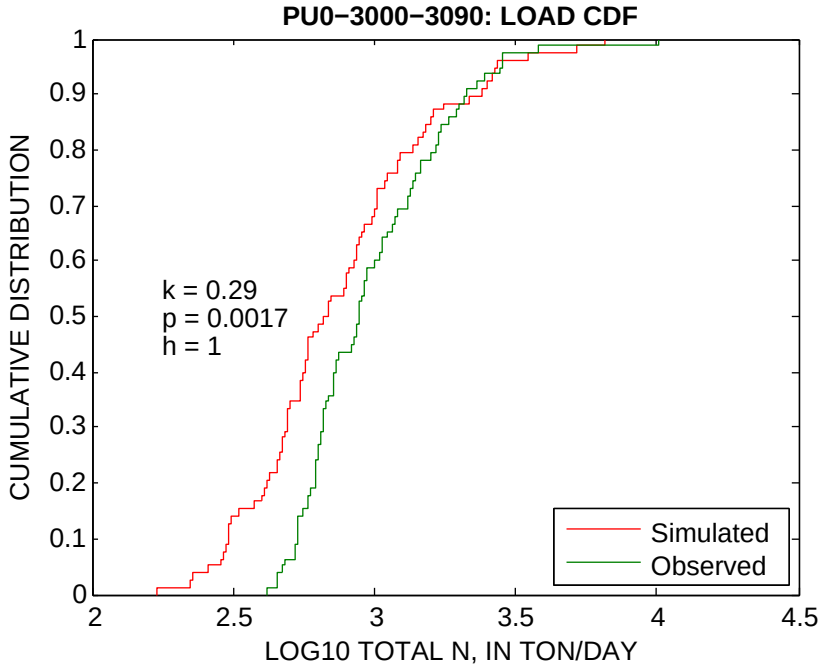


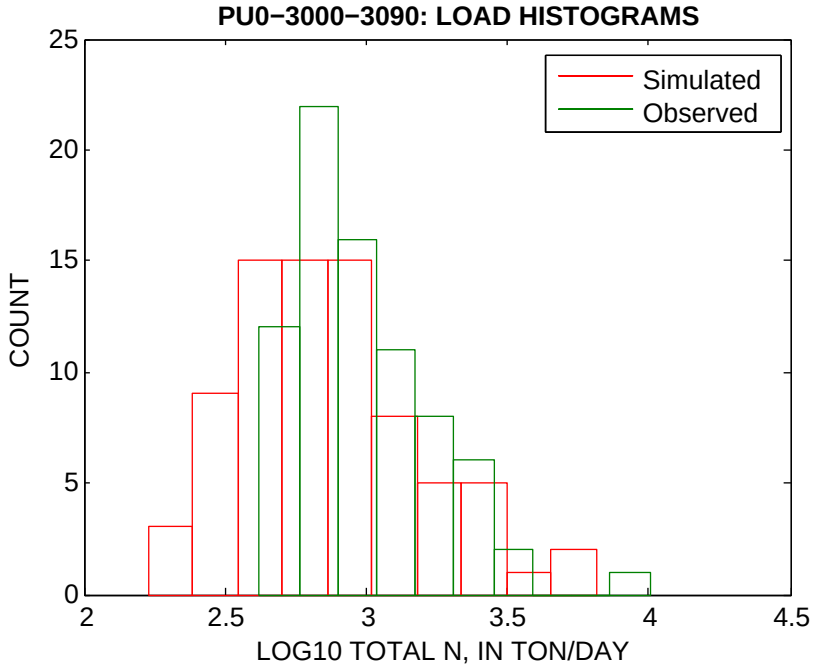


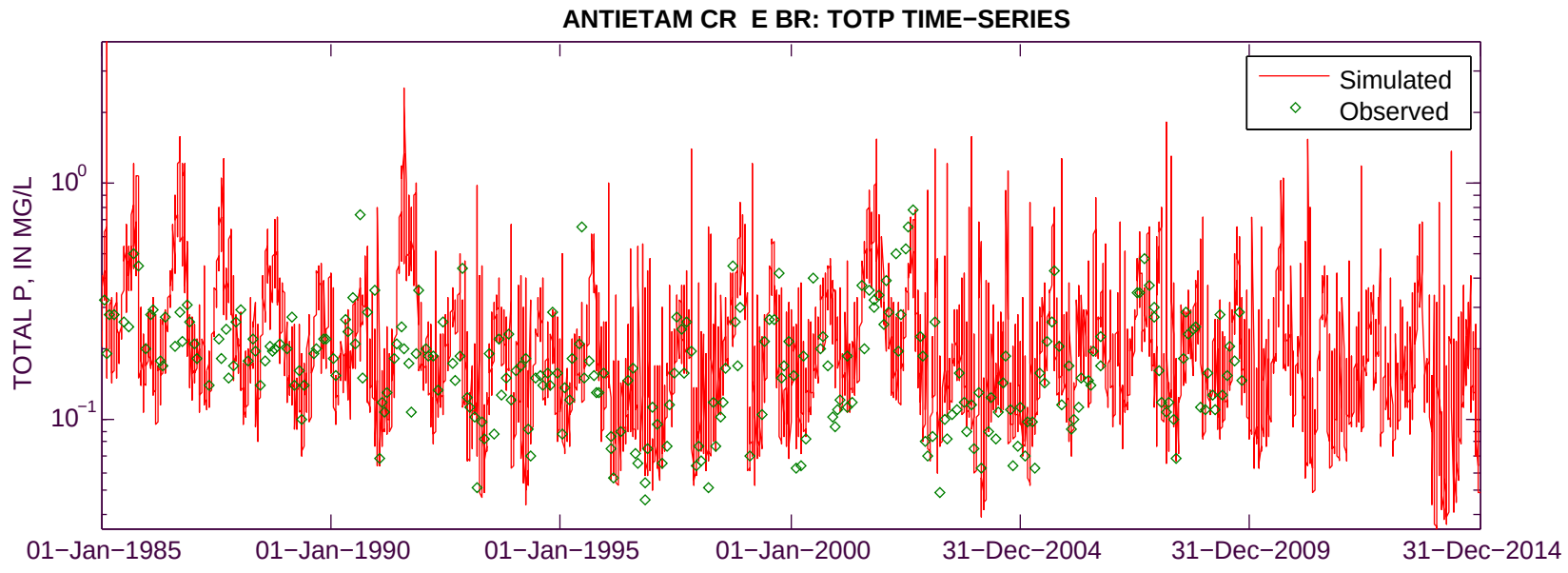
LOAD DATA
LOG10

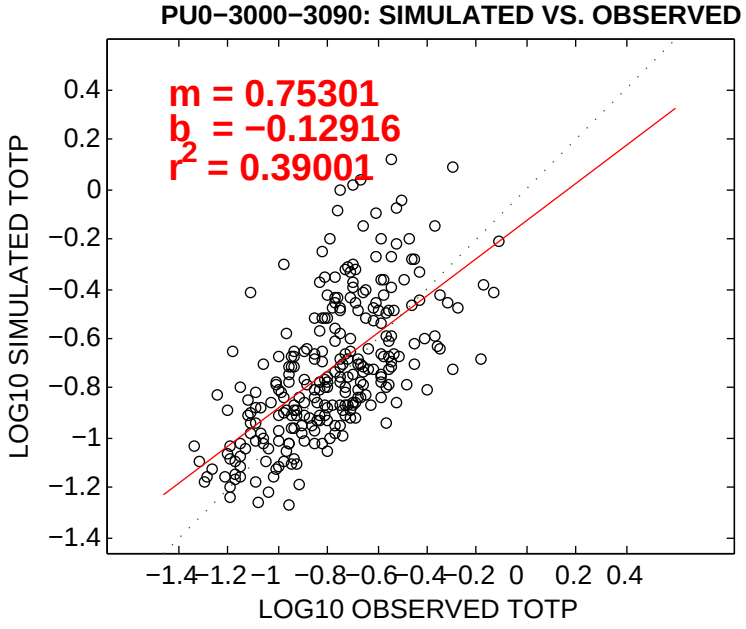


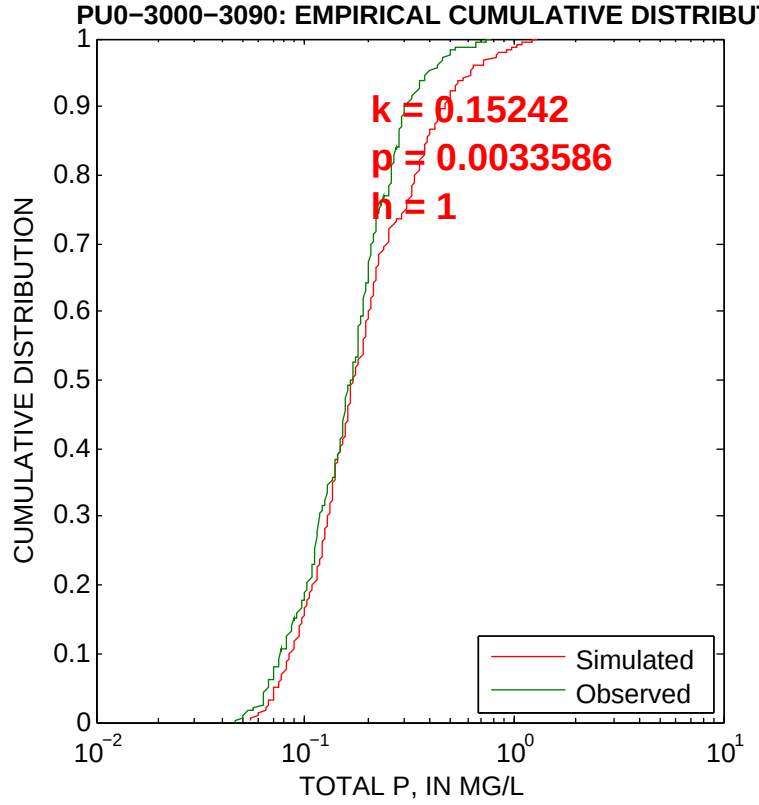












DATA SELECTION

scenario	file
P620171001WQ	TOTP.calib

plot: TOTP - total phosphorus

Dates: 1/1/1985 – 12/31/201

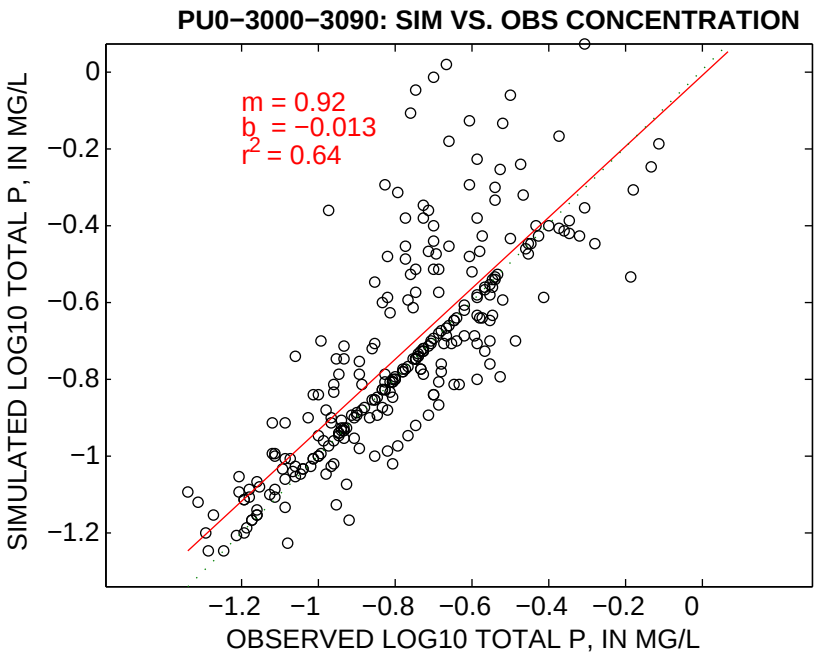
Drive	Directory	Observed
N/A	model	OBS20161101

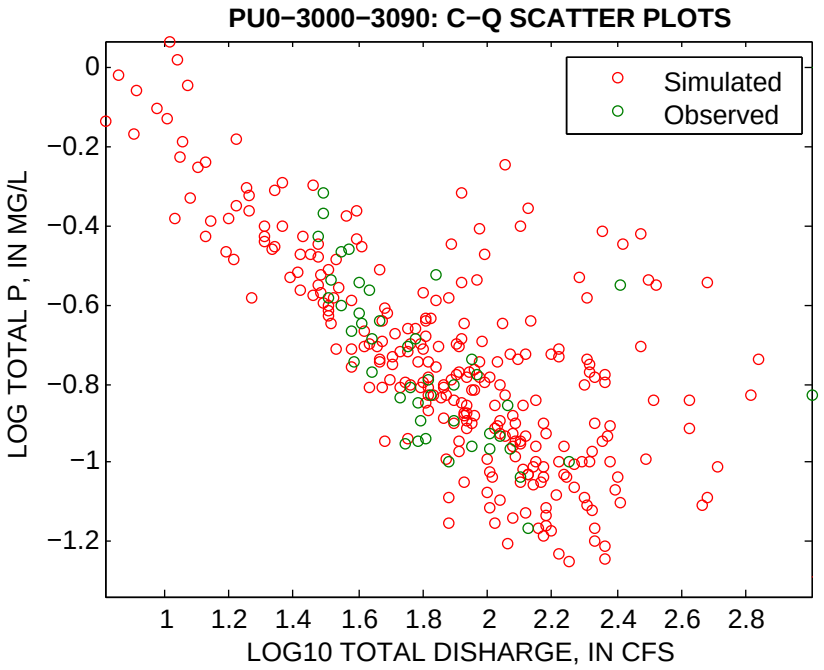
STATISTICS

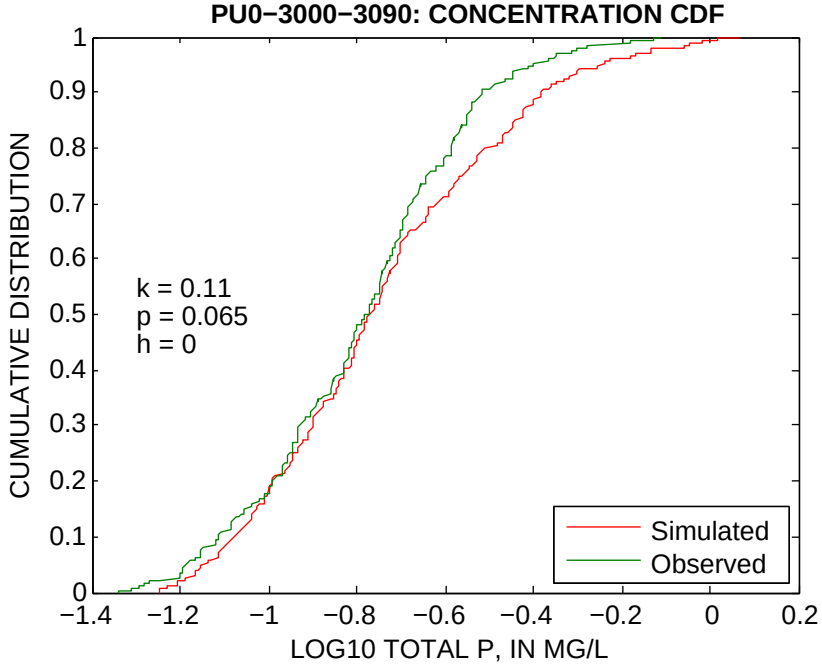
	n	269	269
		observe	simulate
min		0.046	0.054034
		-1.33724	-1.26733
mean		0.189037	0.239673
		-0.787717	-0.722313
media		0.168	0.17123
		-0.774691	-0.76642
max		0.777	1.3124
		-0.109579	0.118066
varian		0.0127618	0.0391404
		0.0550453	0.0800278
JB		0.001	0.001
		0.5	0.006093
		ra	log
%		26.7859	-8.30299
err.va		0.034683	0.0564679
rel.std.err		2.71773	1.02584
mod.eff		-1.71773	-0.0258438

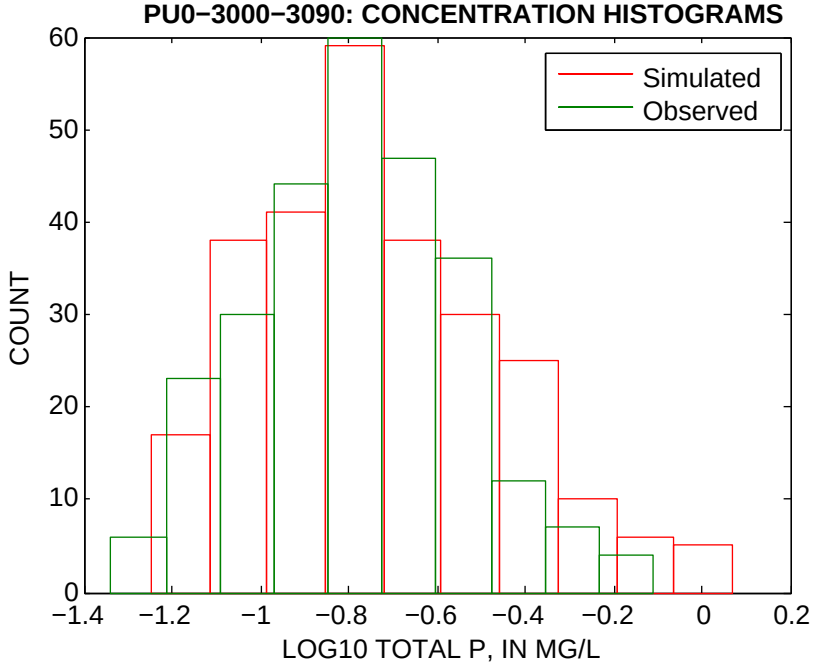
VERSION 2.1

ALL DATA
LOG10

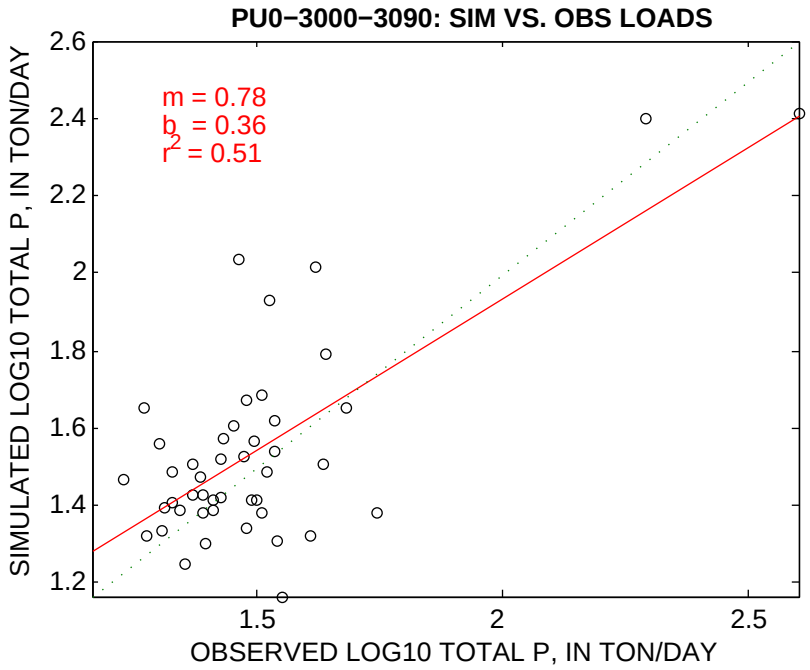


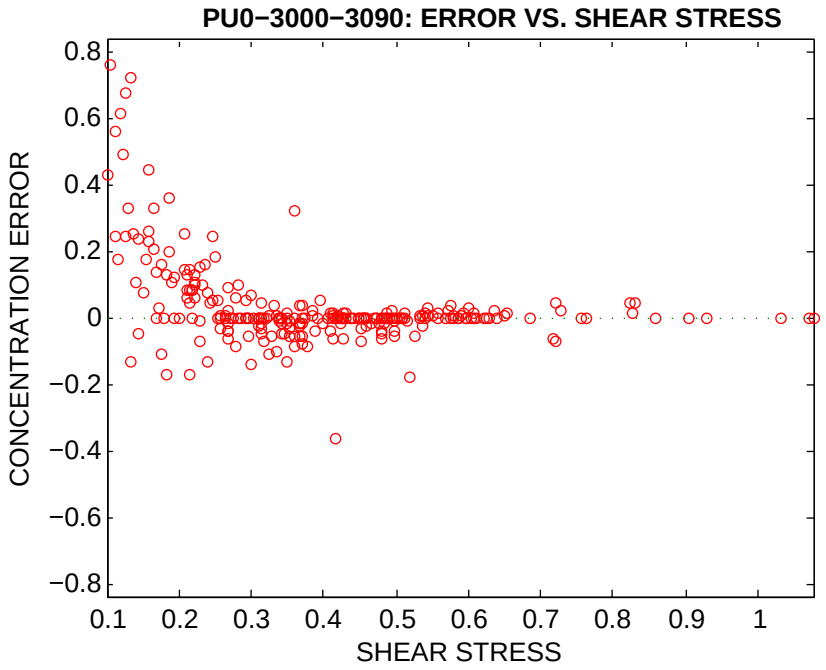


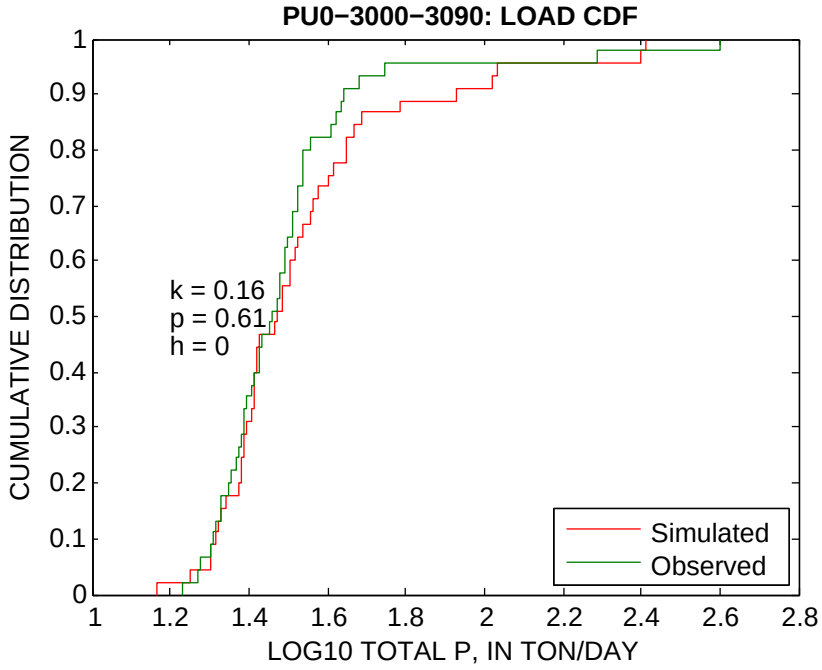


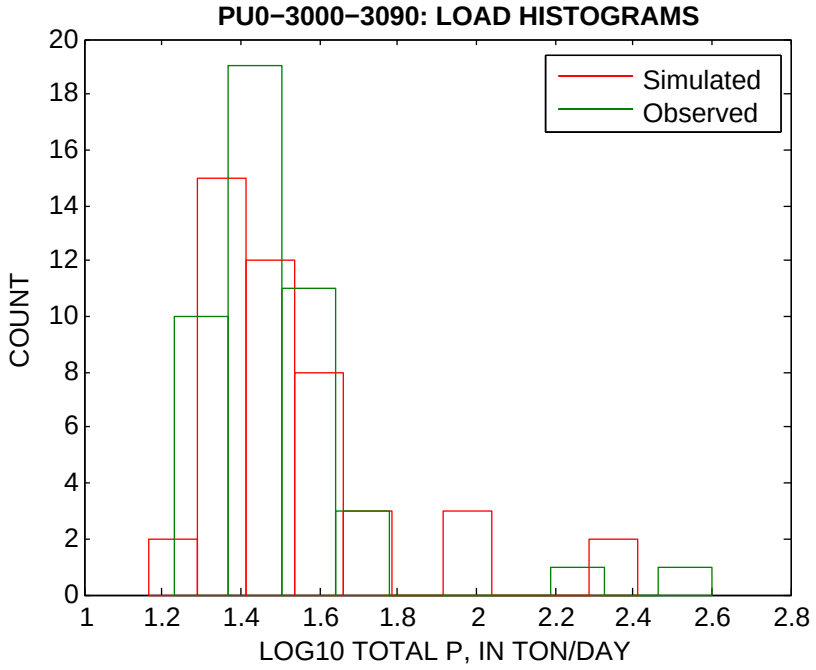


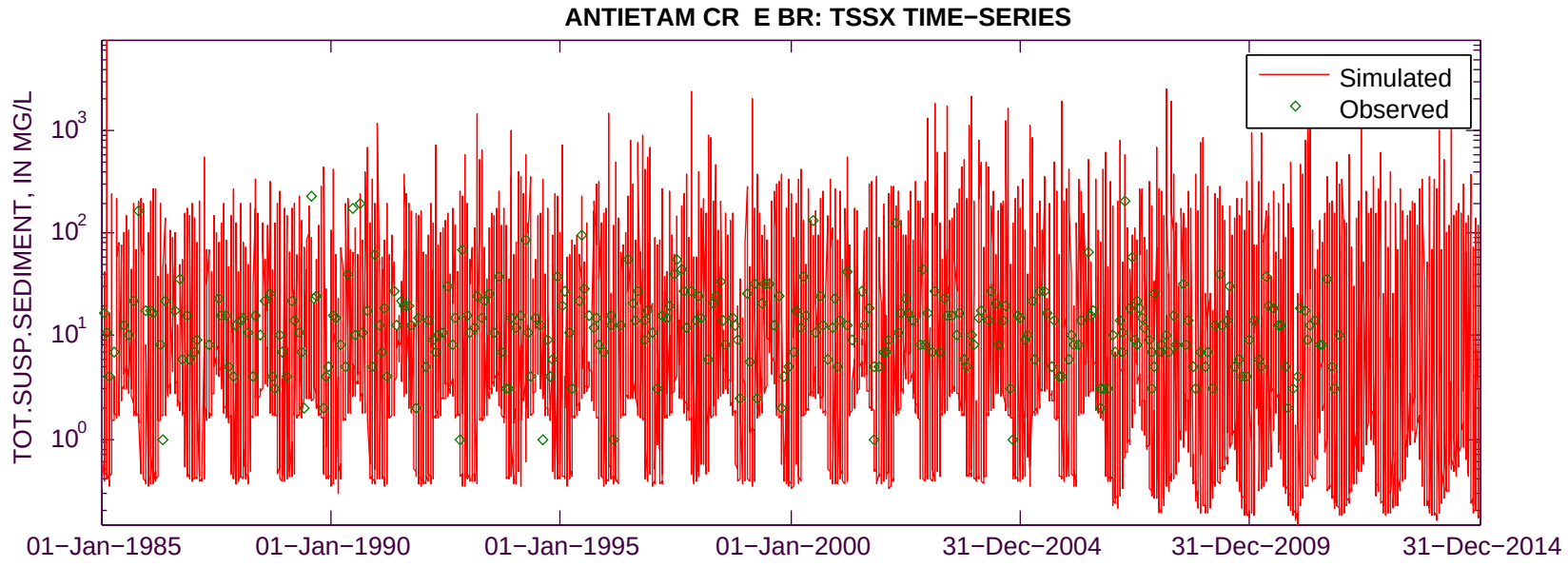
LOAD DATA
LOG10

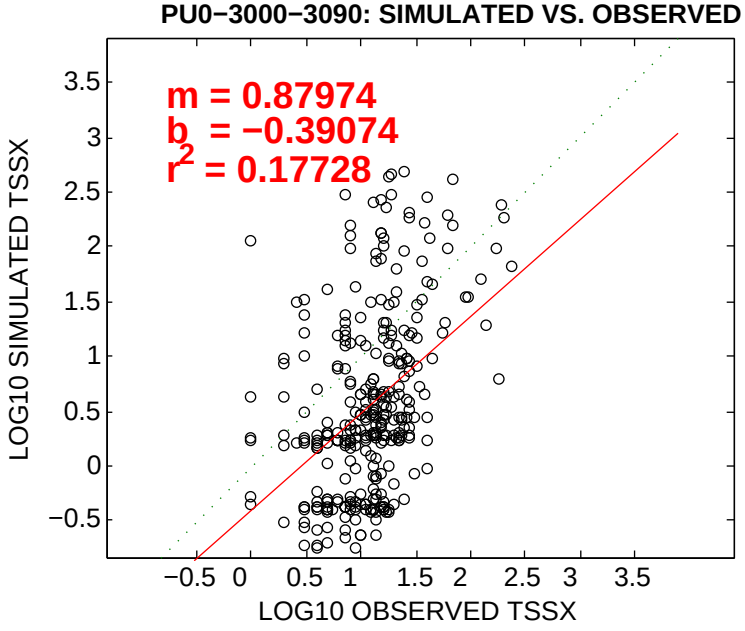


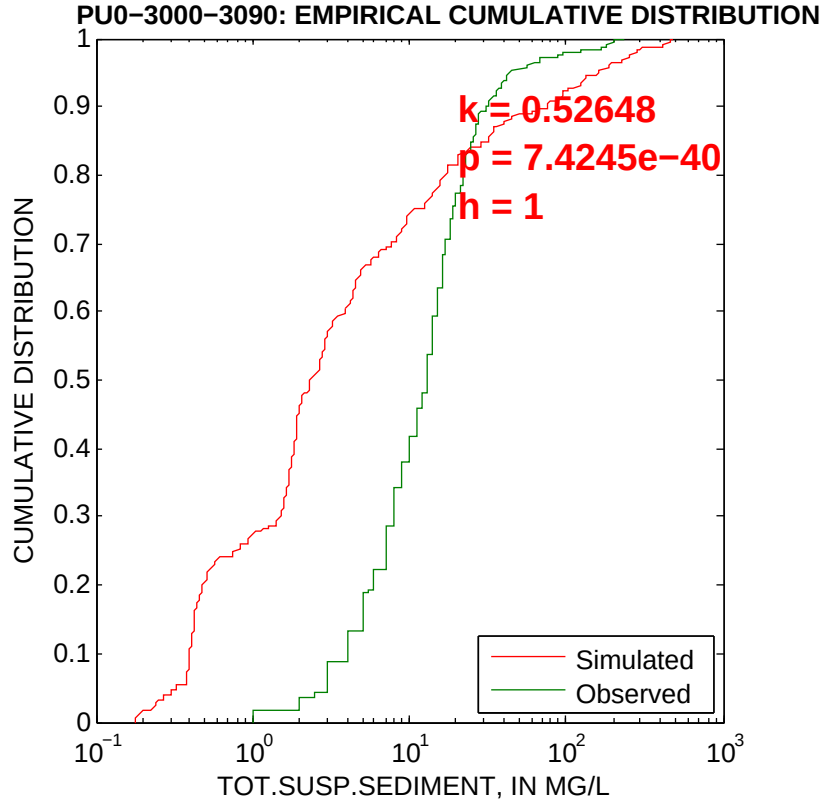












DATA SELECTION

scenario	file
P620171001WQ	TSSX.calib

plot: TSSX - total suspended ...

Dates: 1/1/1985 – 12/31/201

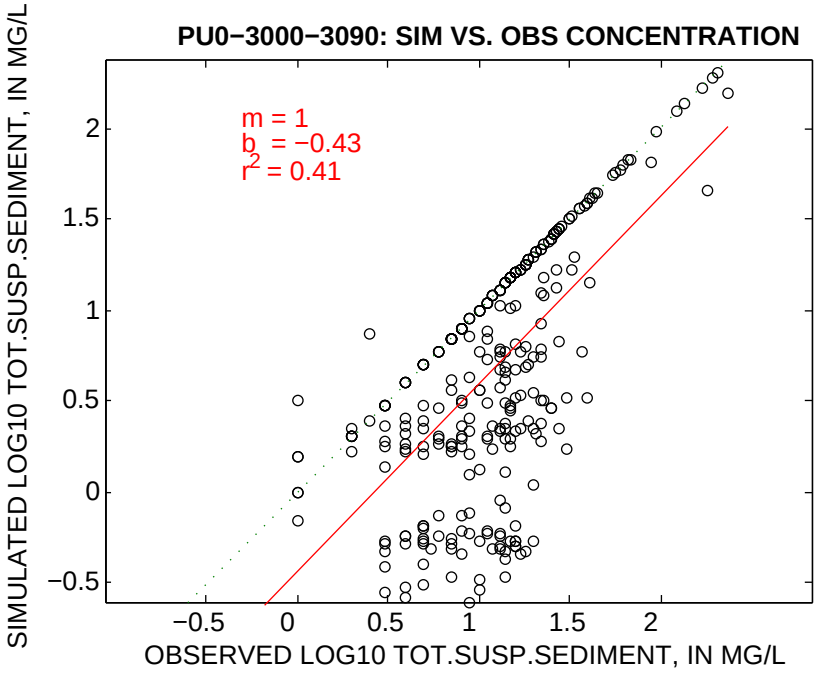
Drive	Directory	Observed
N/A	model	OBS20161101

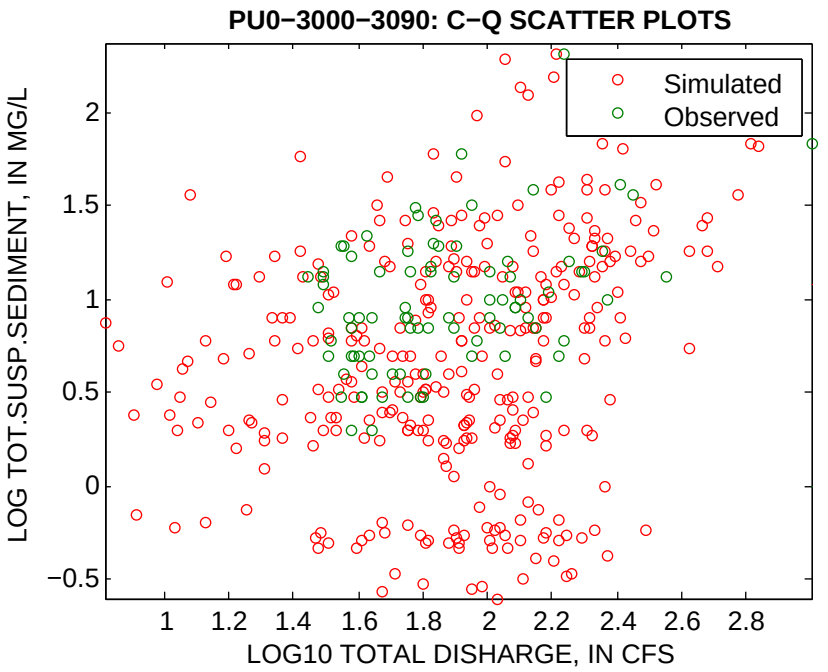
STATISTICS

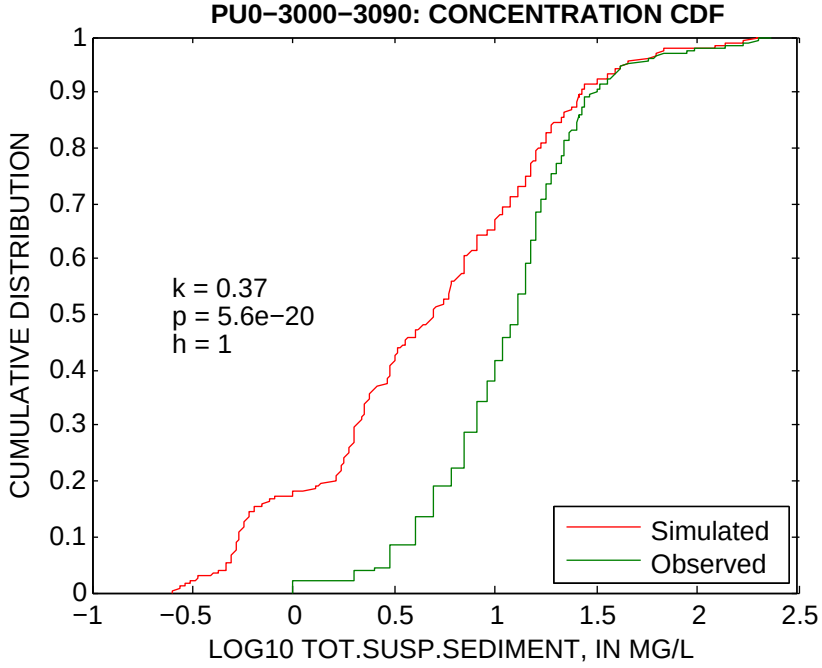
	n	321	321
		observe	simulate
min		1	0.18215
		0	-0.739571
mean		18.5096	25.8205
		1.06877	0.549505
media		13	2.3705
		1.11394	0.37484
max		236	477.75
		2.37291	2.6792
varian		753.531	4824.86
		0.154395	0.674043
JB		0.001	0.001
		0.002436	0.001
		ra	log
%		39.4977	-48.5854
err.va		4594.62	0.827265
rel.std.err		6.09745	5.35811
mod.eff		-5.09745	-4.35811

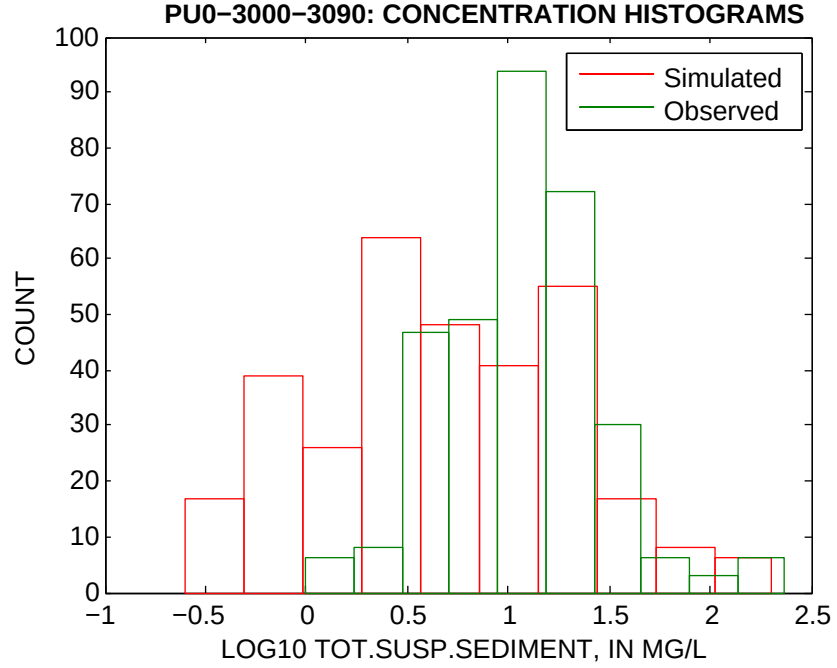
VERSION 2.1

ALL DATA
LOG10

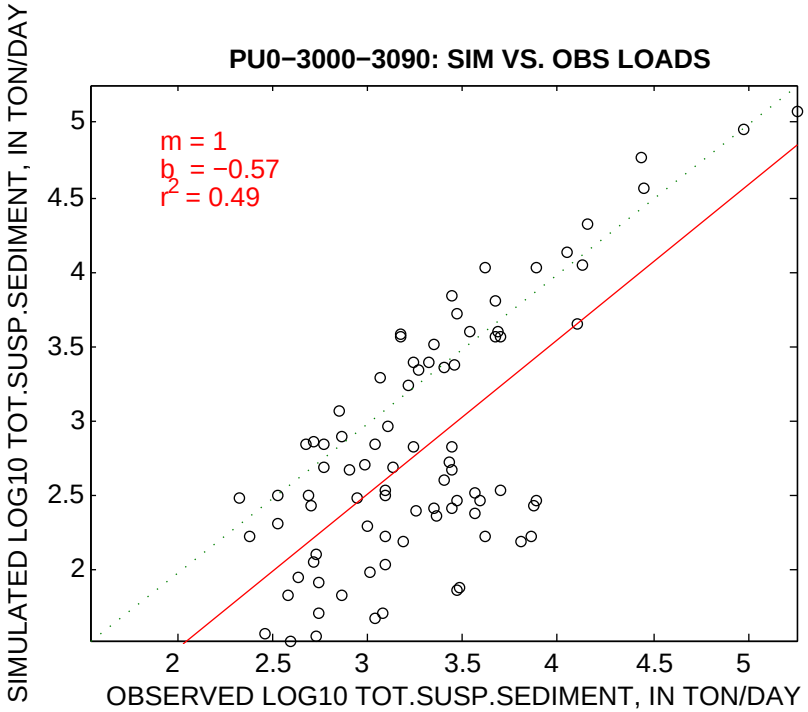


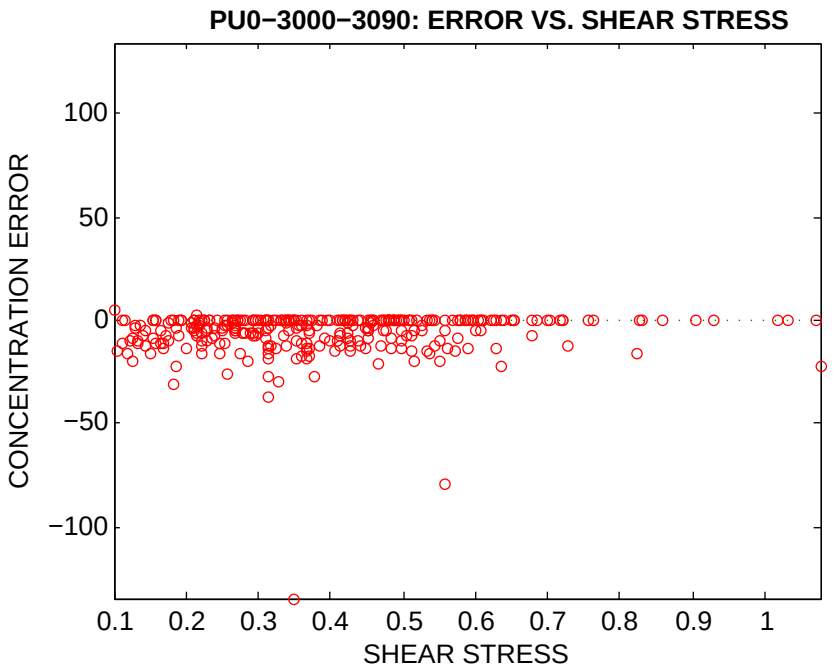


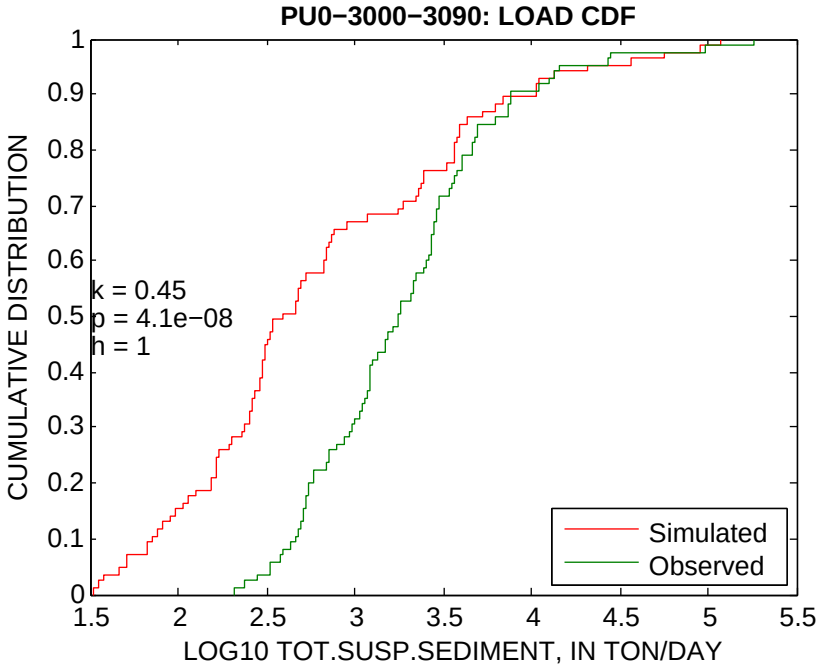


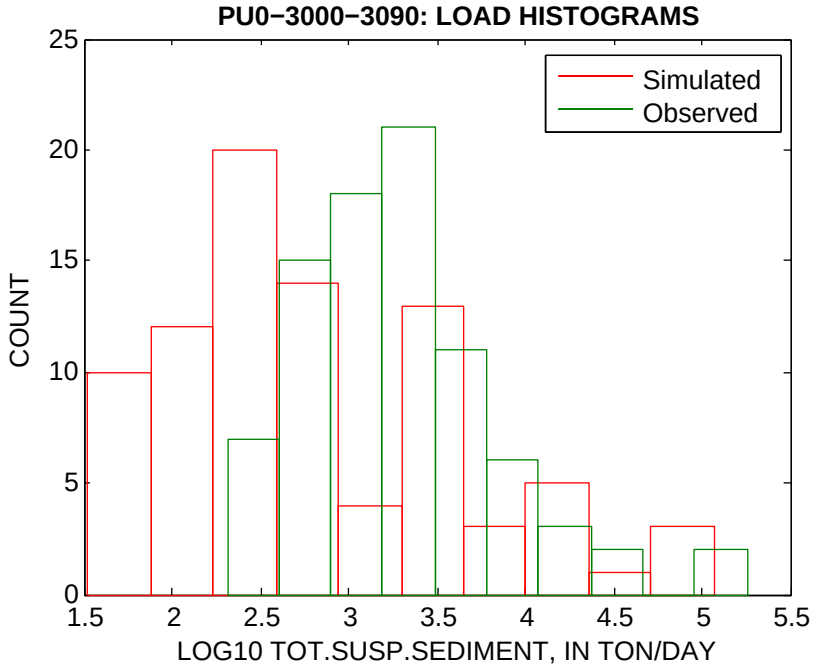


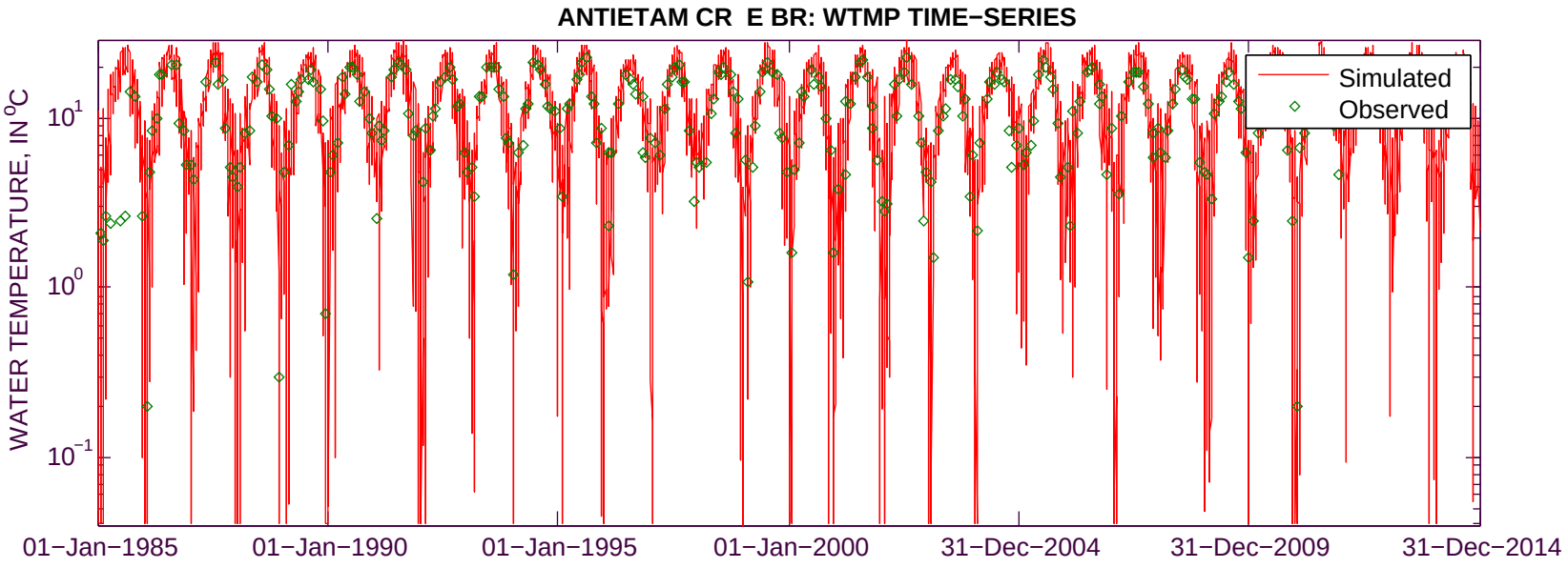
LOAD DATA
LOG10

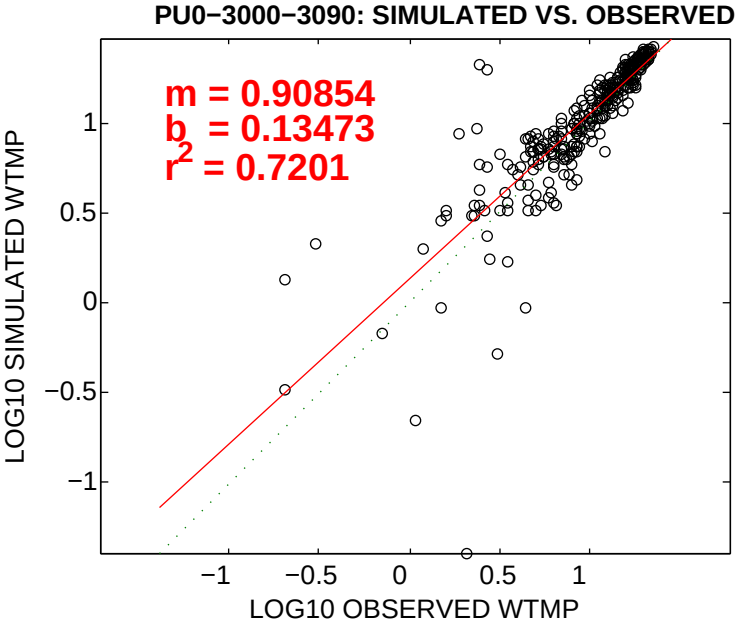


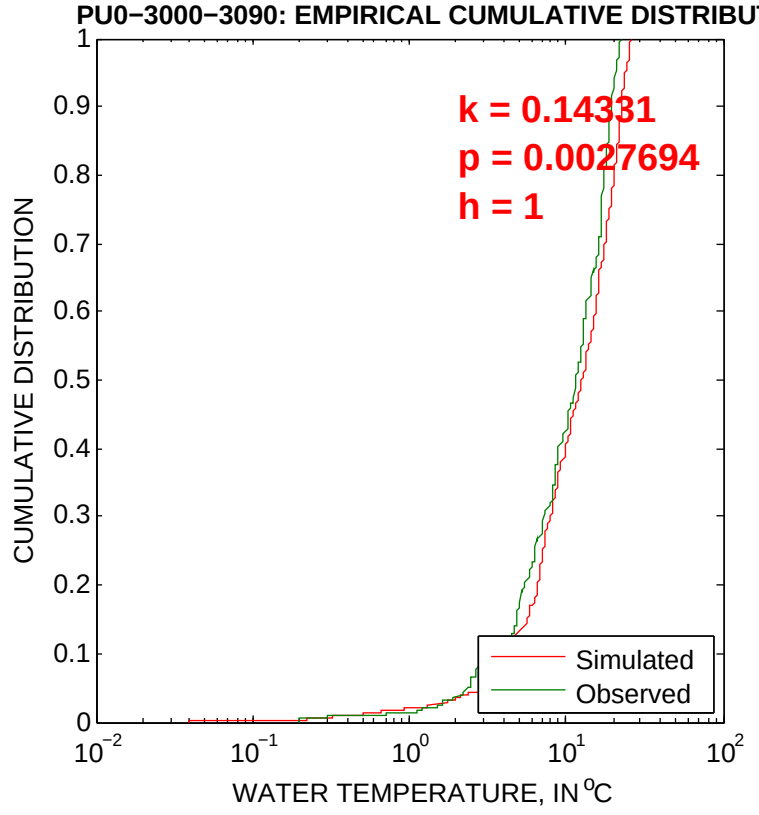












DATA SELECTION

scenario	file
P620171001WQ	WTMP.calib

plot: WTMP - water tempera...

Dates	1/1/1985	12/31/201

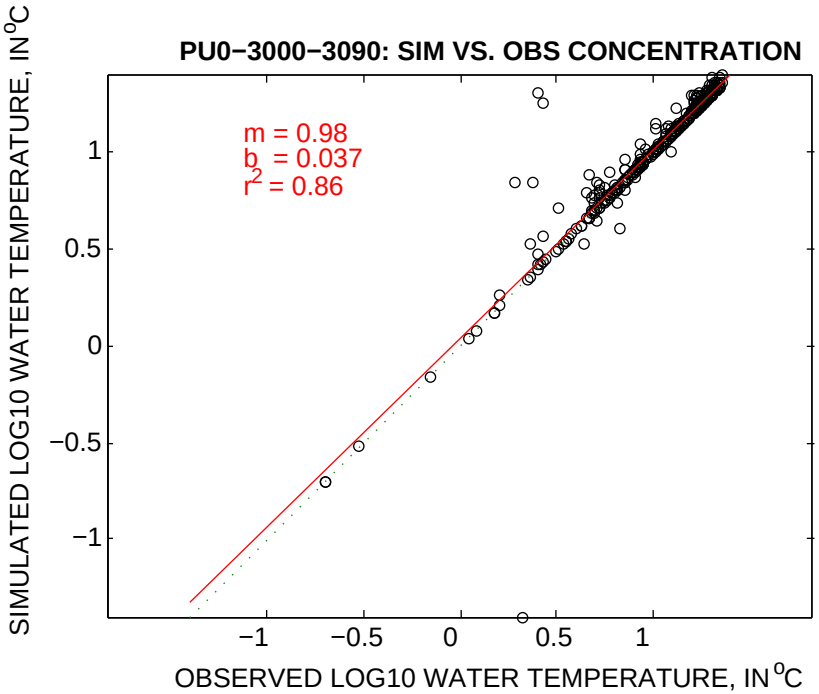
Drive	Directory	Observed
N/A	model	OBS20161101

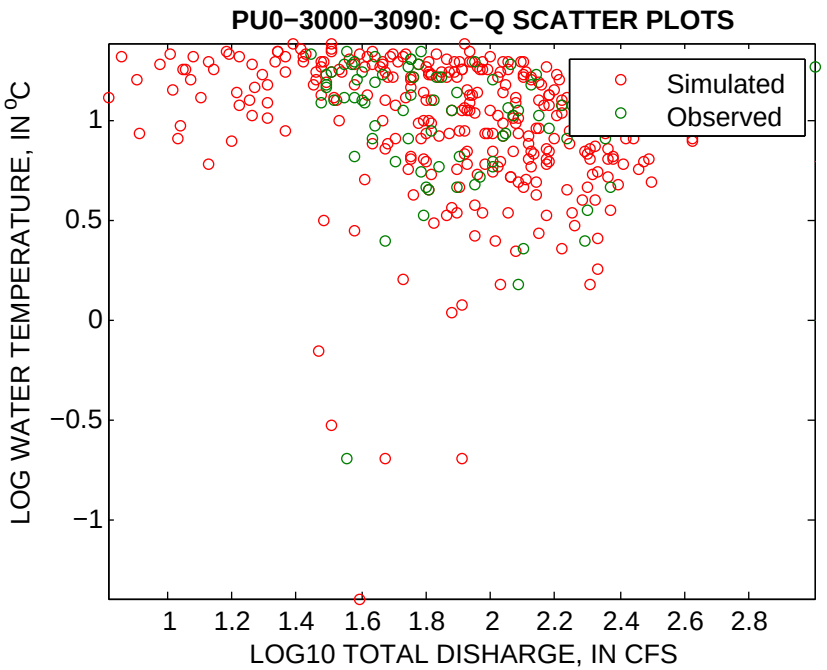
STATISTICS

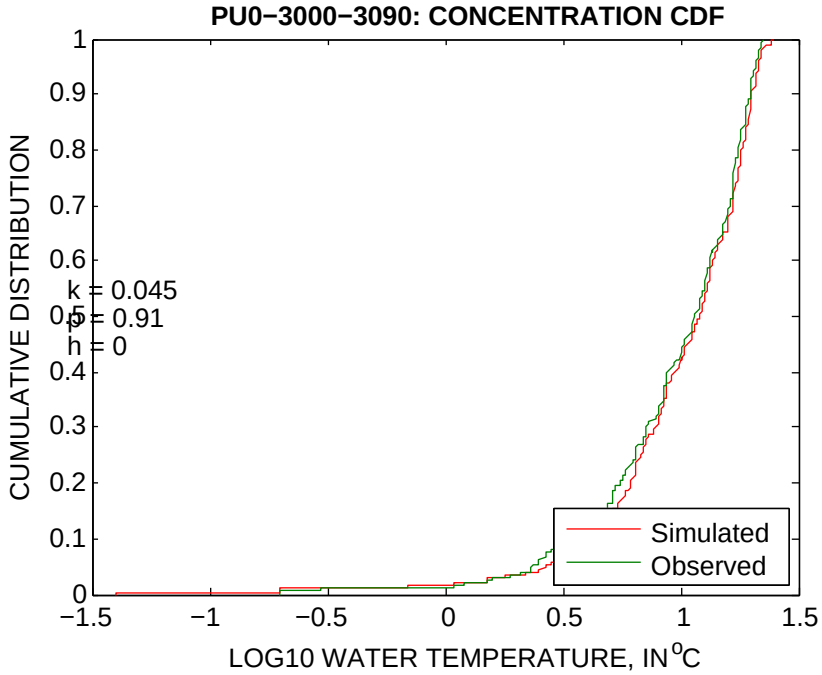
	n	314	314
		observe	simulate
min		0.2	0.040028
		-0.69897	-1.39764
mean		11.5868	13.0486
		0.97544	1.02095
media		11.5495	12.67
		1.06256	1.10277
max		22.7	26.784
		1.35603	1.42788
varian		35.6318	47.5301
		0.108827	0.124747
JB		0.002696	0.002868
		0.001	0.001
		ra	log
%		12.616	4.66551
err.va		8.22668	0.0379053
rel.std.err		0.23088	0.348307
mod.eff		0.76912	0.651693

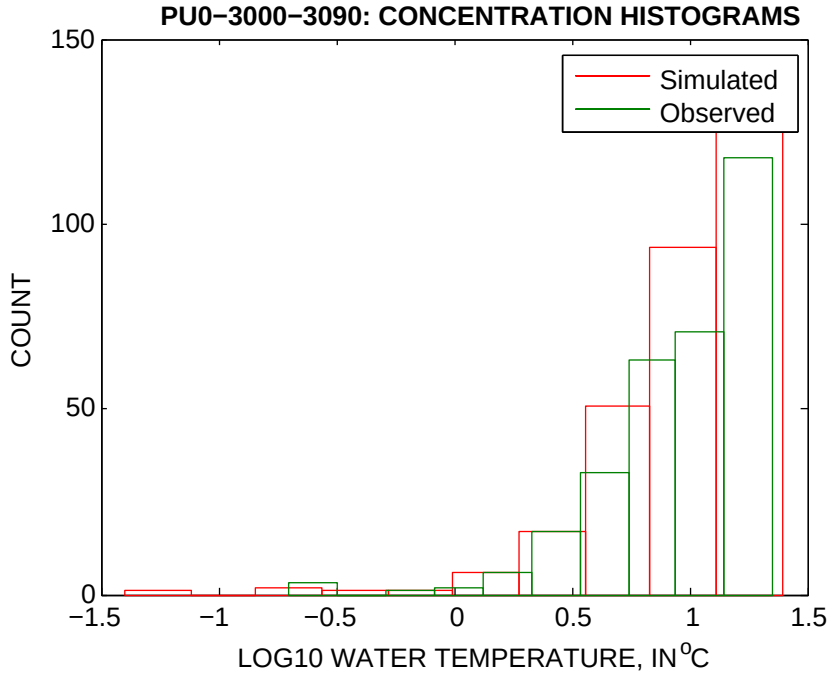
VERSION 2.1

ALL DATA
LOG10

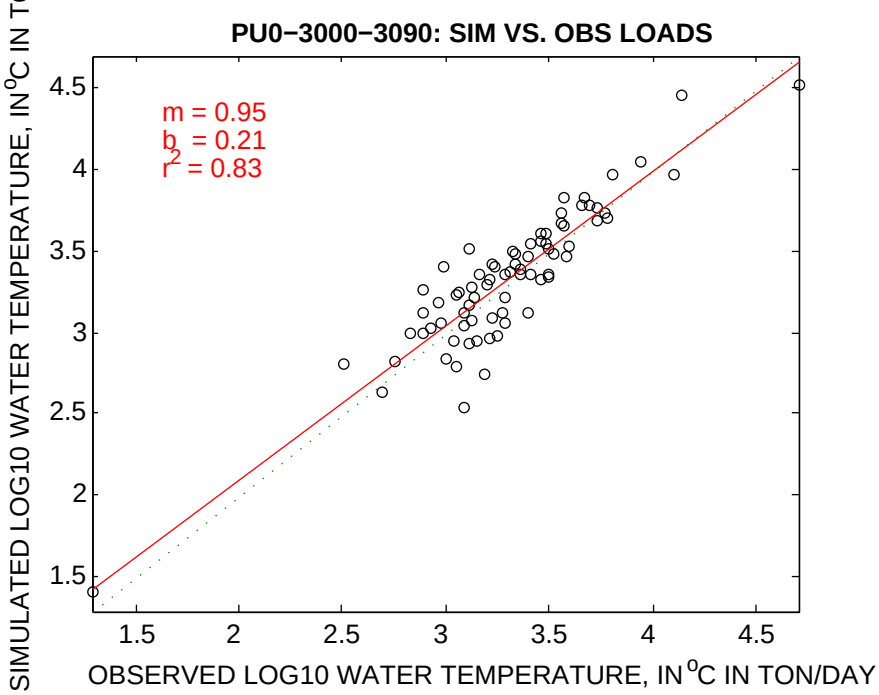




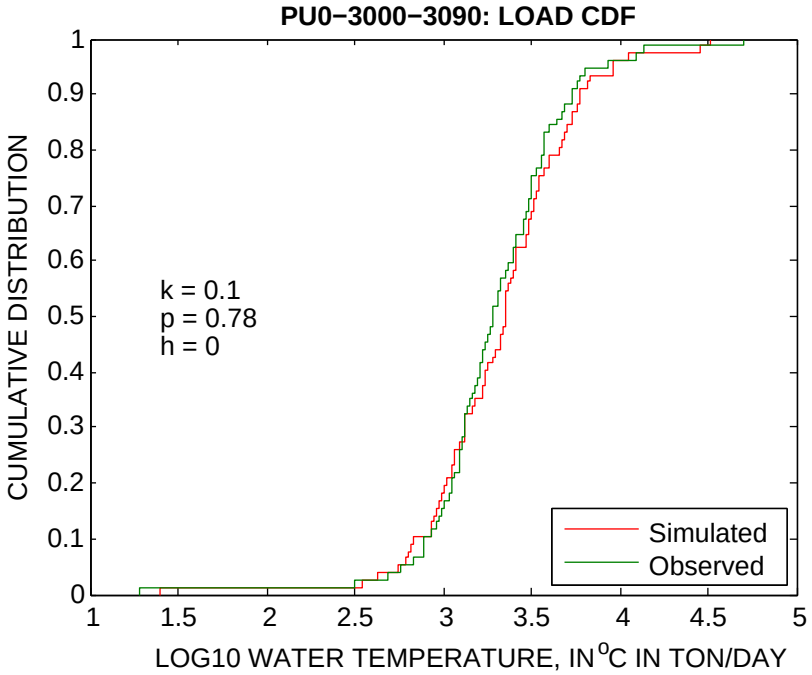


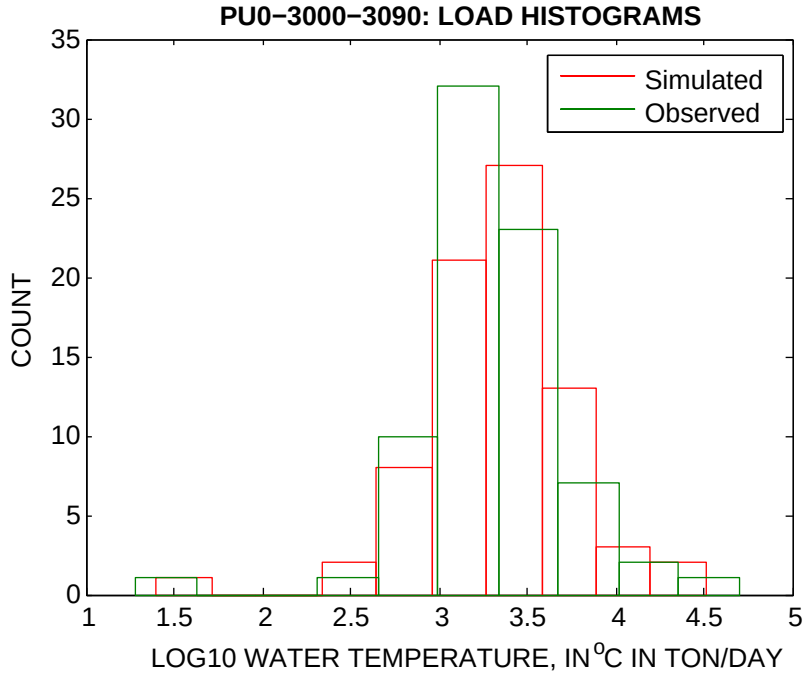


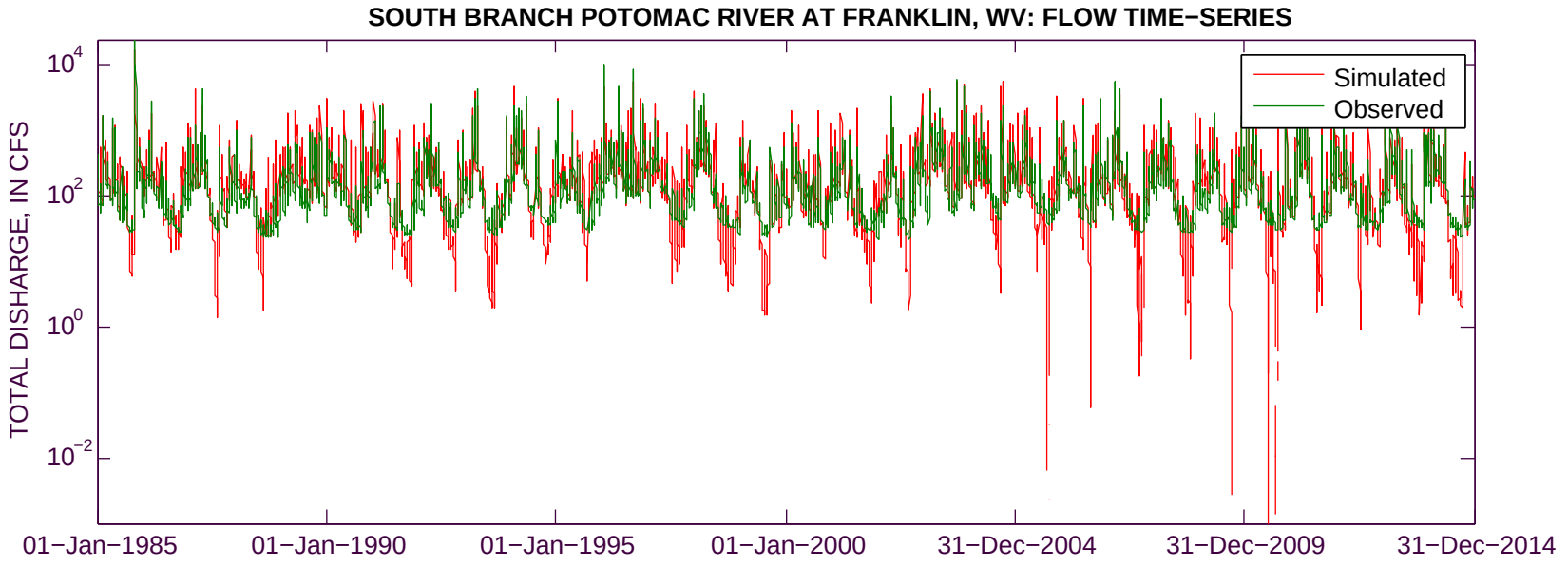
LOAD DATA
LOG10

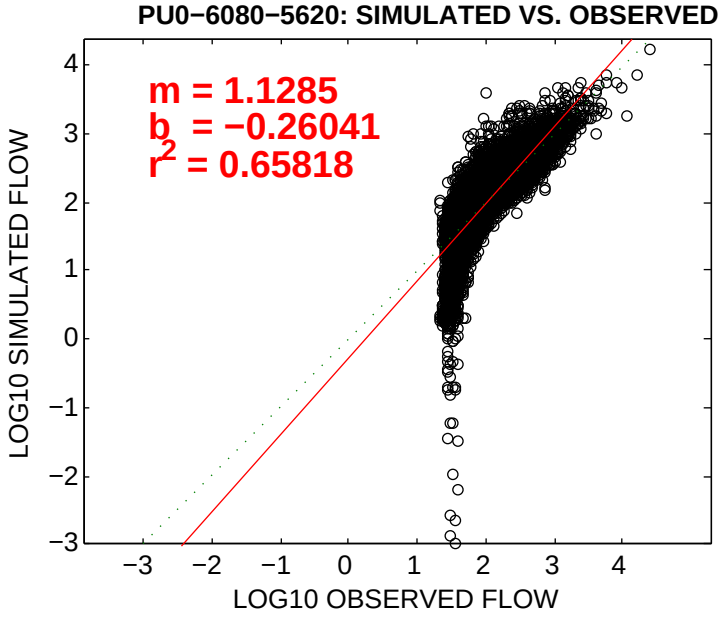


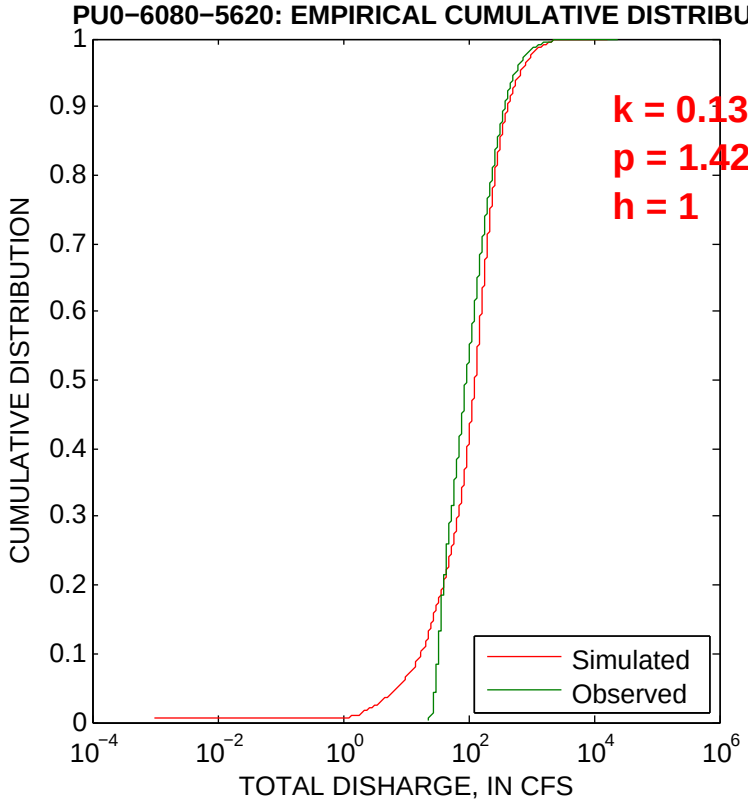












DATA SELECTION

scenario: P620171001WQ | file: FLOW.calib

plot: FLOW - total discharge

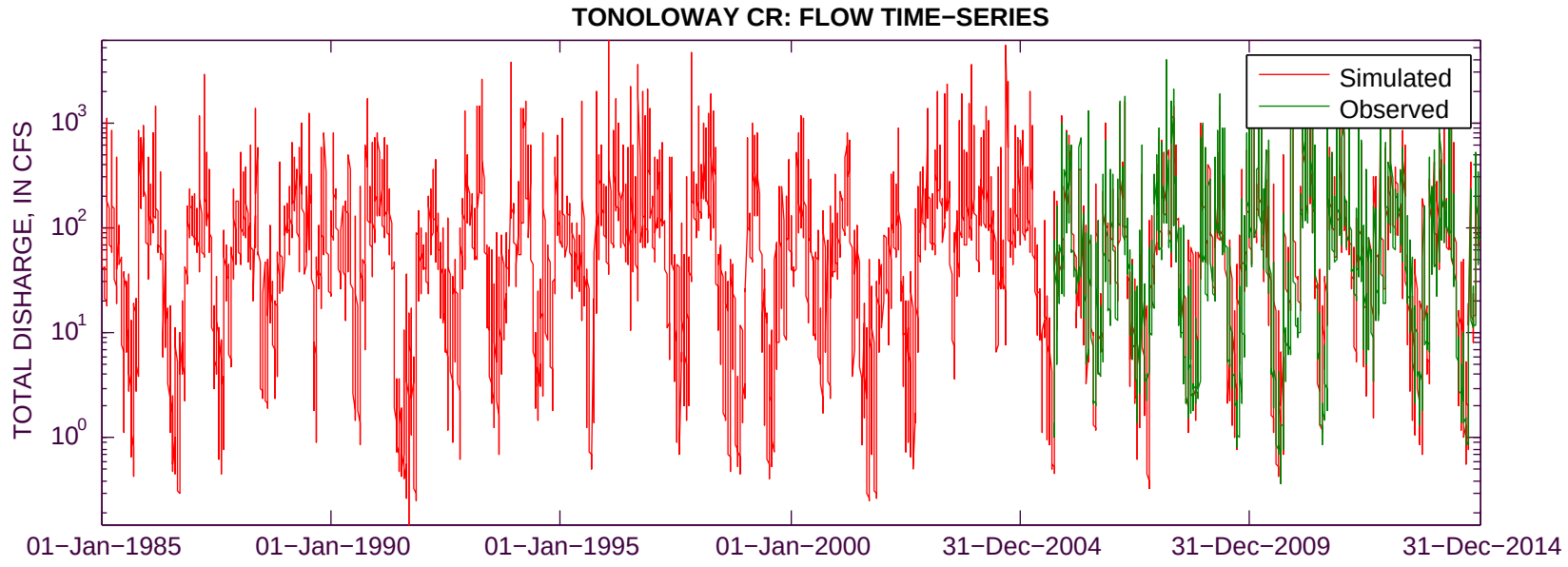
Dates: 1/1/1985 – 12/31/201

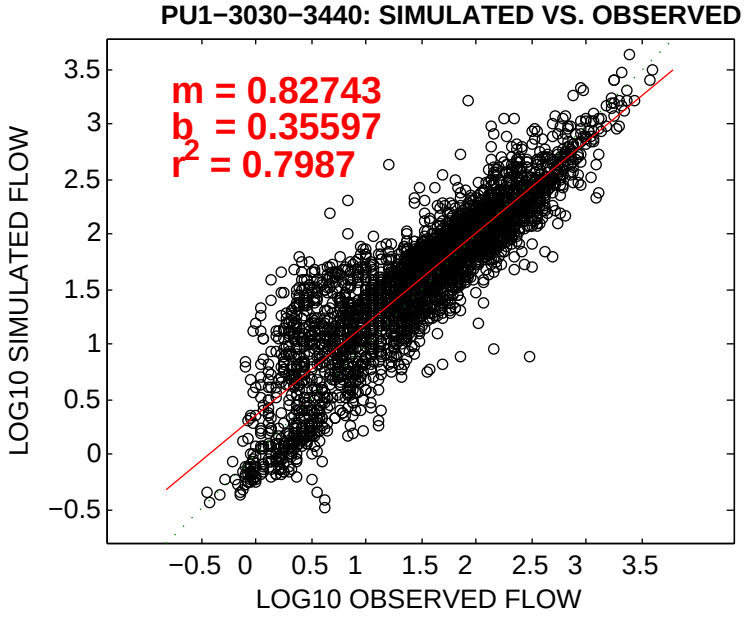
Drive: N/A | Directory: model | Observed: OBS20161101

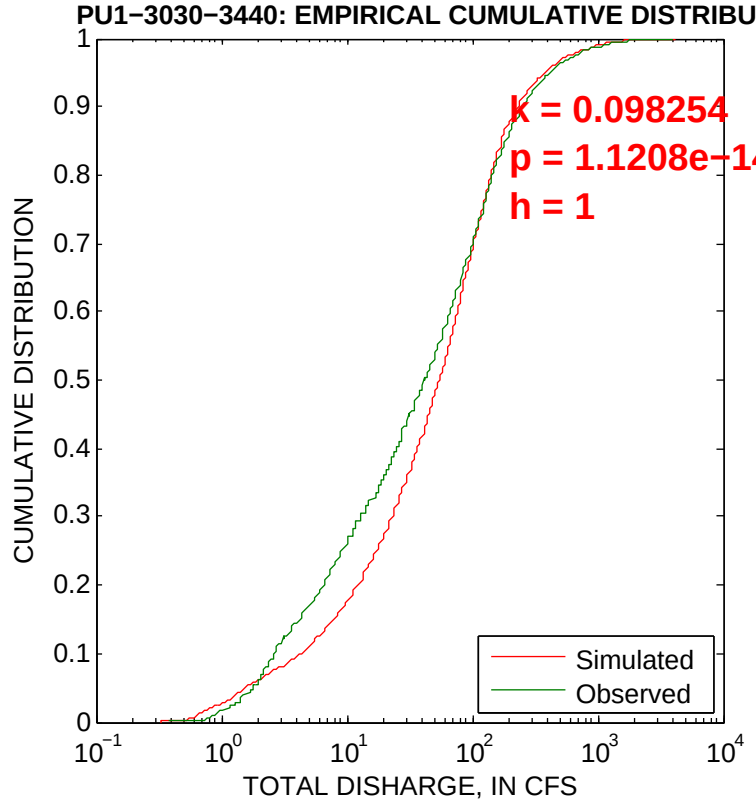
STATISTICS

		observe	simulate
n		10957	10911
min		21	0
		1.32222	-3.00085
mean		186.798	214.357
		2.02459	2.02442
media		94	131.15
		1.97313	2.12041
max		25000	16980
		4.39794	4.22994
varian		195915	144702
		0.172919	0.334602
JB		0.001	0.001
		0.001	0.001
		ra	log
%		14.7533	-0.0085854
err.va		71243.7	0.117231
rel.std.err		0.363646	0.677956
mod.eff		0.636354	0.322044

VERSION







DATA SELECTION

scenario: P620171001WQ | file: FLOW.calib

plot: FLOW - total discharge

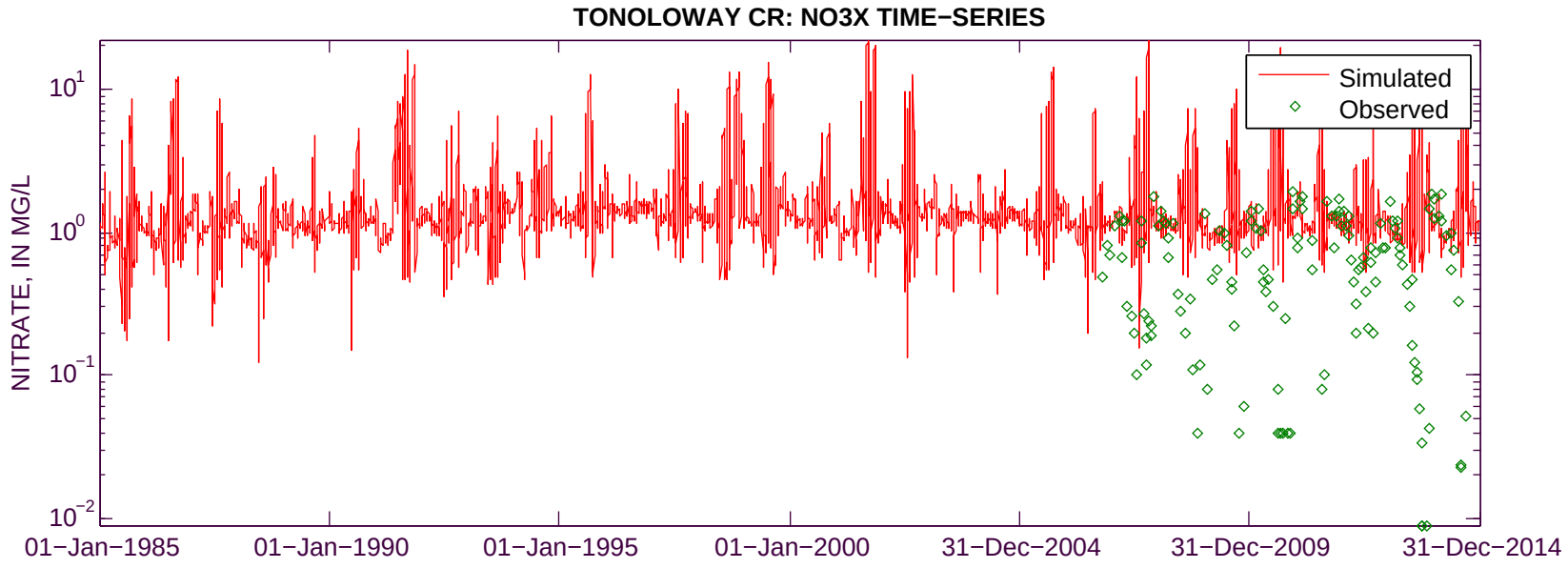
Dates: 1/1/1985 – 12/31/201

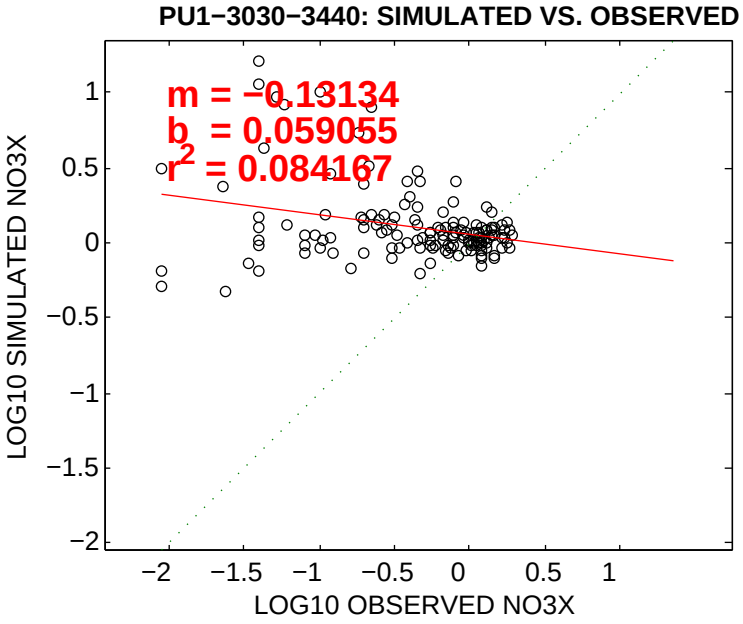
Drive: N/A | Directory: model | Observed: OBS20161101

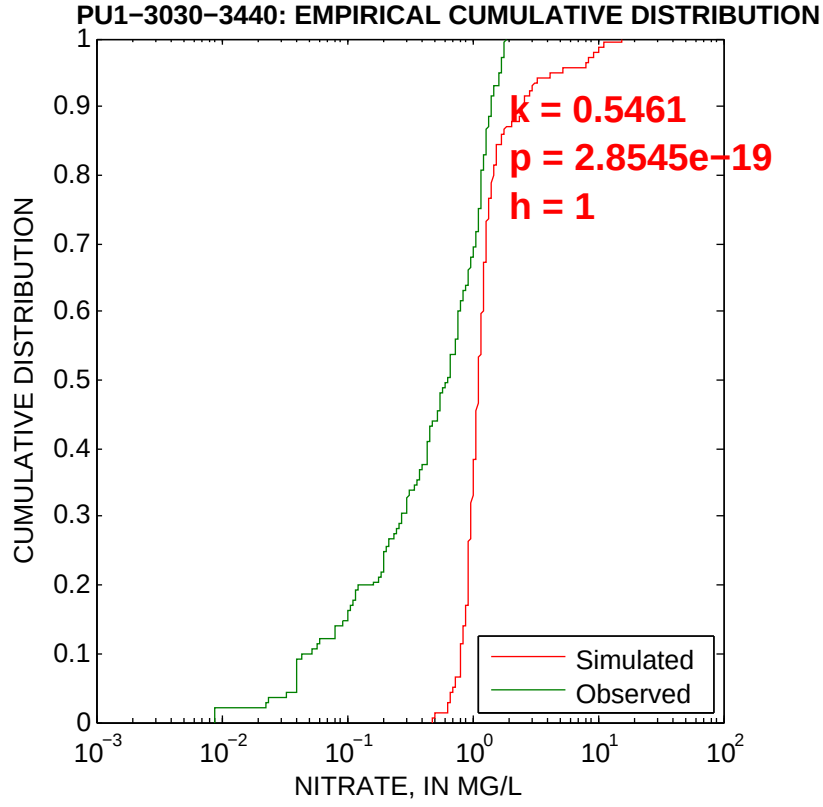
STATISTICS

		observe	simulate
n		3379	3379
min		0.37	0.32593
		-0.431798	-0.486876
mean		112.204	111.473
		1.52779	1.6201
media		42	54.802
		1.62325	1.7388
max		3920	4244.4
		3.59329	3.62782
varian		55014.1	48152.6
		0.550595	0.471966
JB		0.001	0.001
		0.001	0.001
		ra	log
%		-0.651858	6.04239
err.va		14132.6	0.11993
rel.std.err		0.256891	0.217818
mod.eff		0.743109	0.782182

VERSION 2.1







DATA SELECTION

scenario	file
P620171001WQ	NO3X.calib

plot: NO3X - nitrate

Dates: 1/1/1985 – 12/31/201

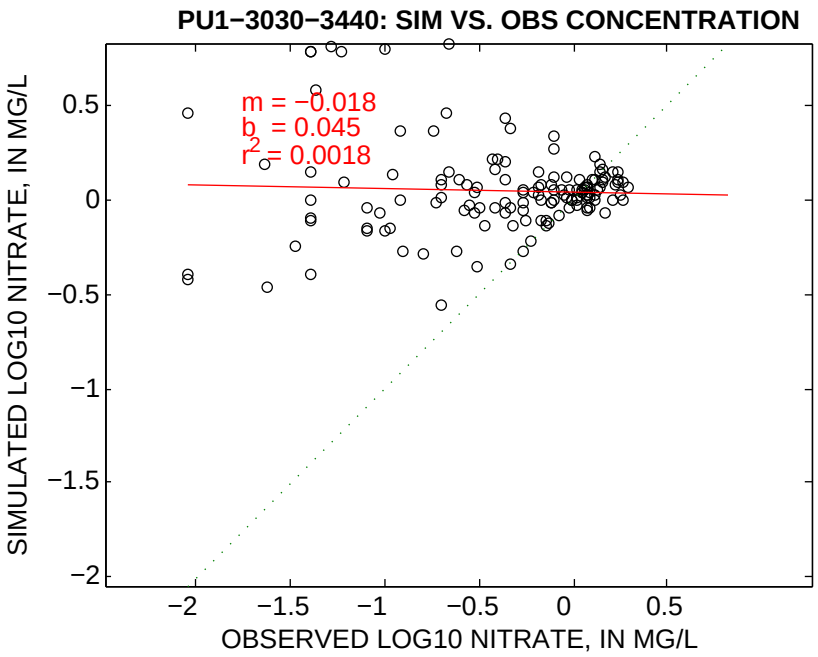
Drive	Directory	Observed
N/A	model	OBS20161101

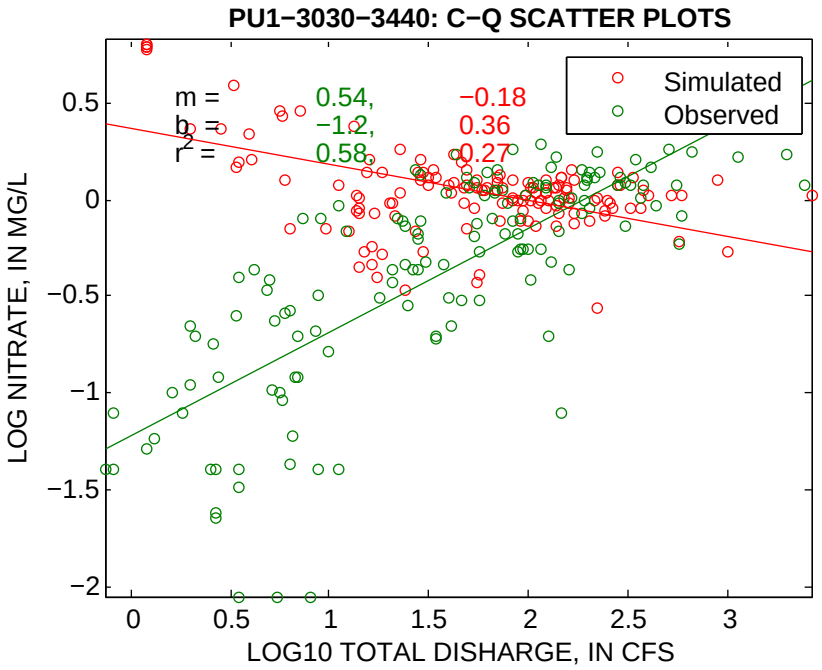
STATISTICS

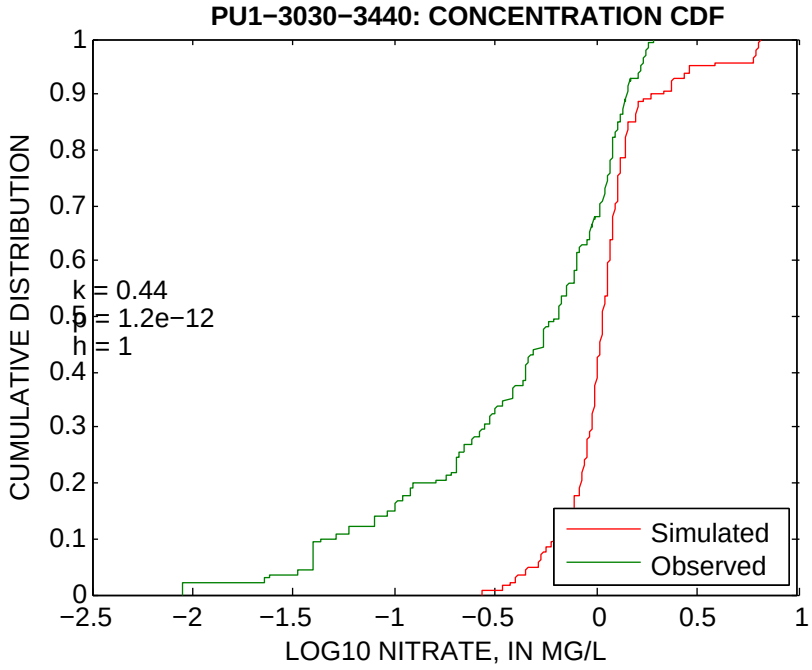
	observe	simulate
n	141	141
min	0.009	0.48289
	-2.04576	-0.316152
mean	0.697766	1.67018
	-0.380549	0.109037
media	0.65	1.1152
	-0.187087	0.0473528
max	1.93	15.994
	0.285557	1.20396
varian	0.278852	4.27284
	0.304995	0.0625108
JB	0.017964	0.001
	0.001046	0.001
	ra	log
%	139.361	-128.653
err.va	6.15531	0.689029
rel.std.err	22.0737	2.25915
mod.eff	-21.0737	-1.25915

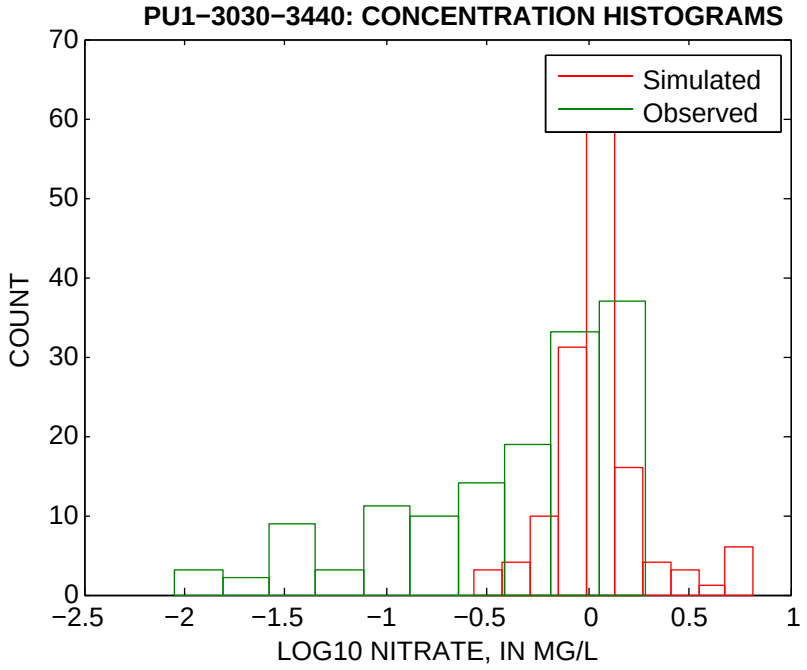
VERSION

ALL DATA
LOG10

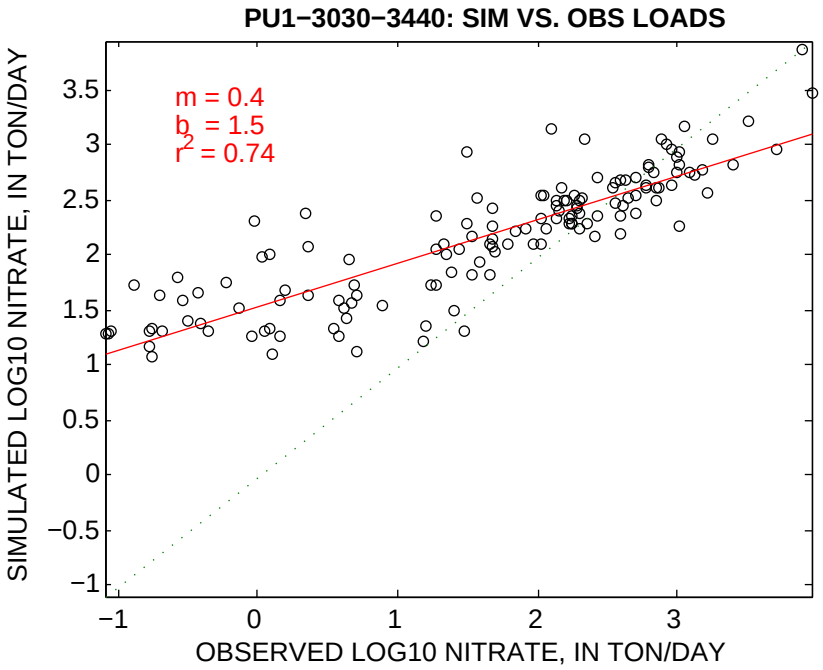


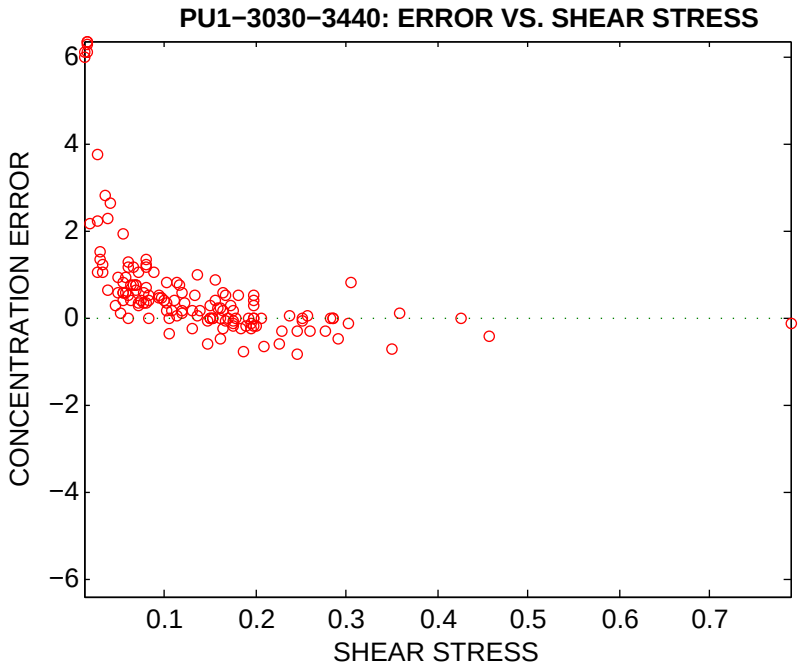


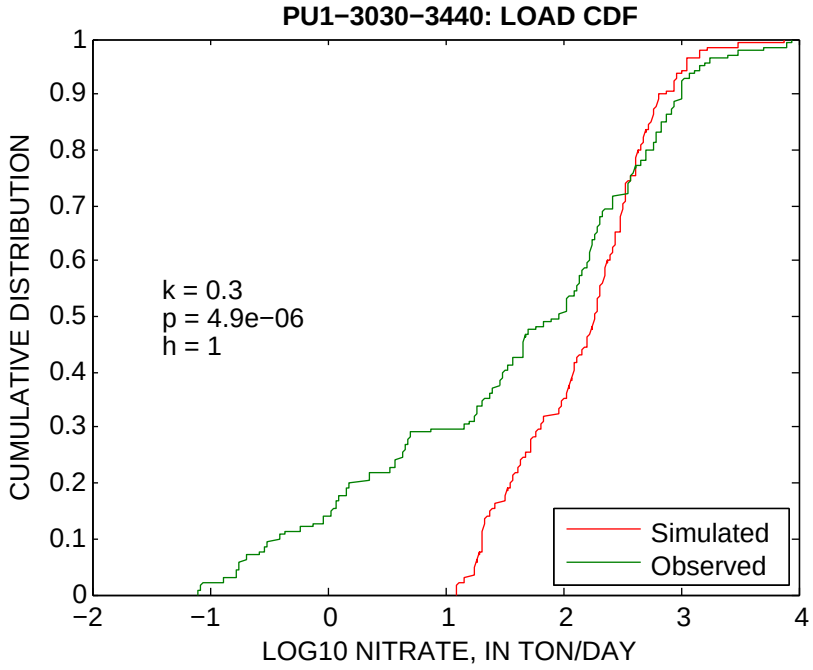


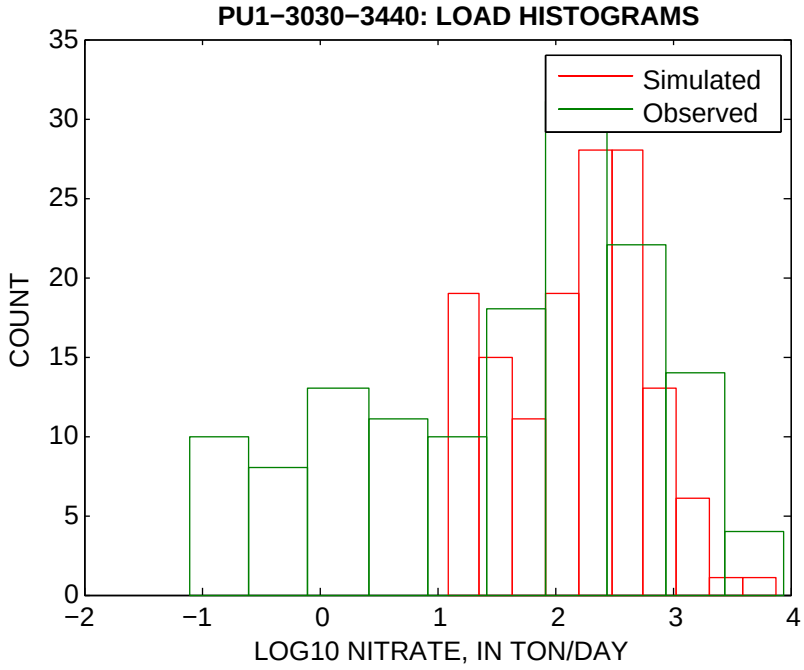


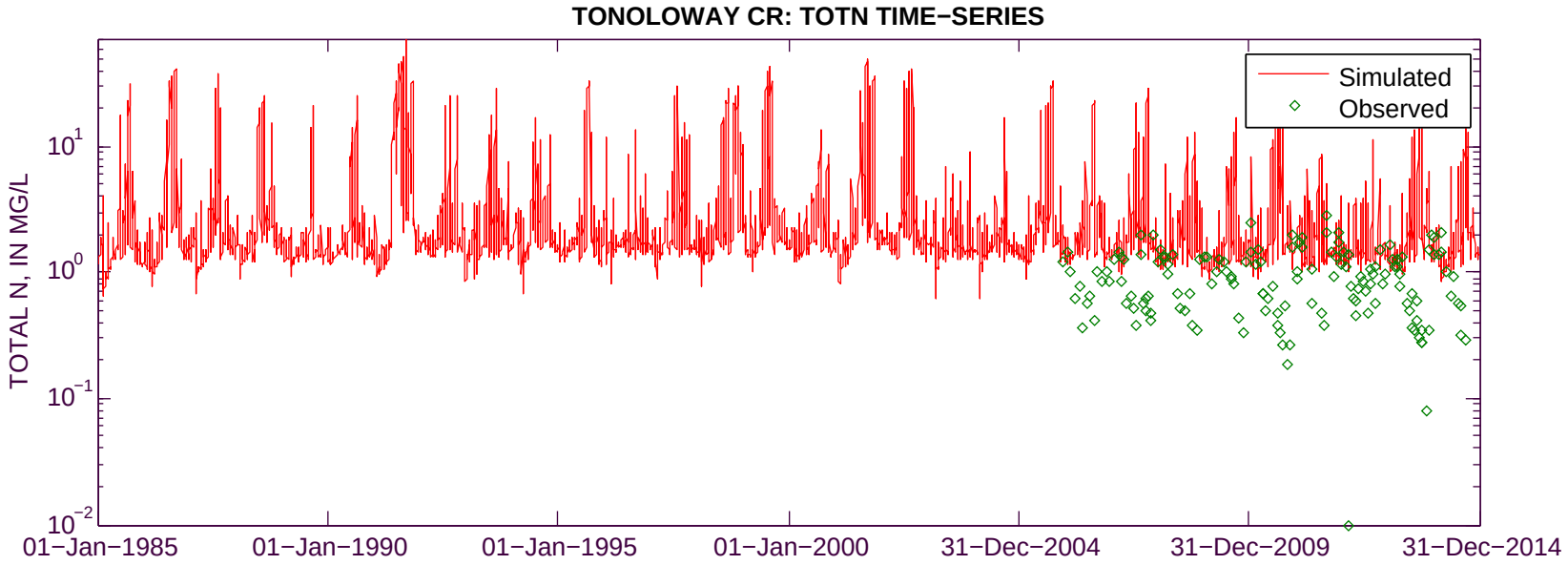
LOAD DATA
LOG10

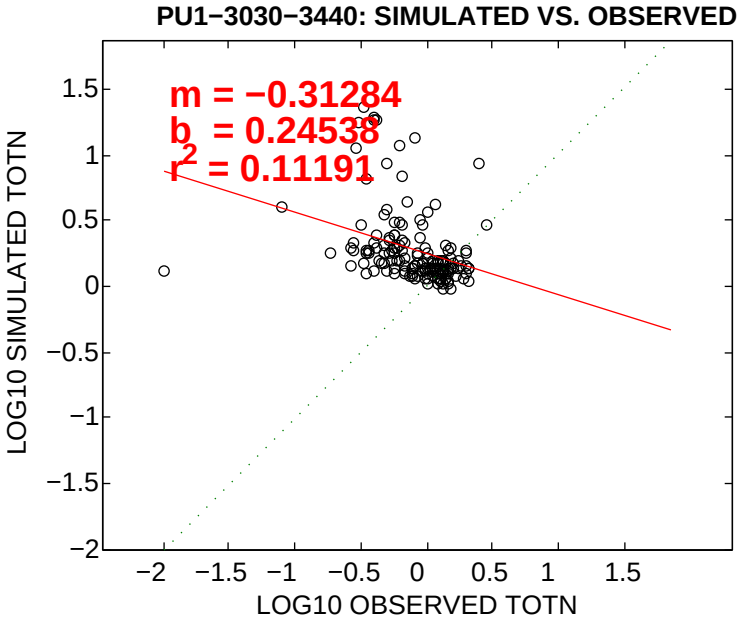


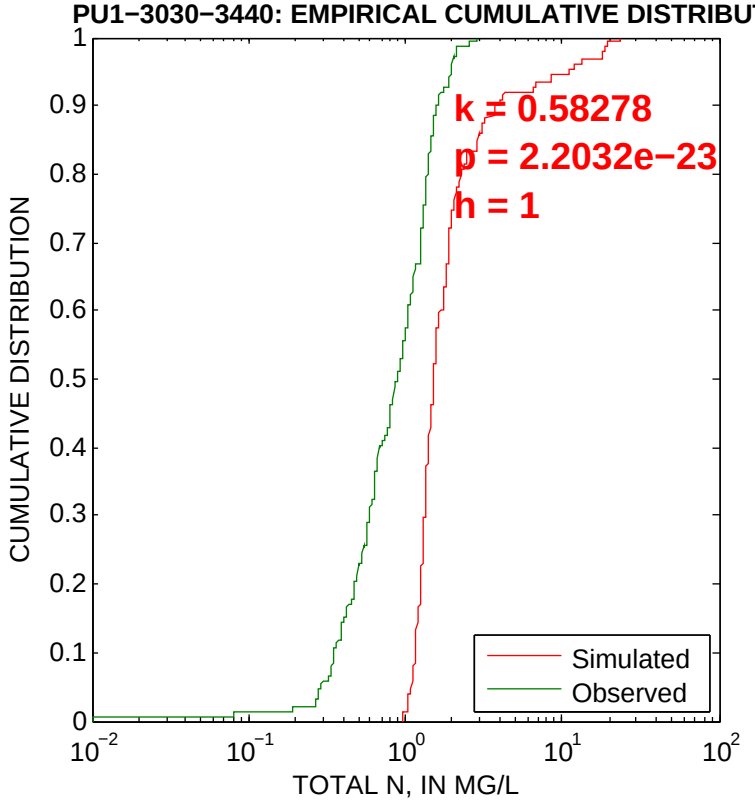












DATA SELECTION

scenario	file
P620171001WQ	TOTN.calib

plot: TOTN - total nitrogen

Dates: 1/1/1985 – 12/31/201

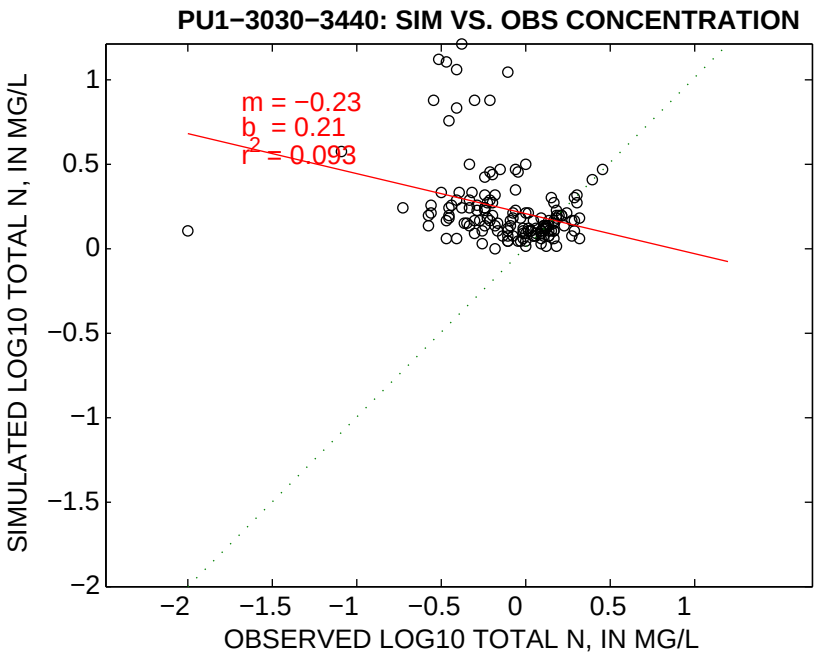
Drive	Directory	Observed
N/A	model	OBS20161101

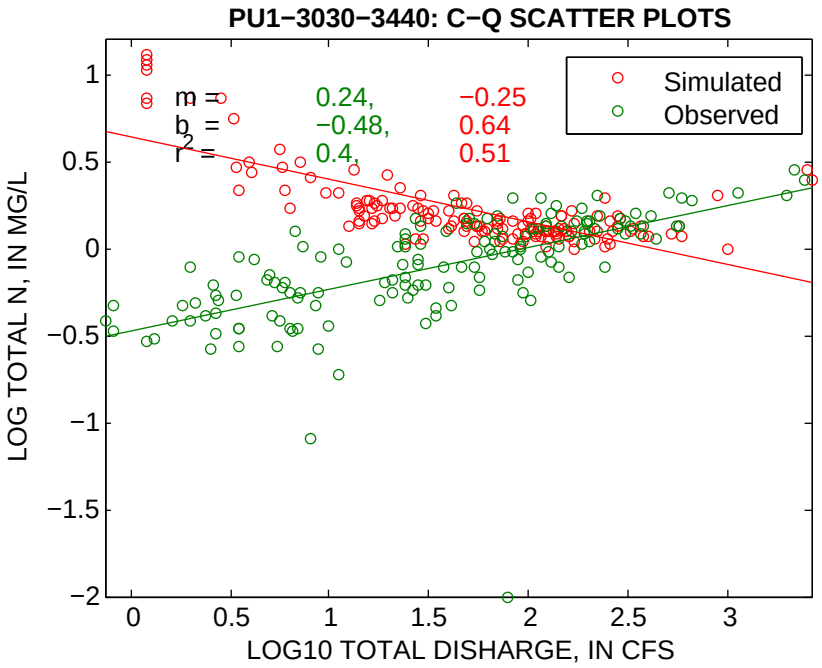
STATISTICS

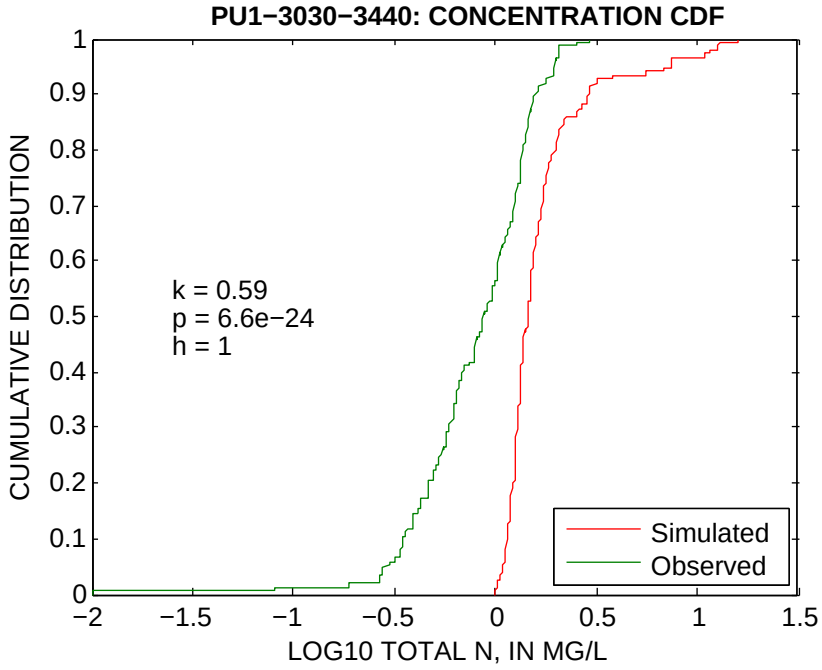
	observe	simulate
n	151	151
min	0.01	0.95567
	-2	-0.019692
mean	0.958205	2.64863
	-0.0974659	0.275876
media	0.88	1.5265
	-0.0555173	0.183697
max	2.9	23.279
	0.462398	1.36696
varian	0.275814	13.2212
	0.0911204	0.0796878
JB	0.004826	0.001
	0.001	0.001
	ra	log
%	176.416	-383.048
err.va	17.3749	0.368133
rel.std.err	62.9951	4.04007
mod.eff	-61.9951	-3.04007

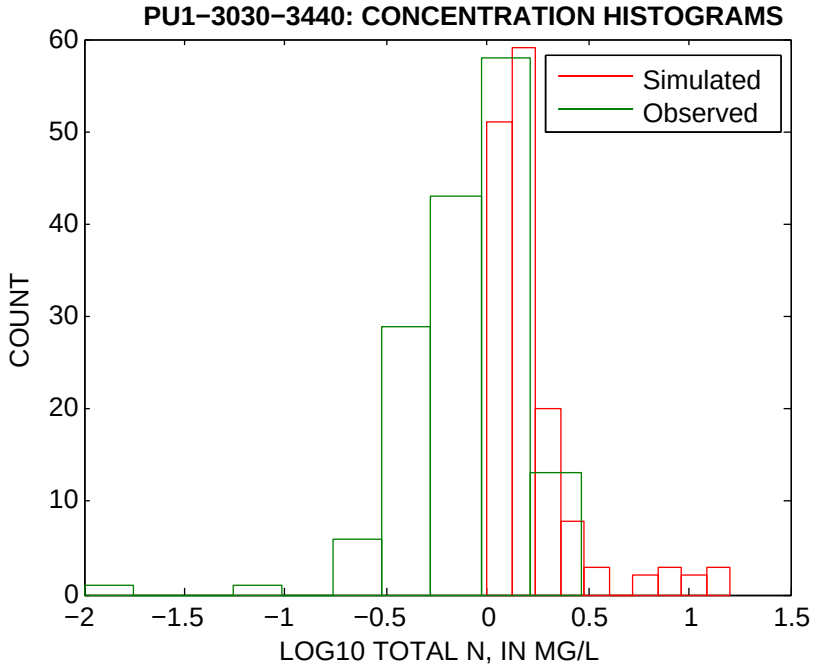
VERSION 2.1

ALL DATA
LOG10

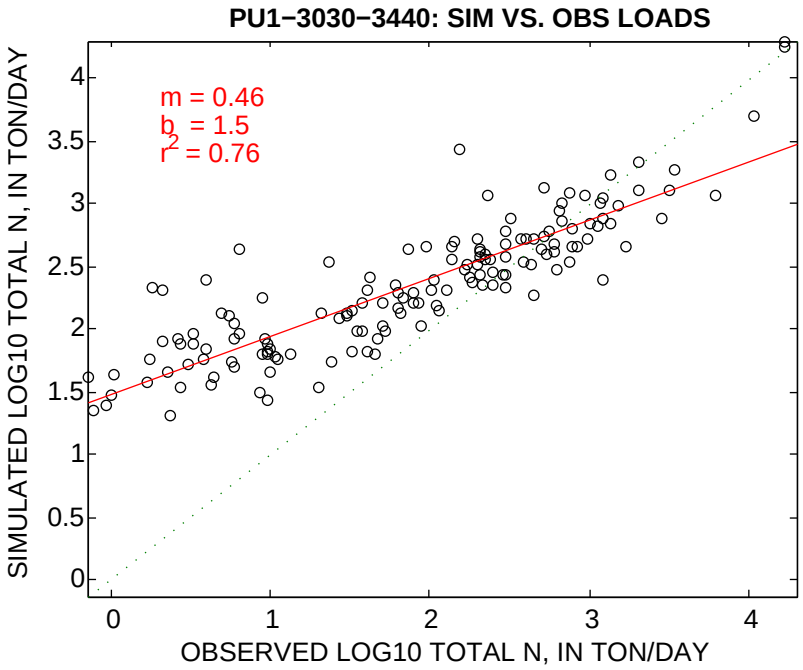


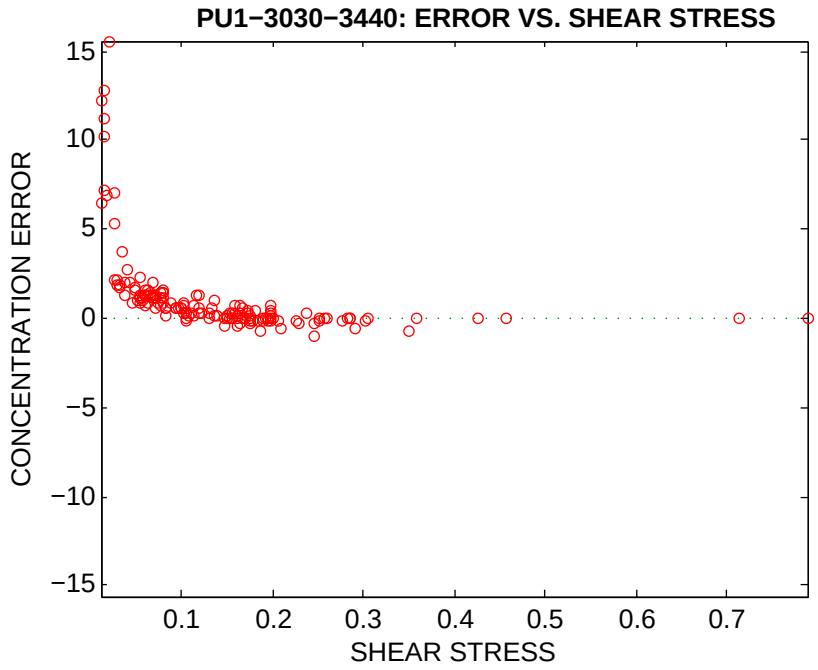


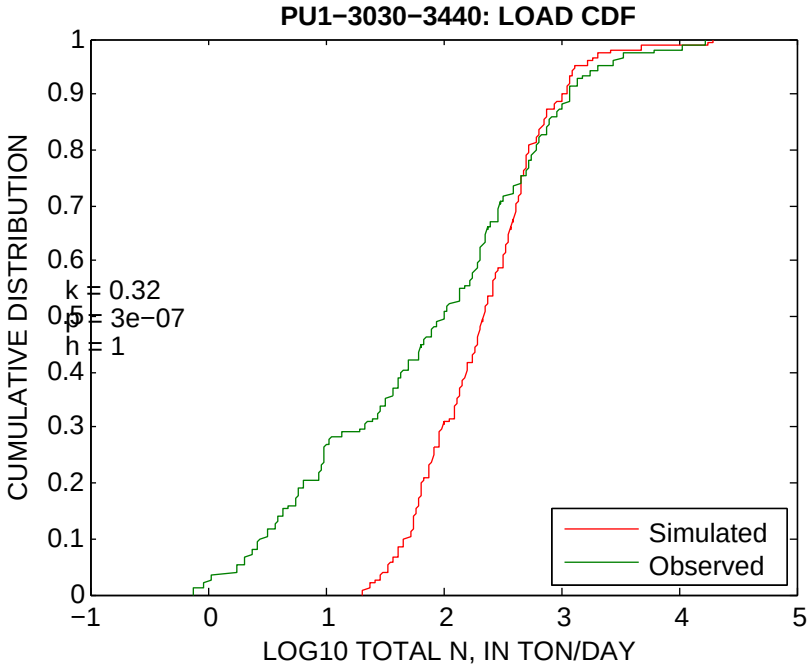


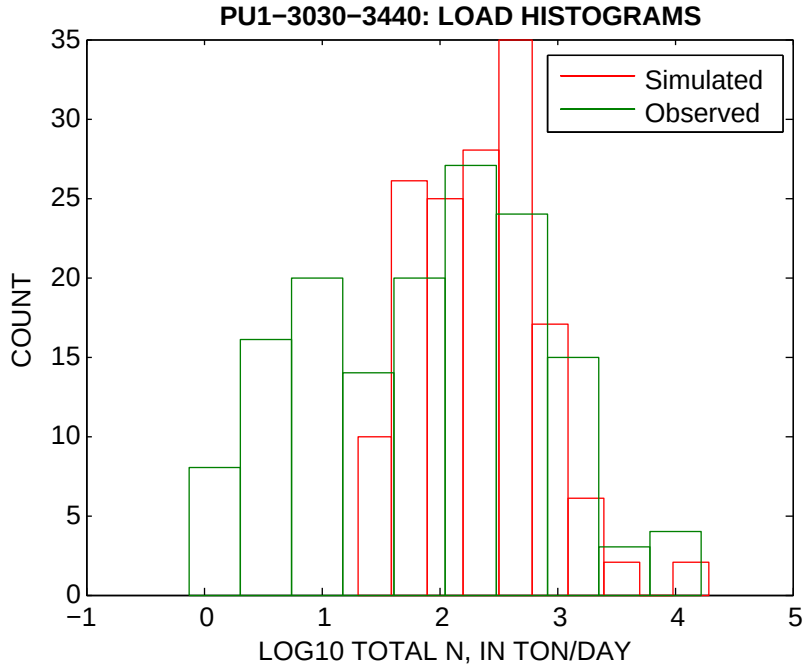


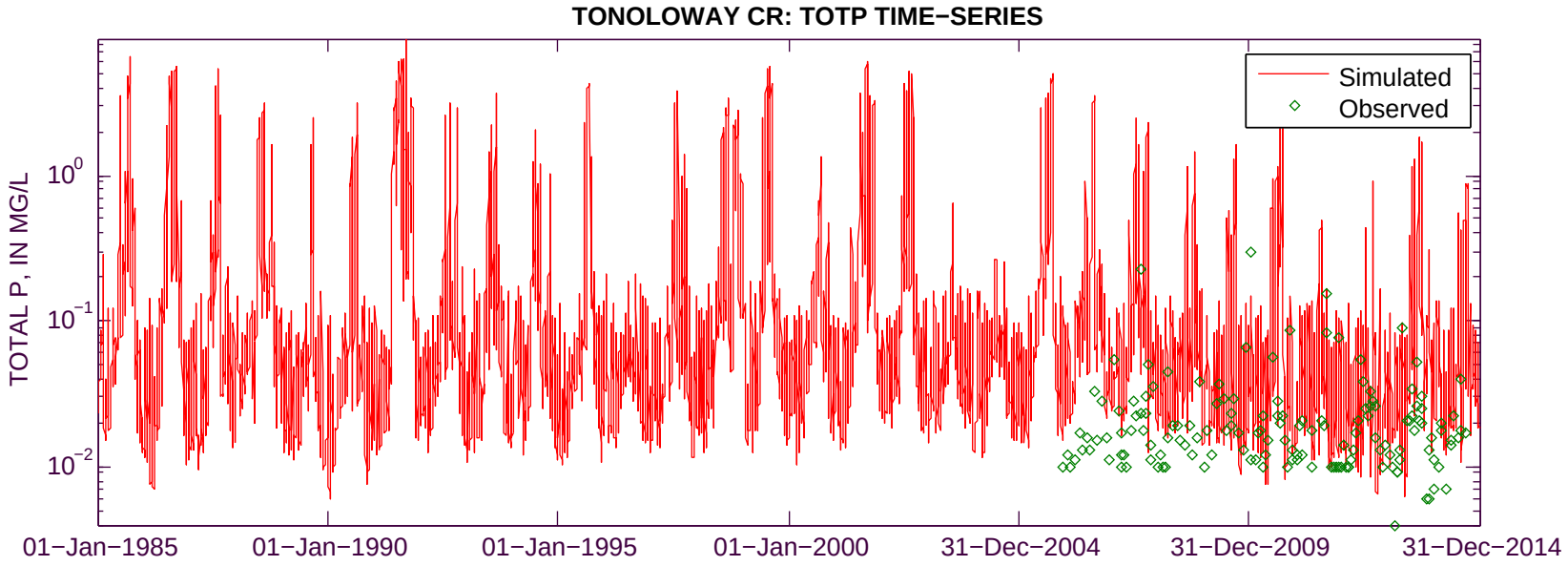
LOAD DATA
LOG10

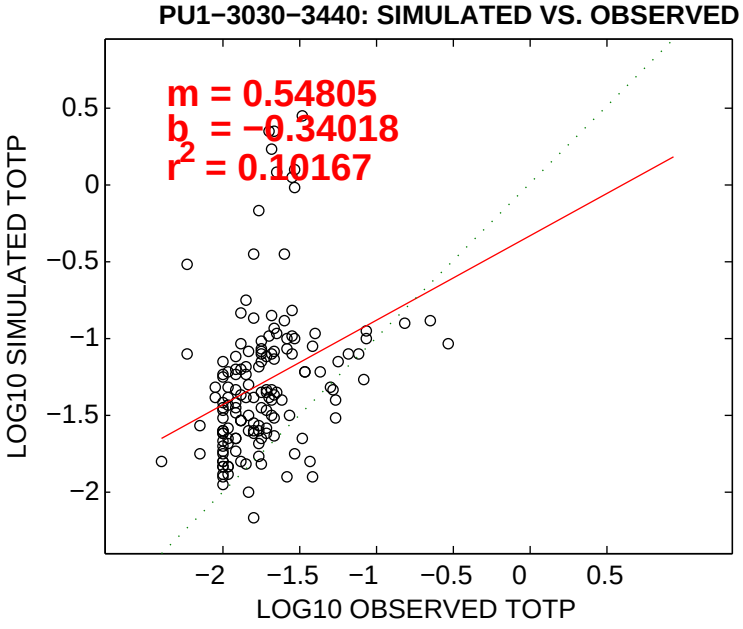


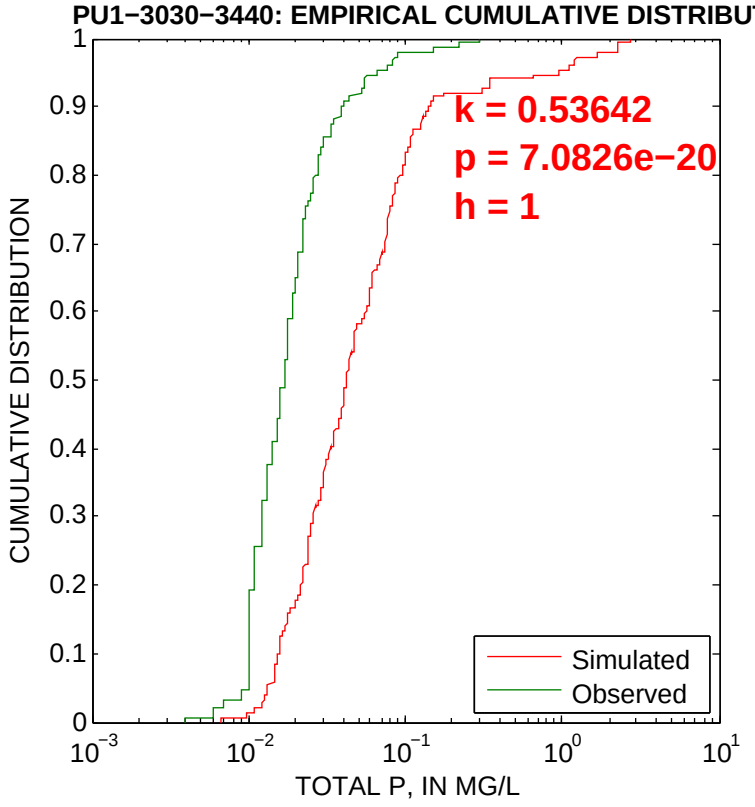












DATA SELECTION

scenario	file
P620171001WQ	TOTP.calib

plot: TOTP - total phosphorus

Dates: 1/1/1985 – 12/31/201

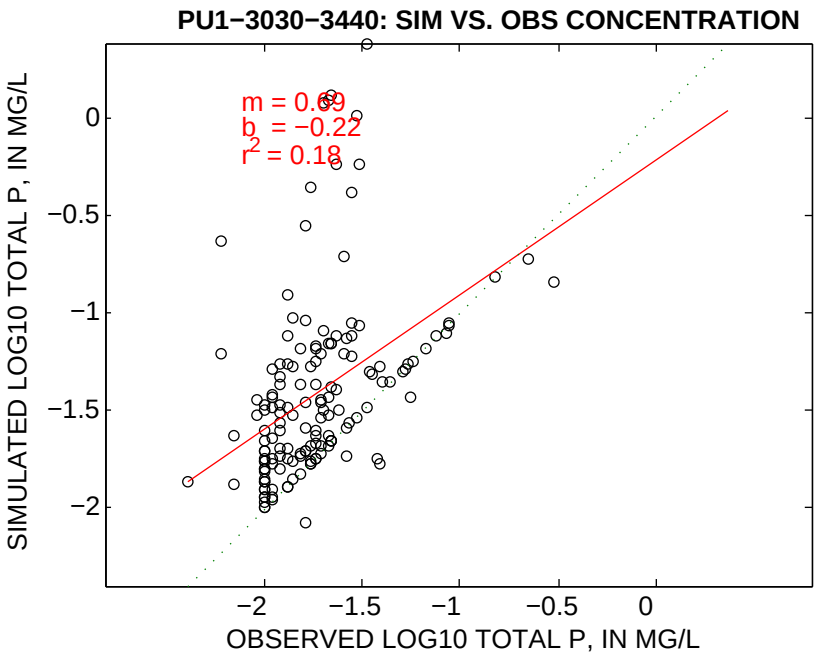
Drive	Directory	Observed
N/A	model	OBS20161101

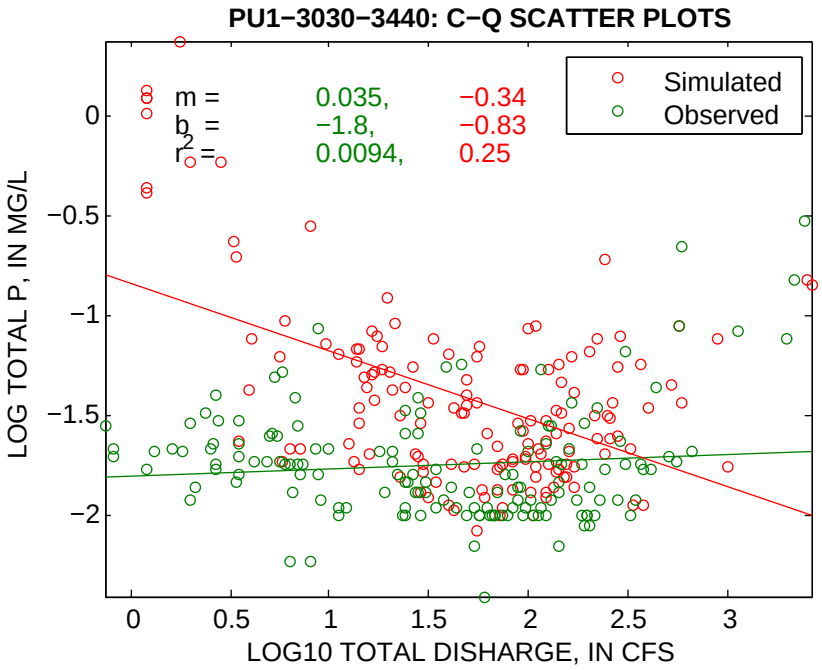
STATISTICS

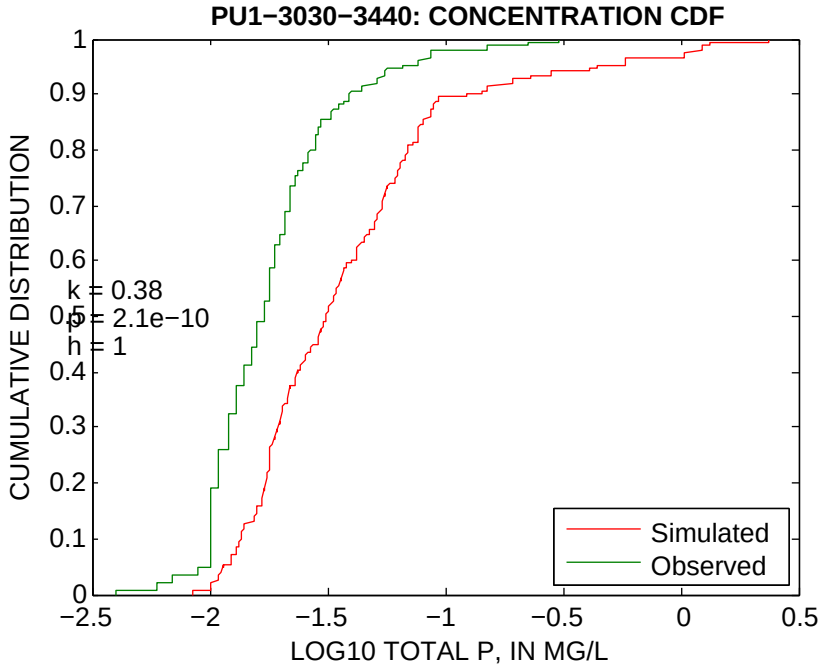
	n	observe	simulate
		151	151
min		0.004	0.006652
		-2.39794	-2.17705
mean		0.0247285	0.14569
		-1.73924	-1.29337
media		0.017	0.042243
		-1.76955	-1.37425
max		0.301	2.7447
		-0.521434	0.438495
varian		0.00111856	0.156486
		0.0810237	0.239371
JB		0.001	0.001
		0.001	0.001
		ra	log
%		489.158	-25.6357
err.va		0.171558	0.431705
rel.std.err		153.374	5.32814
mod.eff		-152.374	-4.32814

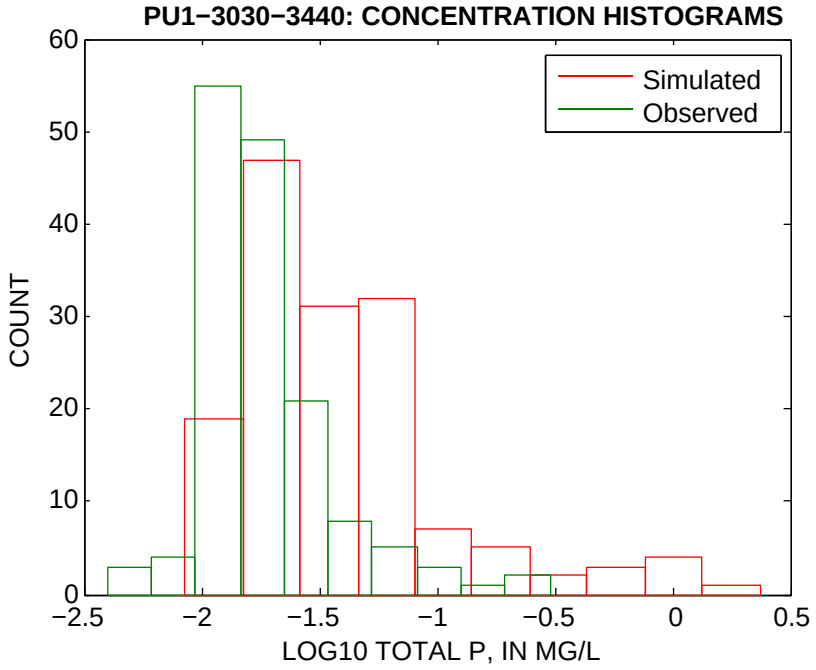
VERSION 2.1

ALL DATA
LOG10

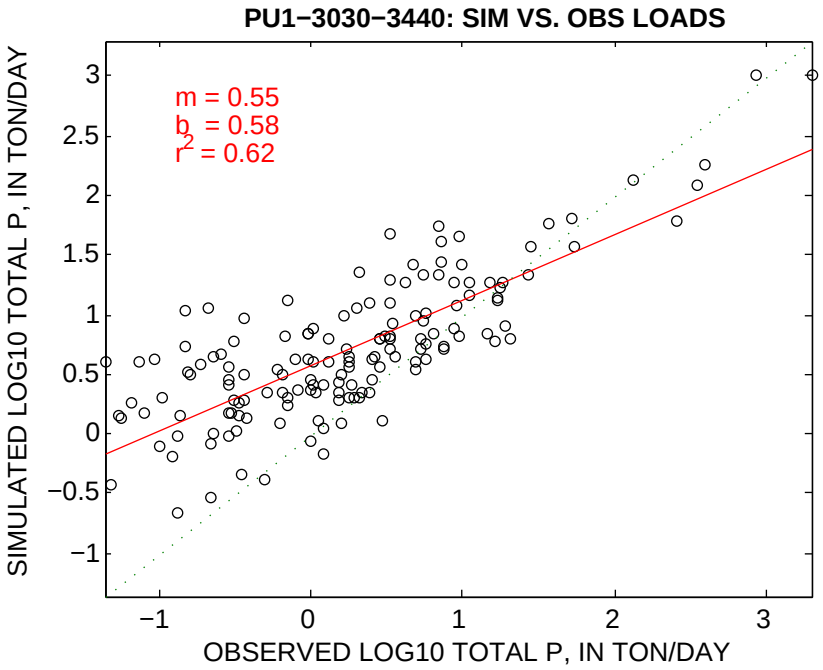


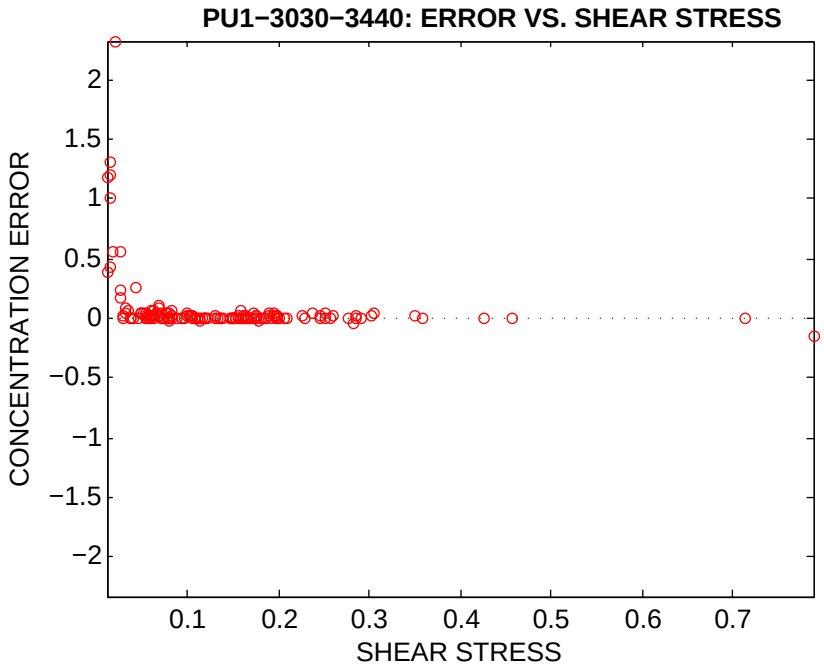


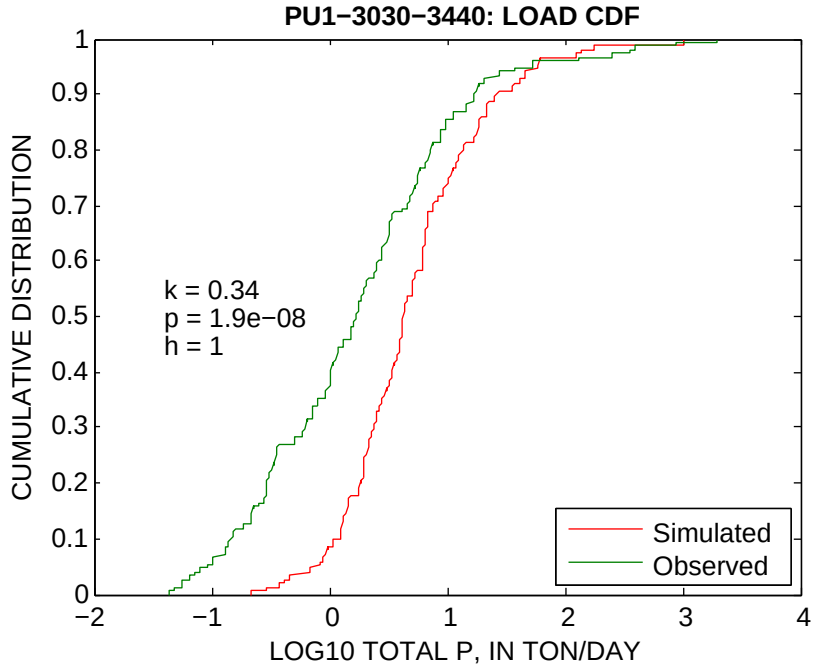


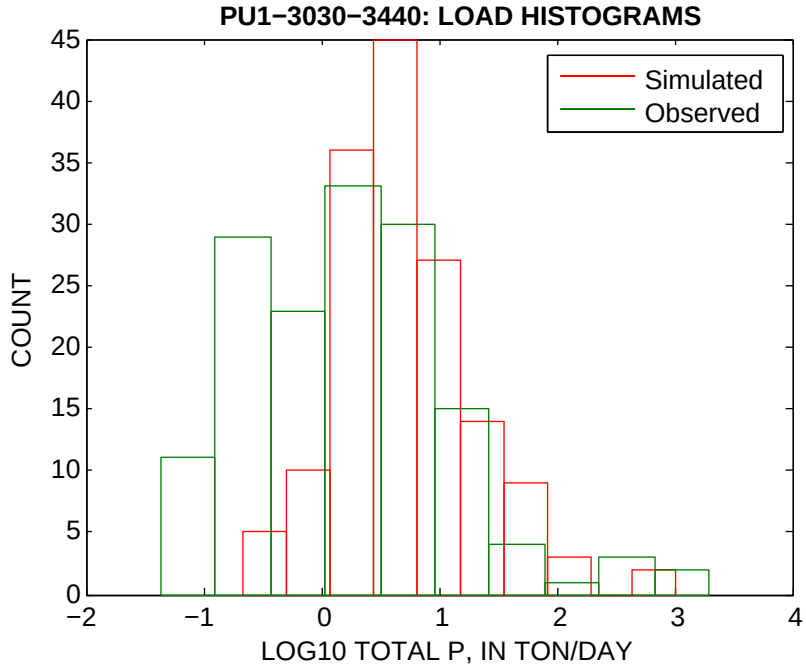


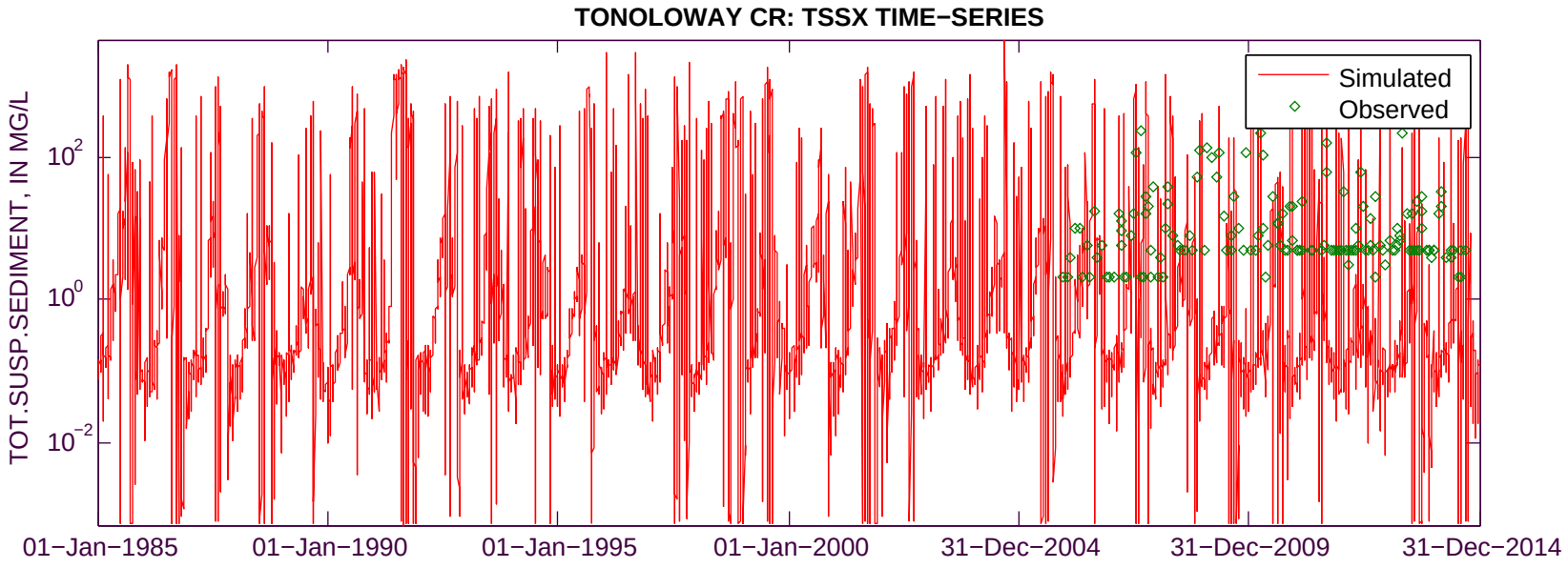
LOAD DATA
LOG10

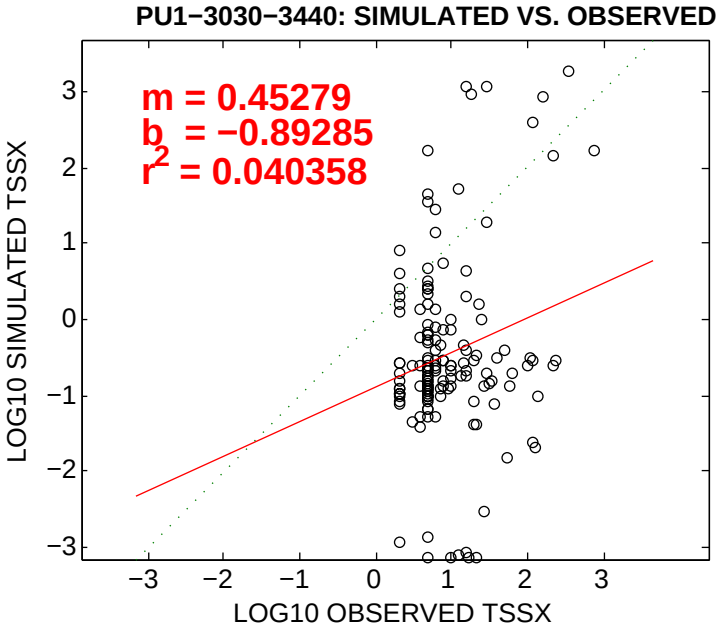


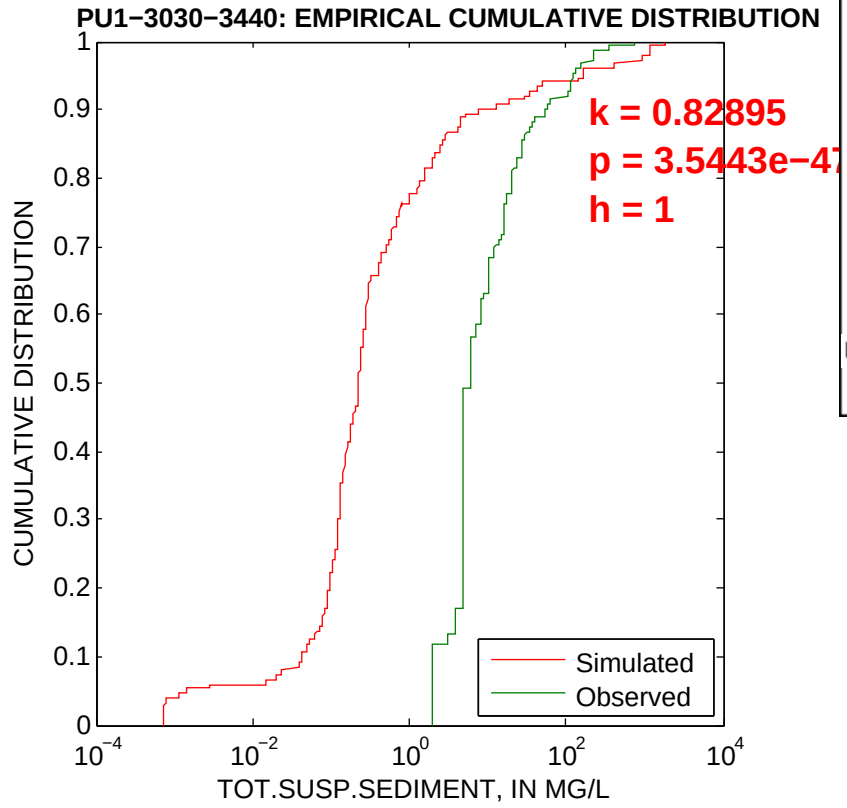












DATA SELECTION

scenario: P620171001WQ | file: TSSX.calib

plot: TSSX - total suspended ...

Dates: 1/1/1985 – 12/31/201

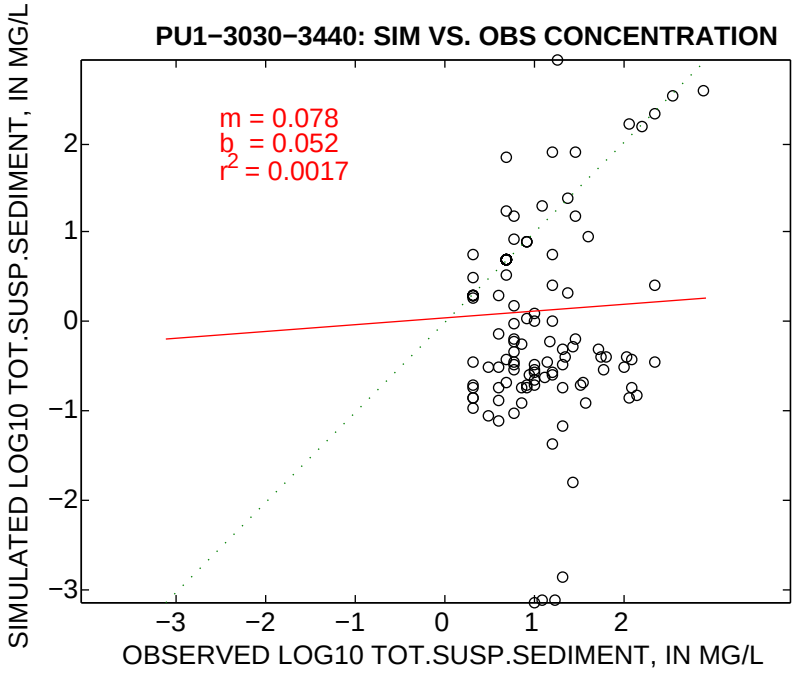
Drive | Directory: N/A | model | Observed: OBS20161101

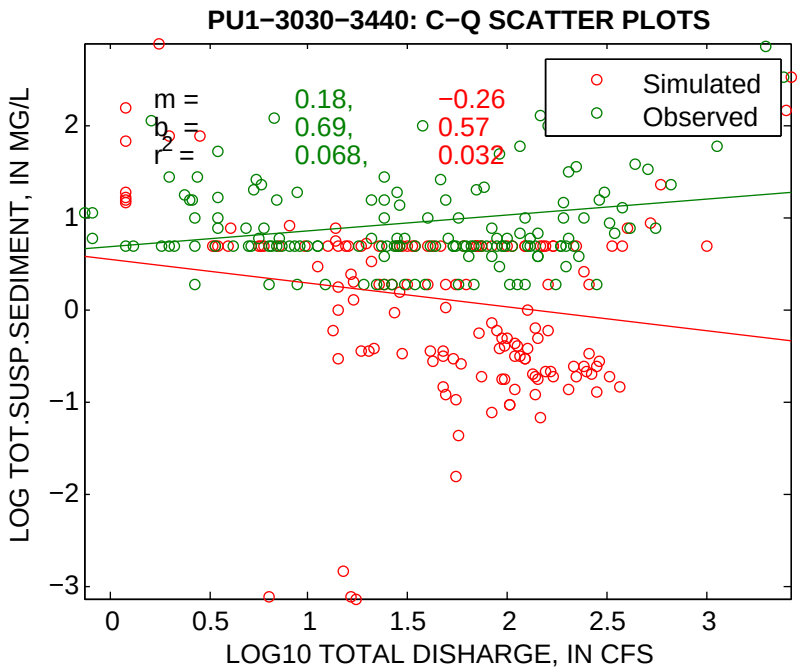
STATISTICS

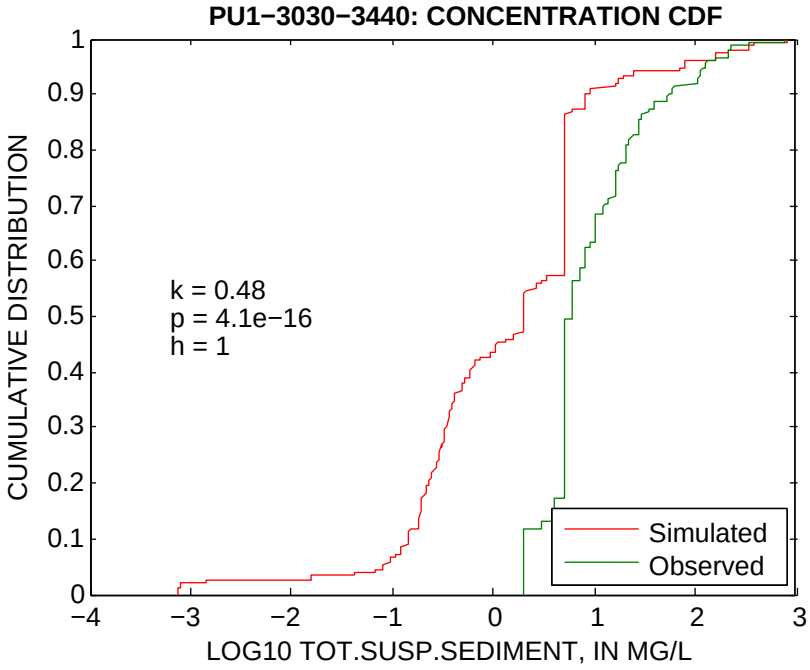
n	152	152
	observe	simulate
min	2	0.00073763
	0.30103	-3.13216
mean	27.479	46.9085
	0.963098	-0.456775
media	6	0.224135
	0.778151	-0.649509
max	772	1896.8
	2.88762	3.27802
varian	5936.88	51417
	0.276512	1.40467
JB	0.001	0.001
	0.001	0.001
	ra	log
%	70.7067	-147.428
err.va	46363.4	3.46017
rel.std.err	7.80938	12.5136
mod.eff	-6.80938	-11.5136

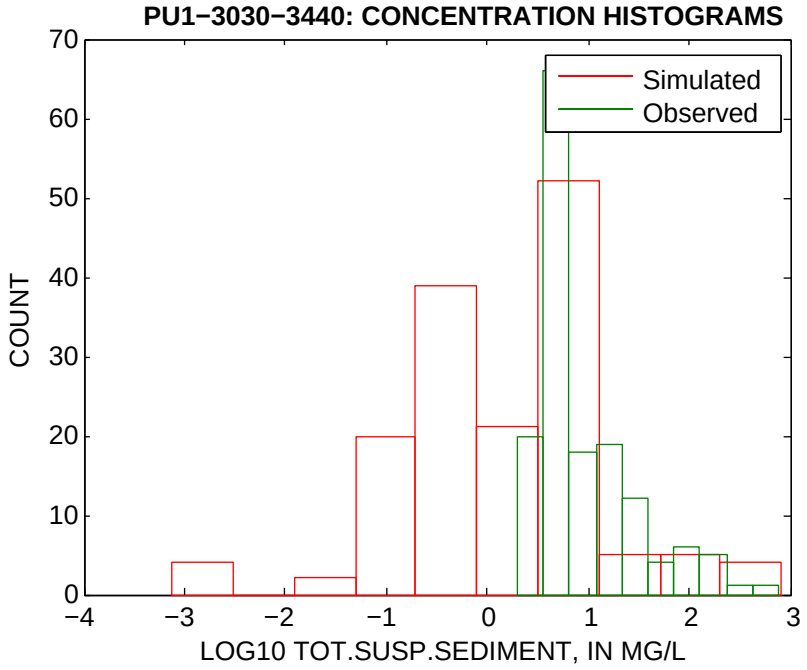
VERSION 2.1

ALL DATA
LOG10

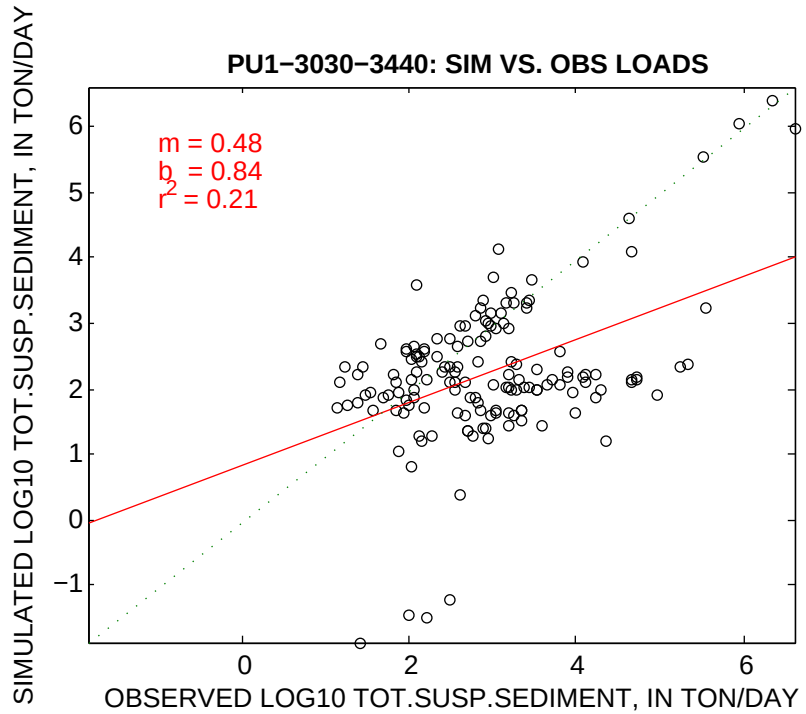


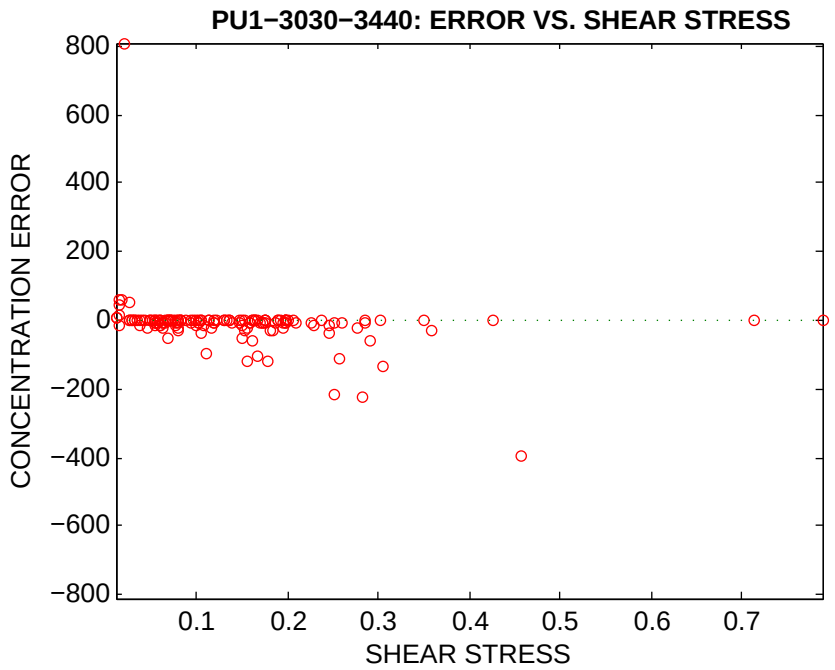


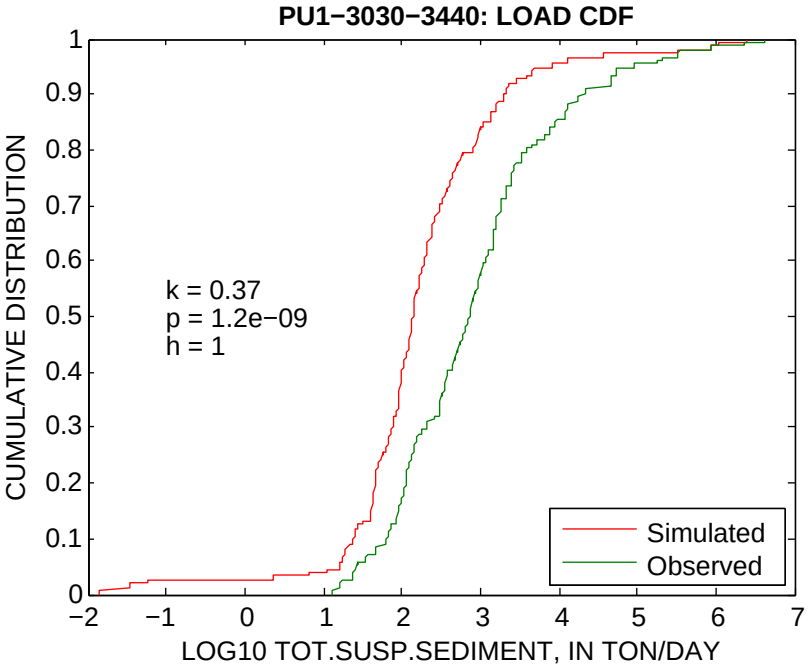


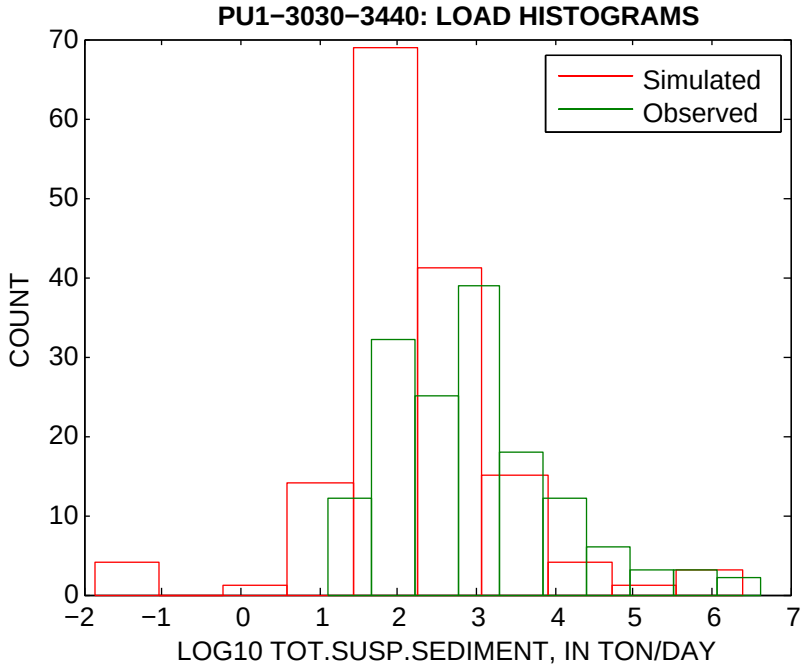


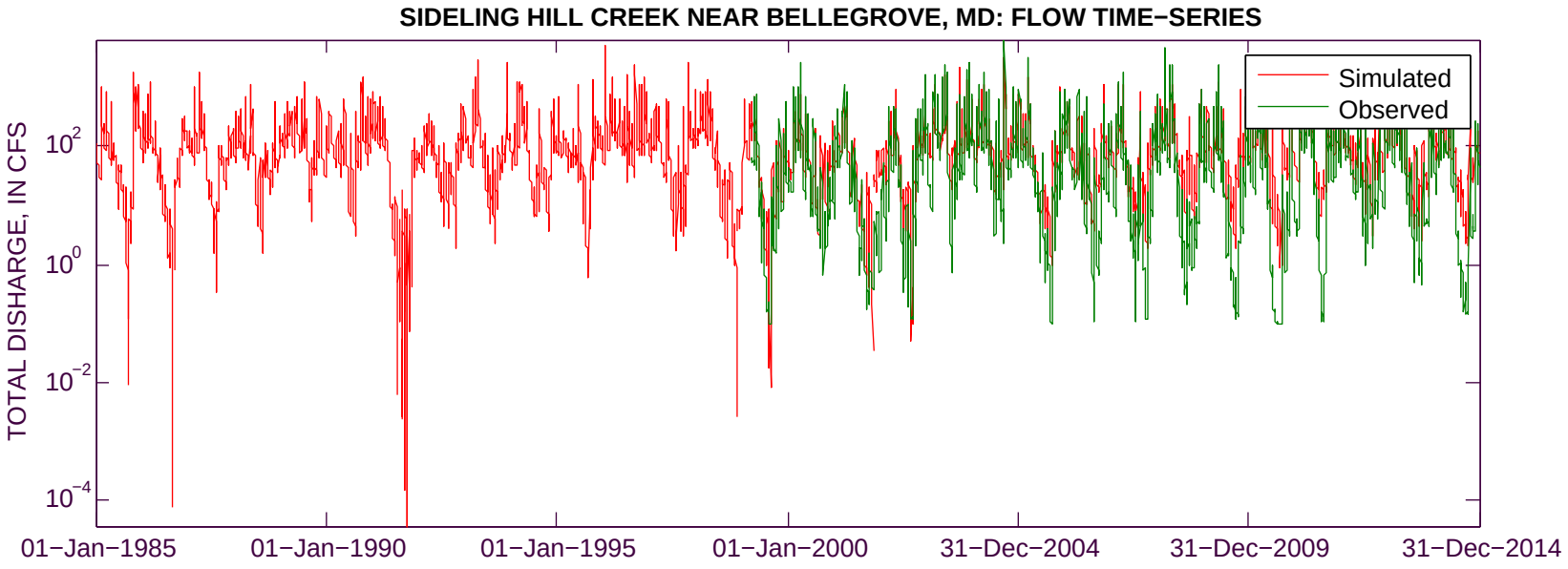
LOAD DATA
LOG10

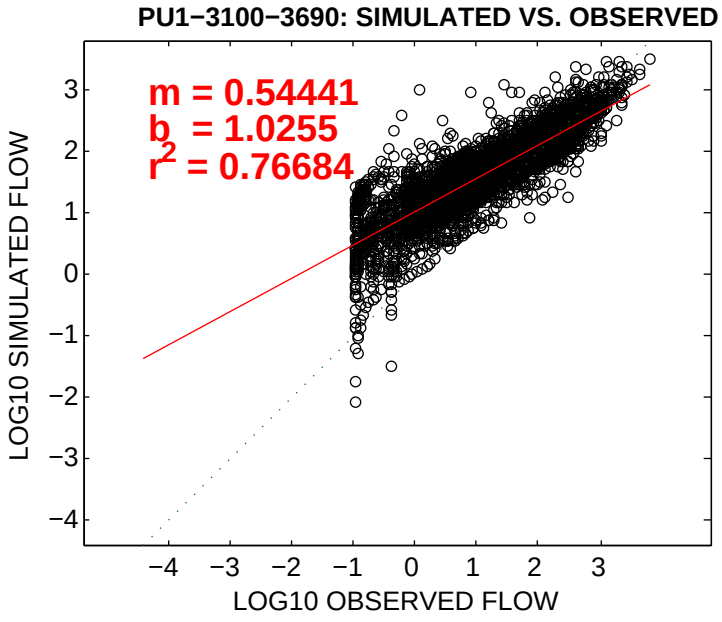


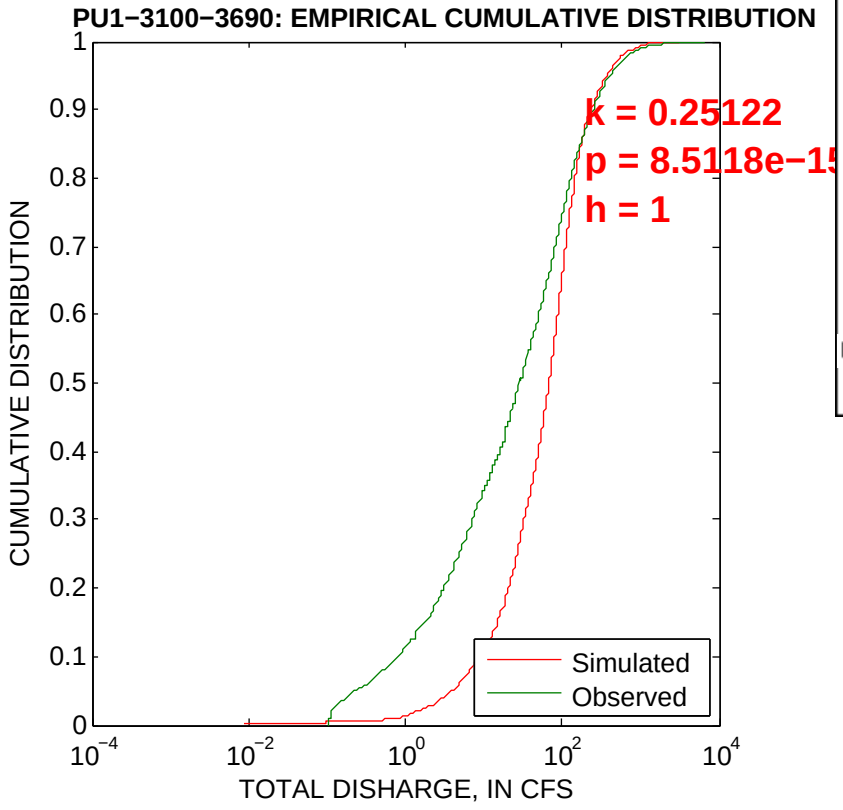












DATA SELECTION

scenario: P620171001WQ | file: FLOW.calib

plot: FLOW - total discharge

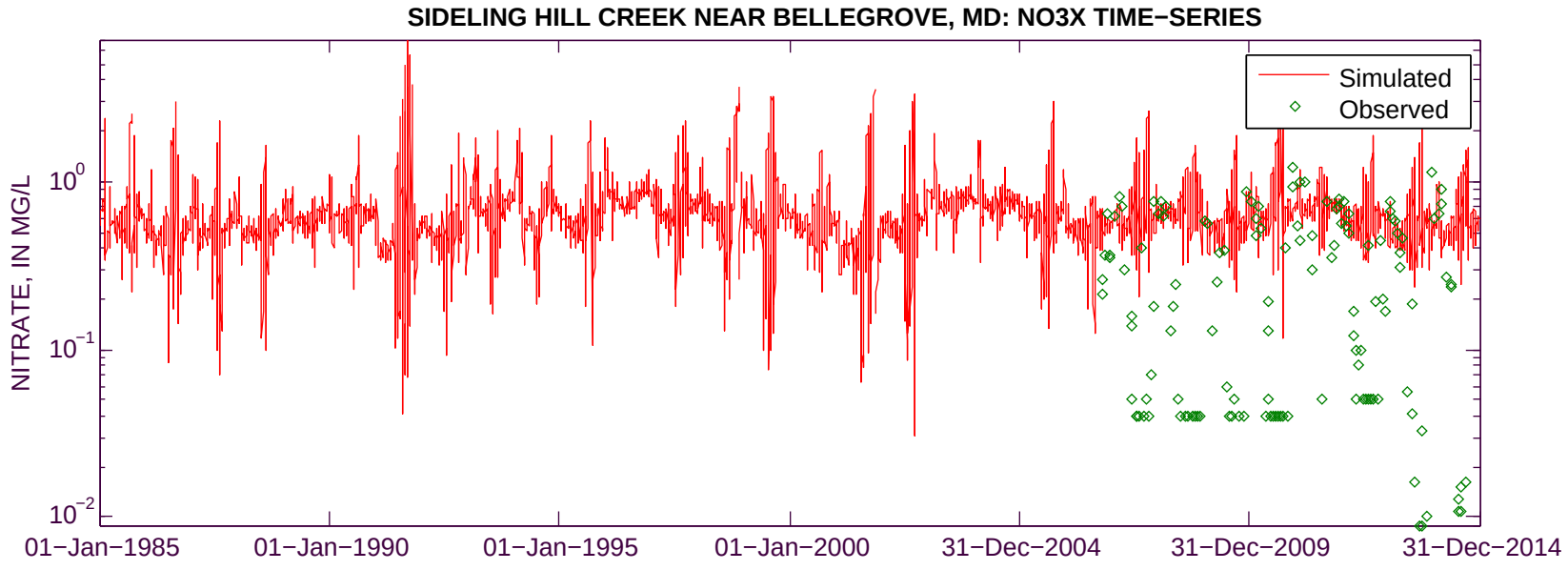
Dates: 1/1/1985 – 12/31/201

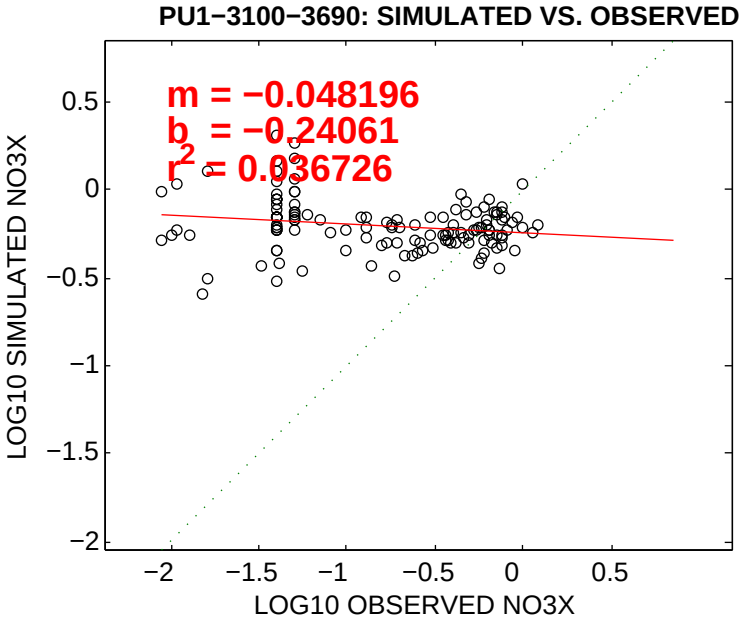
Drive: N/A | Directory: model | Observed: OBS20161101

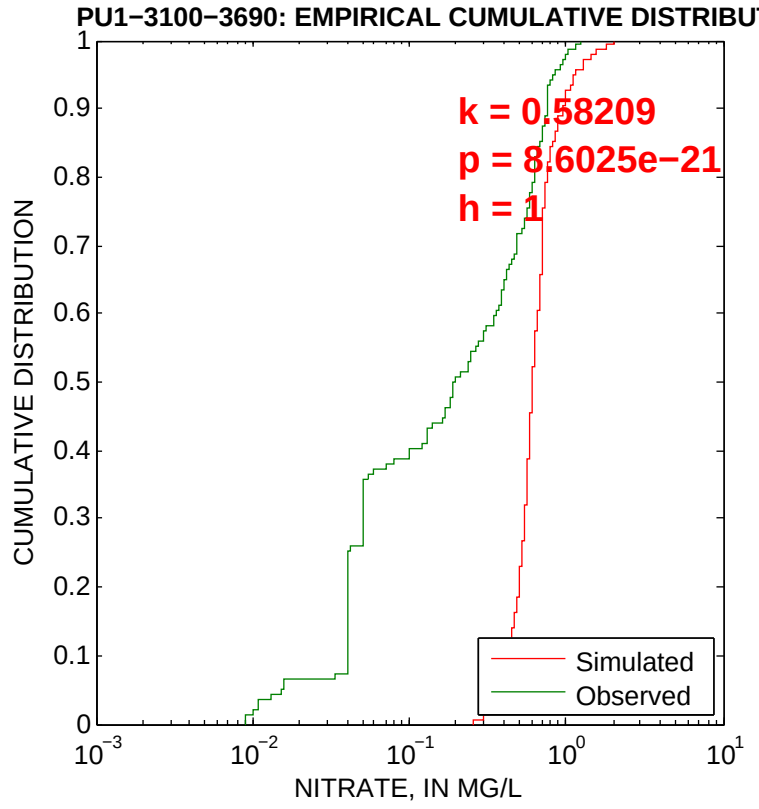
STATISTICS

	observe	simulate
n	5752	5737
min	0.102317	0
	-0.990052	-2.06873
mean	102.419	113.072
	1.30727	1.73723
media	29.1023	68.6075
	1.46393	1.83811
max	6400.1	3060.9
	3.80619	3.48585
varian	61834.2	33187.5
	0.90029	0.347953
JB	0.001	0.001
	0.001	0.001
	ra	log
%	10.4018	32.8903
err.va	22409.5	0.452898
rel.std.err	0.362413	0.503057
mod.eff	0.637587	0.496943

VERSION 2.1







DATA SELECTION

scenario	file
P620171001WQ	NO3X.calib

plot: NO3X - nitrate

Dates: 1/1/1985 – 12/31/201

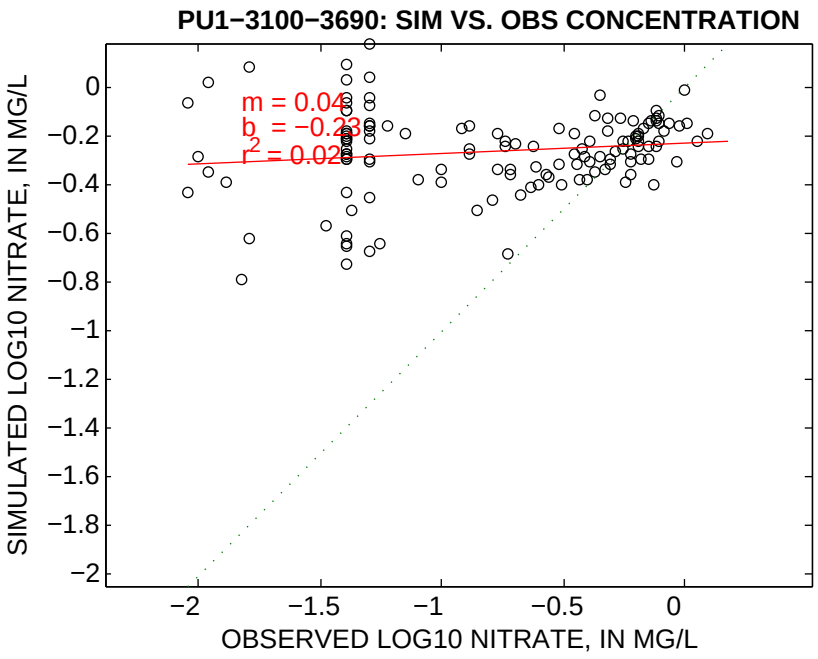
Drive	Directory	Observed
N/A	model	OBS20161101

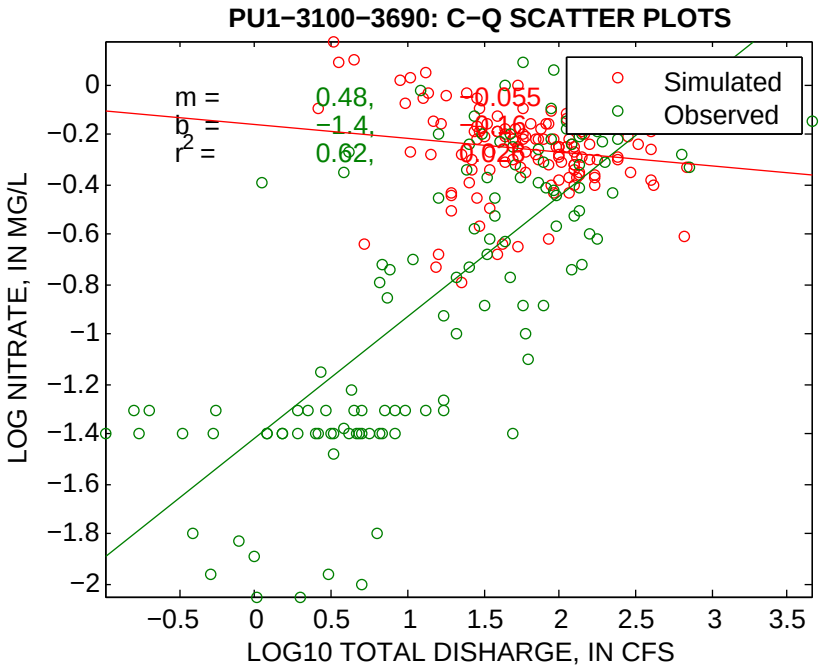
STATISTICS

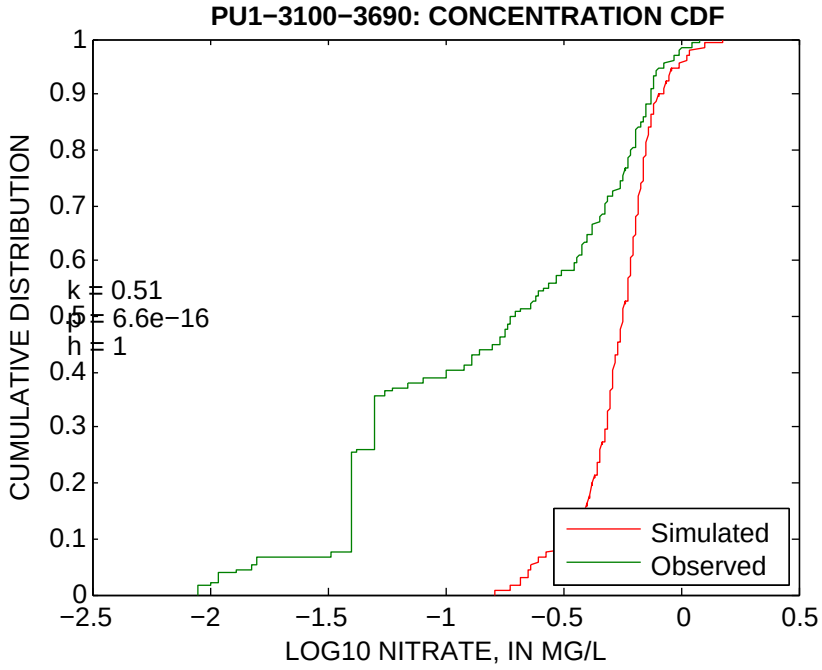
	n	134	134
		observe	simulate
min		0.009	0.25291
		-2.04576	-0.597034
mean		0.316015	0.667233
		-0.797044	-0.202197
media		0.195	0.61498
		-0.710108	-0.211139
max		1.22	2.0534
		0.0863598	0.312474
varian		0.0910596	0.070899
		0.338416	0.021404
JB		0.006154	0.001
		0.016107	0.002339
		ra	log
%		111.14	-74.6317
err.va		0.315402	0.748944
rel.std.err		3.46368	2.21309
mod.eff		-2.46368	-1.21309

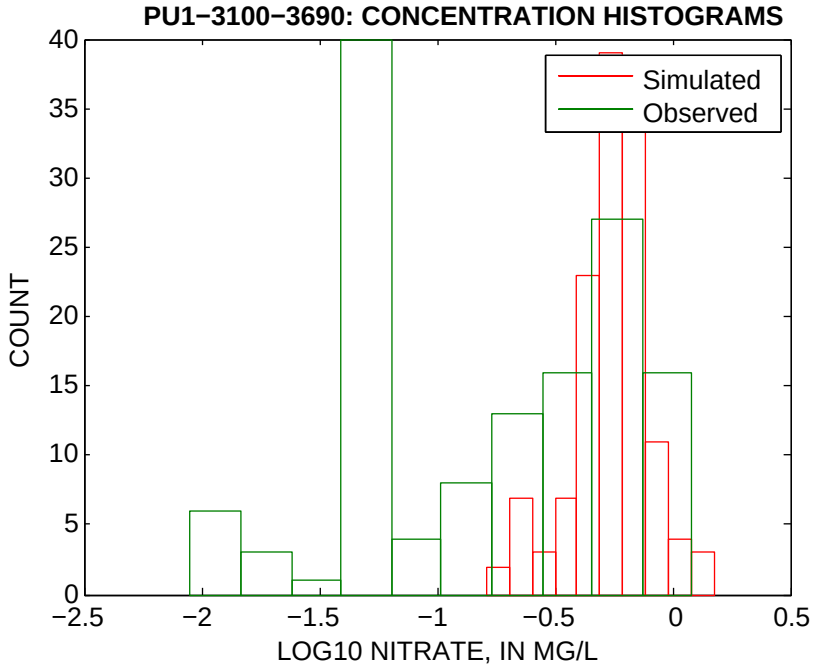
VERSION 2.1

ALL DATA
LOG10

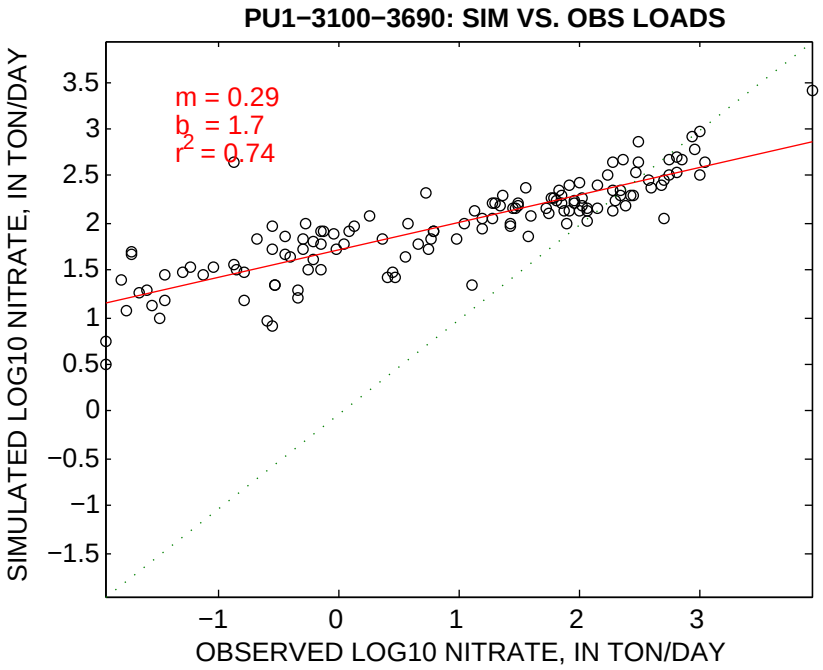


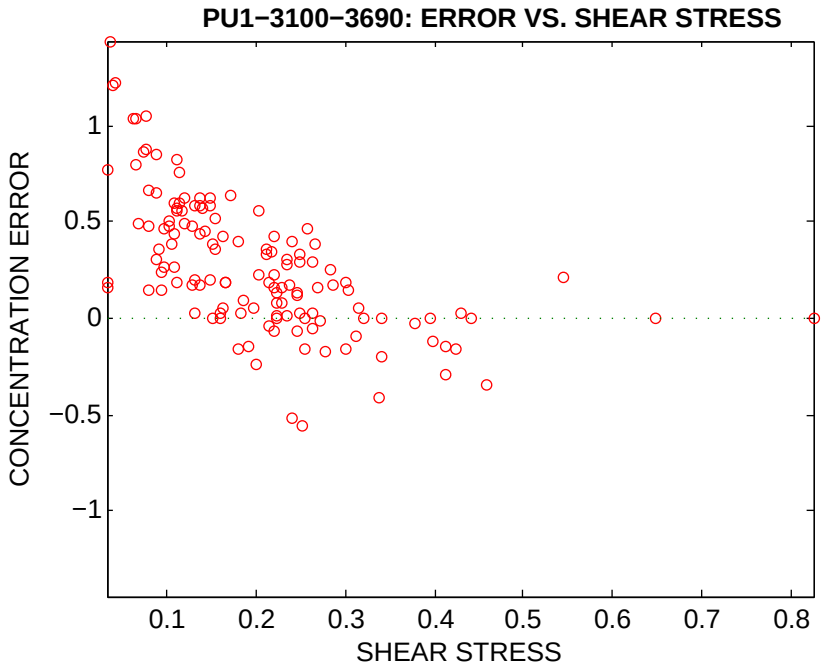


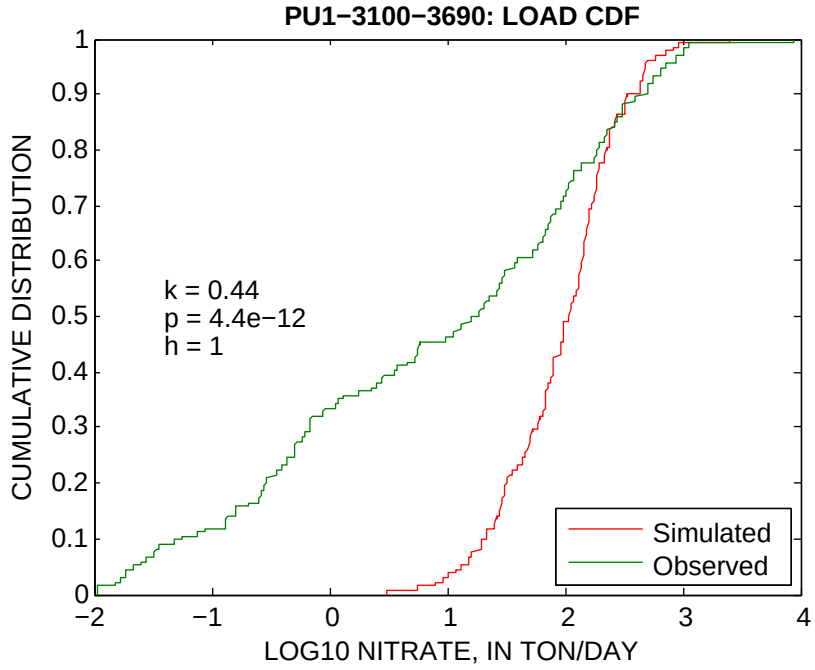


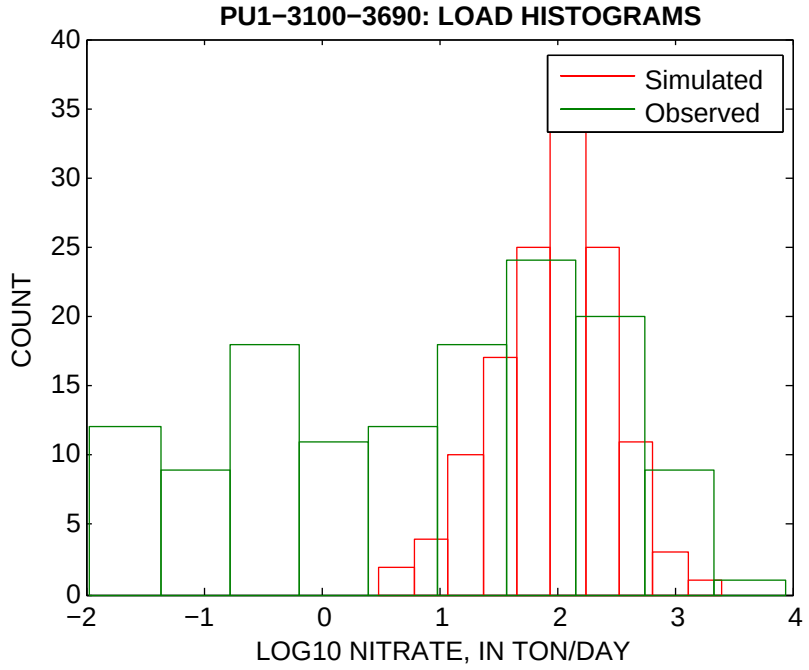


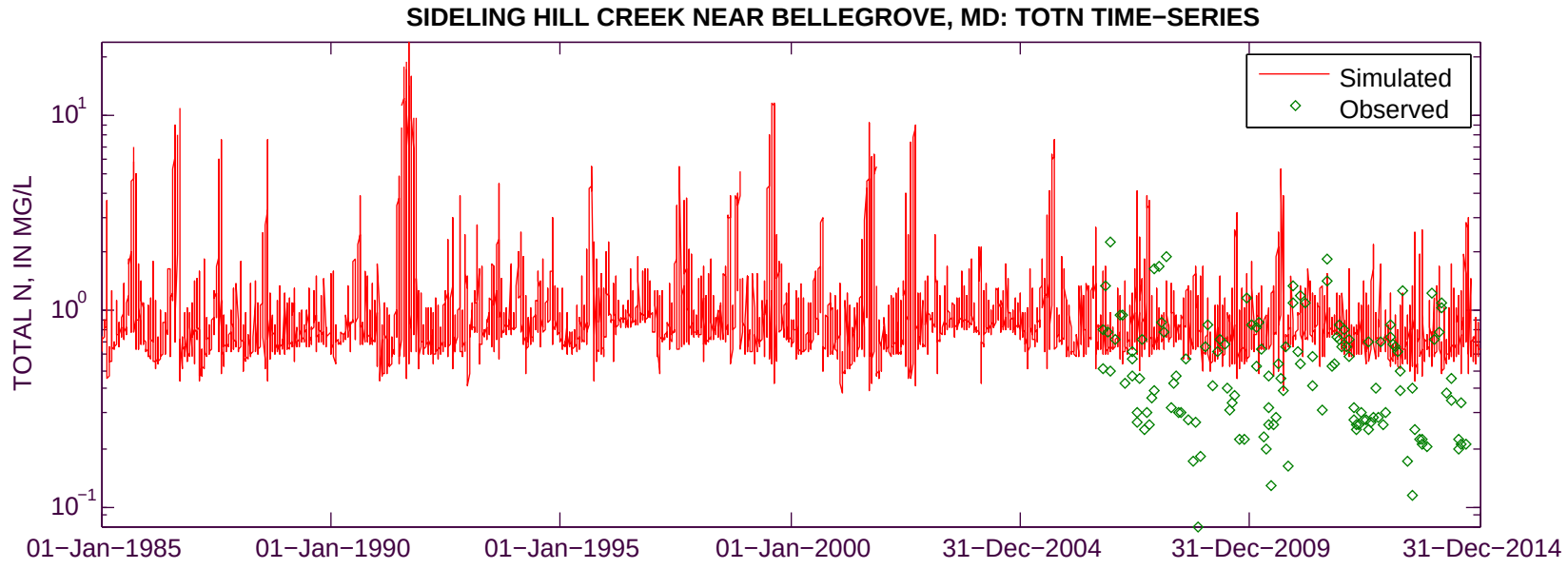
LOAD DATA
LOG10

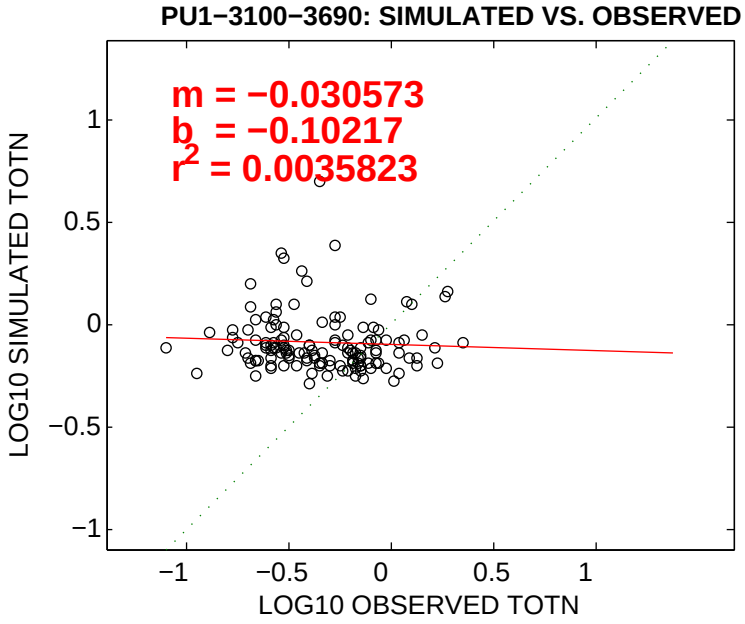


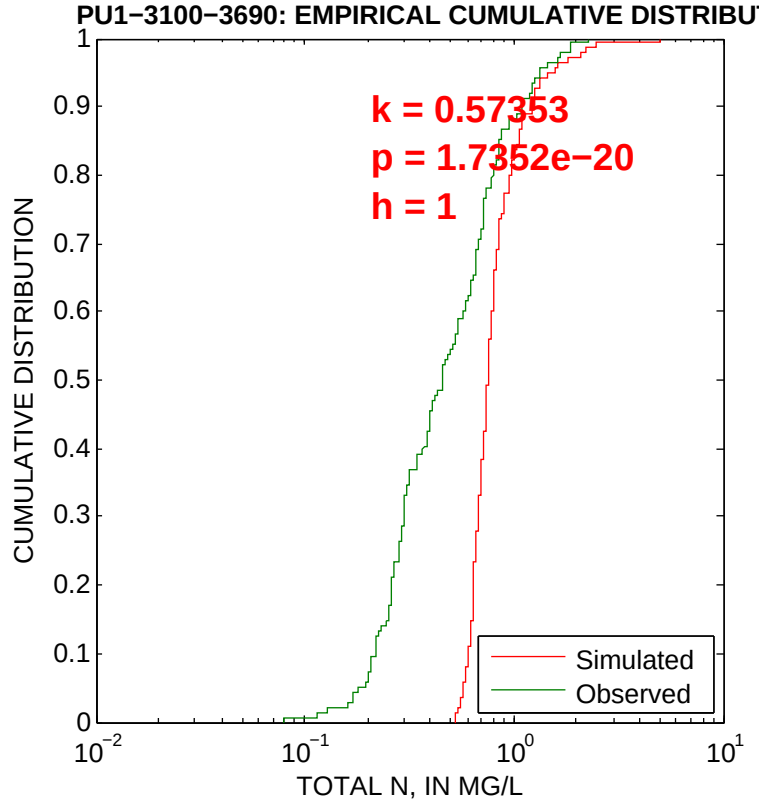












DATA SELECTION

scenario	file
P620171001WQ	TOTN.calib

plot: TOTN - total nitrogen

Dates: 1/1/1985 – 12/31/201

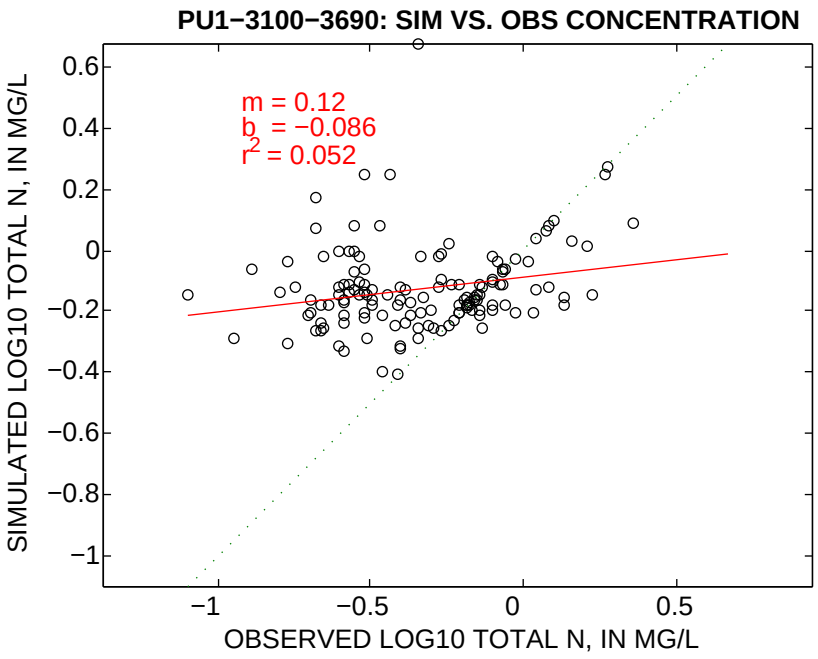
Drive	Directory	Observed
N/A	model	OBS20161101

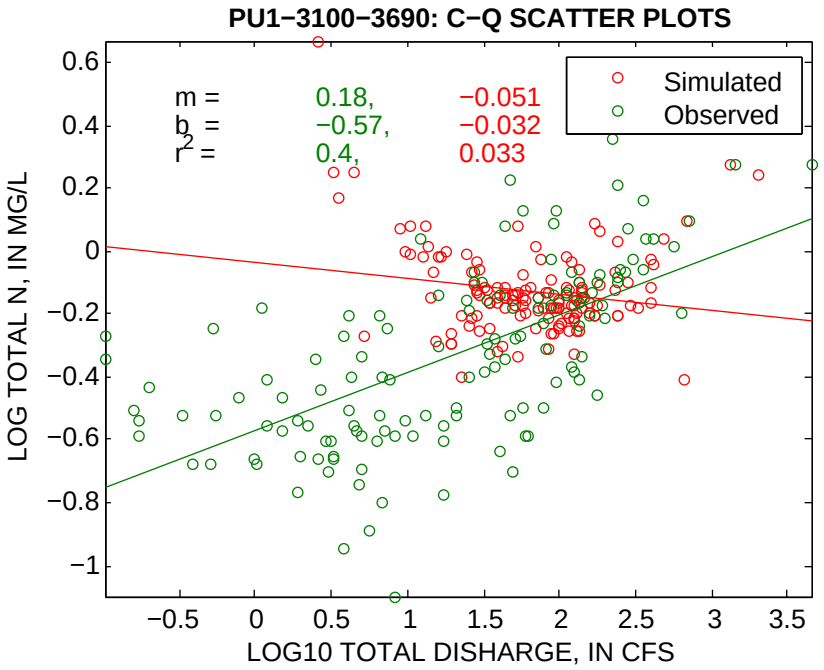
STATISTICS

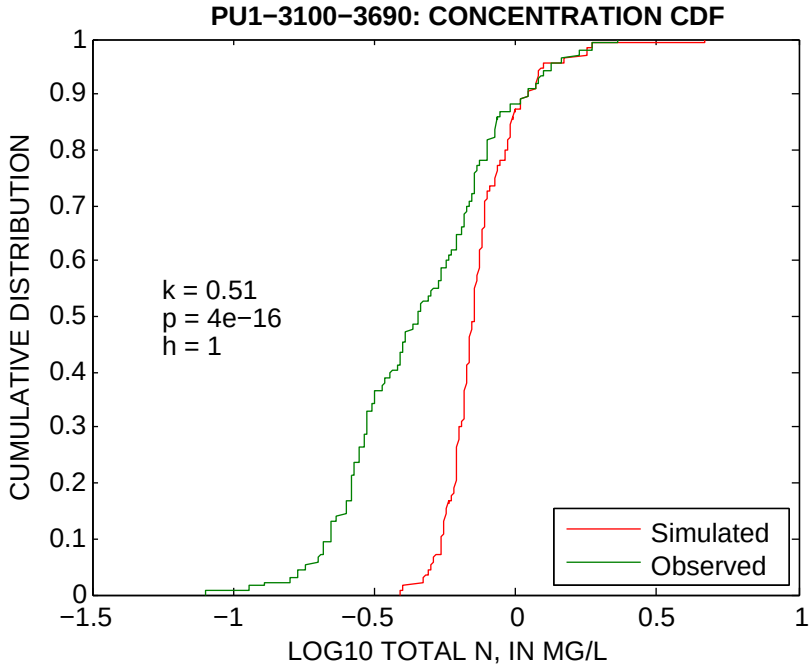
	n	136	136
		observe	simulate
min		0.08	0.51939
		-1.09691	-0.284506
mean		0.567654	0.868037
		-0.334705	-0.0919339
media		0.45	0.75323
		-0.346787	-0.123072
max		2.28	5.0112
		0.357935	0.699942
varian		0.154417	0.224011
		0.0770097	0.0200934
JB		0.001	0.001
		0.5	0.001
		ra	log
%		52.9165	-72.5328
err.va		0.479348	0.161186
rel.std.err		3.10423	2.09306
mod.eff		-2.10423	-1.09306

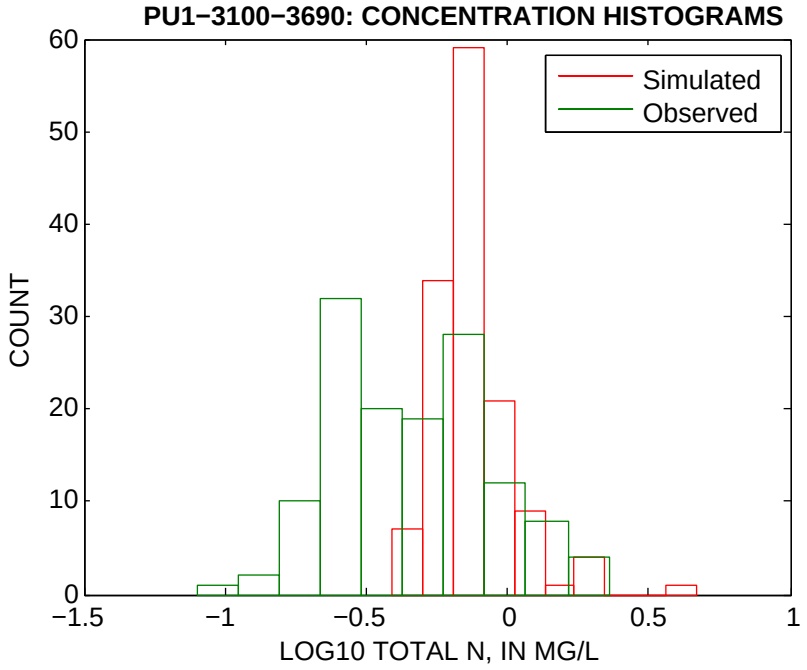
VERSION

ALL DATA
LOG10

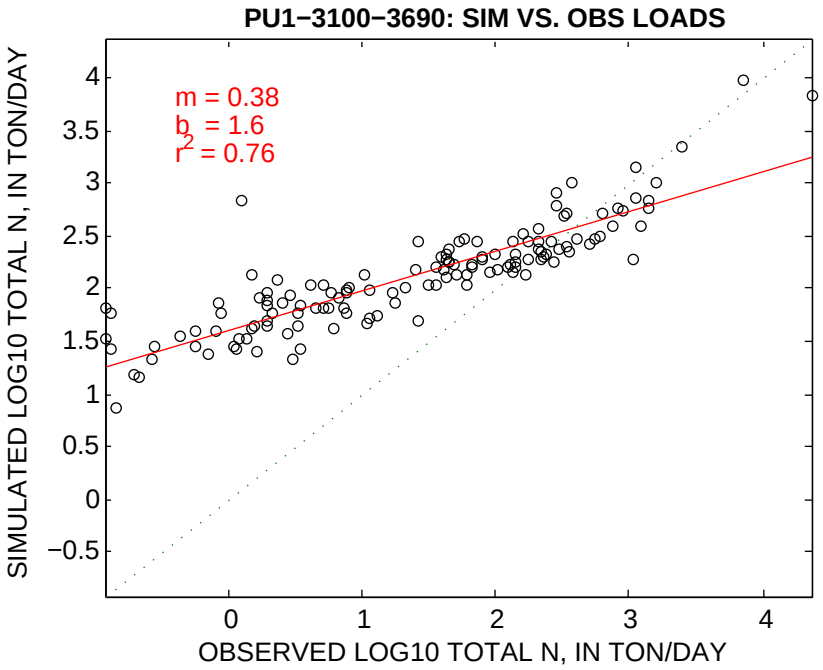


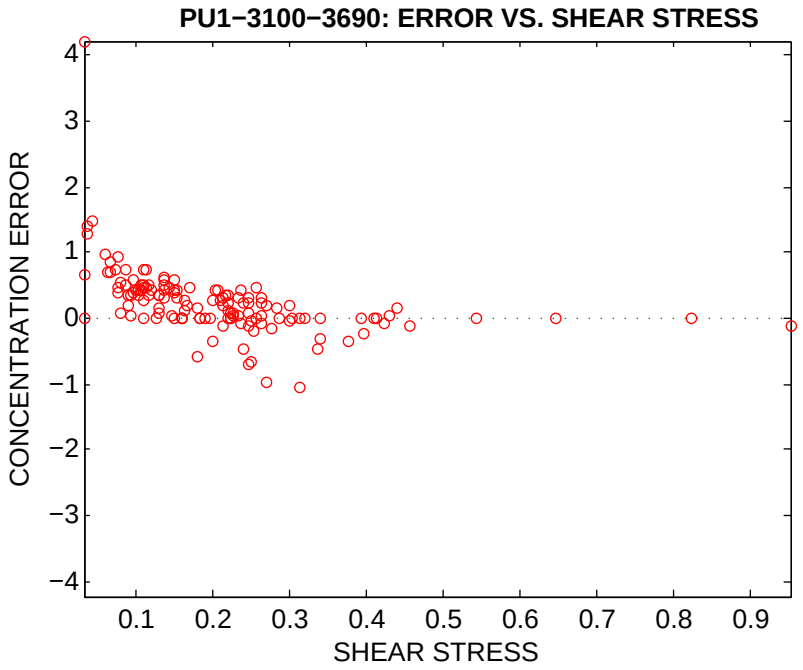


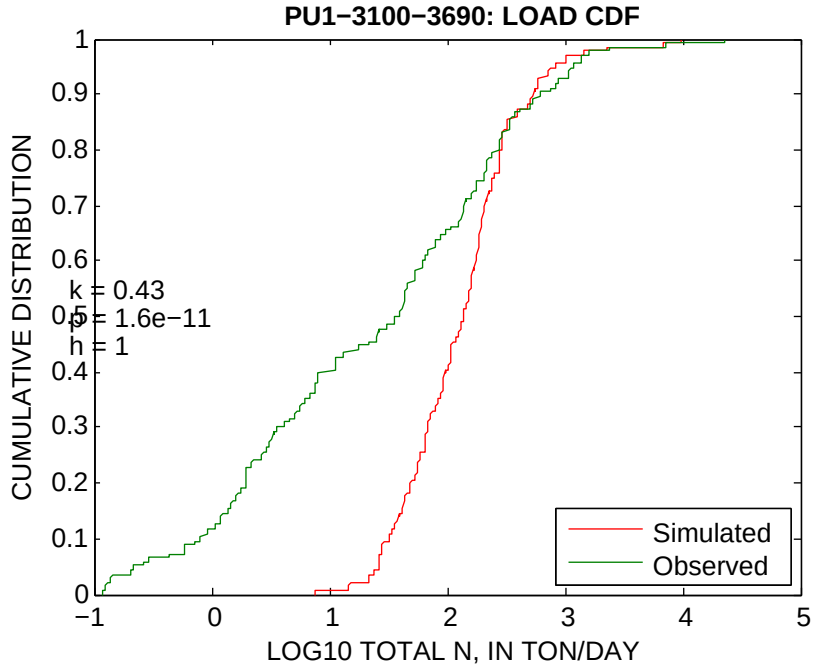


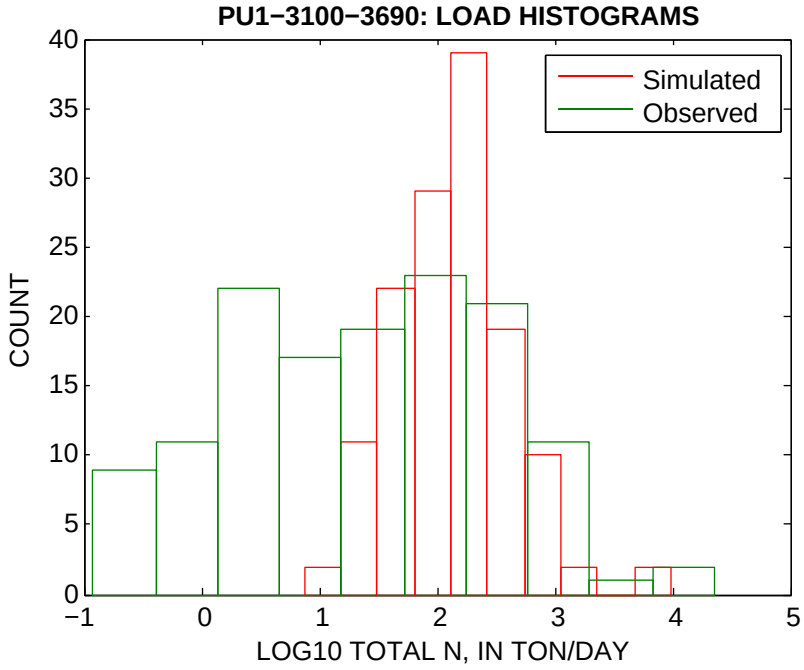


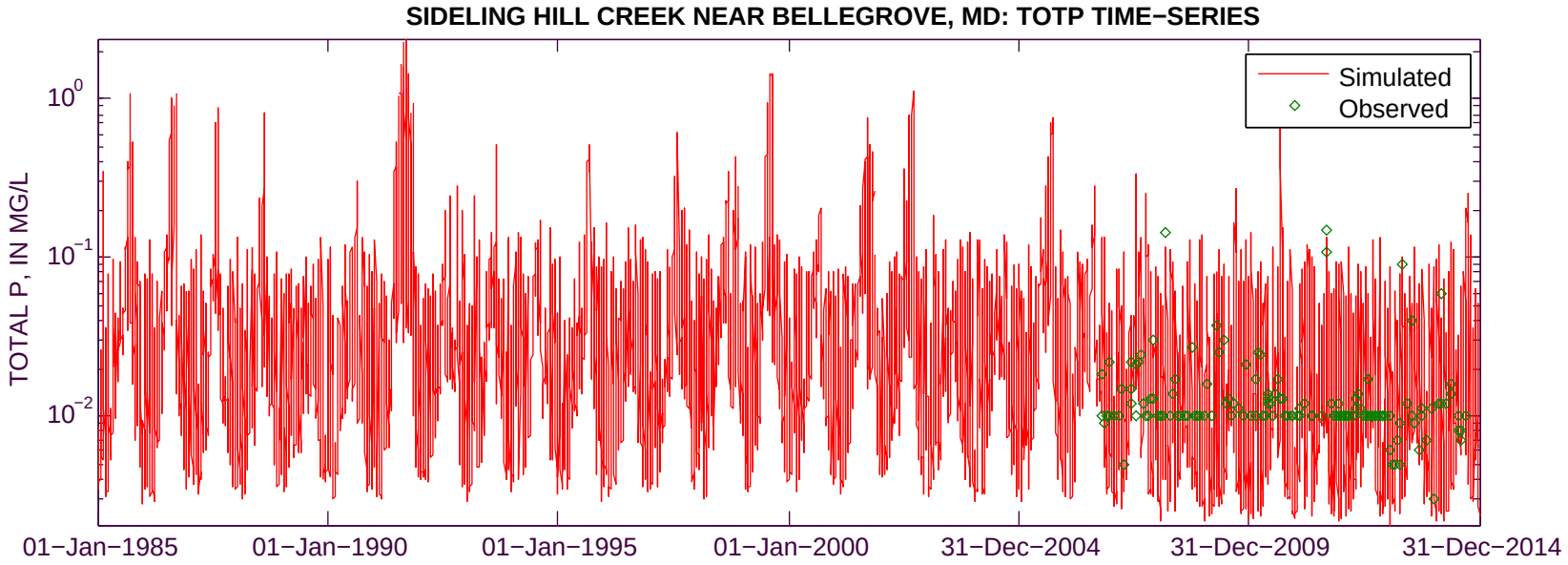
LOAD DATA
LOG10

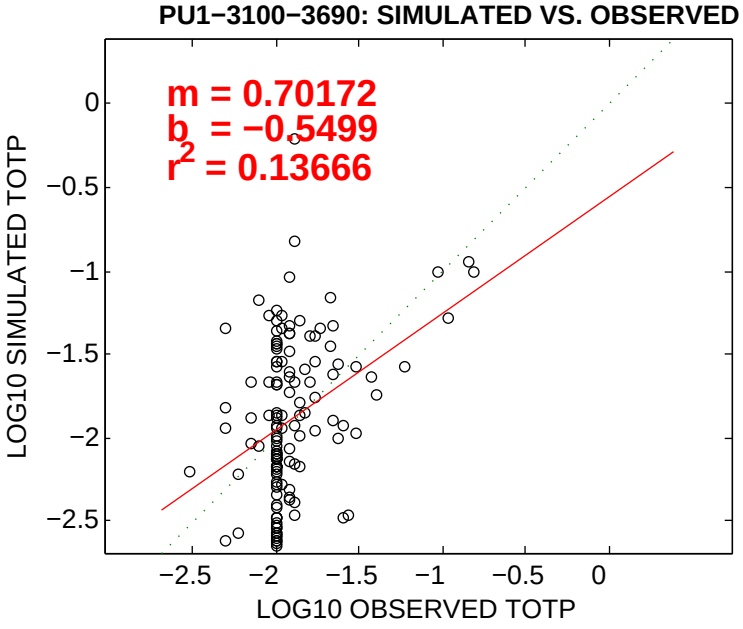


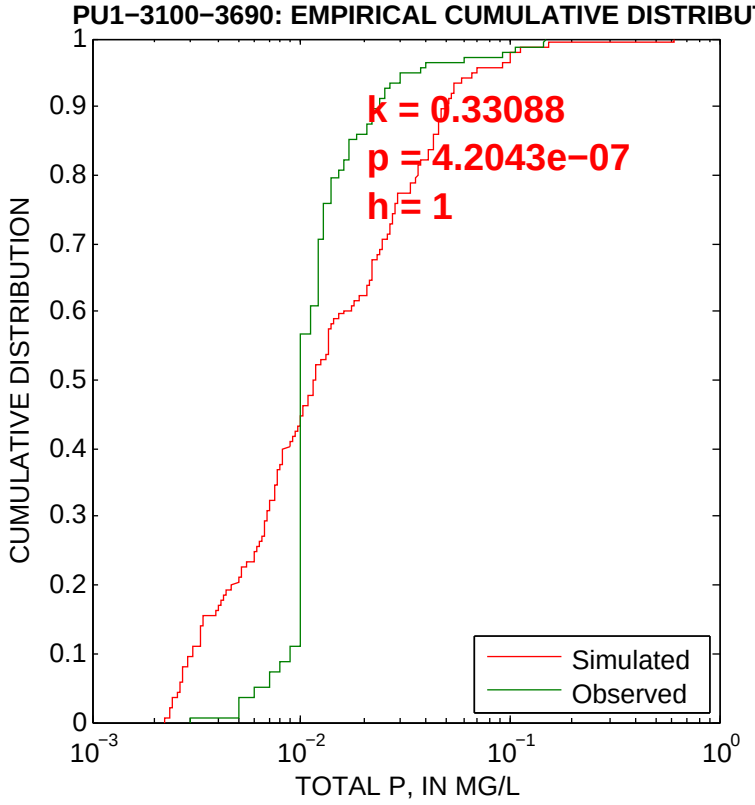












DATA SELECTION

scenario	file
P620171001WQ	TOTP.calib

plot: TOTP - total phosphorus

Dates: 1/1/1985 – 12/31/201

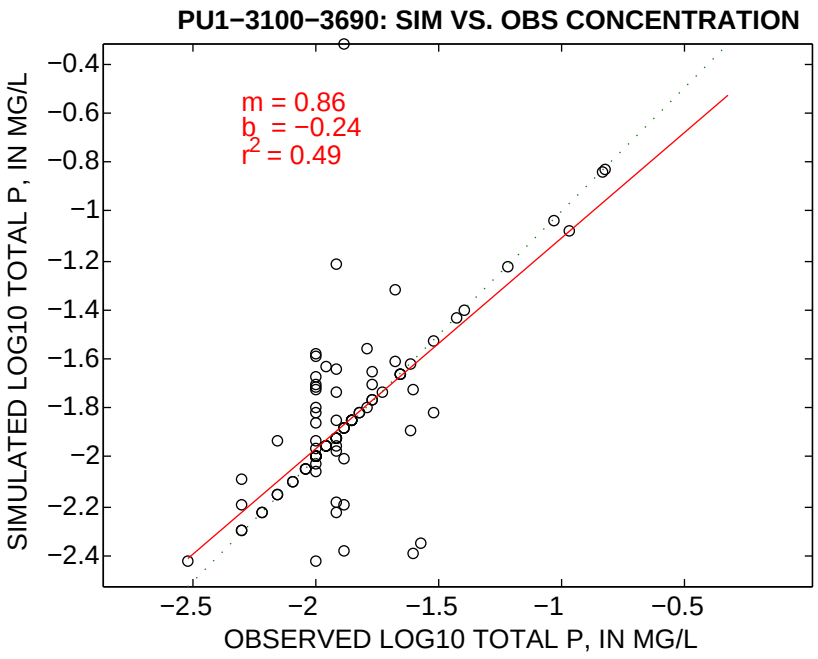
Drive	Directory	Observed
N/A	model	OBS20161101

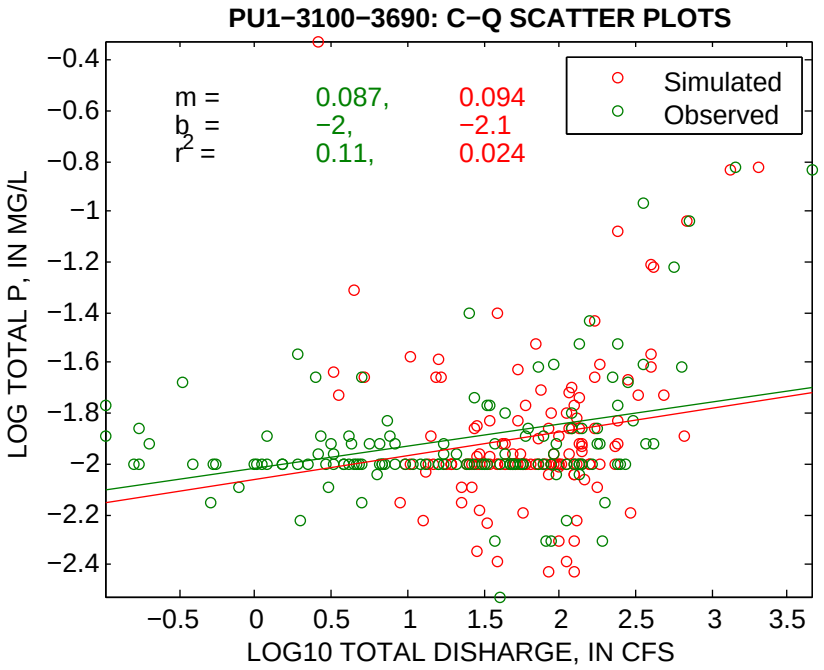
STATISTICS

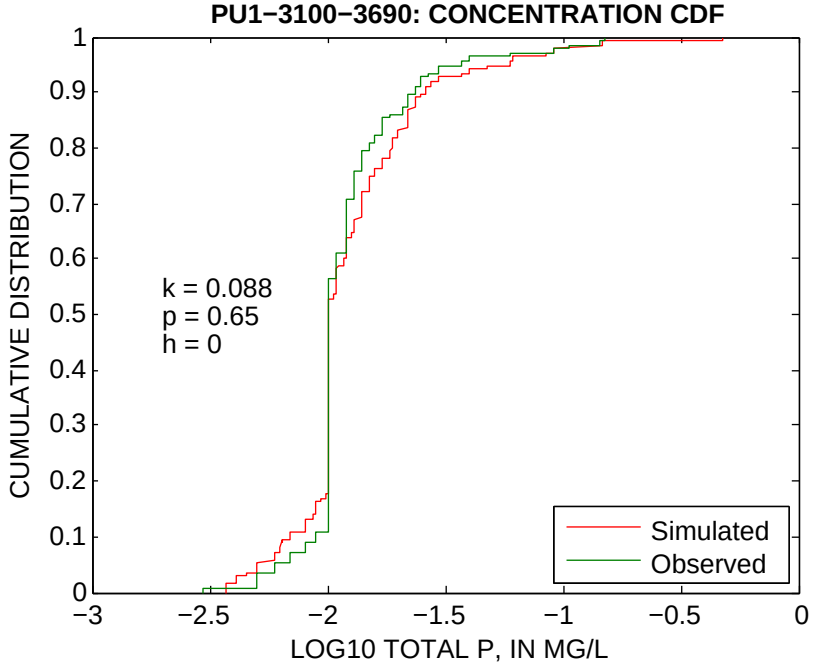
	n	observe	simulate
		136	136
min		0.003	0.0022449
		-2.52288	-2.6488
mean		0.0159963	0.0254867
		-1.90673	-1.8879
media		0.01	0.0116665
		-2	-1.93309
max		0.151	0.61397
		-0.821023	-0.211853
varian		0.00042143	0.0031637
		0.0606788	0.218638
JB		0.001	0.001
		0.001	0.086960
		ra	log
%		59.3282	-0.987881
err.va		0.00319278	0.194516
rel.std.err		7.57604	3.20566
mod.eff		-6.57604	-2.20566

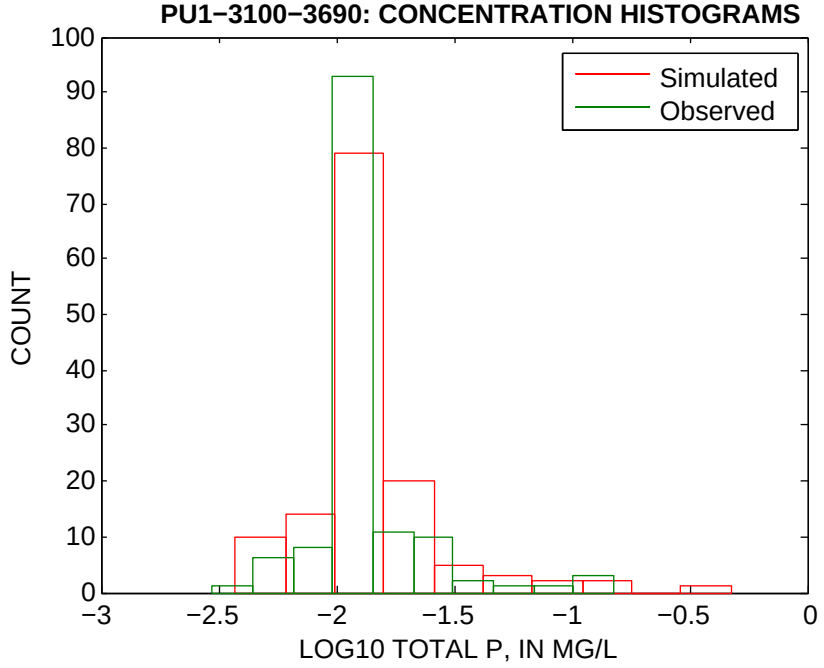
VERSION

ALL DATA
LOG10

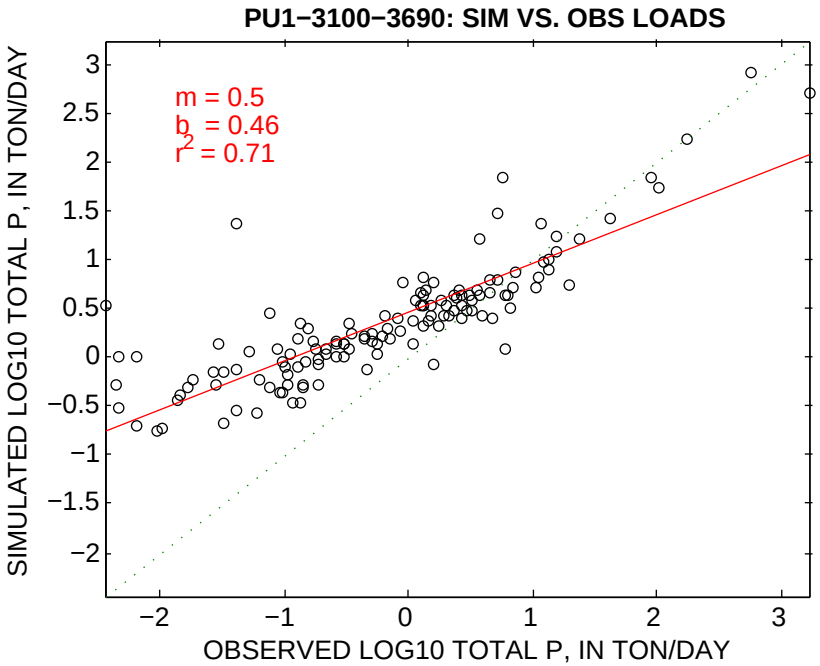


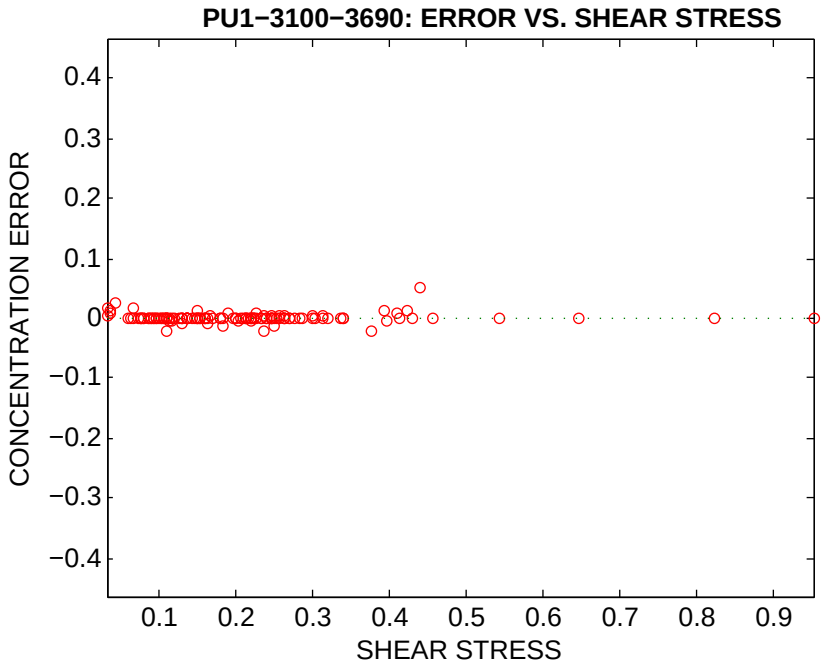


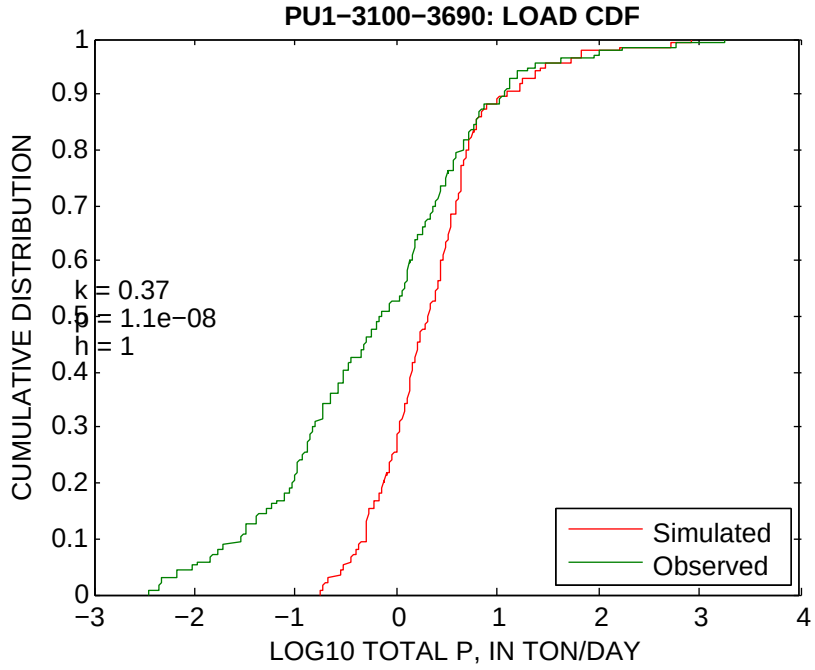


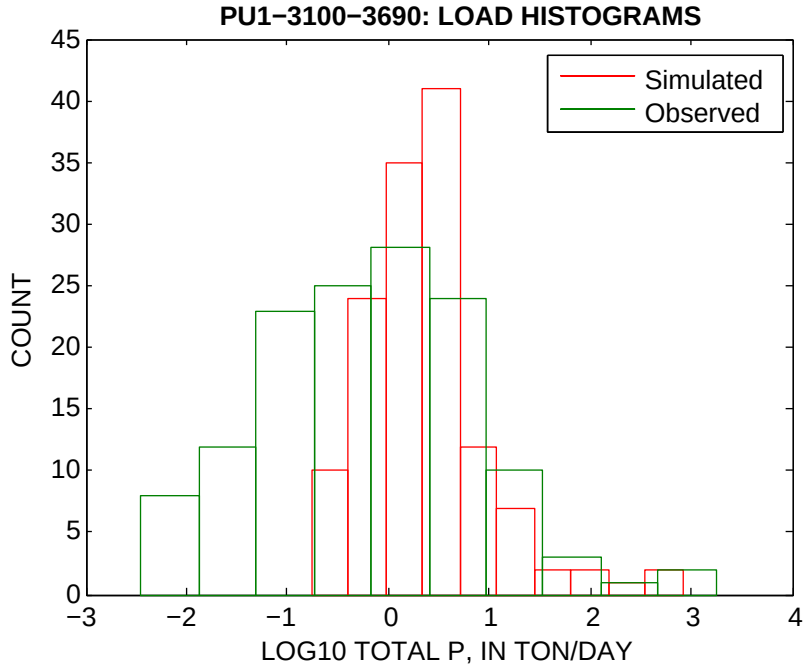


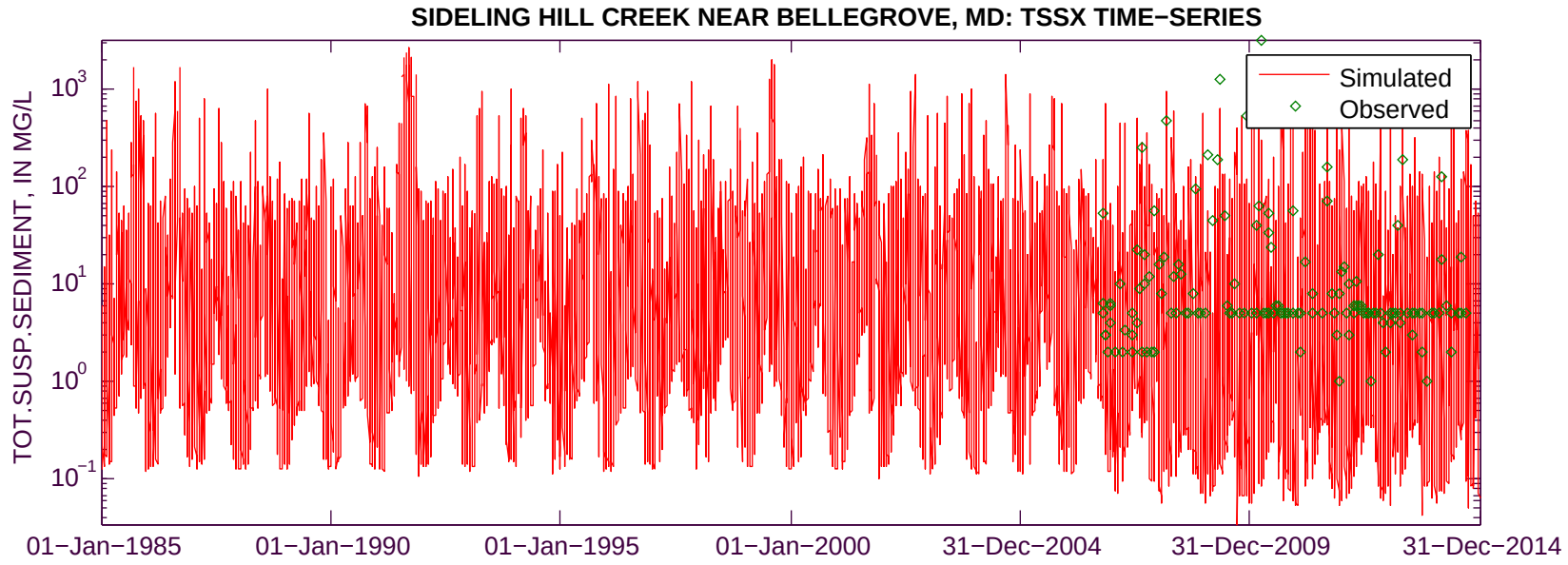
LOAD DATA
LOG10

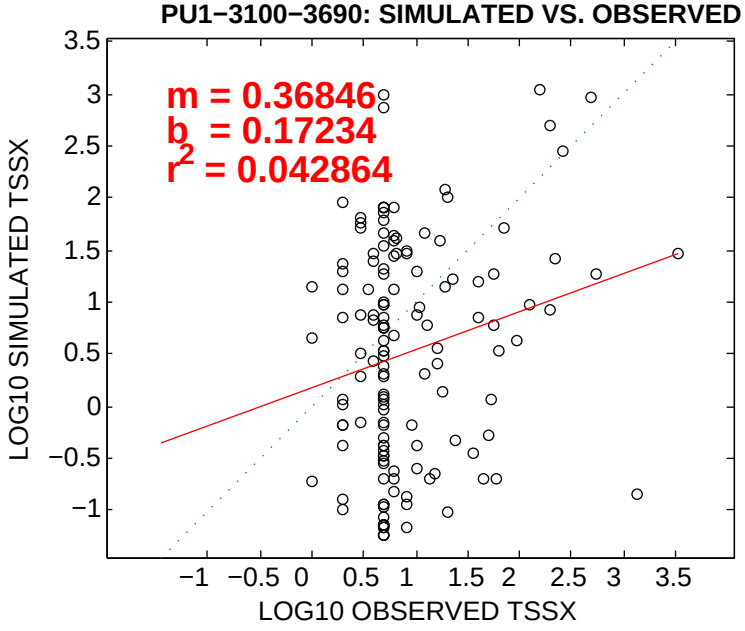


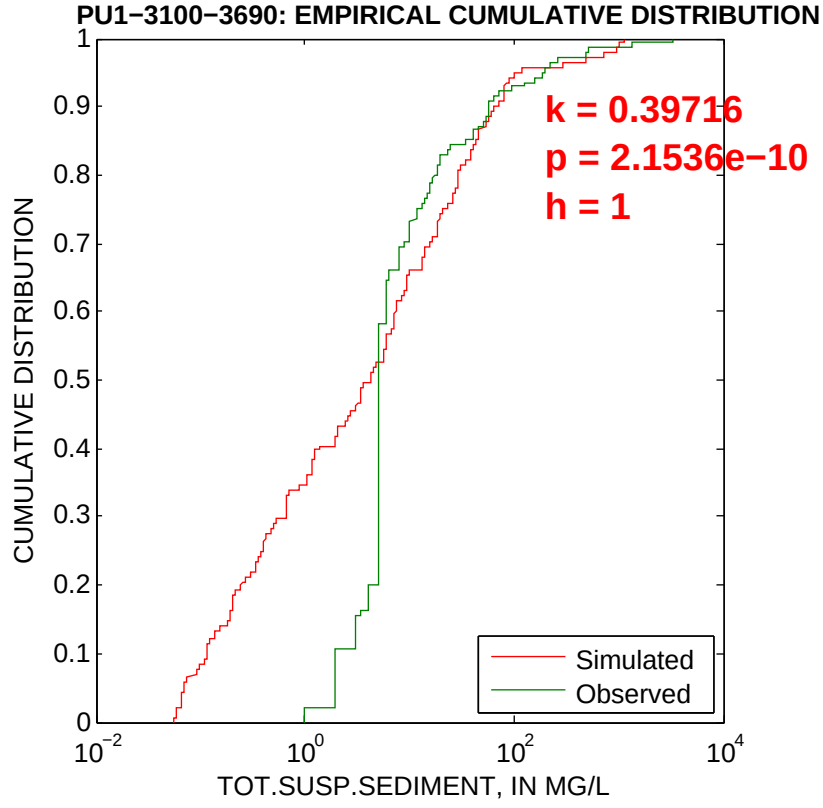












DATA SELECTION

scenario: P620171001WQ | file: TSSX.calib

plot: TSSX - total suspended ...

Dates: 1/1/1985 – 12/31/201

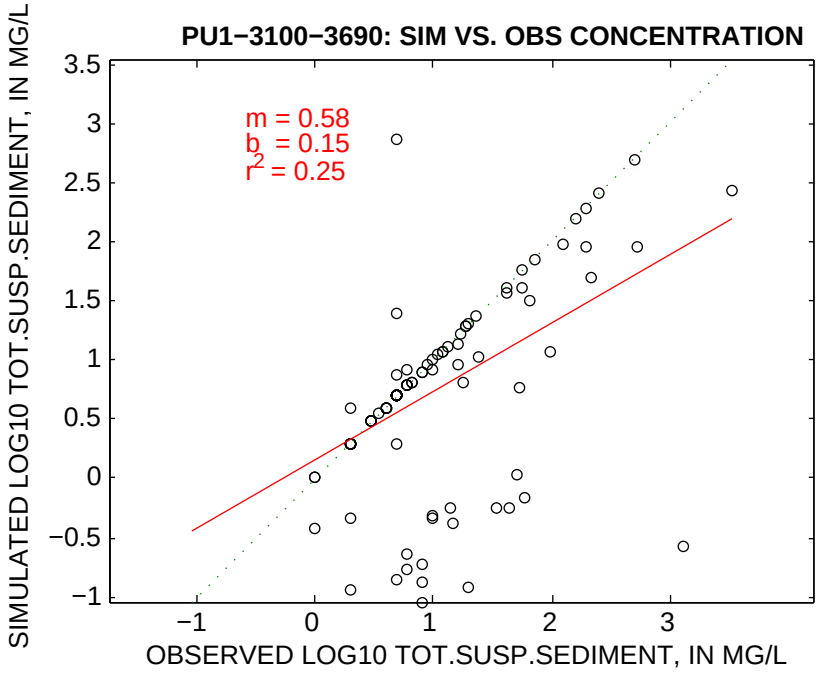
Drive: N/A | Directory: model | Observed: OBS20161101

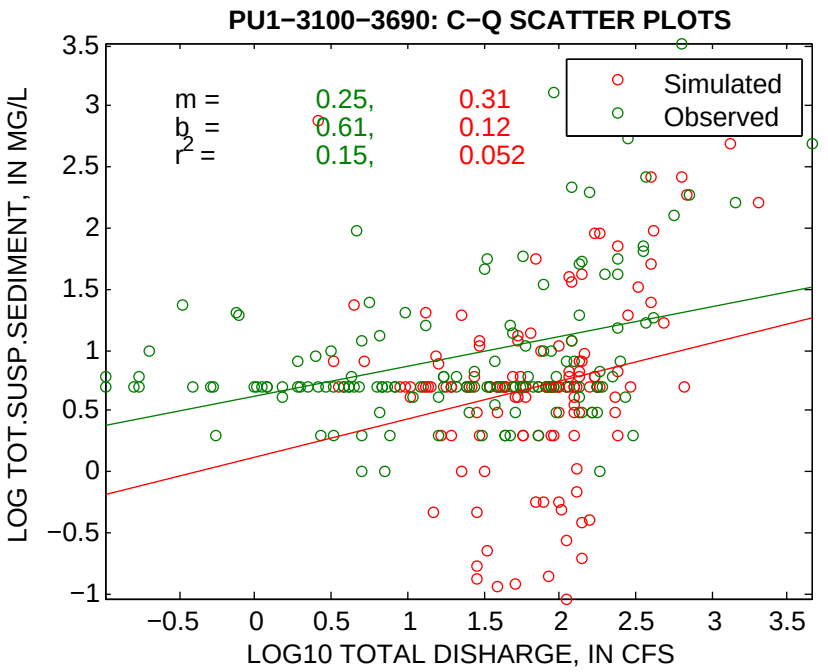
STATISTICS

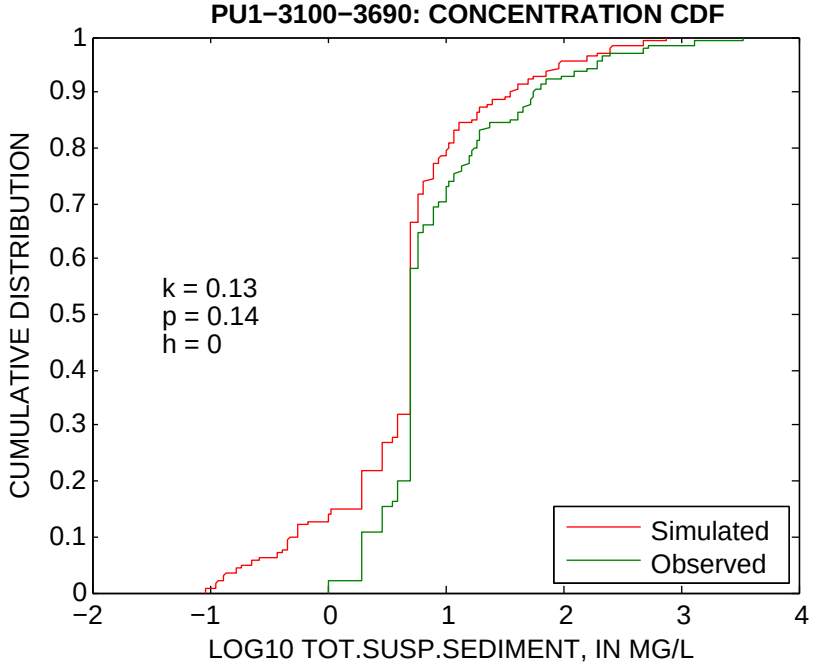
		observe	simulate
n		141	141
min		1	0.057218
		0	-1.24247
mean		58.7199	46.4359
		0.937968	0.517947
media		5	4.2709
		0.69897	0.630519
max		3347	1117.9
		3.52466	3.0484
varian		94709.5	27145.4
		0.361753	1.14579
JB		0.001	0.001
		0.001	0.092881
		ra	log
%		-20.9196	-44.7799
err.va		113767	1.41863
rel.std.err		1.20122	3.92155
mod.eff		-0.201216	-2.92155

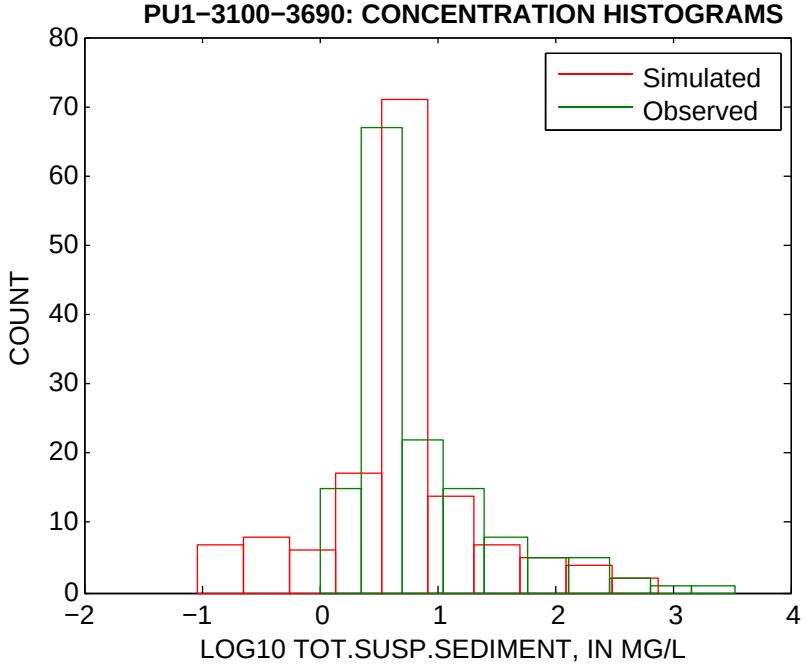
VERSION 2.1

ALL DATA
LOG10

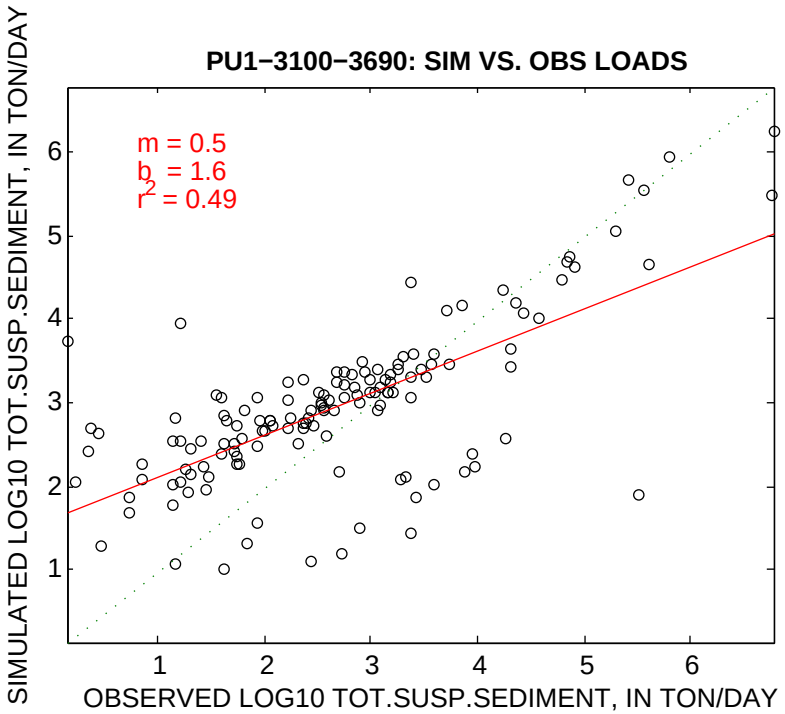


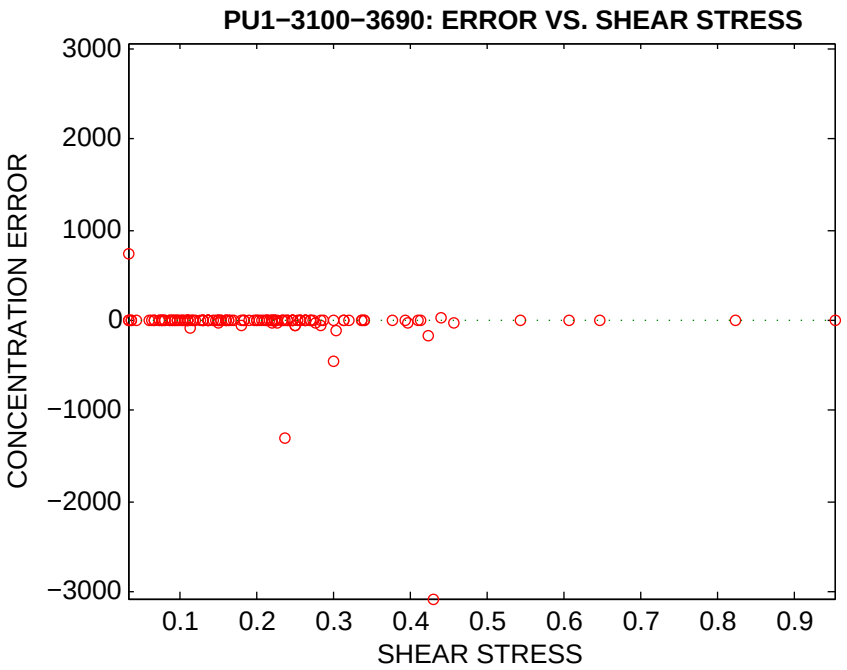


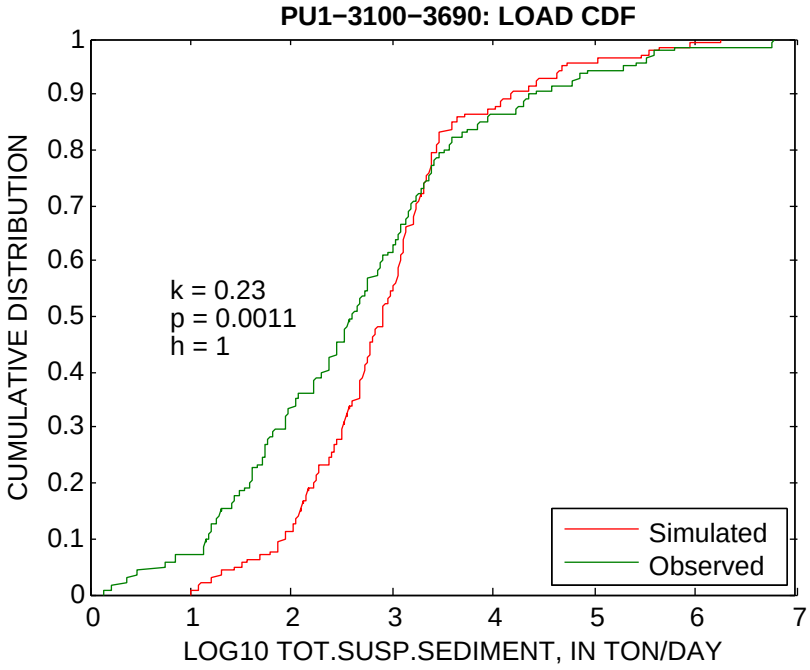


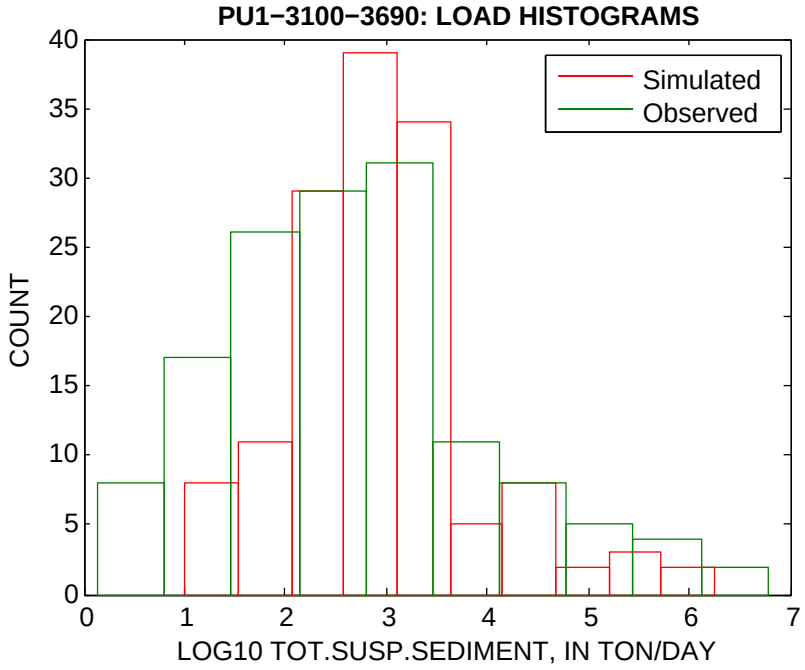


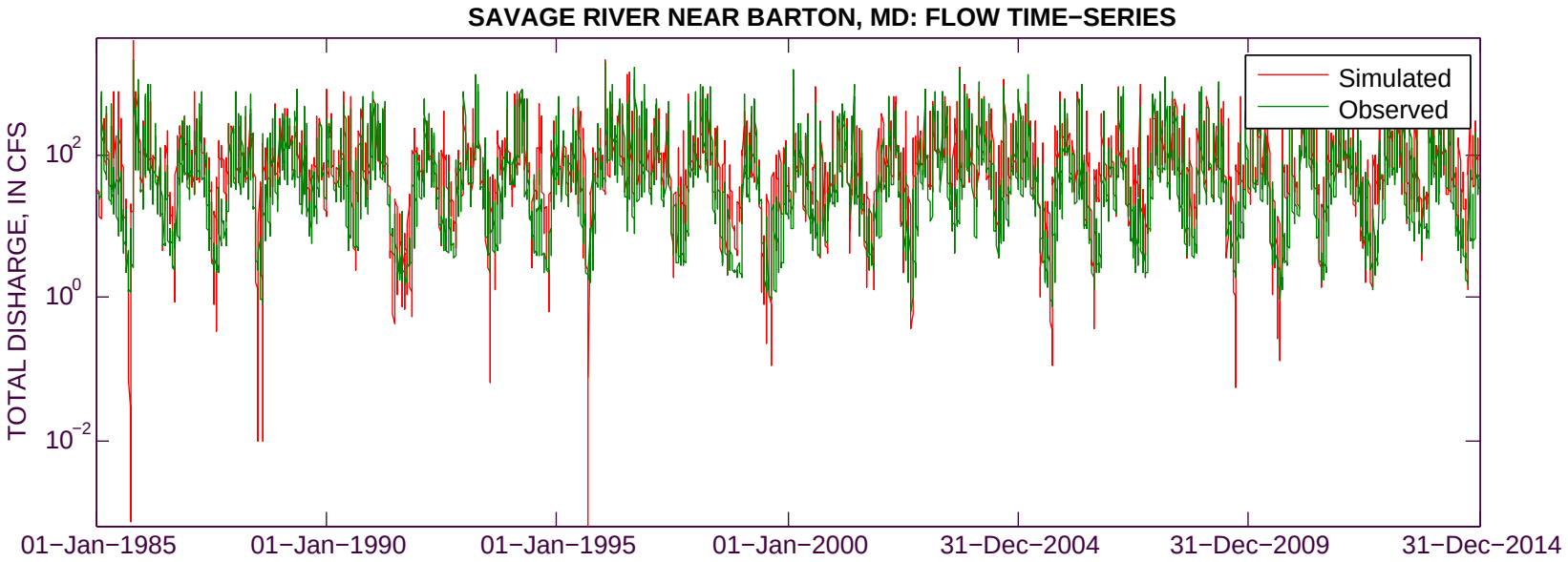
LOAD DATA
LOG10

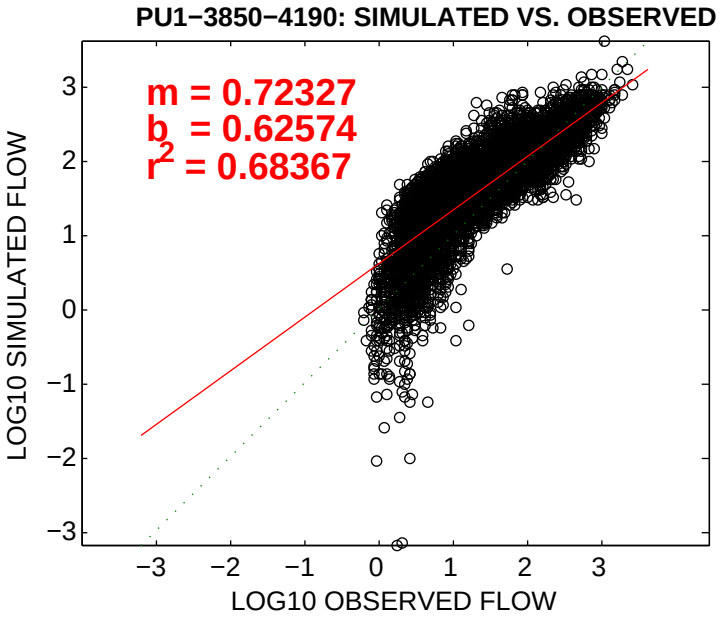


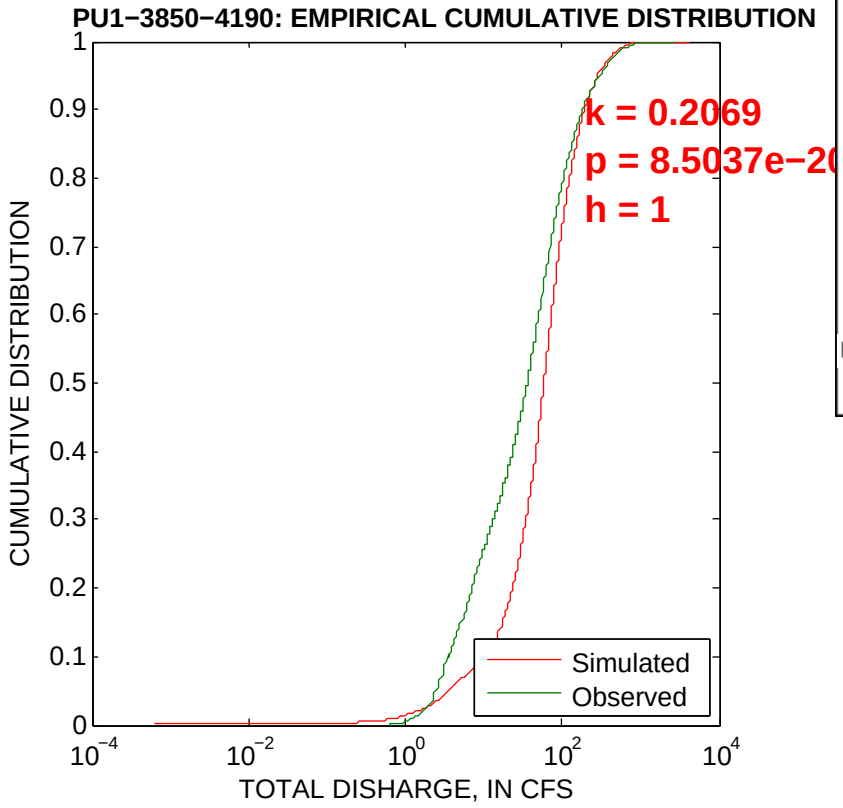












DATA SELECTION

scenario: P620171001WQ | file: FLOW.calib

plot: FLOW - total discharge

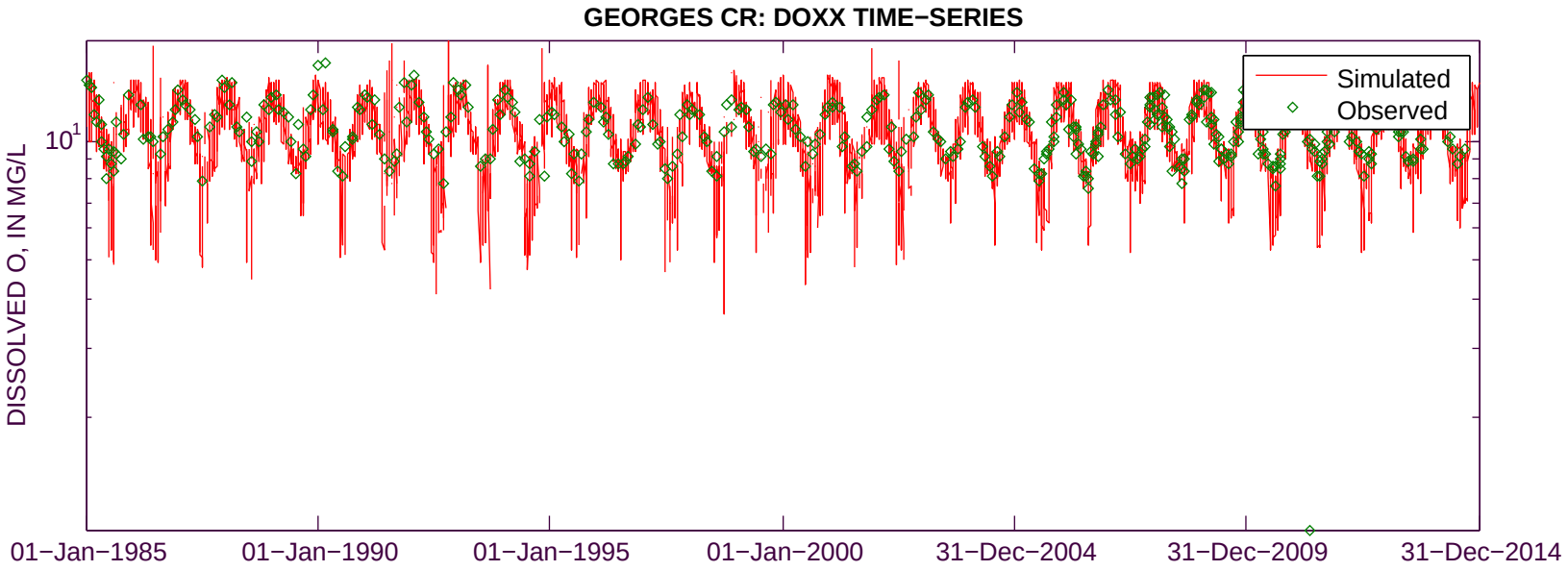
Dates: 1/1/1985 – 12/31/201

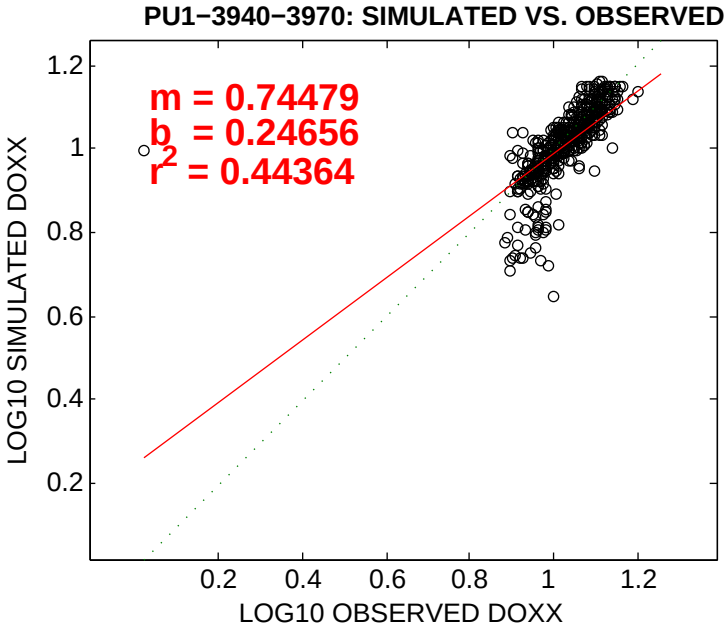
Drive: N/A | Directory: model | Observed: OBS20161101

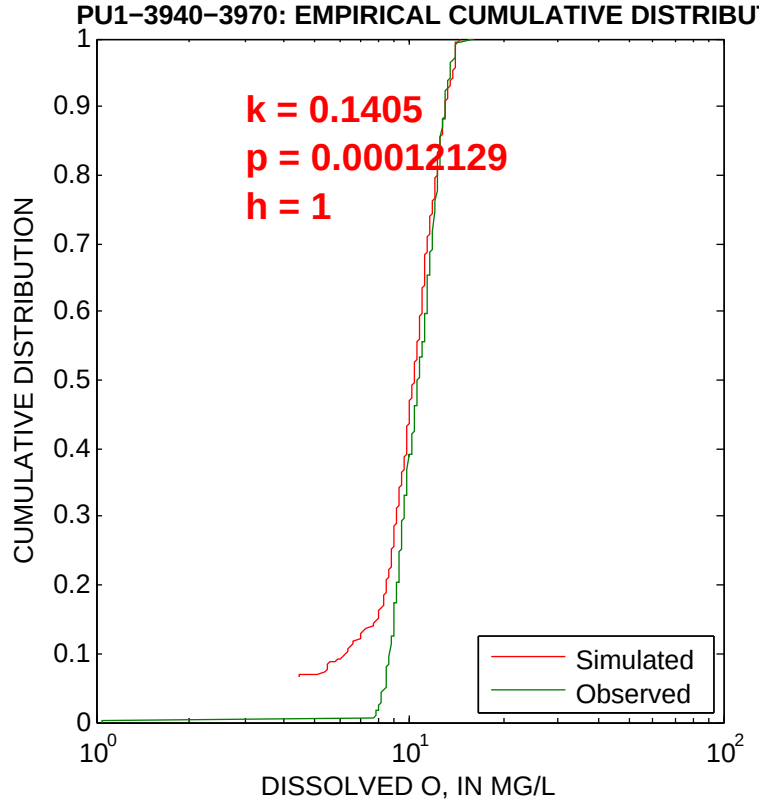
STATISTICS

		observe	simulate
n		10957	10952
min		0.64	0
		-0.19382	-3.19685
mean		77.6393	90.9909
		1.47896	1.69543
media		36	58.903
		1.5563	1.77045
max		2620	4251.9
		3.4183	3.62858
varian		18042.8	14471.6
		0.407634	0.311904
JB		0.001	0.001
		0.001	0.001
		ra	log
%		17.197	14.6362
err.va		7756.53	0.176741
rel.std.err		0.429896	0.433578
mod.eff		0.570104	0.566422

VERSION 2.1







DATA SELECTION

scenario	file
P620171001WQ	DOXX.calib

plot: DOXX - dissolved oxygen

Dates: 1/1/1985 – 12/31/201

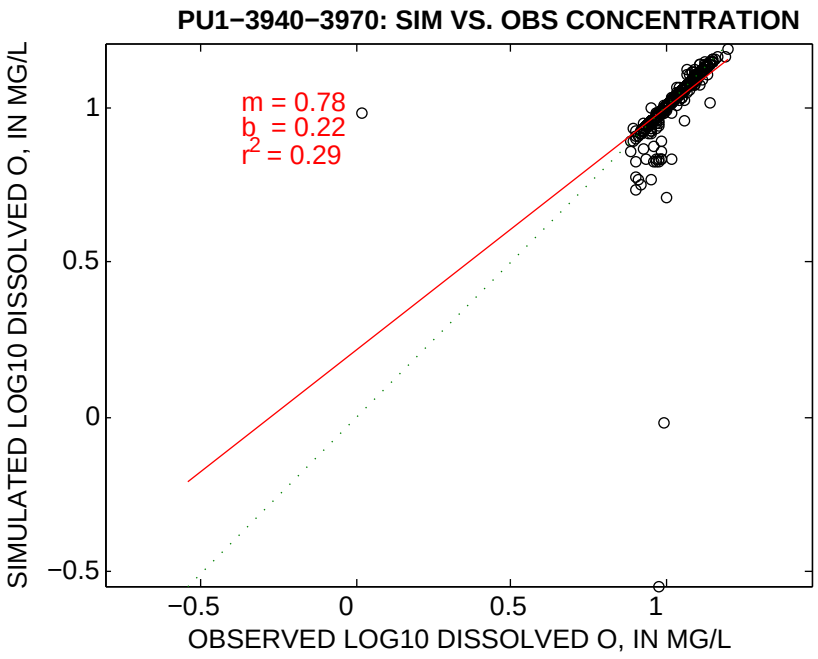
Drive	Directory	Observed
N/A	model	OBS20161101

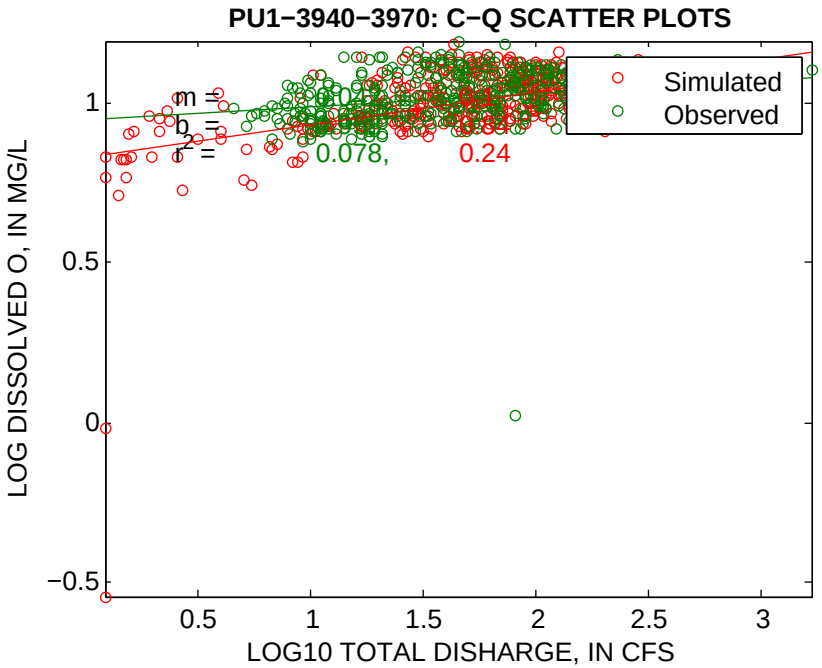
STATISTICS

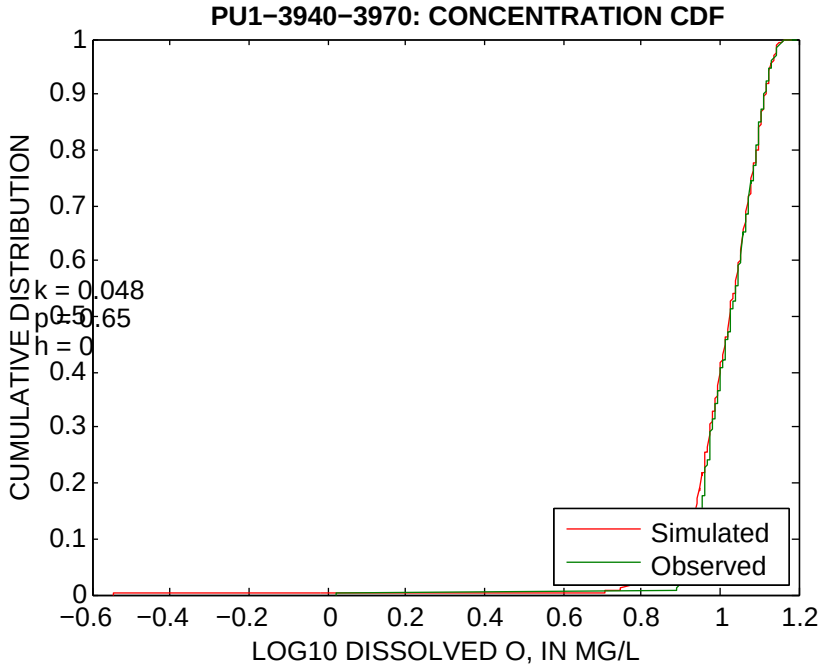
		observe	simulate
n		484	452
min		1.05	0
		0.0211893	0.650337
mean		10.7557	9.7758
		1.02609	1.01078
media		10.6495	10.335
		1.02938	1.02278
max		15.8	14.454
		1.19866	1.15999
varian		2.91152	10.6447
		0.00673387	0.00841991
JB		0.001	0.001
		0.001	0.001
		ra	log
%		-9.11066	-1.49145
err.va		8.7371	0.00535783
rel.std.err		3.00087	0.795654
mod.eff		-2.00087	0.204346

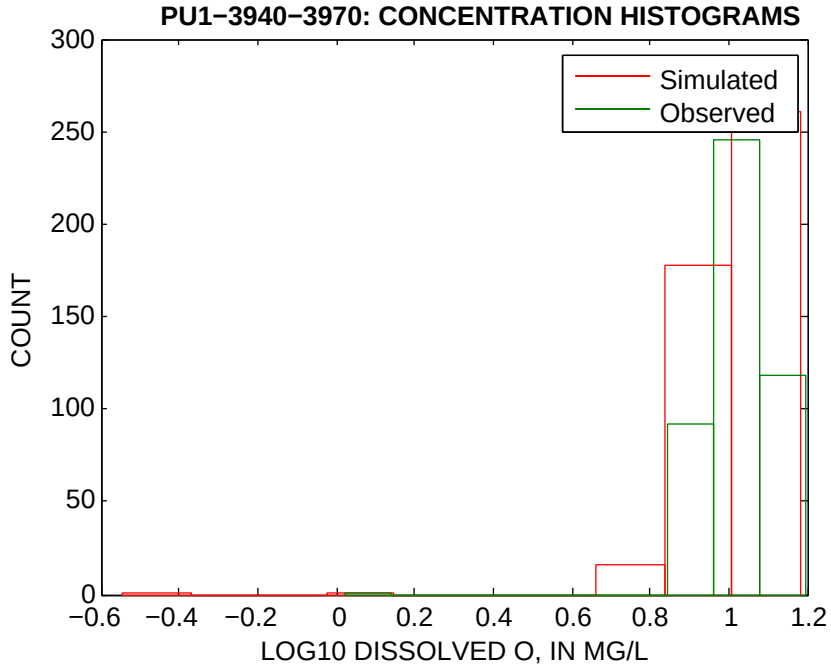
VERSION 2.1

ALL DATA
LOG10

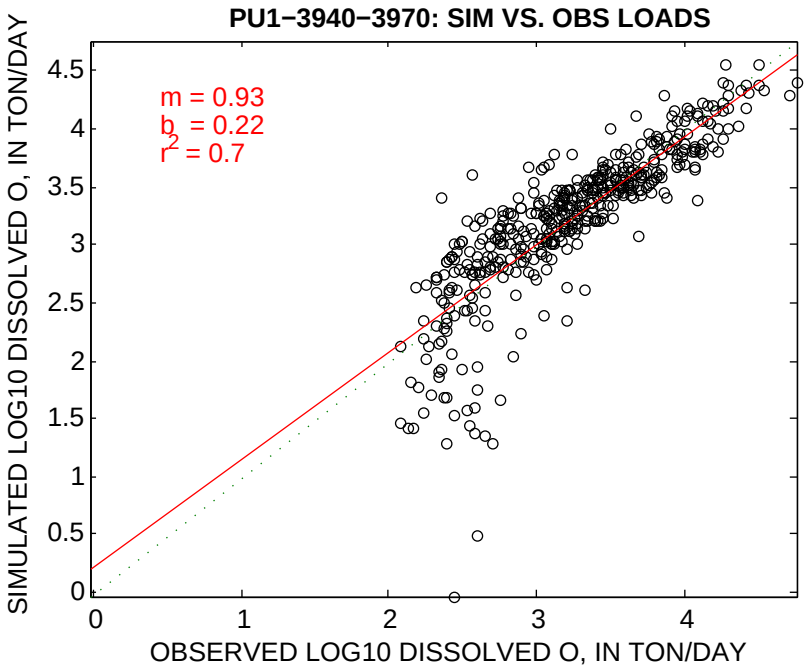


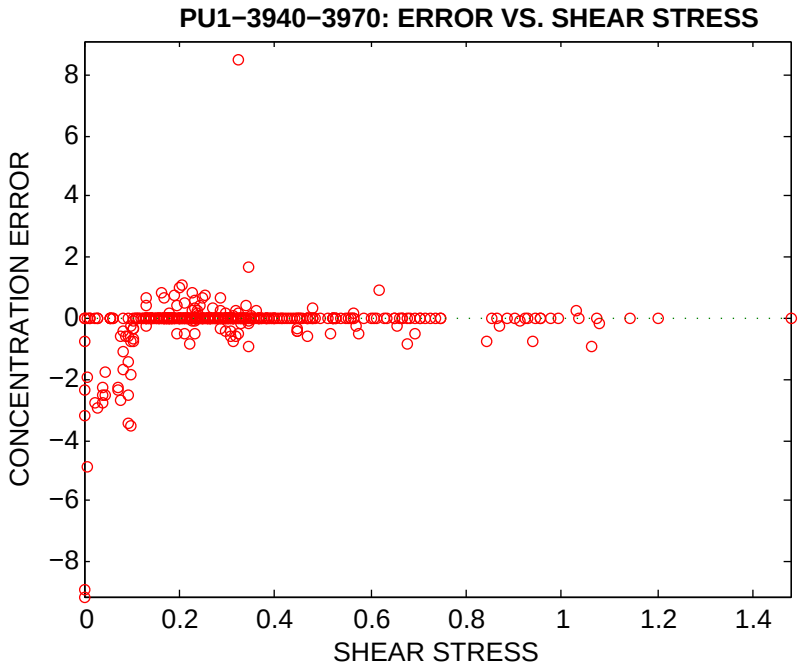


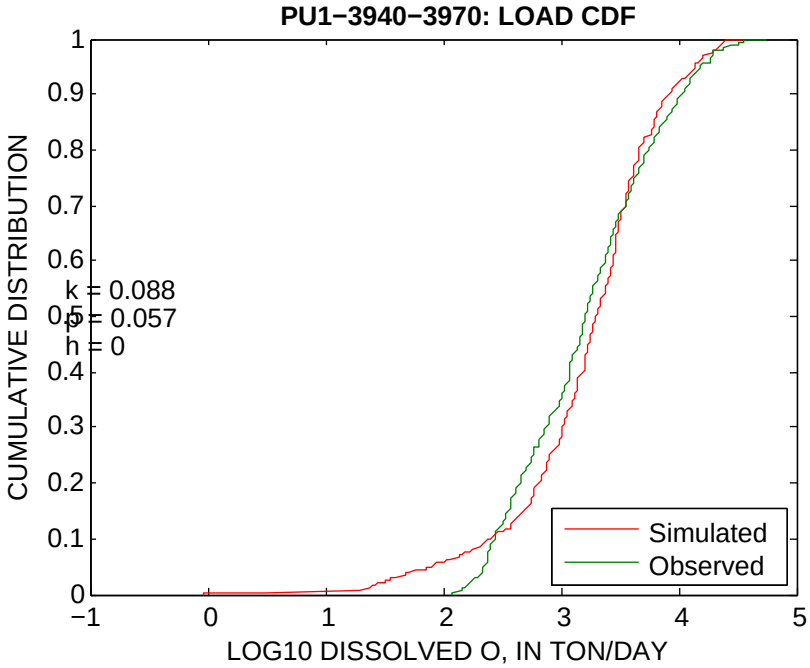


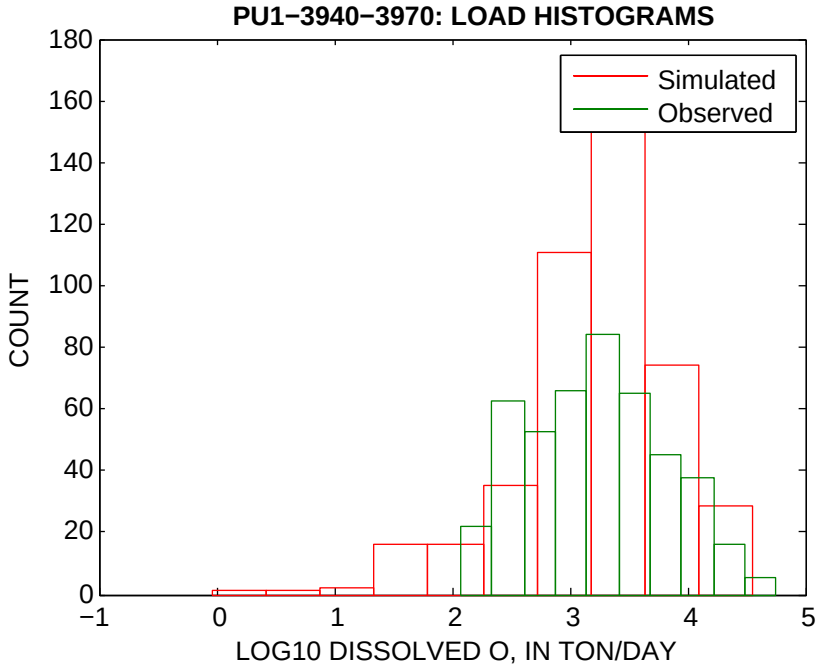


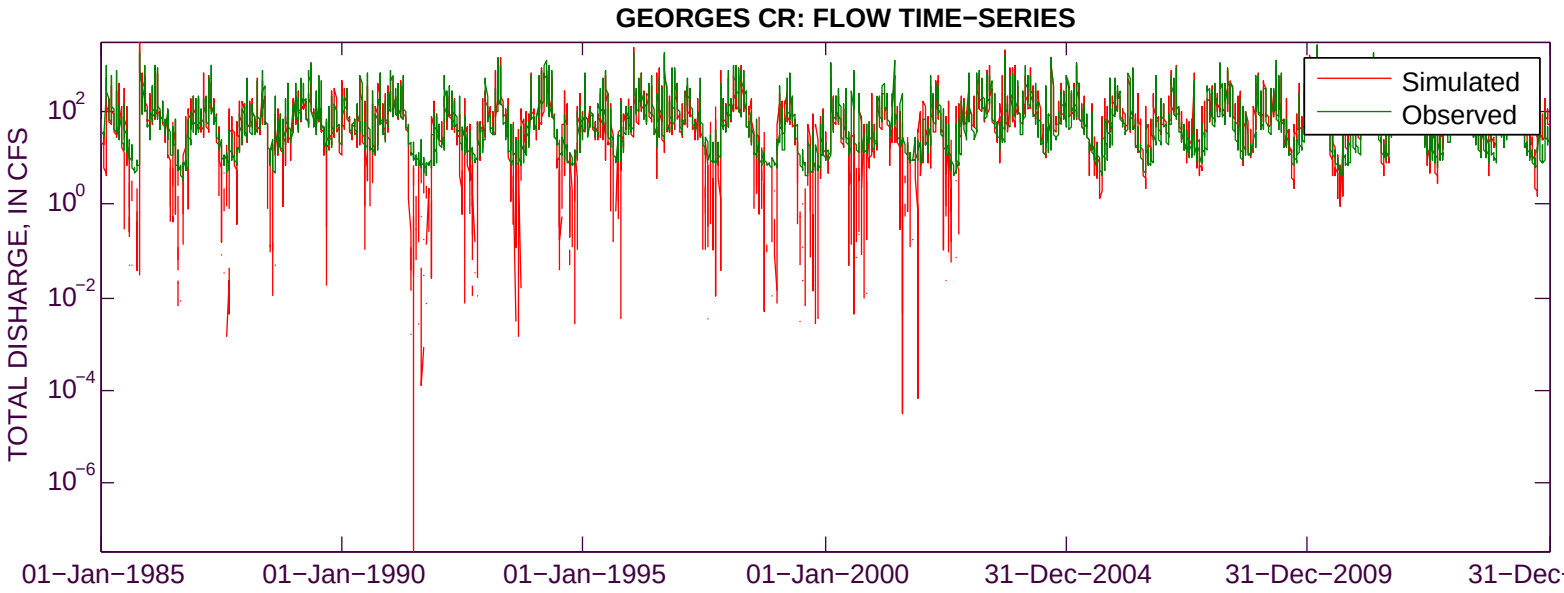
LOAD DATA
LOG10

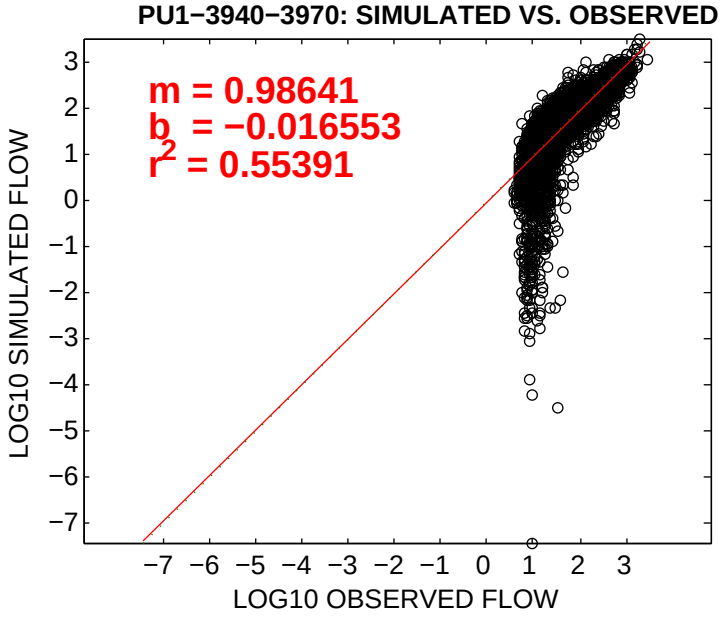


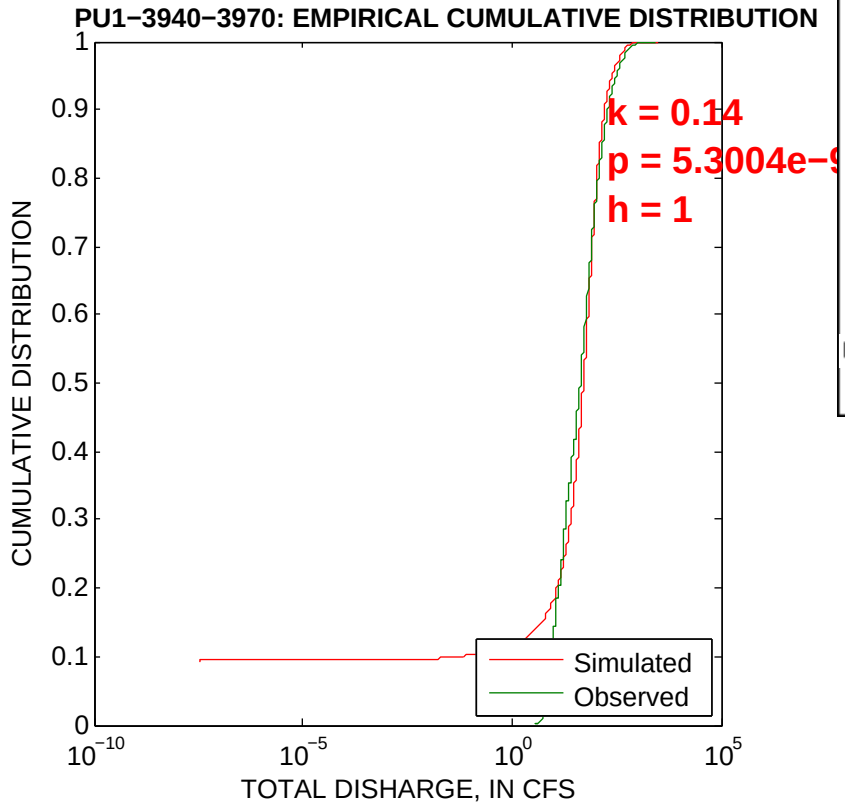












DATA SELECTION

scenario	file
P620171001WQ	FLOW.calib

plot: FLOW - total discharge

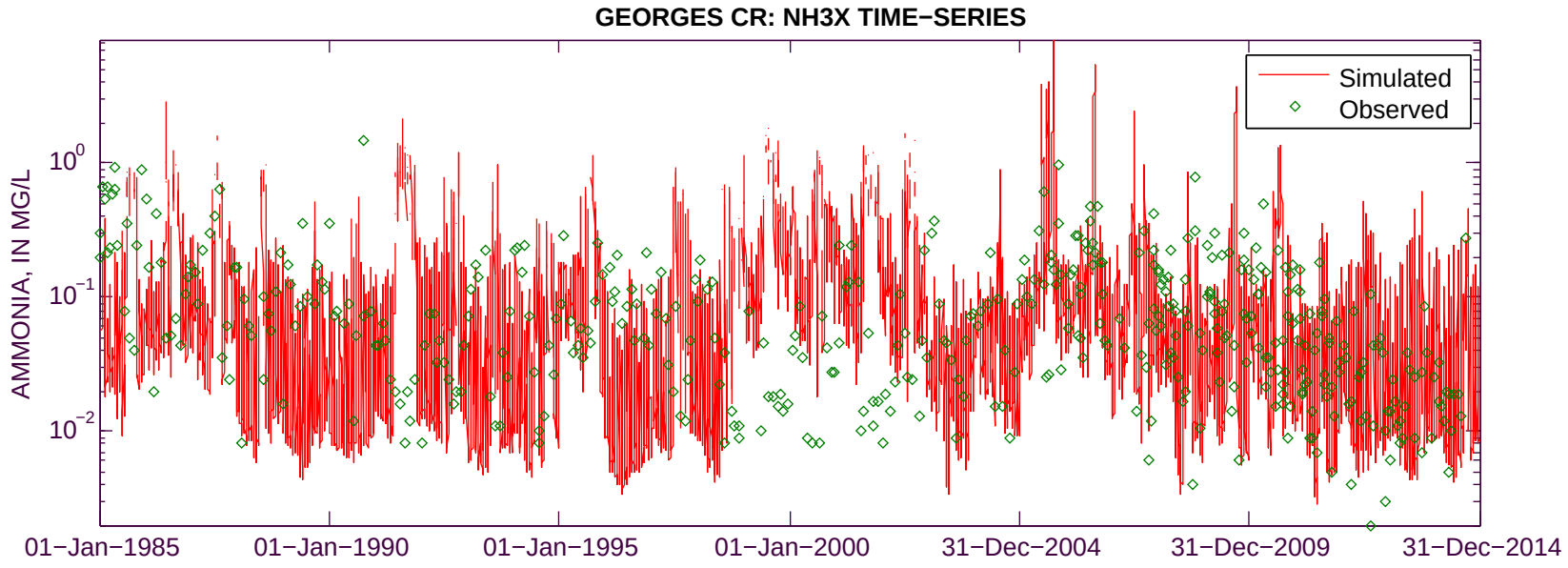
Dates 1/1/1985 12/31/201

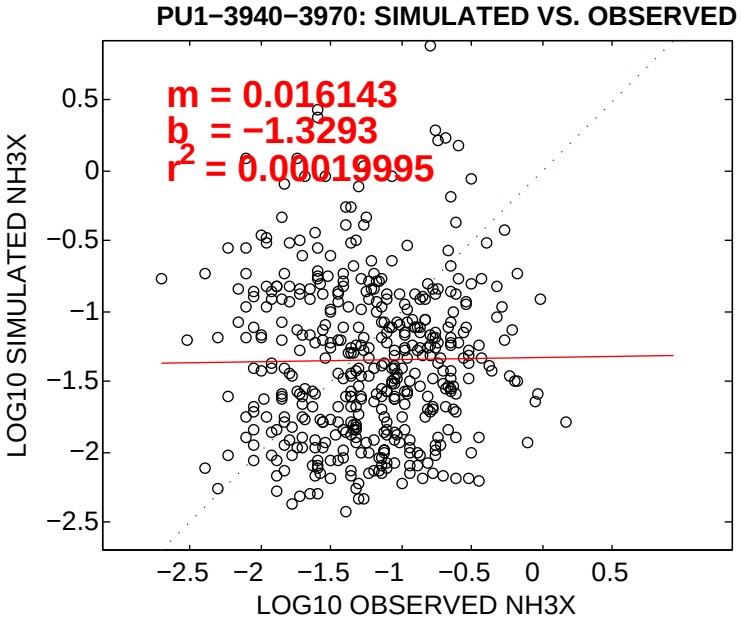
Drive	Directory	Observed
N/A	model	OBS20161101

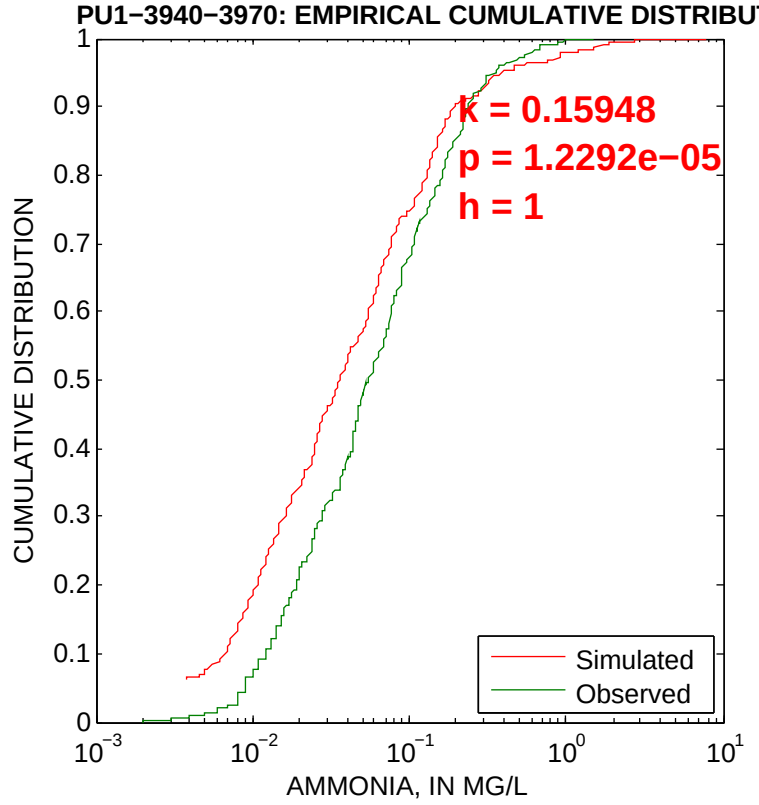
STATISTICS

		observe	simulate
n		10957	9932
min		3.4	0
		0.612784	-7.44224
mean		87.4772	79.3967
		1.69968	1.66003
media		44	51.656
		1.70757	1.76906
max		2890	3295.3
		3.4609	3.51789
varian		20056.5	13715.1
		0.234254	0.41149
JB		0.001	0.001
		0.001	0.001
		ra	log
%		-9.23729	-2.33309
err.va		5741.42	0.185177
rel.std.err		0.286263	0.790497
mod.eff		0.713737	0.209503

VERSION







DATA SELECTION

scenario	file
P620171001WQ	NH3X.calib

plot: NH3X - ammonia

Dates: 1/1/1985 – 12/31/201

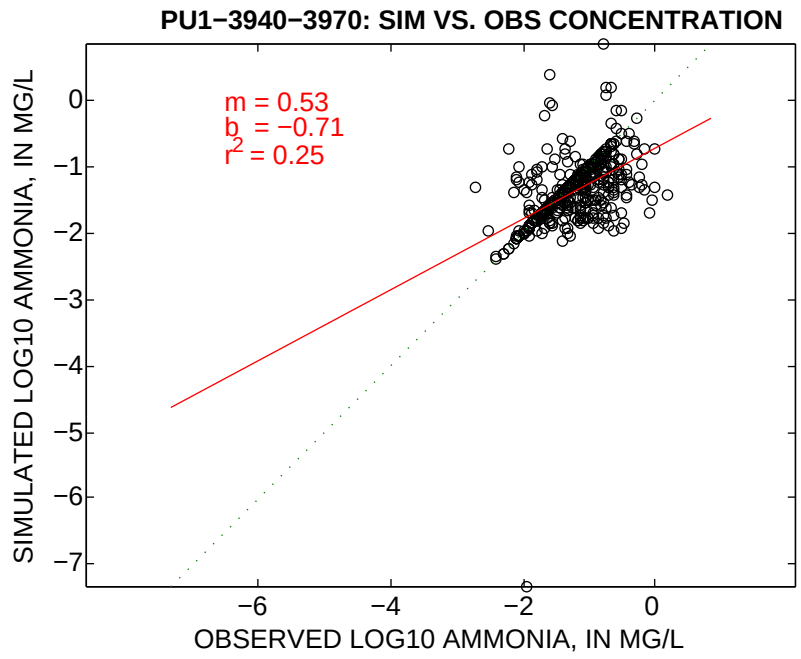
Drive	Directory	Observed
N/A	model	OBS20161101

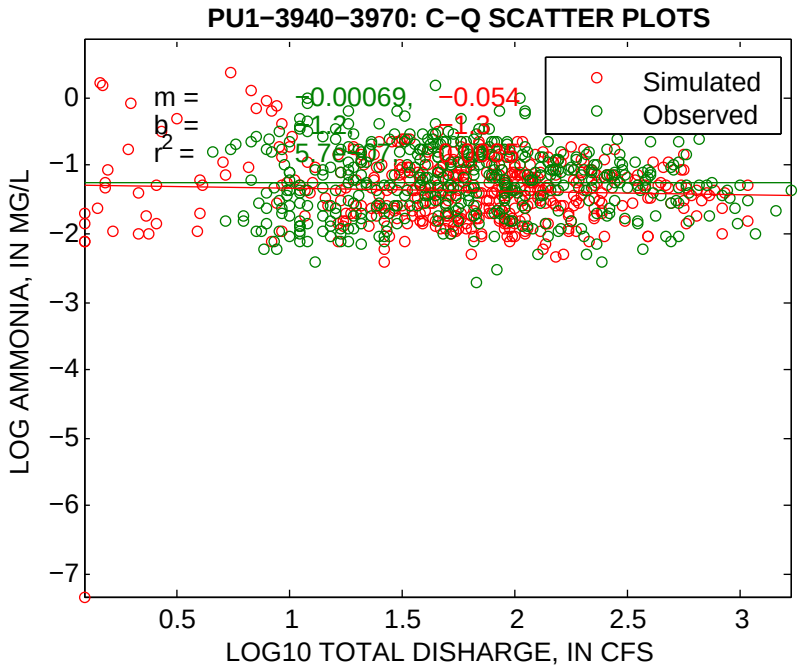
STATISTICS

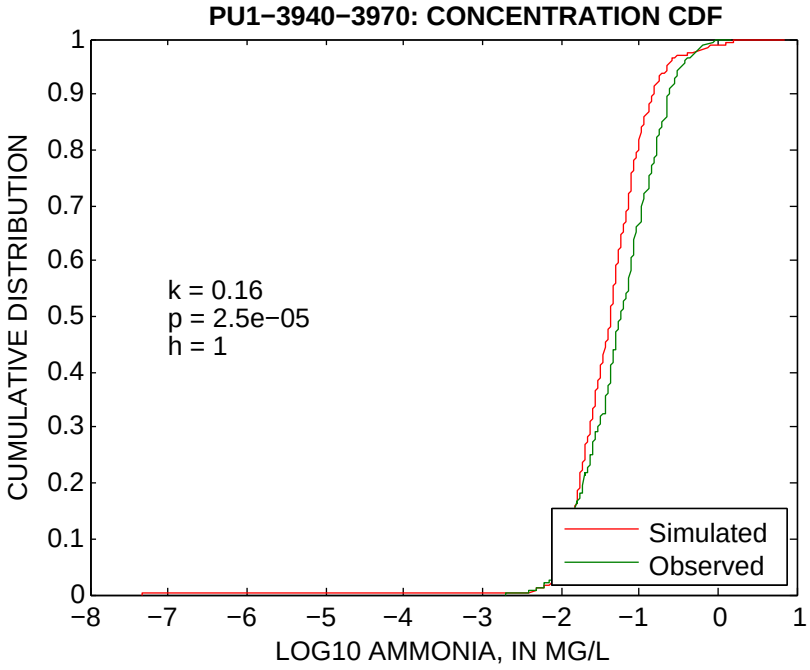
		observe	simulate
n		464	435
min		0.002	0
		-2.69897	-2.42769
mean		0.106673	0.127205
		-1.23187	-1.34917
media		0.054	0.03599
		-1.22185	-1.39616
max		1.5	7.7271
		0.176091	0.888017
varian		0.0225983	0.196839
		0.248672	0.324082
JB		0.001	0.001
	☑	0.235819	0.001
		ra	log
%		19.2476	9.52156
err.va		0.218381	0.578516
rel.std.err		9.66361	2.32642
mod.eff		-8.66361	-1.32642

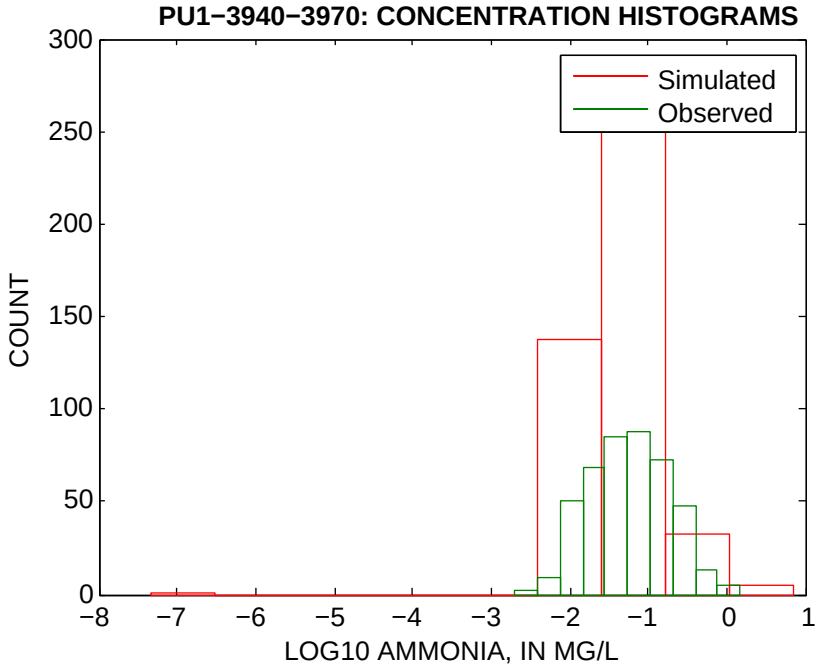
VERSION 2.1

ALL DATA
LOG10

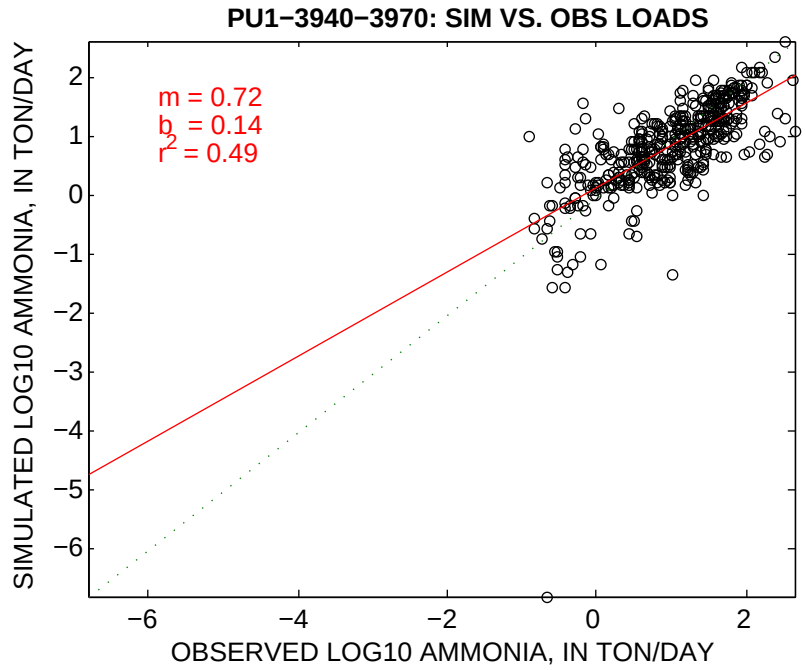


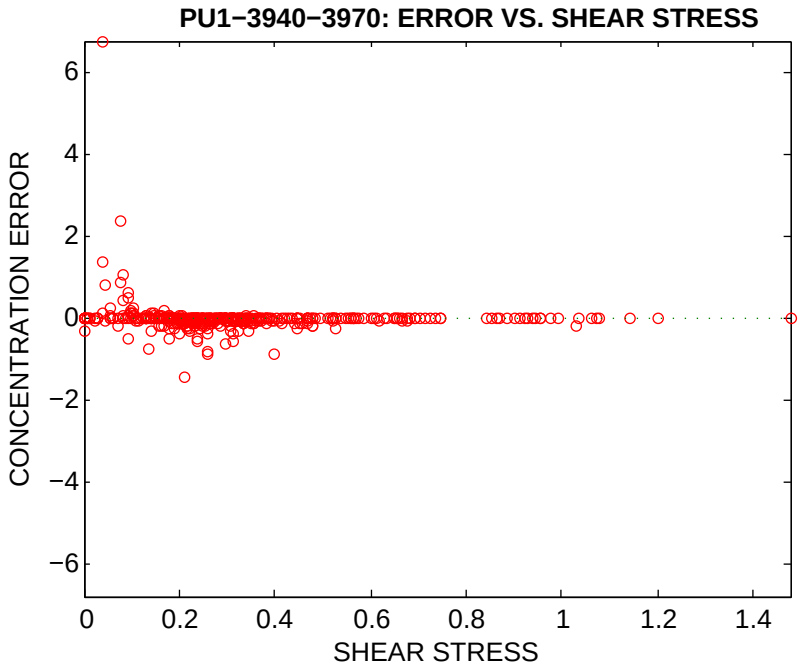


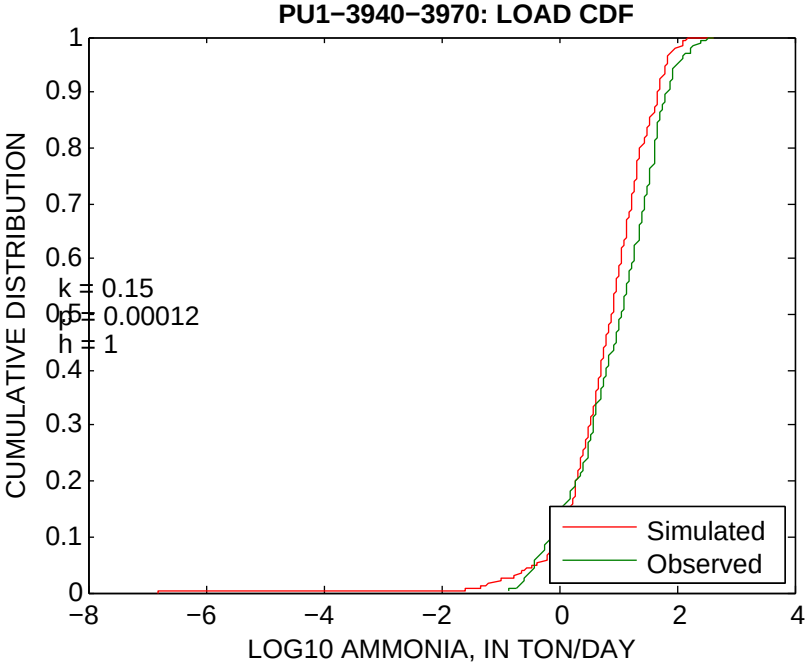


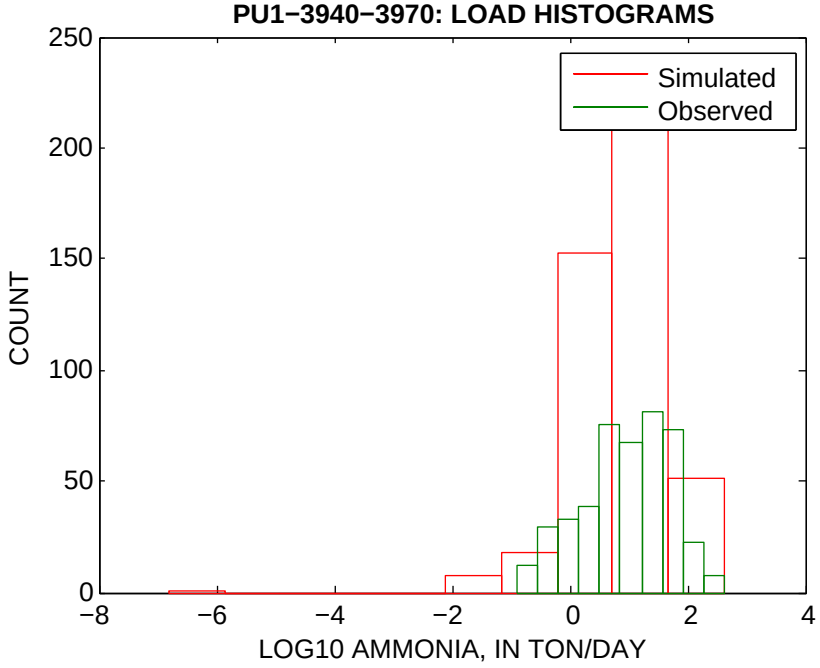


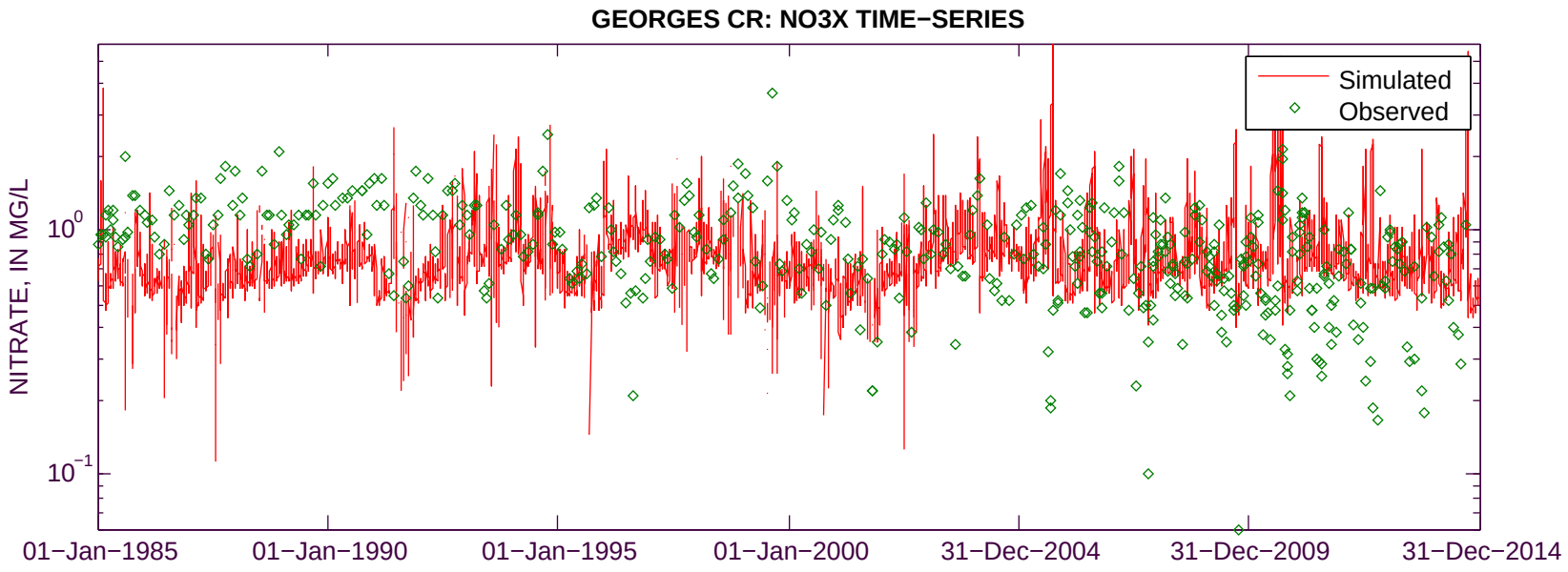
LOAD DATA
LOG10

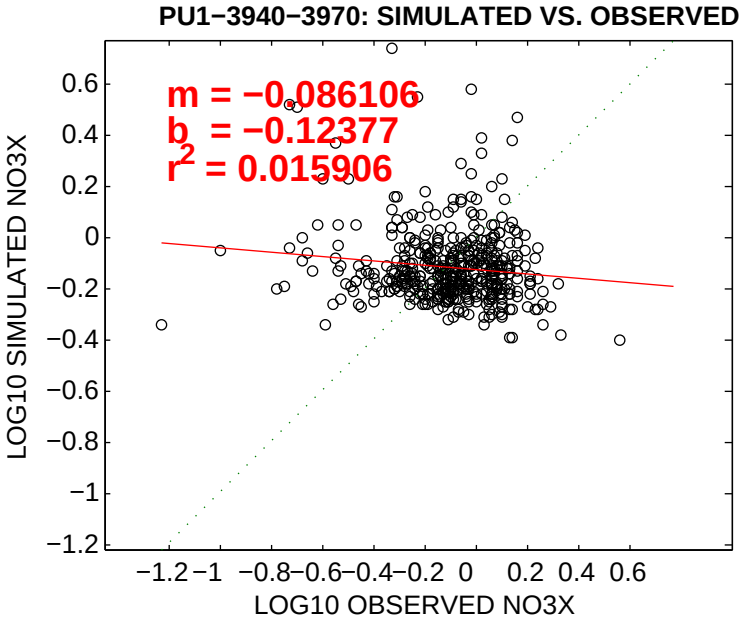


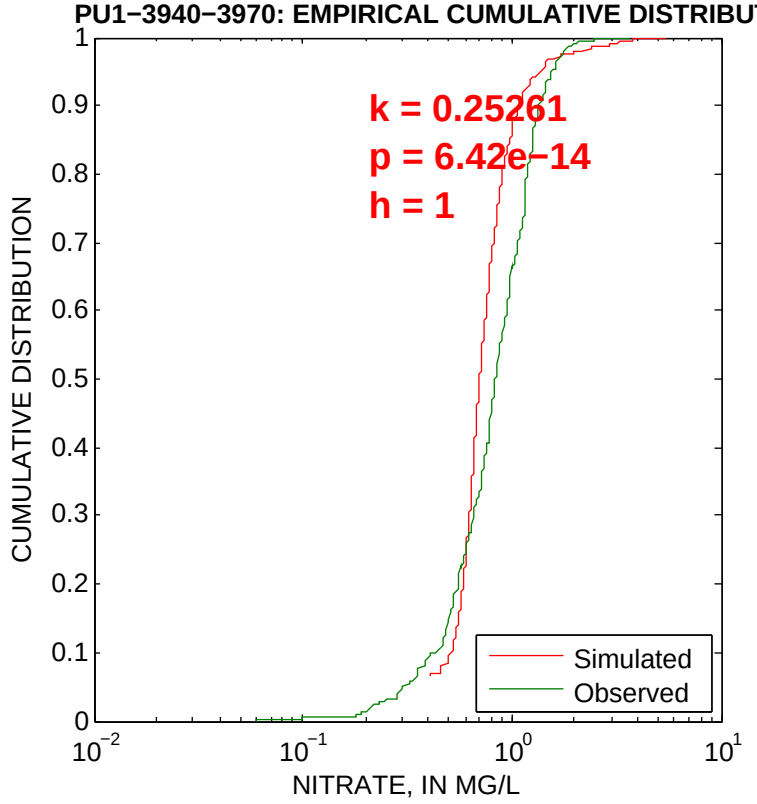












DATA SELECTION

scenario	file
P620171001WQ	NO3X.calib

plot: NO3X - nitrate

Dates: 1/1/1985 – 12/31/201

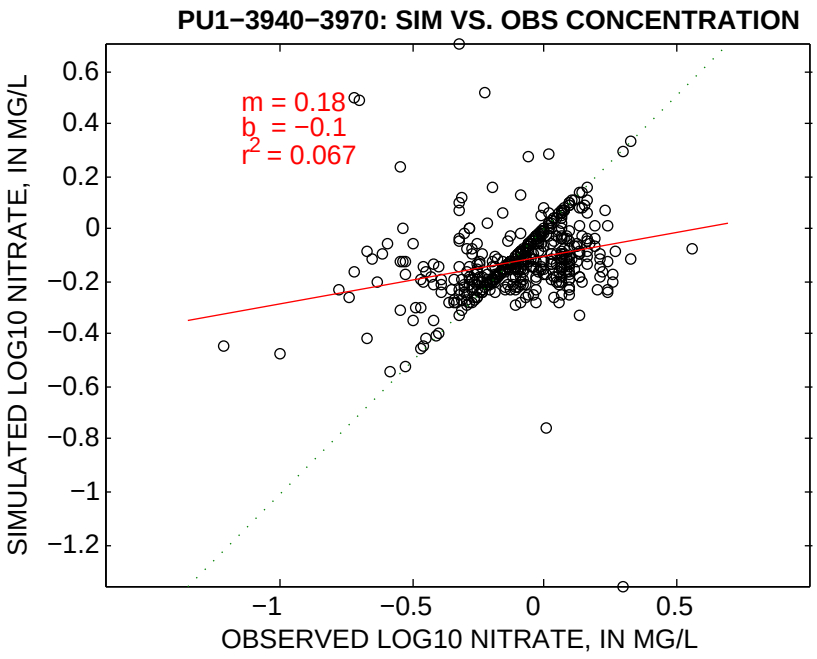
Drive	Directory	Observed
N/A	model	OBS20161101

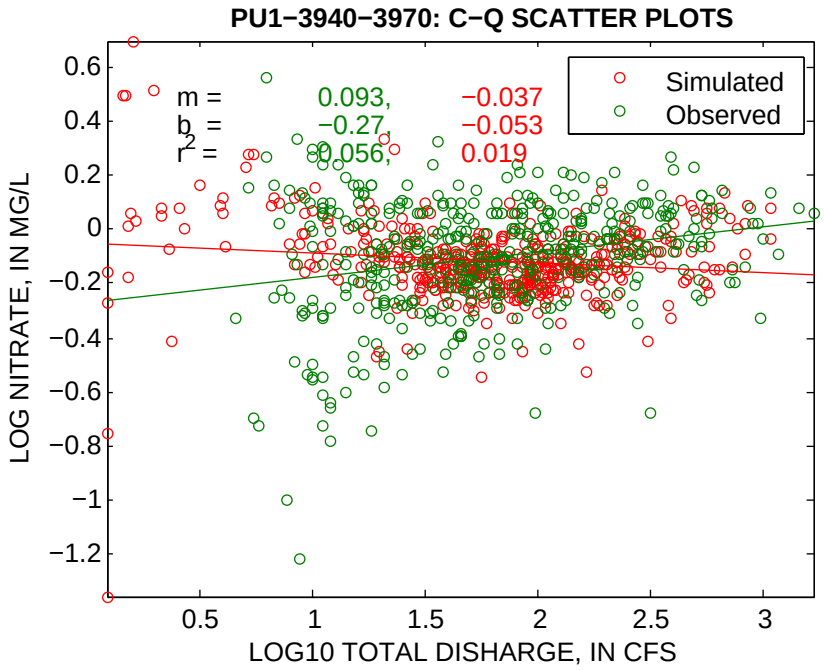
STATISTICS

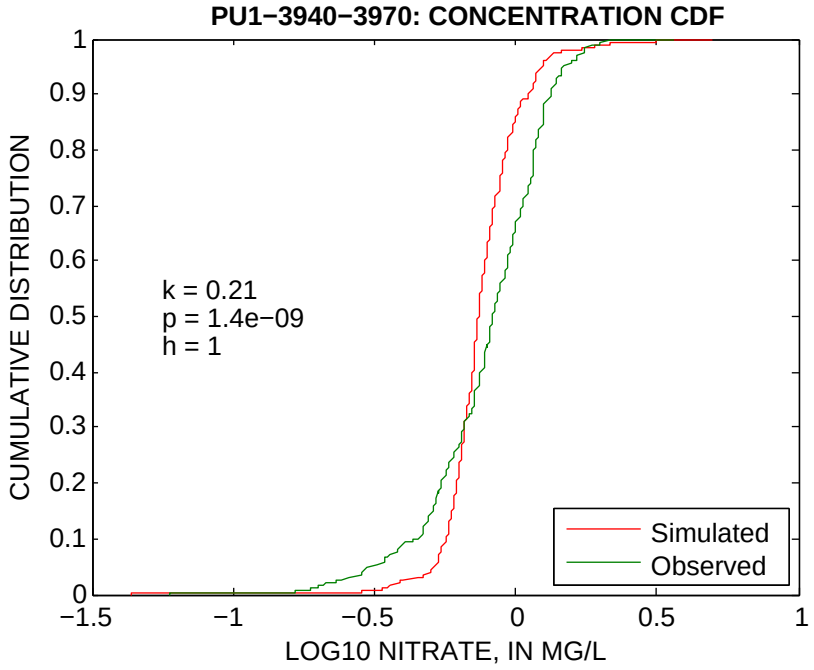
	n	observe	simulate
		479	449
min		0.06	0
		-1.22185	-0.396087
mean		0.888711	0.772978
		-0.102336	-0.114955
media		0.835	0.70152
		-0.0809219	-0.145888
max		3.65	5.474
		0.562293	0.738305
varian		0.160882	0.223246
		0.0451539	0.0210475
JB		0.001	0.001
		0.001	0.001
		ra	log
%		-13.0226	12.3307
err.va		0.450225	0.0741371
rel.std.err		2.79849	1.64188
mod.eff		-1.79849	-0.641876

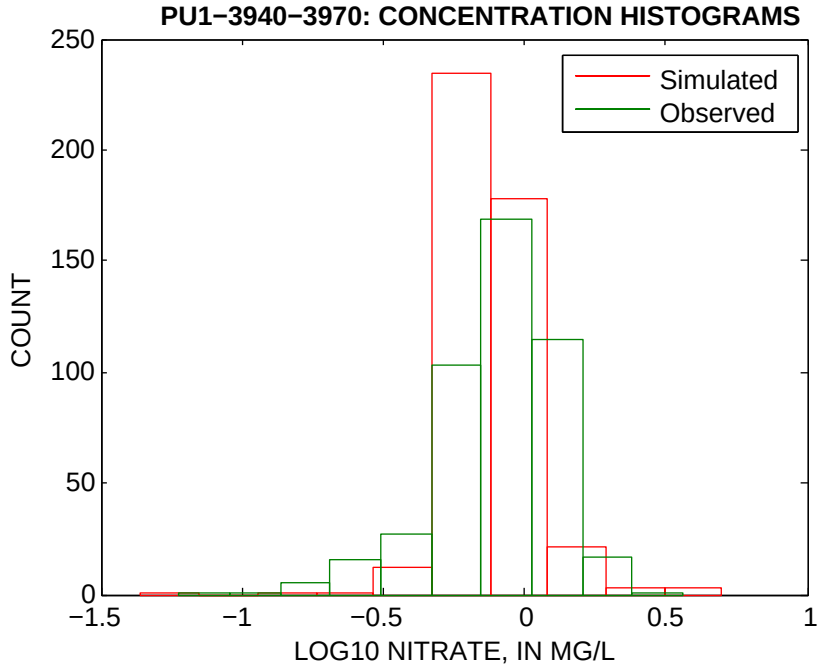
VERSION 2.1

ALL DATA
LOG10

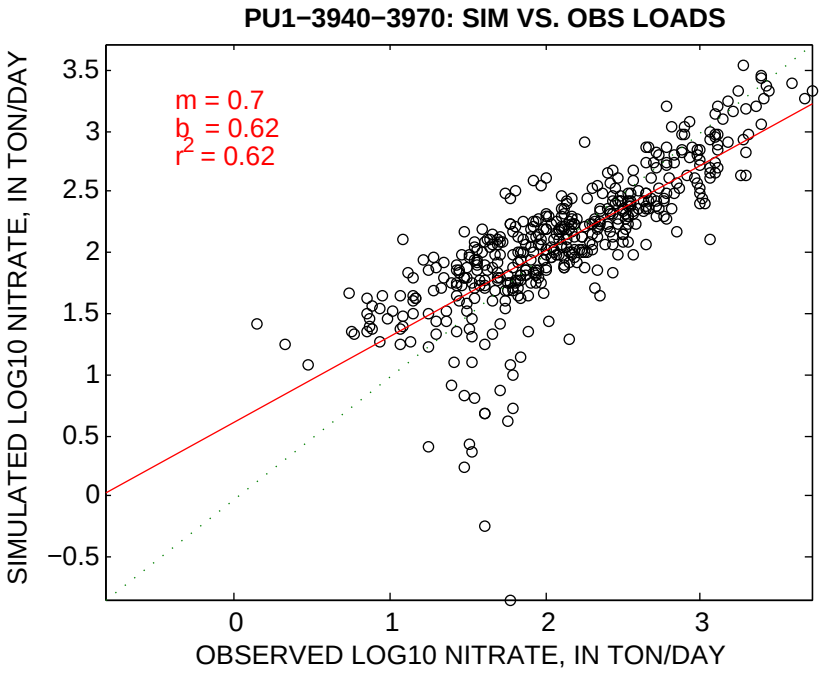


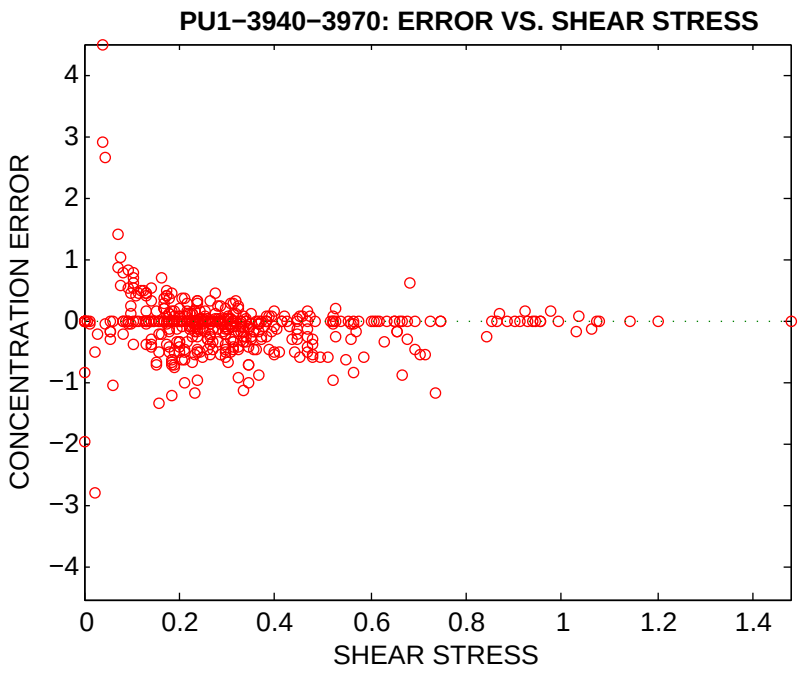


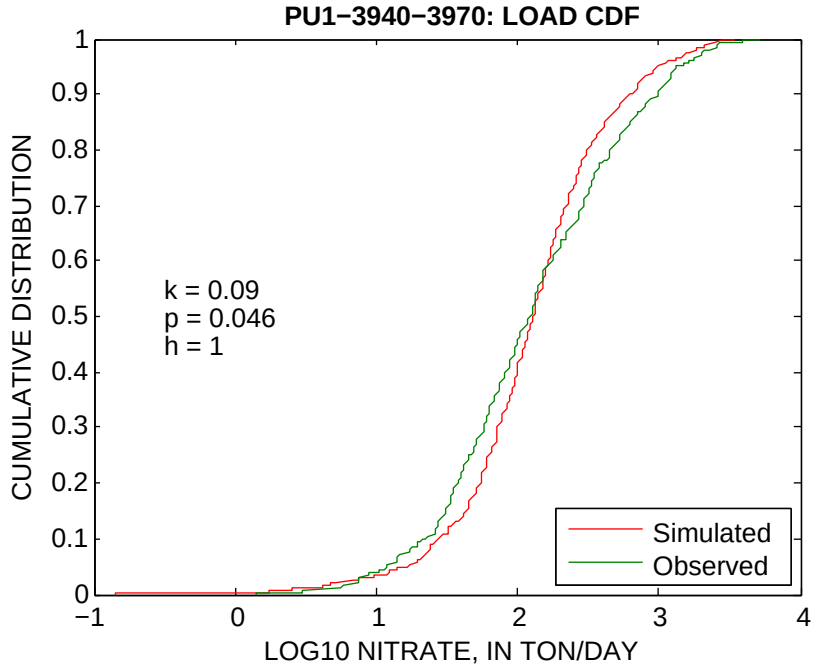


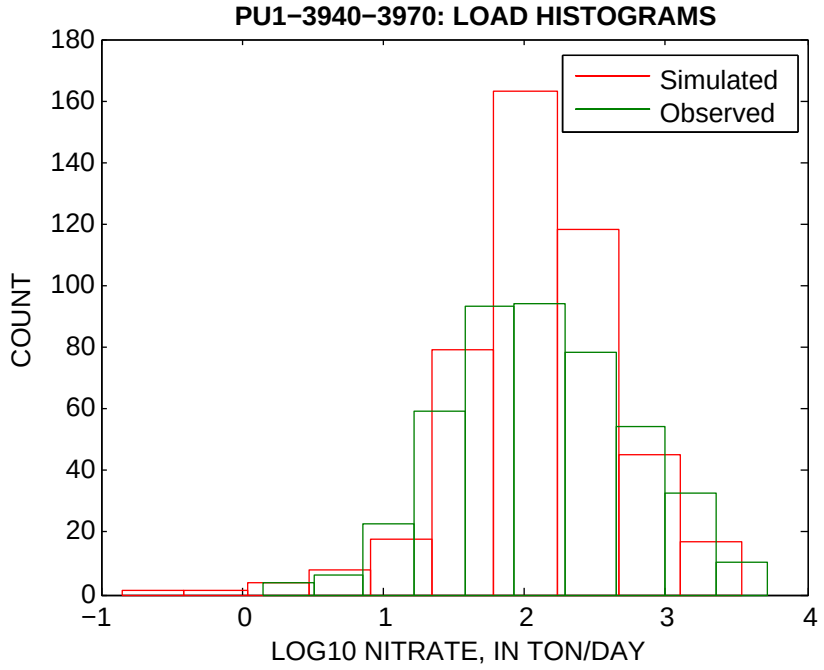


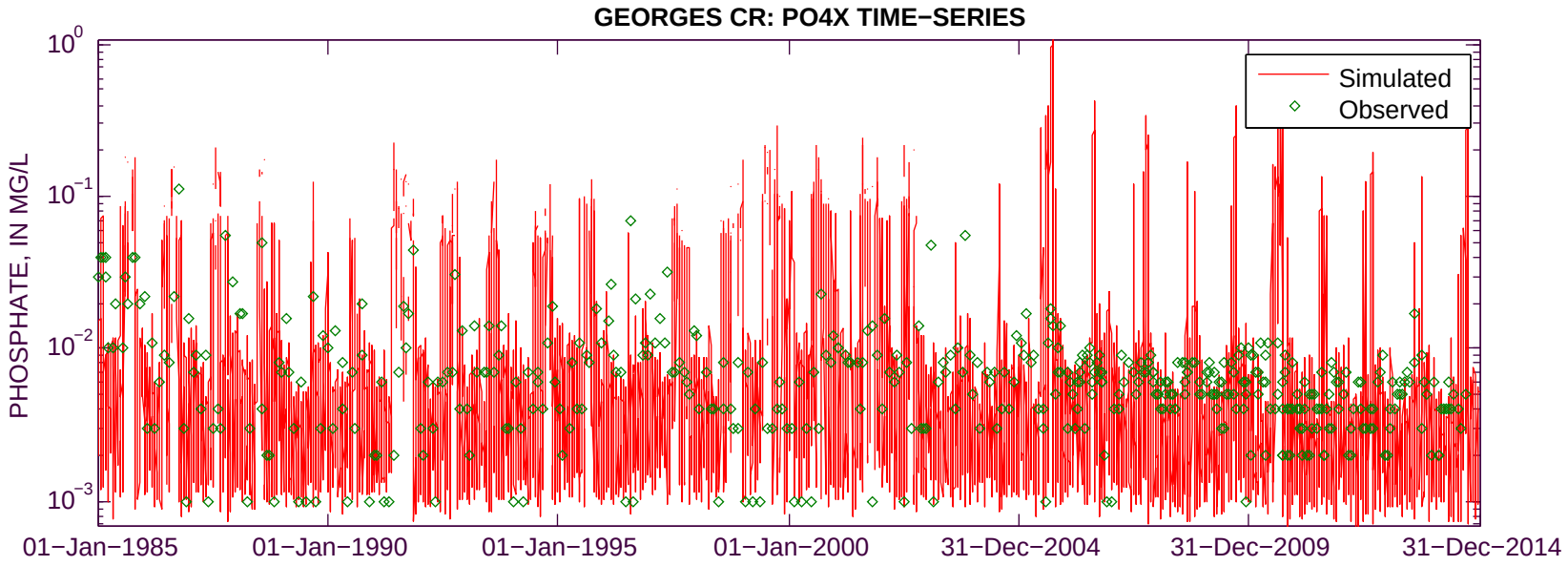
LOAD DATA
LOG10

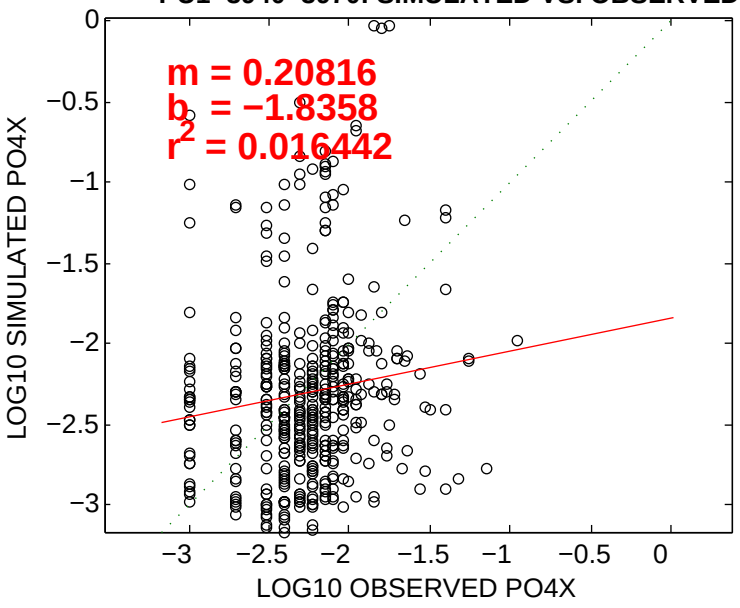


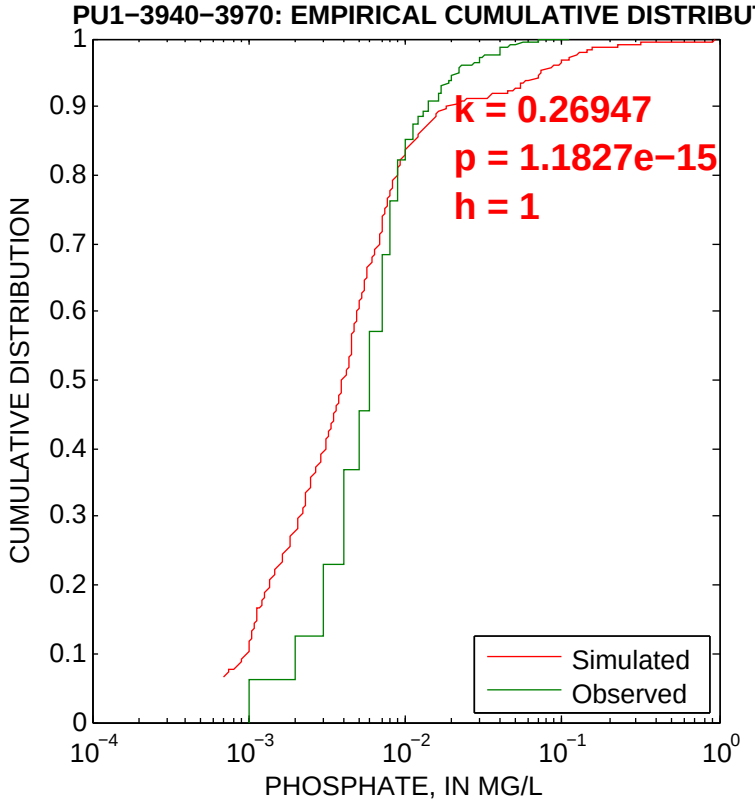












DATA SELECTION

scenario: P620171001WQ | file: PO4X.calib

plot: PO4X - phosphate

Dates: 1/1/1985 – 12/31/201

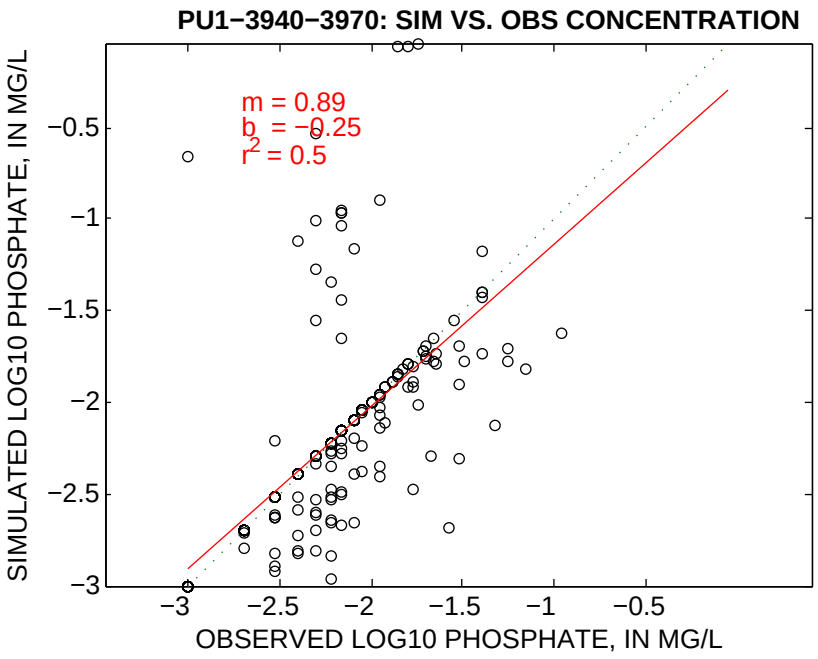
Drive: N/A | Directory: model | Observed: OBS20161101

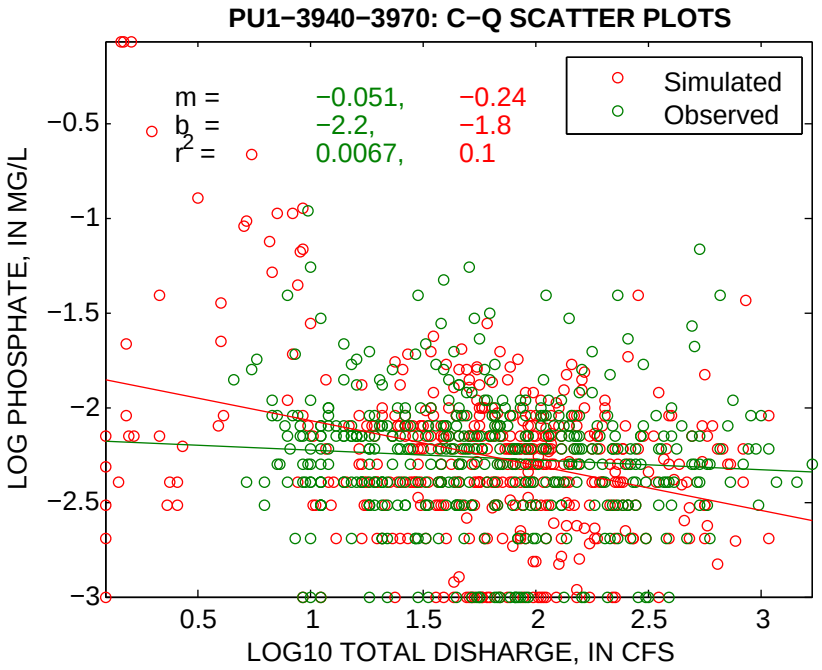
STATISTICS

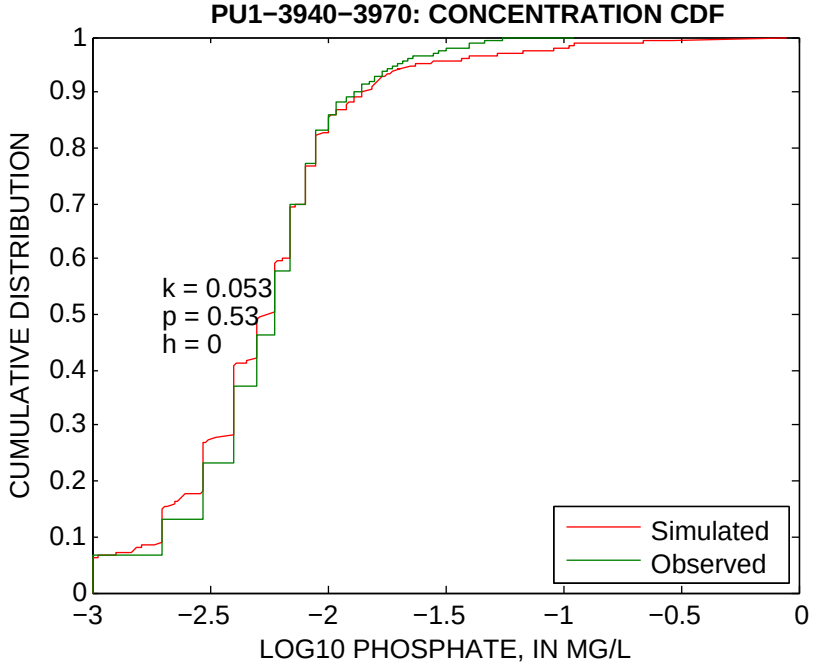
	observe	simulate
n	475	445
min	0.001 -3	0 -3.17288
mean	0.00786947 -2.26137	0.018205 -2.30651
media	0.006 -2.22185	0.0039983 -2.35219
max	0.111 -0.954677	0.95386 -0.0205154
varian	8.67888e-0 0.114295	0.00643924 0.301199
JB	0.001 0.001	0.001 0.001
	ra	log
%	131.337	1.99626
err.va	0.00654092	0.369954
rel.std.err	75.3659	3.23683
mod.eff	-74.3659	-2.23683

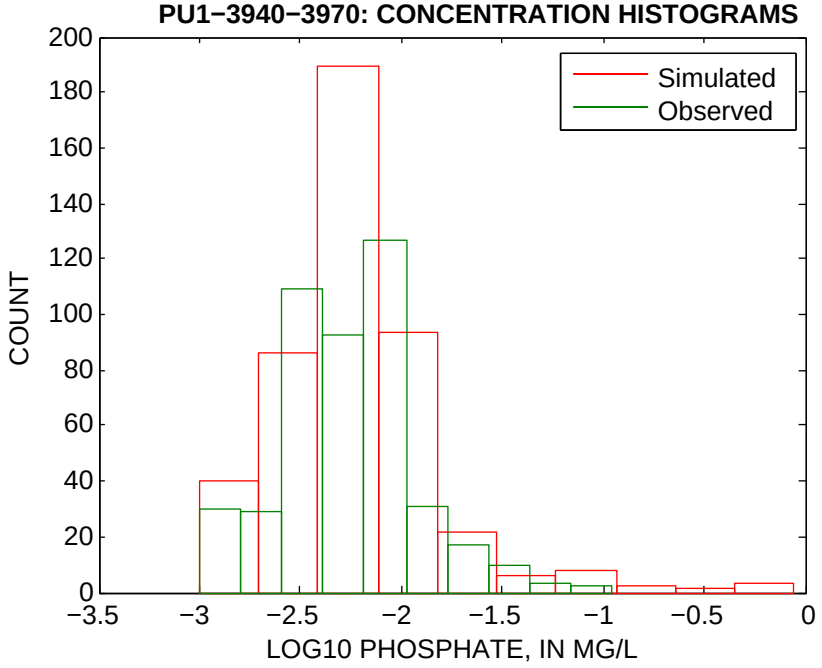
VERSION 2.1

ALL DATA
LOG10

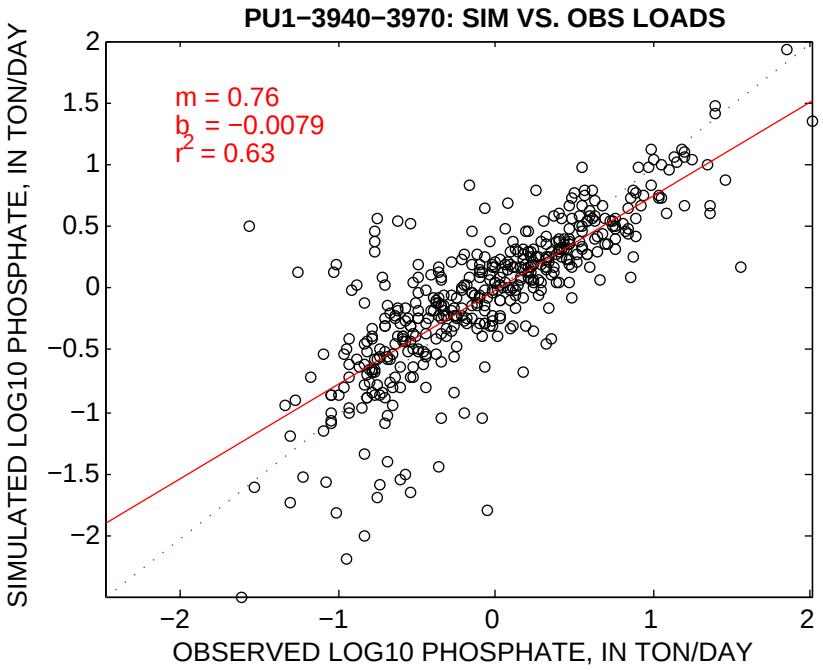


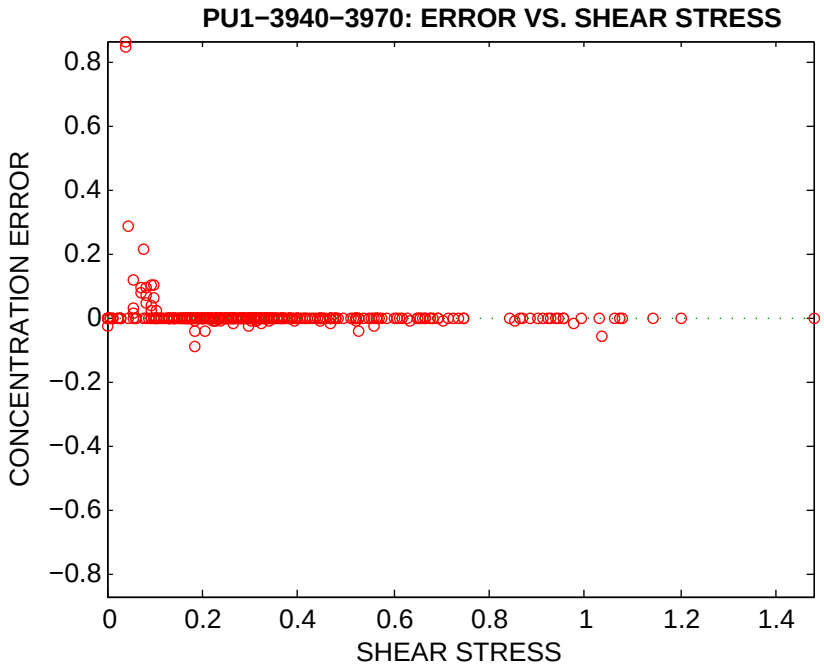


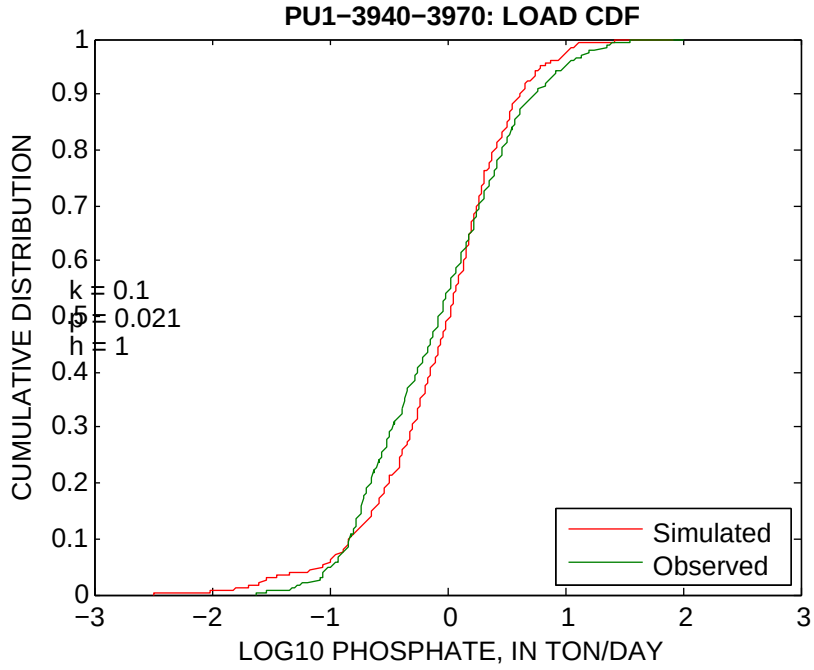


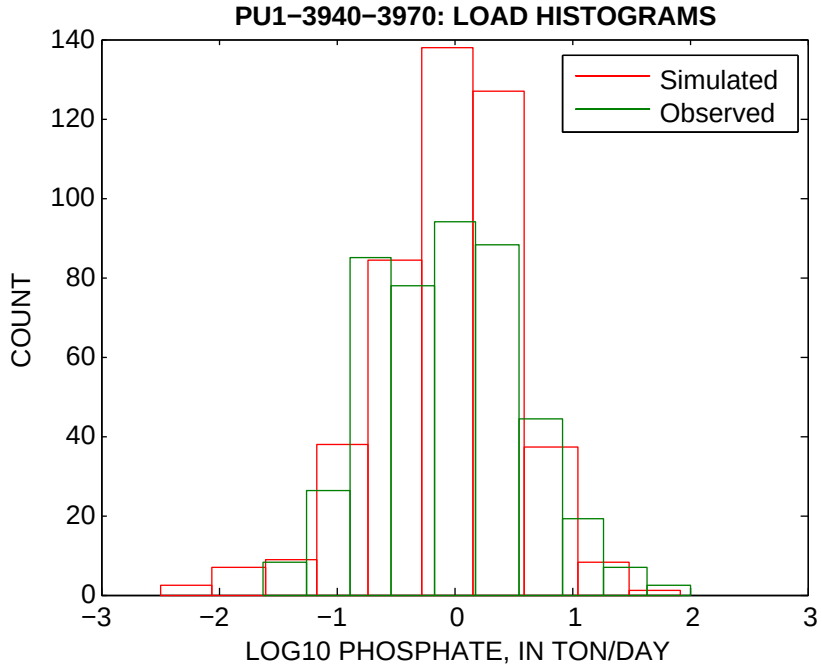


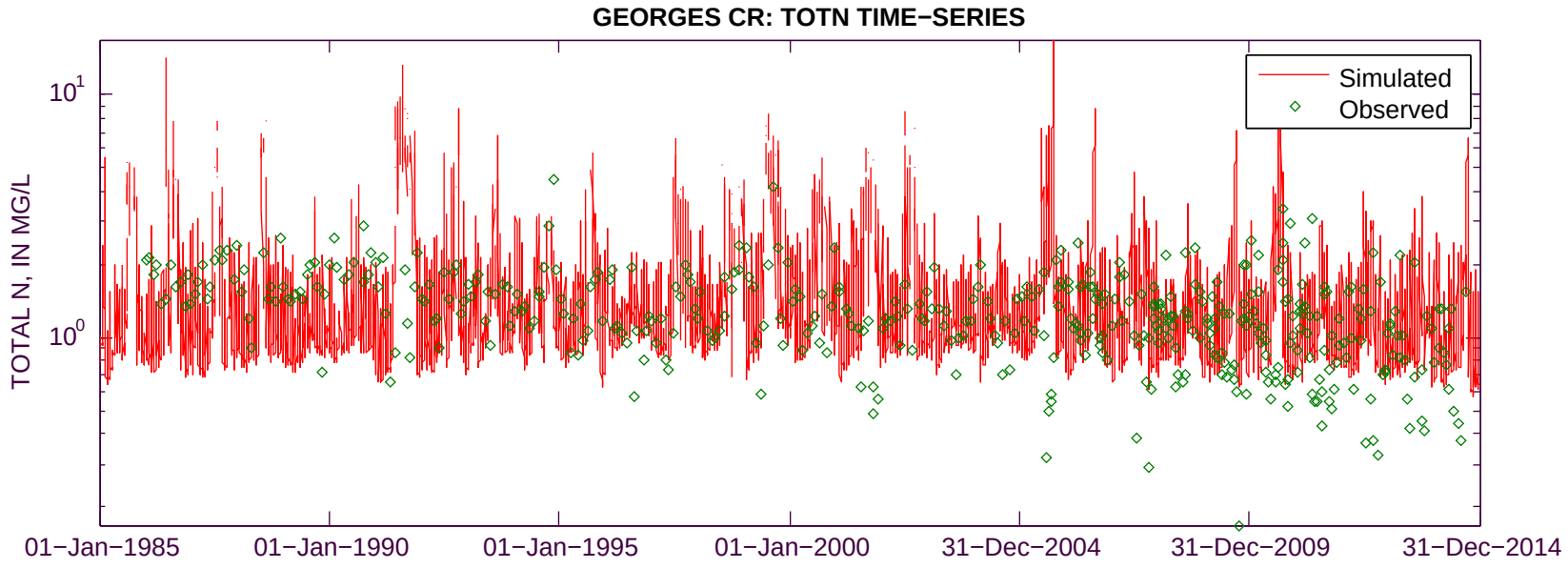
LOAD DATA
LOG10

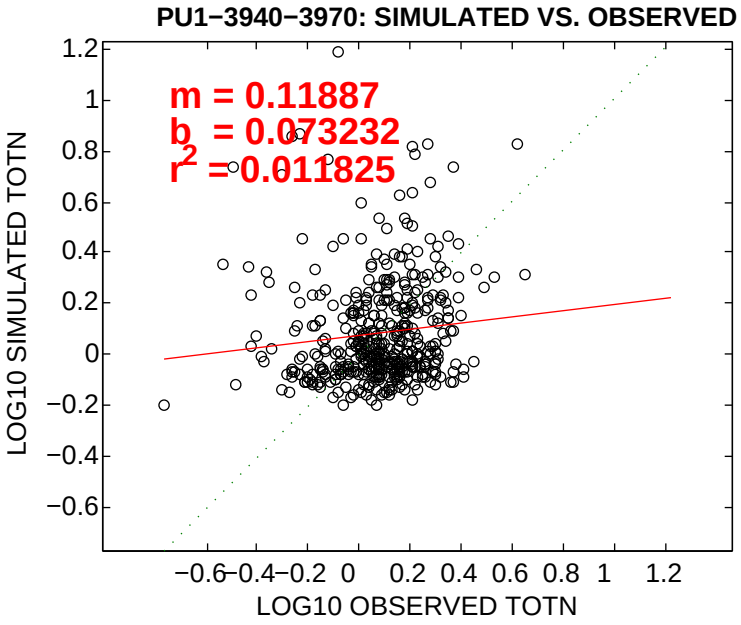


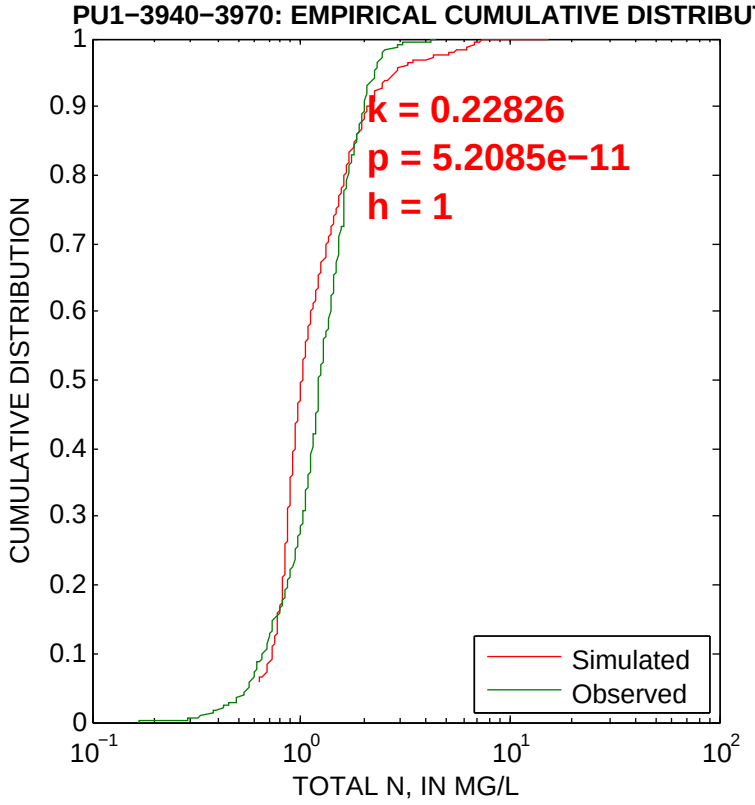












DATA SELECTION

scenario	file
P620171001WQ	TOTN.calib

plot: TOTN - total nitrogen

Dates: 1/1/1985 – 12/31/201

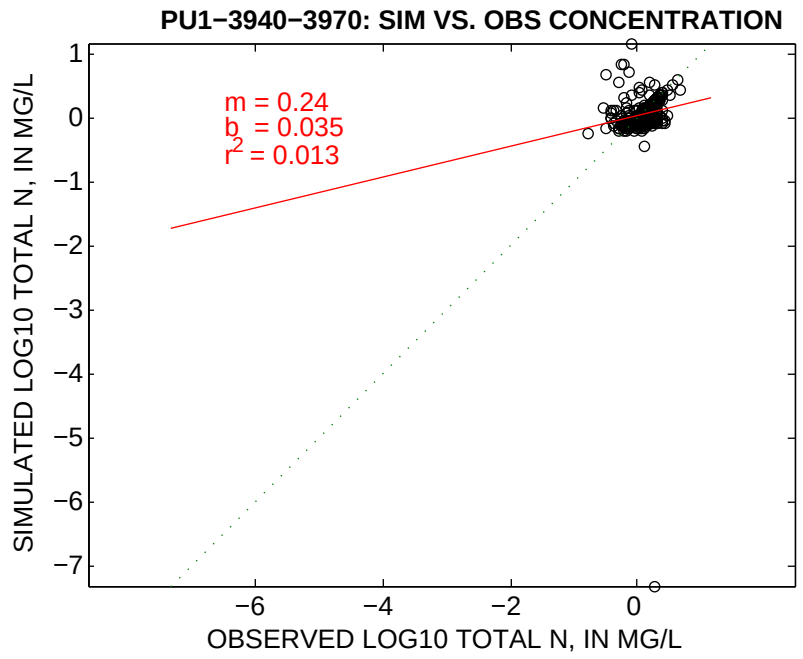
Drive	Directory	Observed
N/A	model	OBS20161101

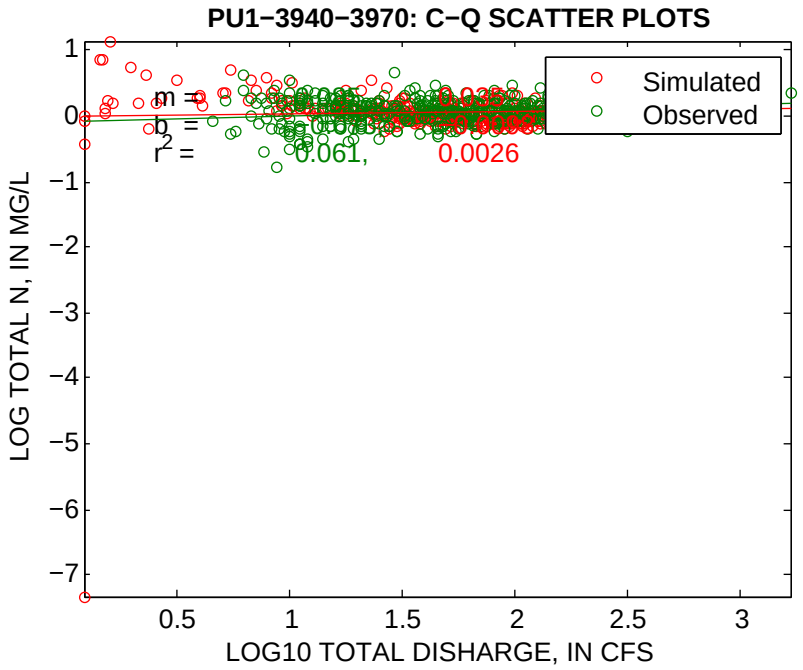
STATISTICS

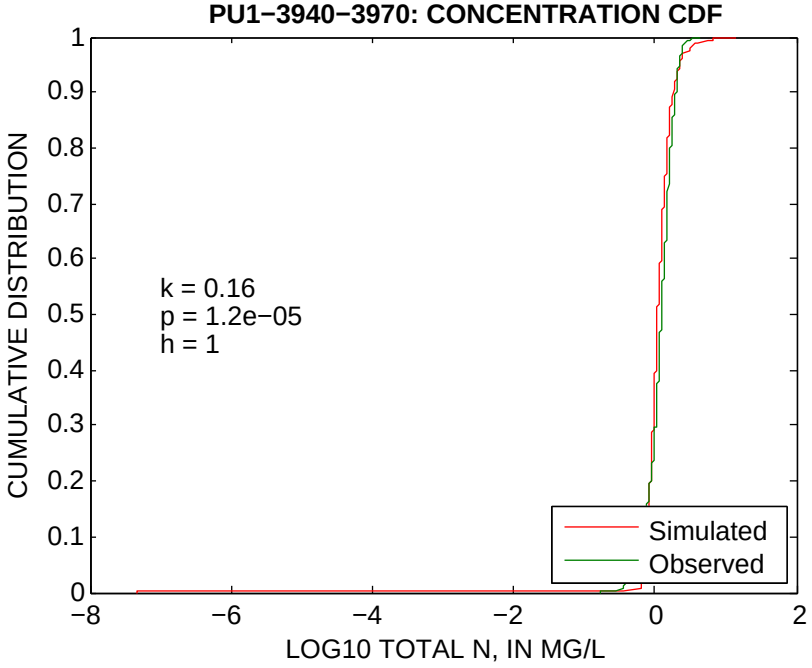
		observe	simulate
n		460	433
min		0.17	0
		-0.769551	-0.202435
mean		1.31206	1.32341
		0.0777229	0.0824706
media		1.2283	1.0132
		0.0891984	0.0162392
max		4.43	15.502
		0.646404	1.19039
varian		0.299141	1.42261
		0.0353707	0.042263
JB		0.001	0.001
		0.001	0.001
		ra	log
%		0.865589	6.1086
err.va		1.63013	0.0692476
rel.std.err		5.44937	1.95777
mod.eff		-4.44937	-0.95777

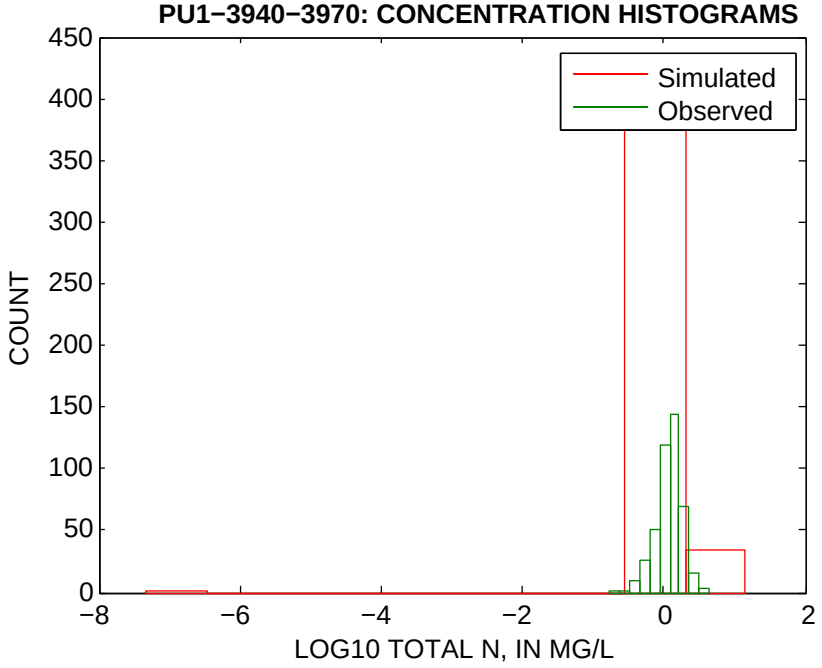
VERSION 2.1

ALL DATA
LOG10

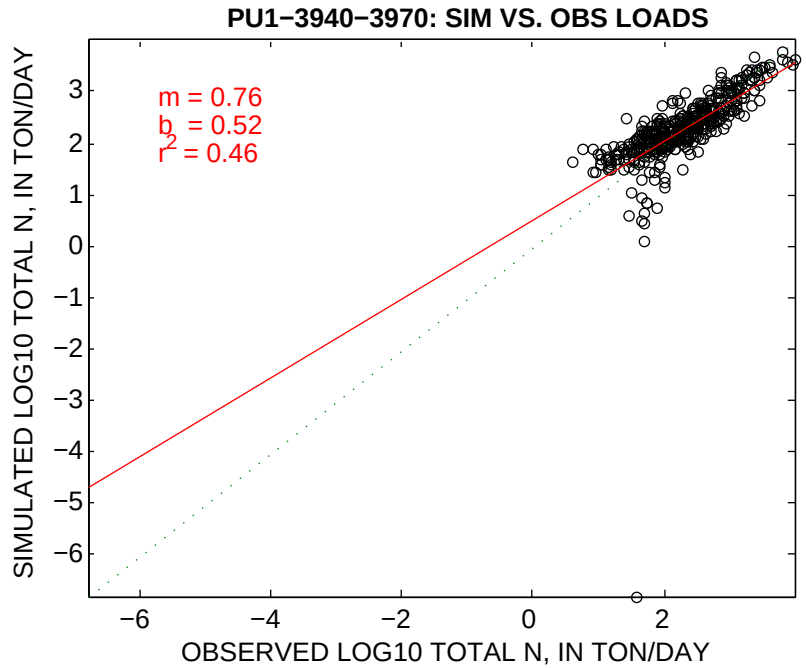


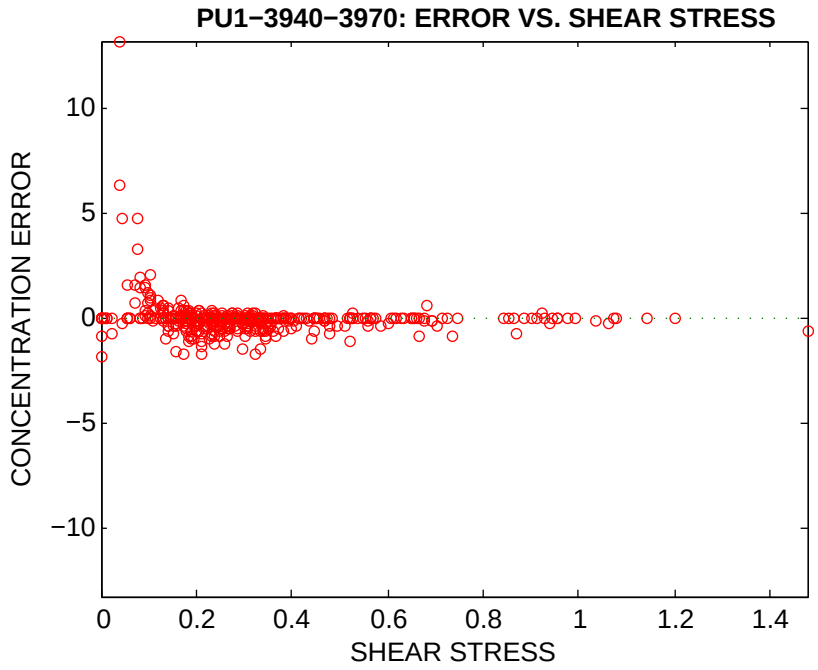


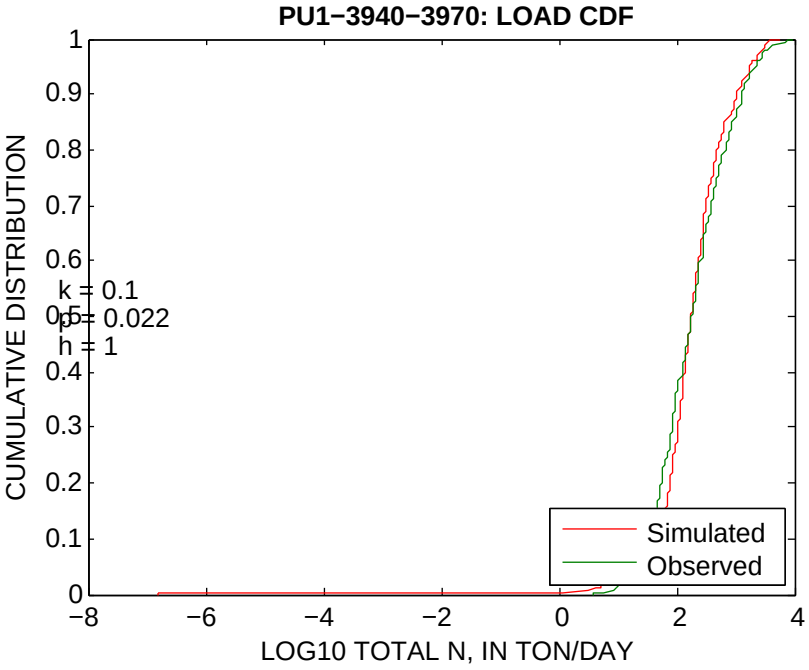


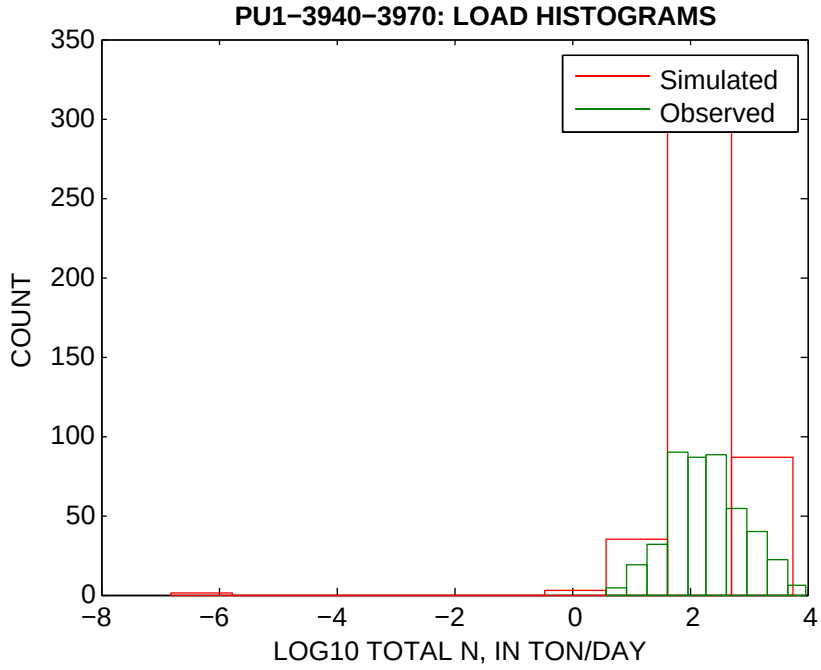


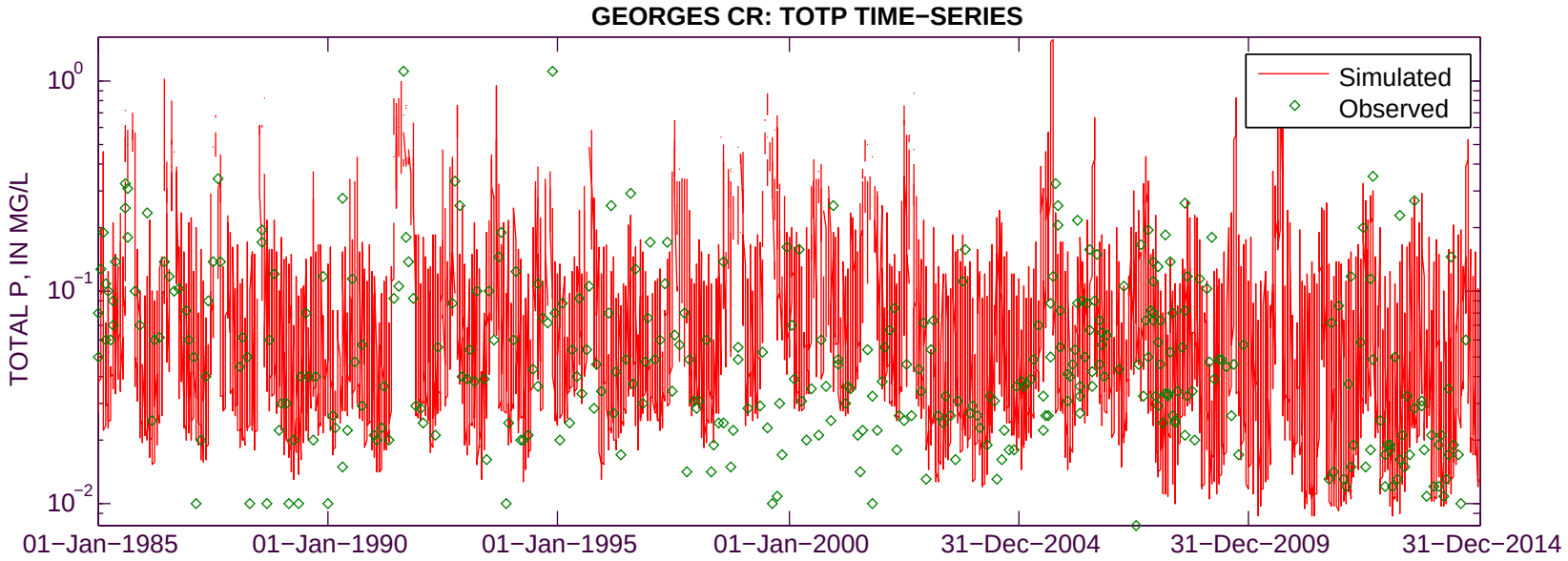
LOAD DATA
LOG10

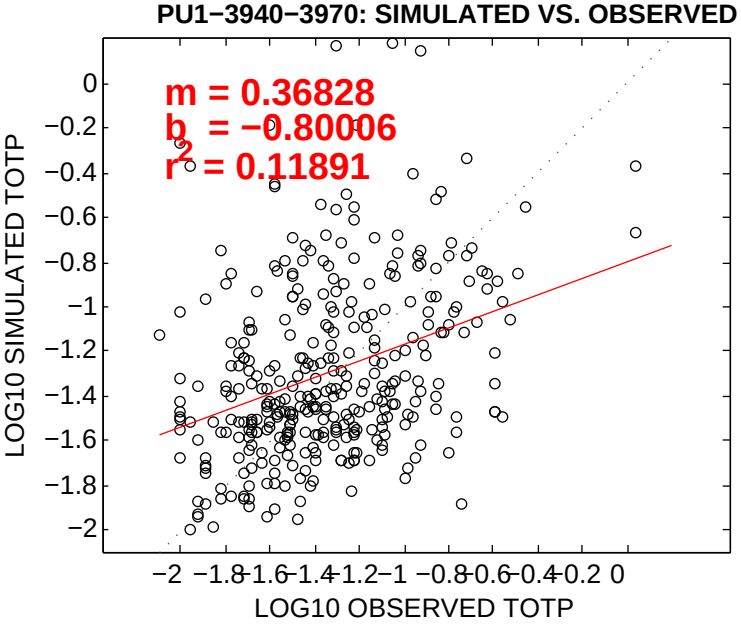


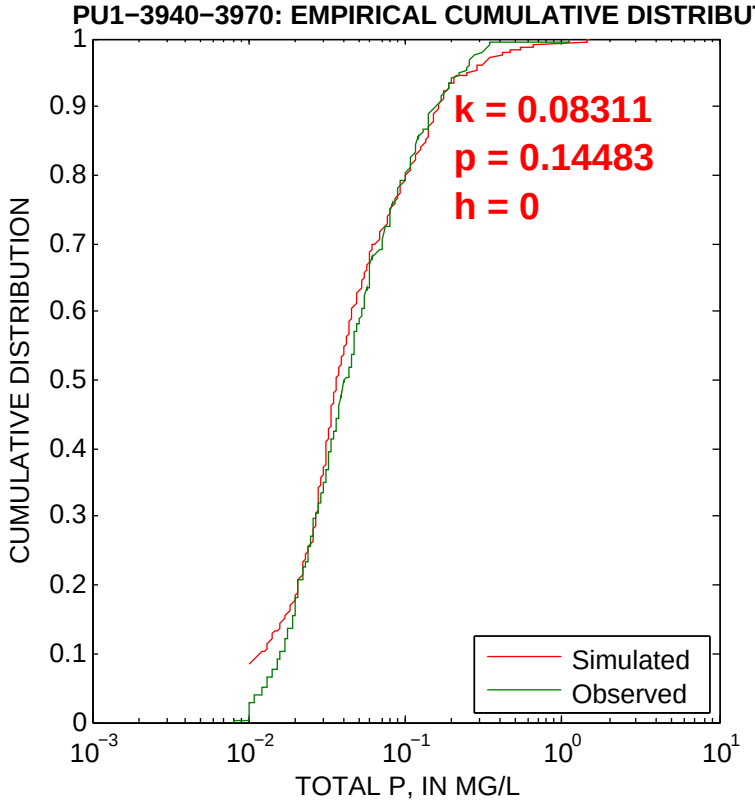












DATA SELECTION

scenario	file
P620171001WQ	TOTP.calib

plot: TOTP - total phosphorus

Dates 1/1/1985 12/31/201

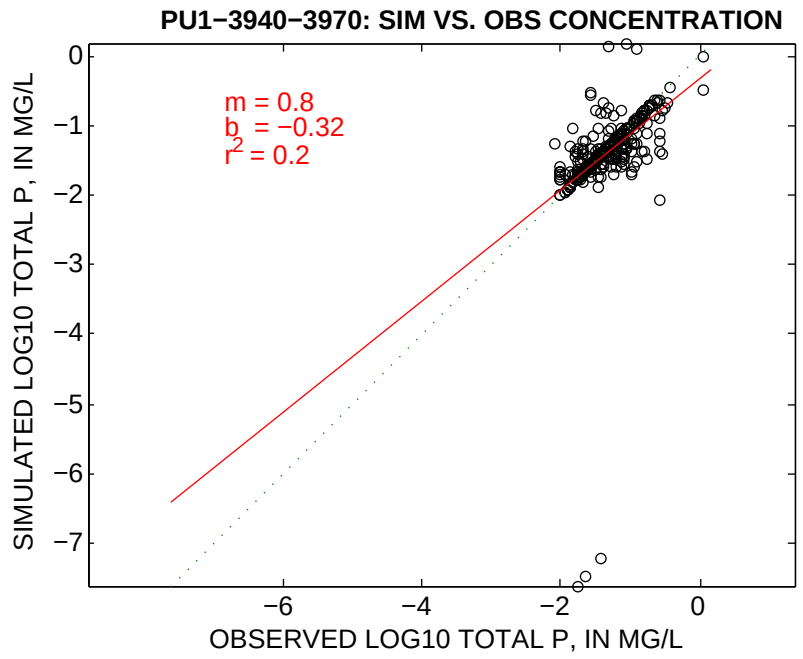
Drive	Directory	Observed
N/A	model	OBS20161101

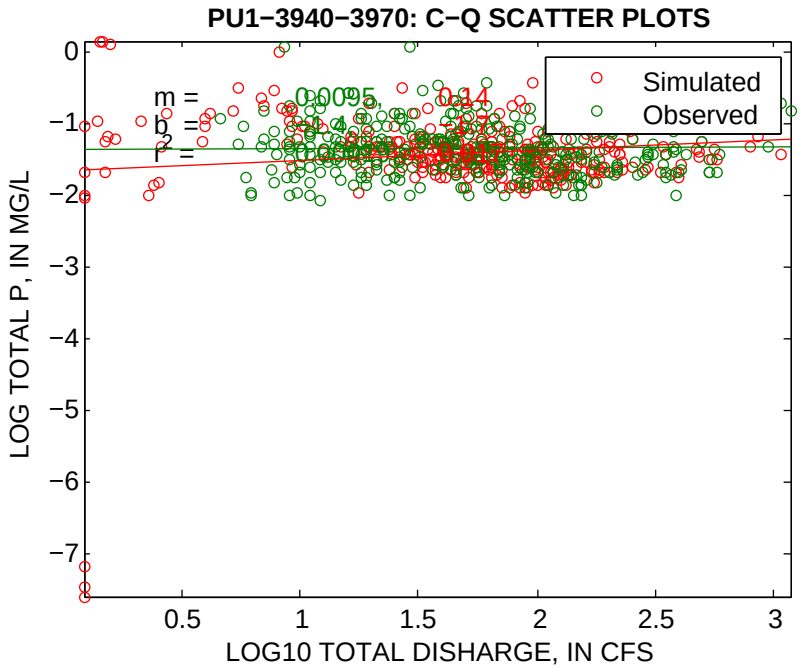
STATISTICS

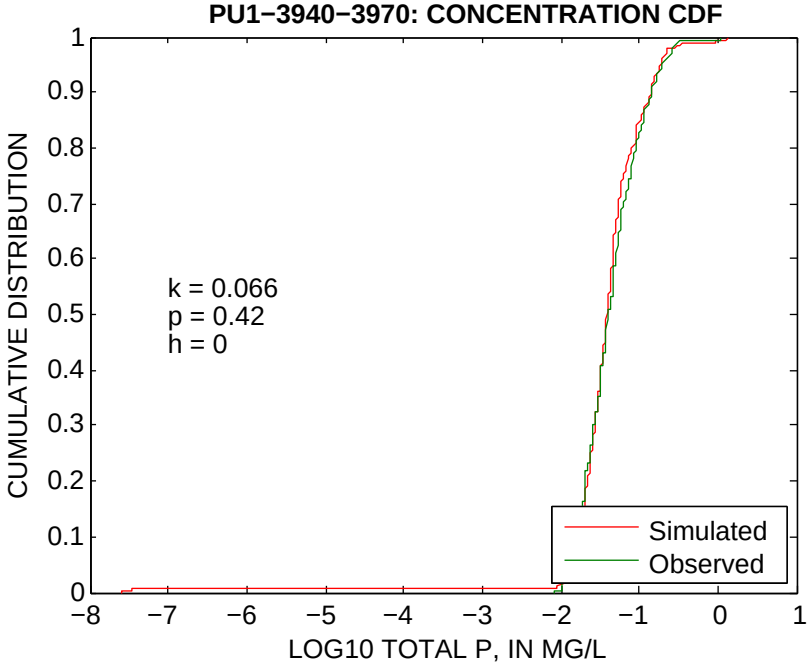
	n	373	342
		observe	simulate
min		0.008	0
		-2.09691	-1.99913
mean		0.0715285	0.0795587
		-1.34668	-1.29601
media		0.042	0.036417
		-1.39258	-1.38788
max		1.1	1.512
		0.0413927	0.179552
varian		0.00999162	0.0231778
		0.134946	0.15392
JB		0.001	0.001
		0.003032	0.001
		ra	log
%		11.2266	-3.76264
err.va		0.0288459	0.192047
rel.std.err		2.88701	1.42313
mod.eff		-1.88701	-0.423134

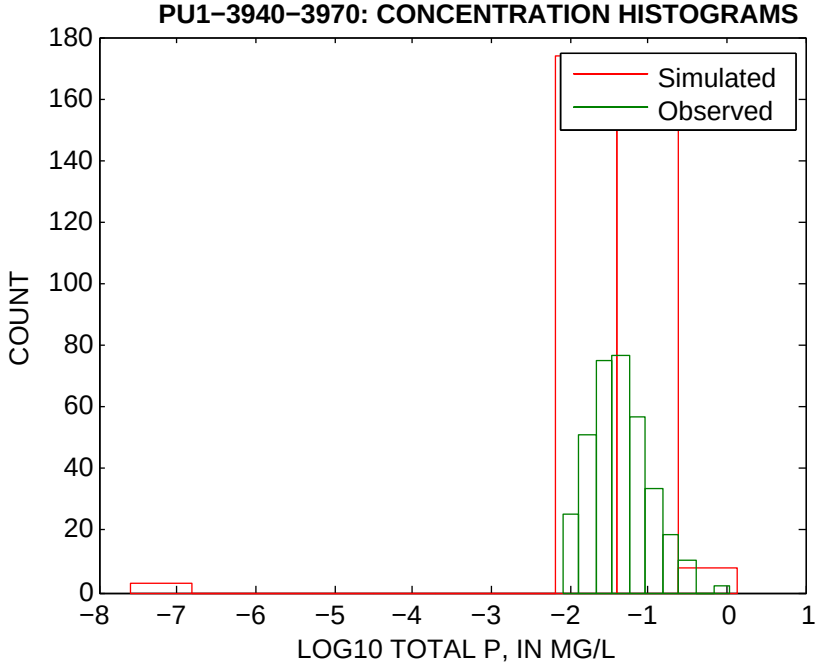
VERSION 2.1

ALL DATA
LOG10

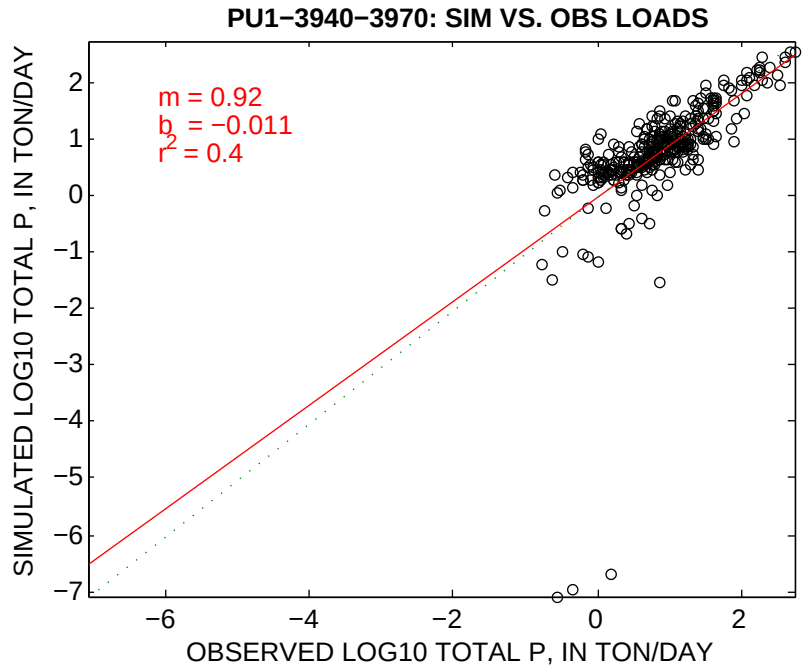


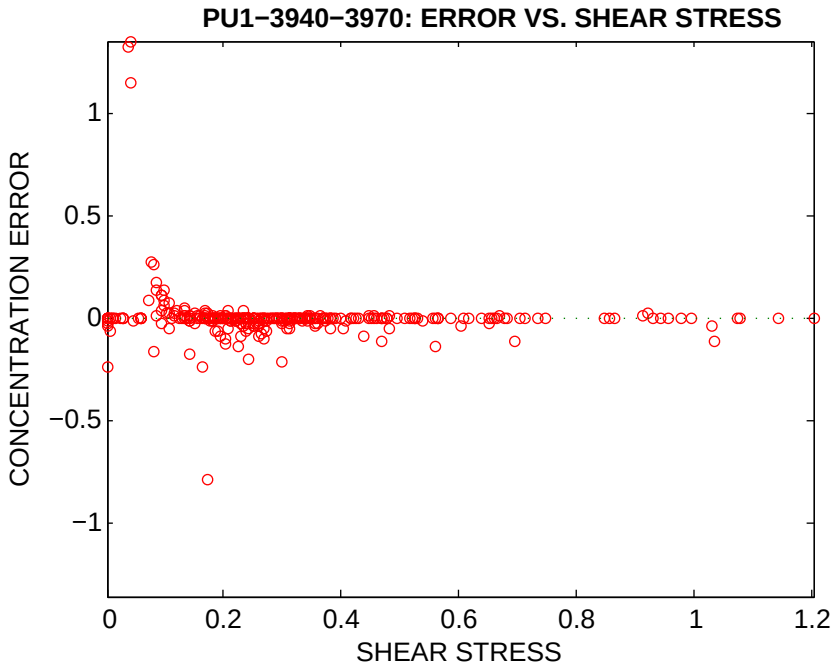


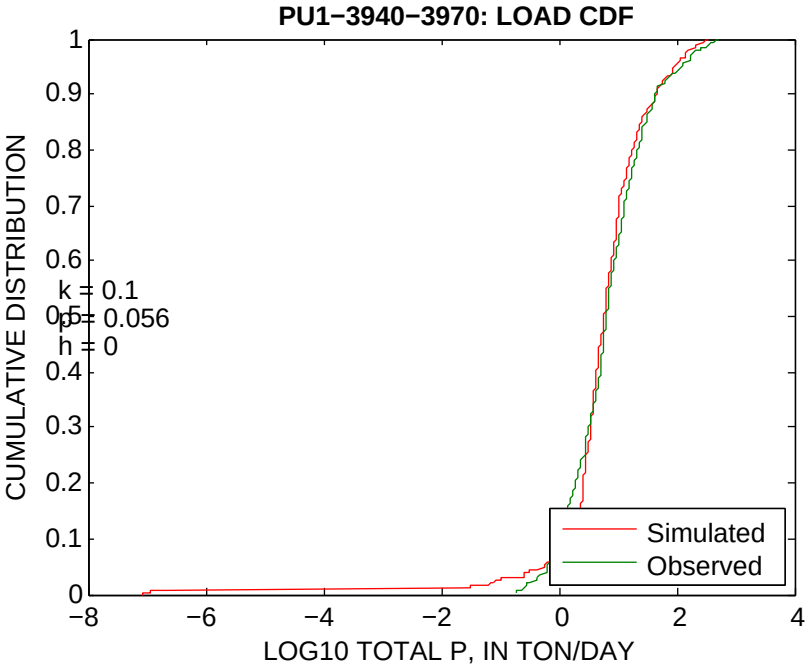


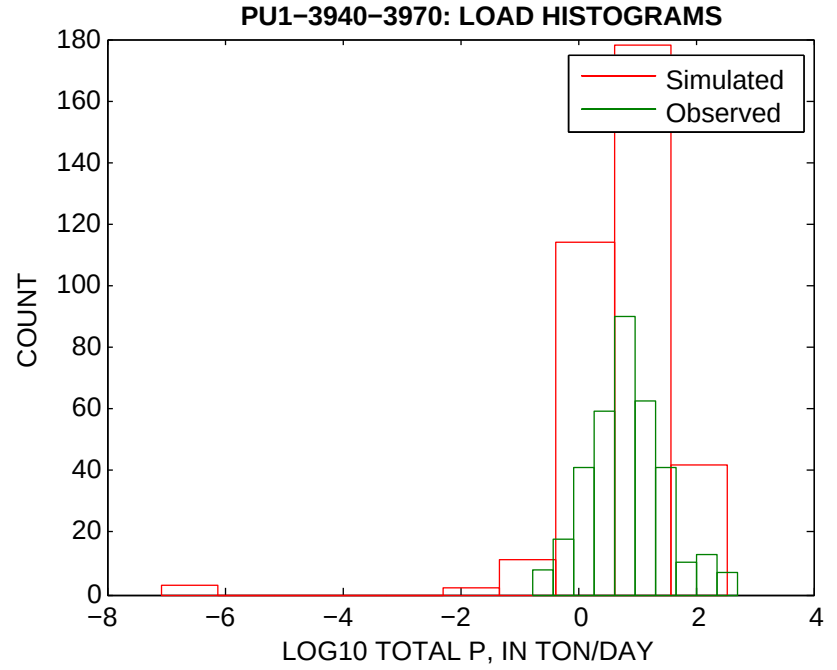


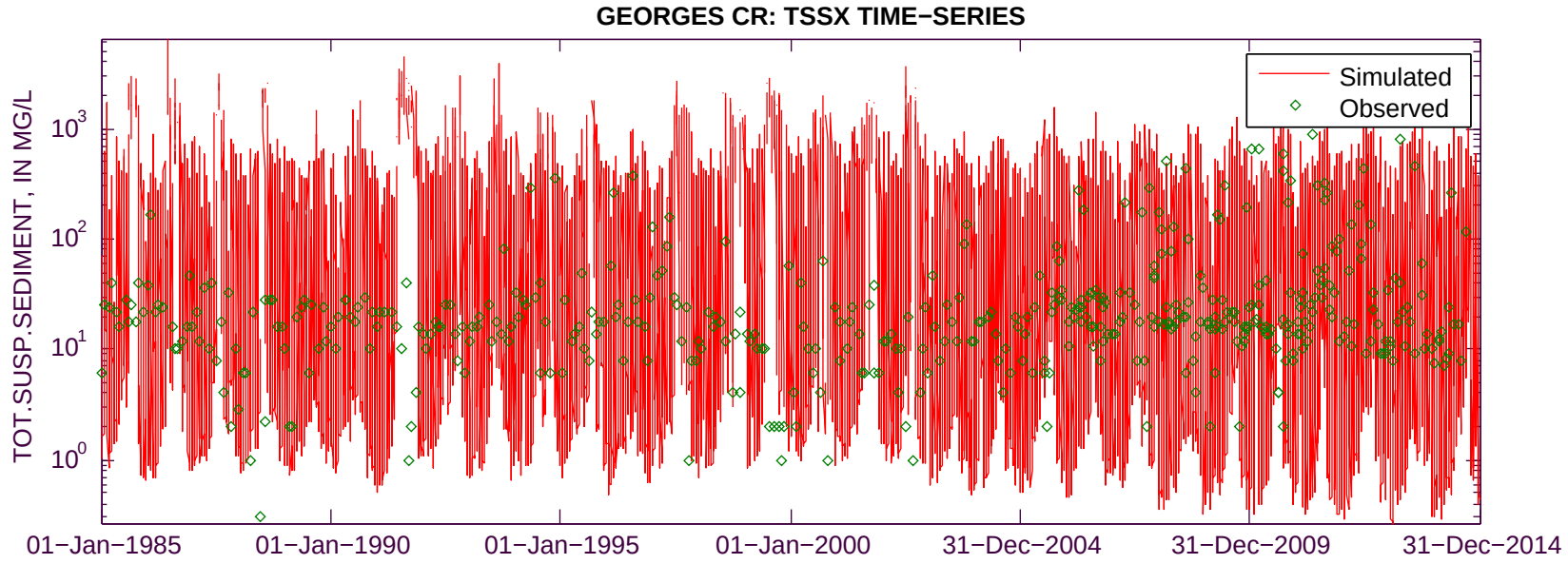
LOAD DATA
LOG10

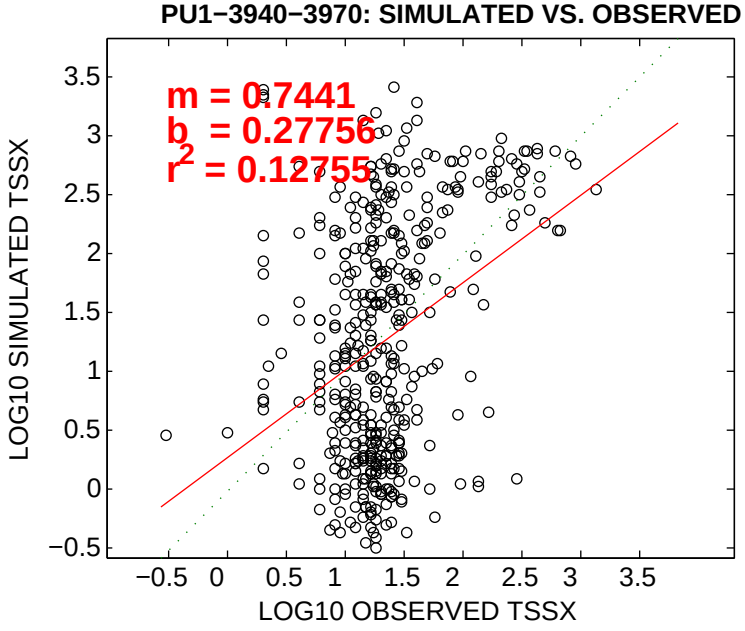


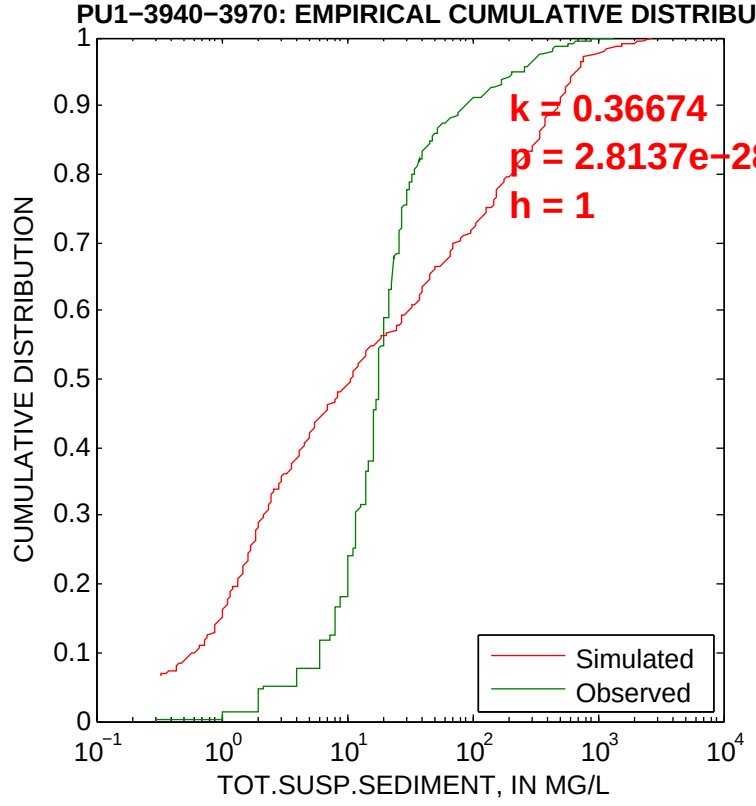












DATA SELECTION

scenario: P620171001WQ | file: TSSX.calib

plot: TSSX - total suspended ...

Dates: 1/1/1985 – 12/31/201

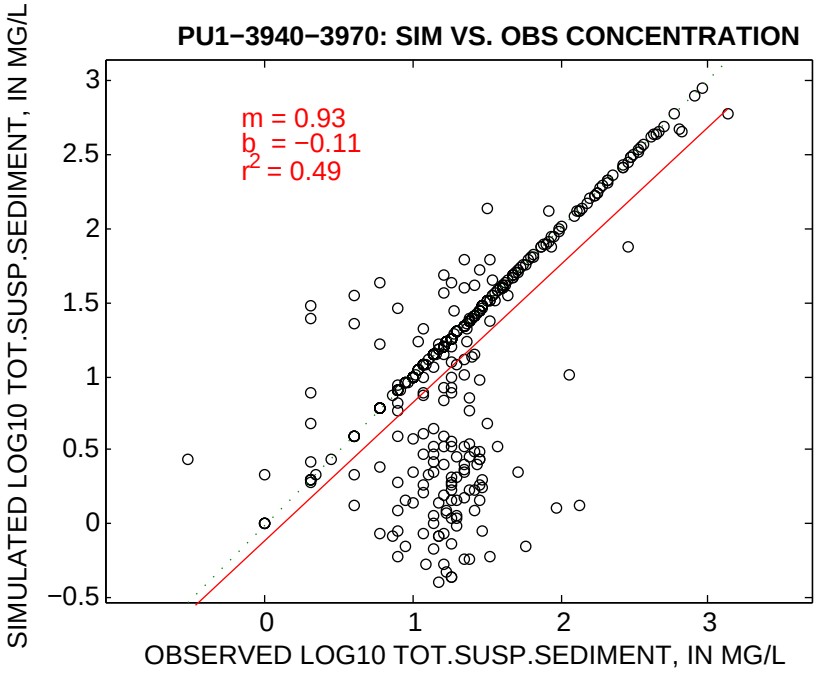
Drive | Directory: N/A | model | Observed: OBS20161101

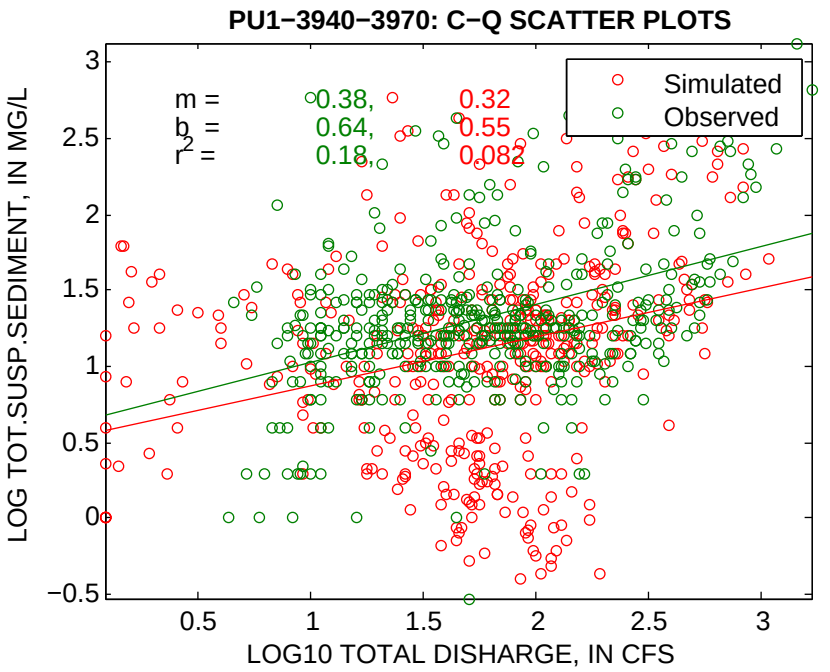
STATISTICS

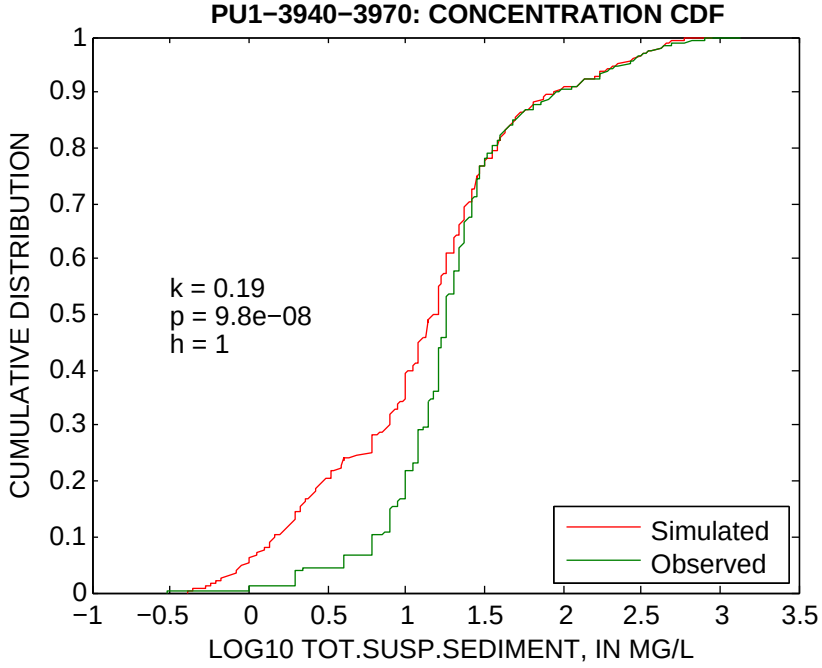
n	469	438
	observe	simulate
min	0.3	0
	-0.522879	-0.488371
mean	48.5877	144.728
	1.33509	1.271
media	18	11.226
	1.25527	1.14771
max	1355	2662.4
	3.13194	3.42527
varian	13556.4	103547
	0.238176	1.03391
JB	0.001	0.001
	0.001	0.001
	ra	log
%	197.869	-4.80022
err.va	108415	0.921749
rel.std.err	7.99734	3.87003
mod.eff	-6.99734	-2.87003

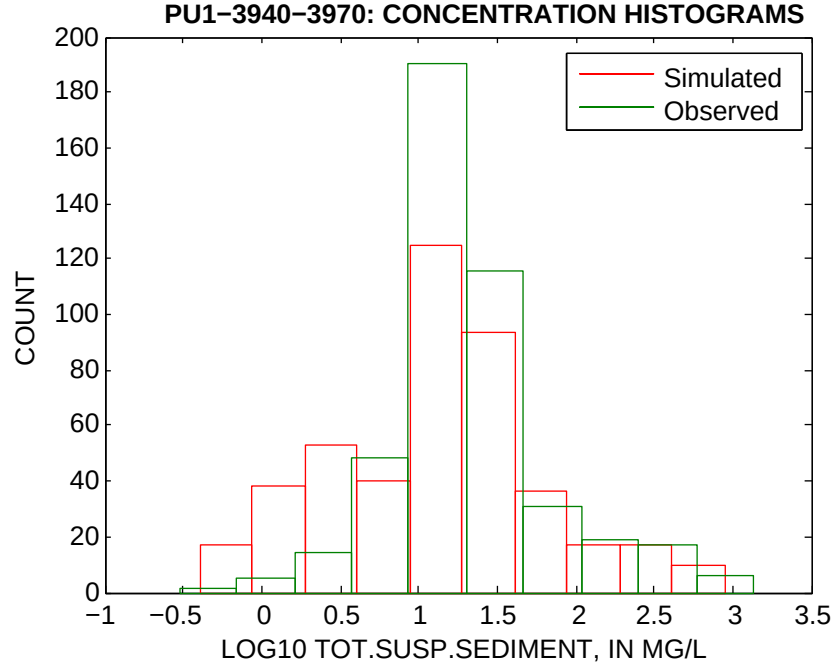
VERSION

ALL DATA
LOG10

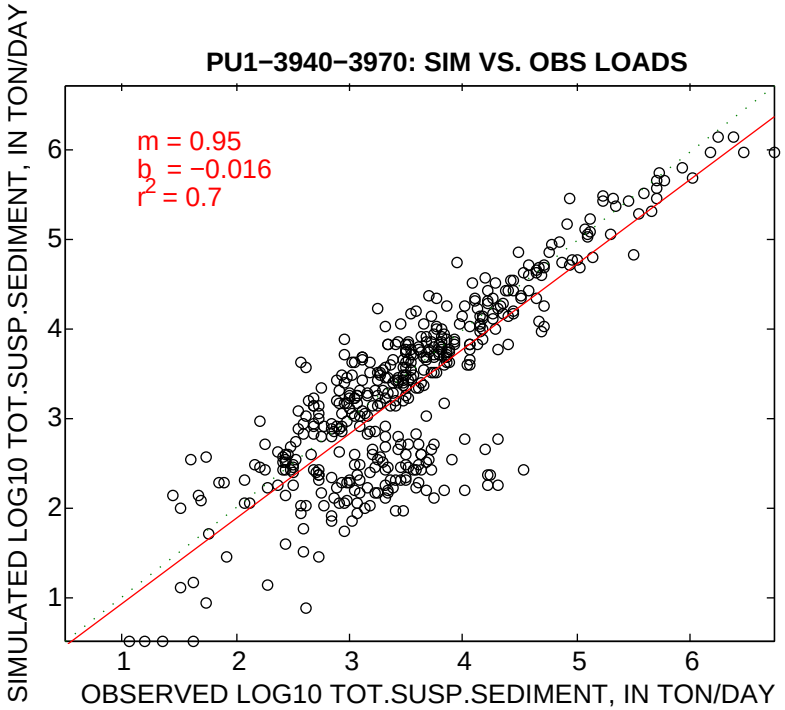


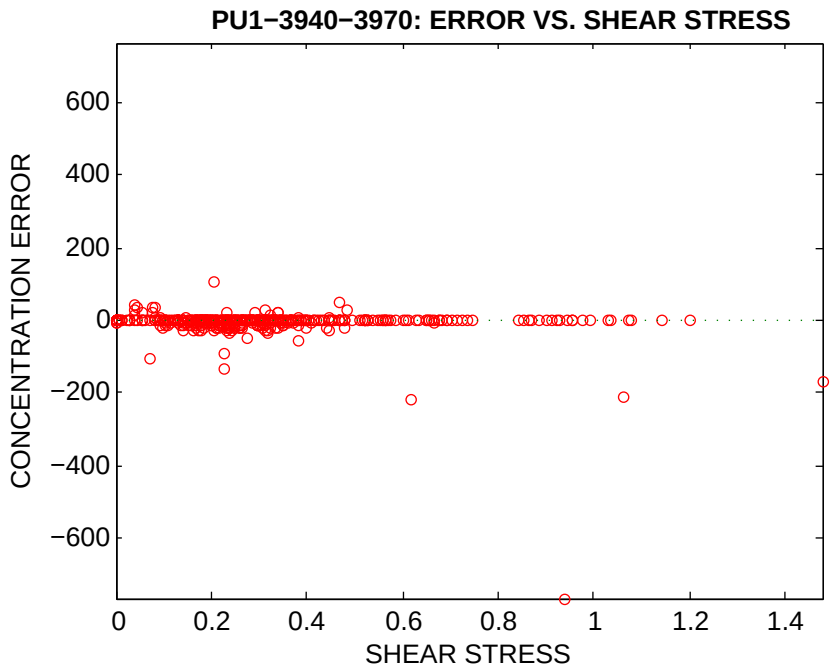


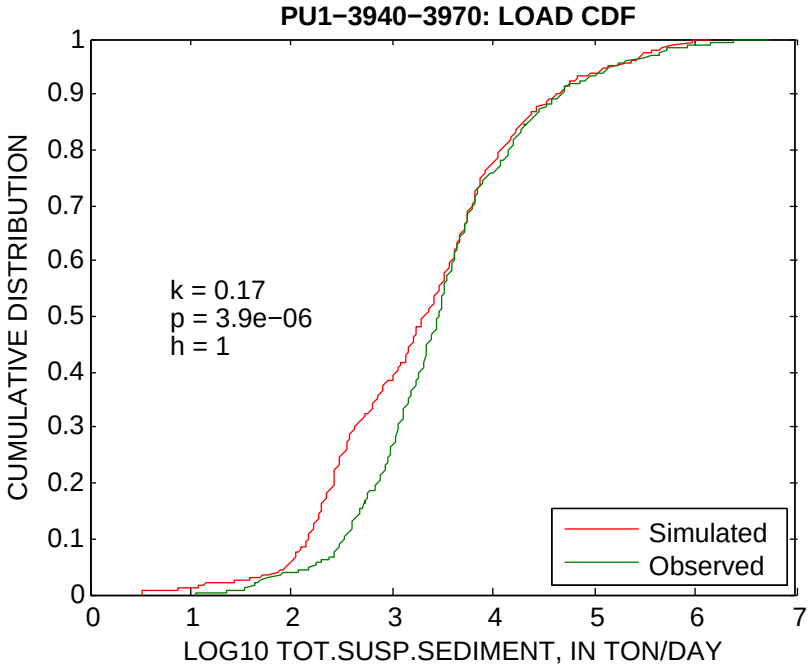


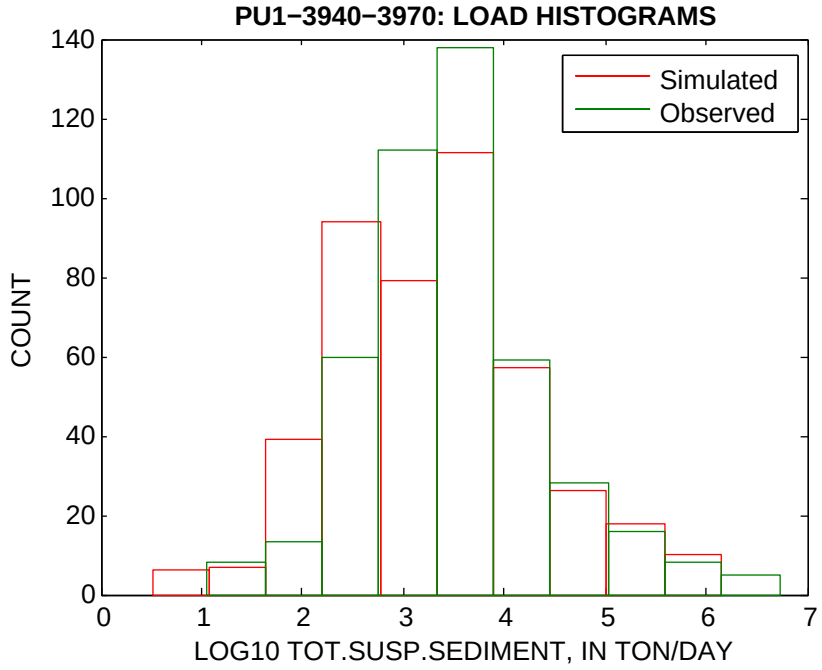


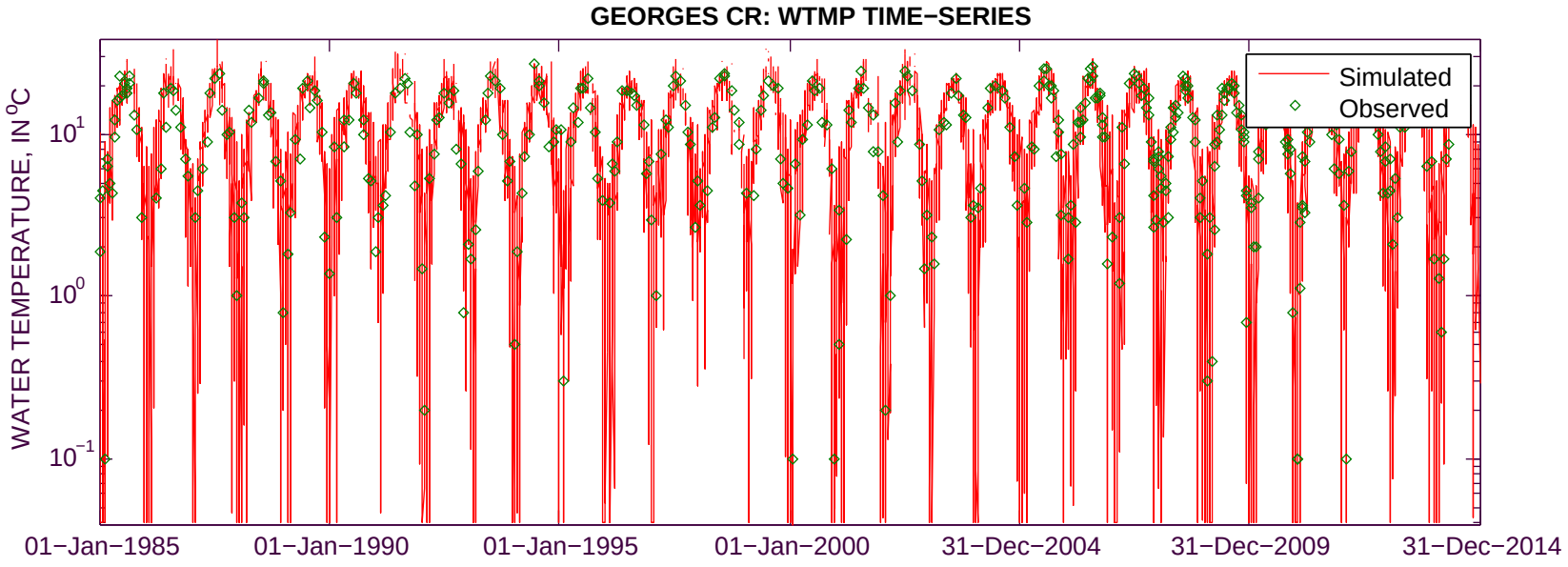
LOAD DATA
LOG10

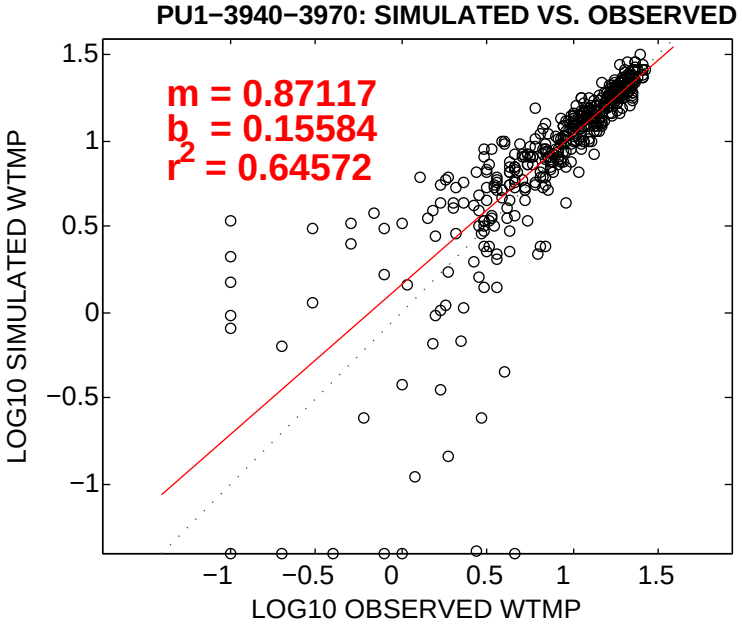


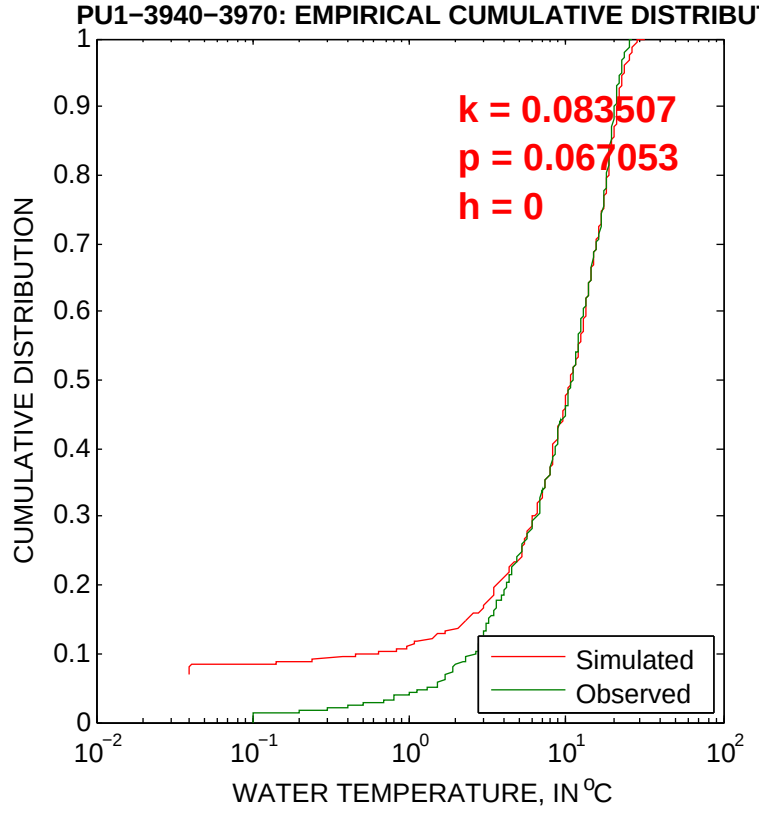












DATA SELECTION

scenario	file
P620171001WQ	WTMP.calib

plot: WTMP - water tempera...

Dates: 1/1/1985 – 12/31/201

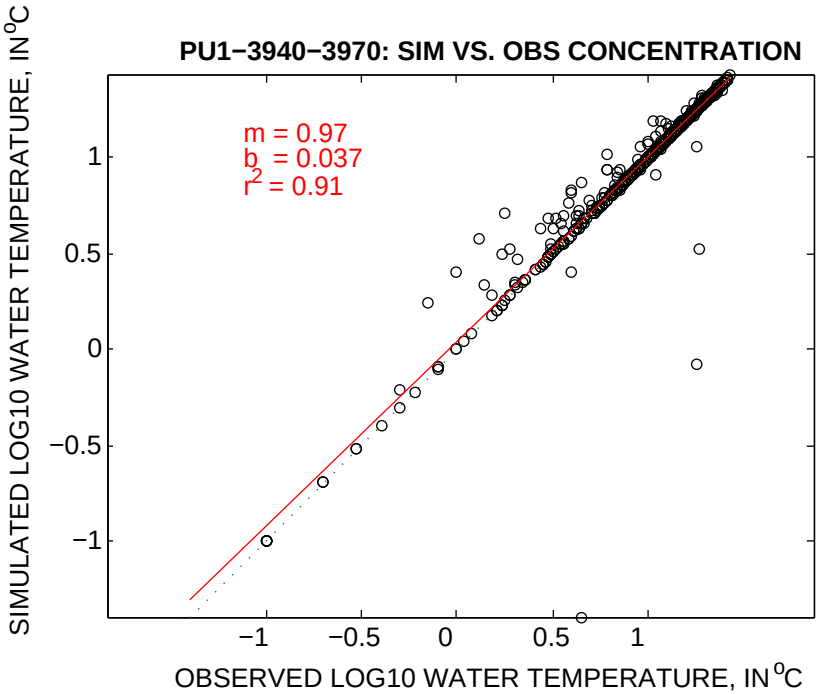
Drive	Directory	Observed
N/A	model	OBS20161101

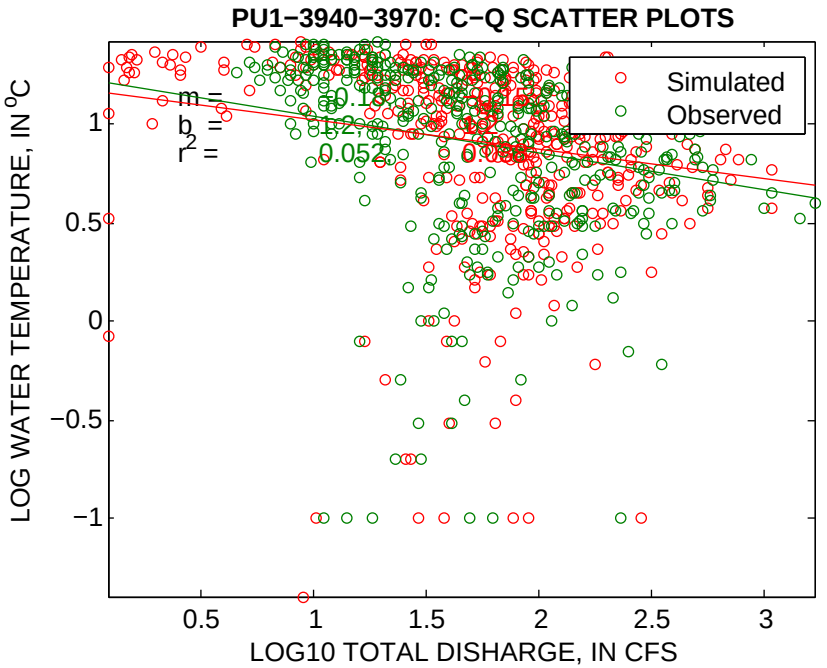
STATISTICS

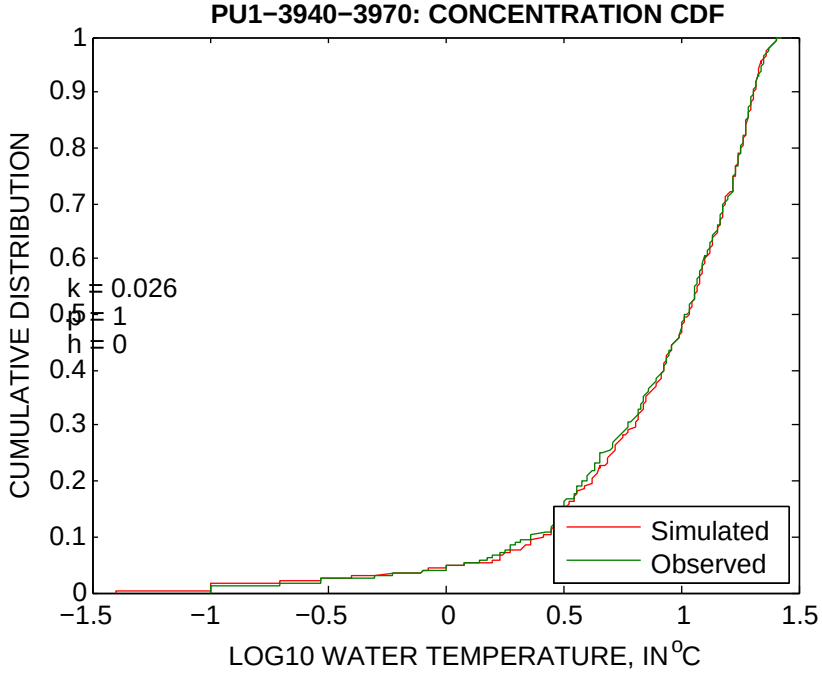
	n	479	446
		observe	simulate
min		0.1	0
		-1	-1.39837
mean		11.2504	11.1945
		0.896008	0.936417
media		11	10.738
		1.02119	1.07849
max		26.6	31.197
		1.42488	1.49411
varian		46.727	55.57
		0.19769	0.232353
JB		0.001	0.001612
		0.001	0.001
		ra	log
%		-0.497625	4.50987
err.va		24.3531	0.0872349
rel.std.err		0.521178	0.44127
mod.eff		0.478822	0.55873

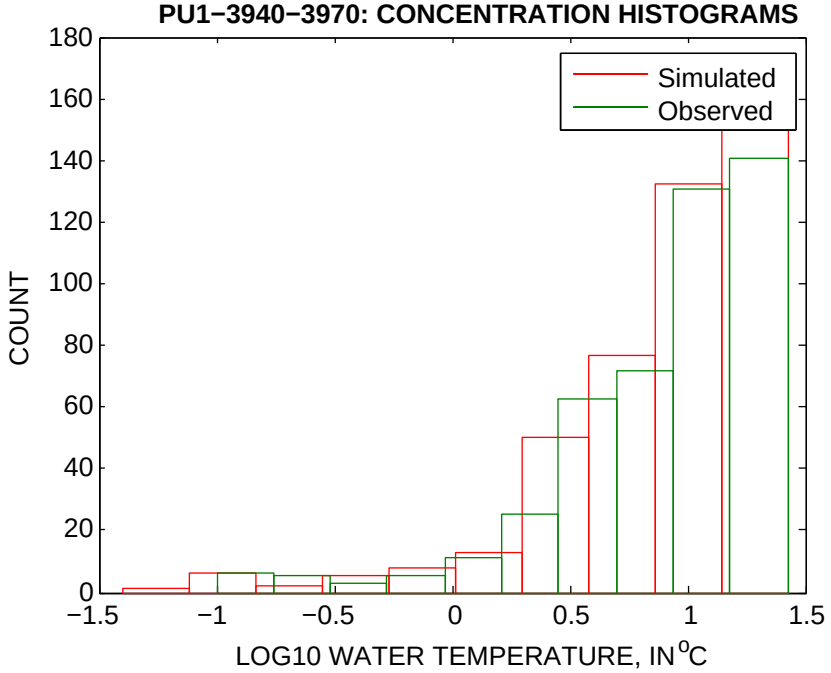
VERSION 3.1

ALL DATA
LOG10

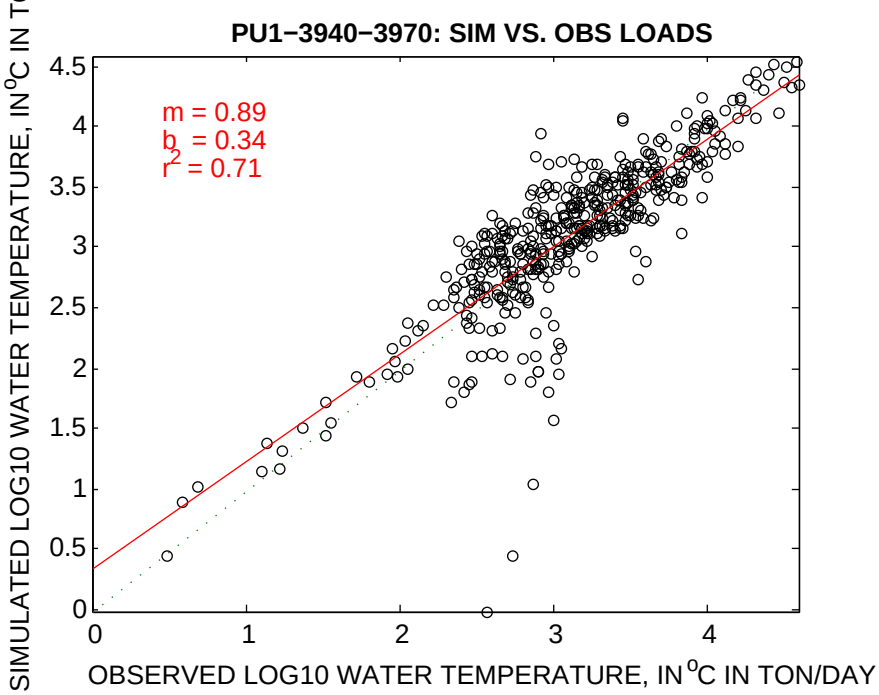


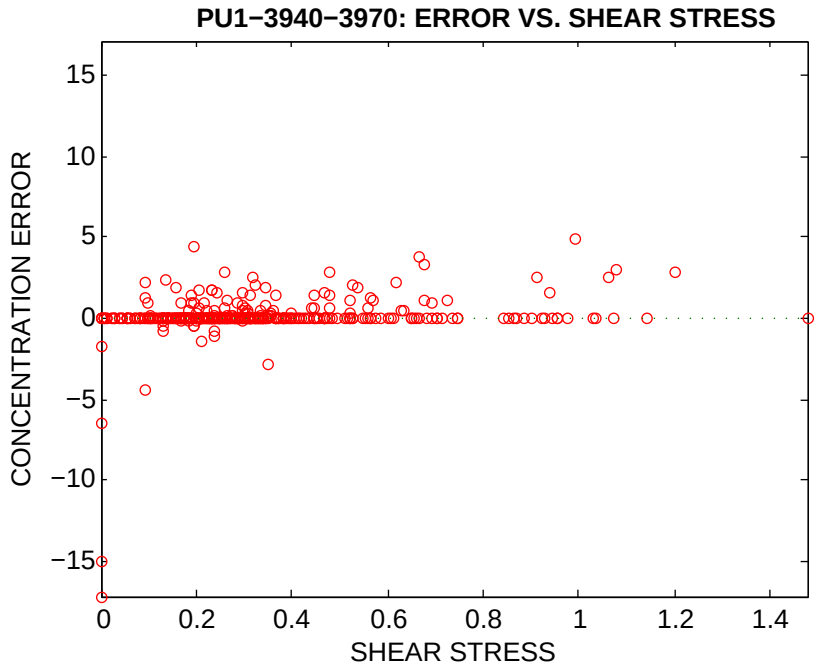


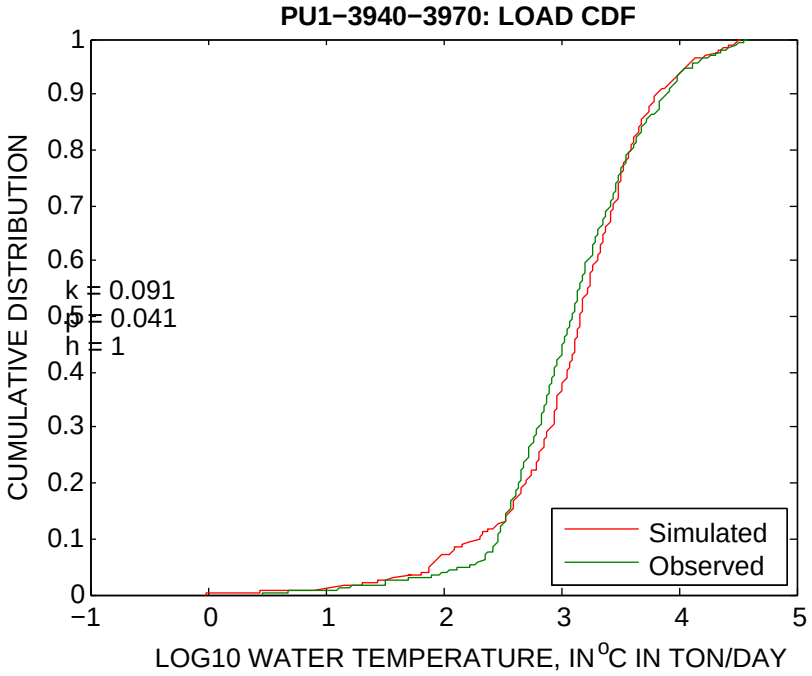


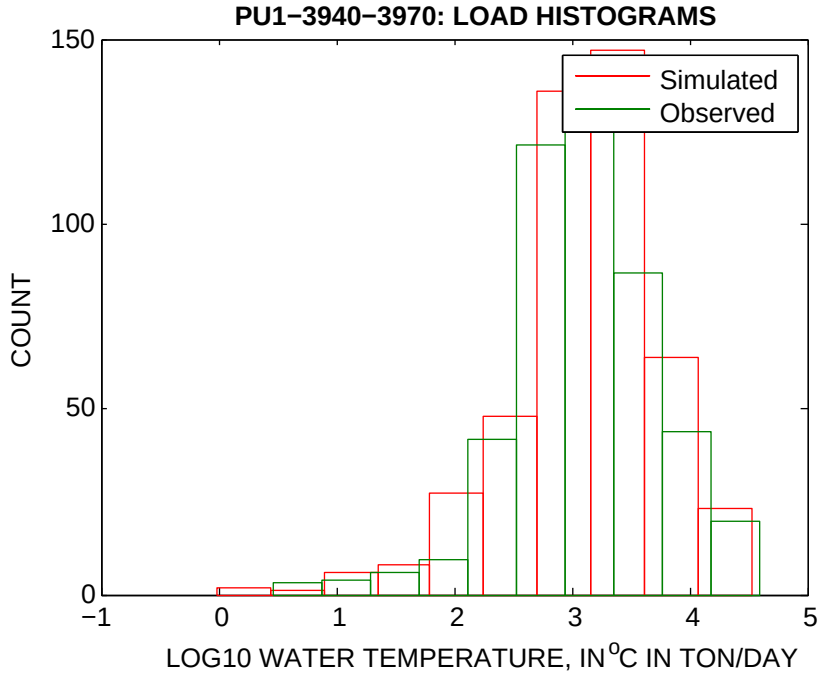


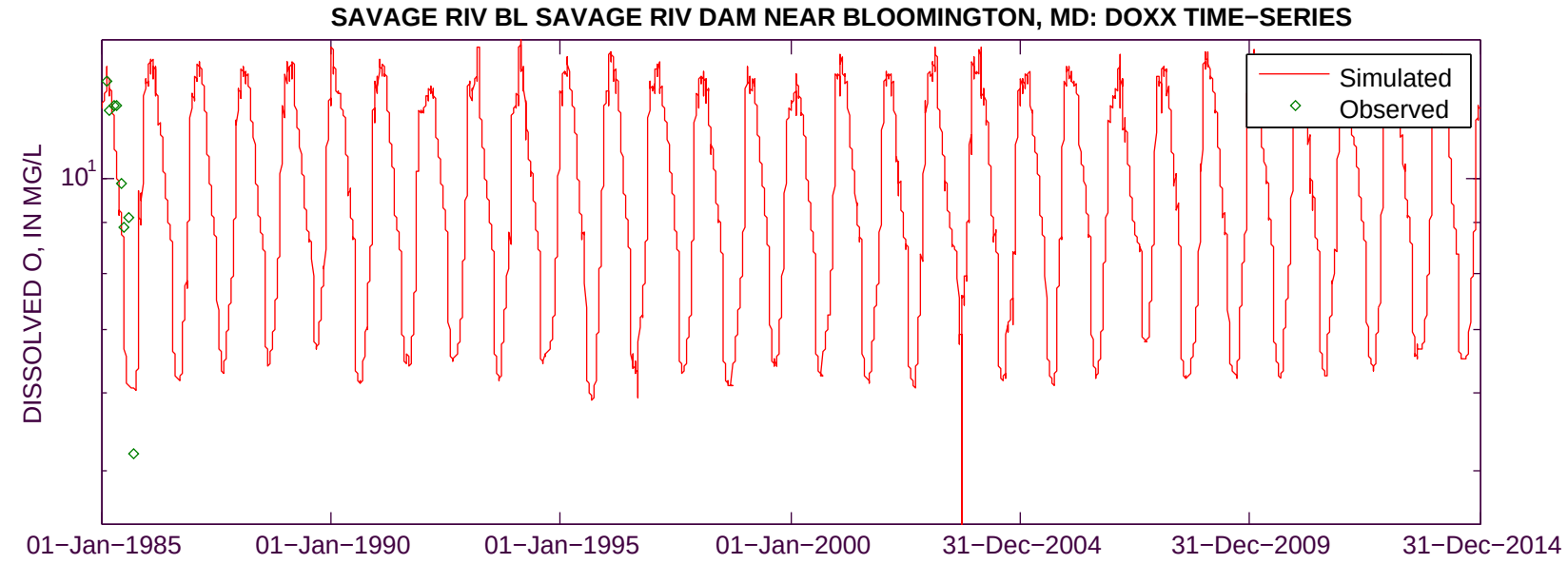
LOAD DATA
LOG10











DATA SELECTION

scenario	file
P620171001WQ	DOXX.calib

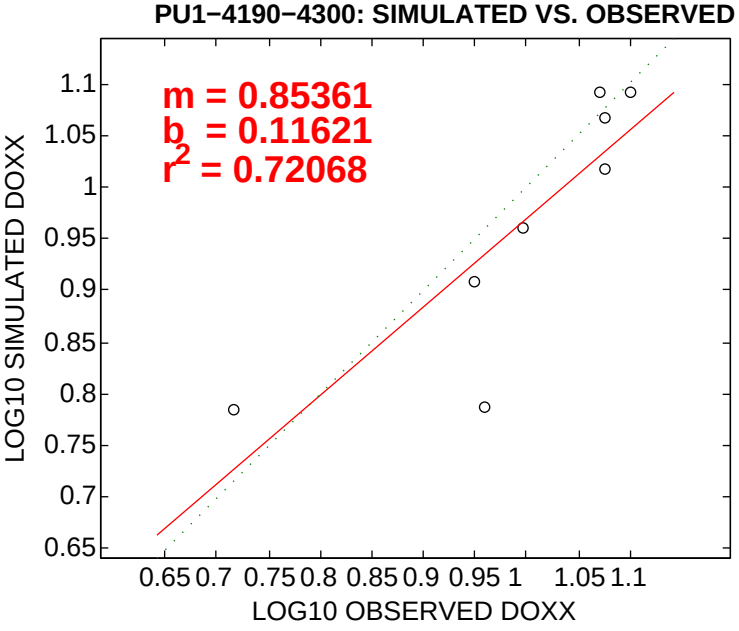
plot: DOXX - dissolved oxygen

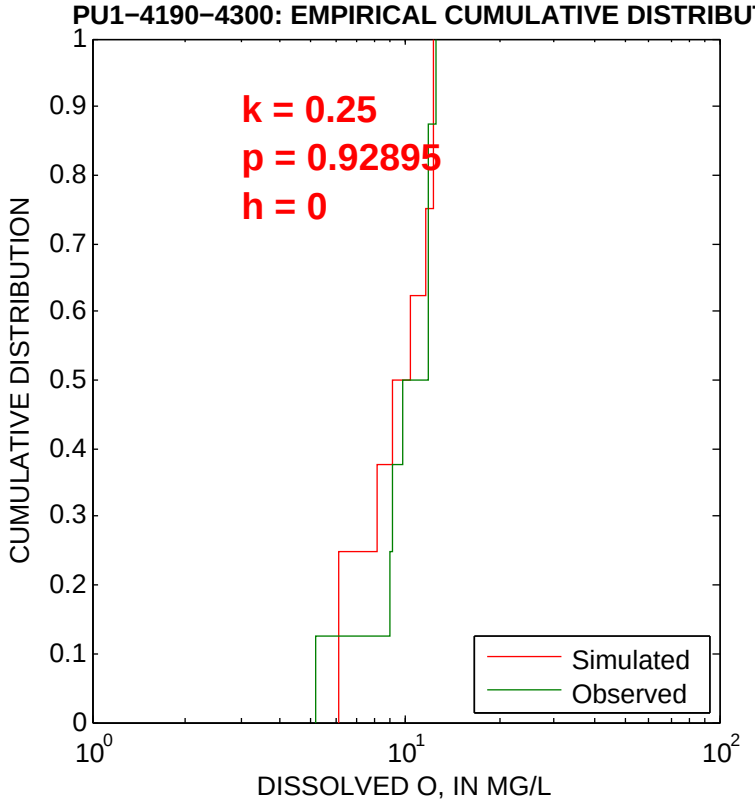
Dates: 1/1/1985 – 12/31/201

Drive	Directory	Observed
N/A	model	OBS20161101

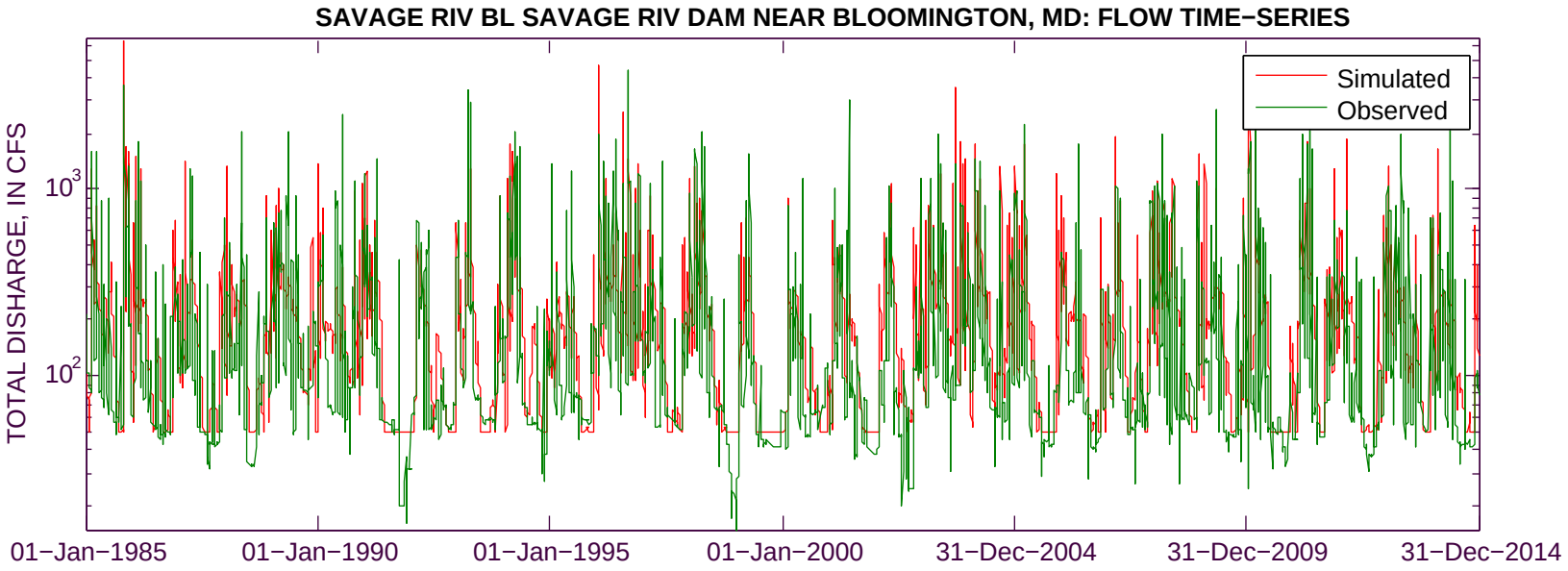
STATISTICS

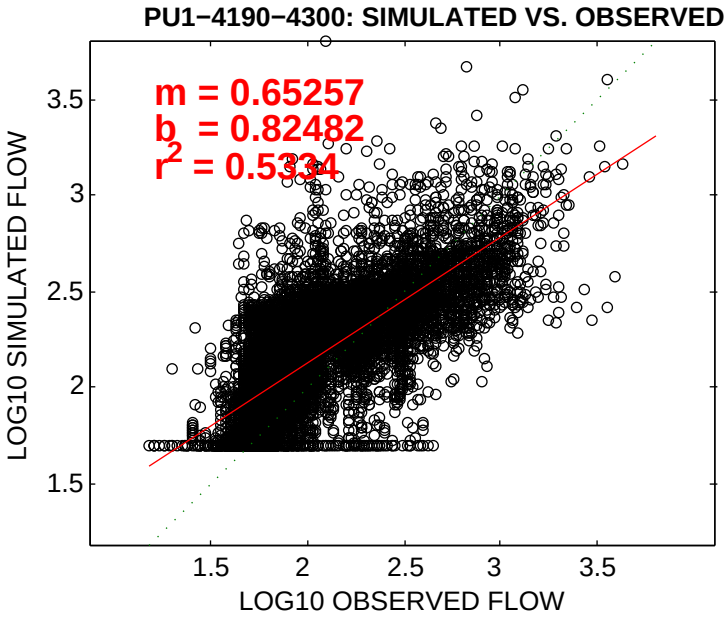
	n	8	8
		observe	simulate
min		5.2	6.0822
		0.716003	0.784061
mean		10.1625	9.53198
		0.992927	0.963785
media		10.85	9.78855
		1.03376	0.989766
max		12.6	12.357
		1.10037	1.09191
varian		6.01125	6.67748
		0.0158811	0.0160569
JB		0.107964	0.354043
		0.024807	0.295041
		ra	log
%		-6.20443	-2.93498
err.va		1.90634	0.00579595
rel.std.err		0.317128	0.364959
mod.eff		0.682872	0.635041

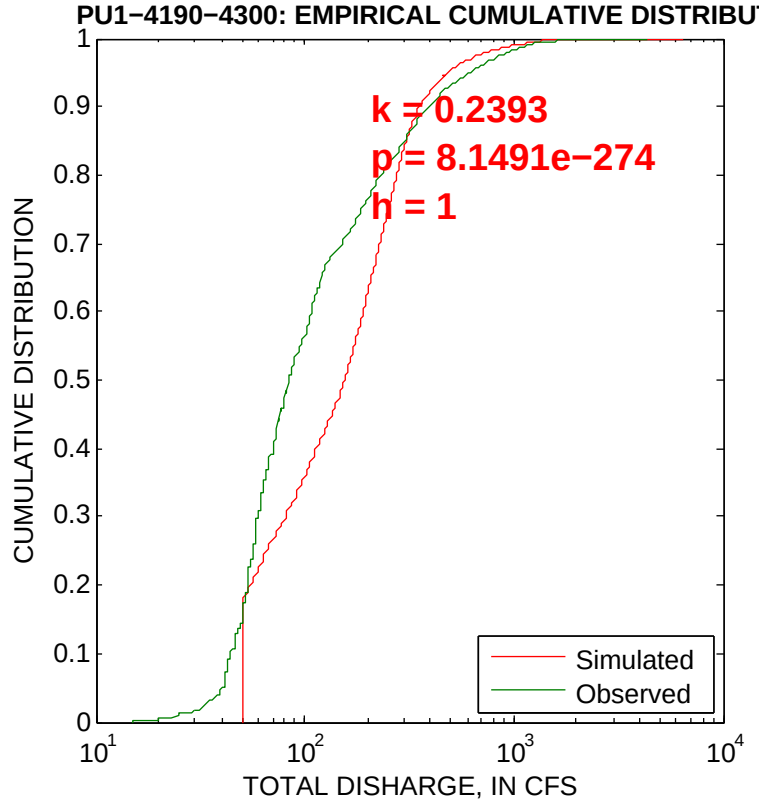




VERSION







DATA SELECTION

scenario: P620171001WQ | file: FLOW.calib

plot: FLOW - total discharge

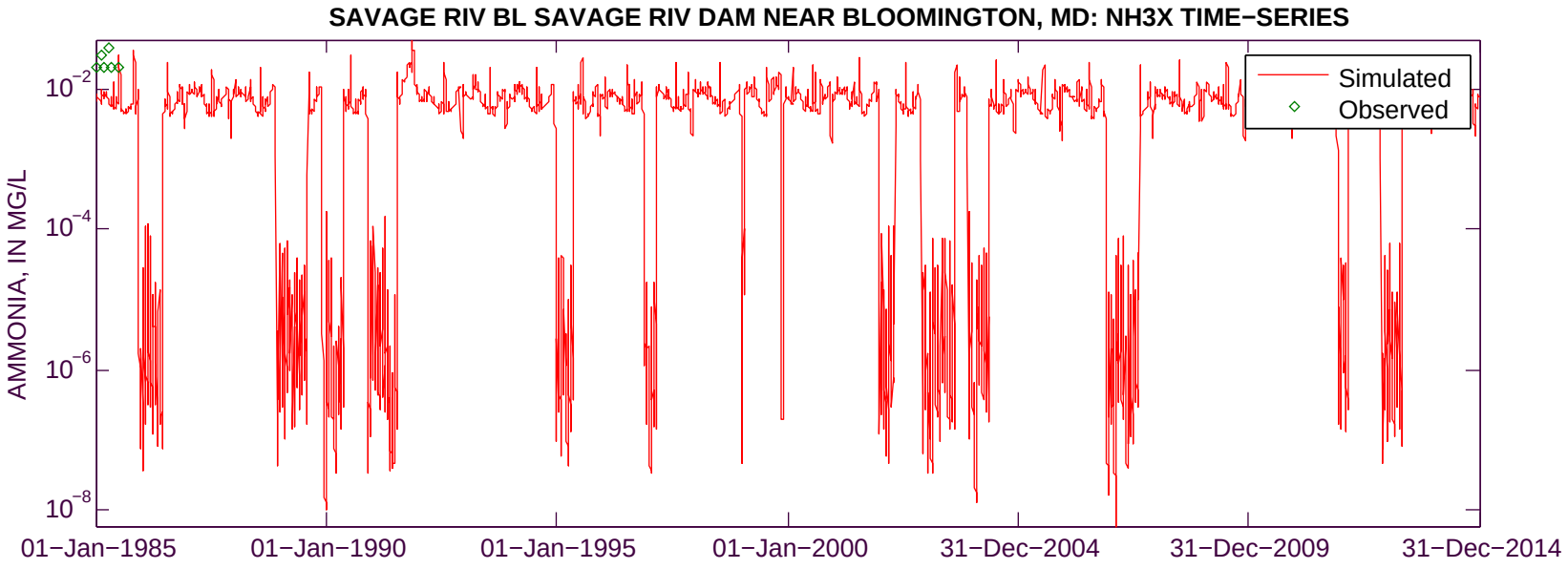
Dates: 1/1/1985 – 12/31/201

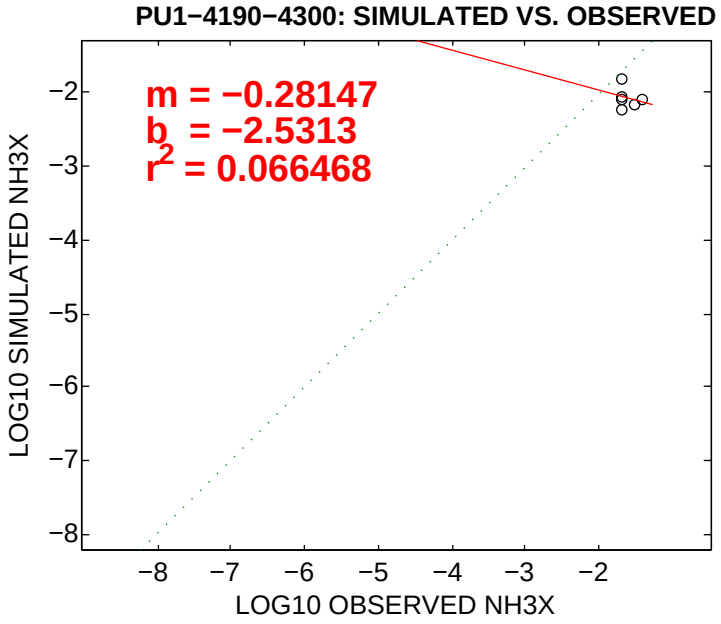
Drive: N/A | Directory: model | Observed: OBS20161101

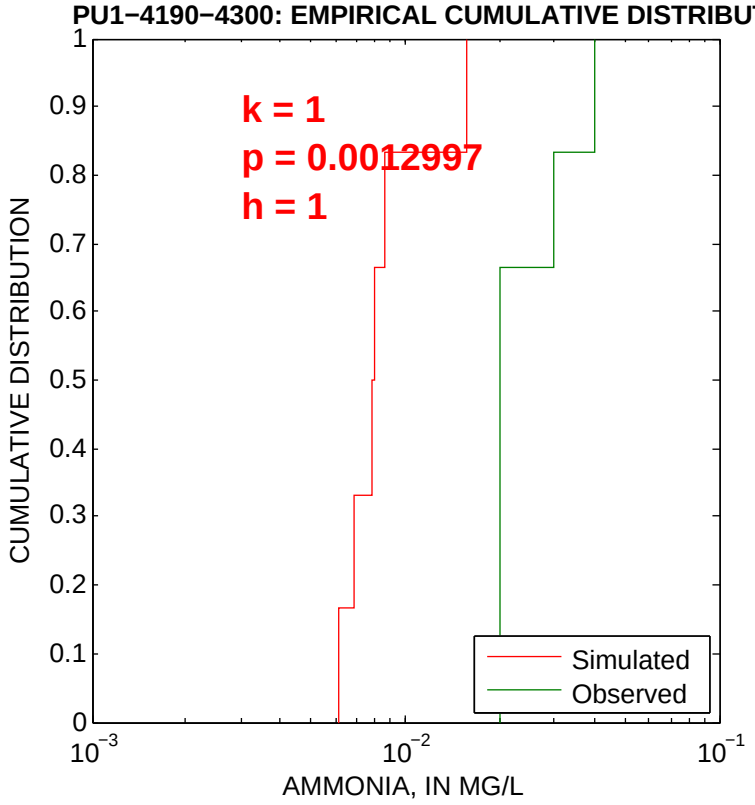
STATISTICS

		observe	simulate
n		10957	10957
min		15	50
		1.17609	1.69897
mean		174.806	196.465
		2.03558	2.15317
media		85	155.61
		1.92942	2.19204
max		4320	6383.9
		3.63548	3.80509
varian		60461.8	43277.8
		0.14409	0.115036
JB		0.001	0.001
		0.001	0.001
		ra	log
%		12.3902	5.77654
err.va		45304.5	0.0848973
rel.std.err		0.749309	0.589195
mod.eff		0.250691	0.410805

VERSION 2.1







DATA SELECTION

scenario	file
P620171001WQ	NH3X.calib

plot: NH3X - ammonia

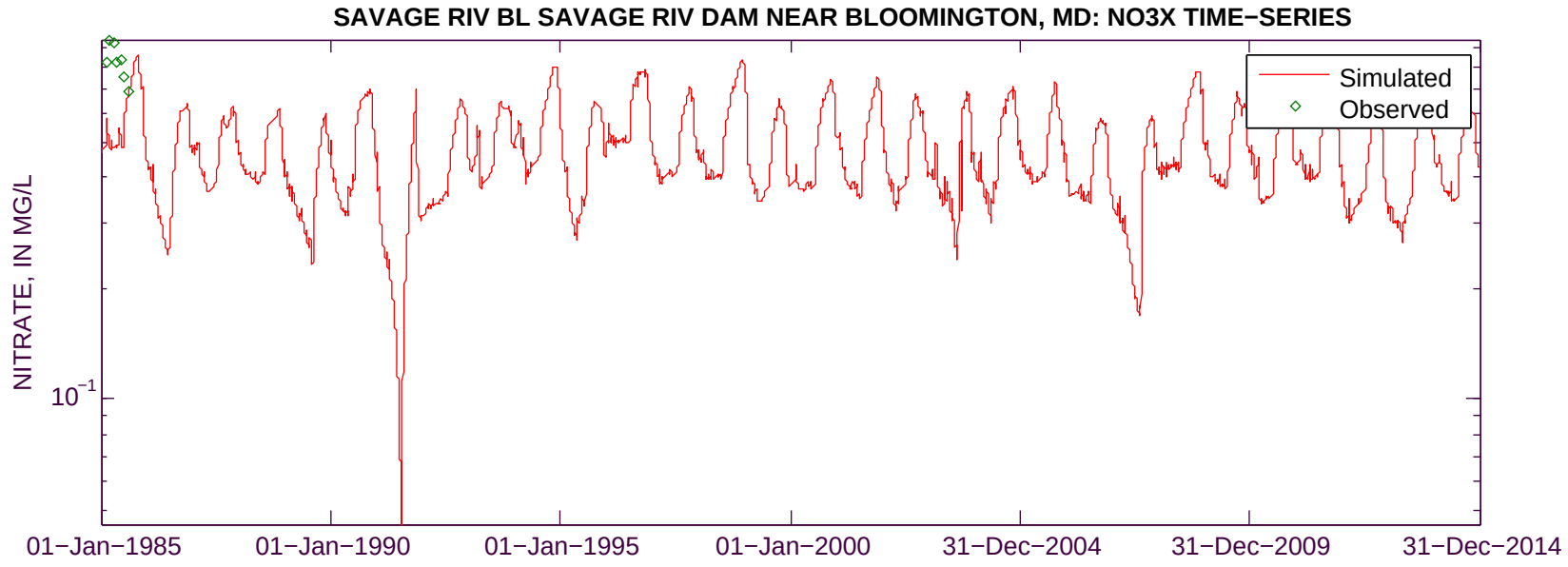
Dates: 1/1/1985 – 12/31/201

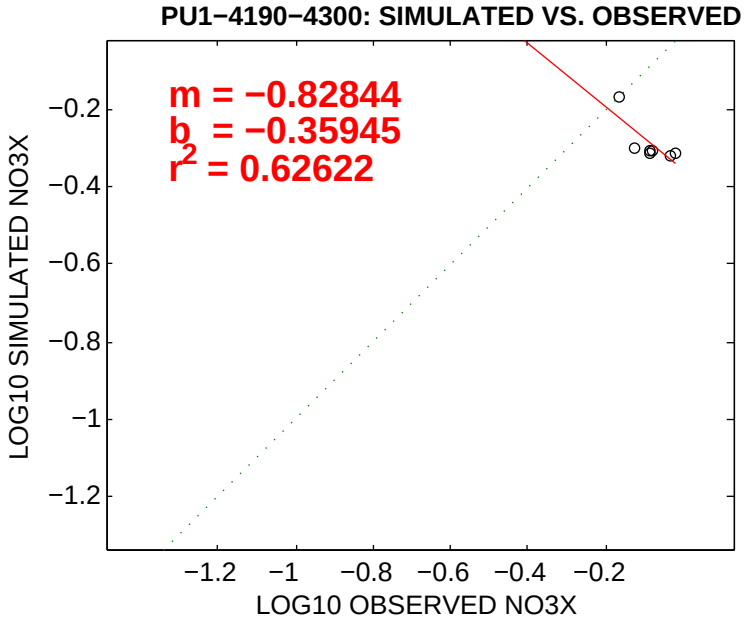
Drive	Directory	Observed
N/A	model	OBS20161101

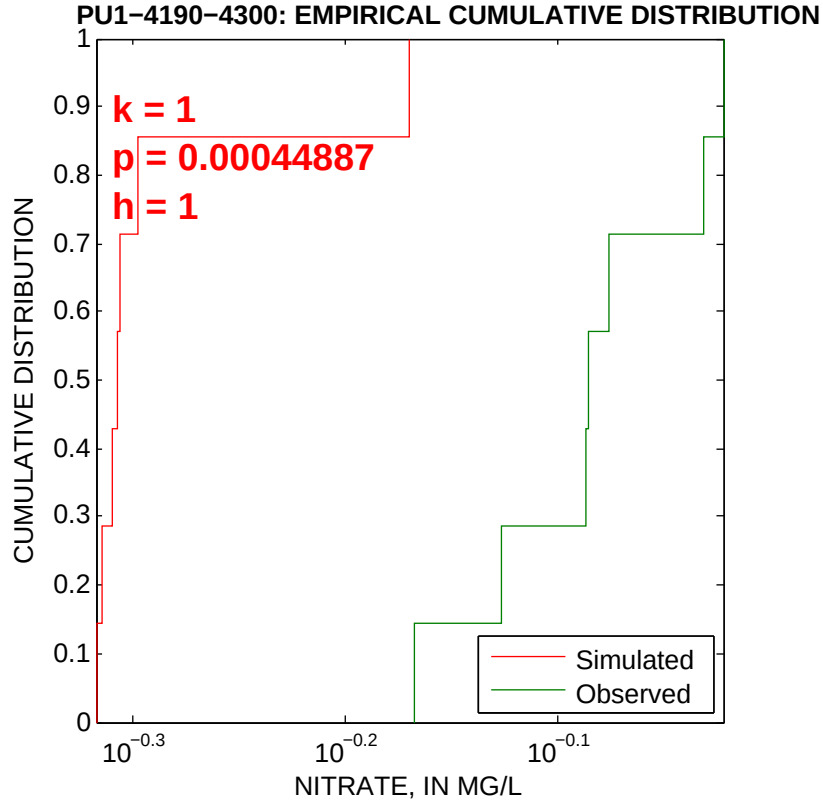
STATISTICS

	n	6	6
		observe	simulate
min		0.02	0.0061102
		-1.69897	-2.21394
mean		0.025	0.00883097
		-1.61945	-2.07548
media		0.02	0.00792055
		-1.69897	-2.10125
max		0.04	0.015585
		-1.39794	-1.80729
varian		7e-05	1.16932e-0
		0.0167373	0.0199501
JB		0.073905	0.010194
		0.099828	0.046981
		ra	log
%		-64.6761	28.1594
err.va		0.00041078	0.295663
rel.std.err		5.86828	17.665
mod.eff		-4.86828	-16.665

VERSION 2.1







DATA SELECTION

scenario	file
P620171001WQ	NO3X.calib

plot: NO3X - nitrate

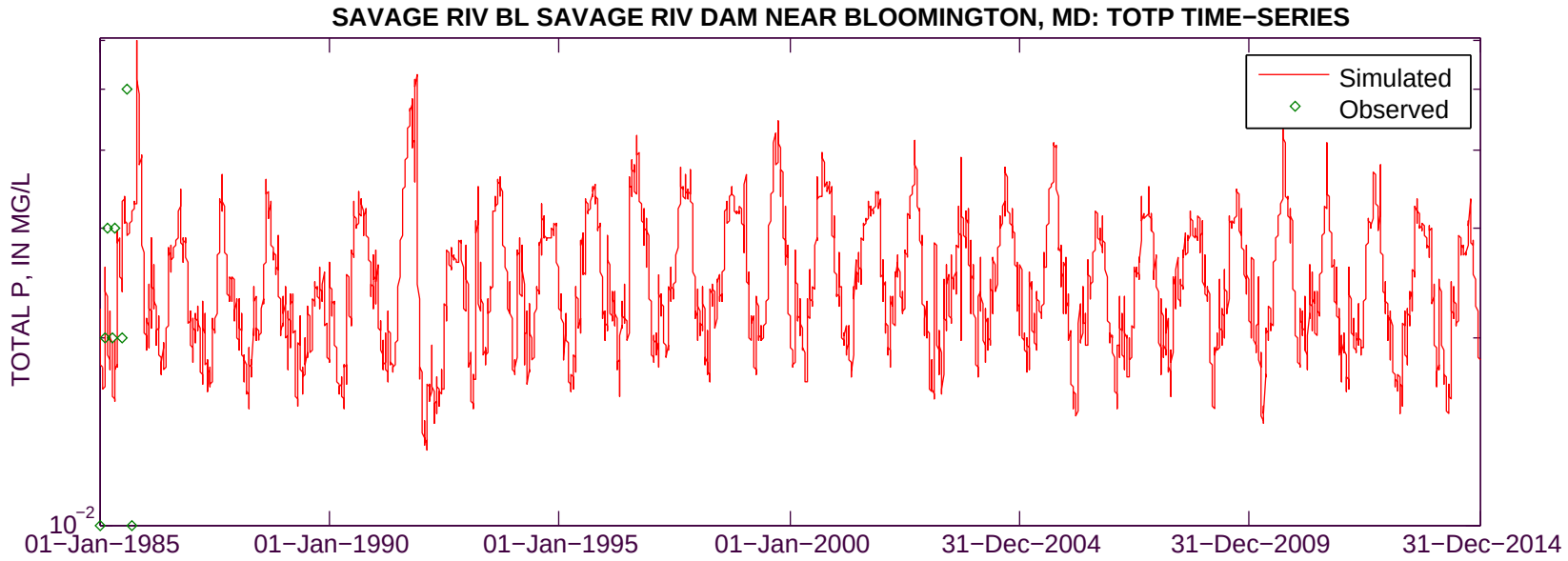
Dates 1/1/1985 12/31/201

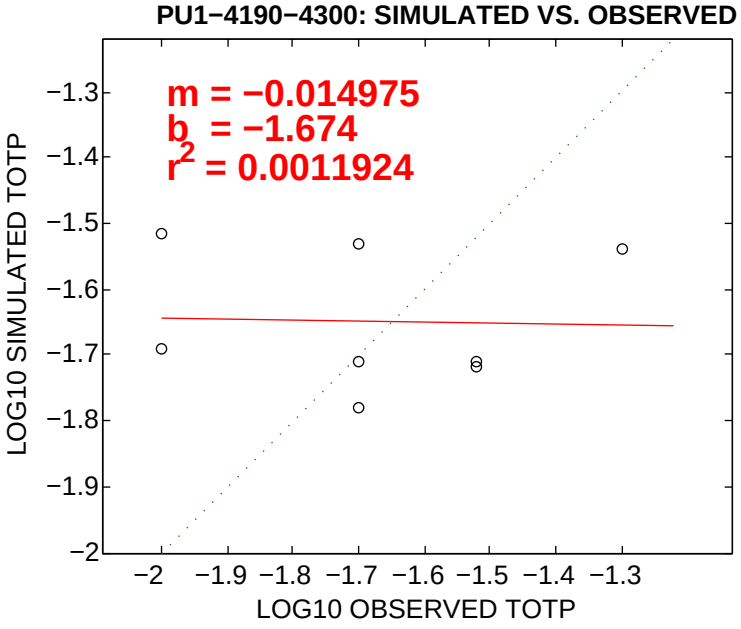
Drive	Directory	Observed
N/A	model	OBS20161101

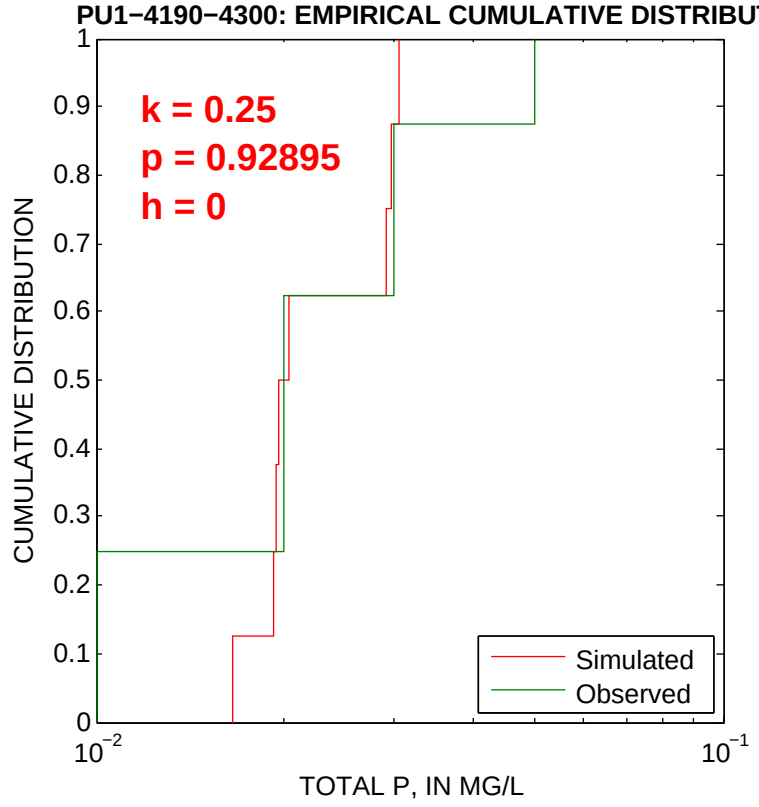
STATISTICS

	n	7	7
		observe	simulate
min		0.68	0.48123
		-0.167491	-0.317647
mean		0.827143	0.517467
		-0.0849169	-0.289101
media		0.822	0.49234
		-0.0851282	-0.307735
max		0.95	0.6764
		-0.0222764	-0.169796
varian		0.00897181	0.00496432
		0.00256267	0.00280858
JB		0.5	0.001
		0.5	0.001
		ra	log
%		-37.4392	240.452
err.va		0.135826	0.0582569
rel.std.err		15.1392	22.7329
mod.eff		-14.1392	-21.7329

VERSION 2.1







DATA SELECTION

scenario	file
P620171001WQ	TOTP.calib

plot: TOTP - total phosphorus

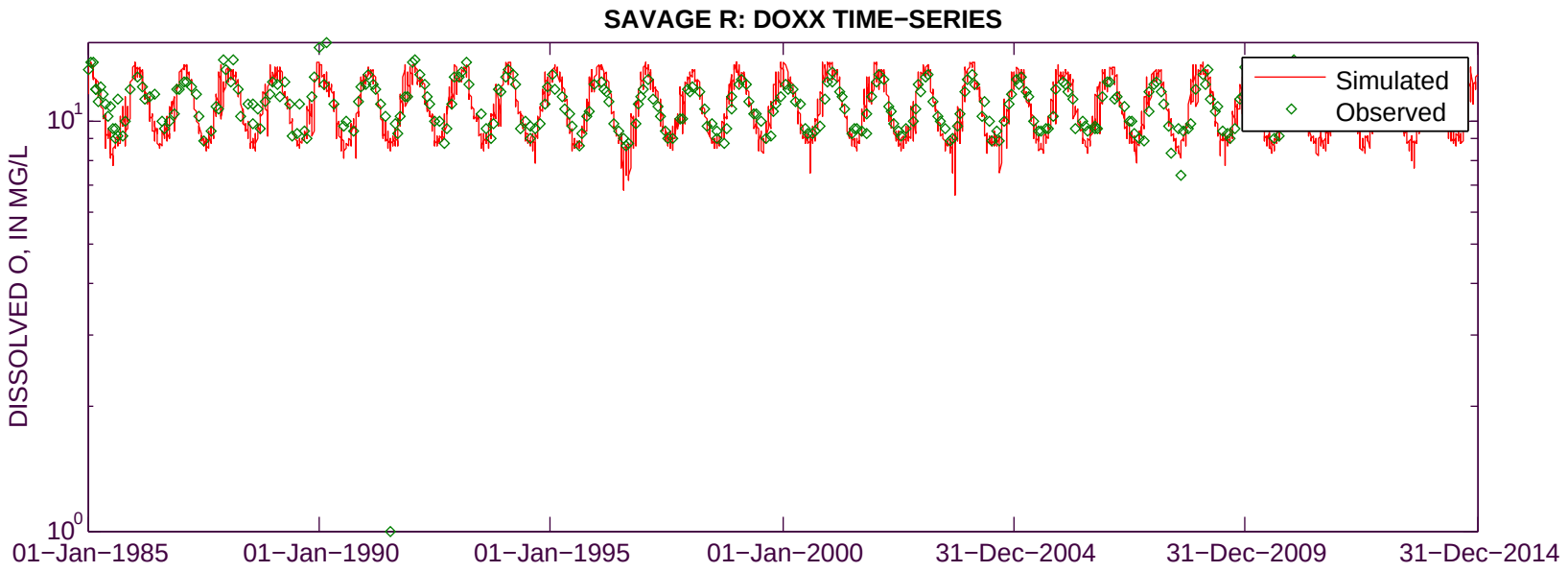
Dates: 1/1/1985 – 12/31/201

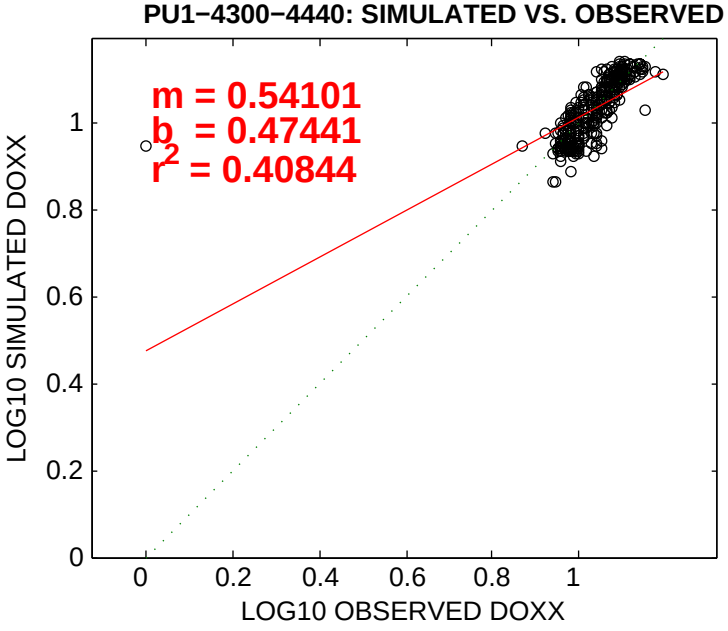
Drive	Directory	Observed
N/A	model	OBS20161101

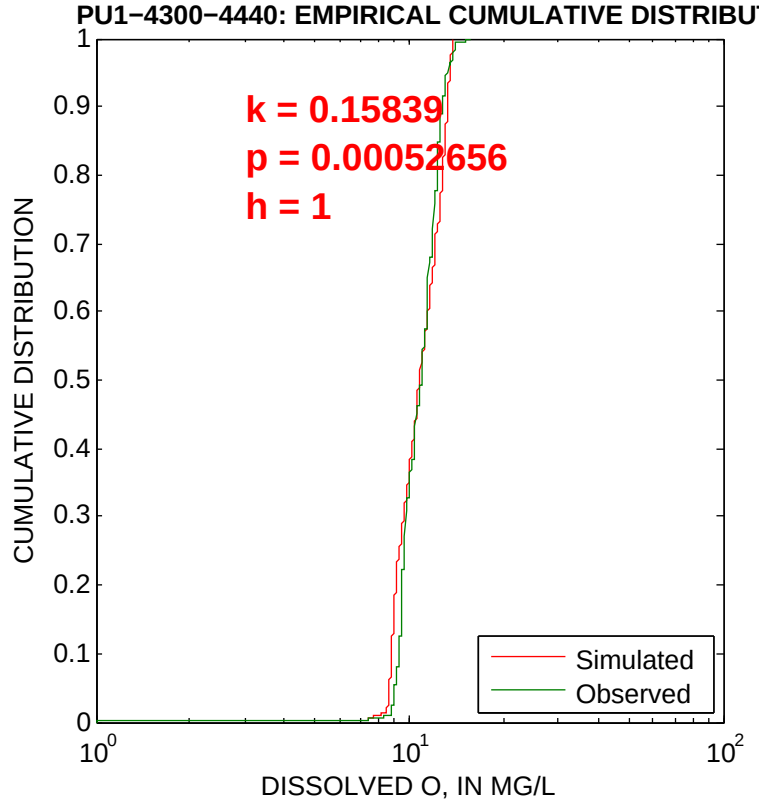
STATISTICS

	n	8	8
		observe	simulate
min		0.01	0.016596
		-2	-1.78
mean		0.02375	0.0230206
		-1.68046	-1.64886
media		0.02	0.0199695
		-1.69897	-1.69974
max		0.05	0.030462
		-1.30103	-1.51624
varian		0.00016964	3.15044e-0
		0.0569815	0.0107166
JB		0.148354	0.154135
		0.5	0.220654
		ra	log
%		-3.07105	-1.88079
err.va		0.00018519	0.0705464
rel.std.err		1.09166	1.23806
mod.eff		-0.0916581	-0.238058

VERSION 2.1







DATA SELECTION

scenario: P620171001WQ | file: DOXX.calib

plot: DOXX - dissolved oxygen

Dates: 1/1/1985 – 12/31/201

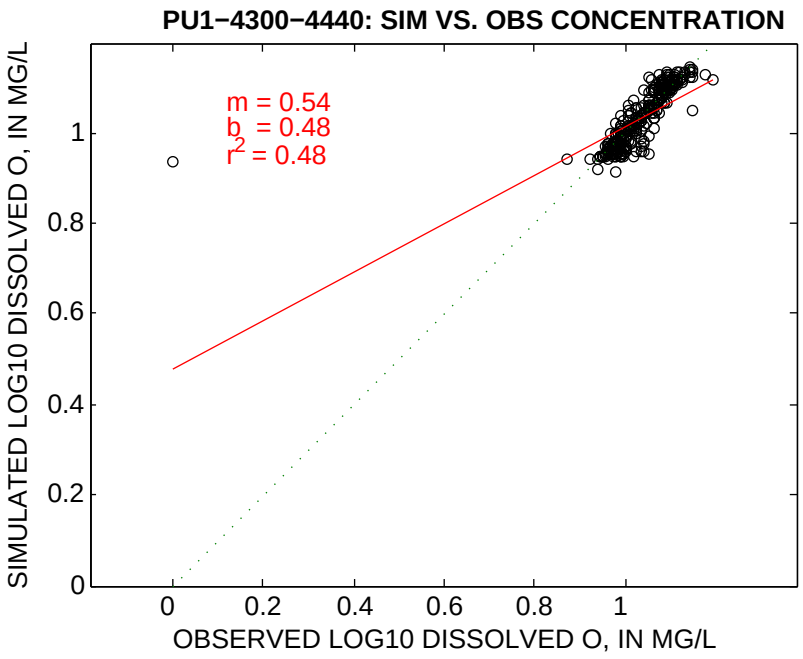
Drive: N/A | Directory: model | Observed: OBS20161101

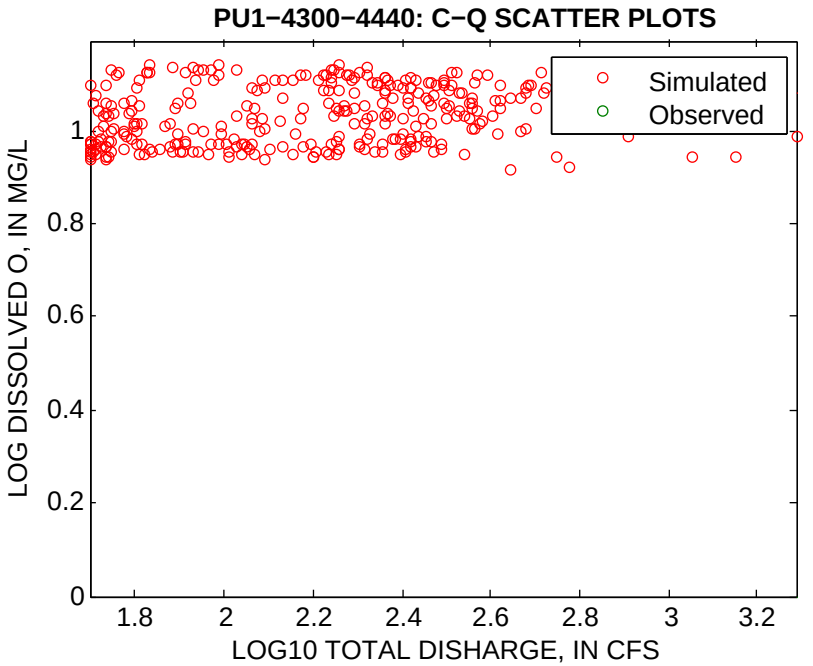
STATISTICS

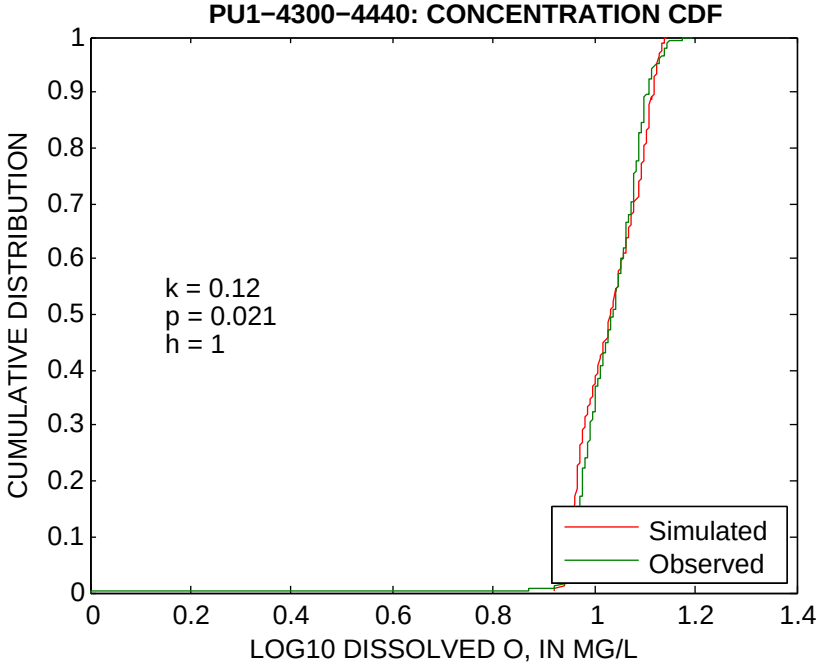
		observe	simulate
n		322	322
min		1	7.3332
		0	0.865294
mean		10.9029	10.9134
		1.03201	1.03273
media		10.9	10.7405
		1.03743	1.03102
max		15.6	13.882
		1.19312	1.14245
varian		2.2823	2.83894
		0.00639955	0.00458594
JB		0.001	0.001248
		0.001	0.001677
		ra	log
%		1.0960453	0.0705696
err.va		0.95514	0.0040616
rel.std.err		0.418498	0.634669
mod.eff		0.581502	0.365331

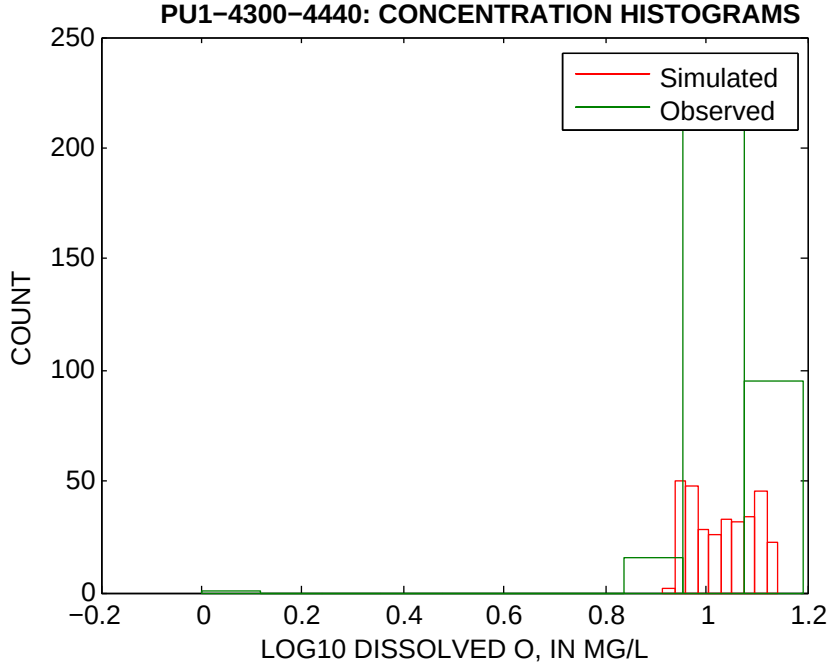
VERSION 2.1

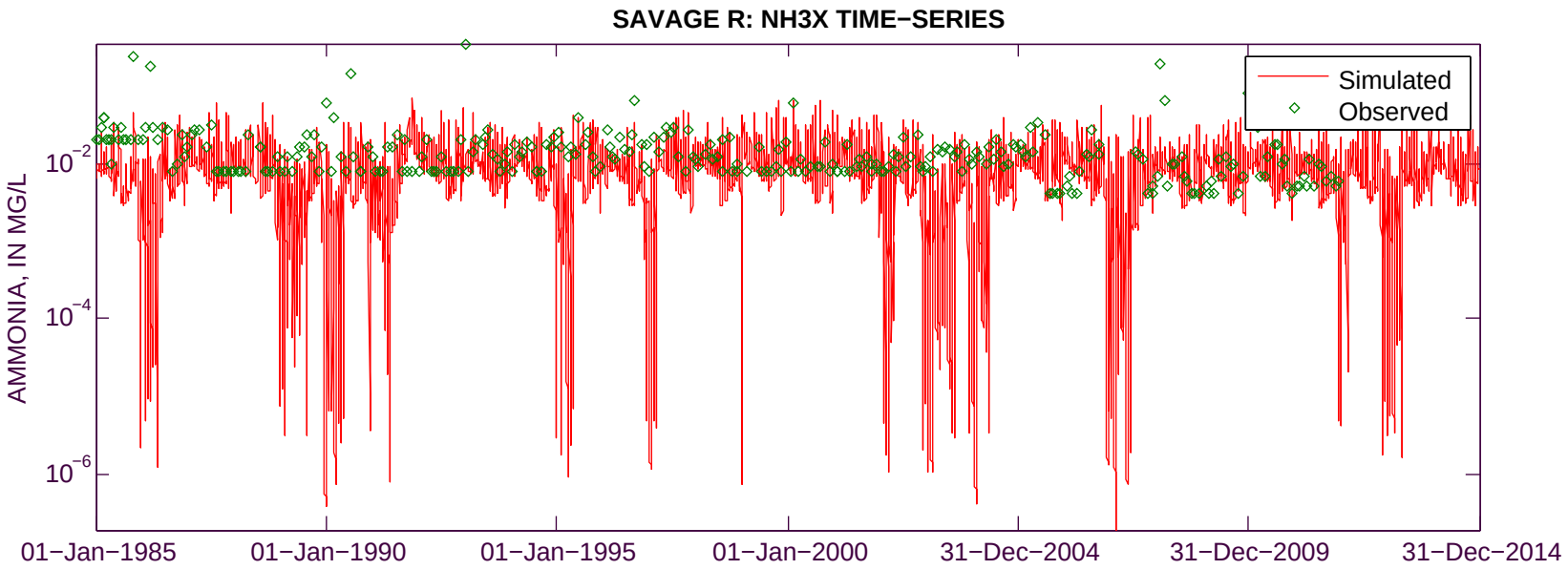
ALL DATA
LOG10

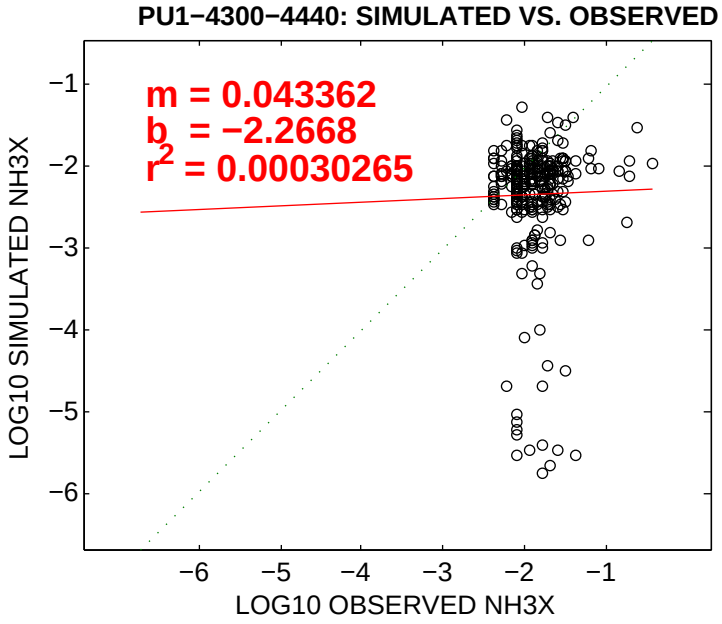


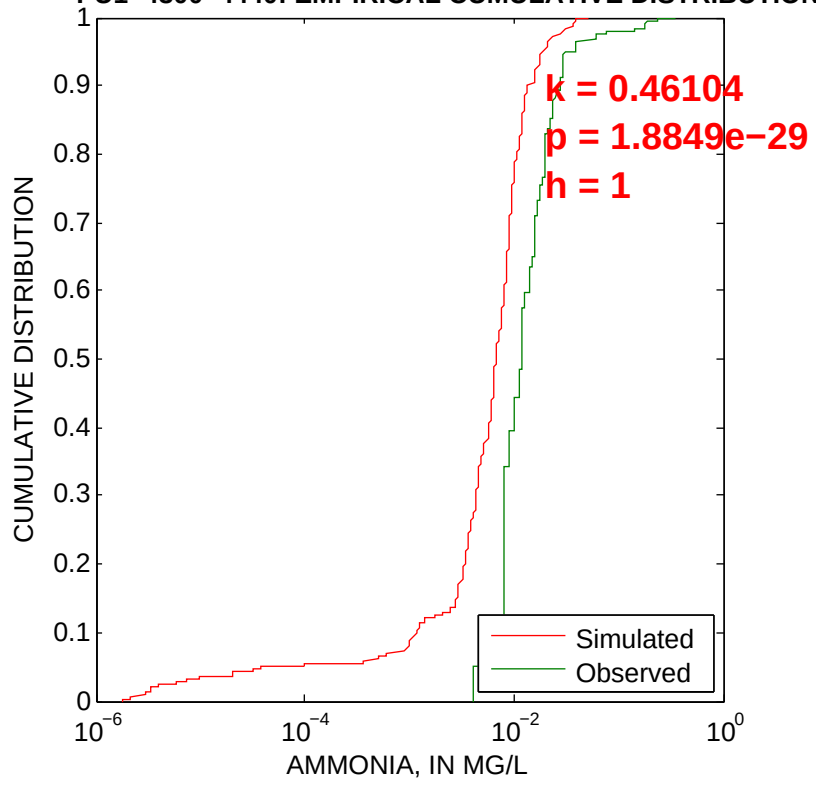












DATA SELECTION

scenario	file
P620171001WQ	NH3X.calib

plot: NH3X - ammonia

Dates: 1/1/1985 – 12/31/201

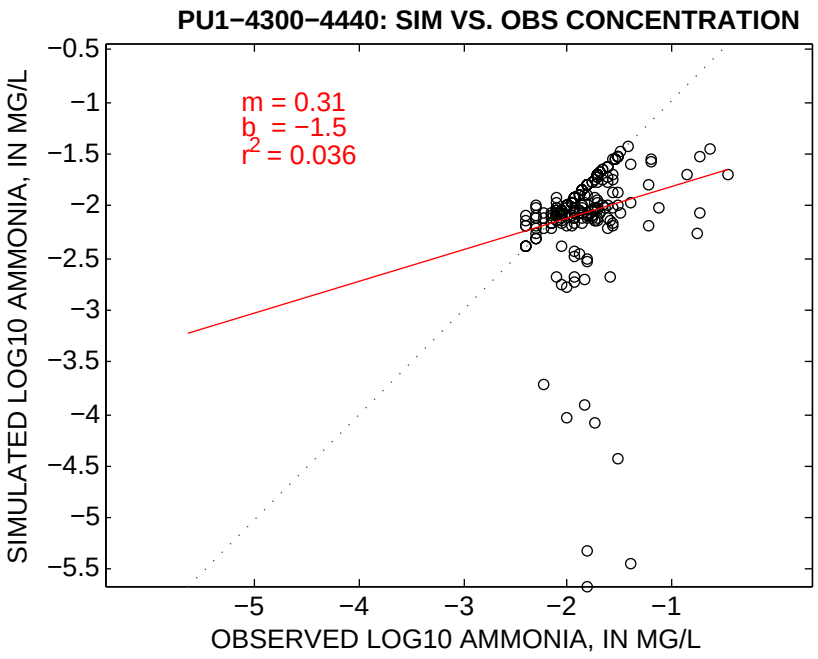
Drive	Directory	Observed
N/A	model	OBS20161101

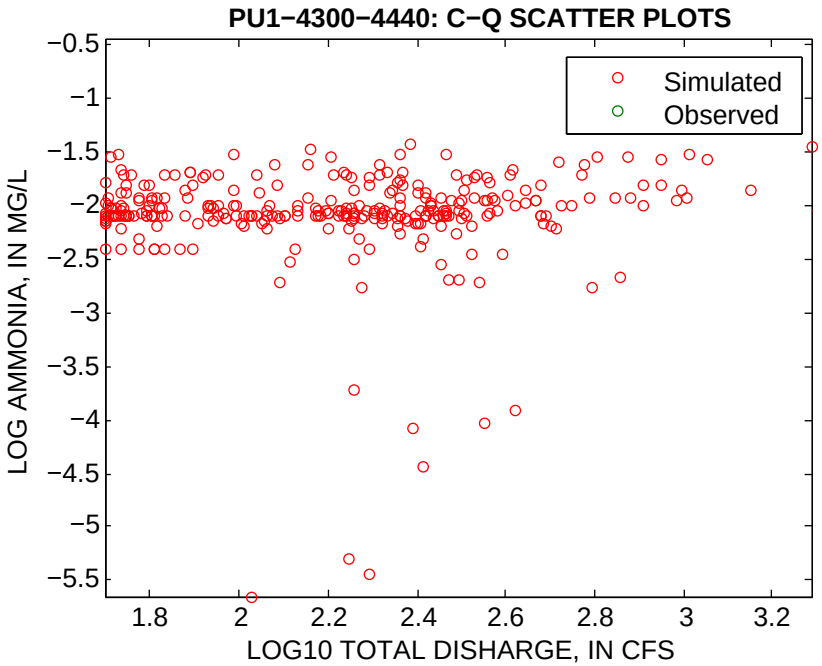
STATISTICS

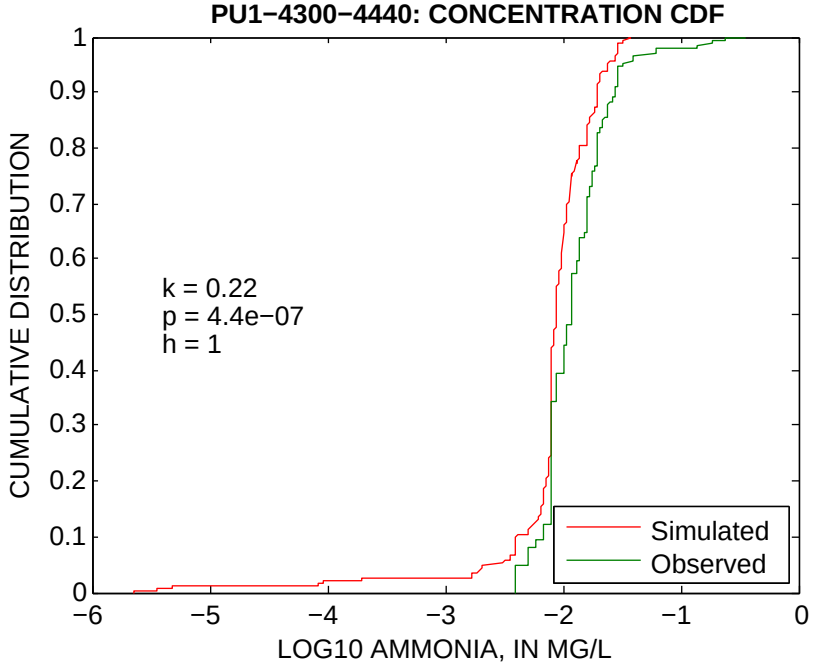
n	308	308
	observe	**simulate**
min	0.004	1.8031e-06
	-2.39794	-5.74398
mean	0.0181104	0.00792103
	-1.89808	-2.34912
media	0.012	0.0067986
	-1.92082	-2.16758
max	0.352	0.051371
	-0.453457	-1.28928
varian	0.00095434	4.48273e-0
	0.0888393	0.551933
JB	0.001	0.001
	0.001	0.001
	ra	log
%	-56.2625	23.7631
err.va	0.00105536	0.837169
rel.std.err	1.10584	9.42341
mod.eff	-0.105845	-8.42341

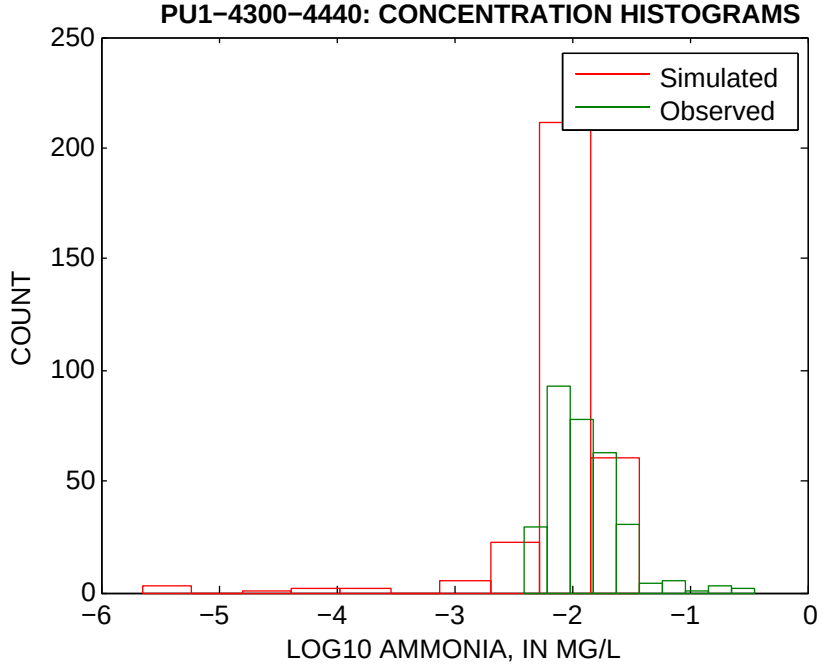
VERSION 2.1

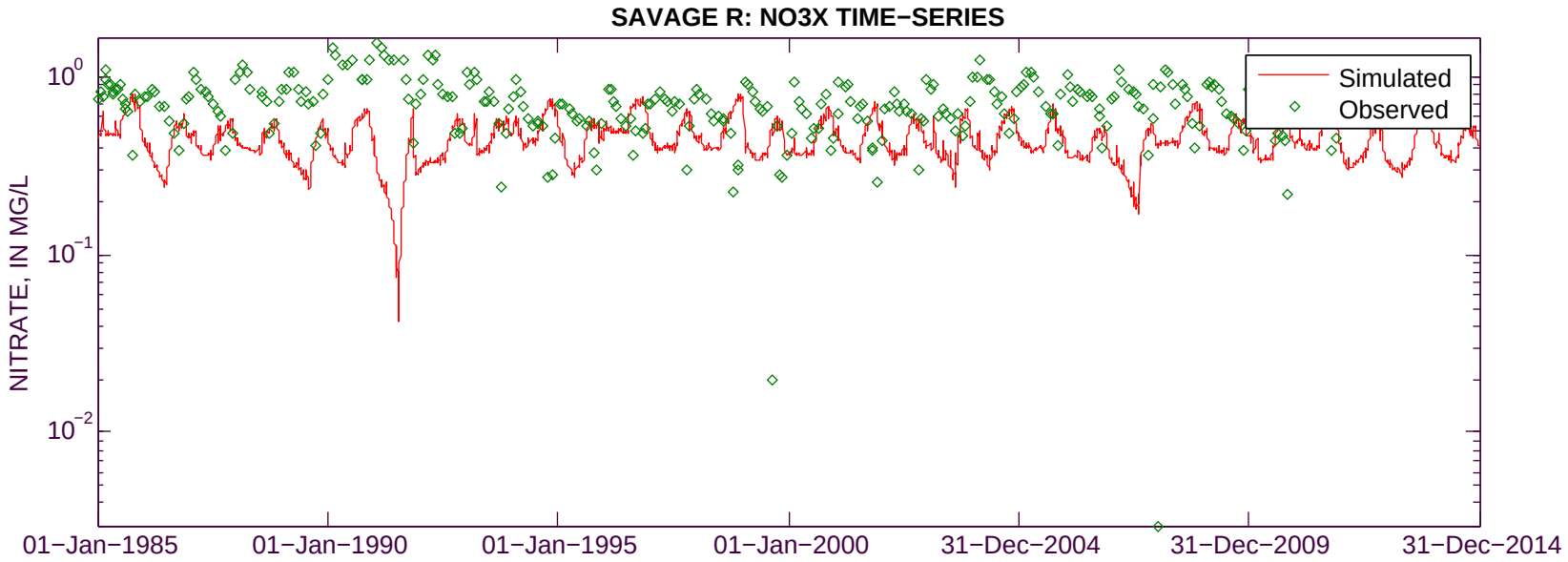
ALL DATA
LOG10

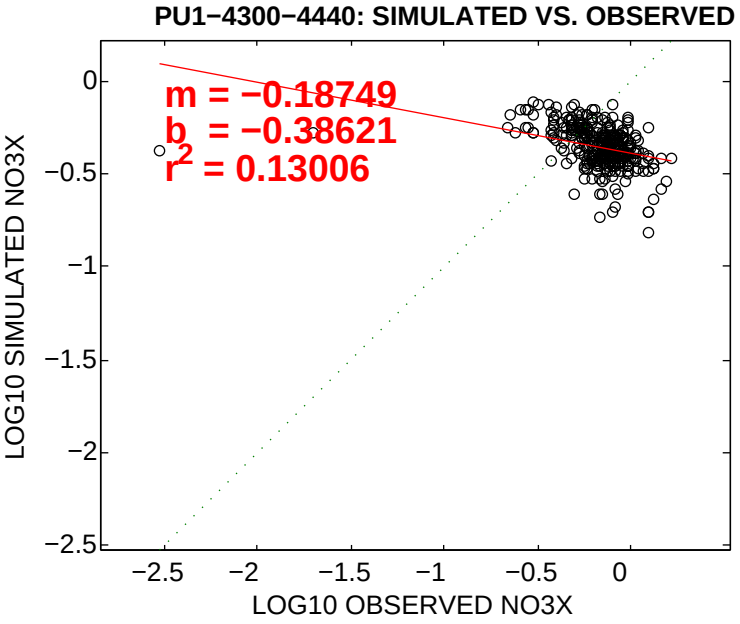


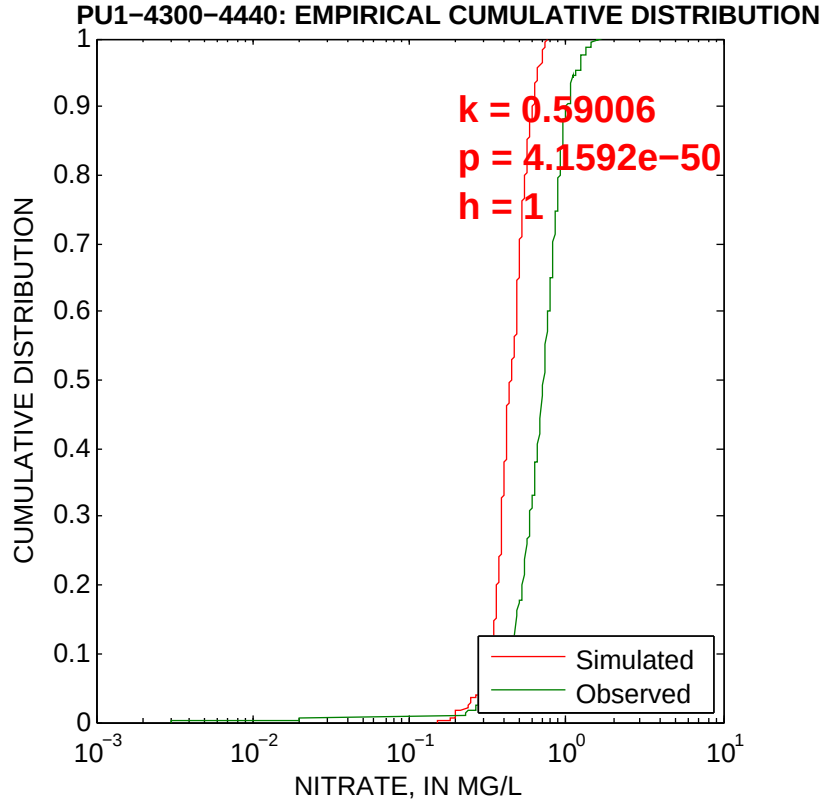












DATA SELECTION

scenario: P620171001WQ | file: NO3X.calib

plot: NO3X - nitrate

Dates: 1/1/1985 – 12/31/201

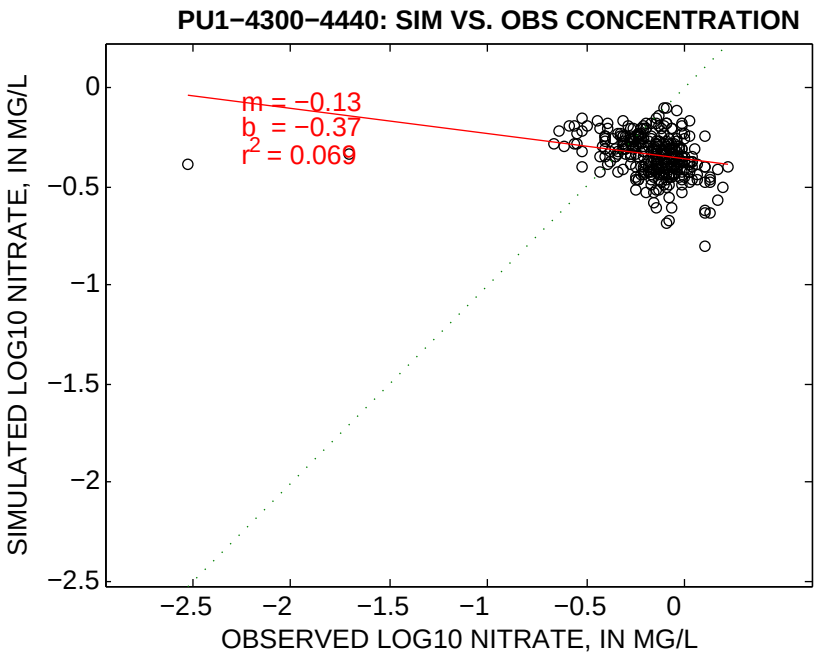
Drive | Directory | Observed: N/A | model | OBS20161101

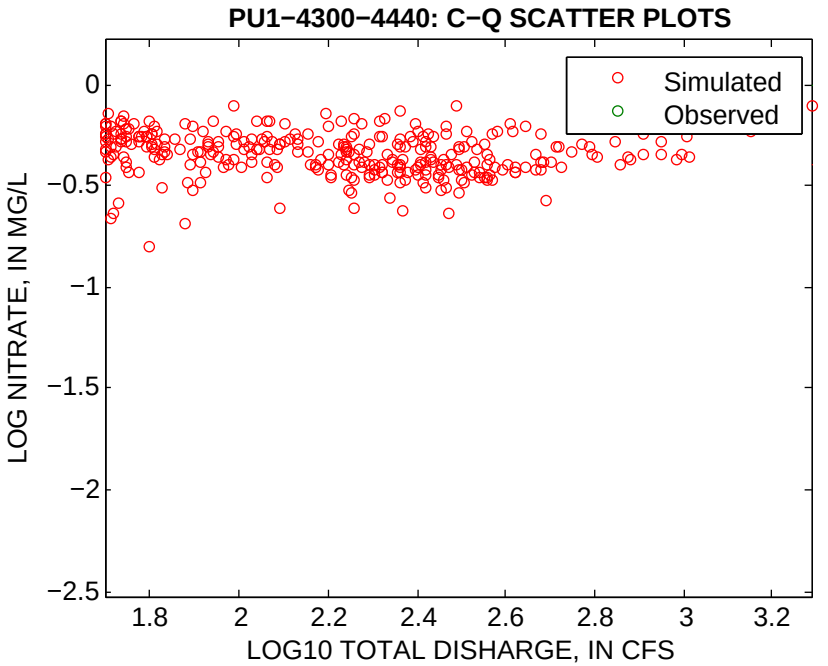
STATISTICS

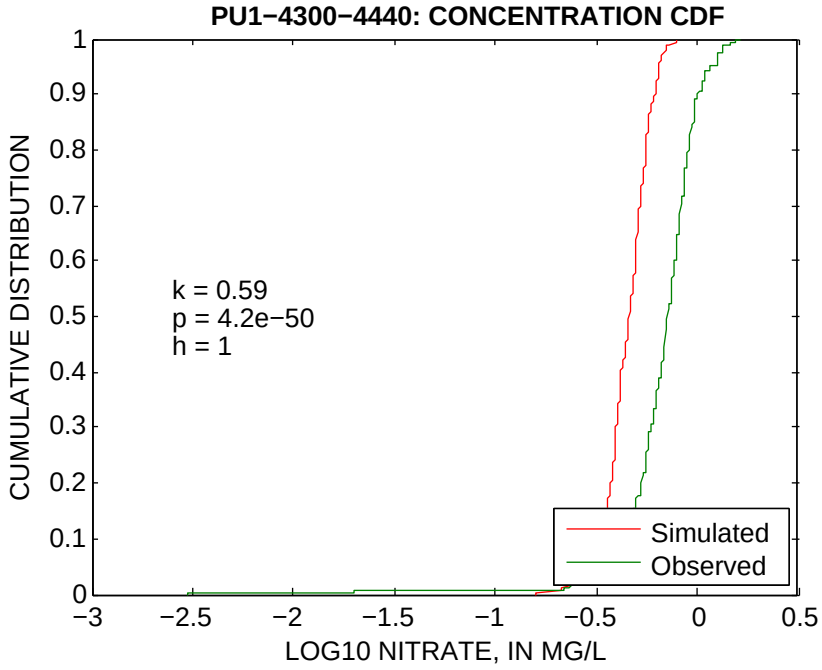
	n	322	322
		observe	simulate
min		0.003	0.15373
		-2.52288	-0.813241
mean		0.727109	0.457346
		-0.172738	-0.353825
media		0.72	0.44345
		-0.142668	-0.353158
max		1.64	0.75869
		0.214844	-0.119936
varian		0.0610871	0.0128955
		0.0475604	0.0128553
JB		0.001252	0.098972
		0.001	0.001
		ra	log
%		-37.1007	104.833
err.va		0.175105	0.111145
rel.std.err		2.86648	2.33692
mod.eff		-1.86648	-1.33692

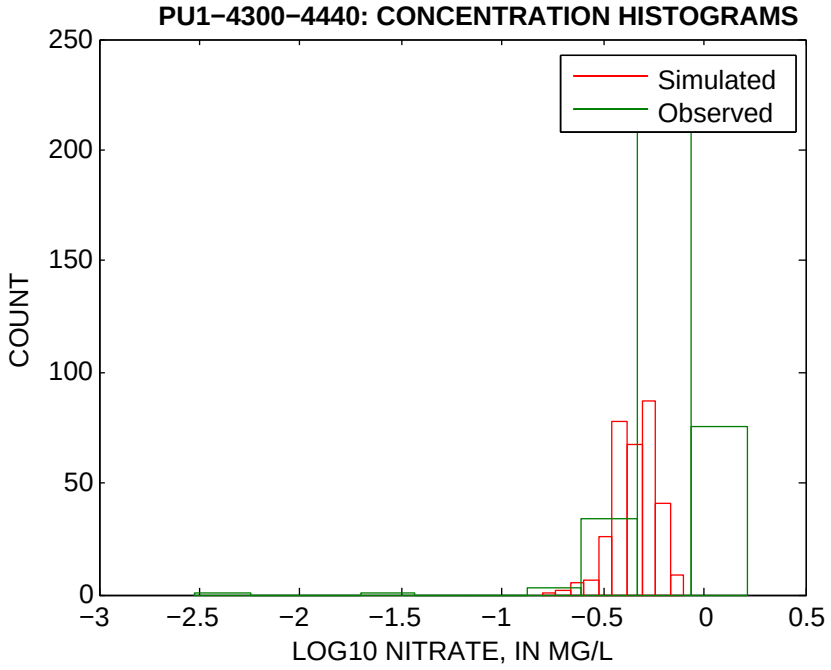
VERSION 2.1

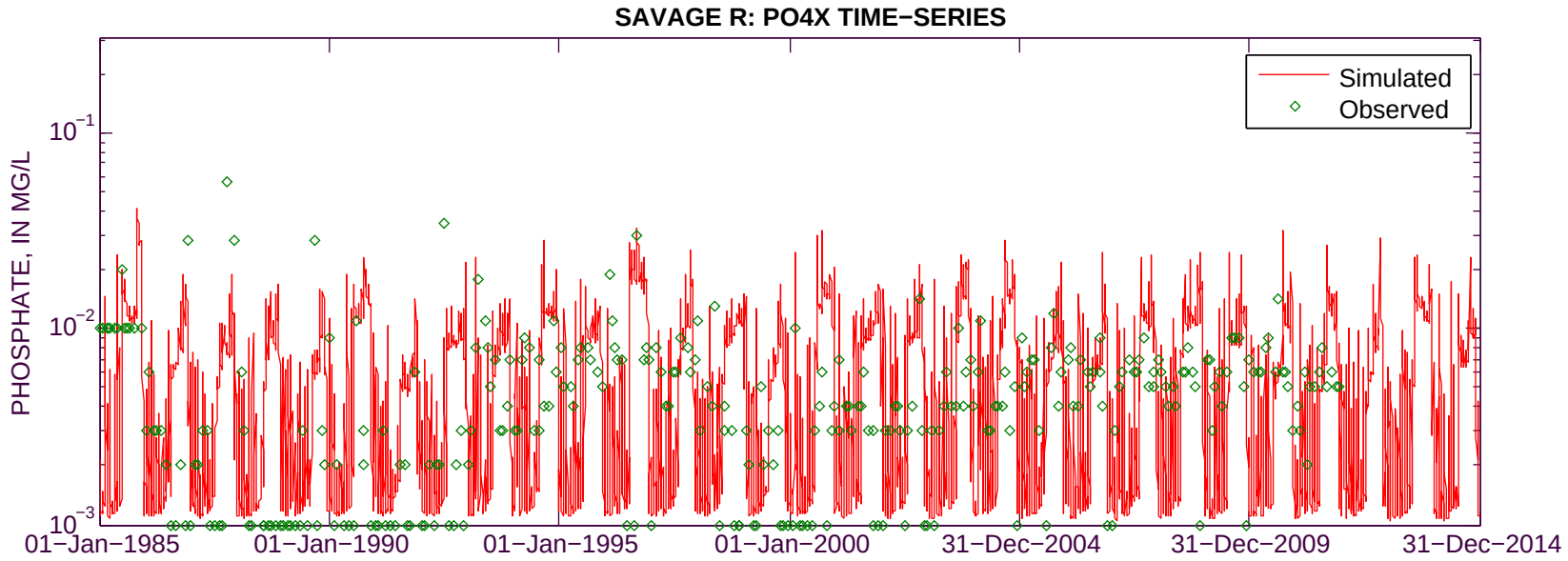
ALL DATA
LOG10

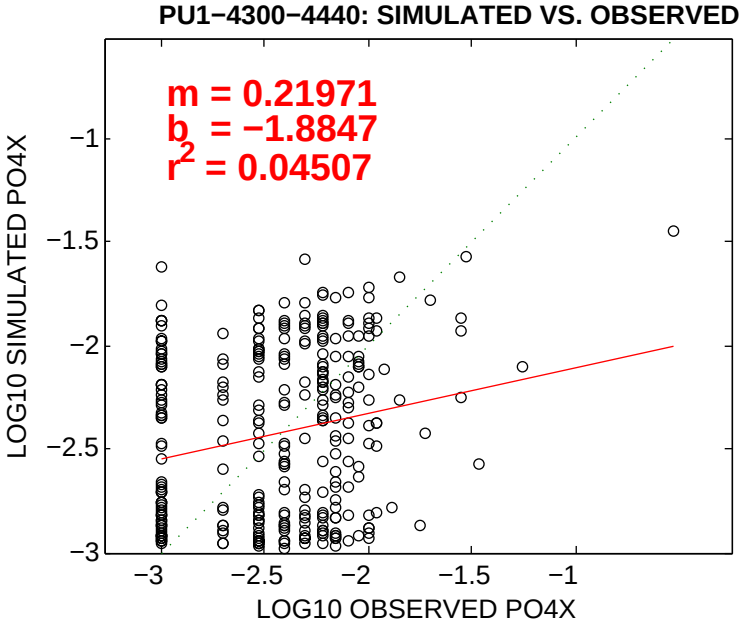


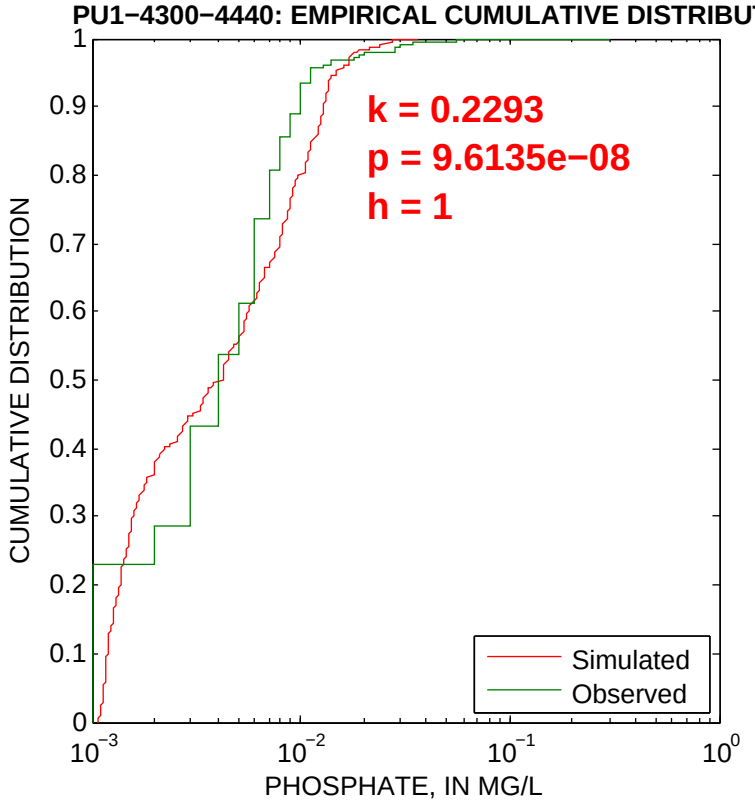












DATA SELECTION

scenario	file
P620171001WQ	PO4X.calib

plot: PO4X - phosphate

Dates: 1/1/1985 – 12/31/201

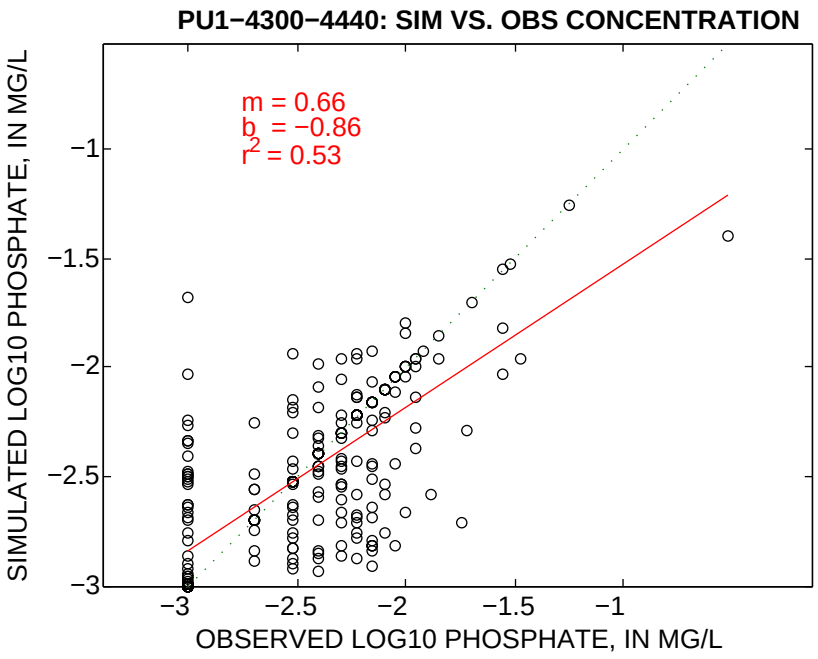
Drive	Directory	Observed
N/A	model	OBS20161101

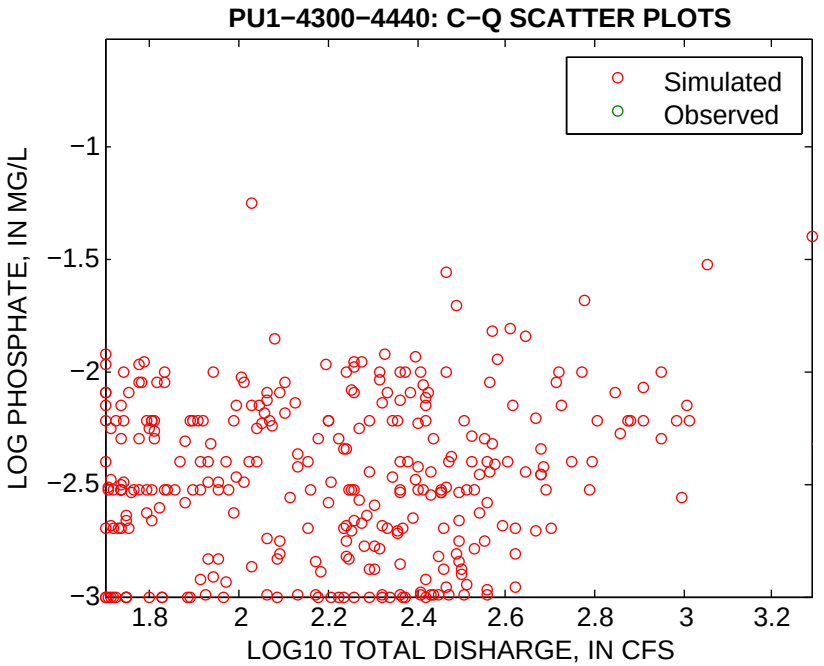
STATISTICS

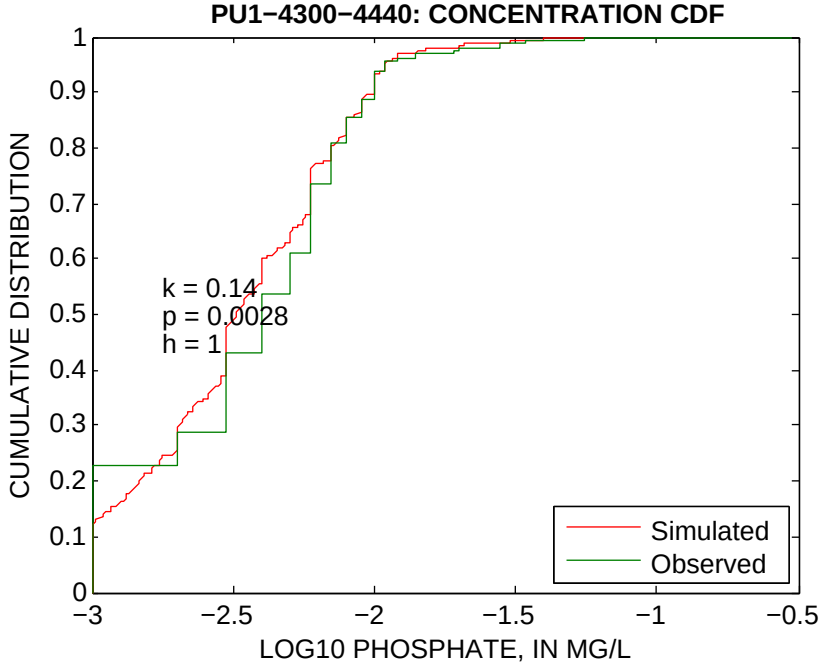
n	314	314
	observe	**simulate**
min	0.001 -3	0.0010658 -2.97232
mean	0.00614013 -2.43526	0.0057595 -2.41978
media	0.004 -2.39794	0.00417685 -2.37921
max	0.3 -0.522879	0.036055 -1.44303
varian	0.00030569 0.153302	2.79471e-0 0.164203
JB	0.001 0.004802	0.001 0.001
	ra	log
%	-6.19905	-0.635796
err.va	0.00026567	0.25038
rel.std.err	0.86908	1.63325
mod.eff	0.13092	-0.633247

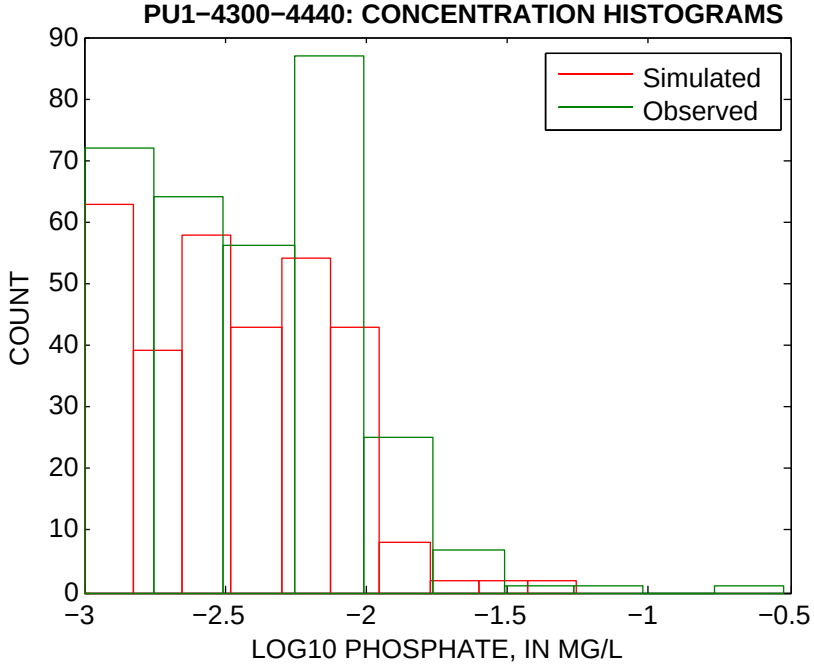
VERSION

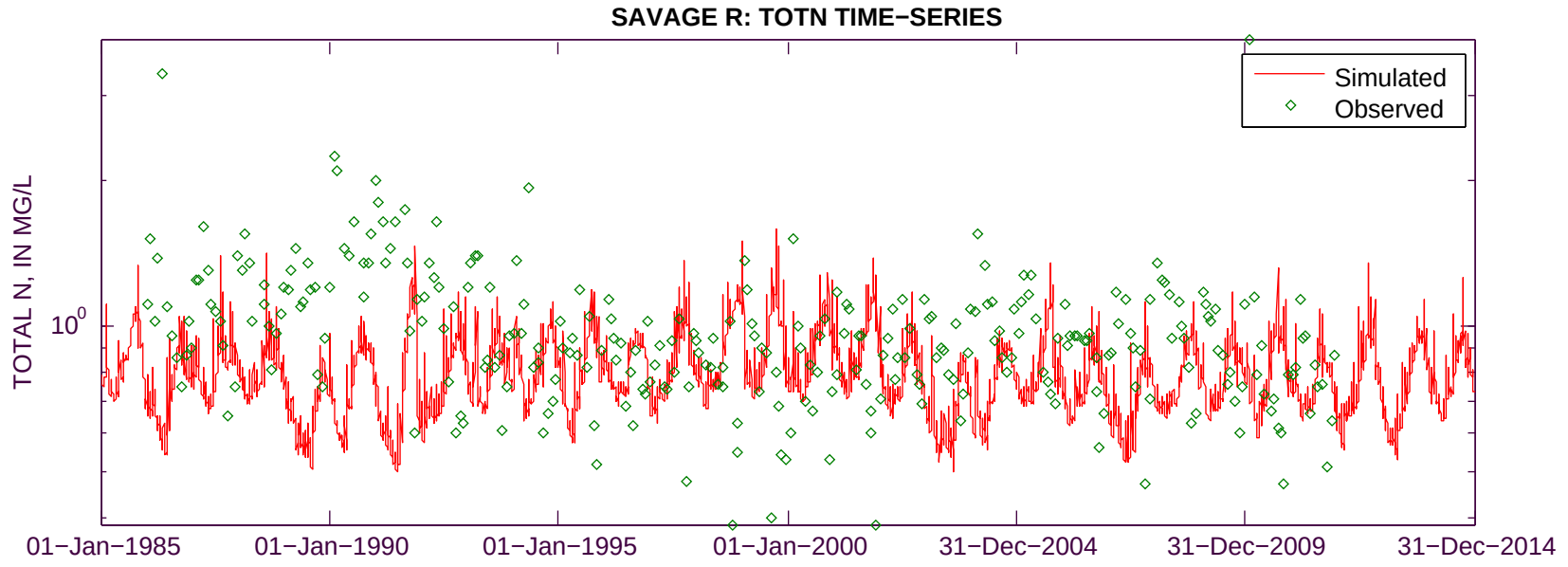
ALL DATA
LOG10

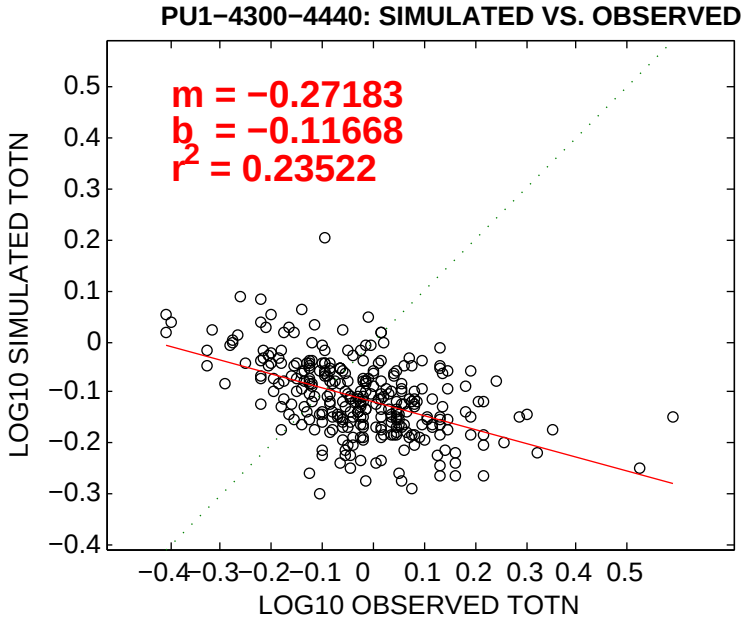


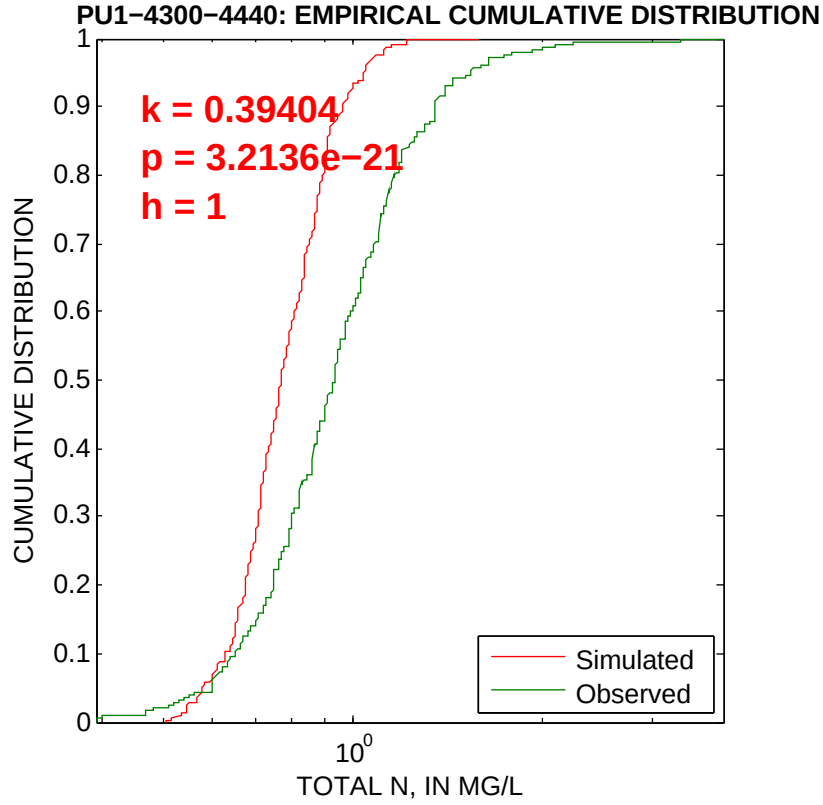












DATA SELECTION

scenario	file
P620171001WQ	TOTN.calib

plot: TOTN - total nitrogen

Dates: 1/1/1985 – 12/31/201

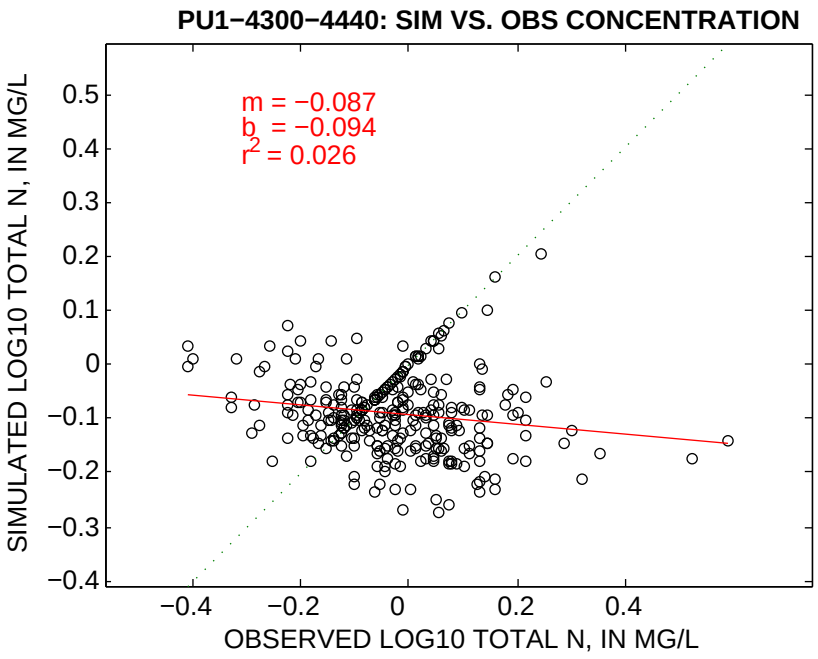
Drive	Directory	Observed
N/A	model	OBS20161101

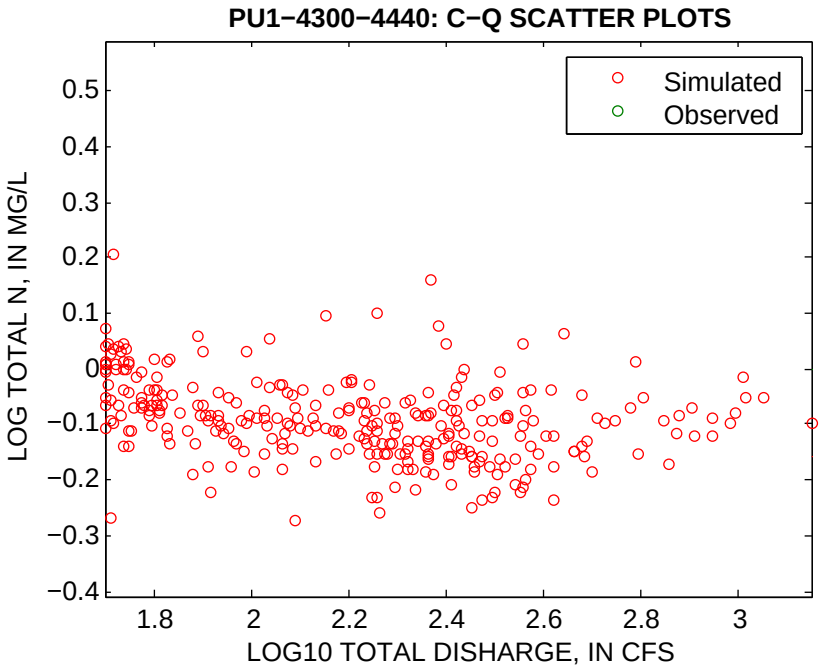
STATISTICS

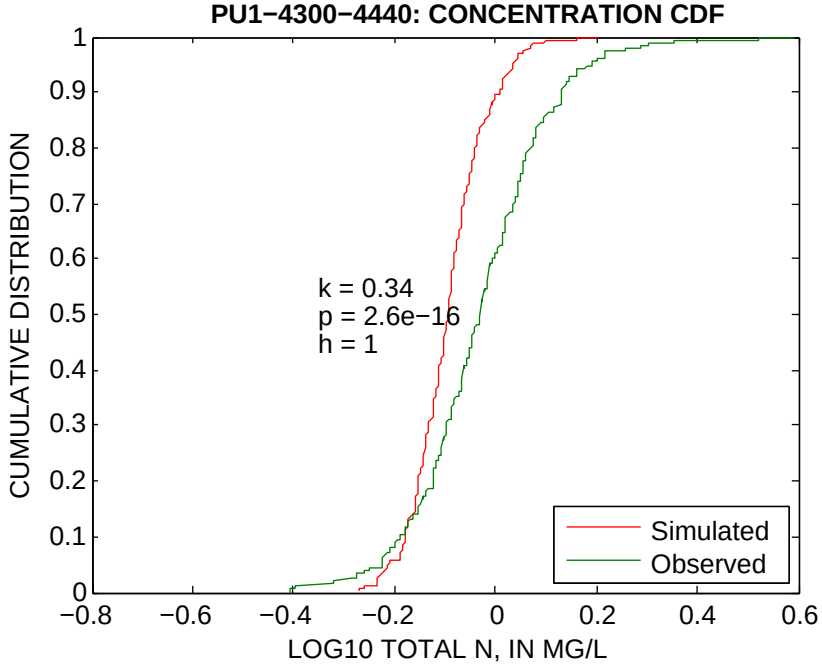
	n	302	302
		observe	simulate
min		0.39	0.50293
		-0.408935	-0.298492
mean		0.988677	0.789375
		-0.0270474	-0.109327
media		0.94	0.76919
		-0.0268721	-0.113966
max		3.89292	1.5911
		0.590275	0.201697
varian		0.130088	0.0200628
		0.0180546	0.0056714
JB		0.001	0.001
		0.001	0.046579
		ra	log
%		-20.1585	304.204
err.va		0.23097	0.0403338
rel.std.err		1.77549	2.234
mod.eff		-0.775495	-1.234

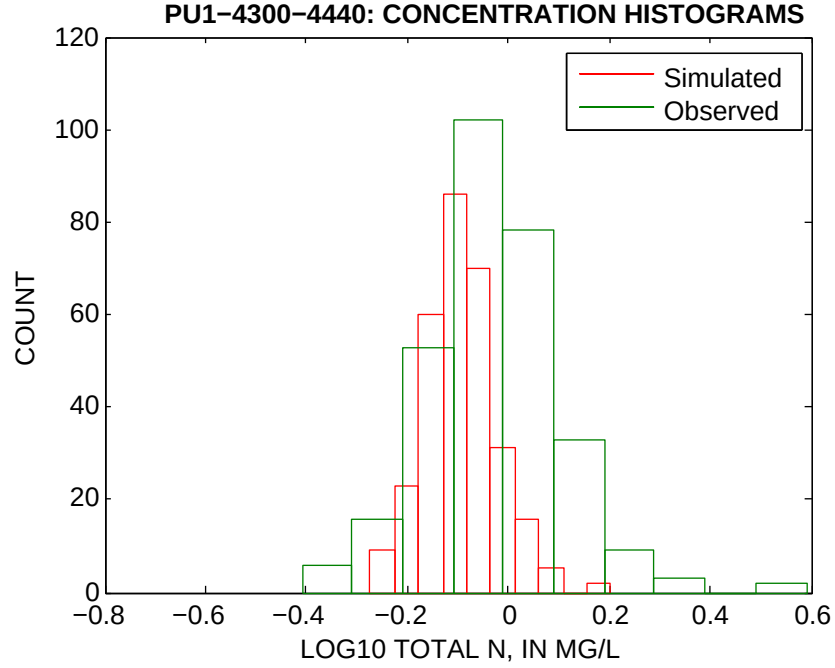
VERSION 2.1

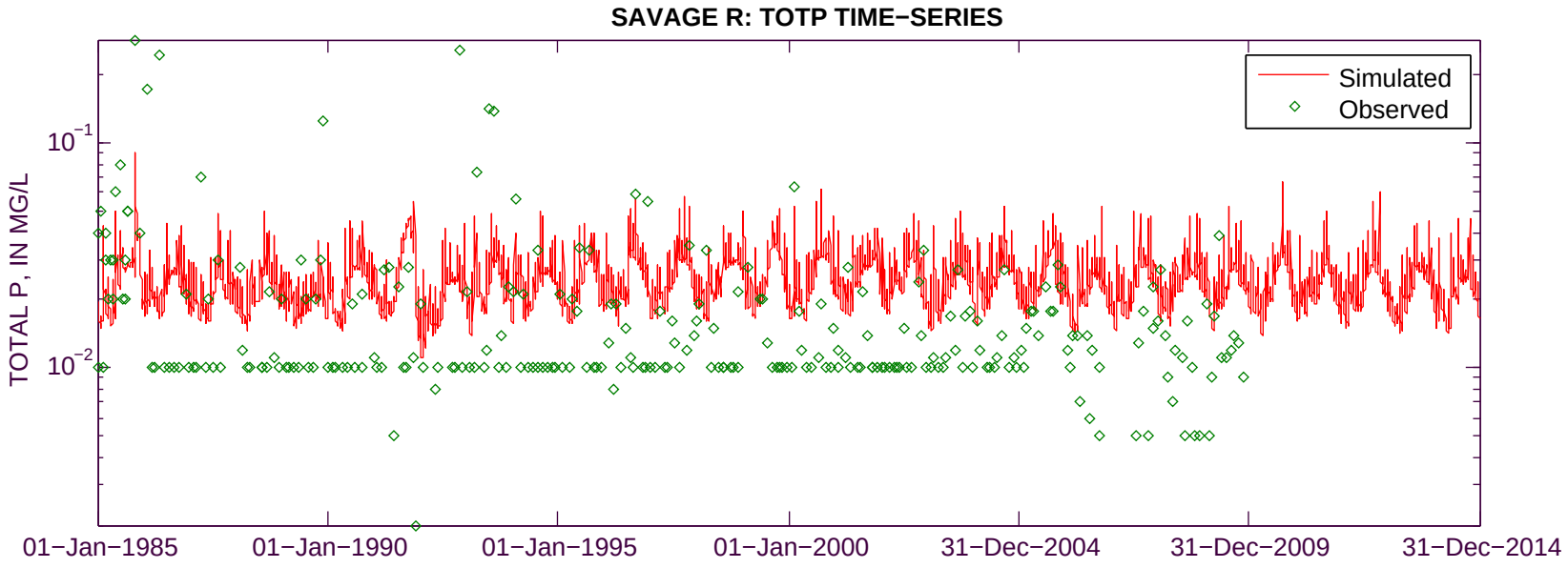
ALL DATA
LOG10

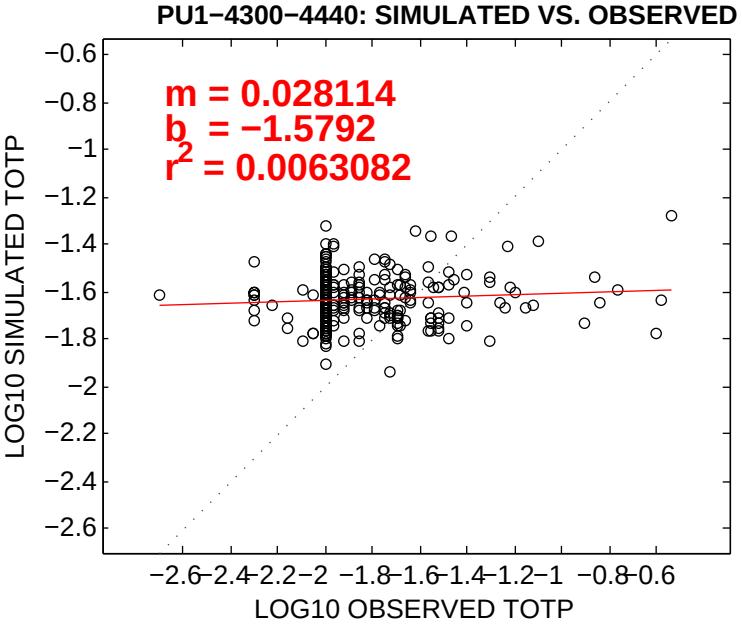


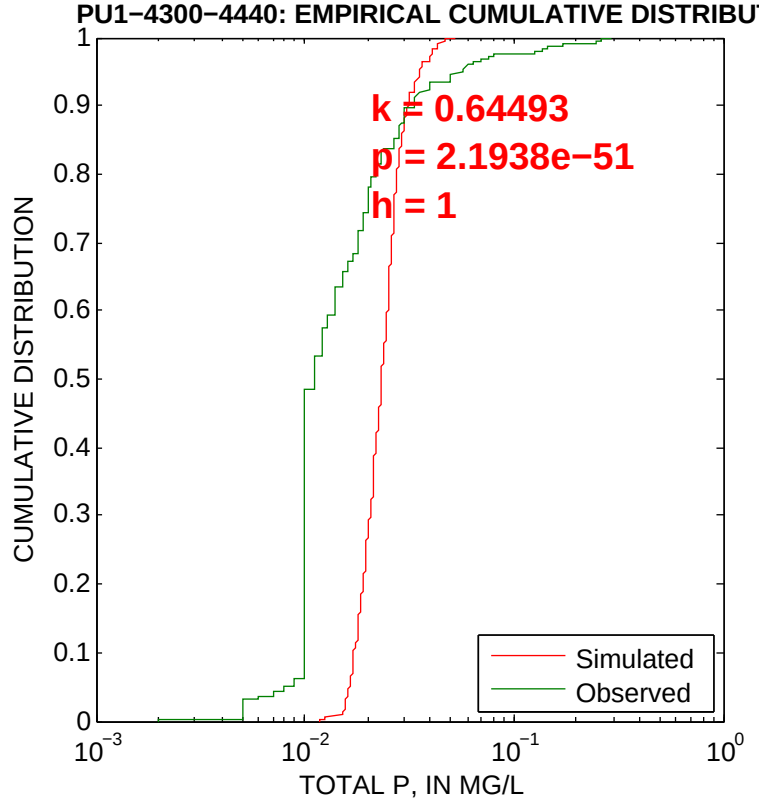












DATA SELECTION

scenario	file
P620171001WQ	TOTP.calib

plot: TOTP - total phosphorus

Dates: 1/1/1985 – 12/31/201

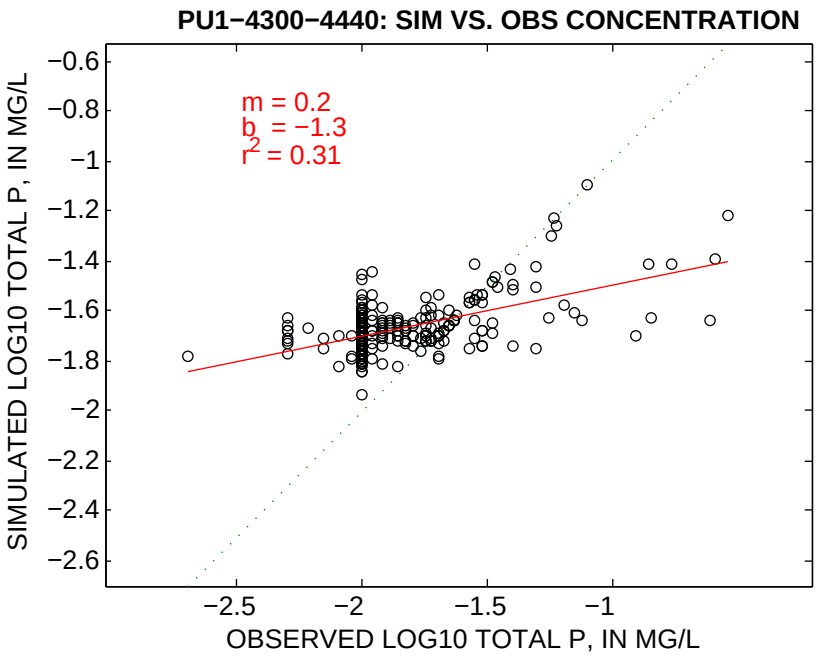
Drive	Directory	Observed
N/A	model	OBS20161101

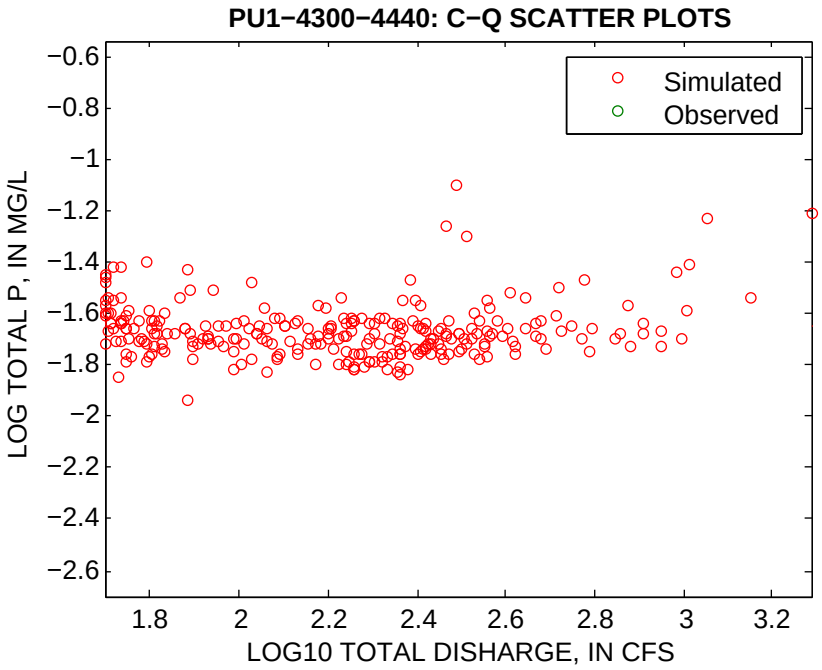
STATISTICS

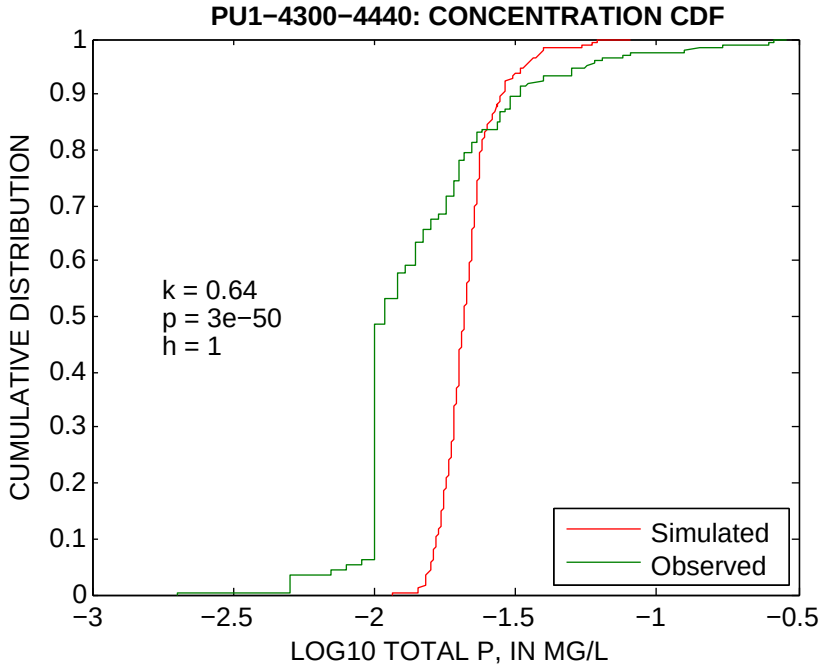
n	276	276
	observe	simulate
min	0.002	0.011678
	-2.69897	-1.93263
mean	0.0208043	0.0240894
	-1.83336	-1.63075
media	0.011	0.023304
	-1.95861	-1.63257
max	0.29	0.052092
	-0.537602	-1.28323
varian	0.00104107	3.70698e-0
	0.0849695	0.010646
JB	0.001	0.001
	0.001	0.023938
	ra	log
%	15.7902	-11.051
err.va	0.00103304	0.132036
rel.std.err	0.992279	1.55392
mod.eff	0.00772082	-0.55392

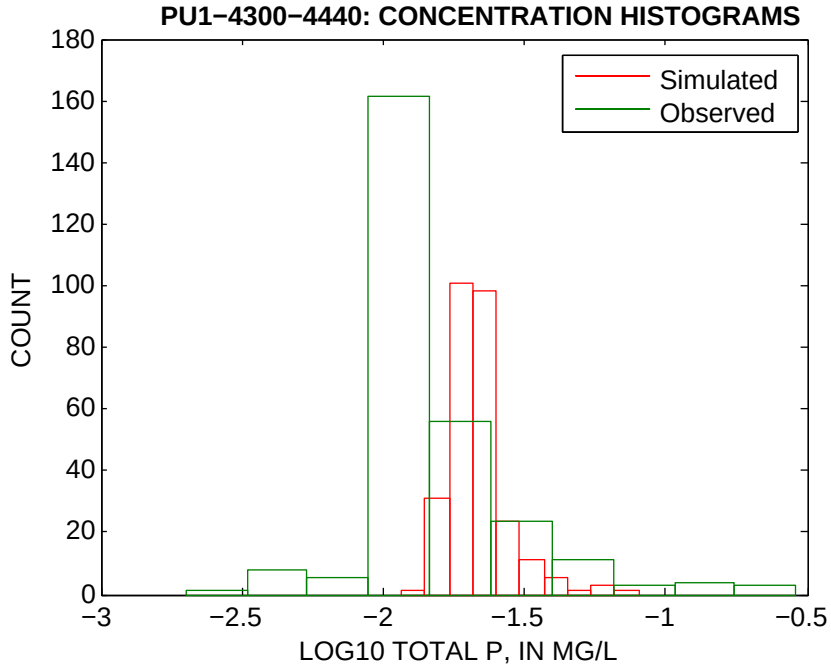
VERSION

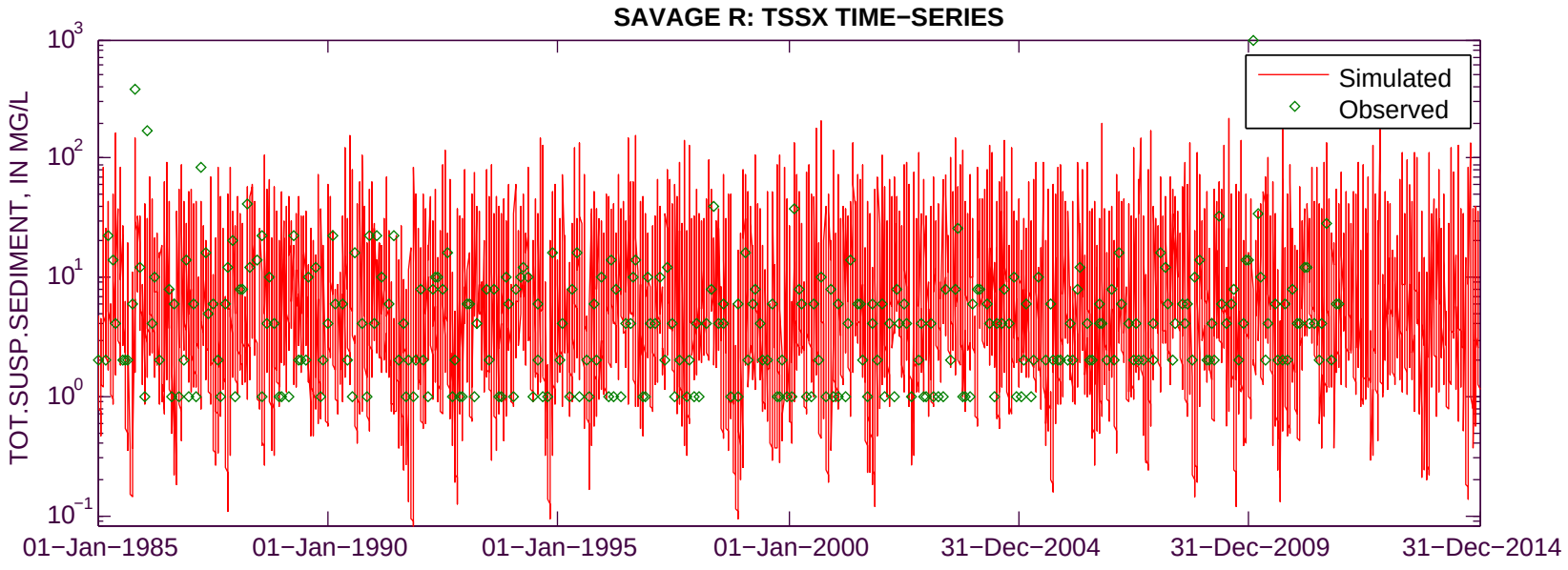
ALL DATA
LOG10

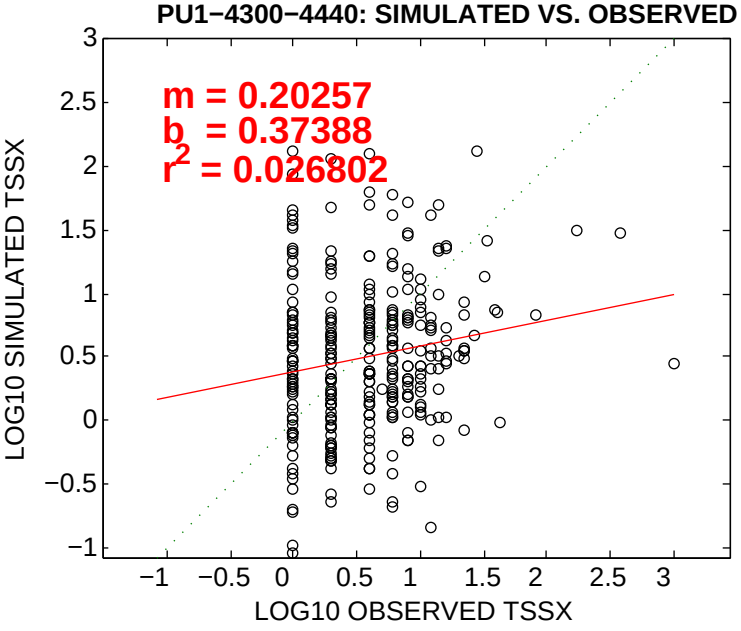


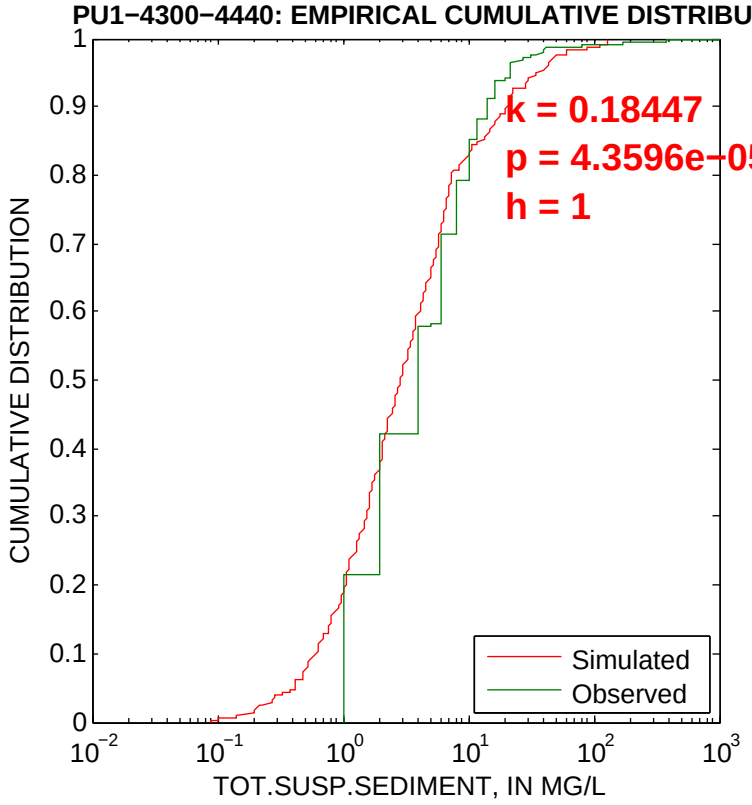












DATA SELECTION

scenario: P620171001WQ

file: TSSX.calib

plot: TSSX - total suspended ...

Dates: 1/1/1985 – 12/31/201

Drive: N/A

Directory: model

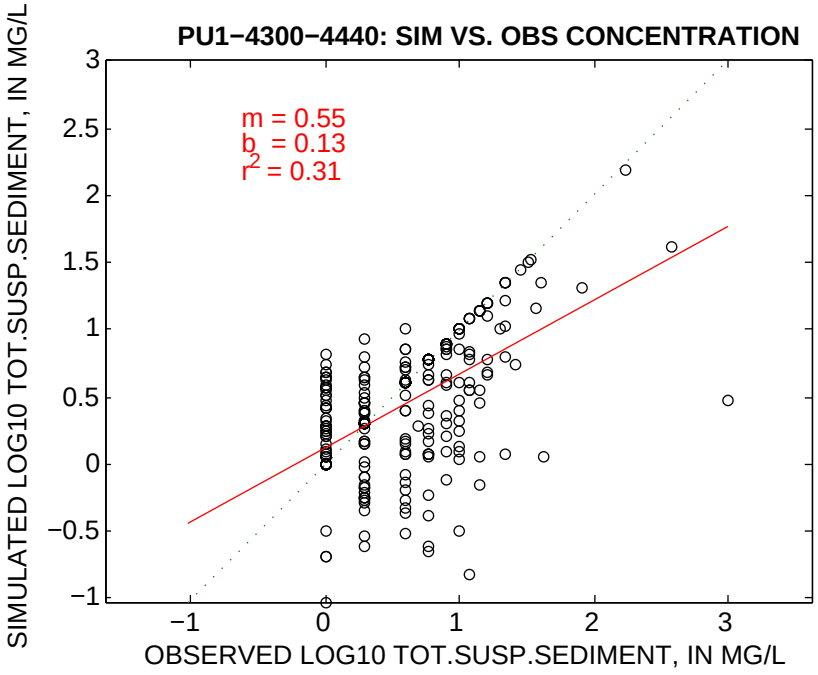
Observed: OBS20161101

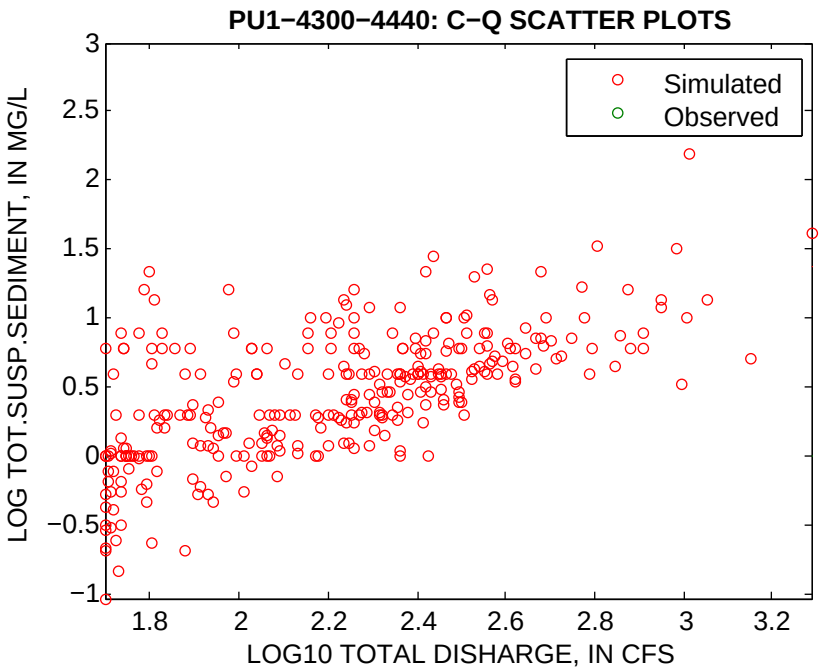
STATISTICS

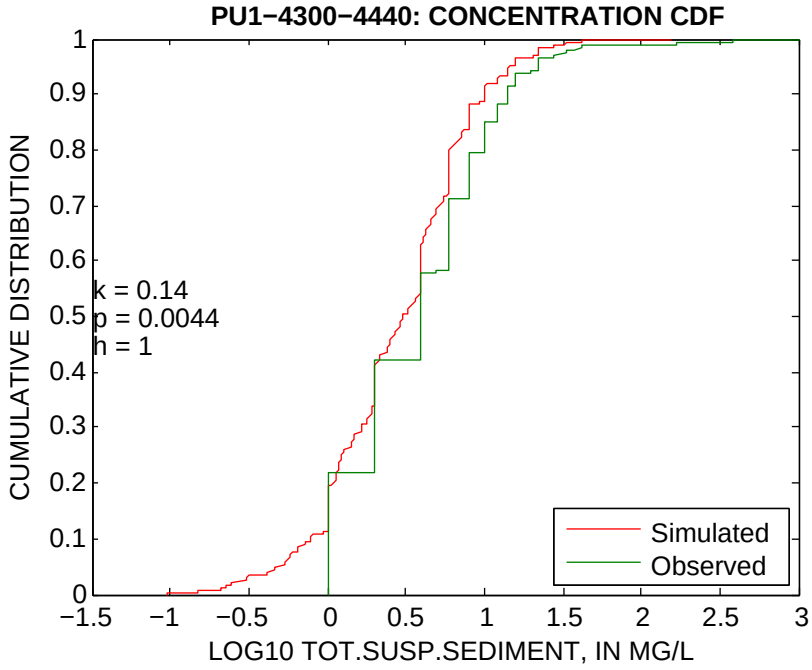
	n	observe	simulate
		309	309
min		1	0.090254
		0	-1.04453
mean		11.1133	8.36109
		0.591372	0.493672
media		4	2.9258
		0.60206	0.466245
max		1000	132.36
		3	2.12176
varian		3783.5	307.475
		0.222656	0.340879
JB		0.001	0.001
		0.001	0.094378
		ra	log
%		-24.7648	-16.5209
err.va		4045.76	0.482906
rel.std.err		1.06932	2.16884
mod.eff		-0.0693189	-1.16884

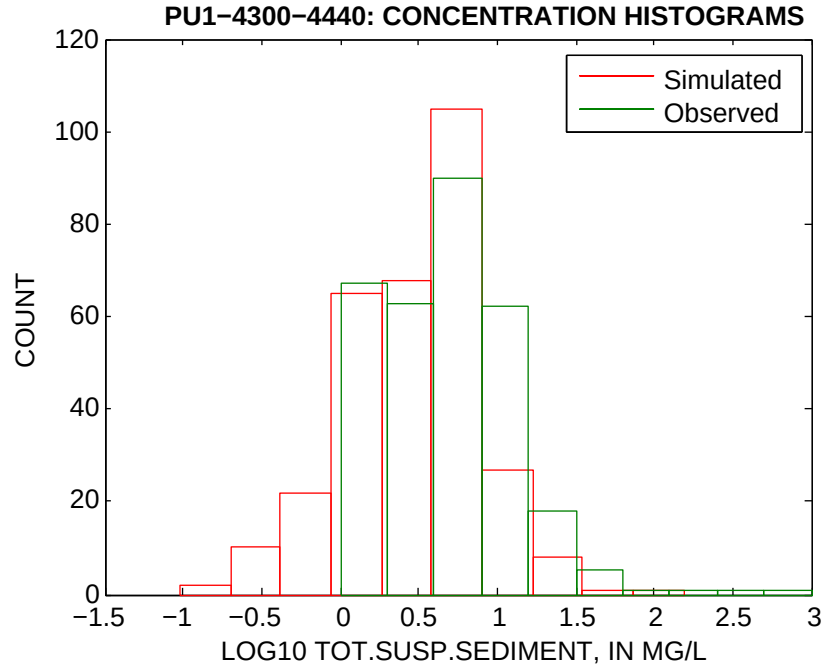
VERSION 2.1

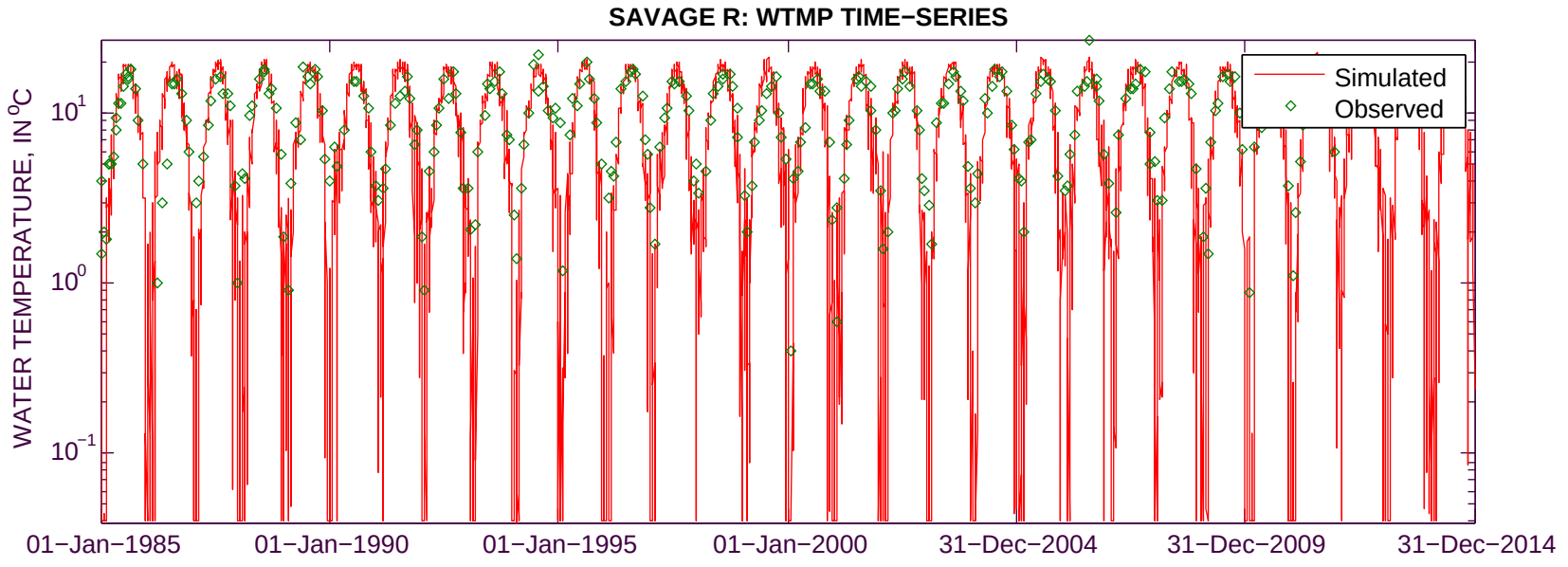
ALL DATA
LOG10

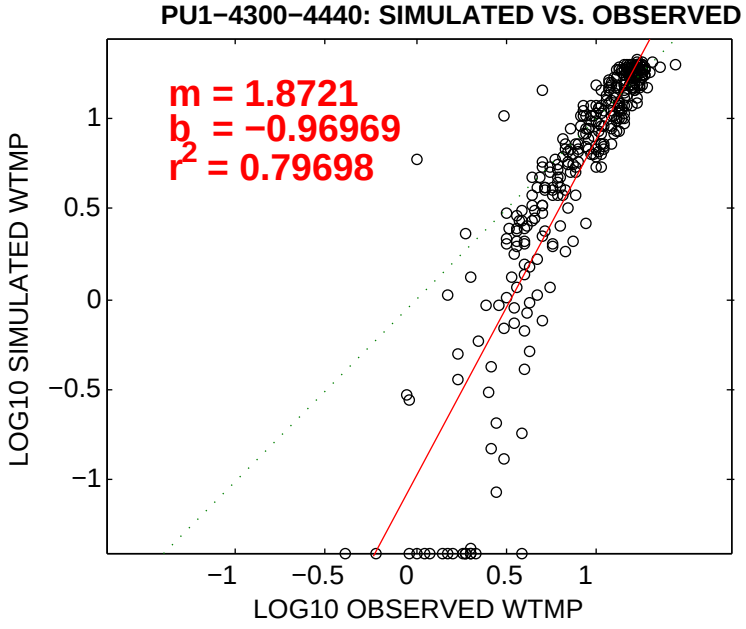


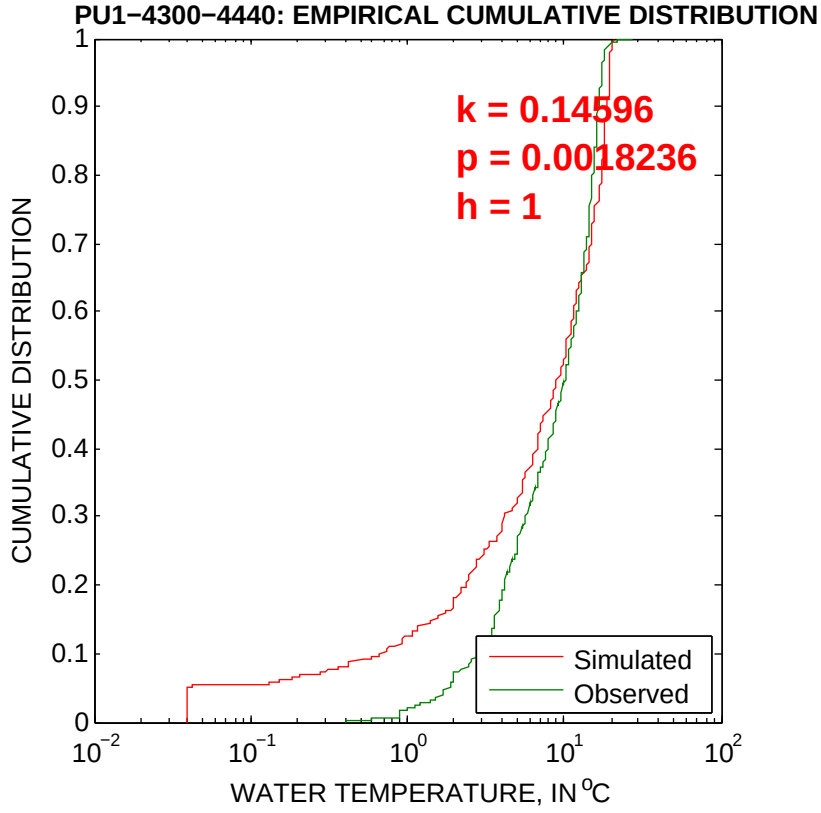












DATA SELECTION

scenario	file
P620171001WQ	WTMP.calib

plot: WTMP - water tempera...

Dates: 1/1/1985 – 12/31/201

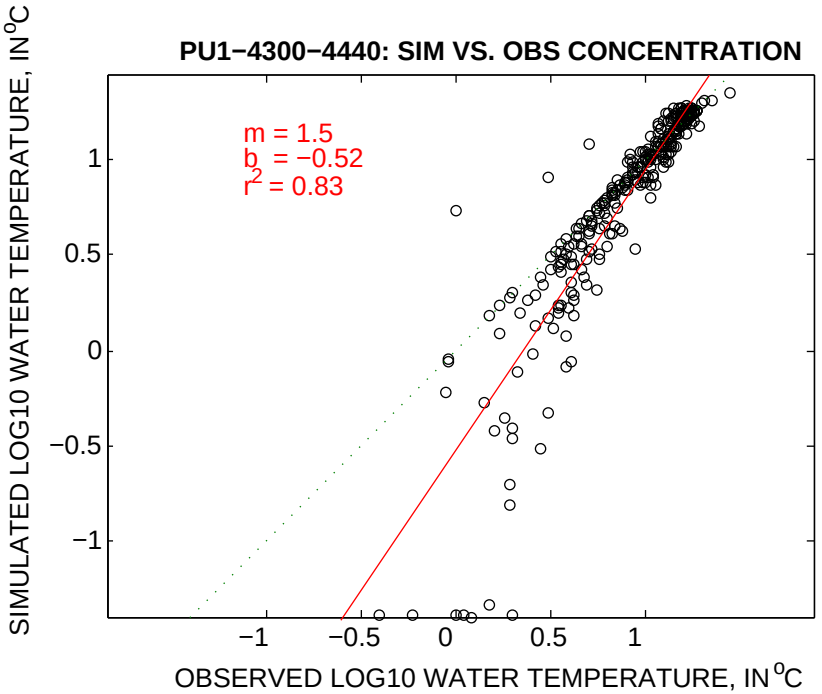
Drive	Directory	Observed
N/A	model	OBS20161101

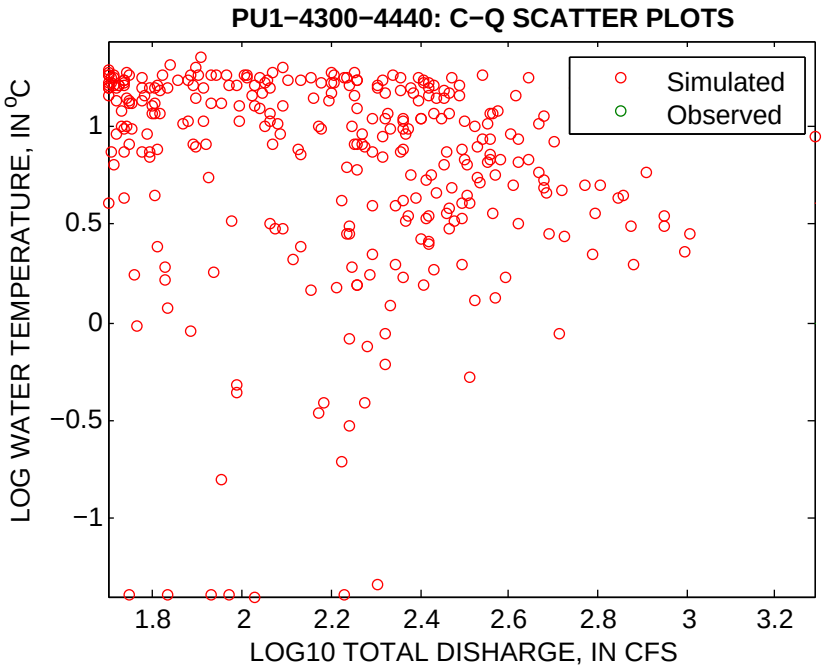
STATISTICS

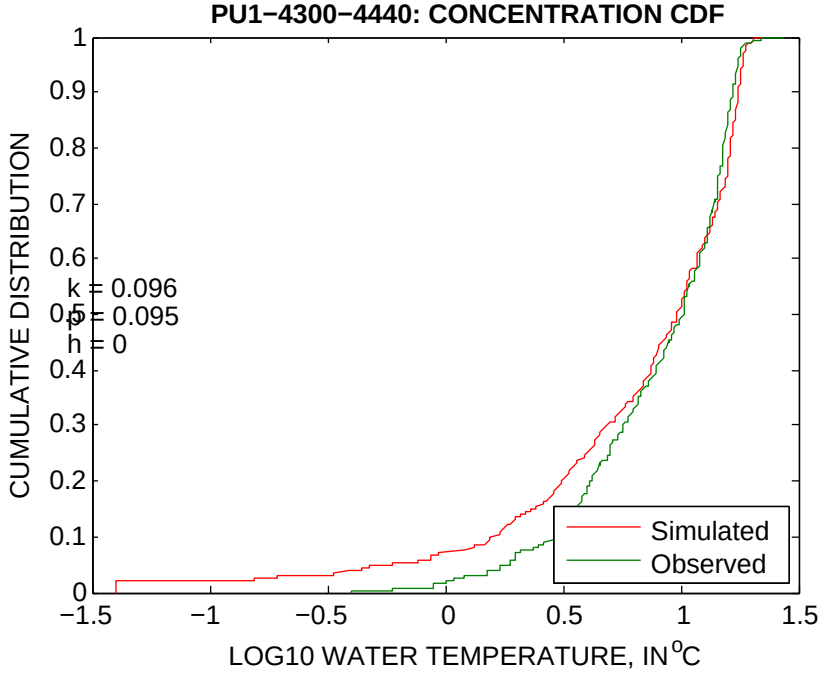
	n	observe	simulate
		322	322
min		0.4	0.039591
		-0.39794	-1.4024
mean		9.89246	9.55008
		0.901598	0.718192
media		10.25	9.0667
		1.01072	0.95744
max		27.4	20.958
		1.43775	1.32135
varian		28.6571	44.6686
		0.10644	0.468075
JB		0.005735	0.001
		0.001	0.001
		ra	log
%		-3.46096	-20.3423
err.va		7.10175	0.209725
rel.std.err		0.247818	1.97036
mod.eff		0.752182	-0.970362

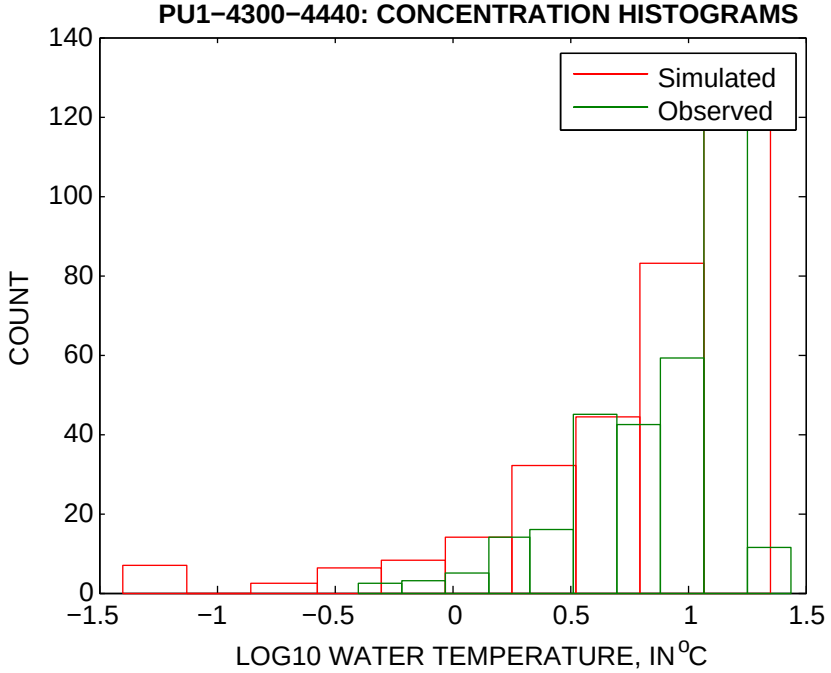
VERSION 2.1

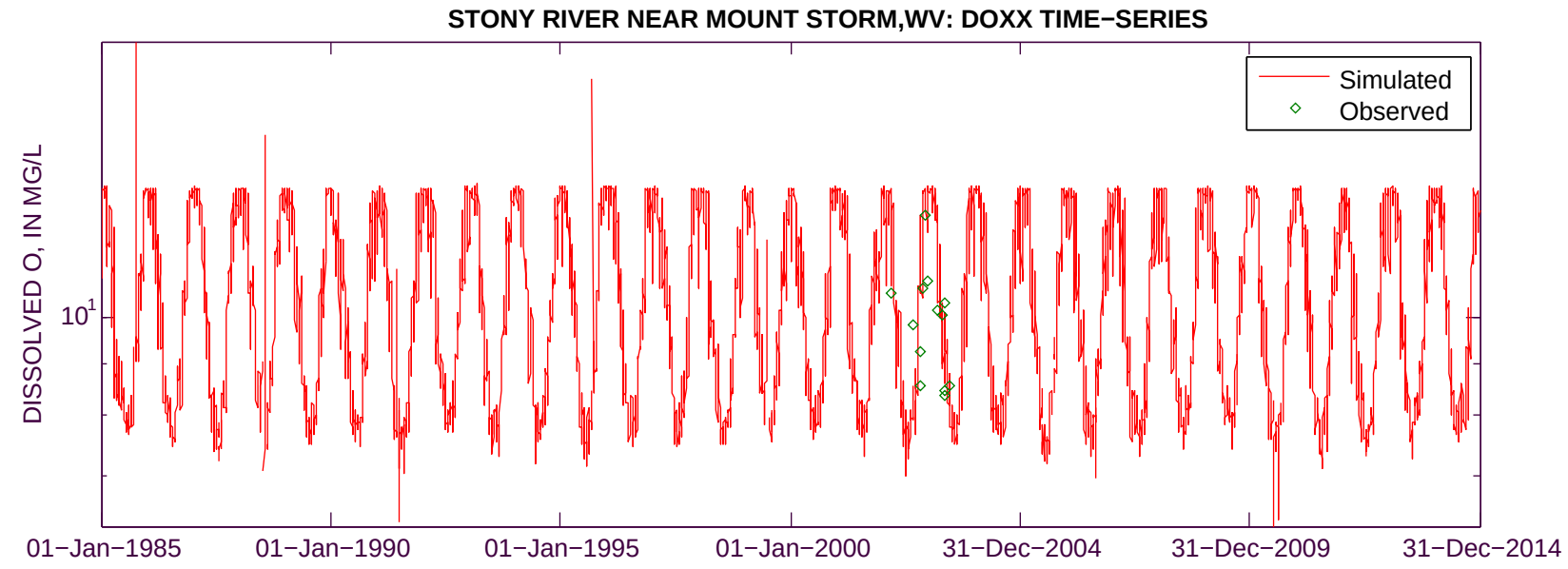
ALL DATA
LOG10

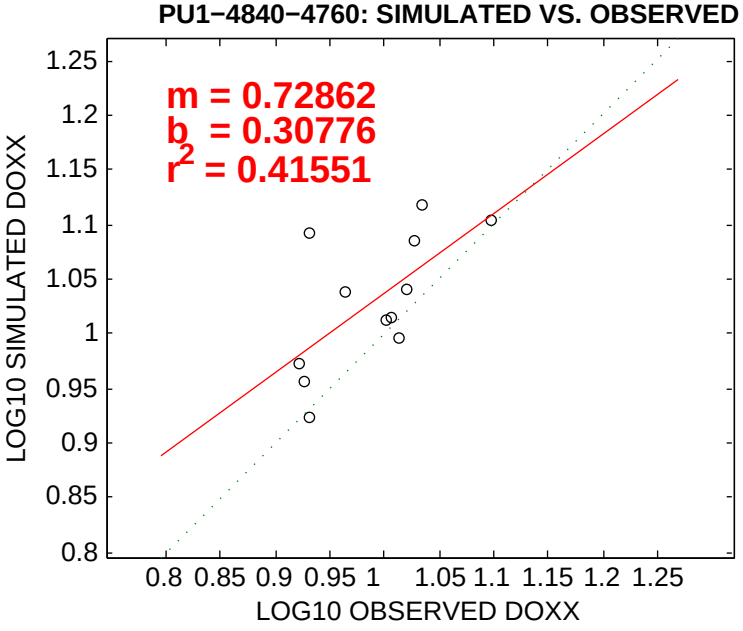


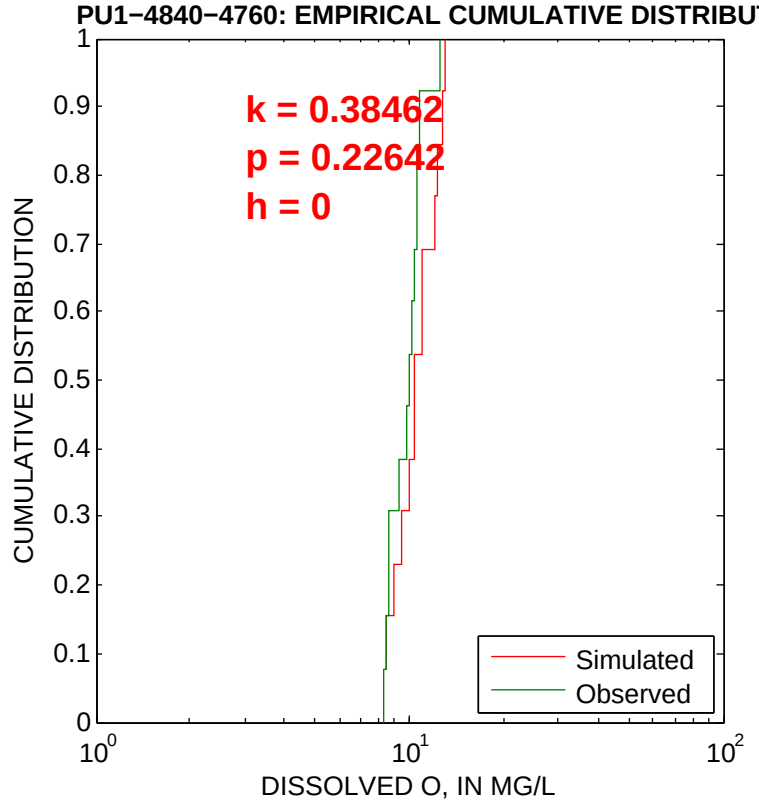












DATA SELECTION

scenario	file
P620171001WQ	DOXX.calib

plot: DOXX - dissolved oxygen

Dates: 1/1/1985 – 12/31/201

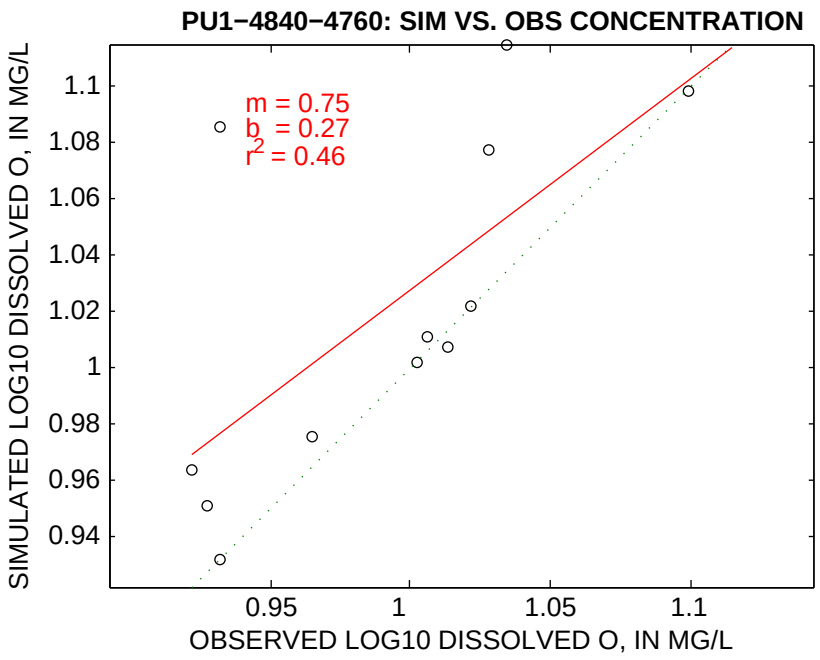
Drive	Directory	Observed
N/A	model	OBS20161101

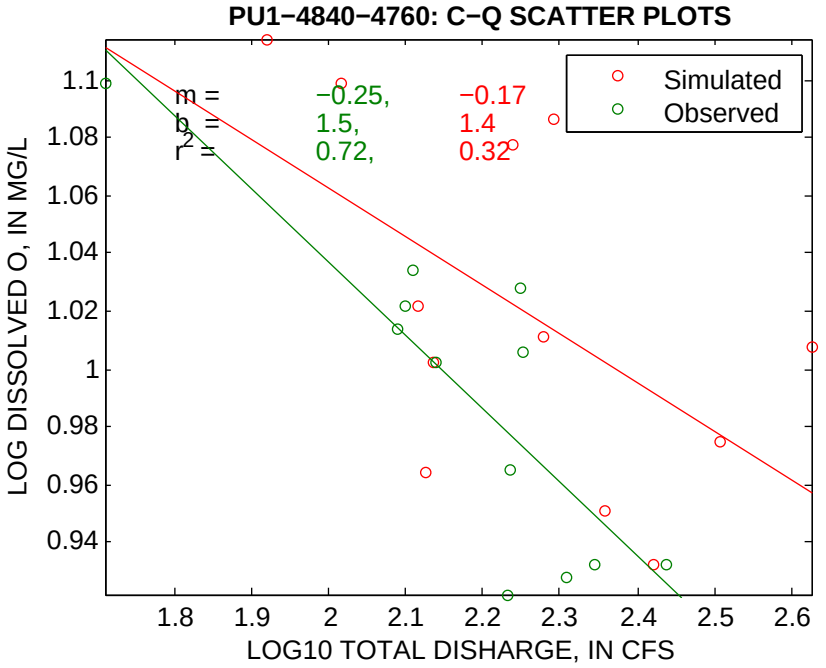
STATISTICS

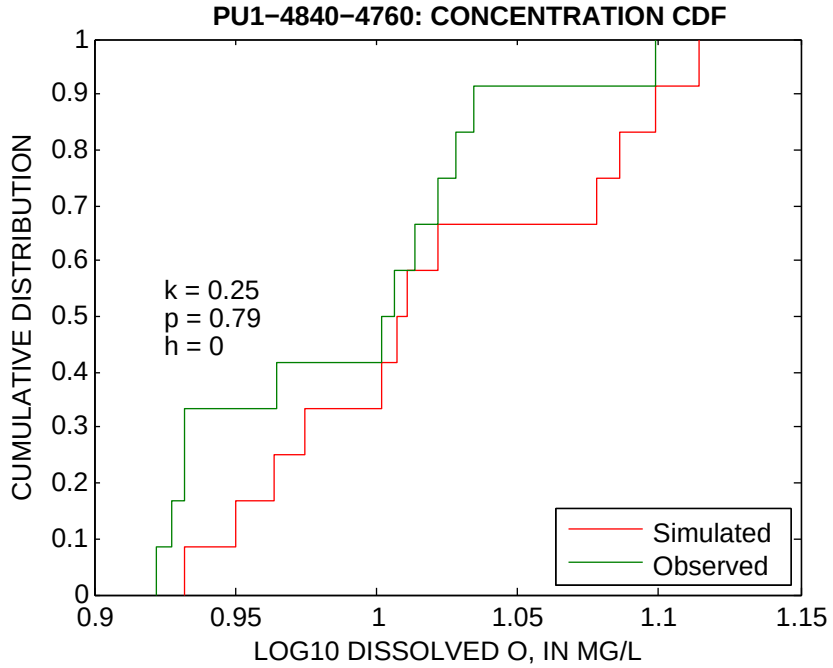
	n	13	12
		observe	simulate
min		8.36	0
		0.922206	0.923653
mean		9.85077	9.96771
		0.990363	1.02936
media		10.05	10.329
		1.0041	1.0262
max		12.55	13.12
		1.09864	1.11793
varian		1.45876	11.0907
		0.00298511	0.00381402
JB		0.5	0.001
		0.5	0.5
		ra	log
%		1.1871	3.93774
err.va		10.2741	0.00410818
rel.std.err		7.04305	1.37623
mod.eff		-6.04305	-0.376226

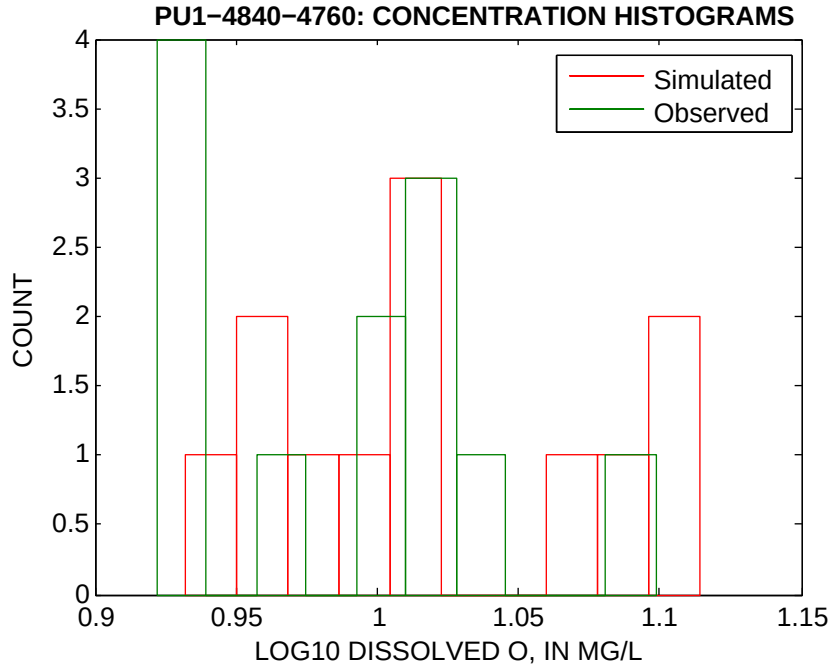
VERSION

ALL DATA
LOG10

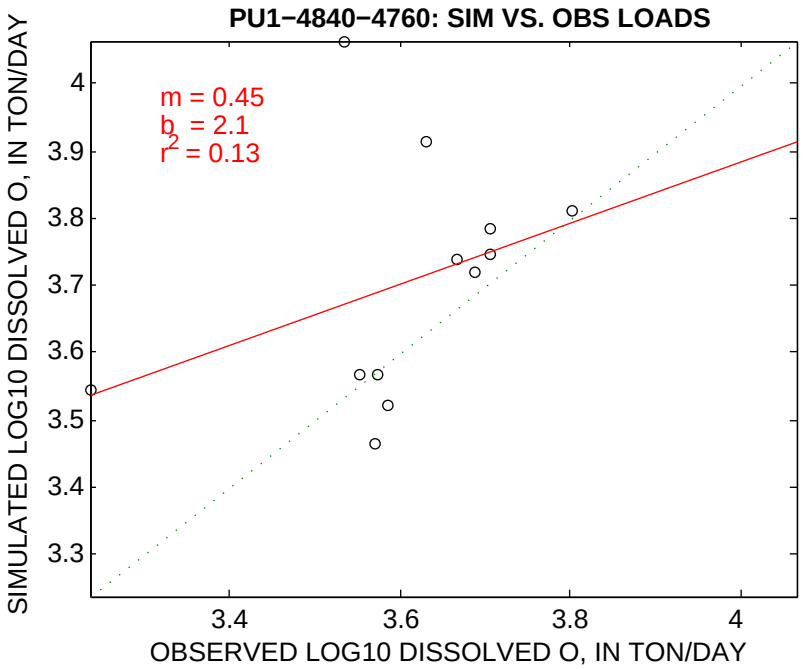


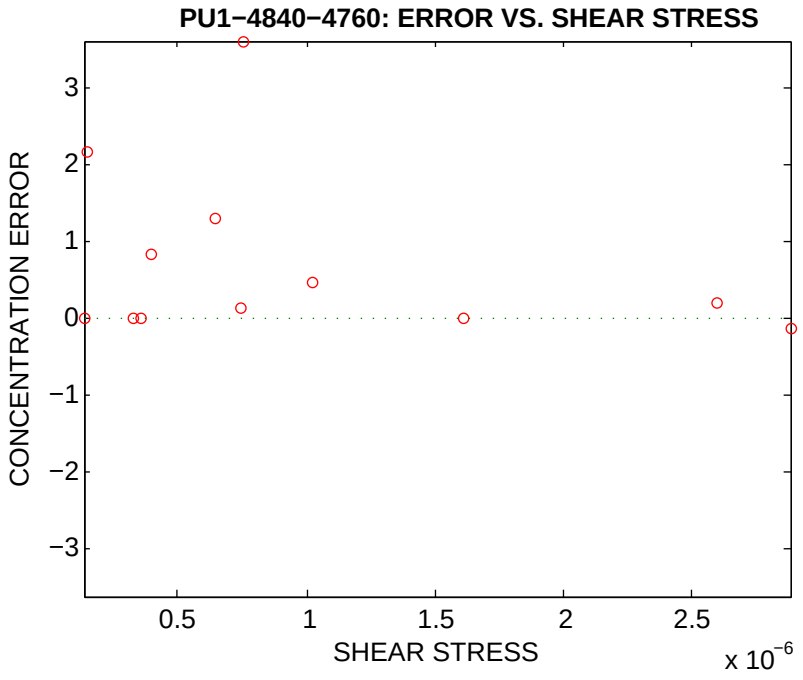


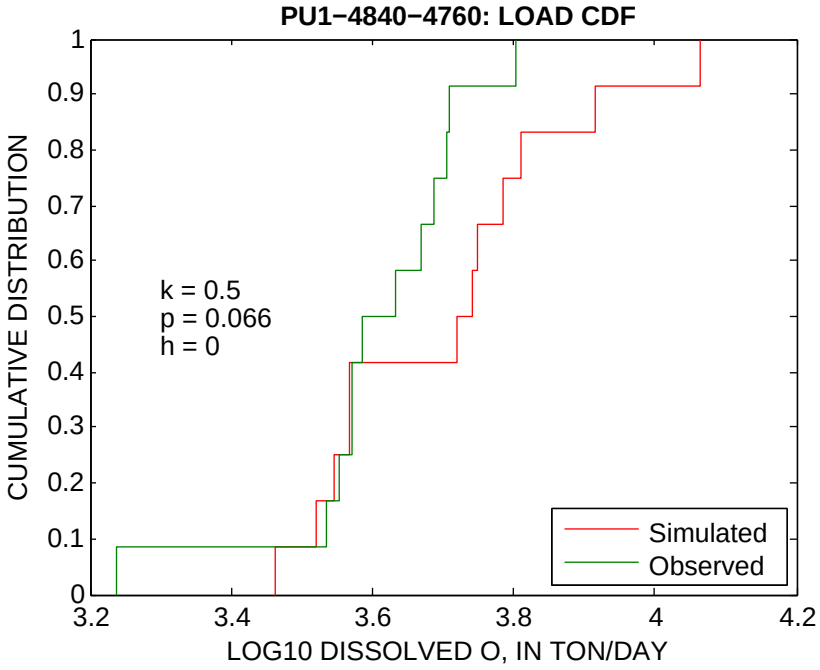


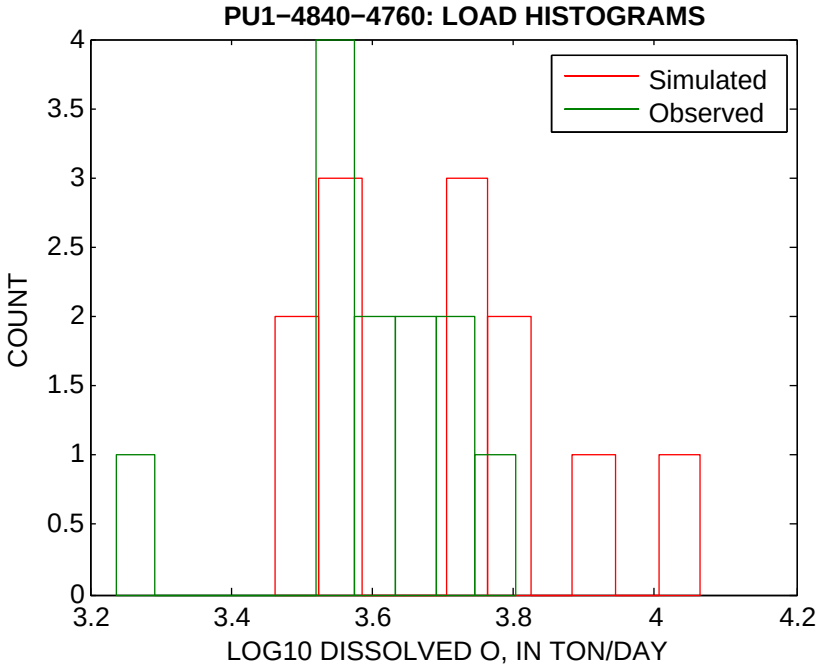


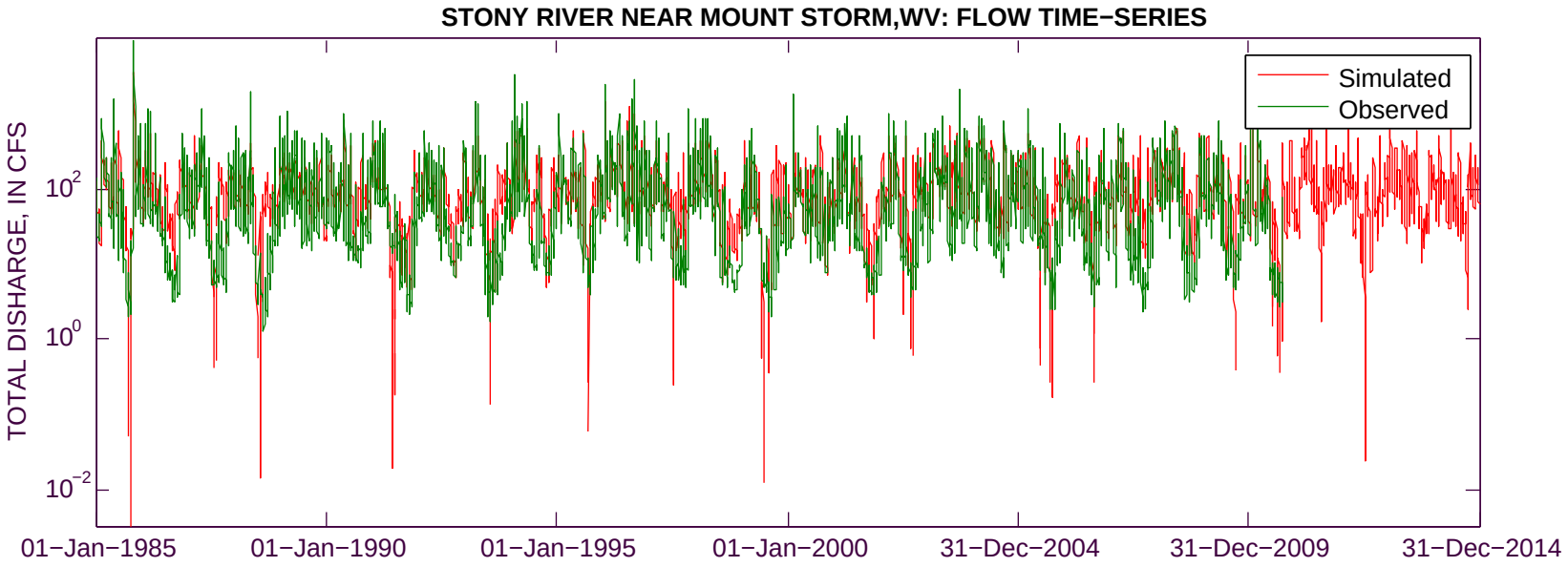
LOAD DATA
LOG10

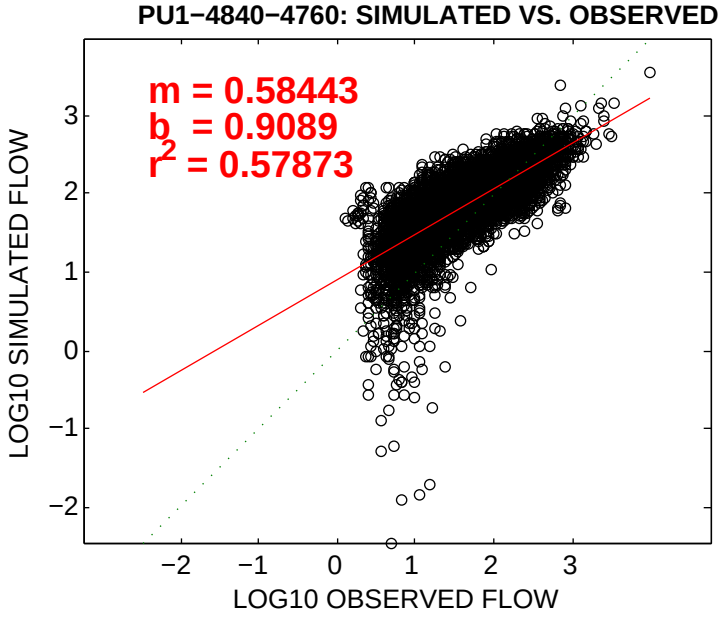


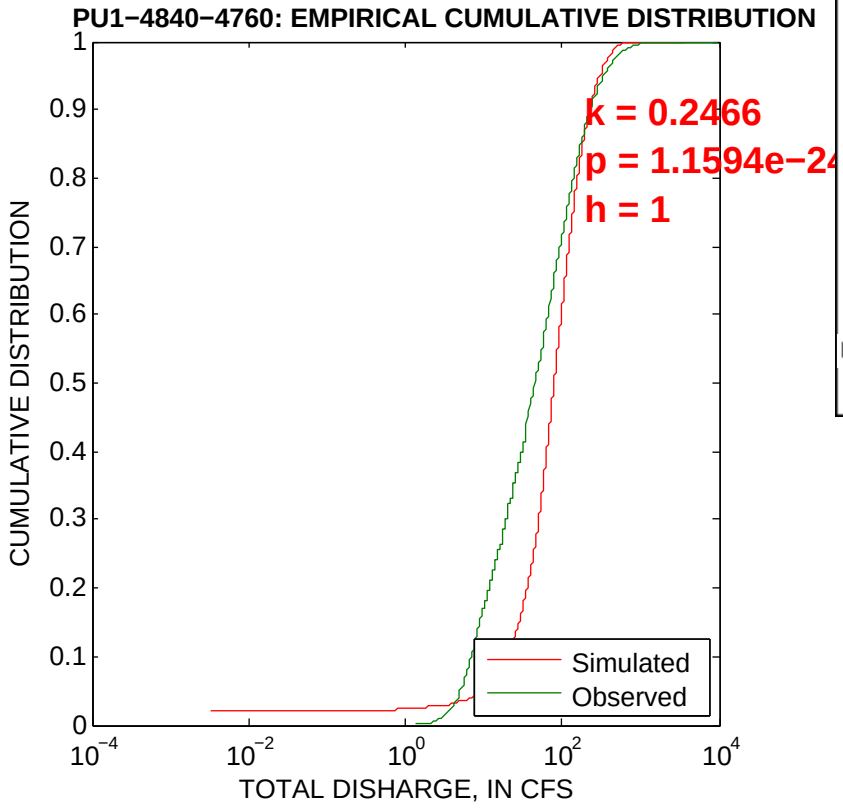












DATA SELECTION

scenario: P620171001WQ | file: FLOW.calib

plot: FLOW - total discharge

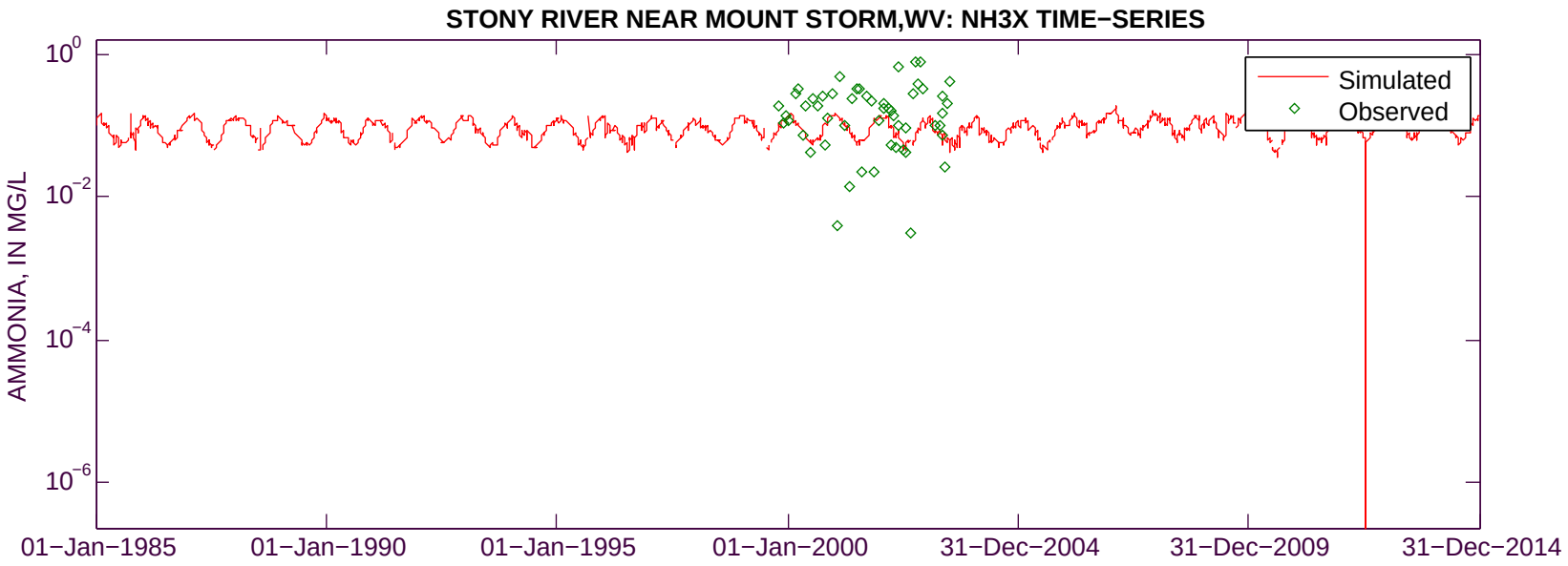
Dates: 1/1/1985 – 12/31/201

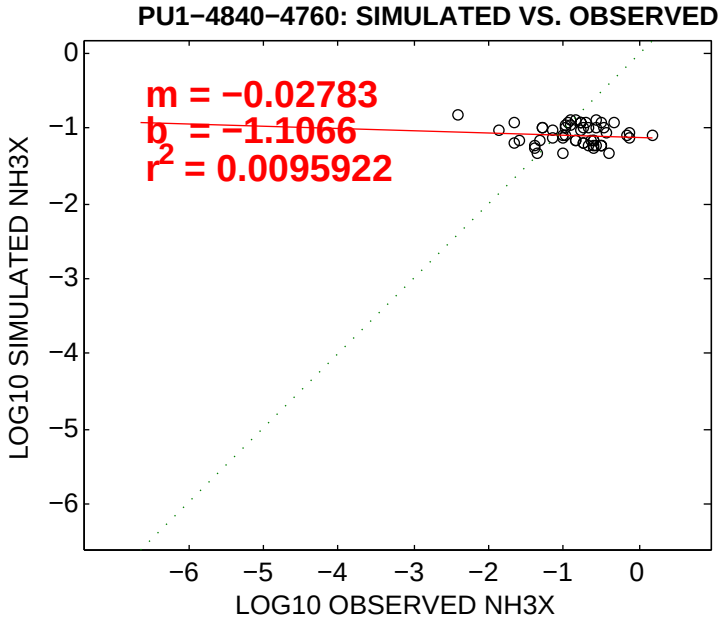
Drive: N/A | Directory: model | Observed: OBS20161101

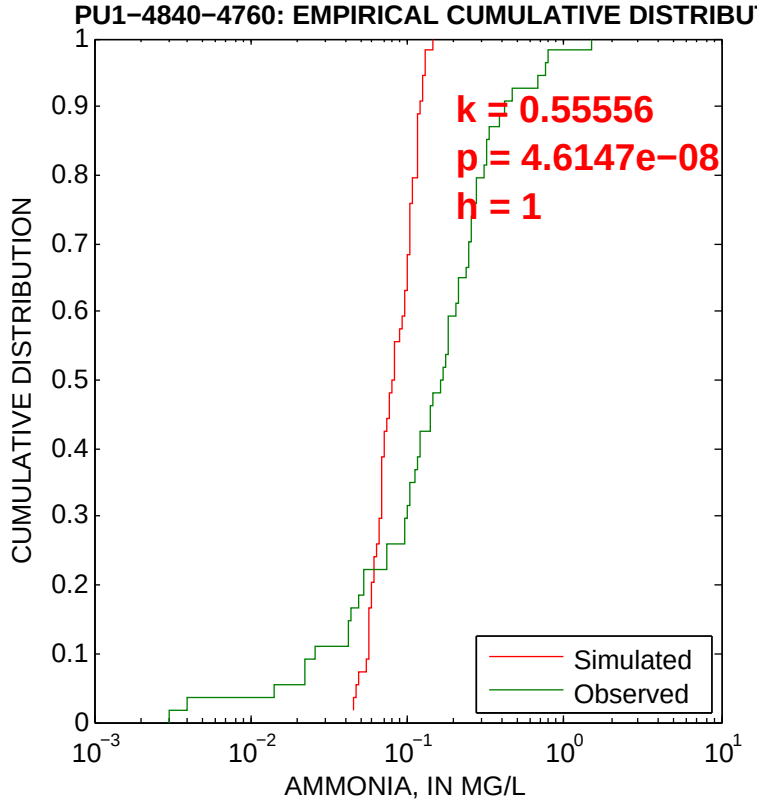
STATISTICS

	n	observe	simulate
		9404	9221
min		1.3	0
		0.113943	-2.48569
mean		96.462	108.334
		1.64763	1.87182
media		46	79.1795
		1.68124	1.90876
max		9880	3714.6
		3.99476	3.56991
varian		34822.6	12585.4
		0.317326	0.187281
JB		0.001	0.001
		0.001	0.001
		ra	log
%		12.3073	13.6069
err.va		15821.4	0.183966
rel.std.err		0.454344	0.579738
mod.eff		0.545656	0.420262

VERSION 2.1







DATA SELECTION

scenario: P620171001WQ; file: NH3X.calib

plot: NH3X - ammonia

Dates: 1/1/1985 – 12/31/201

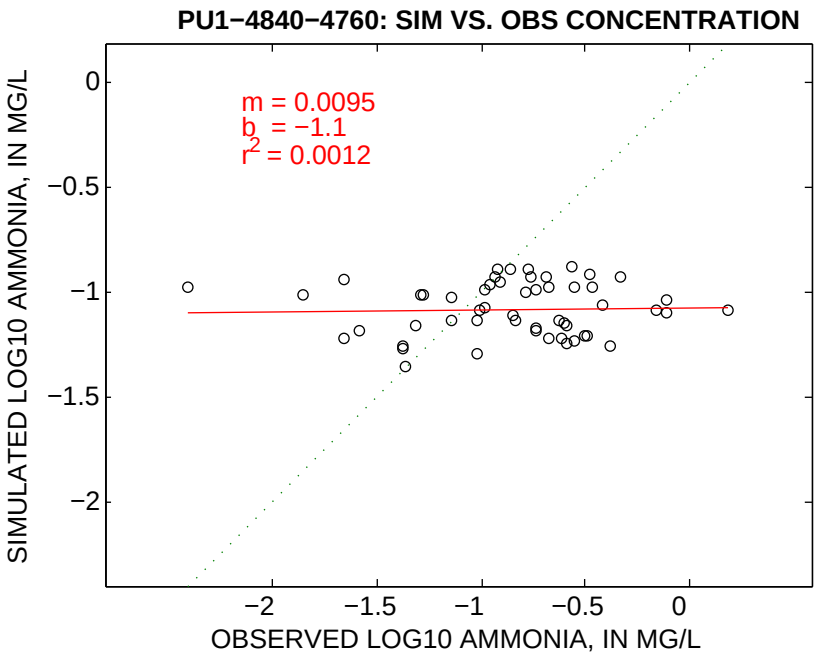
Drive: N/A; Directory: model; Observed: OBS20161101

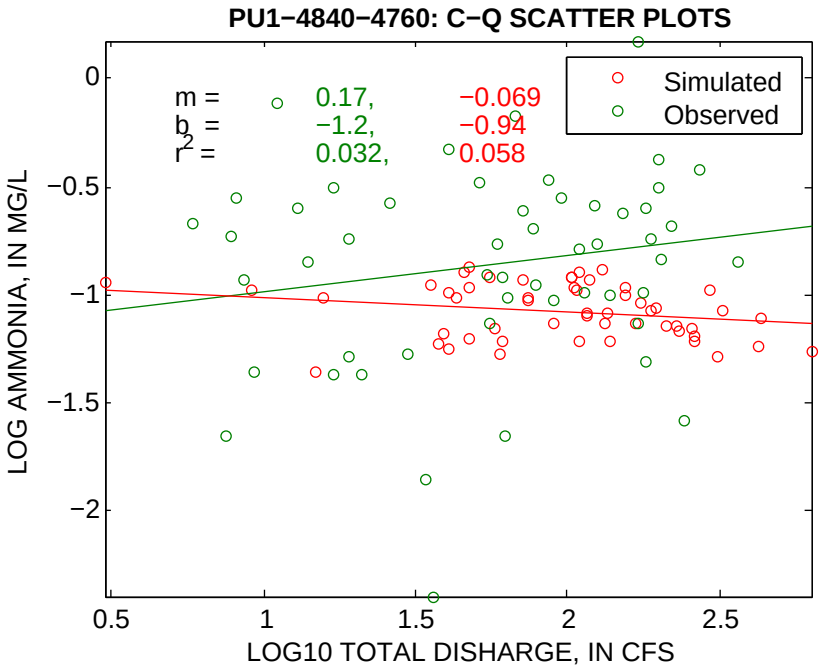
STATISTICS

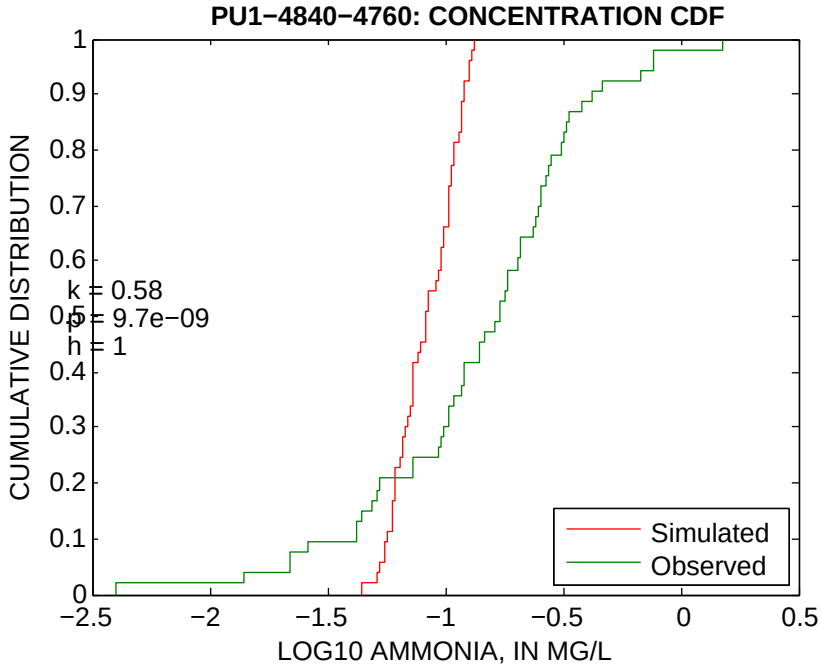
		observe	simulate
n		54	53
min		0.003	0
		-2.39794	-1.34864
mean		0.22113	0.0848788
		-0.854425	-1.08281
media		0.167	0.080481
		-0.769551	-1.08816
max		1.506	0.14632
		0.177825	-0.834696
varian		0.0617793	0.00080266
		0.220102	0.0177723
JB		0.001	0.5
		0.023680	0.140428
		ra	log
%		-61.6158	26.73
err.va		0.0818186	0.30329
rel.std.err		1.32437	1.37795
mod.eff		-0.324369	-0.377948

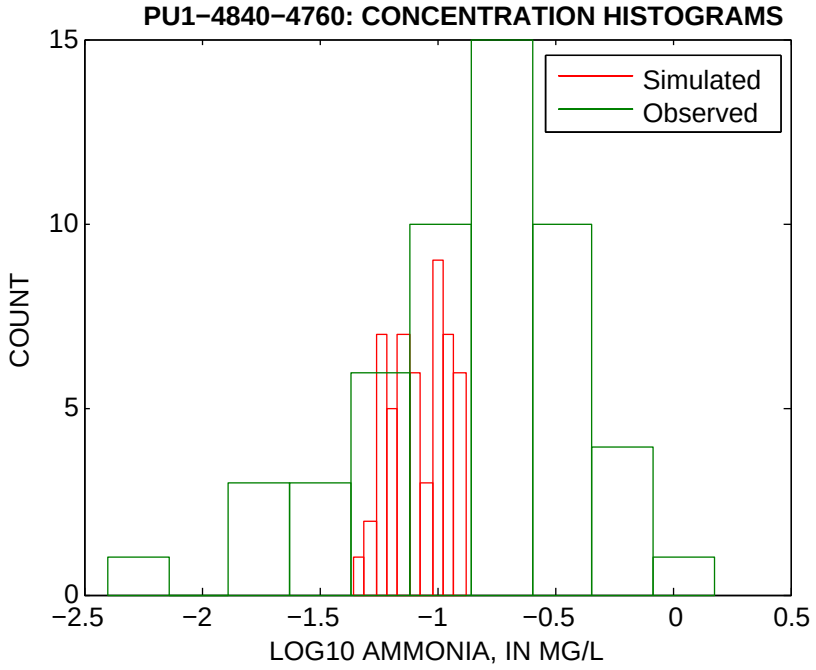
VERSION 2.1

ALL DATA
LOG10

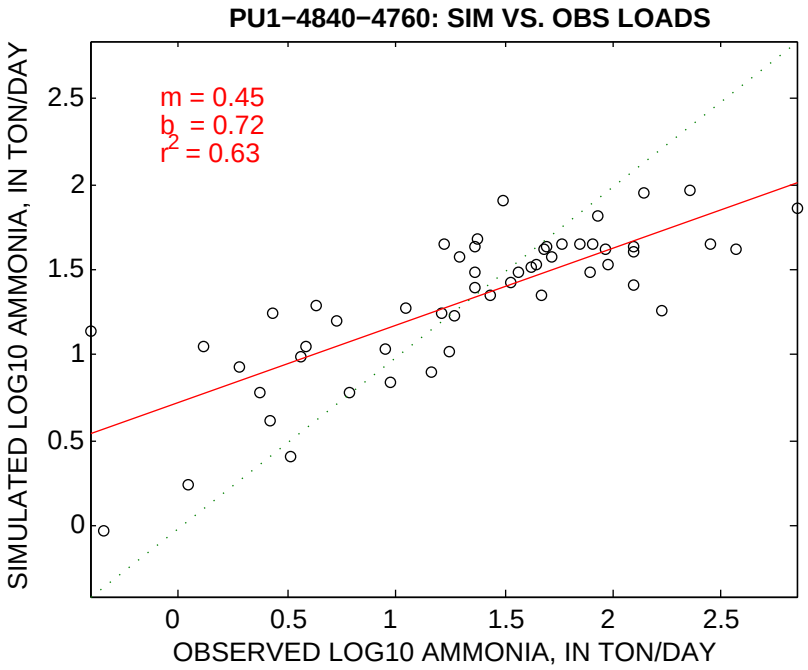


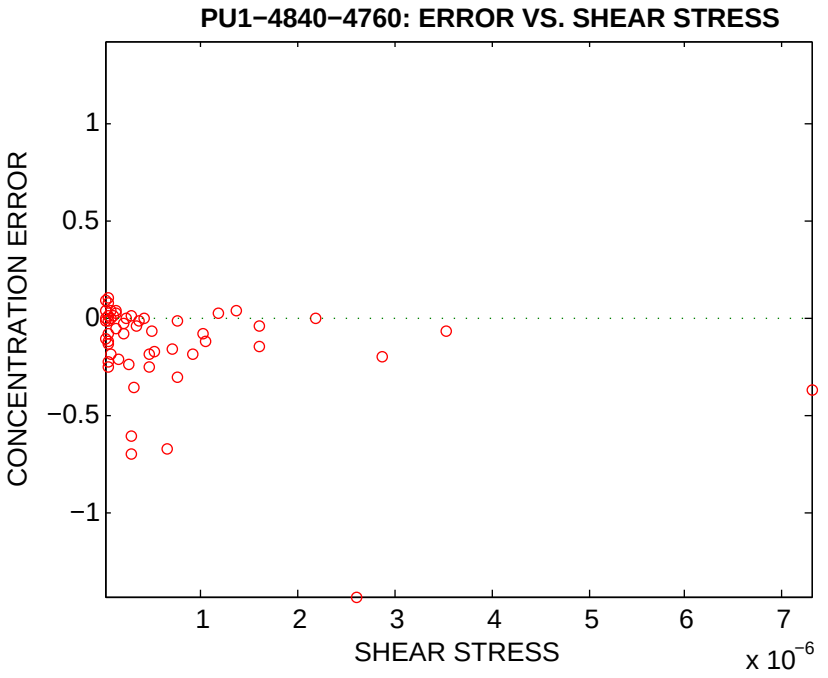


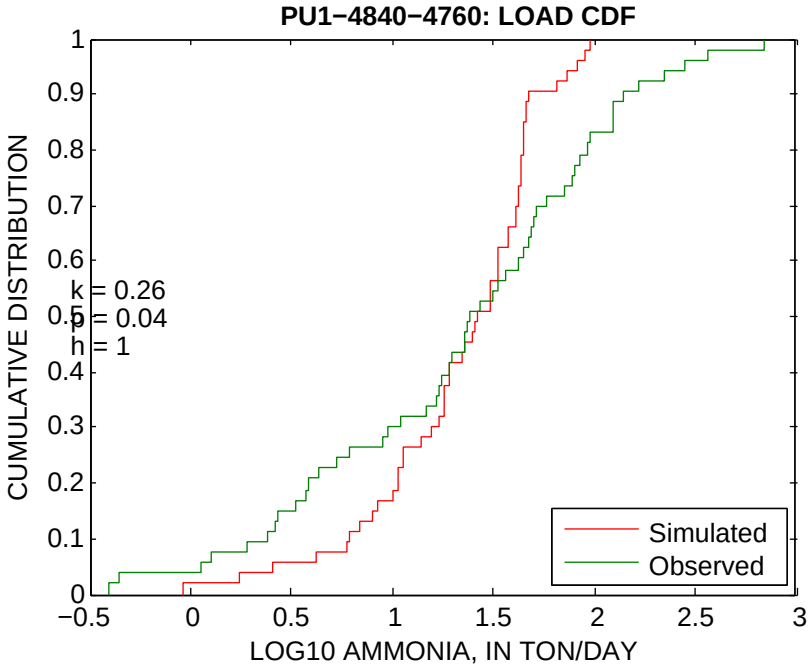


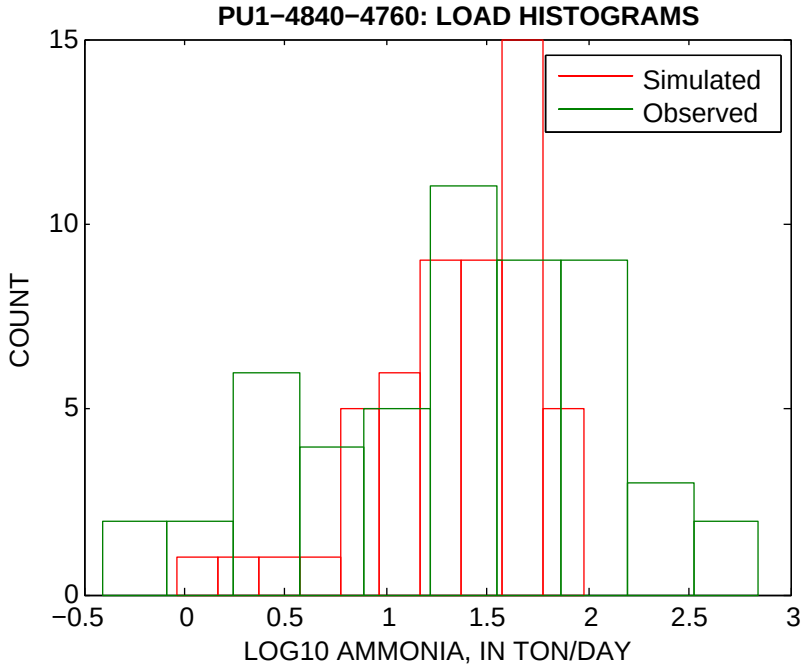


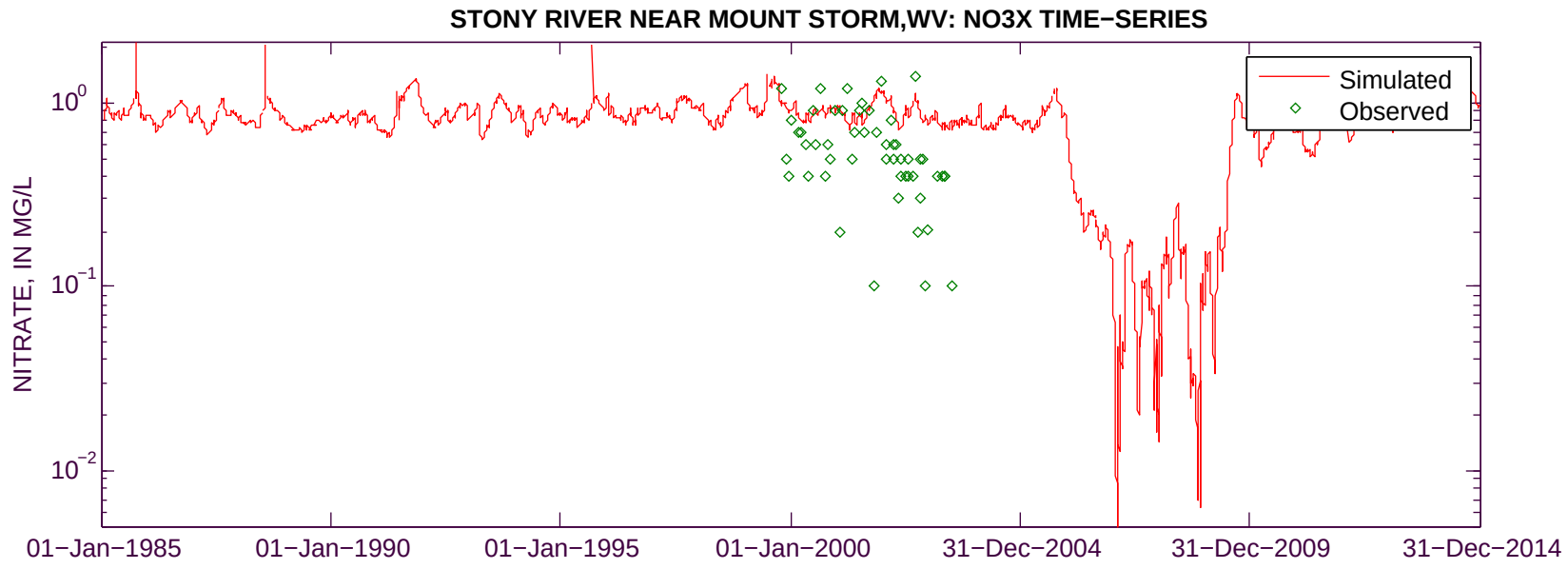
LOAD DATA
LOG10

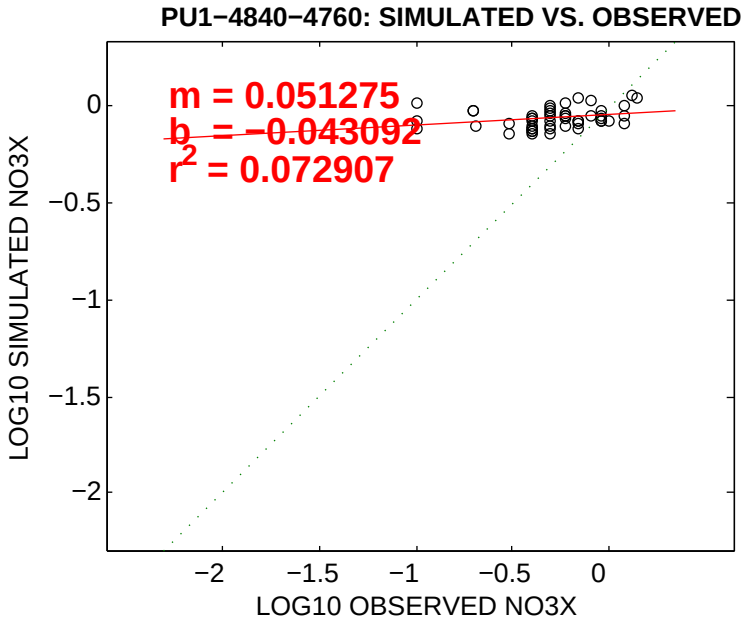


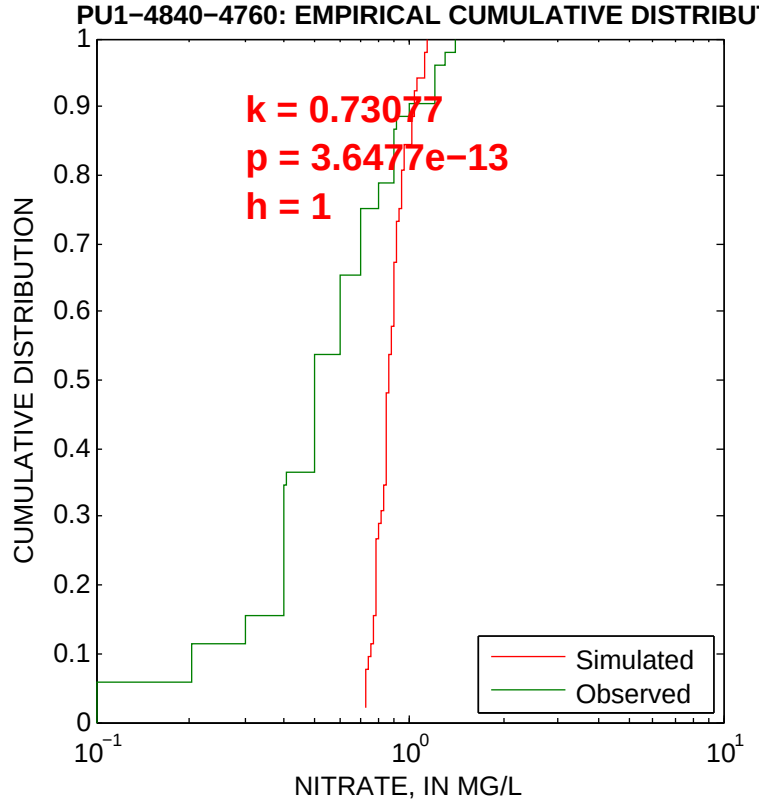












DATA SELECTION

scenario: P620171001WQ | file: NO3X.calib

plot: NO3X - nitrate

Dates: 1/1/1985 – 12/31/201

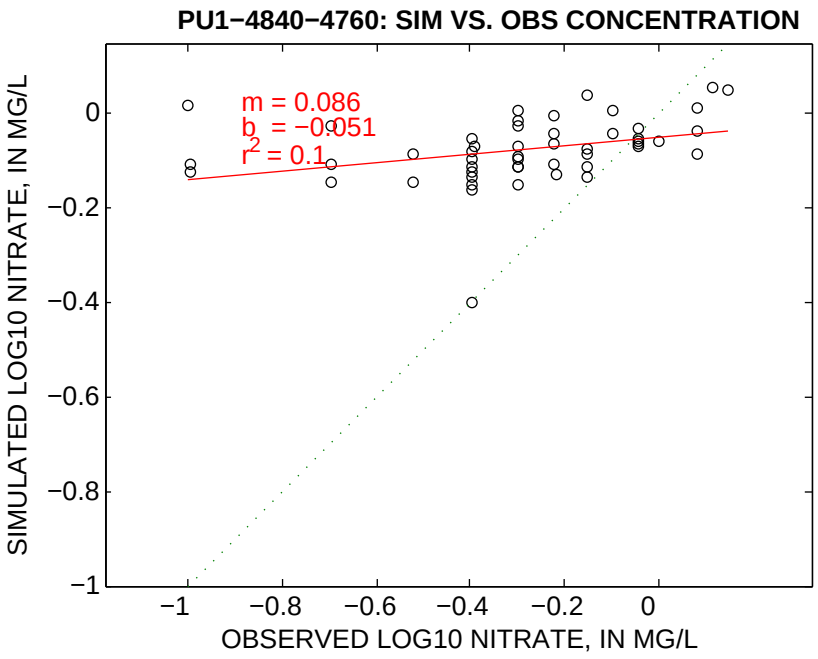
Drive | Directory | Observed: N/A | model | OBS20161101

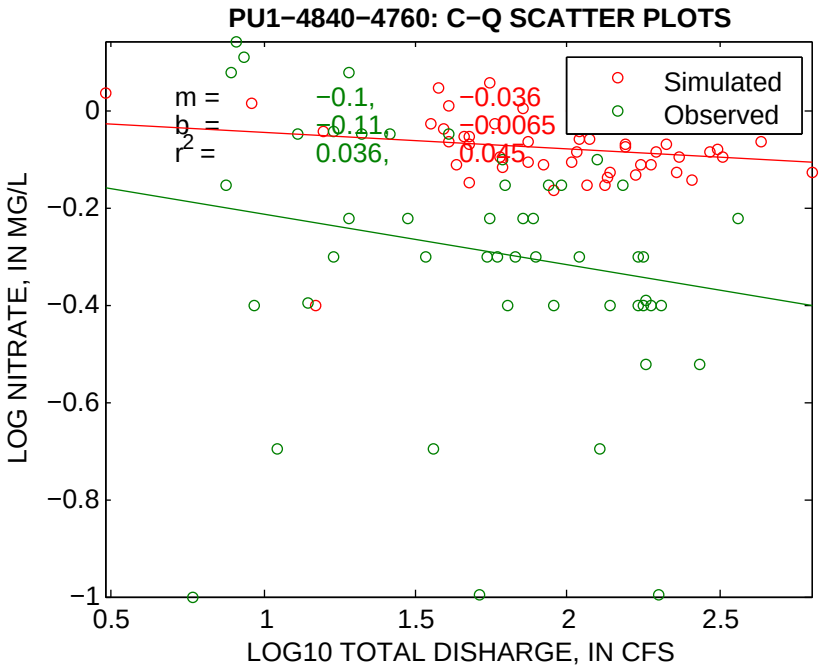
STATISTICS

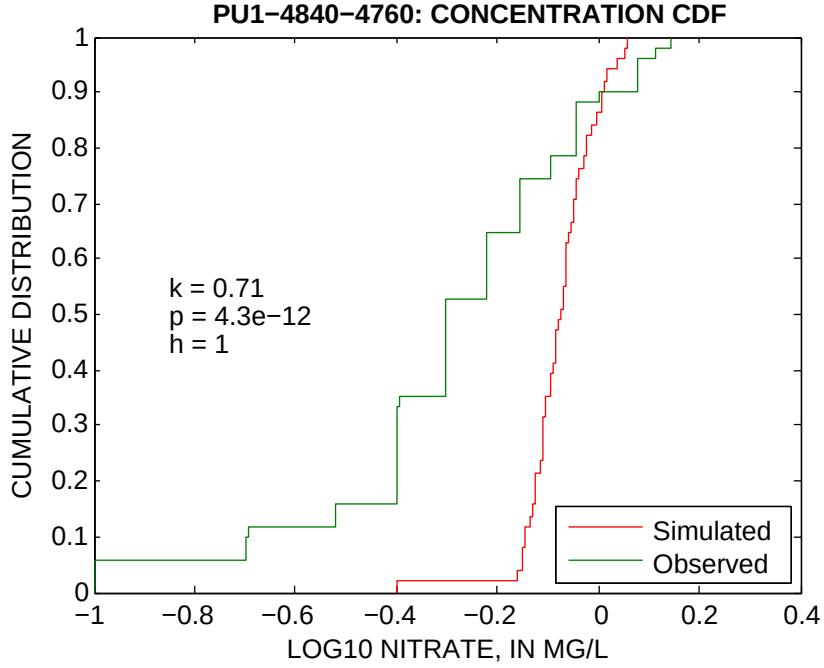
	n	observe	simulate
		52	51
min		0.1	0
		-1	-0.142601
mean		0.594615	0.863984
		-0.290859	-0.0580057
media		0.5	0.85833
		-0.30103	-0.0643416
max		1.4	1.1362
		0.146128	0.0554548
varian		0.0957758	0.025835
		0.0711878	0.00256712
JB		0.056719	0.001
		0.017906	0.232887
		ra	log
%		45.3014	-80.0571
err.va		0.163465	0.12176
rel.std.err		1.70674	1.7104
mod.eff		-0.706742	-0.710403

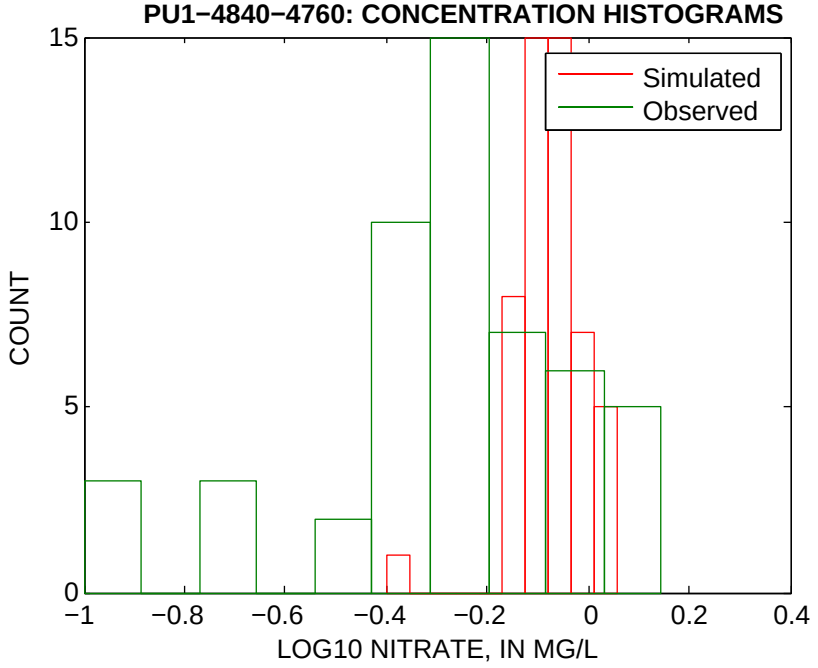
VERSION 2.1

ALL DATA
LOG10

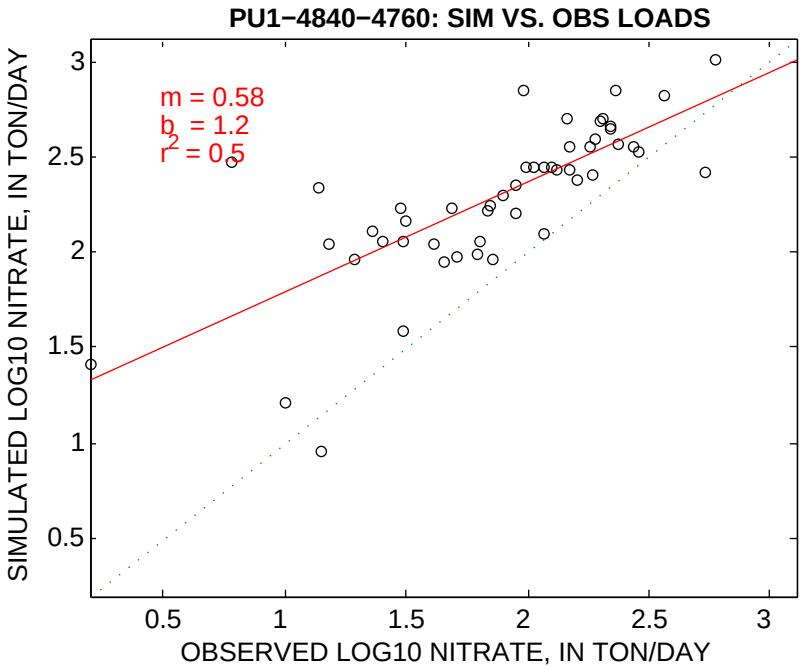


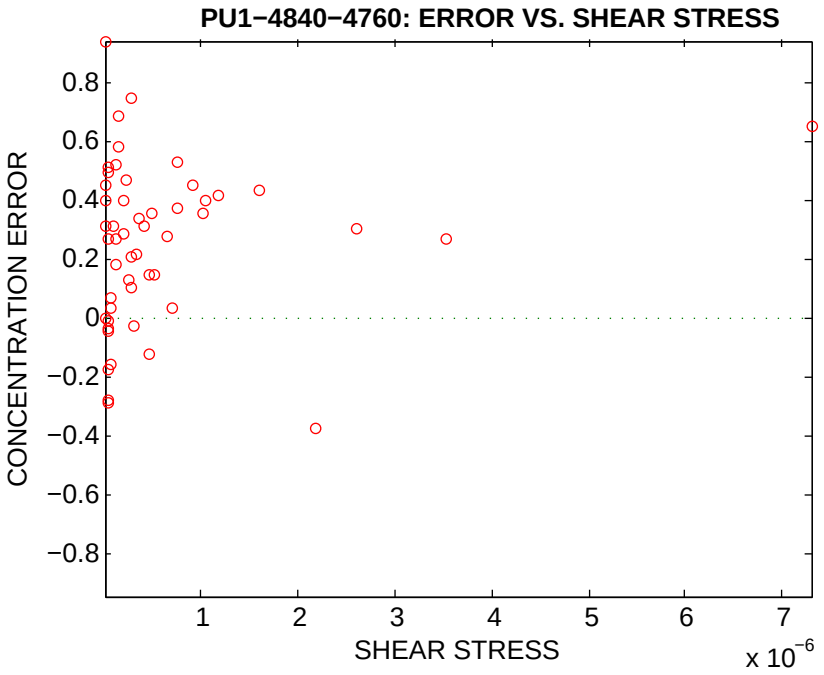


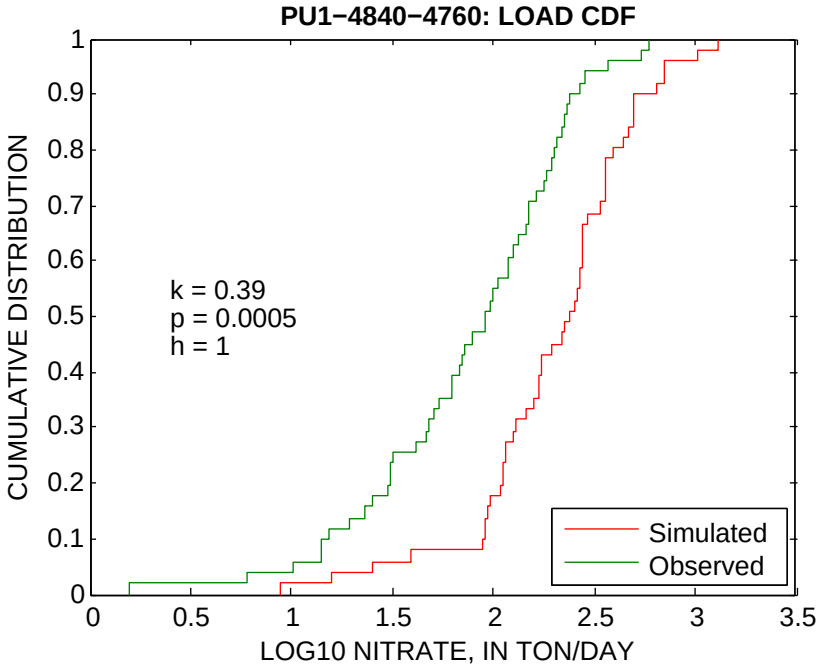


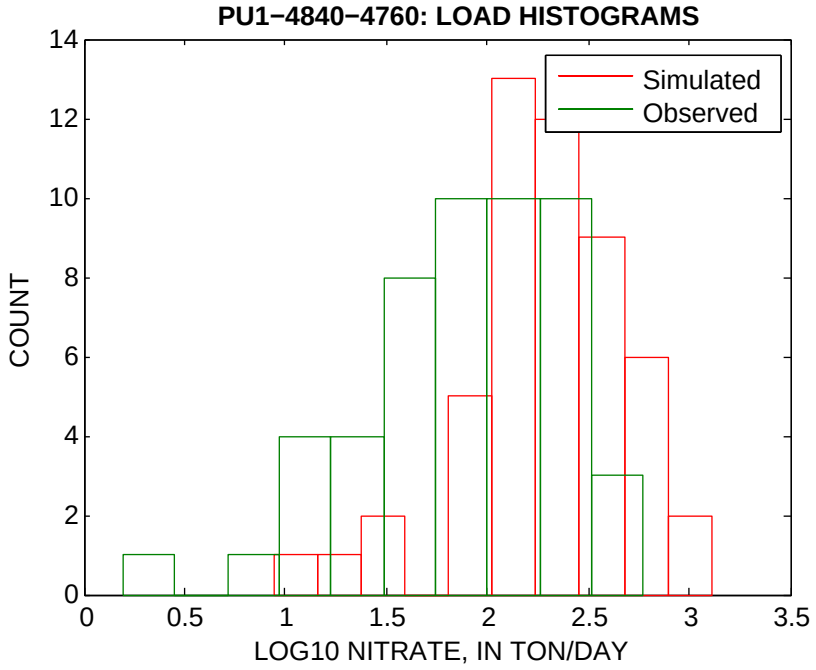


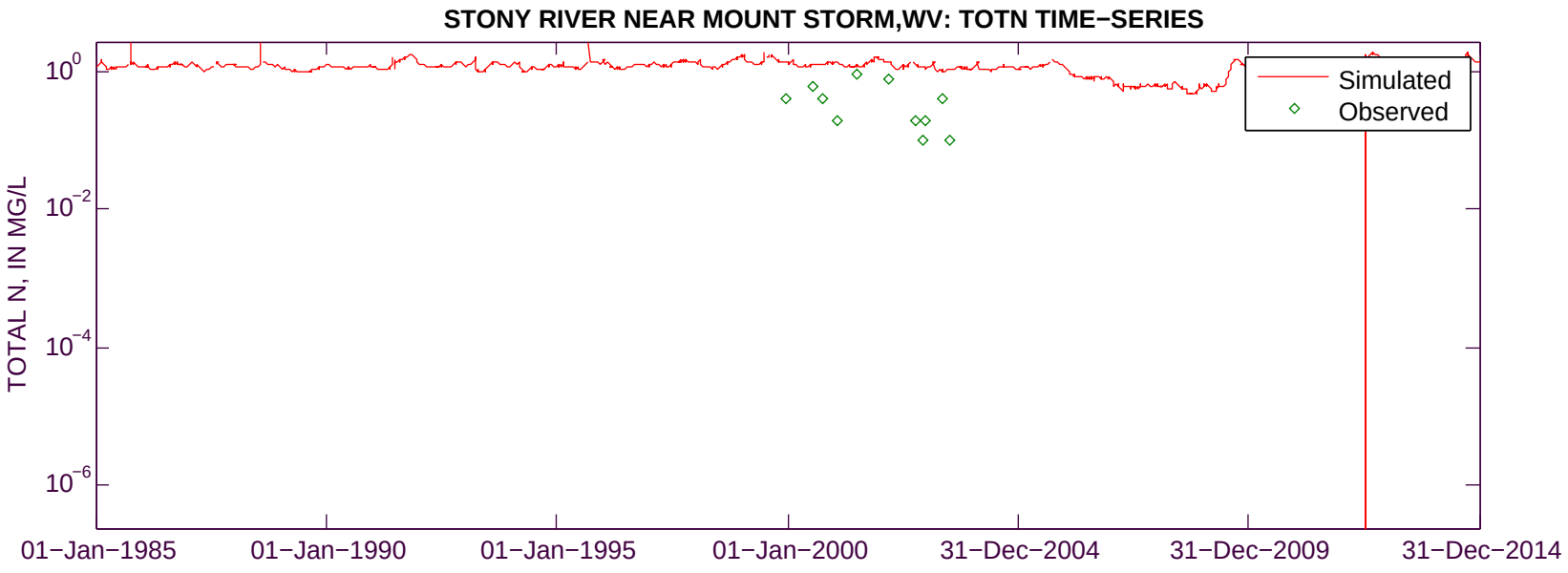
LOAD DATA
LOG10

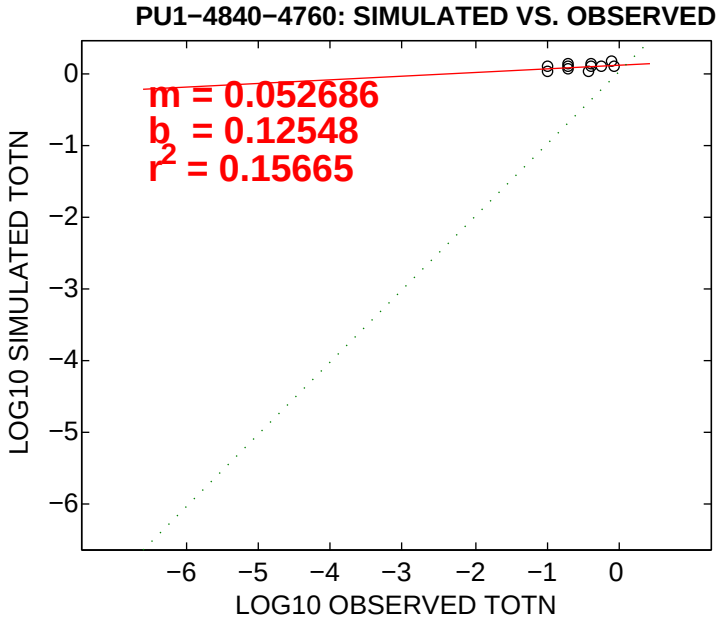


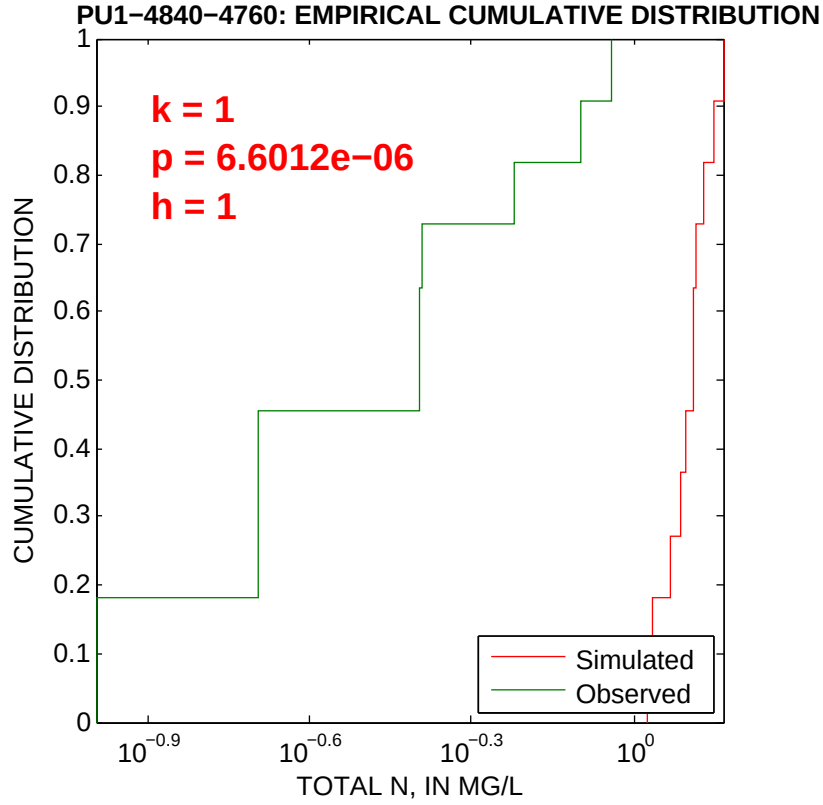












DATA SELECTION

scenario: P620171001WQ | file: TOTN.calib

plot: TOTN - total nitrogen

Dates: 1/1/1985 – 12/31/201

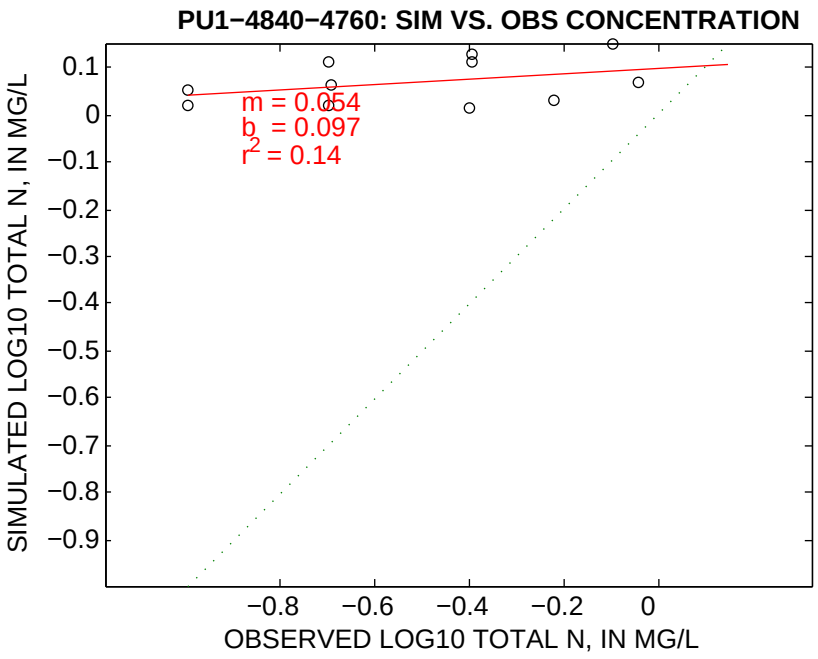
Drive: N/A | Directory: model | Observed: OBS20161101

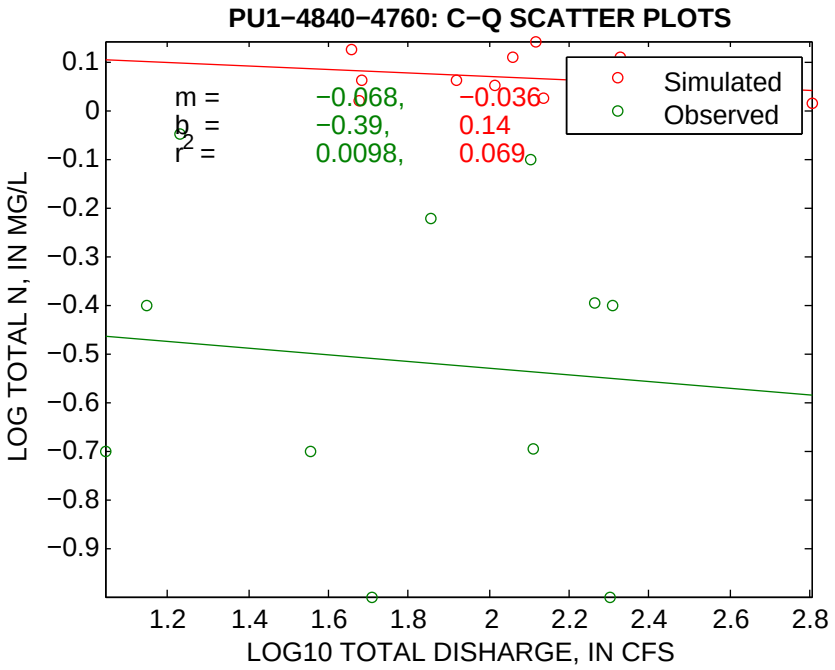
STATISTICS

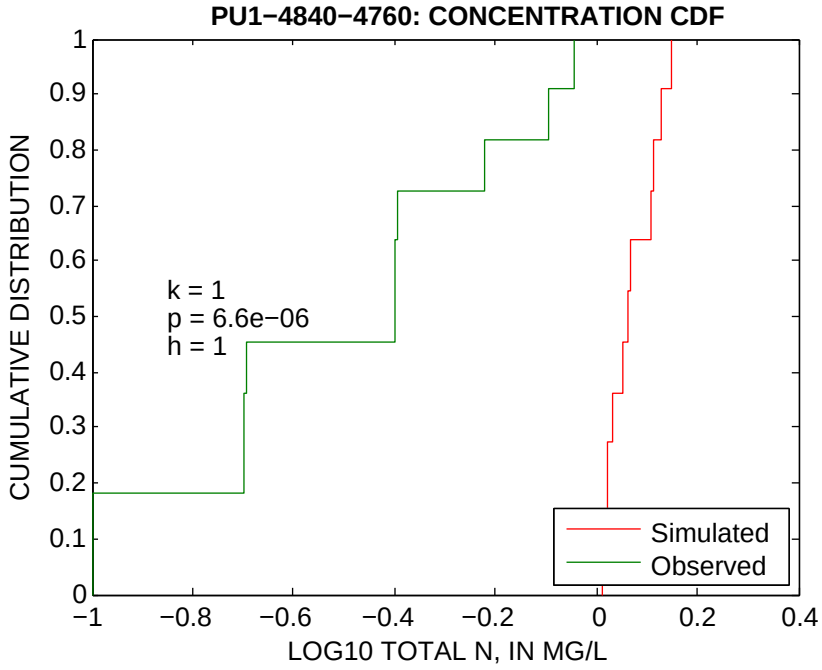
		observe	simulate
n		11	11
min		0.101	1.054
		-0.995679	0.0228406
mean		0.392727	1.26044
		-0.511558	0.0985267
media		0.4	1.2863
		-0.39794	0.109342
max		0.906	1.4597
		-0.0428718	0.164264
varian		0.0753492	0.0157227
		0.10875	0.001927
JB		0.199926	0.5
		0.5	0.5
		ra	log
%		220.944	-119.26
err.va		0.893603	0.508642
rel.std.err		11.8595	4.67716
mod.eff		-10.8595	-3.67716

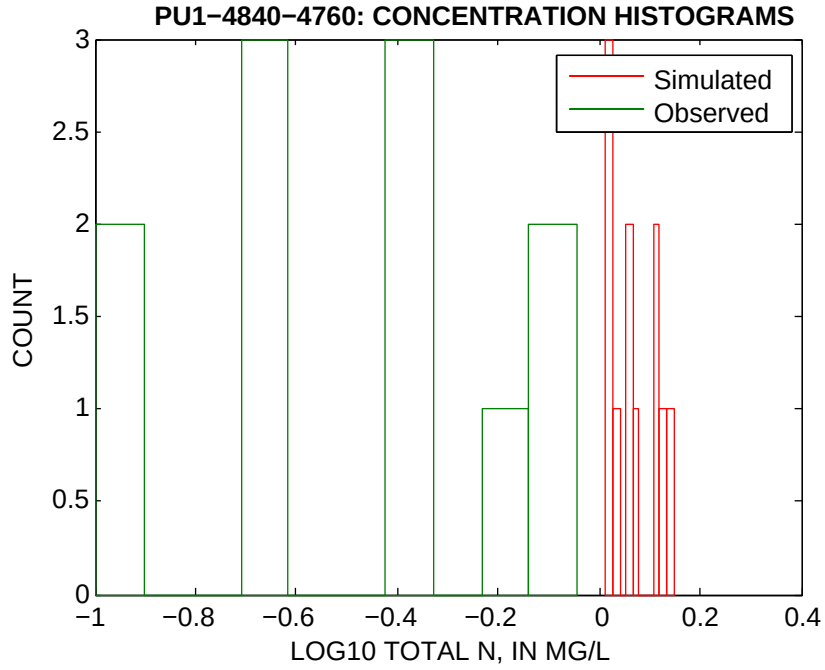
VERSION 2.1

ALL DATA
LOG10

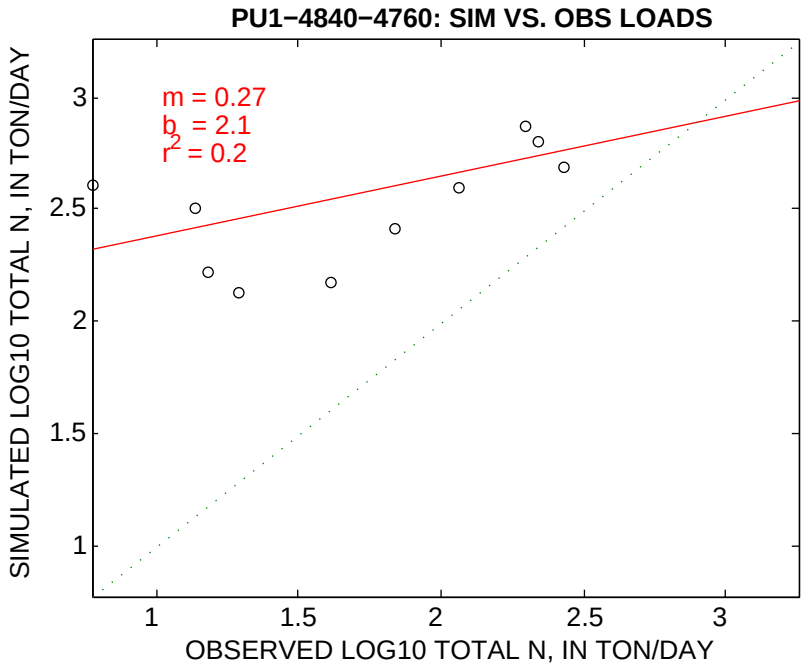


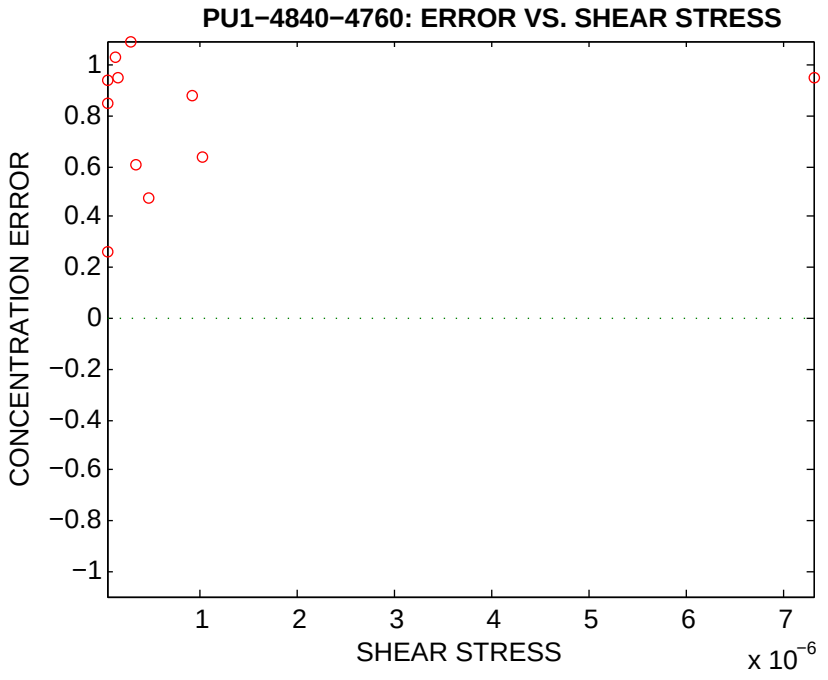


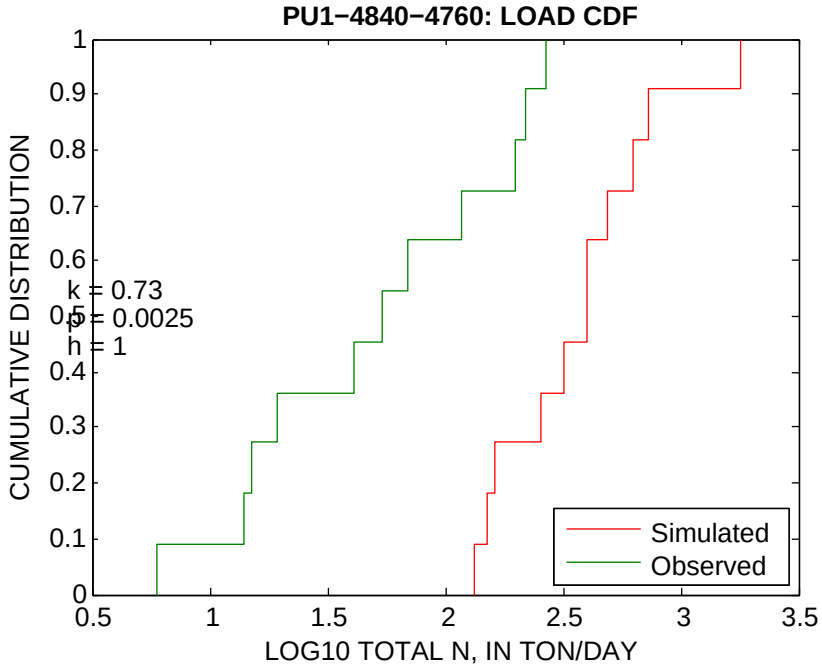


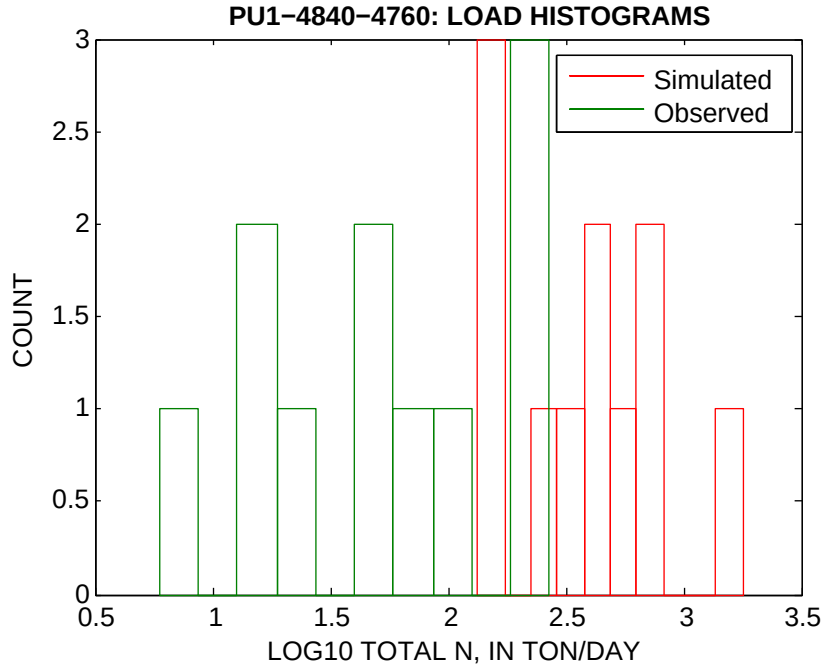


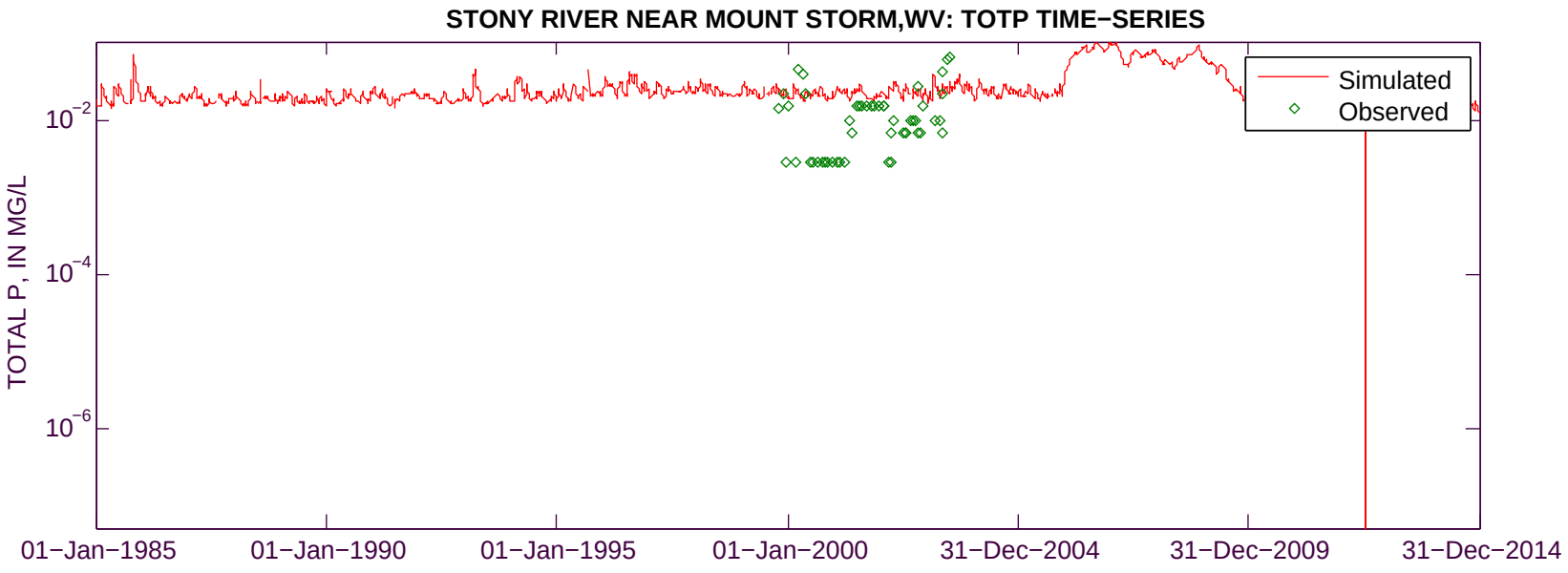
LOAD DATA
LOG10

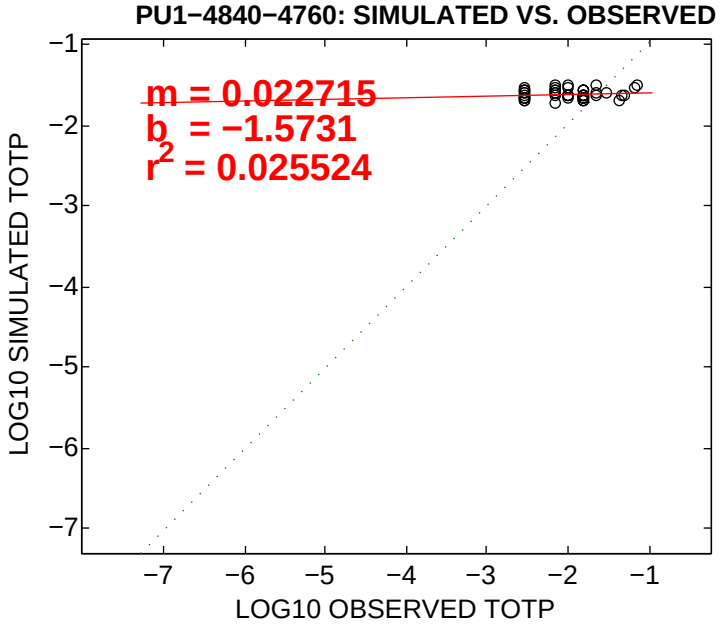


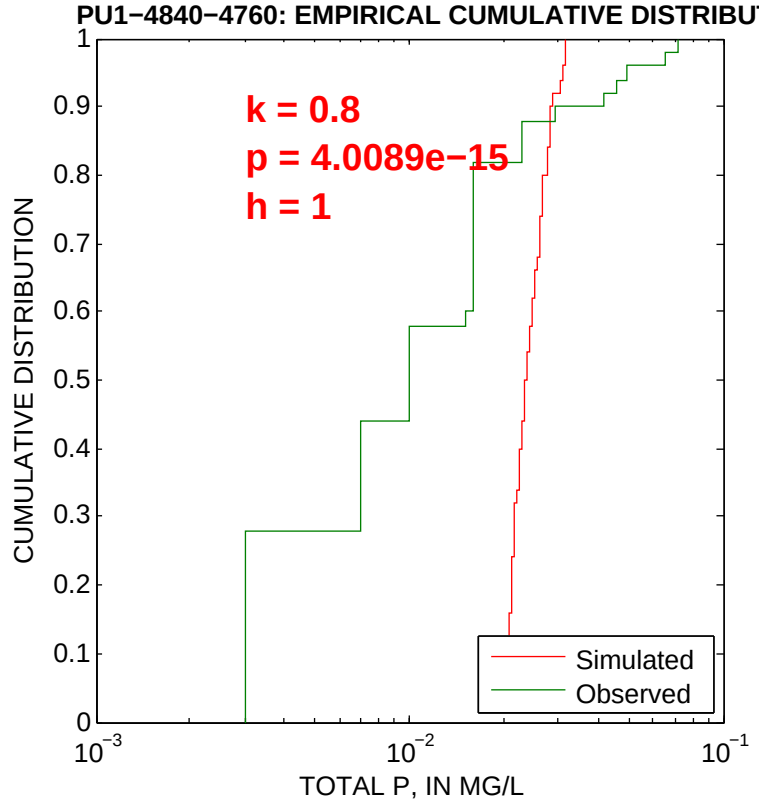












DATA SELECTION

scenario	file
P620171001WQ	TOTP.calib

plot: TOTP - total phosphorus

Dates: 1/1/1985 – 12/31/201

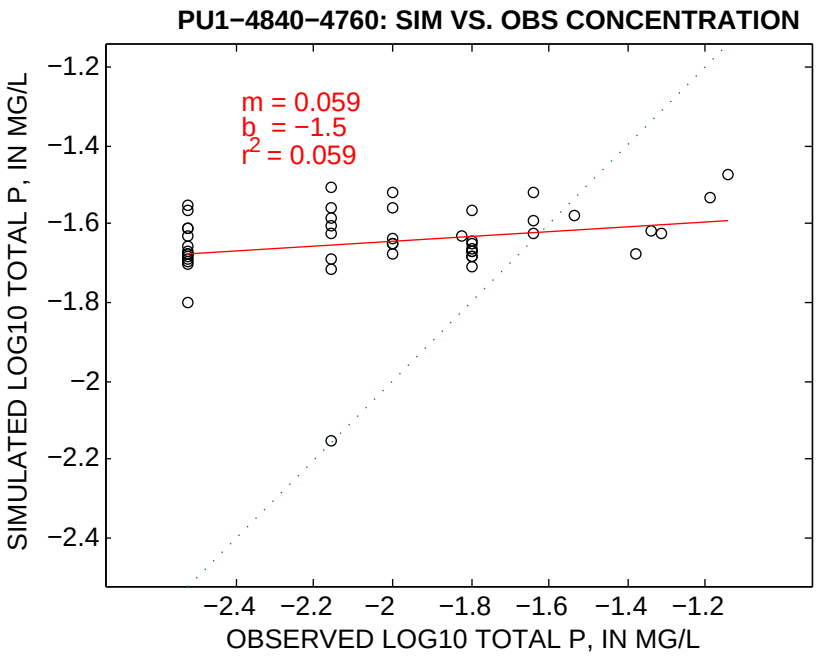
Drive	Directory	Observed
N/A	model	OBS20161101

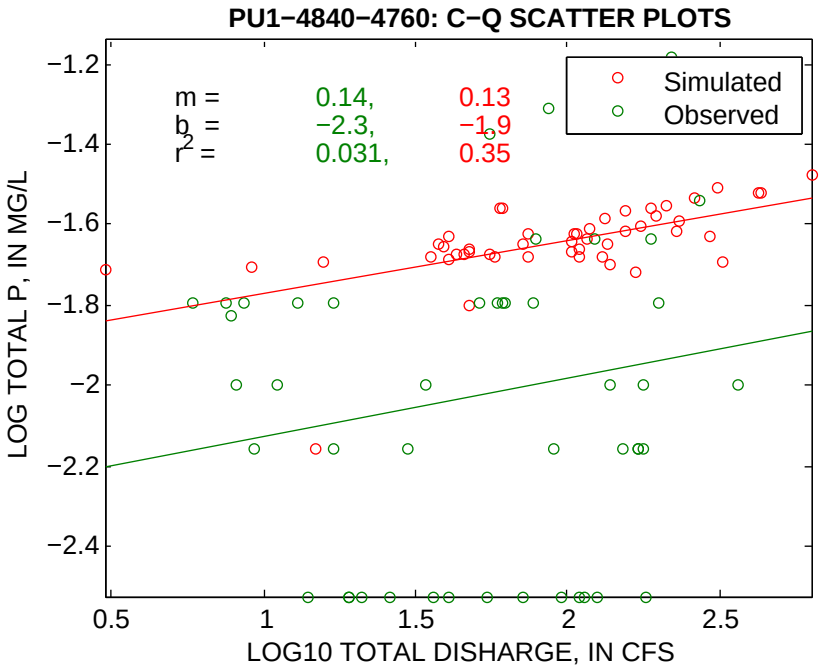
STATISTICS

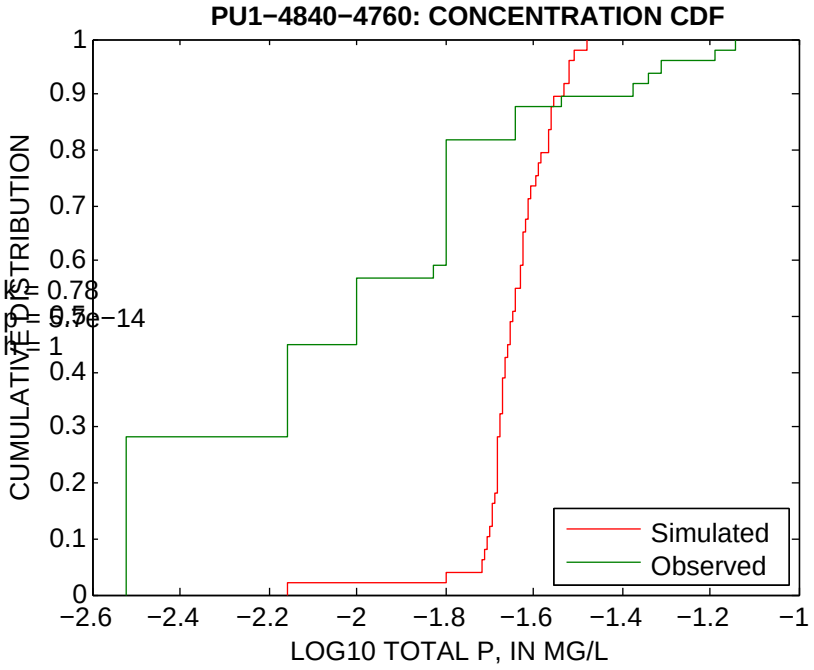
	n	50	49
		observe	simulate
min		0.003	0
		-2.52288	-1.73142
mean		0.01462	0.0237714
		-2.01927	-1.61892
media		0.01	0.0235785
		-2	-1.62538
max		0.072	0.031401
		-1.14267	-1.50306
varian		0.00023856	2.22126e-0
		0.162437	0.00328358
JB		0.001	0.001
		0.27118	0.233391
		ra	log
%		62.5952	-19.8264
err.va		0.00031732	0.321958
rel.std.err		1.33014	1.98205
mod.eff		-0.330143	-0.98205

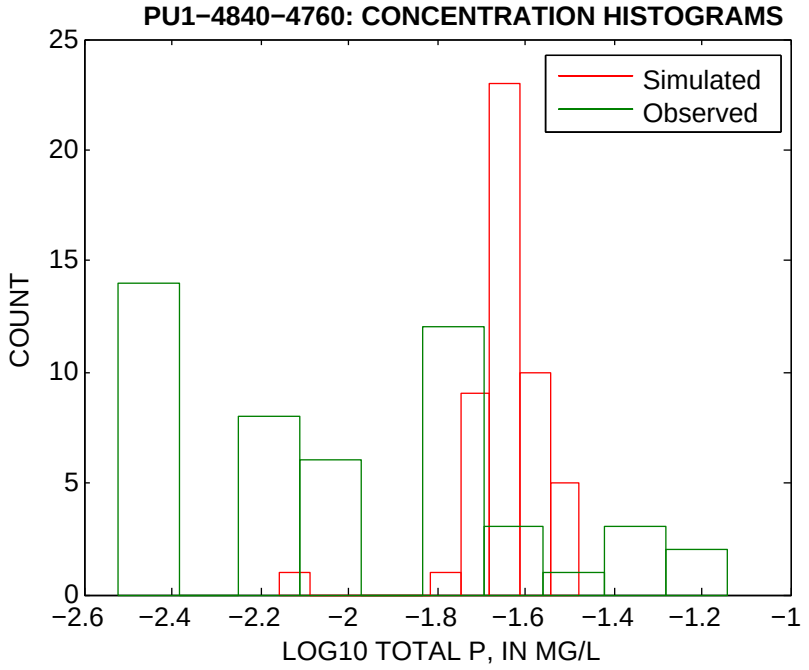
VERSION 2.1

ALL DATA
LOG10

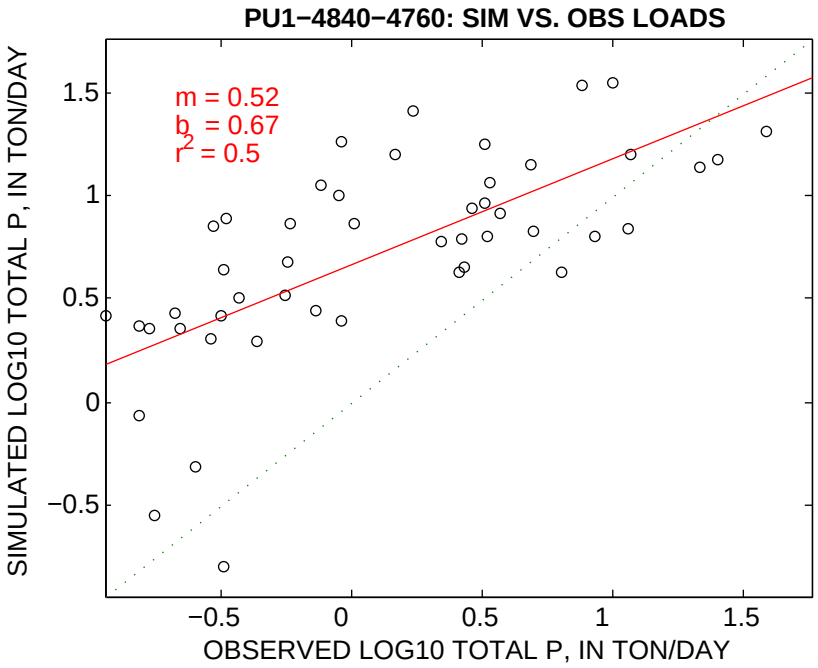


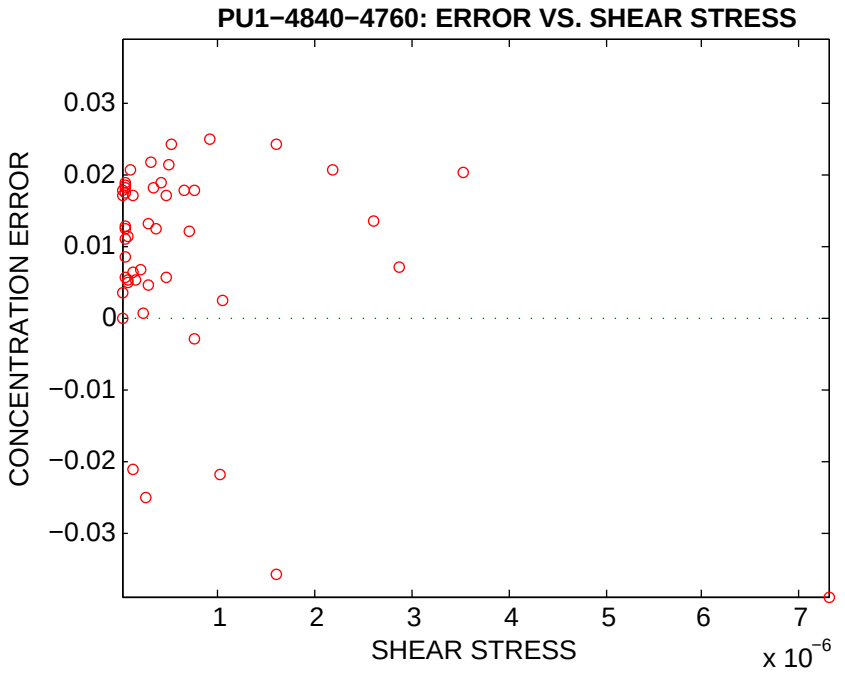


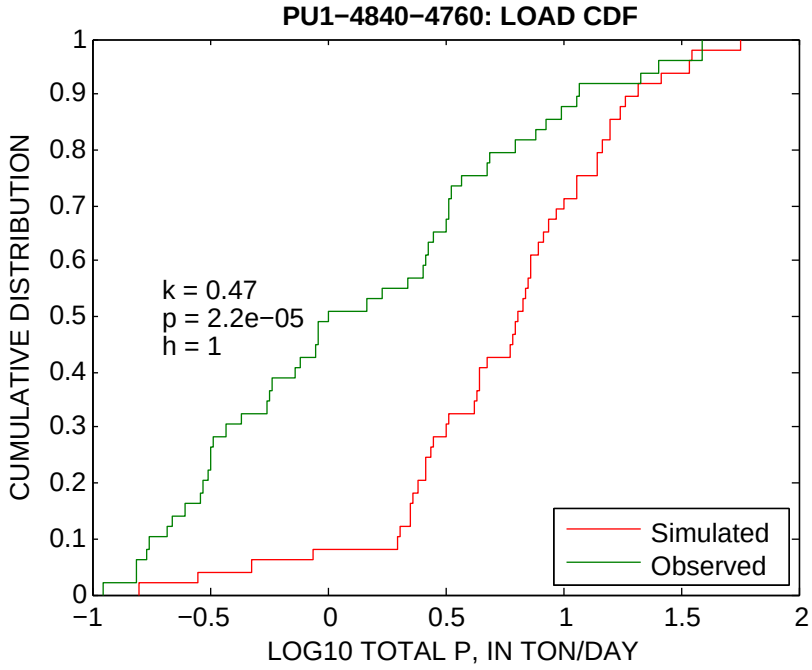


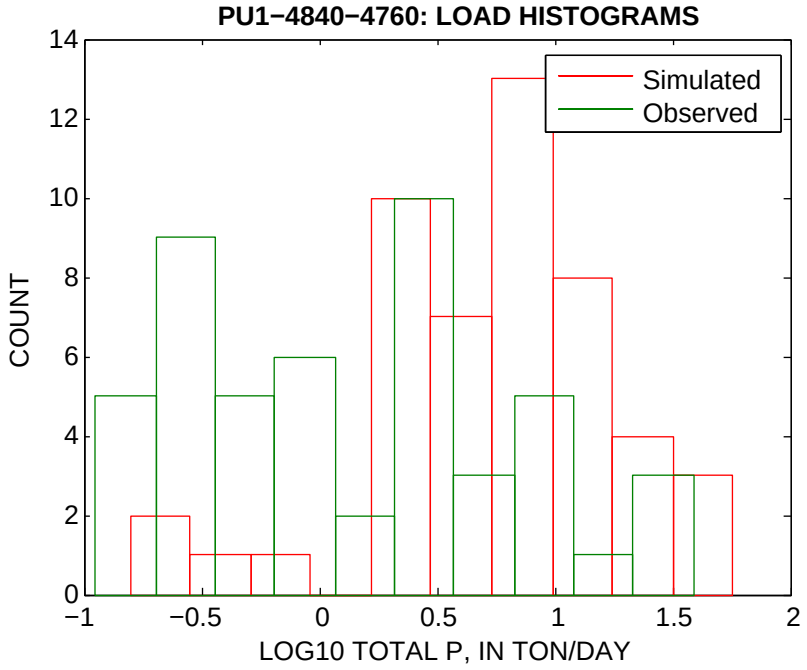


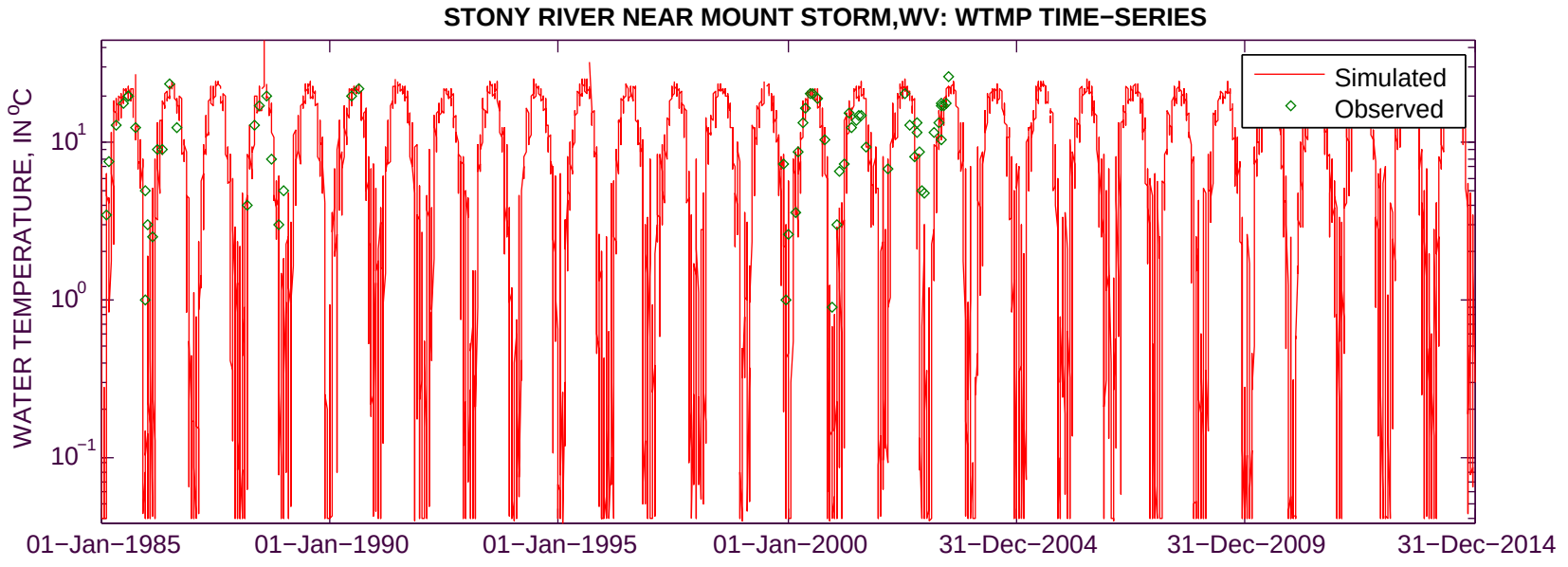
LOAD DATA
LOG10

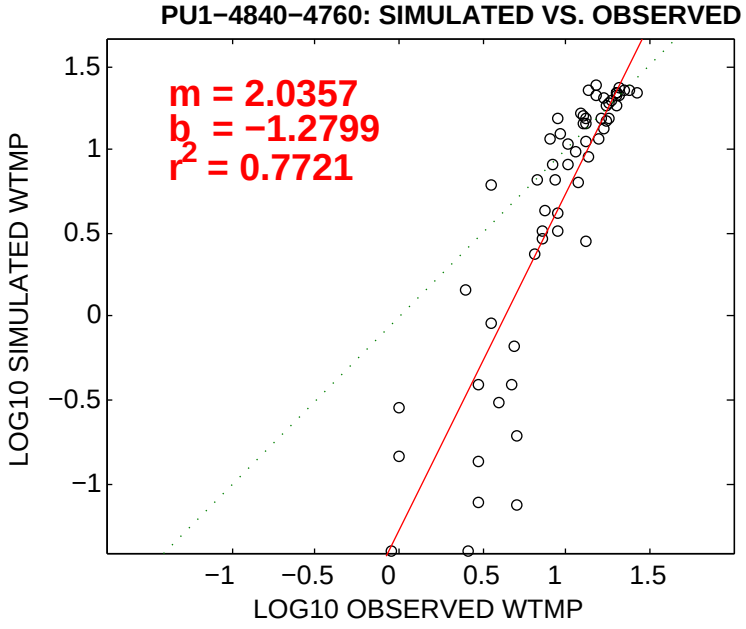


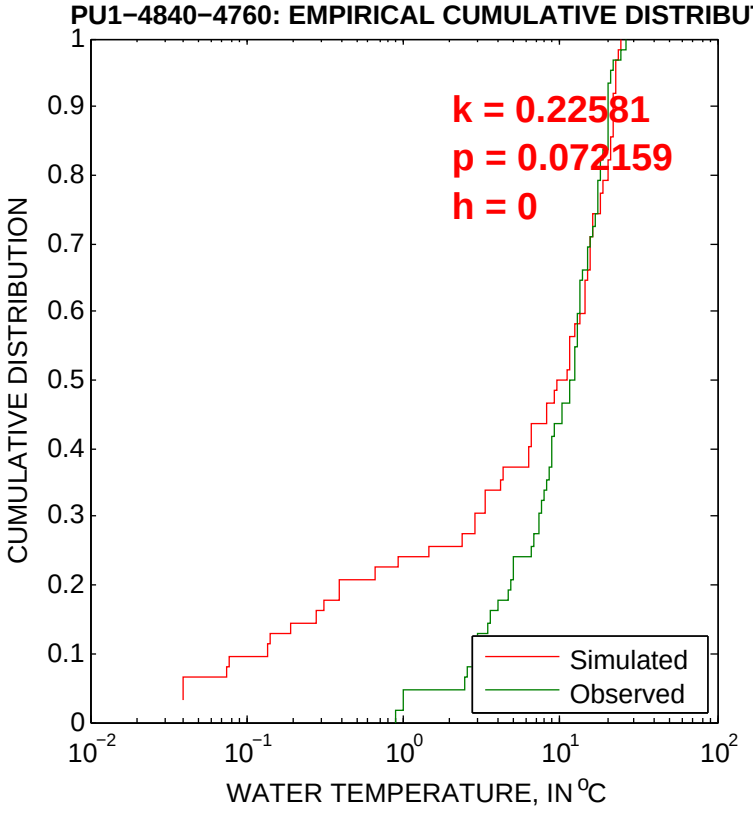












DATA SELECTION

scenario	file
P620171001WQ	WTMP.calib

plot: WTMP - water tempera...

Dates 1/1/1985 12/31/201

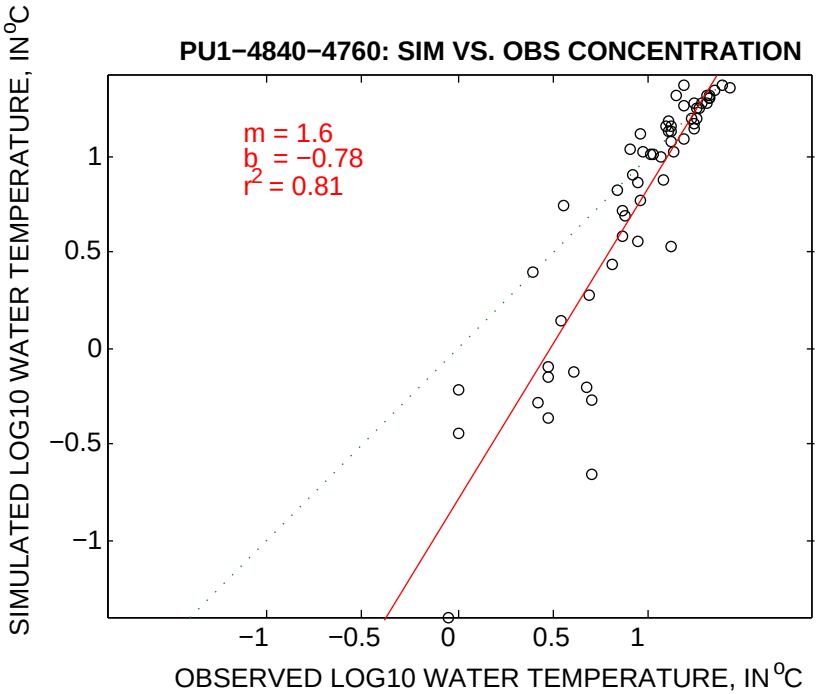
Drive	Directory	Observed
N/A	model	OBS20161101

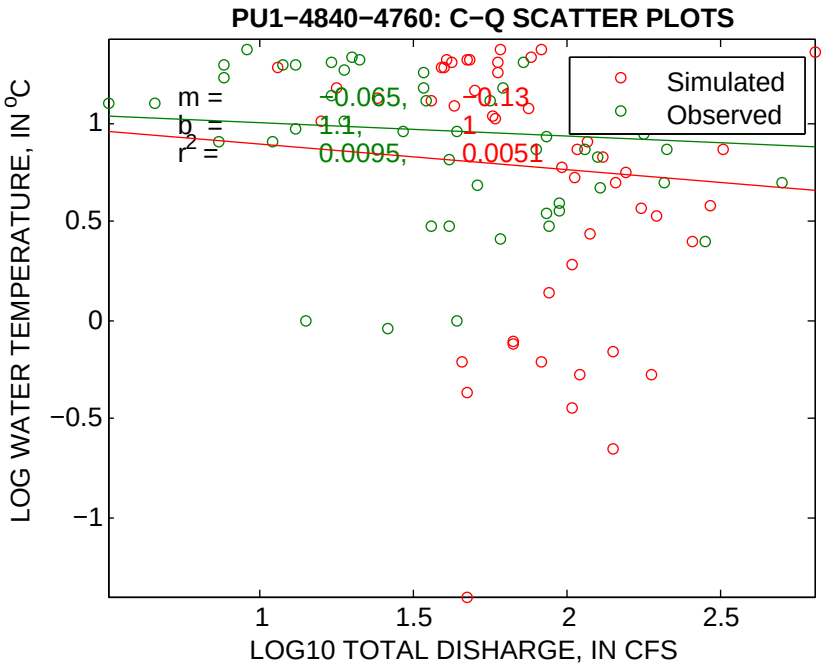
STATISTICS

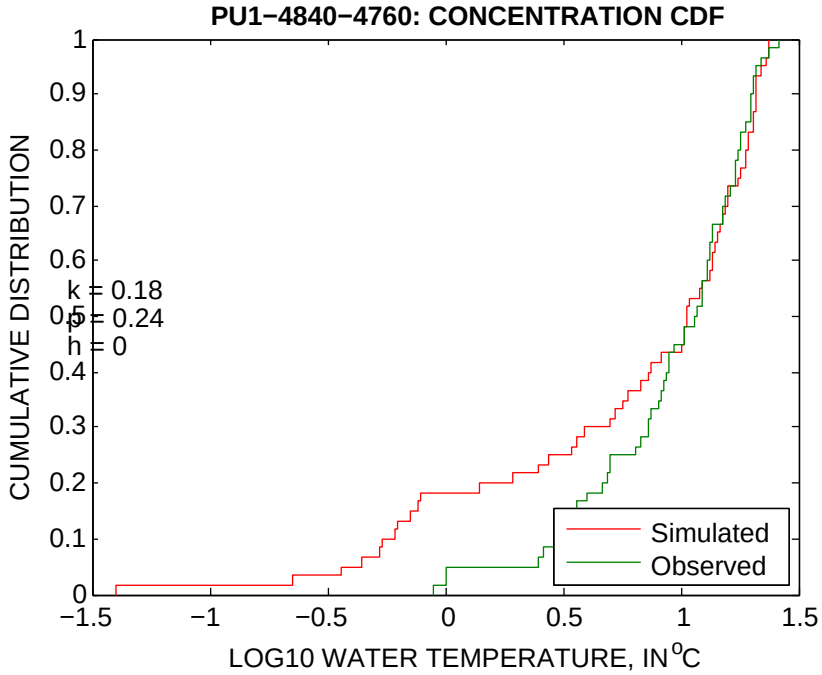
n	62	60
	observe	simulate
min	0.9	0
	-0.0457575	-1.39756
mean	11.5726	10.3005
	0.952311	0.658717
media	12	10.2882
	1.06444	1.0469
max	26.4	24.123
	1.4216	1.38243
varian	42.7328	69.3682
	0.123431	0.662494
JB	0.159721	0.043335
	0.008010	0.006992
	ra	log
%	-10.9921	-30.8297
err.va	22.9221	0.371044
rel.std.err	0.536404	3.00608
mod.eff	0.463596	-2.00608

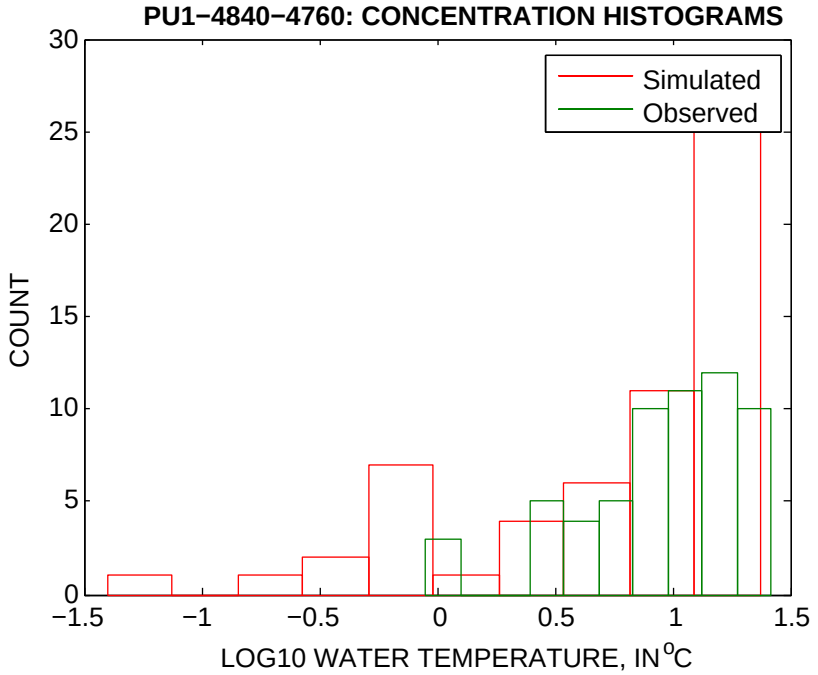
VERSION 2.1

ALL DATA
LOG10

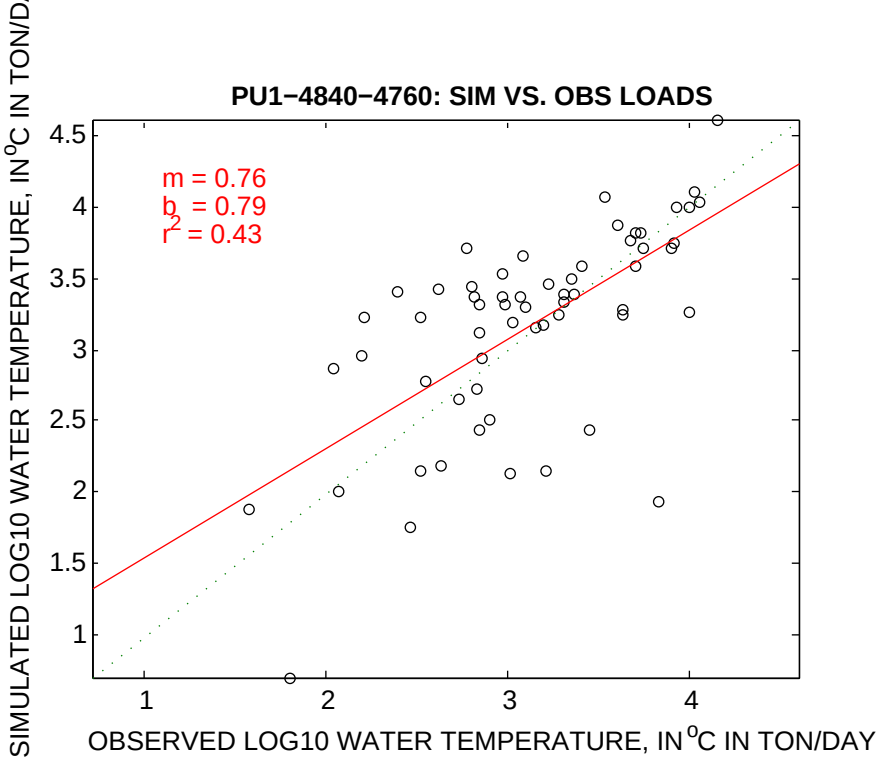


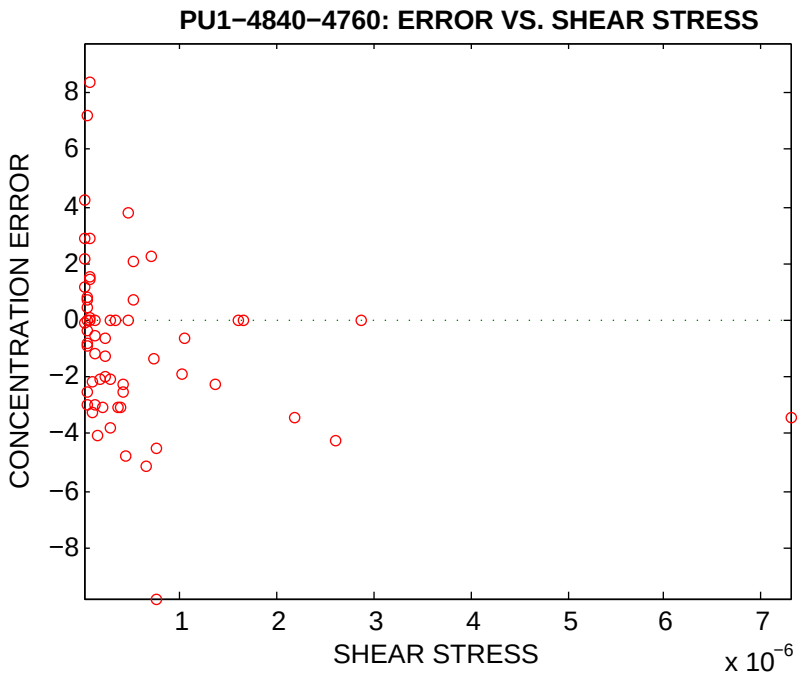


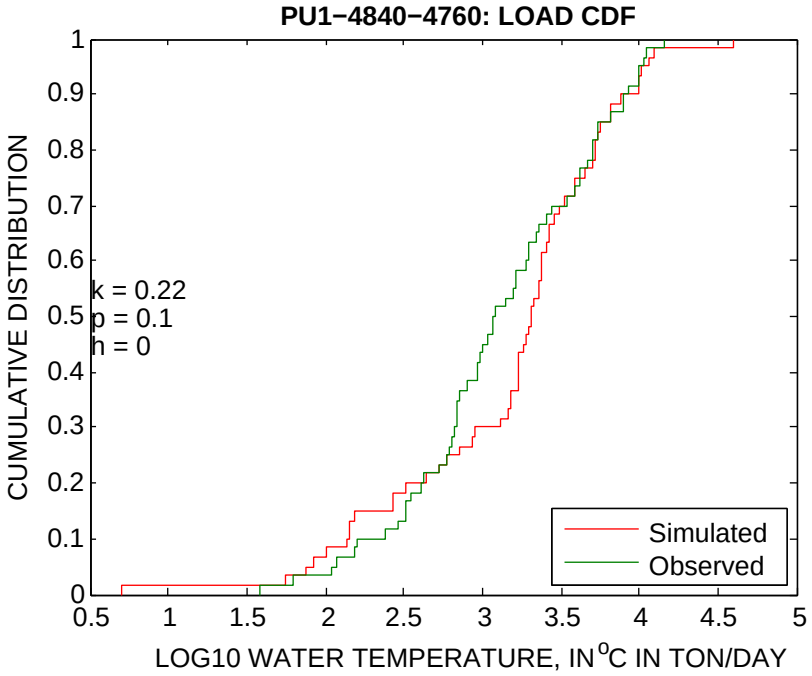


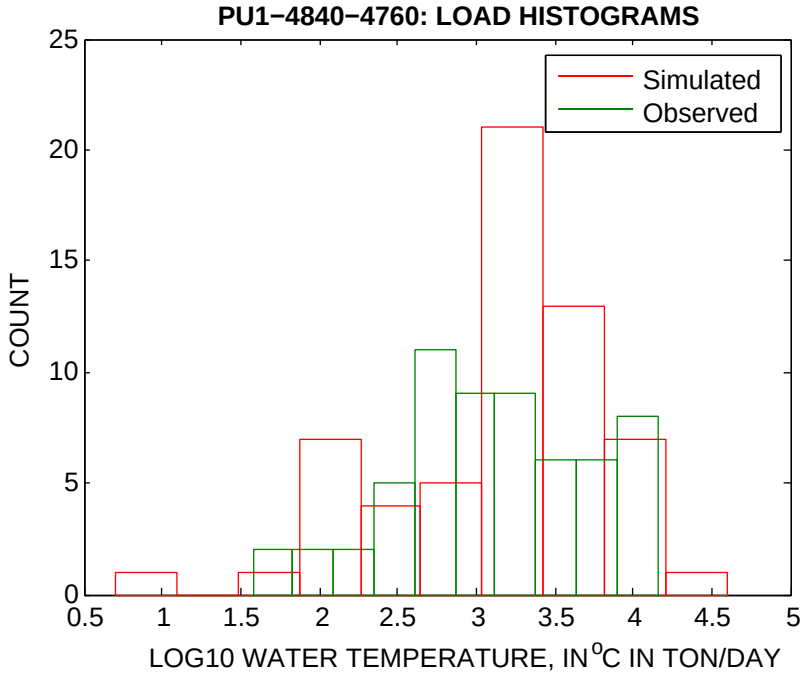


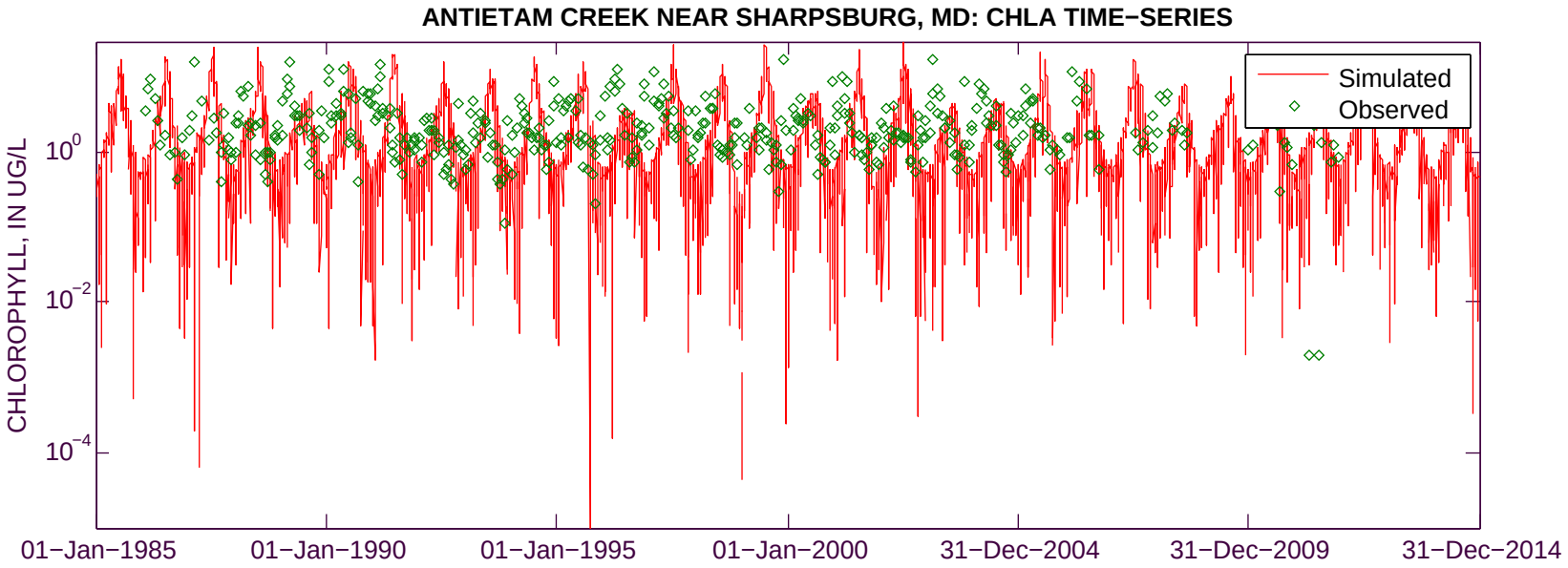
LOAD DATA
LOG10

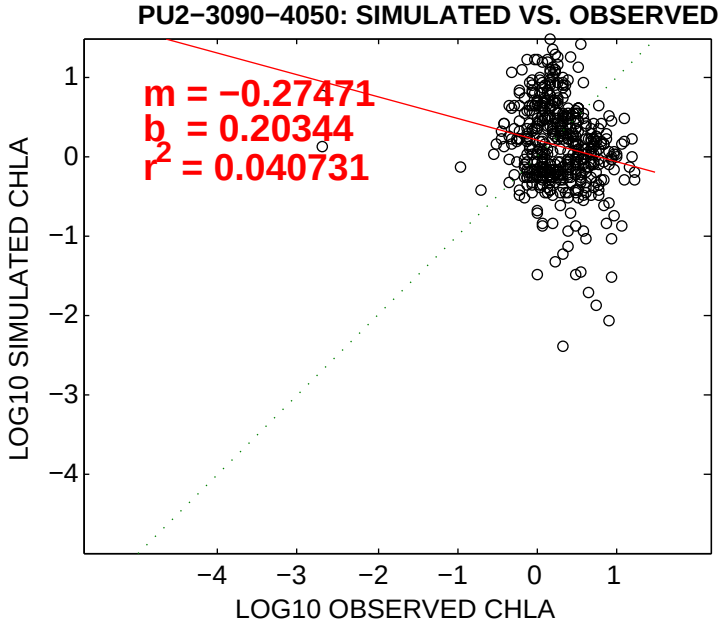


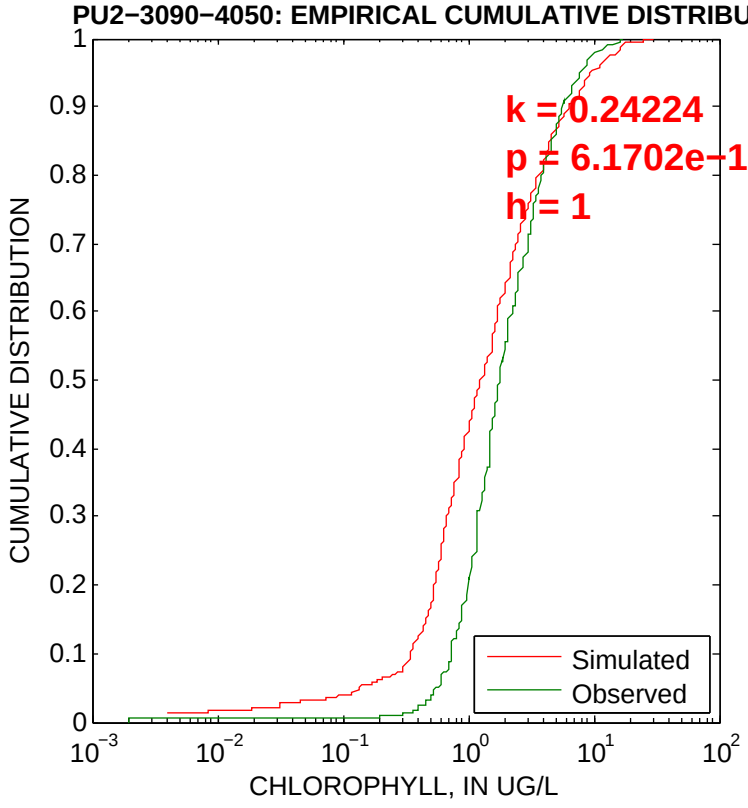












DATA SELECTION

scenario	file
P620171001WQ	CHLA.calib

plot: CHLA - chlorophyll A

Dates: 1/1/1985 – 12/31/201

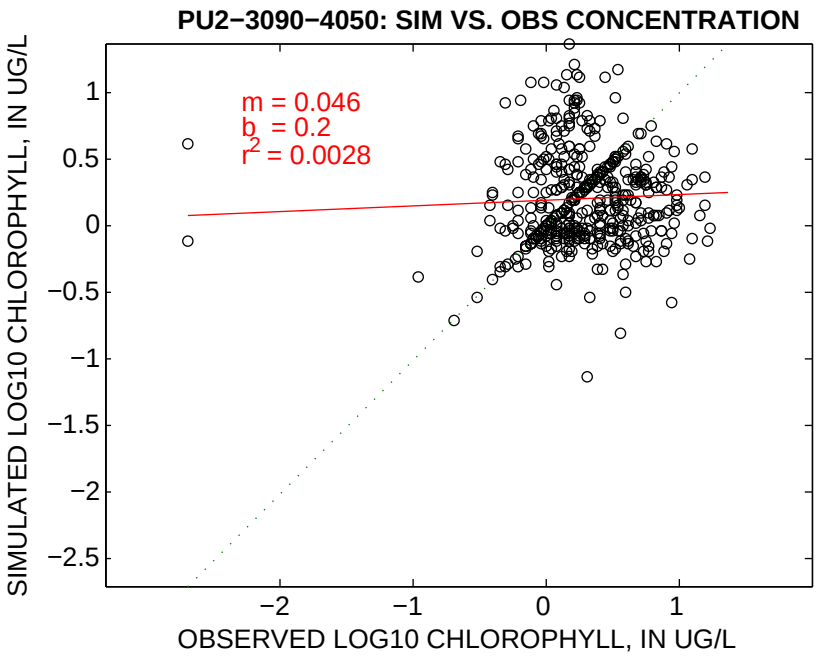
Drive	Directory	Observed
N/A	model	OBS20161101

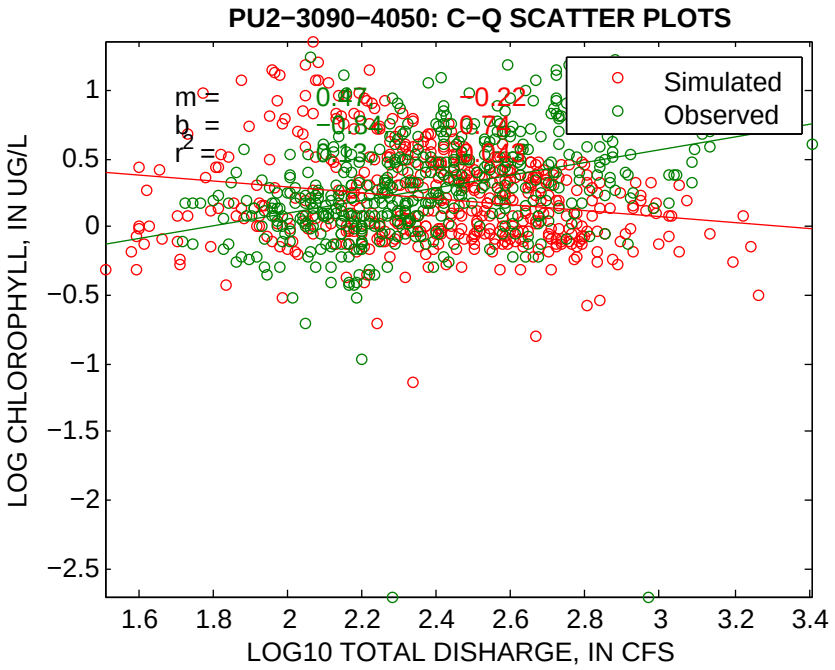
STATISTICS

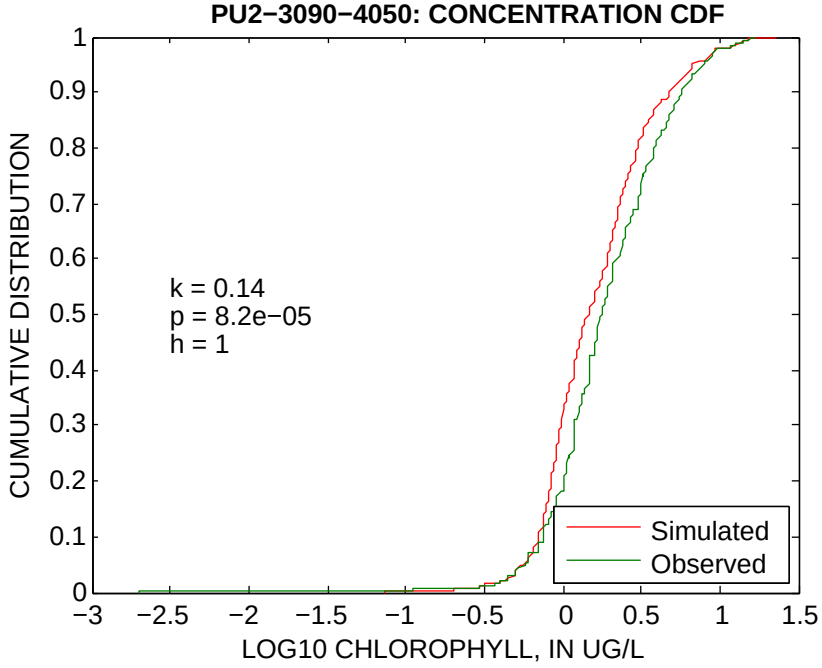
	n	483	477
		observe	simulate
min		0.002	0
		-2.69897	-2.38841
mean		2.71946	2.61489
		0.275915	0.127641
media		1.79	1.2665
		0.247237	0.126813
max		17.19	29.867
		1.23528	1.47519
varian		6.71074	13.4201
		0.156873	0.290652
JB		0.001	0.001
		0.001	0.001
		ra	log
%		-3.84516	-53.7392
err.va		23.6949	0.555745
rel.std.err		3.5309	3.54265
mod.eff		-2.5309	-2.54265

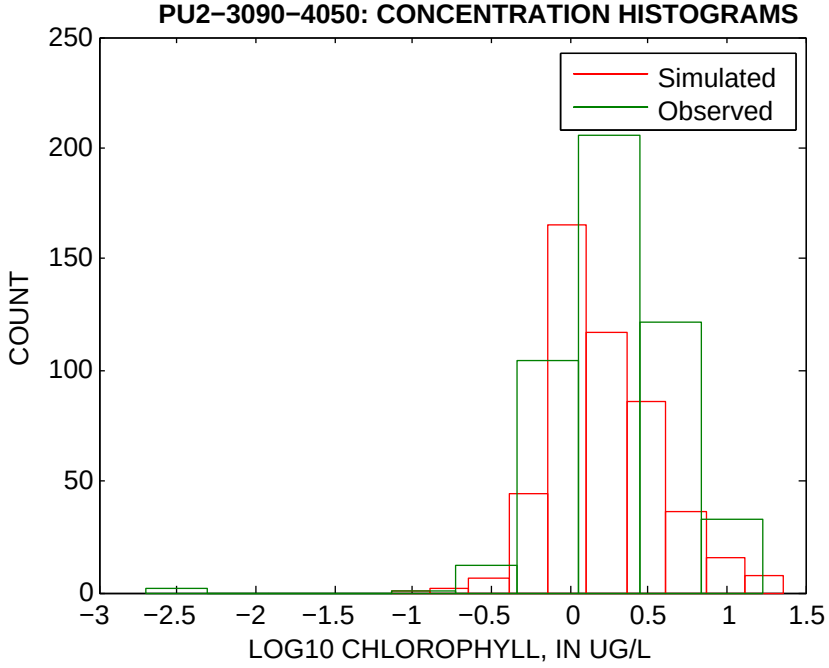
VERSION 3.1

ALL DATA
LOG10

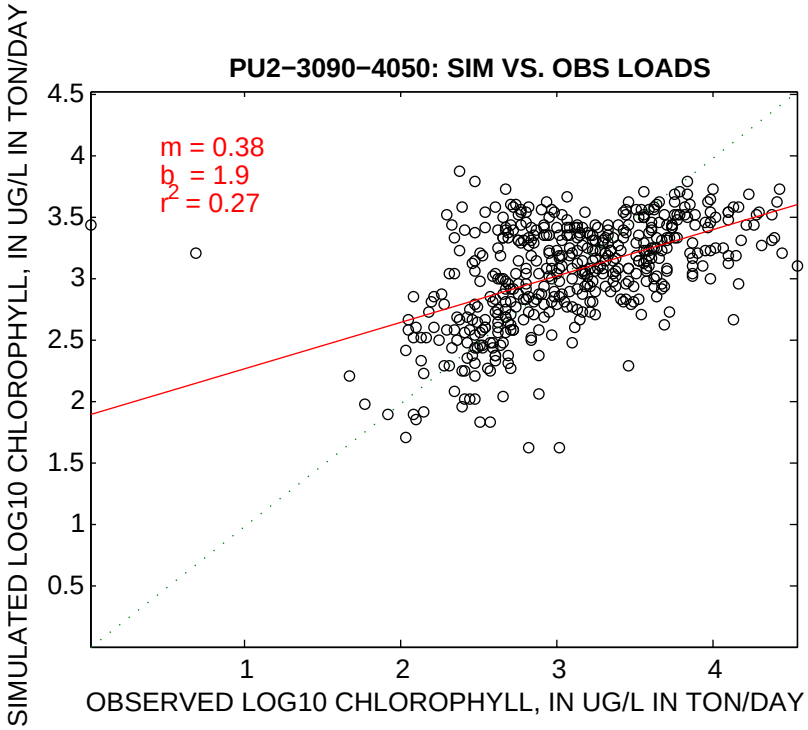


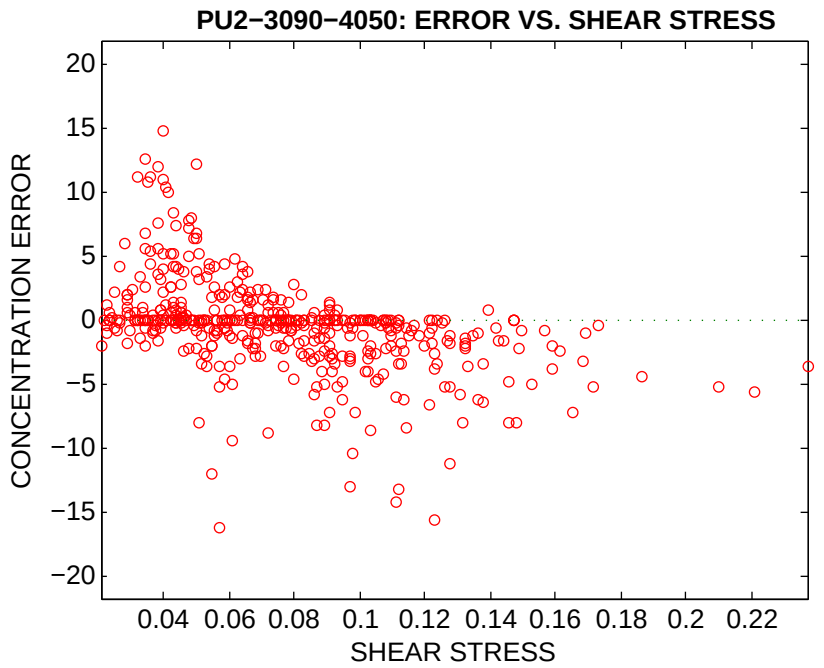


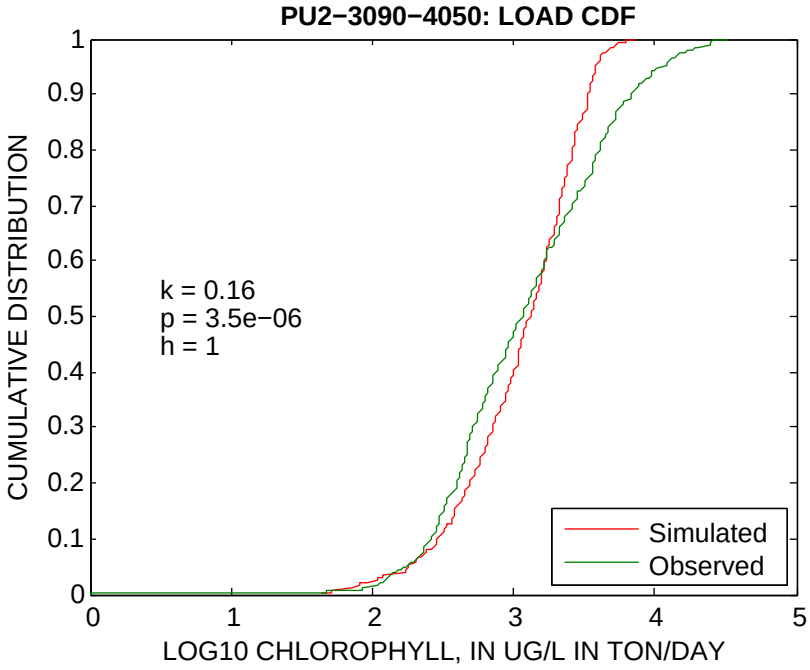


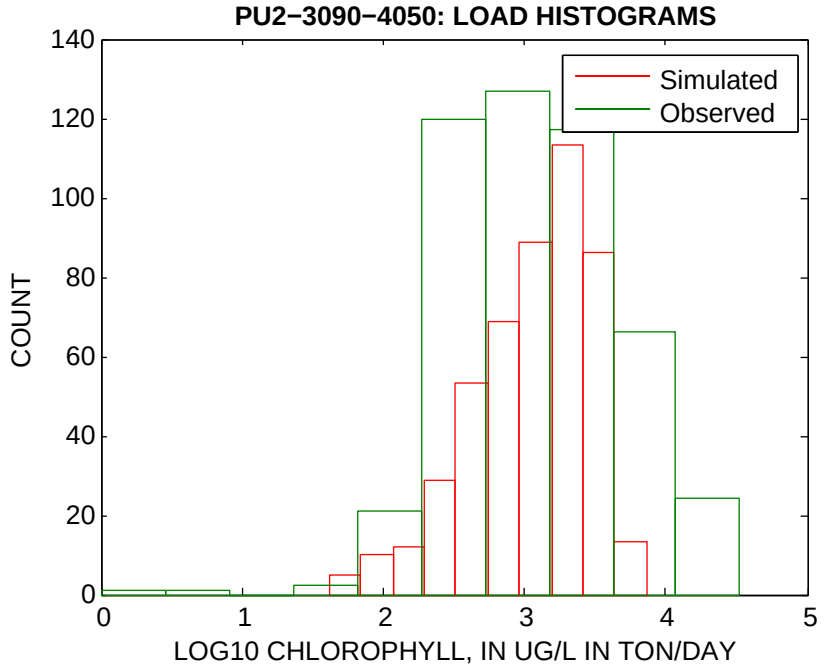


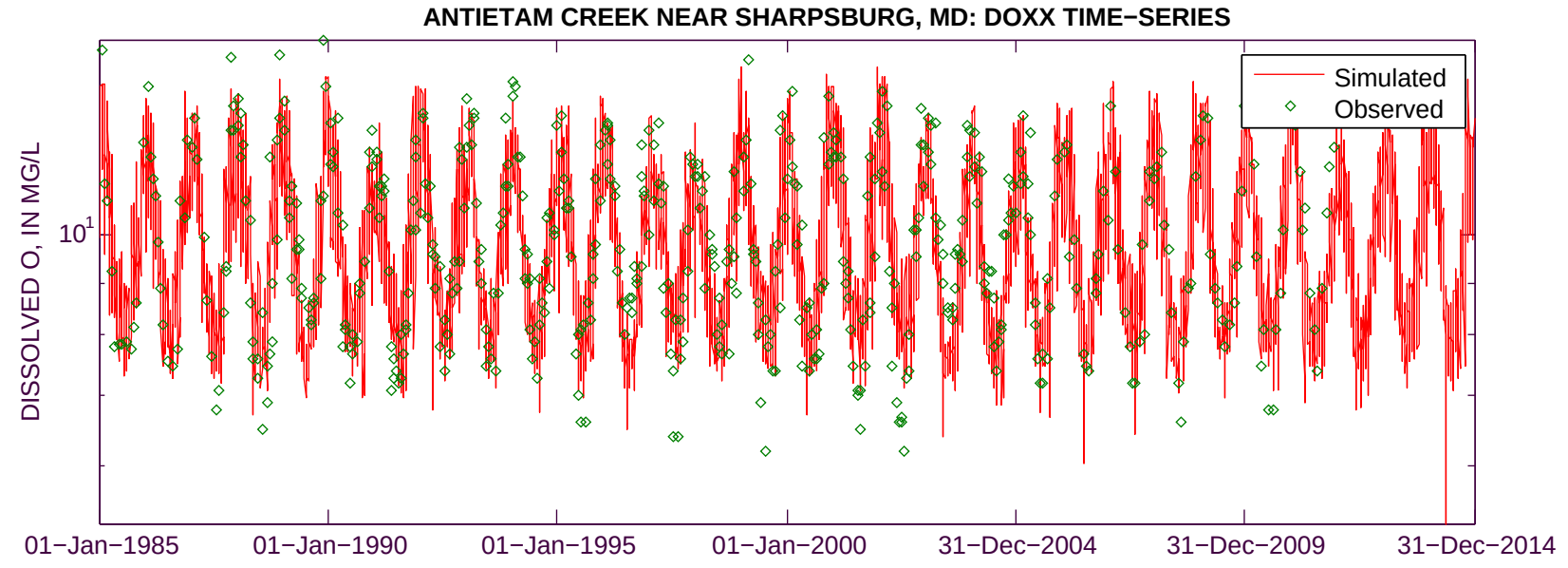
LOAD DATA
LOG10

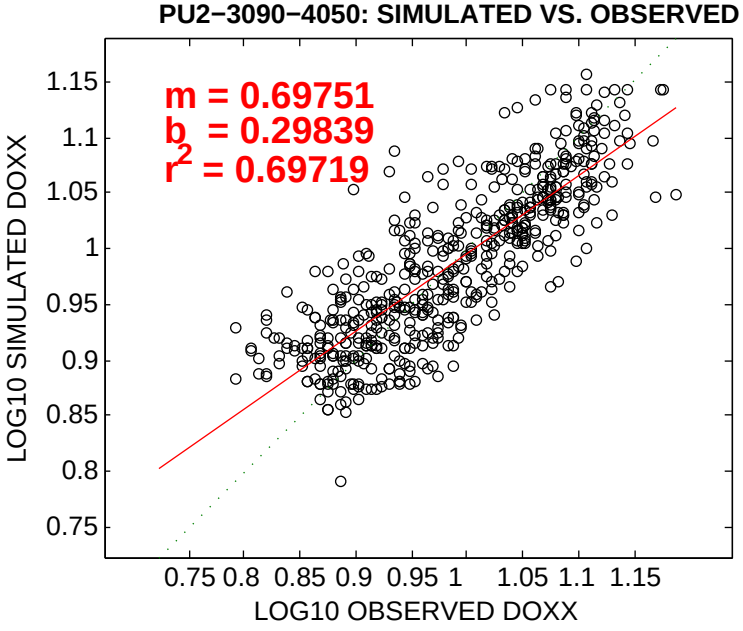


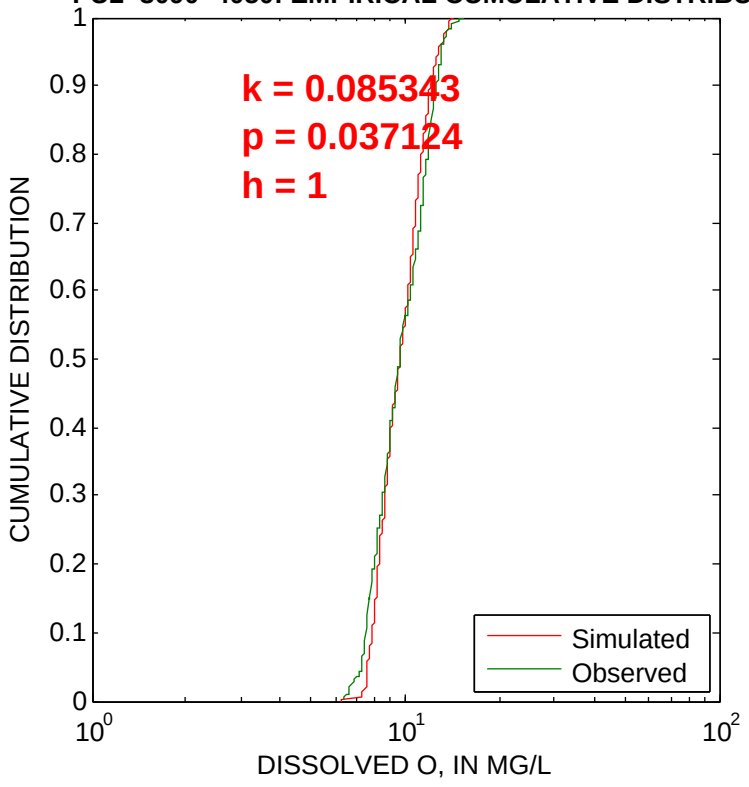












DATA SELECTION

scenario	file
P620171001WQ	DOXX.calib

plot: DOXX - dissolved oxygen

Dates: 1/1/1985 – 12/31/201

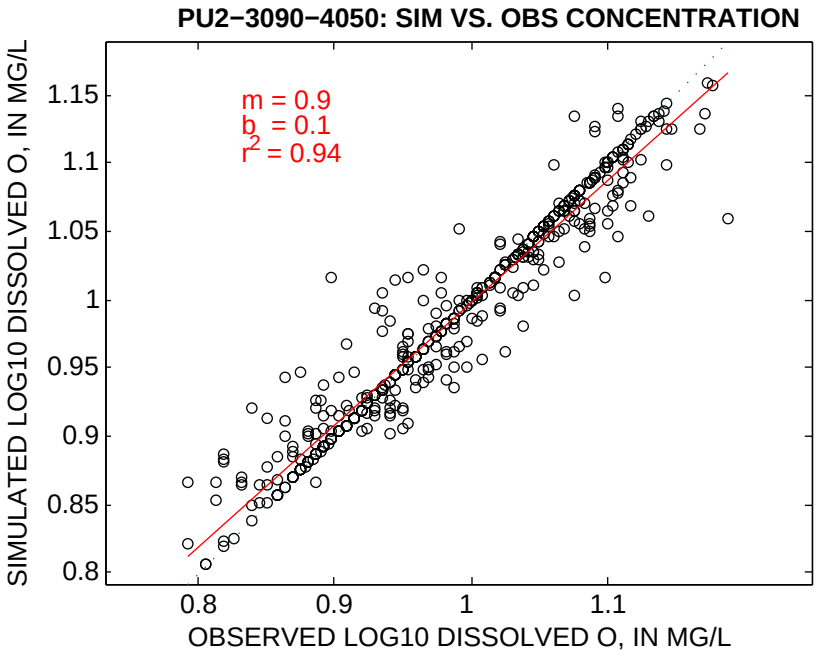
Drive	Directory	Observed
N/A	model	OBS20161101

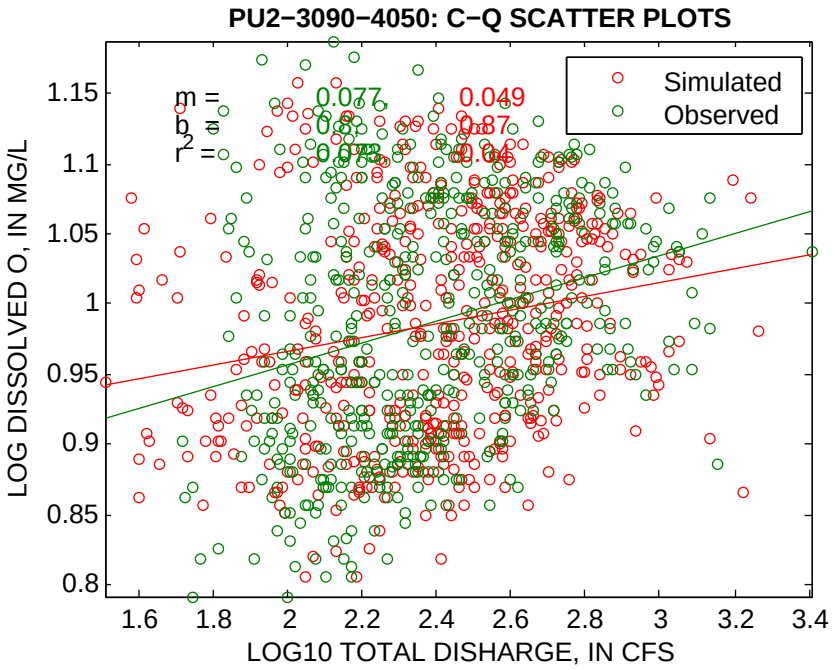
STATISTICS

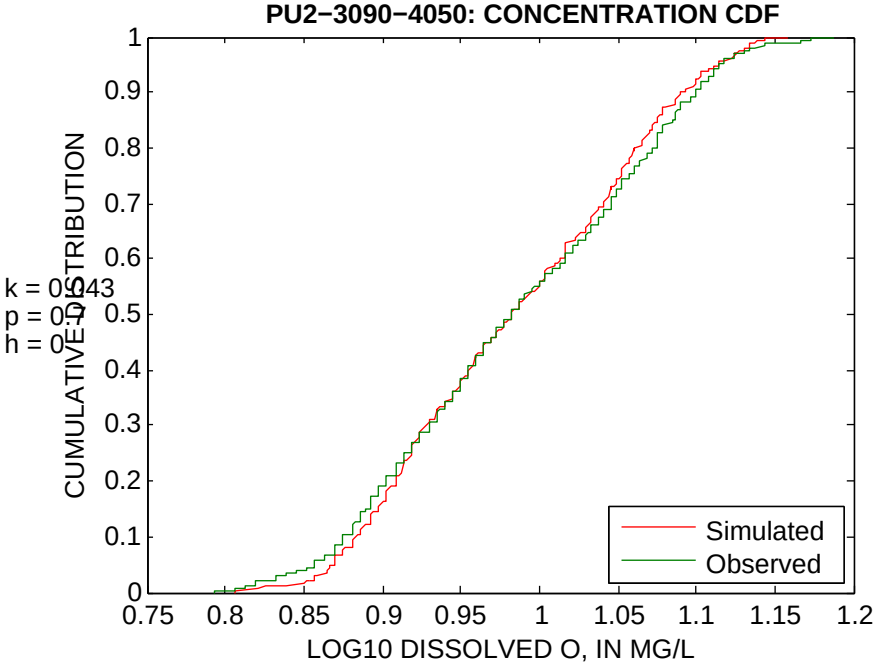
	n	observe	simulate
		539	539
min		6.2	6.1961
		0.792392	0.792118
mean		9.87399	9.82007
		0.986171	0.986245
media		9.6	9.6155
		0.982271	0.982972
max		15.4	14.318
		1.18752	1.15588
varian		3.74947	2.66793
		0.00726117	0.00506698
JB		0.001	0.001
		0.001220	0.001532
		ra	log
%		-0.546075	0.00758779
err.va		1.10417	0.00219875
rel.std.err		0.294487	0.302809
mod.eff		0.705513	0.697191

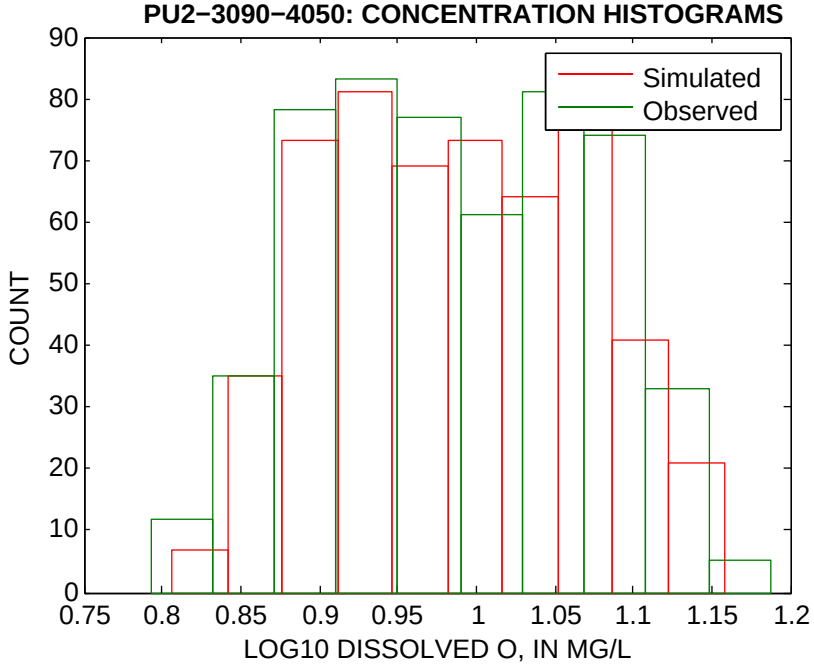
VERSION 2.1

ALL DATA
LOG10

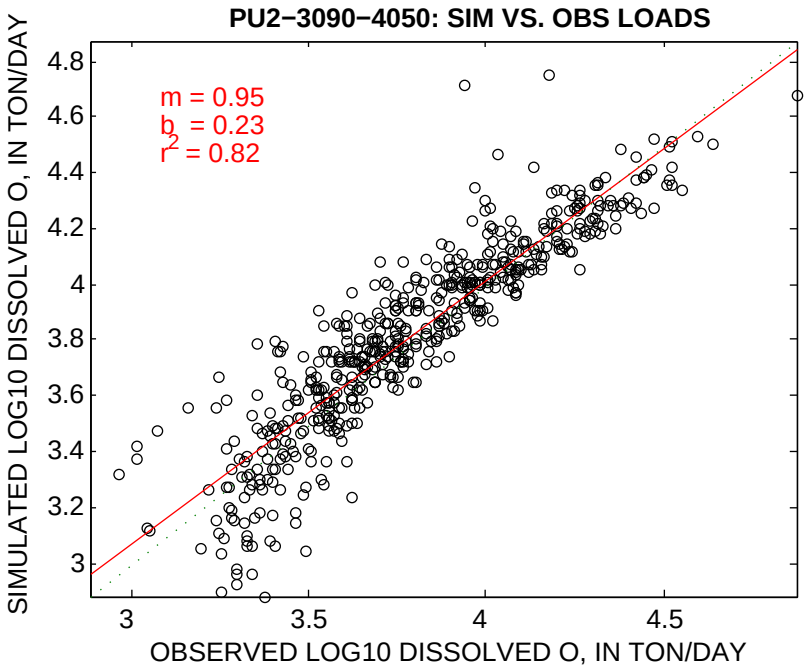


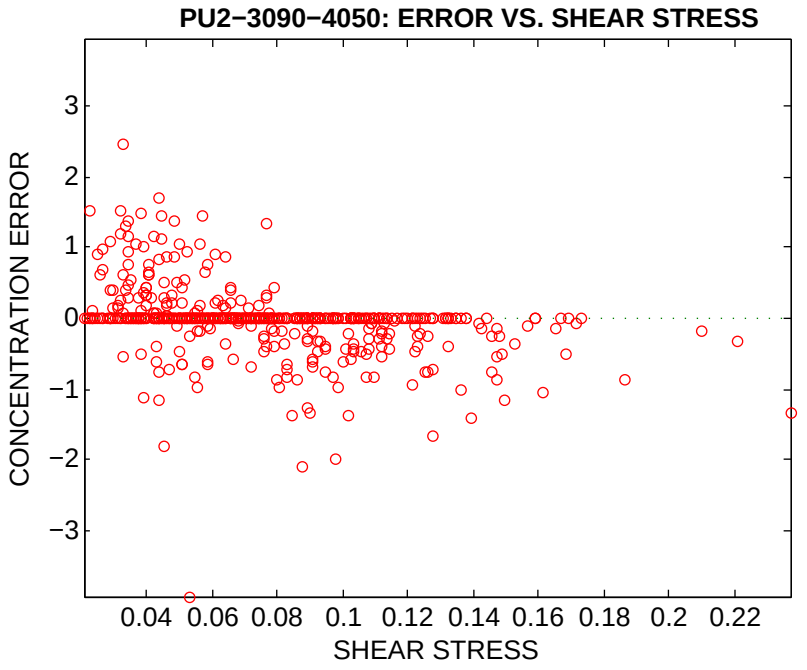


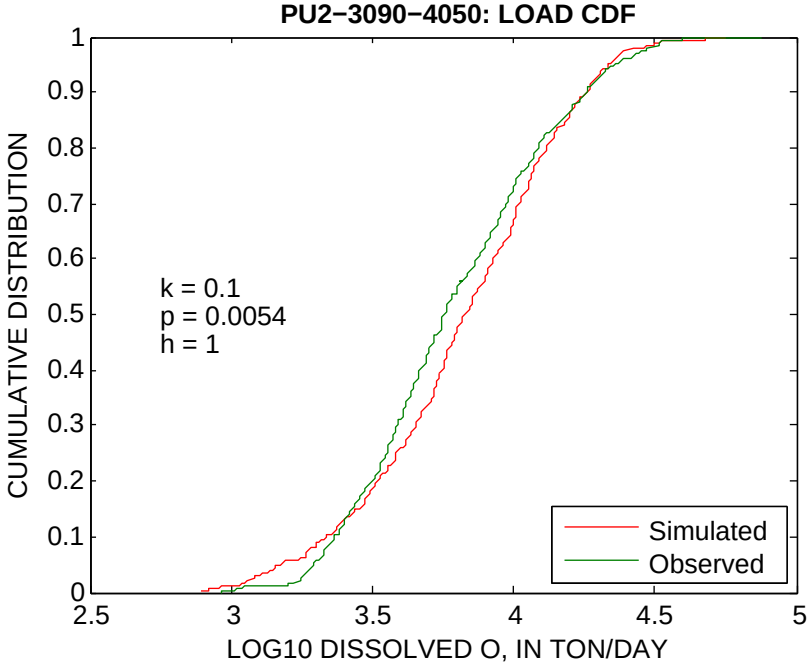


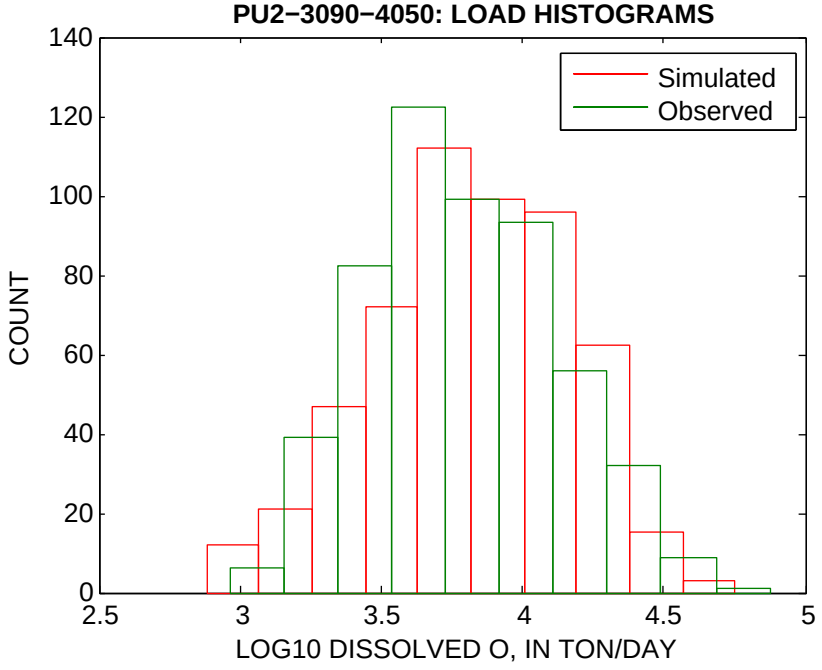


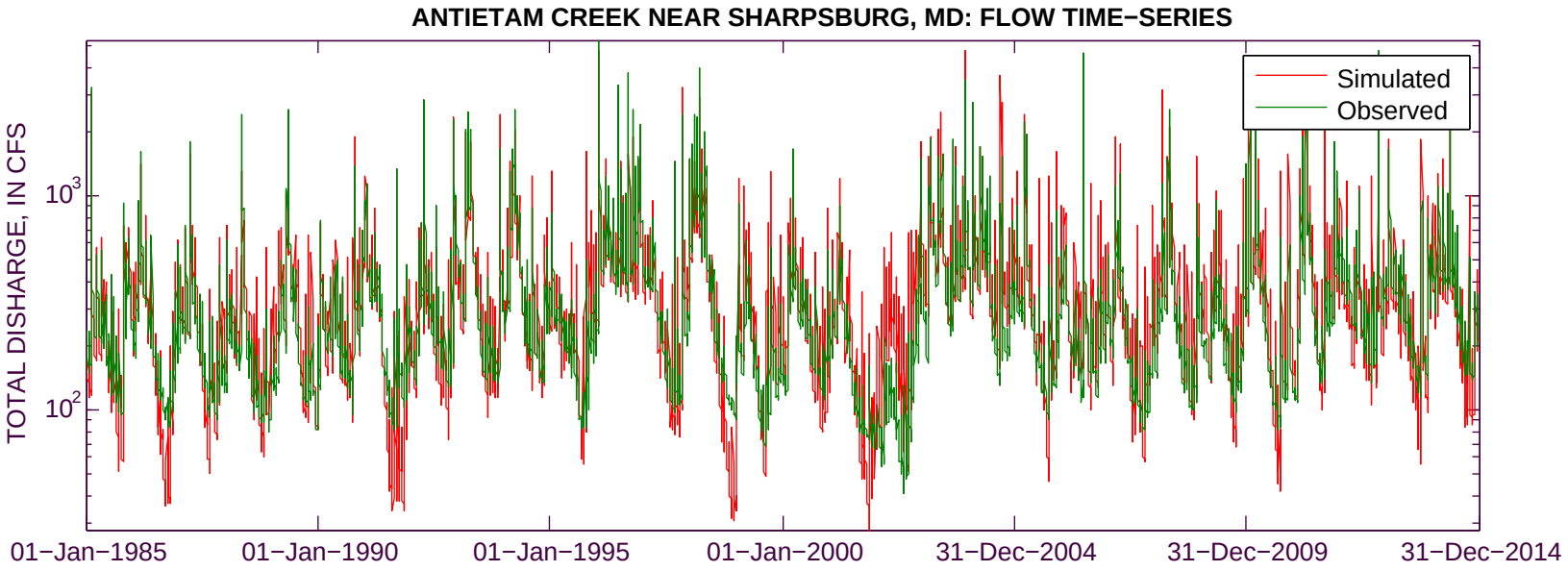
LOAD DATA
LOG10

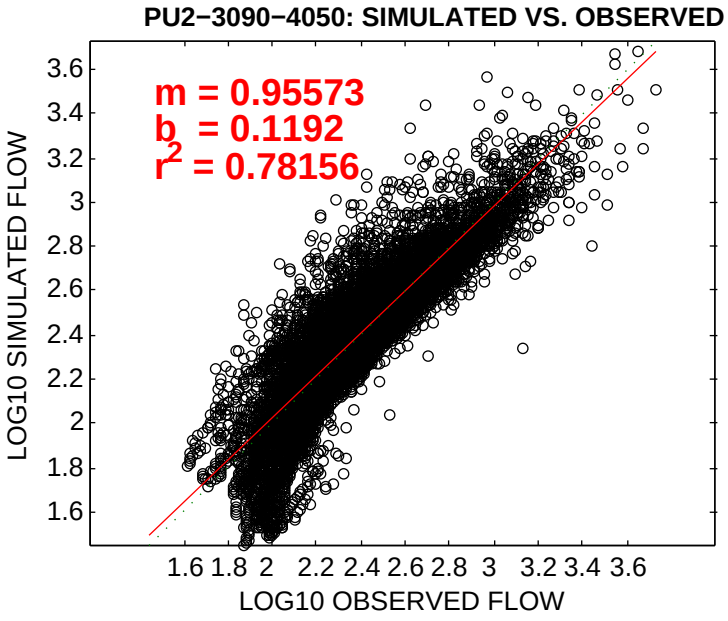


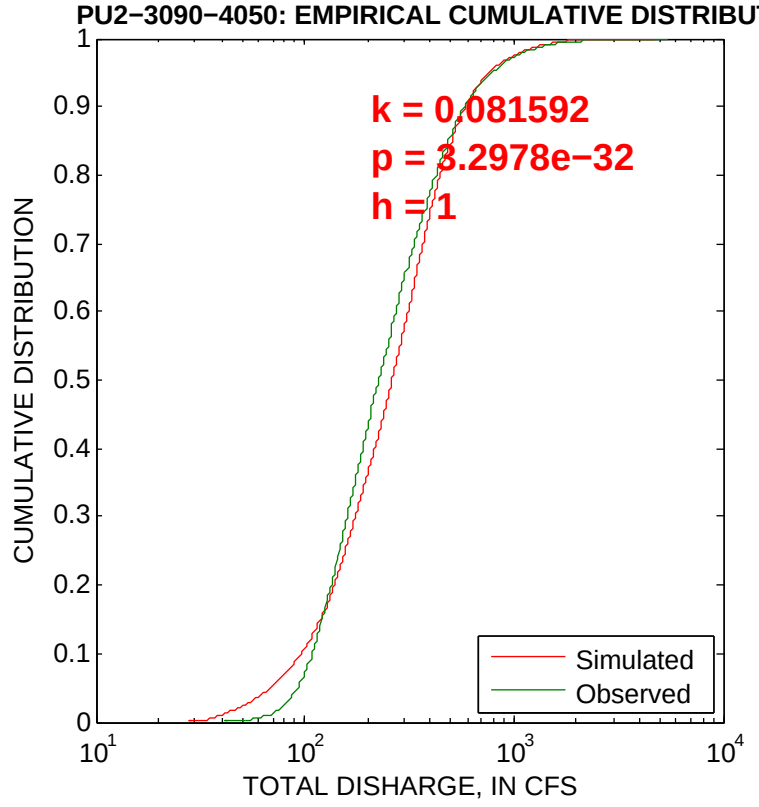












DATA SELECTION

scenario: P620171001WQ | file: FLOW.calib

plot: FLOW - total discharge

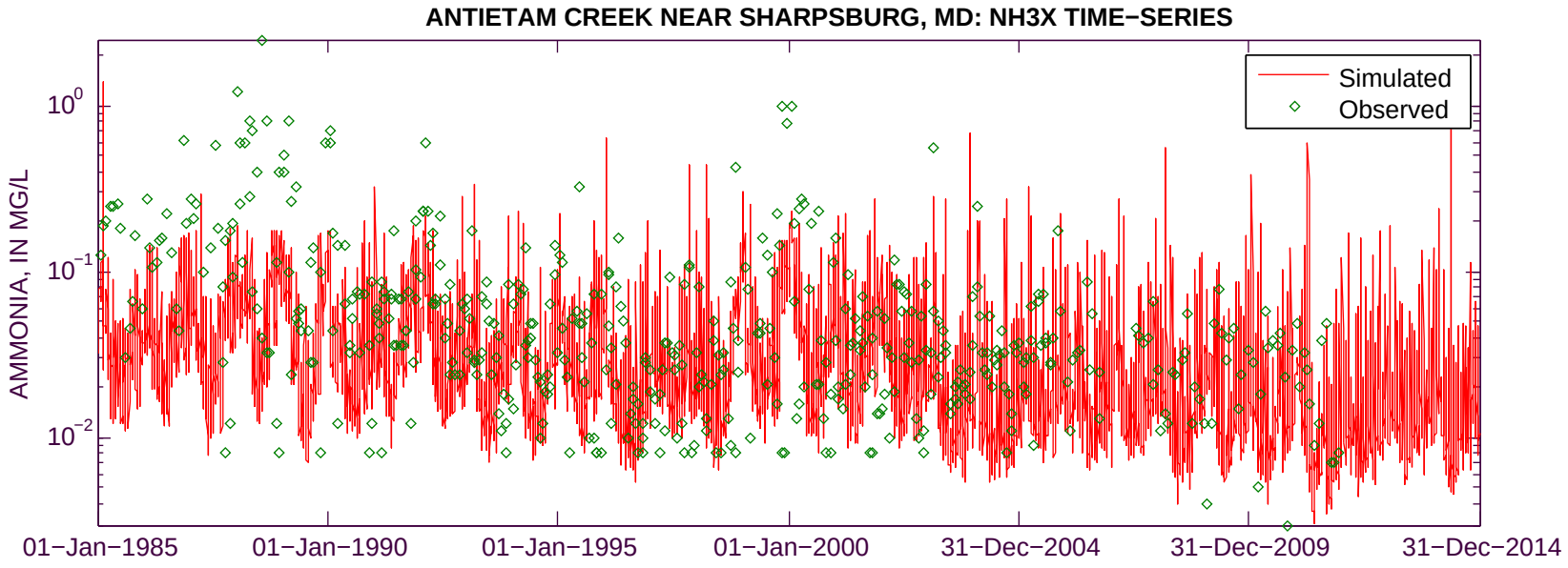
Dates: 1/1/1985 – 12/31/201

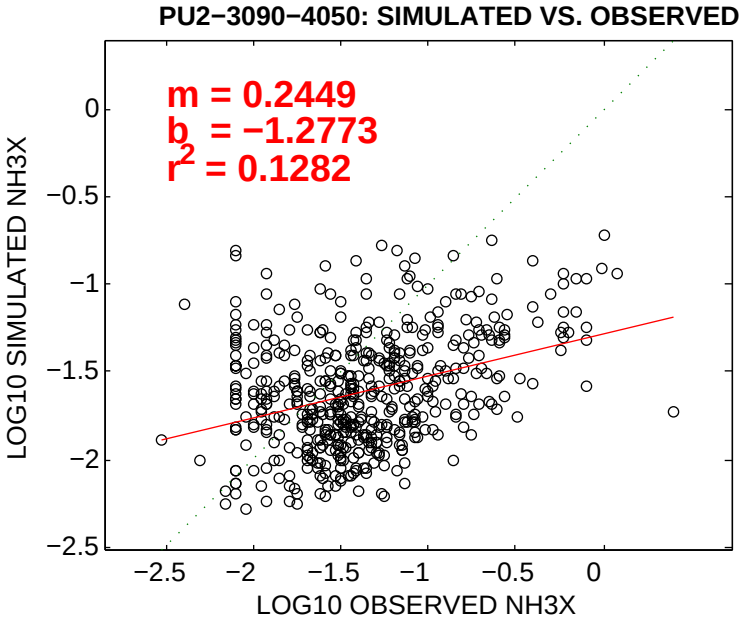
Drive: N/A | Directory: model | Observed: OBS20161101

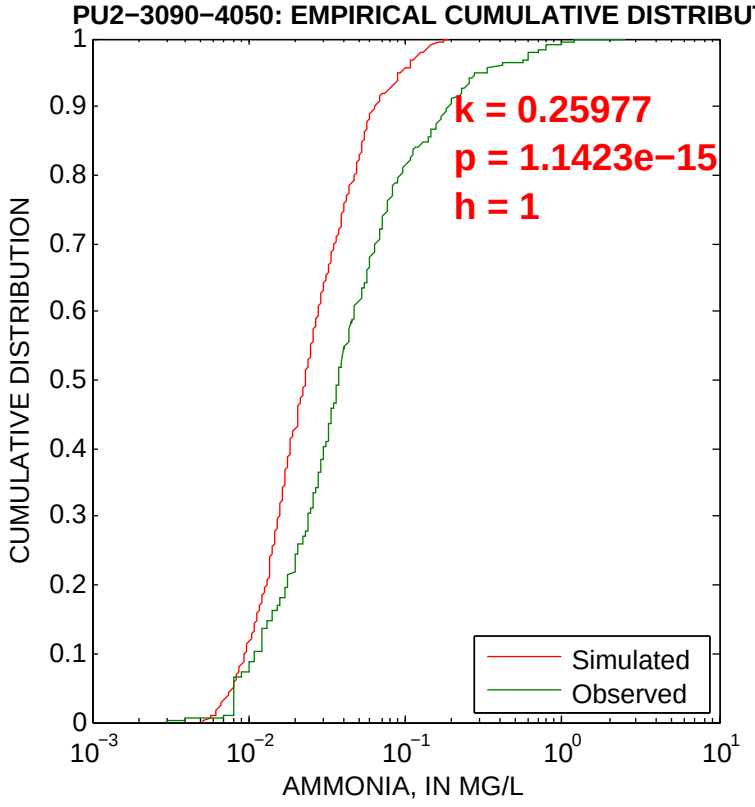
STATISTICS

		observe	simulate
n		10957	10957
min		41	27.843
		1.61278	1.44472
mean		312.281	323.577
		2.38415	2.39781
media		227	262.22
		2.35603	2.41867
max		5390	4802.9
		3.73159	3.6815
varian		86821.1	75169.1
		0.0849654	0.0993012
JB		0.001	0.001
		0.001	0.001
		ra	log
%		3.61739	0.572978
err.va		24640.9	0.0220447
rel.std.err		0.283812	0.259455
mod.eff		0.716188	0.740545

VERSION 2.1







DATA SELECTION

scenario	file
P620171001WQ	NH3X.calib

plot: NH3X - ammonia

Dates: 1/1/1985 – 12/31/201

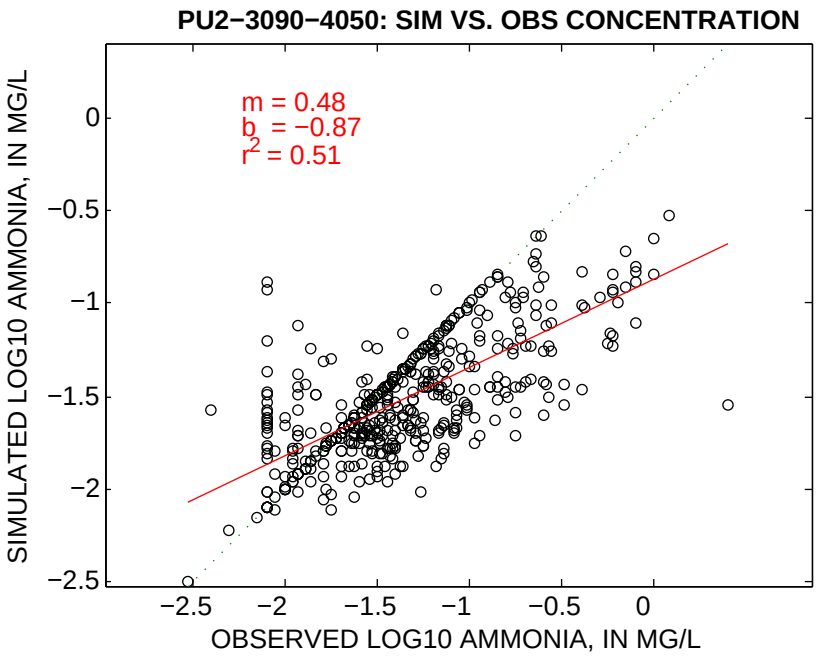
Drive	Directory	Observed
N/A	model	OBS20161101

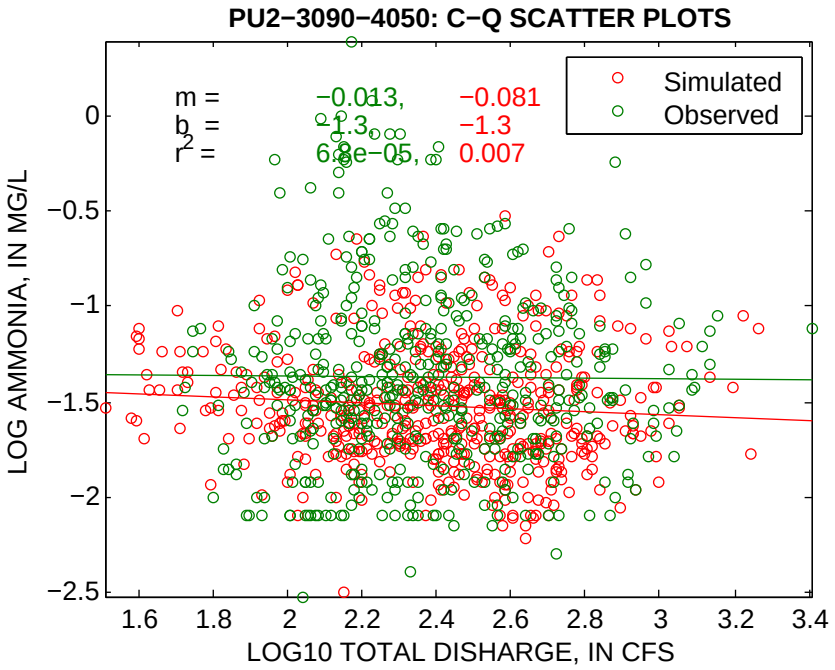
STATISTICS

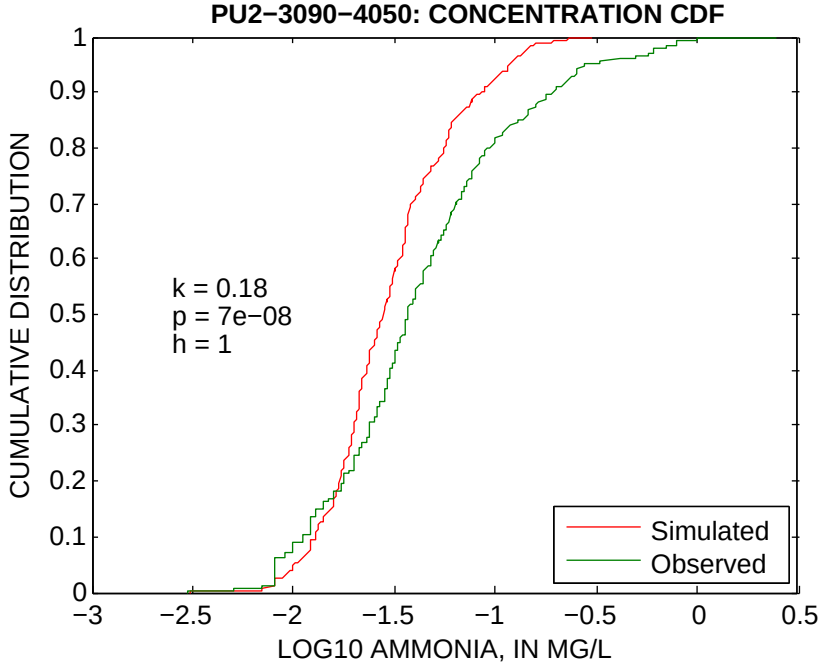
n	512	512
	observe	**simulate**
min	0.003	0.0051836
	-2.52288	-2.28537
mean	0.0883949	0.0326544
	-1.36941	-1.61263
media	0.037	0.02304
	-1.4318	-1.63752
max	2.5	0.19259
	0.39794	-0.715366
varian	0.0318871	0.00084301
	0.221418	0.103581
JB	0.001	0.001
	0.001	0.005413
	ra	log
%	-63.0584	17.761
err.va	0.032426	0.275821
rel.std.err	1.0169	1.24571
mod.eff	-0.0169016	-0.245705

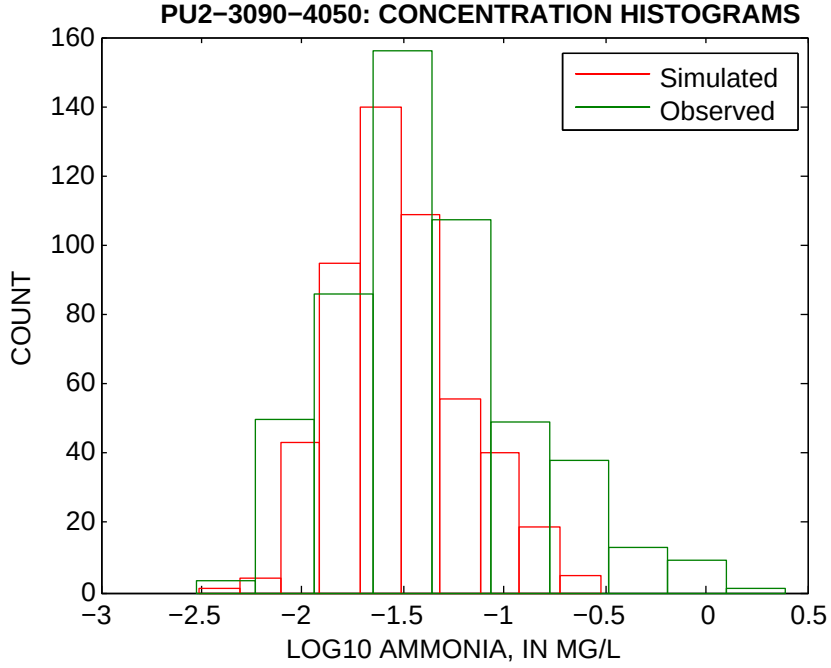
VERSION

ALL DATA
LOG10

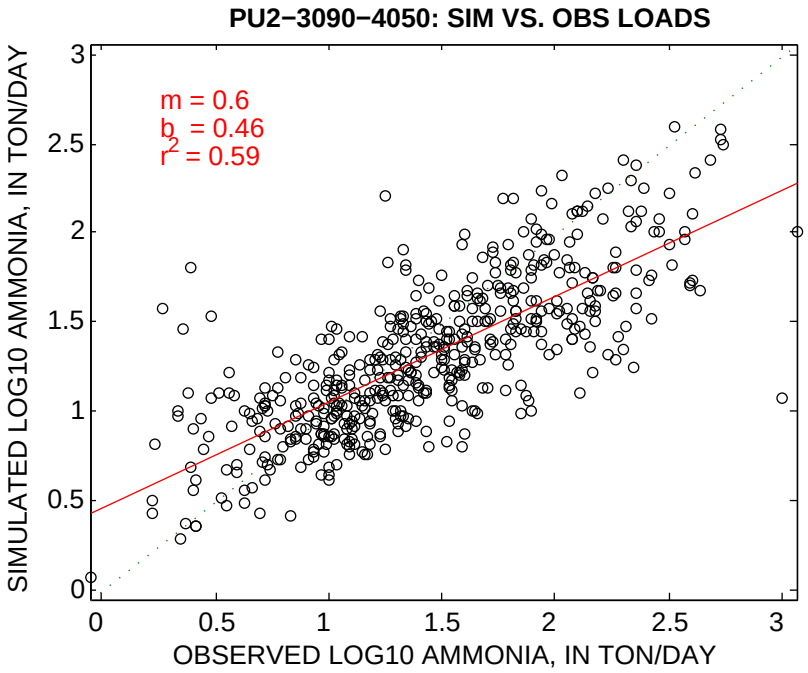


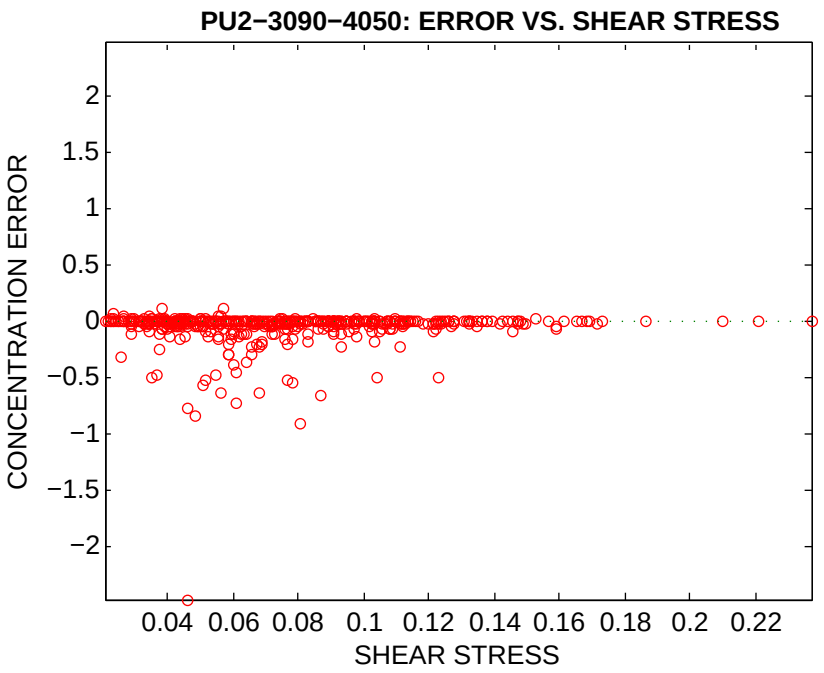


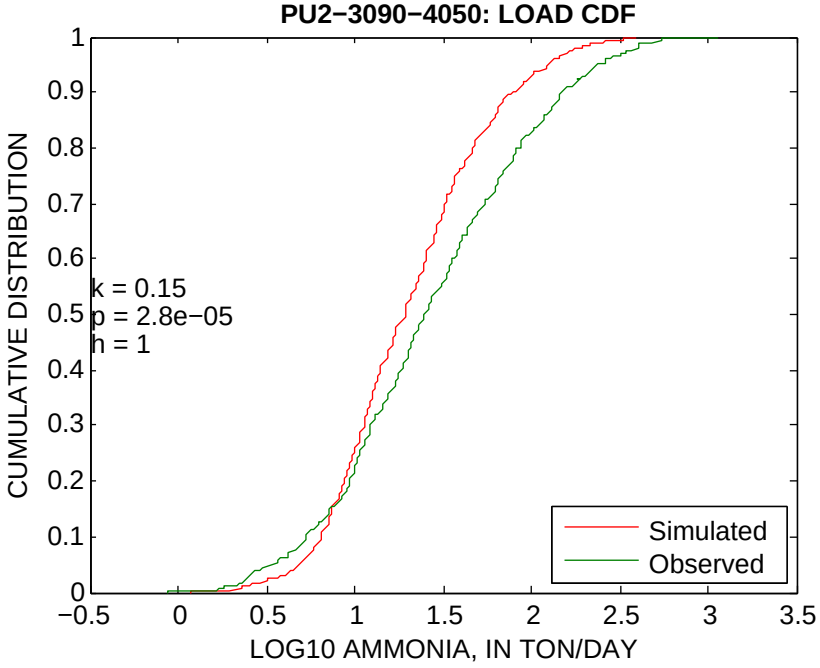


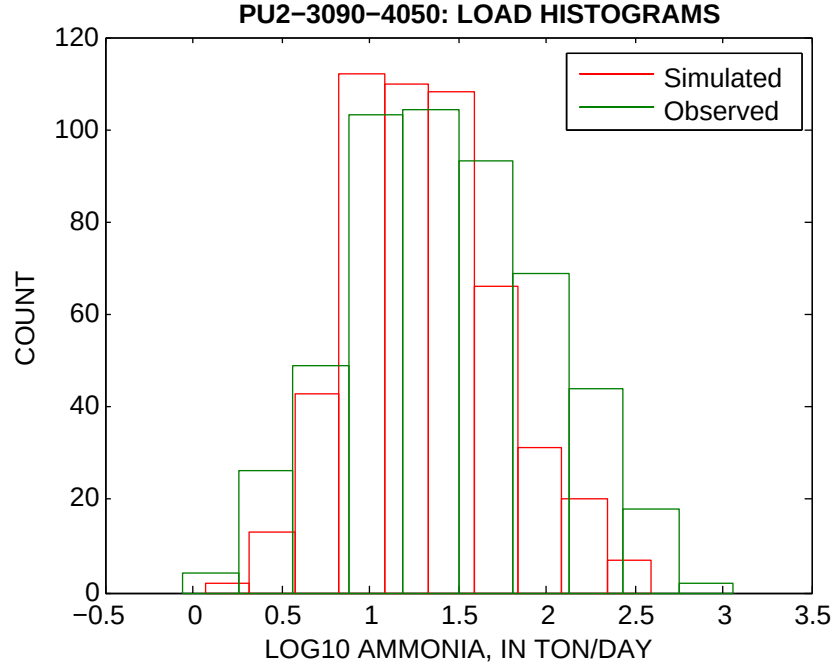


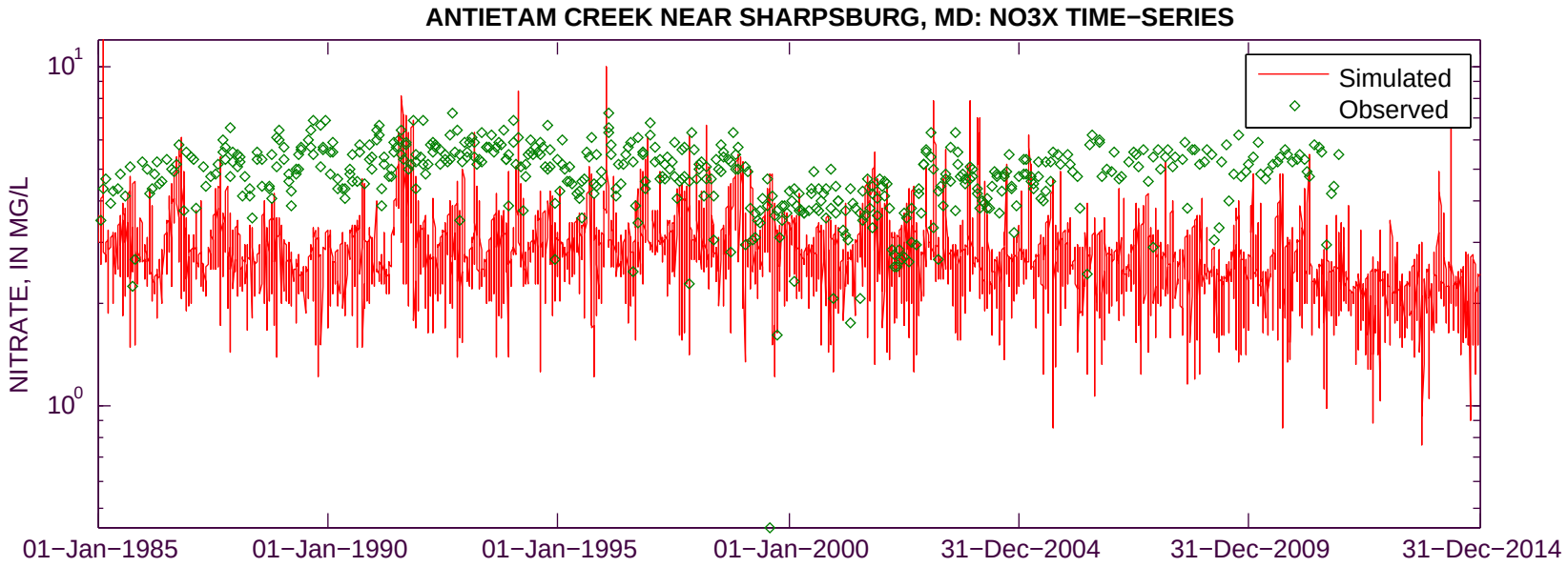
LOAD DATA
LOG10

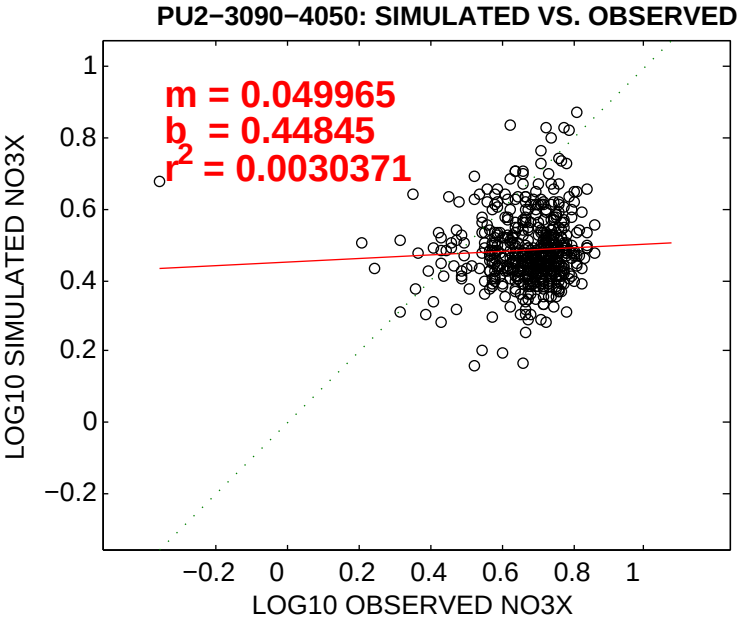


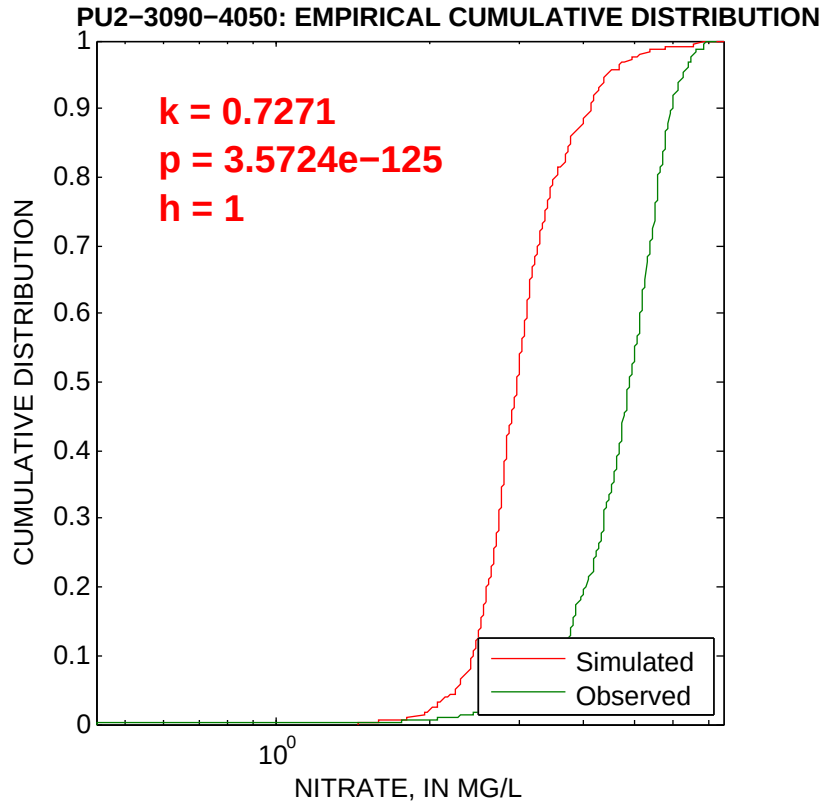












DATA SELECTION

scenario	file
P620171001WQ	NO3X.calib

plot: NO3X - nitrate

Dates: 1/1/1985 – 12/31/201

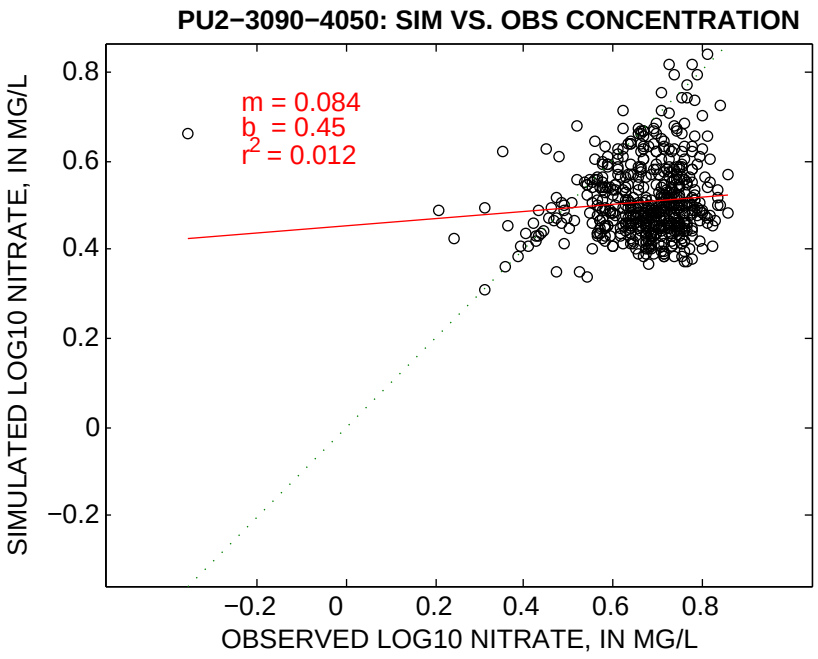
Drive	Directory	Observed
N/A	model	OBS20161101

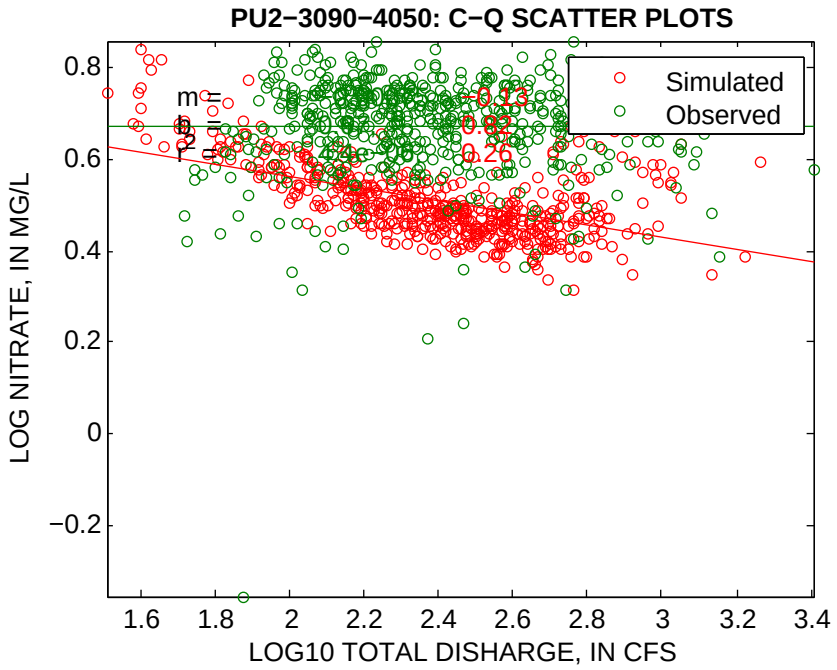
STATISTICS

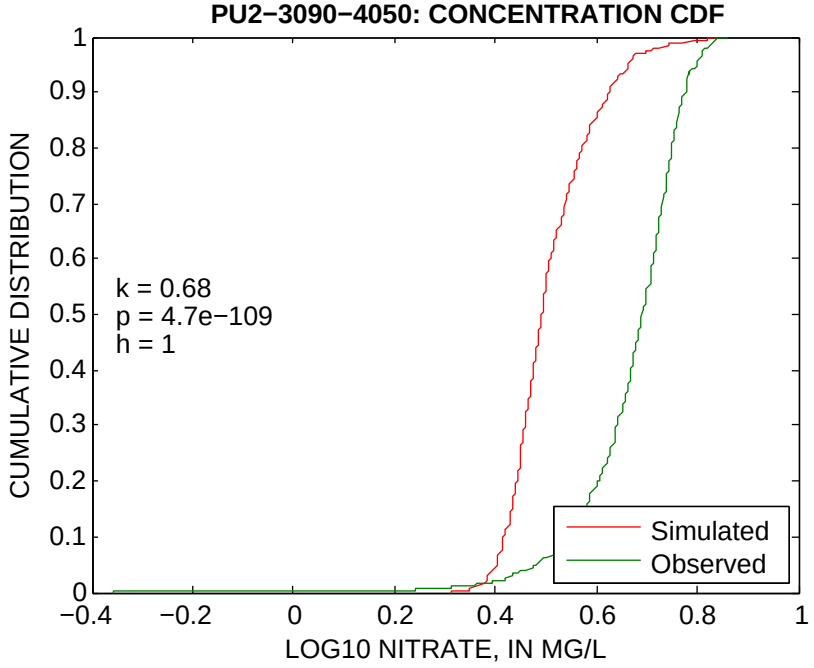
	n	observe	simulate
		535	535
min		0.44	1.4446
		-0.356547	0.159748
mean		4.82785	3.11385
		0.672758	0.482068
media		4.93	2.962
		0.692847	0.471585
max		7.24	7.4828
		0.859739	0.874064
varian		0.955711	0.585731
		0.0112712	0.00926511
JB		0.001	0.001
		0.001	0.001
		ra	log
%		-35.5024	-28.3445
err.va		4.35902	0.0558406
rel.std.err		4.56102	4.95428
mod.eff		-3.56102	-3.95428

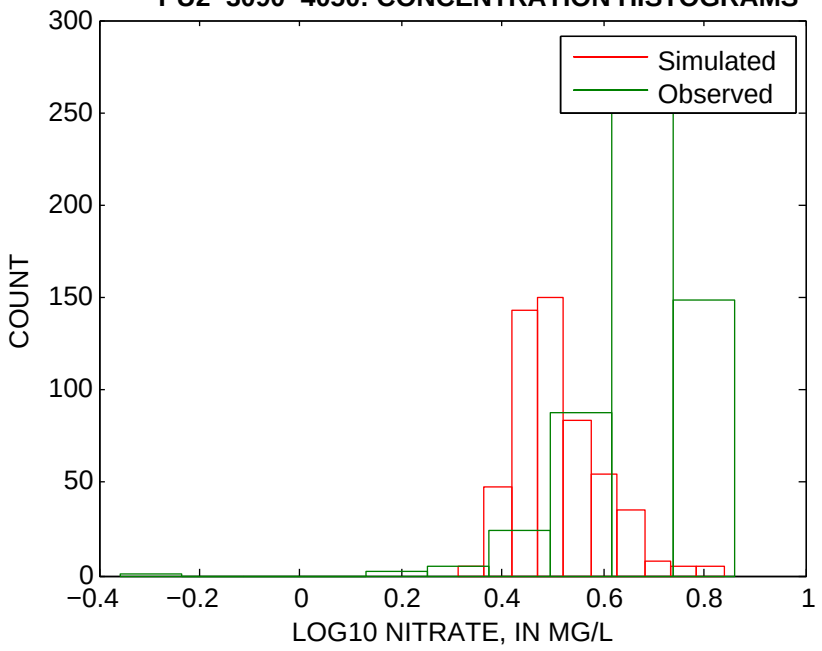
VERSION 2.1

ALL DATA
LOG10

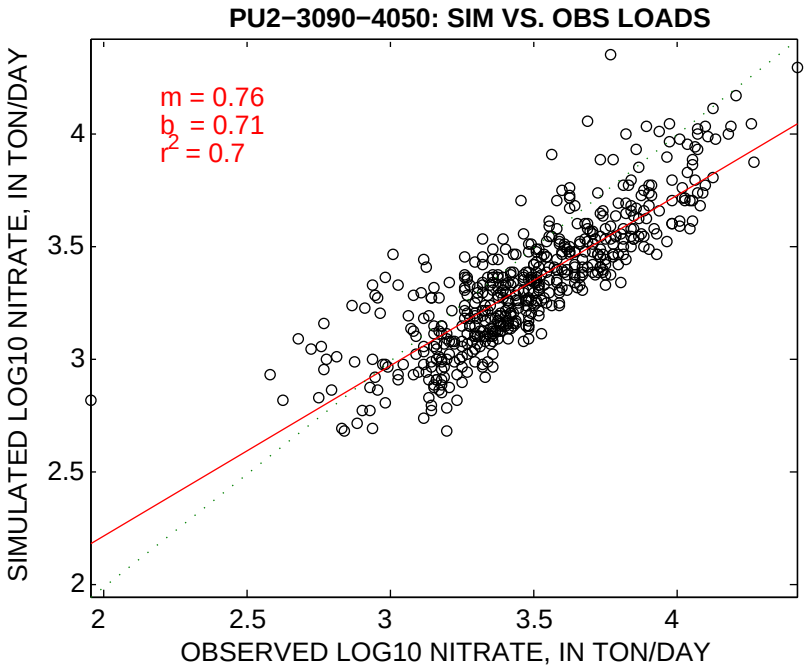


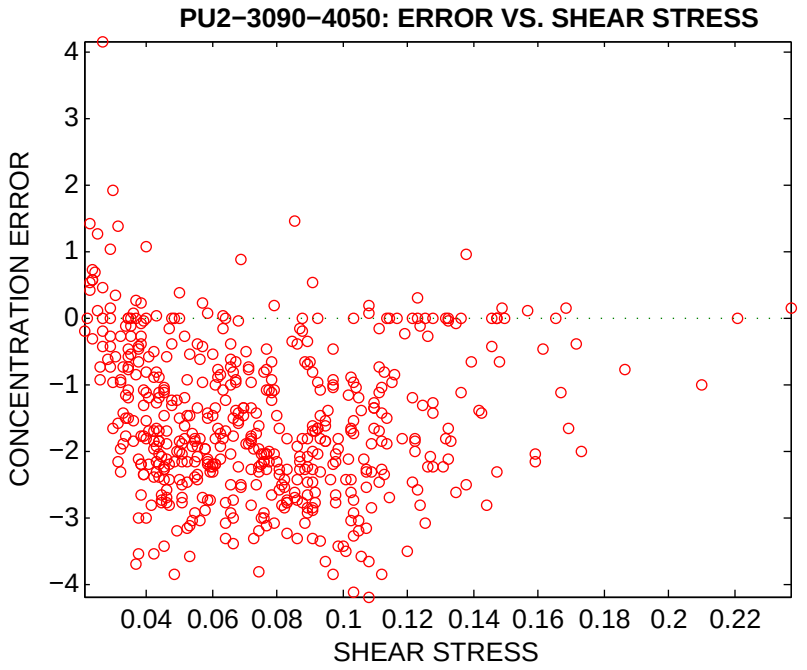


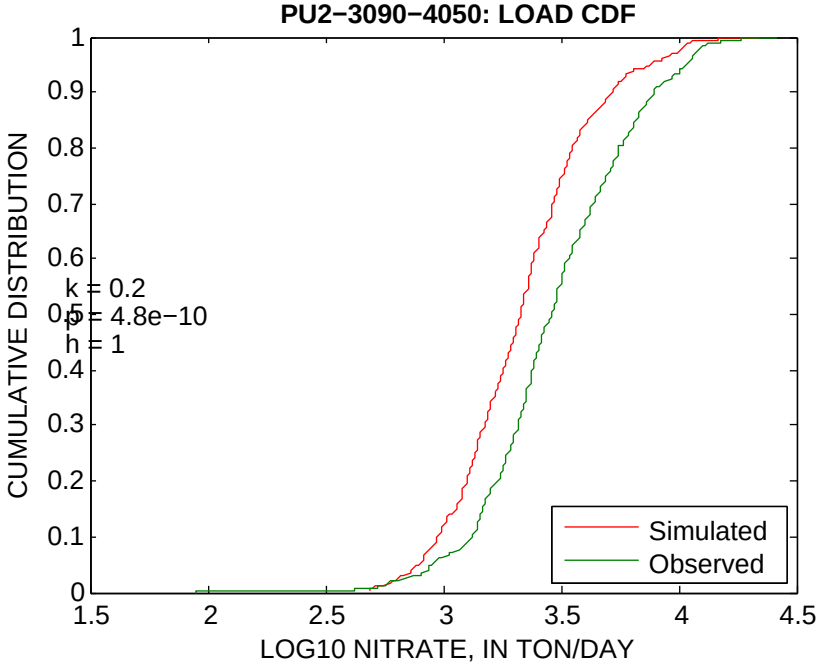


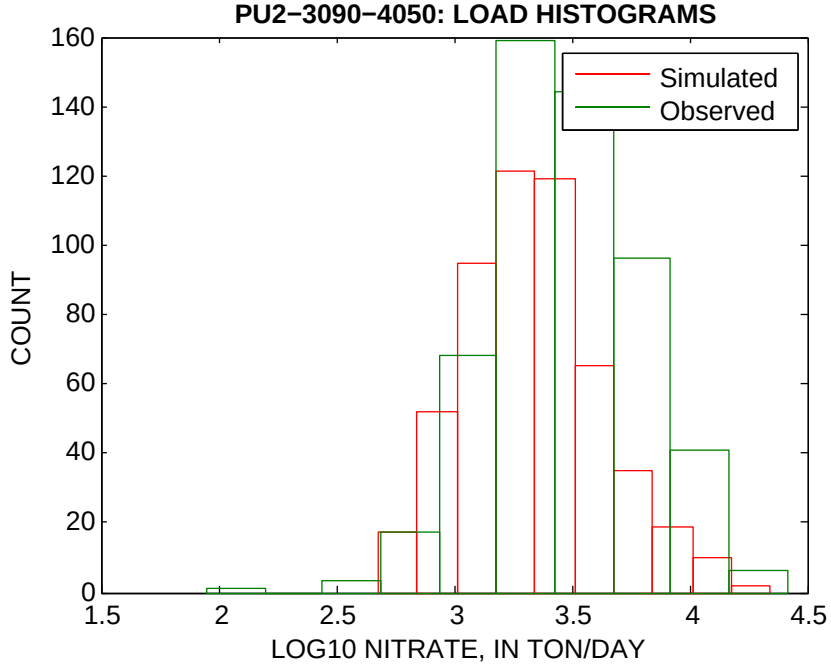


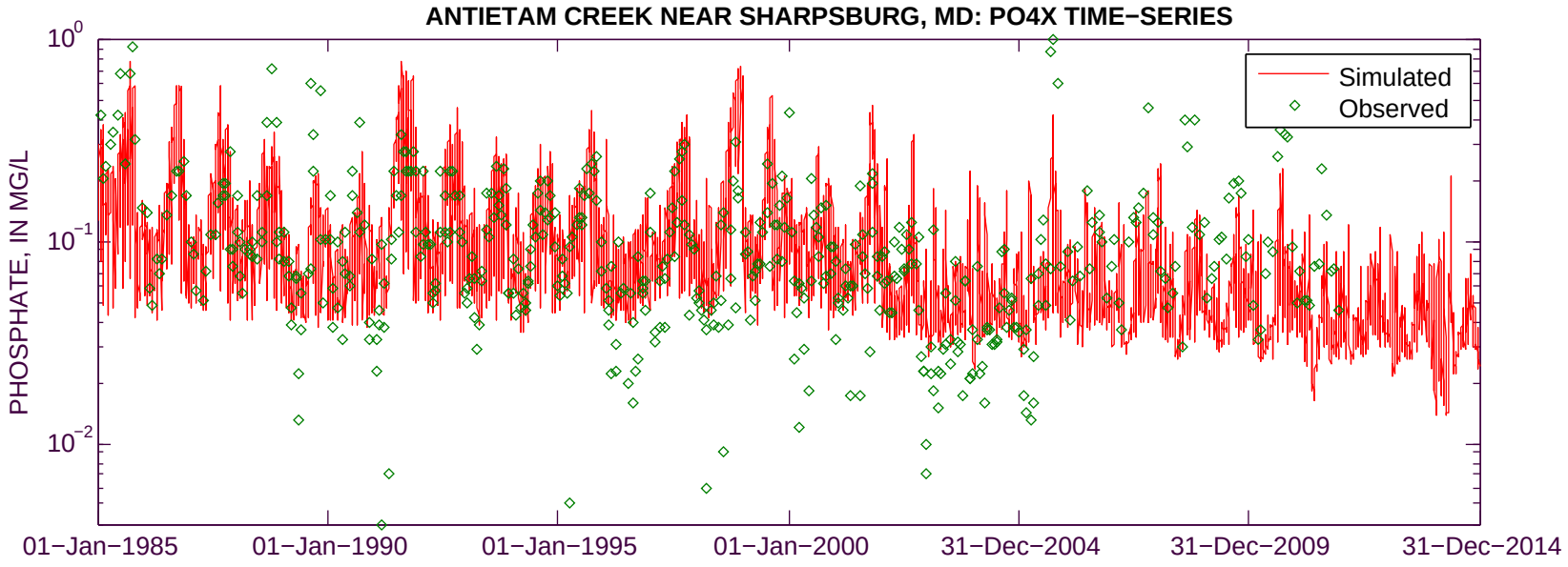
LOAD DATA
LOG10

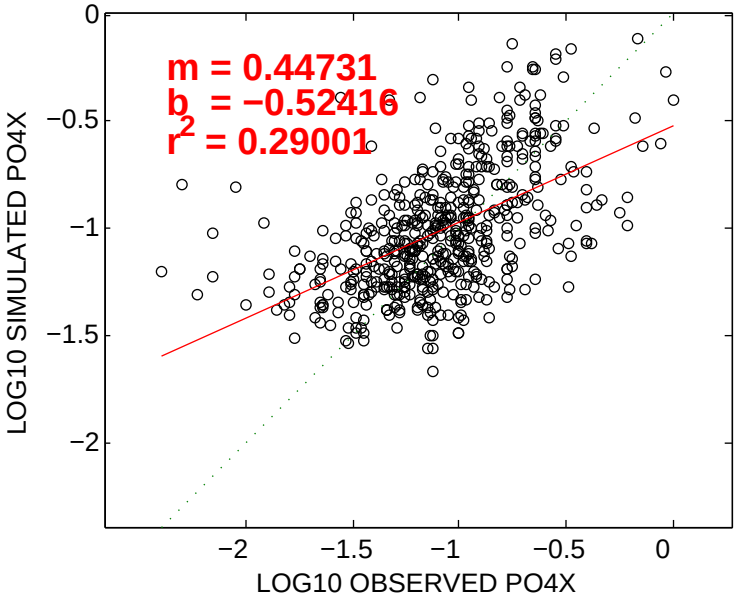


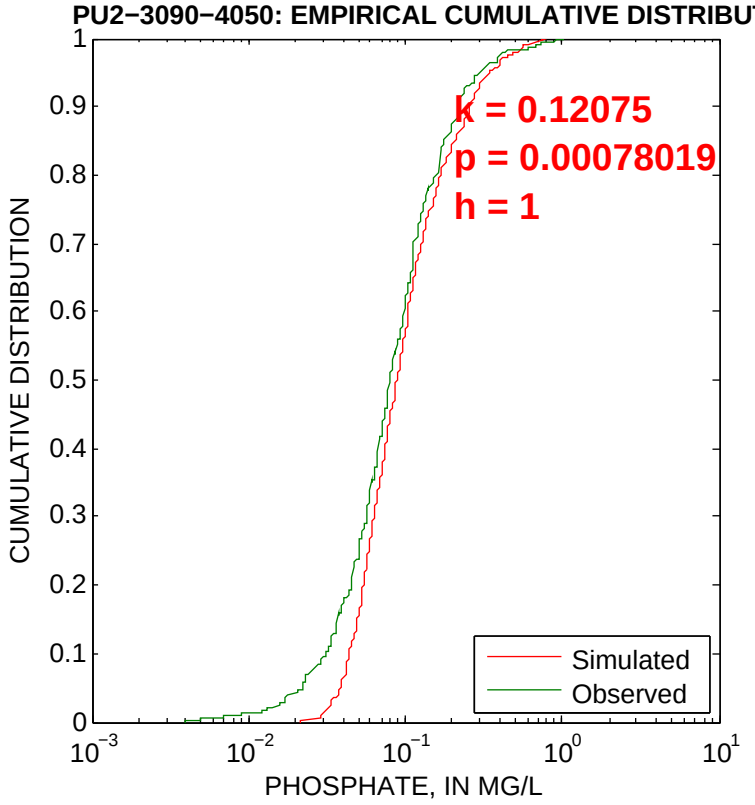












DATA SELECTION

scenario	file
P620171001WQ	PO4X.calib

plot: PO4X - phosphate

Dates: 1/1/1985 – 12/31/201

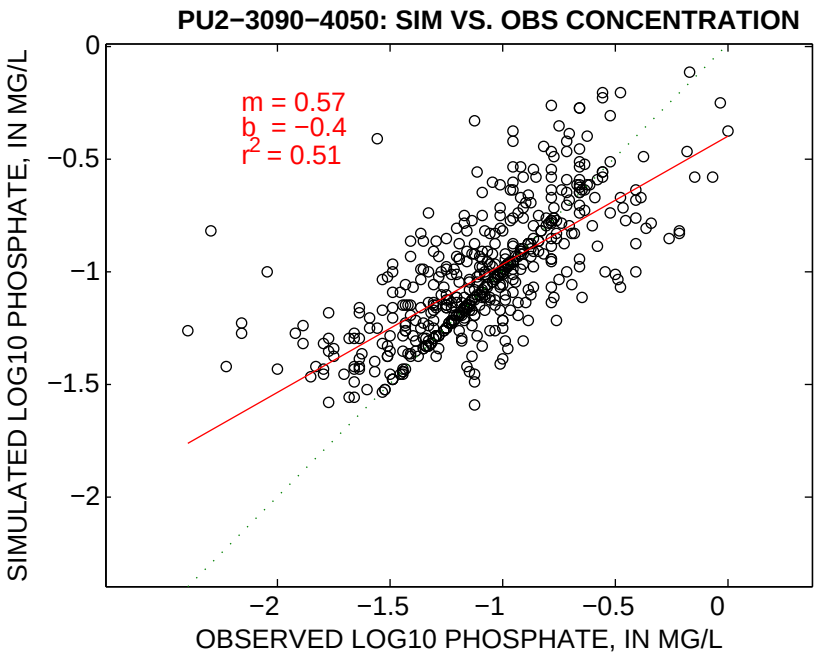
Drive	Directory	Observed
N/A	model	OBS20161101

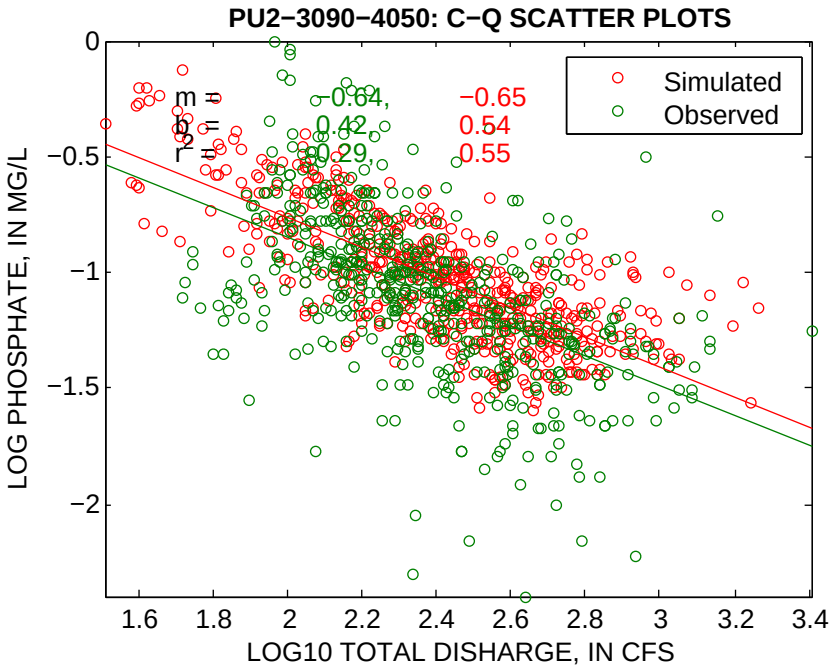
STATISTICS

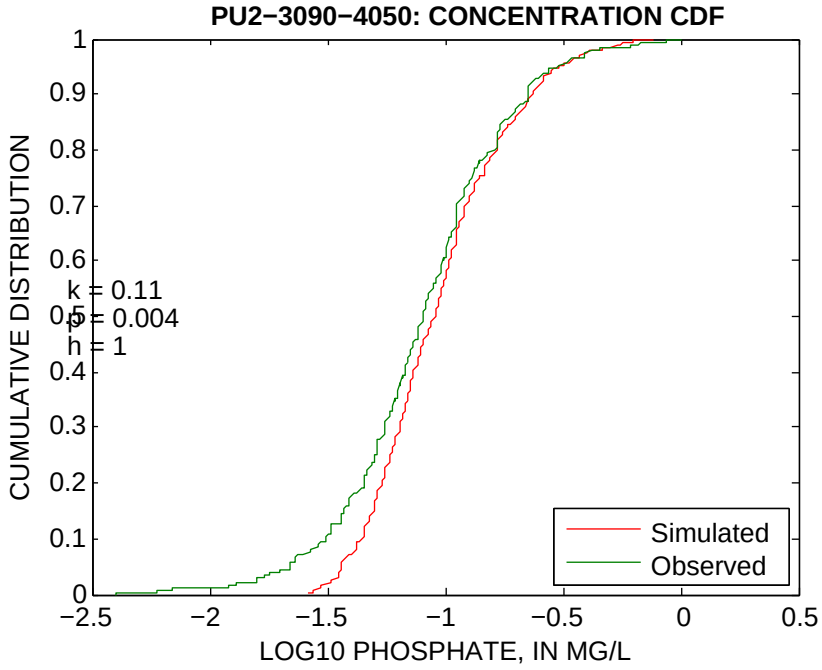
	n	530	530
		observe	simulate
min		0.004	0.021245
		-2.39794	-1.67274
mean		0.113129	0.125719
		-1.09047	-1.01195
media		0.081	0.088034
		-1.09151	-1.05535
max		1.01	0.77463
		0.00432137	-0.110906
varian		0.0132309	0.0121204
		0.124428	0.0858498
JB		0.001	0.001
		0.002006	0.001
		ra	log
%		11.1291	-7.20097
err.va		0.0132477	0.105139
rel.std.err		1.00127	0.844974
mod.eff		-0.0012691	0.155026

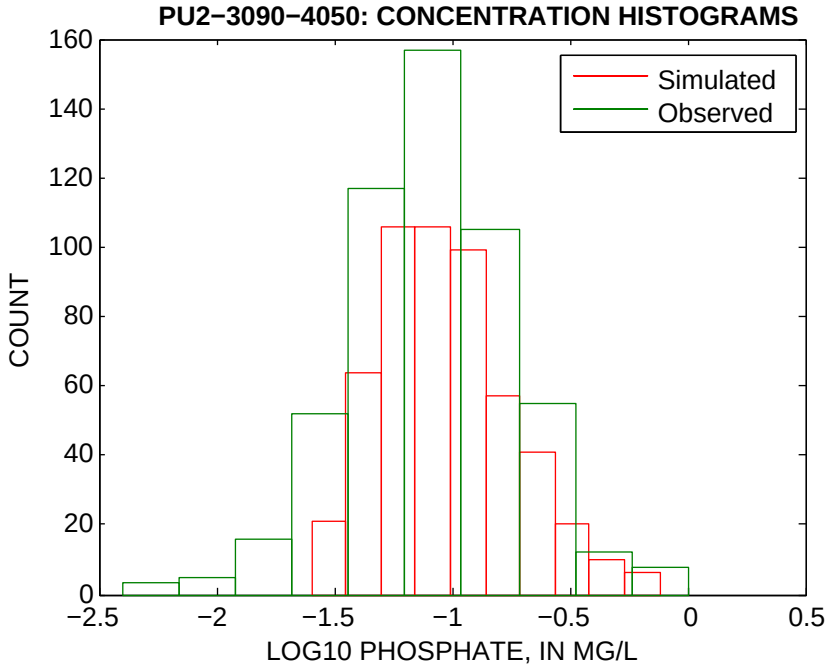
VERSION 2.1

ALL DATA
LOG10

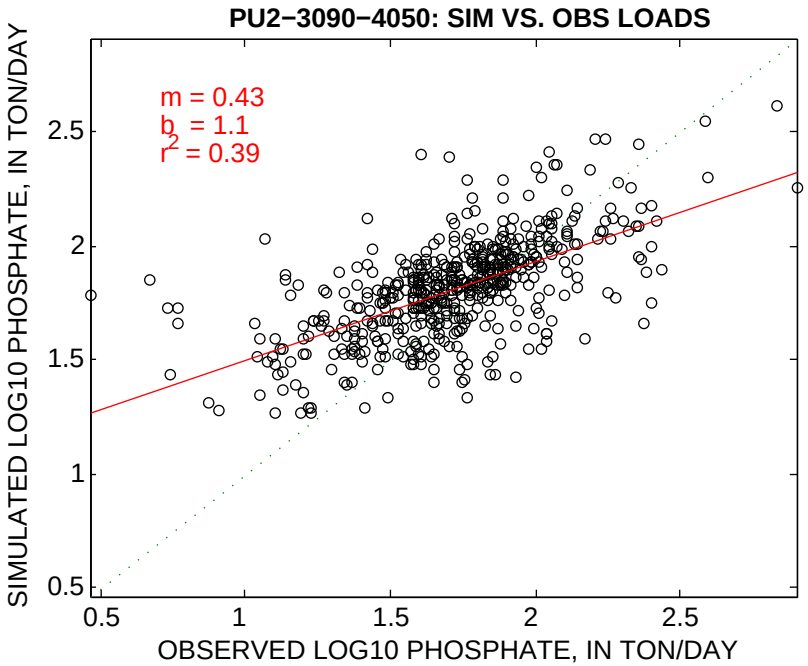


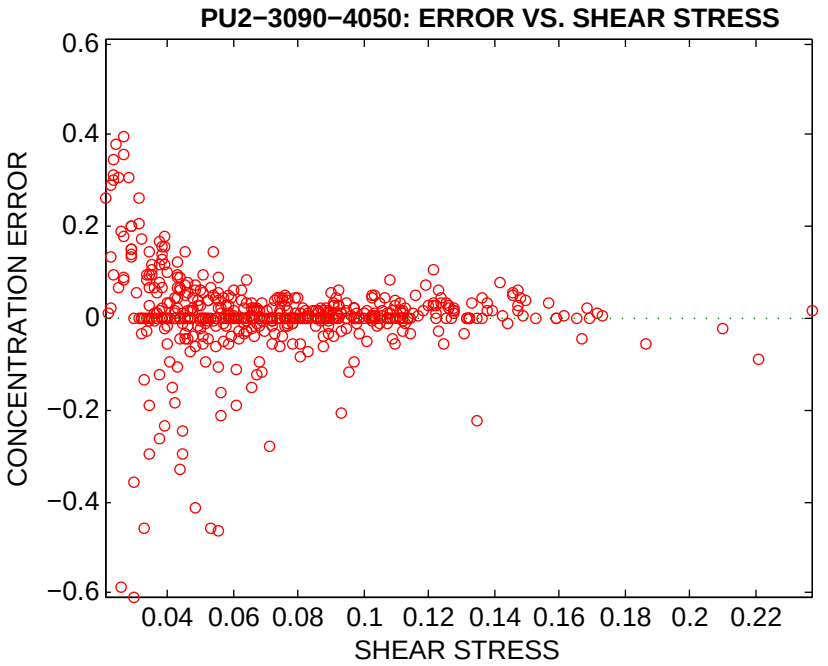


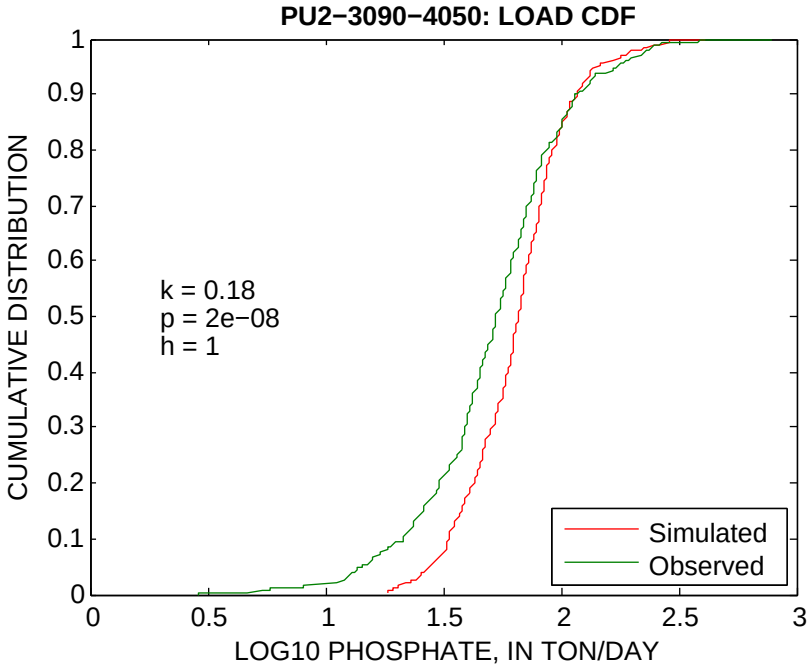


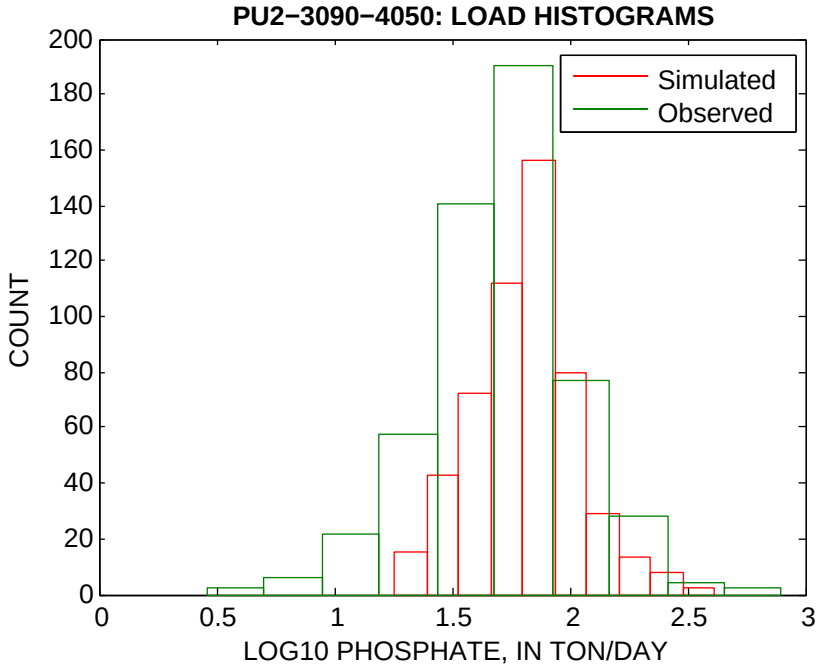


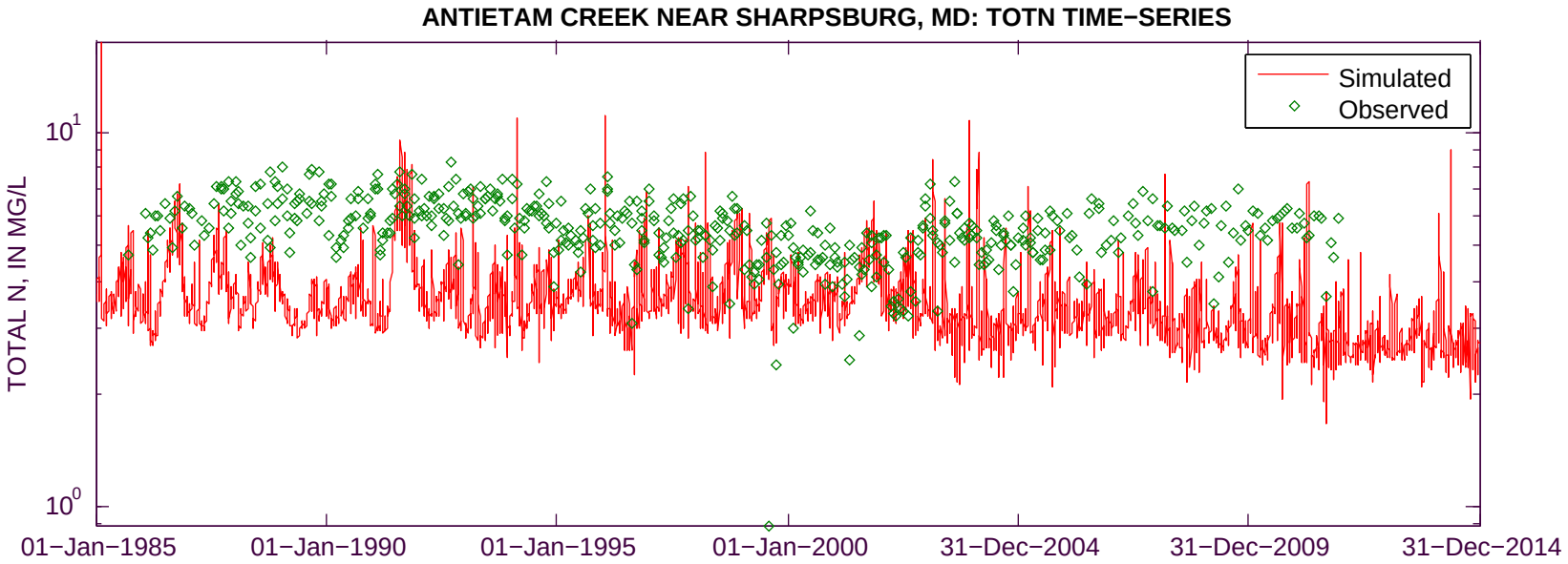
LOAD DATA
LOG10

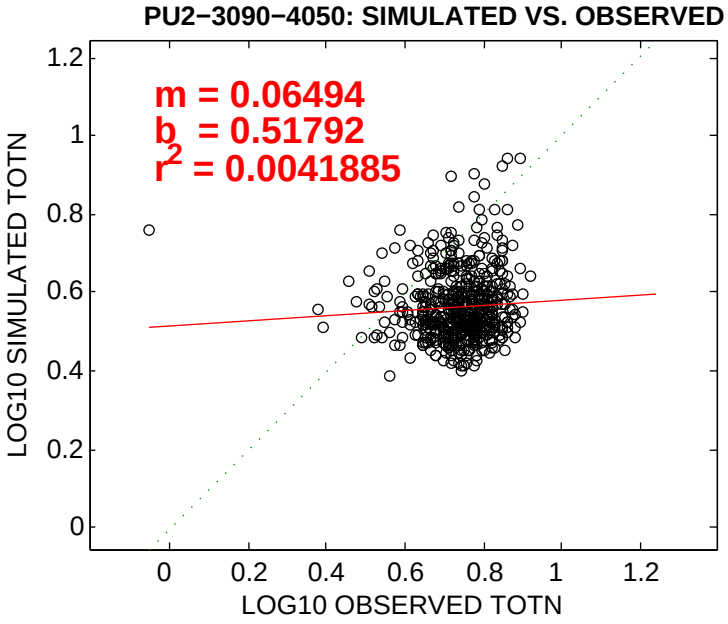


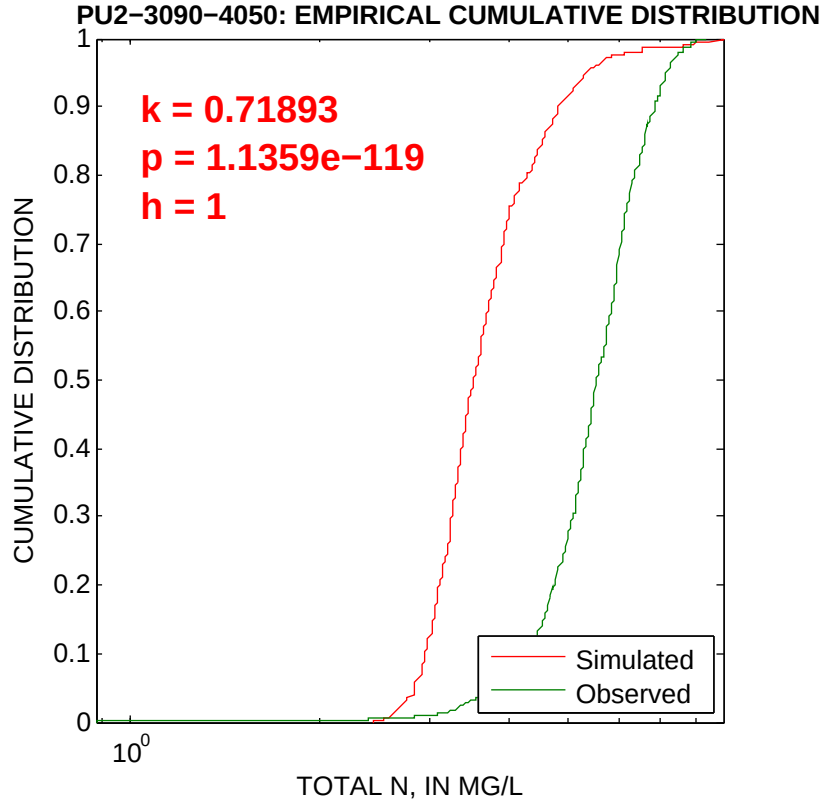












DATA SELECTION

scenario	file
P620171001WQ	TOTN.calib

plot: TOTN - total nitrogen

Dates: 1/1/1985 – 12/31/201

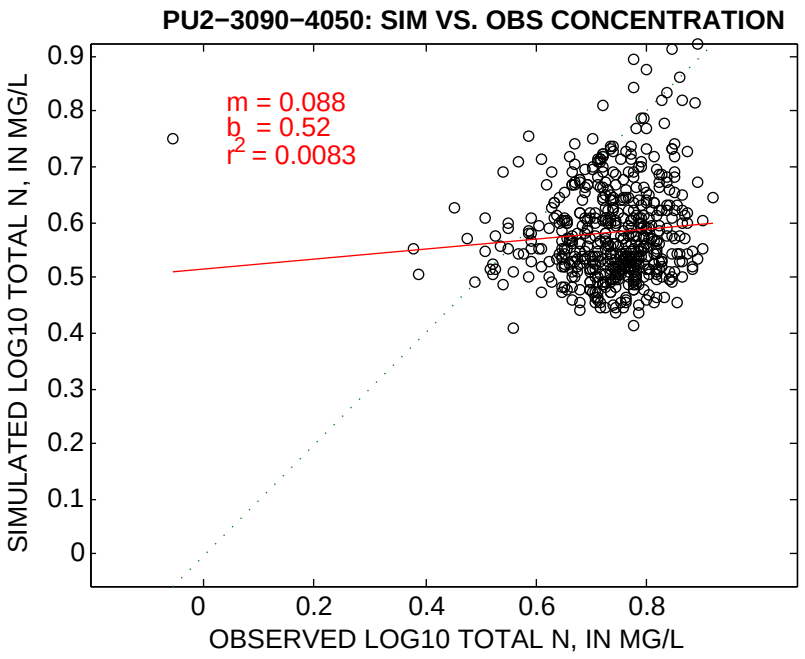
Drive	Directory	Observed
N/A	model	OBS20161101

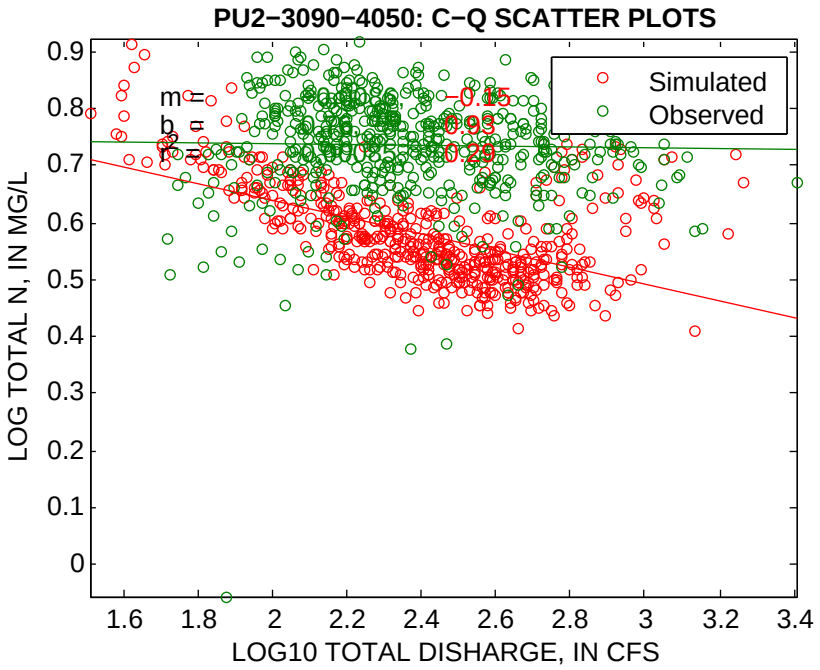
STATISTICS

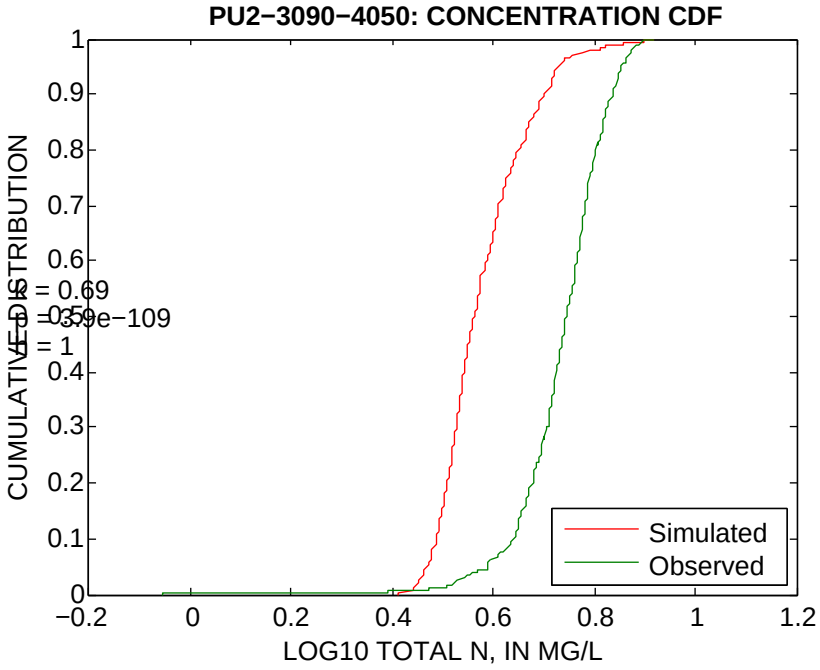
	n	observe	simulate
		523	523
min		0.88	2.4397
		-0.0555173	0.387336
mean		5.55668	3.76452
		0.73663	0.565757
media		5.55	3.539
		0.744293	0.548881
max		8.27	8.8128
		0.917506	0.945114
varian		1.01794	0.793524
		0.00792231	0.00797672
JB		0.001582	0.001
		0.001	0.001
		ra	log
%		-32.2523	-23.1966
err.va		4.8227	0.0441236
rel.std.err		4.7377	5.56953
mod.eff		-3.7377	-4.56953

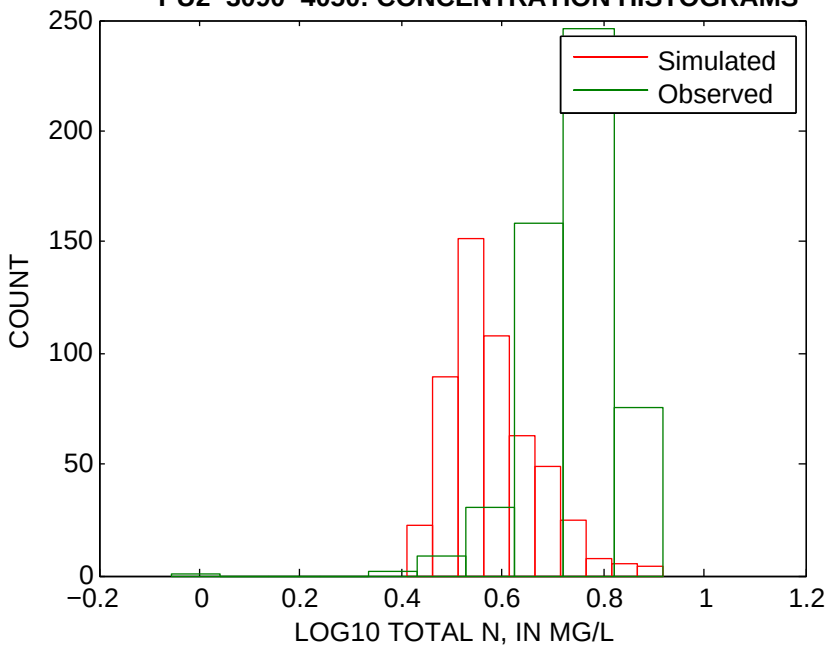
VERSION 2.1

ALL DATA
LOG10

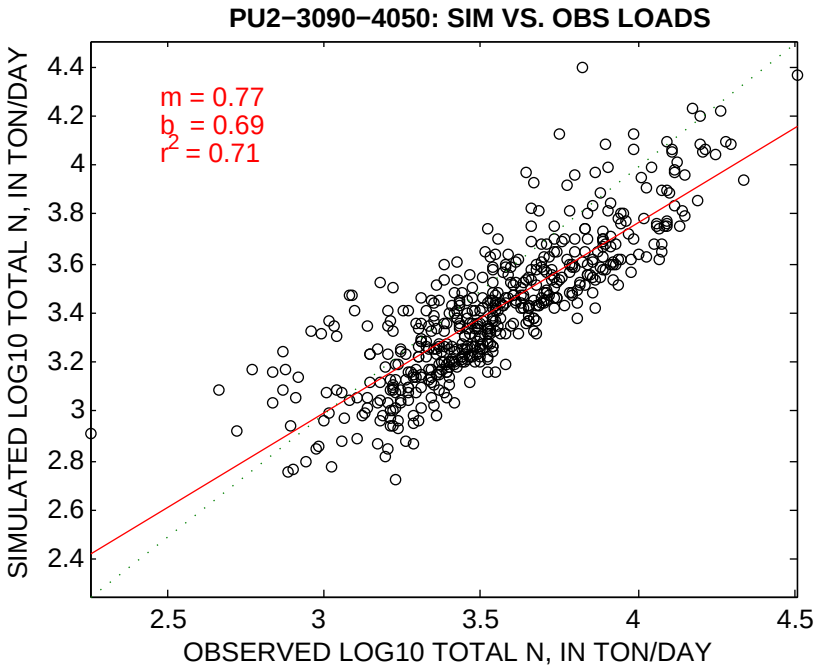


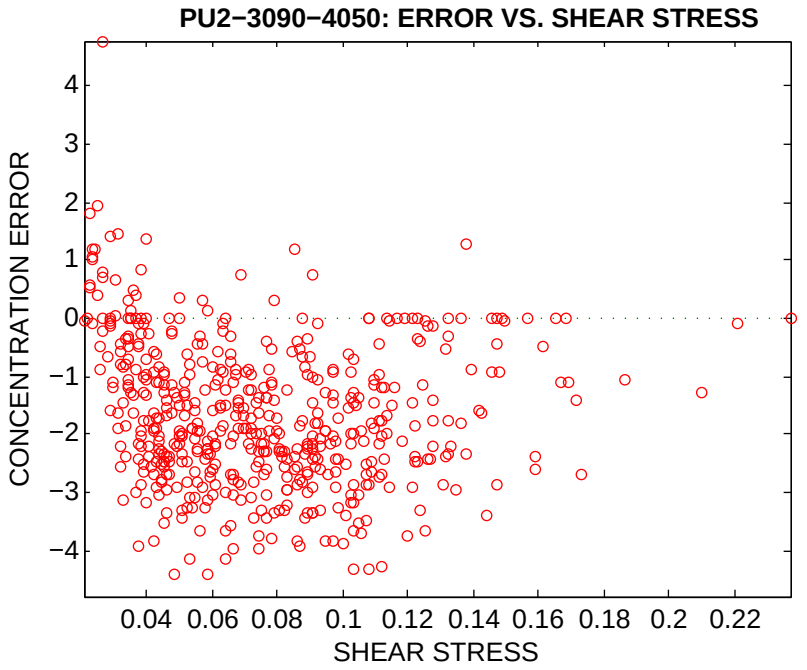


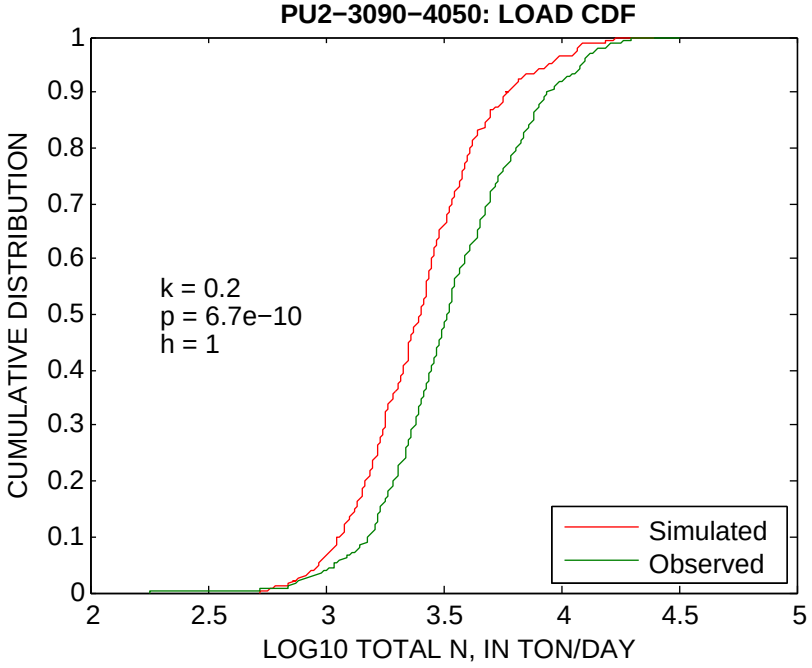


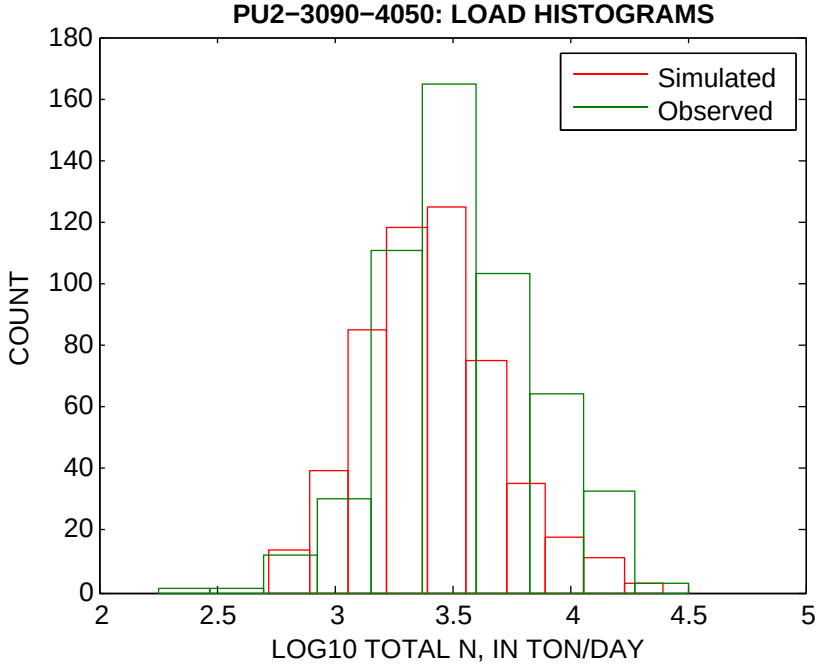


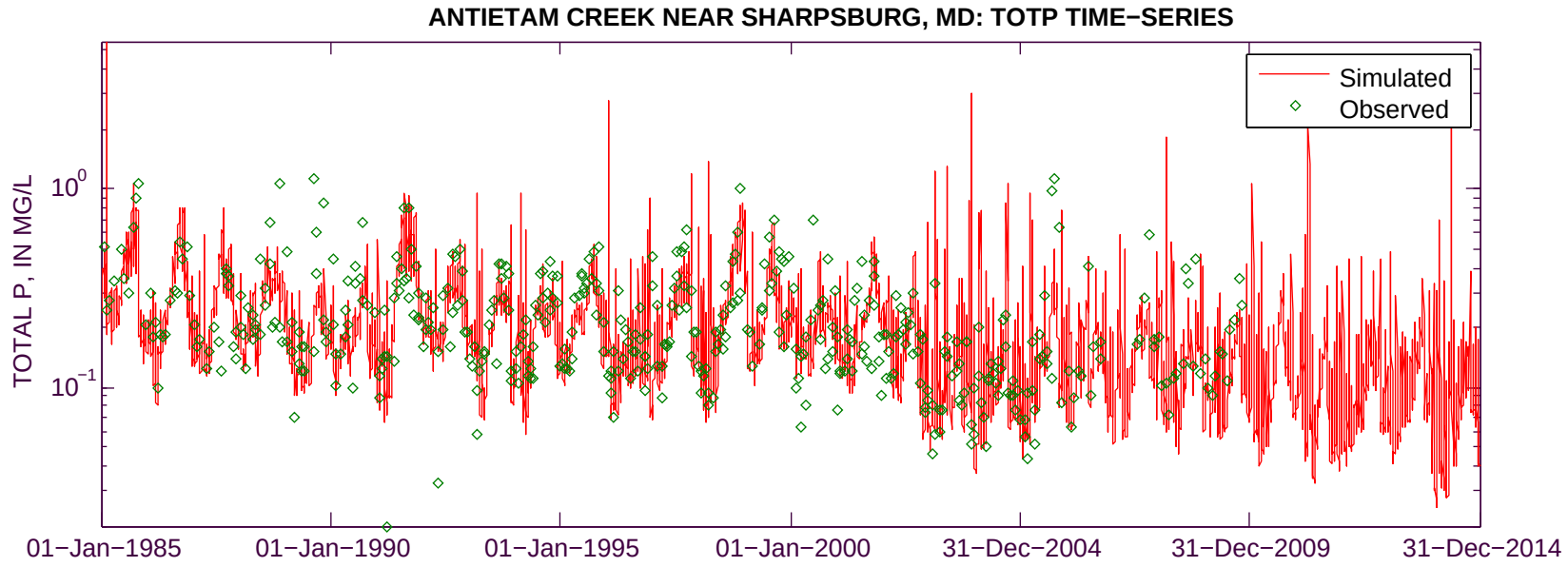
LOAD DATA
LOG10

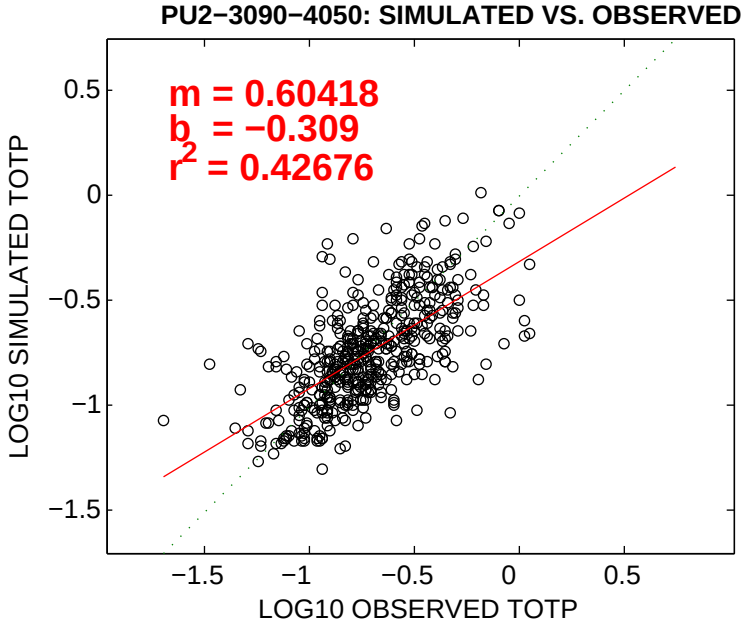


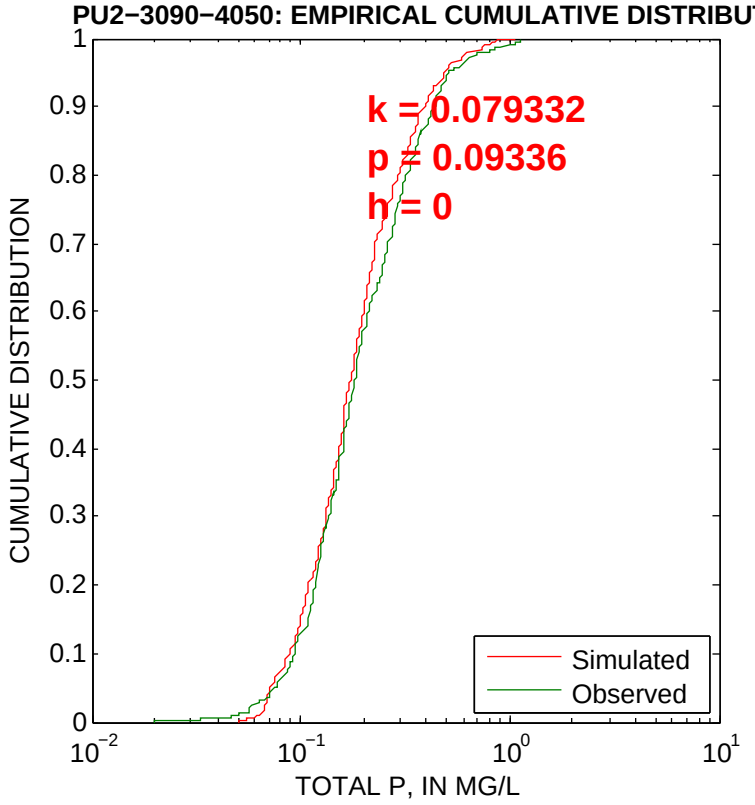












DATA SELECTION

scenario	file
P620171001WQ	TOTP.calib

plot: TOTP - total phosphorus

Dates: 1/1/1985 – 12/31/201

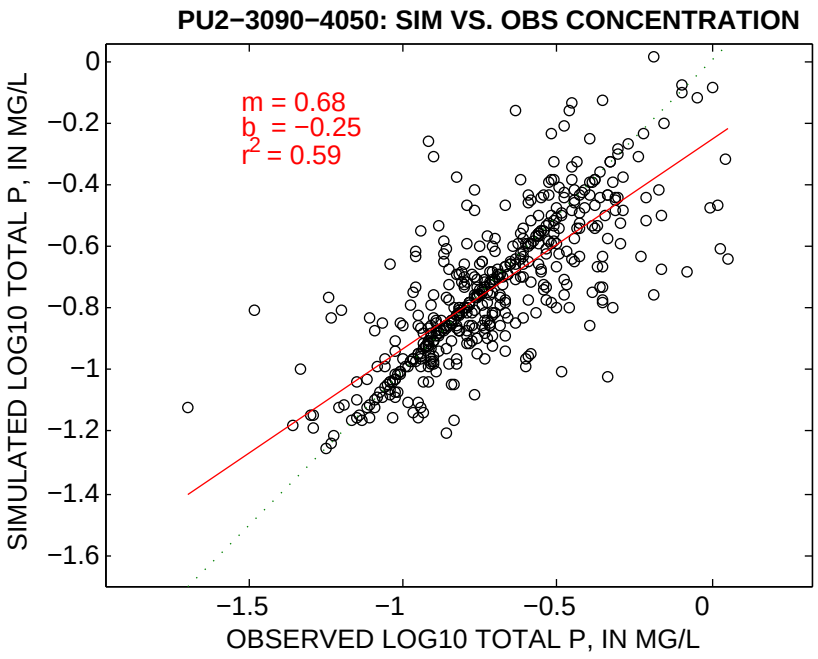
Drive	Directory	Observed
N/A	model	OBS20161101

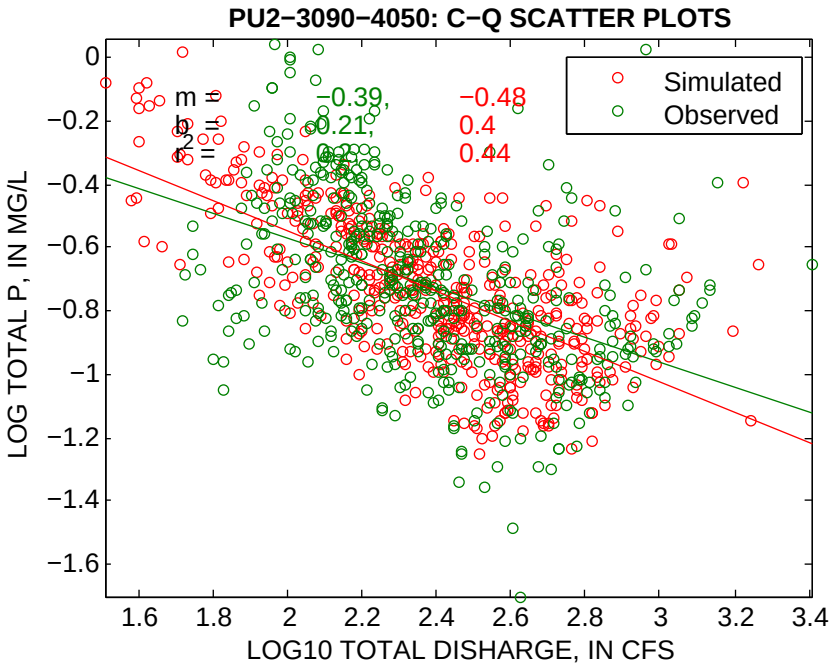
STATISTICS

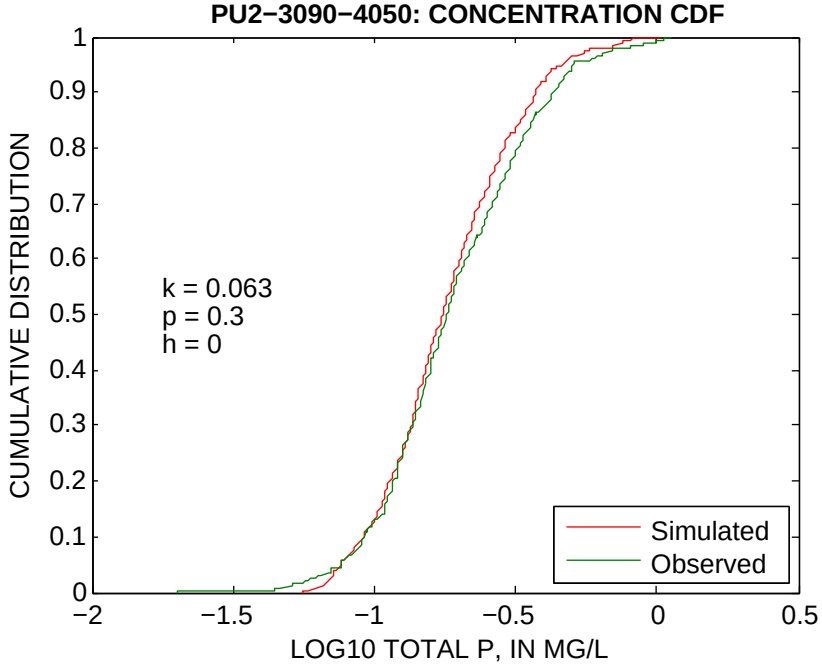
	n	479	479
		observe	simulate
min		0.02	0.050185
		-1.69897	-1.29943
mean		0.233384	0.214749
		-0.716537	-0.741915
media		0.182	0.1735
		-0.739929	-0.760701
max		1.13	1.0494
		0.0530784	0.0209411
varian		0.0278762	0.0203287
		0.0706958	0.0604705
JB		0.001	0.001
		0.101383	0.009280
		ra	log
%		-7.98438	3.54173
err.va		0.0215077	0.0463859
rel.std.err		0.771544	0.656134
mod.eff		0.228456	0.343866

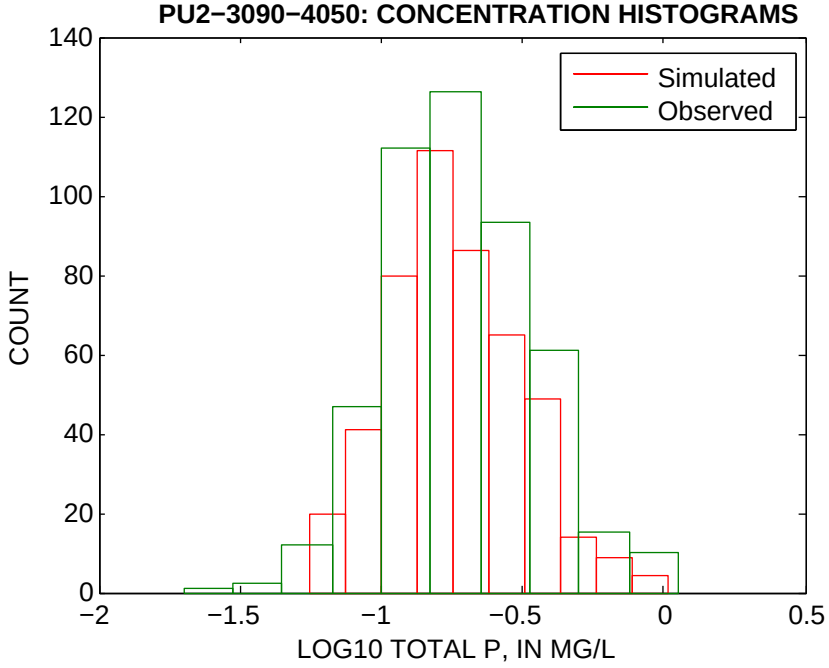
VERSION 2.1

ALL DATA
LOG10

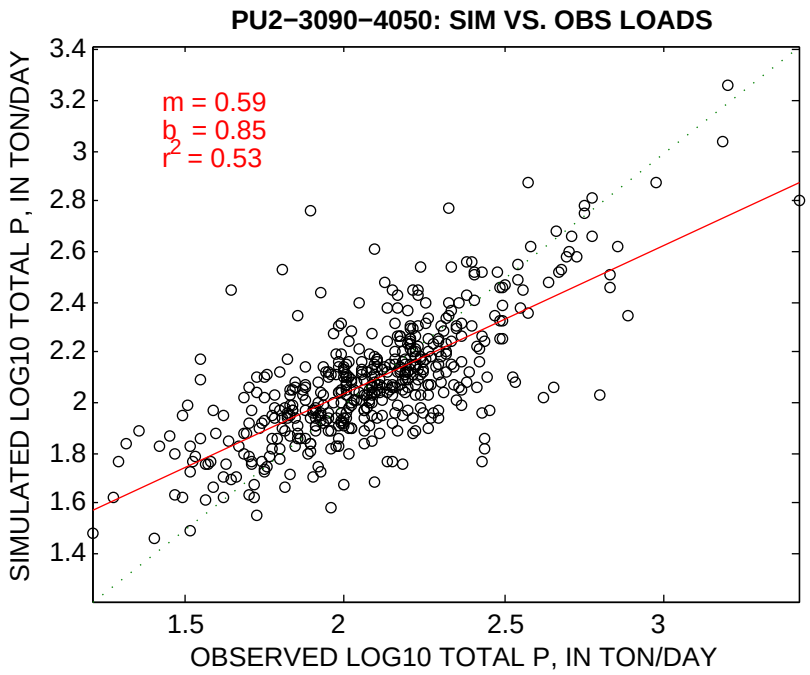


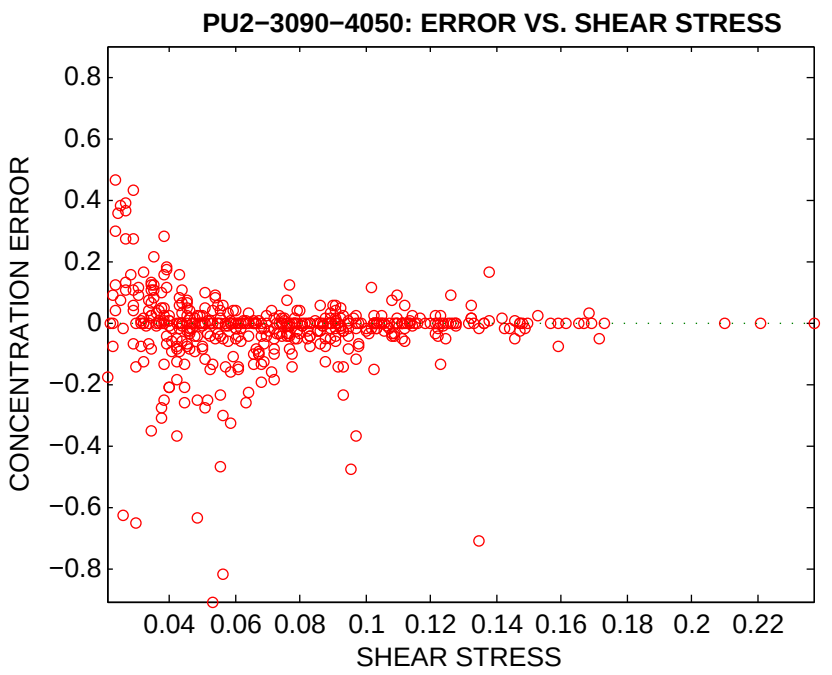


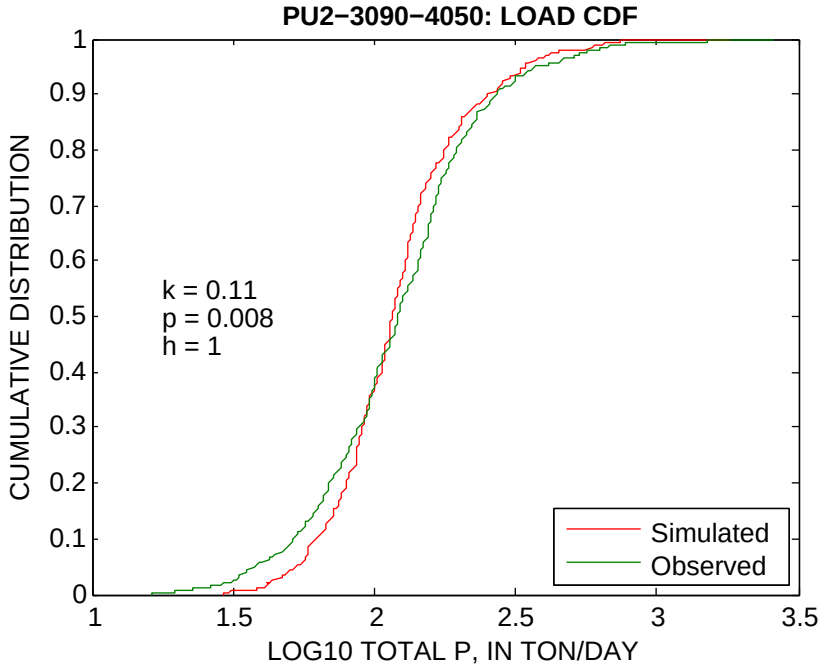


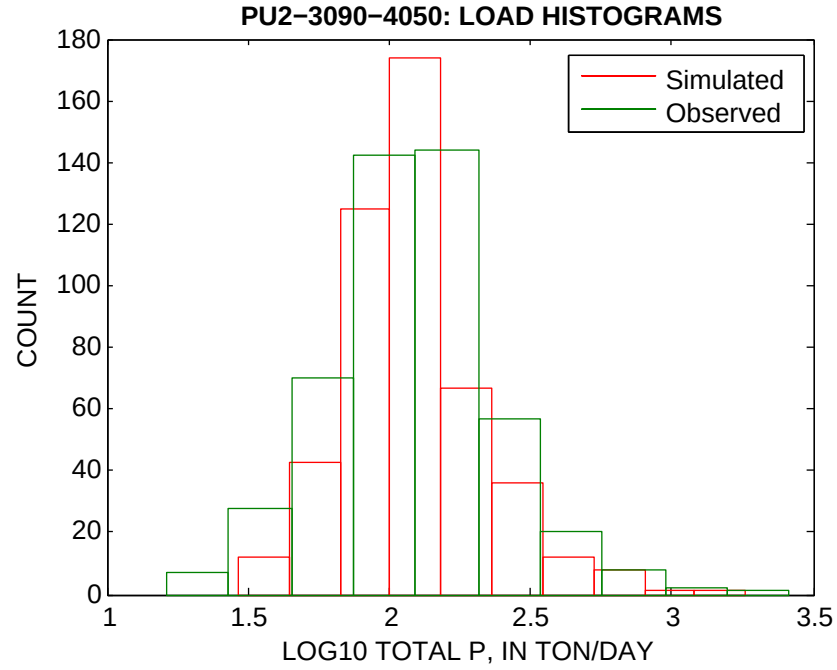


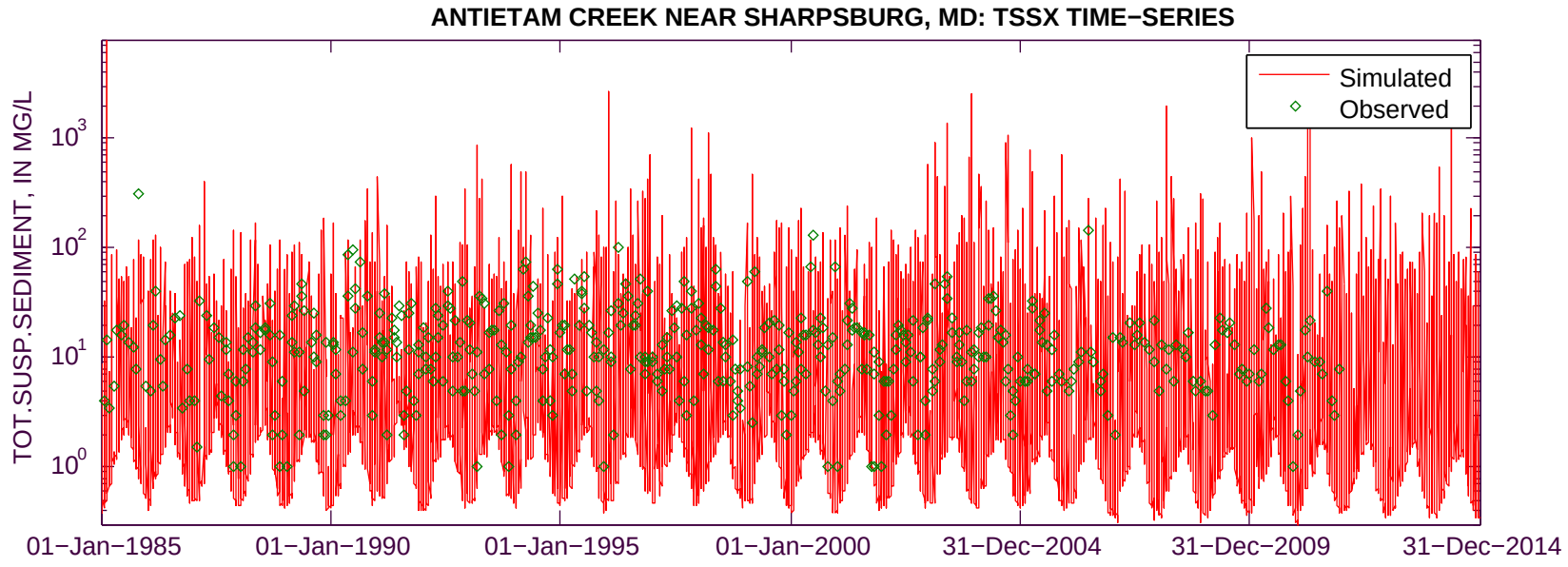
LOAD DATA
LOG10

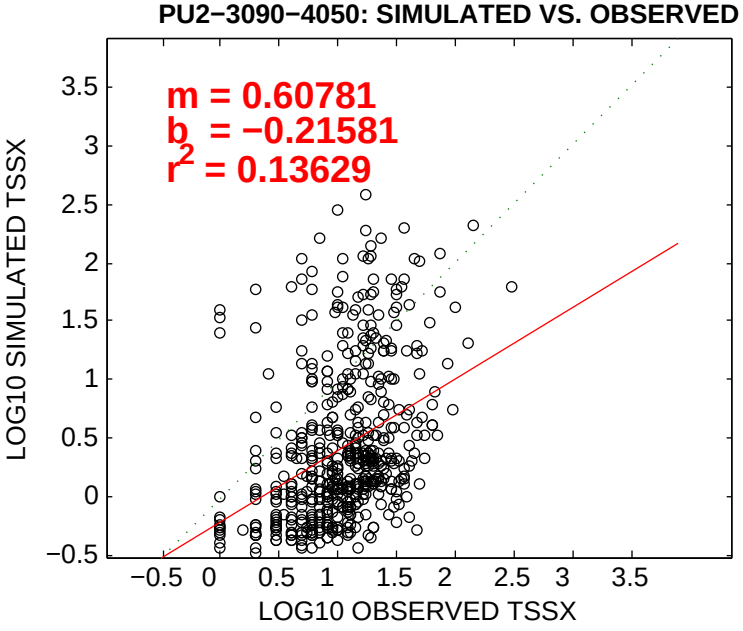


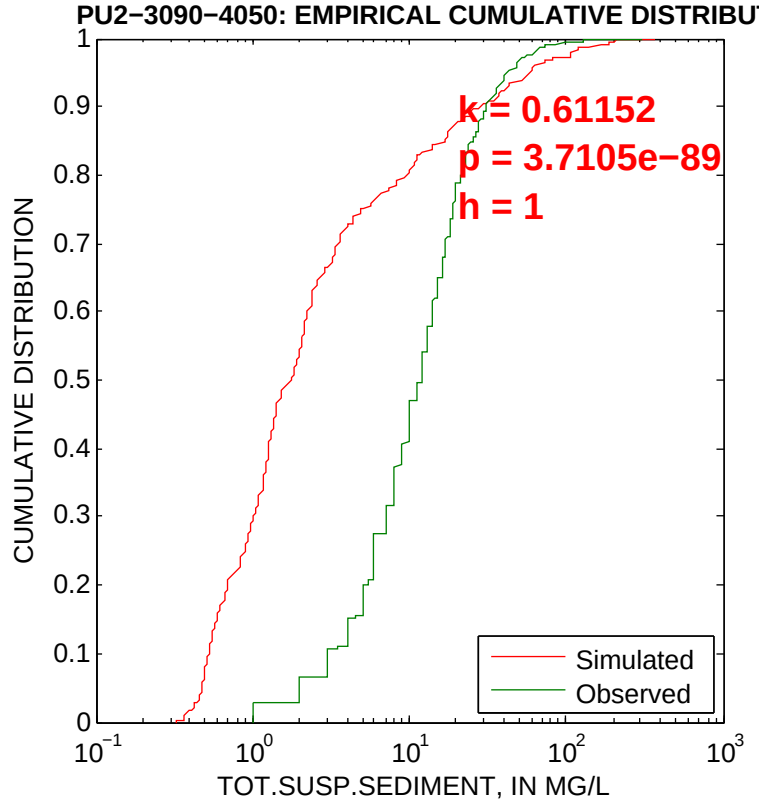












DATA SELECTION

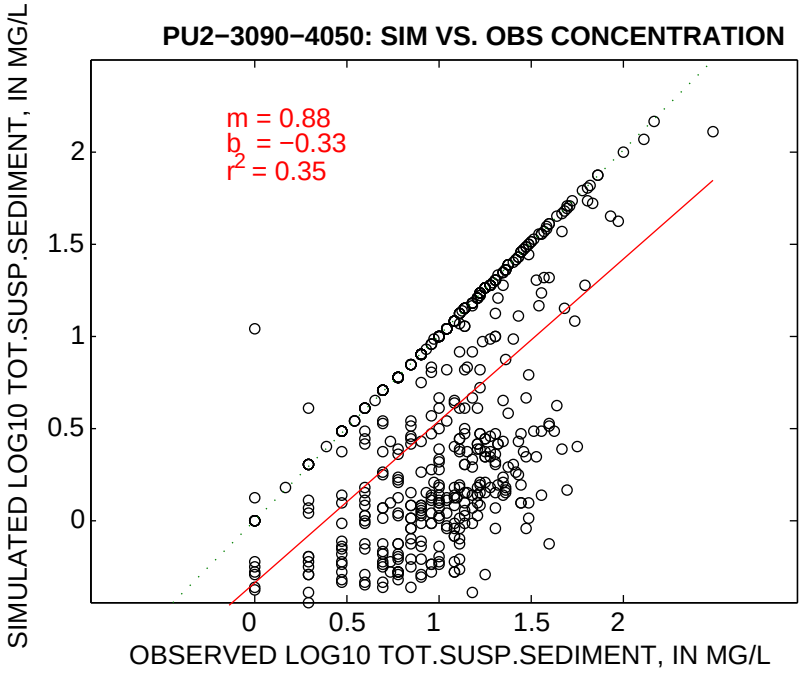
scenario: P620171001WQ
file: TSSX.calib
plot: TSSX - total suspended ...
Dates: 1/1/1985 12/31/201
Drive: N/A
Directory: model
Observed: OBS20161101

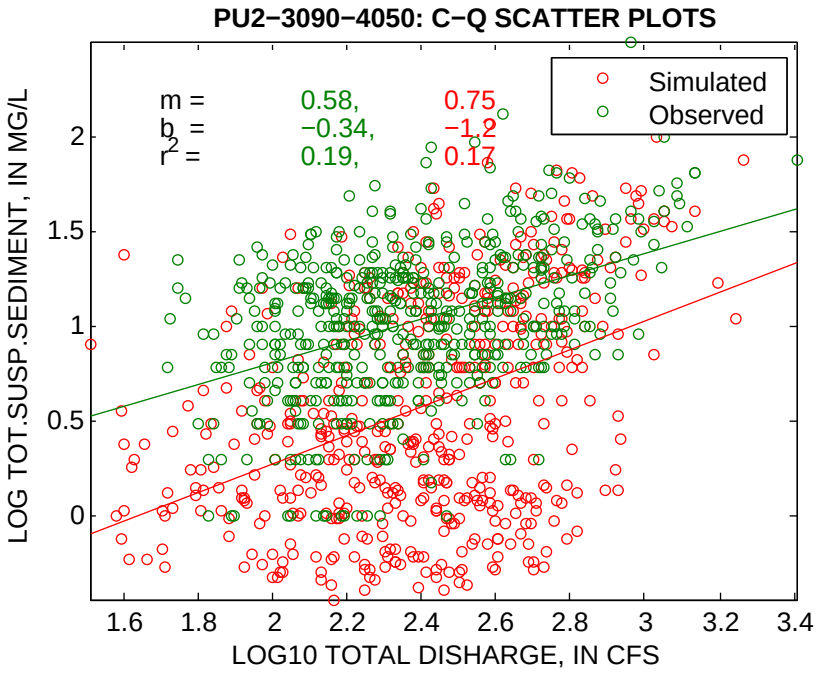
STATISTICS

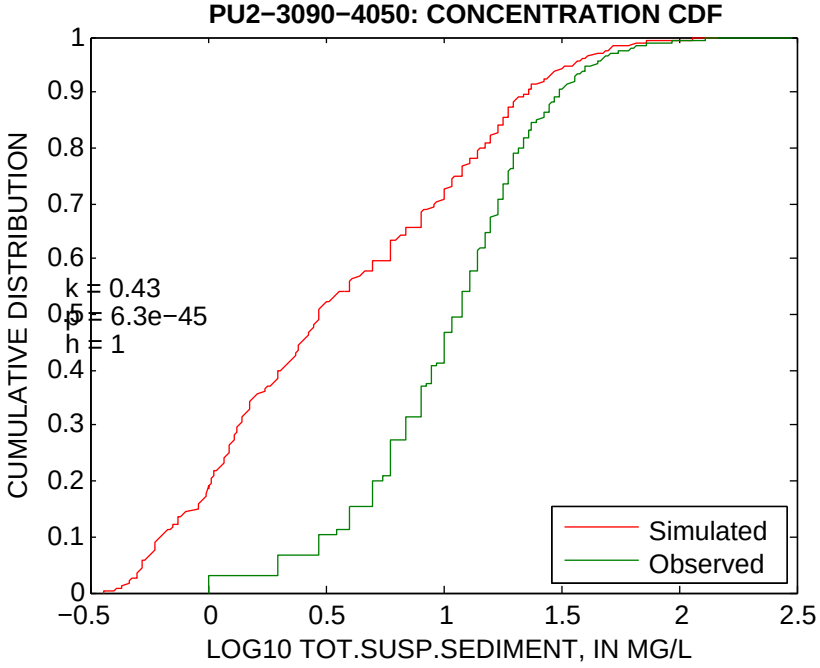
		observe	simulate
n		538	538
min		1	0.32705
		0	-0.485386
mean		16.0391	11.505
		1.02996	0.410208
media		12	1.76465
		1.07918	0.246658
max		307	373.79
		2.48714	2.57263
varian		400.021	1041.45
		0.156201	0.423395
JB		0.001	0.001
		0.011498	0.001
		ra	log
%		-28.2689	-60.1726
err.va		1178.91	0.774529
rel.std.err		2.94711	4.95854
mod.eff		-1.94711	-3.95854

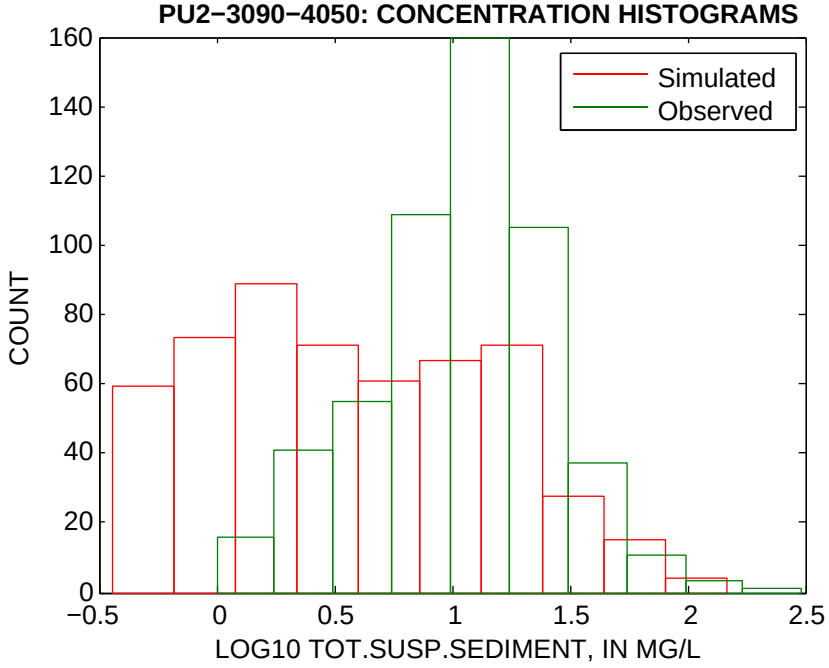
VERSION 2.1

ALL DATA
LOG10

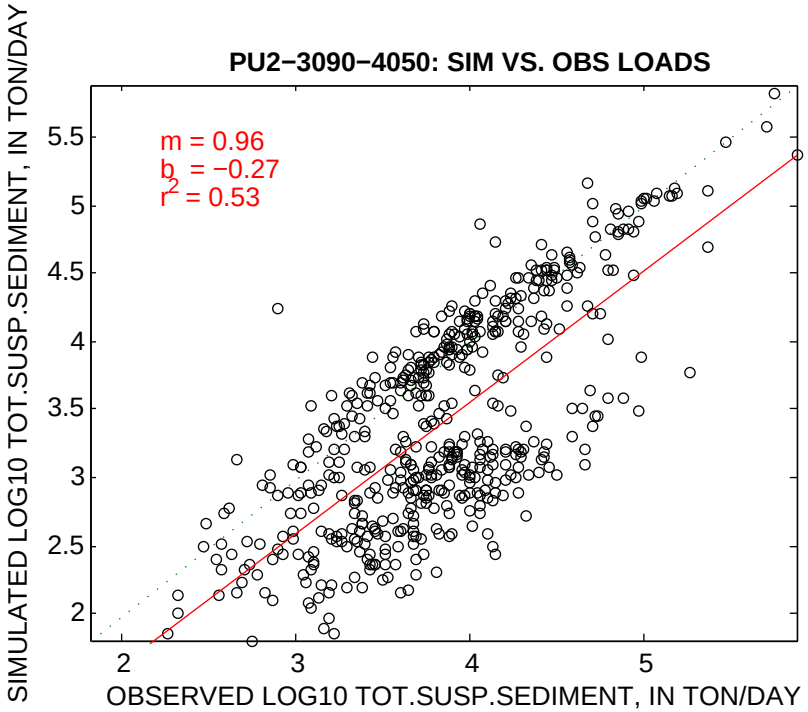


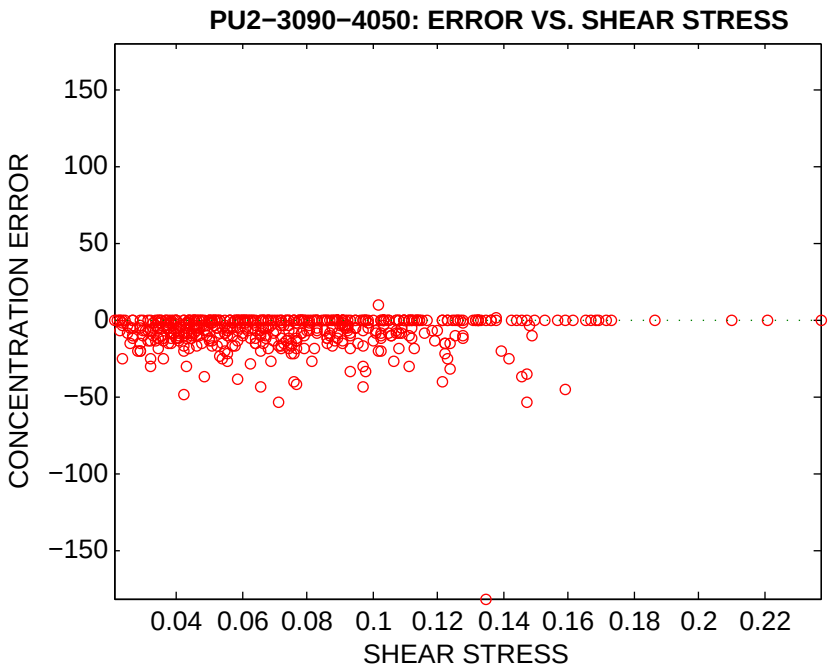


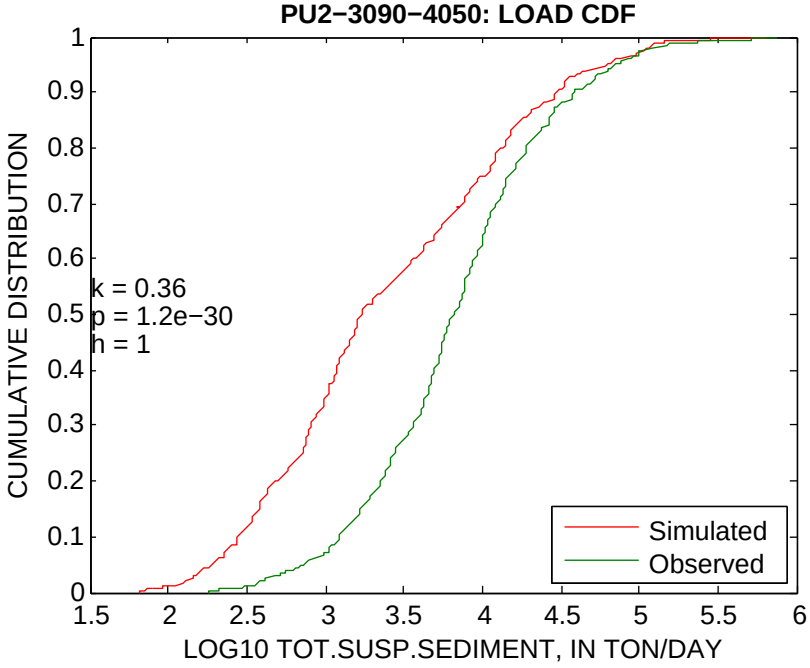


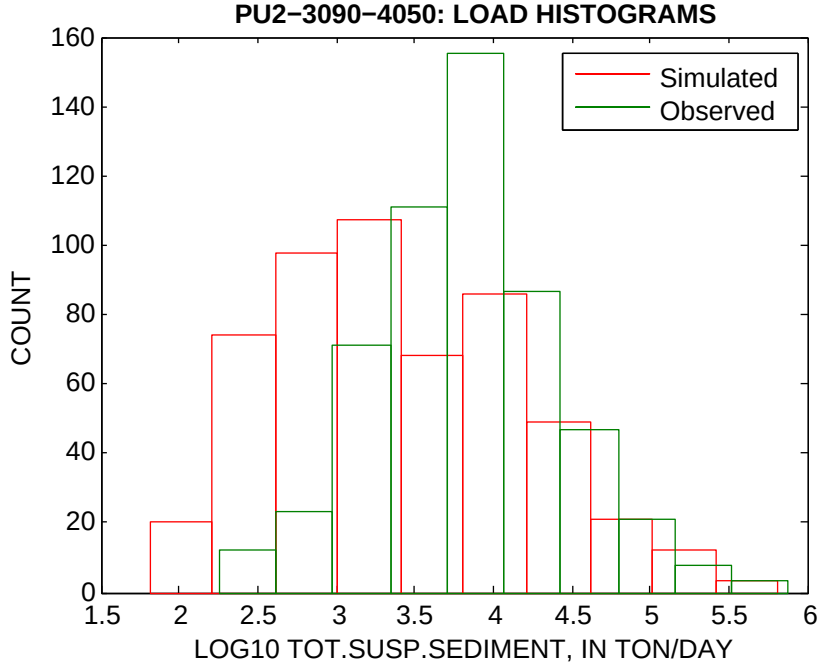


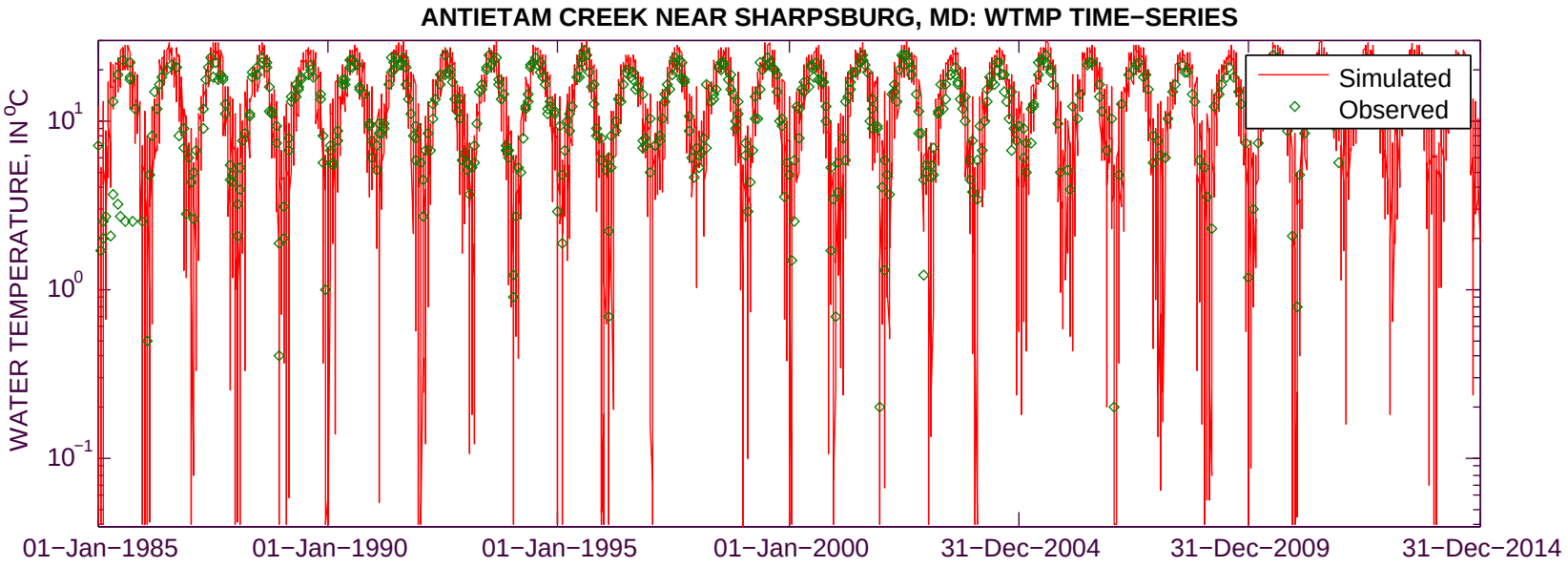
LOAD DATA
LOG10

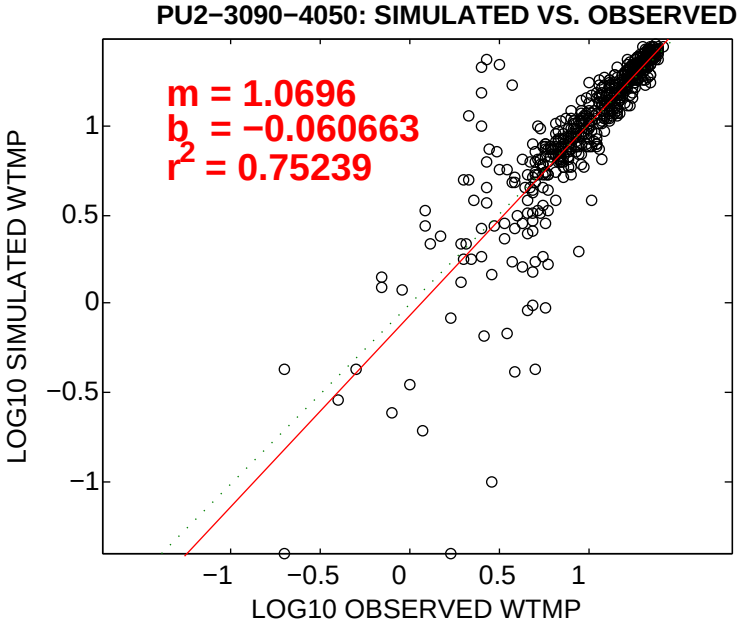


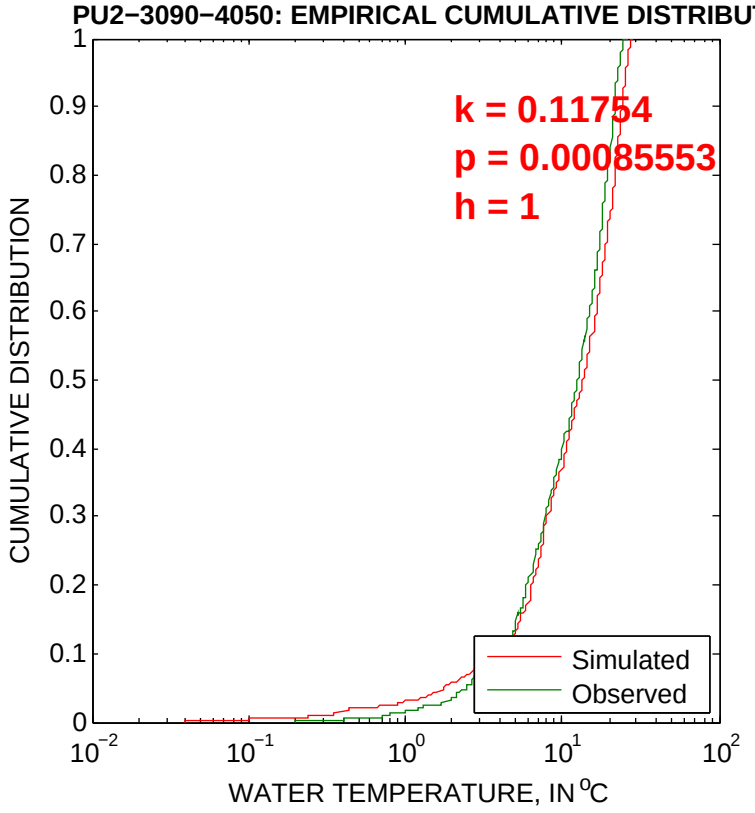












DATA SELECTION

scenario	file
P620171001WQ	WTMP.calib

plot: WTMP - water tempera...

Dates: 1/1/1985 — 12/31/201

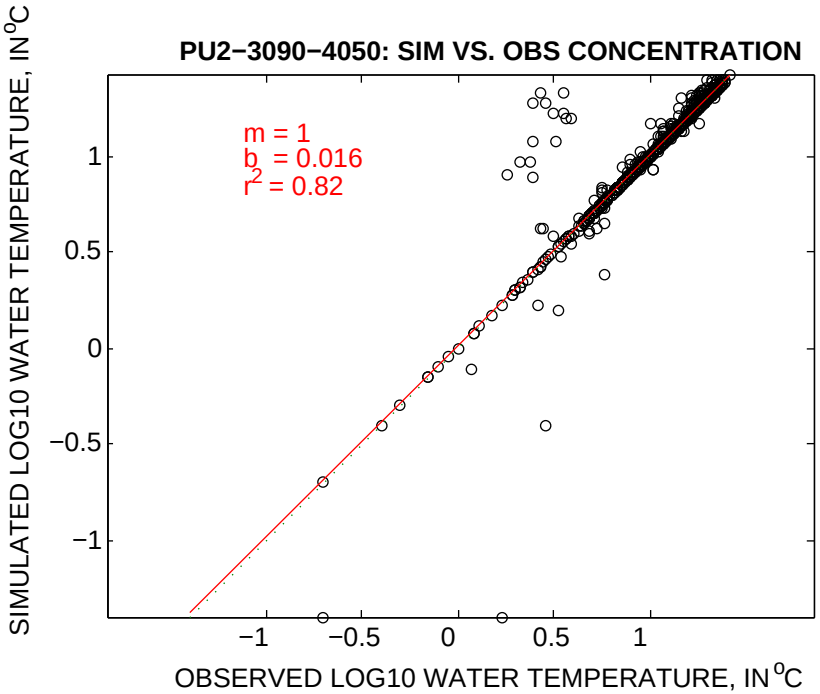
Drive	Directory	Observed
N/A	model	OBS20161101

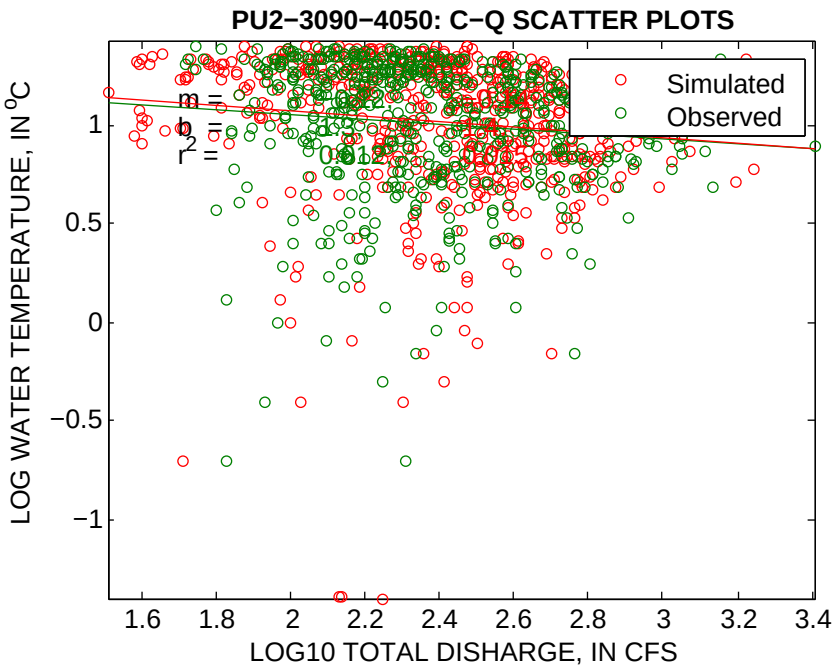
STATISTICS

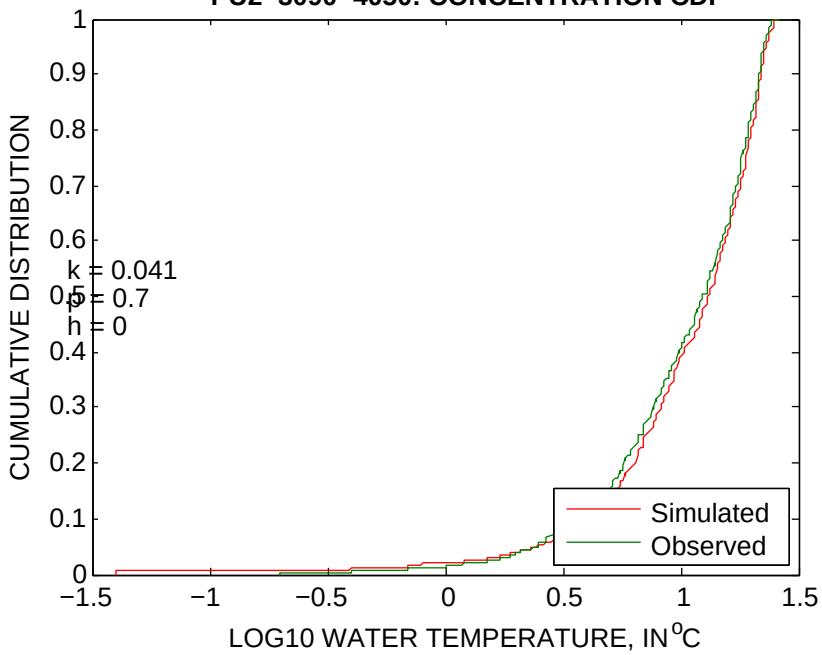
	n	observe	simulate
		553	553
min		0.2	0.040022
		-0.69897	-1.3977
mean		12.6881	13.7976
		1.01461	1.02453
media		12.8	13.551
		1.10721	1.13197
max		26.3	28.105
		1.41996	1.44878
varian		43.2892	57.745
		0.107015	0.162712
JB		0.001	0.001
		0.001	0.001
		ra	log
%		8.74402	0.977991
err.va		8.90899	0.0409057
rel.std.err		0.205802	0.382244
mod.eff		0.794198	0.617756

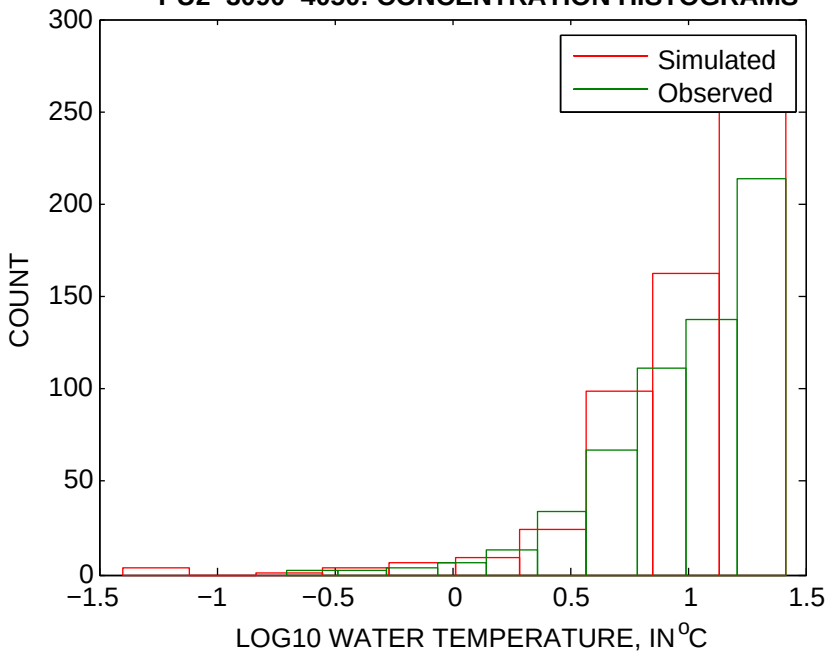
VERSION 2.1

ALL DATA
LOG10

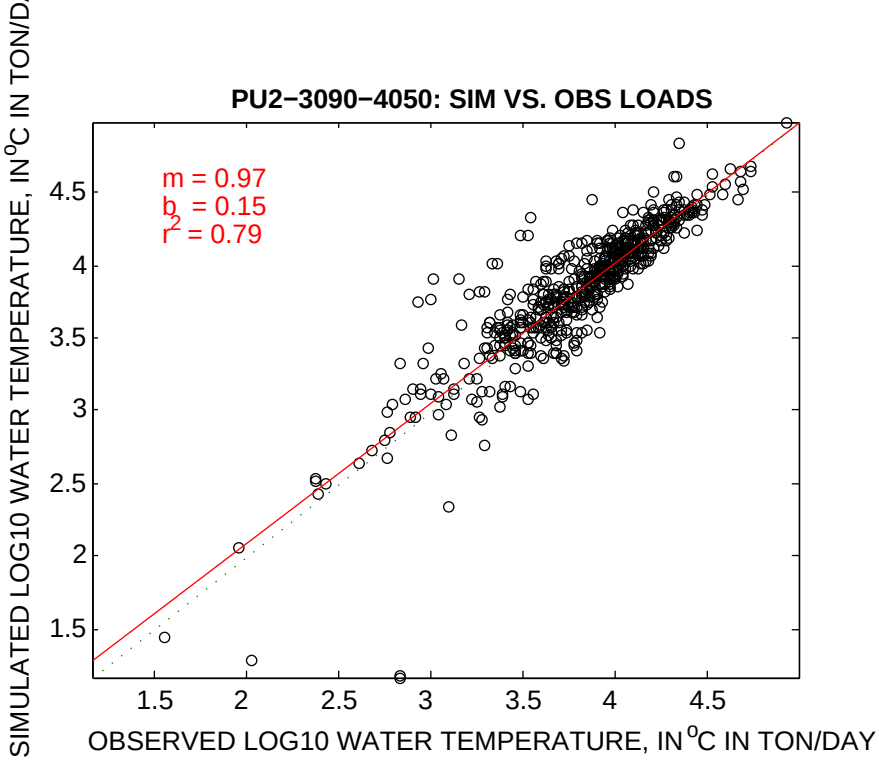


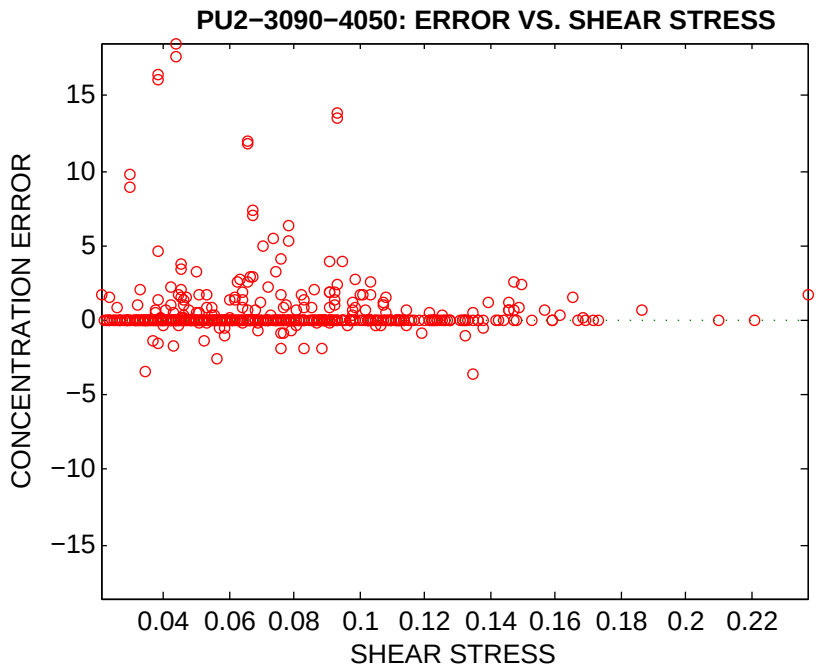


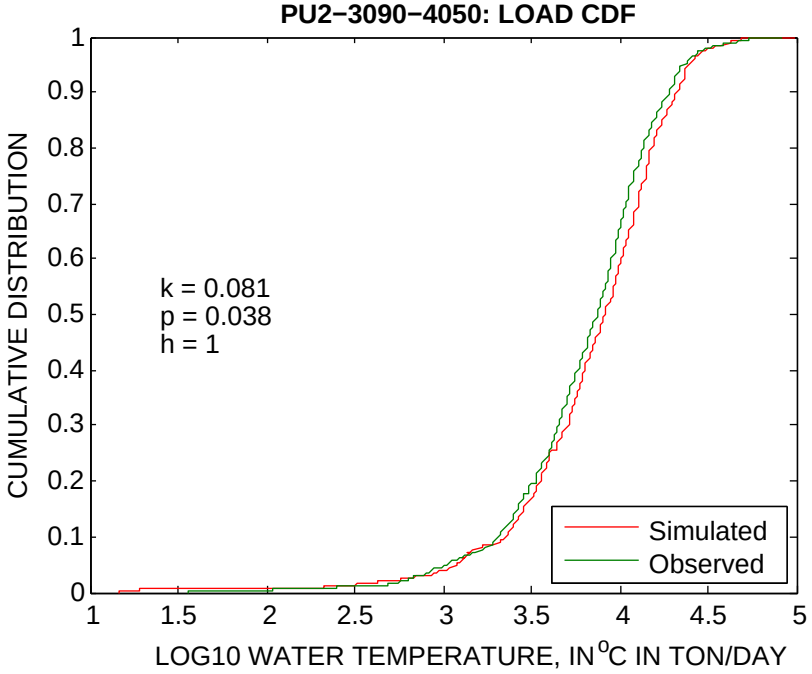


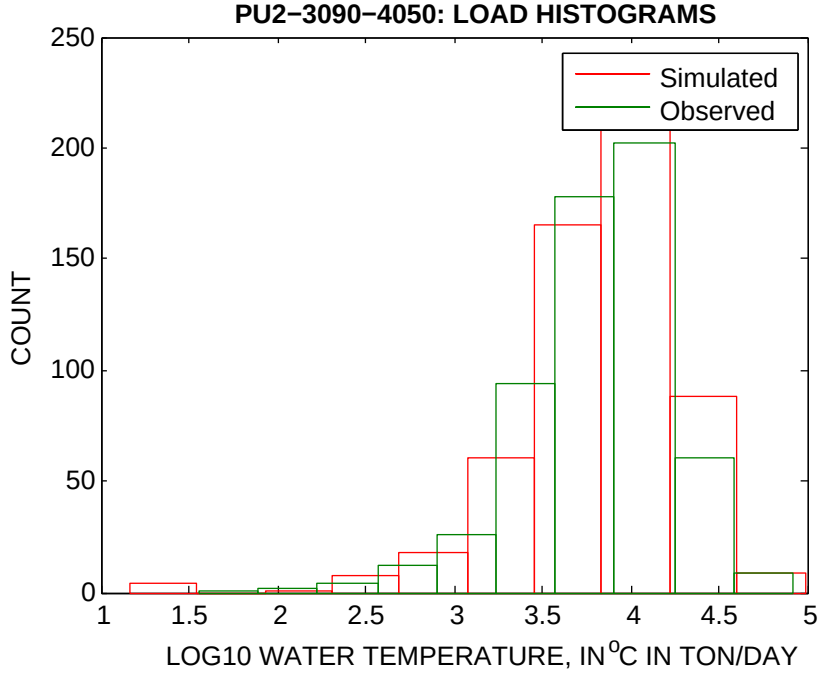


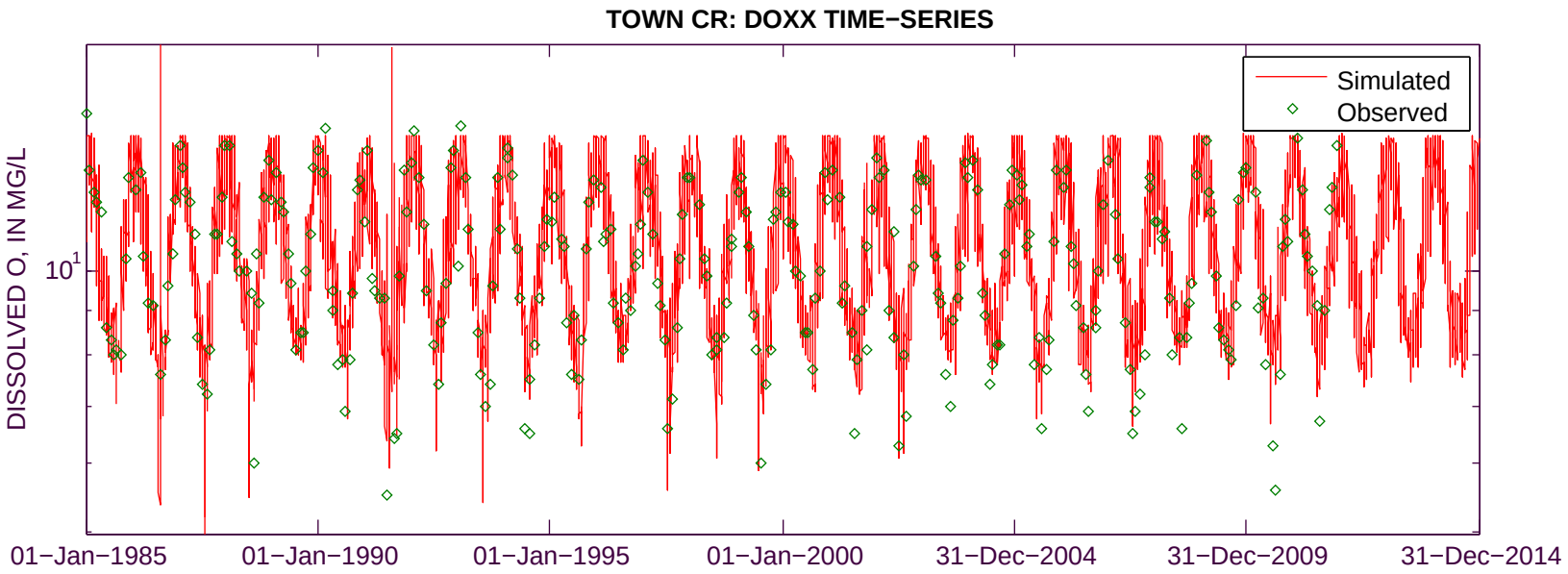
LOAD DATA
LOG10

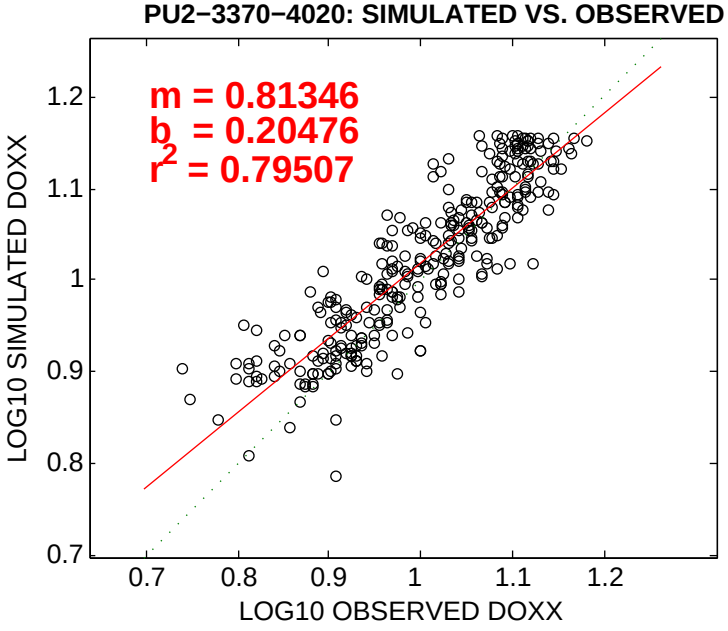


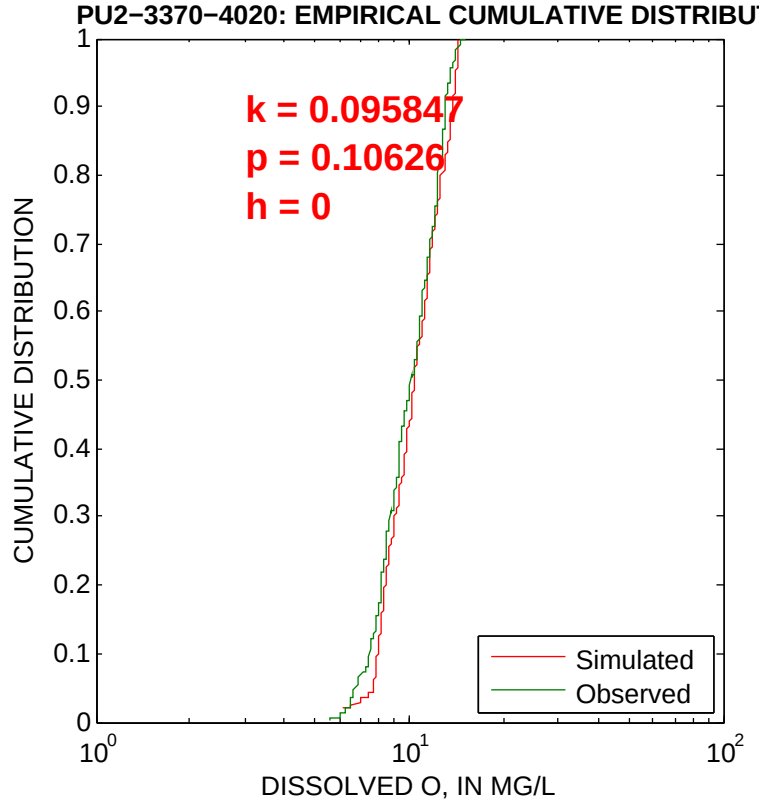












DATA SELECTION

scenario	file
P620171001WQ	DOXX.calib

plot: DOXX - dissolved oxygen

Dates: 1/1/1985 – 12/31/201

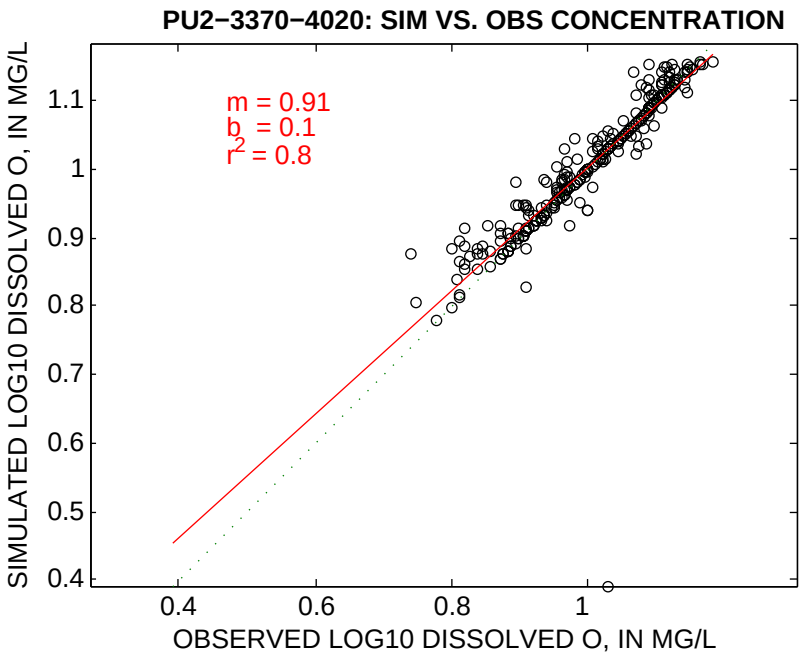
Drive	Directory	Observed
N/A	model	OBS20161101

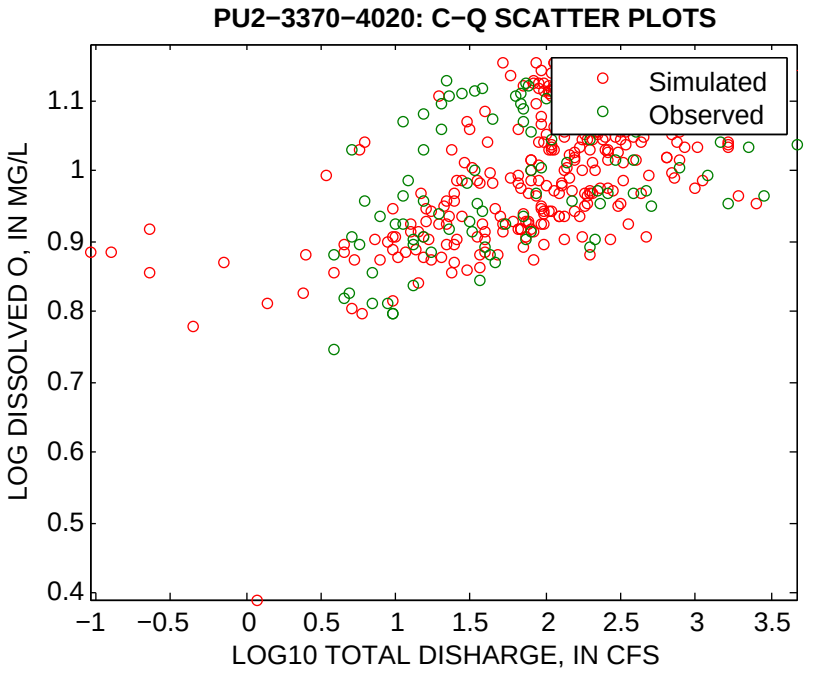
STATISTICS

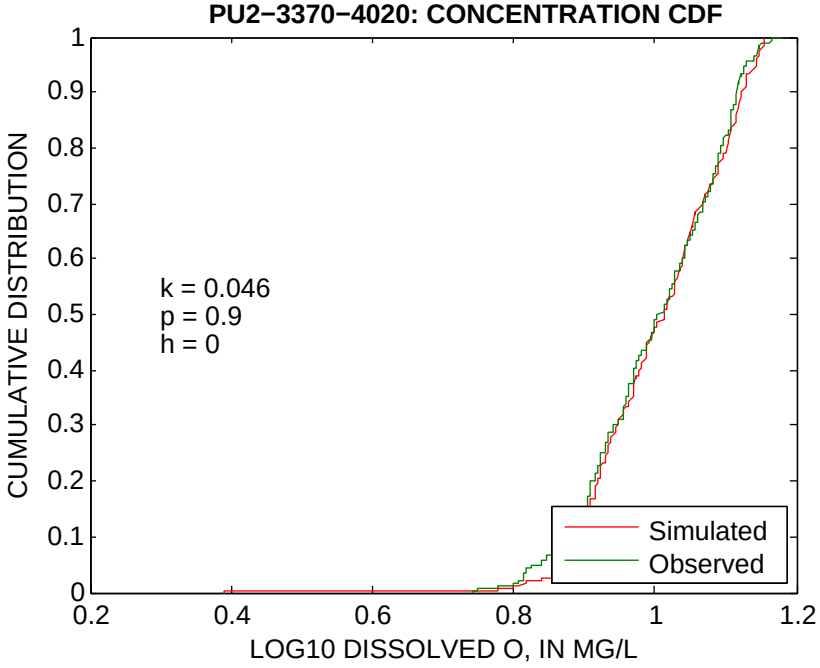
	n	313	307
		observe	**simulate**
min		5.5	0
		0.740363	0.78491
mean		10.2238	10.4436
		1.00077	1.01885
media		10.1	10.423
		1.00432	1.0192
max		15.2	14.397
		1.18184	1.15827
varian		4.68092	6.39848
		0.00888841	0.00739763
JB		0.007231	0.001
		0.008548	0.006628
		ra	log
%		2.15022	1.80645
err.va		2.72534	0.00215314
rel.std.err		0.582223	0.242241
mod.eff		0.417777	0.757759

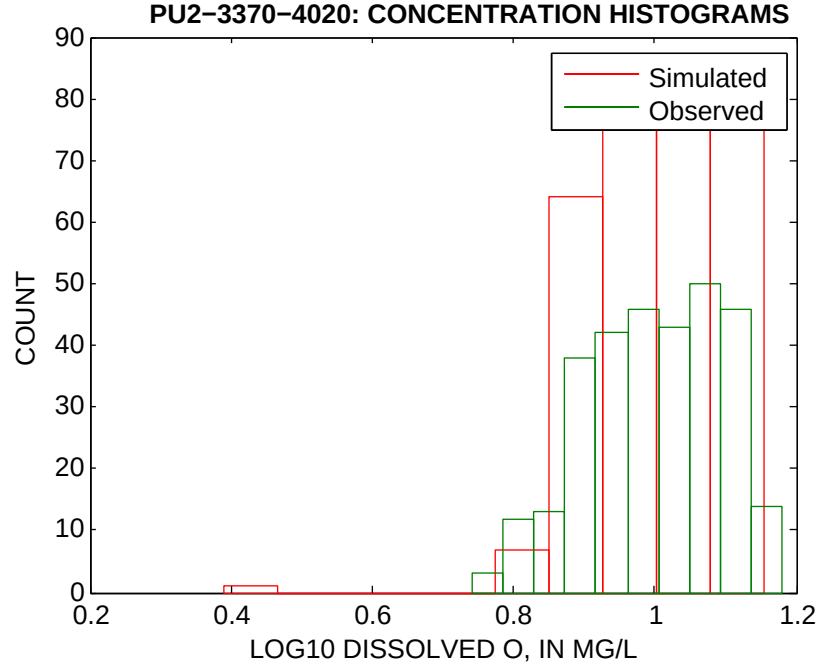
VERSION 2.1

ALL DATA
LOG10

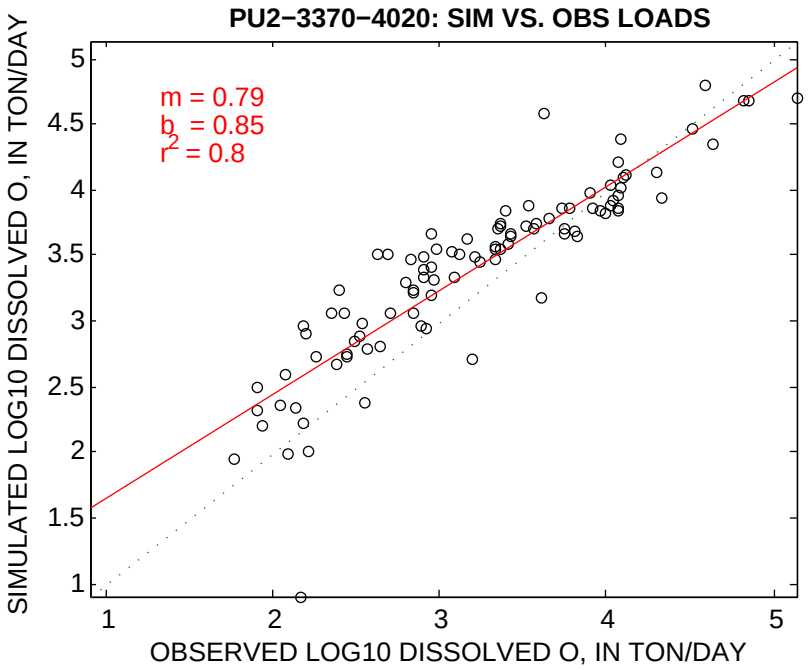


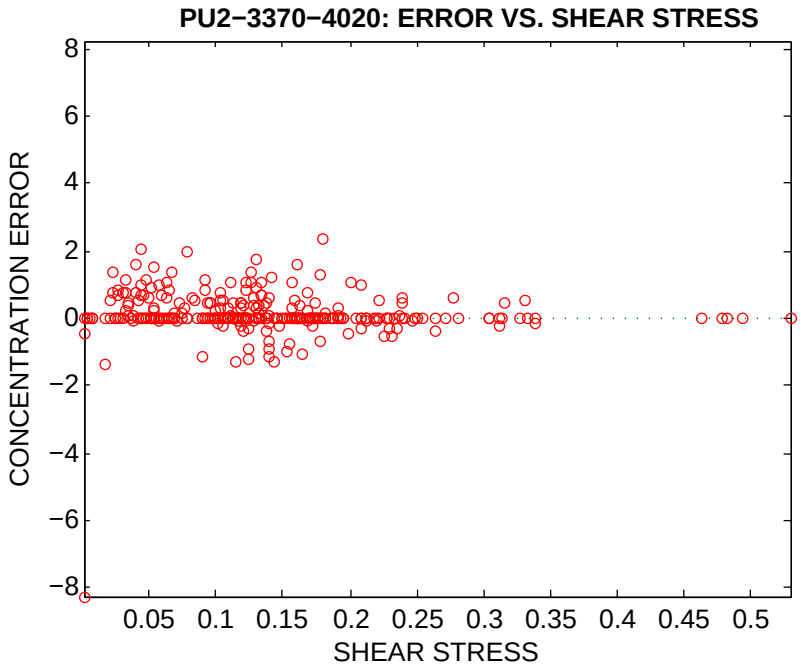


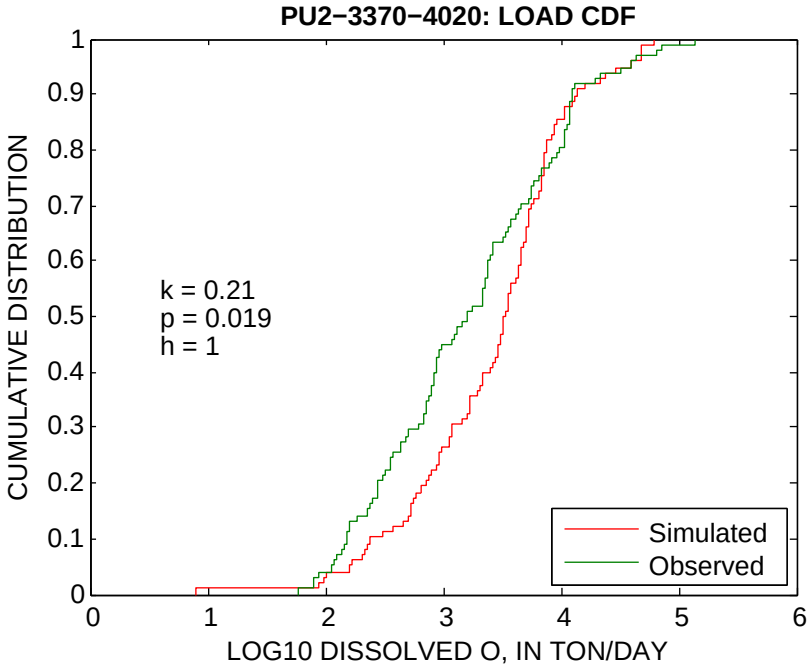


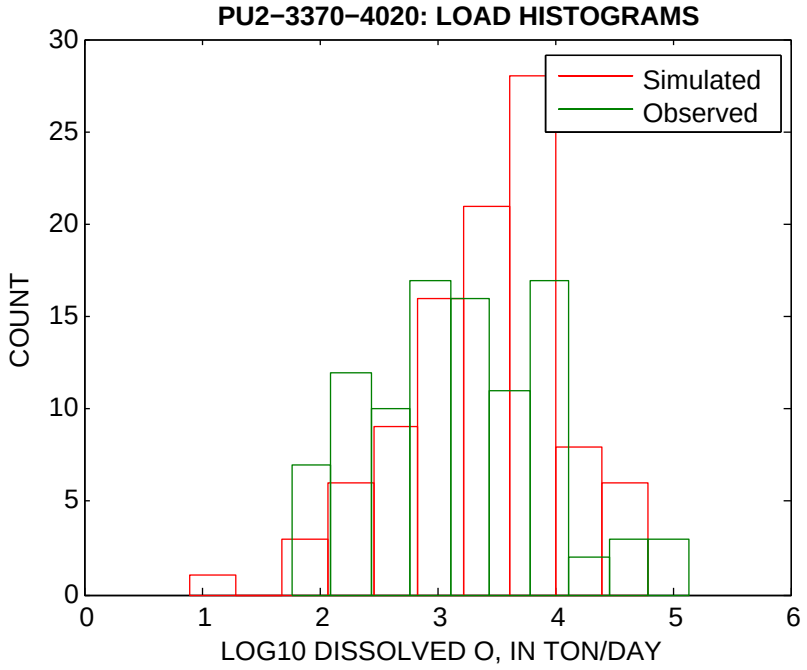


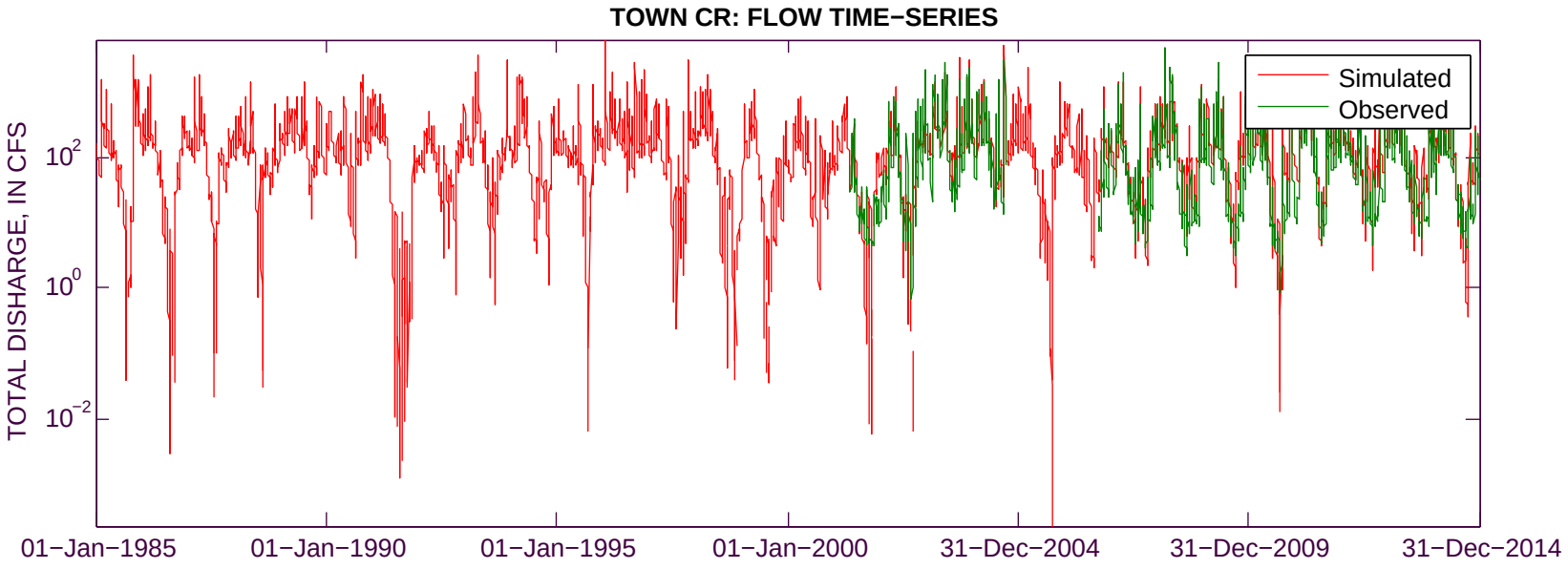
LOAD DATA
LOG10

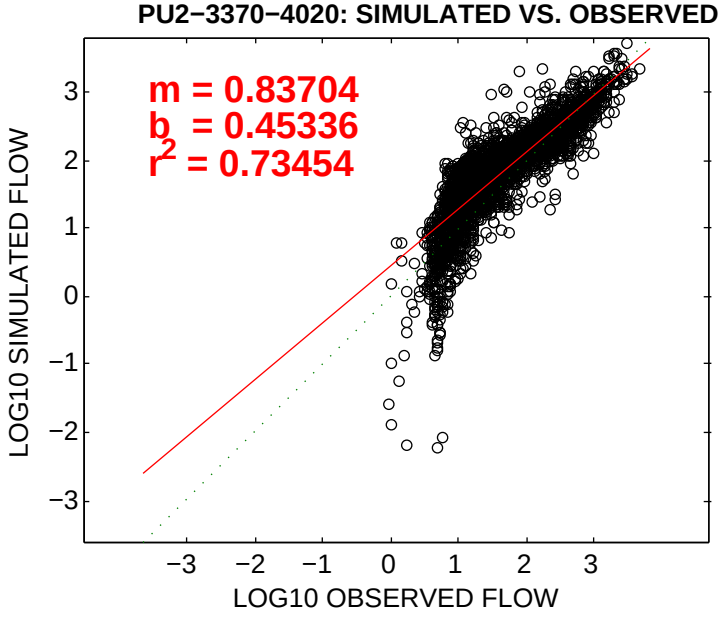


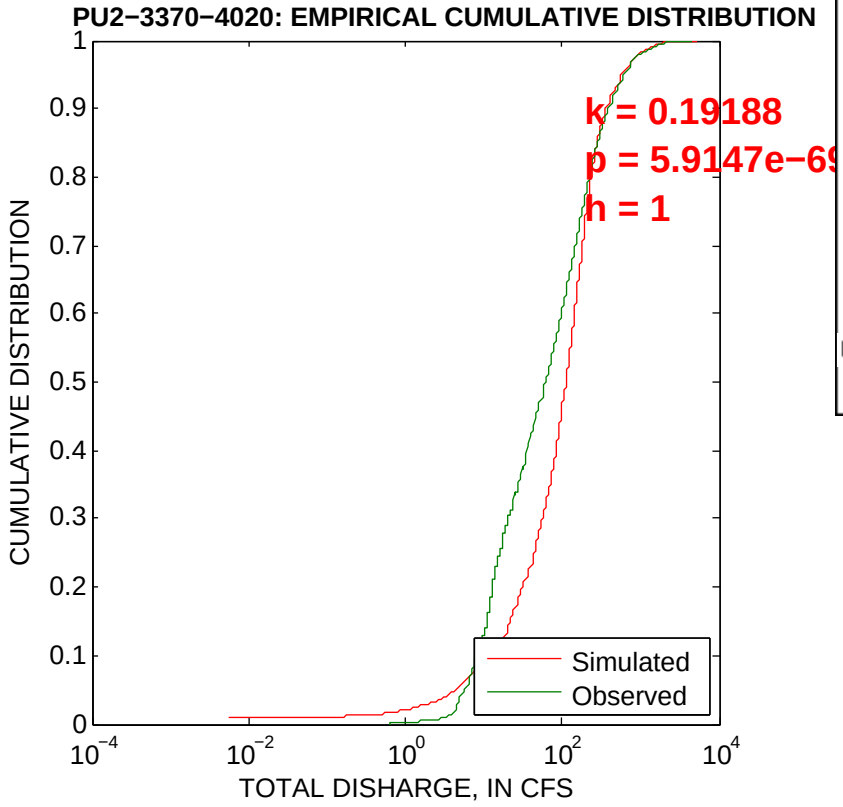












DATA SELECTION

scenario	file
P620171001WQ	FLOW.calib

plot: FLOW - total discharge

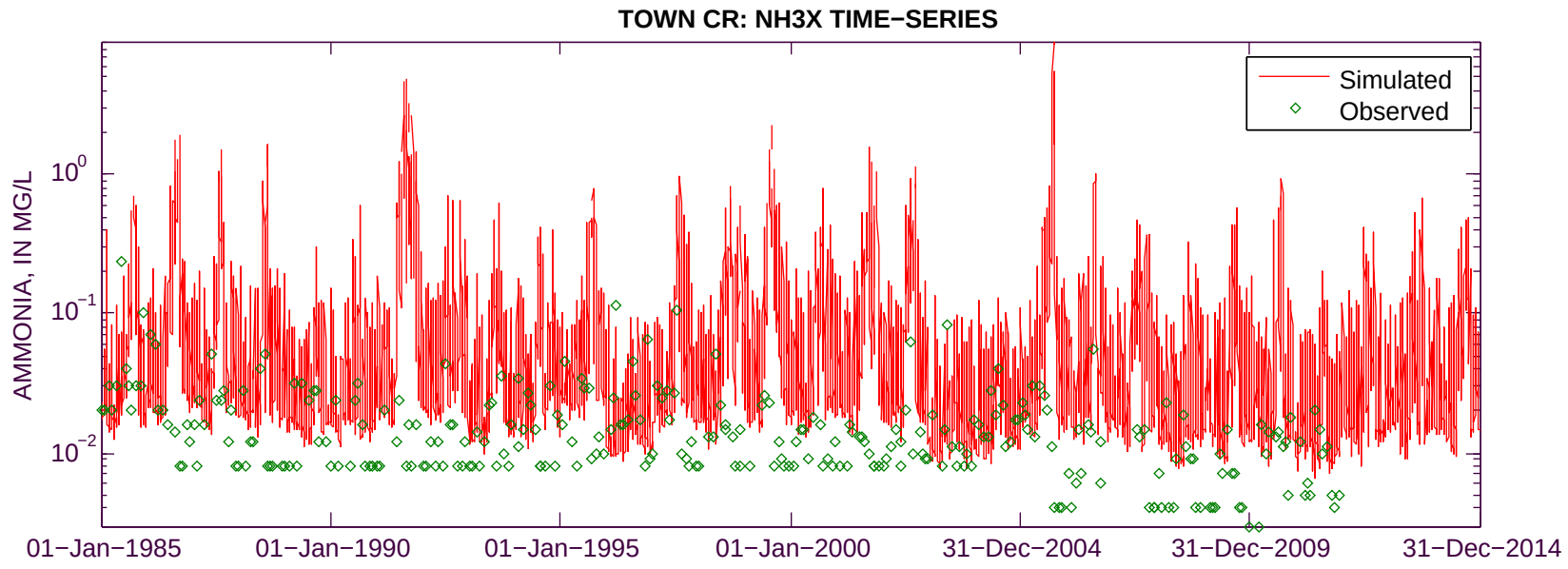
Dates 1/1/1985 12/31/201

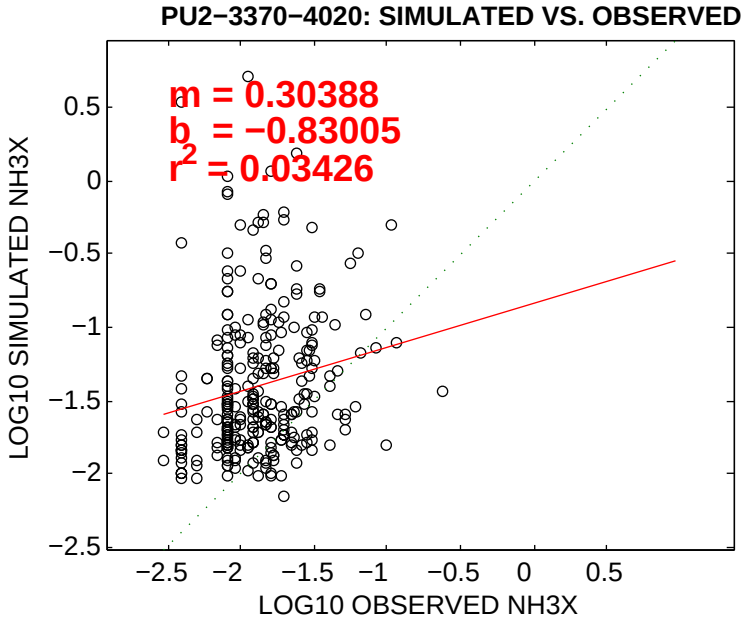
Drive	Directory	Observed
N/A	model	OBS20161101

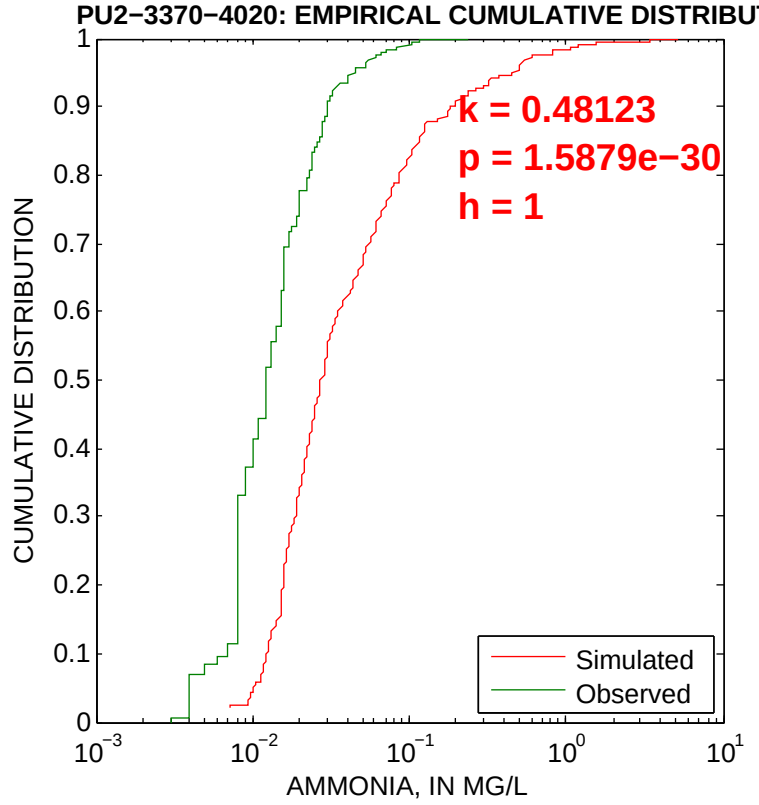
STATISTICS

	observe	simulate
n	4263	4226
min	0.66 -0.0409586	0 -2.23922
mean	161.34 1.77423	181.112 1.93847
media	62 1.80276	112.36 2.05582
max	4670 3.66932	5328.8 3.72663
varian	88090.6 0.409018	79439.8 0.39014
JB	0.001 0.001	0.001 0.001
	ra	log
%	12.2546	9.25652
err.va	28727.8	0.141408
rel.std.err	0.326117	0.345726
mod.eff	0.673883	0.654274

VERSION 2.1







DATA SELECTION

scenario	file
P620171001WQ	NH3X.calib

plot: NH3X - ammonia

Dates: 1/1/1985 – 12/31/201

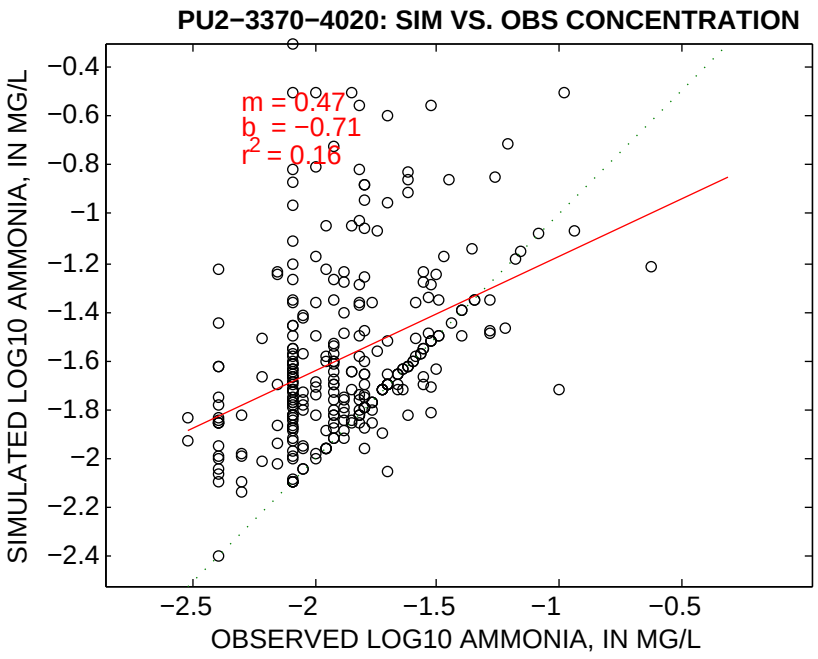
Drive	Directory	Observed
N/A	model	OBS20161101

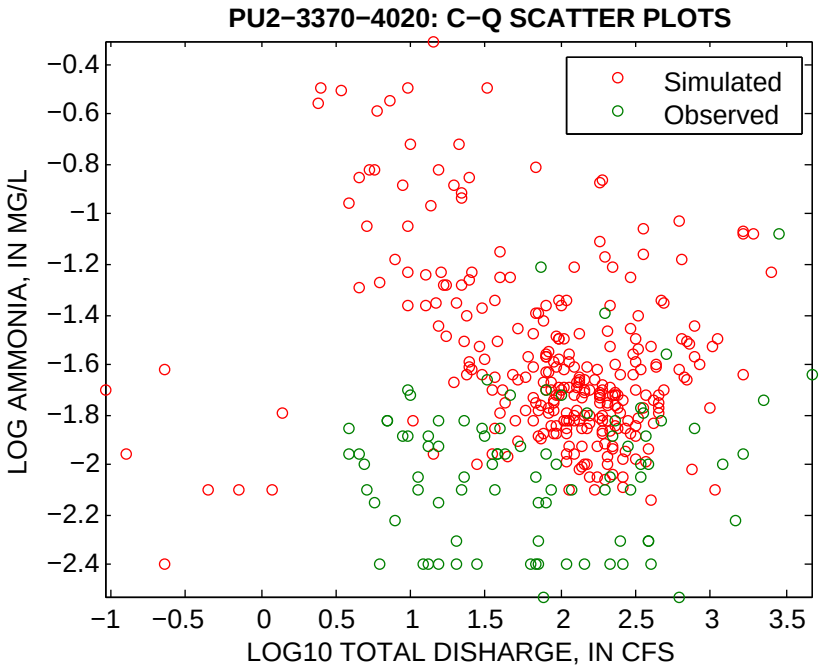
STATISTICS

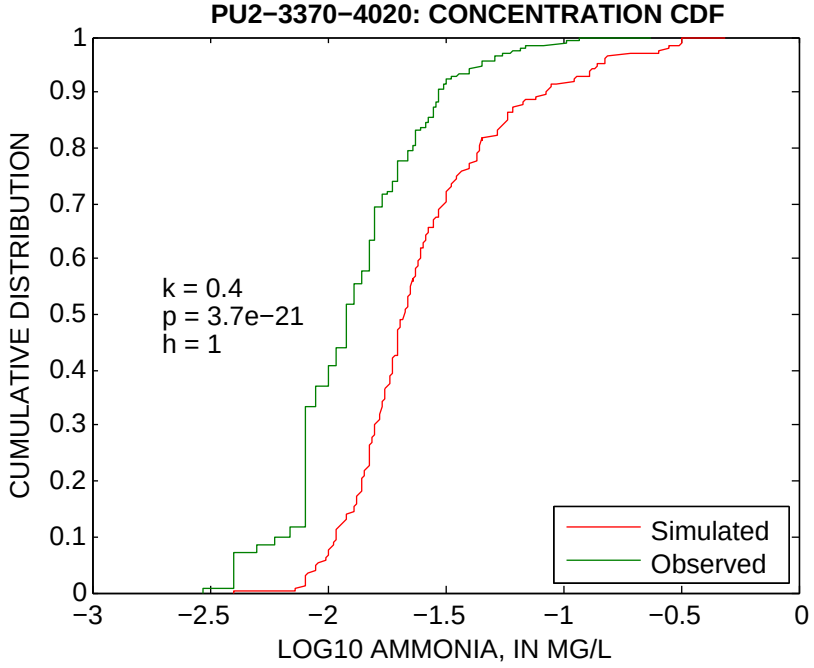
	observe	simulate
n	293	287
min	0.003 -2.52288	0 -2.14988
mean	0.0174061 -1.88053	0.11135 -1.4015
media	0.012 -1.92082	0.027138 -1.53882
max	0.24 -0.619789	5.2136 0.717138
varian	0.00039406 0.0898018	0.155407 0.24204
JB	0.001 0.001	0.001 0.001
	ra	log
%	539.715	-25.473
err.va	0.164793	0.507533
rel.std.err	418.188	5.6517
mod.eff	-417.188	-4.6517

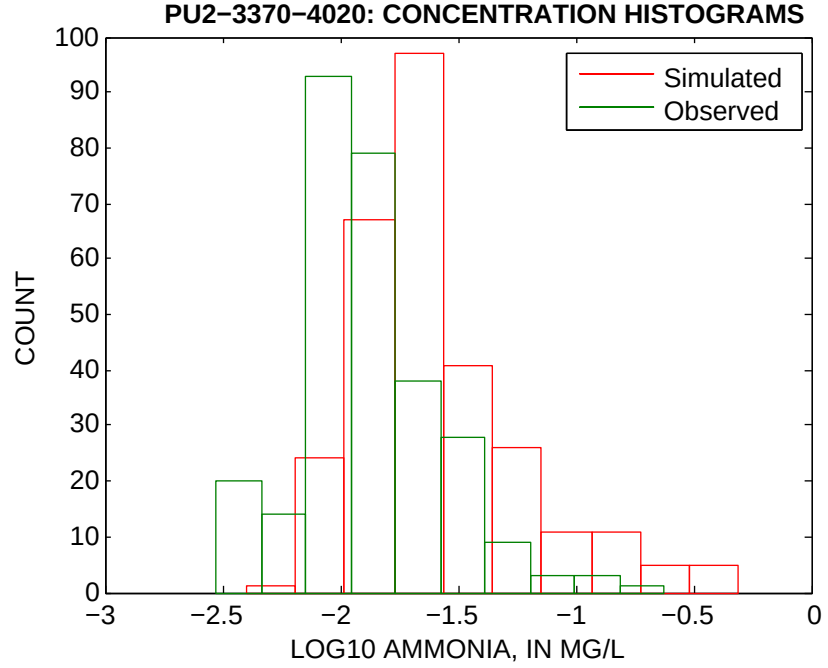
VERSION 2.1

ALL DATA
LOG10

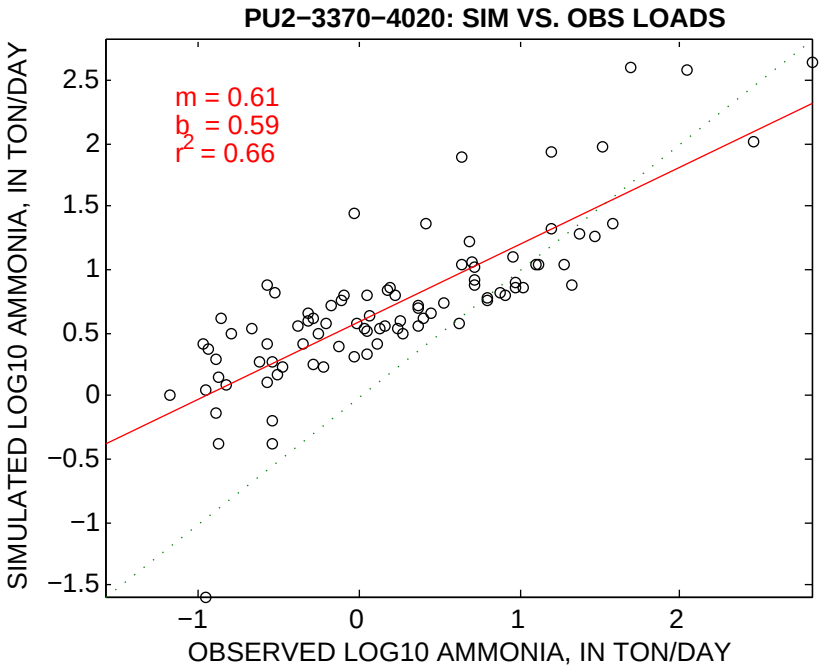


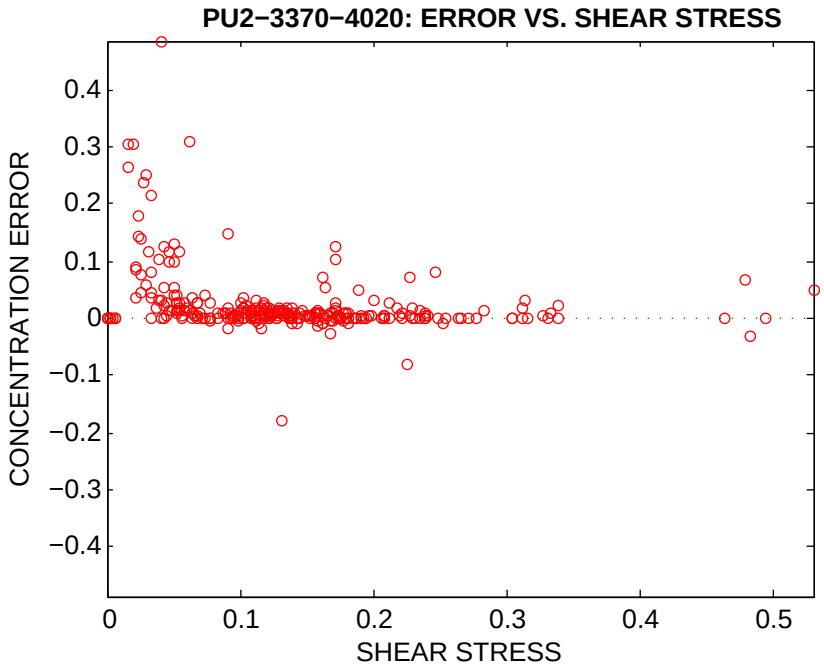


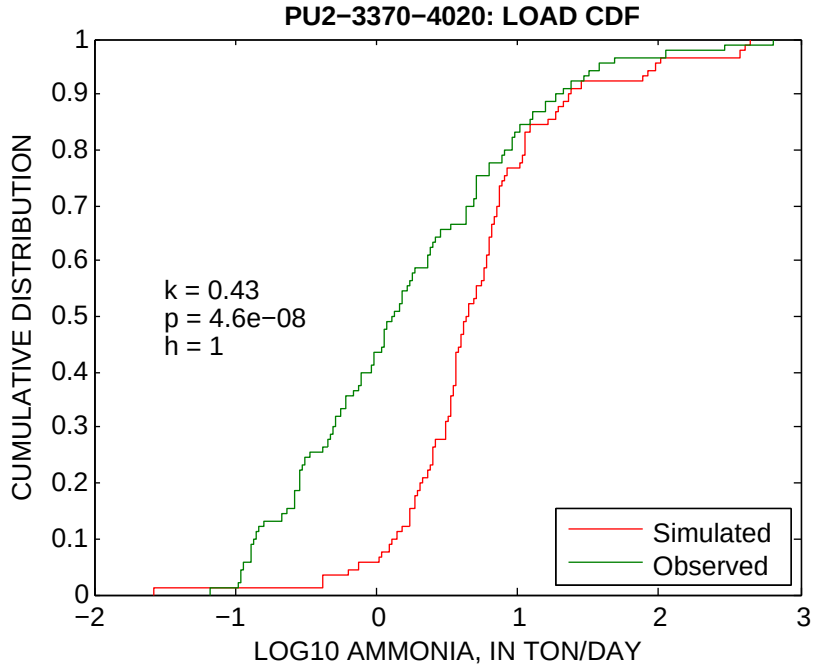


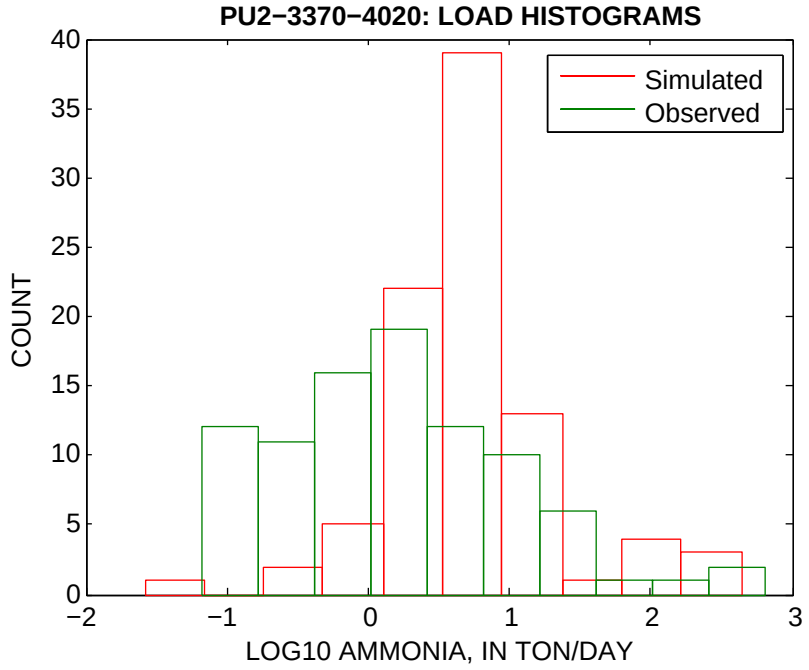


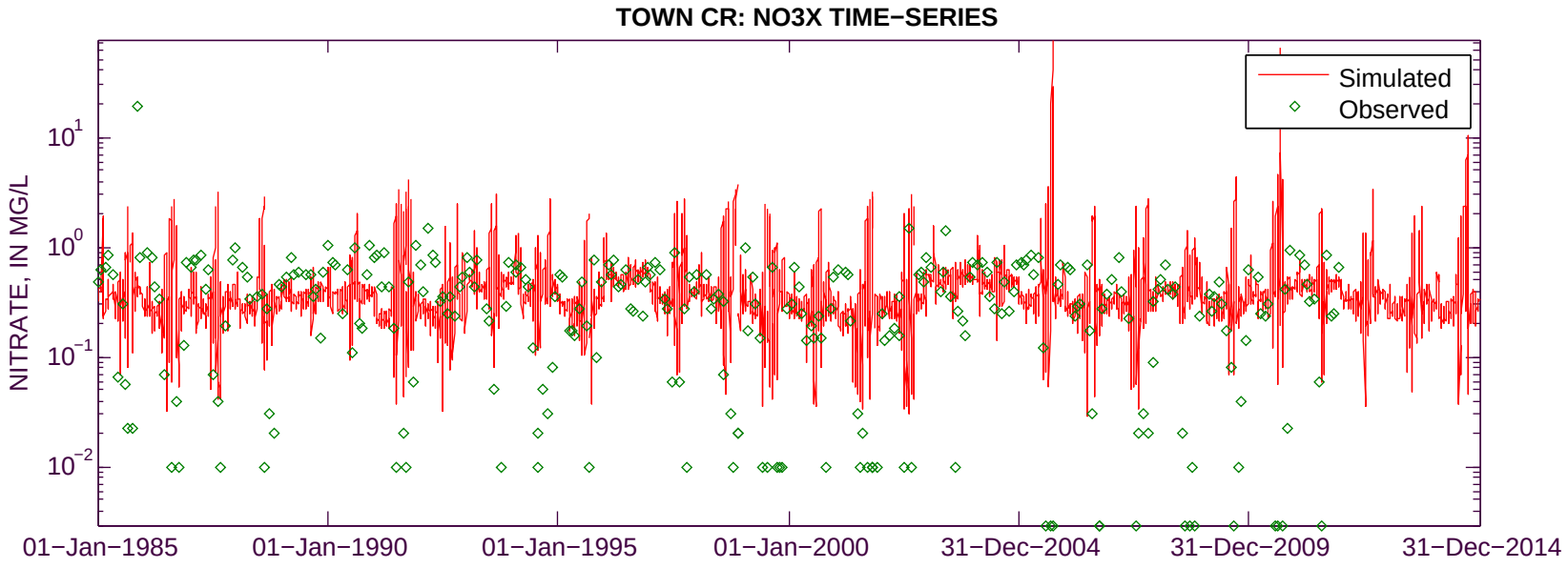
LOAD DATA
LOG10

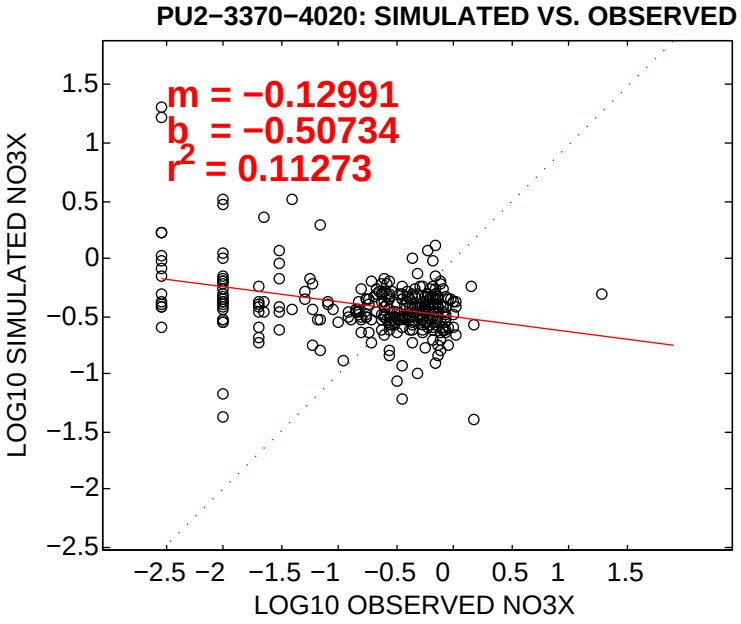


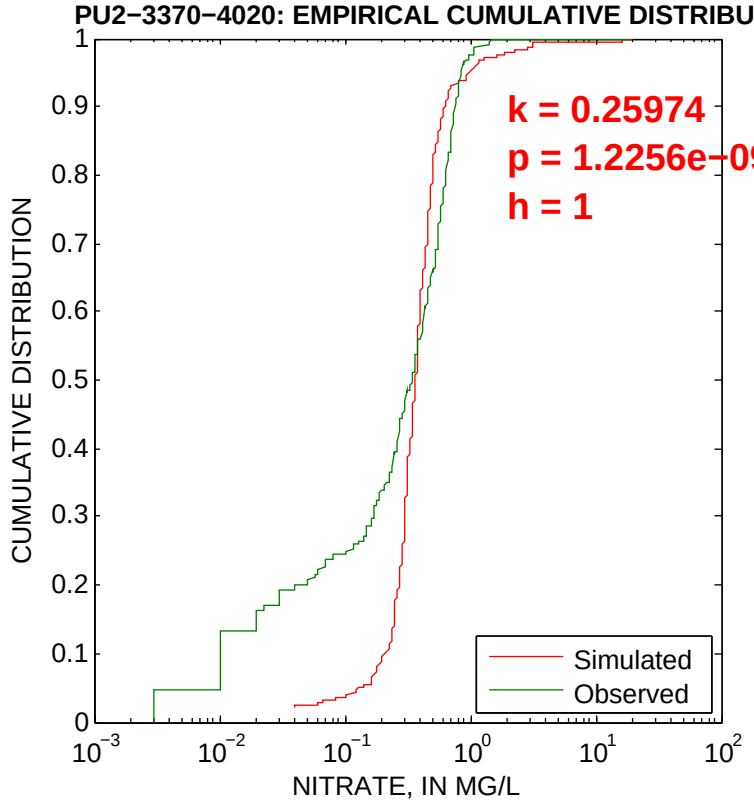












DATA SELECTION

scenario	file
P620171001WQ	NO3X.calib

plot: NO3X - nitrate

Dates: 1/1/1985 – 12/31/201

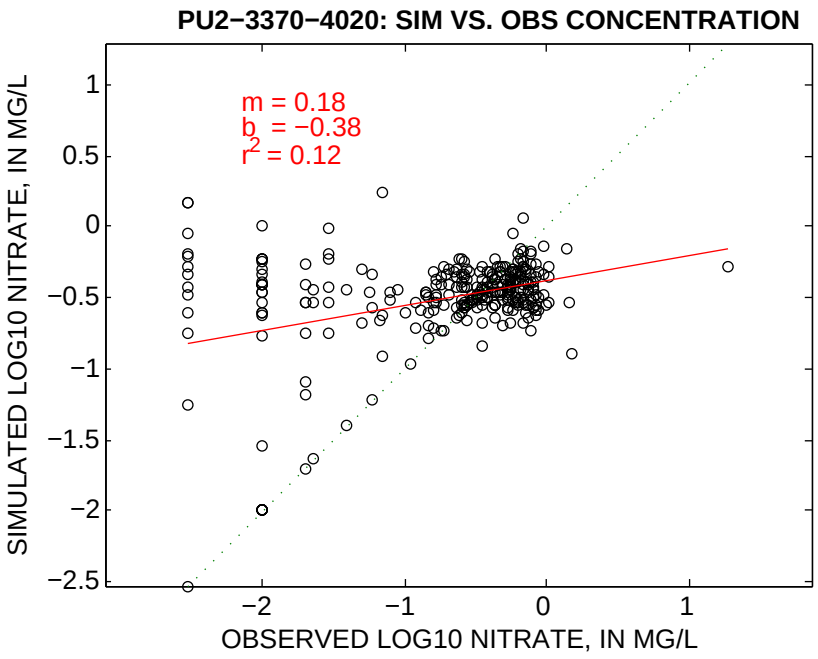
Drive	Directory	Observed
N/A	model	OBS20161101

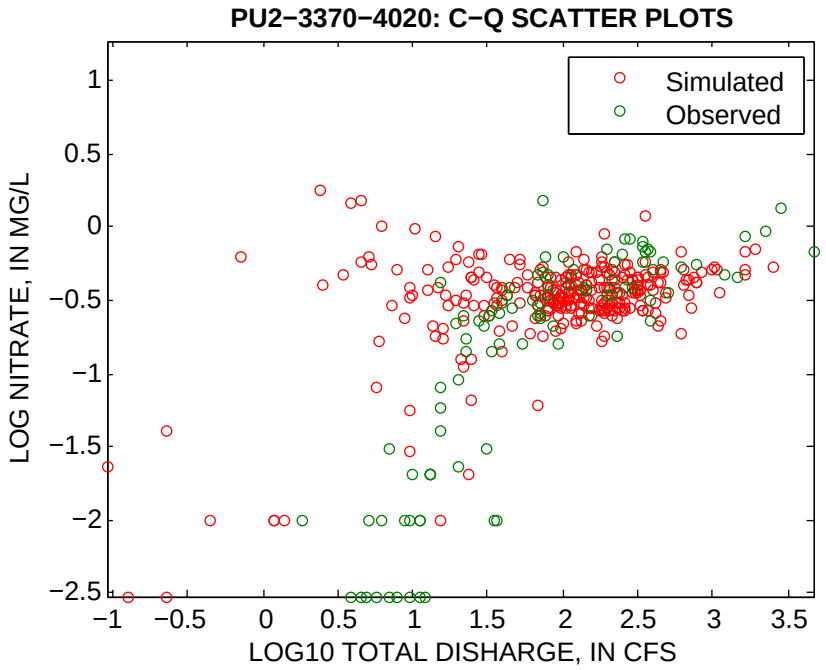
STATISTICS

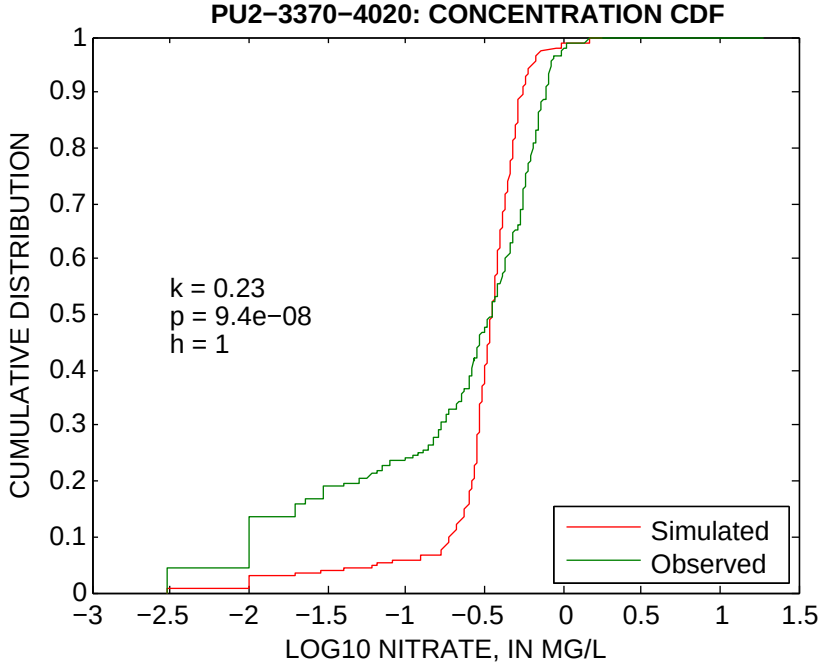
	n	observe	simulate
		308	302
min		0.003	0
		-2.52288	-1.389
mean		0.434893	0.549966
		-0.707789	-0.415387
media		0.347	0.37101
		-0.455932	-0.427797
max		18.998	20.142
		1.27871	1.3041
varian		1.21439	2.21461
		0.492281	0.0736981
JB		0.001	0.001
		0.001	0.001
		ra	log
%		26.4601	-41.312
err.va		3.57903	0.779666
rel.std.err		2.9472	1.58378
mod.eff		-1.9472	-0.583782

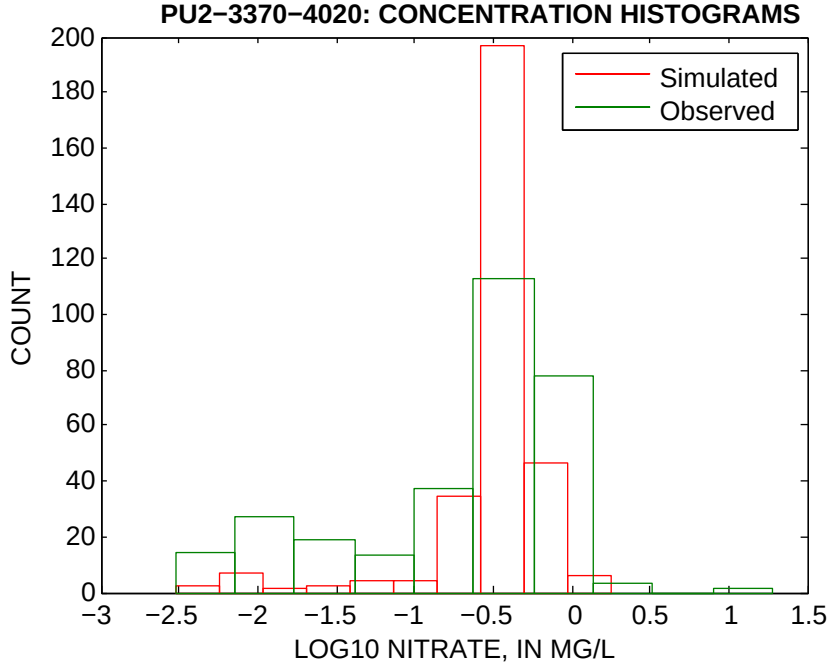
VERSION 2.1

ALL DATA
LOG10

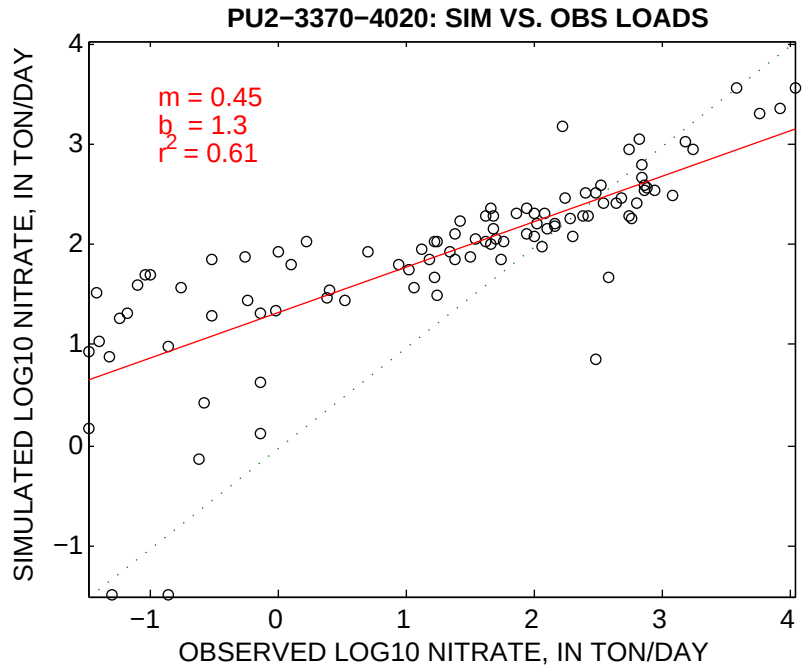




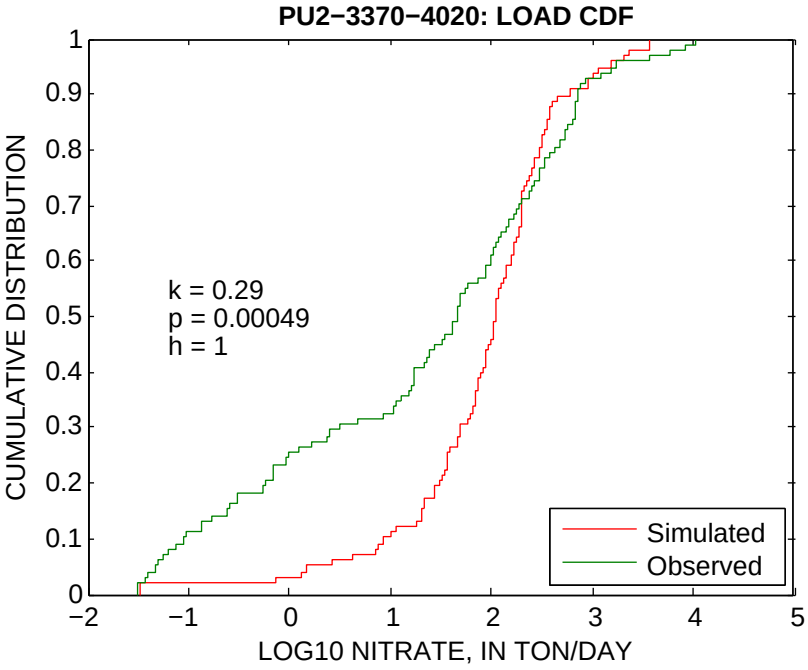


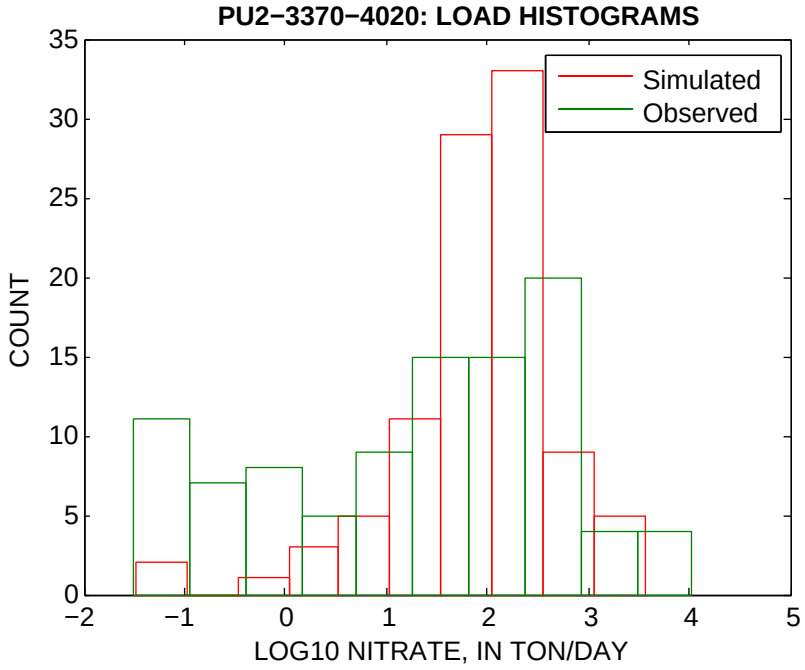


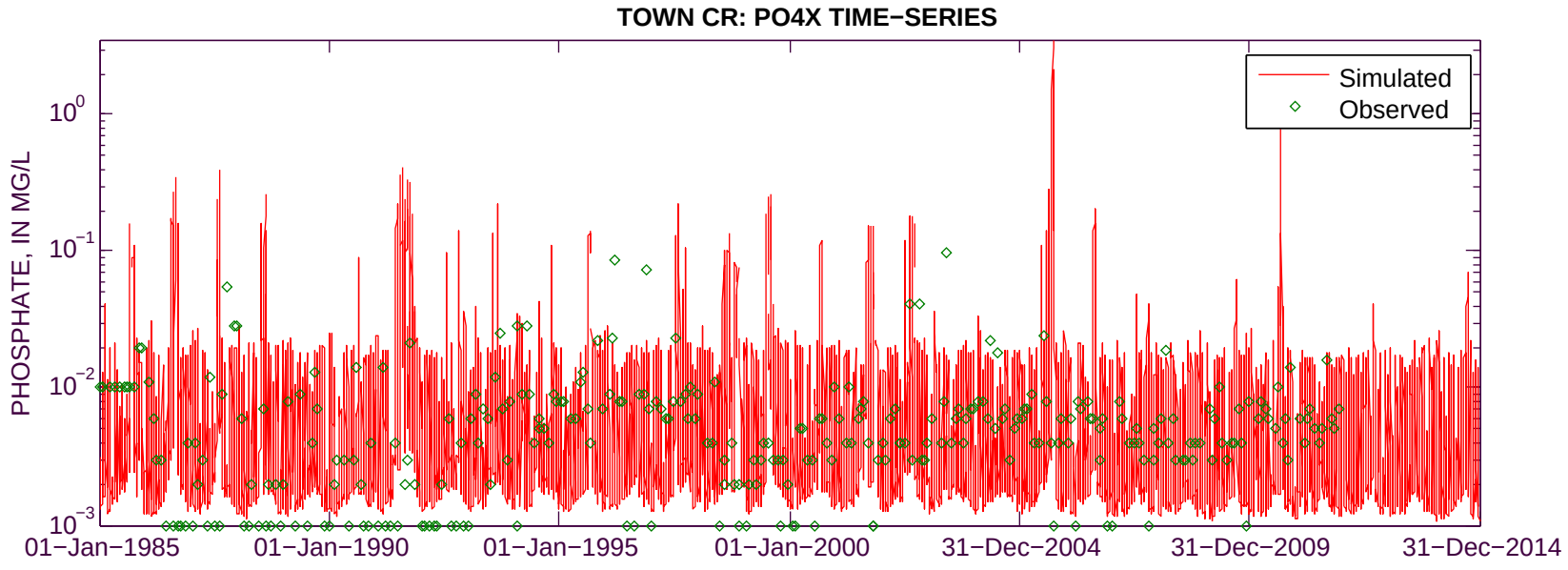
LOAD DATA
LOG10

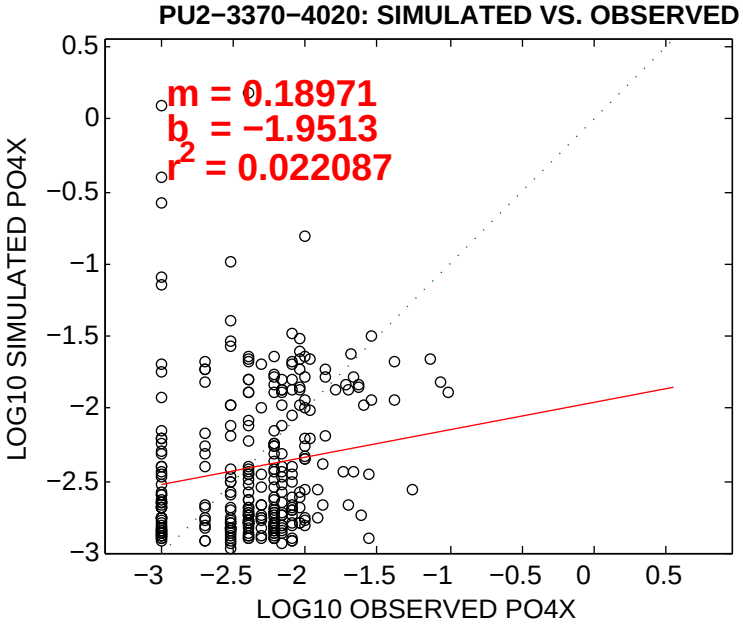


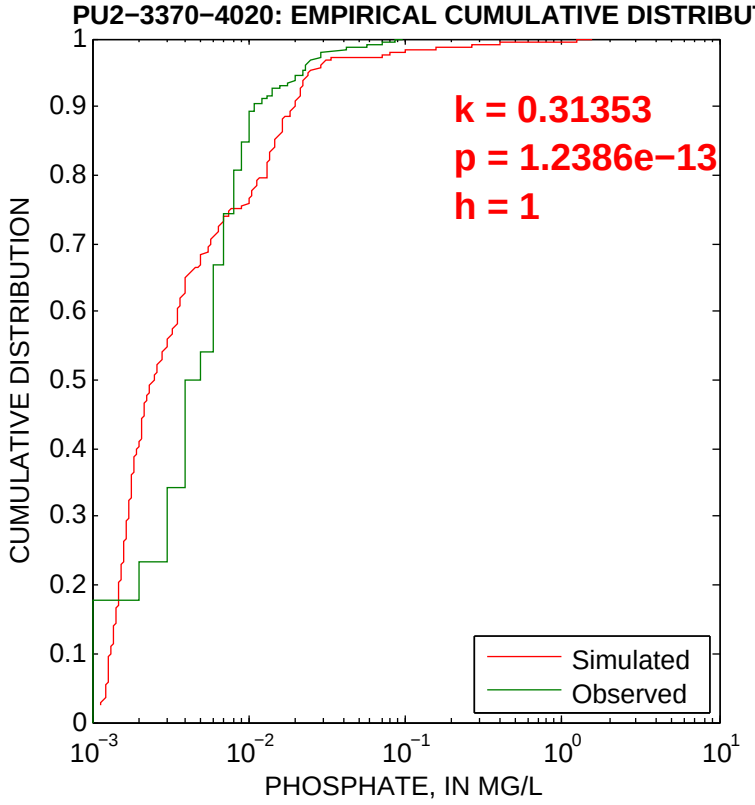












DATA SELECTION

scenario: P620171001WQ | file: PO4X.calib

plot: PO4X - phosphate

Dates: 1/1/1985 – 12/31/201

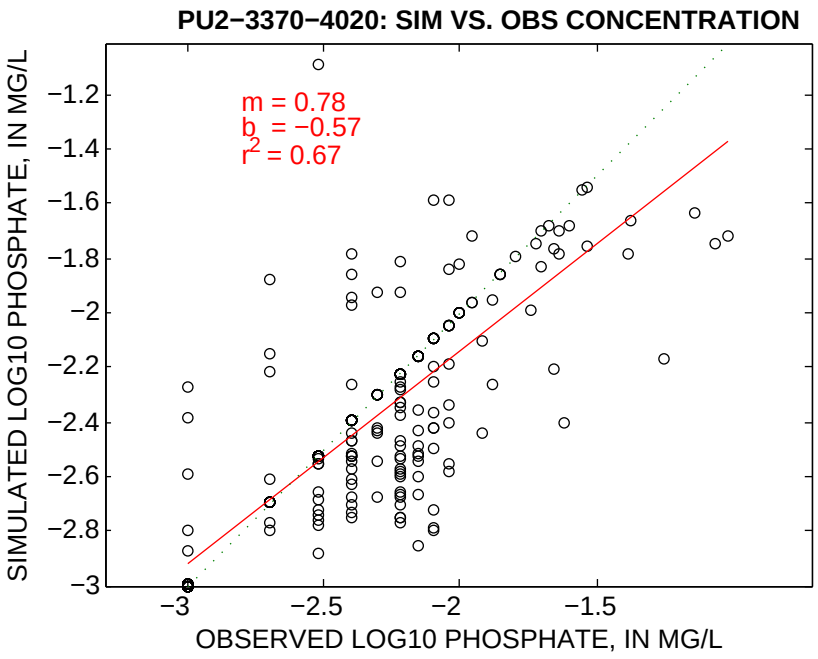
Drive: N/A | Directory: model | Observed: OBS20161101

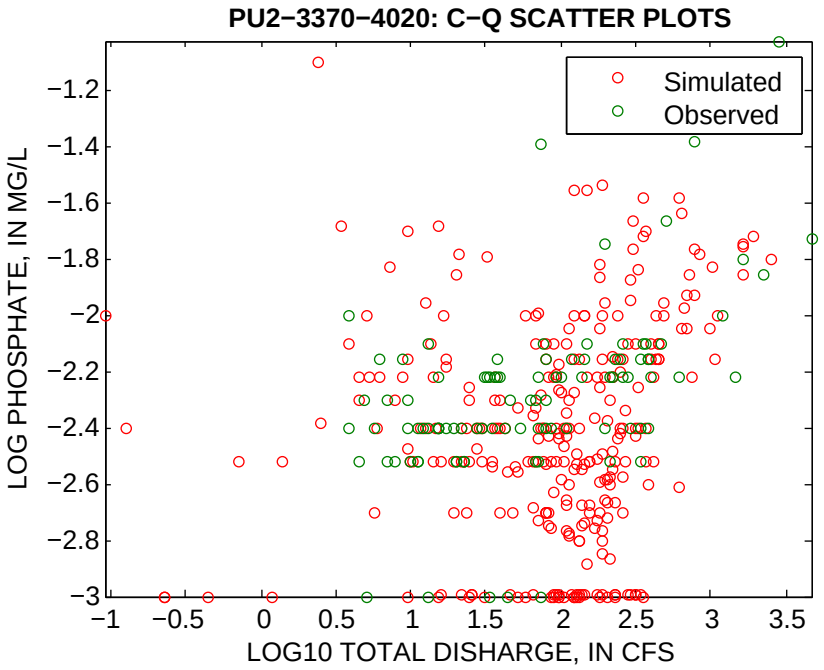
STATISTICS

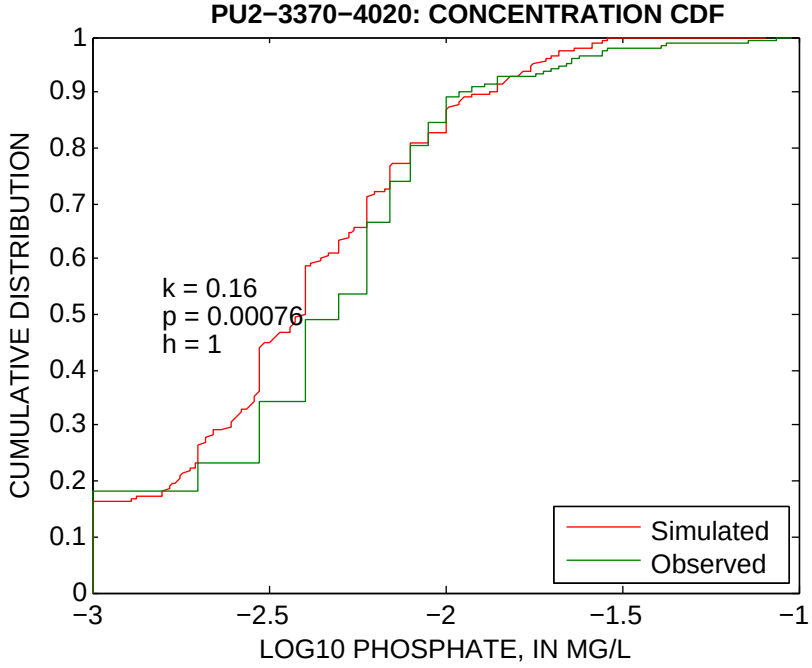
	n	observe	simulate
		303	297
min		0.001	0
		-3	-2.96433
mean		0.0070033	0.0185295
		-2.35321	-2.39775
media		0.005	0.0024641
		-2.30103	-2.59008
max		0.096	1.5572
		-1.01773	0.192344
varian		0.00010448	0.0137283
		0.164147	0.267488
JB		0.001	0.001
		0.346236	0.001
		ra	log
%		164.583	1.89257
err.va		0.0140383	0.371343
rel.std.err		134.355	2.26226
mod.eff		-133.355	-1.26226

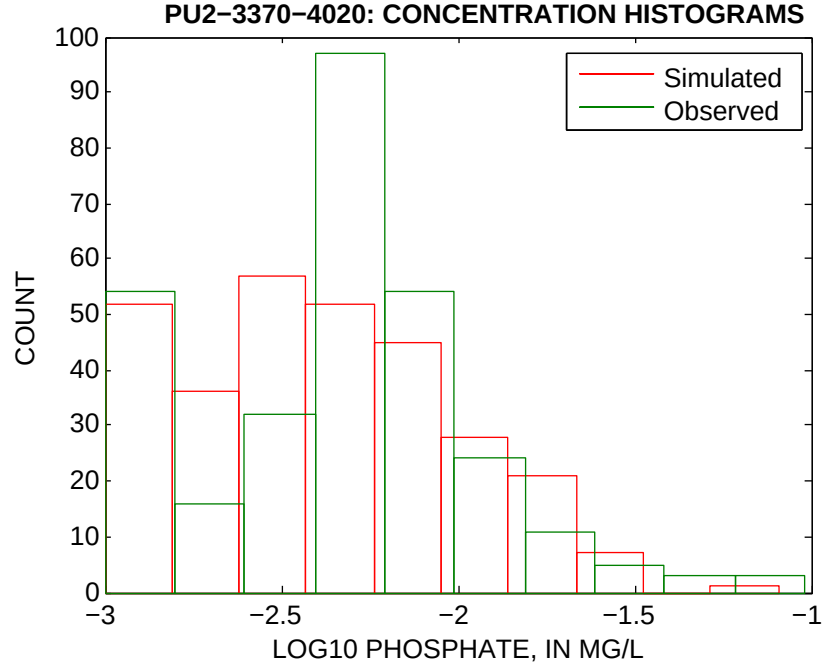
VERSION 2.1

ALL DATA
LOG10

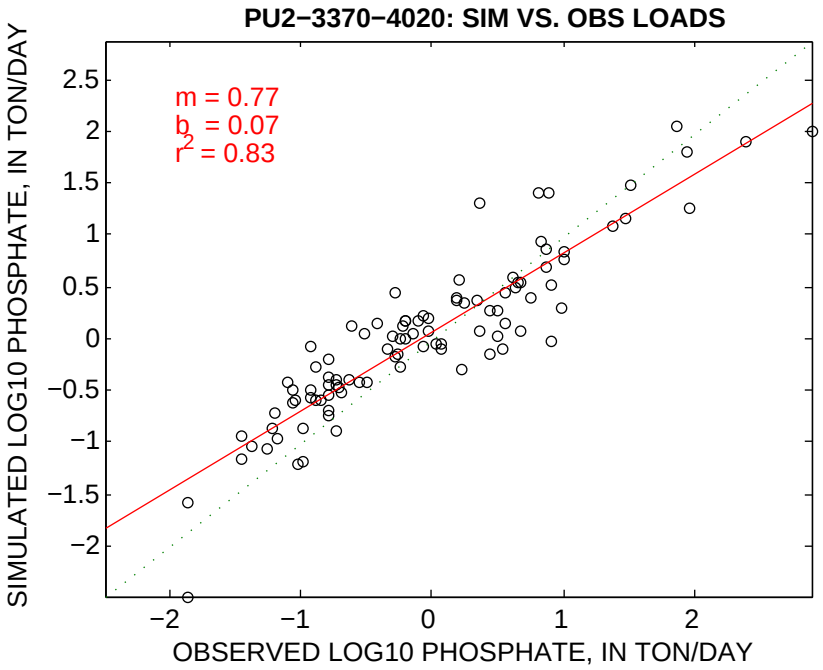


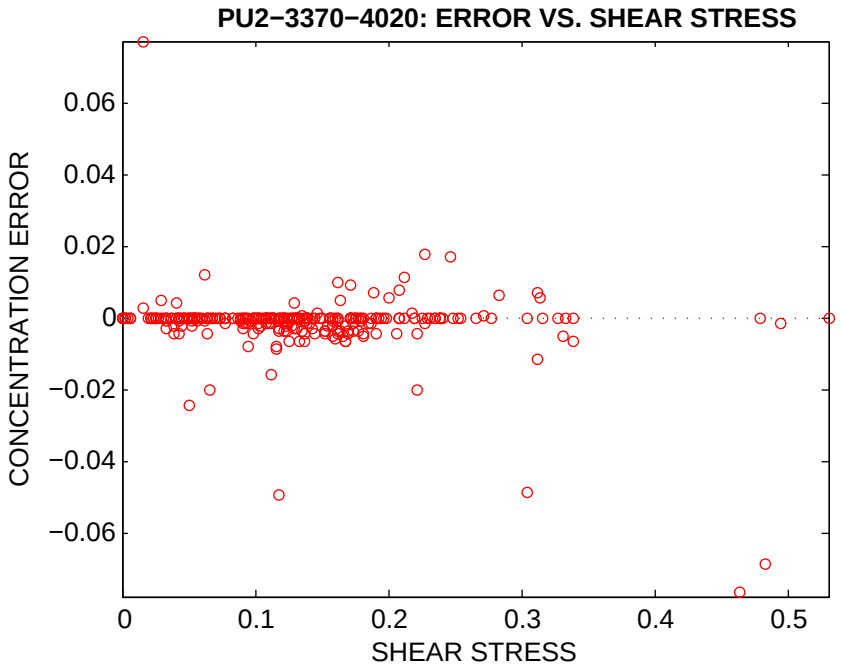


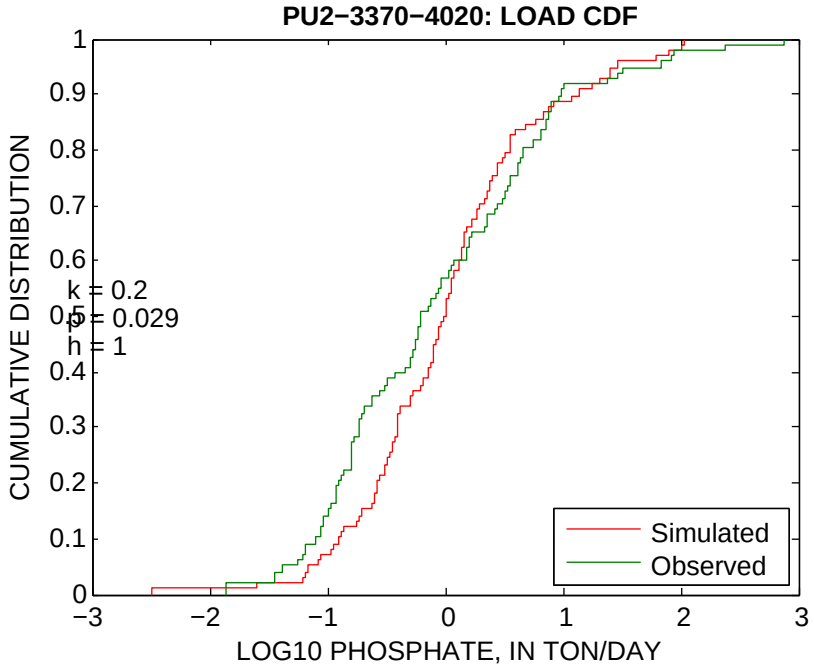


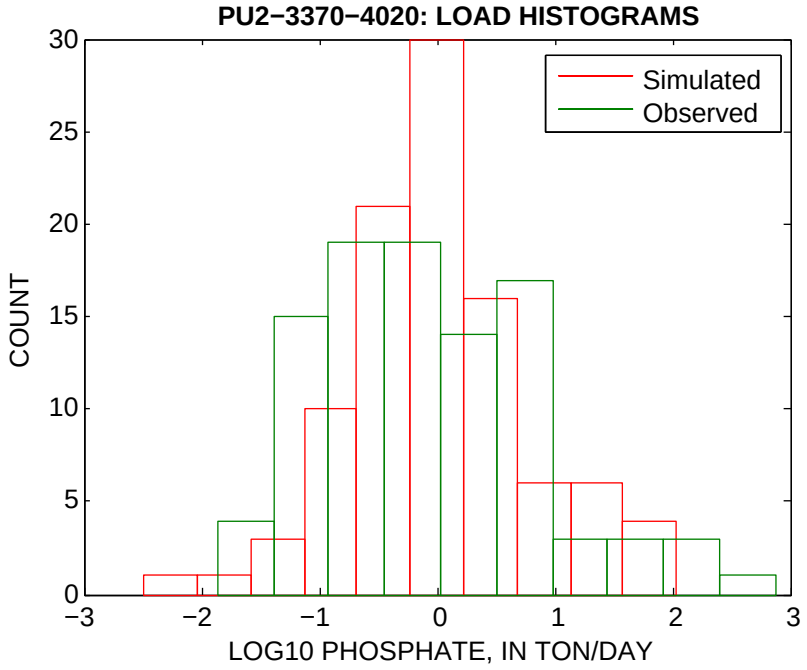


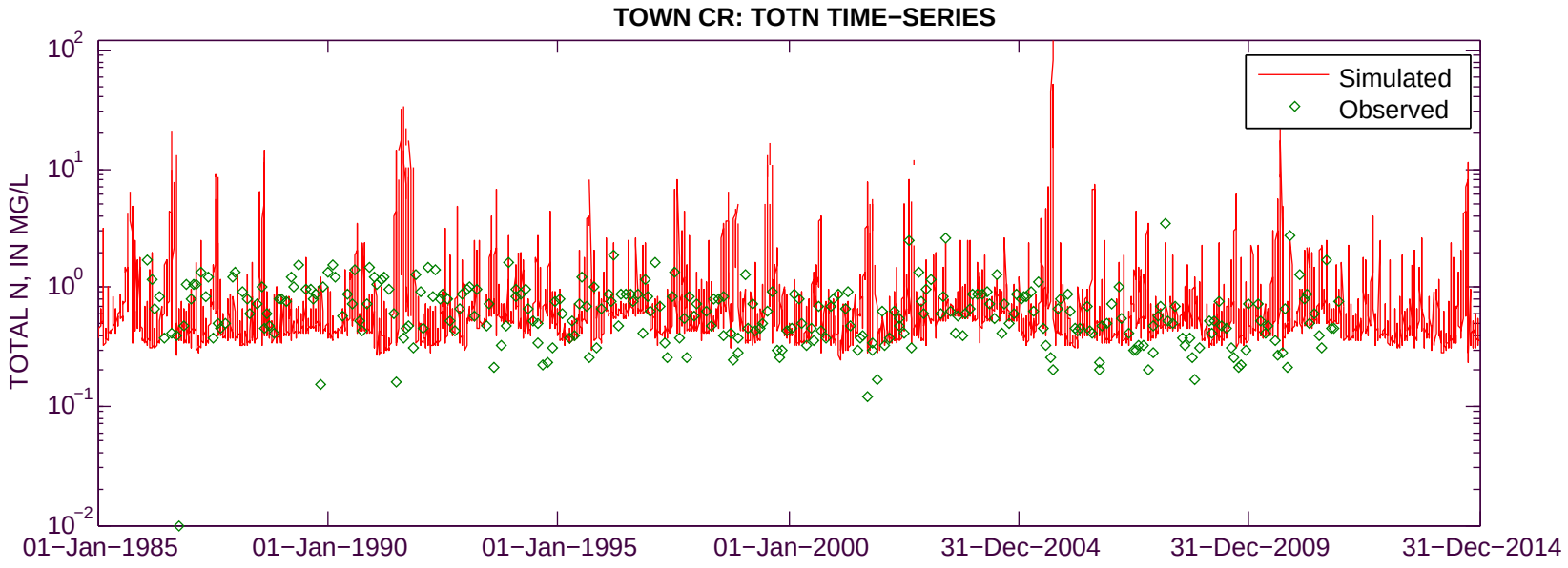
LOAD DATA
LOG10

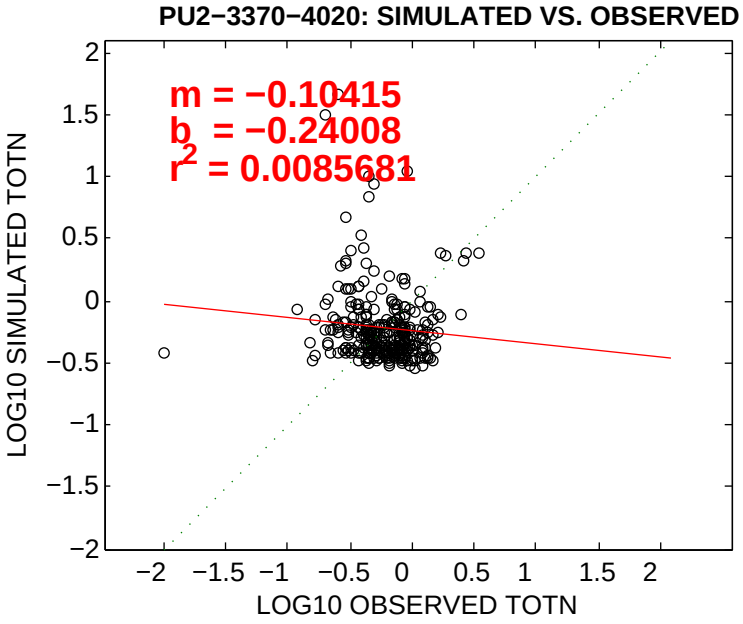


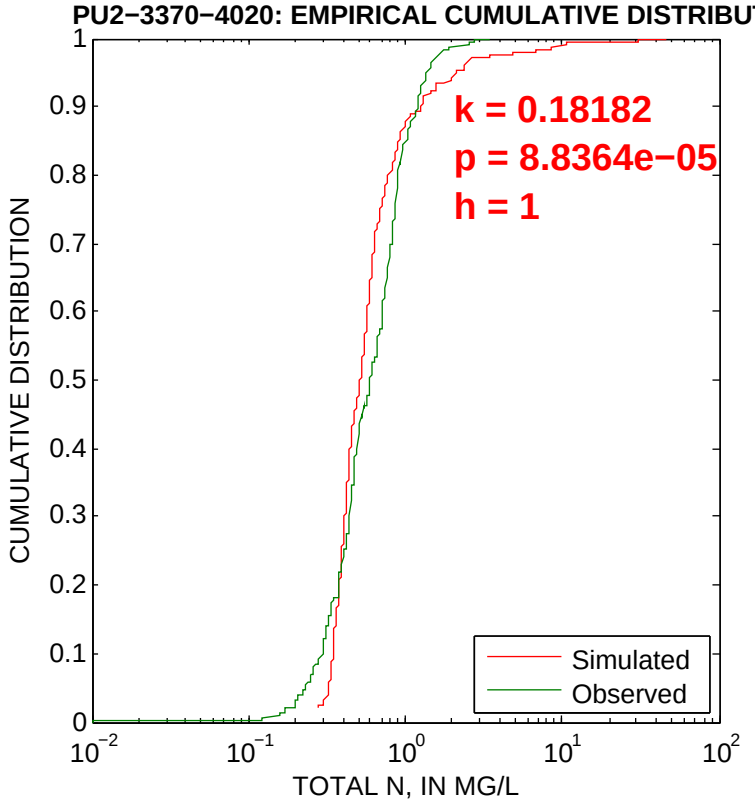












DATA SELECTION

scenario: P620171001WQ | file: TOTN.calib

plot: TOTN - total nitrogen

Dates: 1/1/1985 – 12/31/201

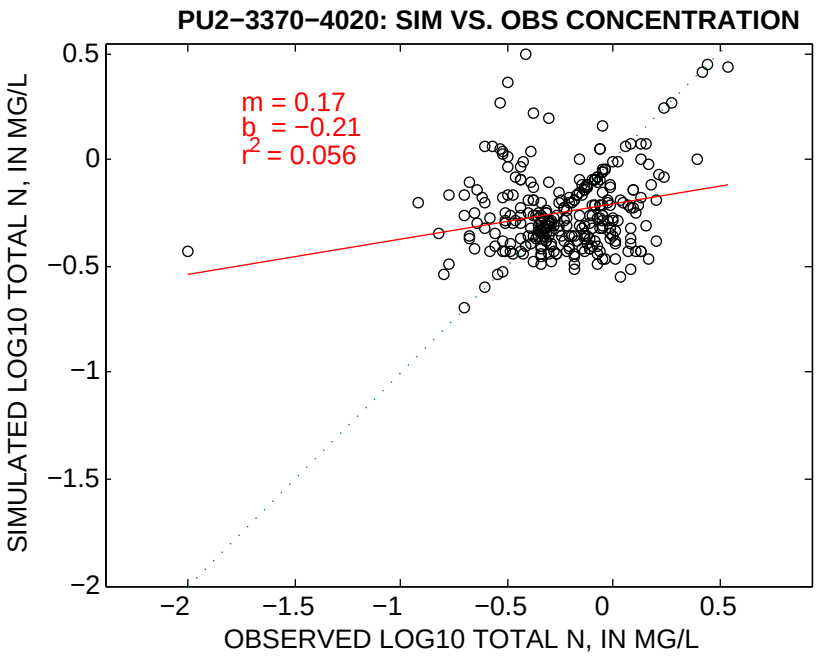
Drive: N/A | Directory: model | Observed: OBS20161101

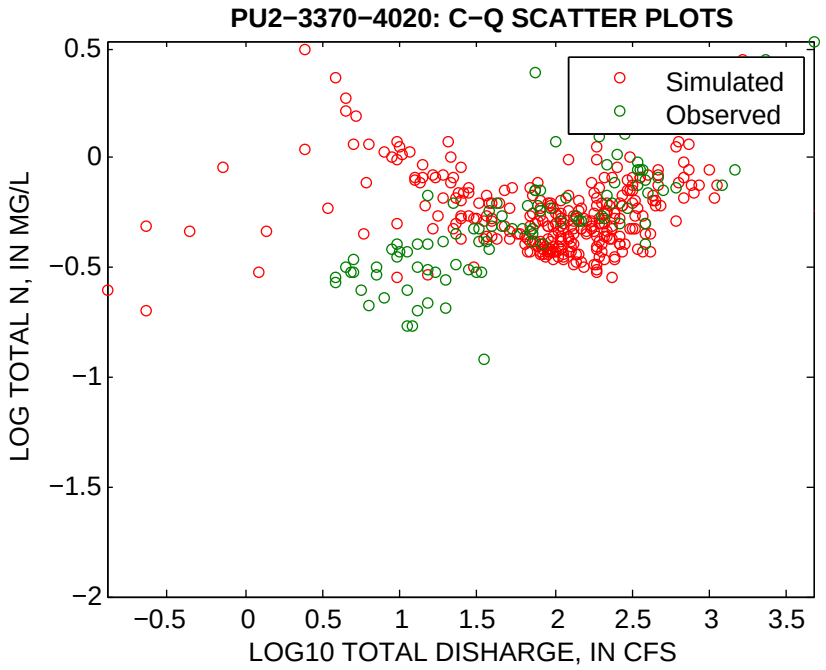
STATISTICS

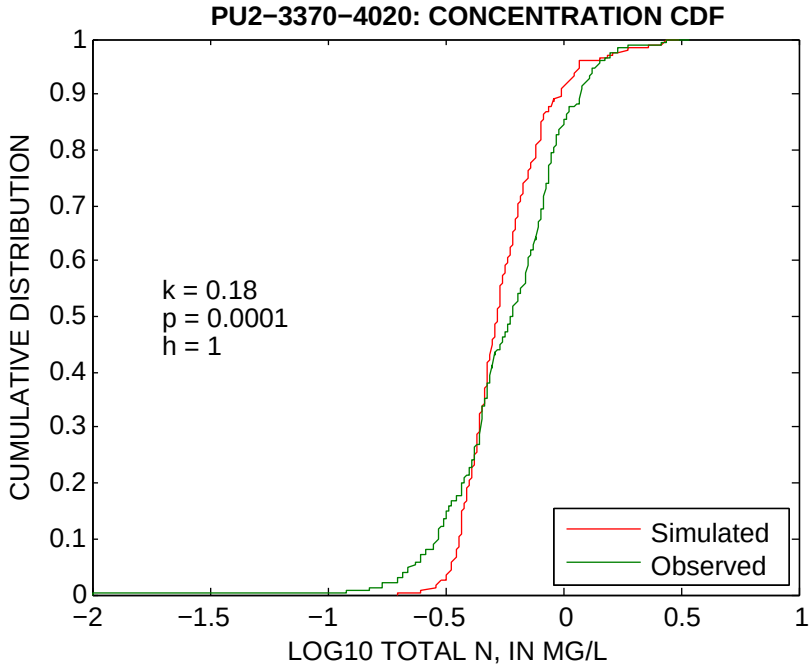
		observe	simulate
n		297	291
min		0.01	0
		-2	-0.552005
mean		0.687515	1.01697
		-0.22946	-0.216187
media		0.6	0.5175
		-0.216883	-0.284992
max		3.44	45.522
		0.536558	1.65822
varian		0.177522	11.0241
		0.0682607	0.0864145
JB		0.001	0.001
		0.001	0.001
		ra	log
%		47.919	-5.78458
err.va		11.501	0.16907
rel.std.err		64.7863	2.47683
mod.eff		-63.7863	-1.47683

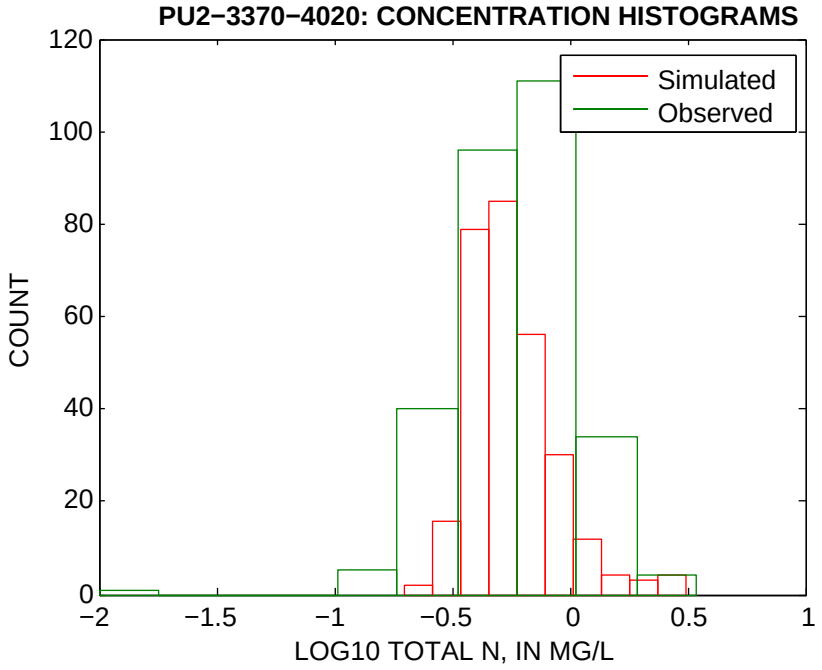
VERSION 2.1

ALL DATA
LOG10

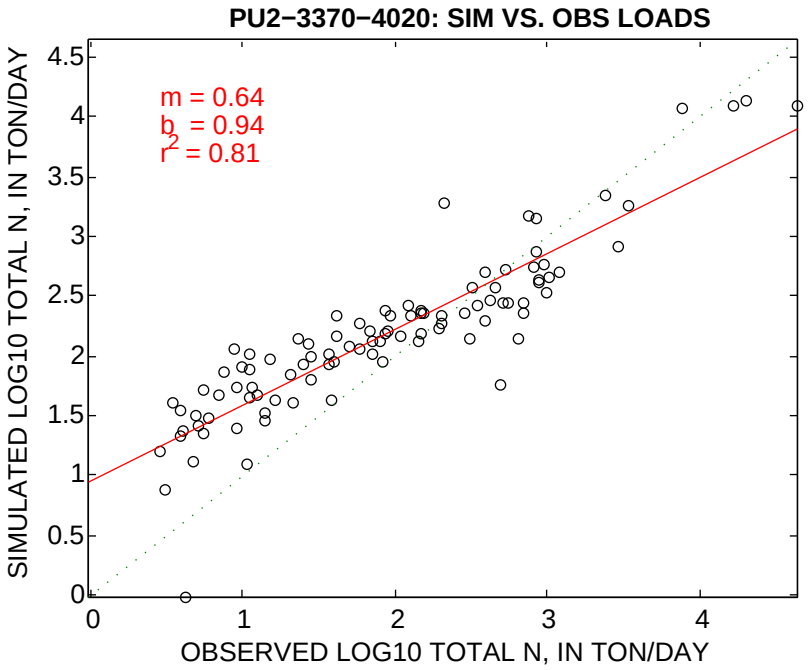


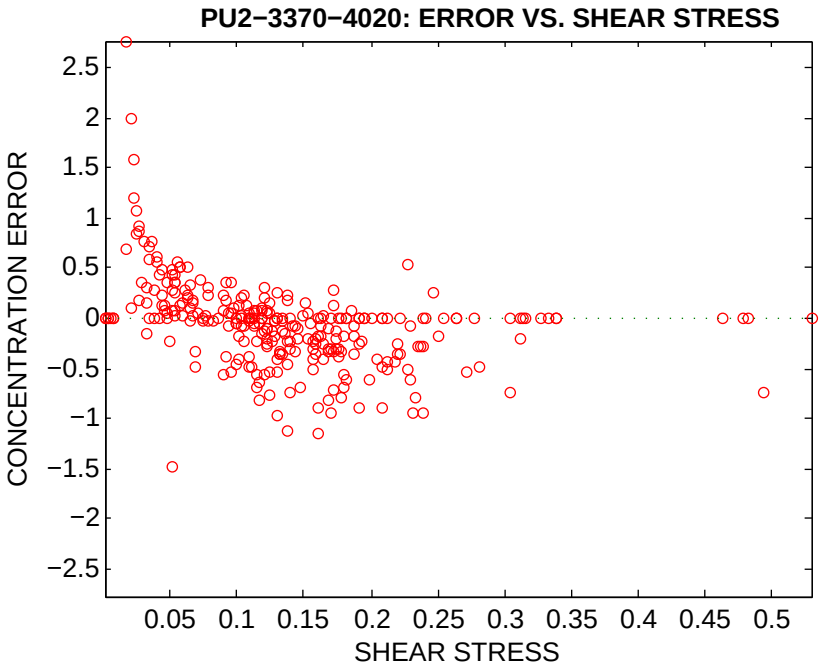


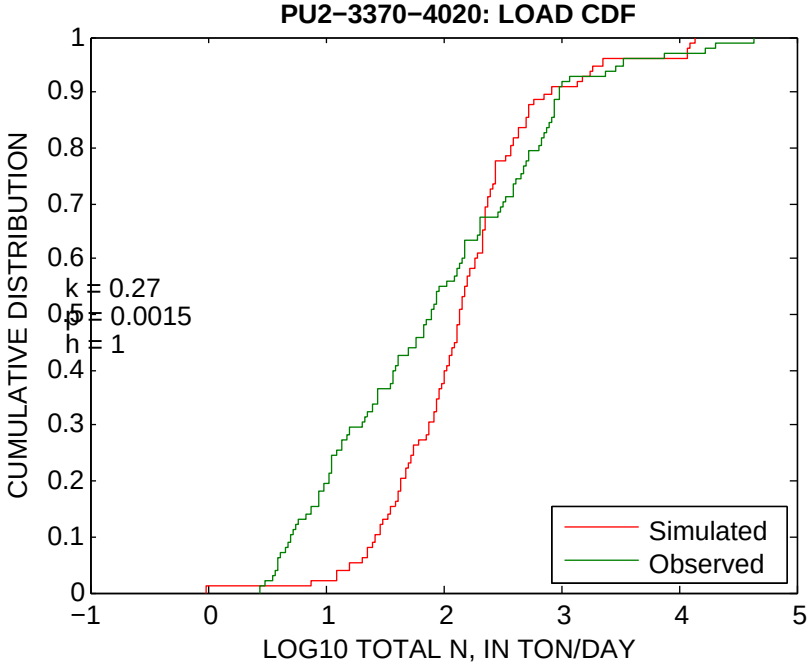


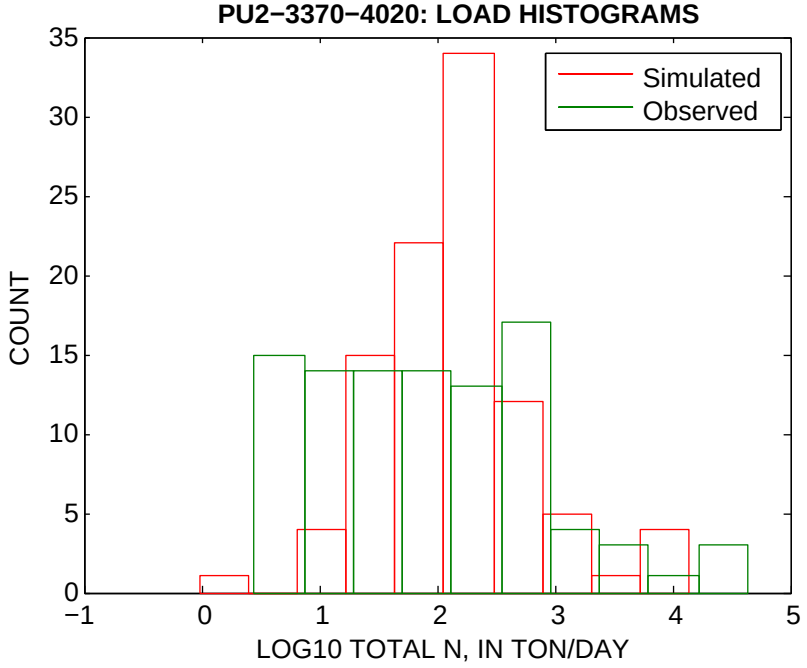


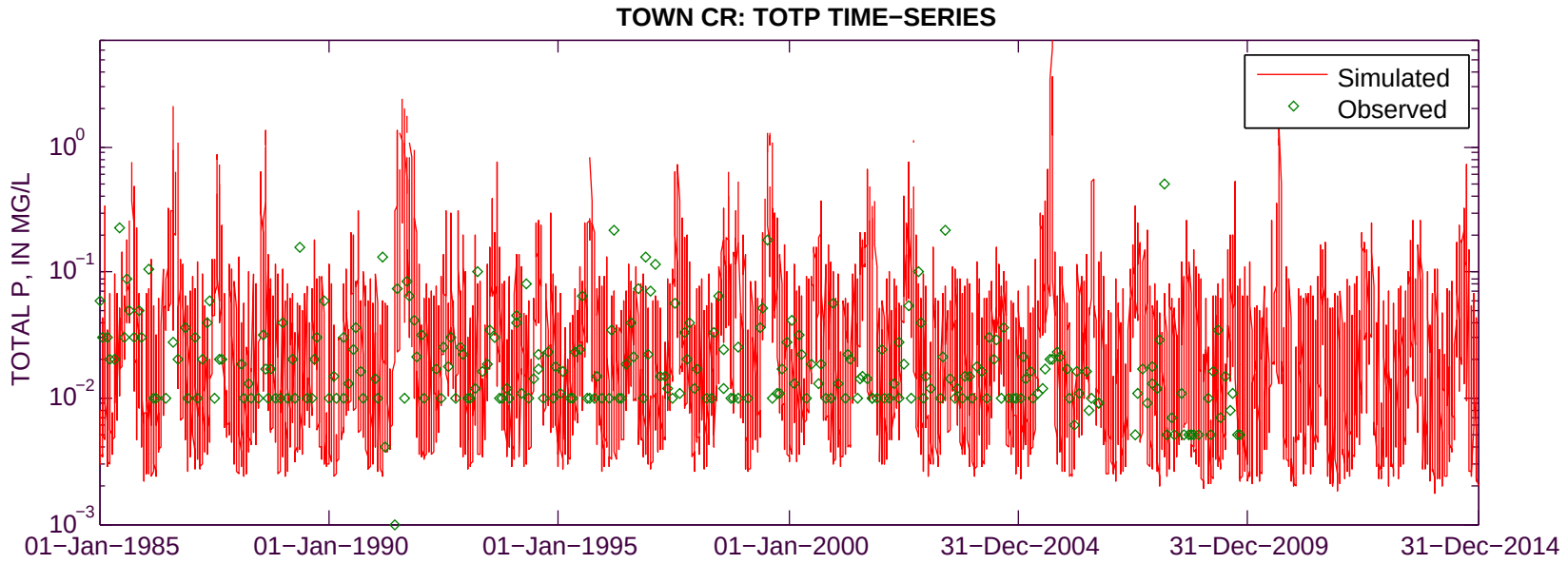
LOAD DATA
LOG10

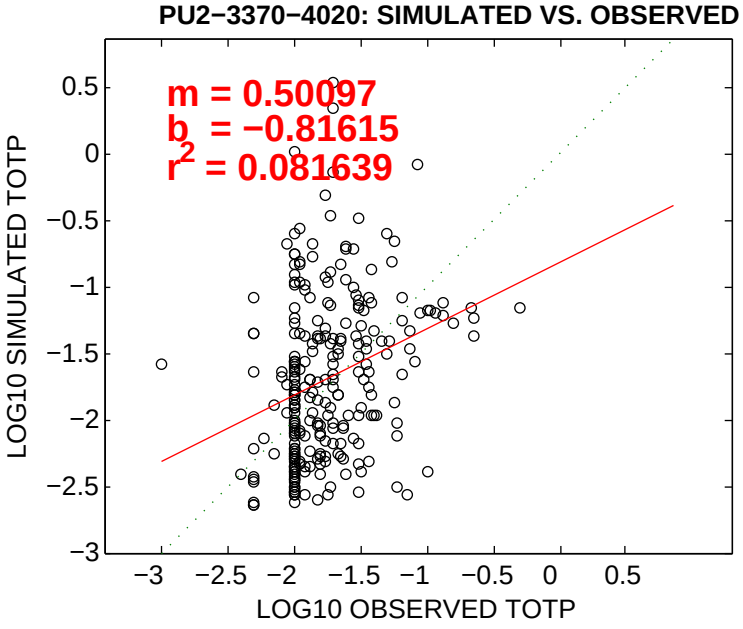


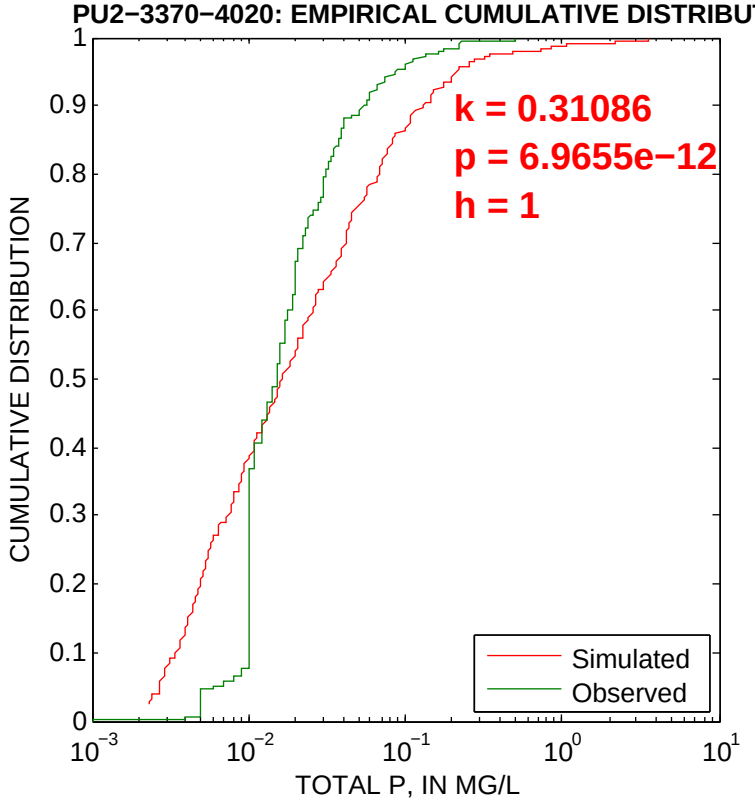












DATA SELECTION

scenario	file
P620171001WQ	TOTP.calib

plot: TOTP - total phosphorus

Dates: 1/1/1985 – 12/31/201

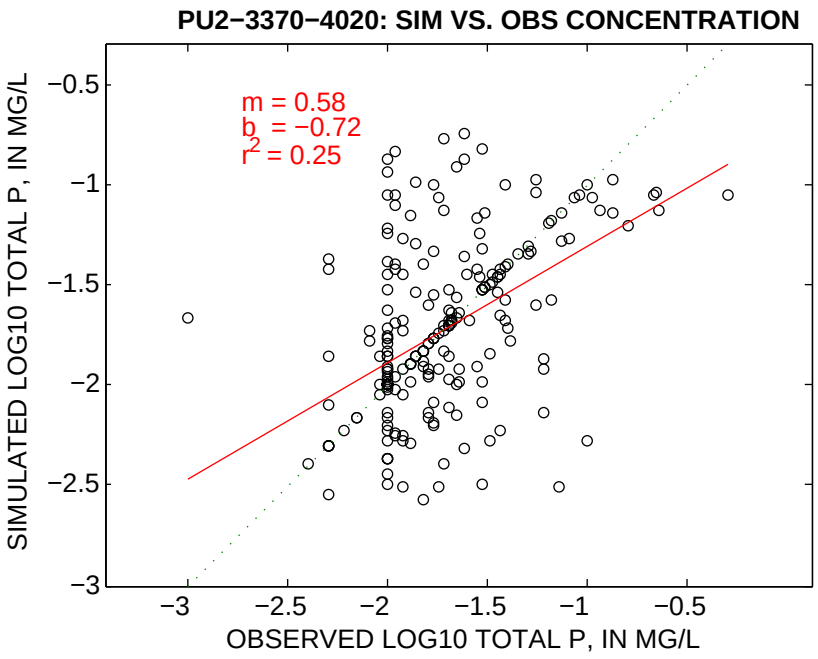
Drive	Directory	Observed
N/A	model	OBS20161101

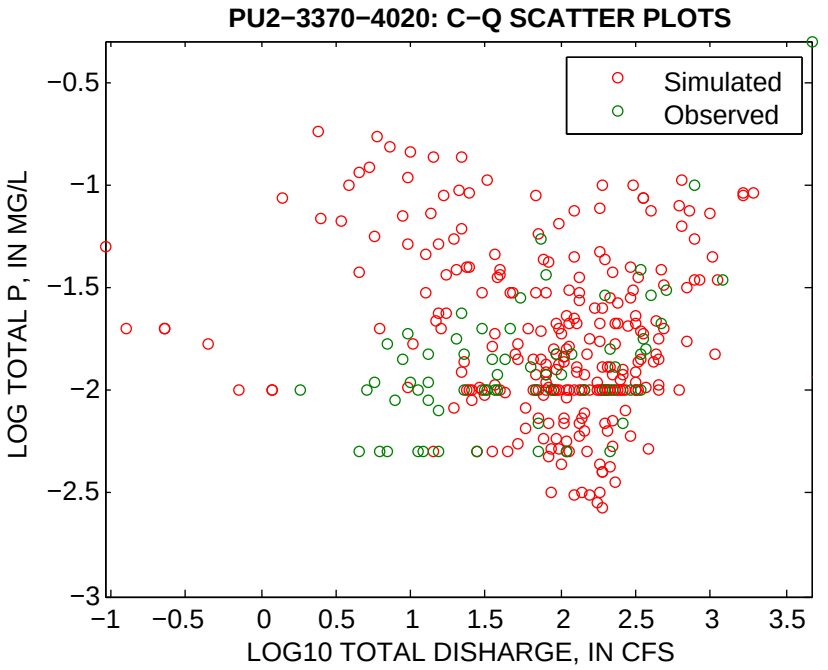
STATISTICS

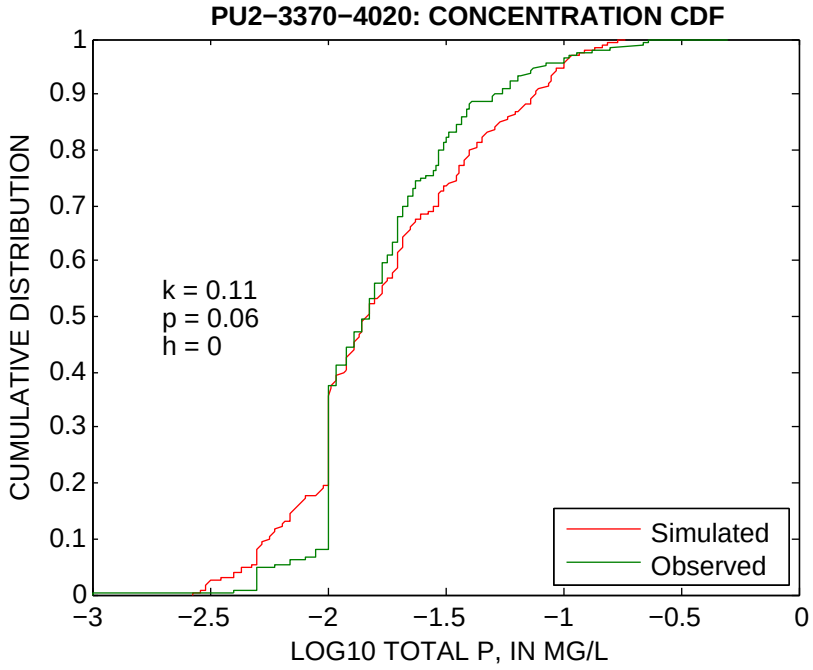
	n	267	261
		observe	simulate
min		0.001	0
		-3	-2.64367
mean		0.0271086	0.0716222
		-1.76163	-1.69867
media		0.015	0.016212
		-1.82391	-1.76384
max		0.504	3.5203
		-0.297569	0.54658
varian		0.00190081	0.0744209
		0.12056	0.370615
JB		0.001	0.001
		0.001	0.002258
		ra	log
%		164.204	-3.57421
err.va		0.0780023	0.374362
rel.std.err		41.0363	3.10519
mod.eff		-40.0363	-2.10519

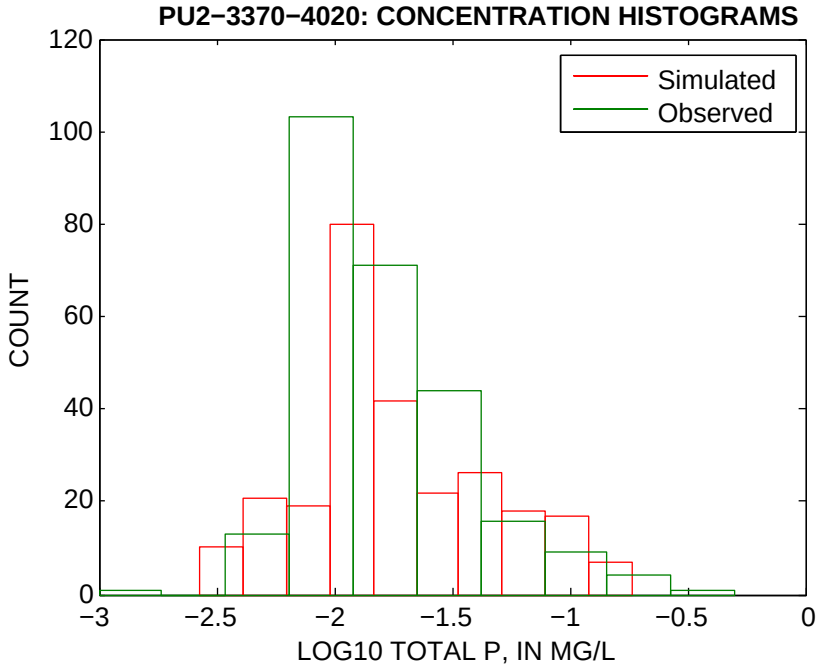
VERSION 2.1

ALL DATA
LOG10

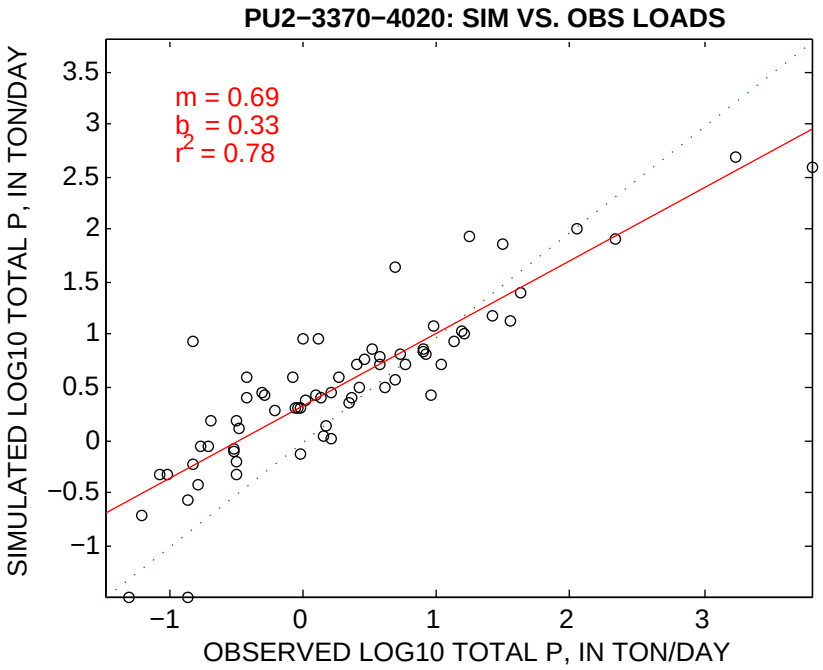


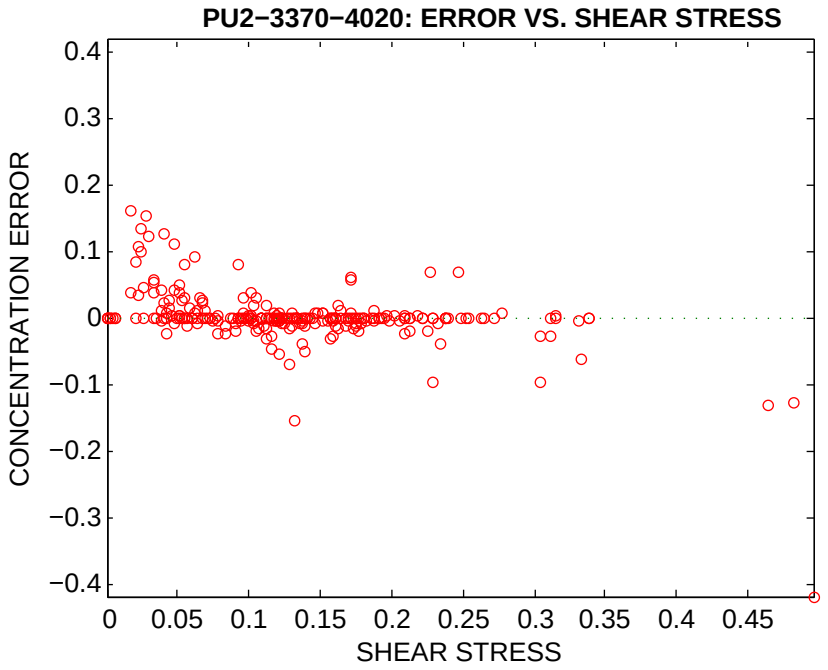


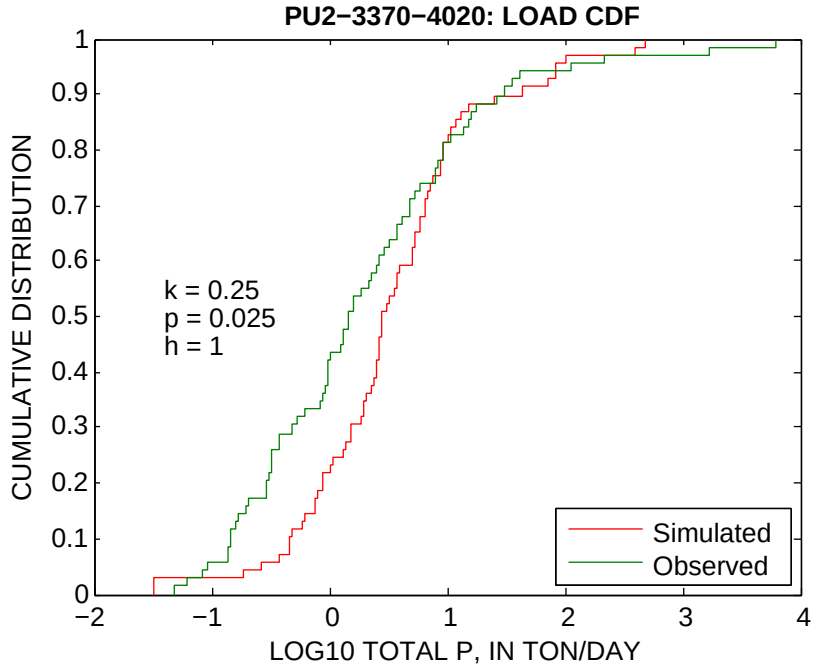


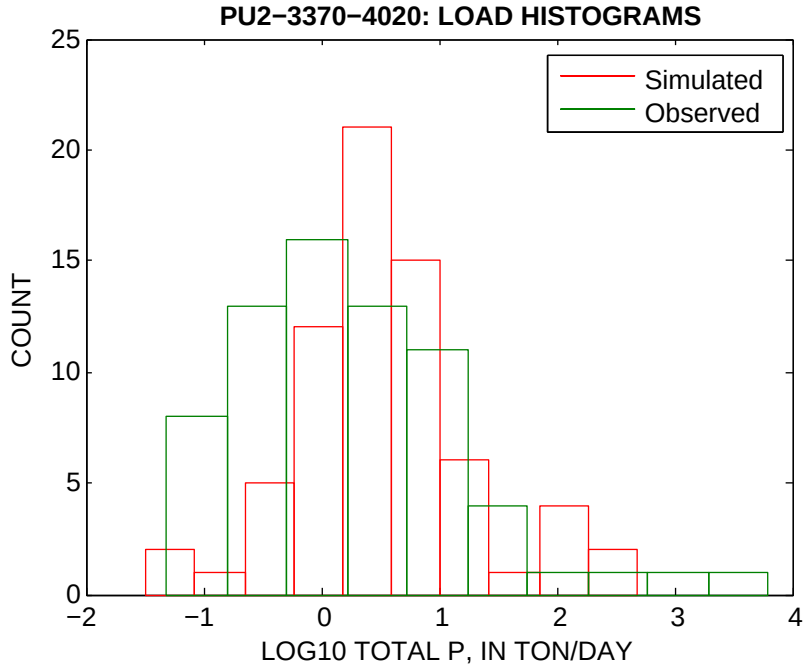


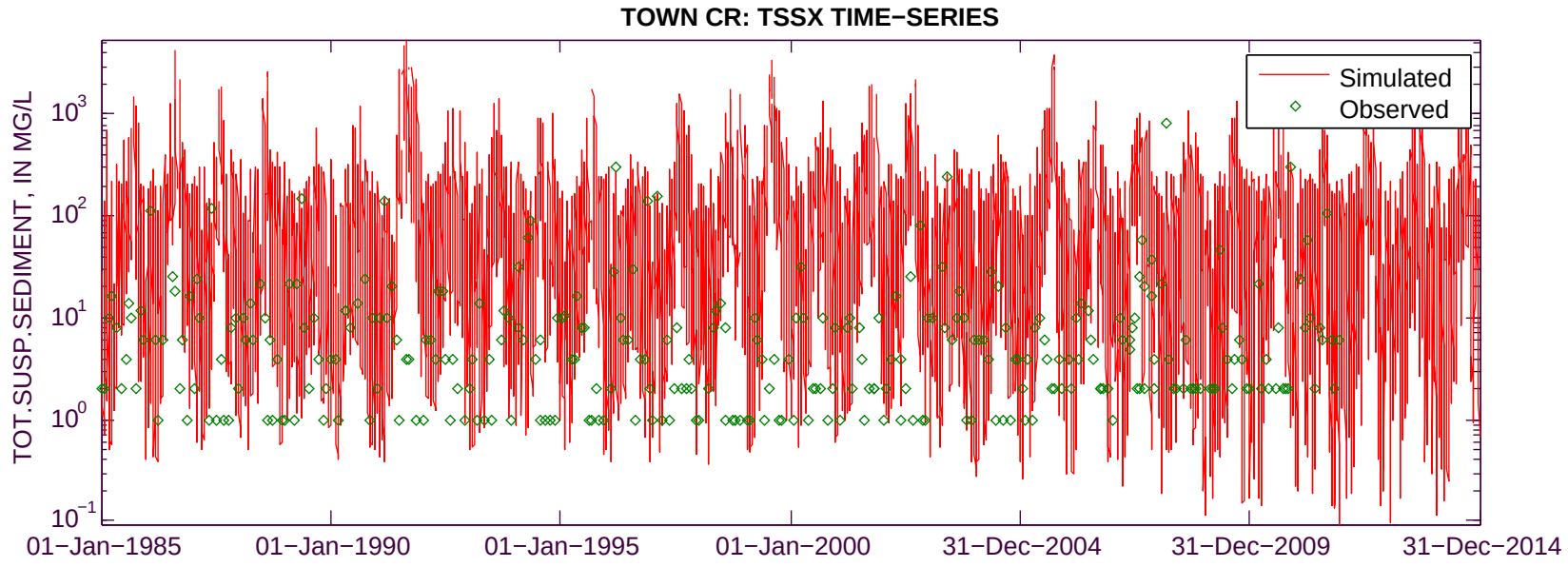
LOAD DATA
LOG10

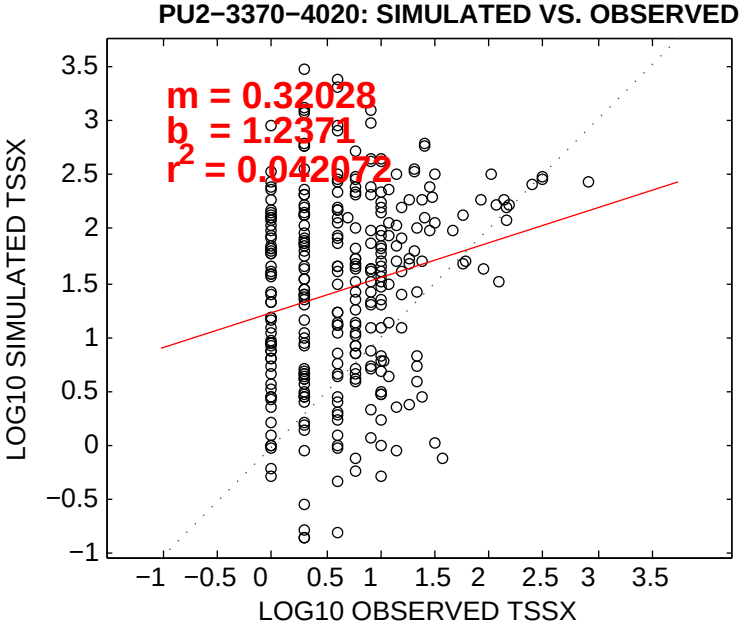


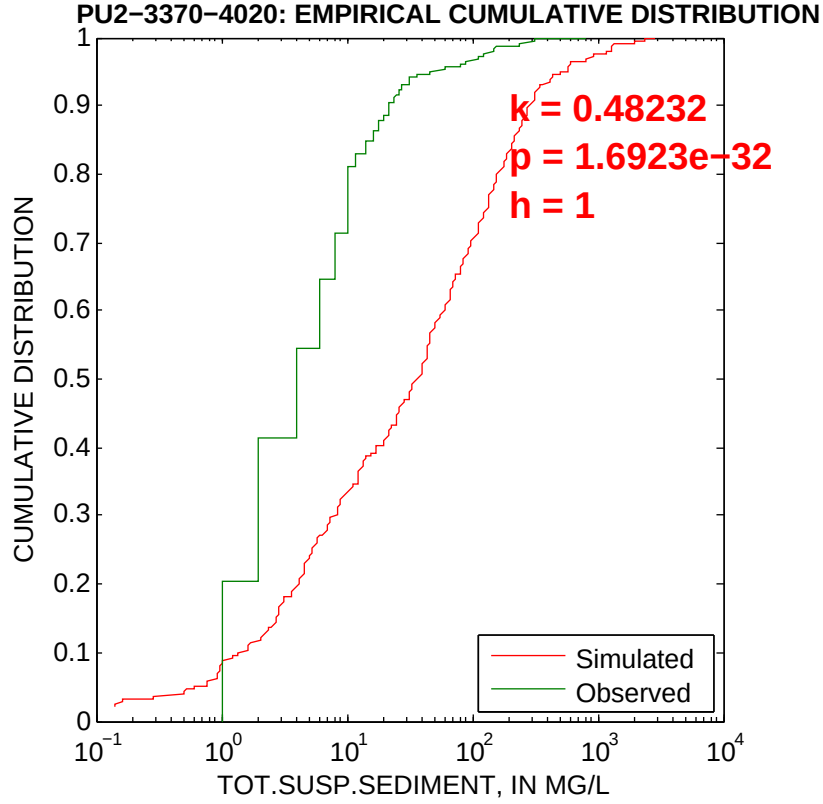












DATA SELECTION

scenario	file
P620171001WQ	TSSX.calib

plot: TSSX - total suspended ...

Dates: 1/1/1985 — 12/31/201

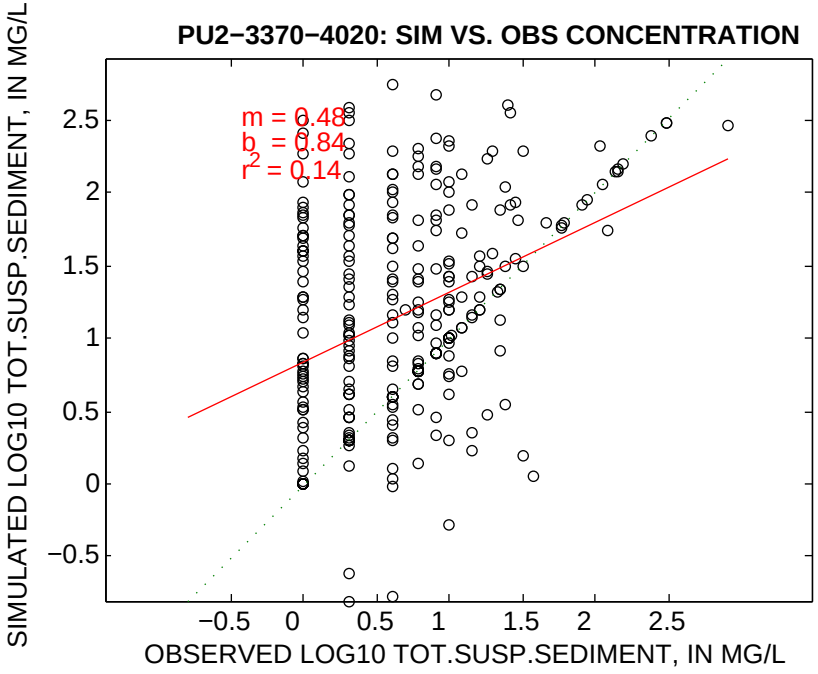
Drive	Directory	Observed
N/A	model	OBS20161101

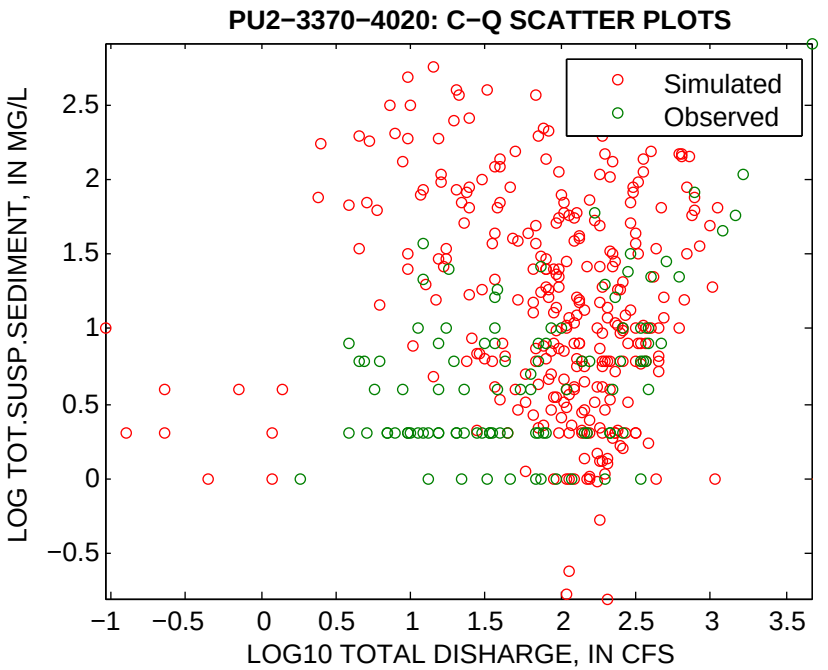
STATISTICS

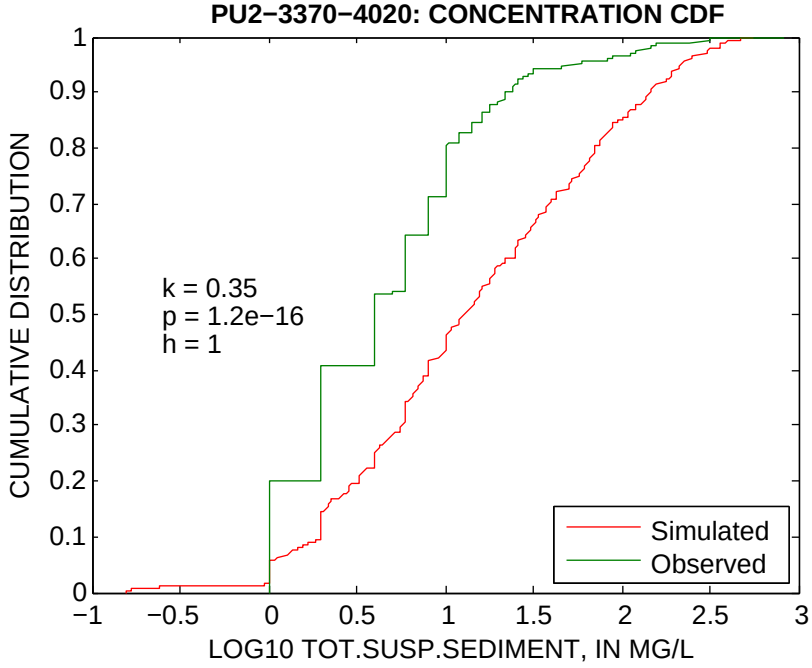
	n	observe	simulate
		311	305
min		1	0
		0	-0.849213
mean		15.6379	130.564
		0.677589	1.4541
media		4	37.09
		0.60206	1.595
max		820	2923.5
		2.91381	3.4659
varian		3300.49	92446
		0.309734	0.755186
JB		0.001	0.001
		0.001	0.032425
		ra	log
%		734.916	114.598
err.va		107351	1.47146
rel.std.err		32.5258	4.75073
mod.eff		-31.5258	-3.75073

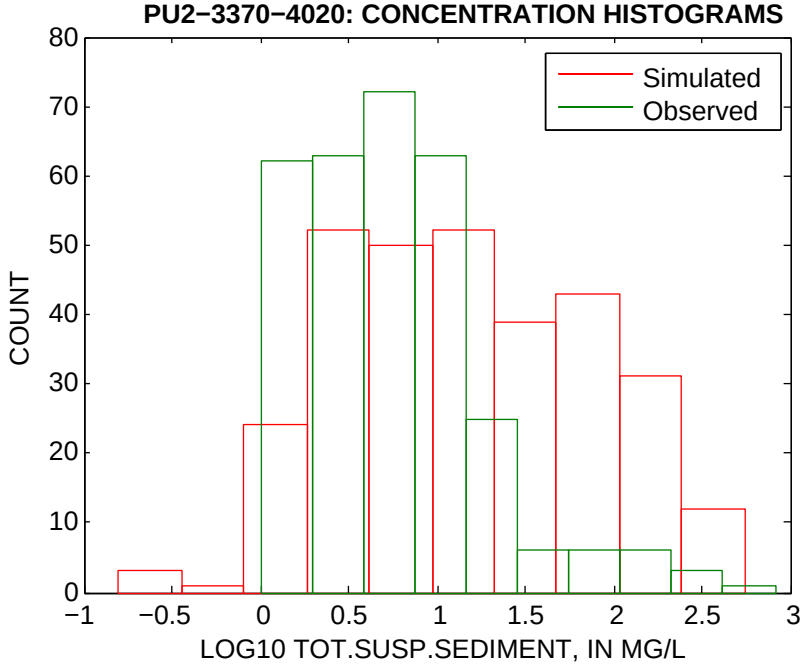
VERSION 2.1

ALL DATA
LOG10

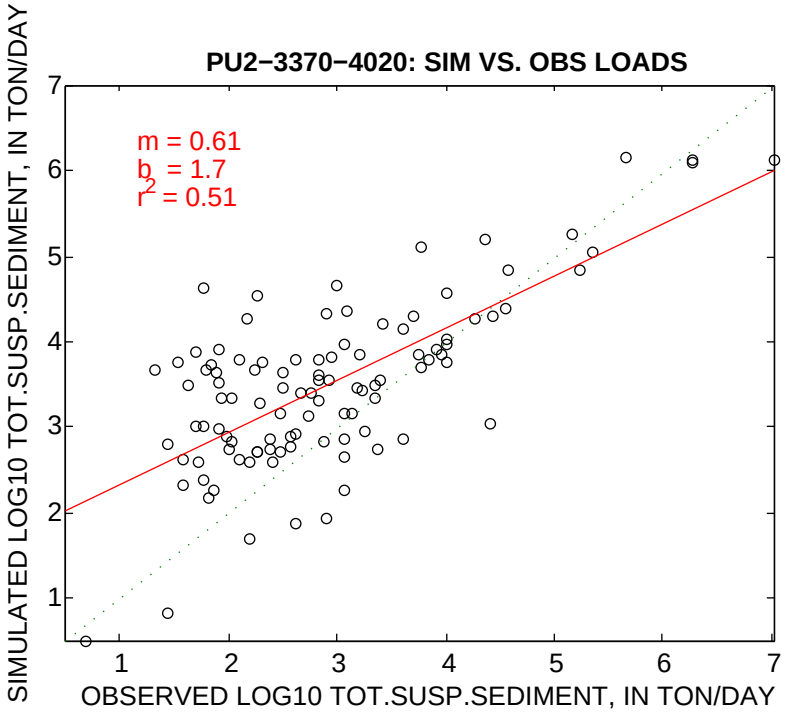


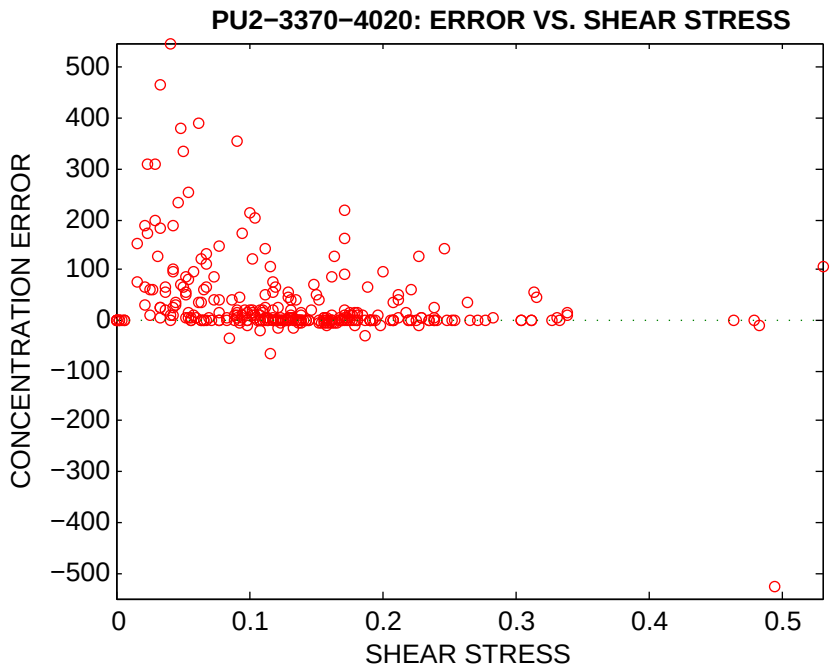


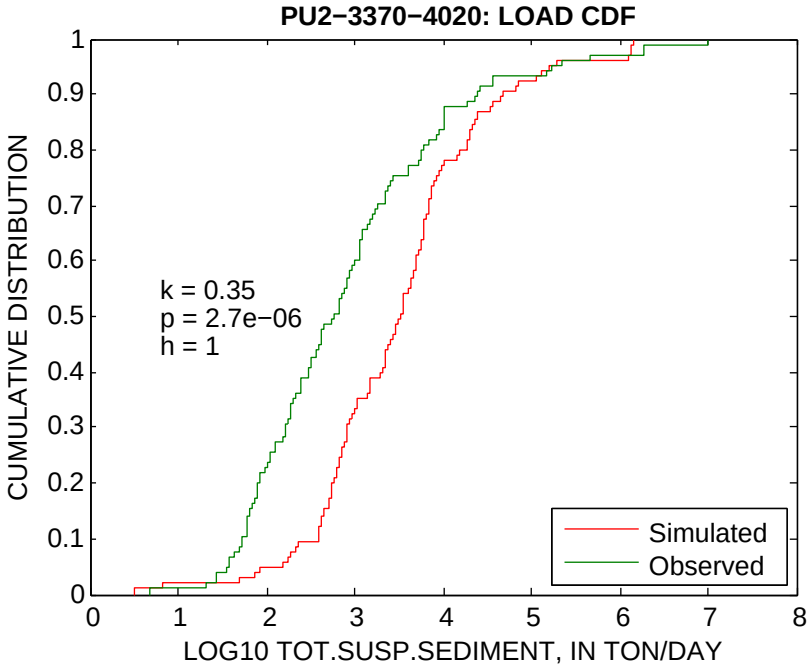


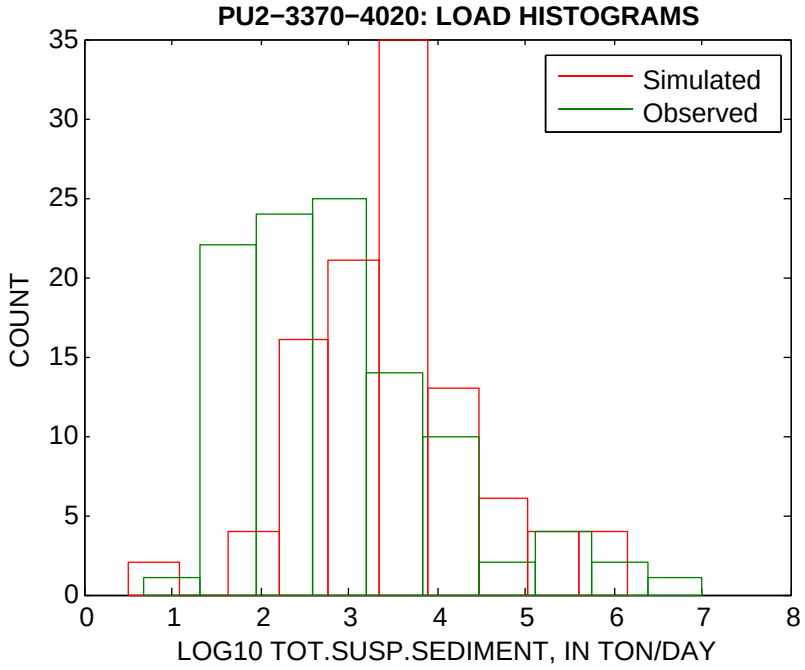


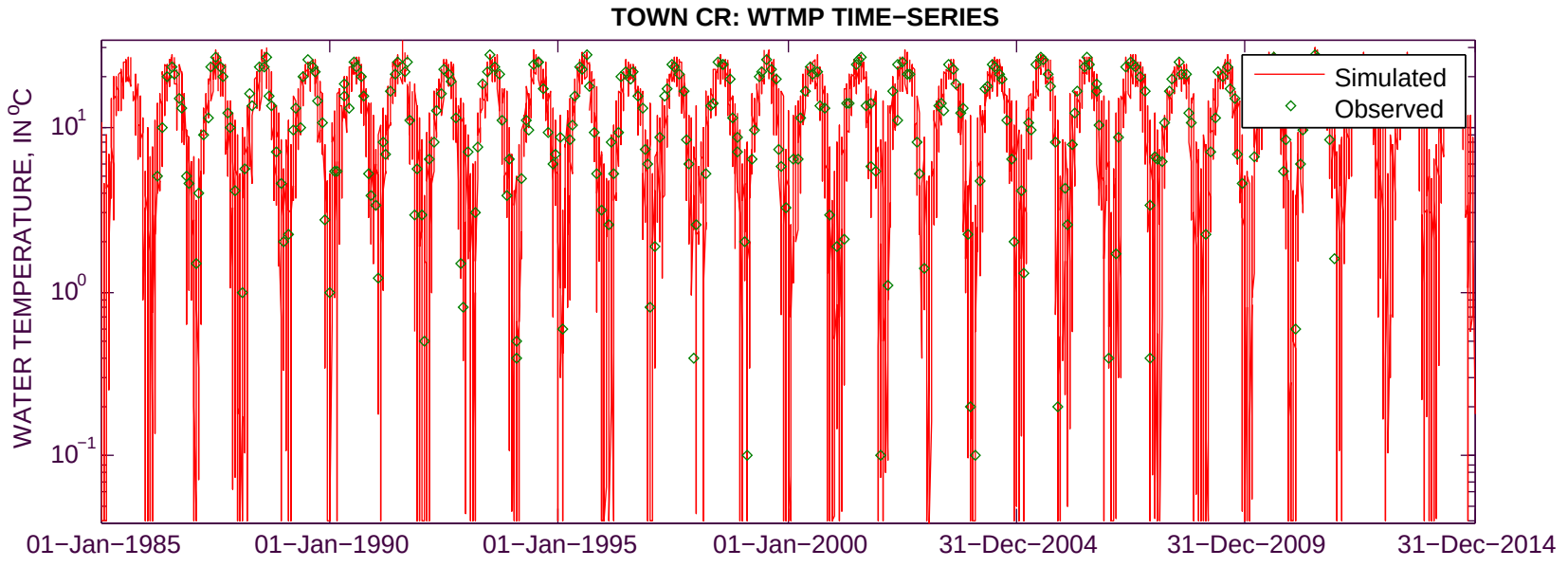
LOAD DATA
LOG10

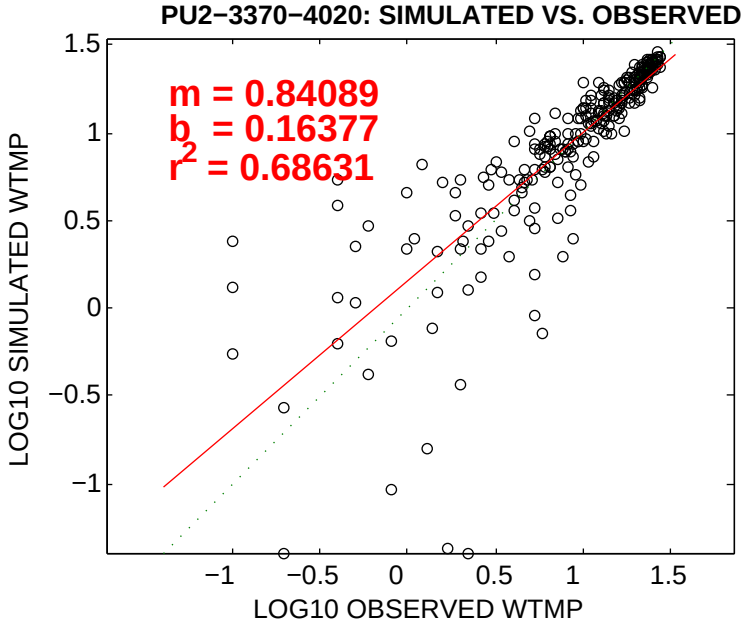


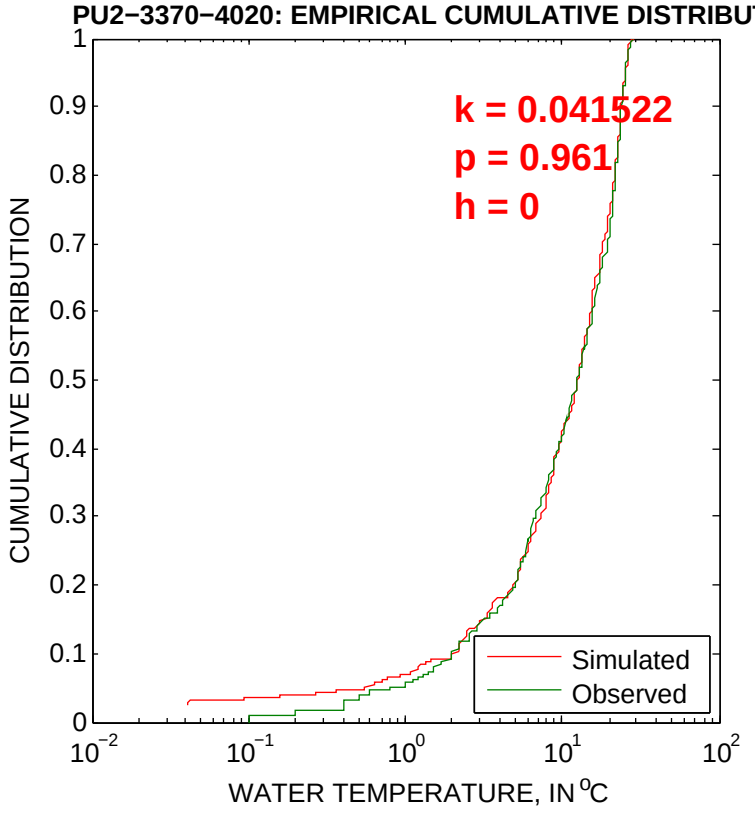












DATA SELECTION

scenario	file
P620171001WQ	WTMP.calib

plot: WTMP - water tempera...

Dates: 1/1/1985 – 12/31/201

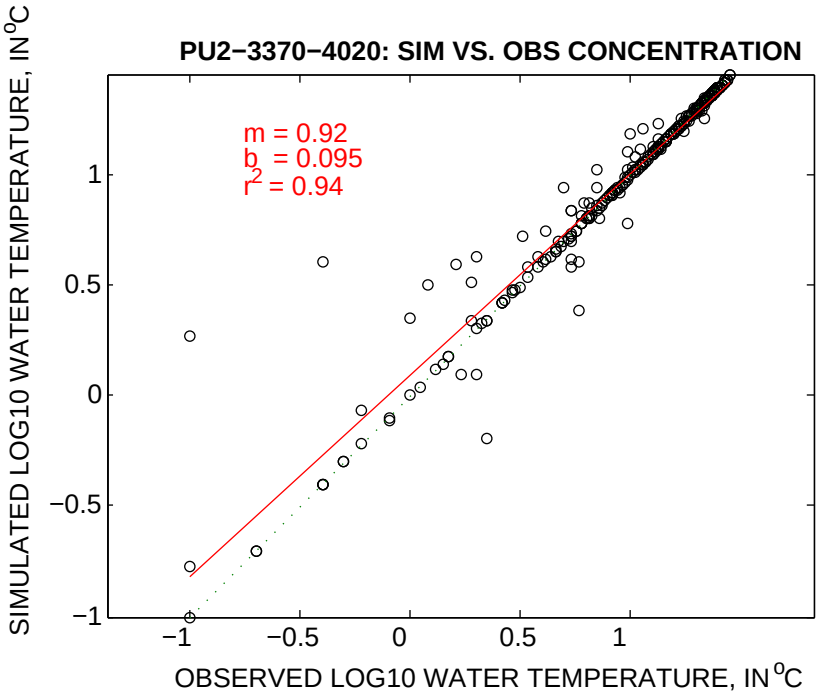
Drive	Directory	Observed
N/A	model	OBS20161101

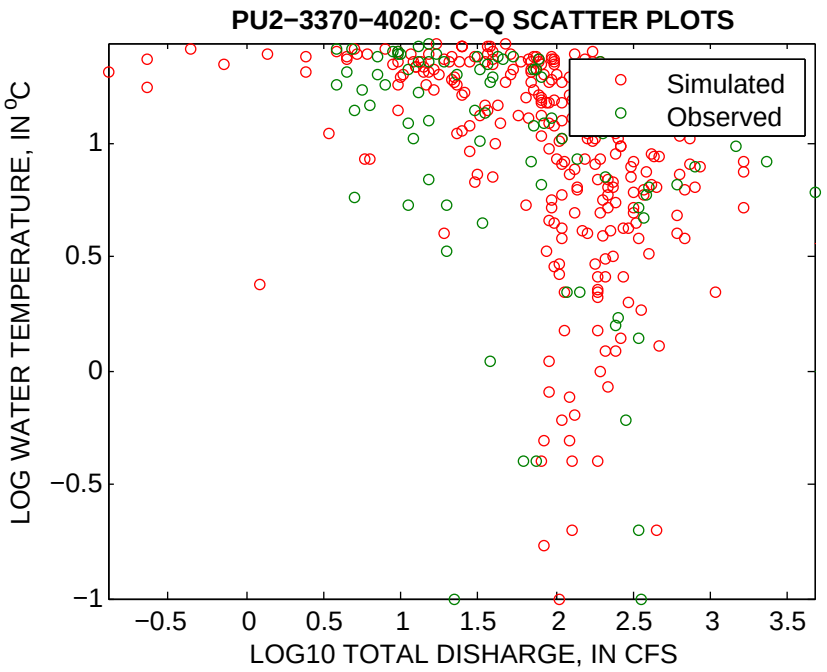
STATISTICS

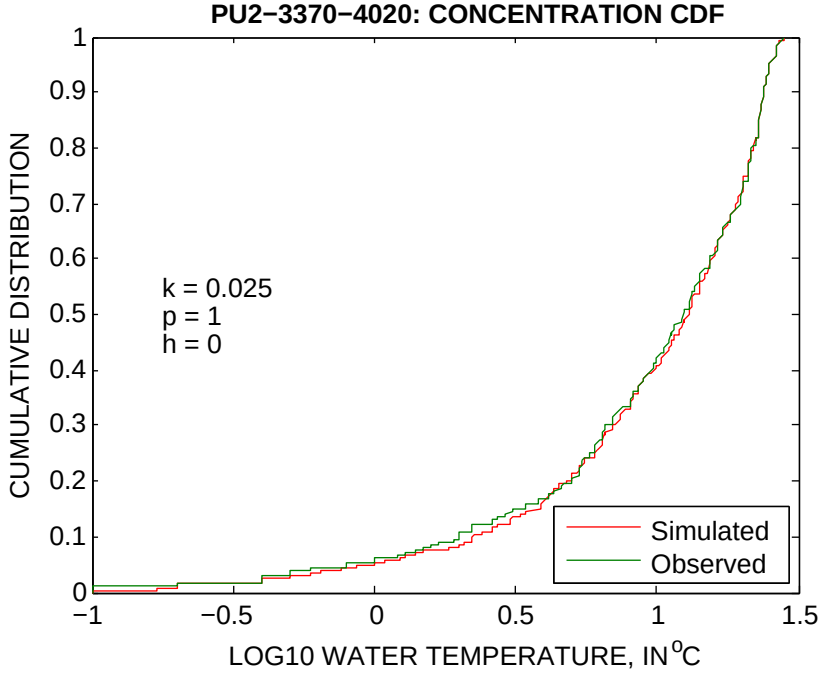
	n	observe	simulate
		289	283
min		0.1	0
		-1	-1.39752
mean		13.0261	12.8658
		0.950529	0.963062
media		12.59	12.547
		1.09691	1.1089
max		28	28.864
		1.44716	1.46036
varian		66.8256	65.3784
		0.234107	0.241197
JB		0.001861	0.002897
		0.001	0.001
		ra	log
%		-1.23016	1.31849
err.va		11.9696	0.081746
rel.std.err		0.179117	0.349183
mod.eff		0.820883	0.650817

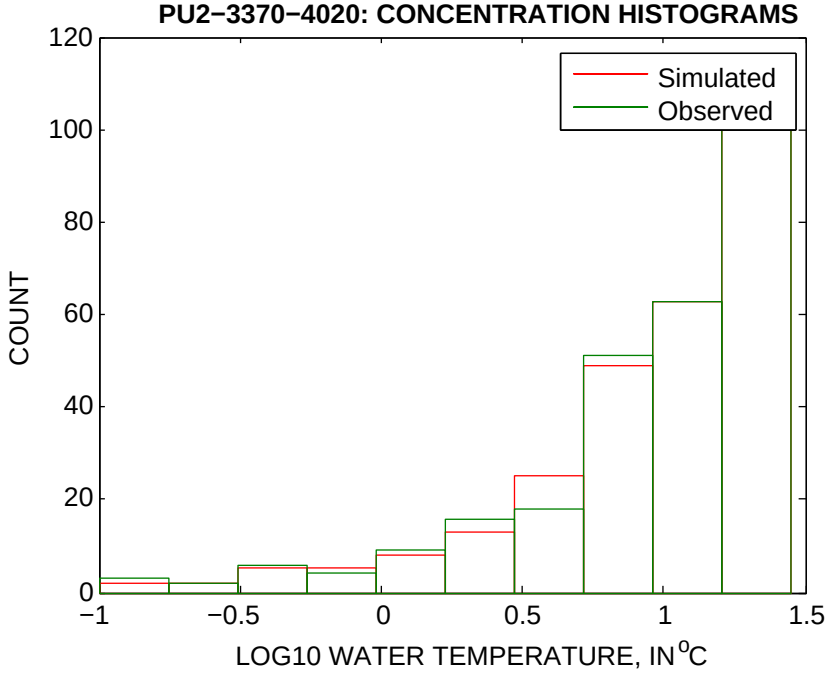
VERSION 2.1

ALL DATA
LOG10

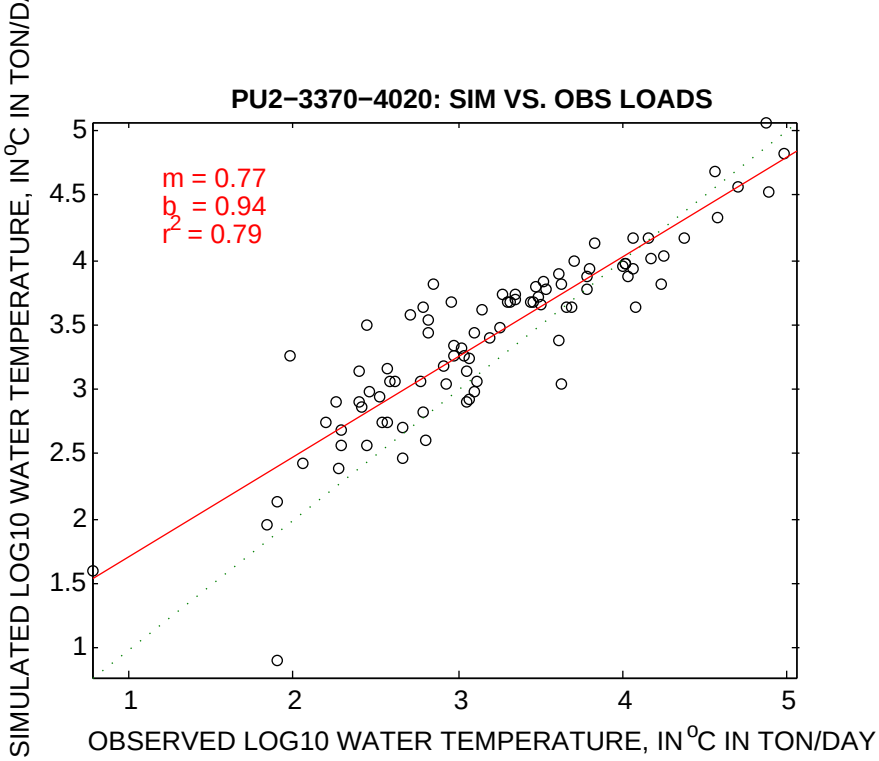


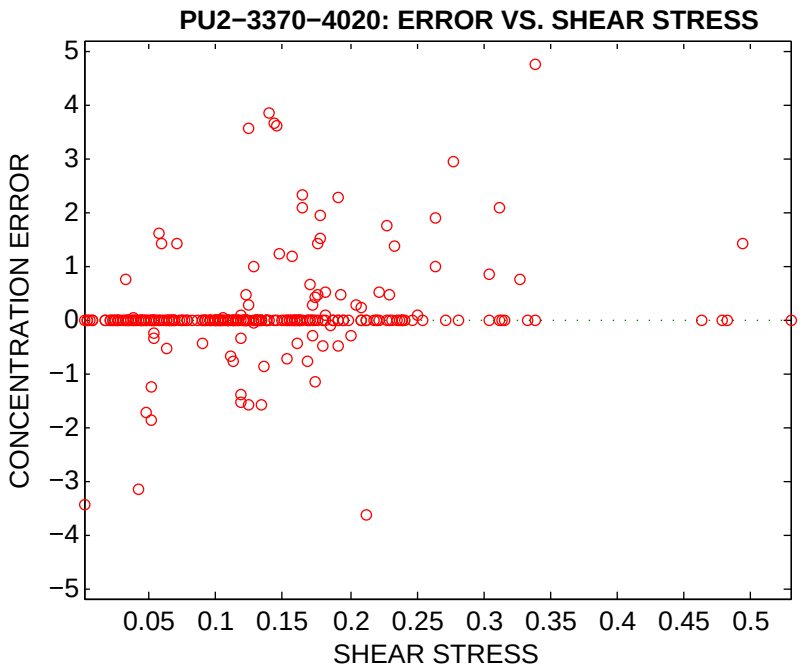


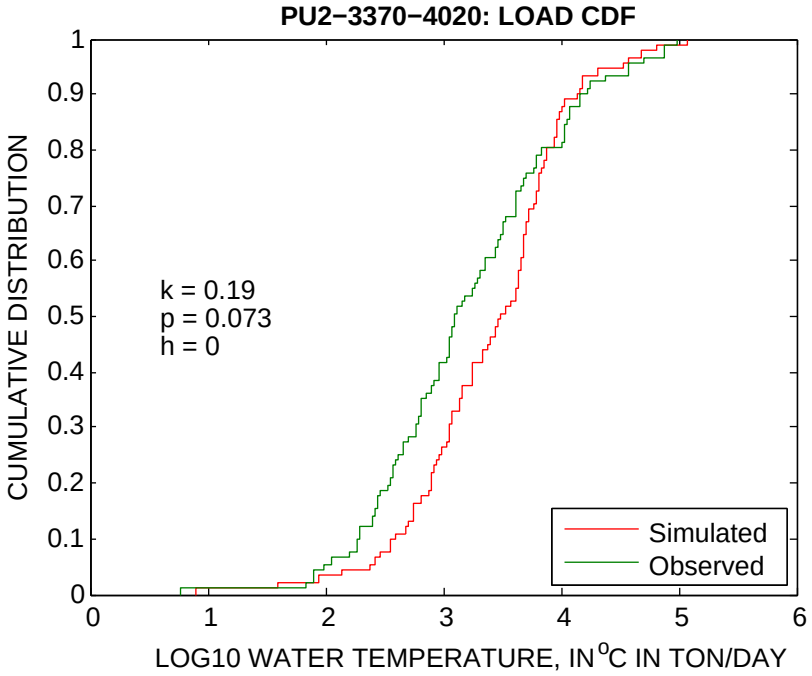


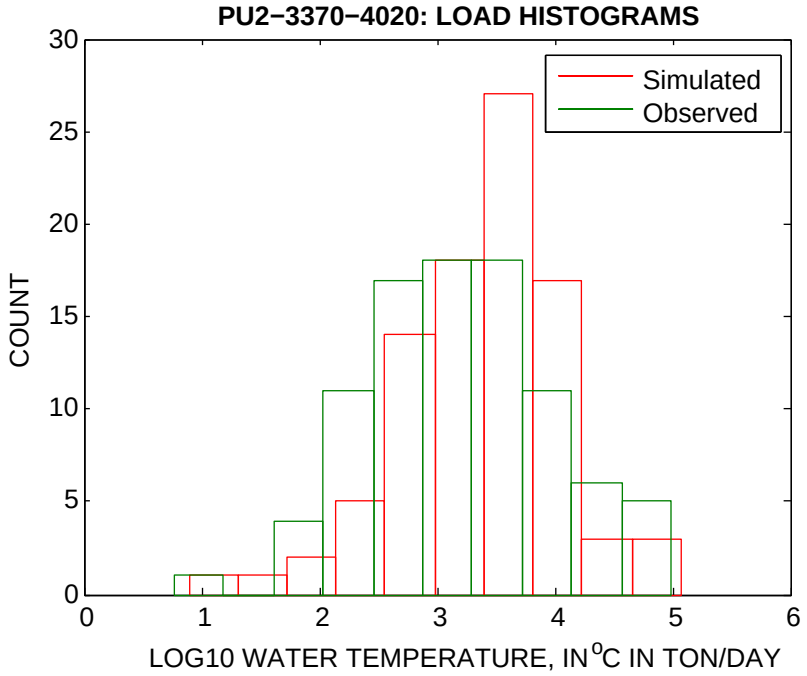


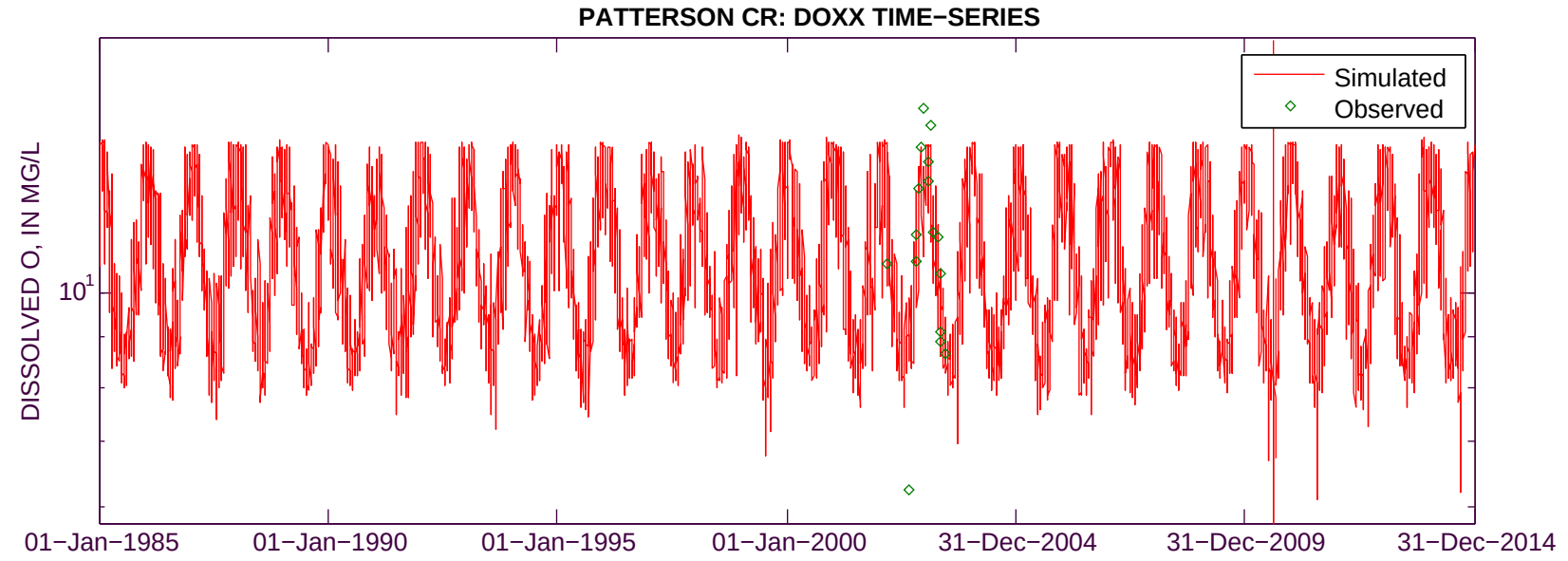
LOAD DATA
LOG10

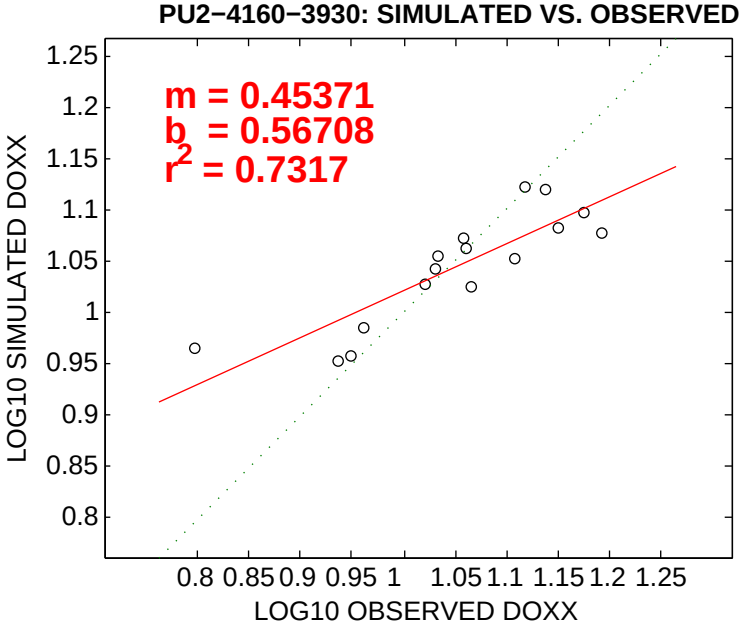


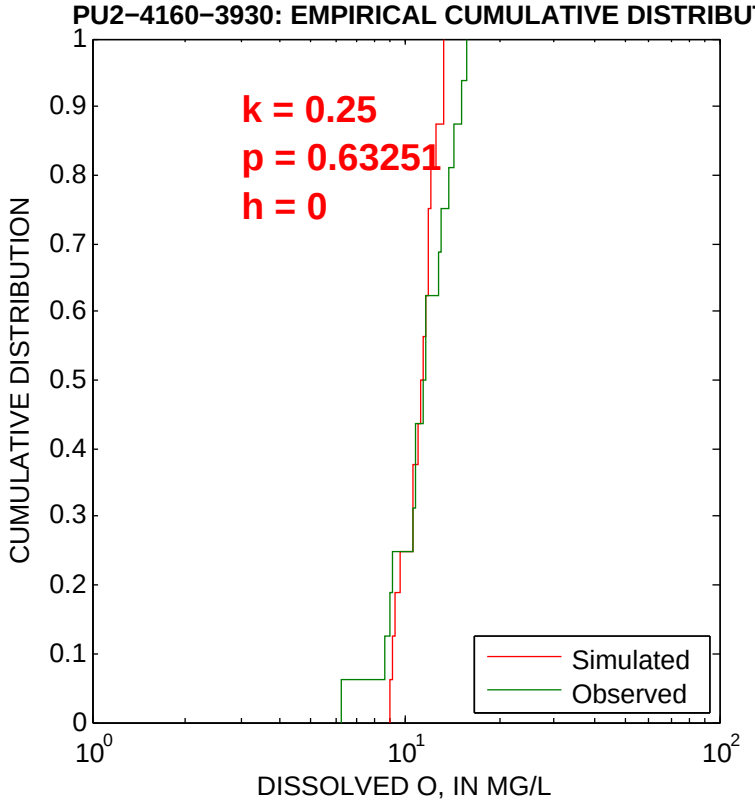












DATA SELECTION

scenario: P620171001WQ | file: DOXX.calib

plot: DOXX - dissolved oxygen

Dates: 1/1/1985 – 12/31/201

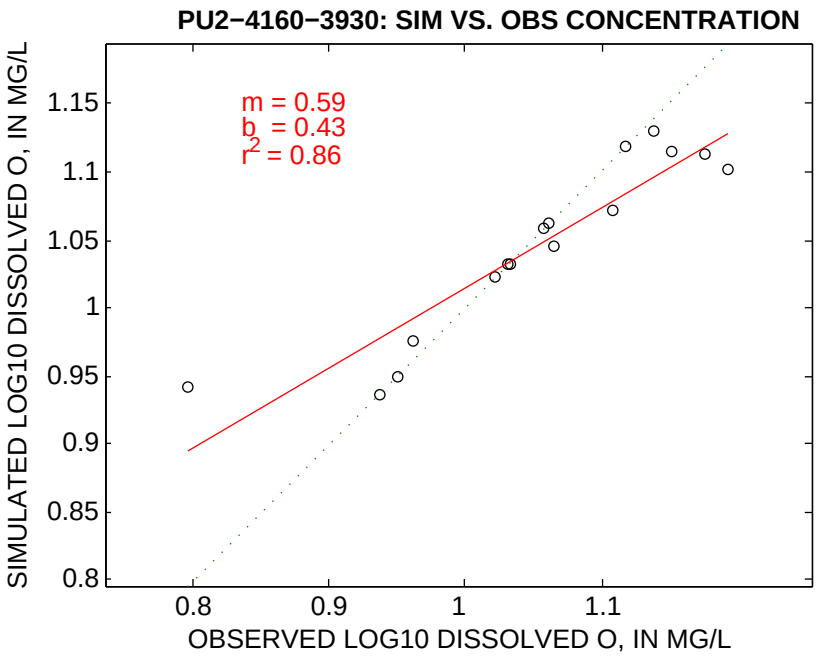
Drive | Directory: N/A | model | Observed: OBS20161101

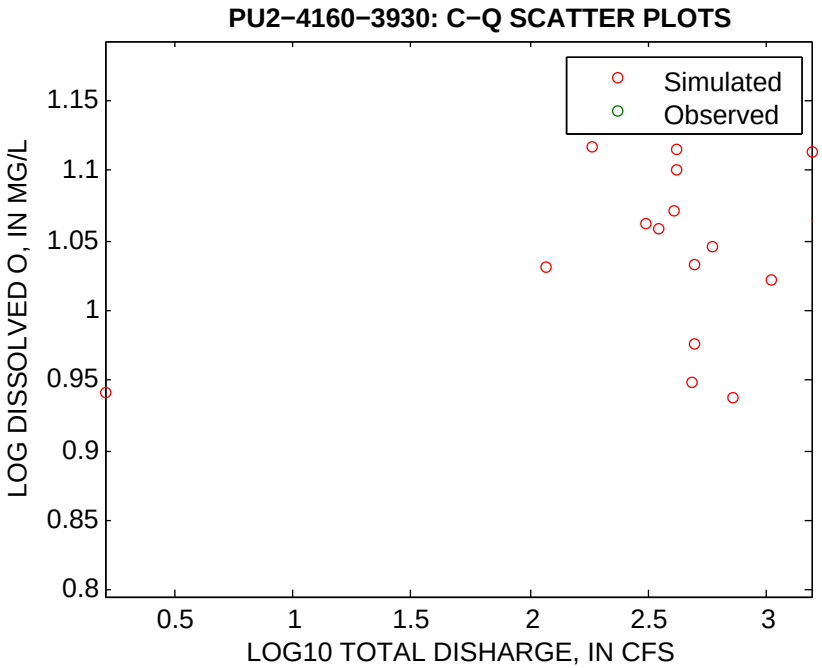
STATISTICS

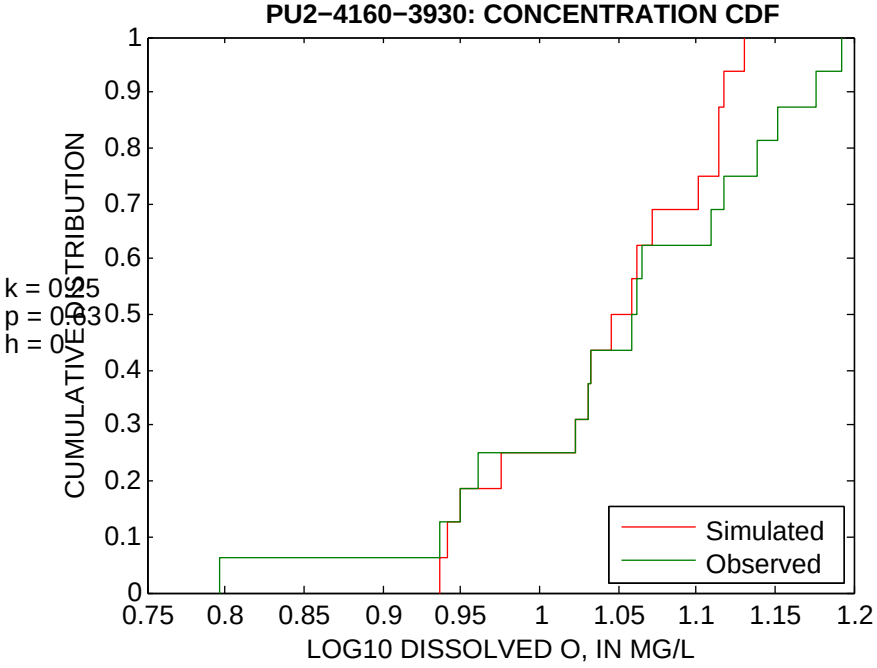
n	16	16
	observe	simulate
min	6.25	8.9605
	0.79588	0.952332
mean	11.5094	11.1366
	1.05019	1.04356
media	11.48	11.302
	1.05994	1.05315
max	15.6	13.286
	1.19312	1.12339
varian	6.4103	1.88963
	0.0106817	0.00300515
JB	0.5	0.5
	0.143215	0.425378
	ra	log
%	-3.23899	-0.631179
err.va	2.54359	0.00404092
rel.std.err	0.396798	0.378301
mod.eff	0.603202	0.621699

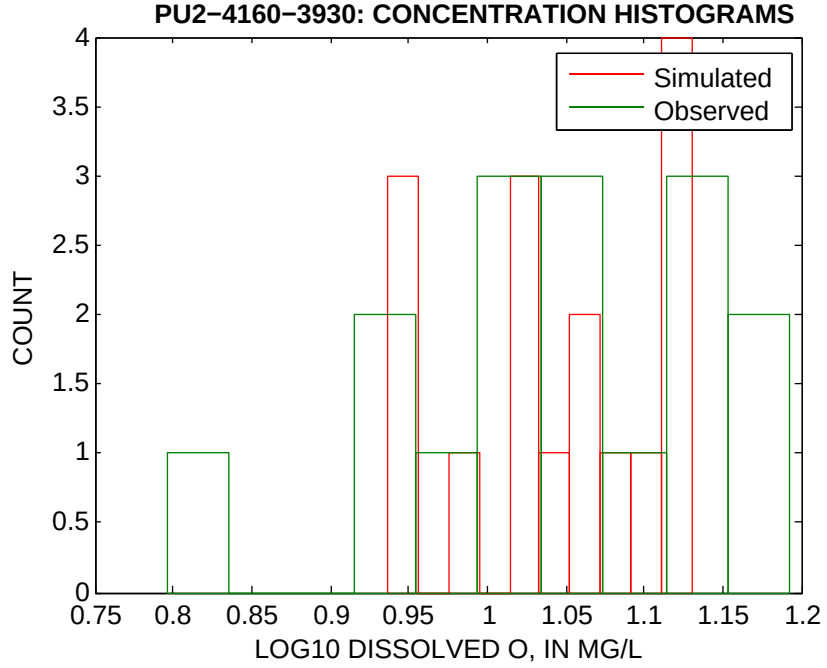
VERSION 2.1

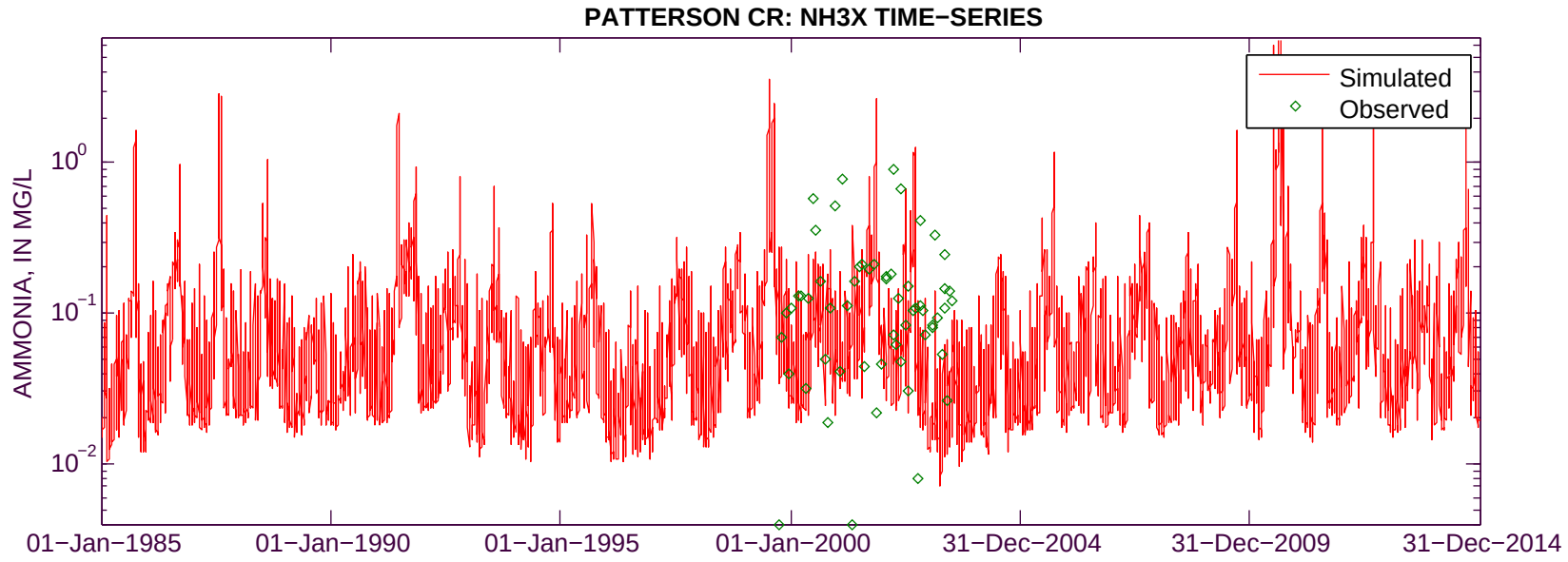
ALL DATA
LOG10

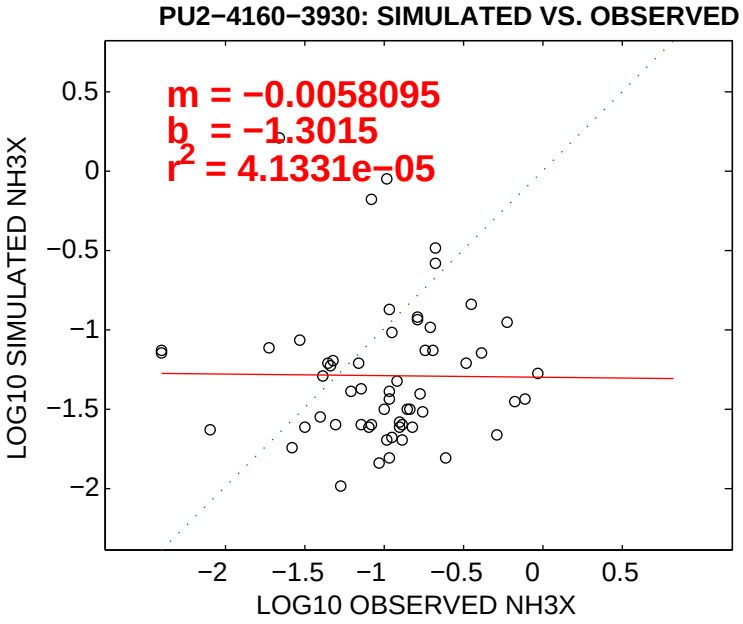


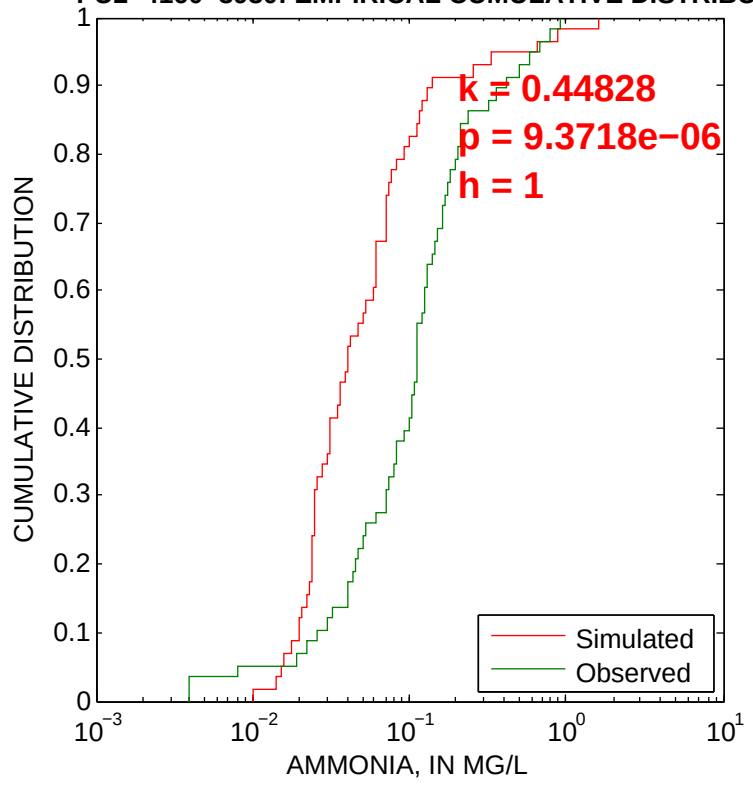












DATA SELECTION

scenario: P620171001WQ | file: NH3X.calib

plot: NH3X - ammonia

Dates: 1/1/1985 – 12/31/201

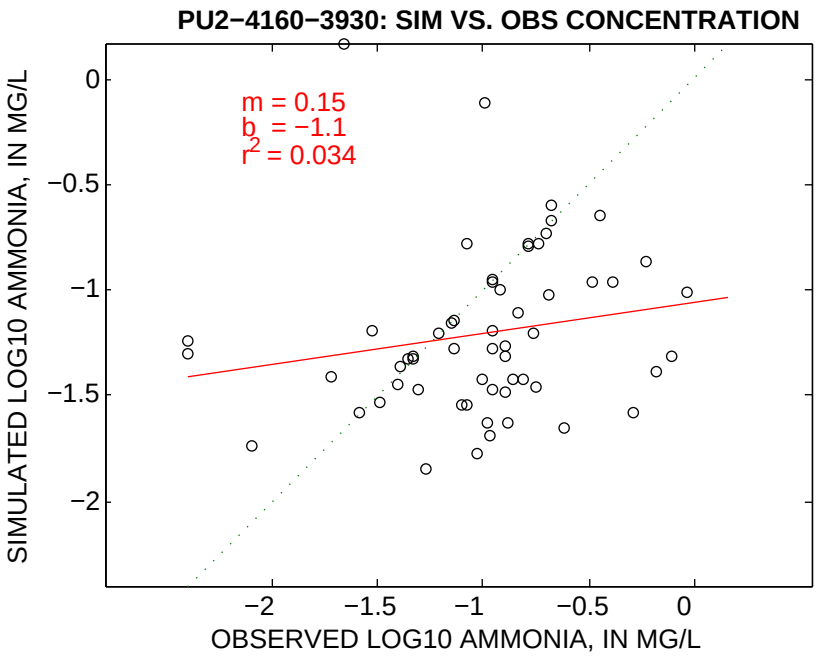
Drive: N/A | Directory: model | Observed: OBS20161101

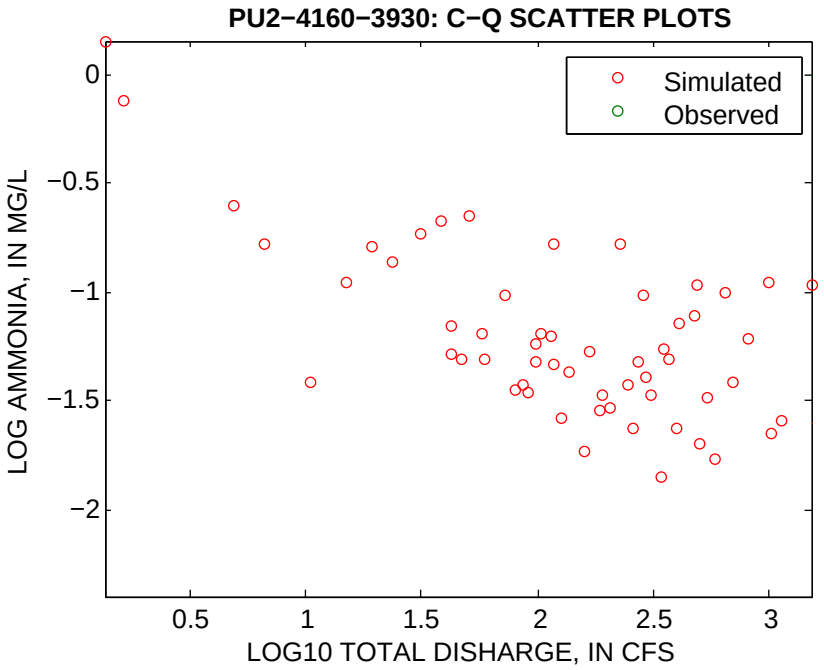
STATISTICS

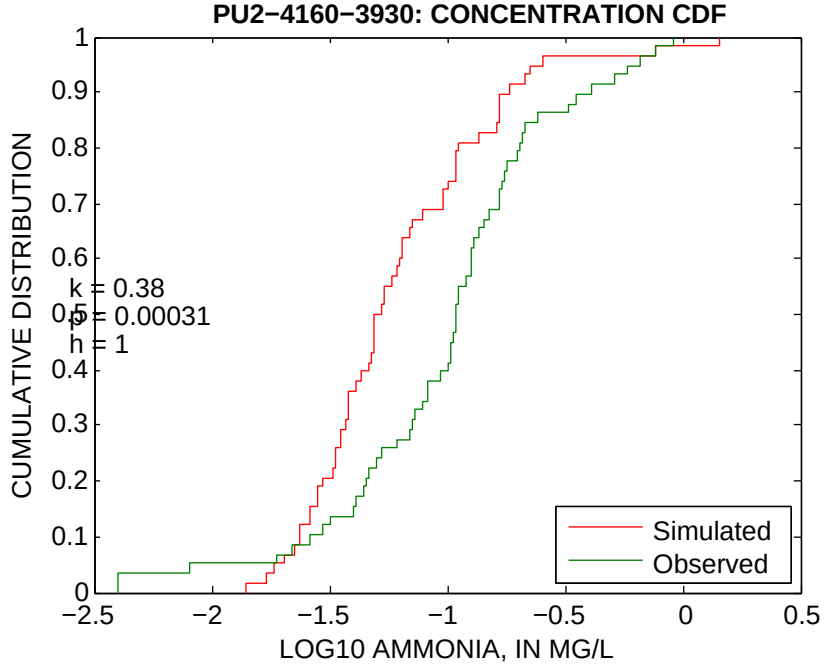
n	58	58
	observe	simulate
min	0.004	0.010116
	-2.39794	-1.99499
mean	0.165448	0.109281
	-1.00478	-1.29567
media	0.11	0.0401655
	-0.958607	-1.39616
max	0.916	1.6082
	-0.0381045	0.20634
varian	0.035152	0.0605399
	0.232919	0.1902
JB	0.001	0.001
	0.024450	0.001364
	ra	log
%	-33.9483	28.9501
err.va	0.107961	0.511924
rel.std.err	3.07126	2.19787
mod.eff	-2.07126	-1.19787

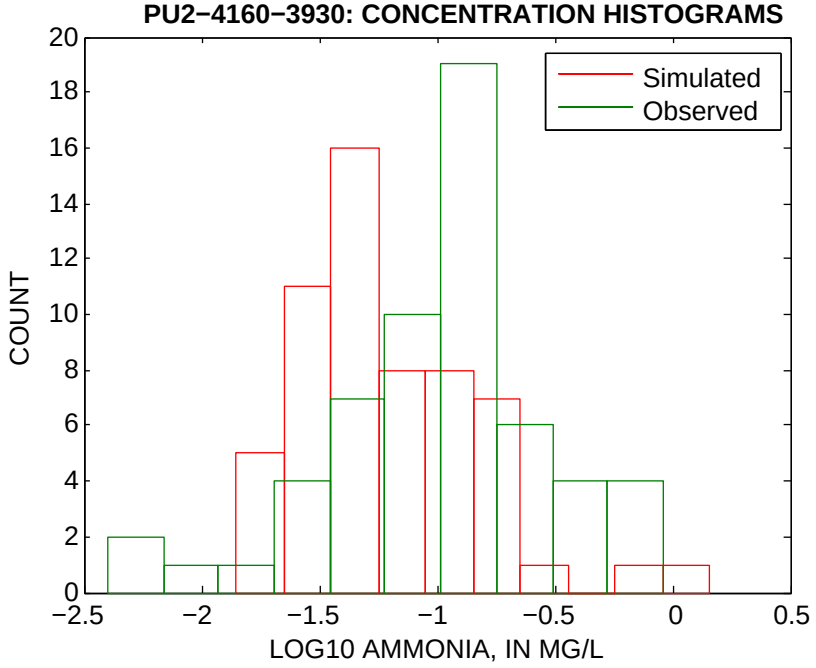
VERSION 2.1

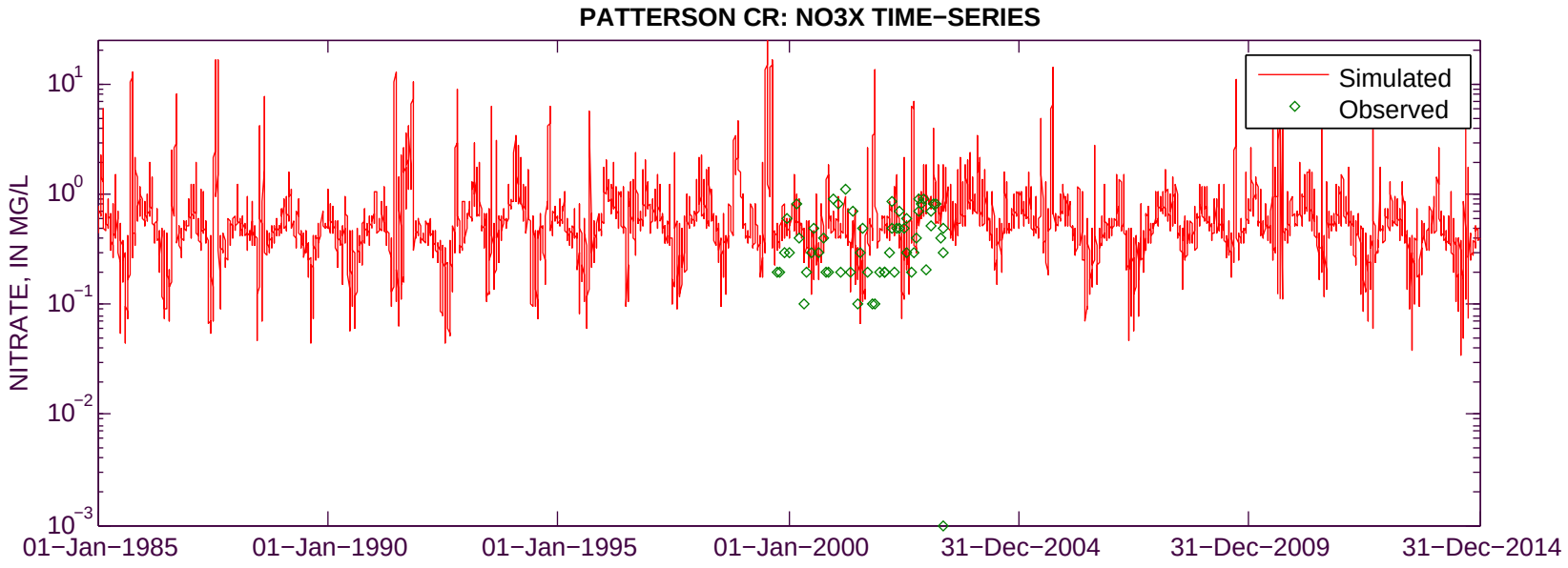
ALL DATA
LOG10

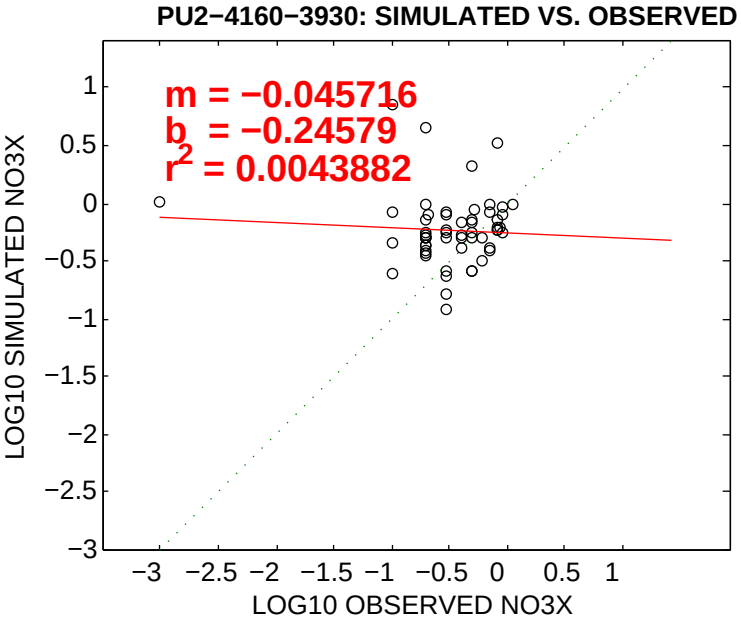


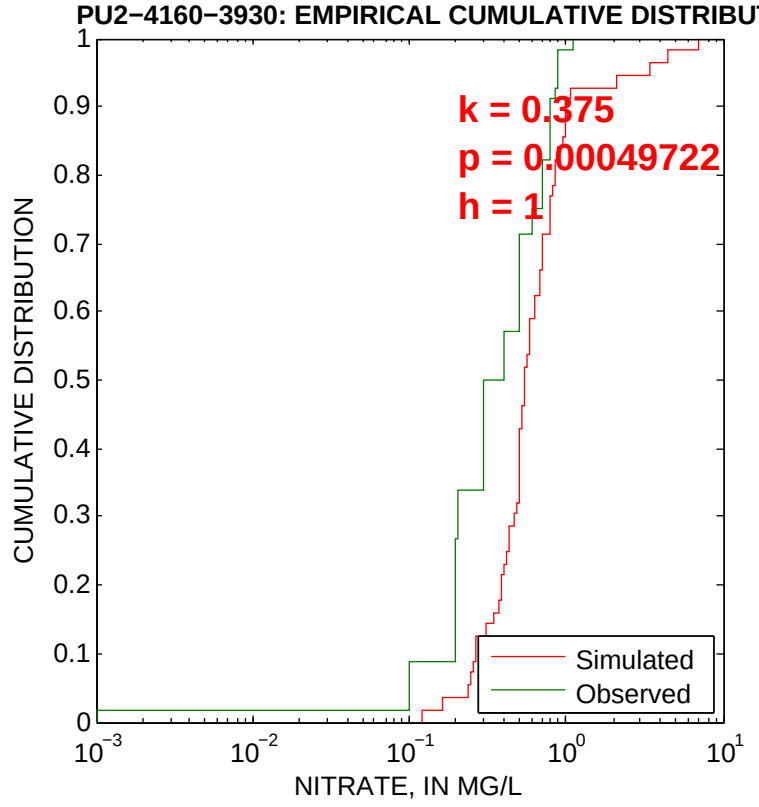












DATA SELECTION

scenario: P620171001WQ | file: NO3X.calib

plot: NO3X - nitrate

Dates: 1/1/1985 – 12/31/201

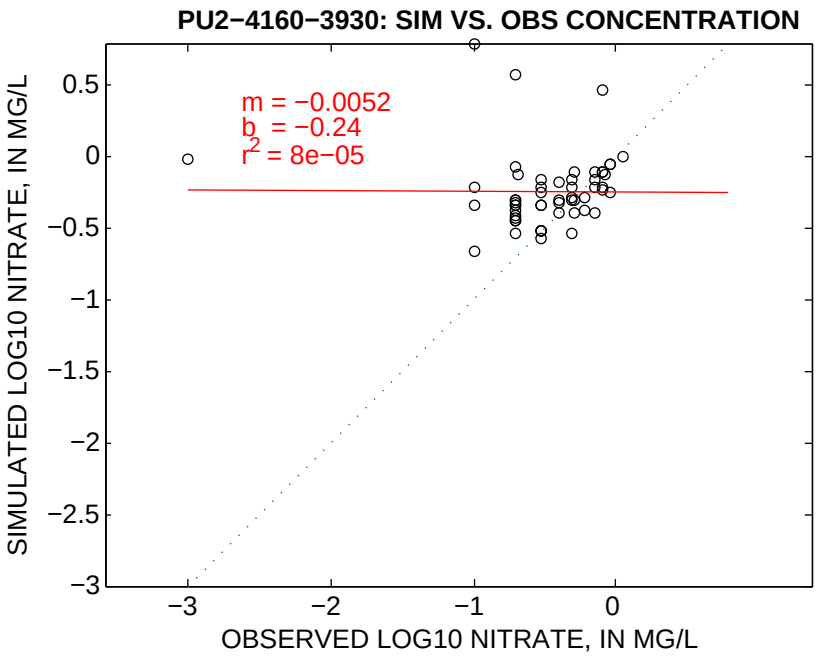
Drive: N/A | Directory: model | Observed: OBS20161101

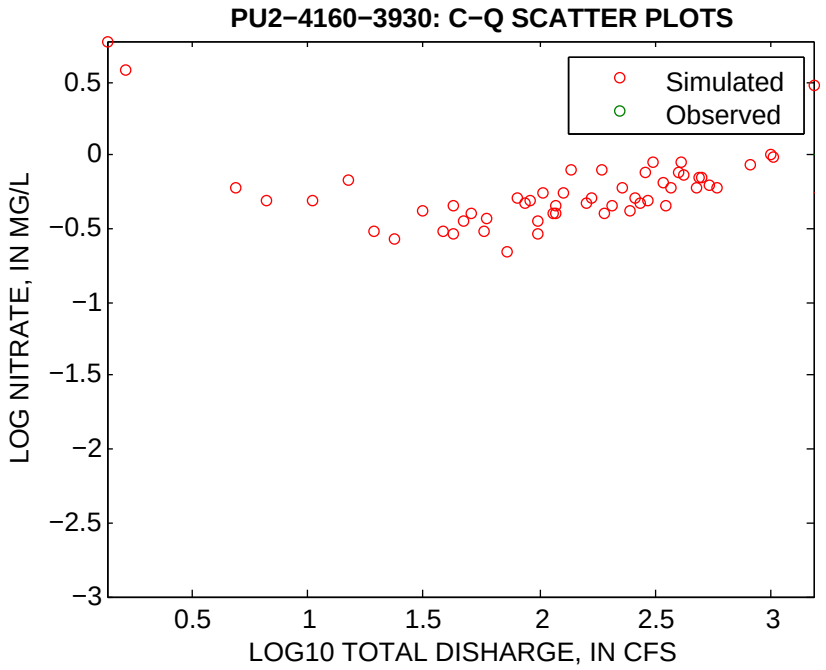
STATISTICS

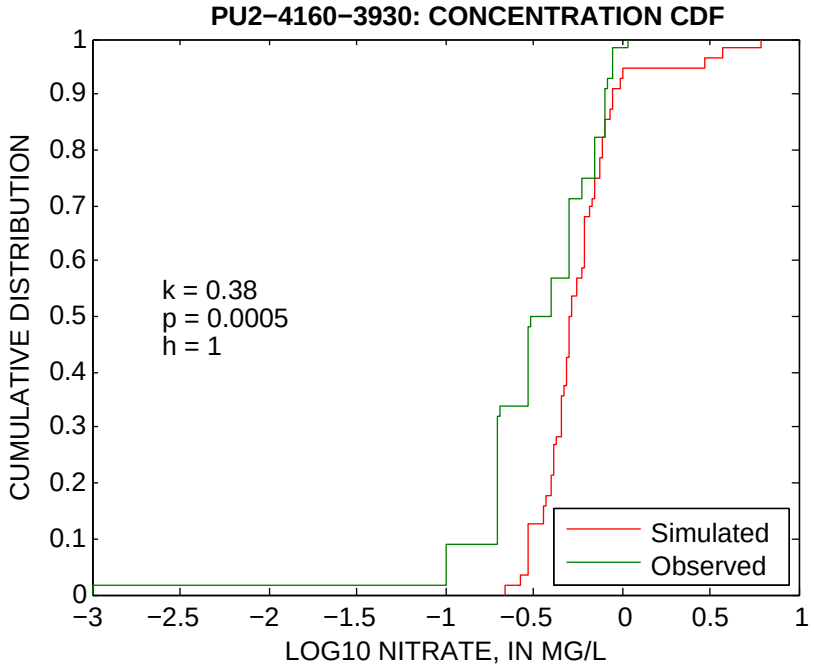
	n	56	56
		observe	simulate
min		0.001	0.12162
		-3	-0.914995
mean		0.431571	0.832146
		-0.485279	-0.223608
media		0.3505	0.55056
		-0.459687	-0.259197
max		1.1	7.063
		0.0413927	0.848989
varian		0.0703873	1.20805
		0.194274	0.0925281
JB		0.062242	0.001
		0.001	0.001067
		ra	log
%		92.8178	-53.9218
err.va		1.48452	0.374281
rel.std.err		21.0908	1.92657
mod.eff		-20.0908	-0.926569

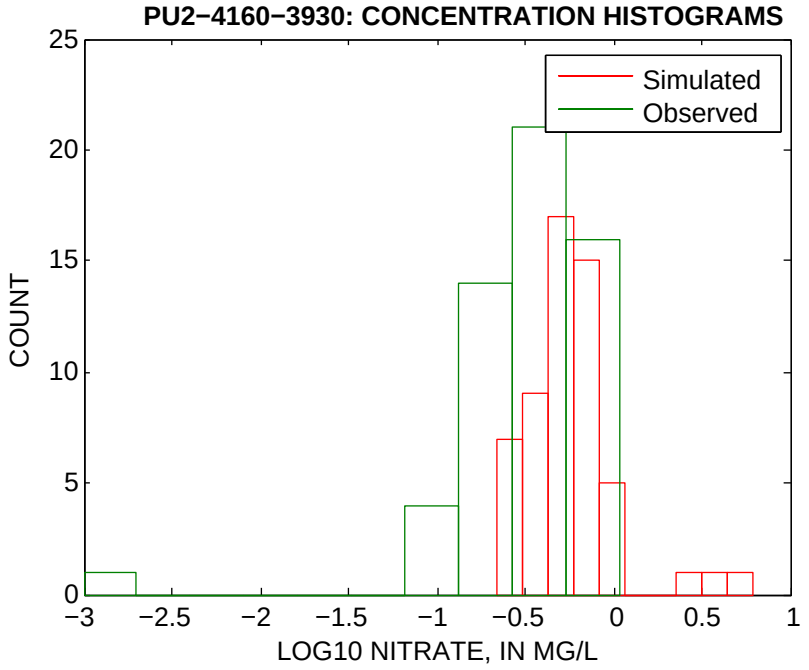
VERSION 2.1

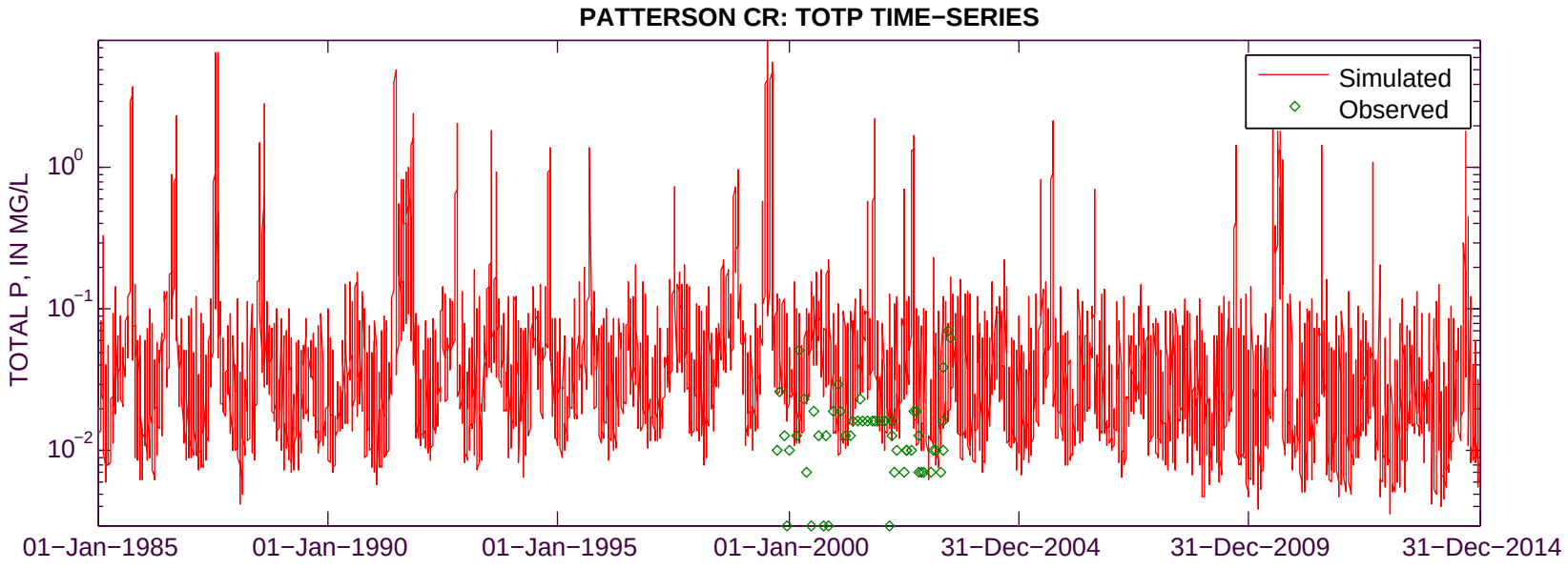
ALL DATA
LOG10

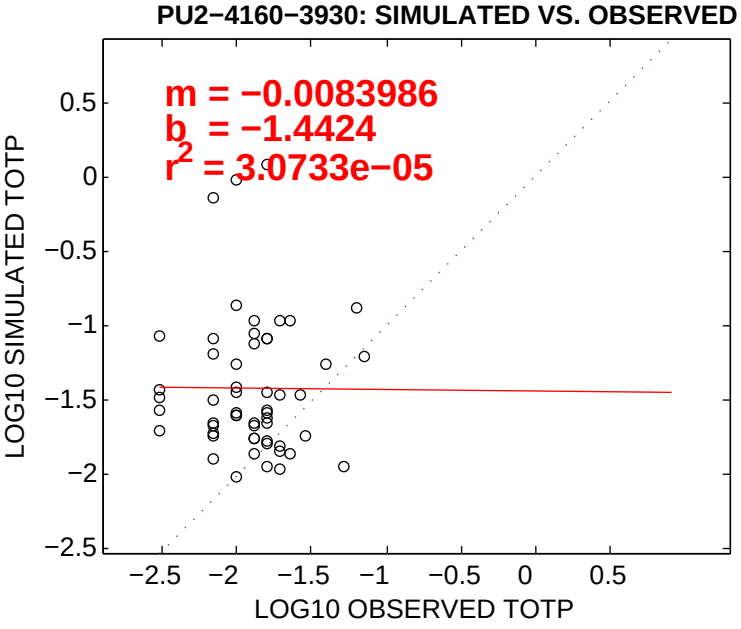


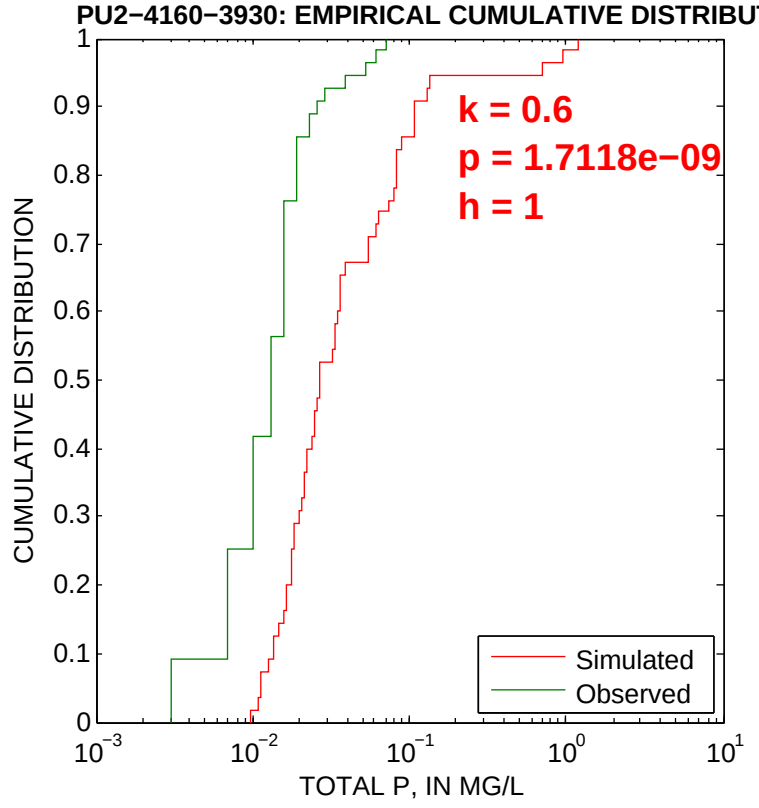


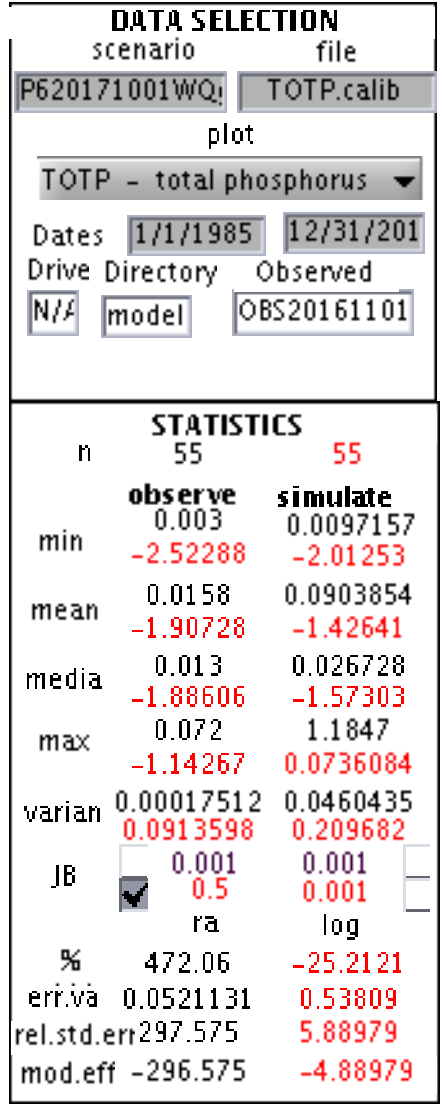





PATTERSON CR: TOTP TIME-SERIES
Simulated
Observed
TOTAL P, IN MG/L
10^{0}
10^{-1}
10^{-2}
01-Jan-1985
01-Jan-1990
01-Jan-1995
01-Jan-2000
31-Dec-2004
31-Dec-2009
31-Dec-2014

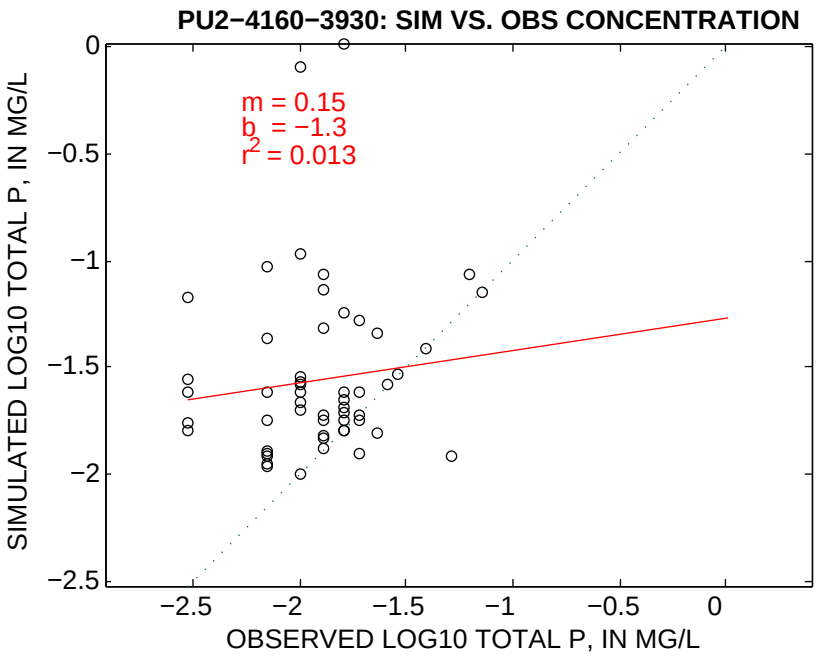

PU2-4160-3930: SIMULATED VS. OBSERVED
m = -0.0083986
b = -1.4424
r^2 = 3.0733e-05
LOG10 SIMULATED TOTP
LOG10 OBSERVED TOTP
0.5
0
-0.5
-1
-1.5
-2
-2.5

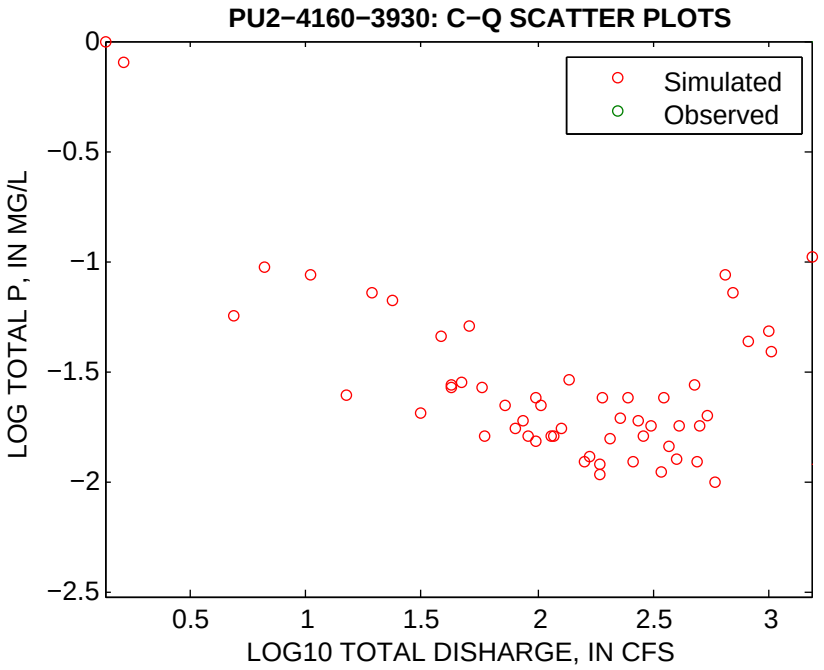

PU2-4160-3930: EMPIRICAL CUMULATIVE DISTRIBUTION
k = 0.6
p = 1.7118e-09
h = 1
Simulated
Observed
CUMULATIVE DISTRIBUTION
TOTAL P, IN MG/L
1
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
10^{-3}
10^{-2}
10^{-1}
10^{0}
10^{1}

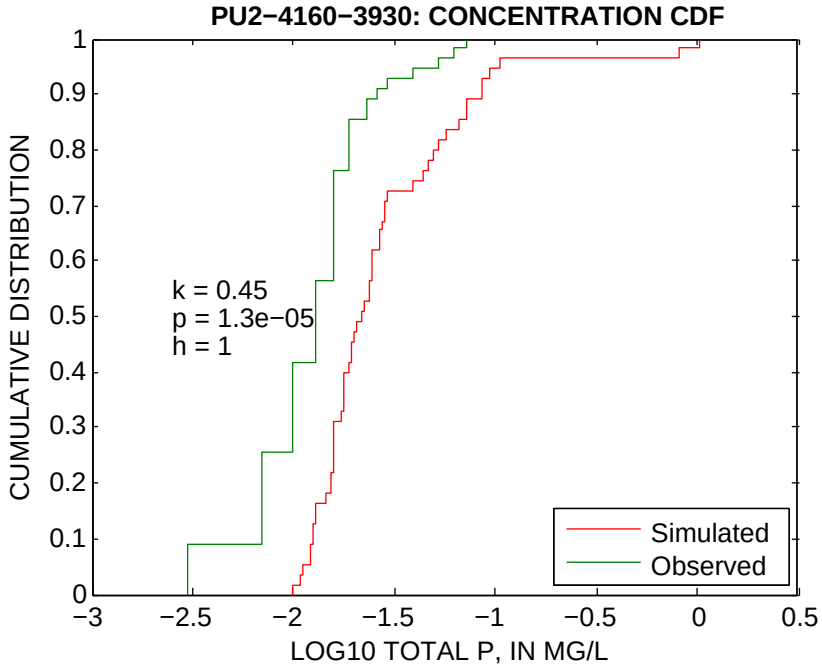

DATA SELECTION
scenario
file
P620171001WQ
TOTP.calib
plot
TOTP - total phosphorus
Dates
1/1/1985
12/31/201
Drive
Directory
Observed
N/A
model
OBS20161101
STATISTICS
n
55
55
observe
simulate
min
0.003
-2.52288
0.0097157
-2.01253
mean
0.0158
-1.90728
0.0903854
-1.42641
media
0.013
-1.88606
0.026728
-1.57303
max
0.072
-1.14267
1.1847
0.0736084
varian
0.00017512
0.0913598
0.0460435
0.209682
JB
0.001
0.5
0.001
0.001
ra
log
%
472.06
-25.2121
err.va
0.0521131
0.53809
rel.std.err
297.575
5.88979
mod.eff
-296.575
-4.88979

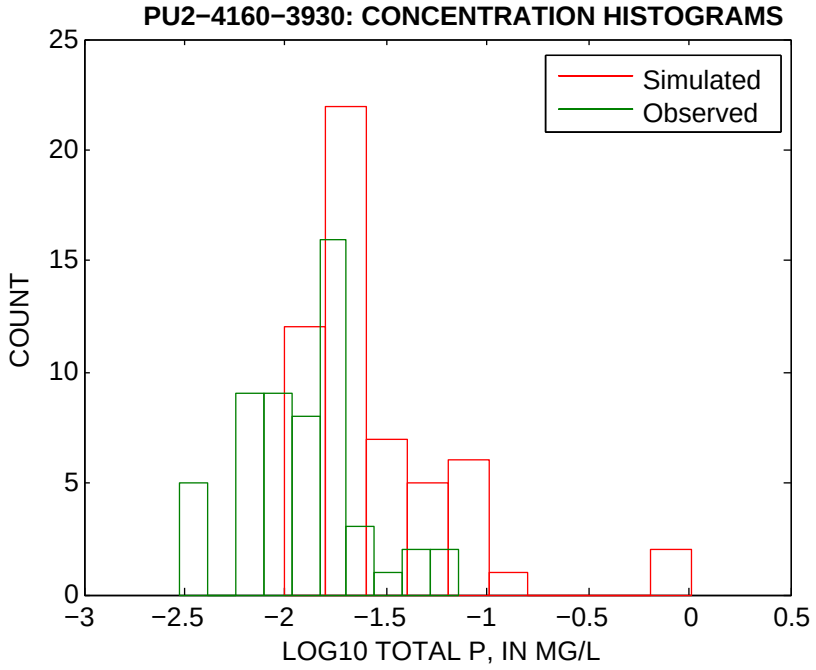
VERSION 2.1

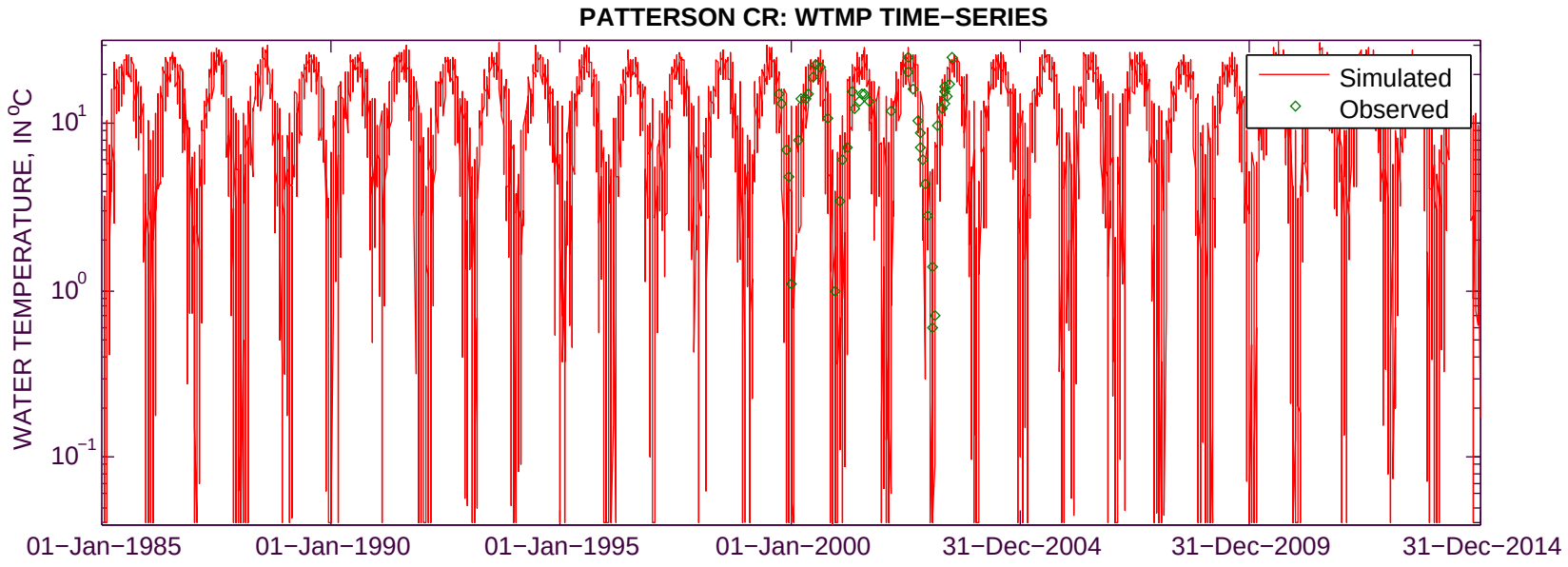
ALL DATA
LOG10

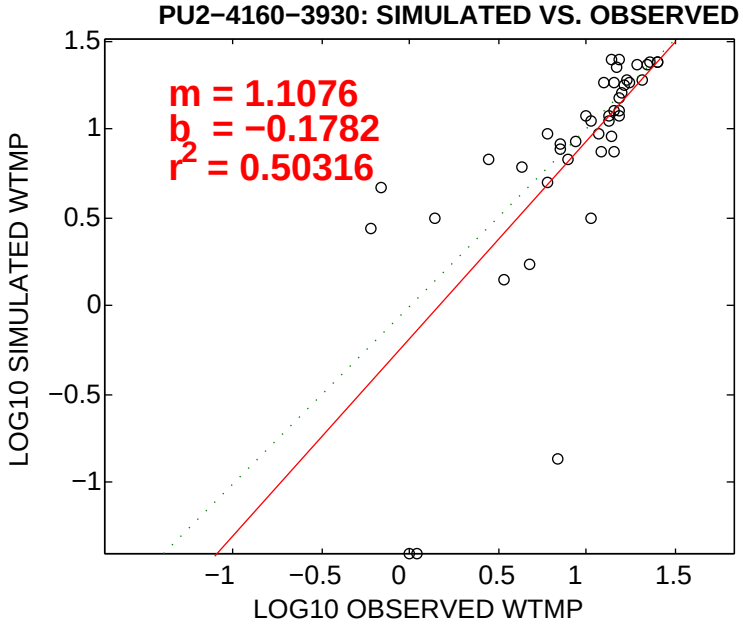


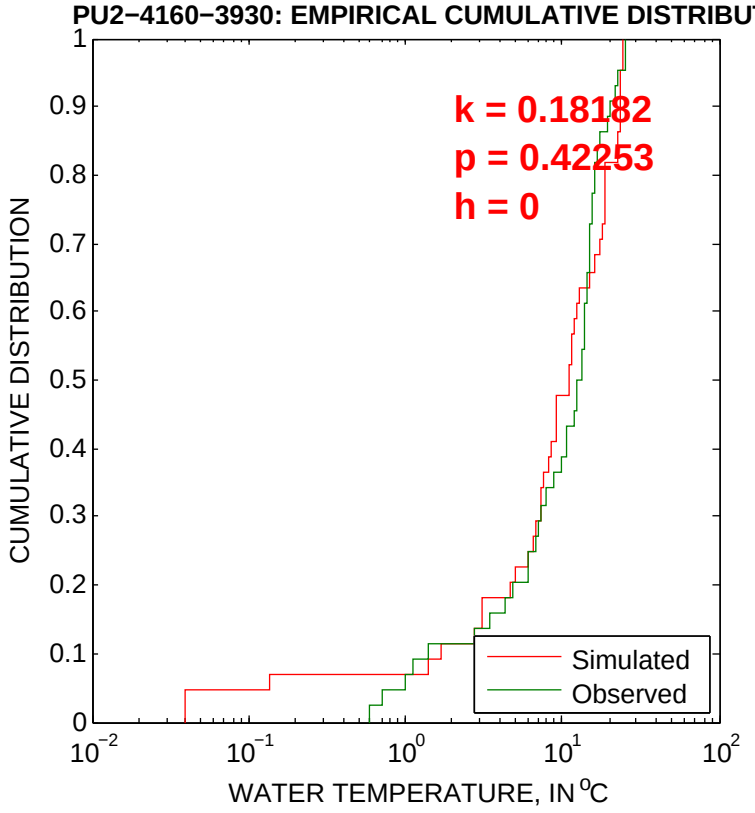












DATA SELECTION

scenario	file
P620171001WQ	WTMP.calib

plot: WTMP - water tempera...

Dates: 1/1/1985 – 12/31/201

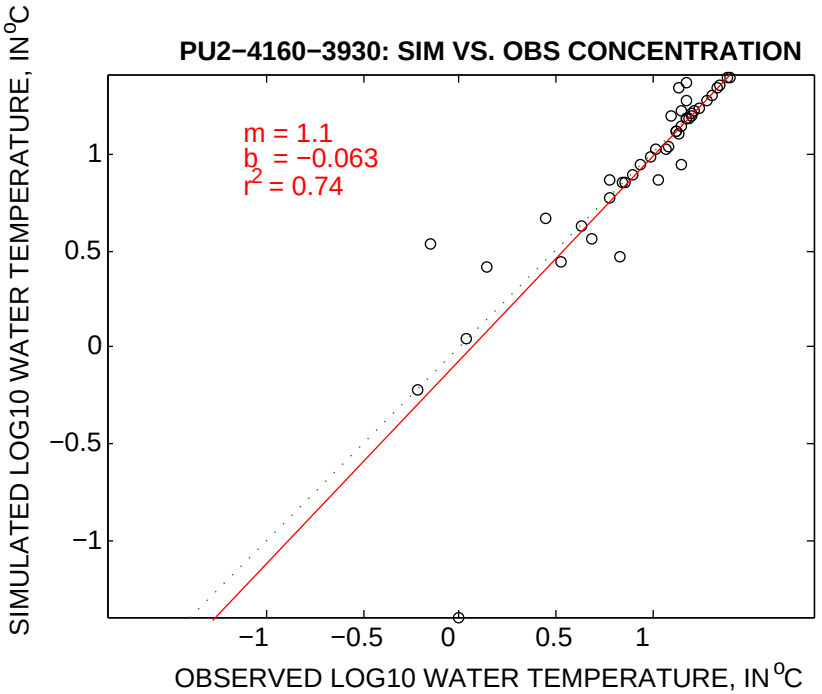
Drive	Directory	Observed
N/A	model	OBS20161101

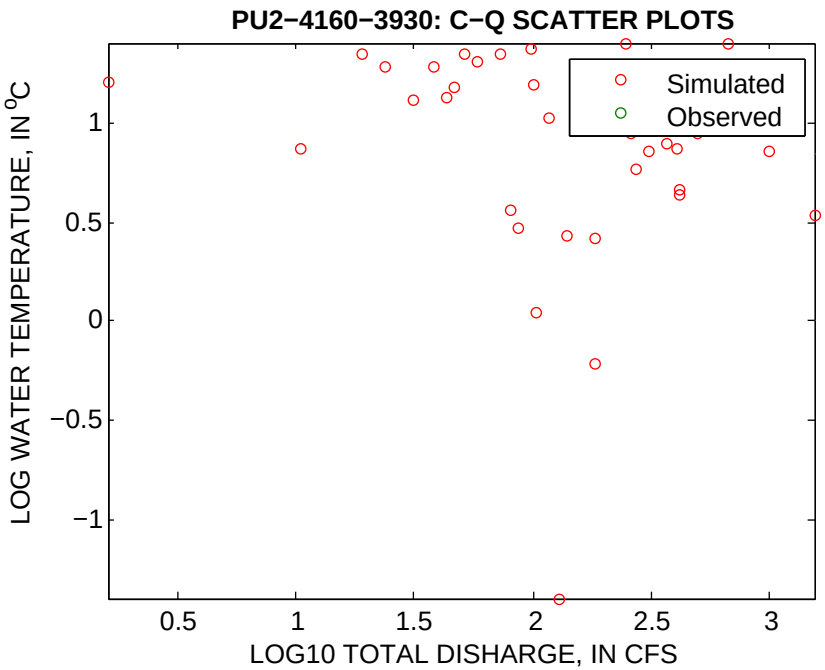
STATISTICS

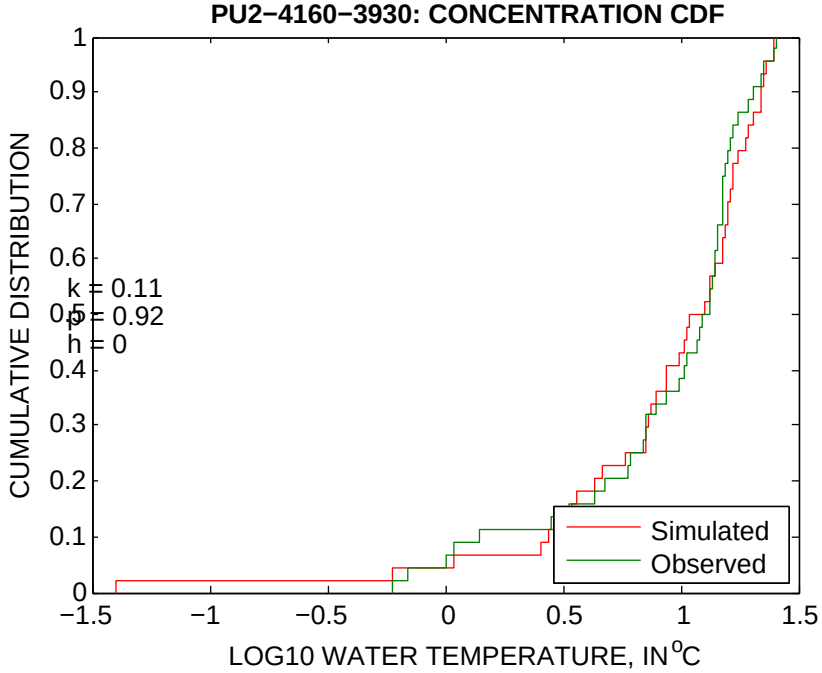
	n	44	44
		observe	simulate
min		0.6	0.040024
		-0.221849	-1.39768
mean		11.6136	11.8707
		0.936597	0.859134
media		12.9	11.1155
		1.11038	1.04589
max		25.4	24.835
		1.40483	1.39506
varian		43.9979	59.381
		0.174292	0.424913
JB		0.5	0.122868
		0.004496	0.001
		ra	log
%		2.21354	-8.27076
err.va		15.1761	0.21927
rel.std.err		1.344927	1.25806
mod.eff		0.655073	-0.258064

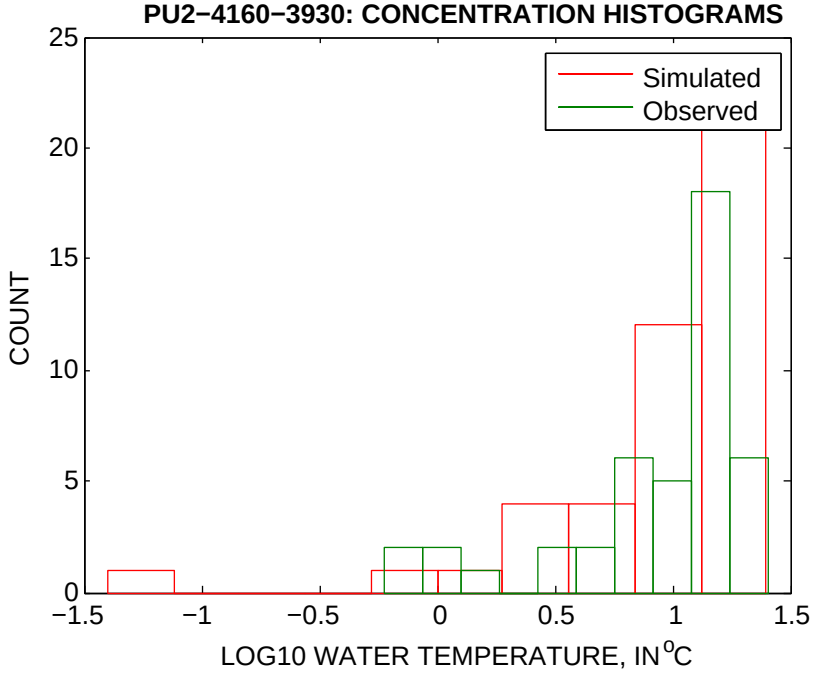
VERSION 2.1

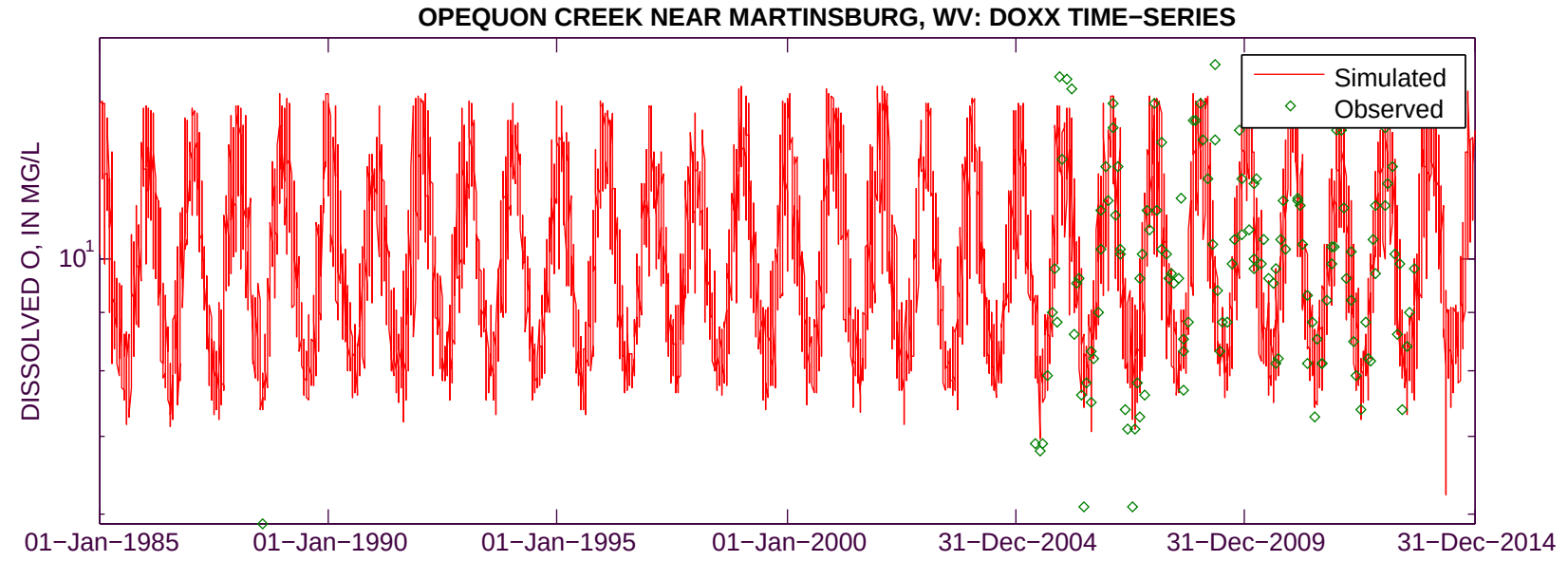
ALL DATA
LOG10

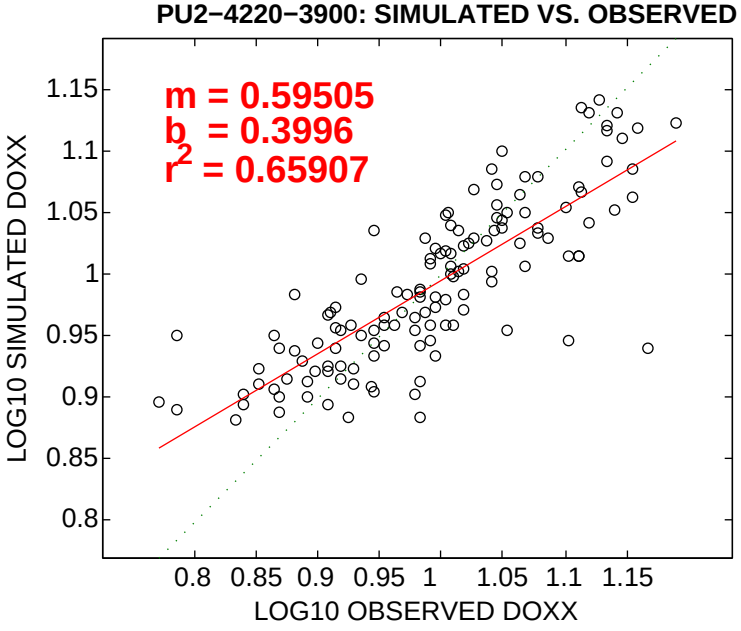


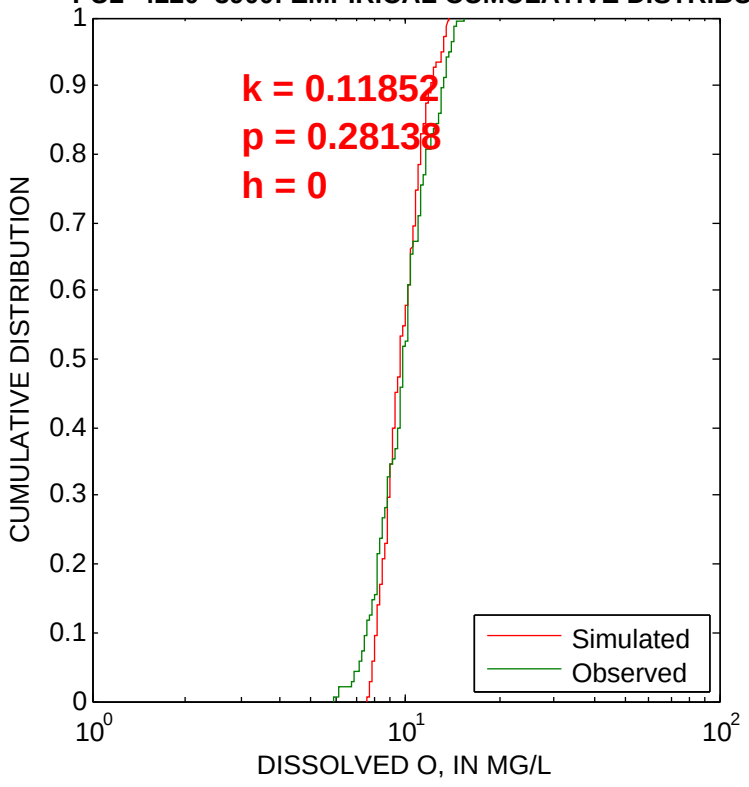












DATA SELECTION

scenario	file
P620171001WQ	DOXX.calib

plot: DOXX - dissolved oxygen

Dates: 1/1/1985 – 12/31/201

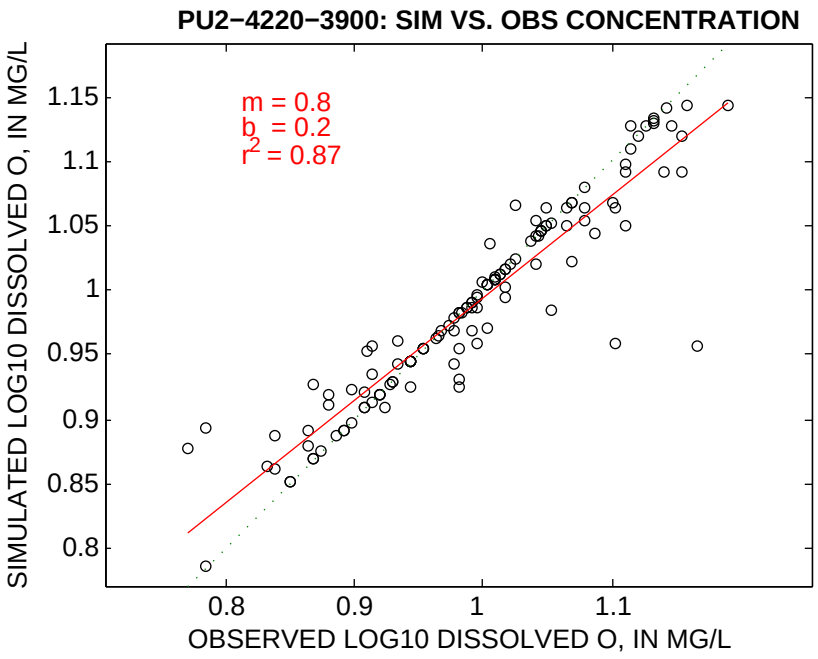
Drive	Directory	Observed
N/A	model	OBS20161101

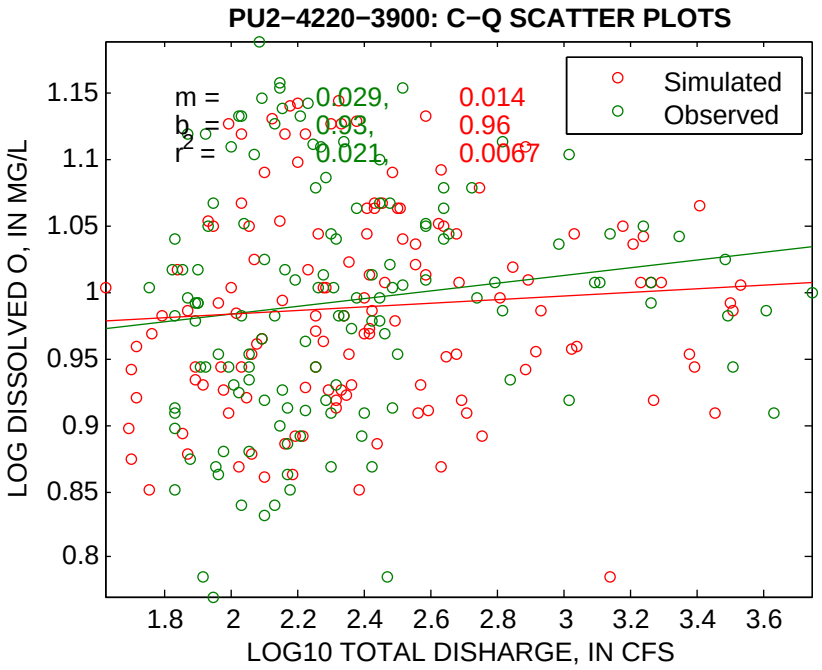
STATISTICS

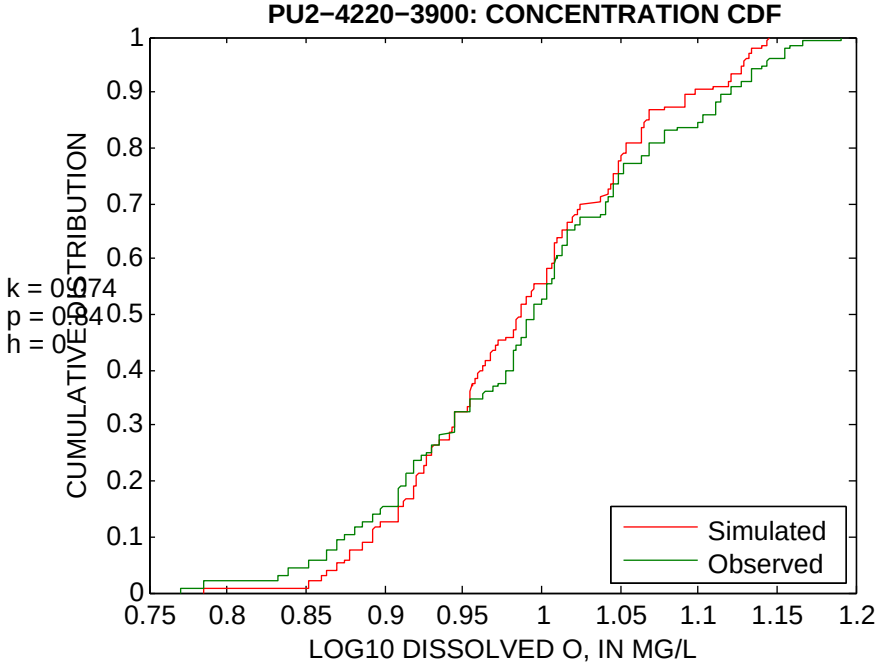
	n	observe	simulate
		135	135
min		5.9	7.61
		0.770852	0.881385
mean		10.0643	9.90557
		0.993697	0.990891
media		9.9	9.6273
		0.995635	0.983505
max		15.5	13.841
		1.19033	1.14117
varian		4.28208	2.35686
		0.00799568	0.00429563
JB		✓ 0.074959	0.018038
		✓ 0.498124	0.052798 ✓
		ra	log
%		-1.57713	-0.282333
err.va		1.49463	0.00278364
rel.std.err		0.349043	0.348143
mod.eff		0.650957	0.651857

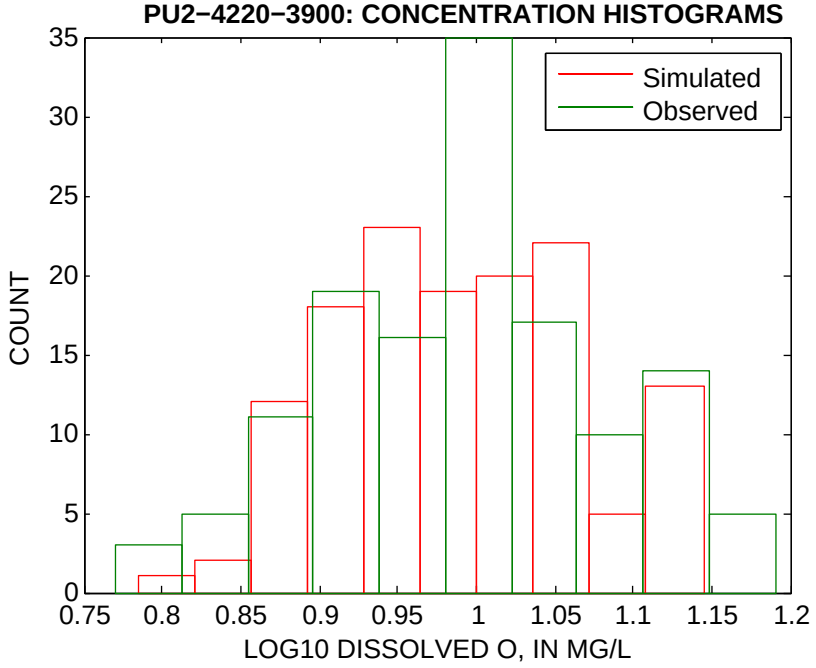
VERSION 2.1

ALL DATA
LOG10

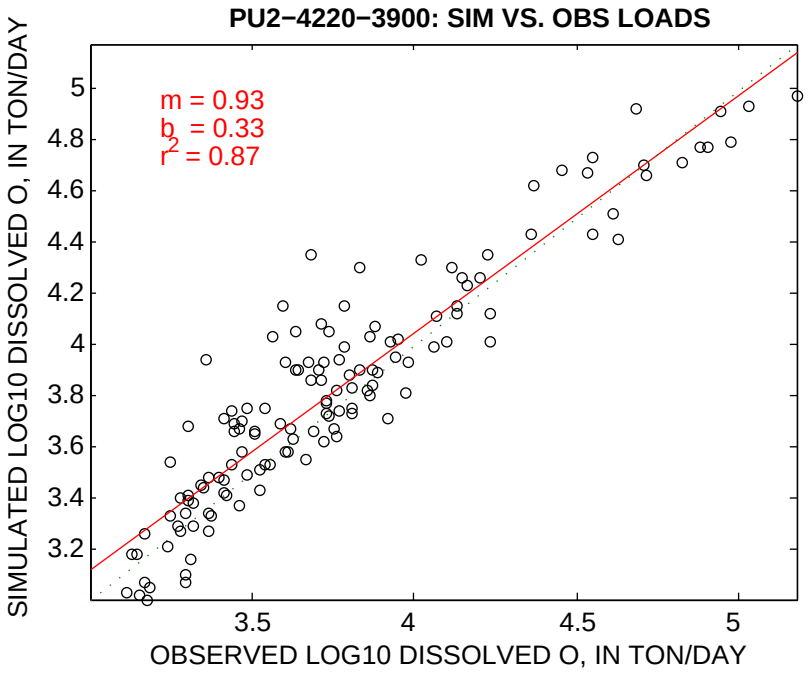


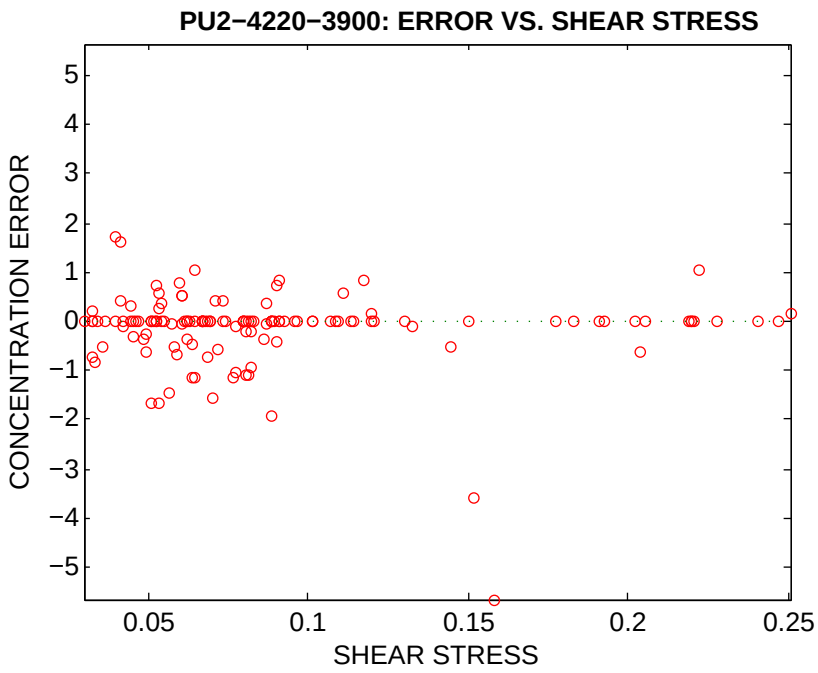


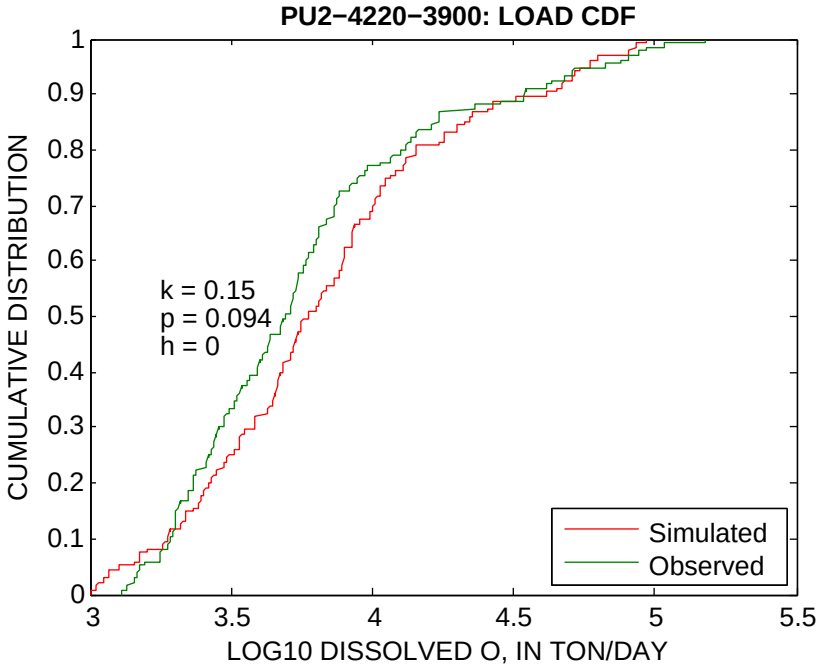


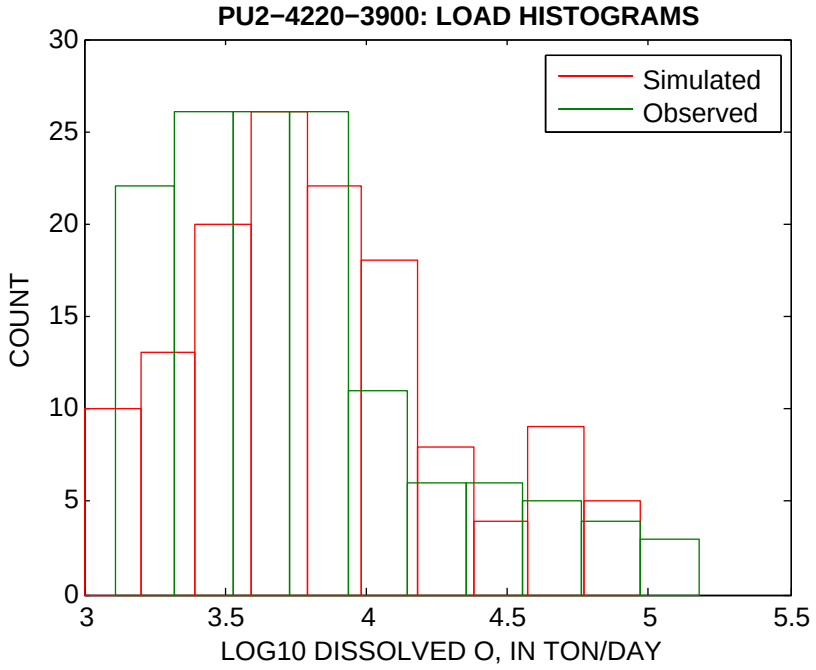


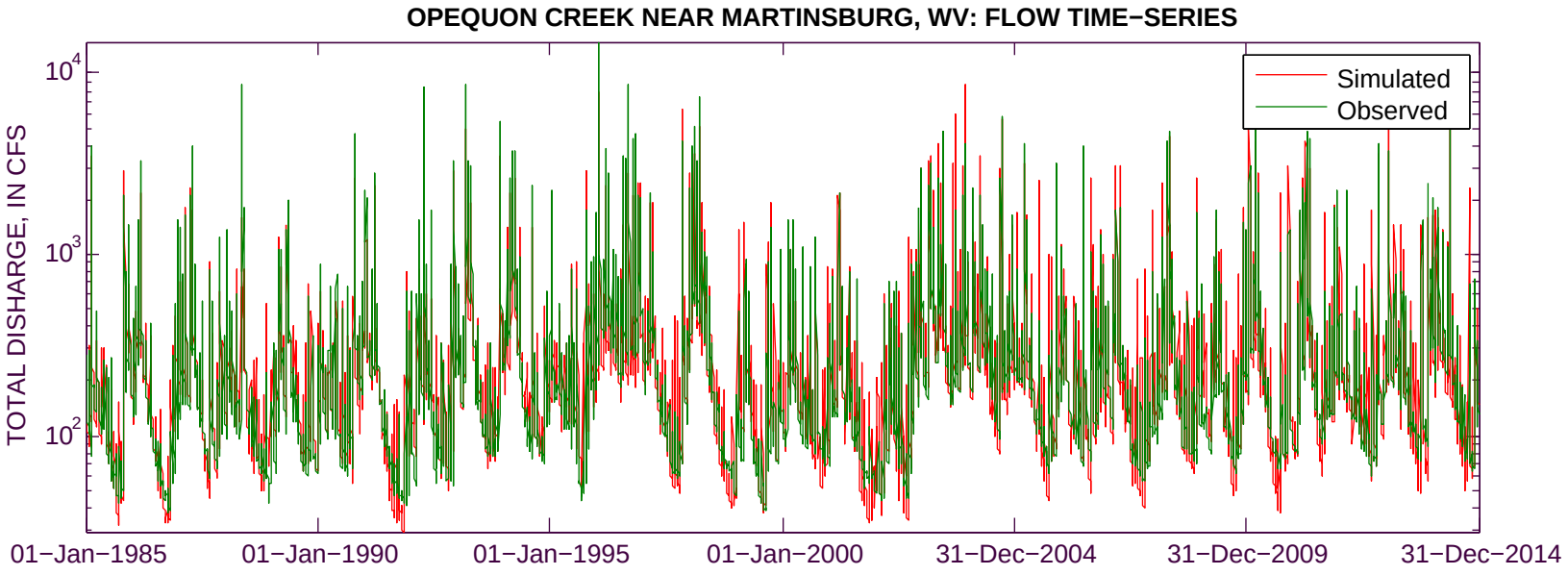
LOAD DATA
LOG10

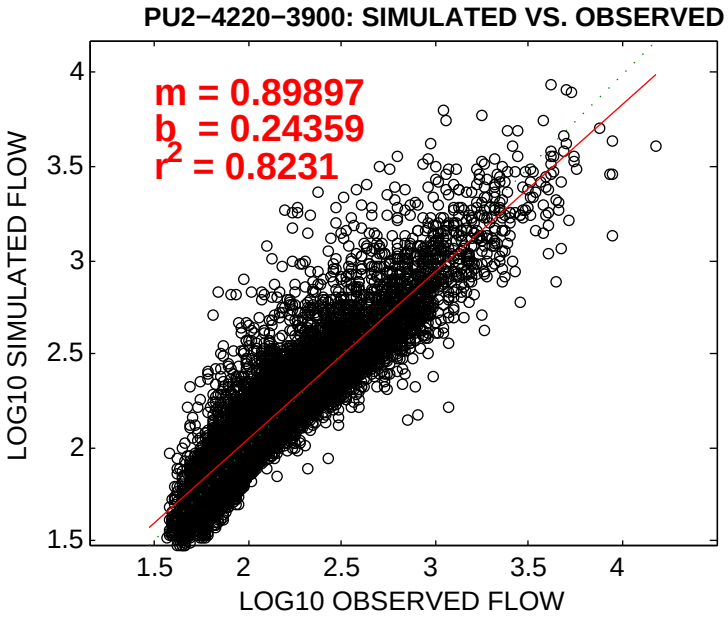


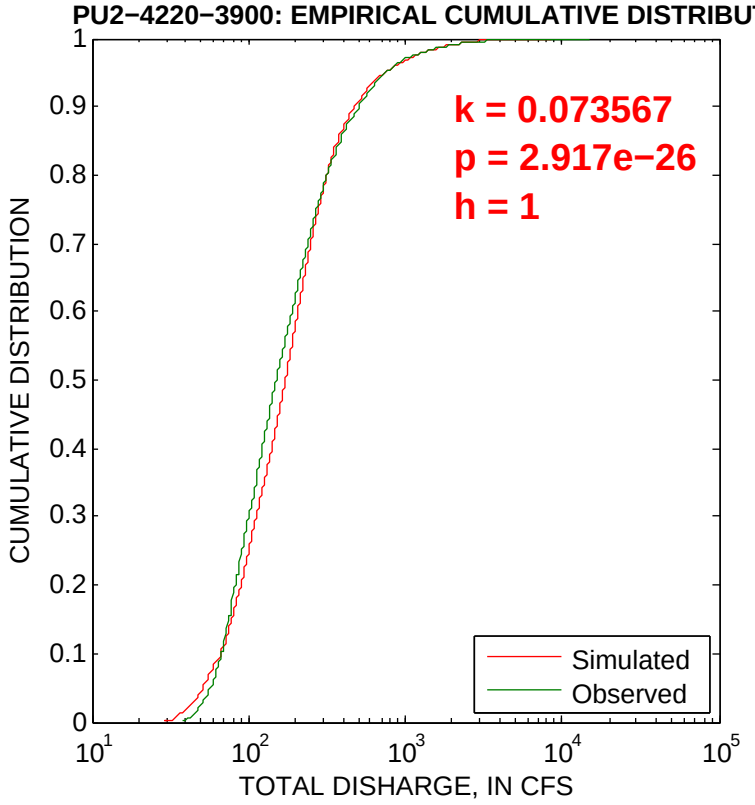












DATA SELECTION

scenario: P620171001WQ | file: FLOW.calib

plot: FLOW - total discharge

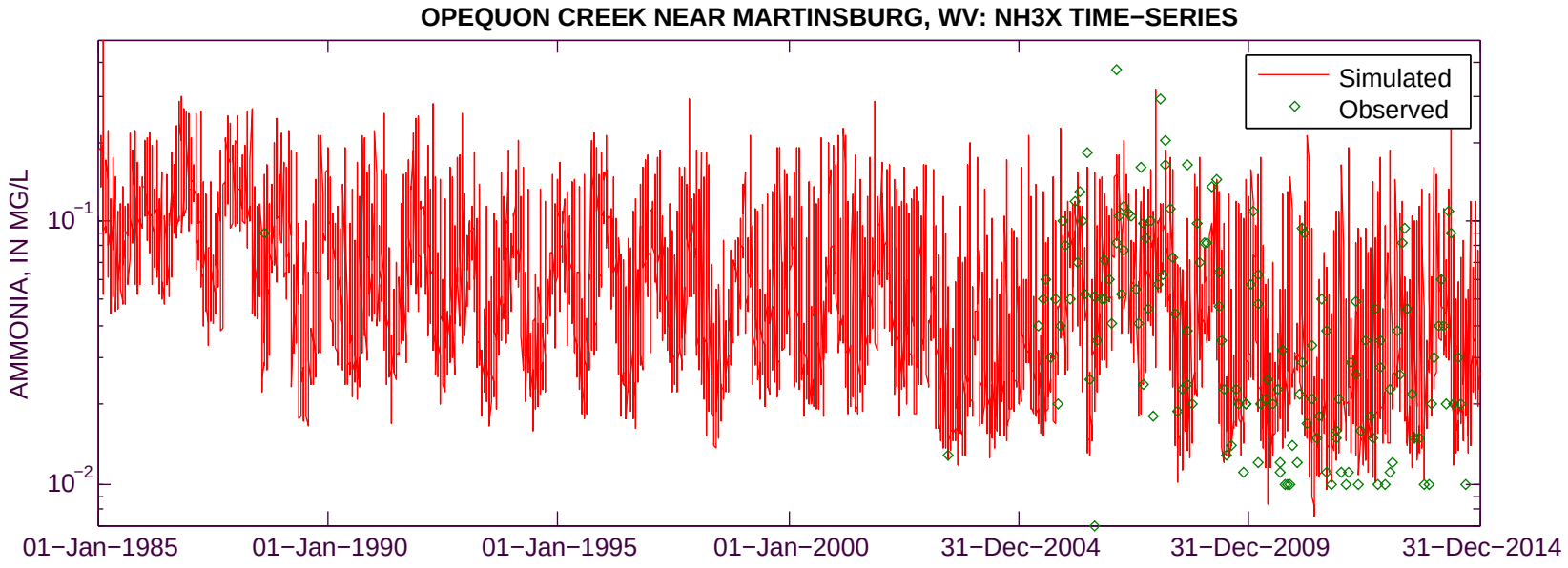
Dates: 1/1/1985 – 12/31/201

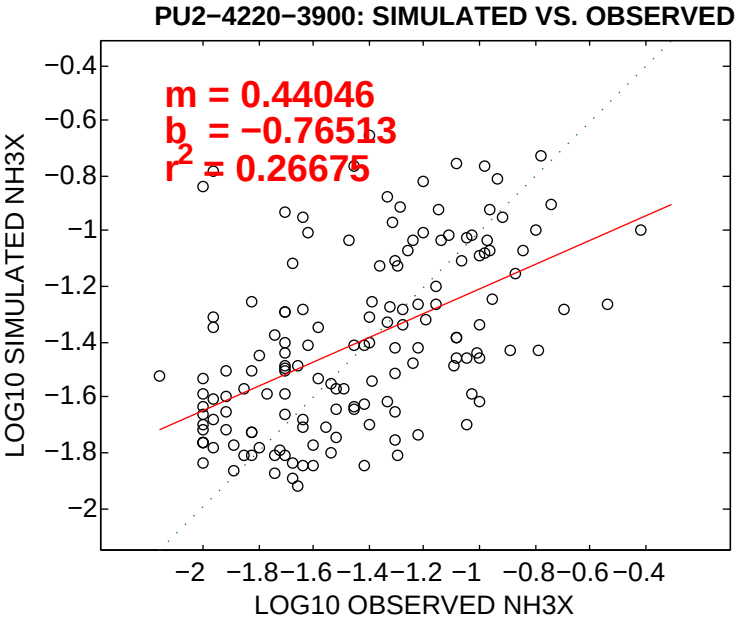
Drive | Directory | Observed: N/A | model | OBS20161101

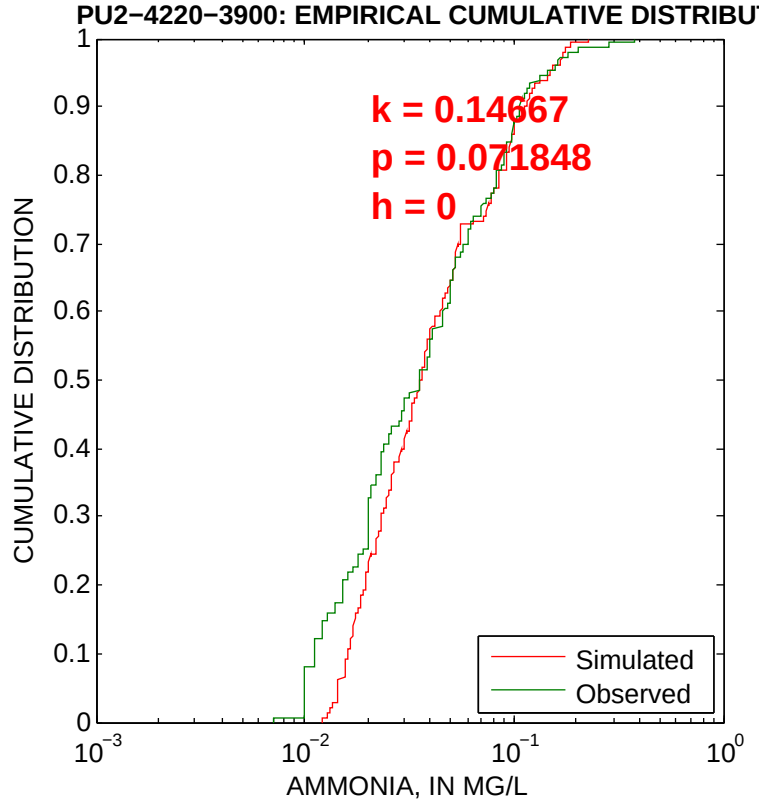
STATISTICS

		observe	simulate
n		10956	10956
min		37	29.532
		1.5682	1.47029
mean		262.965	265.191
		2.2309	2.24911
media		150	172.75
		2.17609	2.23742
max		15000	8666.8
		4.17609	3.93786
varian		195189	151822
		0.125789	0.123505
JB		0.001	0.001
		0.001	0.001
		ra	log
%		0.846465	0.816139
err.va		81646.6	0.0234636
rel.std.err		0.418296	0.186531
mod.eff		0.581704	0.813469

VERSION 2.1







DATA SELECTION

scenario	file
P620171001WQ	NH3X.calib

plot: NH3X - ammonia

Dates: 1/1/1985 – 12/31/201

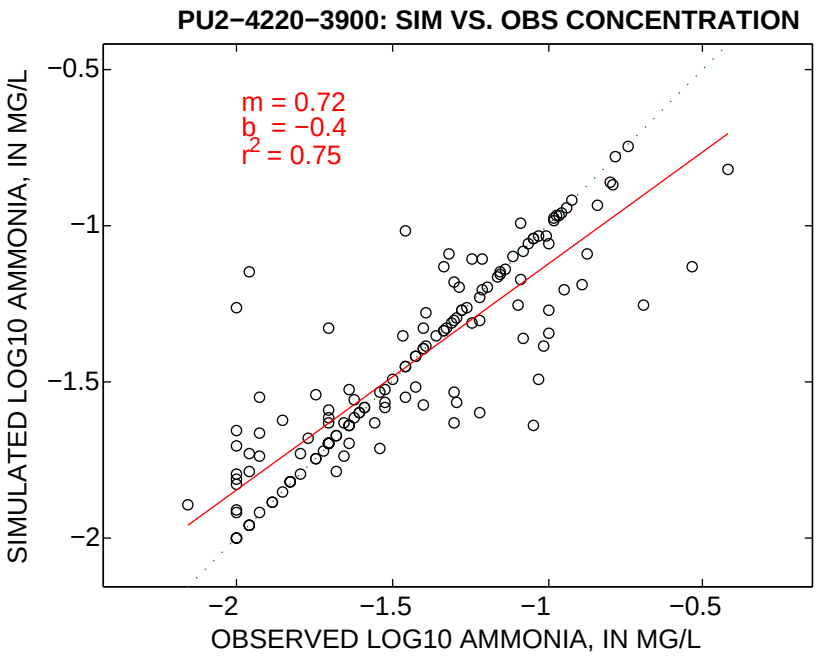
Drive	Directory	Observed
N/A	model	OBS20161101

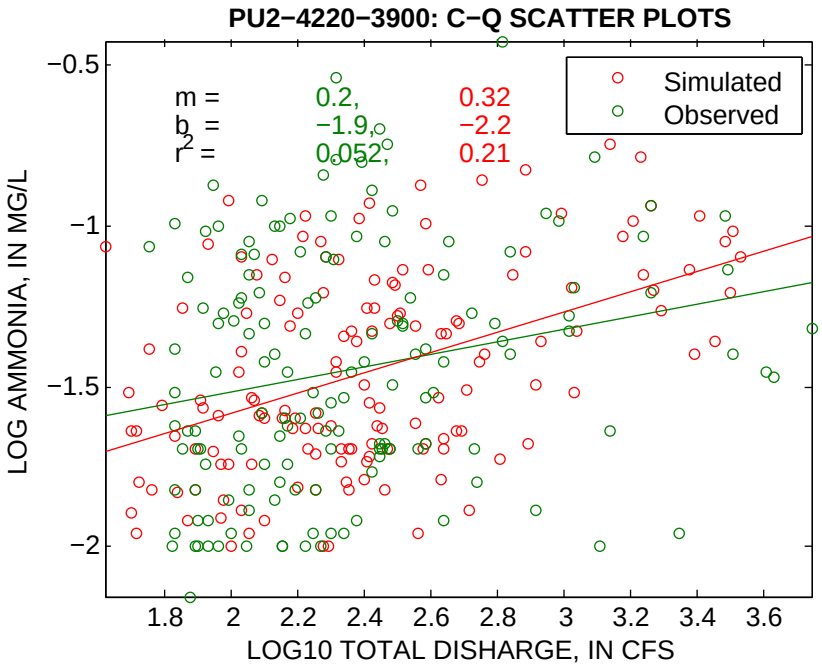
STATISTICS

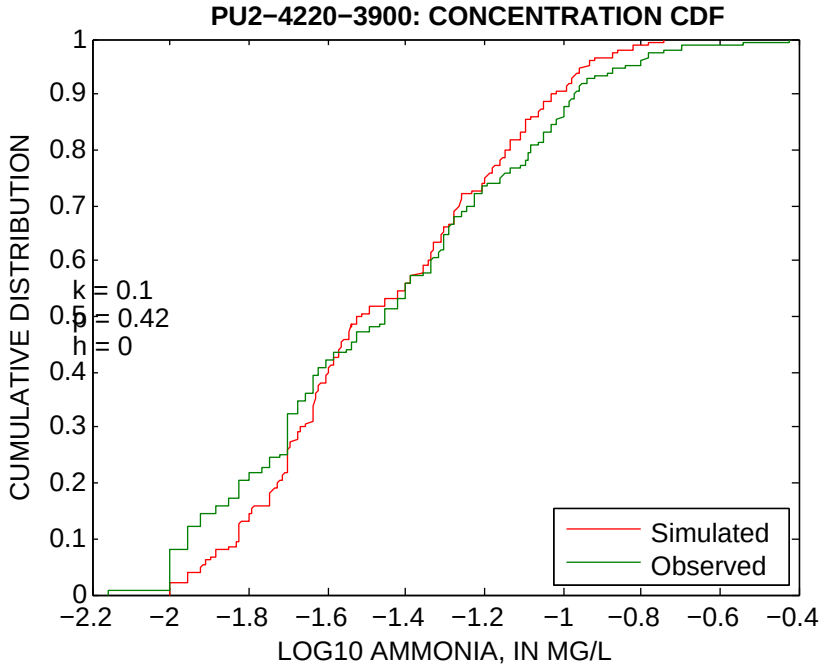
	n	150	150
		observe	simulate
min		0.007	0.012074
		-2.1549	-1.91815
mean		0.0518267	0.0523247
		-1.44918	-1.40343
media		0.035	0.035836
		-1.45593	-1.4457
max		0.379	0.22451
		-0.421361	-0.648764
varian		0.0027179	0.00185076
		0.13957	0.101506
JB		0.001	0.001
		0.061050	0.019842
		ra	log
%		0.960972	-3.15713
err.va		0.00289932	0.120234
rel.std.err		1.06675	0.861463
mod.eff		-0.0667507	0.138537

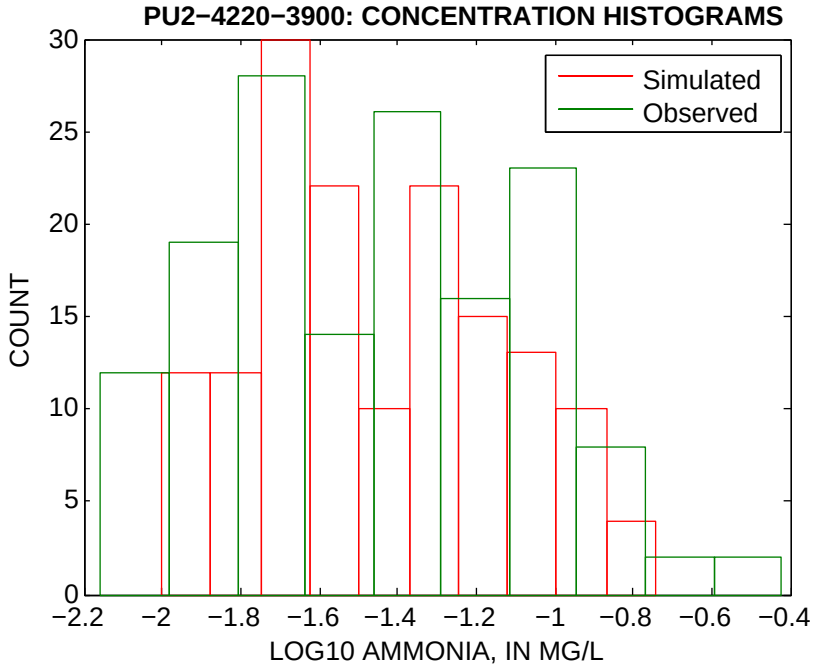
VERSION 2.1

ALL DATA
LOG10

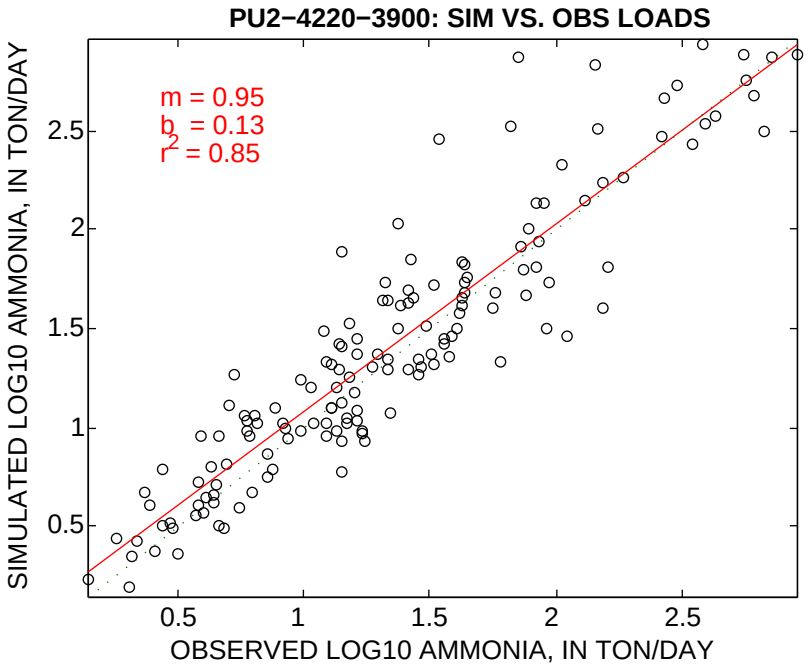


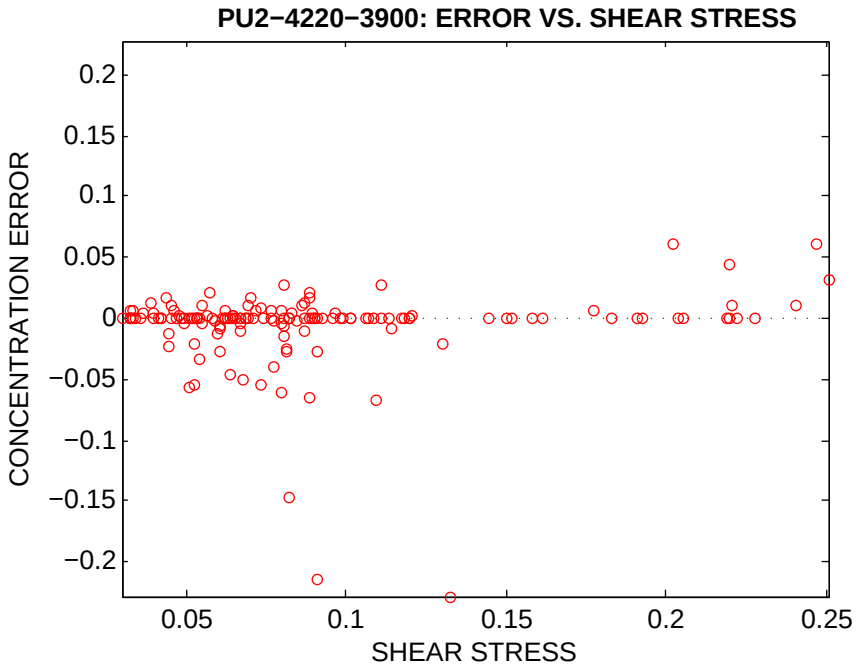


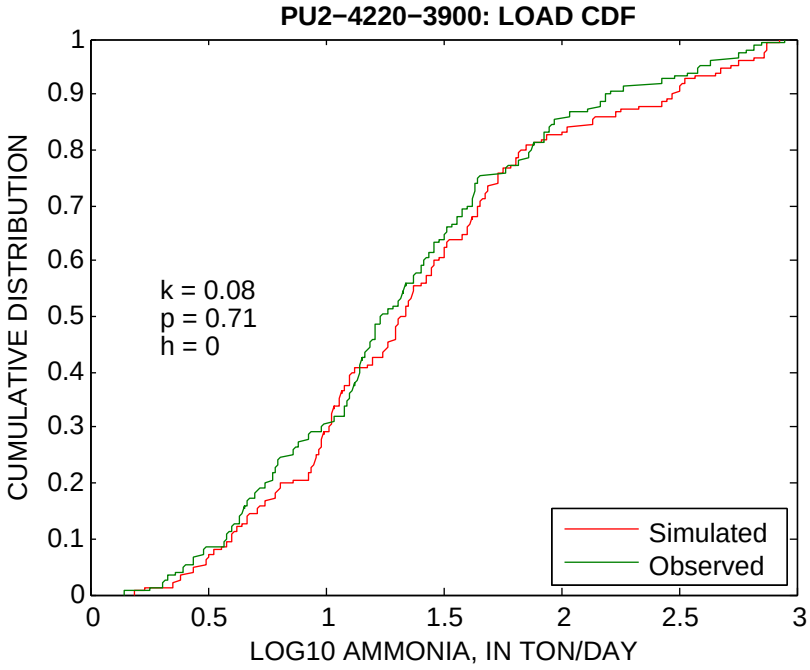


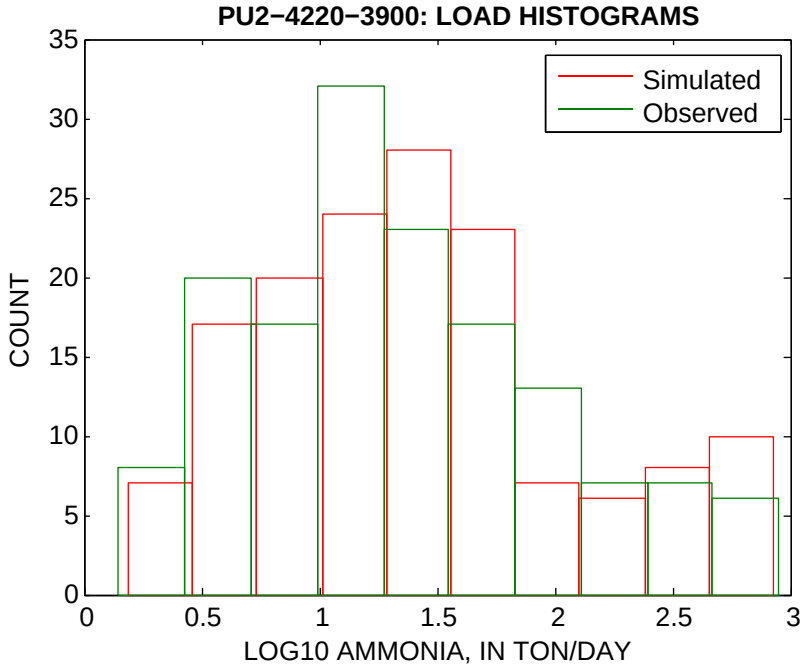


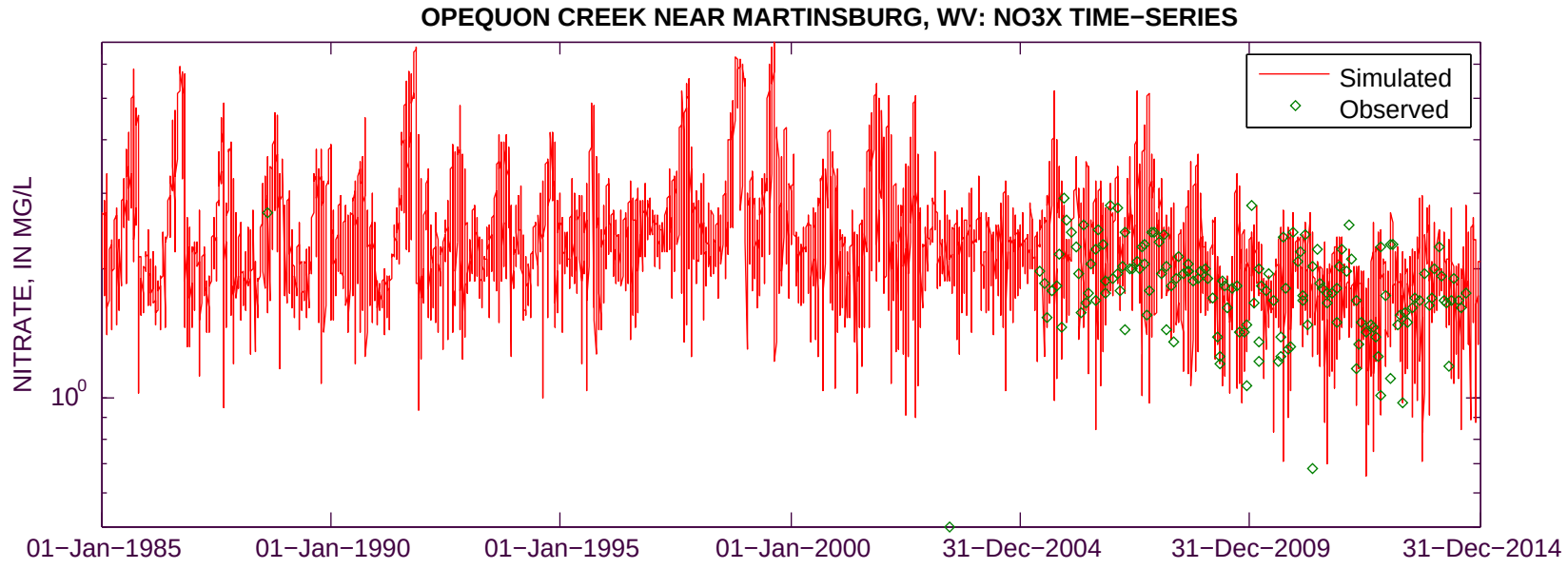
LOAD DATA
LOG10

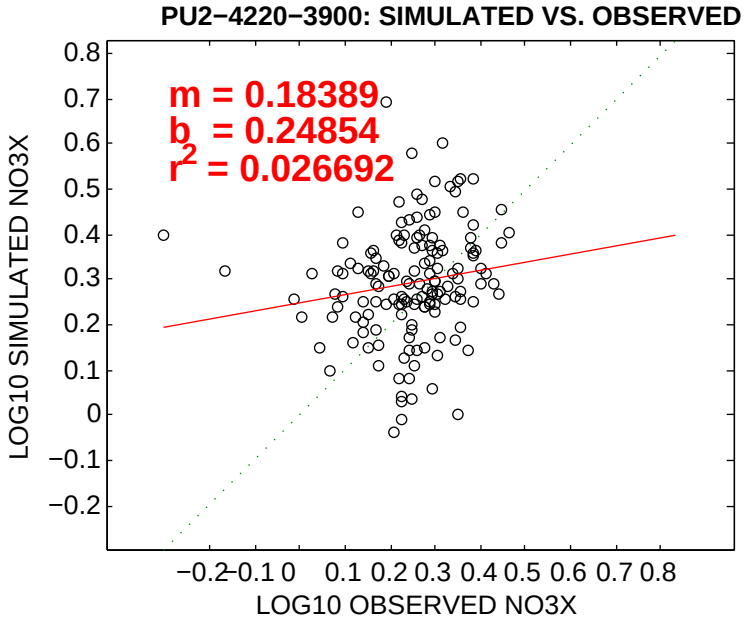


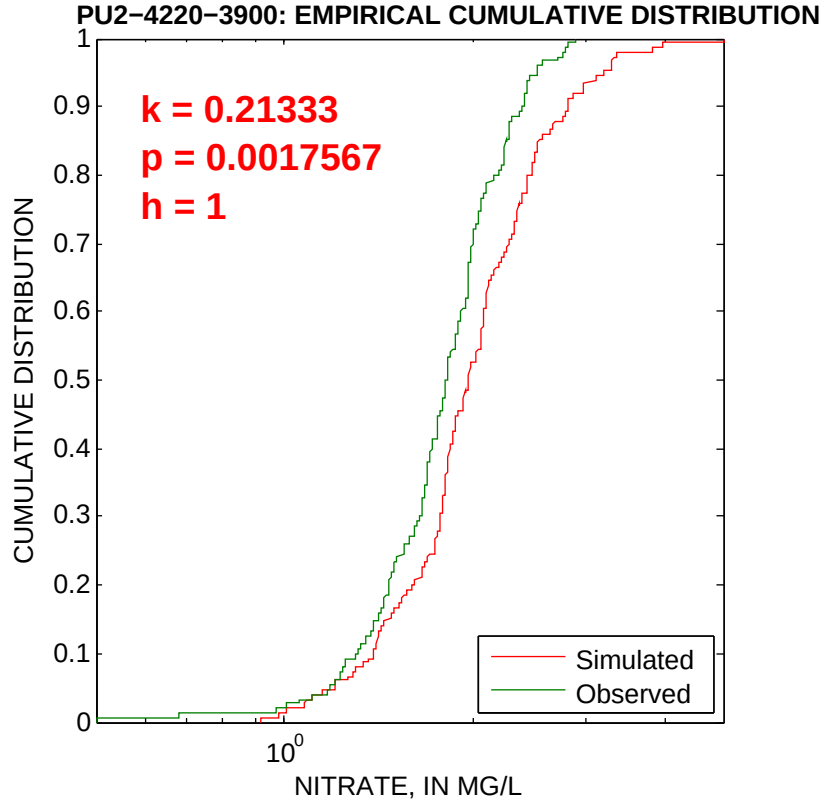












DATA SELECTION

scenario	file
P620171001WQ	NO3X.calib

plot: NO3X - nitrate

Dates: 1/1/1985 – 12/31/201

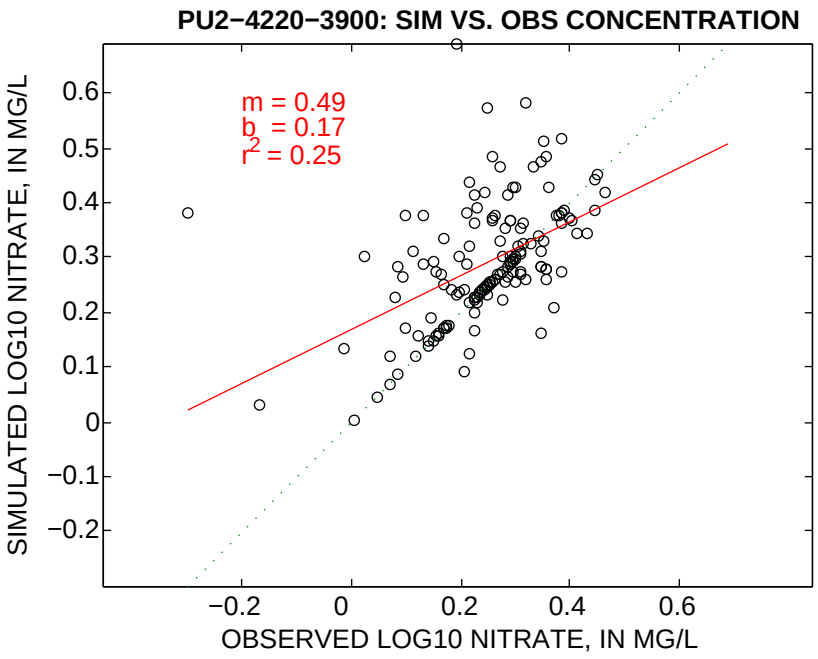
Drive	Directory	Observed
N/A	model	OBS20161101

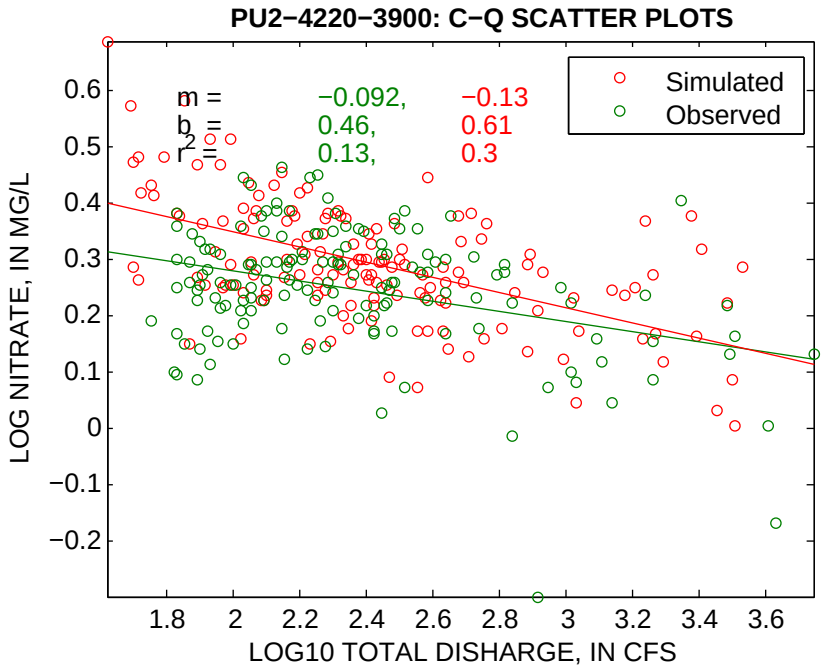
STATISTICS

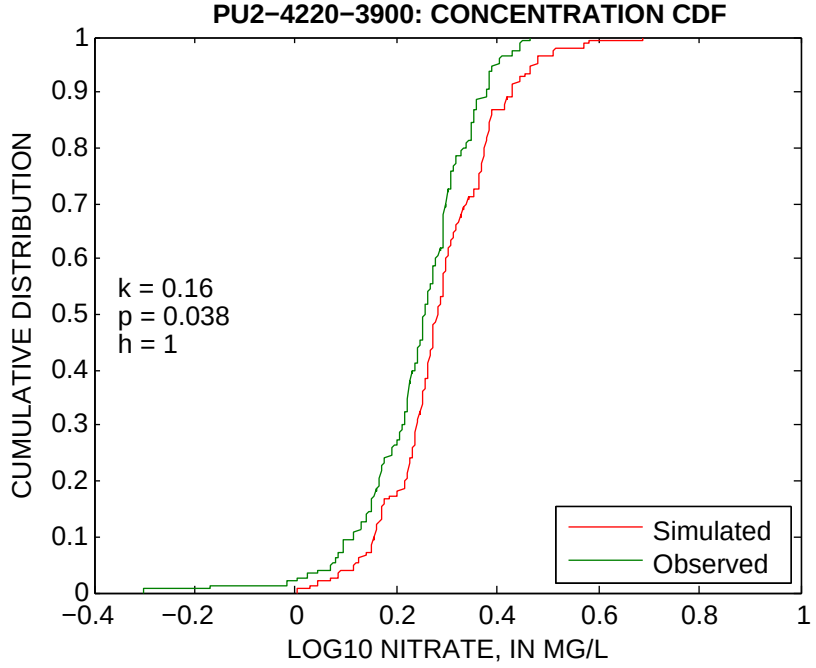
	n	150	150
		observe	simulate
min		0.502	0.91955
		-0.299296	-0.0364247
mean		1.81559	2.04913
		0.246293	0.29383
media		1.805	1.94795
		0.256476	0.289578
max		2.9	4.9533
		0.462398	0.694895
varian		0.173174	0.370342
		0.0121717	0.01542
JB		0.5	0.001
		0.001	0.348711
		ra	log
%		12.8632	19.3011
err.va		0.499561	0.0253903
rel.std.err		2.88474	2.086
mod.eff		-1.88474	-1.086

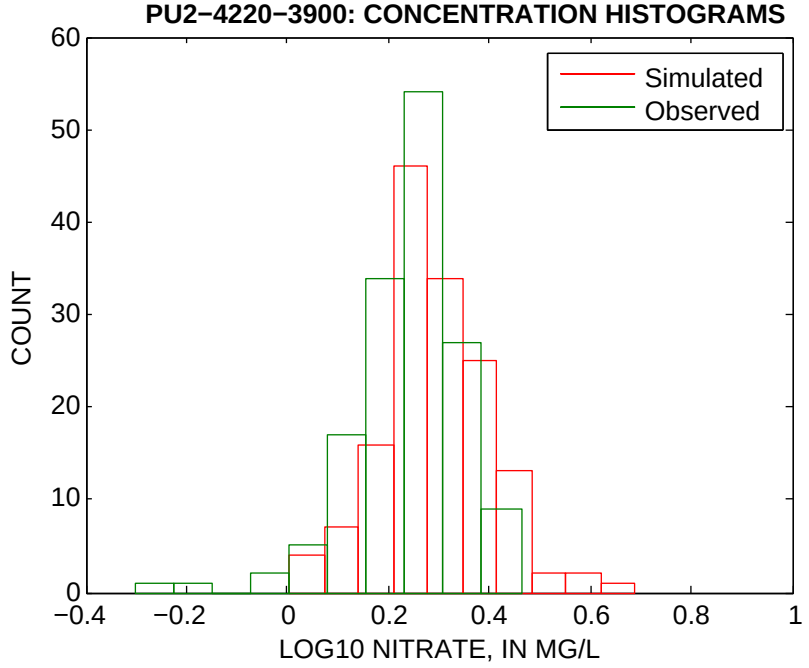
VERSION 2.1

ALL DATA
LOG10

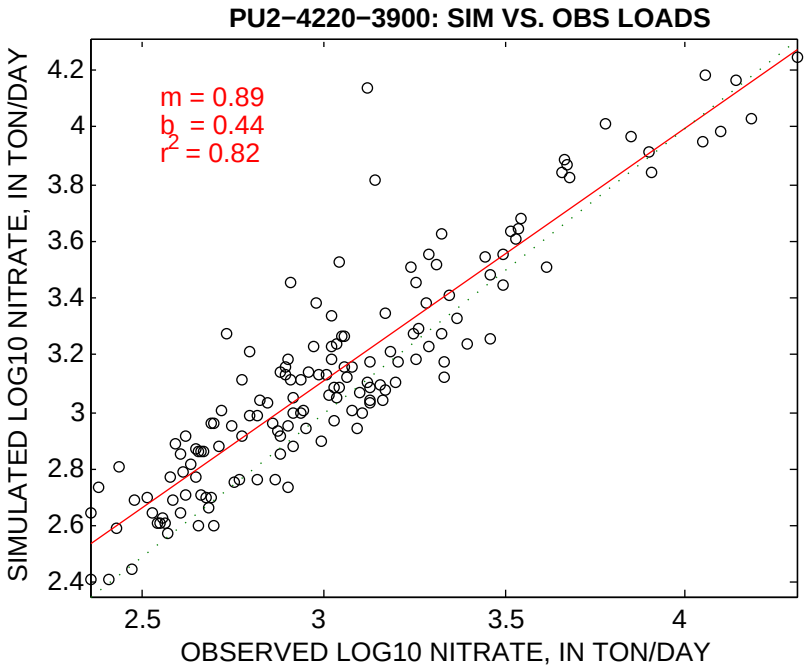


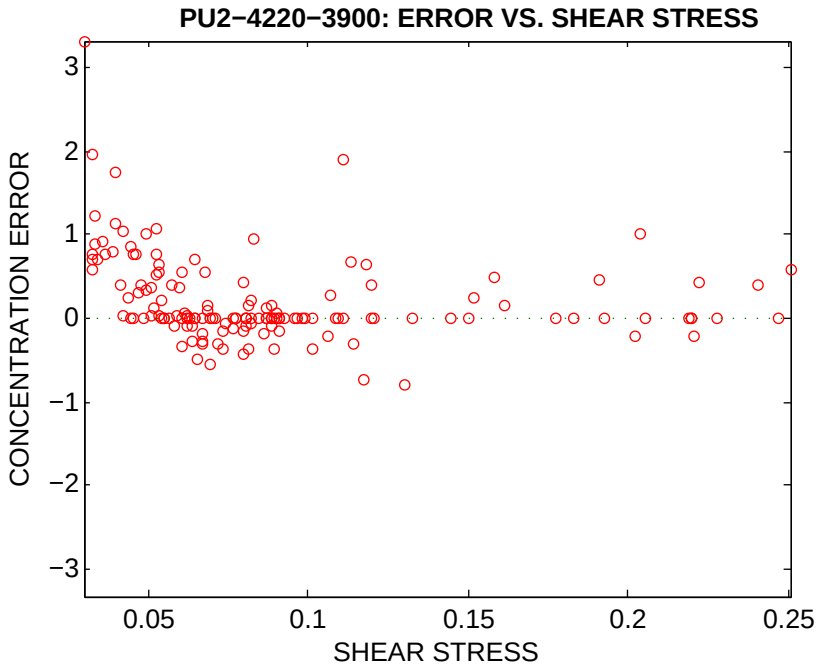


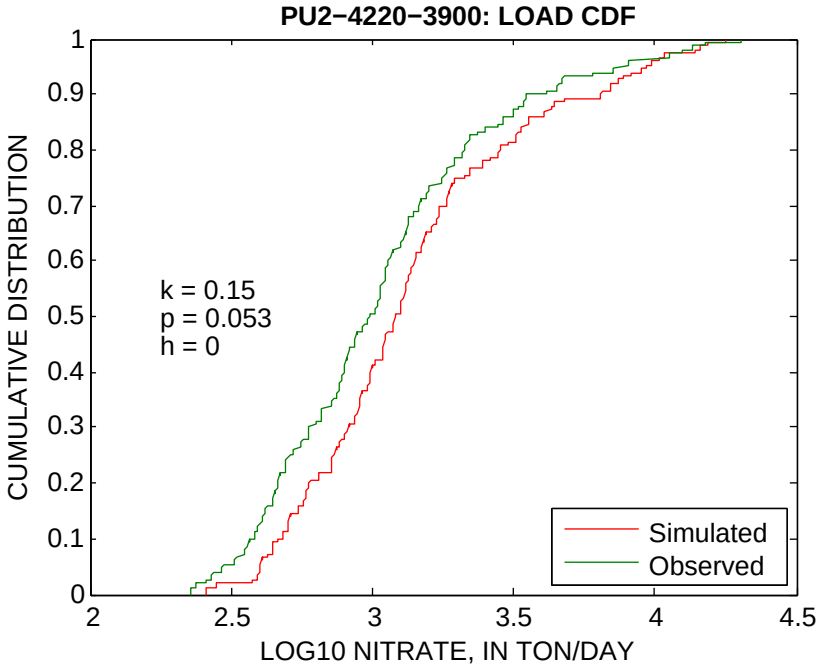


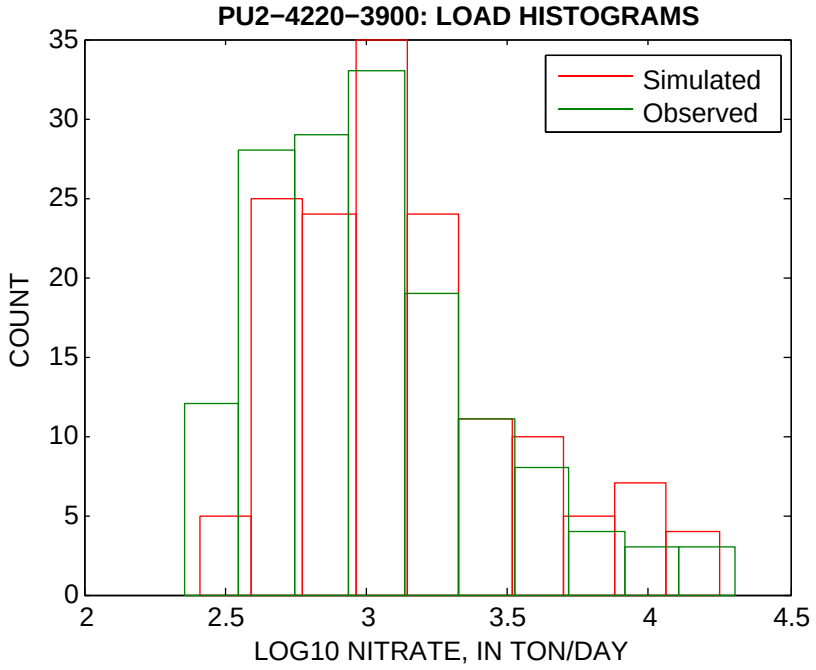


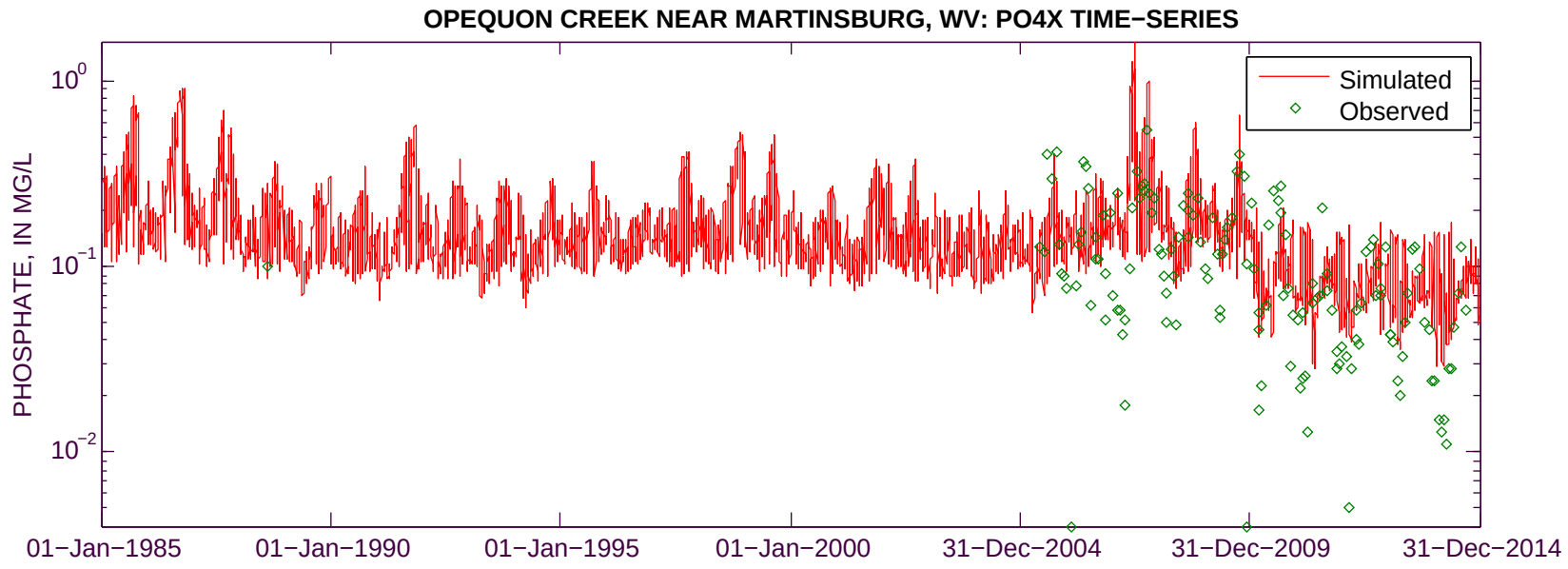
LOAD DATA
LOG10

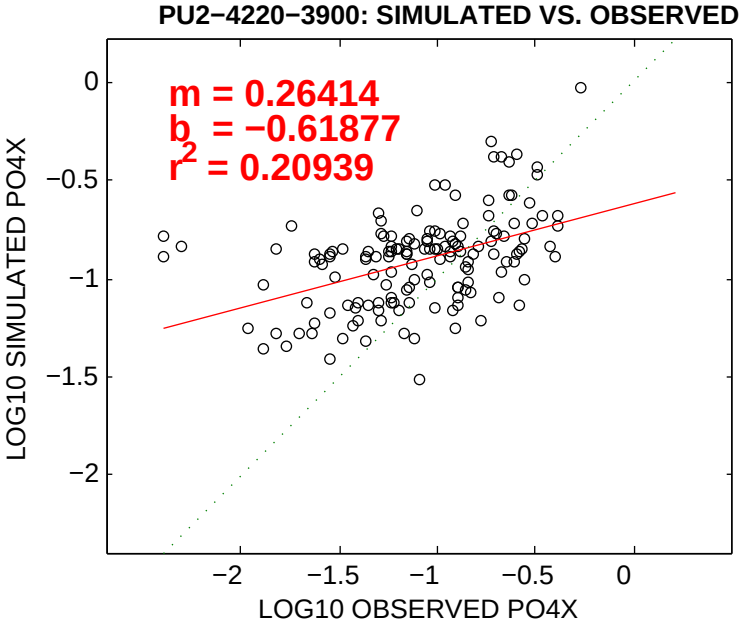


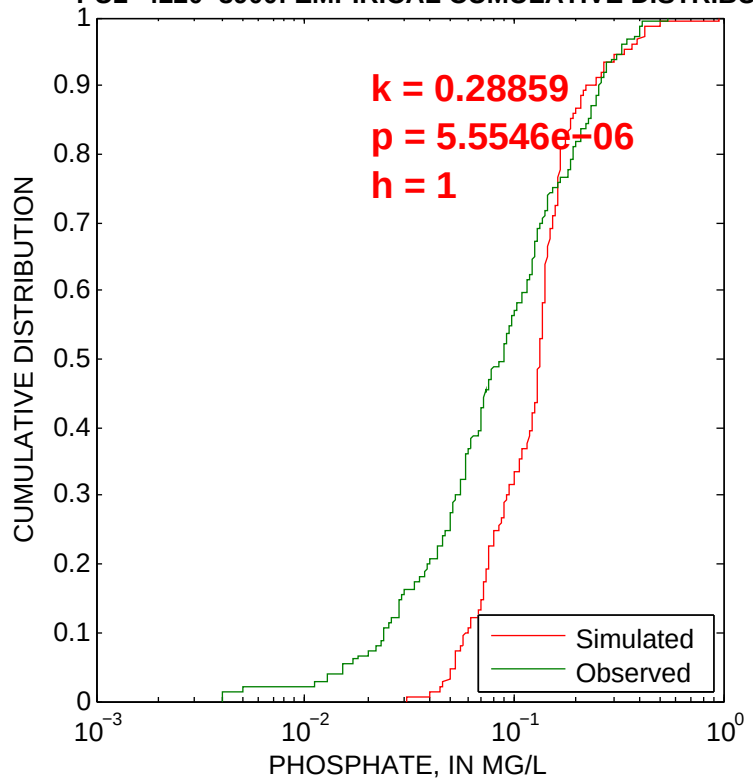












DATA SELECTION

scenario	file
P620171001WQ	PO4X.calib

plot: PO4X - phosphate

Dates: 1/1/1985 – 12/31/201

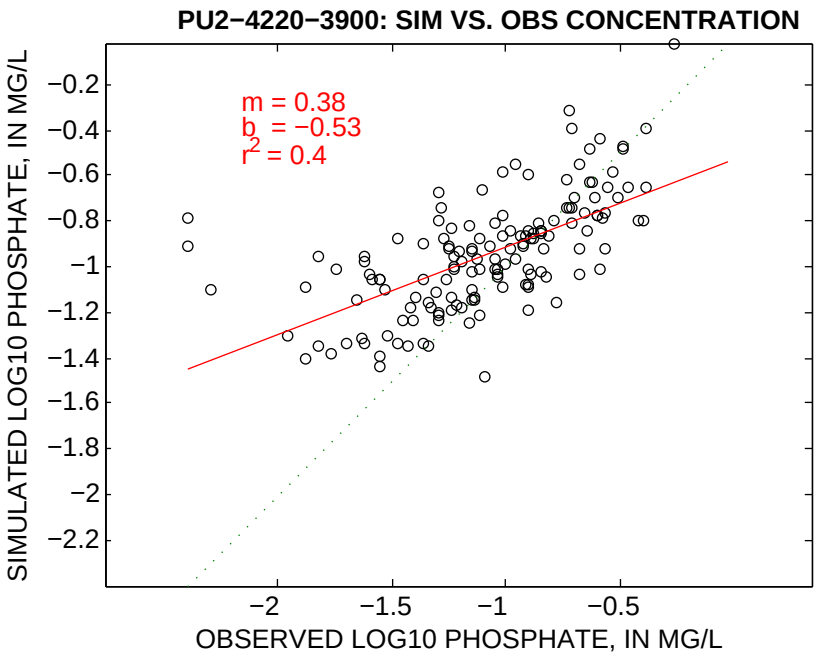
Drive	Directory	Observed
N/A	model	OBS20161101

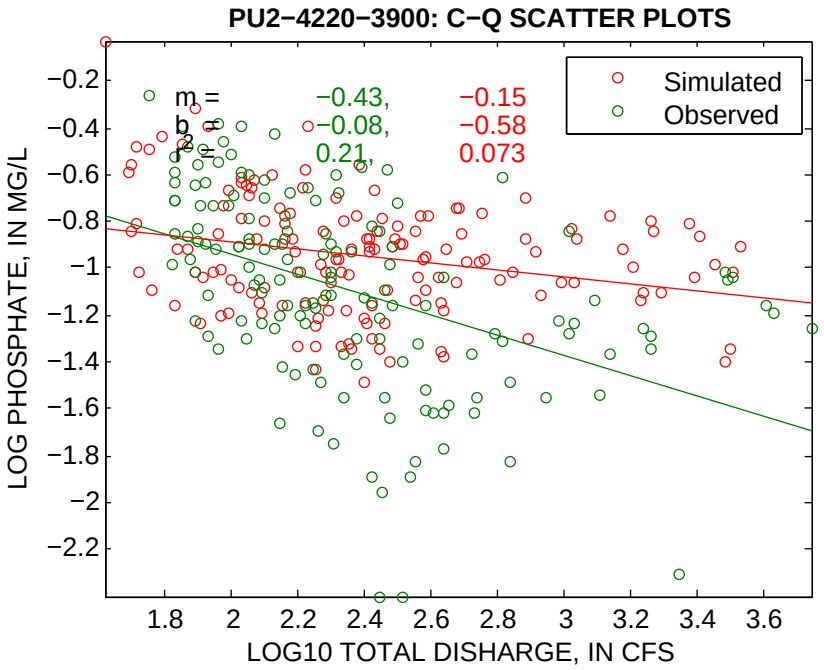
STATISTICS

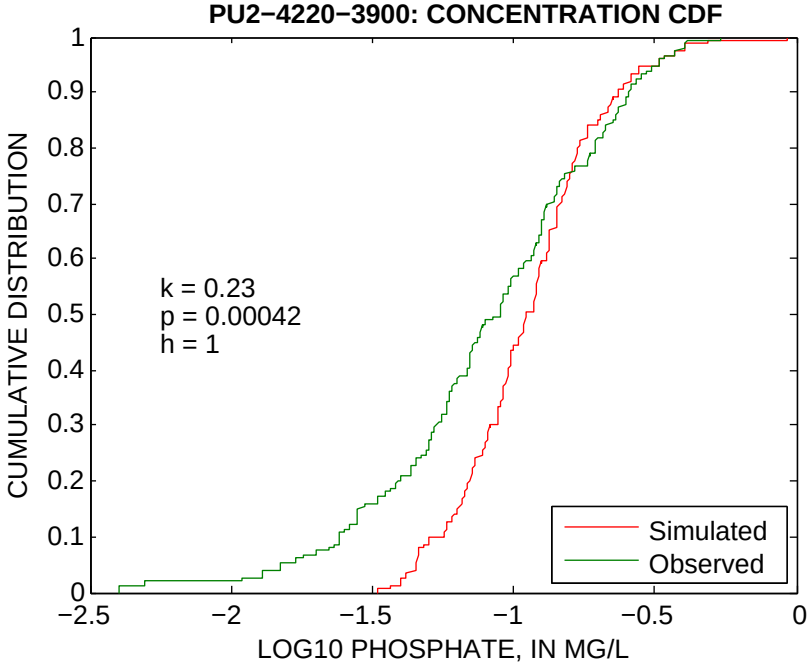
	n	149	149
		observe	simulate
min		0.004	0.030445
		-2.39794	-1.51648
mean		0.11755	0.14547
		-1.09207	-0.907235
media		0.089	0.13347
		-1.05061	-0.874616
max		0.545	0.94948
		-0.263603	-0.0225142
varian		0.00985244	0.0108513
		0.168424	0.0561203
JB		0.001	0.001
		0.014794	0.023116
		ra	log
%		23.751	-16.9253
err.va		0.0100048	0.169964
rel.std.err		1.01546	1.00914
mod.eff		-0.0154607	-0.00914313

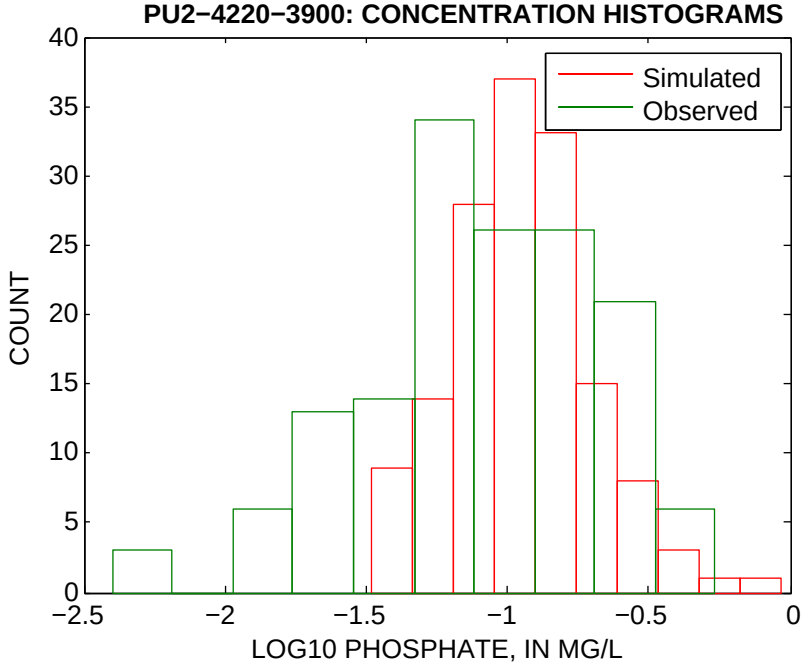
VERSION 2.1

ALL DATA
LOG10

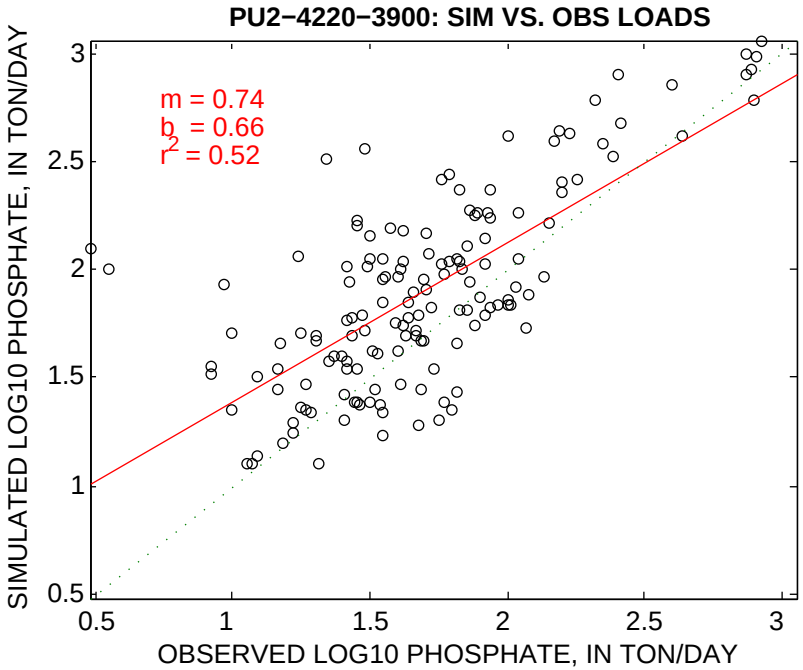


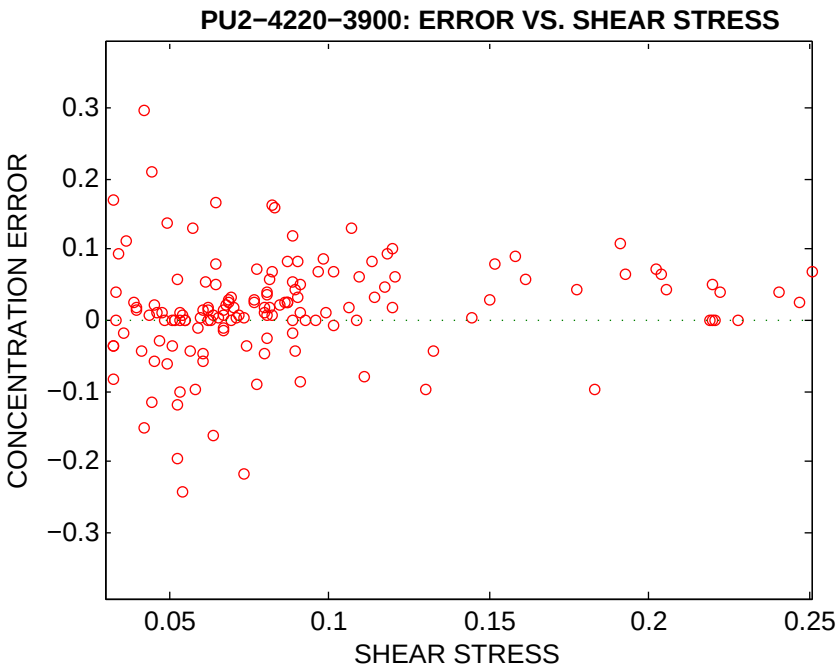


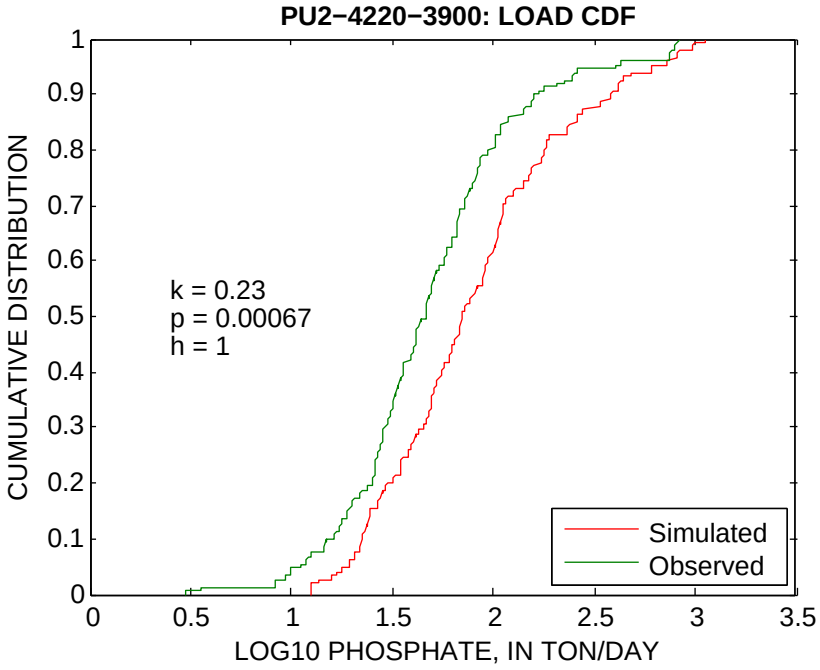


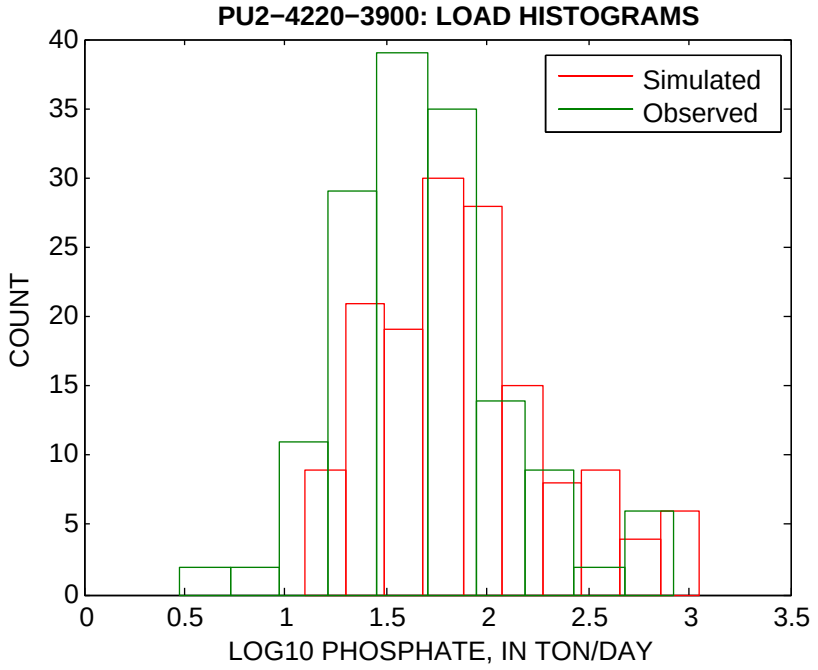


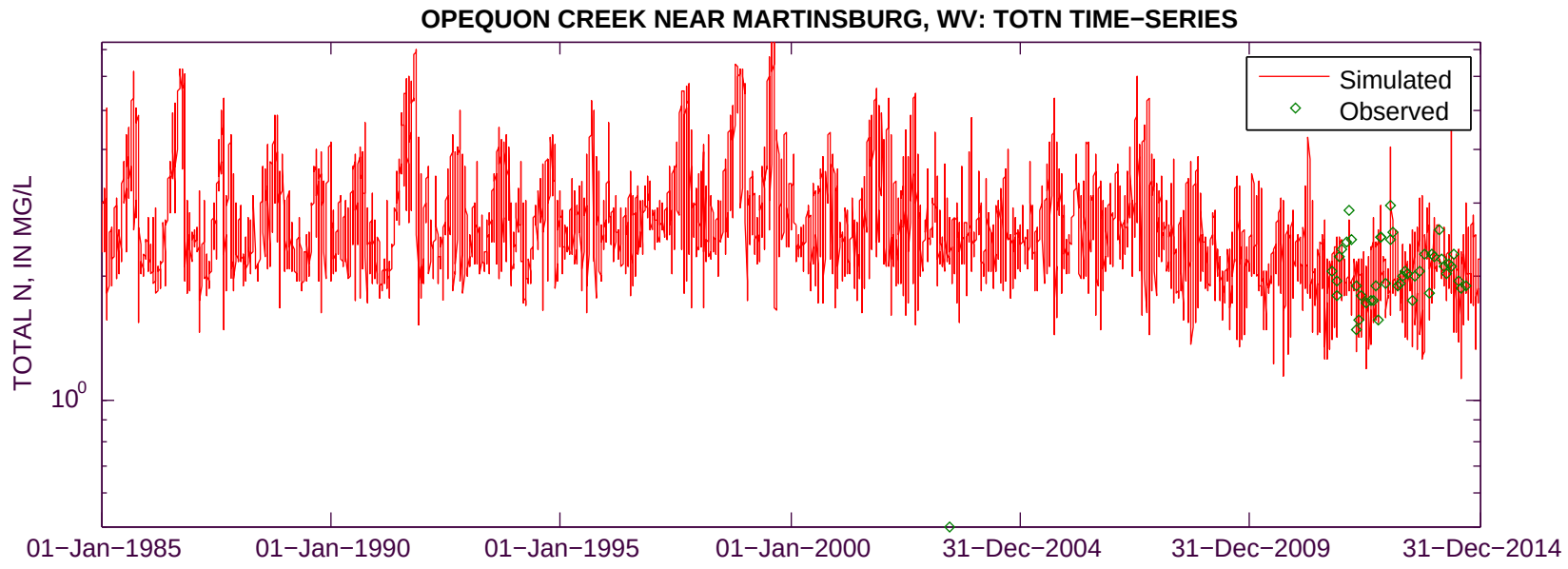
LOAD DATA
LOG10

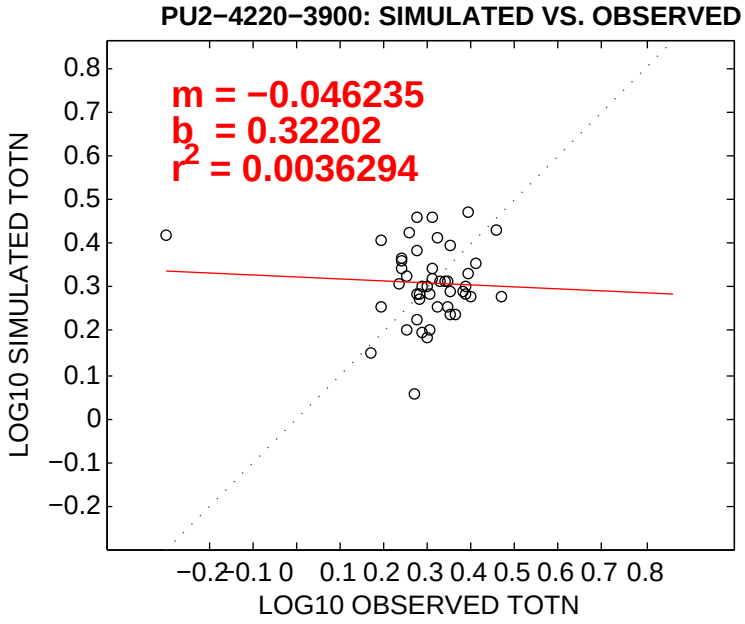


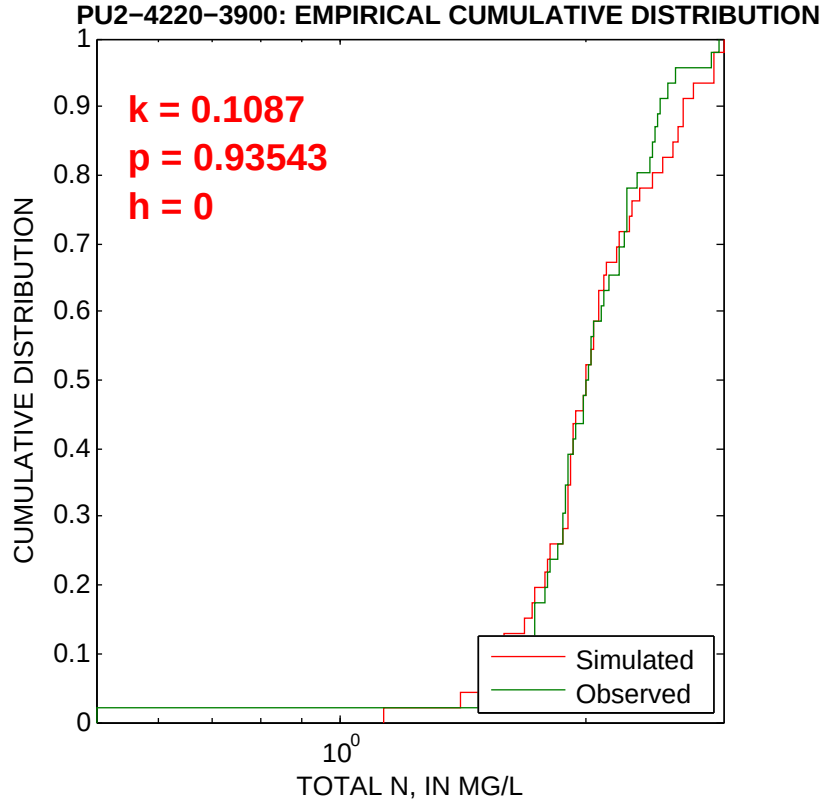












DATA SELECTION

scenario	file
P620171001WQ	TOTN.calib

plot: TOTN - total nitrogen

Dates: 1/1/1985 – 12/31/201

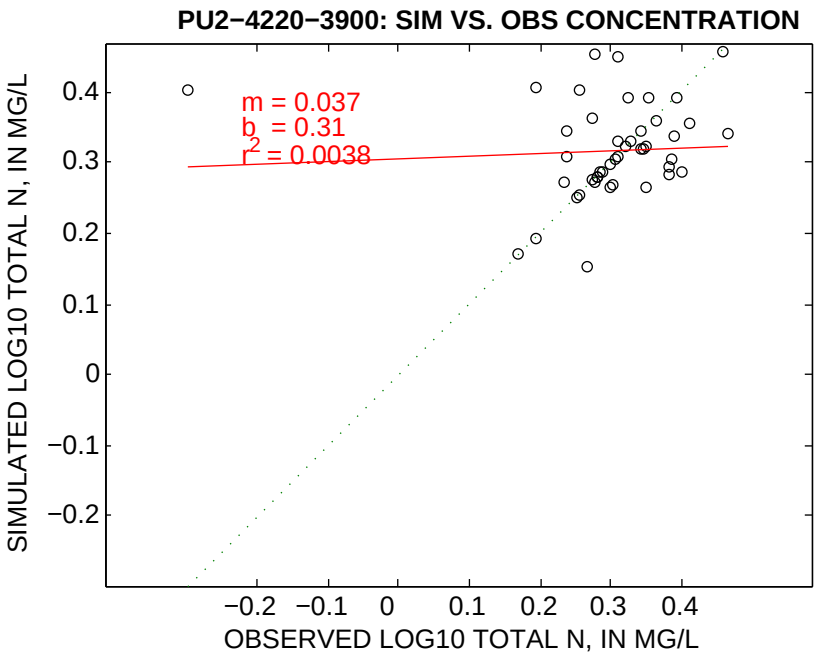
Drive	Directory	Observed
N/A	model	OBS20161101

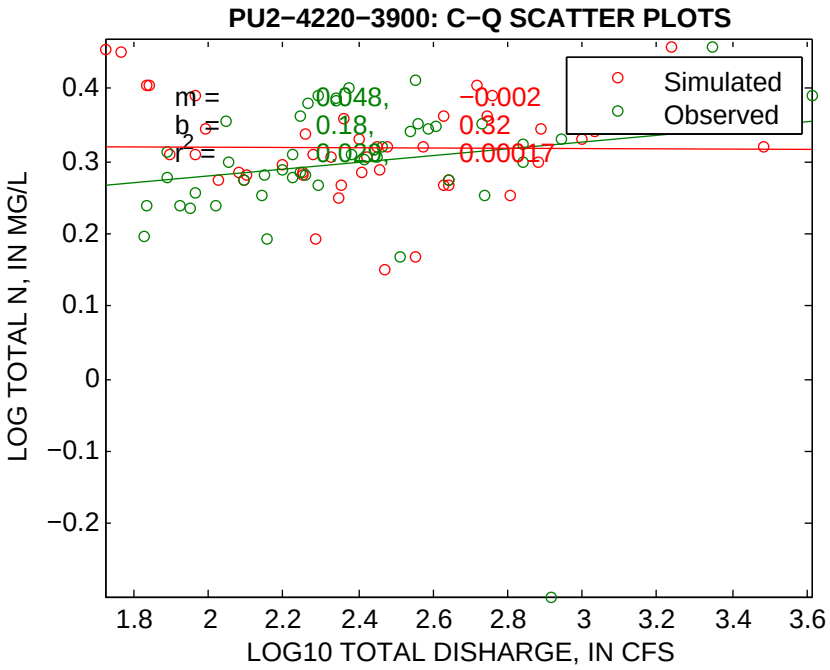
STATISTICS

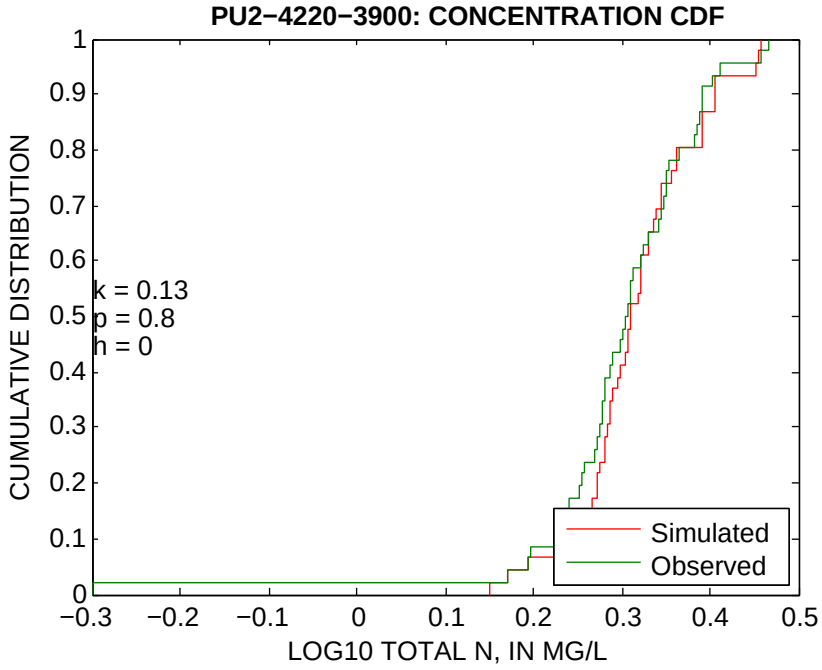
	n	46	46
		observe	simulate
min		0.502	1.1339
		-0.299296	0.0545748
mean		2.04	2.0717
		0.29855	0.308222
media		2.019	2.00775
		0.305133	0.30271
max		2.93	2.955
		0.466868	0.470557
varian		0.155939	0.161582
		0.0124292	0.00732055
JB		0.001079	0.5
		0.001	0.5
		ra	log
%		1.55382	3.23963
err.va		0.318408	0.0209947
rel.std.err		2.04187	1.68914
mod.eff		-1.04187	-0.689144

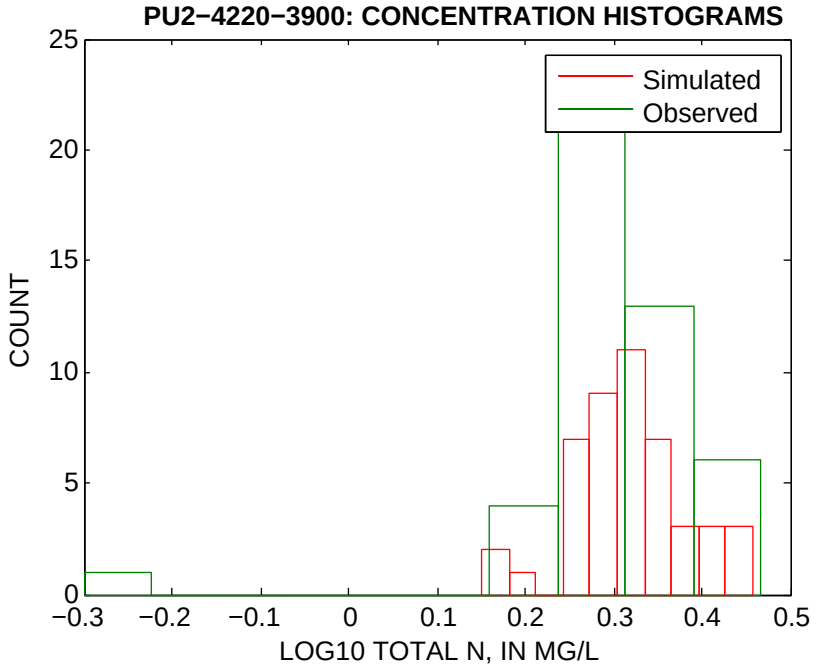
VERSION 2.1

ALL DATA
LOG10

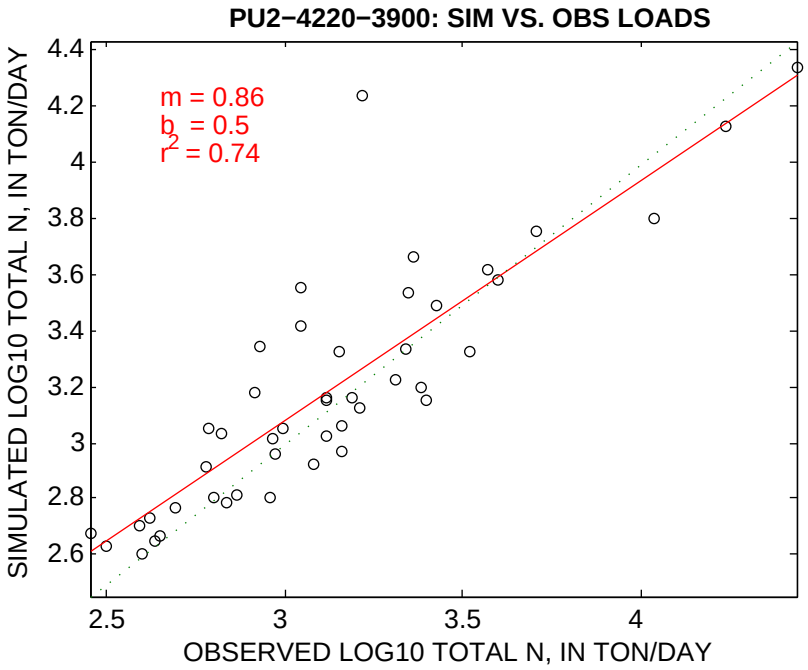


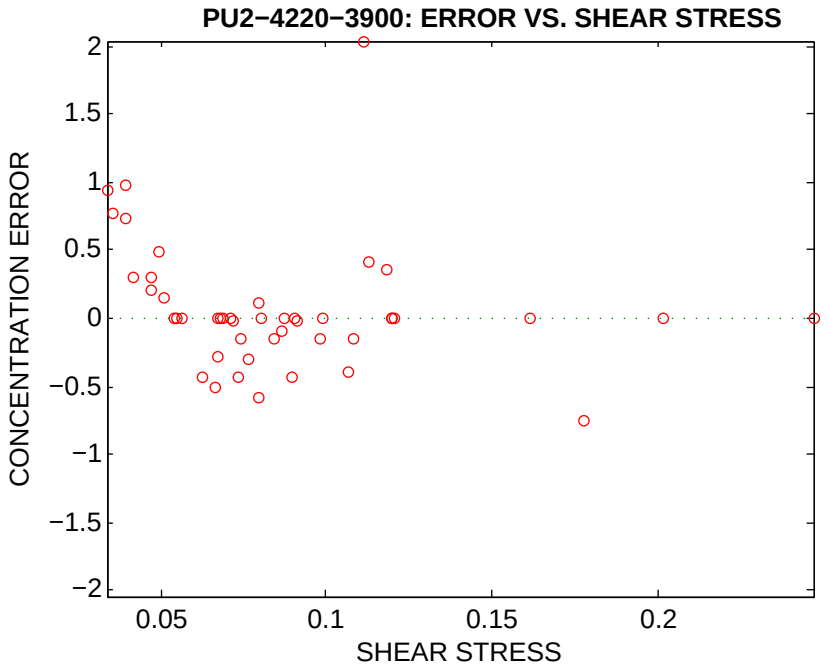


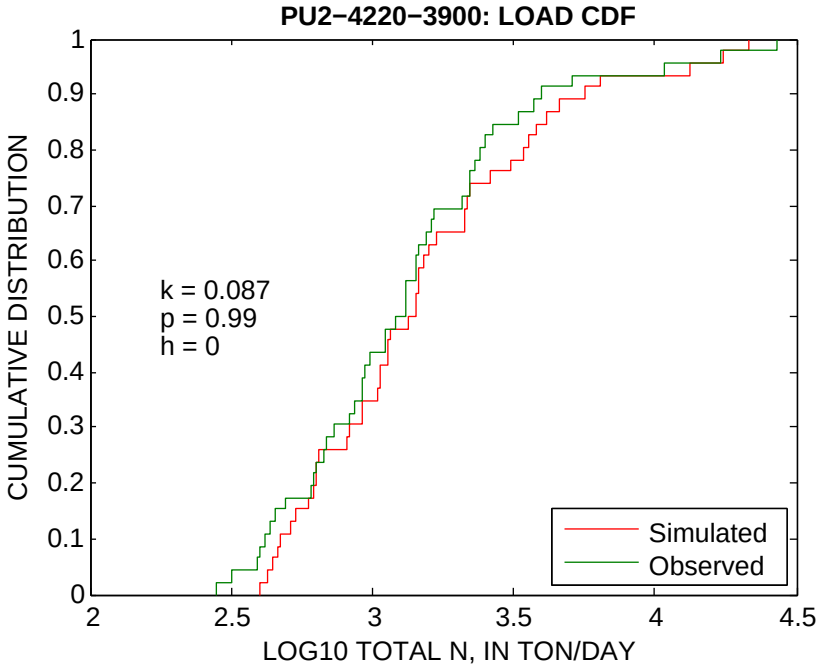


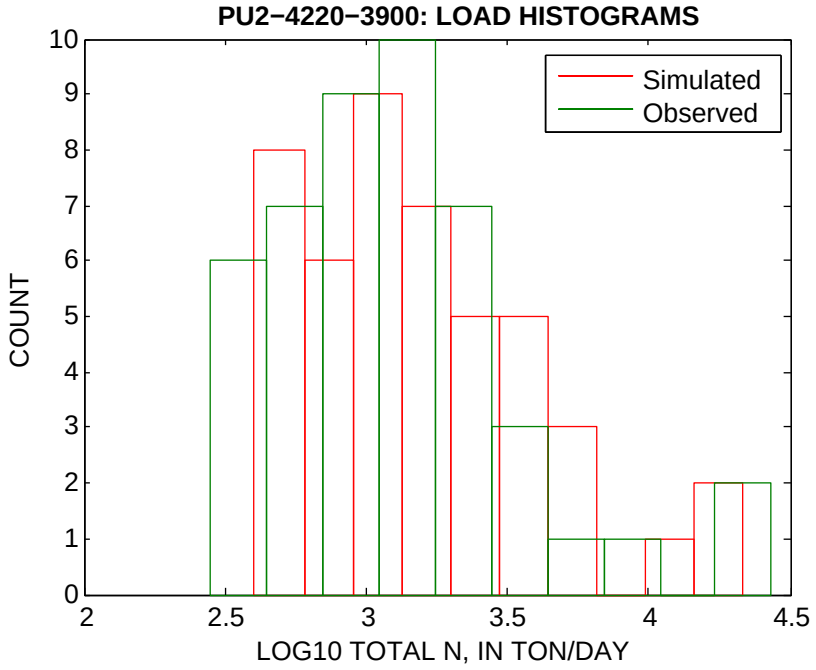


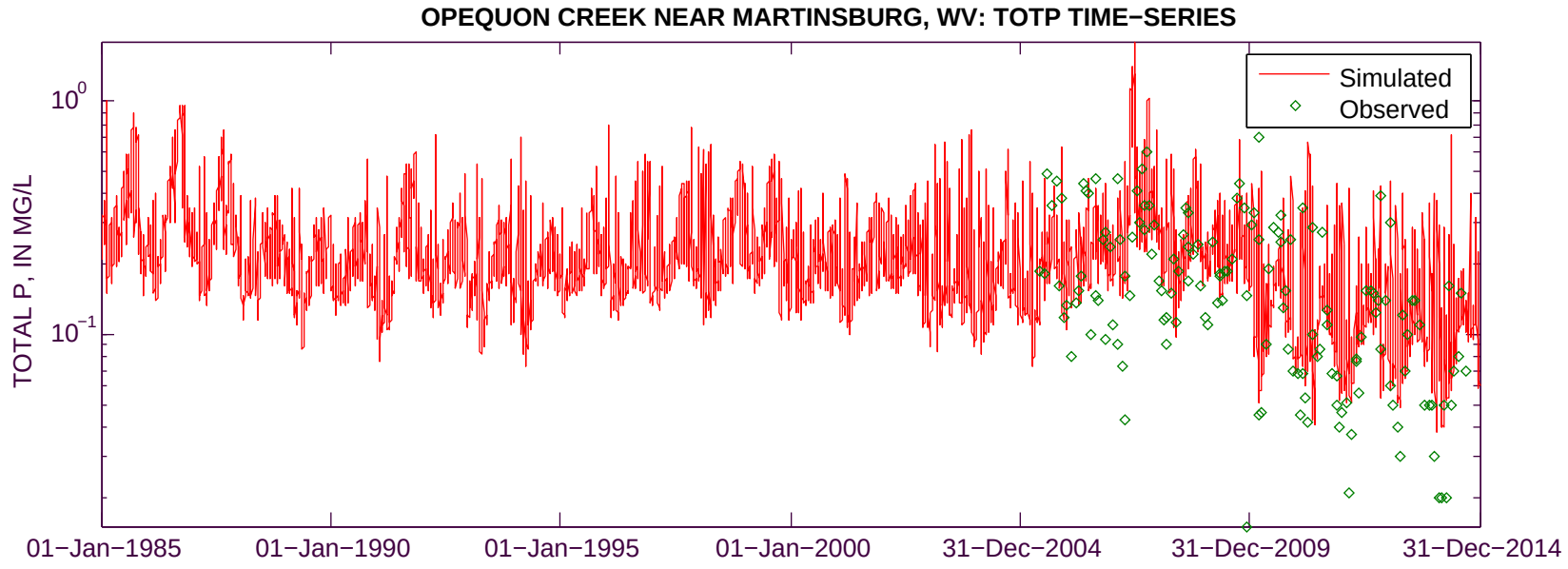
LOAD DATA
LOG10

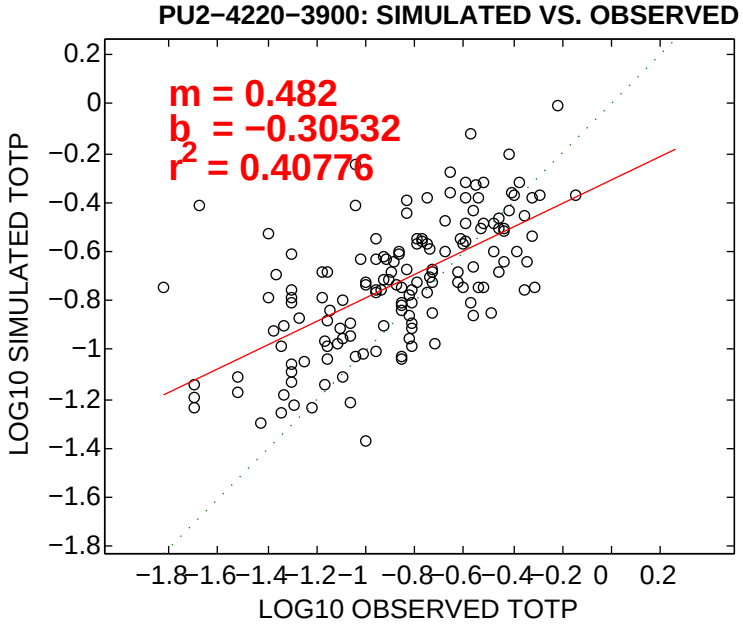


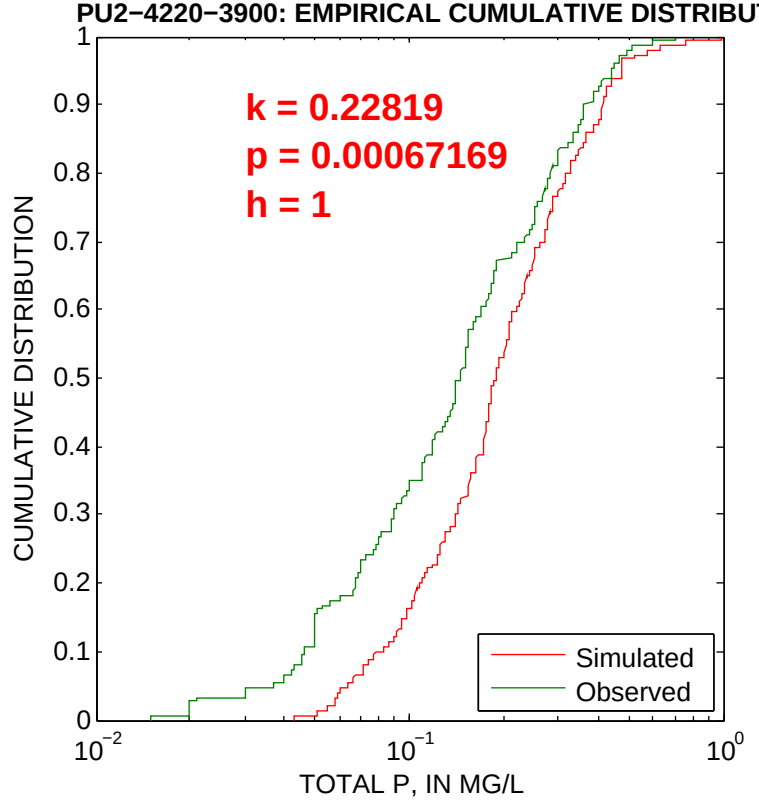












DATA SELECTION

scenario	file
P620171001WQ	TOTP.calib

plot: TOTP - total phosphorus

Dates: 1/1/1985 – 12/31/201

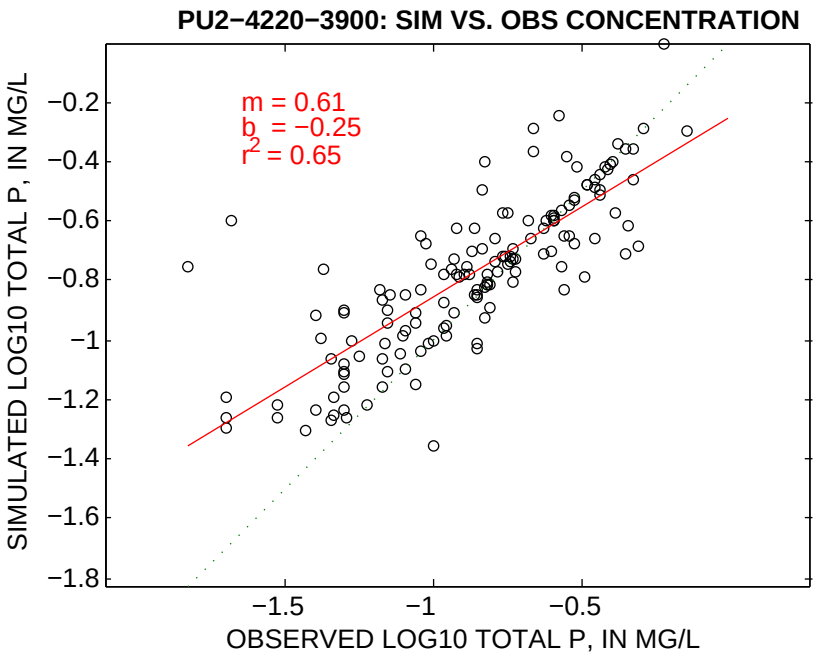
Drive	Directory	Observed
N/A	model	OBS20161101

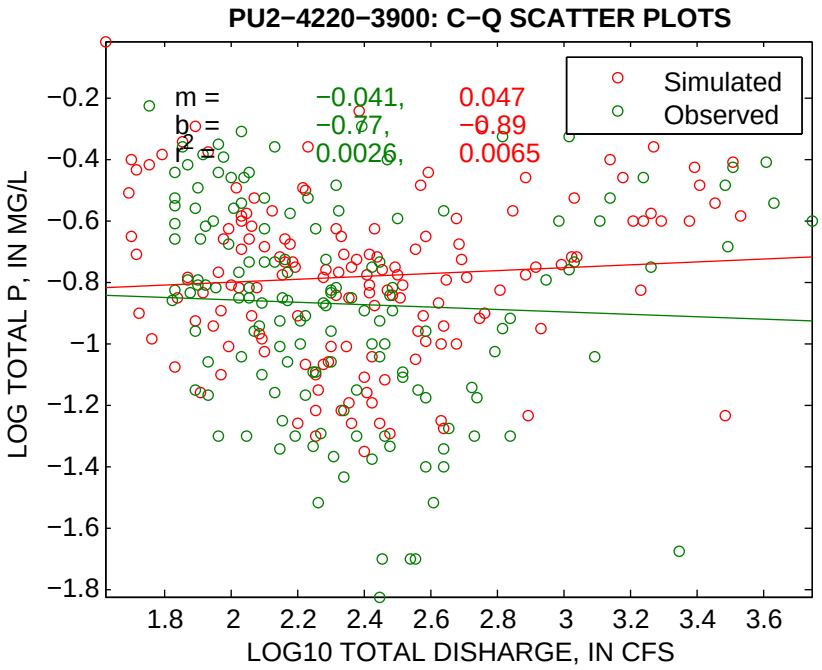
STATISTICS

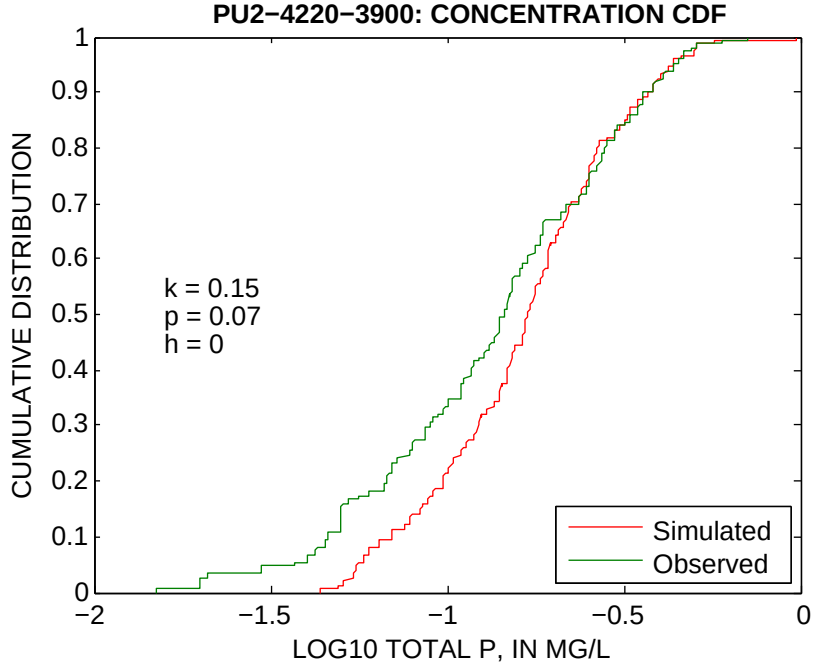
	n	149	149
		observe	simulate
min		0.015	0.043046
		-1.82391	-1.36607
mean		0.179624	0.225433
		-0.870078	-0.724701
media		0.145	0.18862
		-0.838632	-0.724412
max		0.705	0.98532
		-0.151811	-0.0064227
varian		0.0174963	0.0204155
		0.122359	0.0697138
JB		0.001	0.001
		0.085471	0.5
		ra	log
%		25.5026	-16.7085
err.va		0.0171731	0.095396
rel.std.err		0.981531	0.779642
mod.eff		0.0184692	0.220358

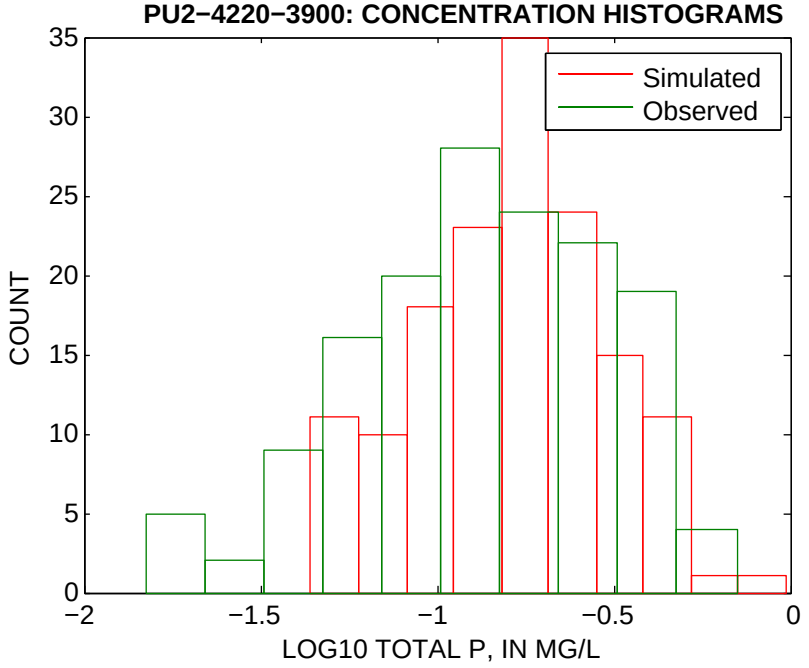
VERSION 2.1

ALL DATA
LOG10

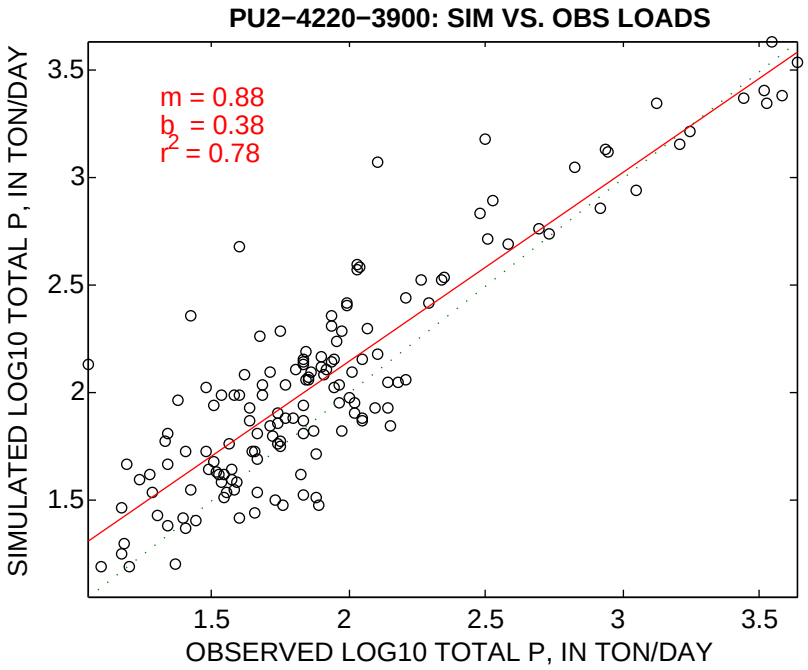


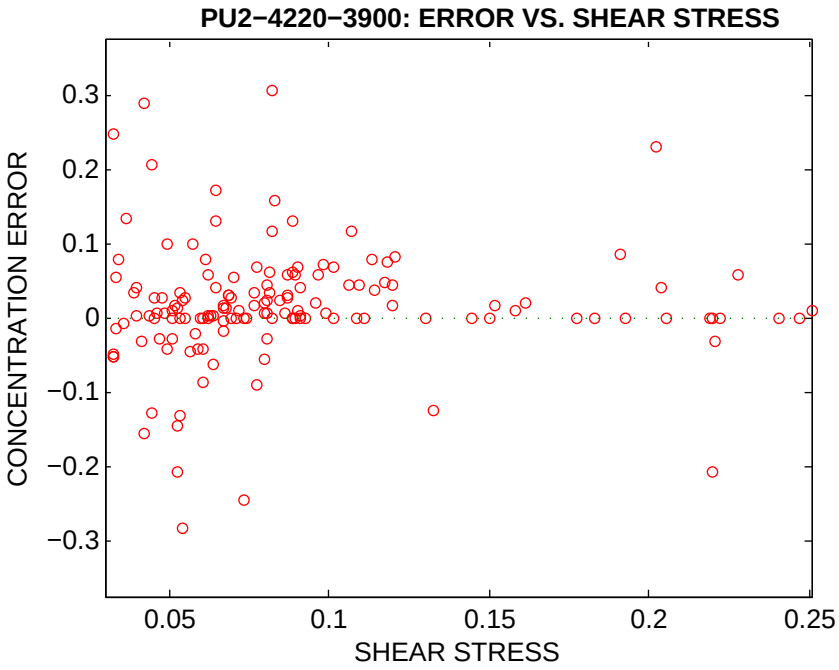


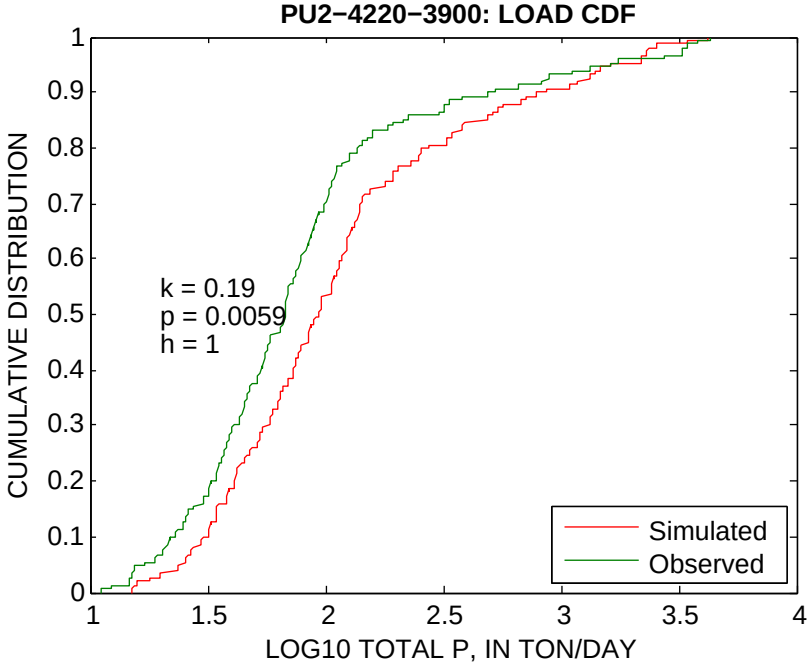


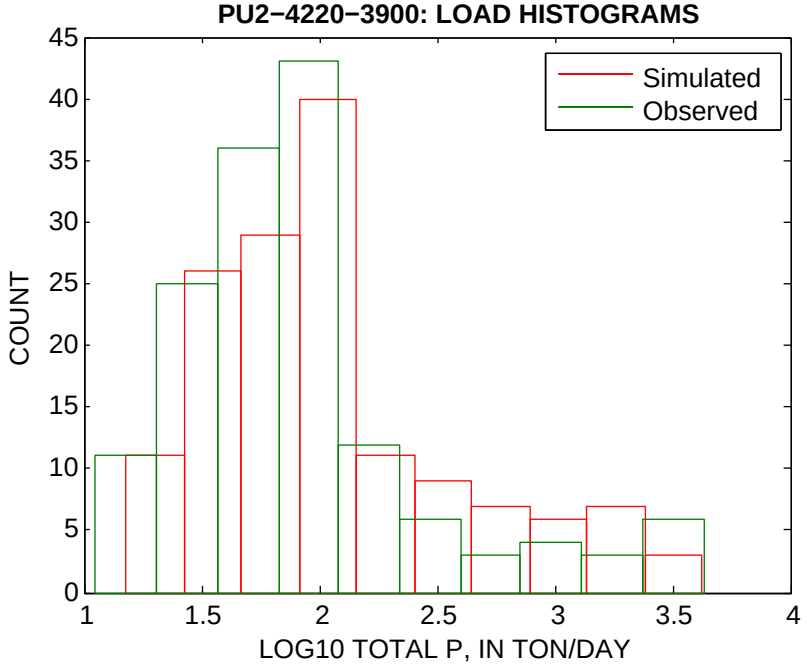


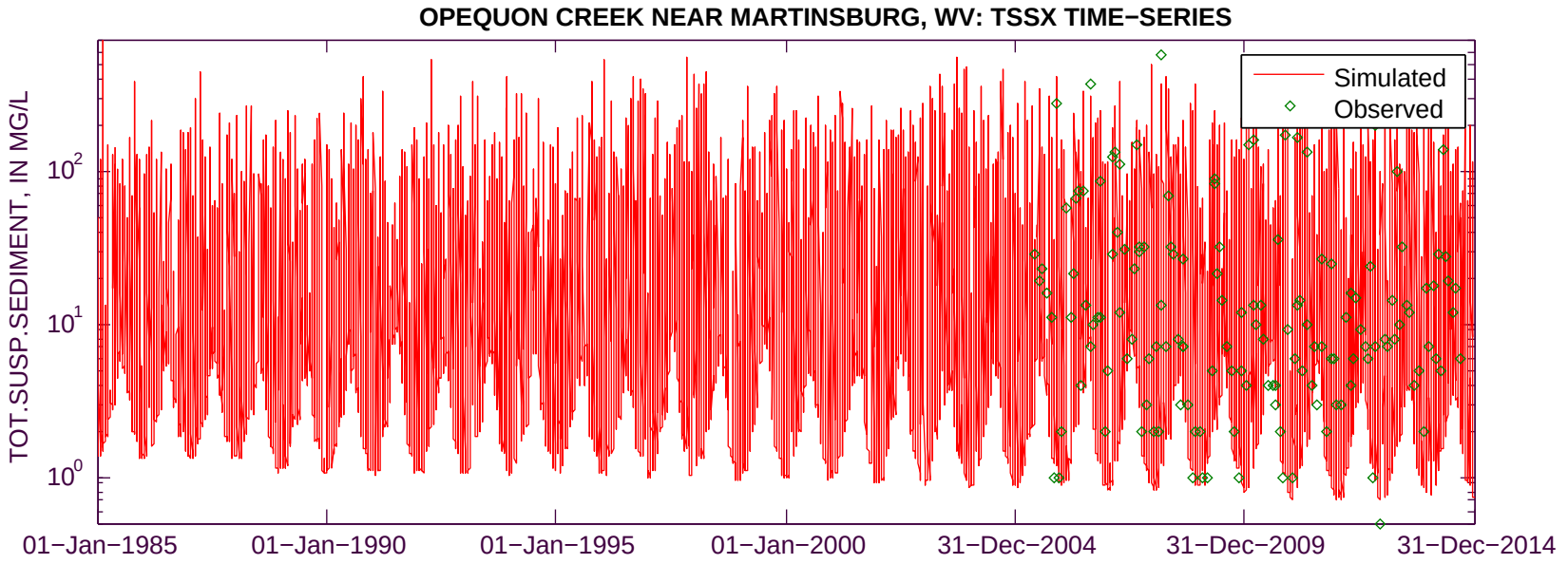
LOAD DATA
LOG10

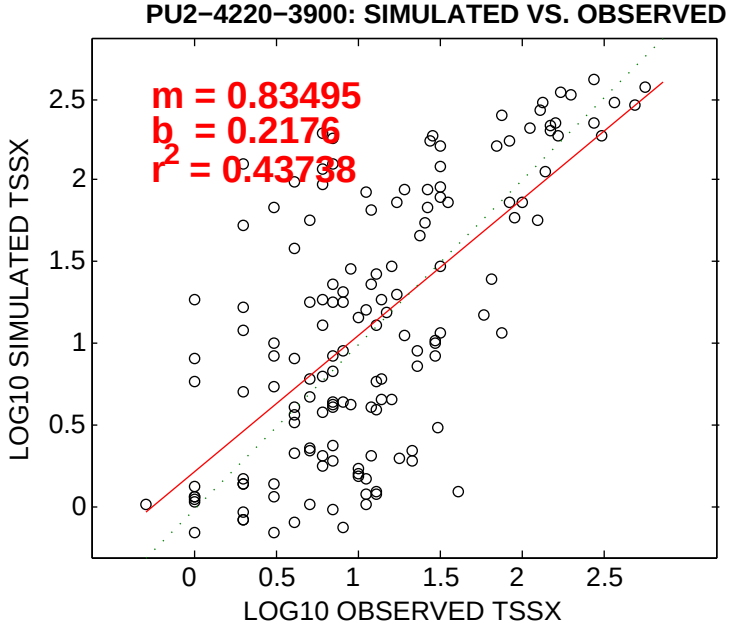


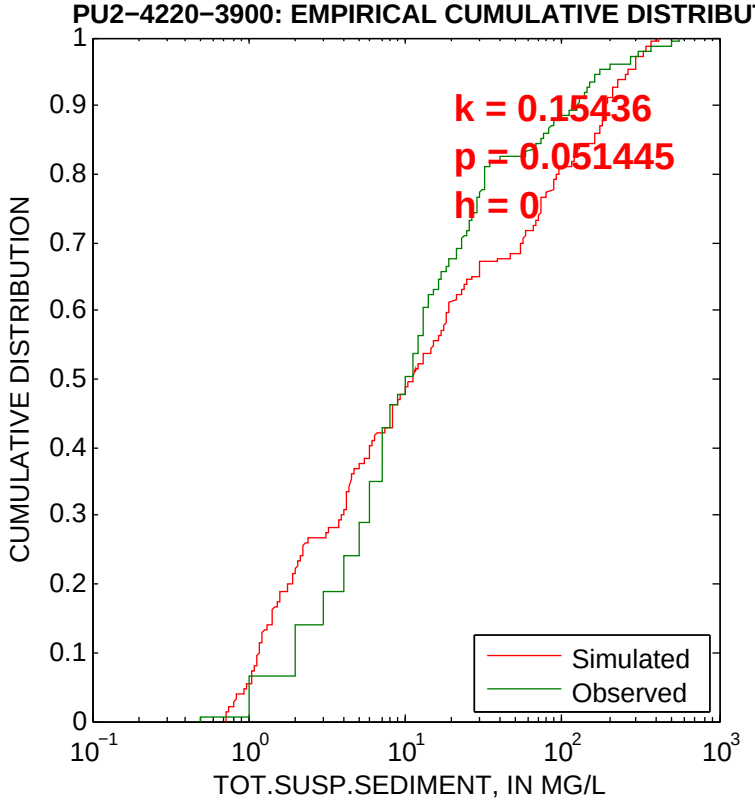












DATA SELECTION

scenario	file
P620171001WQ	TSSX.calib

plot: TSSX - total suspended ...

Dates: 1/1/1985 – 12/31/201

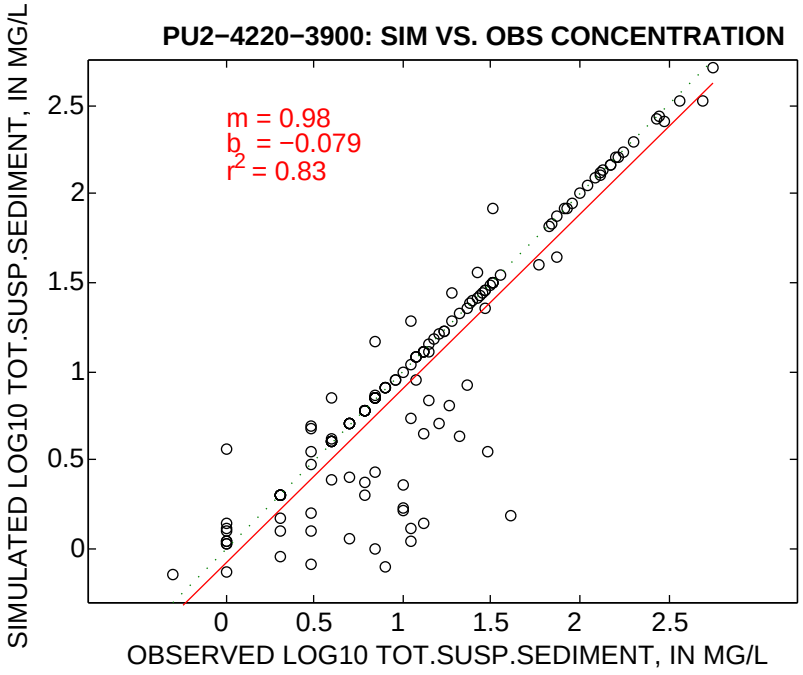
Drive: N/A | Directory: model | Observed: OBS20161101

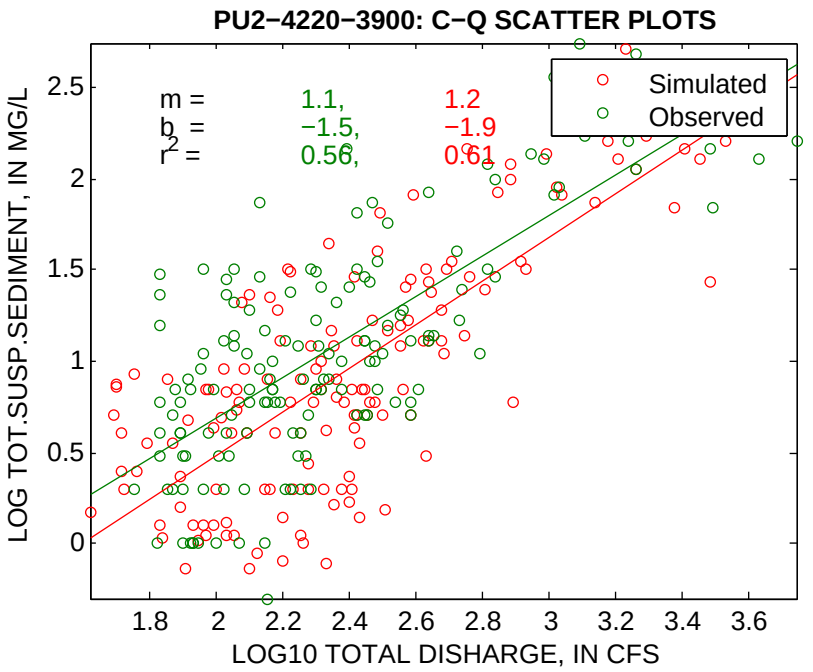
STATISTICS

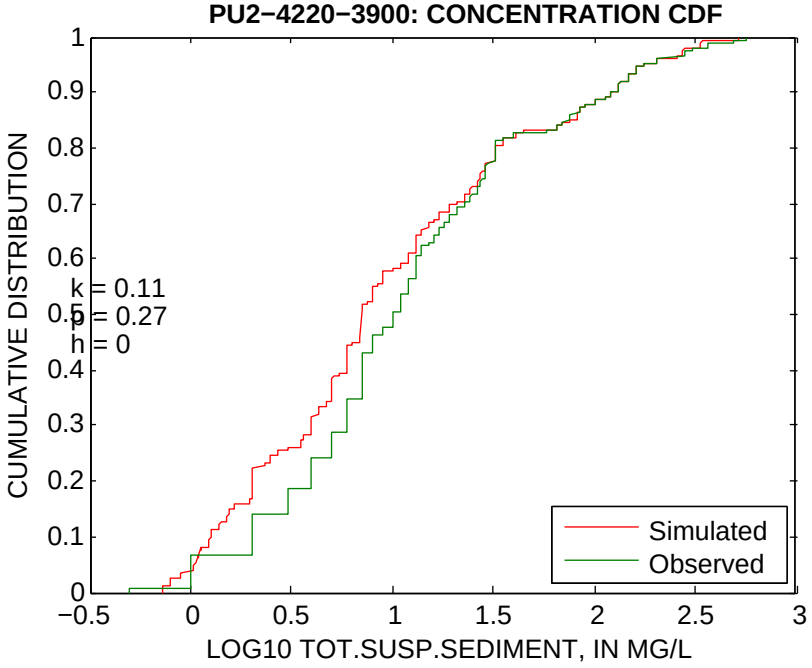
	n	observe	simulate
		149	149
min		0.5	0.71333
		-0.30103	-0.14671
mean		39.896	56.4338
		1.08152	1.12061
media		10	11.335
		1	1.05442
max		565	418.54
		2.75205	2.62174
varian		6970.04	8002.13
		0.416195	0.663377
JB		0.001	0.001
		0.060655	0.015016
		ra	log
%		41.4525	3.61434
err.va		3676.99	0.386107
rel.std.err		0.527541	0.927707
mod.eff		0.472459	0.0722933

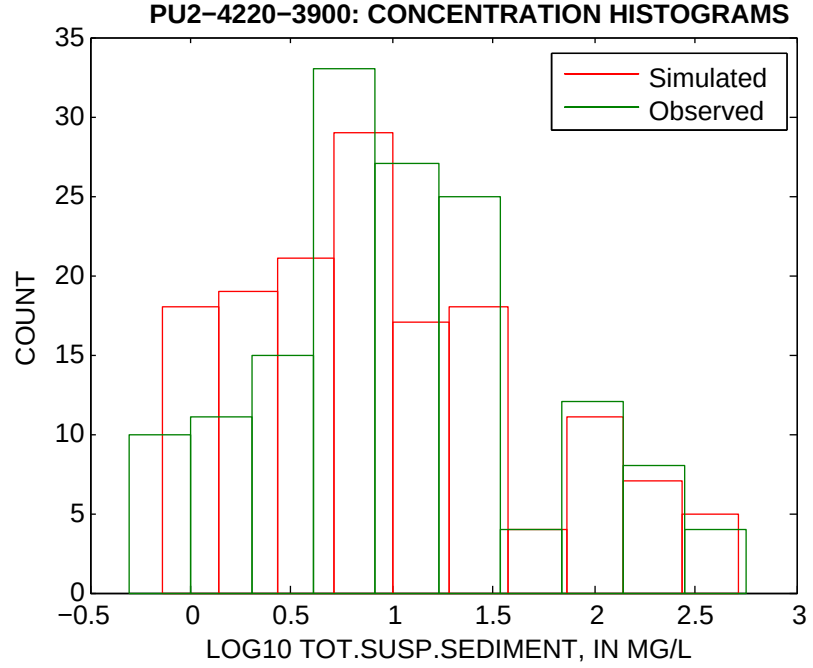
VERSION 2.1

ALL DATA
LOG10

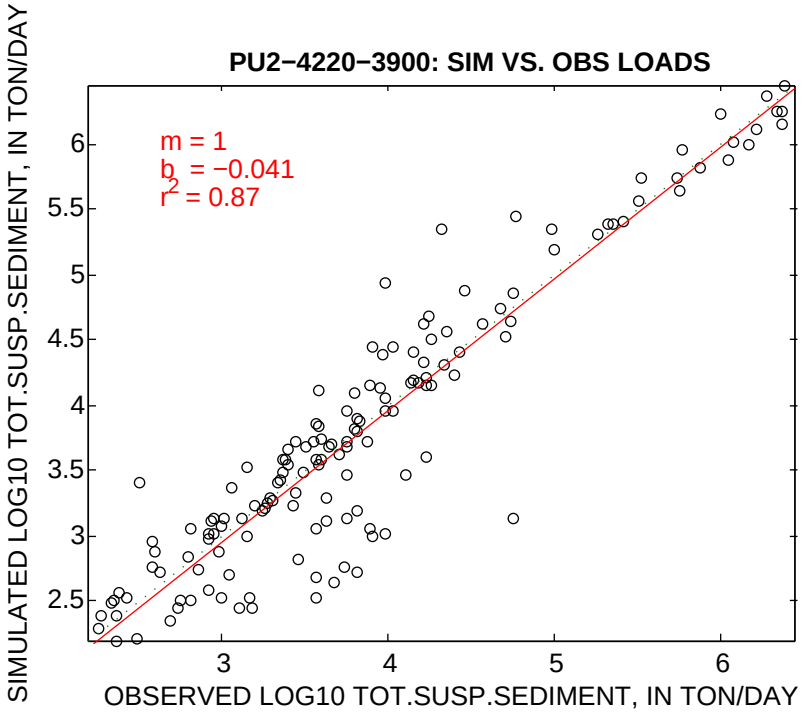


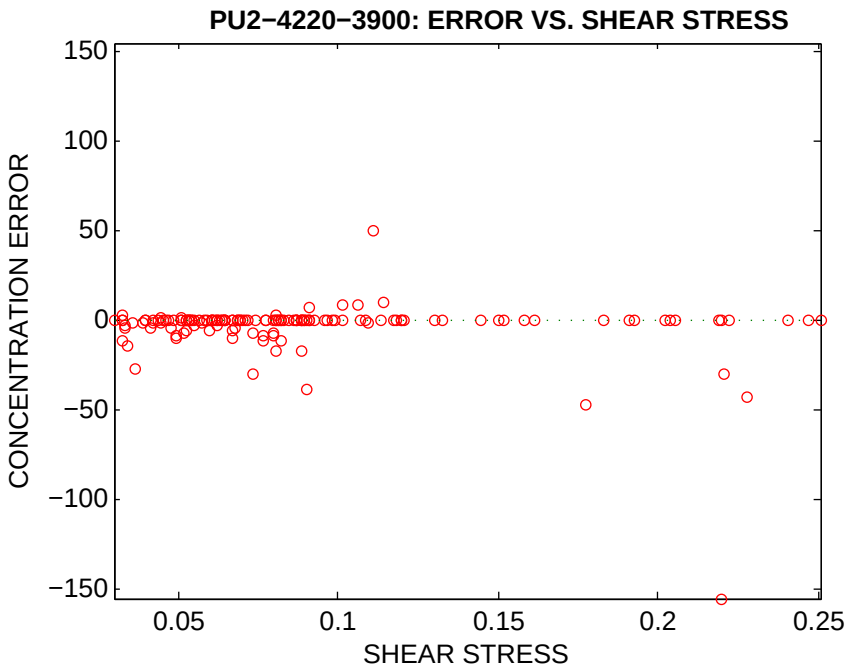


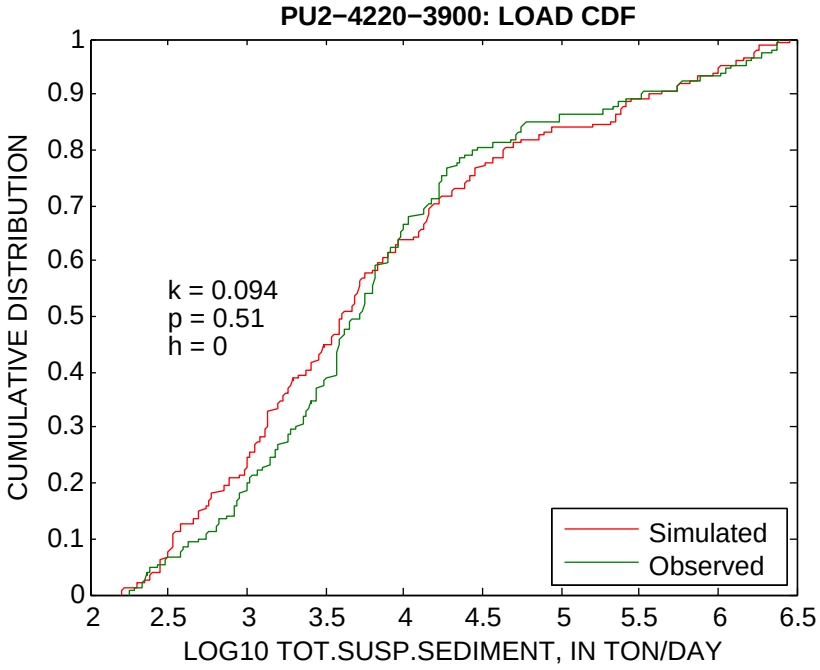


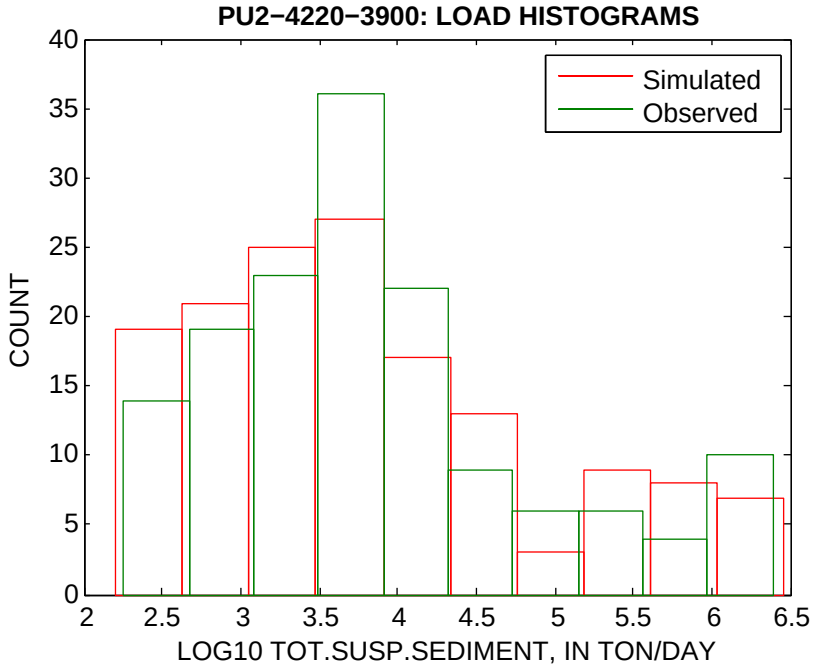


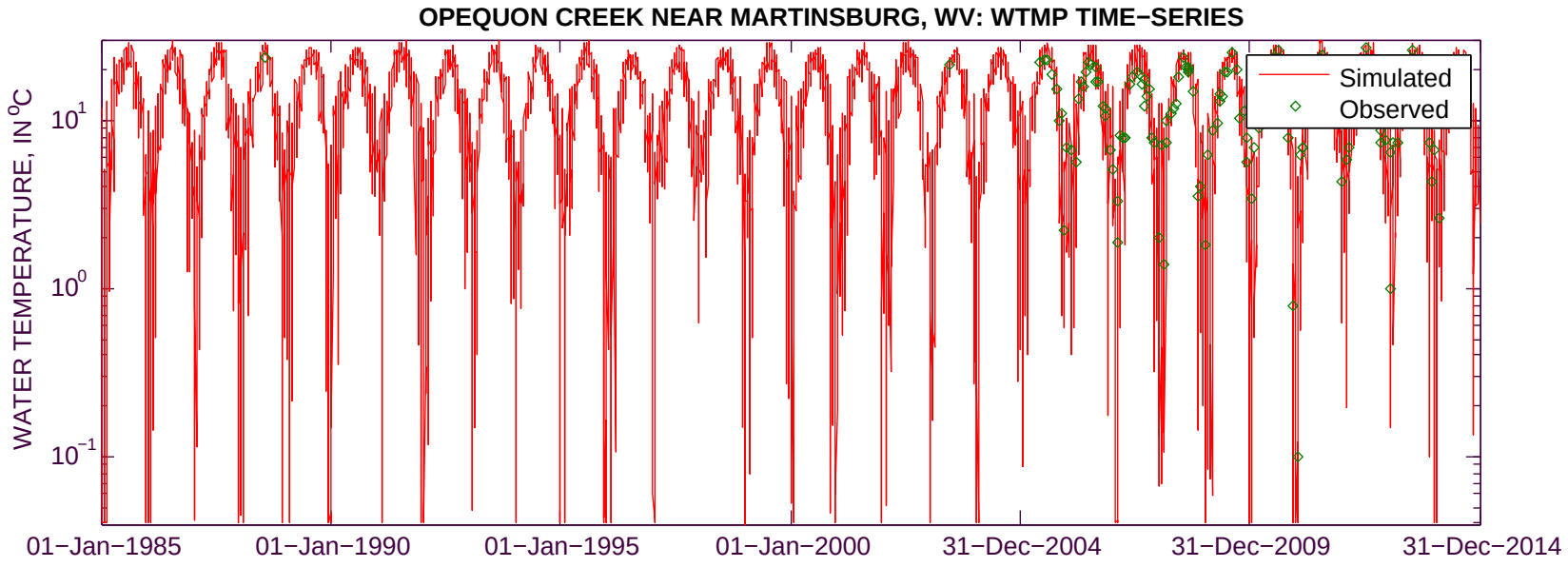
LOAD DATA
LOG10

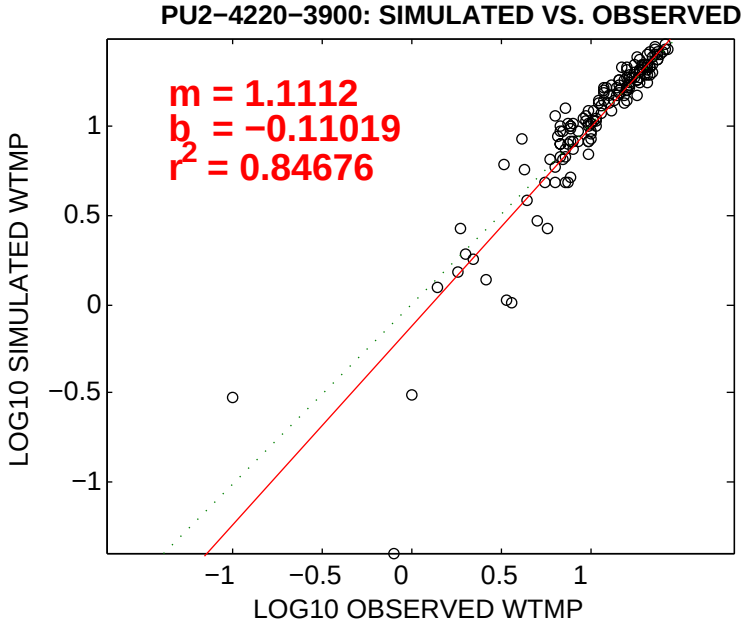


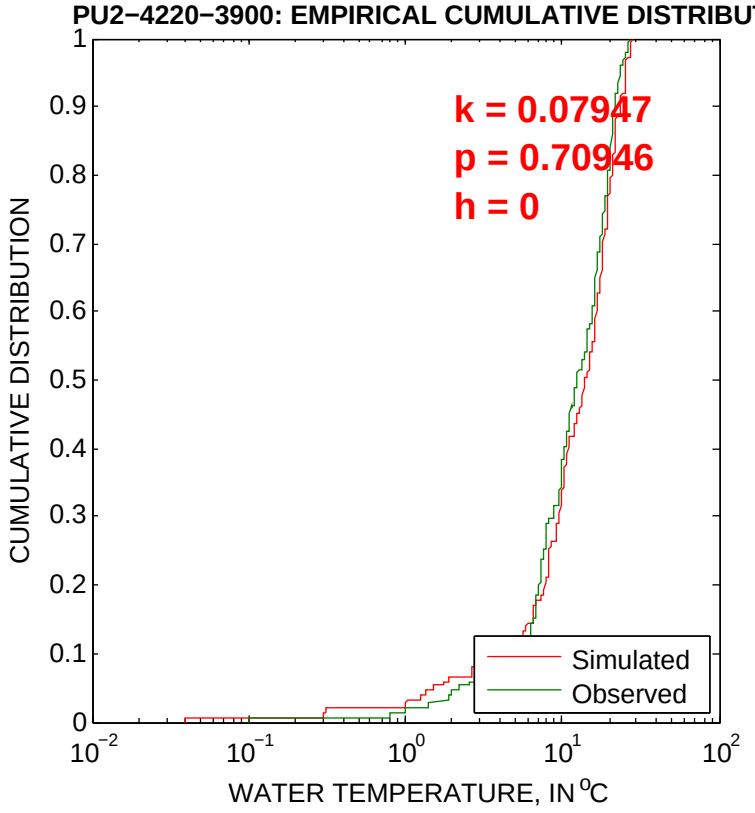












DATA SELECTION

scenario	file
P620171001WQ	WTMP.calib

plot: WTMP - water tempera...

Dates: 1/1/1985 – 12/31/201

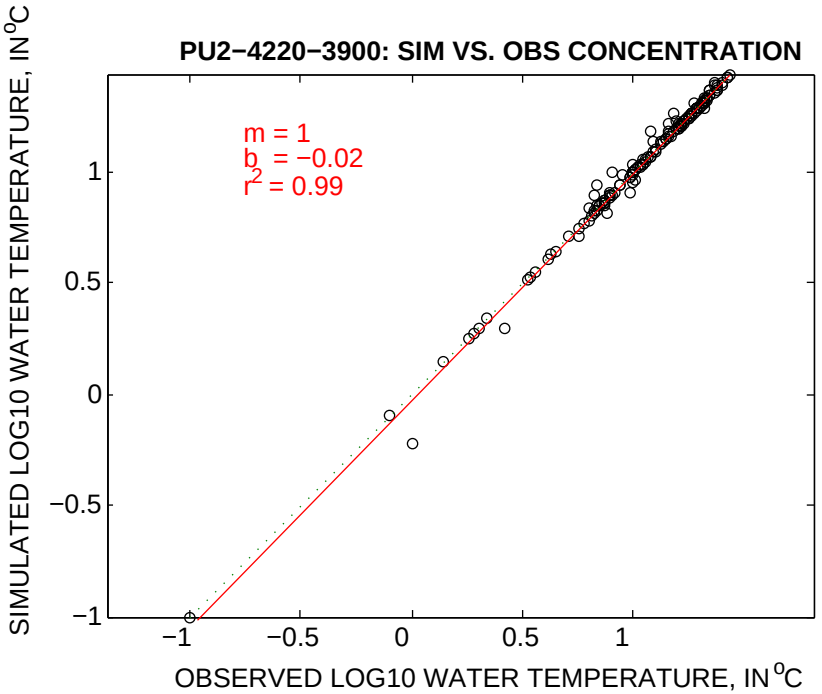
Drive	Directory	Observed
N/A	model	OBS20161101

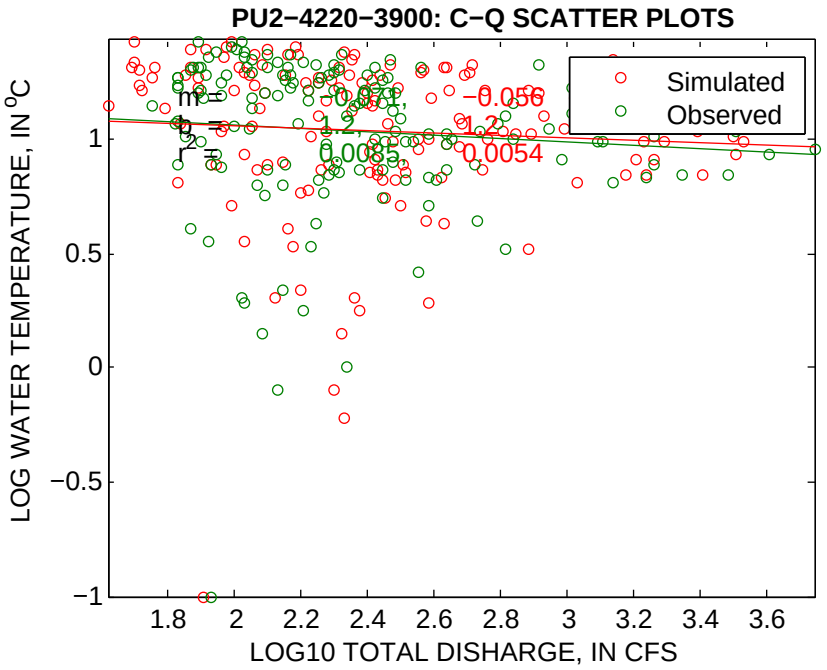
STATISTICS

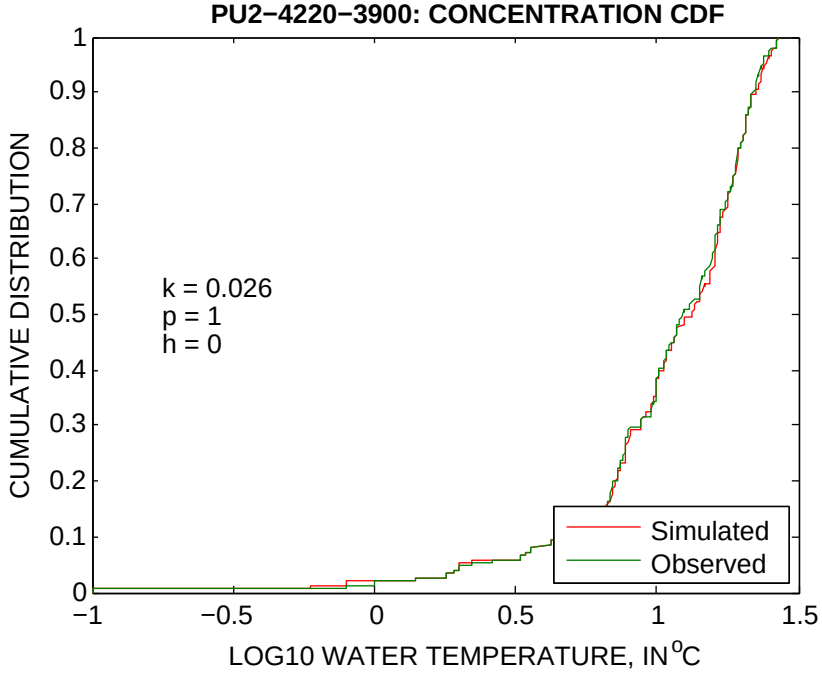
	n	observe	simulate
		151	151
min		0.1	0.04016
		-1	-1.39621
mean		13.1679	13.9911
		1.03416	1.03892
media		12.54	13.993
		1.0983	1.14591
max		27.1	28.137
		1.43297	1.44928
varian		43.3702	51.0397
		0.112837	0.164528
JB		0.045984	0.059719
		0.001	0.001
		ra	log
%		6.25185	0.460378
err.va		4.77282	0.0266287
rel.std.err		0.110048	0.235992
mod.eff		0.889952	0.764008

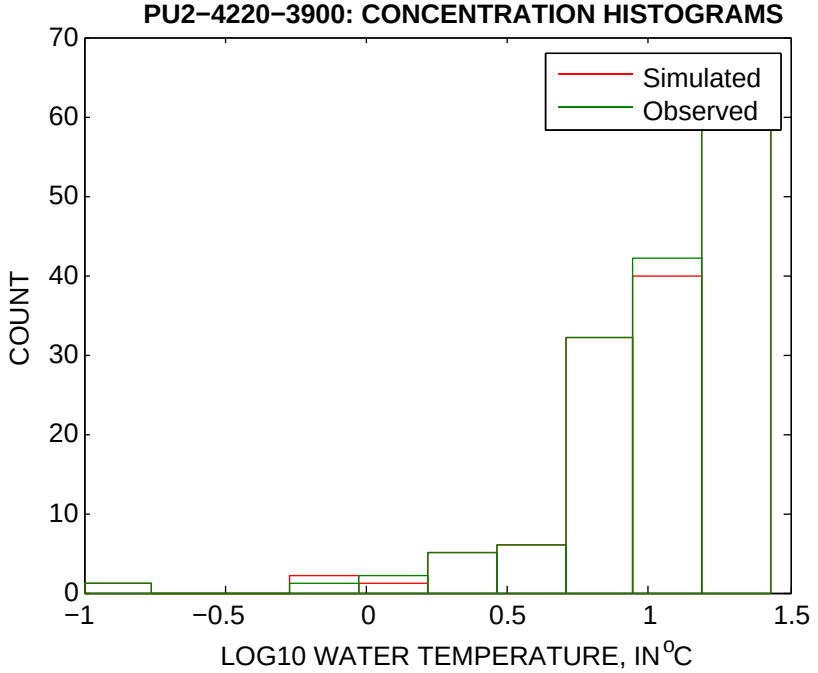
VERSION 2.1

ALL DATA
LOG10

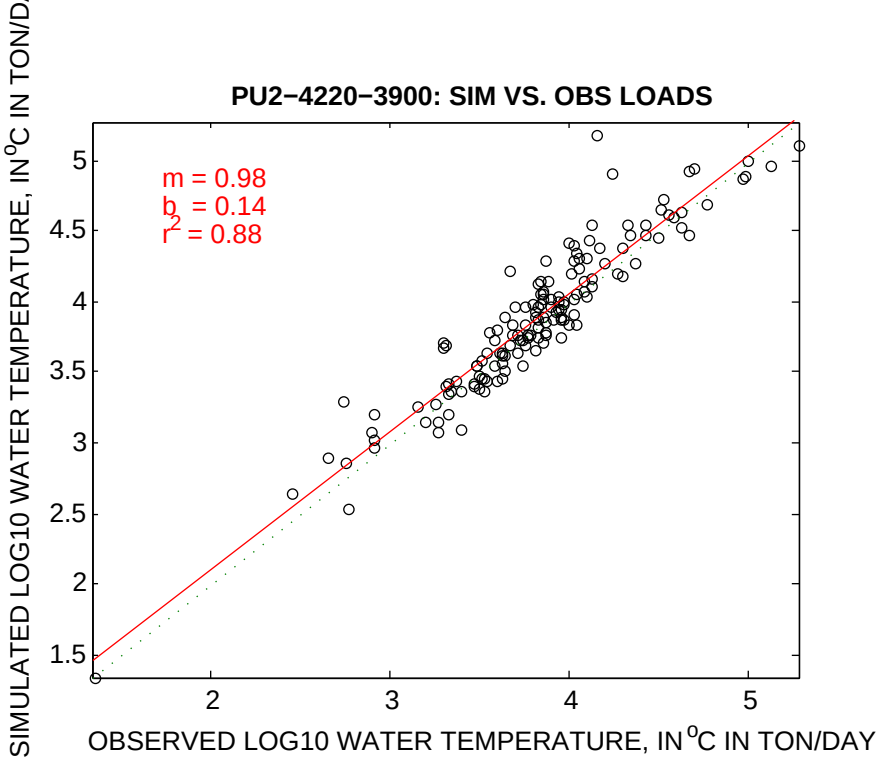


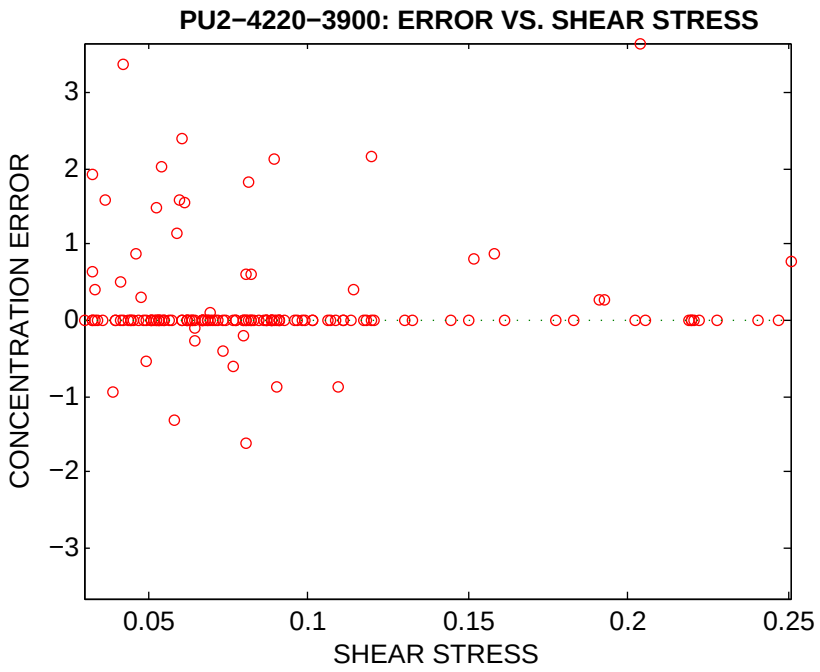


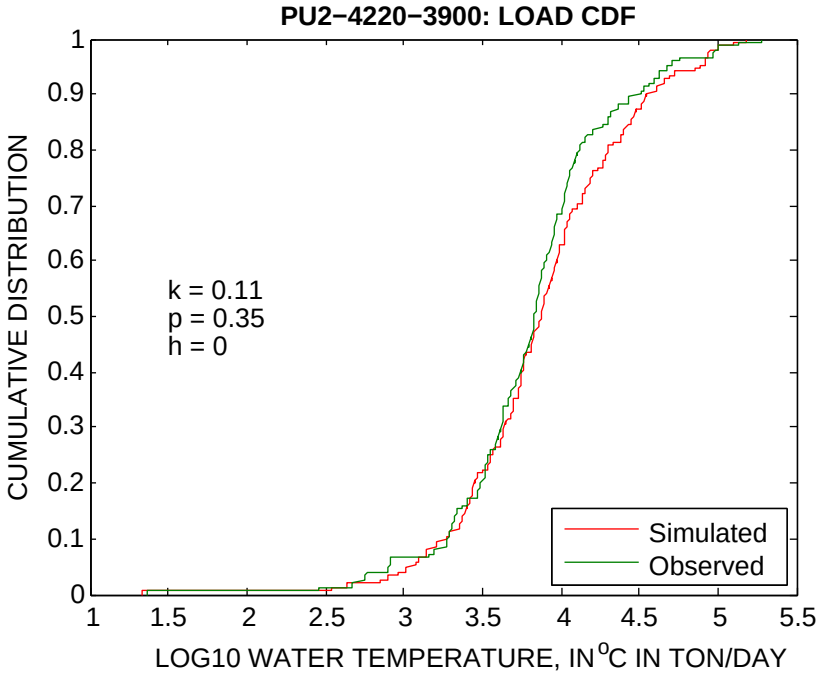


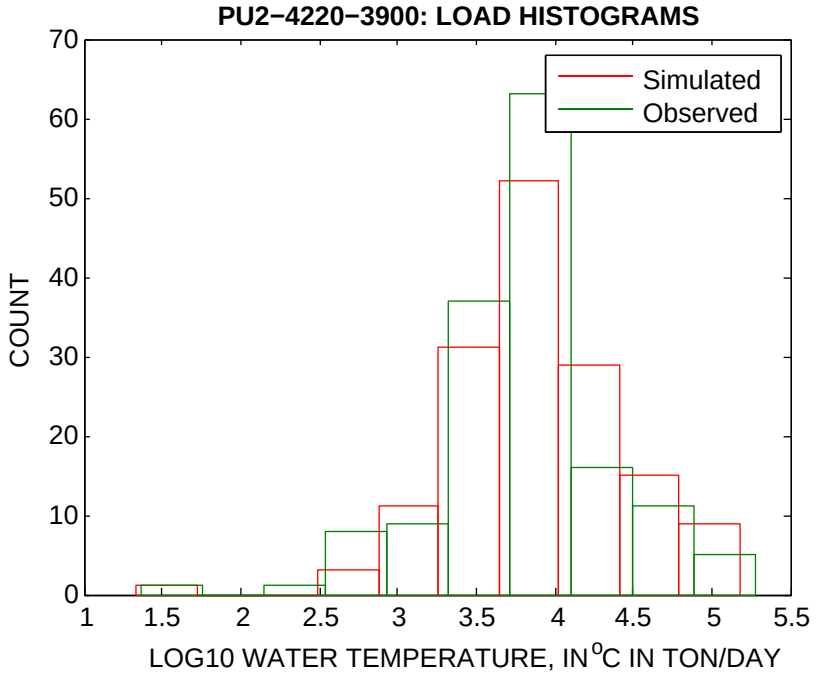


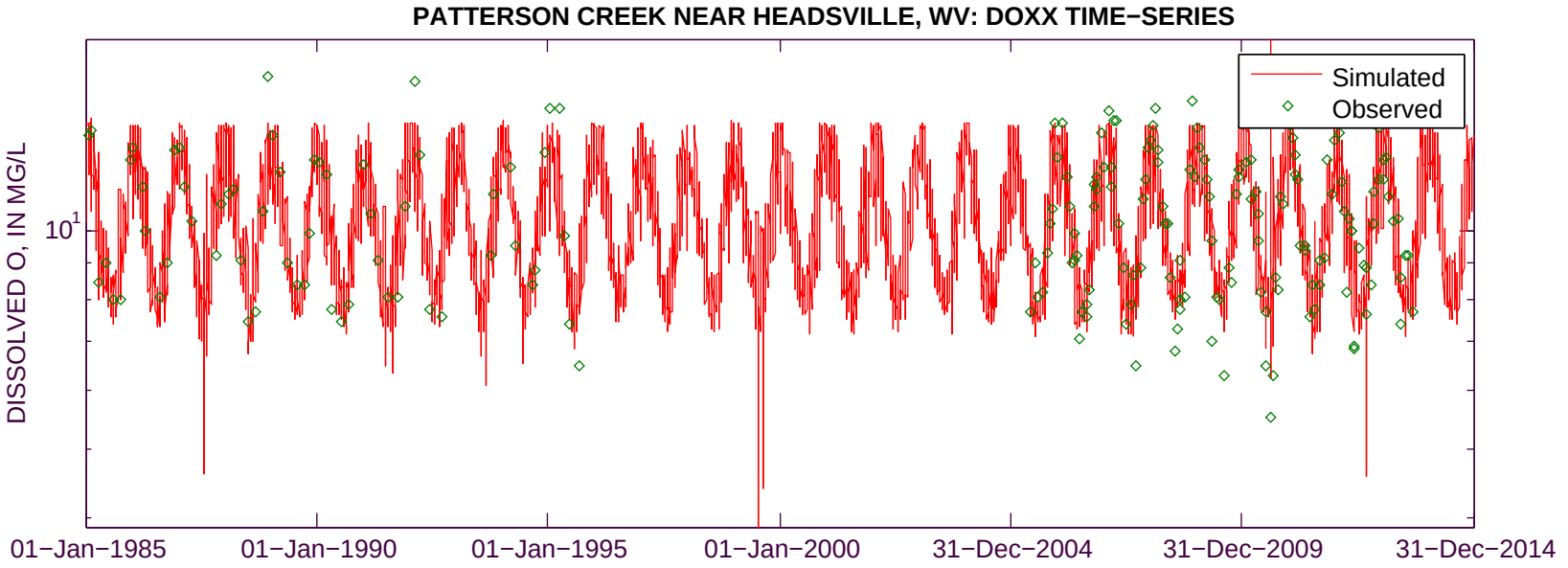
LOAD DATA
LOG10

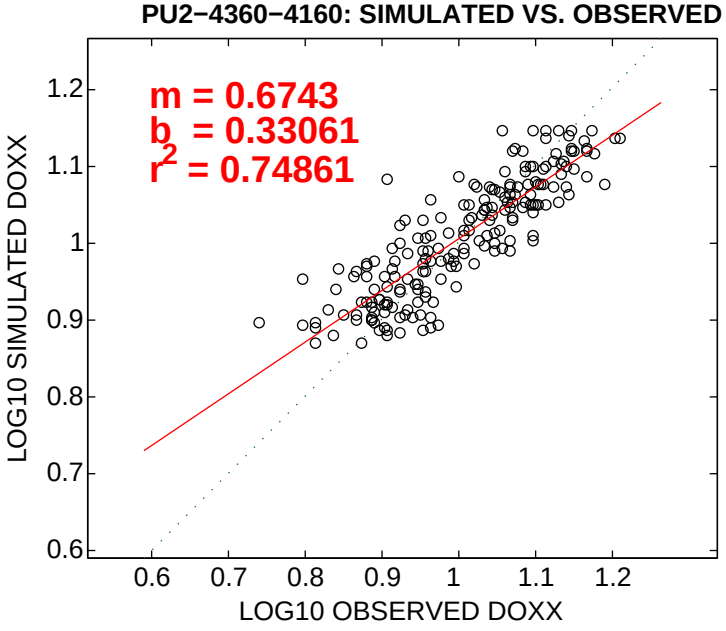


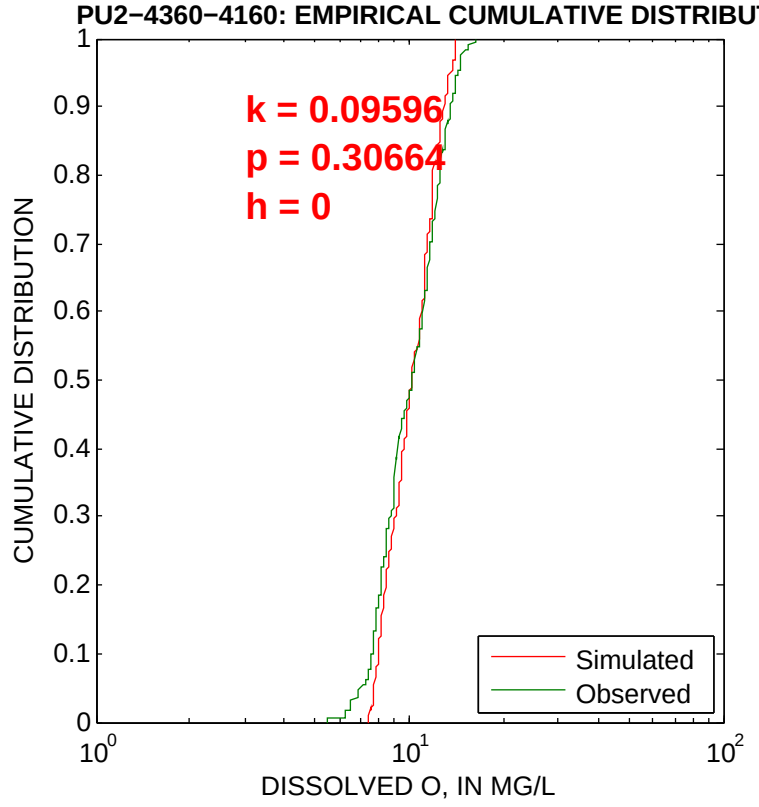












DATA SELECTION

scenario	file
P620171001WQ	DOXX.calib

plot: DOXX - dissolved oxygen

Dates: 1/1/1985 – 12/31/201

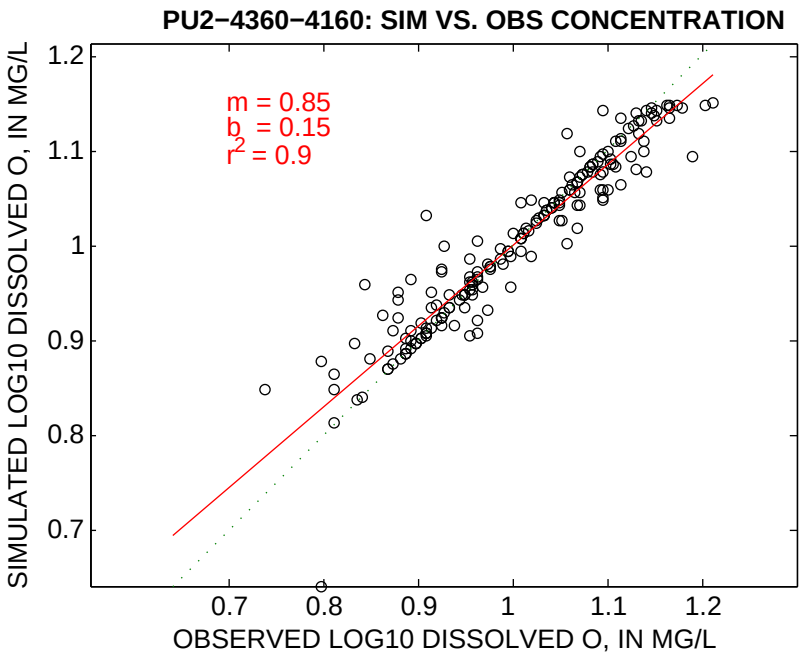
Drive	Directory	Observed
N/A	model	OBS20161101

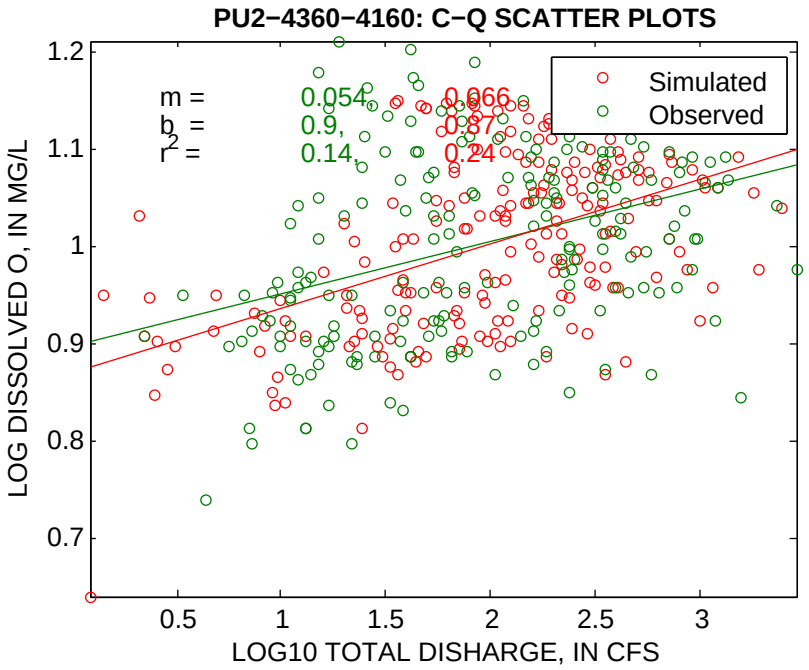
STATISTICS

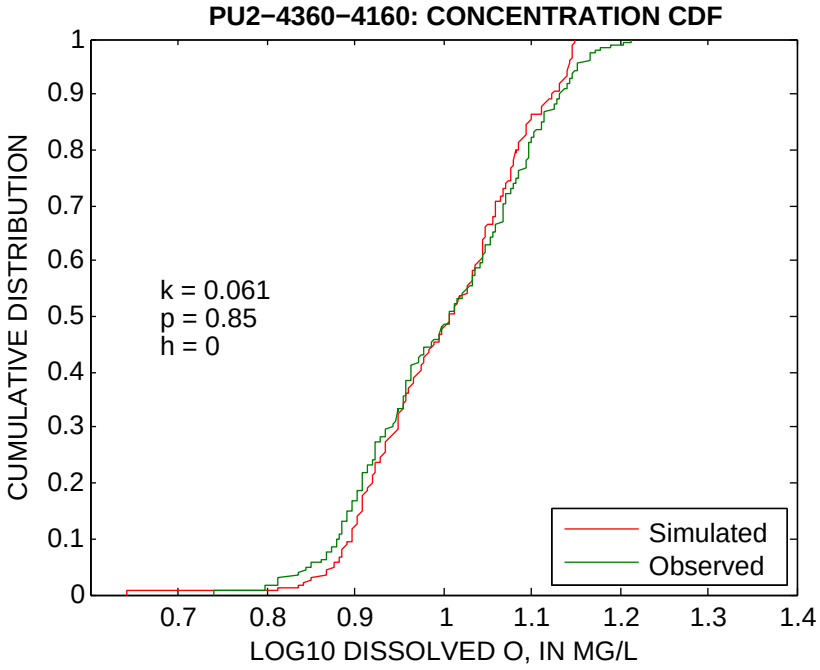
	n	198	198
		observe	simulate
min		5.5	7.3779
		0.740363	0.867933
mean		10.3569	10.3396
		1.00424	1.00778
media		10.2	10.195
		1.0086	1.00839
max		16.3	14.007
		1.21219	1.14635
varian		5.40061	3.32299
		0.00969586	0.00588899
JB		0.025682	0.014103
		0.045186	0.013854
		ra	log
%		-0.167564	0.35205
err.va		1.35842	0.00252151
rel.std.err		0.251532	0.26006
mod.eff		0.748468	0.73994

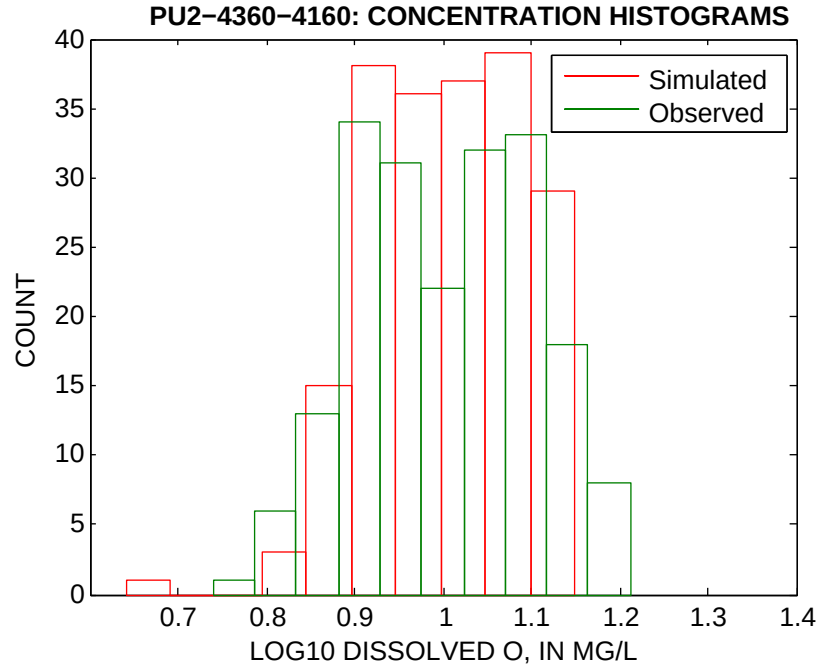
VERSION 2.1

ALL DATA
LOG10

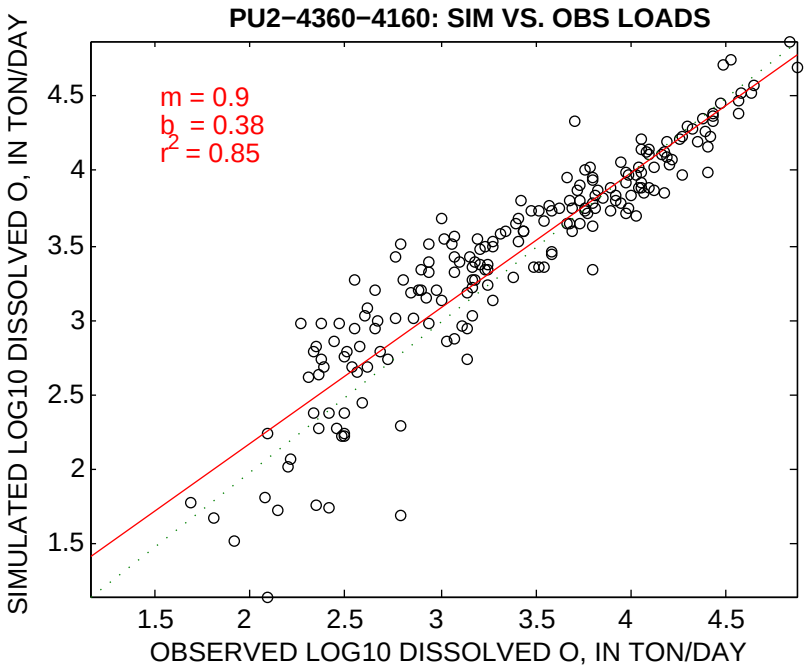


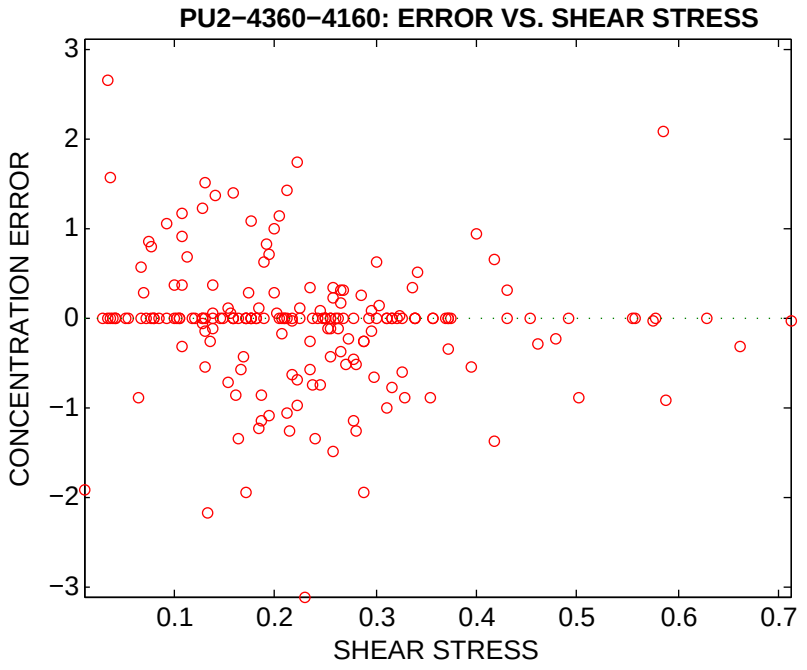


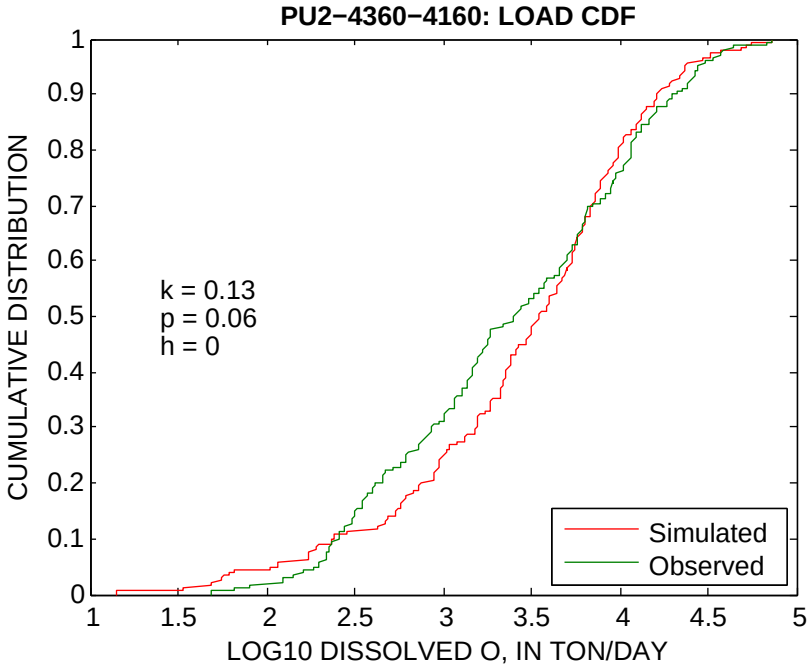


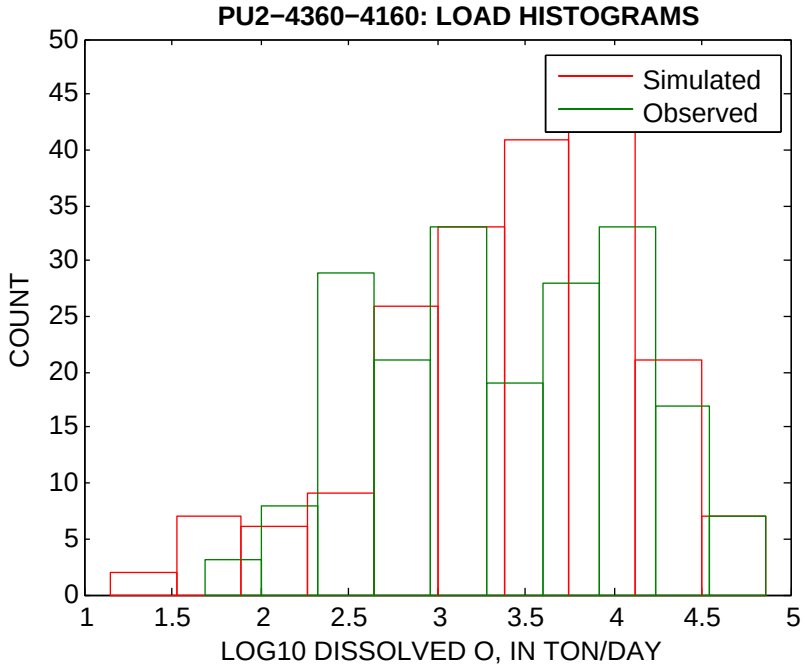


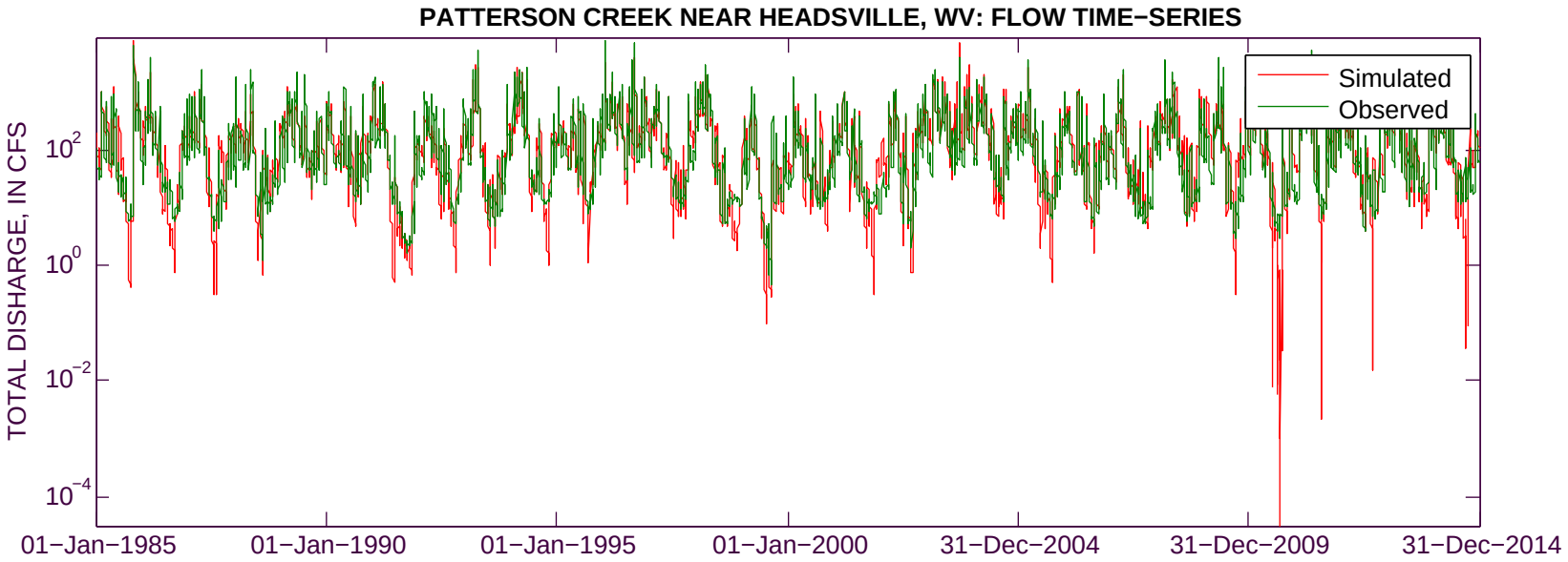
LOAD DATA
LOG10

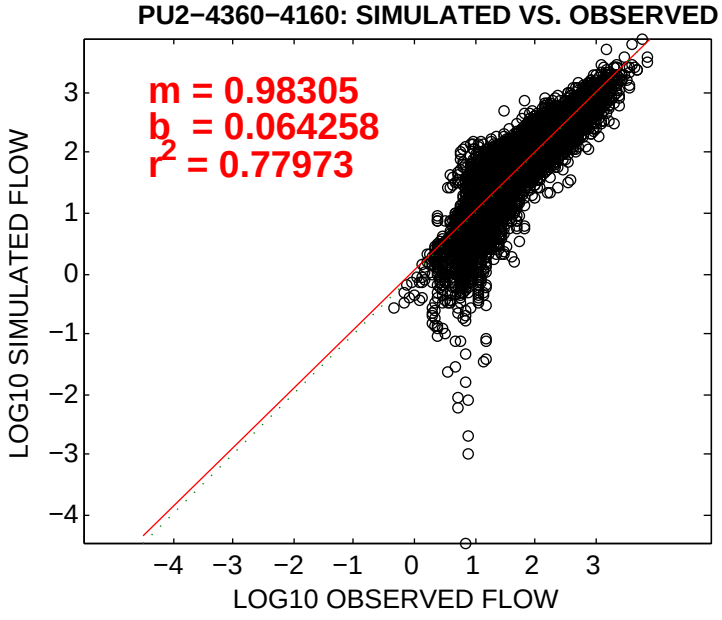


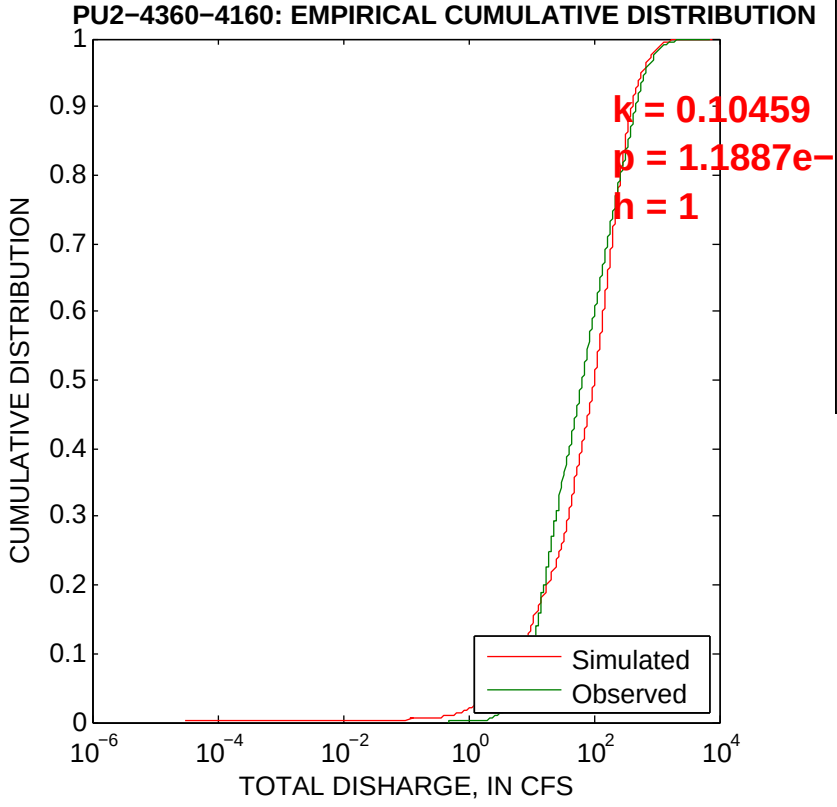












DATA SELECTION

scenario: P620171001WQ | file: FLOW.calib

plot: FLOW - total discharge

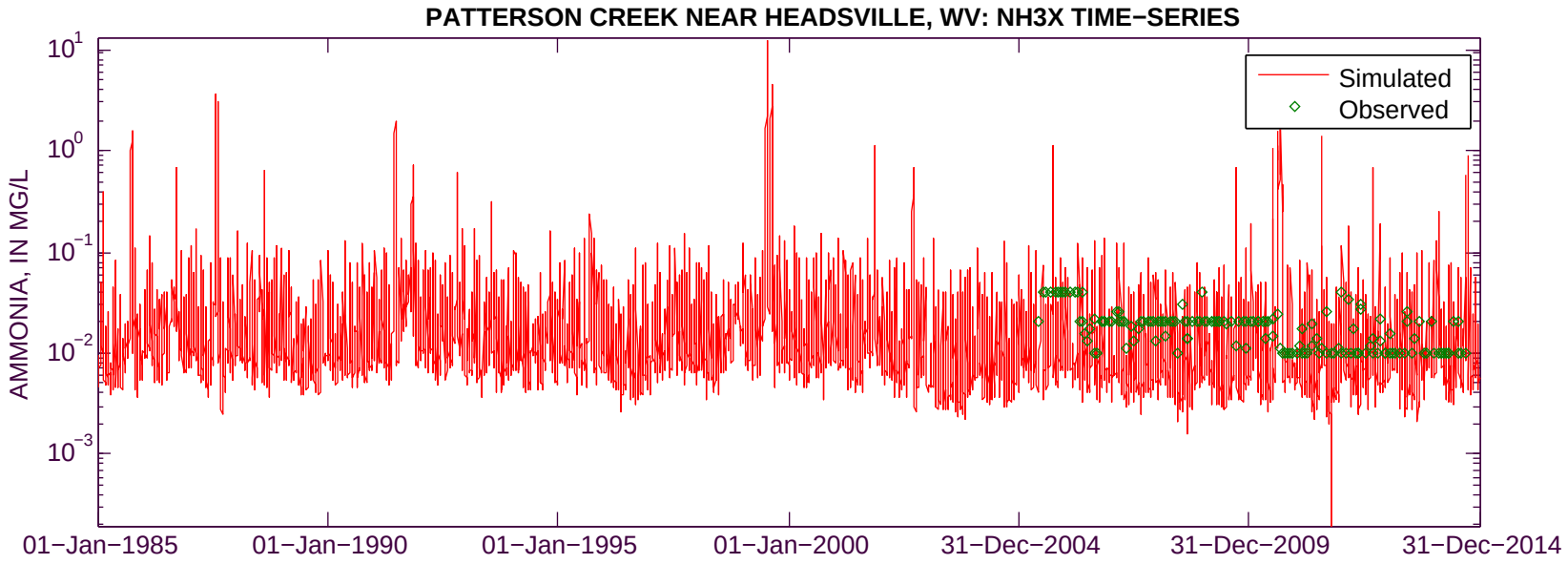
Dates: 1/1/1985 – 12/31/201

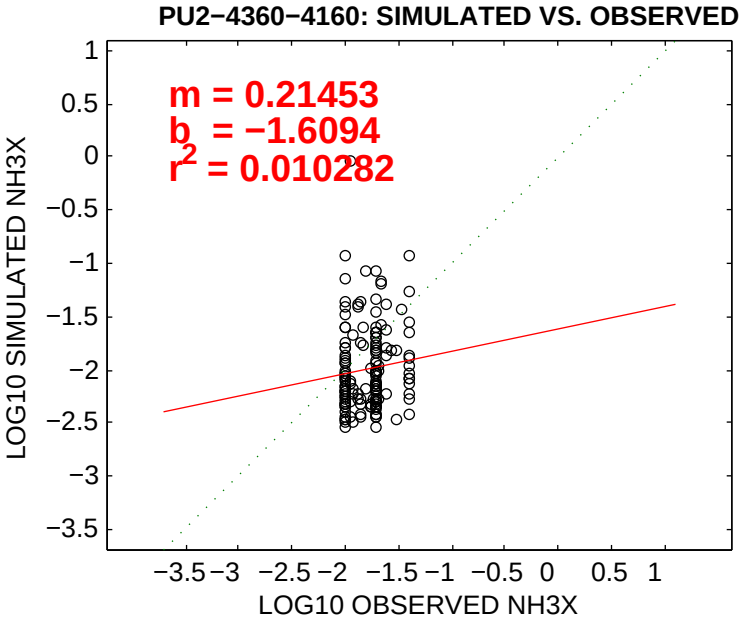
Drive: N/A | Directory: model | Observed: OBS20161101

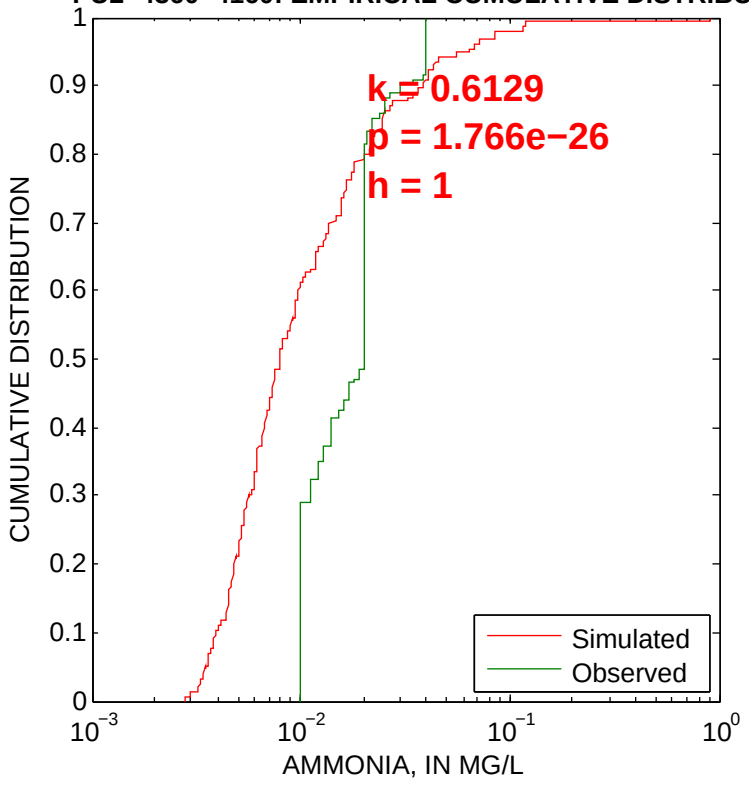
STATISTICS

		observe	simulate
n		10957	10934
min		0.48	0
		-0.318759	-4.4906
mean		179.987	180.945
		1.82947	1.86271
media		68	103.72
		1.83251	2.01764
max		7330	7919.4
		3.8651	3.89869
varian		100757	75747.2
		0.406903	0.504309
JB		0.001	0.001
		0.001	0.001
		ra	log
%		0.532526	1.81714
err.va		23905.7	0.112308
rel.std.err		0.237261	0.276006
mod.eff		0.762739	0.723994

VERSION







DATA SELECTION

scenario: P620171001WQ | file: NH3X.calib

plot: NH3X - ammonia

Dates: 1/1/1985 | 12/31/201

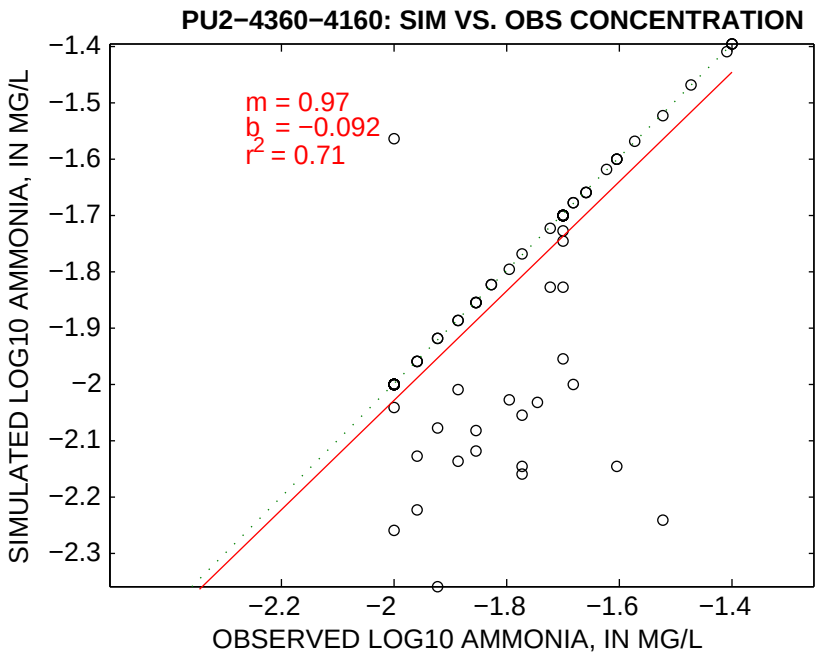
Drive: N/A | Directory: model | Observed: OBS20161101

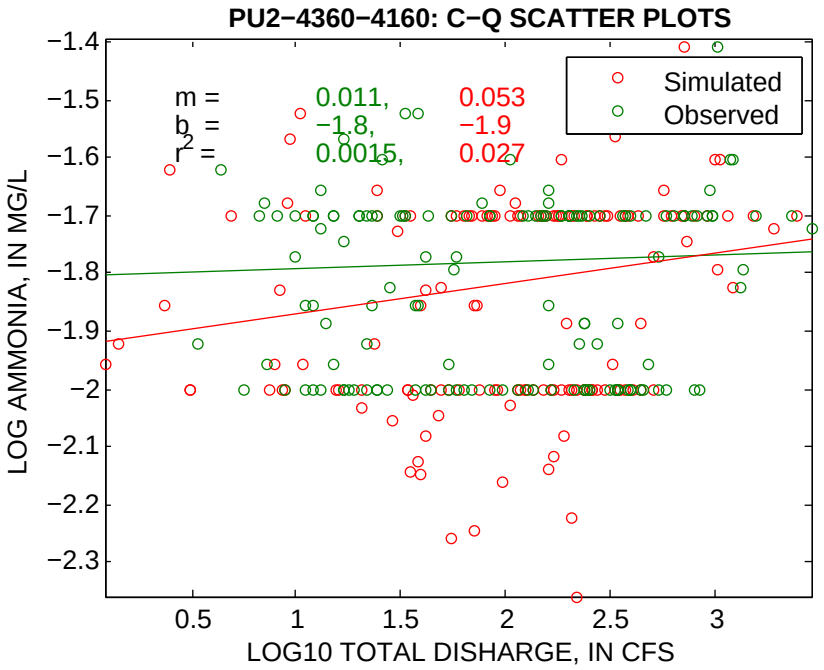
STATISTICS

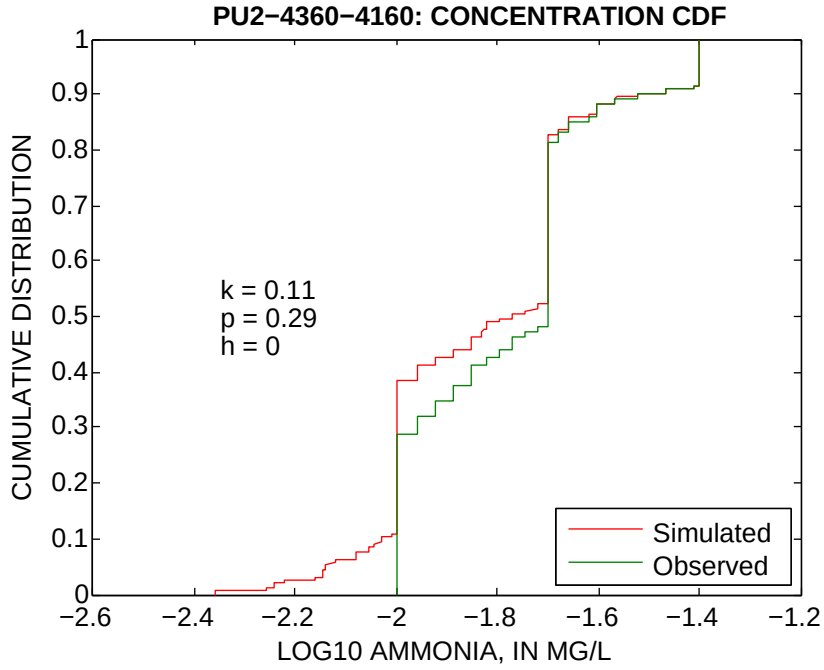
		observe	simulate
n		155	155
min		0.01	0.0028297
		-2	-2.54826
mean		0.0182452	0.0209698
		-1.78062	-1.9914
media		0.02	0.0080104
		-1.69897	-2.09635
max		0.04	0.90383
		-1.39794	-0.0439132
varian		7.37447e-0	0.00546115
		0.034936	0.156374
JB		0.001	0.001
		0.034126	0.001
		ra	log
%		14.9337	11.8377
err.va		0.00558874	0.221039
rel.std.err		75.785	6.32697
mod.eff		-74.785	-5.32697

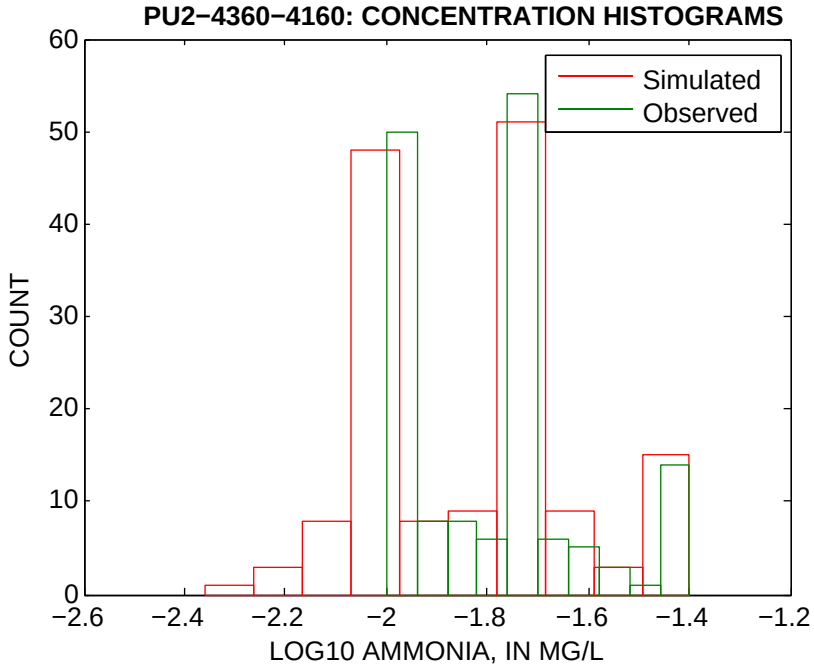
VERSION 2.1

ALL DATA
LOG10

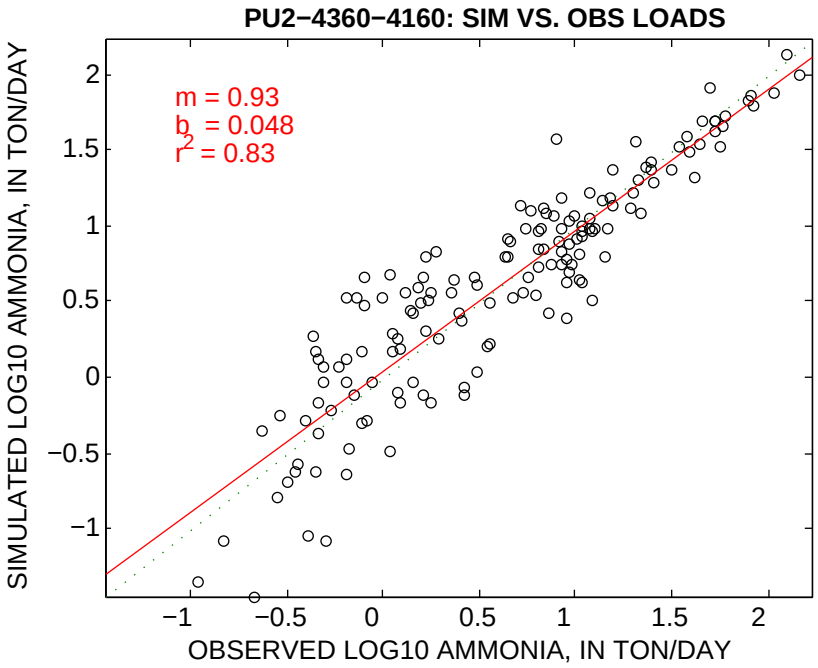


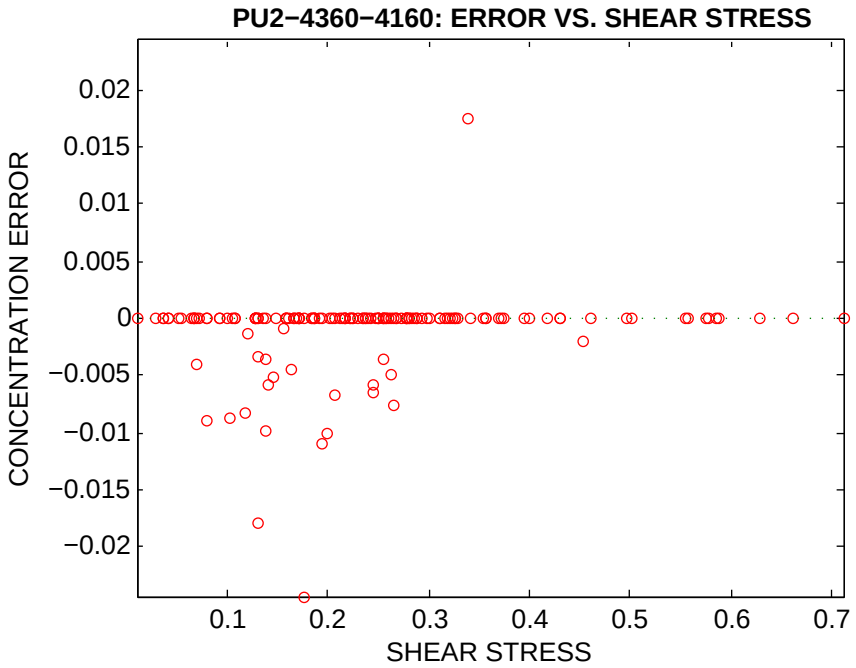


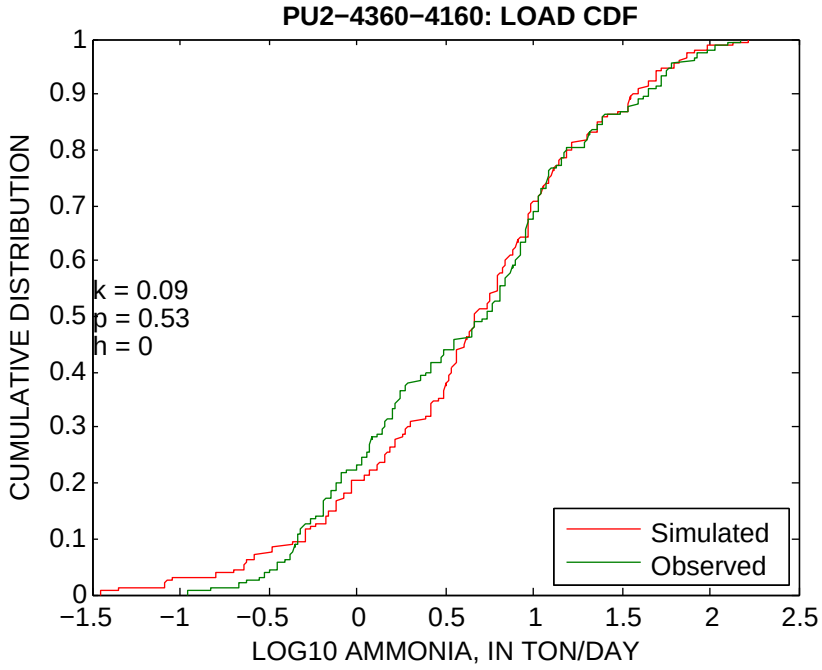


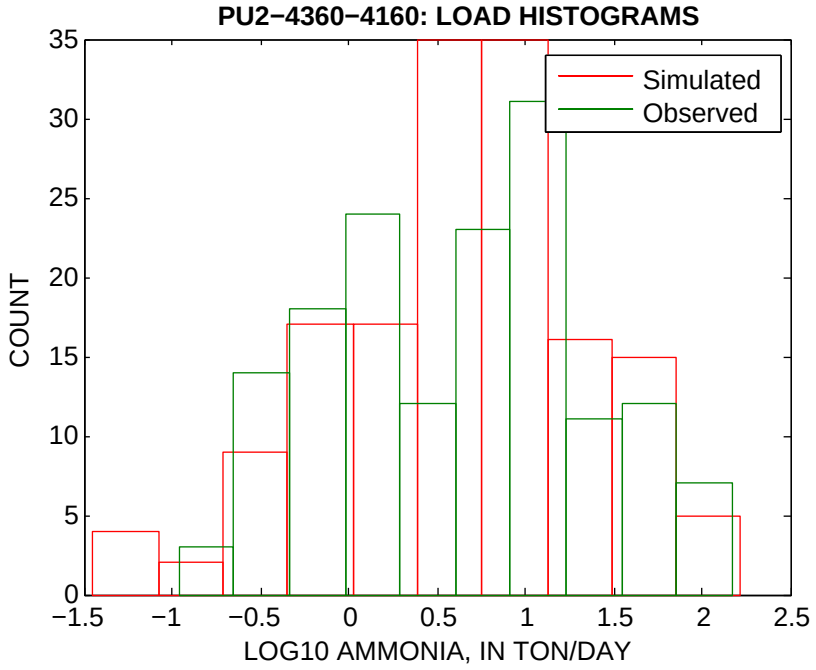


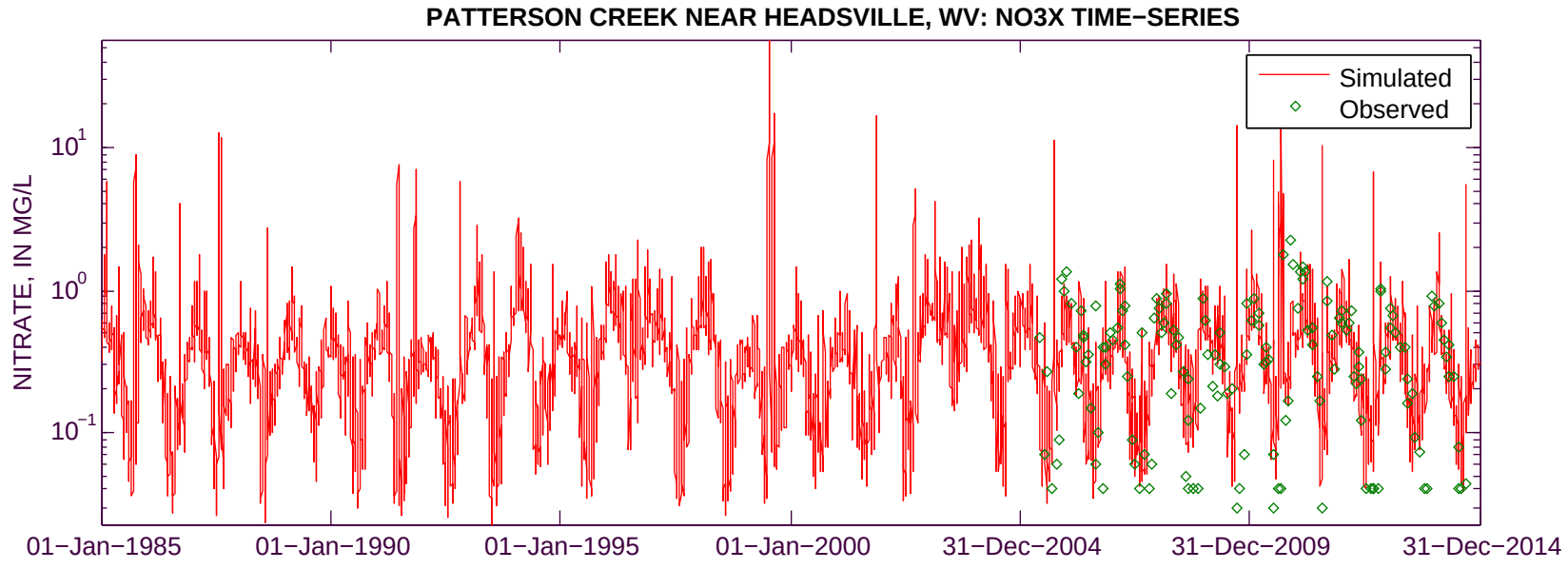
LOAD DATA
LOG10

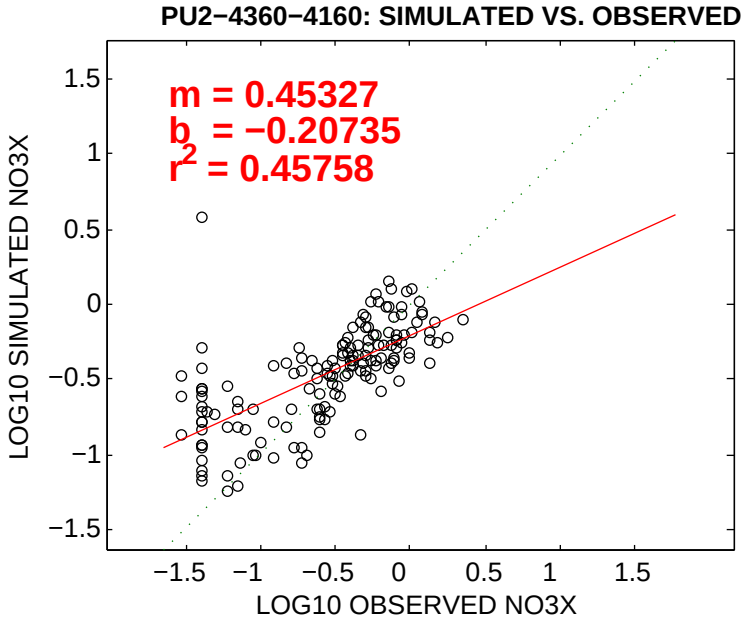


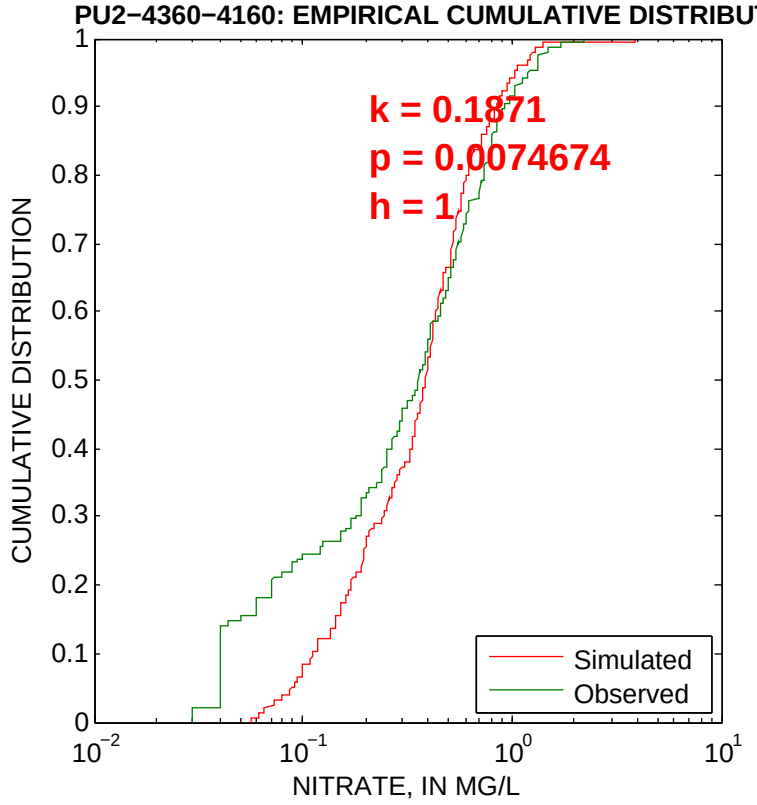












DATA SELECTION

scenario	file
P620171001WQ	NO3X.calib

plot: NO3X - nitrate

Dates: 1/1/1985 – 12/31/201

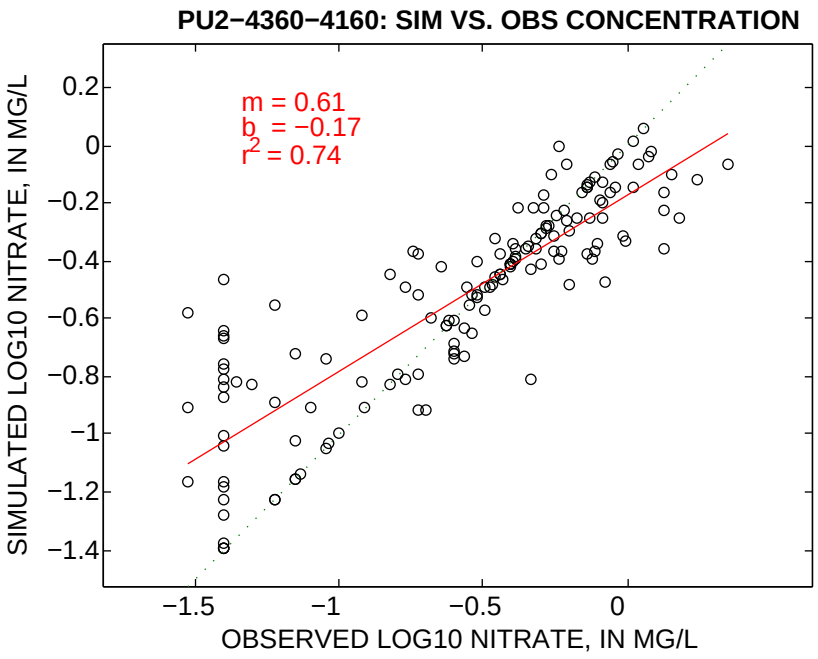
Drive	Directory	Observed
N/A	model	OBS20161101

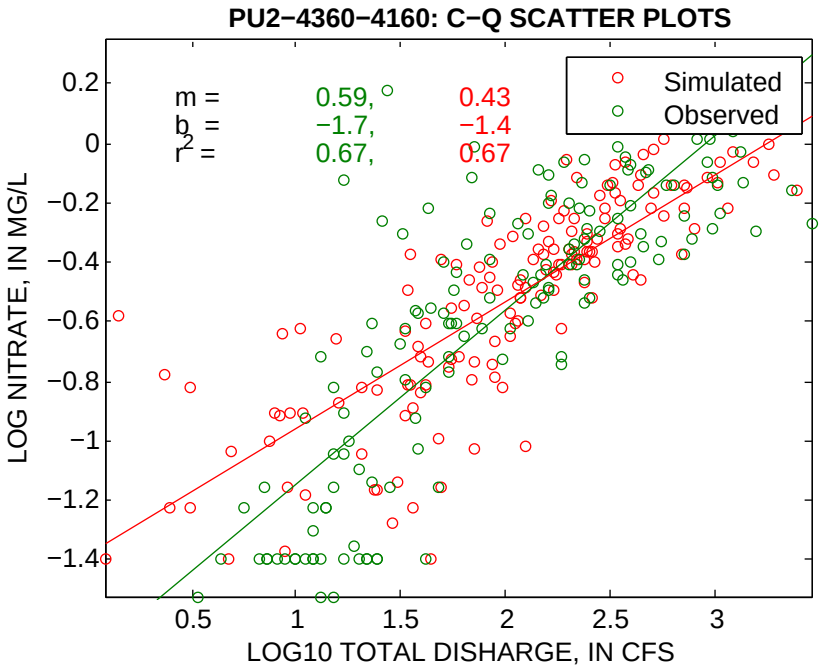
STATISTICS

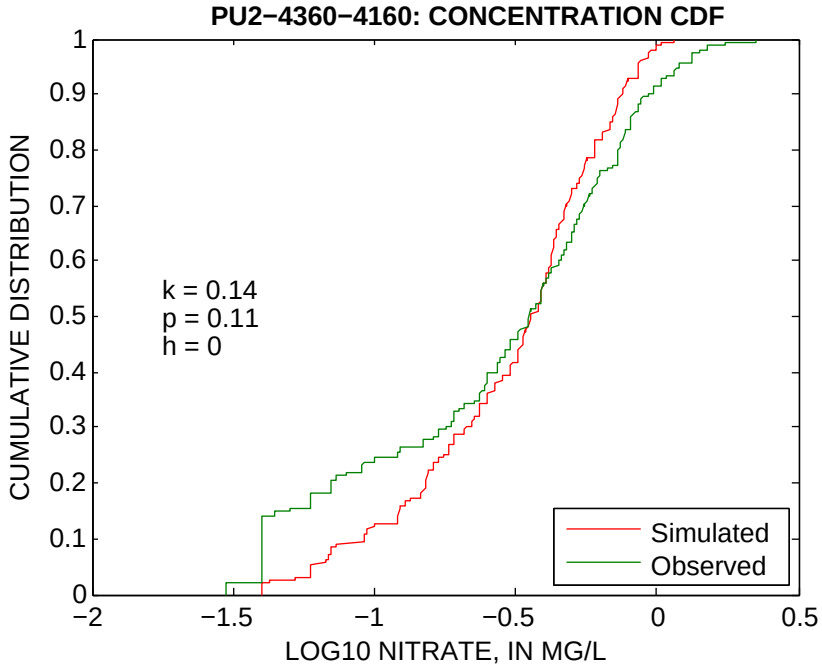
	n	155	155
		observe	simulate
min		0.03	0.056581
		-1.52288	-1.24733
mean		0.438465	0.447968
		-0.571743	-0.466508
media		0.36	0.38891
		-0.443697	-0.410151
max		2.22	3.8721
		0.346353	0.587947
varian		0.151023	0.156003
		0.23861	0.107136
JB		0.001	0.001
		0.011138	0.5
		ra	log
%		2.16747	-18.406
err.va		0.182	0.140583
rel.std.err		1.20511	0.589176
mod.eff		-0.20511	0.410824

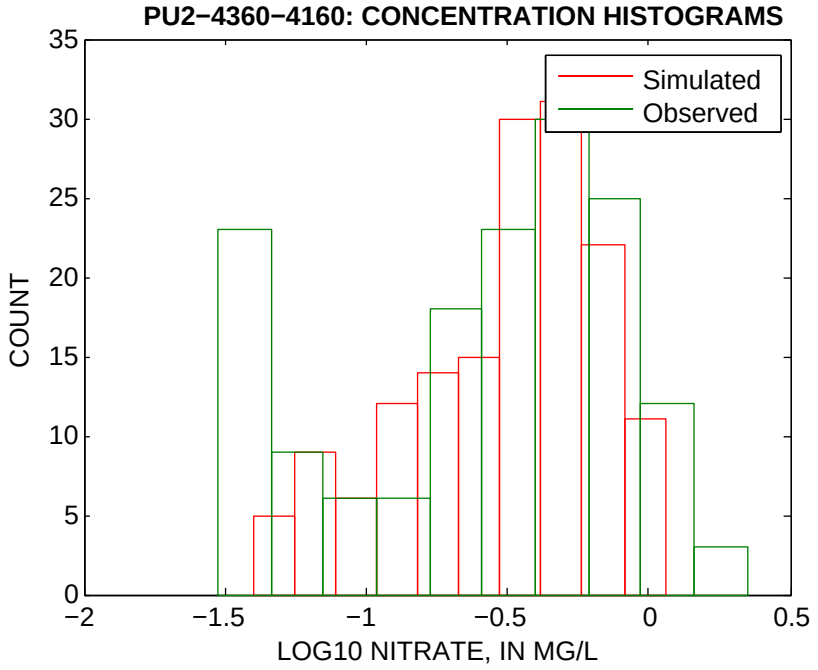
VERSION 2.1

ALL DATA
LOG10

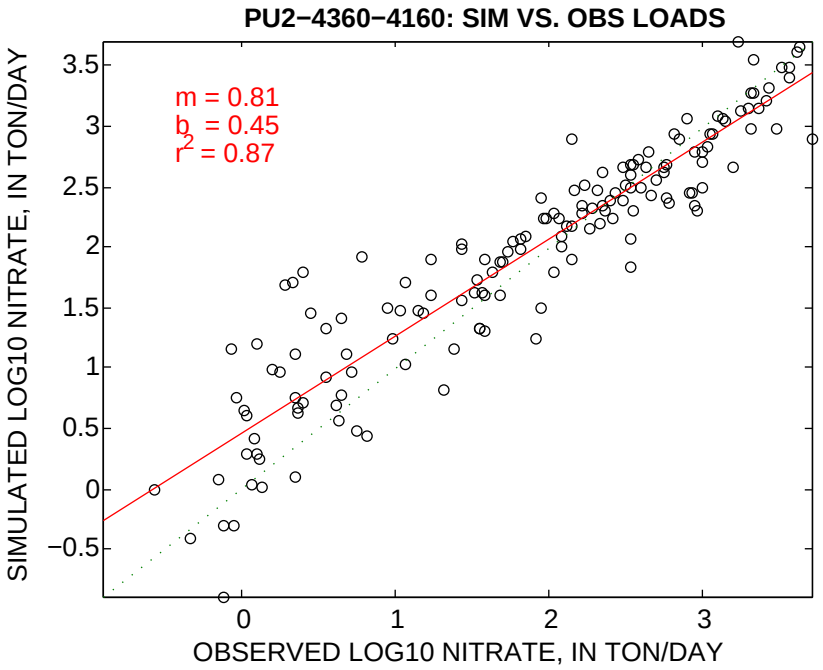


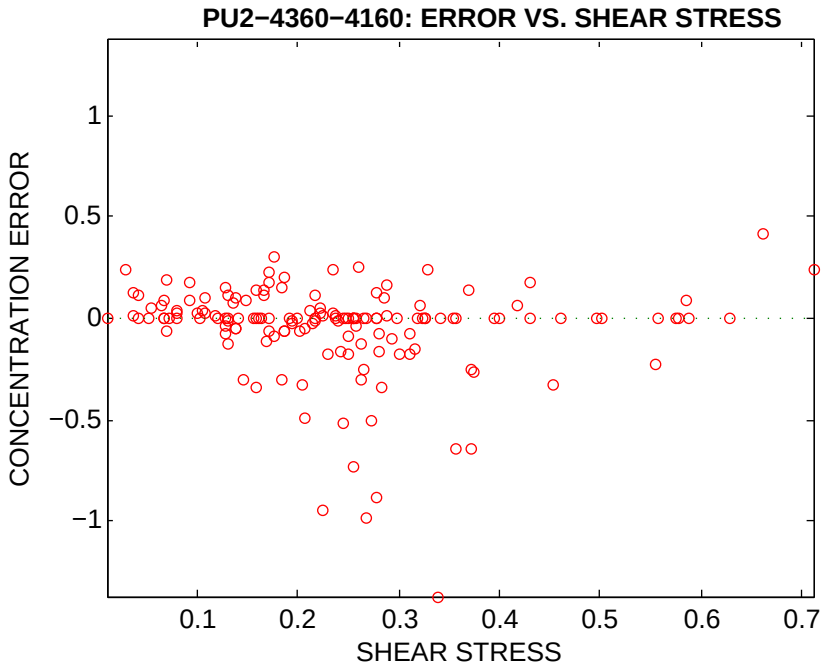


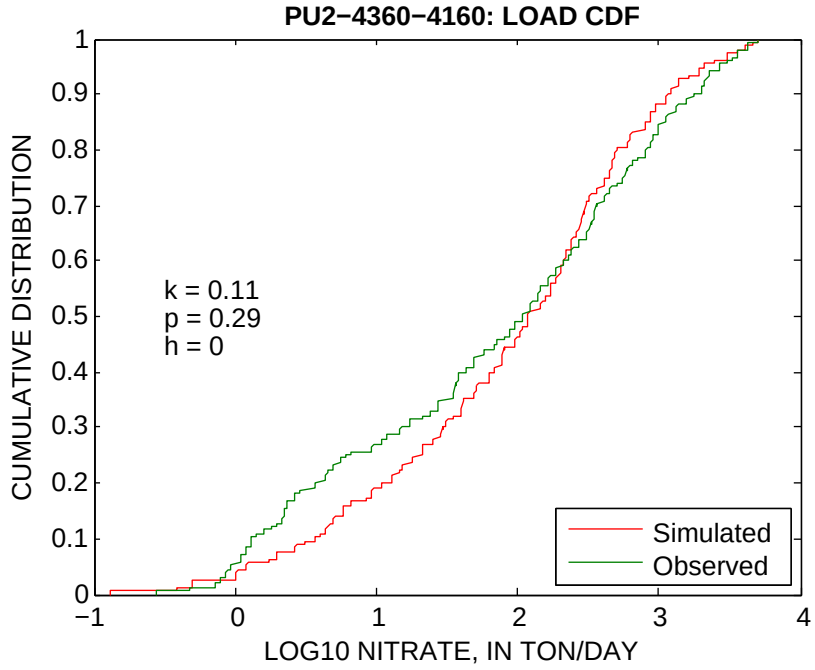


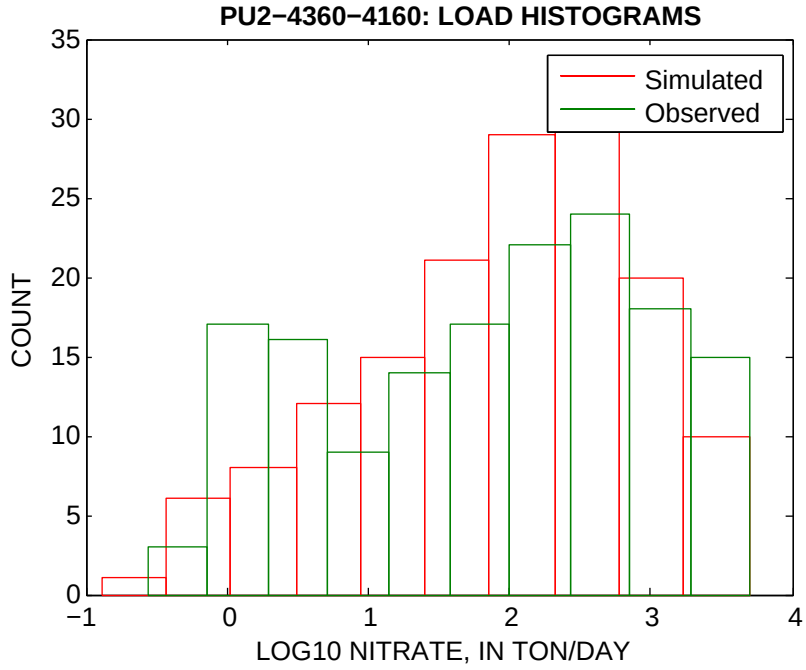


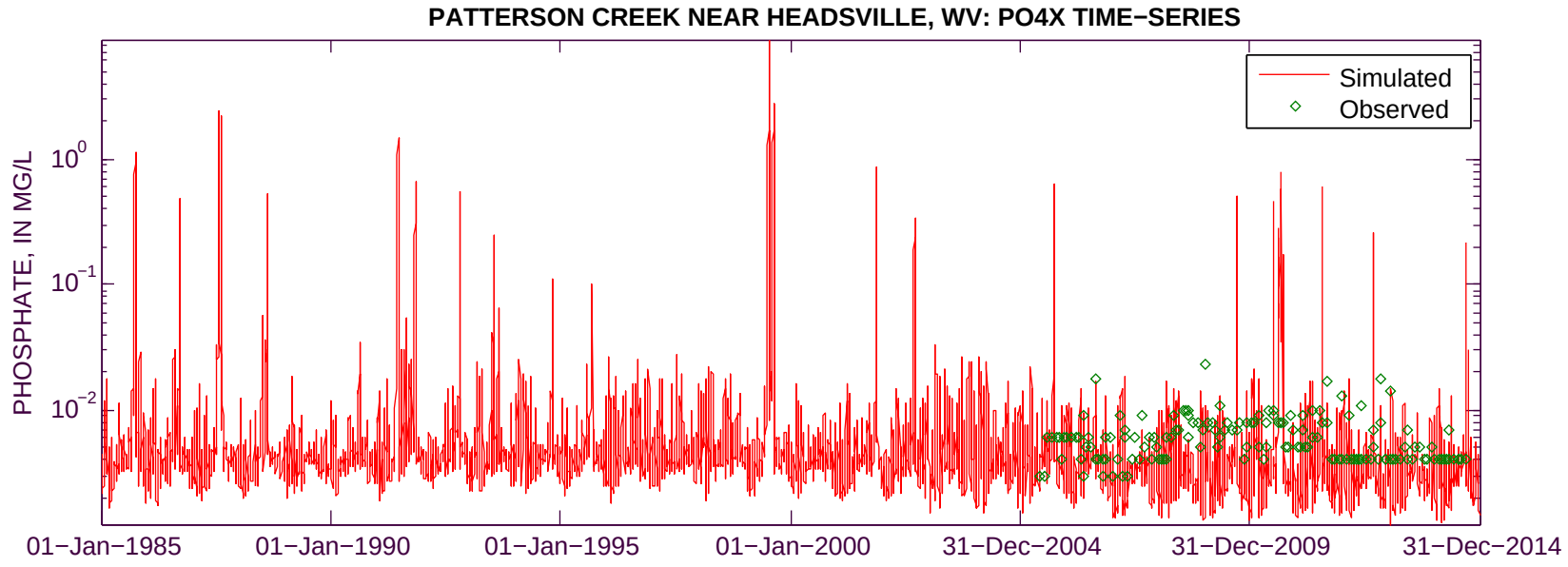
LOAD DATA
LOG10

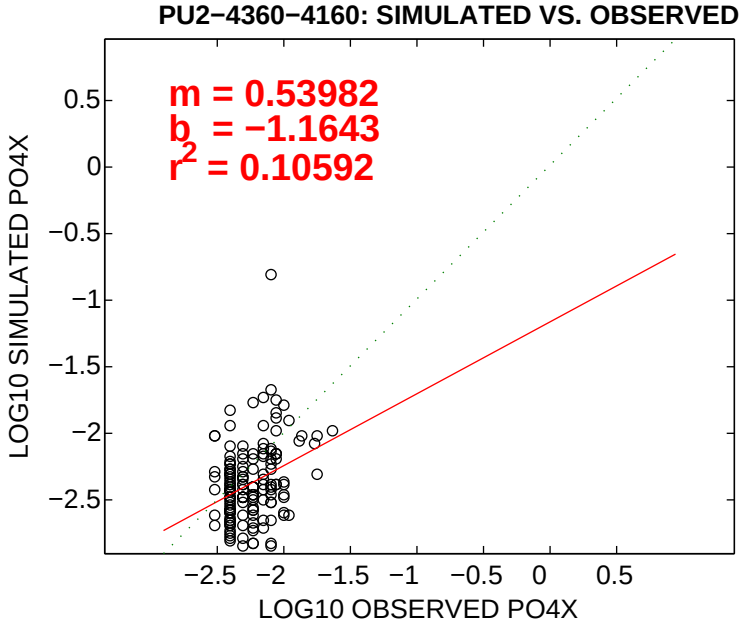


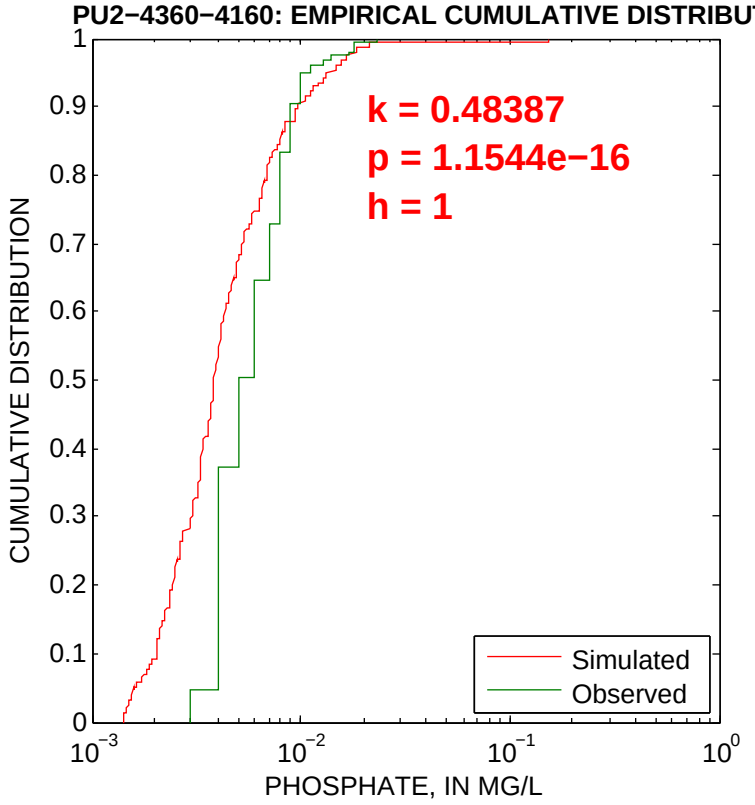












DATA SELECTION

scenario	file
P620171001WQ	PO4X.calib

plot: PO4X - phosphate

Dates: 1/1/1985 – 12/31/201

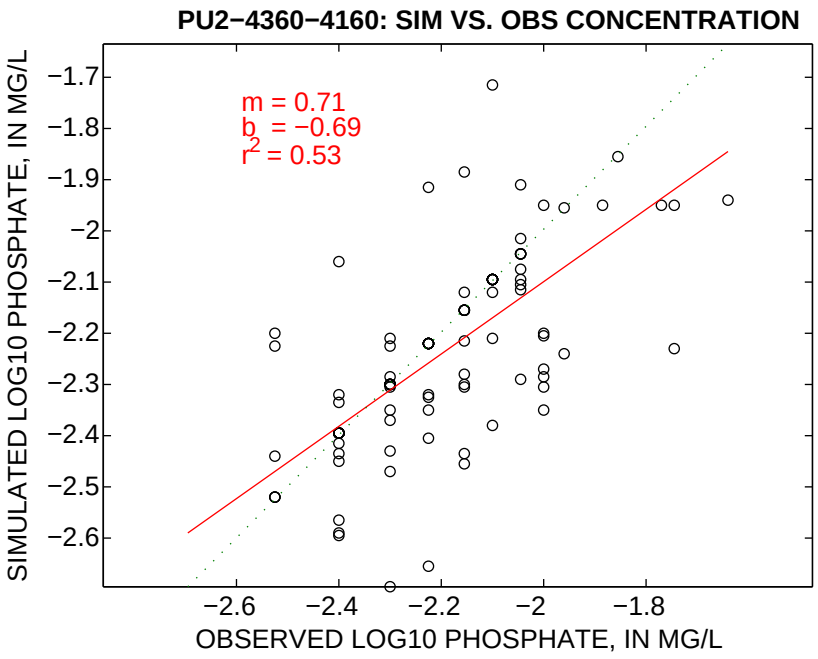
Drive	Directory	Observed
N/A	model	OBS20161101

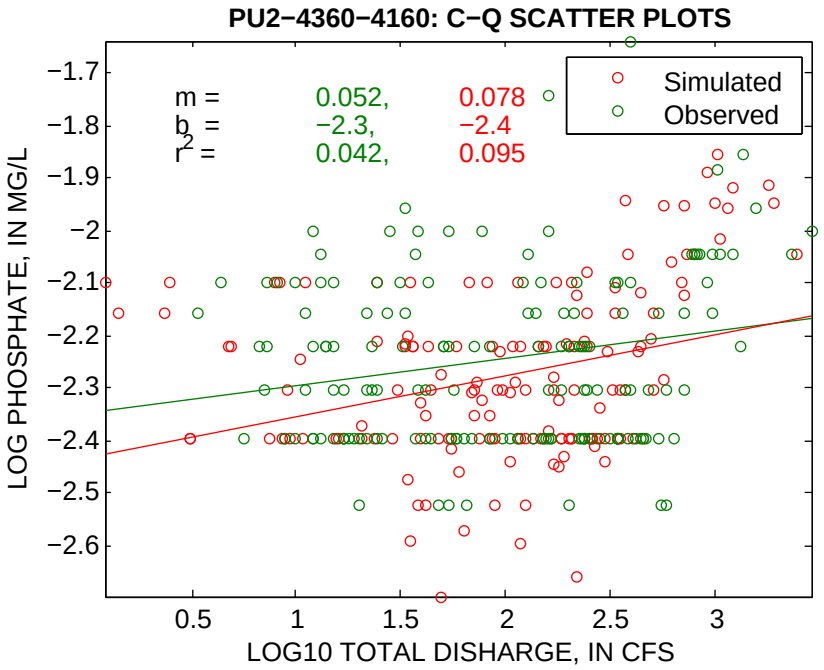
STATISTICS

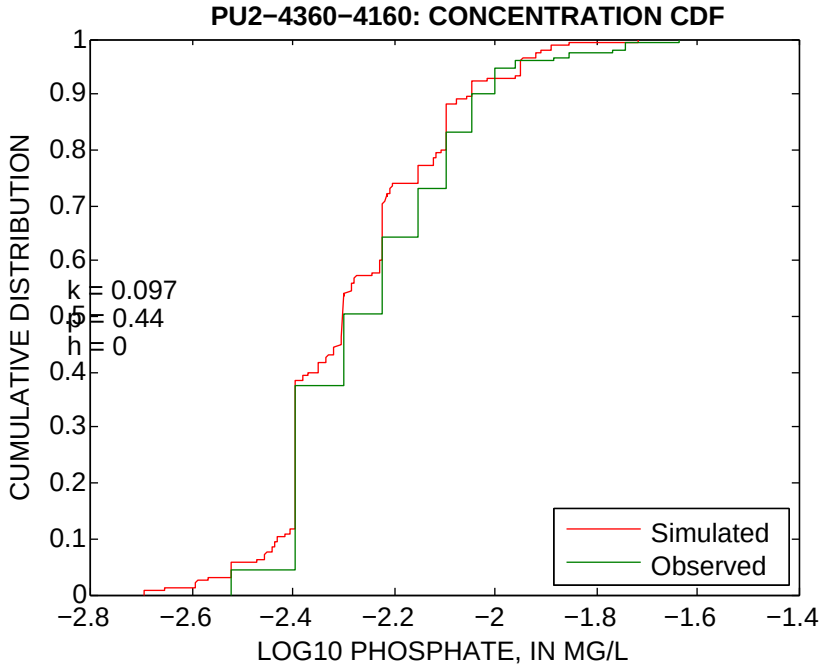
n	155	155
	observe	simulate
min	0.003	0.001422
	-2.52288	-2.8471
mean	0.00625806	0.0059741
	-2.2418	-2.37445
media	0.005	0.0038311
	-2.30103	-2.41668
max	0.023	0.15451
	-1.63827	-0.811043
varian	9.25765e-0	0.00015727
	0.0302615	0.0832575
JB	0.001	0.001
	0.005489	0.001
	ra	log
%	-4.53763	5.91748
err.va	0.00015587	0.09856
rel.std.err	16.8377	3.25694
mod.eff	-15.8377	-2.25694

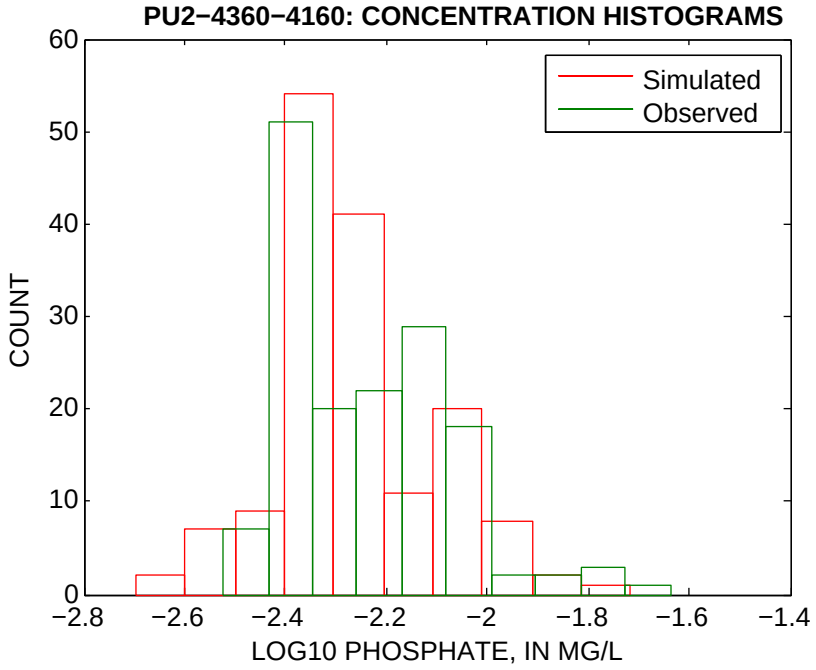
VERSION 2.1

ALL DATA
LOG10

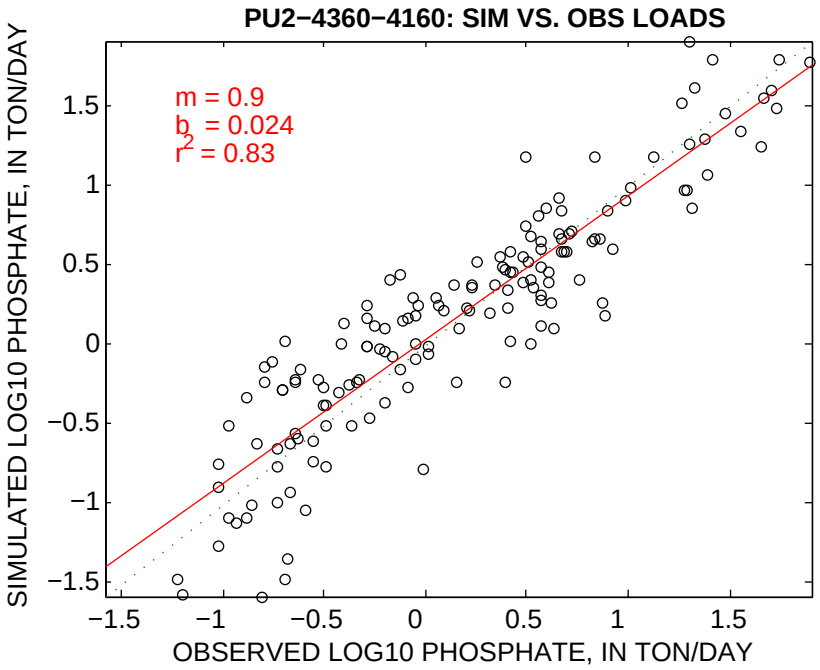


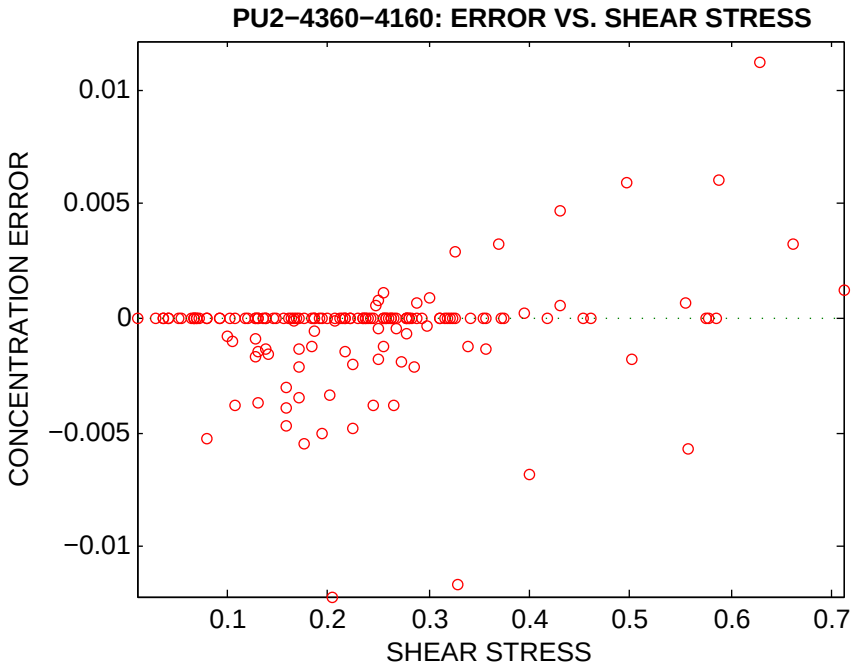


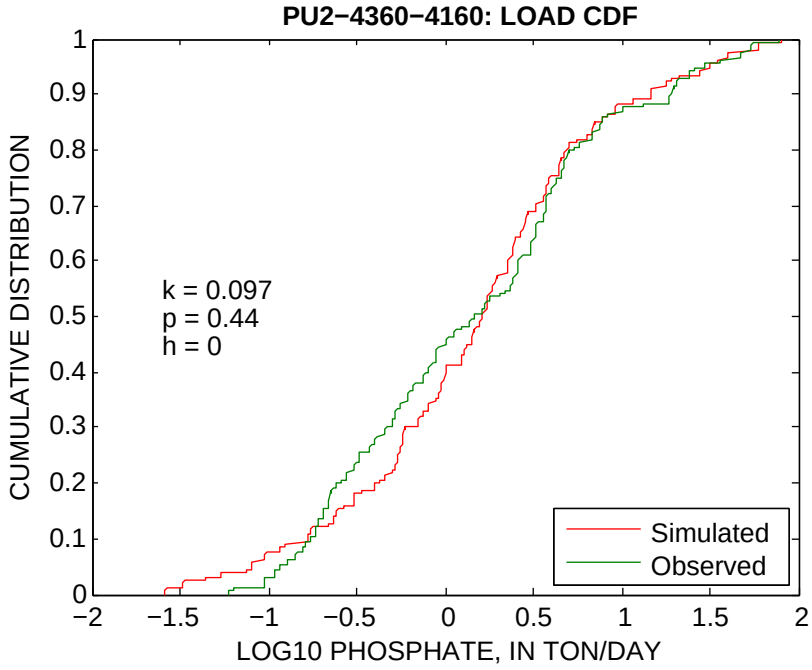


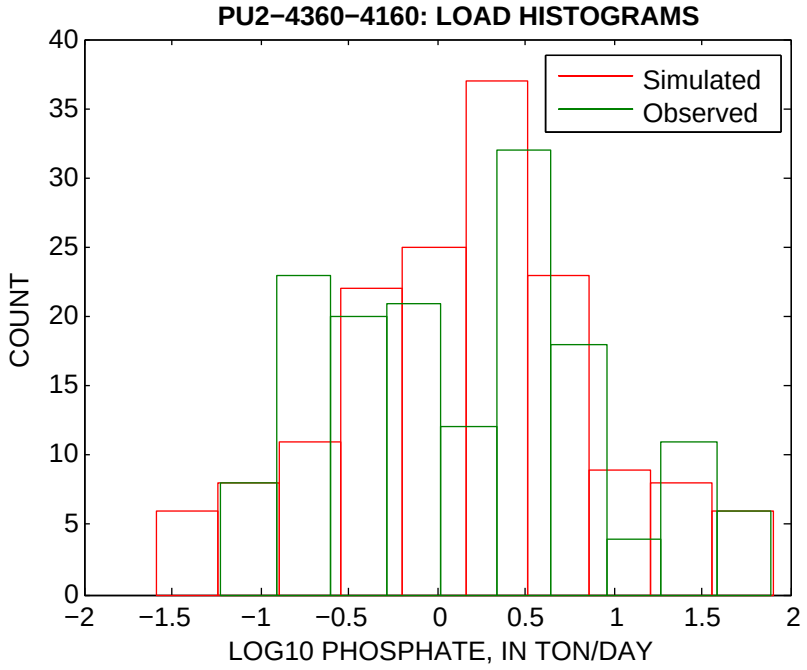


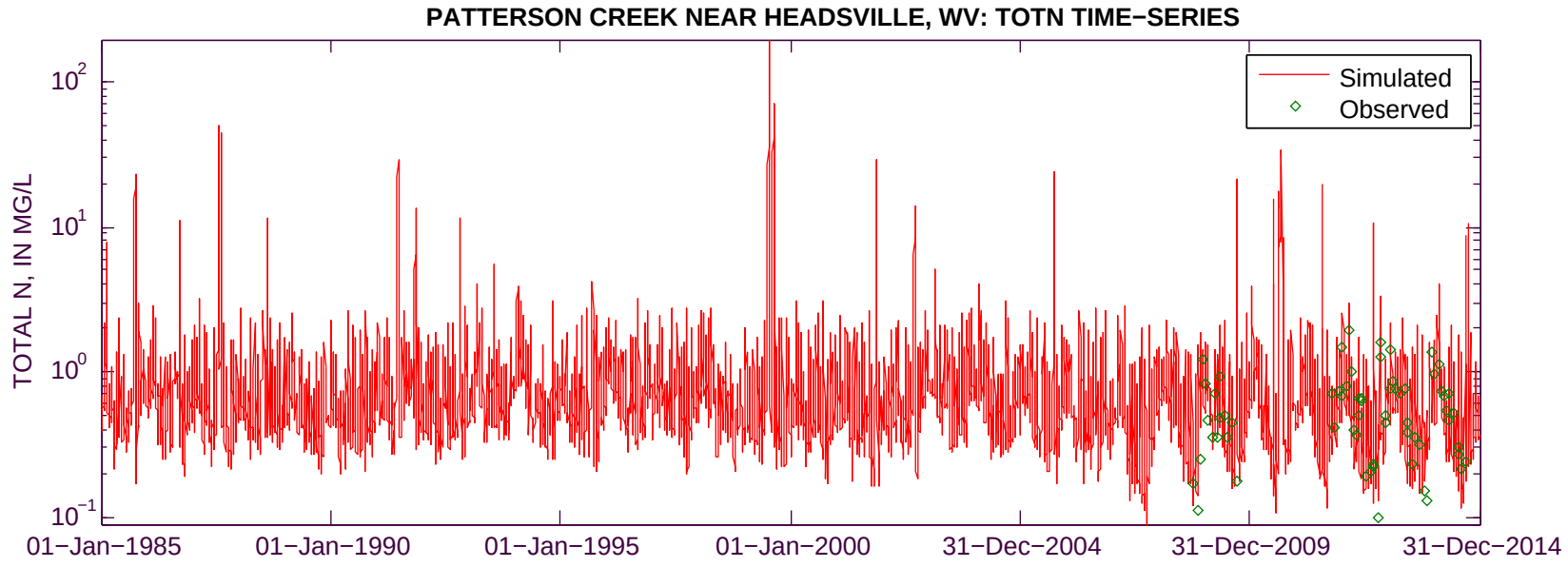
LOAD DATA
LOG10

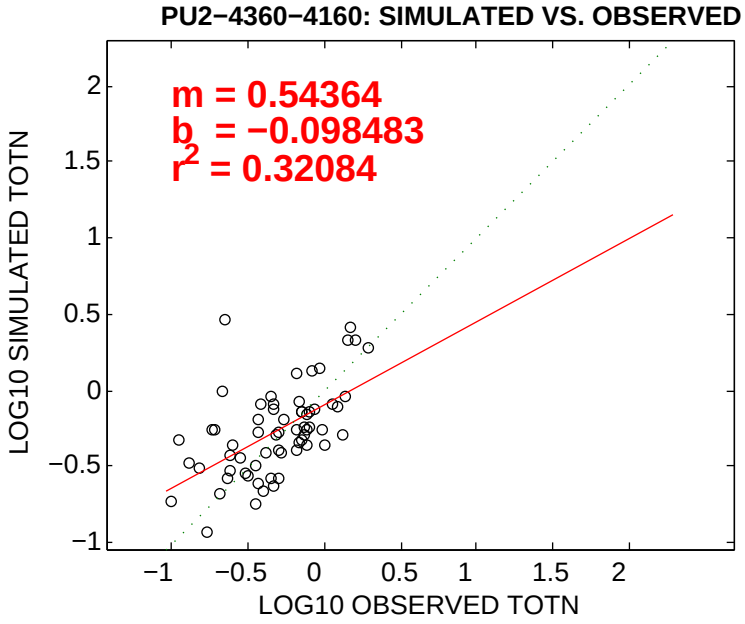


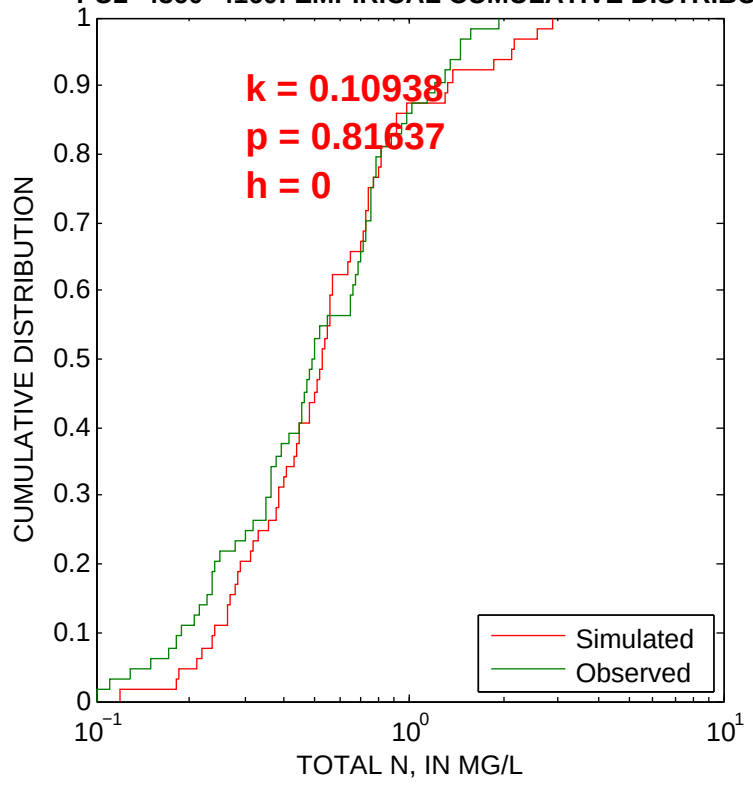












DATA SELECTION

scenario	file
P620171001WQ	TOTN.calib

plot: TOTN - total nitrogen

Dates: 1/1/1985 – 12/31/201

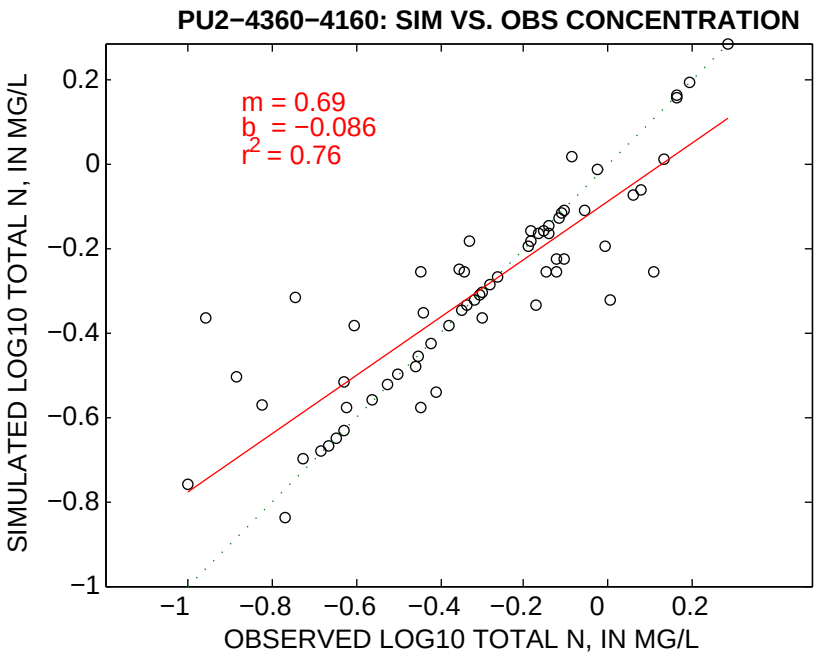
Drive	Directory	Observed
N/A	model	OBS20161101

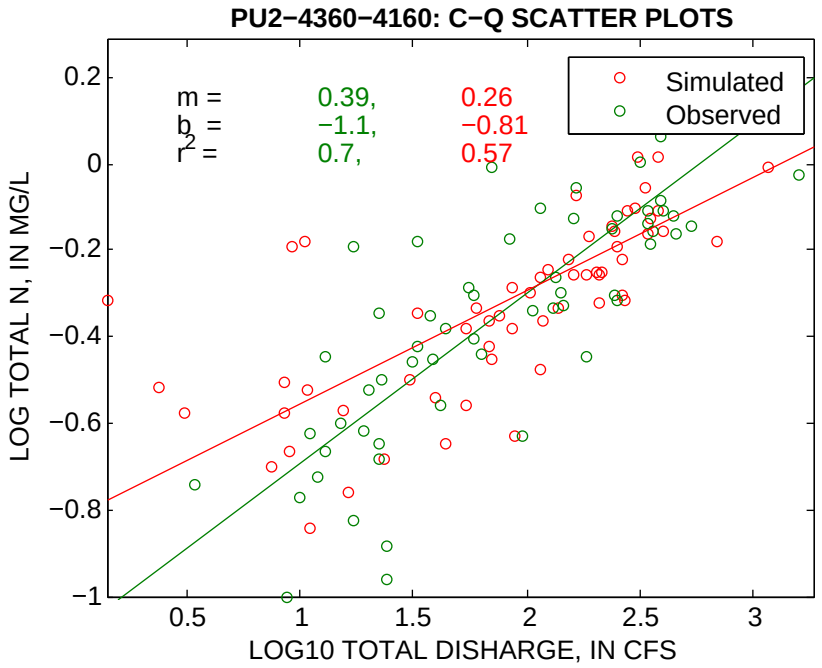
STATISTICS

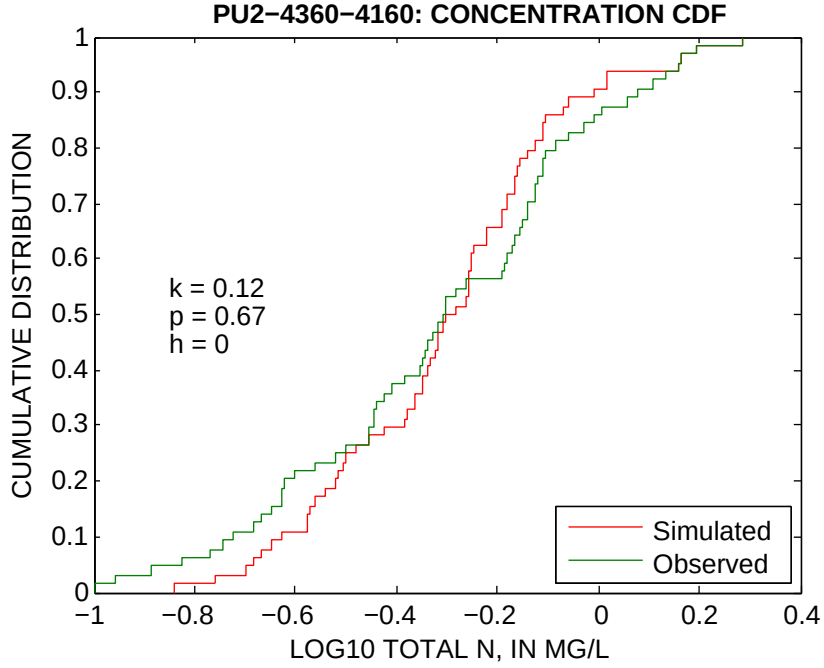
		observe	simulate
n		64	64
min		0.1	0.1189
		-1	-0.924818
mean		0.603047	0.680695
		-0.313526	-0.268929
media		0.4955	0.52795
		-0.304962	-0.277409
max		1.925	2.8885
		0.284431	0.460672
varian		0.157422	0.312741
		0.0892455	0.08221
JB		0.004767	0.001
		0.397266	0.22236
		ra	log
%		12.876	-14.2243
err.va		0.225203	0.0764405
rel.std.err		1.43057	0.856519
mod.eff		-0.430569	0.143481

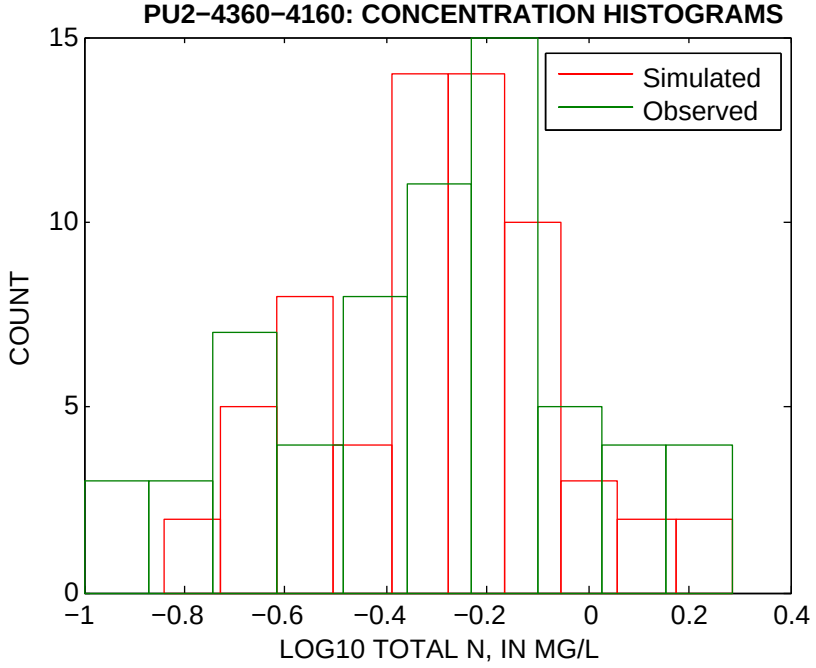
VERSION 2.1

ALL DATA
LOG10

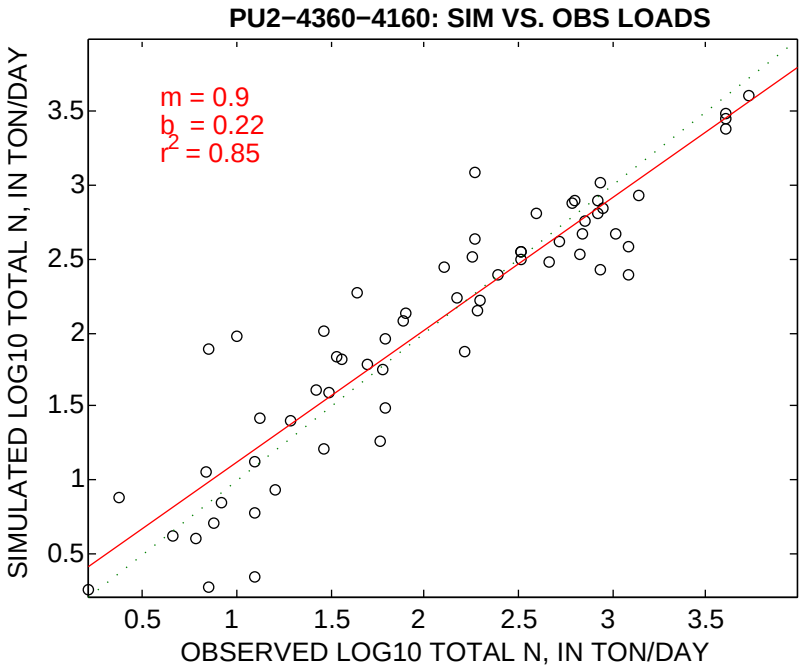


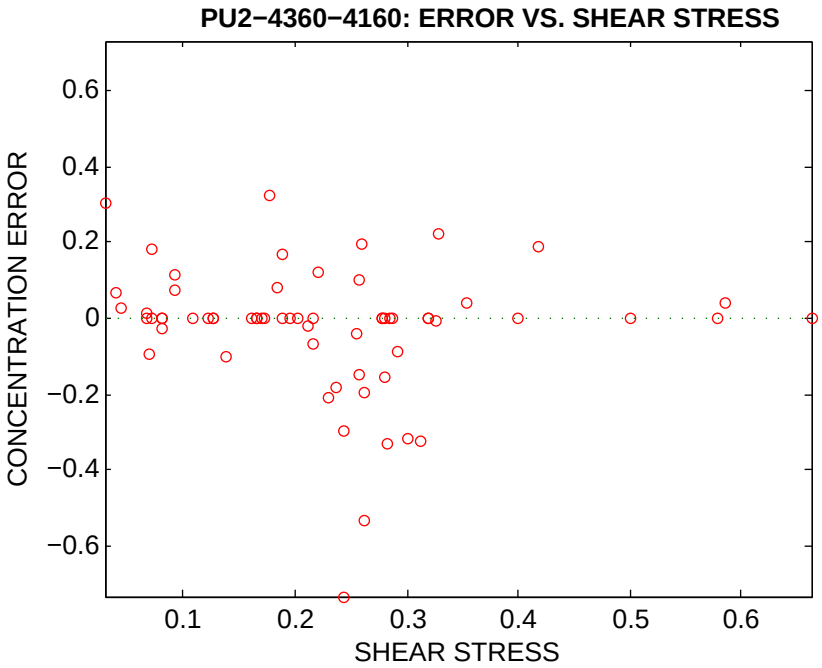


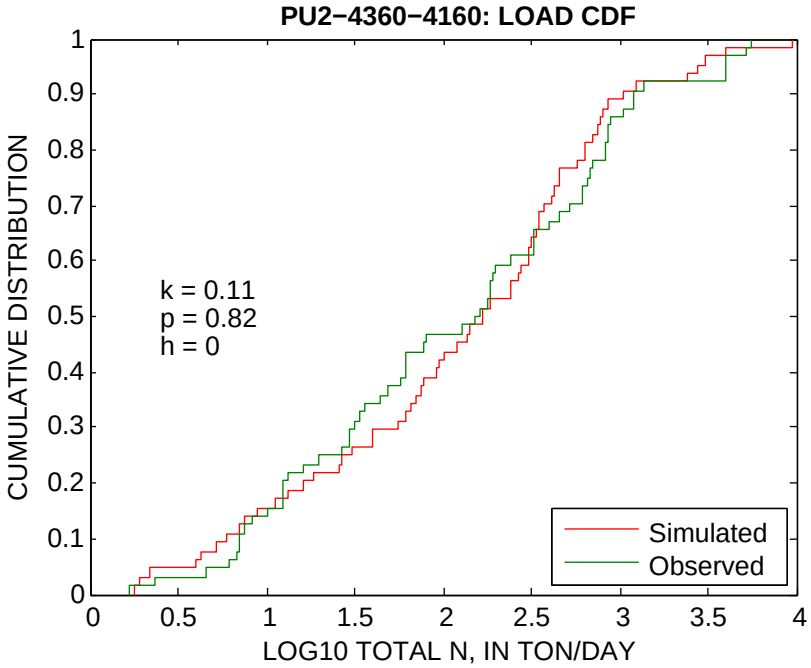


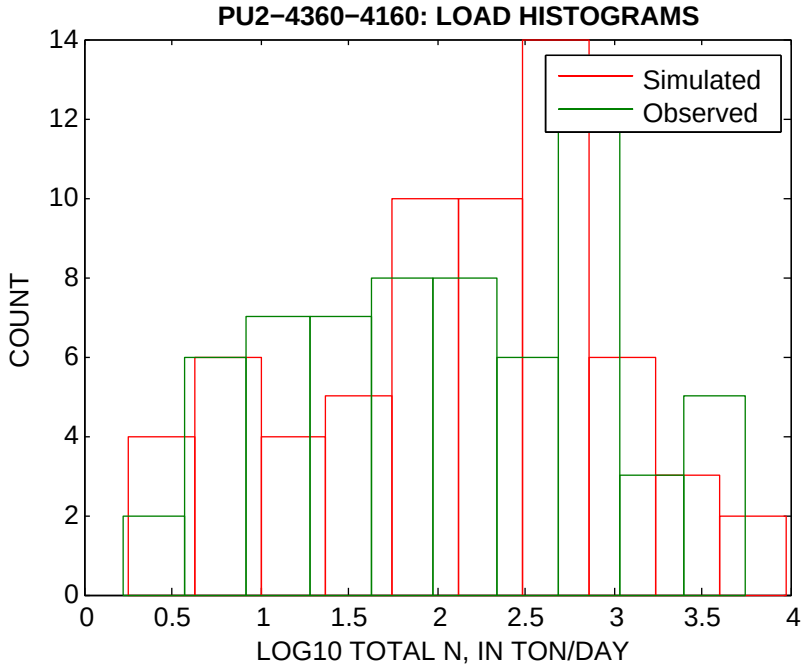


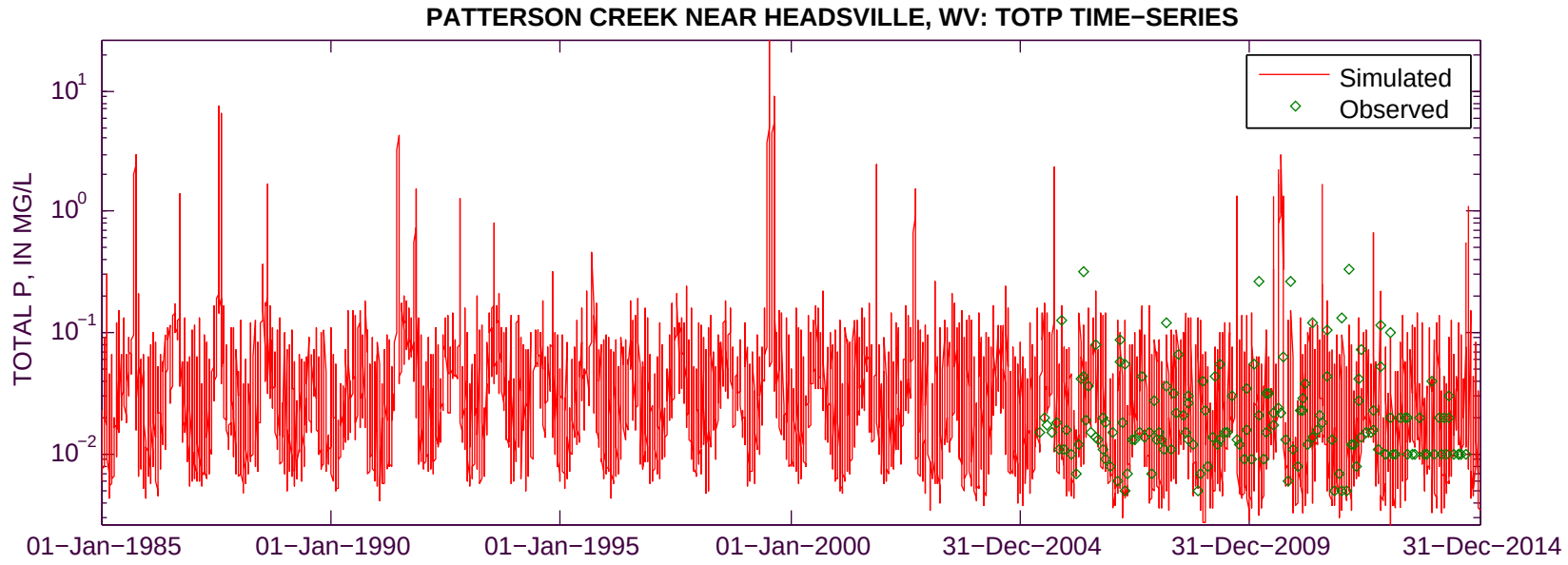
LOAD DATA
LOG10

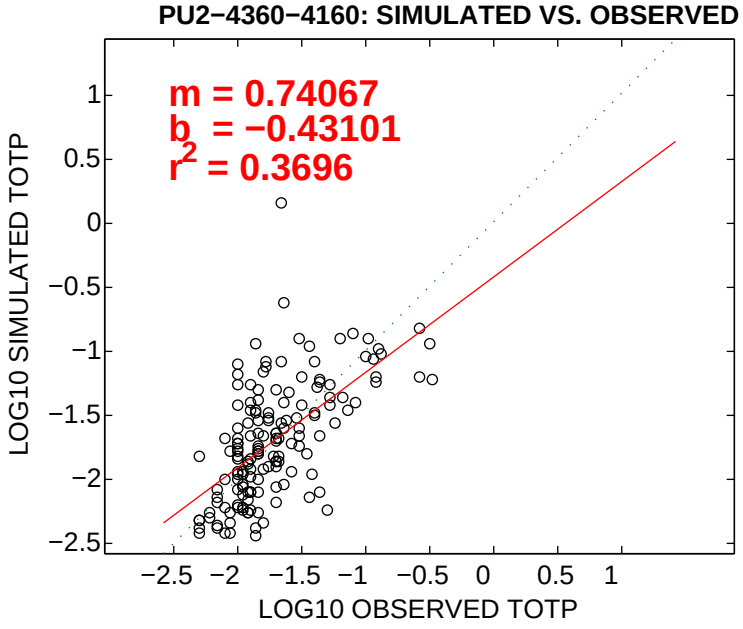


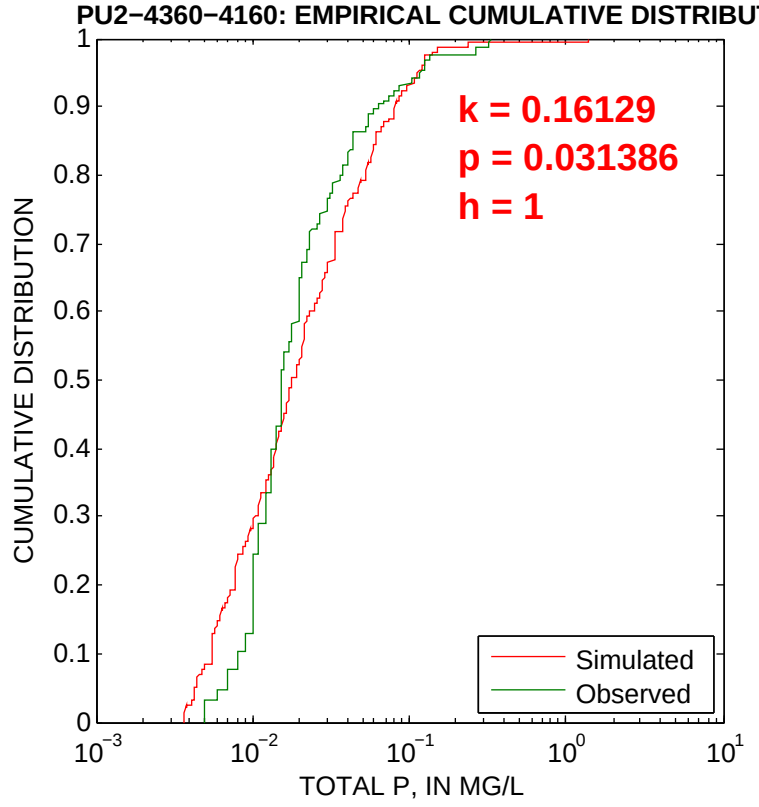












DATA SELECTION

scenario	file
P620171001WQ	TOTP.calib

plot: TOTP - total phosphorus

Dates: 1/1/1985 – 12/31/201

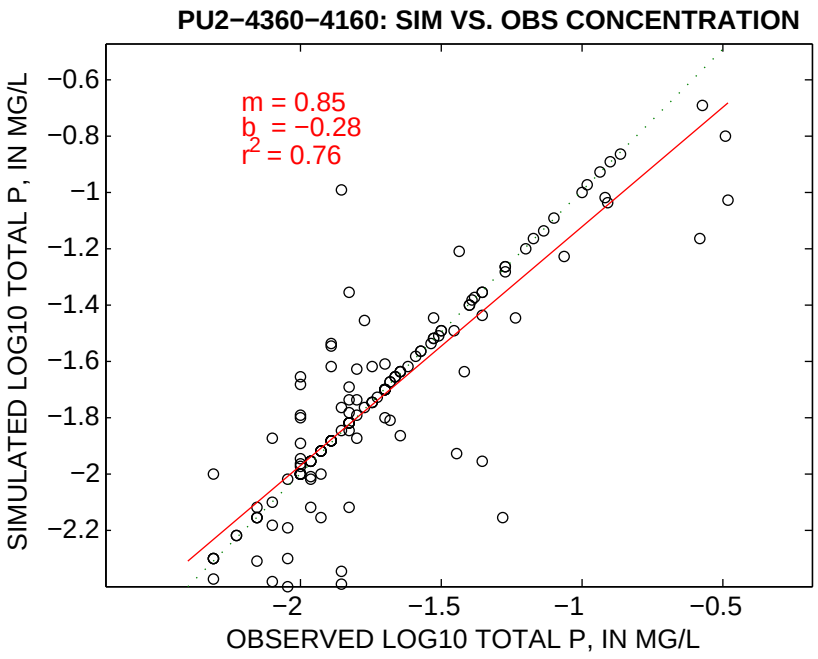
Drive	Directory	Observed
N/A	model	OBS20161101

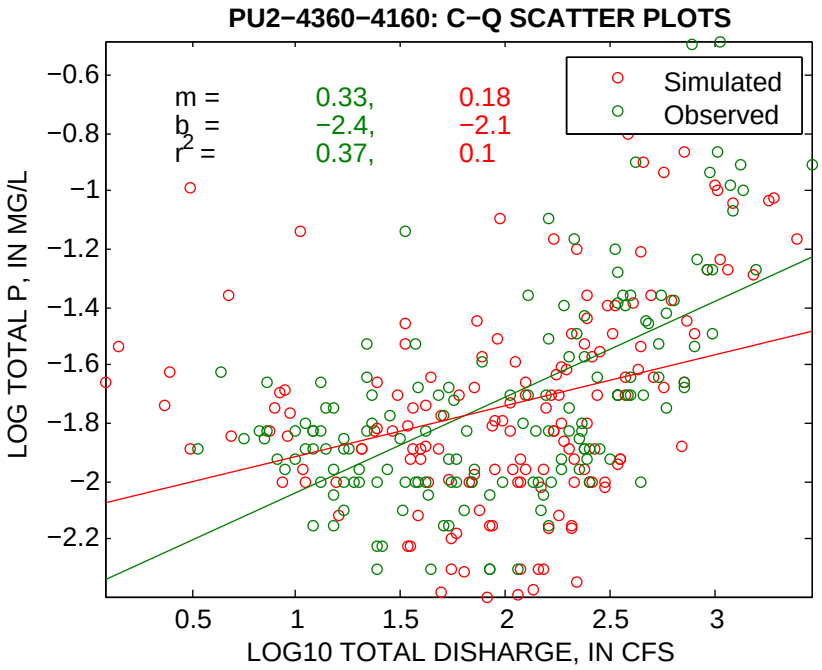
STATISTICS

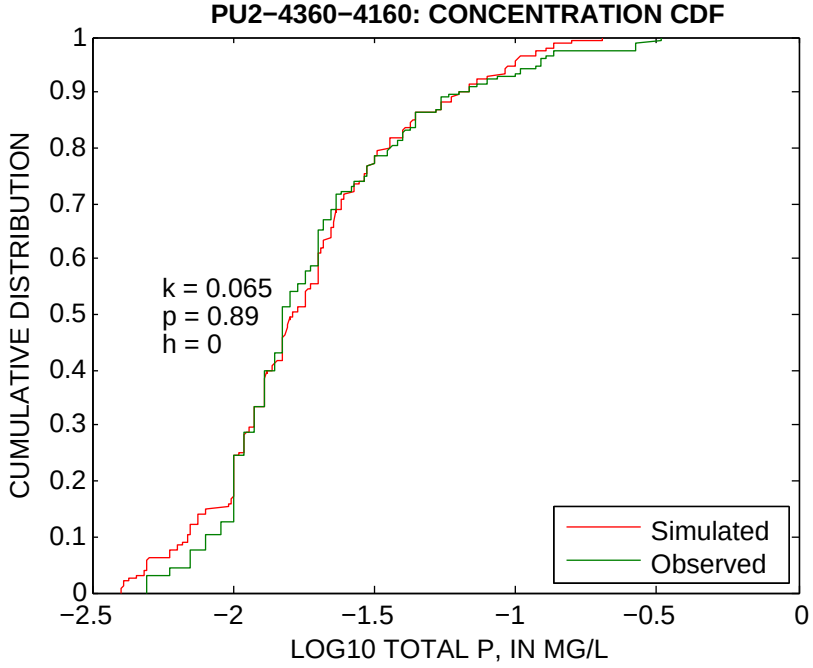
	n	155	155
		observe	simulate
min		0.005	0.0036088
		-2.30103	-2.44264
mean		0.0318839	0.0405436
		-1.71331	-1.70001
media		0.015	0.017876
		-1.82391	-1.74773
max		0.33	1.4025
		-0.481486	0.146903
varian		0.00251952	0.0133693
		0.138166	0.205079
JB		0.001	0.001
		0.001	0.013057
		ra	log
%		27.1603	-0.77583
err.va		0.0143659	0.138751
rel.std.err		5.70184	1.00424
mod.eff		-4.70184	-0.00423675

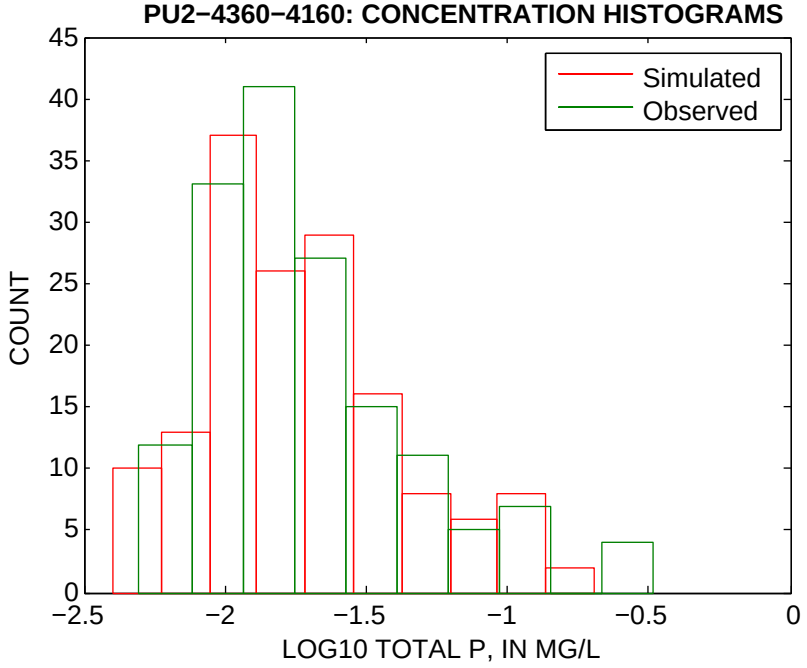
VERSION 2.1

ALL DATA
LOG10

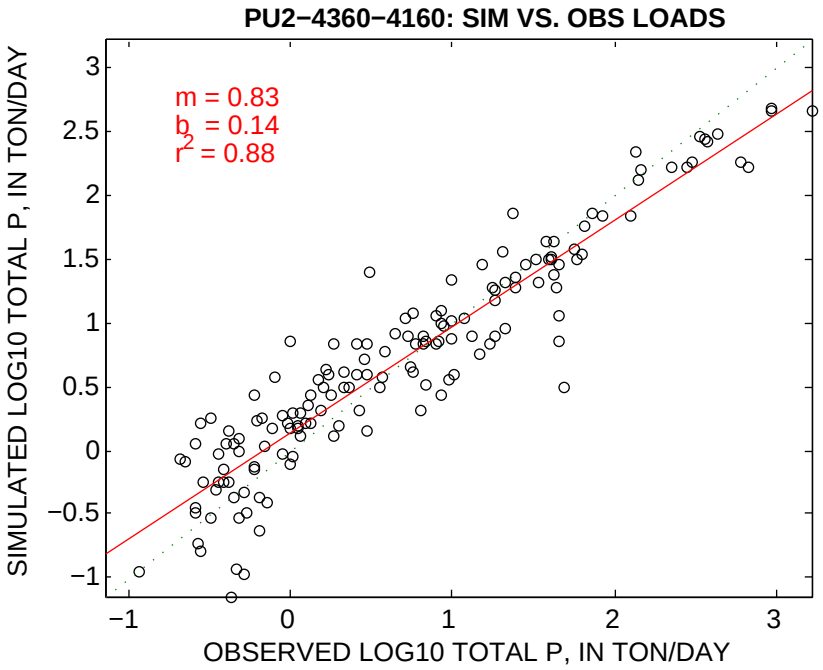


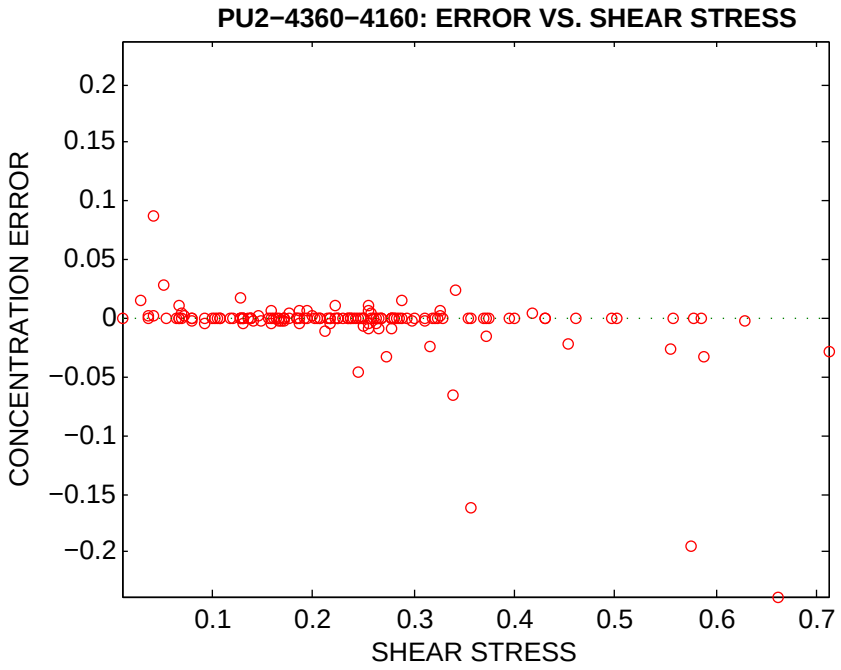


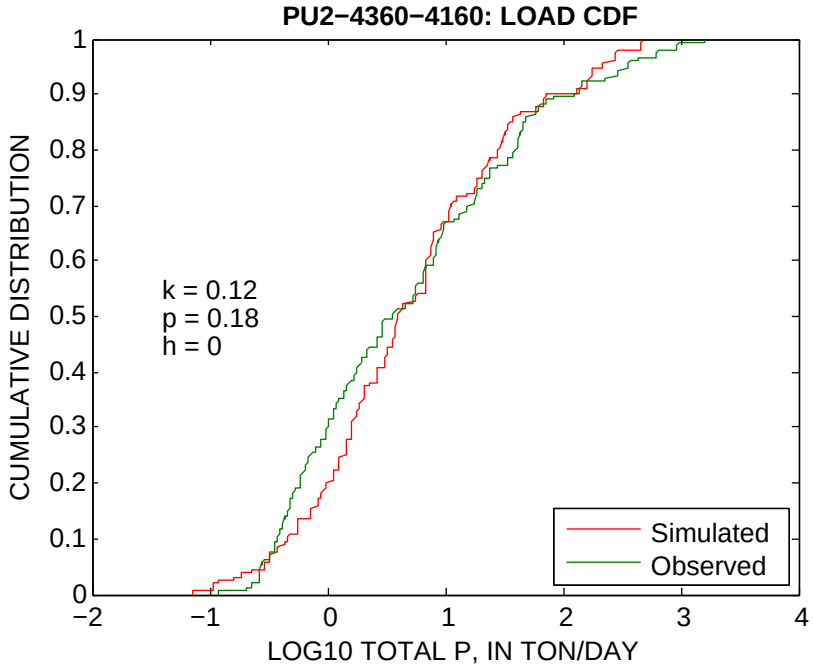


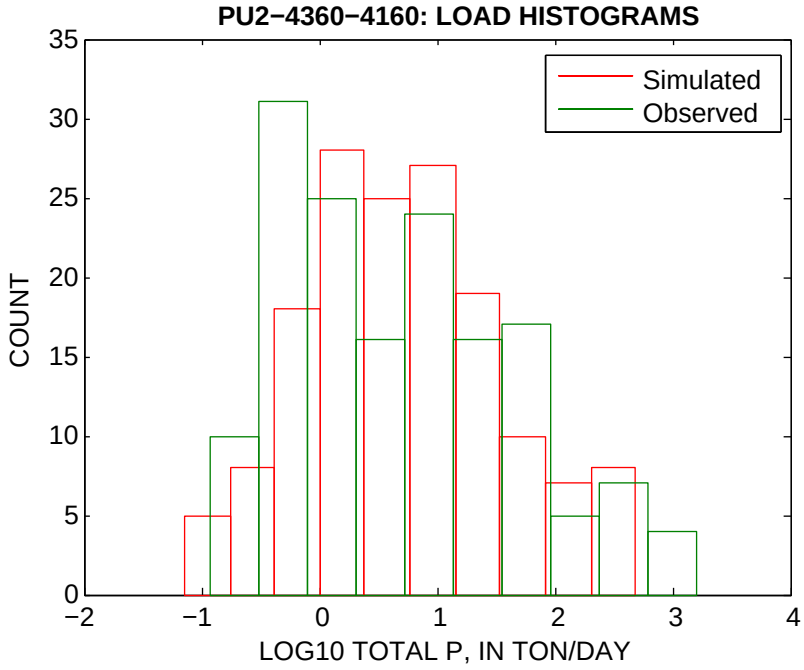


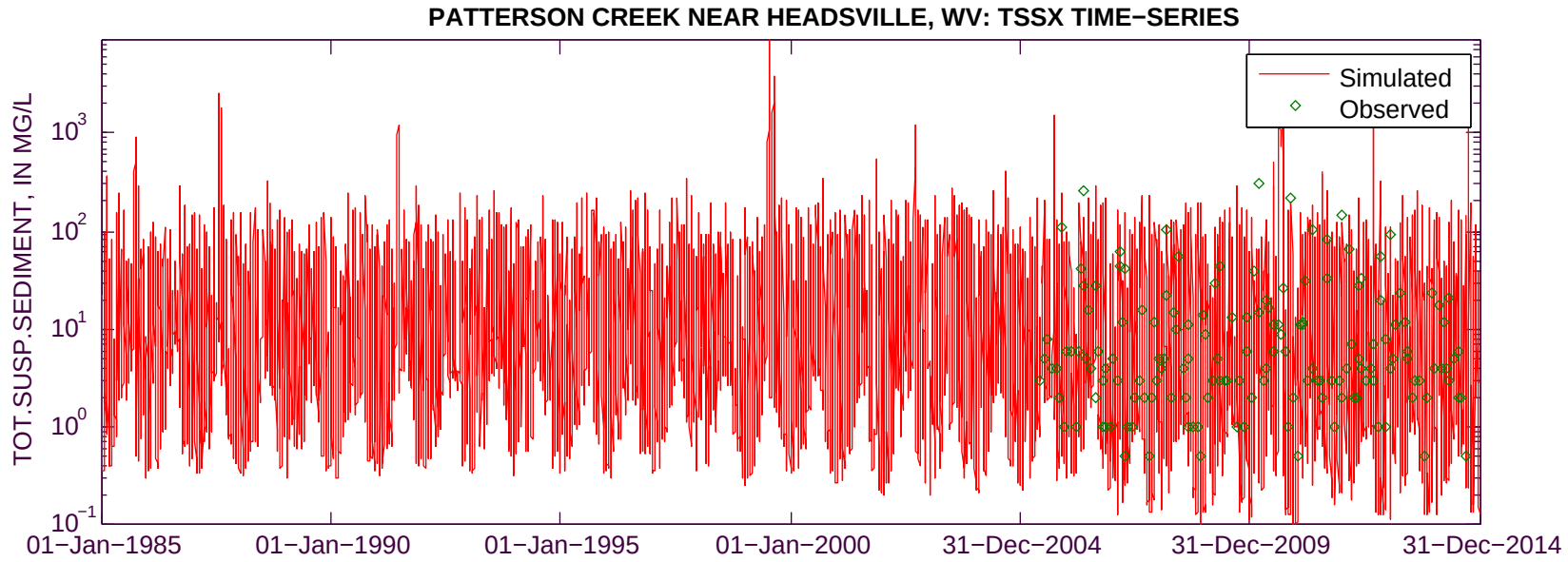
LOAD DATA
LOG10

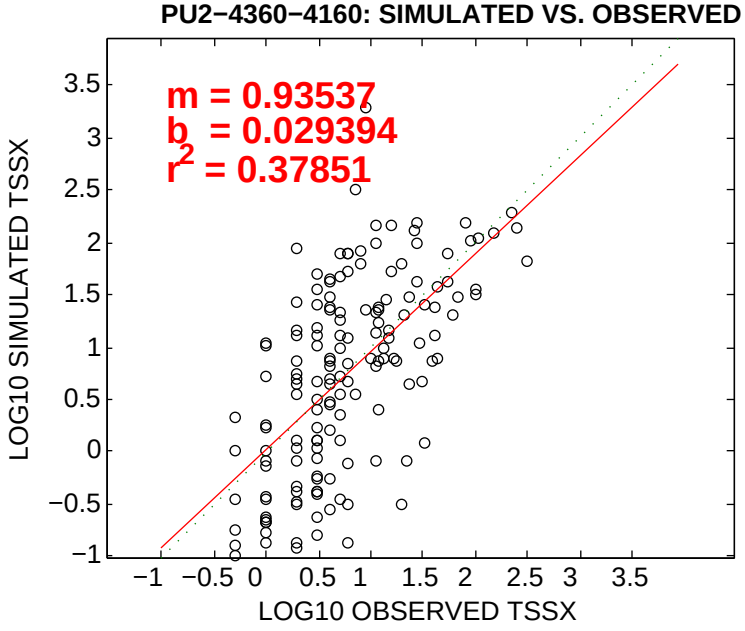


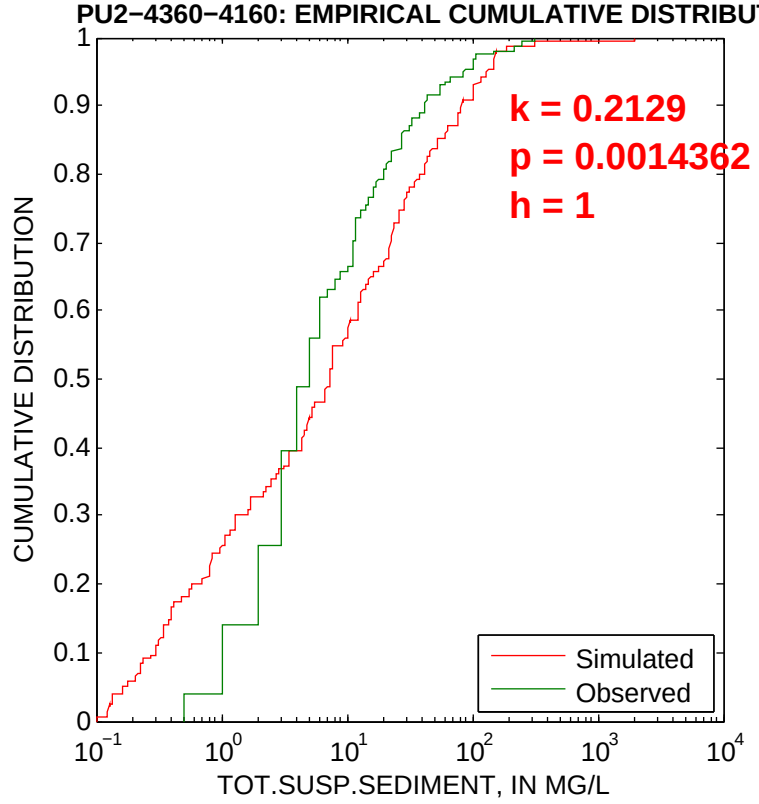












DATA SELECTION

scenario: P620171001WQ | file: TSSX.calib

plot: TSSX - total suspended ...

Dates: 1/1/1985 – 12/31/201

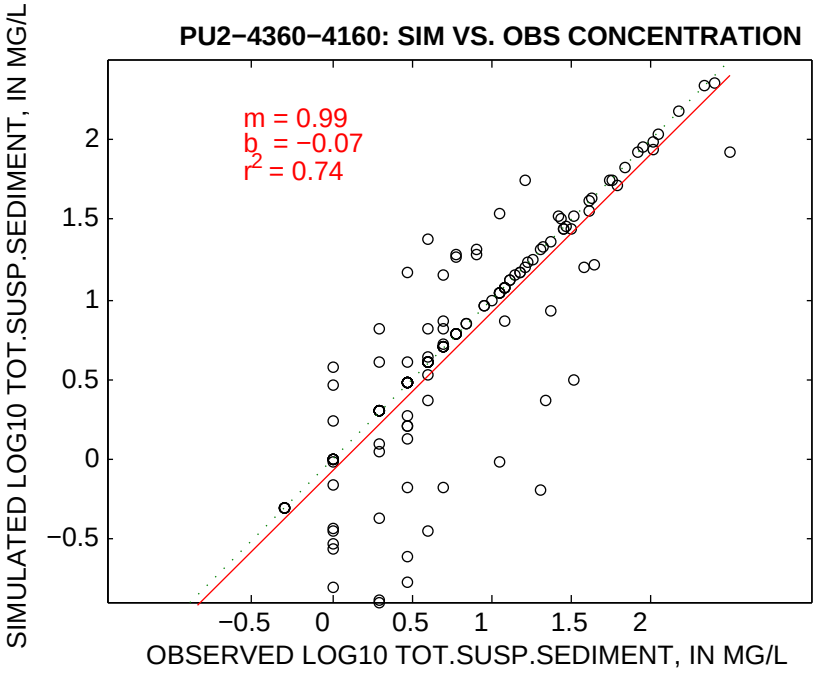
Drive: N/A | Directory: model | Observed: OBS20161101

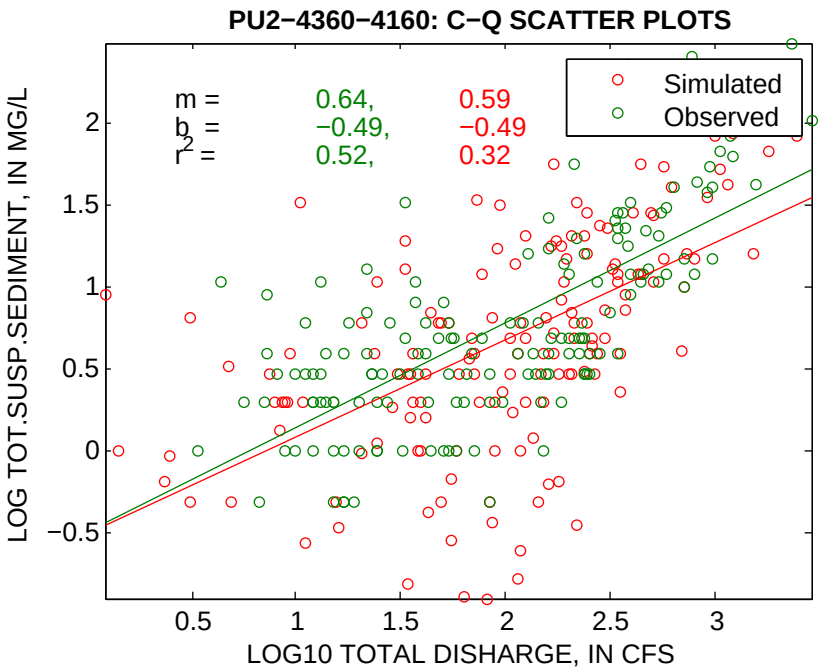
STATISTICS

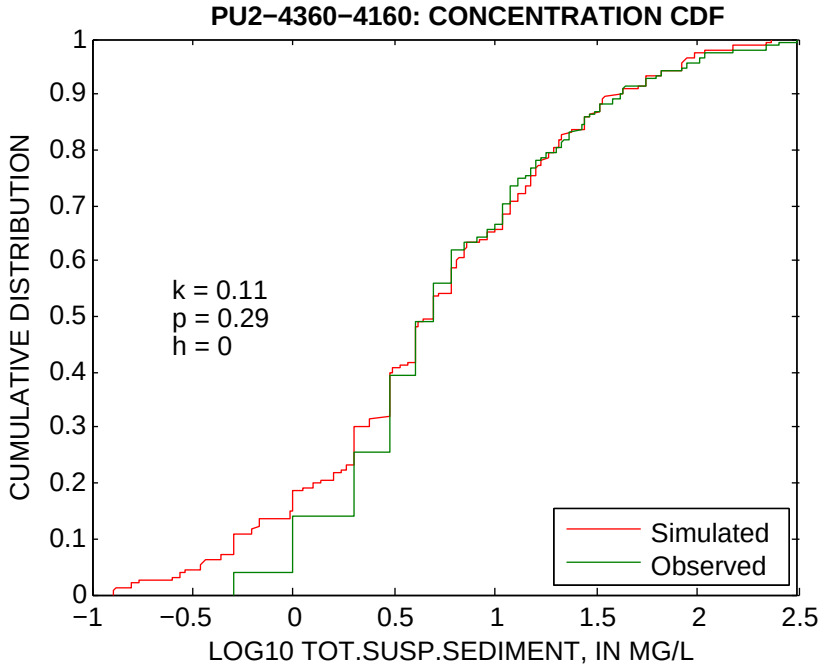
		observe	simulate
n		155	155
min		0.5	0.10292
		-0.30103	-0.9875
mean		18.2903	38.4078
		0.775976	0.755217
media		5	7.3802
		0.69897	0.868068
max		310	1996.8
		2.49136	3.30033
varian		1706.59	27057.2
		0.364445	0.842402
JB		0.001	0.001
		0.024539	0.080879
		ra	log
%		109.99	-2.67522
err.va		27749.6	0.5255
rel.std.err		16.2603	1.44192
mod.eff		-15.2603	-0.441917

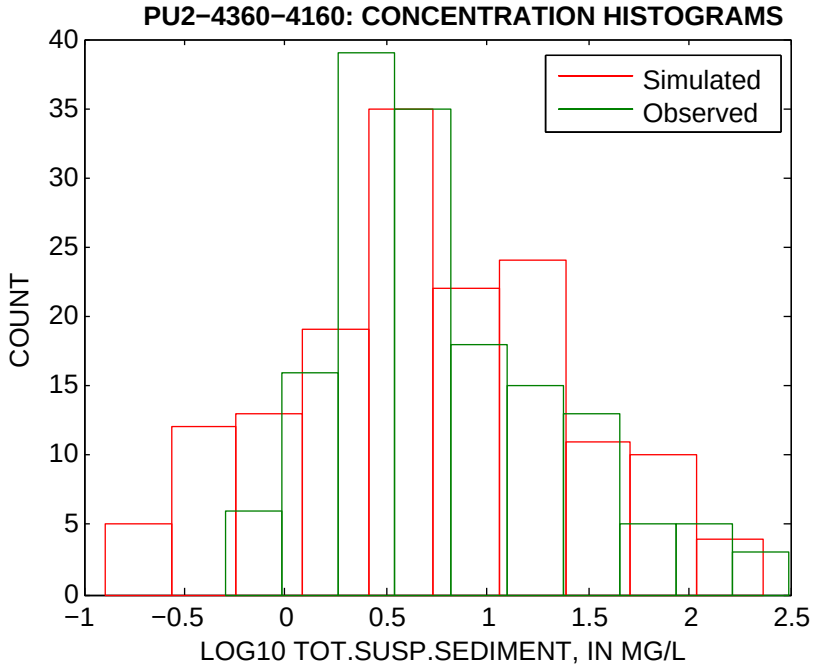
VERSION 2.1

ALL DATA
LOG10

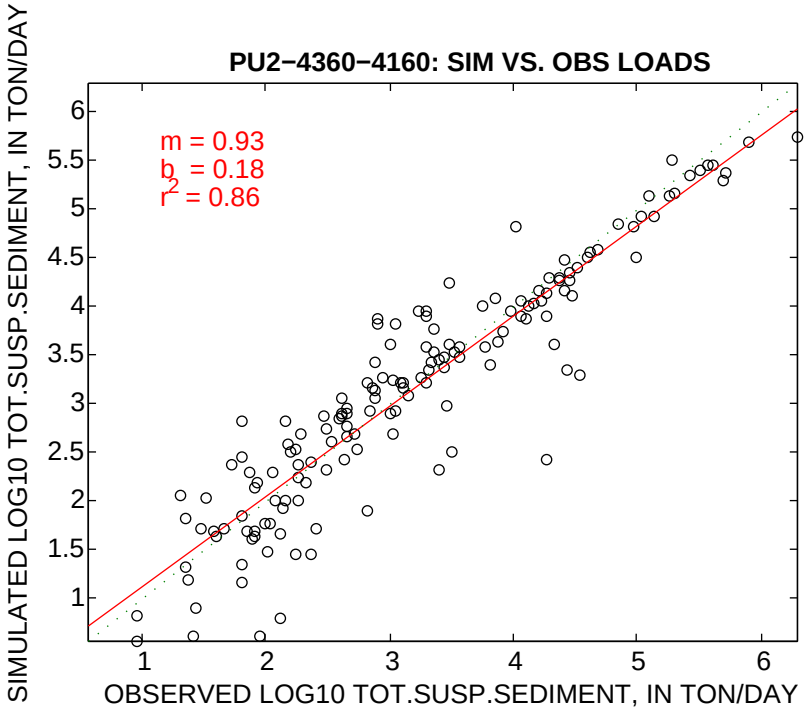


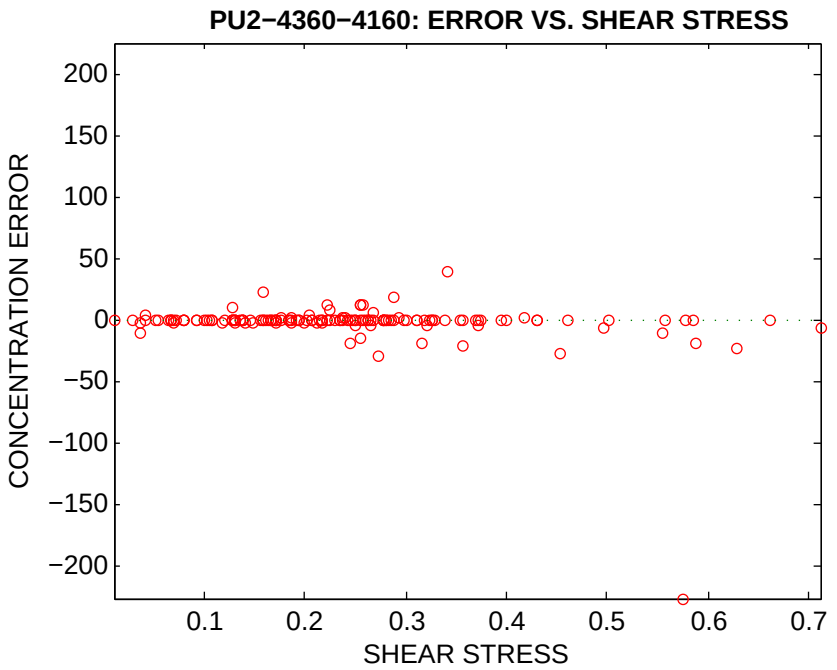


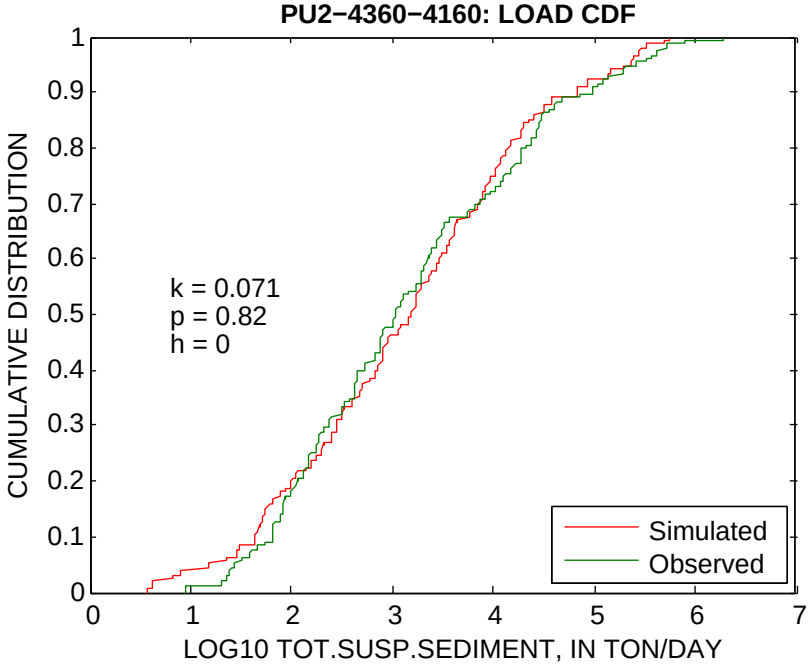


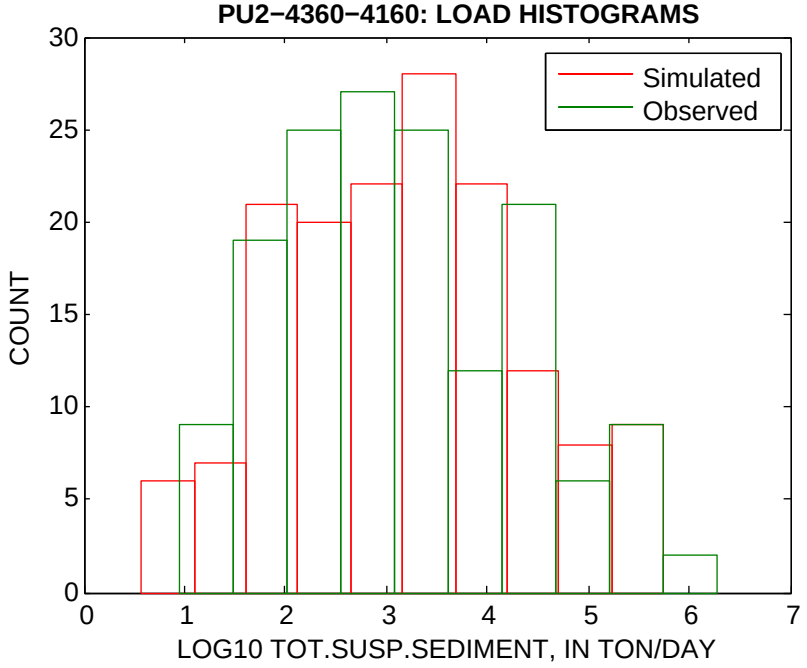


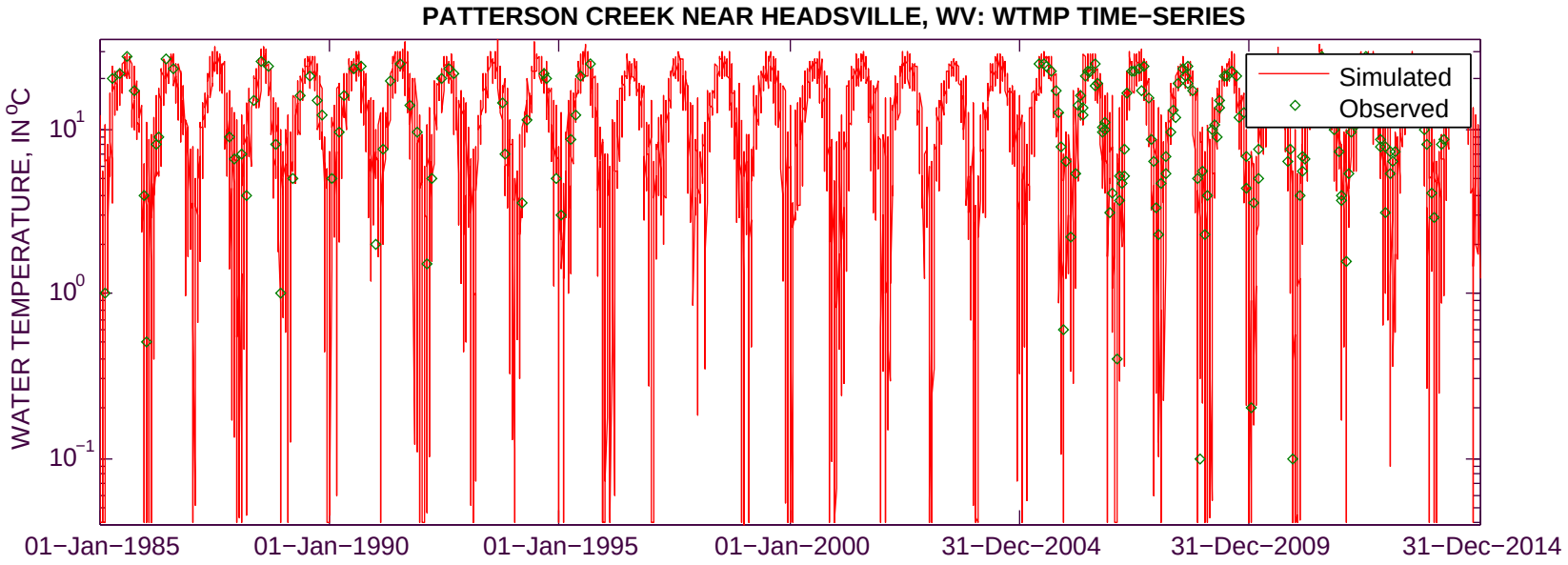
LOAD DATA
LOG10

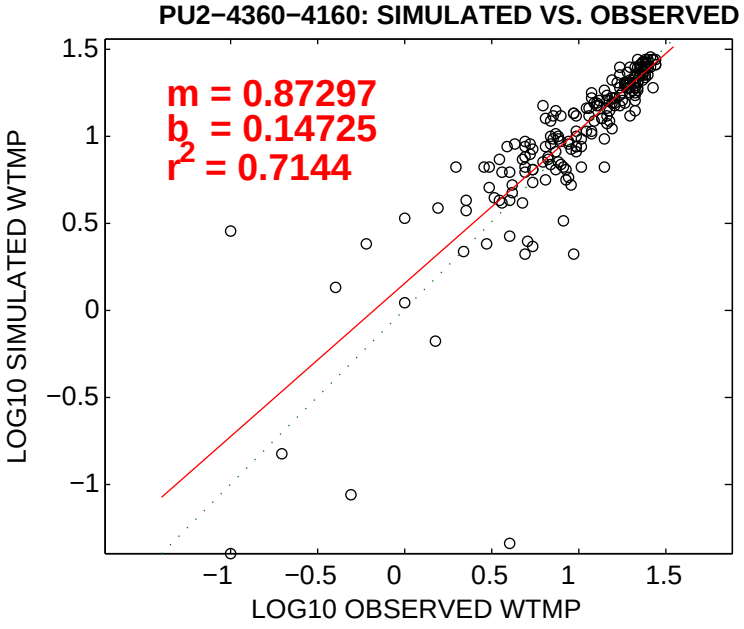


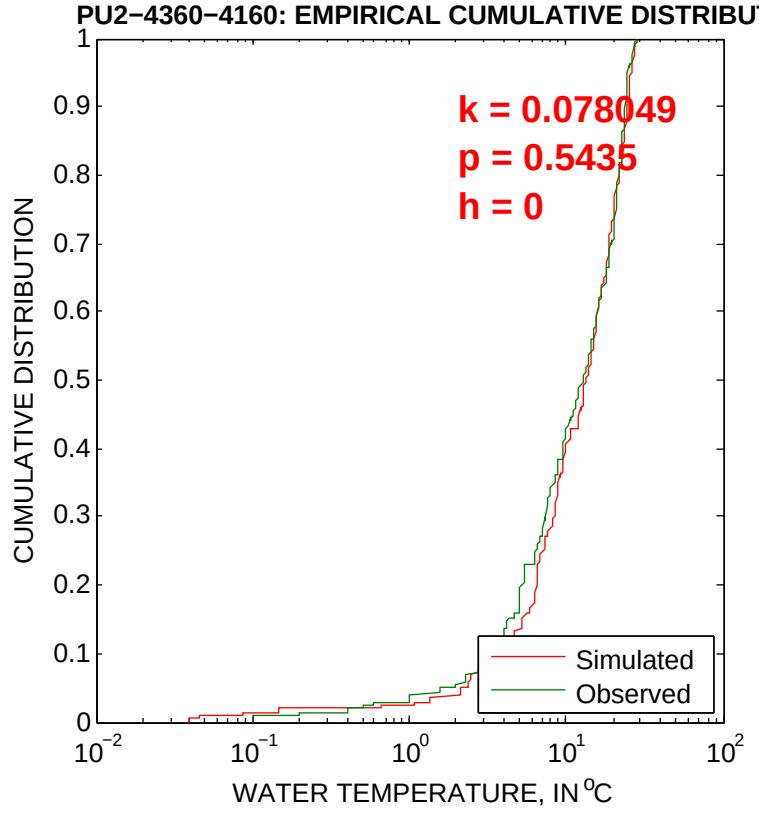












DATA SELECTION

scenario	file
P620171001WQ	WTMP.calib

plot: WTMP - water tempera...

Dates 1/1/1985 12/31/201

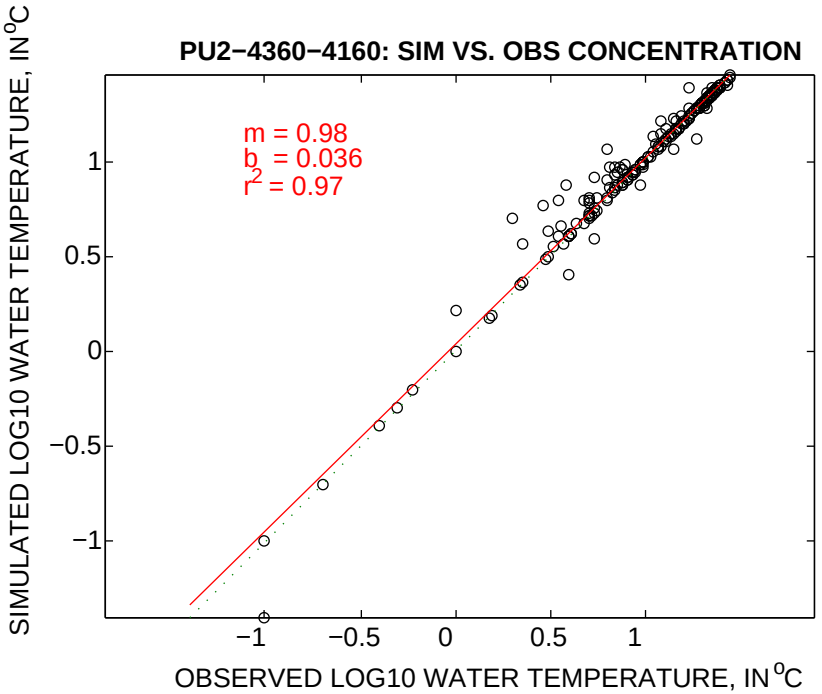
Drive	Directory	Observed
N/A	model	OBS20161101

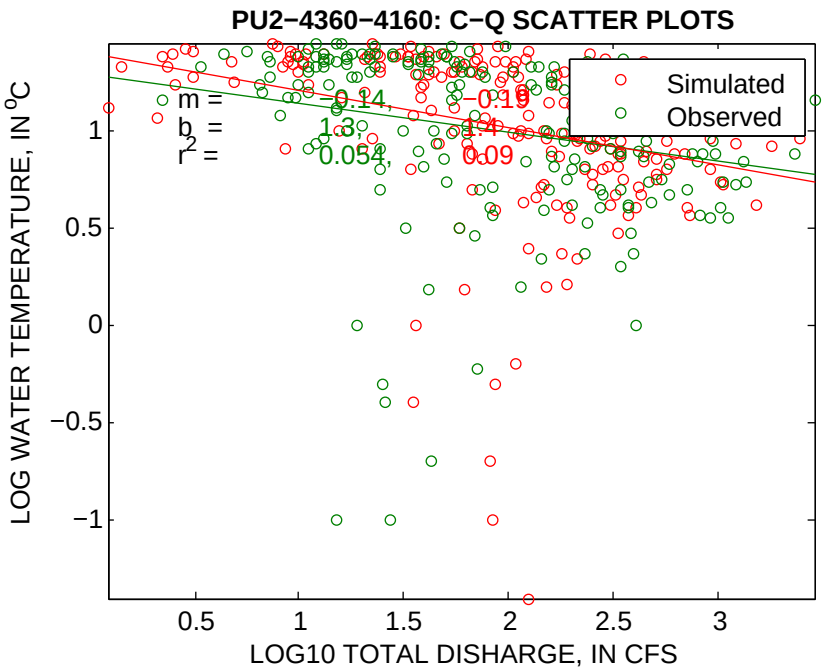
STATISTICS

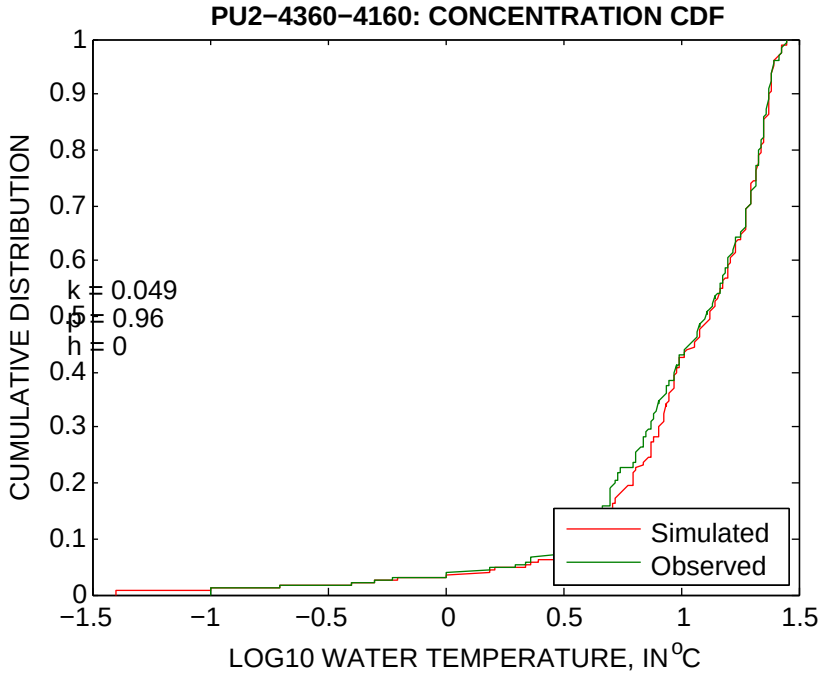
	n	205	205
		observe	simulate
min		0.1	0.040053
		-1	-1.39736
mean		13.3478	13.7712
		0.997146	1.01773
media		12.9	13.562
		1.11059	1.13232
max		28	28.617
		1.44716	1.45662
varian		61.5597	58.8069
		0.178169	0.19006
JB		0.005855	0.010372
		0.001	0.001
		ra	log
%		3.17203	2.0642
err.va		7.90267	0.0575822
rel.std.err		0.128374	0.323188
mod.eff		0.871626	0.676812

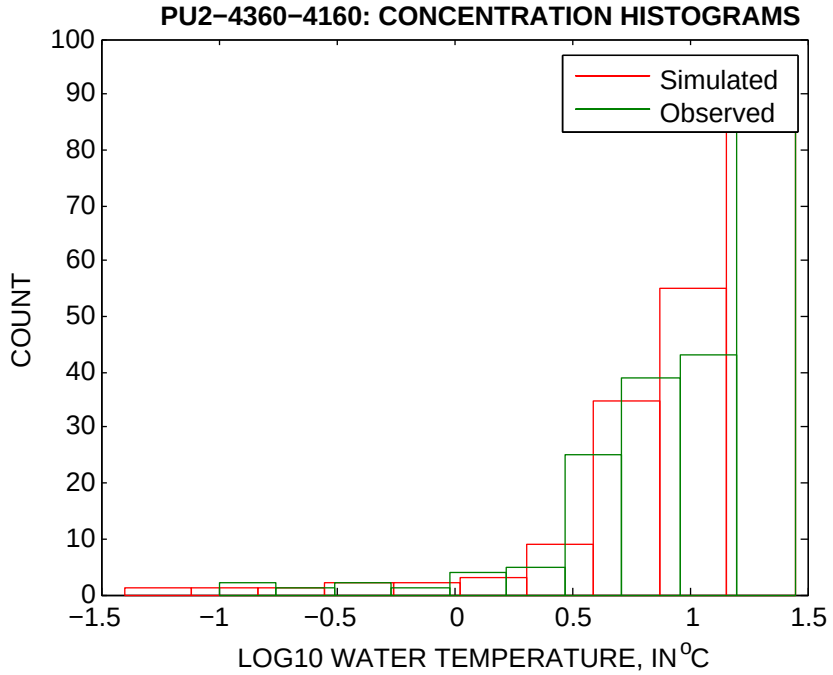
VERSION 2.1

ALL DATA
LOG10

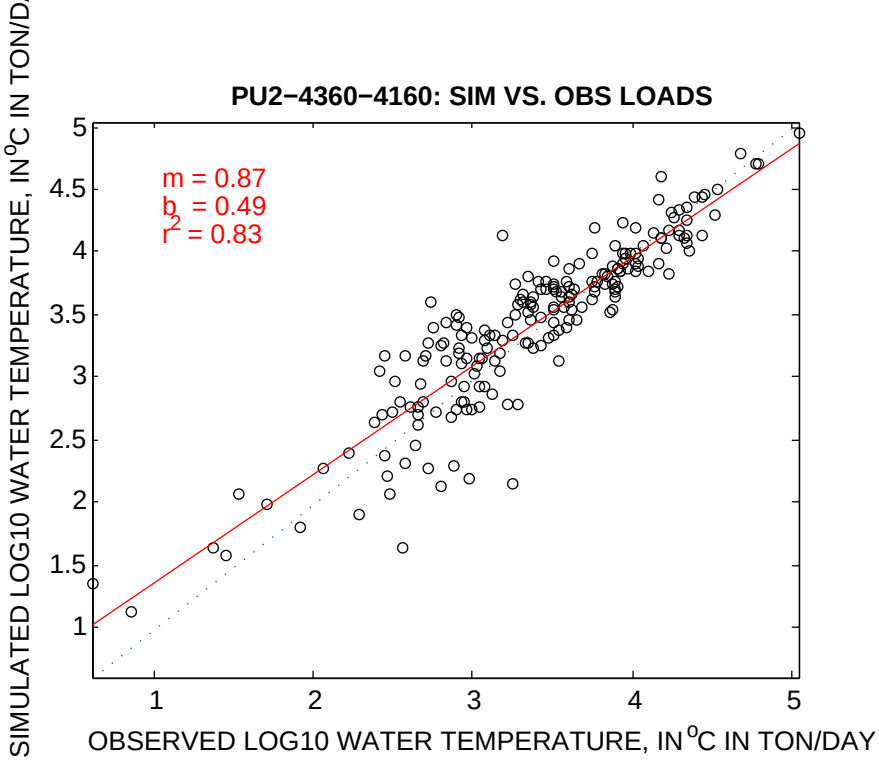


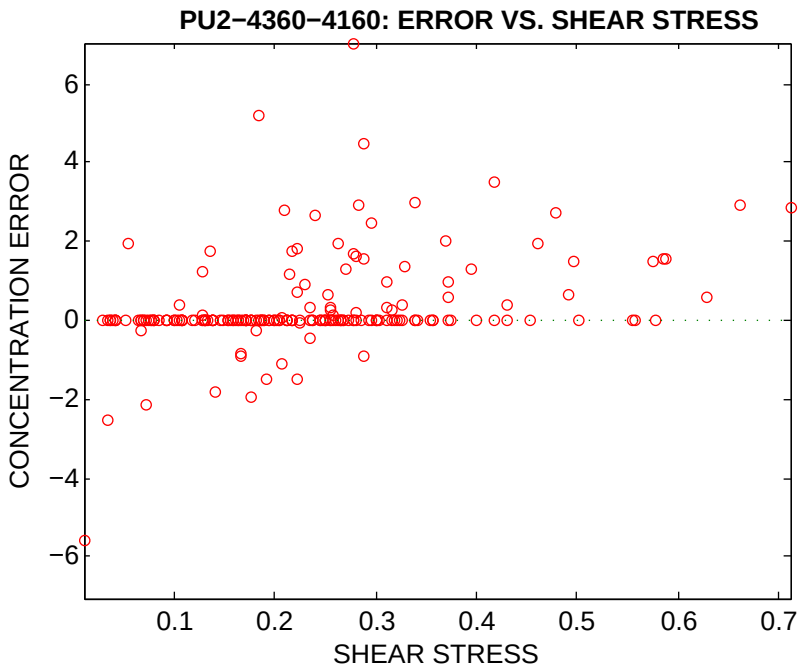


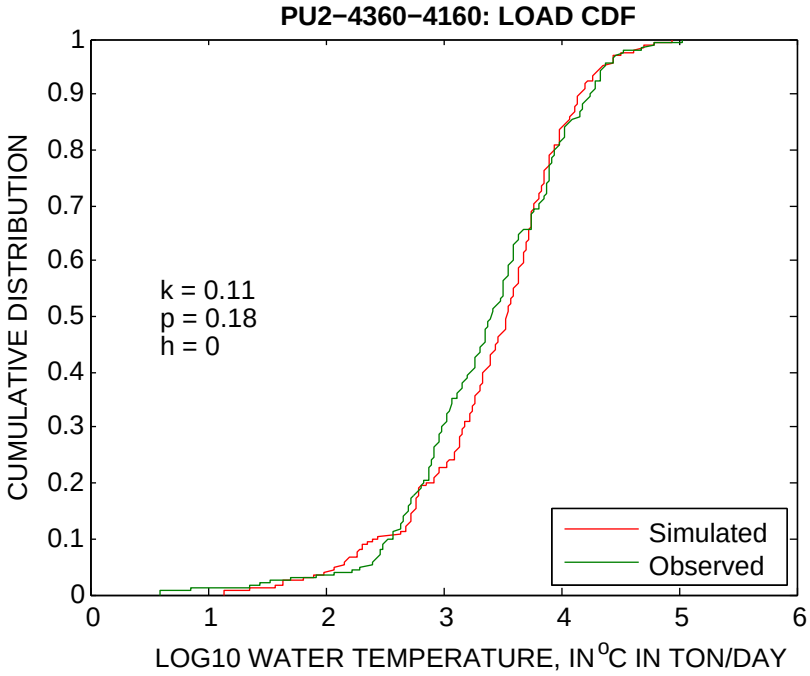


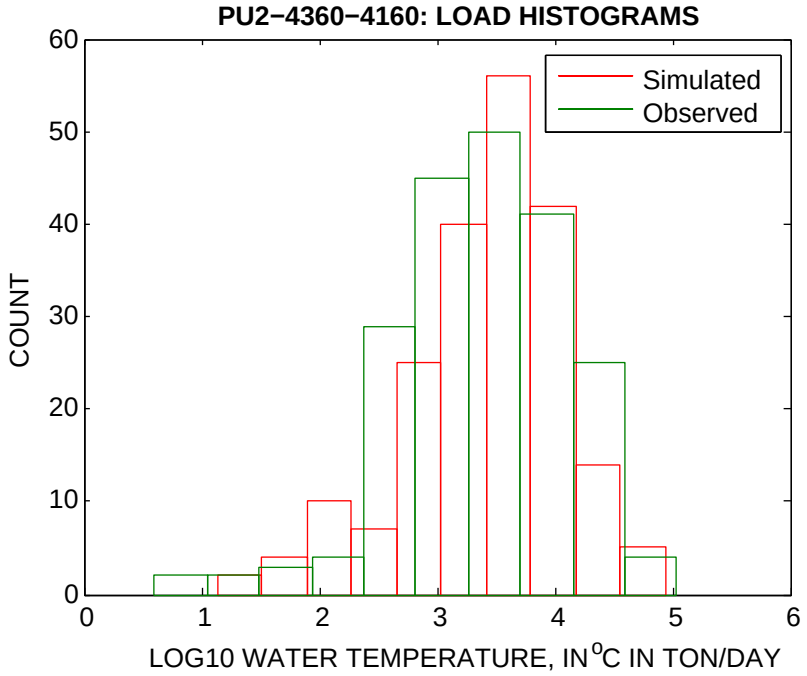


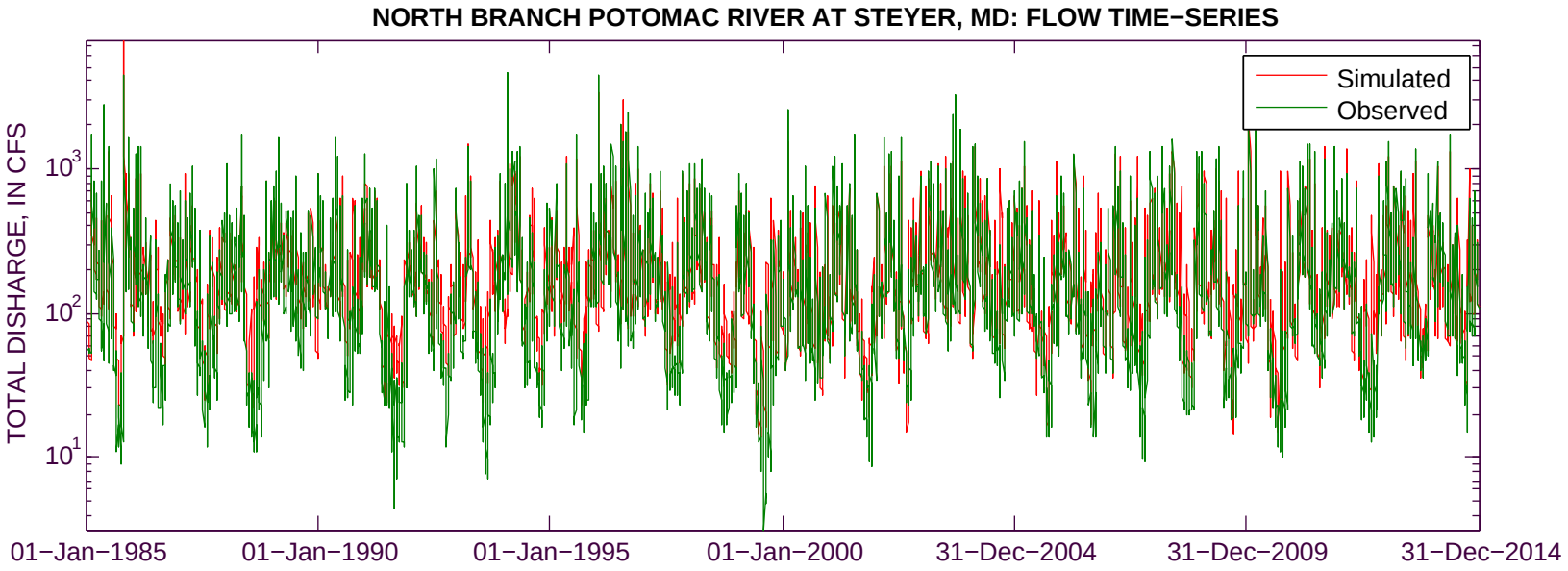
LOAD DATA
LOG10

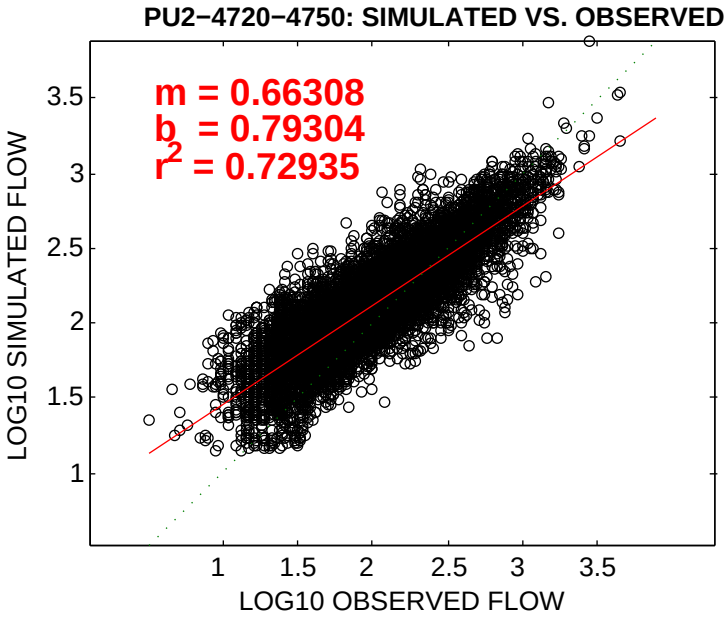


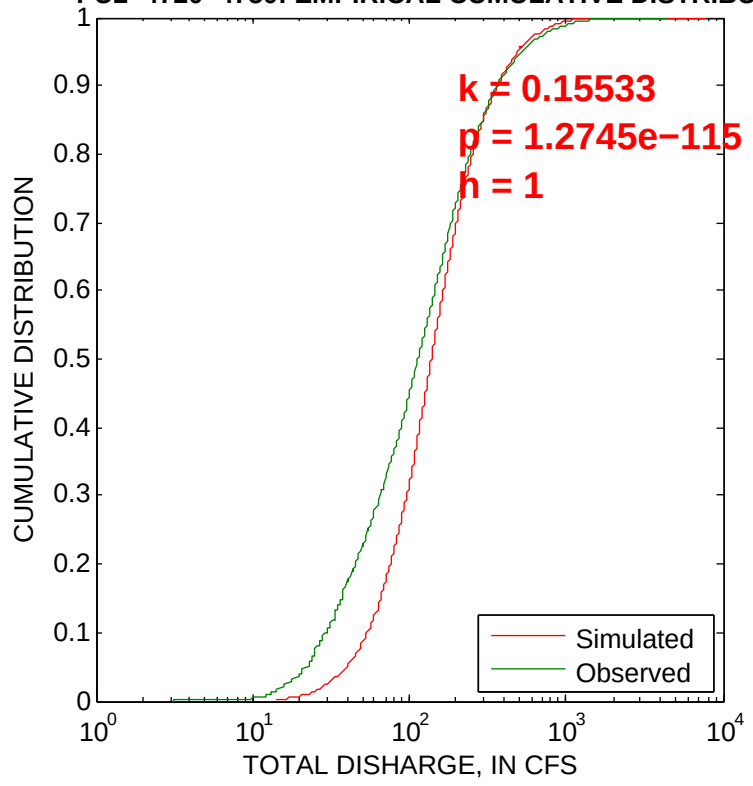












DATA SELECTION

scenario: P620171001WQ | file: FLOW.calib

plot: FLOW - total discharge

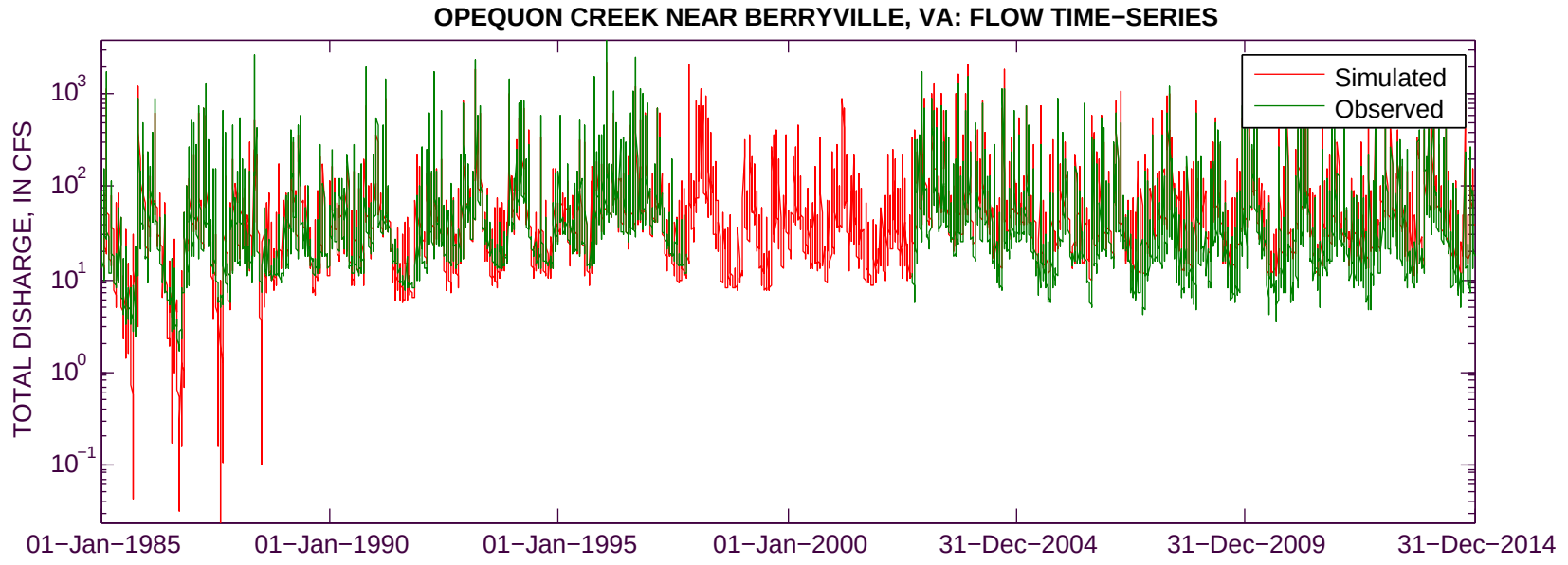
Dates: 1/1/1985 – 12/31/201

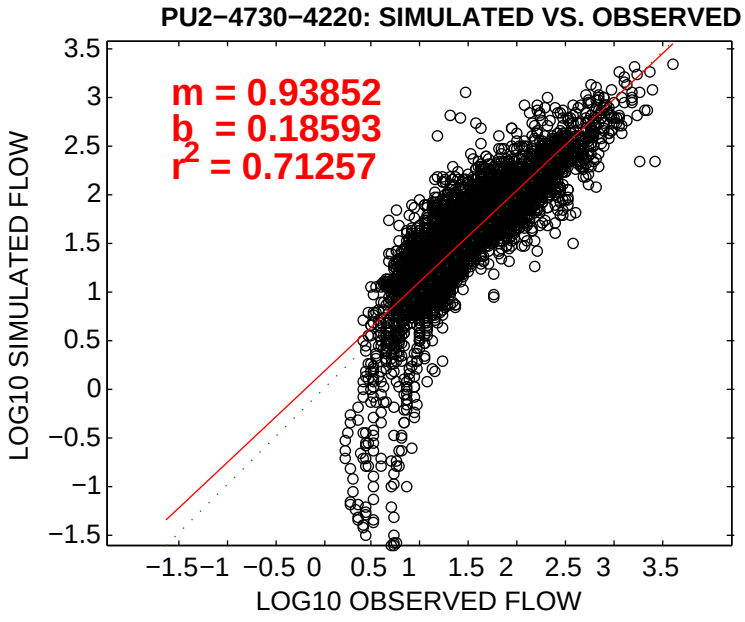
Drive: N/A | Directory: model | Observed: OBS20161101

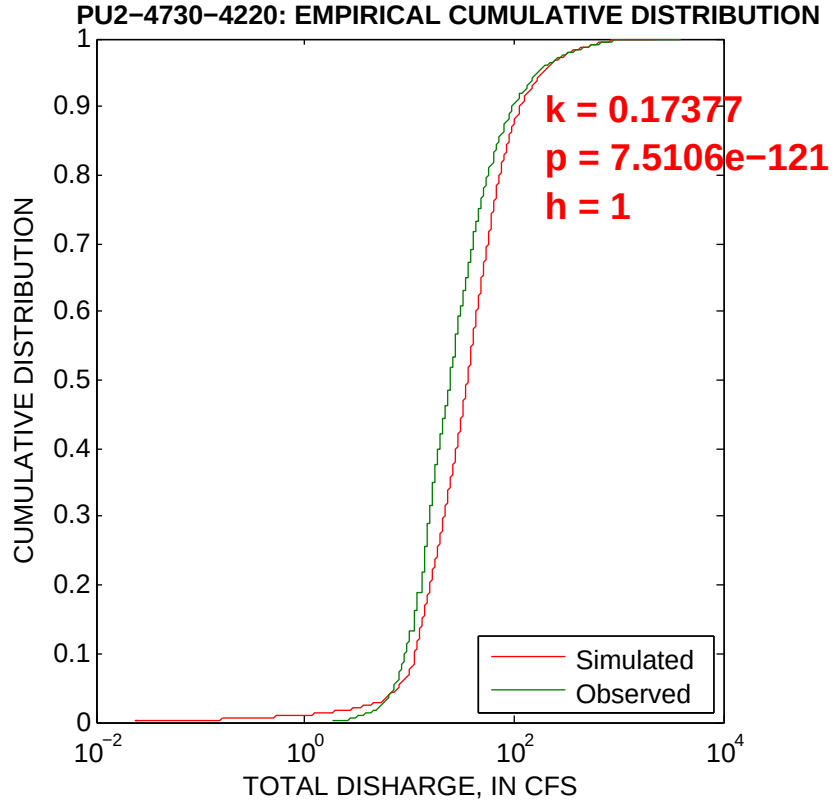
STATISTICS

		observe	simulate
n		10957	10957
min		3.2	13.741
		0.50515	1.13802
mean		174.601	187.452
		2.03895	2.14504
media		114	138.21
		2.0569	2.14054
max		4530	7774.5
		3.6561	3.89067
varian		46662.7	35938.8
		0.178082	0.107355
JB		0.001	0.001
		0.001	0.001
		ra	log
%		7.36045	5.20304
err.va		15207.2	0.0605252
rel.std.err		0.325897	0.339873
mod.eff		0.674103	0.660127

VERSION 2.1







DATA SELECTION

scenario	file
P620171001WQ	FLOW.calib

plot: FLOW - total discharge

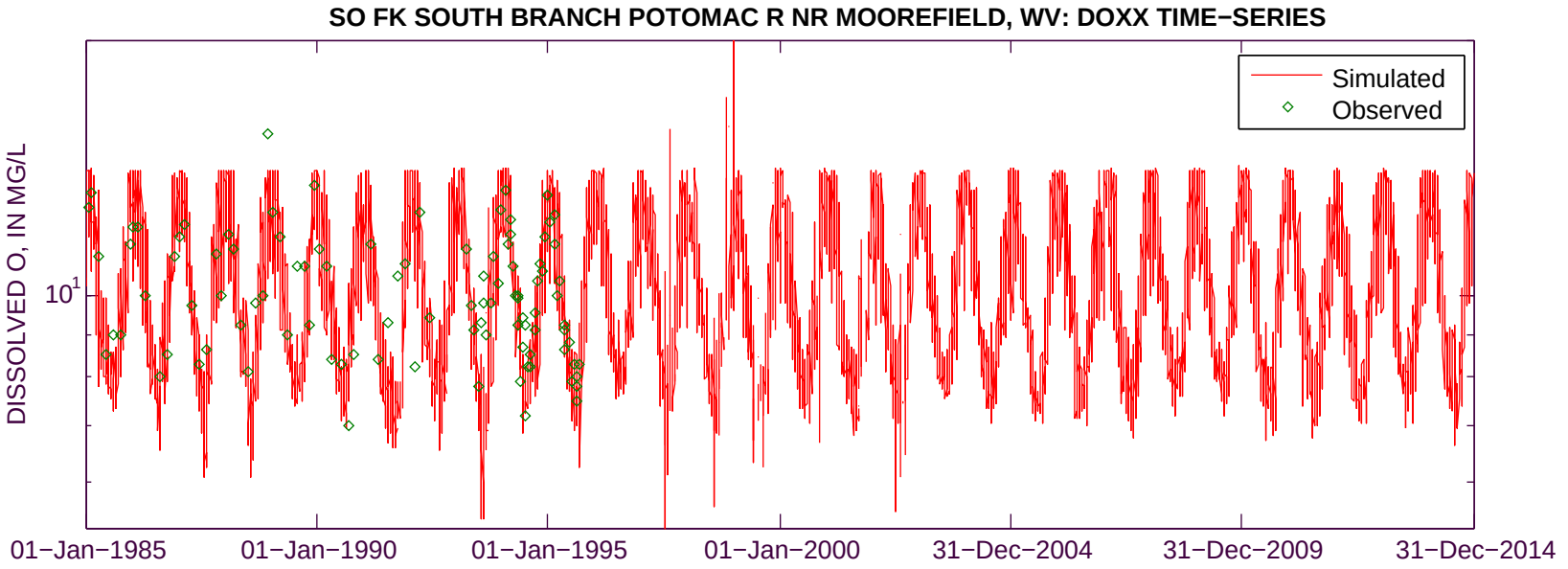
Dates 1/1/1985 12/31/201

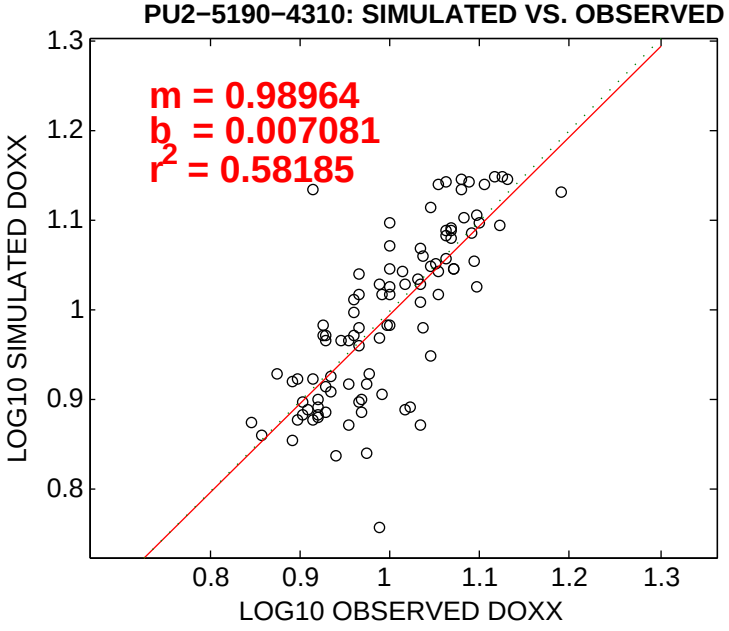
Drive	Directory	Observed
N/A	model	OBS20161101

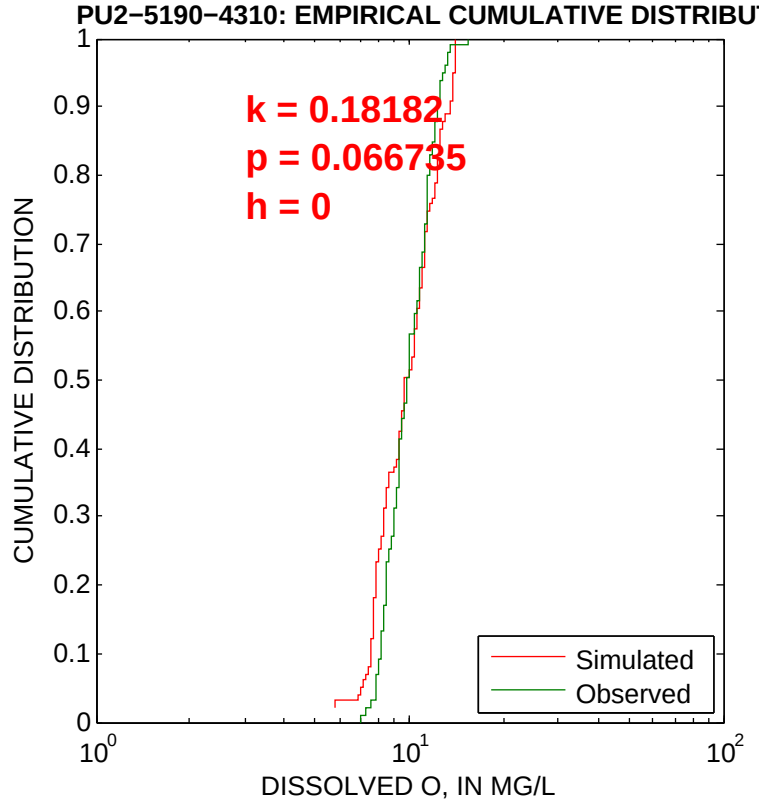
STATISTICS

		observe	simulate
n		9150	9150
min		1.7	0.023849
		0.230449	-1.62253
mean		54.3229	62.6614
		1.44456	1.54169
media		24	36.093
		1.38021	1.55742
max		3980	2187.3
		3.59988	3.33991
varian		16414.9	12242
		0.185403	0.229182
JB		0.001	0.001
		0.001	0.001
		ra	log
%		15.3499	6.72379
err.va		5626.07	0.0760094
rel.std.err		0.342742	0.409968
mod.eff		0.657258	0.590032

VERSION 2.1







DATA SELECTION

scenario	file
P620171001WQ	DOXX.calib

plot: DOXX - dissolved oxygen

Dates: 1/1/1985 – 12/31/201

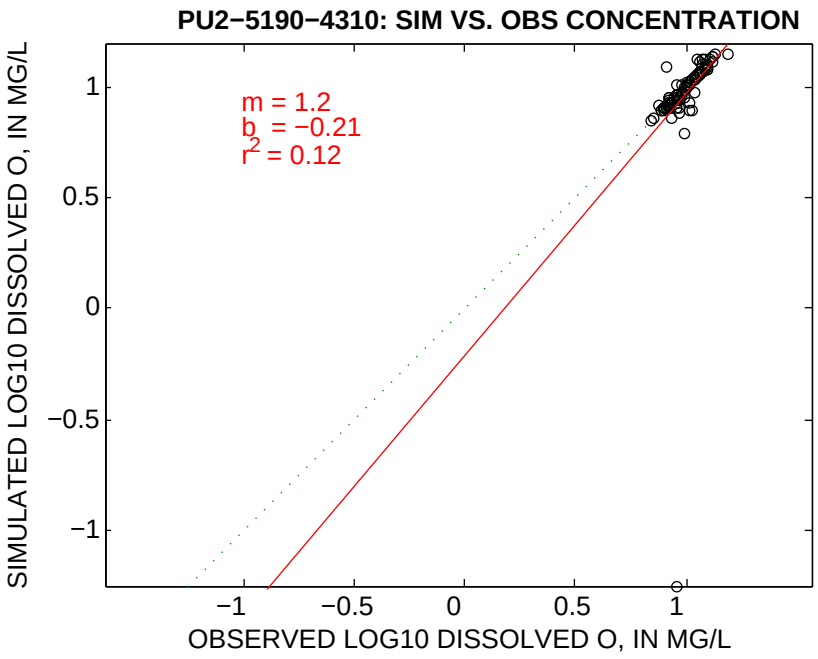
Drive	Directory	Observed
N/A	model	OBS20161101

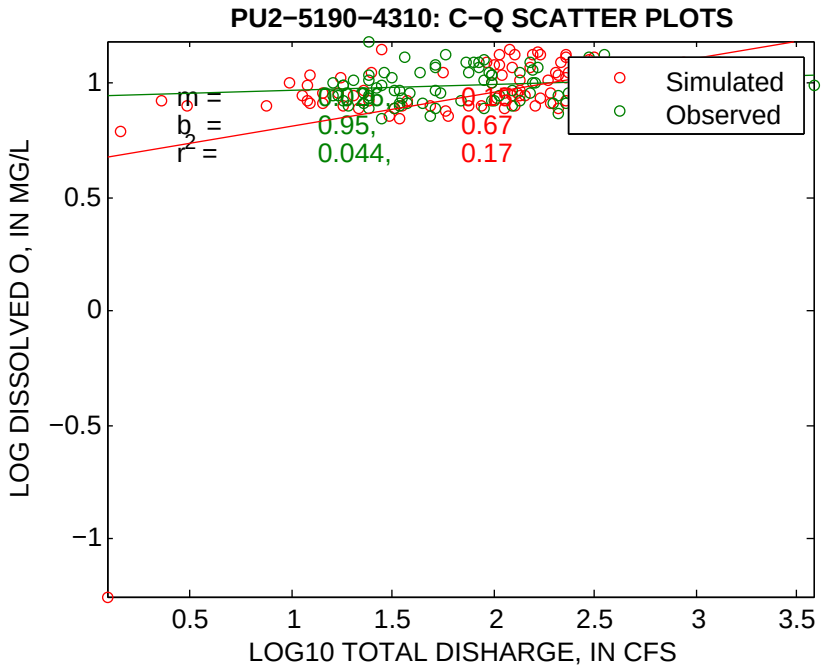
STATISTICS

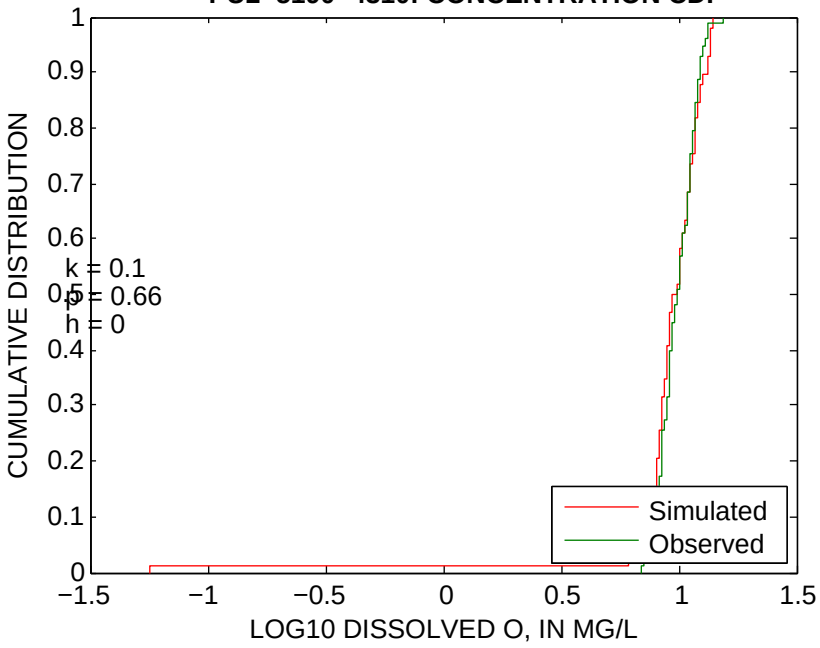
	n	observe	simulate
		99	97
min		7	0
		0.845098	0.759758
mean		10.0823	9.90019
		0.997956	0.994703
media		9.9	9.6518
		0.995635	0.997461
max		15.5	14.07
		1.19033	1.14829
varian		2.80461	6.57383
		0.00514701	0.00866366
JB		0.084054	0.001
		0.219912	0.086112
		ra	log
%		-1.80648	-0.325952
err.va		3.72927	0.00363394
rel.std.err		1.32969	0.706029
mod.eff		-0.329693	0.293971

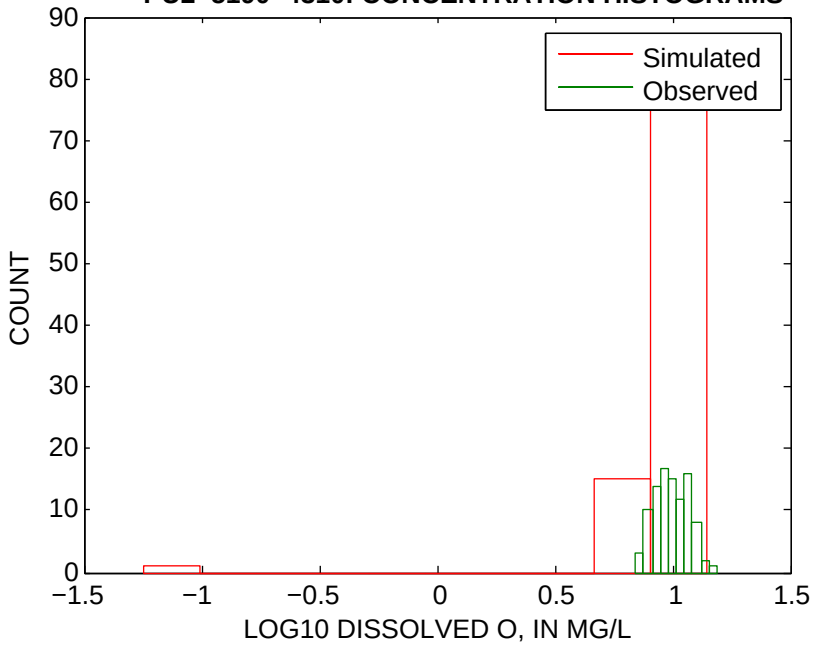
VERSION 2.1

ALL DATA
LOG10

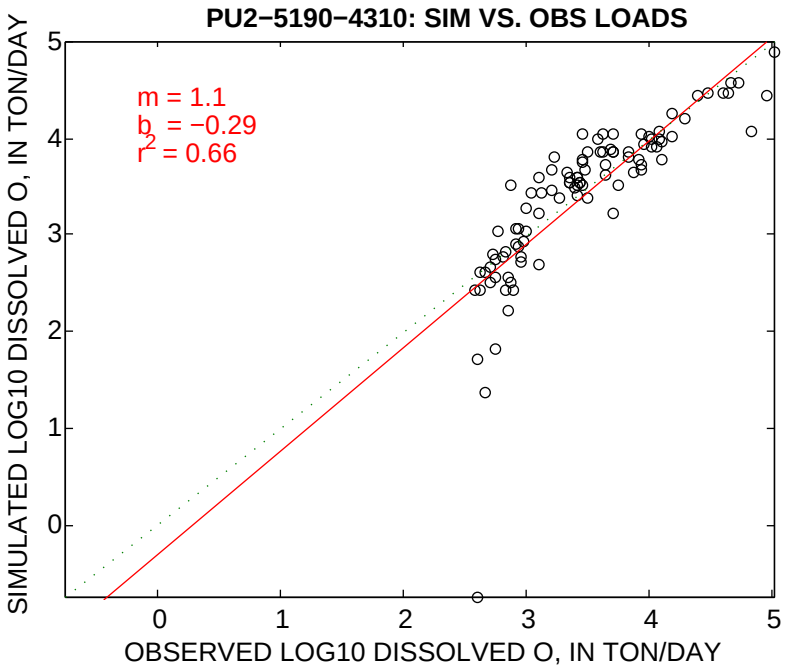


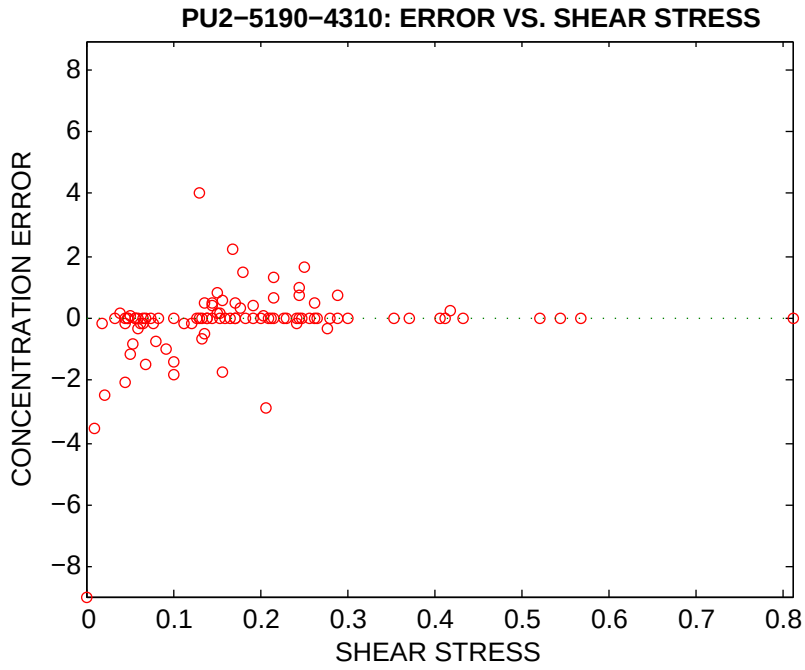


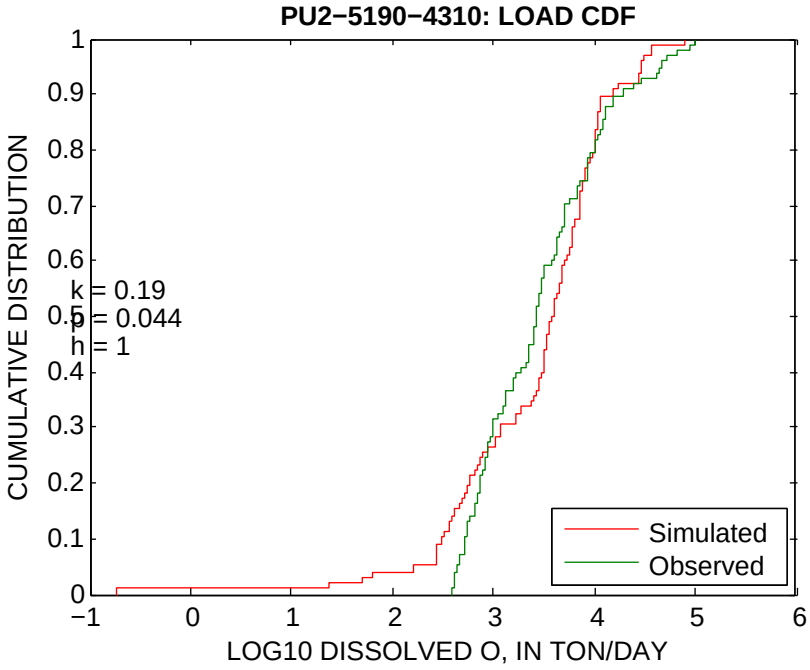


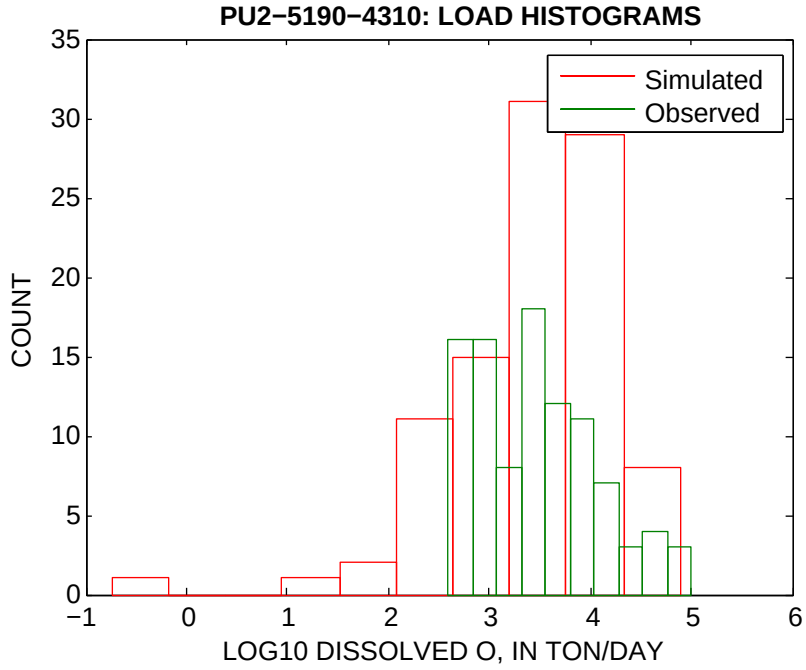


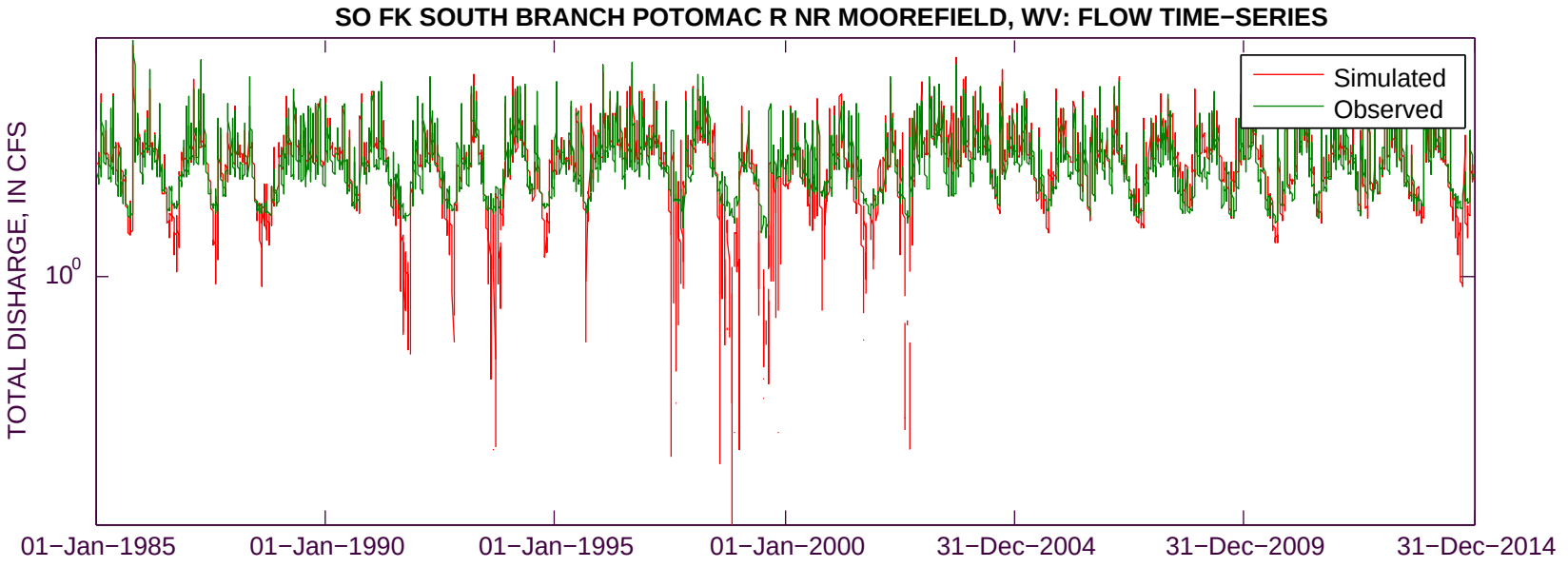
LOAD DATA
LOG10

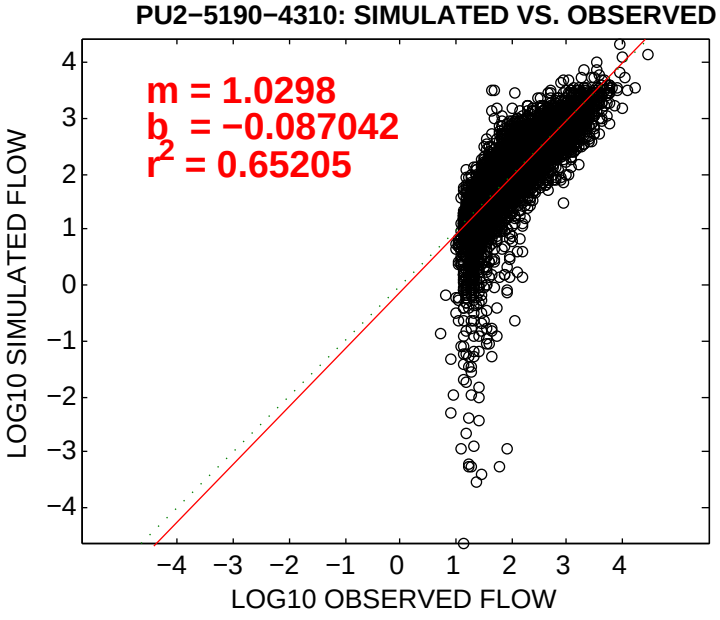


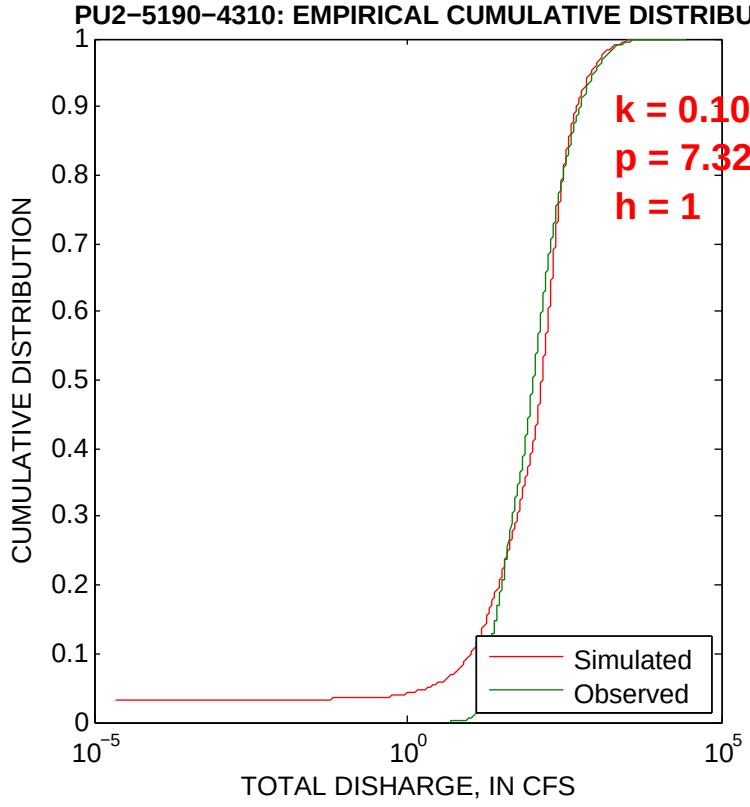












DATA SELECTION

scenario: P620171001WQ | file: FLOW.calib

plot: FLOW - total discharge

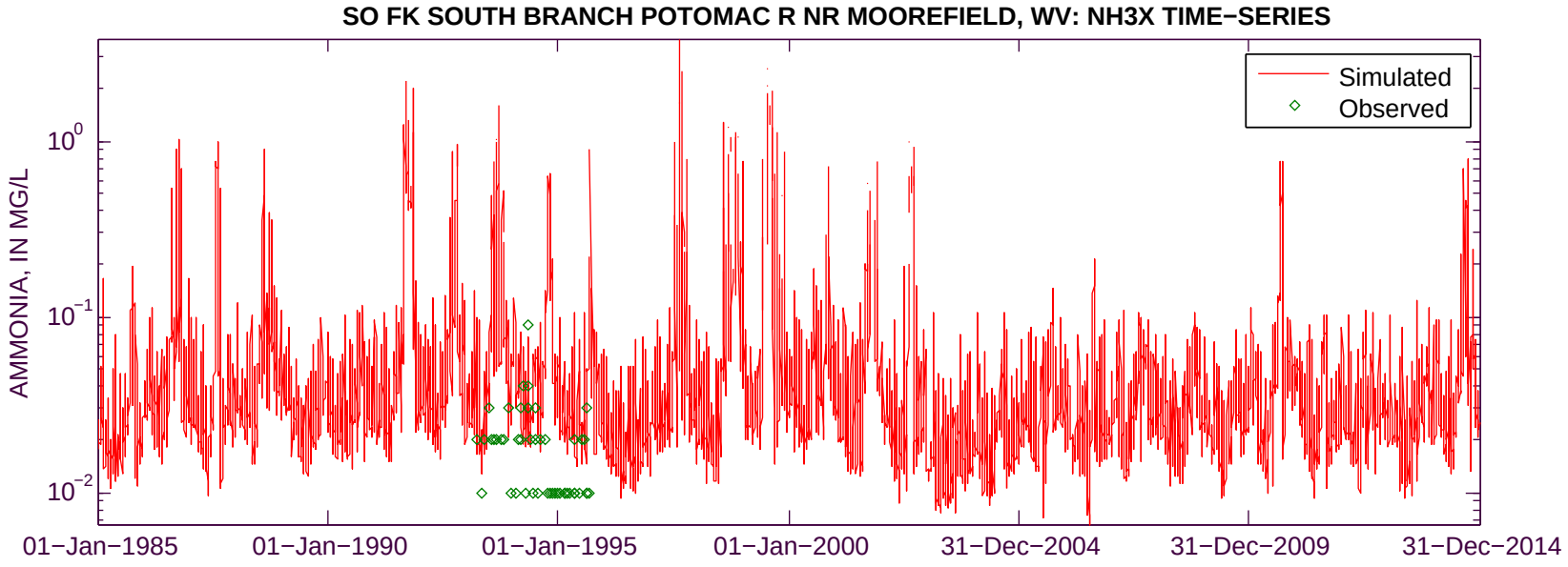
Dates: 1/1/1985 | 12/31/201

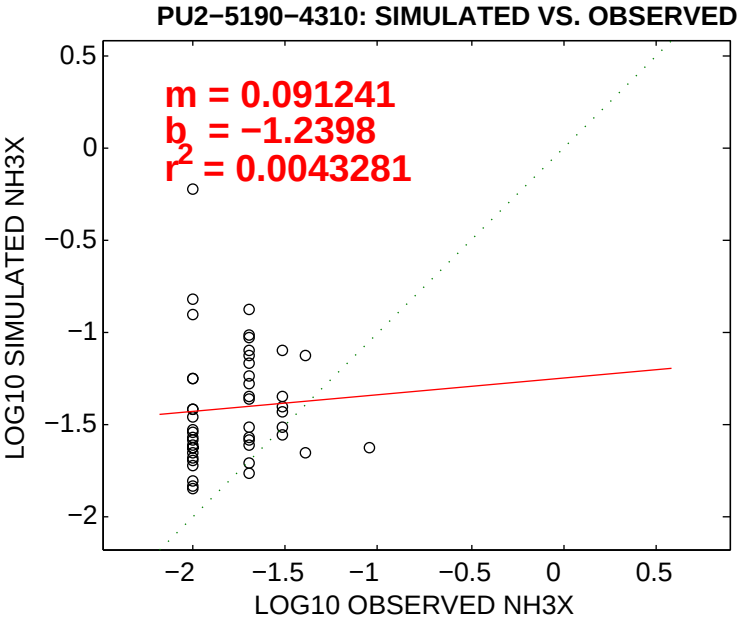
Drive | Directory: N/A | model | Observed: OBS20161101

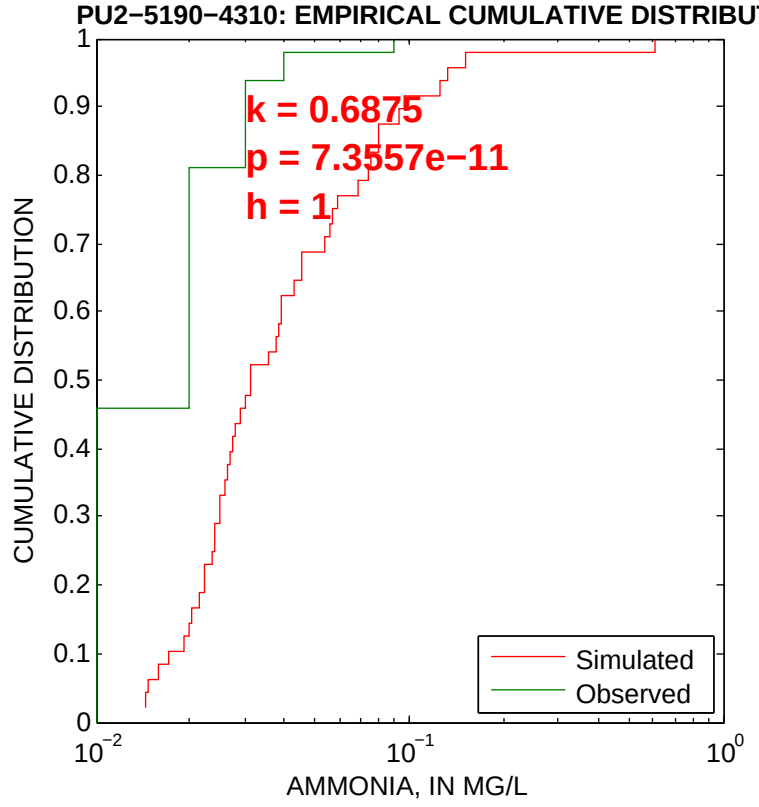
STATISTICS

		observe	simulate
n		10957	10618
min		5	0
		0.70757	-4.66063
mean		257.528	248.996
		2.05302	2.02724
media		103	139.6
		2.03342	2.16312
max		28000	21637
		4.44716	4.3352
varian		377118	261789
		0.284188	0.462236
JB		0.001	0.001
		0.001	0.001
		ra	log
%		-3.31317	-1.25558
err.va		167211	0.161752
rel.std.err		0.443392	0.569171
mod.eff		0.556608	0.430829

VERSION 2.1







DATA SELECTION

scenario	file
P620171001WQ	NH3X.calib

plot: NH3X - ammonia

Dates: 1/1/1985 – 12/31/201

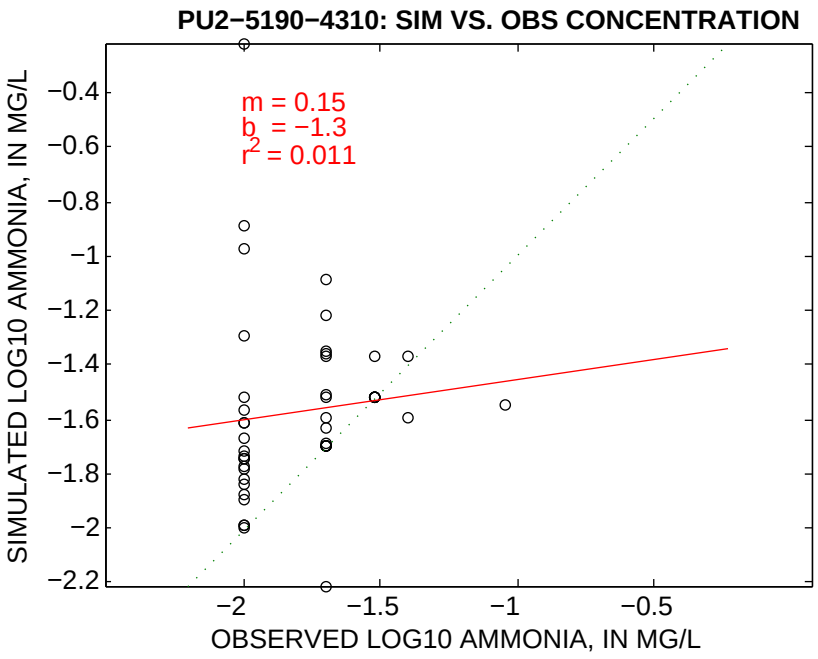
Drive	Directory	Observed
N/A	model	OBS20161101

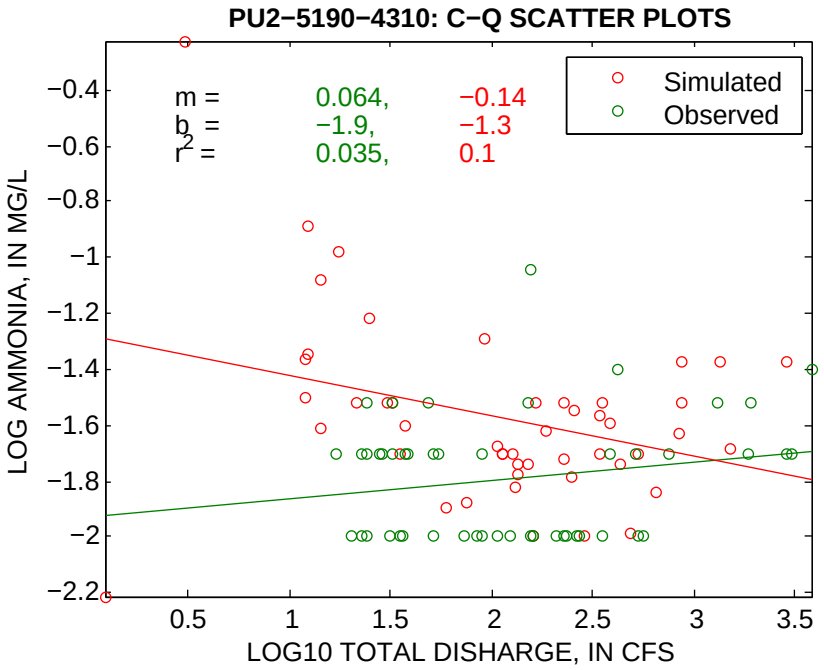
STATISTICS

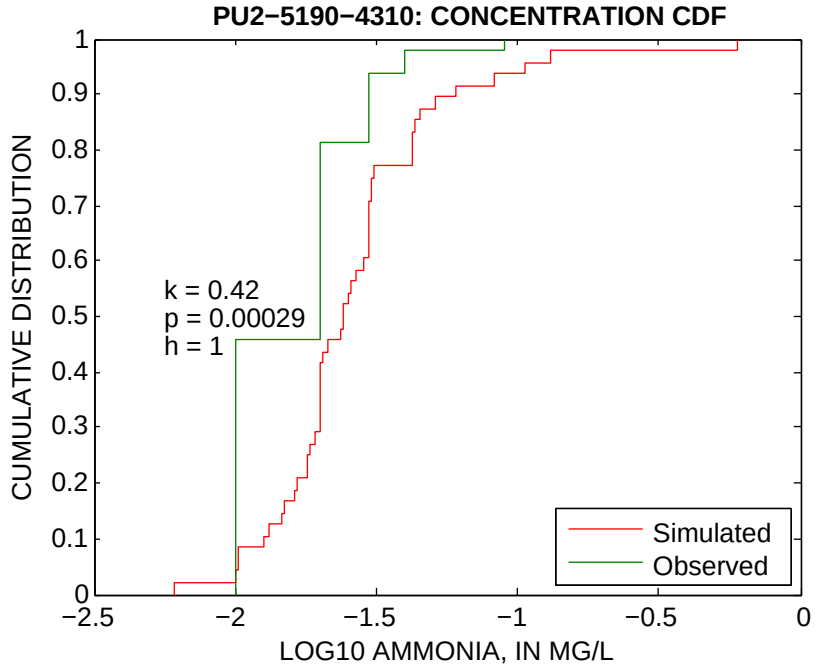
	n	observe	simulate
		48	47
min		0.01 -2	0 -1.83803
mean		0.0189583 -1.79069	0.0561479 -1.40314
media		0.02 -1.69897	0.0312305 -1.50461
max		0.09 -1.04576	0.6063 -0.217312
varian		0.00017974 0.0520044	0.00762268 0.100029
JB		0.001 0.034000	0.001 0.001979
		ra	log
%		196.165	-21.6422
err.va		0.00943316	0.296
rel.std.err		52.4814	5.69182
mod.eff		-51.4814	-4.69182

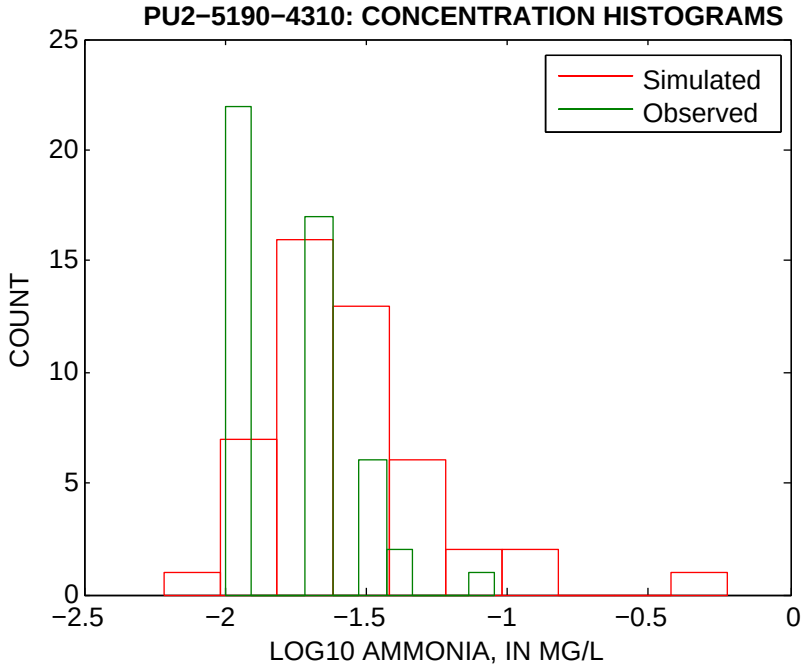
VERSION 2.1

ALL DATA
LOG10

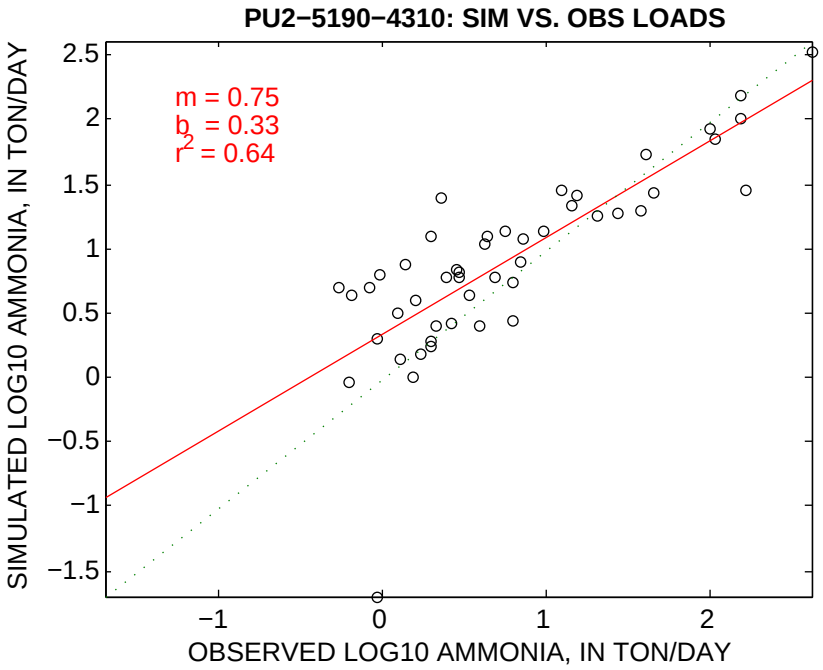


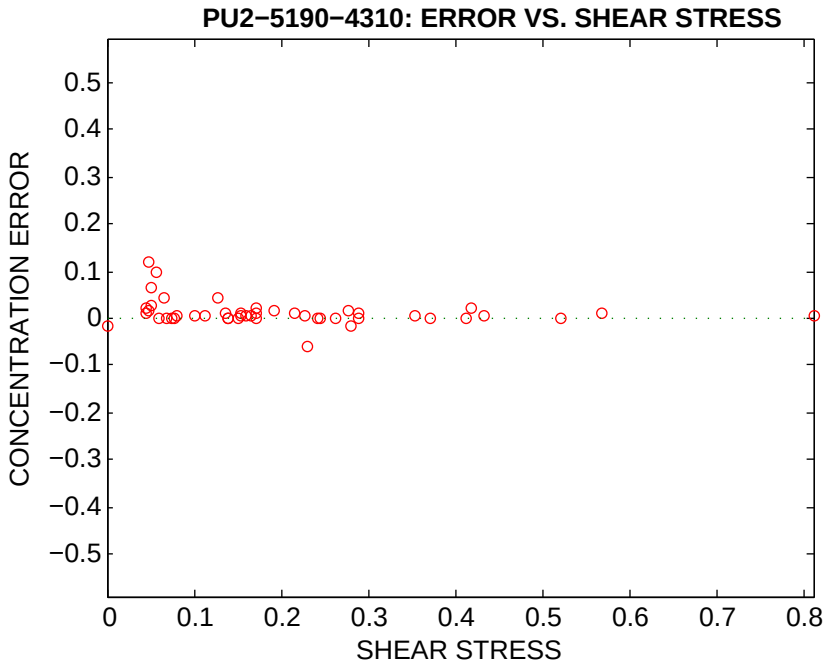


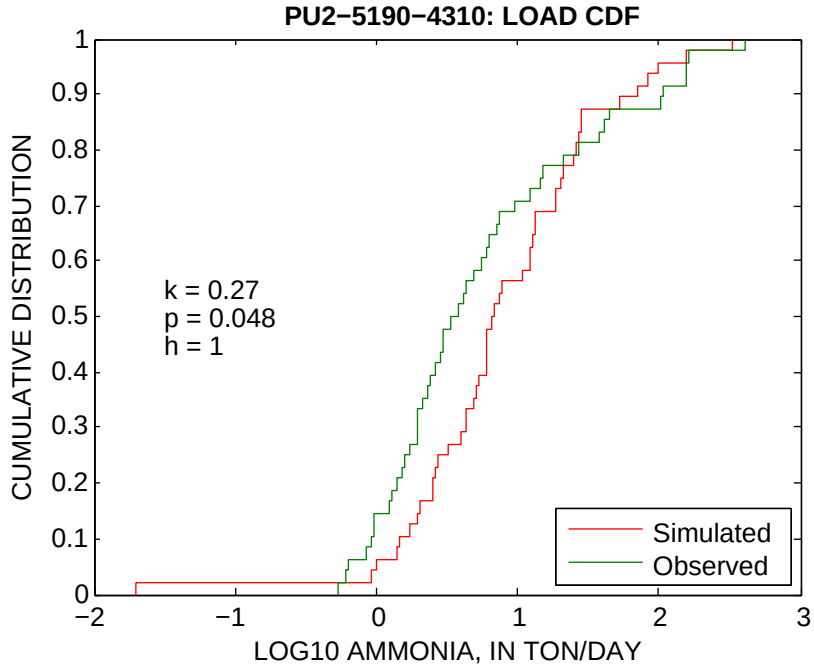


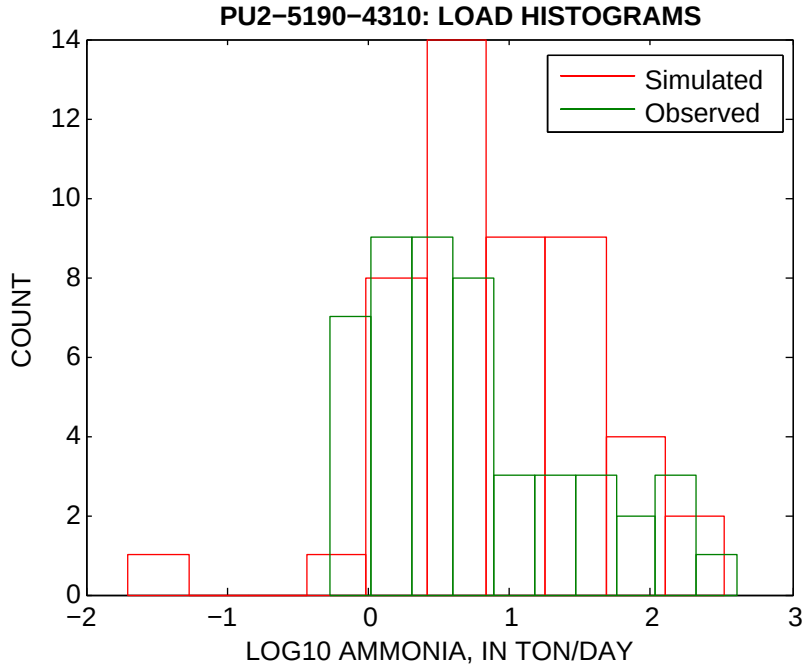


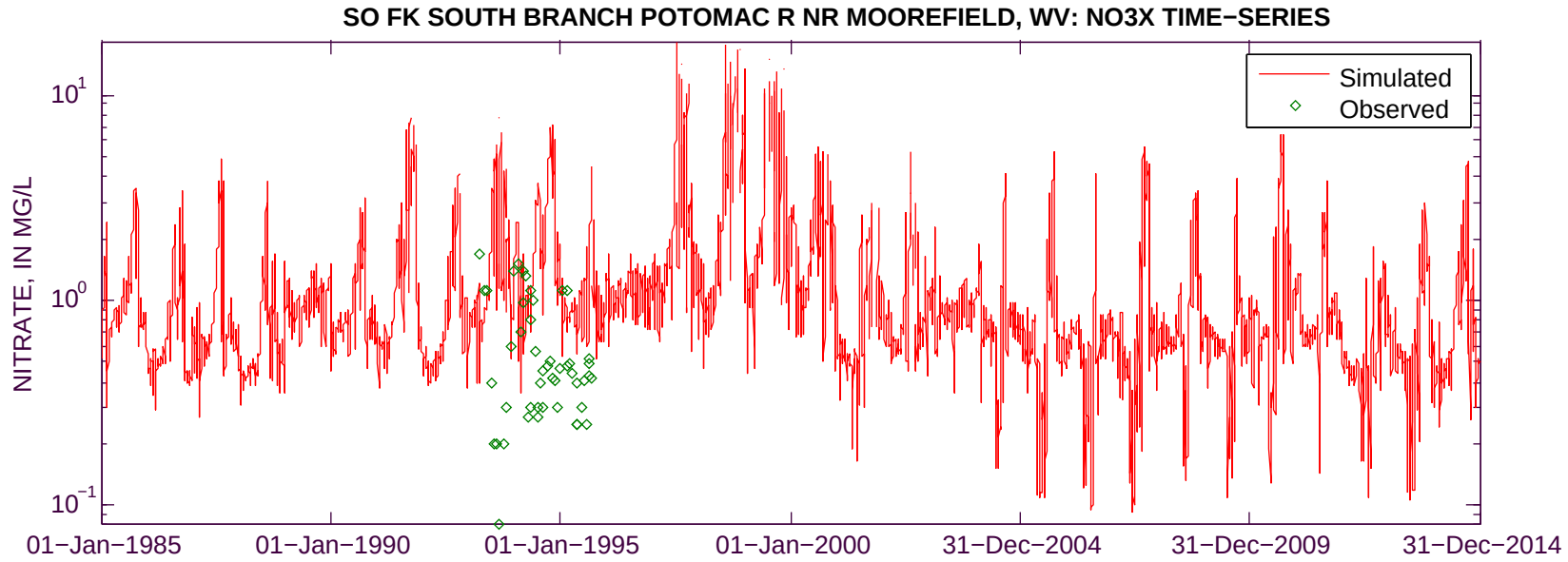
LOAD DATA
LOG10

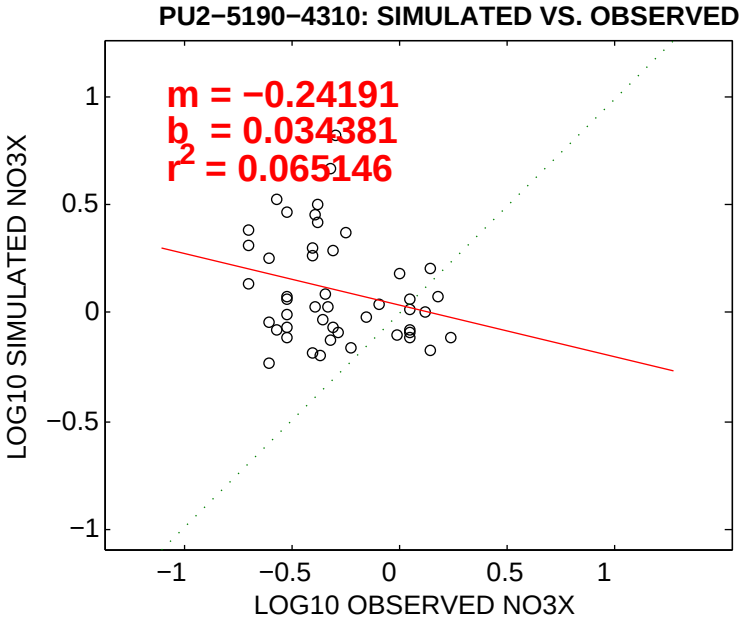


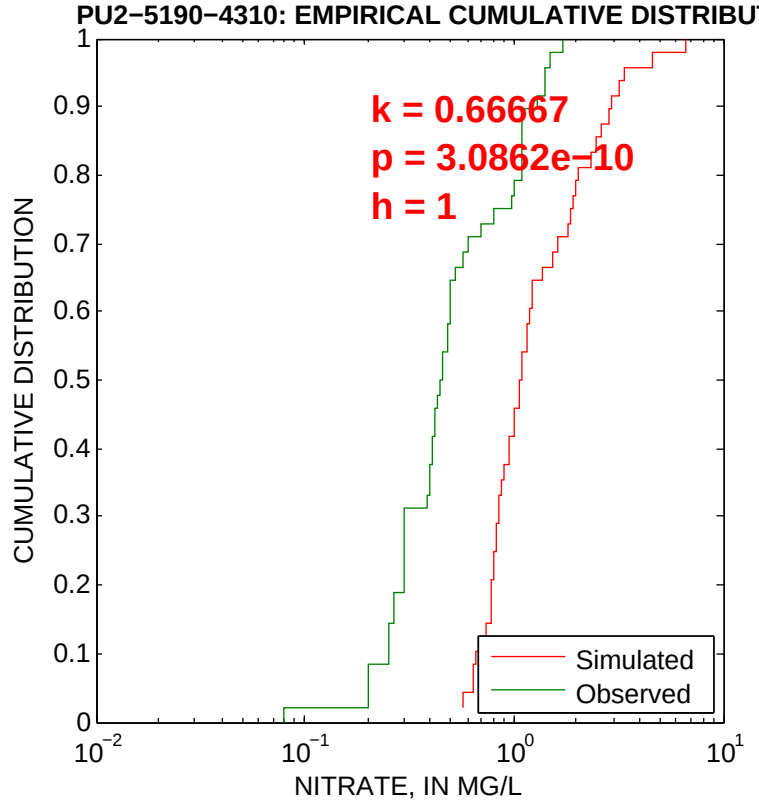












DATA SELECTION

scenario	file
P620171001WQ	NO3X.calib

plot: NO3X - nitrate

Dates: 1/1/1985 – 12/31/201

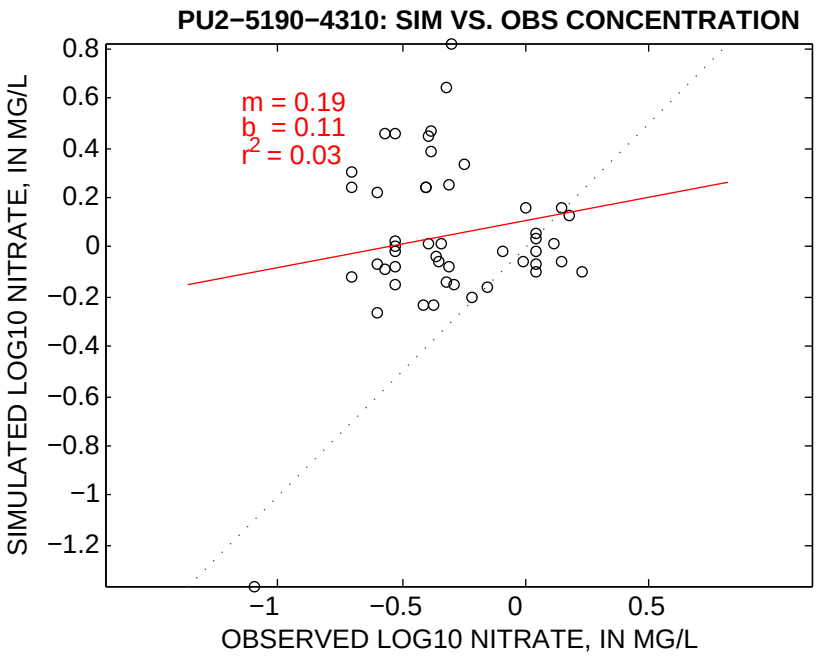
Drive	Directory	Observed
N/A	model	OBS20161101

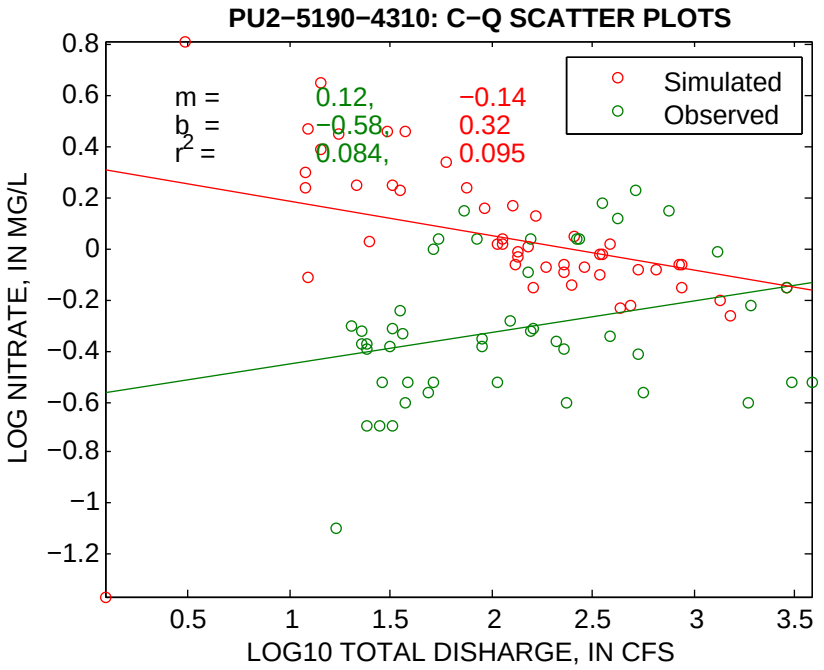
STATISTICS

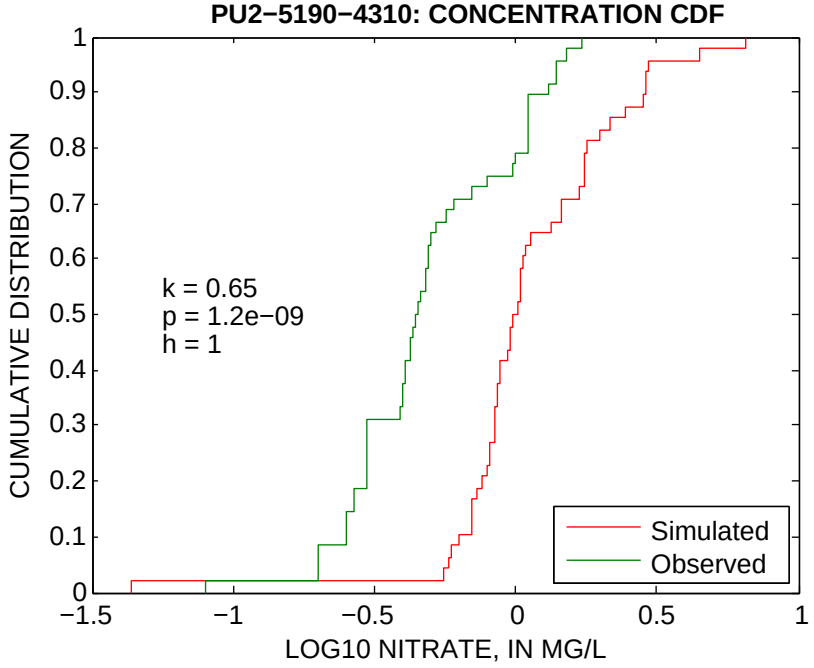
	n	48	47
		observe	simulate
min		0.08	0
		-0.69897	-0.237261
mean		0.6	1.50594
		-0.295127	0.105776
media		0.445	1.0682
		-0.346787	0.0329812
max		1.7	6.6338
		0.230449	0.821762
varian		0.16363	1.36657
		0.0688451	0.0618462
JB		0.015456	0.001
		0.109106	0.031860
		ra	log
%		150.99	-135.841
err.va		2.55378	0.328218
rel.std.err		15.607	4.76748
mod.eff		-14.607	-3.76748

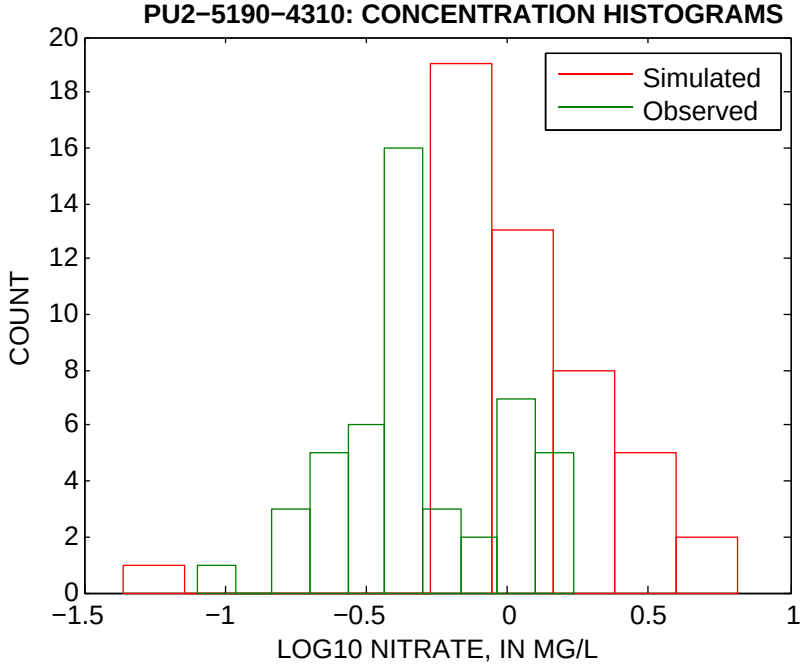
VERSION 2.1

ALL DATA
LOG10

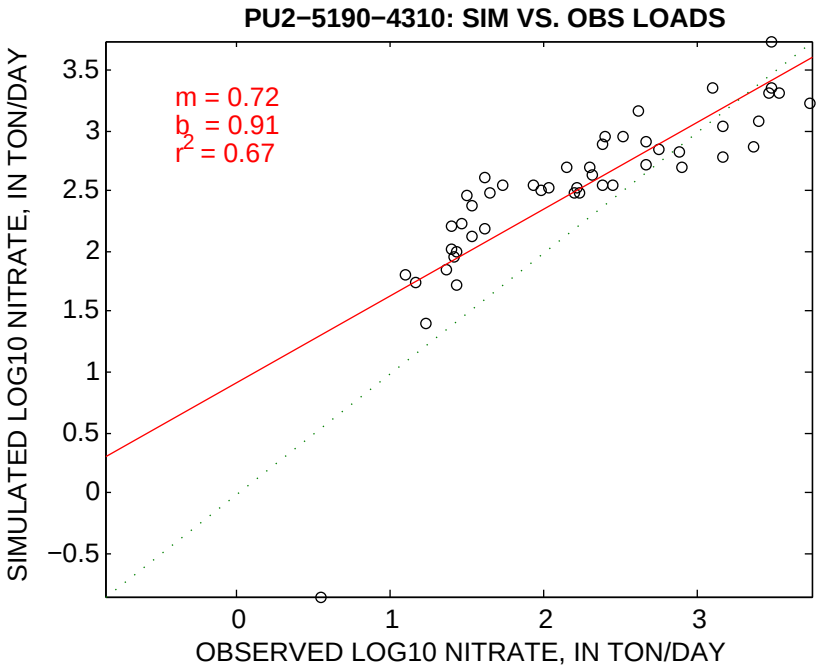


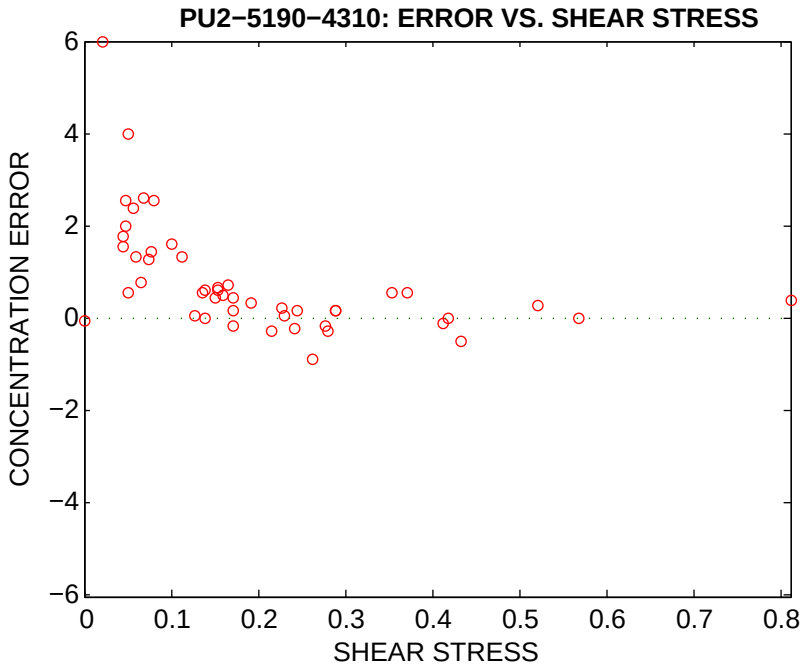


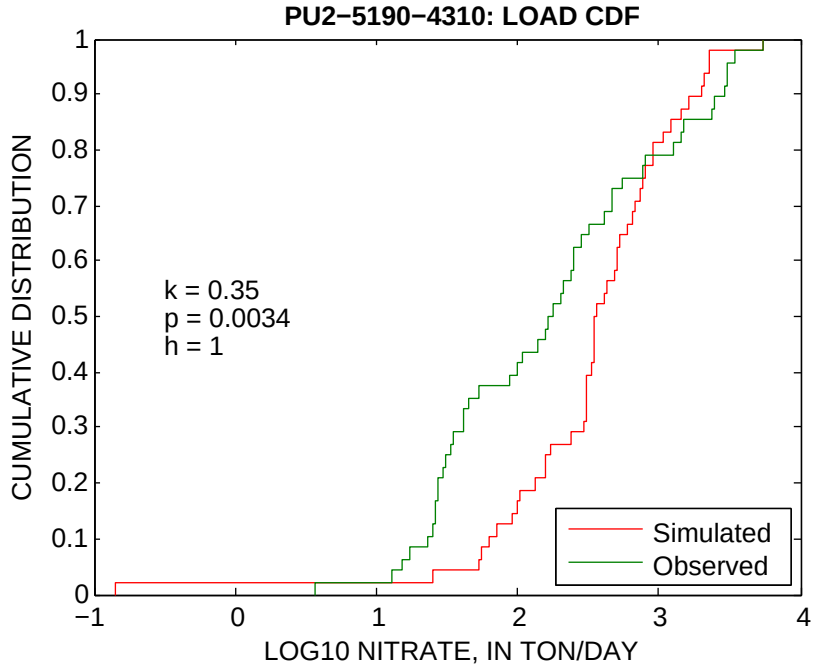


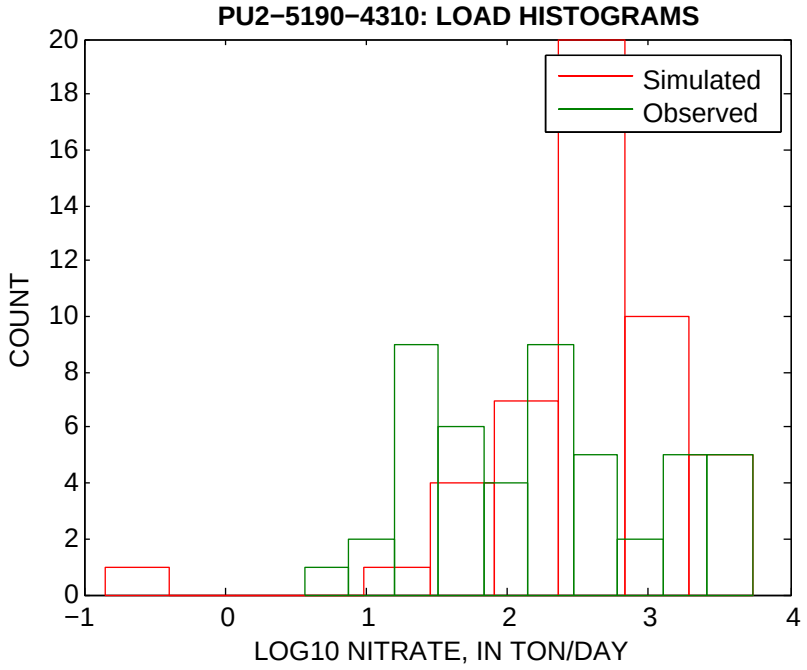


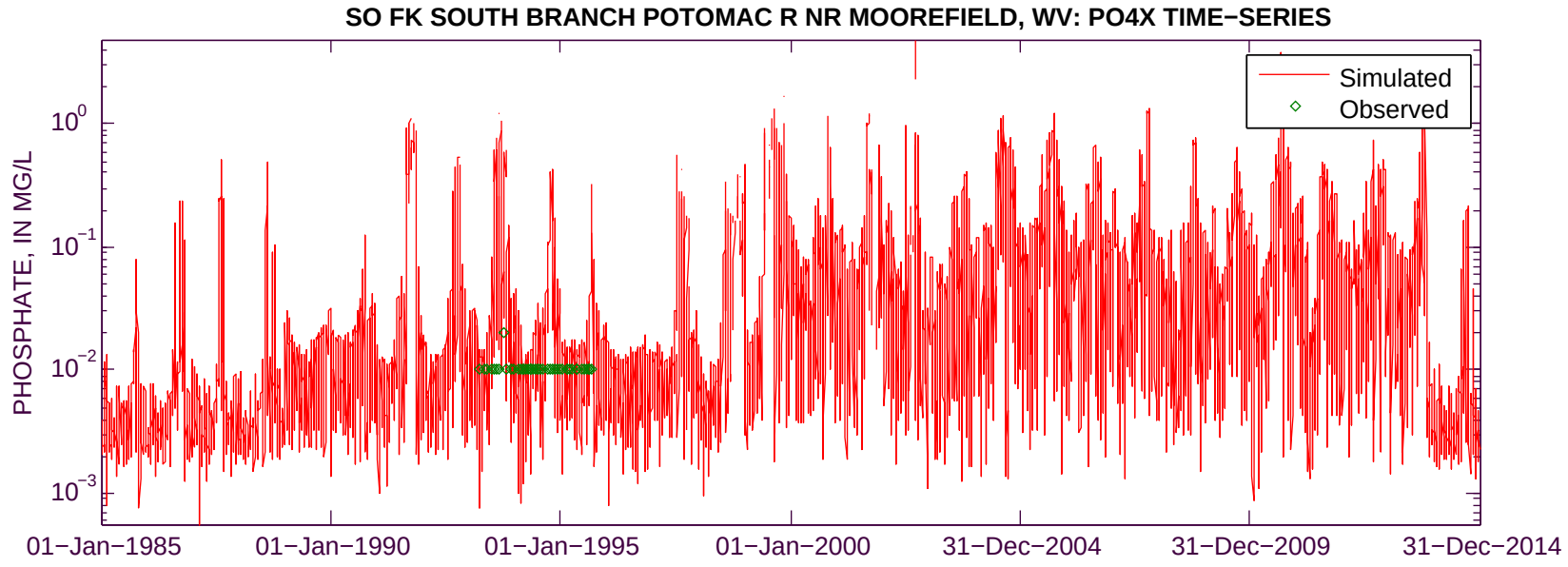
LOAD DATA
LOG10

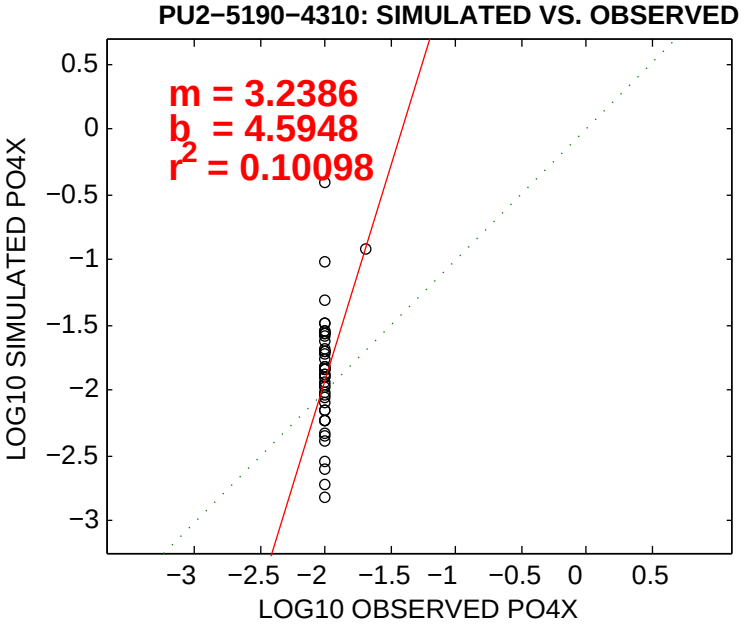


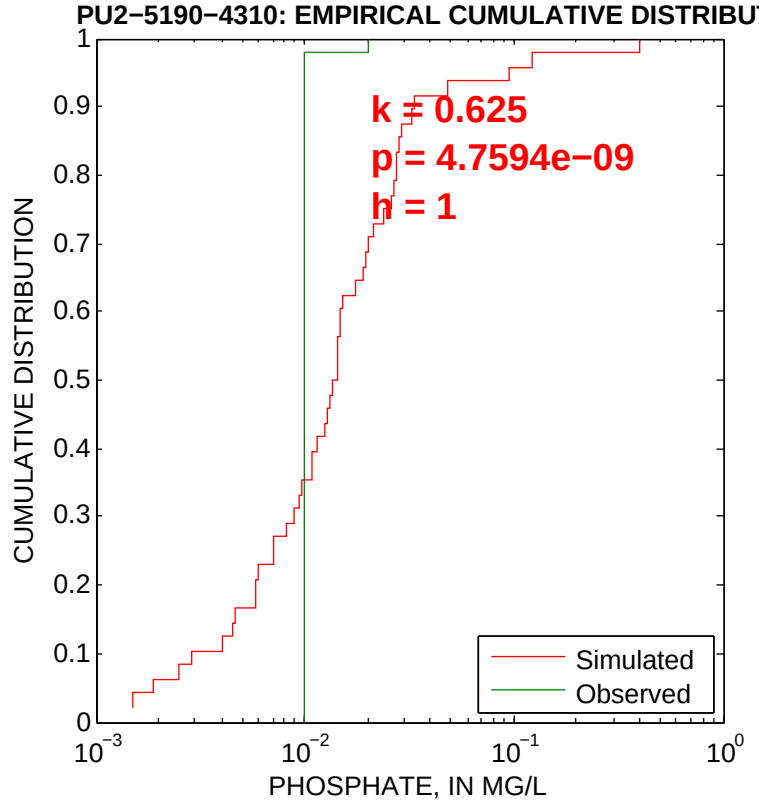












DATA SELECTION

scenario	file
P620171001WQ	PO4X.calib

plot: PO4X - phosphate

Dates: 1/1/1985 – 12/31/201

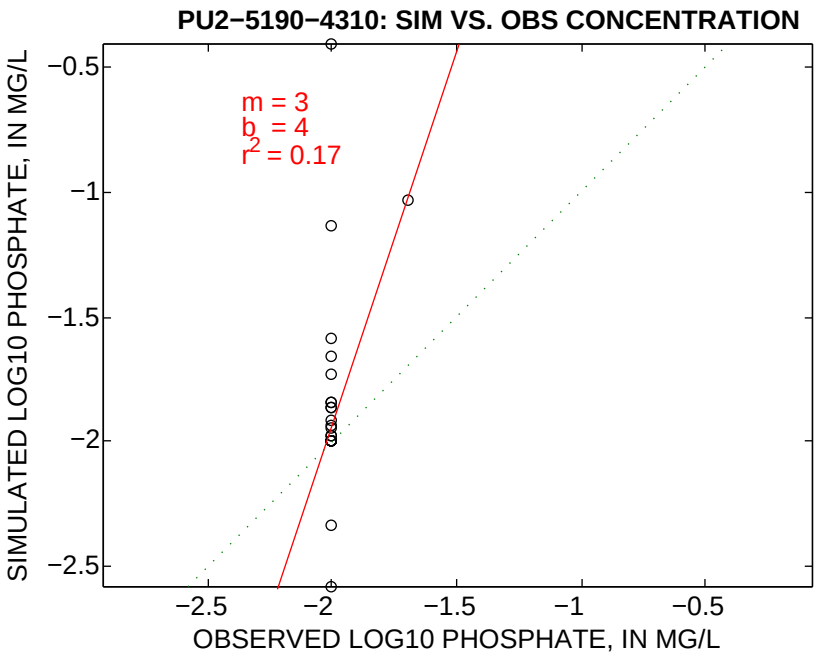
Drive	Directory	Observed
N/A	model	OBS20161101

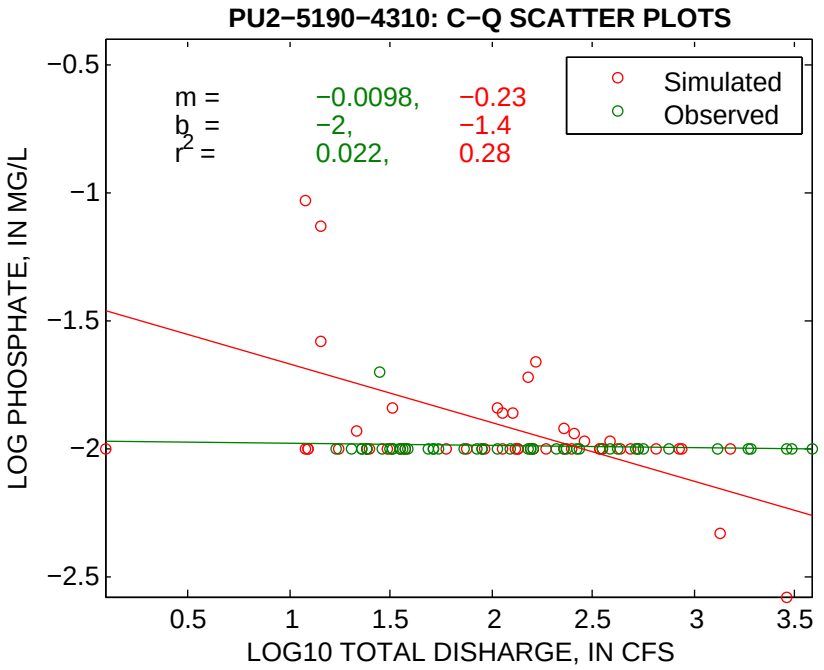
STATISTICS

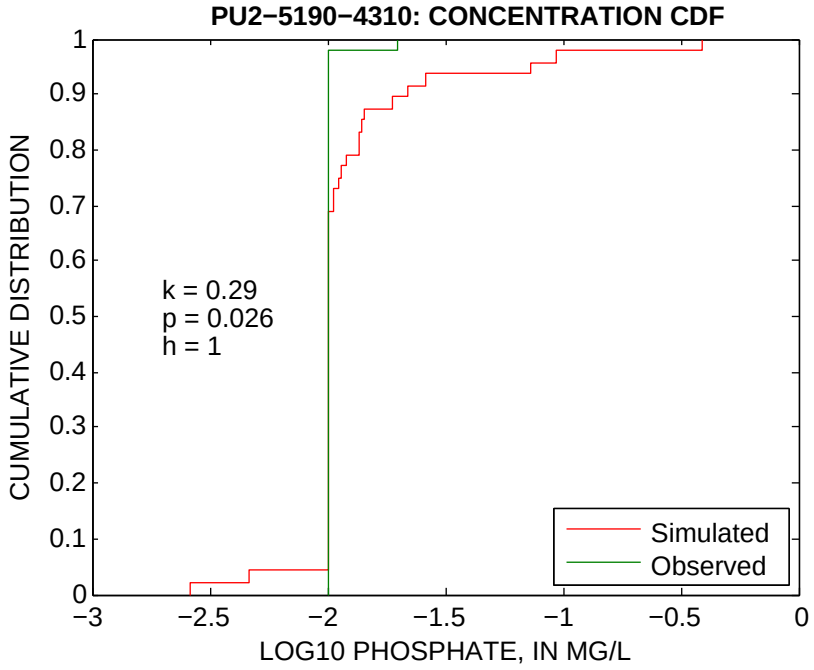
	observe	simulate
n	48	47
min	0.01 -2	0 -2.82518
mean	0.0102083 -1.9936	0.0266311 -1.86159
media	0.01 -2	0.013899 -1.84524
max	0.02 -1.69897	0.3953 -0.403073
varian	2.08333e-0 0.00192807	0.00342717 0.200266
JB	0.001 0.001	0.001 0.028143
	ra	log
%	160.876	-6.62163
err.va	0.00366337	0.207511
rel.std.err	1758.42	107.627
mod.eff	-1757.42	-106.627

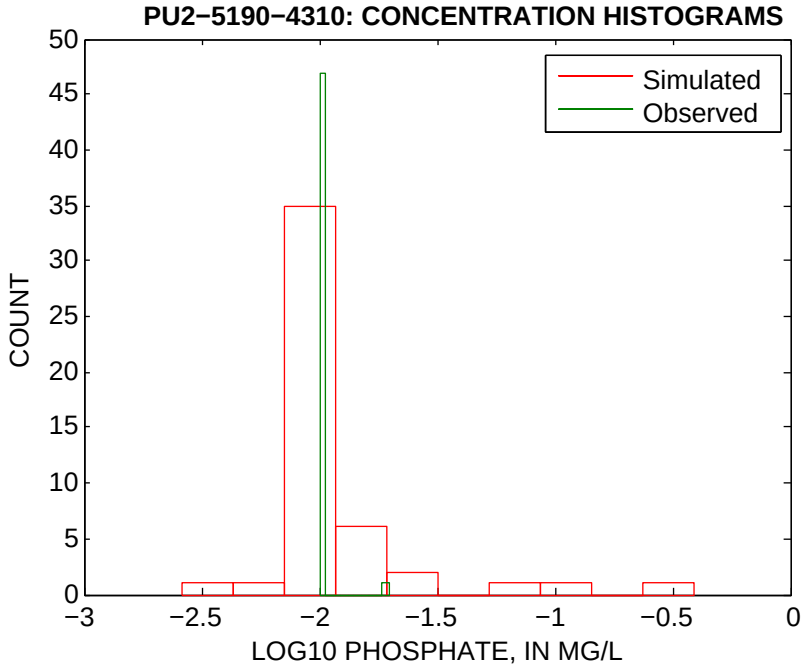
VERSION 2.1

ALL DATA
LOG10

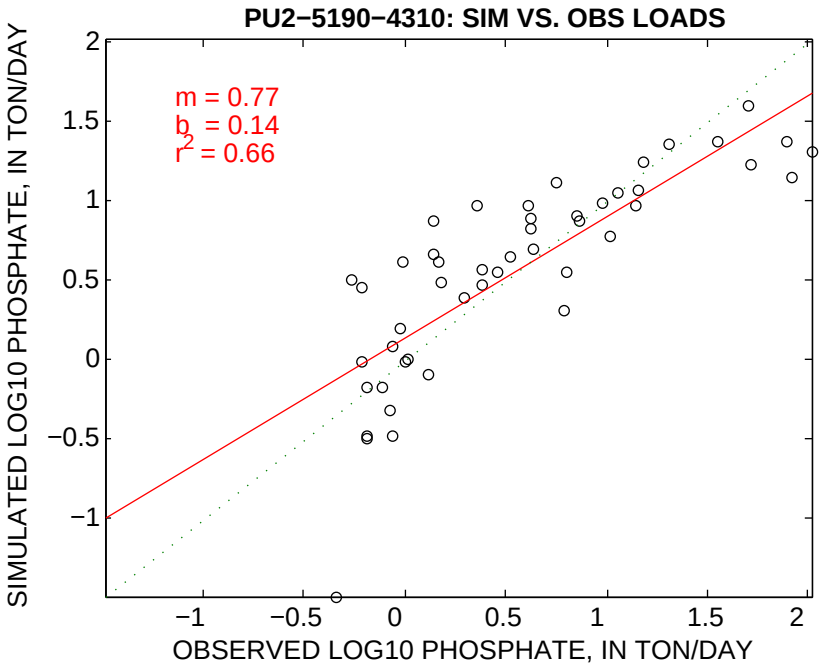


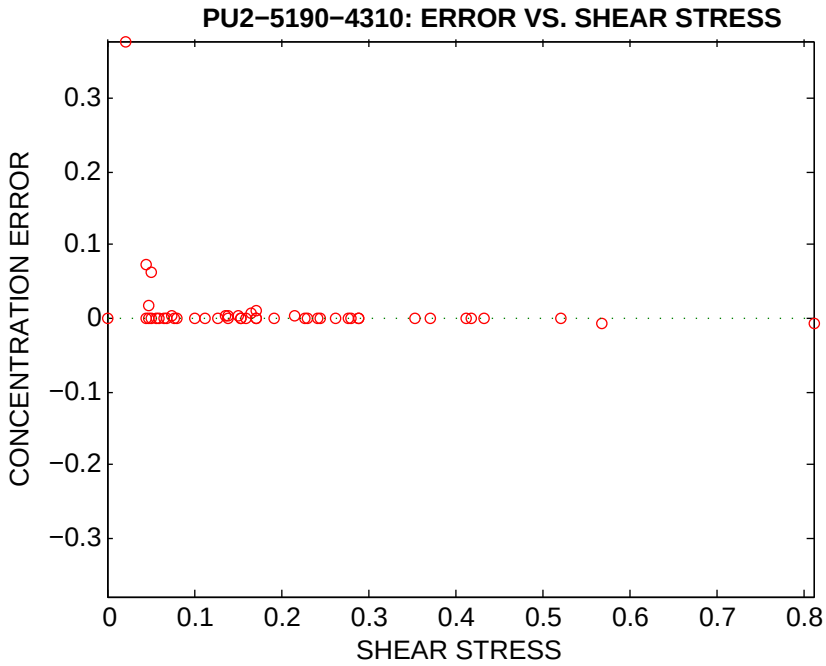


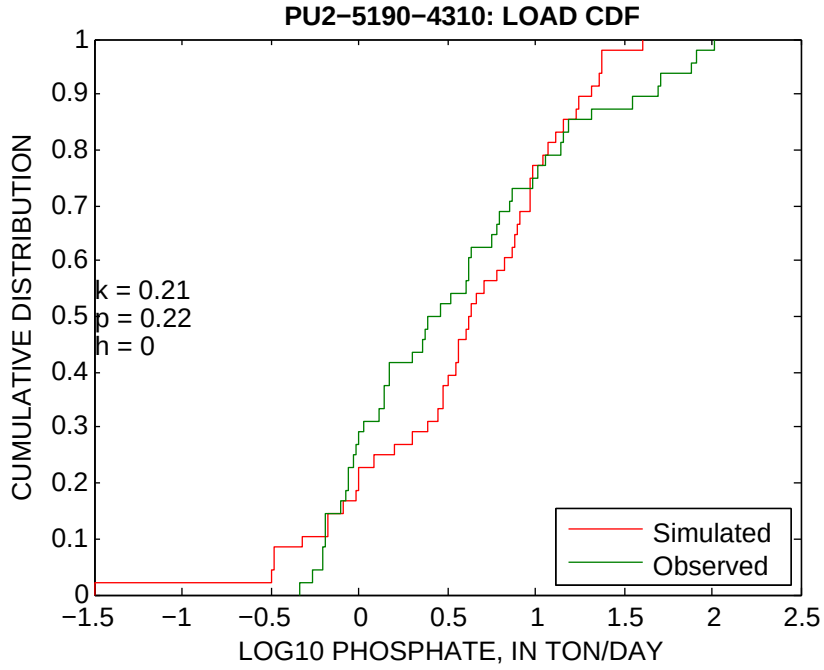


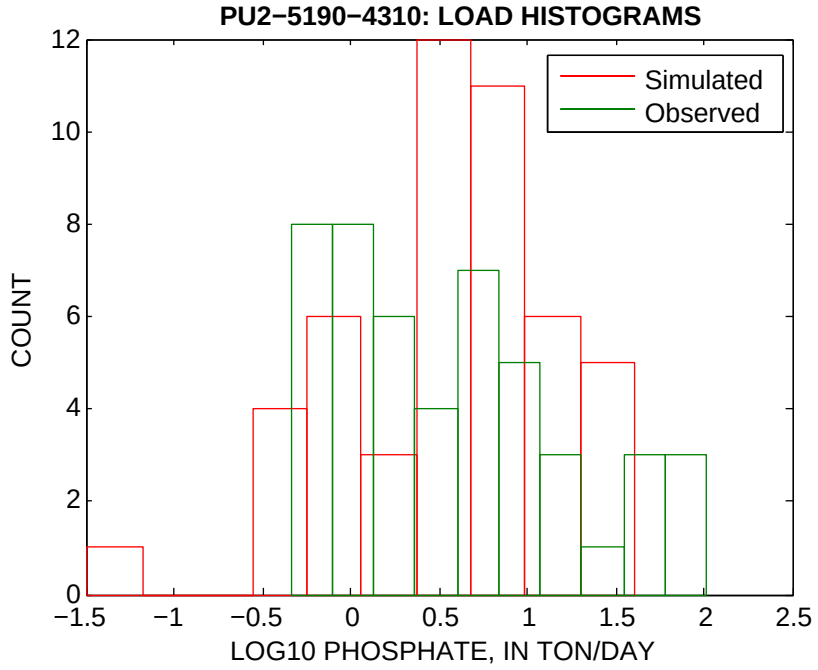


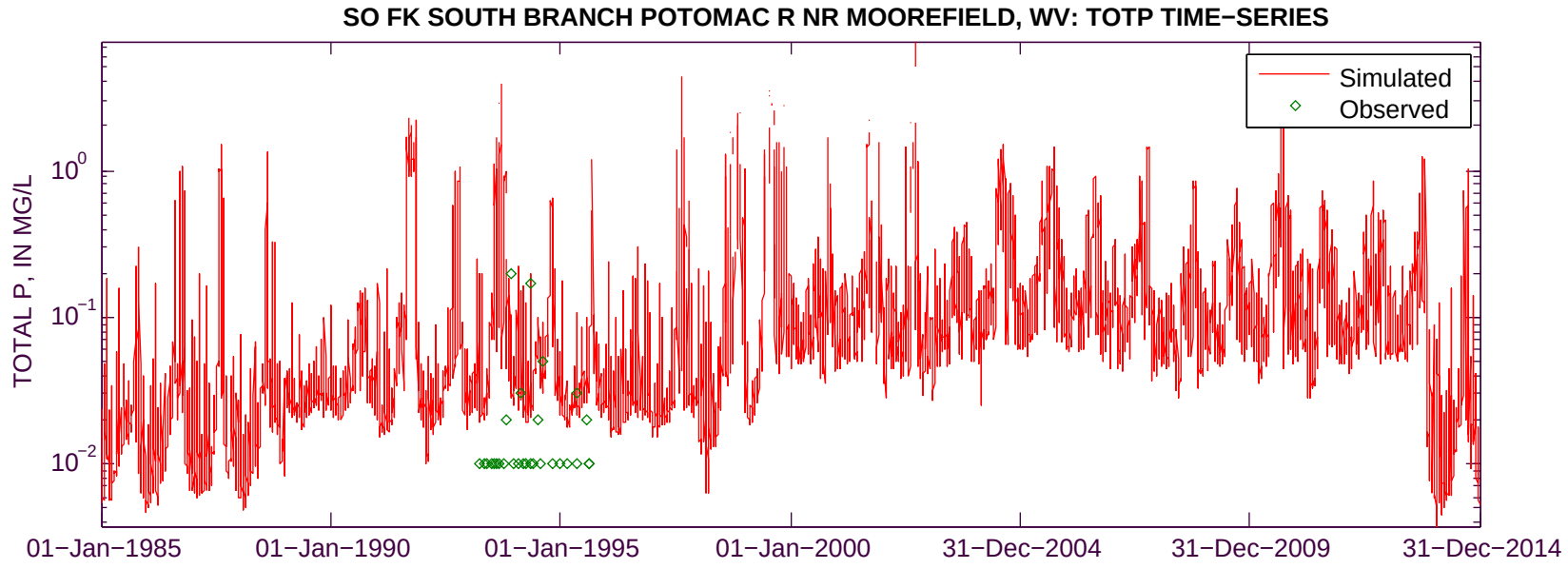
LOAD DATA
LOG10

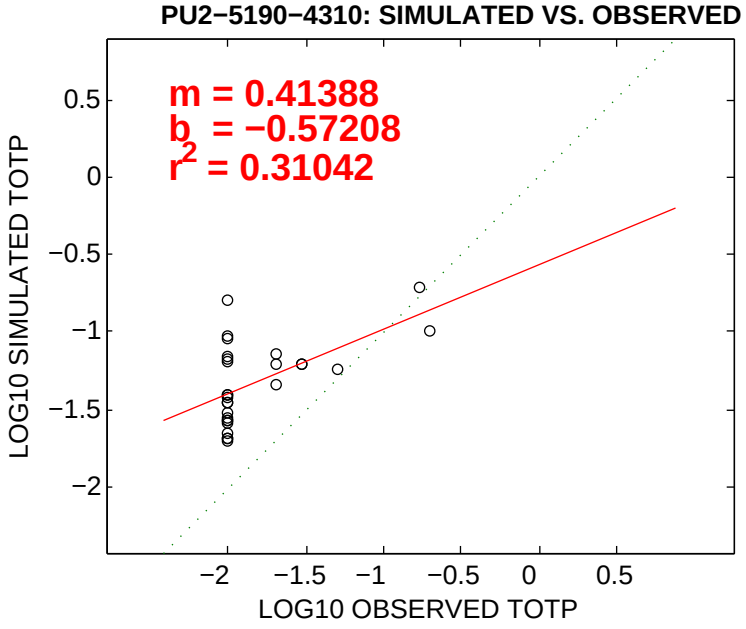


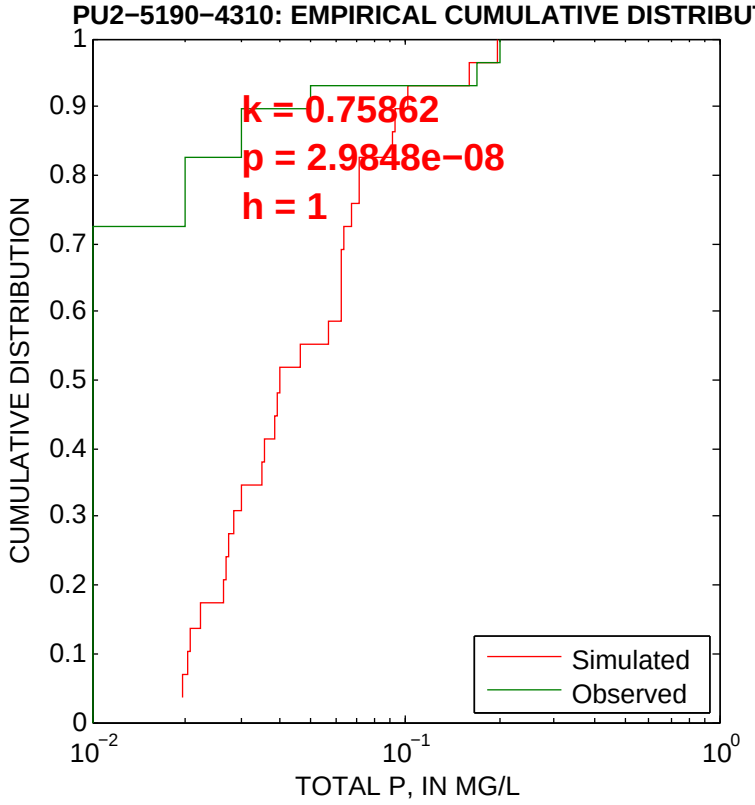












DATA SELECTION

scenario	file
P620171001WQ	TOTP.calib

plot: TOTP - total phosphorus

Dates: 1/1/1985 – 12/31/201

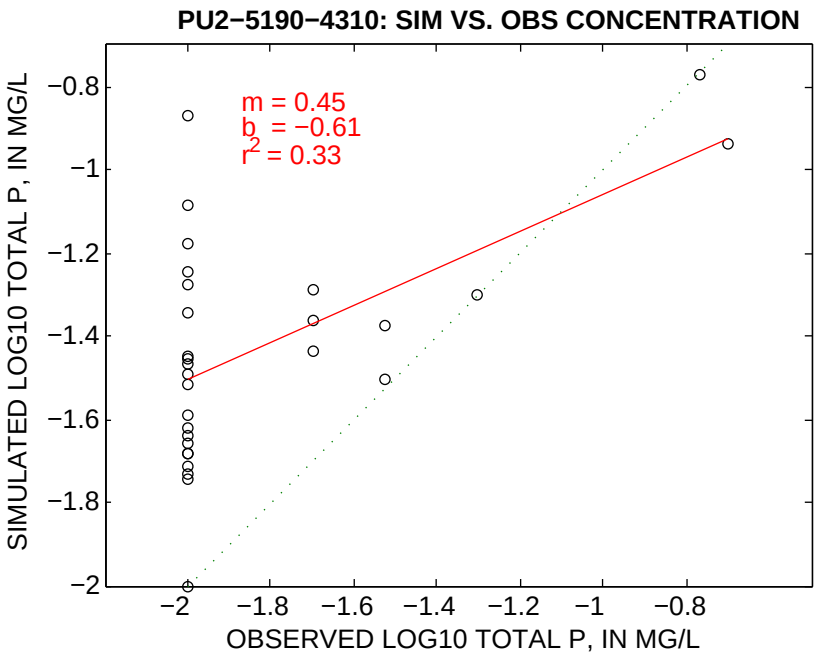
Drive	Directory	Observed
N/A	model	OBS20161101

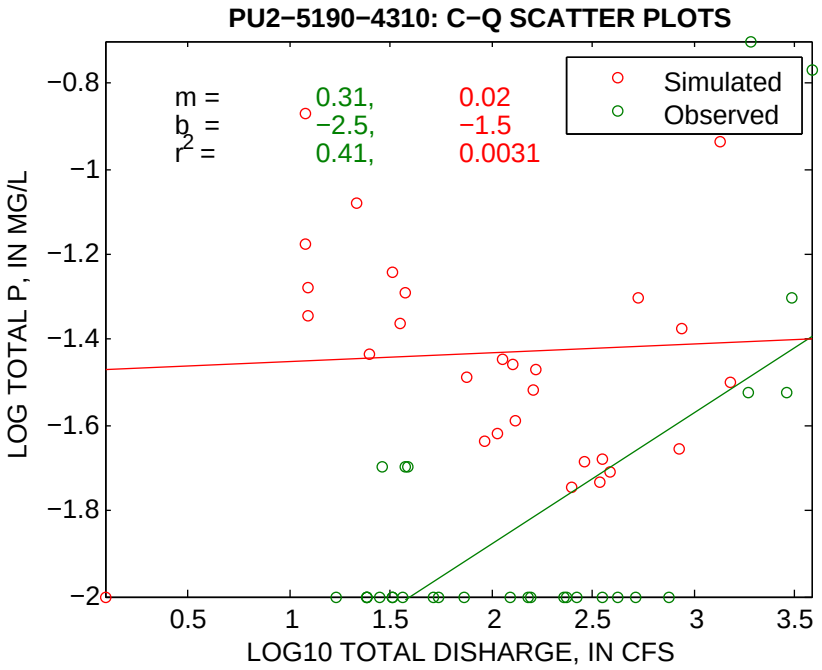
STATISTICS

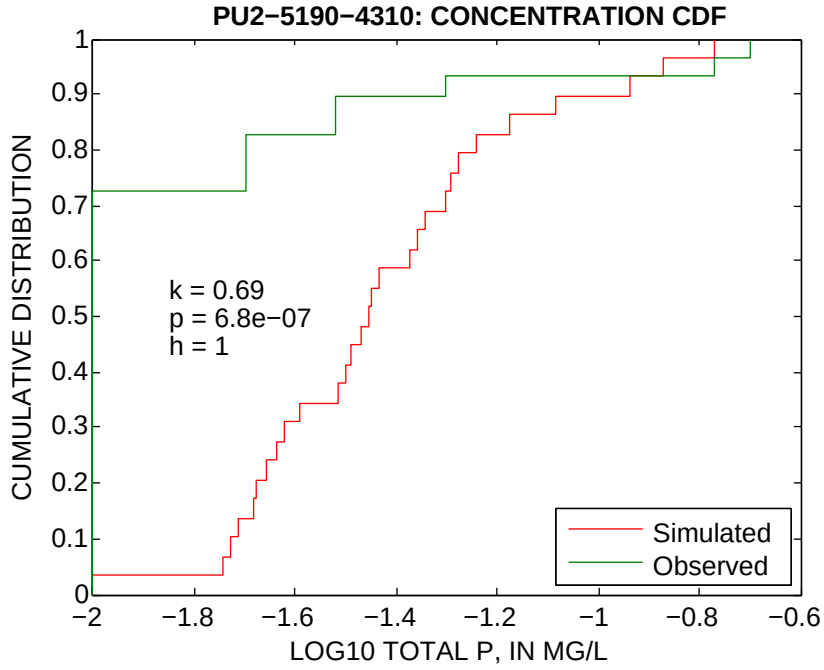
	n	observe	simulate
		29	28
min		0.01 -2	0 -1.70994
mean		0.0258621 -1.81829	0.0555917 -1.32464
media		0.01 -2	0.03957 -1.36959
max		0.2 -0.69897	0.19492 -0.710144
varian		0.00203941 0.129552	0.00176033 0.0714913
JB		0.001 0.001	0.001381 0.373702
		ra	log
%		114.955	-27.1494
err.va		0.00246044	0.346527
rel.std.err		1.20645	2.67481
mod.eff		-0.20645	-1.67481

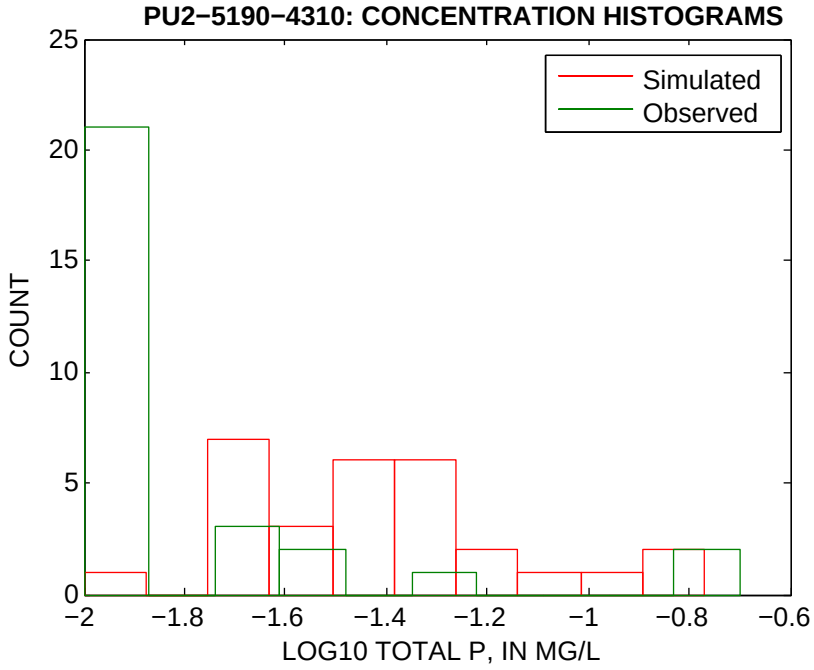
VERSION 2.1

ALL DATA
LOG10

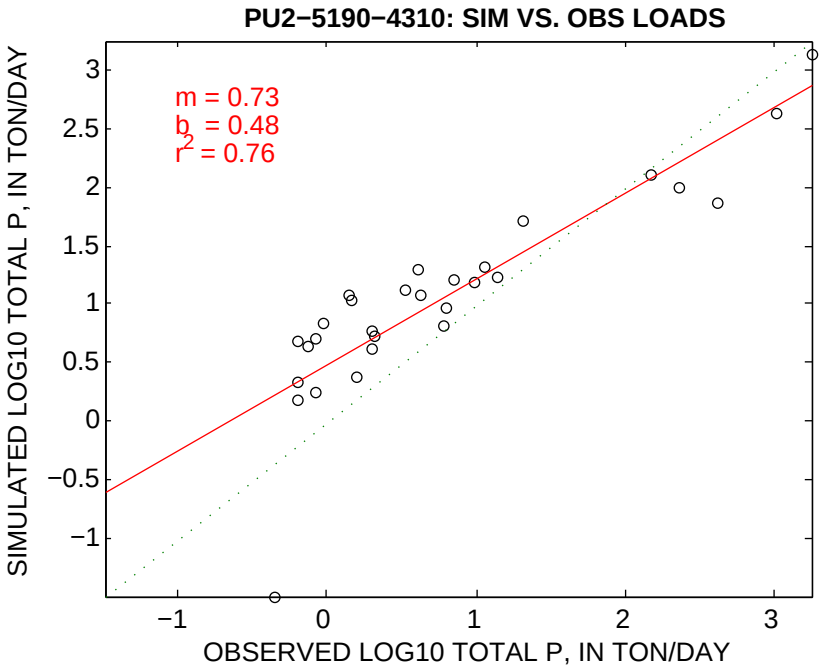


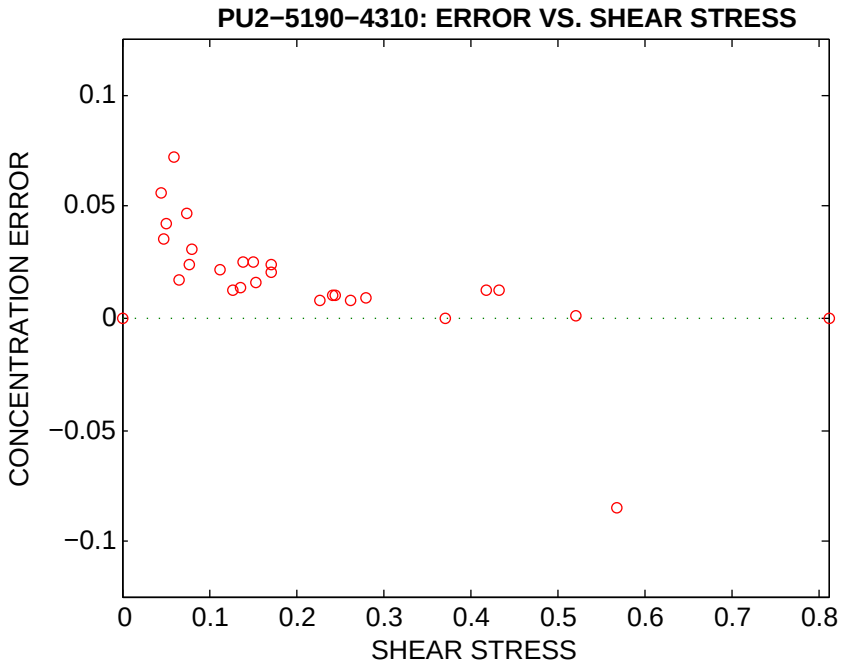


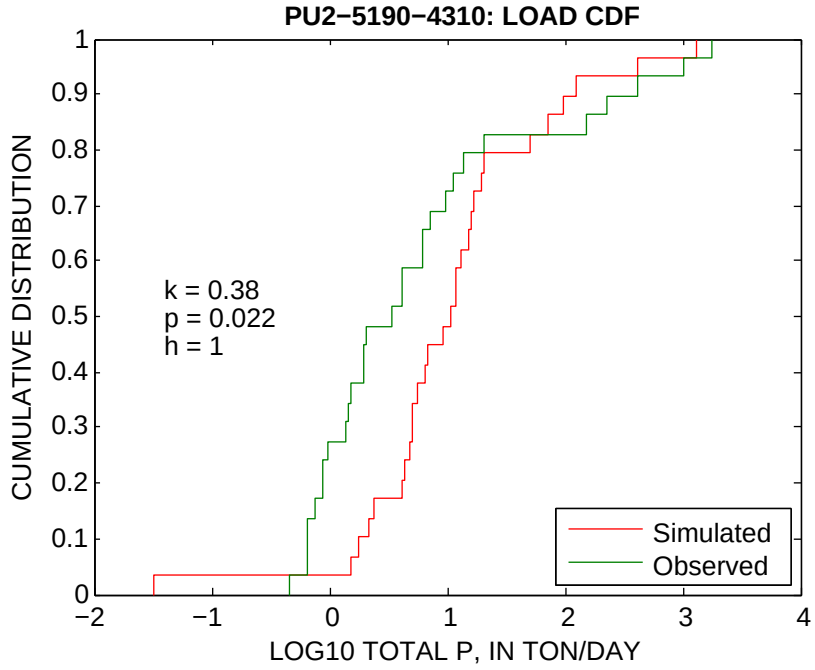


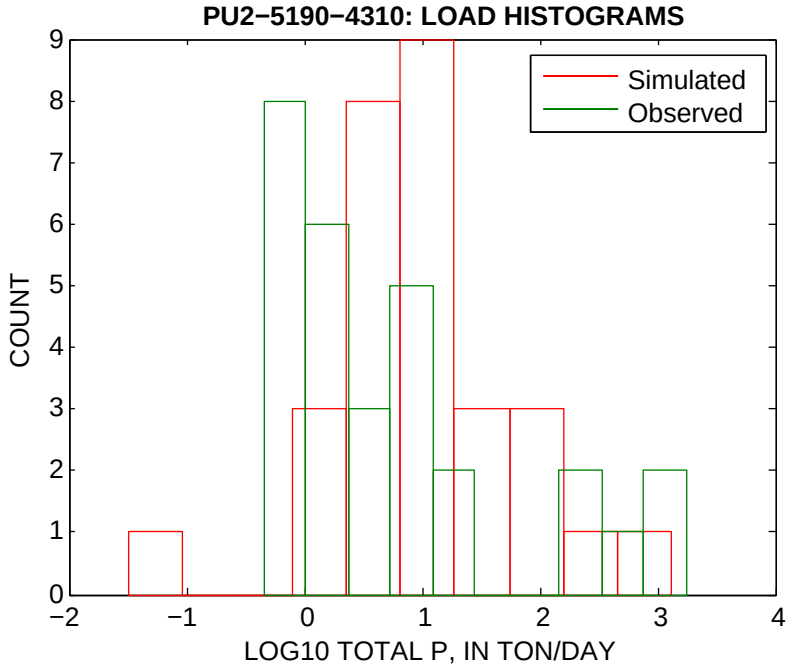


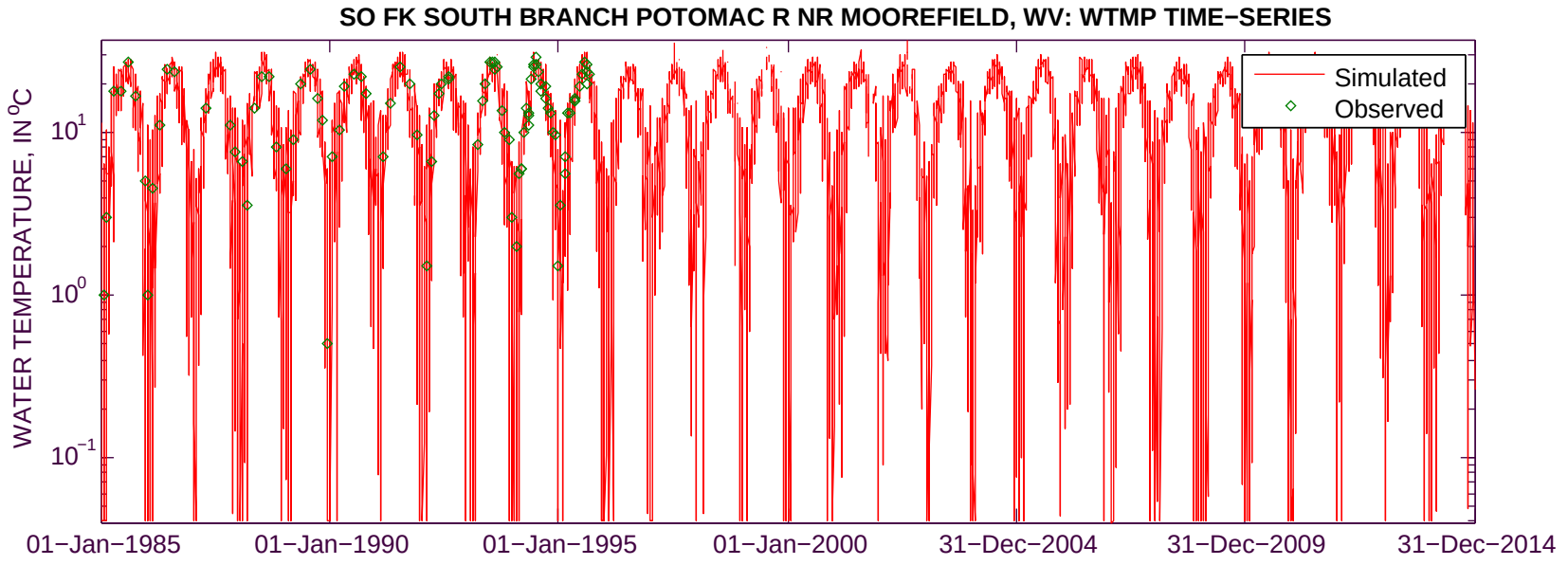
LOAD DATA
LOG10

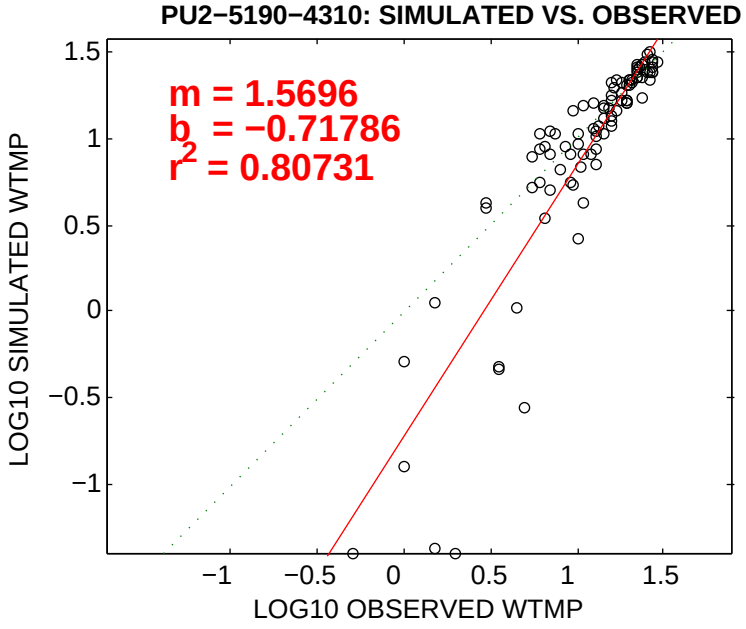


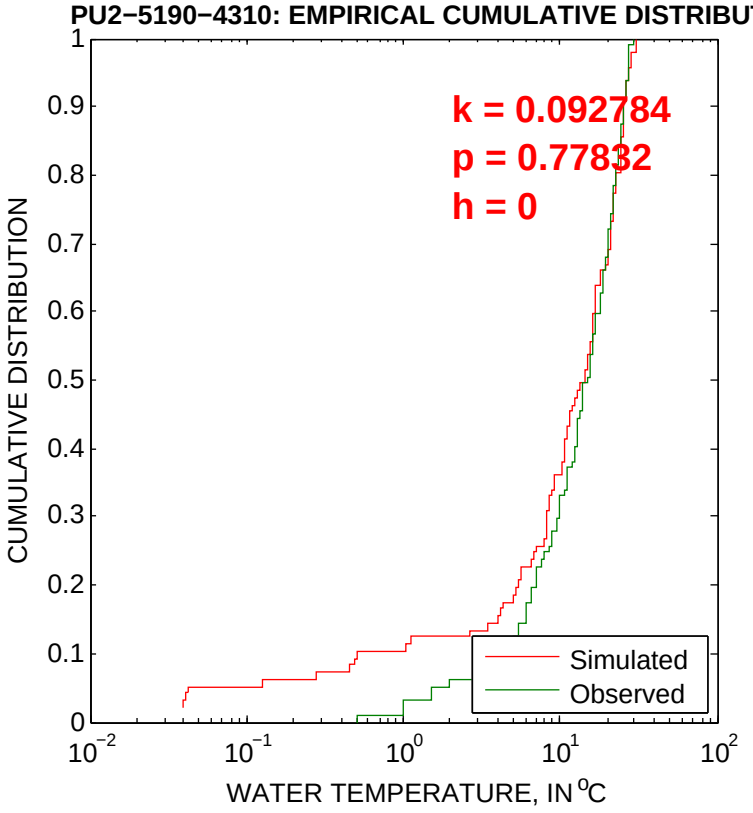












DATA SELECTION

scenario	file
P620171001WQ	WTMP.calib

plot: WTMP - water tempera...

Dates 1/1/1985 12/31/201

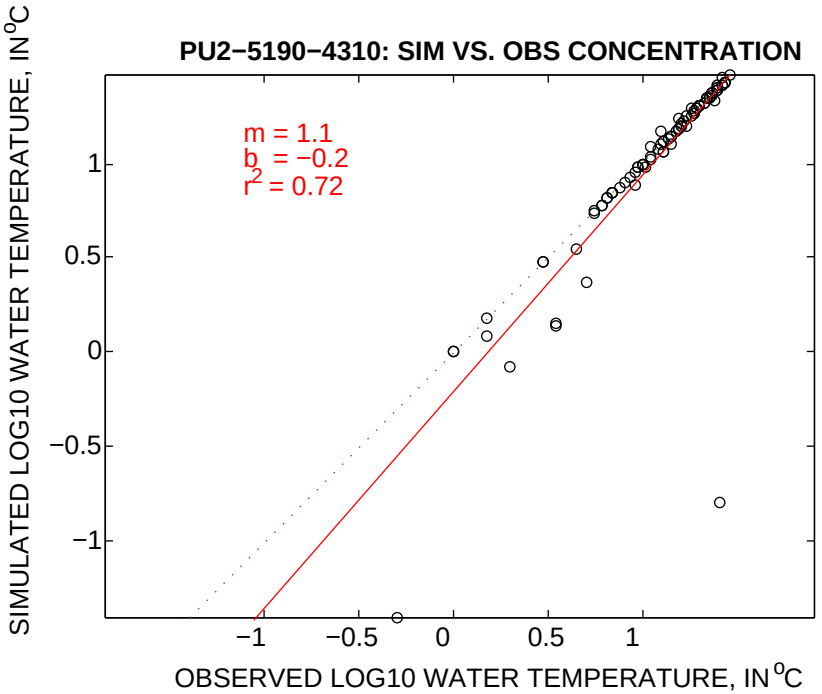
Drive	Directory	Observed
N/A	model	OBS20161101

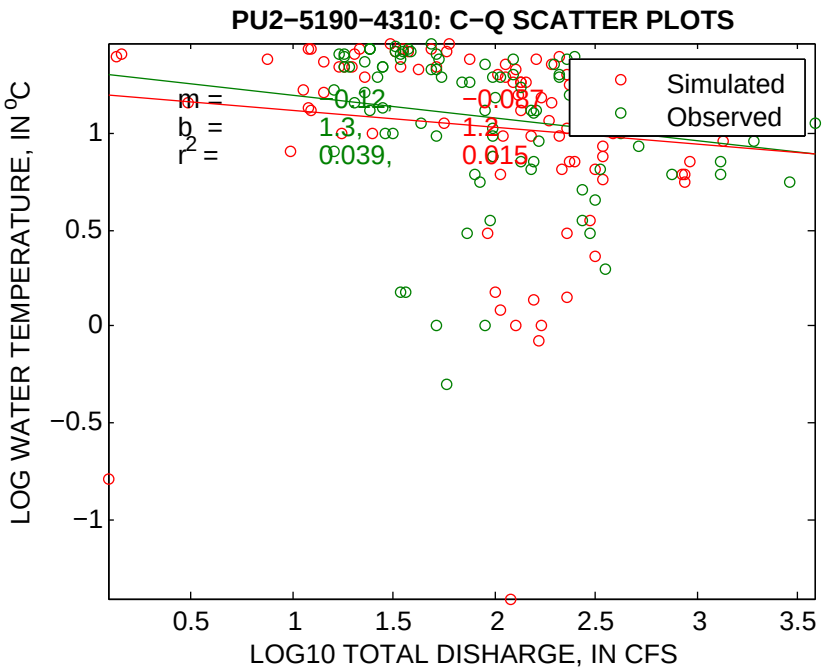
STATISTICS

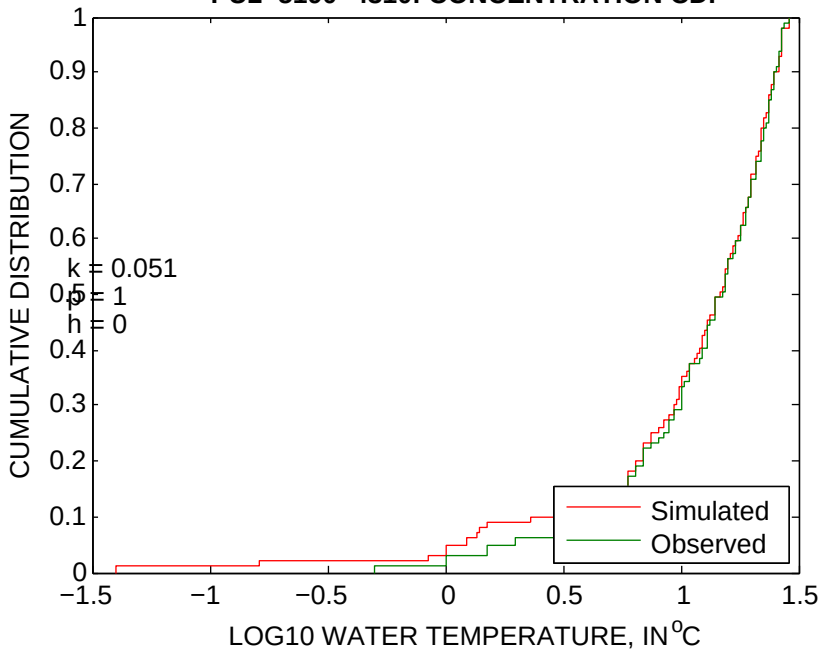
	observe	simulate
n	97	95
min	0.5 -0.30103	0 -1.39783
mean	14.799 1.06344	14.0411 0.951352
media	15 1.14613	14.334 1.16513
max	29 1.4624	31.111 1.49291
varian	61.2014 0.129384	78.8429 0.394858
JB	0.056425 0.001	0.052924 0.001
	ra	log
%	-5.12078	-10.5399
err.va	19.7465	0.130767
rel.std.err	0.322648	1.01069
mod.eff	0.677352	-0.0106929

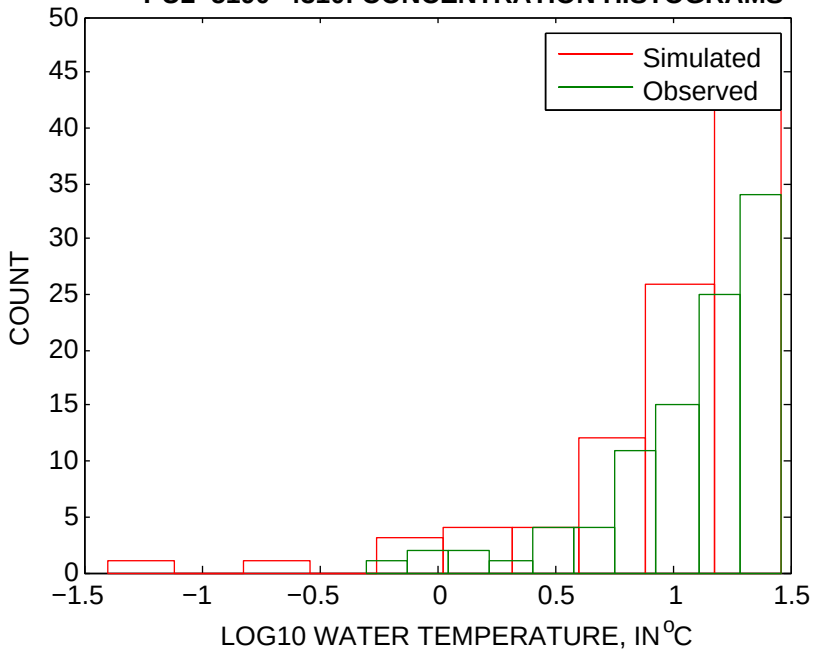
VERSION 2.1

ALL DATA
LOG10

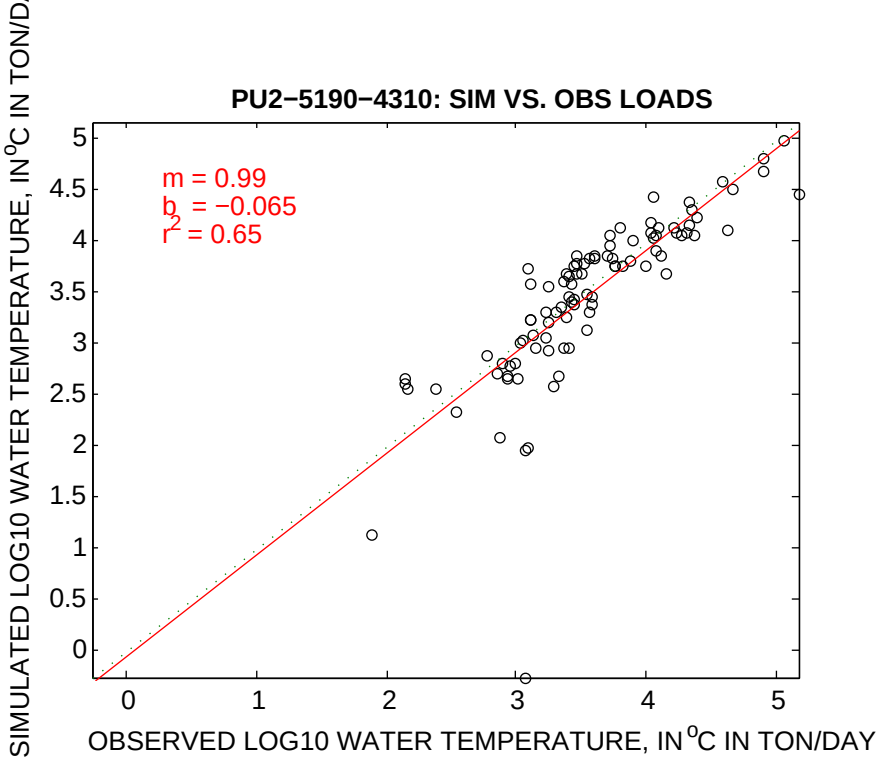


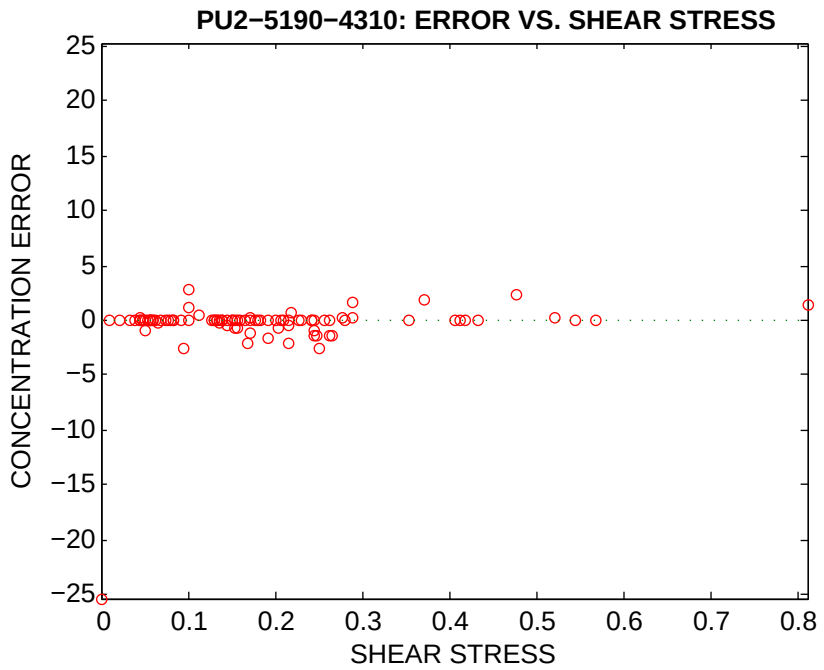


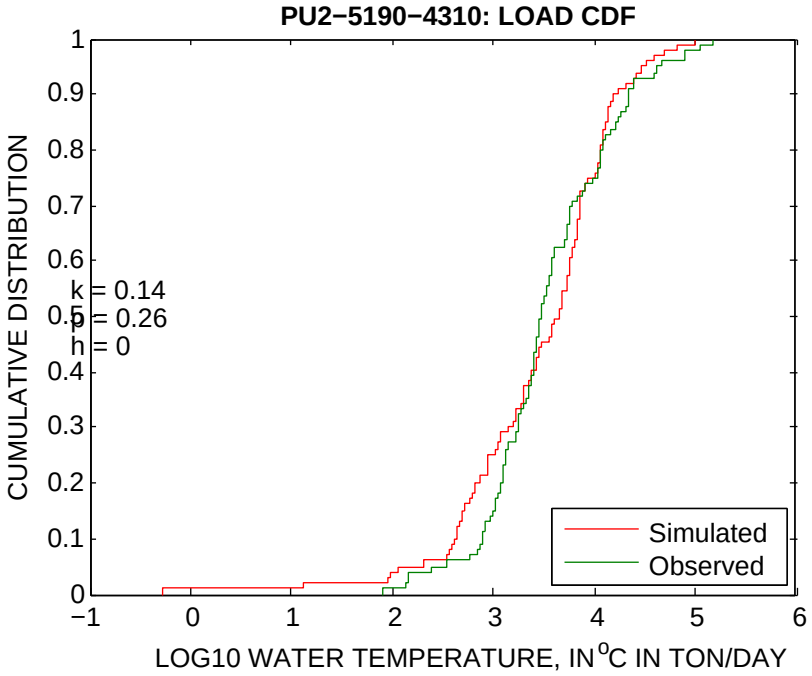


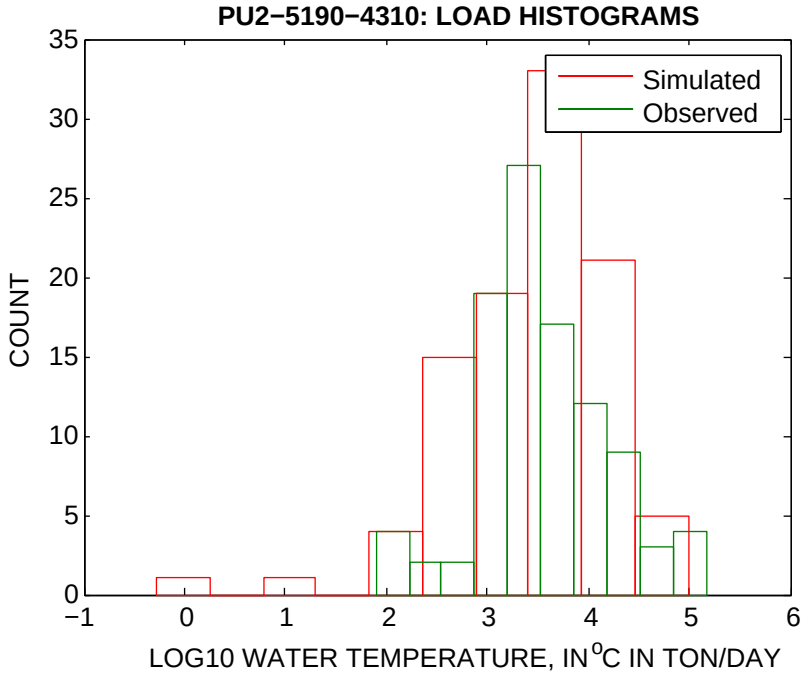


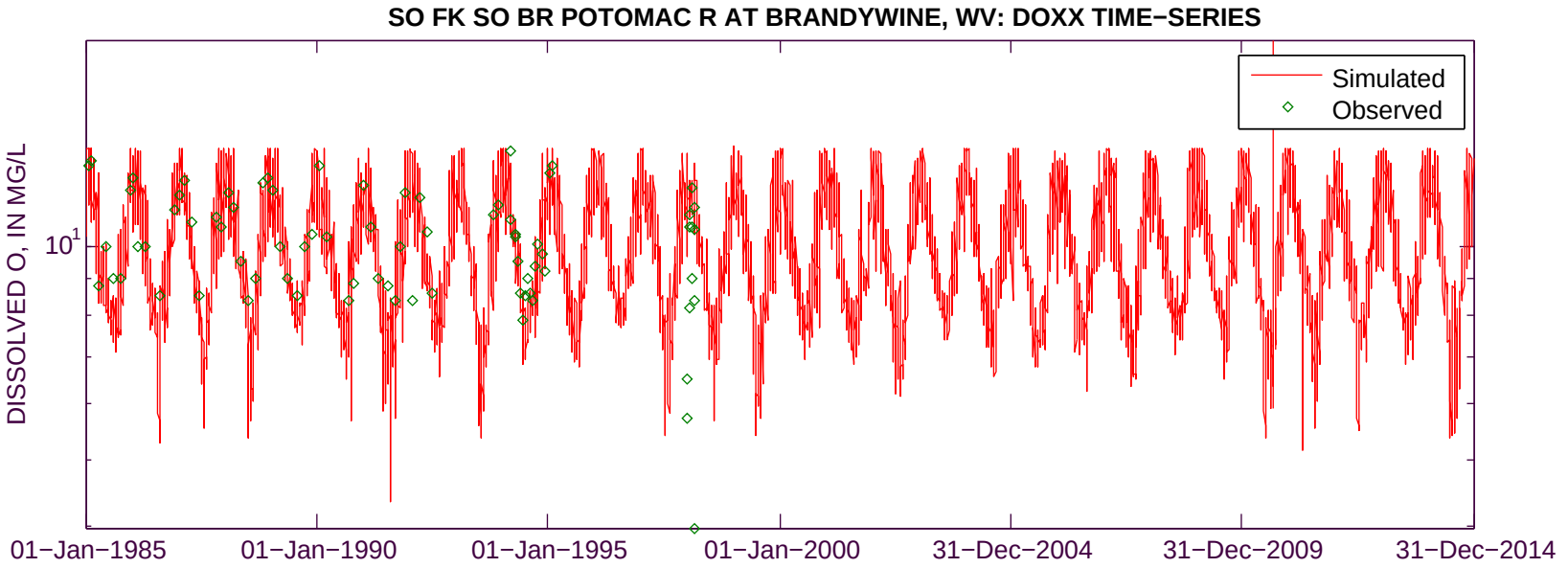
LOAD DATA
LOG10

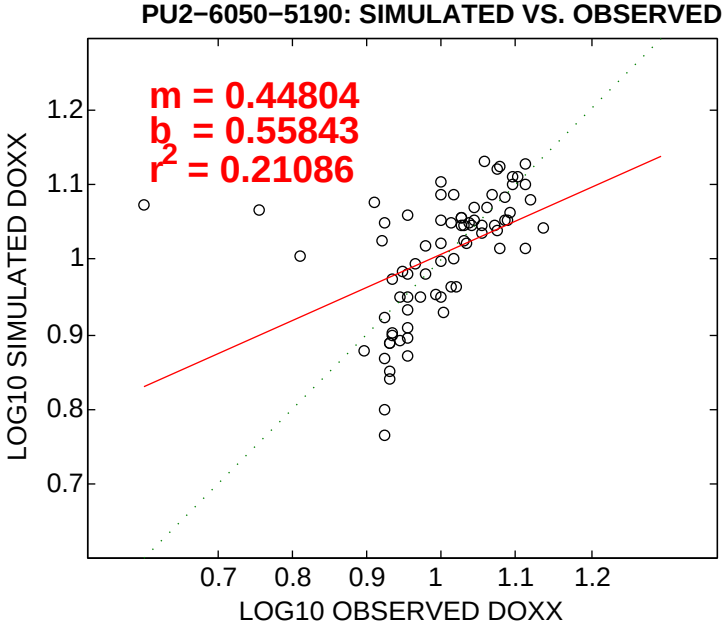


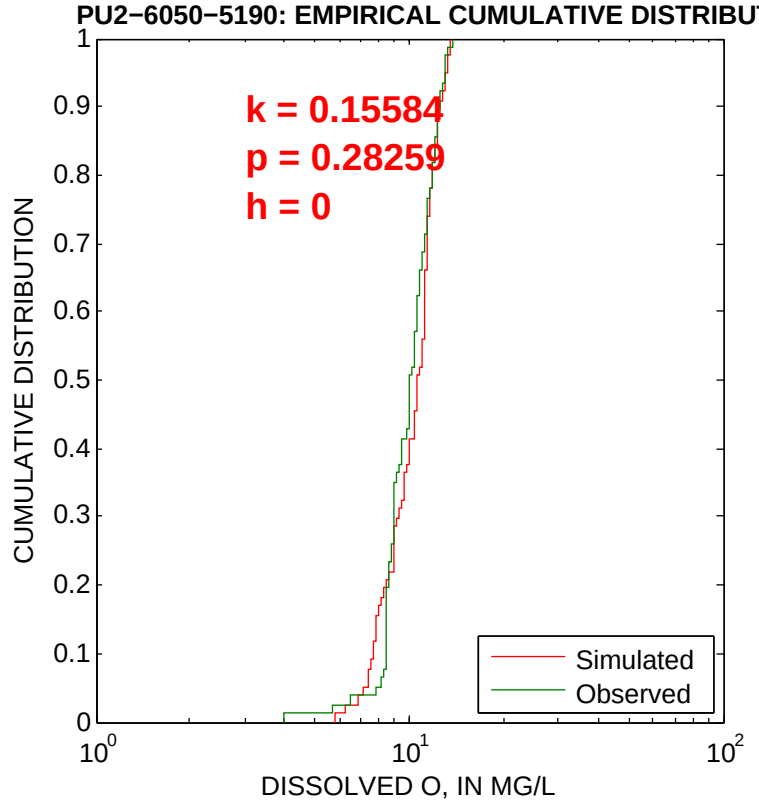












DATA SELECTION

scenario	file
P620171001WQ	DOXX.calib

plot: DOXX - dissolved oxygen

Dates: 1/1/1985 – 12/31/201

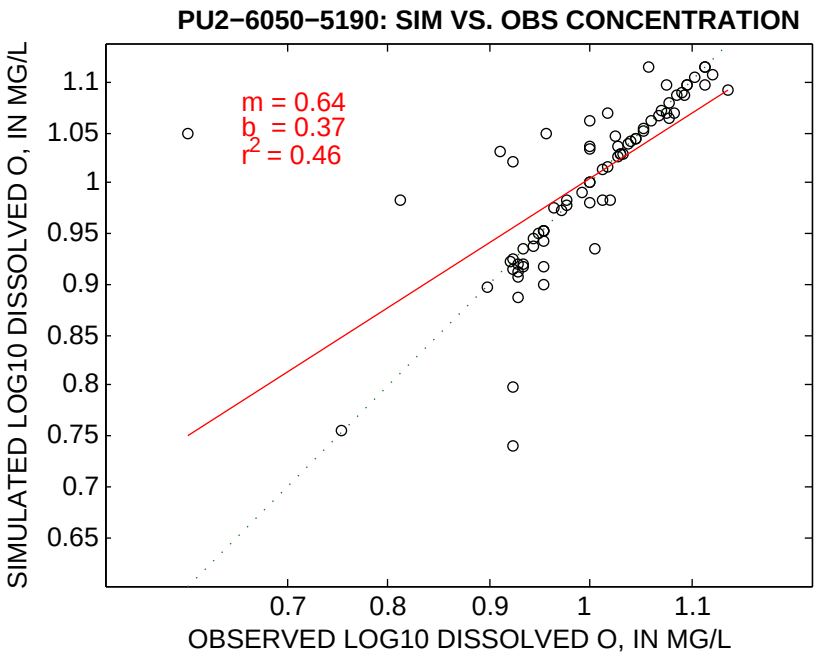
Drive	Directory	Observed
N/A	model	OBS20161101

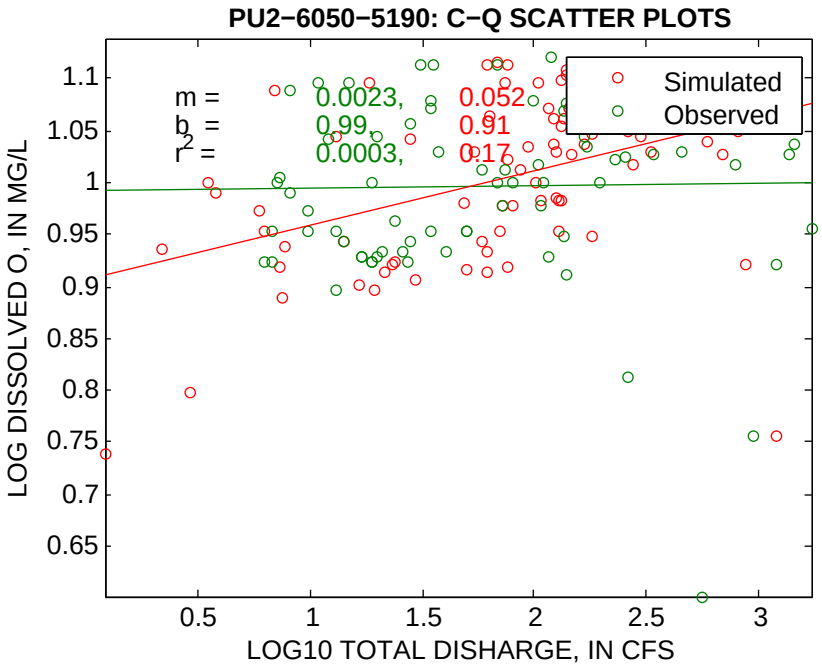
STATISTICS

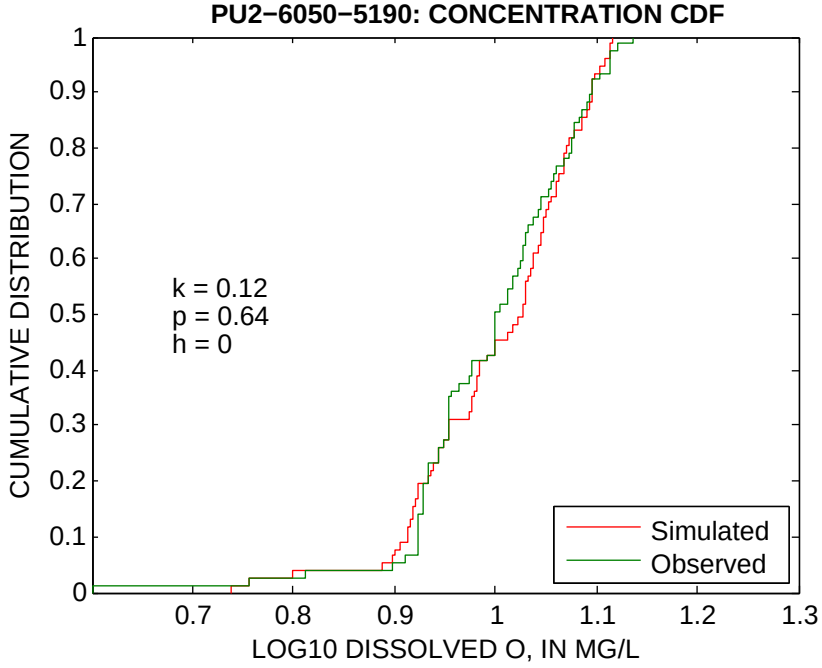
	n	77	77
		observe	simulate
min		4	5.8083
		0.60206	0.764049
mean		10.1165	10.3006
		0.997366	1.00528
media		10	10.586
		1	1.02473
max		13.7	13.543
		1.13672	1.13171
varian		3.21873	3.44521
		0.00734829	0.00699559
JB		0.095408	0.114717
		0.001	0.032310
		ra	log
%		1.82034	0.793949
err.va		3.02082	0.00782277
rel.std.err		0.938514	1.06457
mod.eff		0.0614865	-0.0645704

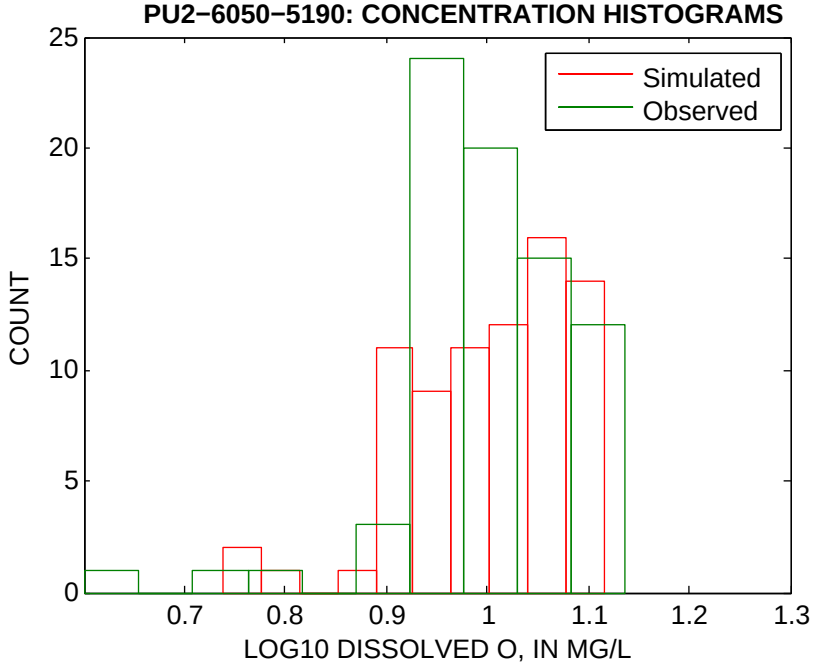
VERSION 2.1

ALL DATA
LOG10

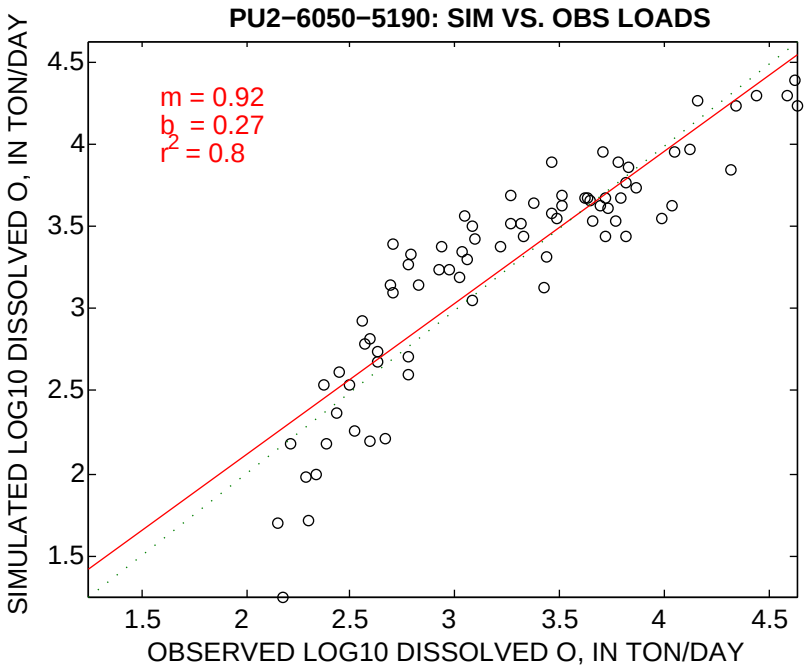


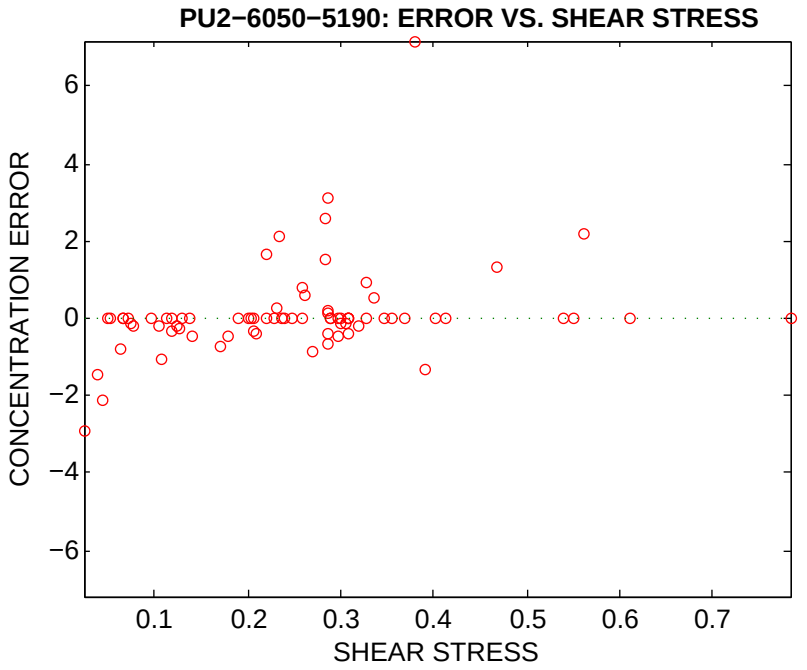


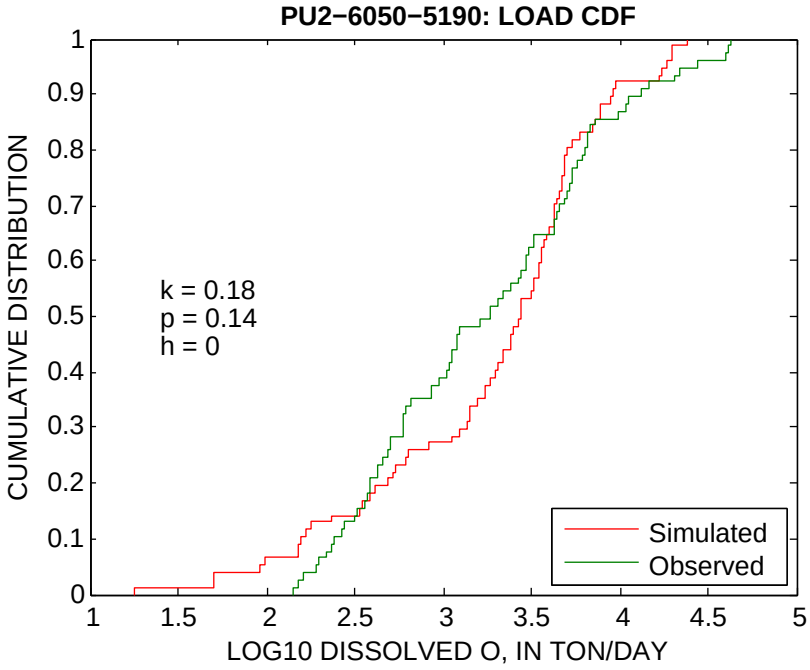


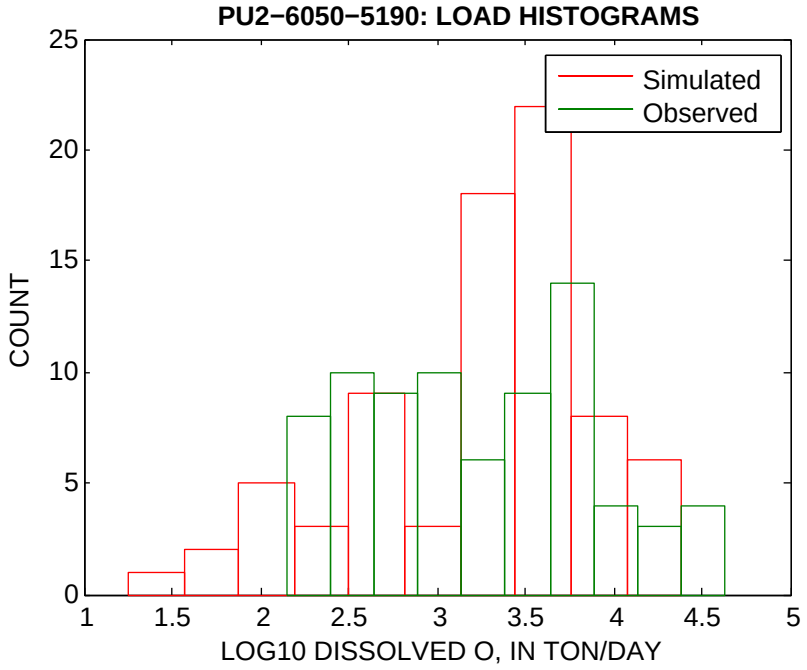


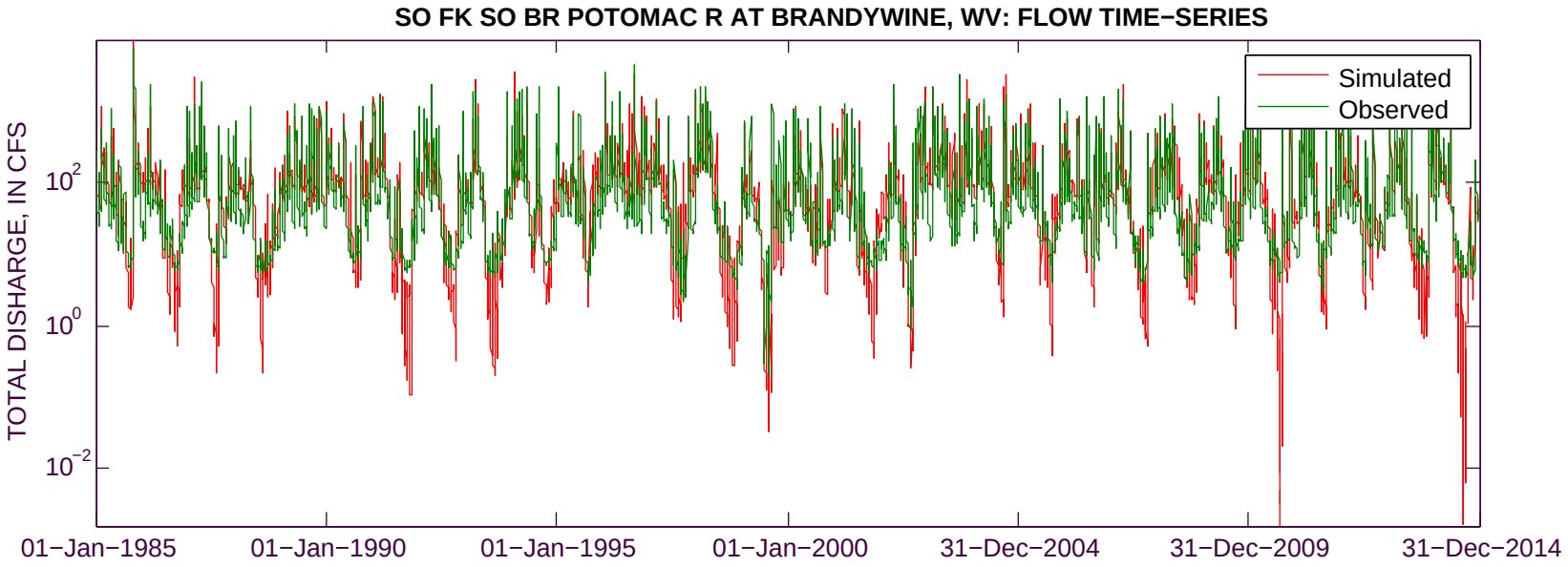
LOAD DATA
LOG10

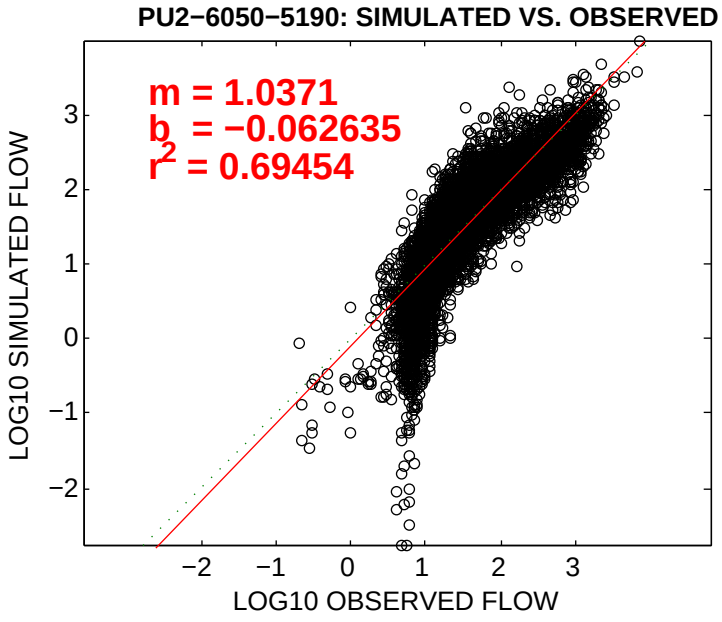


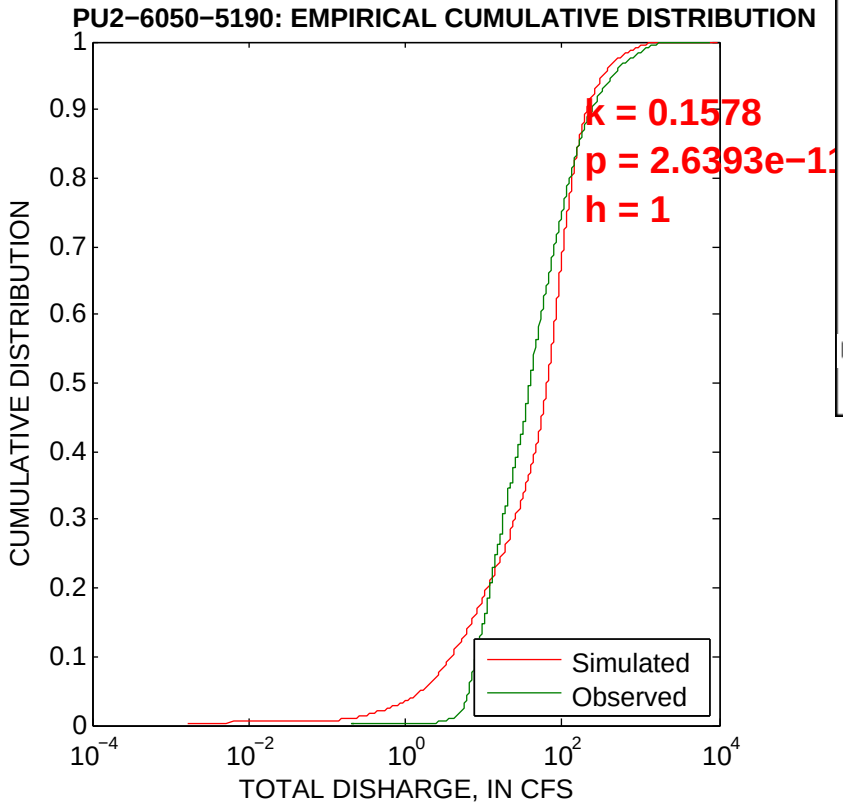












DATA SELECTION

scenario	file
P620171001WQ	FLOW.calib

plot: FLOW - total discharge

Dates: 1/1/1985 – 12/31/201

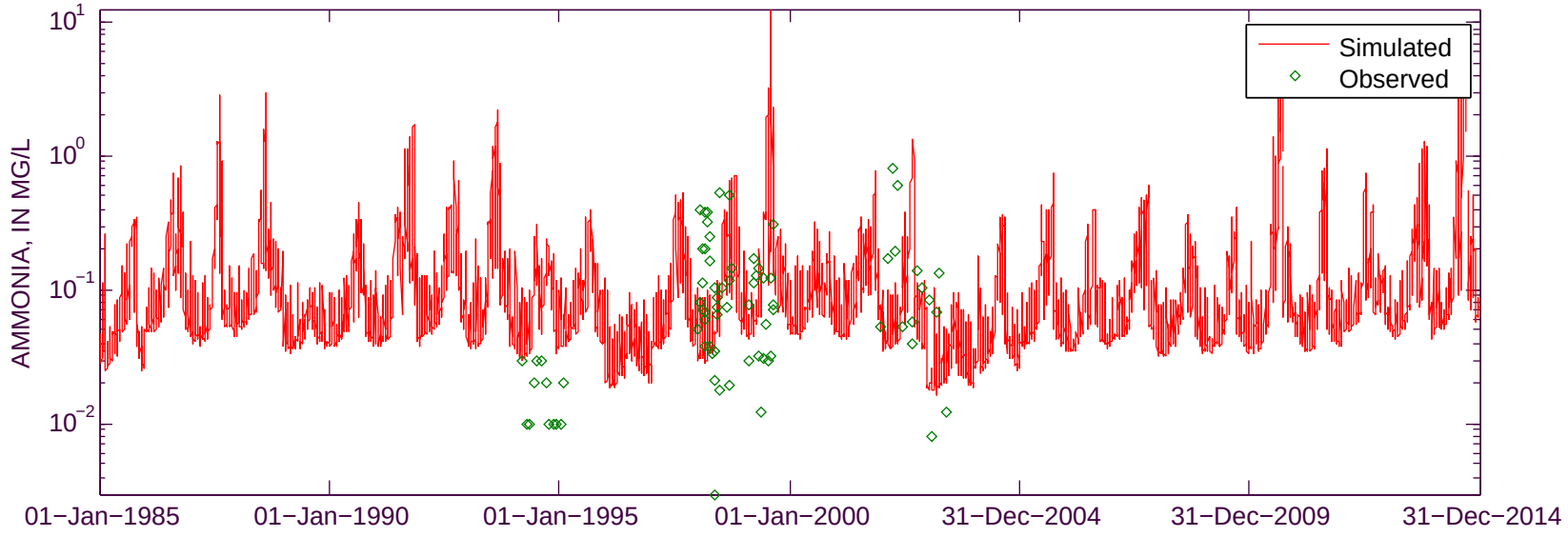
Drive	Directory	Observed
N/A	model	OBS20161101

STATISTICS

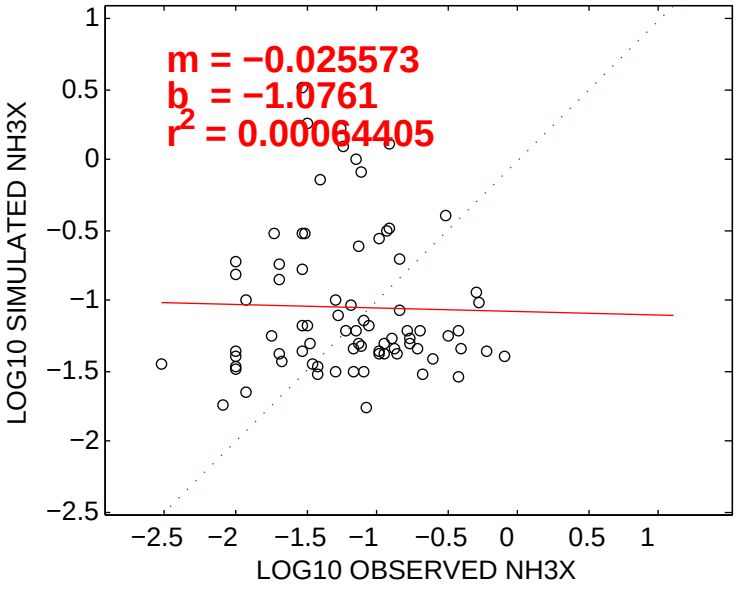
		observe	simulate
n		10957	10920
min		0.2	0
		-0.69897	-2.78455
mean		110.501	105.735
		1.62466	1.6223
media		39	65.065
		1.59106	1.81555
max		7500	9997.4
		3.87506	3.99989
varian		60922.1	44002.6
		0.327375	0.506979
JB		0.001	0.001
		0.001	0.001
		ra	log
%		-4.31264	-0.144897
err.va		24784.3	0.155316
rel.std.err		0.40682	0.474429
mod.eff		0.59318	0.525571

VERSION

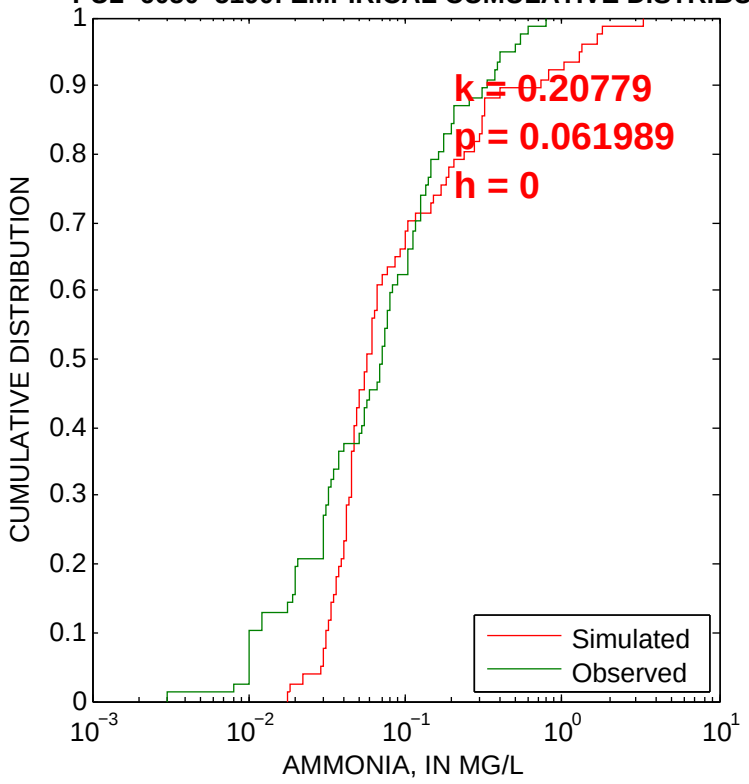
SO FK SO BR POTOMAC R AT BRANDYWINE, WV: NH3X TIME-SERIES



PU2-6050-5190: SIMULATED VS. OBSERVED



PU2-6050-5190: EMPIRICAL CUMULATIVE DISTRIBUTION



DATA SELECTION

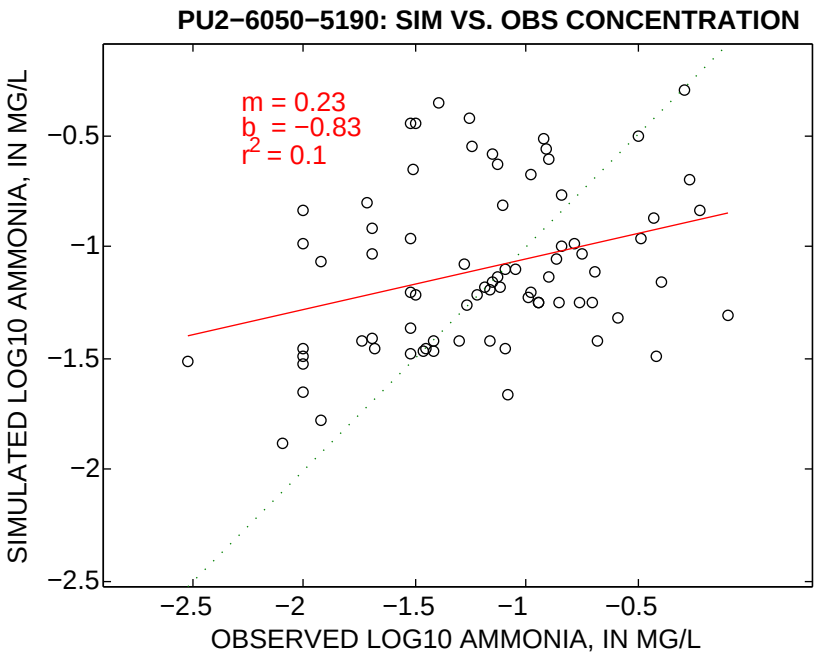
scenario: P620171001WQ
file: NH3X.calib
plot: NH3X - ammonia
Dates: 1/1/1985 – 12/31/201
Drive: N/A
Directory: model
Observed: OBS20161101

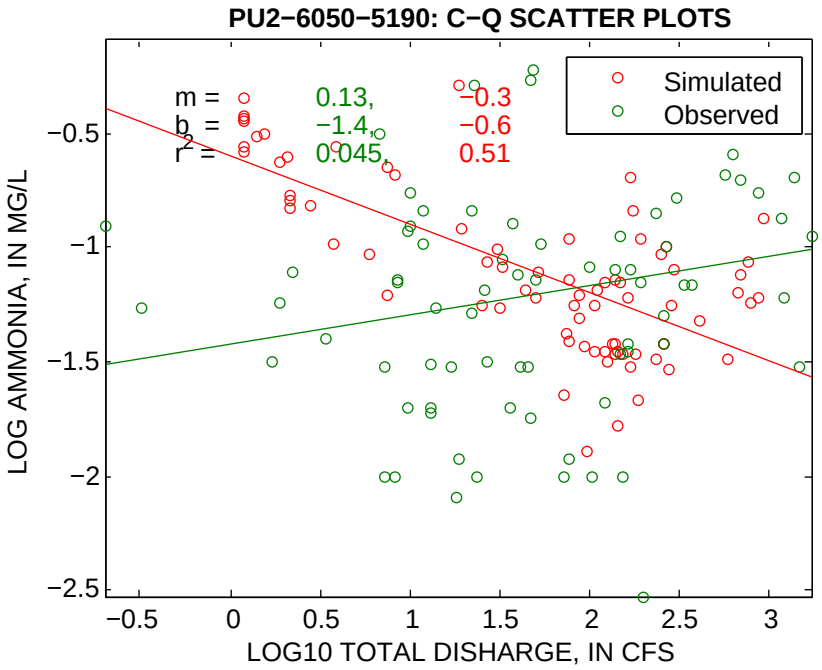
STATISTICS

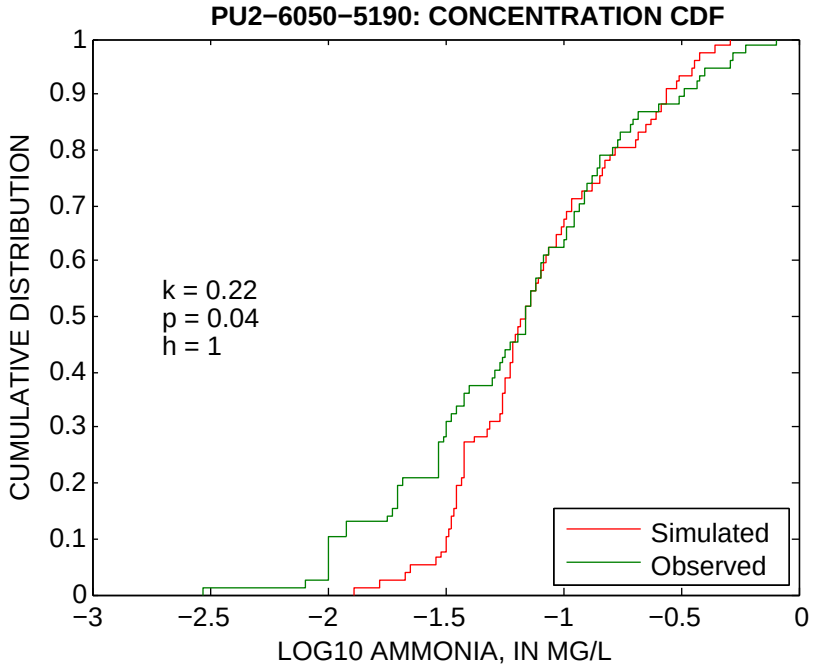
	n	77	77
		observe	simulate
min		0.003	0.017805
		-2.52288	-1.74946
mean		0.118896	0.236899
		-1.1975	-1.0455
media		0.07	0.05688
		-1.1549	-1.24504
max		0.802	3.2716
		-0.0958256	0.51476
varian		0.0223416	0.252065
		0.258558	0.262542
JB		0.001	0.001
		0.5	0.002698
		ra	log
%		99.2487	-12.693
err.va		0.308868	0.557732
rel.std.err		13.8248	2.15708
mod.eff		-12.8248	-1.15708

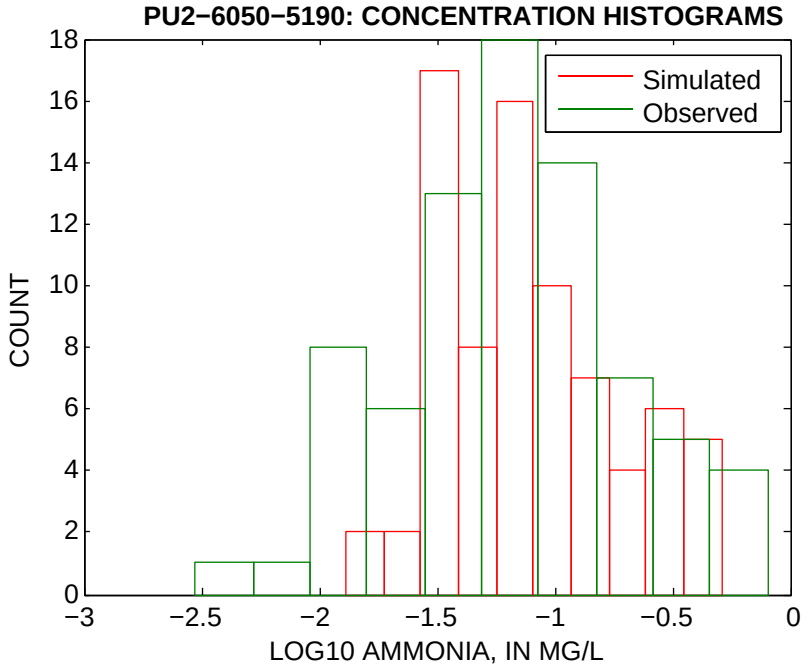
VERSION 2.1

ALL DATA
LOG10

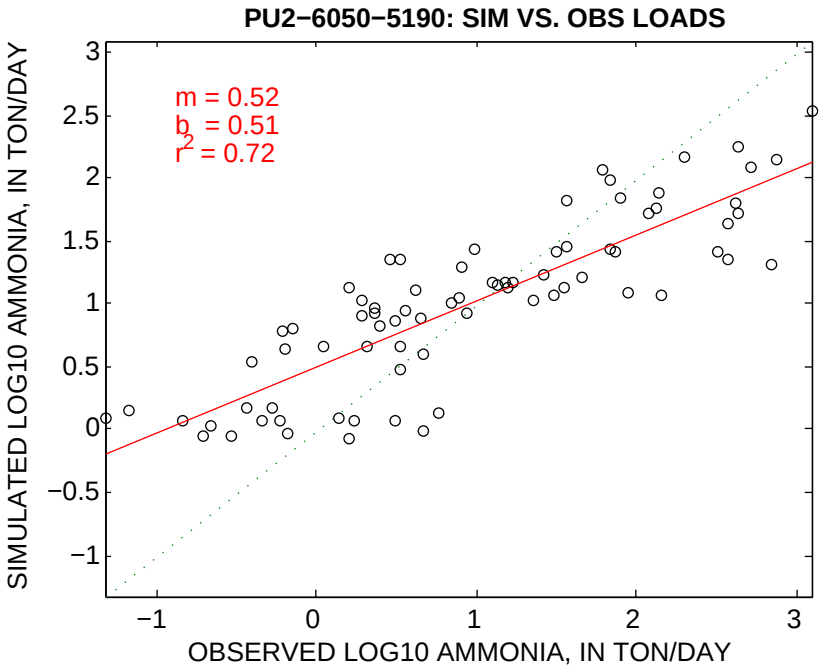


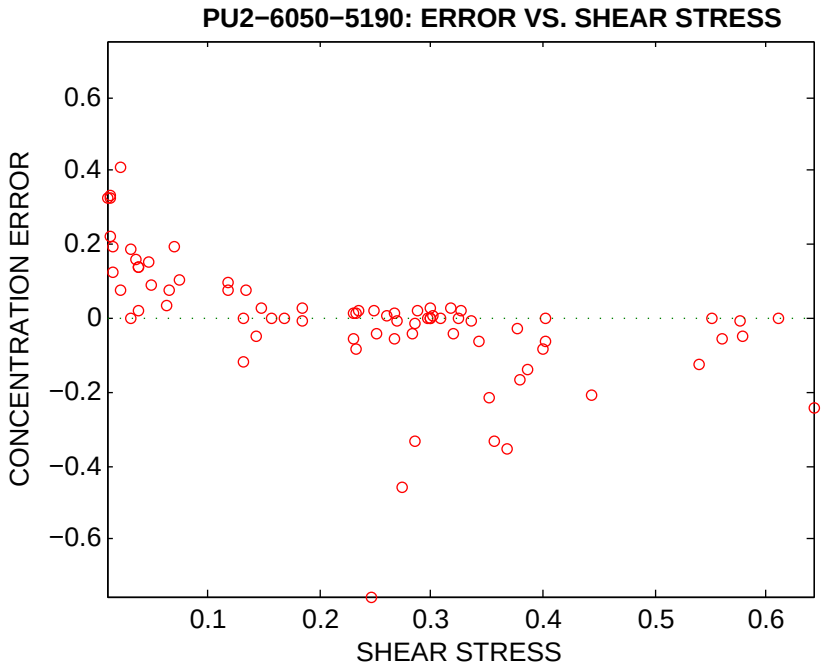


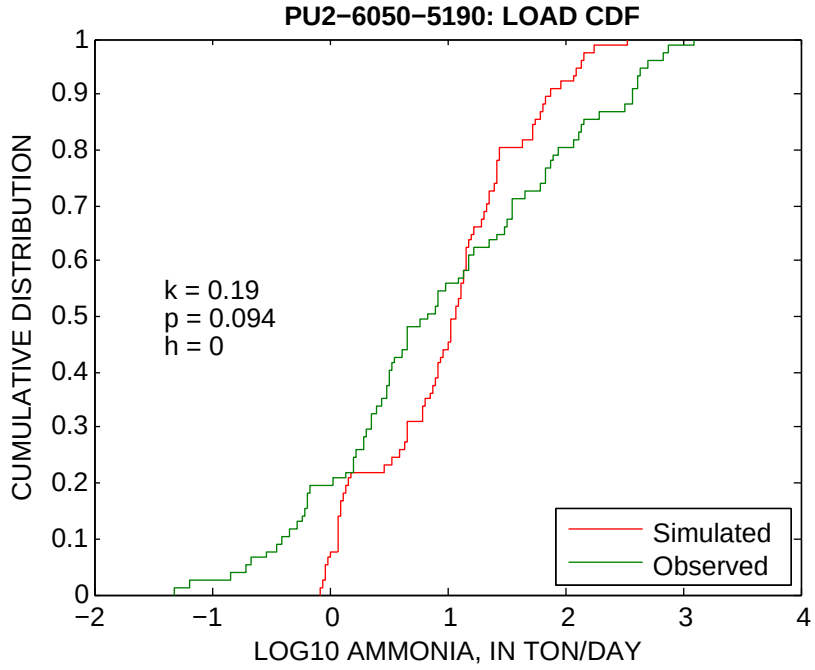


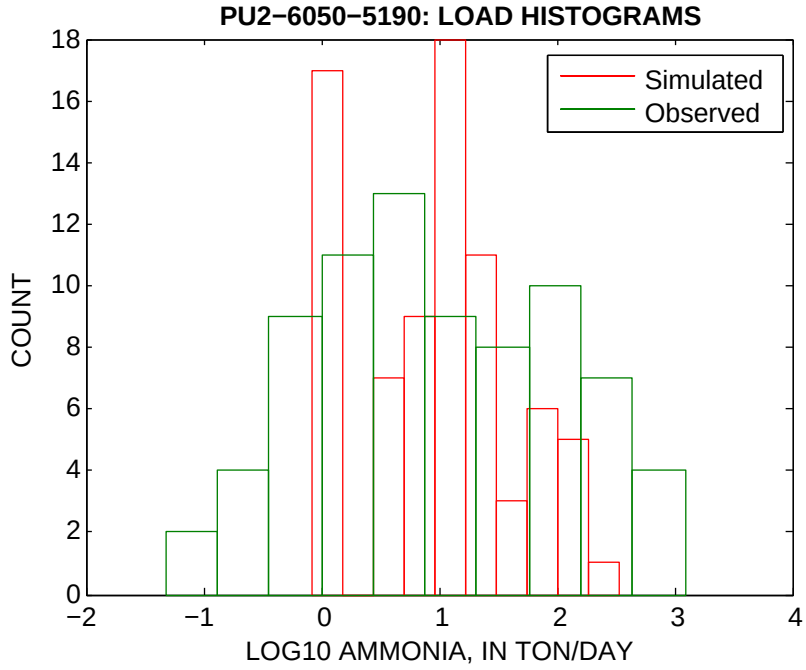


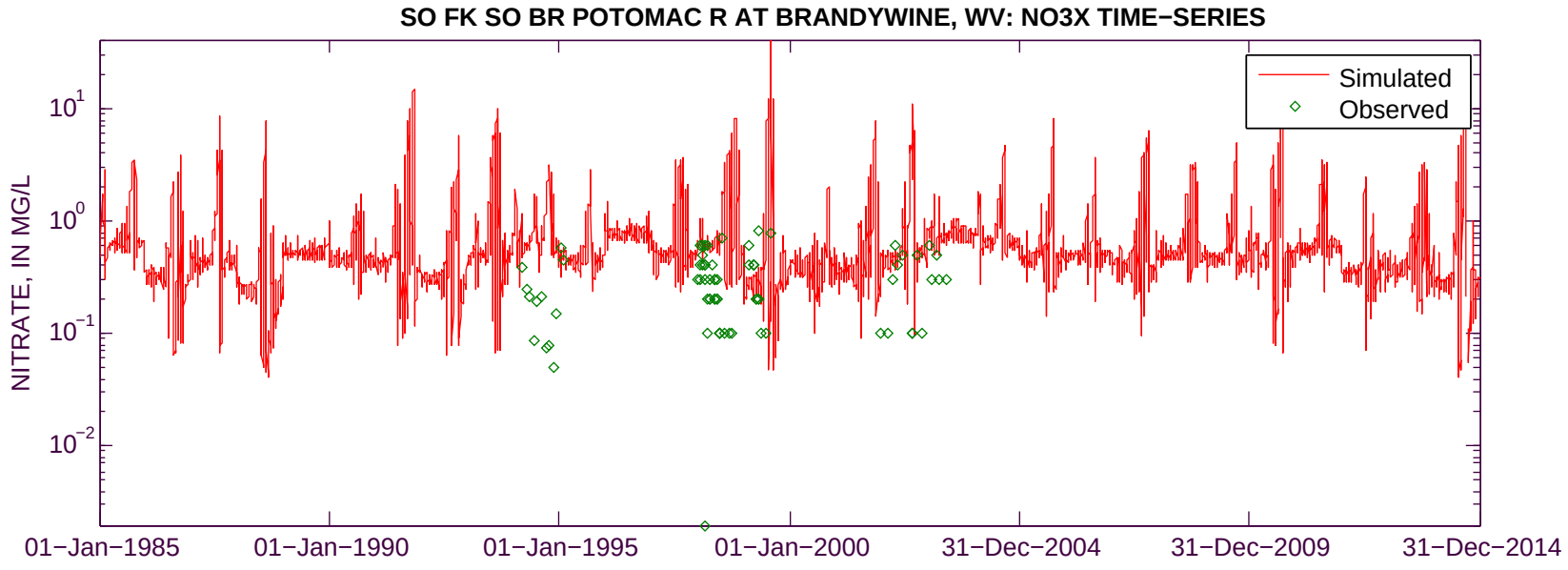
LOAD DATA
LOG10

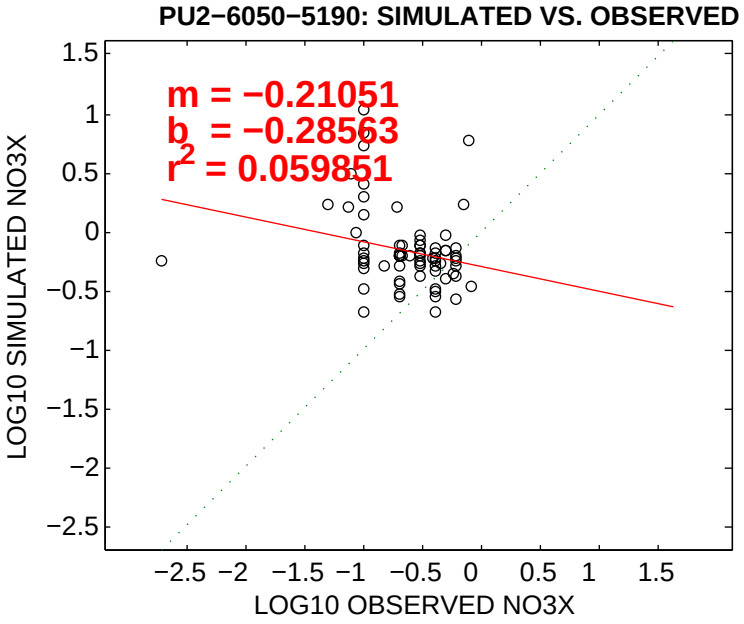


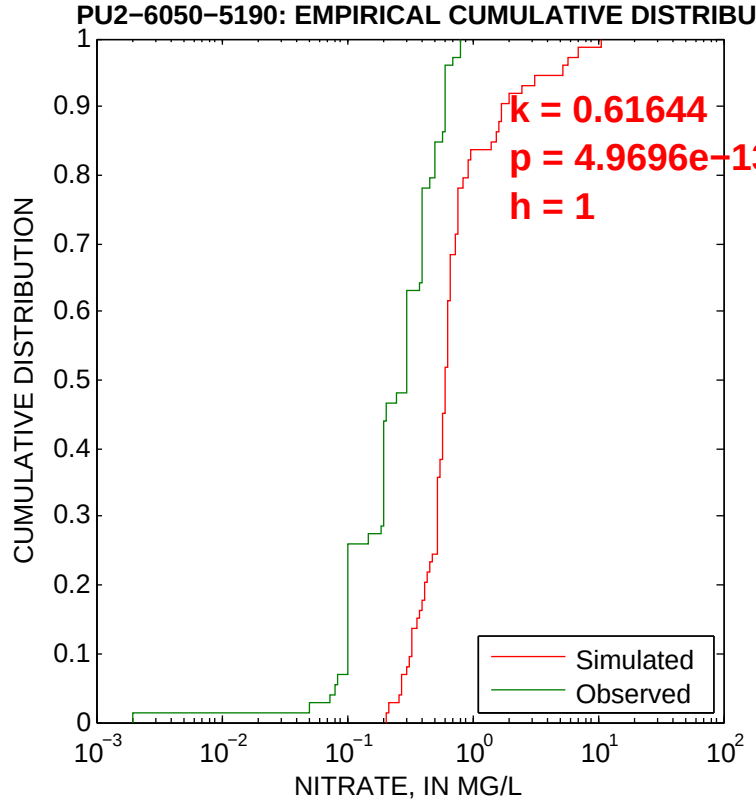












DATA SELECTION

scenario	file
P620171001WQ	NO3X.calib

plot: NO3X - nitrate

Dates: 1/1/1985 – 12/31/201

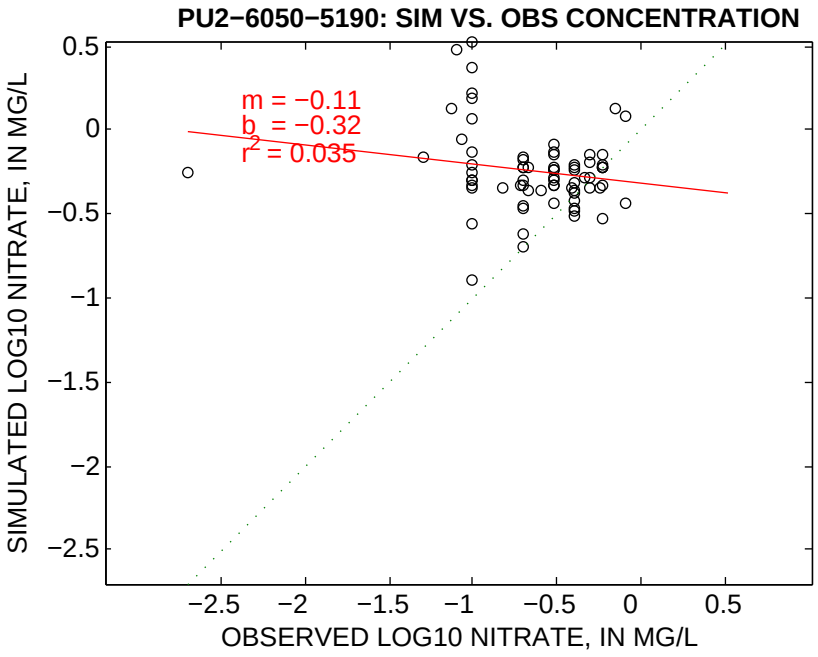
Drive	Directory	Observed
N/A	model	OBS20161101

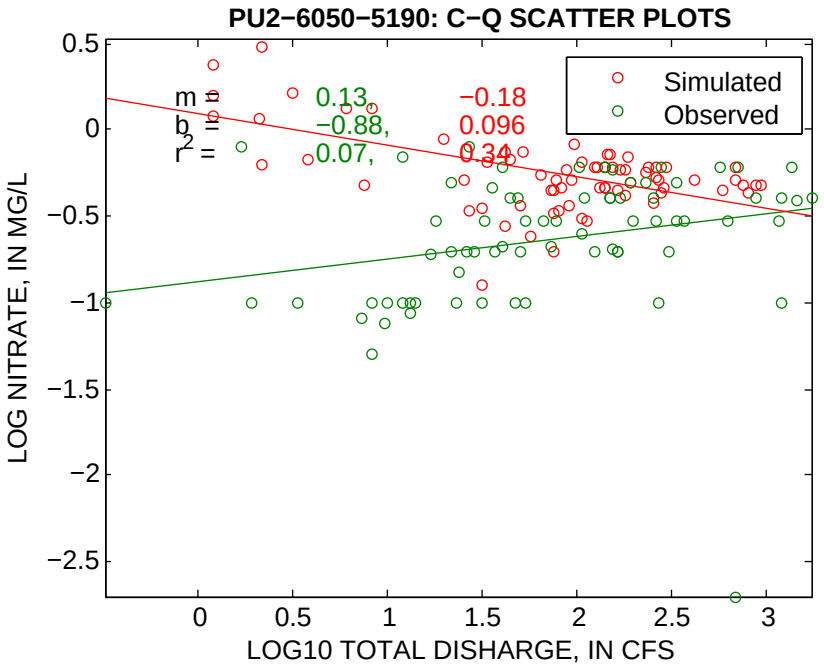
STATISTICS

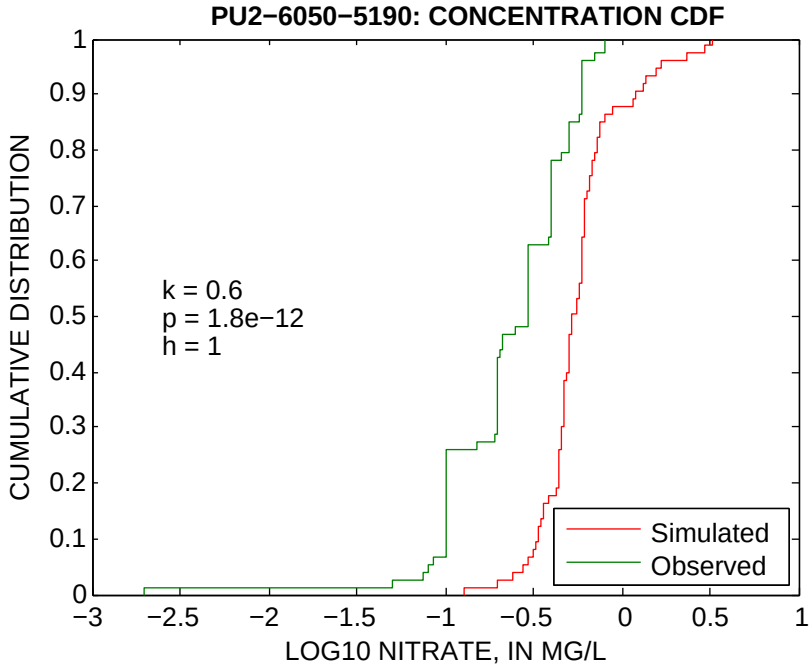
	observe	simulate
n	73	73
min	0.002 -2.69897	0.20432 -0.689689
mean	0.303452 -0.633995	1.08539 -0.152174
media	0.3 -0.522879	0.61597 -0.21044
max	0.81 -0.091515	10.9 1.03743
varian	0.0373969 0.149425	2.77858 0.110634
JB	0.041430 0.001	0.001 0.001
	ra	log
%	257.682	-75.9977
err.va	3.53758	0.558345
rel.std.err	94.5954	3.73663
mod.eff	-93.5954	-2.73663

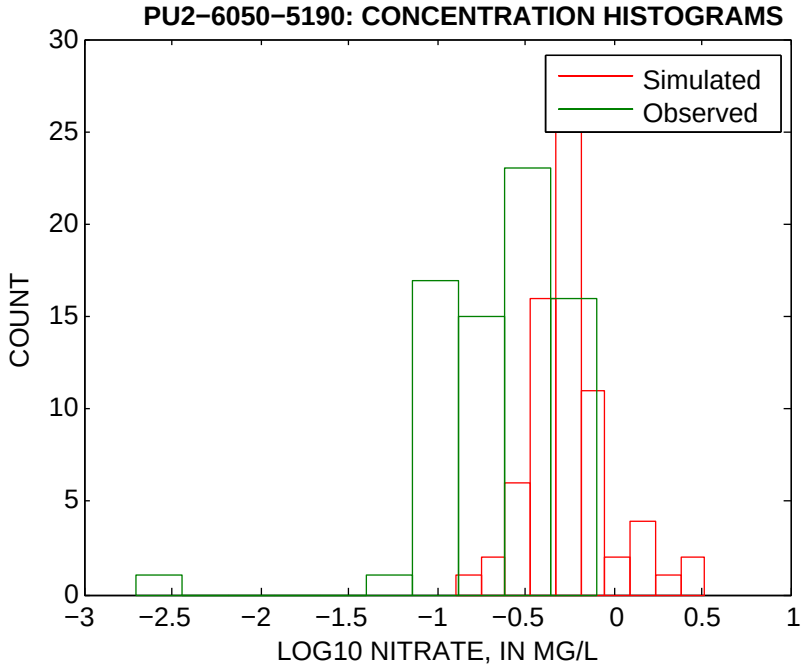
VERSION 2.1

ALL DATA
LOG10

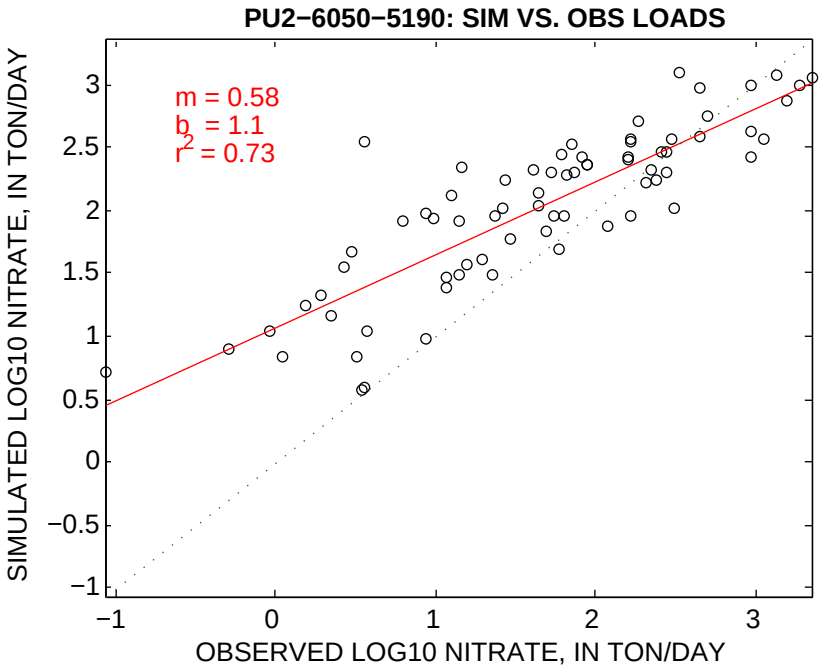


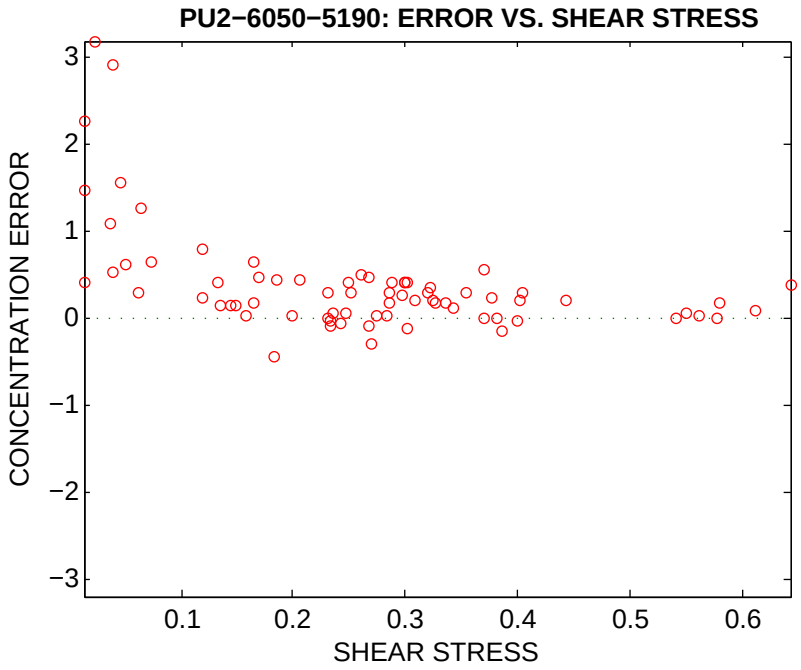


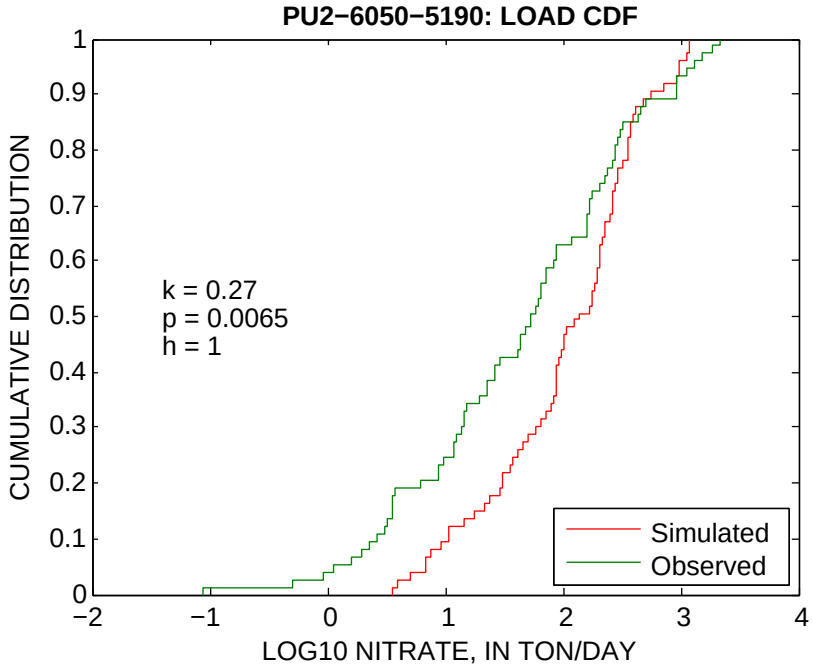


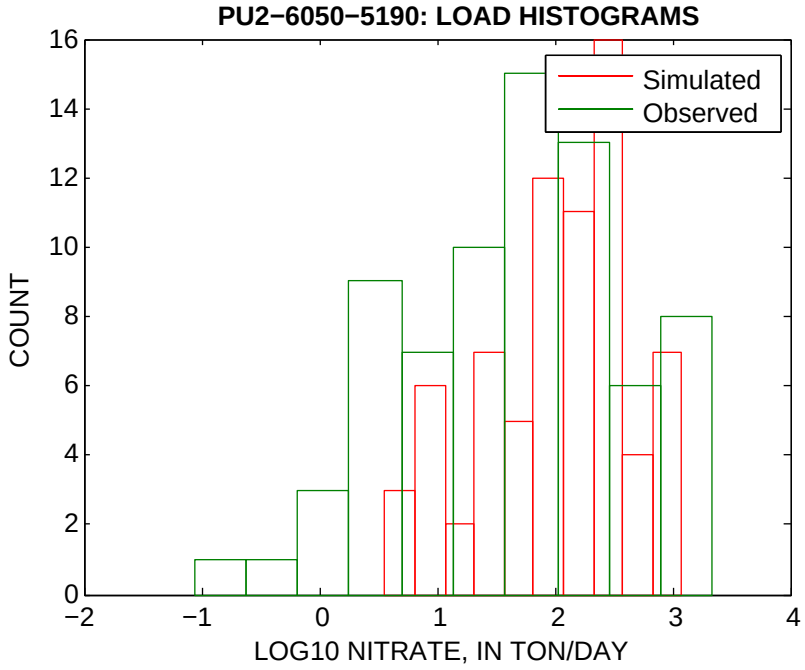


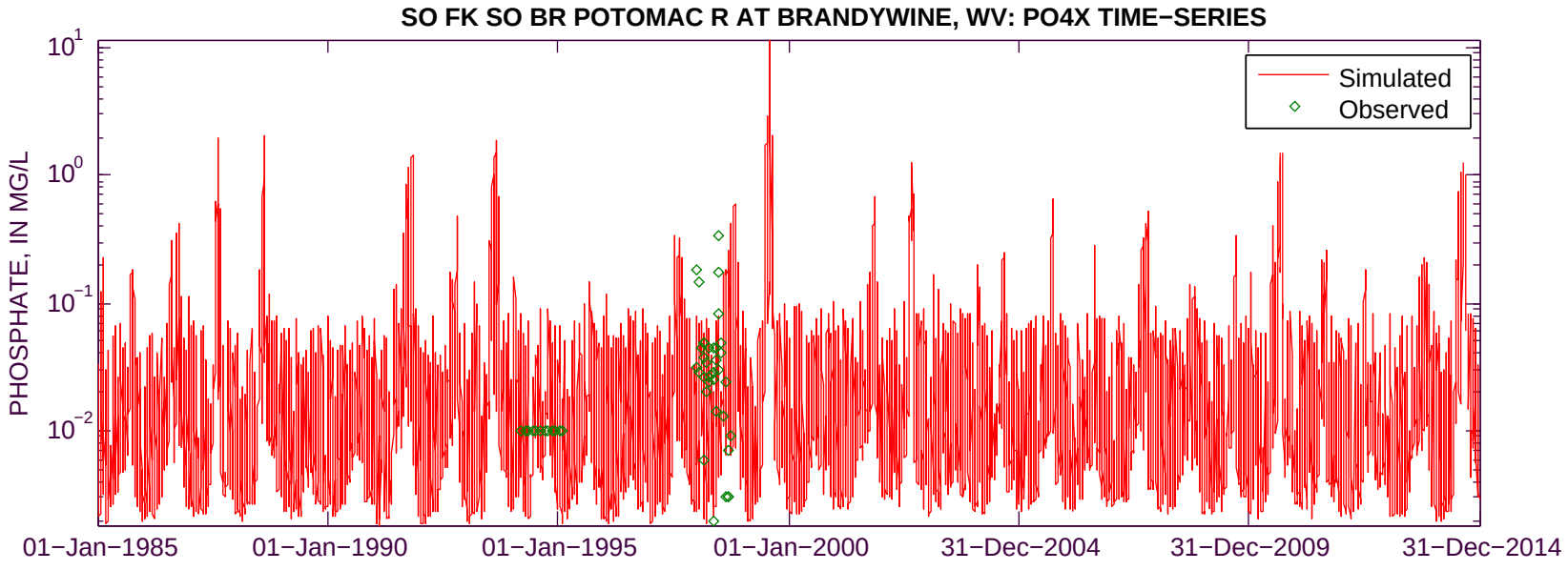
LOAD DATA
LOG10

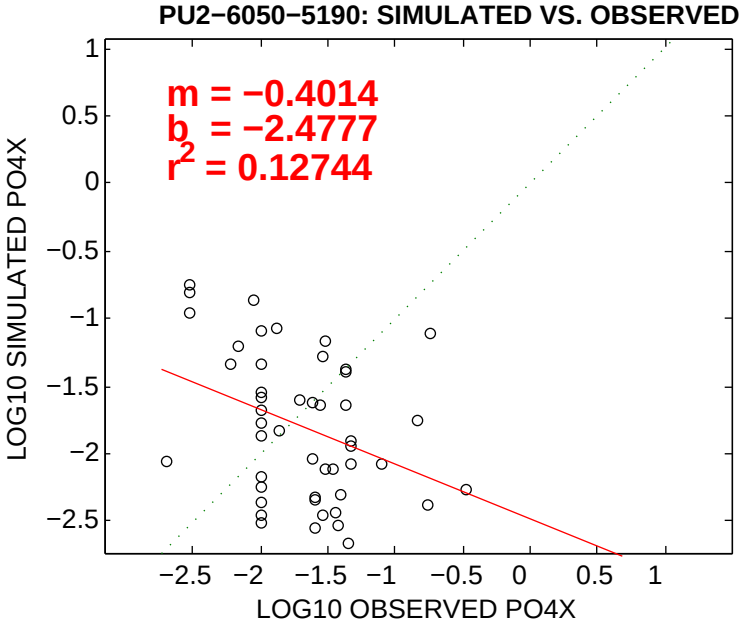


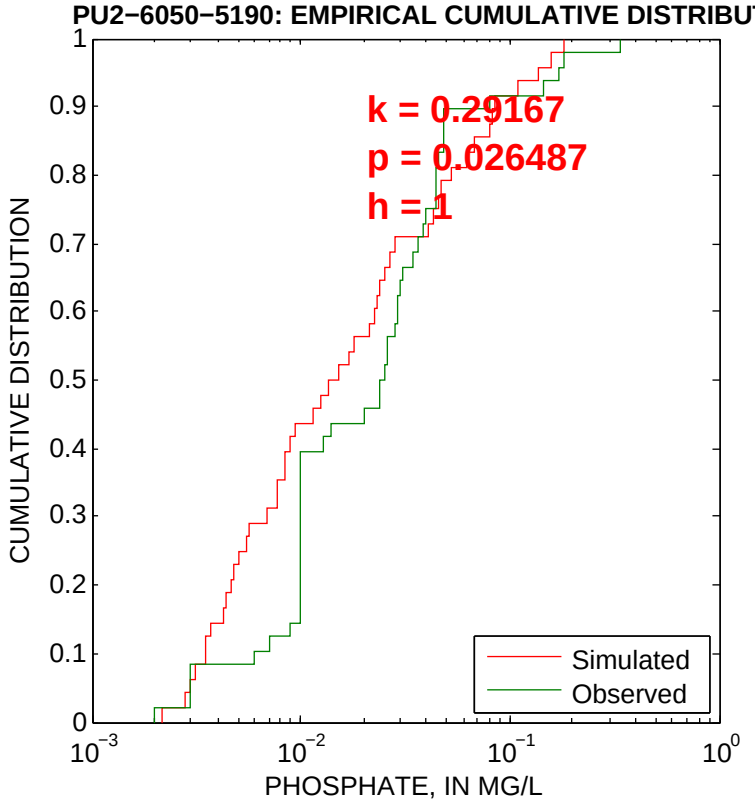












DATA SELECTION

scenario	file
P620171001WQ	PO4X.calib

plot: PO4X - phosphate

Dates: 1/1/1985 – 12/31/201

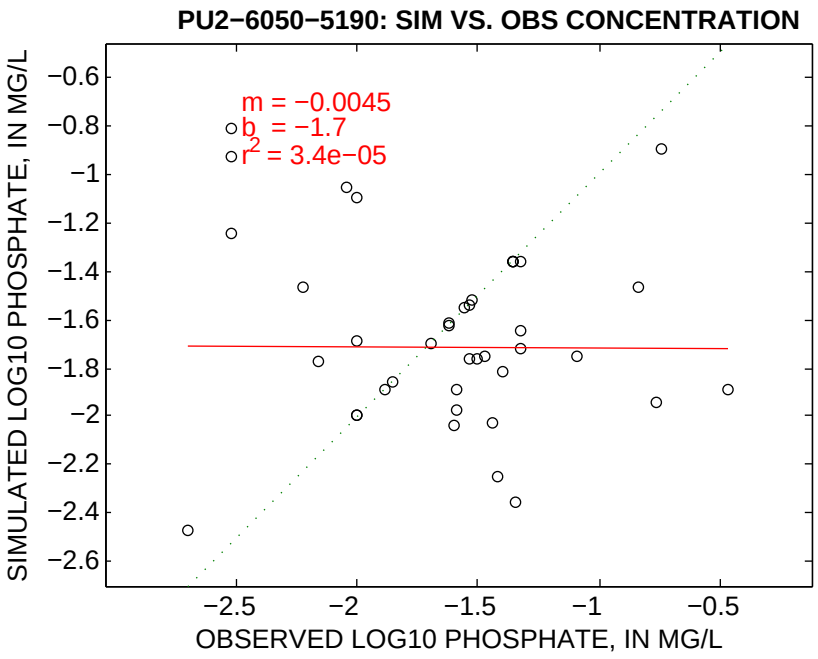
Drive	Directory	Observed
N/A	model	OBS20161101

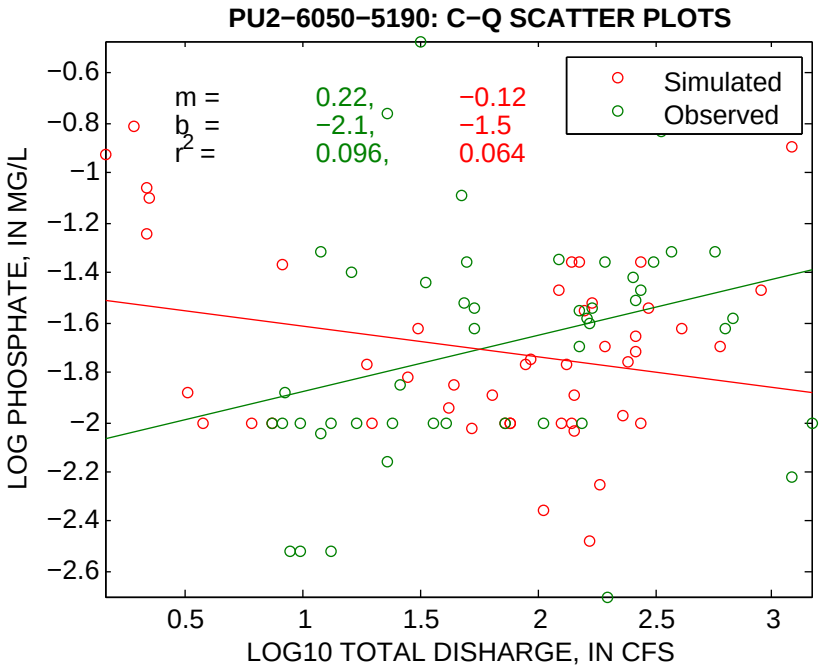
STATISTICS

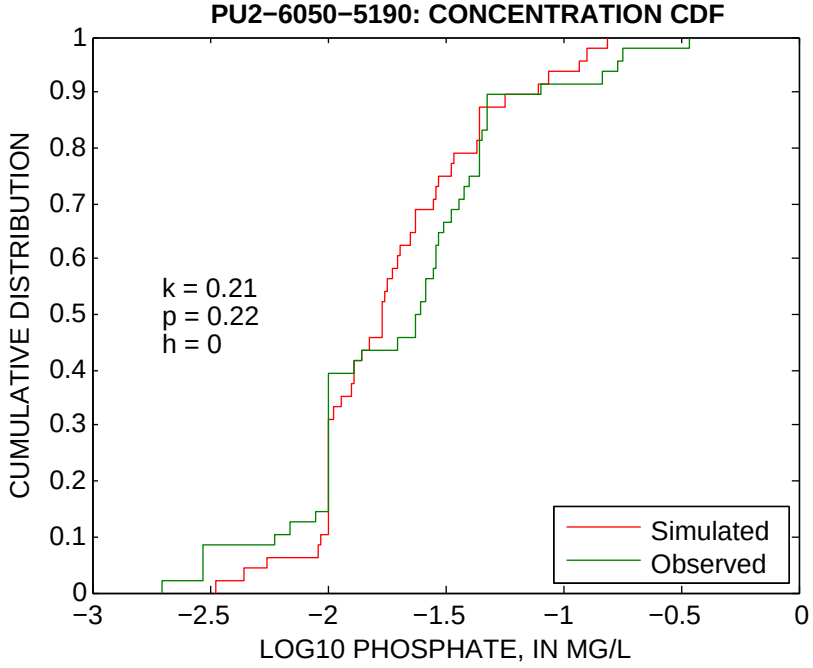
	n	48	48
		observe	simulate
min		0.002	0.0021577
		-2.69897	-2.66601
mean		0.0388333	0.0324865
		-1.68332	-1.80205
media		0.0245	0.0142815
		-1.61092	-1.84595
max		0.341	0.18054
		-0.467246	-0.743427
varian		0.00350282	0.00175996
		0.225254	0.284793
JB		0.001	0.001
		0.5	0.123567
		ra	log
%		-16.3437	7.05347
err.va		0.00614925	0.705277
rel.std.err		1.75551	3.13102
mod.eff		-0.755513	-2.13102

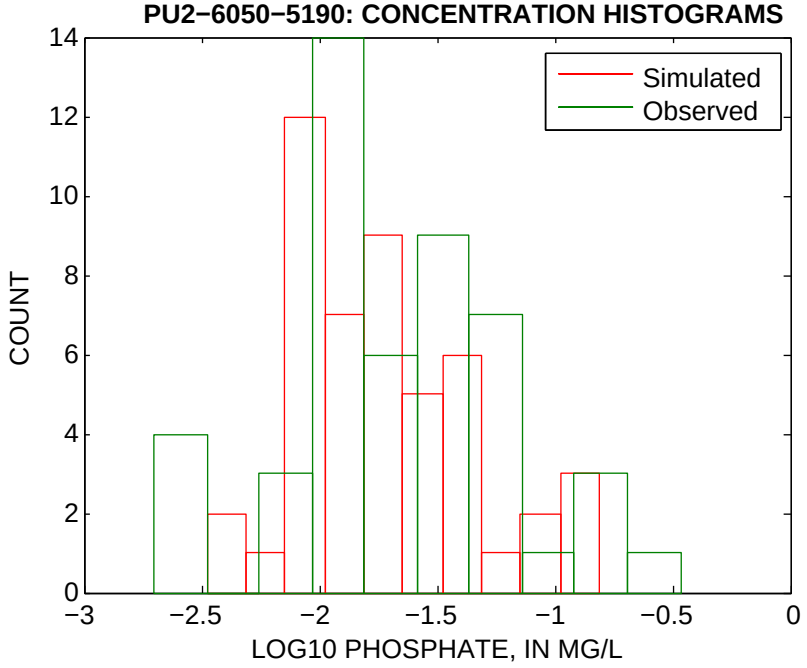
VERSION 2.1

ALL DATA
LOG10

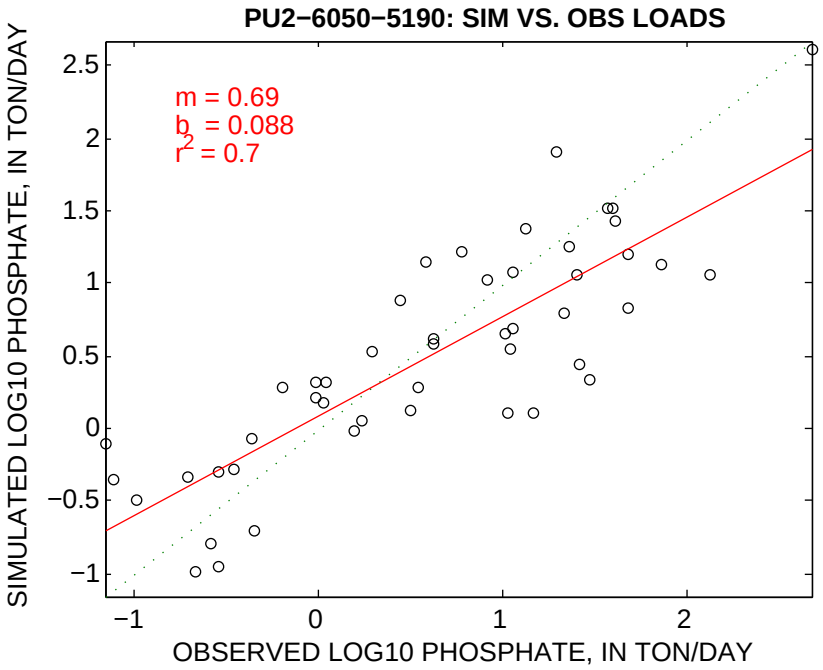


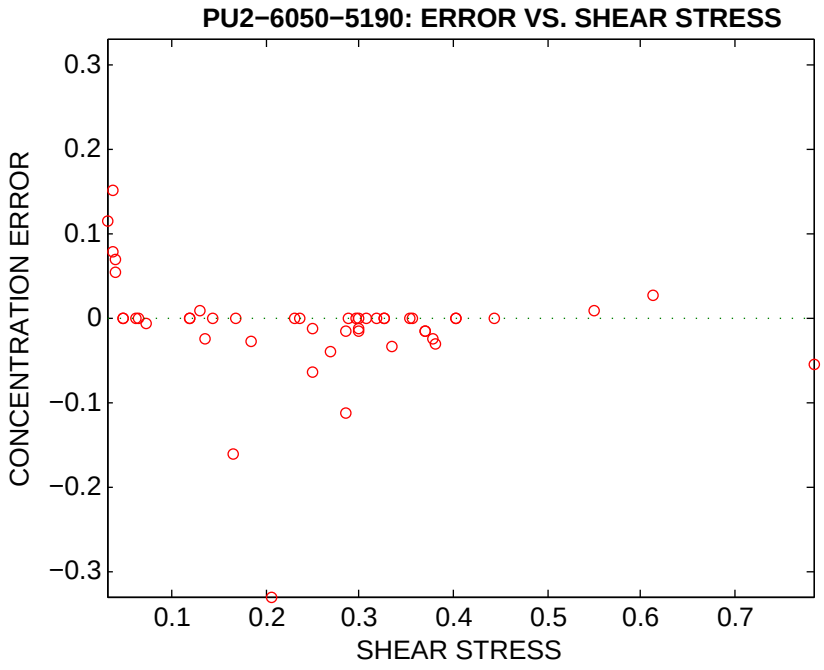


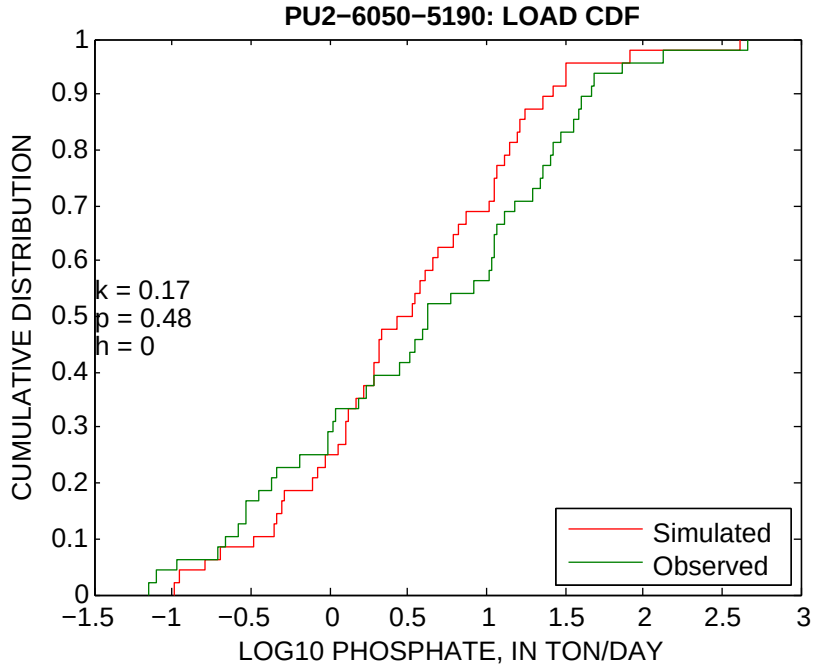


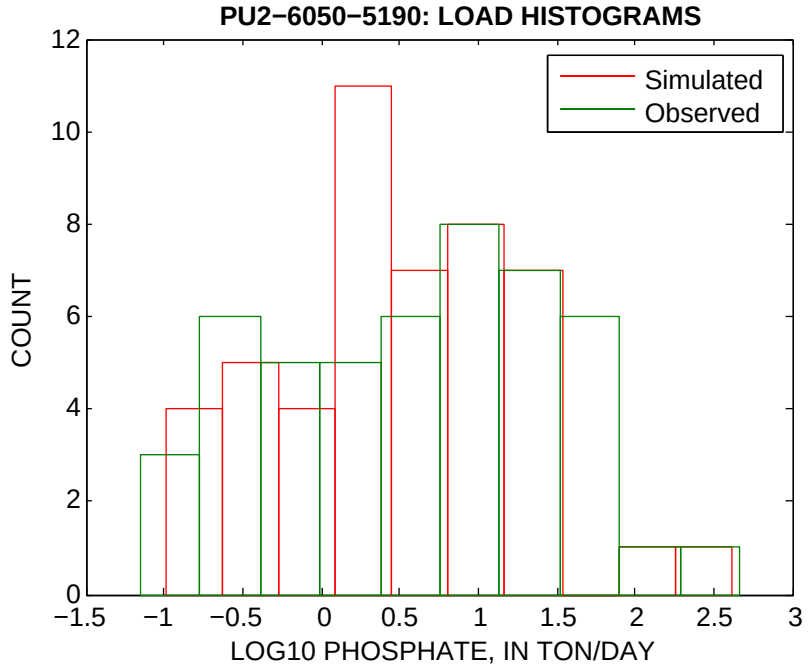


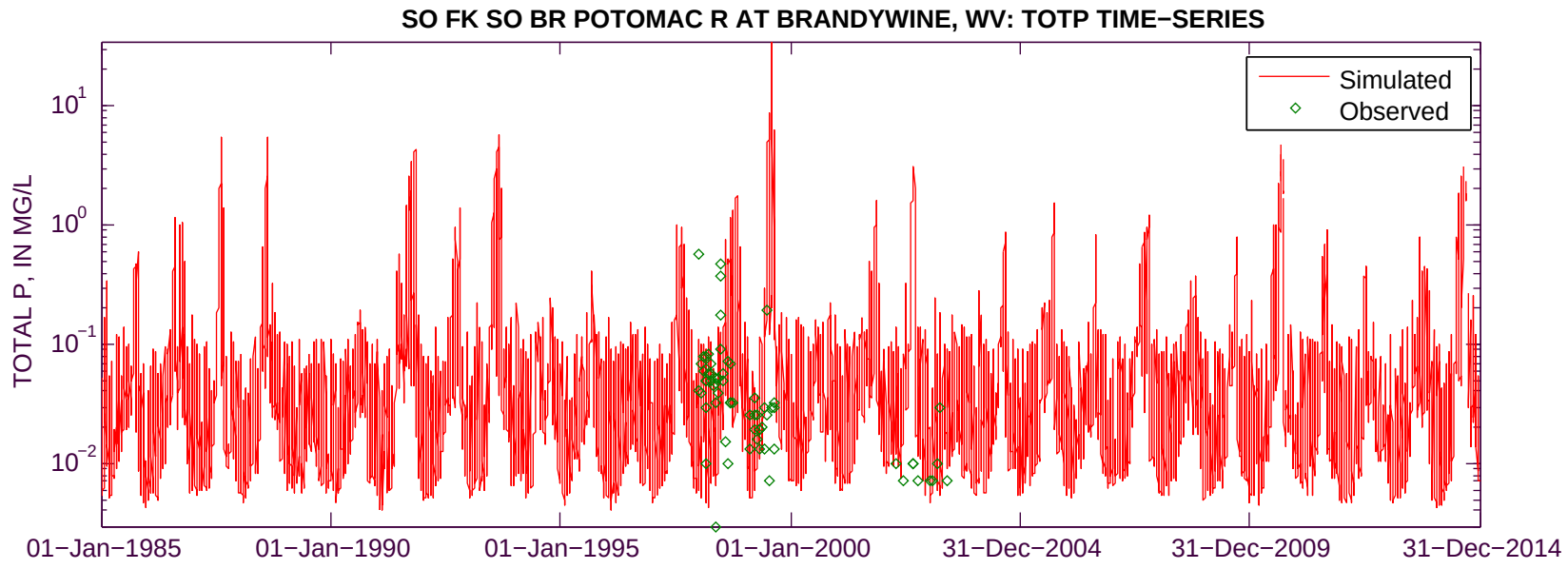
LOAD DATA
LOG10

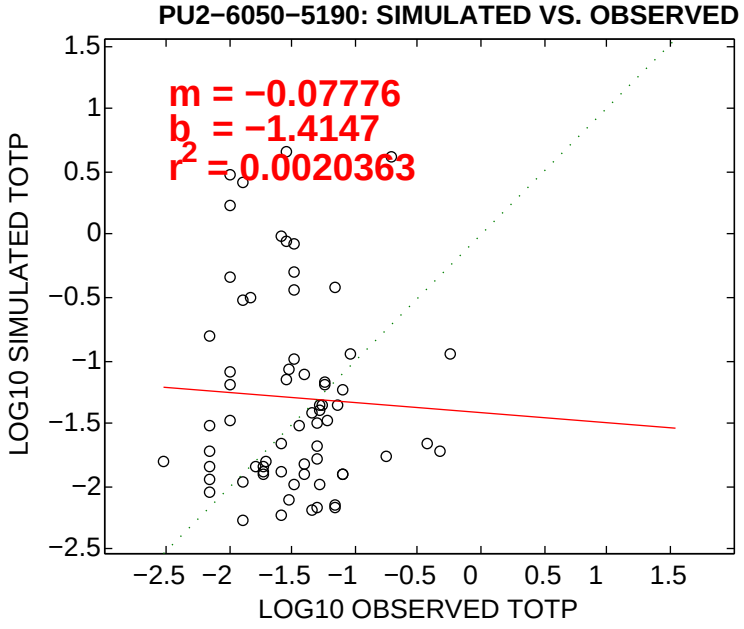


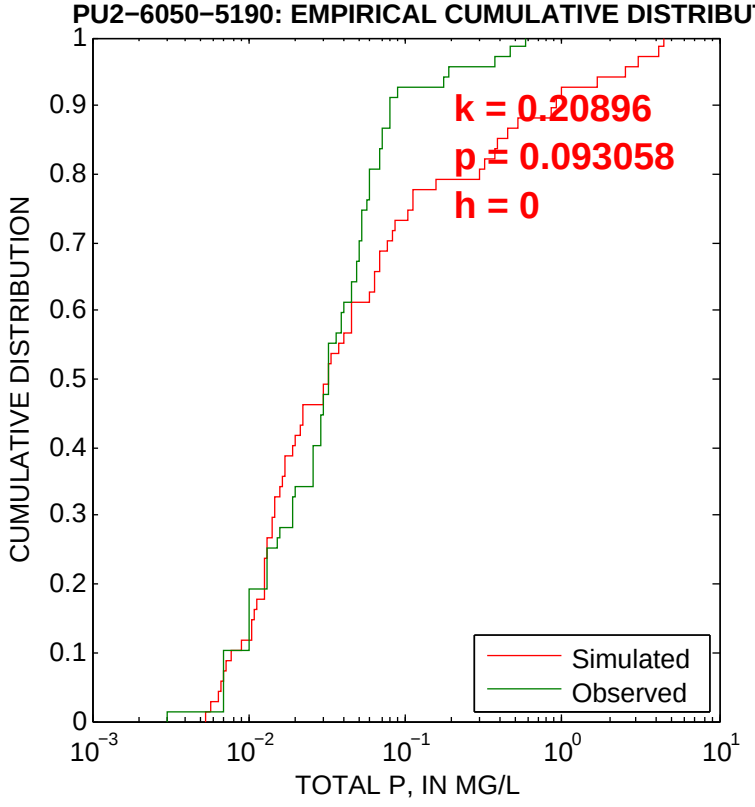












DATA SELECTION

scenario: P620171001WQ | file: TOTP.calib

plot: TOTP - total phosphorus

Dates: 1/1/1985 – 12/31/201

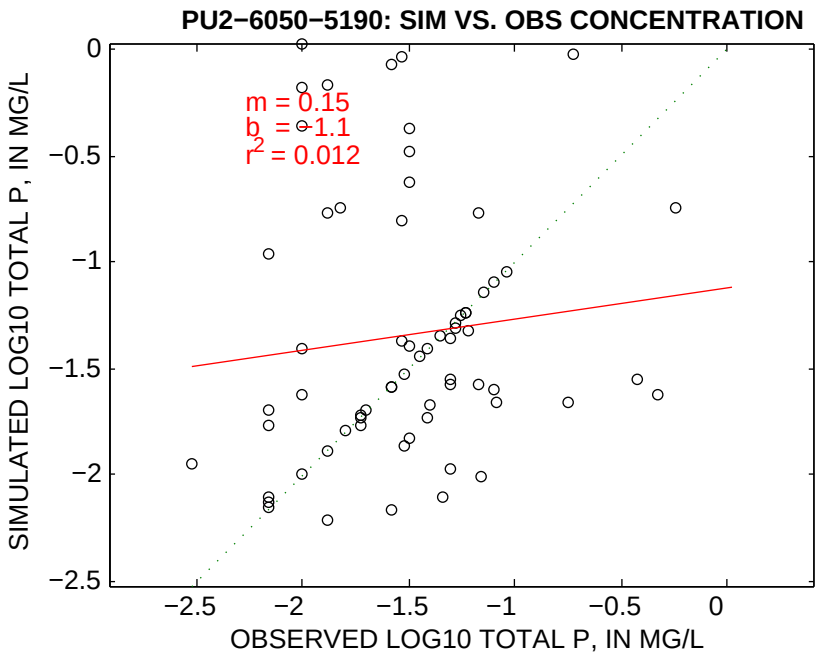
Drive | Directory: N/A | model | Observed: OBS20161101

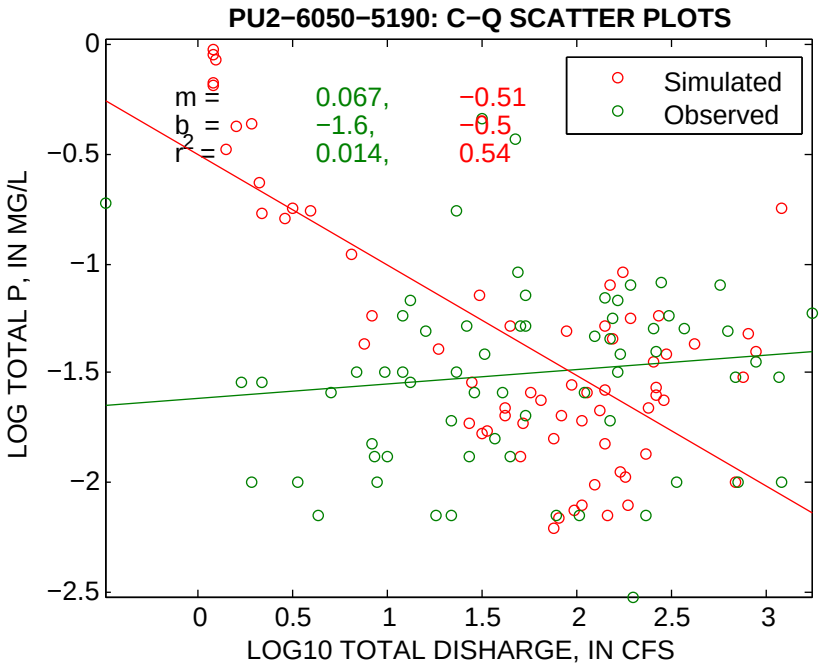
STATISTICS

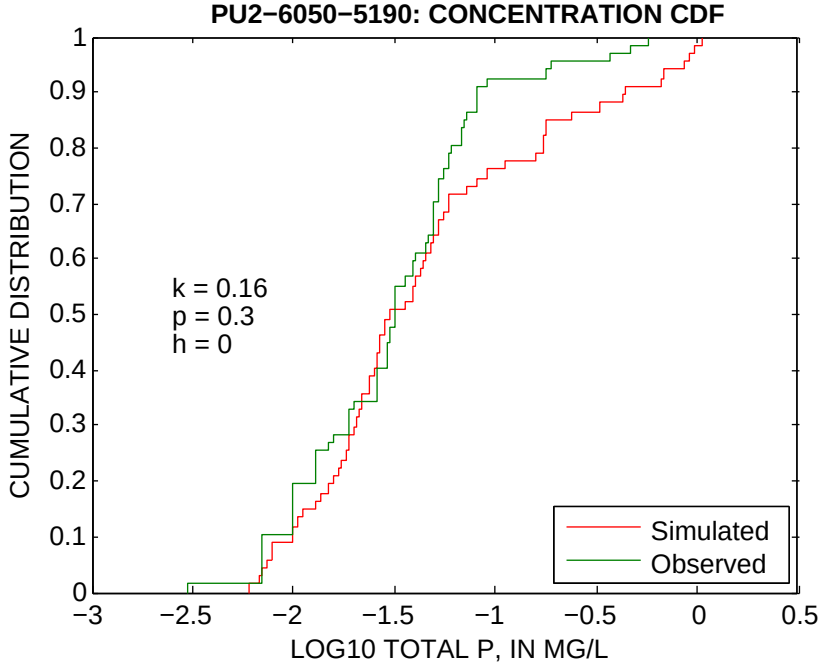
n	67	67
	observe	simulate
min	0.003	0.0052997
	-2.52288	-2.27575
mean	0.0582836	0.342667
	-1.50361	-1.29775
media	0.032	0.032114
	-1.49485	-1.49331
max	0.579	4.5183
	-0.237321	0.654975
varian	0.00966527	0.797395
	0.200442	0.595193
JB	0.001	0.001
	0.110356	0.012909
	ra	log
%	487.93	-13.691
err.va	0.89007	0.869828
rel.std.err	92.0895	4.33956
mod.eff	-91.0895	-3.33956

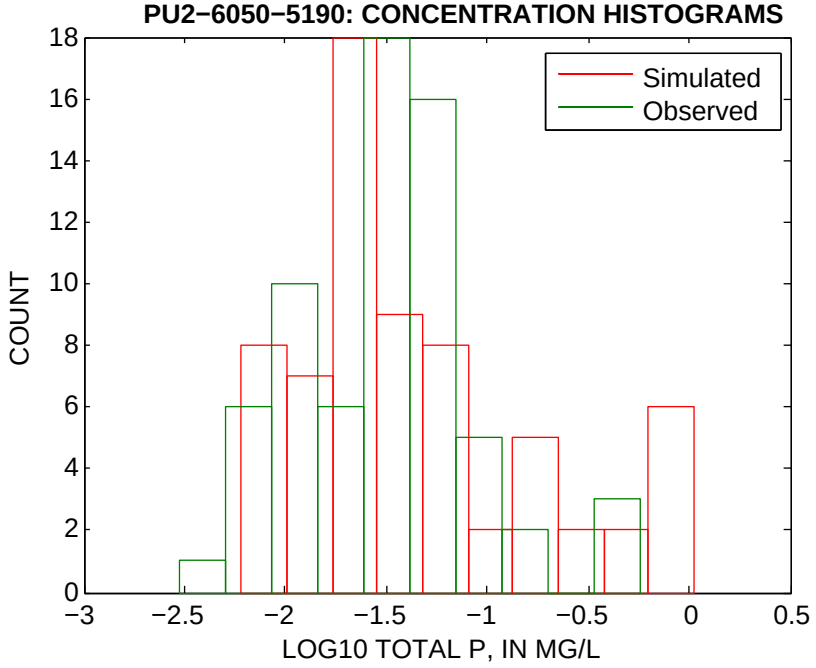
VERSION 2.1

ALL DATA
LOG10

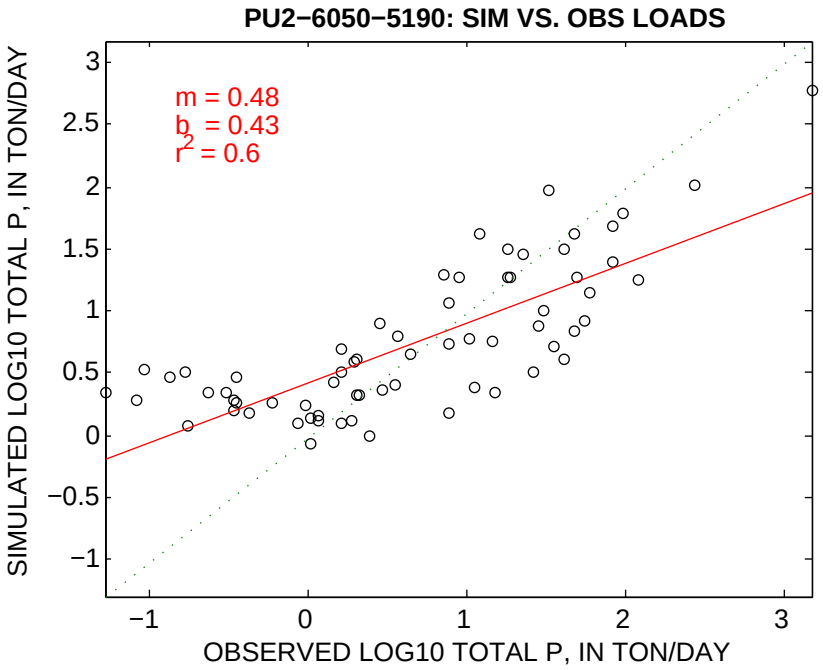


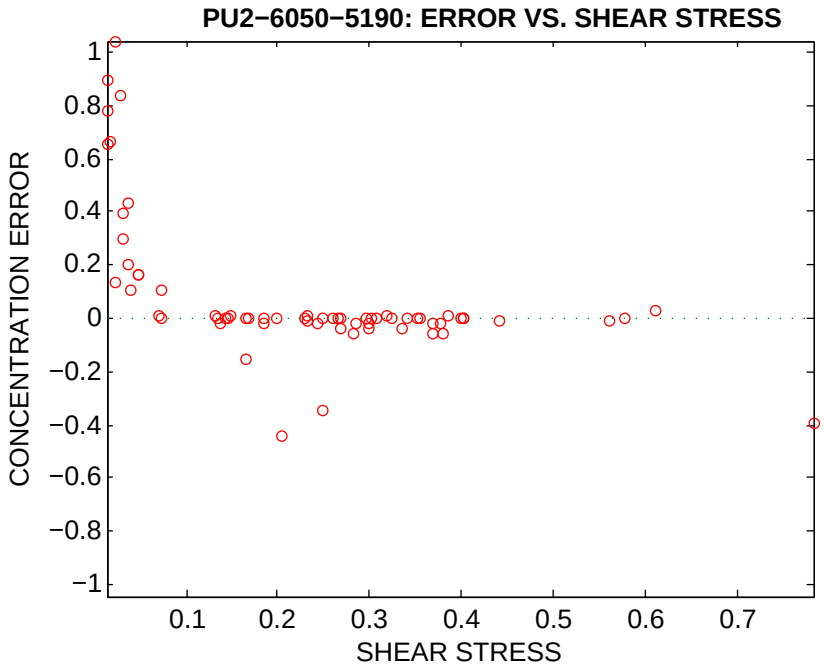


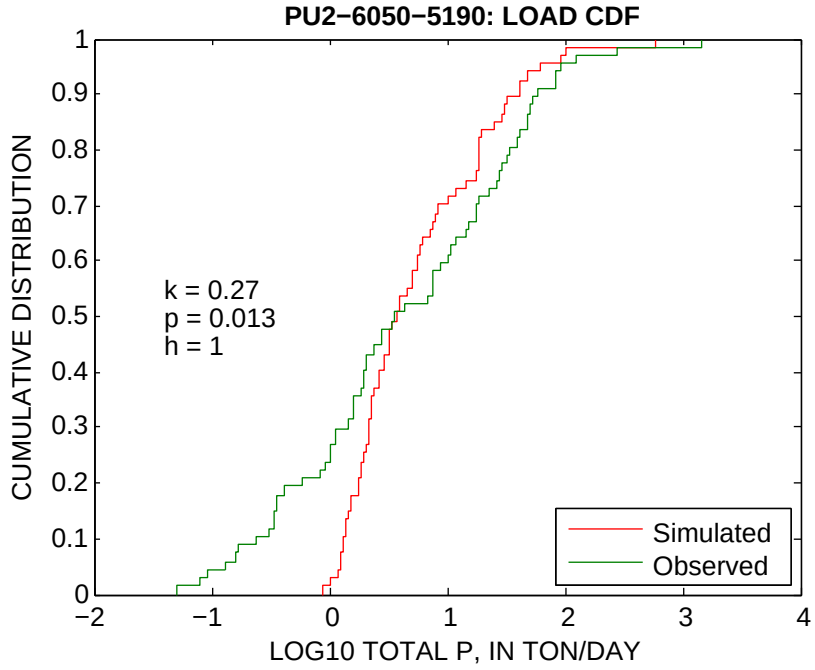


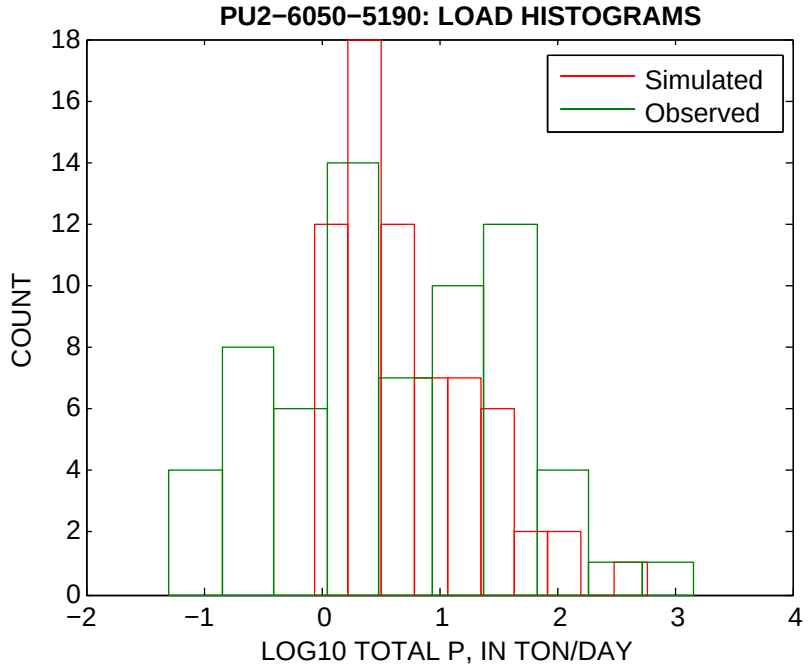


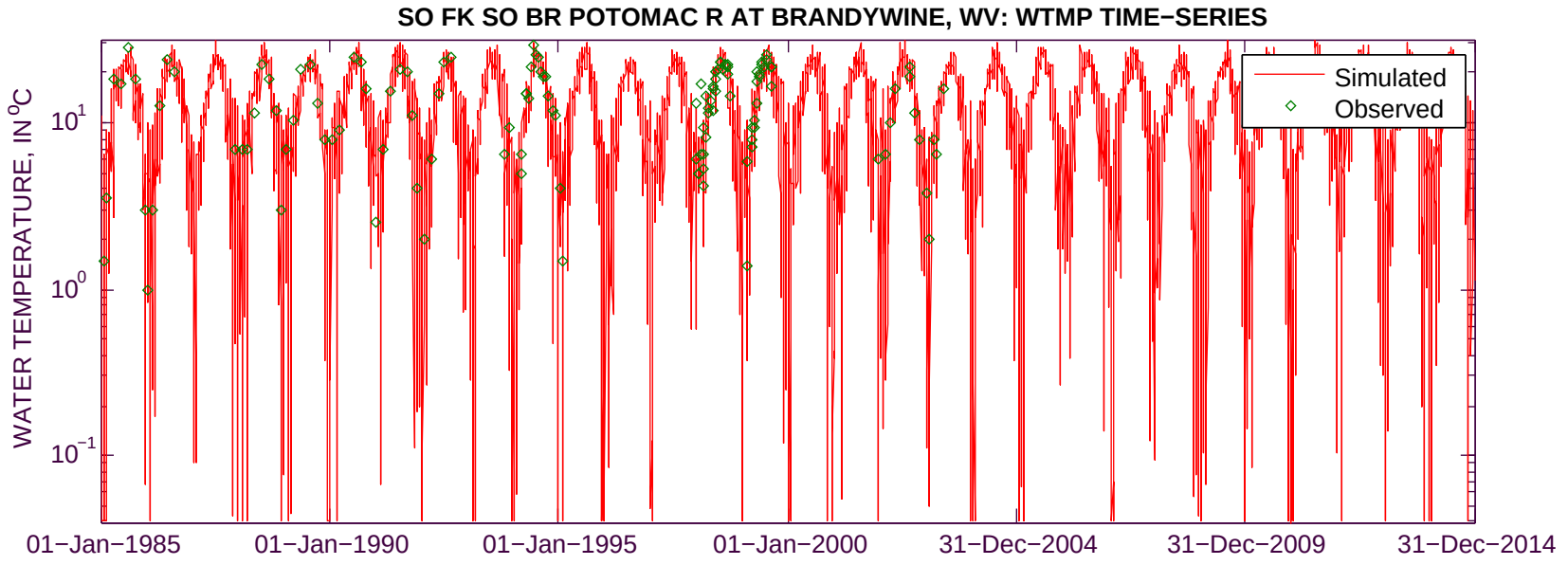
LOAD DATA
LOG10

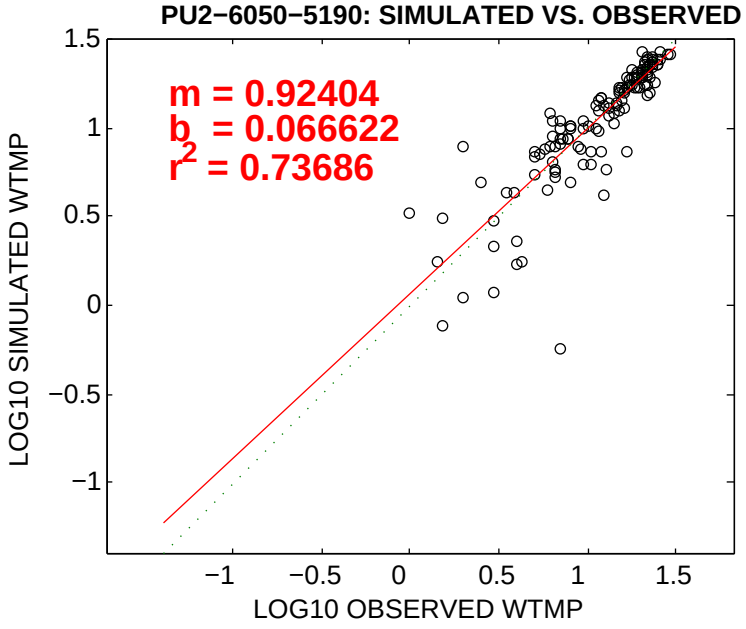


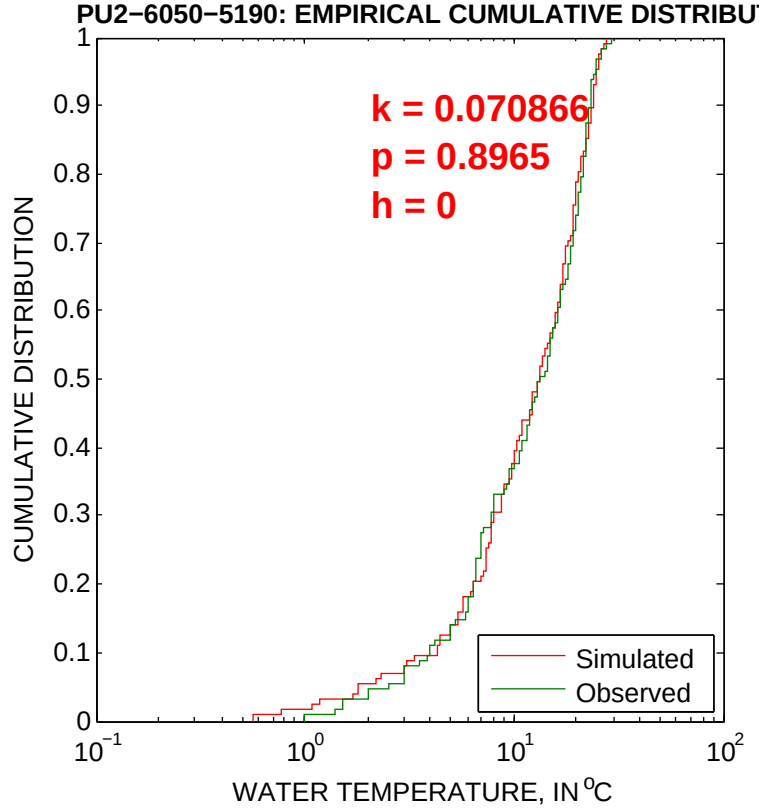












DATA SELECTION

scenario	file
P620171001WQ	WTMP.calib

plot: WTMP - water tempera...

Dates 1/1/1985 12/31/201

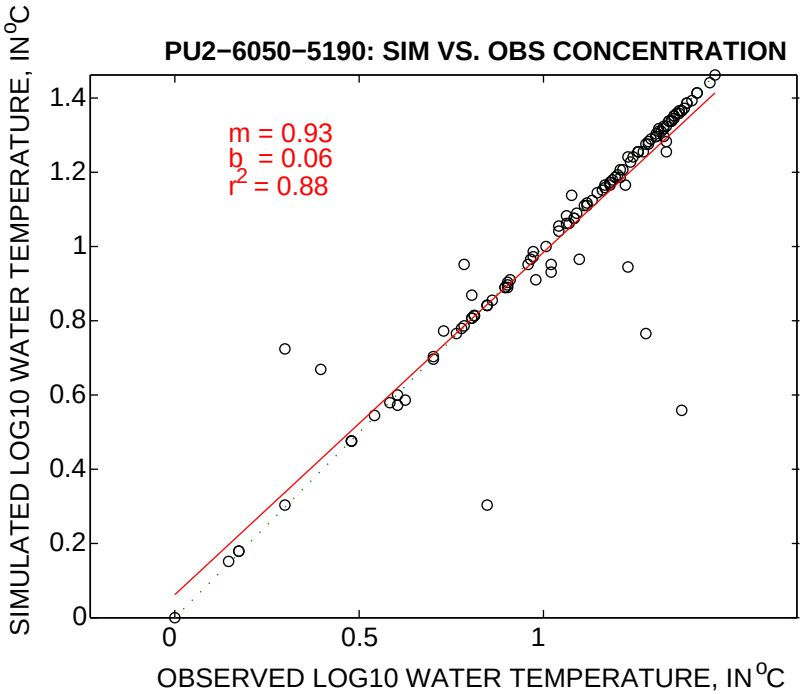
Drive	Directory	Observed
N/A	model	OBS20161101

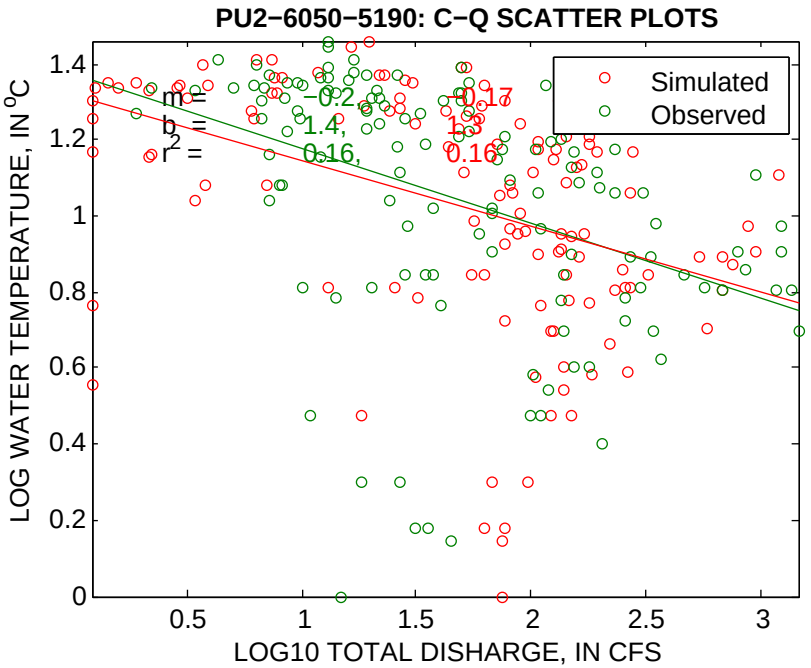
STATISTICS

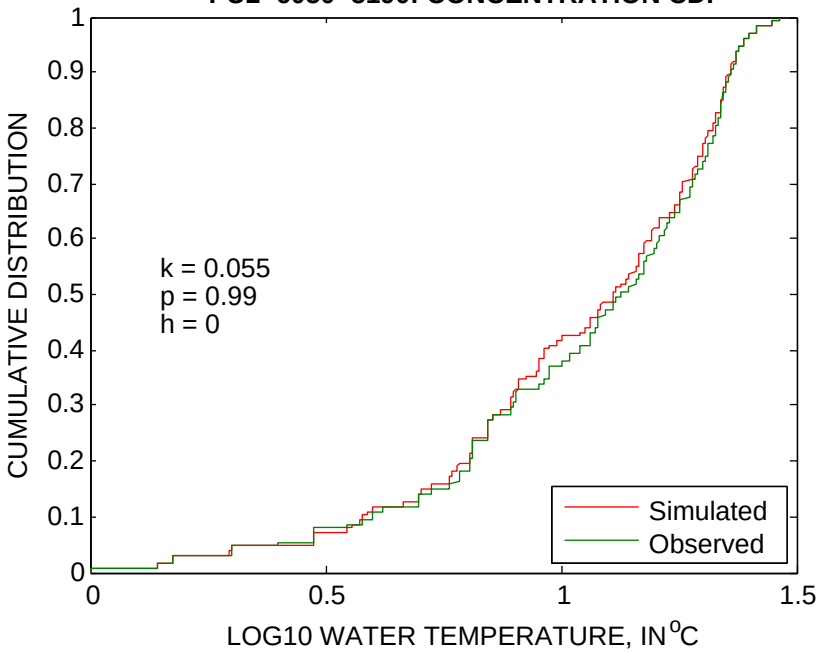
n	127	127
	observe	simulate
min	1	0.56876
	0	-0.245071
mean	13.6339	13.4678
	1.04441	1.0317
media	13.4	13.24
	1.1271	1.12189
max	29	27.421
	1.4624	1.43808
varian	53.3519	52.975
	0.101902	0.118081
JB	0.027419	0.036595
	0.001413	0.001
	ra	log
%	-1.21819	-1.21729
err.va	7.26083	0.0318233
rel.std.err	0.136093	0.312292
mod.eff	0.863907	0.687708

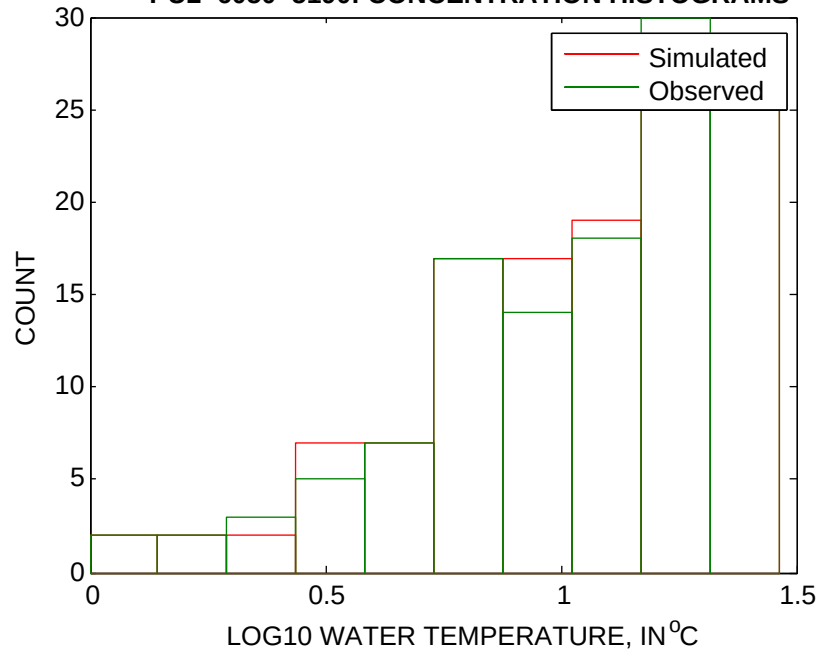
VERSION 2.1

ALL DATA
LOG10

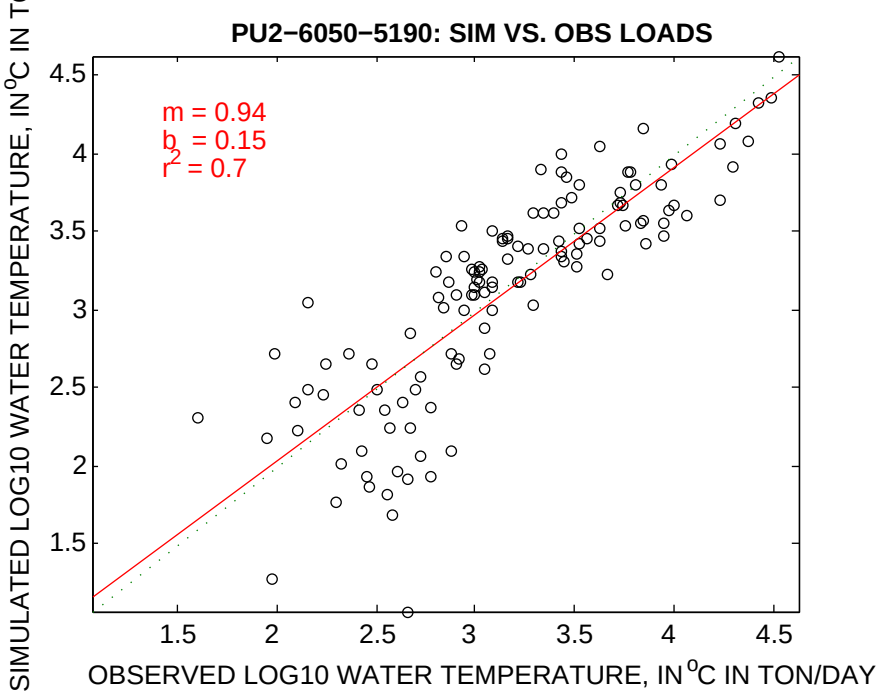


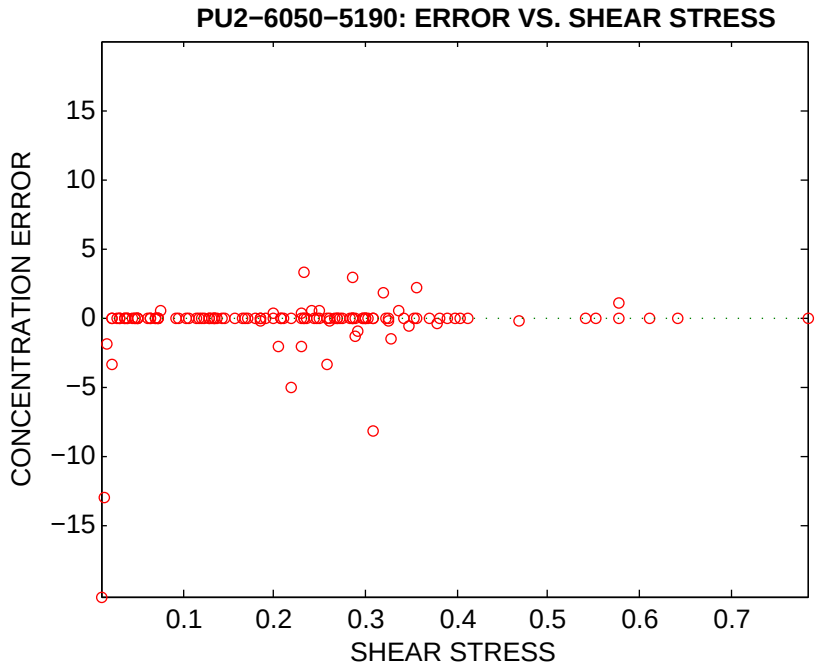


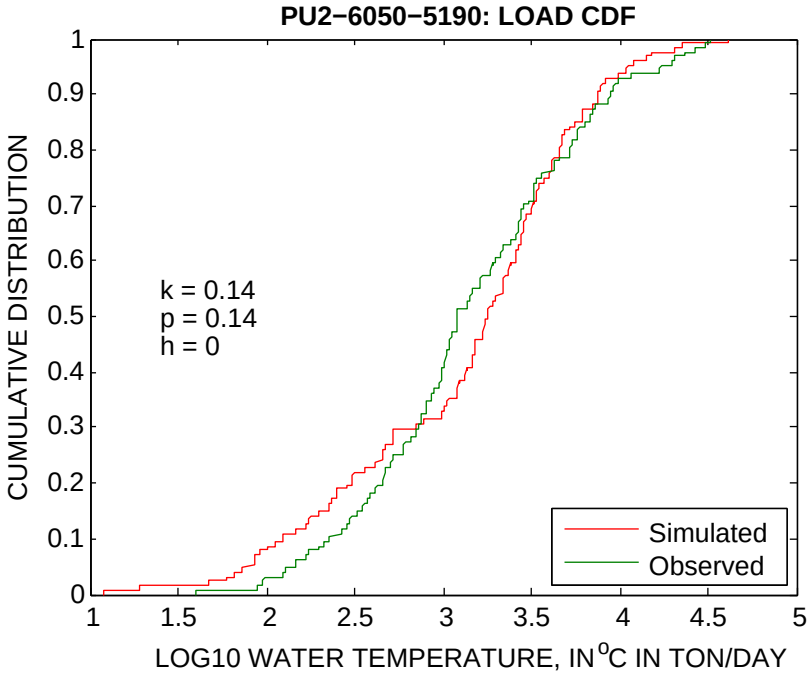


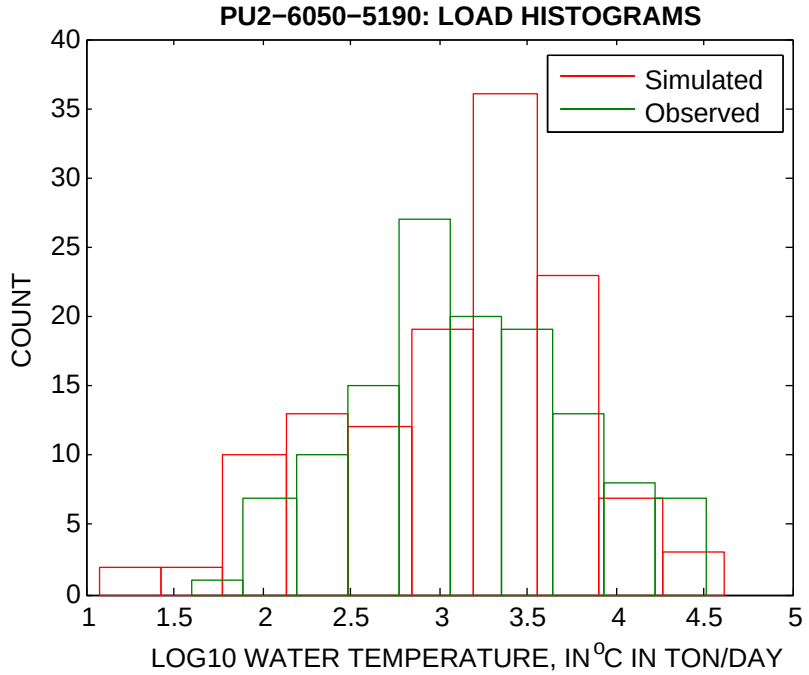


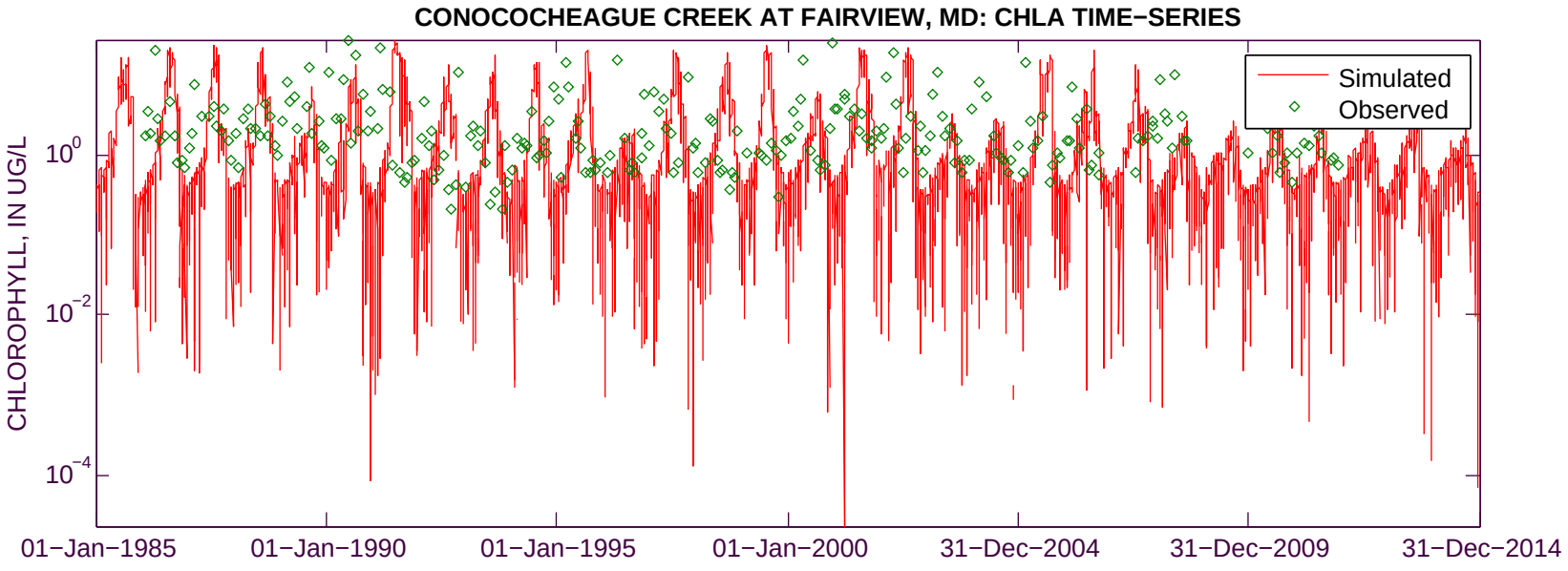
LOAD DATA
LOG10

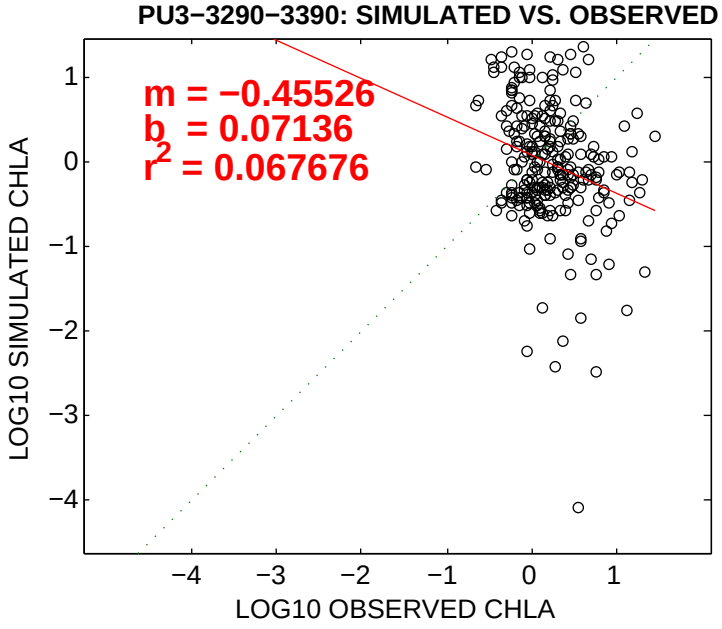


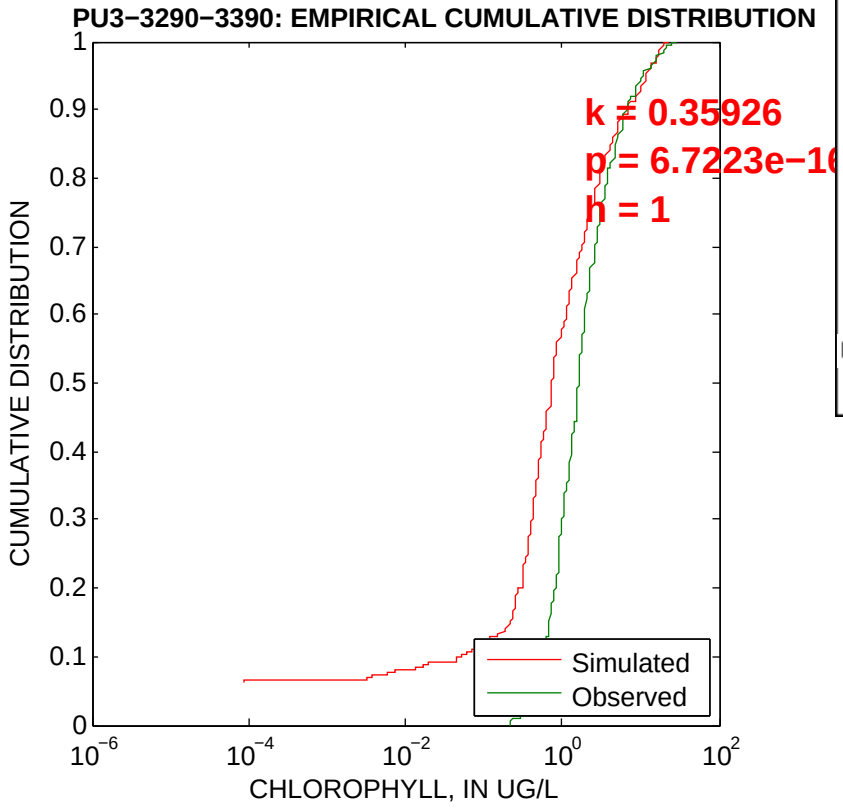












DATA SELECTION

scenario	file
P620171001WQ	CHLA.calib

plot: CHLA - chlorophyll A

Dates: 1/1/1985 – 12/31/201

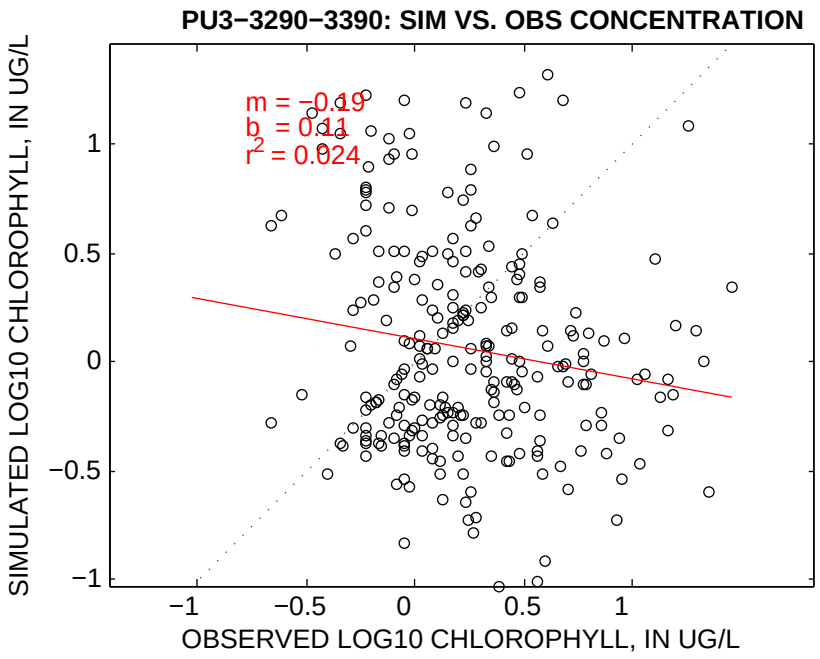
Drive	Directory	Observed
N/A	model	OBS20161101

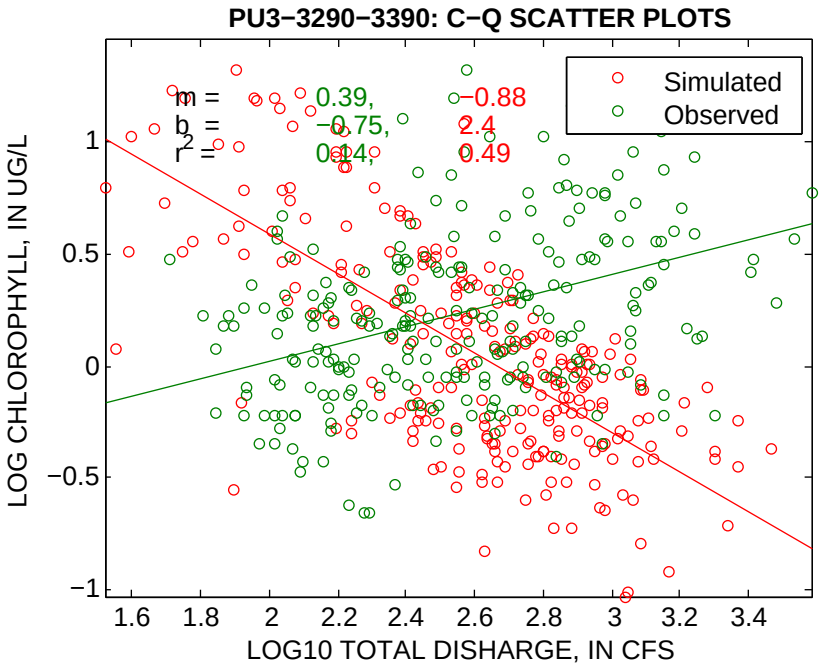
STATISTICS

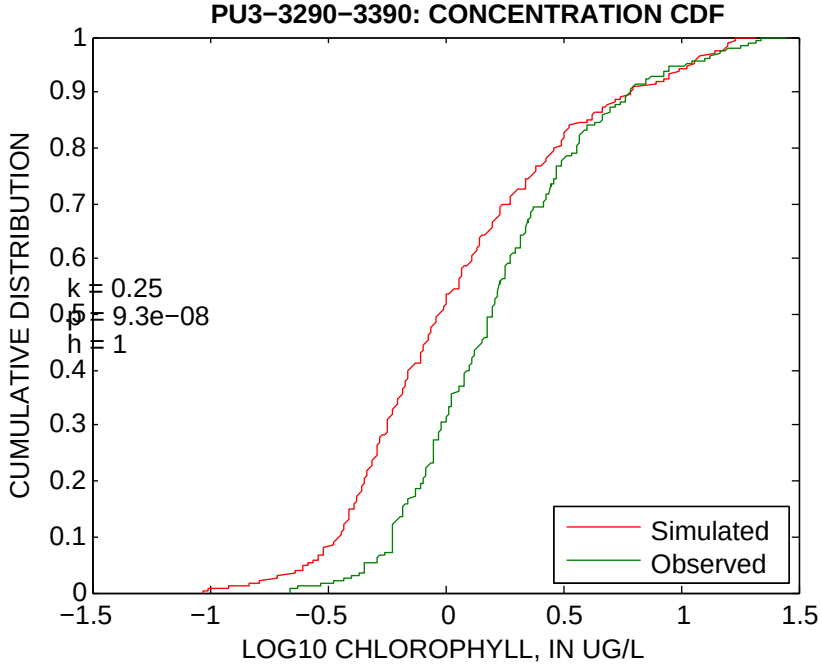
	n	270	253
		observe	simulate
min		0.22	0
		-0.657577	-4.06793
mean		3.00314	2.3765
		0.236041	-0.0360995
media		1.64	0.748275
		0.176091	-0.0970566
max		28.4	22.686
		1.45332	1.35576
varian		16.3821	16.1075
		0.163045	0.499332
JB		0.001	0.001
		0.005396	0.001
		ra	log
%		-20.8662	-115.294
err.va		37.8534	0.885186
rel.std.err		2.31065	5.4291
mod.eff		-1.31065	-4.4291

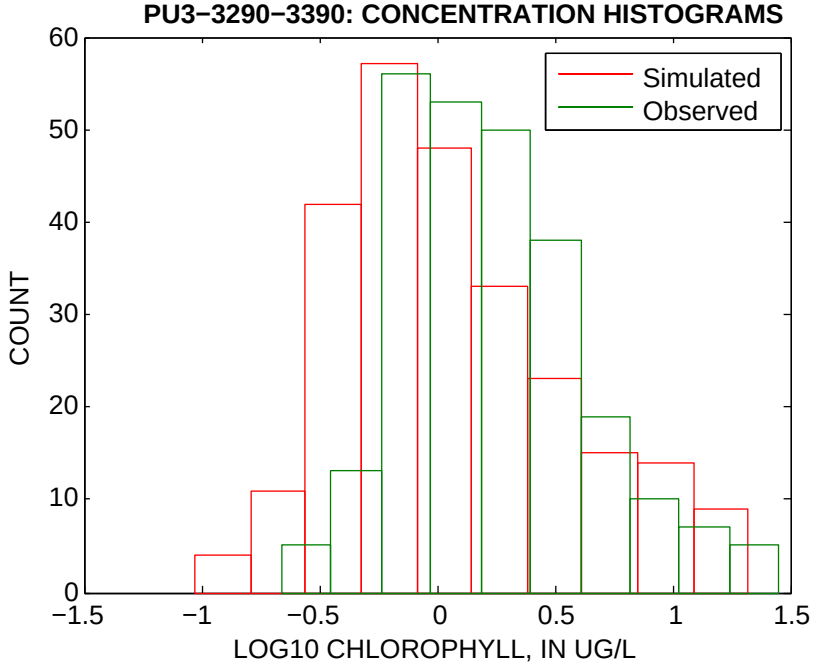
VERSION 2.1

ALL DATA
LOG10

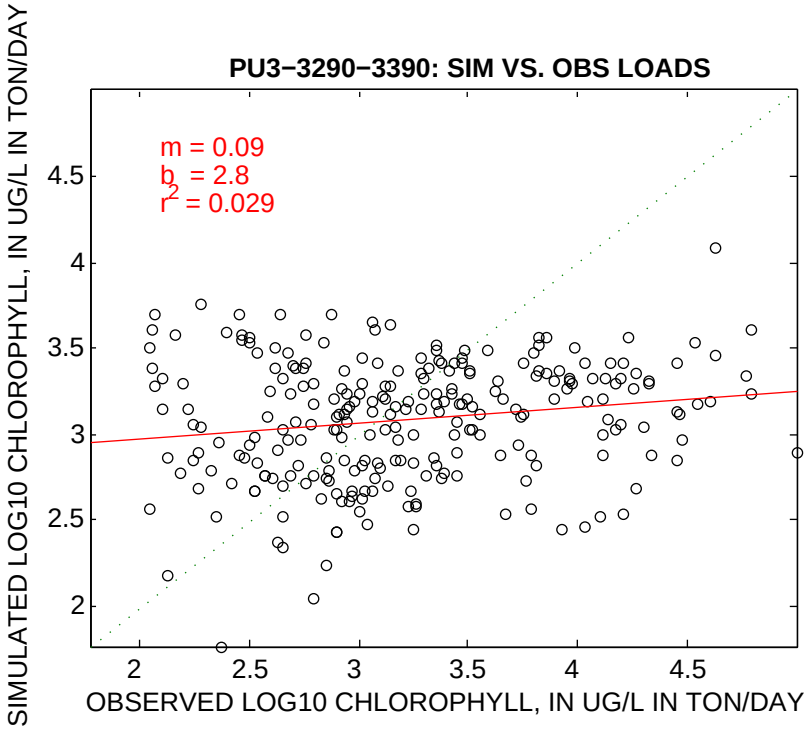


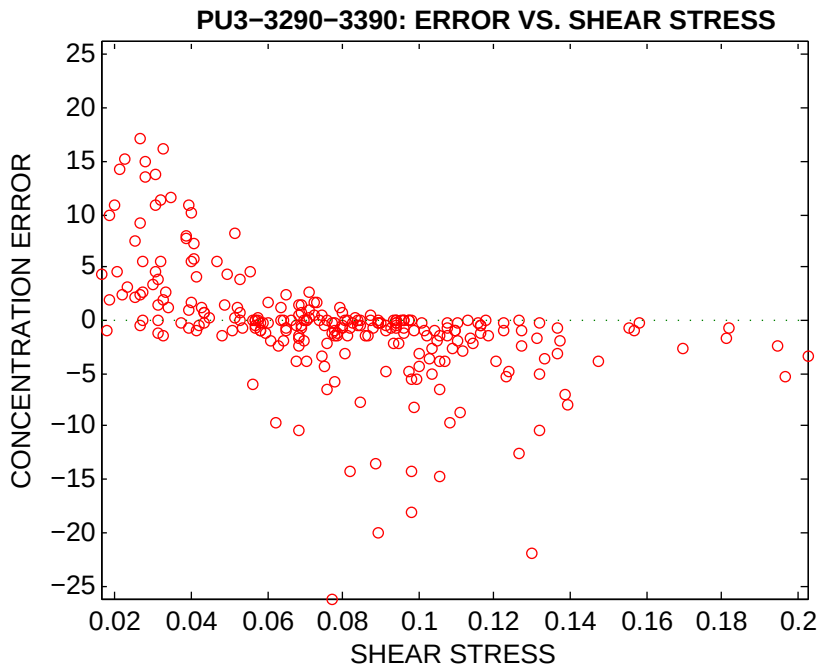


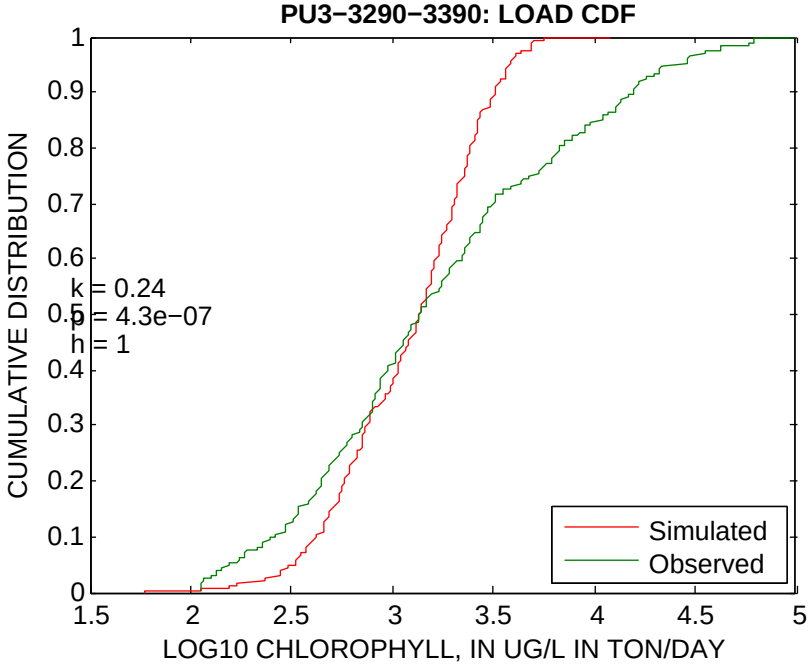


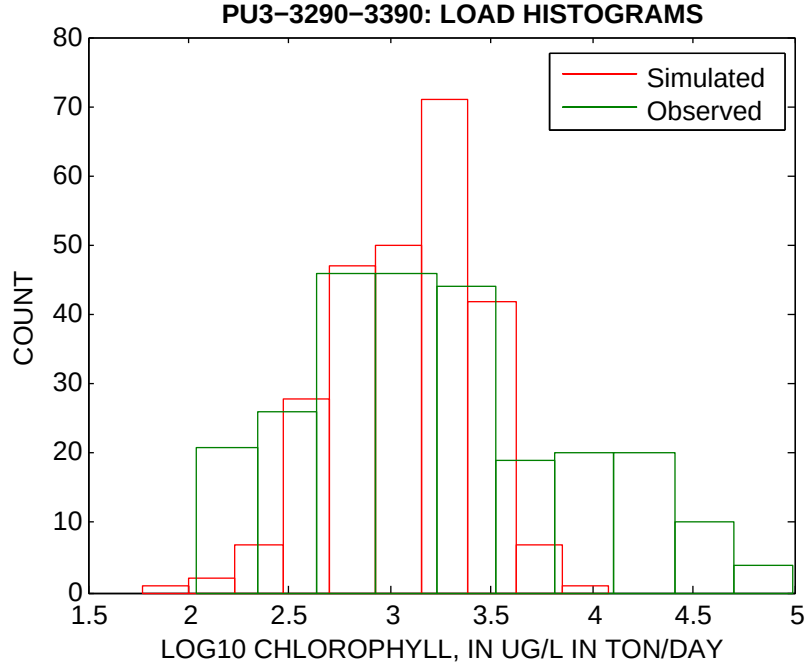


LOAD DATA
LOG10

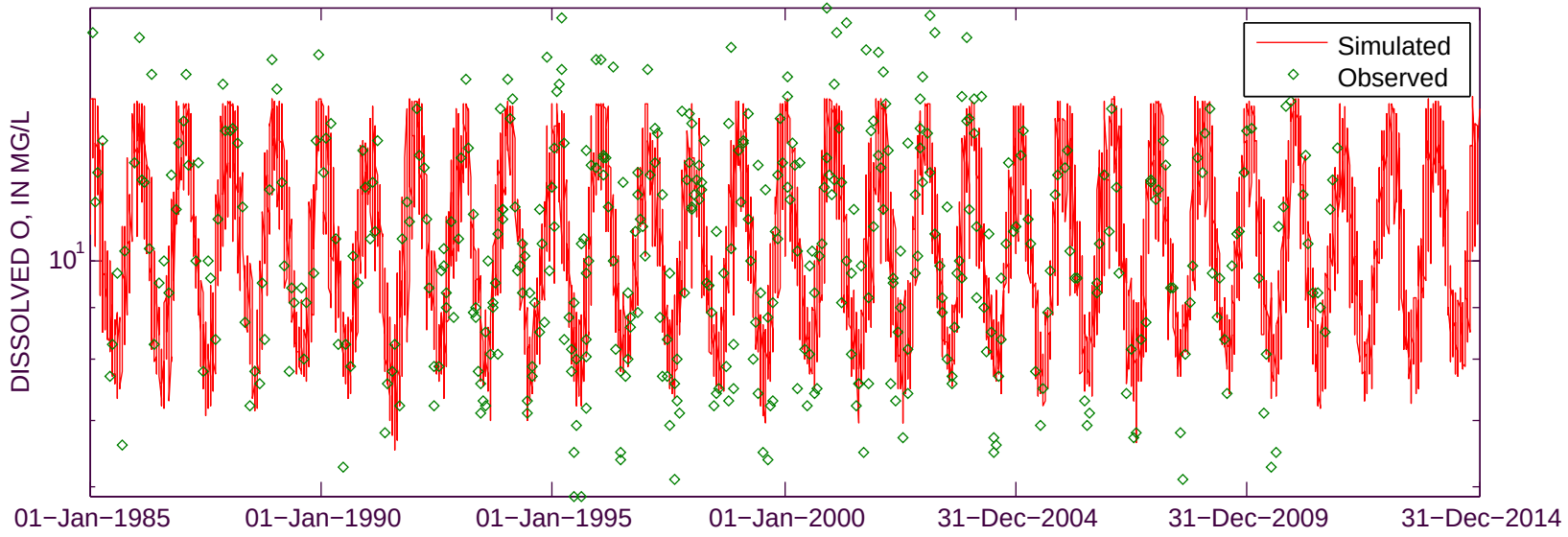




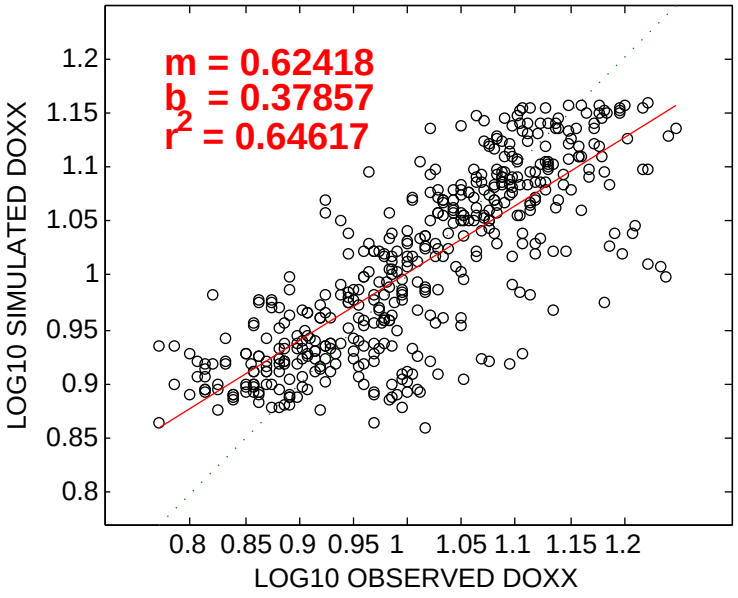




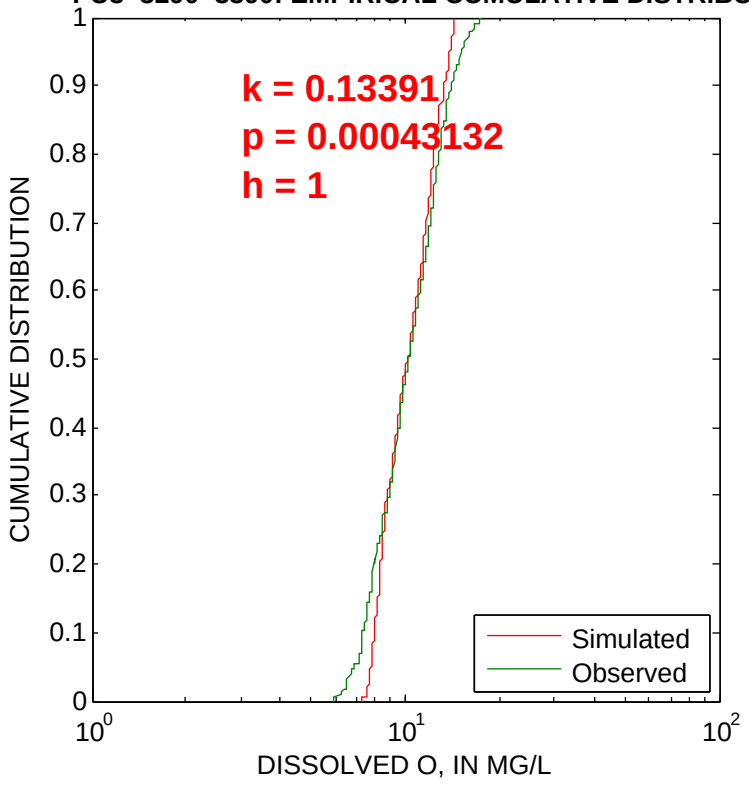
CONOCOCHEAGUE CREEK AT FAIRVIEW, MD: DOXX TIME-SERIES



PU3-3290-3390: SIMULATED VS. OBSERVED



PU3-3290-3390: EMPIRICAL CUMULATIVE DISTRIBUTION



DATA SELECTION

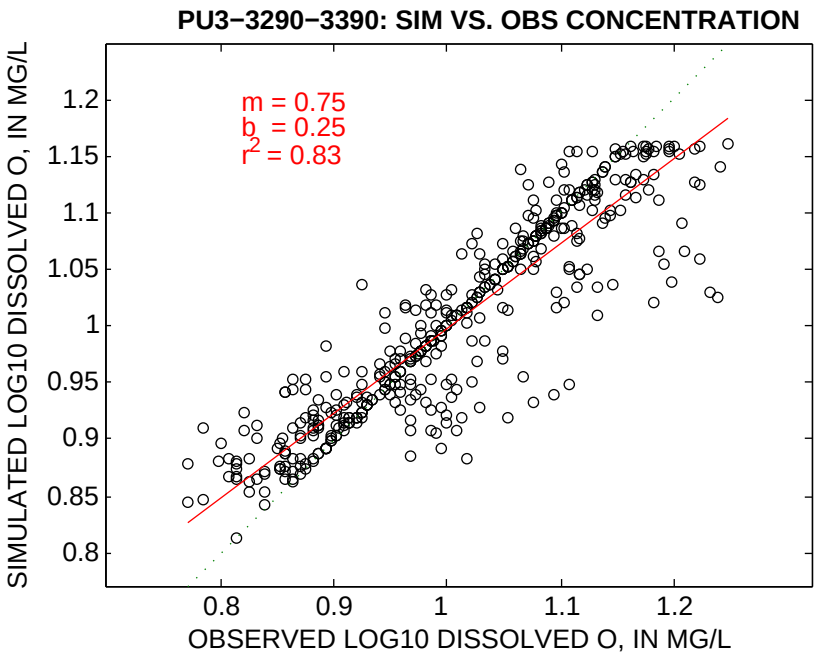
scenario: P620171001WQ
file: DOXX.calib
plot: DOXX - dissolved oxygen
Dates: 1/1/1985 12/31/201
Drive: N/A
Directory: model
Observed: OBS20161101

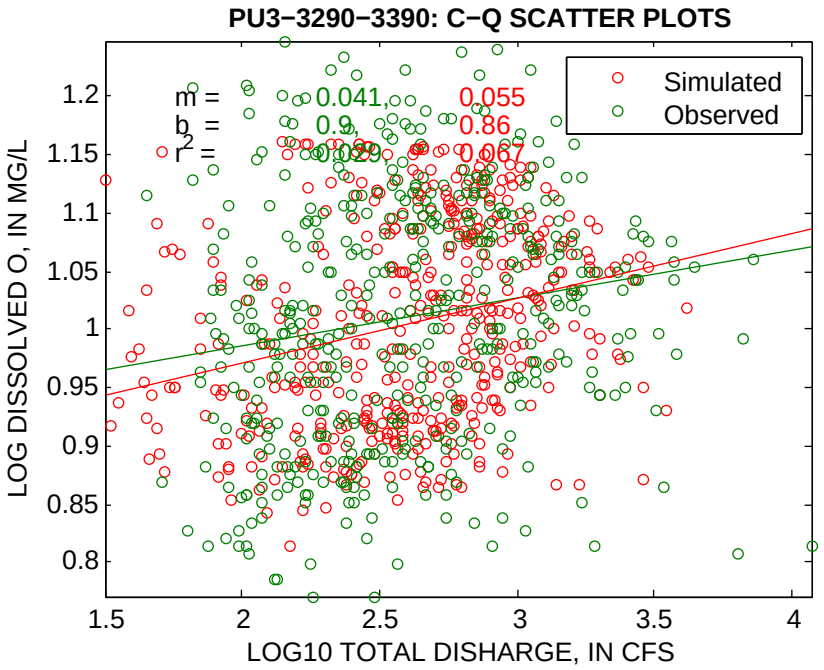
STATISTICS

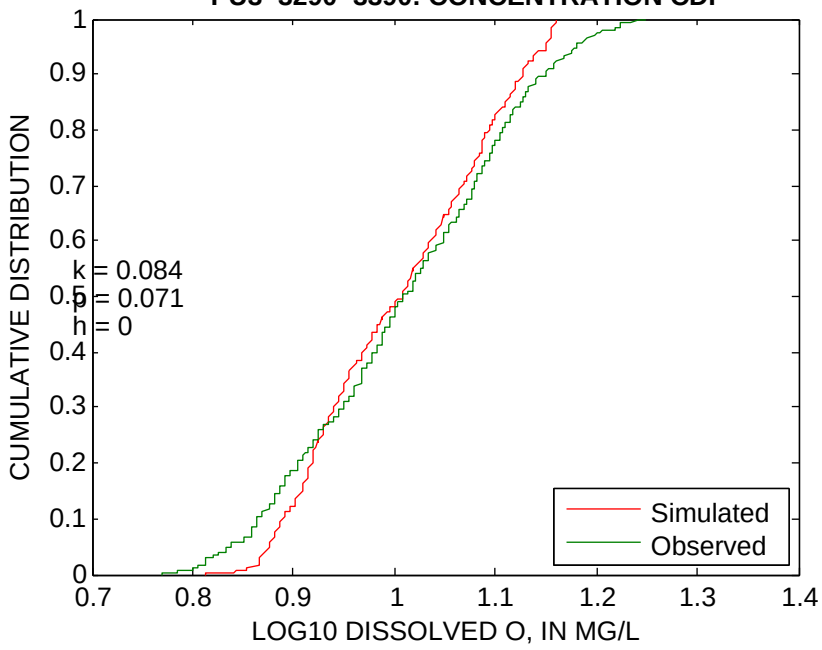
n	463	463
	observe	simulate
min	5.9	7.2367
	0.770852	0.859541
mean	10.5437	10.3966
	1.01007	1.00903
media	10.2	10.182
	1.0086	1.00783
max	17.7	14.399
	1.24797	1.15833
varian	6.63062	3.95221
	0.0113199	0.00682505
JB	0.001880	0.001
	0.005991	0.001
	ra	log
%	-1.39473	-0.103175
err.va	2.46268	0.00401484
rel.std.err	0.37141	0.354671
mod.eff	0.62859	0.645329

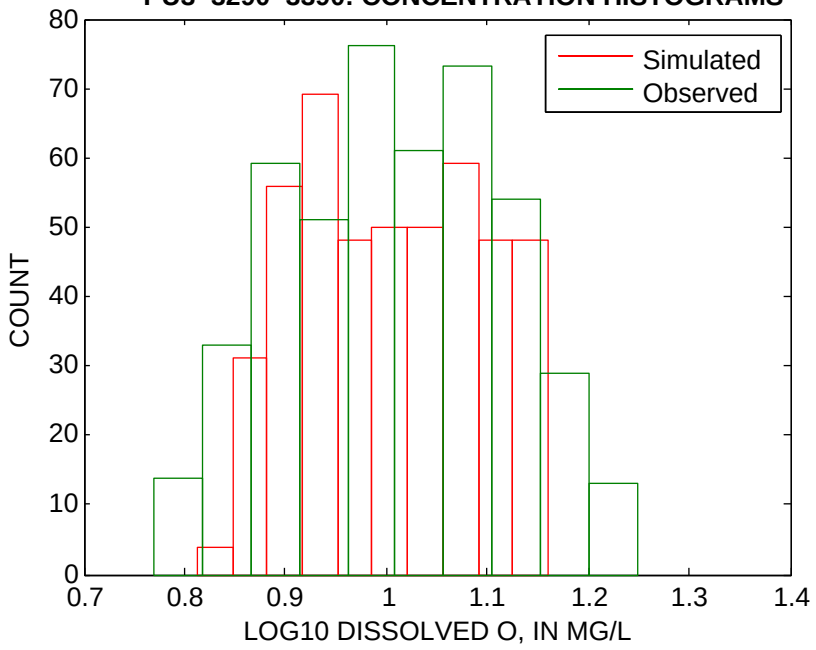
VERSION 3.1

ALL DATA
LOG10

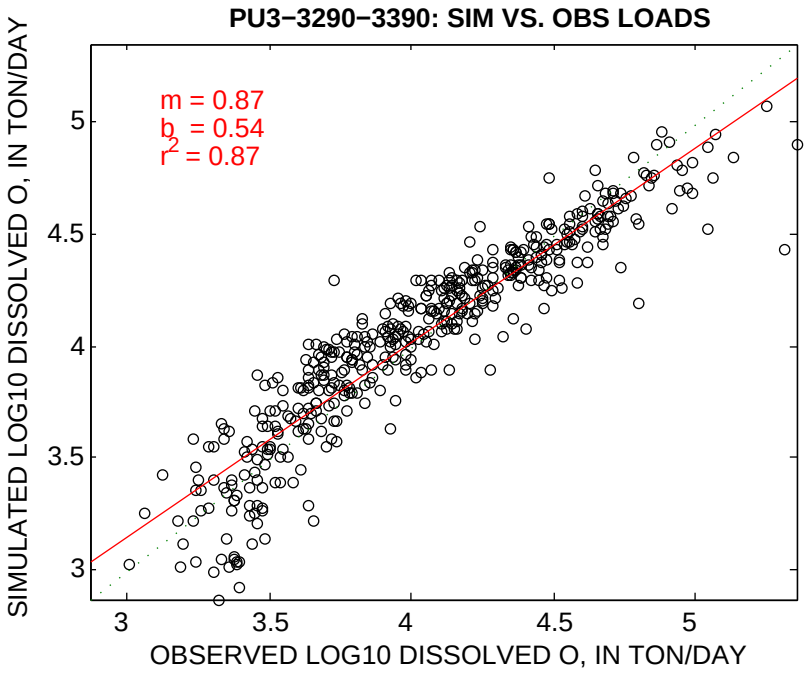


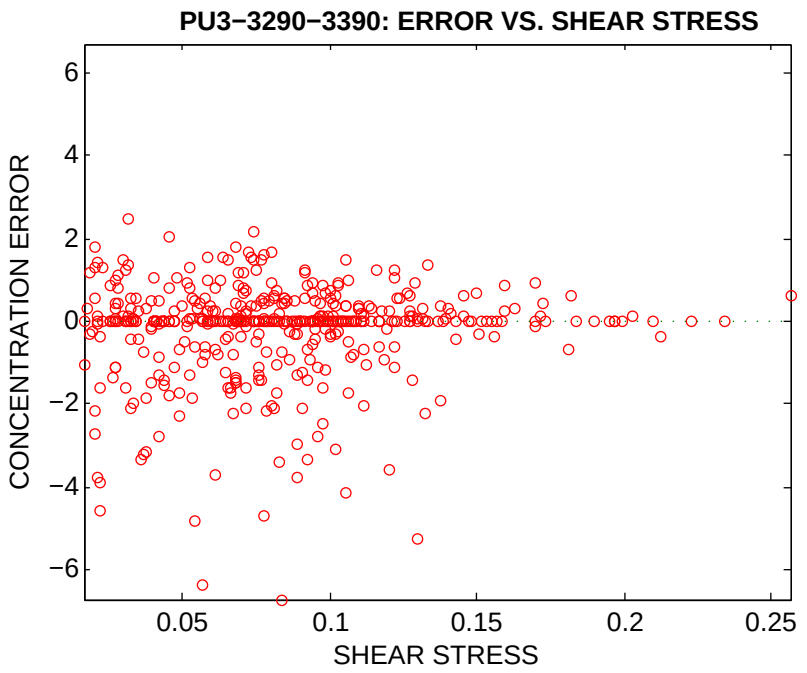


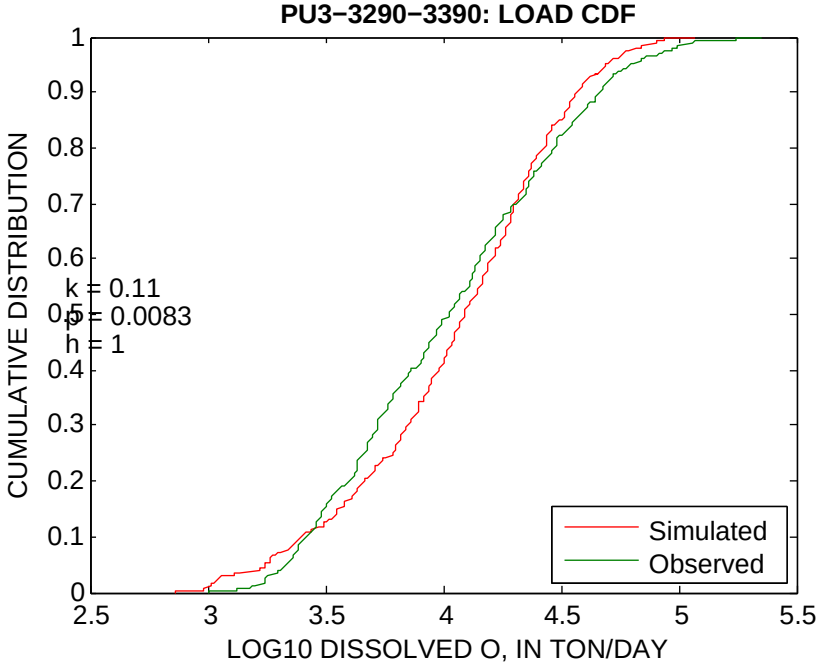


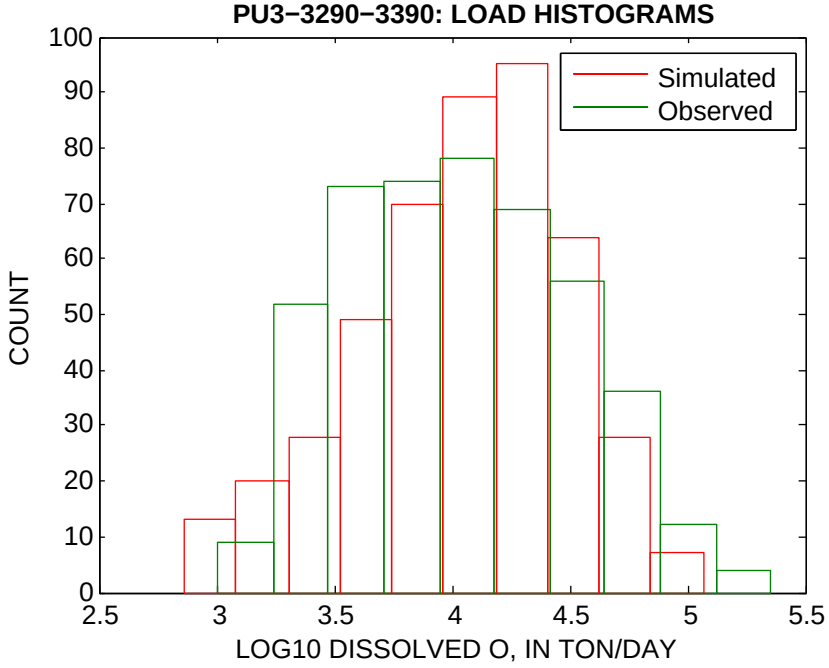


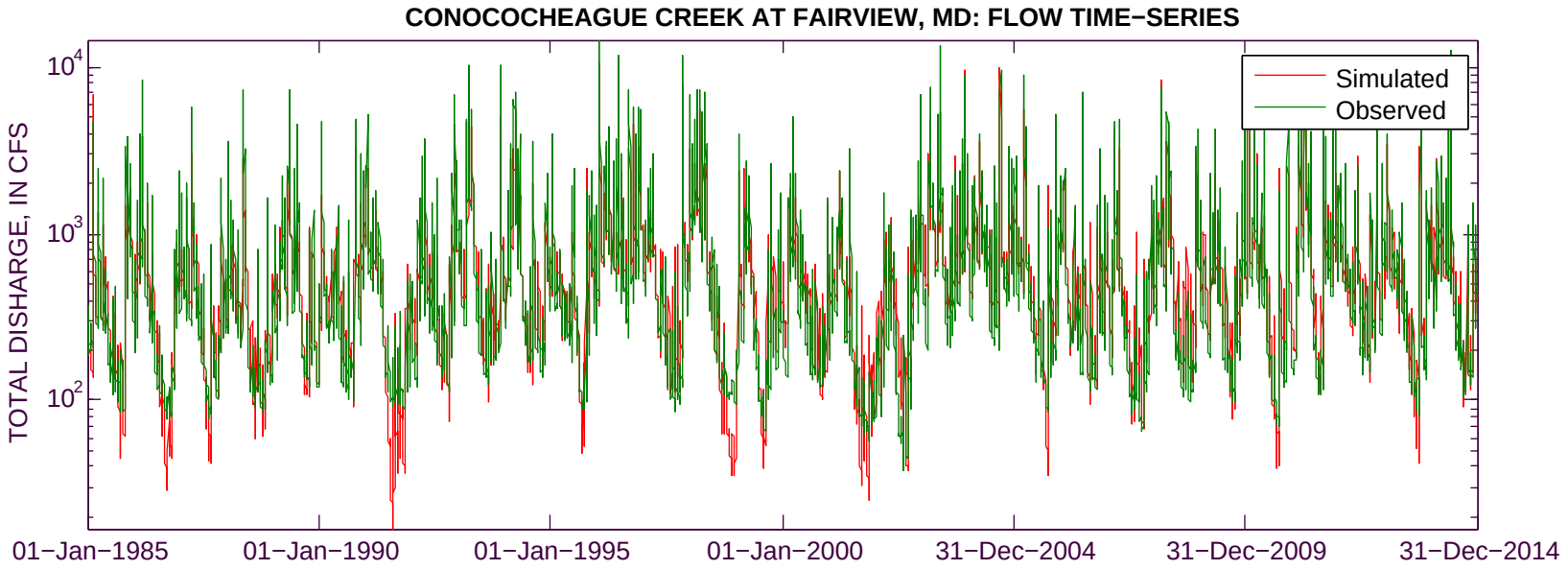
LOAD DATA
LOG10

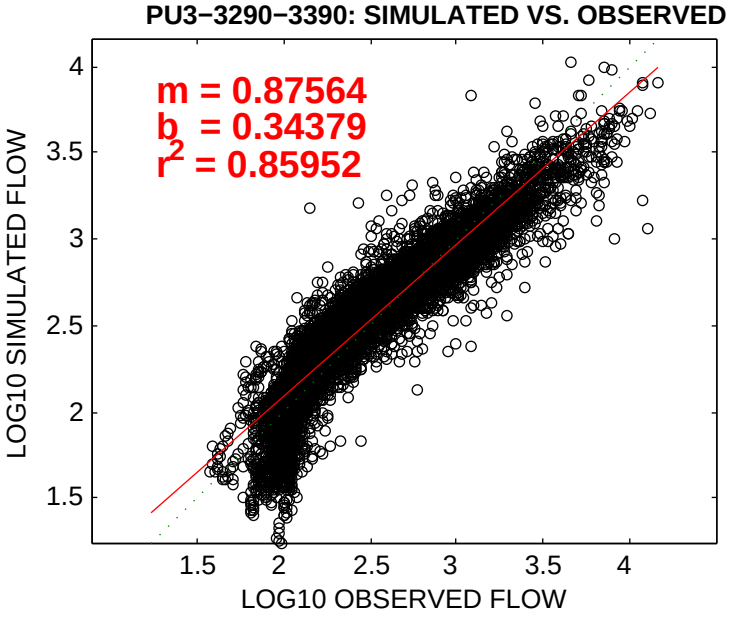


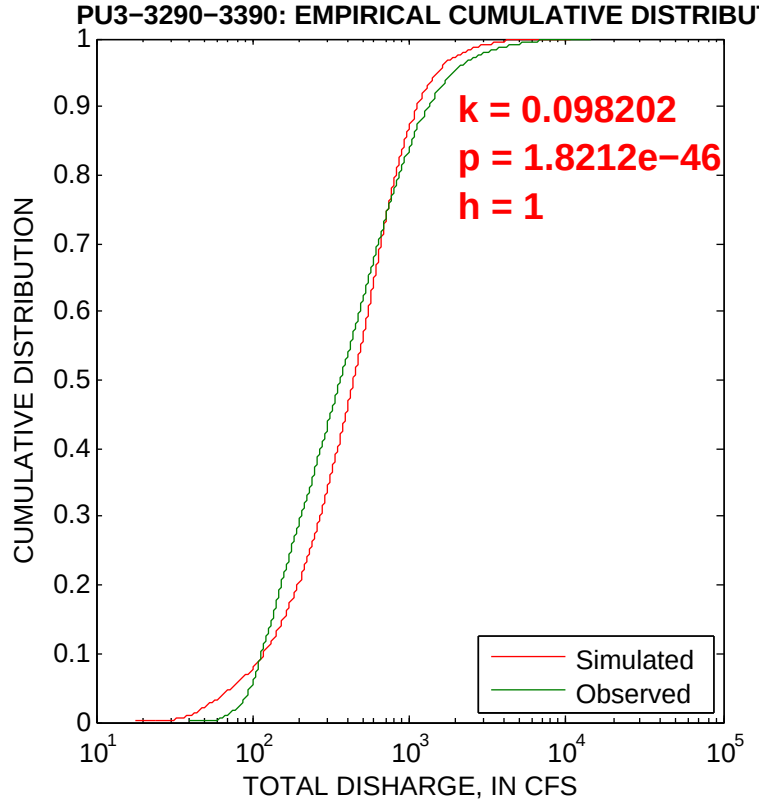












DATA SELECTION

scenario	file
P620171001WQ	FLOW.calib

plot: FLOW - total discharge

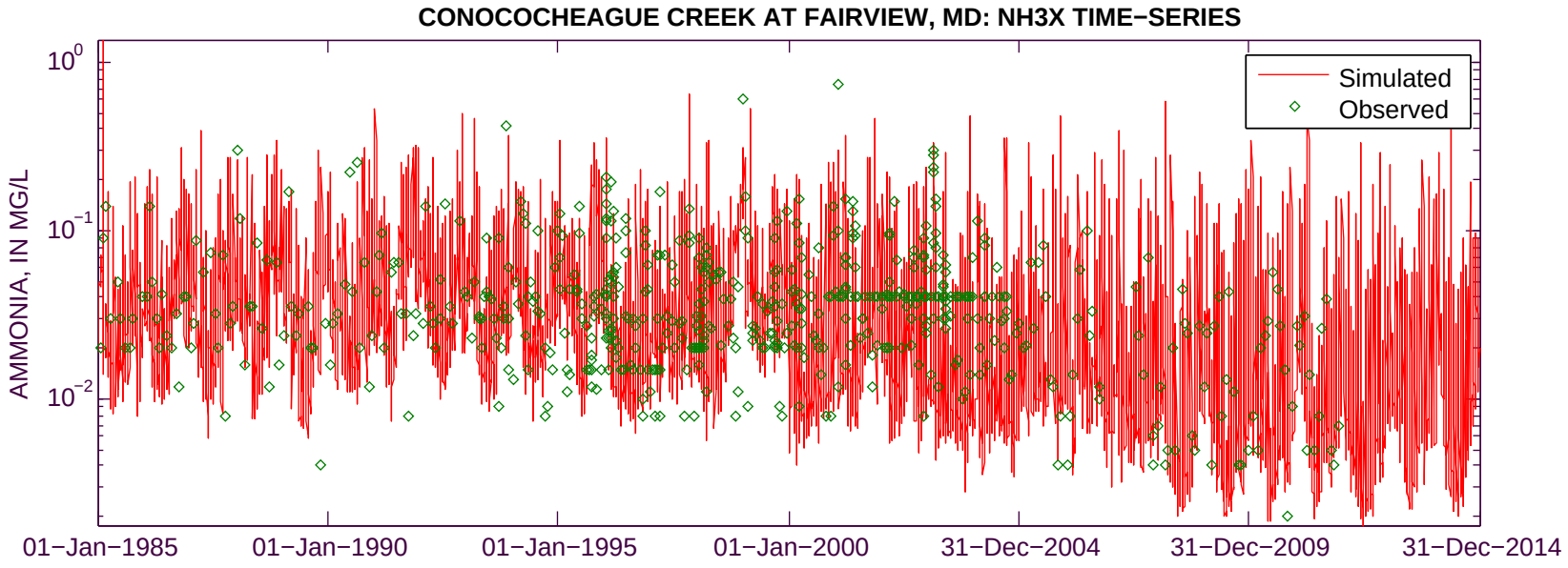
Dates: 1/1/1985 – 12/31/201

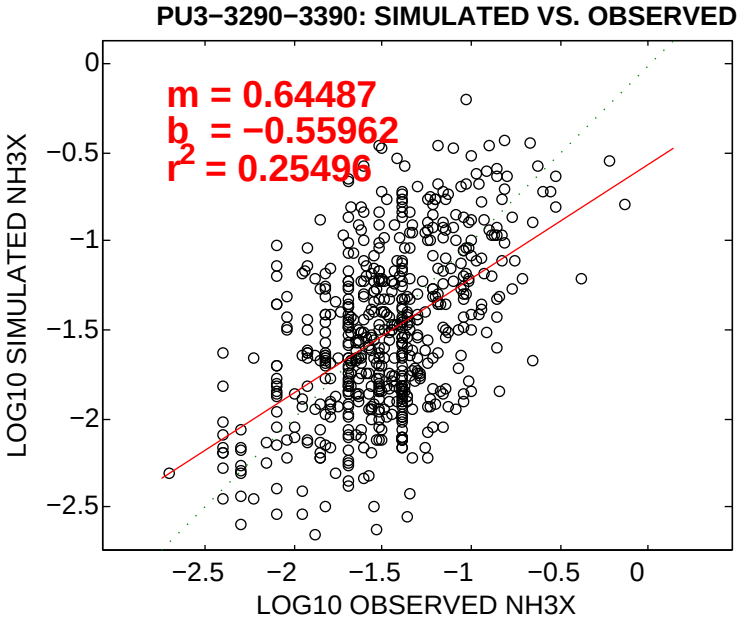
Drive	Directory	Observed
N/A	model	OBS20161101

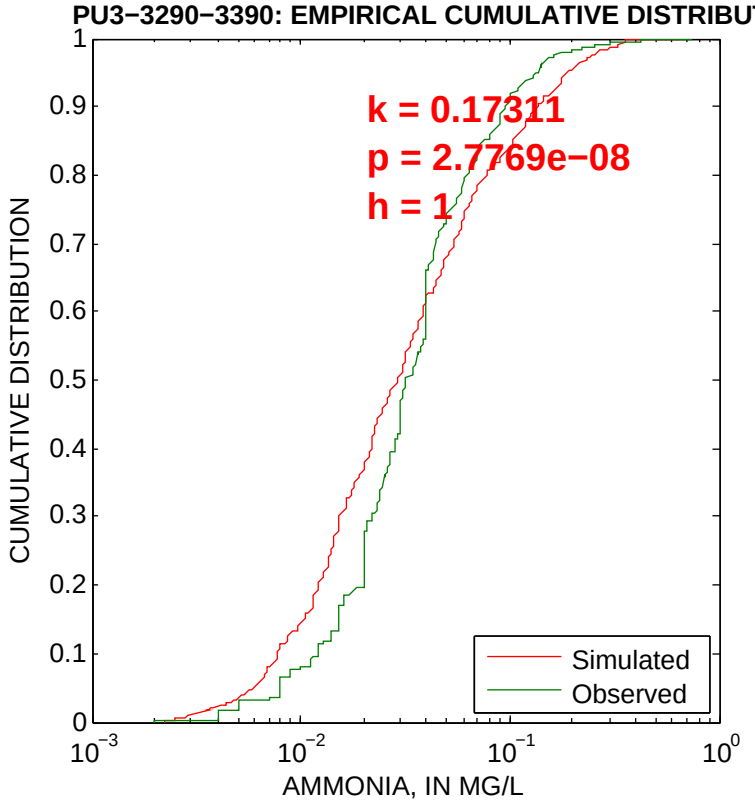
STATISTICS

	n	observe	simulate
		10957	10957
min		38	17.127
		1.57978	1.23368
mean		630.574	584.448
		2.5819	2.6046
media		363	443.64
		2.55991	2.64703
max		14600	10490
		4.16435	4.02078
varian		789788	363054
		0.170743	0.152313
JB		0.001	0.001
		0.001	0.001
		ra	log
%		-7.31497	0.879098
err.va		219705	0.0245534
rel.std.err		0.278183	0.143803
mod.eff		0.721817	0.856197

VERSION







DATA SELECTION

scenario: P620171001WQ | file: NH3X.calib

plot: NH3X - ammonia

Dates: 1/1/1985 – 12/31/201

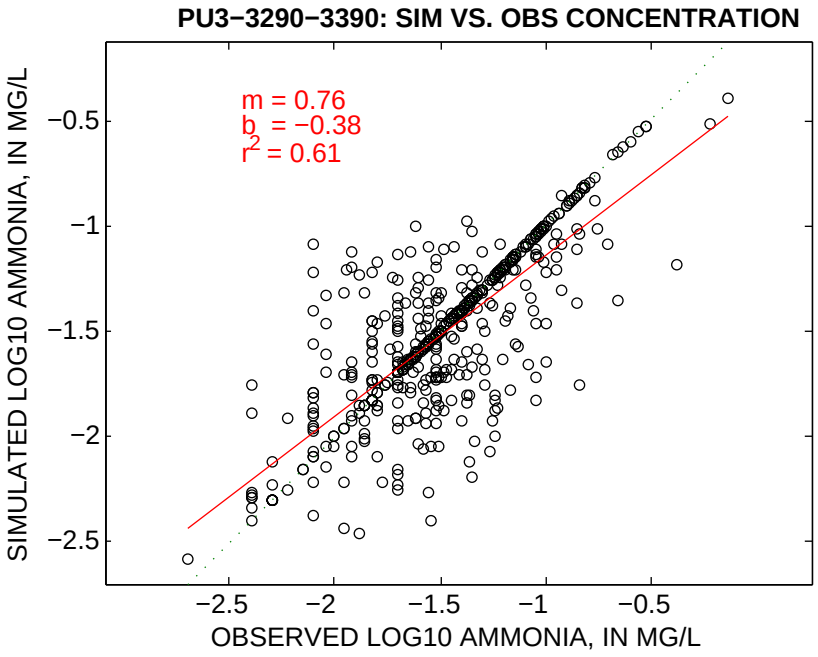
Drive: N/A | Directory: model | Observed: OBS20161101

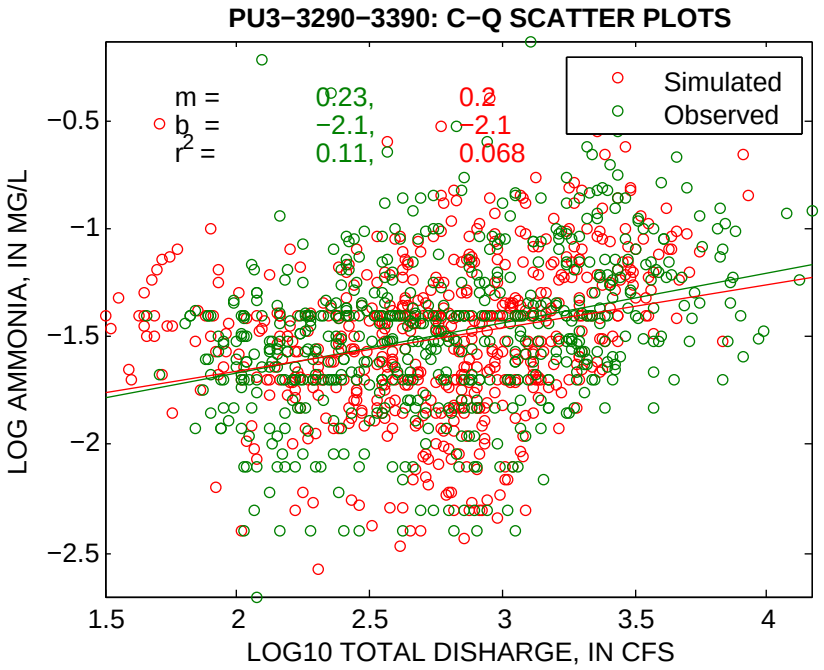
STATISTICS

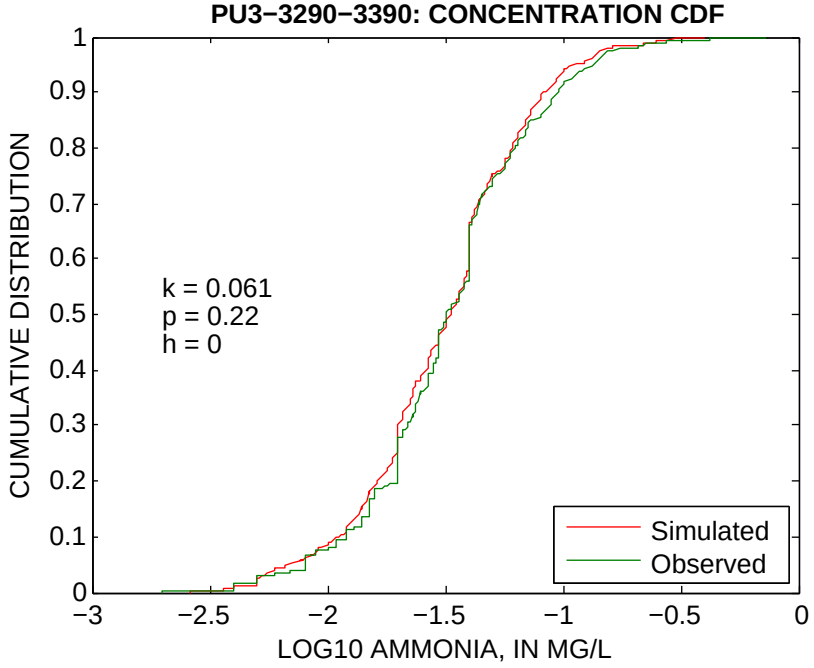
	observe	simulate
n	595	595
min	0.002 -2.69897	0.0022177 -2.6541
mean	0.0475223 -1.48265	0.0540468 -1.51573
media	0.032 -1.49485	0.028856 -1.53976
max	0.74 -0.130768	0.64068 -0.193359
varian	0.00327089 0.131977	0.00462239 0.215261
JB	0.001 0.007355	0.001 0.020029
	ra	log
%	13.7295	2.23126
err.va	0.00471477	0.178119
rel.std.err	1.44143	1.34963
mod.eff	-0.441434	-0.349628

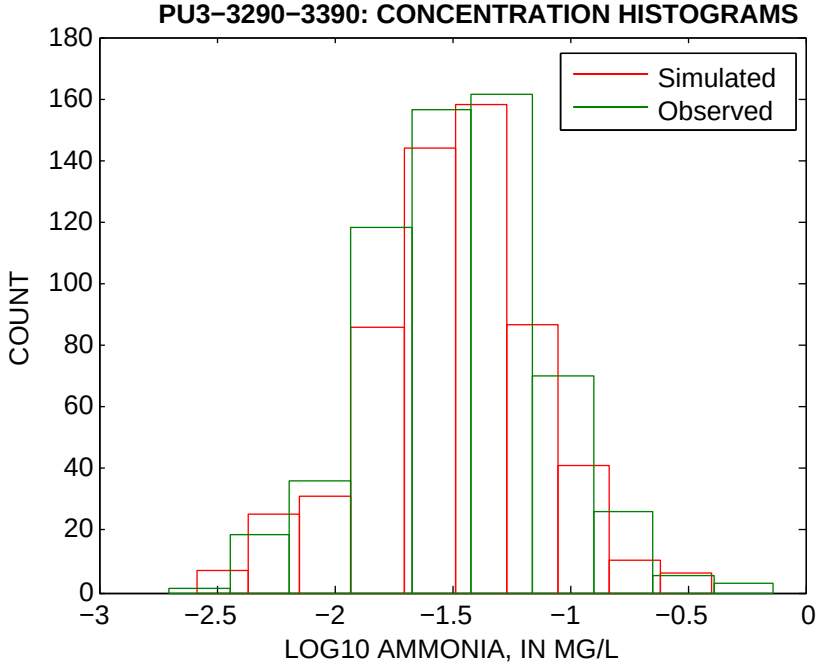
VERSION 2.1

ALL DATA
LOG10

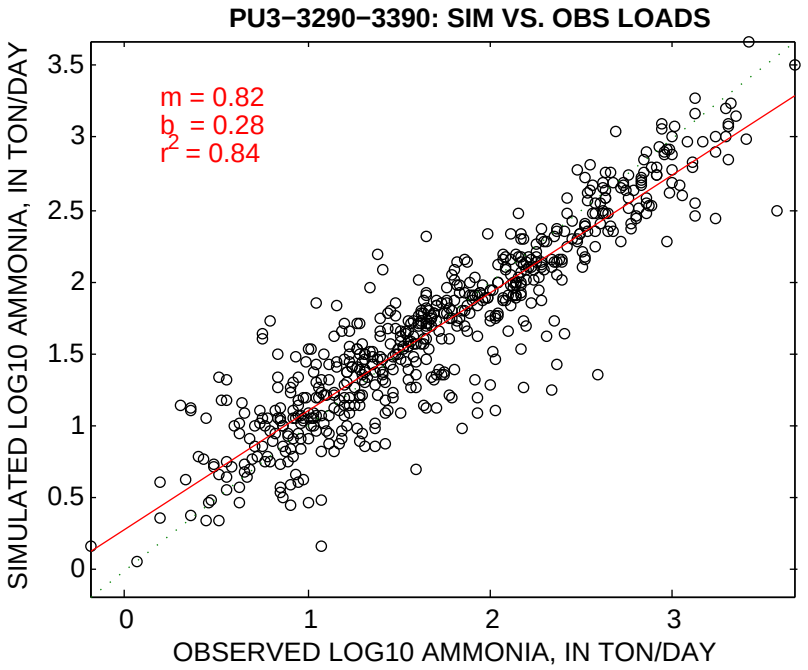


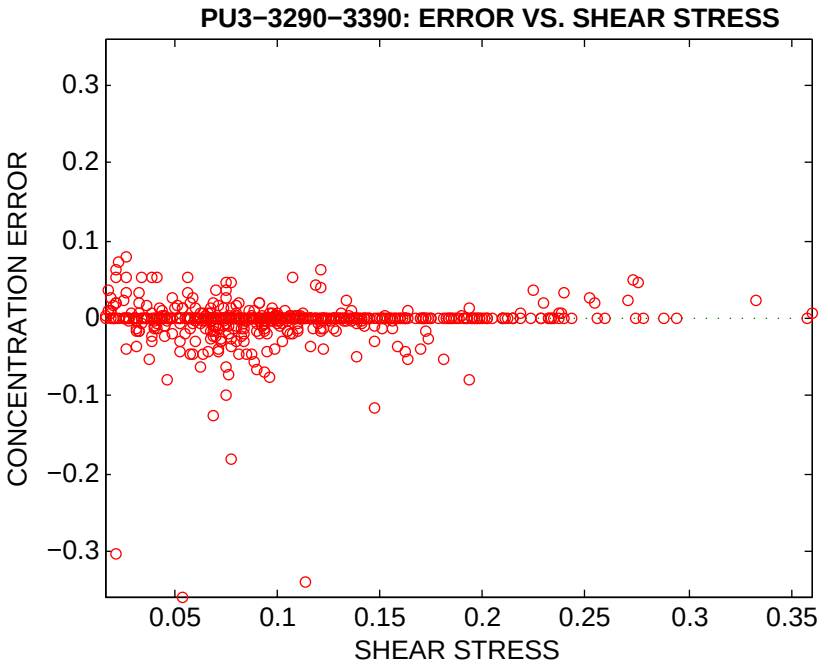


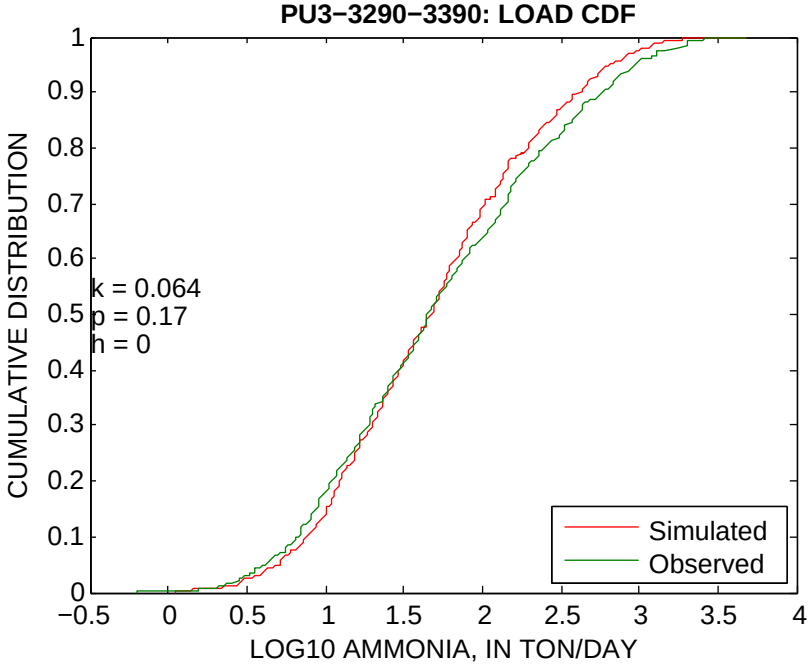


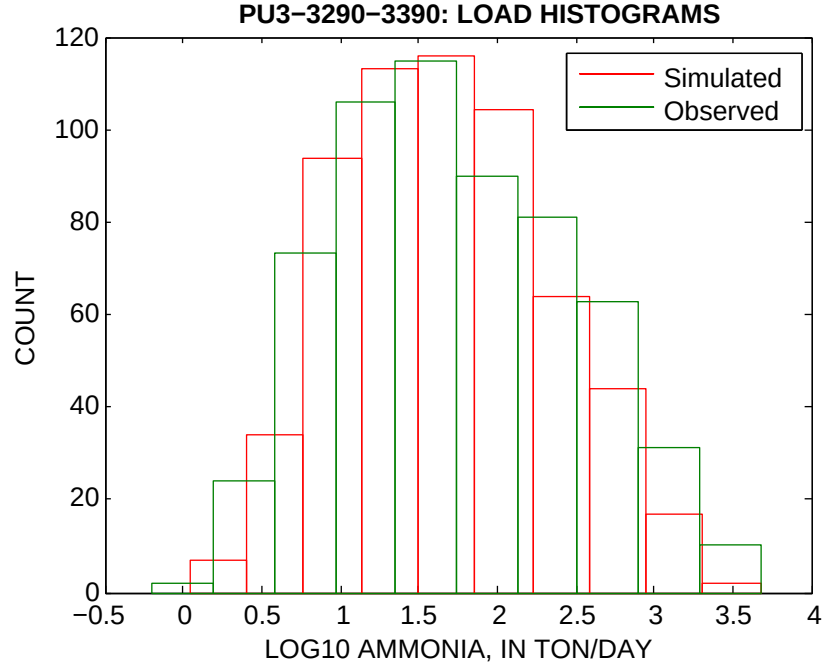


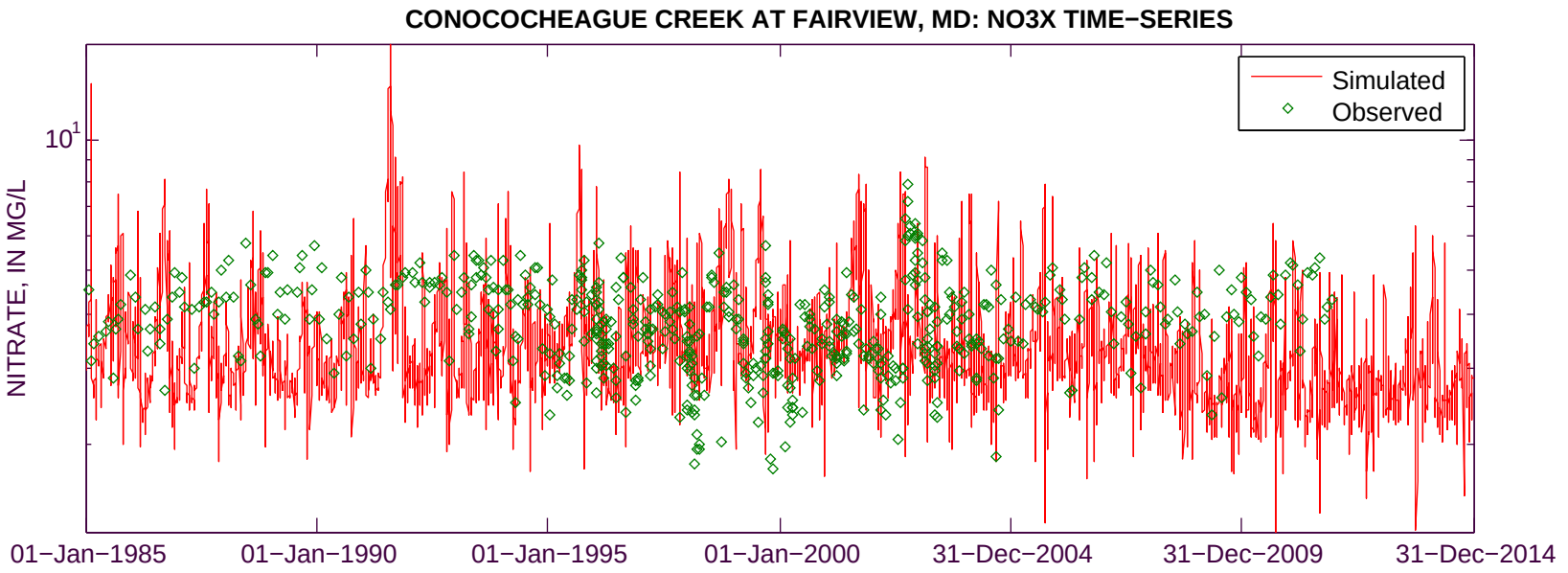
LOAD DATA
LOG10

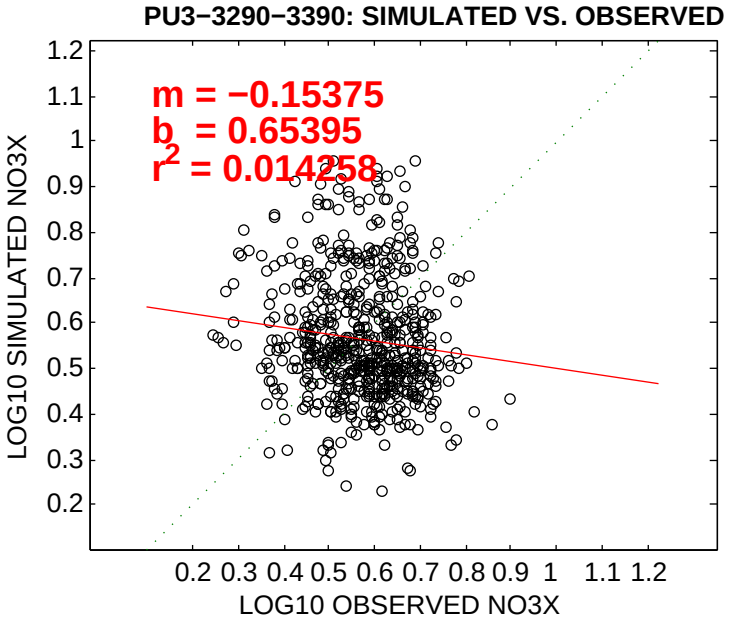


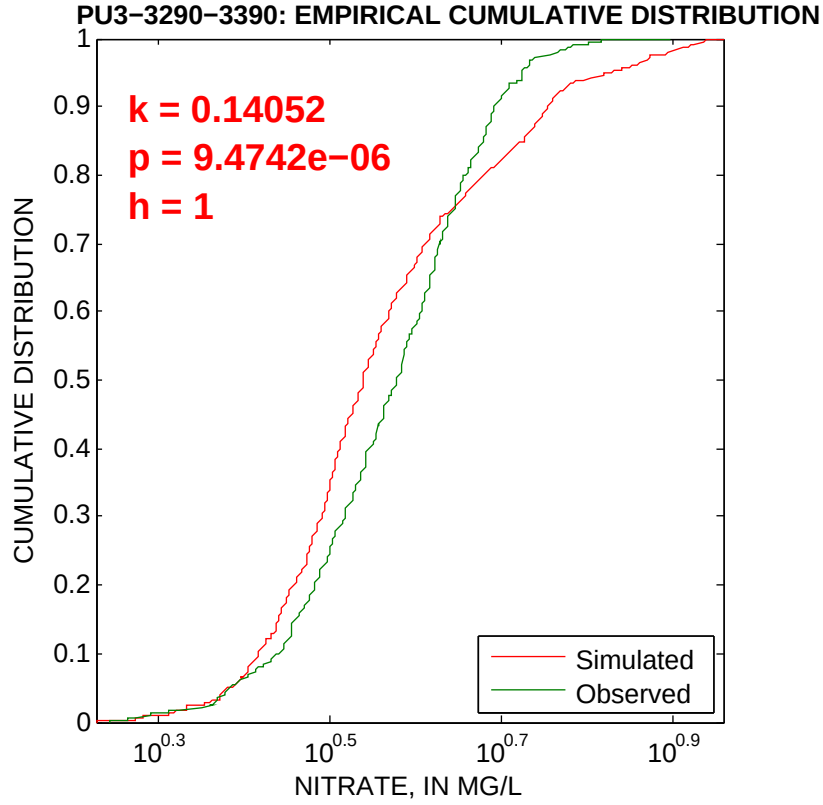












DATA SELECTION

scenario	file
P620171001WQ	NO3X.calib

plot: NO3X - nitrate

Dates: 1/1/1985 – 12/31/201

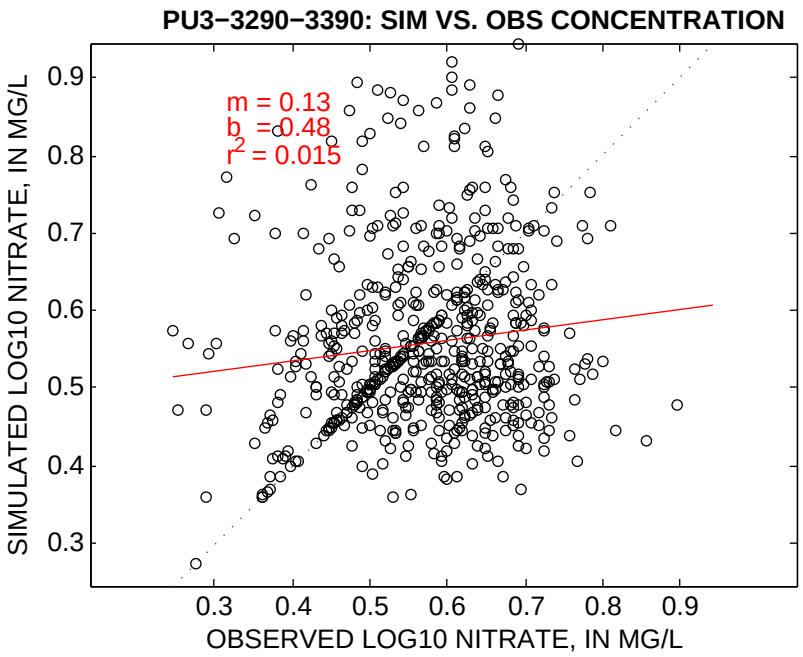
Drive	Directory	Observed
N/A	model	OBS20161101

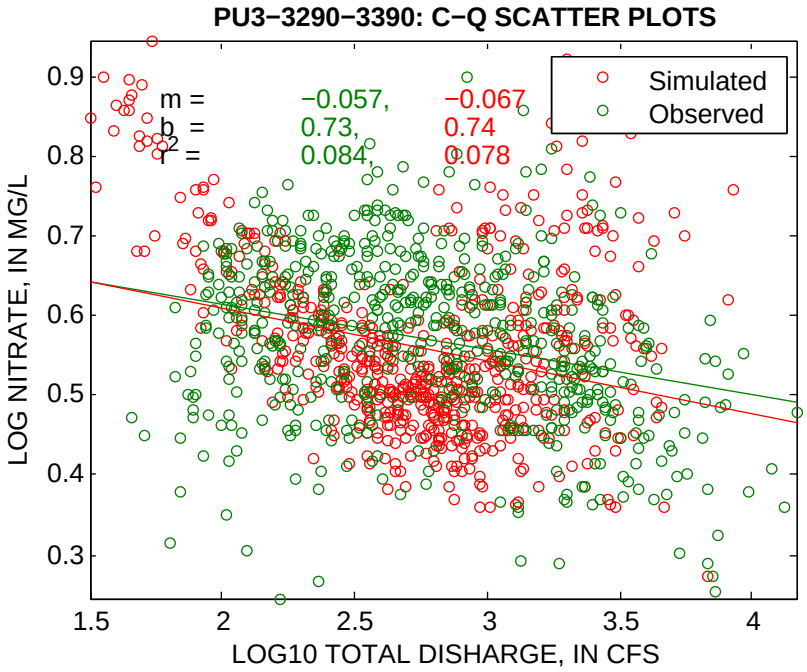
STATISTICS

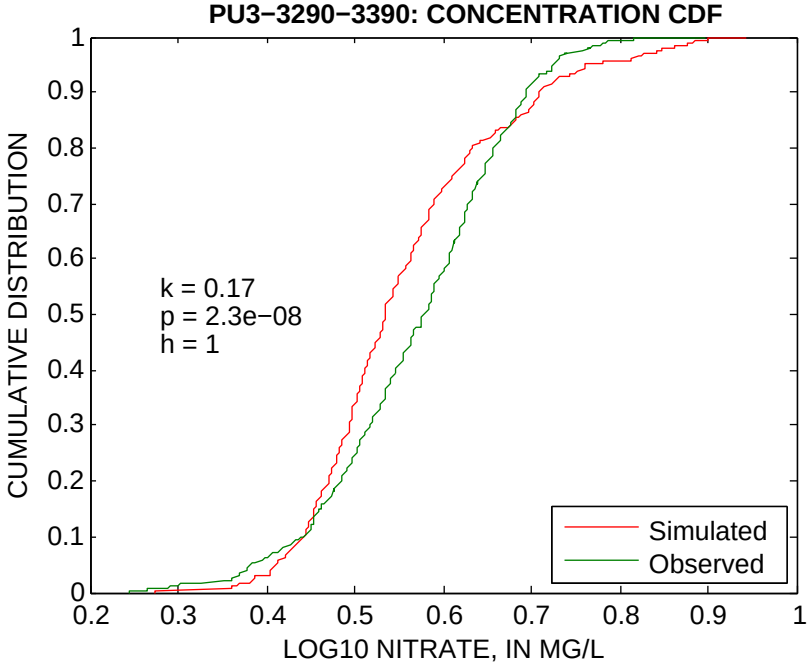
	n	612	612
		observe	simulate
min		1.76	1.6908
		0.245513	0.228092
mean		3.82738	3.87275
		0.570809	0.566183
media		3.8	3.4672
		0.579784	0.539979
max		7.9	9.095
		0.897627	0.958803
varian		0.803394	1.77696
		0.0107604	0.0178405
JB		0.001	0.001
		0.018962	0.001
		ra	log
%		1.18554	-0.810503
err.va		2.84367	0.0319312
rel.std.err		3.53958	2.96747
mod.eff		-2.53958	-1.96747

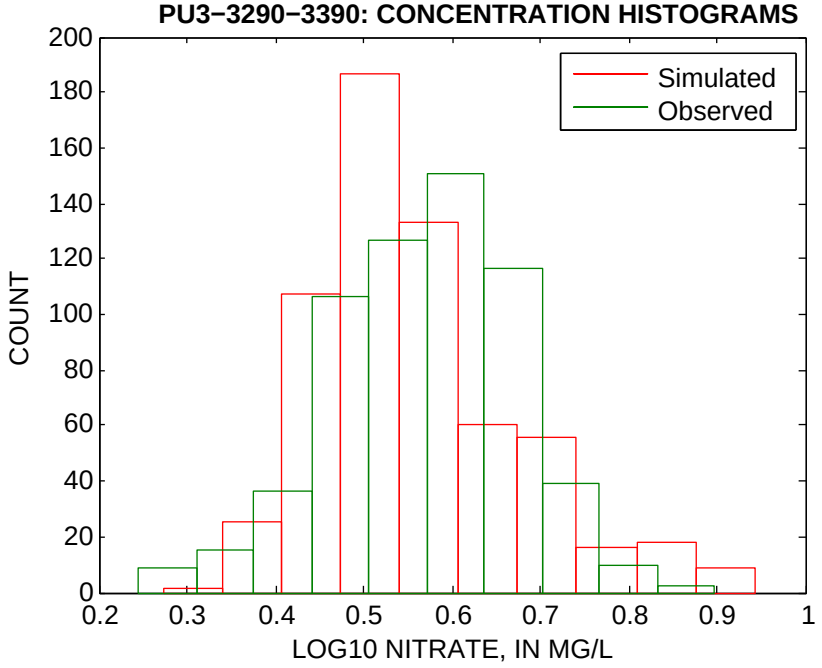
VERSION 2.1

ALL DATA
LOG10

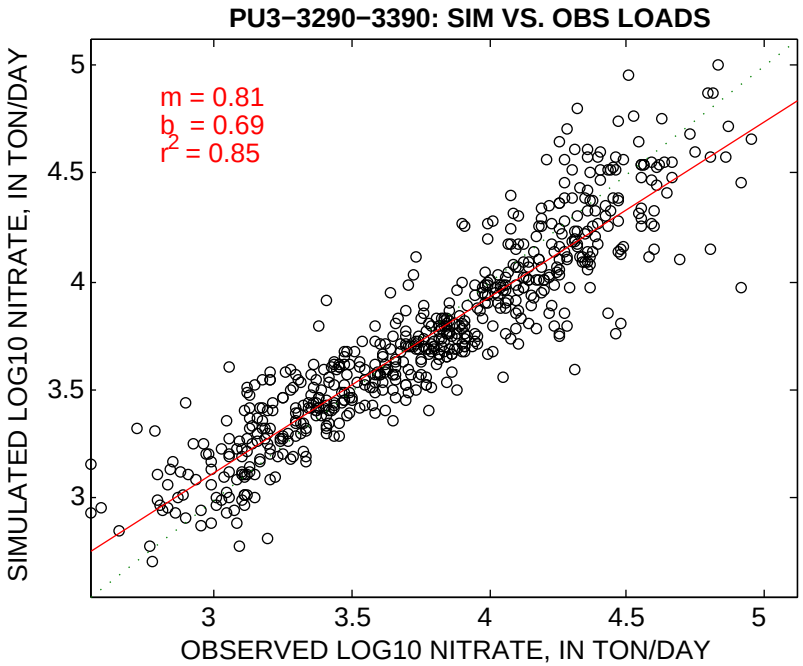


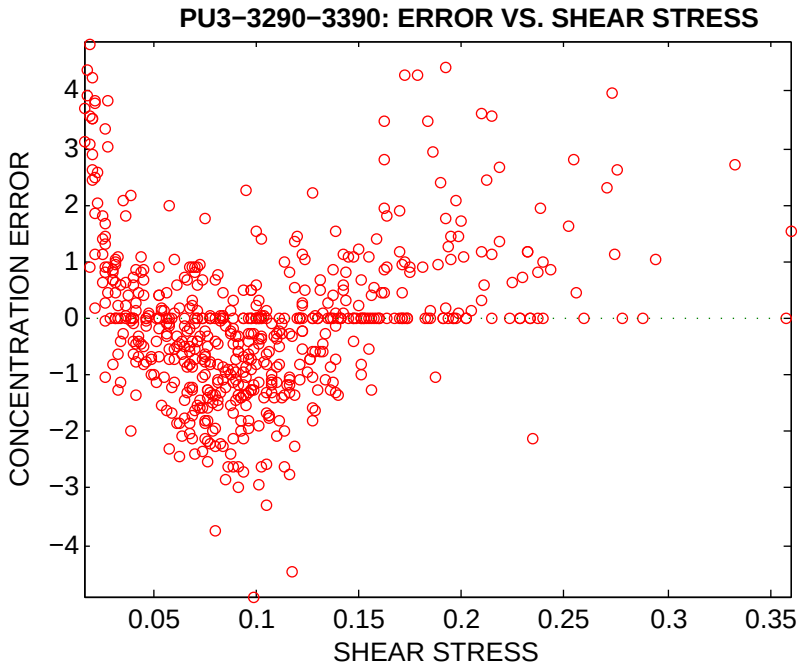


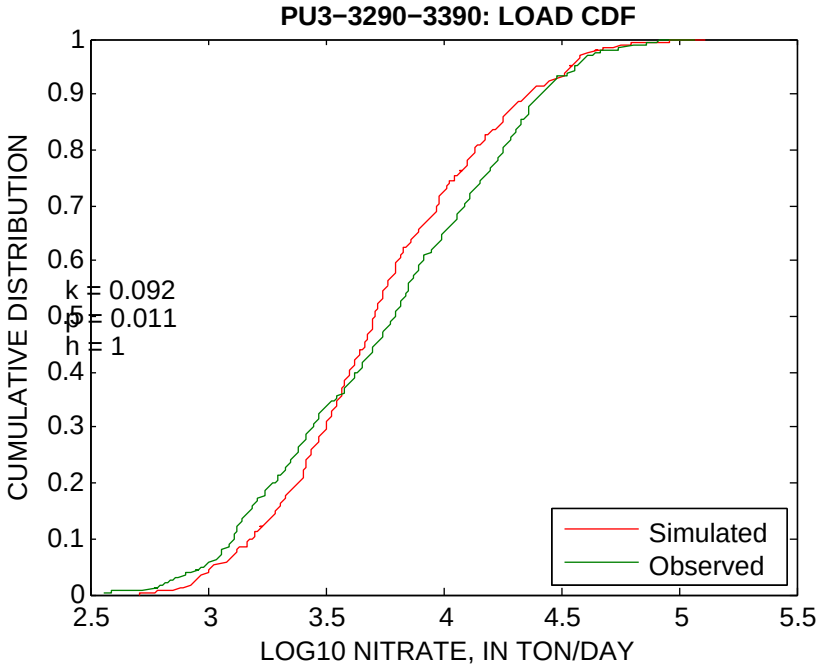


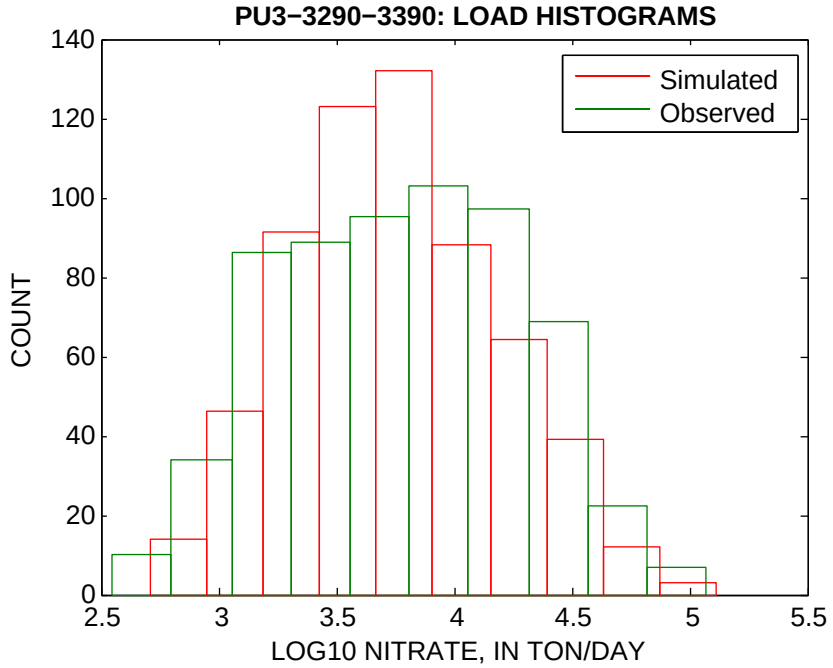


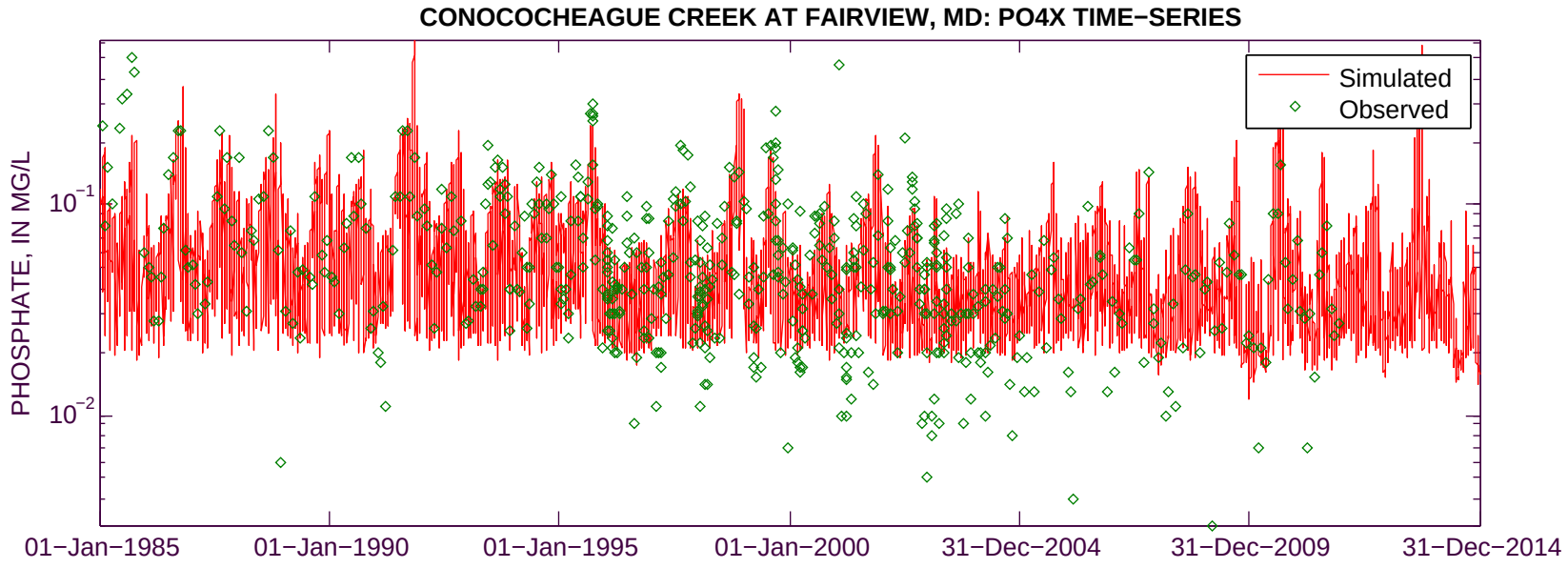
LOAD DATA
LOG10

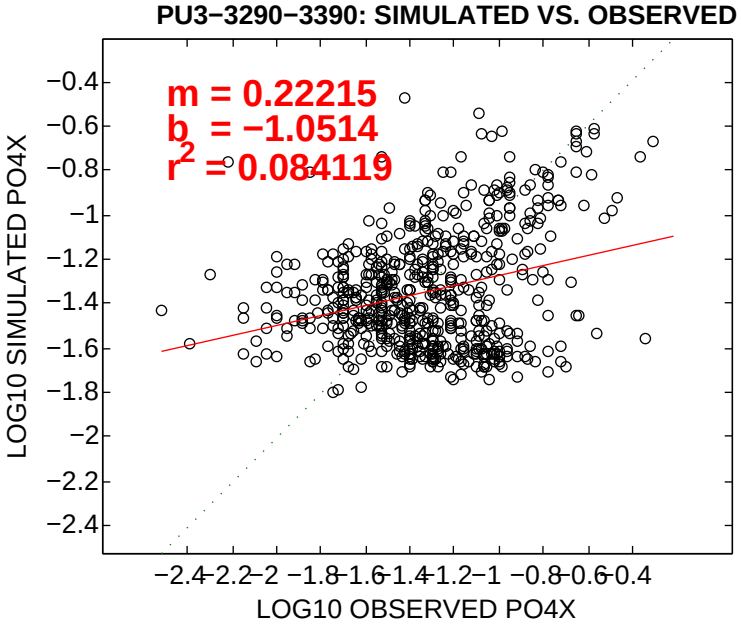


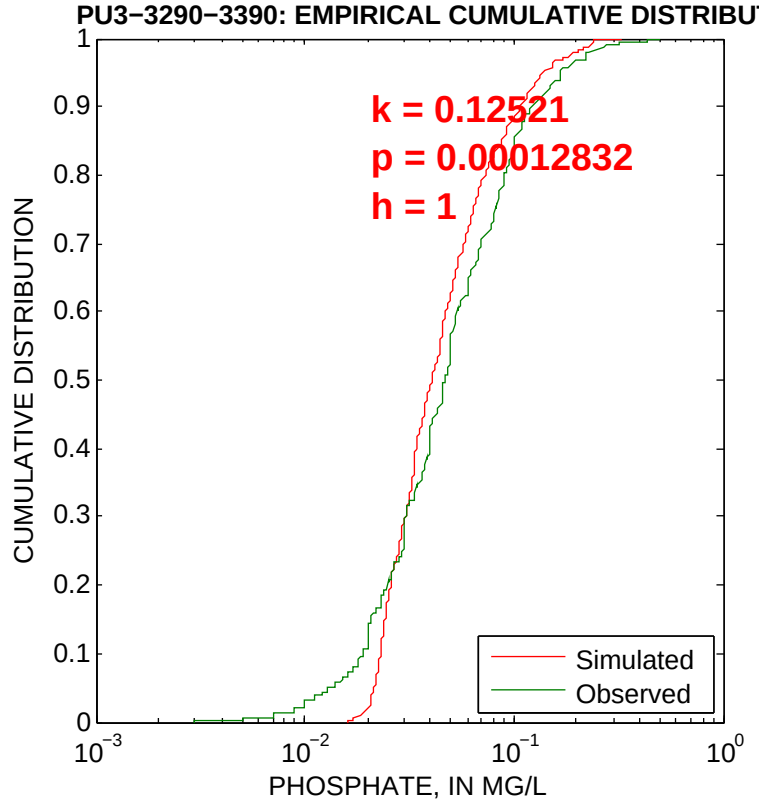












DATA SELECTION

scenario: P620171001WQ | file: PO4X.calib

plot: PO4X - phosphate

Dates: 1/1/1985 – 12/31/201

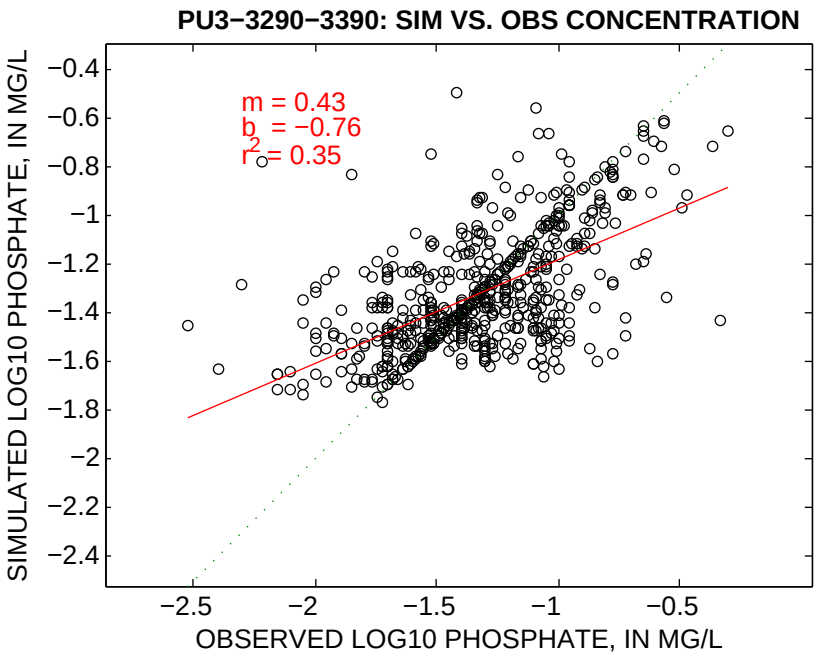
Drive: N/A | Directory: model | Observed: OBS20161101

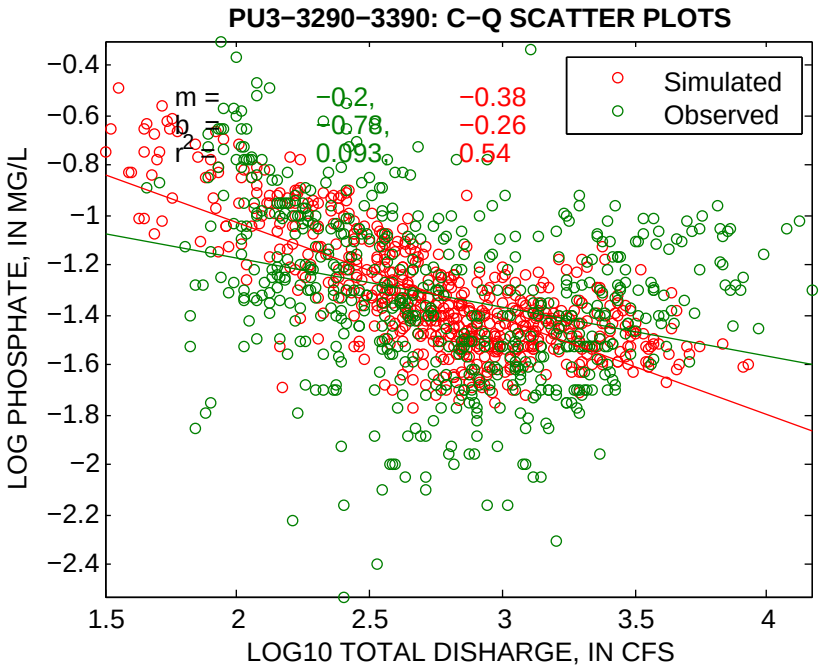
STATISTICS

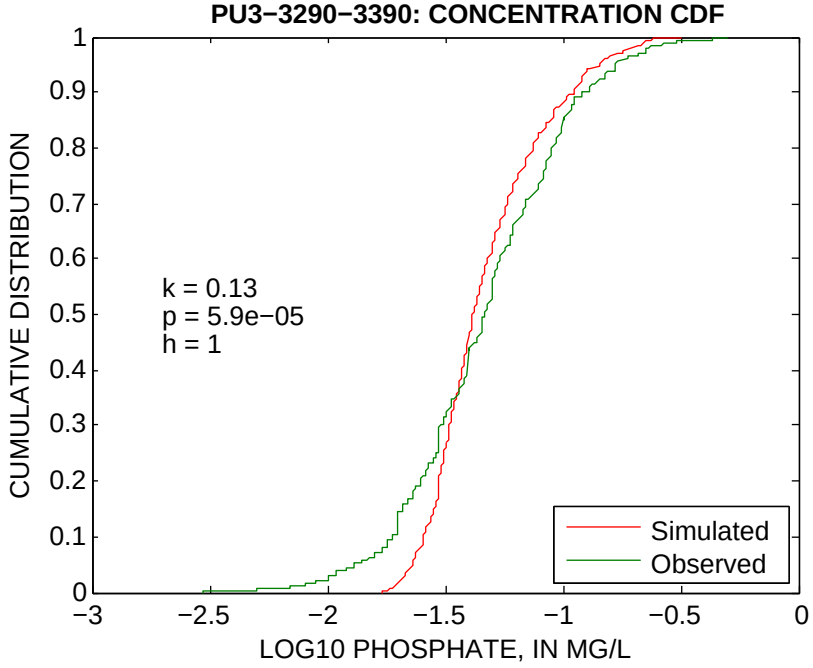
	n	observe	simulate
		607	607
min		0.003	0.015925
		-2.52288	-1.79792
mean		0.0637121	0.0551467
		-1.32645	-1.34607
media		0.047	0.040806
		-1.3279	-1.38928
max		0.5	0.33273
		-0.30103	-0.477908
varian		0.00335538	0.00181762
		0.113356	0.0665054
JB		0.001	0.001
		0.429014	0.001
		ra	log
%		-13.4439	1.47872
err.va		0.00309193	0.129882
rel.std.err		0.921486	1.14579
mod.eff		0.0785138	-0.145788

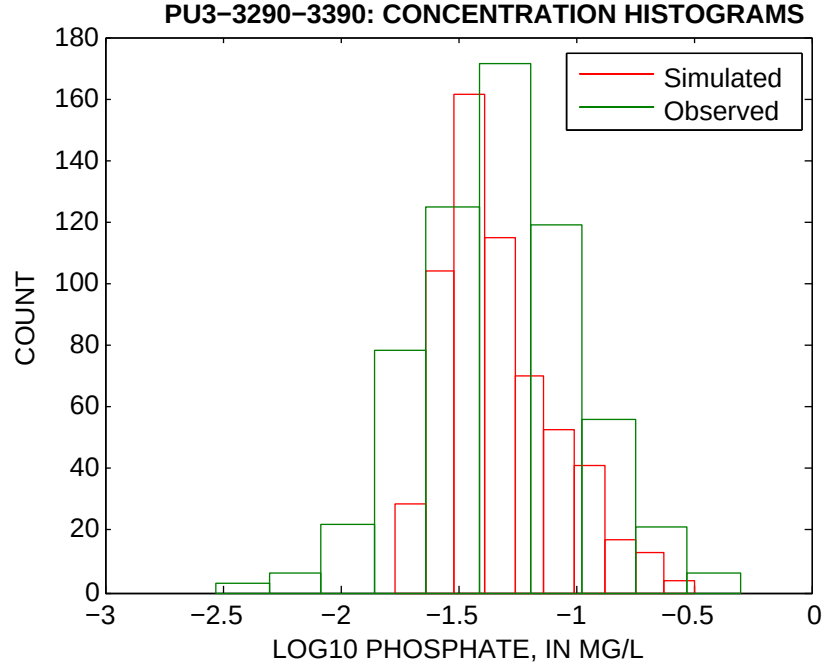
VERSION 2.1

ALL DATA
LOG10

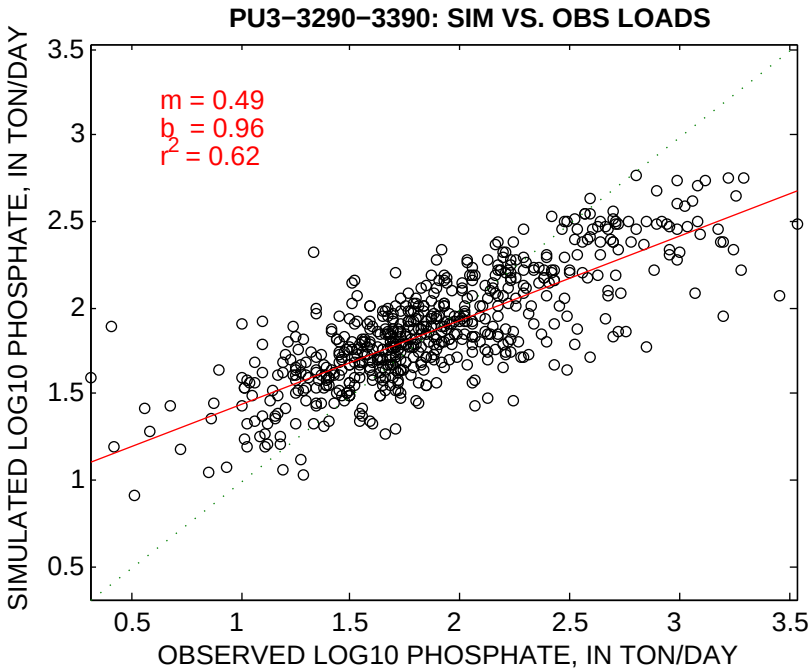


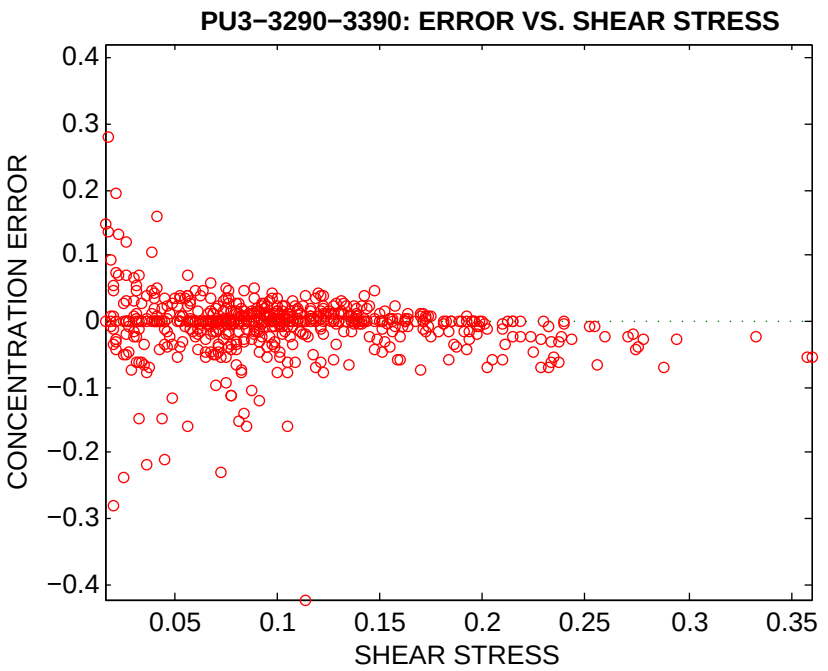


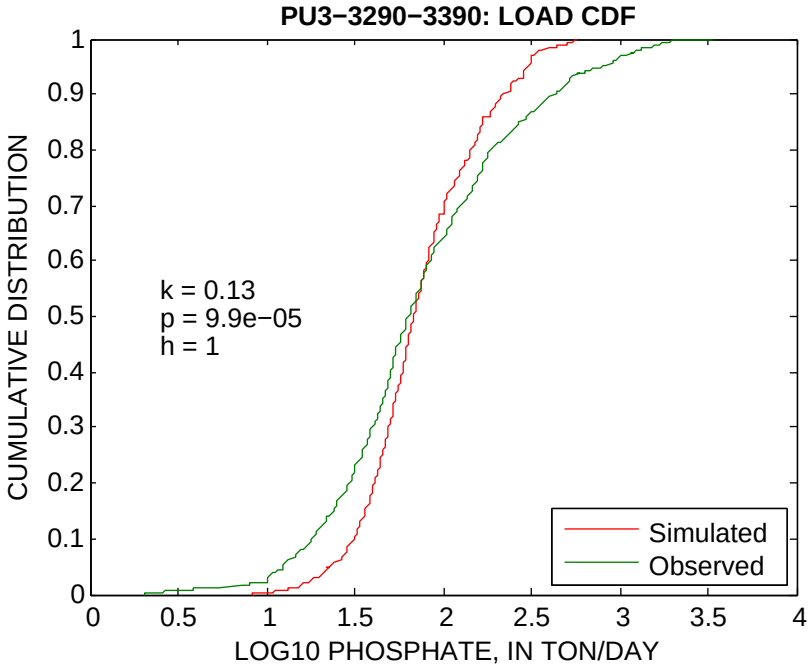


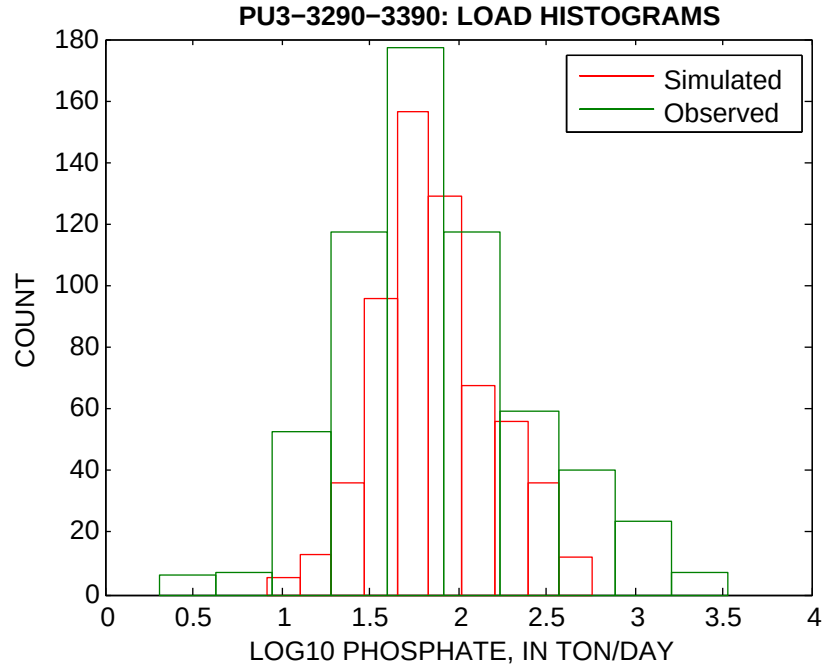


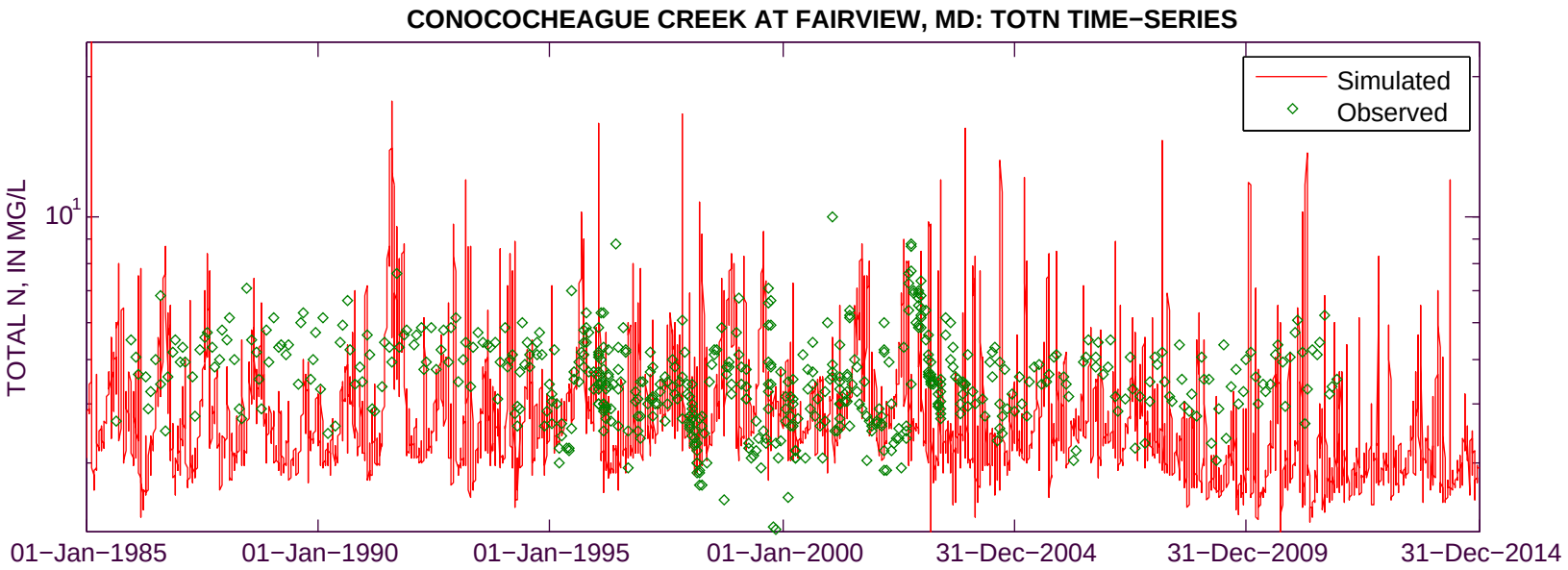
LOAD DATA
LOG10

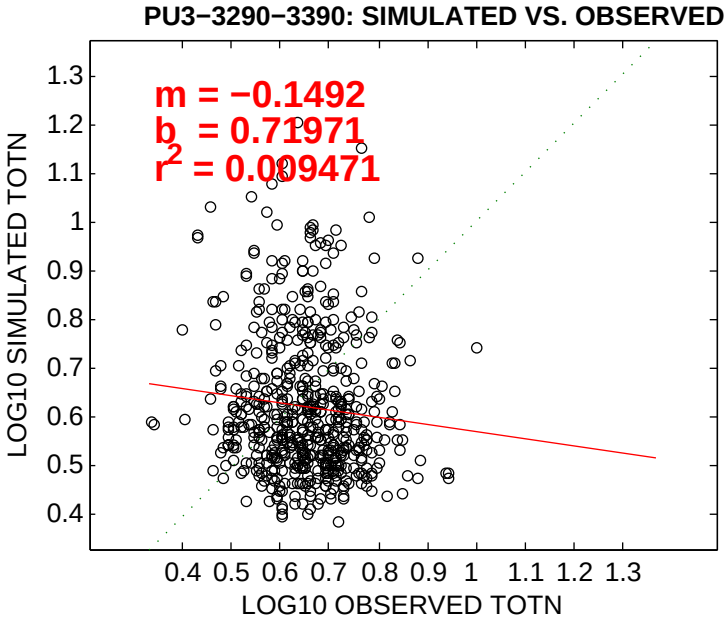


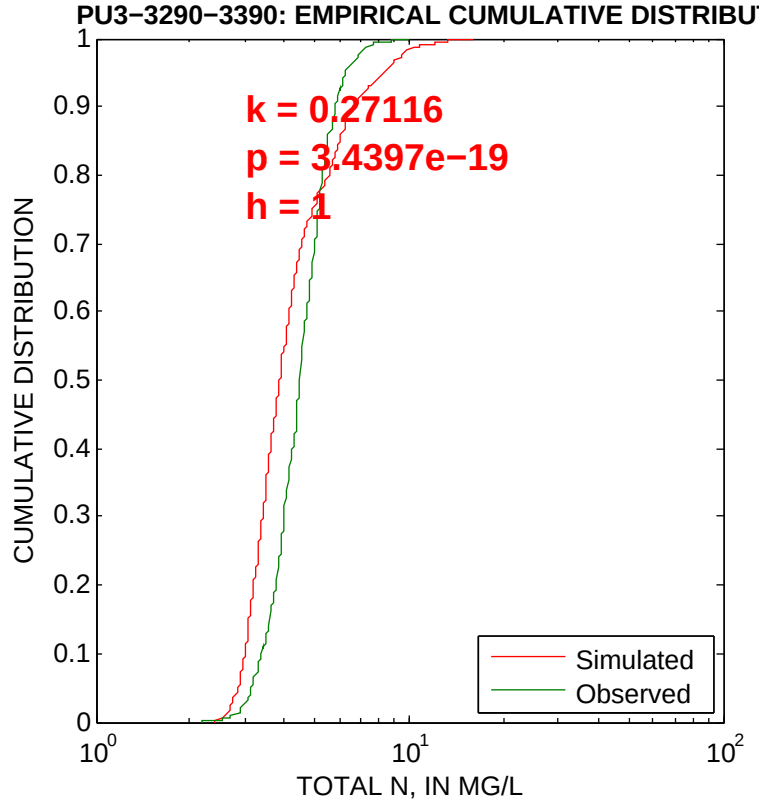












DATA SELECTION

scenario	file
P620171001WQ	TOTN.calib

plot: TOTN - total nitrogen

Dates: 1/1/1985 – 12/31/201

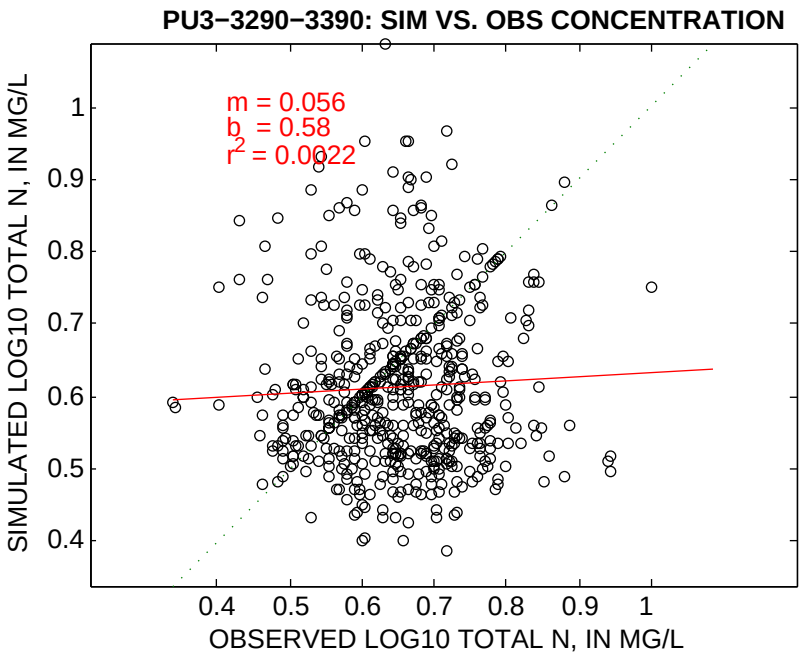
Drive	Directory	Observed
N/A	model	OBS20161101

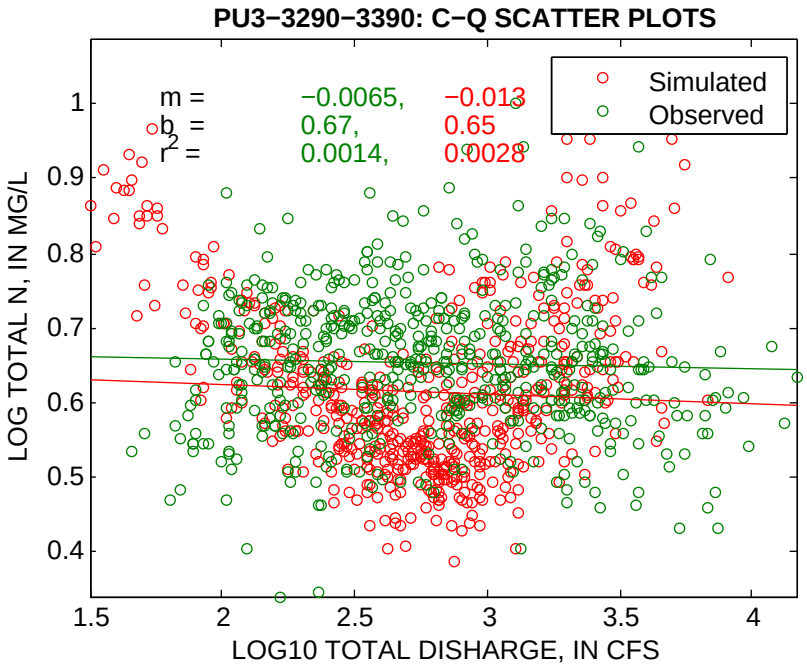
STATISTICS

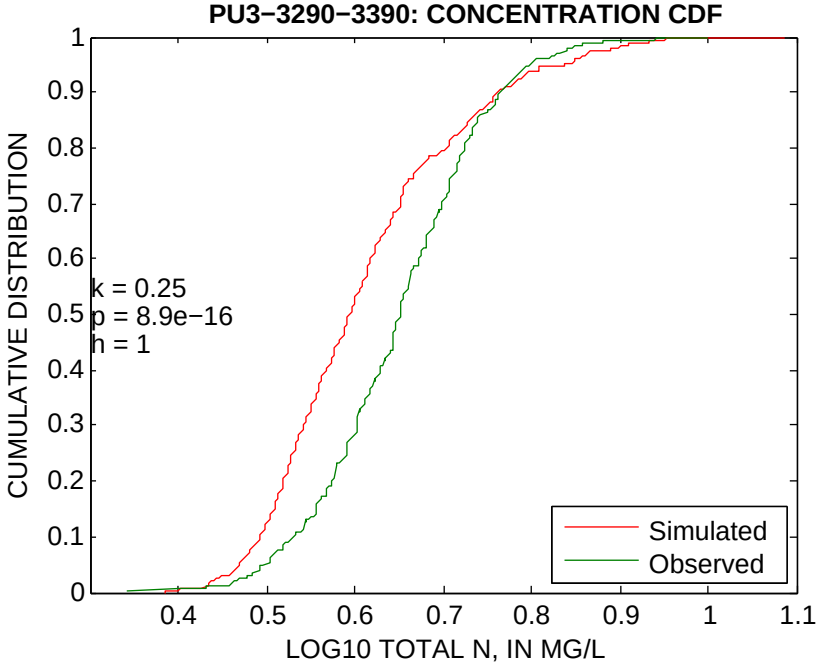
	n	observe	simulate
		579	579
min		2.18	2.4191
		0.338456	0.383654
mean		4.58152	4.4585
		0.650917	0.622596
media		4.49664	3.8694
		0.652888	0.587644
max		10	15.922
		1	1.202
varian		1.02467	3.27455
		0.00871224	0.0204773
JB		0.001	0.001
		0.046860	0.001
		ra	log
%		-2.68522	-4.35096
err.va		4.62432	0.0325927
rel.std.err		4.51297	3.74103
mod.eff		-3.51297	-2.74103

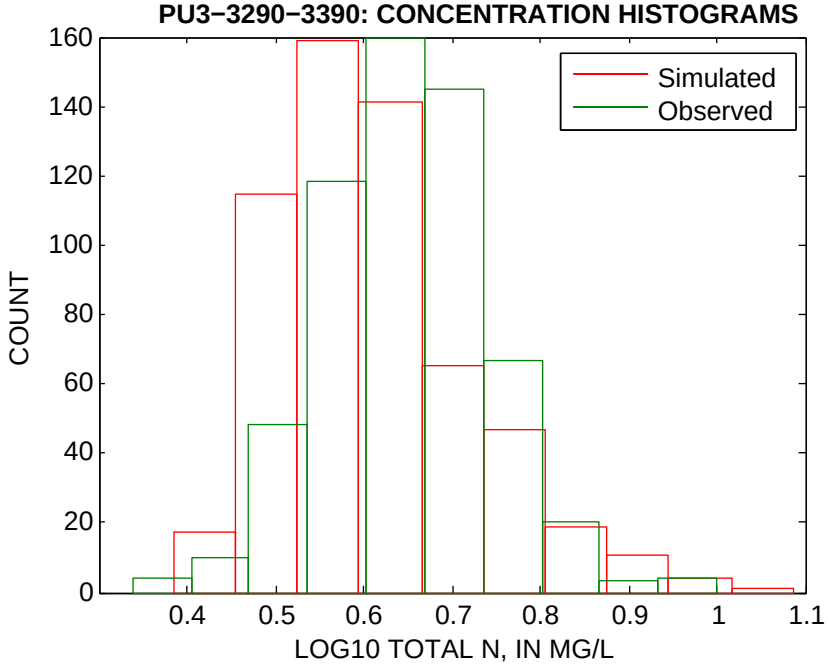
VERSION

ALL DATA
LOG10

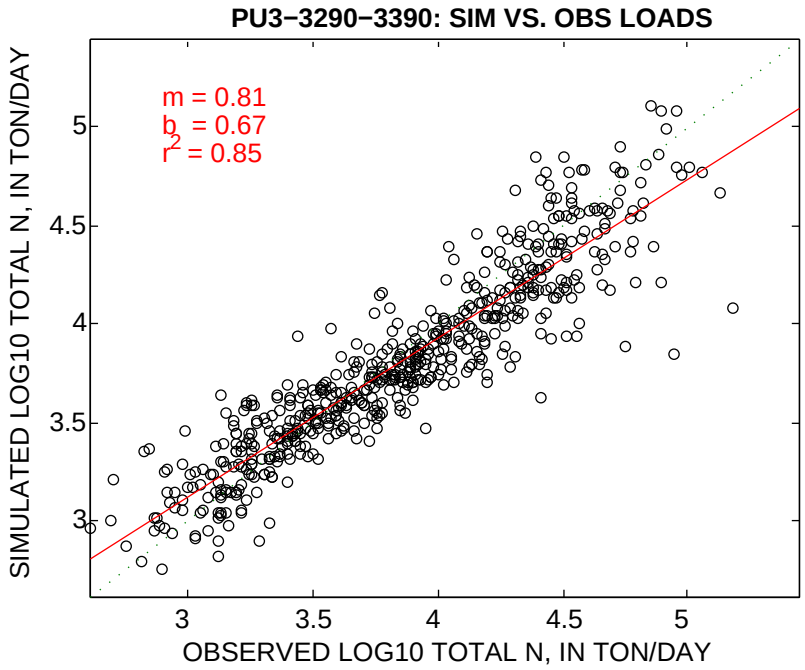


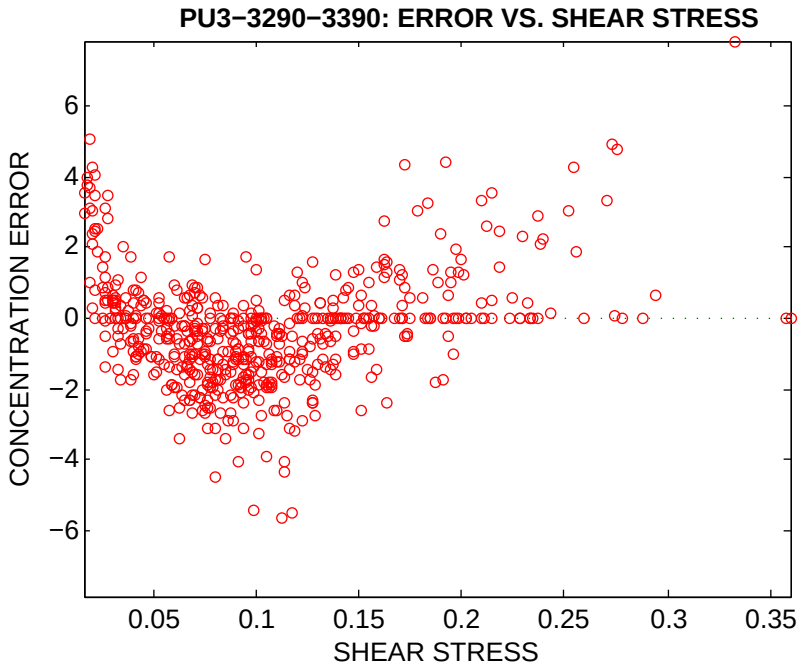


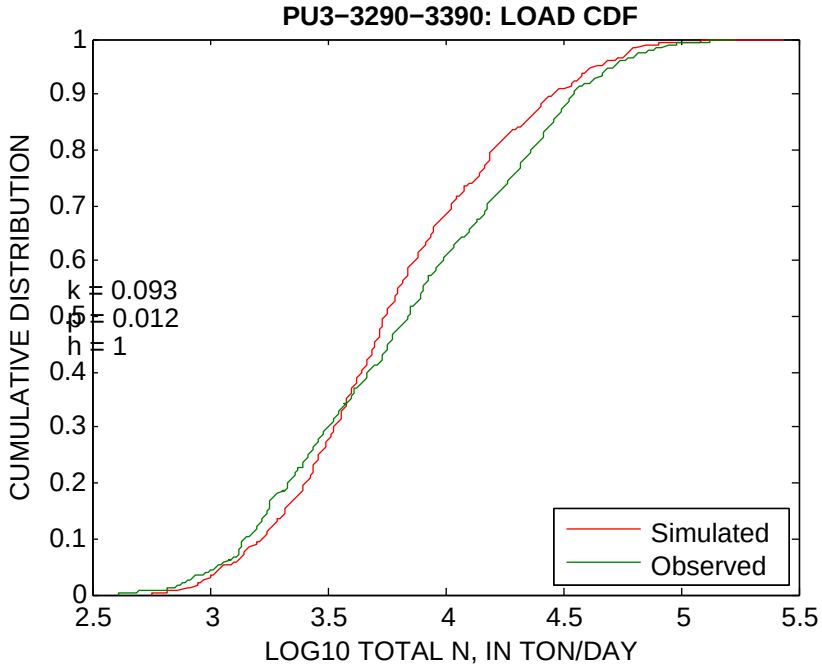


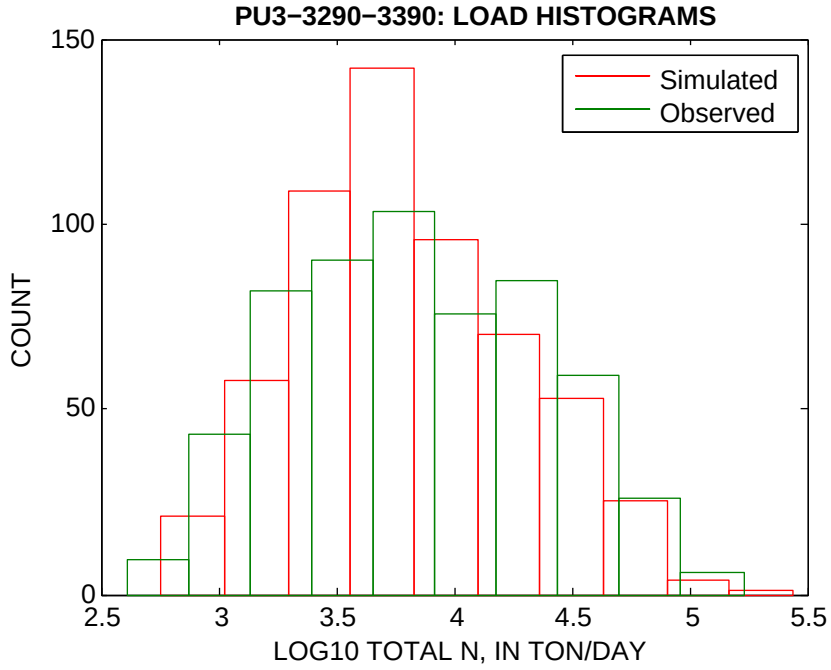


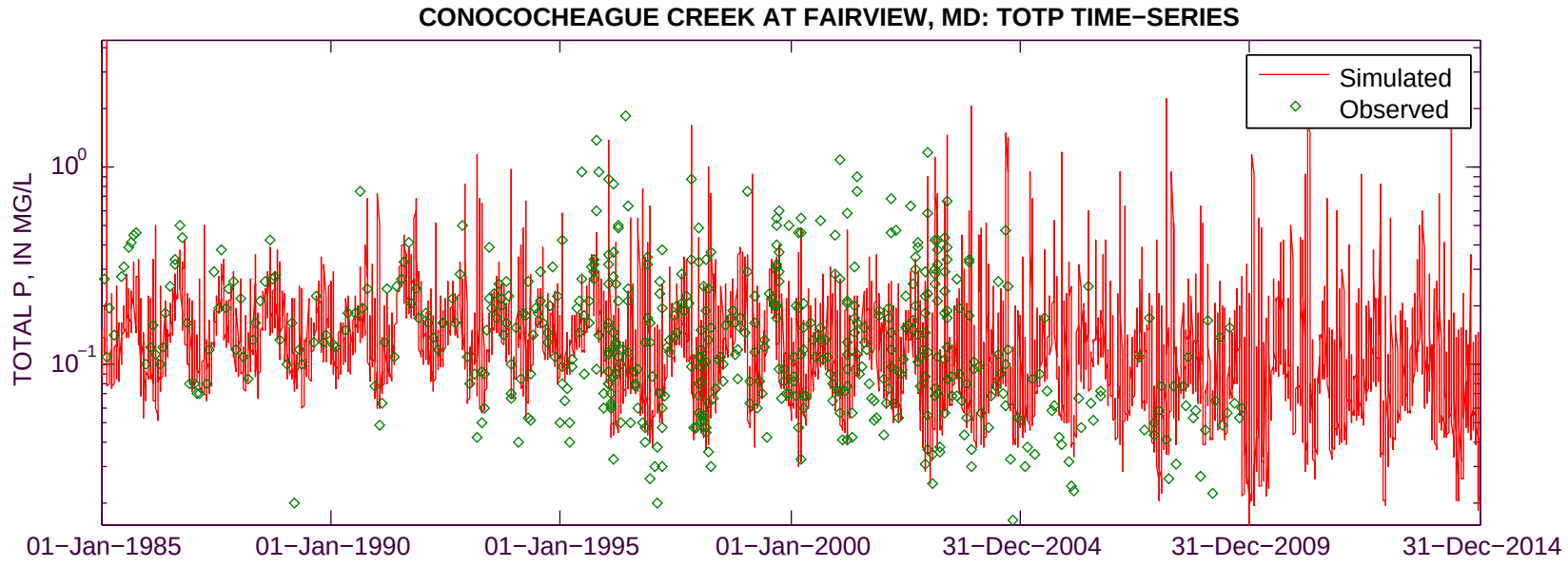
LOAD DATA
LOG10

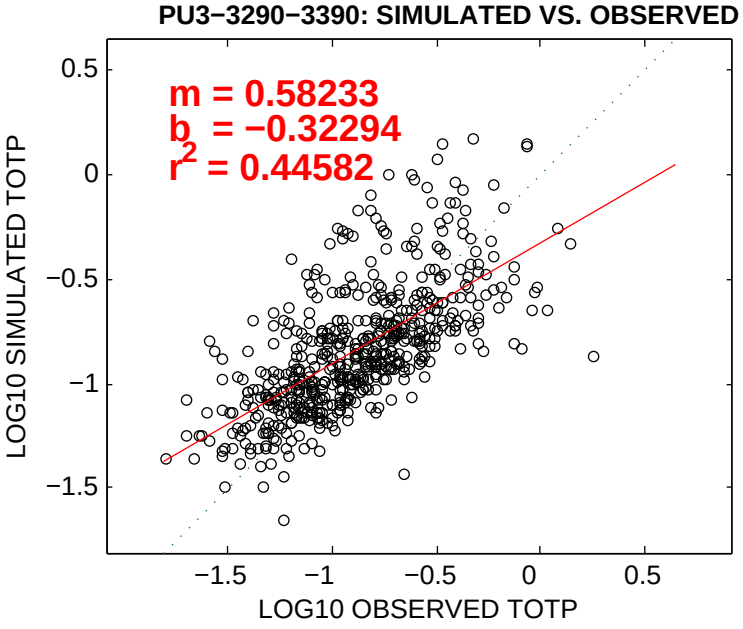


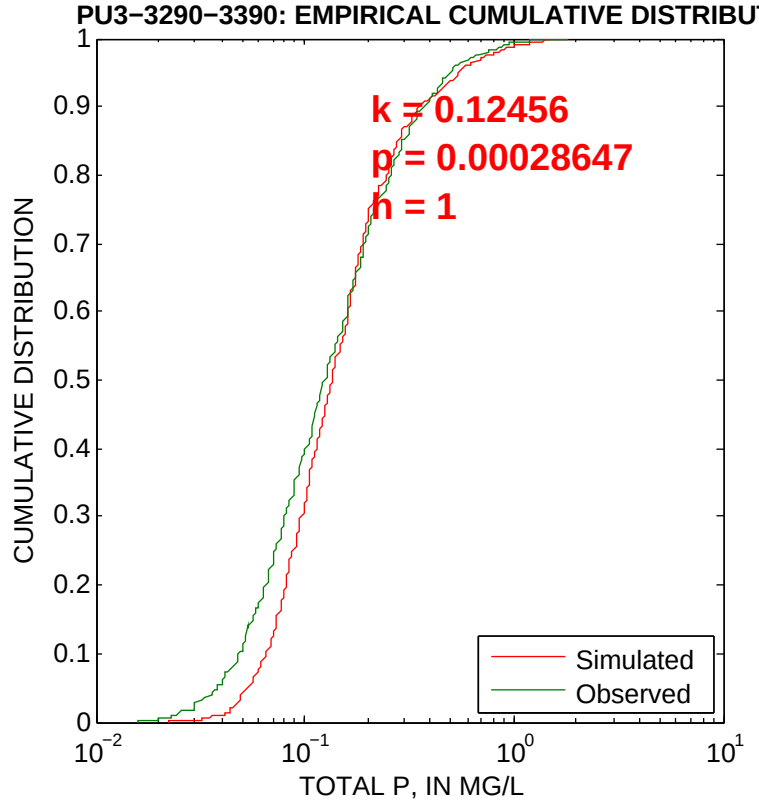












DATA SELECTION

scenario: P620171001WQ | file: TOTP.calib

plot: TOTP - total phosphorus

Dates: 1/1/1985 – 12/31/201

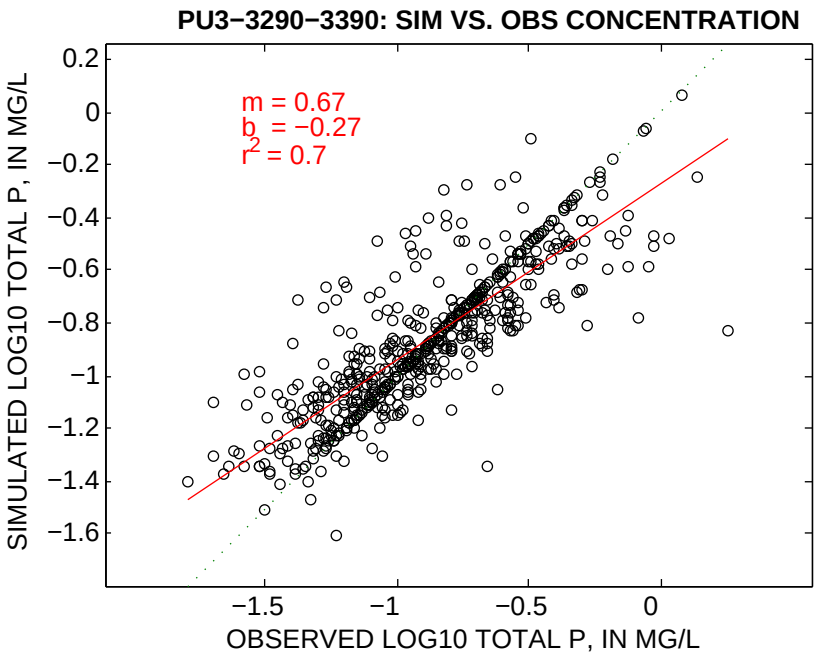
Drive: N/A | Directory: model | Observed: OBS20161101

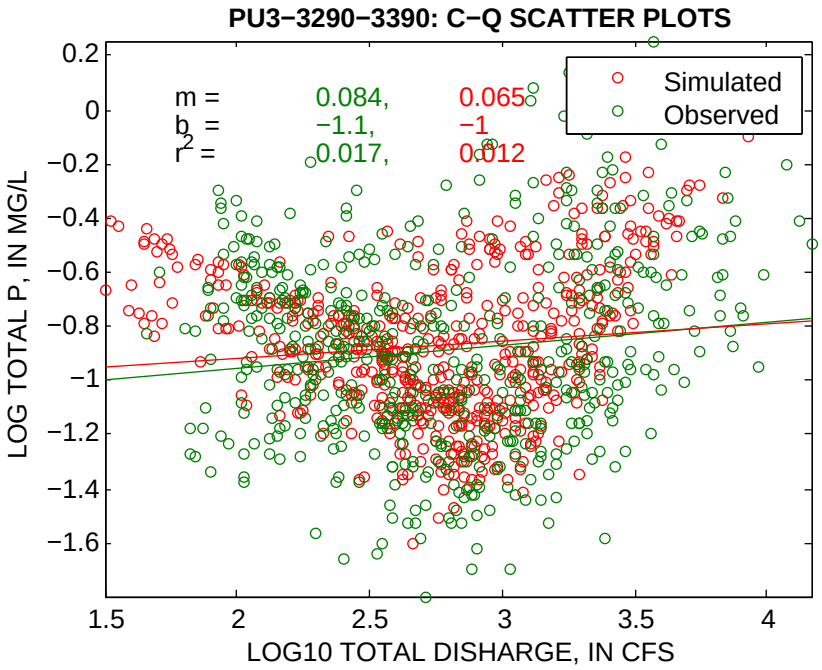
STATISTICS

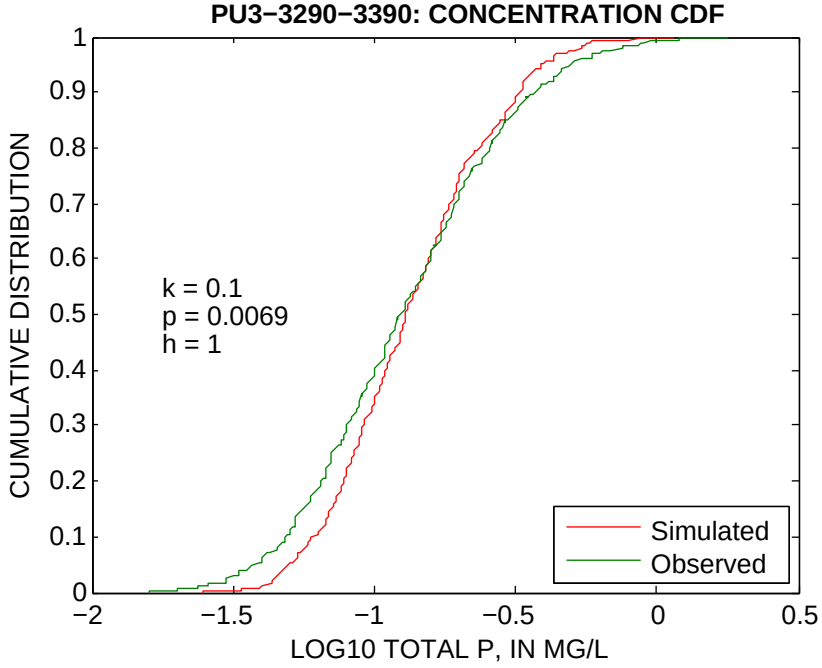
		observe	simulate
n		562	562
min		0.016	0.022056
		-1.79588	-1.65647
mean		0.181337	0.191762
		-0.88631	-0.83907
media		0.123	0.136005
		-0.910095	-0.866445
max		1.8	1.4986
		0.255273	0.175686
varian		0.0331595	0.0362635
		0.119431	0.0908465
JB		0.001	0.001
		0.047908	0.001
		ra	log
%		5.74885	-5.32995
err.va		0.0381111	0.0734154
rel.std.err		1.14933	0.614708
mod.eff		-0.149326	0.385292

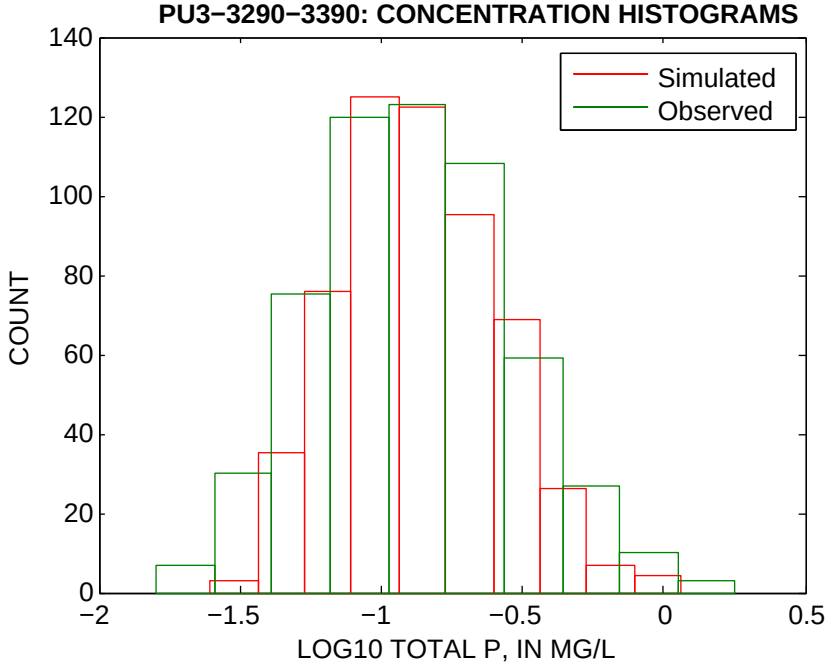
VERSION 2.1

ALL DATA
LOG10

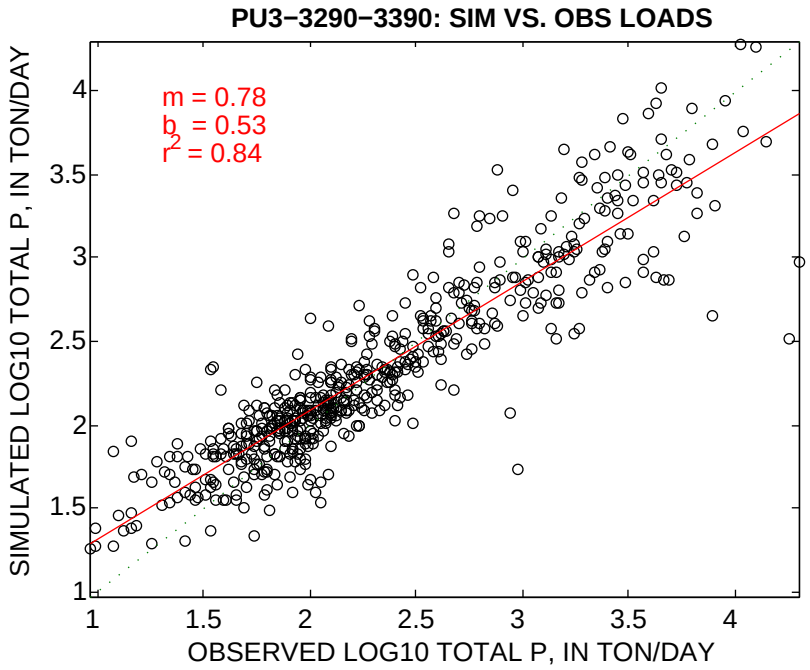


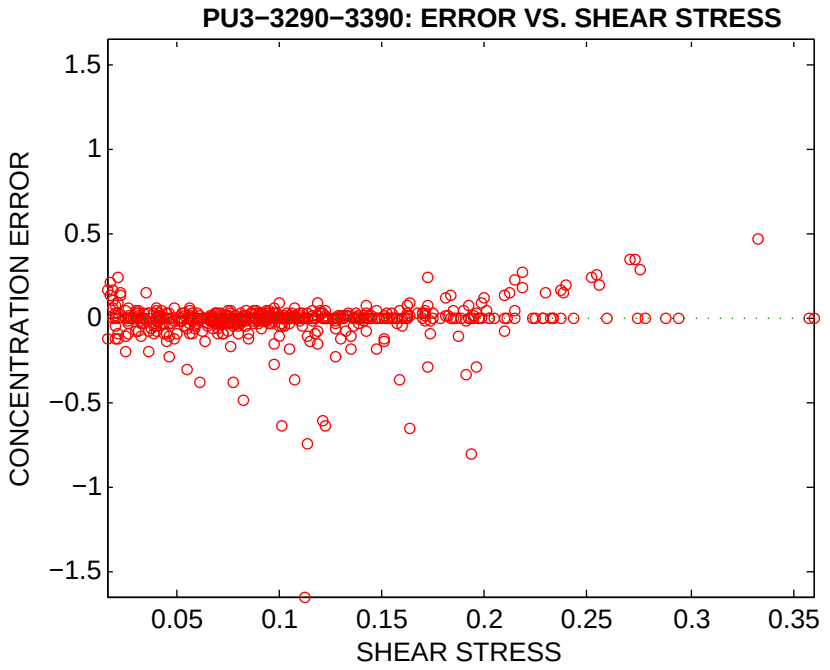


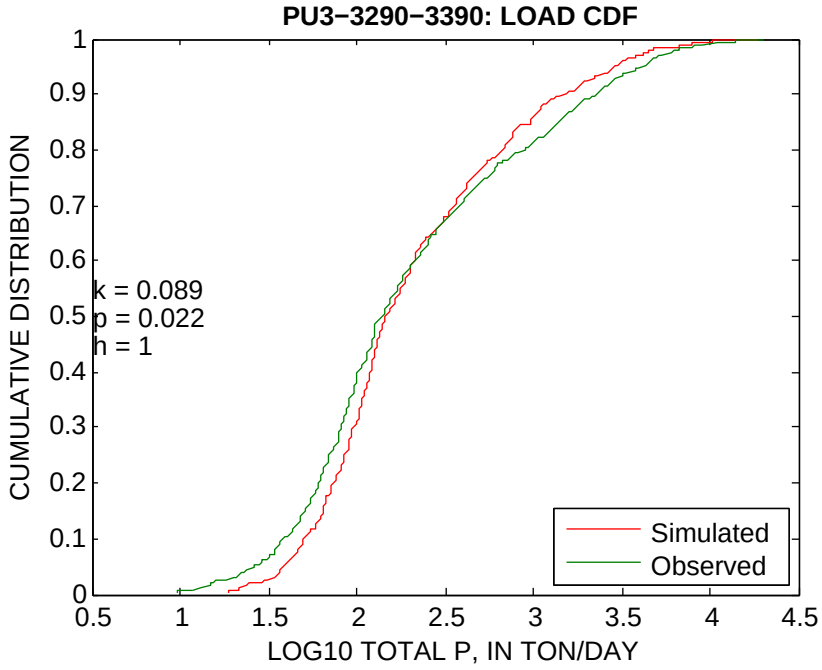


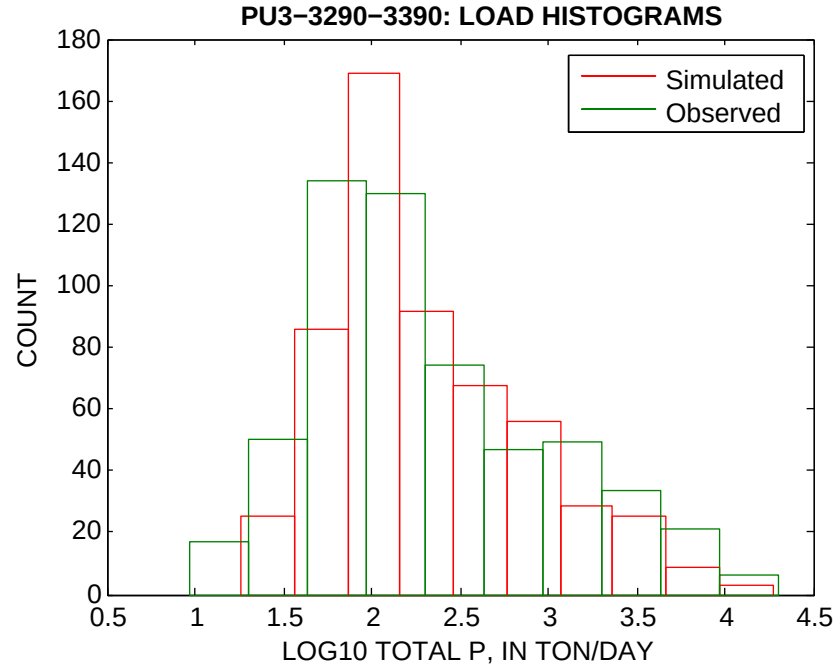


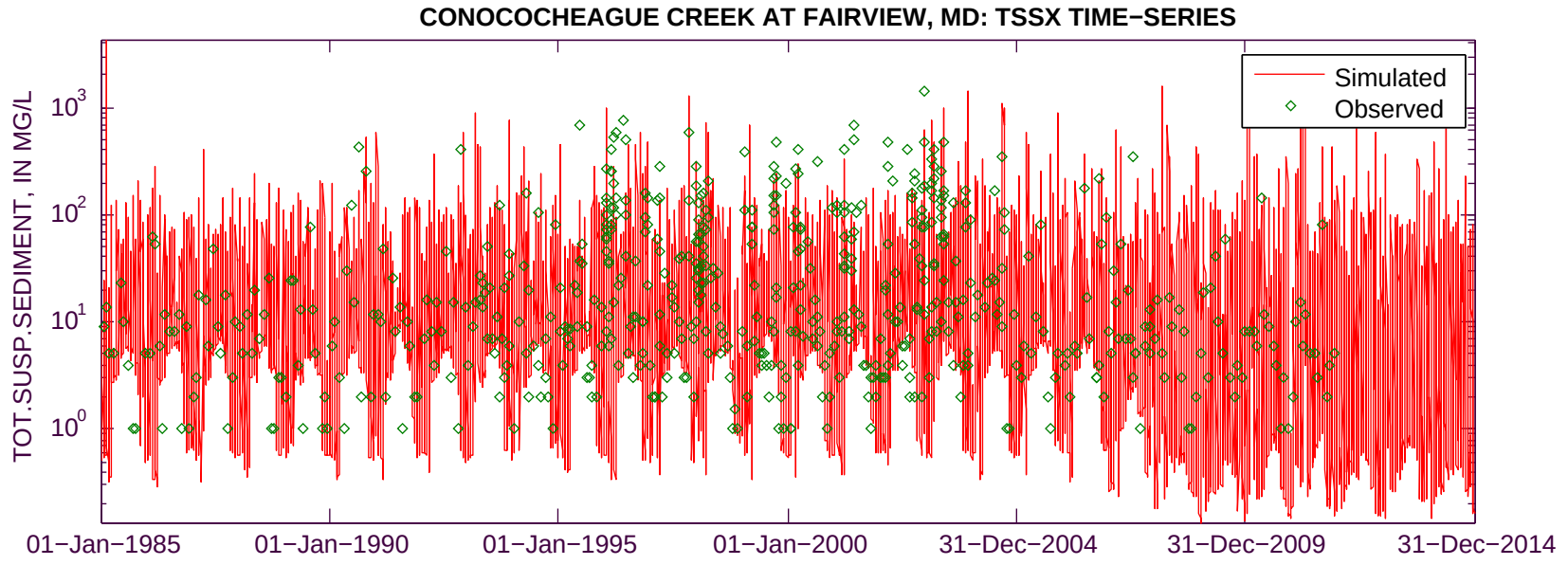
LOAD DATA
LOG10

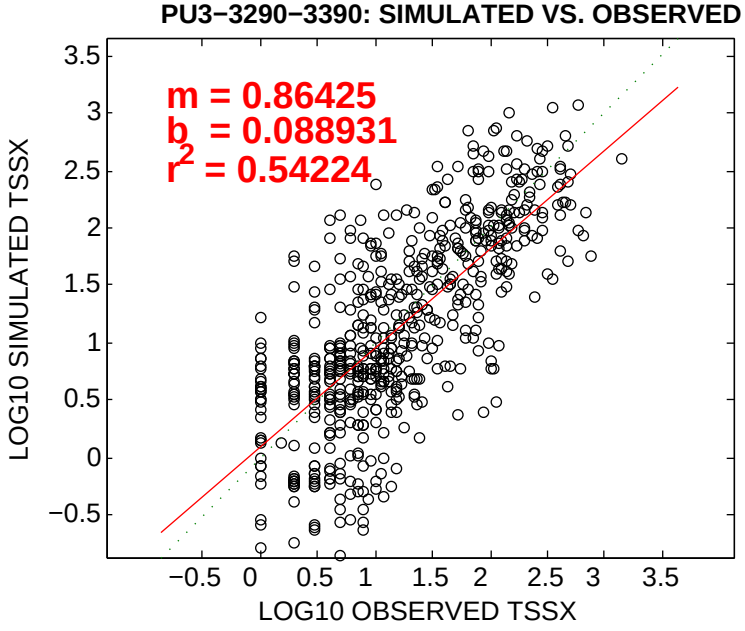


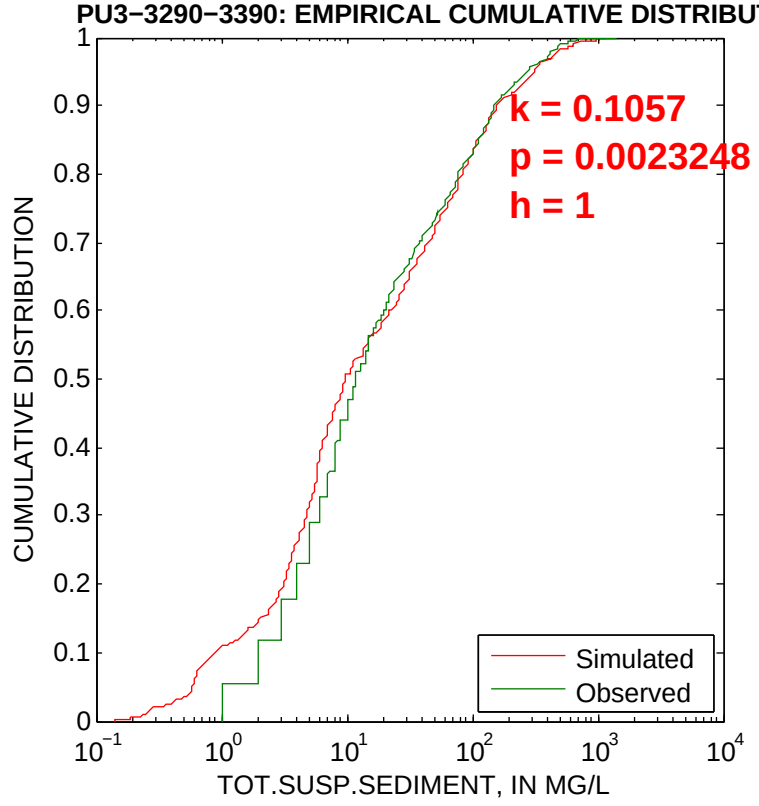












DATA SELECTION

scenario: P620171001WQ | file: TSSX.calib

plot: TSSX - total suspended ...

Dates: 1/1/1985 – 12/31/201

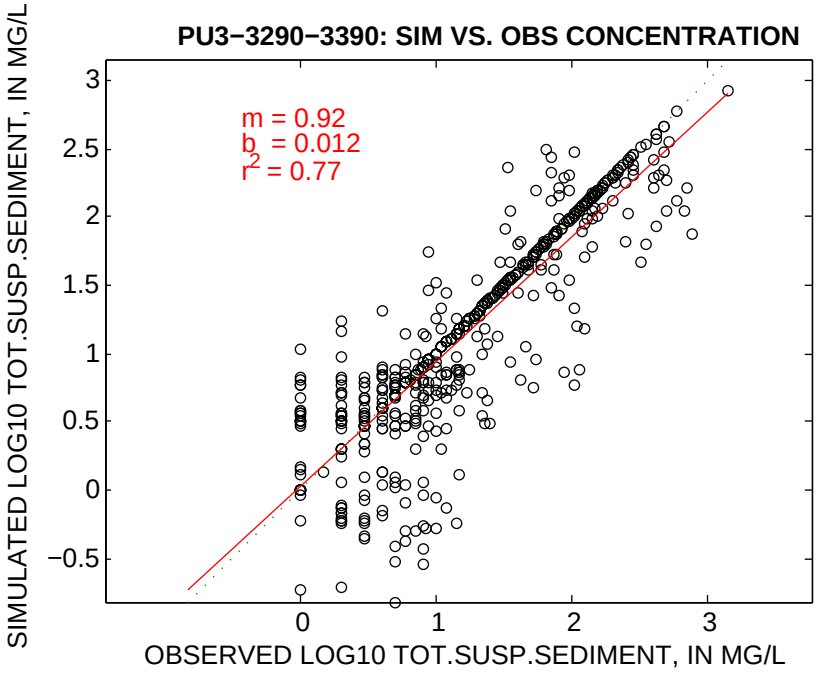
Drive: N/A | Directory: model | Observed: OBS20161101

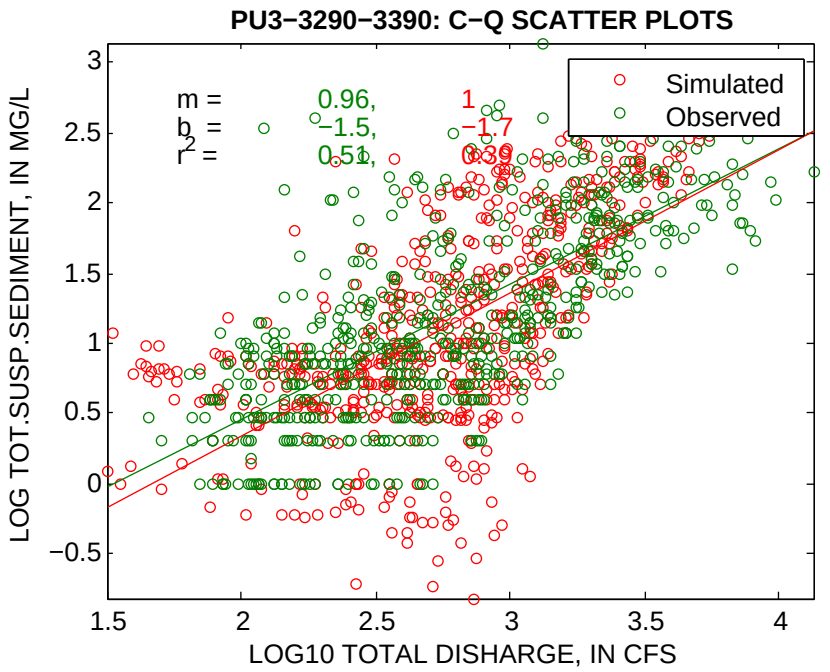
STATISTICS

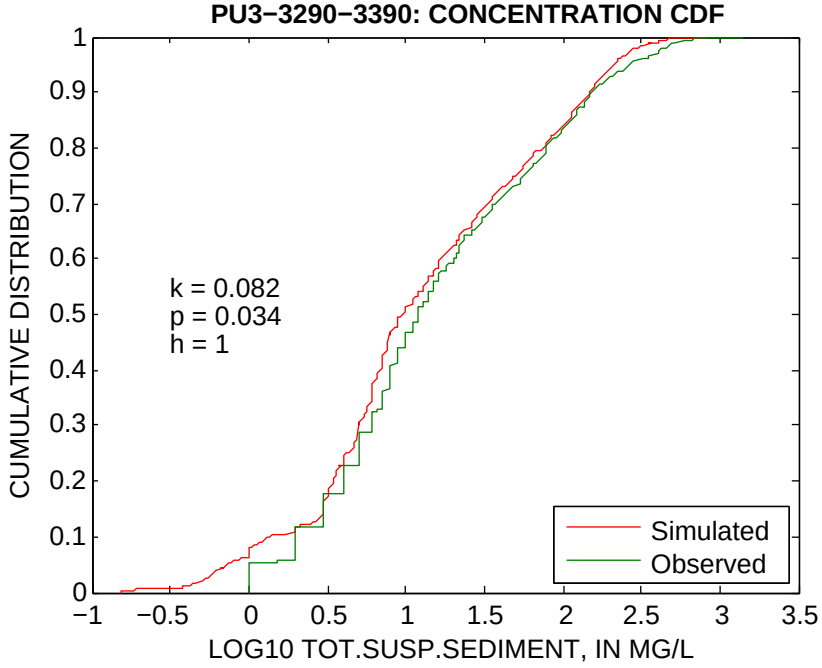
		observe	simulate
n		596	596
min		1	0.14084
		0	-0.851274
mean		57.9941	62.9902
		1.20252	1.12821
media		12	9.7383
		1.07918	0.98848
max		1390	1158.1
		3.14301	3.06375
varian		13928.1	17390.6
		0.492521	0.678439
JB		0.001	0.001
		0.001	0.009754
		ra	log
%		8.6148	-6.17932
err.va		15248.1	0.325166
rel.std.err		1.09477	0.660209
mod.eff		-0.0947705	0.339791

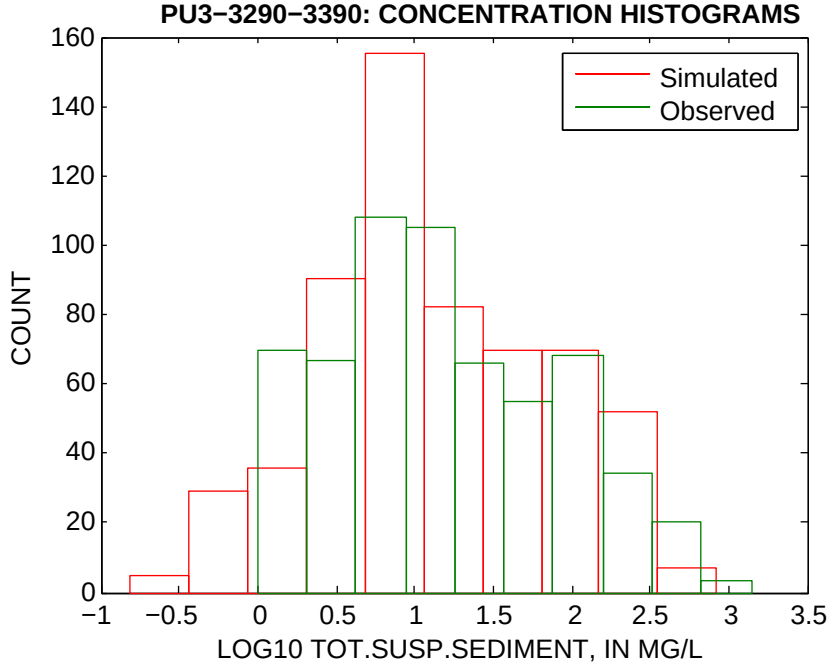
VERSION 2.1

ALL DATA
LOG10

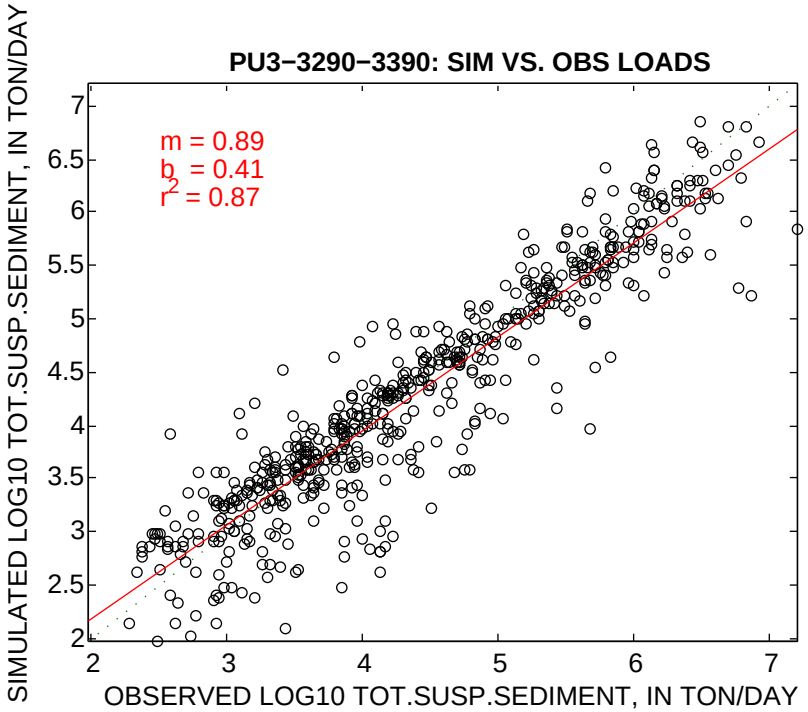


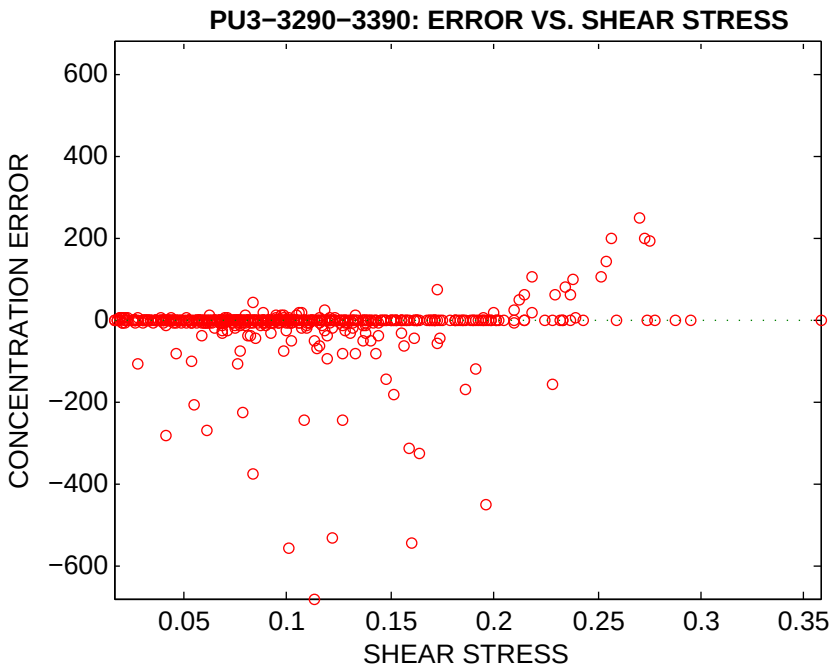


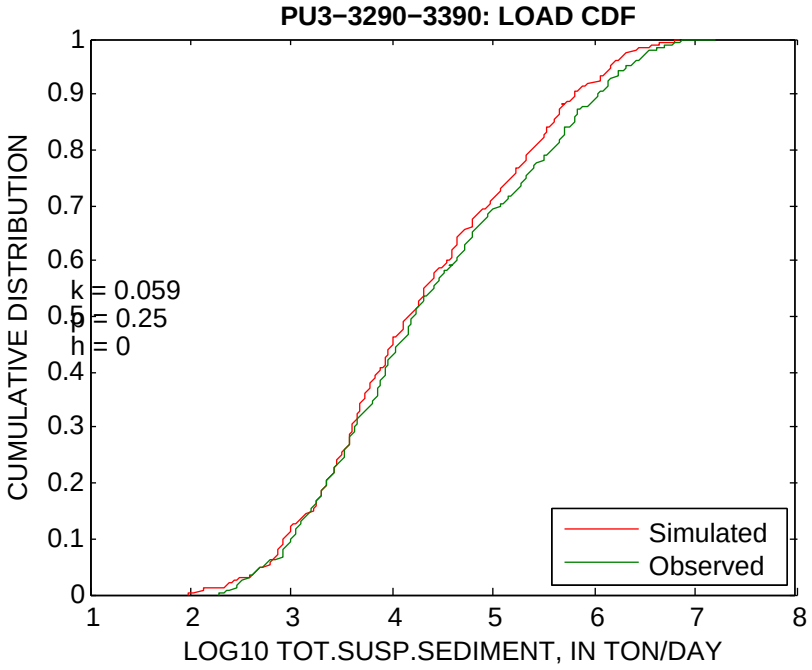


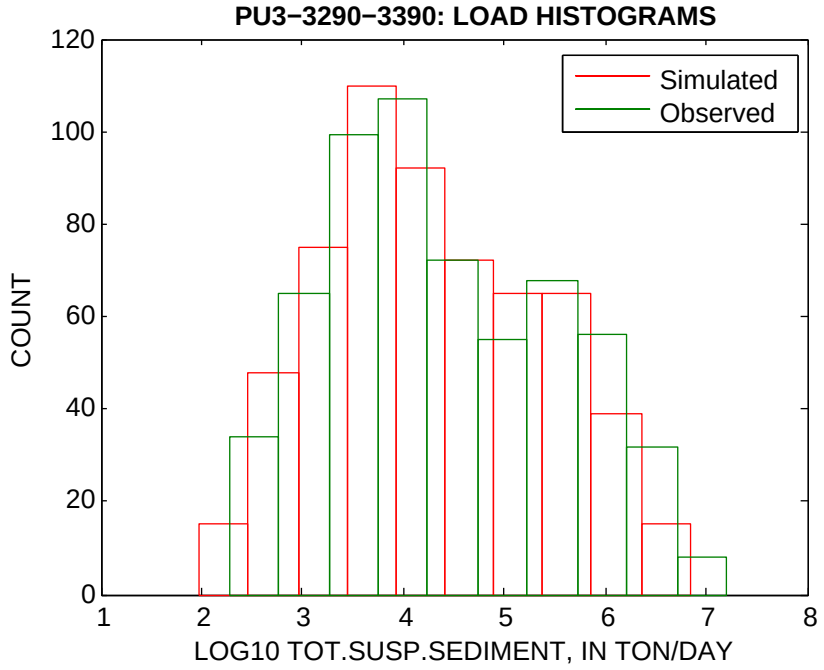


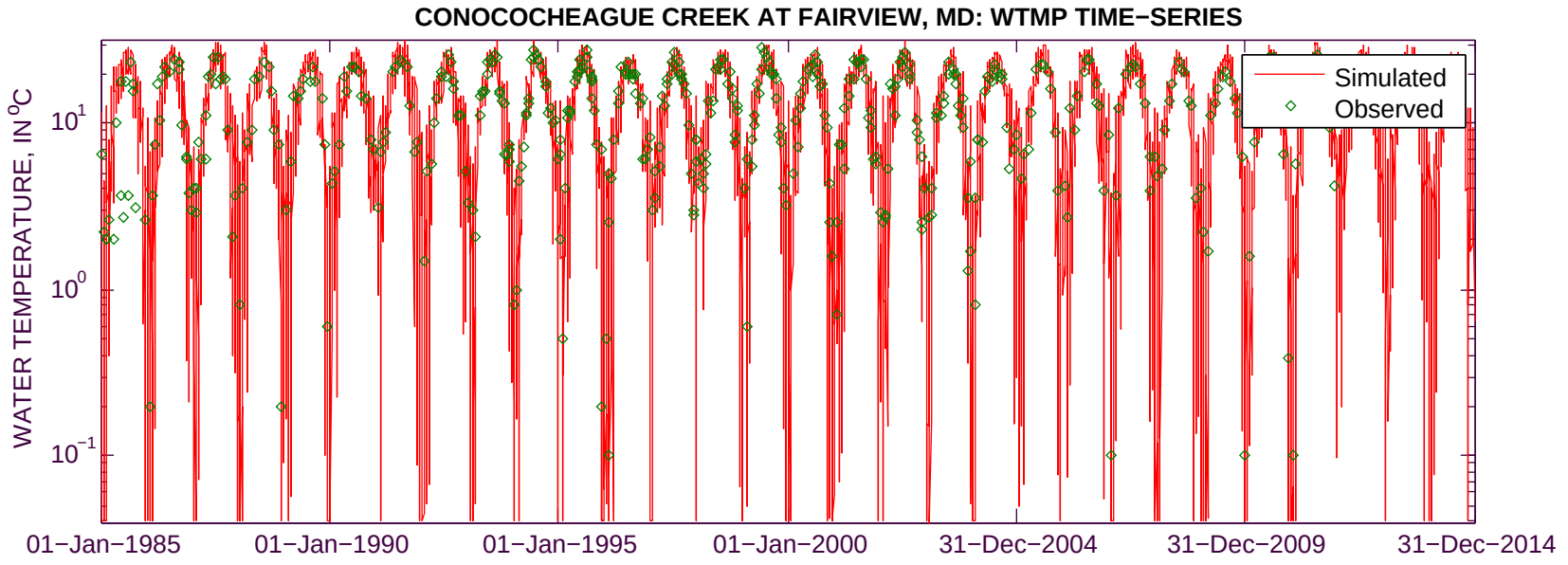
LOAD DATA
LOG10

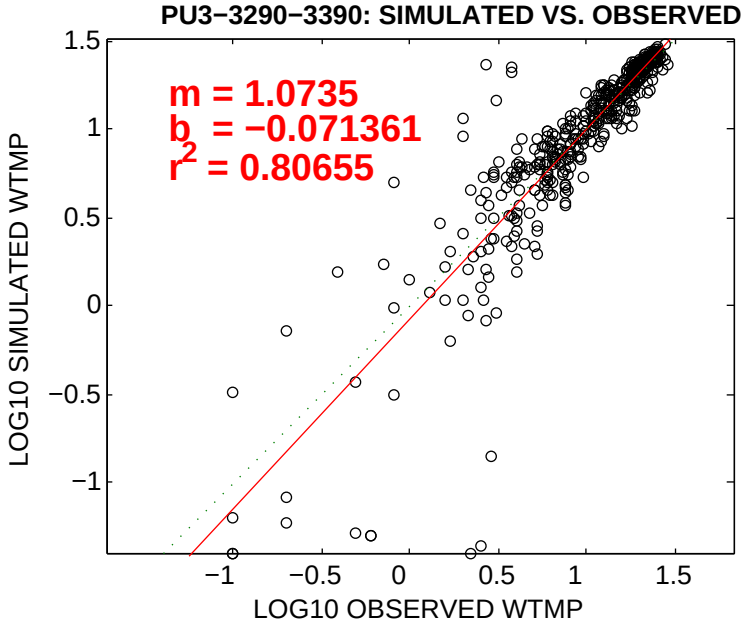


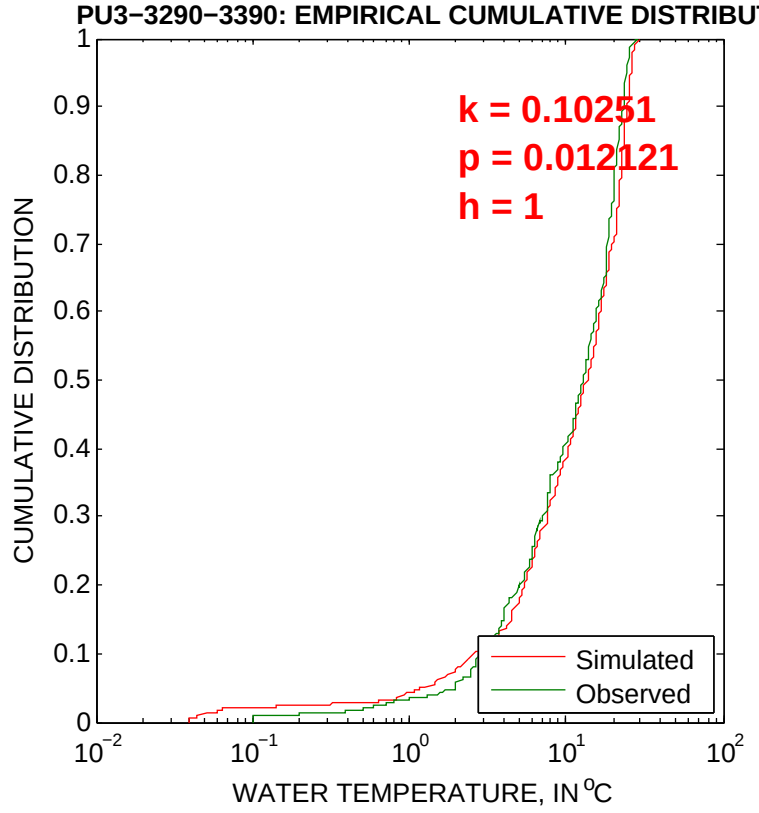












DATA SELECTION

scenario	file
P620171001WQ	WTMP.calib

plot: WTMP - water tempera...

Dates: 1/1/1985 – 12/31/201

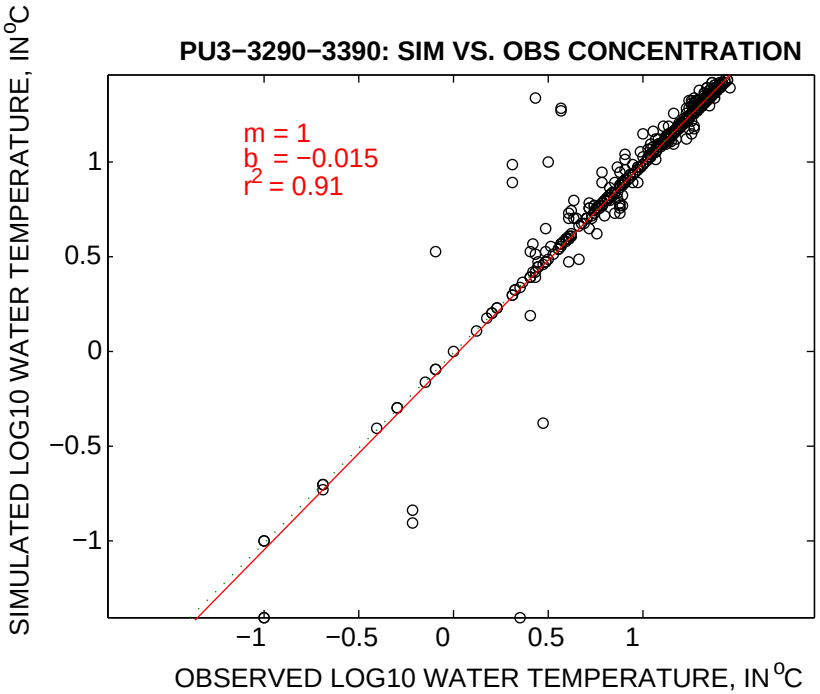
Drive	Directory	Observed
N/A	model	OBS20161101

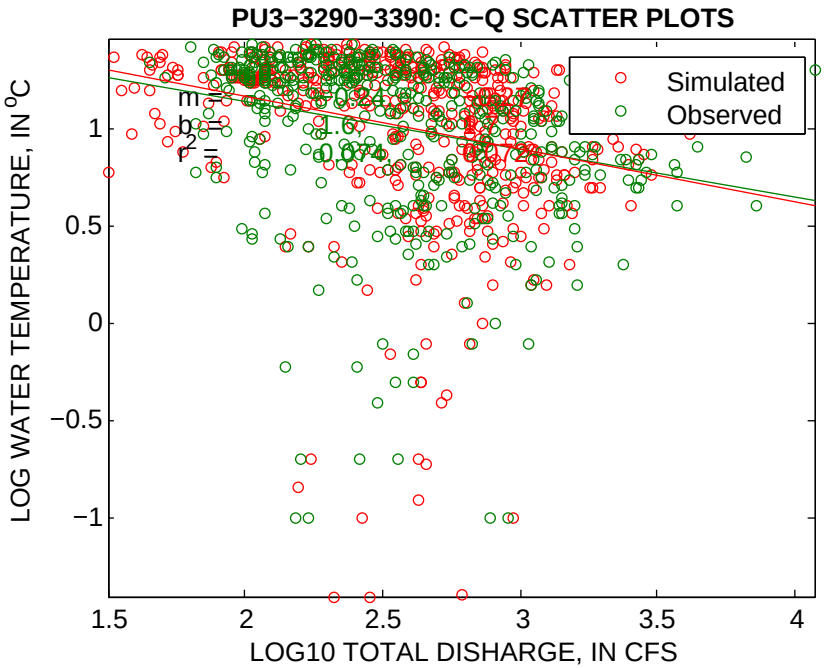
STATISTICS

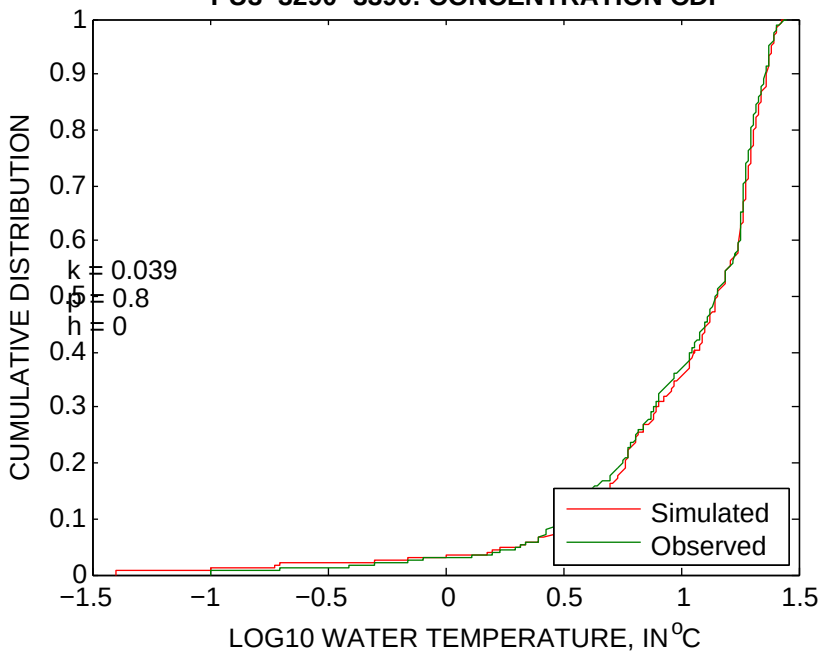
	n	observe	simulate
		478	478
min		0.1	0.040029
		-1	-1.39763
mean		12.8961	13.7017
		0.981431	0.982209
media		12.85	13.624
		1.1089	1.1343
max		28.5	29.682
		1.45484	1.47249
varian		57.0044	66.3318
		0.176243	0.251818
JB		0.001	0.001
		0.001	0.001
		ra	log
%		6.2467	0.0793067
err.va		8.26765	0.049666
rel.std.err		0.145035	0.281804
mod.eff		0.854965	0.718196

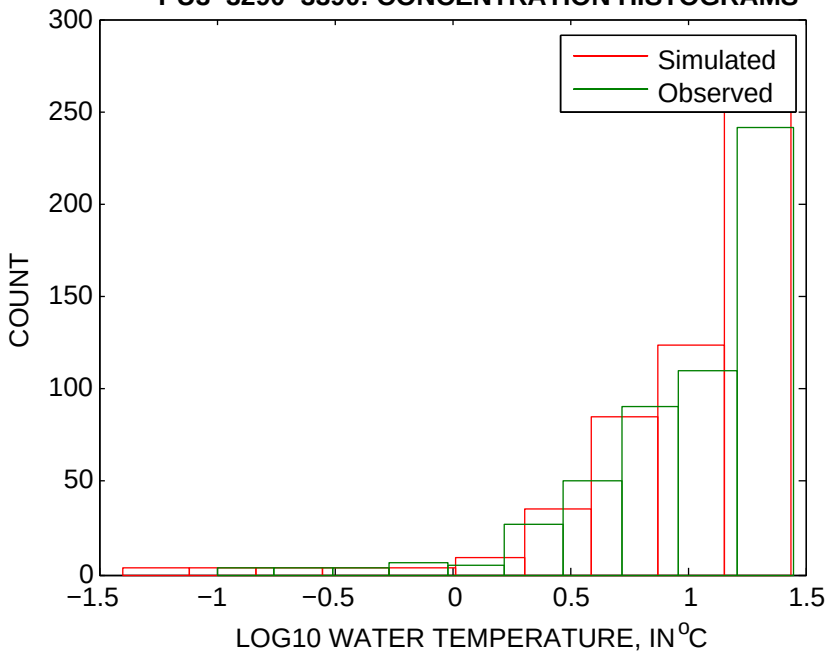
VERSION 2.1

ALL DATA
LOG10

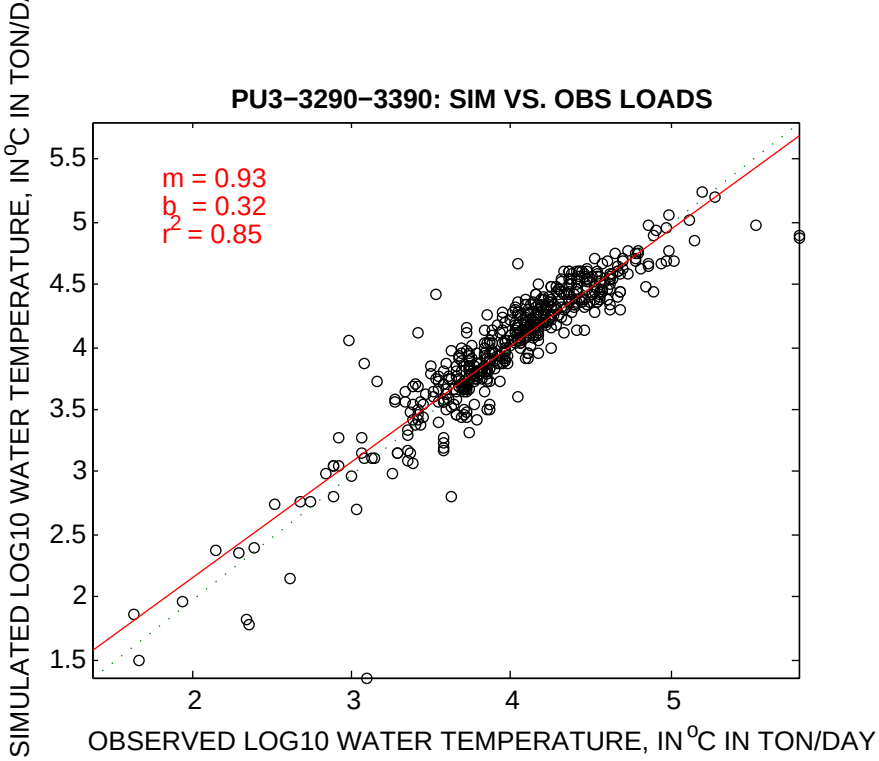


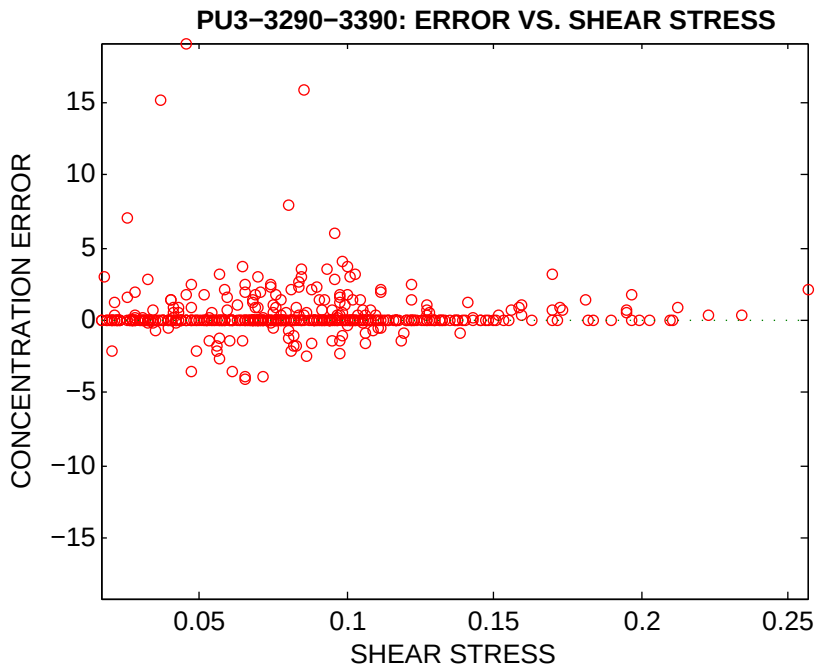


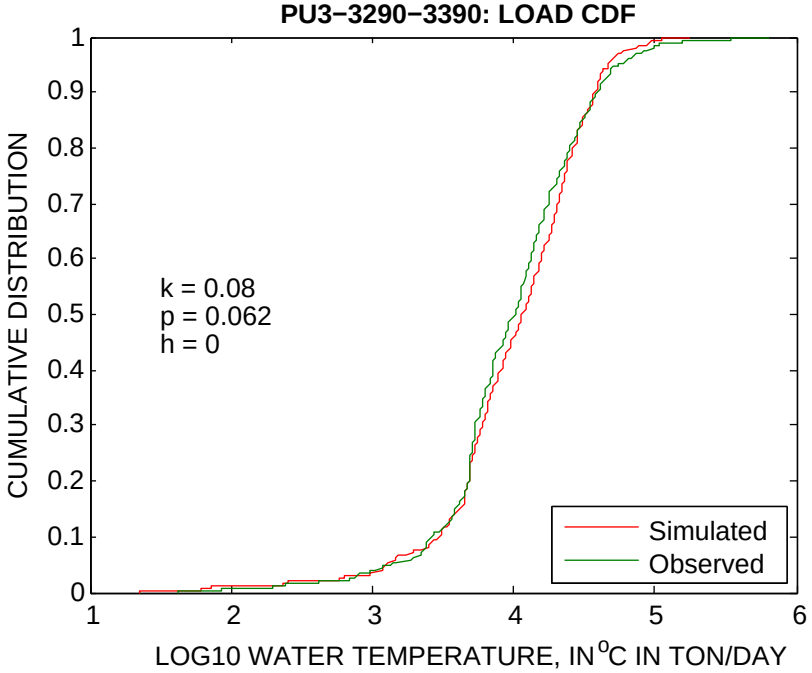


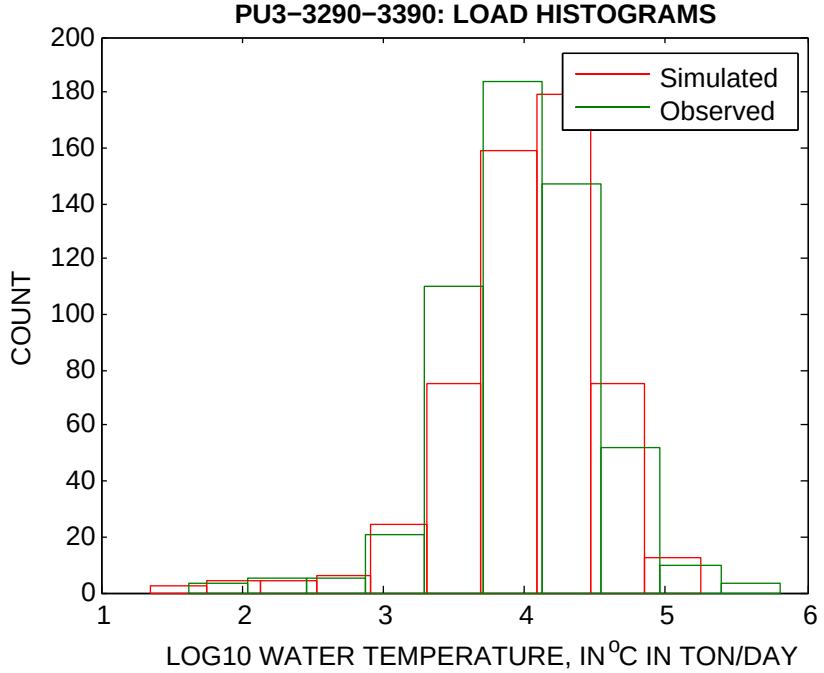


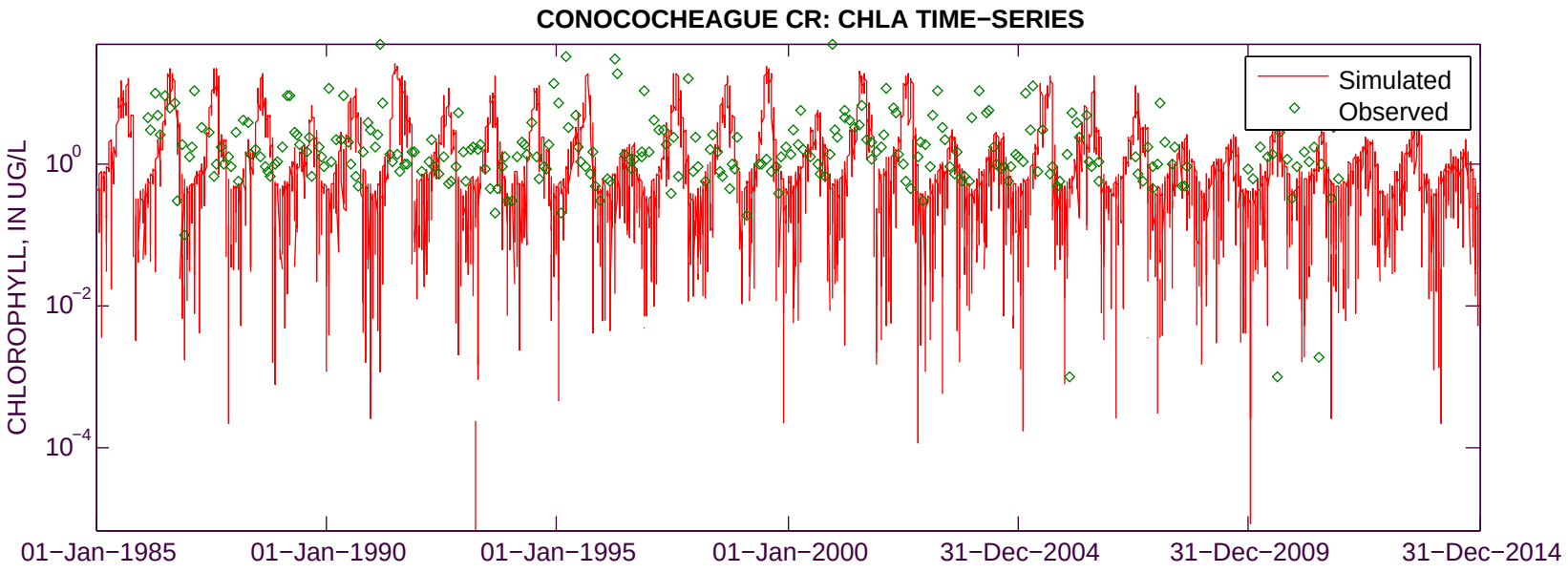
LOAD DATA
LOG10

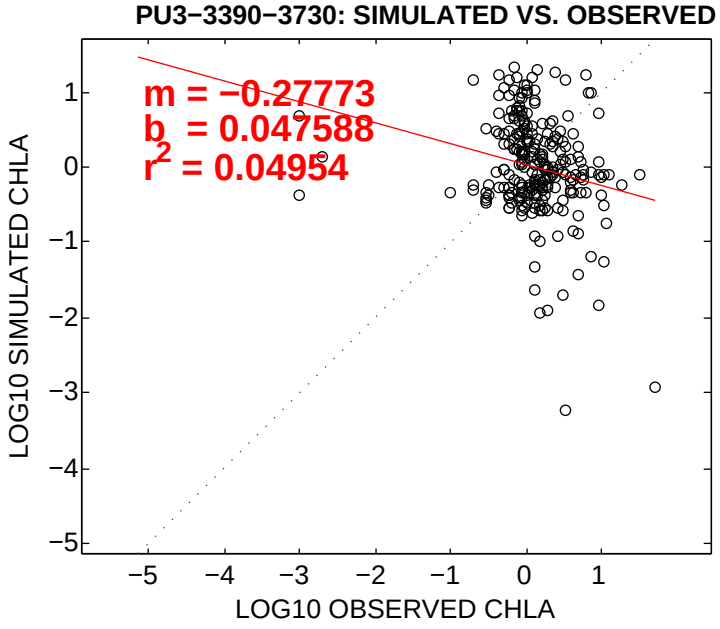


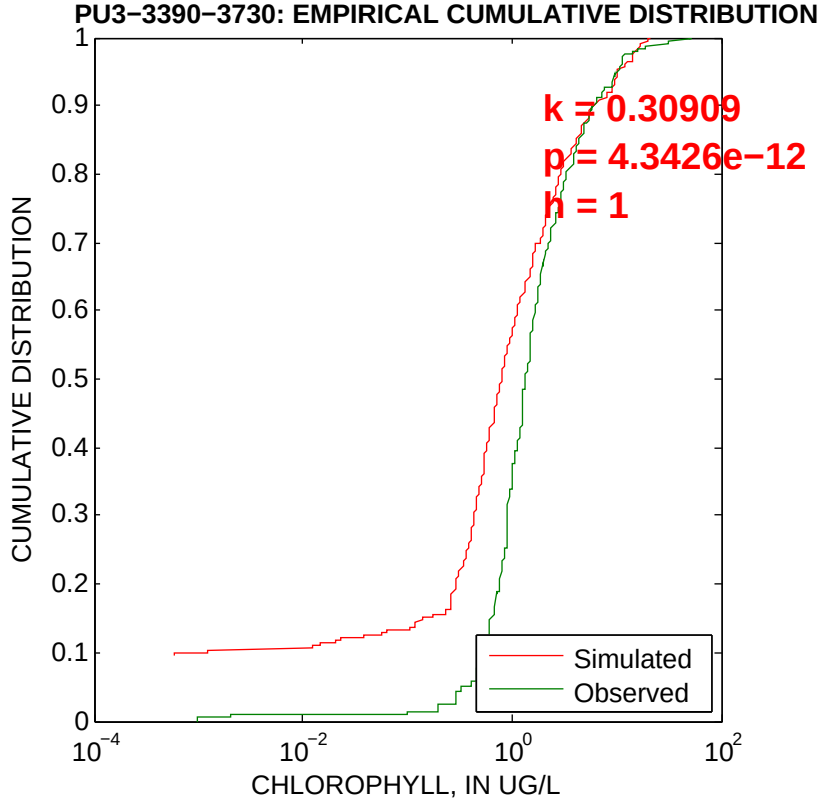












DATA SELECTION

scenario	file
P620171001WQ	CHLA.calib

plot: CHLA - chlorophyll A

Dates: 1/1/1985 – 12/31/201

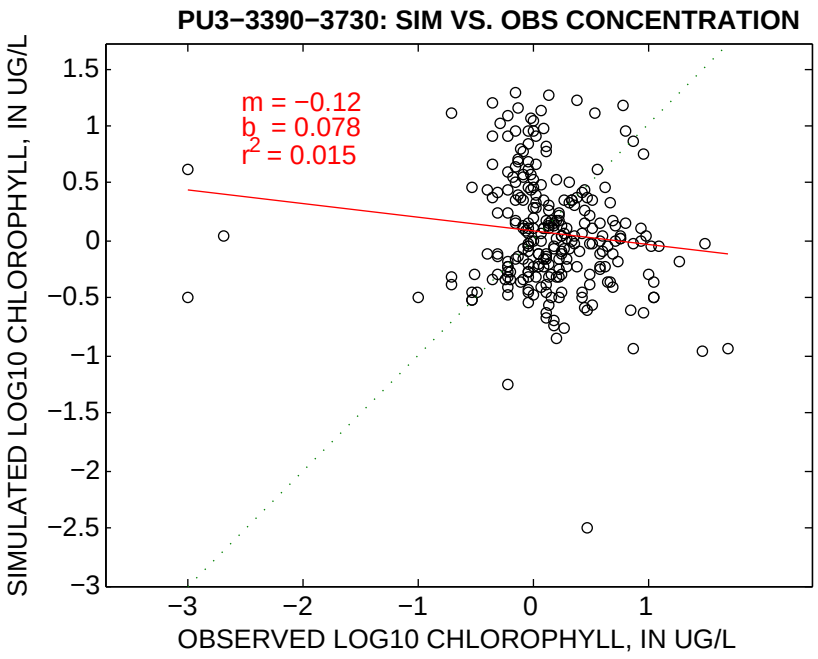
Drive	Directory	Observed
N/A	model	OBS20161101

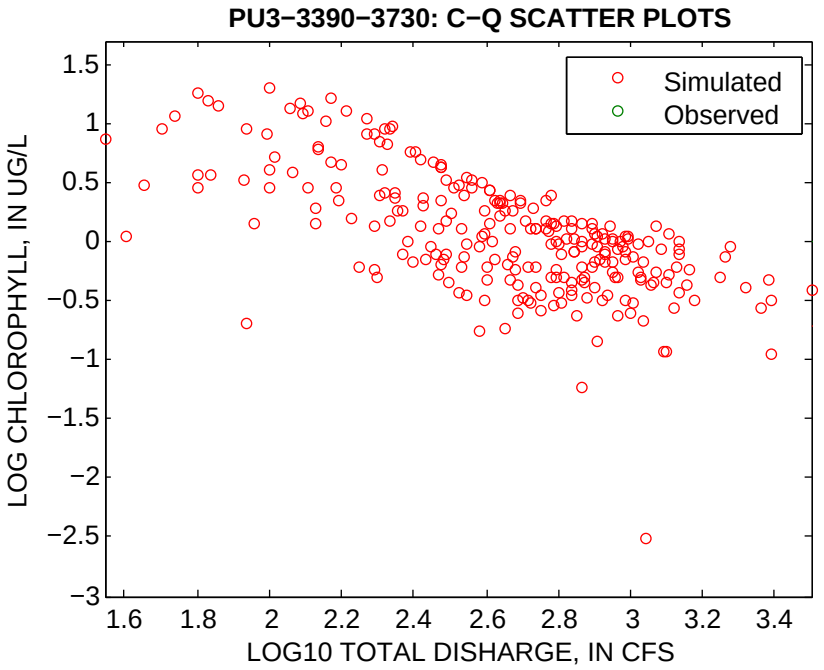
STATISTICS

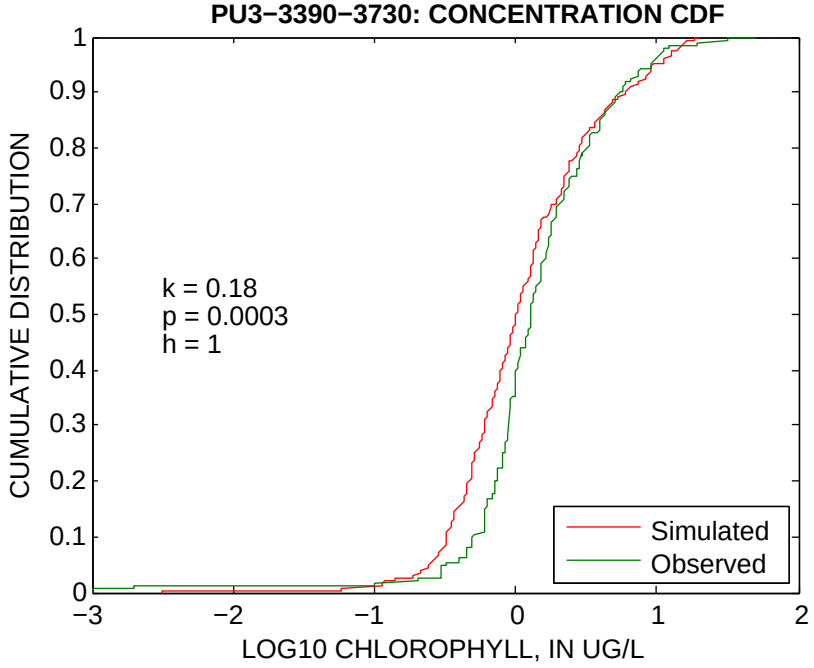
	n	275	249
		observe	simulate
min		0.001	0
		-3	-3.22694
mean		2.95227	2.27665
		0.133114	0.0106179
media		1.35	0.79941
		0.112605	-0.036987
max		50.84	21.32
		1.70105	1.32879
varian		30.3782	13.8617
		0.274191	0.426913
JB		0.001	0.001
		0.001	0.001
		ra	log
%		-22.8846	-92.0235
err.va		50.1319	0.868471
rel.std.err		1.65026	3.1674
mod.eff		-0.650261	-2.1674

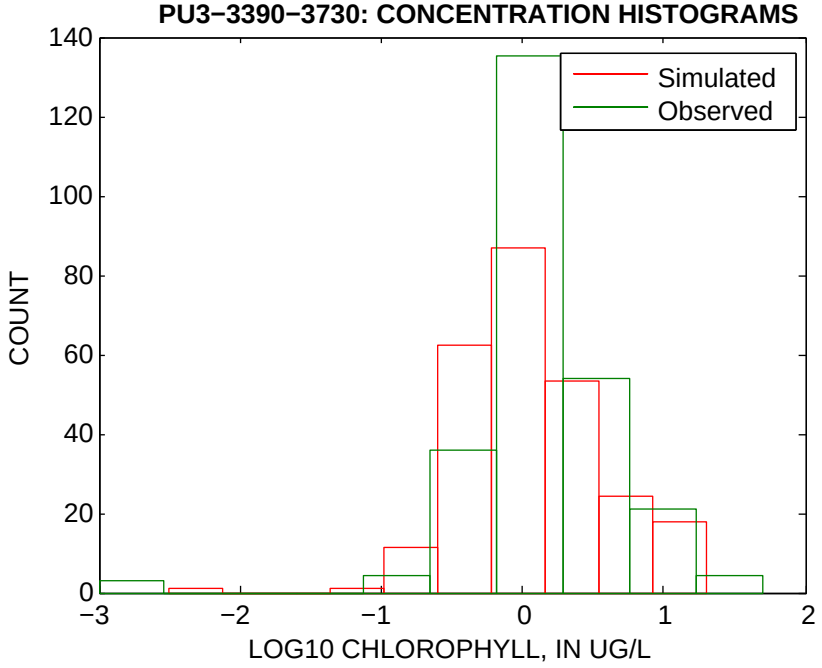
VERSION 3.1

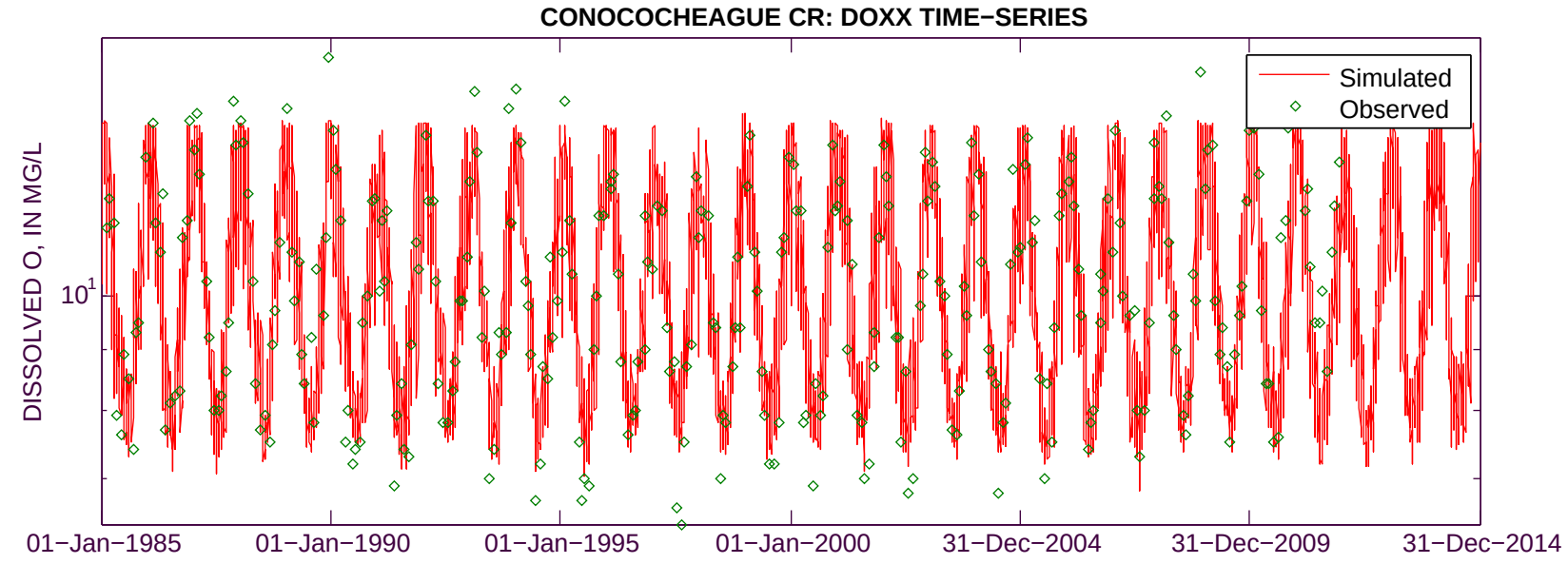
ALL DATA
LOG10

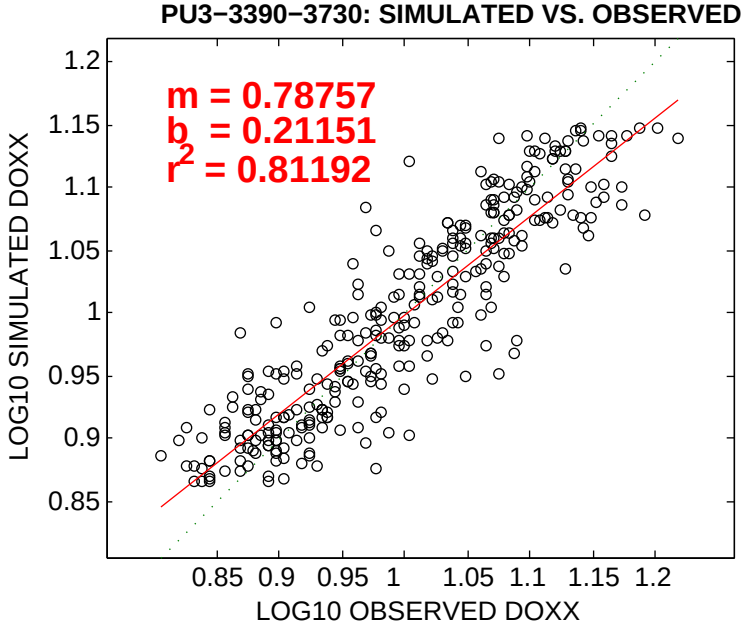


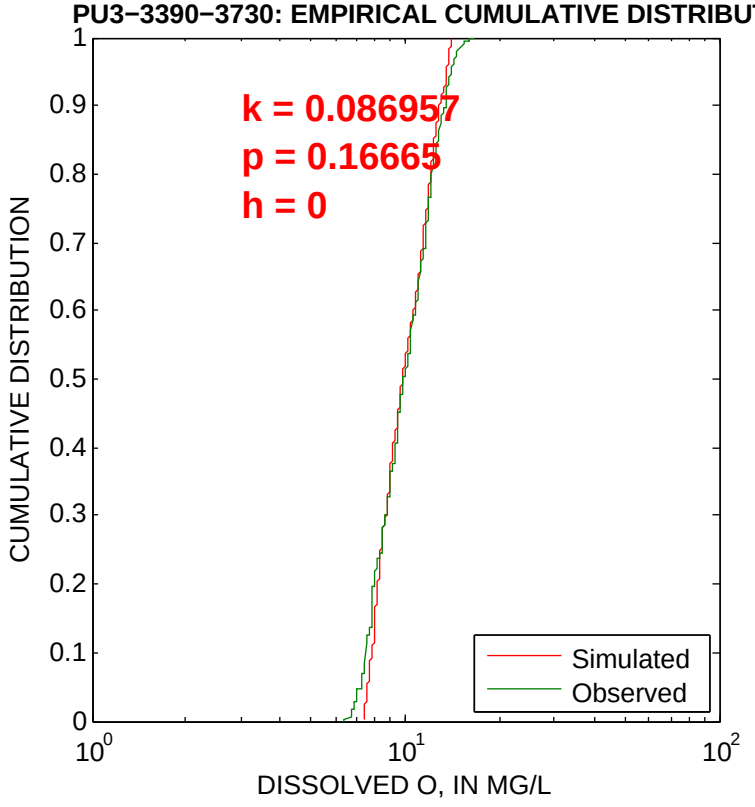












DATA SELECTION

scenario: P620171001WQ | file: DOXX.calib

plot: DOXX - dissolved oxygen

Dates: 1/1/1985 – 12/31/201

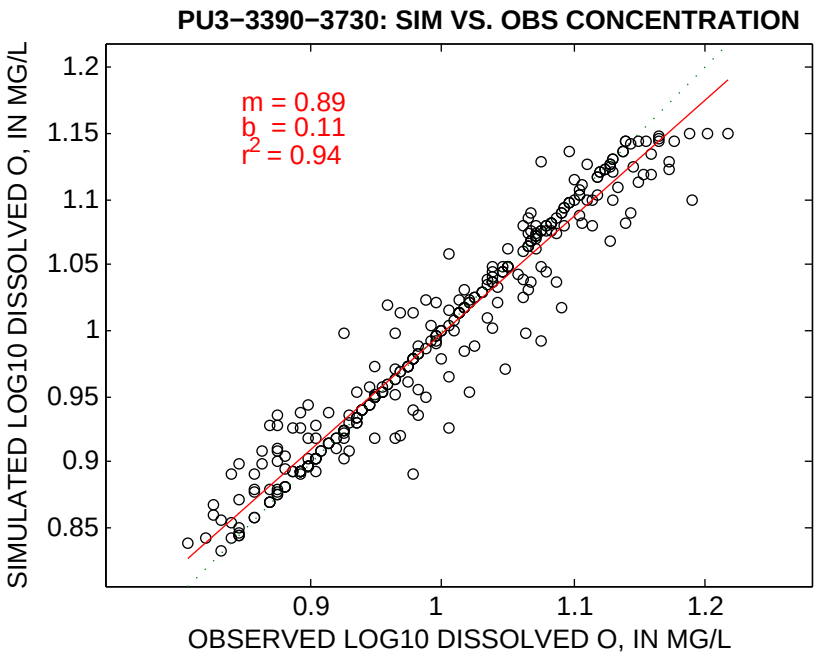
Drive: N/A | Directory: model | Observed: OBS20161101

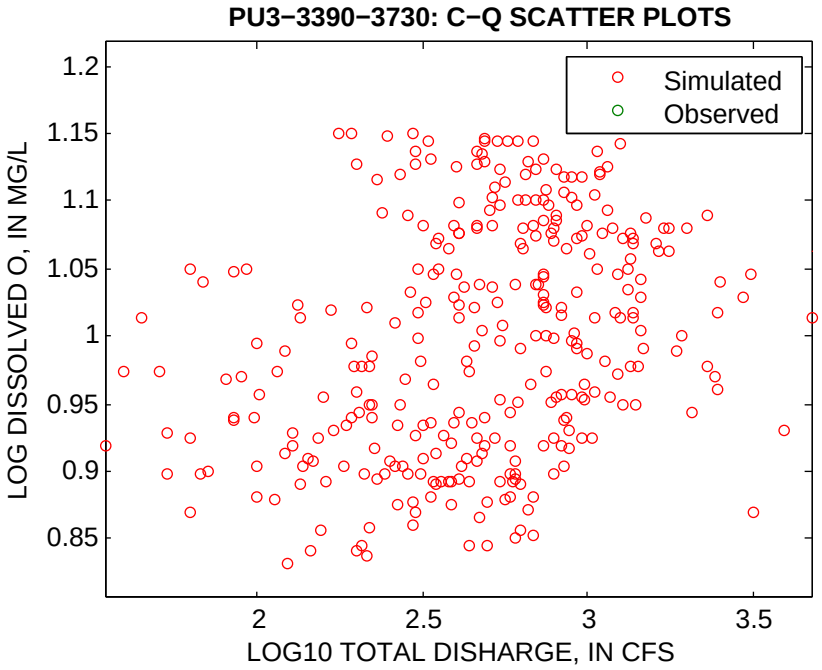
STATISTICS

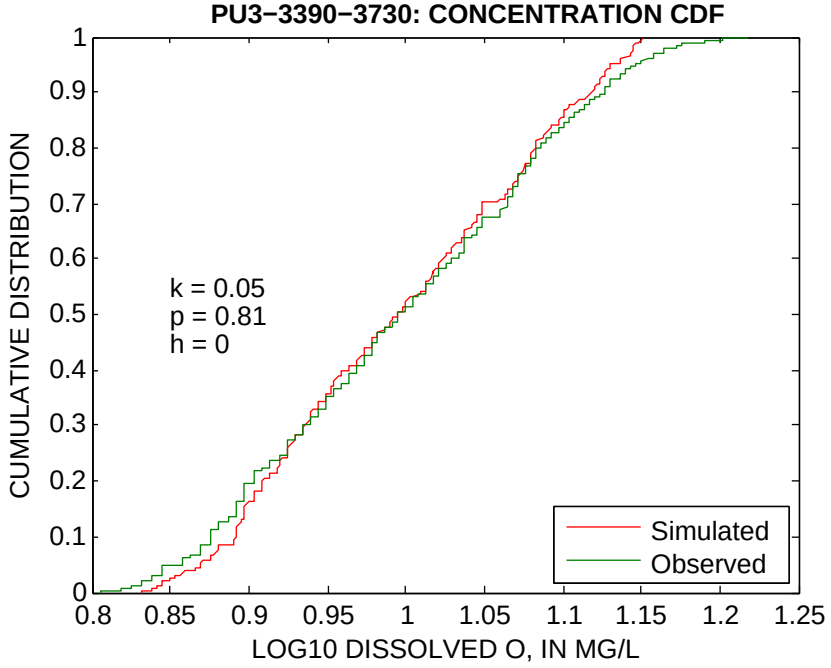
	n	observe	simulate
		322	322
min		6.4	7.3324
		0.80618	0.865246
mean		10.2026	10.133
		0.998737	0.998084
media		9.9	9.83885
		0.995635	0.992944
max		16.5	14.04
		1.21748	1.14737
varian		4.84035	3.67582
		0.00868642	0.00663602
JB		0.004438	0.001324
		0.007063	0.001565
		ra	log
%		-0.682492	-0.0653839
err.va		0.940878	0.00164048
rel.std.err		0.194382	0.188856
mod.eff		0.805618	0.811144

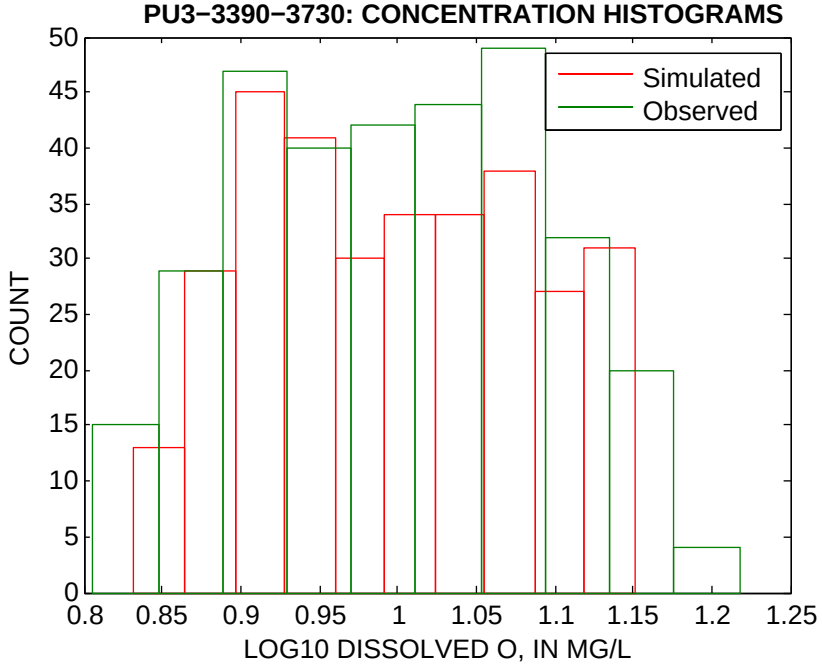
VERSION 2.1

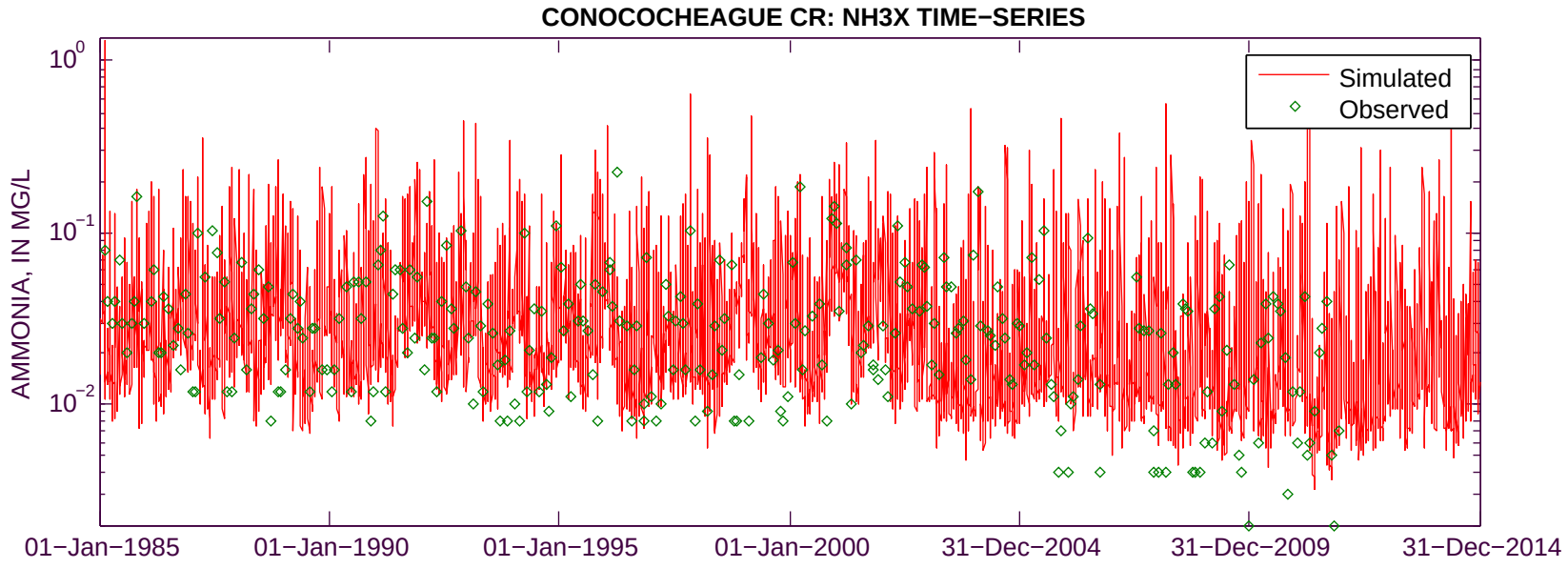
ALL DATA
LOG10

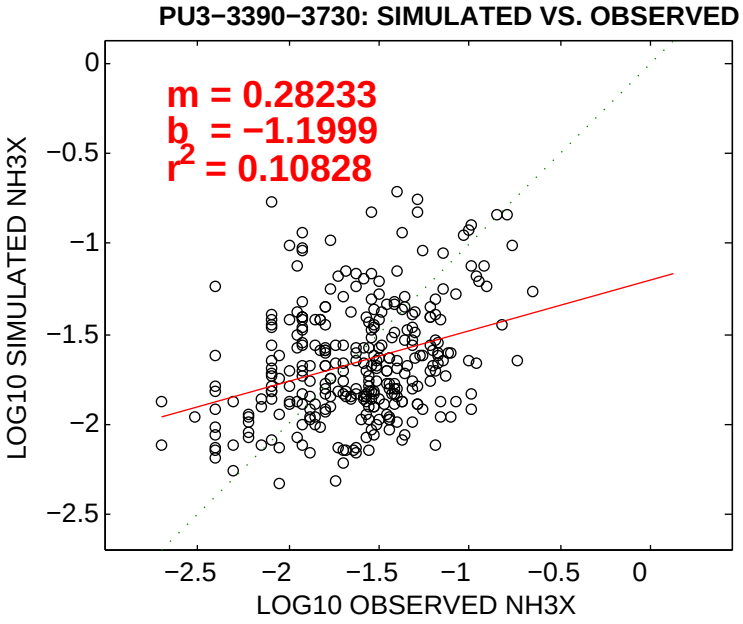


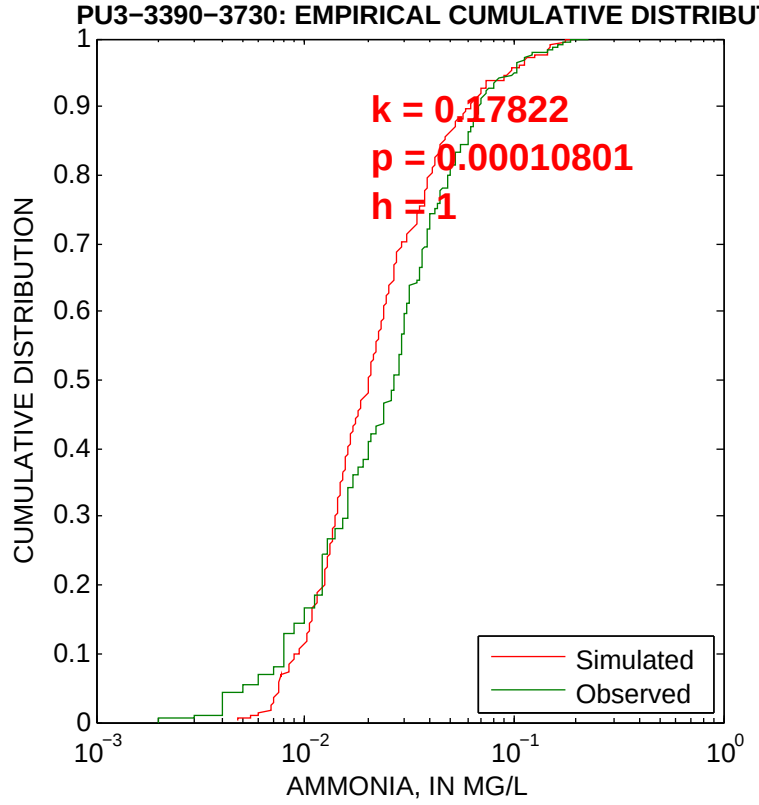












DATA SELECTION

scenario: P620171001WQ | file: NH3X.calib

plot: NH3X - ammonia

Dates: 1/1/1985 – 12/31/201

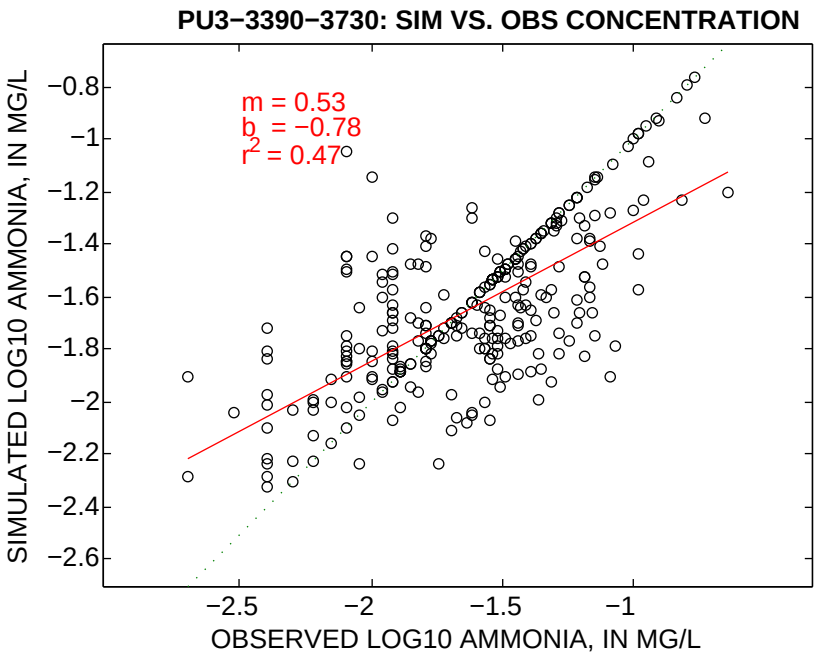
Drive: N/A | Directory: model | Observed: OBS20161101

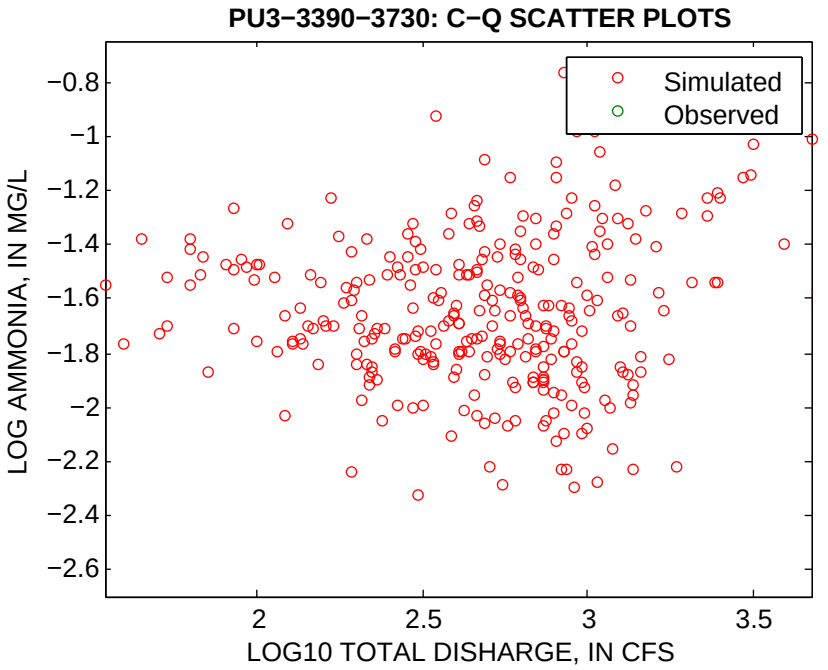
STATISTICS

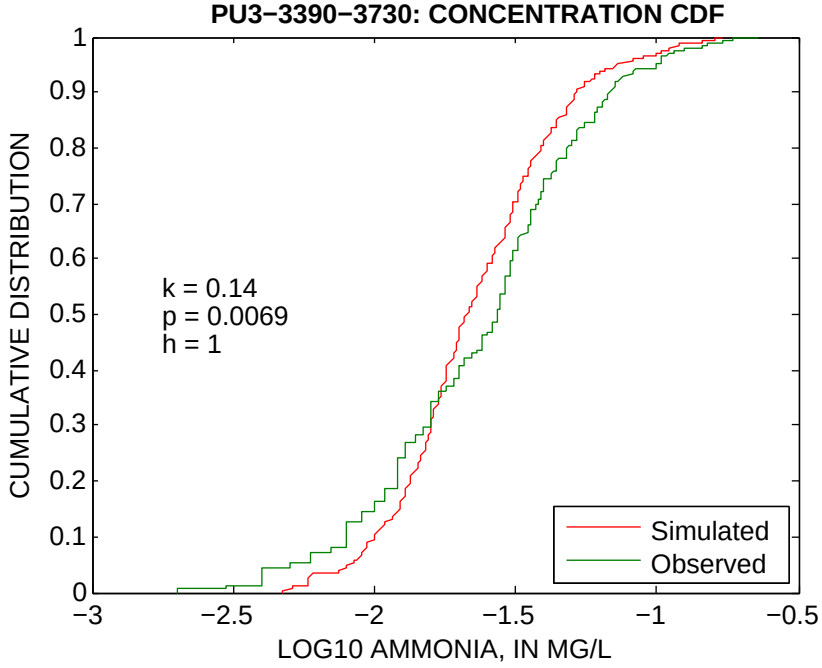
		observe	simulate
n		303	303
min		0.002	0.0047021
		-2.69897	-2.32771
mean		0.0340396	0.0300324
		-1.61944	-1.65713
media		0.027	0.020081
		-1.56864	-1.69721
max		0.227	0.19445
		-0.643974	-0.711192
varian		0.00098422	0.00088624
		0.139792	0.102905
JB		0.001	0.001
		0.350089	0.002192
		ra	log
%		-11.7721	2.32744
err.va		0.00128874	0.165187
rel.std.err		1.30939	1.18167
mod.eff		-0.309393	-0.181669

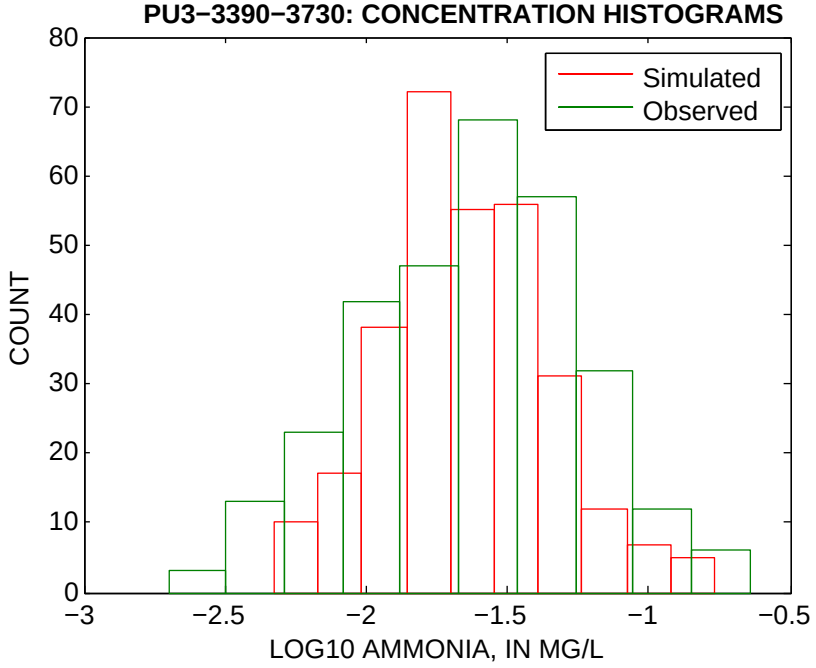
VERSION 2.1

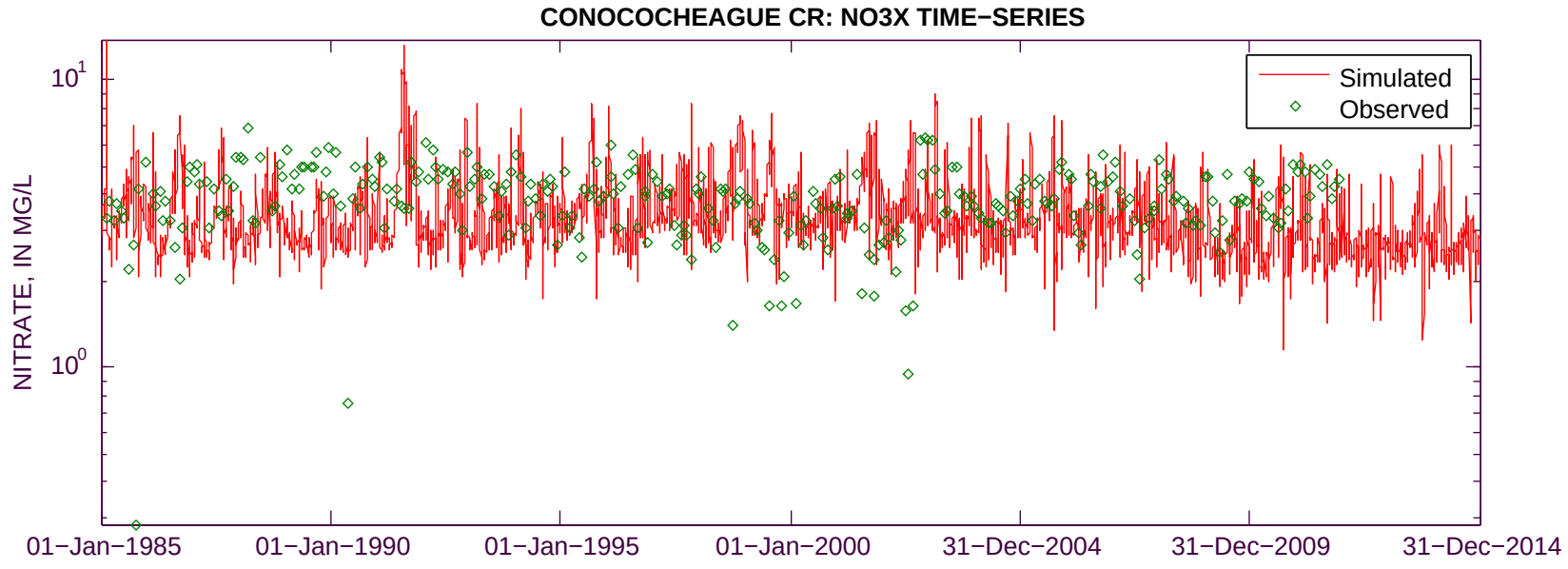
ALL DATA
LOG10

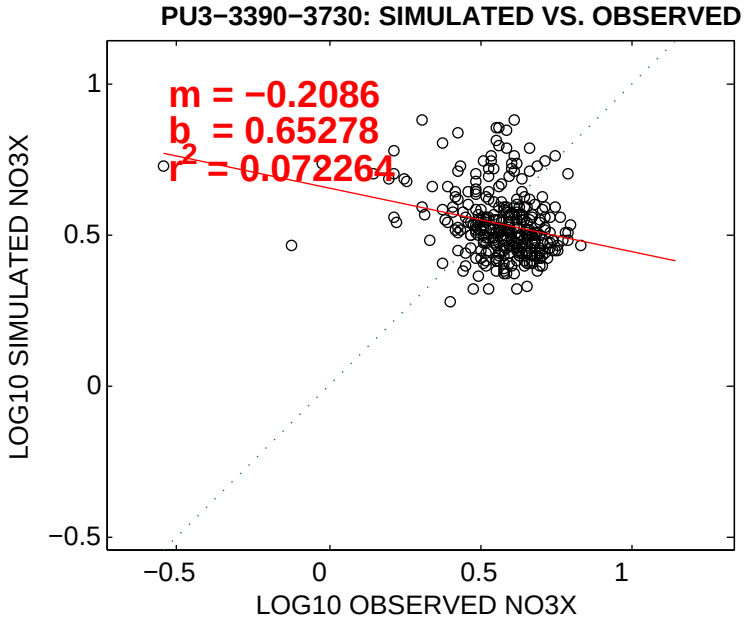


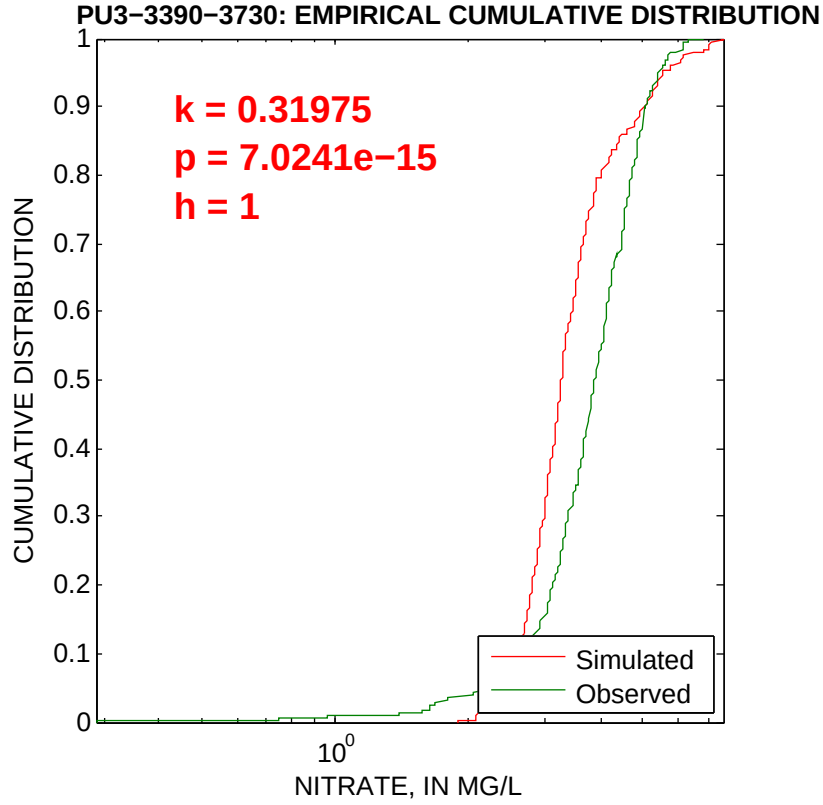












DATA SELECTION

scenario	file
P620171001WQ	NO3X.calib

plot: NO3X - nitrate

Dates: 1/1/1985 – 12/31/201

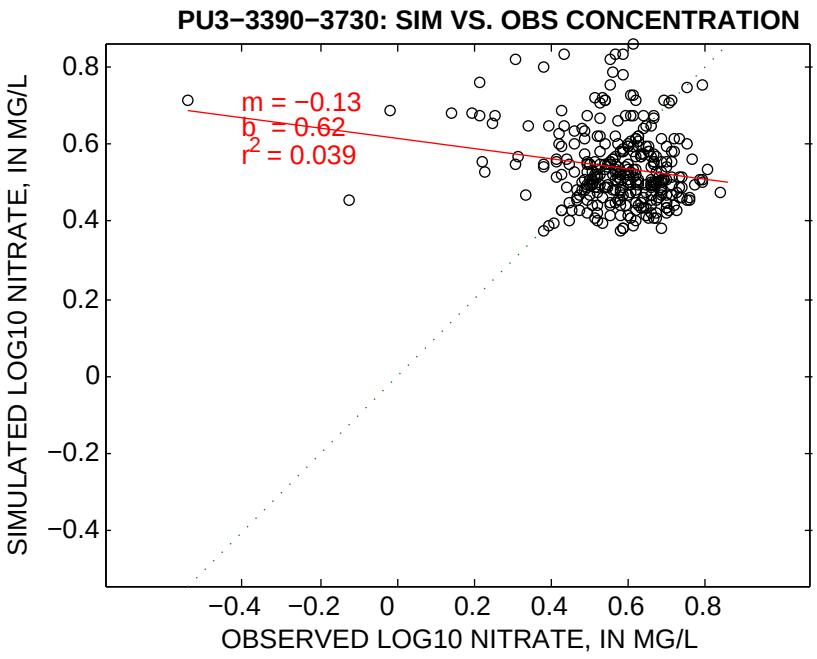
Drive	Directory	Observed
N/A	model	OBS20161101

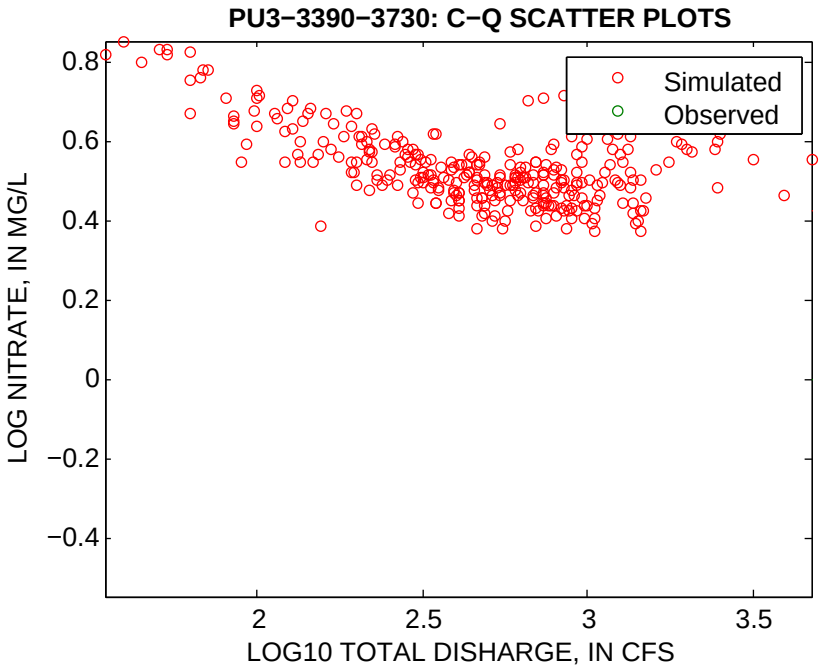
STATISTICS

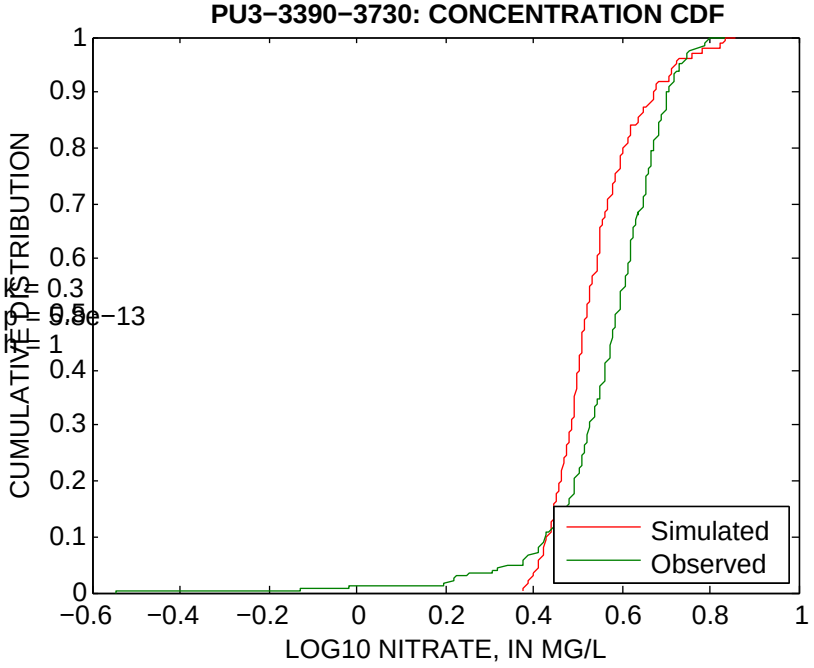
n	319	319
	observe	**simulate**
min	0.287	1.912
	-0.542118	0.281488
mean	3.89148	3.53106
	0.572075	0.533445
media	3.878	3.2574
	0.588608	0.512871
max	6.86	7.573
	0.836324	0.879268
varian	0.980629	0.994149
	0.019424	0.0116966
JB	0.022465	0.001
	0.001	0.001
	ra	log
%	-9.26173	-6.75255
err.va	2.60386	0.0407213
rel.std.err	2.6553	2.09644
mod.eff	-1.6553	-1.09644

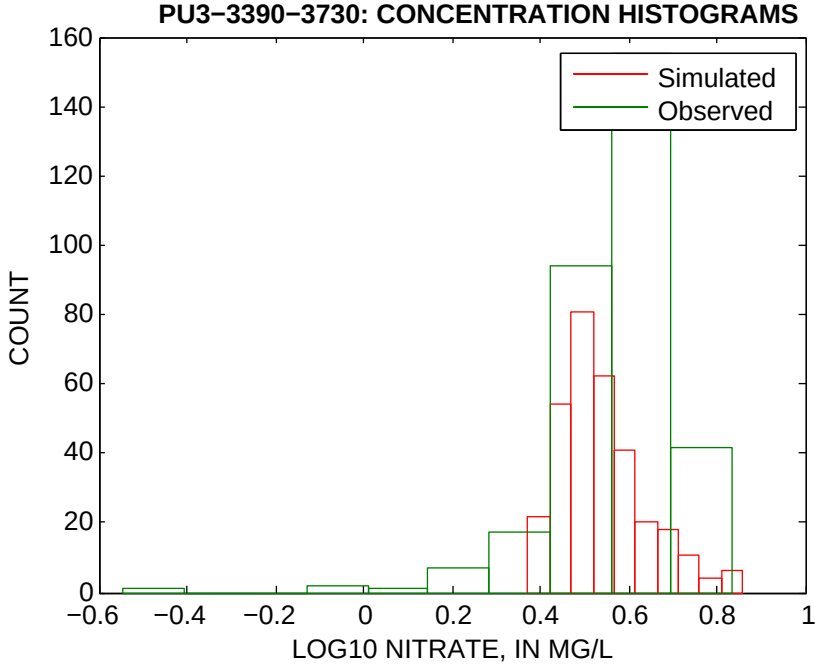
VERSION 2.1

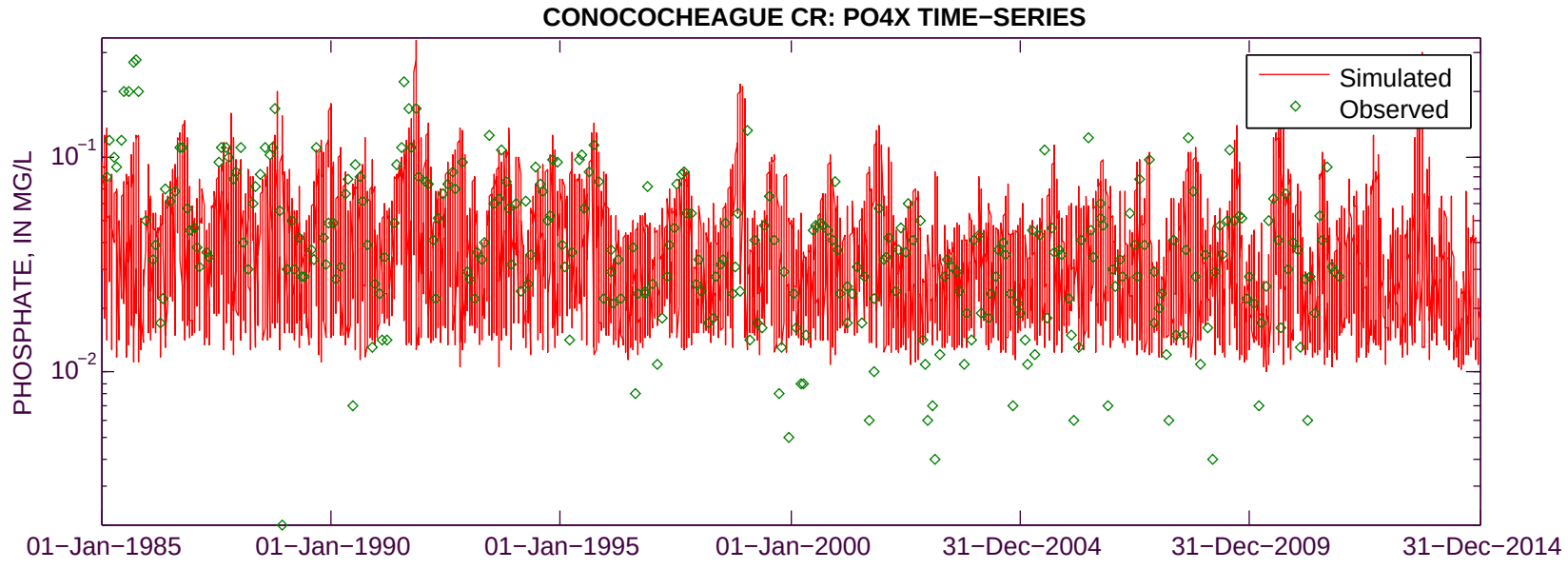
ALL DATA
LOG10

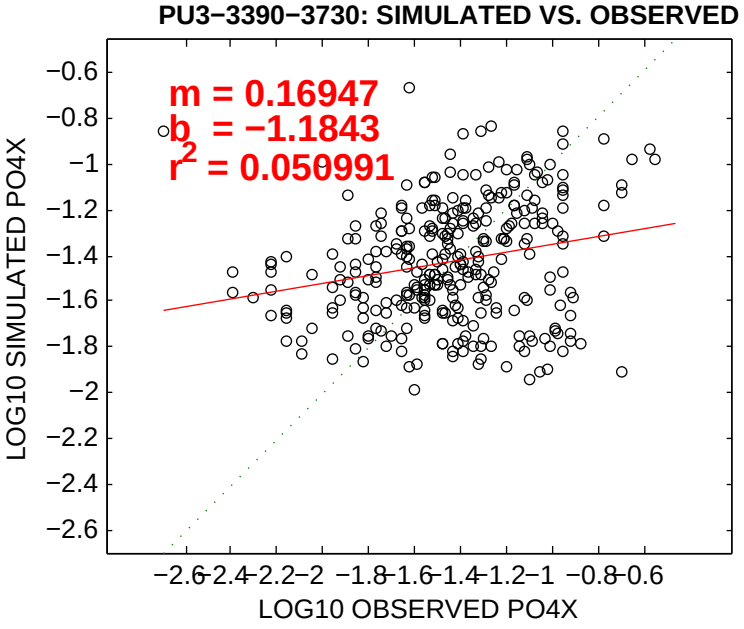


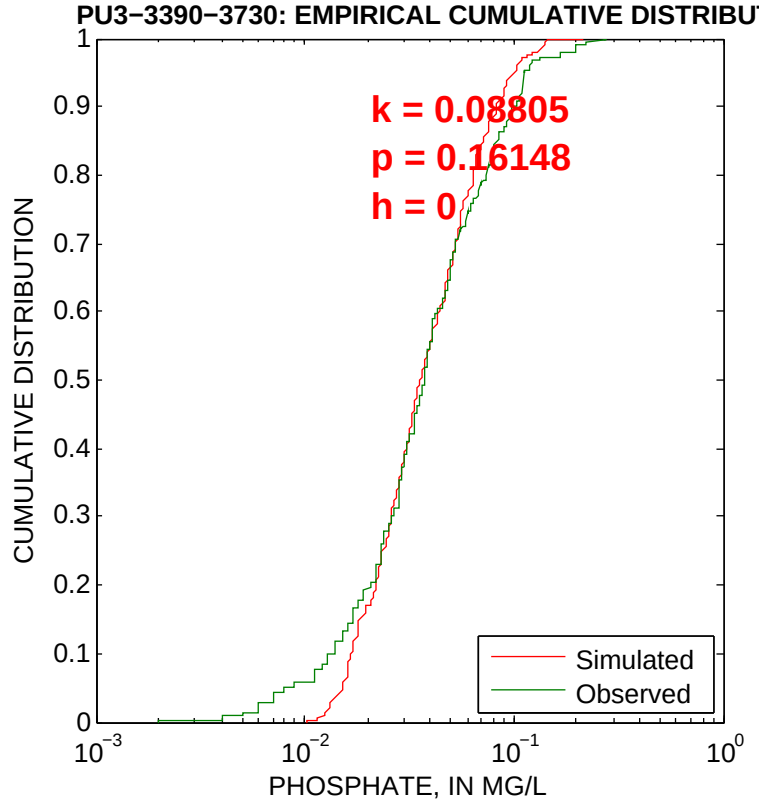












DATA SELECTION

scenario	file
P620171001WQ	PO4X.calib

plot: PO4X - phosphate

Dates 1/1/1985 12/31/201

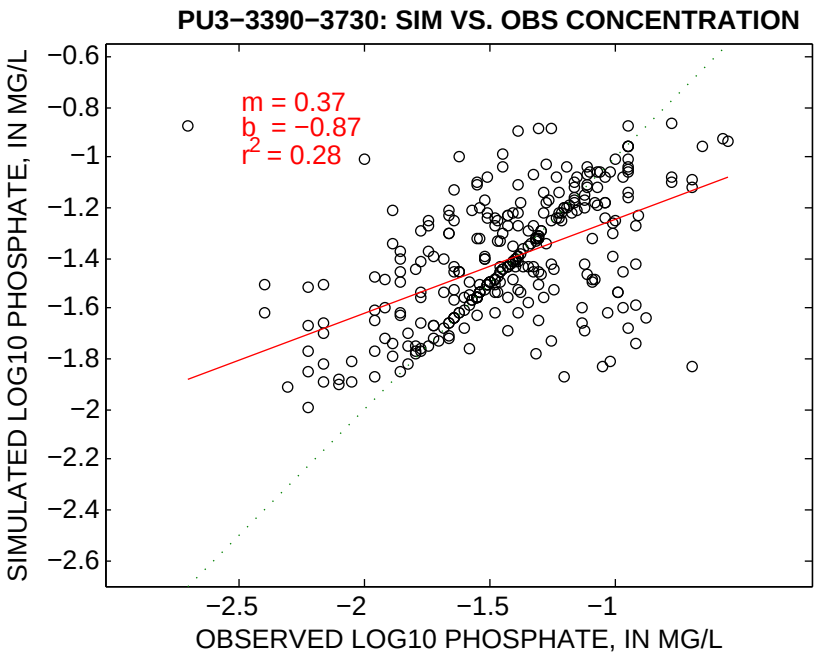
Drive	Directory	Observed
N/A	model	OBS20161101

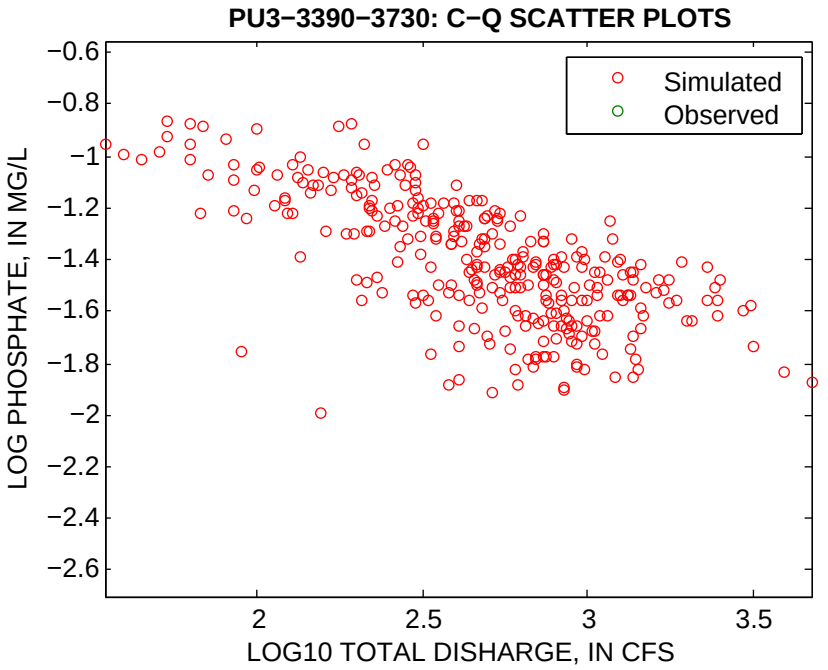
STATISTICS

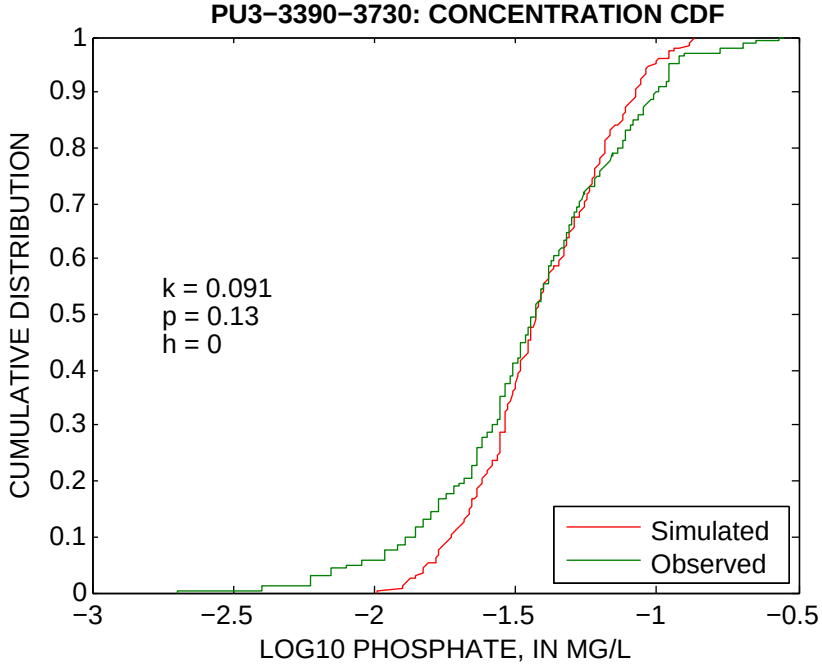
		observe	simulate
n		318	318
min		0.002	0.010201
		-2.69897	-1.99136
mean		0.0486918	0.0445983
		-1.43881	-1.42817
media		0.037	0.035998
		-1.4318	-1.44372
max		0.28	0.21528
		-0.552842	-0.666996
varian		0.00162815	0.00082354
		0.117913	0.0664137
JB		0.001	0.001
		0.023111	0.034407
		ra	log
%		-8.40706	-0.739509
err.va		0.00180164	0.144474
rel.std.err		1.10656	1.22527
mod.eff		-0.106558	-0.225265

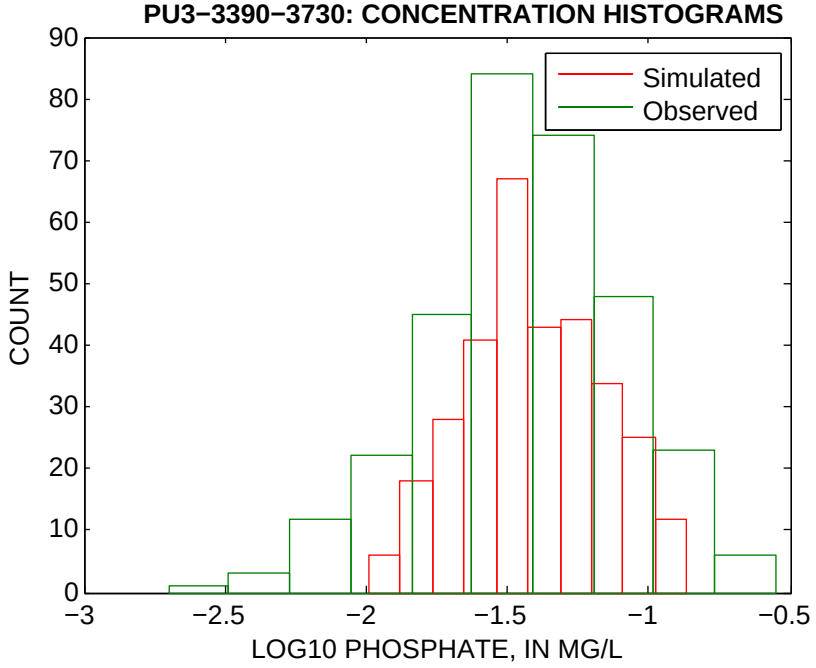
VERSION 2.1

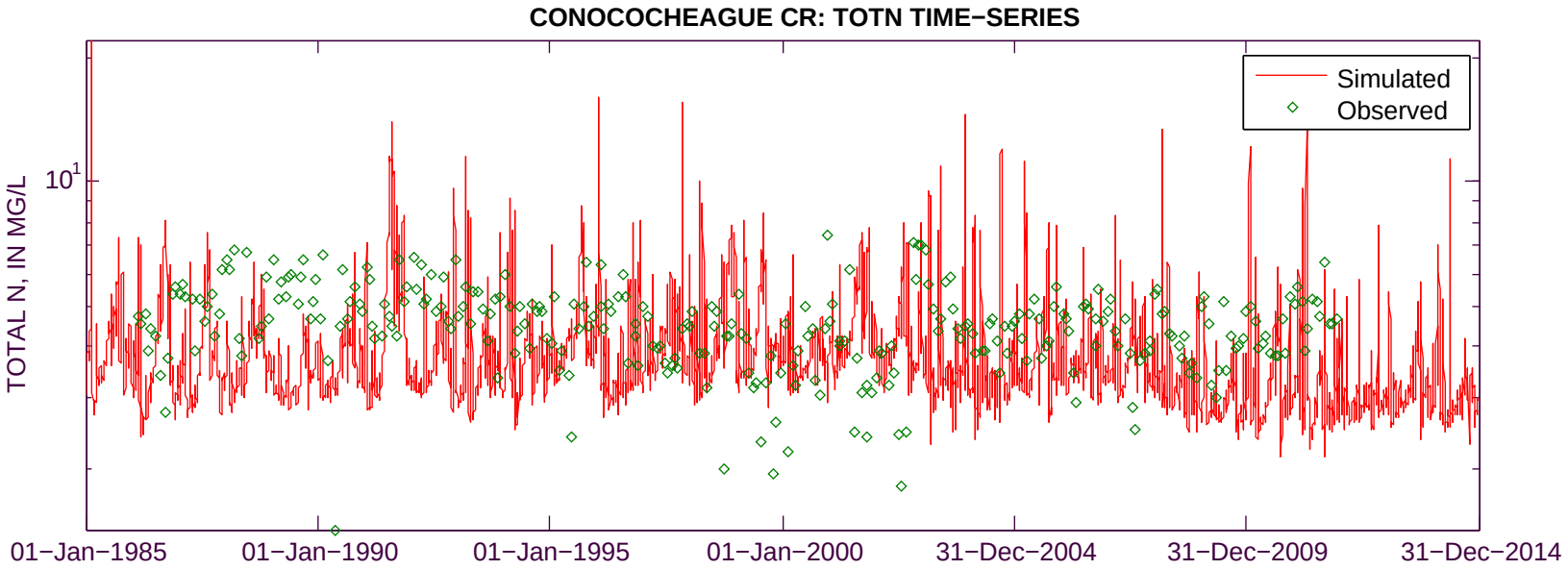
ALL DATA
LOG10

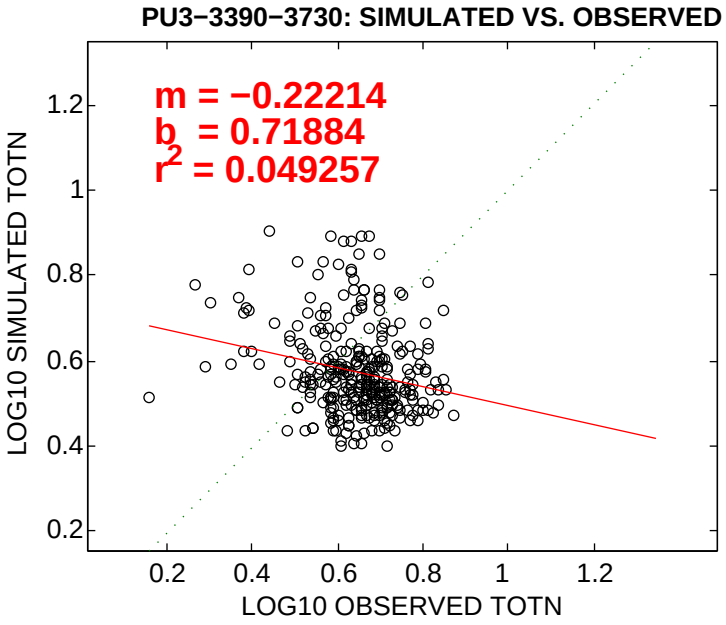


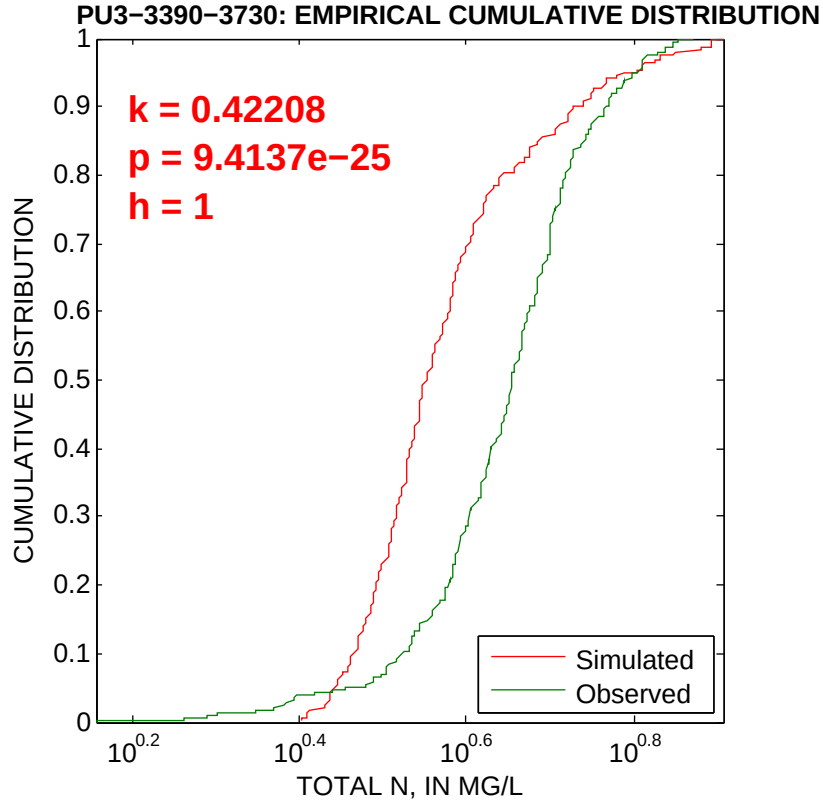












DATA SELECTION

scenario: P620171001WQ | file: TOTN.calib

plot: TOTN - total nitrogen

Dates: 1/1/1985 – 12/31/201

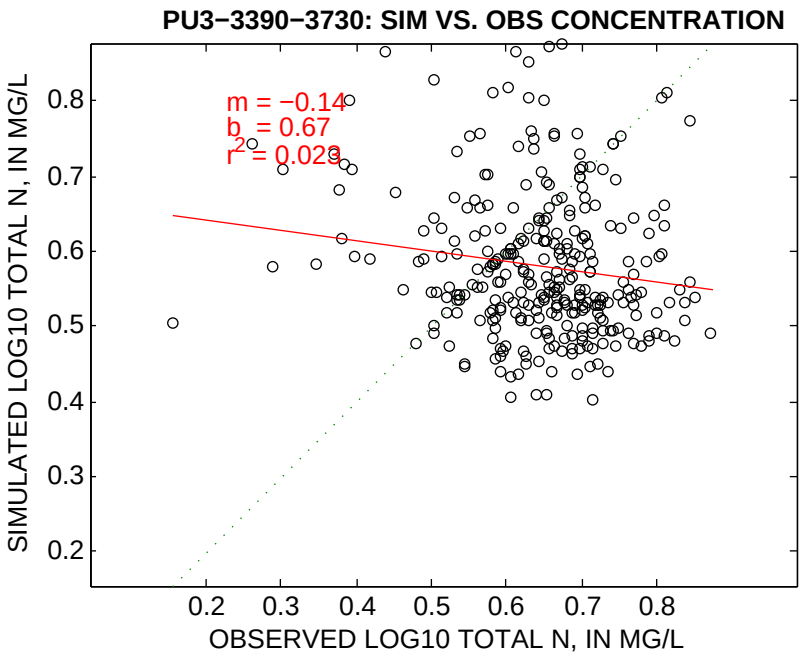
Drive: N/A | Directory: model | Observed: OBS20161101

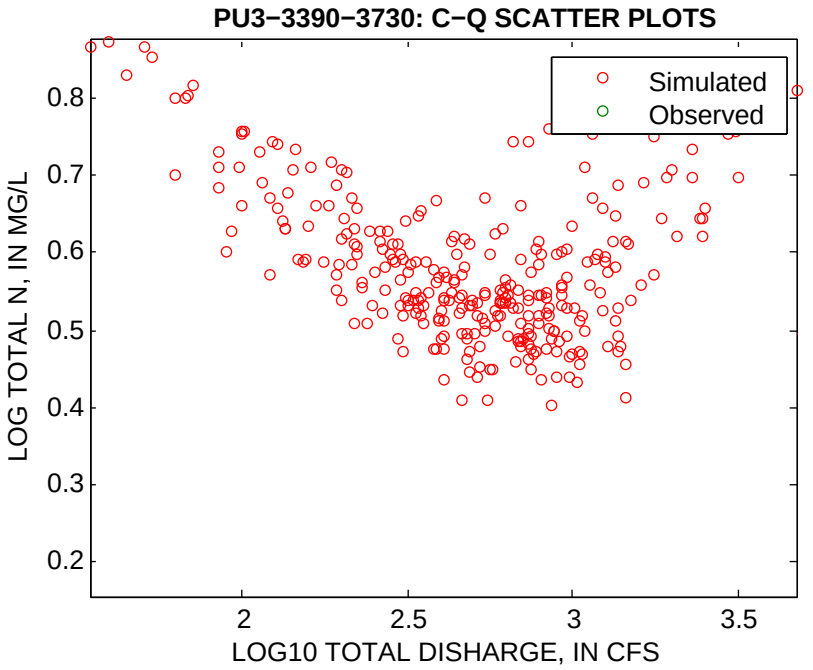
STATISTICS

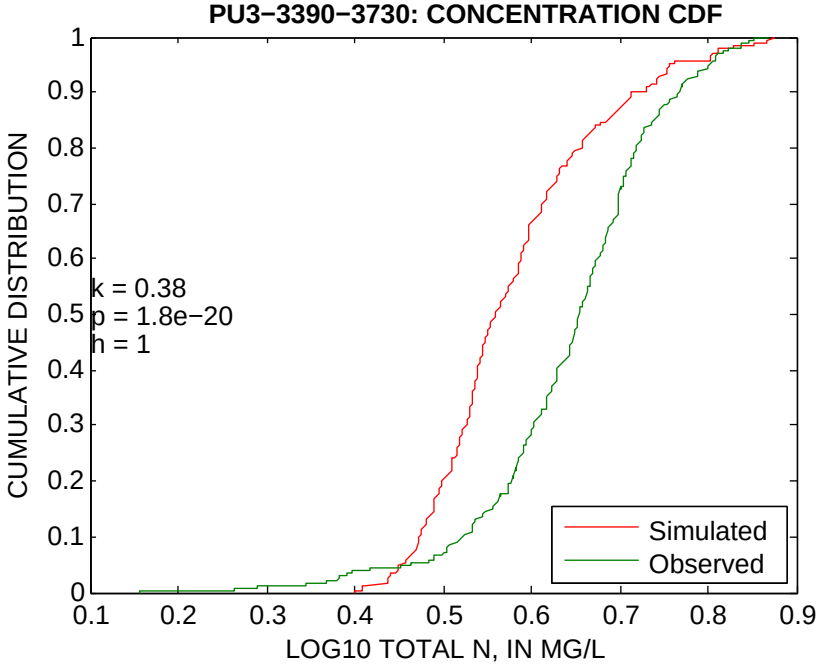
	n	308	308
		observe	simulate
min		1.43	2.5066
		0.155336	0.399085
mean		4.52908	3.88398
		0.644364	0.575699
media		4.515	3.557
		0.654657	0.551084
max		7.42	8.0676
		0.870404	0.906744
varian		1.0058	1.14013
		0.010881	0.0109003
JB		☑ 0.33458	0.001
		0.001	0.001
		ra	log
%		-14.2434	-10.6562
err.va		3.00396	0.0313456
rel.std.err		2.98664	2.88076
mod.eff		-1.98664	-1.88076

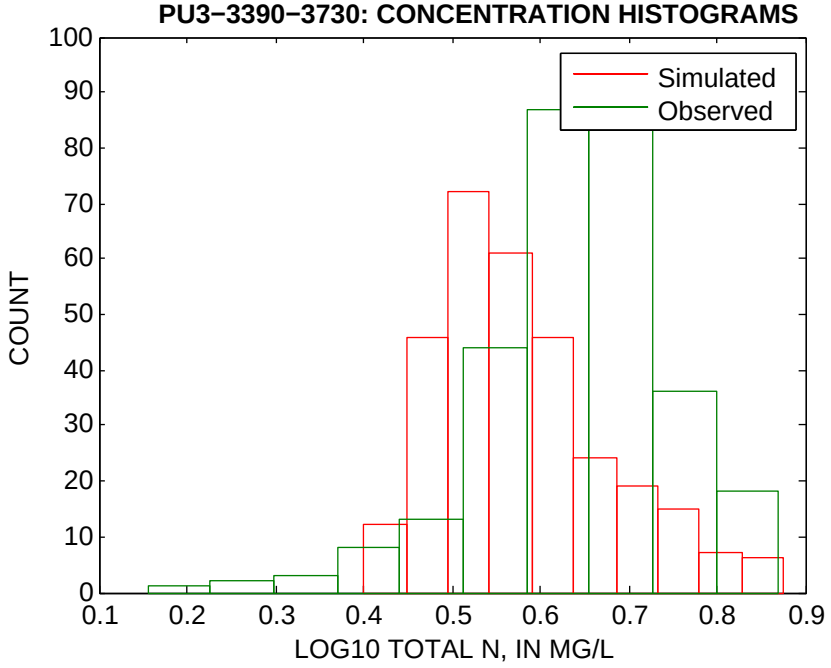
VERSION 2.1

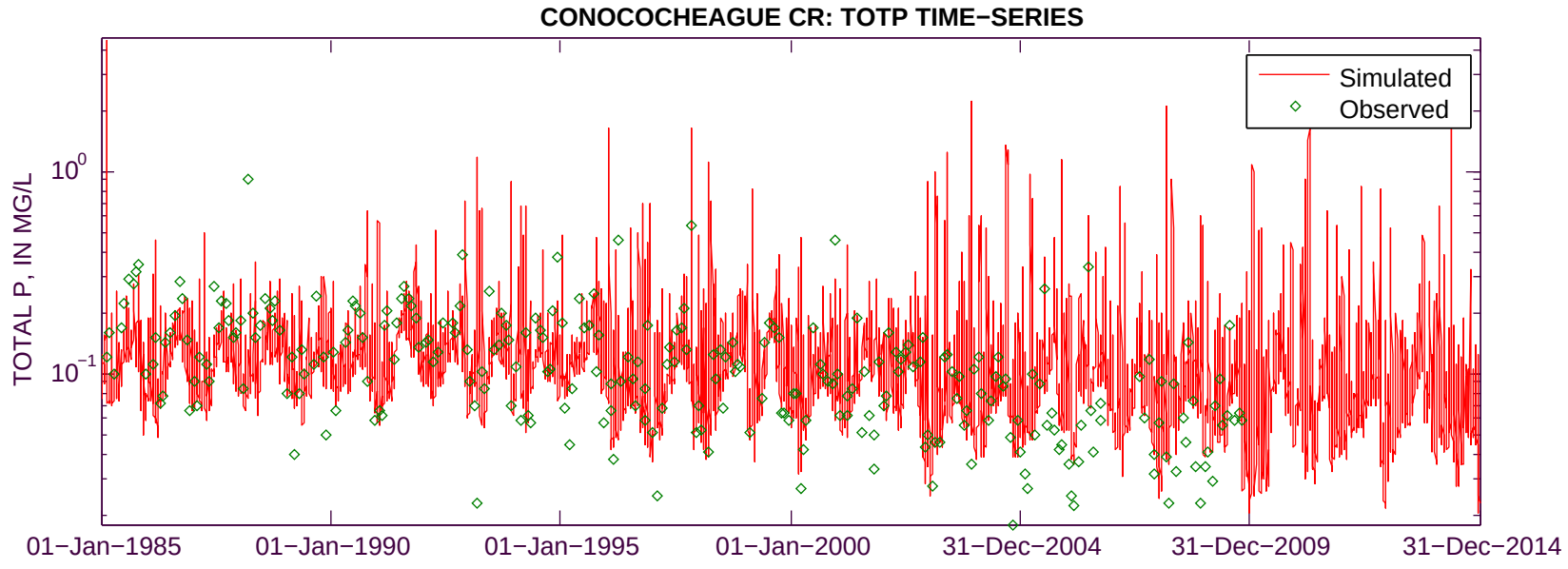
ALL DATA
LOG10

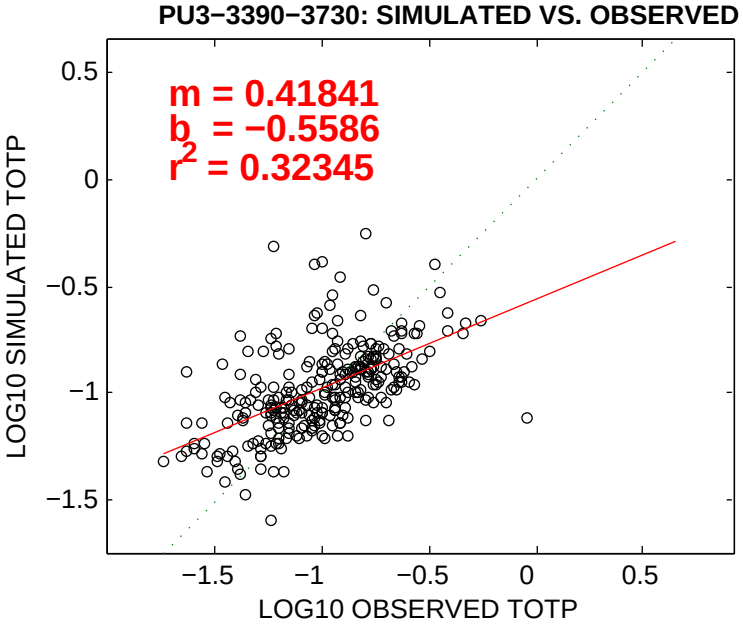


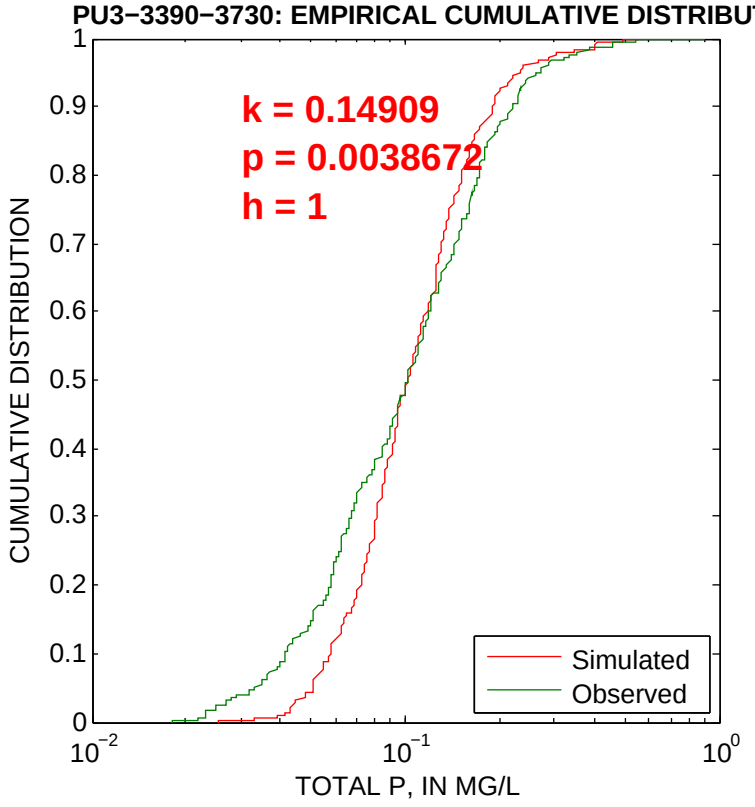












DATA SELECTION

scenario	file
P620171001WQ	TOTP.calib

plot: TOTP - total phosphorus

Dates: 1/1/1985 – 12/31/201

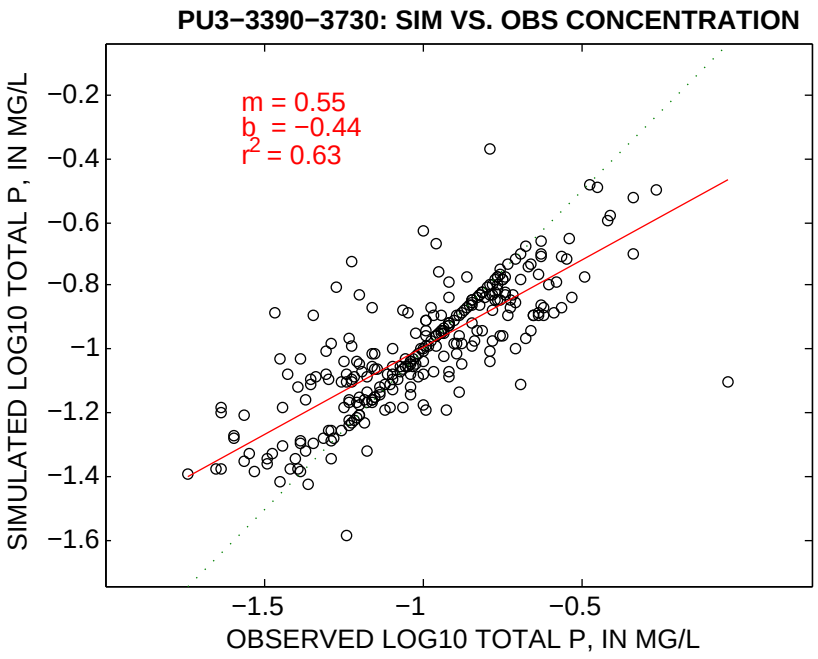
Drive	Directory	Observed
N/A	model	OBS20161101

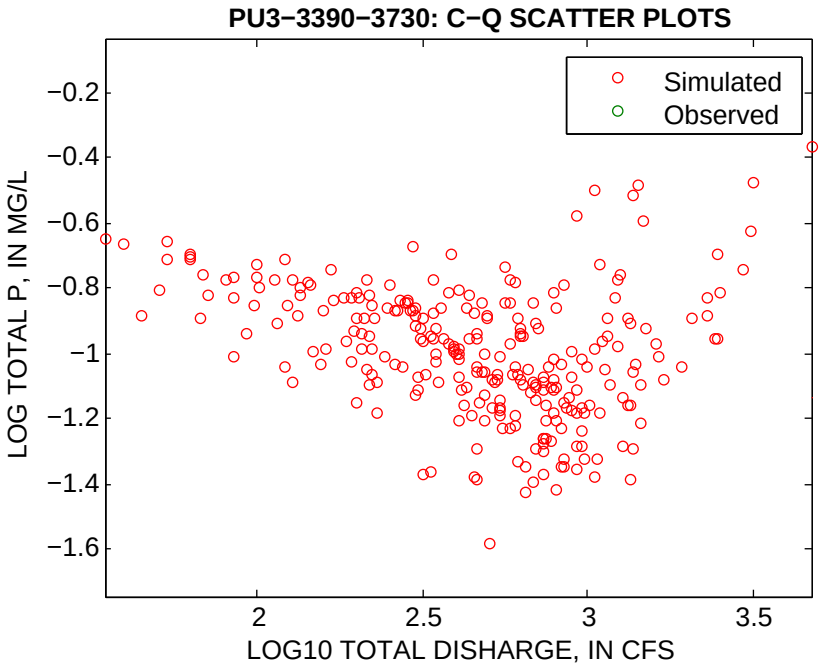
STATISTICS

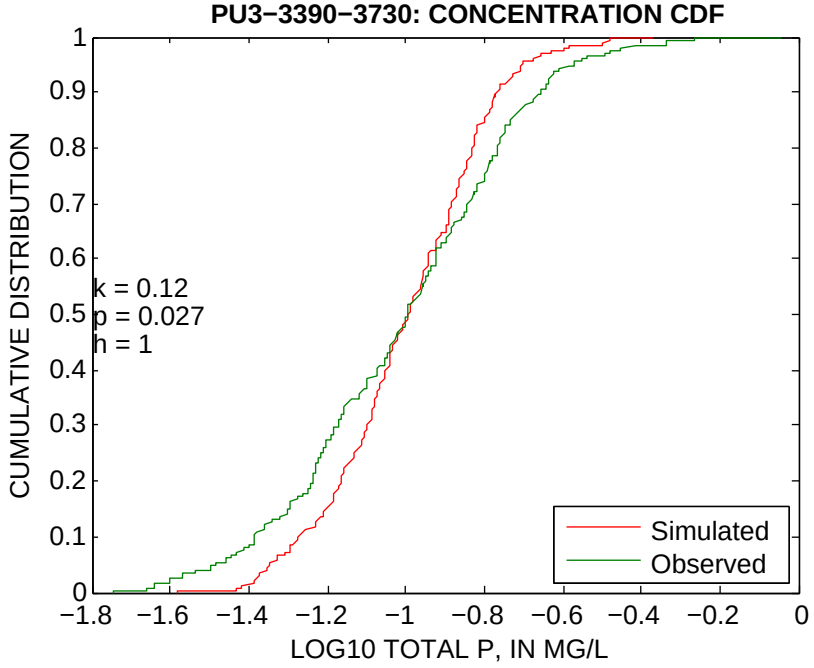
	n	275	275
		observe	simulate
min		0.018	0.02556
		-1.74473	-1.59244
mean		0.122113	0.118632
		-1.00602	-0.979525
media		0.101	0.10189
		-0.995679	-0.991868
max		0.909	0.55805
		-0.0414361	-0.253327
varian		0.00852655	0.00478185
		0.0804808	0.0435599
JB		0.001	0.001
		0.5	0.009108
		ra	log
%		-2.8506	-2.63374
err.va		0.00874822	0.0573975
rel.std.err		1.026	0.713182
mod.eff		-0.0259976	0.286818

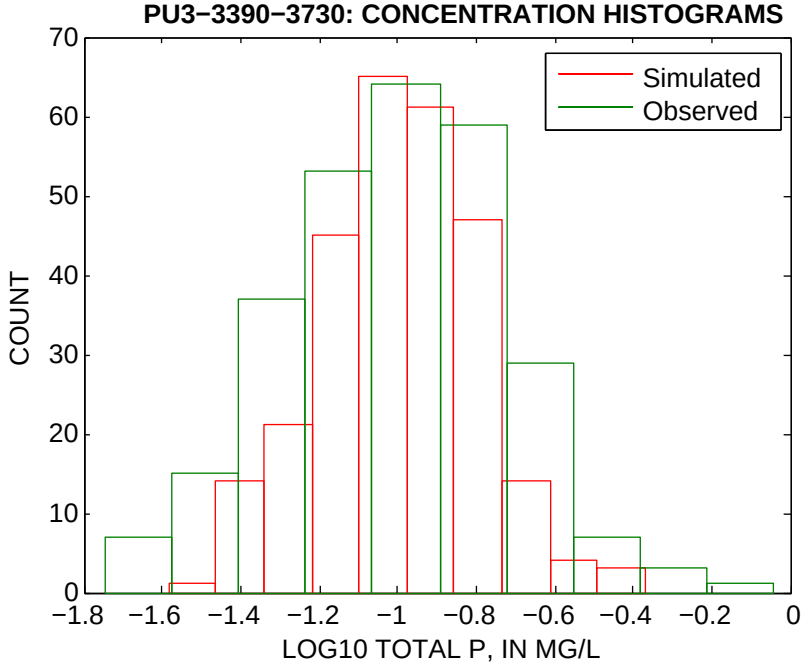
VERSION 2.1

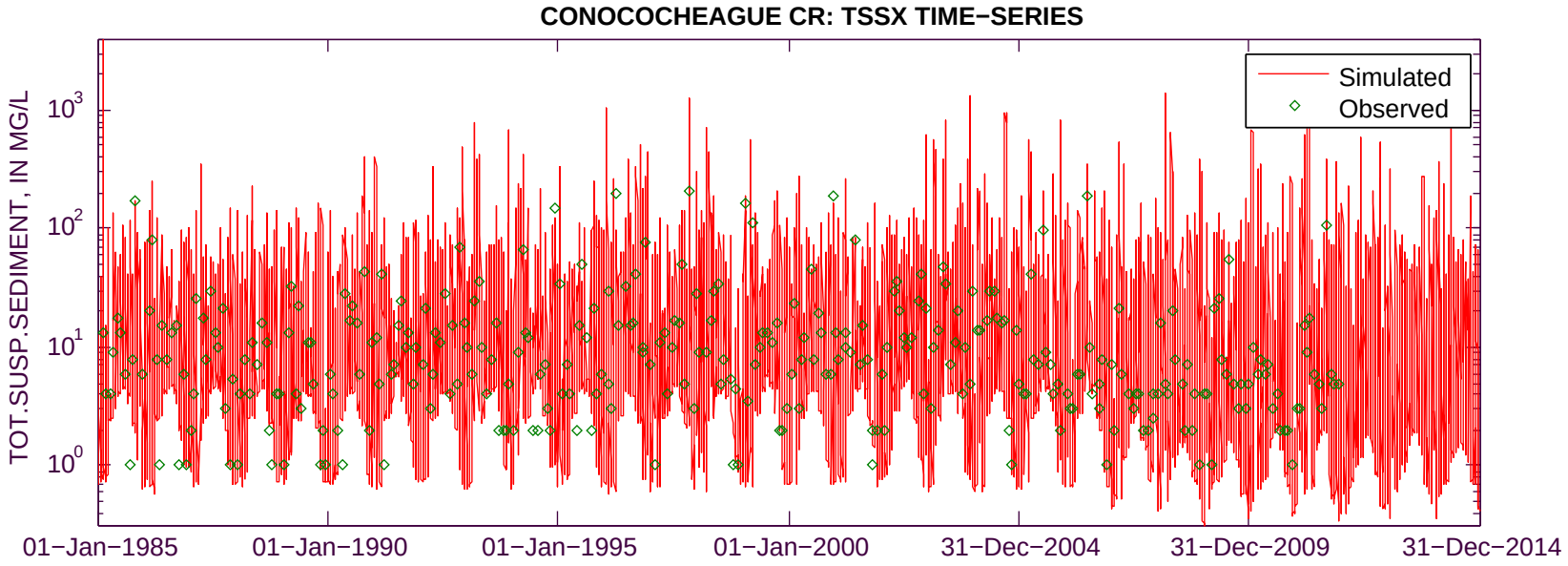
ALL DATA
LOG10

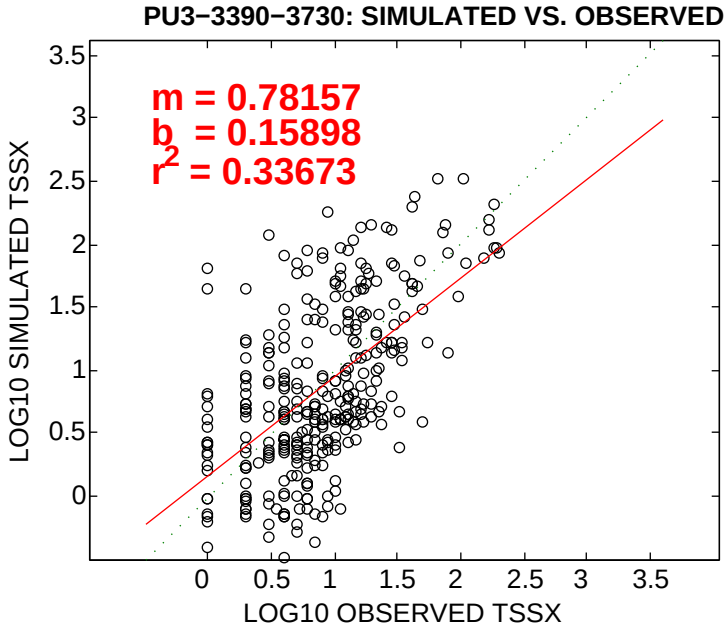


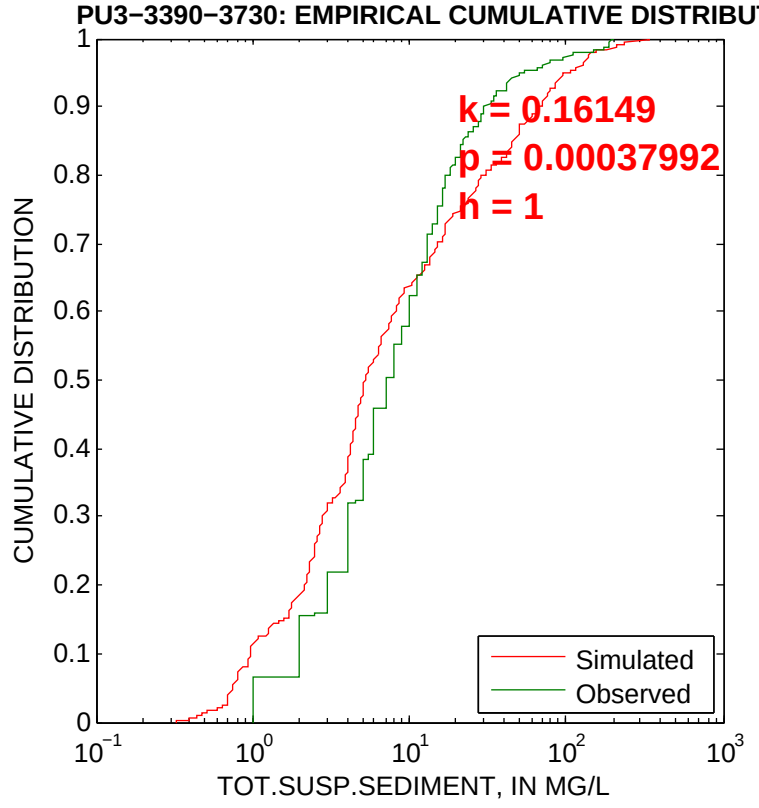












DATA SELECTION

scenario	file
P620171001WQ	TSSX.calib

plot: TSSX - total suspended ...

Dates: 1/1/1985 – 12/31/201

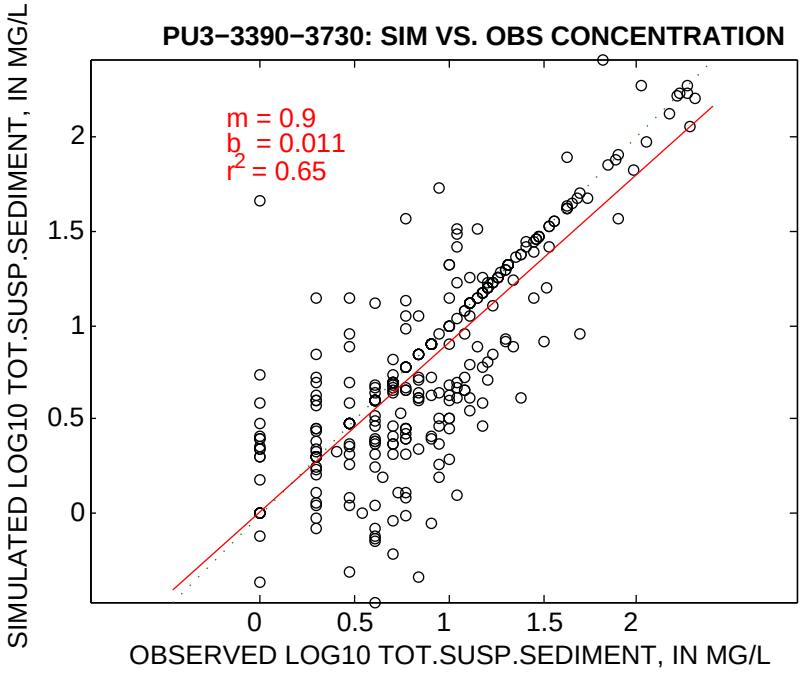
Drive	Directory	Observed
N/A	model	OBS20161101

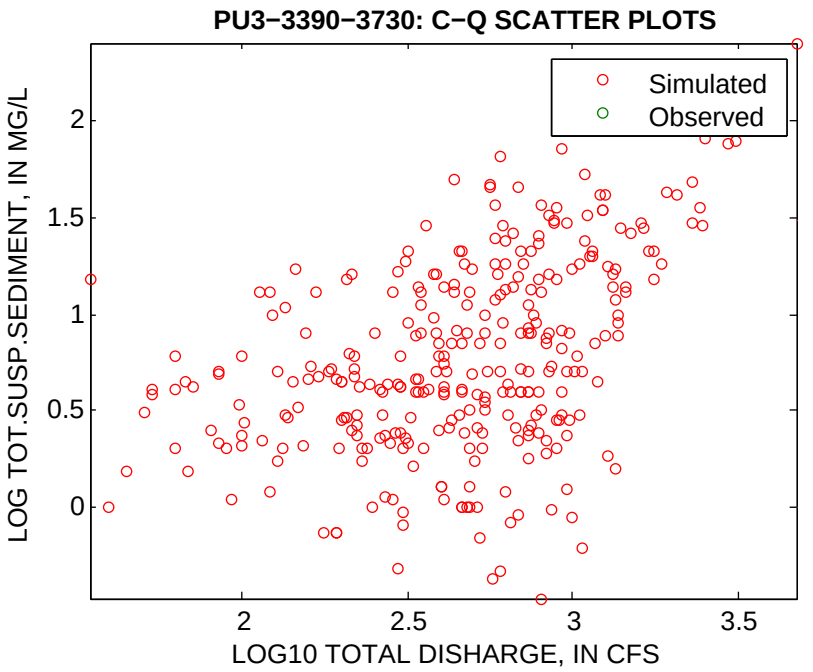
STATISTICS

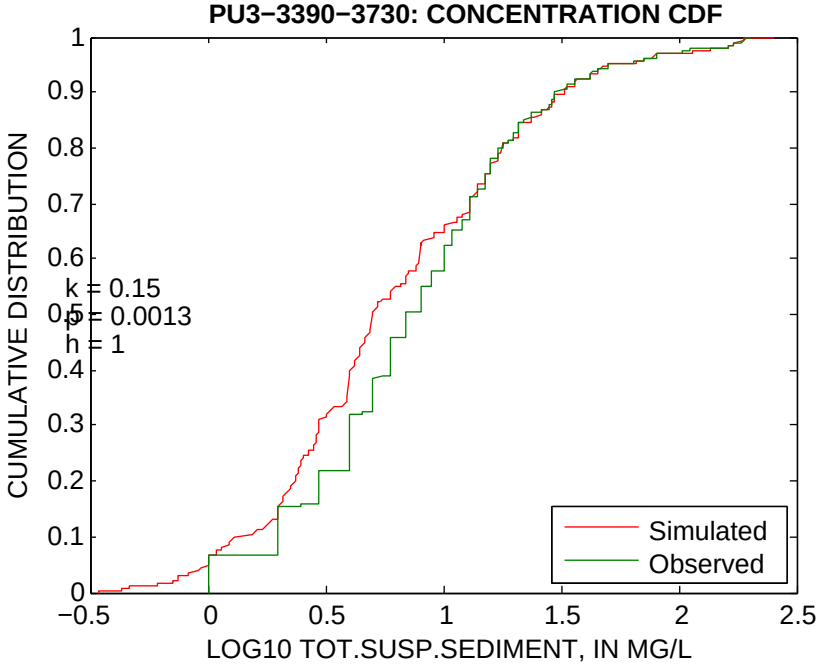
	n	322	322
		observe	simulate
min		1	0.33153
		0	-0.479477
mean		16.0043	22.8486
		0.892302	0.856377
media		7	5.2884
		0.845098	0.723324
max		204	337.9
		2.30963	2.52879
varian		841.593	1902.67
		0.236771	0.429515
JB		0.001	0.001
		0.018543	0.008721
		ra	log
%		42.7649	-4.02614
err.va		1396.79	0.297476
rel.std.err		1.6597	1.25639
mod.eff		-0.659698	-0.256385

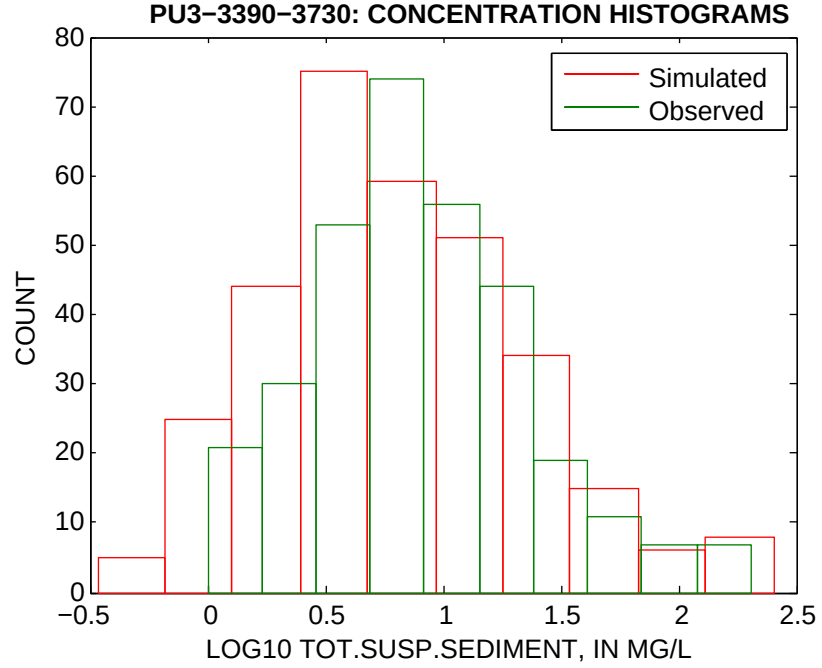
VERSION

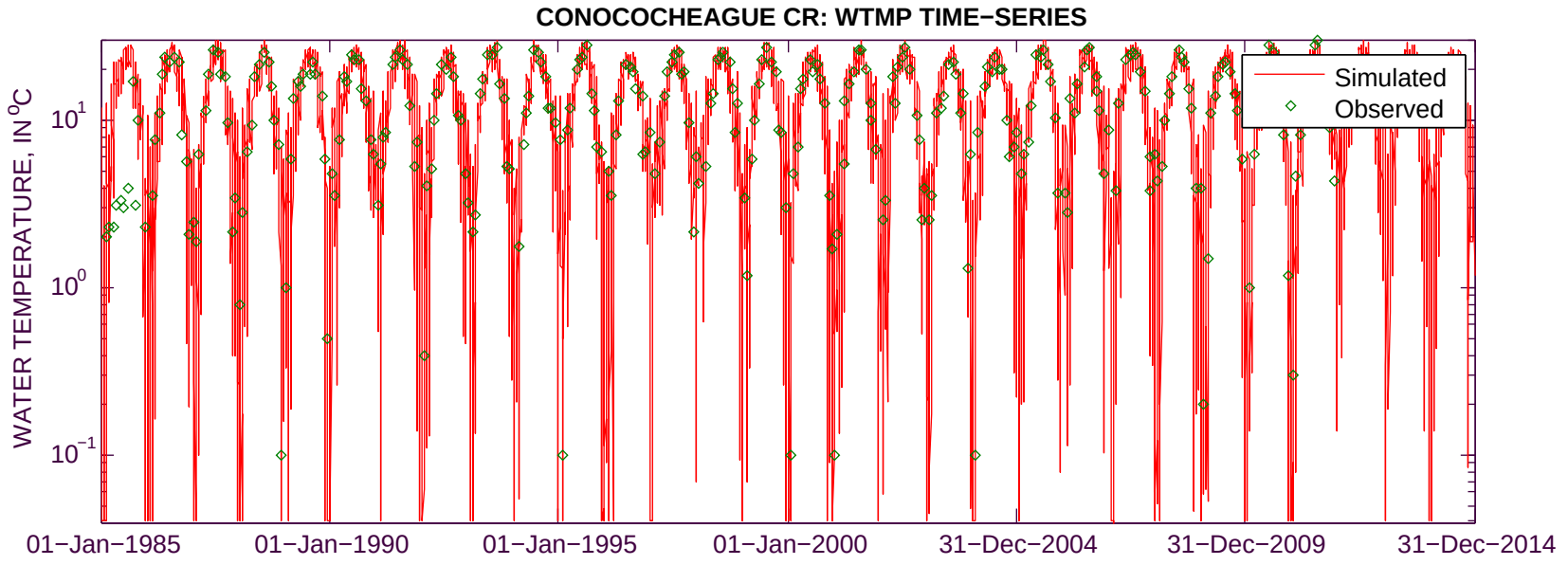
ALL DATA
LOG10

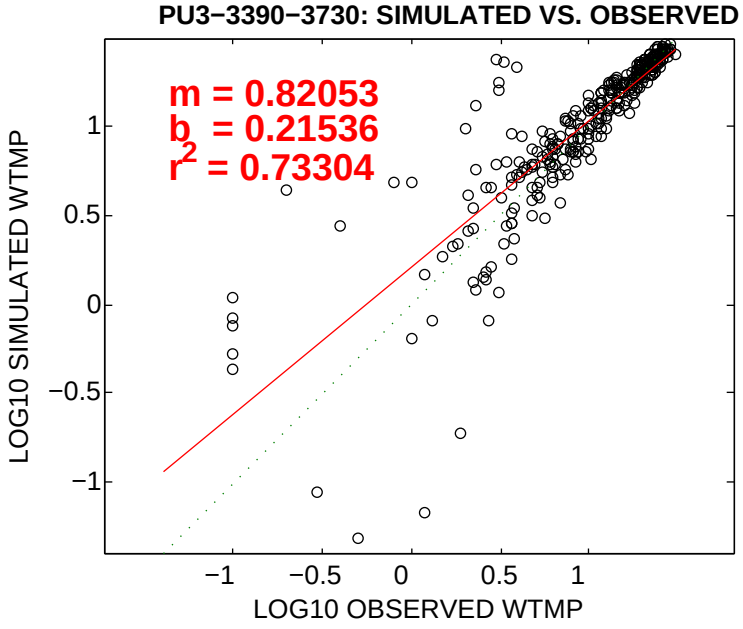


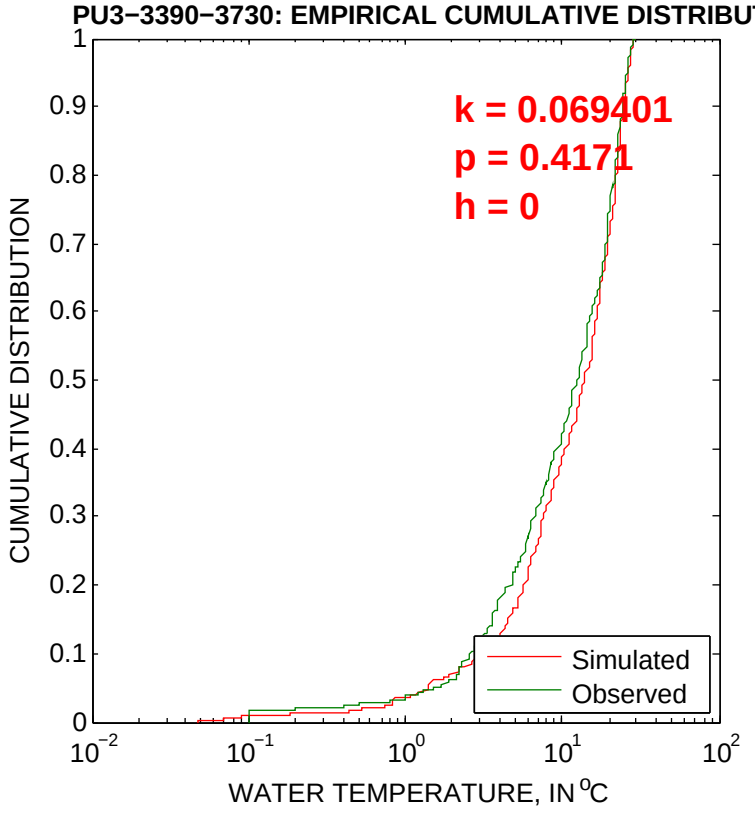












DATA SELECTION

scenario	file
P620171001WQ	WTMP.calib

plot: WTMP - water tempera...

Dates: 1/1/1985 – 12/31/201

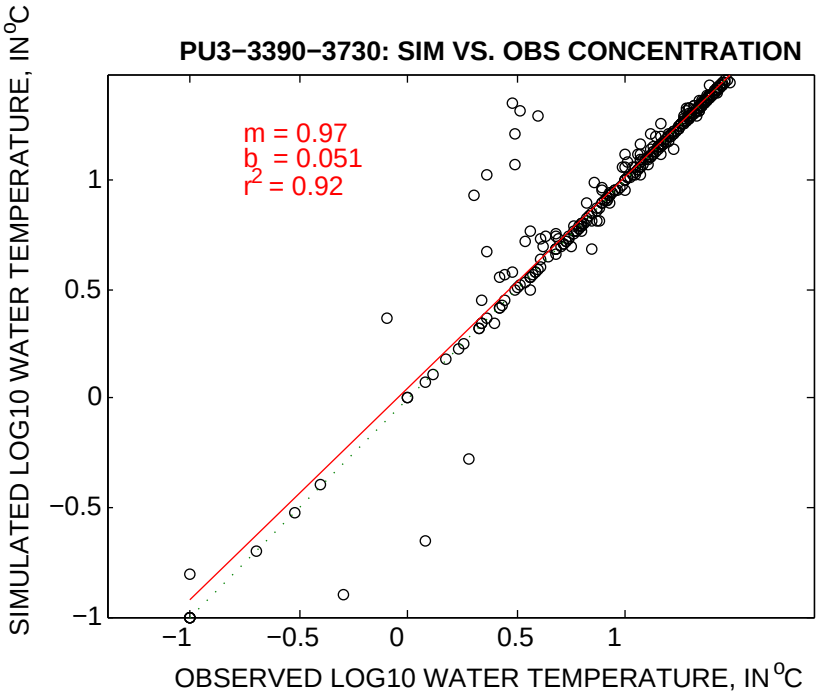
Drive	Directory	Observed
N/A	model	OBS20161101

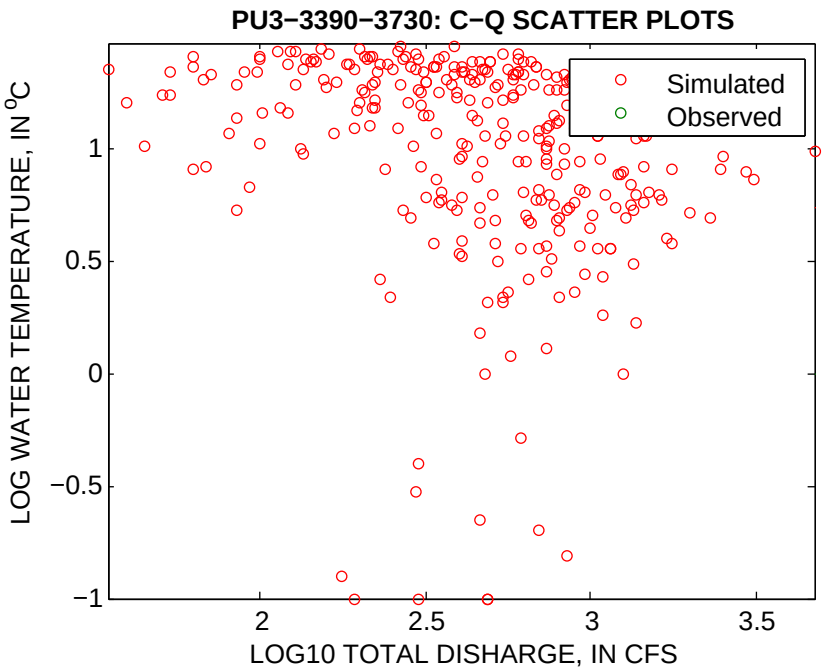
STATISTICS

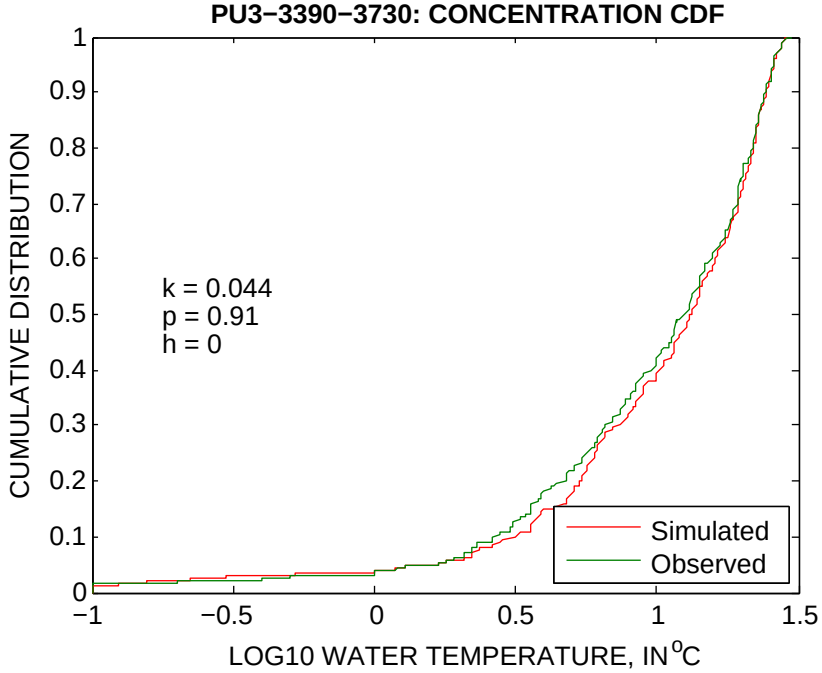
	n	observe	simulate
		317	317
min		0.1	0.047884
		-1	-1.31981
mean		13.0434	13.8905
		0.967053	1.00885
media		12.6	13.935
		1.10037	1.14411
max		29.898	29.324
		1.47564	1.46722
varian		66.2053	65.5748
		0.208924	0.191887
JB		0.001437	0.001852
		0.001	0.001
		ra	log
%		6.49409	4.3219
err.va		9.42572	0.0597086
rel.std.err		0.142371	0.285791
mod.eff		0.857629	0.714209

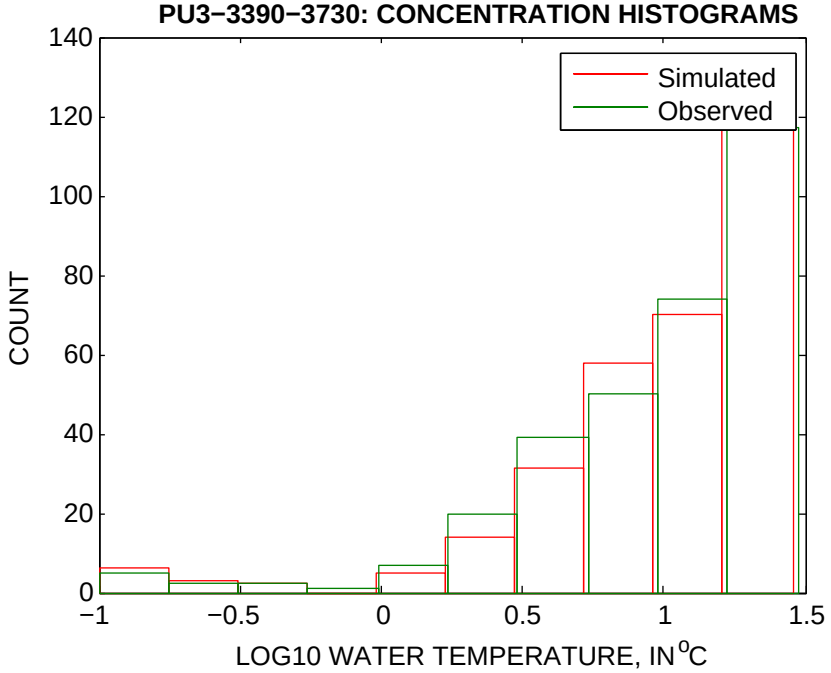
VERSION 2.1

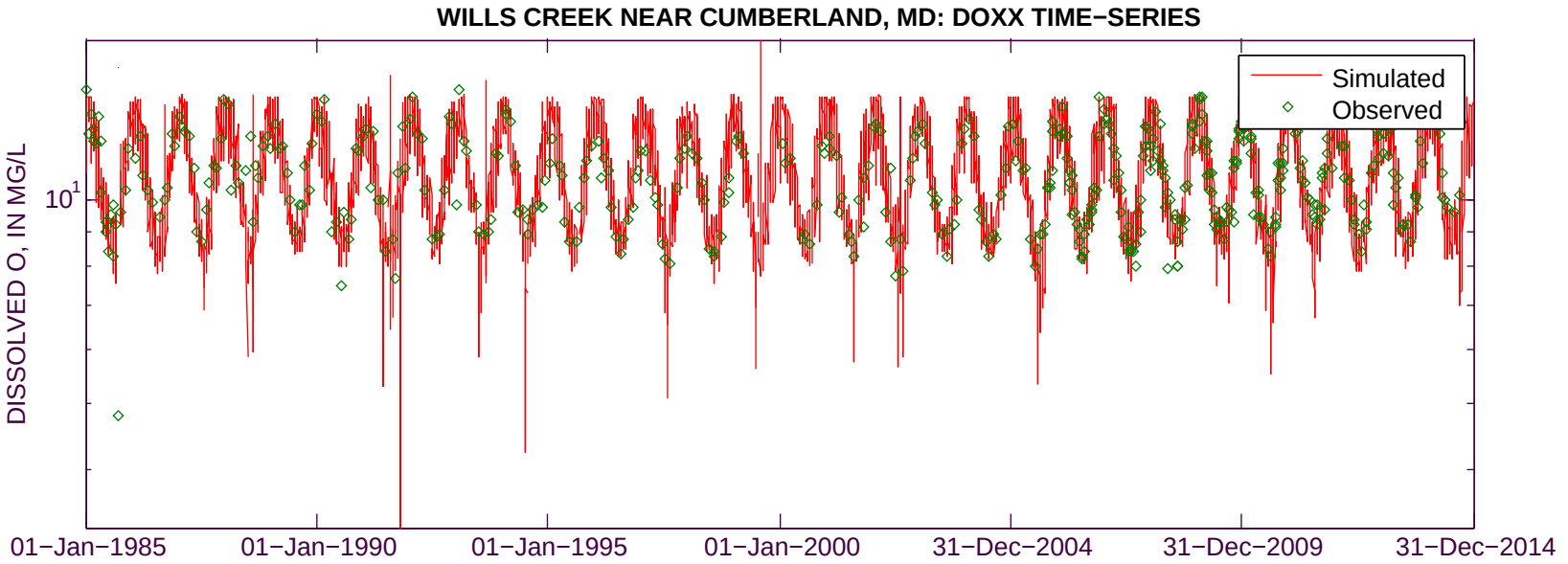
ALL DATA
LOG10

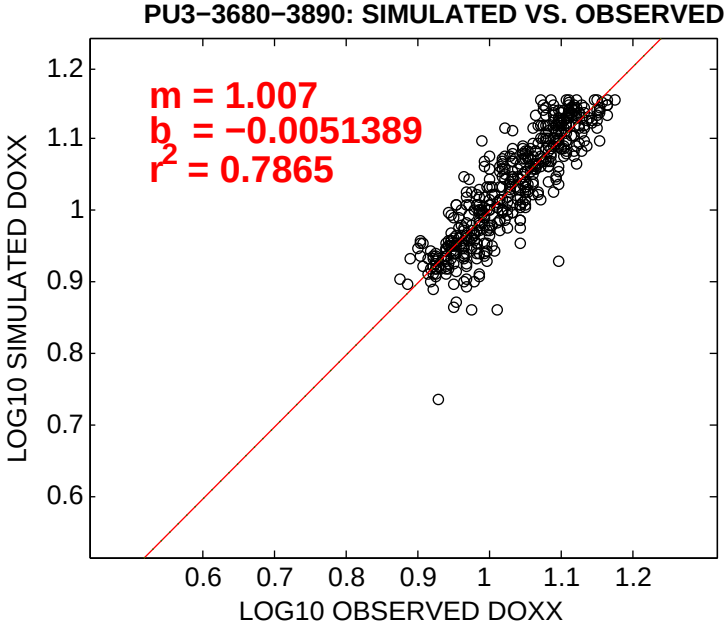


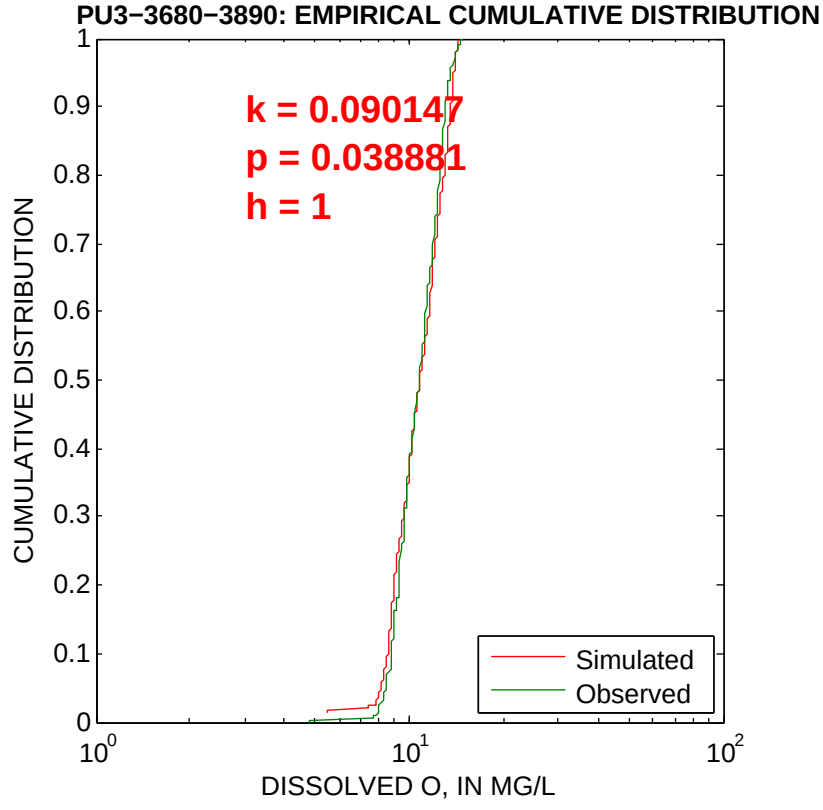












DATA SELECTION

scenario	file
P620171001WQ	DOXX.calib

plot: DOXX - dissolved oxygen

Dates: 1/1/1985 – 12/31/201

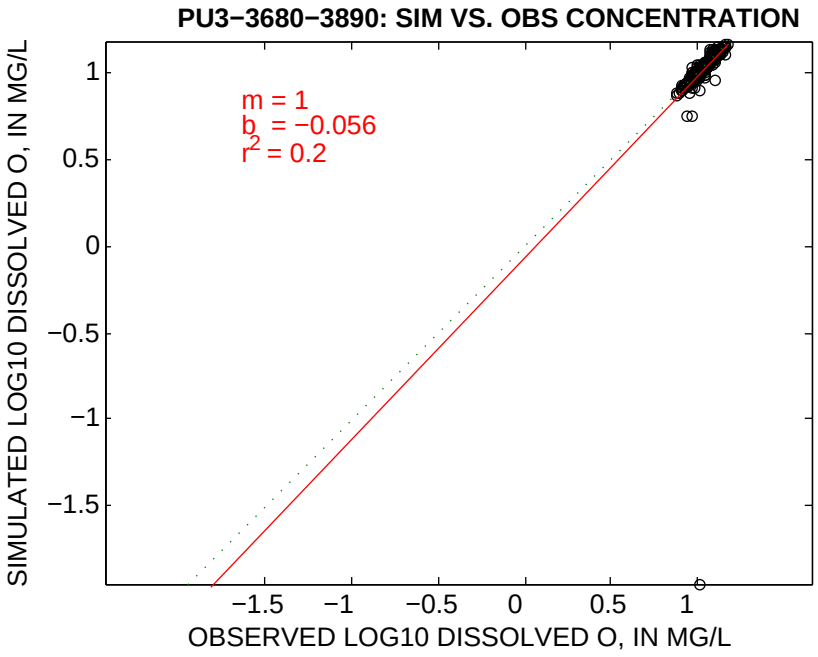
Drive	Directory	Observed
N/A	model	OBS20161101

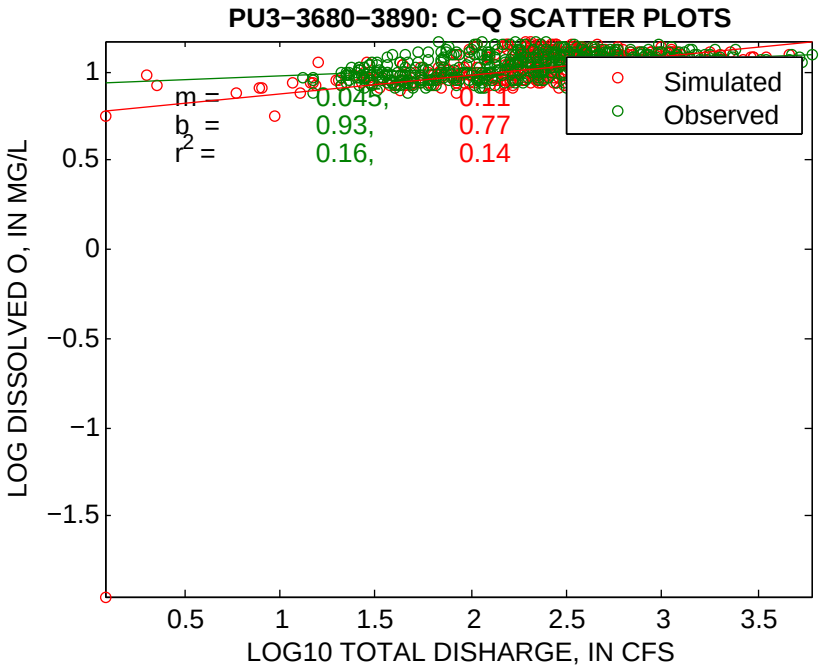
STATISTICS

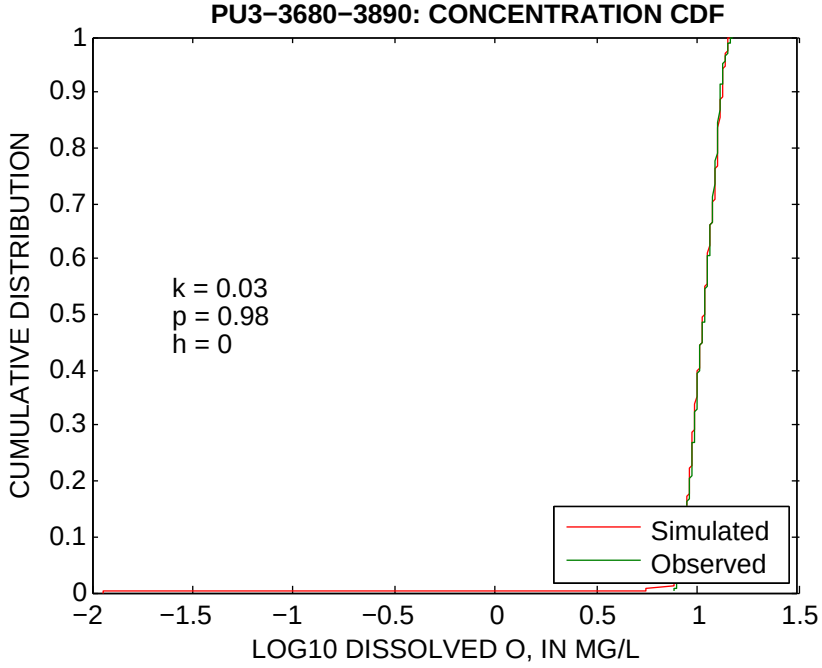
	n	477	470
		observe	simulate
min		4.8	0
		0.875061	0.734912
mean		10.8495	10.7948
		1.03113	1.03316
media		10.798	10.82
		1.03342	1.03555
max		14.9	14.306
		1.17319	1.15552
varian		2.82346	5.1883
		0.00443317	0.00571533
JB		0.011178	0.001
		0.001485	0.004621
		ra	log
%		-0.504438	0.197657
err.va		2.13293	0.00122462
rel.std.err		0.755429	0.276241
mod.eff		0.244571	0.723759

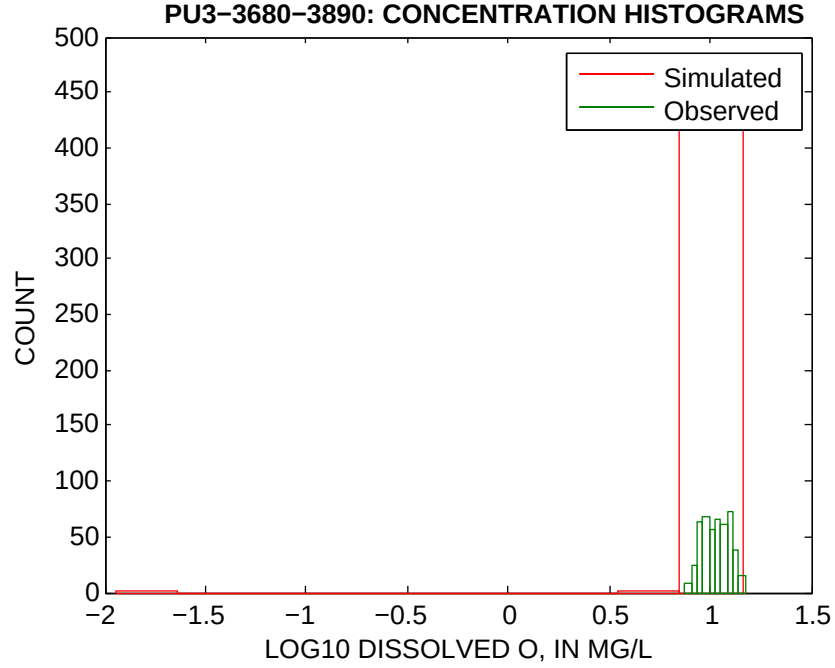
VERSION 2.1

ALL DATA
LOG10

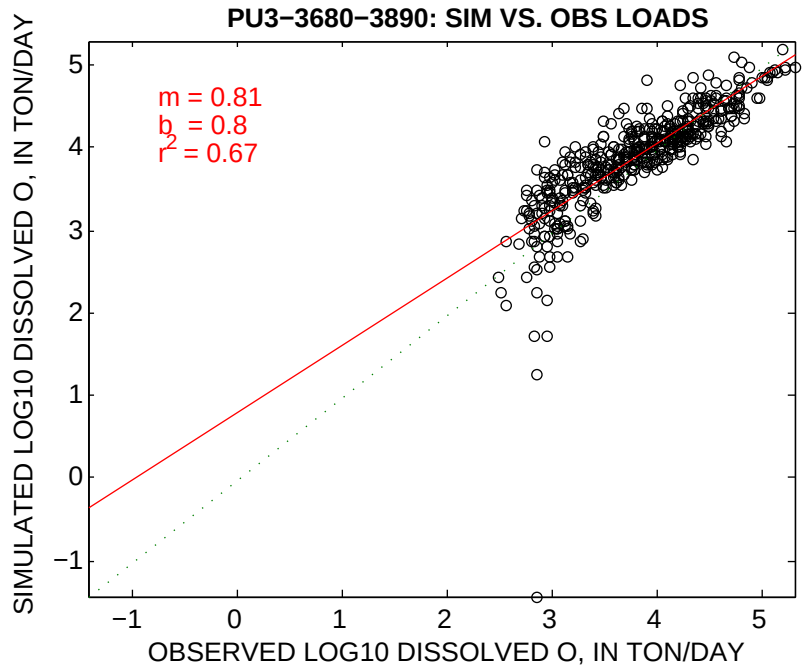


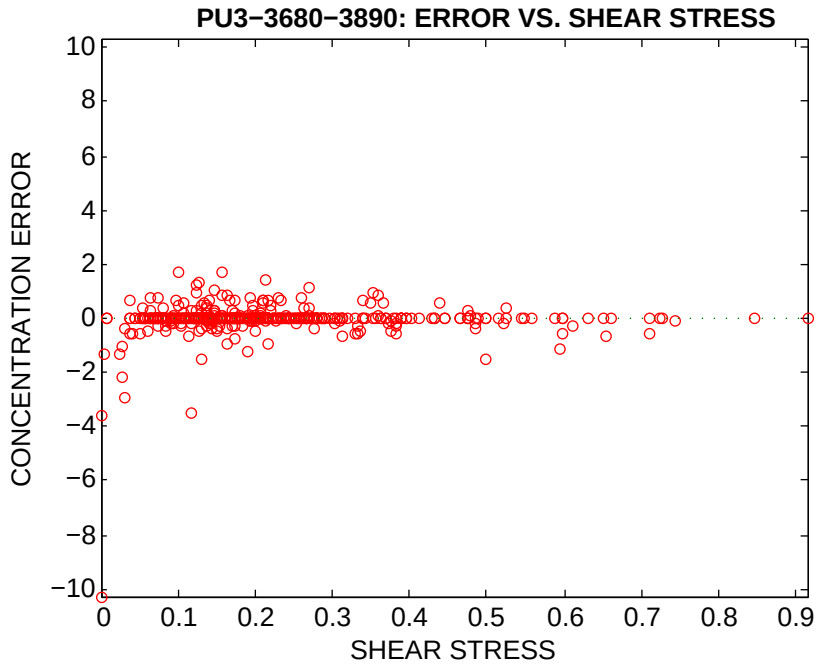


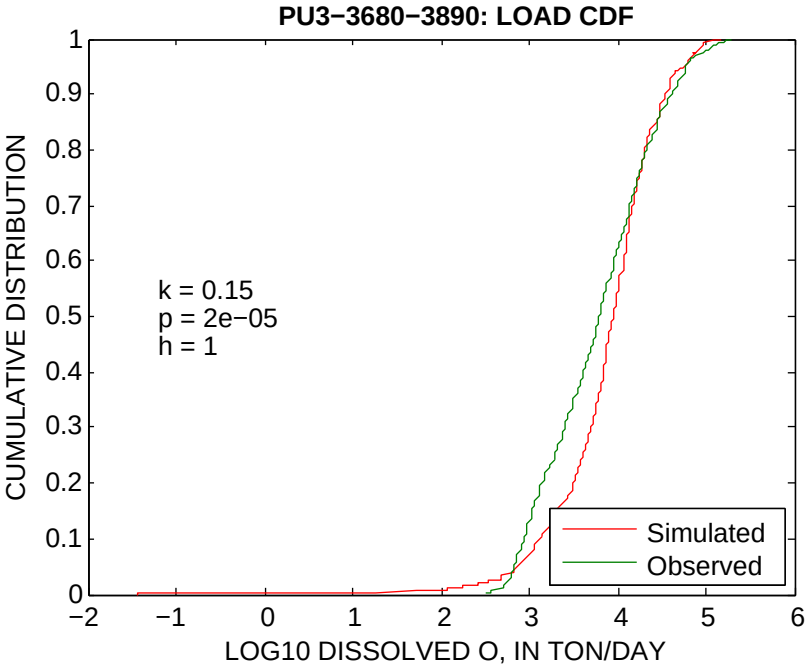


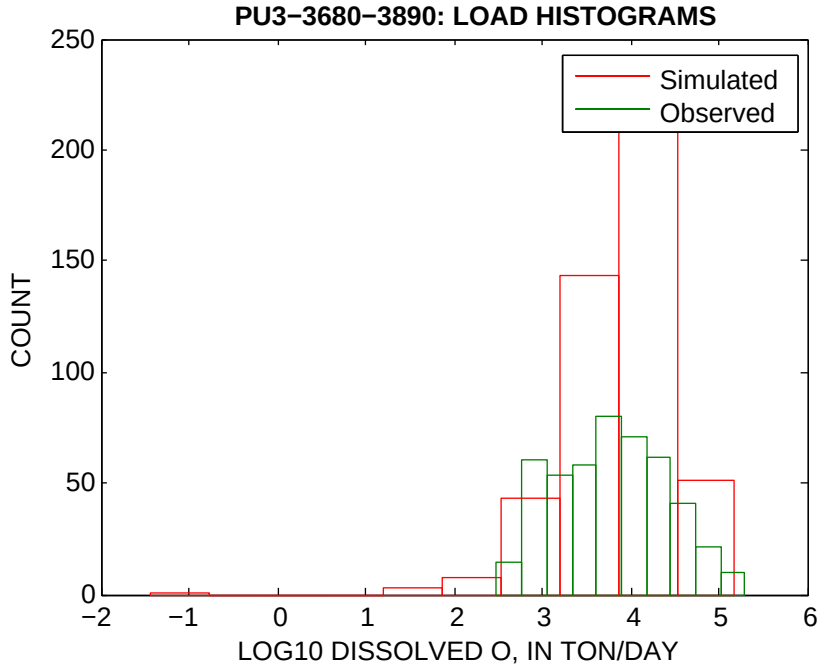


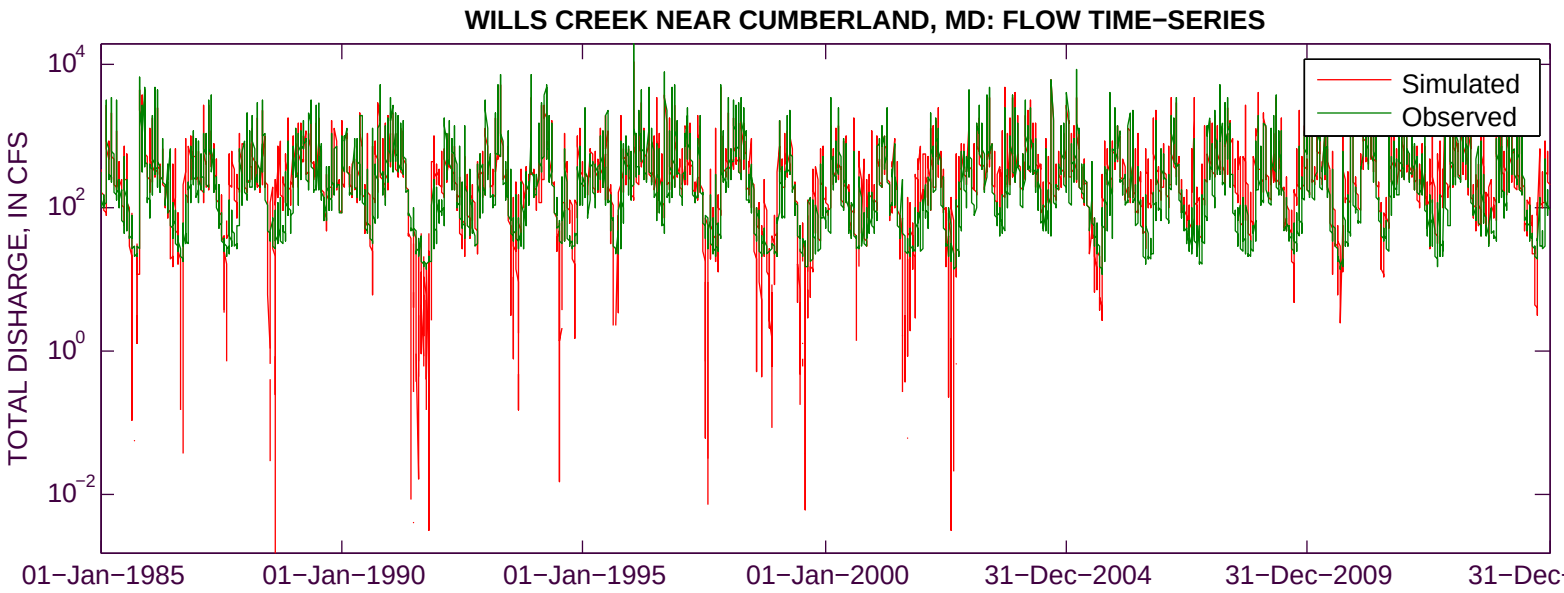
LOAD DATA
LOG10

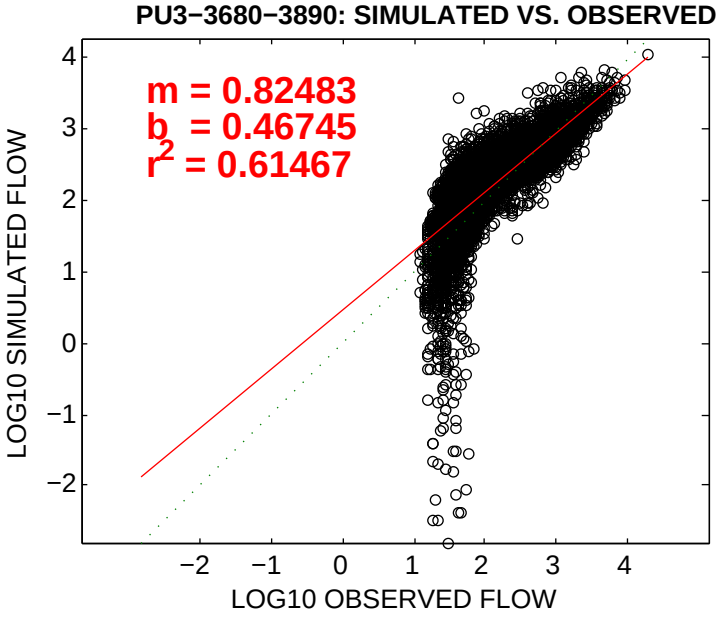


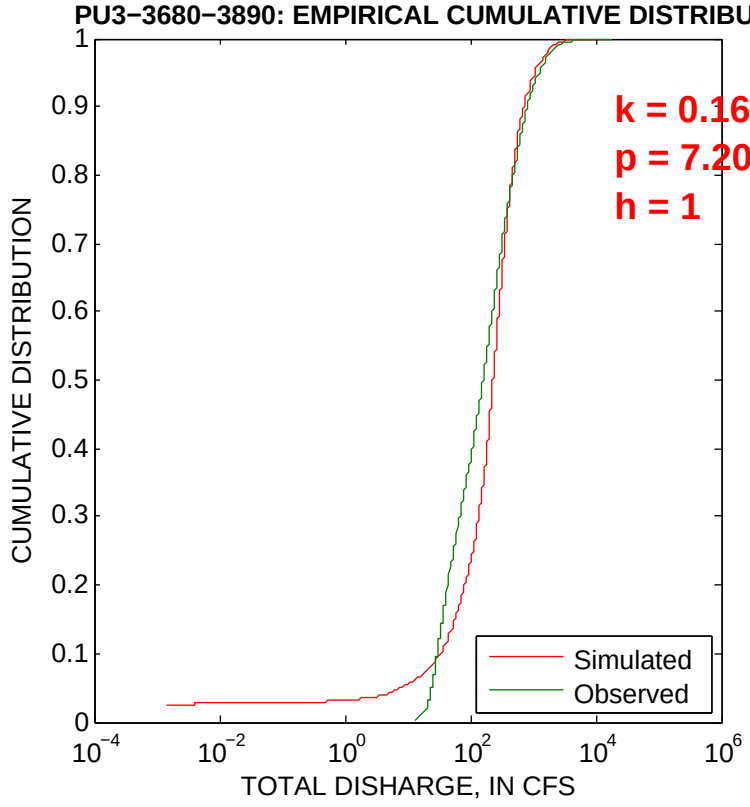












DATA SELECTION

scenario	file
P620171001WQ	FLOW.calib

plot: FLOW - total discharge

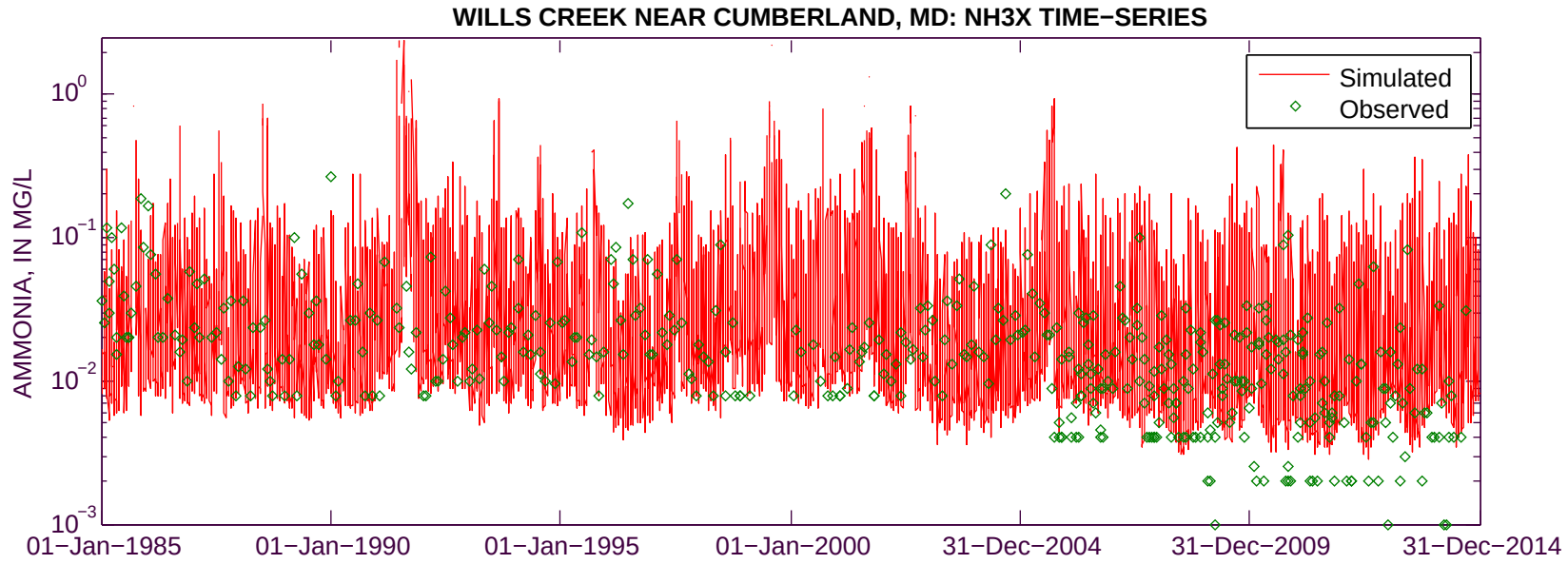
Dates: 1/1/1985 – 12/31/201

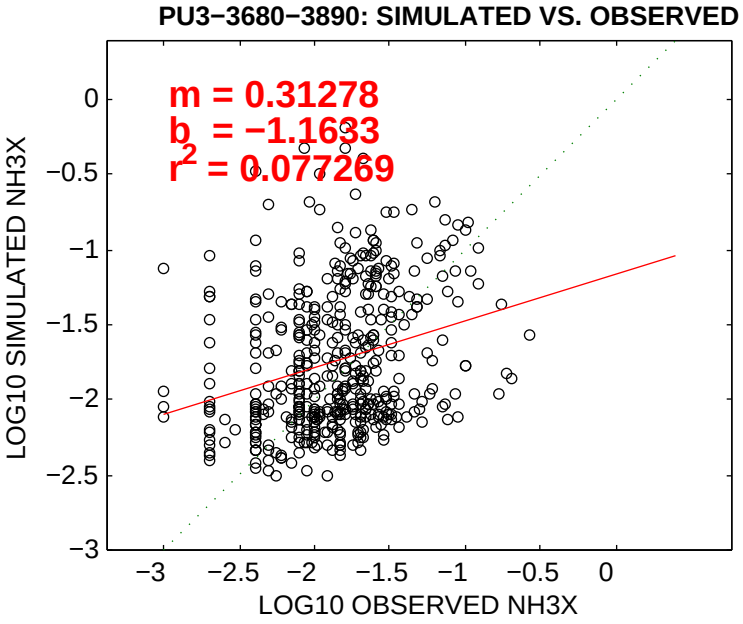
Drive	Directory	Observed
N/A	model	OBS20161101

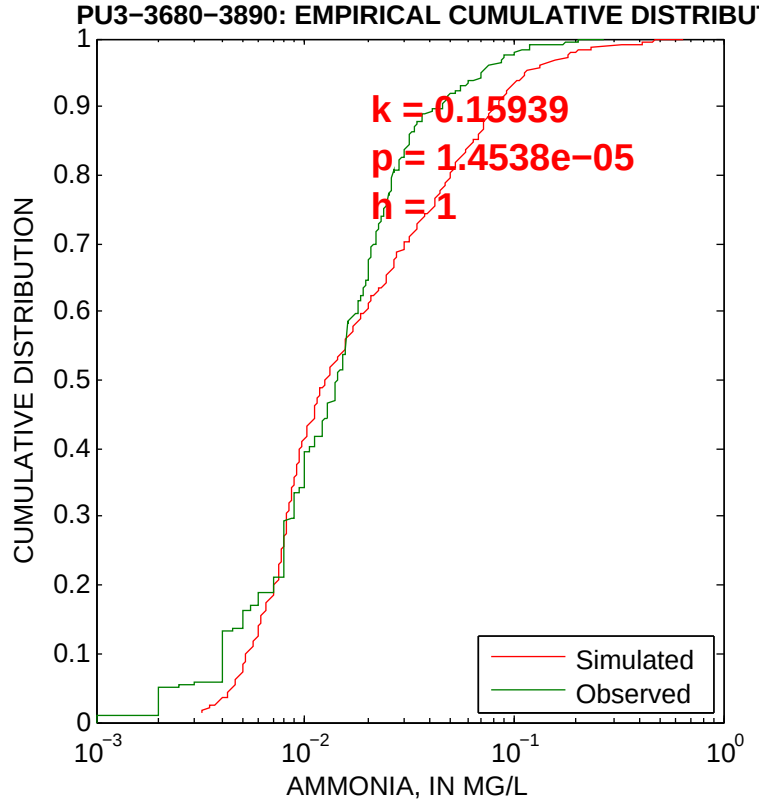
STATISTICS

		observe	simulate
n		10957	10673
min		12	0
		1.07918	-2.83103
mean		349.071	348.677
		2.22307	2.3011
media		161	233.27
		2.23045	2.37862
max		19200	11233
		4.2833	4.0505
varian		359145	208568
		0.284735	0.315154
JB		0.001	0.001
		0.001	0.001
		ra	log
%		-0.112878	3.50993
err.va		112626	0.136263
rel.std.err		0.313594	0.478562
mod.eff		0.686406	0.521438

VERSION







DATA SELECTION

scenario	file
P620171001WQ	NH3X.calib

plot: NH3X - ammonia

Dates: 1/1/1985 – 12/31/201

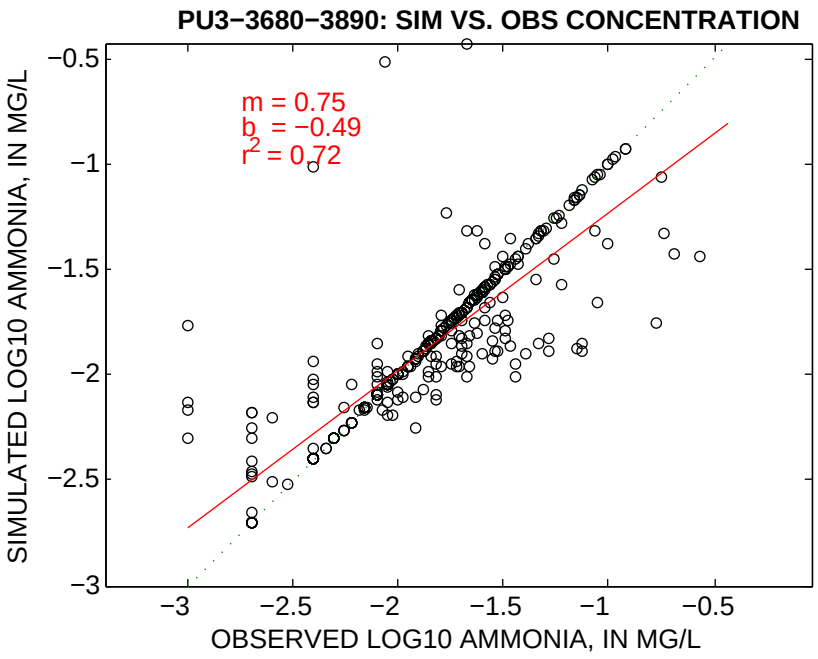
Drive	Directory	Observed
N/A	model	OBS20161101

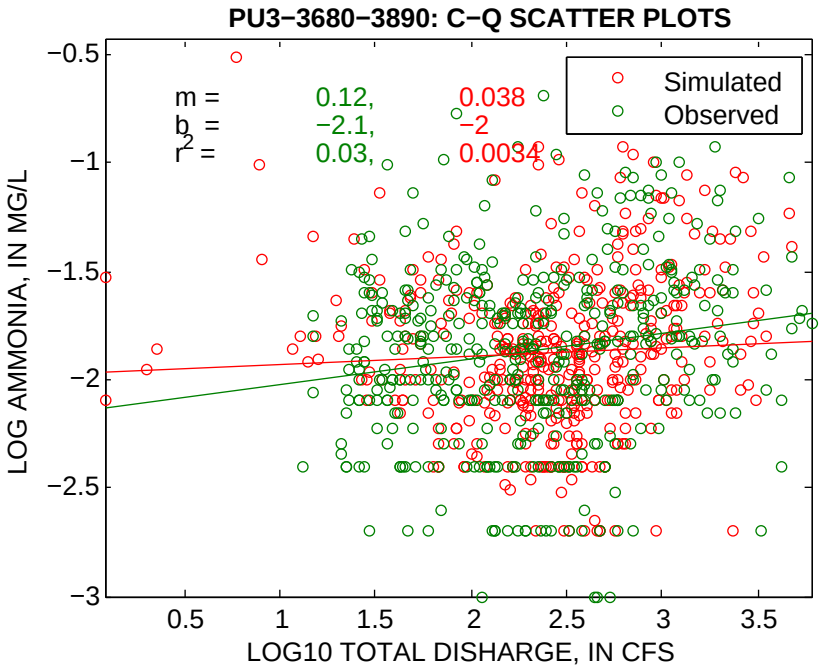
STATISTICS

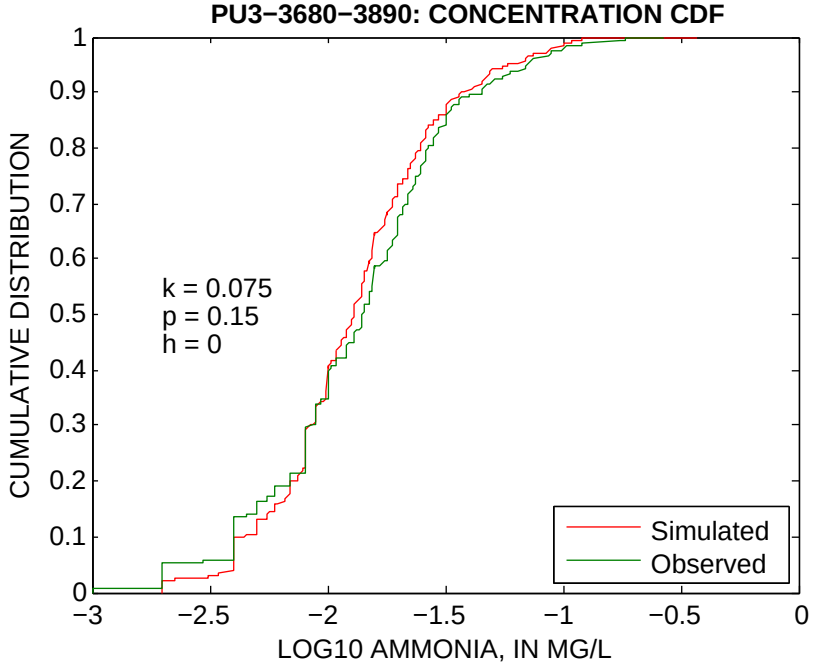
	n	observe	simulate
		458	452
min		0.001 -3	0 -2.49708
mean		0.0215854 -1.86441	0.0349009 -1.7465
media		0.0144728 -1.83992	0.012598 -1.88588
max		0.268 -0.571865	0.64315 -0.191688
varian		0.00075179 0.169297	0.0036948 0.214353
JB		0.001 0.354667	0.001 0.001
		ra	log
%		61.6878	-6.32405
err.va		0.00427921	0.291676
rel.std.err		5.69197	1.72287
mod.eff		-4.69197	-0.722868

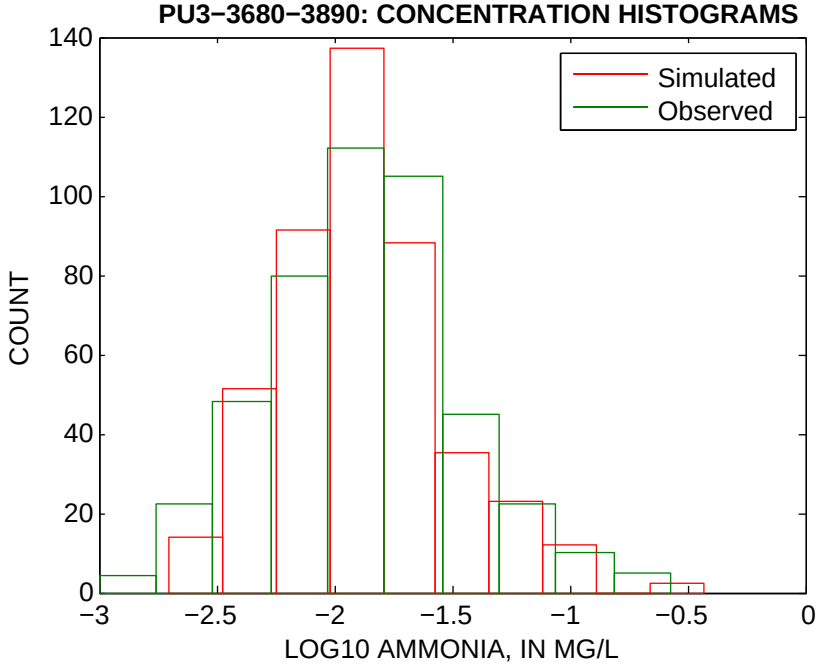
VERSION 3.1

ALL DATA
LOG10

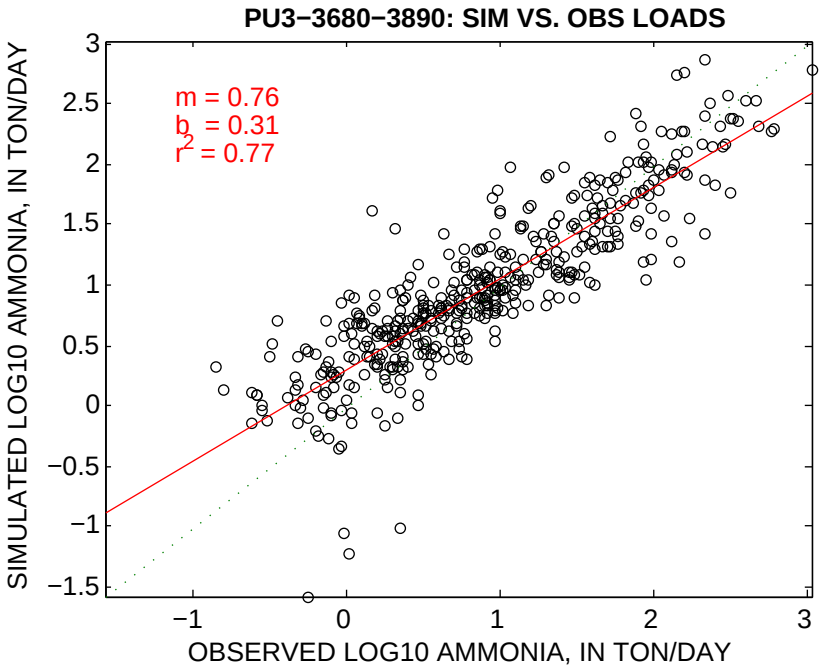


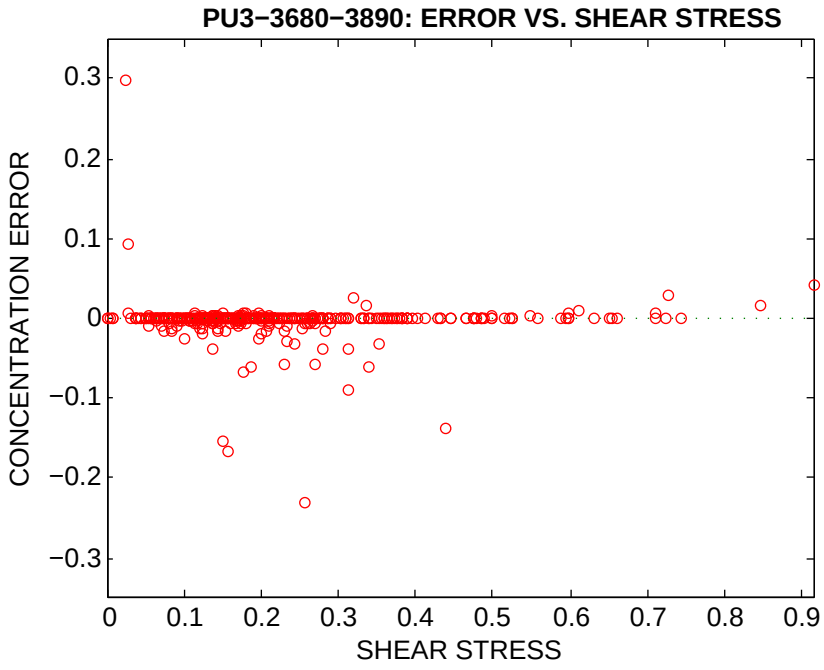


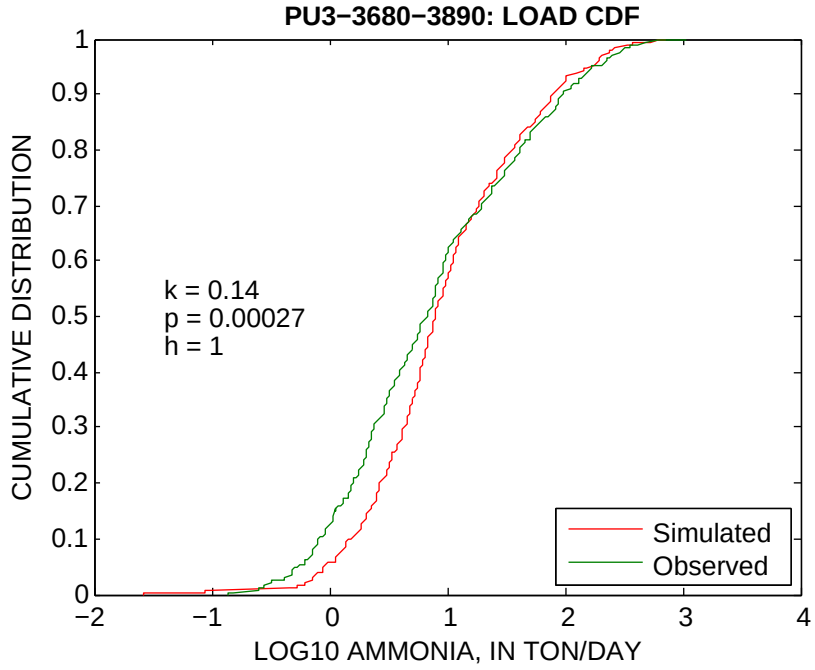


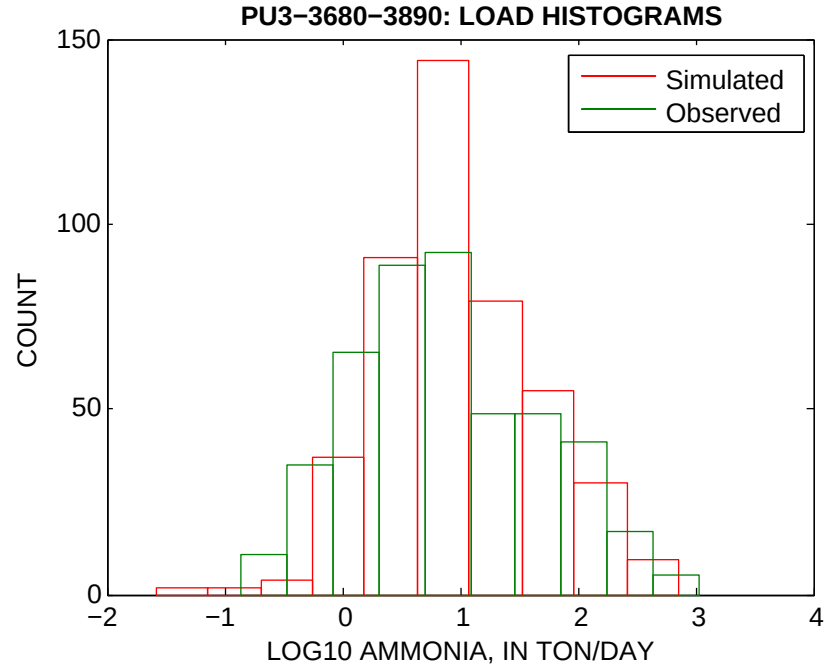


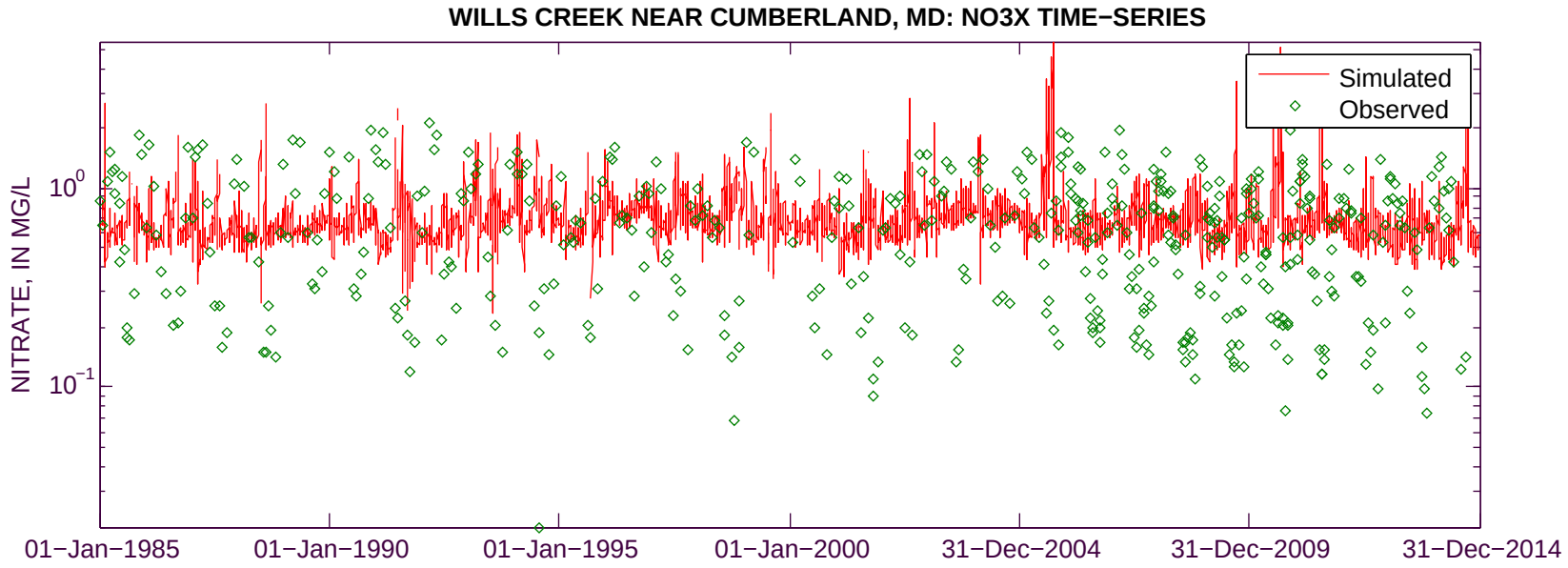
LOAD DATA
LOG10

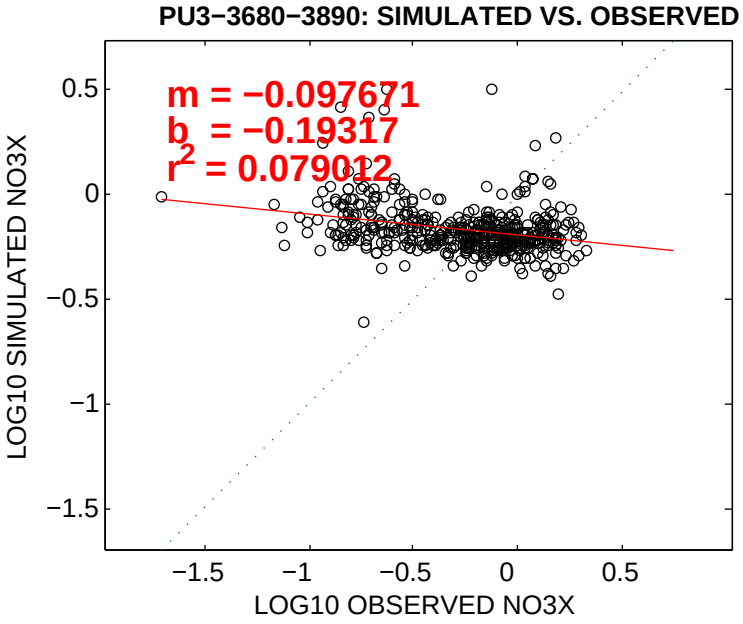


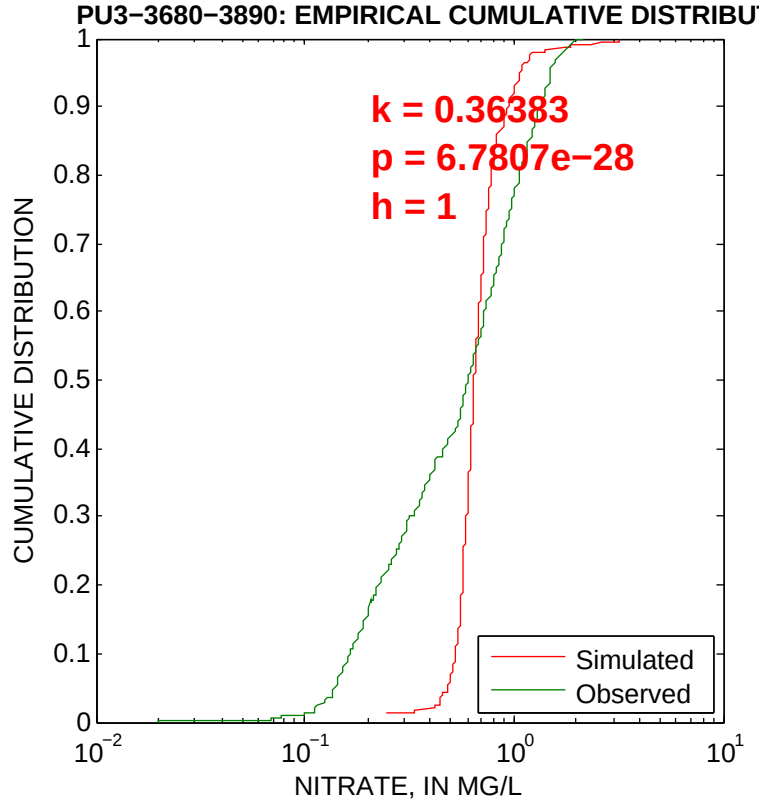












DATA SELECTION

scenario	file
P620171001WQ	NO3X.calib

plot: NO3X - nitrate

Dates: 1/1/1985 – 12/31/201

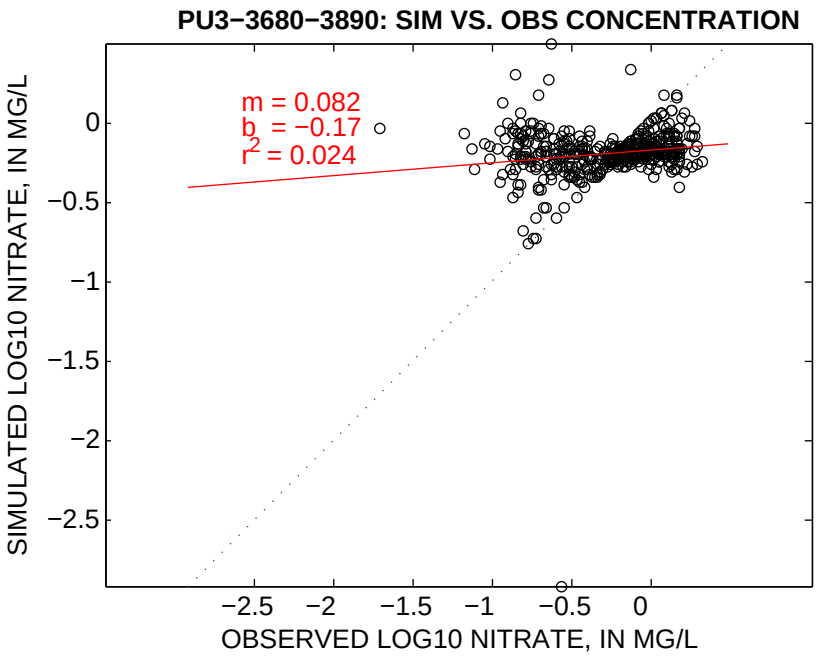
Drive	Directory	Observed
N/A	model	OBS20161101

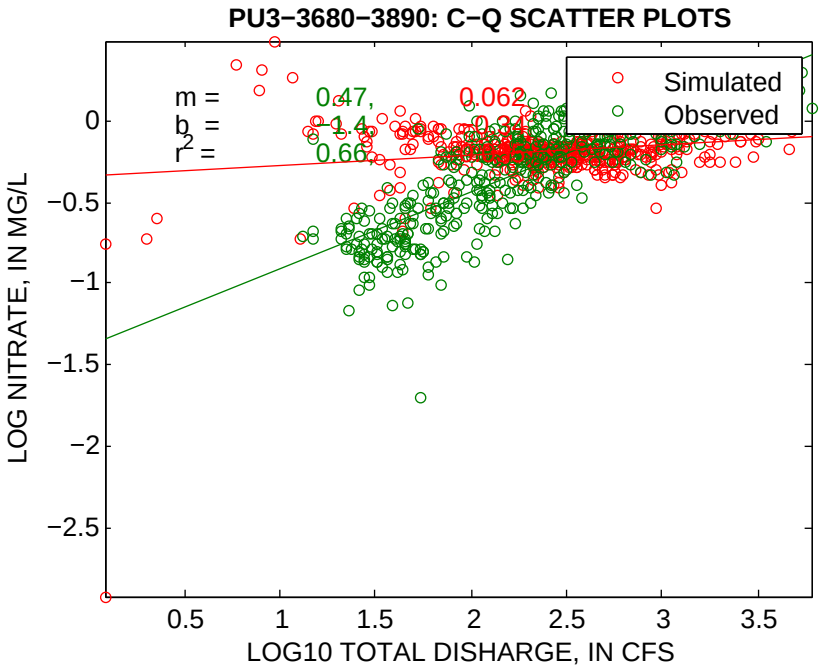
STATISTICS

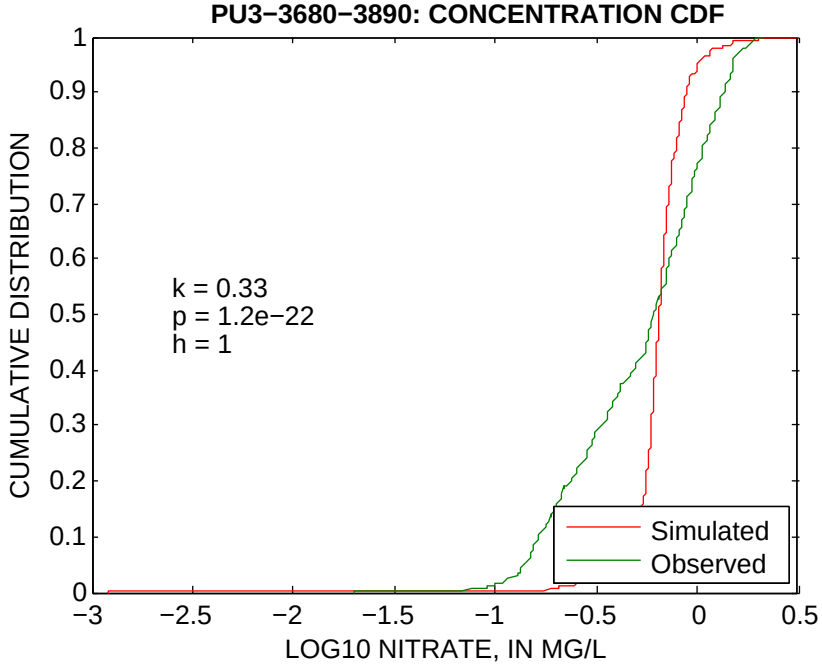
	n	470	464
		observe	simulate
min		0.02	0
		-1.69897	-0.610426
mean		0.67599	0.705133
		-0.279956	-0.165825
media		0.602525	0.646265
		-0.212898	-0.187498
max		2.12546	3.2087
		0.327453	0.506329
varian		0.202869	0.0862714
		0.116004	0.0140059
JB		0.001	0.001
		0.001	0.001
		ra	log
%		4.31117	-40.7674
err.va		0.325068	0.165724
rel.std.err		1.60236	1.42861
mod.eff		-0.602357	-0.428608

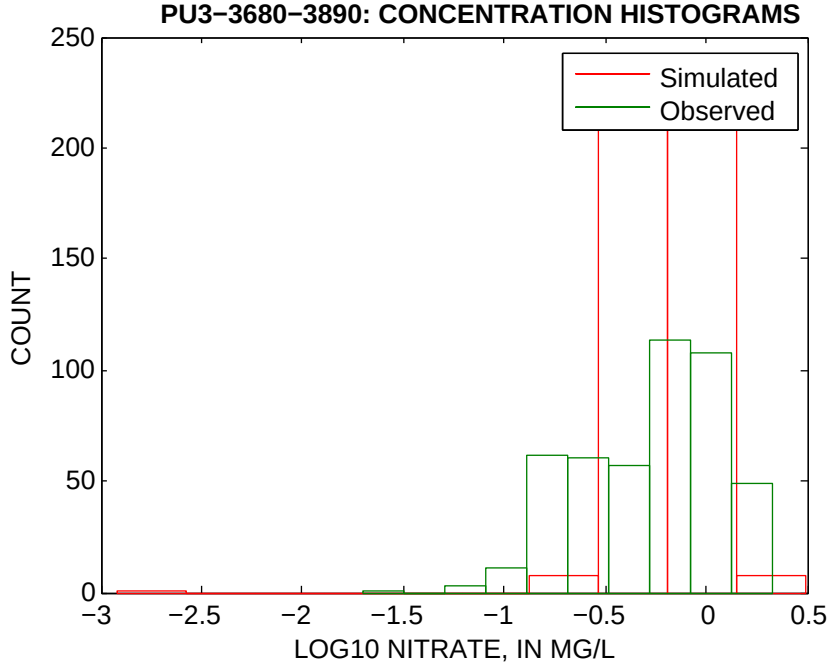
VERSION 2.1

ALL DATA
LOG10

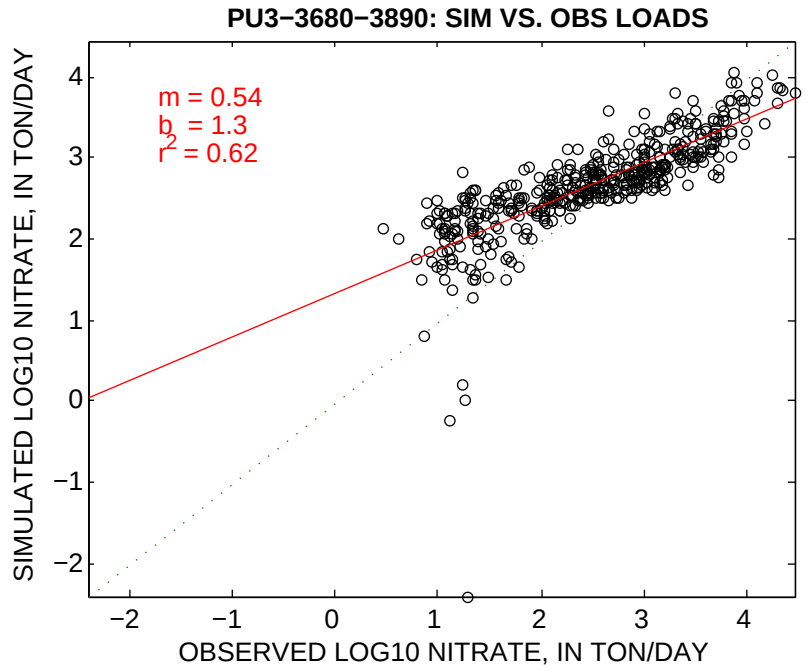


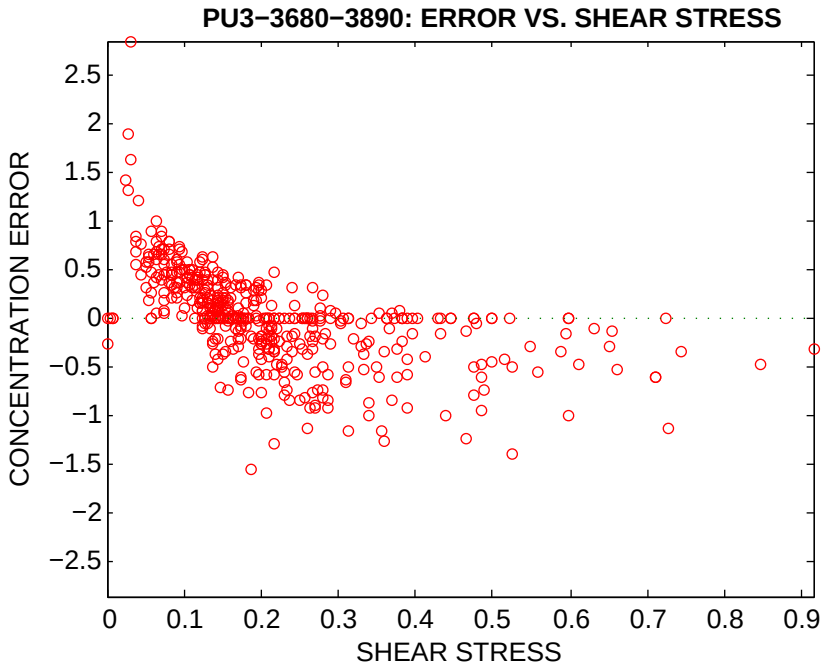


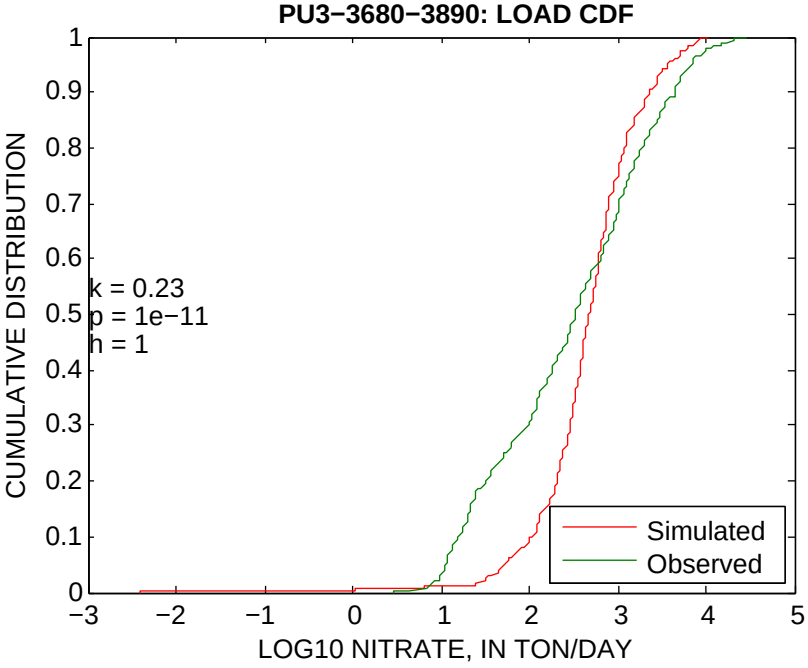


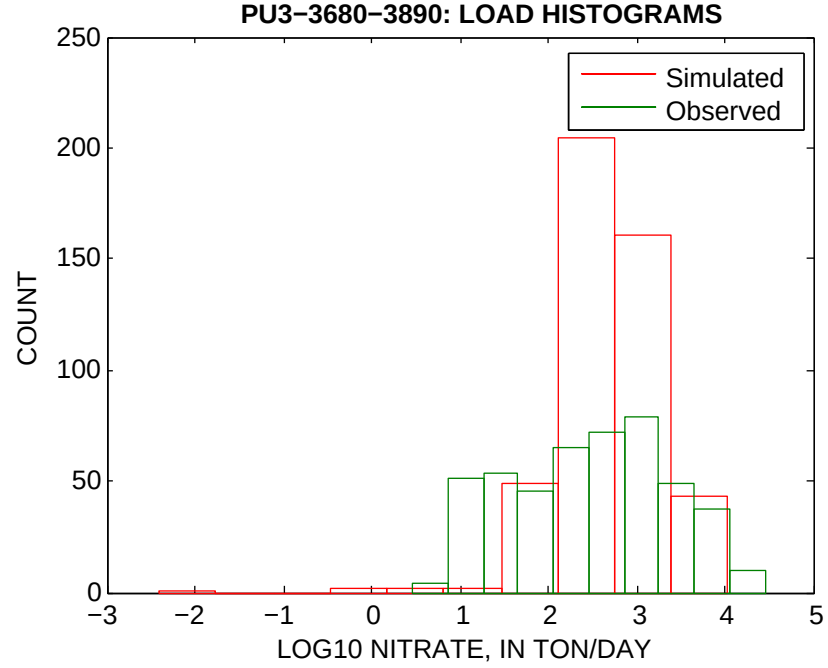


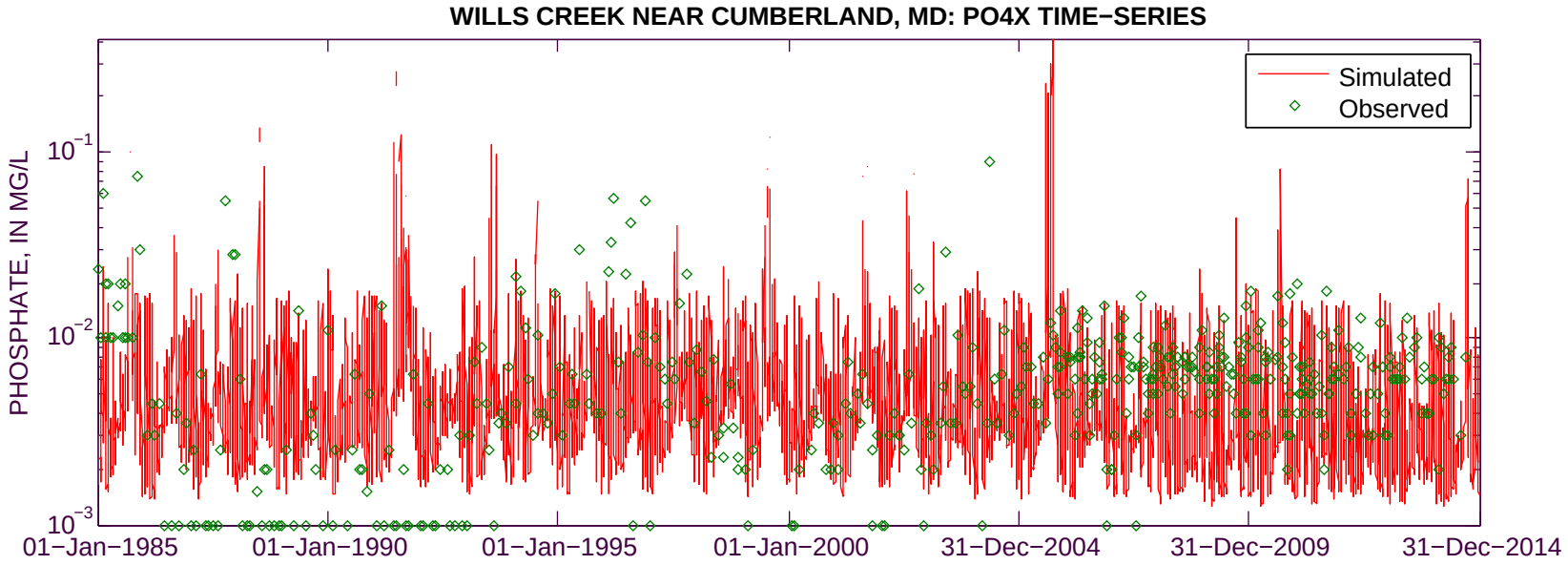
LOAD DATA
LOG10

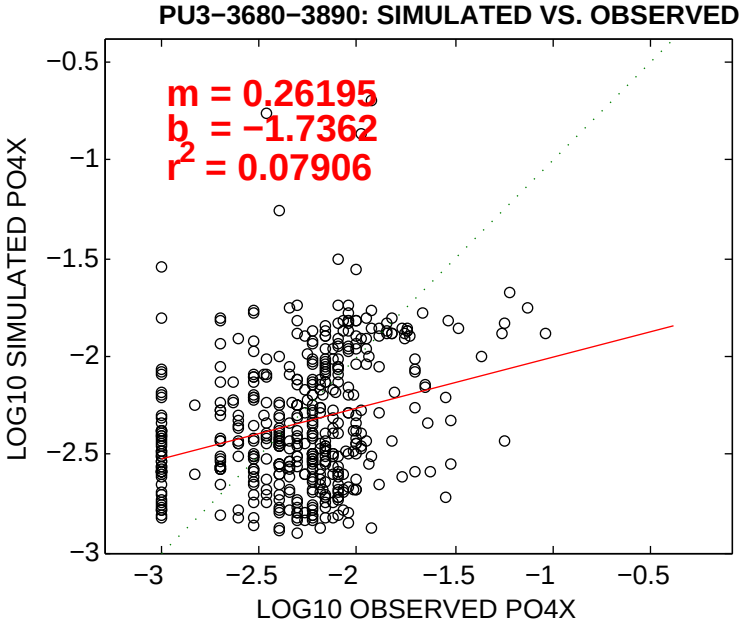


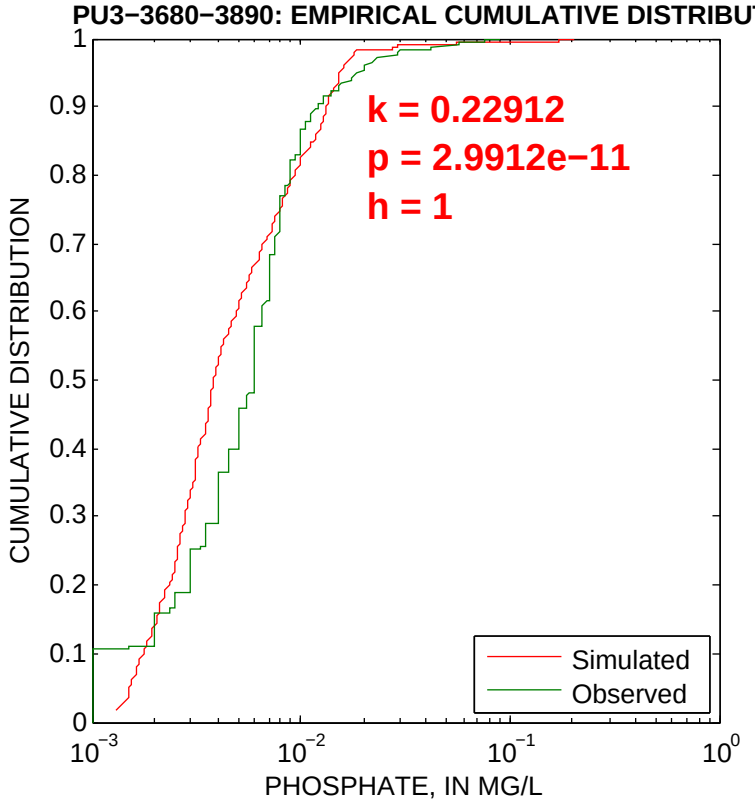












DATA SELECTION

scenario	file
P620171001WQ	PO4X.calib

plot: PO4X - phosphate

Dates	1/1/1985	12/31/201

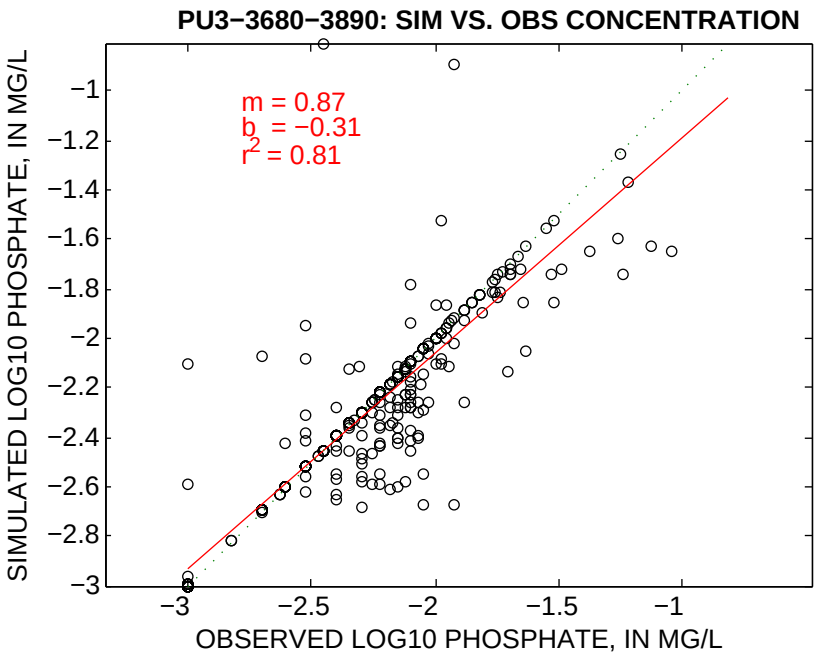
Drive	Directory	Observed
N/A	model	OBS20161101

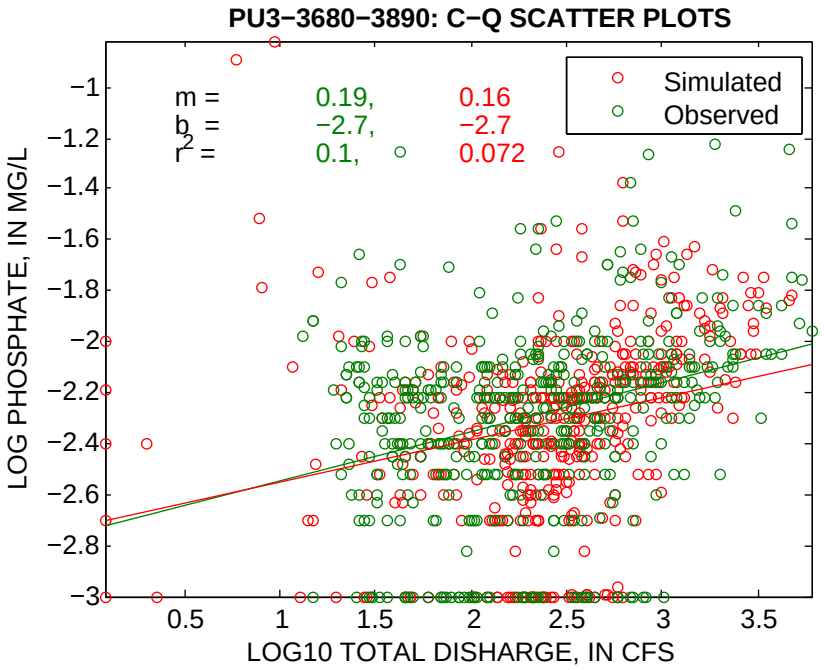
STATISTICS

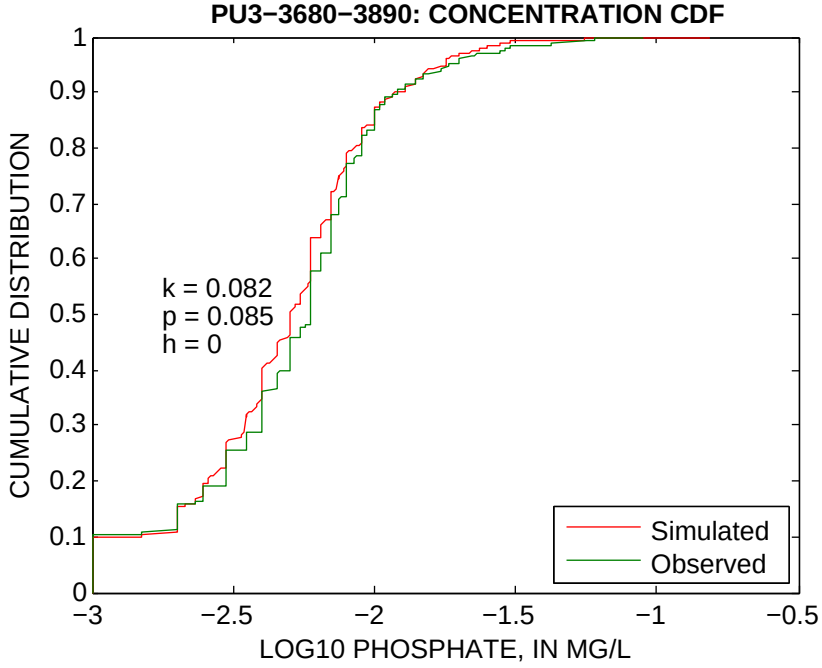
	n	observe	simulate
		467	461
min		0.001	0
		-3	-2.89395
mean		0.00725797	0.00692297
		-2.29078	-2.33624
media		0.006	0.0038367
		-2.22185	-2.41007
max		0.09	0.20088
		-1.04576	-0.697063
varian		7.3065e-05	0.00020348
		0.130648	0.11339
JB		0.001	0.001
		0.030604	0.001
		ra	log
%		-4.61566	1.98448
err.va		0.00024804	0.177663
rel.std.err		3.39486	1.35986
mod.eff		-2.39486	-0.359858

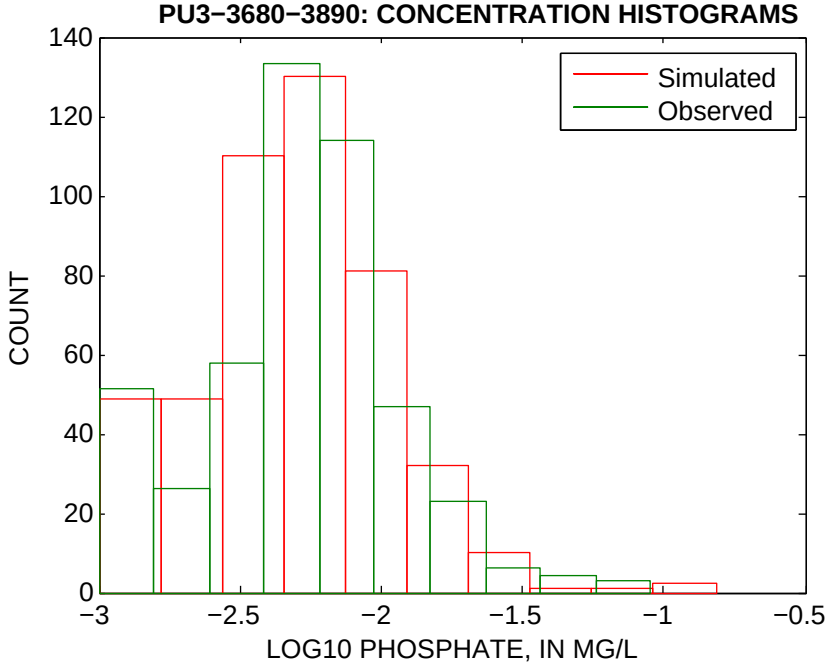
VERSION

ALL DATA
LOG10

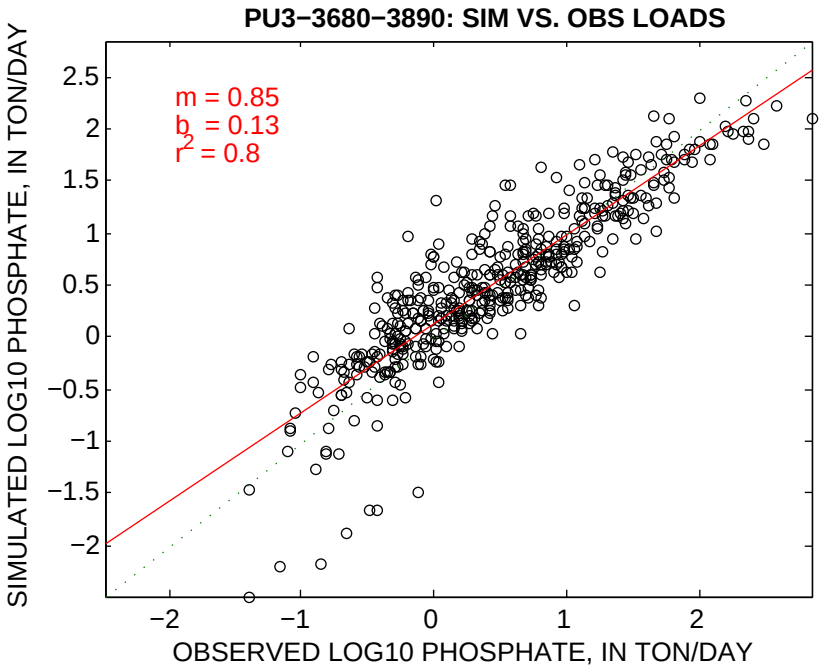


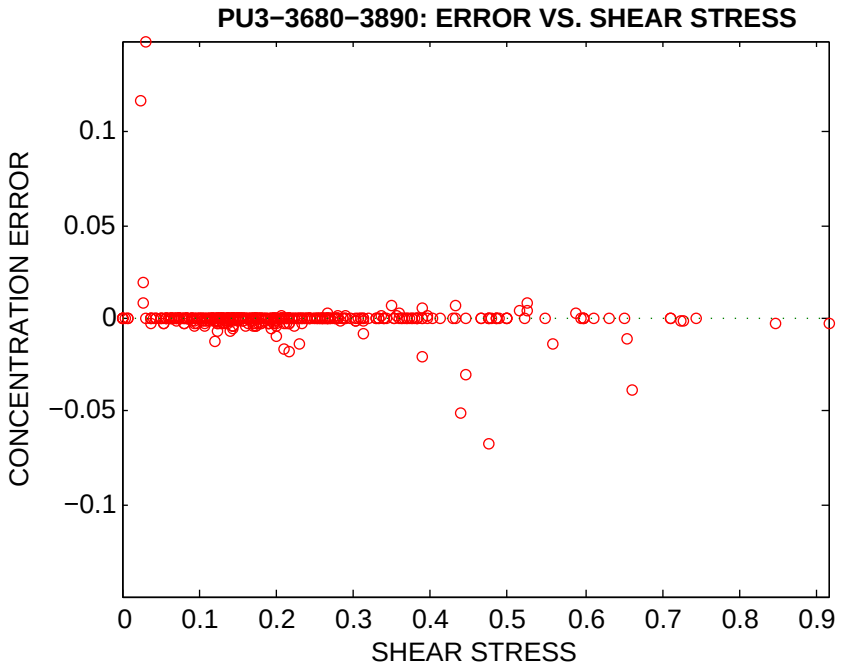


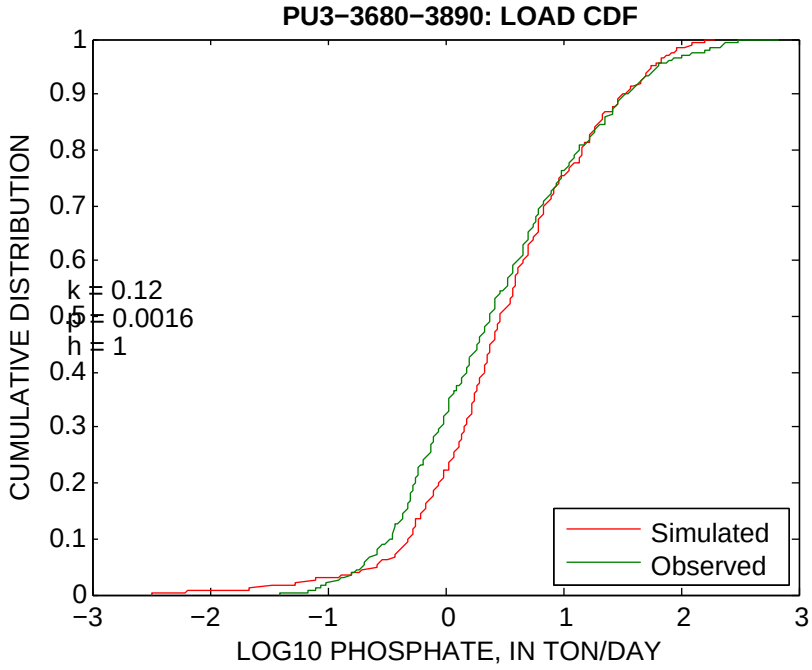


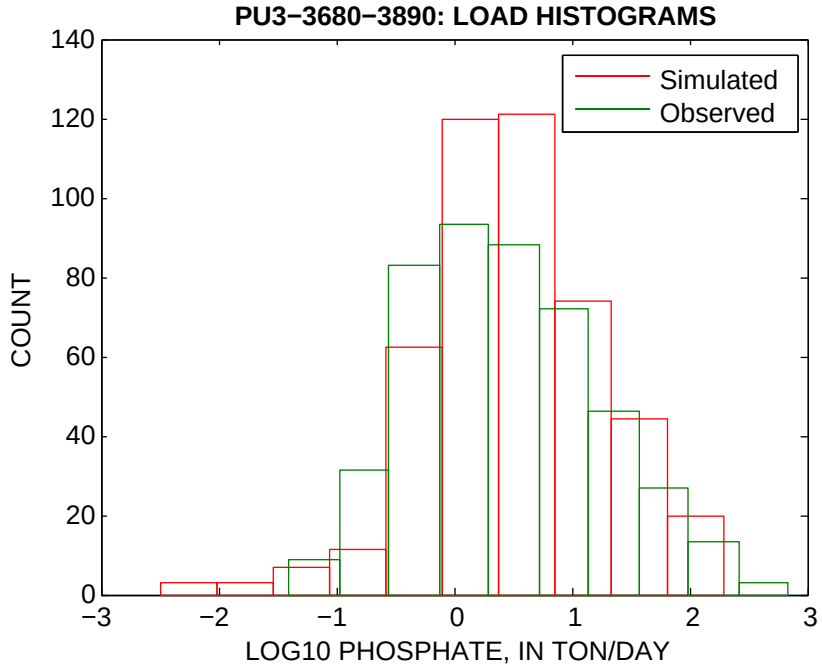


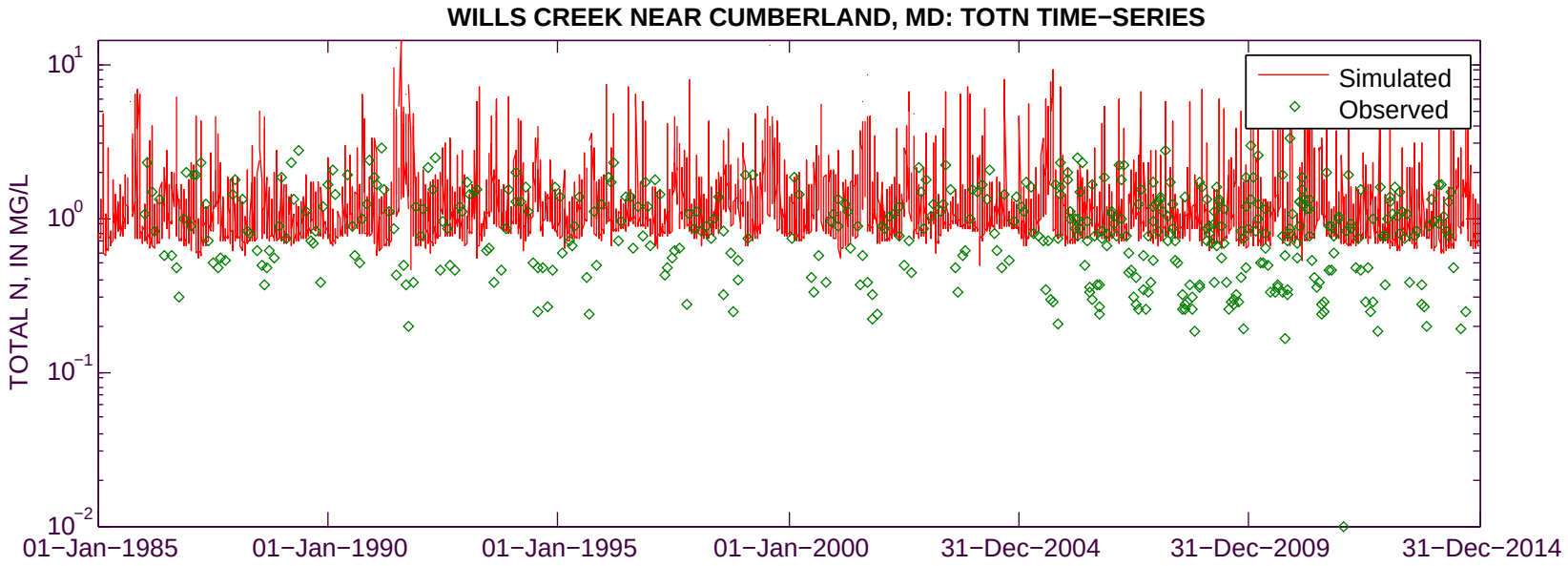
LOAD DATA
LOG10

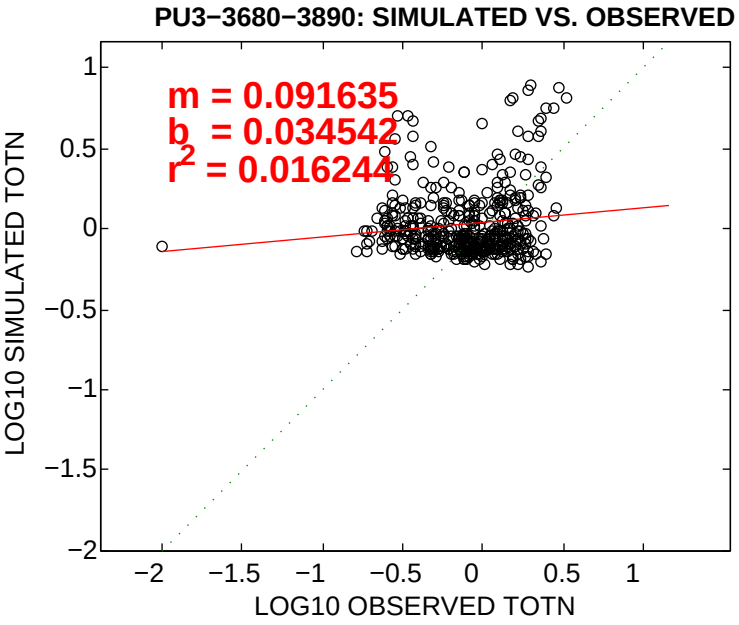


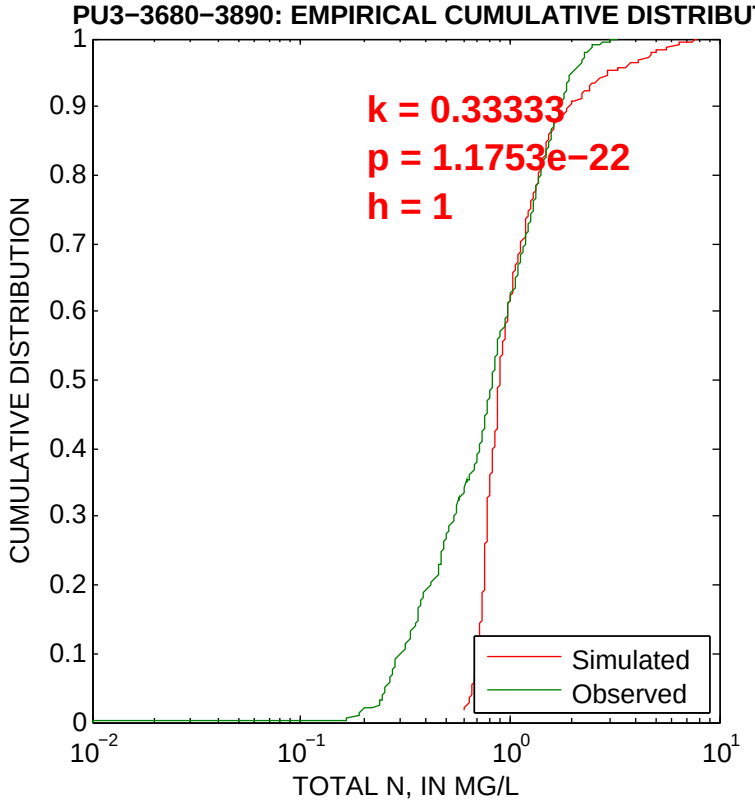












DATA SELECTION

scenario	file
P620171001WQ	TOTN.calib

plot: TOTN - total nitrogen

Dates	1/1/1985	12/31/201

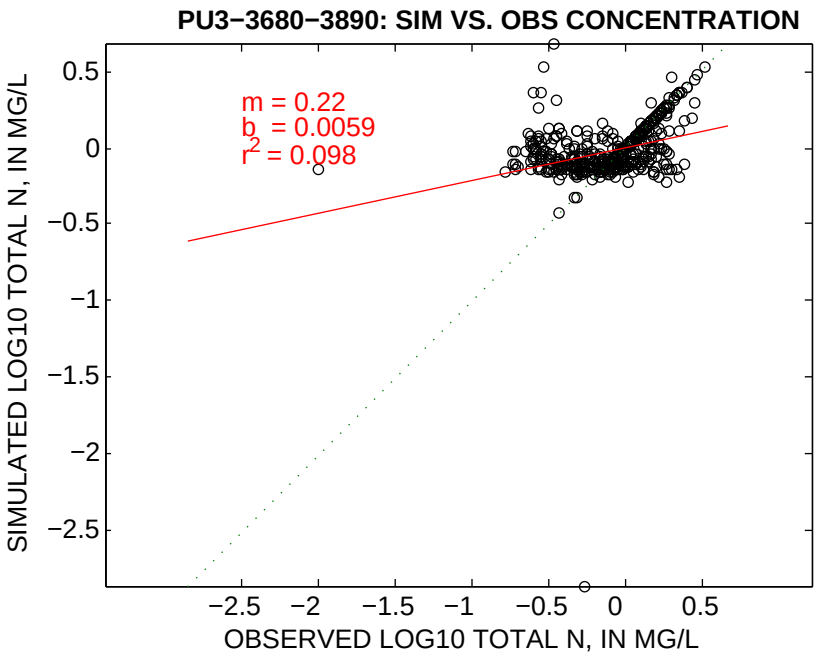
Drive	Directory	Observed
N/A	model	OBS20161101

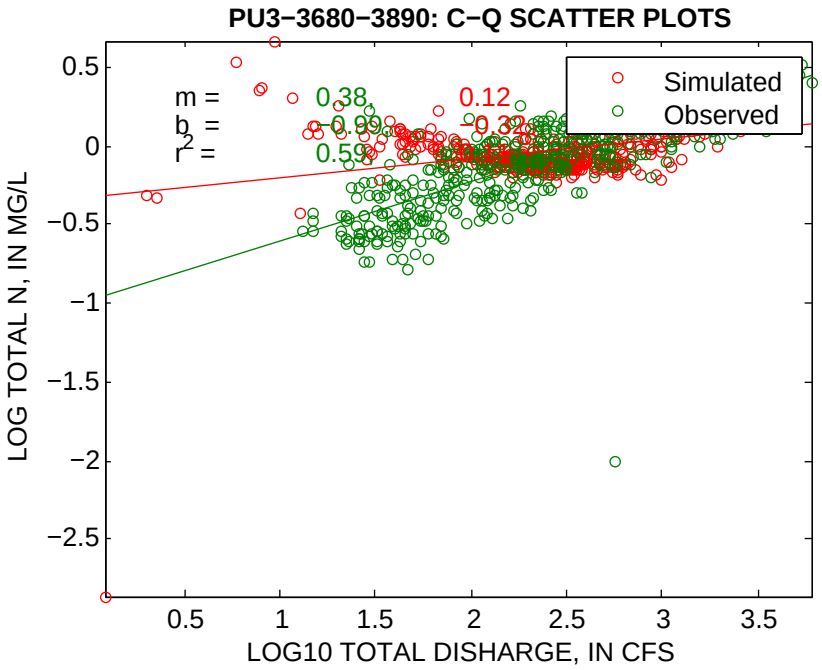
STATISTICS

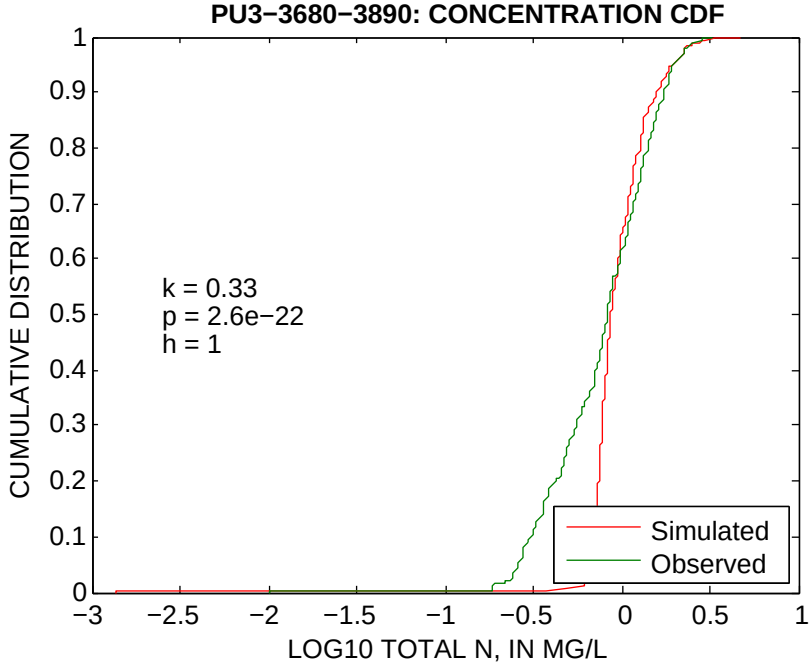
	n	453	447
		observe	simulate
min		0.01	0
		-2	-0.231969
mean		0.941613	1.22386
		-0.107362	0.0247041
media		0.830333	0.88971
		-0.0783135	-0.0493042
max		3.31825	7.9397
		0.520909	0.899804
varian		0.324912	1.04221
		0.0843756	0.043616
JB		0.001	0.001
		0.001	0.001
		ra	log
%		29.9752	-123.01
err.va		1.07813	0.130009
rel.std.err		3.31821	1.54083
mod.eff		-2.31821	-0.540831

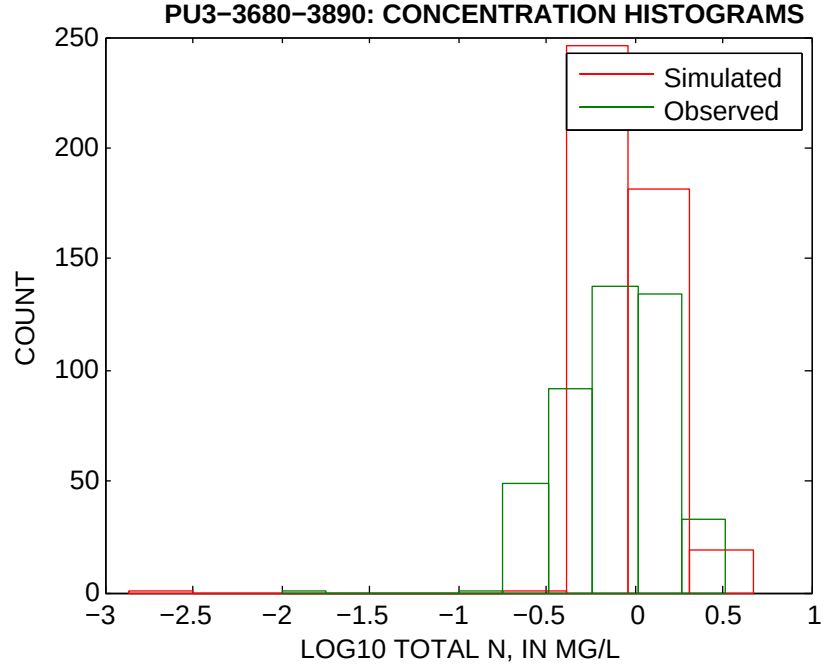
VERSION 2.1

ALL DATA
LOG10

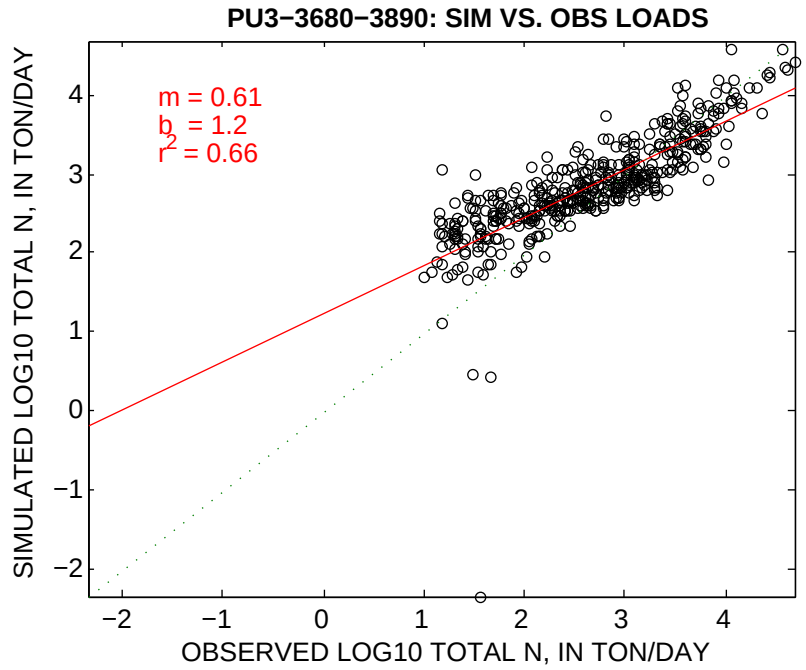


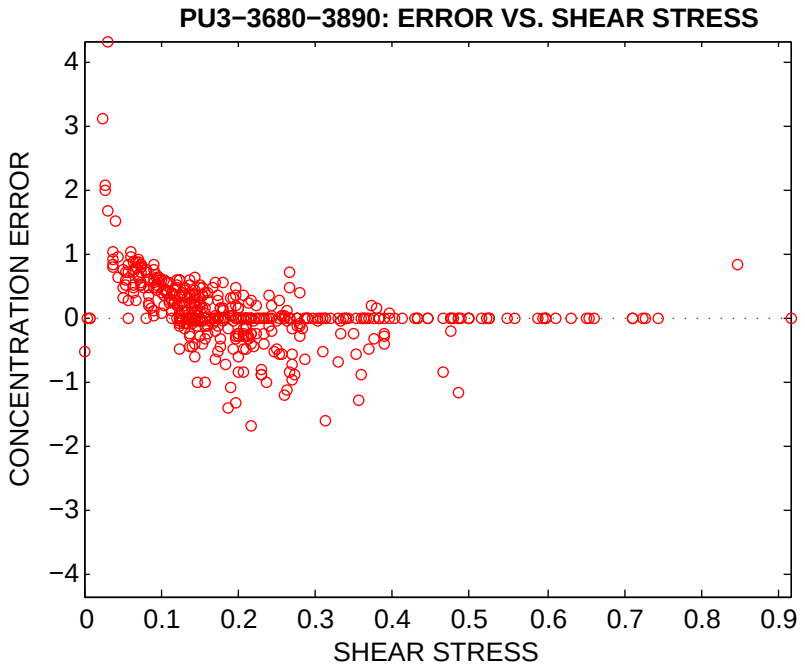


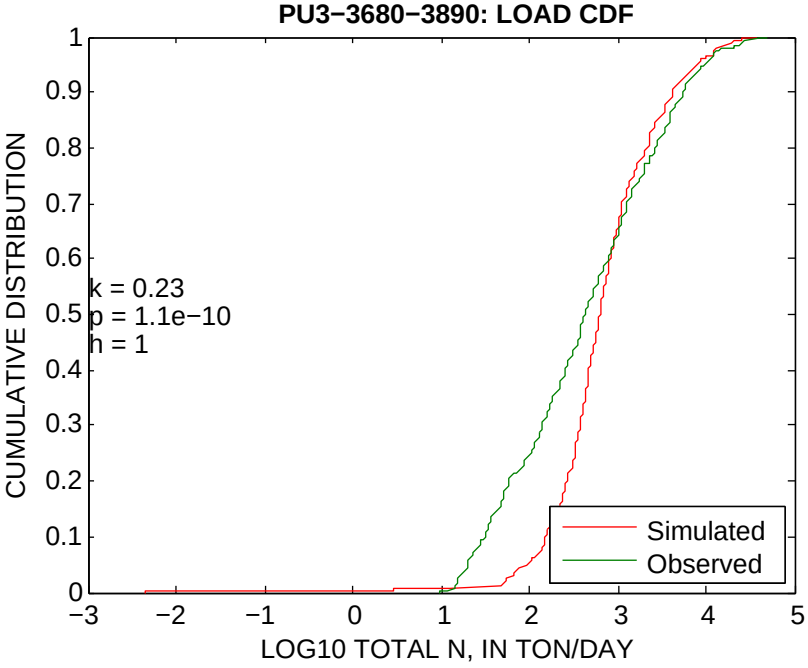


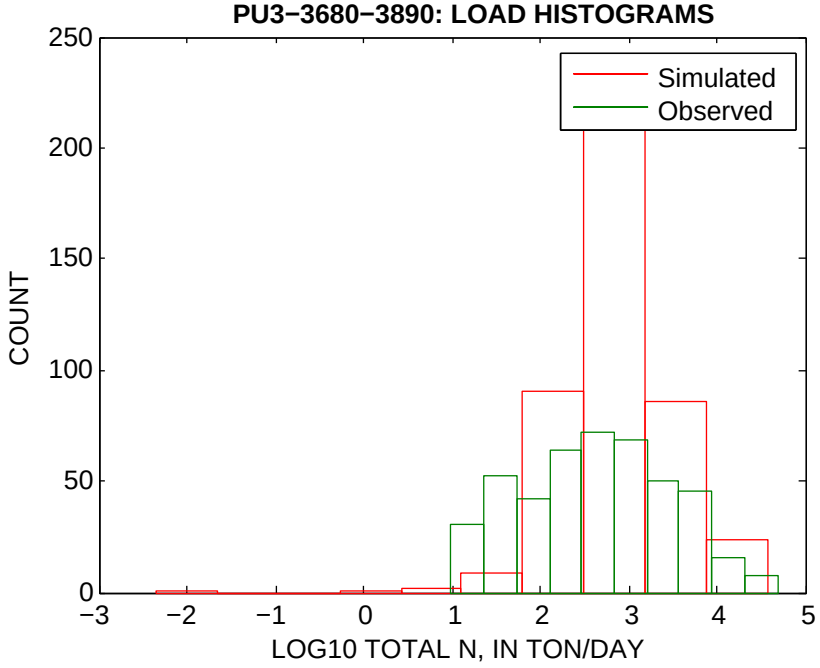


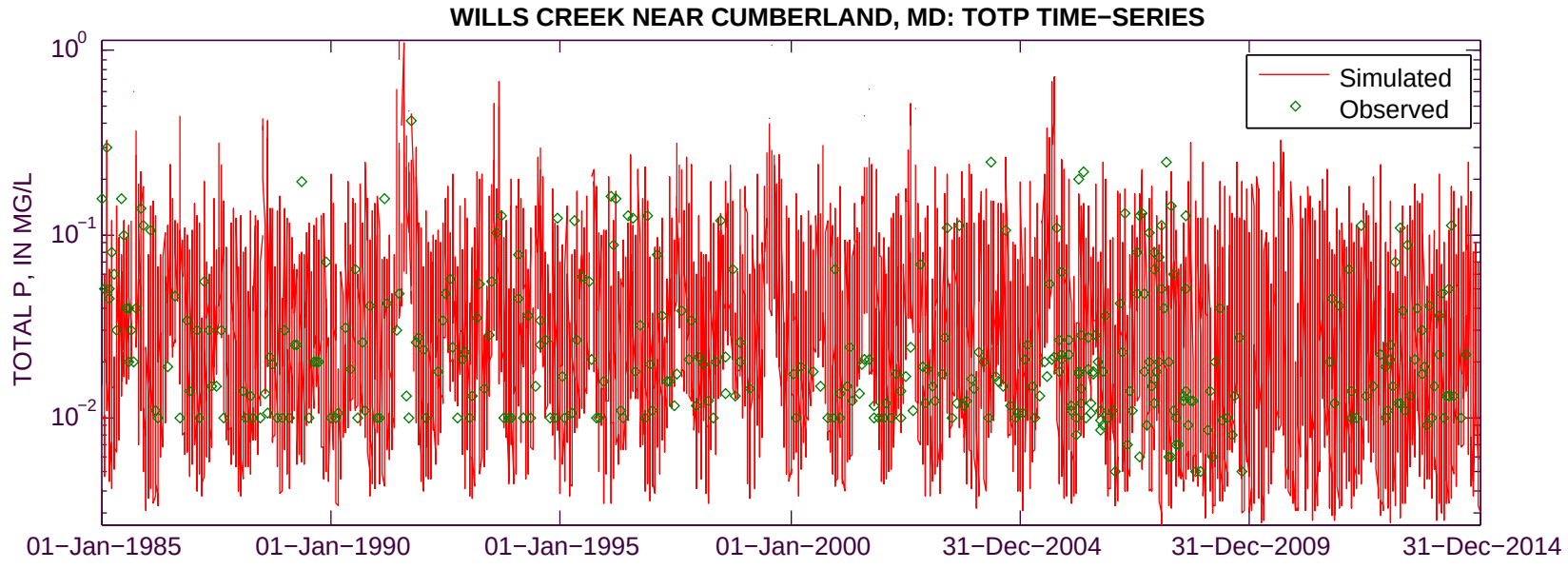
LOAD DATA
LOG10

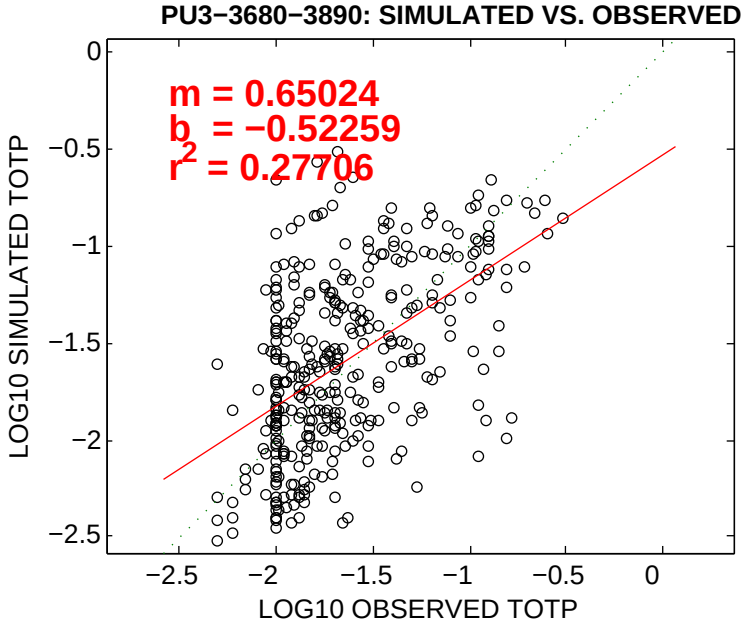


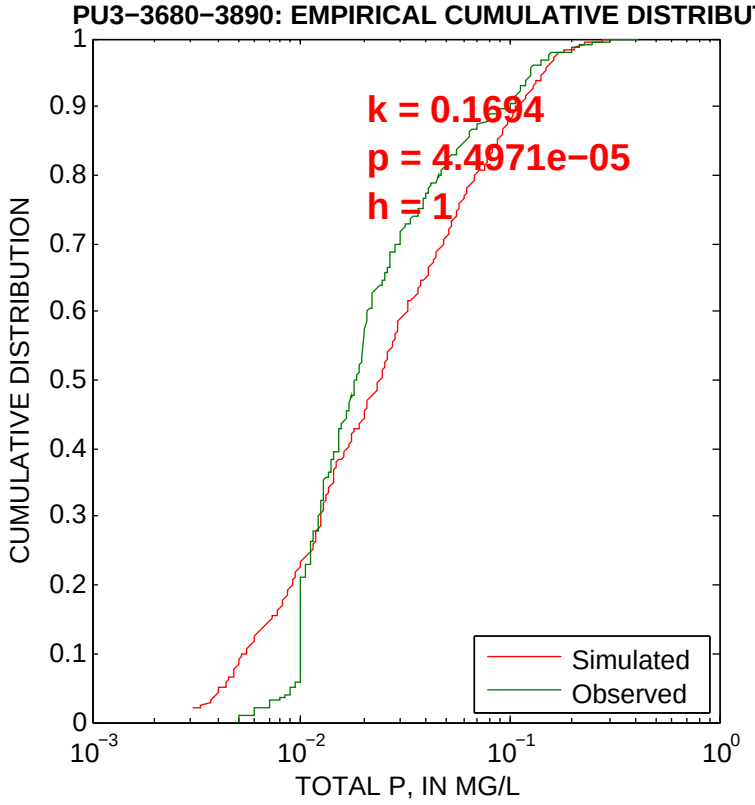












DATA SELECTION

scenario: P620171001WQ | file: TOTP.calib

plot: TOTP - total phosphorus

Dates: 1/1/1985 – 12/31/201

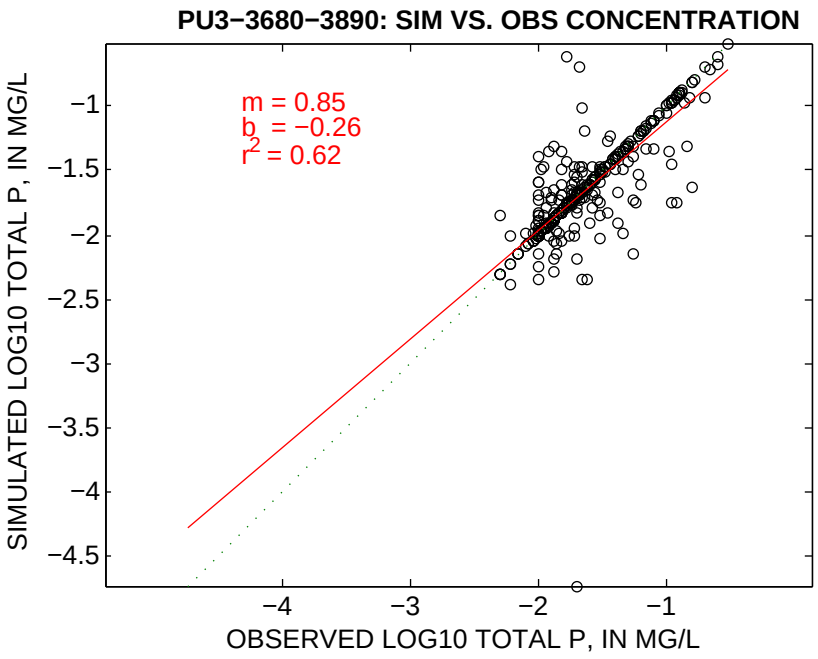
Drive | Directory | Observed: N/A | model | OBS20161101

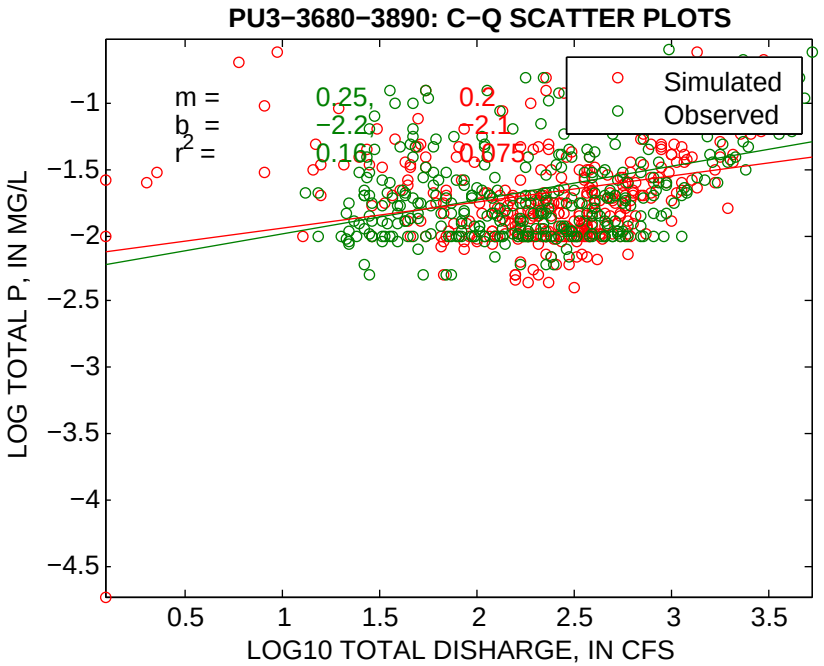
STATISTICS

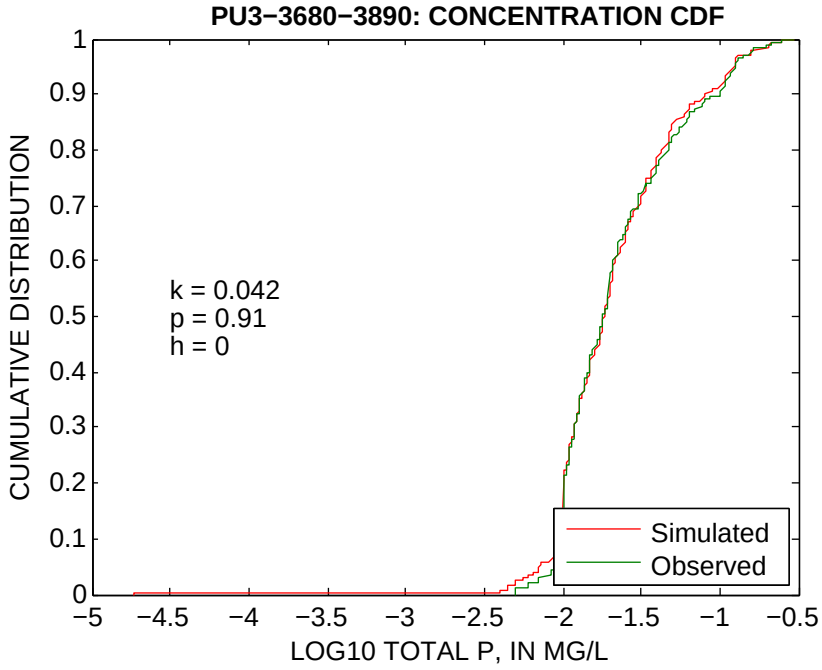
		observe	simulate
n		366	359
min		0.005	0
		-2.30103	-2.51866
mean		0.0355252	0.042553
		-1.65179	-1.59665
media		0.01825	0.023985
		-1.74473	-1.60868
max		0.4125	0.31038
		-0.522879	-0.508106
varian		0.00215826	0.00230225
		0.1391	0.212276
JB		0.001	0.001
		0.001	0.007995
		ra	log
%		19.7827	-3.33867
err.va		0.00279688	0.17353
rel.std.err		1.2959	1.24752
mod.eff		-0.295897	-0.247517

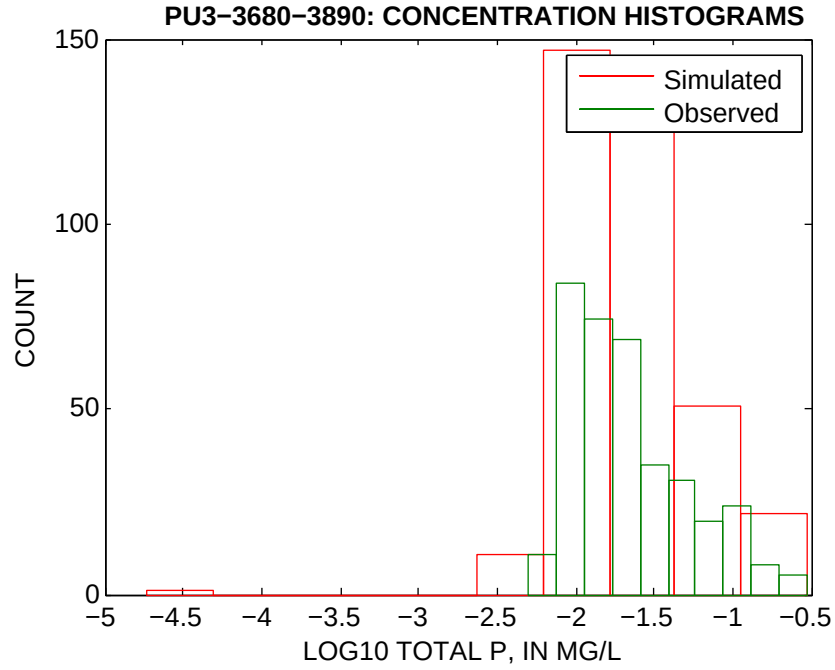
VERSION 2.1

ALL DATA
LOG10

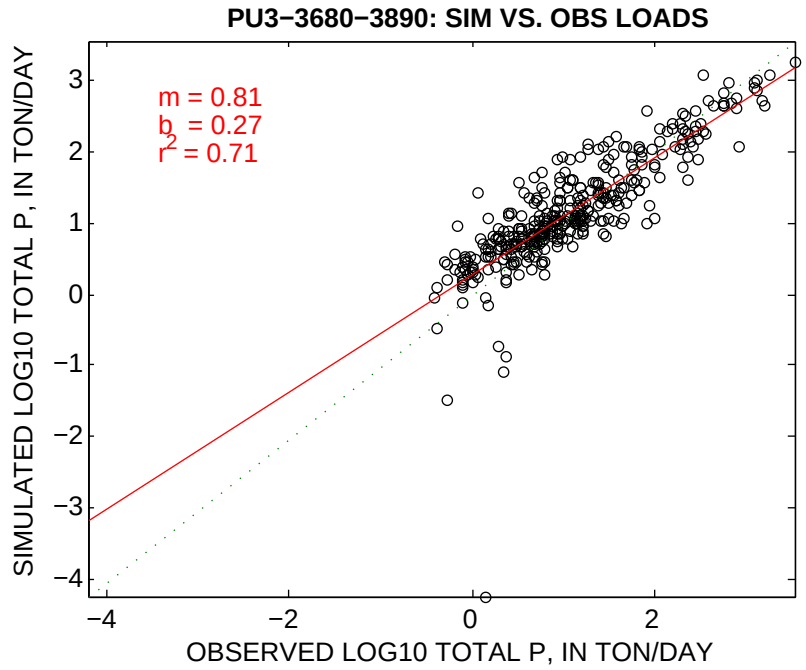


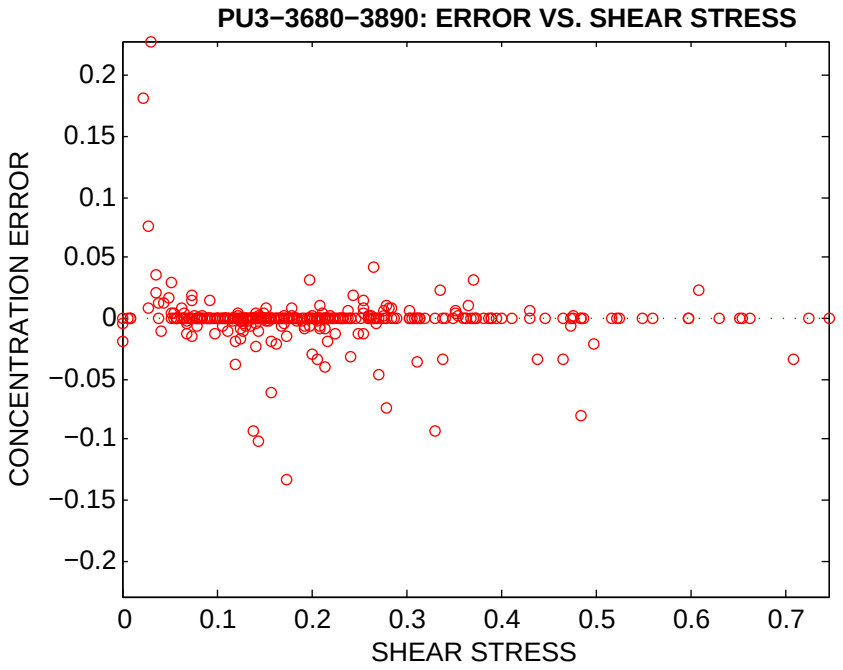


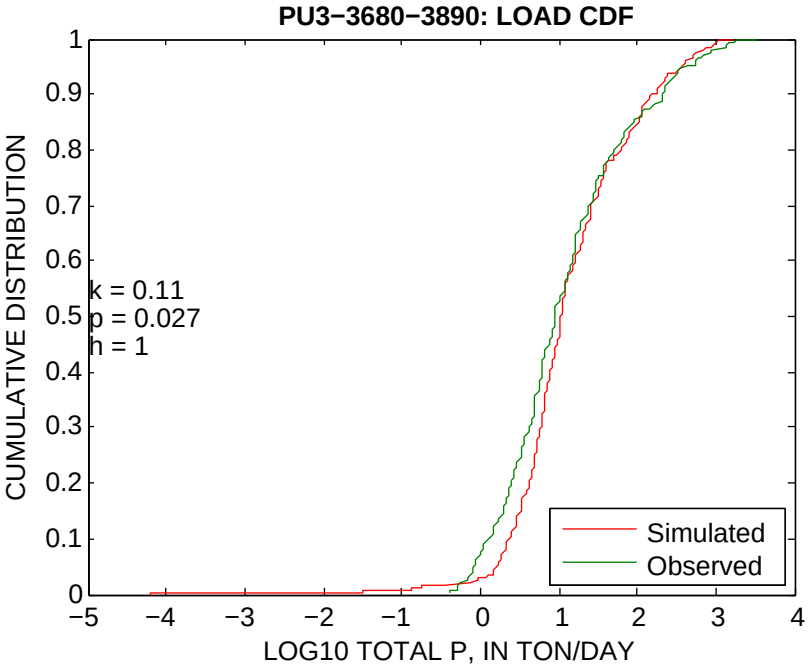


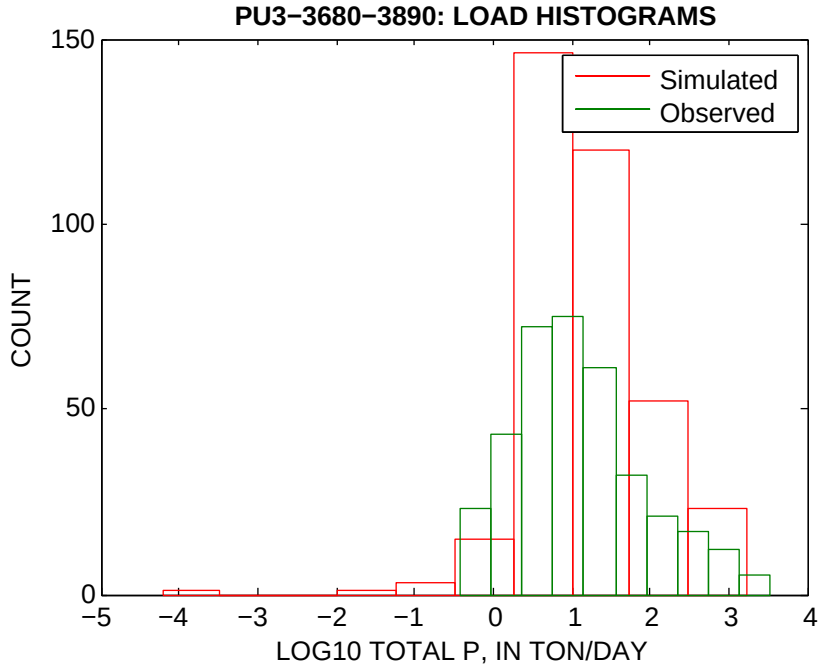


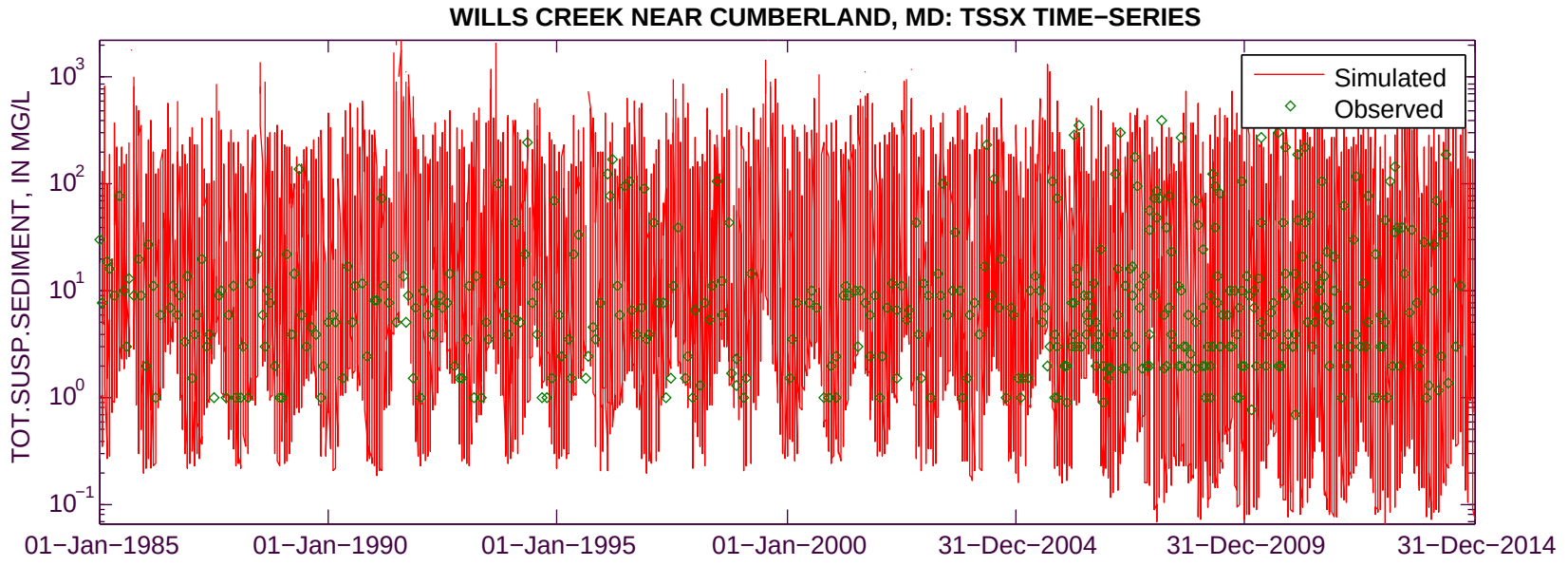
LOAD DATA
LOG10

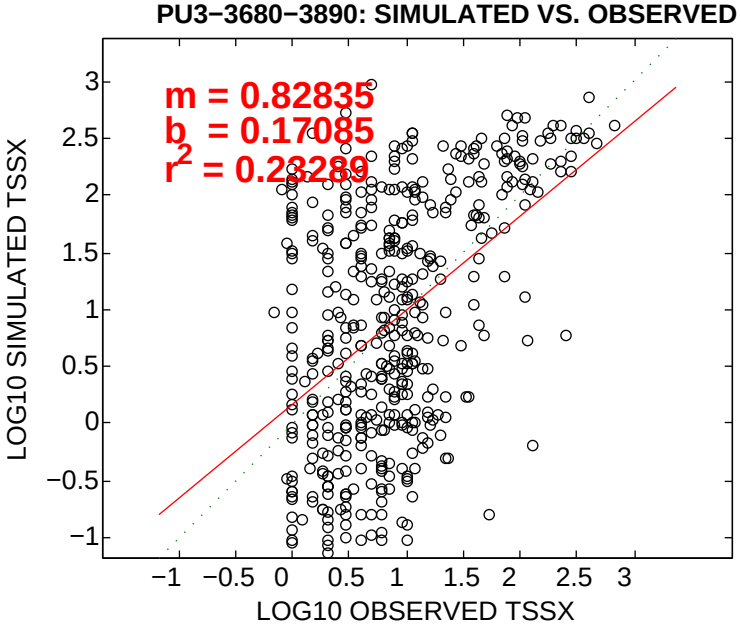


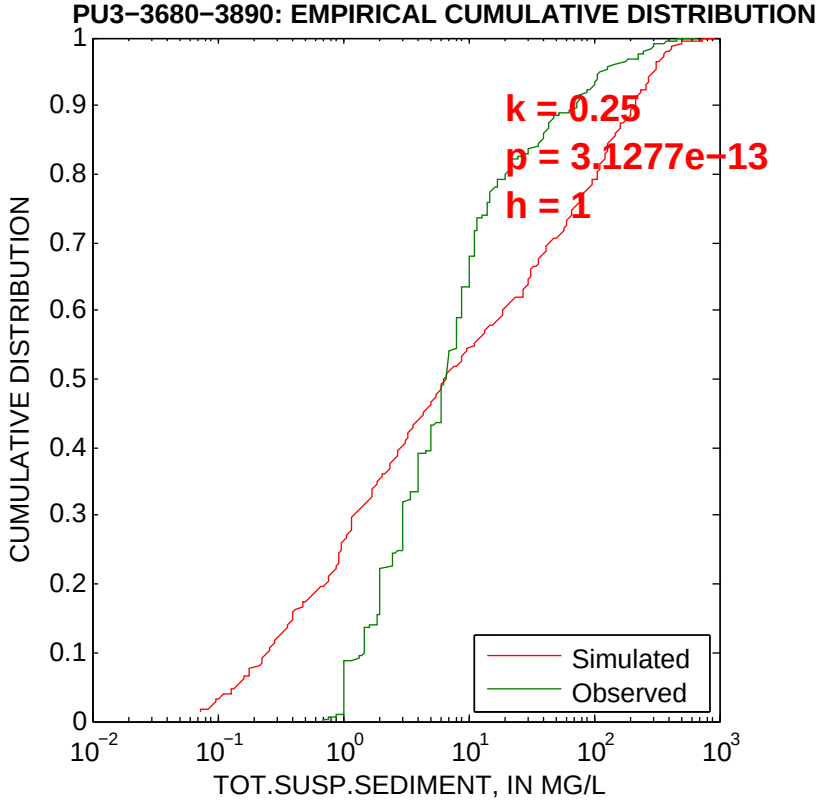












DATA SELECTION

scenario	file
P620171001WQ	TSSX.calib

plot: TSSX - total suspended ...

Dates	1/1/1985	12/31/201

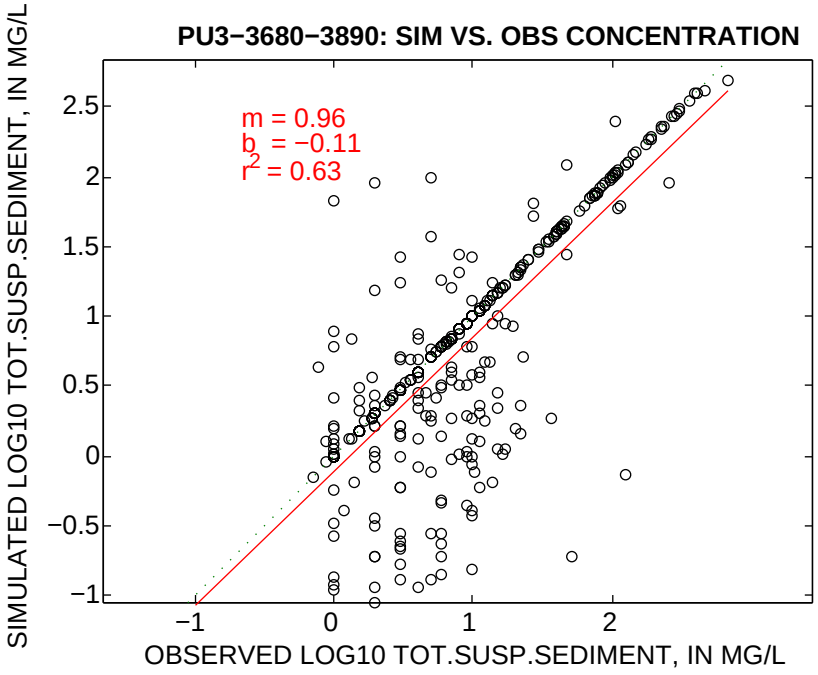
Drive	Directory	Observed
N/A	model	OBS20161101

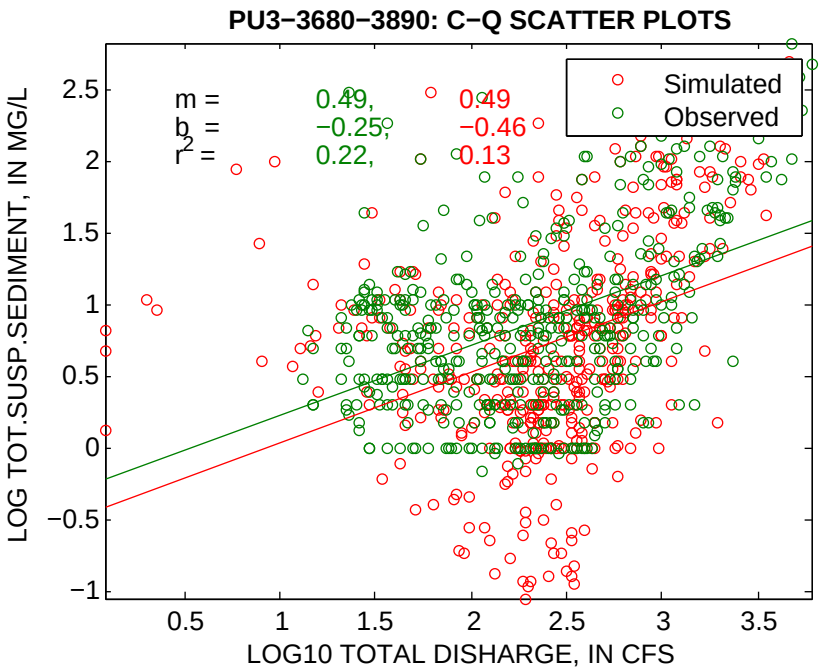
STATISTICS

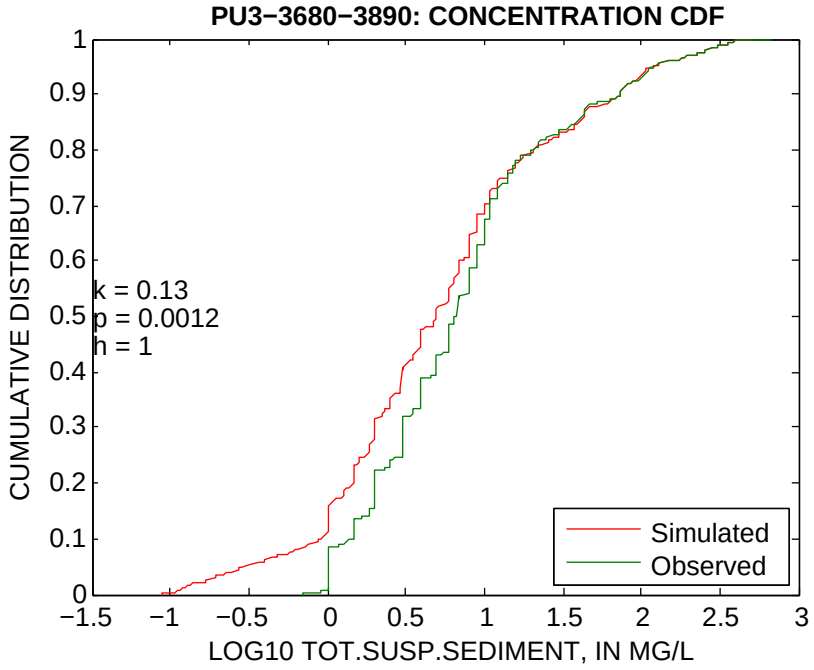
	n	observe	simulate
		464	458
min		0.7	0
		-0.154902	-1.13208
mean		26.3574	61.1311
		0.879978	0.899783
media		6.58333	6.69325
		0.845098	0.835556
max		675	926.97
		2.8293	2.96707
varian		4242.1	12359.4
		0.38319	1.129
JB		0.001	0.001
		0.001	0.001
		ra	log
%		131.932	2.25063
err.va		9755.61	0.877753
rel.std.err		2.29971	2.29065
mod.eff		-1.29971	-1.29065

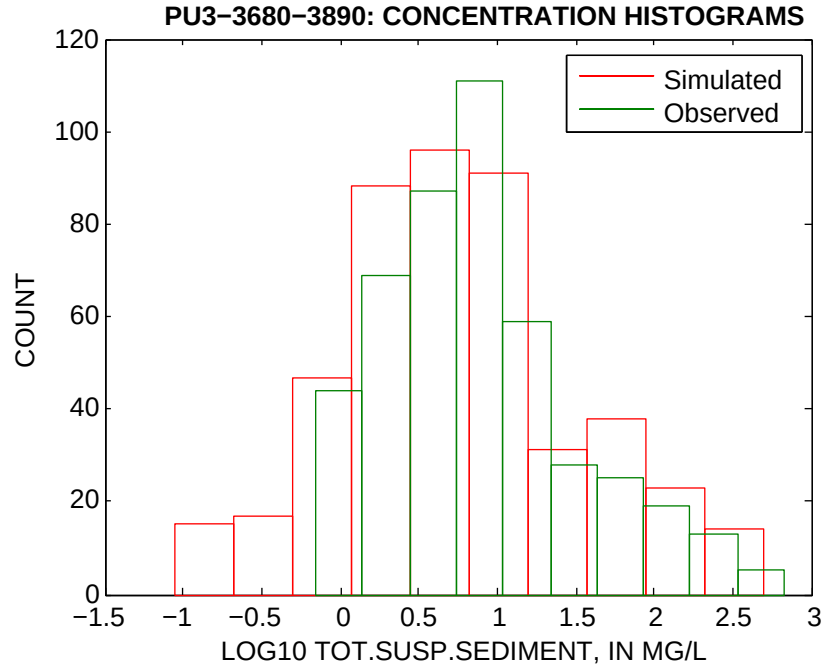
VERSION 2.1

ALL DATA
LOG10

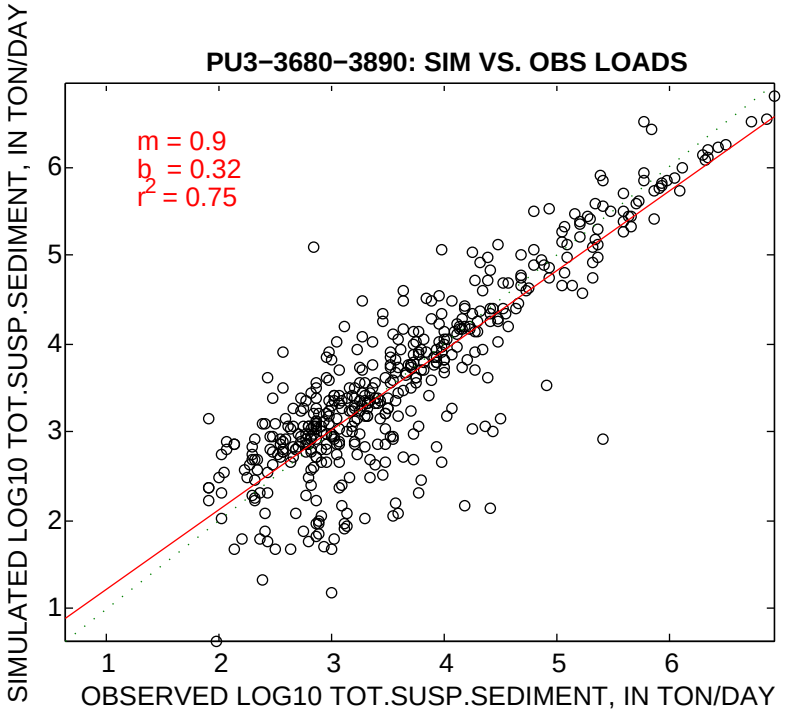


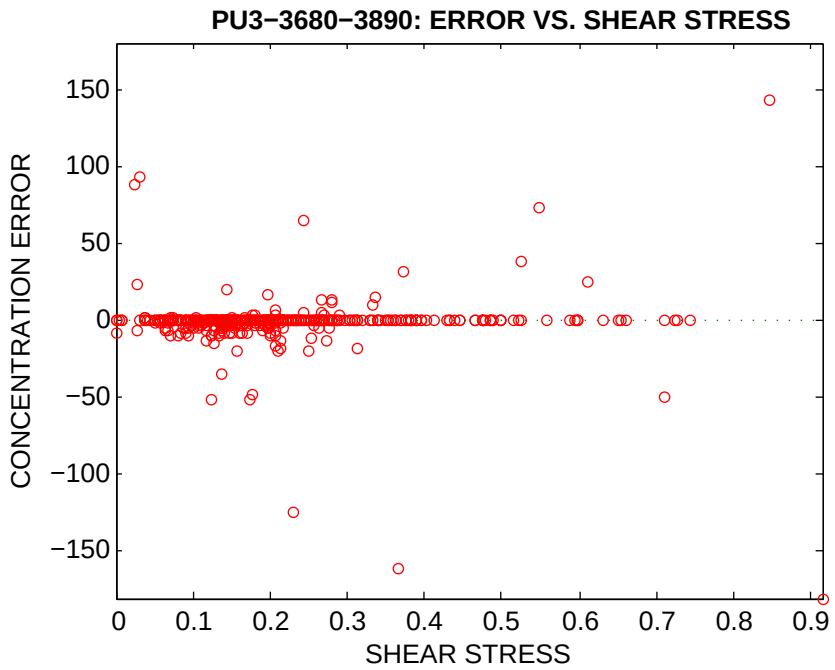


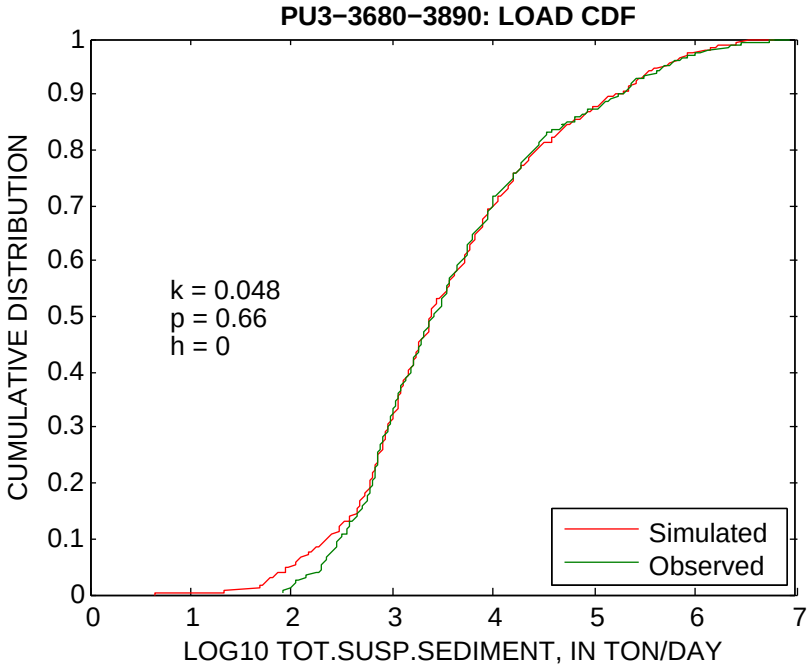


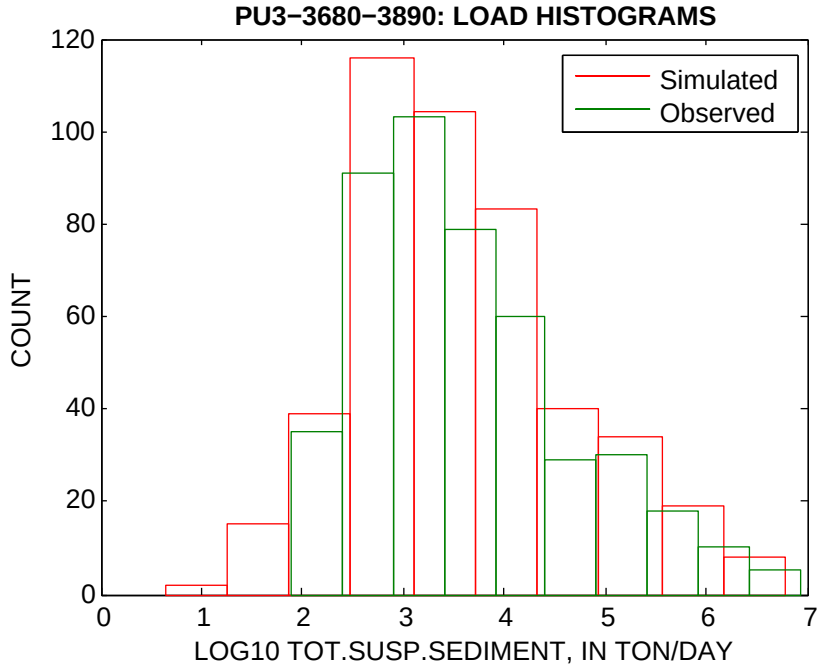


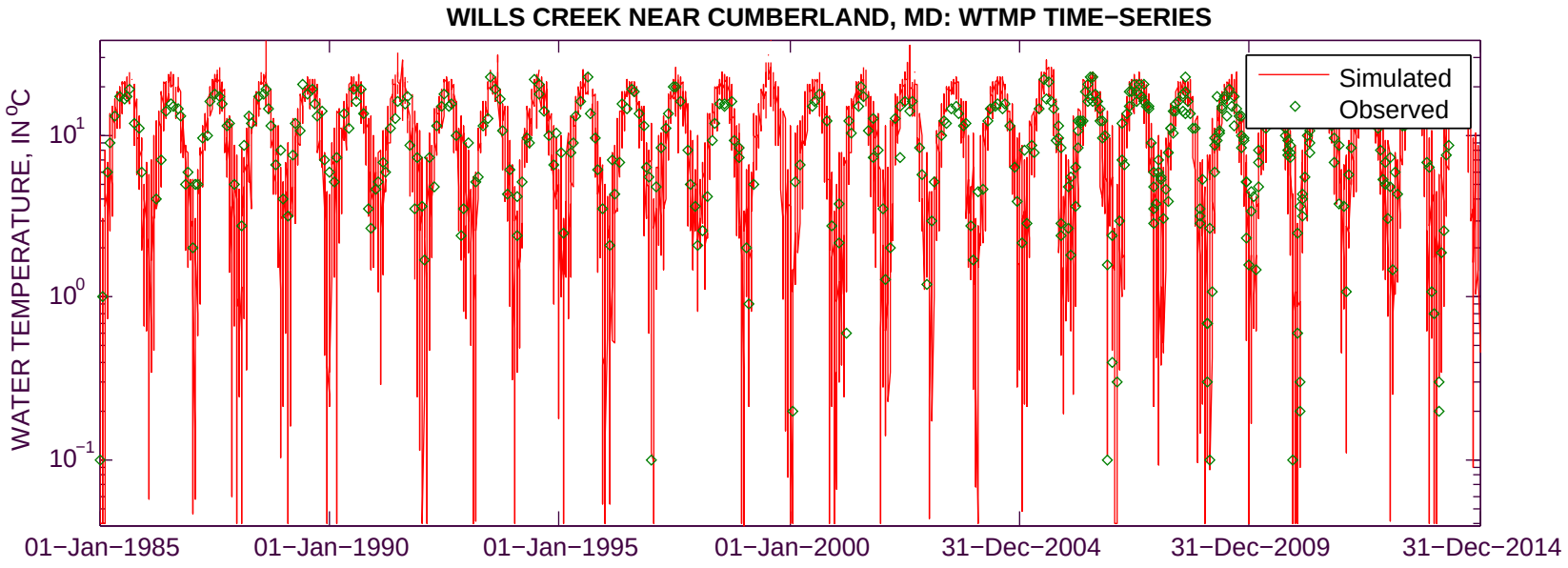
LOAD DATA
LOG10

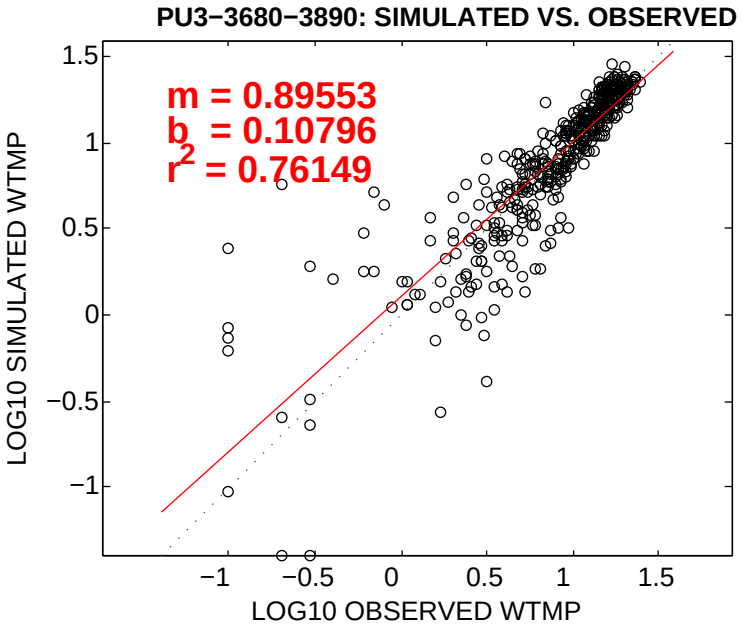


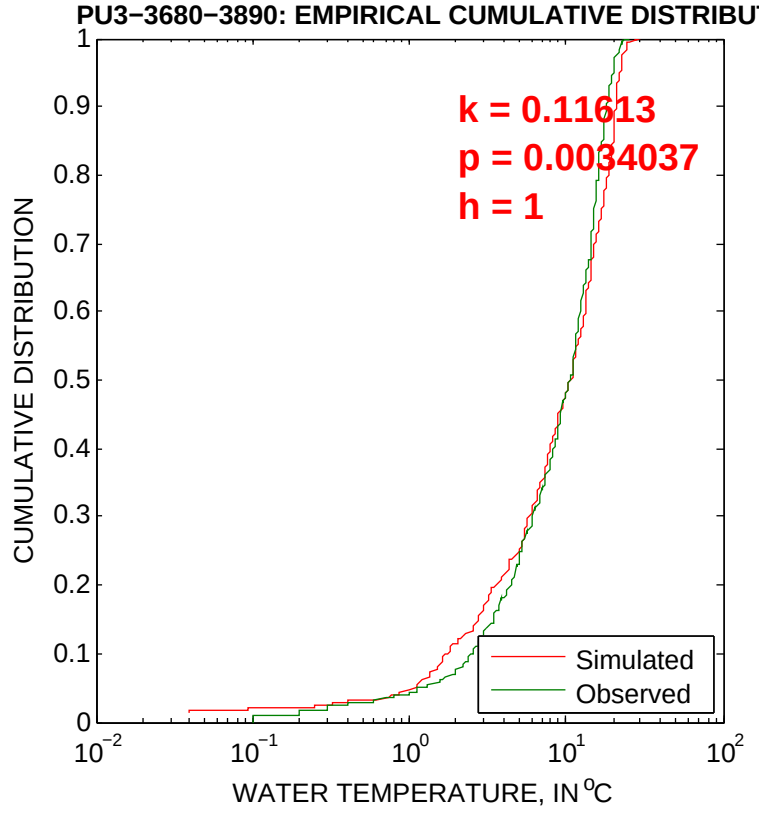












DATA SELECTION

scenario	file
P620171001WQ	WTMP.calib

plot: WTMP - water tempera...

Dates 1/1/1985 12/31/201

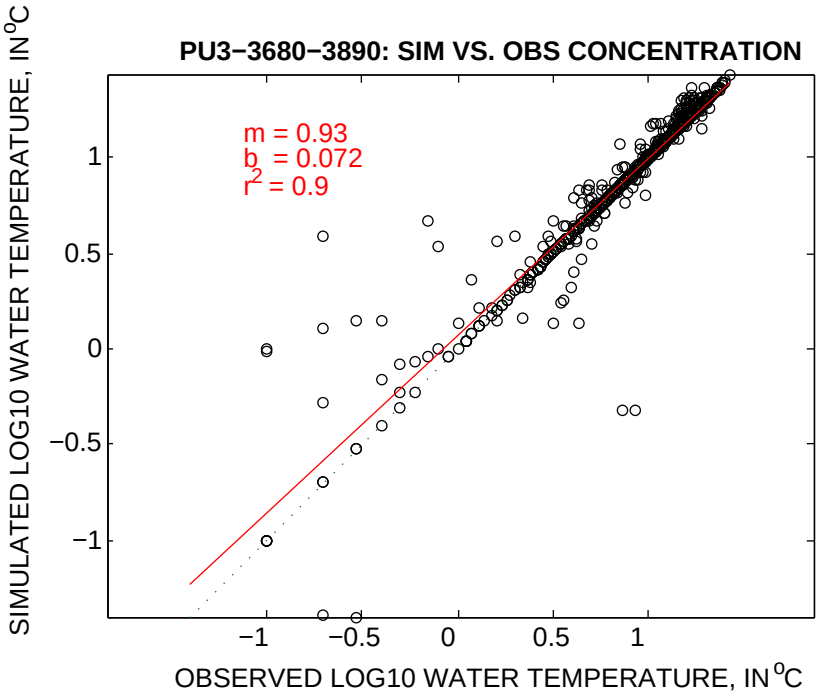
Drive	Directory	Observed
N/A	model	OBS20161101

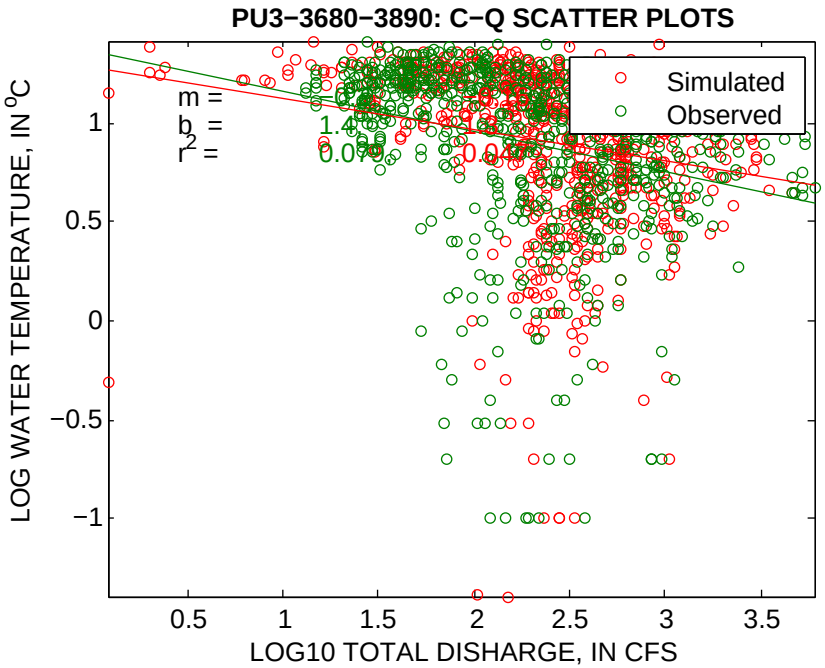
STATISTICS

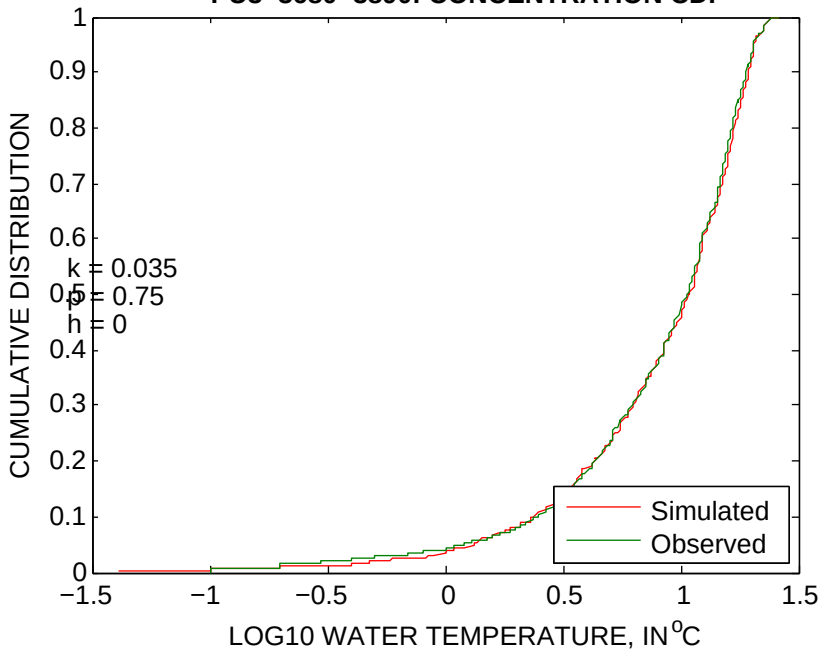
	observe	simulate
n	465	459
min	0.1 -1	0 -1.39765
mean	10.3985 0.889524	11.0092 0.904554
media	10.7 1.02938	10.875 1.04017
max	24.9 1.3962	28.418 1.45359
varian	35.0791 0.180355	49.5562 0.189943
JB	0.001414 0.001	0.001 0.001
	ra	log
%	5.87277	1.68963
err.va	9.0389	0.0474973
rel.std.err	0.257672	0.263355
mod.eff	0.742328	0.736645

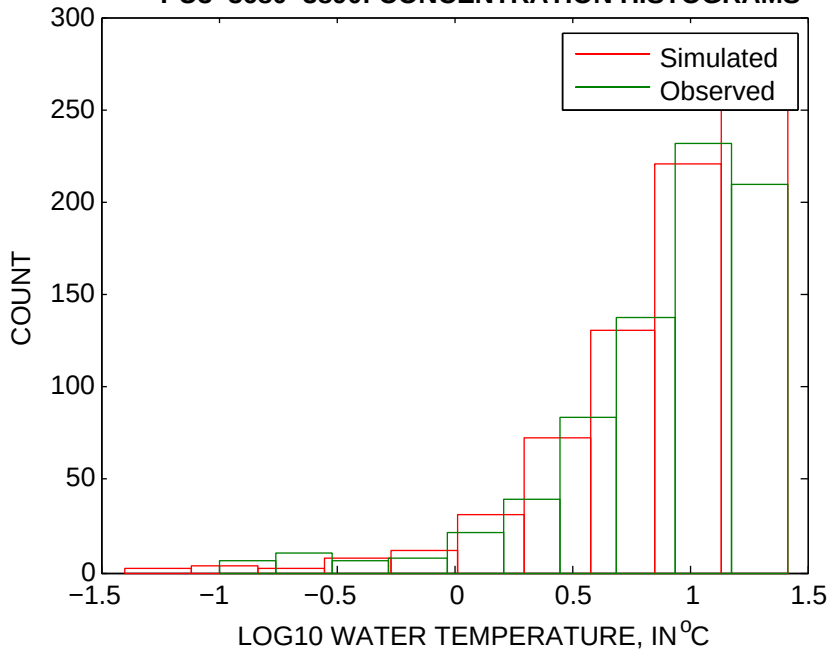
VERSION 2.1

ALL DATA
LOG10

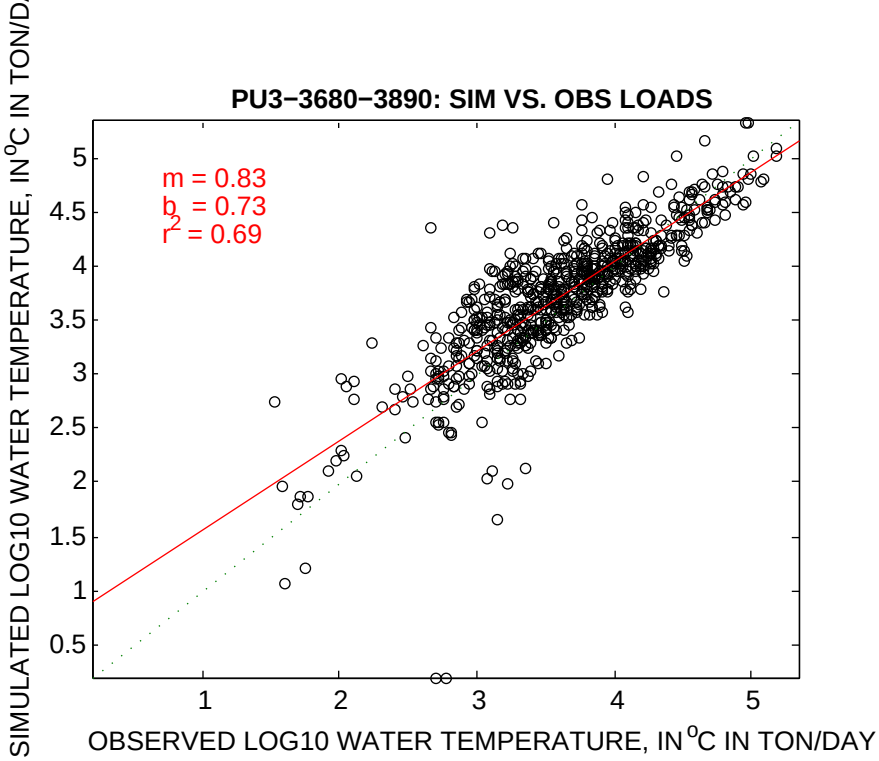


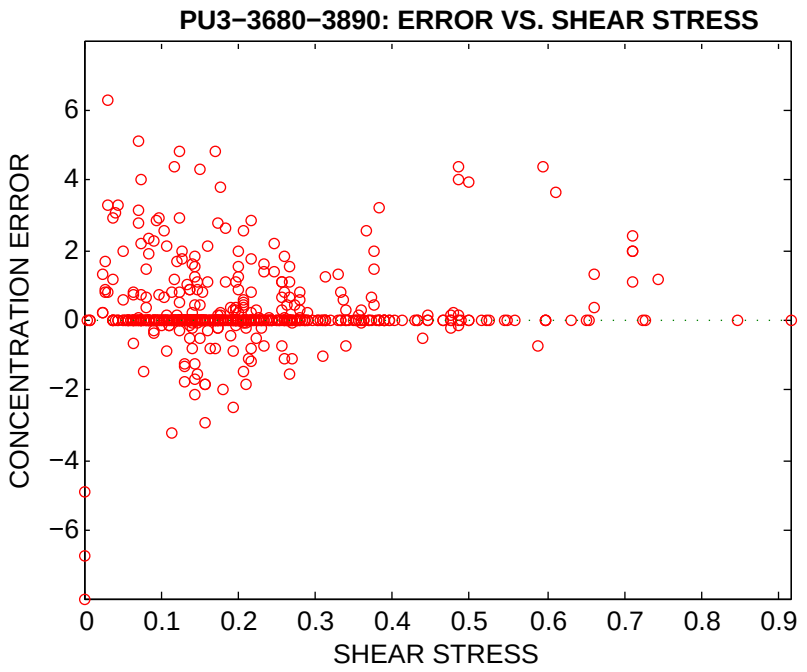


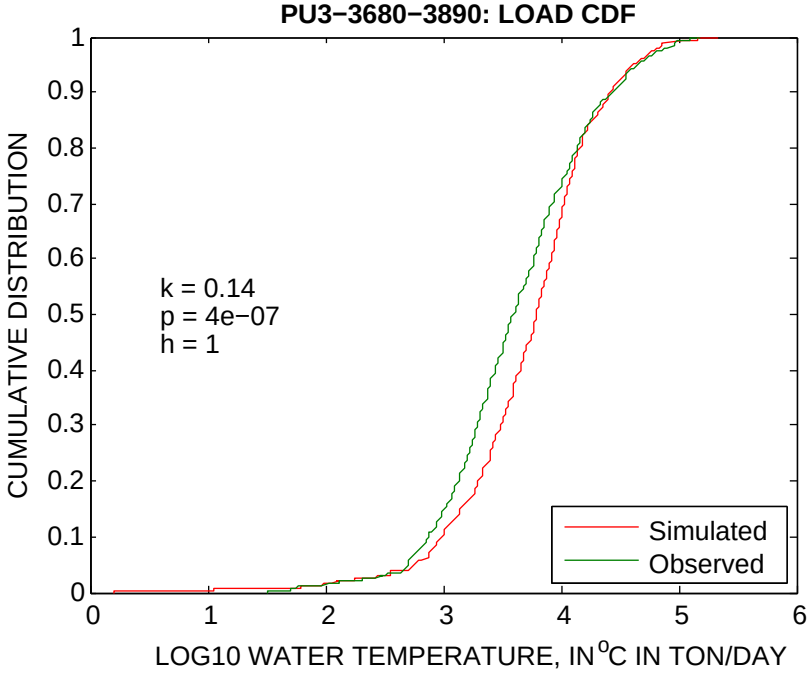


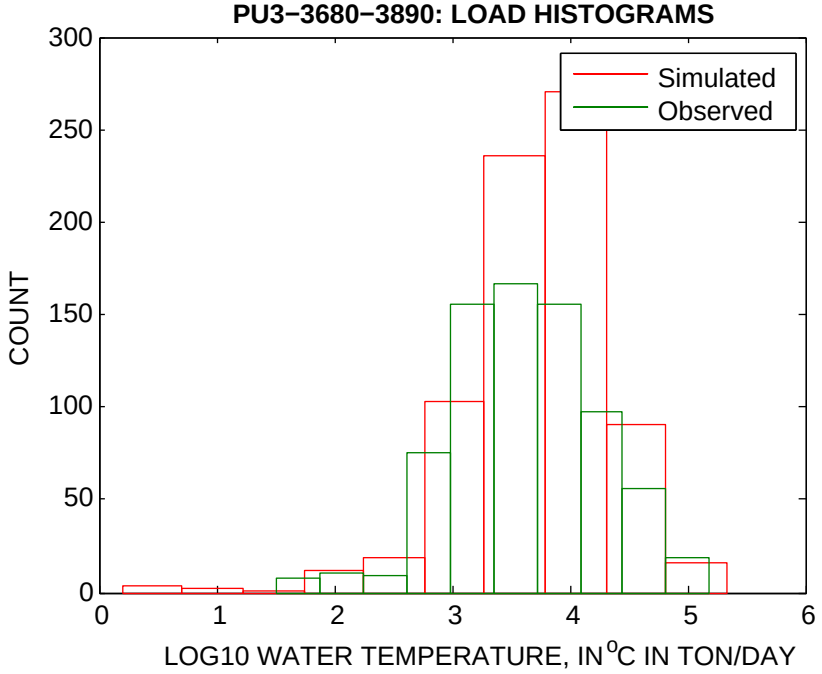


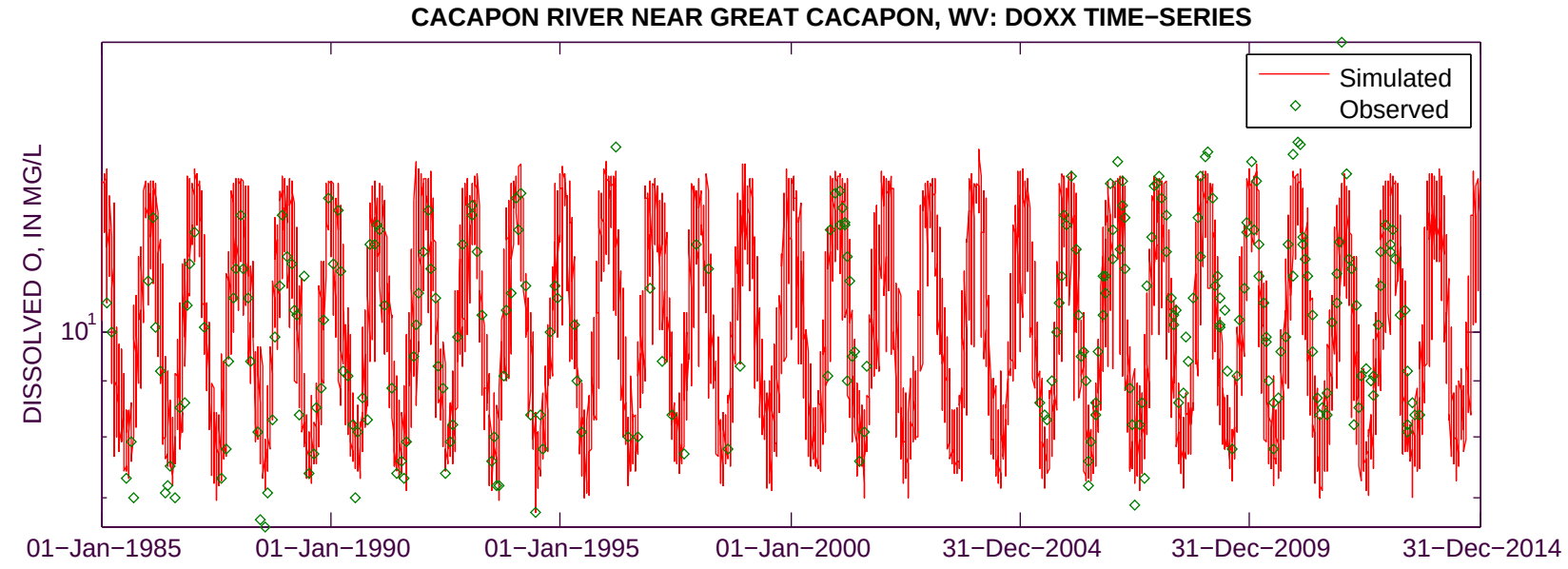
LOAD DATA
LOG10

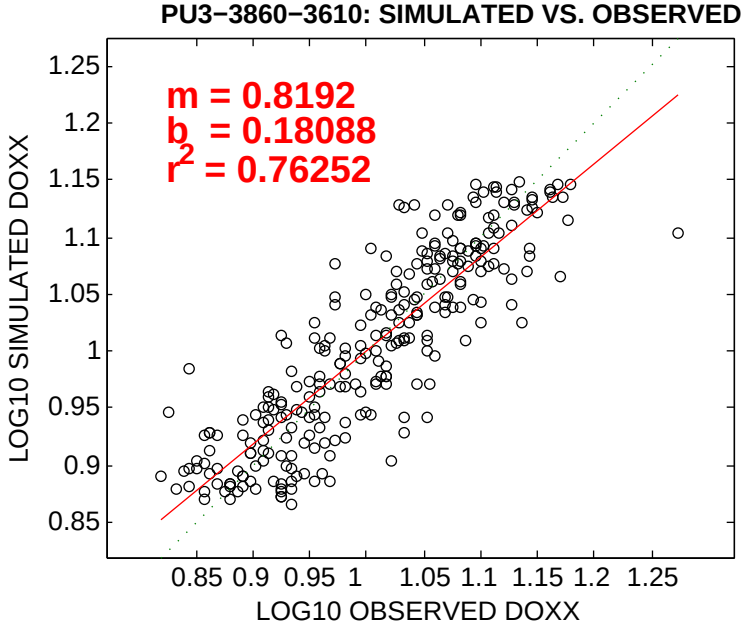


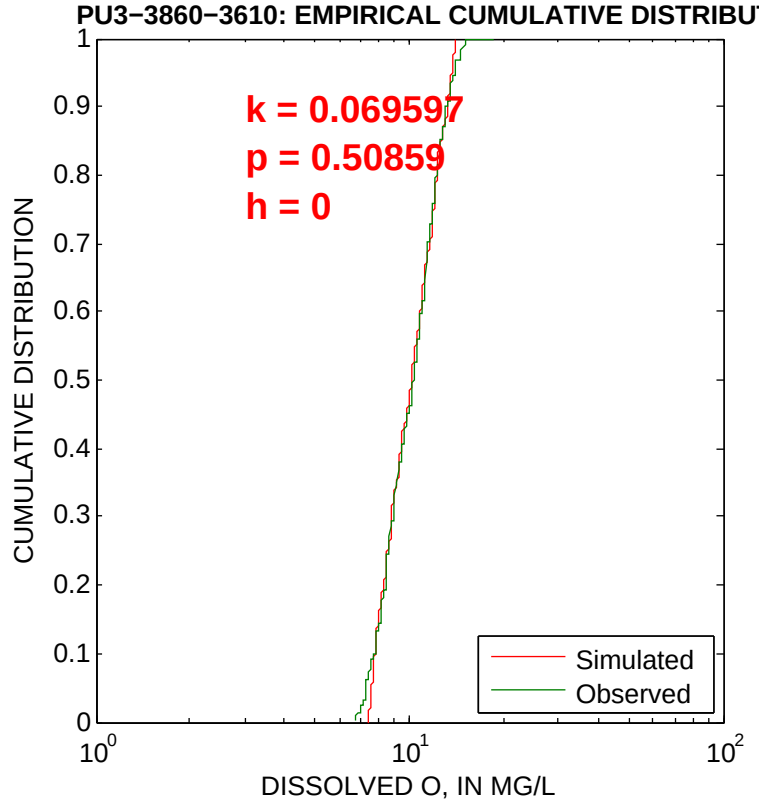












DATA SELECTION

scenario	file
P620171001WQ	DOXX.calib

plot: DOXX - dissolved oxygen

Dates: 1/1/1985 – 12/31/201

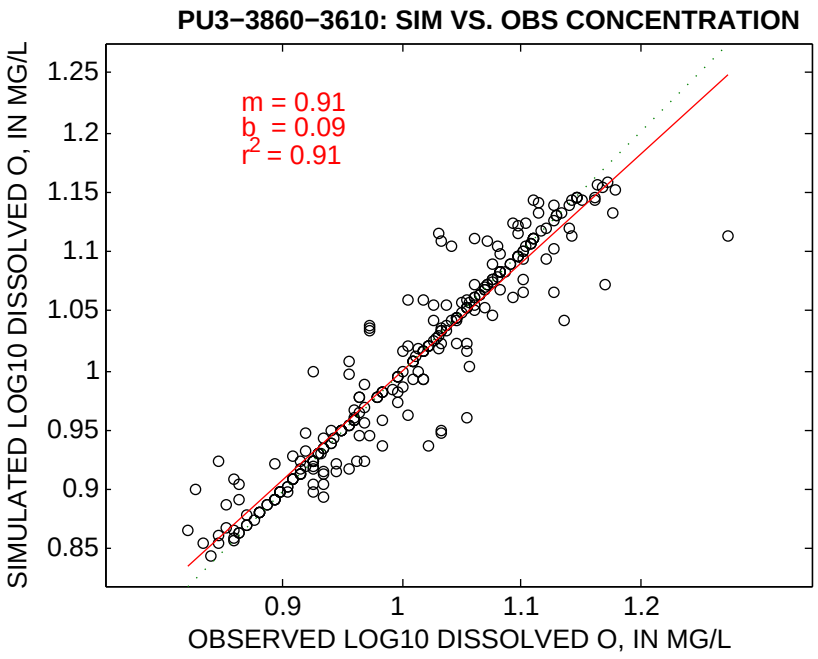
Drive	Directory	Observed
N/A	model	OBS20161101

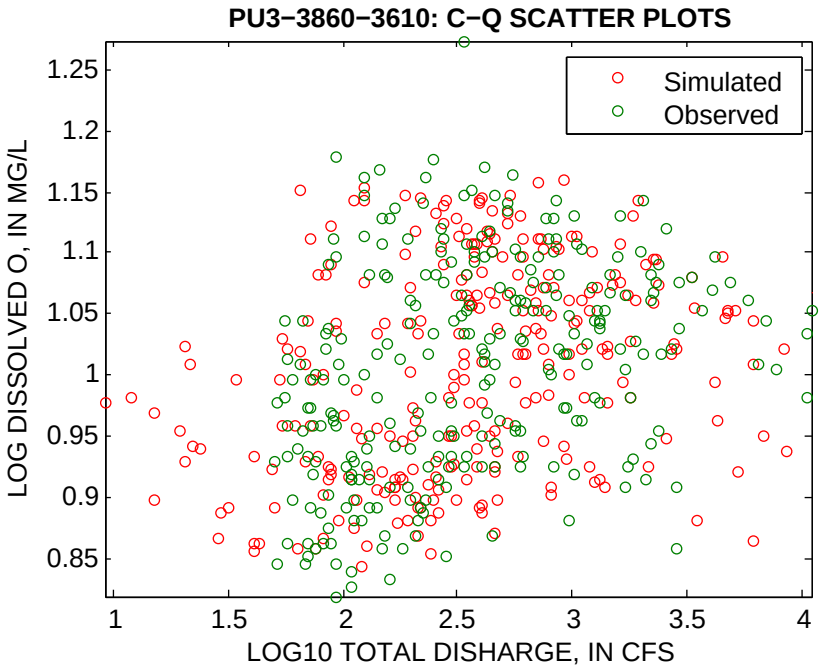
STATISTICS

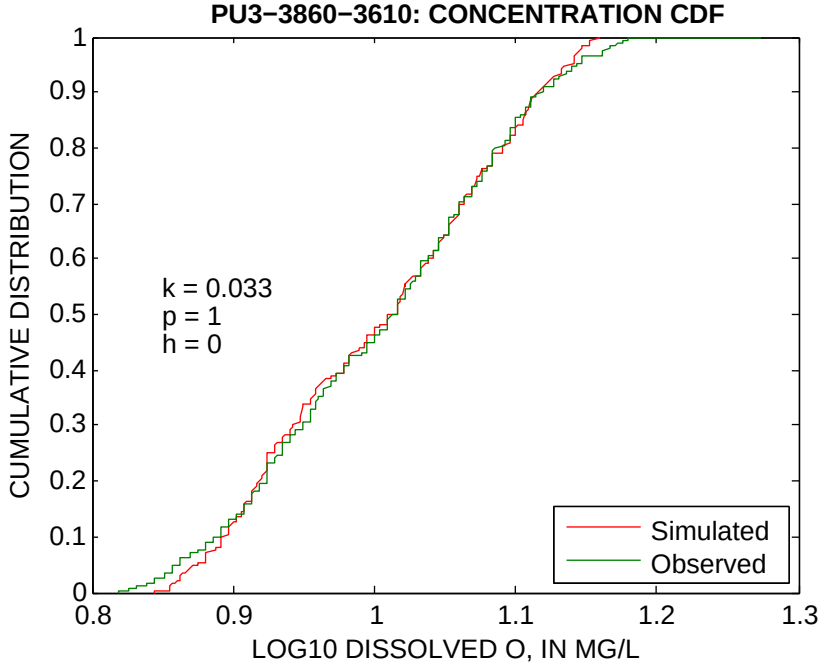
	n	273	273
		observe	simulate
min		6.6	7.3531
		0.819544	0.86647
mean		10.3565	10.3058
		1.00632	1.00526
media		10.3	10.169
		1.01284	1.00728
max		18.77	14.058
		1.27346	1.14792
varian		4.43474	3.83547
		0.00777275	0.00684069
JB		0.023680	0.003048
		0.035998	0.003158
		ra	log
%		-0.48886	-0.105586
err.va		1.12536	0.00187971
rel.std.err		0.25376	0.241834
mod.eff		0.74624	0.758166

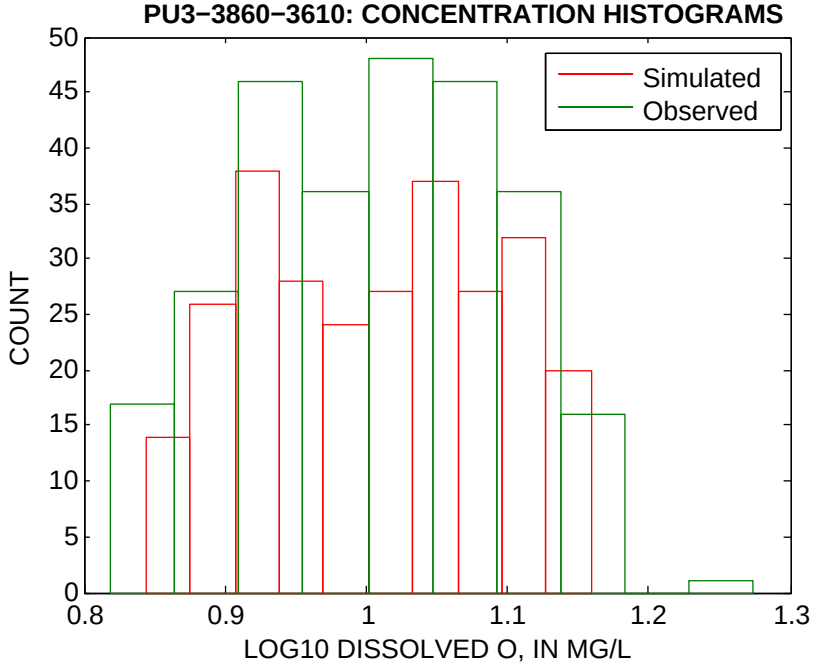
VERSION 2.1

ALL DATA
LOG10

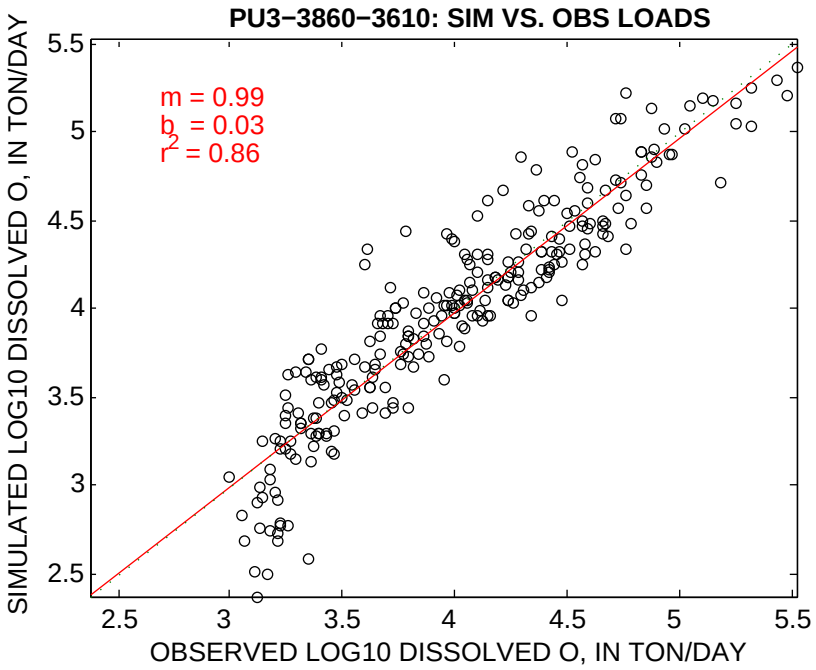


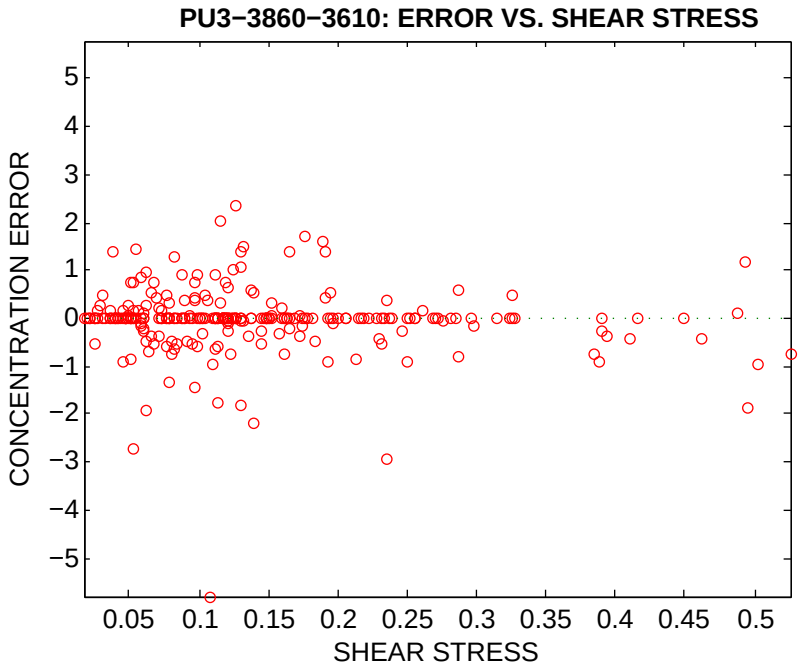


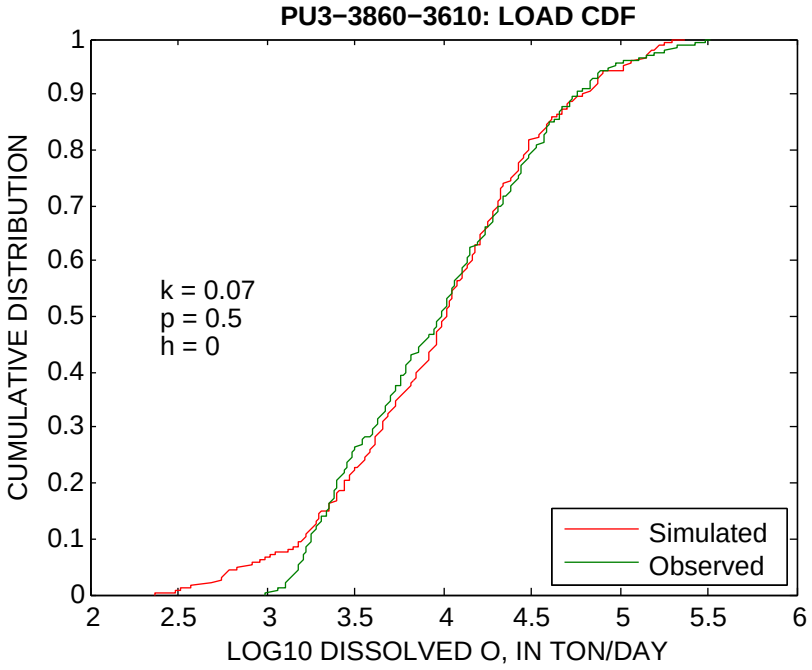


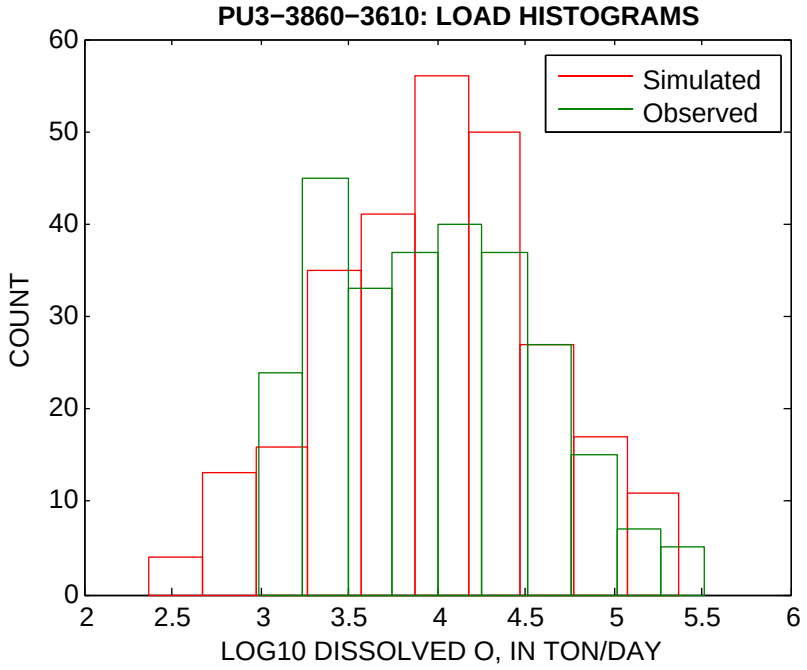


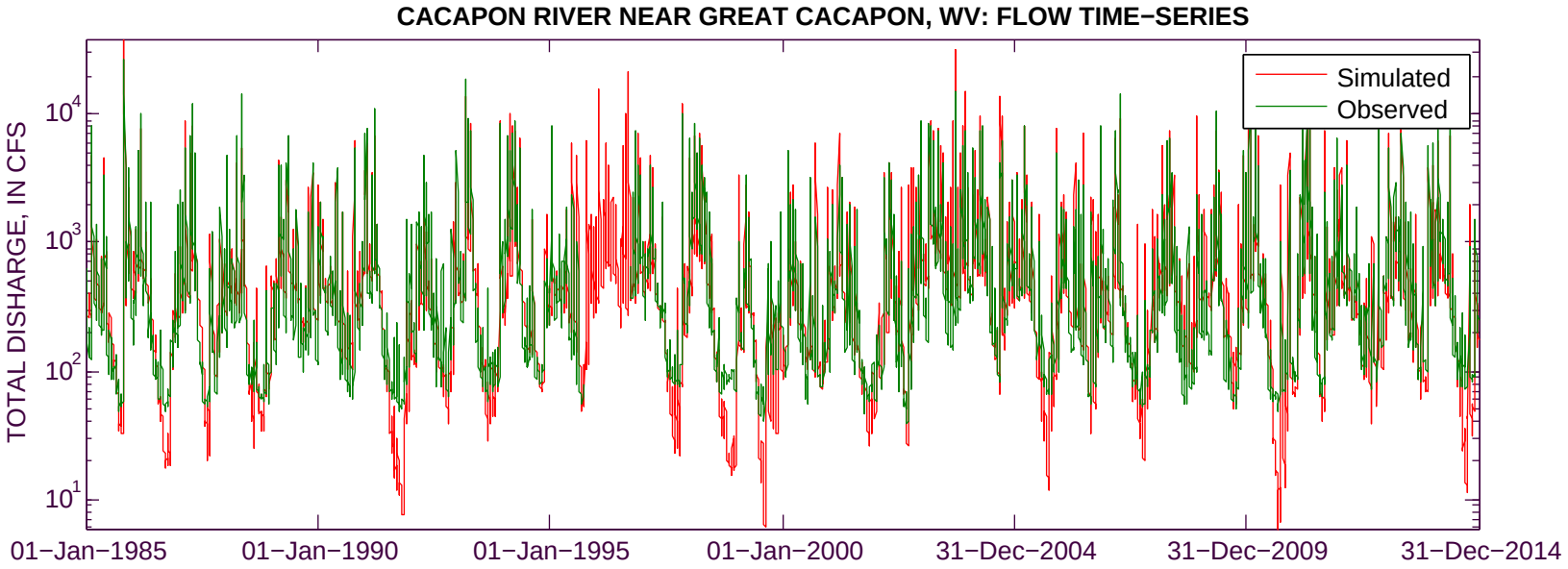
LOAD DATA
LOG10

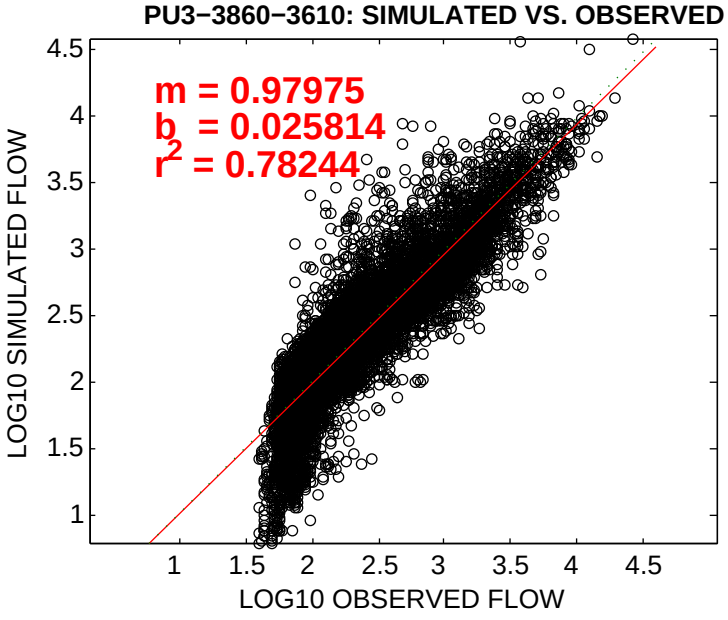


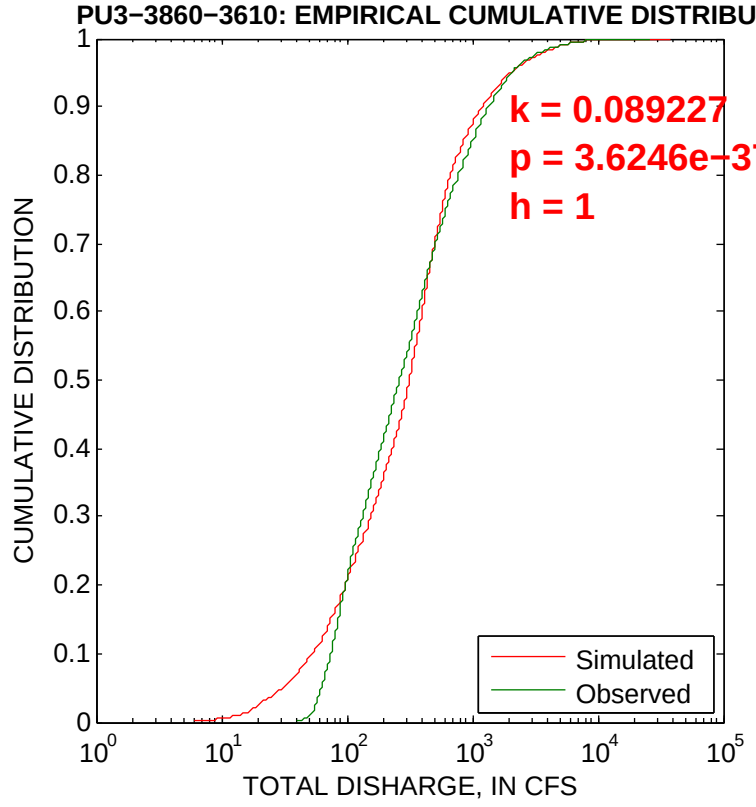












DATA SELECTION

scenario	file
P620171001WQ	FLOW.calib

plot: FLOW - total discharge

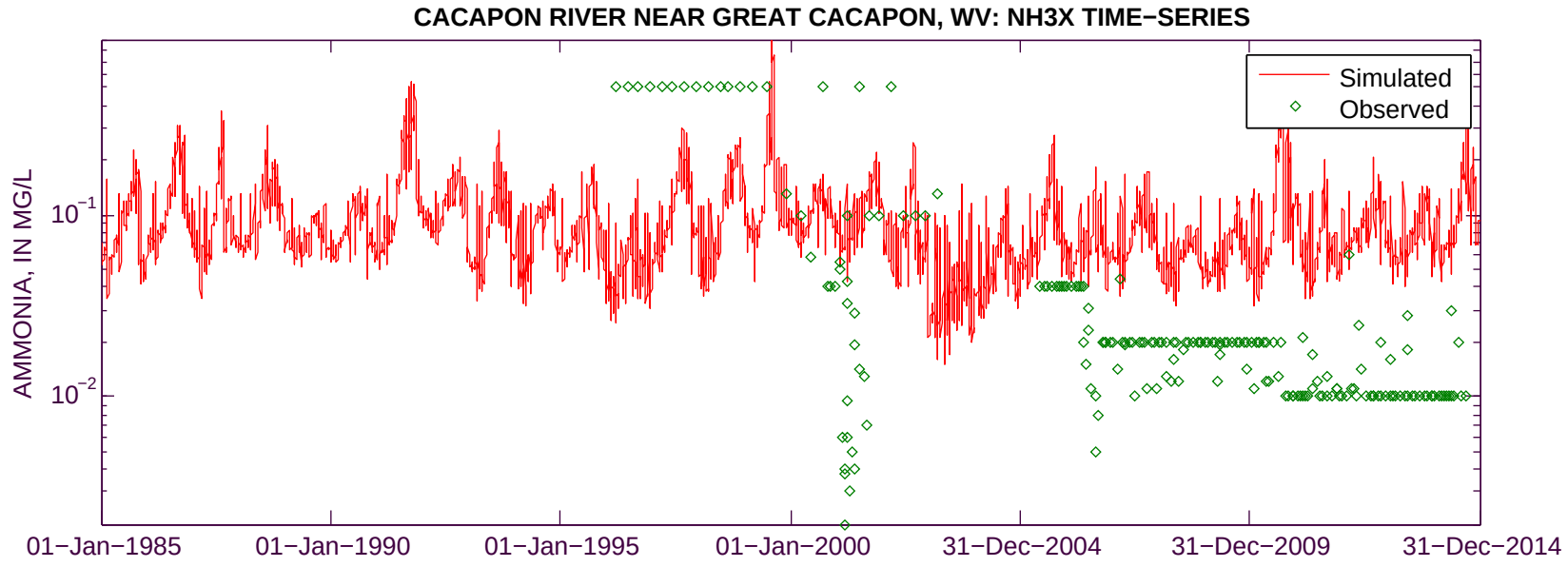
Dates: 1/1/1985 – 12/31/201

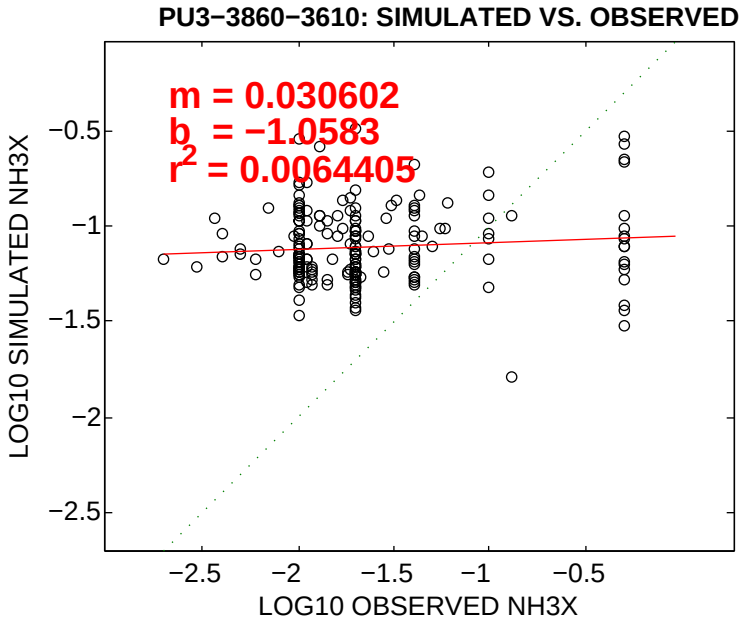
Drive	Directory	Observed
N/A	model	OBS20161101

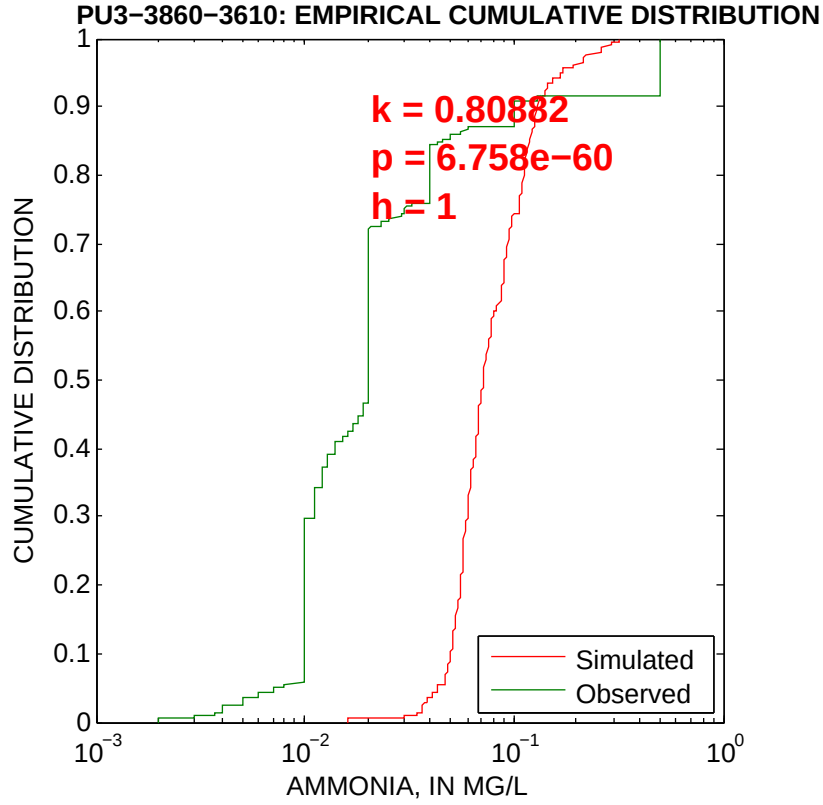
STATISTICS

	n	observe	simulate
		10591	10591
min		39	5.9098
		1.59106	0.771573
mean		594.028	588.329
		2.46674	2.44261
media		266	317.43
		2.42488	2.50165
max		26800	39047
		4.42813	4.59159
varian		1.13397e+0	1.35706e+
		0.234113	0.287213
JB		0.001	0.001
		0.001	0.001
		ra	log
%		-0.959358	-0.978391
err.va		503279	0.0631638
rel.std.err		0.44382	0.269801
mod.eff		0.55618	0.730199

VERSION 2.1







DATA SELECTION

scenario: P620171001WQ; file: NH3X.calib

plot: NH3X - ammonia

Dates: 1/1/1985 – 12/31/201

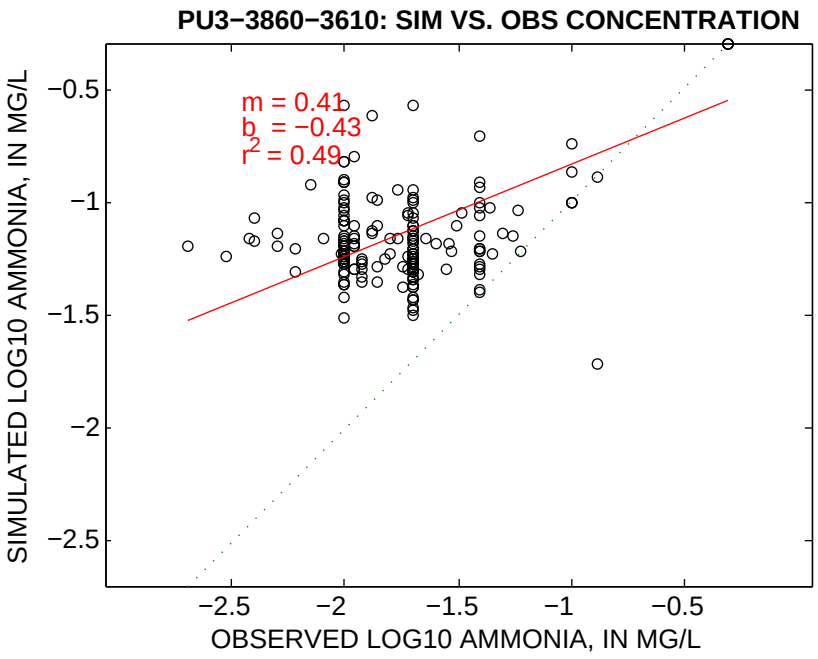
Drive: N/A; Directory: model; Observed: OBS20161101

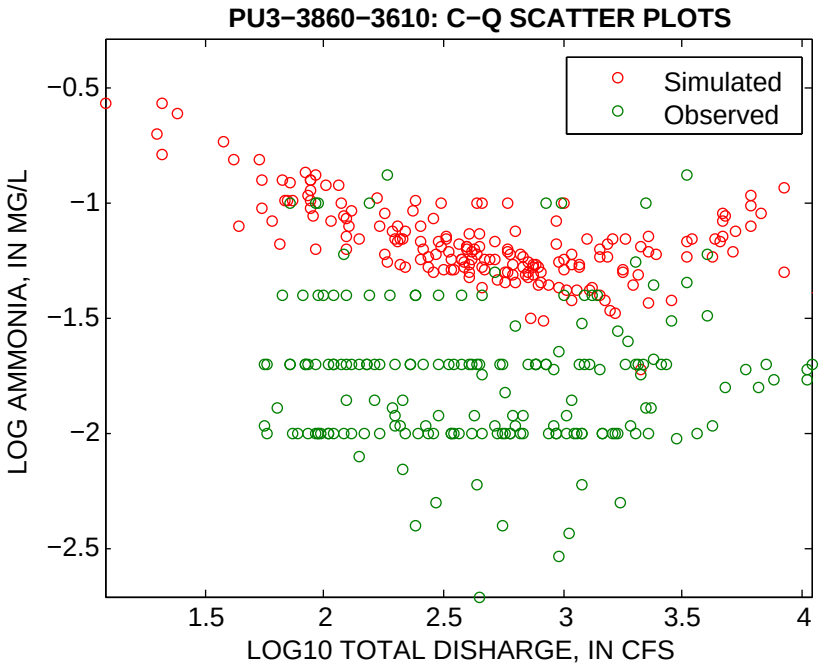
STATISTICS

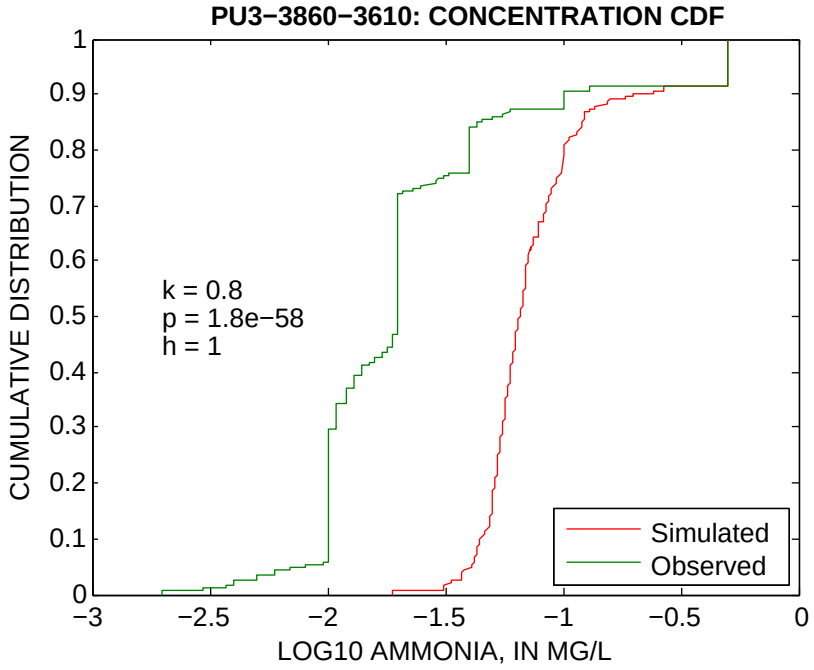
	n	204	204
		observe	simulate
min		0.002	0.016134
		-2.69897	-1.79226
mean		0.0624388	0.0864883
		-1.64436	-1.10858
media		0.02	0.0710185
		-1.69897	-1.14863
max		0.5	0.31778
		-0.30103	-0.497873
varian		0.0179373	0.0021512
		0.249574	0.0362891
JB		0.001	0.001
		0.001	0.001839
		ra	log
%		38.517	-32.5831
err.va		0.0186132	0.559068
rel.std.err		1.03768	2.24009
mod.eff		-0.0376848	-1.24009

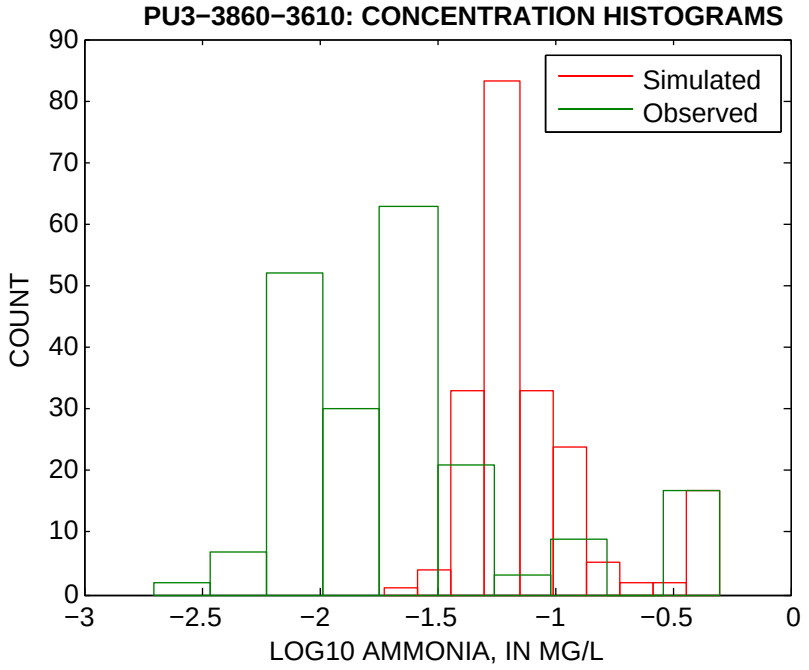
VERSION 2.1

ALL DATA
LOG10

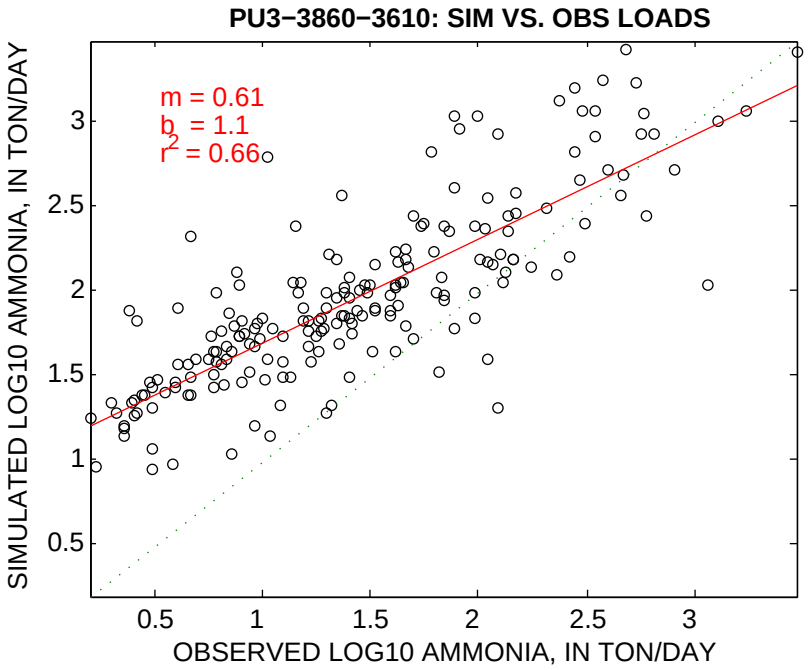


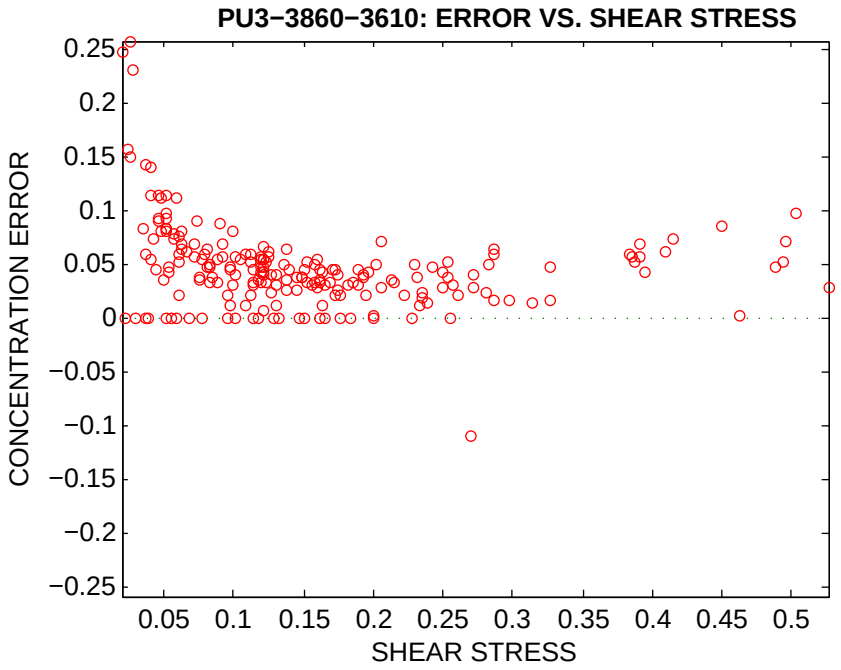


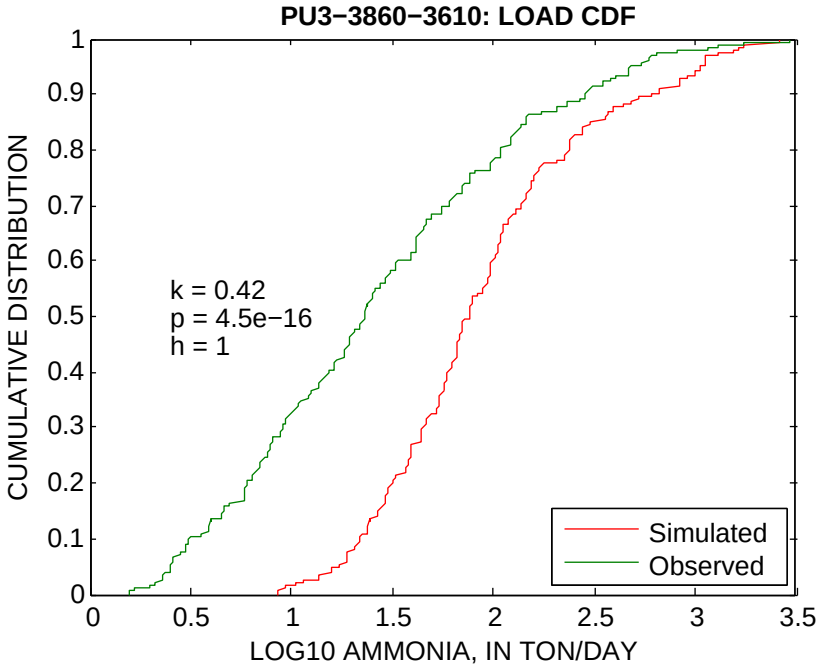


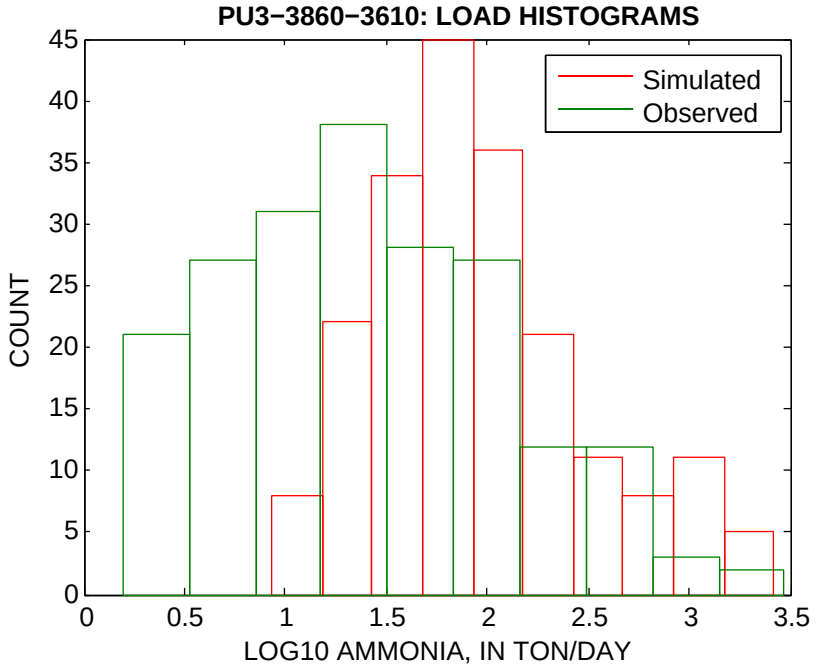


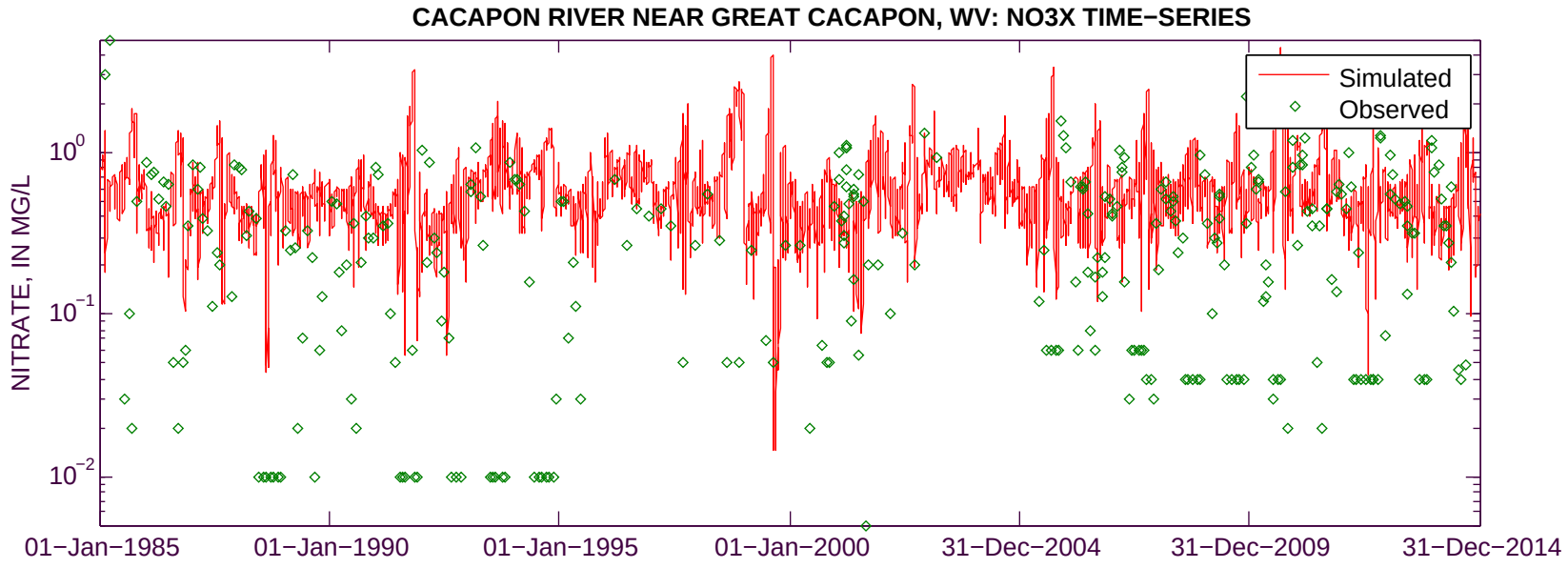
LOAD DATA
LOG10

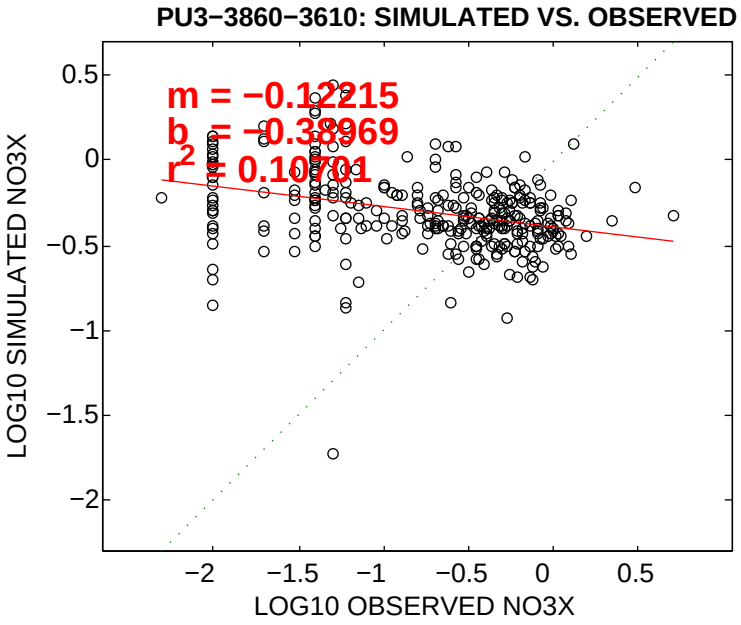


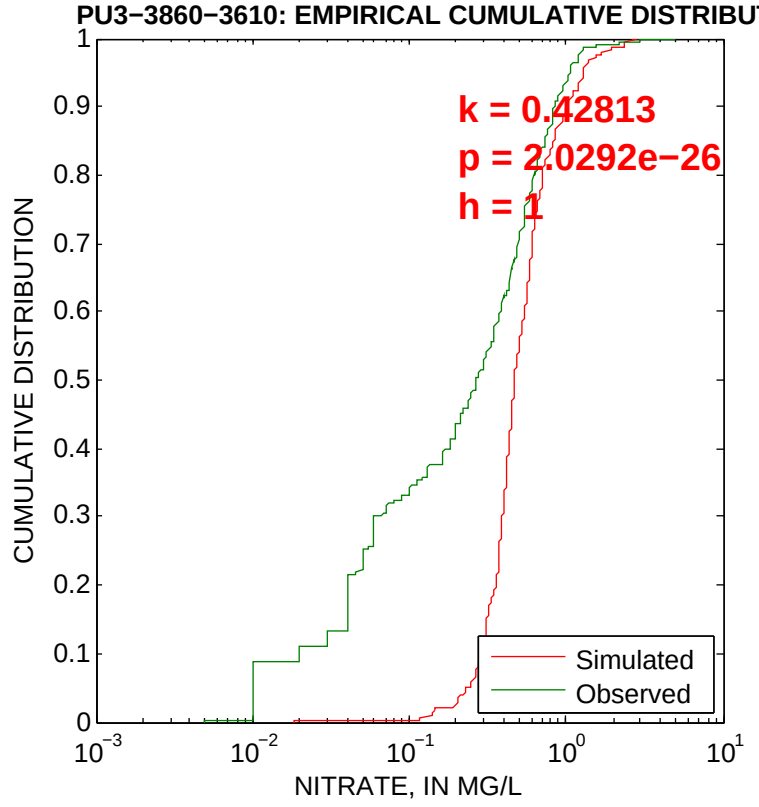












DATA SELECTION

scenario	file
P620171001WQ	NO3X.calib

plot: NO3X - nitrate

Dates: 1/1/1985 – 12/31/201

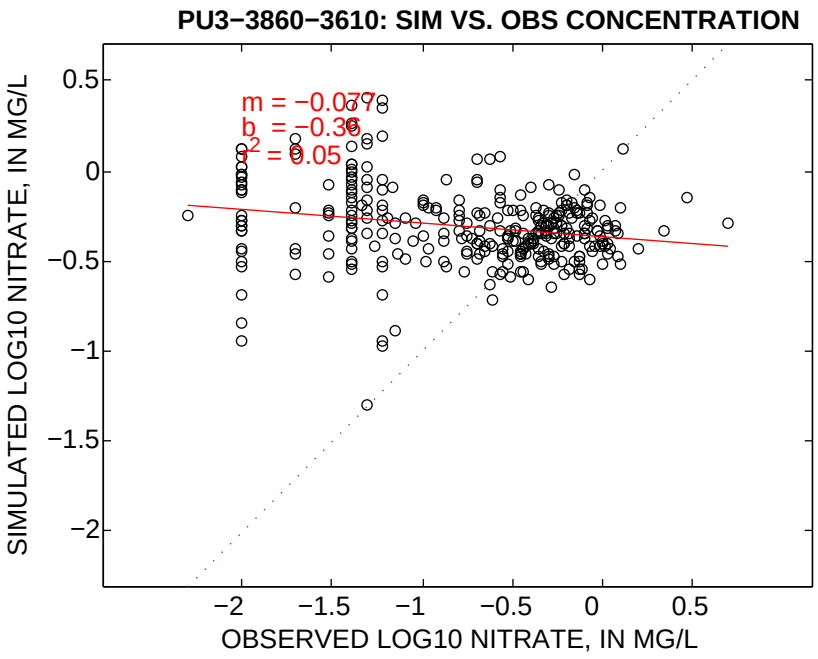
Drive	Directory	Observed
N/A	model	OBS20161101

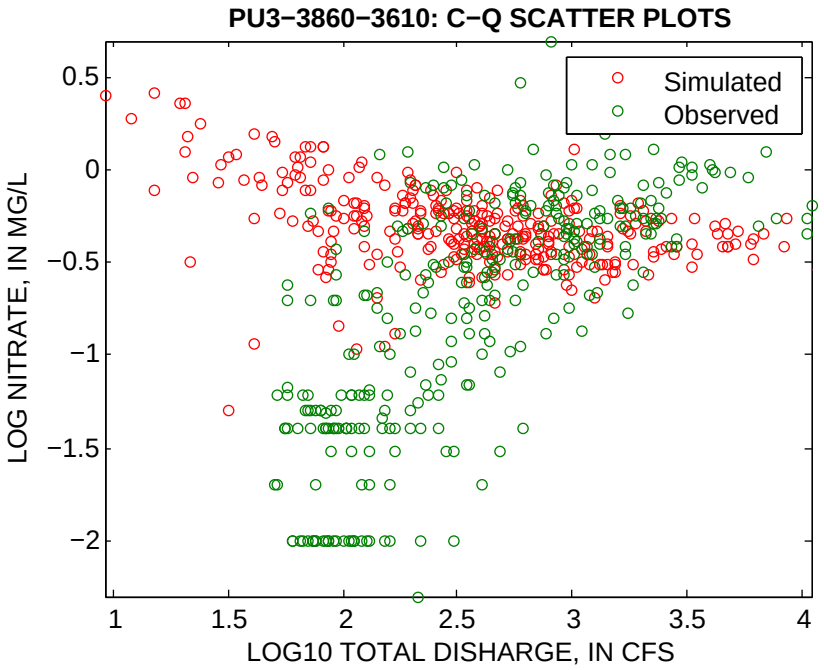
STATISTICS

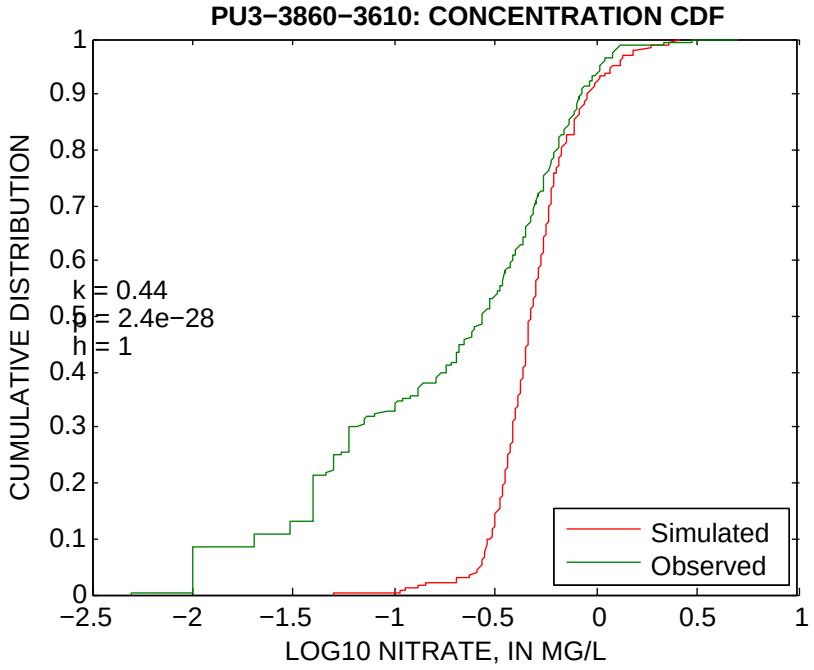
	n	320	320
		observe	simulate
min		0.005	0.018624
		-2.30103	-1.72993
mean		0.378595	0.583638
		-0.74863	-0.298247
media		0.27	0.46867
		-0.568636	-0.329134
max		5	2.7687
		0.69897	0.442276
varian		0.206896	0.139277
		0.393337	0.0548422
JB		0.001	0.001
		0.001230	0.001
		ra	log
%		54.1588	-60.161
err.va		0.469604	0.747749
rel.std.err		2.26975	1.90104
mod.eff		-1.26975	-0.901037

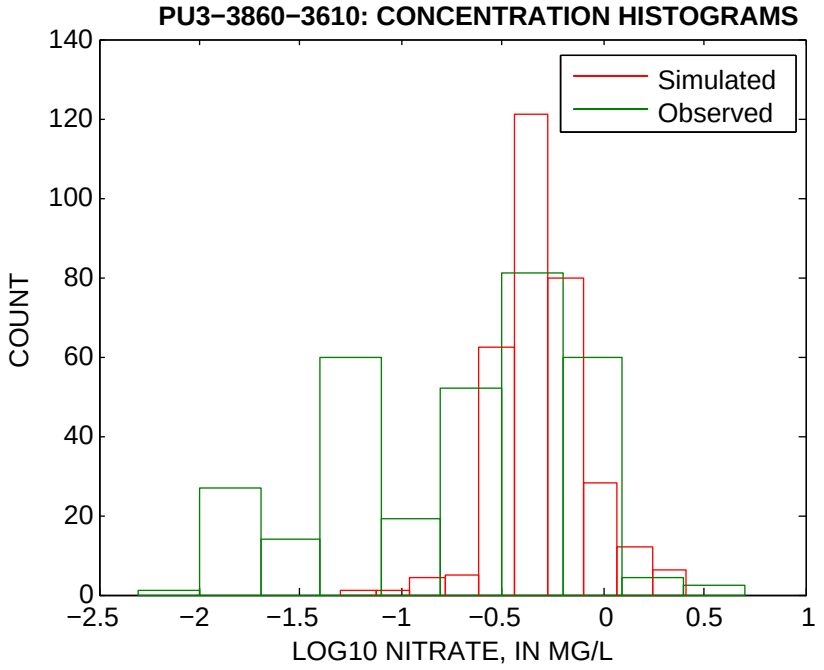
VERSION 2.1

ALL DATA
LOG10

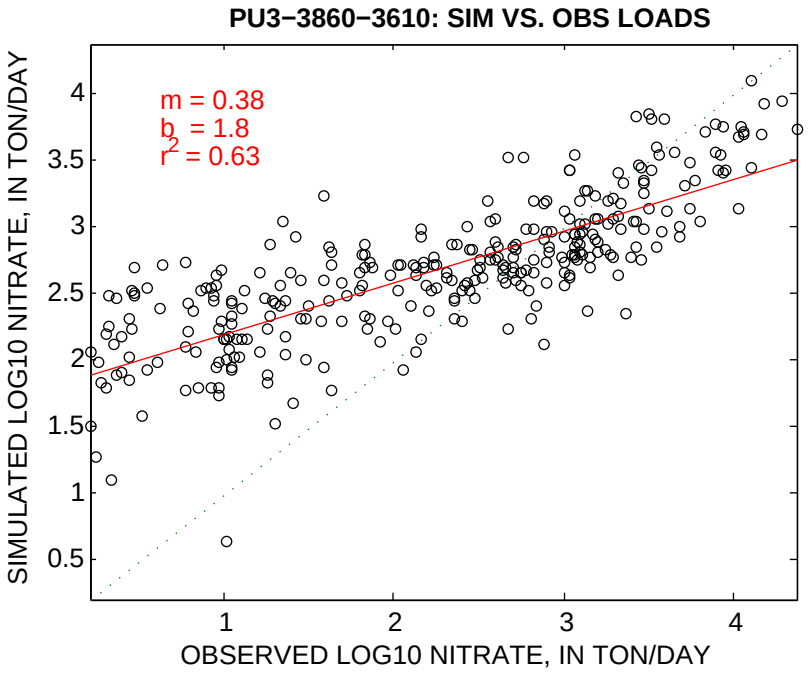


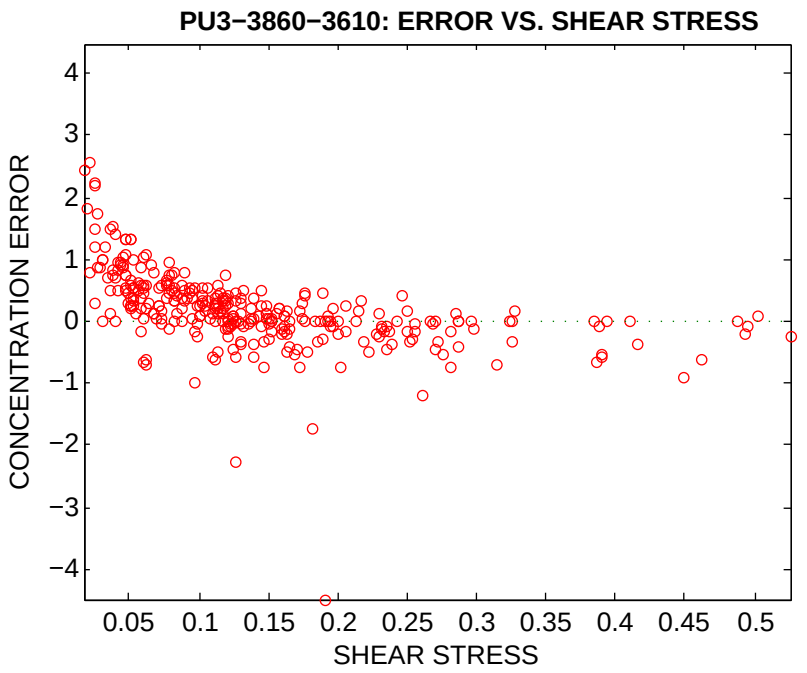


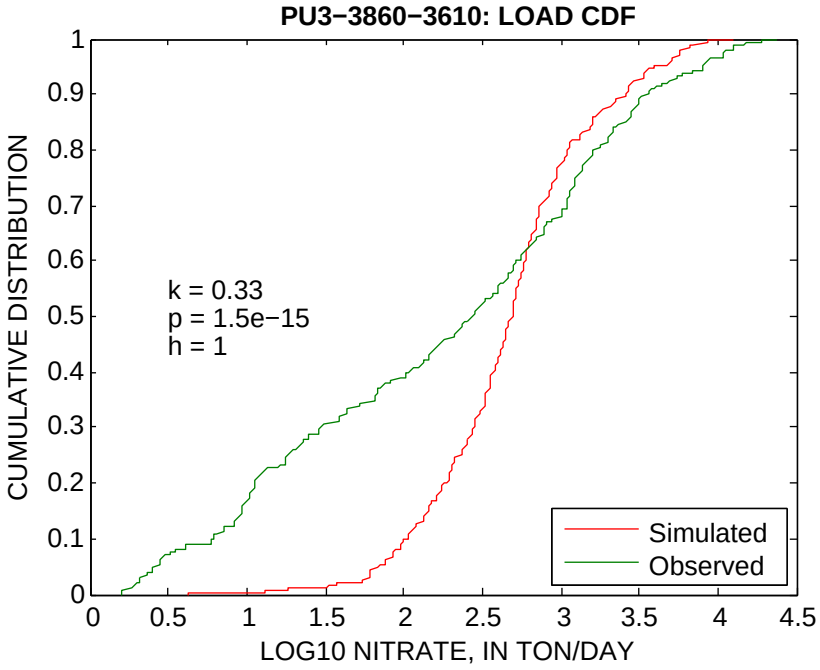


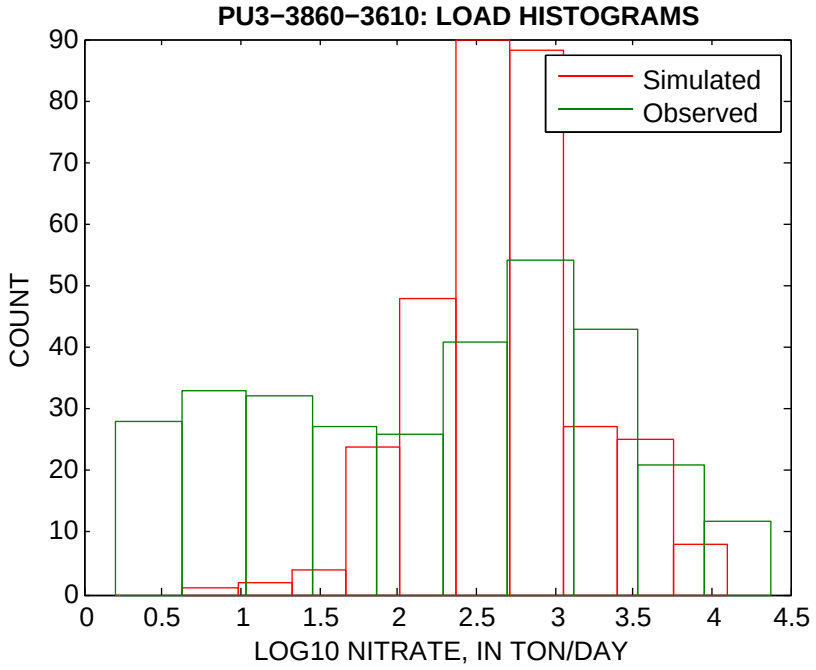


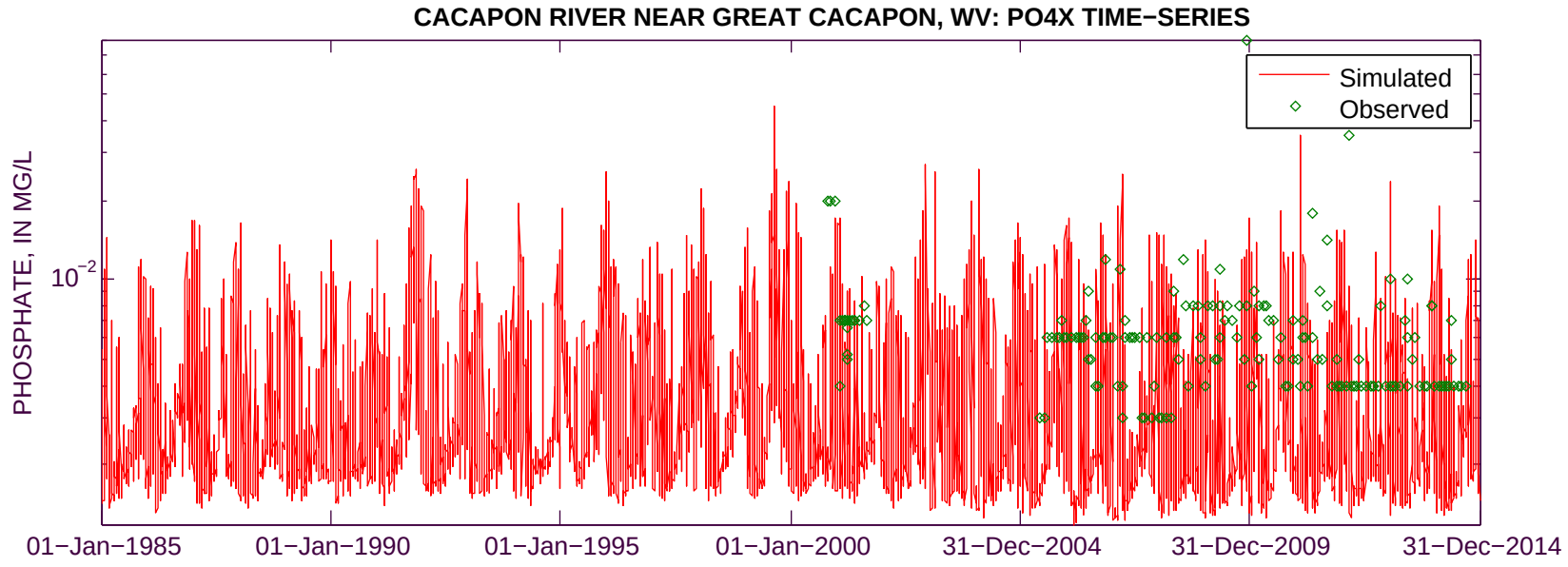
LOAD DATA
LOG10

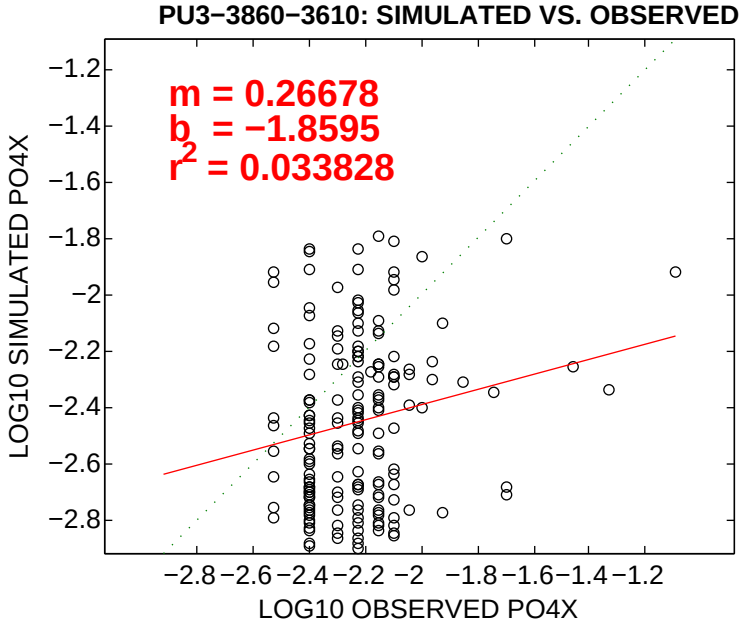


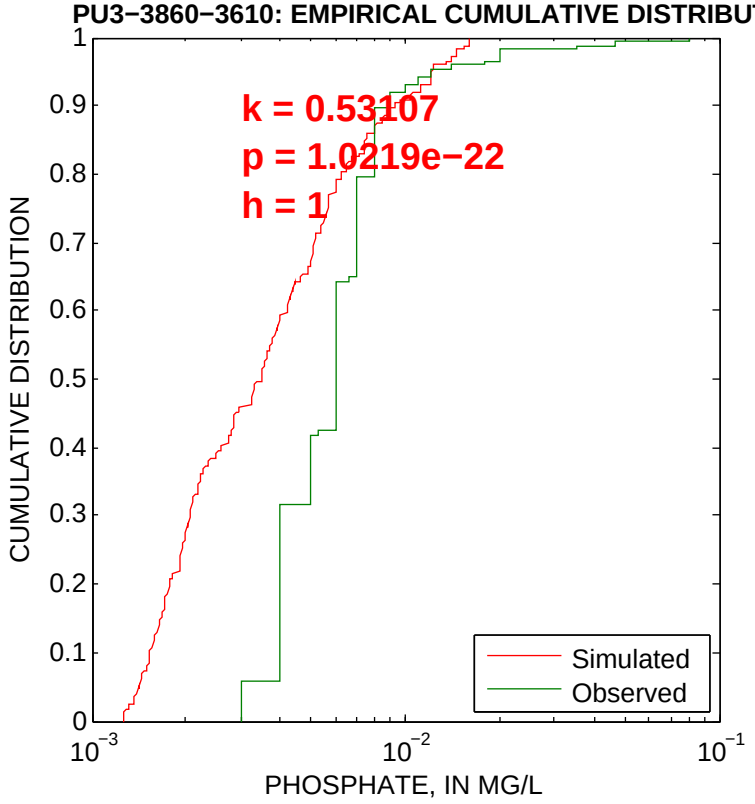












DATA SELECTION

scenario	file
P620171001WQ	PO4X.calib

plot: PO4X - phosphate

Dates 1/1/1985 12/31/201

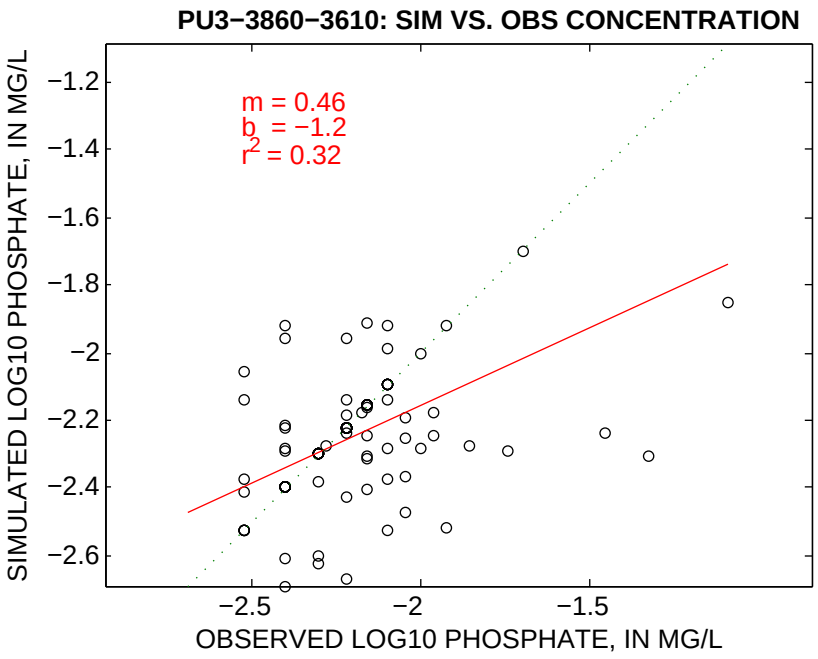
Drive	Directory	Observed
N/A	model	OBS20161101

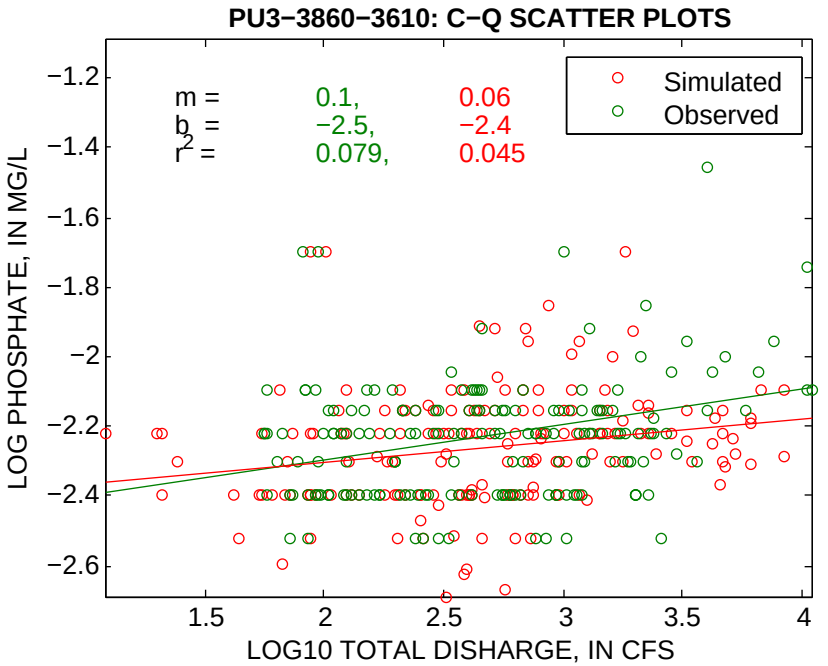
STATISTICS

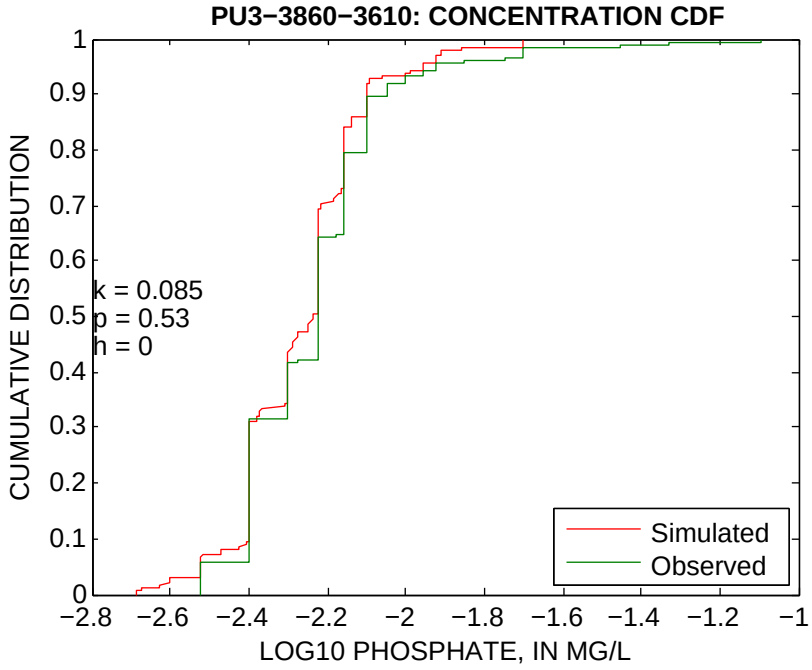
	n	177	177
		observe	simulate
min		0.003	0.0012572
		-2.52288	-2.9006
mean		0.00696575	0.0044706
		-2.22793	-2.45384
media		0.006	0.0034735
		-2.22185	-2.45923
max		0.081	0.01612
		-1.09151	-1.79263
varian		5.31755e-0	1.1577e-05
		0.041083	0.0864326
JB		0.001	0.001
		0.001	0.015412
		ra	log
%		-35.8203	10.1401
err.va		6.16433e-0	0.156923
rel.std.err		1.15924	3.81965
mod.eff		-0.159243	-2.81965

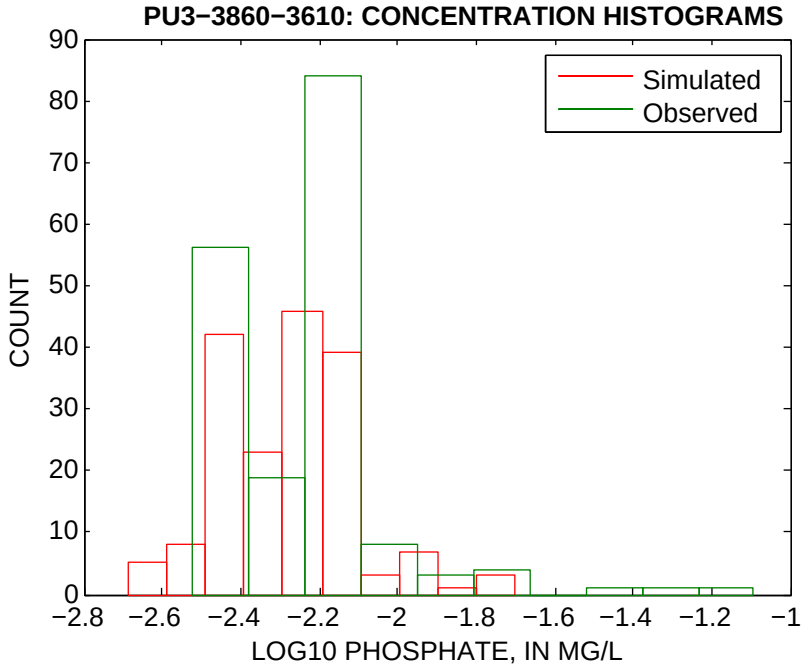
VERSION 2.1

ALL DATA
LOG10

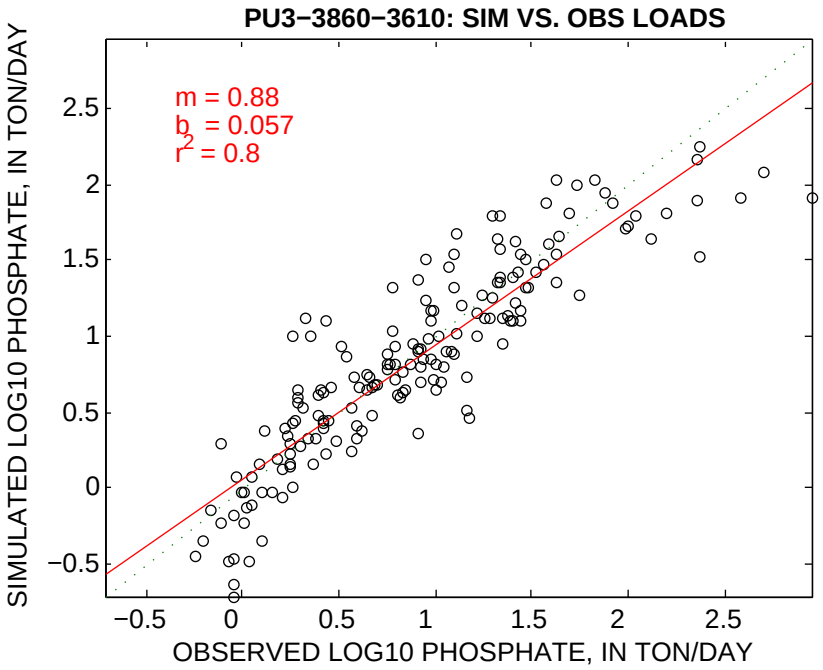


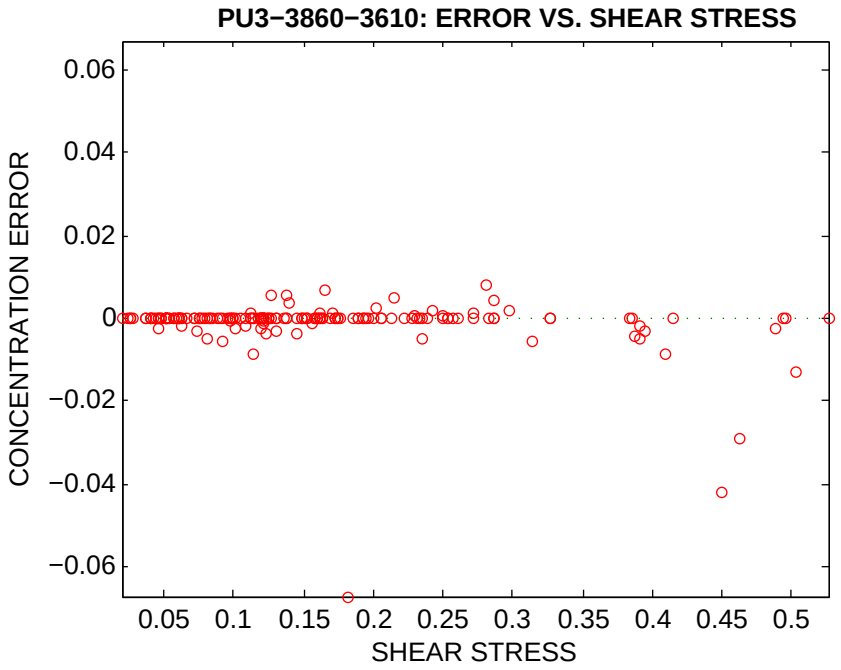


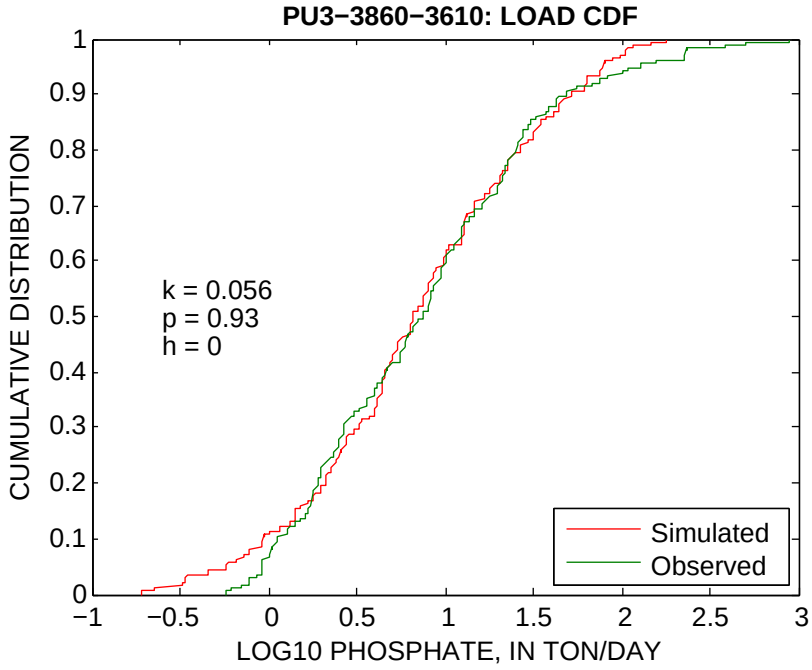


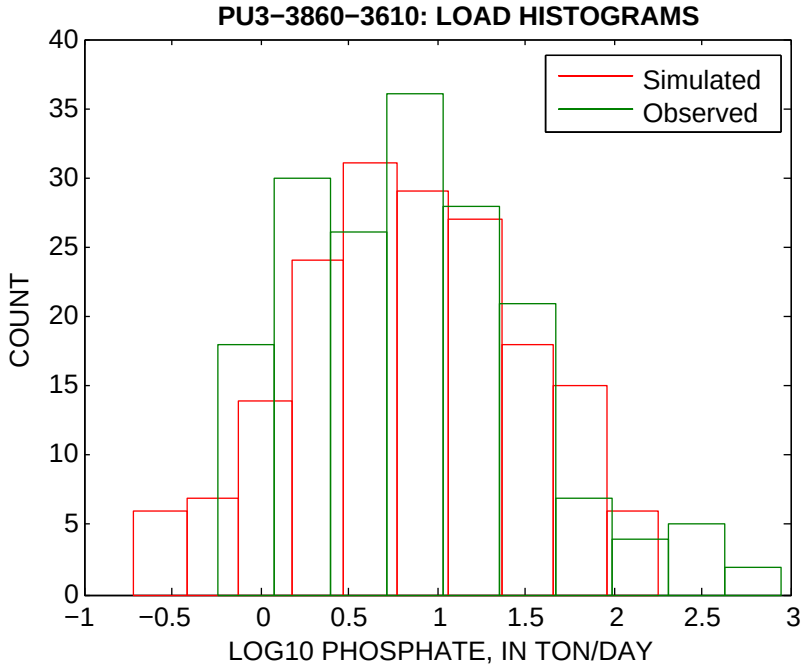


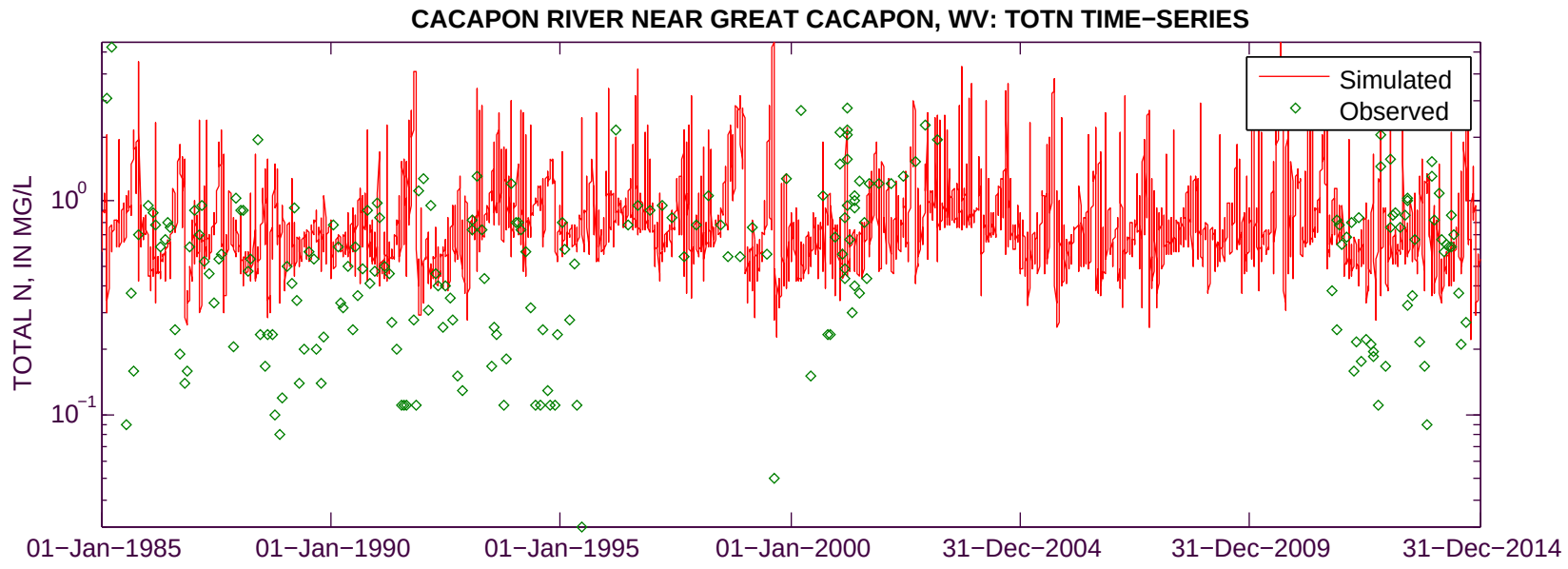
LOAD DATA
LOG10

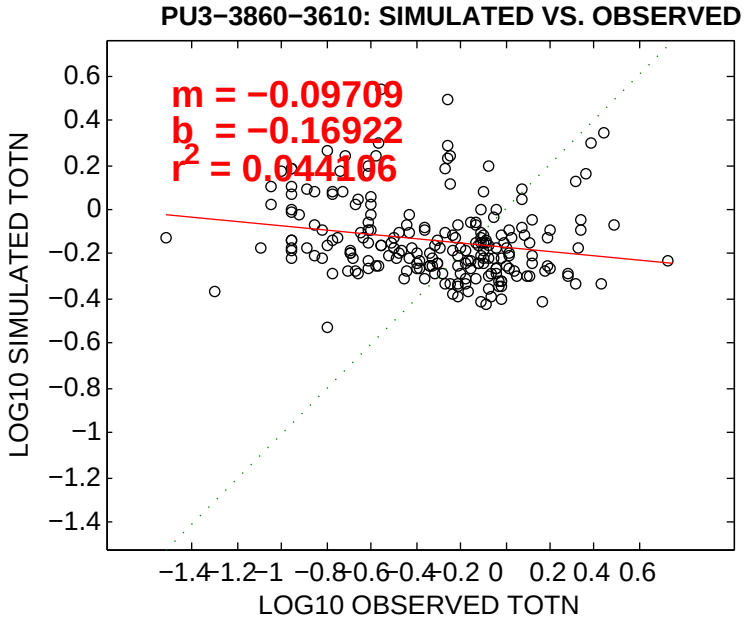


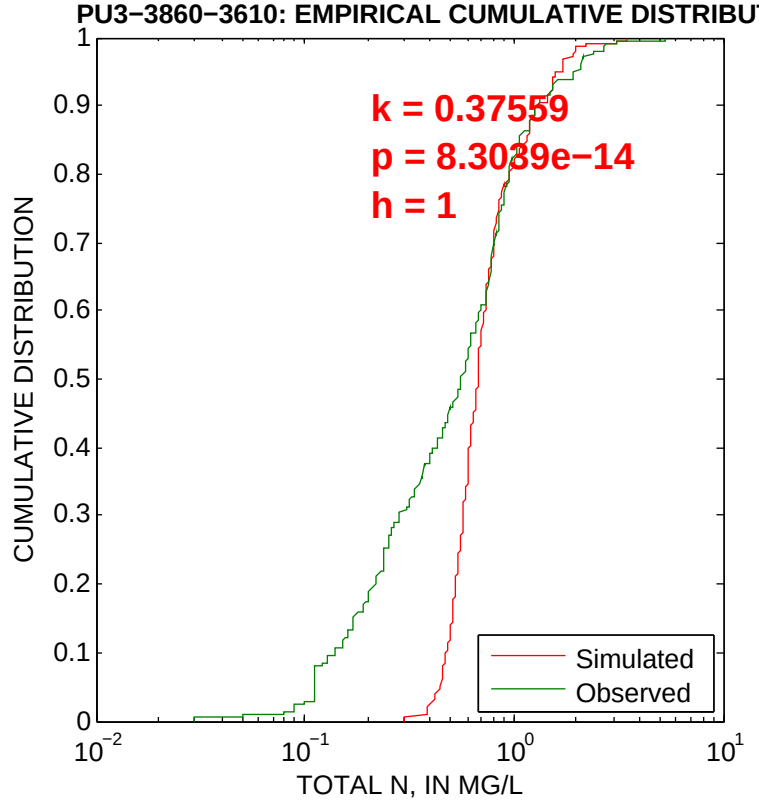












DATA SELECTION

scenario: P620171001WQ | file: TOTN.calib

plot: TOTN - total nitrogen

Dates: 1/1/1985 – 12/31/201

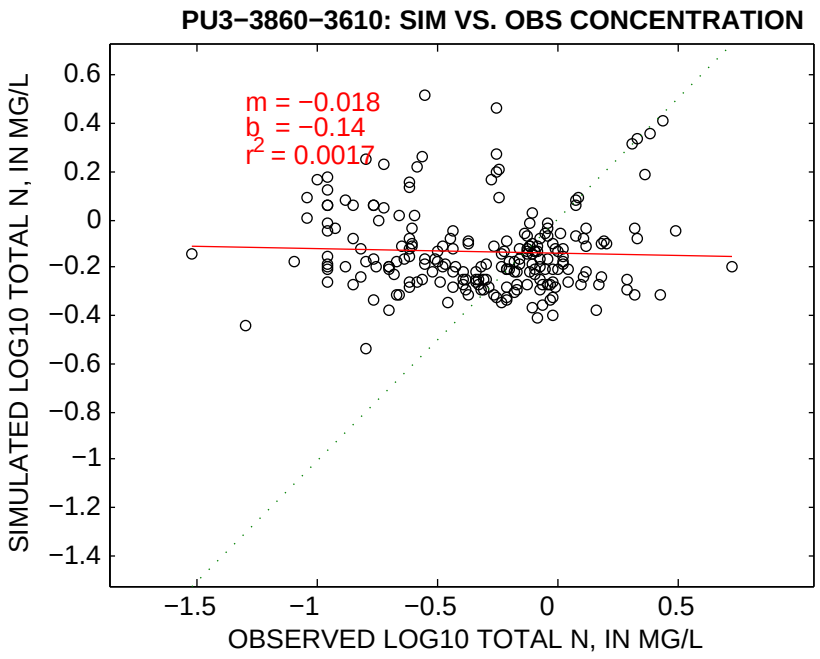
Drive | Directory | Observed: N/A | model | OBS20161101

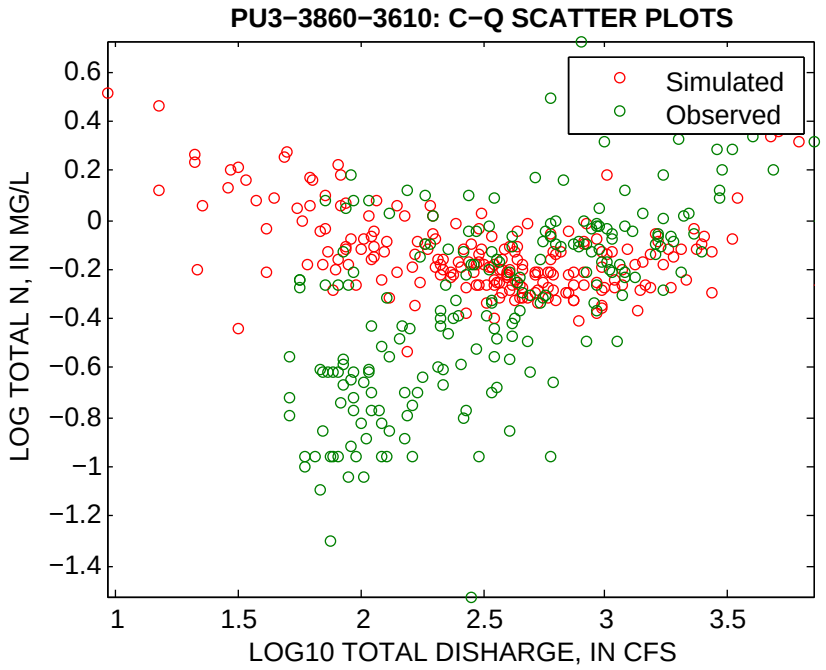
STATISTICS

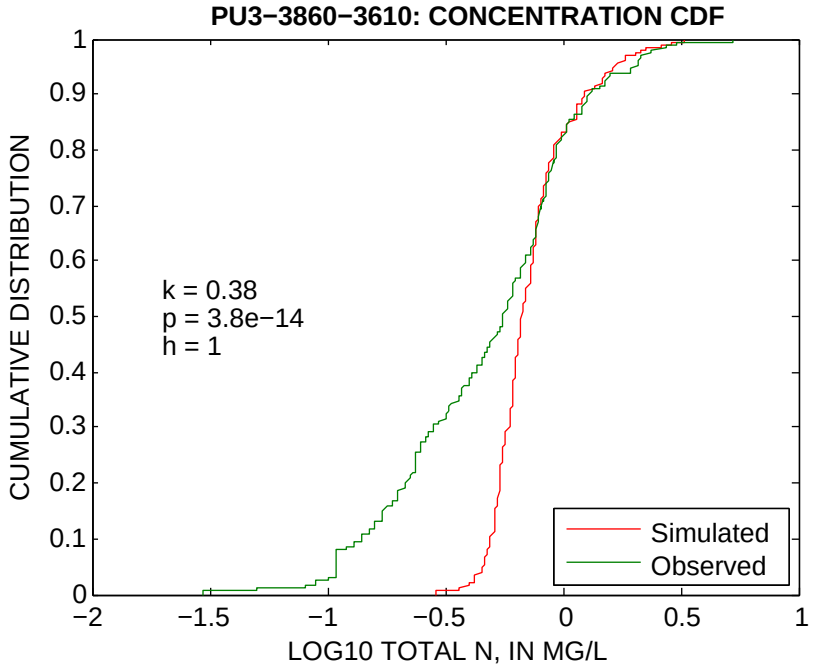
	n	213	213
		observe	simulate
min		0.03	0.29726
		-1.52288	-0.526864
mean		0.687066	0.799562
		-0.316372	-0.138508
media		0.56	0.6712
		-0.251812	-0.173148
max		5.32	3.4481
		0.725912	0.53758
varian		0.399796	0.181837
		0.145413	0.0310778
JB		0.001	0.001
		0.193641	0.001
		ra	log
%		16.3734	-56.2199
err.va		0.626506	0.236512
rel.std.err		1.56706	1.62648
mod.eff		-0.567063	-0.626482

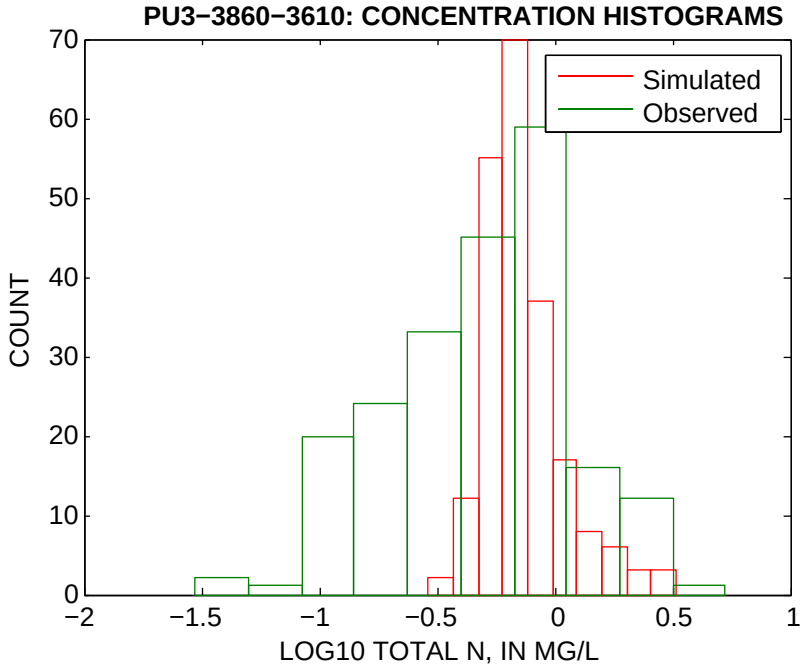
VERSION 3.1

ALL DATA
LOG10

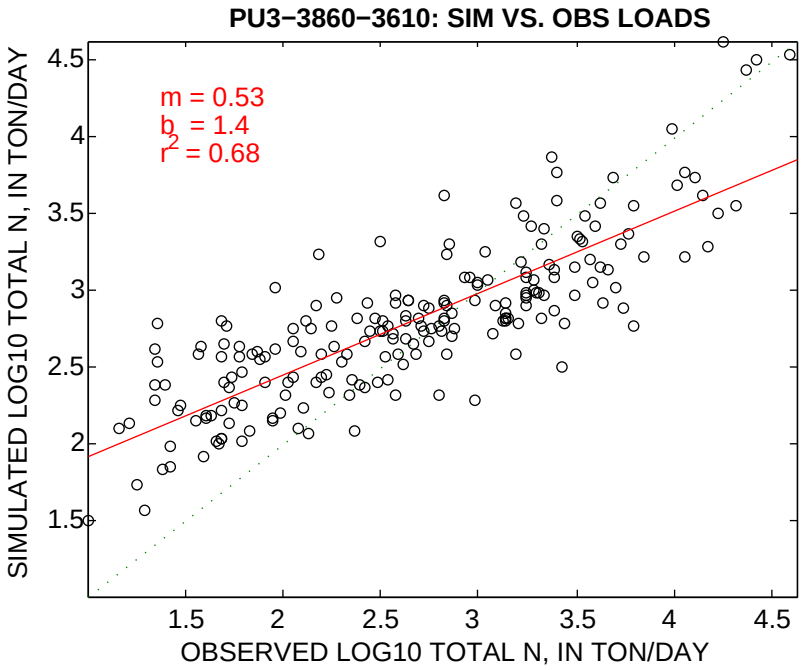


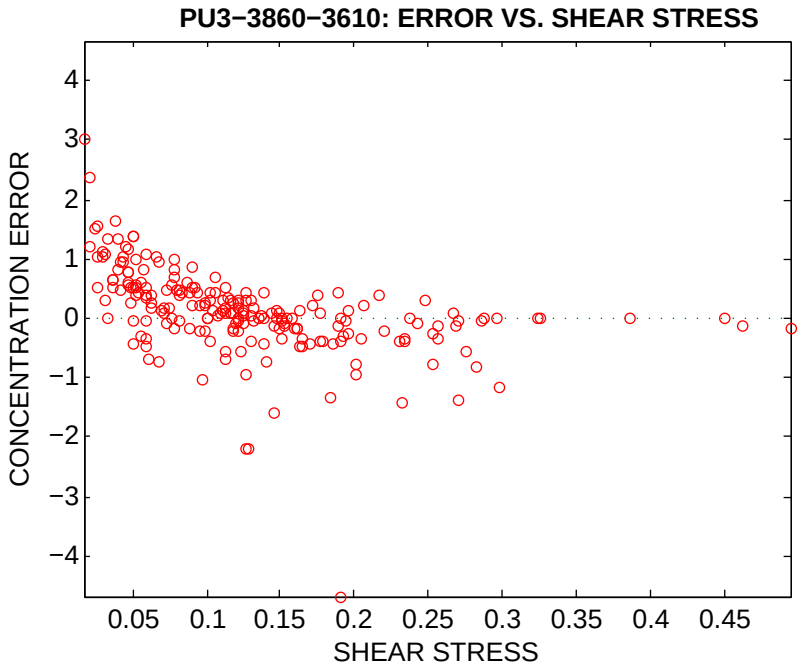


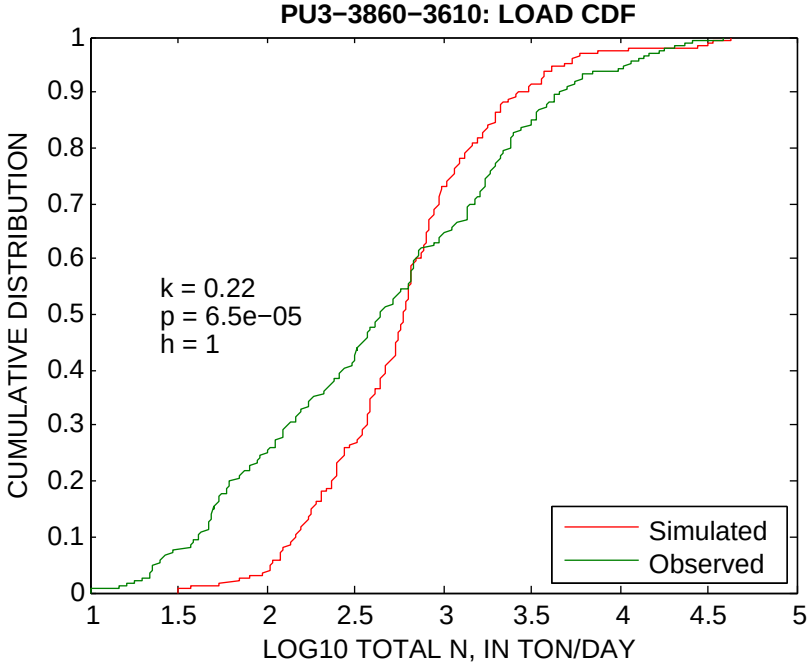


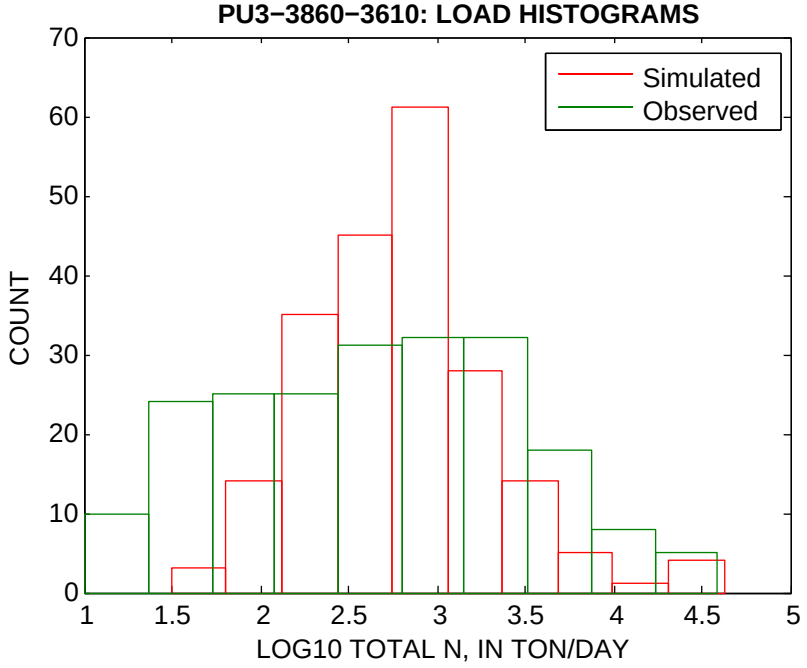


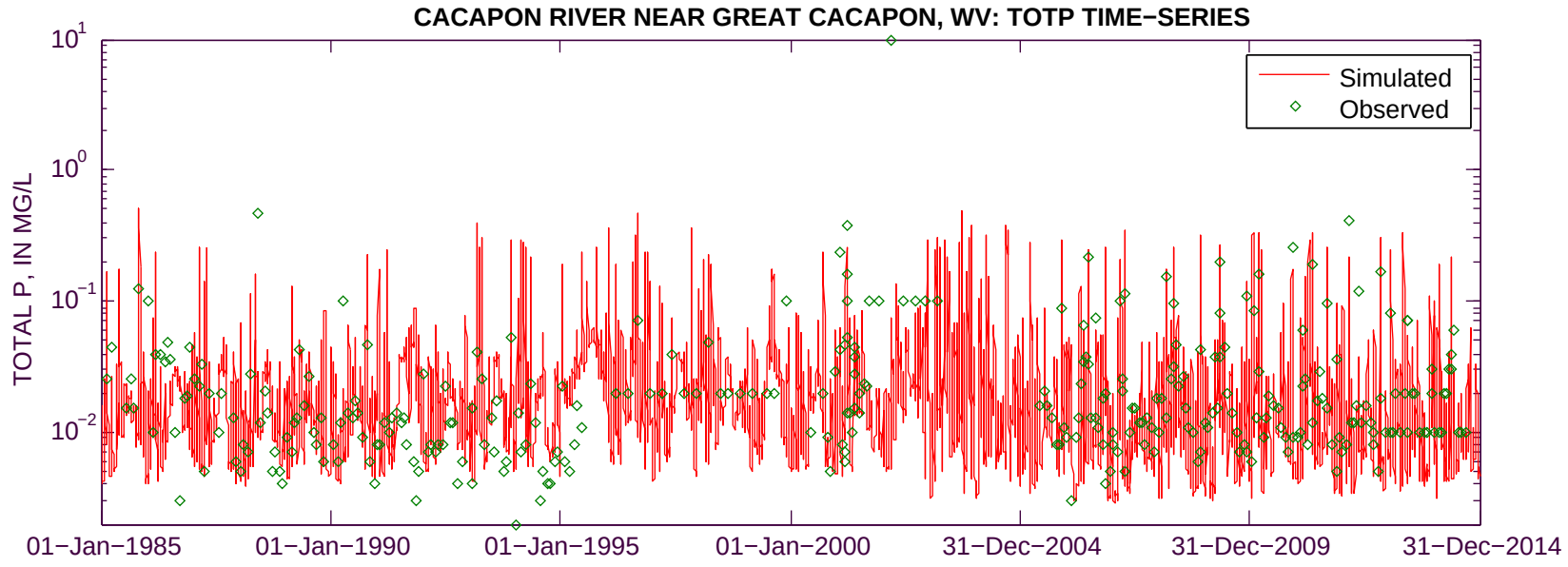
LOAD DATA
LOG10

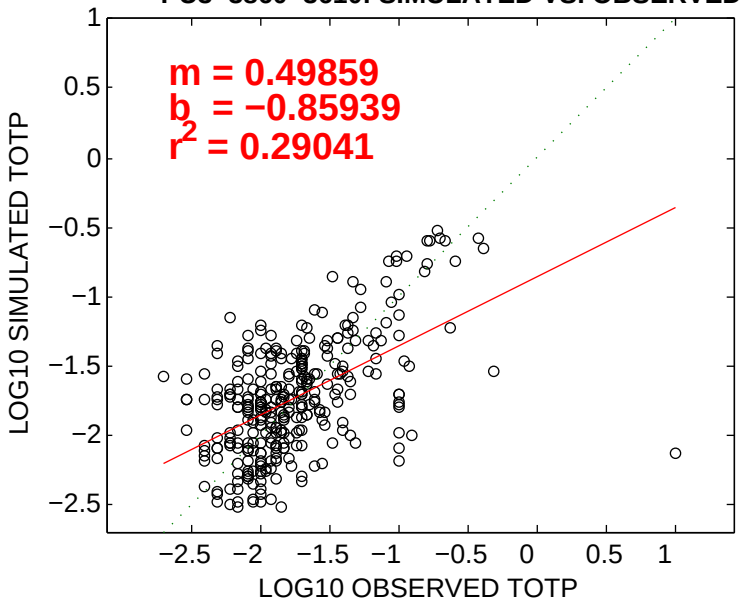


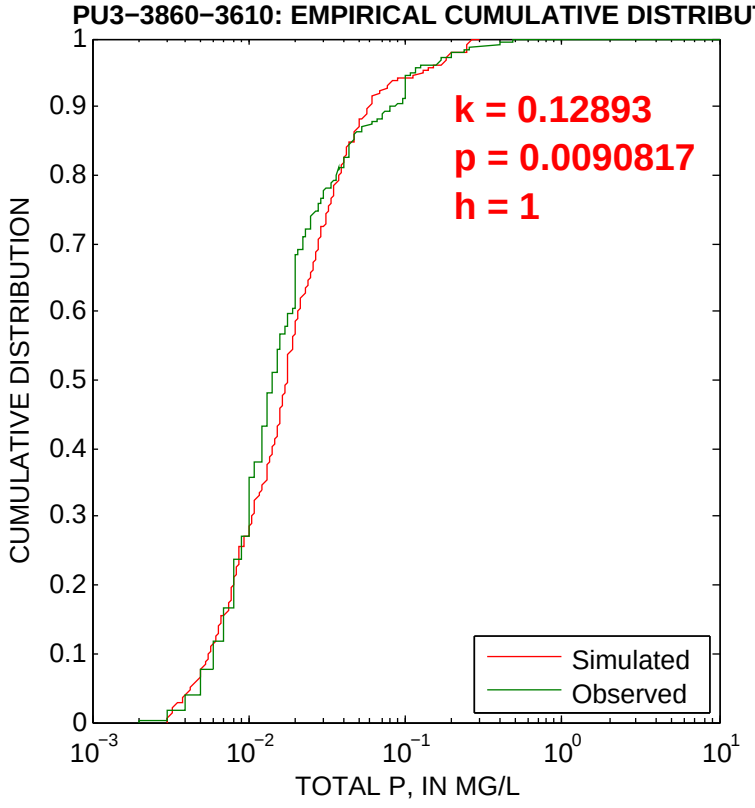












DATA SELECTION

scenario	file
P620171001WQ	TOTP.calib

plot: TOTP - total phosphorus

Dates: 1/1/1985 – 12/31/201

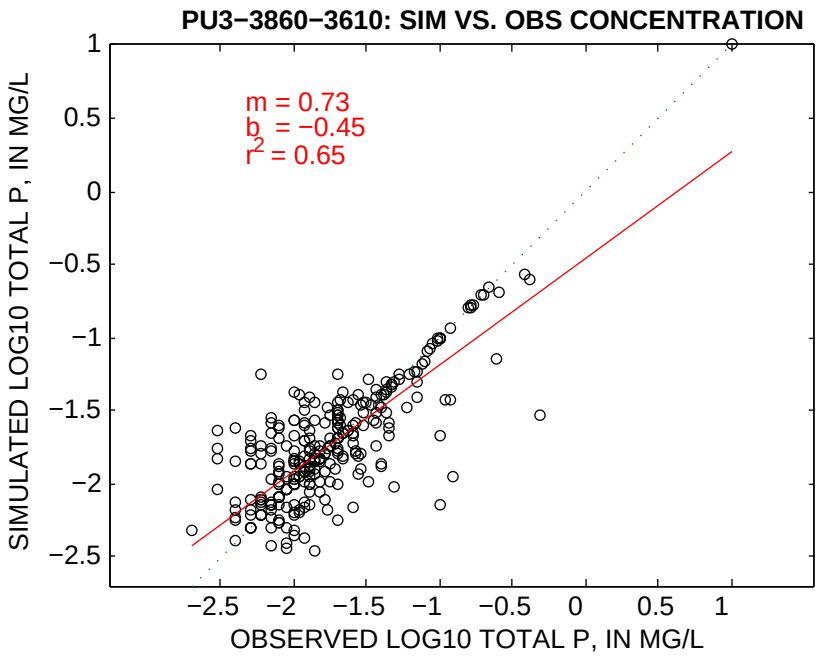
Drive	Directory	Observed
N/A	model	OBS20161101

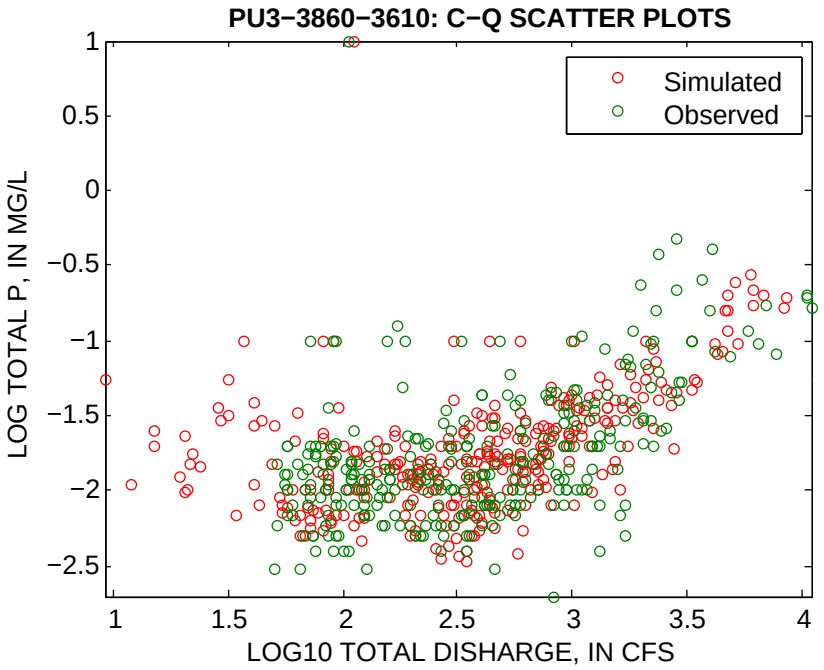
STATISTICS

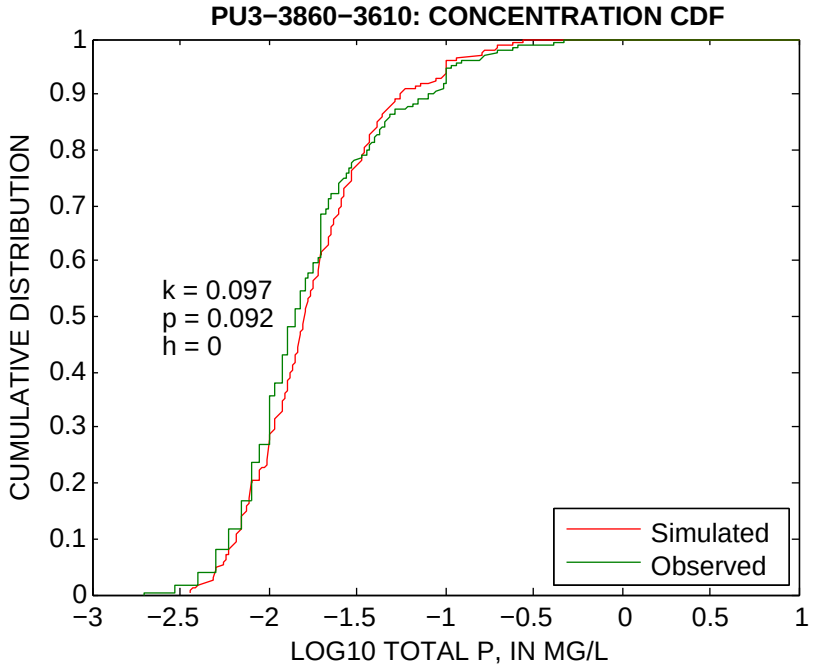
	n	318	318
		observe	simulate
min		0.002	0.0030352
		-2.69897	-2.51781
mean		0.0629724	0.0314504
		-1.75582	-1.73482
media		0.014	0.017644
		-1.85387	-1.75341
max		10	0.30166
		1	-0.520482
varian		0.315401	0.00209382
		0.201695	0.17265
JB		0.001	0.001
		0.001	0.003029
		ra	log
%		-50.0568	-1.19603
err.va		0.316682	0.173662
rel.std.err		1.00406	0.861012
mod.eff		-0.0040615	0.138988

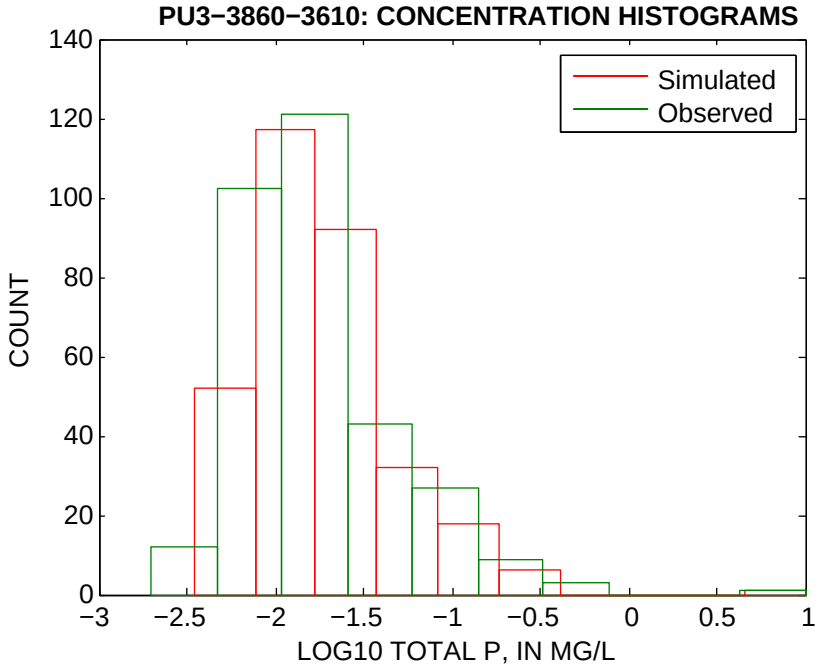
VERSION 2.1

ALL DATA
LOG10

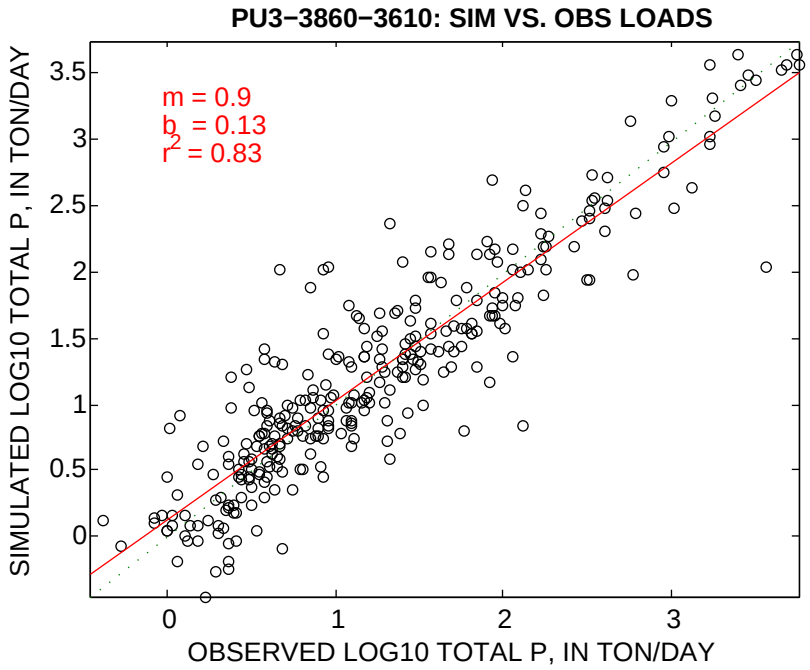


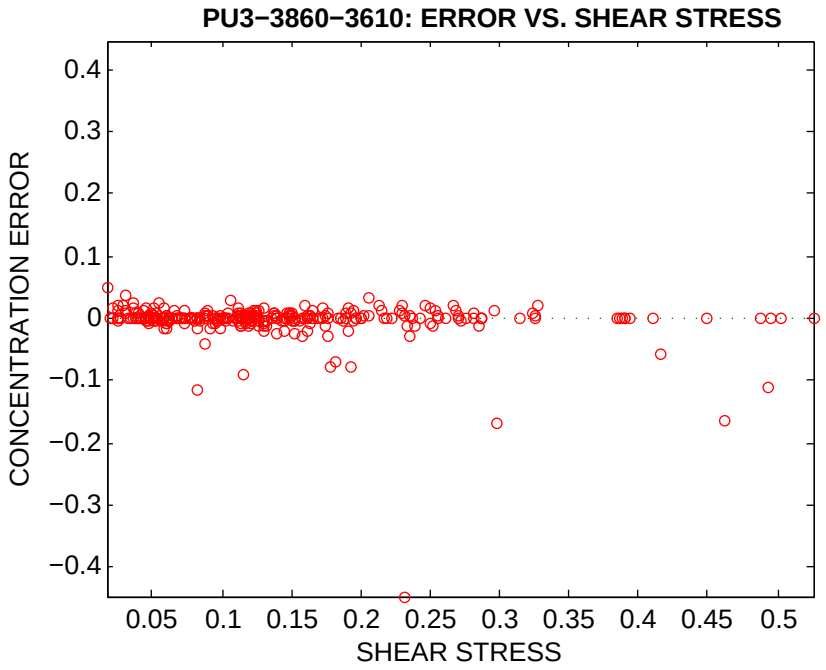


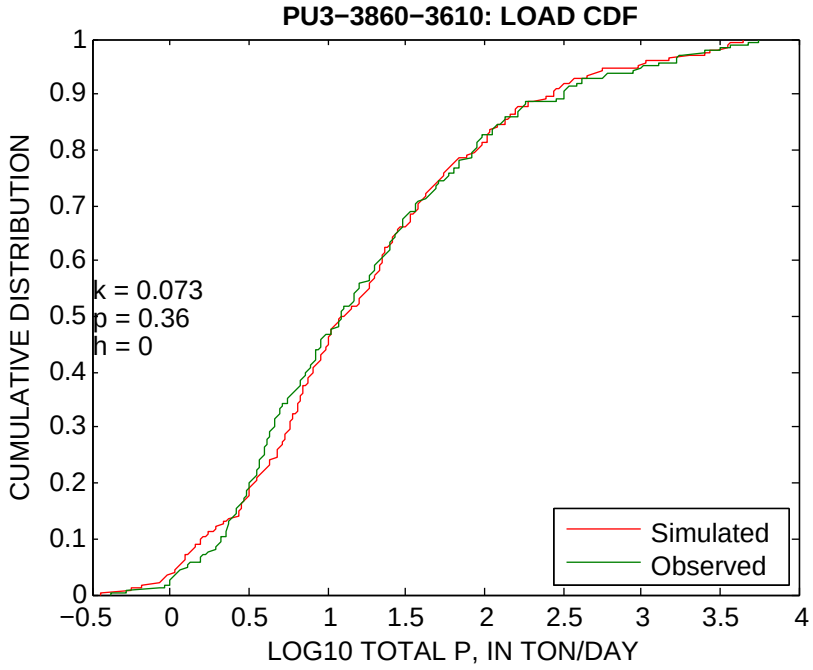


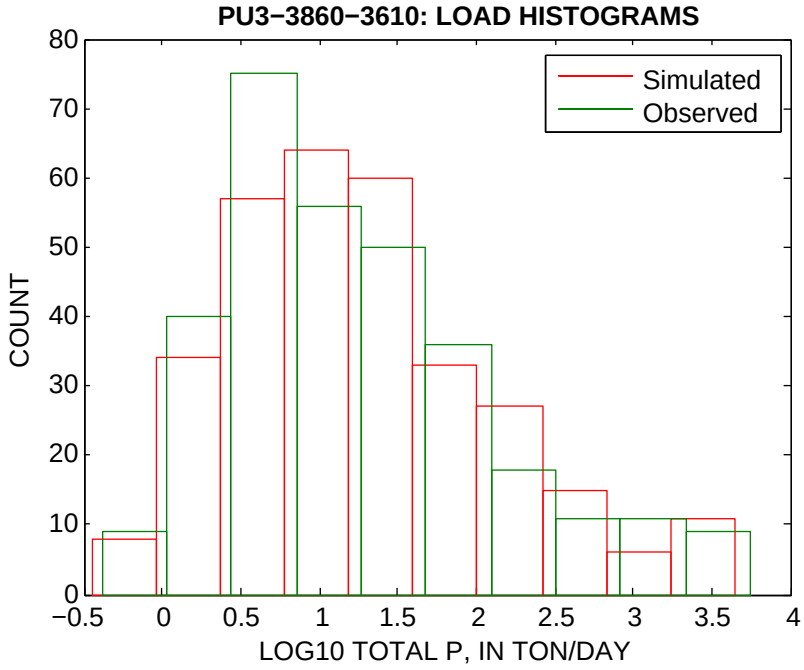


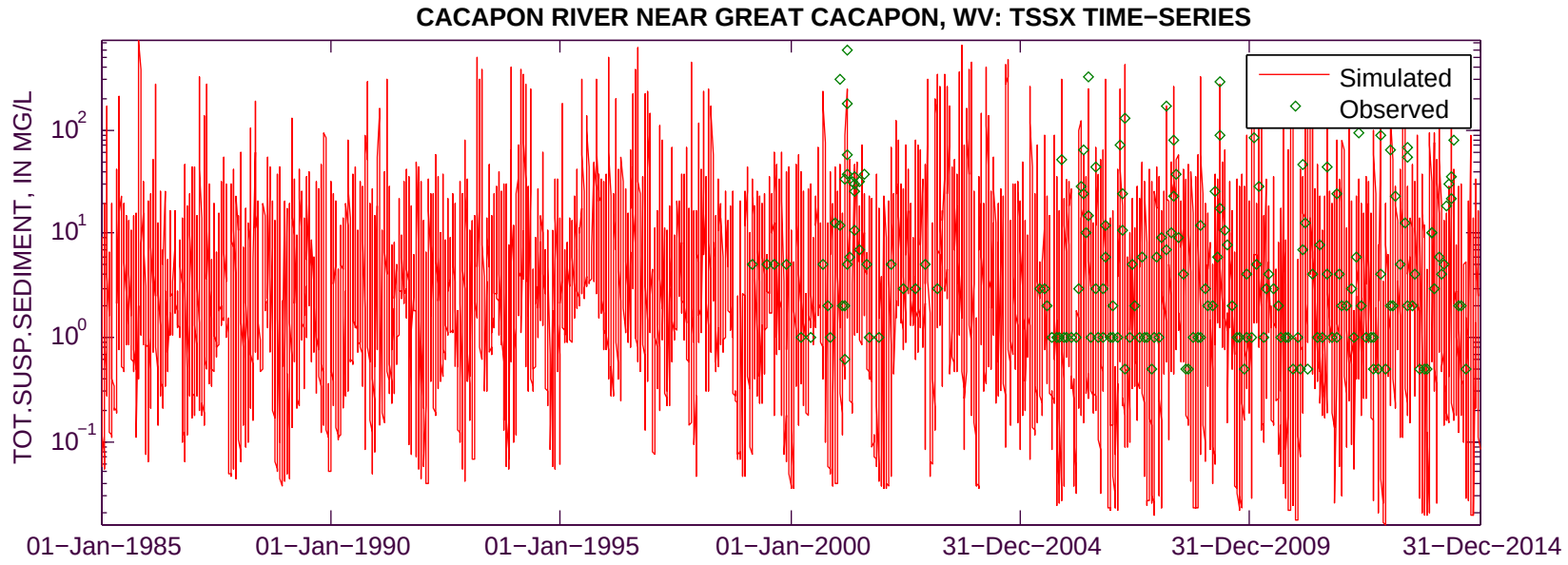
LOAD DATA
LOG10

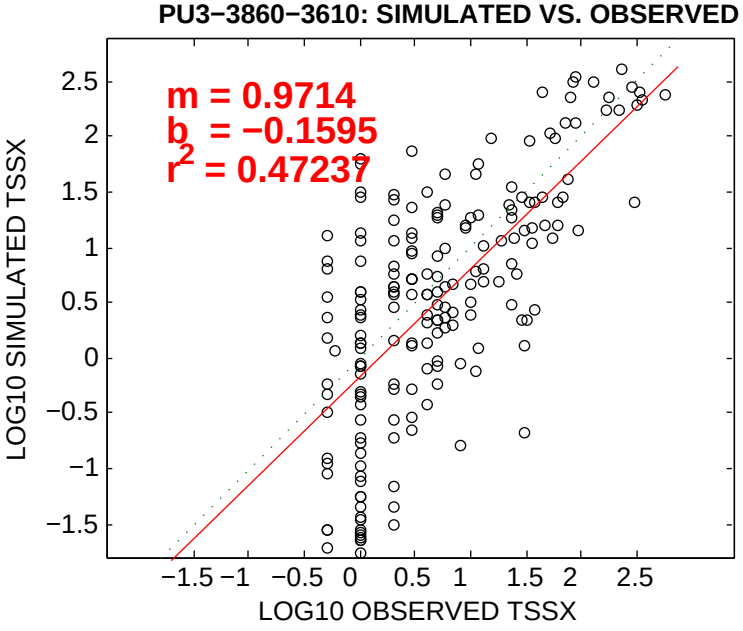


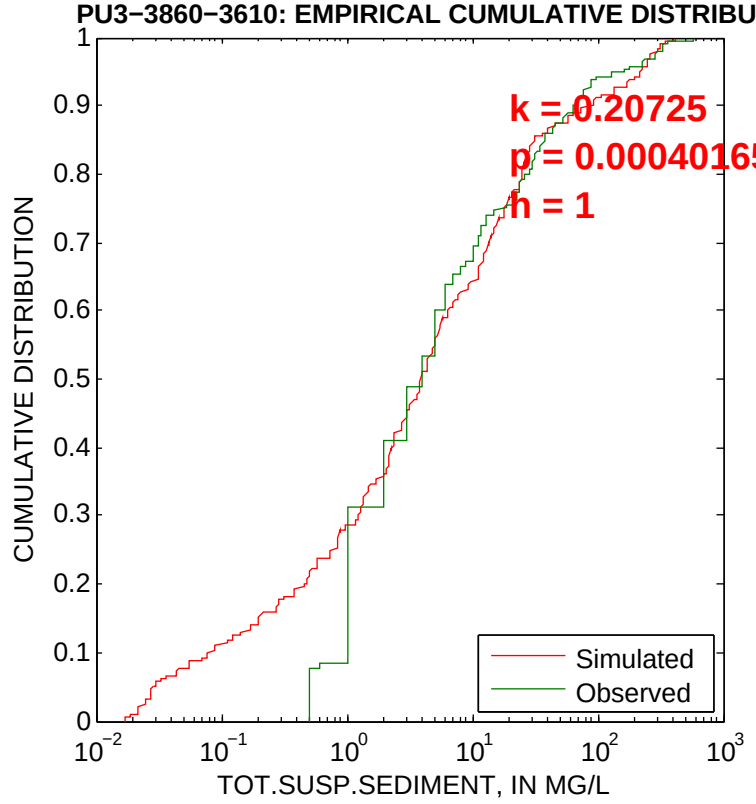












DATA SELECTION

scenario	file
P620171001WQ	TSSX.calib

plot: TSSX - total suspended ...

Dates: 1/1/1985 – 12/31/201

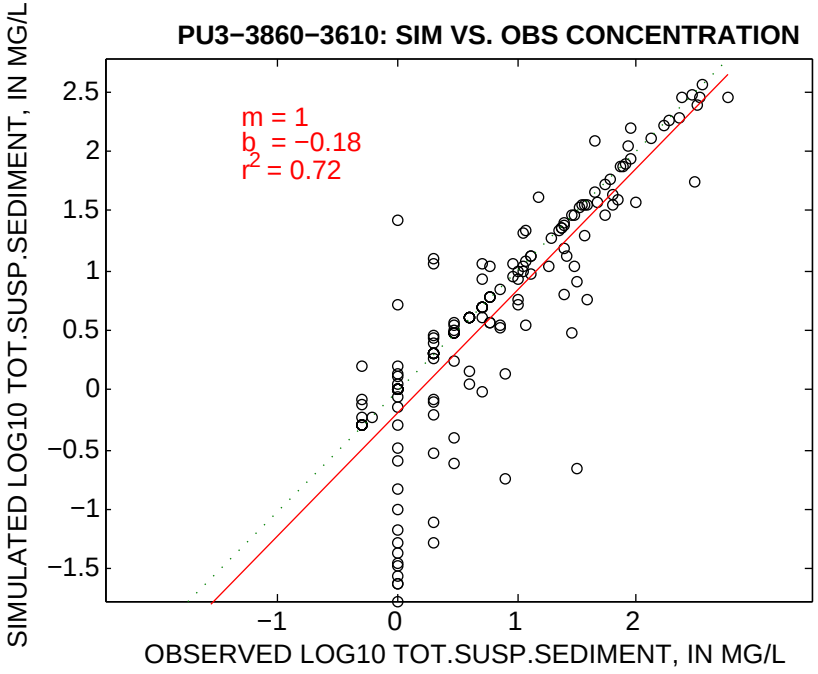
Drive	Directory	Observed
N/A	model	OBS20161101

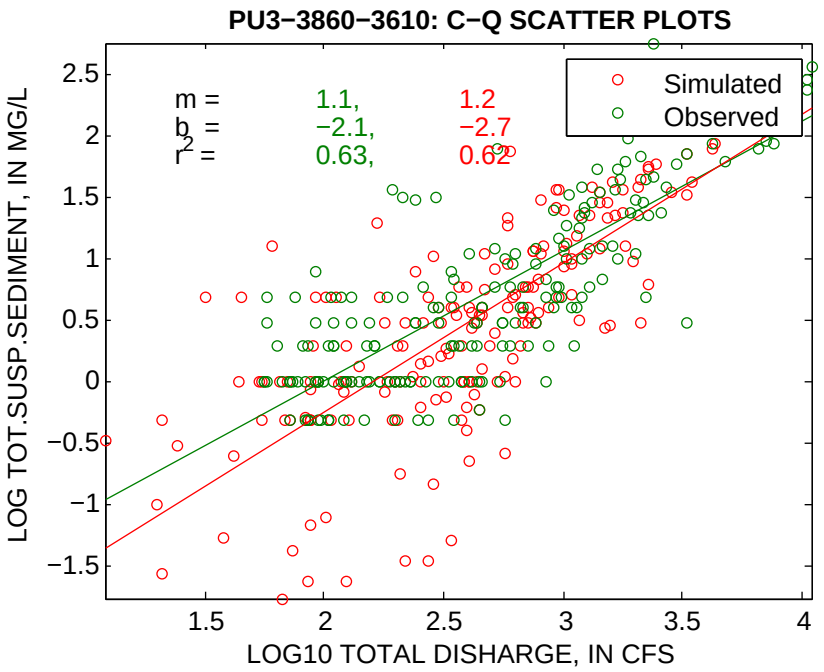
STATISTICS

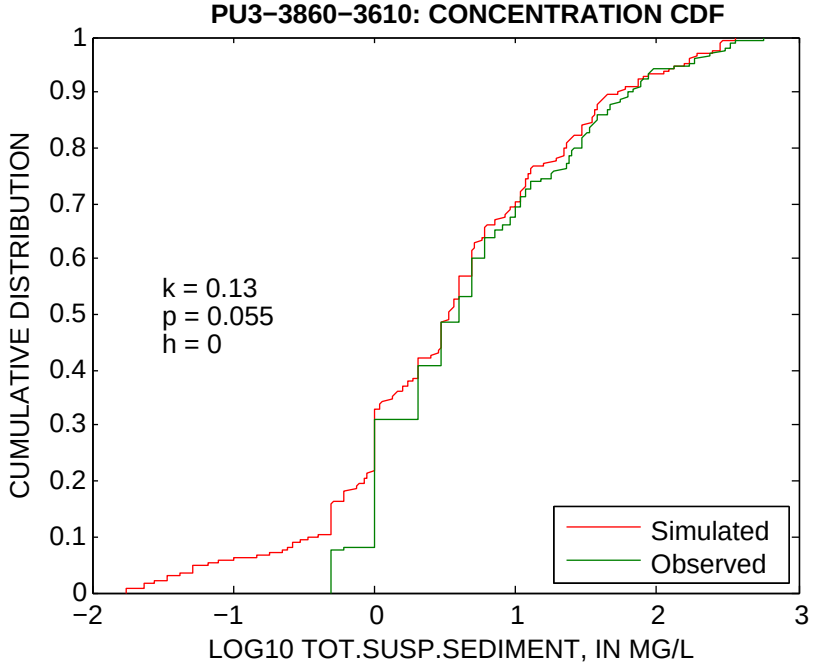
n	193	193
	observe	simulate
min	0.5	0.017298
	-0.30103	-1.762
mean	27.6322	30.0326
	0.708308	0.528553
media	4	3.9097
	0.60206	0.592143
max	578.5	412.15
	2.7623	2.61506
varian	5165.4	4943.04
	0.567185	1.13303
JB	0.001	0.001
	0.004643	0.110571
	ra	log
%	8.68708	-25.3781
err.va	2907.19	0.63076
rel.std.err	0.56282	1.11209
mod.eff	0.43718	-0.112089

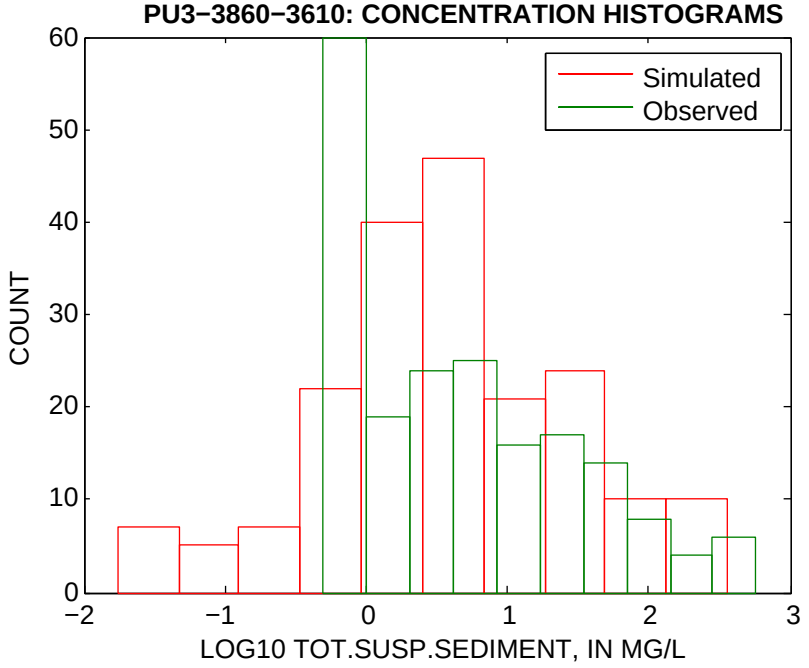
VERSION 2.1

ALL DATA
LOG10

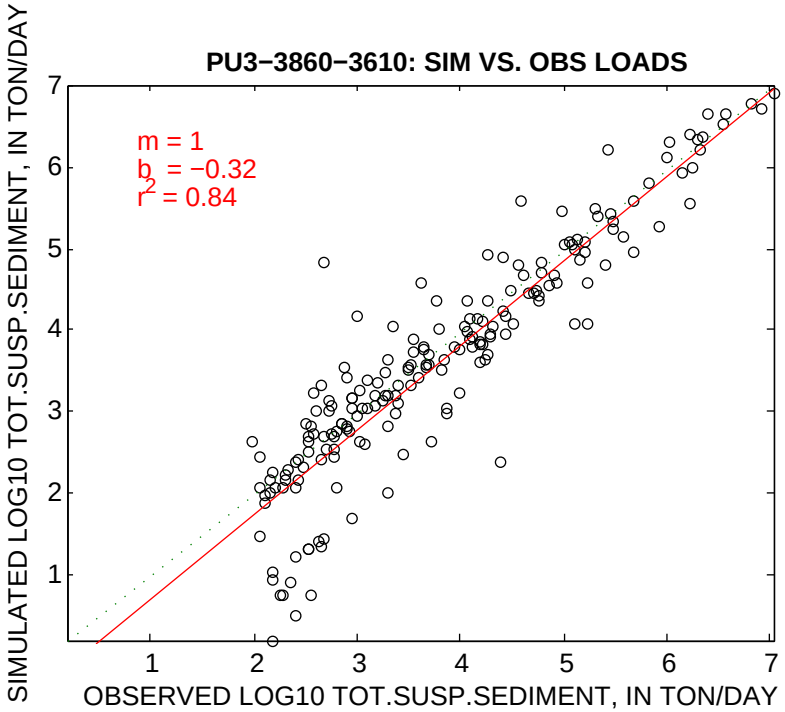


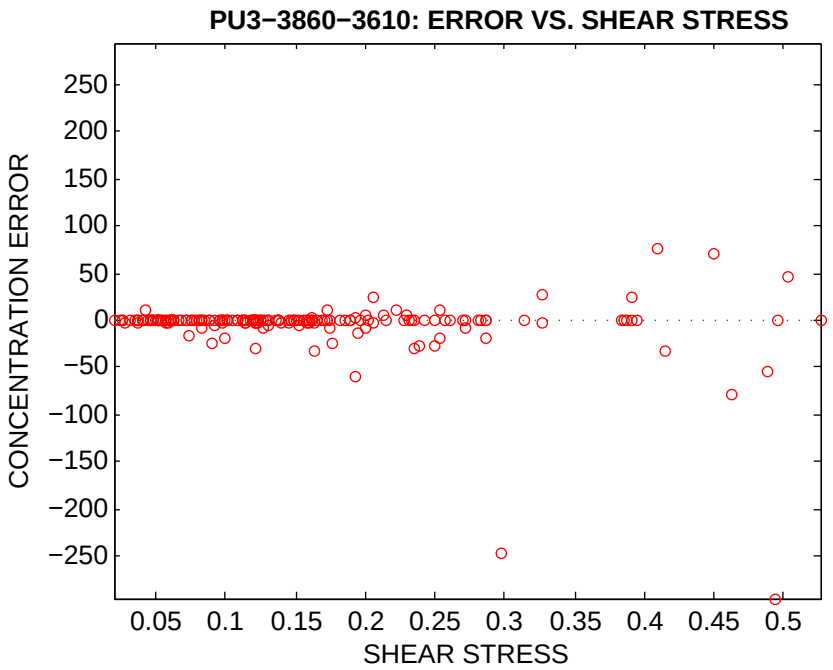


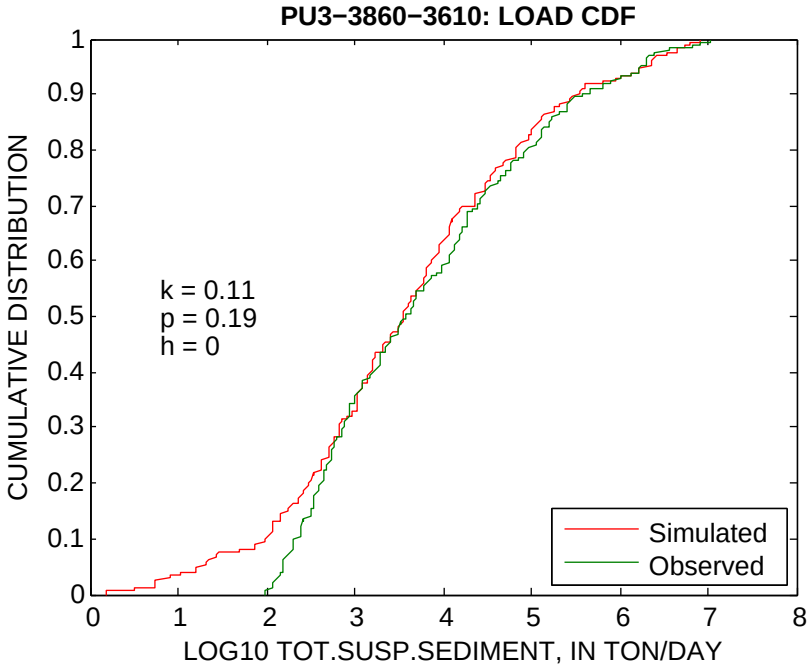


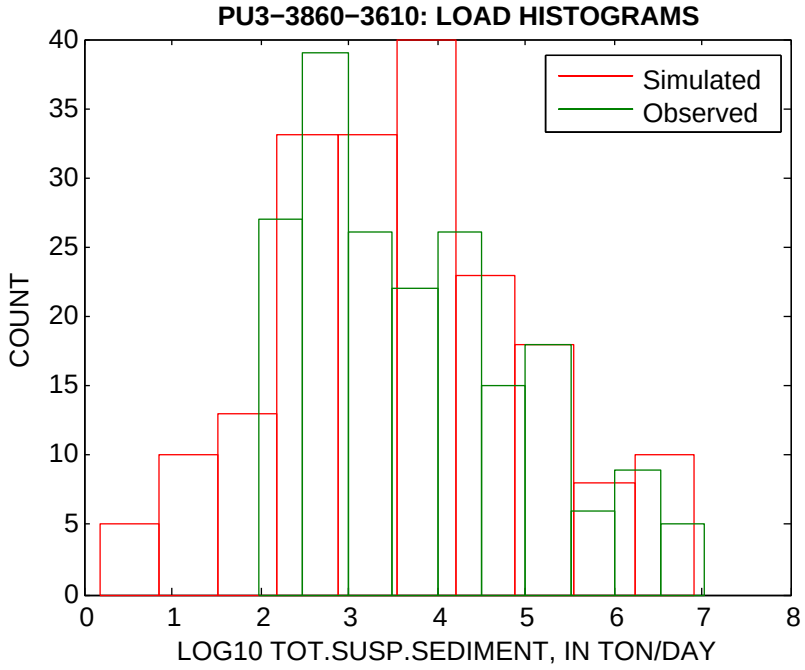


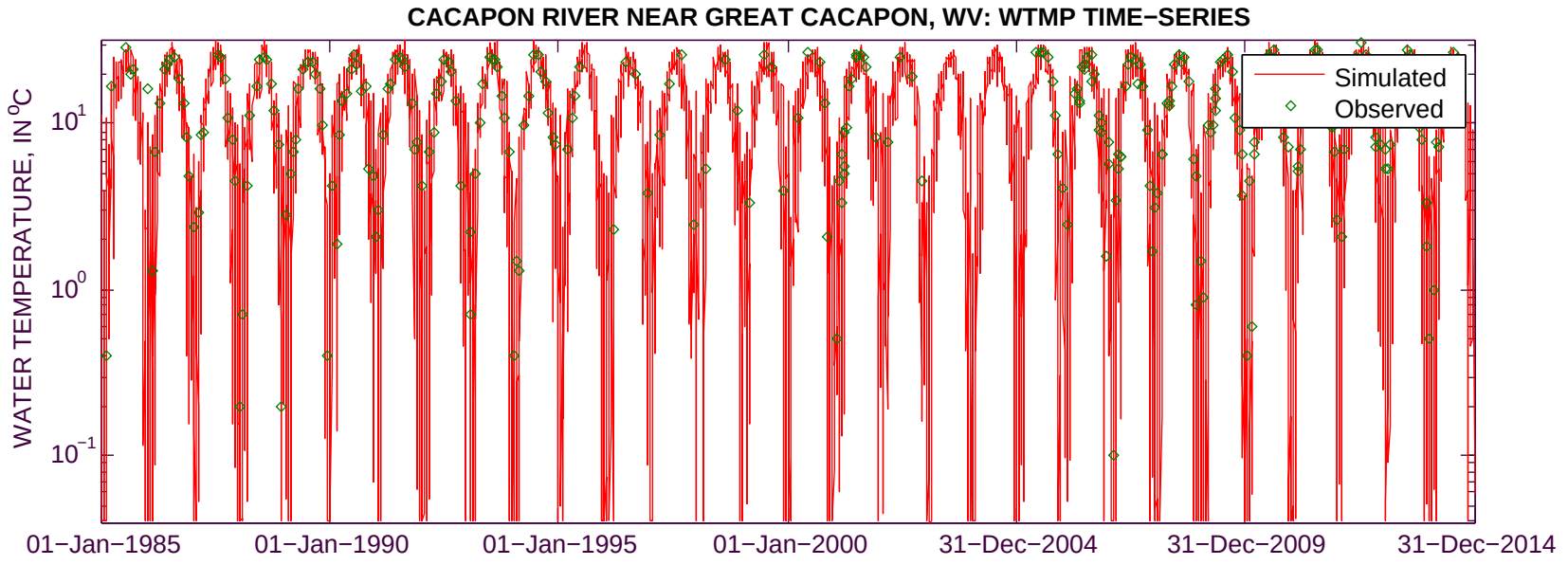
LOAD DATA
LOG10

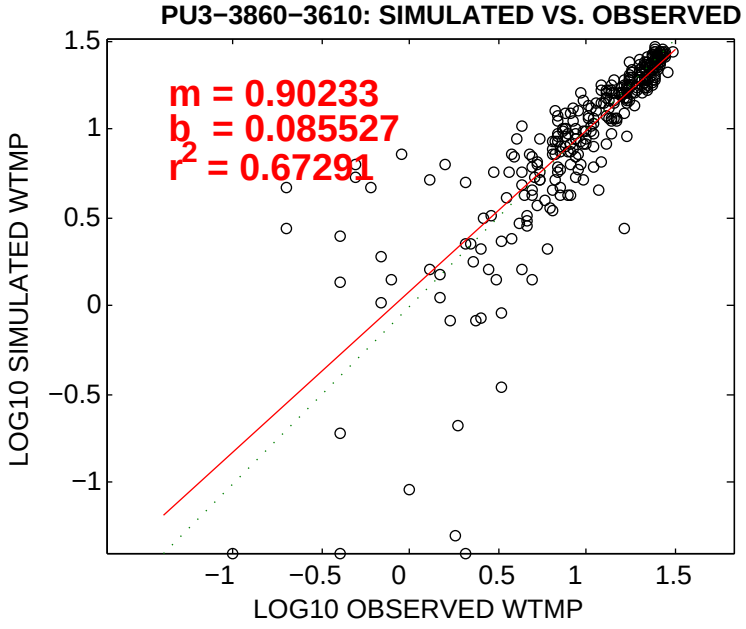


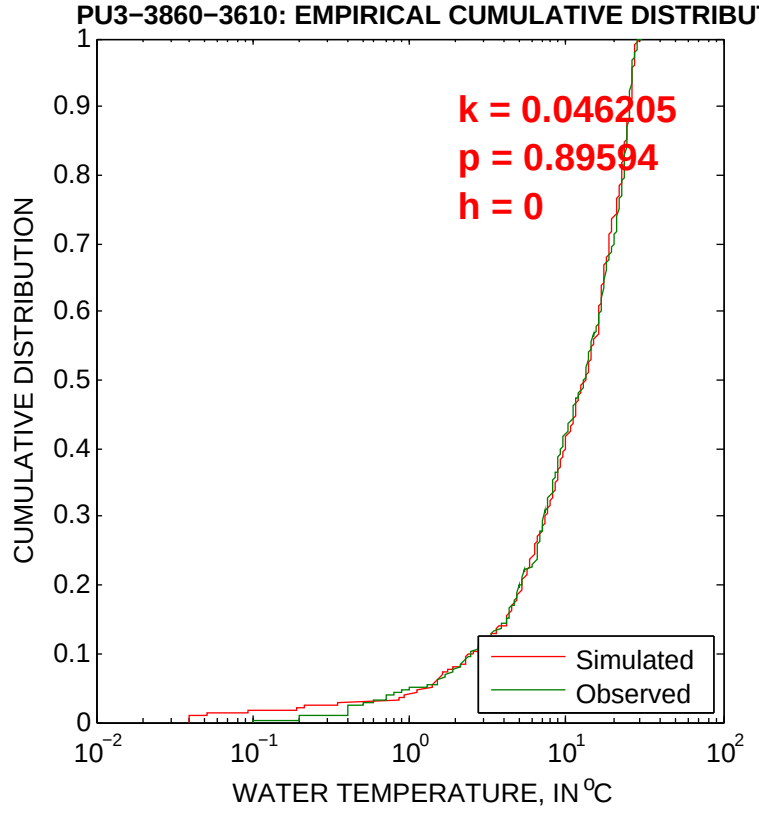












DATA SELECTION

scenario	file
P620171001WQ	WTMP.calib

plot: WTMP - water tempera...

Dates: 1/1/1985 – 12/31/201

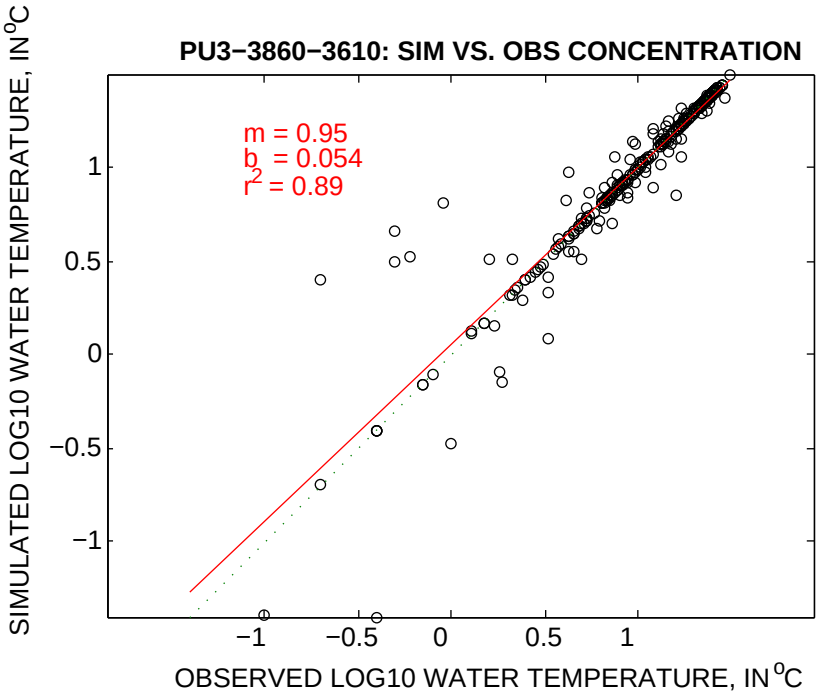
Drive	Directory	Observed
N/A	model	OBS20161101

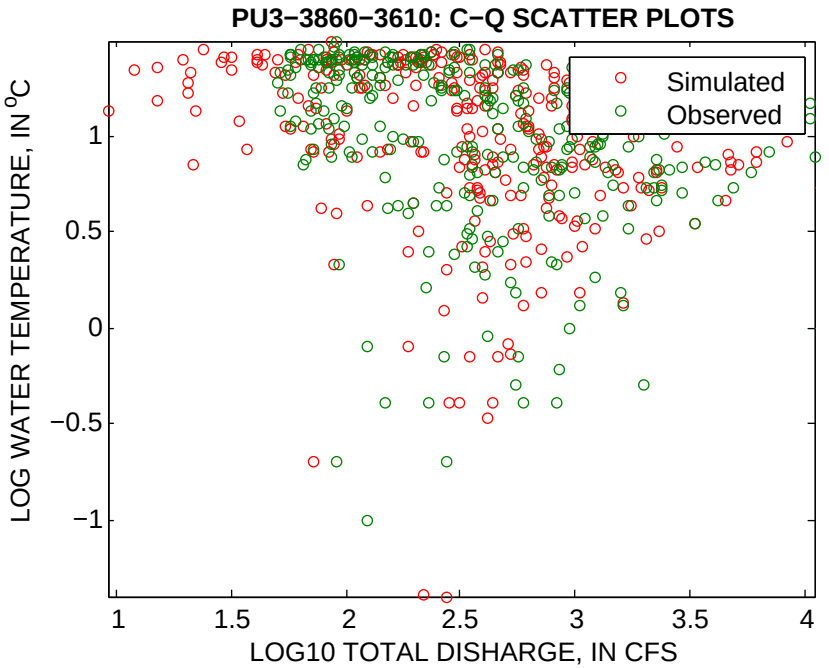
STATISTICS

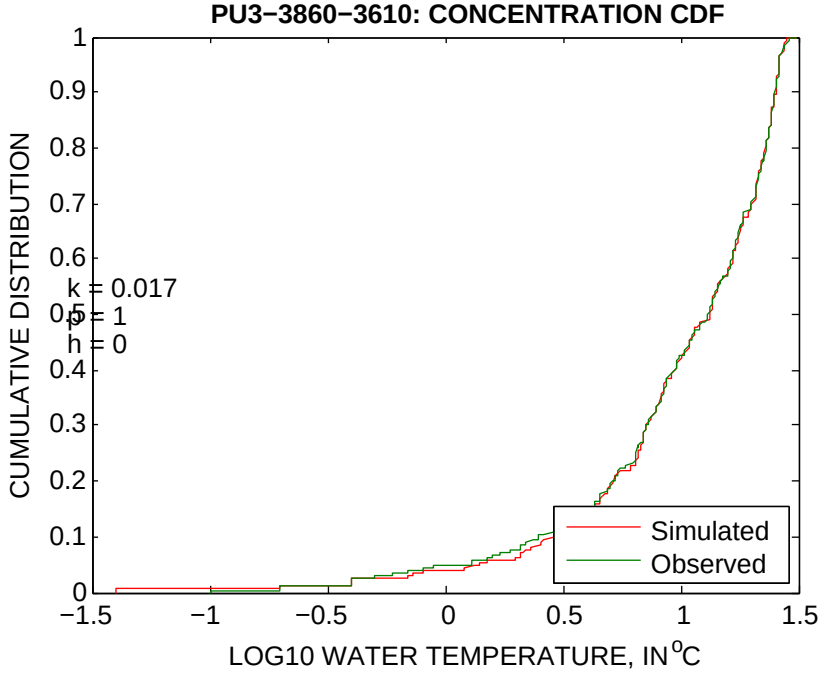
	n	303	303
		observe	simulate
min		0.1	0.040009
		-1	-1.39784
mean		13.6362	13.5459
		0.988504	0.977479
media		13.2	13.121
		1.12057	1.11797
max		31.13	29.337
		1.49318	1.46742
varian		71.5607	68.8287
		0.198188	0.239799
JB		0.001440	0.002049
		0.001	0.001
		ra	log
%		-0.66268	-1.11538
err.va		7.71866	0.0804495
rel.std.err		0.107862	0.405926
mod.eff		0.892138	0.594074

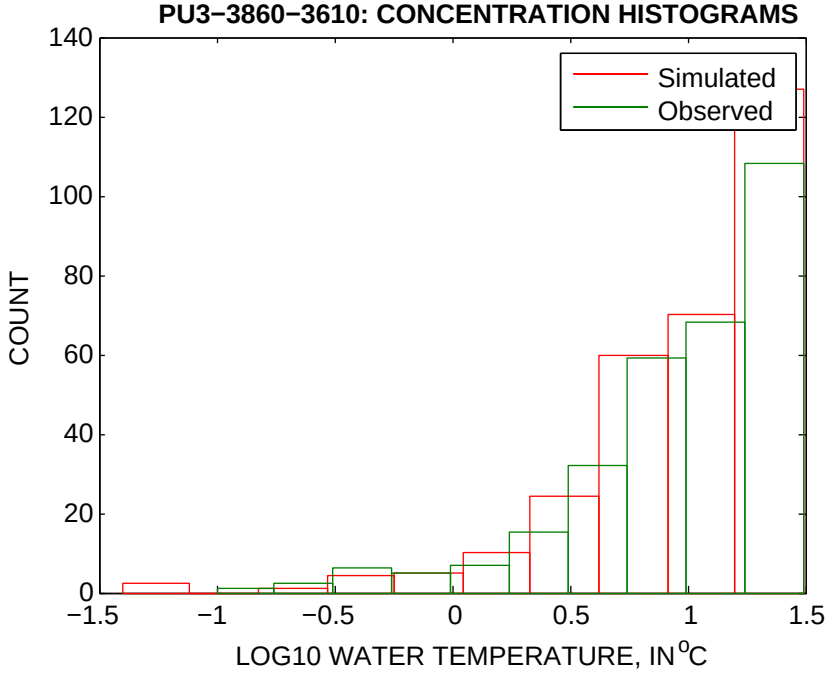
VERSION 3.1

ALL DATA
LOG10

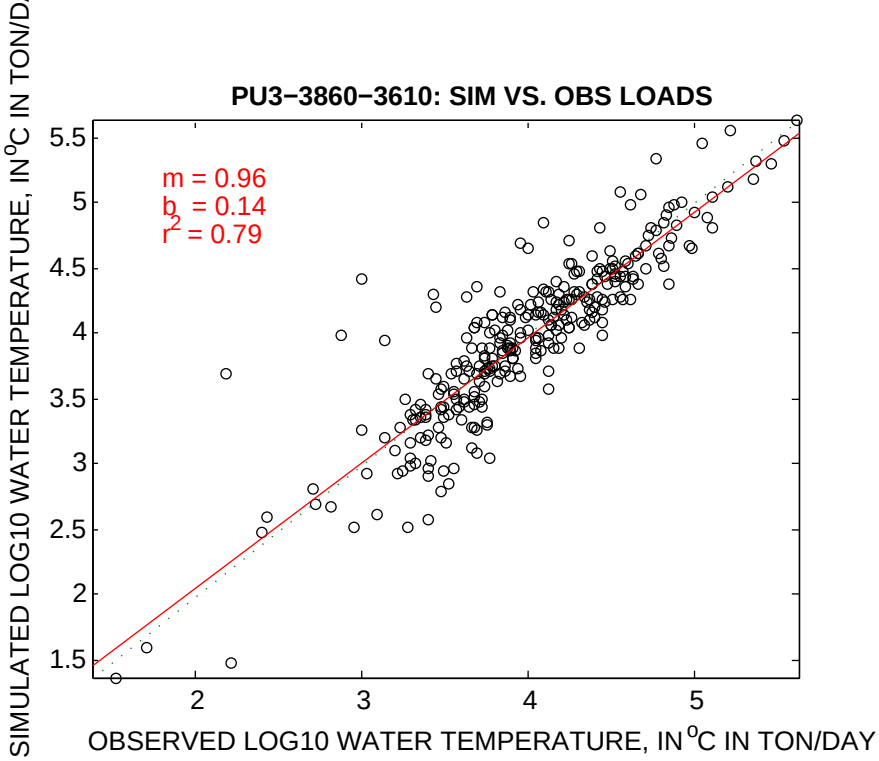


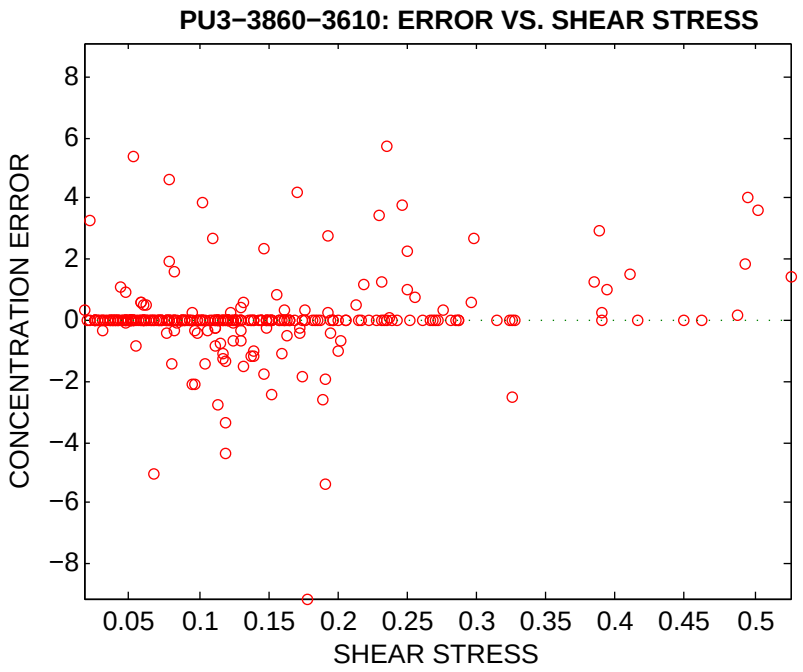


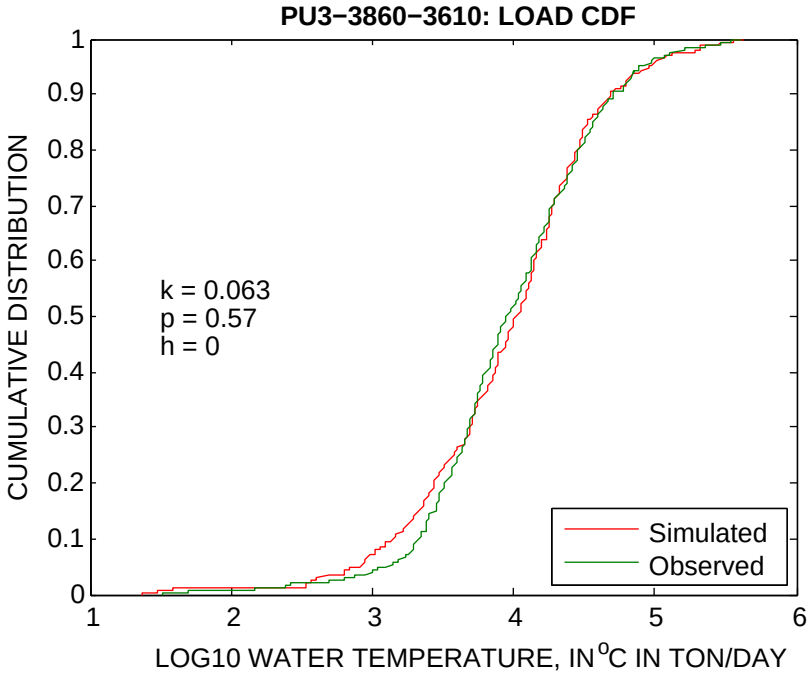


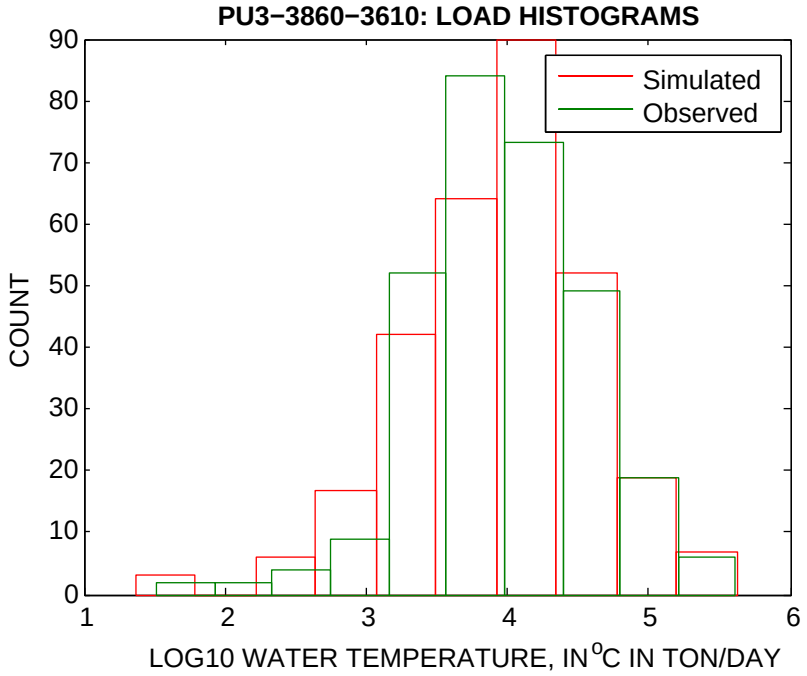


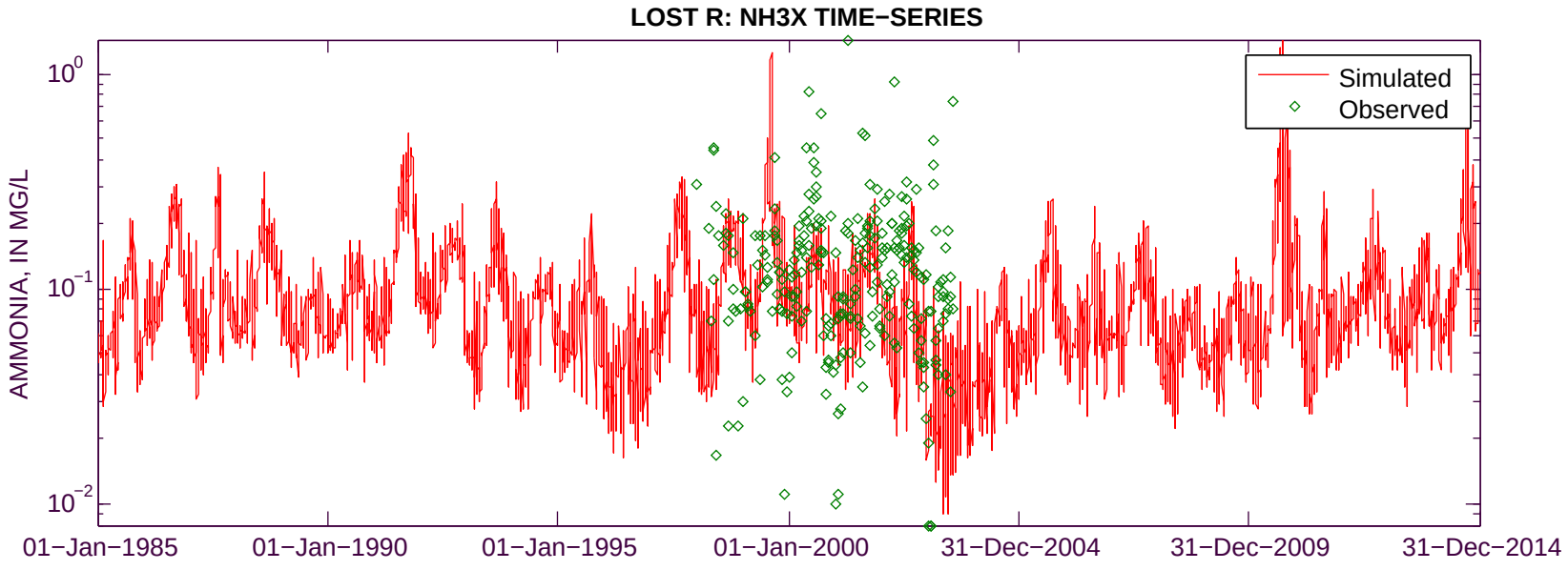
LOAD DATA
LOG10

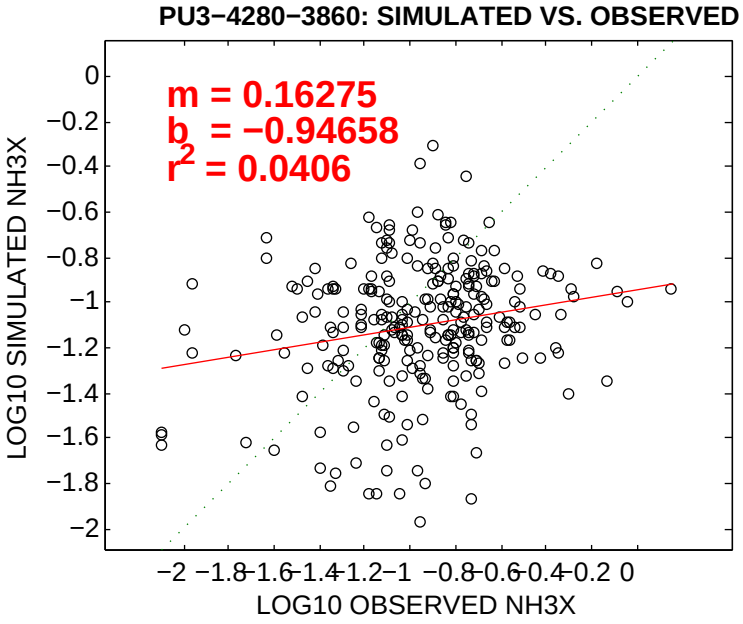


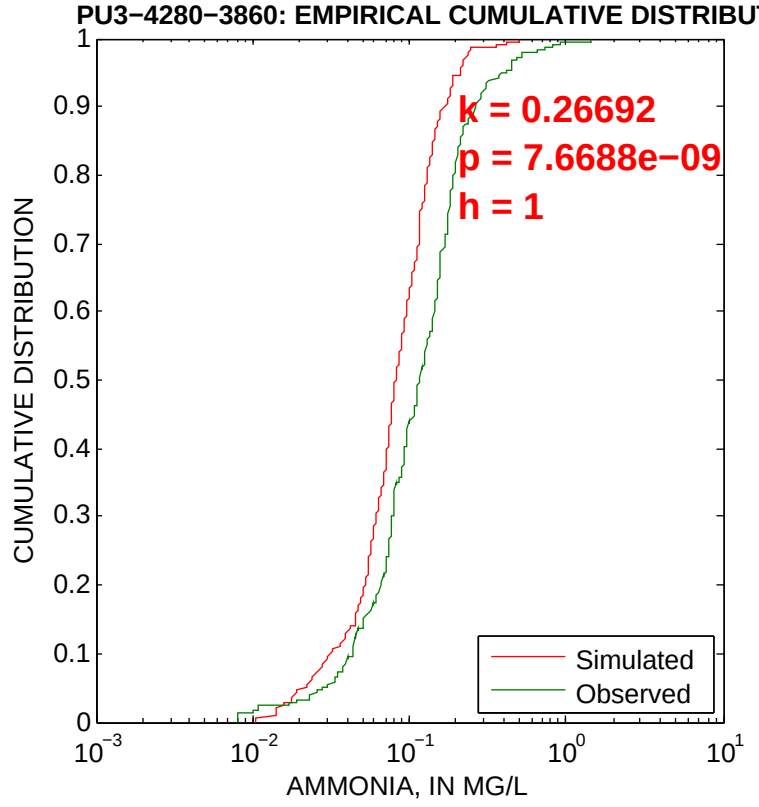












DATA SELECTION

scenario	file
P620171001WQ	NH3X.calib

plot: NH3X - ammonia

Dates: 1/1/1985 – 12/31/201

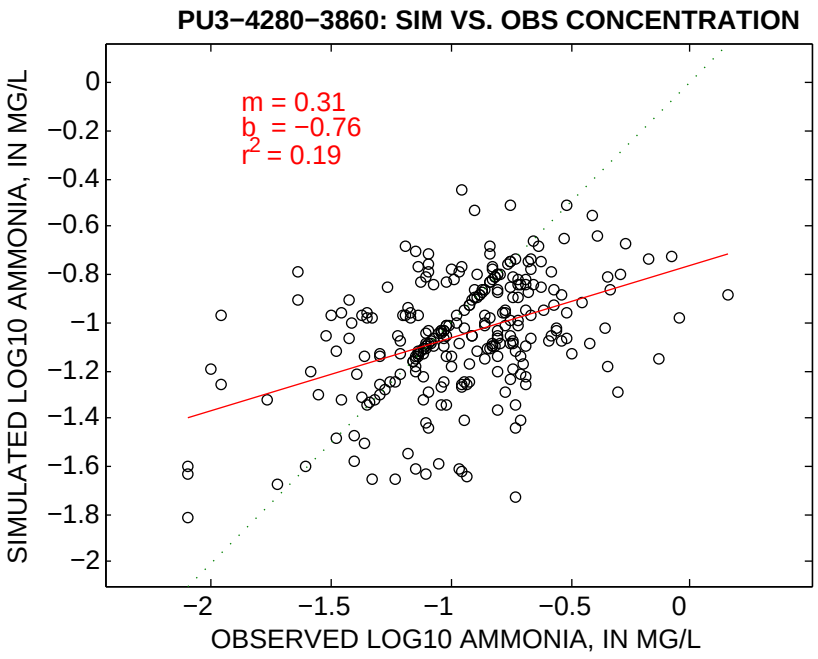
Drive	Directory	Observed
N/A	model	OBS20161101

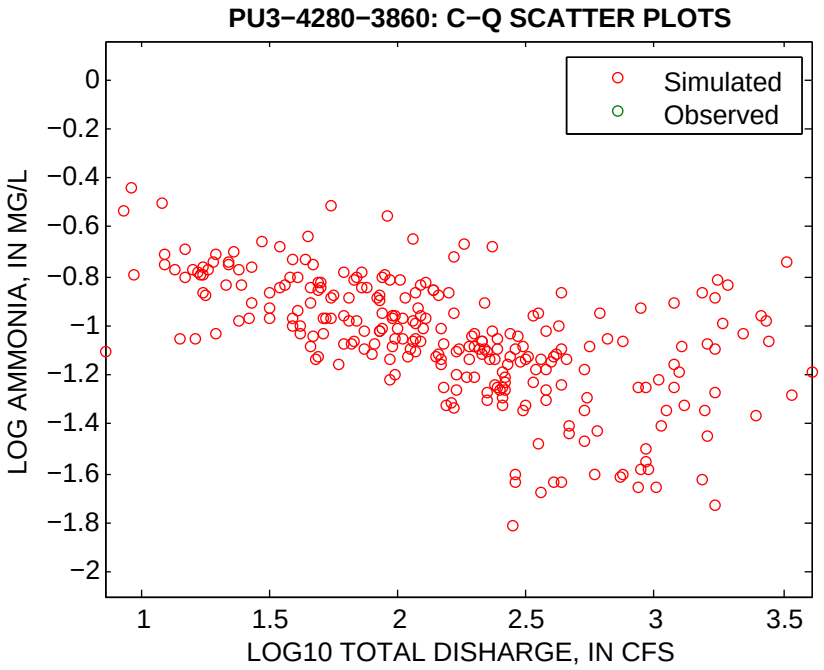
STATISTICS

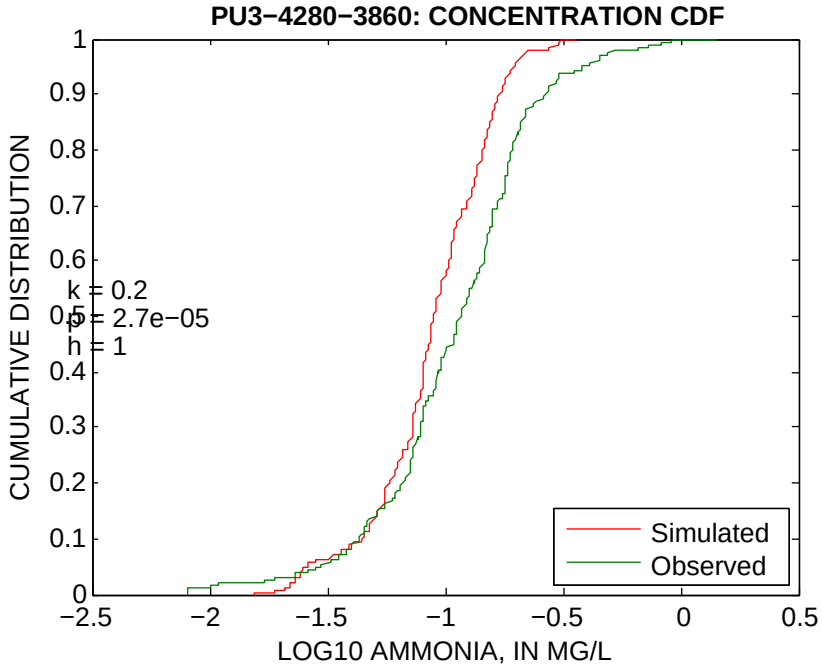
	observe	simulate
n	266	266
min	0.008 -2.09691	0.010668 -1.97192
mean	0.150143 -0.95528	0.095474 -1.10205
media	0.1165 -0.933678	0.0825525 -1.08327
max	1.434 0.156549	0.49974 -0.301256
varian	0.021262 0.120048	0.00377056 0.0783144
JB	0.001 0.001	0.001 0.003540
	ra	log
%	-36.4112	15.3643
err.va	0.0269784	0.180911
rel.std.err	1.26885	1.50699
mod.eff	-0.268852	-0.506988

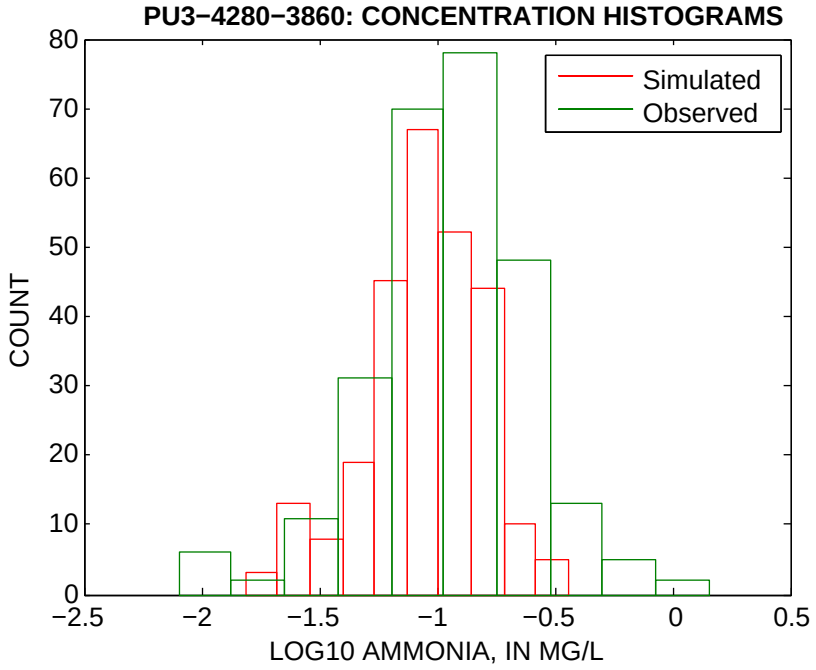
VERSION 2.1

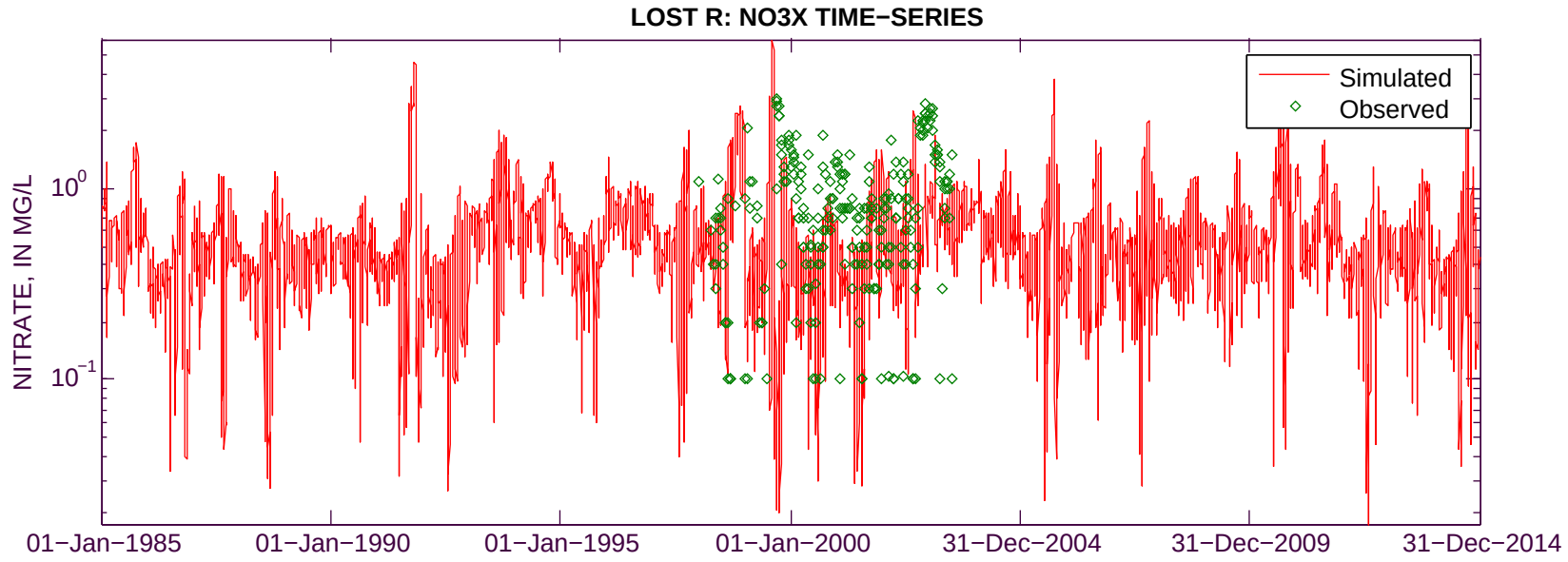
ALL DATA
LOG10

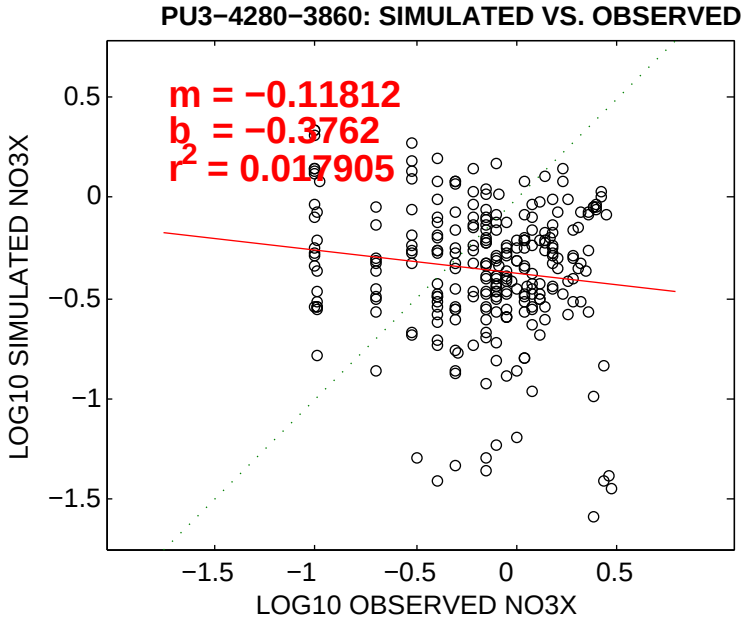


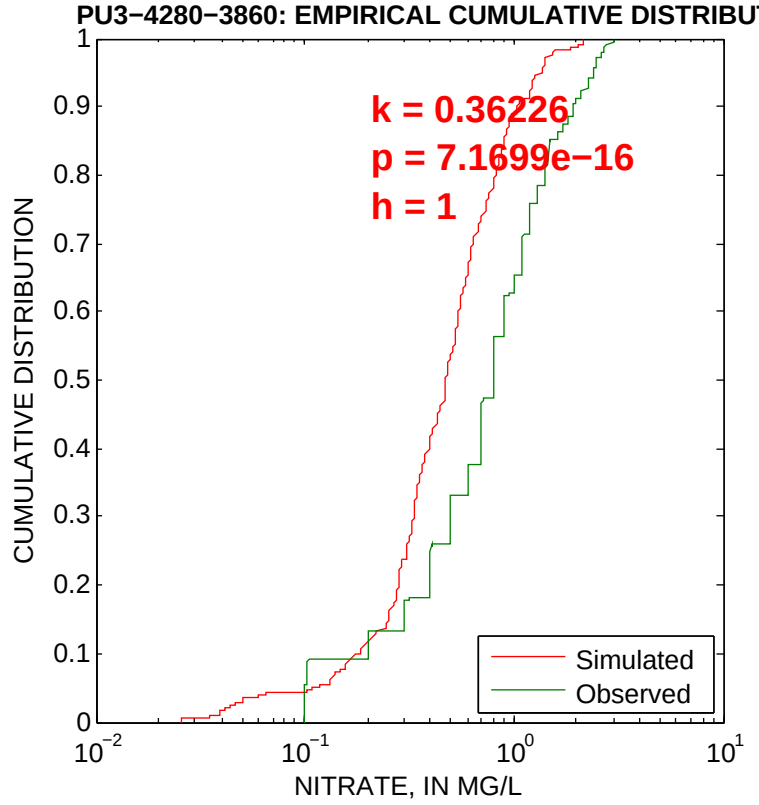












DATA SELECTION

scenario	file
P620171001WQ	NO3X.calib

plot: NO3X - nitrate

Dates: 1/1/1985 – 12/31/201

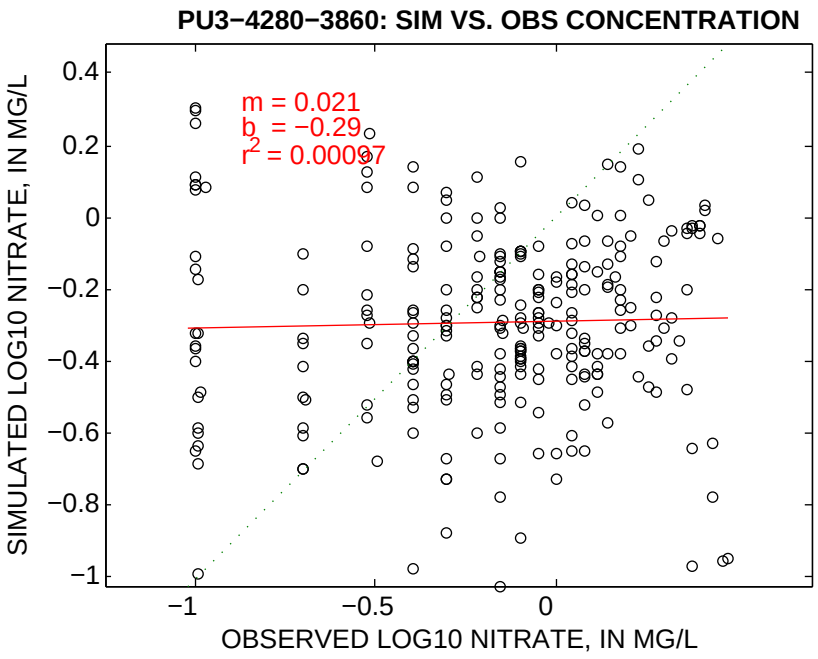
Drive	Directory	Observed
N/A	model	OBS20161101

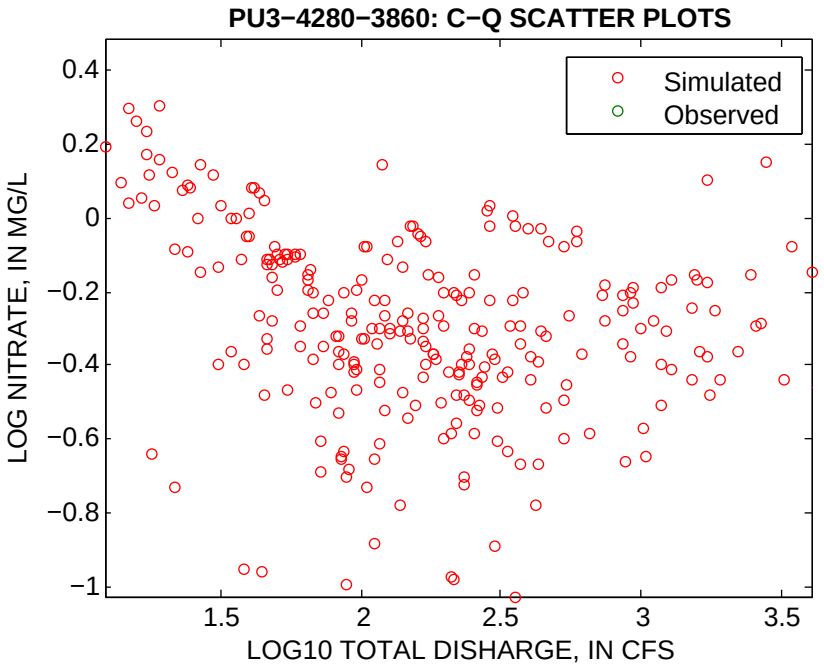
STATISTICS

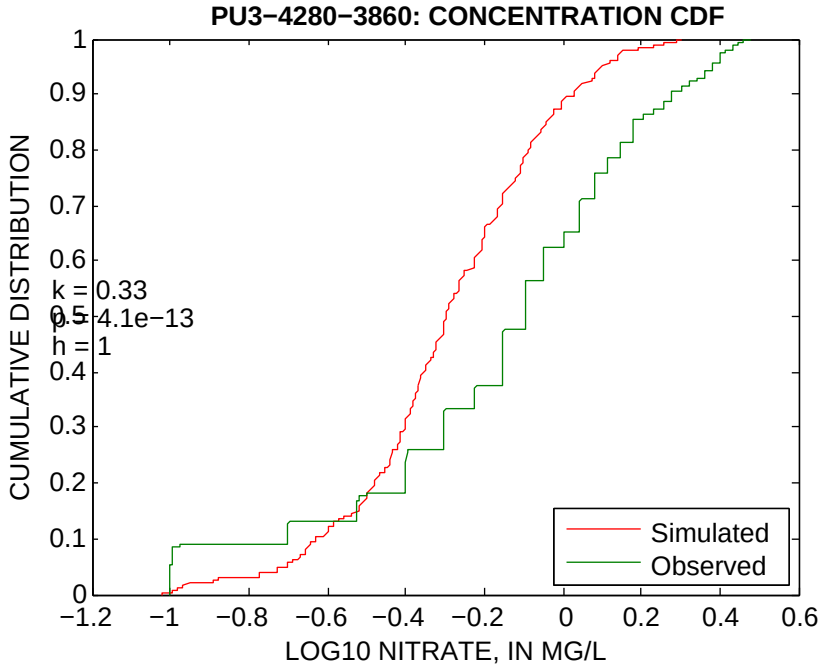
	n	observe	simulate
		265	265
min		0.1	0.025786
		-1	-1.58862
mean		0.926075	0.559052
		-0.164888	-0.356728
media		0.8	0.4728
		-0.09691	-0.325323
max		3	2.1778
		0.477121	0.338018
varian		0.435531	0.141616
		0.141076	0.10993
JB		0.001	0.001
		0.001479	0.001
		ra	log
%		-39.6321	116.346
err.va		0.754209	0.321276
rel.std.err		1.7317	2.27732
mod.eff		-0.7317	-1.27732

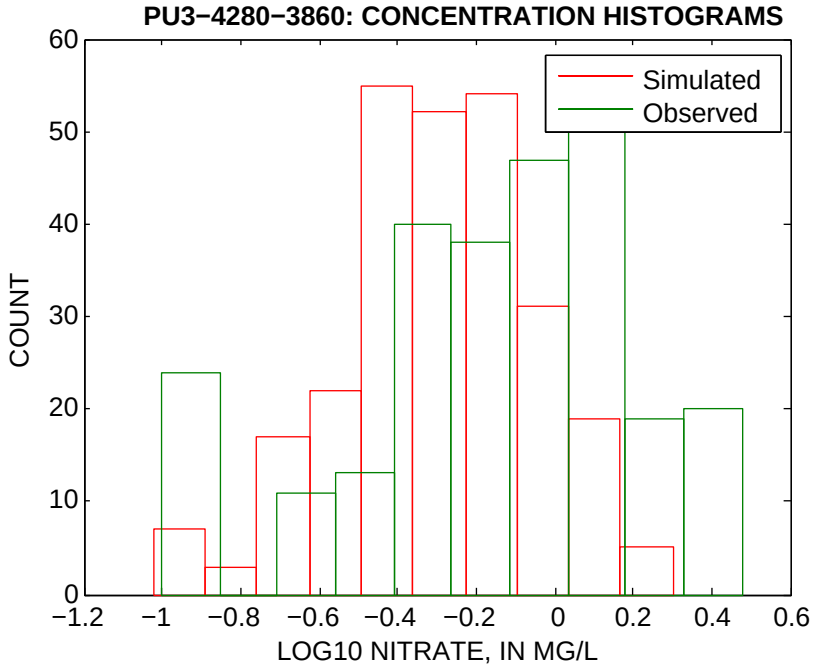
VERSION 2.1

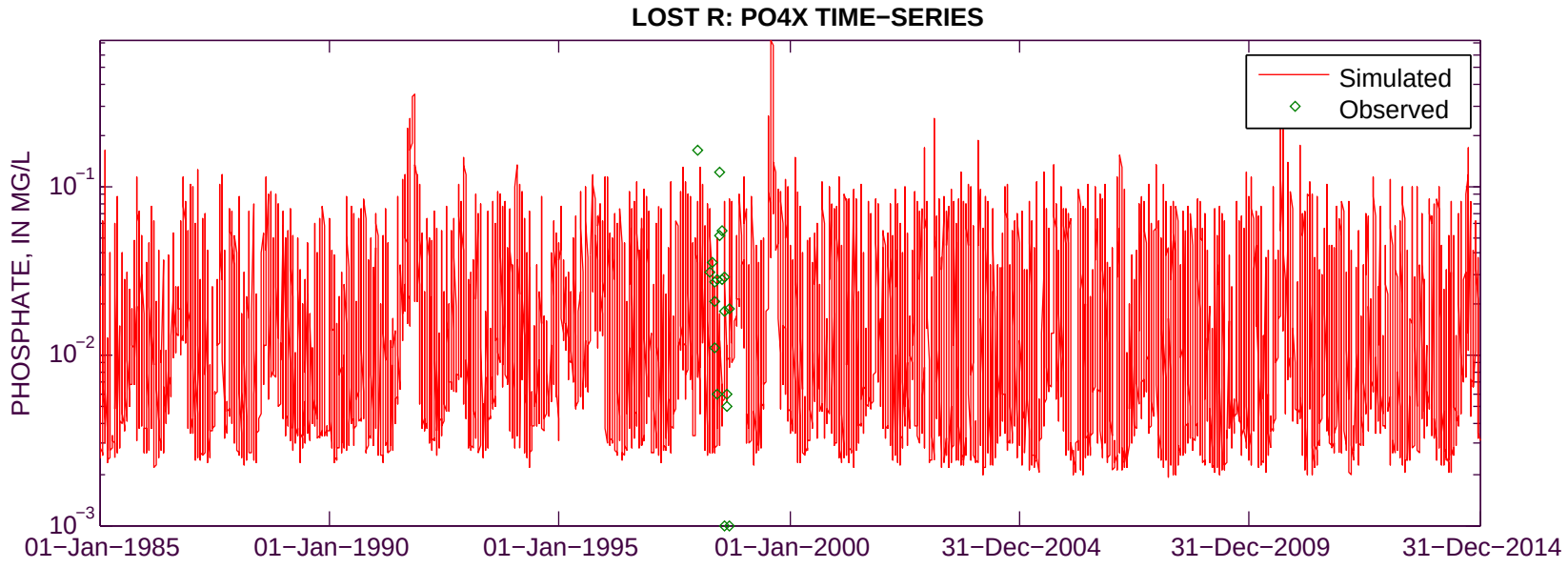
ALL DATA
LOG10

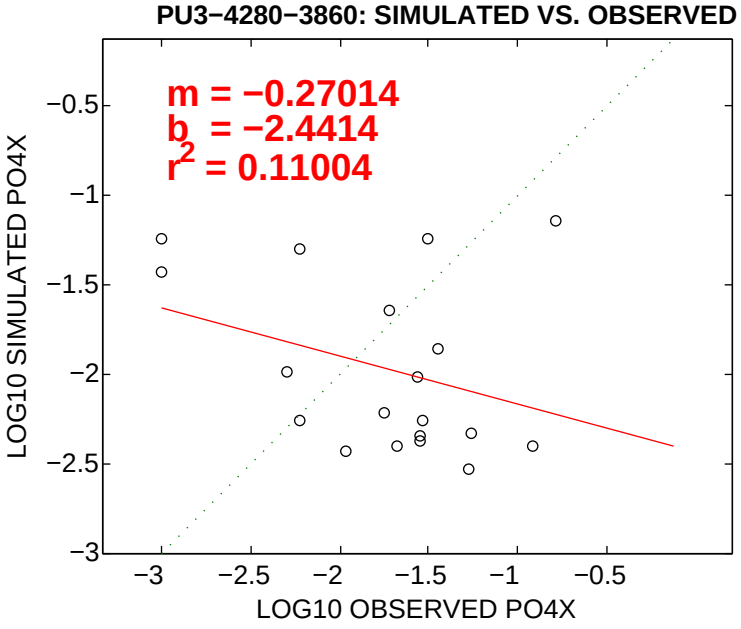


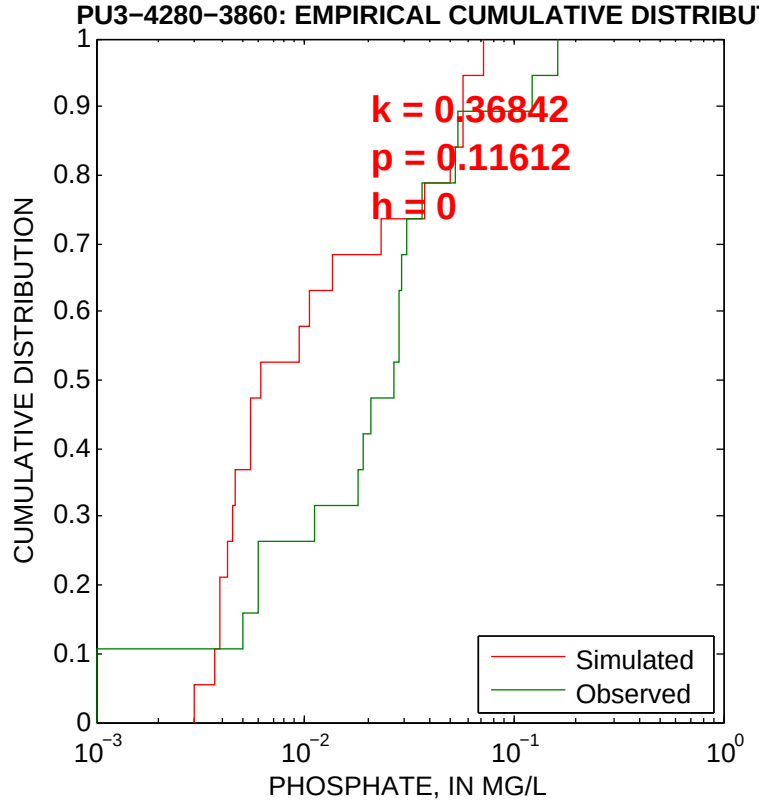












DATA SELECTION

scenario	file
P620171001WQ	PO4X.calib

plot: PO4X - phosphate

Dates: 1/1/1985 – 12/31/201

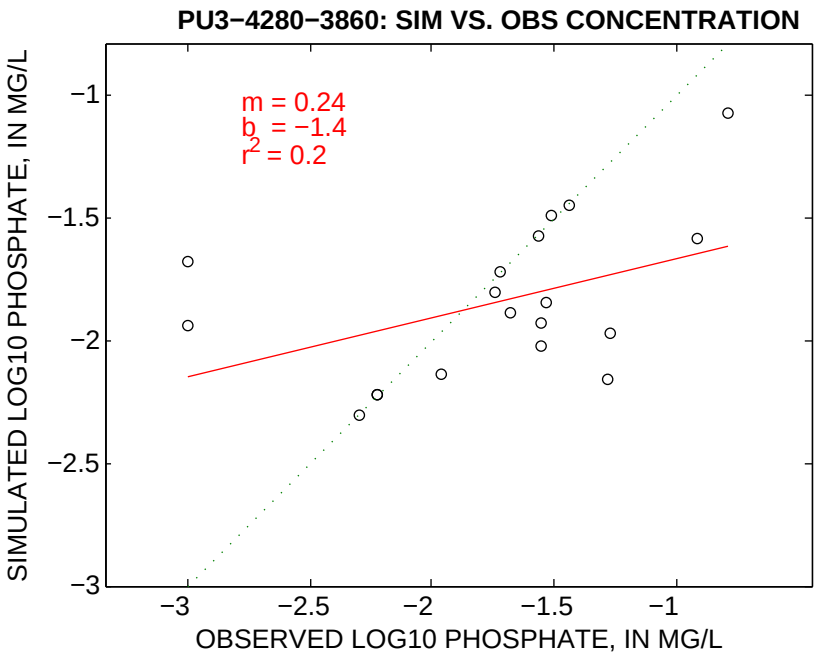
Drive	Directory	Observed
N/A	model	OBS20161101

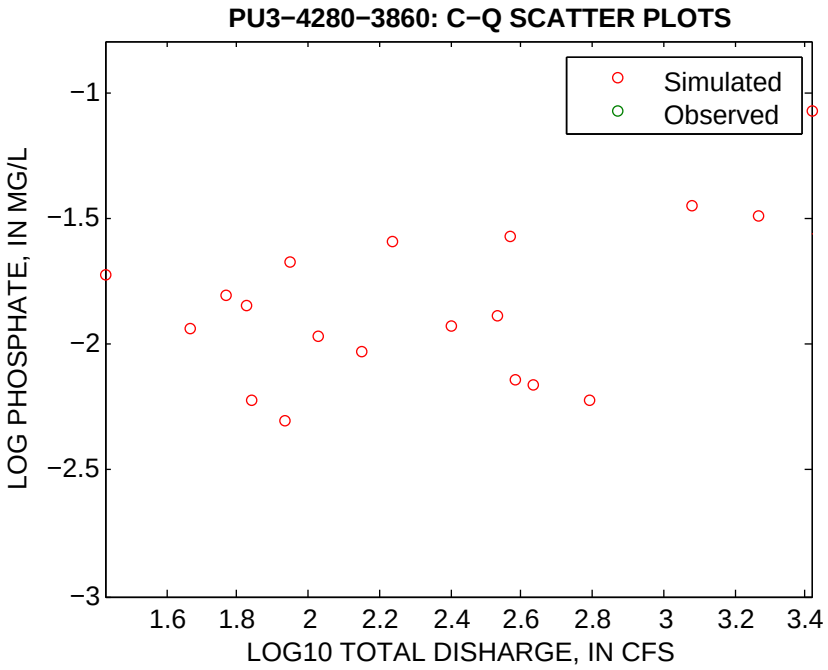
STATISTICS

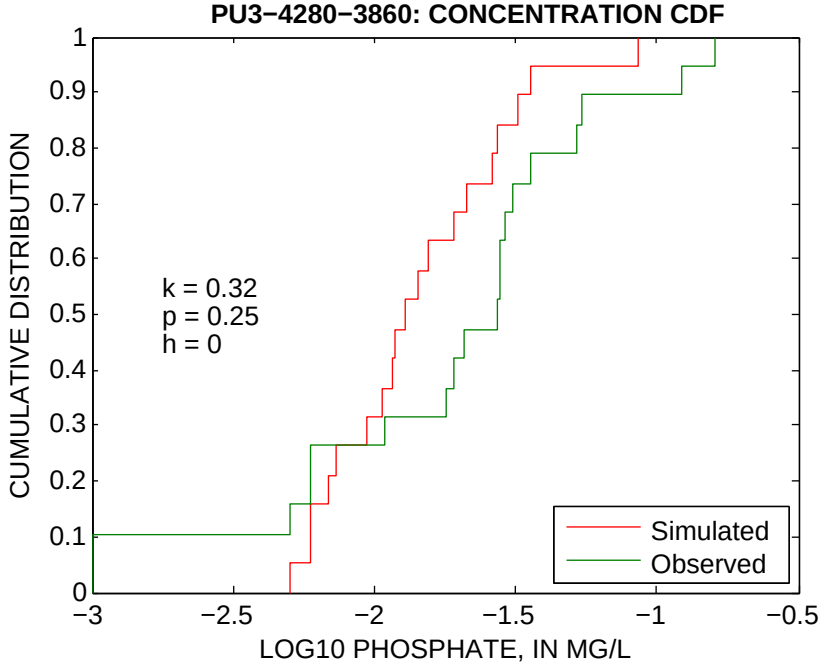
	n	19	19
		observe	simulate
min		0.001	0.0029748
		-3	-2.52654
mean		0.0345789	0.0198225
		-1.7509	-1.96843
media		0.027	0.0061132
		-1.56864	-2.21373
max		0.162	0.07254
		-0.790485	-1.13942
varian		0.00170948	0.00052337
		0.350075	0.232176
JB		0.001053	0.038487
		0.19787	0.098791
		ra	log
%		-42.6746	12.4238
err.va		0.00205077	0.821339
rel.std.err		1.19965	2.34618
mod.eff		-0.199648	-1.34618

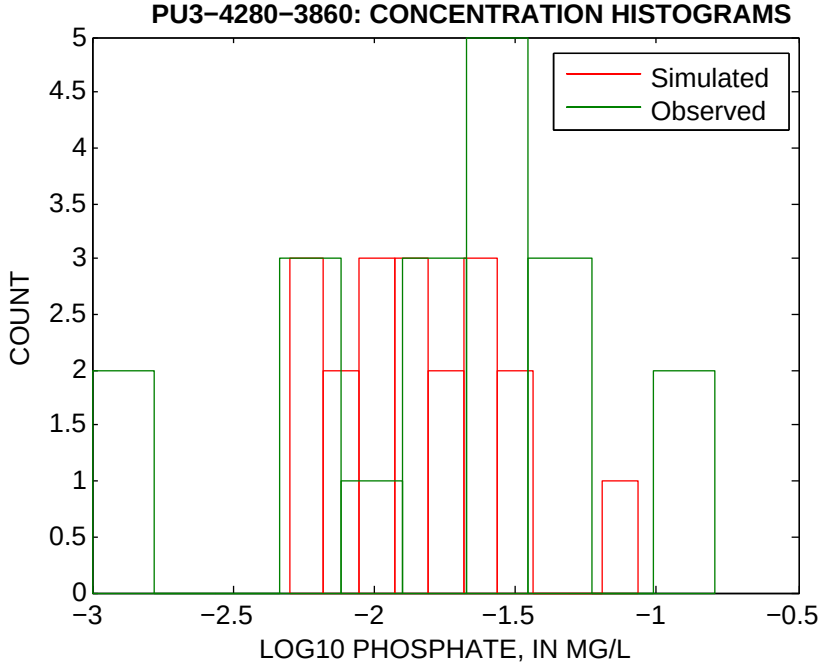
VERSION 2.1

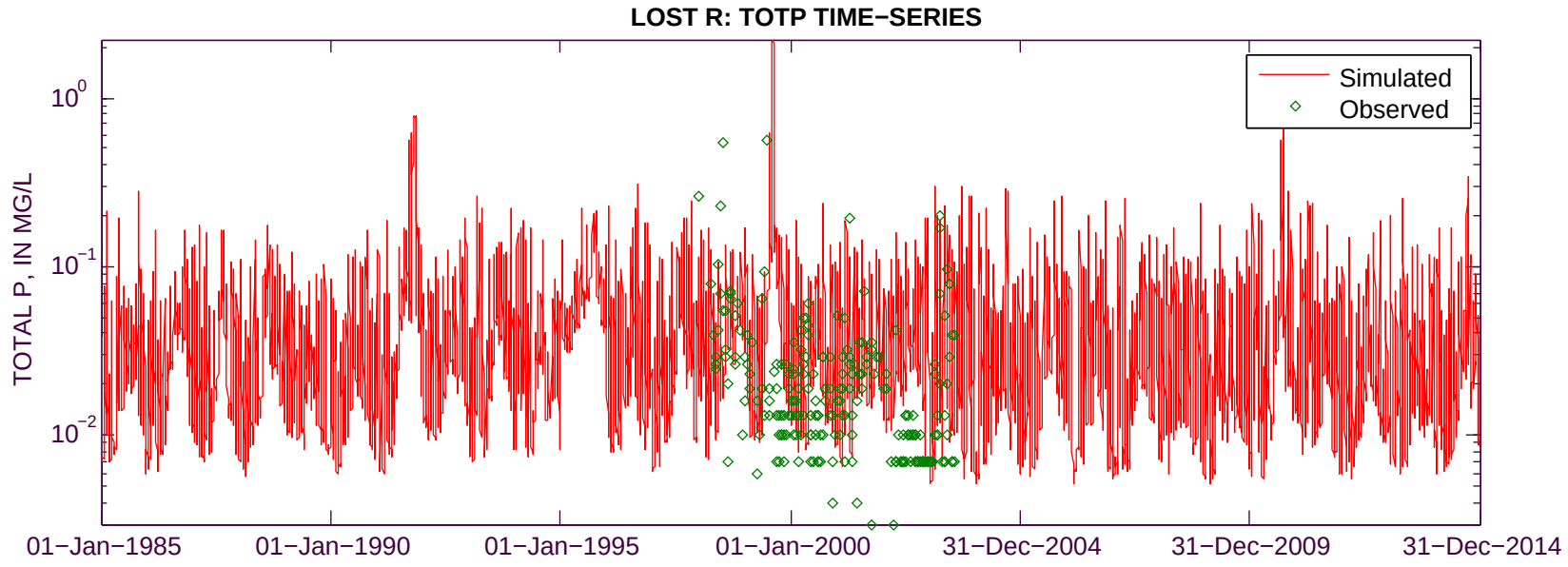
ALL DATA
LOG10

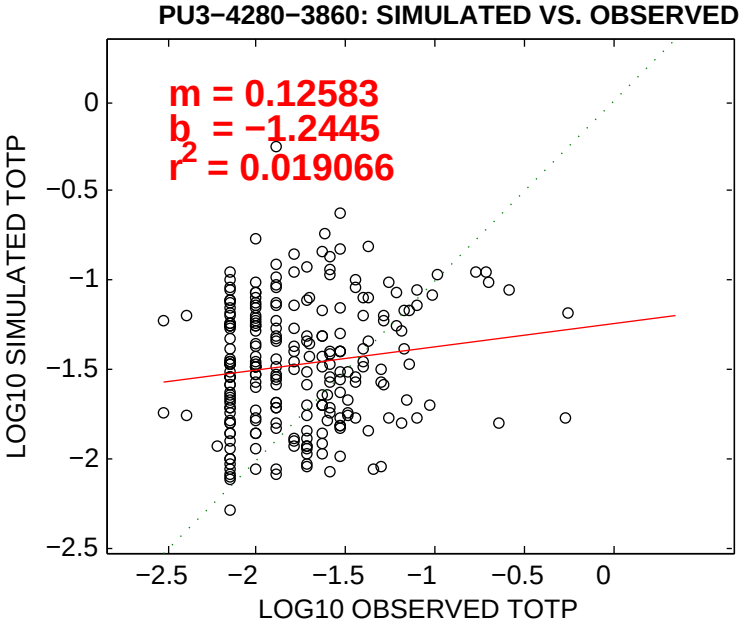


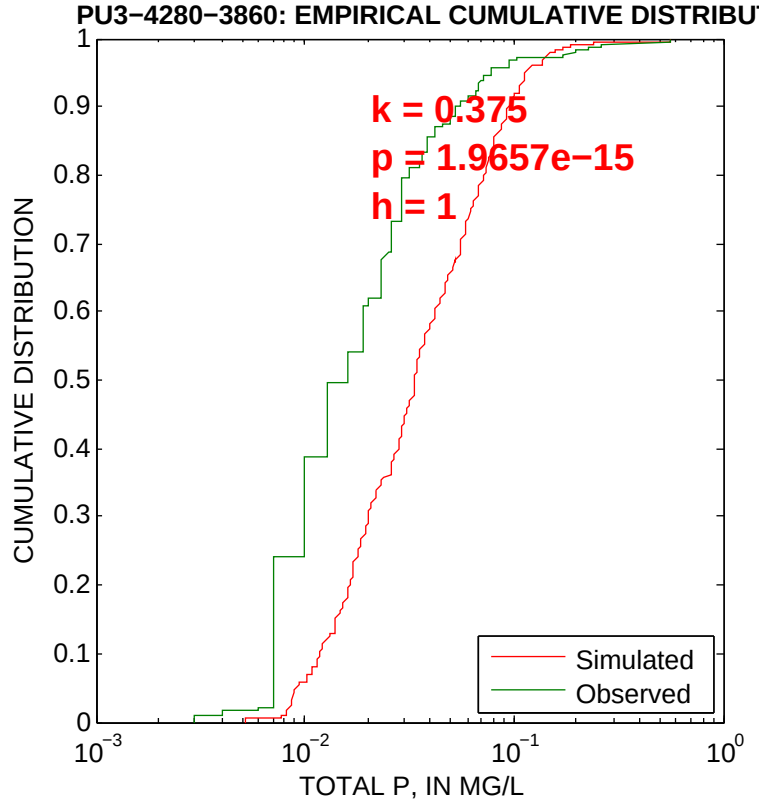












DATA SELECTION

scenario	file
P620171001WQ	TOTP.calib

plot: TOTP - total phosphorus

Dates: 1/1/1985 – 12/31/201

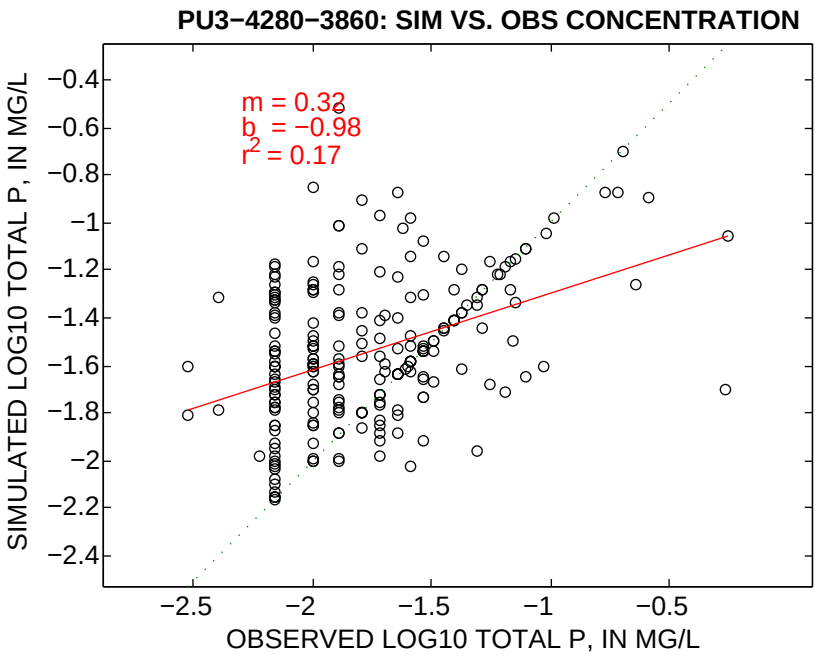
Drive	Directory	Observed
N/A	model	OBS20161101

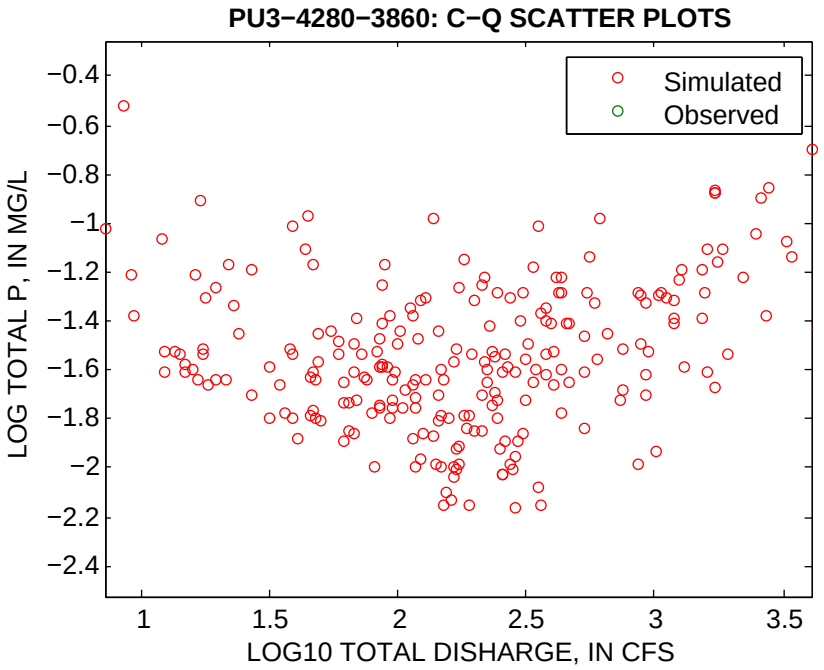
STATISTICS

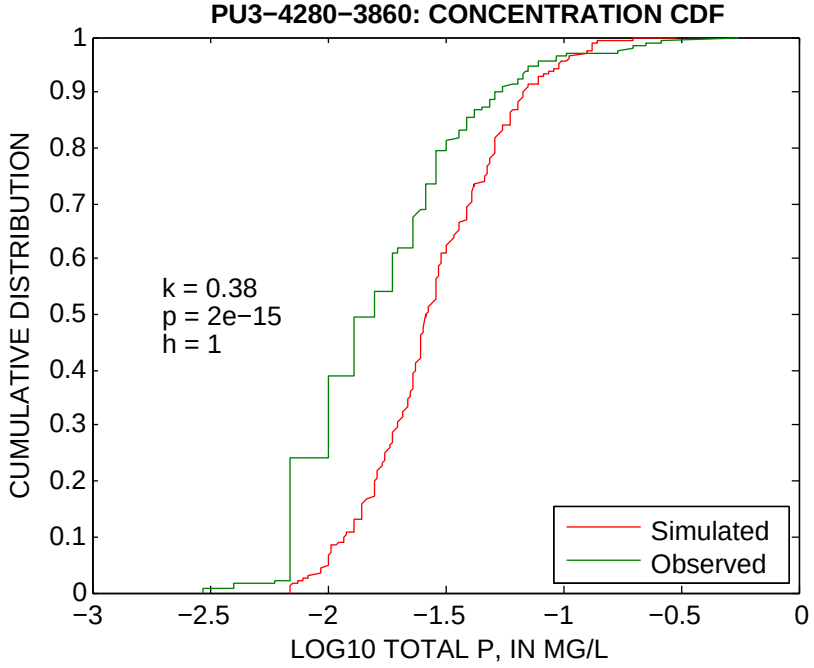
	n	240	240
		observe	simulate
min		0.003	0.0051888
		-2.52288	-2.28493
mean		0.0296458	0.047477
		-1.76092	-1.46605
media		0.016	0.0334705
		-1.79588	-1.47534
max		0.556	0.56367
		-0.254925	-0.248975
varian		0.00335218	0.00244489
		0.1446	0.120093
JB		0.001	0.001
		0.001	0.250542
		ra	log
%		60.1474	-16.7451
err.va		0.00577137	0.315612
rel.std.err		1.72167	2.18266
mod.eff		-0.721675	-1.18266

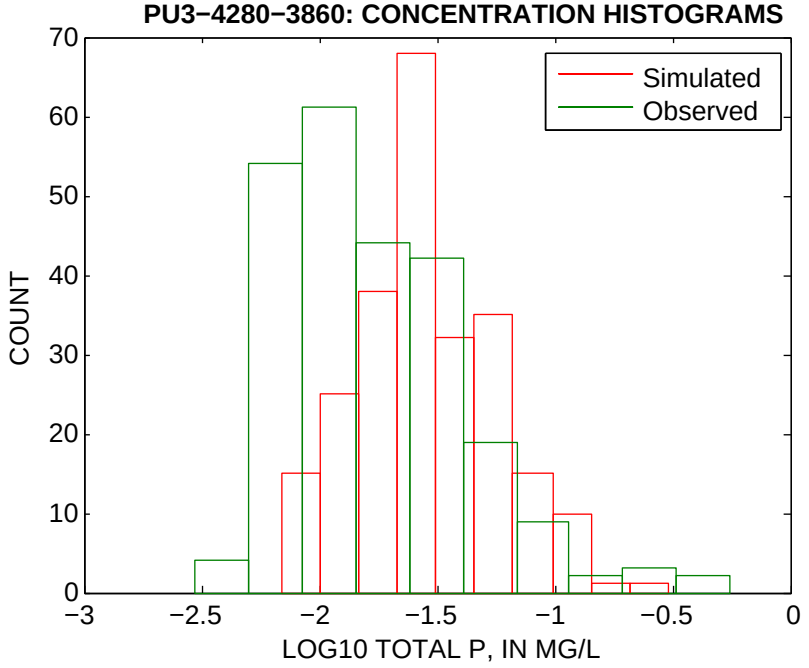
VERSION 2.1

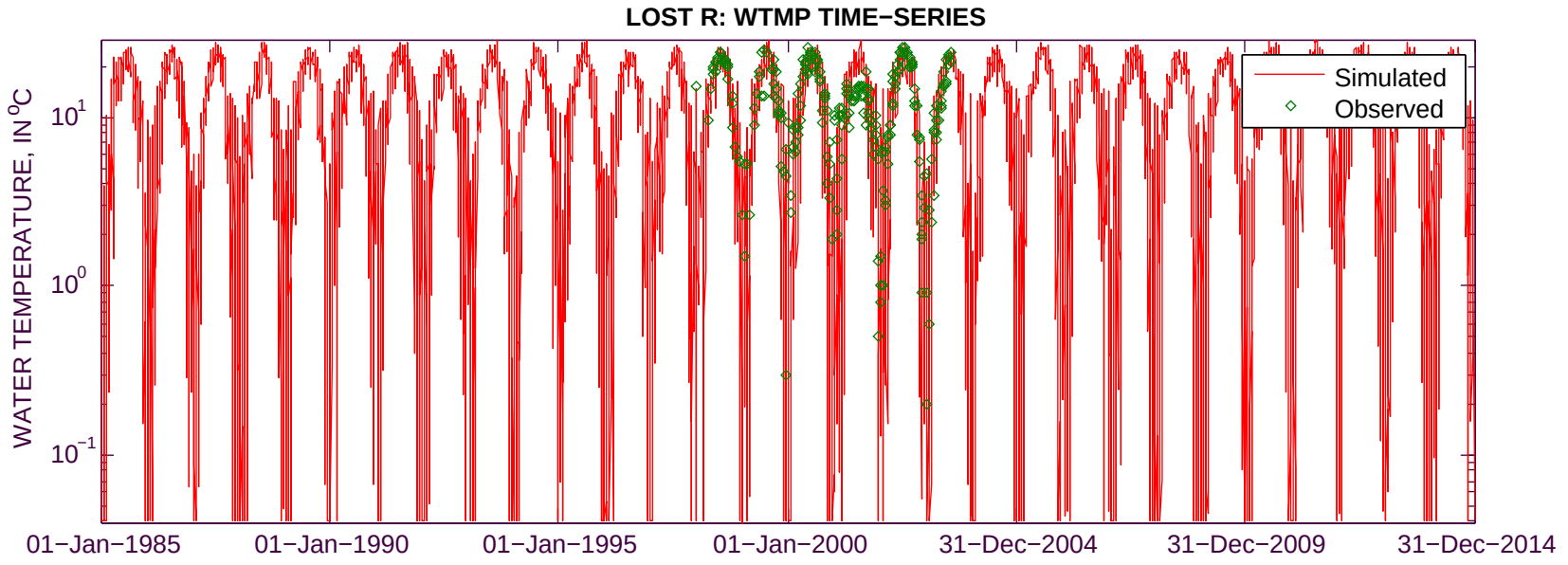
ALL DATA
LOG10

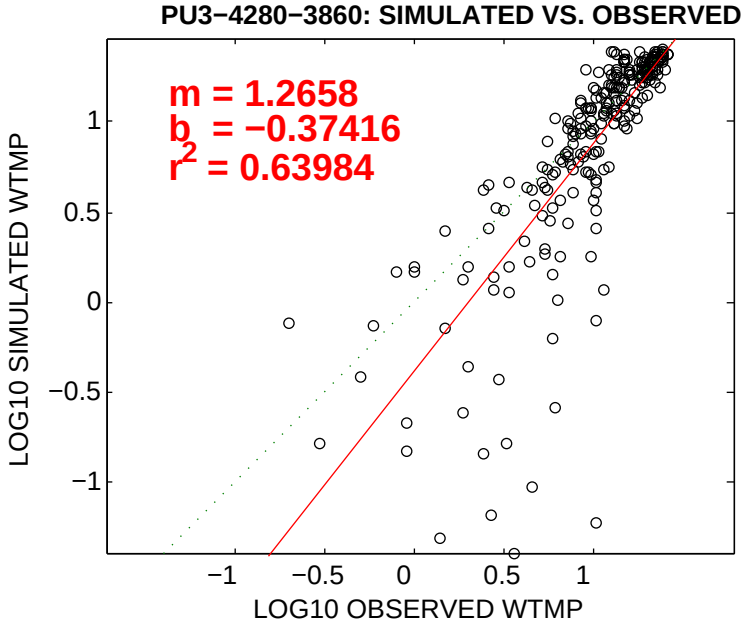


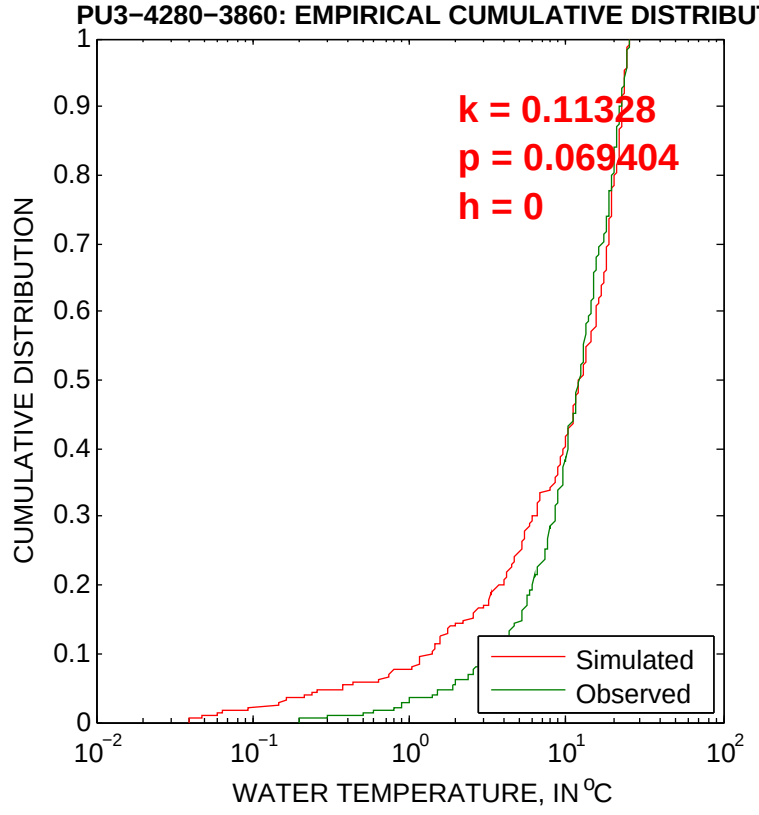












DATA SELECTION

scenario	file
P620171001WQ	WTMP.calib

plot: WTMP - water tempera...

Dates: 1/1/1985 – 12/31/201

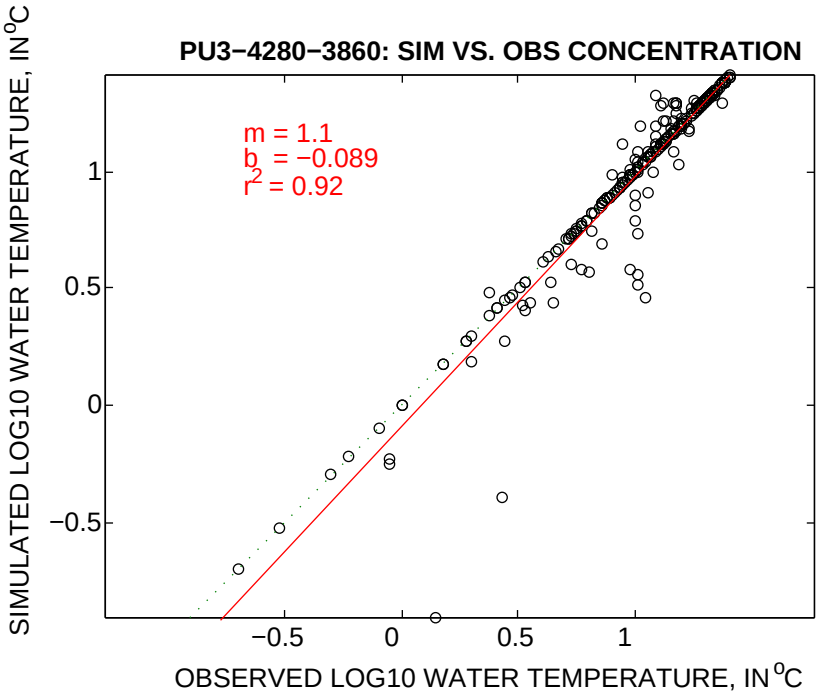
Drive	Directory	Observed
N/A	model	OBS20161101

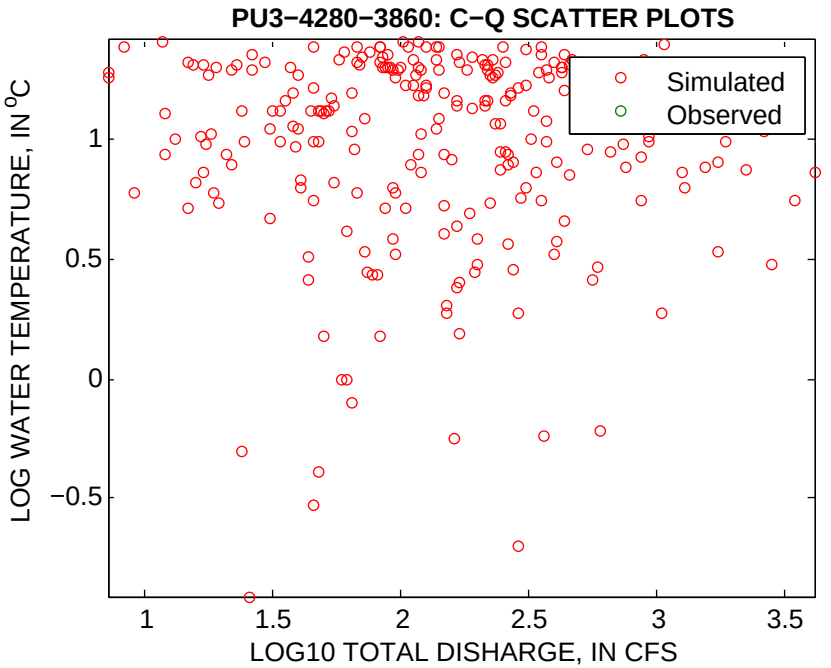
STATISTICS

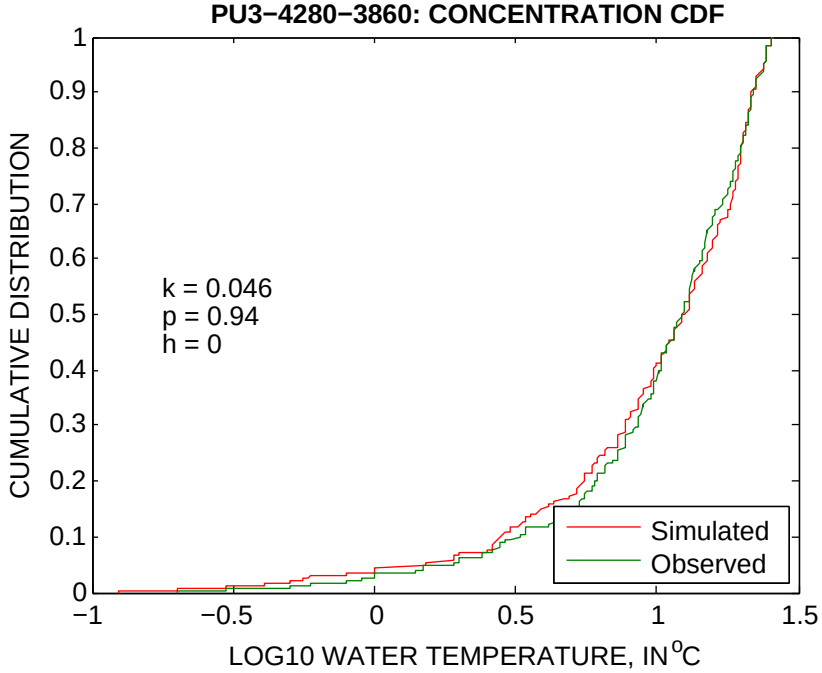
n	256	256
	observe	**simulate**
min	0.2	0.040085
	-0.69897	-1.39702
mean	12.6273	12.36
	0.997743	0.888766
media	12.3	12.2245
	1.08991	1.0872
max	25.7	25.286
	1.40993	1.40288
varian	46.699	62.3622
	0.13298	0.332991
JB	0.010598	0.002266
	0.001	0.001
	ra	log
%	-2.11712	-10.9223
err.va	13.0729	0.141245
rel.std.err	0.279939	1.06215
mod.eff	0.720061	-0.0621527

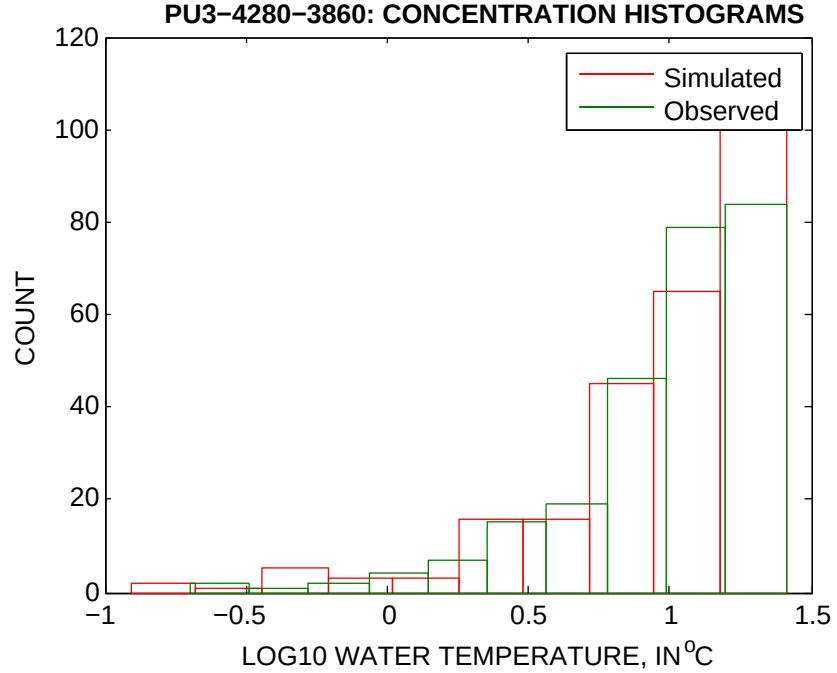
VERSION 2.1

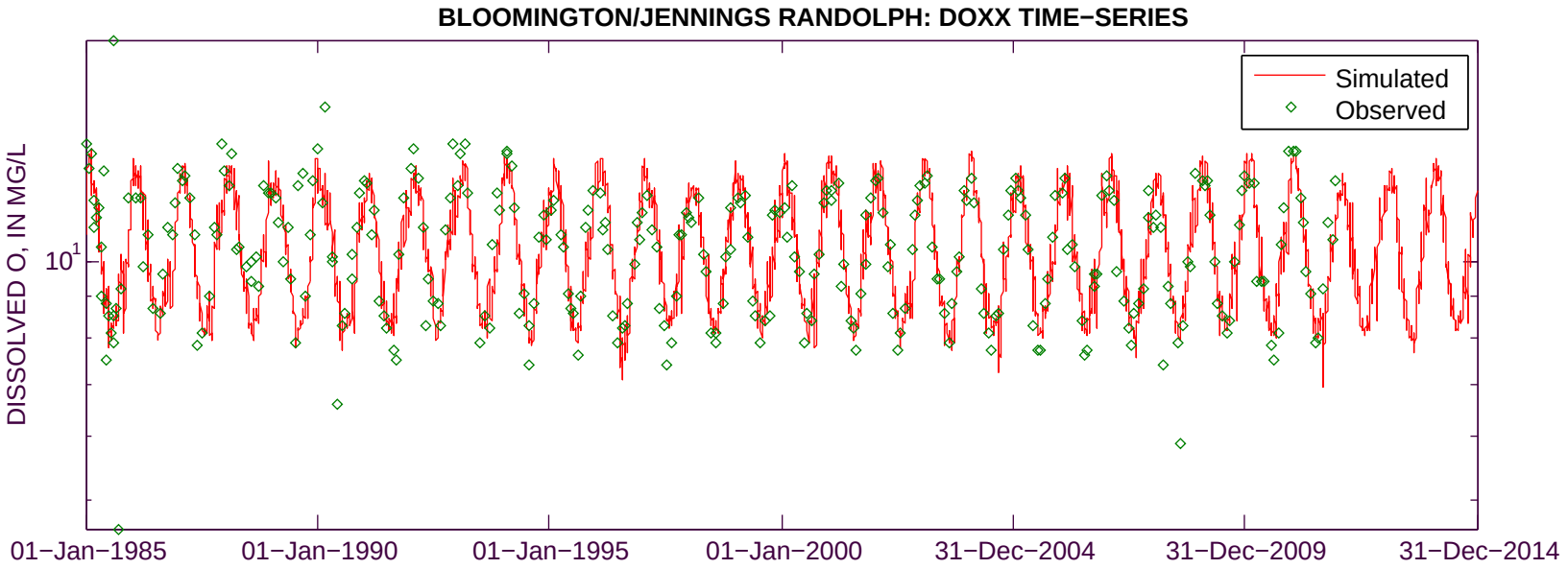
ALL DATA
LOG10

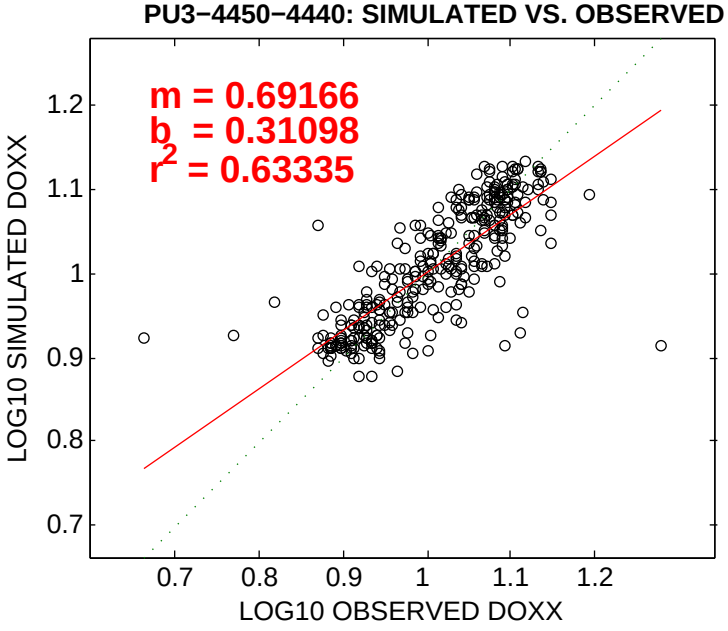


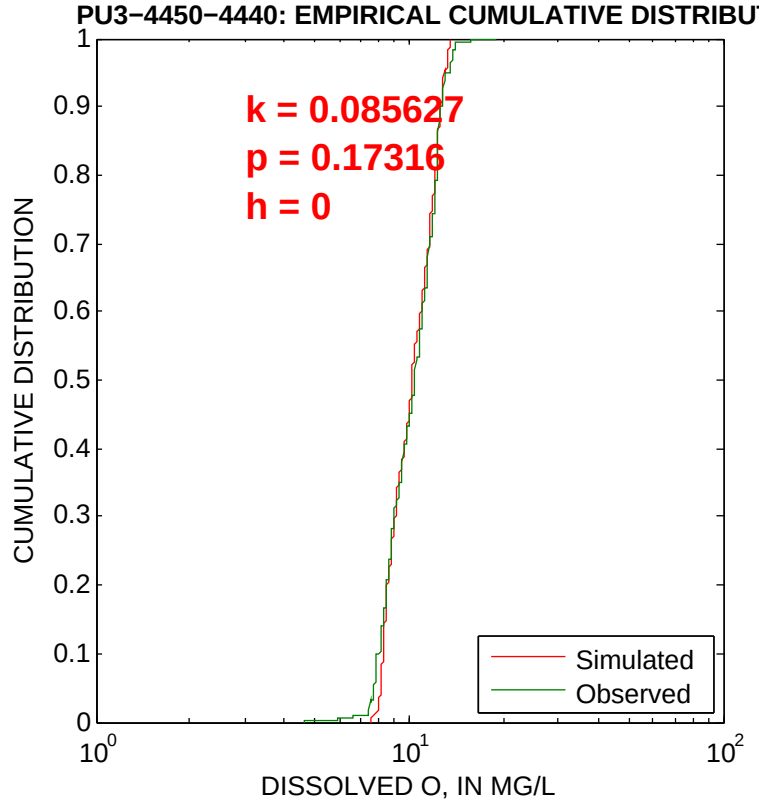












DATA SELECTION

scenario	file
P620171001WQ	DOXX.calib

plot: DOXX - dissolved oxygen

Dates: 1/1/1985 – 12/31/201

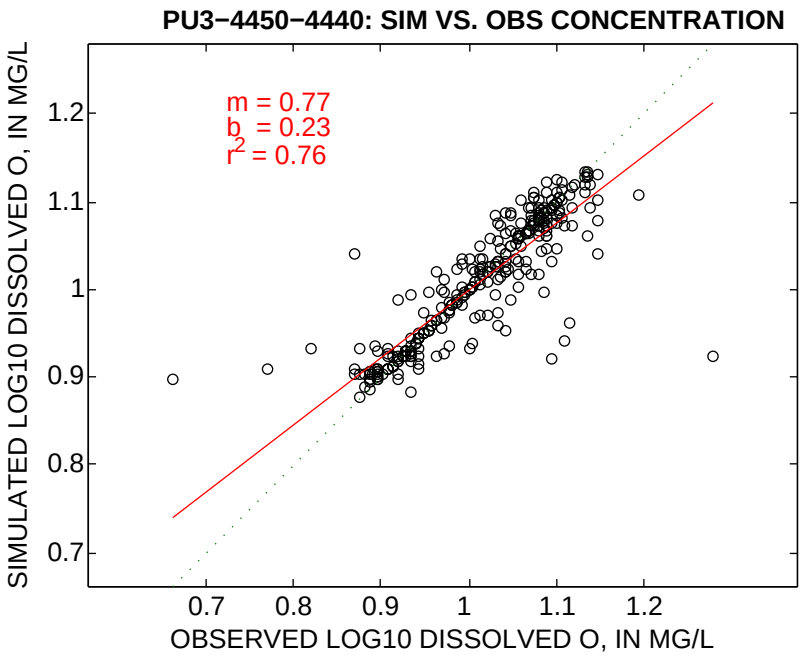
Drive	Directory	Observed
N/A	model	OBS20161101

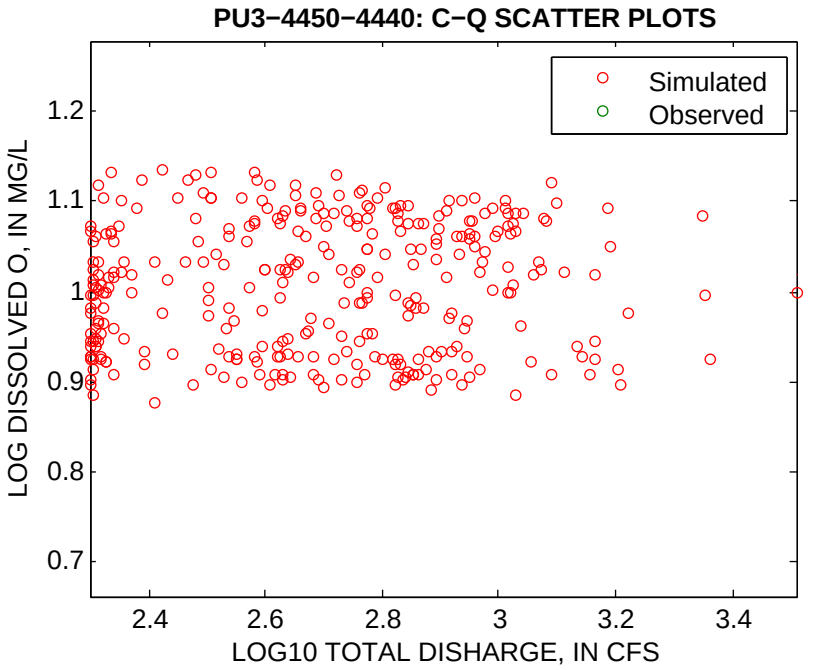
STATISTICS

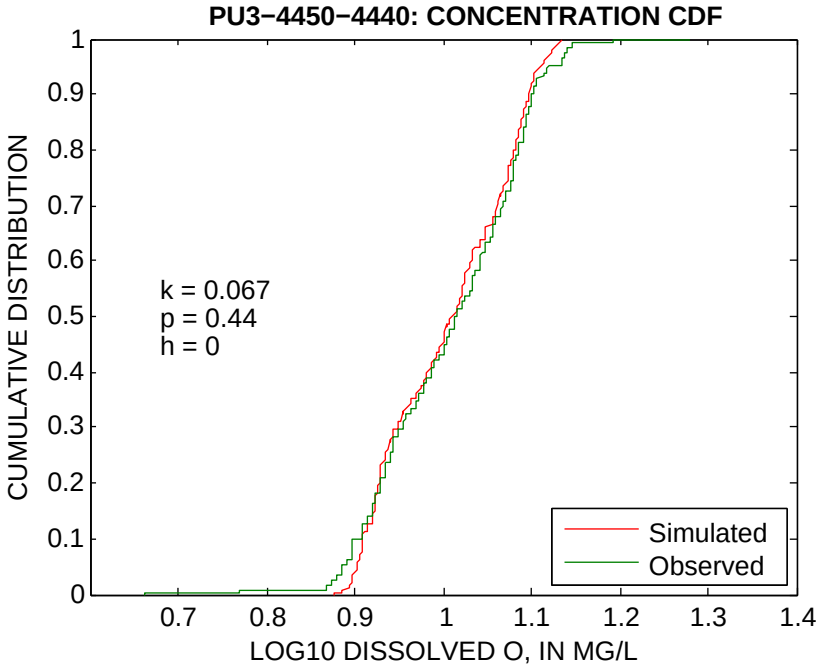
	n	327	327
		observe	simulate
min		4.6	7.5383
		0.662758	0.877273
mean		10.3919	10.3452
		1.00935	1.00911
media		10.4	10.203
		1.01703	1.00873
max		19	13.593
		1.27875	1.13332
varian		3.60282	2.77275
		0.00650655	0.00491467
JB		☑ 0.070684	0.001132
		☑ 0.089110	0.001117
		ra	log
%		-0.449237	-0.0235841
err.va		1.4118	0.00242058
rel.std.err		0.39186	0.372023
mod.eff		0.60814	0.627977

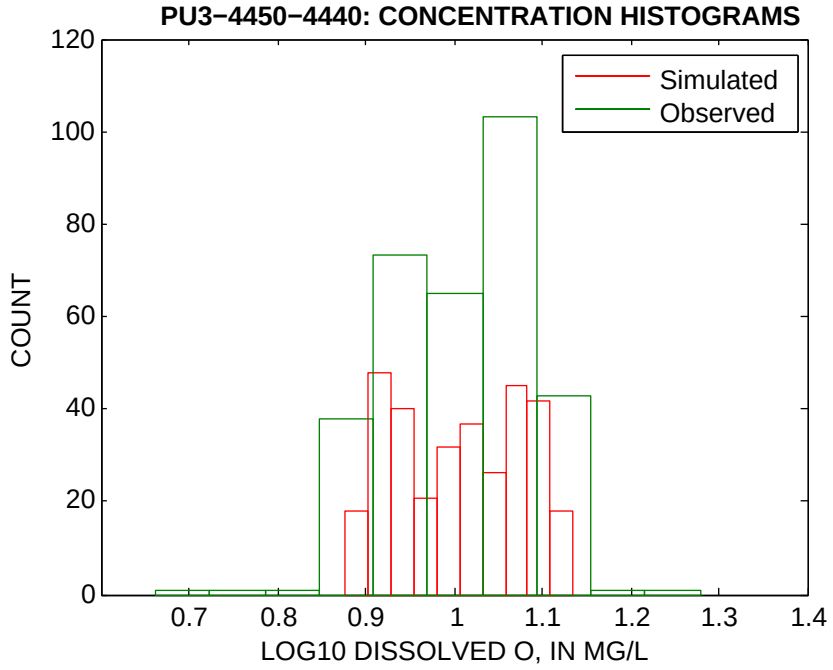
VERSION 2.1

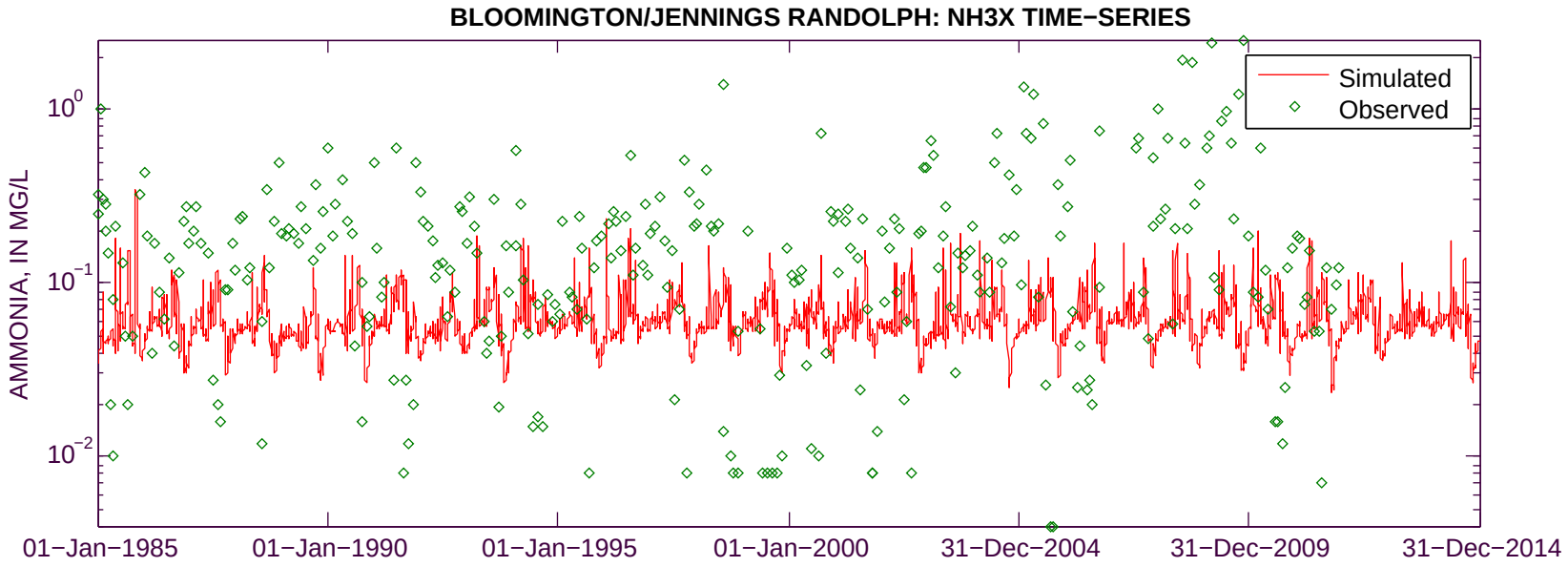
ALL DATA
LOG10

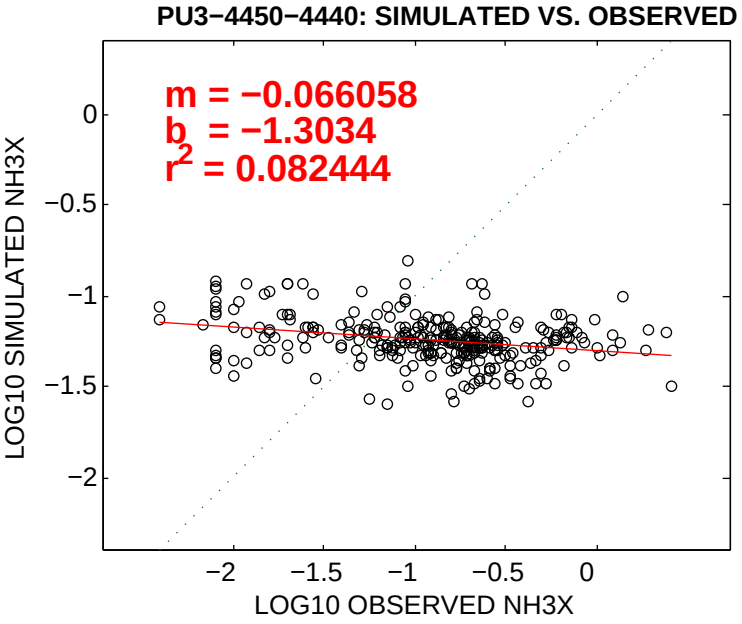


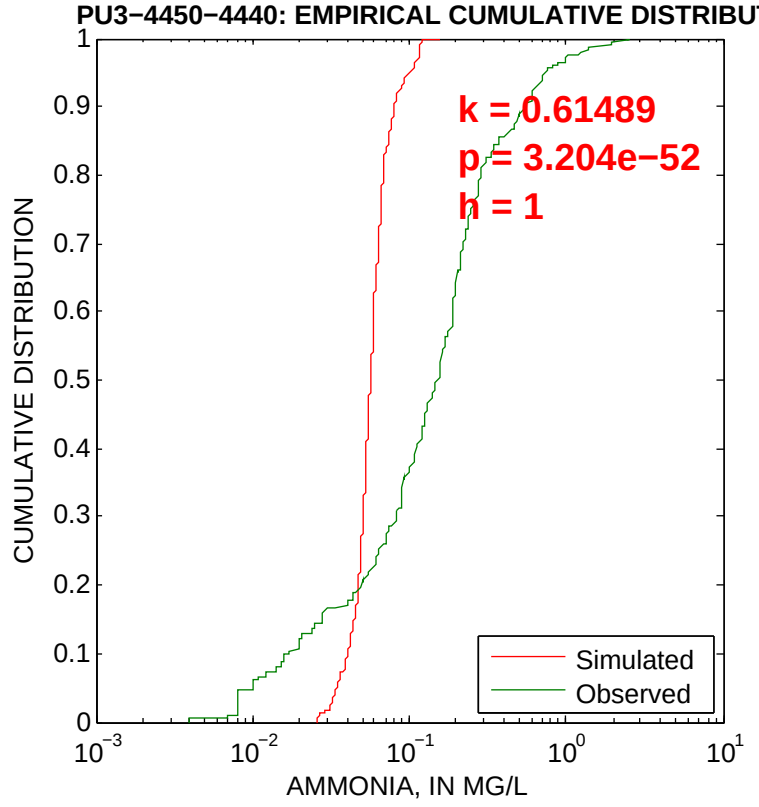












DATA SELECTION

scenario	file
P620171001WQ	NH3X.calib

plot: NH3X - ammonia

Dates: 1/1/1985 – 12/31/201

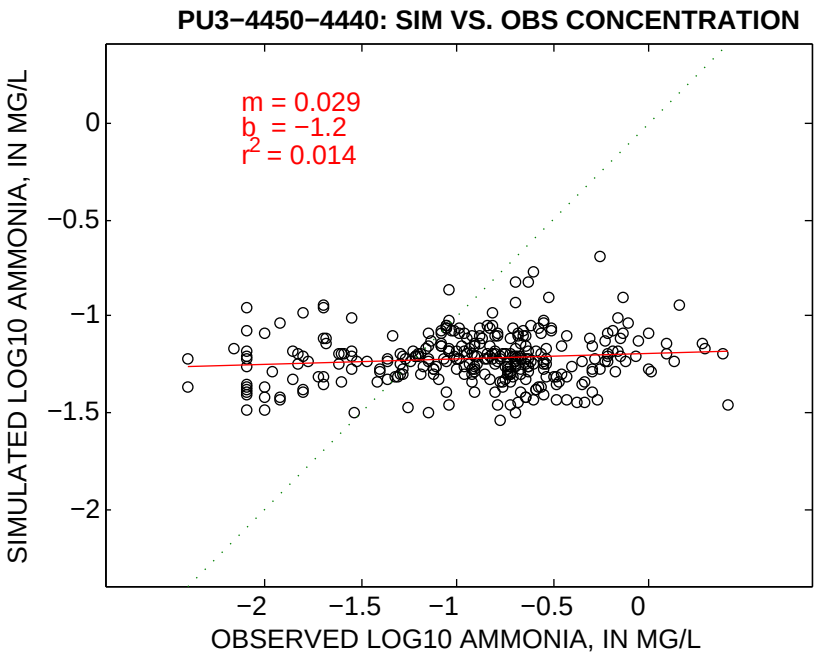
Drive	Directory	Observed
N/A	model	OBS20161101

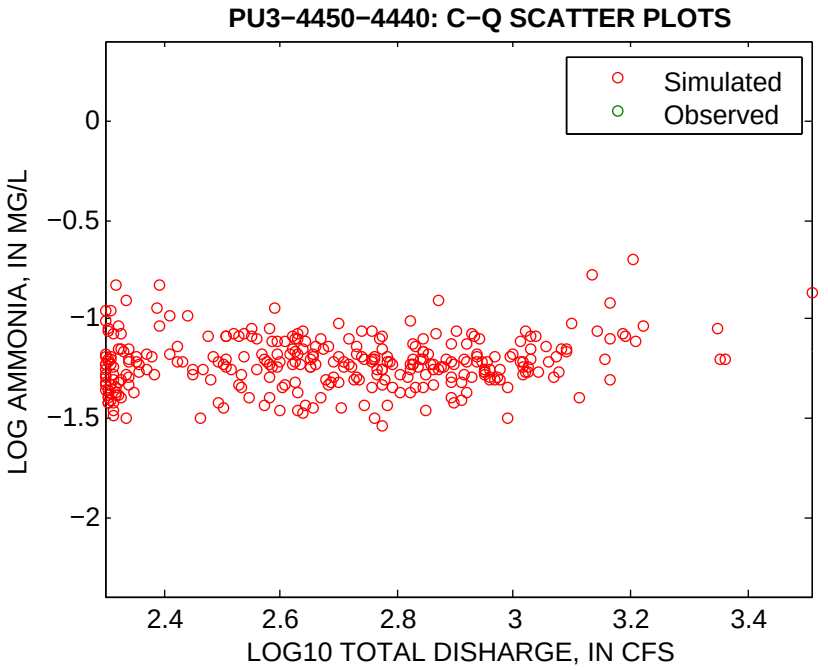
STATISTICS

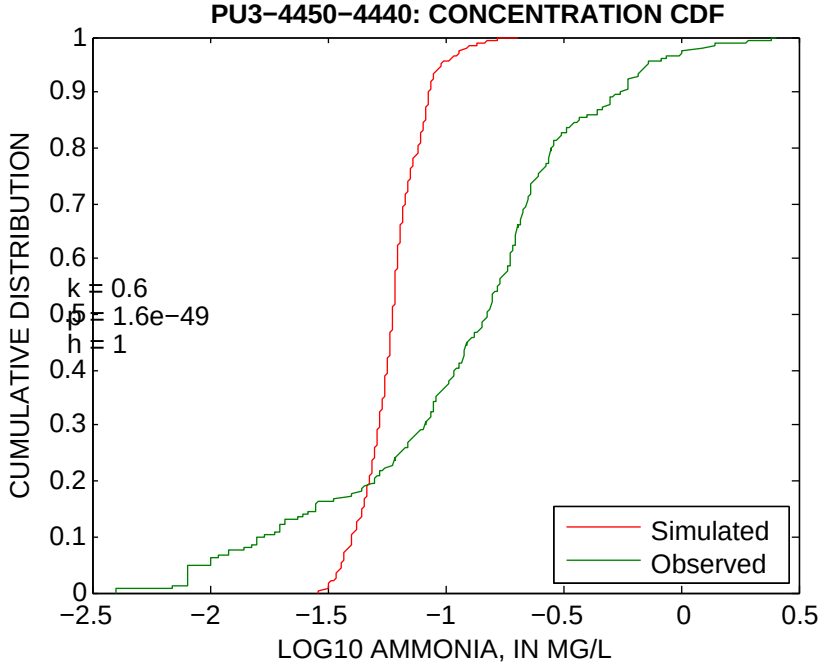
	n	observe	simulate
		309	309
min		0.004	0.025721
		-2.39794	-1.58971
mean		0.233816	0.0596589
		-0.917908	-1.24281
media		0.153	0.056559
		-0.815309	-1.2475
max		2.553	0.15549
		0.407051	-0.808298
varian		0.103406	0.00034363
		0.295674	0.0156494
JB		0.001	0.001
		0.009303	0.004796
		ra	log
%		-74.4846	35.3963
err.va		0.135608	0.456293
rel.std.err		1.31142	1.54323
mod.eff		-0.311424	-0.543229

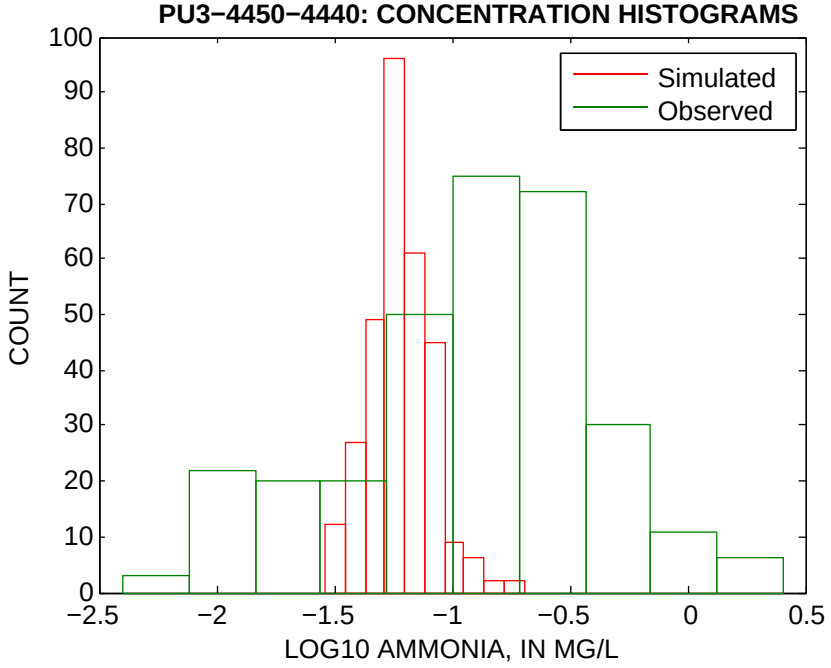
VERSION 2.1

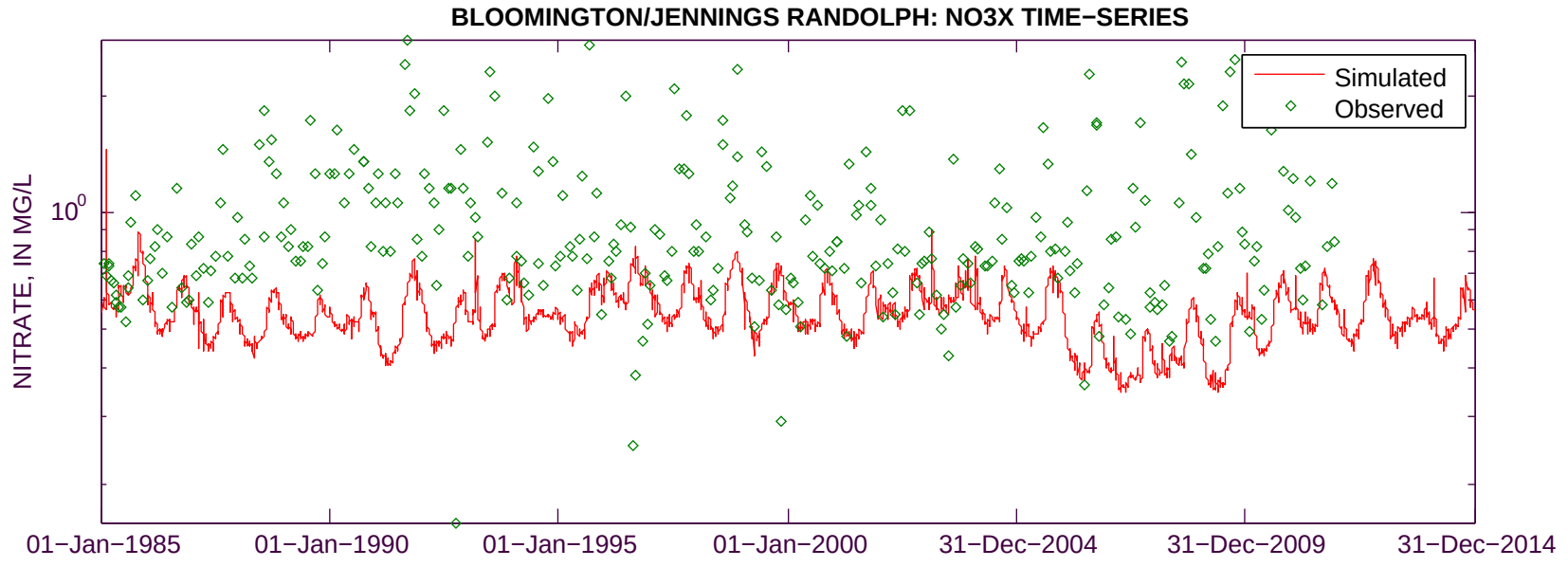
ALL DATA
LOG10

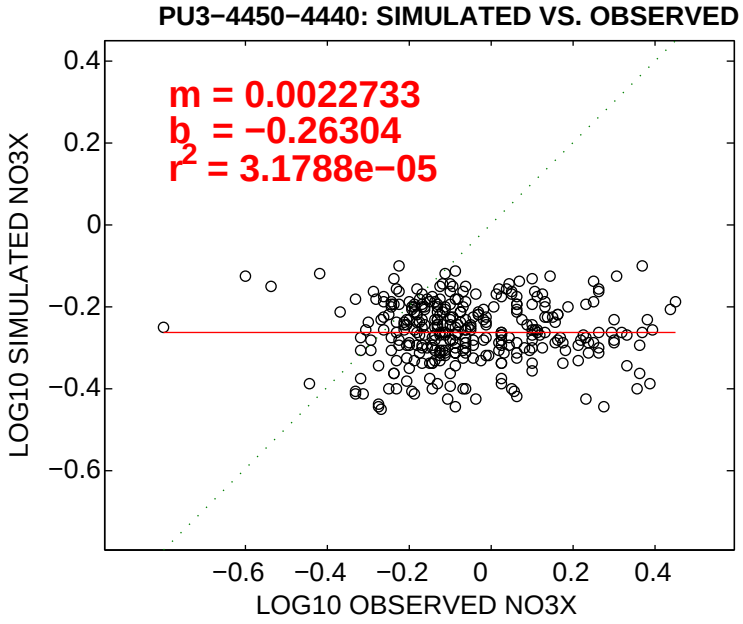


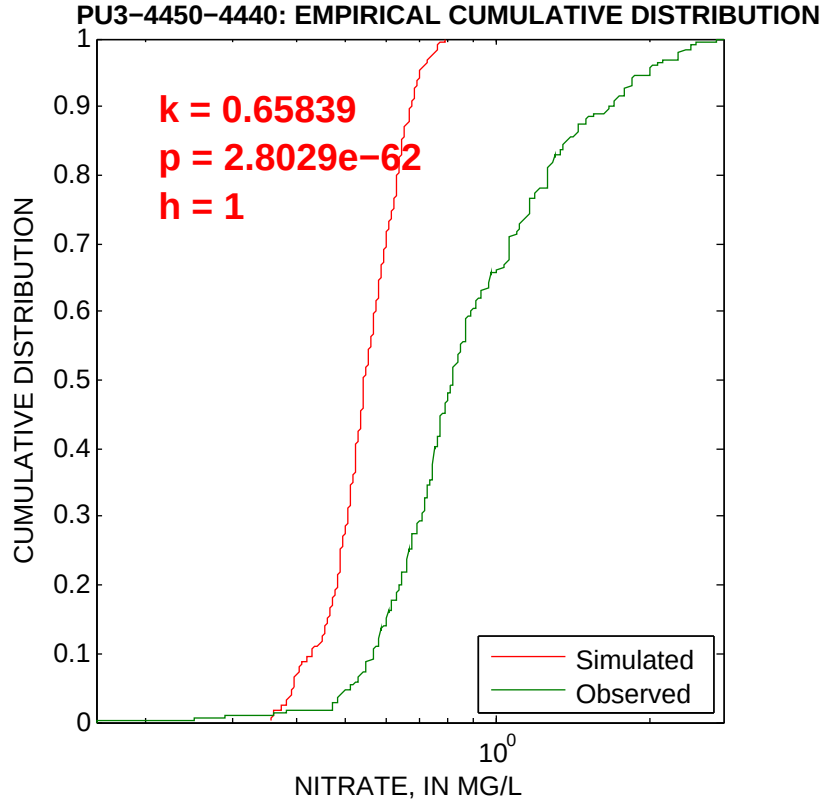












DATA SELECTION

scenario	file
P620171001WQ	NO3X.calib

plot: NO3X - nitrate

Dates: 1/1/1985 – 12/31/201

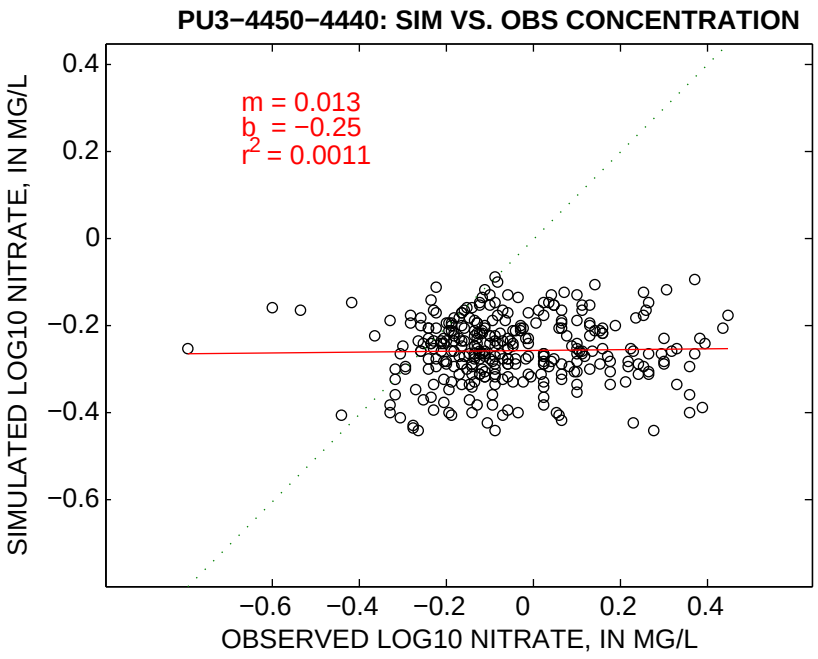
Drive	Directory	Observed
N/A	model	OBS20161101

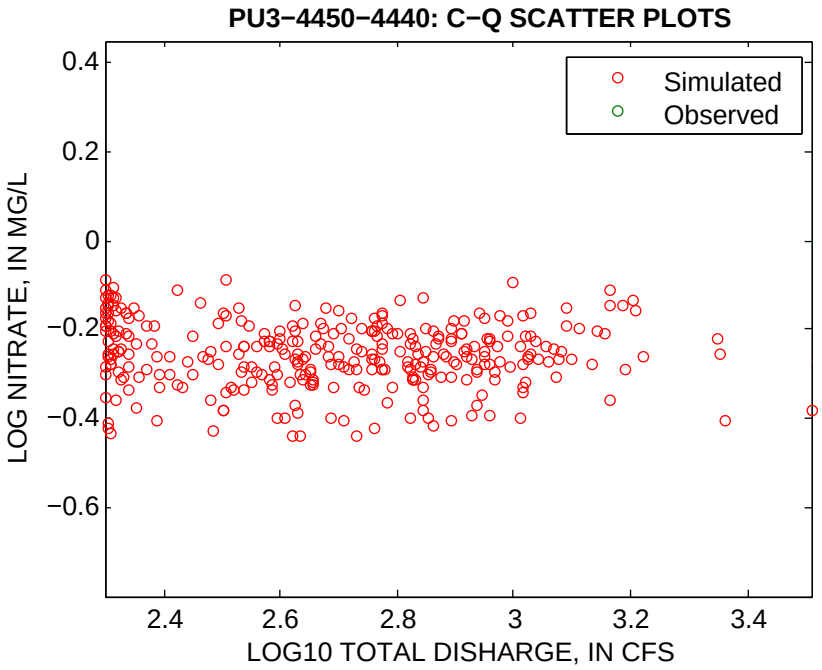
STATISTICS

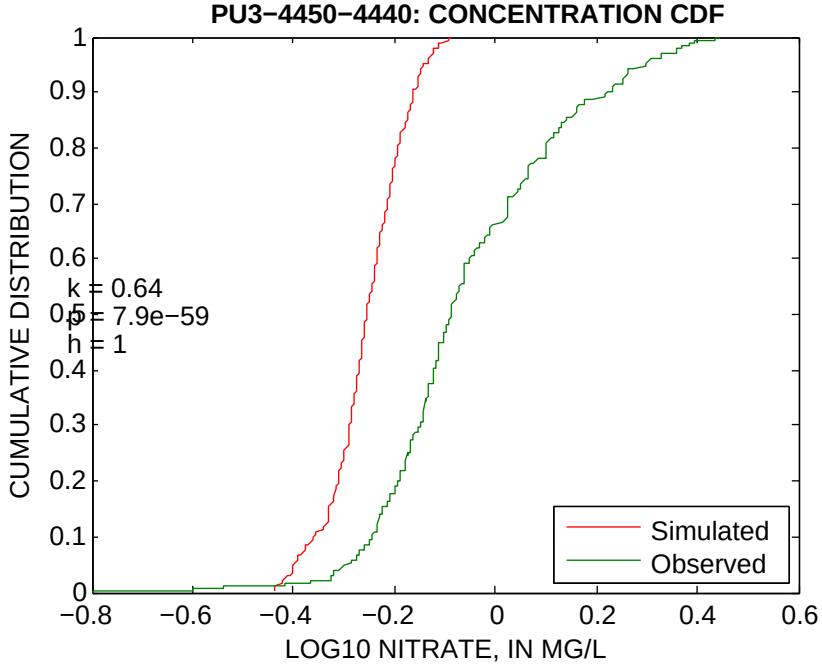
	n	322	322
		observe	simulate
min		0.16	0.35205
		-0.79588	-0.453396
mean		0.973211	0.553309
		-0.0519648	-0.263156
media		0.82	0.543675
		-0.0861861	-0.264661
max		2.8	0.79226
		0.447158	-0.101132
varian		0.208985	0.00842493
		0.0334673	0.00544085
JB		0.001	0.317973
		0.010169	0.037314
		ra	log
%		-43.146	406.413
err.va		0.393855	0.0834968
rel.std.err		1.88461	2.49488
mod.eff		-0.884606	-1.49488

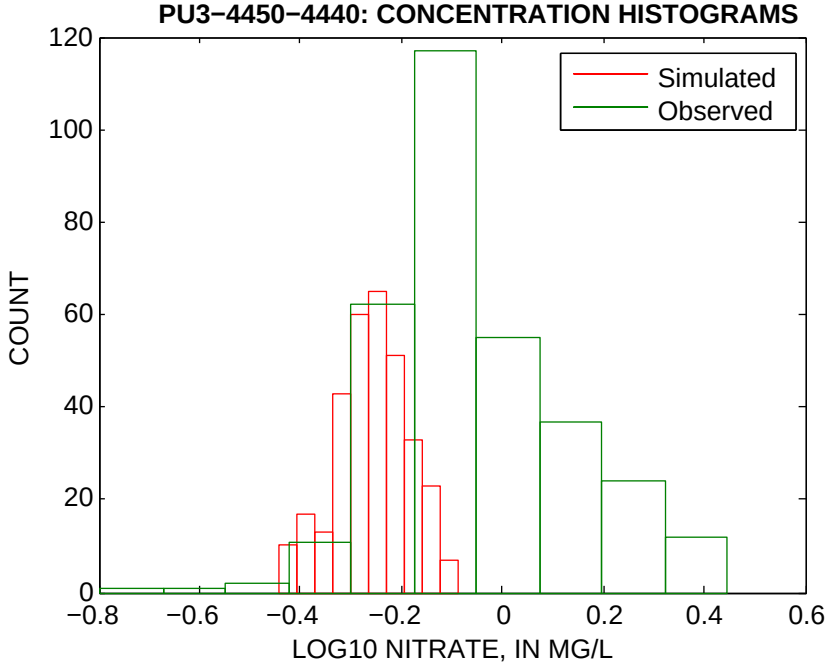
VERSION 2.1

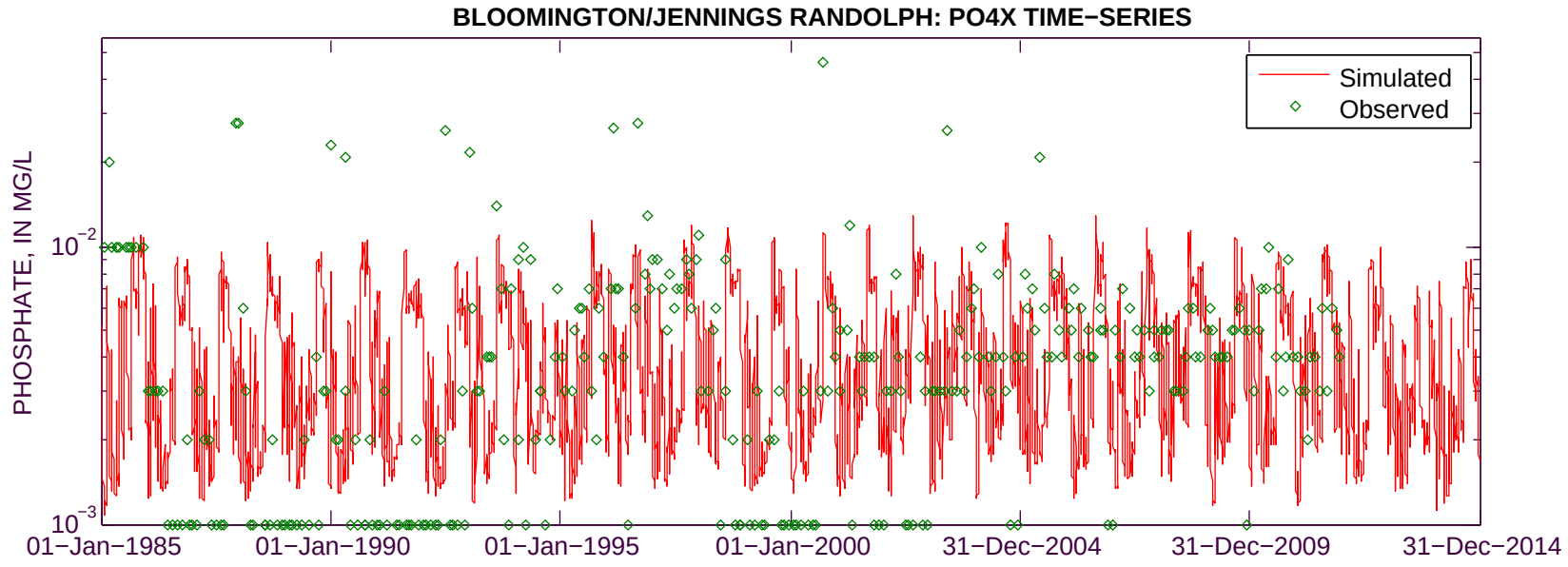
ALL DATA
LOG10

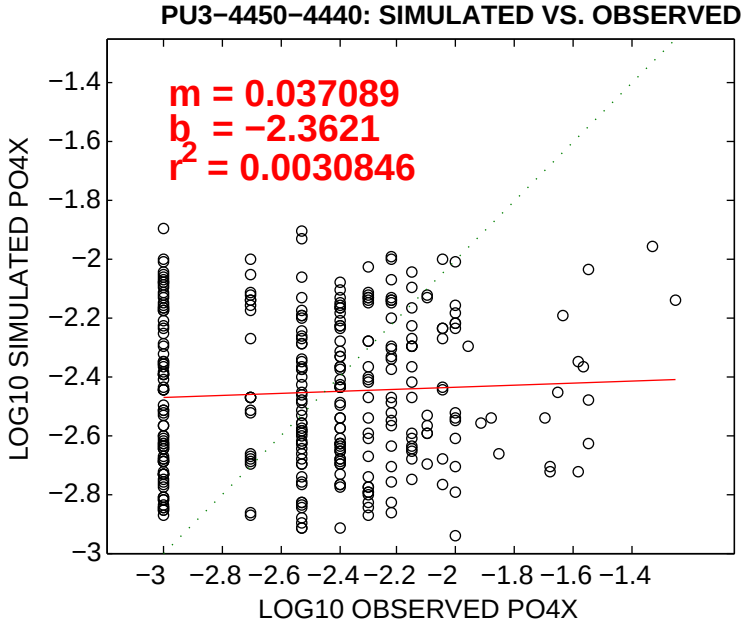


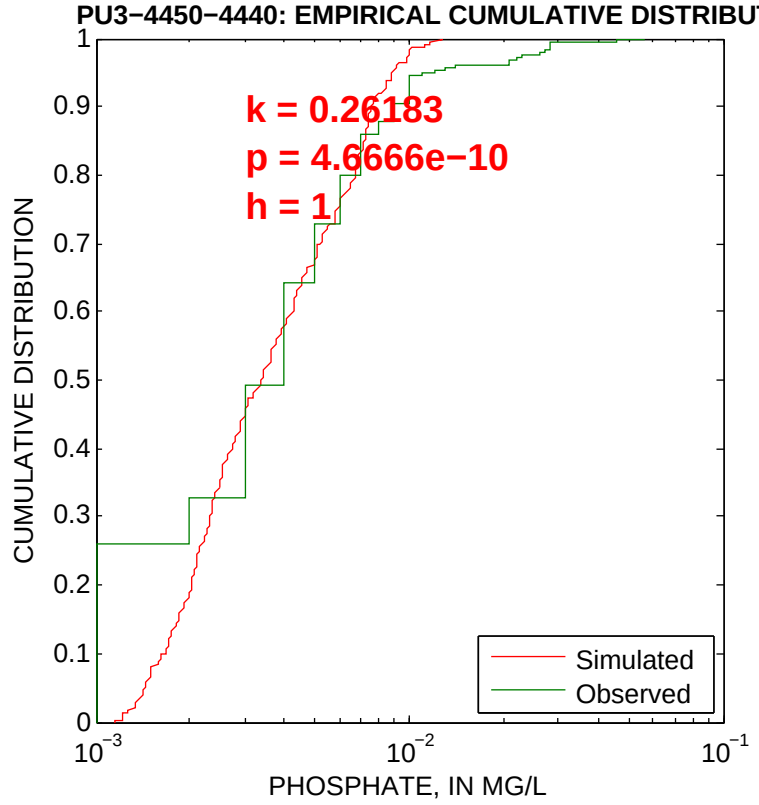












DATA SELECTION

scenario	file
P620171001WQ	PO4X.calib

plot: PO4X - phosphate

Dates: 1/1/1985 – 12/31/201

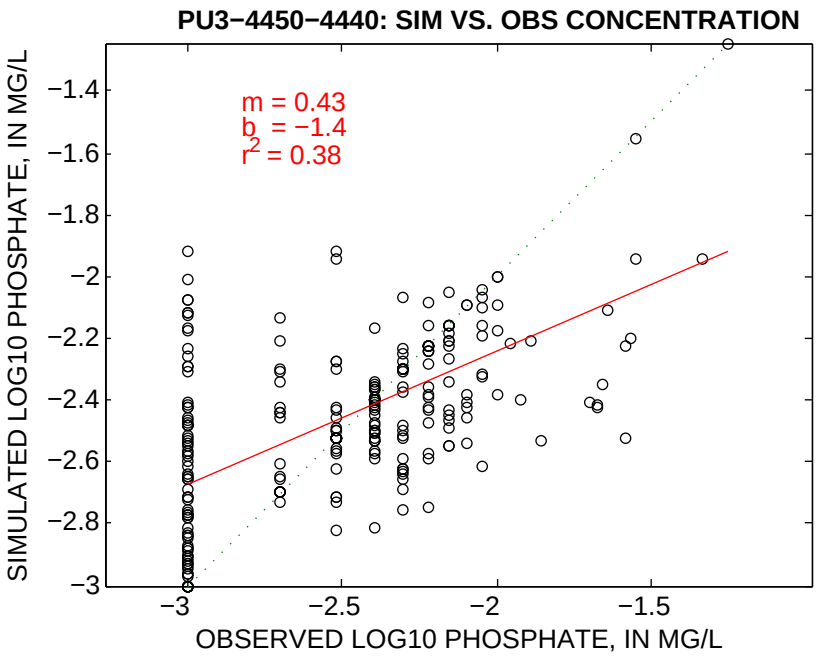
Drive	Directory	Observed
N/A	model	OBS20161101

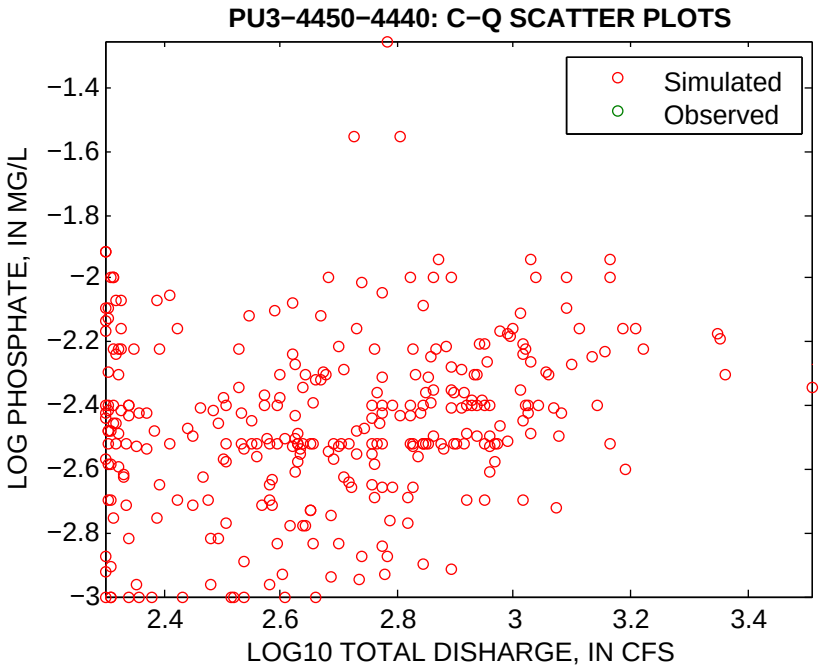
STATISTICS

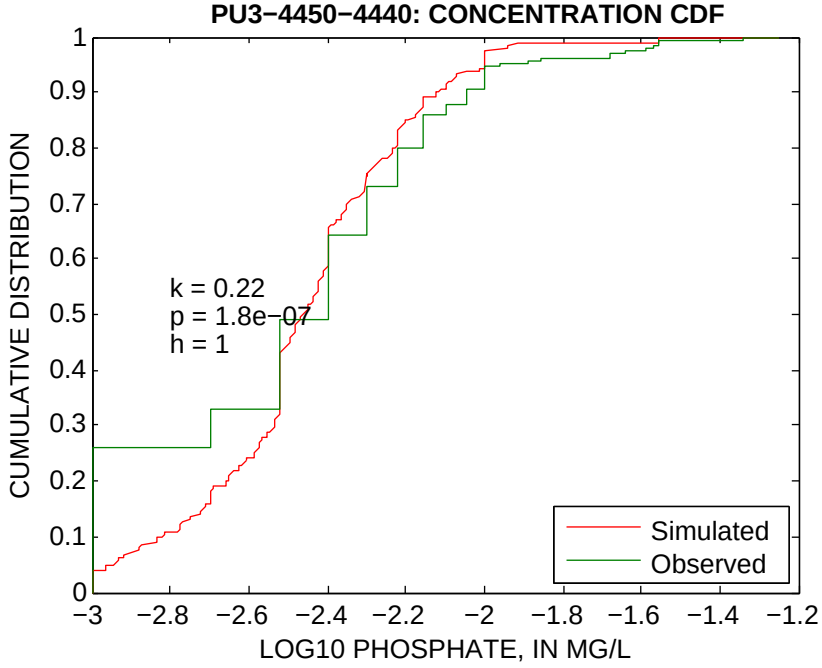
n	317	317
	observe	**simulate**
min	0.001 -3	0.0011485 -2.93987
mean	0.0048959 -2.48892	0.00416678 -2.45444
media	0.004 -2.39794	0.0033934 -2.46936
max	0.056 -1.25181	0.01284 -1.89143
varian	3.5429e-05 0.145923	6.15007e-0 0.0650749
JB	0.001 0.107399	0.001 0.003427
	ra	log
%	-14.8924	-1.38546
err.va	3.93041e-0	0.201367
rel.std.err	1.10938	1.37995
mod.eff	-0.109376	-0.379949

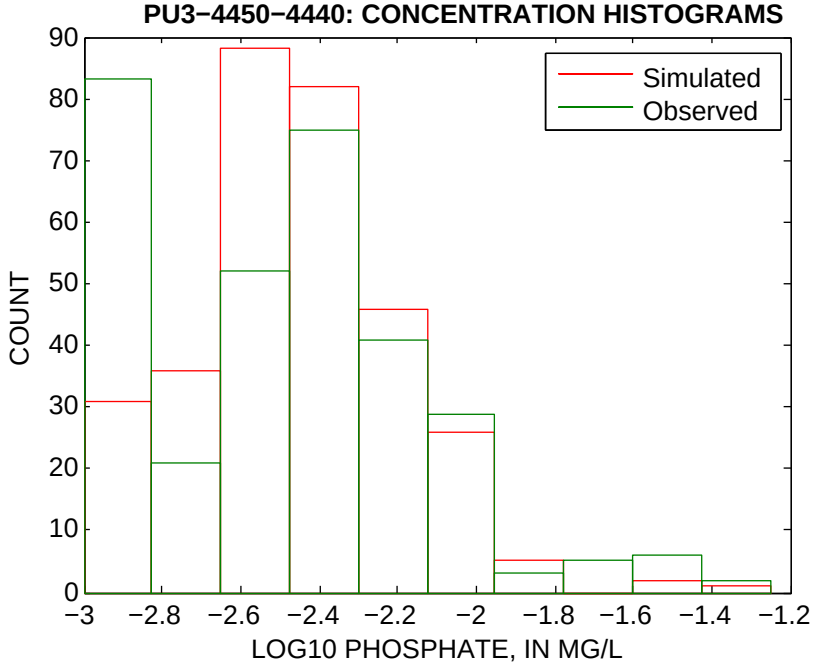
VERSION 2.1

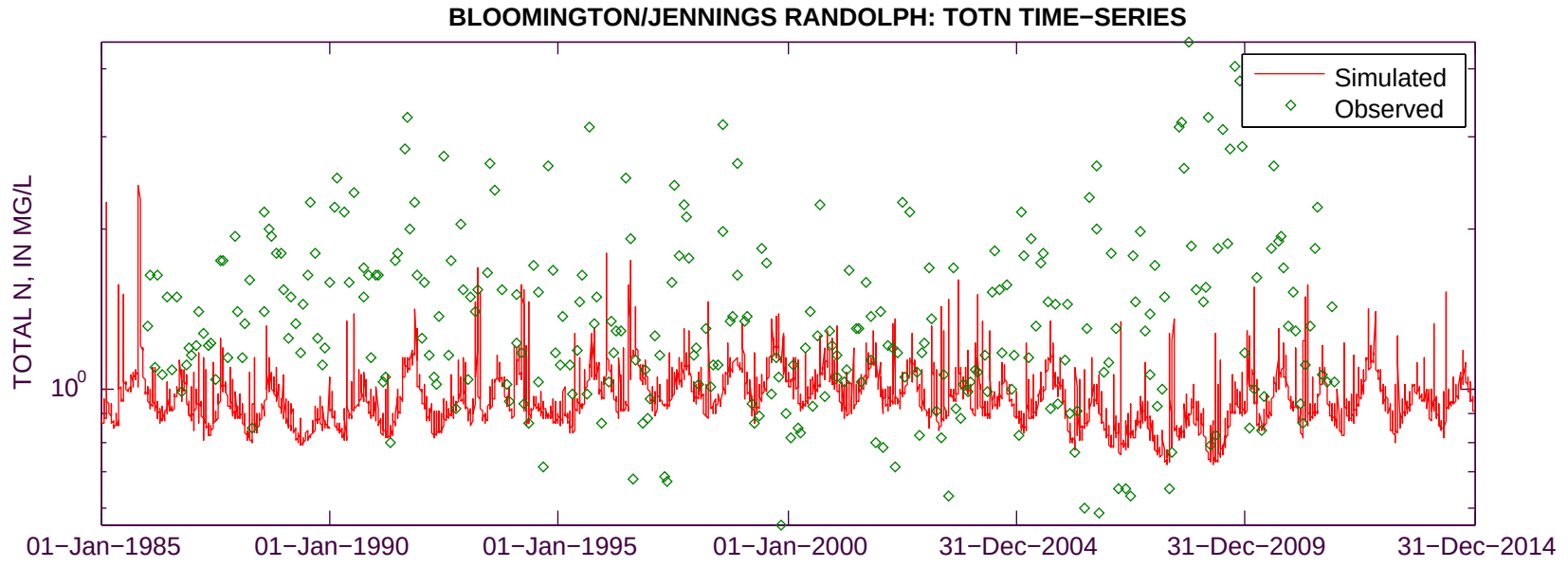
ALL DATA
LOG10

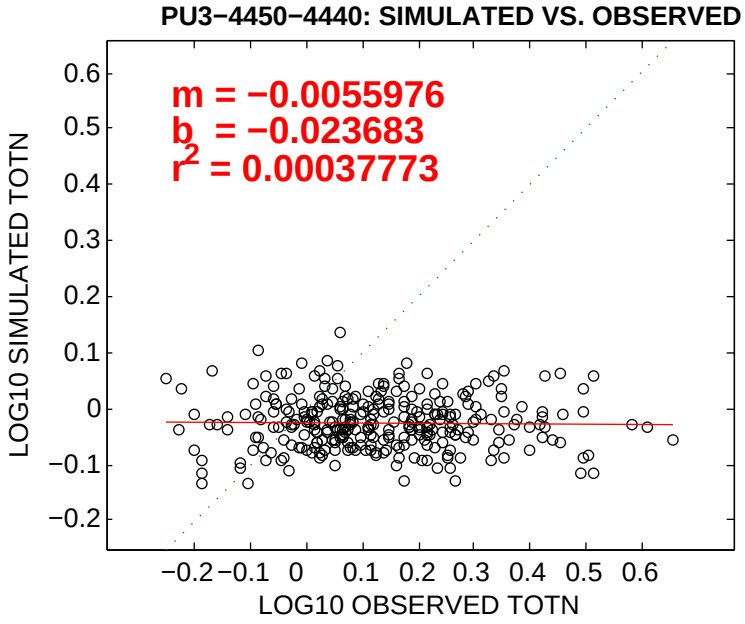


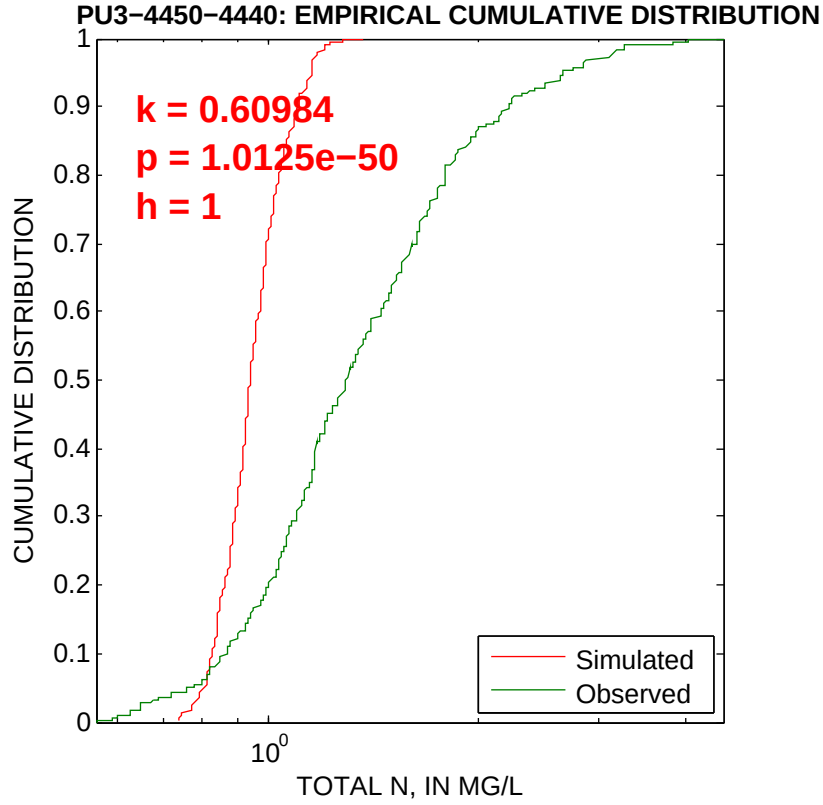












DATA SELECTION

scenario: P620171001WQ | file: TOTN.calib

plot: TOTN - total nitrogen

Dates: 1/1/1985 – 12/31/201

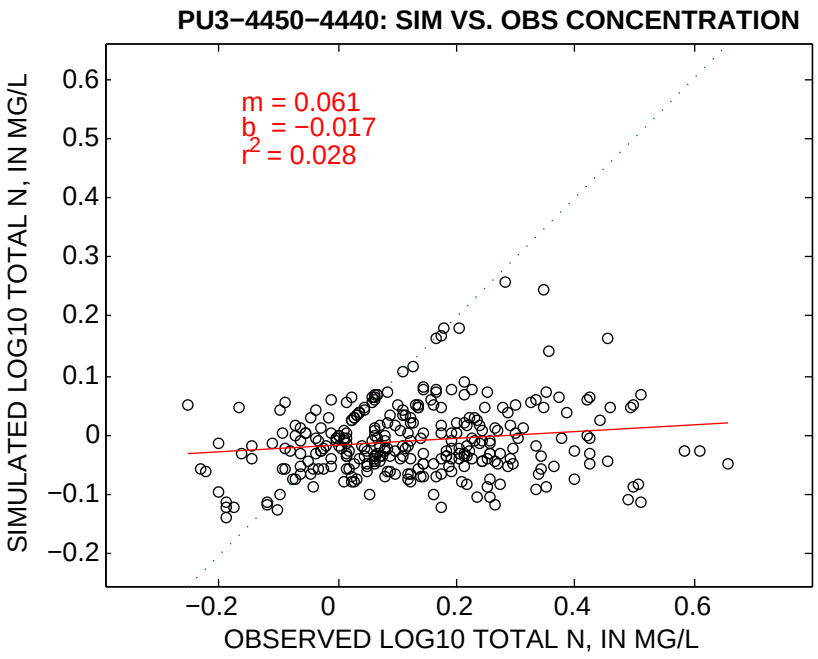
Drive Directory: N/A | model | Observed: OBS20161101

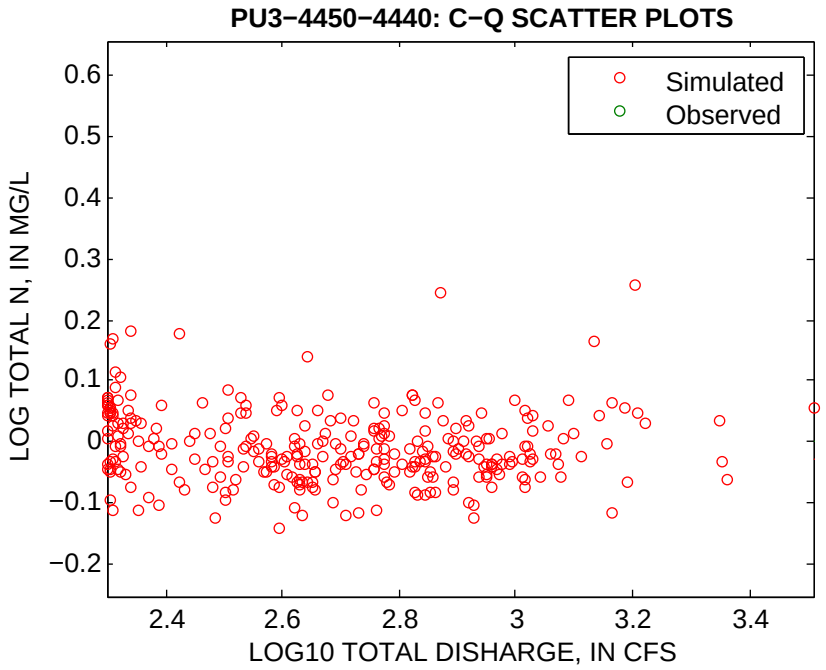
STATISTICS

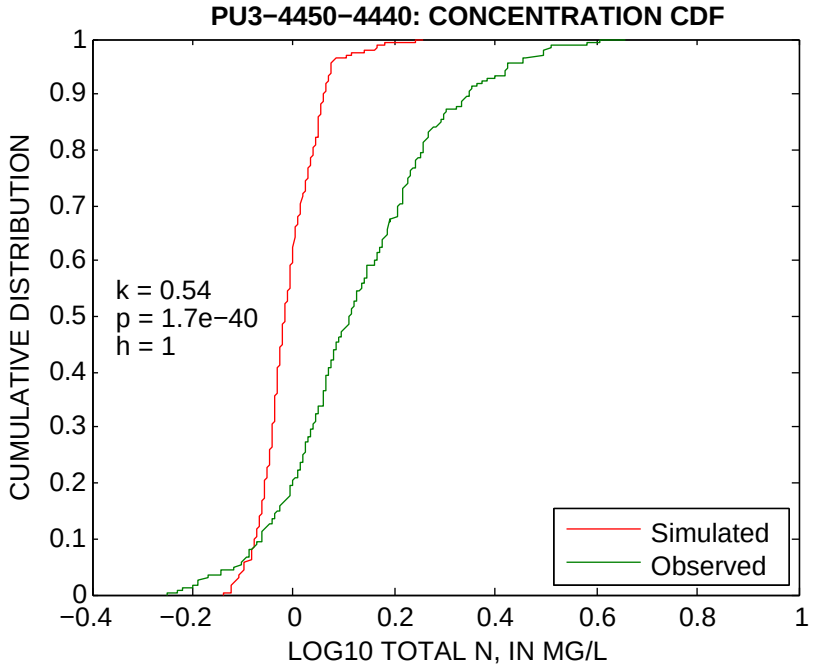
n	305	305
	observe	simulate
min	0.56	0.73223
	-0.251812	-0.135352
mean	1.44841	0.950899
	0.129009	-0.024405
media	1.3	0.93878
	0.113943	-0.0274362
max	4.53	1.3698
	0.656098	0.136657
varian	0.366923	0.0108832
	0.0264142	0.00219107
JB	0.001	0.001796
	0.019120	0.108078
	ra	log
%	-34.3486	-118.917
err.va	0.630467	0.0525144
rel.std.err	1.71826	1.98811
mod.eff	-0.718258	-0.988113

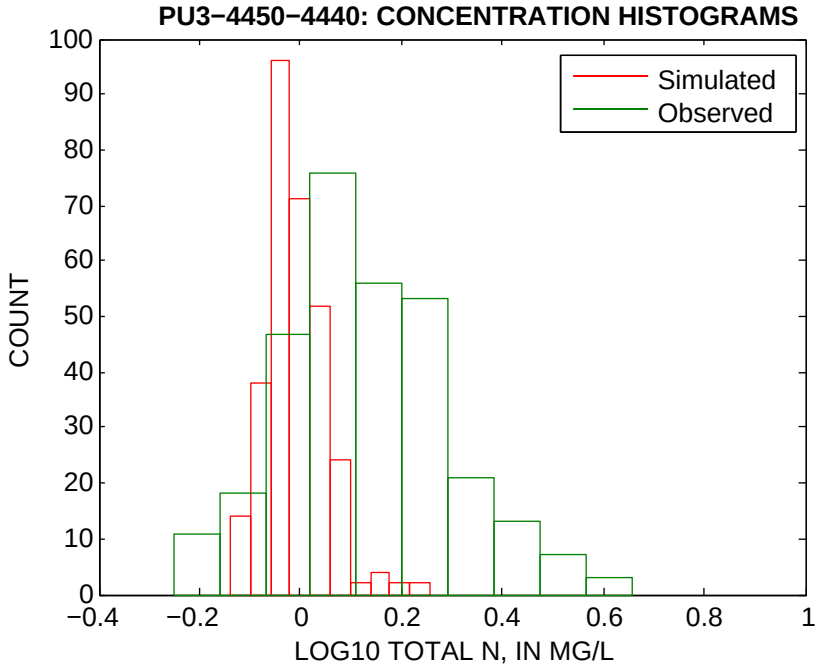
VERSION 2.1

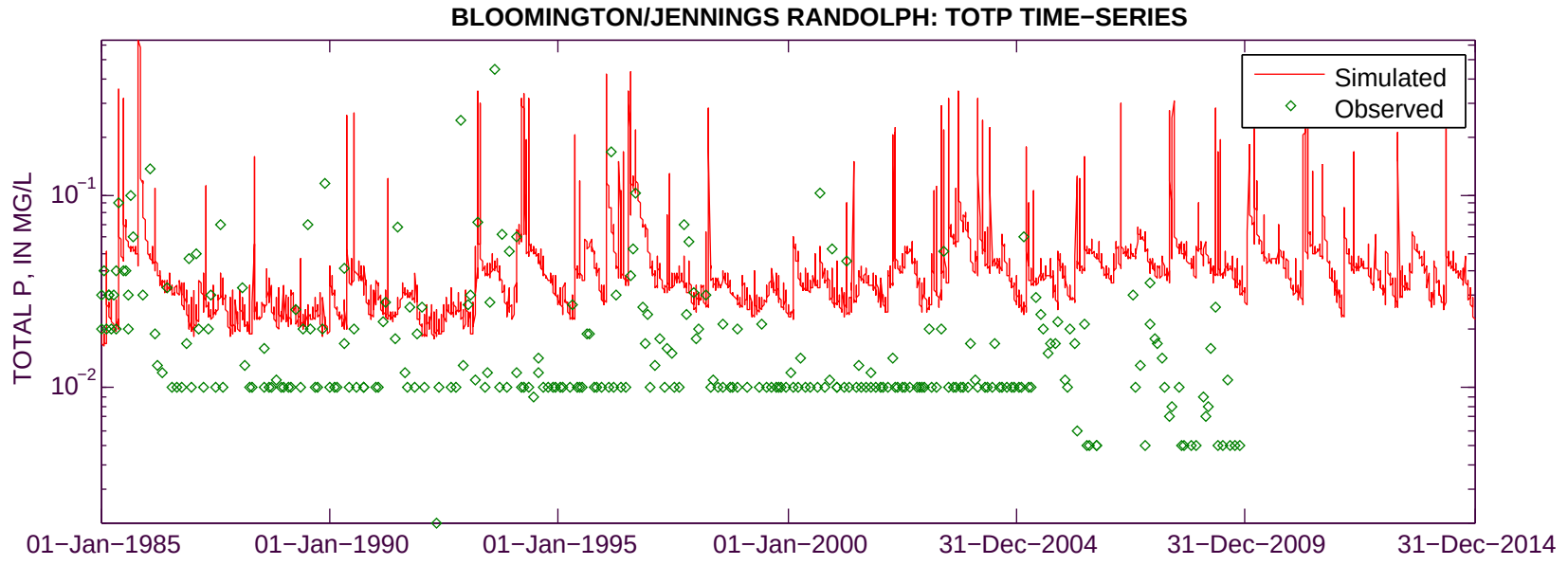
ALL DATA
LOG10

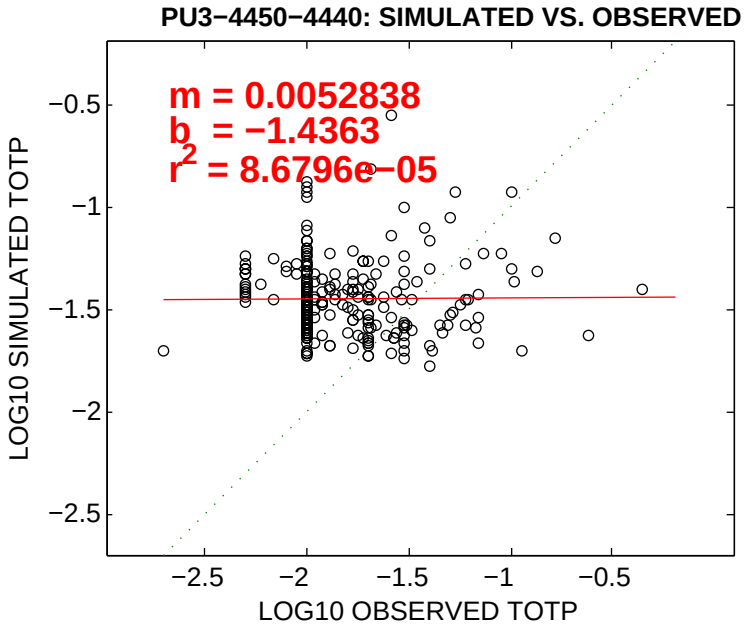


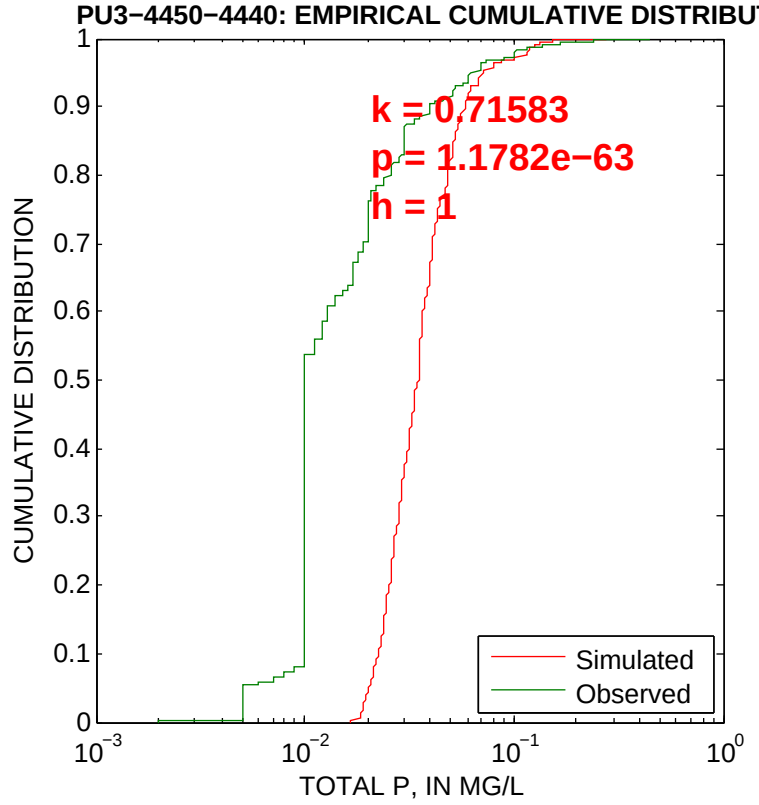












DATA SELECTION

scenario	file
P620171001WQ	TOTP.calib

plot: TOTP - total phosphorus

Dates: 1/1/1985 — 12/31/201

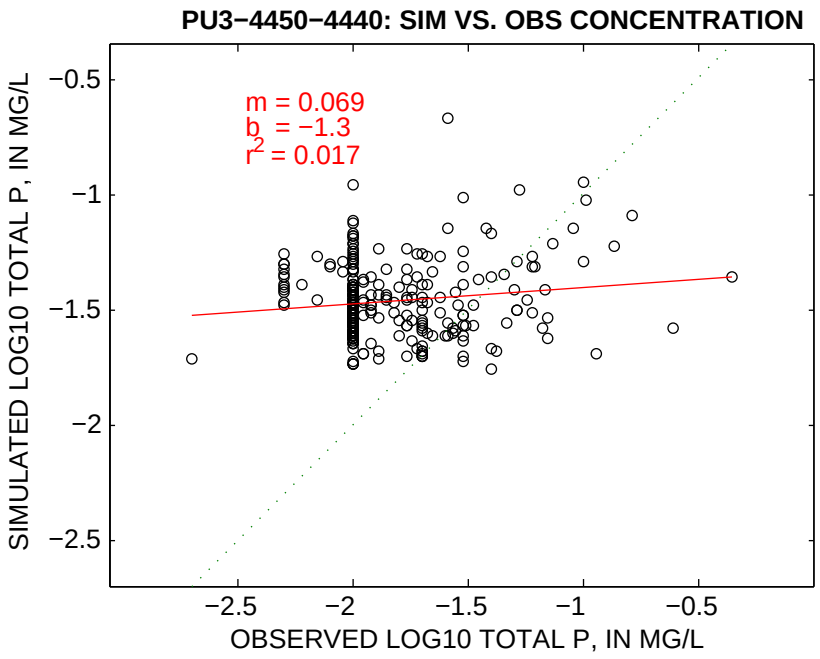
Drive	Directory	Observed
N/A	model	OBS20161101

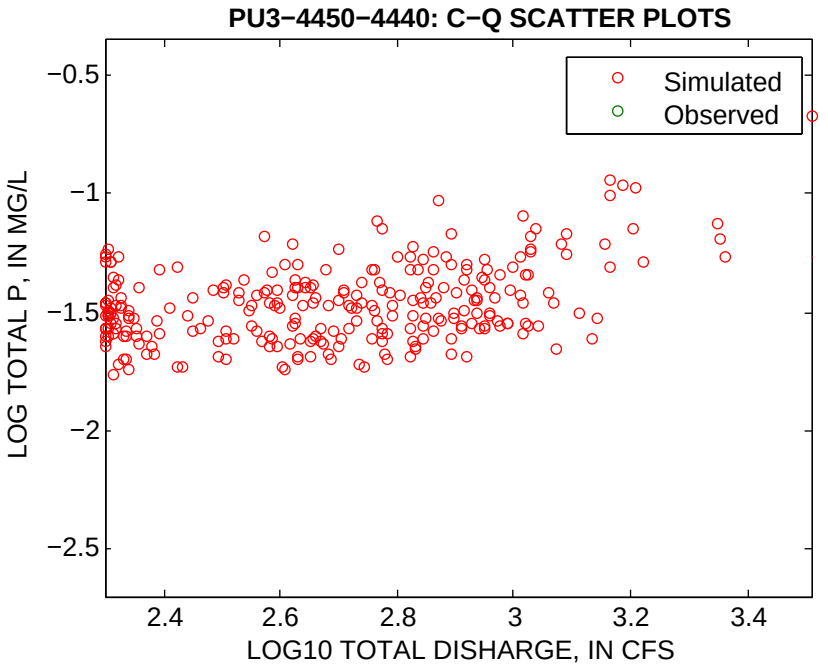
STATISTICS

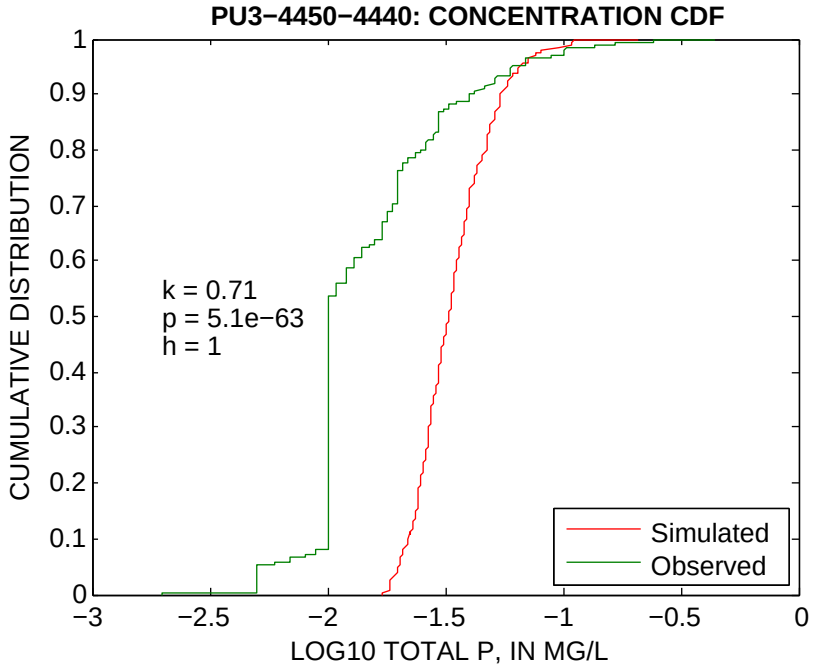
	n	278	278
		observe	simulate
min		0.002	0.016768
		-2.69897	-1.77552
mean		0.0218525	0.0396696
		-1.8259	-1.44594
media		0.01	0.035063
		-2	-1.45515
max		0.443	0.27879
		-0.353596	-0.554723
varian		0.00125234	0.00058650
		0.099563	0.0320245
JB		0.001	0.001
		0.001	0.001
		ra	log
%		81.5332	-20.8094
err.va		0.00207193	0.275426
rel.std.err		1.65445	2.76635
mod.eff		-0.654447	-1.76635

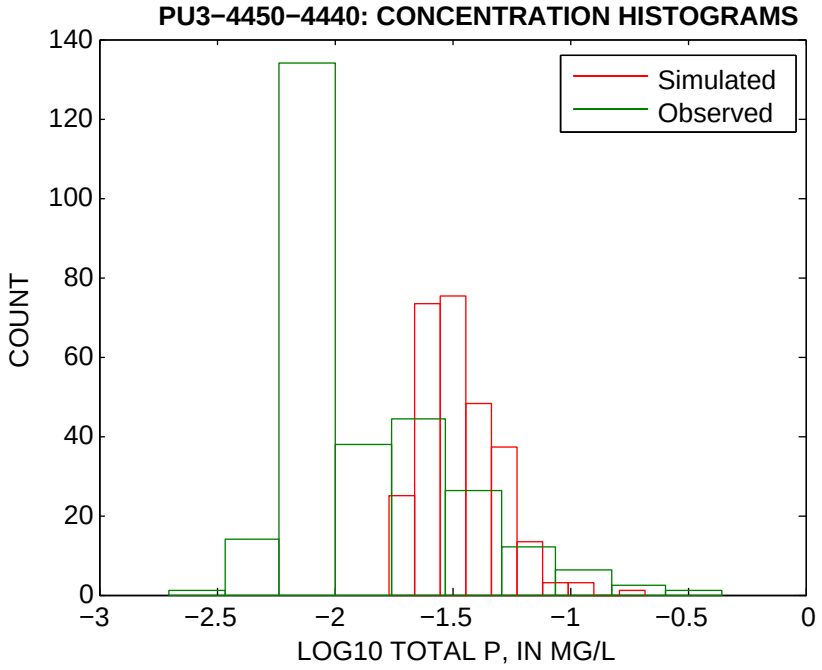
VERSION 2.1

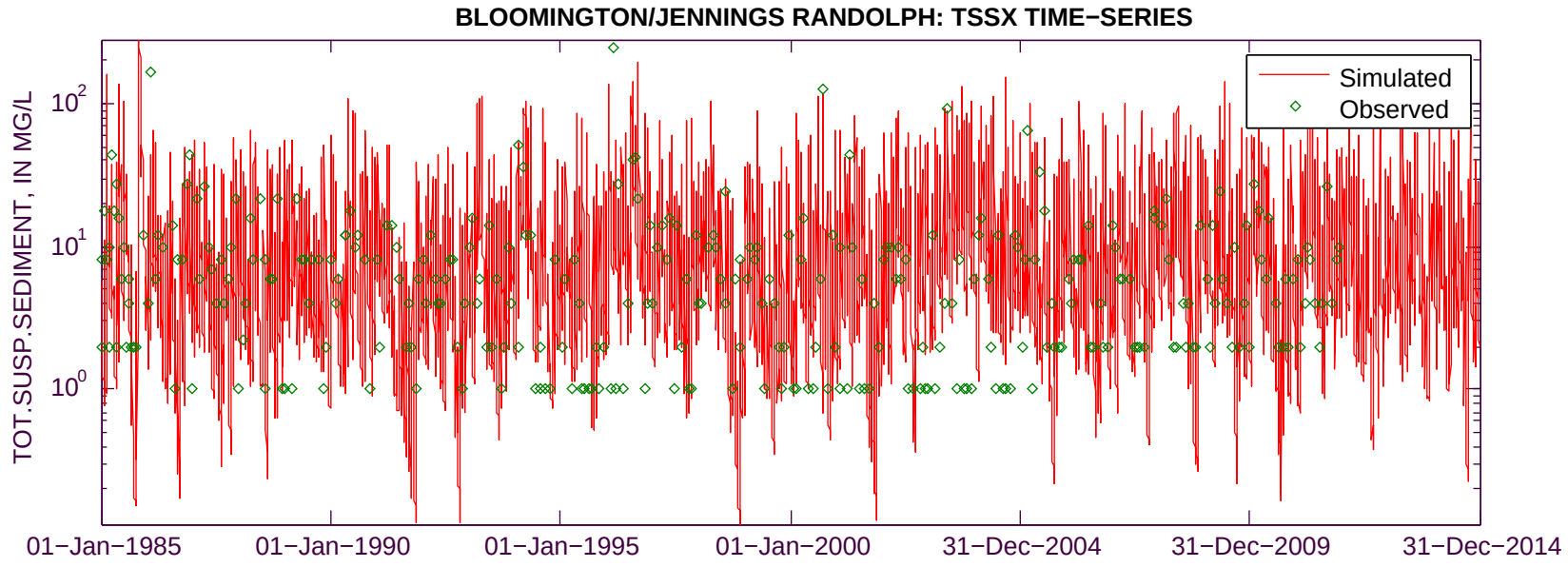
ALL DATA
LOG10

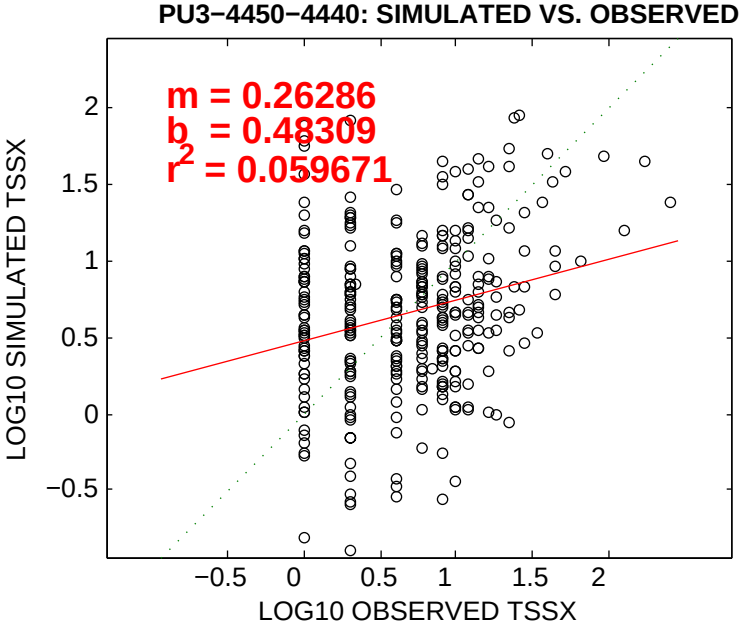


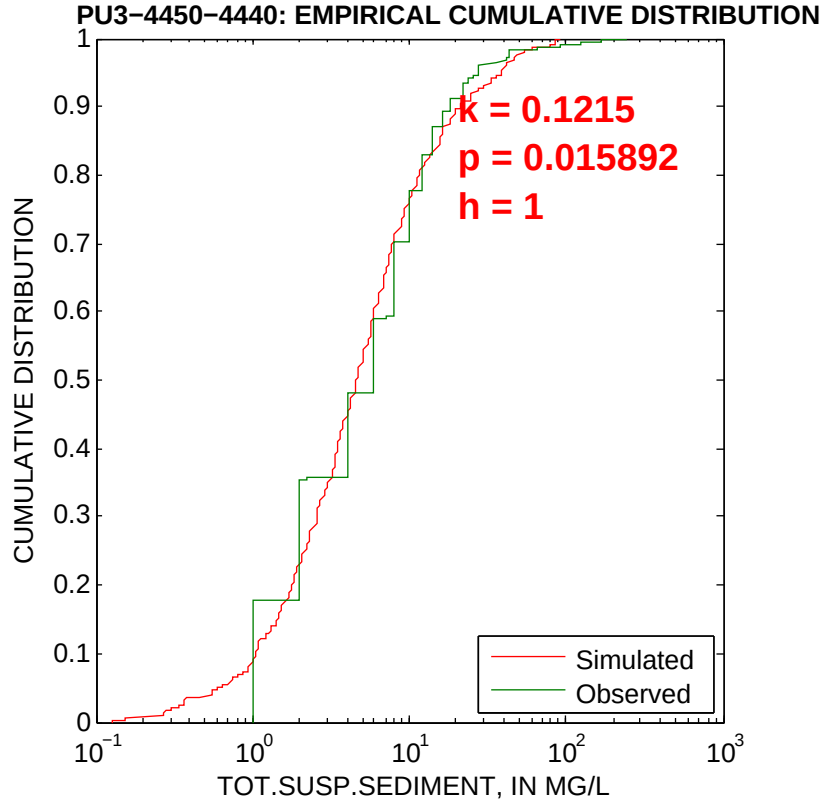












DATA SELECTION

scenario	file
P620171001WQ	TSSX.calib

plot: TSSX - total suspended ...

Dates 1/1/1985 12/31/201

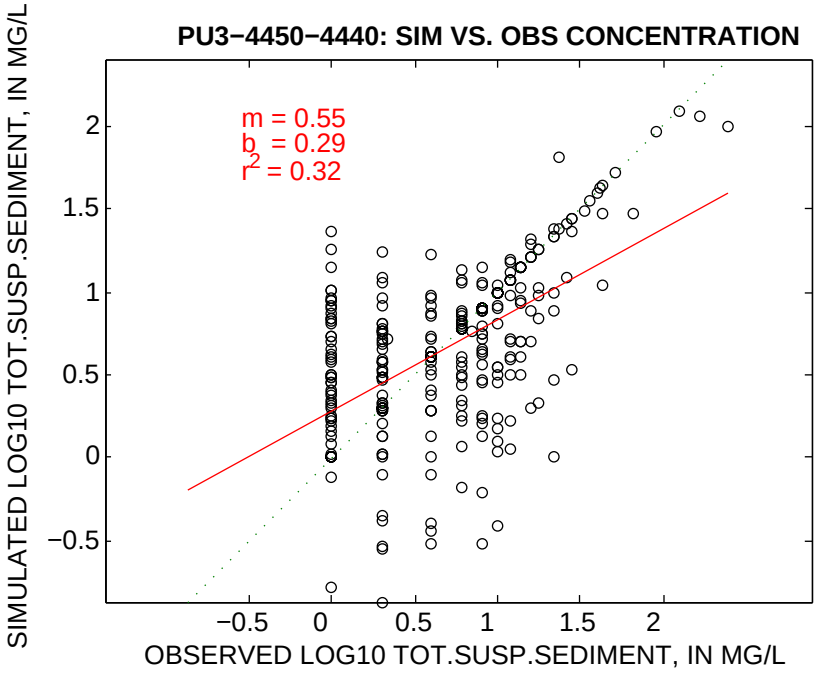
Drive	Directory	Observed
N/A	model	OBS20161101

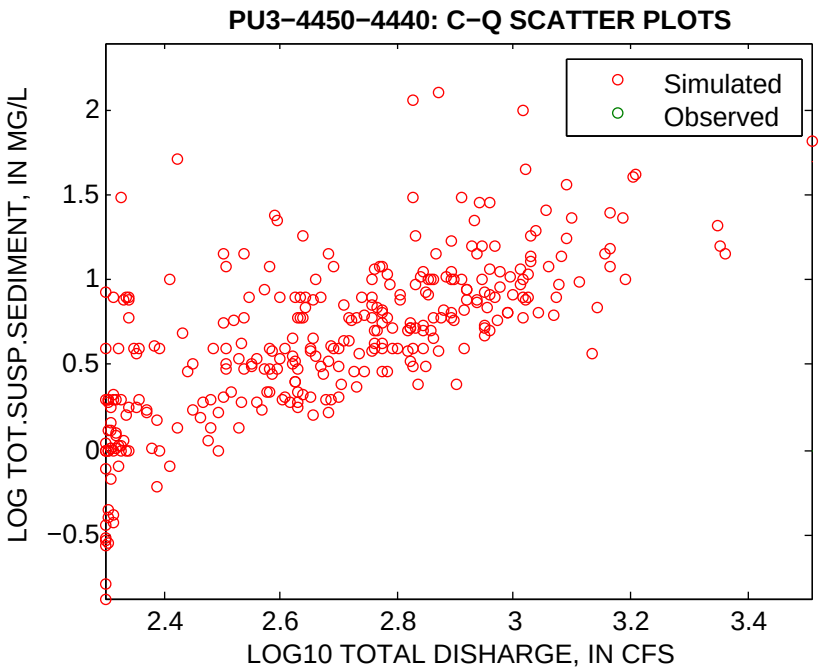
STATISTICS

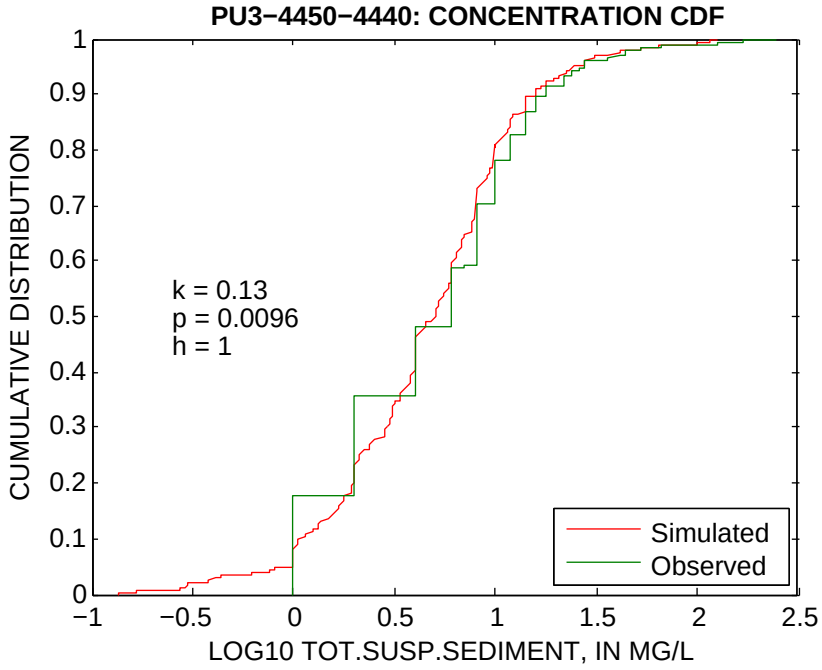
	n	observe	simulate
		321	321
min		1	0.12793
		0	-0.893028
mean		9.62056	9.15664
		0.682705	0.662544
media		6	4.6442
		0.778151	0.666911
max		248	92.274
		2.39445	1.96508
varian		401.614	181.584
		0.231086	0.267583
JB		0.001	0.001
		0.050435	0.5
		ra	log
%		-4.82215	-2.95308
err.va		442.13	0.37759
rel.std.err		1.10088	1.63398
mod.eff		-0.100882	-0.633981

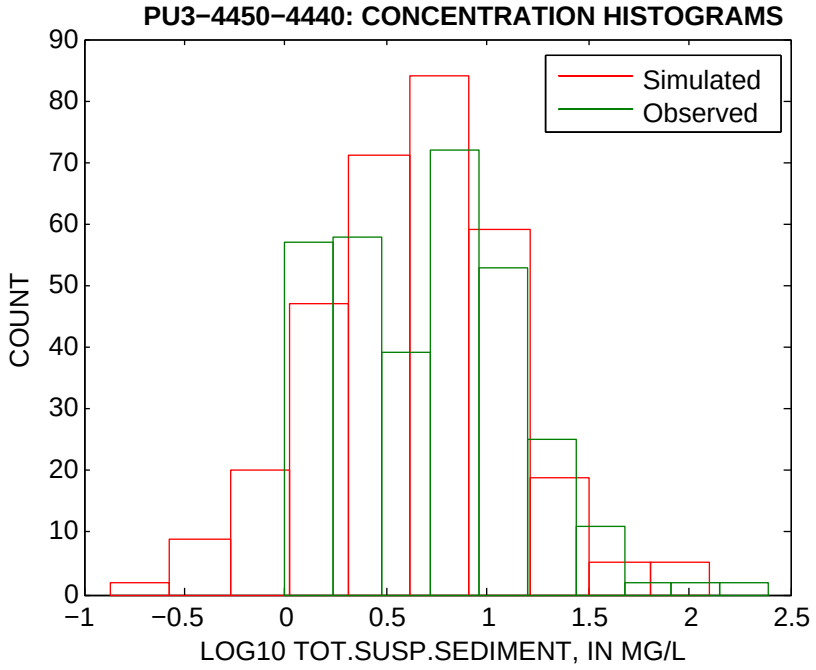
VERSION 2.1

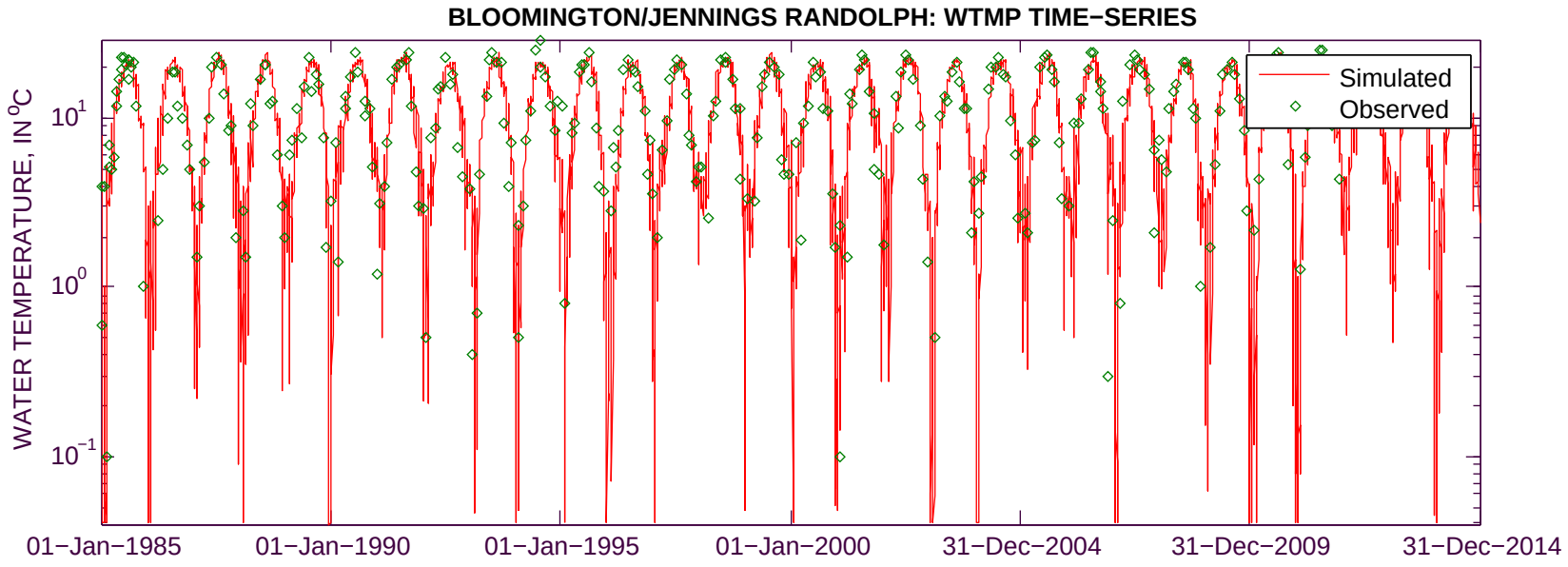
ALL DATA
LOG10

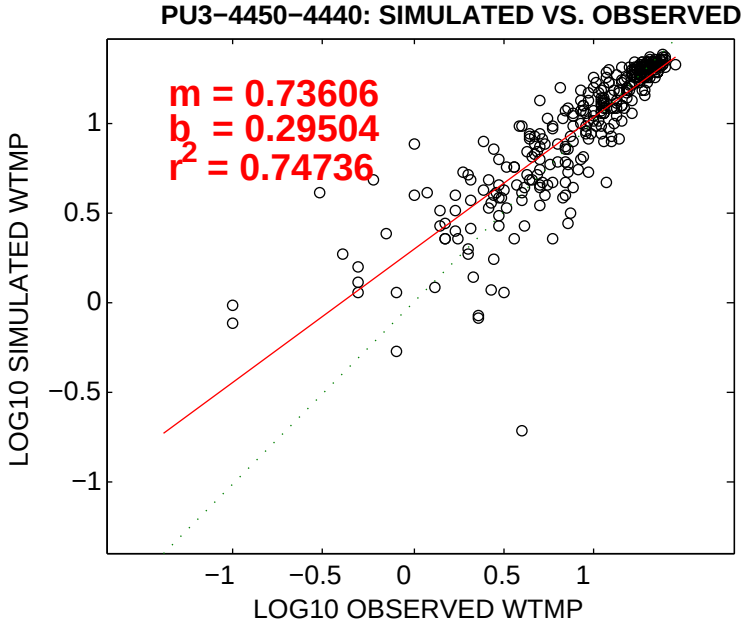


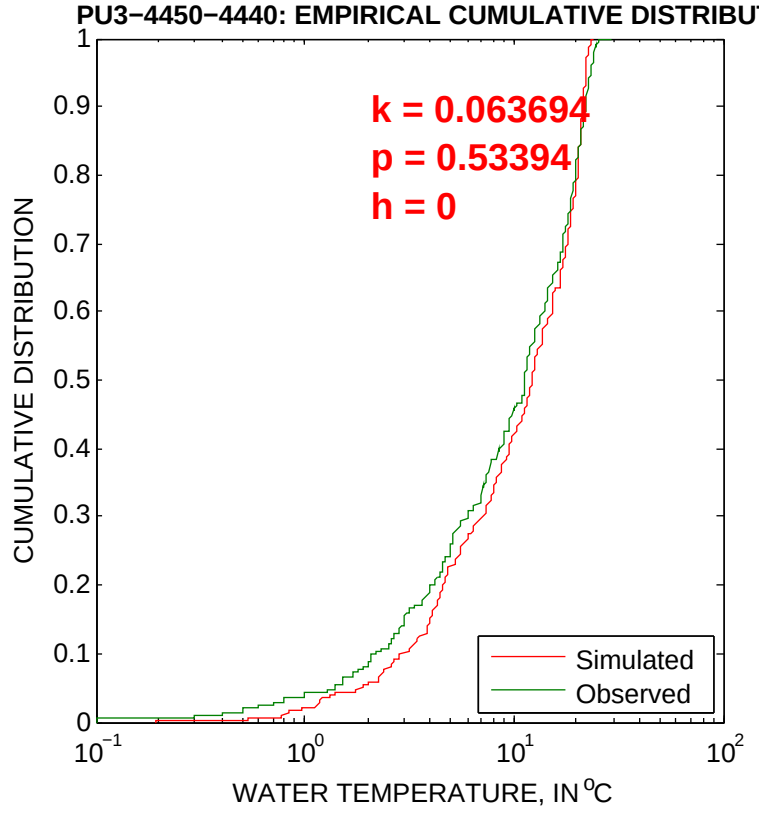












DATA SELECTION

scenario	file
P620171001WQ	WTMP.calib

plot: WTMP - water tempera...

Dates: 1/1/1985 – 12/31/201

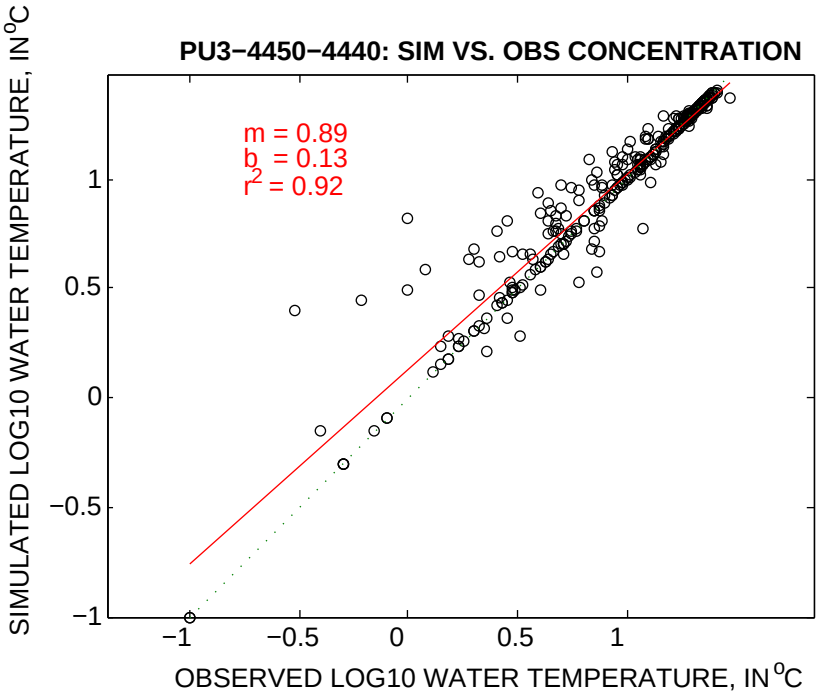
Drive	Directory	Observed
N/A	model	OBS20161101

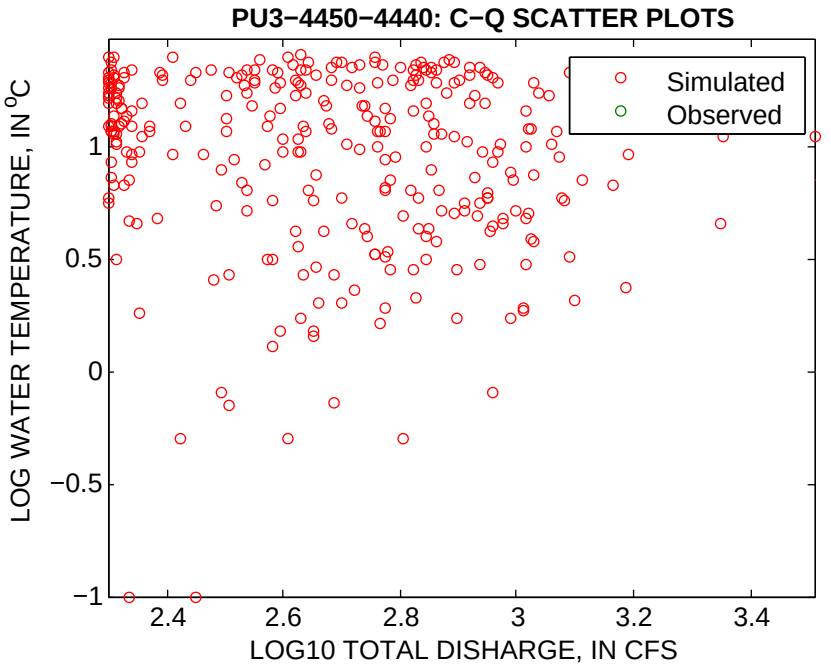
STATISTICS

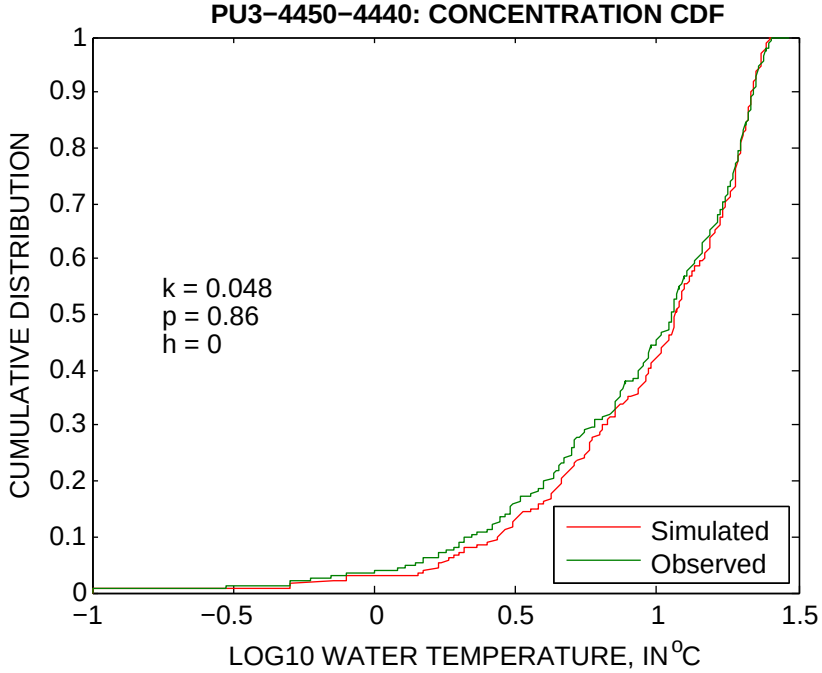
	n	observe	simulate
		314	314
min		0.1	0.19492
		-1	-0.710144
mean		11.7613	12.2742
		0.927684	0.977873
media		11.3	12.269
		1.05308	1.08881
max		29.4	24.125
		1.46835	1.38247
varian		54.9119	48.6055
		0.183553	0.133064
JB		0.001572	0.001
		0.001	0.001
		ra	log
%		4.36086	5.41008
err.va		7.52162	0.0489308
rel.std.err		0.136976	0.266576
mod.eff		0.863024	0.733424

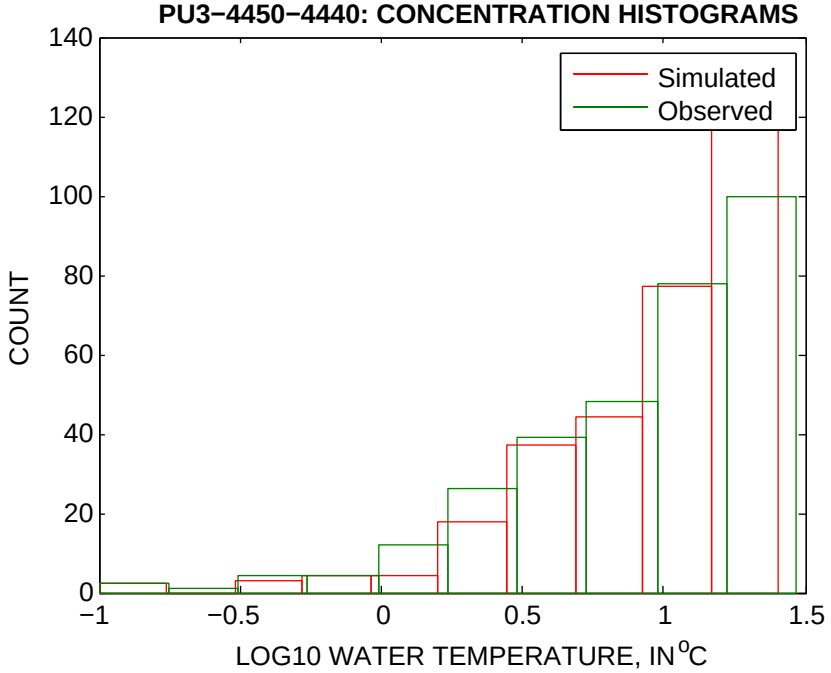
VERSION 2.1

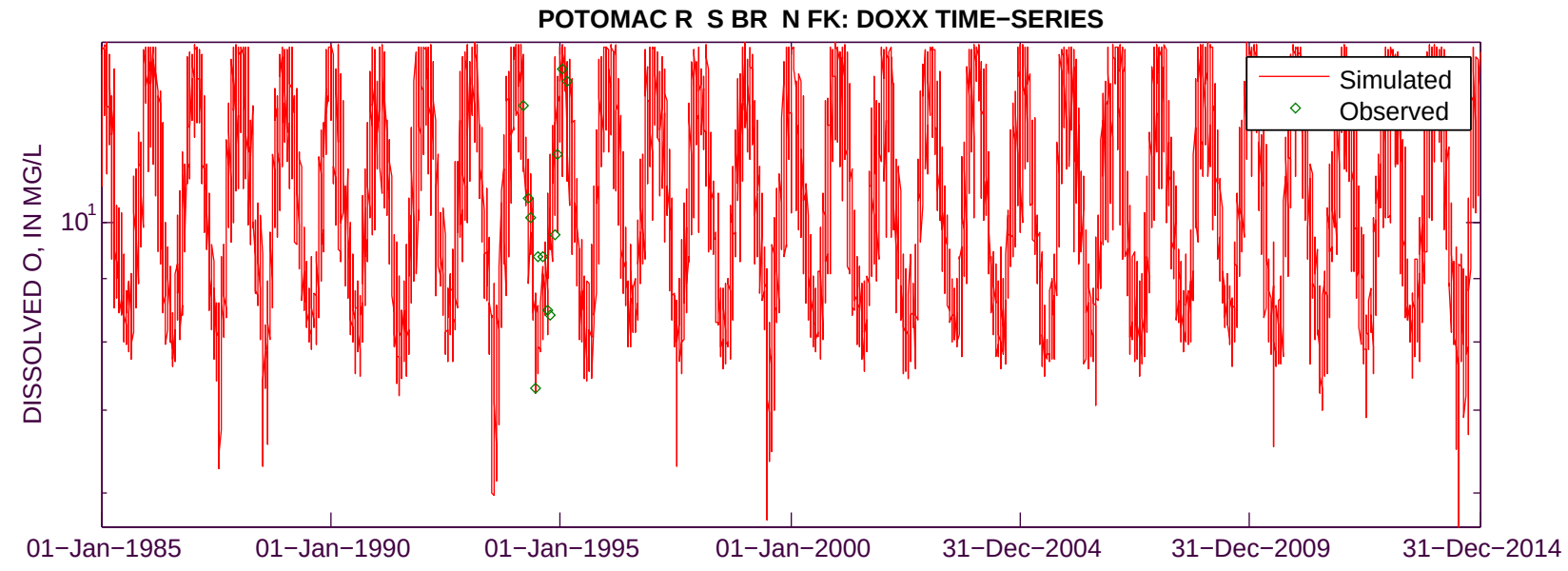
ALL DATA
LOG10

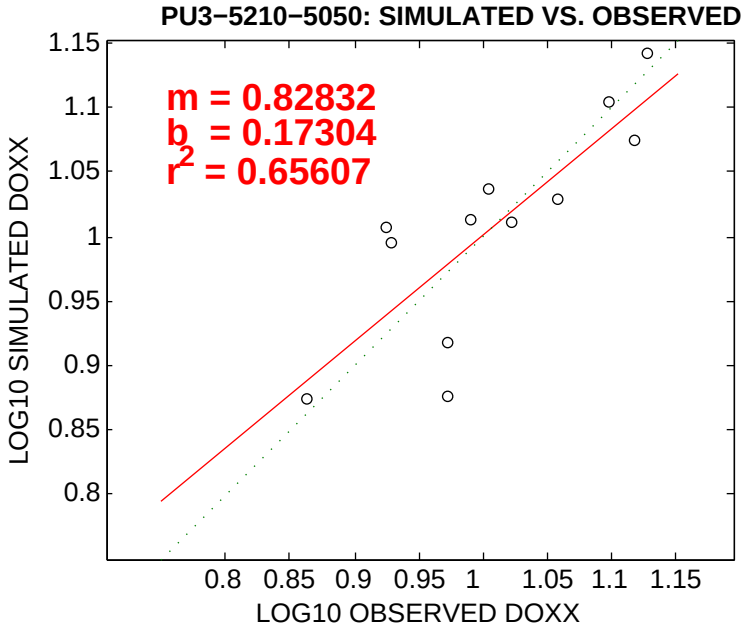


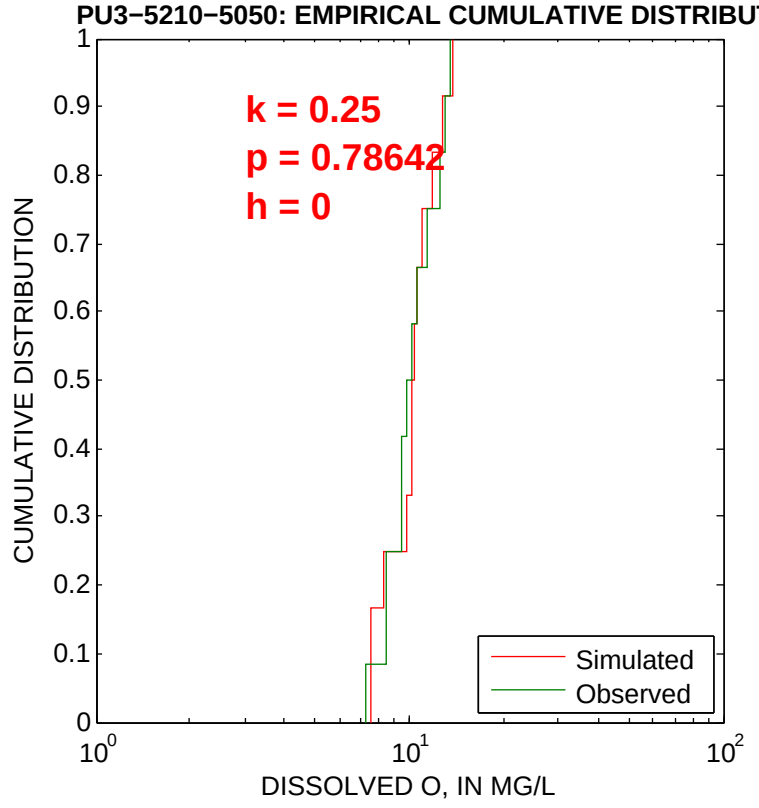












DATA SELECTION

scenario	file
P620171001WQ	DOXX.calib

plot: DOXX - dissolved oxygen

Dates: 1/1/1985 – 12/31/201

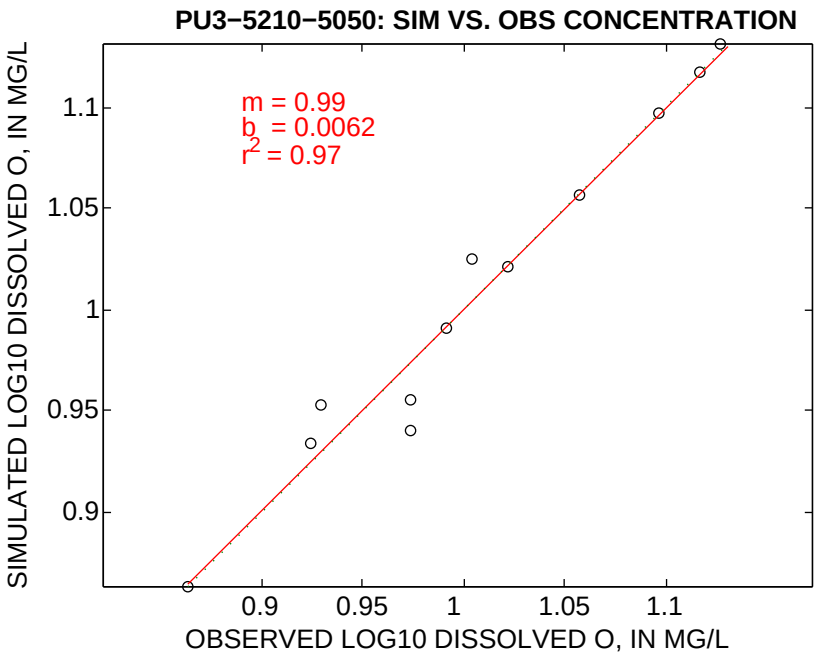
Drive	Directory	Observed
N/A	model	OBS20161101

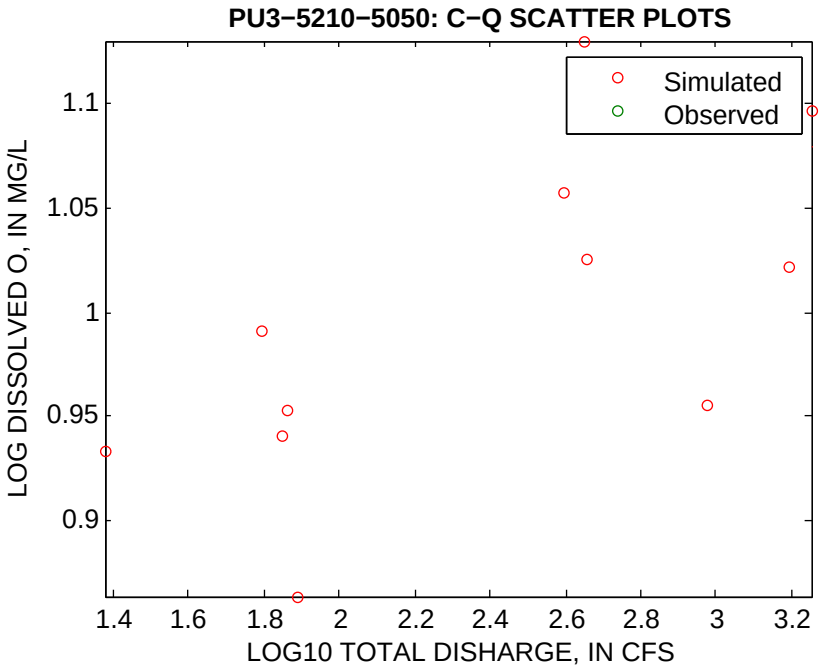
STATISTICS

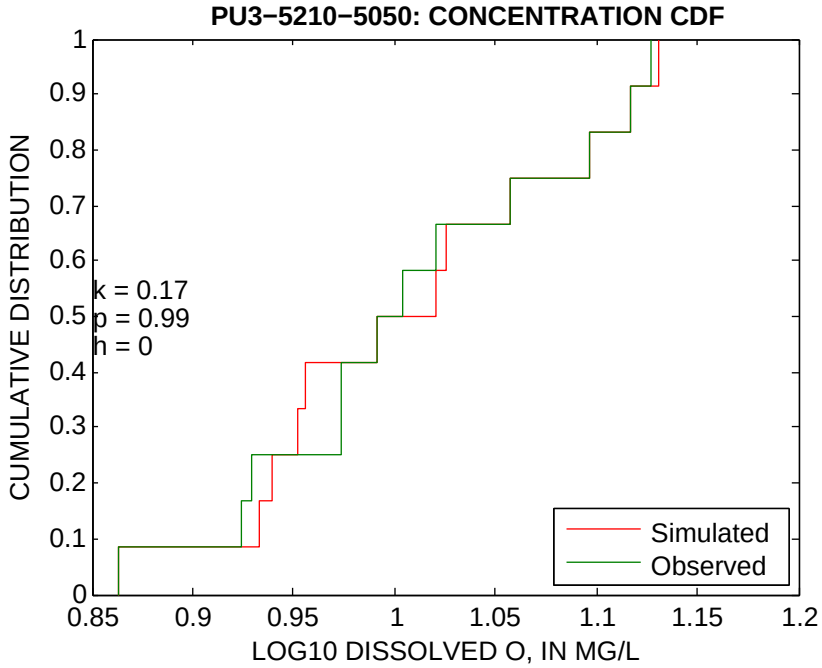
	n	12	12
		observe	simulate
min		7.3	7.4772
		0.863323	0.873739
mean		10.3167	10.3273
		1.00652	1.00675
media		9.95	10.292
		0.997774	1.0125
max		13.4	13.875
		1.1271	1.14223
varian		3.75424	3.77548
		0.00667391	0.00697953
JB		0.5	0.5
		0.5	0.5
		ra	log
%		0.103069	0.0231577
err.va		1.20216	0.00259728
rel.std.err		0.320214	0.389168
mod.eff		0.679786	0.610832

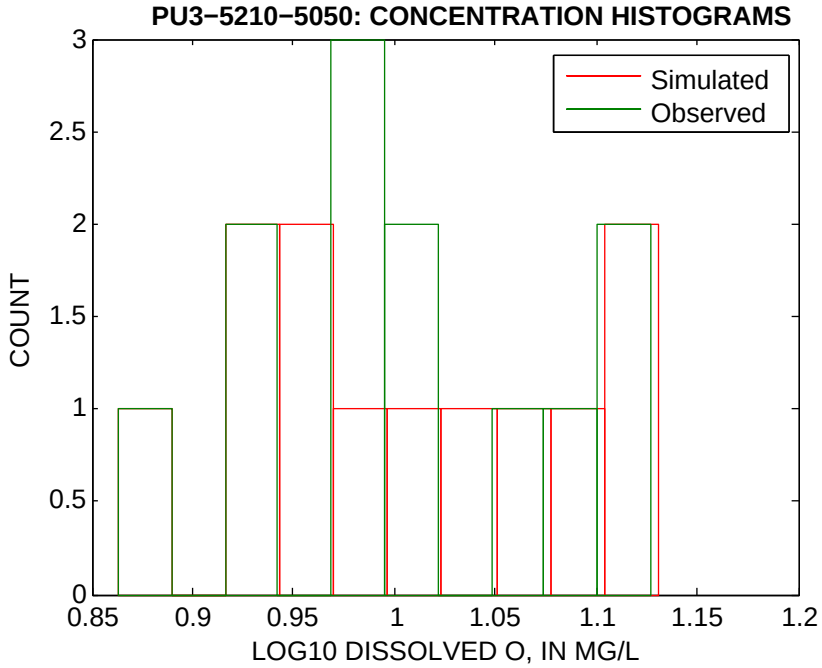
VERSION 2.1

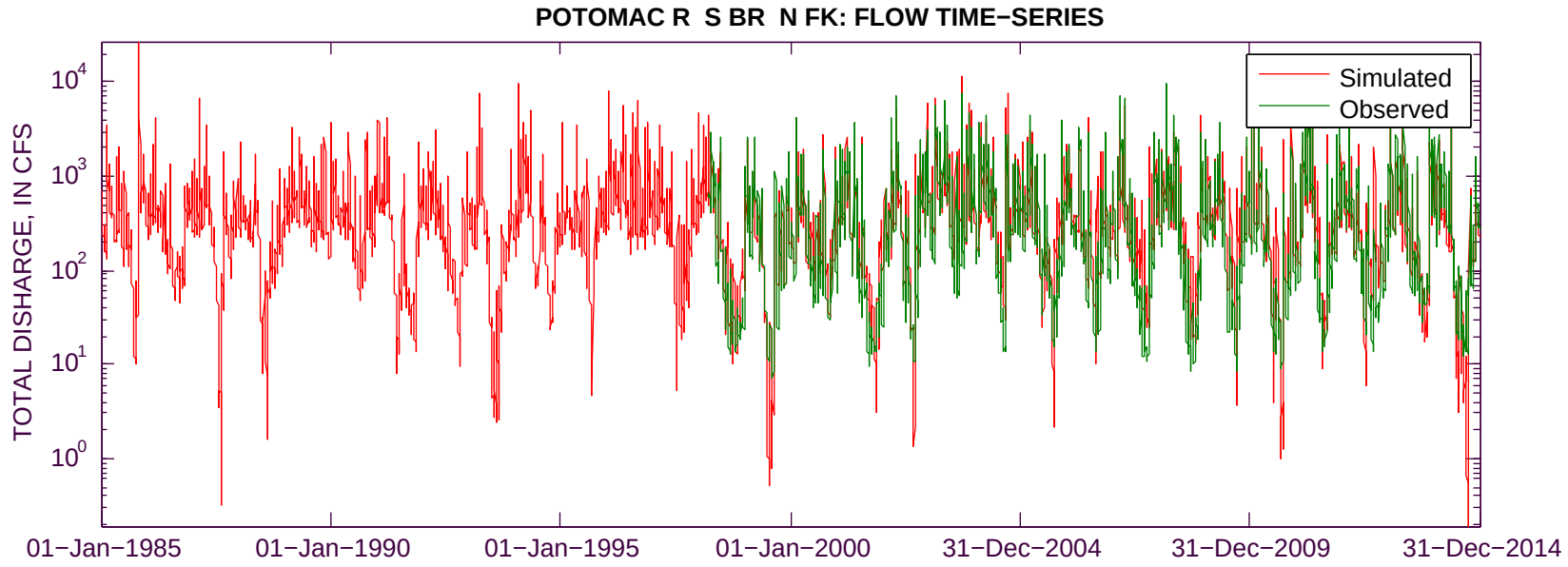
ALL DATA
LOG10

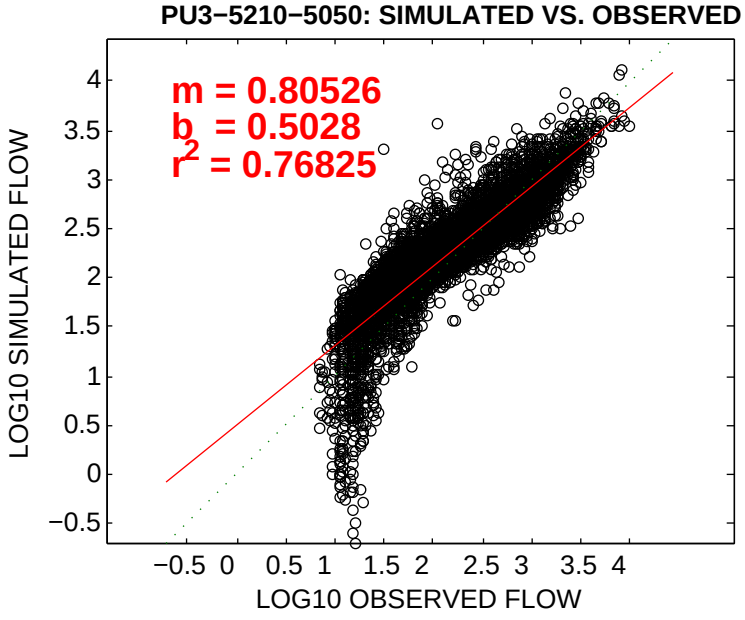


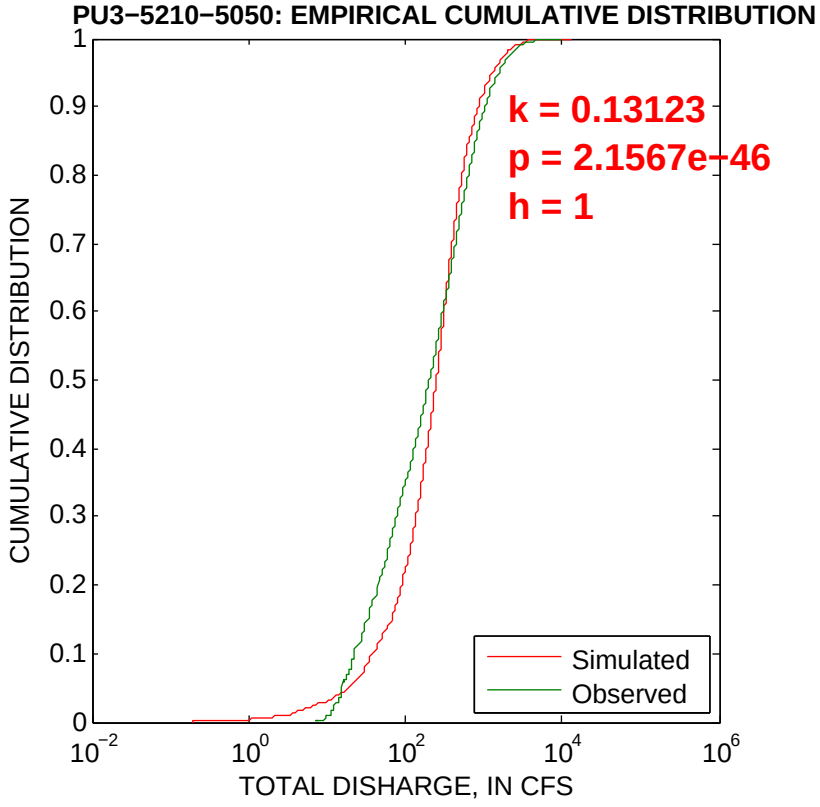












DATA SELECTION

scenario: P620171001WQ | file: FLOW.calib

plot: FLOW - total discharge

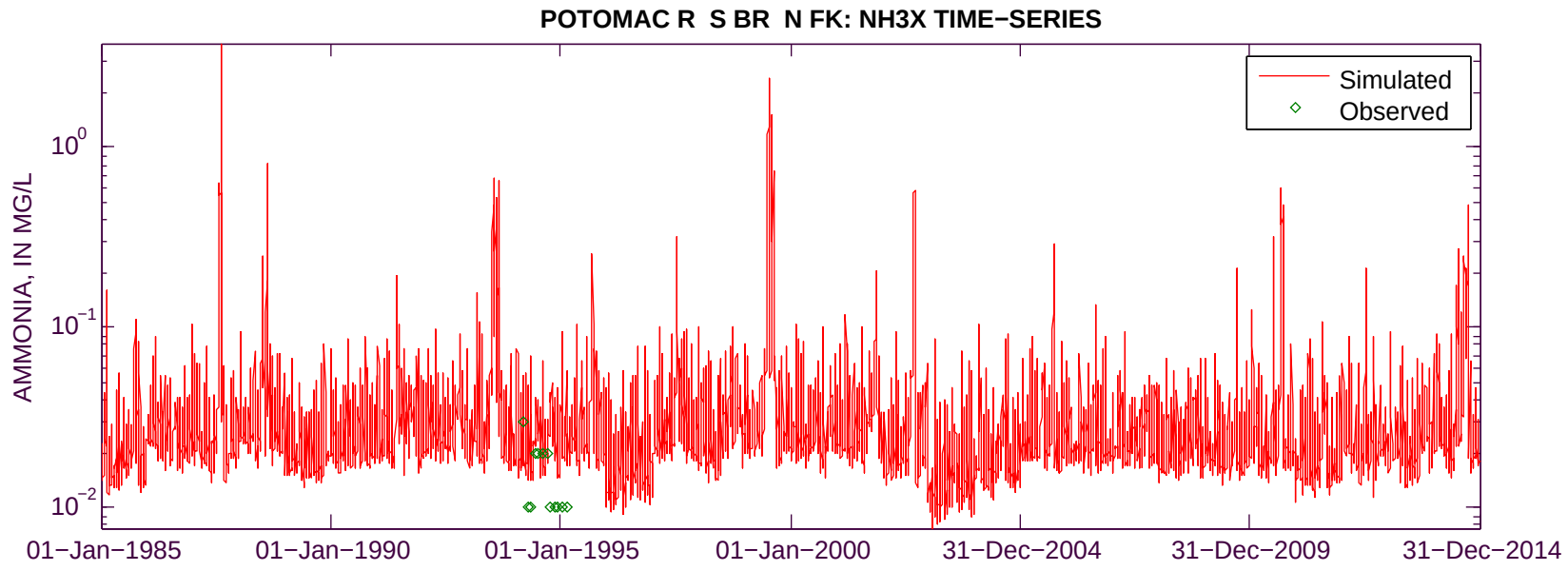
Dates: 1/1/1985 – 12/31/201

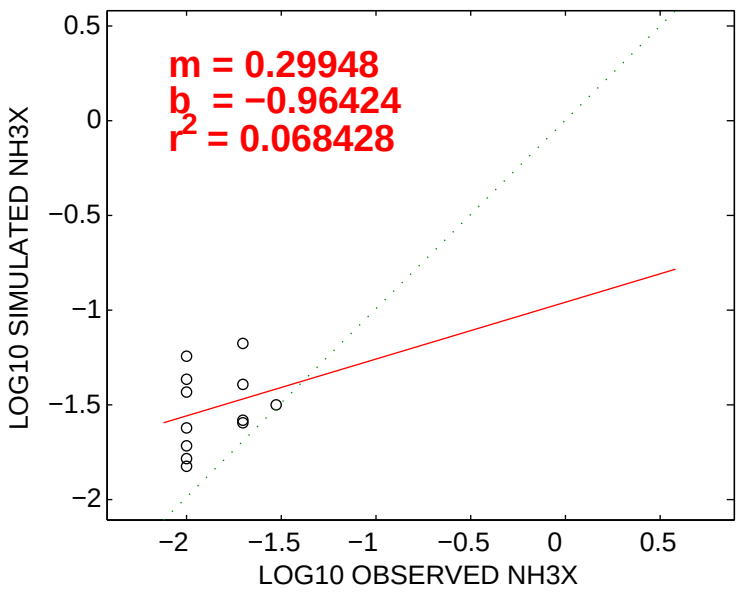
Drive | Directory: N/A | model | Observed: OBS20161101

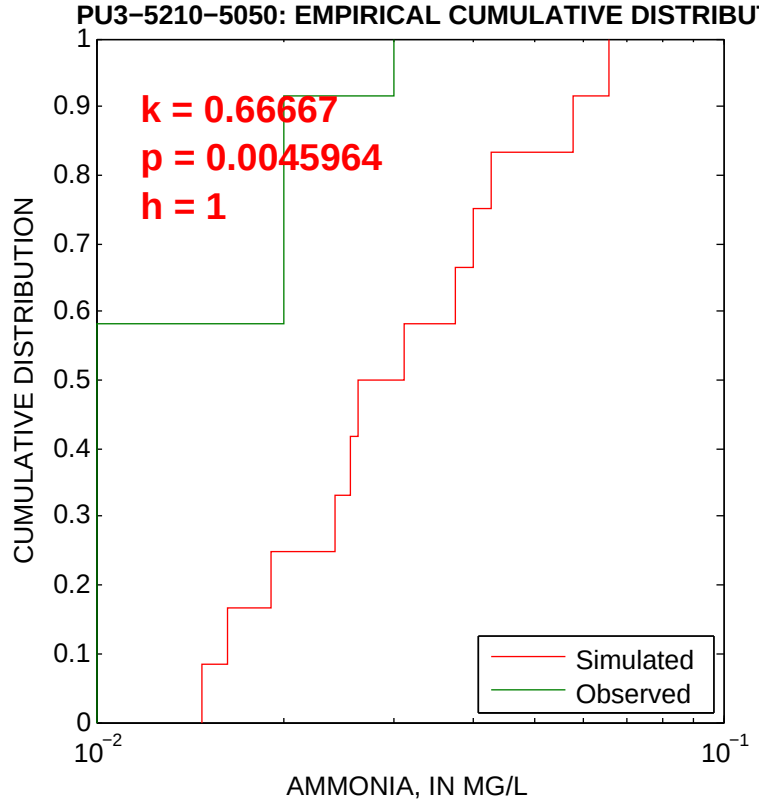
STATISTICS

		observe	simulate
n		6119	6119
min		7	0.19303
		0.845098	-0.714375
mean		428.968	400.186
		2.25419	2.31801
media		205	250.5
		2.31175	2.39881
max		9660	13106
		3.98498	4.11747
varian		447619	331972
		0.378593	0.319555
JB		0.001	0.001
		0.001	0.001
		ra	log
%		-6.70968	2.83122
err.va		138627	0.092489
rel.std.err		0.309698	0.244297
mod.eff		0.690302	0.755703

VERSION 2.1







DATA SELECTION

scenario	file
P620171001WQ	NH3X.calib

plot: NH3X - ammonia

Dates: 1/1/1985 – 12/31/201

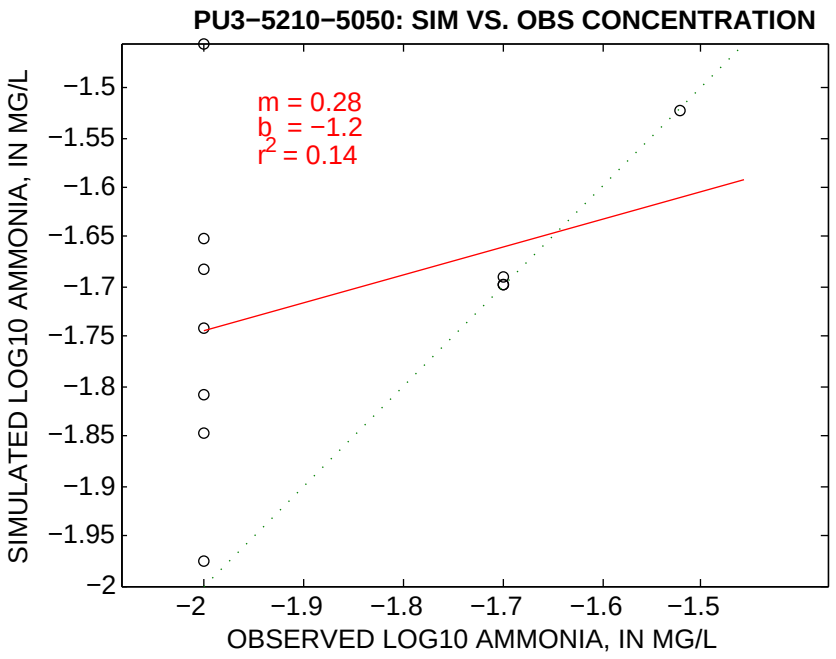
Drive	Directory	Observed
N/A	model	OBS20161101

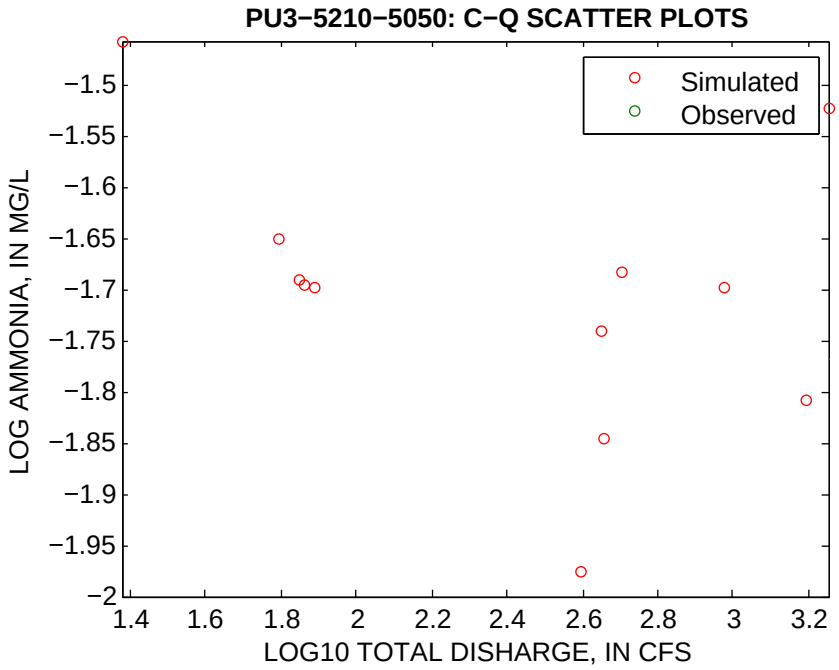
STATISTICS

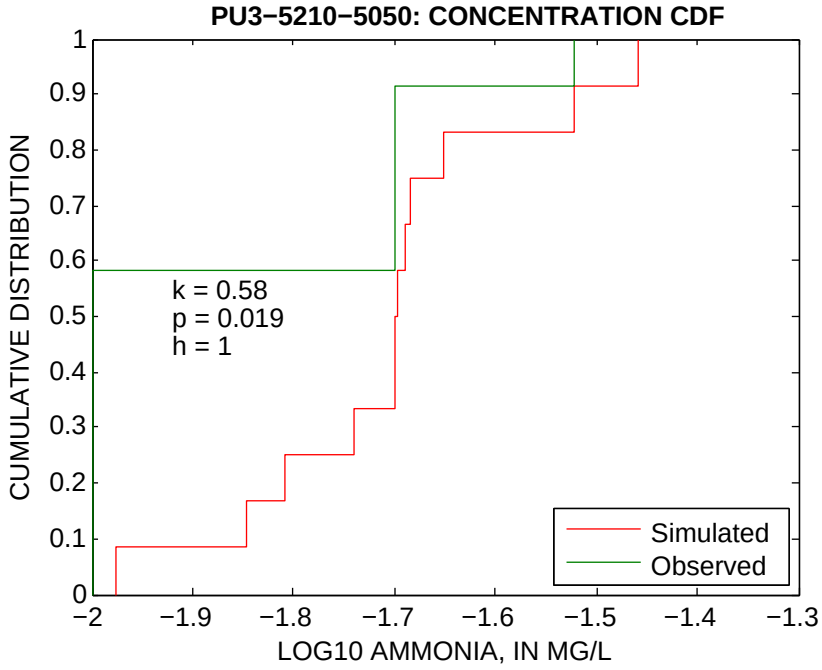
	n	12	12
		observe	simulate
min		0.01 -2	0.014814 -1.82933
mean		0.015 -1.8599	0.0333602 -1.52124
media		0.01 -2	0.028719 -1.54339
max		0.03 -1.52288	0.065528 -1.18357
varian		4.54545e-0 0.0322339	0.00025535 0.0422482
JB		0.104931 0.140079	0.196842 0.5
		ra	log
%		122.401	-18.2082
err.va		0.00063328	0.180287
rel.std.err		13.9323	5.59309
mod.eff		-12.9323	-4.59309

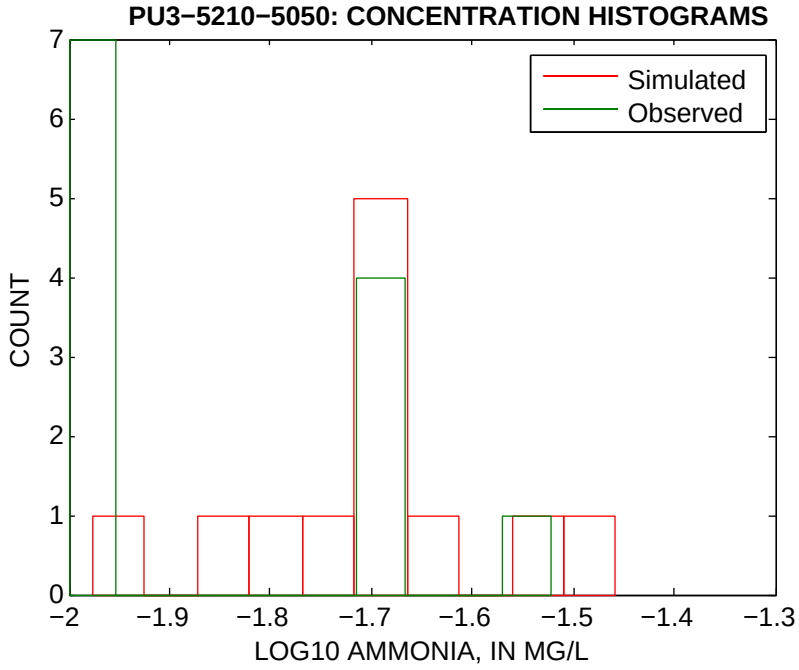
VERSION

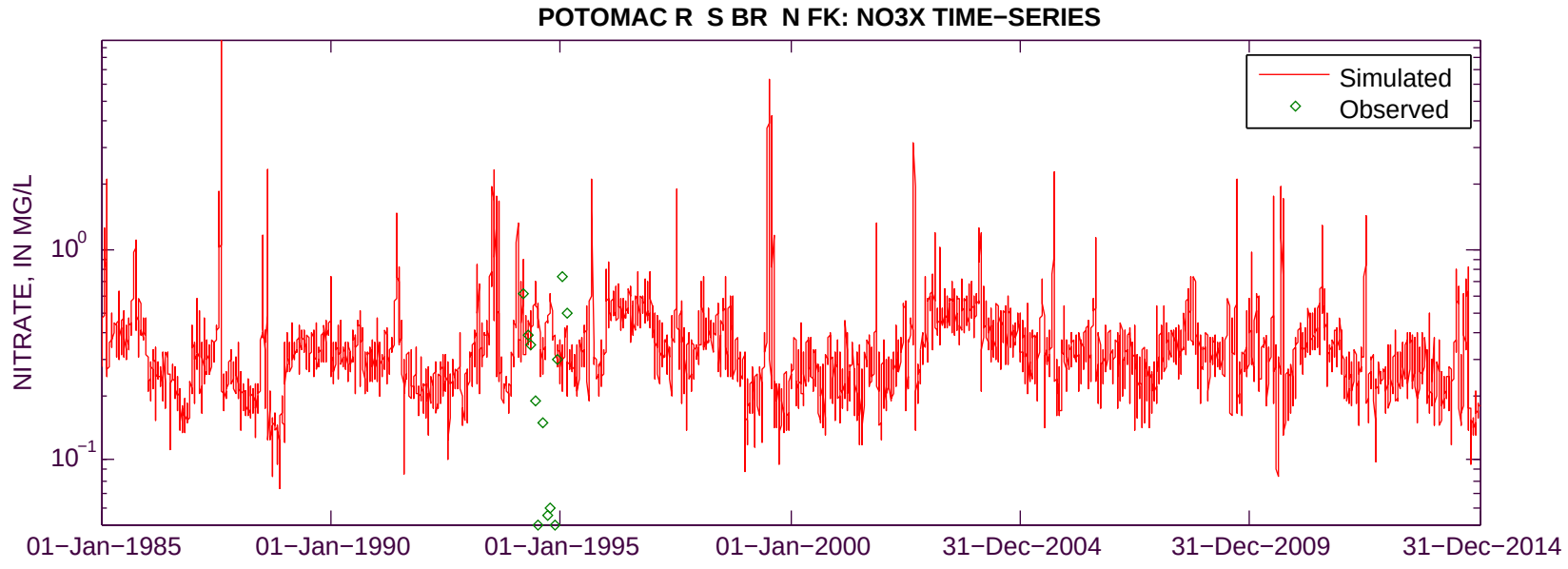
ALL DATA
LOG10

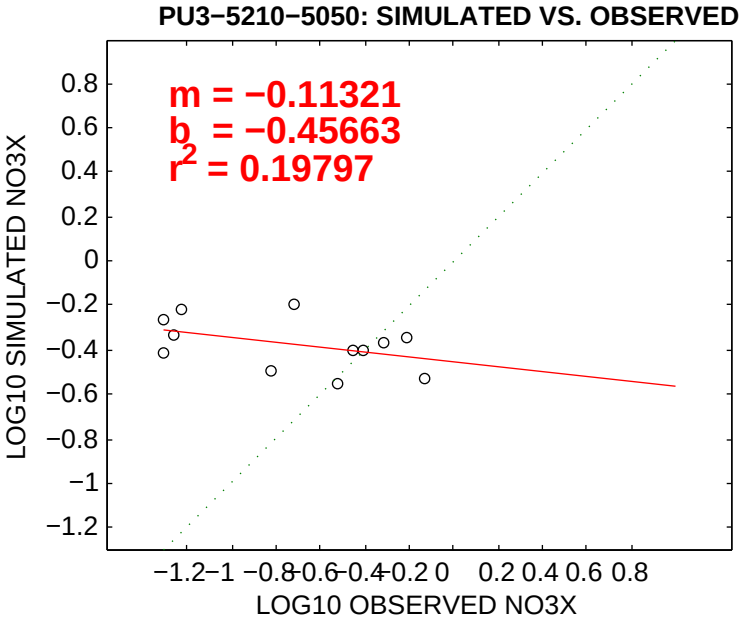


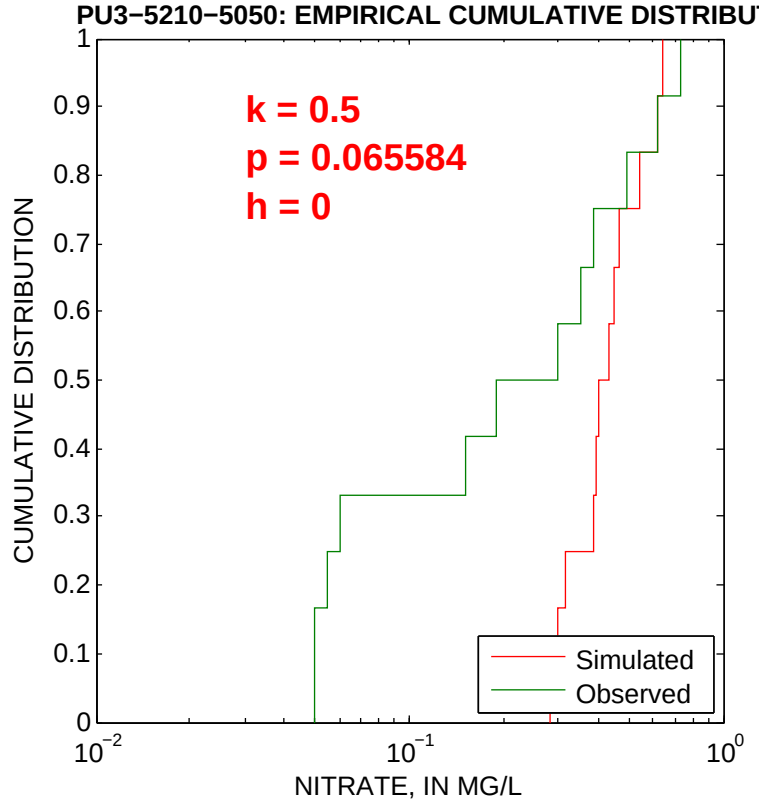












DATA SELECTION

scenario	file
P620171001WQ	NO3X.calib

plot: NO3X - nitrate

Dates: 1/1/1985 – 12/31/201

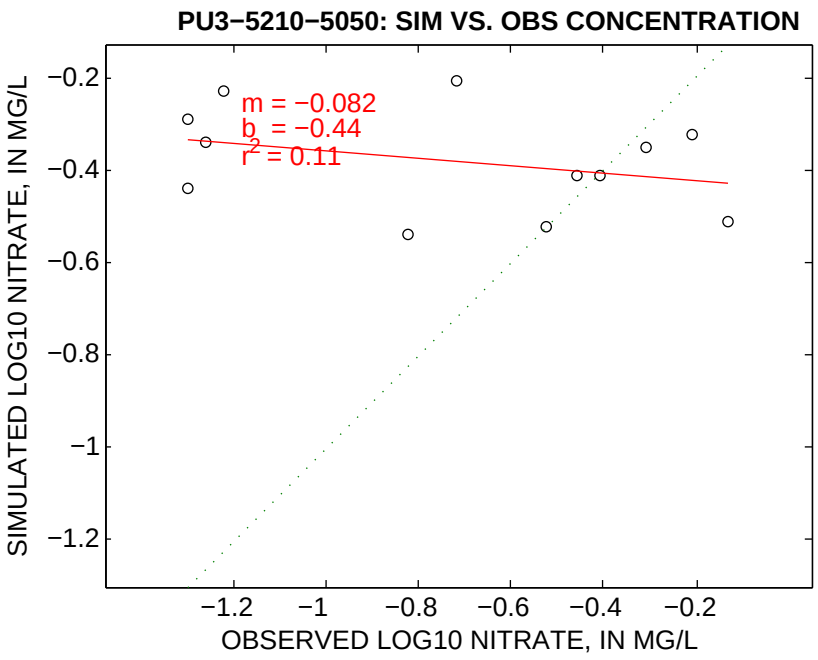
Drive	Directory	Observed
N/A	model	OBS20161101

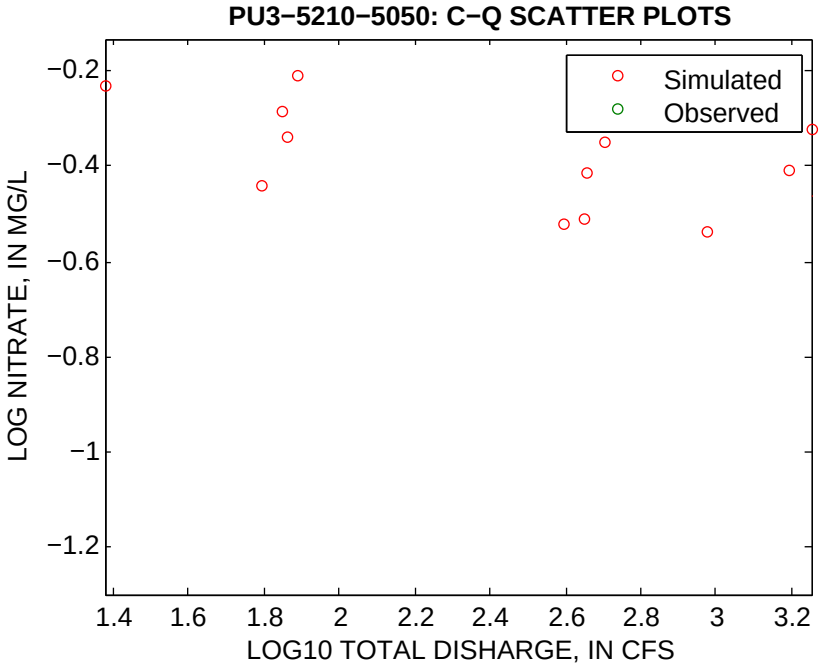
STATISTICS

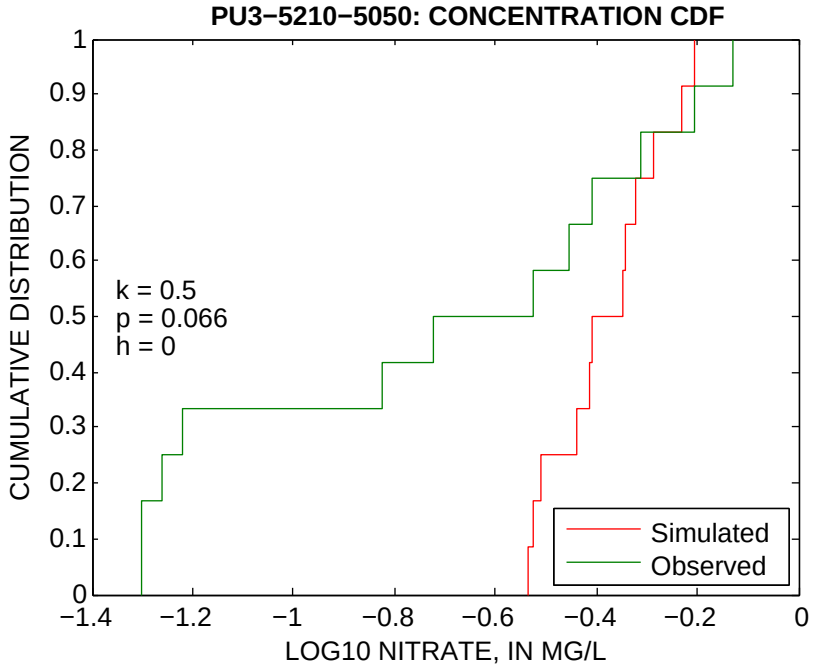
	n	12	12
		observe	simulate
min		0.05	0.2838
		-1.30103	-0.546988
mean		0.287083	0.435373
		-0.722052	-0.374887
media		0.245	0.41491
		-0.622063	-0.382397
max		0.74	0.63708
		-0.130768	-0.195806
varian		0.0561748	0.0132497
		0.201123	0.0130193
JB		0.258941	0.5
		0.20352	0.5
		ra	log
%		51.654	-48.0804
err.va		0.11699	0.391159
rel.std.err		2.08261	1.94488
mod.eff		-1.08261	-0.944878

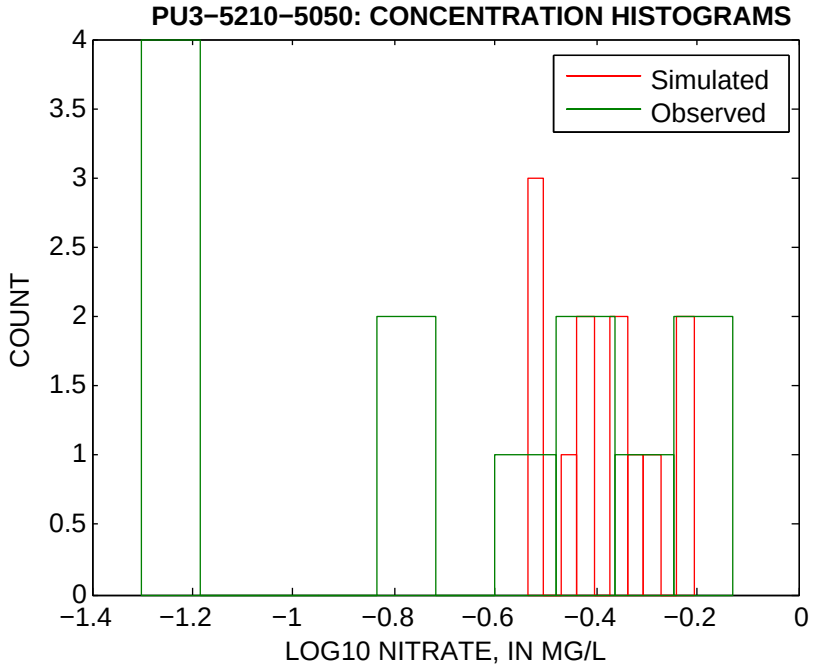
VERSION 2.1

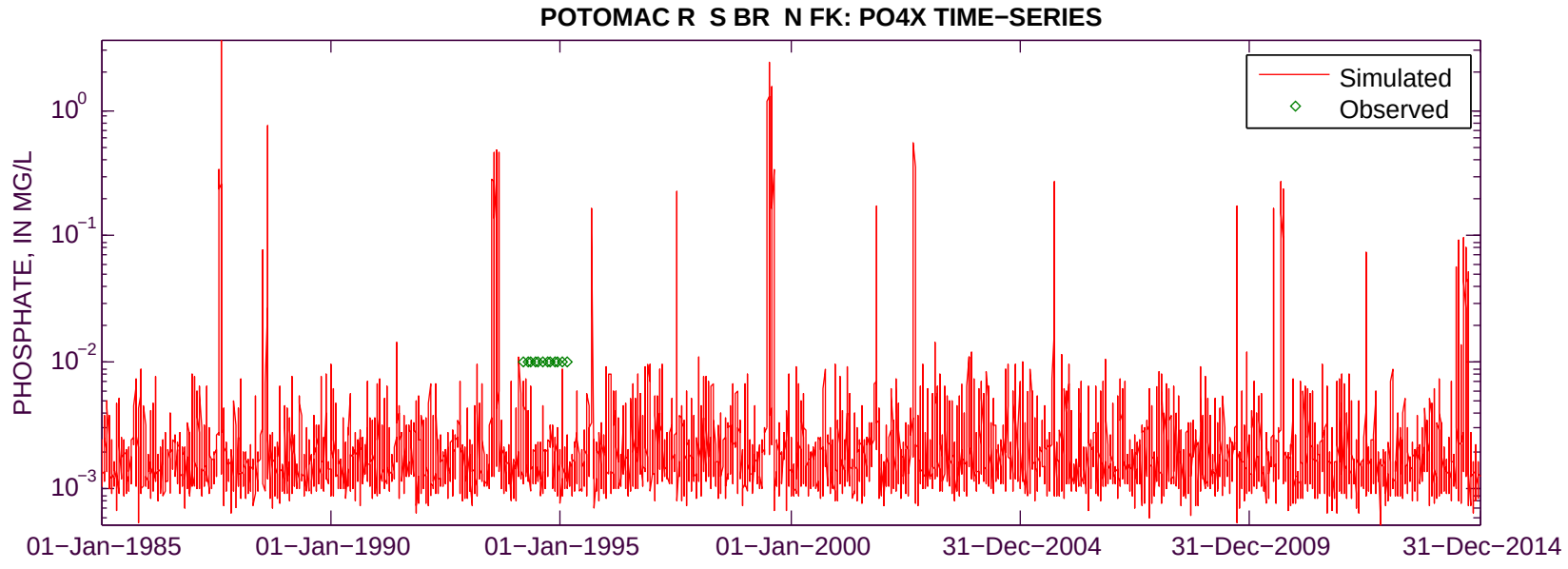
ALL DATA
LOG10

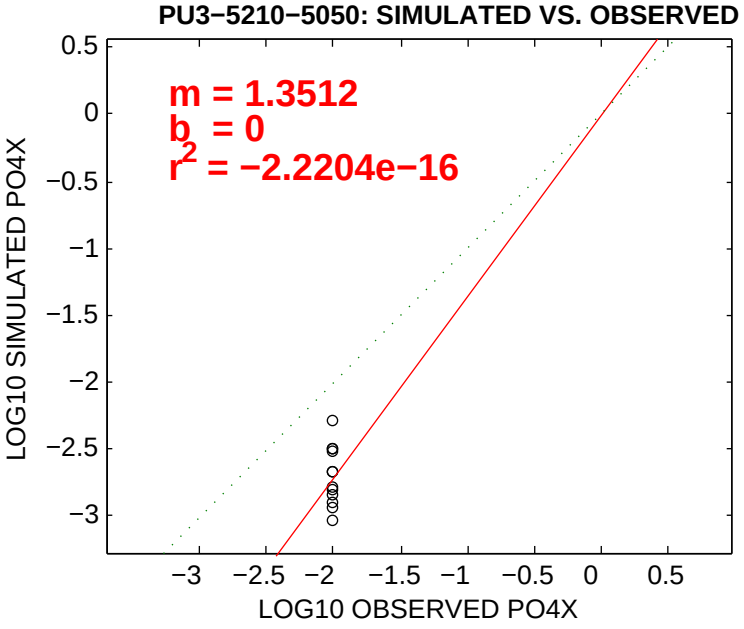


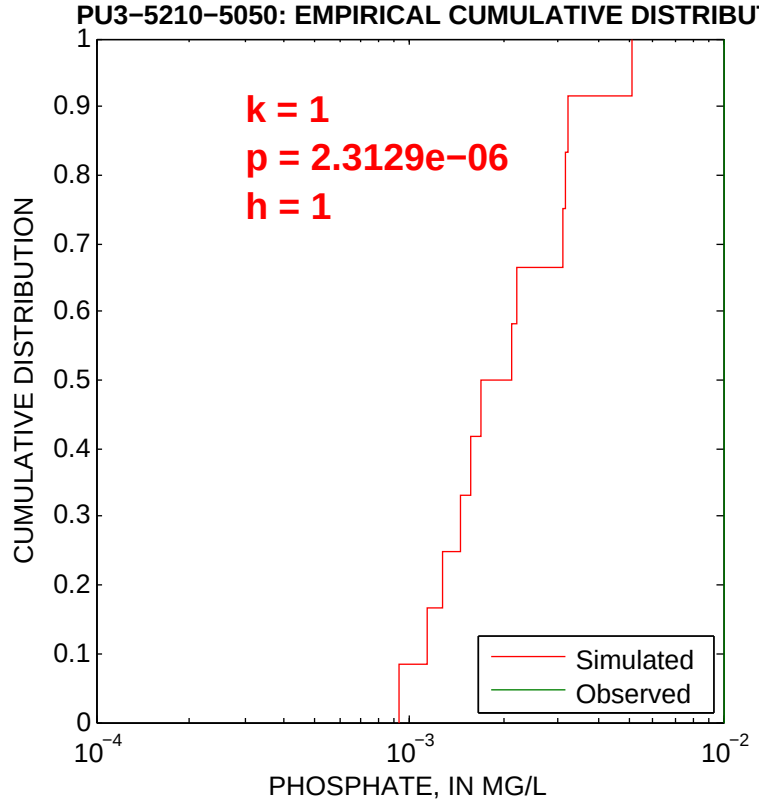












DATA SELECTION

scenario: P620171001WQ | file: PO4X.calib

plot: PO4X - phosphate

Dates: 1/1/1985 – 12/31/201

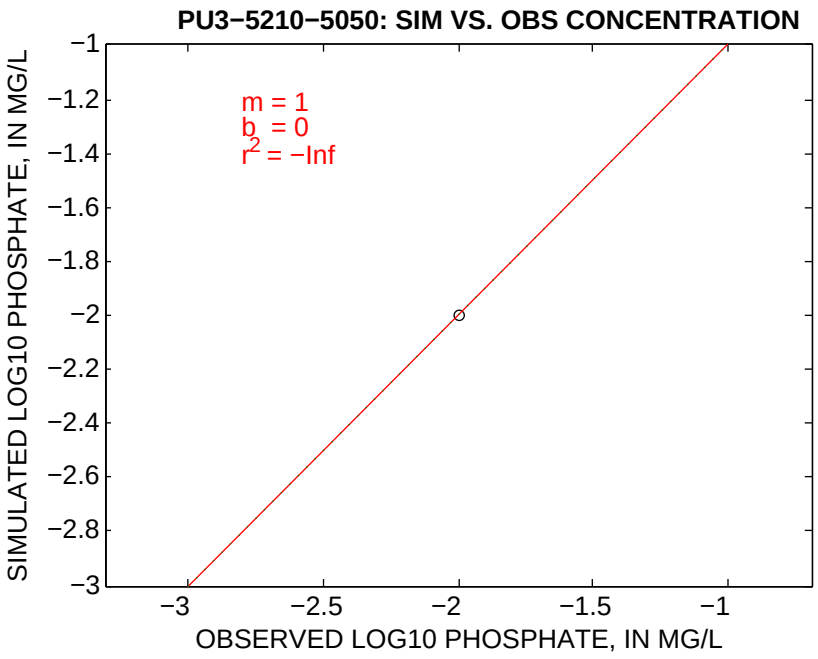
Drive: N/A | Directory: model | Observed: OBS20161101

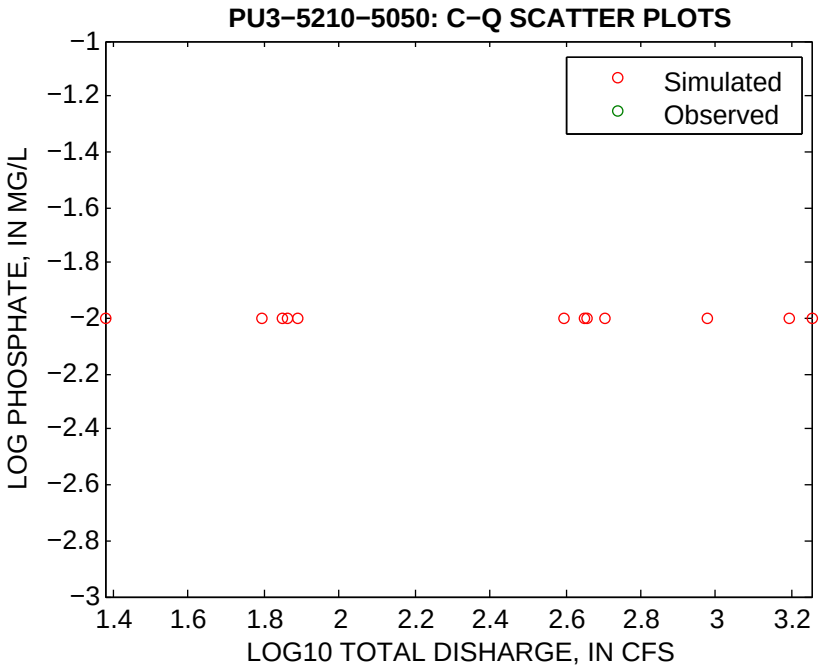
STATISTICS

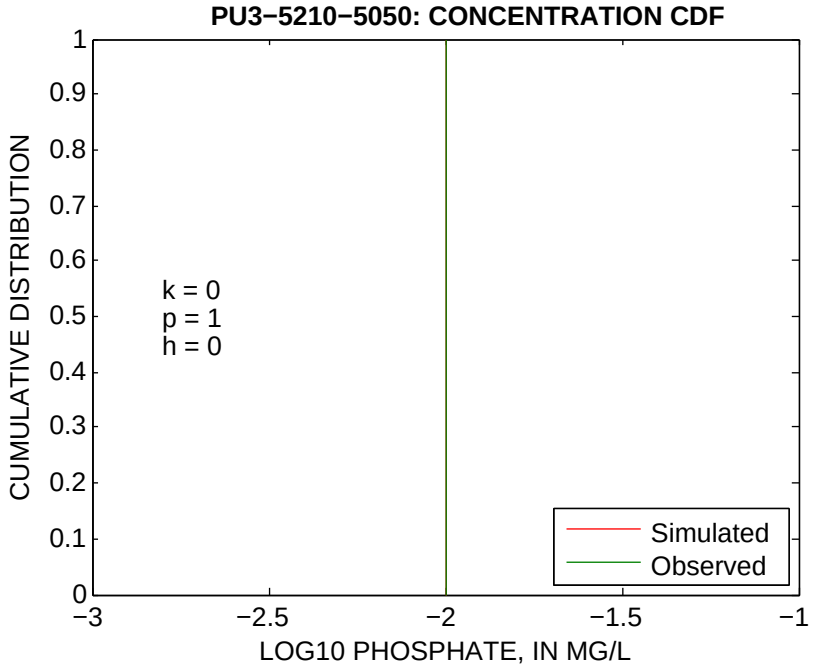
	n	12	12
		observe	simulate
min		0.01	0.00092208
		-2	-3.03523
mean		0.01	0.00223873
		-2	-2.70233
media		0.01	0.00189275
		-2	-2.72562
max		0.01	0.0051013
		-2	-2.29232
varian		3.28284e-3	1.45071e-0
		0	0.0483158
JB		0.029114	0.059566
		NaN	0.5
		ra	log
%		-77.6127	35.1165
err.va		6.71641e-0	0.586427
rel.std.err		04592e+3	Inf
mod.eff		-2.04592e+	-Inf

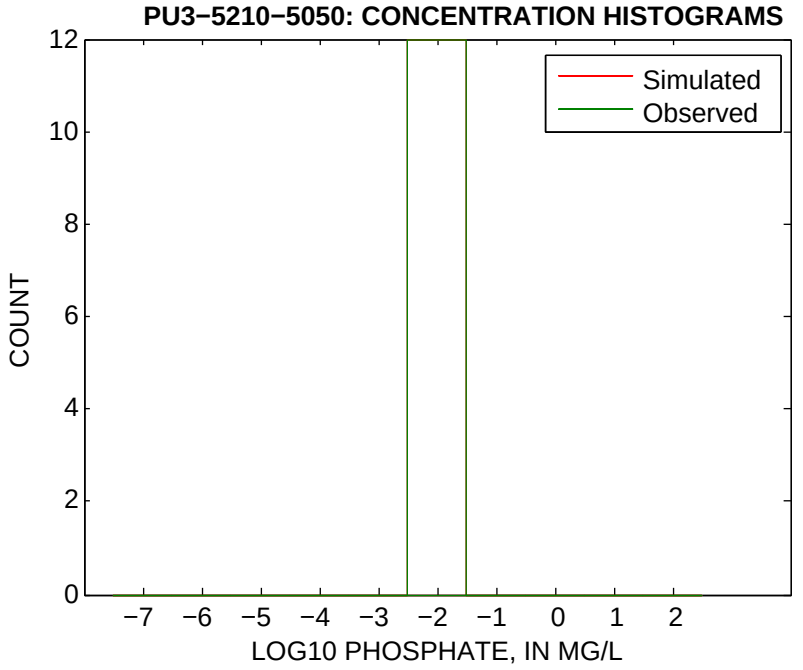
VERSION 2.1

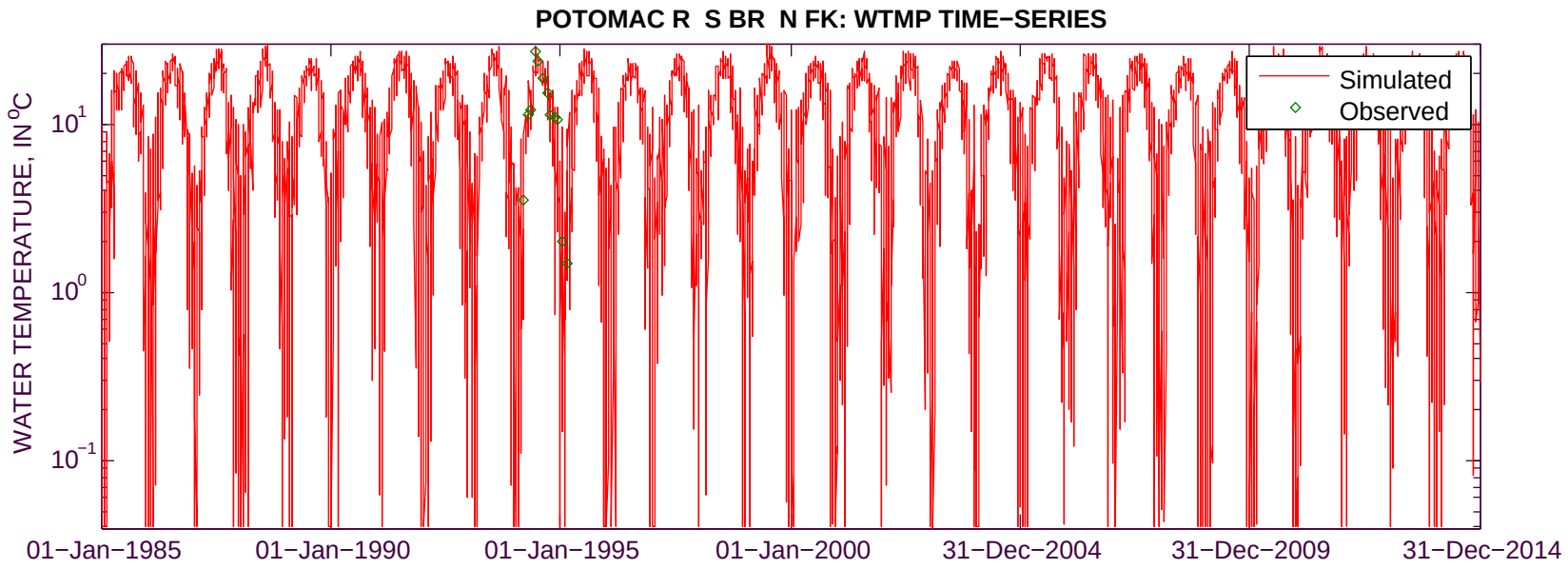
ALL DATA
LOG10

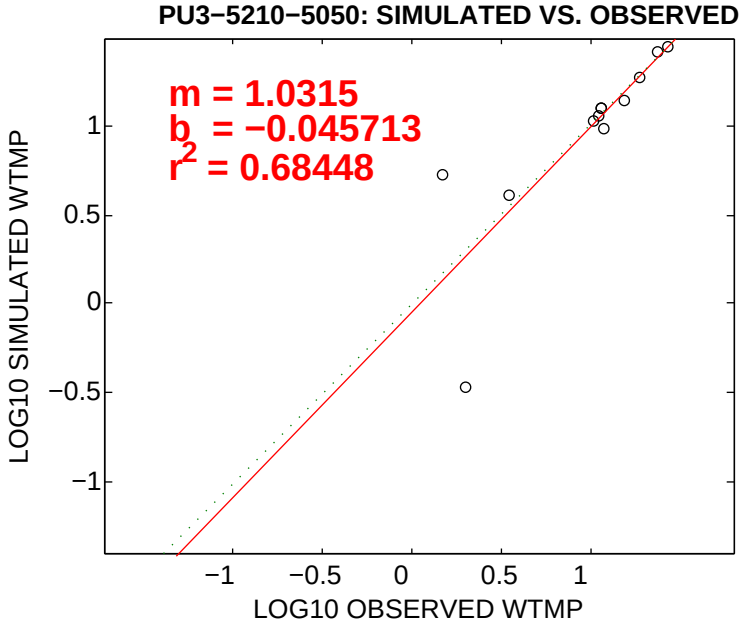


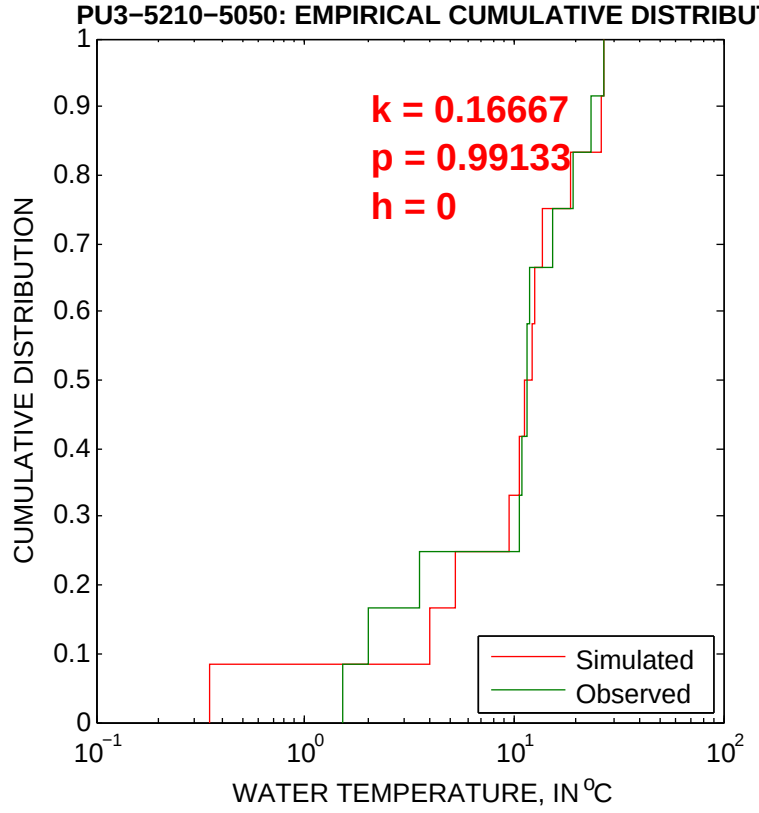












DATA SELECTION

scenario	file
P620171001WQ	WTMP.calib

plot: WTMP - water tempera...

Dates: 1/1/1985 – 12/31/201

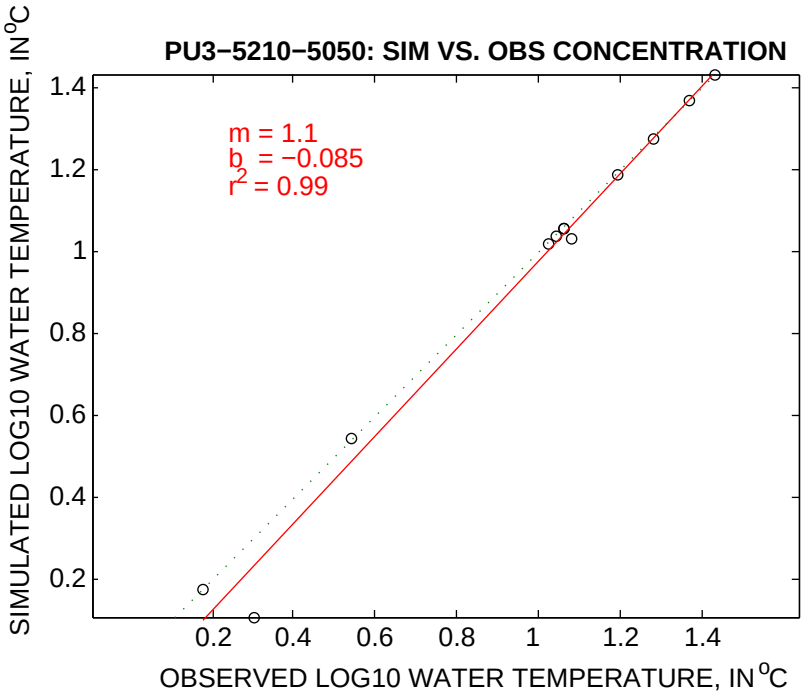
Drive	Directory	Observed
N/A	model	OBS20161101

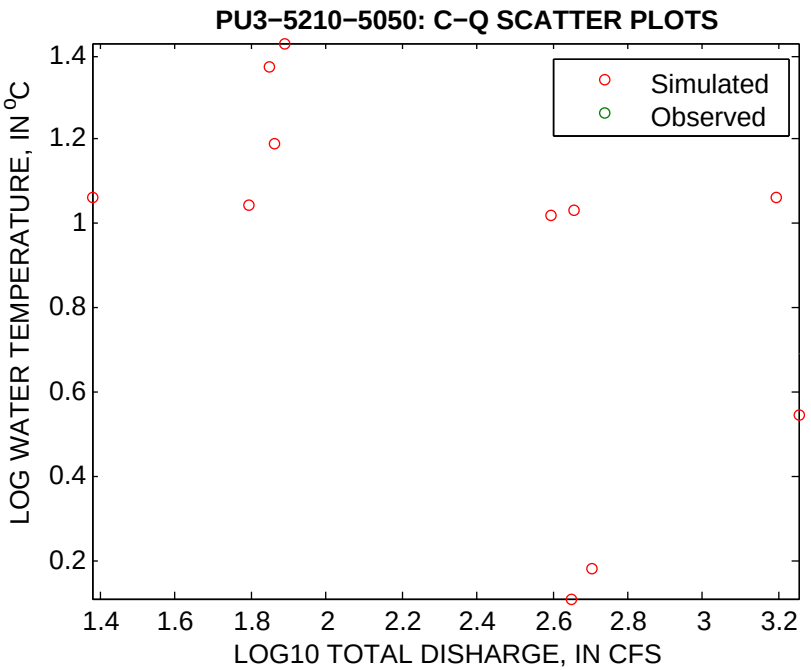
STATISTICS

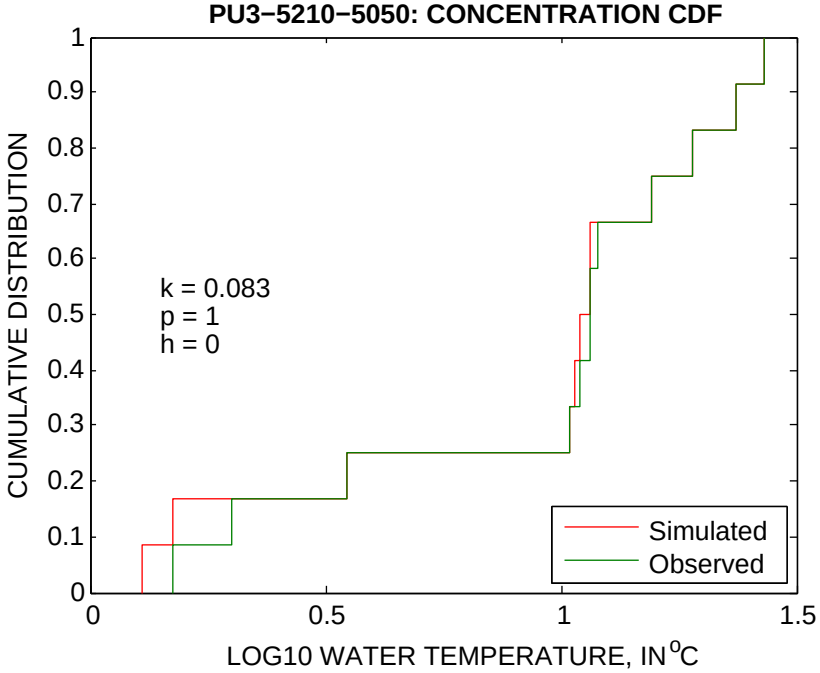
	n	12	12
		observe	simulate
min		1.5	0.34617
		0.176091	-0.460711
mean		12.375	12.6496
		0.962989	0.947652
media		11.5	11.7945
		1.0607	1.07111
max		27	27.321
		1.43136	1.4365
varian		63.9148	66.5045
		0.164756	0.256128
JB		0.5	0.5
		0.108193	0.002120
		ra	log
%		2.2191	-1.59264
err.va		3.21789	0.0812352
rel.std.err		0.0503466	0.493063
mod.eff		0.949653	0.506937

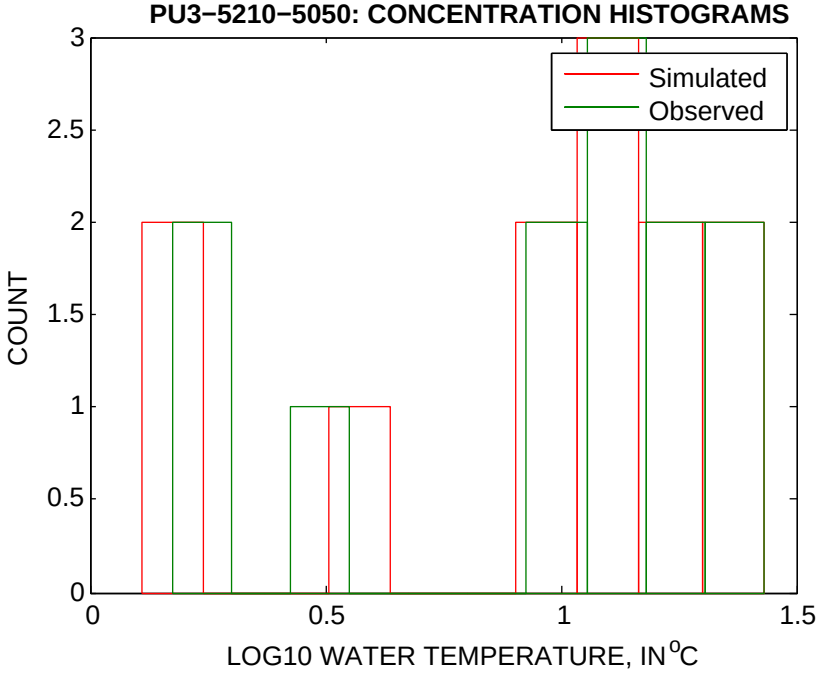
VERSION 2.1

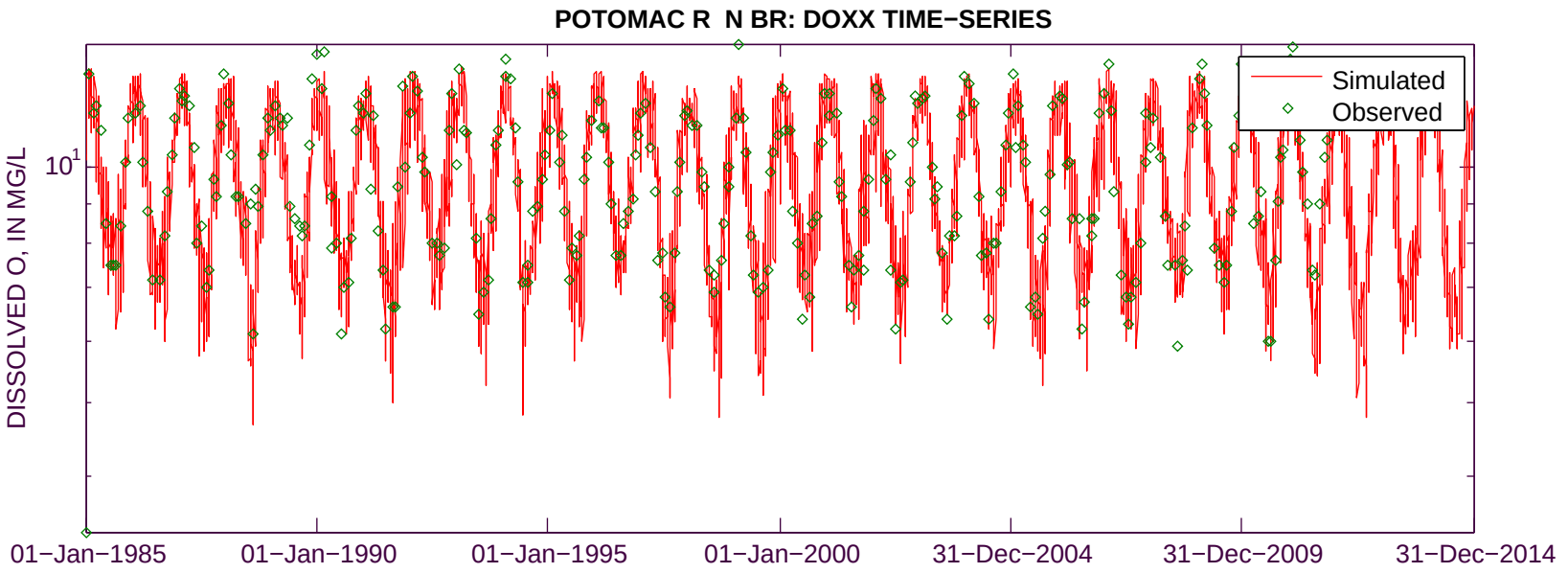
ALL DATA
LOG10

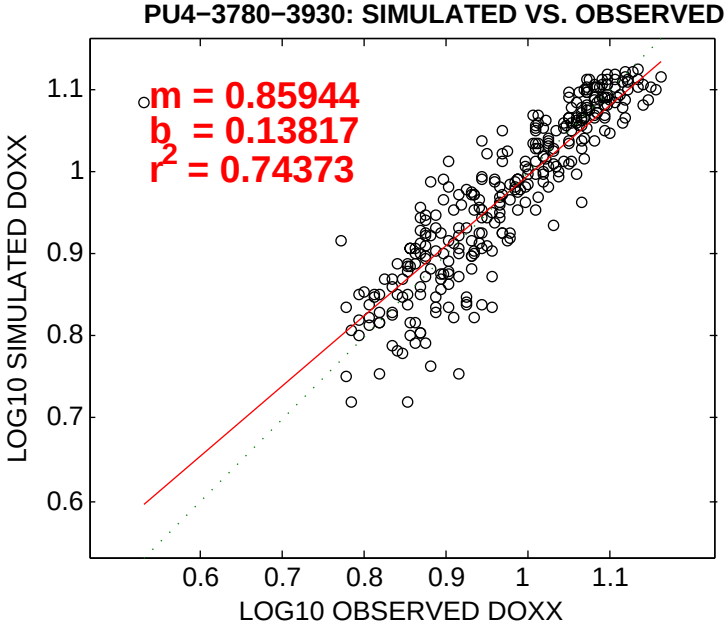


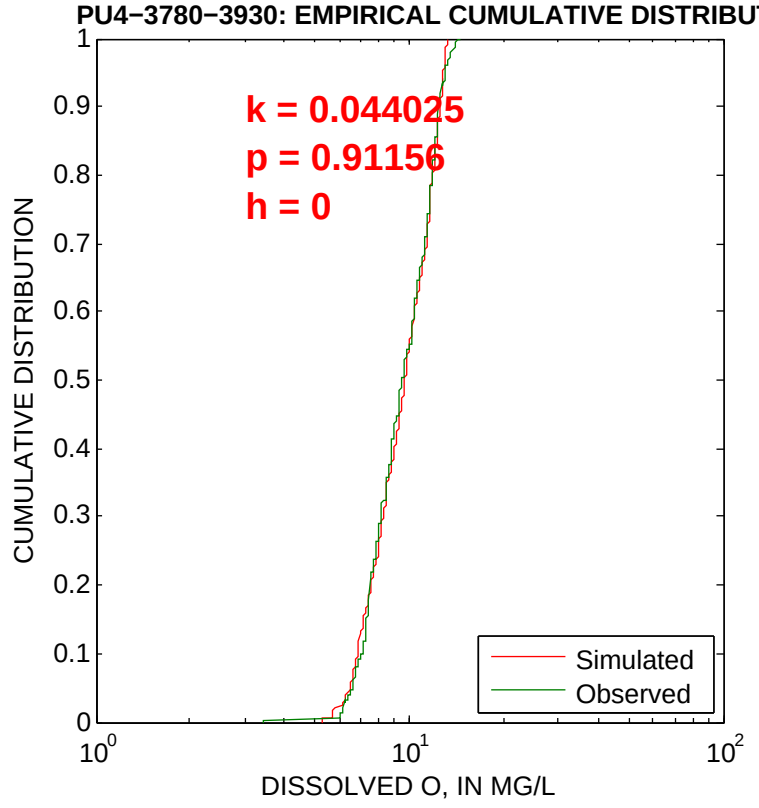












DATA SELECTION

scenario	file
P620171001WQ	DOXX.calib

plot: DOXX - dissolved oxygen

Dates: 1/1/1985 – 12/31/201

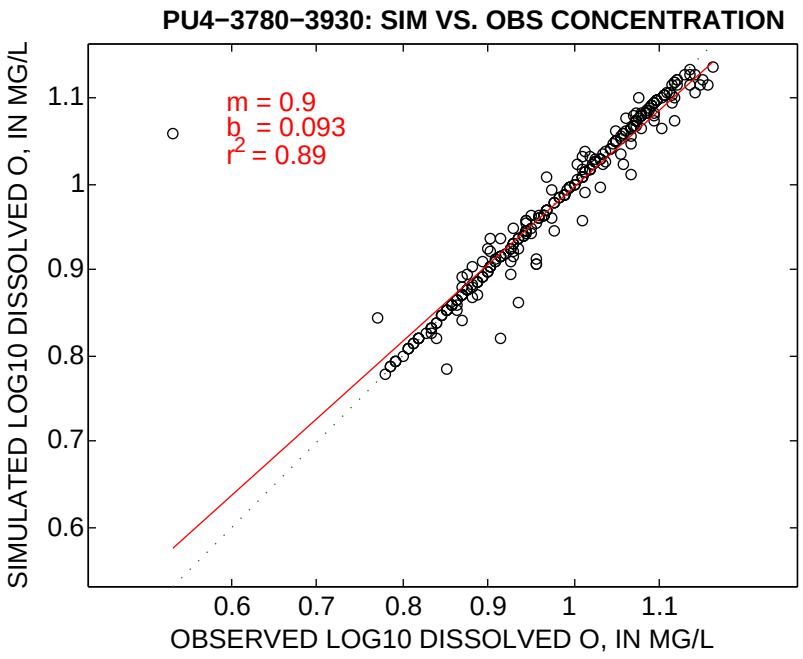
Drive	Directory	Observed
N/A	model	OBS20161101

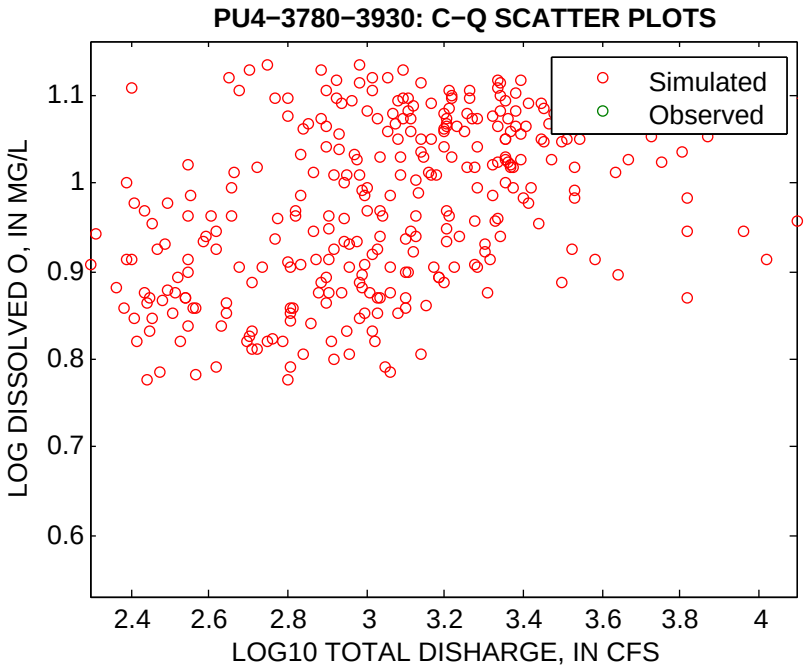
STATISTICS

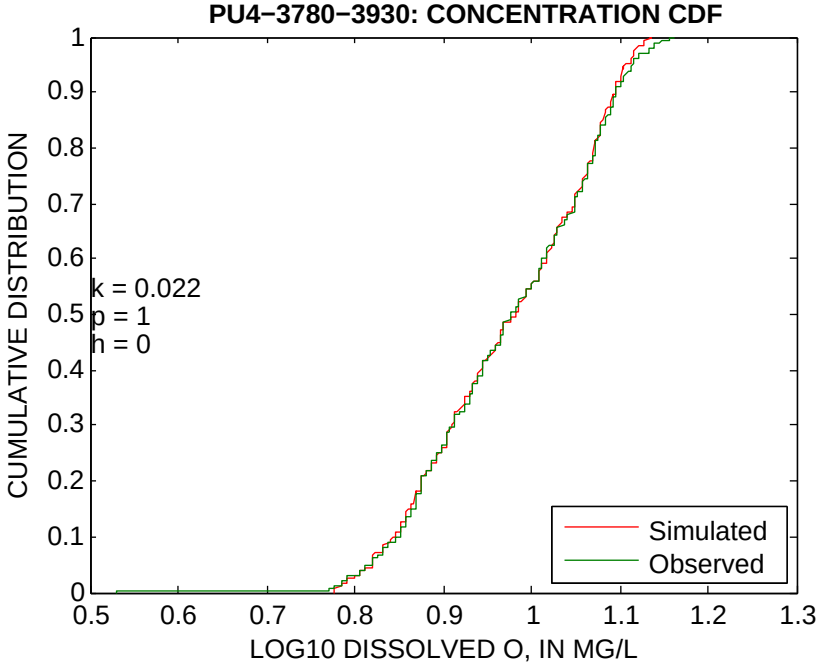
	n	observe	simulate
		318	318
min		3.4	5.2433
		0.531479	0.719605
mean		9.67843	9.70177
		0.974856	0.976002
media		9.5	9.68195
		0.977724	0.98596
max		14.5	13.305
		1.16137	1.12401
varian		4.54076	4.46042
		0.00982627	0.00975894
JB		0.008454	0.002522
		0.027583	0.002795
		ra	log
%		0.241138	0.117543
err.va		0.949259	0.00269634
rel.std.err		0.209053	0.274402
mod.eff		0.790947	0.725598

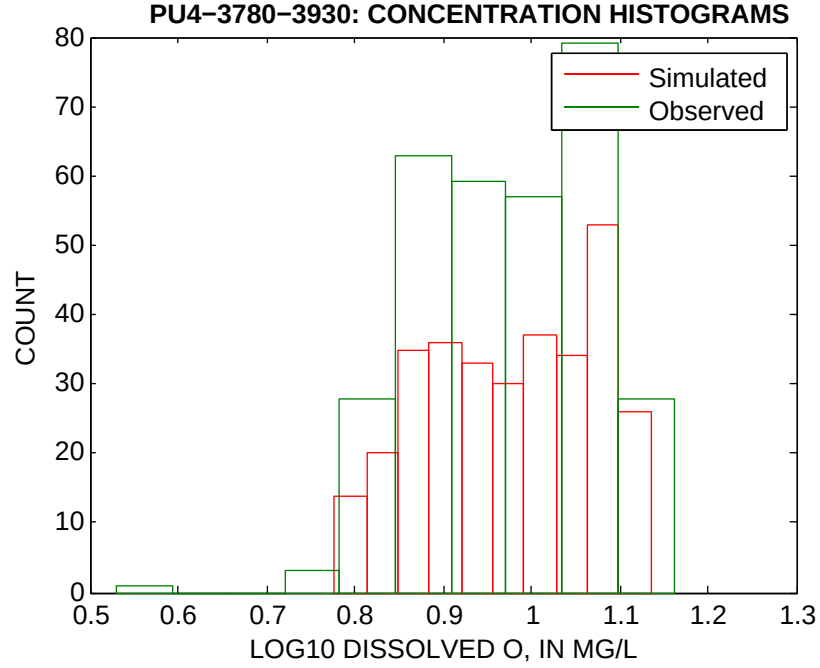
VERSION 2.1

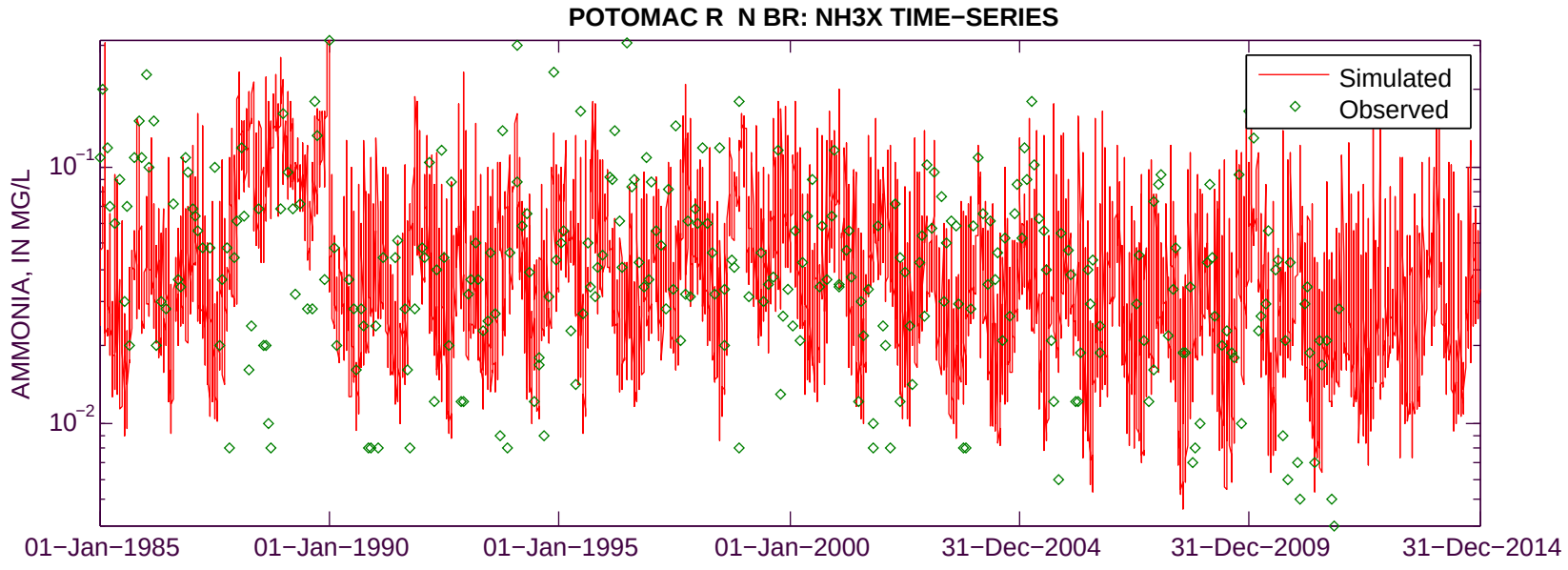
ALL DATA
LOG10

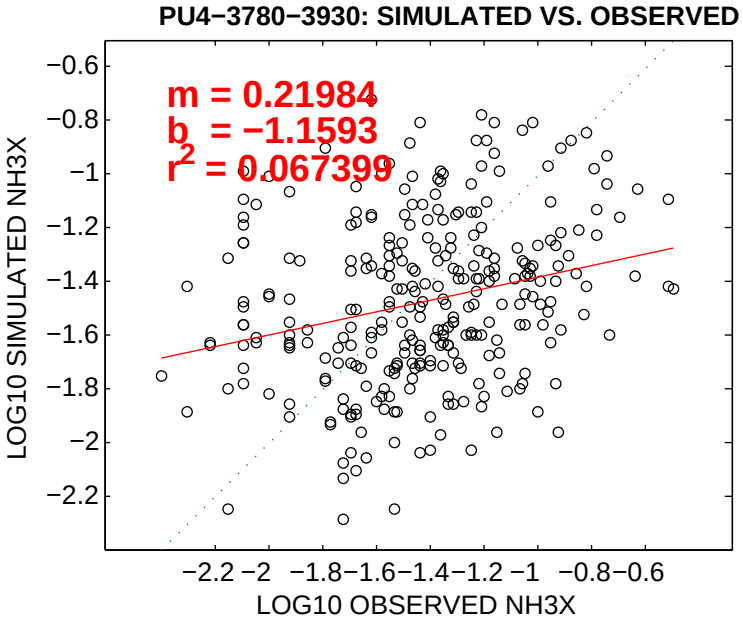


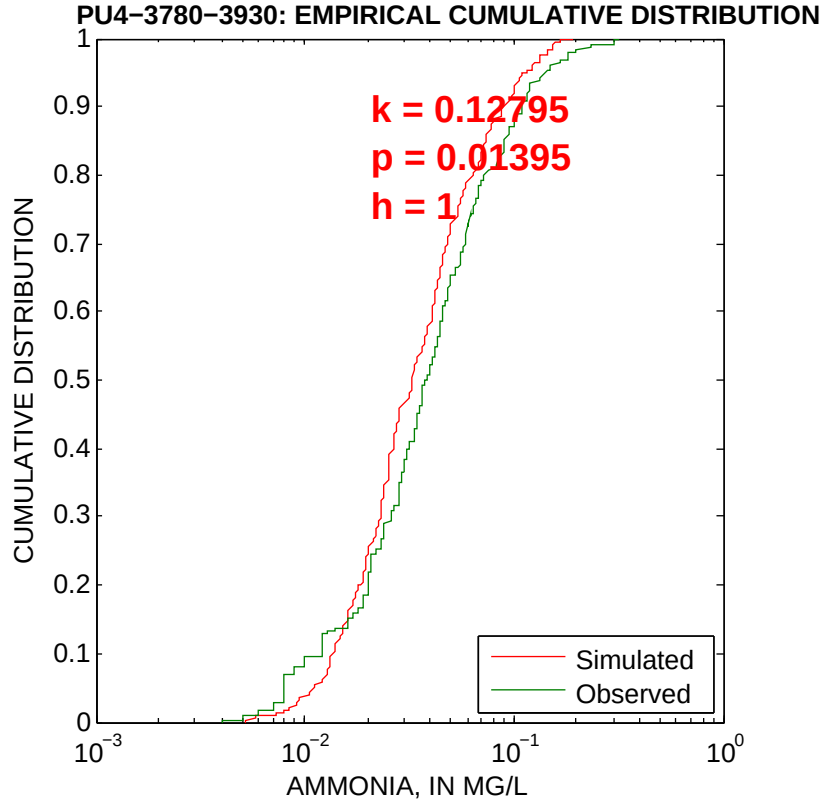












DATA SELECTION

scenario	file
P620171001WQ	NH3X.calib

plot: NH3X - ammonia

Dates: 1/1/1985 – 12/31/201

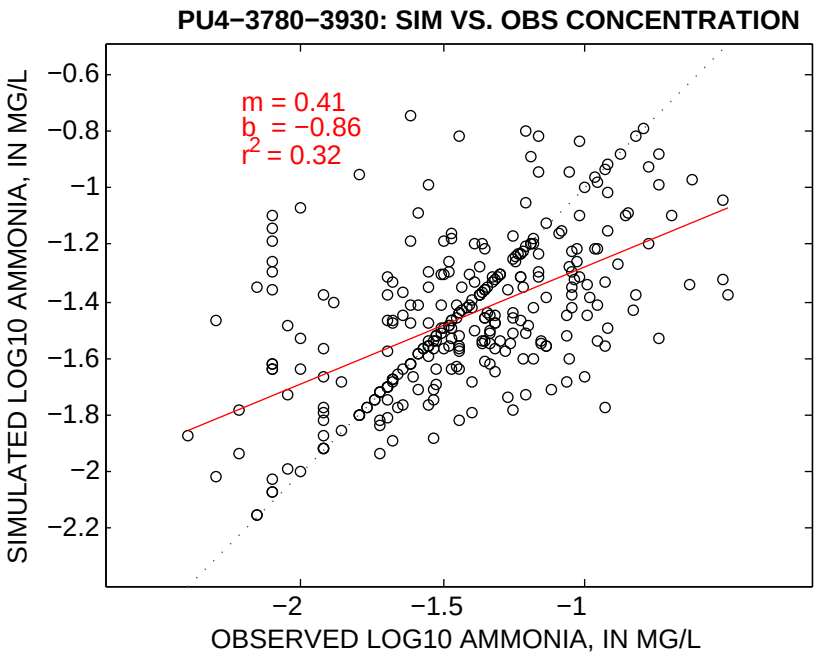
Drive	Directory	Observed
N/A	model	OBS20161101

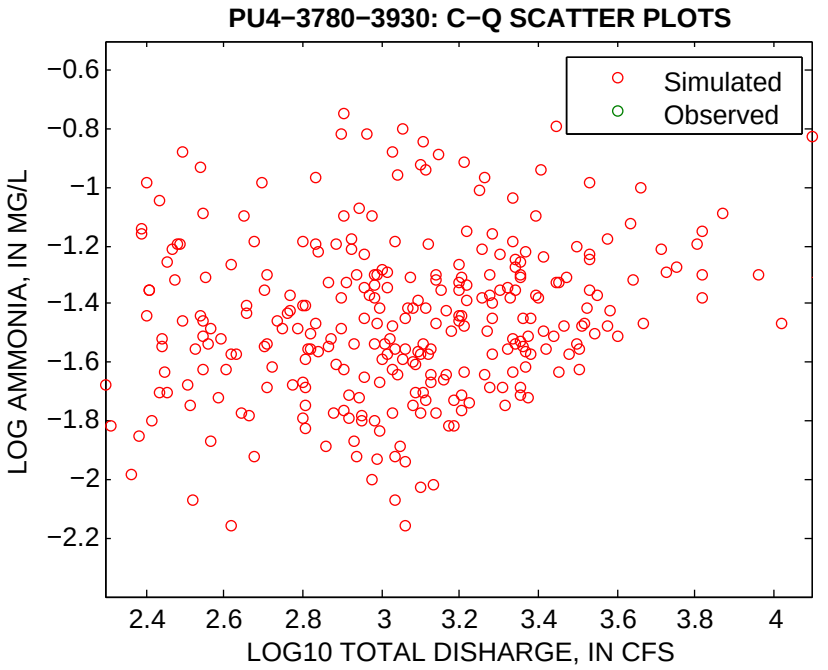
STATISTICS

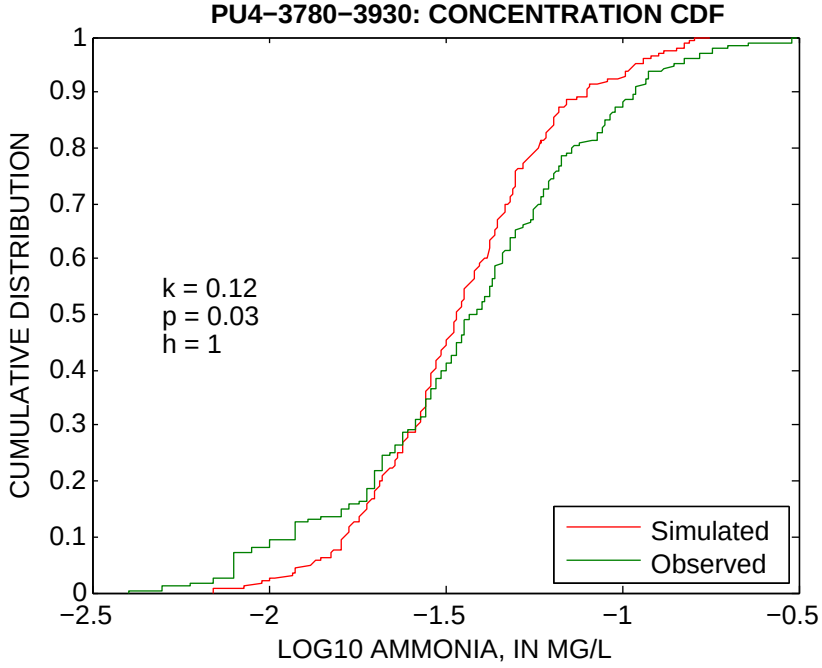
	n	observe	simulate
		297	297
min		0.004	0.0051828
		-2.39794	-2.28544
mean		0.0523872	0.0432769
		-1.42654	-1.47292
media		0.038	0.032729
		-1.42022	-1.48507
max		0.316	0.1914
		-0.500313	-0.718058
varian		0.00228706	0.0010969
		0.132608	0.0950856
JB		0.001	0.001
		0.5	0.26217
		ra	log
%		-17.3904	3.25055
err.va		0.00275723	0.171547
rel.std.err		1.20558	1.29364
mod.eff		-0.205576	-0.293641

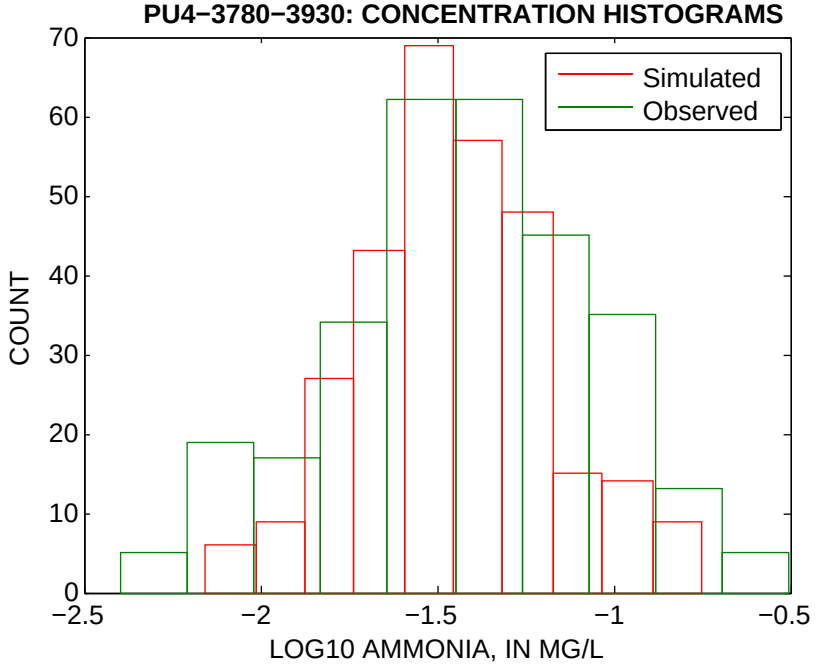
VERSION 2.1

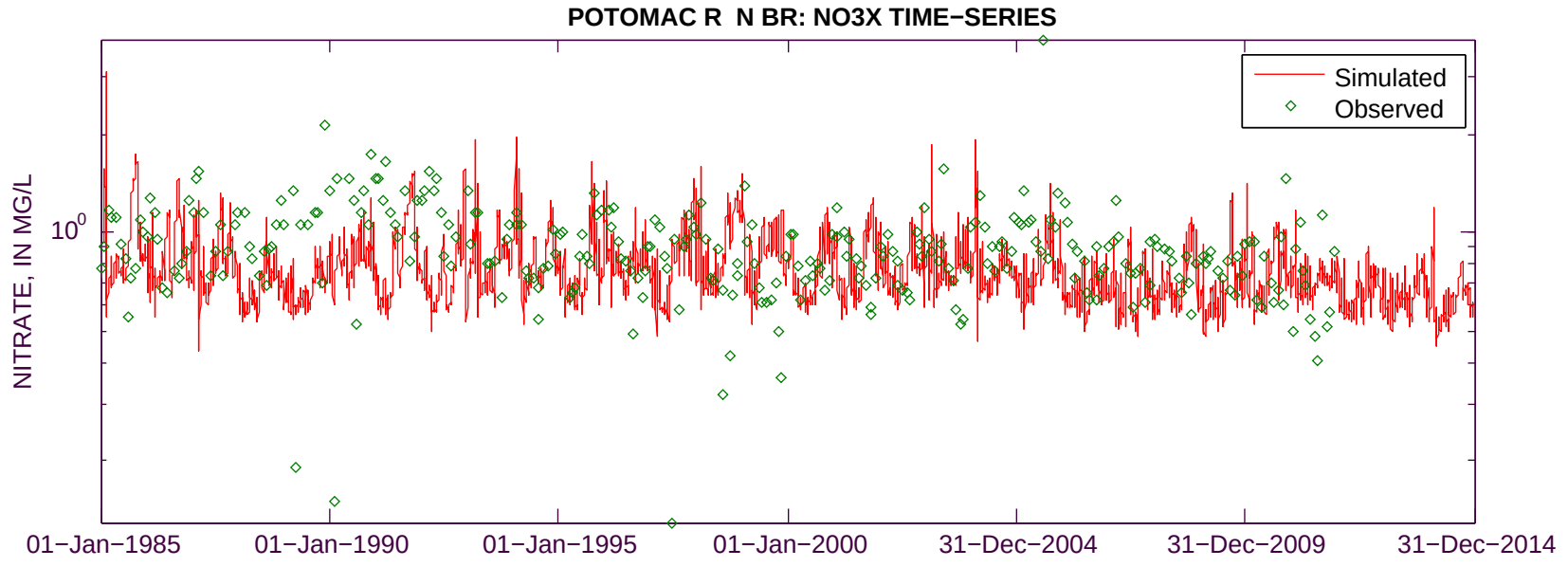
ALL DATA
LOG10

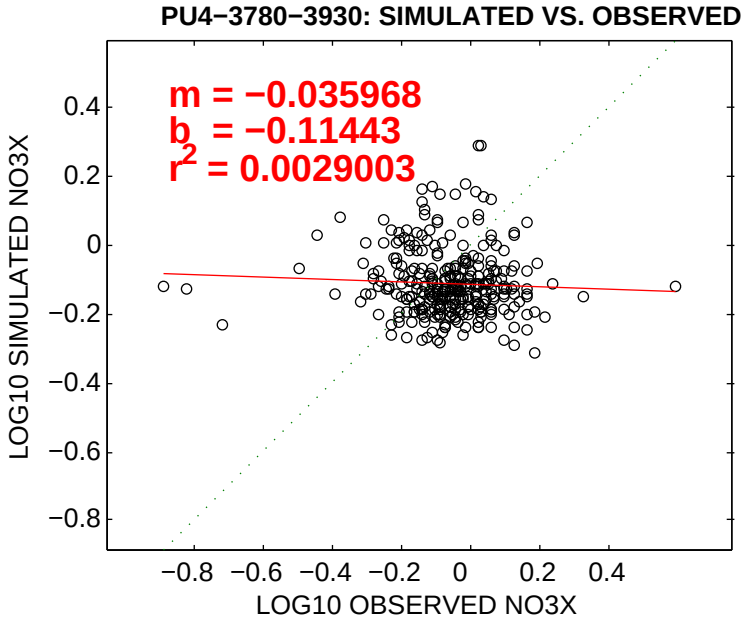


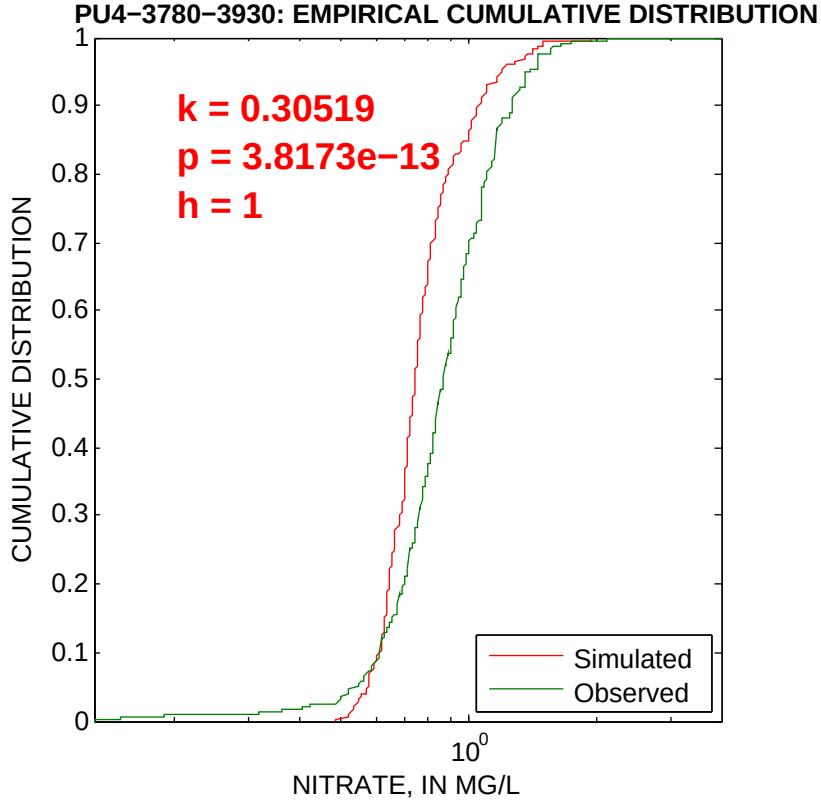












DATA SELECTION

scenario	file
P620171001WQ	NO3X.calib

plot: NO3X - nitrate

Dates: 1/1/1985 – 12/31/201

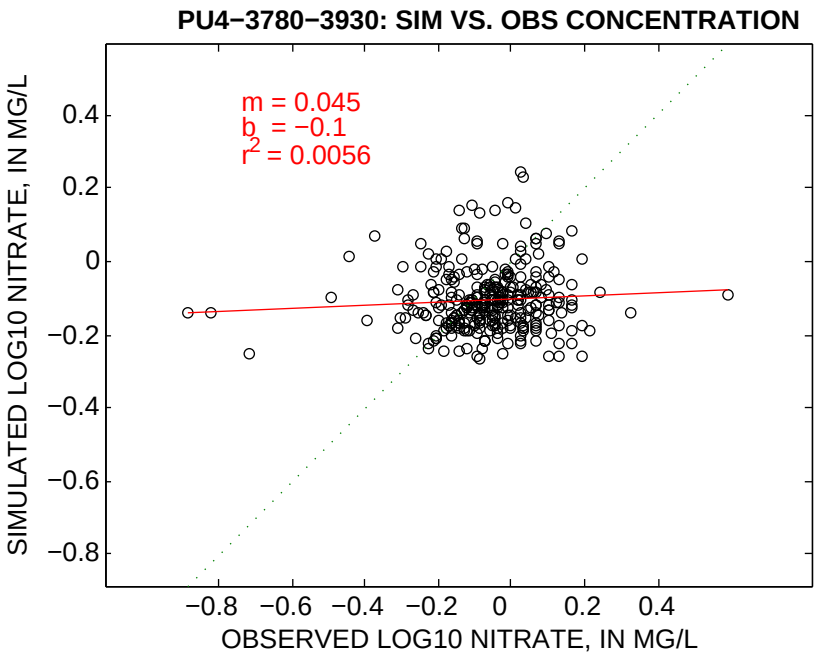
Drive	Directory	Observed
N/A	model	OBS20161101

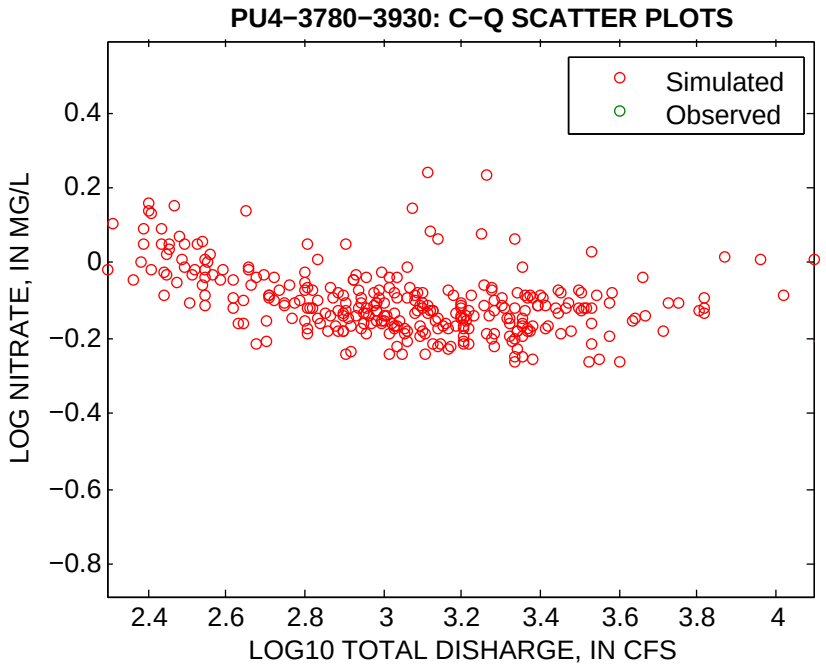
STATISTICS

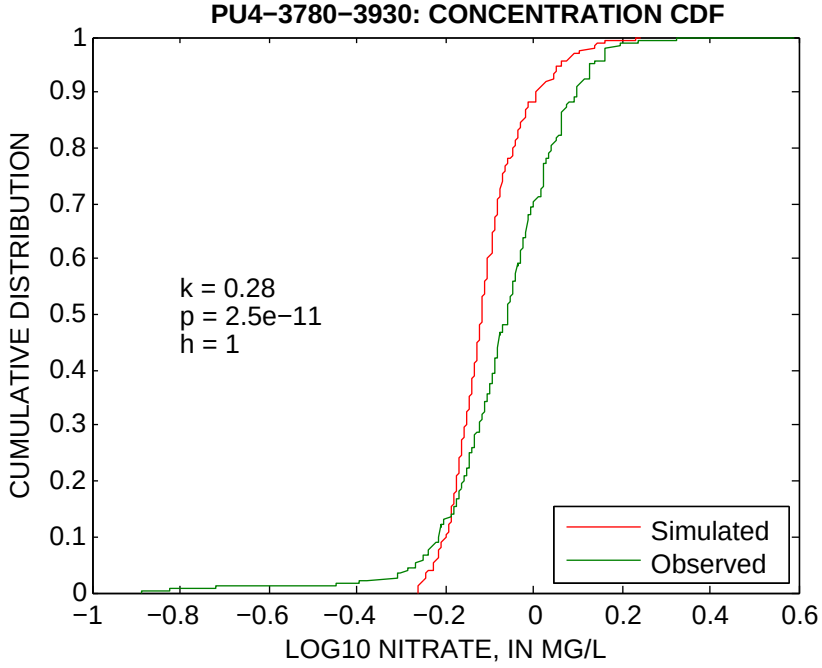
	n	308	308
		observe	simulate
min		0.13	0.48523
		-0.886057	-0.314052
mean		0.911279	0.793845
		-0.0632861	-0.112152
media		0.87	0.74289
		-0.0604807	-0.129076
max		3.91	1.9374
		0.592177	0.287219
varian		0.0987246	0.0425058
		0.0213474	0.00952231
JB		0.001	0.001
		0.001	0.001
		ra	log
%		-12.8867	77.2144
err.va		0.161506	0.034801
rel.std.err		1.63592	1.63022
mod.eff		-0.63592	-0.630223

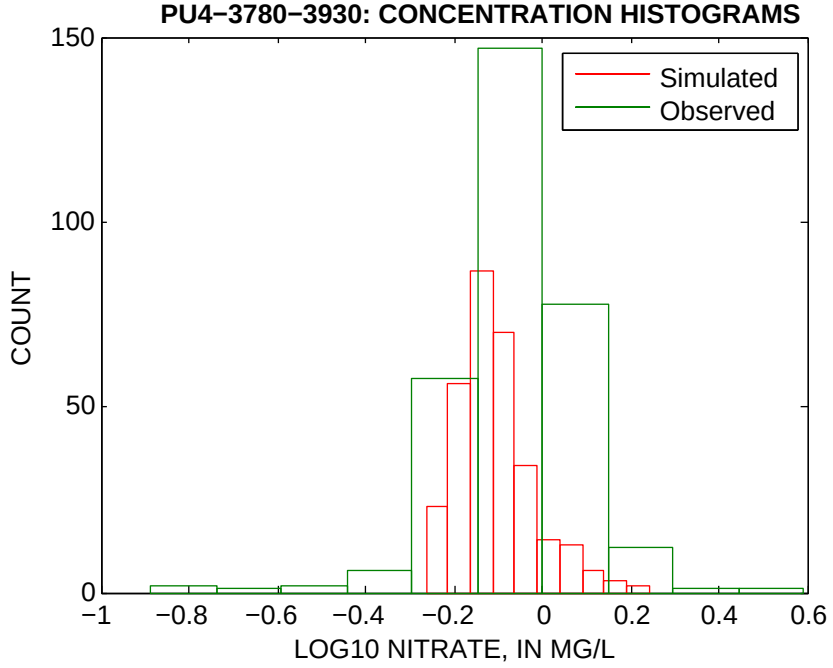
VERSION 2.1

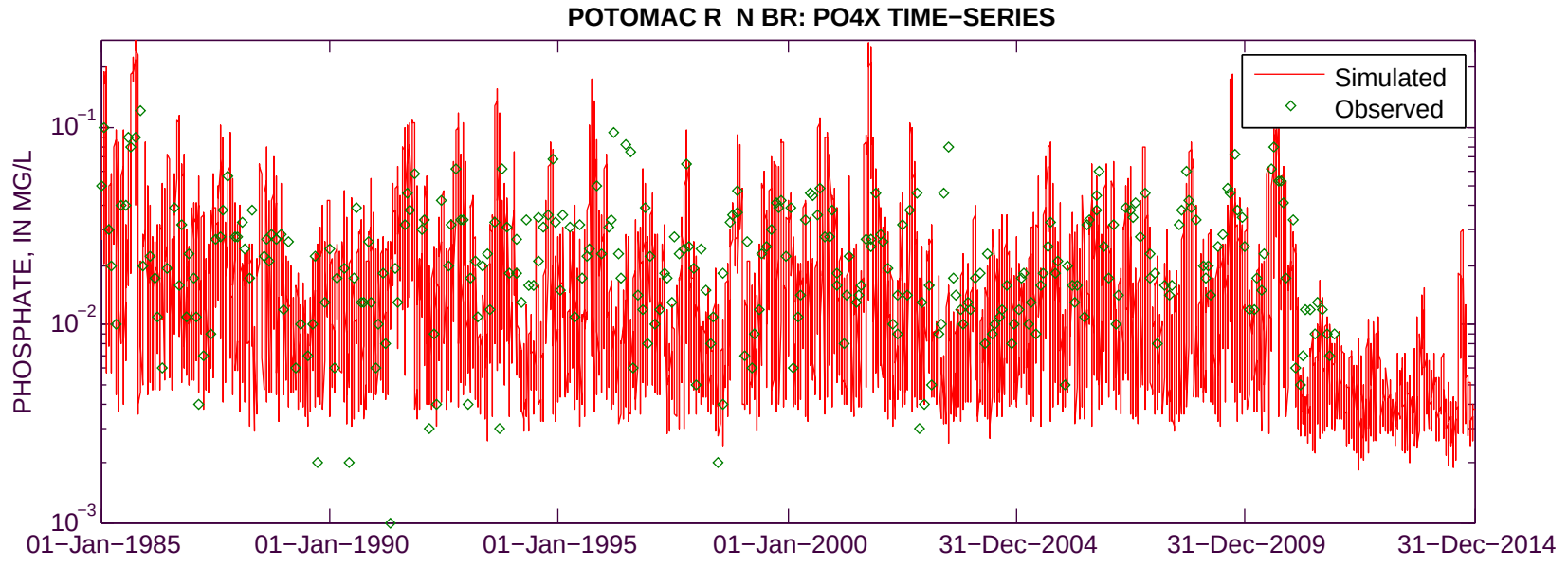
ALL DATA
LOG10

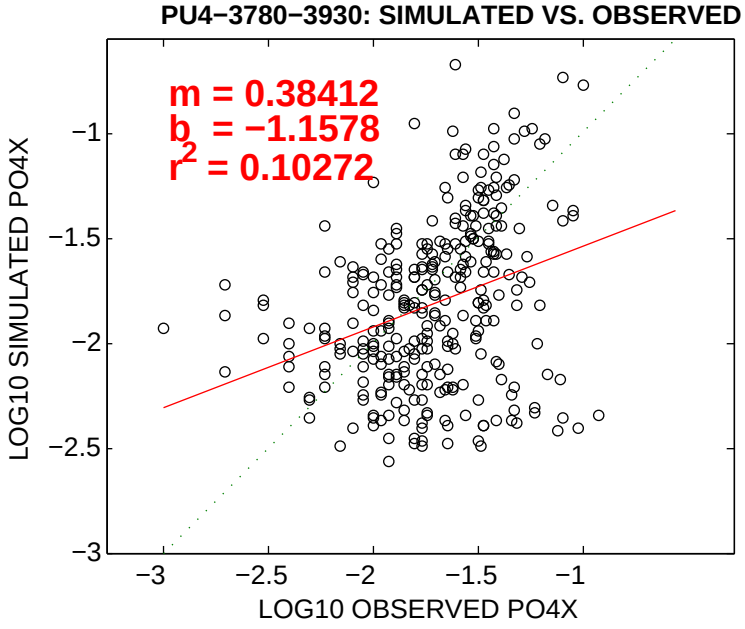


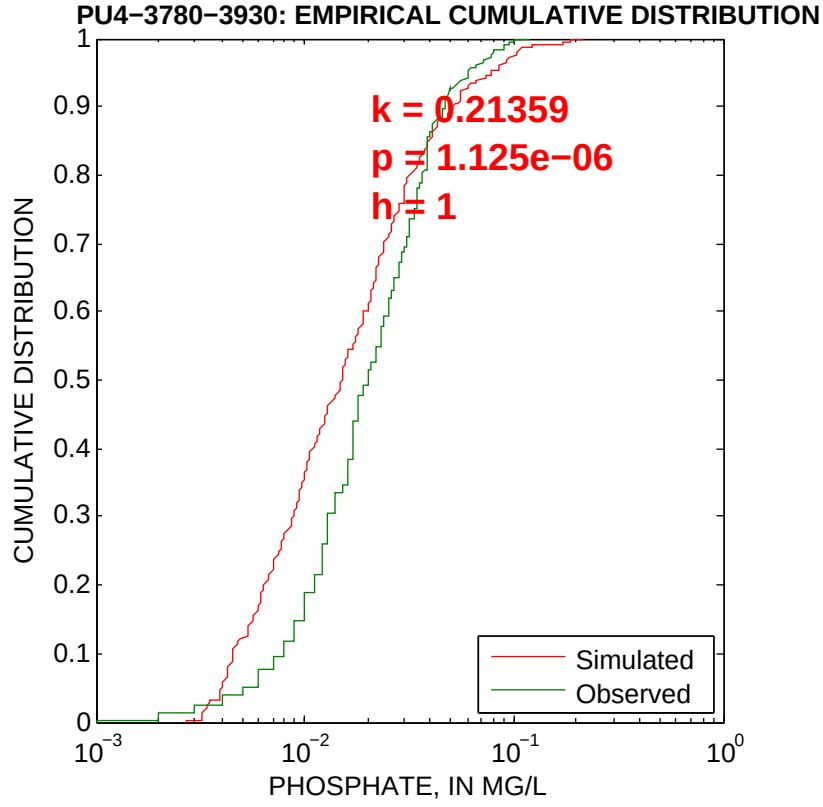












DATA SELECTION

scenario	file
P620171001WQ	PO4X.calib

plot: PO4X - phosphate

Dates: 1/1/1985 — 12/31/201

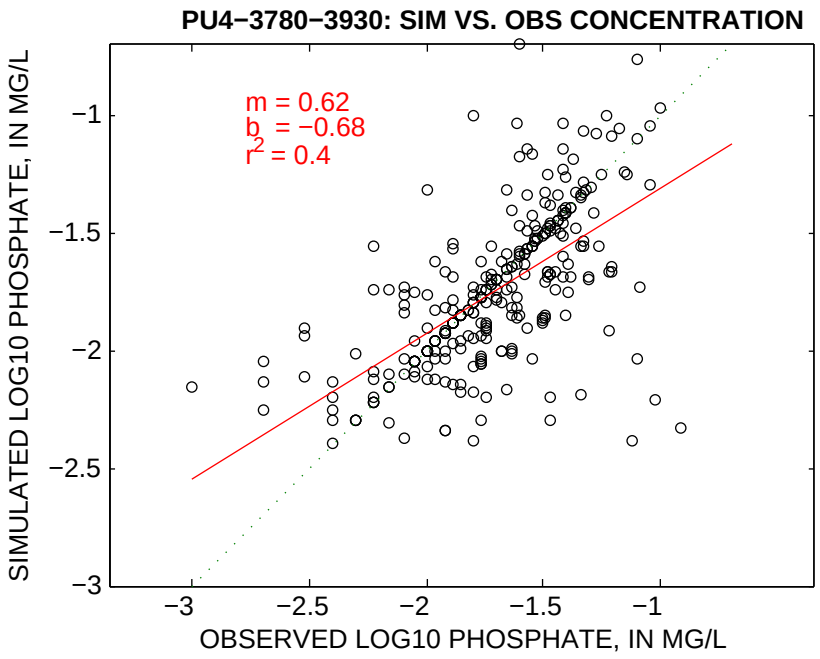
Drive	Directory	Observed
N/A	model	OBS20161101

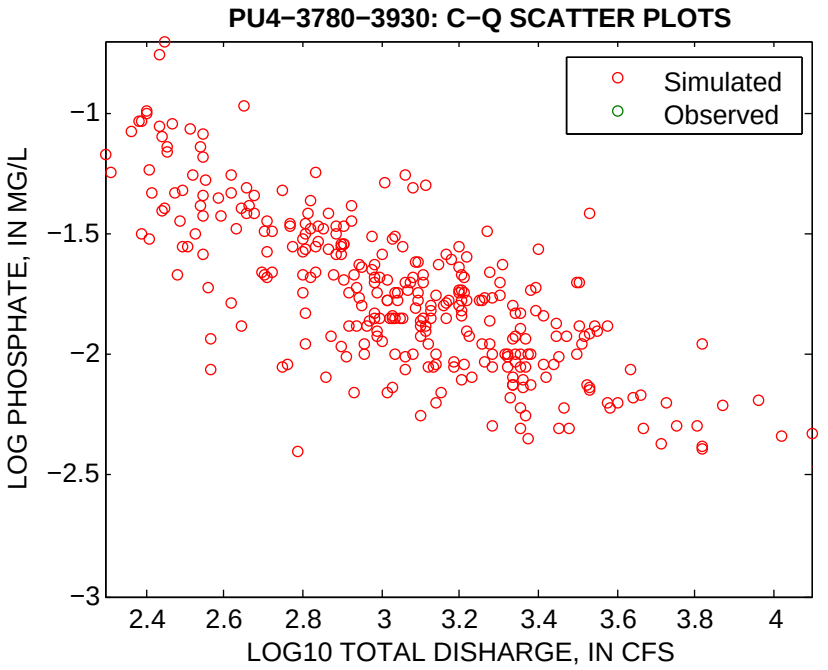
STATISTICS

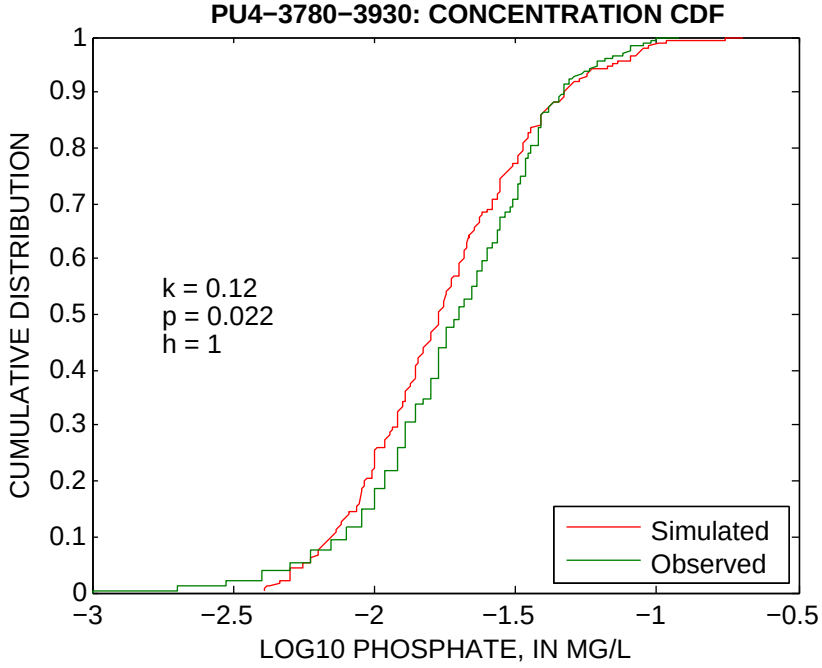
	n	observe	simulate
		309	309
min		0.001	0.0027309
		-3	-2.56369
mean		0.0249806	0.0235608
		-1.71263	-1.81569
media		0.02	0.015217
		-1.69897	-1.81767
max		0.12	0.21524
		-0.920819	-0.667077
varian		0.00033574	0.00074214
		0.106695	0.15325
JB		0.001	0.001
		0.001966	0.021206
		ra	log
%		-5.68369	6.01722
err.va		0.00071326	0.188633
rel.std.err		2.12445	1.76796
mod.eff		-1.12445	-0.767965

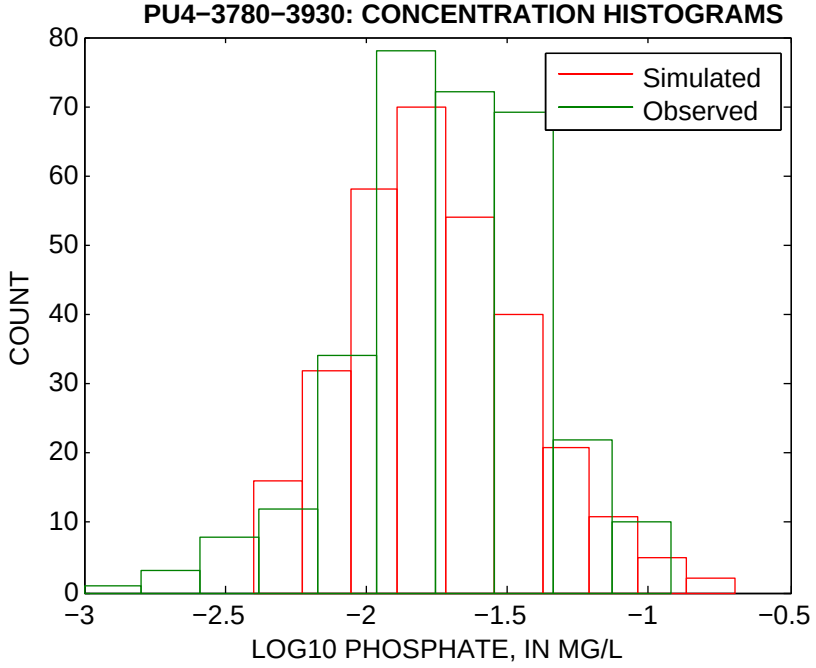
VERSION 2.1

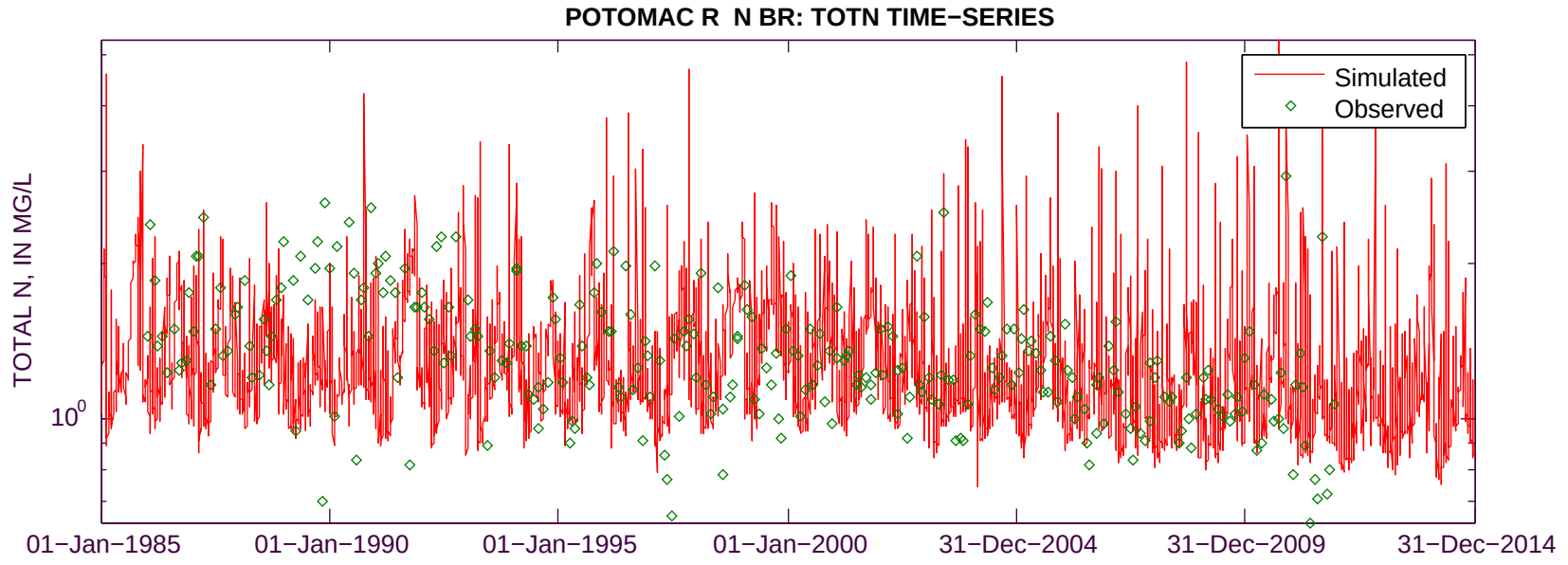
ALL DATA
LOG10

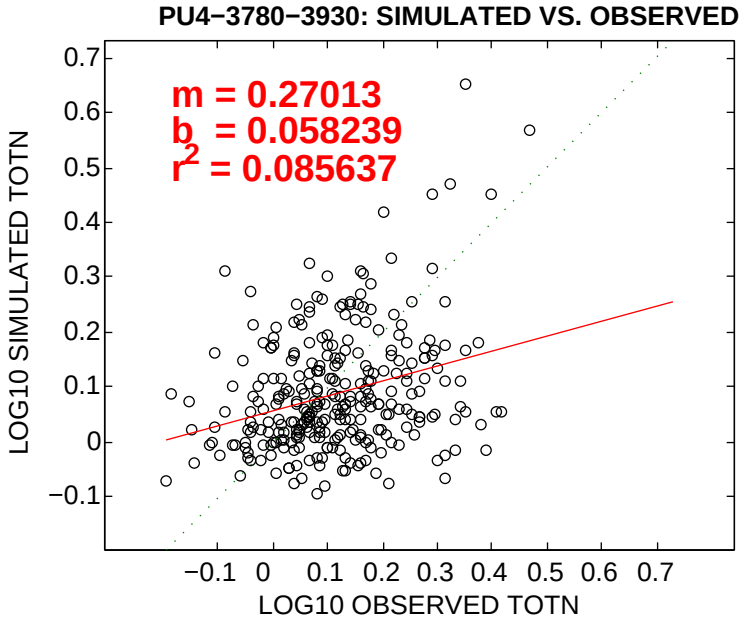


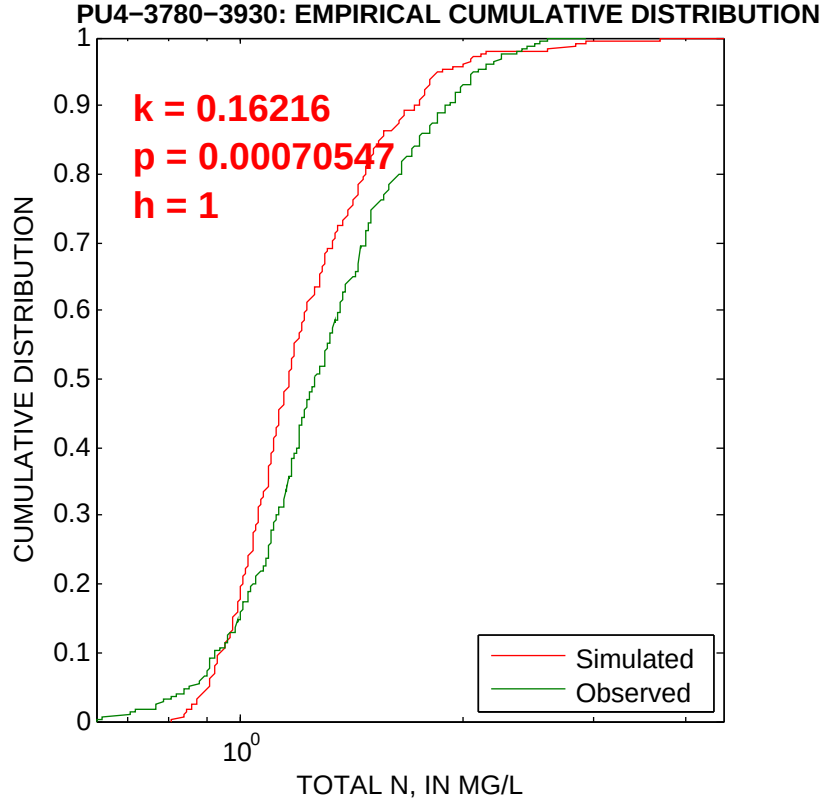












DATA SELECTION

scenario: P620171001WQ | file: TOTN.calib

plot: TOTN - total nitrogen

Dates: 1/1/1985 – 12/31/201

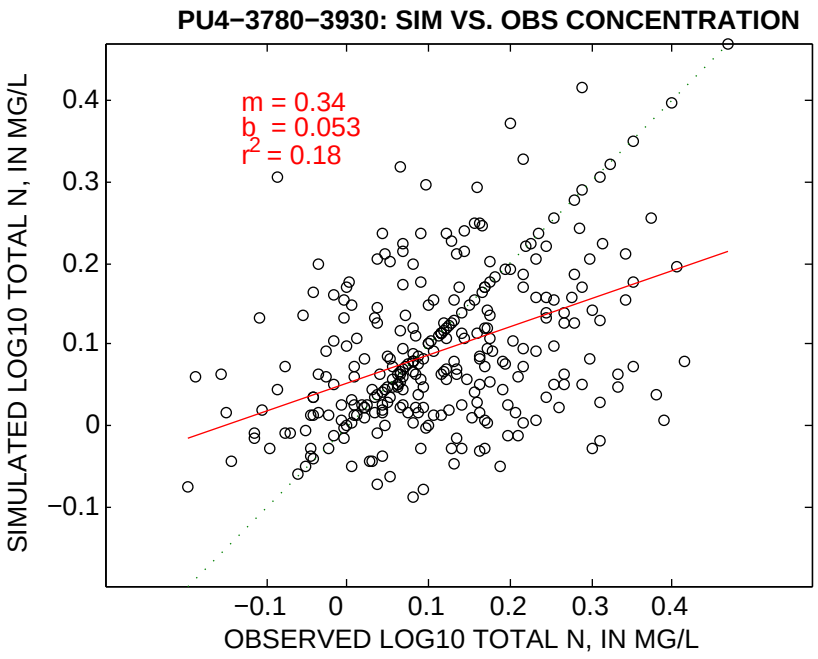
Drive | Directory: N/A | model | Observed: OBS20161101

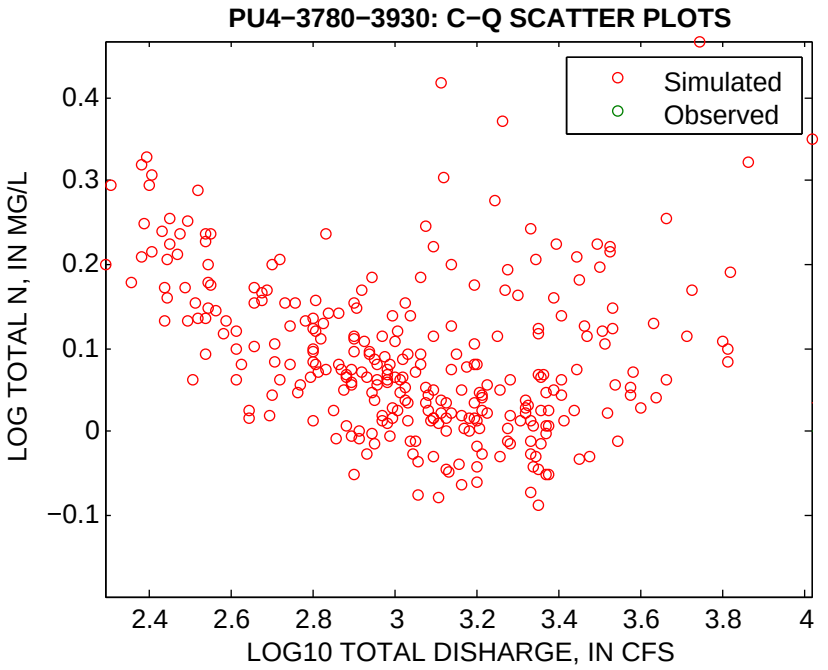
STATISTICS

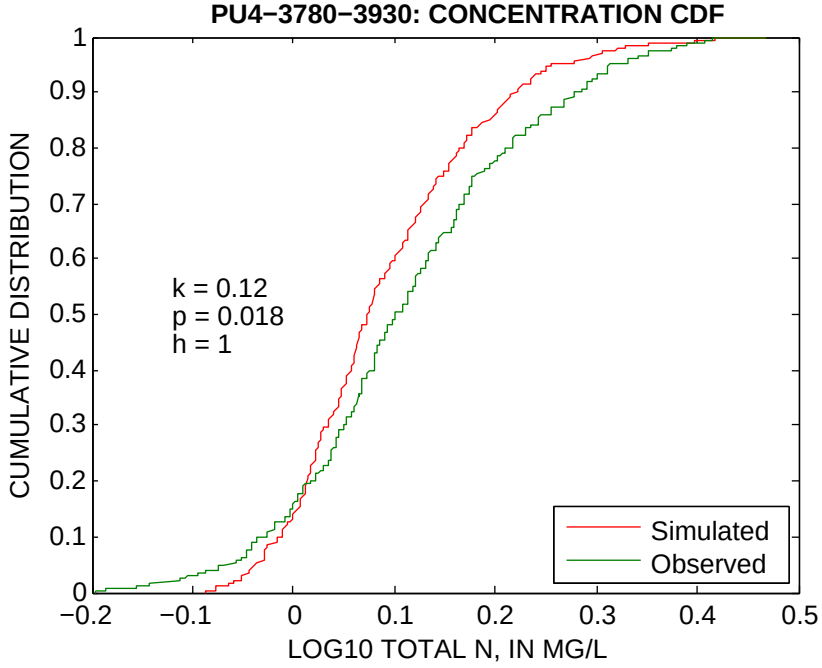
		observe	simulate
n		296	296
min		0.6359	0.80574
		-0.196611	-0.0938051
mean		1.34953	1.27232
		0.113771	0.0889718
media		1.26	1.16405
		0.100371	0.0659716
max		2.93797	4.5061
		0.468047	0.653801
varian		0.149219	0.16525
		0.0139916	0.0119221
JB		0.001	0.001
	☑	0.174406	0.001
		ra	log
% err.va		-5.72088	-21.7975
		0.216129	0.0189717
rel.std.err		1.4484	1.35593
mod.eff		-0.448405	-0.355935

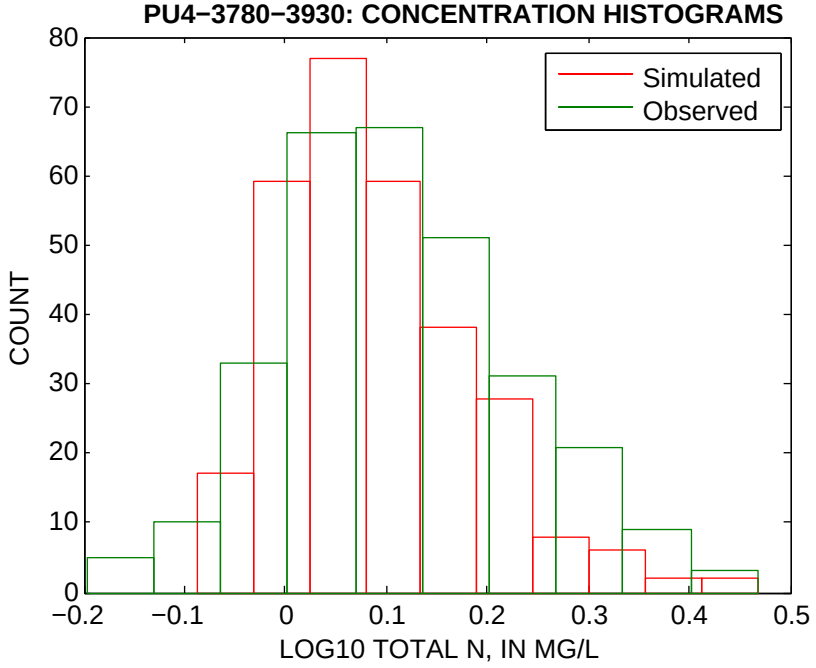
VERSION 2.1

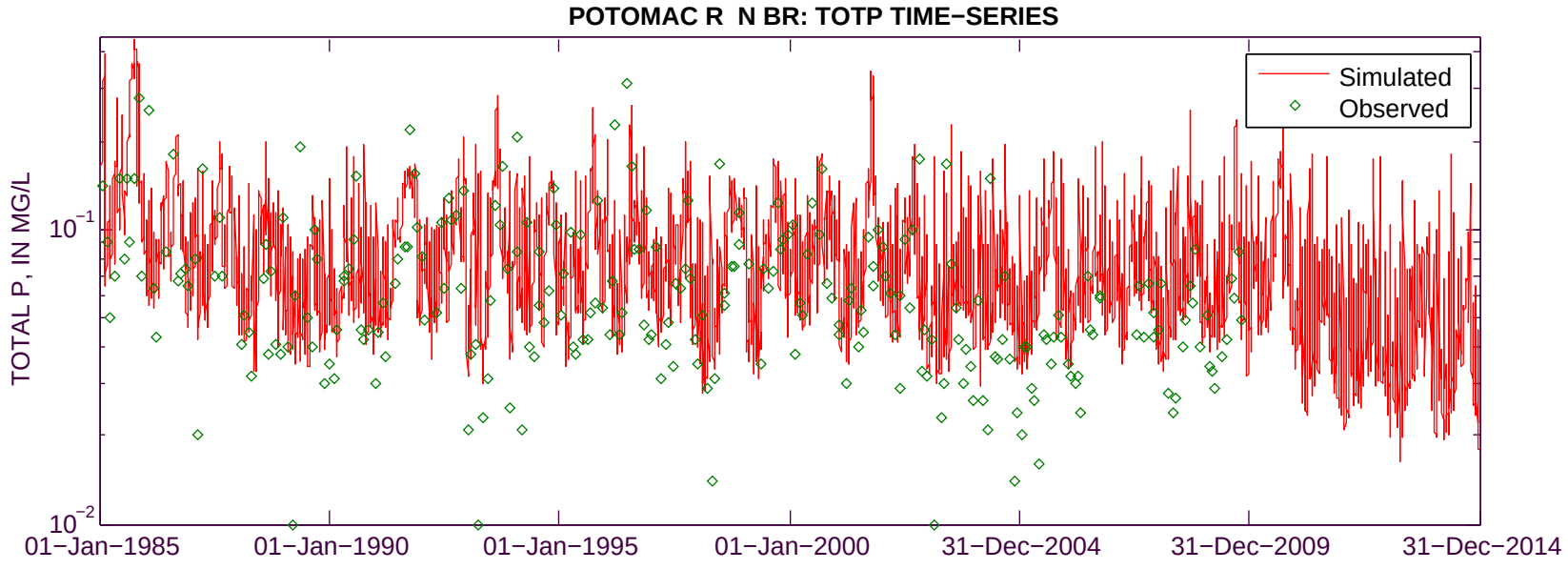
ALL DATA
LOG10

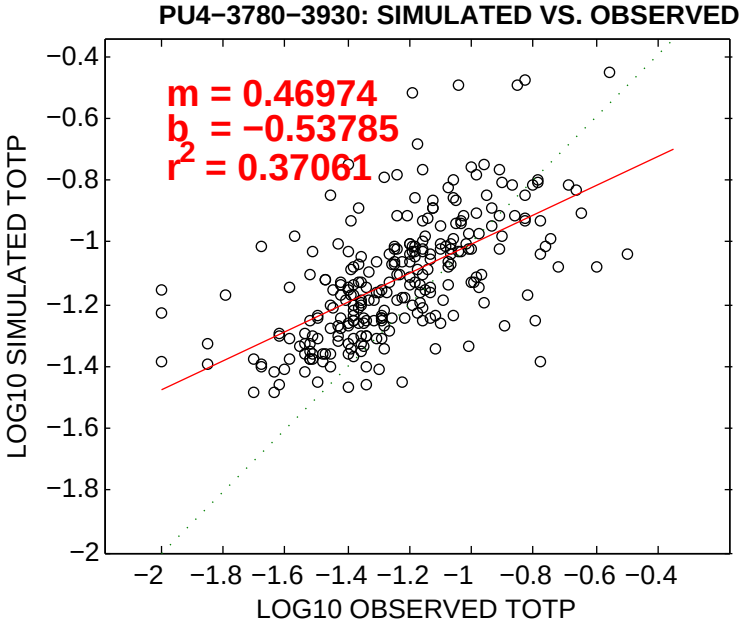


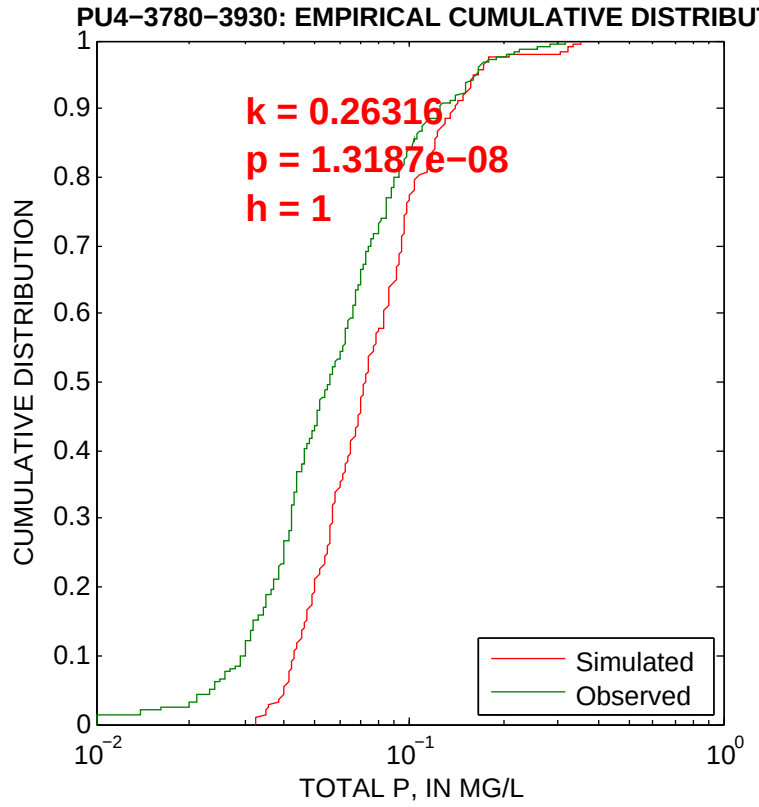












DATA SELECTION

scenario	file
P620171001WQ	TOTP.calib

plot: TOTP - total phosphorus

Dates	1/1/1985	12/31/201

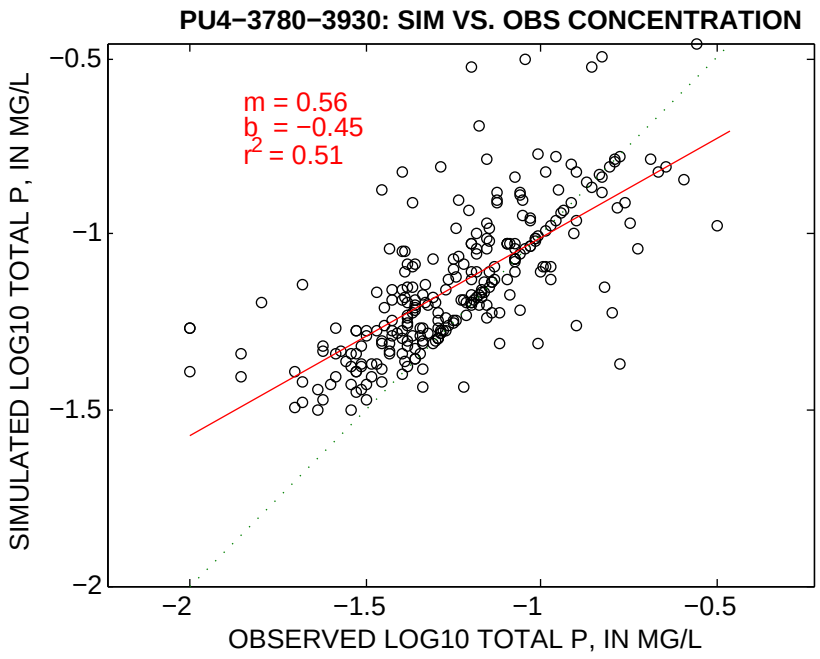
Drive	Directory	Observed
N/A	model	OBS20161101

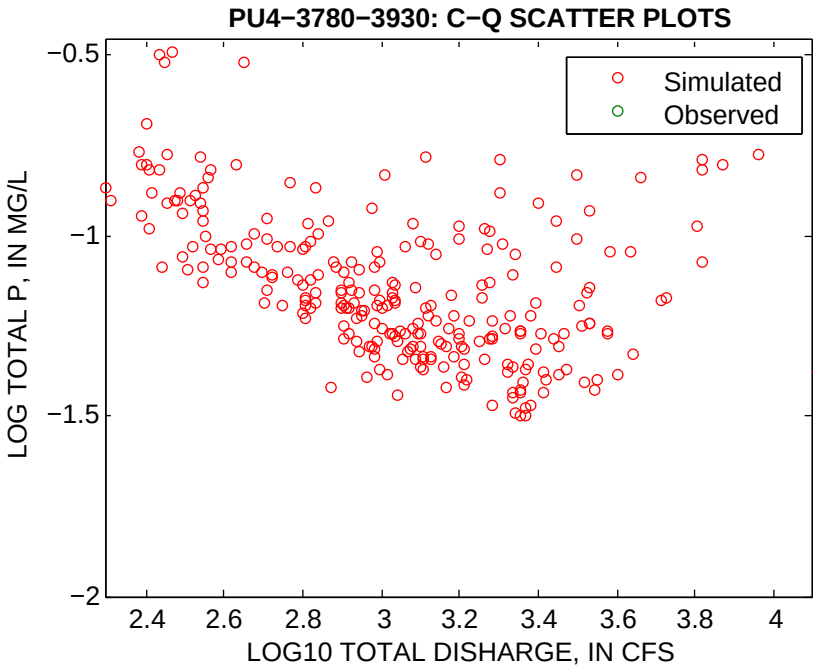
STATISTICS

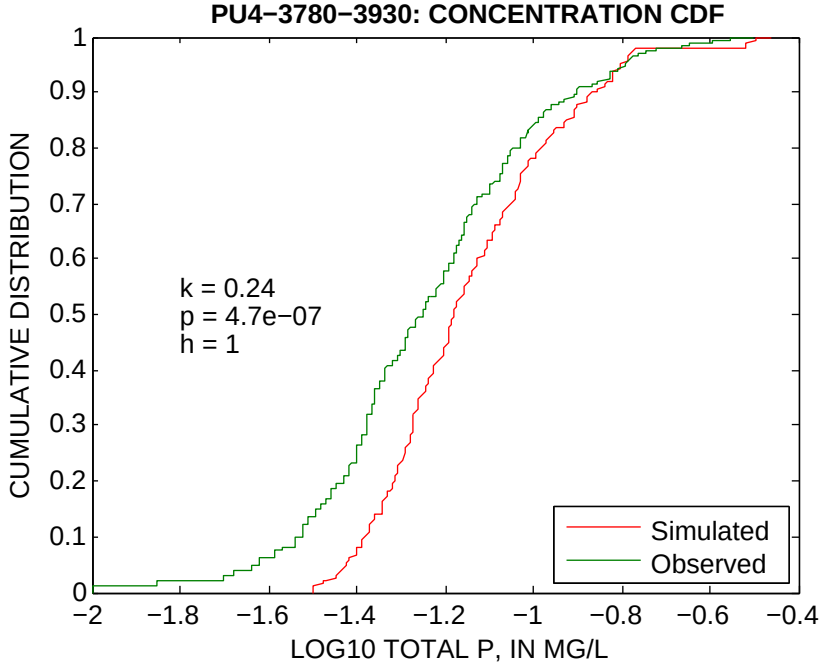
	n	266	266
		observe	simulate
min		0.01	0.032511
		-2	-1.48797
mean		0.0684248	0.0848171
		-1.24142	-1.12099
media		0.056	0.0726115
		-1.25181	-1.13899
max		0.317	0.35105
		-0.498941	-0.454631
varian		0.00206973	0.00230894
		0.0654459	0.0389648
JB		0.001	0.001
		0.323254	0.001708
		ra	log
%		23.9567	-9.70064
err.va		0.00240858	0.0574828
rel.std.err		1.16371	0.878326
mod.eff		-0.163714	0.121674

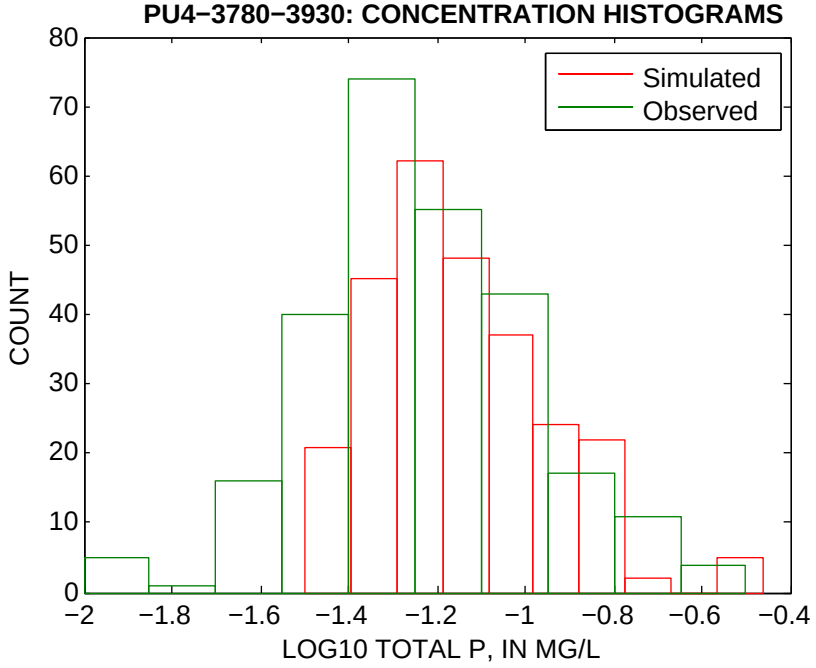
VERSION 2.1

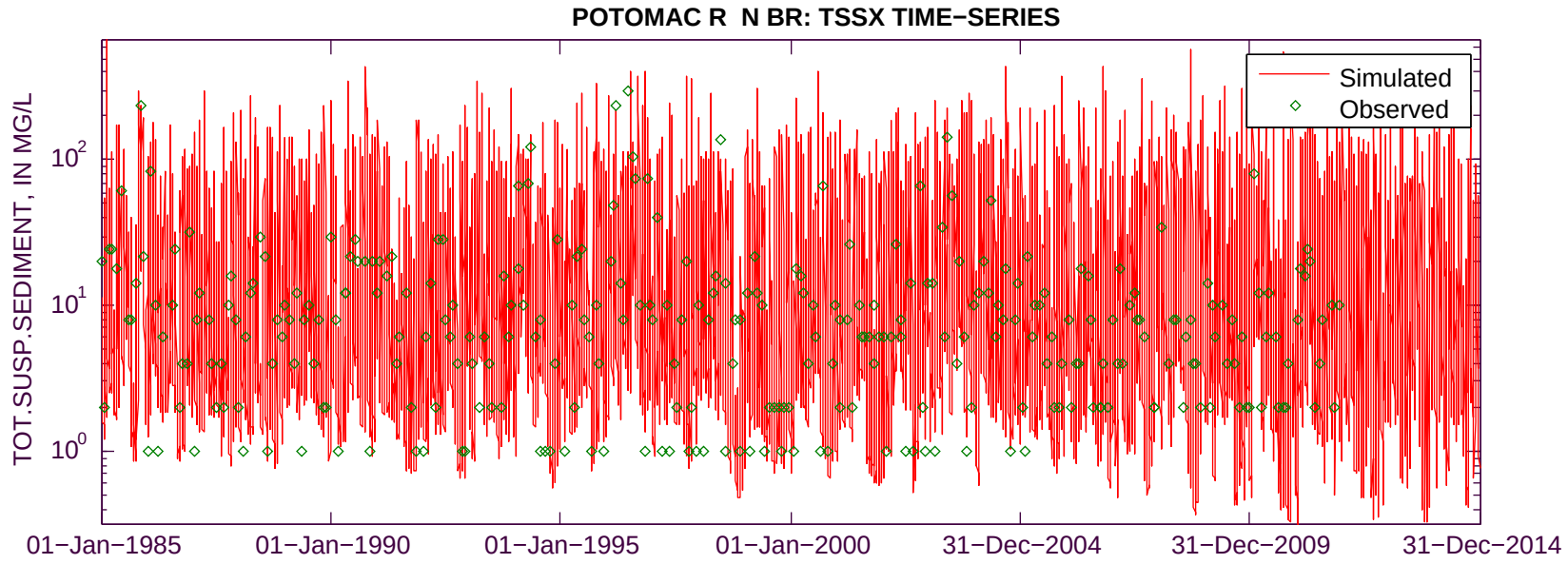
ALL DATA
LOG10

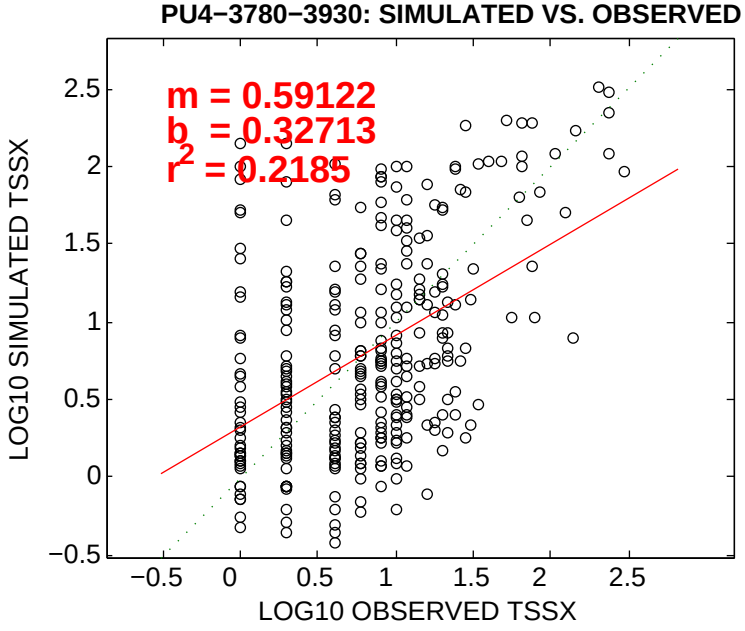


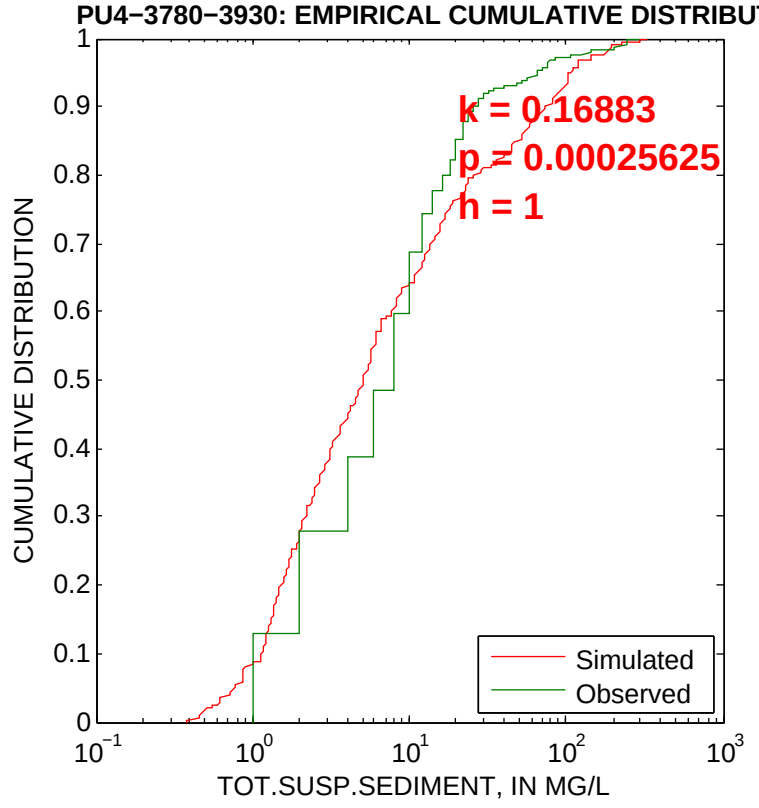












DATA SELECTION

scenario	file
P620171001WQ	TSSX.calib

plot: TSSX - total suspended ...

Dates: 1/1/1985 – 12/31/201

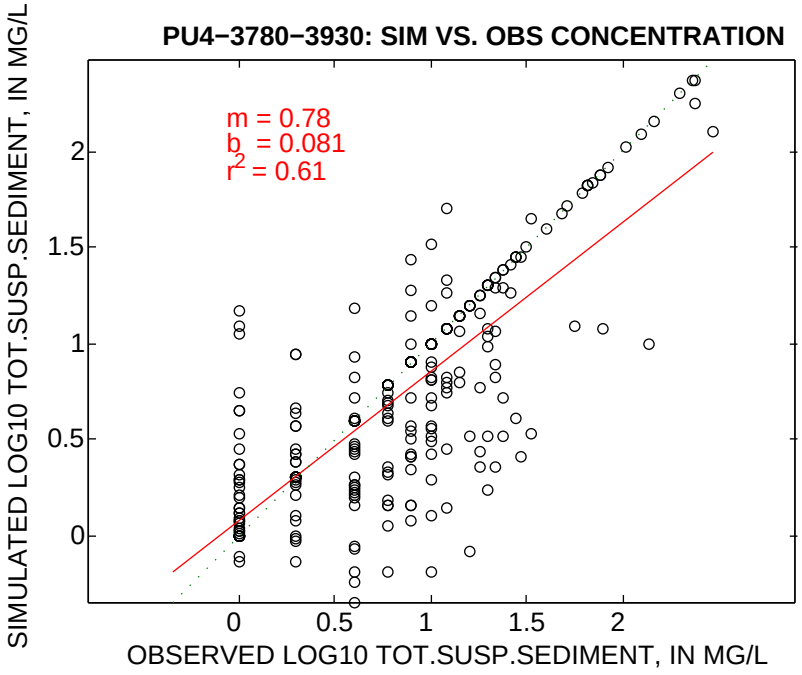
Drive	Directory	Observed
N/A	model	OBS20161101

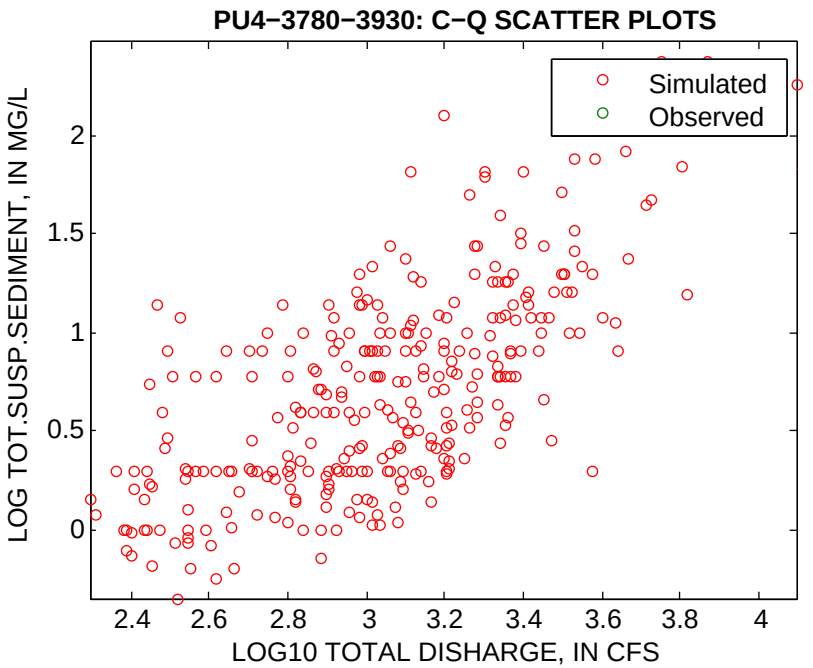
STATISTICS

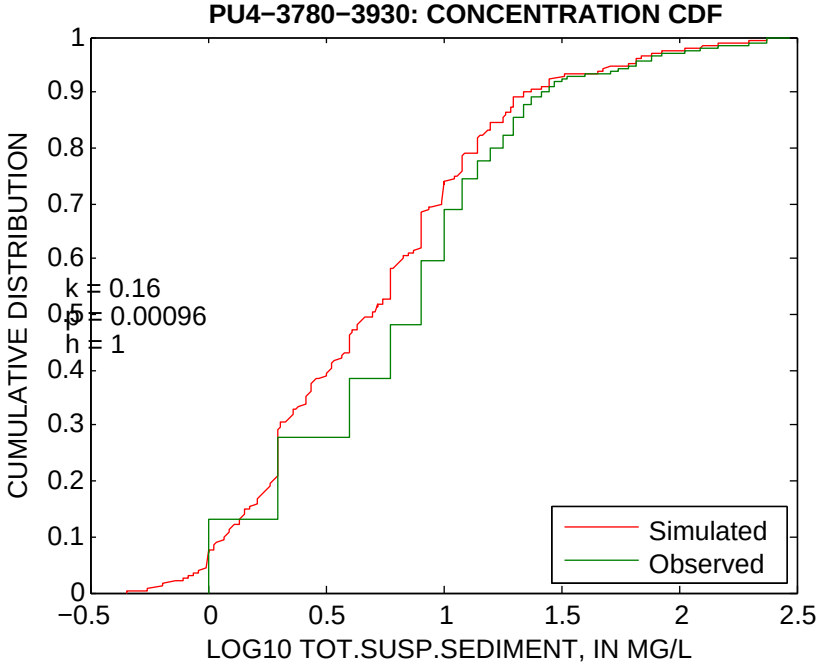
	n	observe	simulate
		308	308
min		1	0.38499
		0	-0.414551
mean		16.0844	23.022
		0.821119	0.812592
media		8	5.1061
		0.90309	0.708089
max		298	324.19
		2.47422	2.5108
varian		1233.83	1966.01
		0.288361	0.461297
JB		0.001	0.001
		0.021240	0.002572
		ra	log
%		43.1325	-1.03842
err.va		1274.24	0.408764
rel.std.err		1.03275	1.41754
mod.eff		-0.0327544	-0.417544

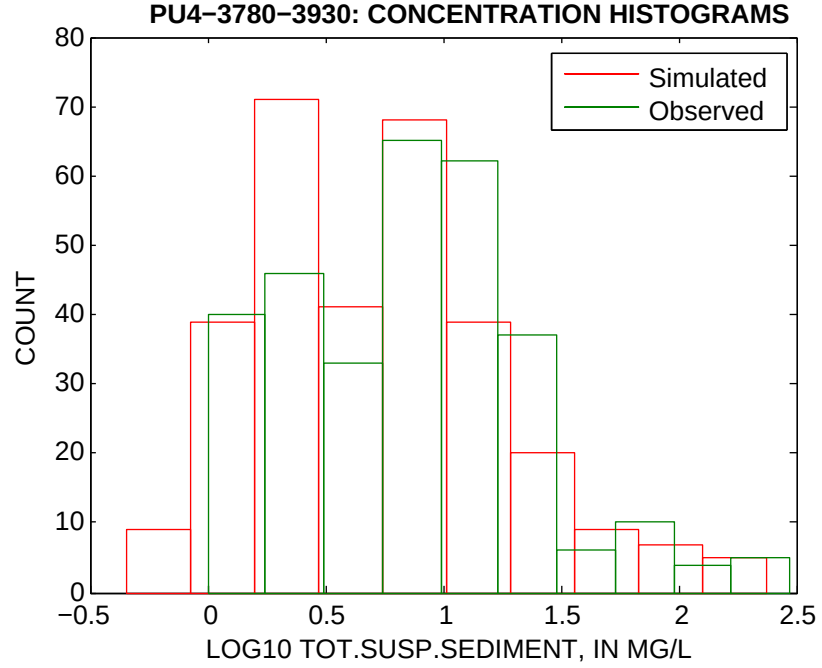
VERSION 2.1

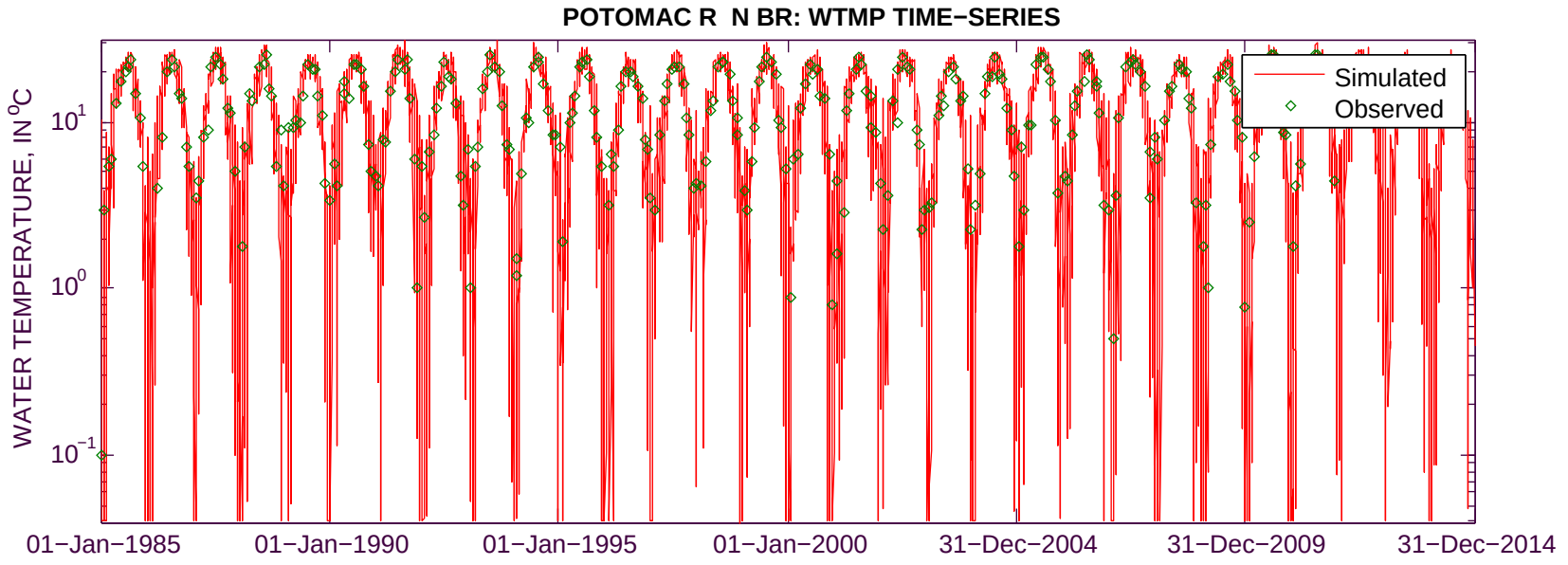
ALL DATA
LOG10

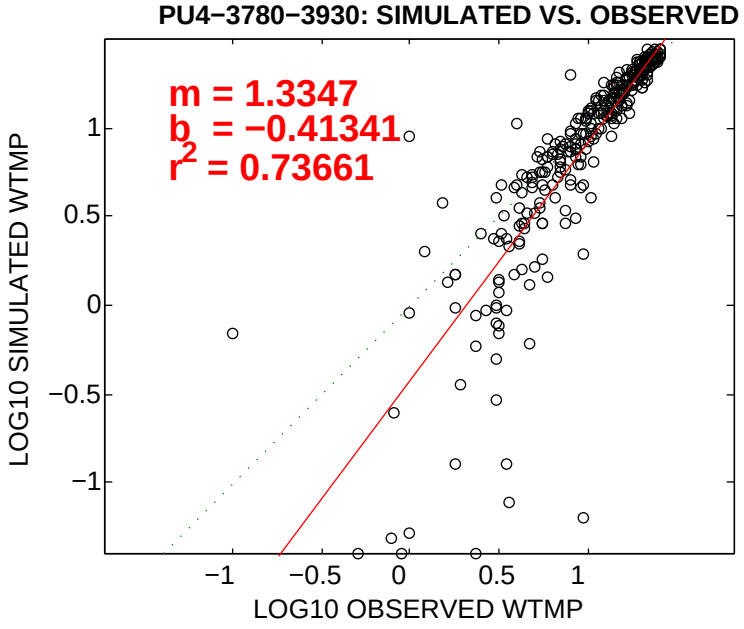


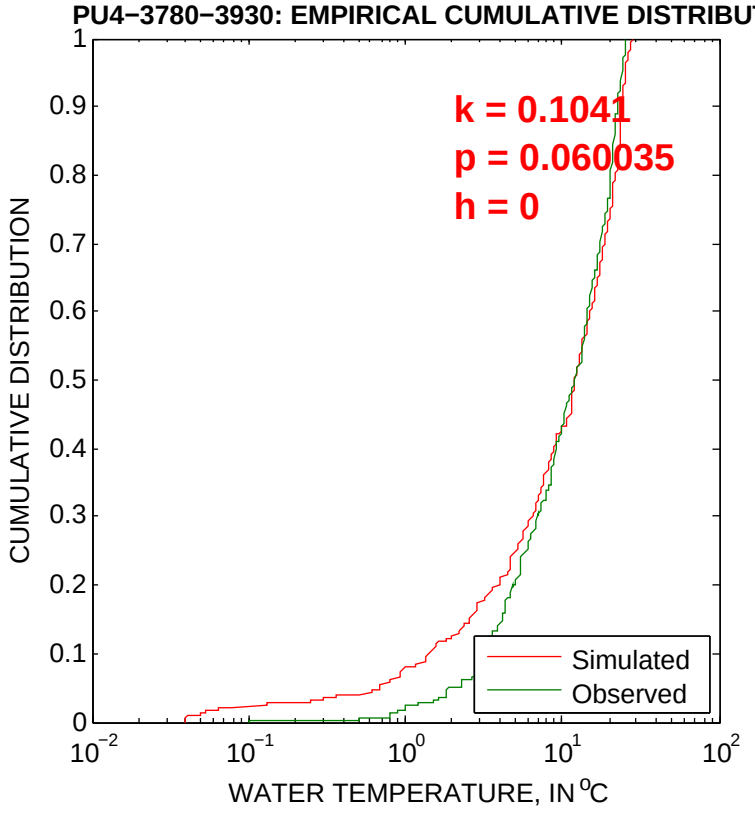












DATA SELECTION

scenario	file
P620171001WQ	WTMP.calib

plot: WTMP - water tempera...

Dates: 1/1/1985 – 12/31/201

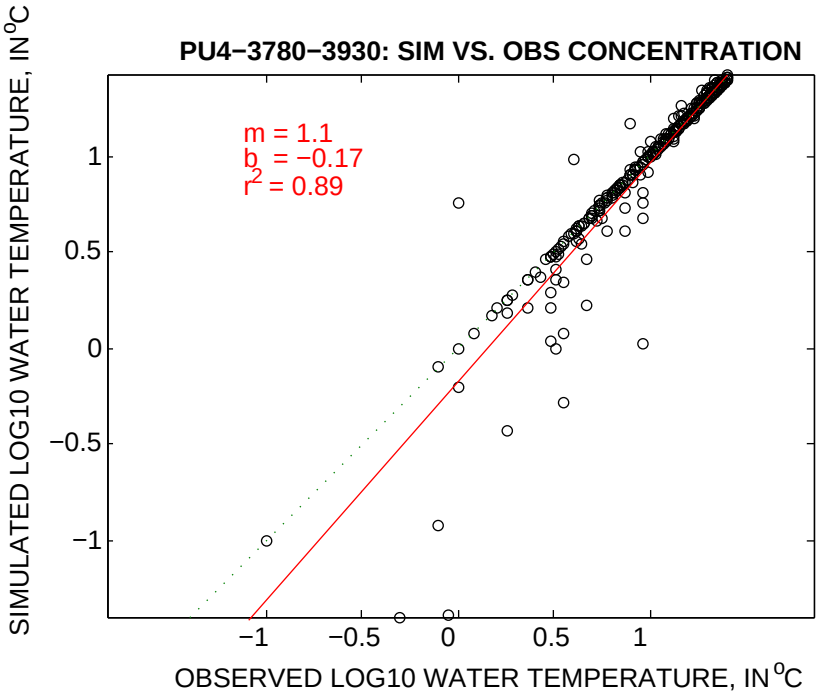
Drive	Directory	Observed
N/A	model	OBS20161101

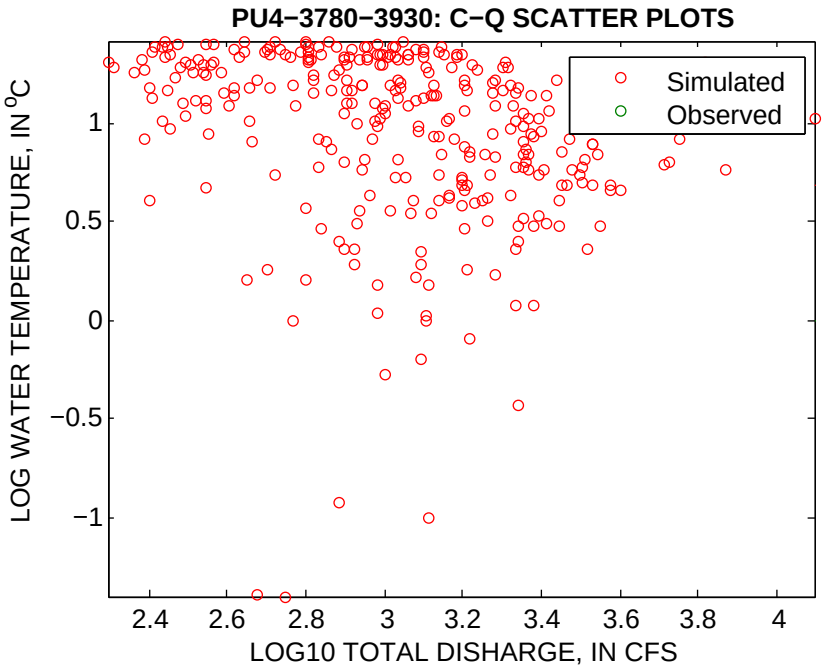
STATISTICS

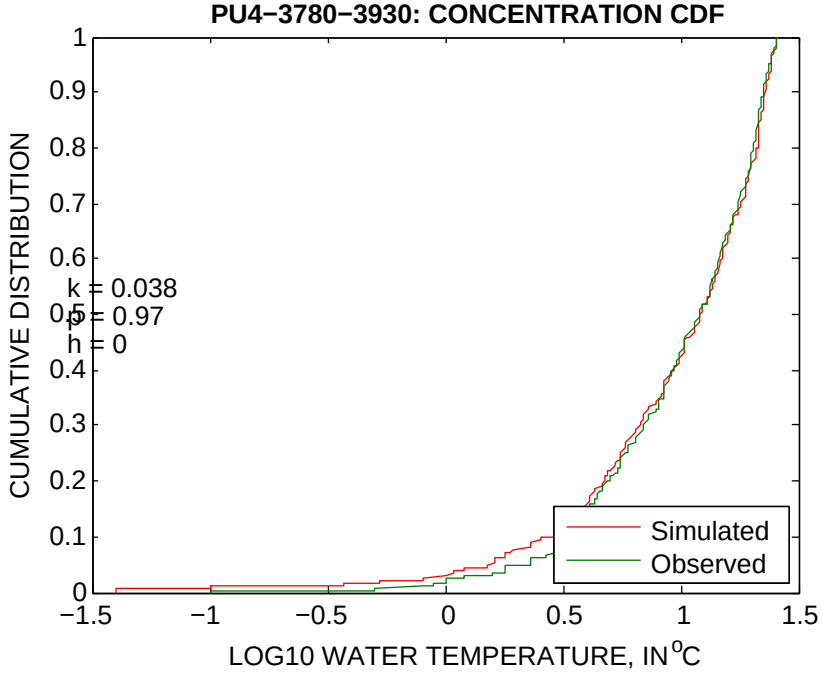
	n	observe	simulate
		317	317
min		0.1	0.040026
		-1	-1.39766
mean		12.5074	12.6685
		0.98704	0.903975
media		12.1	12.15
		1.08279	1.08458
max		25.699	28.017
		1.40992	1.44742
varian		52.6753	70.2487
		0.131406	0.317786
JB		0.001436	0.001212
		0.001	0.001
		ra	log
%		1.28834	-8.41559
err.va		5.89155	0.105344
rel.std.err		0.111847	0.801664
mod.eff		0.888153	0.198336

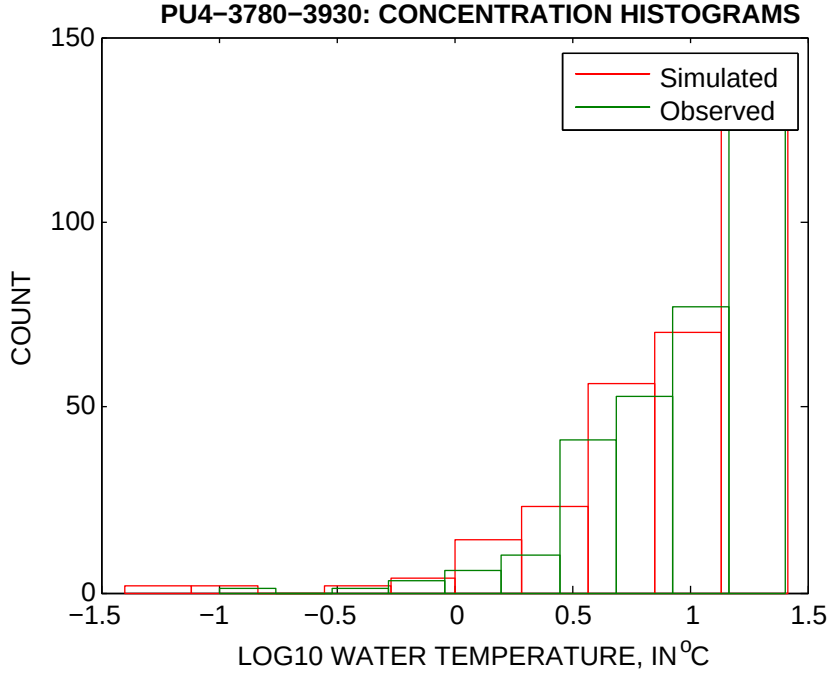
VERSION 2.1

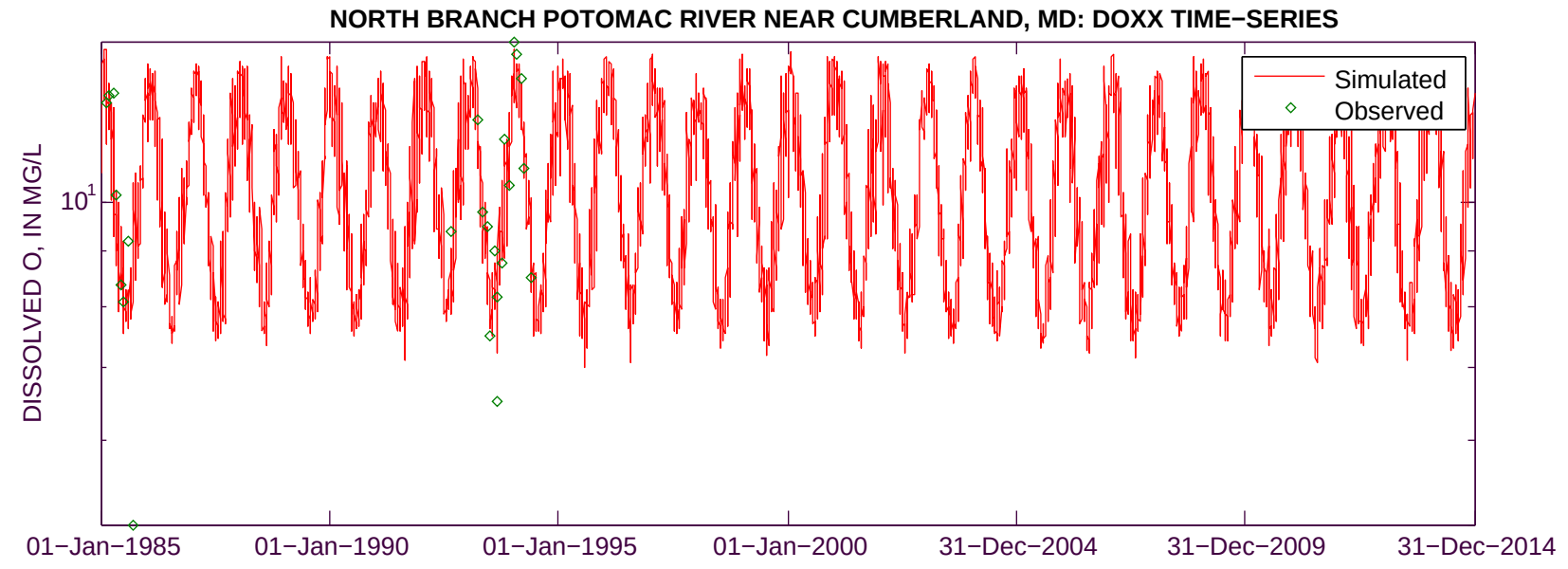
ALL DATA
LOG10

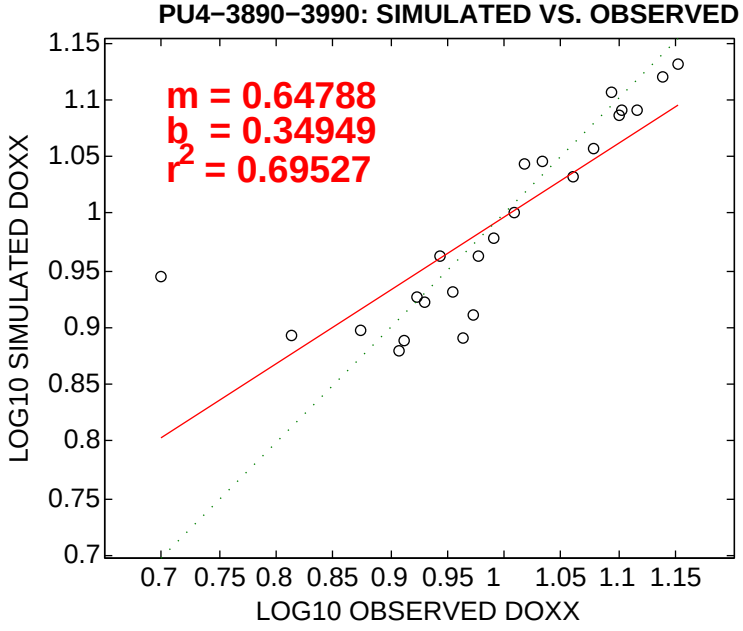


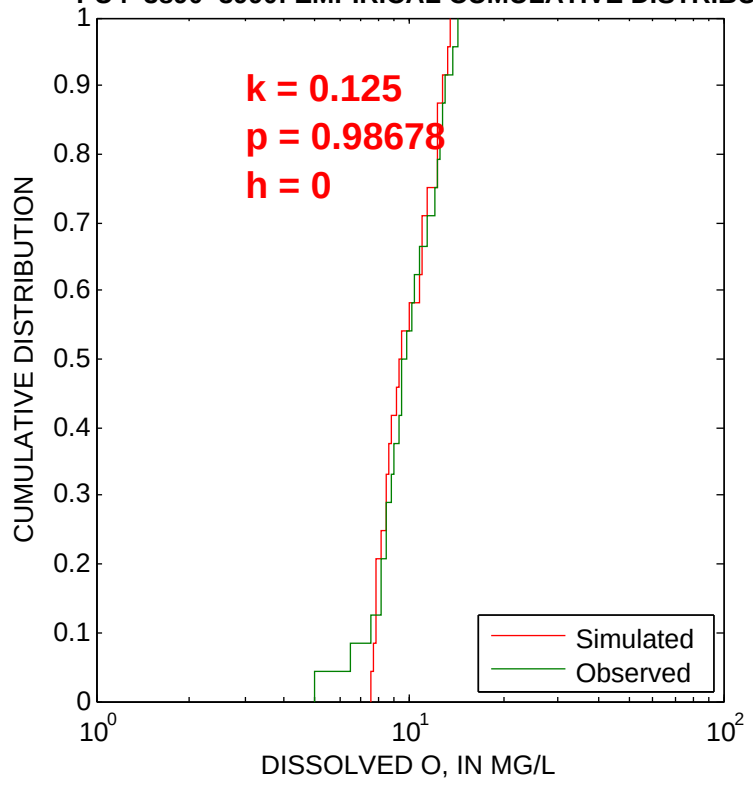












DATA SELECTION

scenario: P620171001WQ | file: DOXX.calib

plot: DOXX - dissolved oxygen

Dates: 1/1/1985 | 12/31/201

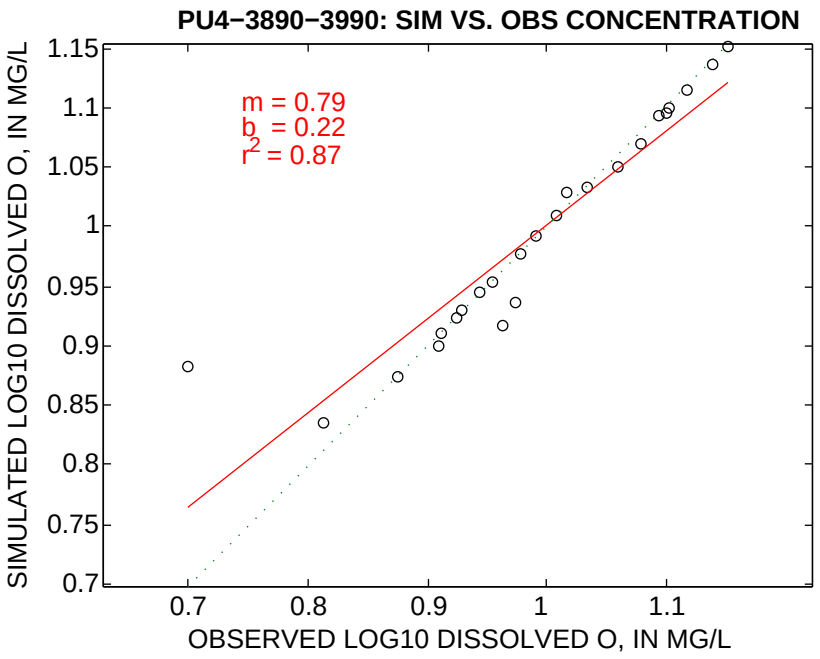
Drive: N/A | Directory: model | Observed: OBS20161101

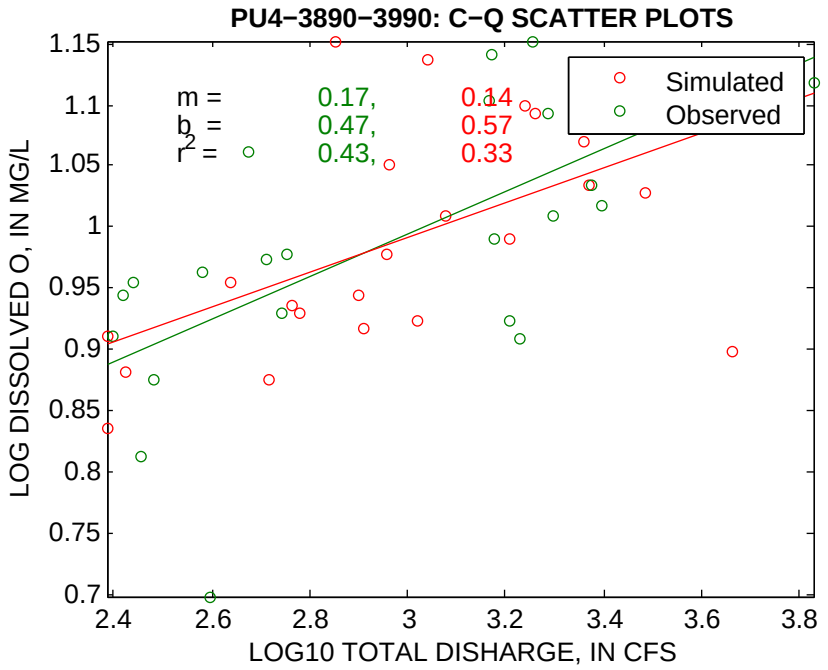
STATISTICS

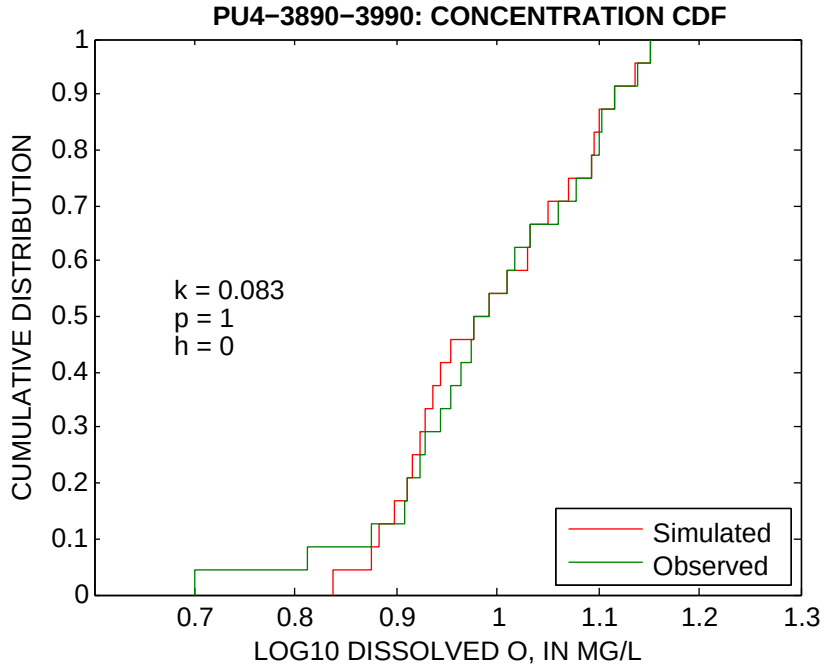
		observe	simulate
n		24	24
min		5	7.564
		0.69897	0.878752
mean		10.0646	9.97985
		0.990452	0.99119
media		9.65	9.35
		0.984475	0.970753
max		14.2	13.514
		1.15229	1.13078
varian		5.54619	3.87222
		0.011797	0.00712219
JB	✓	0.5	0.118751 ✓
	✓	0.158846	0.124565 ✓
		ra	log
%		-0.841855	0.074554
err.va		1.0598	0.00363357
rel.std.err		0.191085	0.308009
mod.eff		0.808915	0.691991

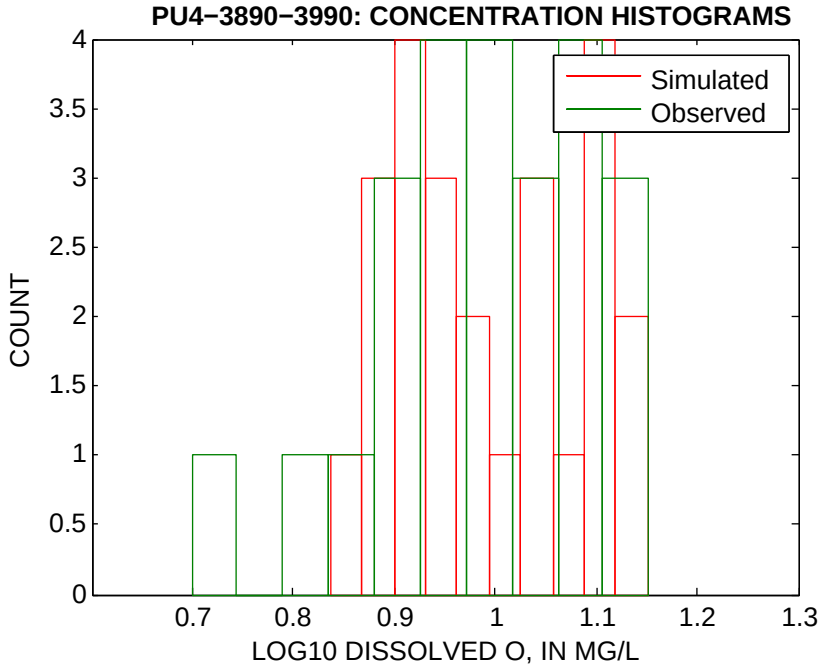
VERSION 2.1

ALL DATA
LOG10

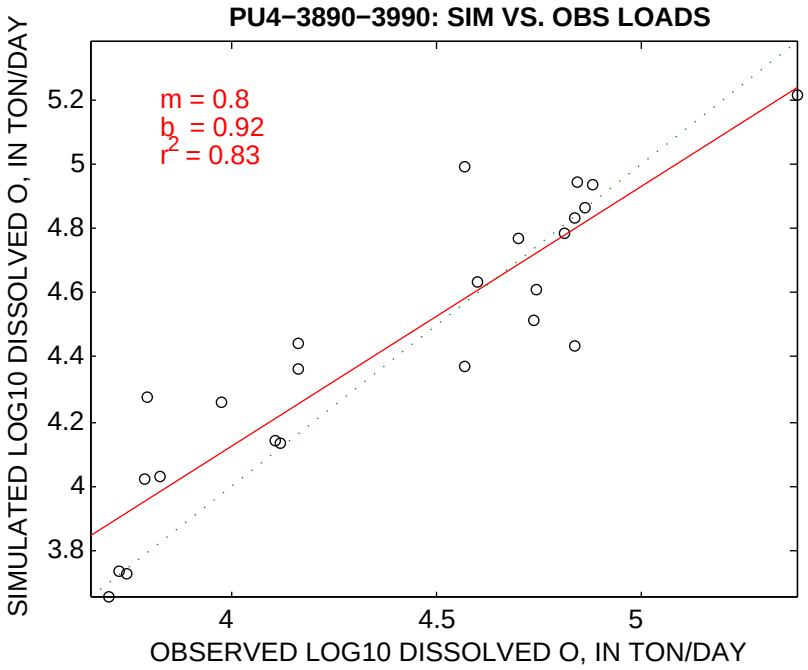


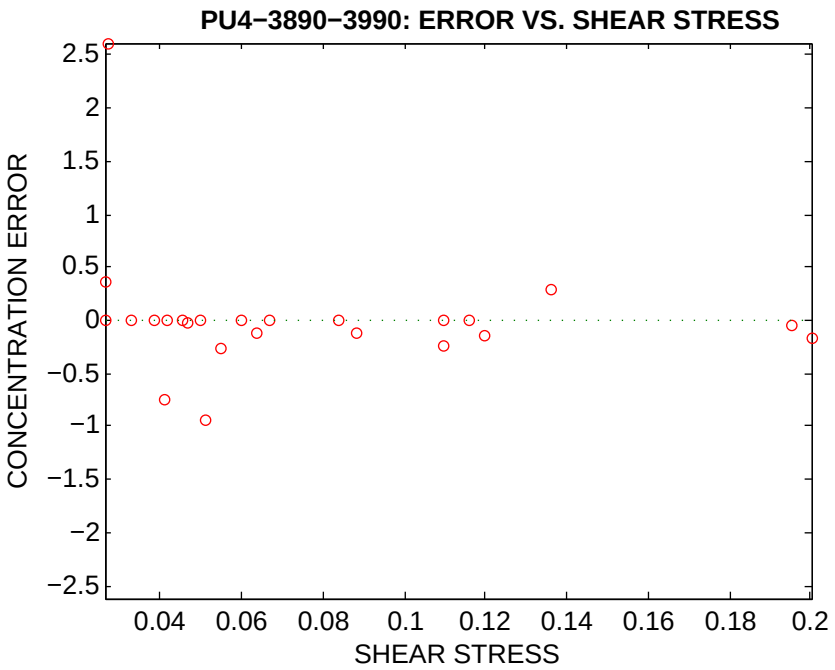


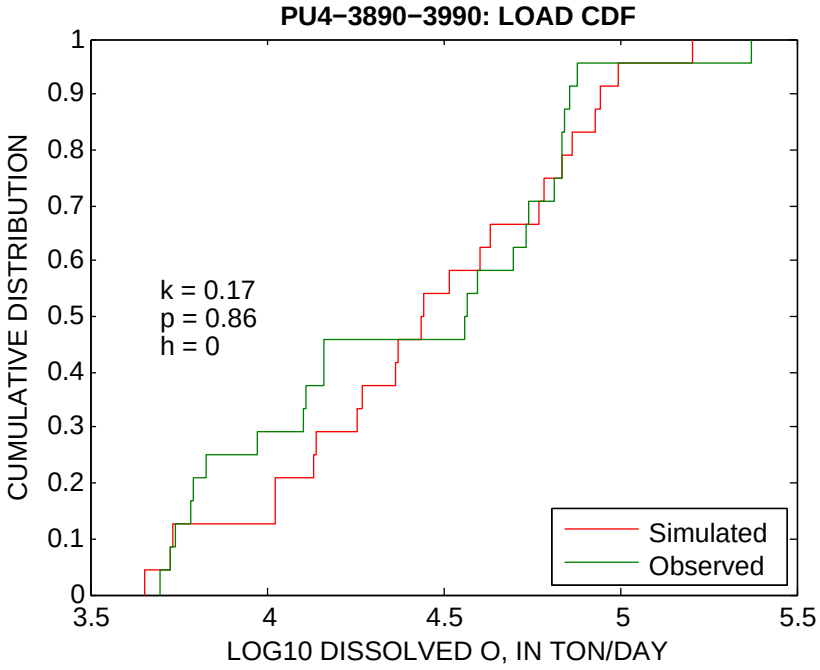


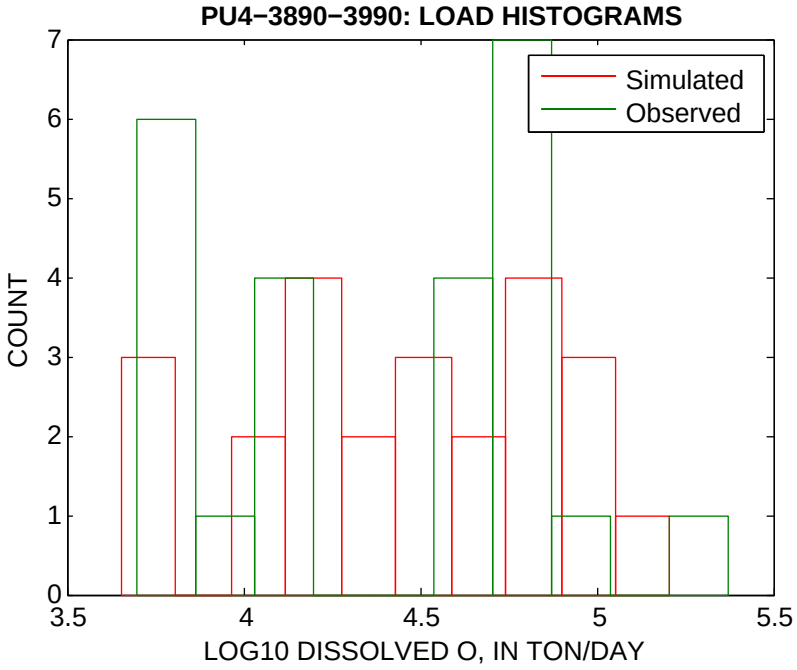


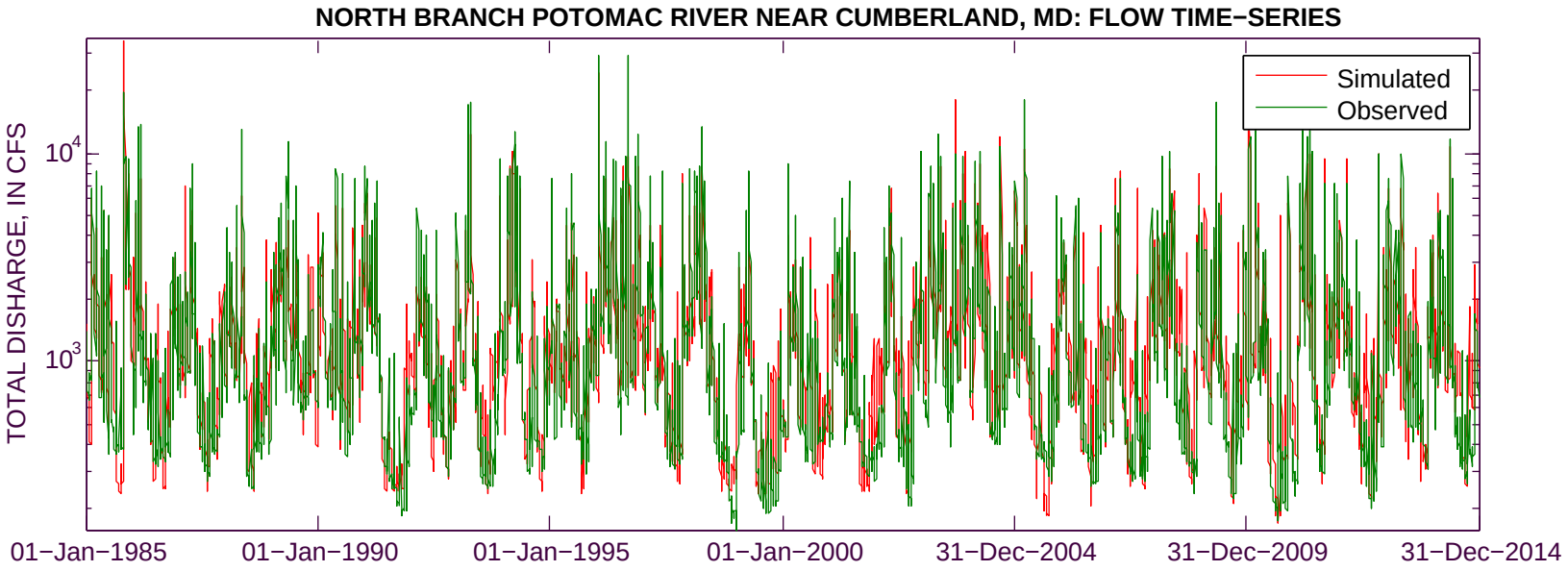
LOAD DATA
LOG10

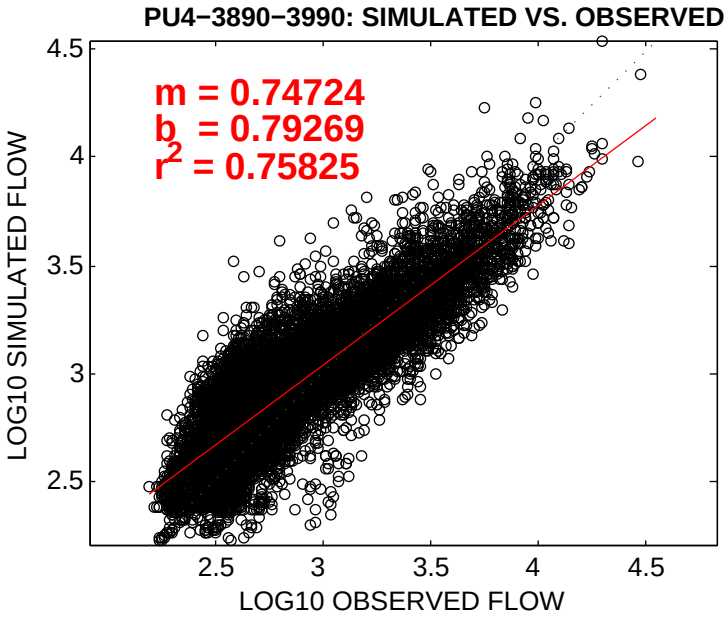


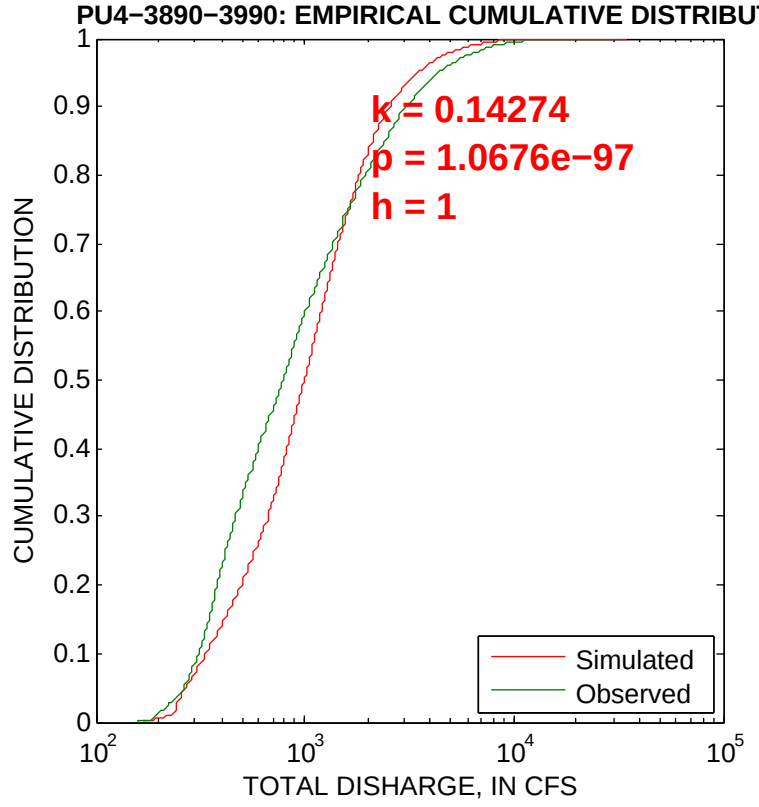












DATA SELECTION

scenario: P620171001WQ | file: FLOW.calib

plot: FLOW - total discharge

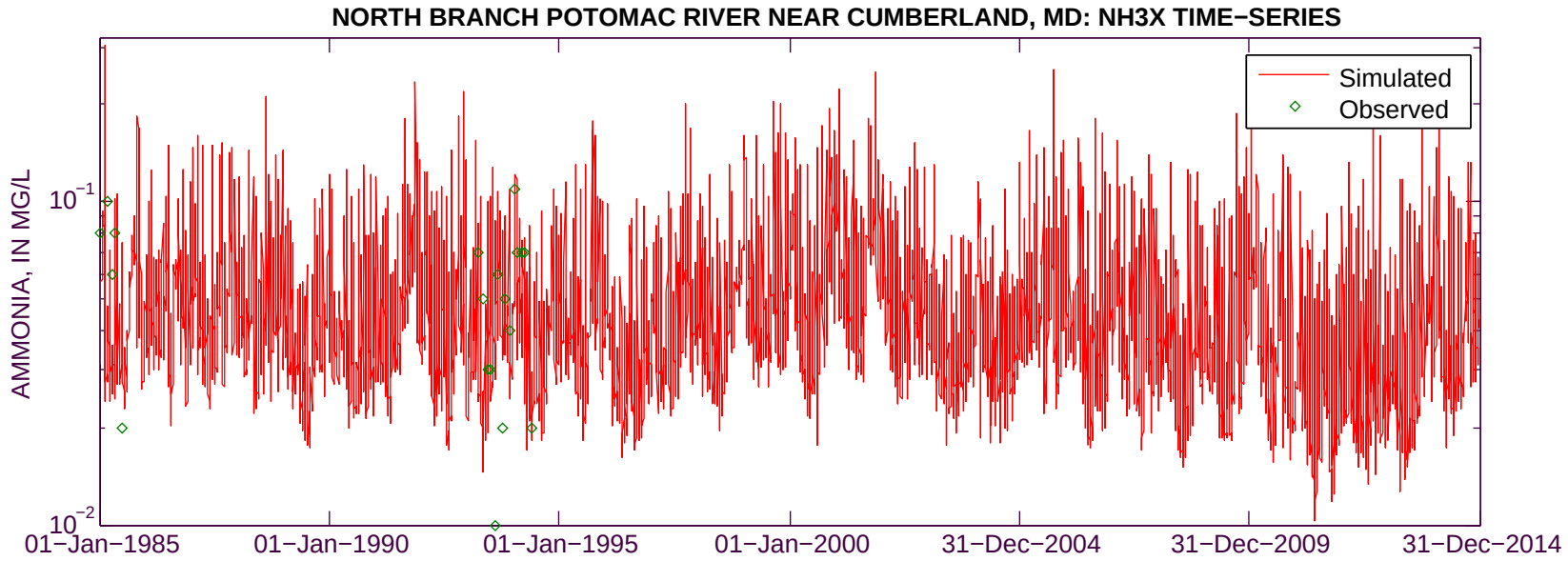
Dates: 1/1/1985 – 12/31/201

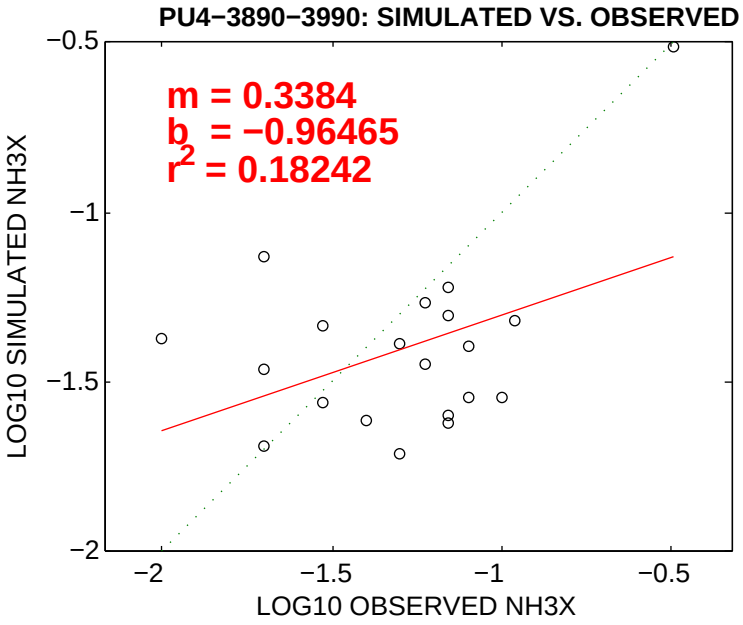
Drive: N/A | Directory: model | Observed: OBS20161101

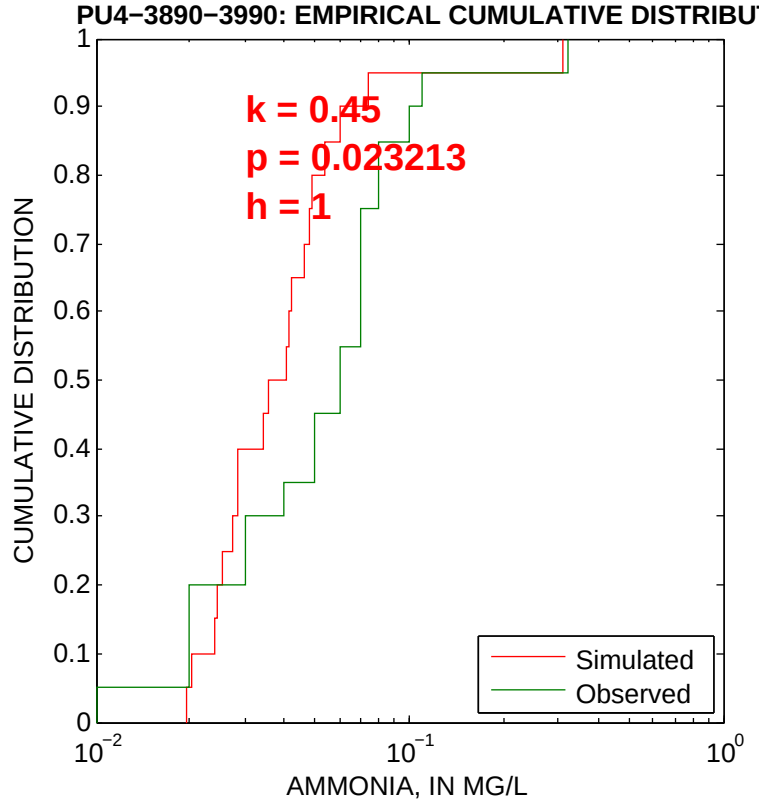
STATISTICS

n	10957	10957
	observe	simulate
min	158	169.1
	2.19866	2.22814
mean	1371.3	1329.27
	2.94385	2.99246
media	792	998.72
	2.89873	2.99944
max	29400	34952
	4.46835	4.54347
varian	2.86379e+0	1.66228e+
	0.149165	0.109843
JB	0.001	0.001
	0.001	0.001
	ra	log
%	-3.06533	1.65113
err.va	804757	0.038447
rel.std.err	0.281012	0.257749
mod.eff	0.718988	0.742251

VERSION 2.1







DATA SELECTION

scenario	file
P620171001WQ	NH3X.calib

plot: NH3X - ammonia

Dates: 1/1/1985 – 12/31/201

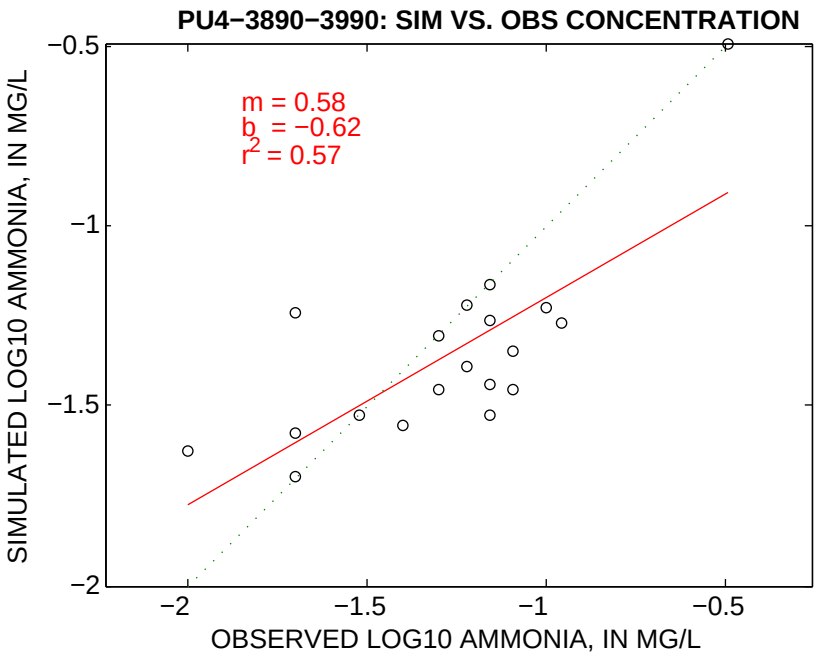
Drive	Directory	Observed
N/A	model	OBS20161101

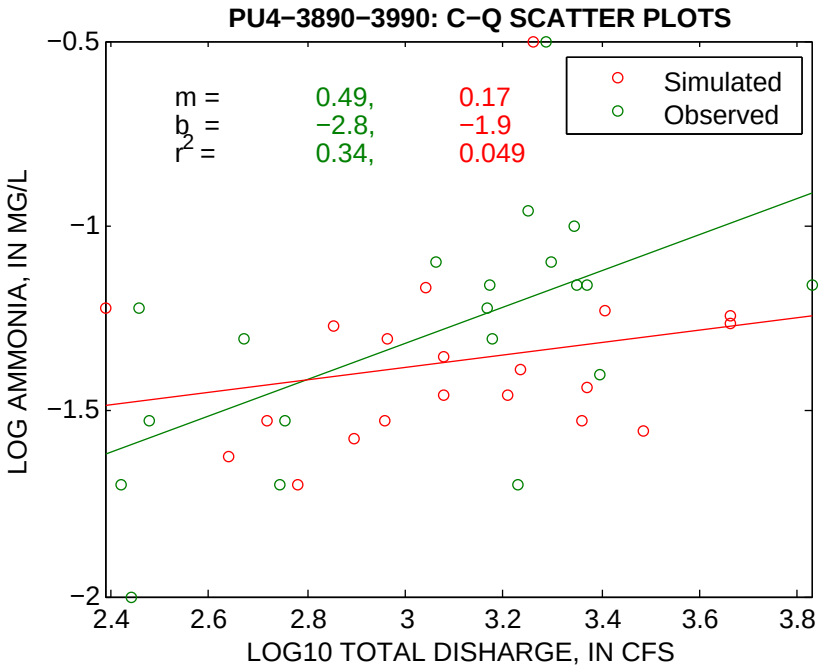
STATISTICS

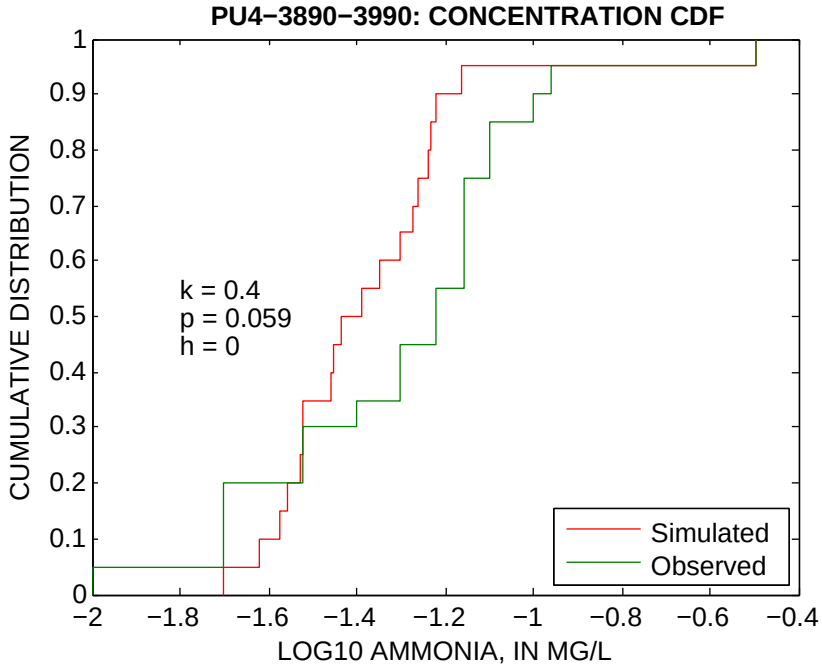
	n	observe	simulate
		20	20
min		0.01	0.019381
		-2	-1.71262
mean		0.068	0.0515798
		-1.29266	-1.40209
media		0.06	0.0381655
		-1.22185	-1.41915
max		0.32	0.3078
		-0.49485	-0.511731
varian		0.00428	0.00384392
		0.111007	0.0696853
JB		0.001	0.001
		0.5	0.001
		ra	log
%		-24.1474	8.46529
err.va		0.00128337	0.118167
rel.std.err		0.299853	1.0645
mod.eff		0.700147	-0.0645023

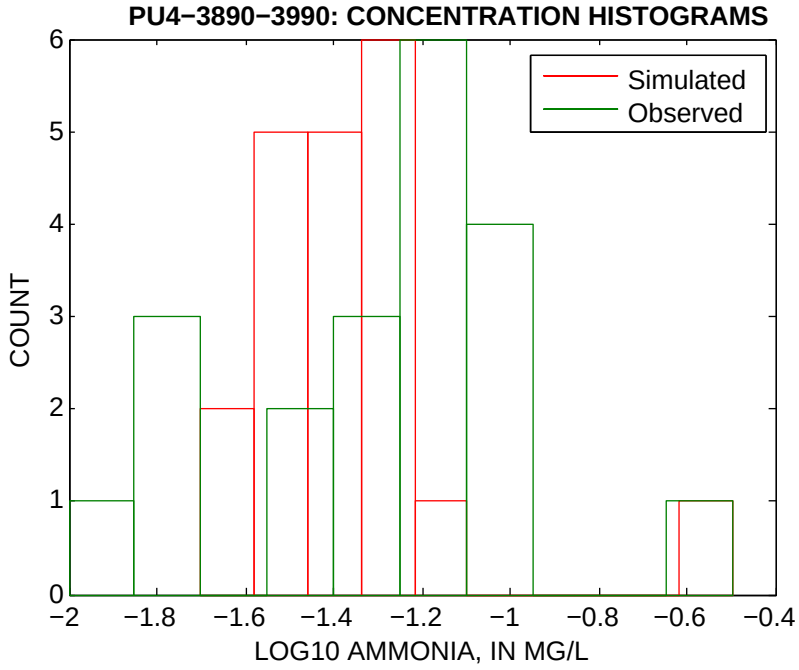
VERSION 2.1

ALL DATA
LOG10

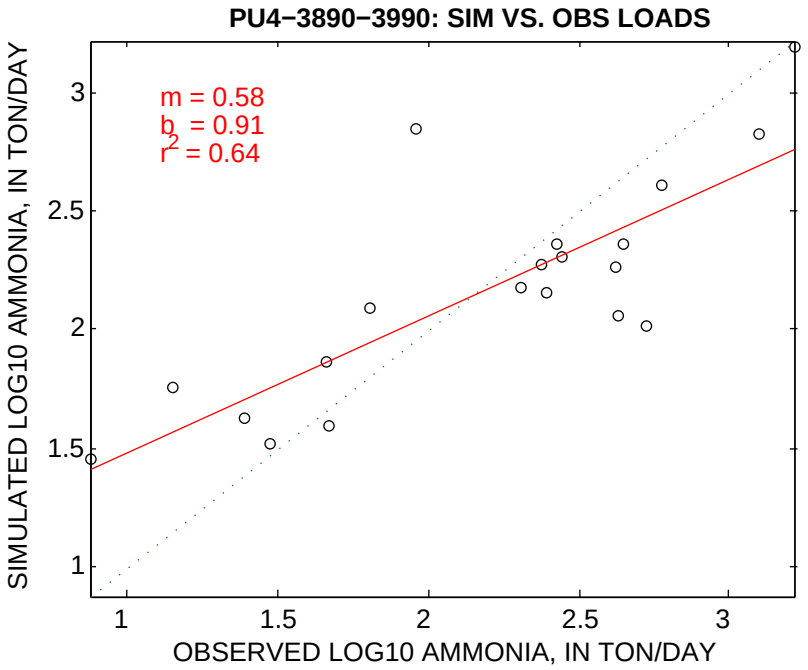


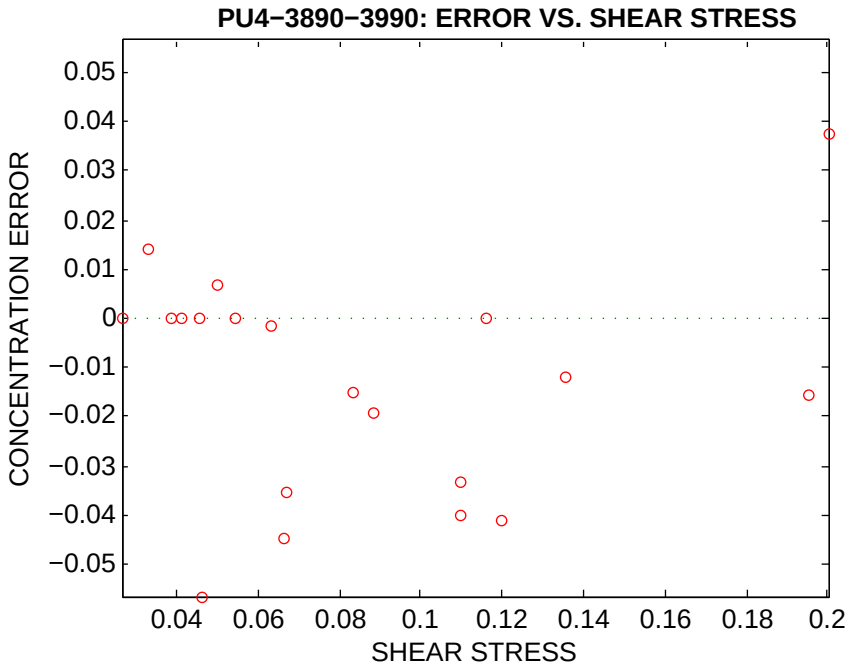


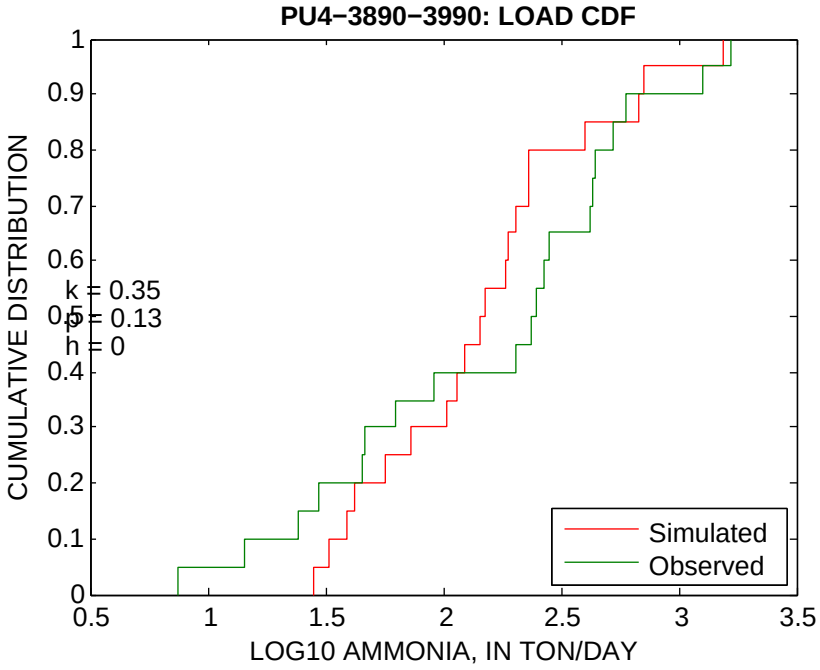


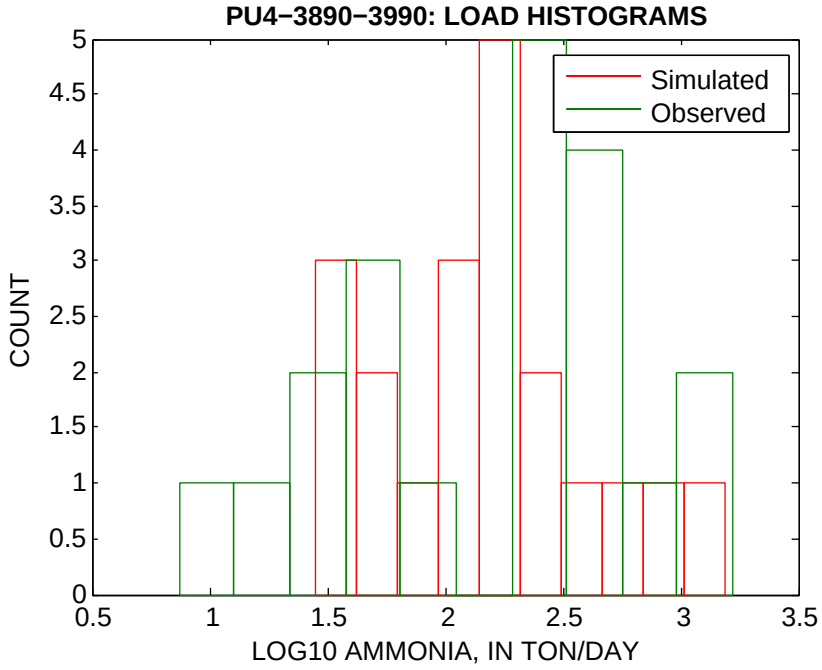


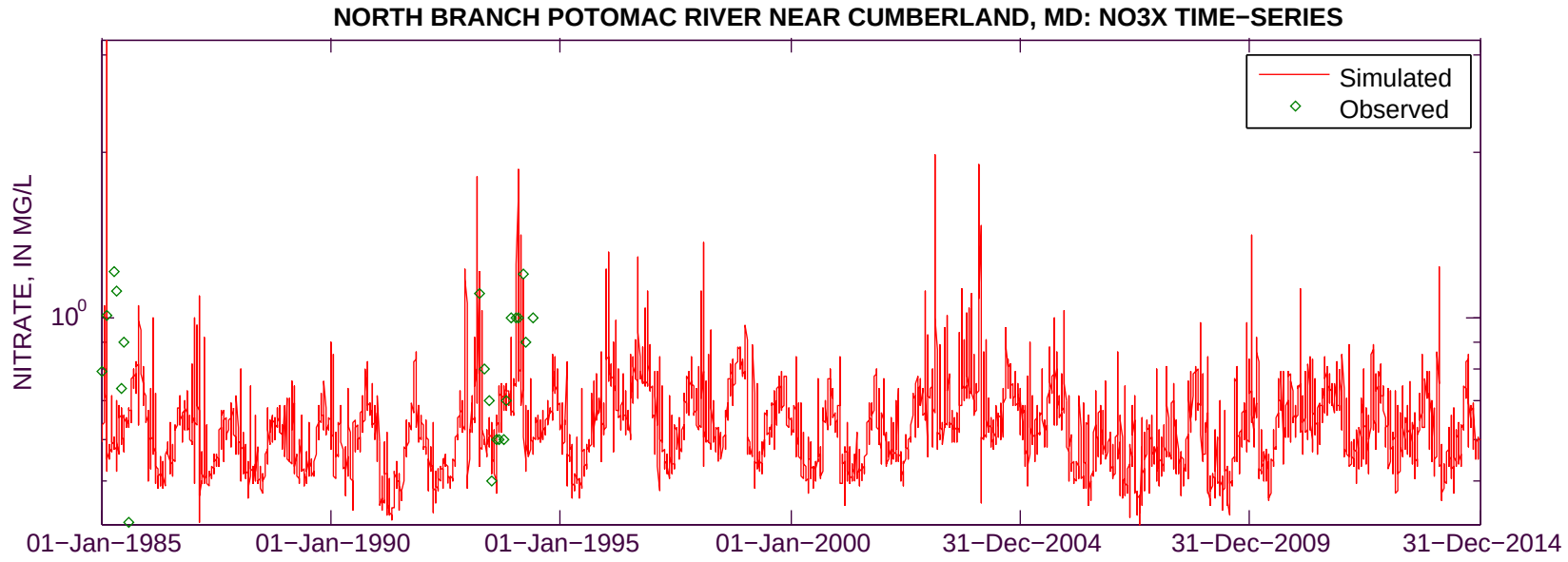
LOAD DATA
LOG10

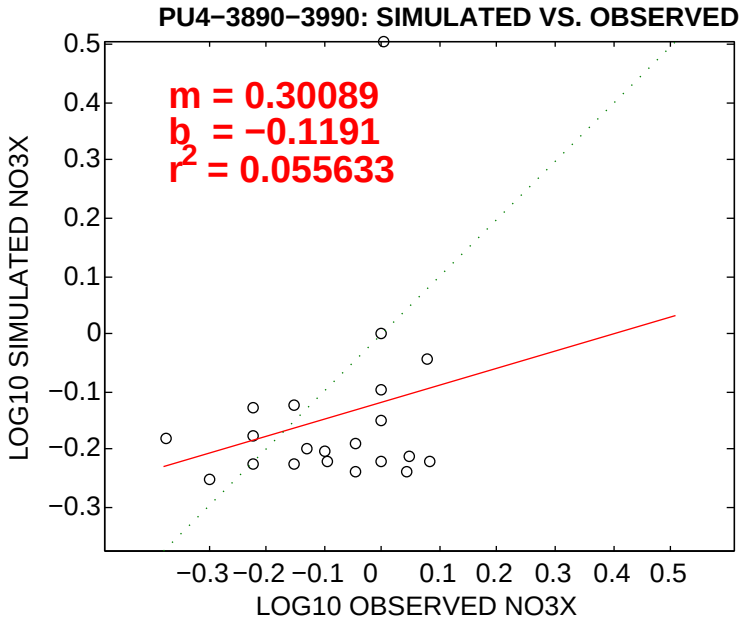


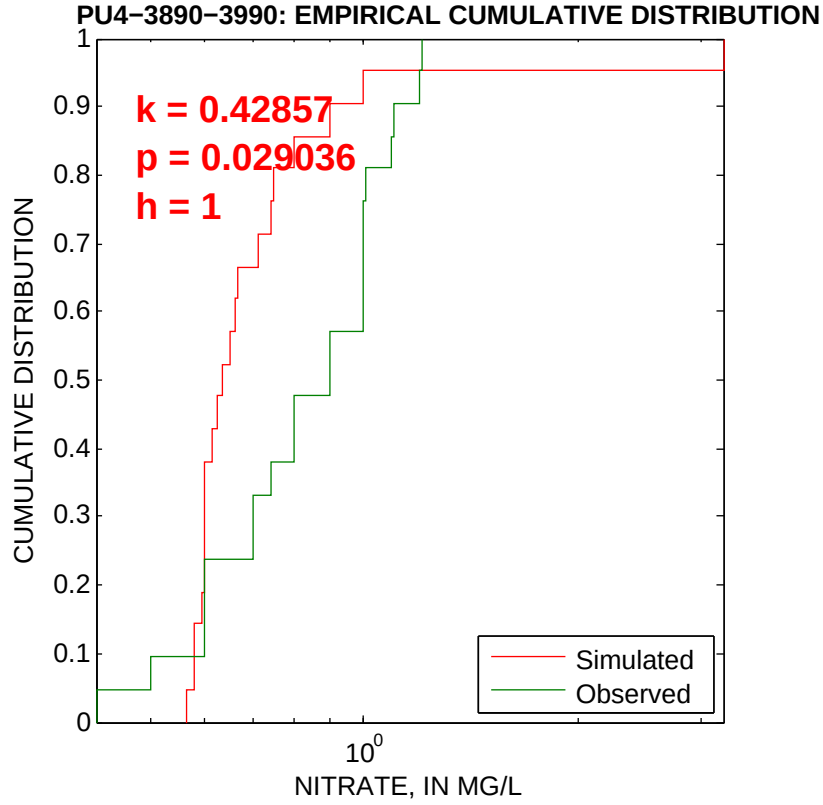












DATA SELECTION

scenario	file
P620171001WQ	NO3X.calib

plot: NO3X - nitrate

Dates 1/1/1985 12/31/201

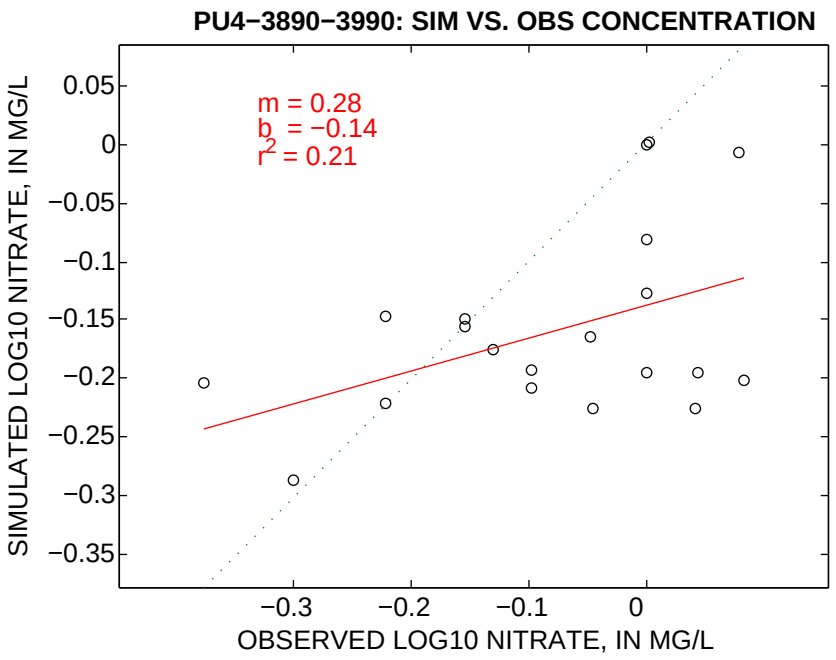
Drive	Directory	Observed
N/A	model	OBS20161101

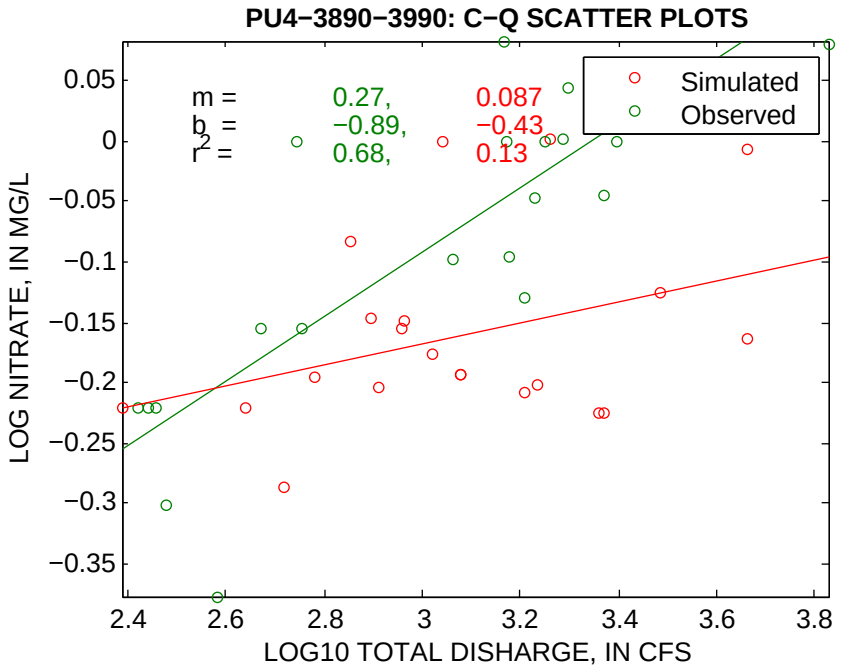
STATISTICS

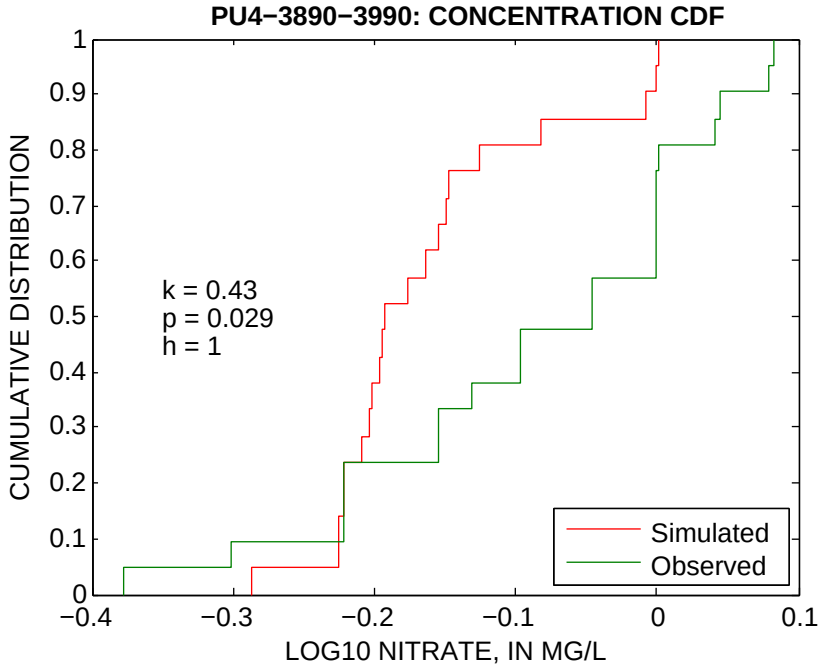
	n	21	21
		observe	simulate
min		0.42	0.56181
		-0.376751	-0.250411
mean		0.851524	0.793175
		-0.0866632	-0.145179
media		0.898	0.63197
		-0.0467237	-0.199304
max		1.211	3.2094
		0.0831441	0.506424
varian		0.0529142	0.319248
		0.0163832	0.0266618
JB		0.410336	0.001
		0.210219	0.001
		ra	log
%		-6.85225	67.521
err.va		0.323784	0.0367811
rel.std.err		6.11904	2.24505
mod.eff		-5.11904	-1.24505

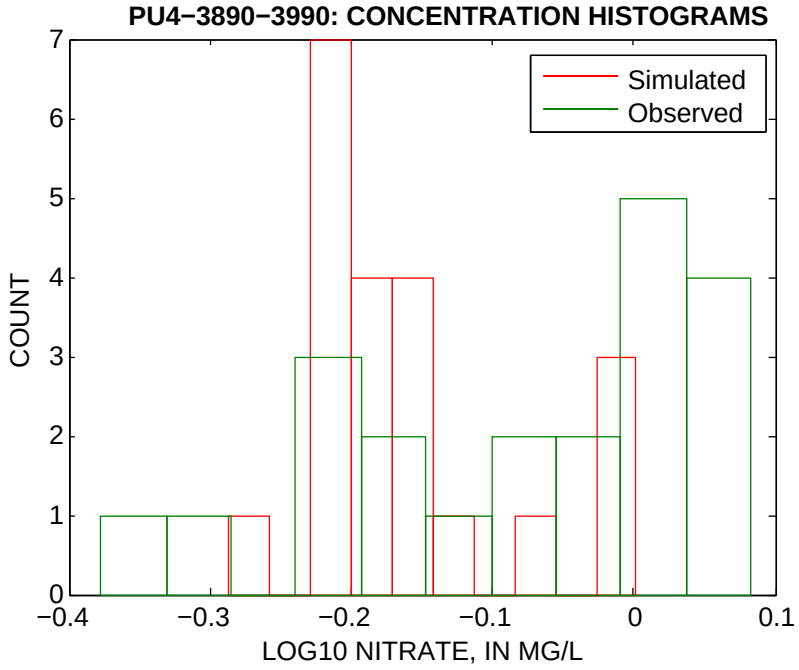
VERSION 2.1

ALL DATA
LOG10

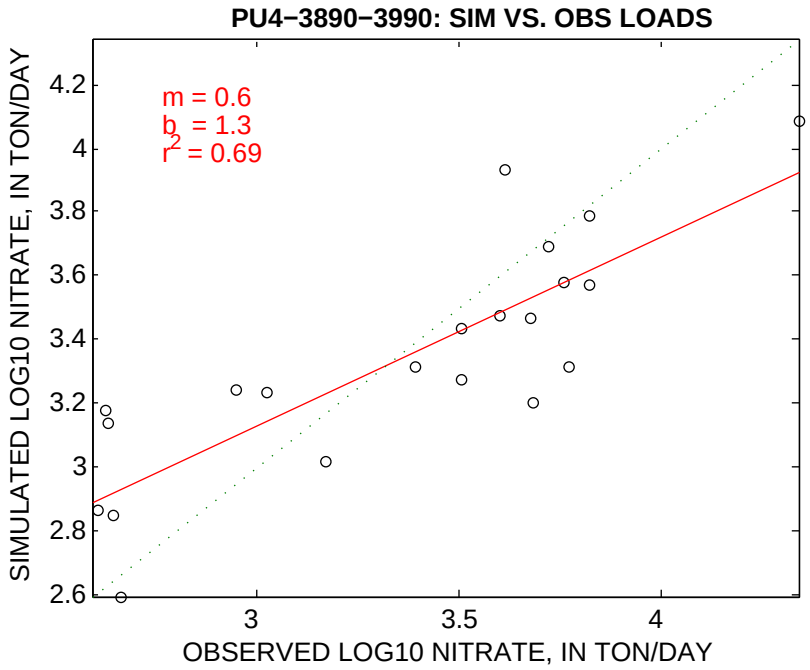


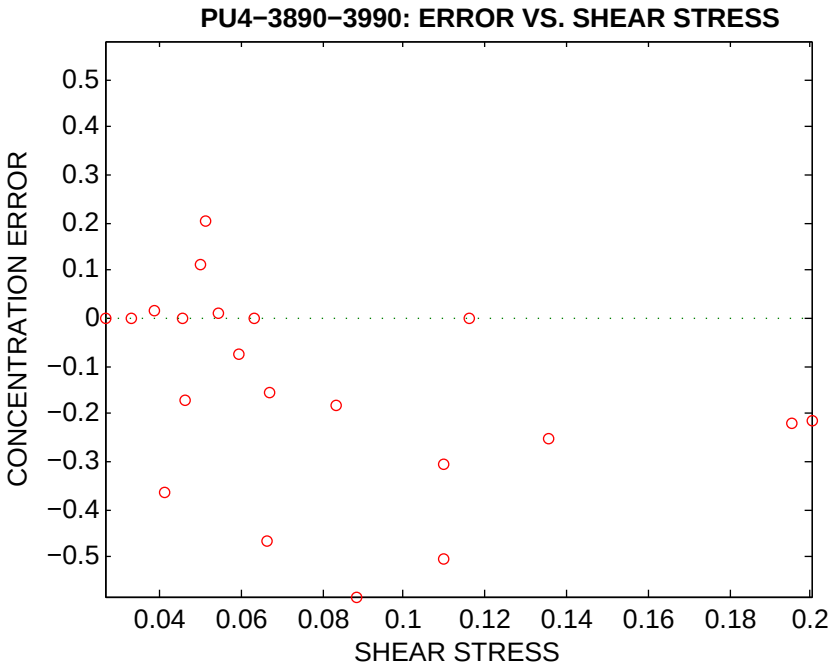


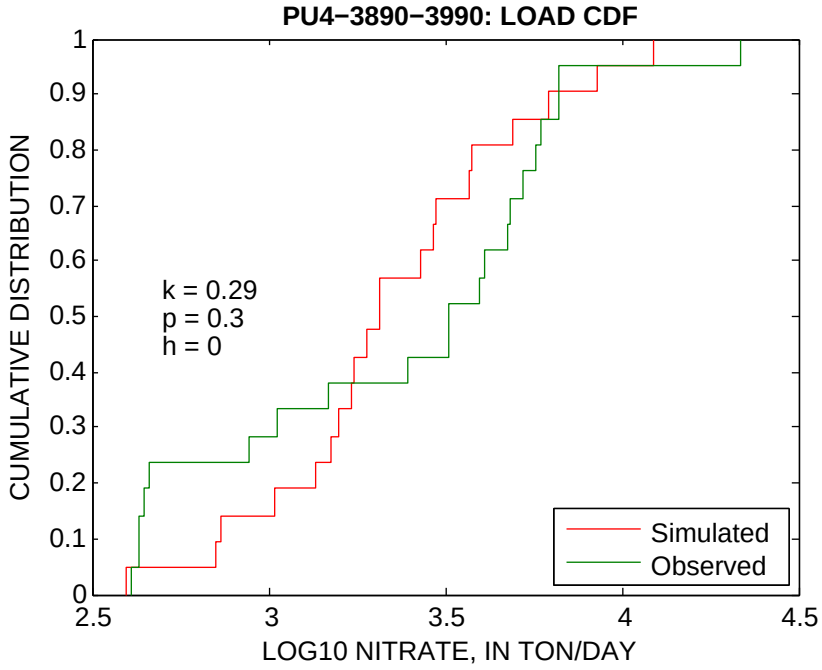


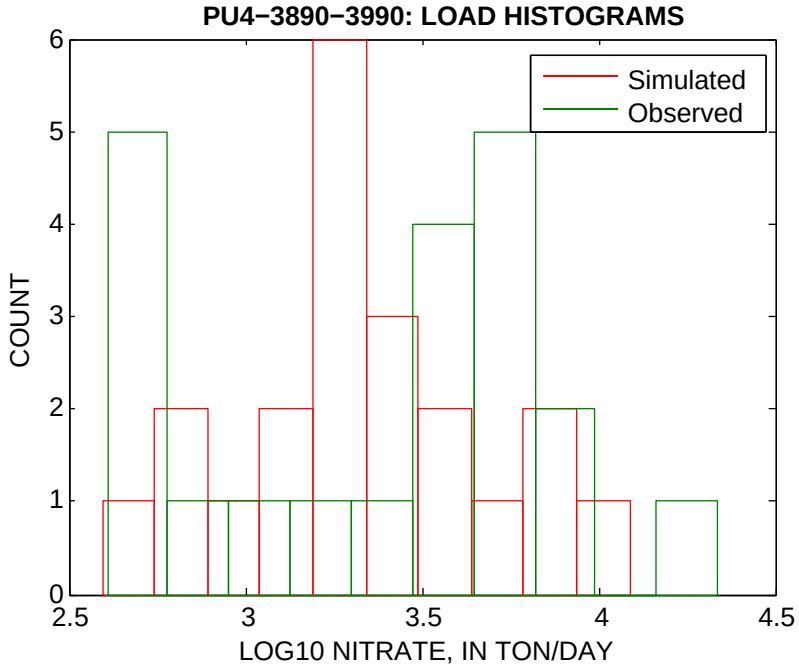


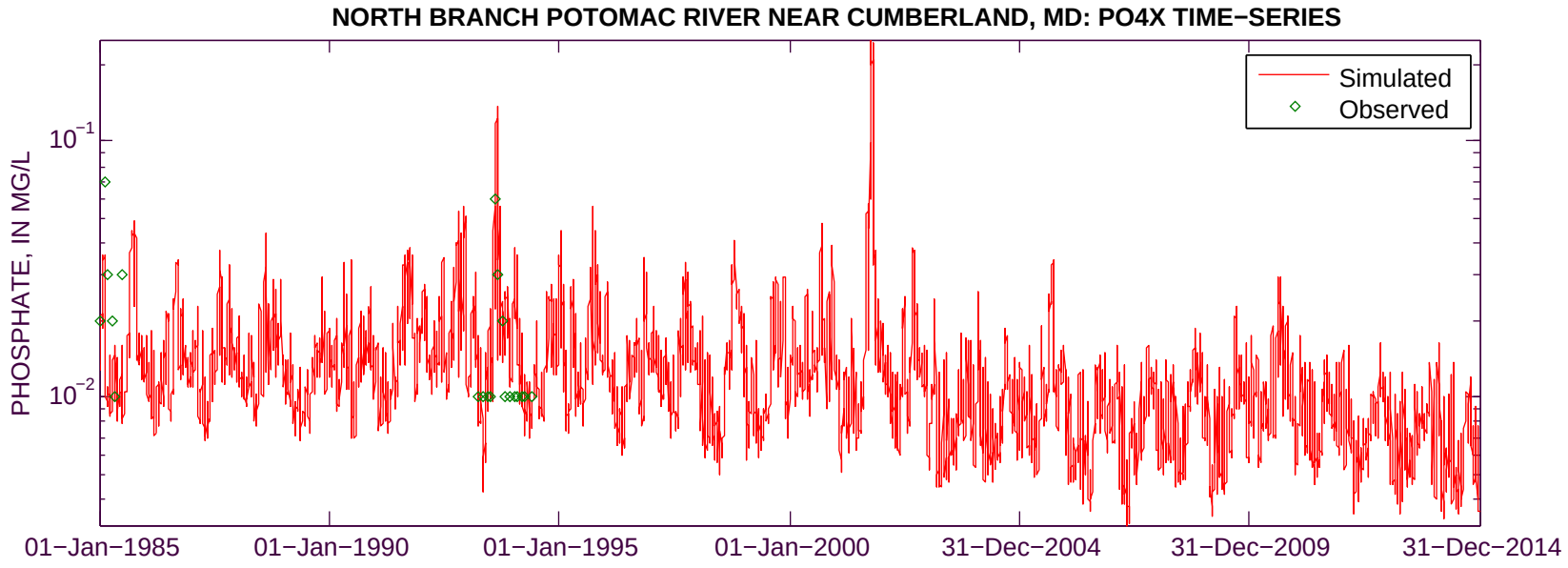
LOAD DATA
LOG10

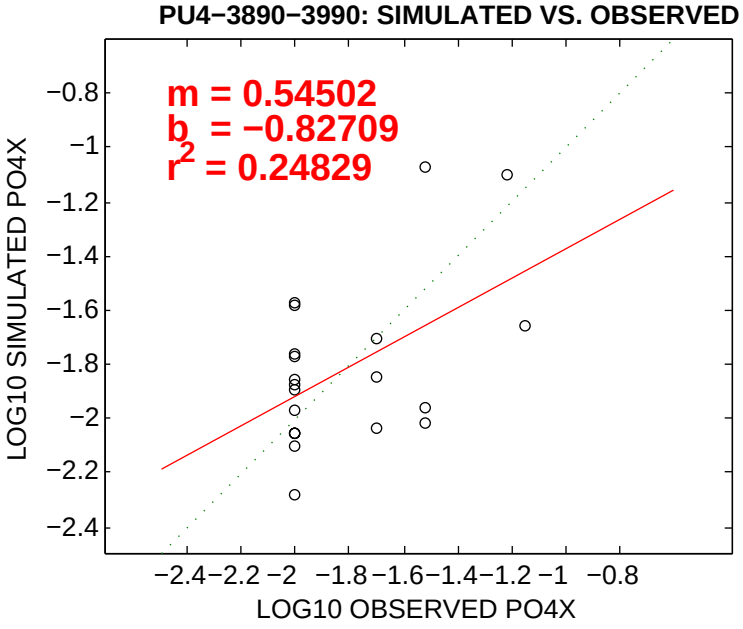


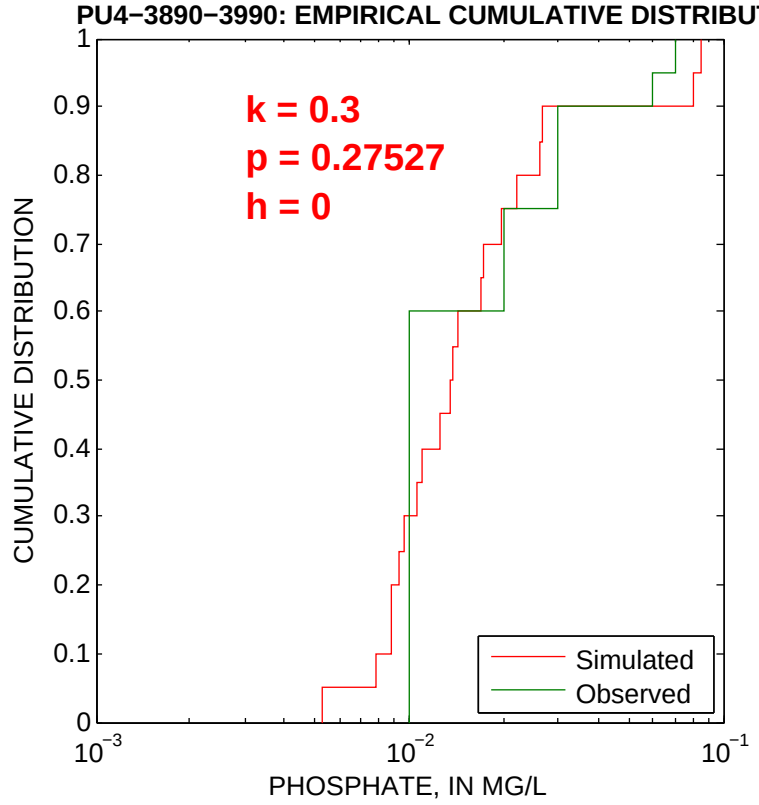












DATA SELECTION

scenario	file
P620171001WQ	PO4X.calib

plot: PO4X - phosphate

Dates: 1/1/1985 – 12/31/201

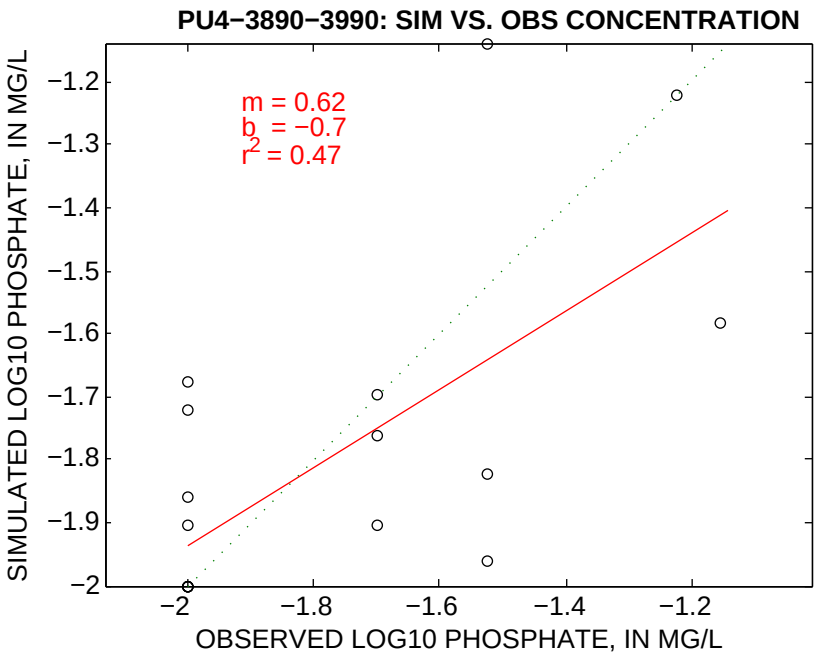
Drive: N/A | Directory: model | Observed: OBS20161101

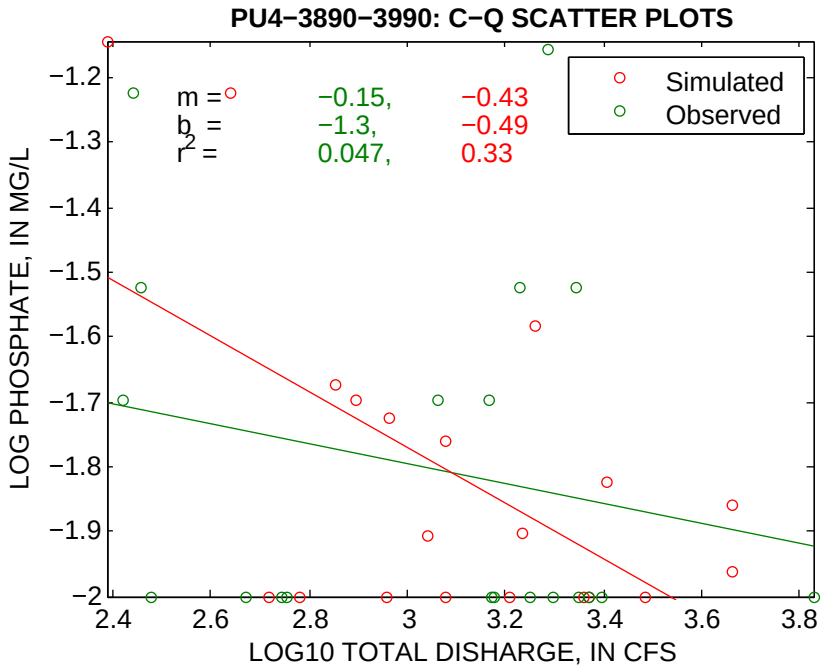
STATISTICS

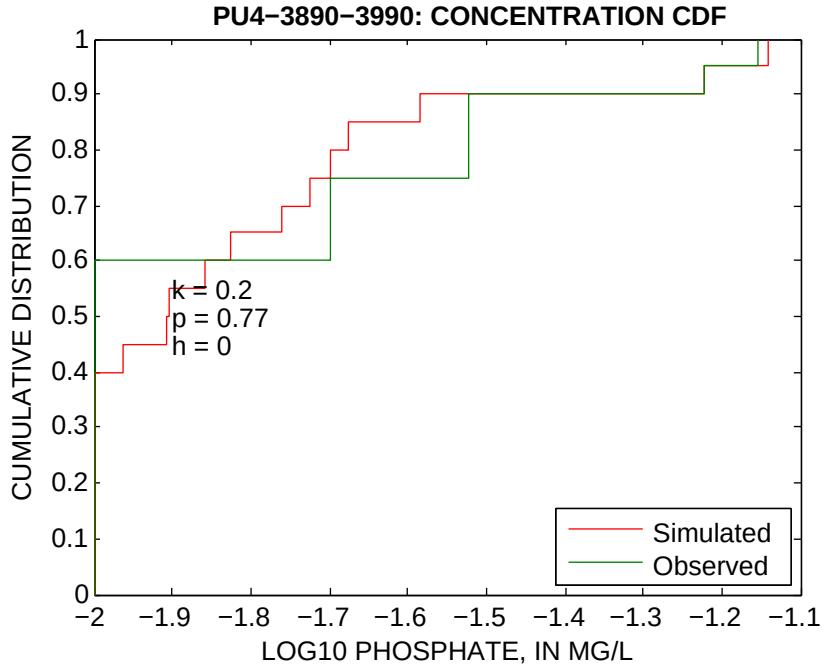
	n	20	20
		observe	simulate
min		0.01	0.0052344
		-2	-2.28113
mean		0.02	0.020938
		-1.80211	-1.80929
media		0.01	0.013658
		-2	-1.86468
max		0.07	0.085367
		-1.1549	-1.06871
varian		0.00029473	0.00048039
		0.0784911	0.0939056
JB		0.002361	0.001
		0.047496	0.031495
		ra	log
%		4.68978	0.397979
err.va		0.00038972	0.0868918
rel.std.err		1.32228	1.10703
mod.eff		-0.322284	-0.107028

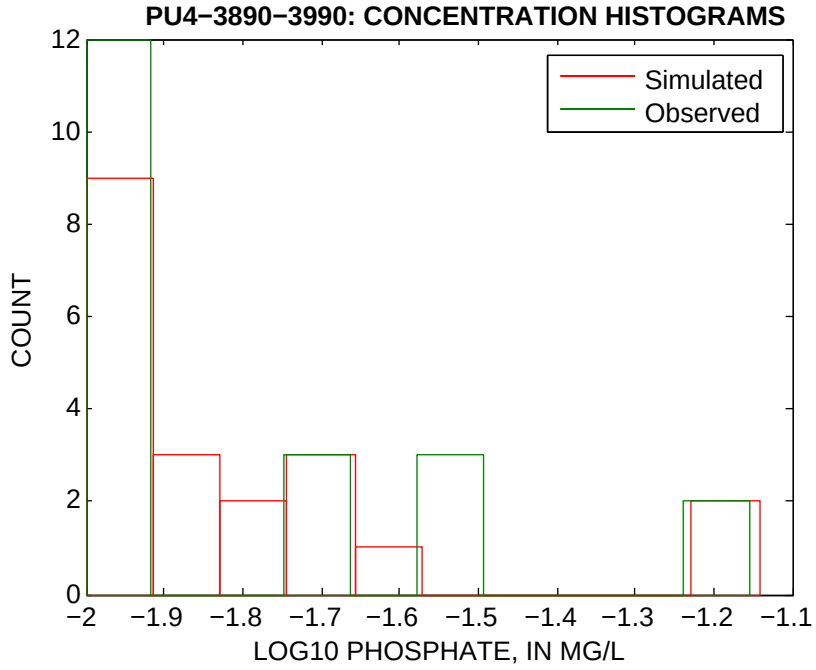
VERSION 2.1

ALL DATA
LOG10

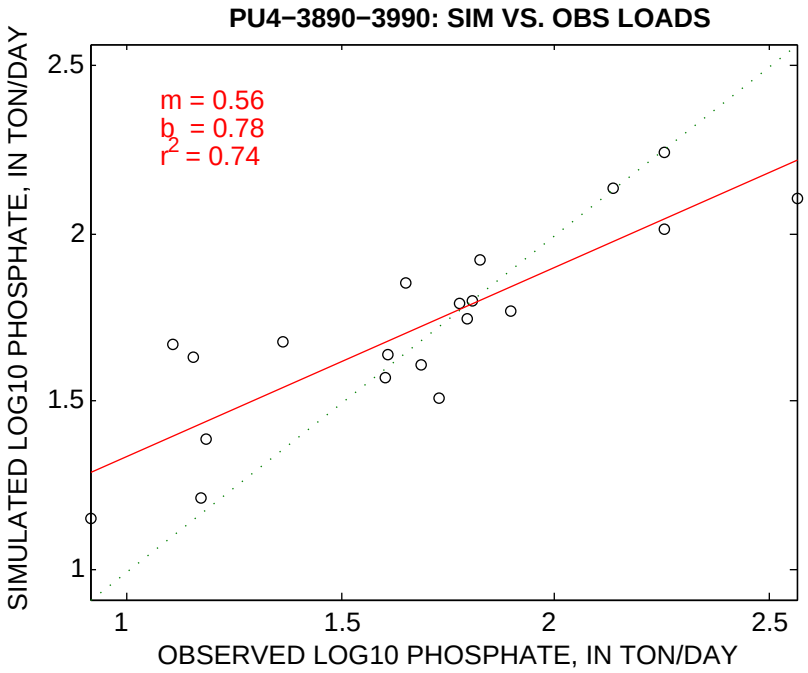


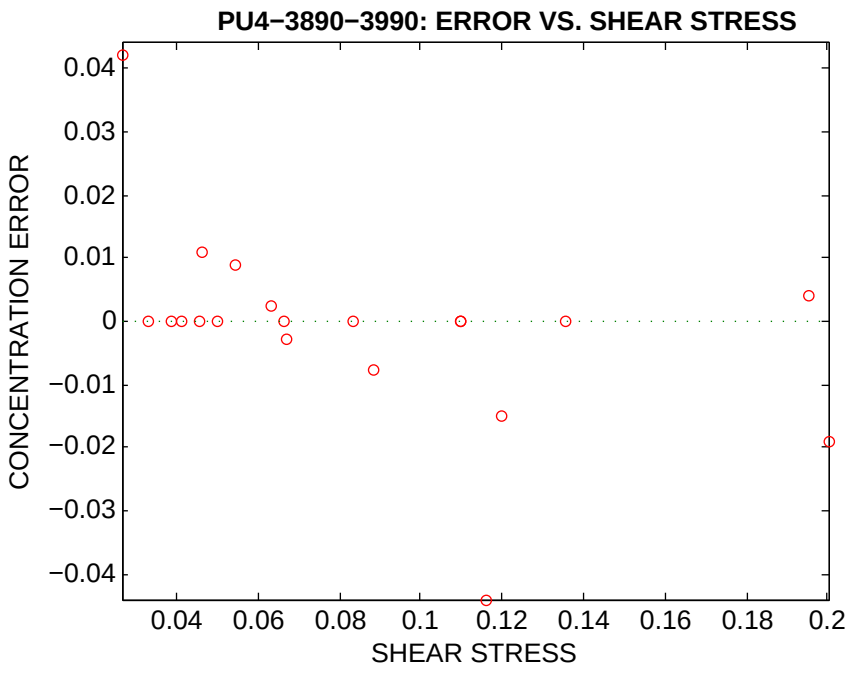


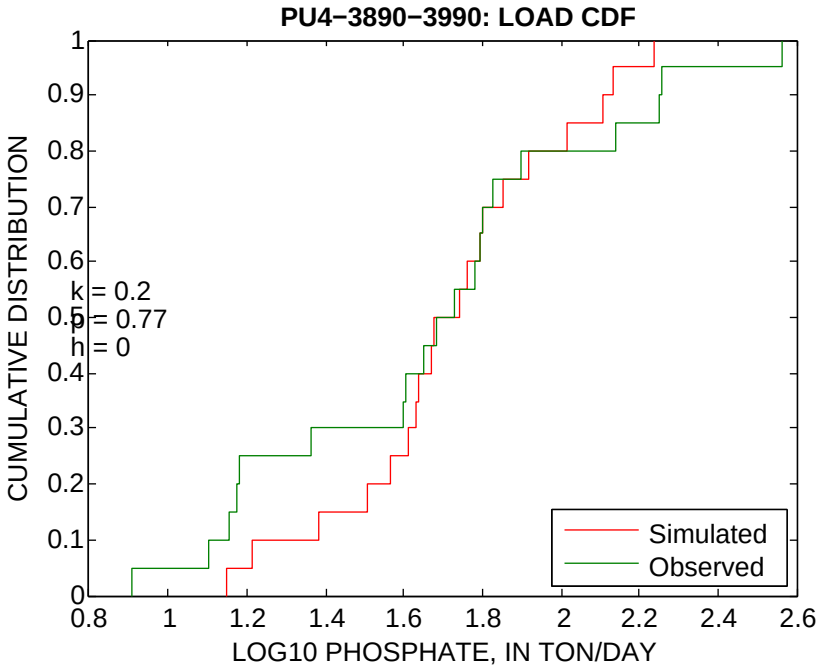


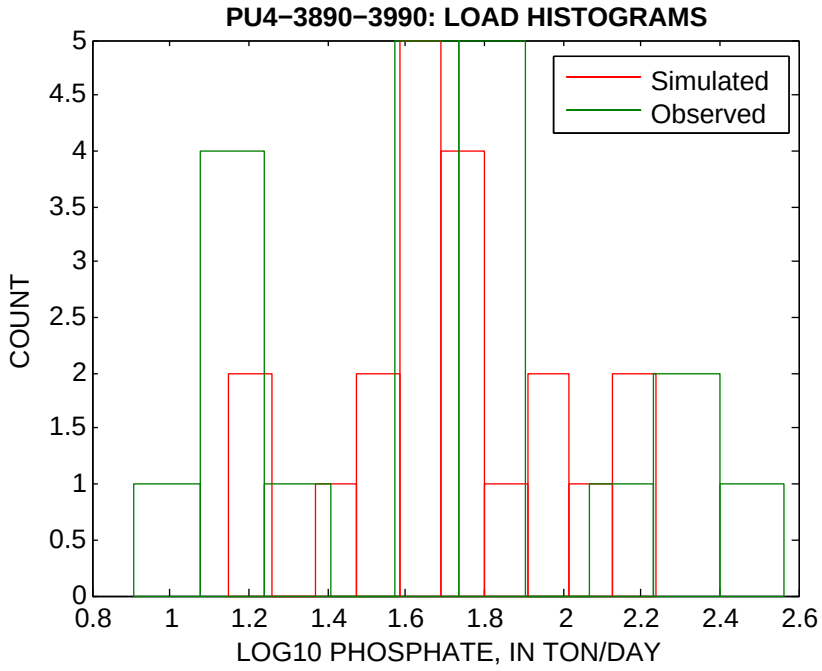


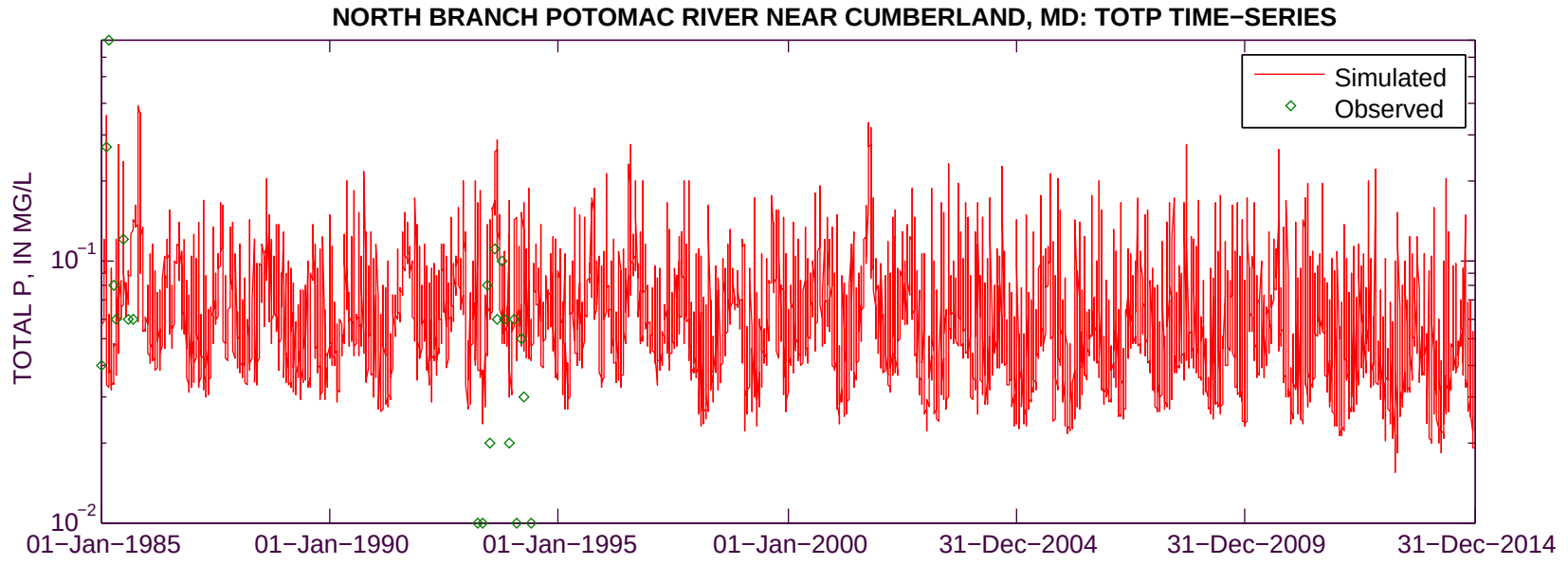
LOAD DATA
LOG10

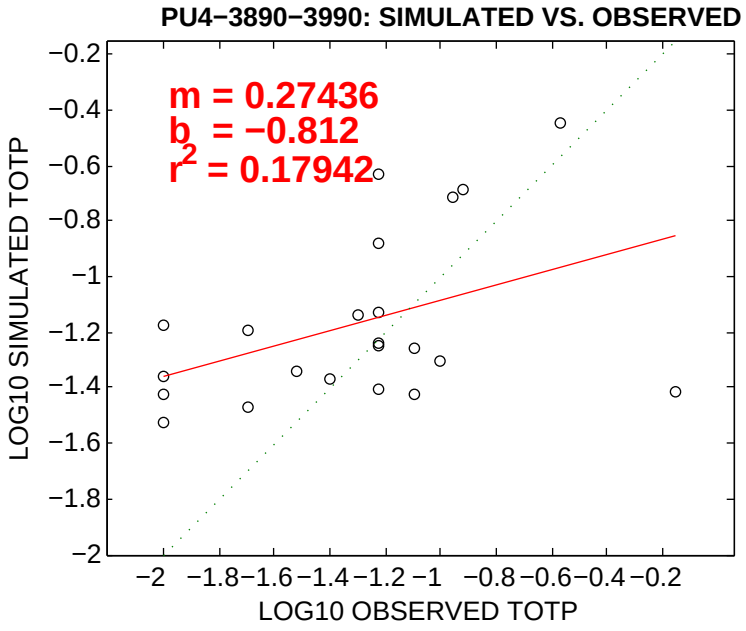


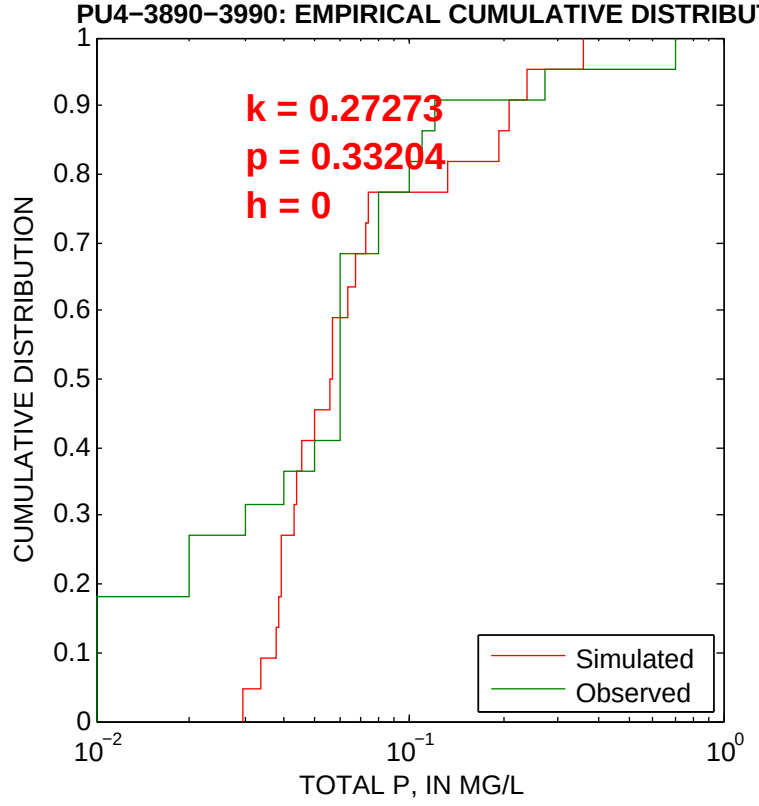












DATA SELECTION

scenario: P620171001WQ | file: TOTP.calib

plot: TOTP - total phosphorus

Dates: 1/1/1985 – 12/31/201

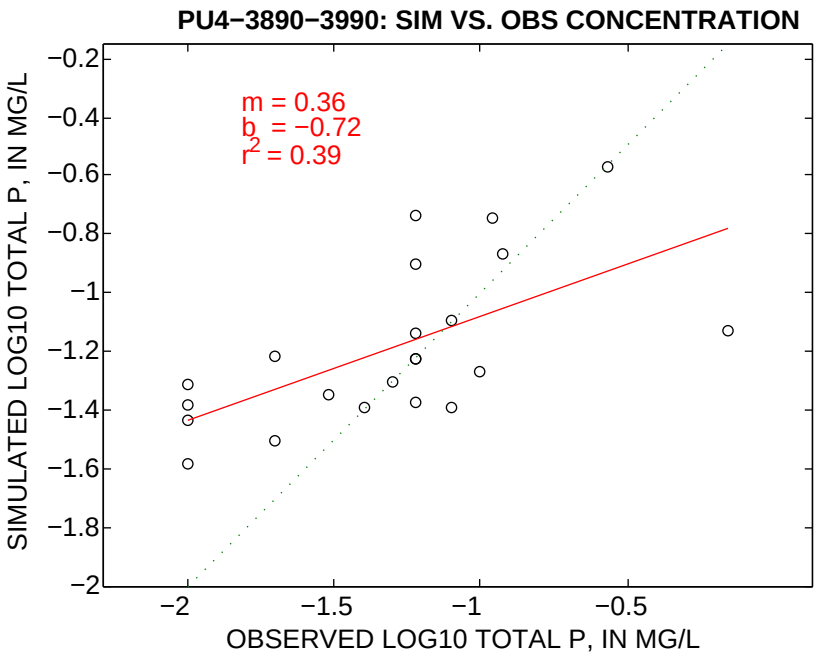
Drive: N/A | Directory: model | Observed: OBS20161101

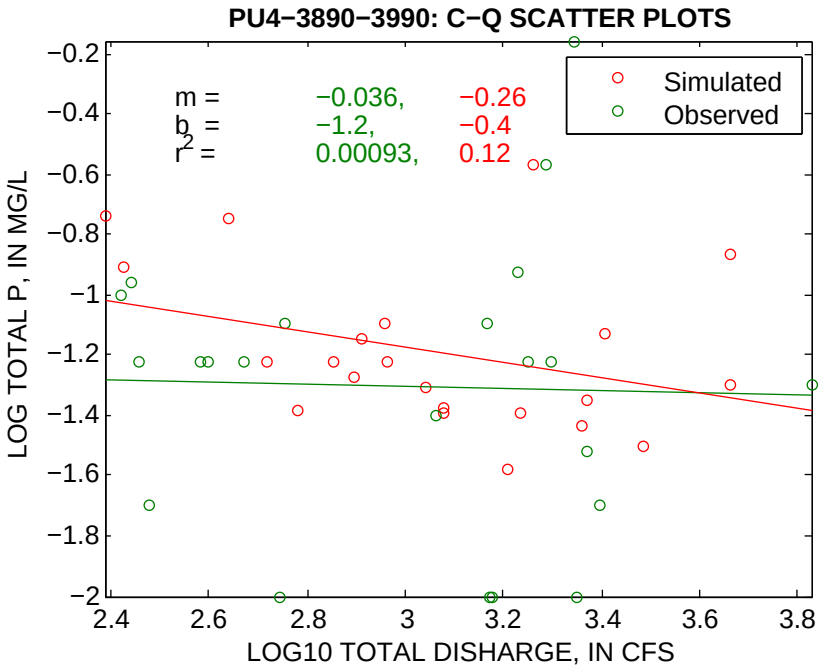
STATISTICS

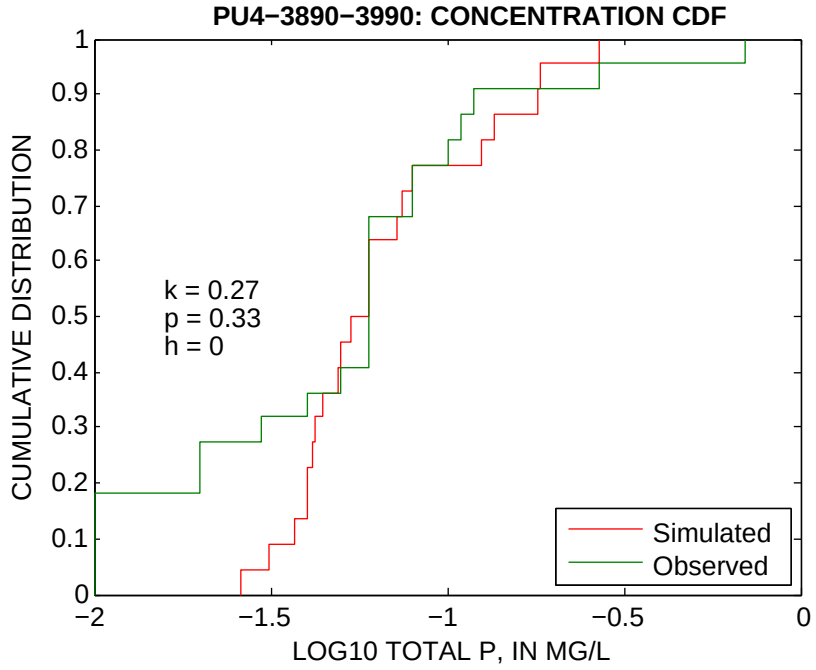
	n	22	22
		observe	simulate
min		0.01	0.029612
		-2	-1.52853
mean		0.0918182	0.0897715
		-1.30671	-1.17051
media		0.06	0.0562625
		-1.22185	-1.24982
max		0.7	0.35821
		-0.154902	-0.445862
varian		0.0216442	0.00713816
		0.221535	0.0929439
JB		0.001	0.001860
		0.5	0.045515
		ra	log
%		-2.22906	-10.4229
err.va		0.0242635	0.212351
rel.std.err		1.12102	0.958545
mod.eff		-0.12102	0.0414547

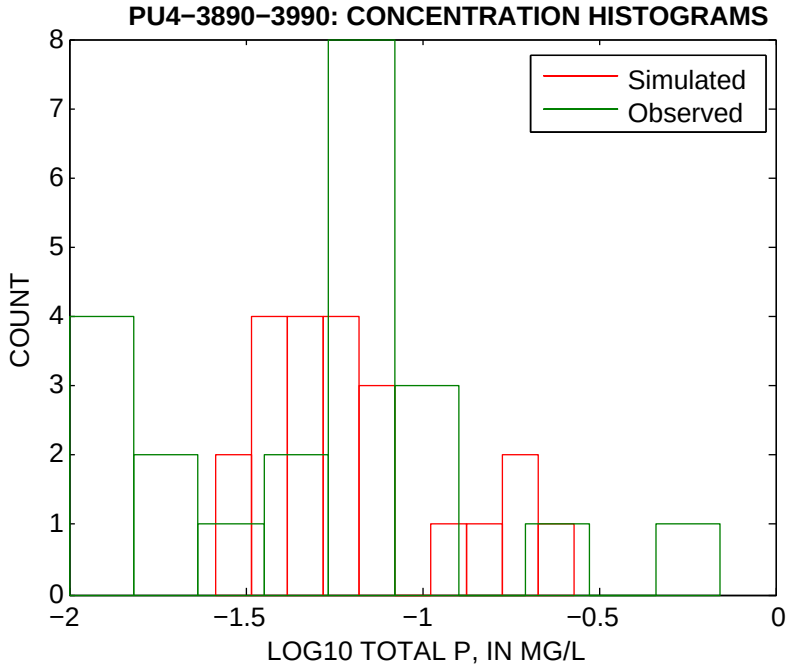
VERSION 2.1

ALL DATA
LOG10

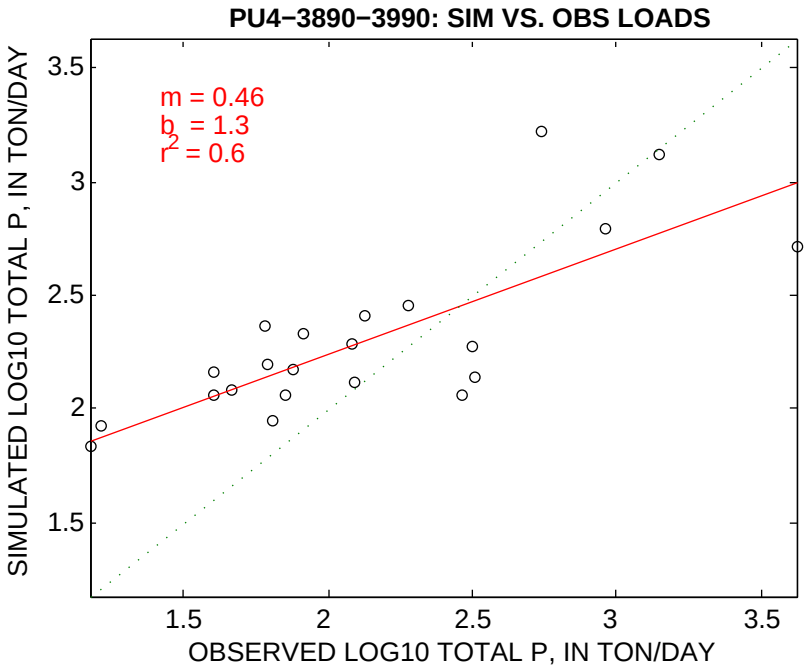


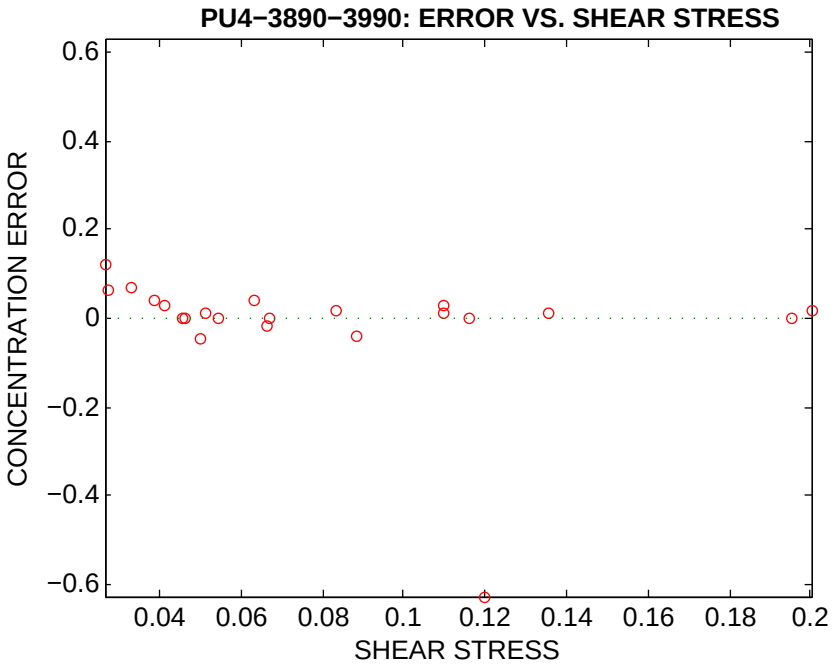


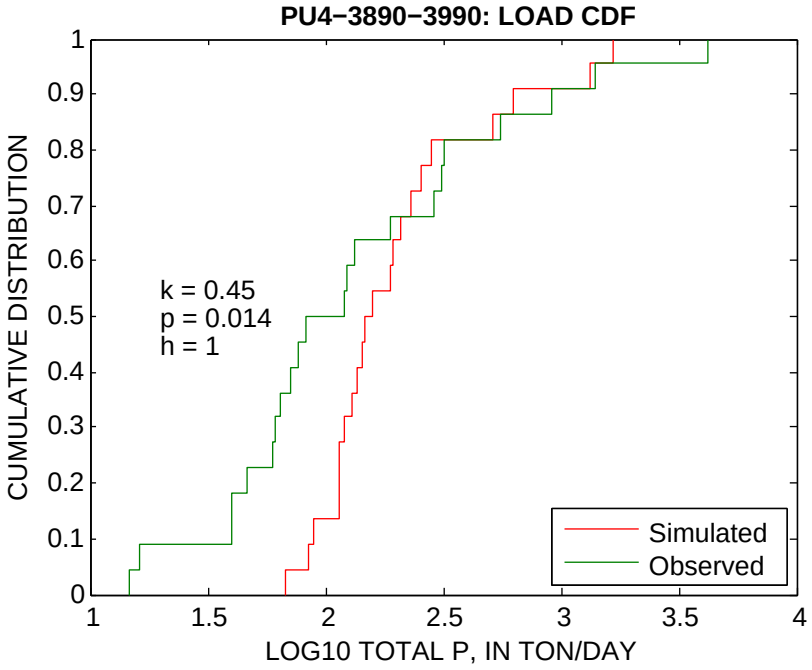


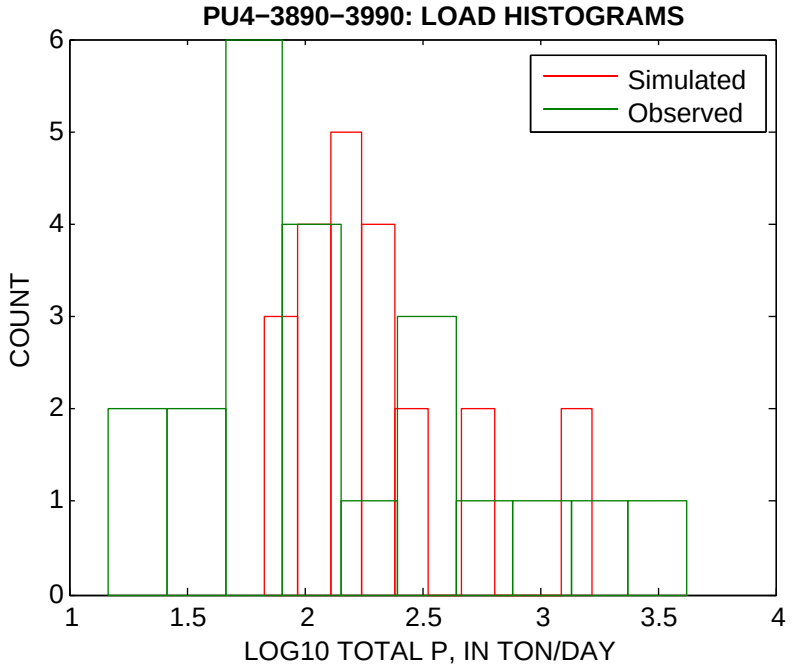


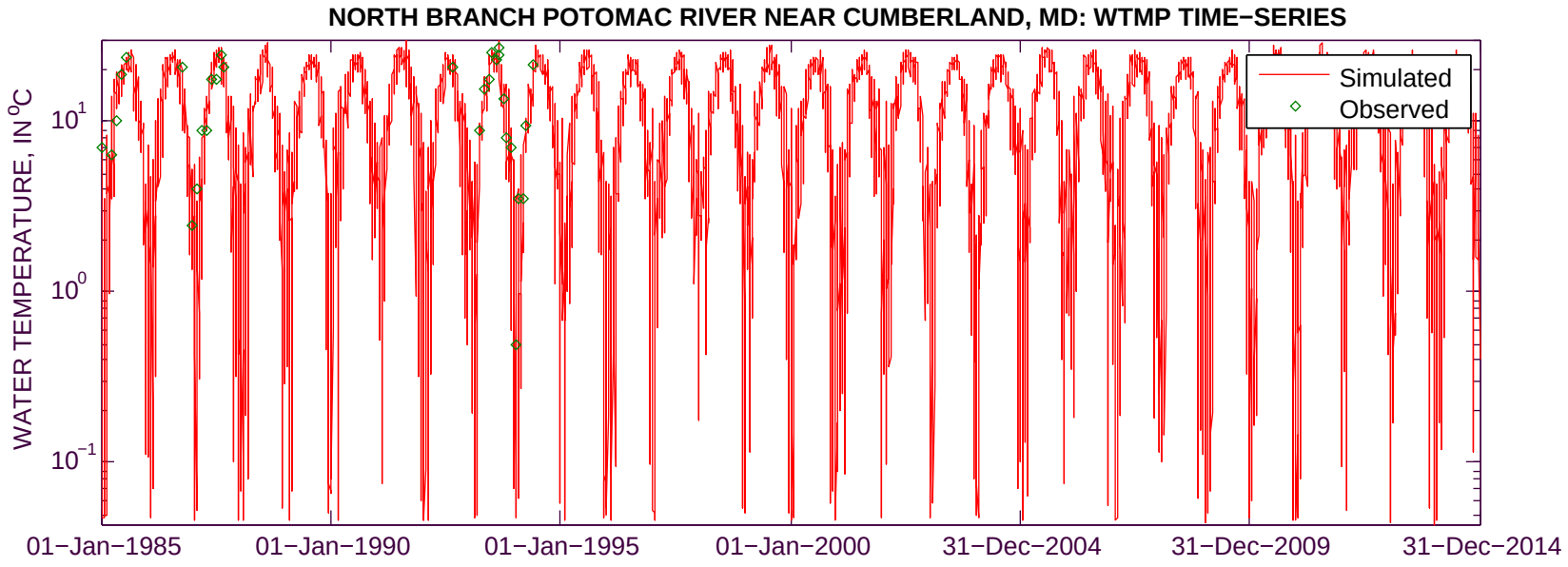
LOAD DATA
LOG10

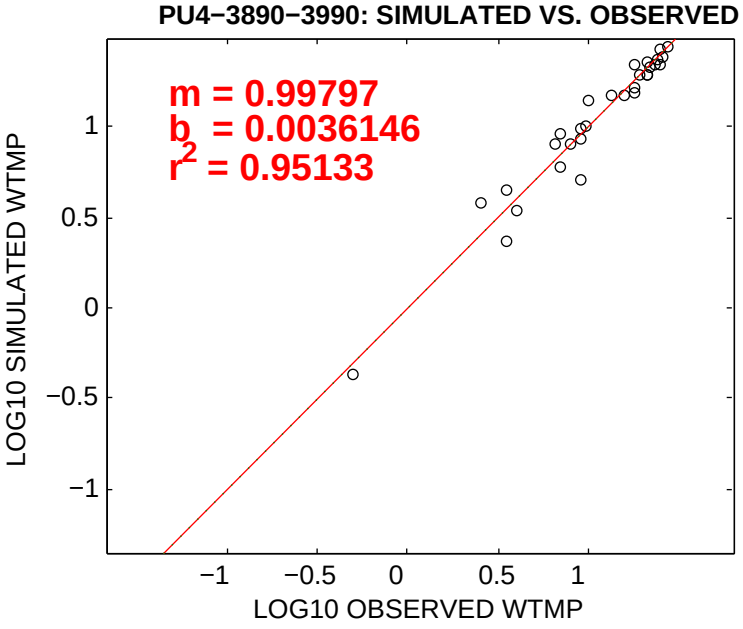


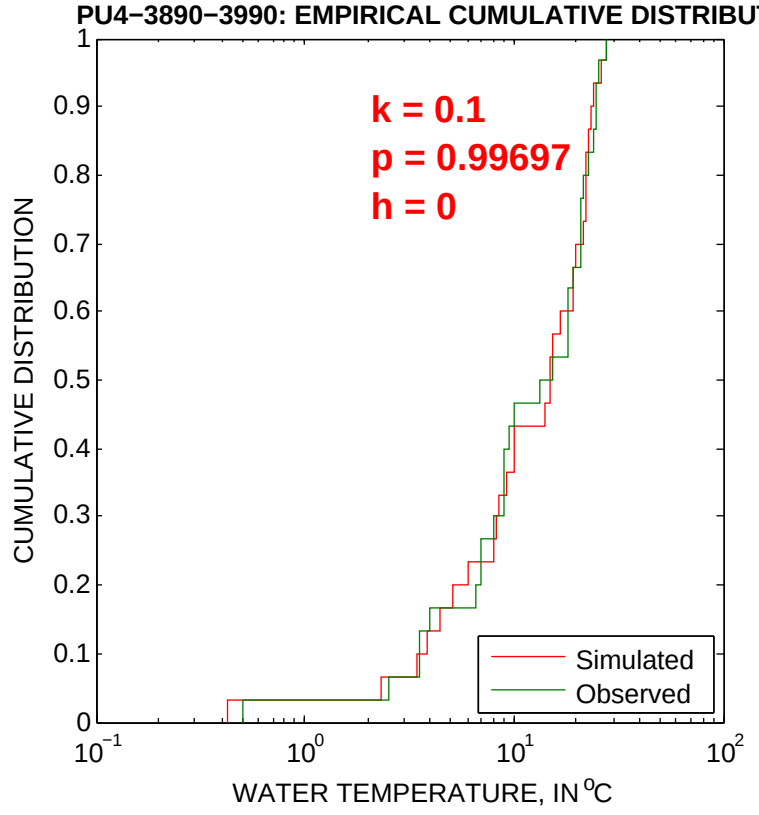












DATA SELECTION

scenario	file
P620171001WQ	WTMP.calib

plot: WTMP - water tempera...

Dates: 1/1/1985 — 12/31/201

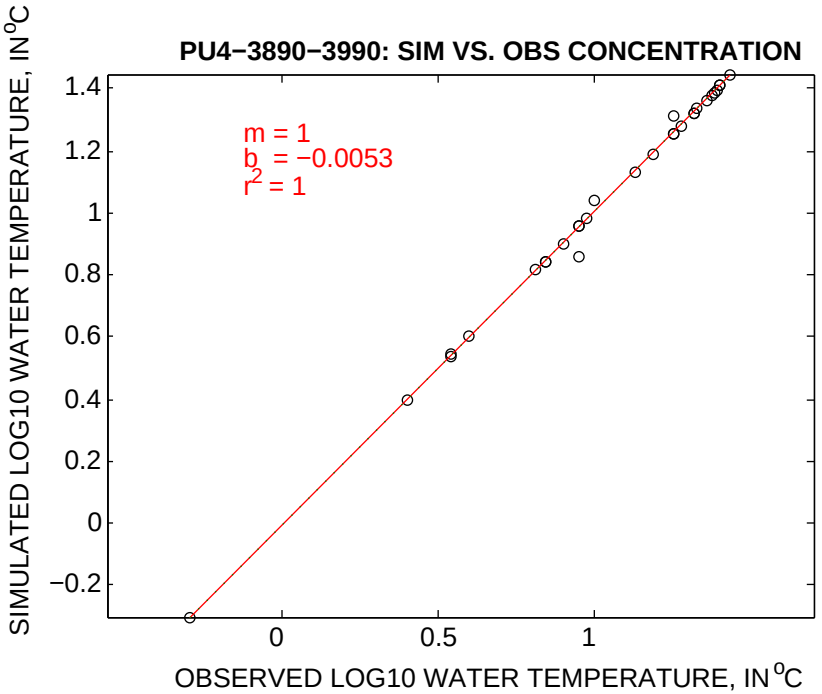
Drive	Directory	Observed
N/A	model	OBS20161101

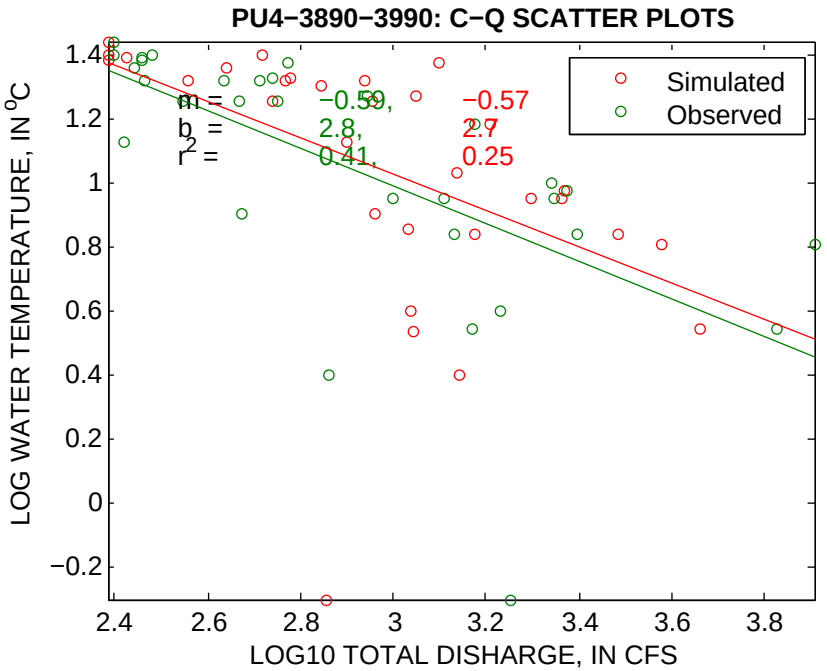
STATISTICS

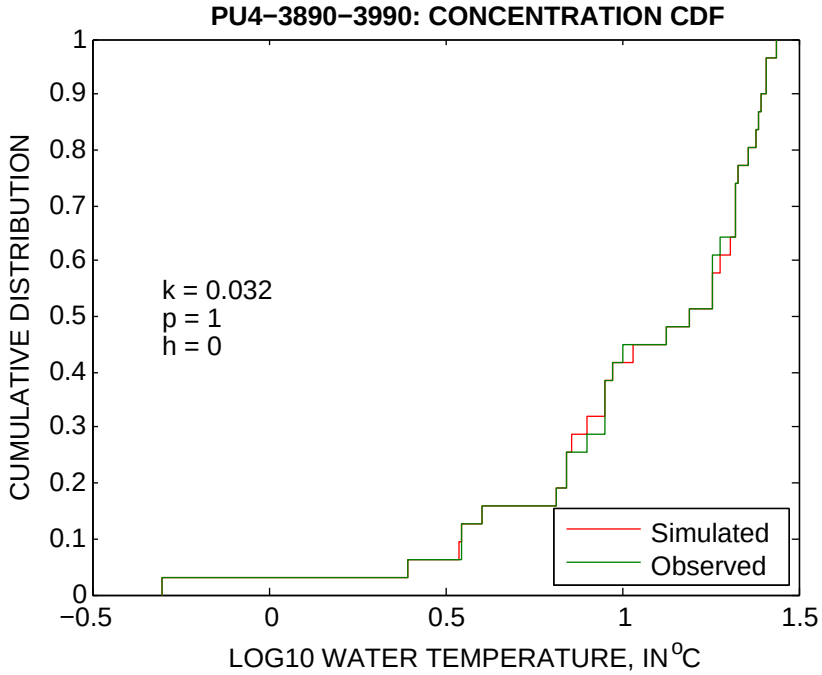
	n	30	30
		observe	simulate
min		0.5	0.4271
		-0.30103	-0.36947
mean		14.1667	14.259
		1.03577	1.03728
media		14.5	15.032
		1.16033	1.17701
max		27.5	27.589
		1.43933	1.44074
varian		66.9368	65.6546
		0.151101	0.158187
JB		0.122353	0.144583
		0.002643	0.001361
		ra	log
%		0.651718	0.145742
err.va		3.38581	0.00770199
rel.std.err		0.0505822	0.0509723
mod.eff		0.949418	0.949028

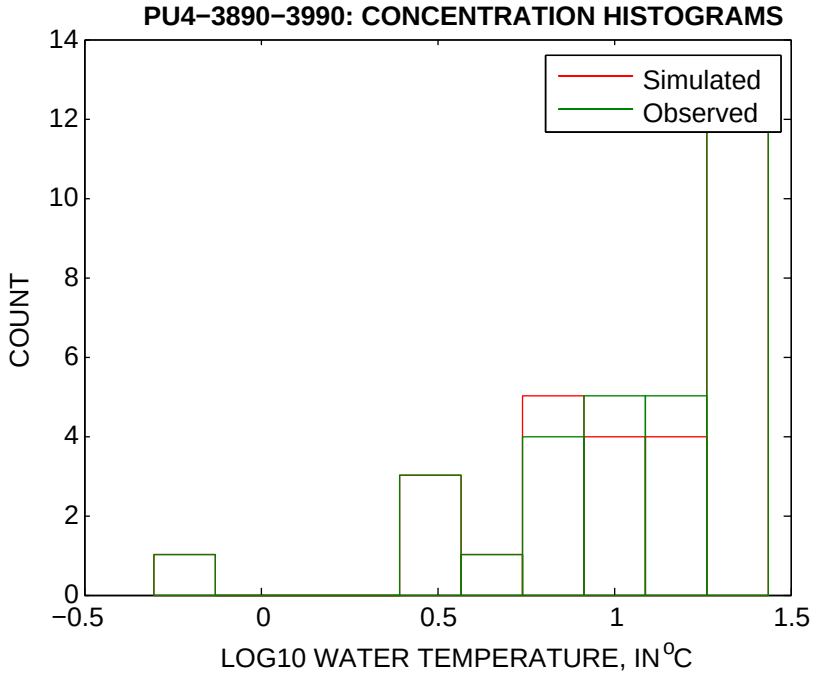
VERSION 2.1

ALL DATA
LOG10

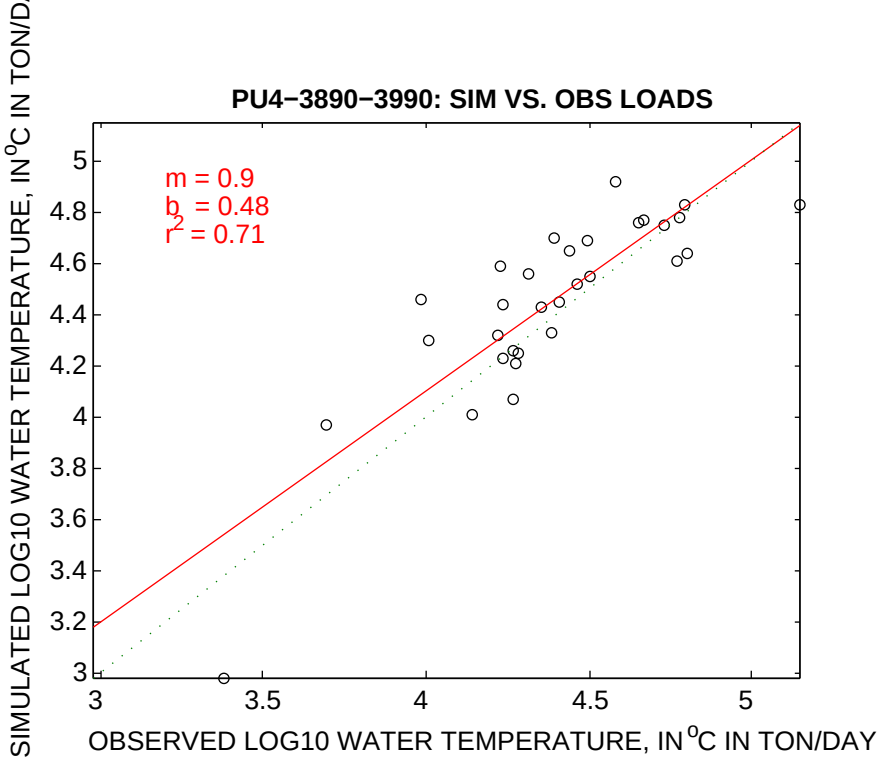




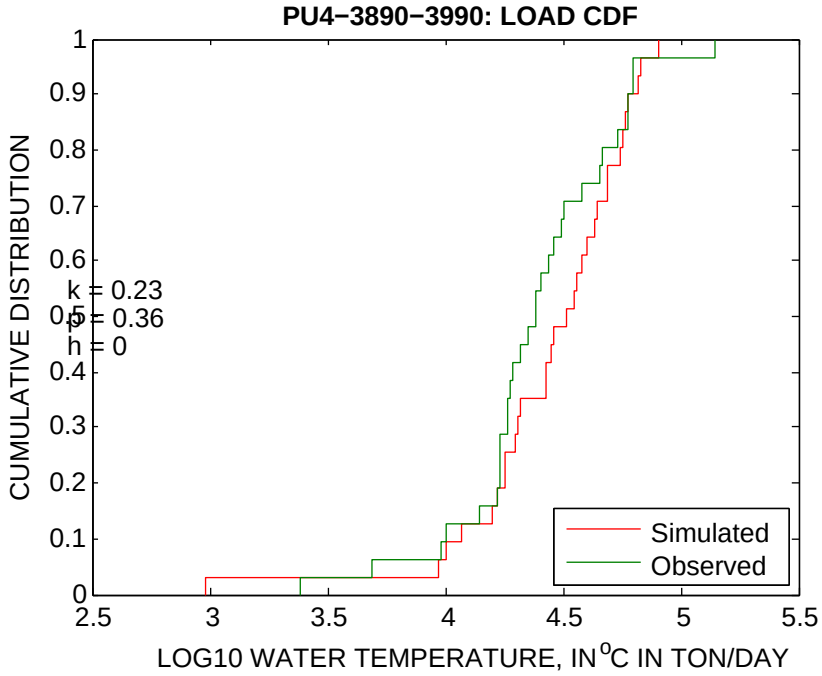


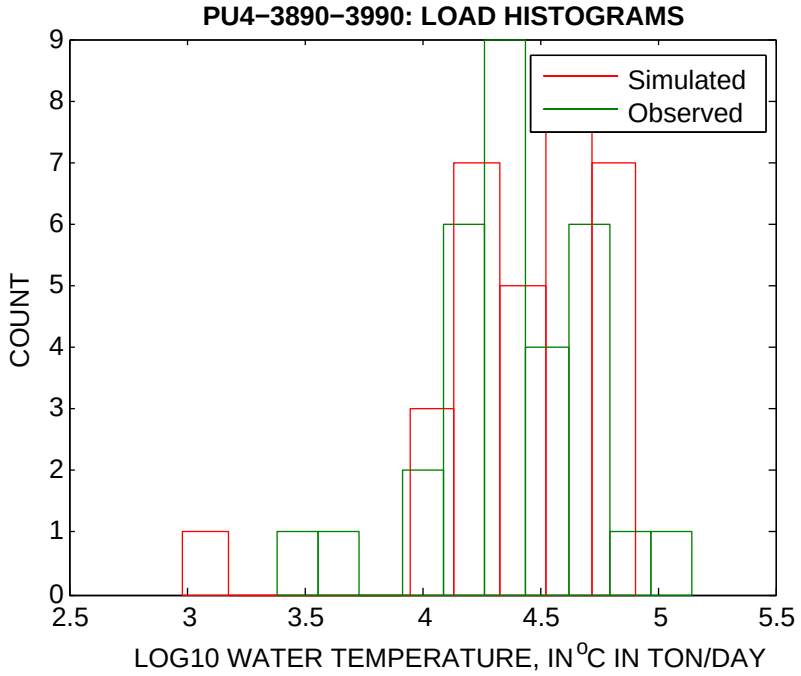


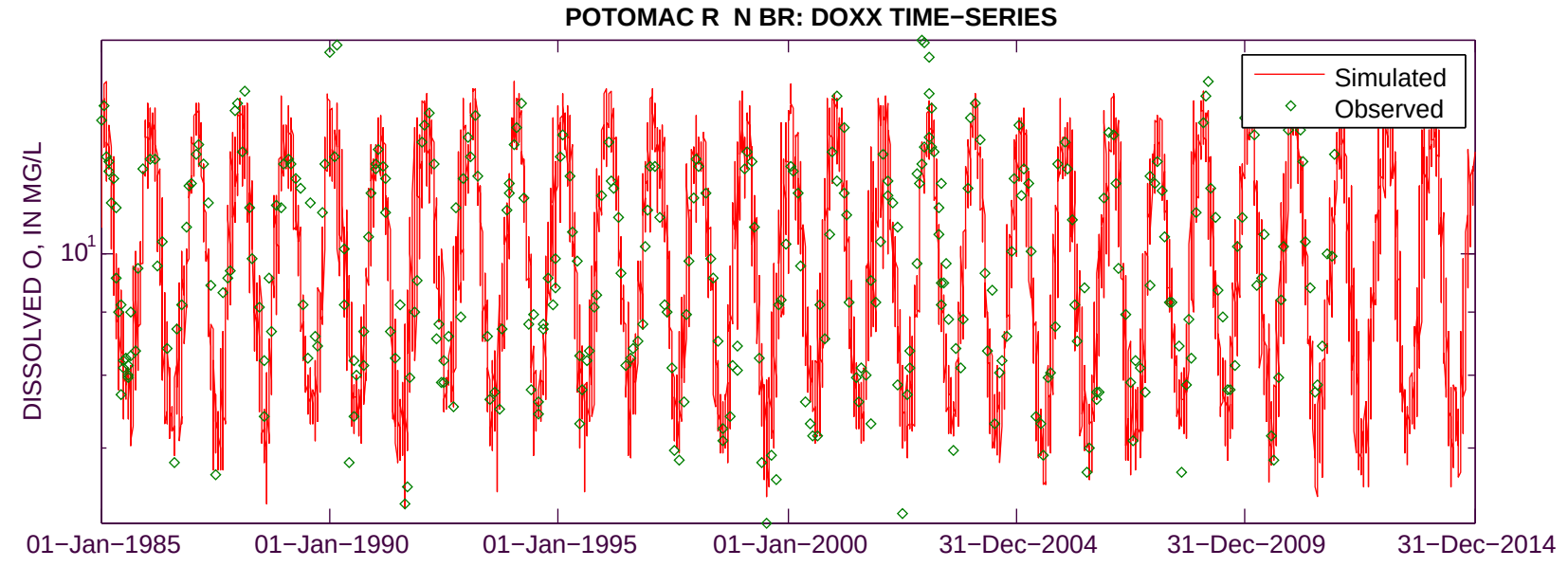
LOAD DATA
LOG10

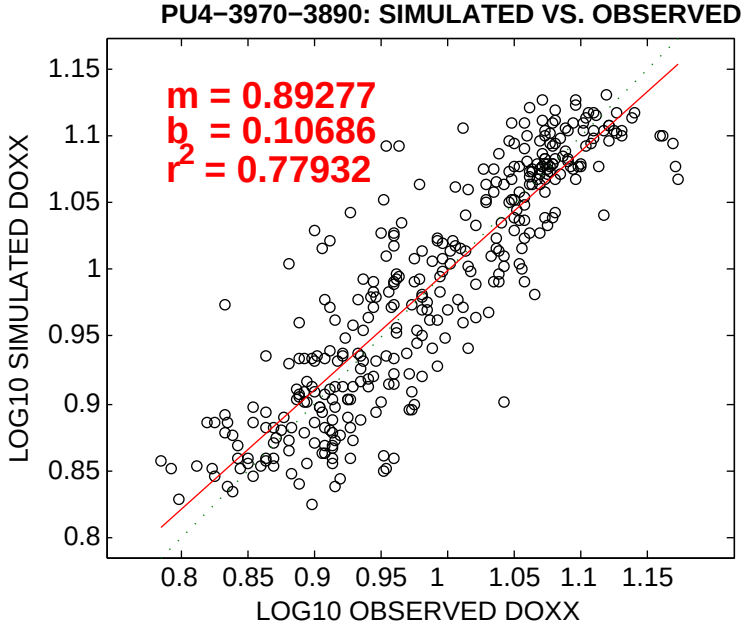


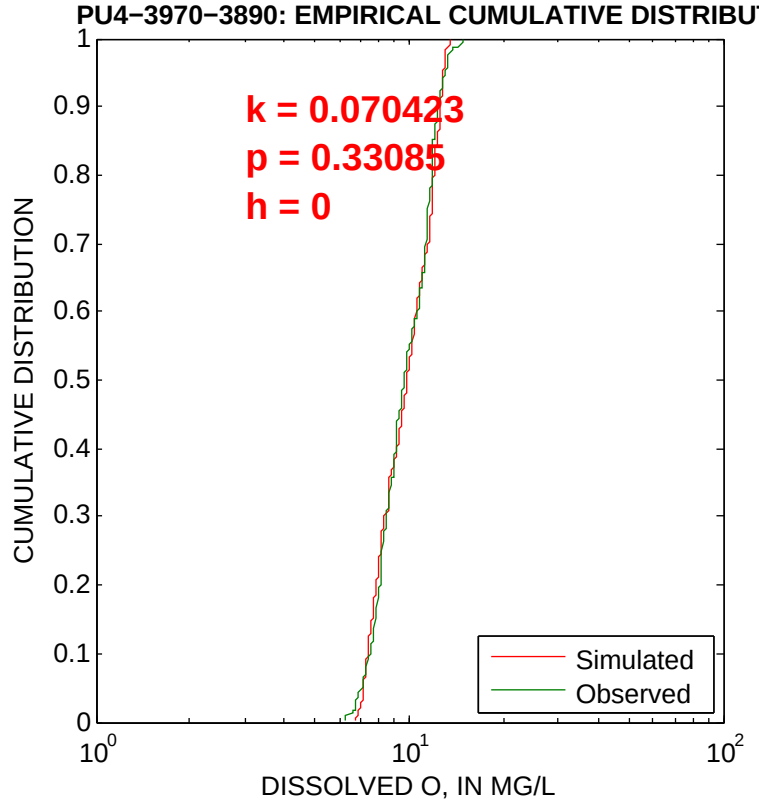












DATA SELECTION

scenario	file
P620171001WQ	DOXX.calib

plot: DOXX - dissolved oxygen

Dates 1/1/1985 12/31/201

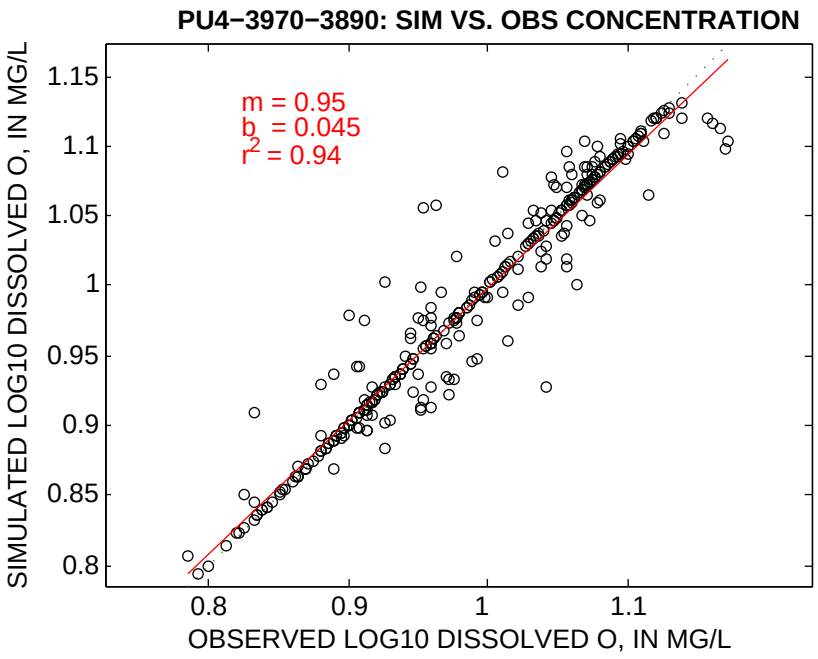
Drive	Directory	Observed
N/A	model	OBS20161101

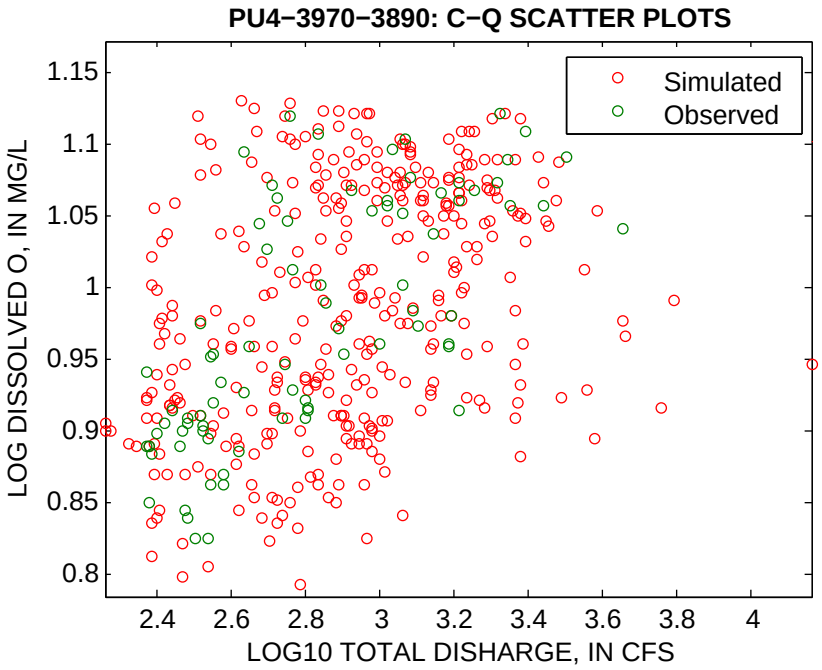
STATISTICS

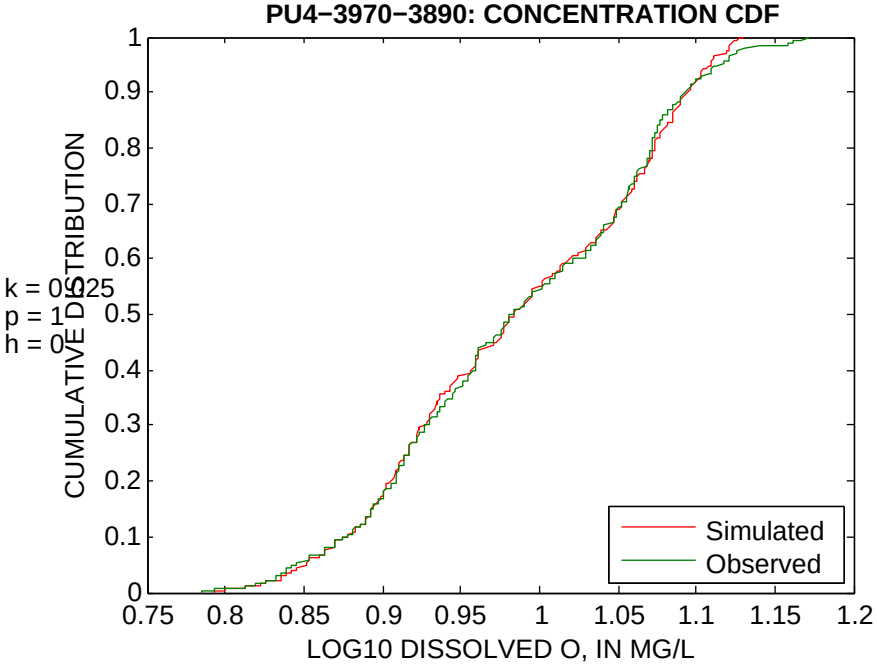
		observe	simulate
n		355	355
min		6.1	6.6628
		0.78533	0.823657
mean		9.89725	9.92386
		0.987185	0.988195
media		9.55011	9.8389
		0.980008	0.992947
max		14.86	13.516
		1.17202	1.13085
varian		3.7307	3.77489
		0.00731594	0.00748231
JB		0.004671	0.001
		0.005368	0.001
		ra	log
%		0.268849	0.102225
err.va		0.868724	0.00173636
rel.std.err		0.232859	0.23734
mod.eff		0.767141	0.76266

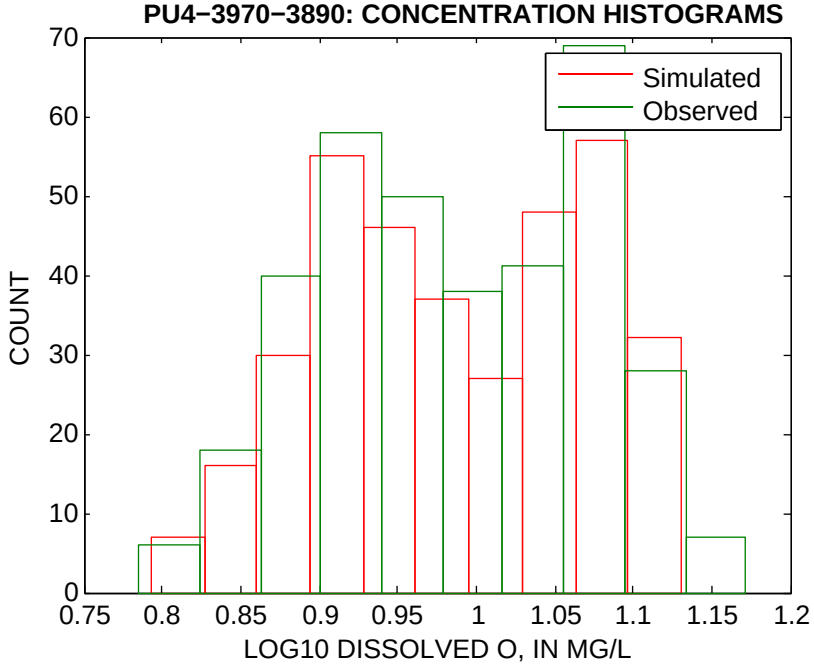
VERSION 2.1

ALL DATA
LOG10

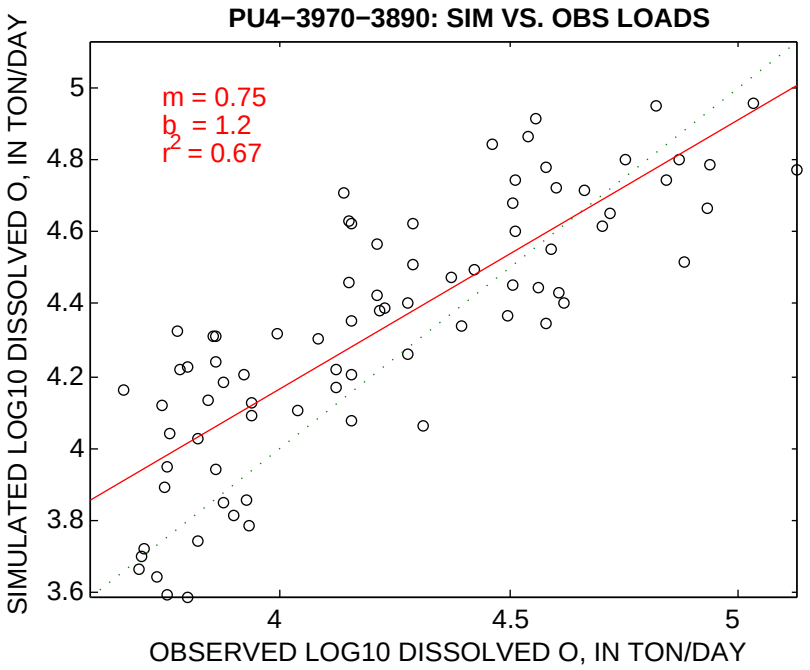


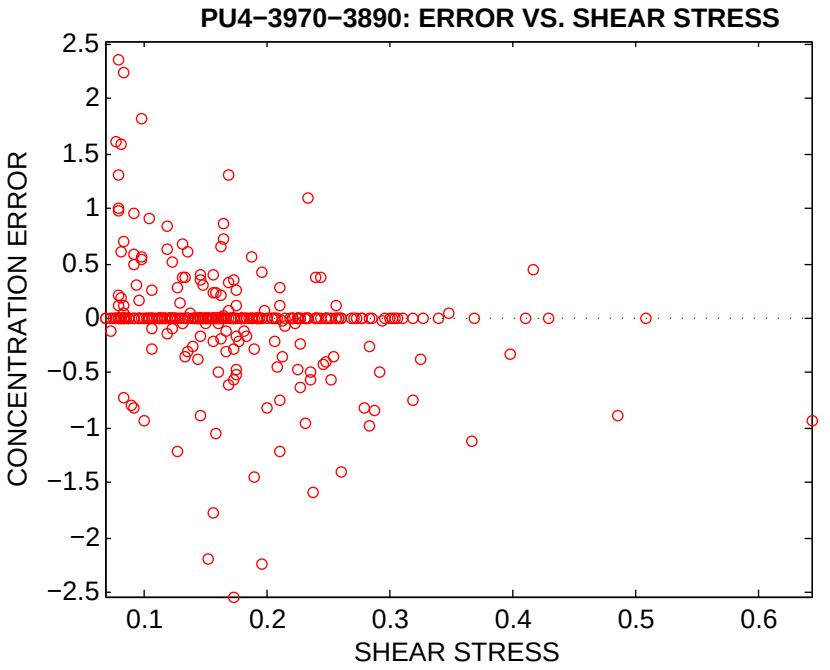


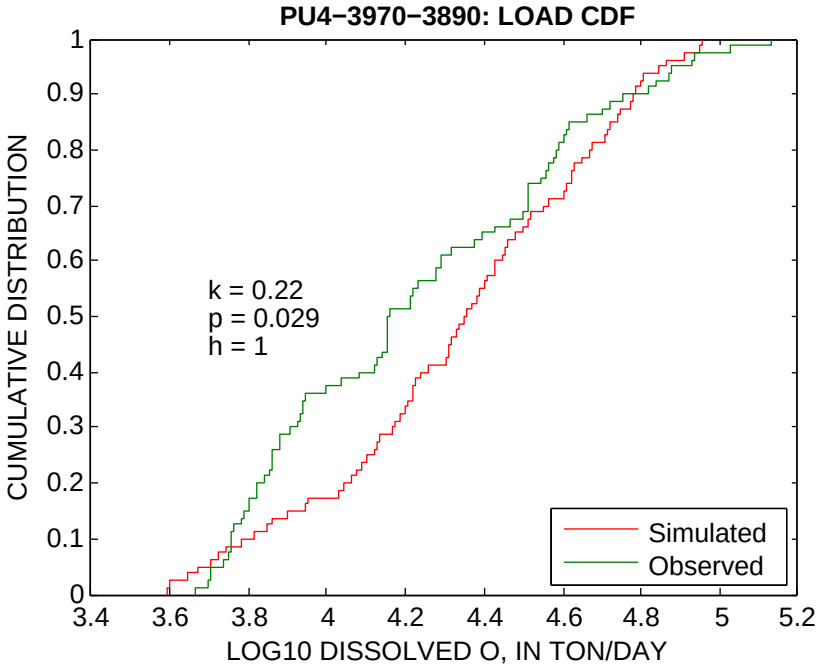


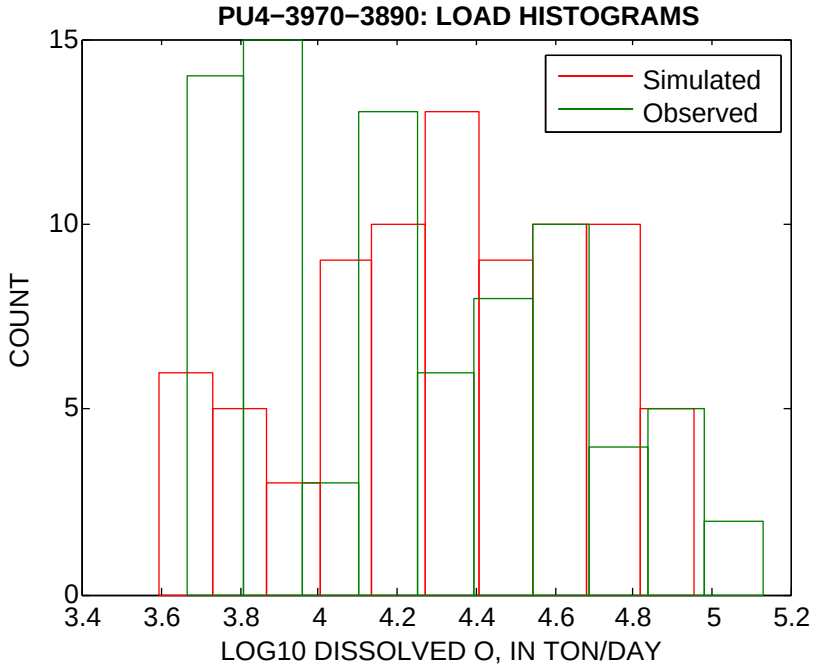


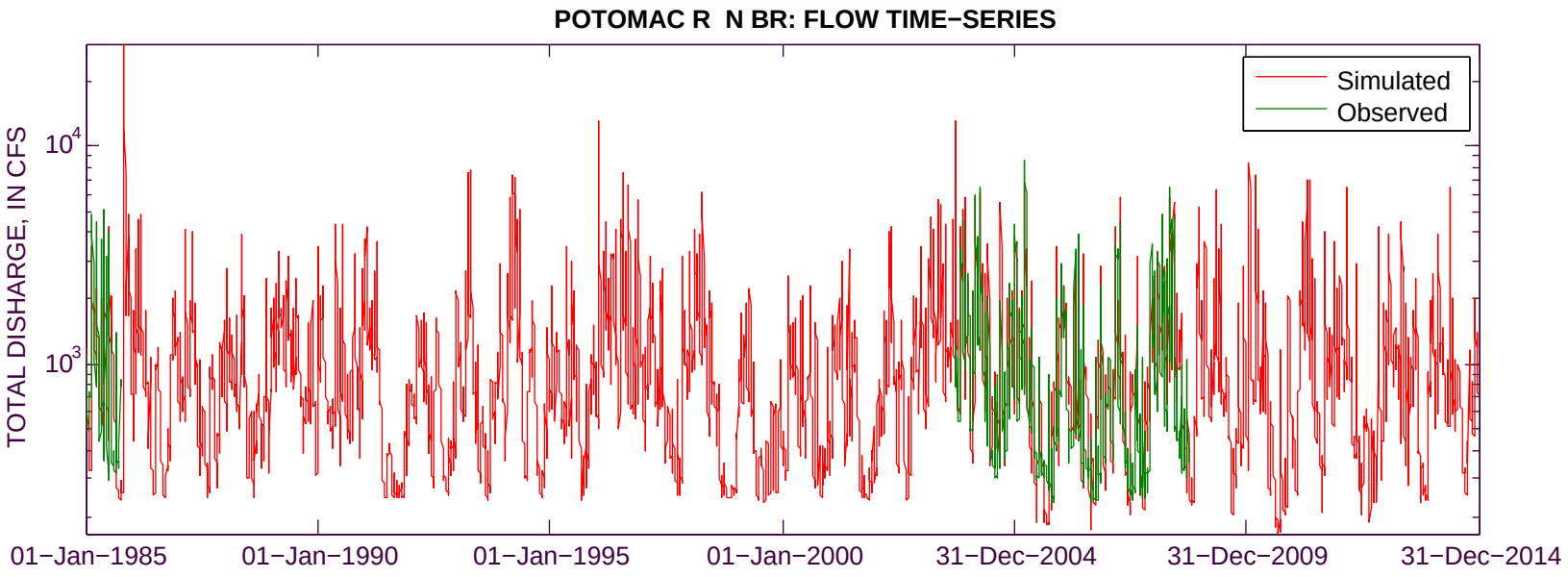
LOAD DATA
LOG10

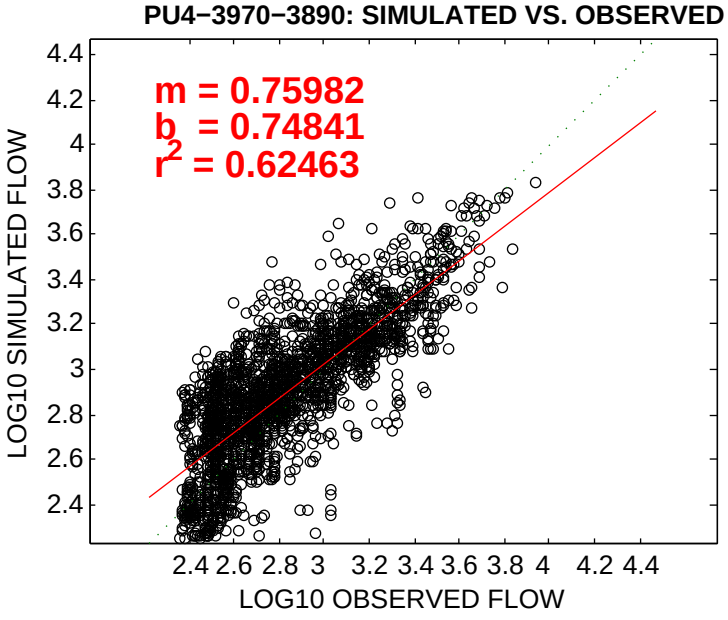


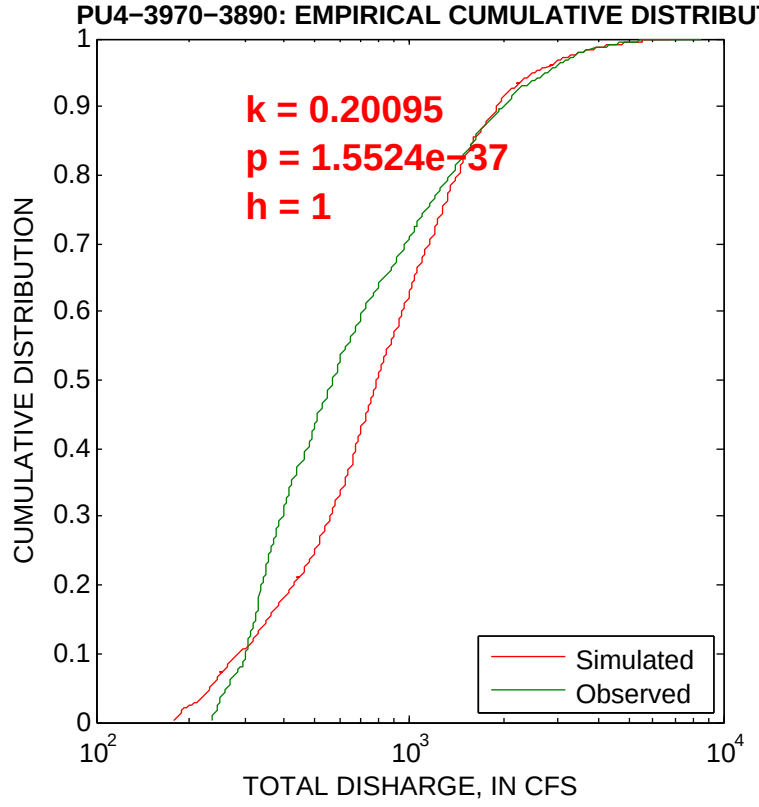












DATA SELECTION

scenario: P620171001WQ | file: FLOW.calib

plot: FLOW - total discharge

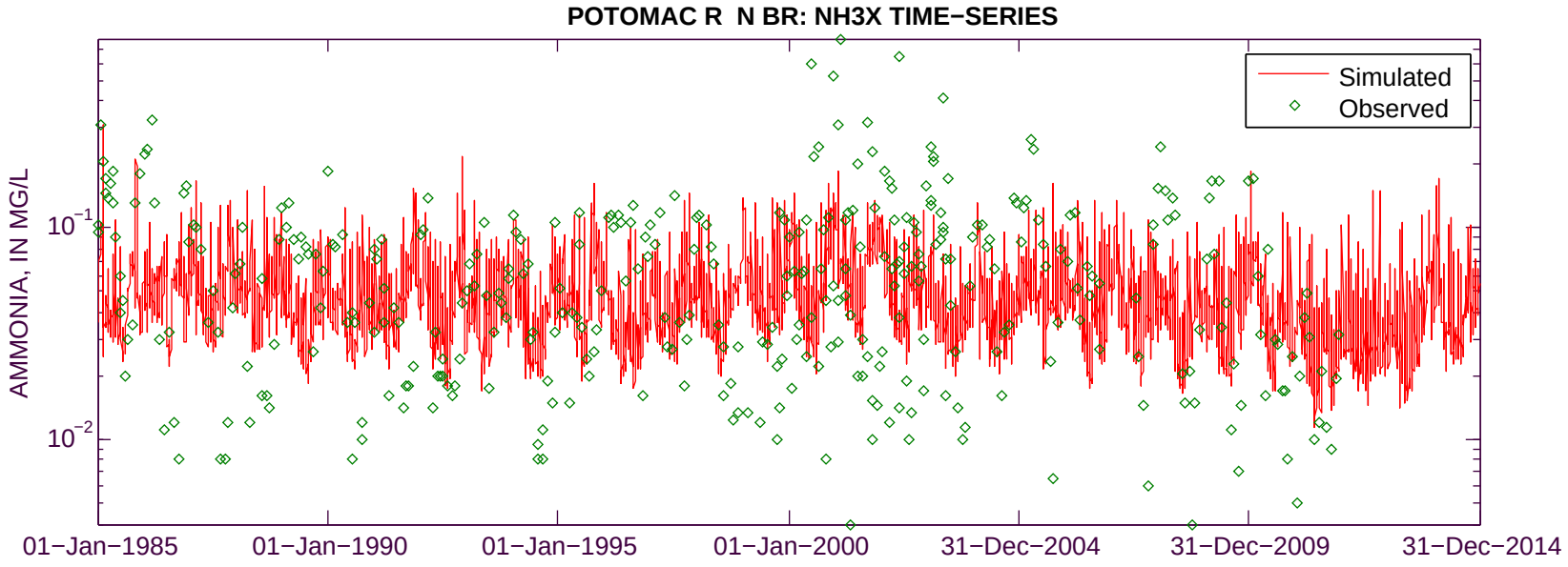
Dates: 1/1/1985 – 12/31/201

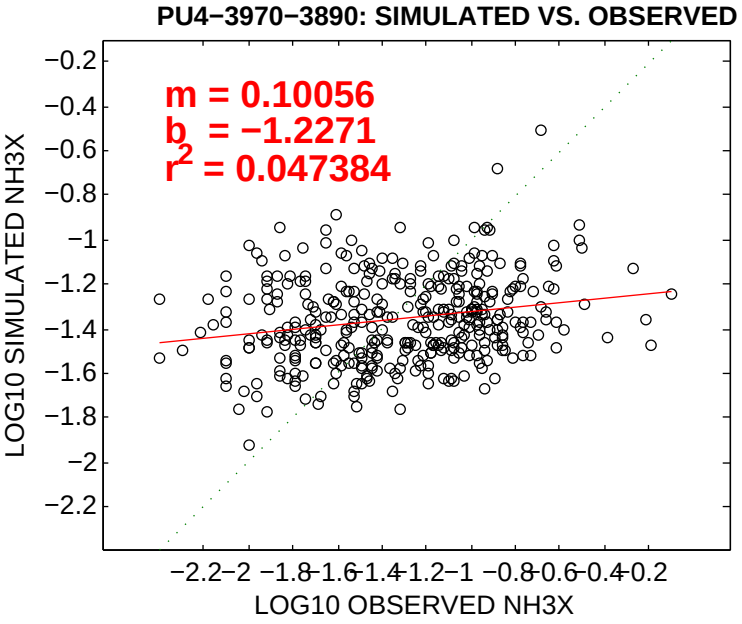
Drive: N/A | Directory: model | Observed: OBS20161101

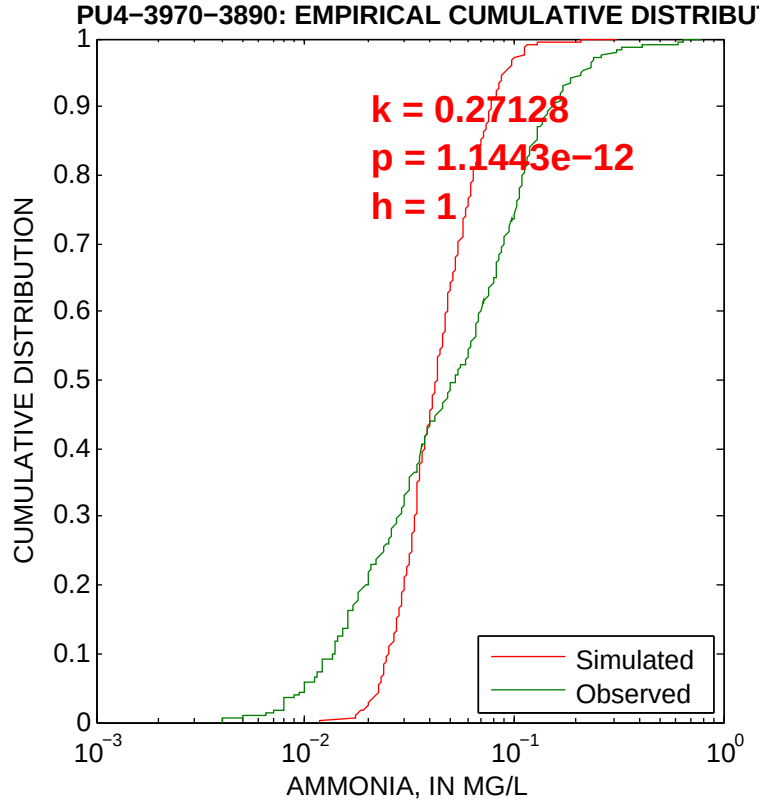
STATISTICS

		observe	simulate
n		2100	2100
min		229	175.67
		2.35984	2.2447
mean		917.831	1017.33
		2.82858	2.89763
media		572	791.09
		2.7574	2.89823
max		8600	6759.4
		3.9345	3.82991
varian		773707	670044
		0.102613	0.0948429
JB		0.001	0.001
		0.001	0.031569
		ra	log
%		10.841	2.44093
err.va		276039	0.04629
rel.std.err		0.356774	0.451113
mod.eff		0.643226	0.548887

VERSION 2.1







DATA SELECTION

scenario	file
P620171001WQ	NH3X.calib

plot: NH3X - ammonia

Dates: 1/1/1985 – 12/31/201

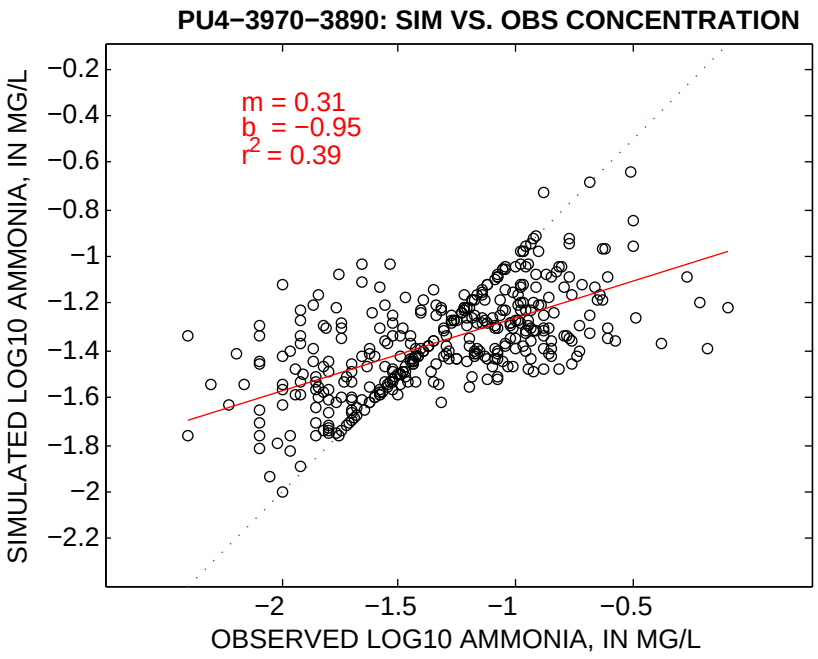
Drive	Directory	Observed
N/A	model	OBS20161101

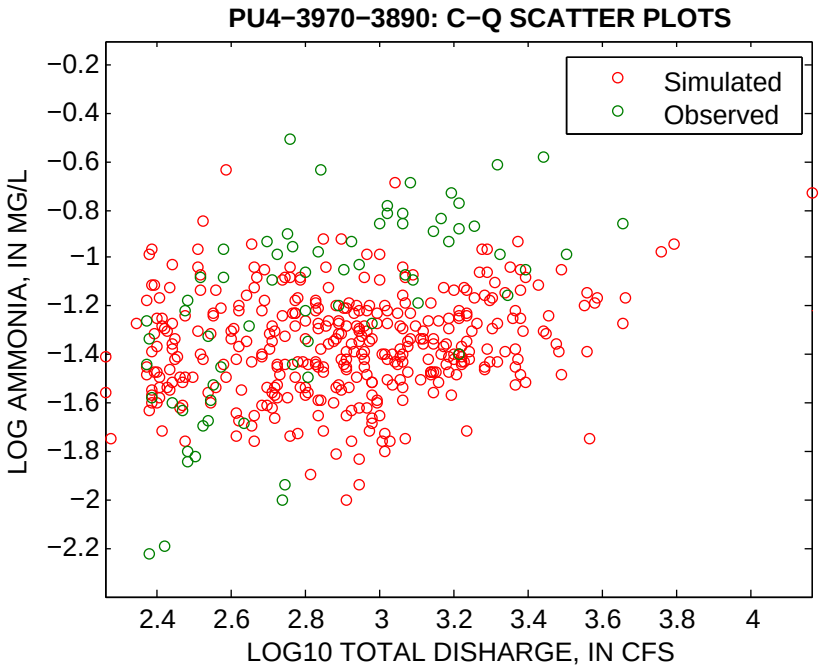
STATISTICS

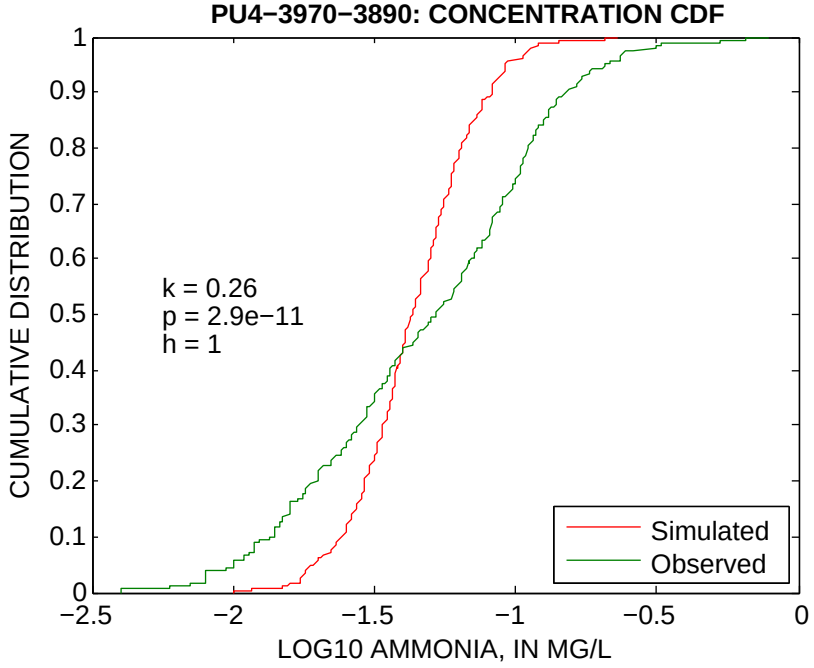
	n	376	376
		observe	simulate
min		0.004	0.01188
		-2.39794	-1.92518
mean		0.0758014	0.0486433
		-1.31412	-1.35921
media		0.05225	0.0425475
		-1.28192	-1.37113
max		0.792	0.31053
		-0.101275	-0.507896
varian		0.00737733	0.00070676
		0.175625	0.037477
JB		0.001	0.001
		0.178088	0.003510
		ra	log
%		-35.8279	3.43098
err.va		0.00806332	0.17982
rel.std.err		1.09299	1.02389
mod.eff		-0.0929865	-0.0238867

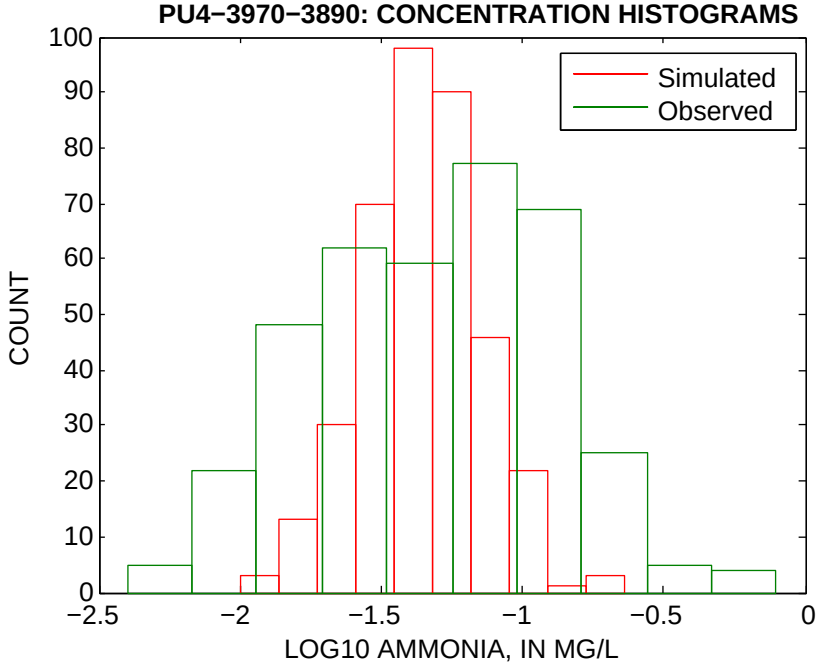
VERSION 2.1

ALL DATA
LOG10

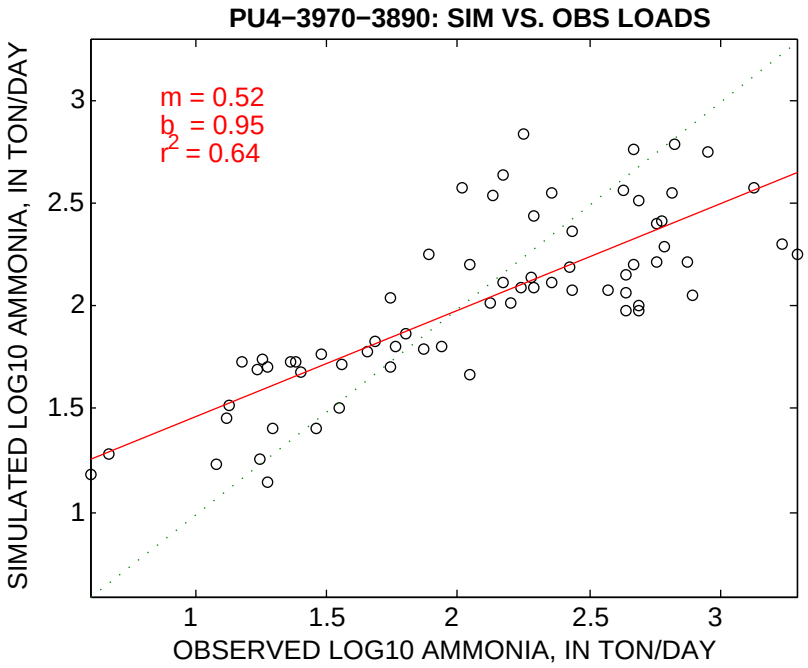


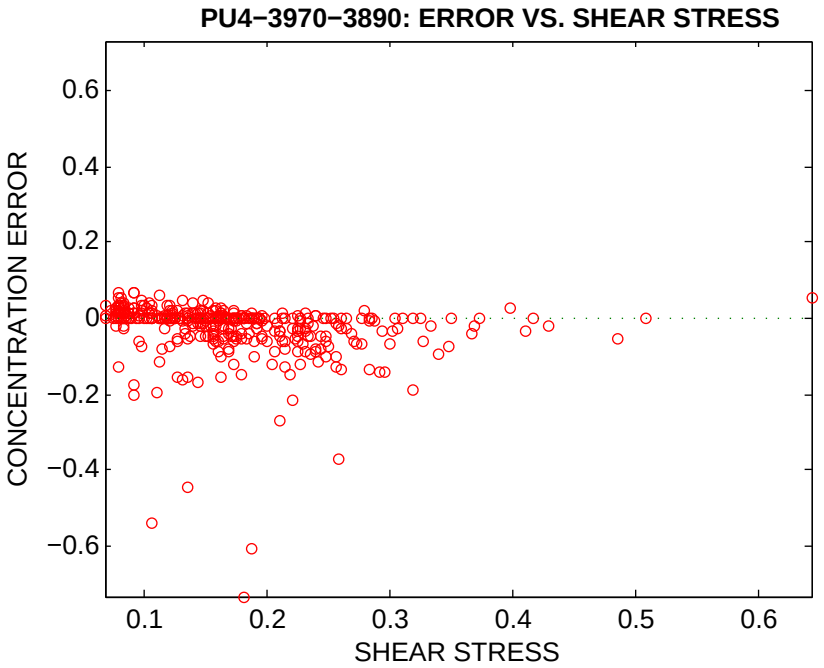


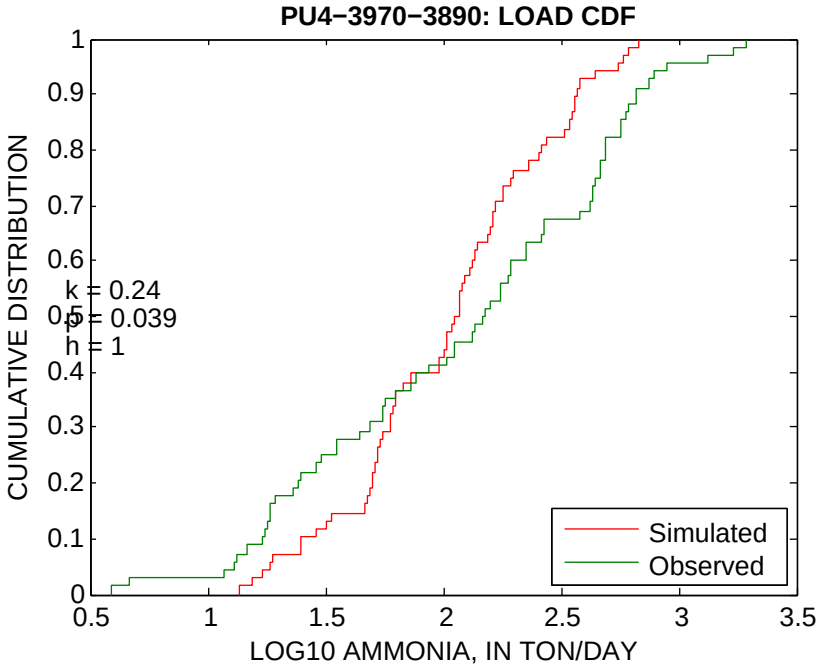


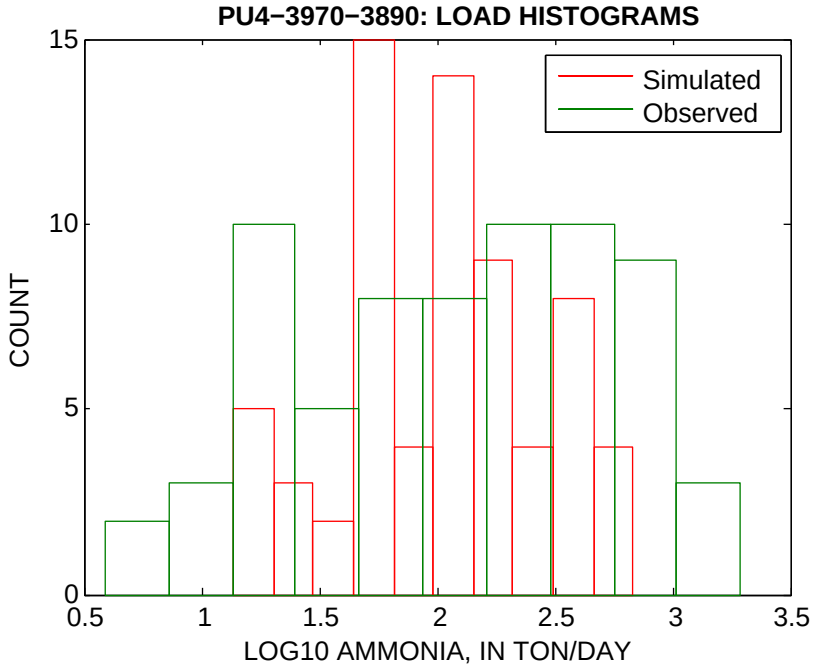


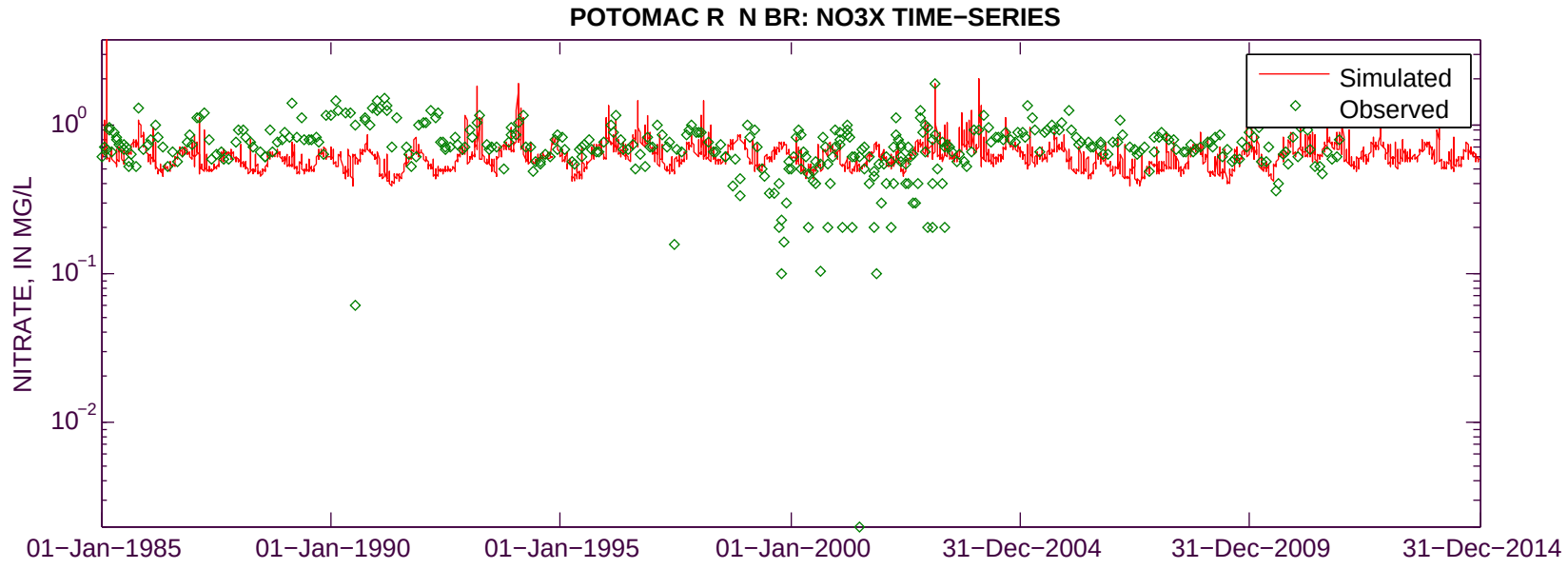
LOAD DATA
LOG10

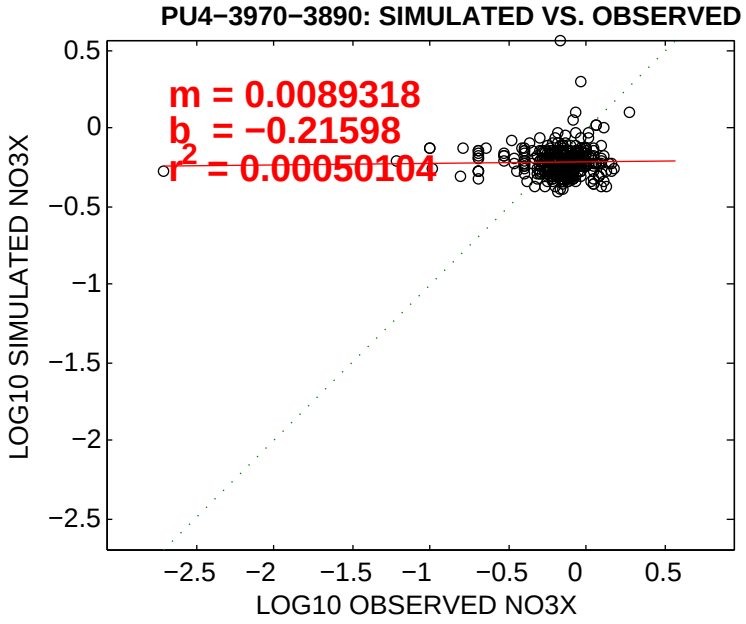


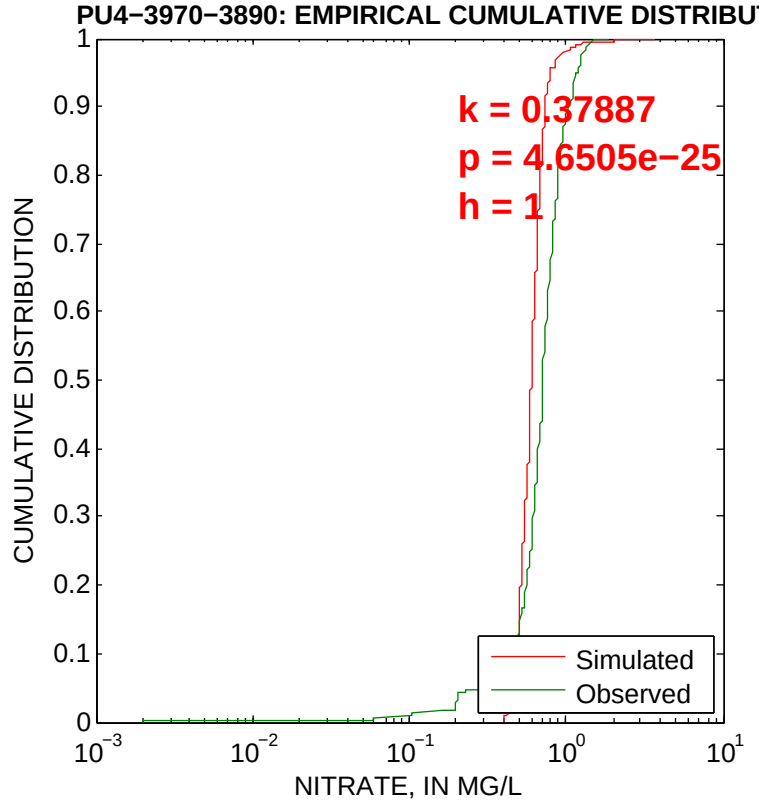












DATA SELECTION

scenario	file
P620171001WQ	NO3X.calib

plot: NO3X - nitrate

Dates: 1/1/1985 – 12/31/201

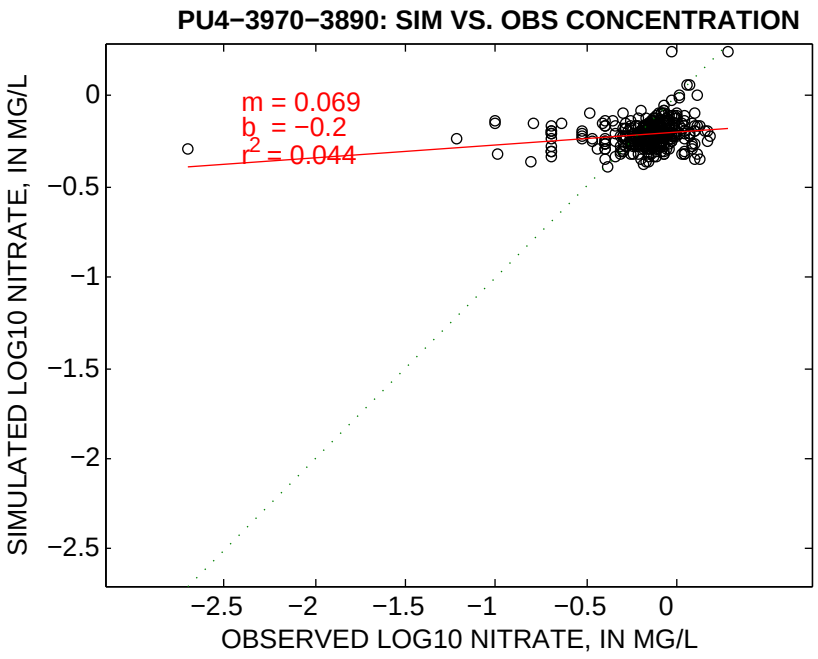
Drive	Directory	Observed
N/A	model	OBS20161101

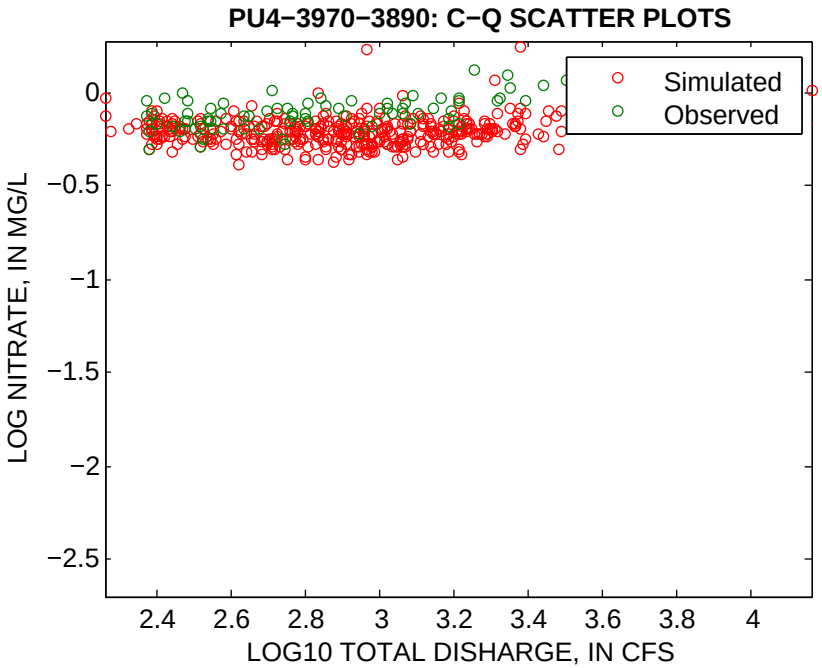
STATISTICS

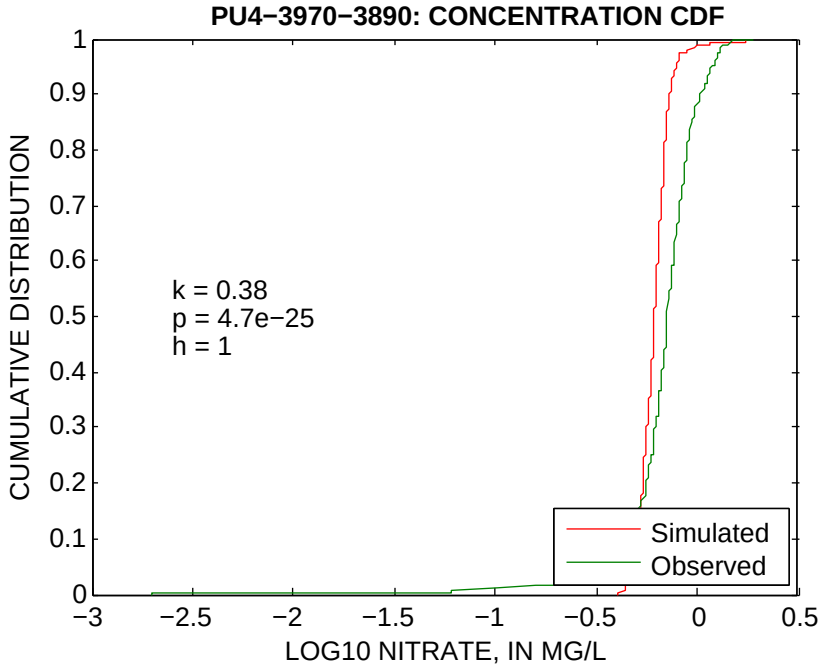
n	388	388
	observe	simulate
min	0.002	0.39318
	-2.69897	-0.405409
mean	0.726967	0.622507
	-0.176157	-0.217555
media	0.71	0.59893
	-0.148742	-0.222624
max	1.9	3.6247
	0.278754	0.559272
varian	0.0642003	0.0419364
	0.051079	0.00813299
JB	0.001	0.001
	0.001	0.001
	ra	log
%	-14.3693	23.5008
err.va	0.111432	0.0600178
rel.std.err	1.73569	1.175
mod.eff	-0.735692	-0.174999

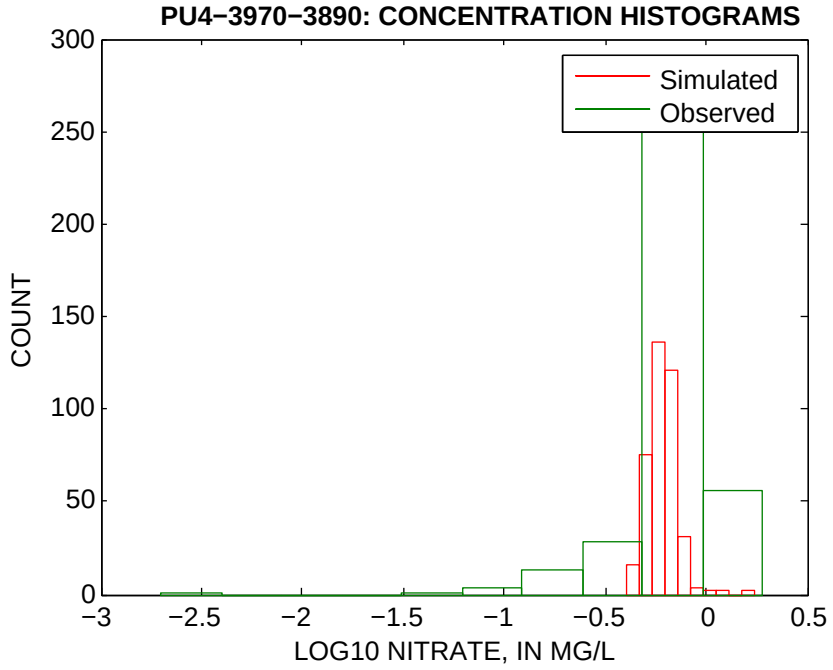
VERSION 2.1

ALL DATA
LOG10

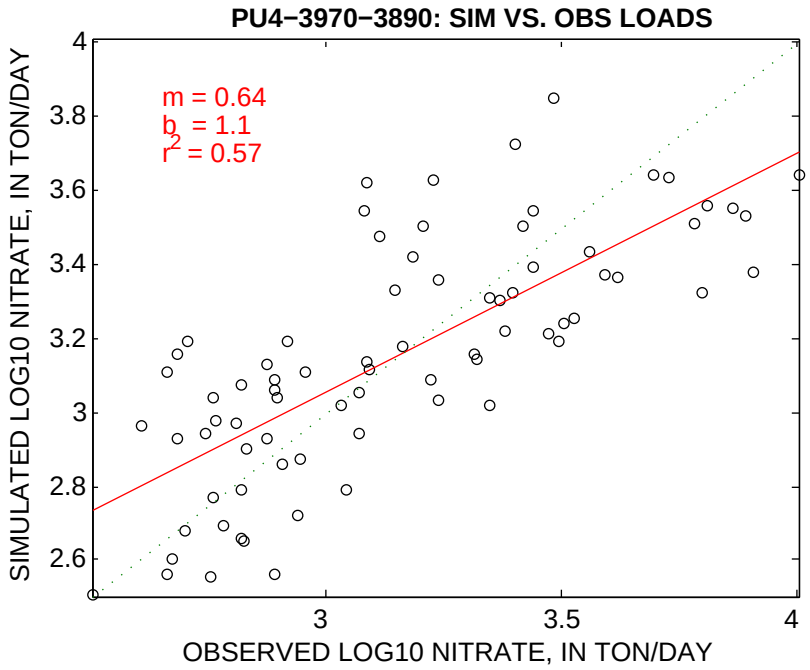


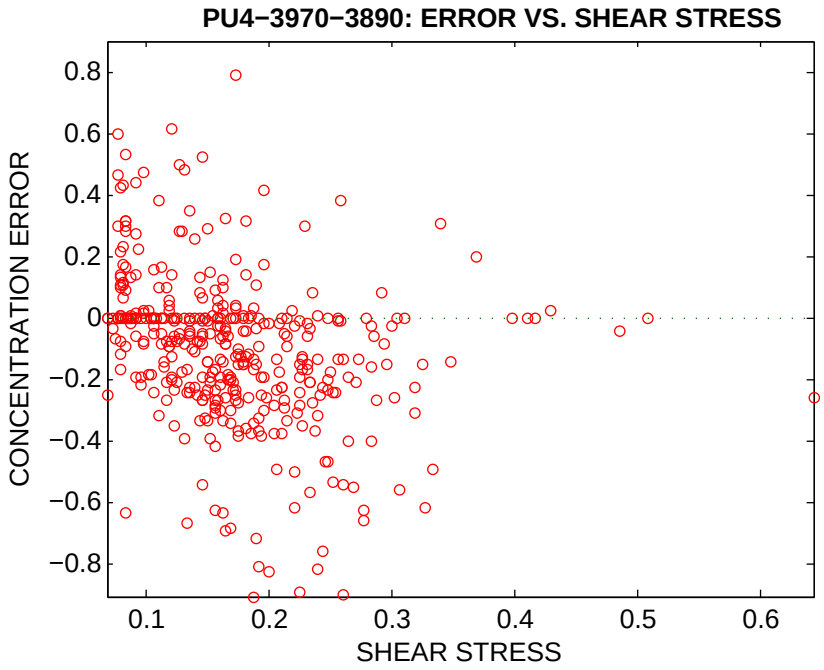


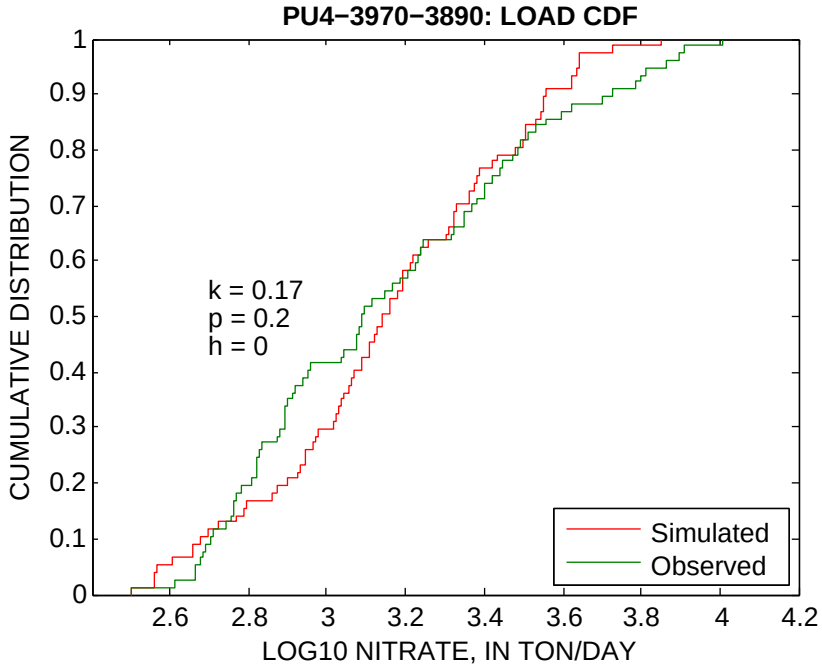


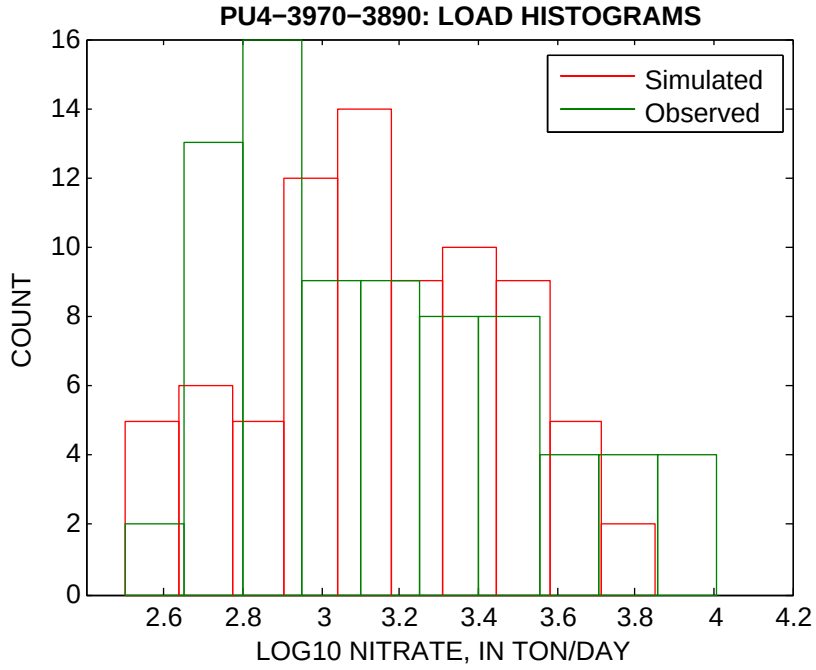


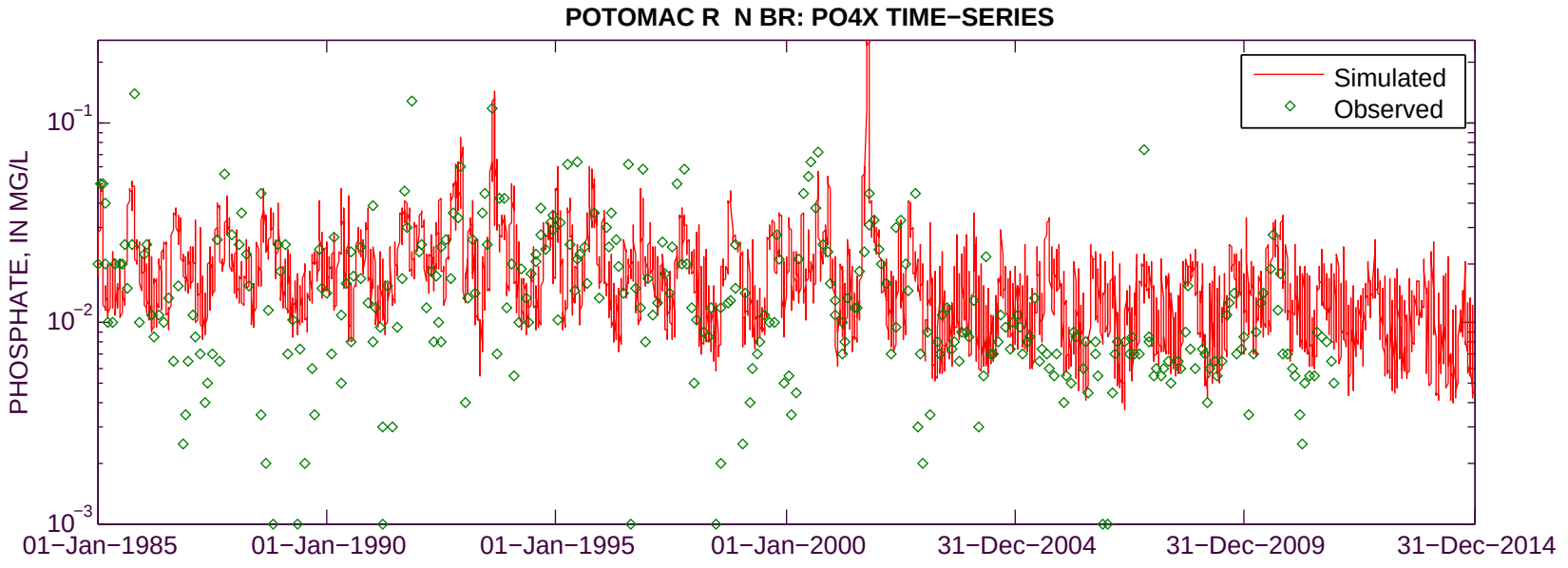
LOAD DATA
LOG10

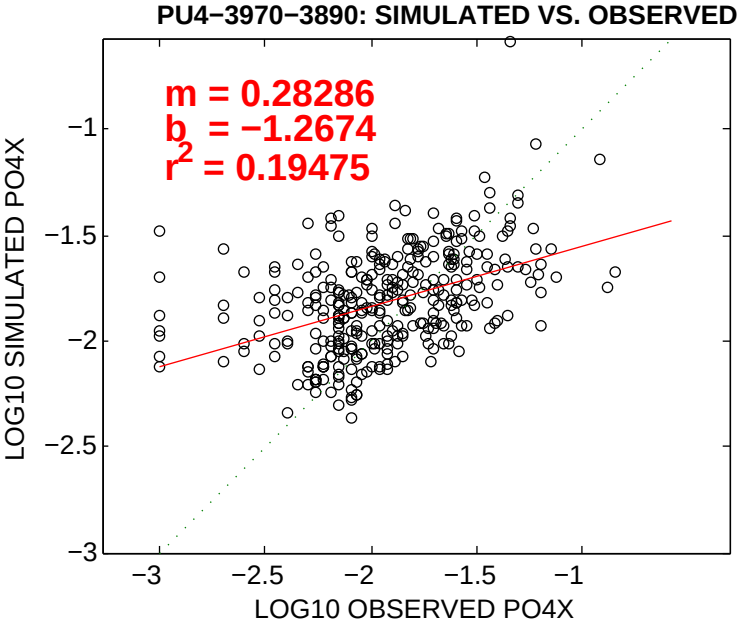


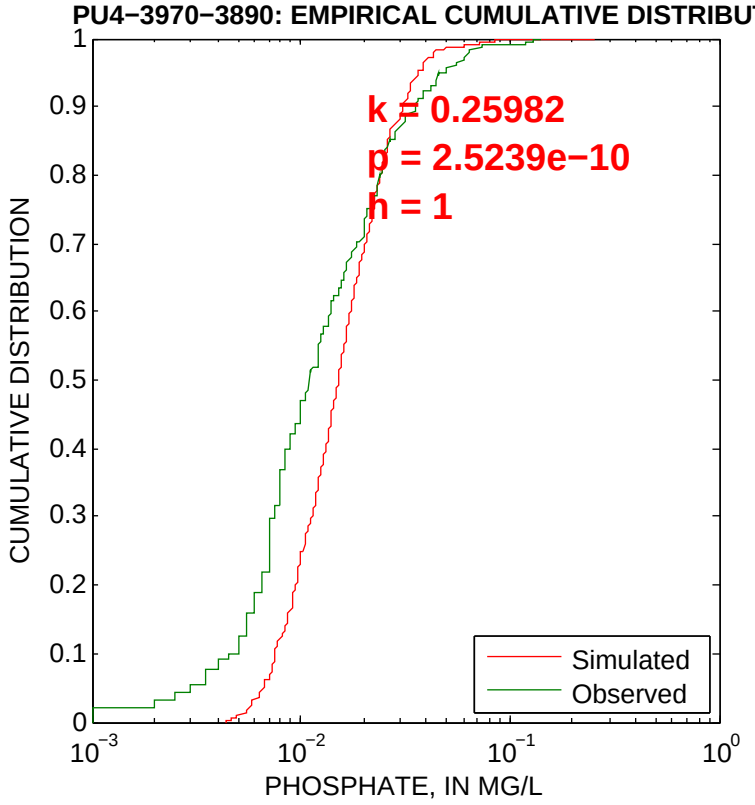












DATA SELECTION

scenario: P620171001WQ | file: PO4X.calib

plot: PO4X - phosphate

Dates: 1/1/1985 – 12/31/201

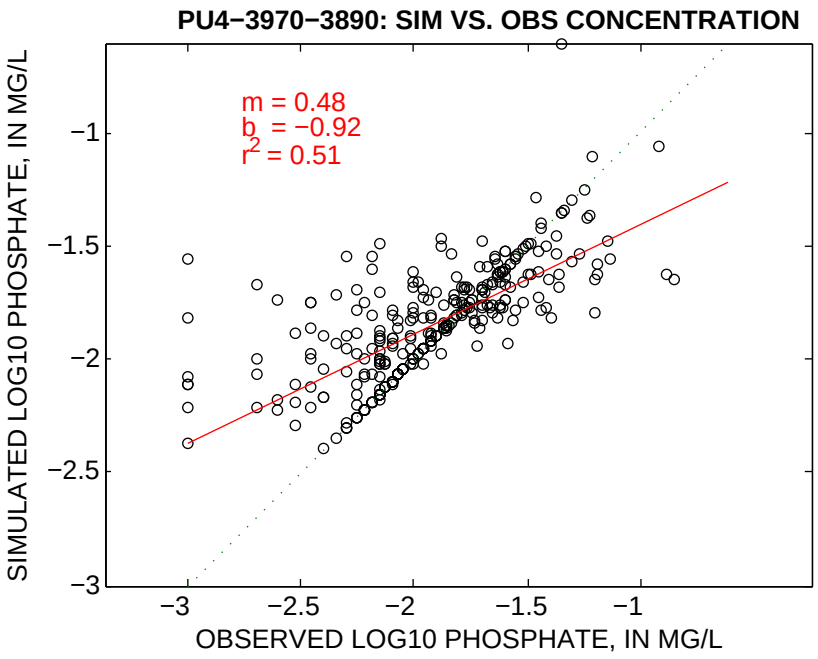
Drive: N/A | Directory: model | Observed: OBS20161101

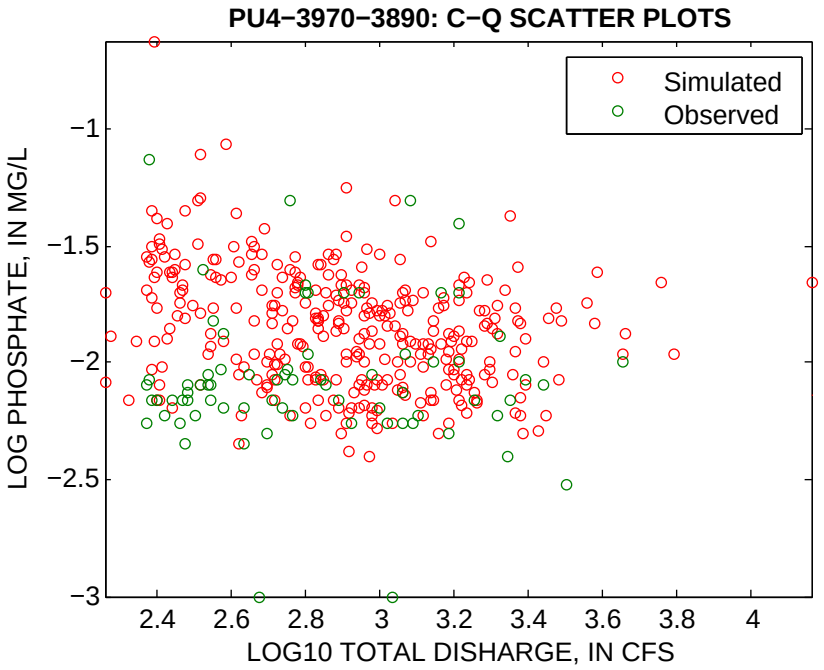
STATISTICS

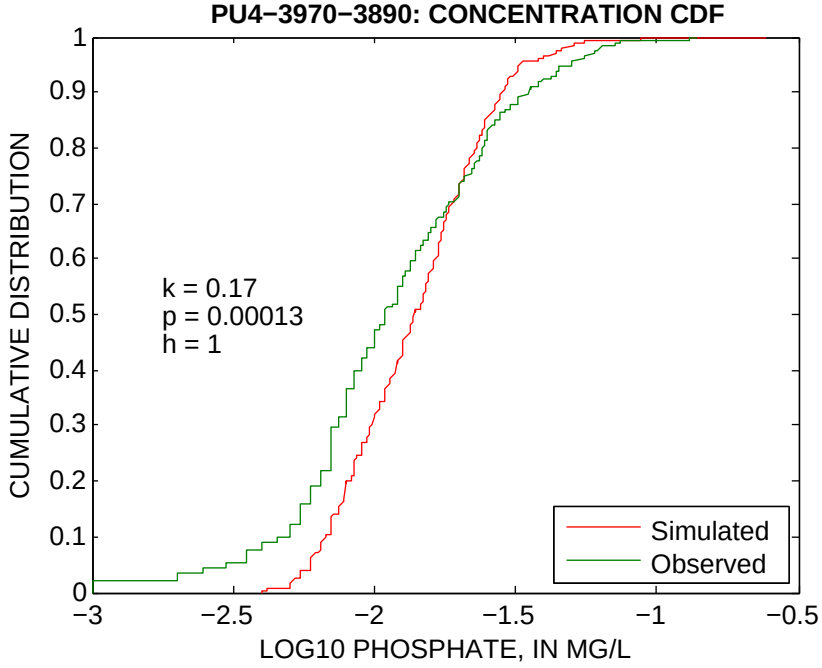
	n	331	331
		observe	simulate
min		0.001	0.0043862
		-3	-2.35791
mean		0.0168046	0.0182633
		-1.9318	-1.81384
media		0.011	0.015155
		-1.95861	-1.81944
max		0.14	0.25547
		-0.853872	-0.59266
varian		0.00029765	0.00027631
		0.138237	0.0567938
JB		0.001	0.001
		0.067015	0.001
		ra	log
%		8.68057	-6.10589
err.va		0.00038131	0.130782
rel.std.err		1.28104	0.946069
mod.eff		-0.281043	0.0539307

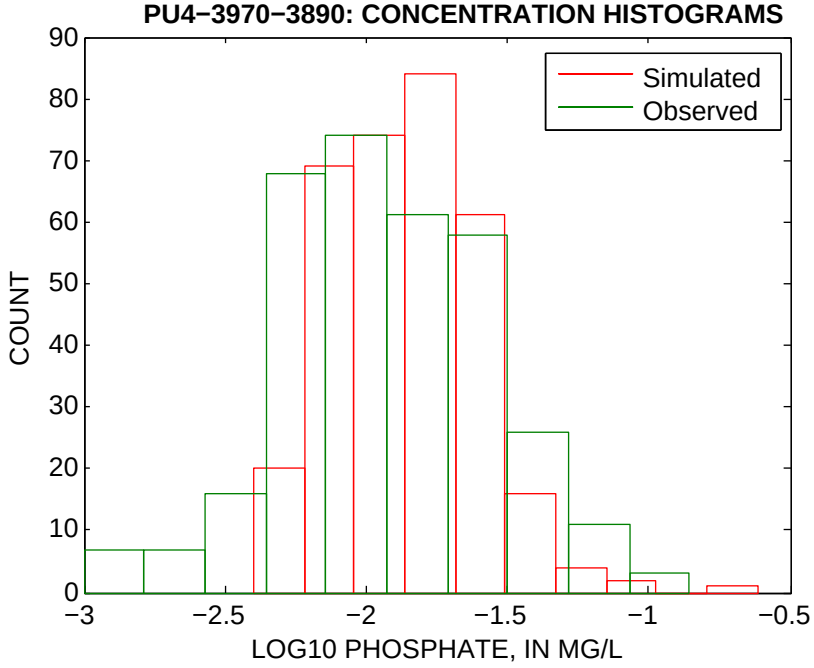
VERSION 2.1

ALL DATA
LOG10

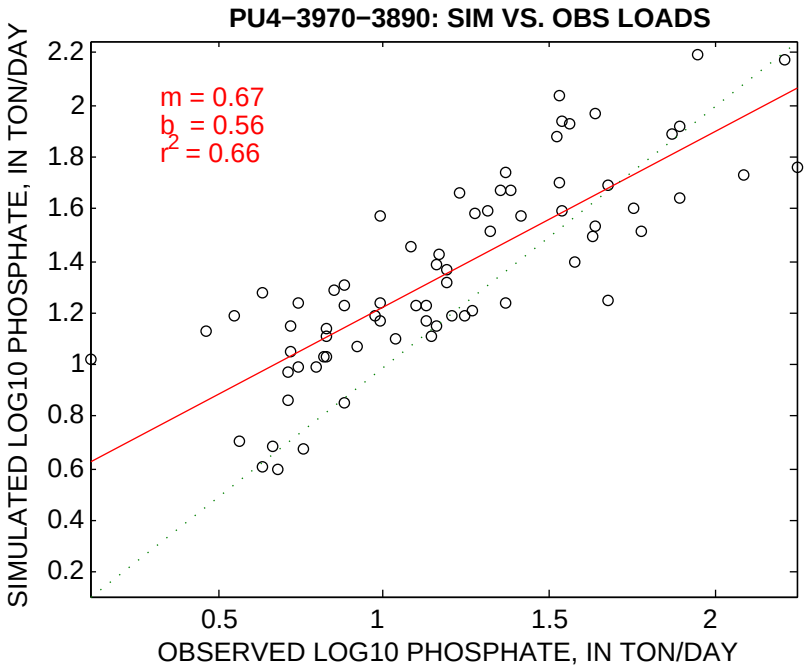


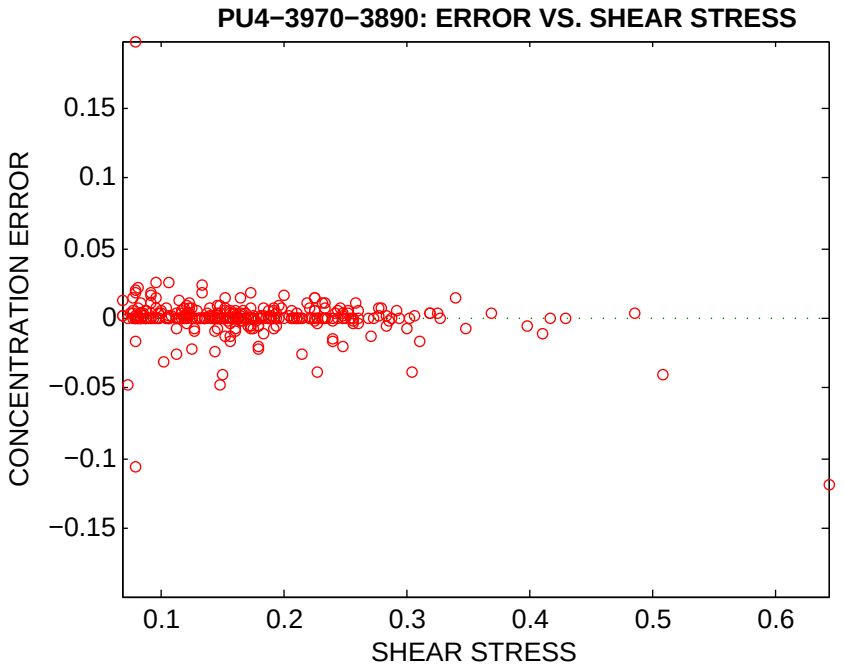


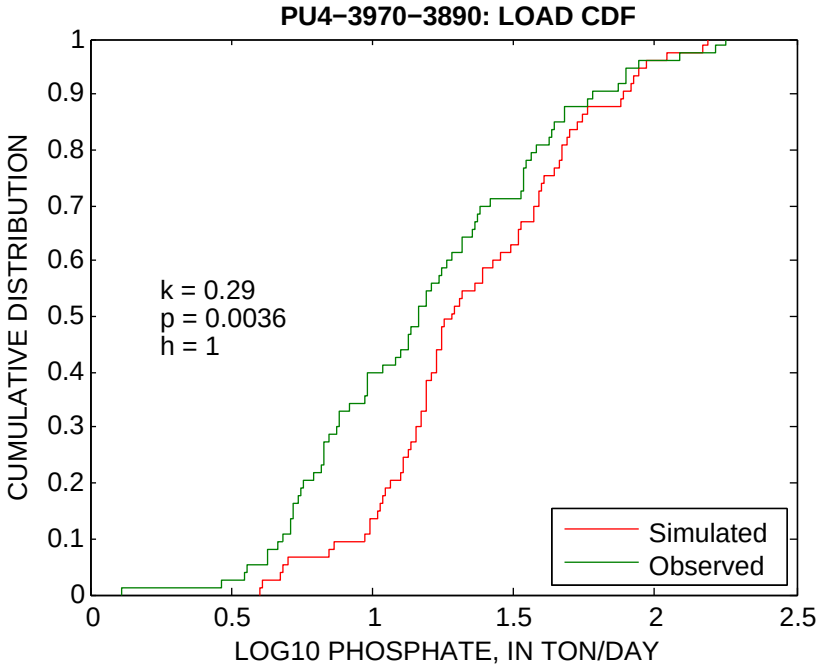


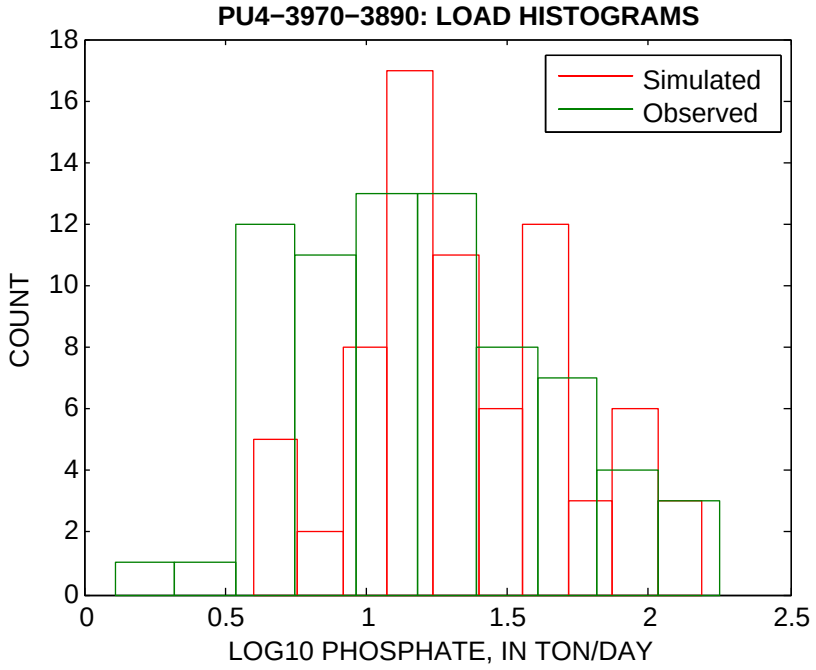


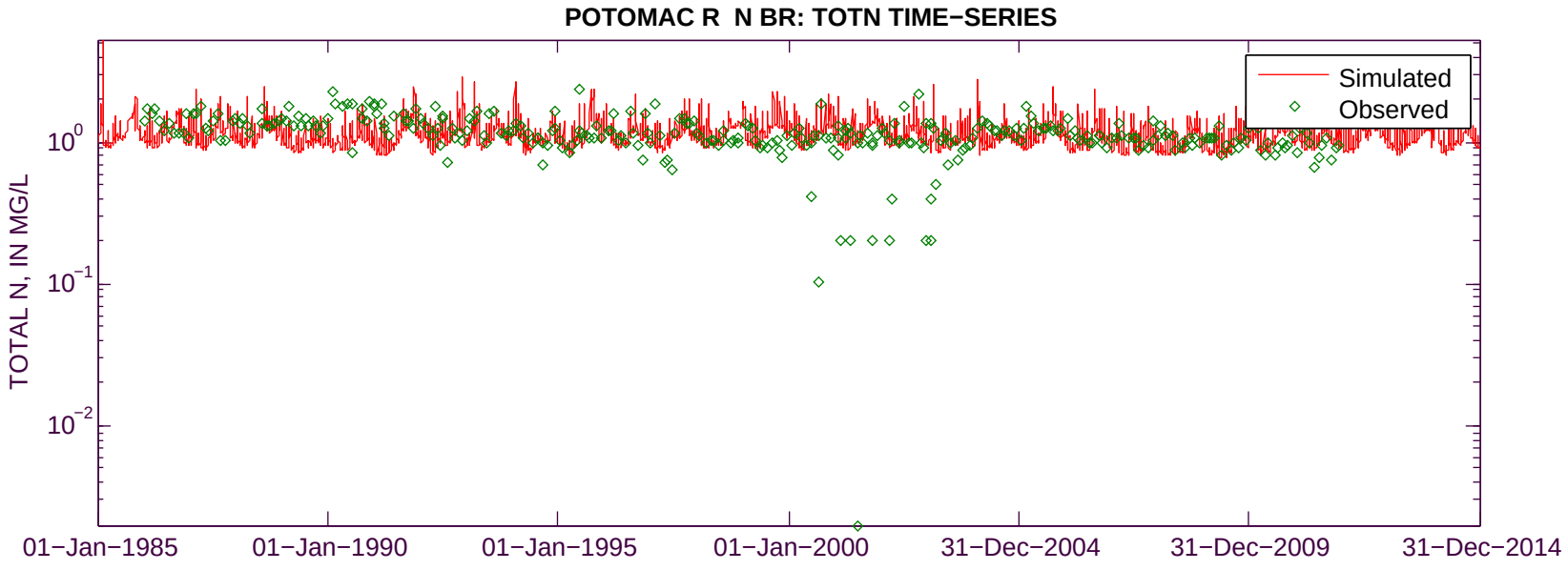
LOAD DATA
LOG10

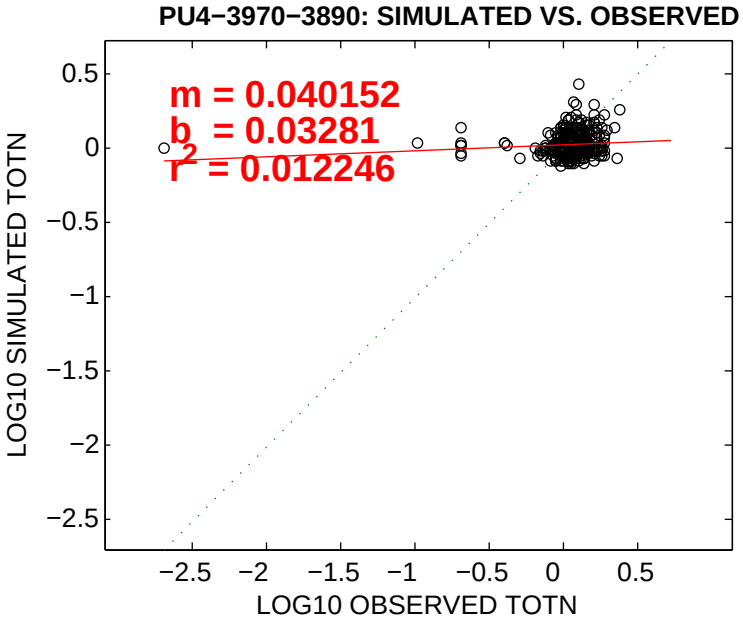


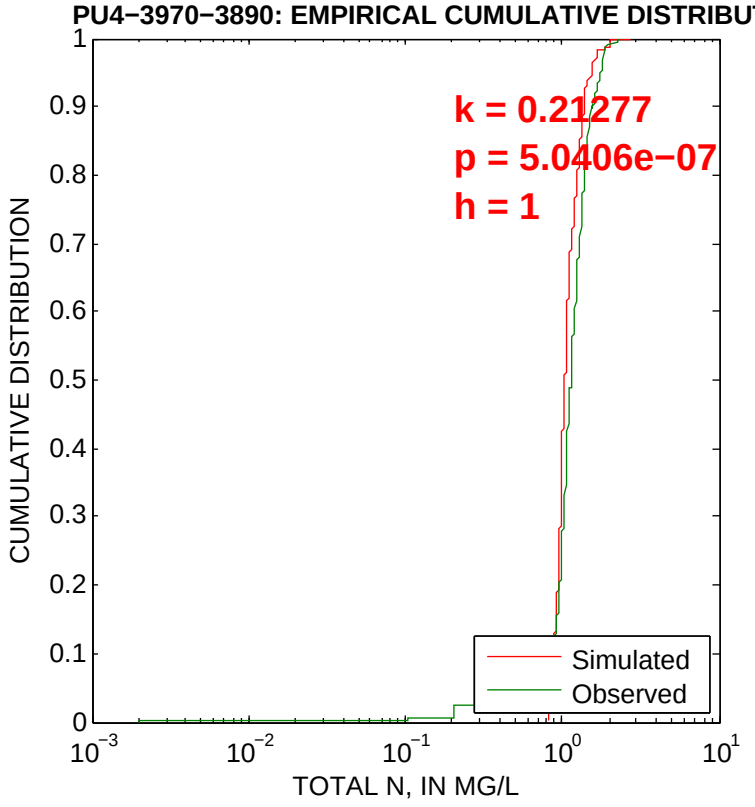












DATA SELECTION

scenario	file
P620171001WQ	TOTN.calib

plot: TOTN - total nitrogen

Dates: 1/1/1985 – 12/31/201

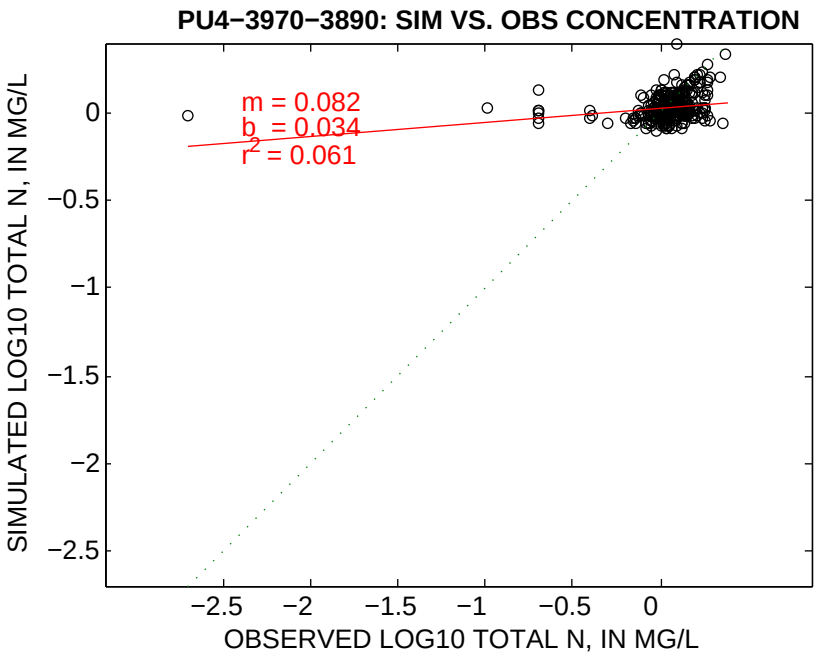
Drive	Directory	Observed
N/A	model	OBS20161101

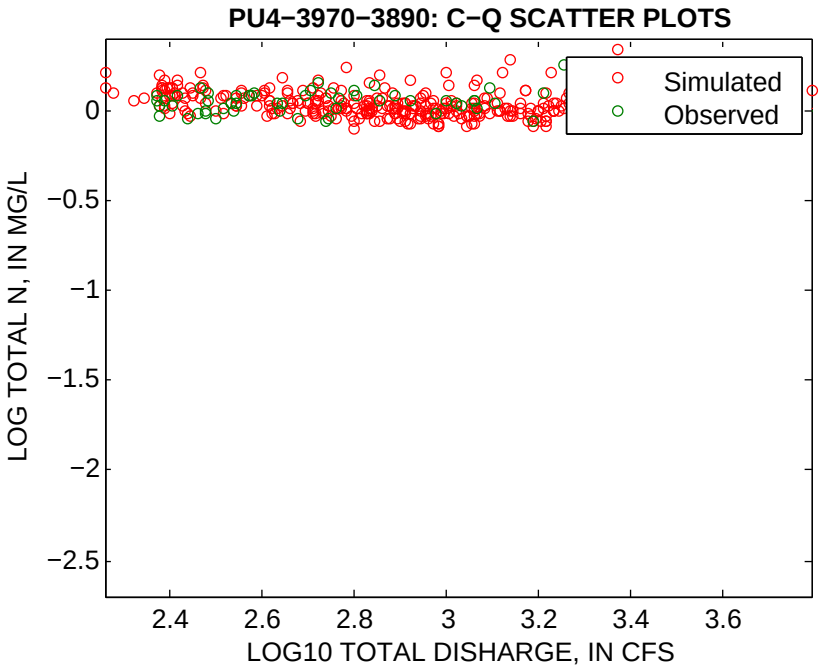
STATISTICS

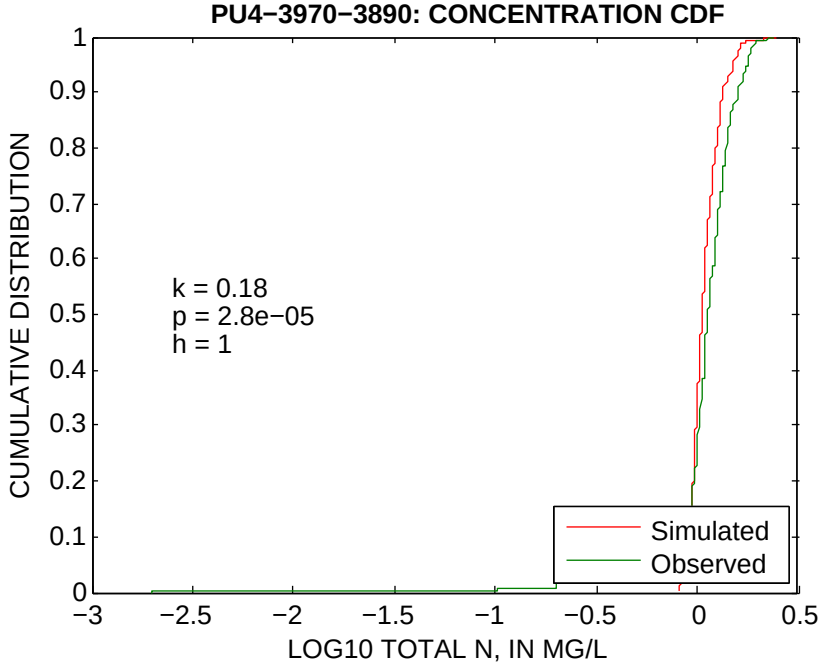
	n	observe	simulate
		329	329
min		0.002	0.78004
		-2.69897	-0.107883
mean		1.16996	1.102
		0.0388986	0.0343717
media		1.13009	1.0461
		0.053113	0.0195732
max		2.38	2.7153
		0.376577	0.433818
varian		0.108939	0.0524377
		0.0480089	0.00632027
JB		0.001	0.001
		0.001	0.001
		ra	log
%		-5.80882	-11.6376
err.va		0.13818	0.0504945
rel.std.err		1.26842	1.05177
mod.eff		-0.268422	-0.0517719

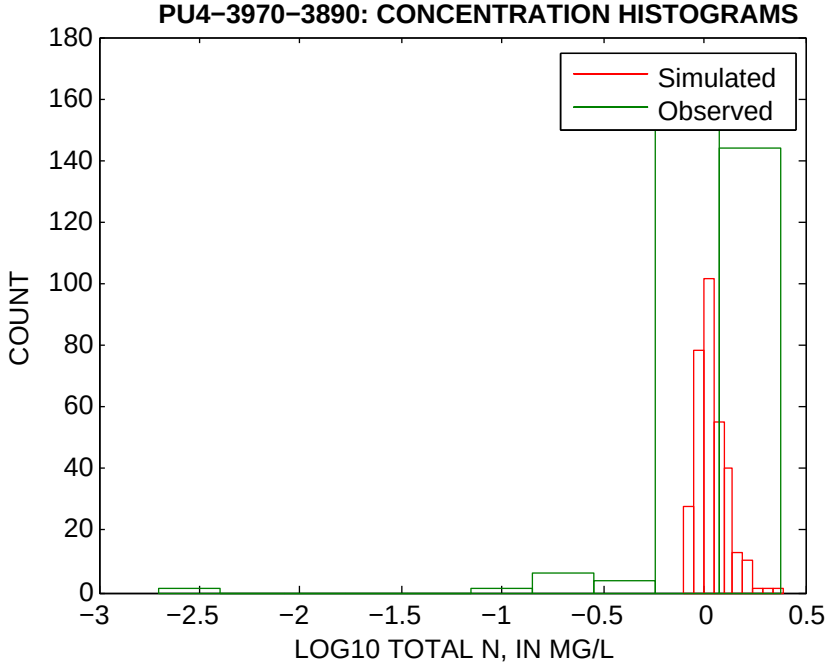
VERSION 2.1

ALL DATA
LOG10

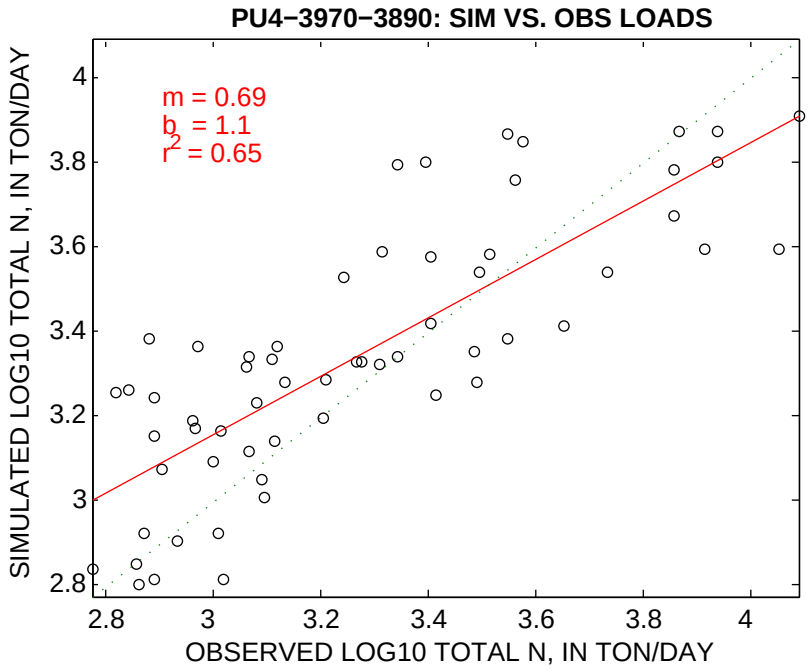


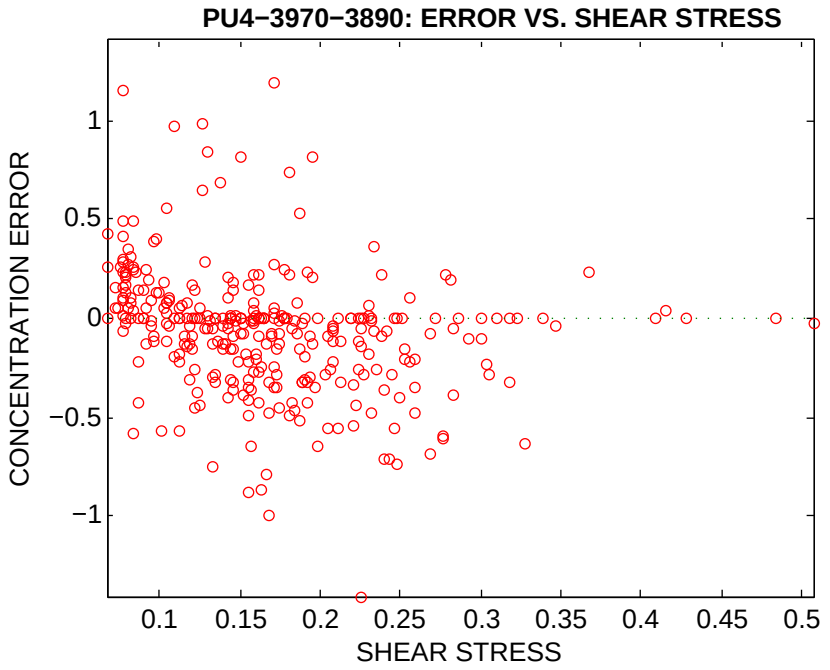


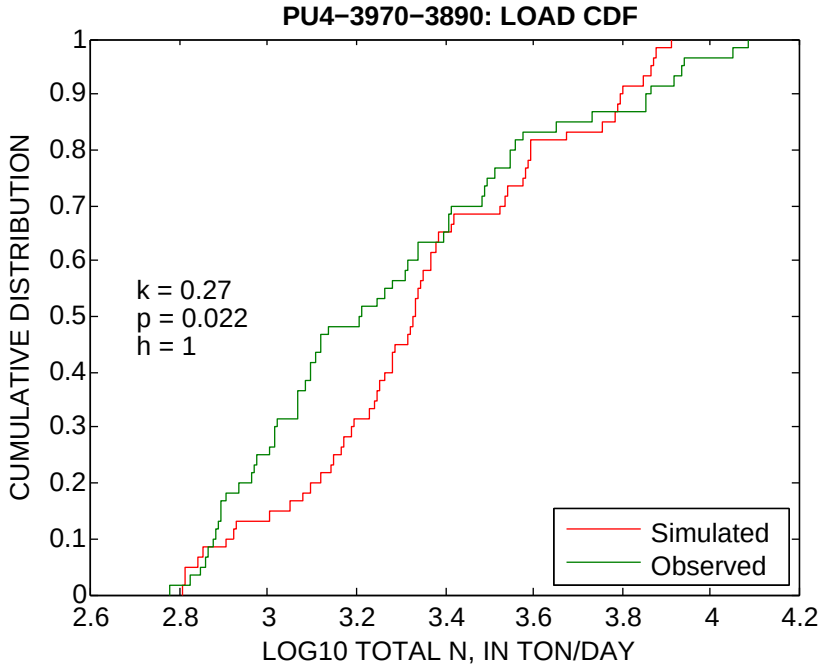


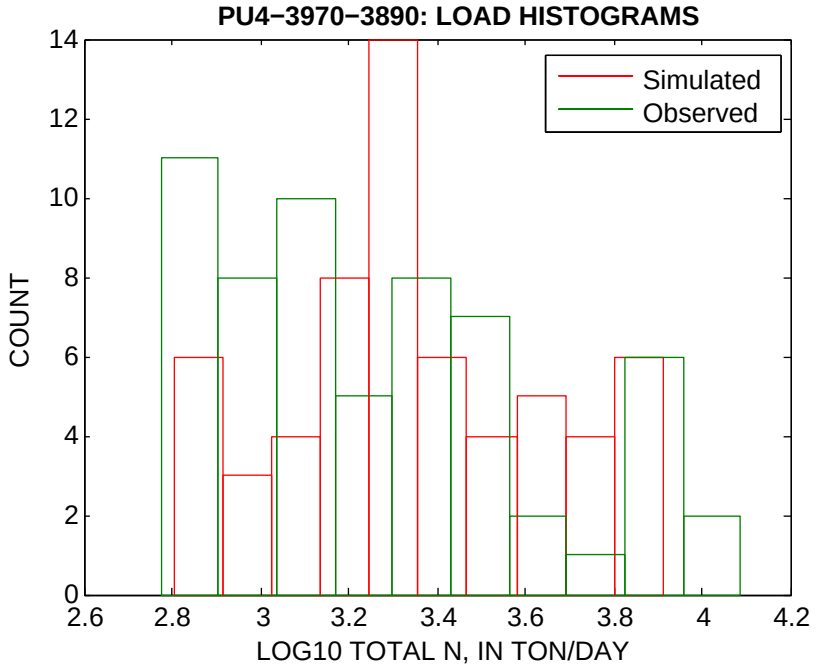


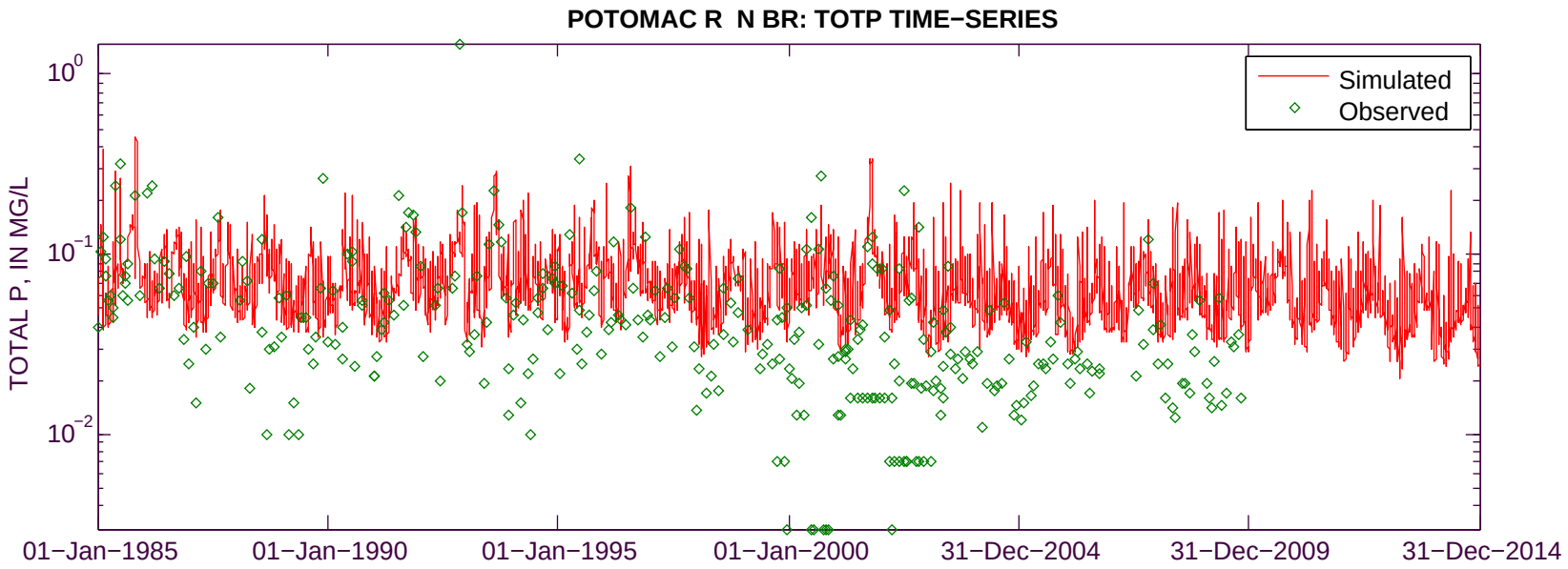
LOAD DATA
LOG10

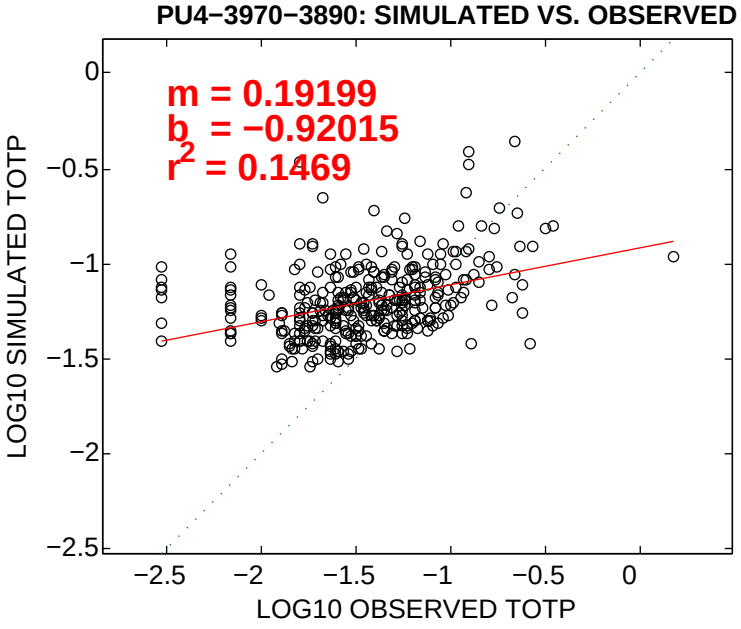


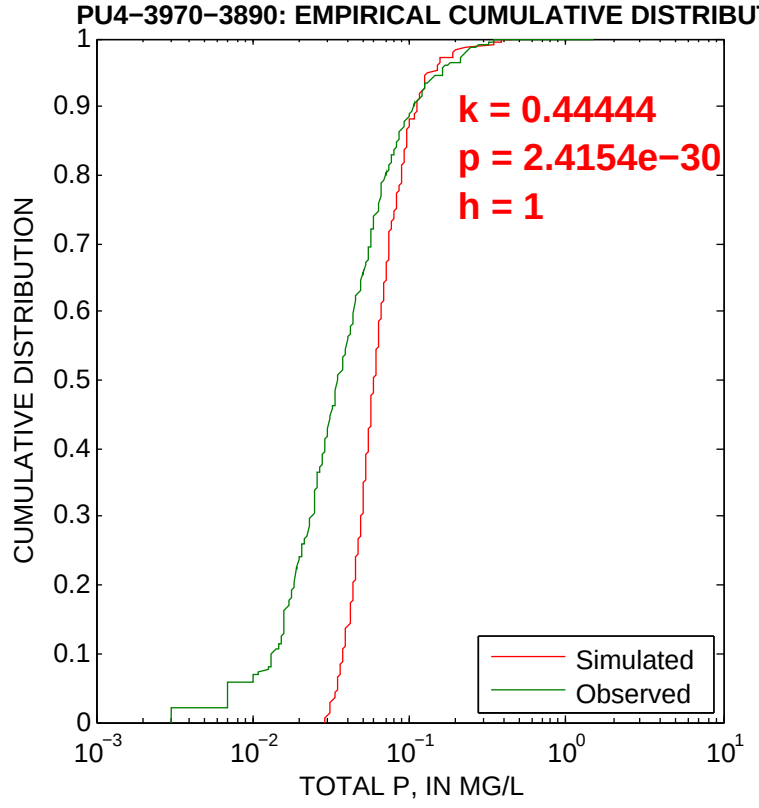












DATA SELECTION

scenario	file
P620171001WQ	TOTP.calib

plot: TOTP - total phosphorus

Dates: 1/1/1985 – 12/31/201

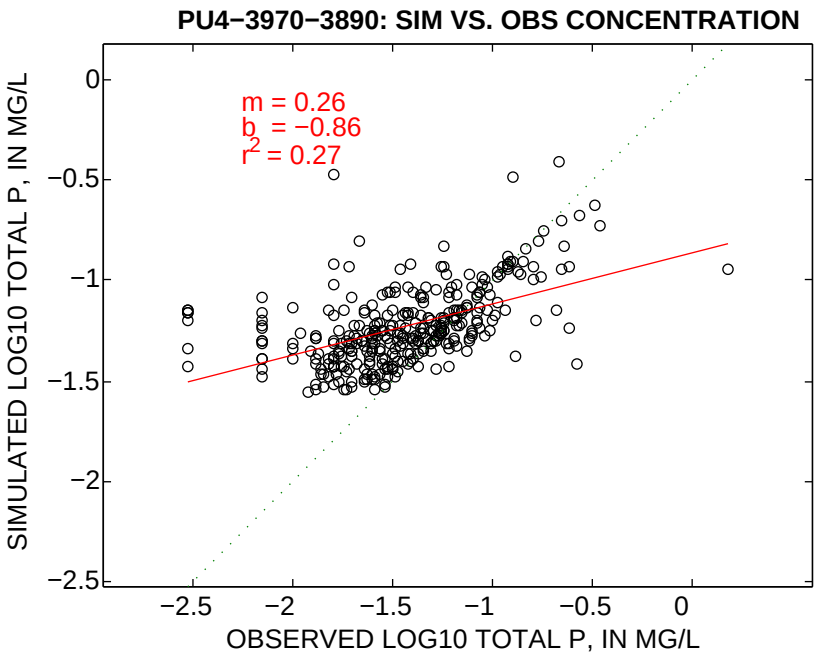
Drive	Directory	Observed
N/A	model	OBS20161101

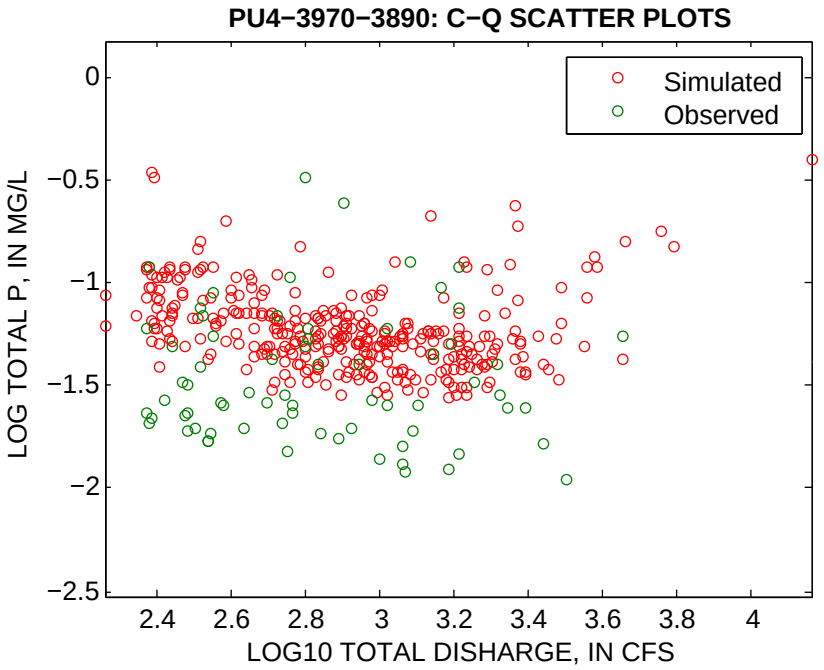
STATISTICS

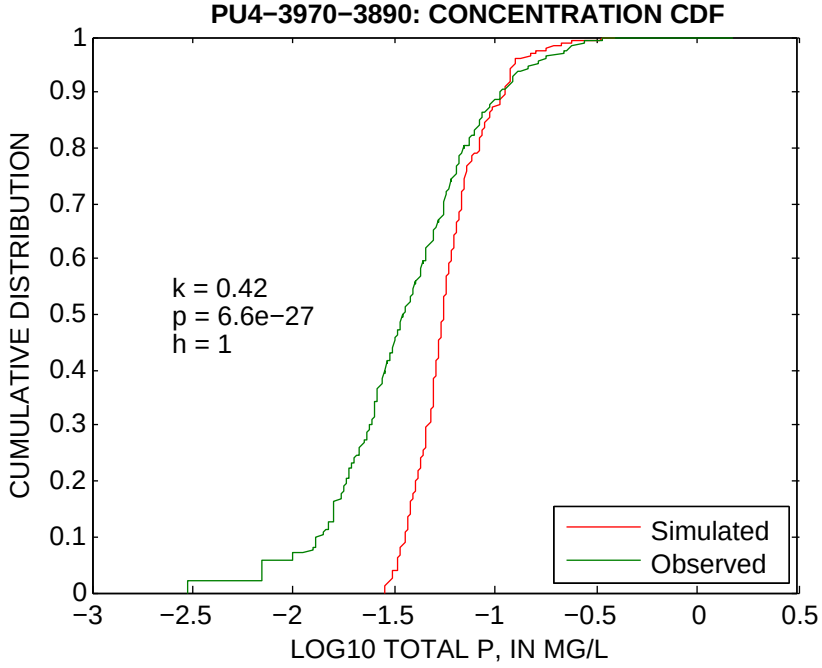
	n	observe	simulate
		342	342
min		0.003	0.02874
		-2.52288	-1.54151
mean		0.055641	0.0715211
		-1.44115	-1.19684
media		0.0353144	0.059724
		-1.45205	-1.22385
max		1.5	0.4455
		0.176091	-0.351152
varian		0.00867362	0.00213766
		0.148601	0.0372857
JB		0.001	0.001
		0.003770	0.001
		ra	log
%		28.5404	-16.9527
err.va		0.00884064	0.188692
rel.std.err		1.01926	1.26978
mod.eff		-0.0192558	-0.269785

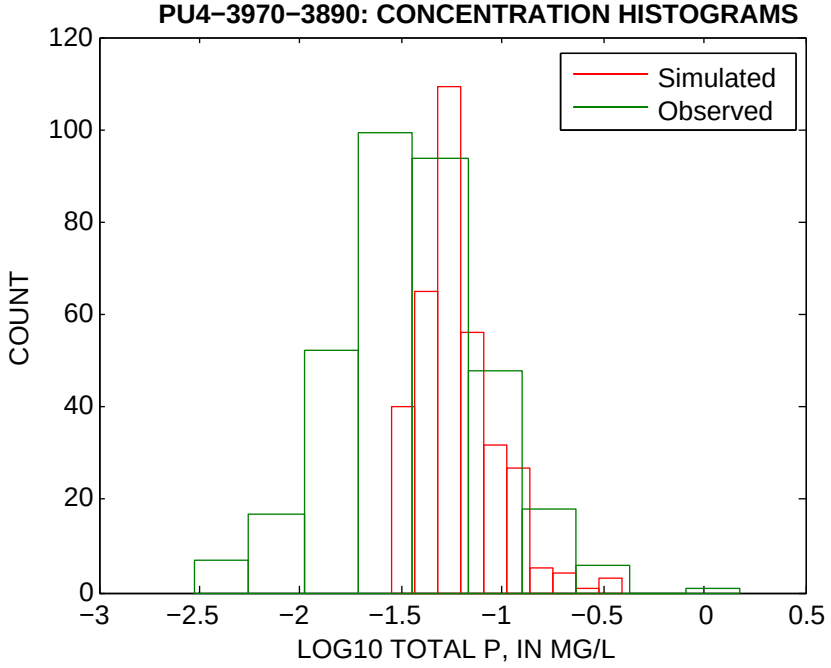
VERSION 2.1

ALL DATA
LOG10

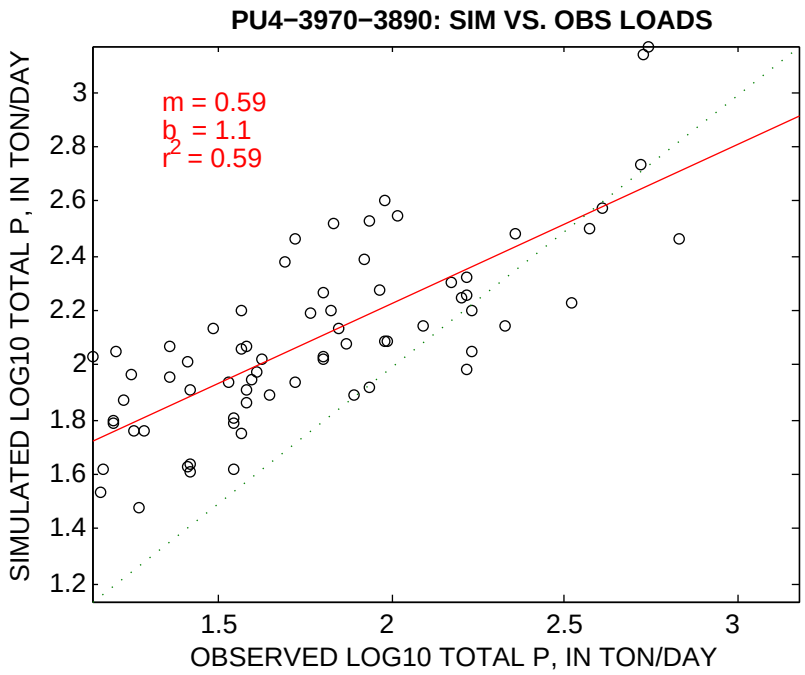


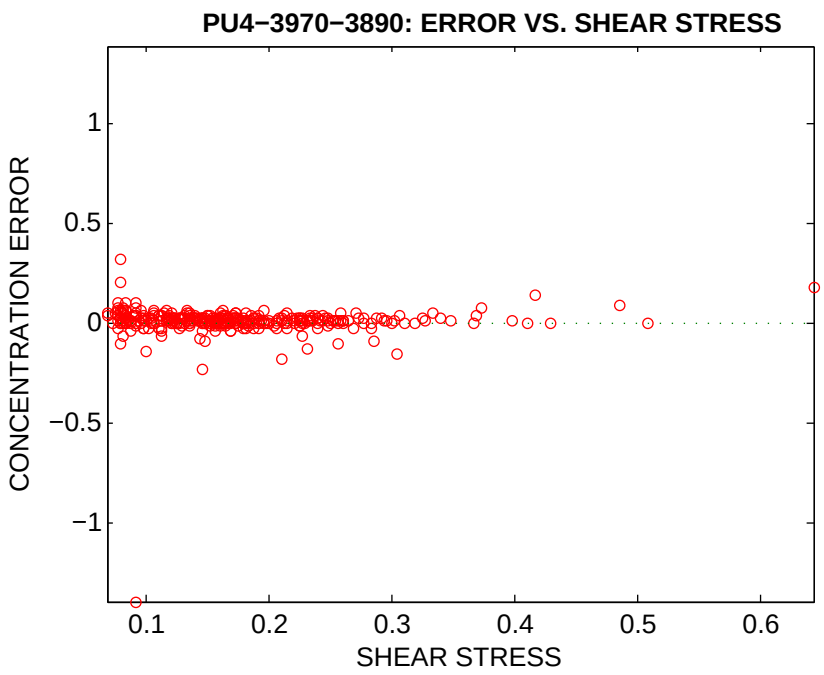


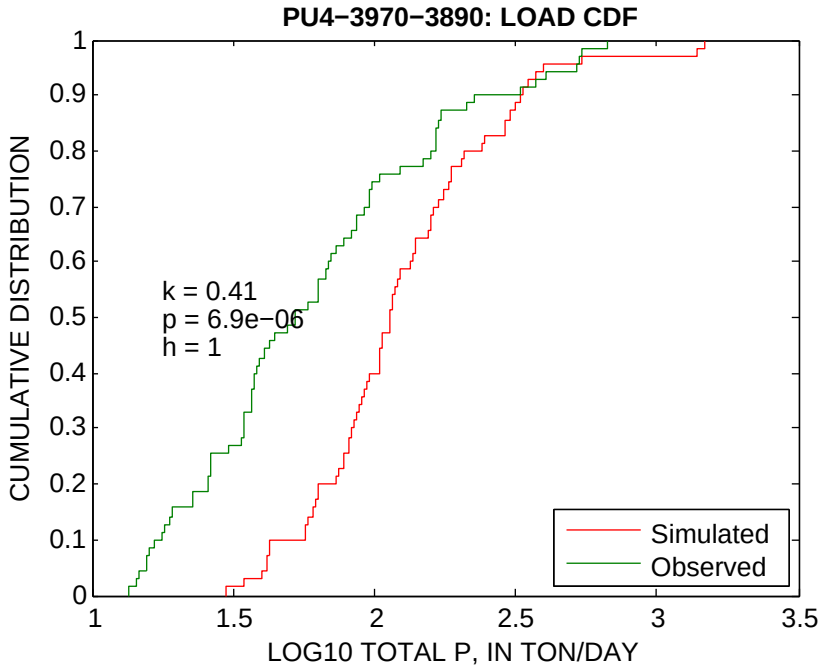


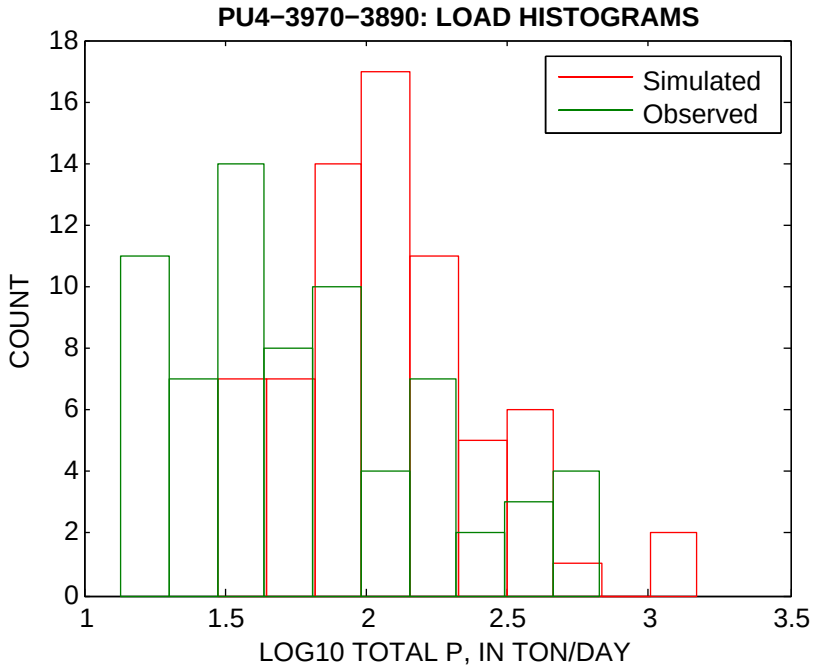


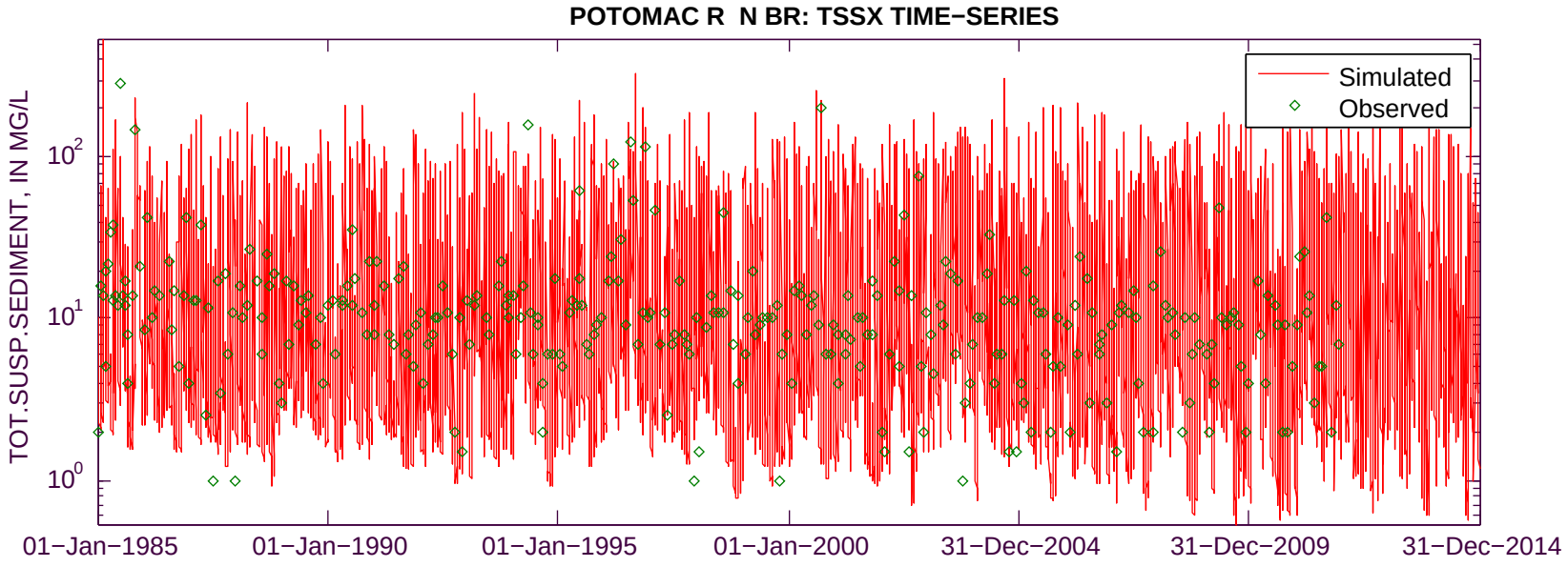
LOAD DATA
LOG10

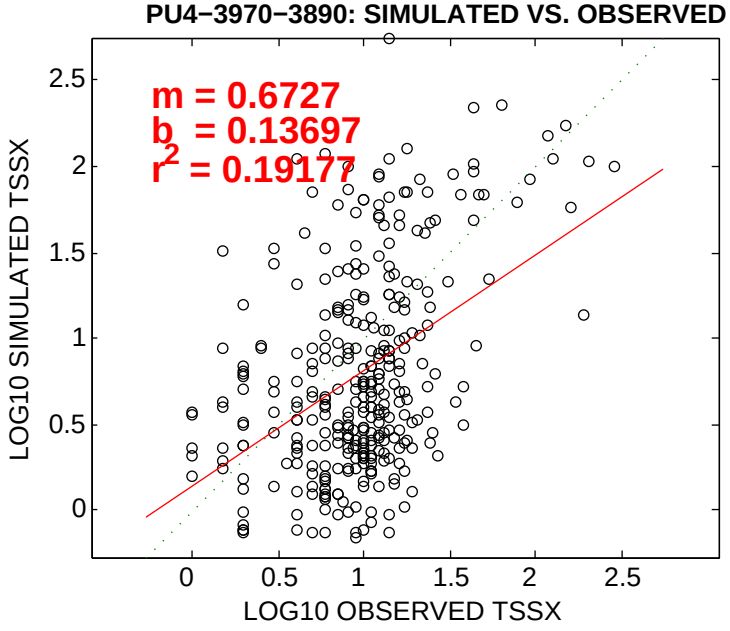


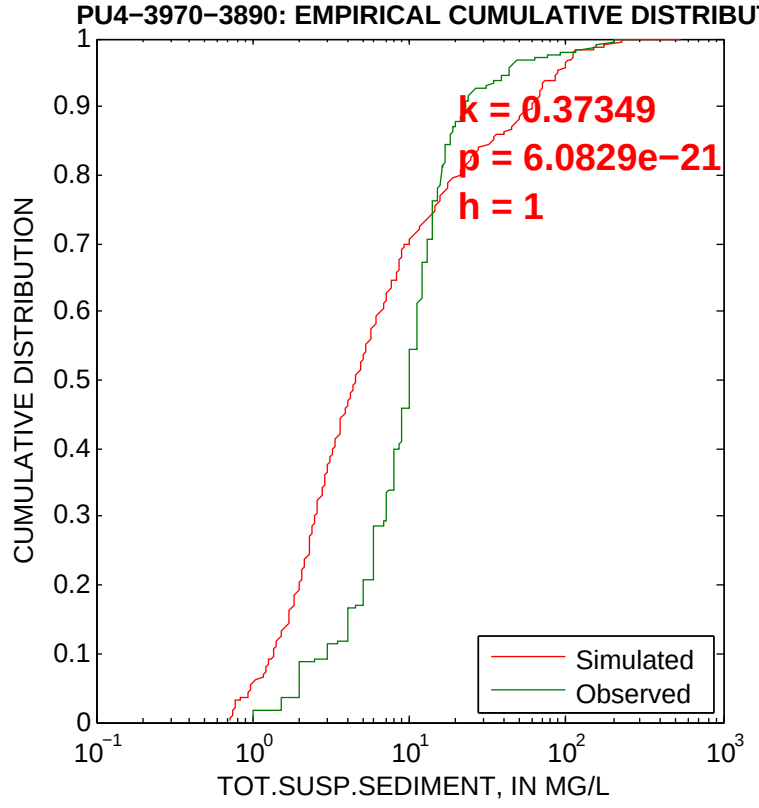












DATA SELECTION

scenario	file
P620171001WQ	TSSX.calib

plot: TSSX - total suspended ...

Dates: 1/1/1985 – 12/31/201

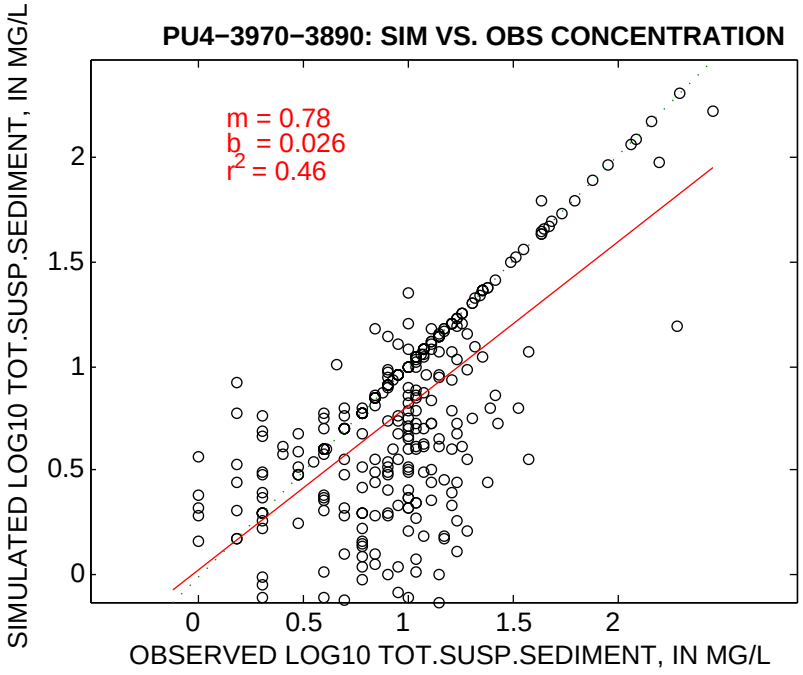
Drive	Directory	Observed
N/A	model	OBS20161101

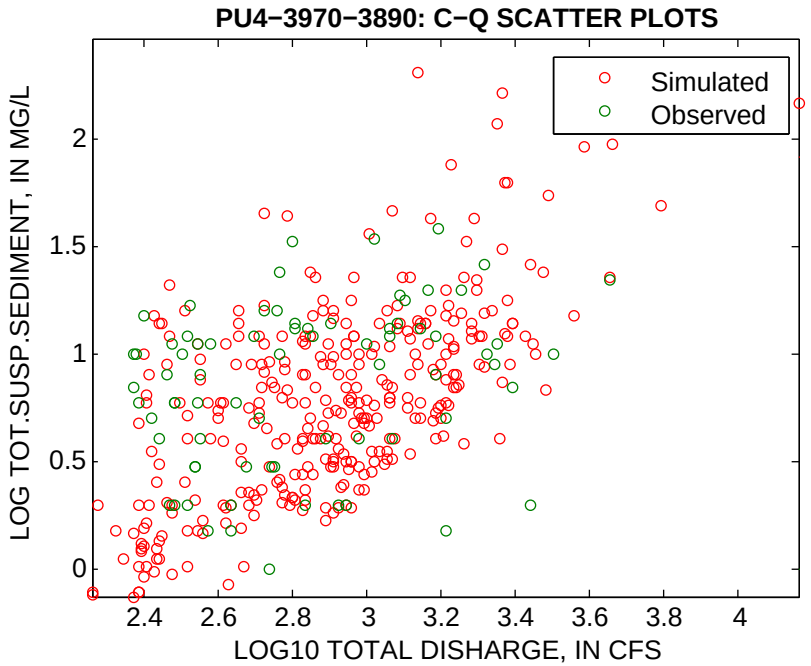
STATISTICS

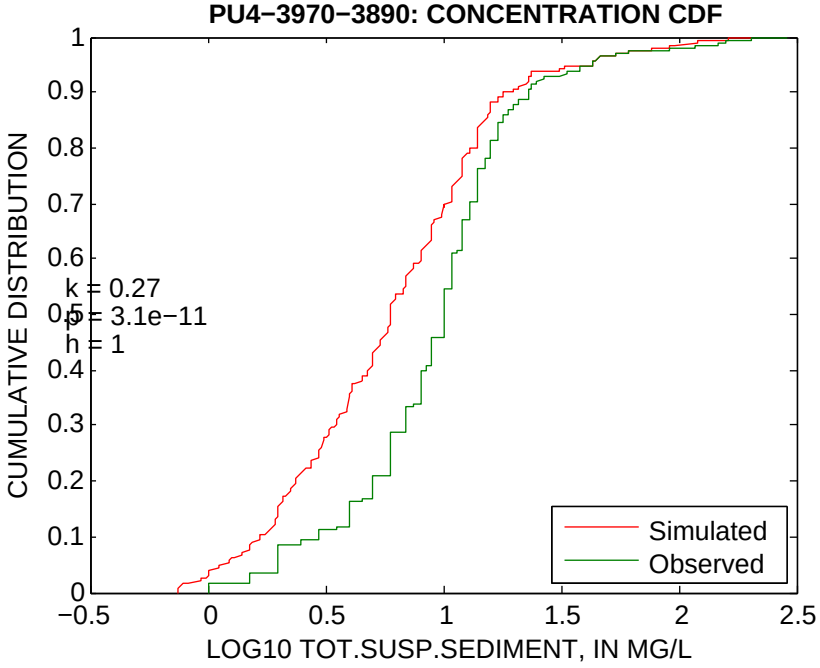
	n	observe	simulate
		332	332
min		1	0.68698
		0	-0.163056
mean		15.3084	18.8118
		0.973482	0.79183
media		10	4.56665
		1	0.659596
max		288	546.97
		2.45939	2.73796
varian		727.294	1846.05
		0.150093	0.35418
JB		0.001	0.001
		0.001	0.001
		ra	log
%		22.8854	-18.6601
err.va		1756.12	0.335436
rel.std.err		2.41459	2.23486
mod.eff		-1.41459	-1.23486

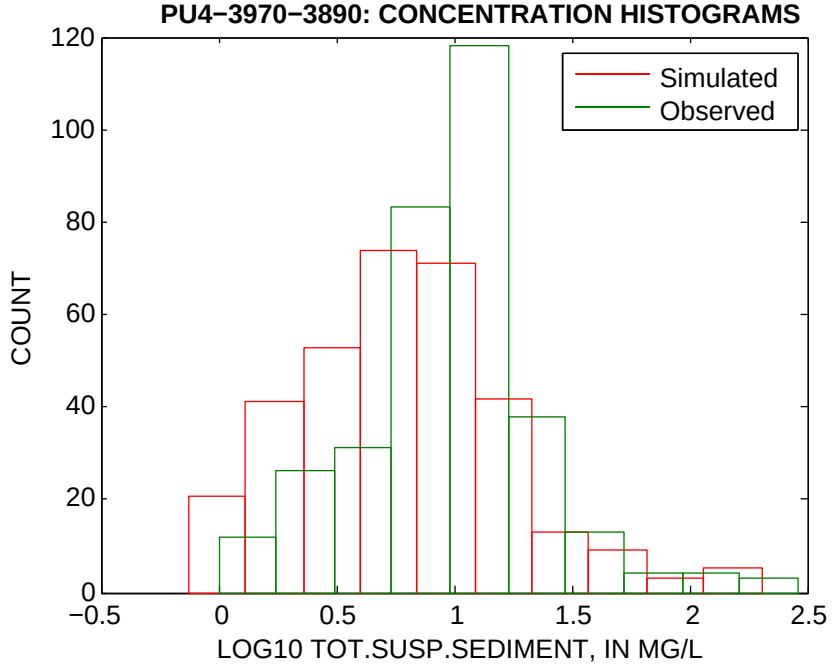
VERSION 2.1

ALL DATA
LOG10

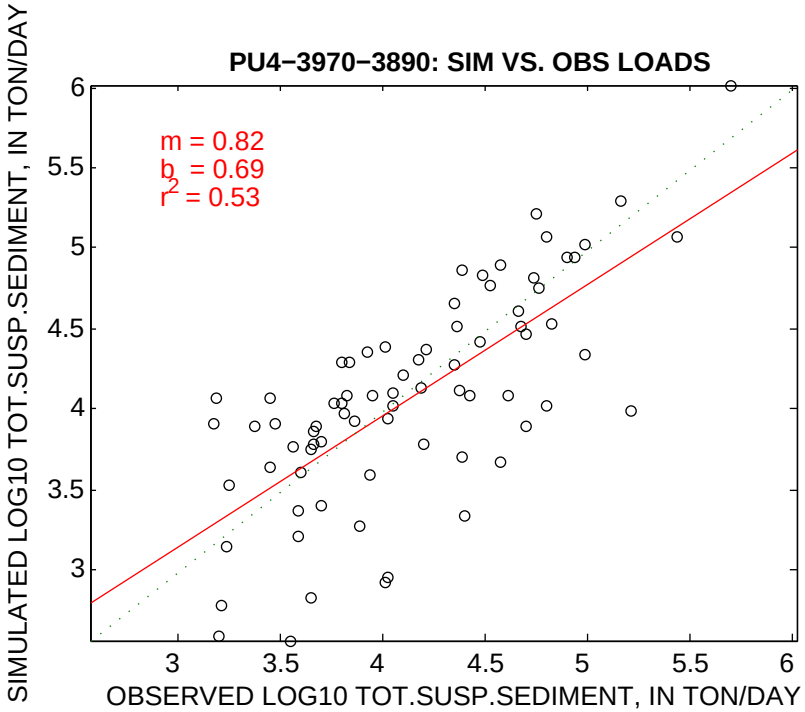


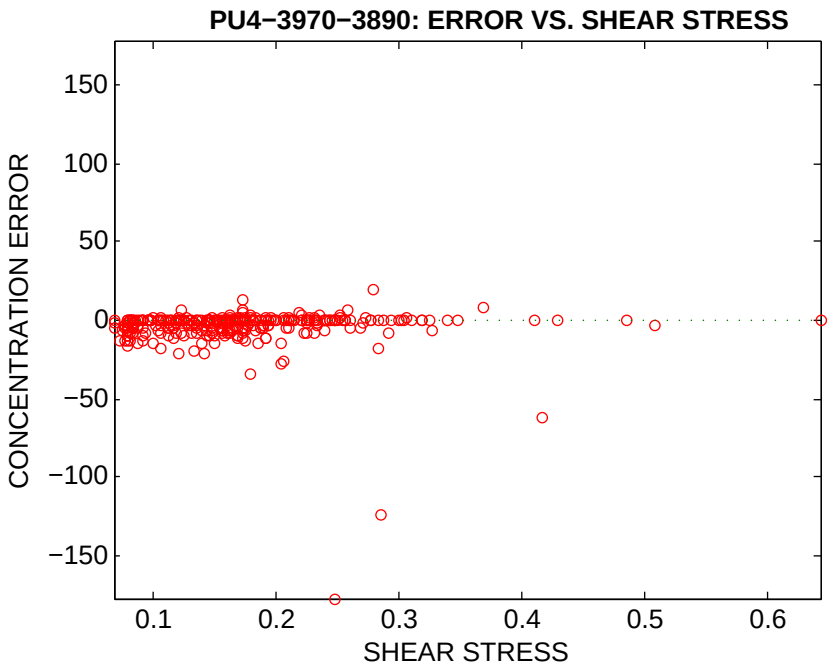


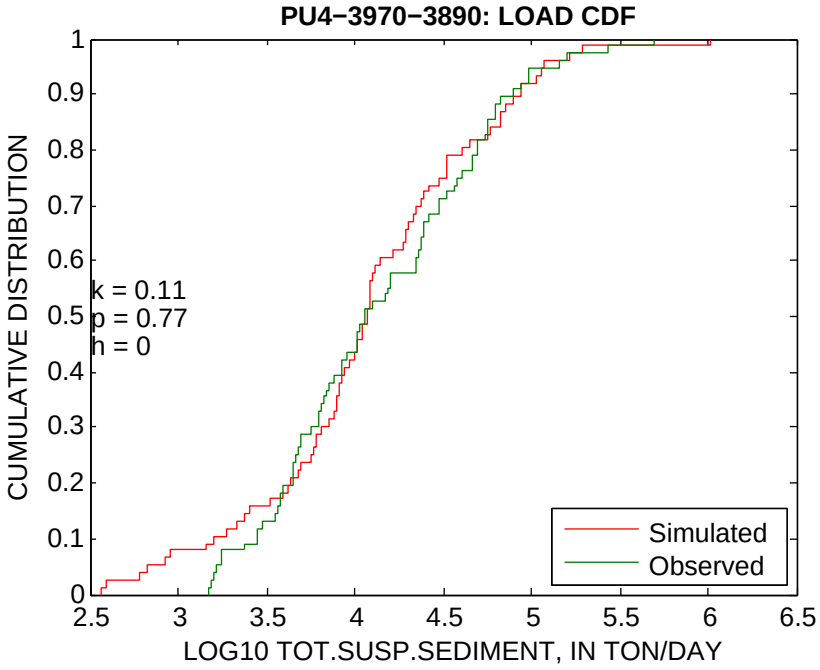


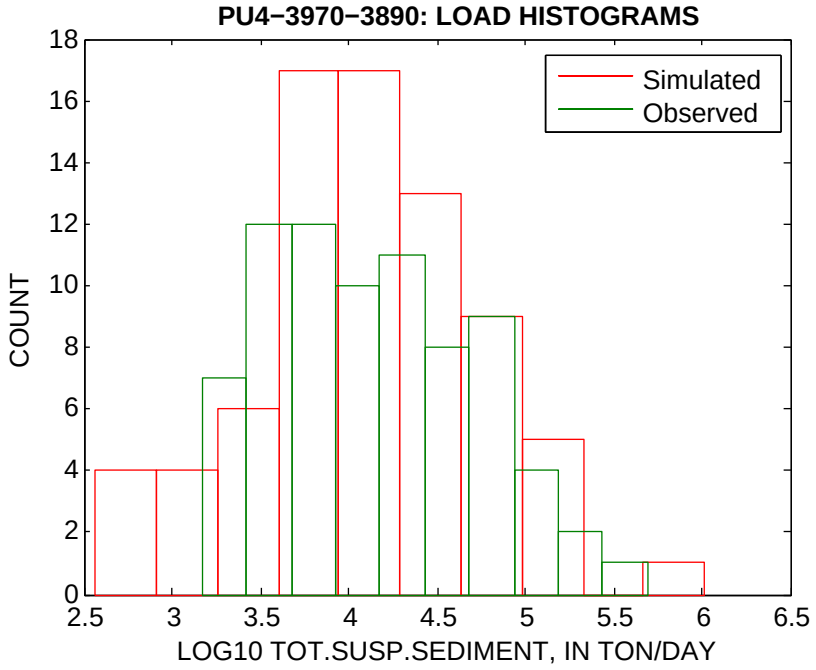


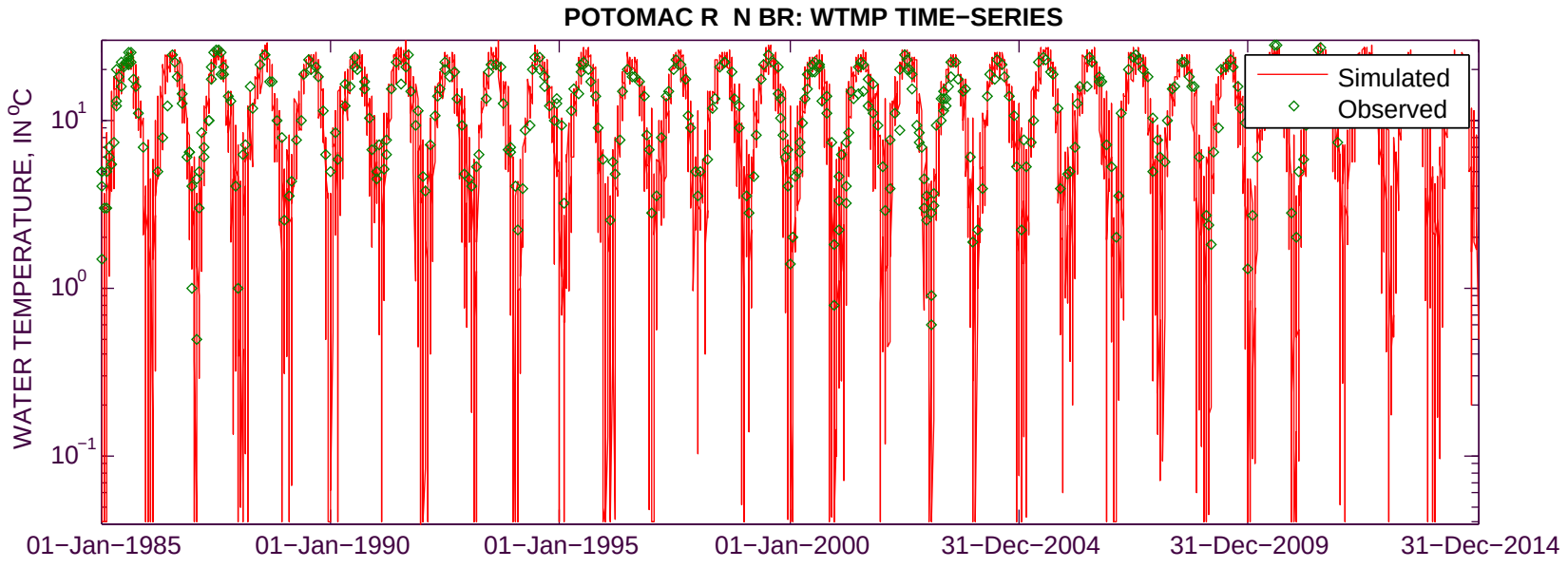
LOAD DATA
LOG10

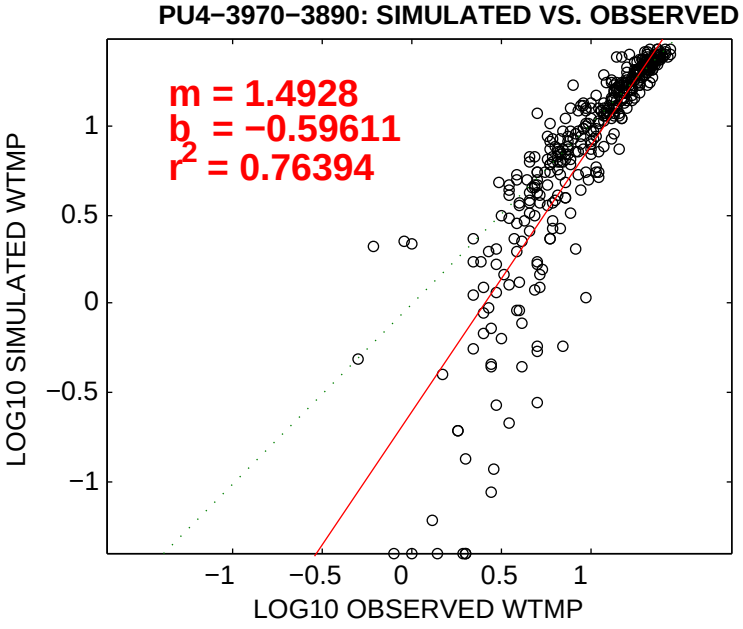


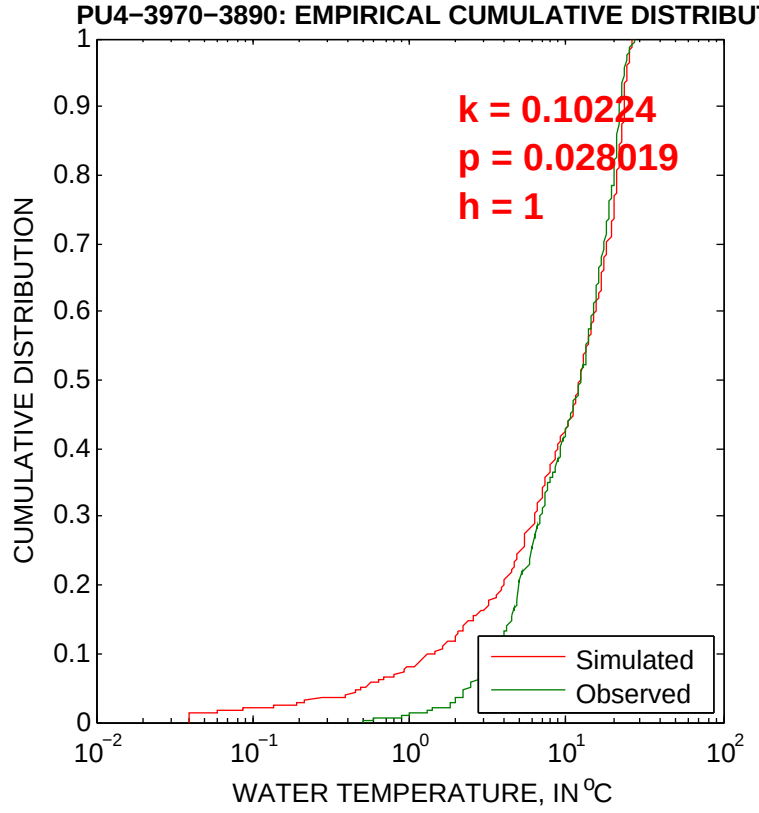












DATA SELECTION

scenario	file
P620171001WQ	WTMP.calib

plot: WTMP - water tempera...

Dates: 1/1/1985 – 12/31/201

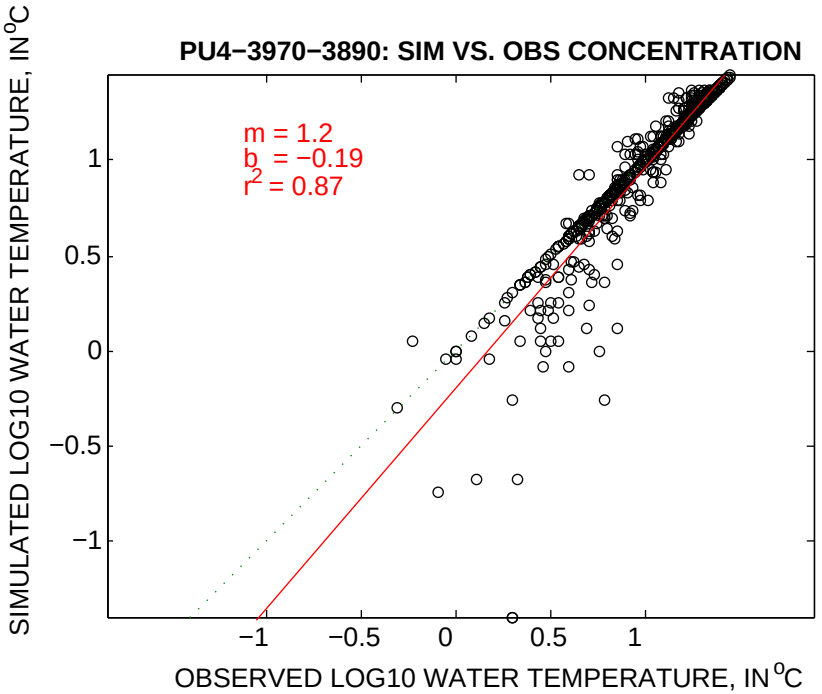
Drive	Directory	Observed
N/A	model	OBS20161101

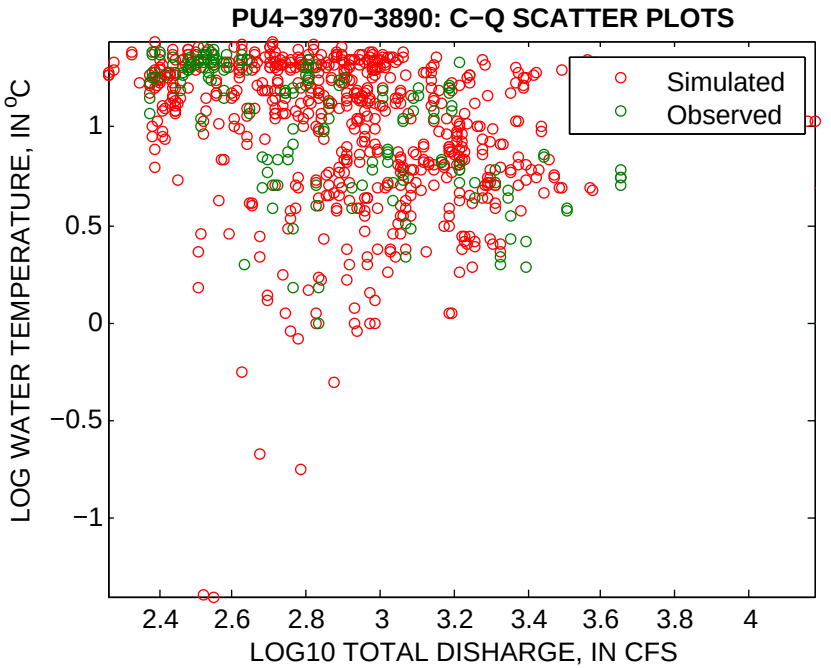
STATISTICS

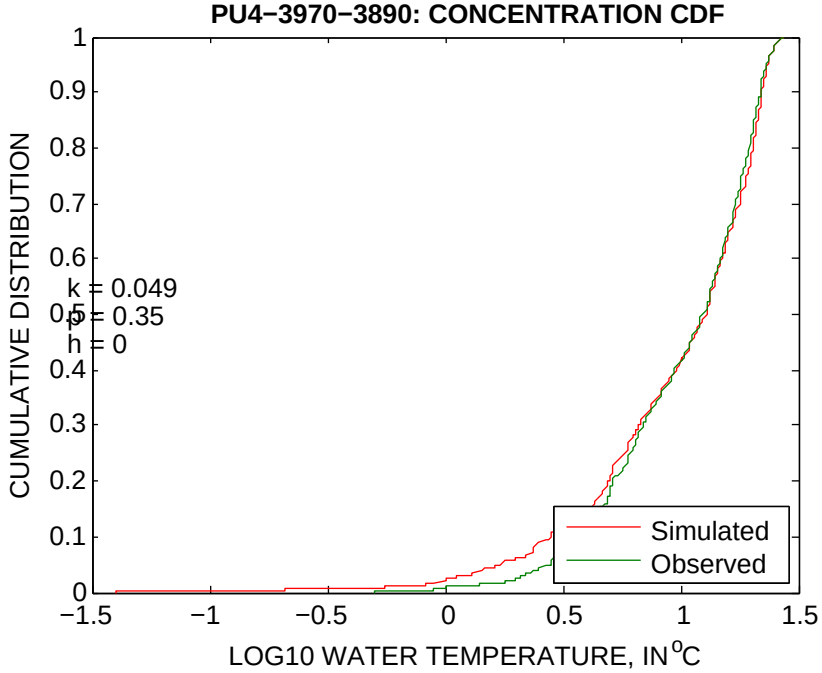
	n	401	401
		observe	simulate
min		0.5	0.039995
		-0.30103	-1.39799
mean		12.55	12.4415
		0.999013	0.895184
media		12.3	12.342
		1.08991	1.09139
max		27.8	26.743
		1.44404	1.42721
varian		50.9221	65.8655
		0.110737	0.323011
JB		0.001	0.001
		0.001	0.001
		ra	log
%		-0.864879	-10.3931
err.va		6.19029	0.113946
rel.std.err		0.121564	1.02897
mod.eff		0.878436	-0.0289749

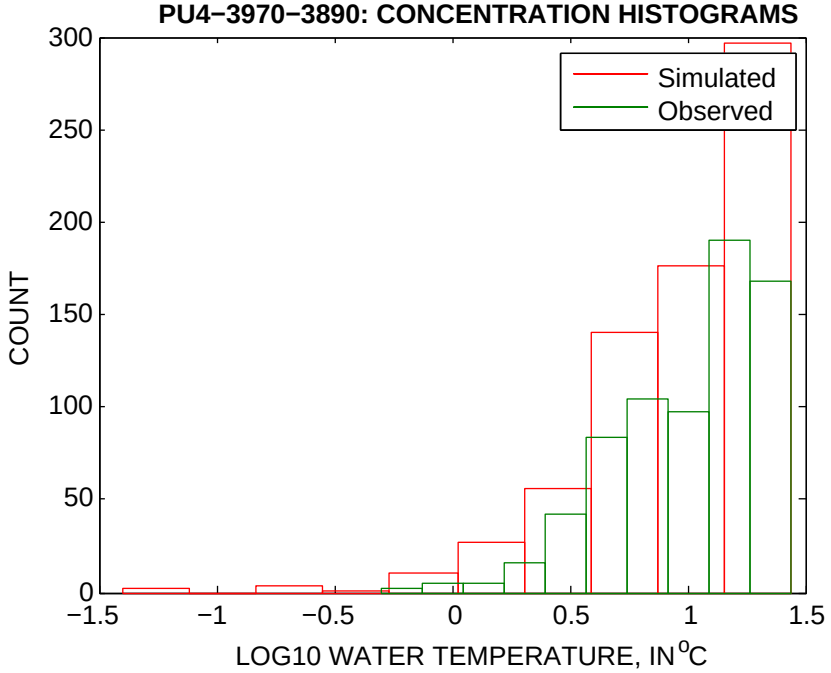
VERSION

ALL DATA
LOG10

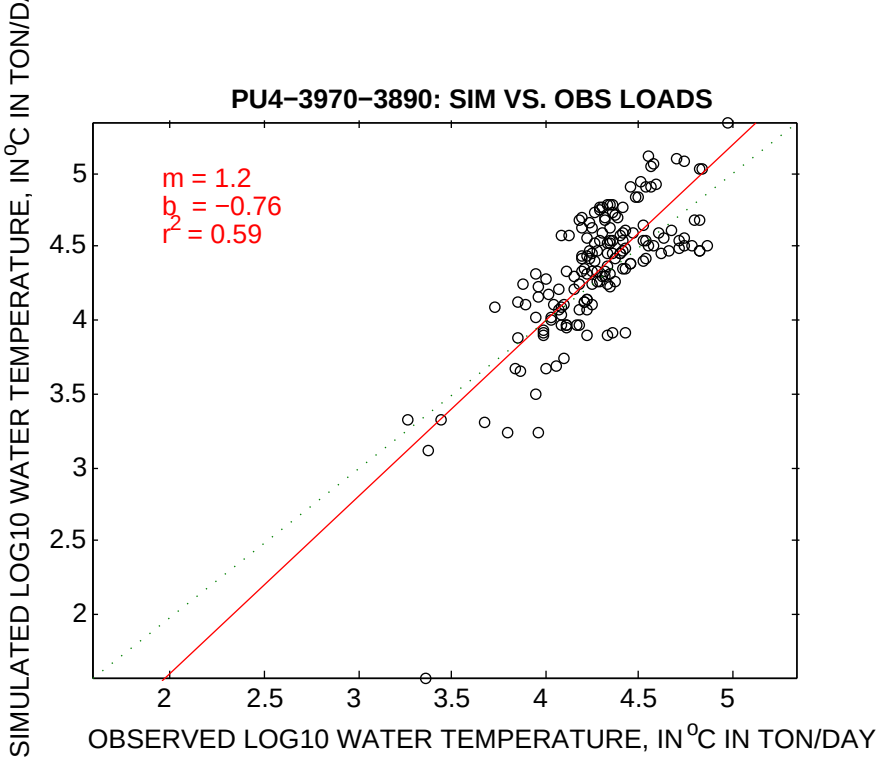


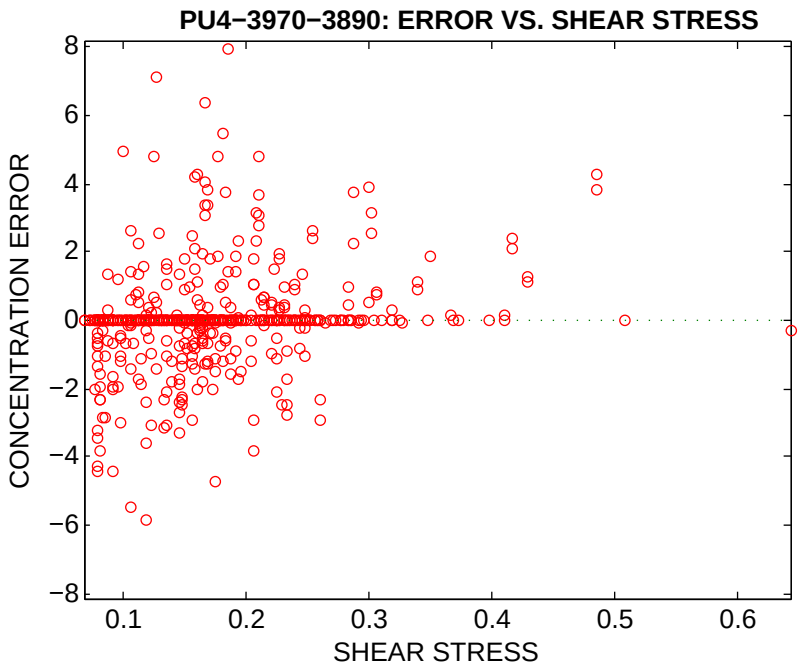


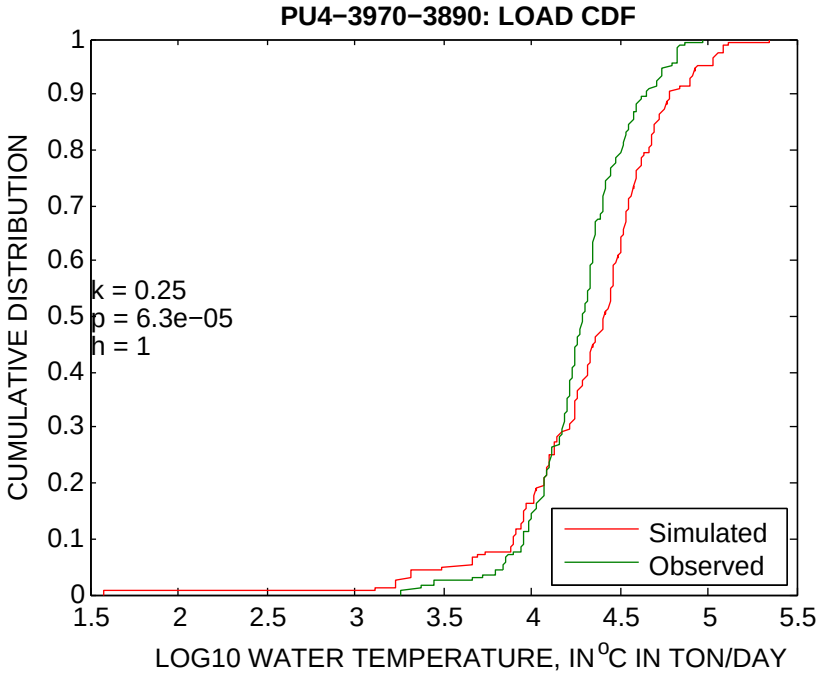


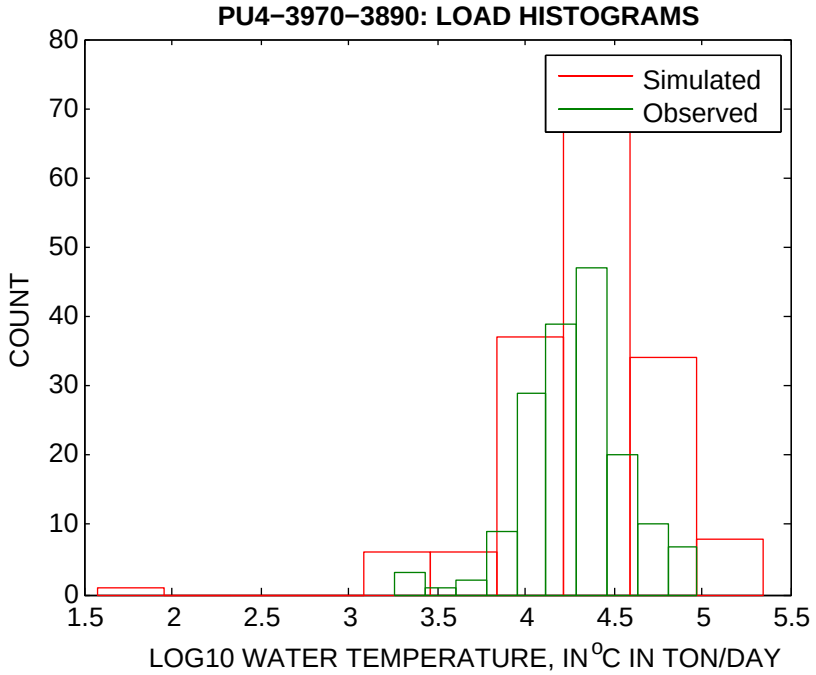


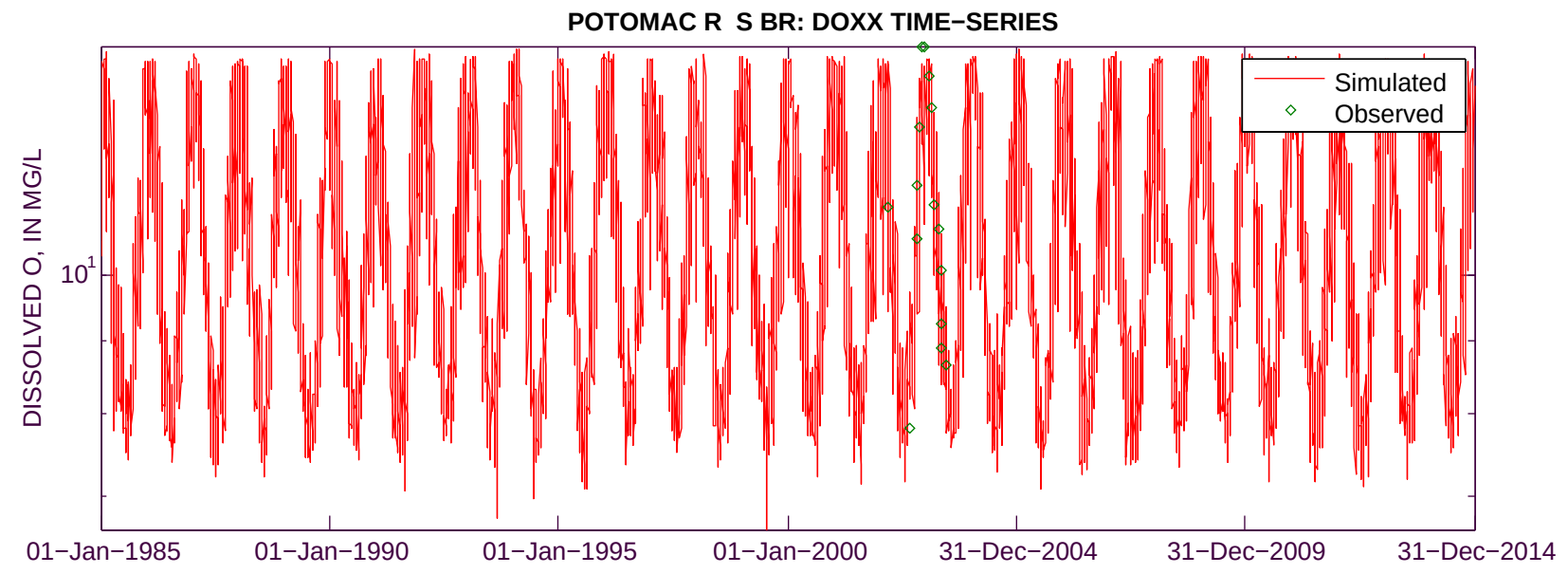
LOAD DATA
LOG10

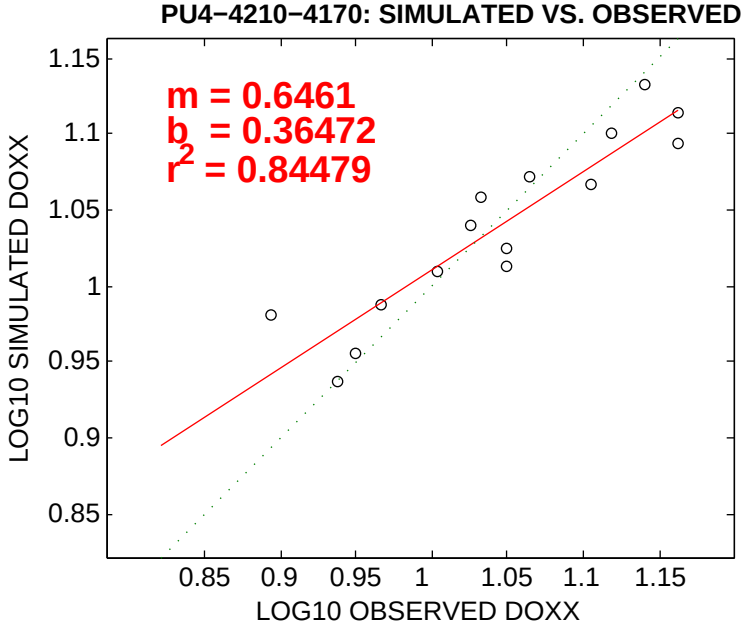


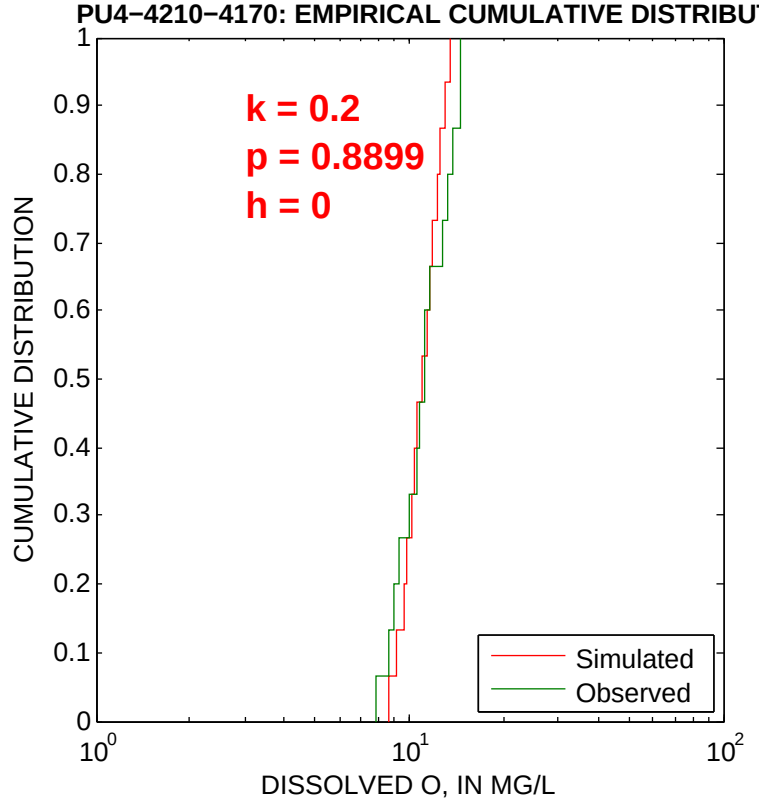












DATA SELECTION

scenario	file
P620171001WQ	DOXX.calib

plot: DOXX - dissolved oxygen

Dates: 1/1/1985 – 12/31/201

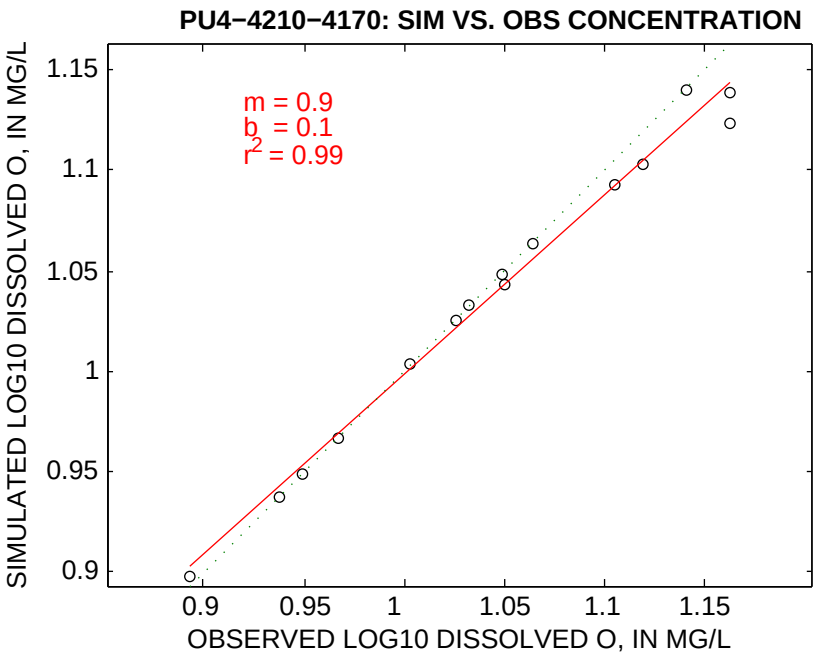
Drive	Directory	Observed
N/A	model	OBS20161101

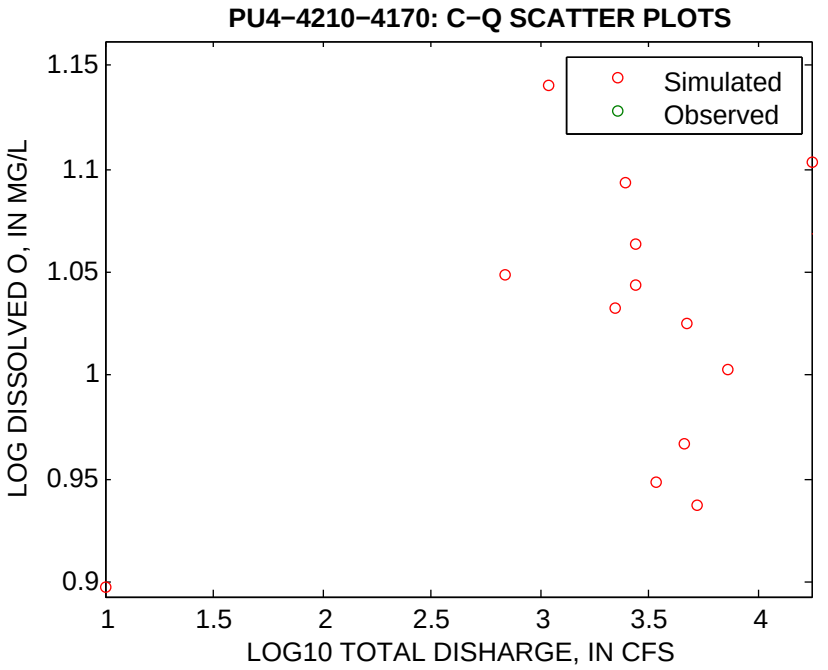
STATISTICS

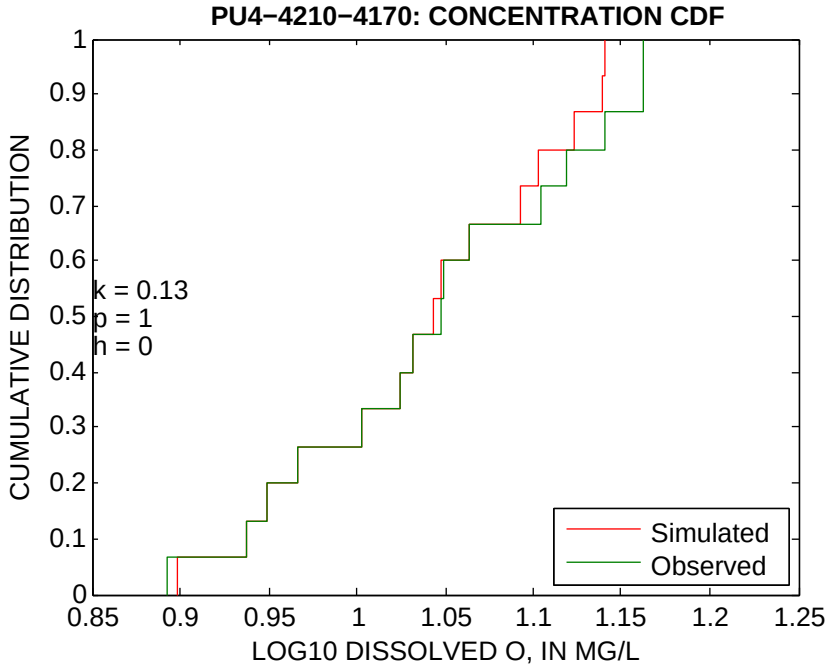
	n	15	15
		observe	simulate
min		7.82	8.6528
		0.893207	0.937157
mean		11.252	11.036
		1.04378	1.03911
media		11.18	10.955
		1.04844	1.03961
max		14.53	13.575
		1.16227	1.13274
varian		4.57116	2.20032
		0.00701478	0.00346631
JB		0.5	0.5
		0.5	0.5
		ra	log
%		-1.91978	-0.44728
err.va		0.96957	0.00143992
rel.std.err		0.212106	0.20527
mod.eff		0.787894	0.79473

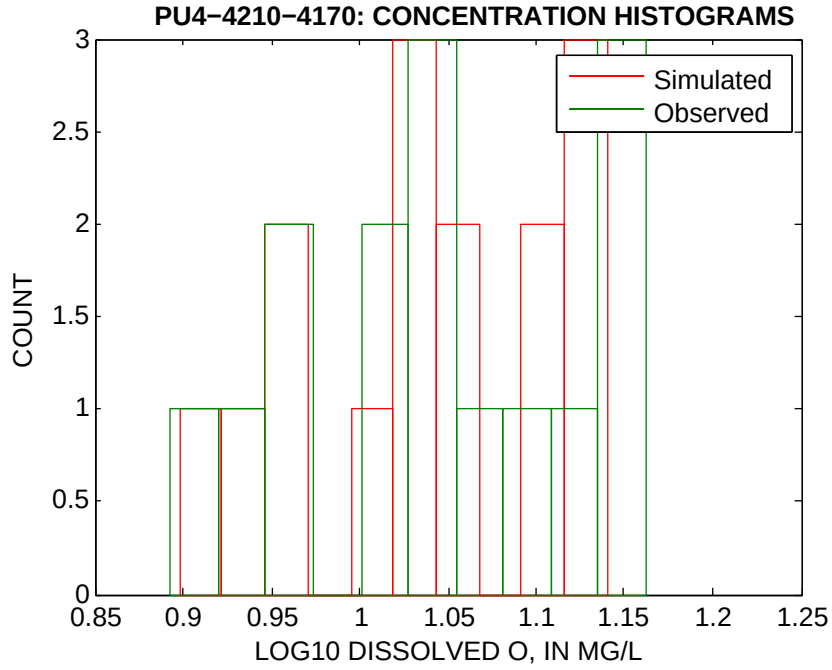
VERSION 2.1

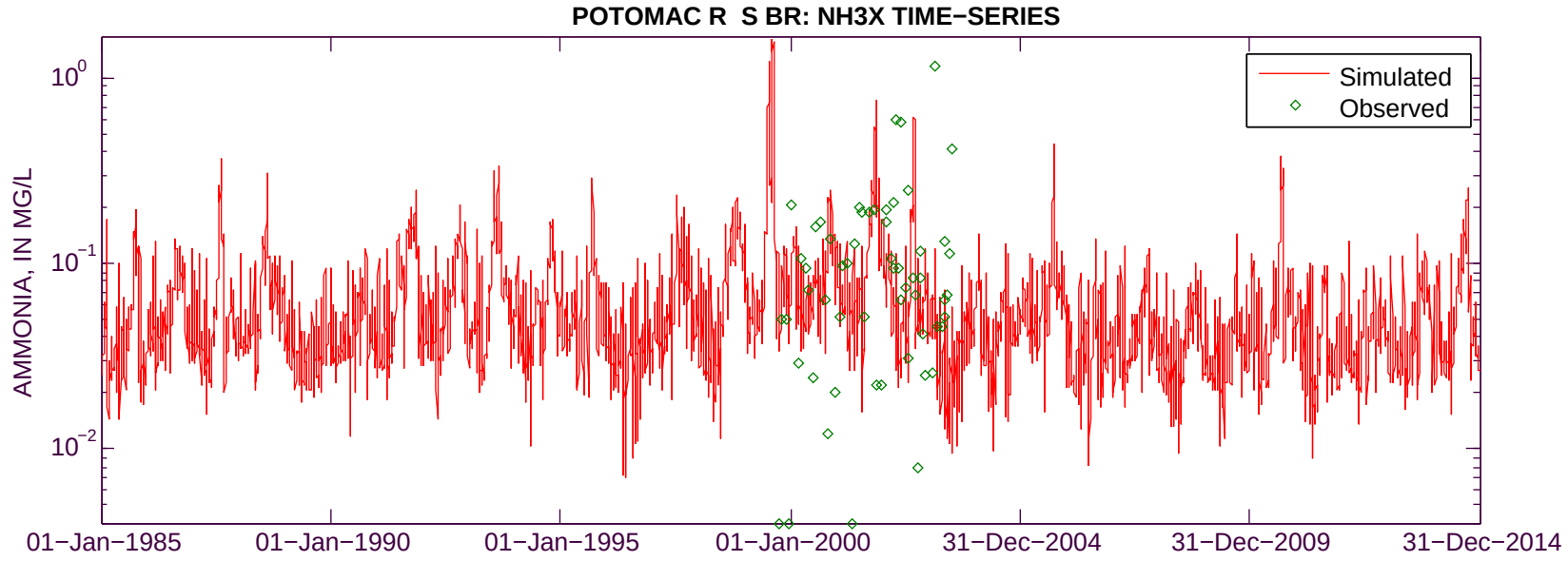
ALL DATA
LOG10

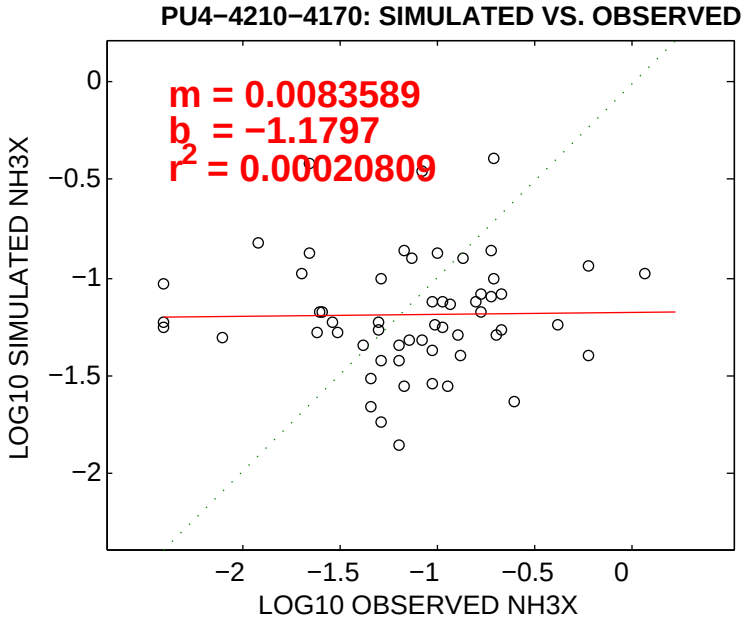


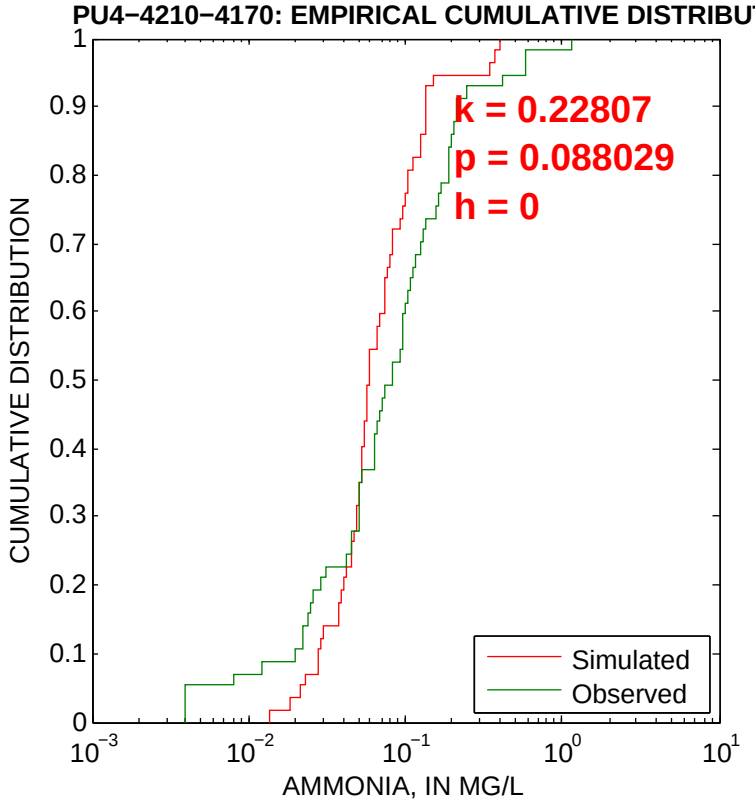












DATA SELECTION

scenario	file
P620171001WQ	NH3X.calib

plot: NH3X - ammonia

Dates: 1/1/1985 – 12/31/201

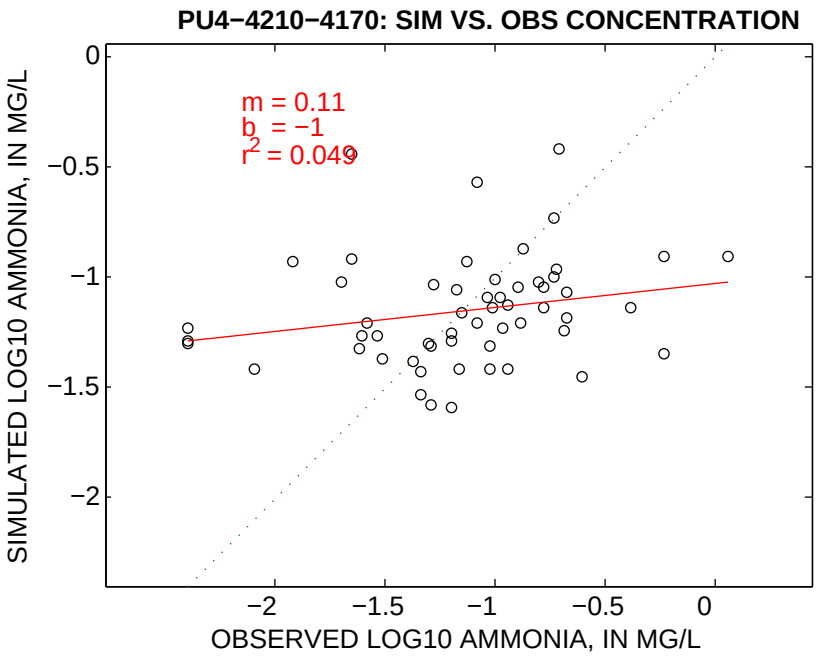
Drive: N/A | Directory: model | Observed: OBS20161101

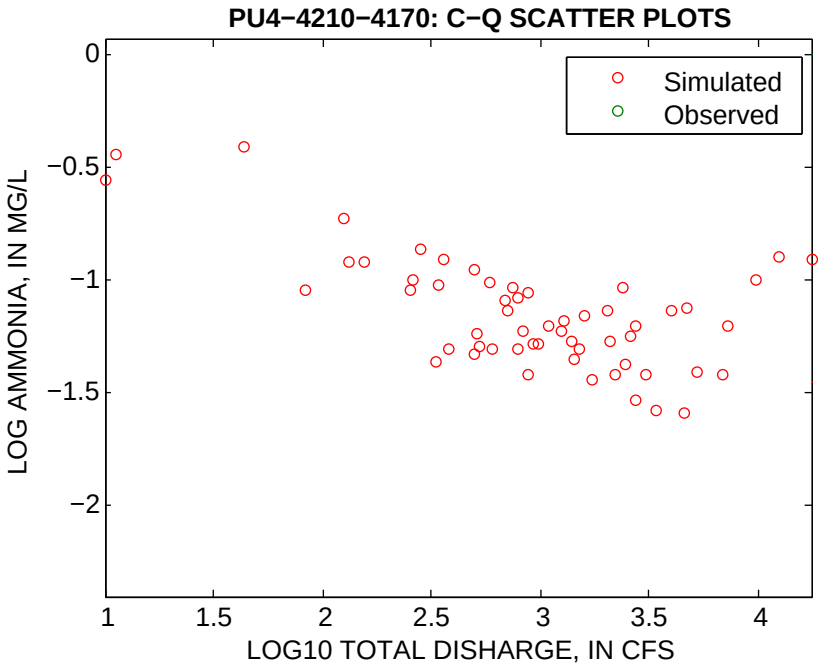
STATISTICS

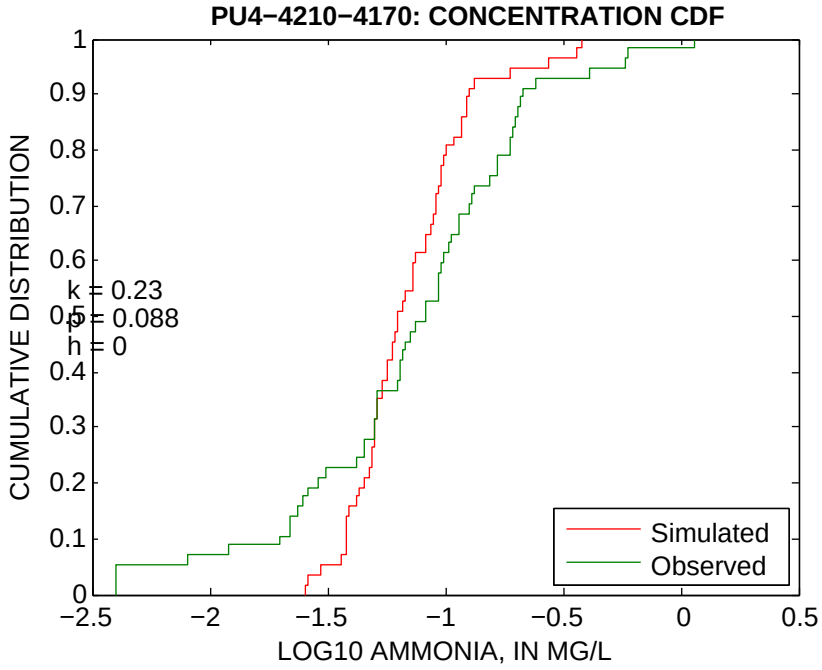
	n	57	57
		observe	simulate
min		0.004	0.013864
		-2.39794	-1.85811
mean		0.130246	0.0834794
		-1.1444	-1.18923
media		0.083	0.058459
		-1.08092	-1.23315
max		1.143	0.40468
		0.0580462	-0.392888
varian		0.0327593	0.00600616
		0.25688	0.0862525
JB		0.001	0.001
		0.107476	0.070546
		ra	log
%		-35.9062	3.91778
err.va		0.0401462	0.340884
rel.std.err		1.22549	1.32702
mod.eff		-0.225489	-0.327017

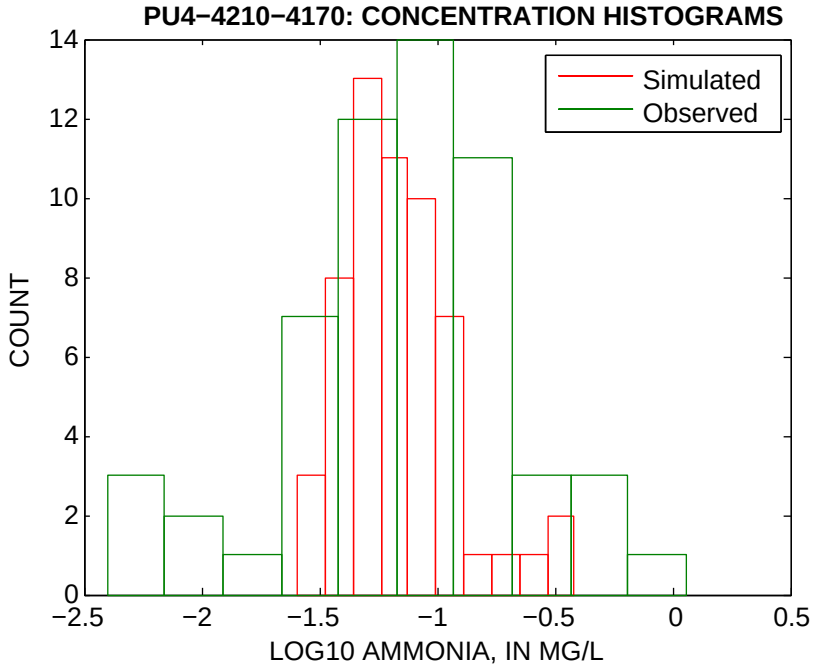
VERSION 2.1

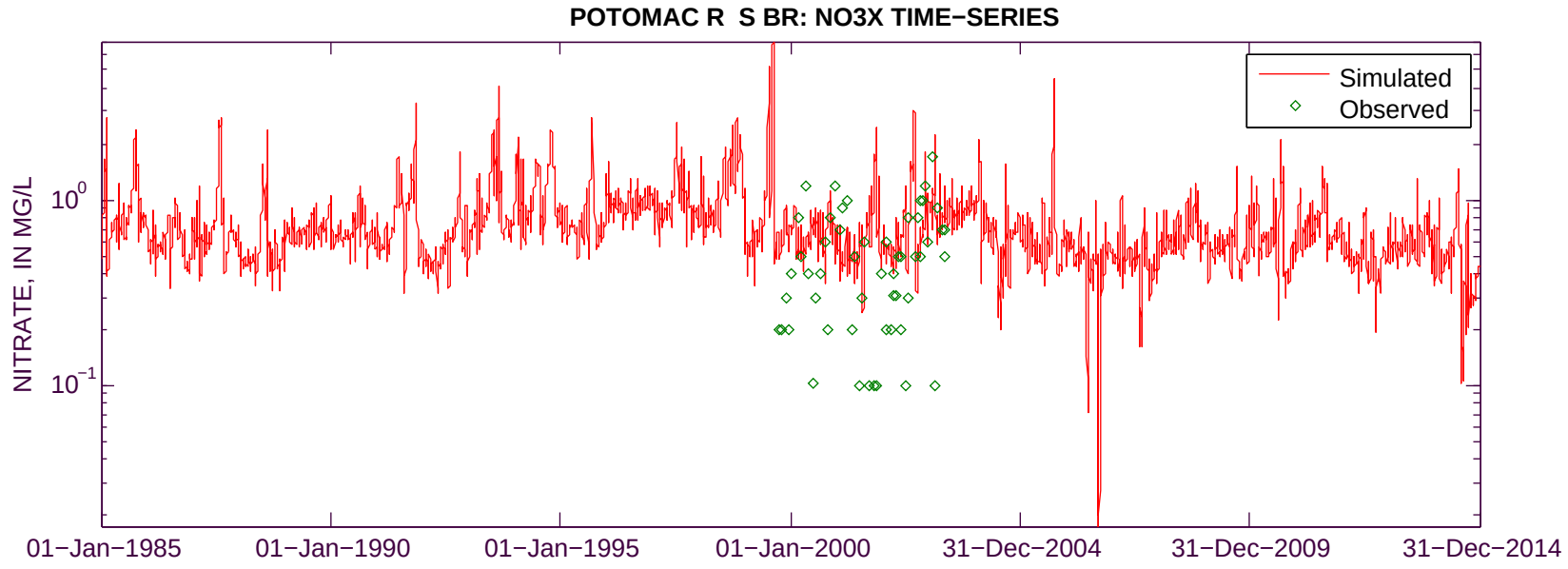
ALL DATA
LOG10

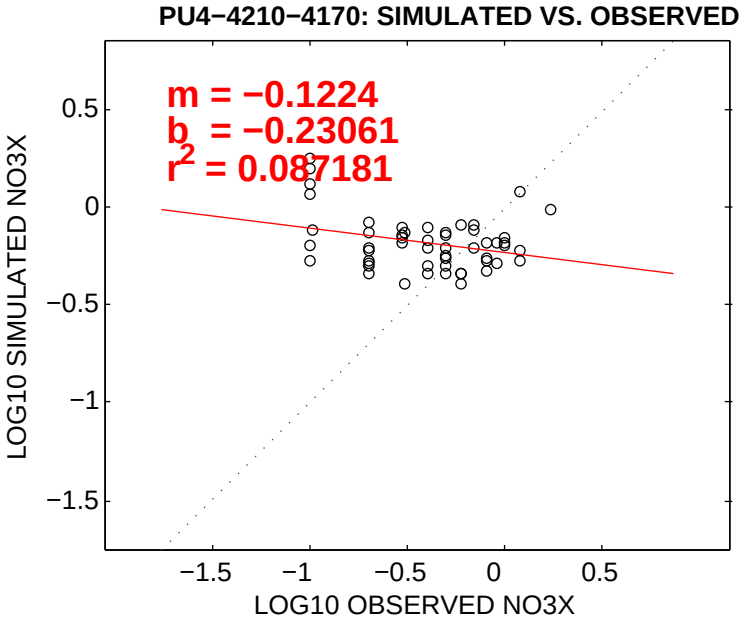


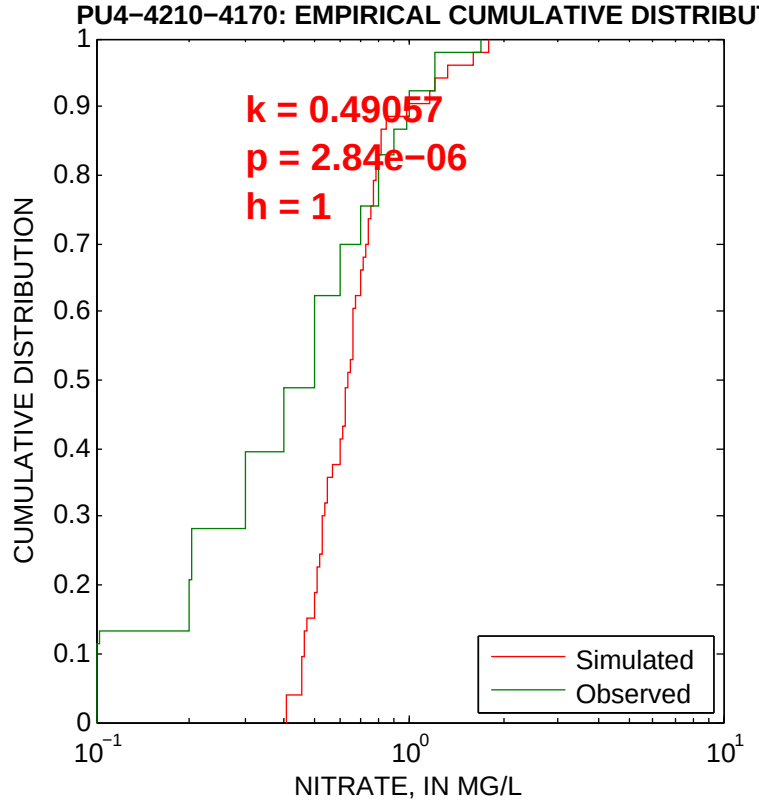












DATA SELECTION

scenario	file
P620171001WQ	NO3X.calib

plot: NO3X - nitrate

Dates: 1/1/1985 – 12/31/201

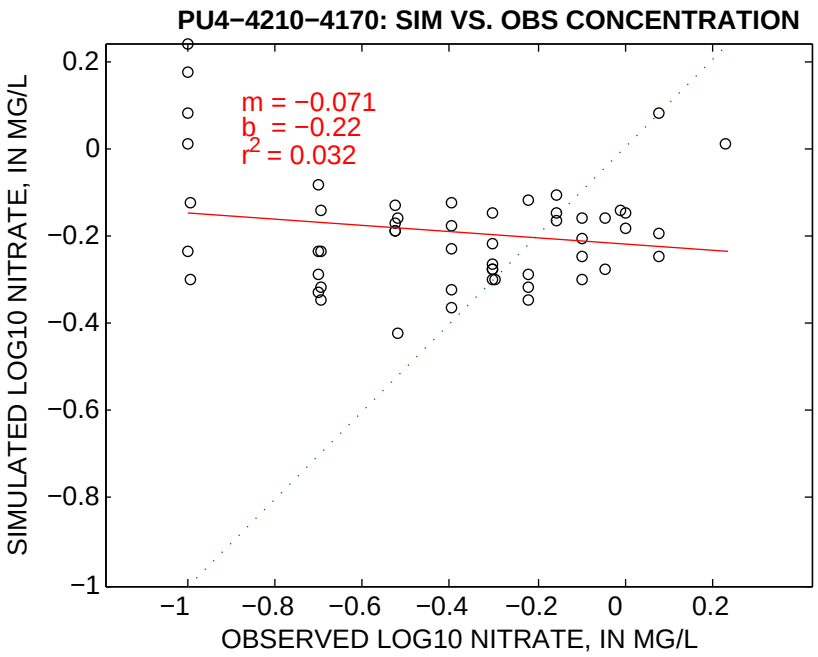
Drive	Directory	Observed
N/A	model	OBS20161101

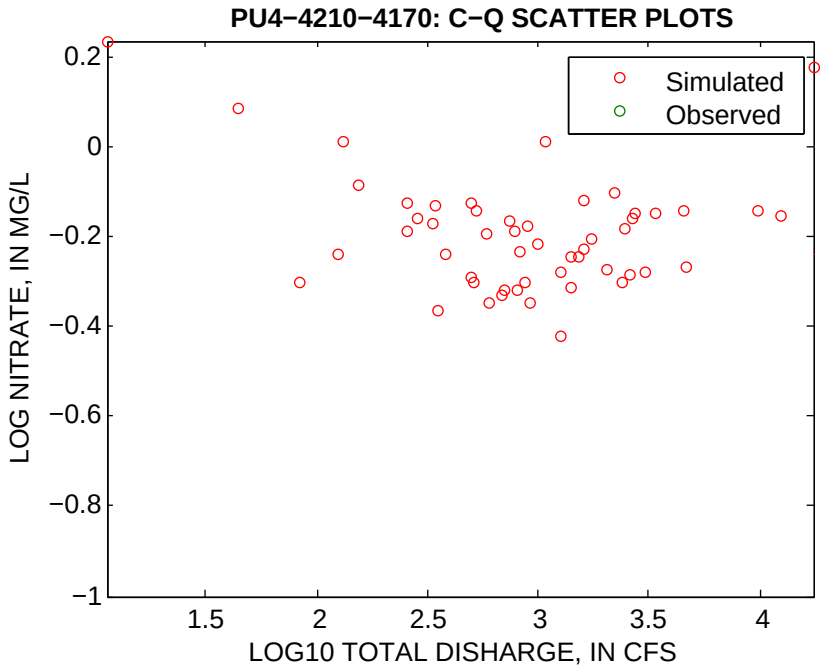
STATISTICS

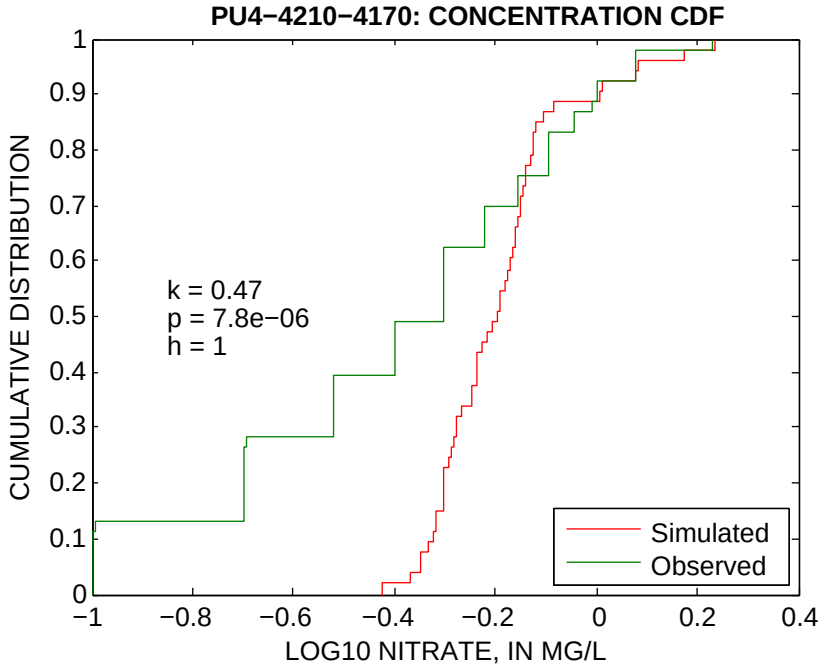
	n	53	53
		observe	simulate
min		0.1	0.40467
		-1	-0.392899
mean		0.516906	0.696639
		-0.399351	-0.181729
media		0.5	0.63206
		-0.30103	-0.199242
max		1.7	1.7931
		0.230449	0.253605
varian		0.126717	0.0759394
		0.112634	0.0193552
JB		0.014006	0.001
		0.159101	0.005919
		ra	log
%		34.771	-54.4939
err.va		0.262428	0.207832
rel.std.err		2.07098	1.8452
mod.eff		-1.07098	-0.845197

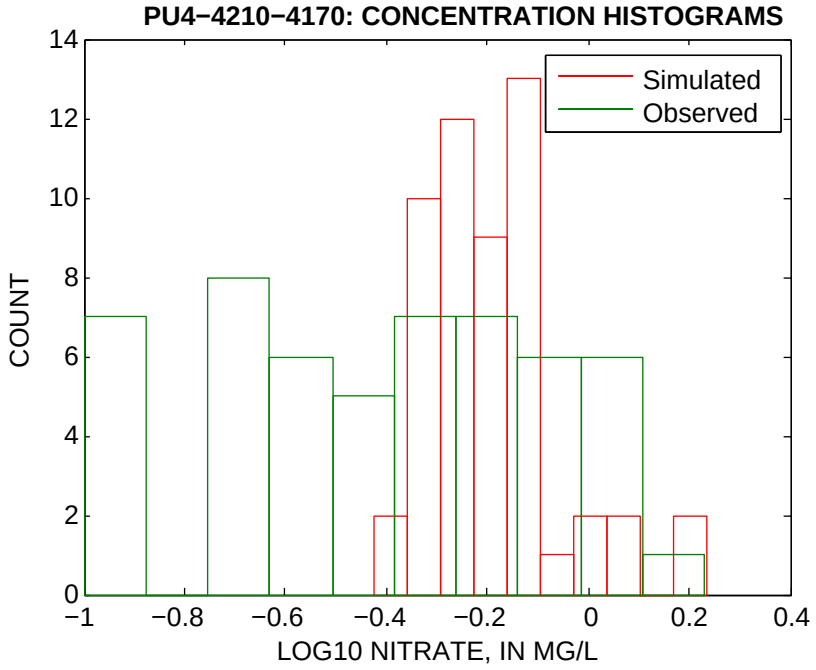
VERSION

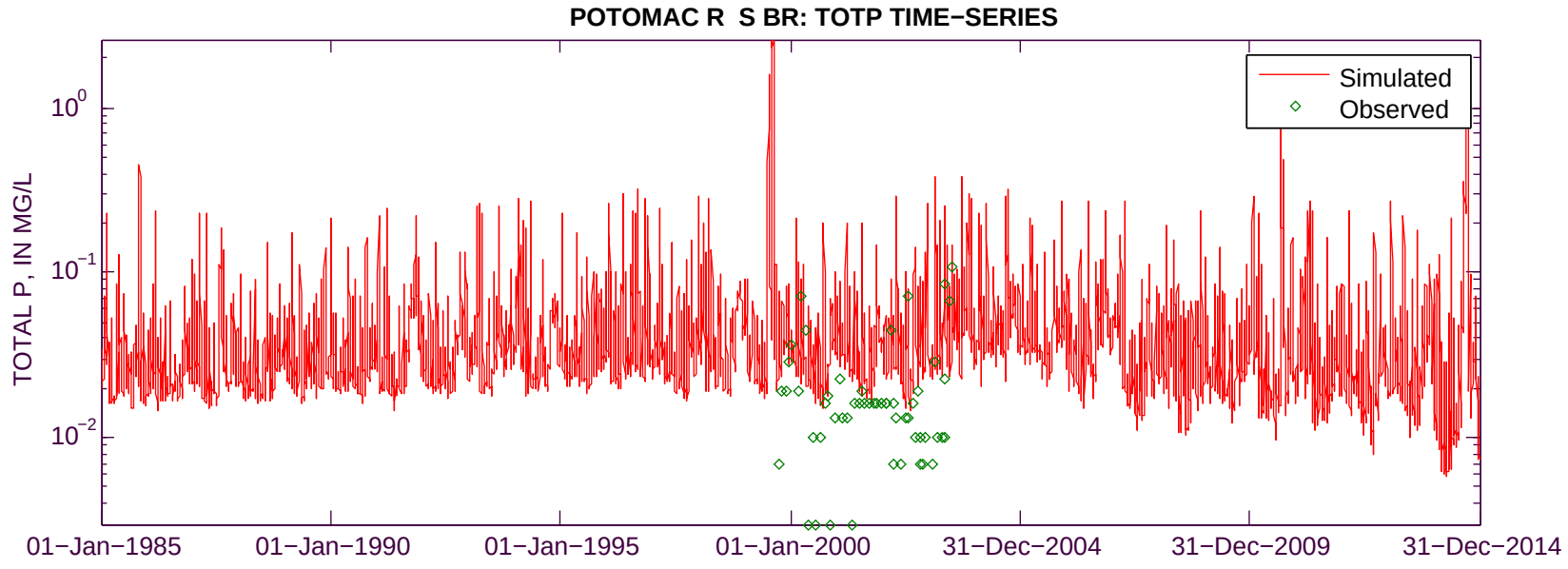
ALL DATA
LOG10

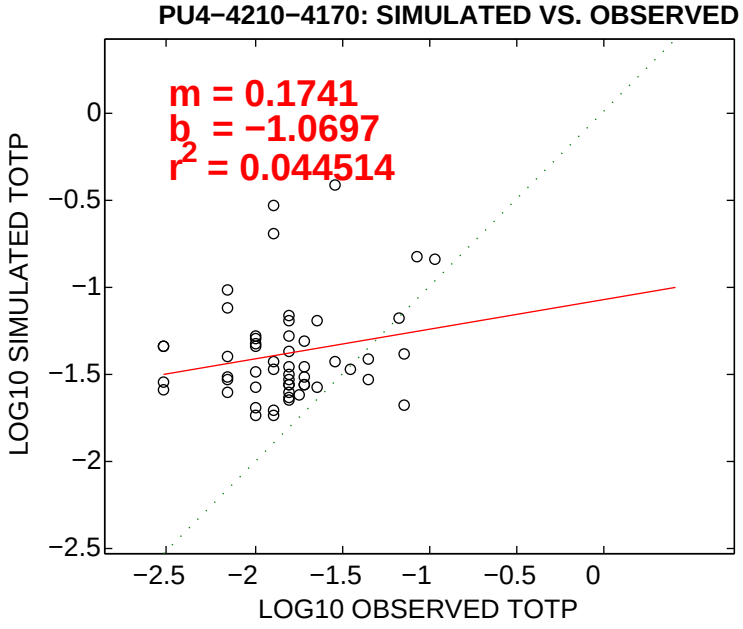


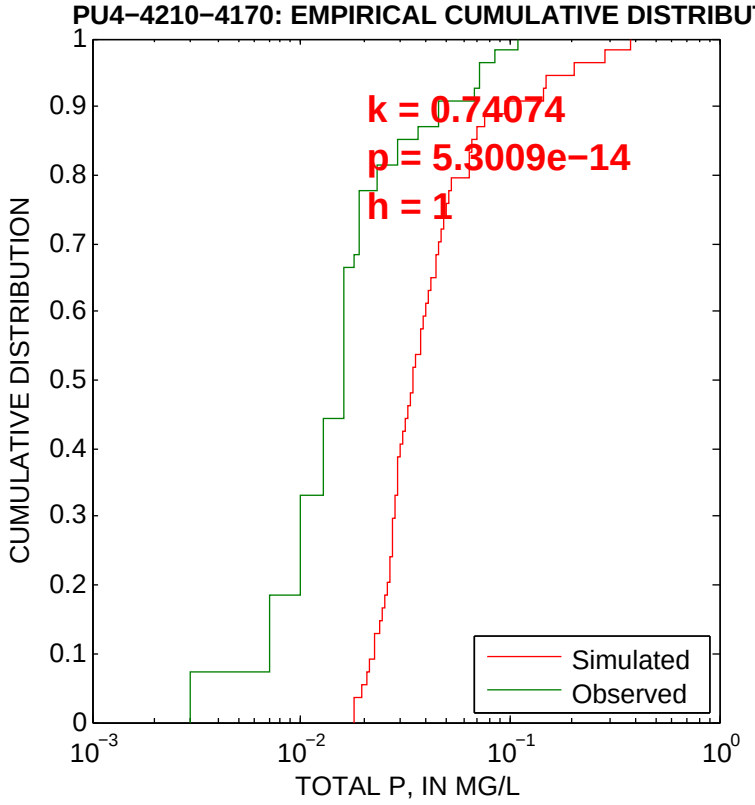












DATA SELECTION

scenario	file
P620171001WQ	TOTP.calib

plot: TOTP - total phosphorus

Dates: 1/1/1985 – 12/31/201

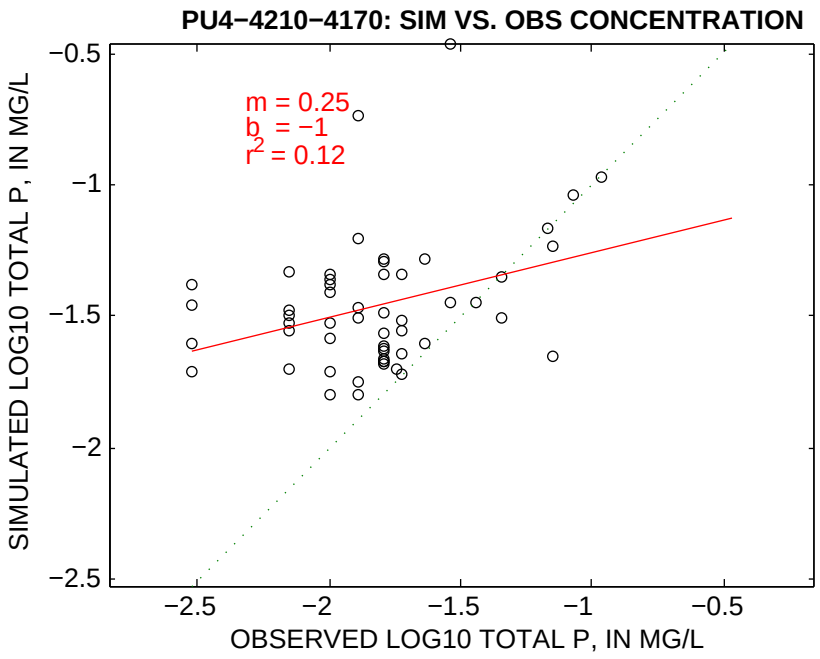
Drive	Directory	Observed
N/A	model	OBS20161101

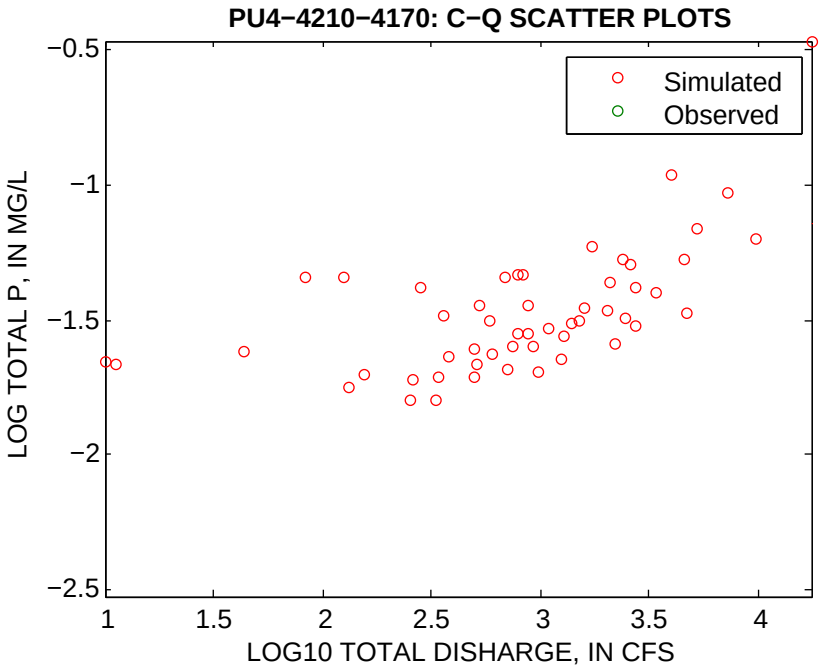
STATISTICS

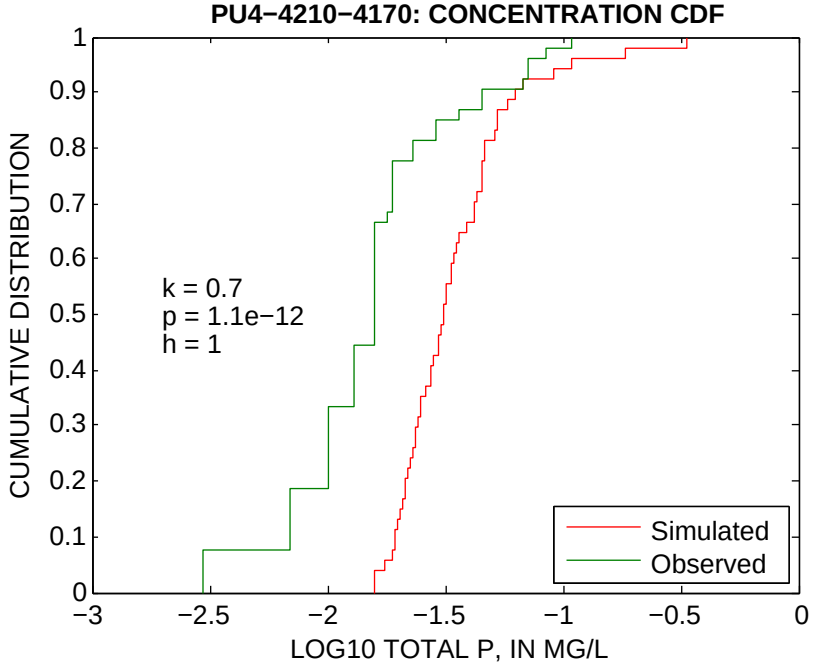
	n	54	54
		observe	simulate
min		0.003	0.018067
		-2.52288	-1.74311
mean		0.0212963	0.0556226
		-1.81907	-1.38635
media		0.016	0.0342215
		-1.79588	-1.46571
max		0.108	0.38228
		-0.966576	-0.417618
varian		0.00046292	0.00429767
		0.121279	0.0825829
JB		0.001	0.001
		0.5	0.001
		ra	log
%		161.184	-23.7879
err.va		0.00536425	0.352412
rel.std.err		11.5876	2.9058
mod.eff		-10.5876	-1.9058

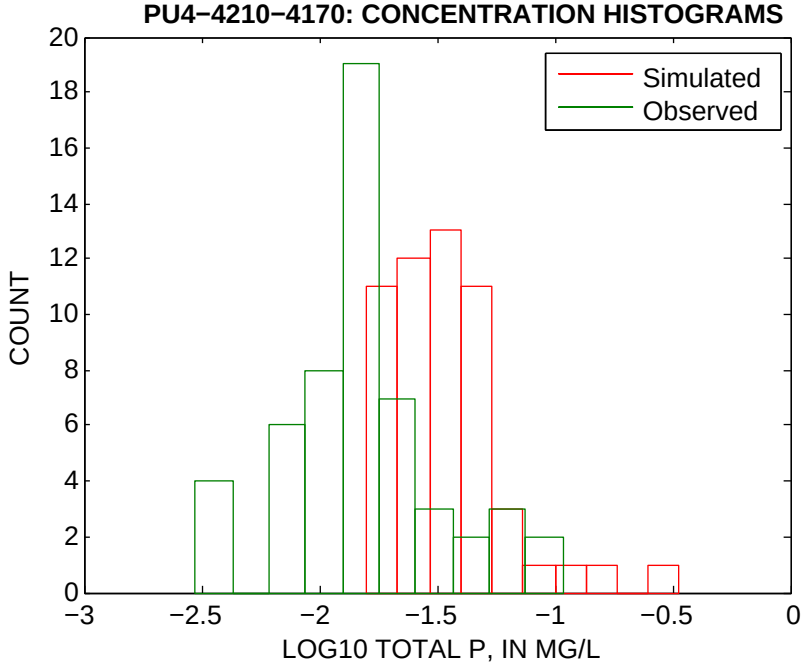
VERSION 2.1

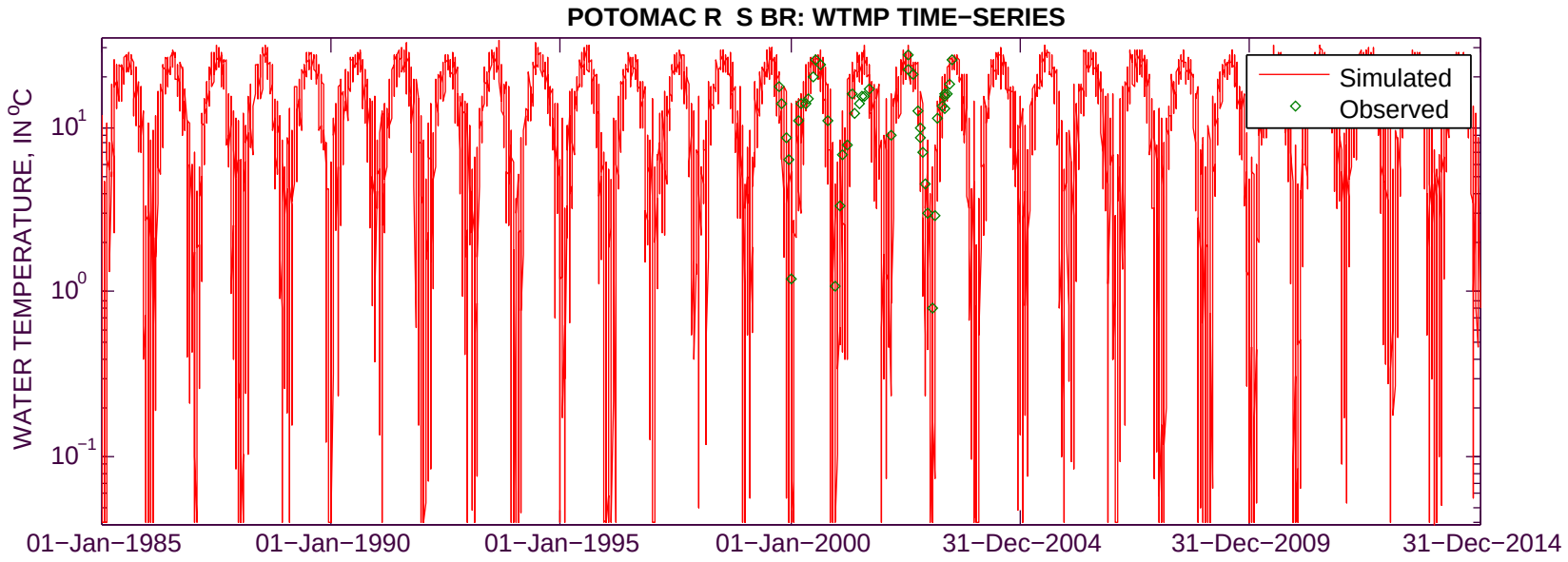
ALL DATA
LOG10

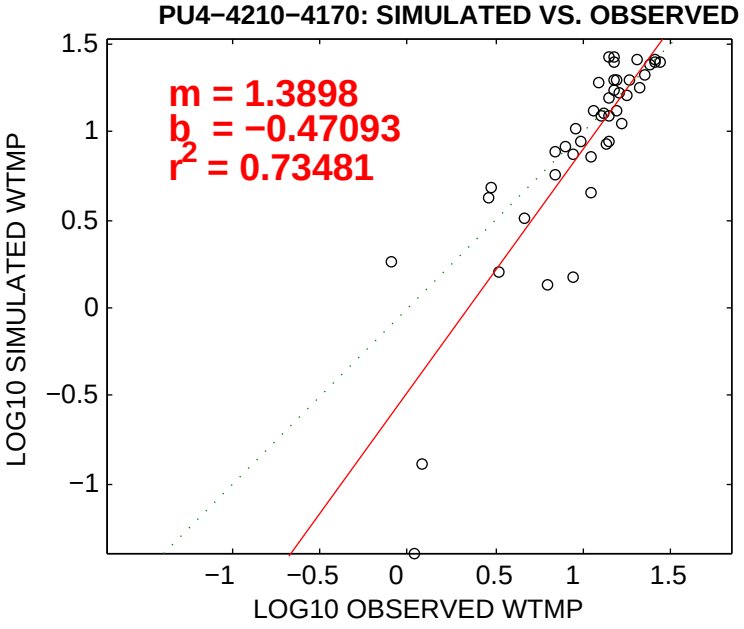


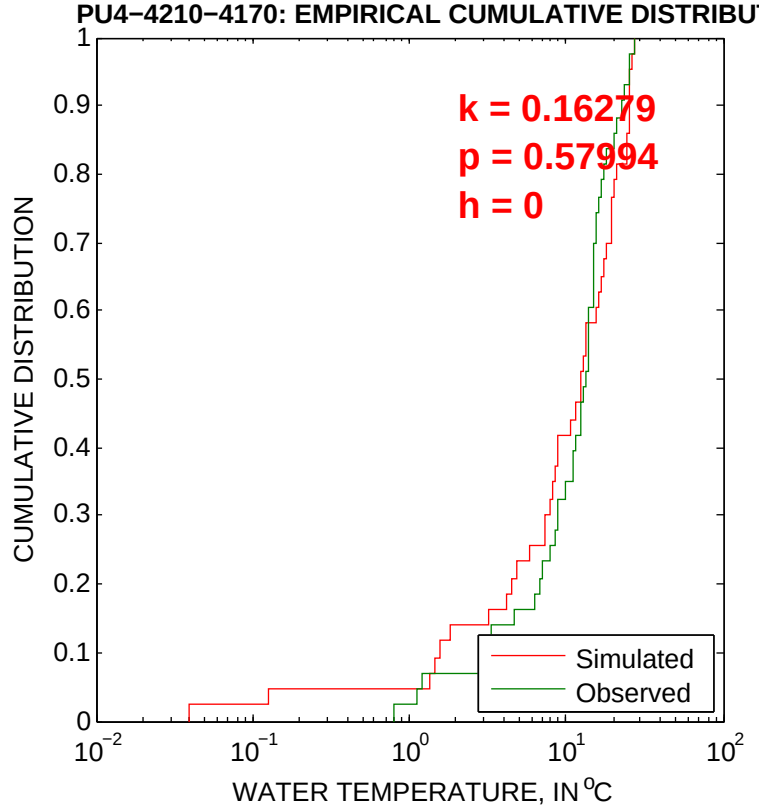












DATA SELECTION

scenario: P620171001WQ | file: WTMP.calib

plot: WTMP - water tempera...

Dates: 1/1/1985 – 12/31/201

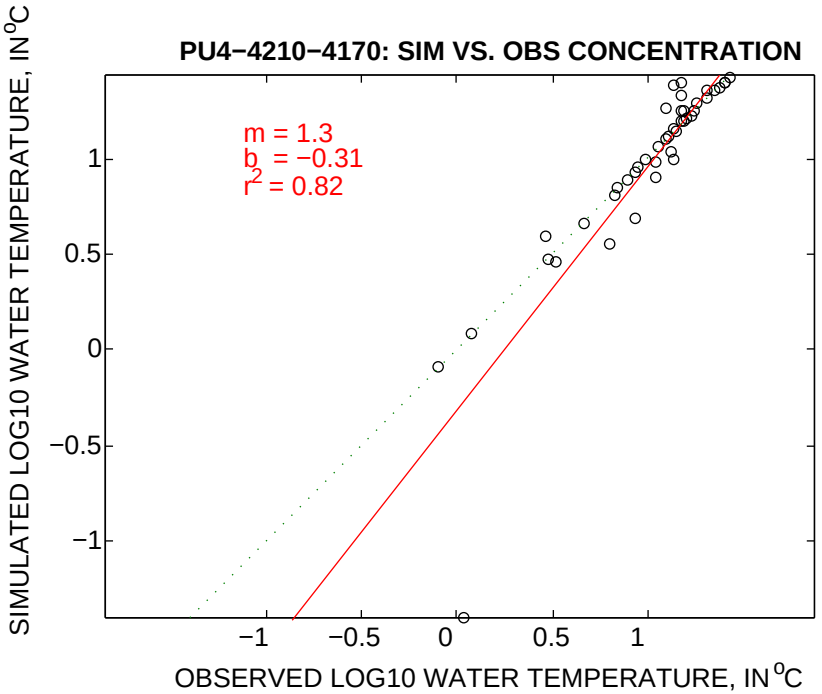
Drive: N/A | Directory: model | Observed: OBS20161101

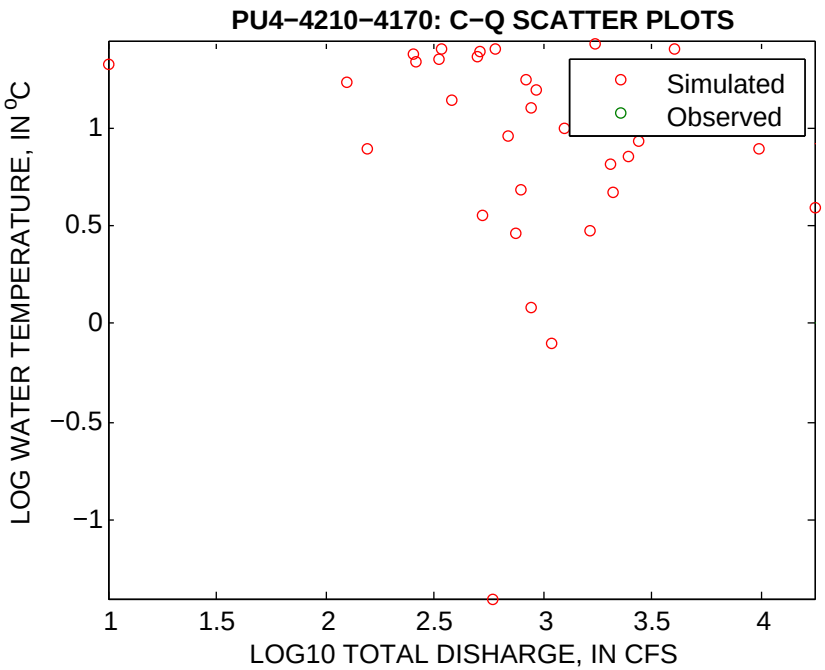
STATISTICS

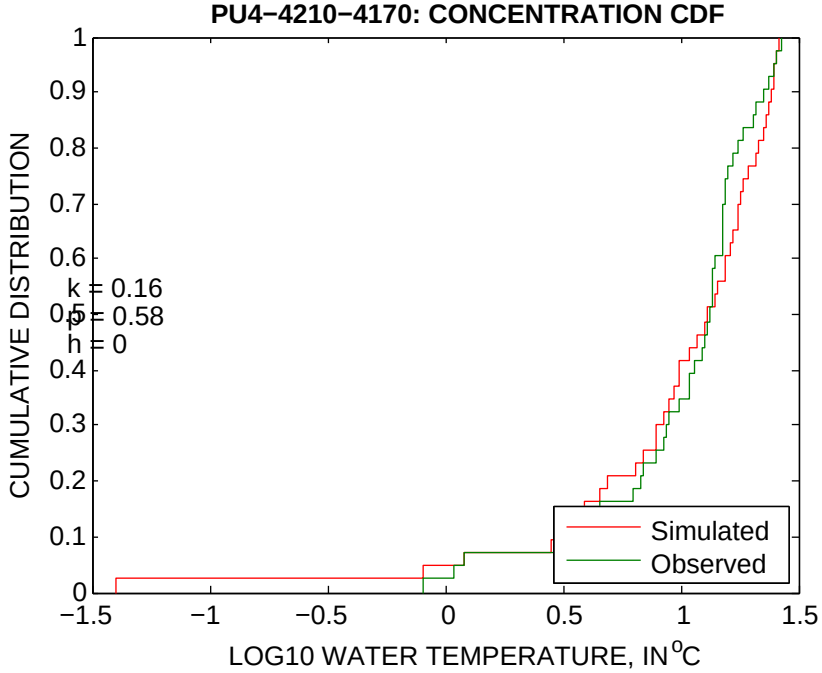
		observe	simulate
n		43	43
min		0.8	0.040029
		-0.09691	-1.39763
mean		12.6977	13.0667
		1.00204	0.921741
media		13.4	12.64
		1.1271	1.10175
max		27	26.864
		1.43136	1.42917
varian		46.2969	71.1834
		0.131495	0.345671
JB	✓	0.5	0.120581 ✓
		0.002628	0.001
		ra	log
%		2.90609	-8.01317
err.va		18.8914	0.118252
rel.std.err		0.408048	0.899288
mod.eff		0.591952	0.100712

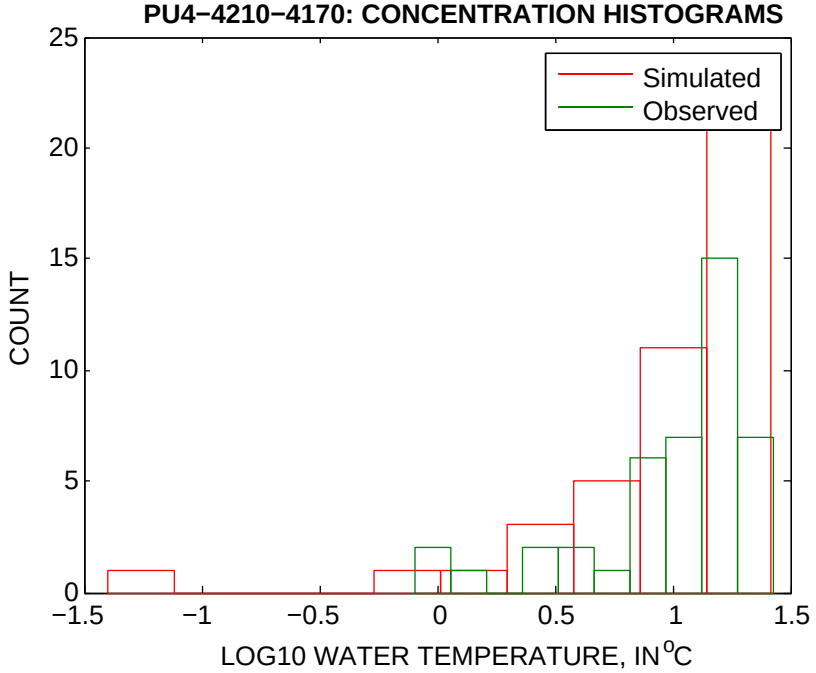
VERSION 2.1

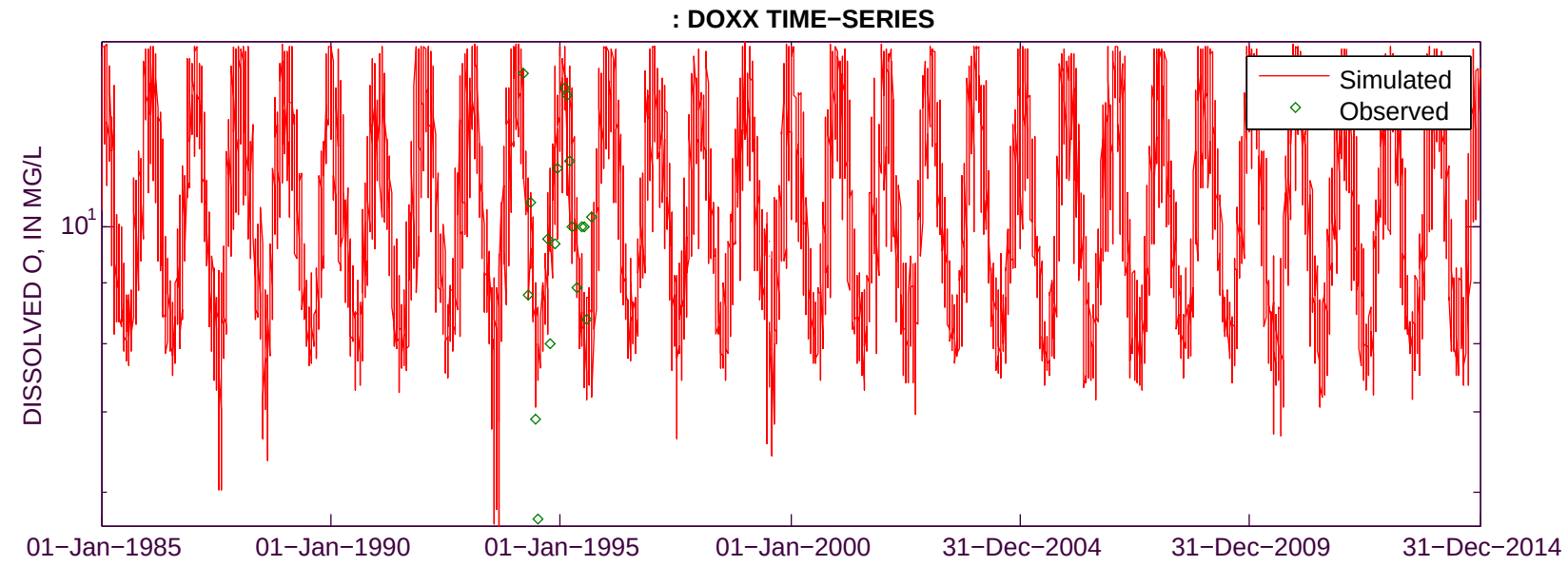
ALL DATA
LOG10

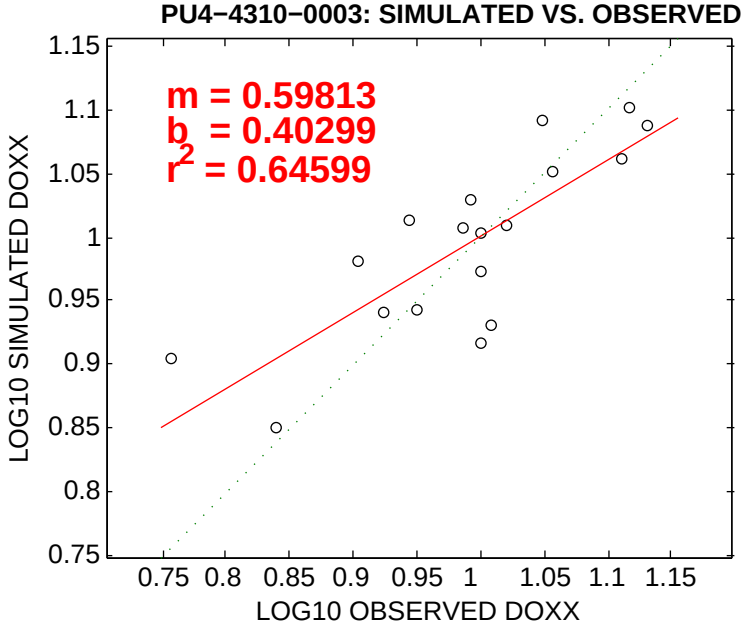


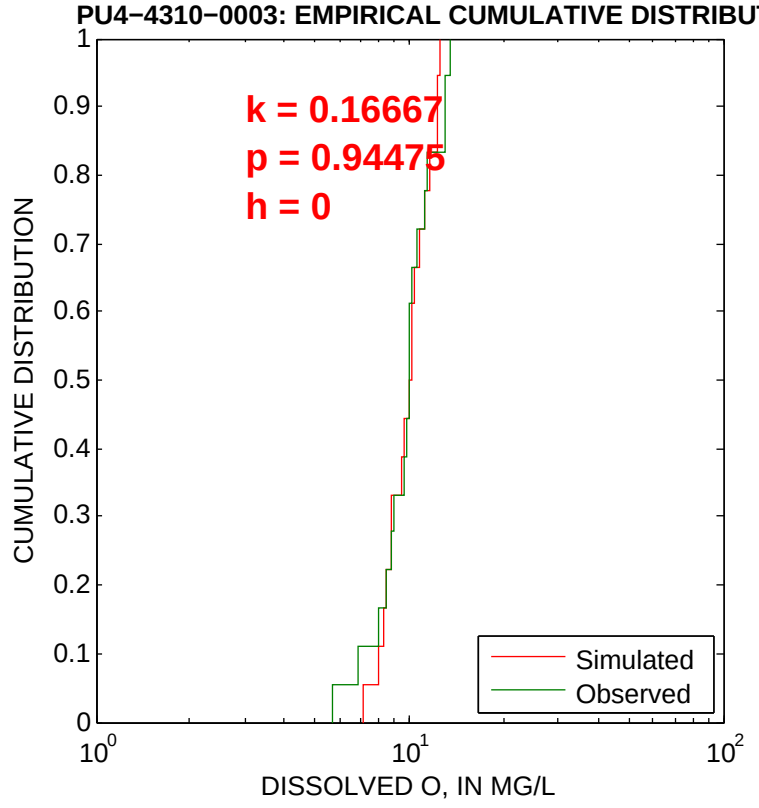












DATA SELECTION

scenario: P620171001WQ | file: DOXX.calib

plot: DOXX - dissolved oxygen

Dates: 1/1/1985 – 12/31/201

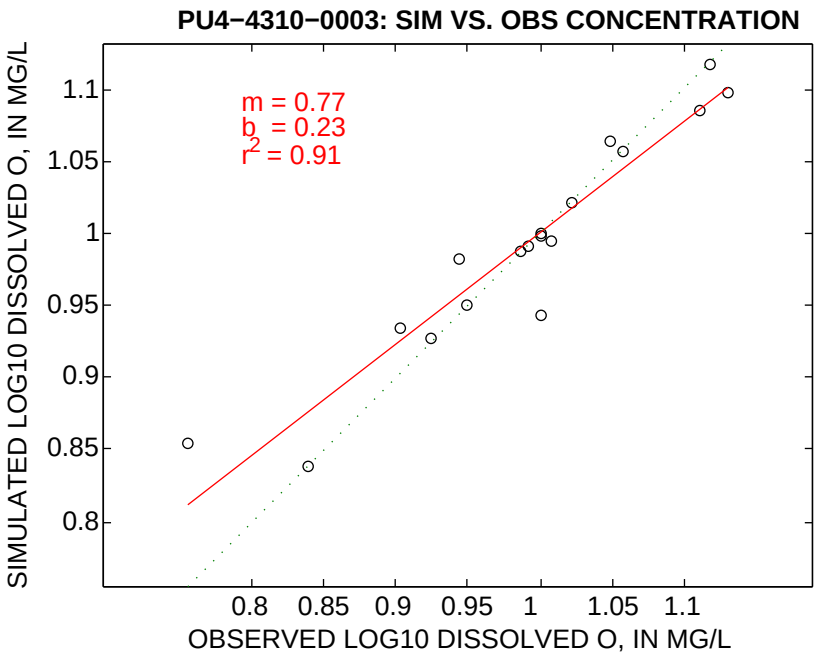
Drive: N/A | Directory: model | Observed: OBS20161101

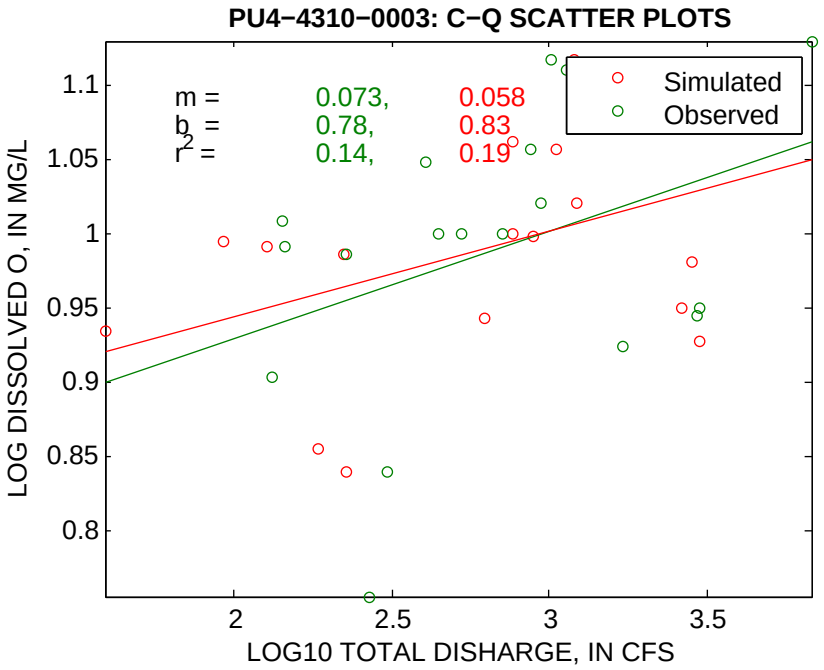
STATISTICS

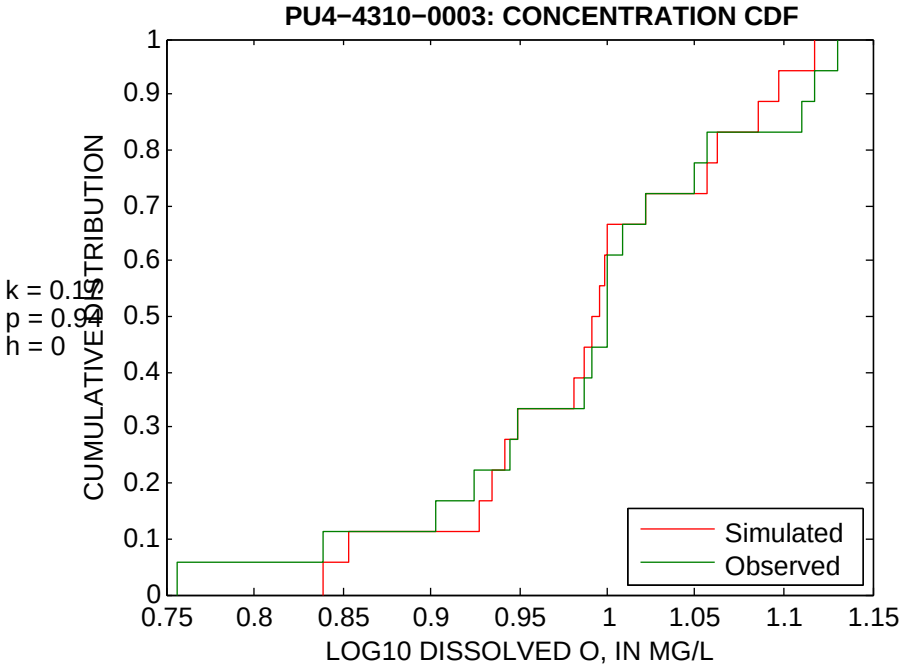
		observe	simulate
n		18	18
min		5.7	7.0913
		0.755875	0.850726
mean		9.94444	9.98706
		0.988226	0.994075
media		10	10.122
		1	1.00526
max		13.5	12.616
		1.13033	1.10092
varian		4.19673	2.55869
		0.00901443	0.0049923
JB	☑	0.5	0.5 ☑
	☑	0.20991	0.5 ☑
		ra	log
%		0.428492	0.591887
err.va		1.33852	0.0032594
rel.std.err		0.318944	0.361576
mod.eff		0.681056	0.638424

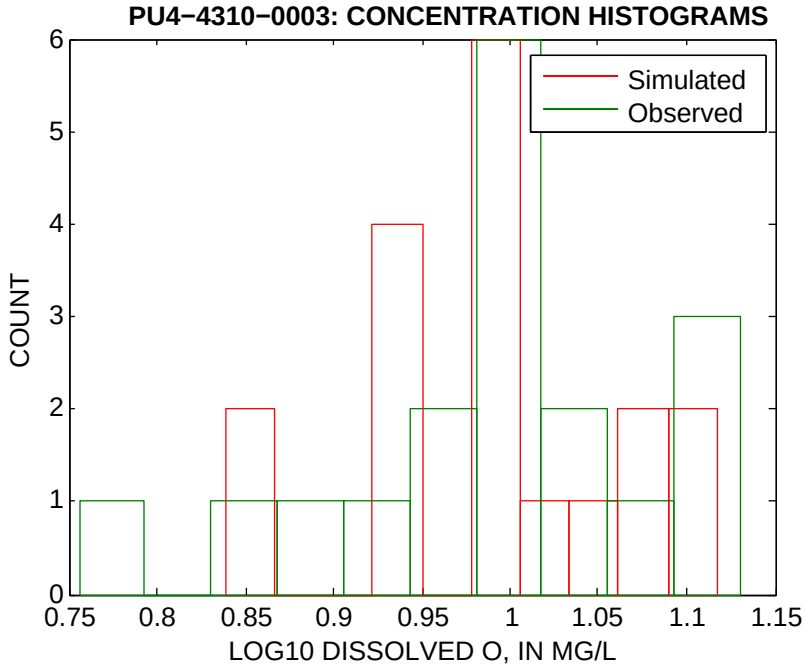
VERSION 2.1

ALL DATA
LOG10

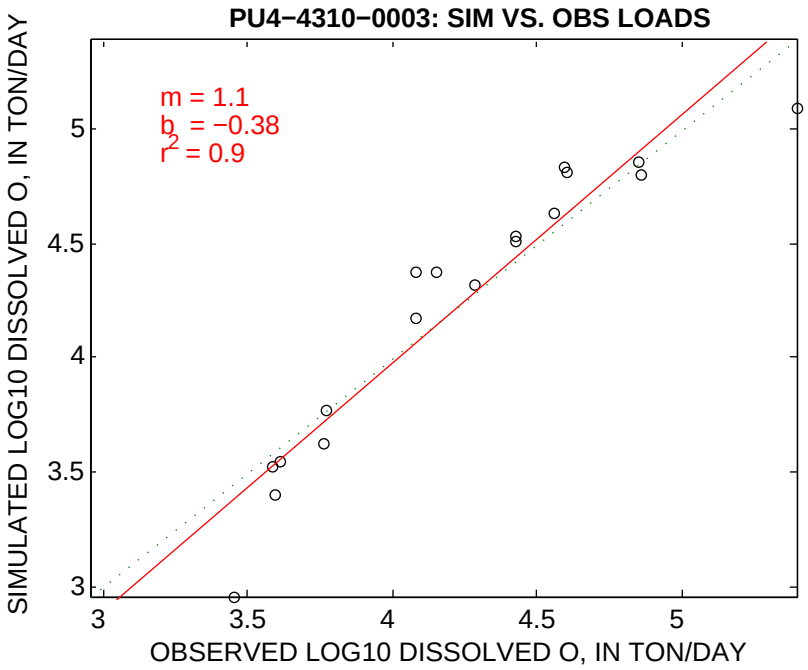


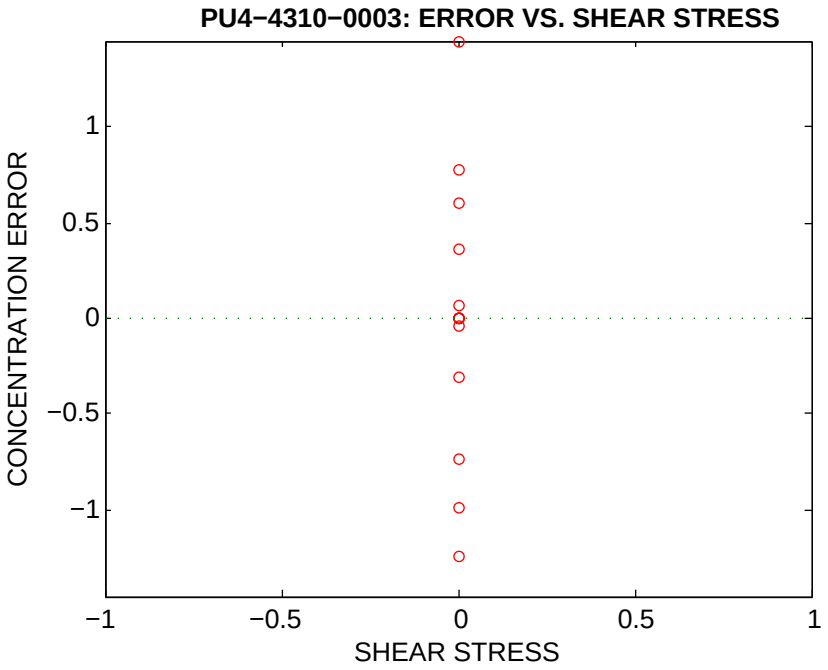


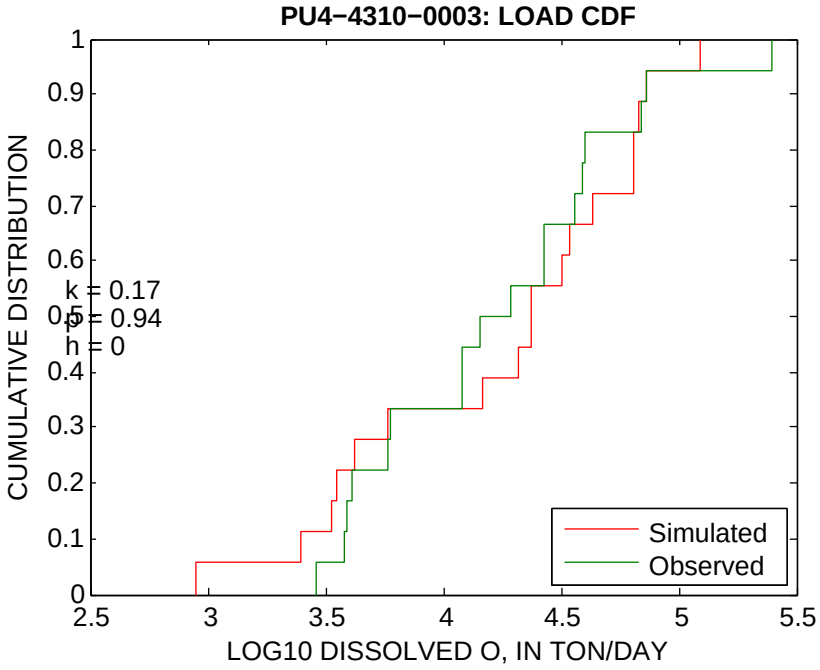


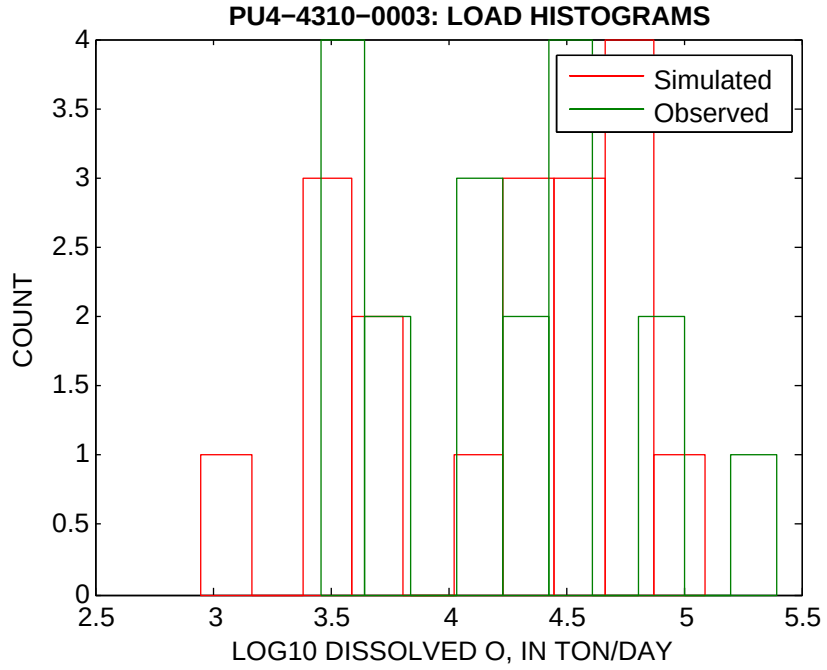


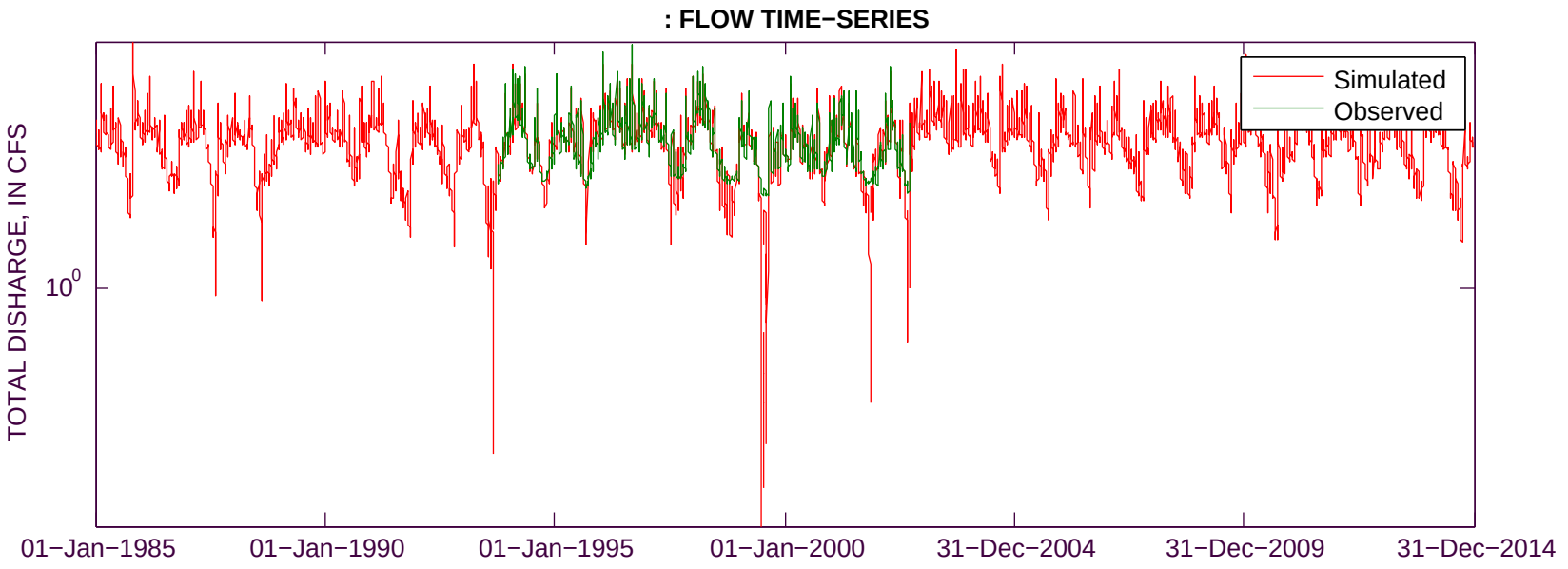
LOAD DATA
LOG10

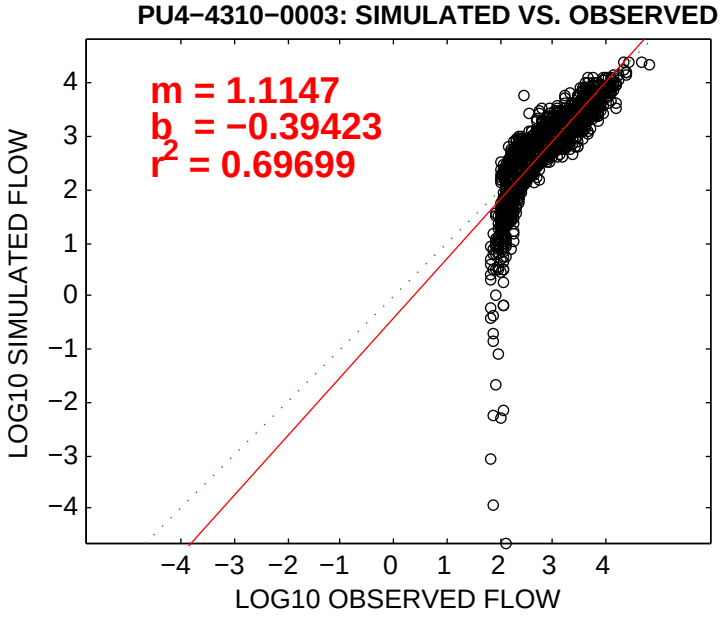


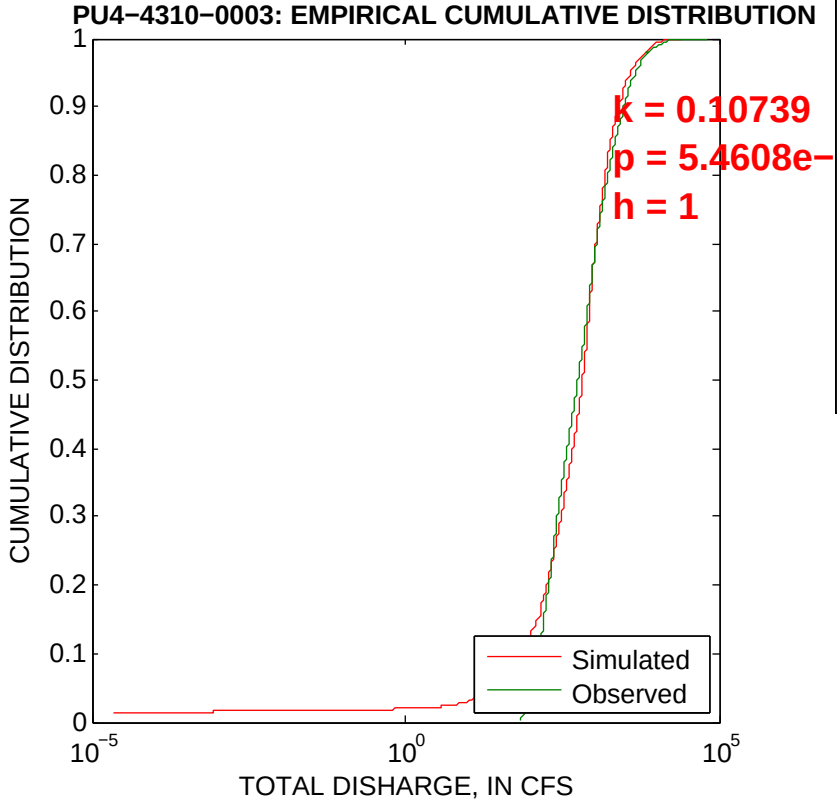












DATA SELECTION

scenario	file
P620171001WQ	FLOW.calib

plot: FLOW - total discharge

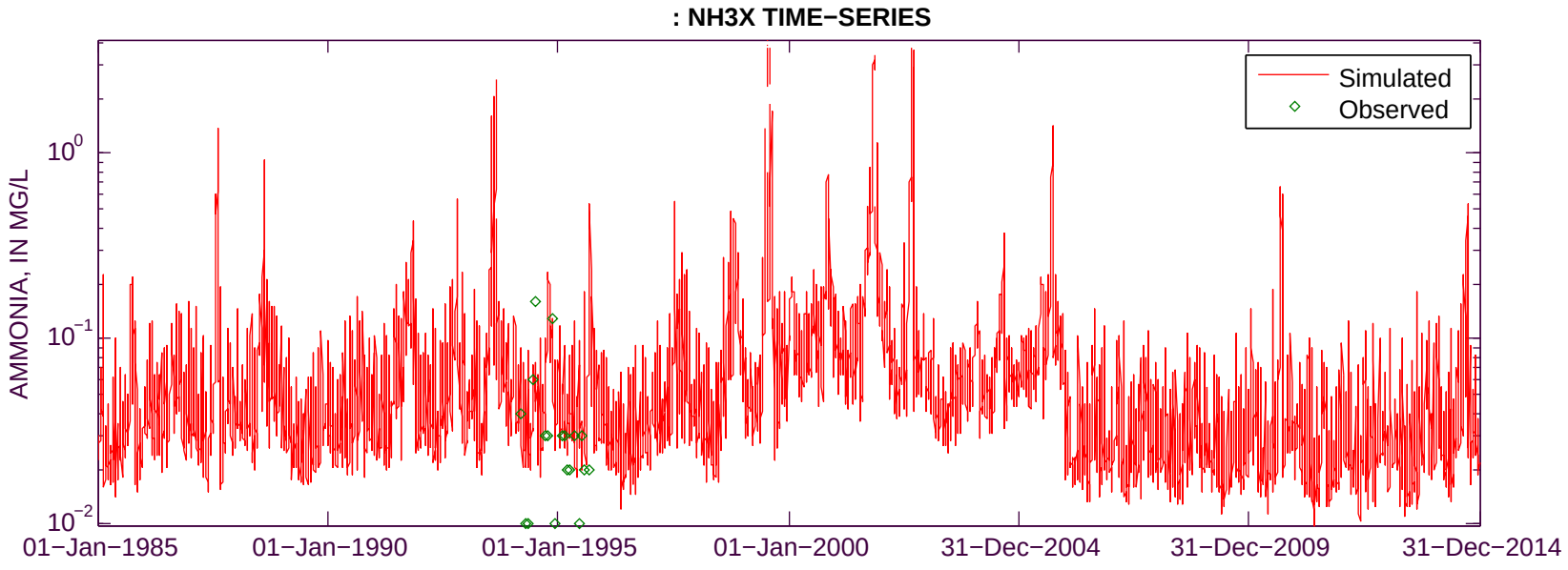
Dates: 1/1/1985 – 12/31/201

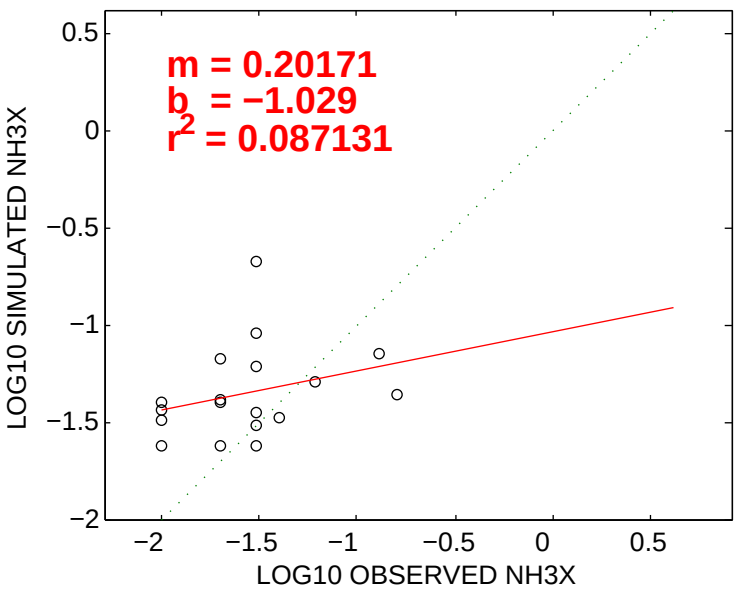
Drive	Directory	Observed
N/A	model	OBS20161101

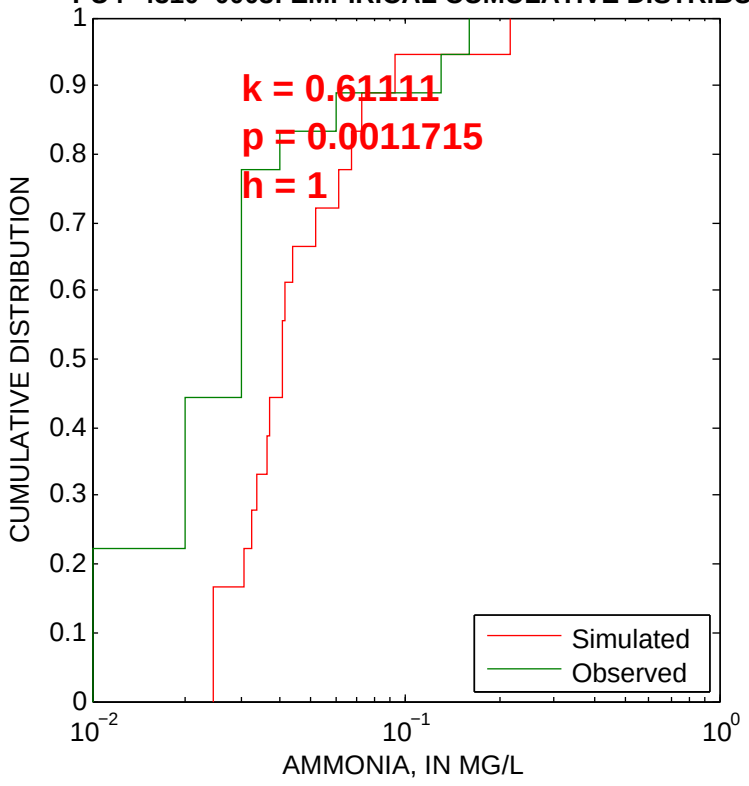
STATISTICS

	n	observe	simulate
		3287	3240
min		64	0
		1.80618	-4.67219
mean		1299.24	1169.17
		2.79614	2.72273
media		565	672.83
		2.76343	2.83823
max		64600	26710
		4.81023	4.42667
varian		6.24549e+0	3.58454e+
		0.253076	0.451201
JB		0.001	0.001
		0.001	0.001
		ra	log
%		-10.0114	-2.62537
err.va		1.57449e+0	0.14544
rel.std.err		0.252101	0.574687
mod.eff		0.747899	0.425313

VERSION 2.1







DATA SELECTION

scenario	file
P620171001WQ	NH3X.calib

plot: NH3X - ammonia

Dates: 1/1/1985 – 12/31/201

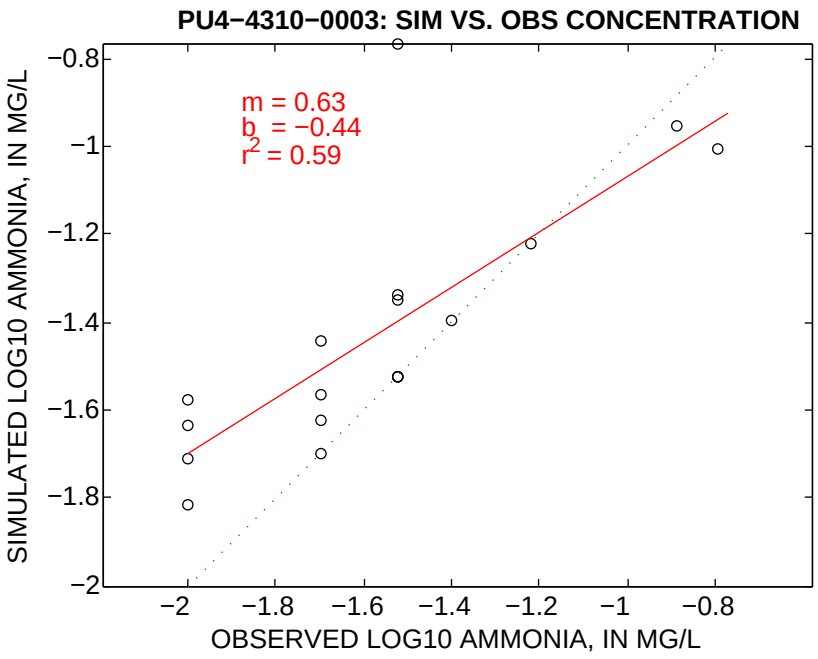
Drive	Directory	Observed
N/A	model	OBS20161101

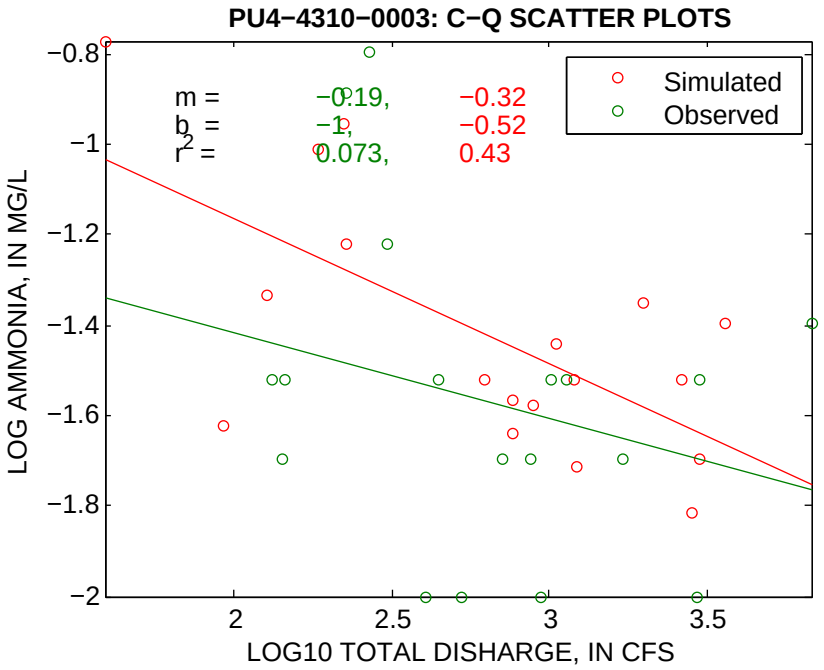
STATISTICS

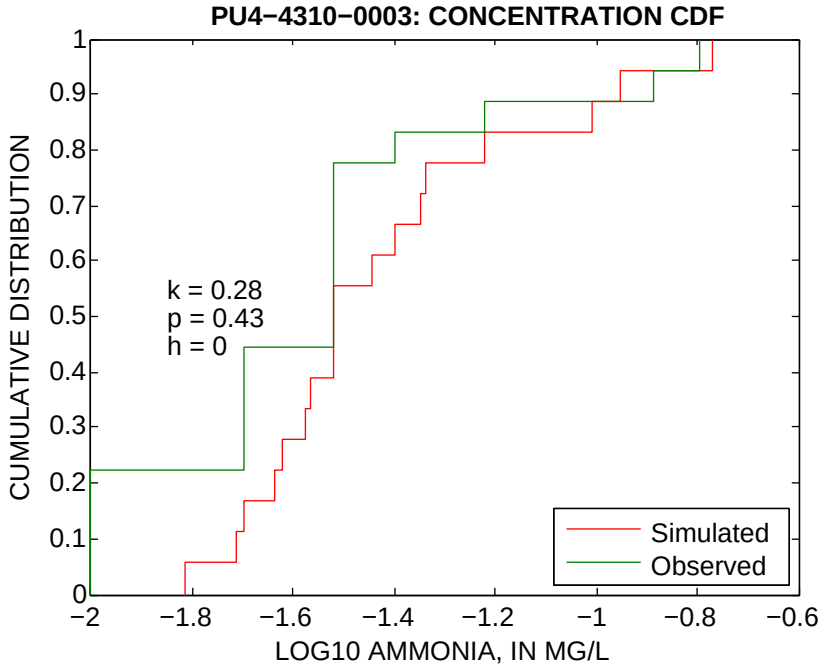
	n	18	18
		observe	simulate
min		0.01	0.024377
		-2	-1.61302
mean		0.0383333	0.0539334
		-1.5686	-1.34537
media		0.03	0.0406795
		-1.52288	-1.39062
max		0.16	0.21569
		-0.79588	-0.66617
varian		0.00168529	0.00196841
		0.11984	0.0559581
JB		0.001068	0.001
		0.17668	0.013865
		ra	log
%		40.6958	-14.2315
err.va		0.00364187	0.180219
rel.std.err		2.16097	1.50384
mod.eff		-1.16097	-0.503836

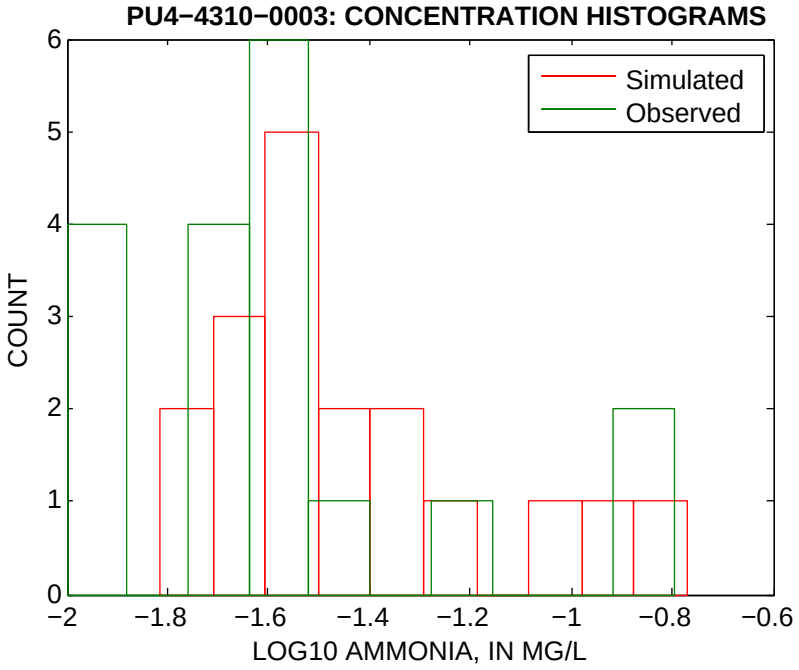
VERSION 2.1

ALL DATA
LOG10

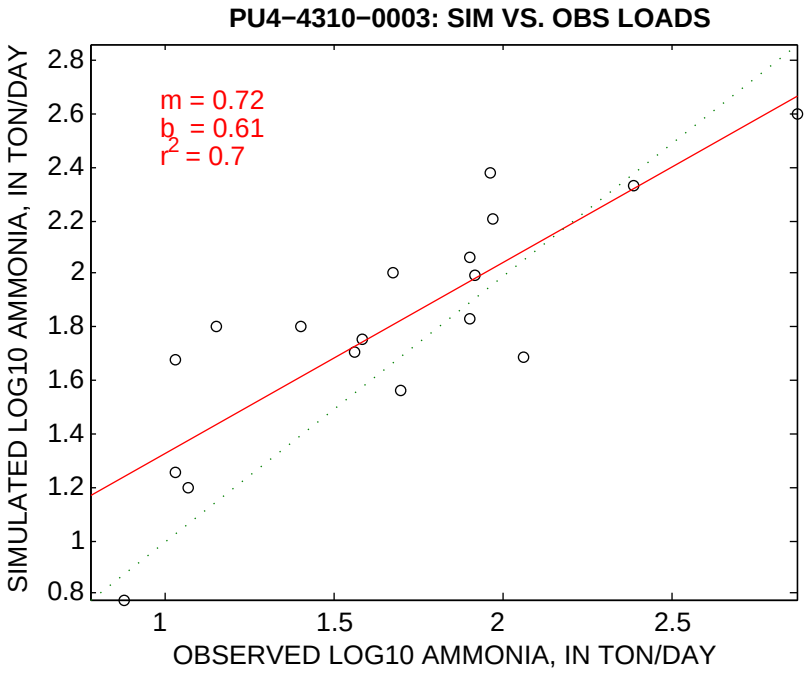


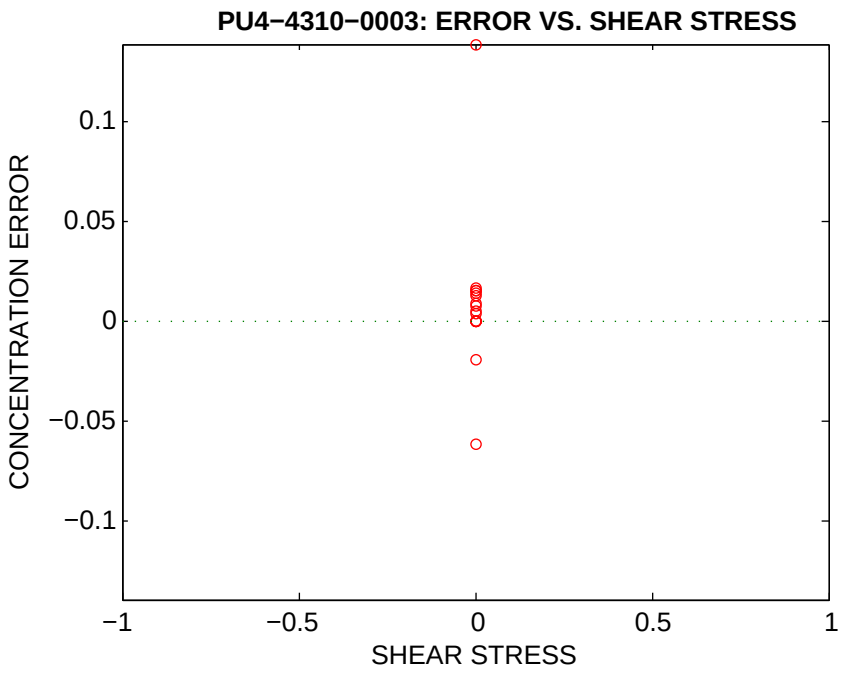


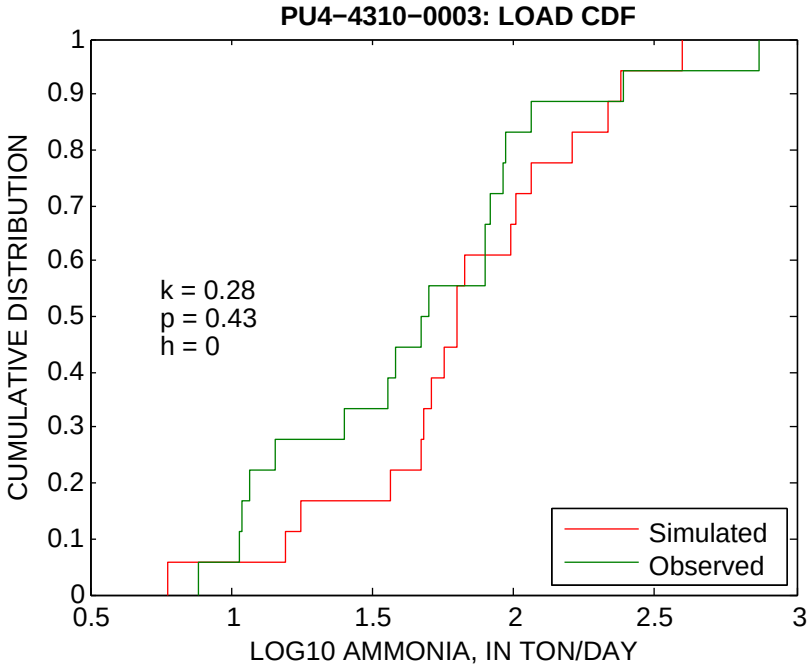


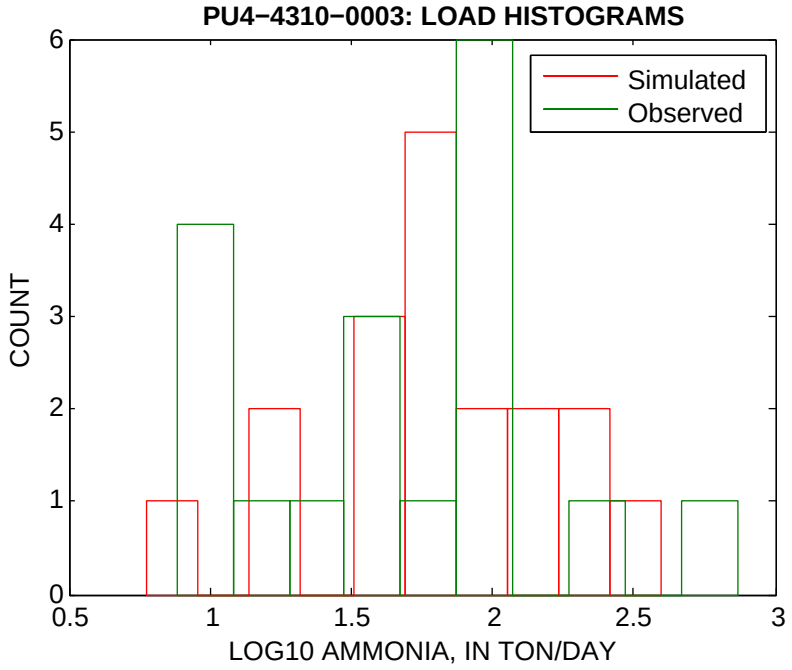


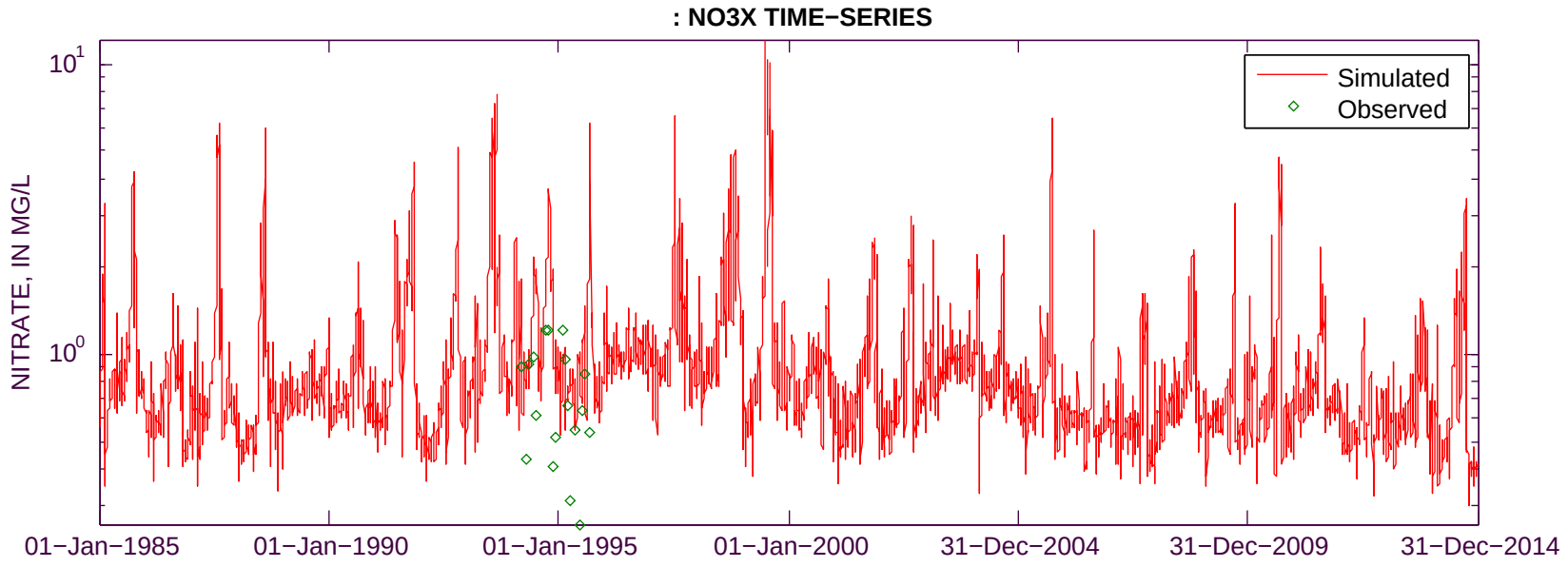
LOAD DATA
LOG10

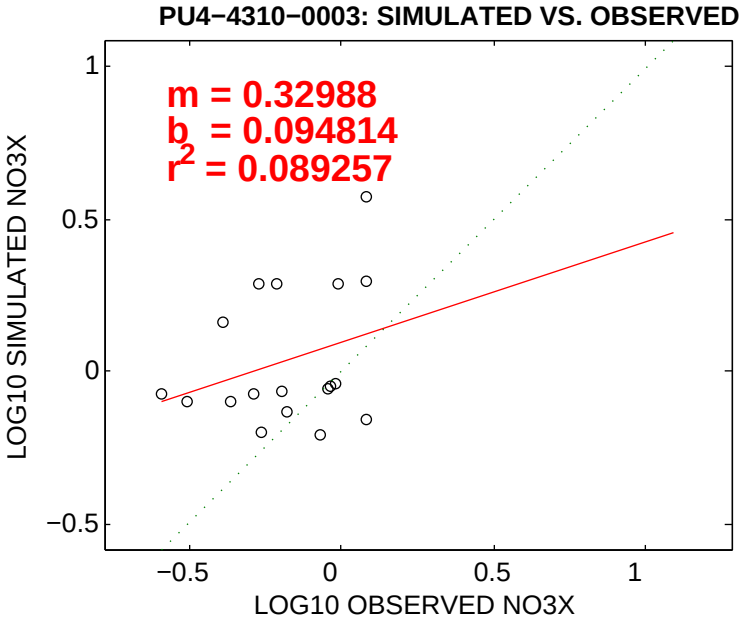


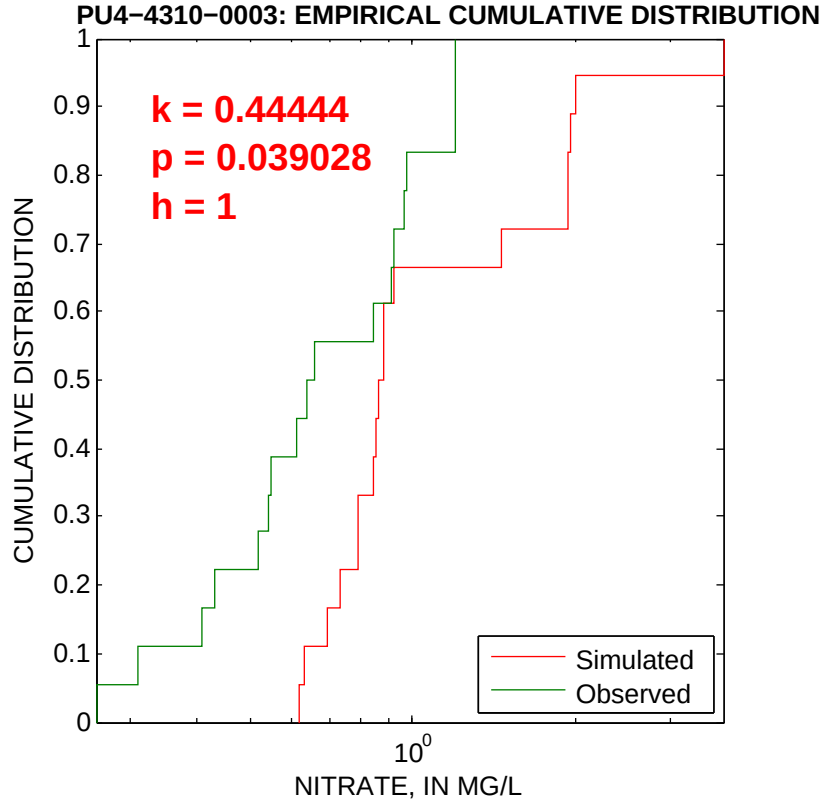












DATA SELECTION

scenario	file
P620171001WQ	NO3X.calib

plot: NO3X - nitrate

Dates: 1/1/1985 – 12/31/201

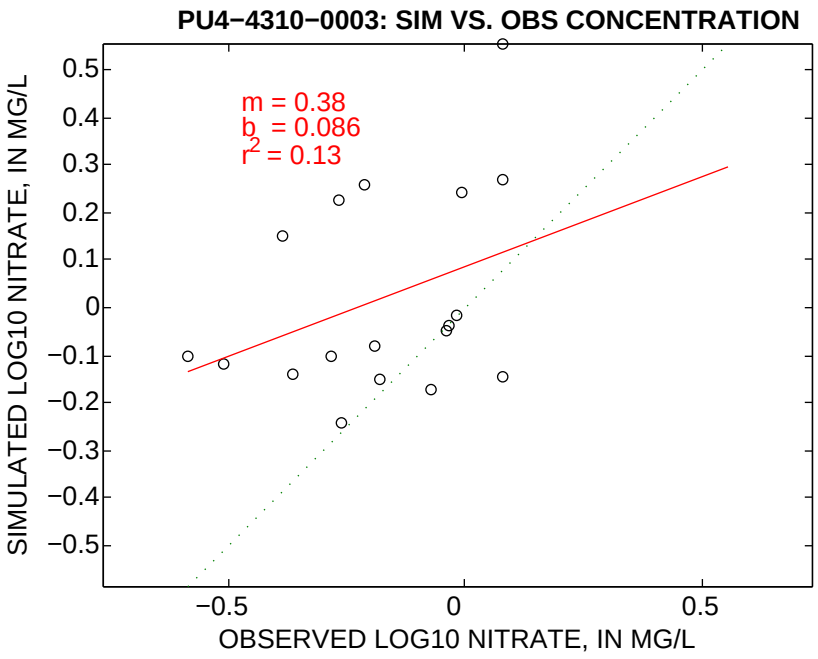
Drive	Directory	Observed
N/A	model	OBS20161101

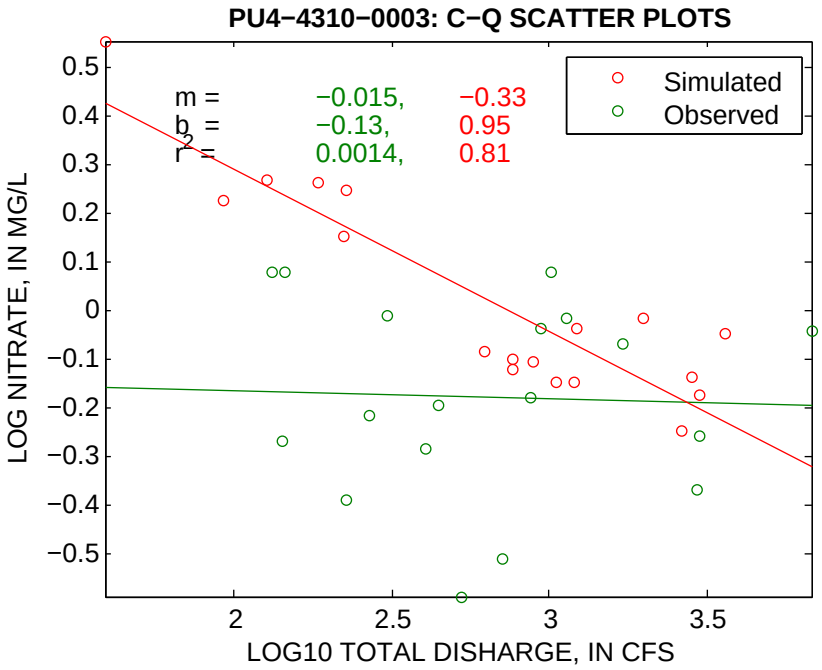
STATISTICS

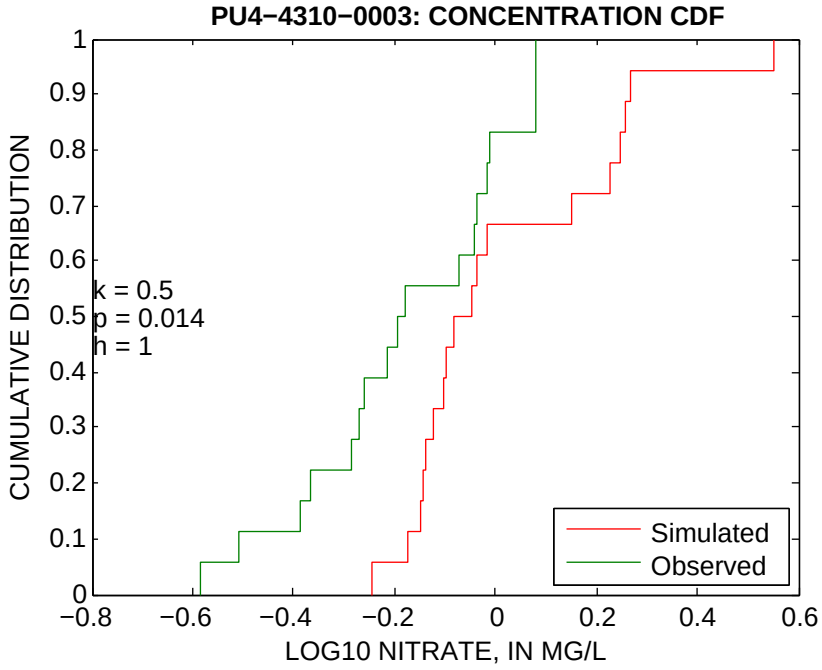
	n	18	18
		observe	simulate
min		0.26	0.62028
		-0.585027	-0.207412
mean		0.730556	1.25212
		-0.176906	0.0364558
media		0.65	0.87602
		-0.187138	-0.0574987
max		1.2	3.7378
		0.0791812	0.572616
varian		0.0935703	0.636502
		0.0402936	0.0491259
JB		0.339672	0.002271
		0.409317	0.074159
		ra	log
%		71.3932	-120.607
err.va		0.823877	0.111036
rel.std.err		8.8049	2.75569
mod.eff		-7.8049	-1.75569

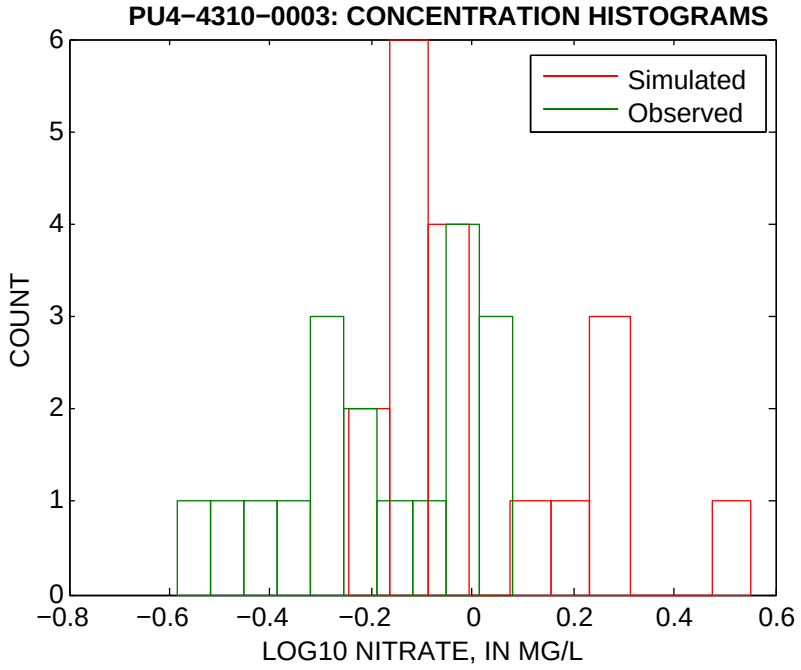
VERSION 2.1

ALL DATA
LOG10

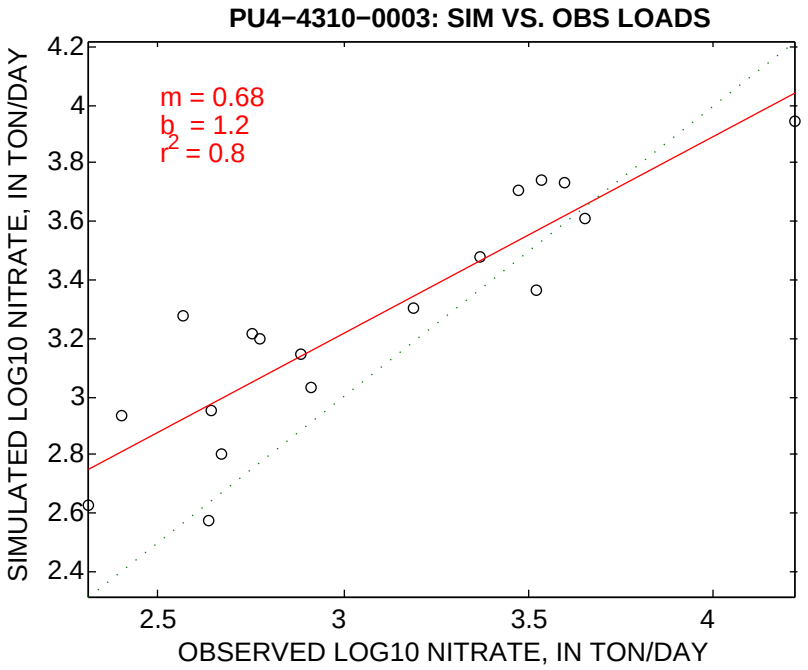




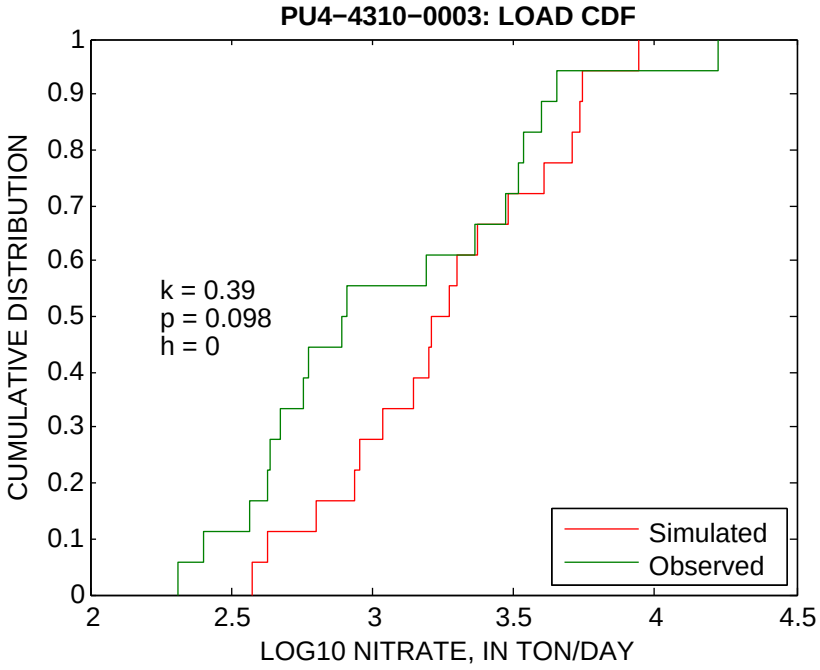


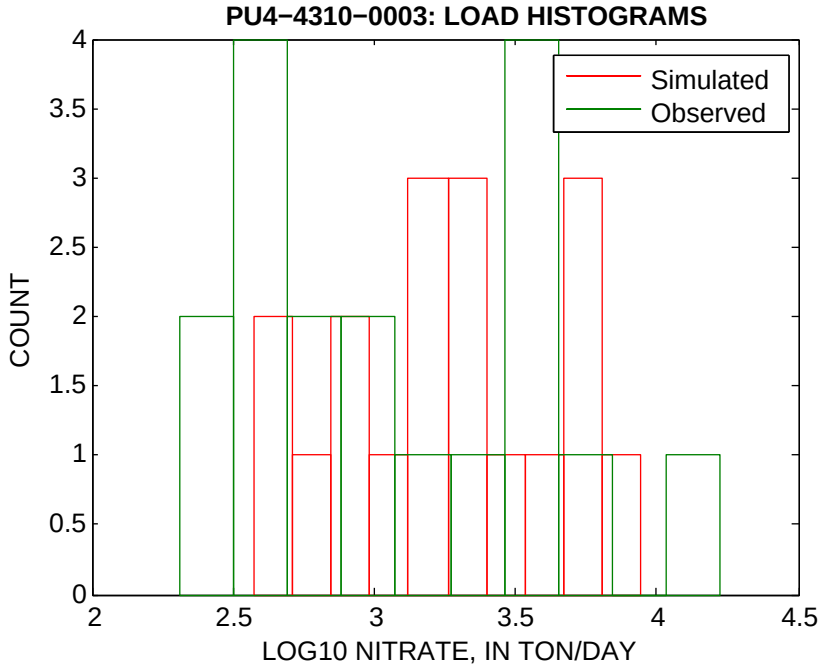


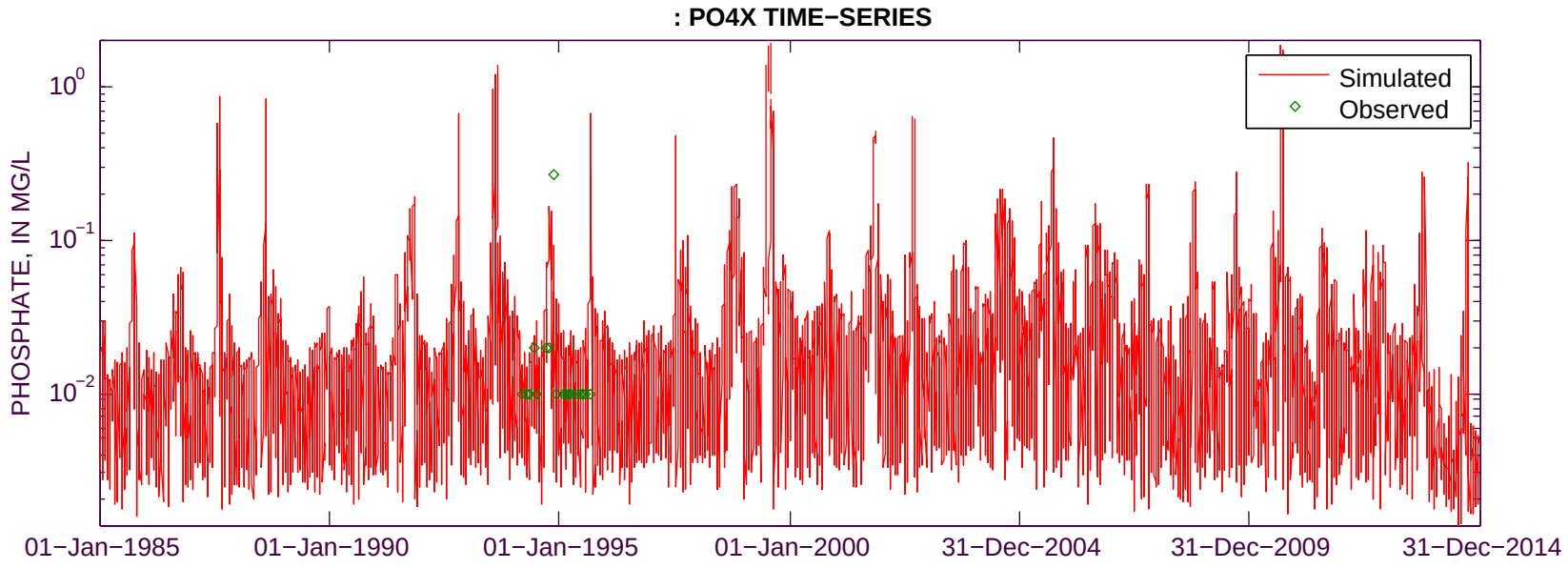
LOAD DATA
LOG10

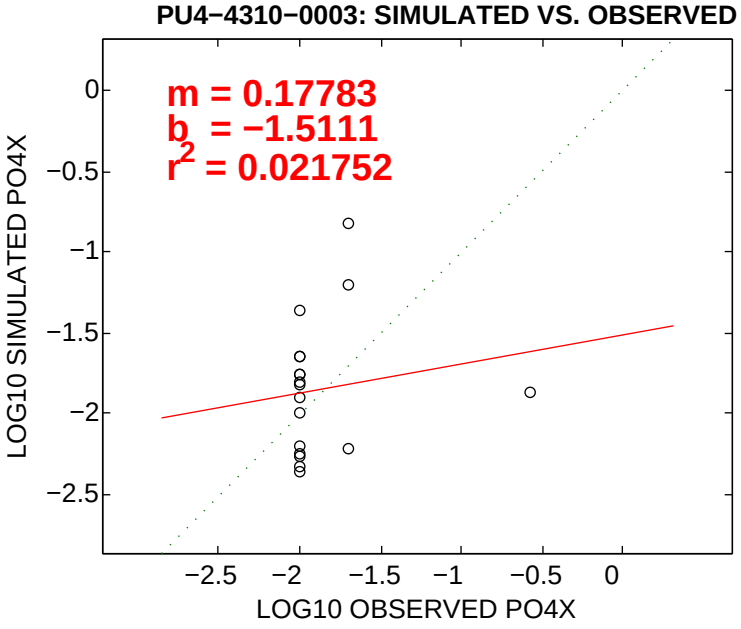


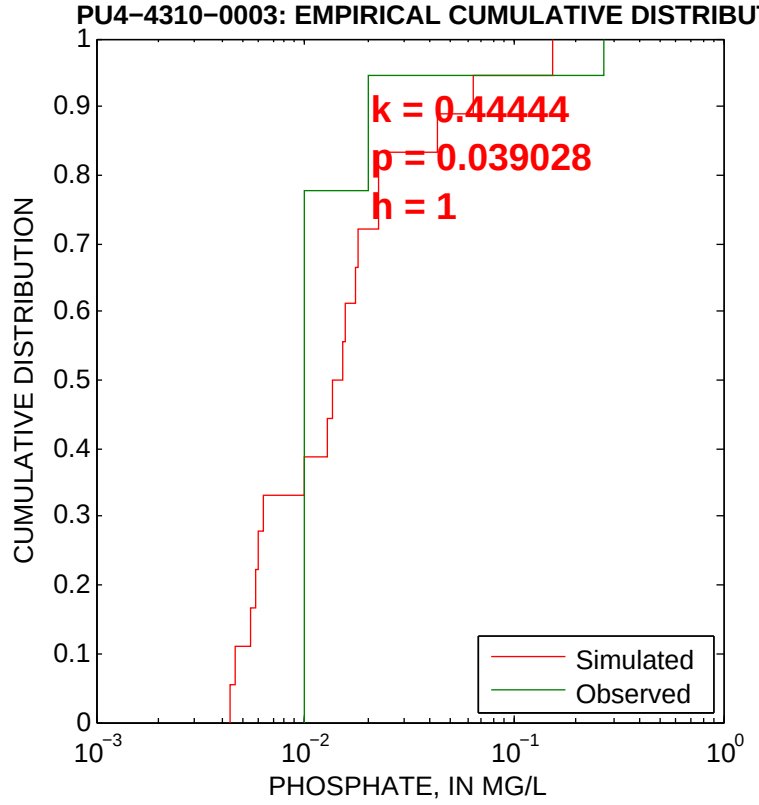












DATA SELECTION

scenario	file
P620171001WQ	PO4X.calib

plot: PO4X - phosphate

Dates: 1/1/1985 – 12/31/201

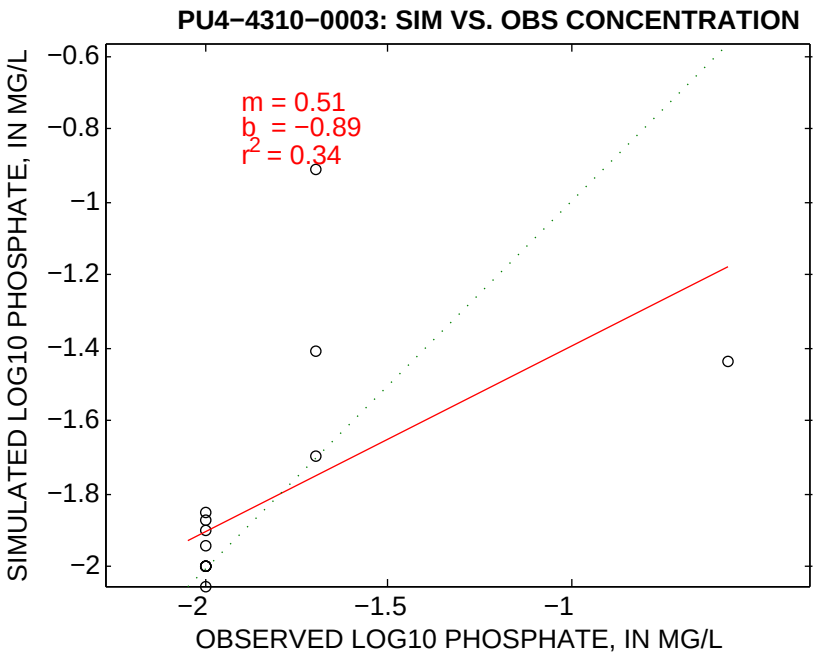
Drive	Directory	Observed
N/A	model	OBS20161101

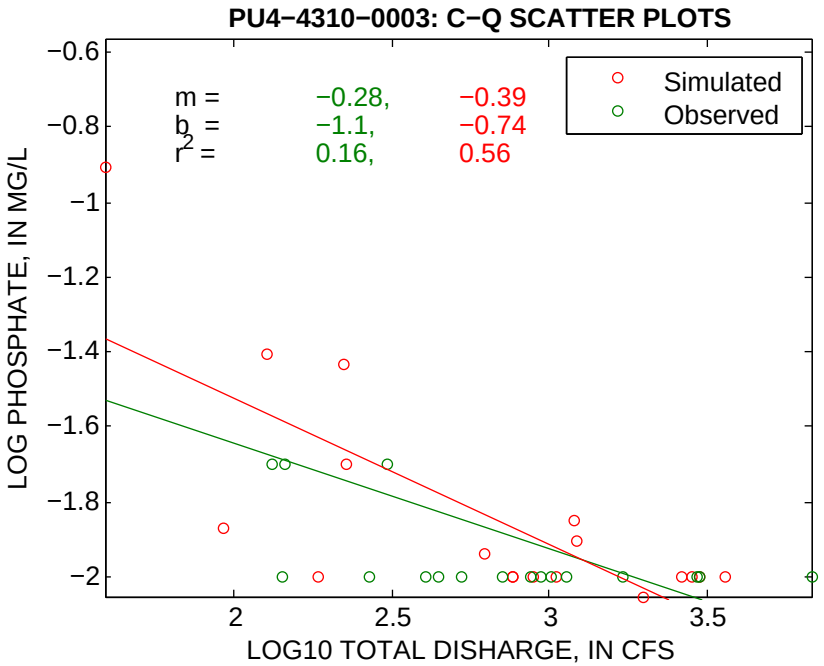
STATISTICS

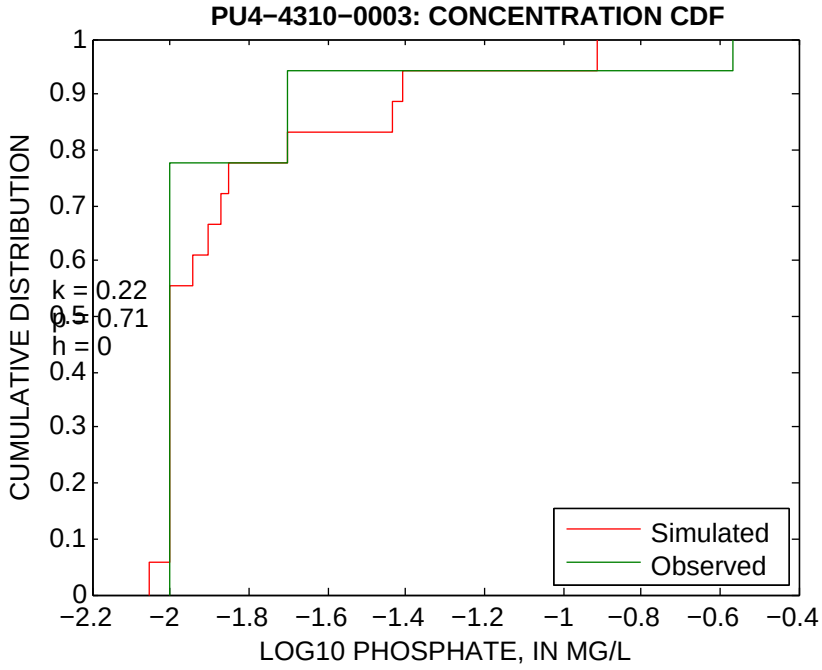
	n	18	18
		observe	simulate
min		0.01	0.0043439
		-2	-2.36212
mean		0.0261111	0.024392
		-1.87031	-1.84368
media		0.01	0.0144085
		-2	-1.84202
max		0.27	0.15242
		-0.568636	-0.816958
varian		0.00371928	0.00124472
		0.1187	0.172566
JB		0.001	0.001
		0.001	0.108092
		ra	log
%		-6.5837	-1.42393
err.va		0.00512132	0.249801
rel.std.err		1.37697	2.10447
mod.eff		-0.376965	-1.10447

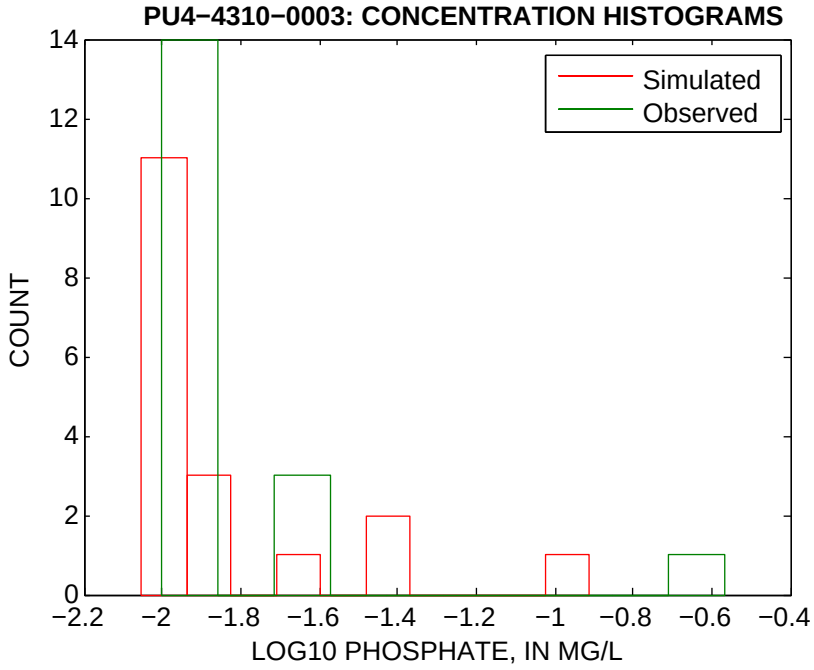
VERSION 2.1

ALL DATA
LOG10

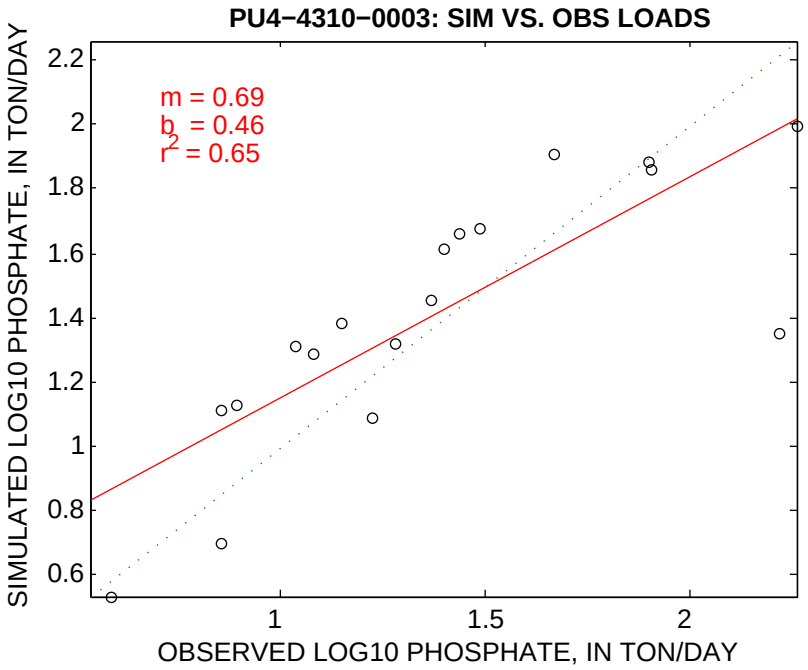


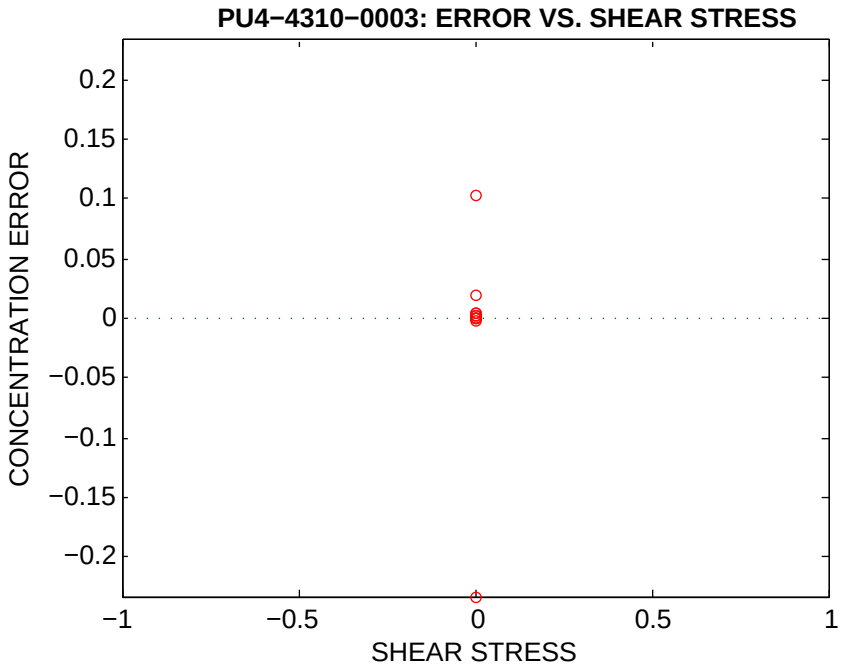


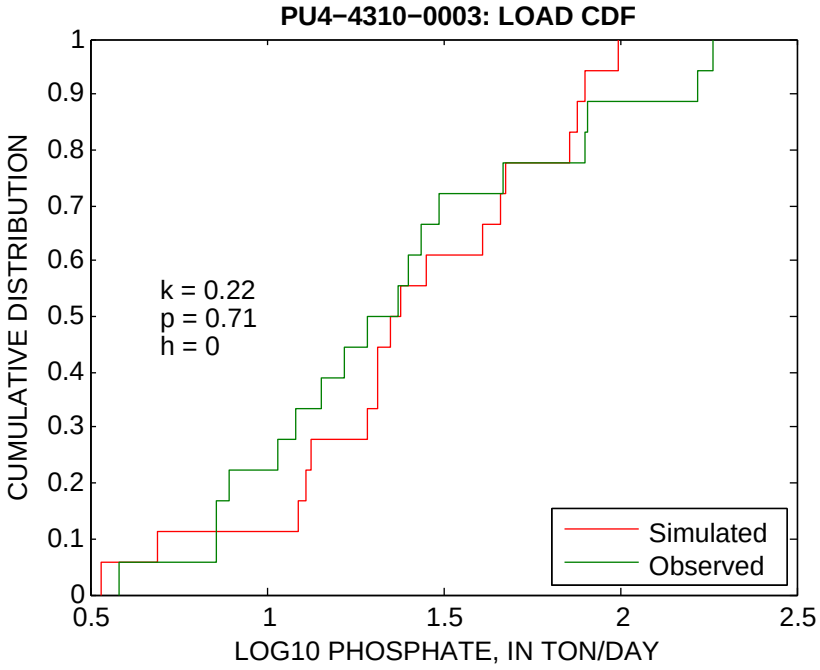


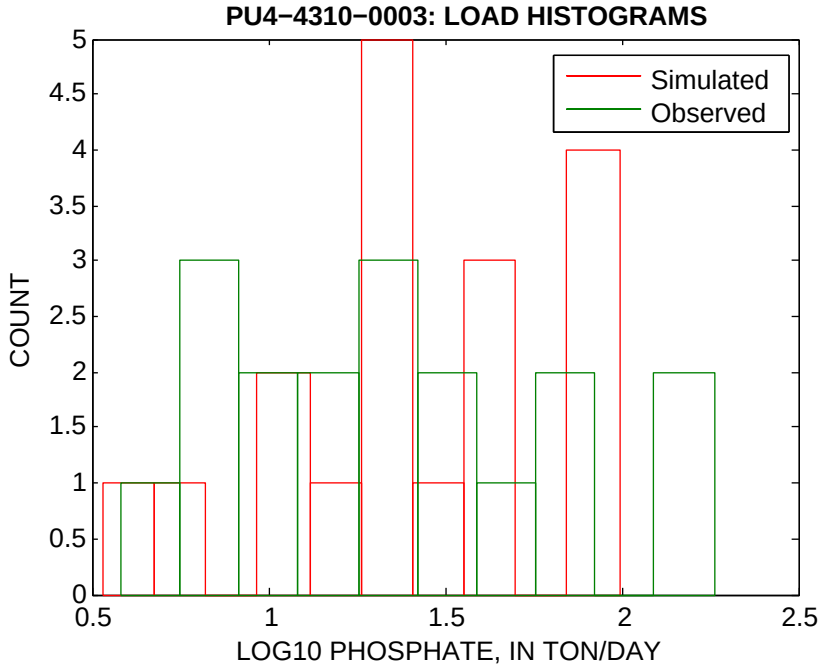


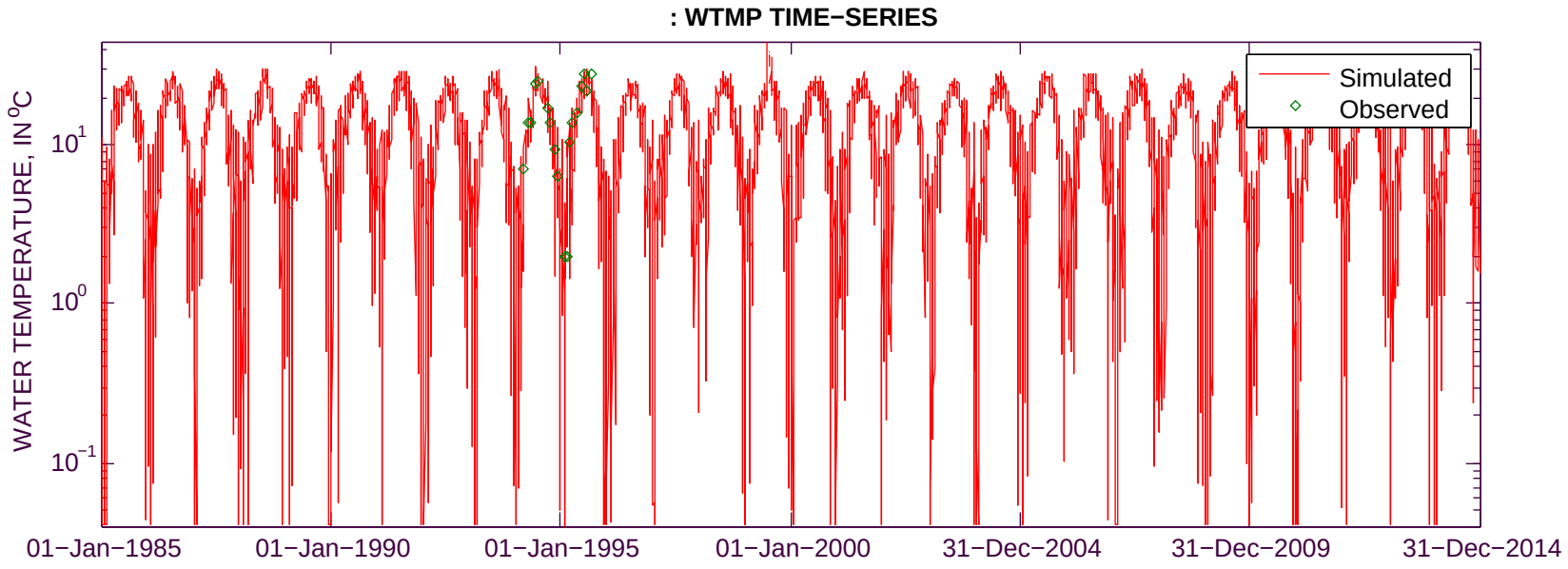
LOAD DATA
LOG10

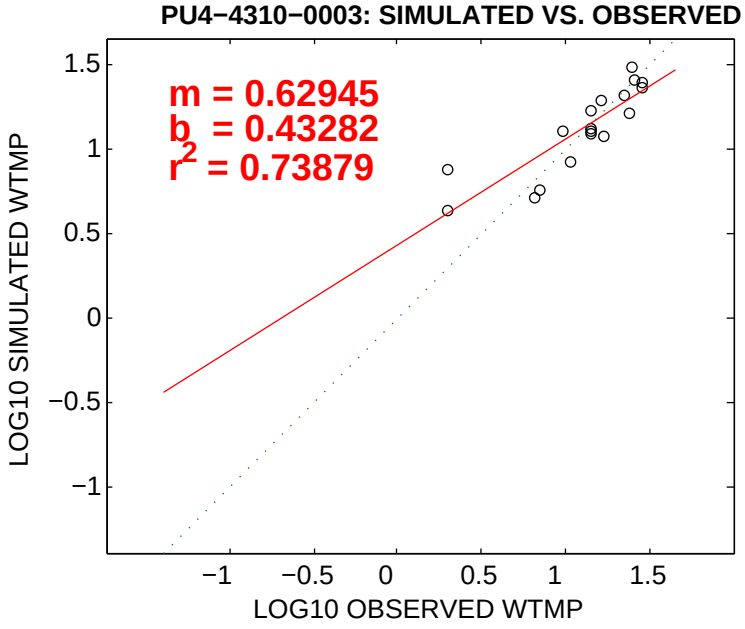


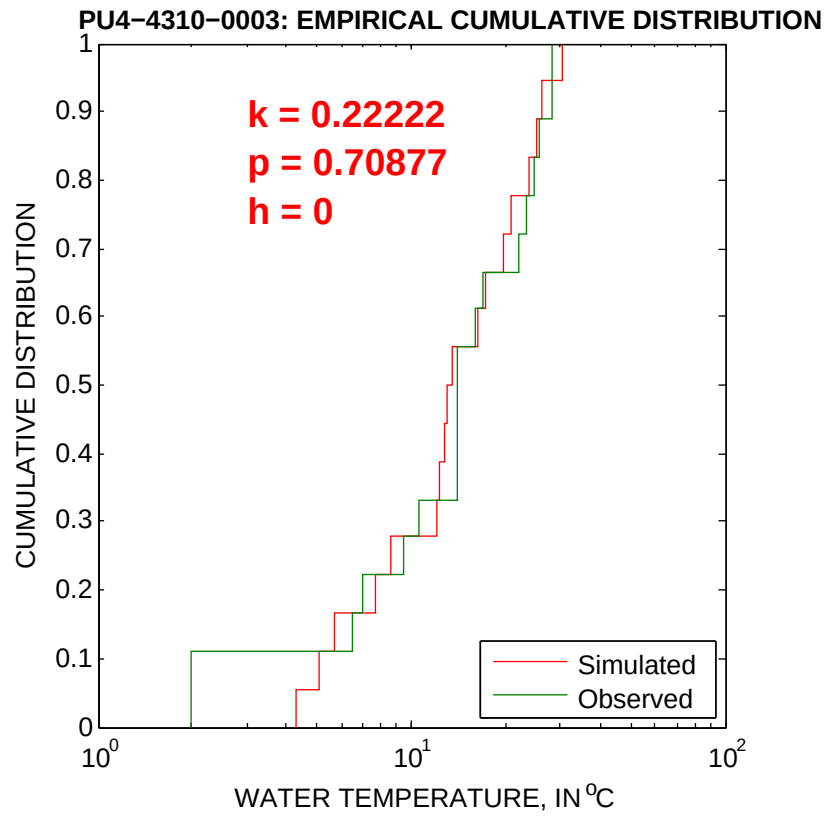


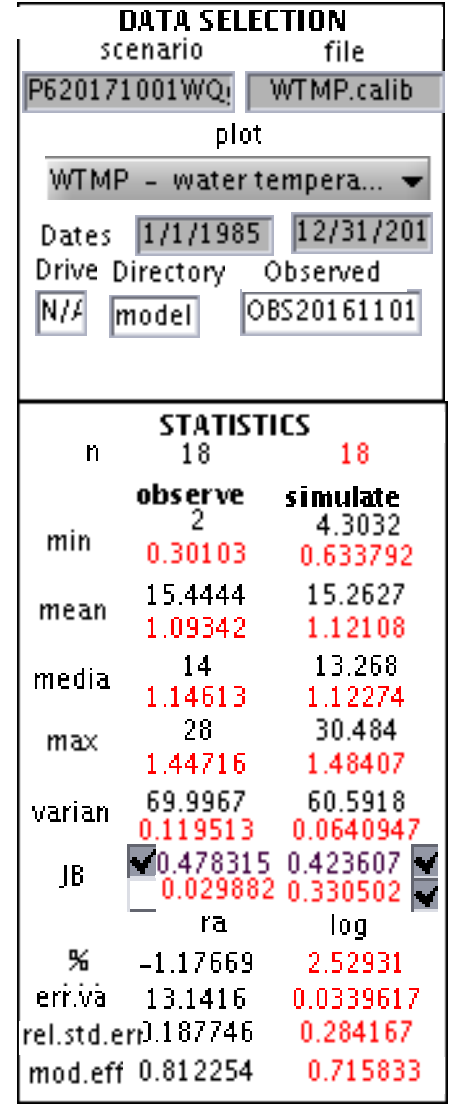





: WTMP TIME−SERIES
WATER TEMPERATURE, IN °C
Simulated
Observed
01−Jan−1985
01−Jan−1990
01−Jan−1995
01−Jan−2000
31−Dec−2004
31−Dec−2009
31−Dec−2014

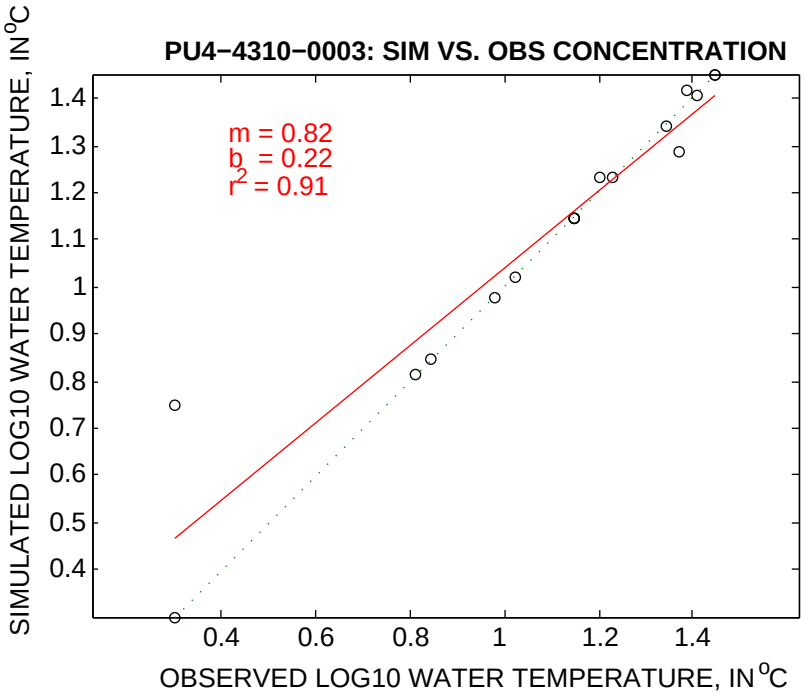

PU4−4310−0003: SIMULATED VS. OBSERVED
m = 0.62945
b = 0.43282
r2 = 0.73879
LOG10 SIMULATED WTMP
LOG10 OBSERVED WTMP

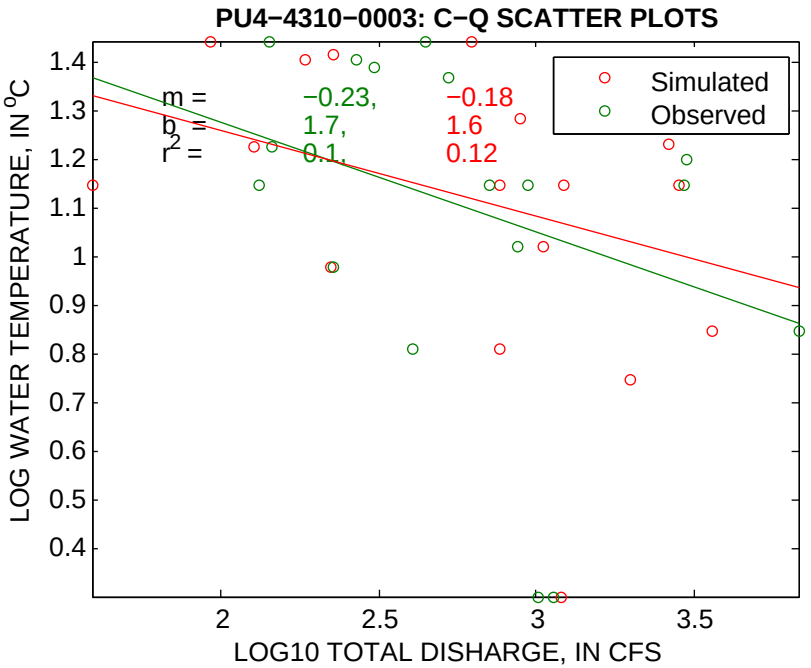

PU4−4310−0003: EMPIRICAL CUMULATIVE DISTRIBUTION
k = 0.22222
p = 0.70877
h = 0
CUMULATIVE DISTRIBUTION
Simulated
Observed
WATER TEMPERATURE, IN °C

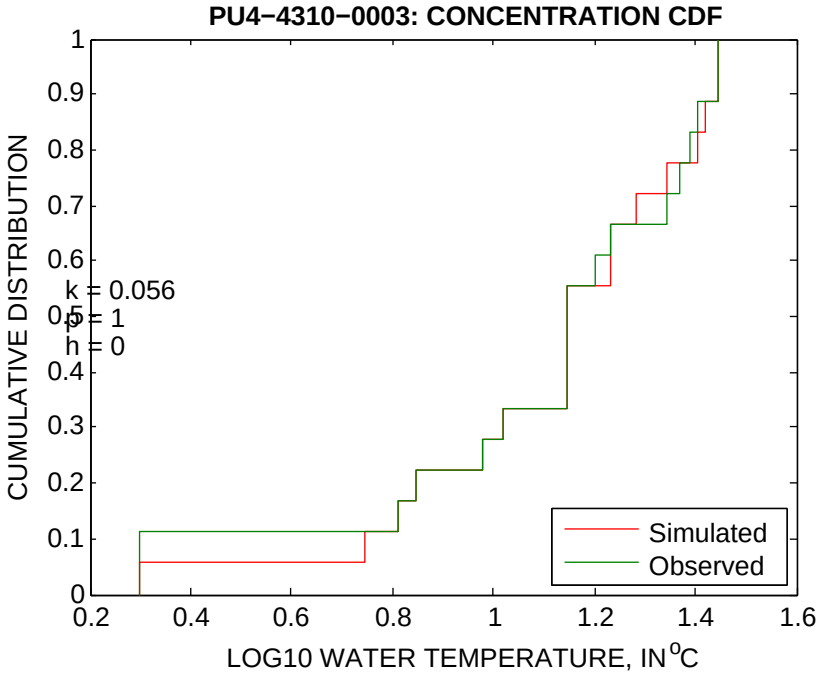

DATA SELECTION
scenario
file
P620171001WQ
WTMP.calib
plot
WTMP - water tempera...
Dates
1/1/1985
12/31/201
Drive
Directory
Observed
N/A
model
OBS20161101
STATISTICS
n 18 18
observe simulate
min 2 4.3032
0.30103 0.633792
mean 15.4444 15.2627
1.09342 1.12108
media 14 13.268
1.14613 1.12274
max 28 30.484
1.44716 1.48407
varian 69.9967 60.5918
0.119513 0.0640947
JB 0.478315 0.423607
0.029882 0.330502
ra log
% -1.17669 2.52931
err.va 13.1416 0.0339617
rel.std.err 0.187746 0.284167
mod.eff 0.812254 0.715833

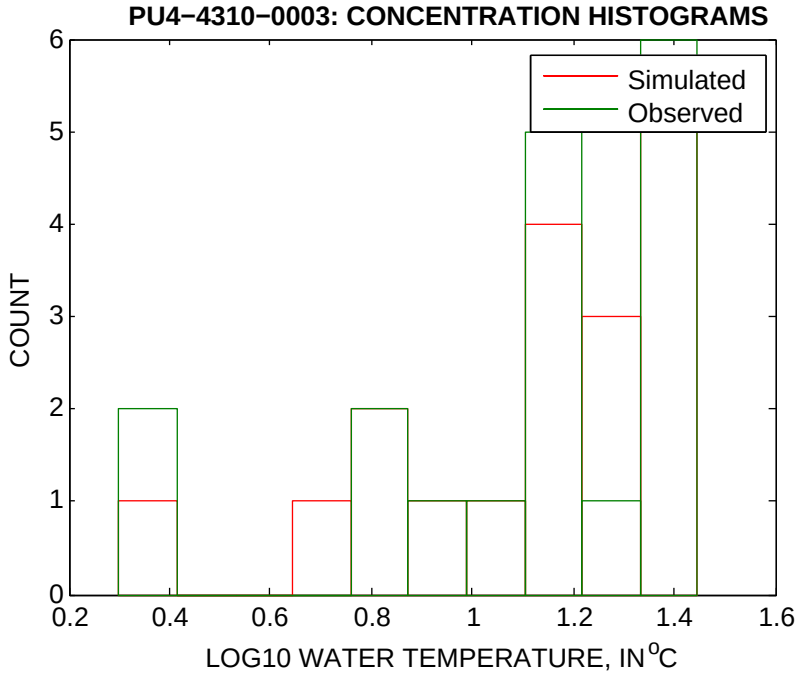
VERSION

ALL DATA
LOG10

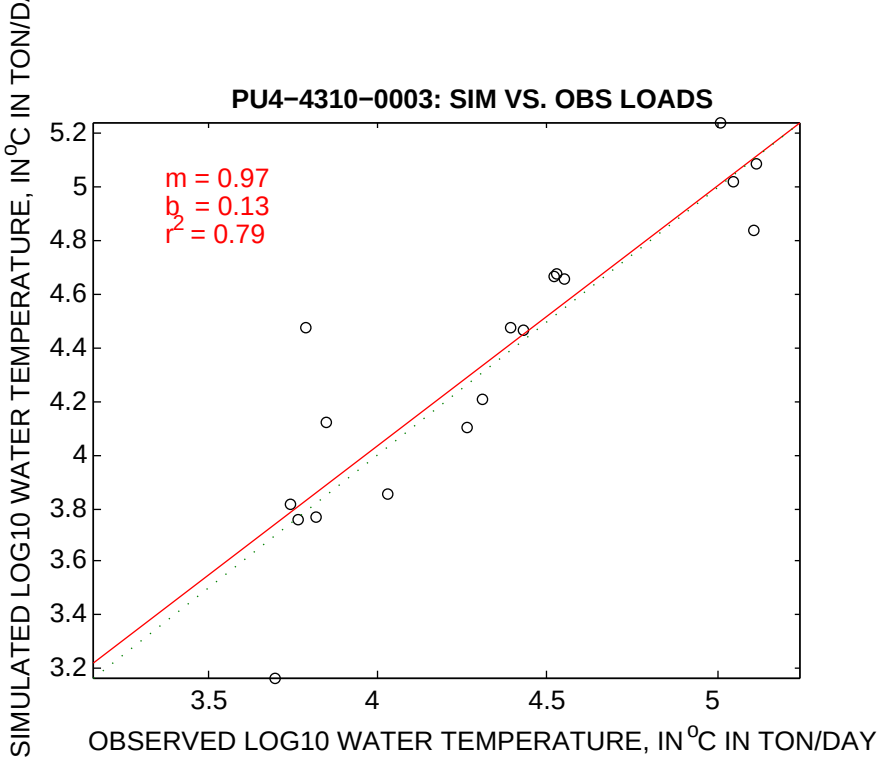


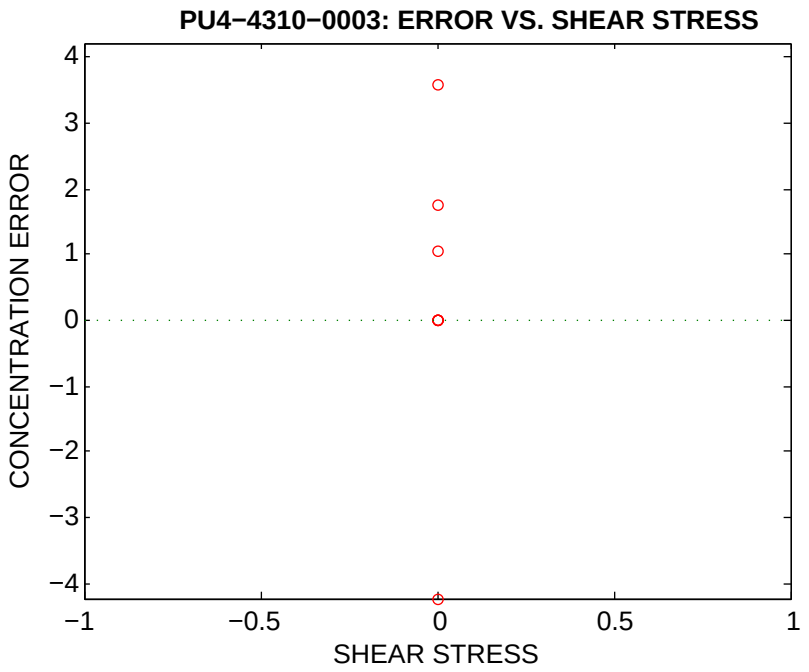


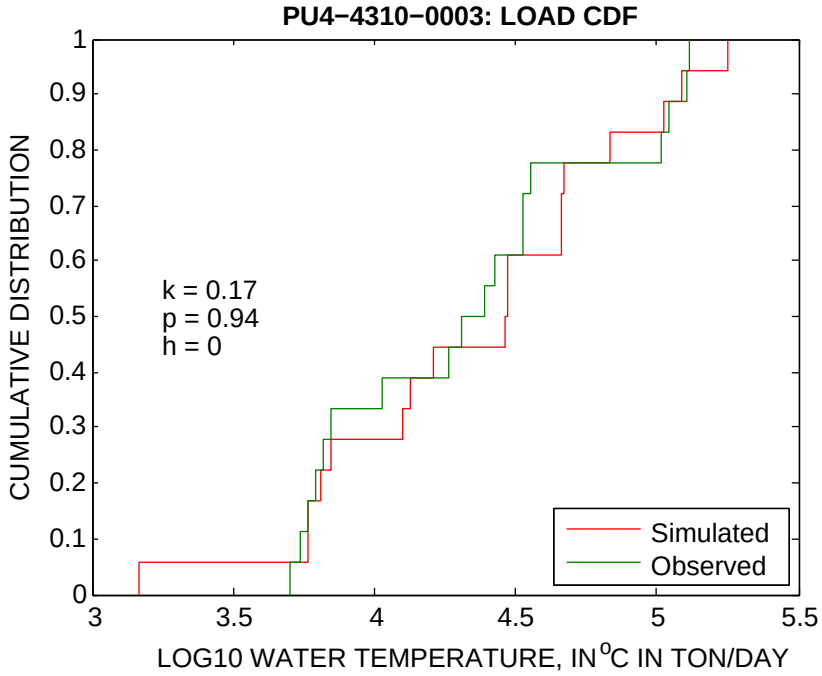


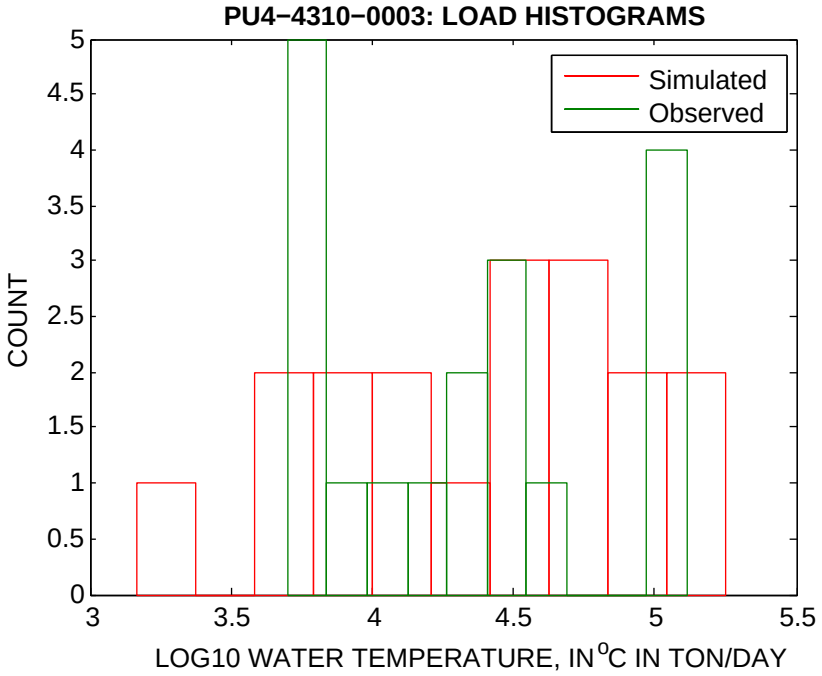


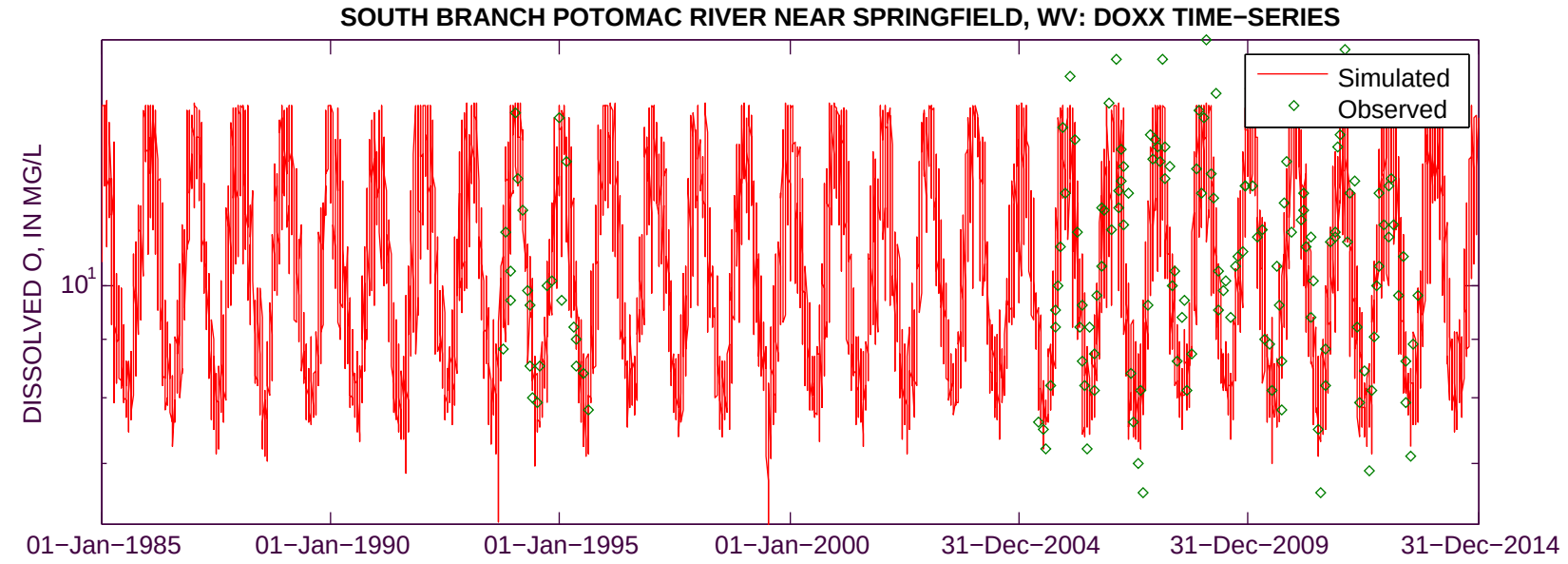
LOAD DATA
LOG10

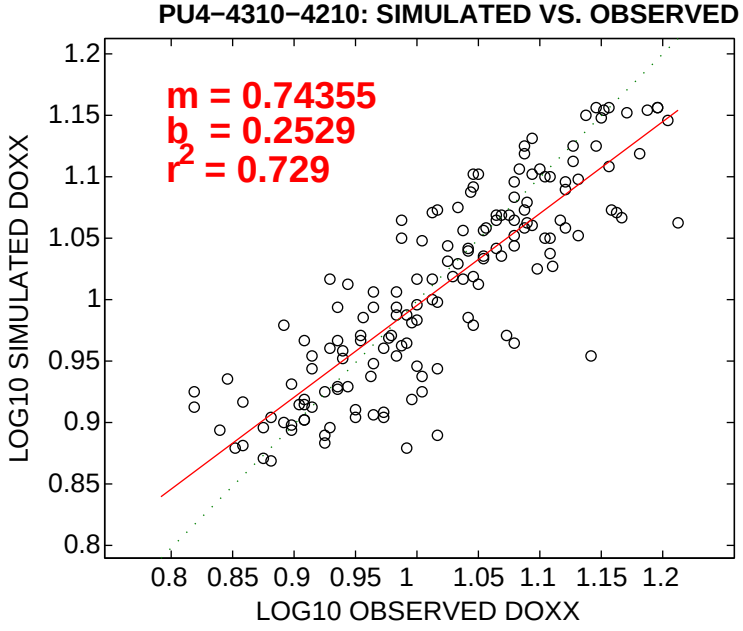


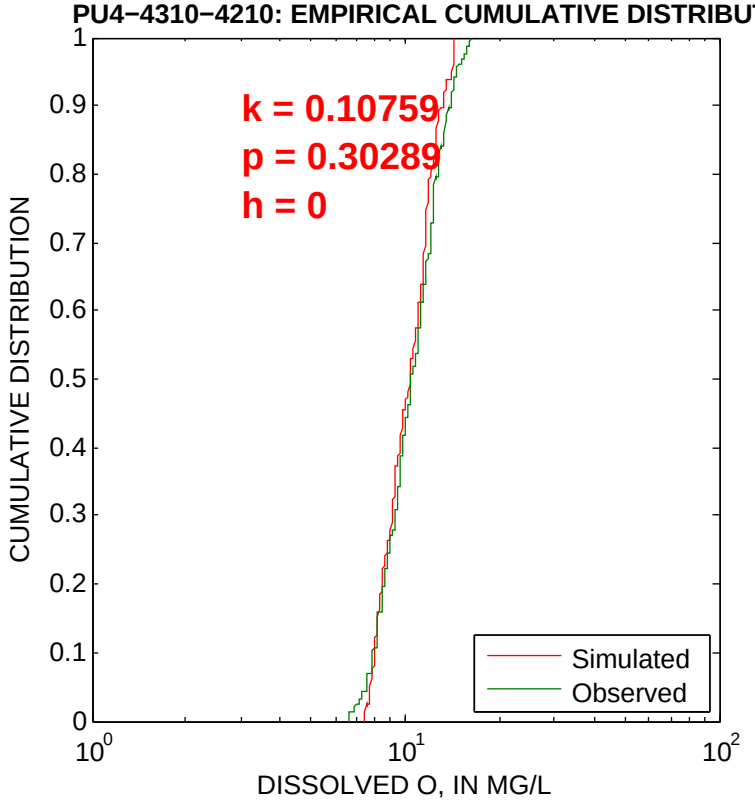












DATA SELECTION

scenario	file
P620171001WQ	DOXX.calib

plot: DOXX - dissolved oxygen

Dates: 1/1/1985 – 12/31/201

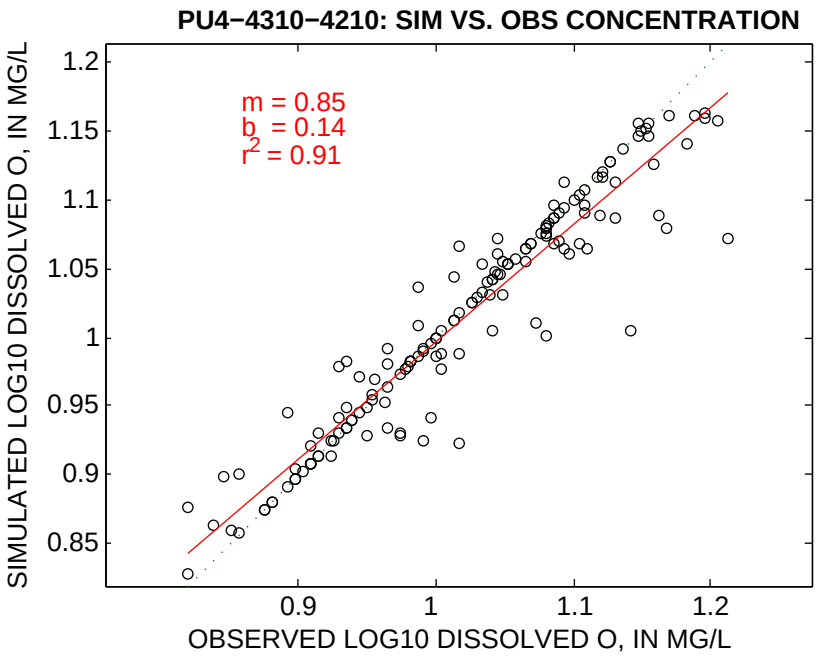
Drive	Directory	Observed
N/A	model	OBS20161101

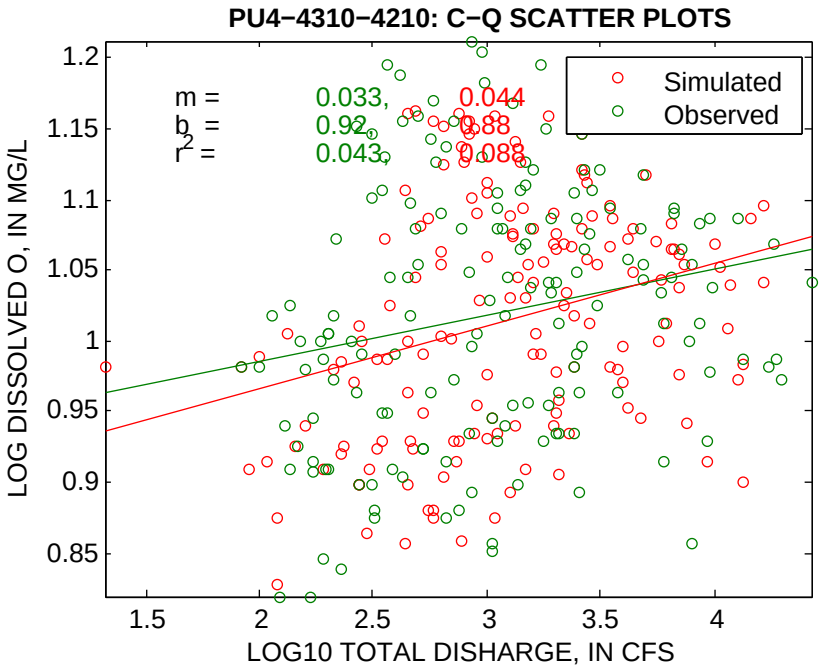
STATISTICS

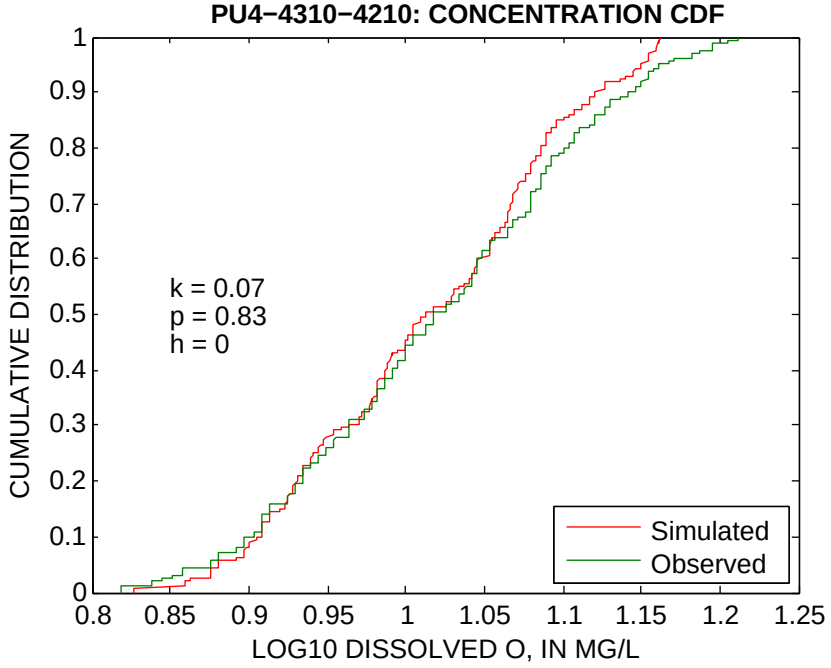
	n	158	158
		observe	simulate
min		6.6	7.4071
		0.819544	0.869648
mean		10.6987	10.4335
		1.01987	1.01122
media		10.4	10.4085
		1.01703	1.01739
max		16.3	14.359
		1.21219	1.15712
varian		5.01969	3.65205
		0.00831556	0.00630642
JB		0.050140	0.026377
		0.105416	0.026583
		ra	log
%		-2.47905	-0.848232
err.va		1.43627	0.00233126
rel.std.err		0.286127	0.280348
mod.eff		0.713873	0.719652

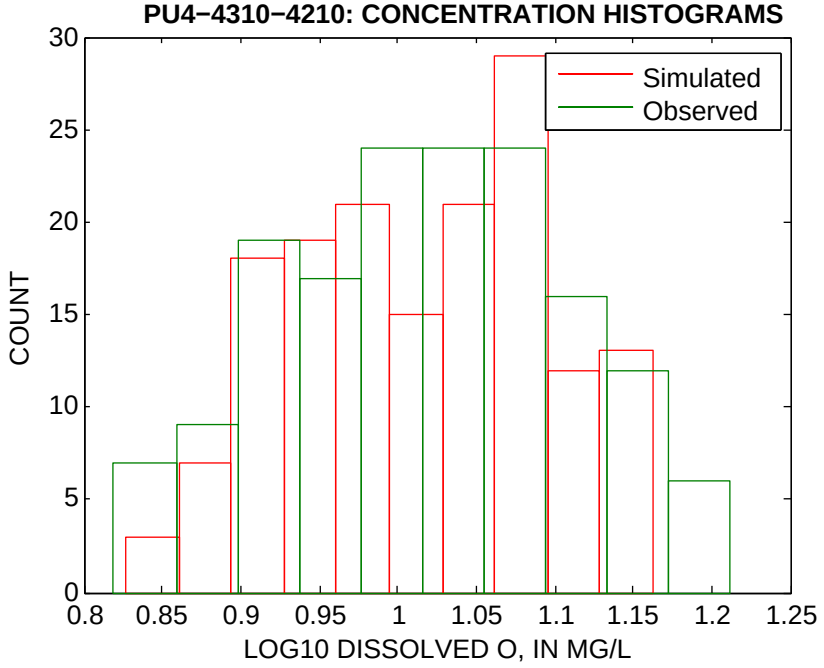
VERSION 2.1

ALL DATA
LOG10

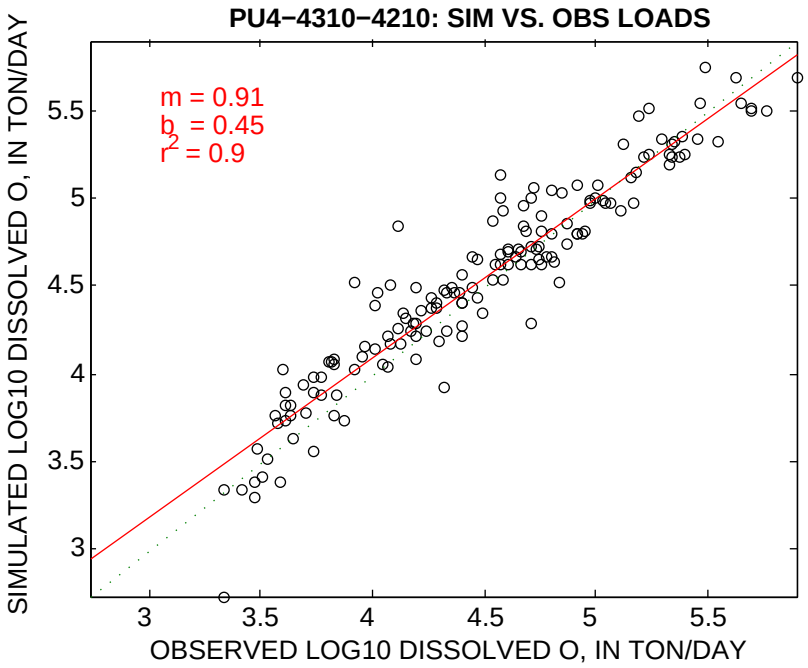


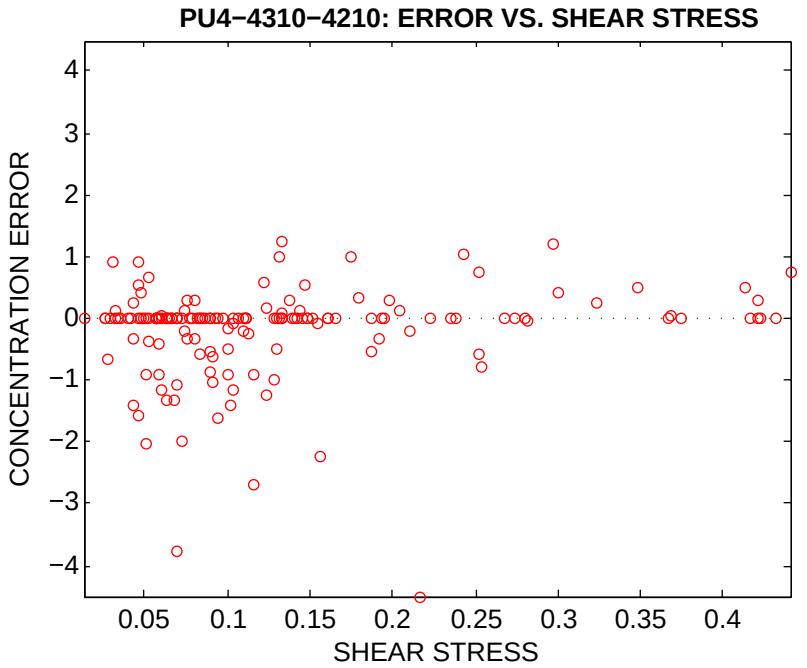


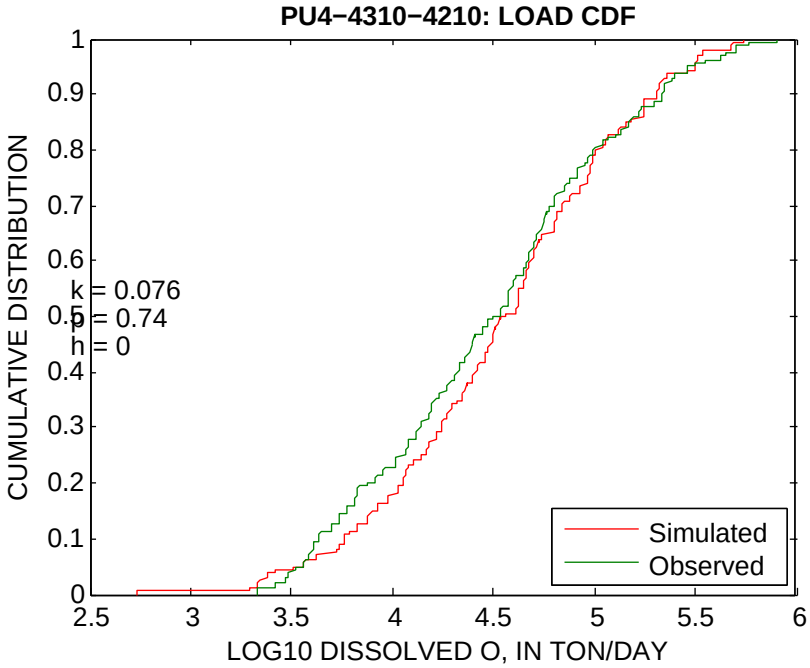


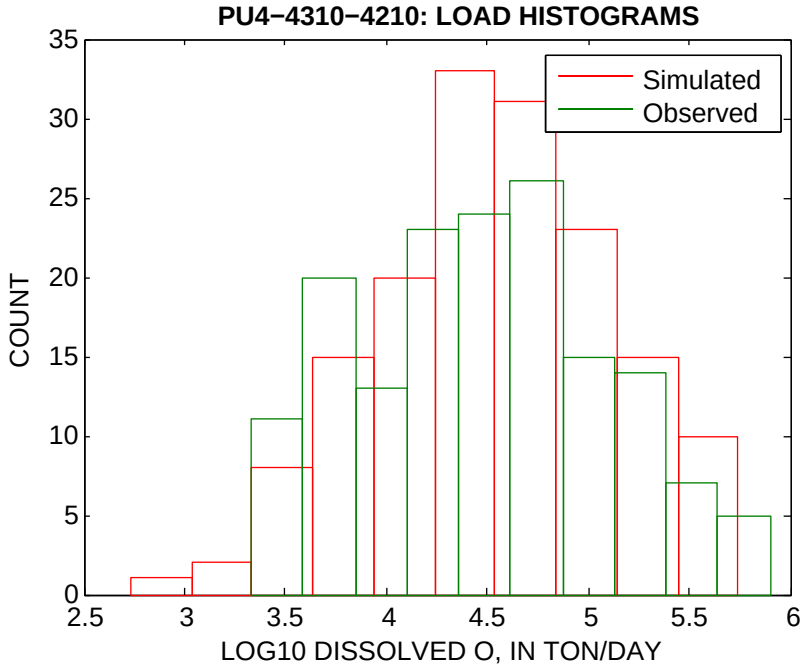


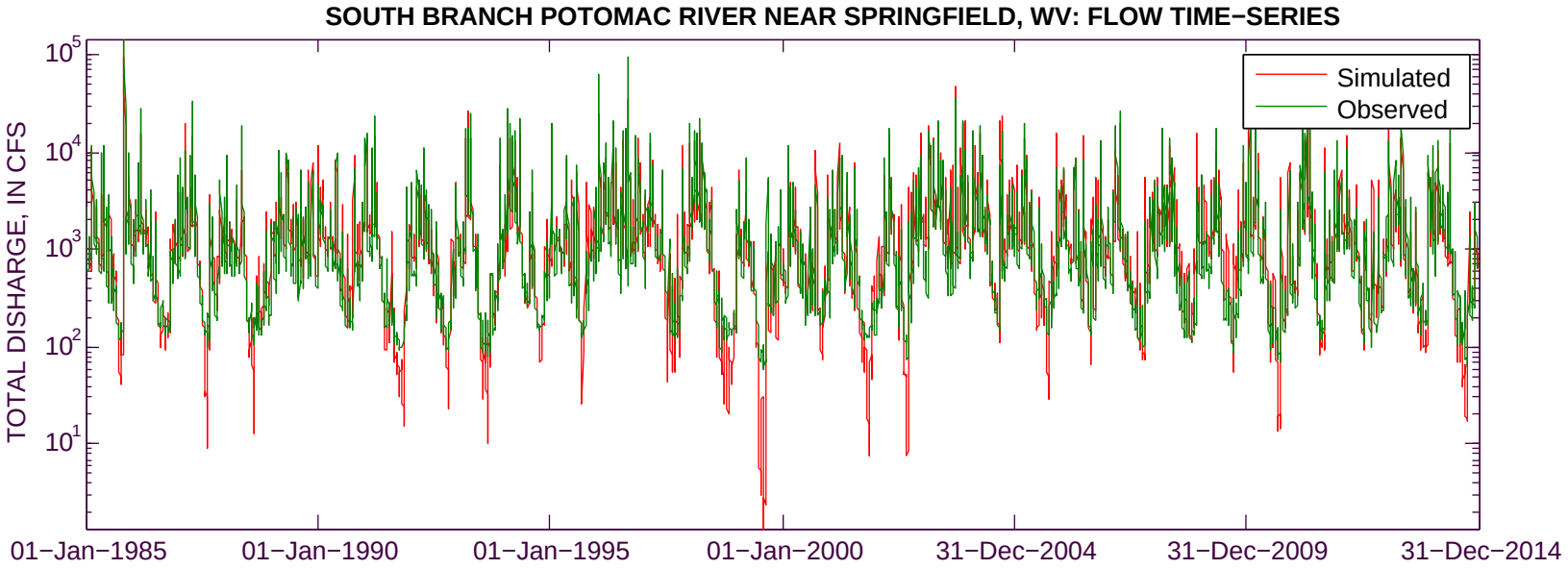
LOAD DATA
LOG10

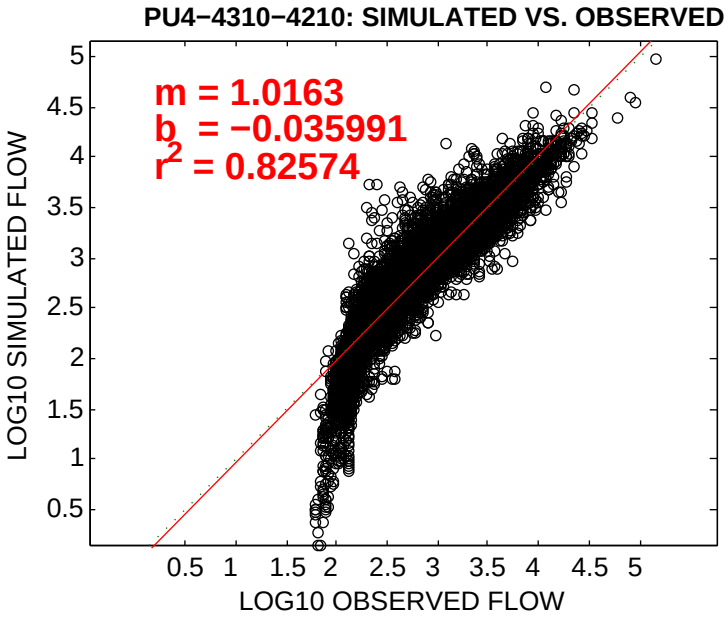


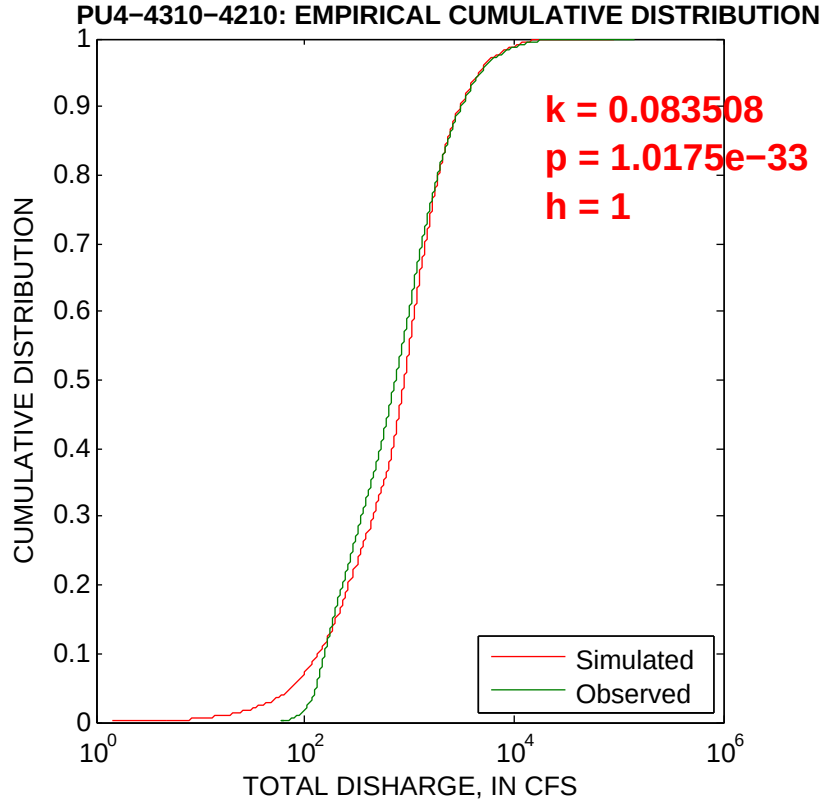












DATA SELECTION

scenario	file
P620171001WQ	FLOW.calib

plot: FLOW - total discharge

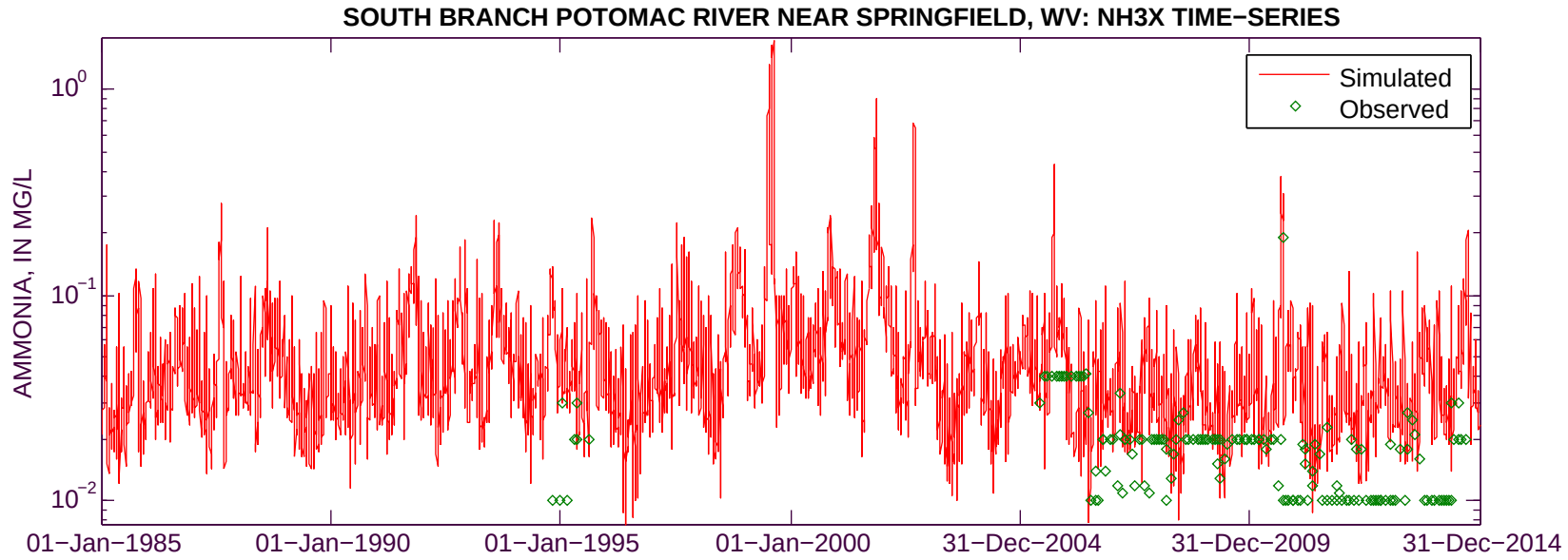
Dates: 1/1/1985 – 12/31/201

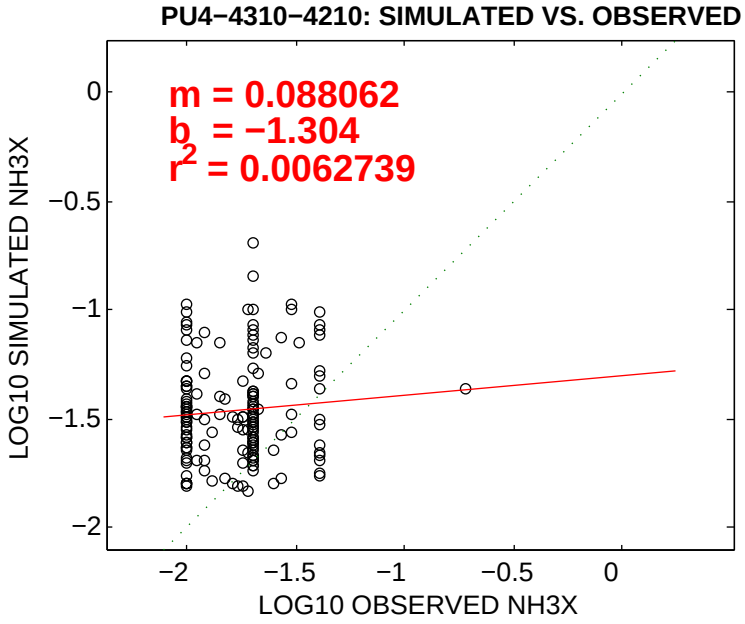
Drive	Directory	Observed
N/A	model	OBS20161101

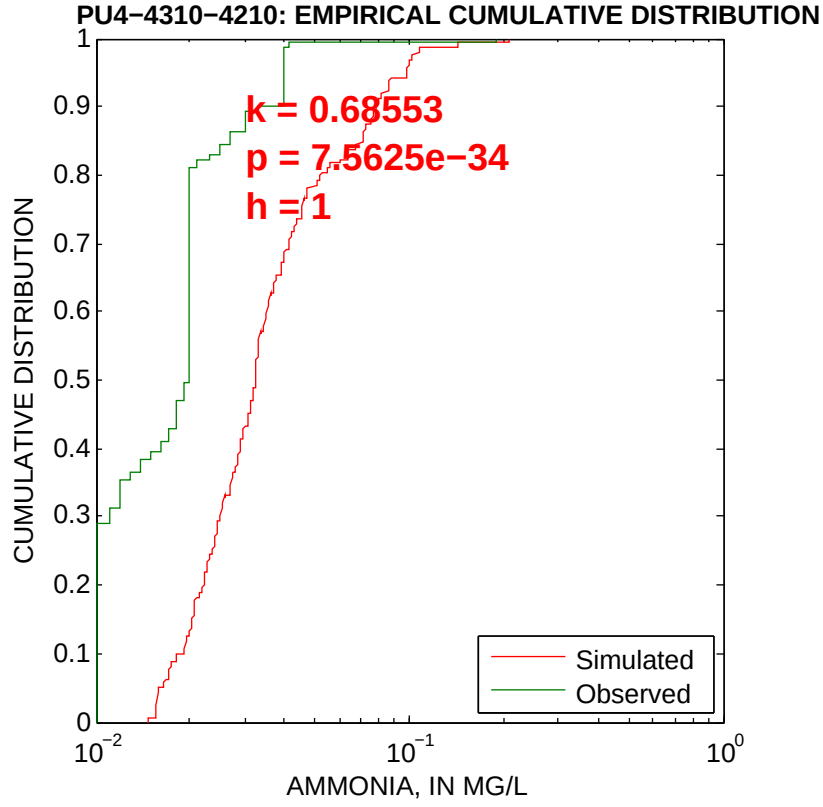
STATISTICS

	n	observe	simulate
		10957	10957
min		60	1.3765
		1.77815	0.138776
mean		1443.75	1453.97
		2.85718	2.86786
media		739	903.01
		2.86864	2.95569
max		145000	93486
		5.16137	4.97075
varian		8.70227e+0	5.44453e+
		0.24509	0.306589
JB		0.001	0.001
		0.001	0.001
		ra	log
%		0.707826	0.373818
err.va		2.26027e+0	0.0536064
rel.std.err		0.259734	0.218721
mod.eff		0.740266	0.781279

VERSION 2.1







DATA SELECTION

scenario	file
P620171001WQ	NH3X.calib

plot: NH3X - ammonia

Dates: 1/1/1985 – 12/31/201

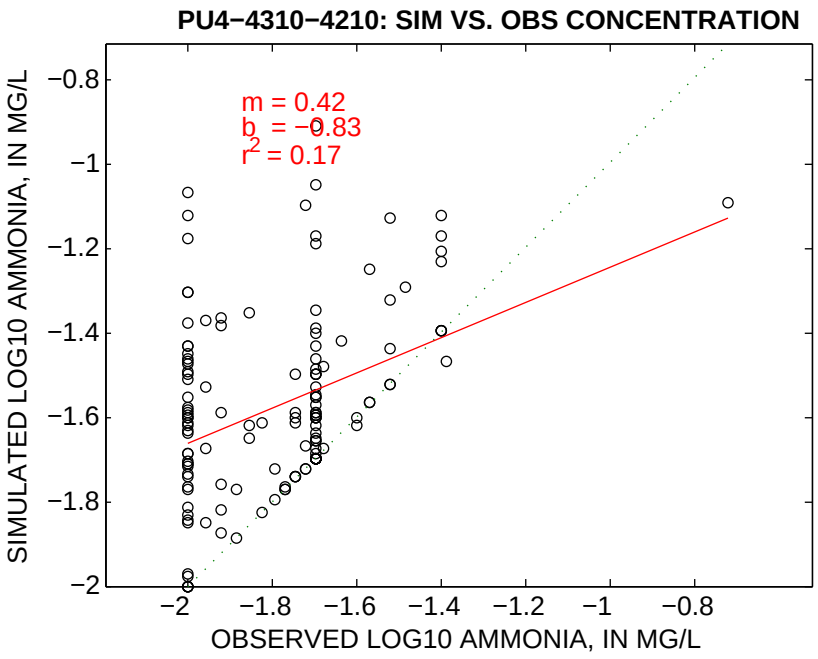
Drive	Directory	Observed
N/A	model	OBS20161101

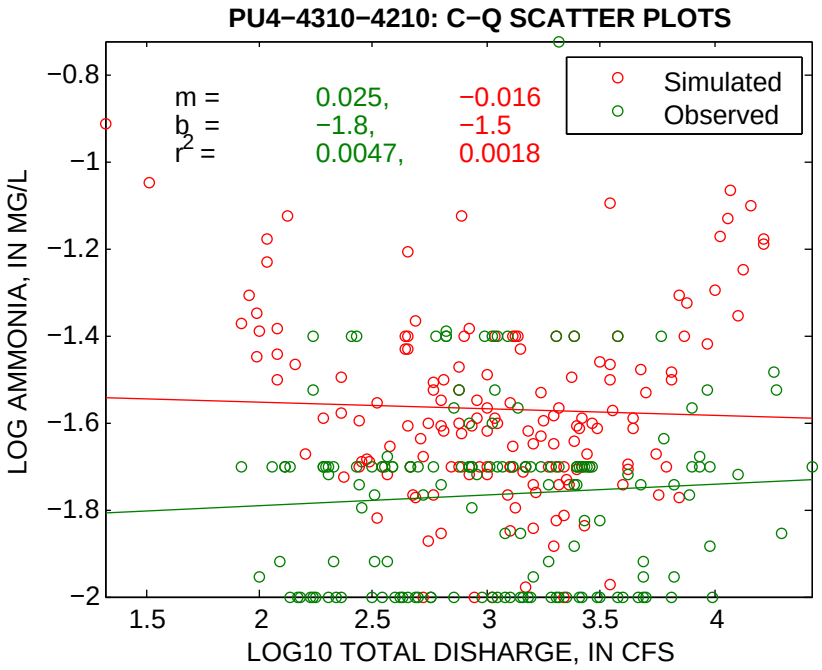
STATISTICS

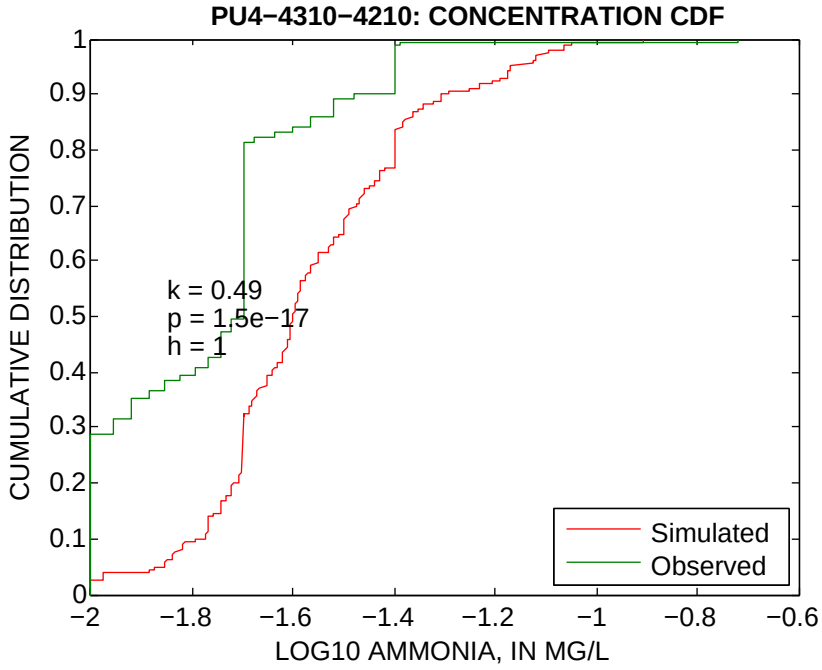
	n	observe	simulate
		159	159
min		0.01	0.014705
		-2	-1.83253
mean		0.0196855	0.0406417
		-1.76708	-1.45958
media		0.02	0.032211
		-1.69897	-1.492
max		0.191	0.2062
		-0.718967	-0.685711
varian		0.00026454	0.00073925
		0.04318	0.0533735
JB		0.001	0.001
		0.001	0.007696
		ra	log
%		106.454	-17.4015
err.va		0.0013899	0.184101
rel.std.err		5.25392	4.26358
mod.eff		-4.25392	-3.26358

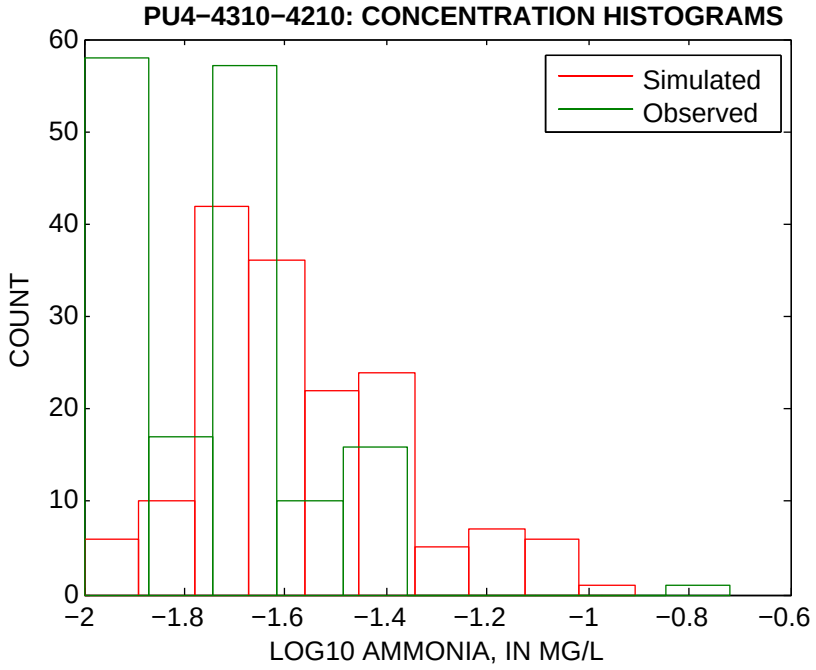
VERSION 2.1

ALL DATA
LOG10

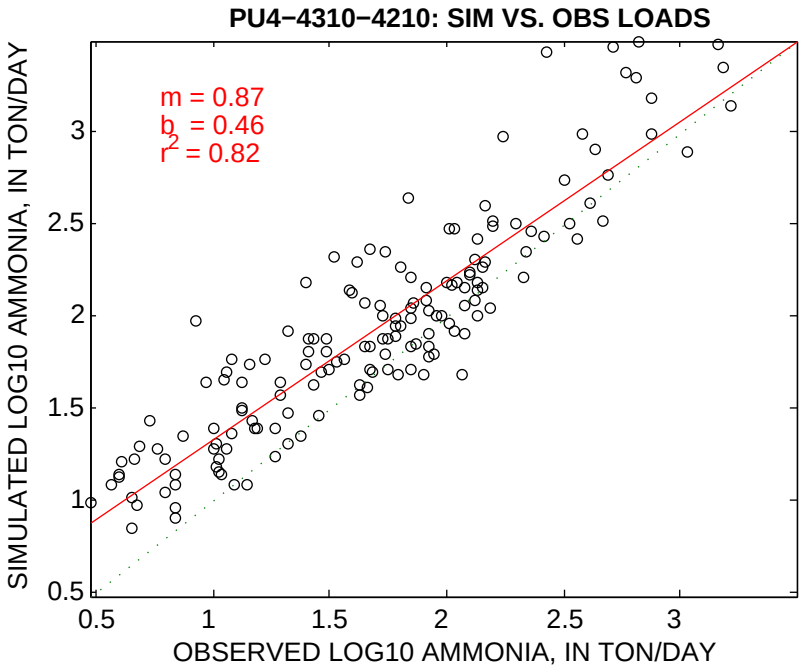


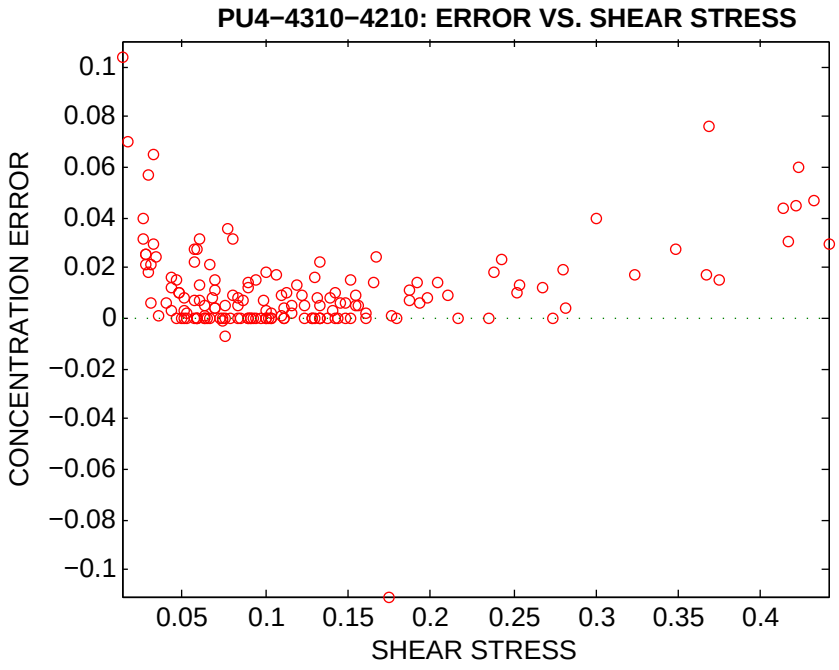


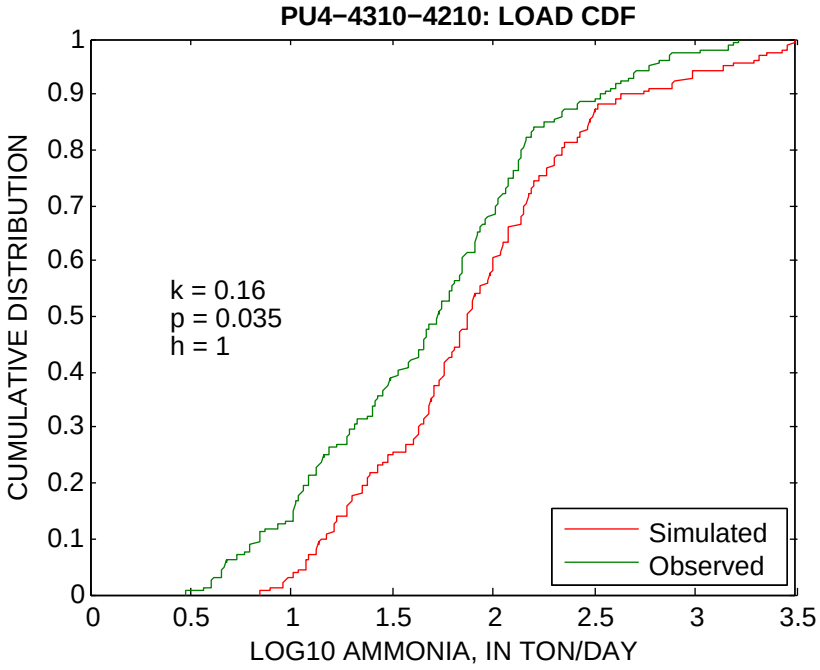


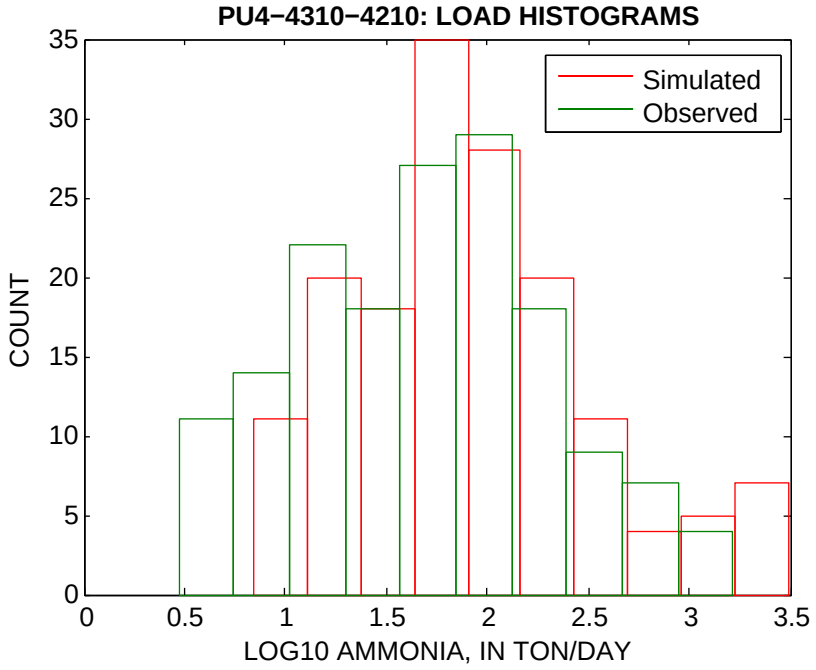


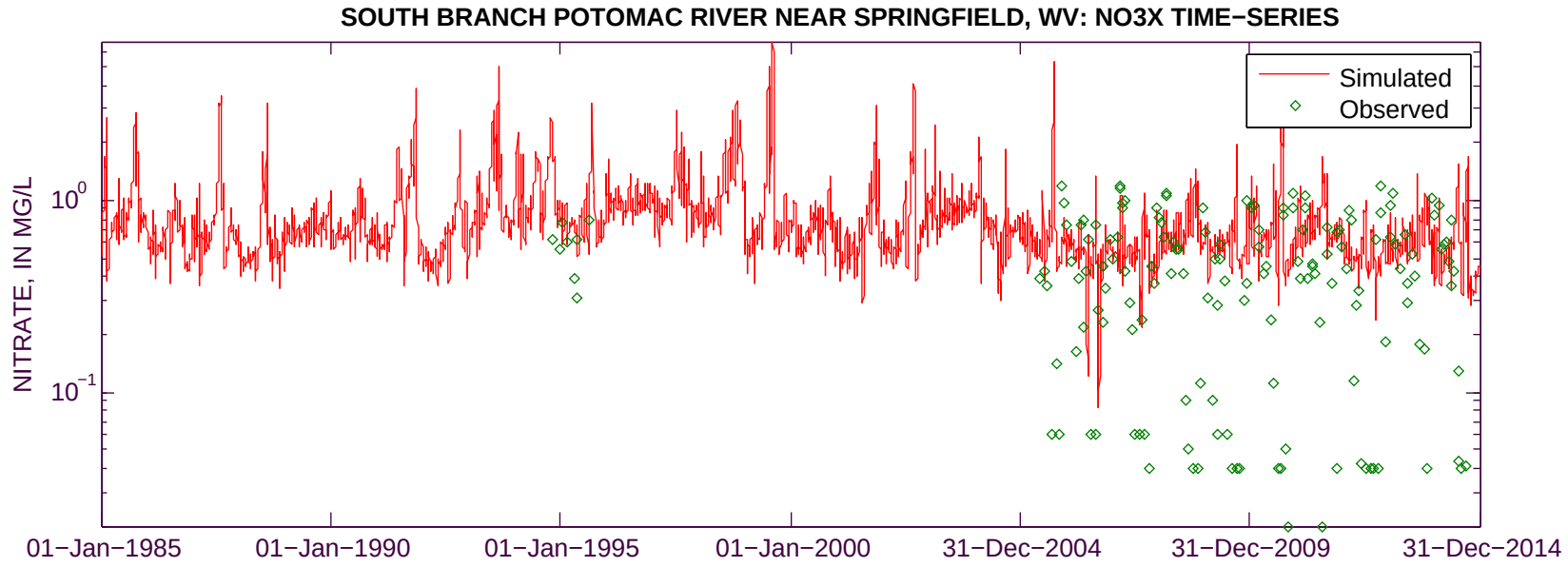
LOAD DATA
LOG10

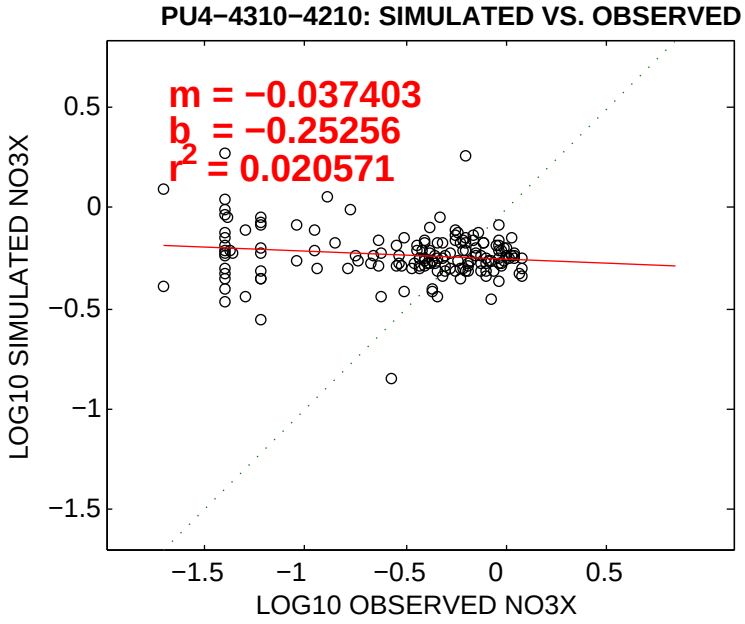


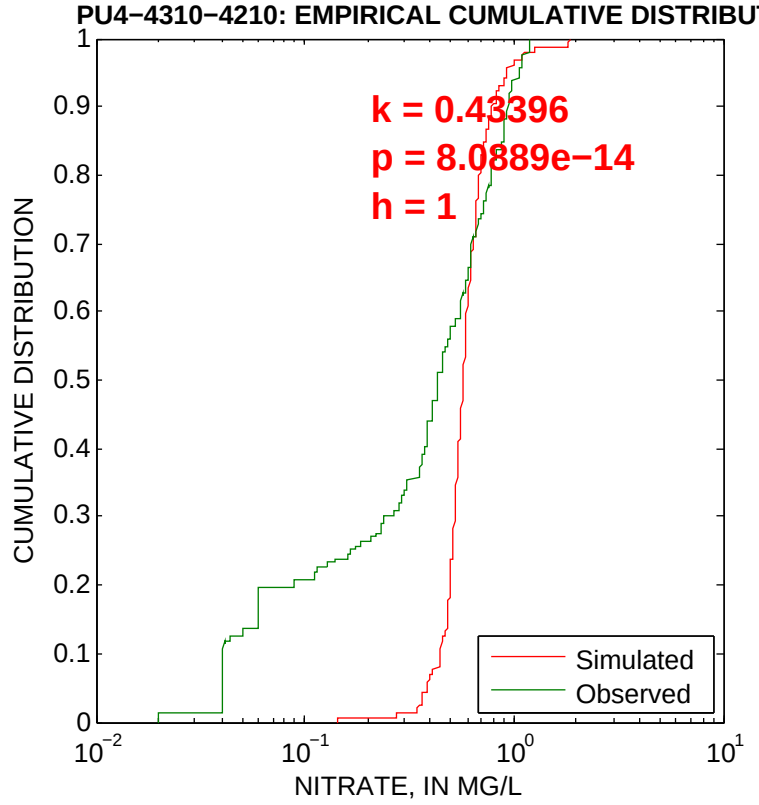












DATA SELECTION

scenario	file
P620171001WQ	NO3X.calib

plot: NO3X - nitrate

Dates: 1/1/1985 – 12/31/201

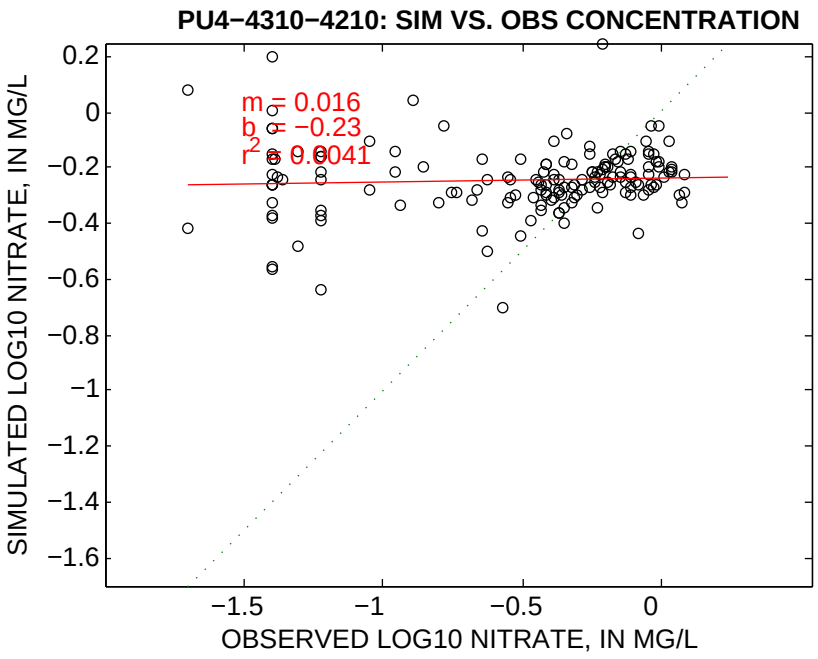
Drive	Directory	Observed
N/A	model	OBS20161101

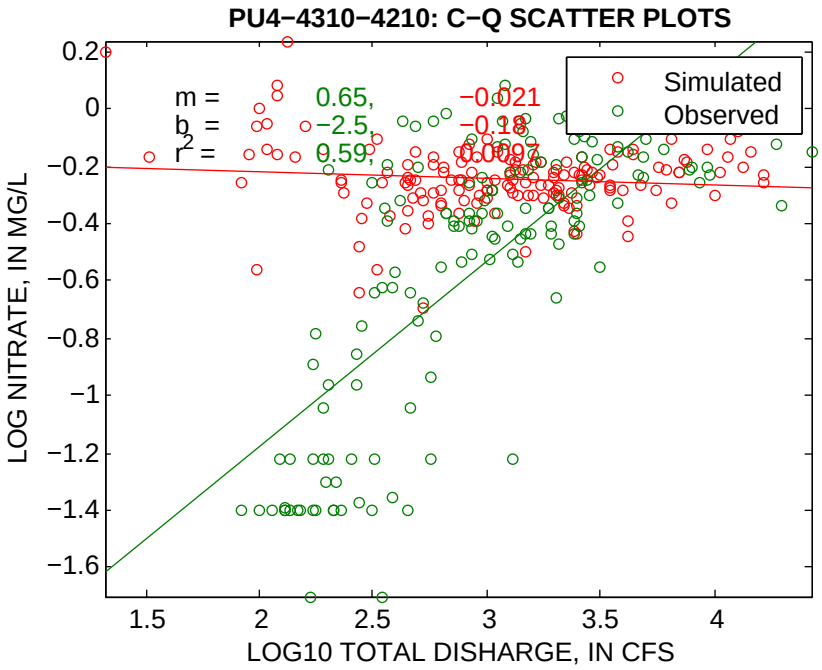
STATISTICS

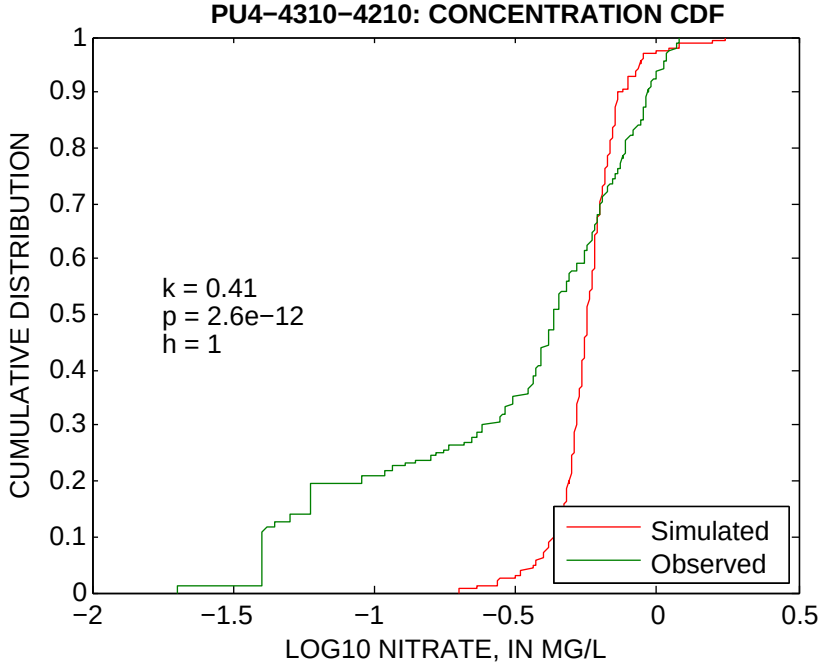
	n	159	159
		observe	simulate
min		0.02	0.14218
		-1.69897	-0.847161
mean		0.470667	0.61017
		-0.510869	-0.233454
media		0.433	0.57193
		-0.363512	-0.242657
max		1.2	1.8554
		0.0791812	0.268438
varian		0.107993	0.042421
		0.23092	0.0157048
JB		0.024791	0.001
		0.002026	0.001
		ra	log
%		29.6395	-54.3025
err.va		0.19073	0.341345
rel.std.err		1.76613	1.4782
mod.eff		-0.766133	-0.478196

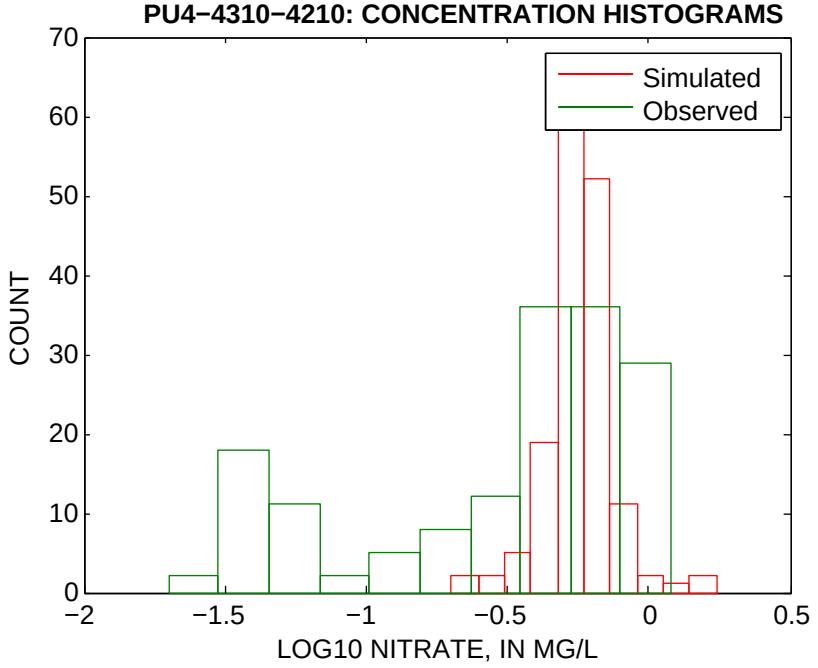
VERSION 2.1

ALL DATA
LOG10

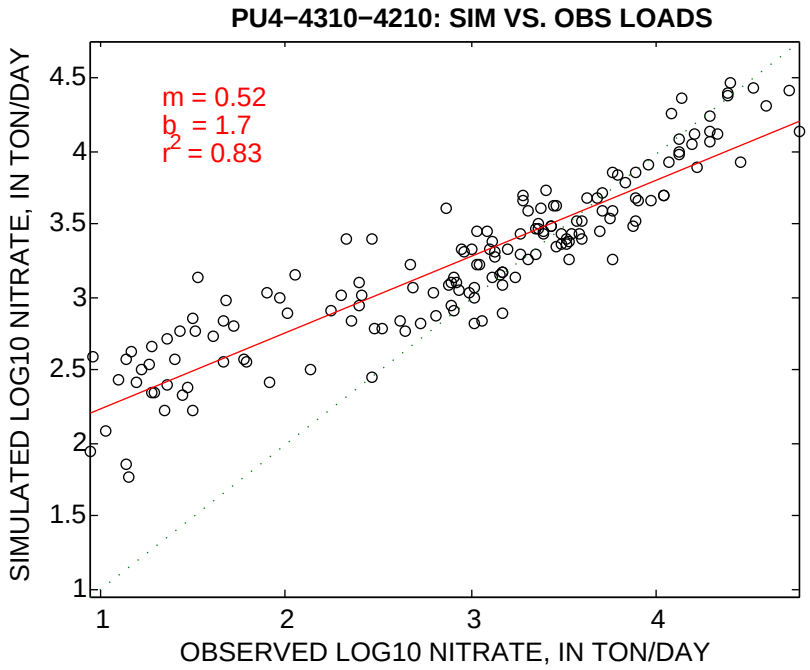


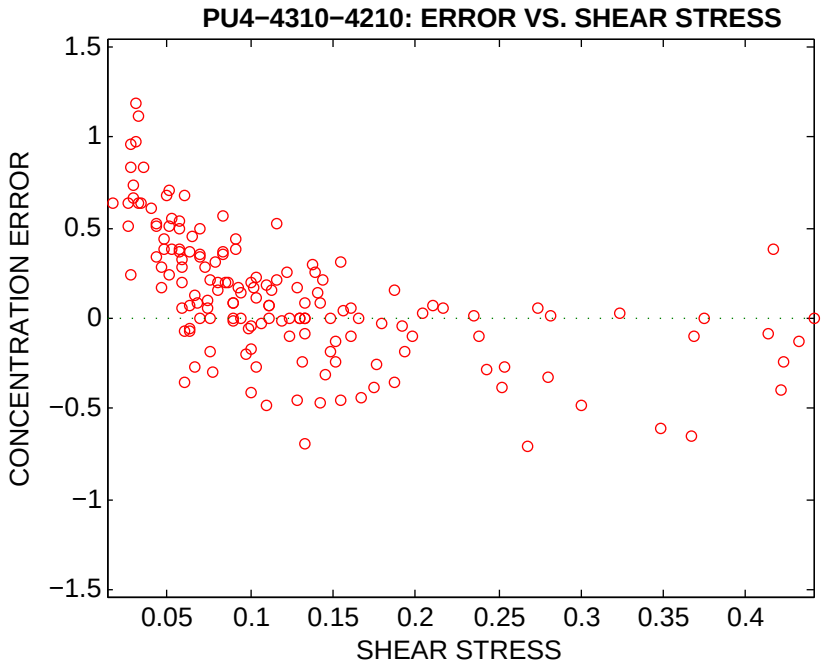


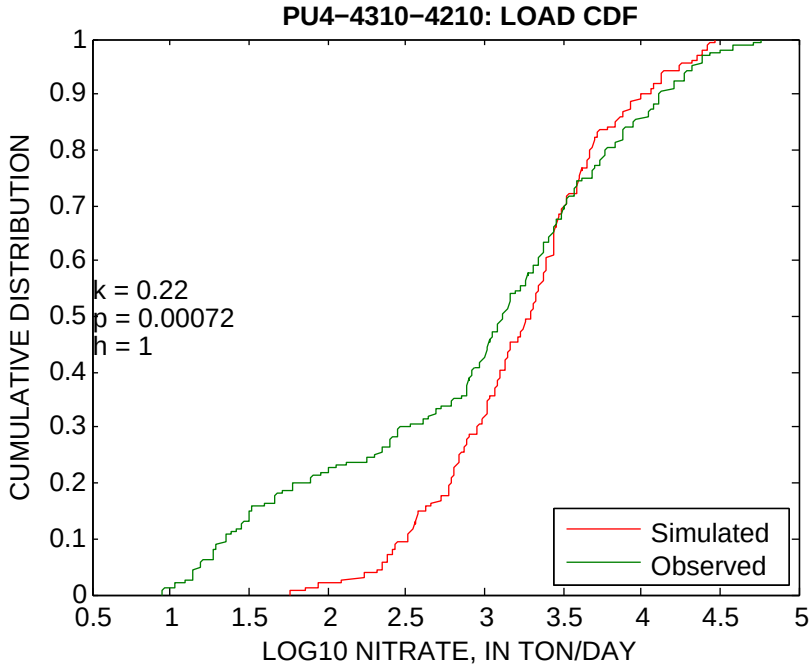


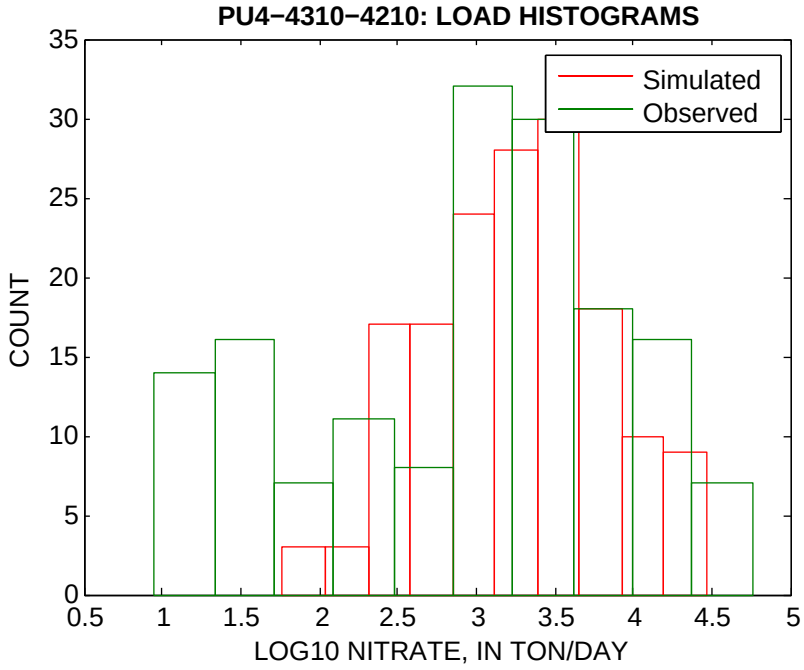


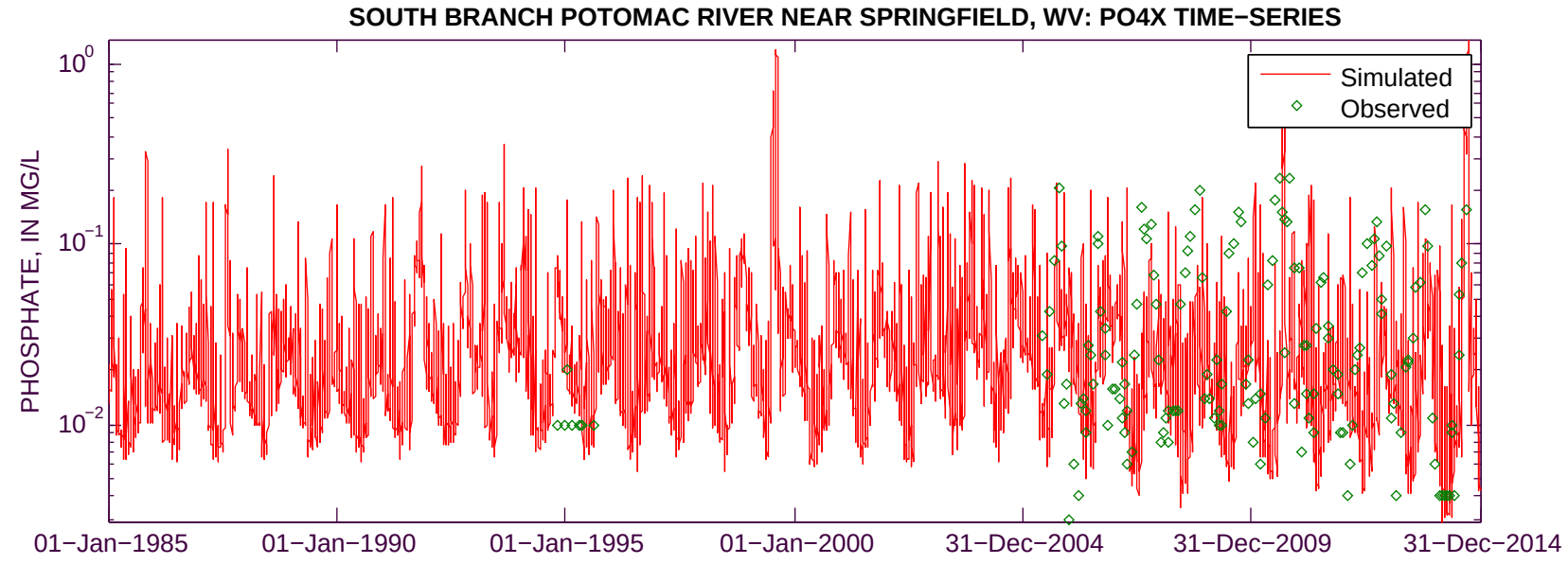
LOAD DATA
LOG10

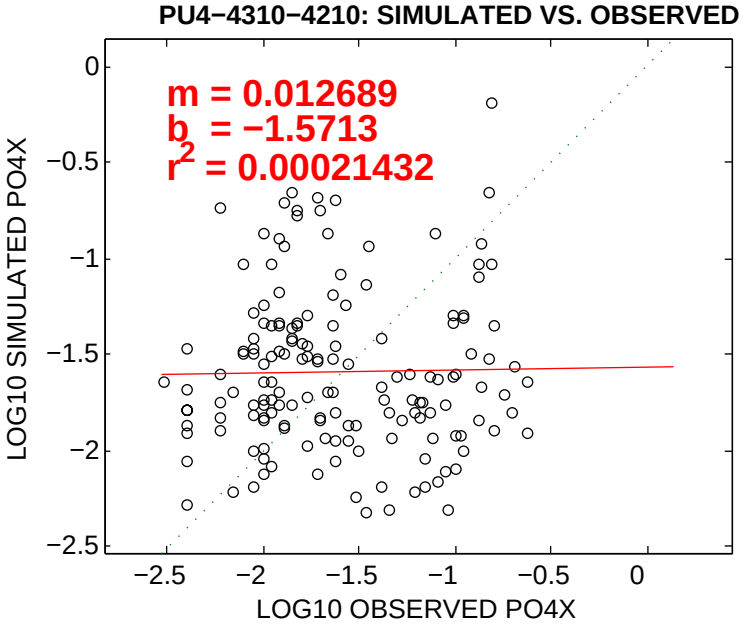


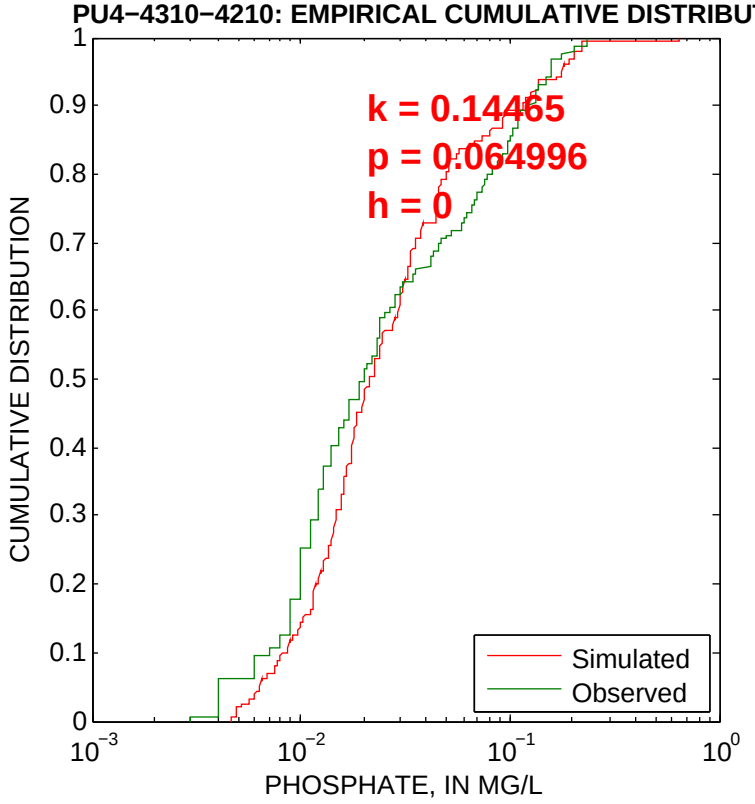












DATA SELECTION

scenario	file
P620171001WQ	PO4X.calib

plot: PO4X - phosphate

Dates: 1/1/1985 – 12/31/201

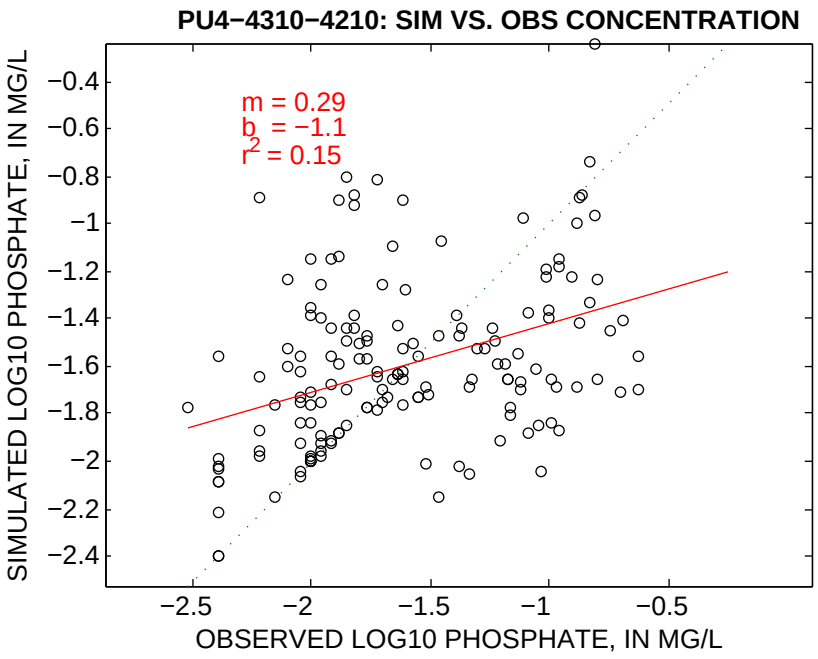
Drive	Directory	Observed
N/A	model	OBS20161101

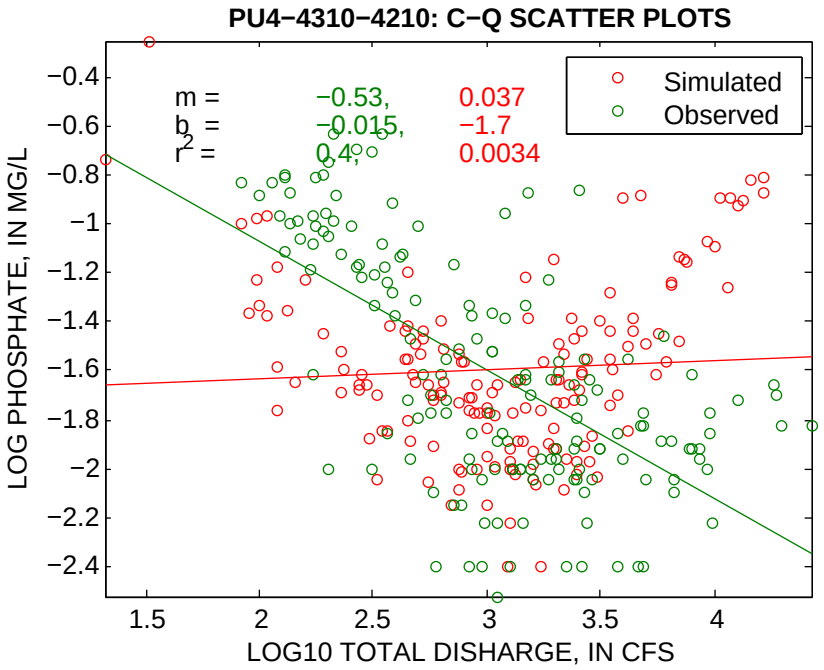
STATISTICS

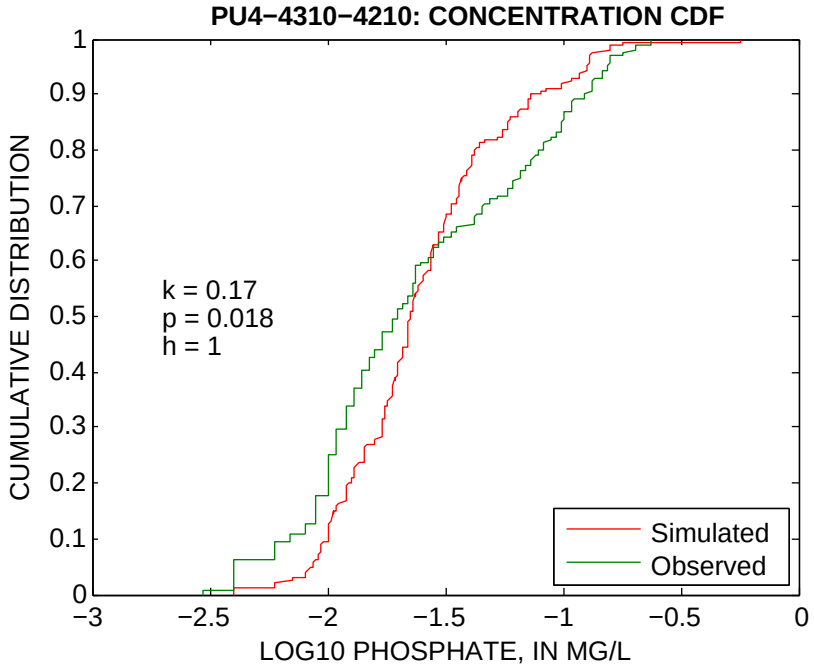
	n	159	159
		observe	simulate
min		0.003	0.0047021
		-2.52288	-2.32771
mean		0.0443208	0.0438428
		-1.61131	-1.59172
media		0.02	0.021426
		-1.69897	-1.66906
max		0.236	0.64513
		-0.627088	-0.190353
varian		0.00261041	0.00453358
		0.225799	0.169626
JB		0.001	0.001
		0.023832	0.008716
		ra	log
%		-1.07846	-1.2161
err.va		0.00640714	0.390081
rel.std.err		2.45446	1.72756
mod.eff		-1.45446	-0.727561

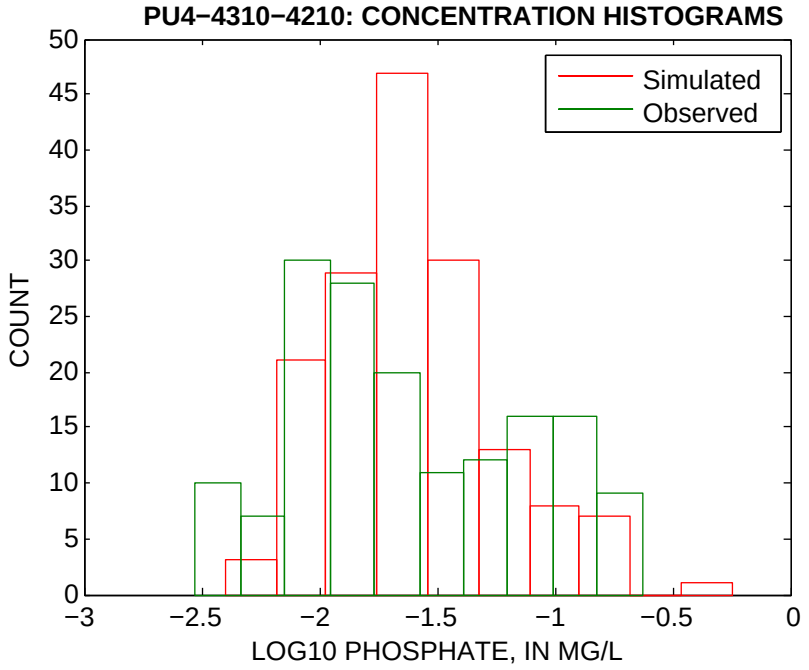
VERSION 2.1

ALL DATA
LOG10

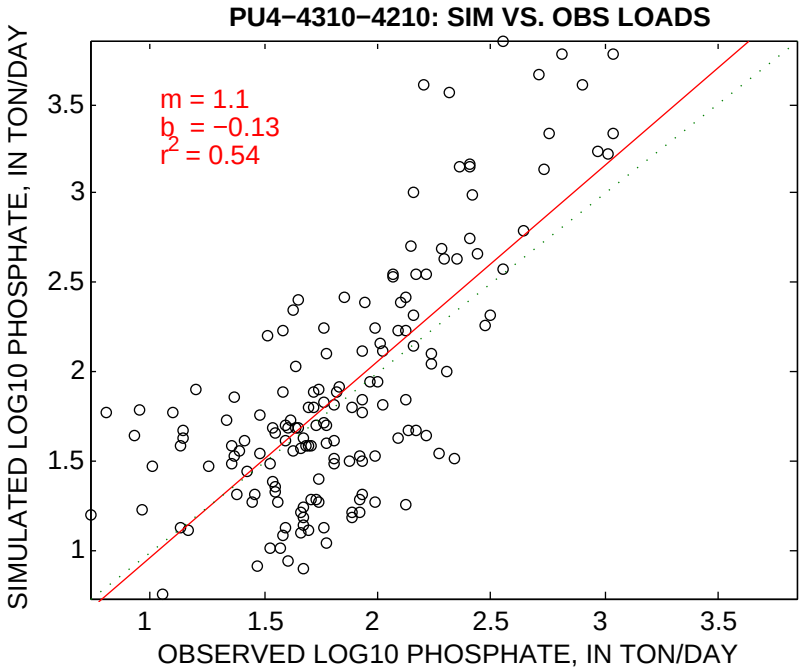


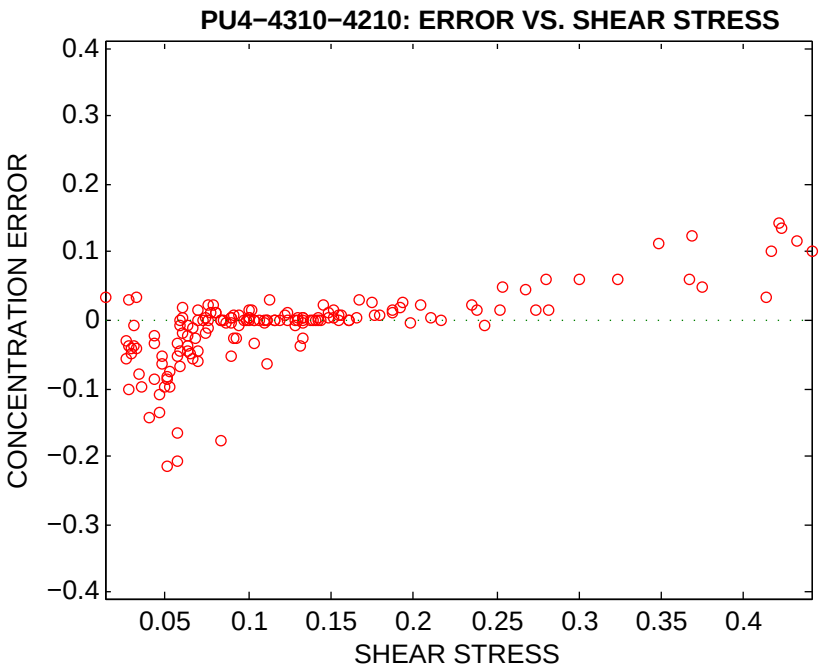


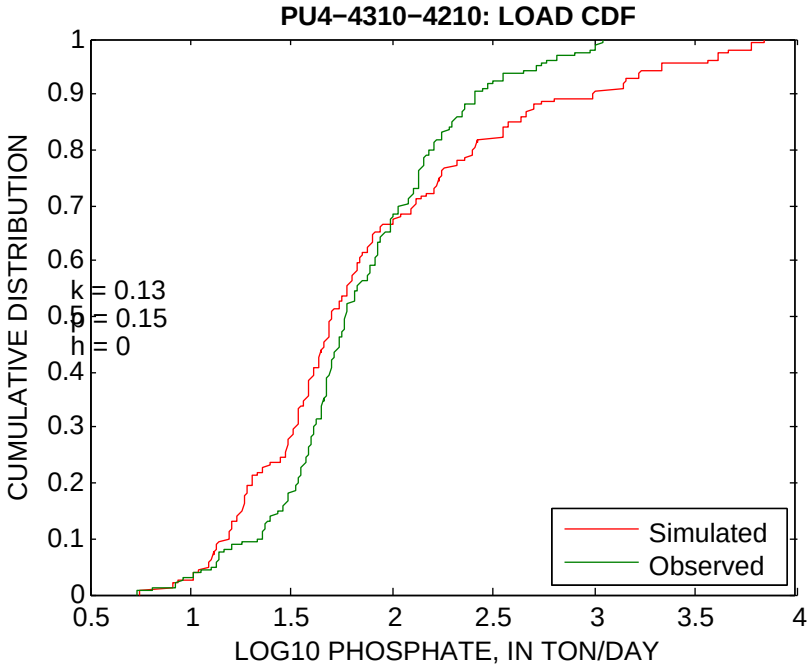


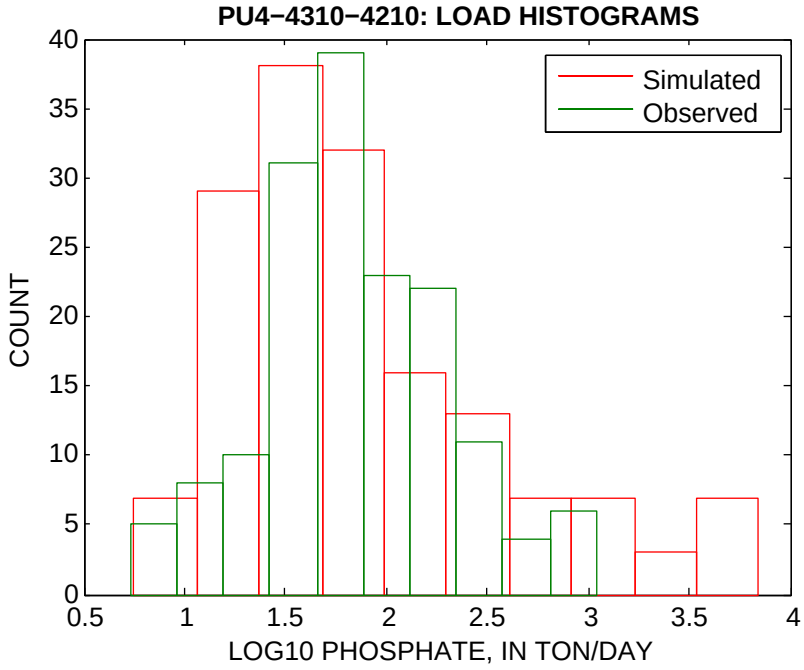


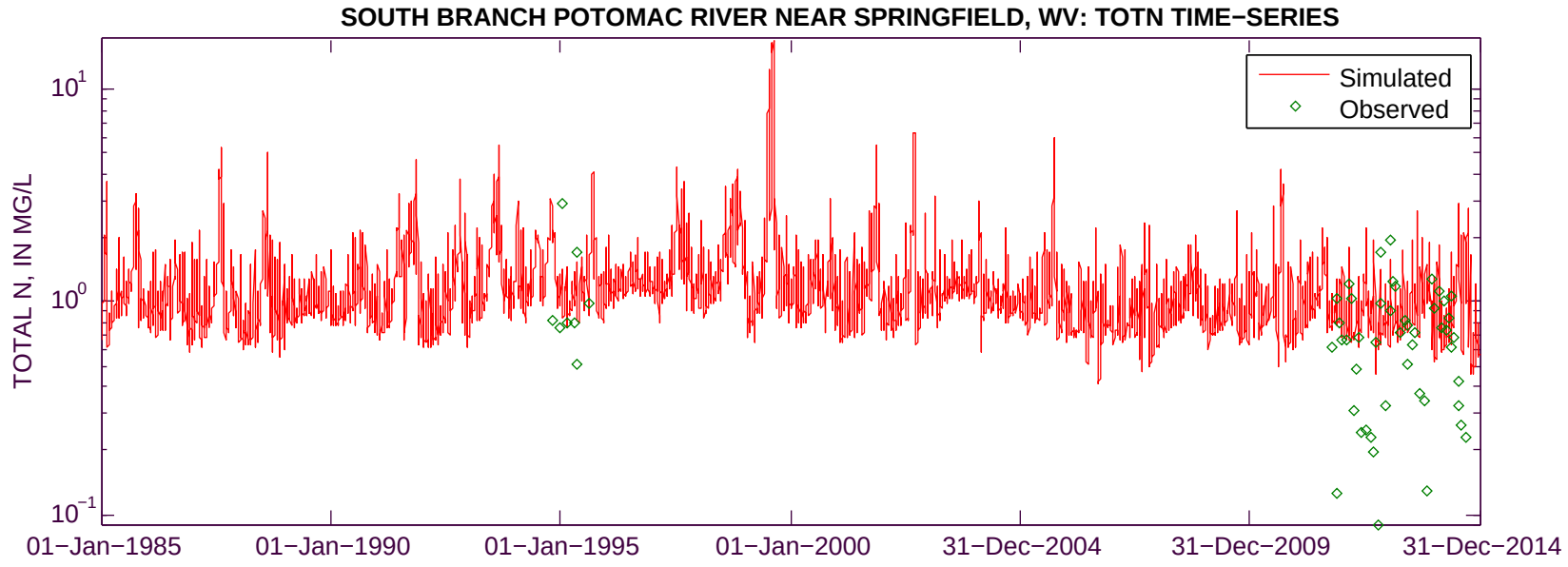
LOAD DATA
LOG10

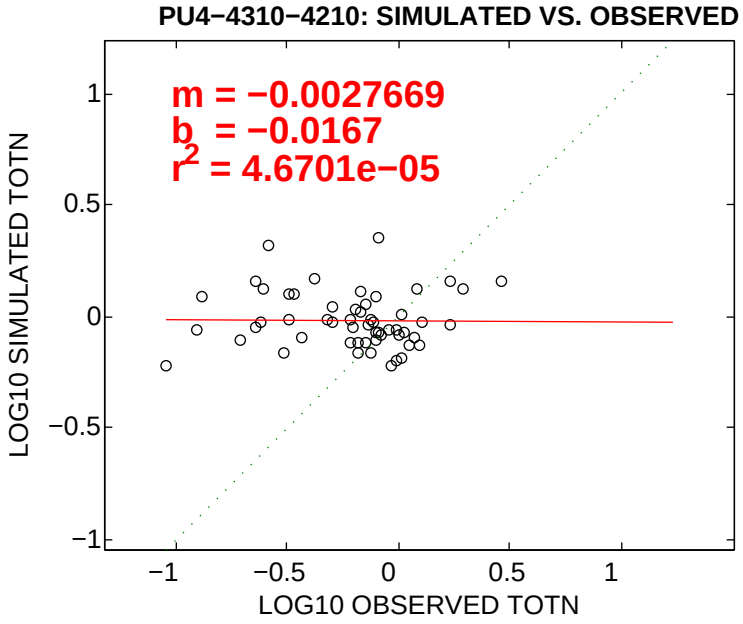


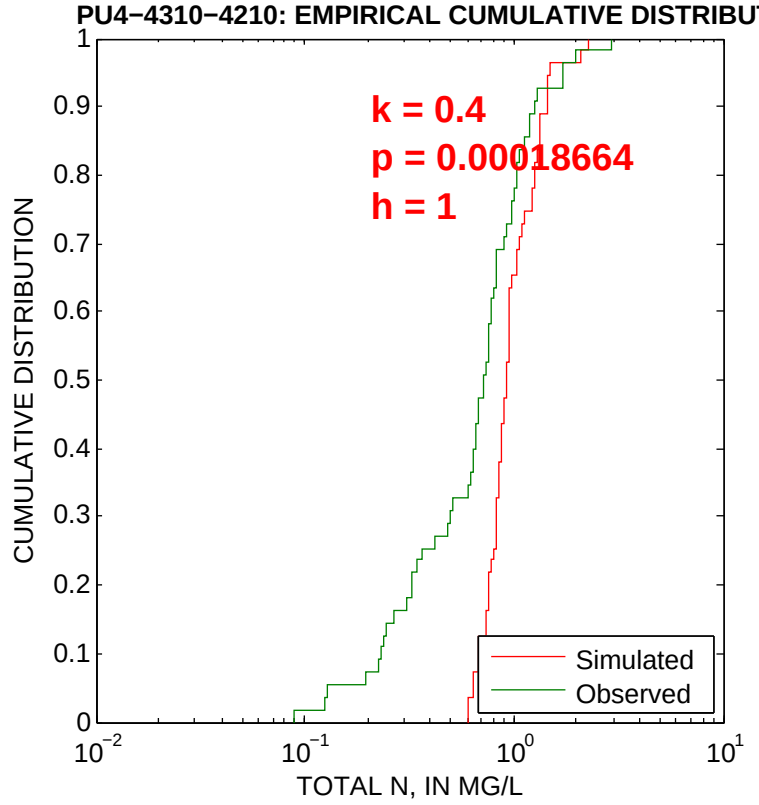












DATA SELECTION

scenario	file
P620171001WQ	TOTN.calib

plot: TOTN - total nitrogen

Dates: 1/1/1985 – 12/31/201

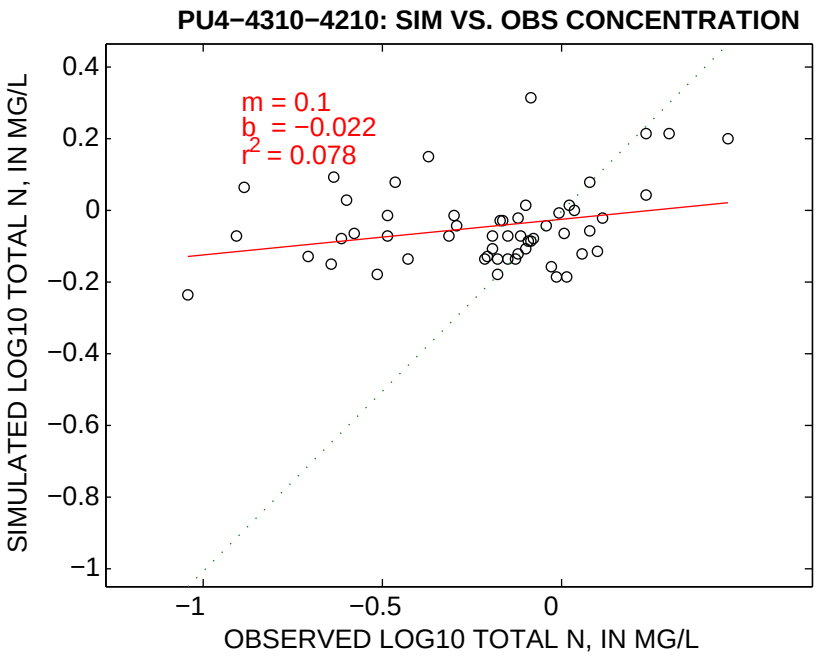
Drive	Directory	Observed
N/A	model	OBS20161101

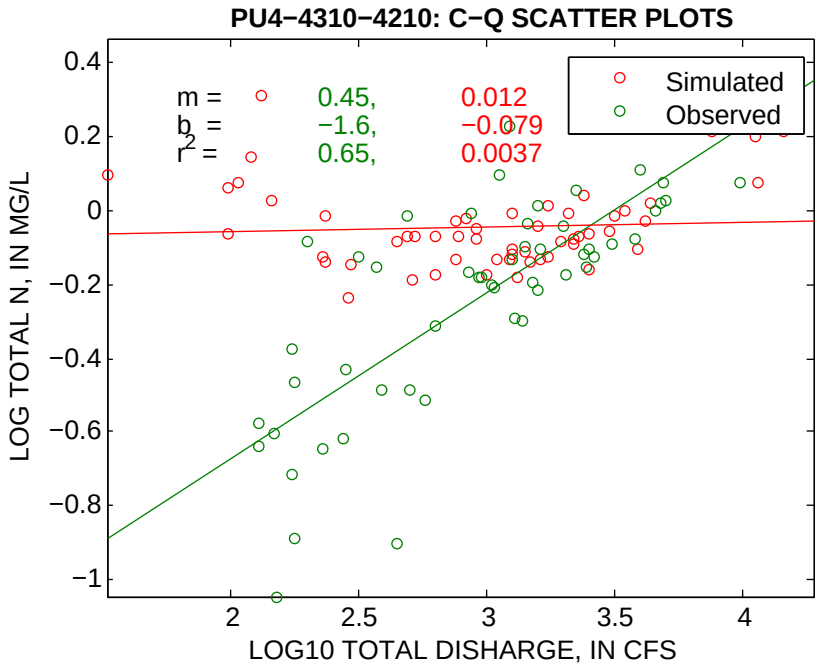
STATISTICS

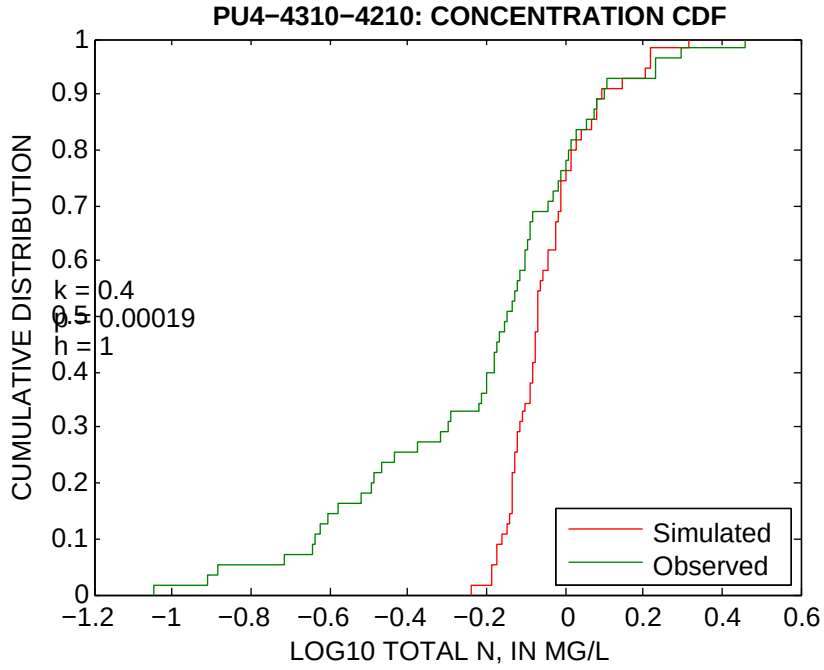
		observe	simulate
n		55	55
min		0.09	0.59671
		-1.04576	-0.224237
mean		0.764691	1.00658
		-0.210478	-0.0161175
media		0.709	0.92618
		-0.149354	-0.0333046
max		2.9	2.2617
		0.462398	0.354435
varian		0.251901	0.108541
		0.0952526	0.0156142
JB		0.001	0.001
		0.080963	0.039514
		ra	log
%		31.6327	-92.3425
err.va		0.397063	0.14987
rel.std.err		1.57626	1.57339
mod.eff		-0.576263	-0.573391

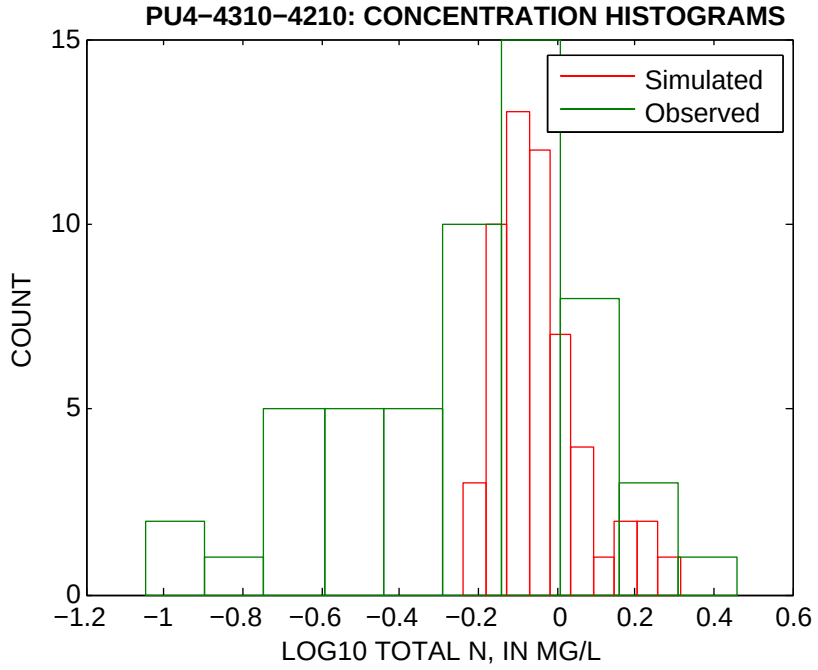
VERSION 2.1

ALL DATA
LOG10

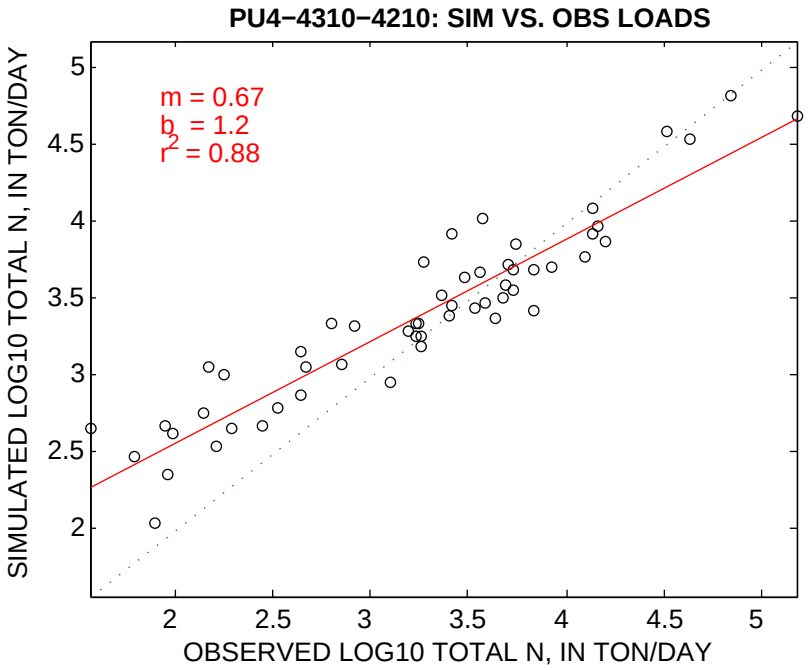


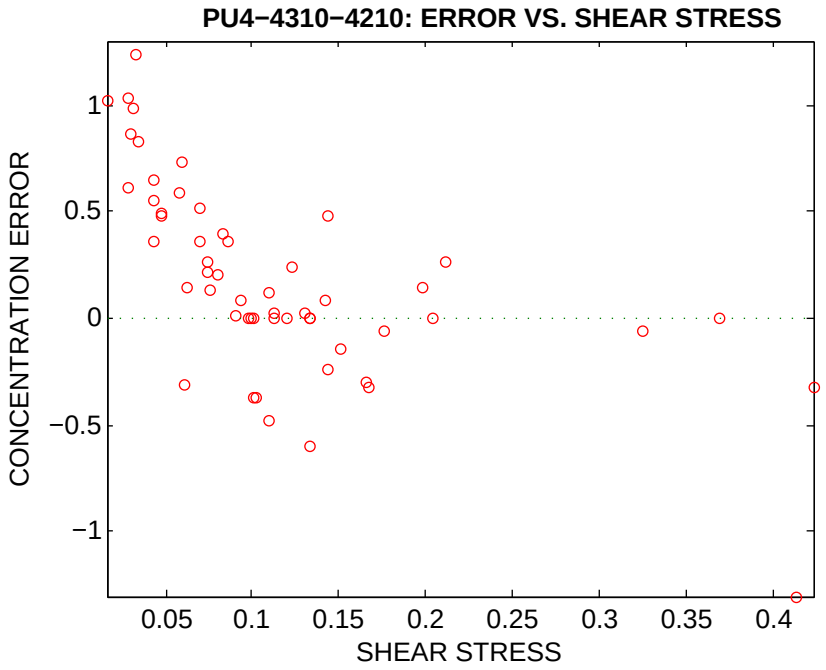


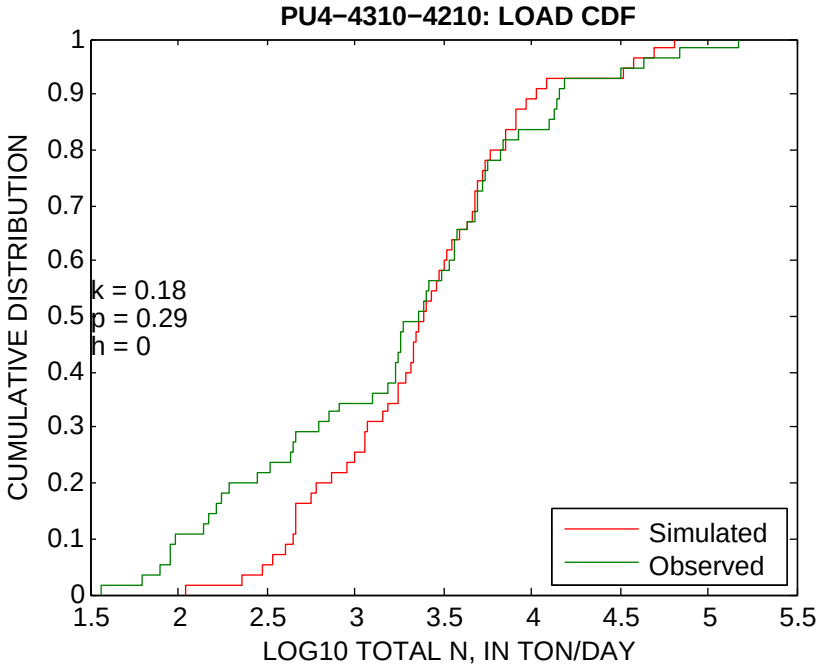


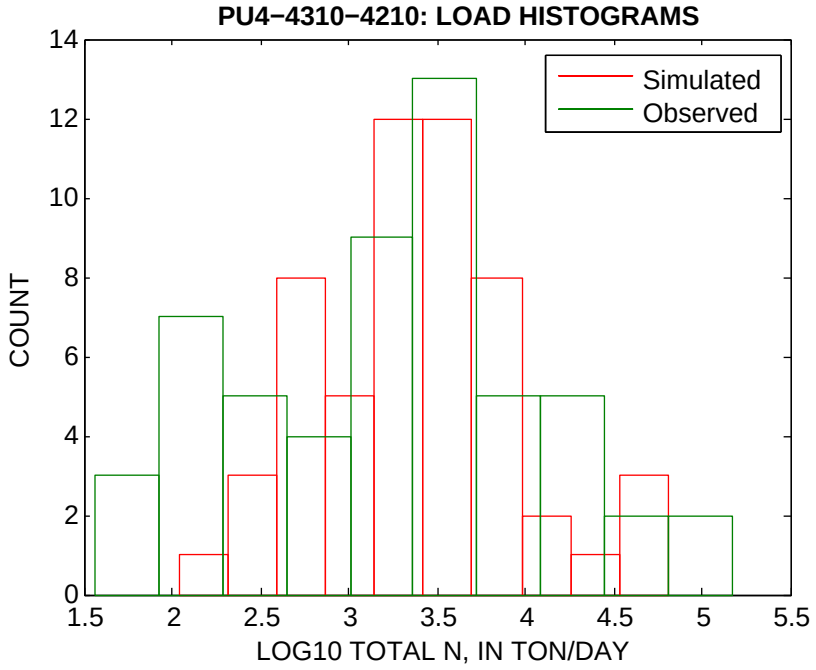


LOAD DATA
LOG10

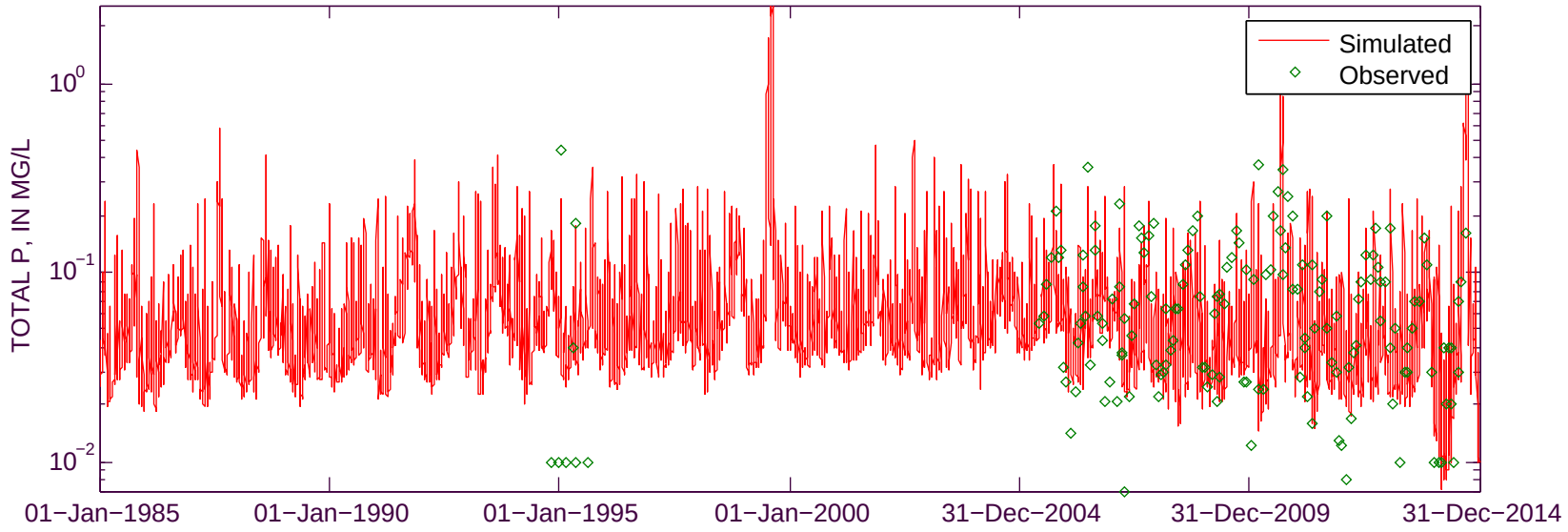




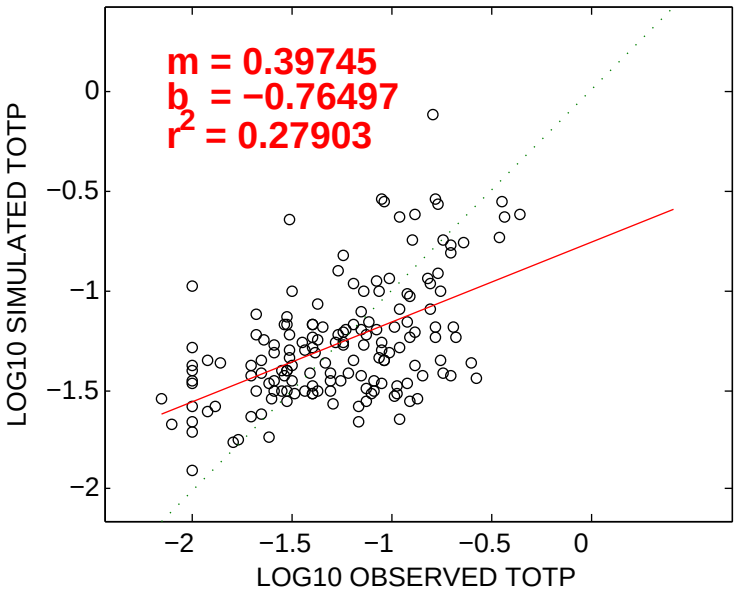




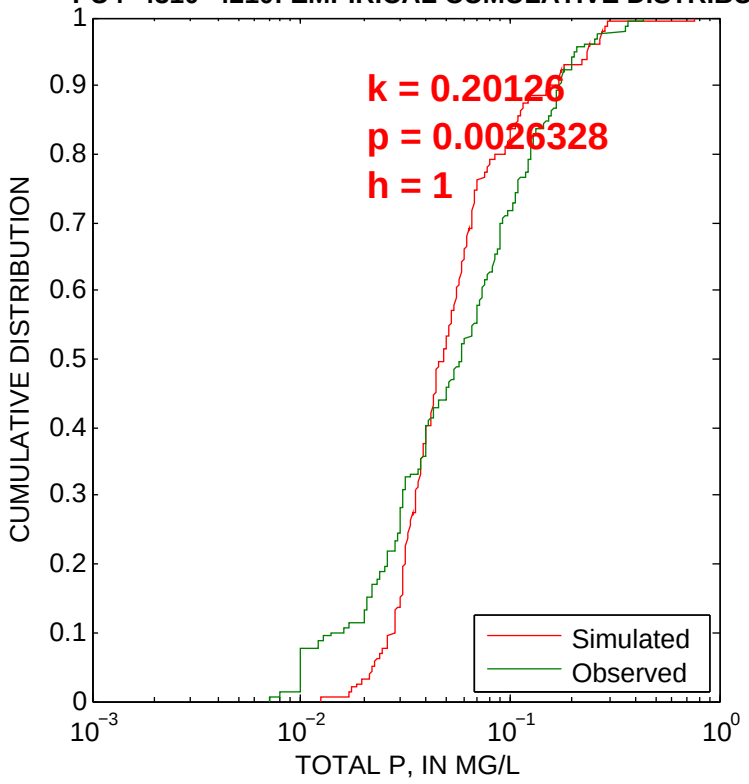
SOUTH BRANCH POTOMAC RIVER NEAR SPRINGFIELD, WV: TOTP TIME-SERIES



PU4-4310-4210: SIMULATED VS. OBSERVED



PU4-4310-4210: EMPIRICAL CUMULATIVE DISTRIBUTION



DATA SELECTION

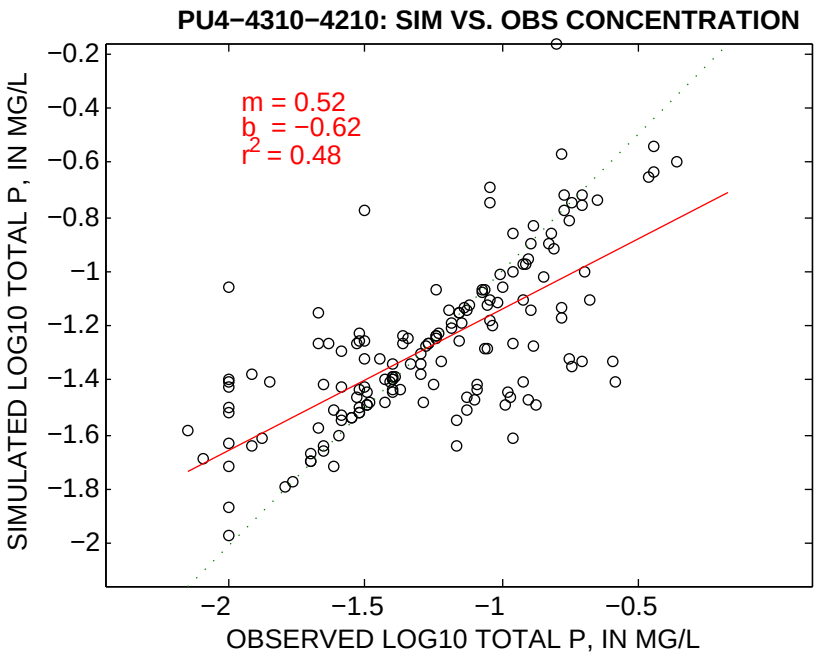
scenario: P620171001WQ
file: TOTP.calib
plot: TOTP - total phosphorus
Dates: 1/1/1985 – 12/31/201
Drive: N/A
Directory: model
Observed: OBS20161101

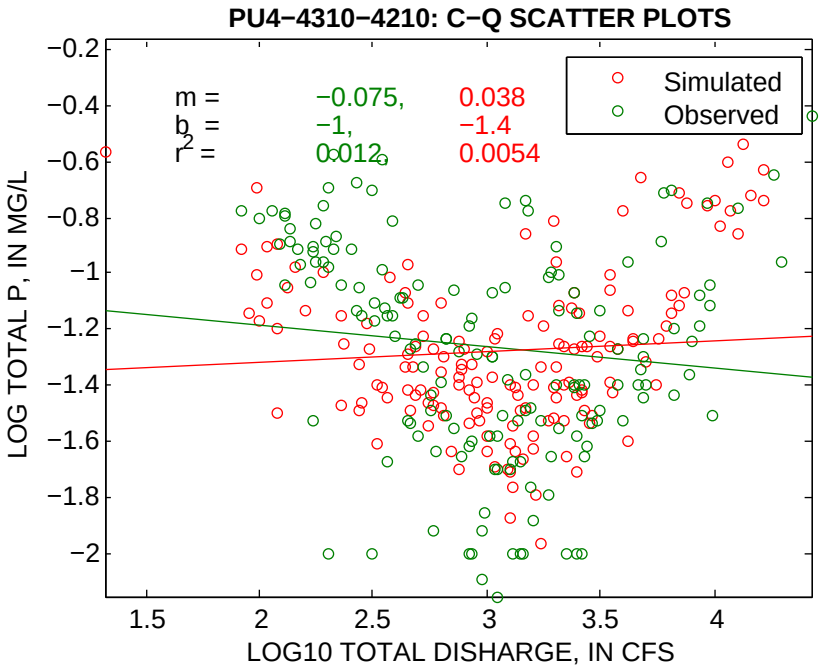
STATISTICS

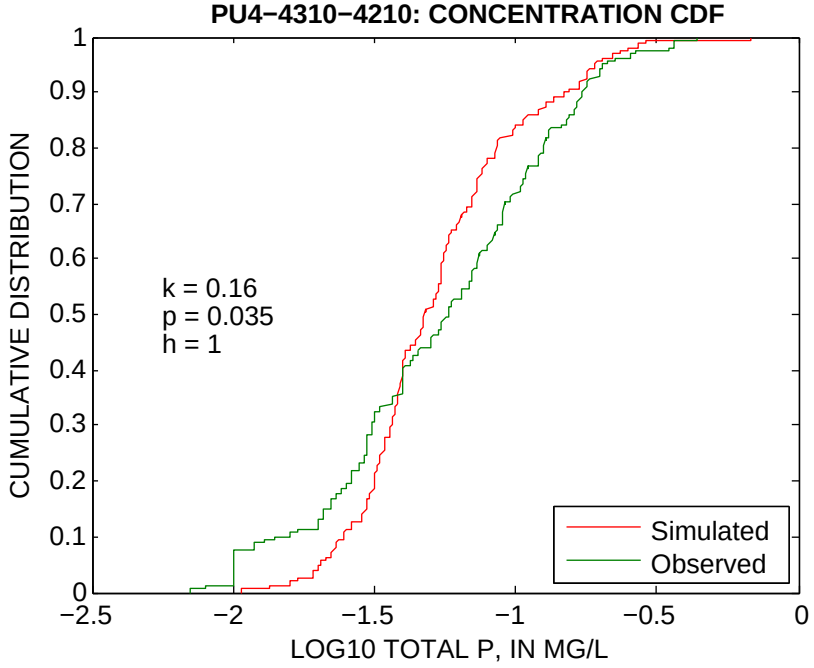
	n	observe	simulate
		159	159
min		0.007	0.012604
		-2.1549	-1.89949
mean		0.0806038	0.0728472
		-1.26175	-1.26646
media		0.058	0.048044
		-1.23657	-1.31836
max		0.44	0.75725
		-0.356547	-0.120761
varian		0.00556719	0.00658511
		0.158403	0.0896797
JB		0.001	0.001
		0.181648	0.001
		ra	log
%		-9.62305	0.373031
err.va		0.00661747	0.122189
rel.std.err		1.18866	0.771379
mod.eff		-0.188656	0.228621

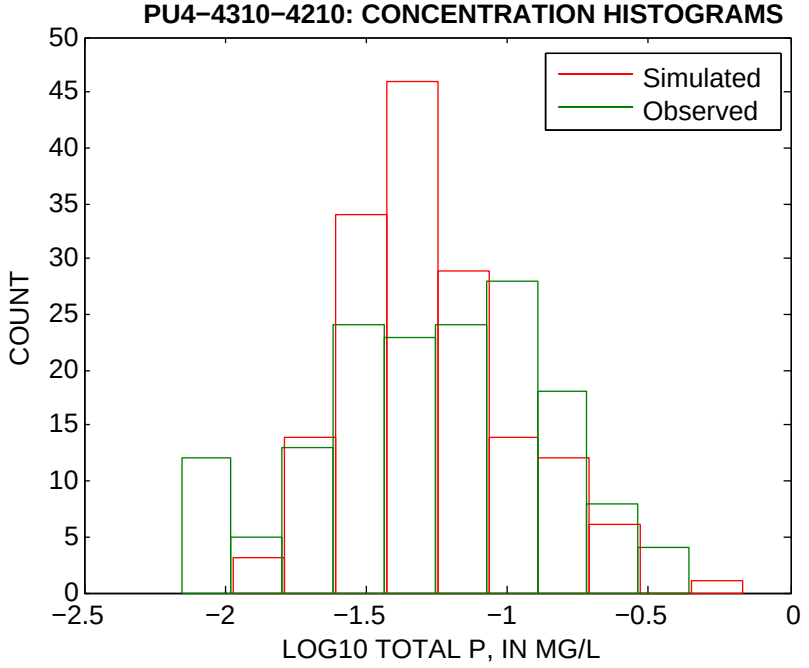
VERSION 2.1

ALL DATA
LOG10

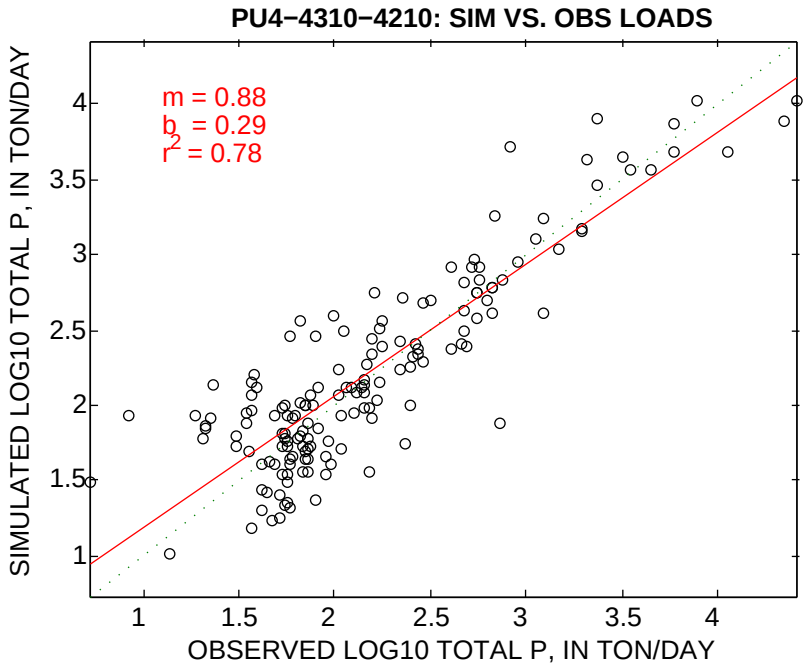


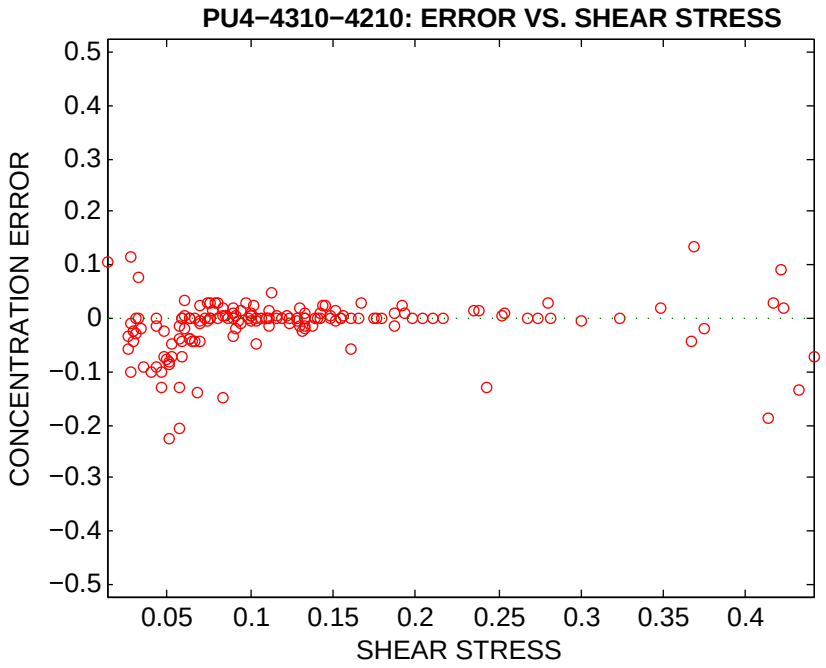


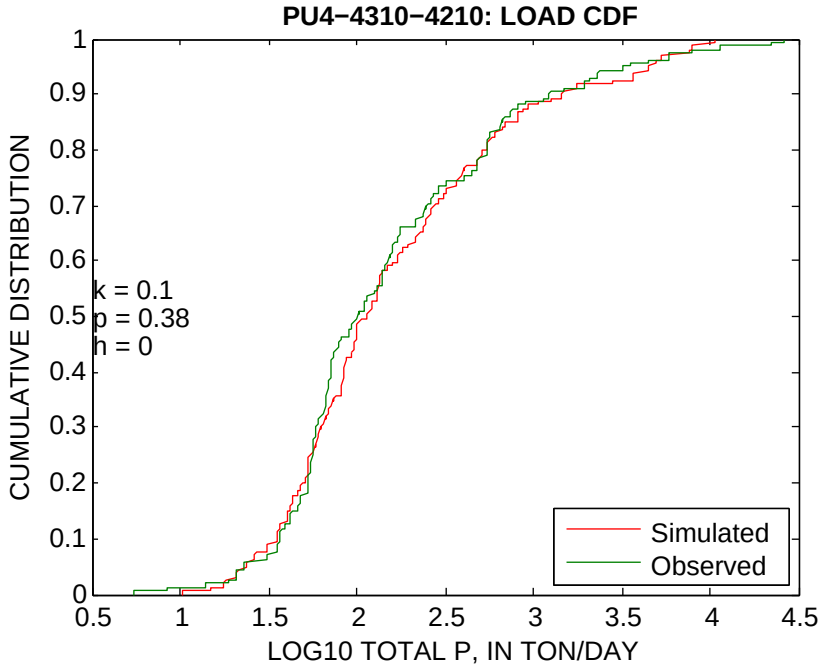


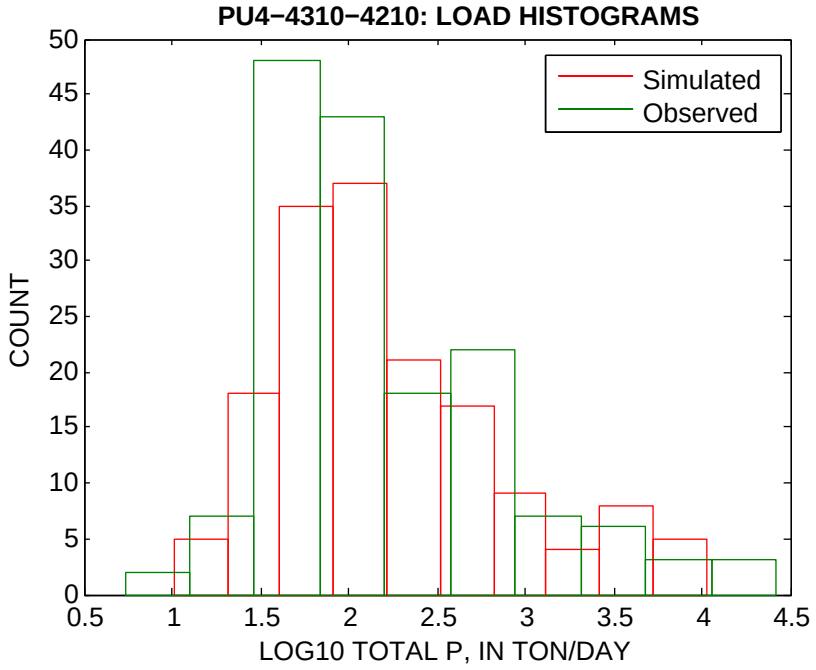


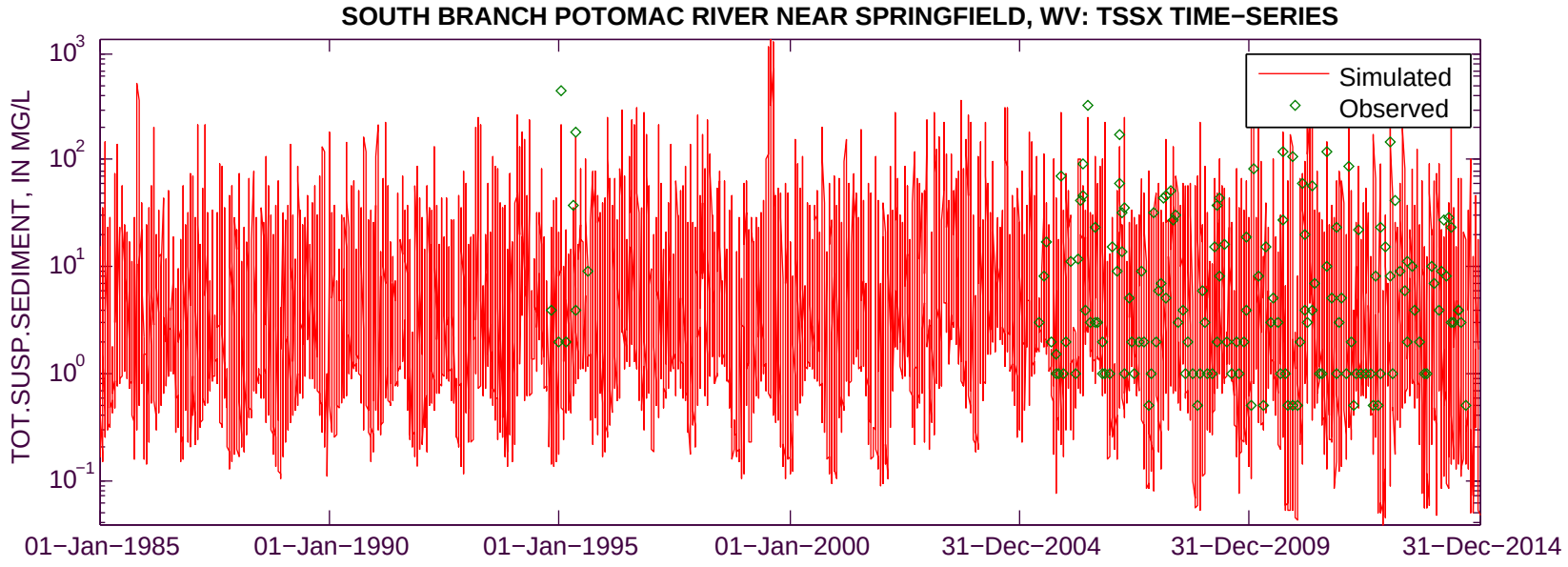
LOAD DATA
LOG10

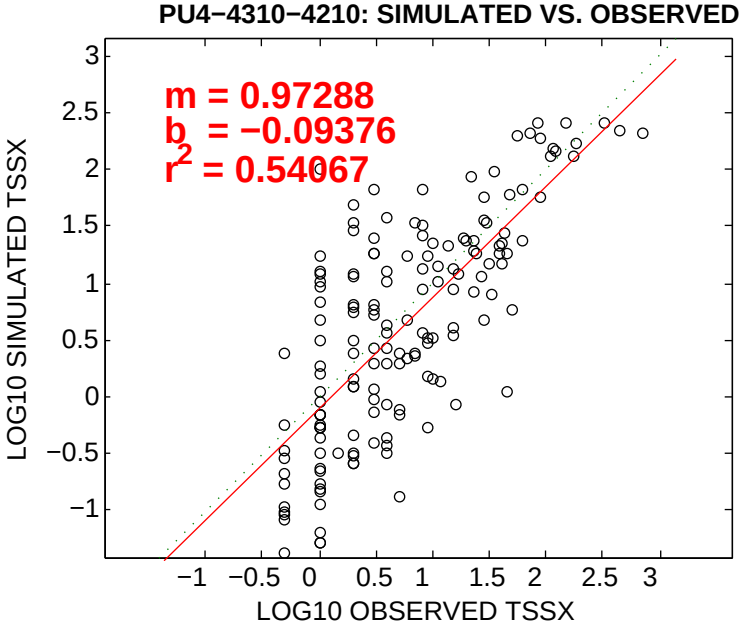


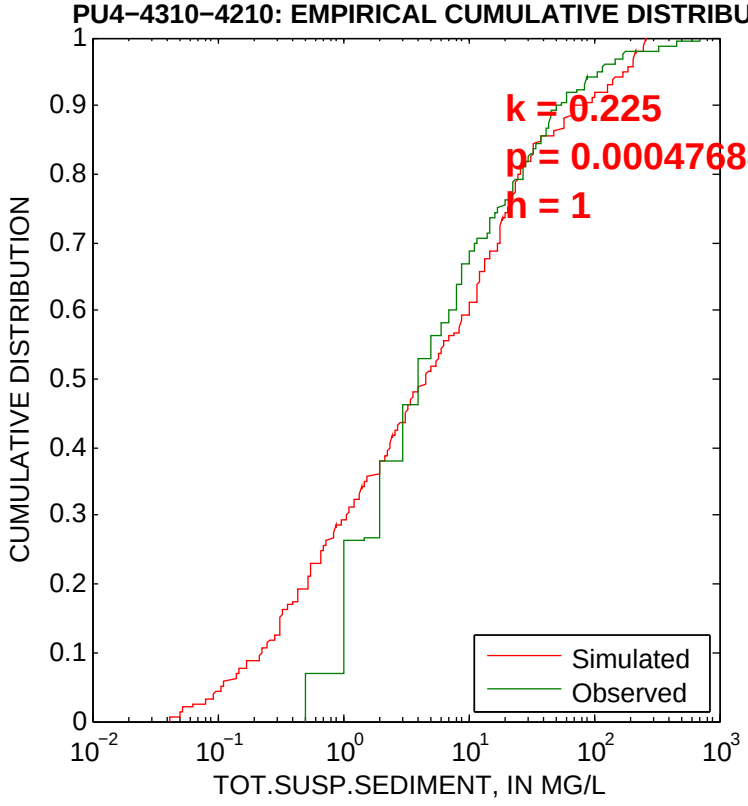












DATA SELECTION

scenario	file
P620171001WQ	TSSX.calib

plot: TSSX - total suspended ...

Dates: 1/1/1985 – 12/31/201

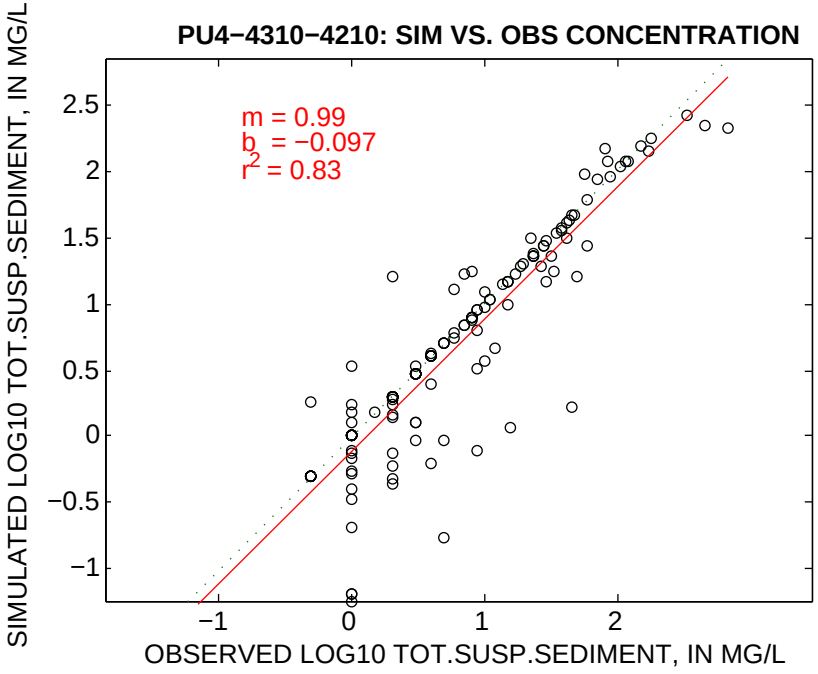
Drive	Directory	Observed
N/A	model	OBS20161101

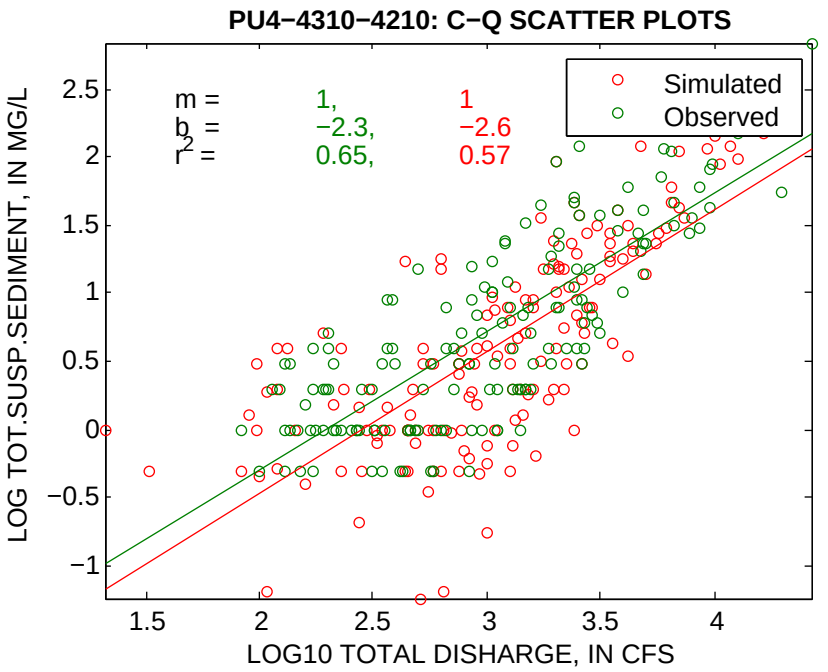
STATISTICS

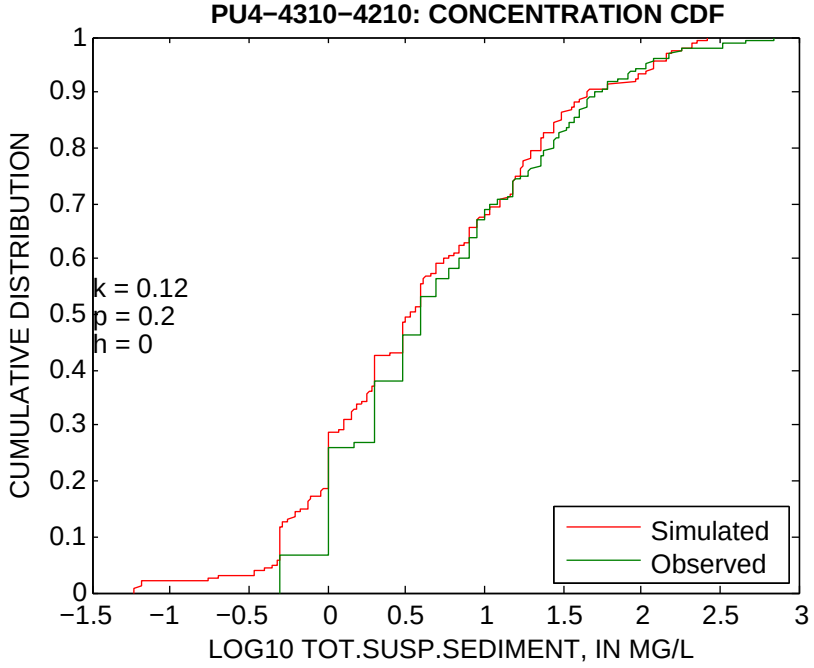
		observe	simulate
n		160	160
min		0.5	0.042375
		-0.30103	-1.37289
mean		25.675	26.7576
		0.736928	0.623182
media		4	4.68745
		0.60206	0.670936
max		691	262.34
		2.83948	2.41886
varian		5560.95	3002.41
		0.51639	0.903984
JB		0.001	0.001
		0.015154	0.068673
		ra	log
%		4.2166	-15.4351
err.va		2797.65	0.428623
rel.std.err		0.503088	0.830037
mod.eff		0.496912	0.169963

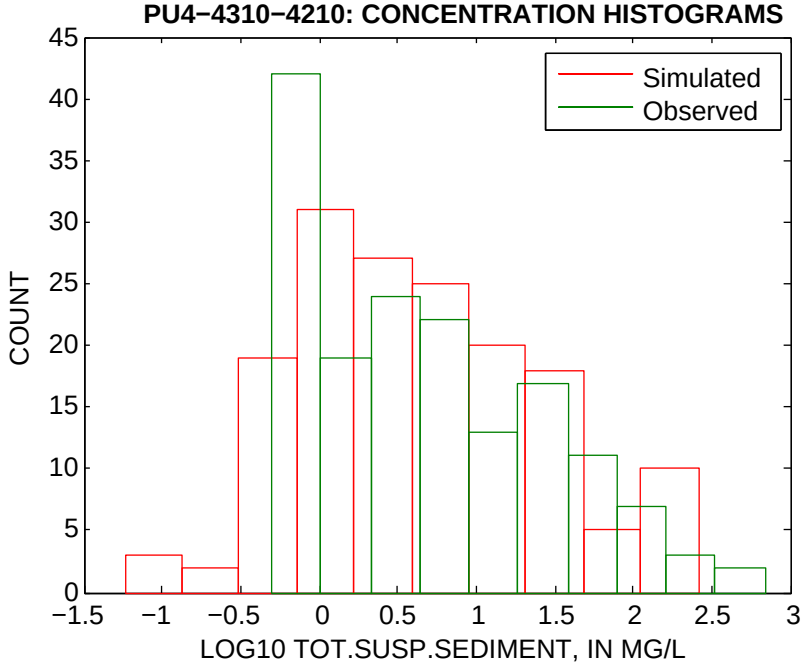
VERSION 2.1

ALL DATA
LOG10

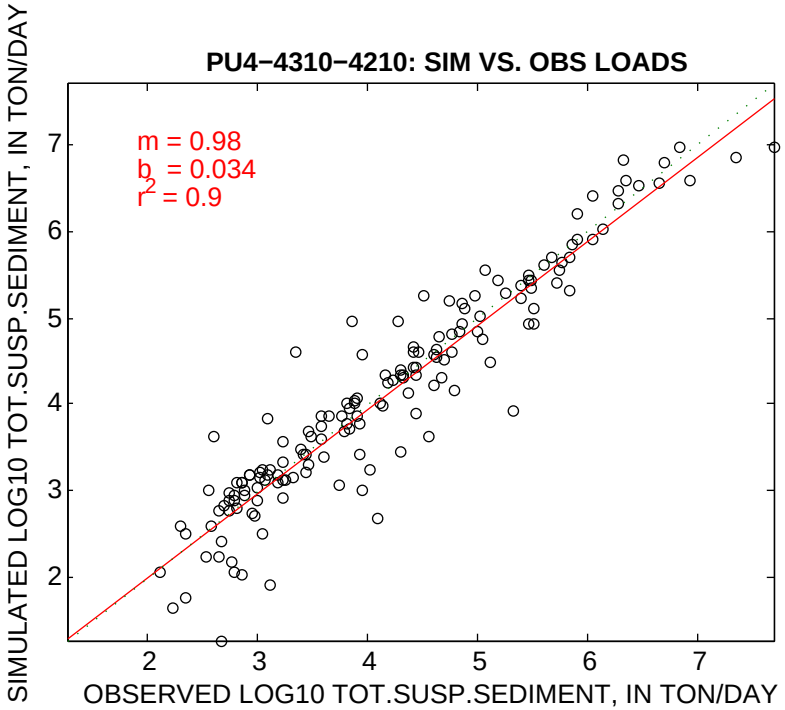


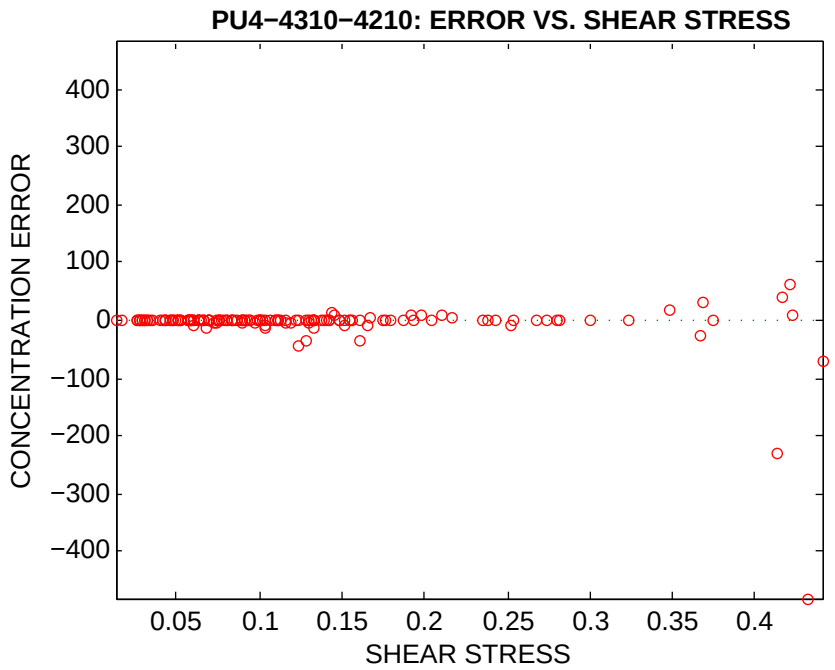


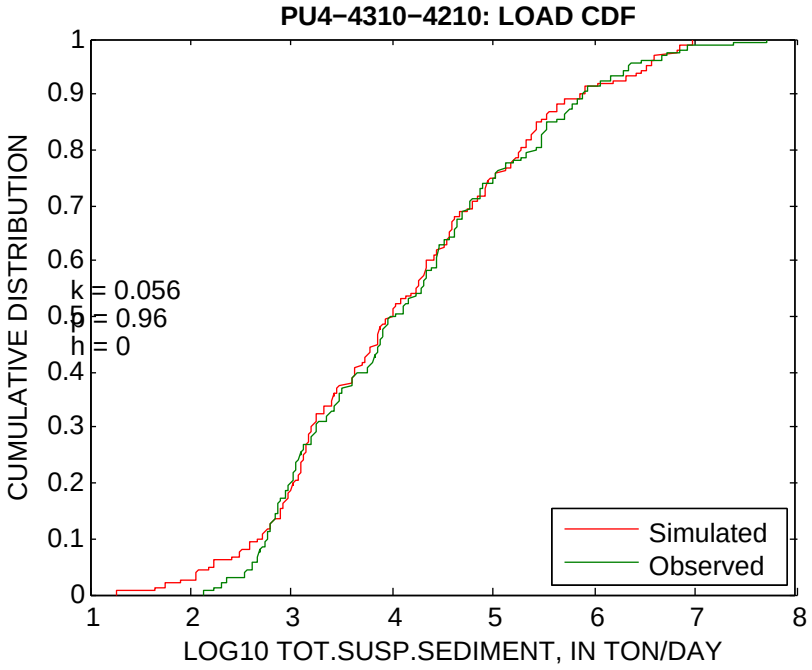


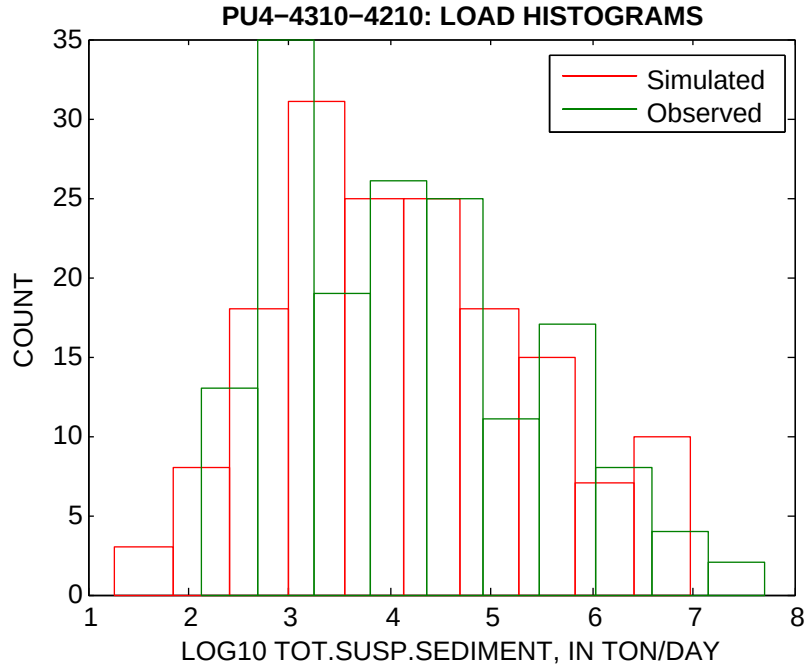


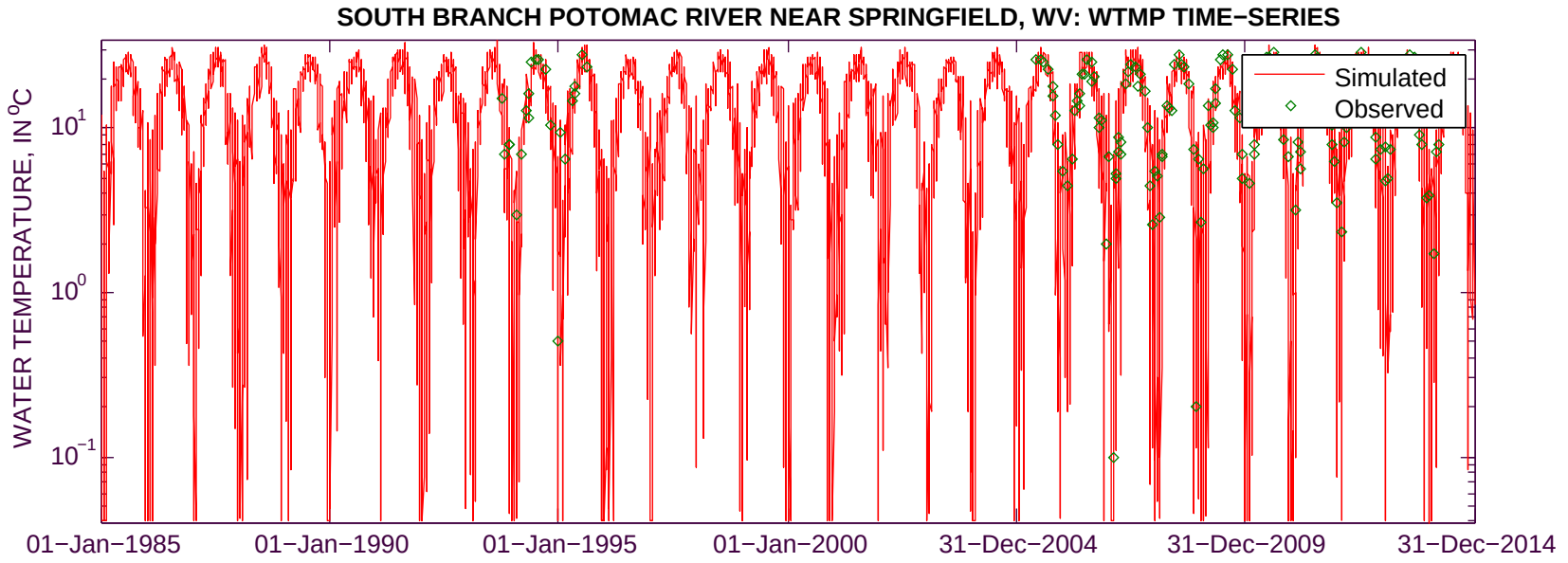
LOAD DATA
LOG10

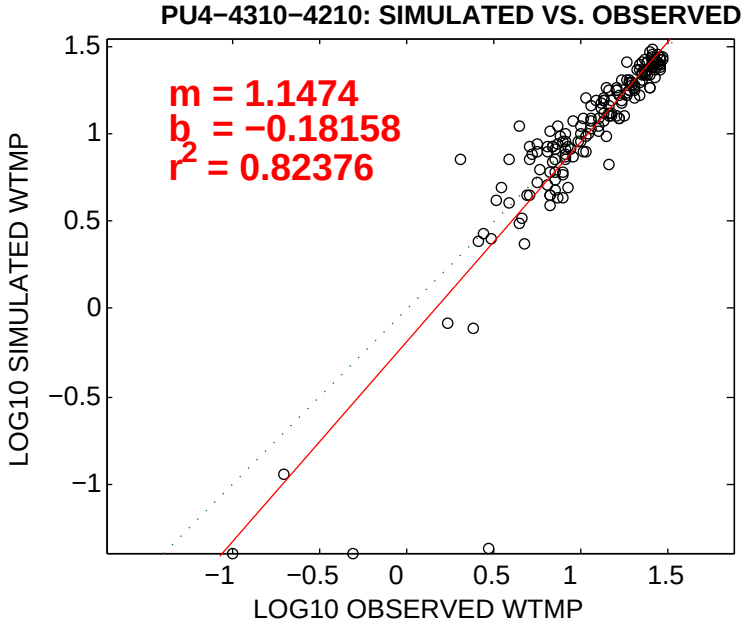


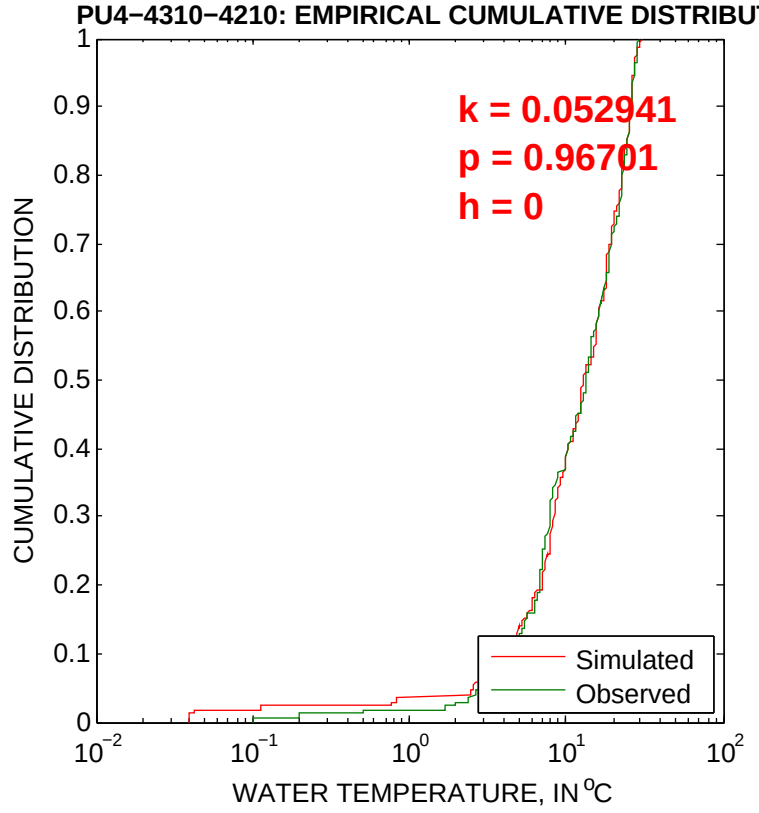












DATA SELECTION

scenario	file
P620171001WQ	WTMP.calib

plot: WTMP - water tempera...

Dates: 1/1/1985 – 12/31/201

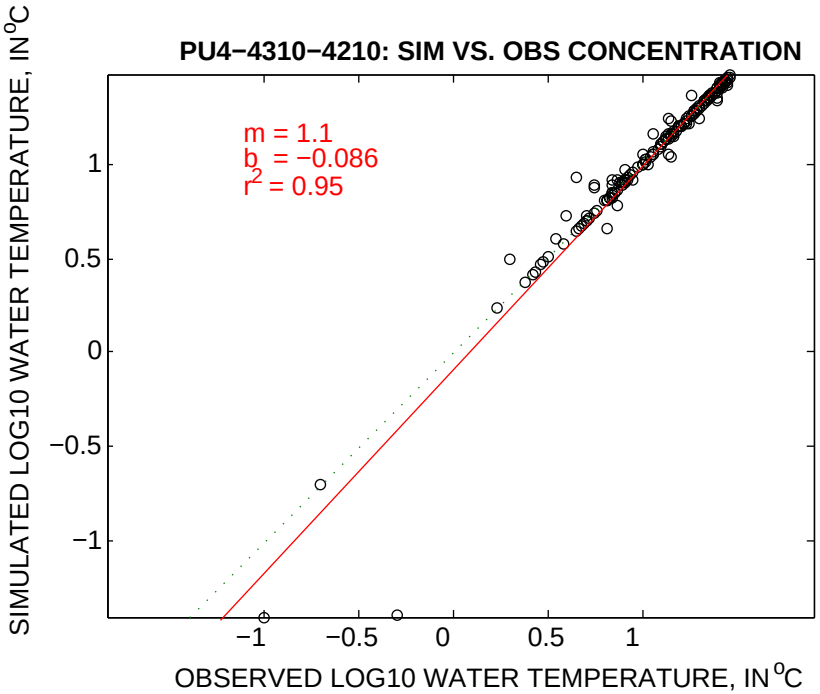
Drive	Directory	Observed
N/A	model	OBS20161101

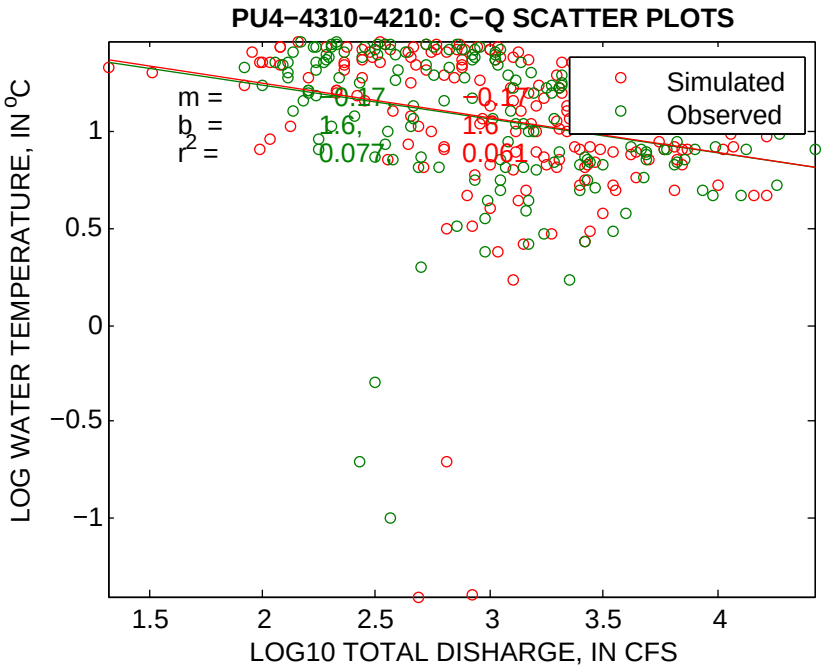
STATISTICS

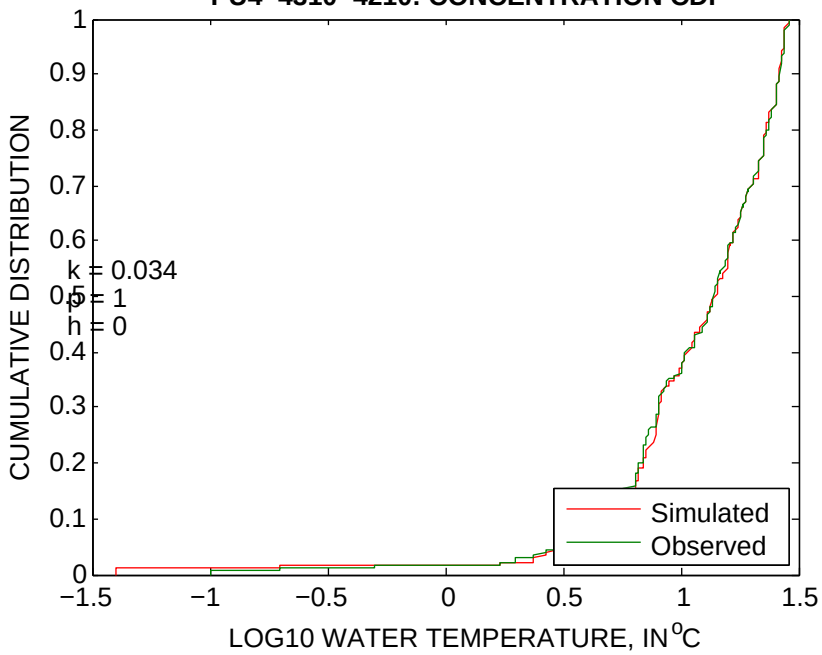
n	170	170
	observe	simulate
min	0.1	0.040043
	-1	-1.39747
mean	14.3252	14.2348
	1.05189	1.02539
media	13.5	12.8495
	1.13032	1.10889
max	29.1	30.134
	1.46389	1.47906
varian	65.4213	64.5009
	0.136115	0.217548
JB	0.010625	0.015814
	0.001	0.001
	ra	log
%	-0.630683	-2.51889
err.va	6.25872	0.0420046
rel.std.err	0.0956679	0.308597
mod.eff	0.904332	0.691403

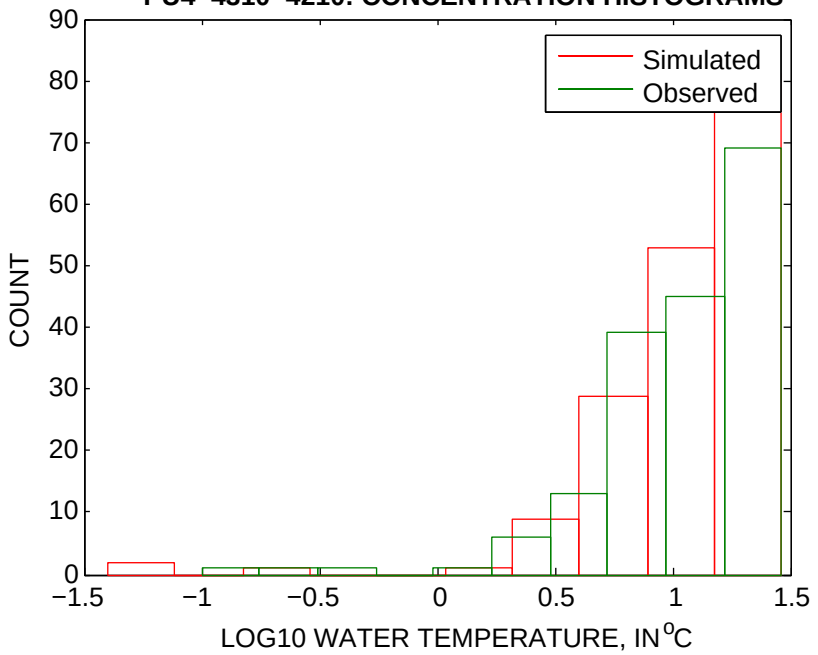
VERSION 2.1

ALL DATA
LOG10

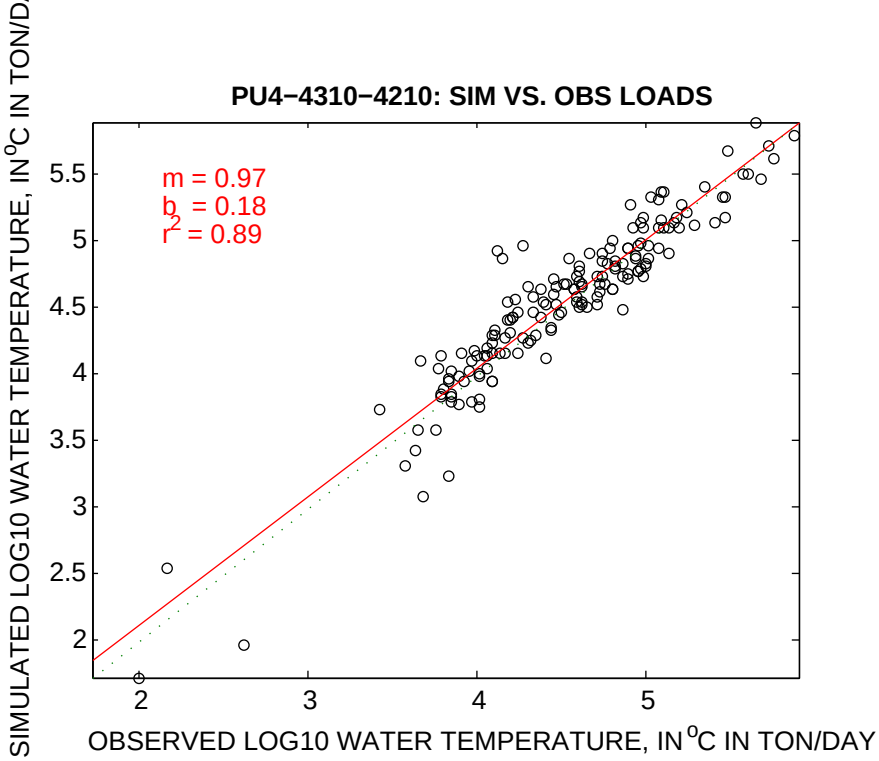


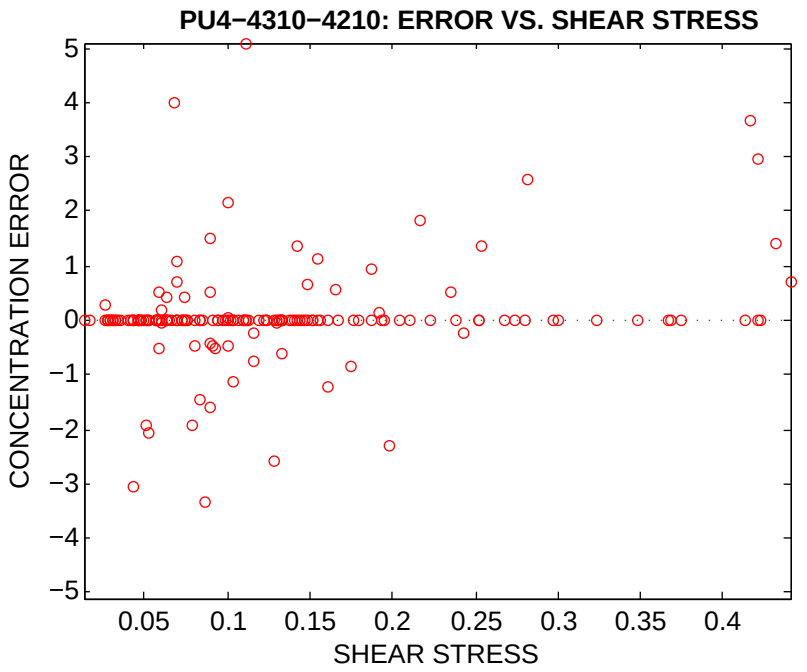


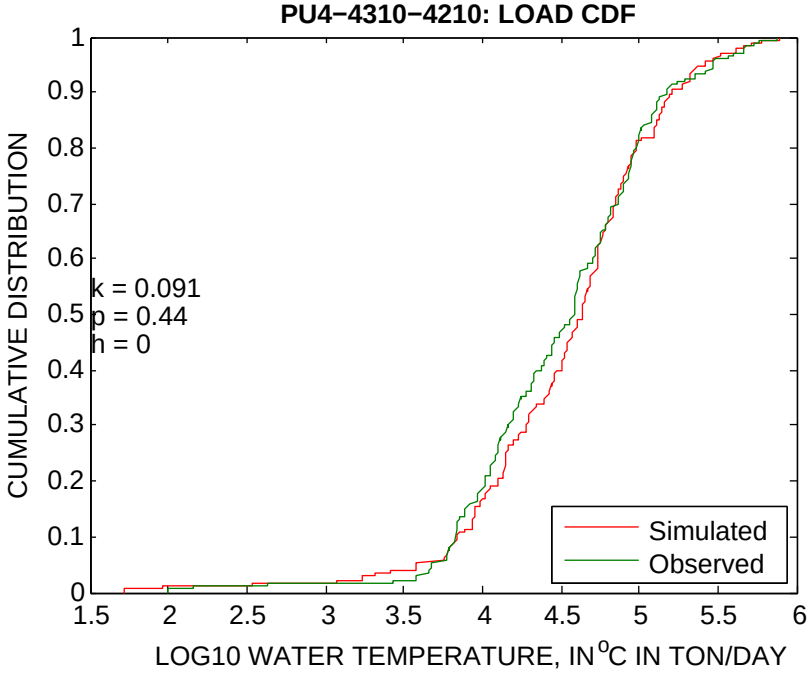


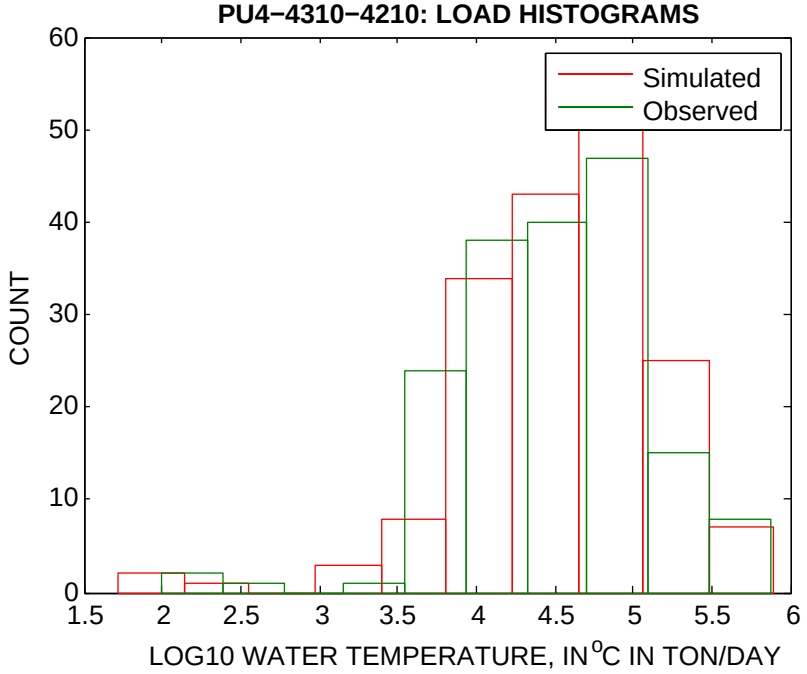


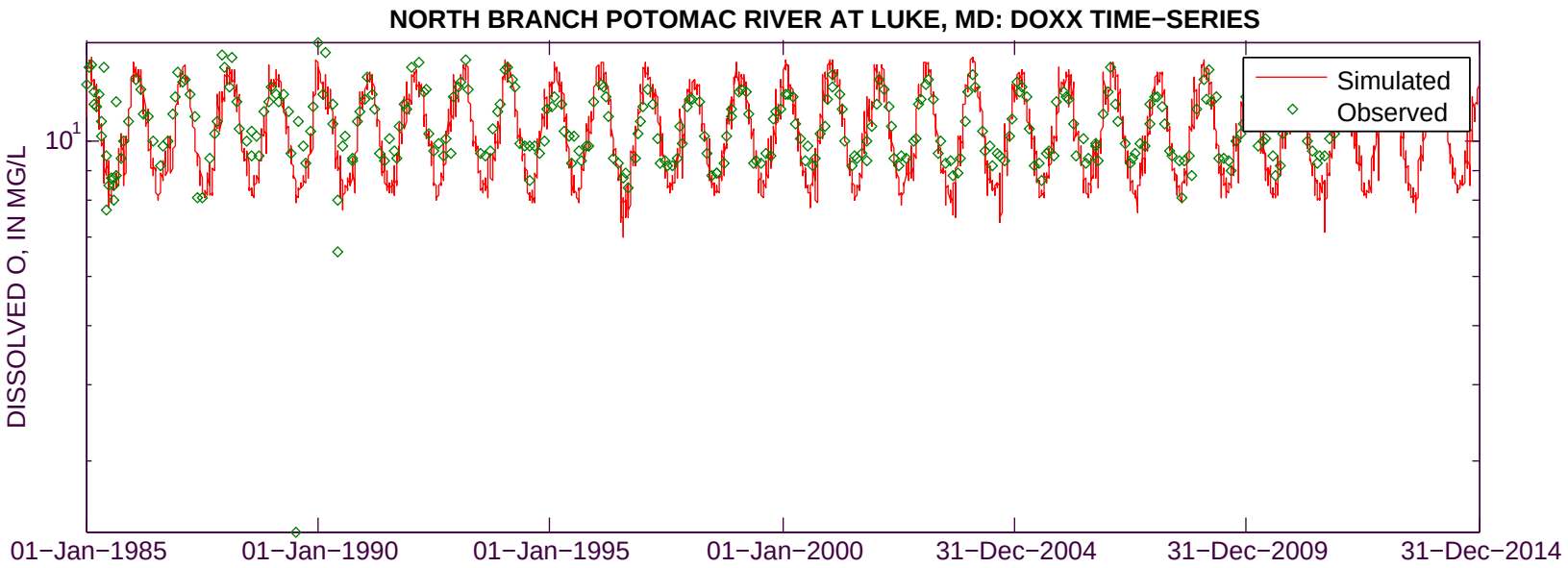
LOAD DATA
LOG10

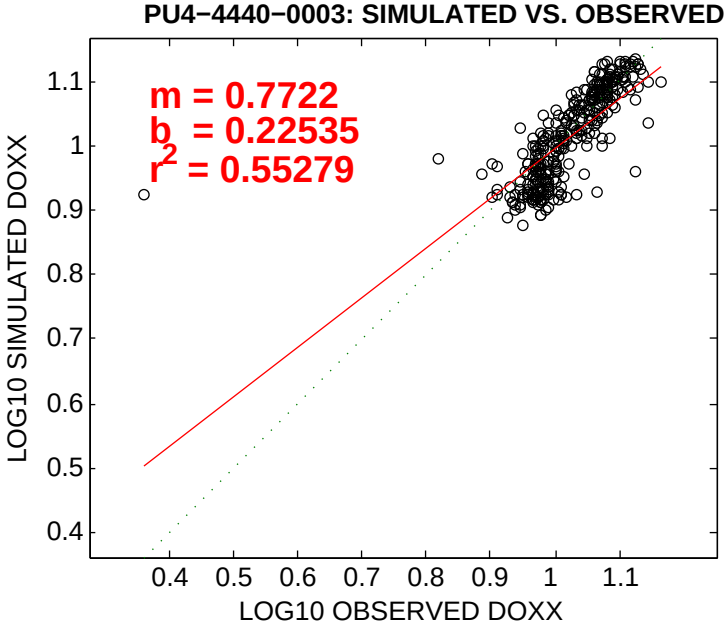


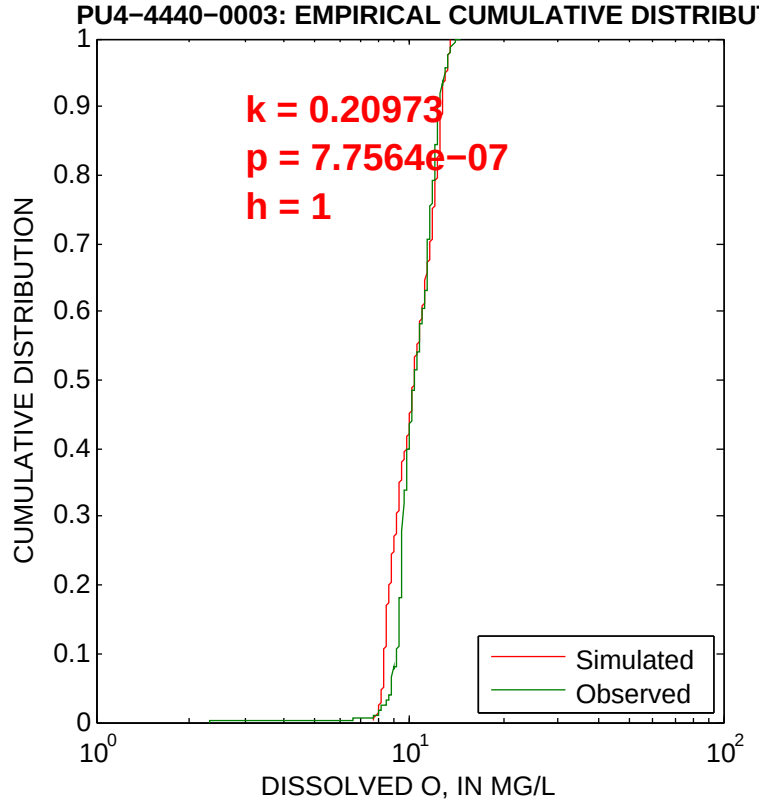












DATA SELECTION

scenario	file
P620171001WQ	DOXX.calib

plot: DOXX - dissolved oxygen

Dates: 1/1/1985 – 12/31/201

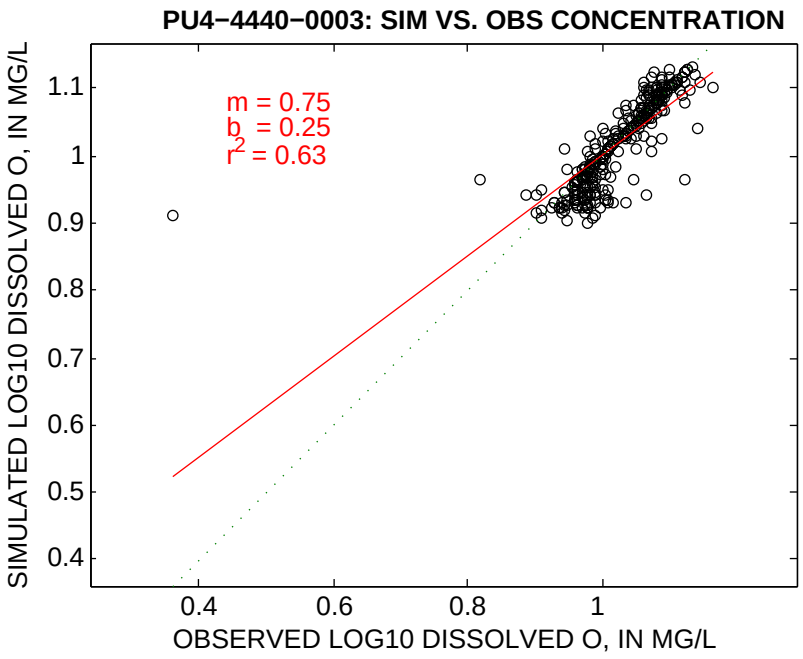
Drive	Directory	Observed
N/A	model	OBS20161101

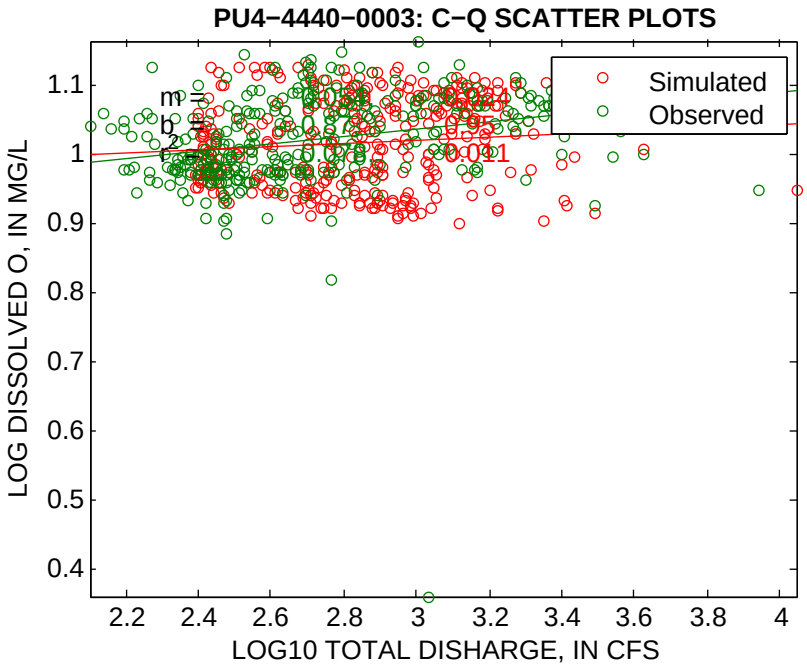
STATISTICS

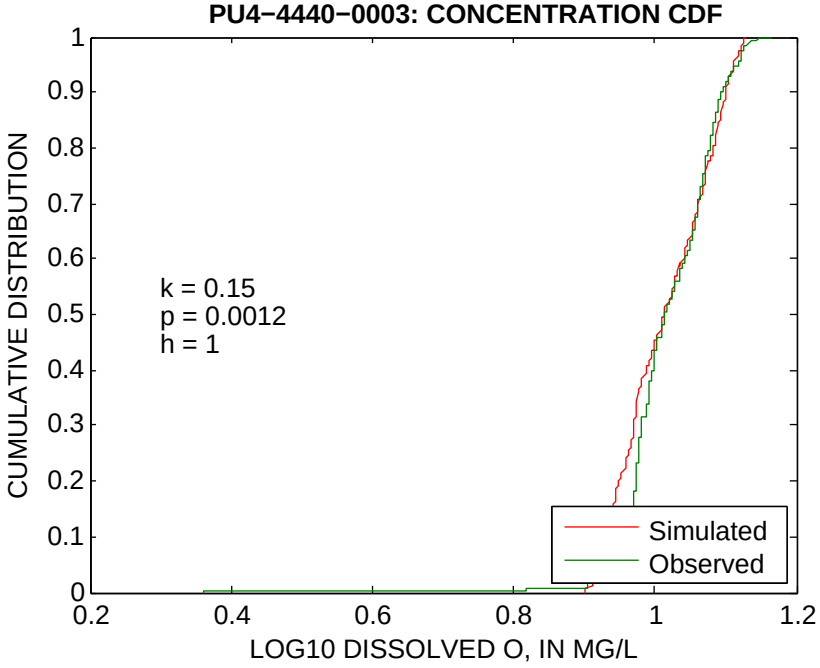
	n	observe	simulate
		329	329
min		2.3	7.4894
		0.361728	0.874447
mean		10.6081	10.4549
		1.02103	1.01378
media		10.3	10.313
		1.01284	1.01339
max		14.6	13.619
		1.16435	1.13415
varian		2.11374	2.77954
		0.00448573	0.00483868
JB		0.001	0.001095
		0.001	0.001118
		ra	log
%		-1.44436	-0.709517
err.va		0.89816	0.00244933
rel.std.err		0.424915	0.546027
mod.eff		0.575085	0.453973

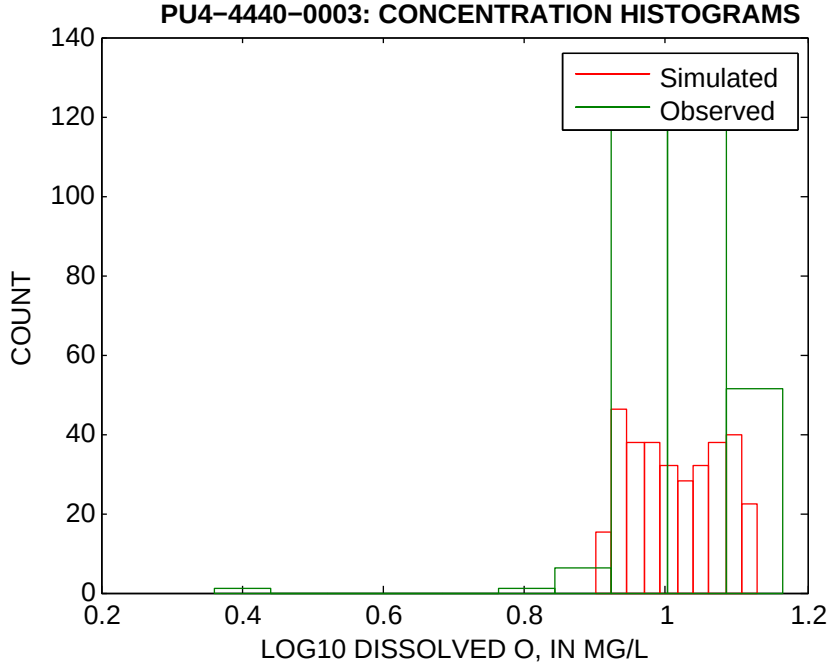
VERSION 2.1

ALL DATA
LOG10

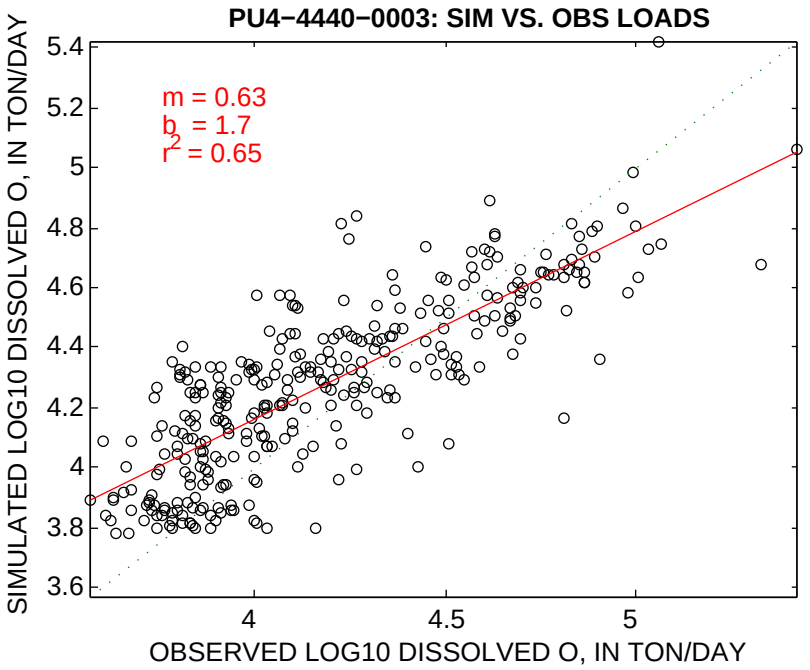


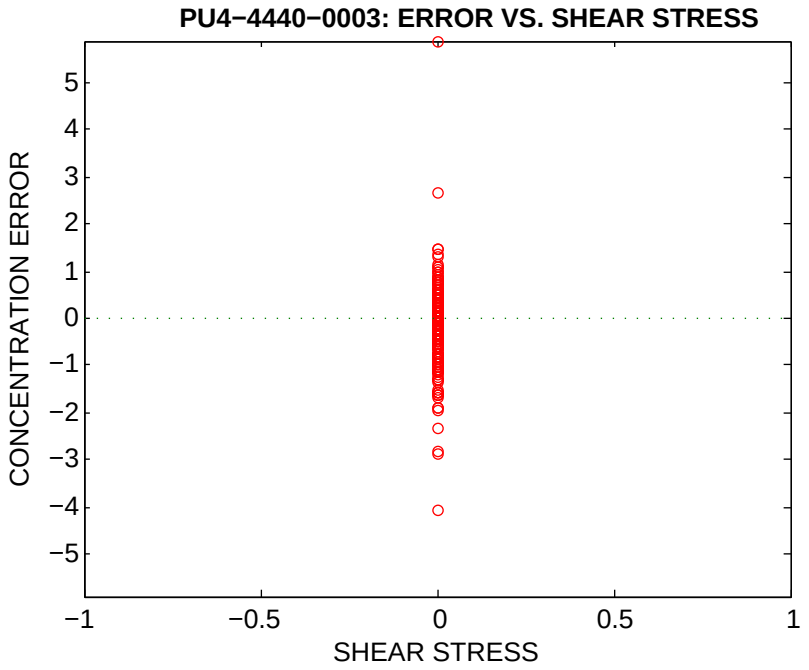


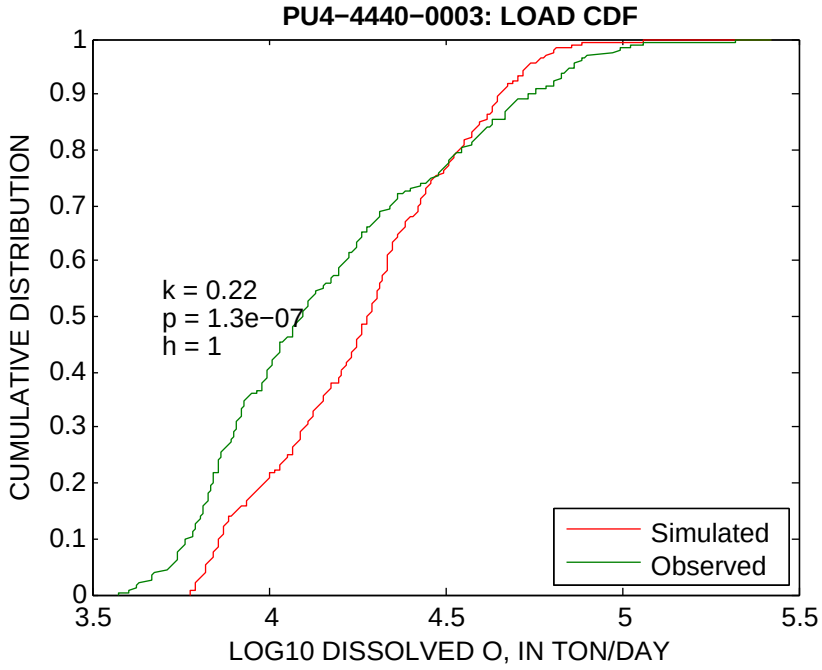


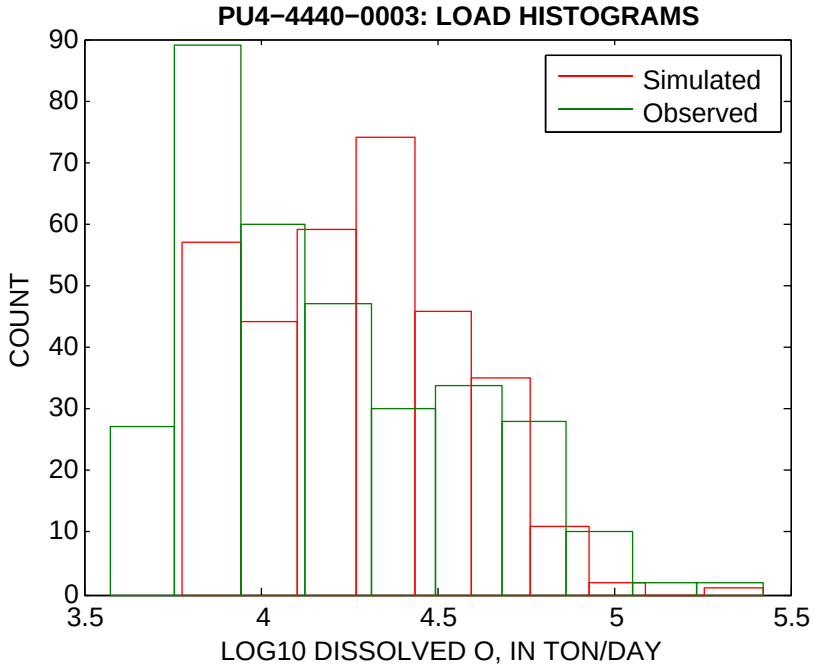


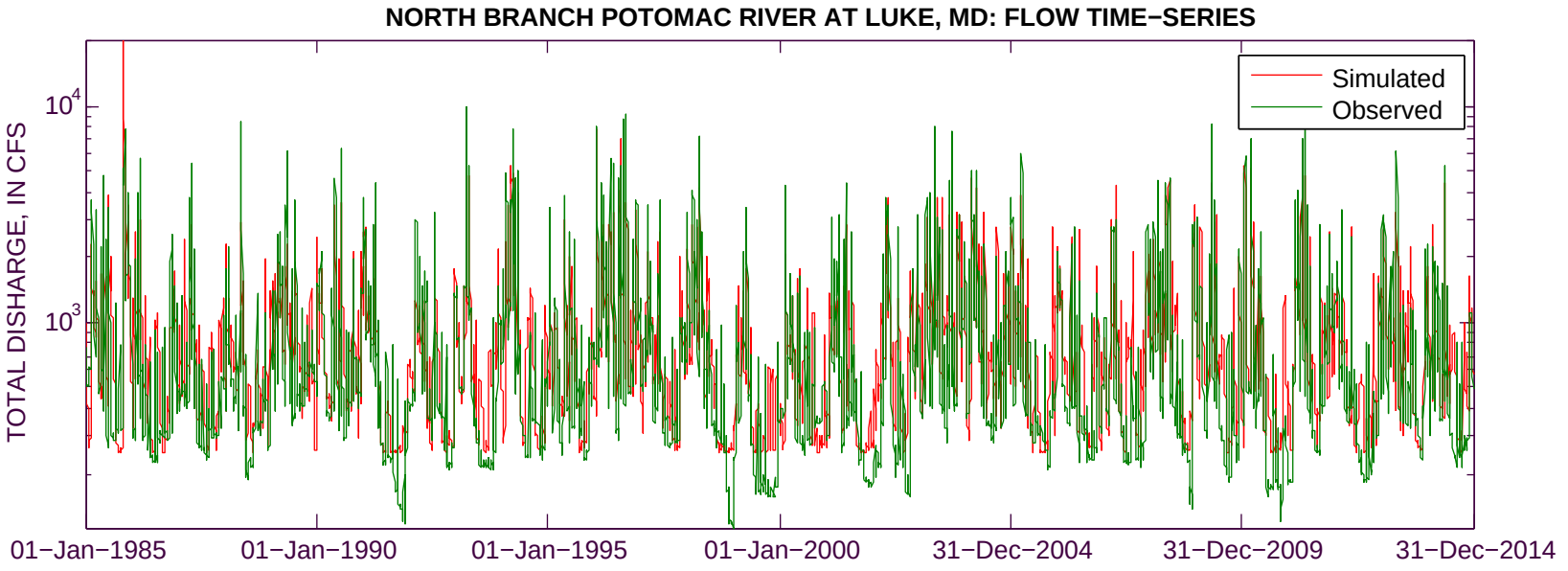
LOAD DATA
LOG10

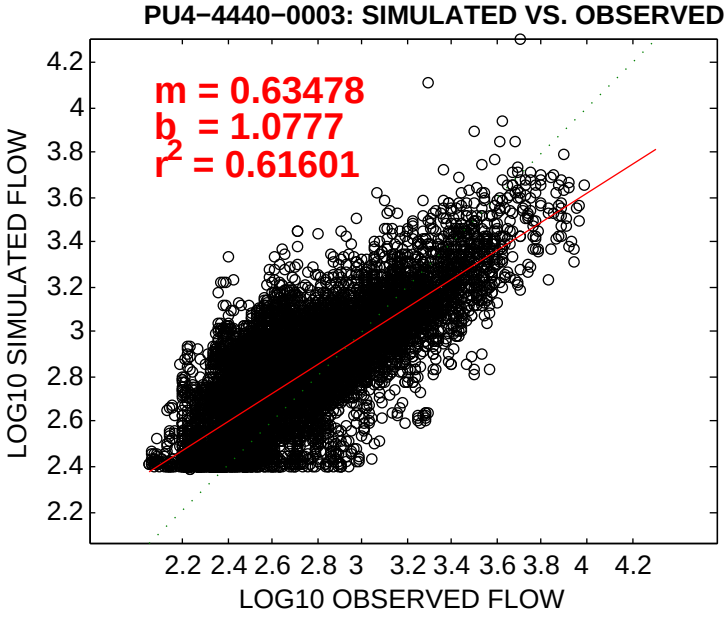


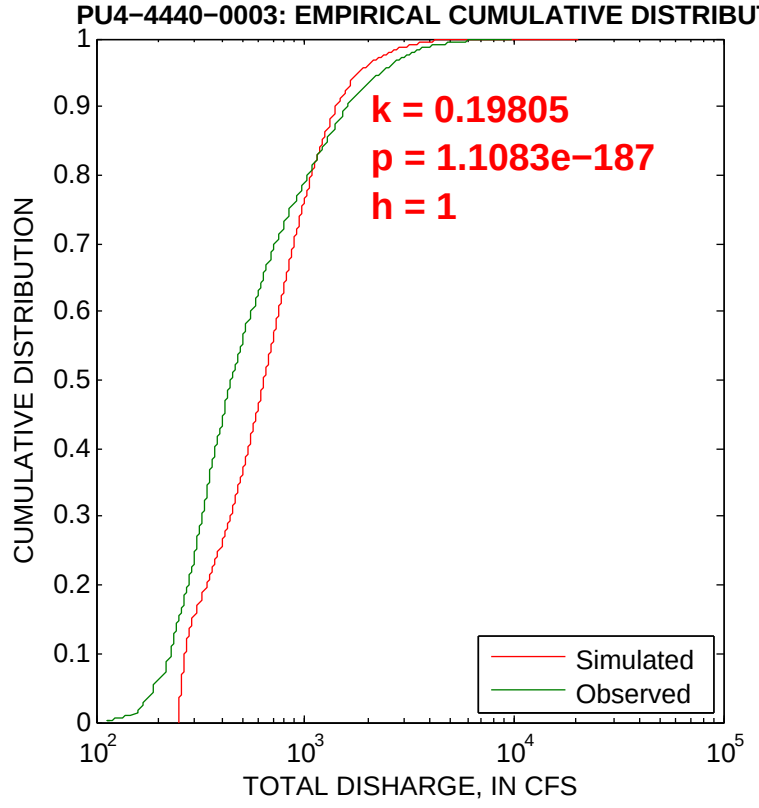












DATA SELECTION

scenario: P620171001WQ | file: FLOW.calib

plot: FLOW - total discharge

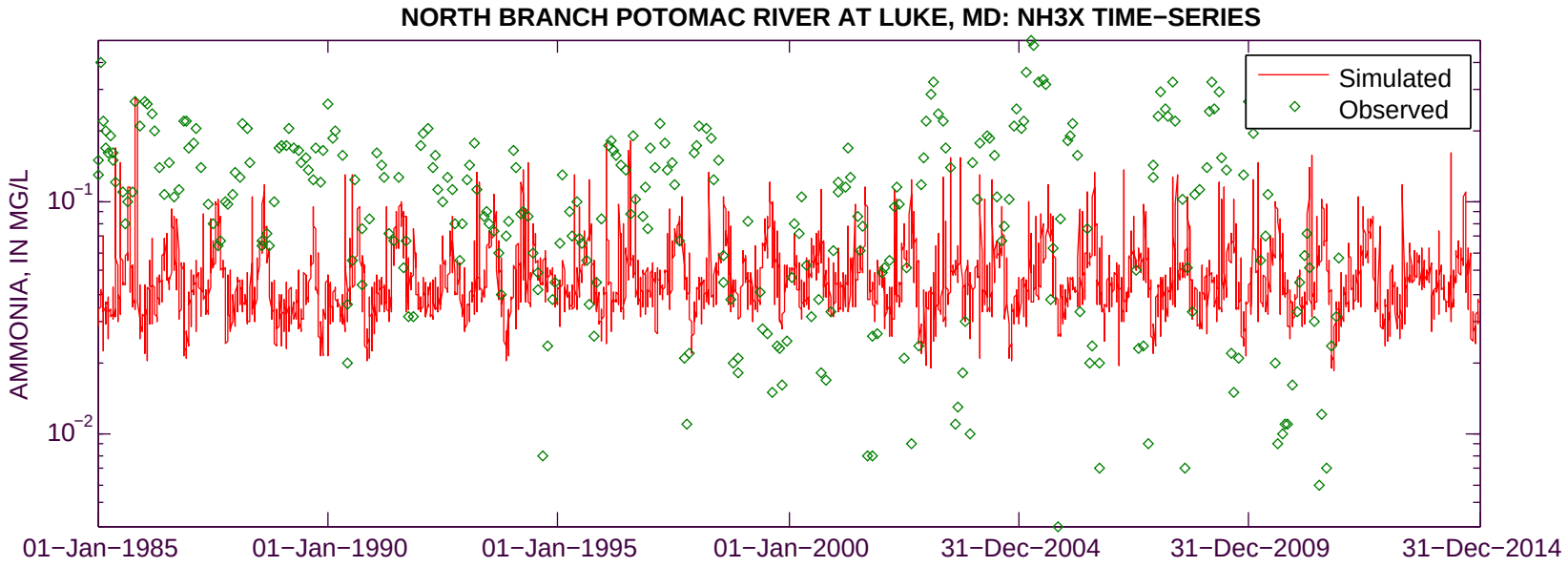
Dates: 1/1/1985 – 12/31/201

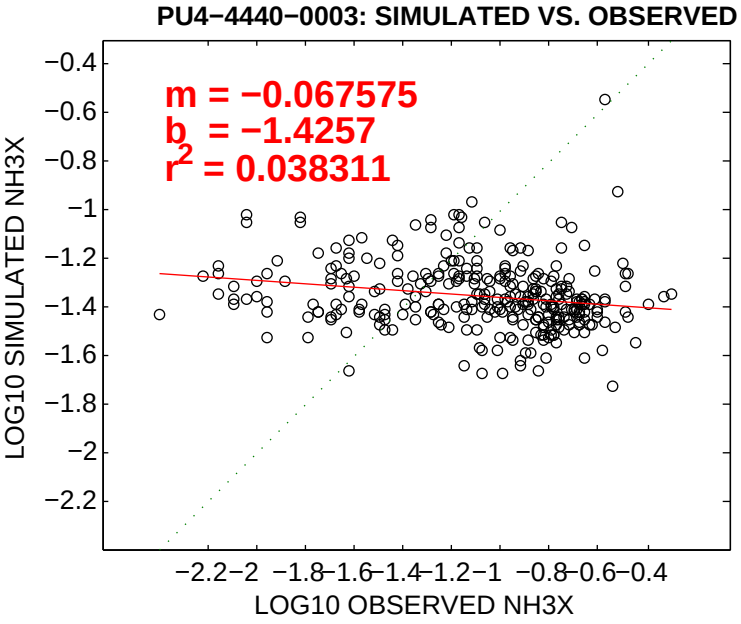
Drive: N/A | Directory: model | Observed: OBS20161101

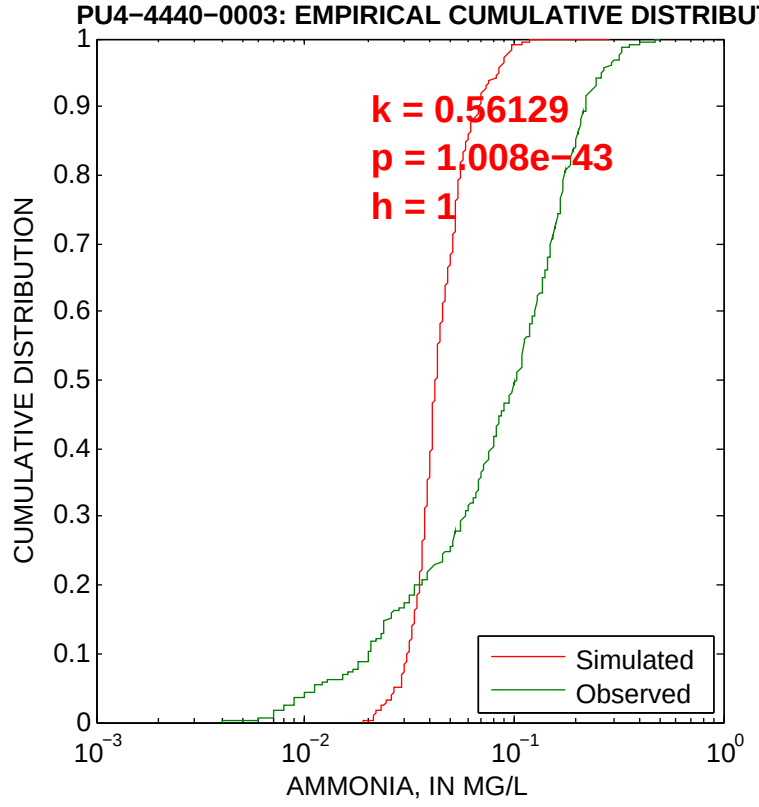
STATISTICS

		observe	simulate
n		10957	10957
min		113	247.48
		2.05308	2.39354
mean		755.76	791.955
		2.72479	2.80732
media		445	640.69
		2.64836	2.80665
max		9820	20278
		3.99211	4.30703
varian		727266	408851
		0.112485	0.0735775
JB		0.001	0.001
		0.001	0.001
		ra	log
%		4.78922	3.02905
err.va		315037	0.0500697
rel.std.err		0.43318	0.445124
mod.eff		0.56682	0.554876

VERSION 2.1







DATA SELECTION

scenario	file
P620171001WQ	NH3X.calib

plot: NH3X - ammonia

Dates: 1/1/1985 – 12/31/201

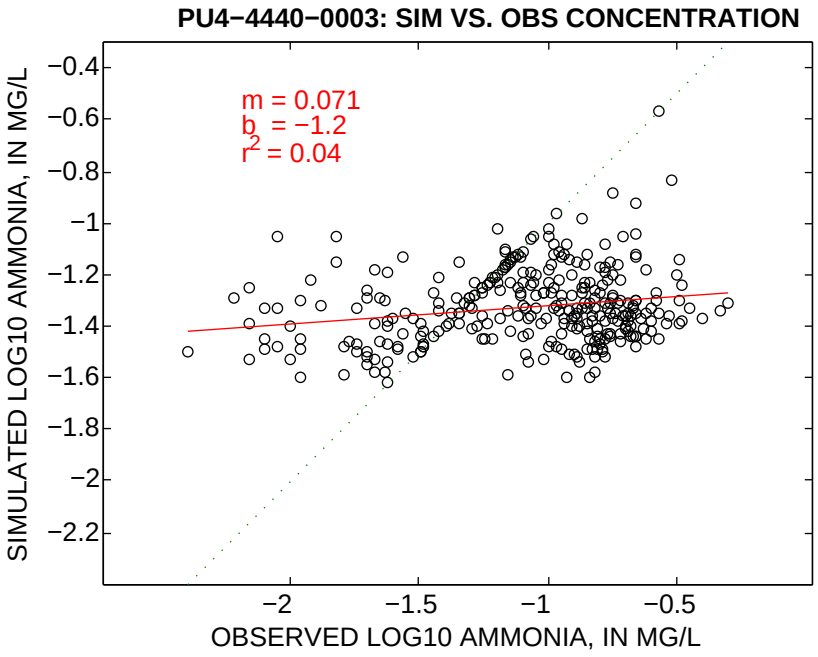
Drive	Directory	Observed
N/A	model	OBS20161101

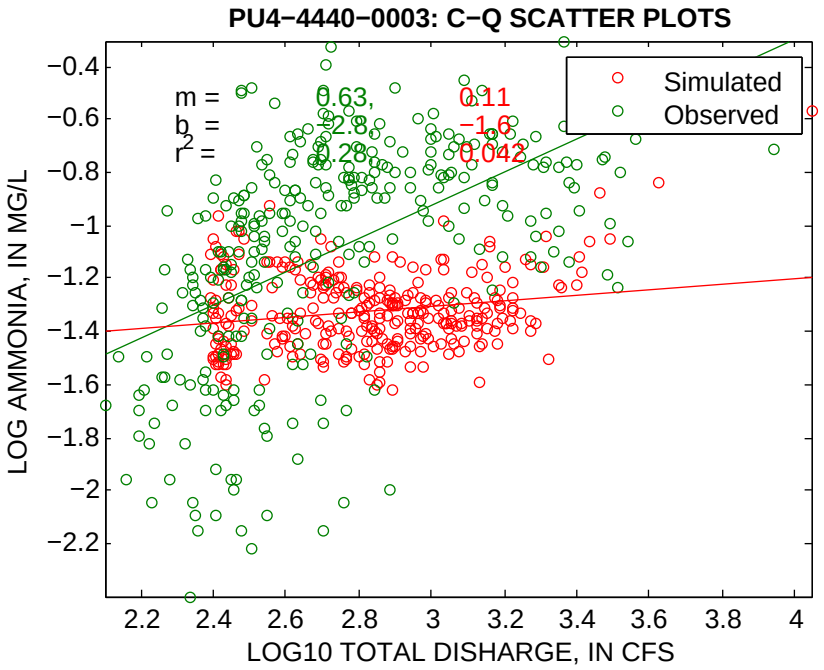
STATISTICS

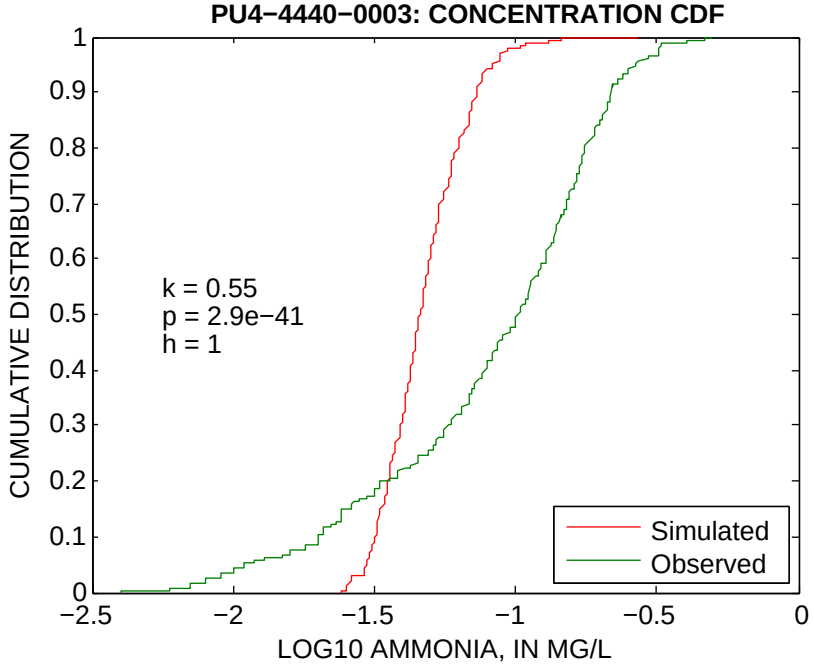
	n	observe	simulate
		310	310
min		0.004	0.01906
		-2.39794	-1.71988
mean		0.114945	0.0472569
		-1.09092	-1.35197
media		0.1025	0.042487
		-0.989281	-1.37174
max		0.498	0.28123
		-0.302771	-0.550938
varian		0.0071363	0.00043155
		0.17068	0.0203434
JB		0.001	0.001
		0.001	0.001
		ra	log
%		-58.8875	23.9291
err.va		0.0124815	0.282457
rel.std.err		1.74902	1.65489
mod.eff		-0.749017	-0.654895

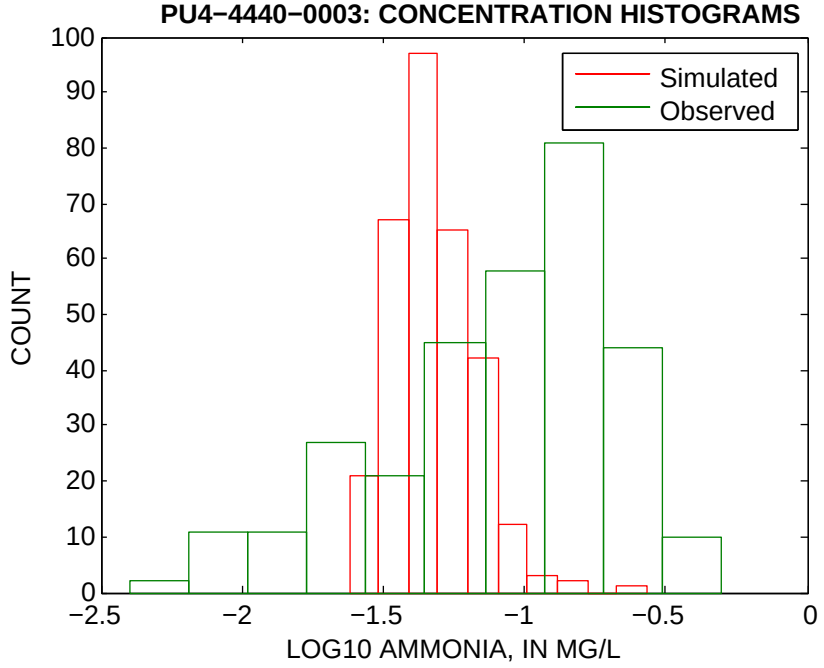
VERSION 2.1

ALL DATA
LOG10

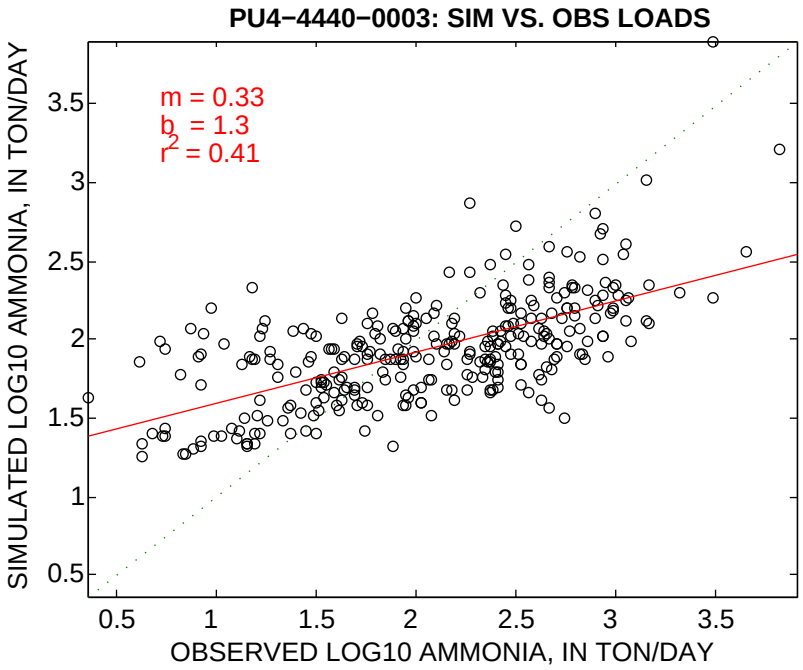


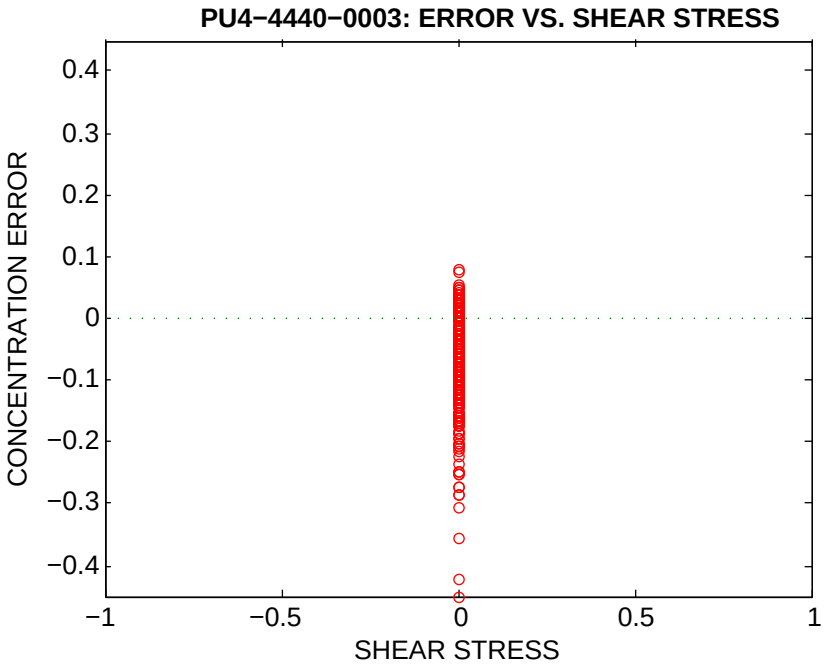


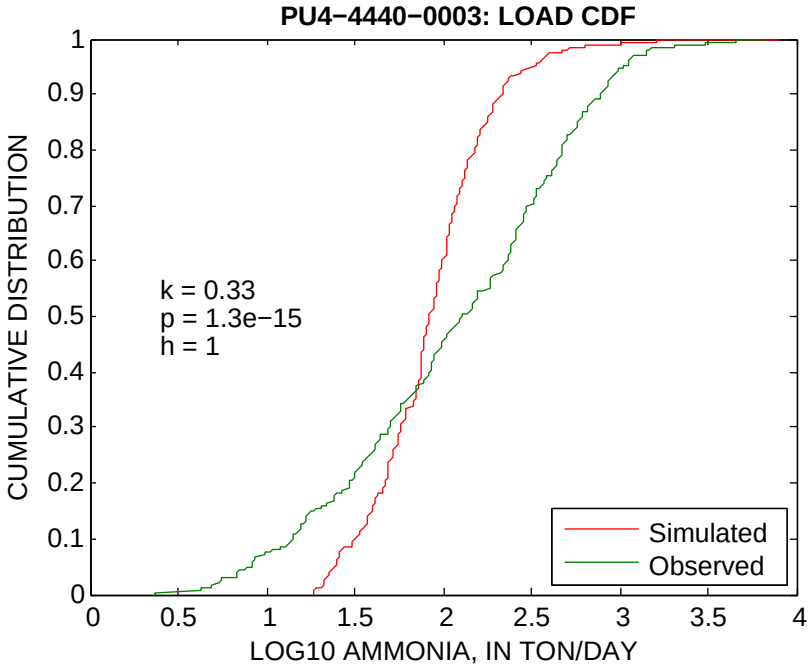


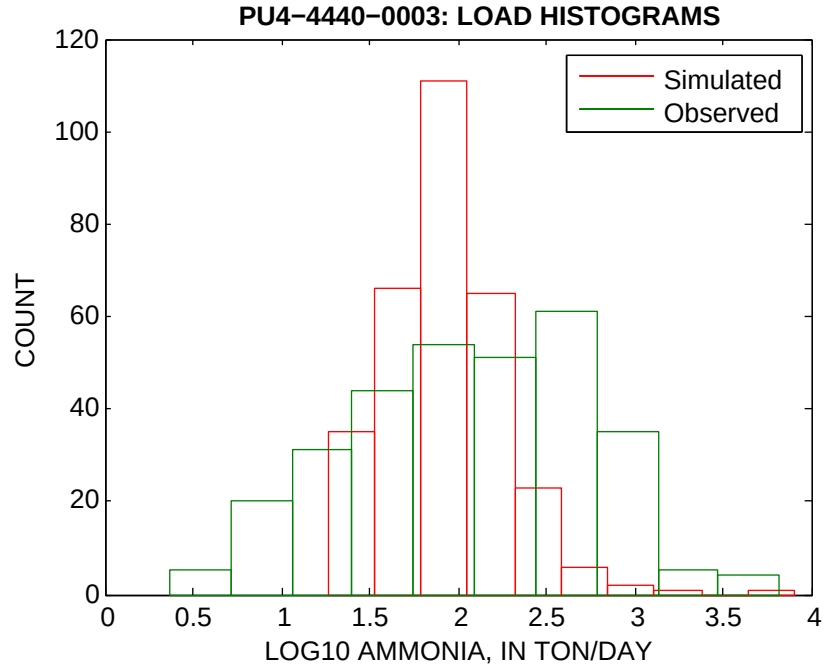


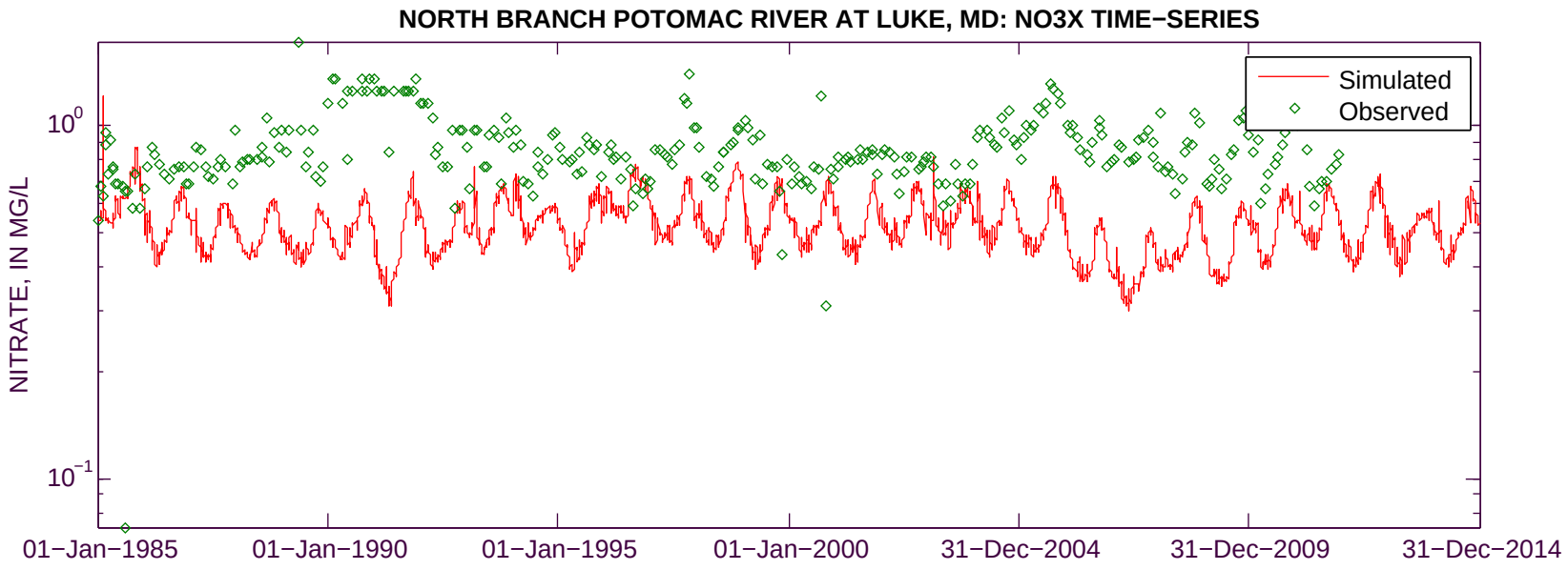
LOAD DATA
LOG10

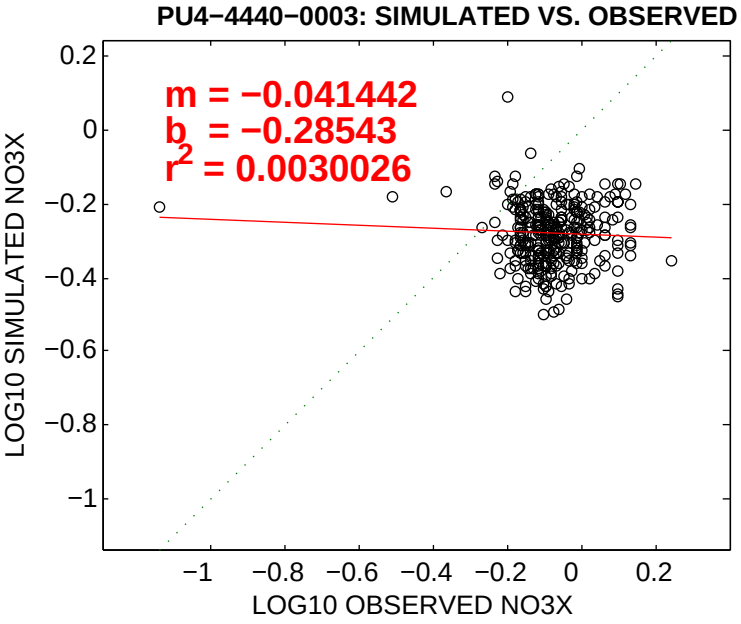


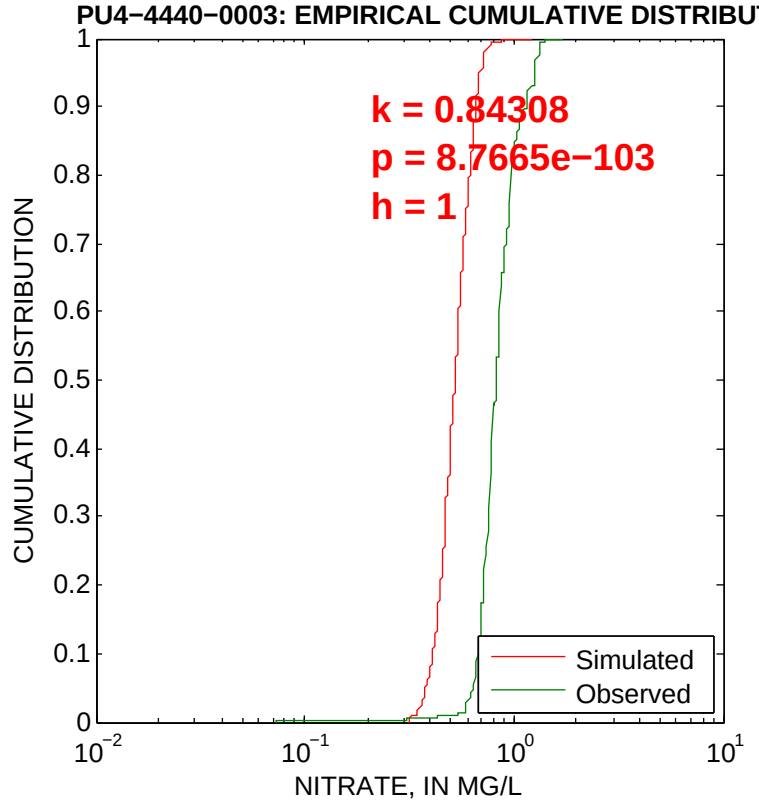












DATA SELECTION

scenario	file
P620171001WQ	NO3X.calib

plot: NO3X - nitrate

Dates: 1/1/1985 – 12/31/201

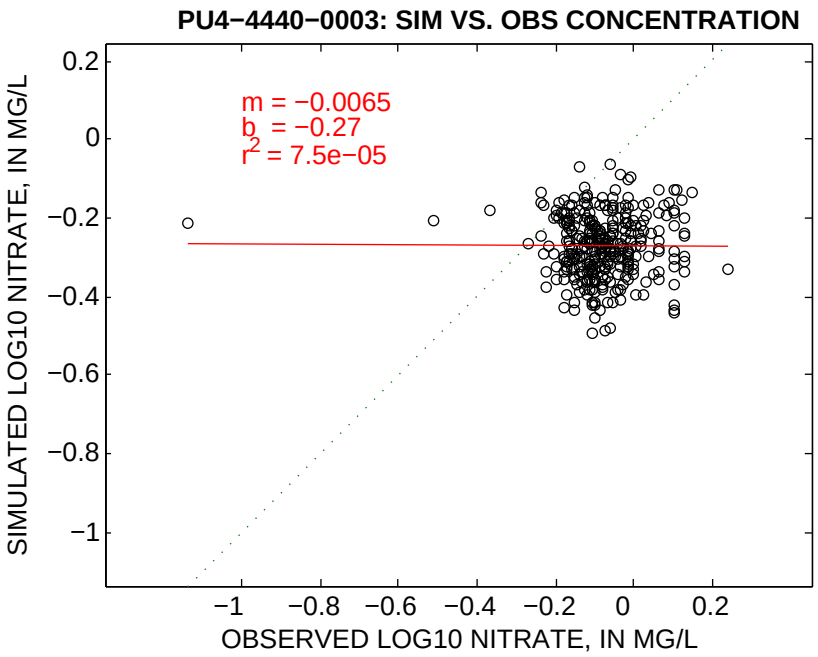
Drive	Directory	Observed
N/A	model	OBS20161101

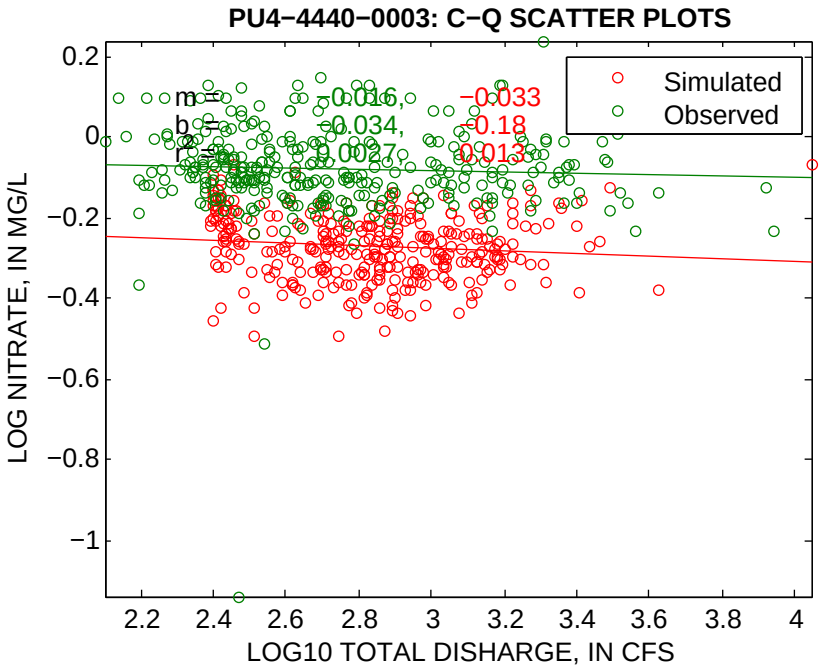
STATISTICS

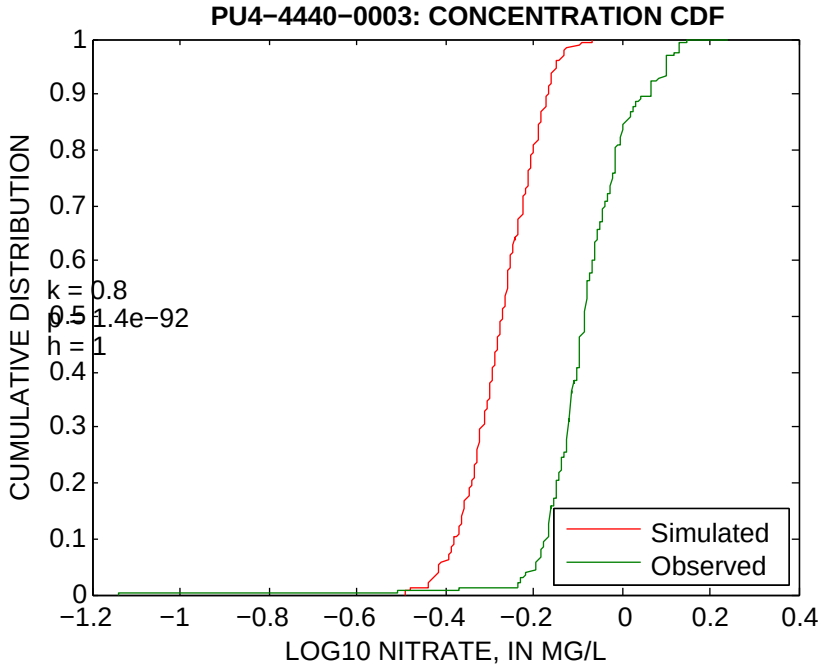
	n	325	325
		observe	simulate
min		0.073	0.31746
		-1.13668	-0.498311
mean		0.859877	0.531298
		-0.0768987	-0.282242
media		0.82	0.52385
		-0.0861861	-0.280793
max		1.74	1.2231
		0.240549	0.087462
varian		0.0358441	0.0104098
		0.0114319	0.00653887
JB		0.001	0.001
		0.001	0.026462
		ra	log
%		-38.2123	267.031
err.va		0.155484	0.0612144
rel.std.err		4.33779	5.35471
mod.eff		-3.33779	-4.35471

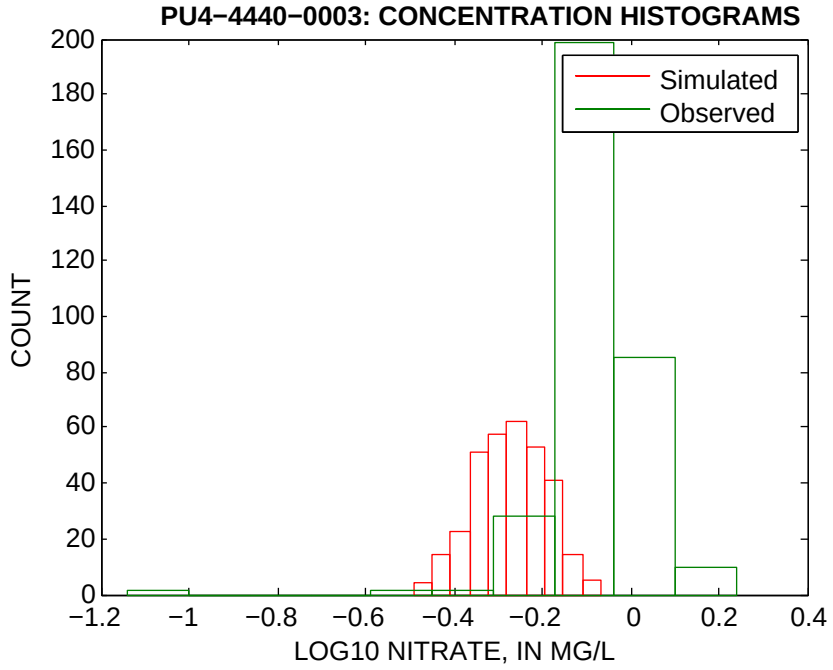
VERSION 2.1

ALL DATA
LOG10

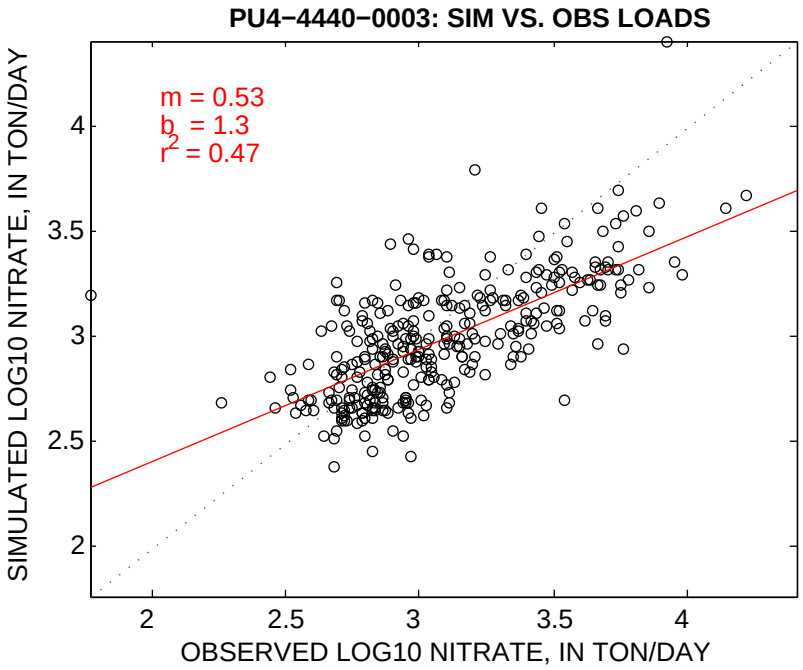


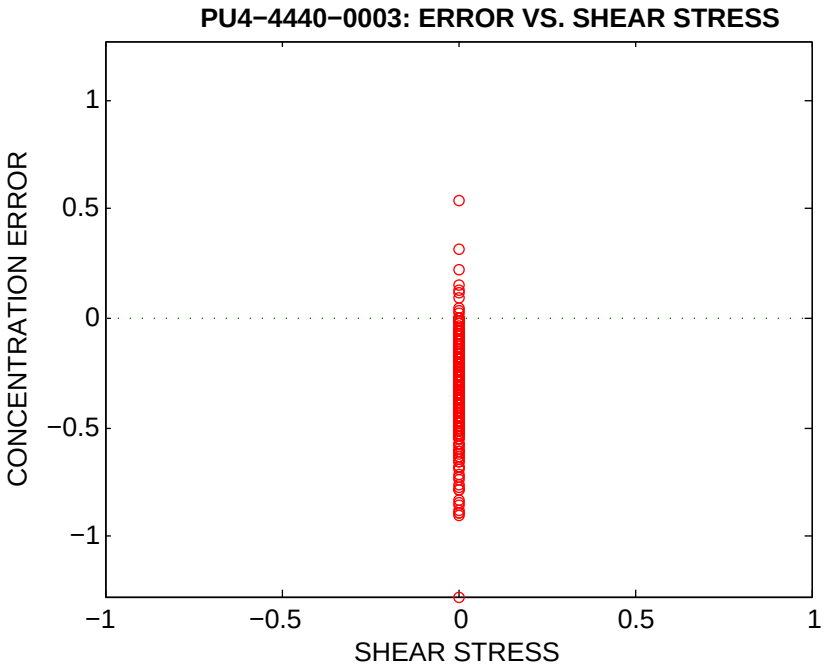


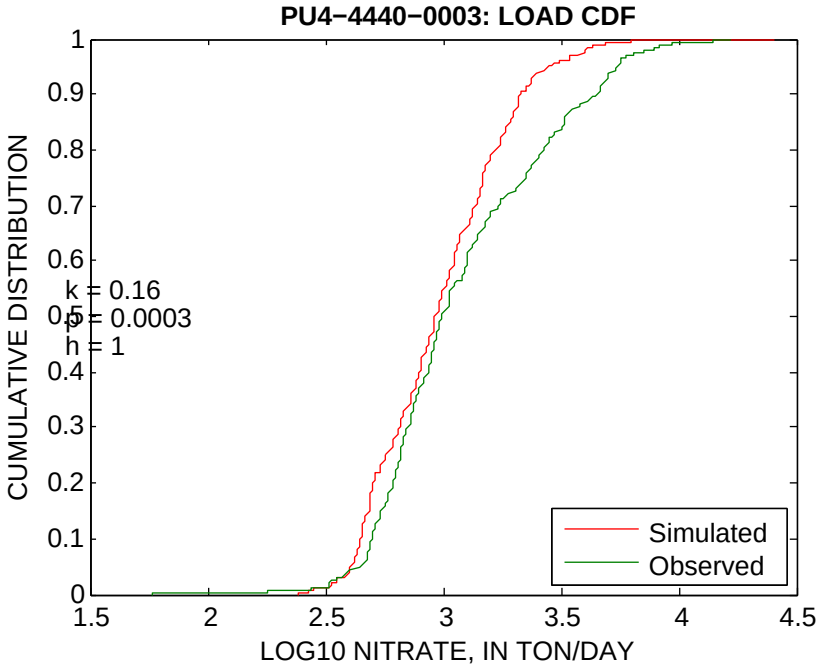


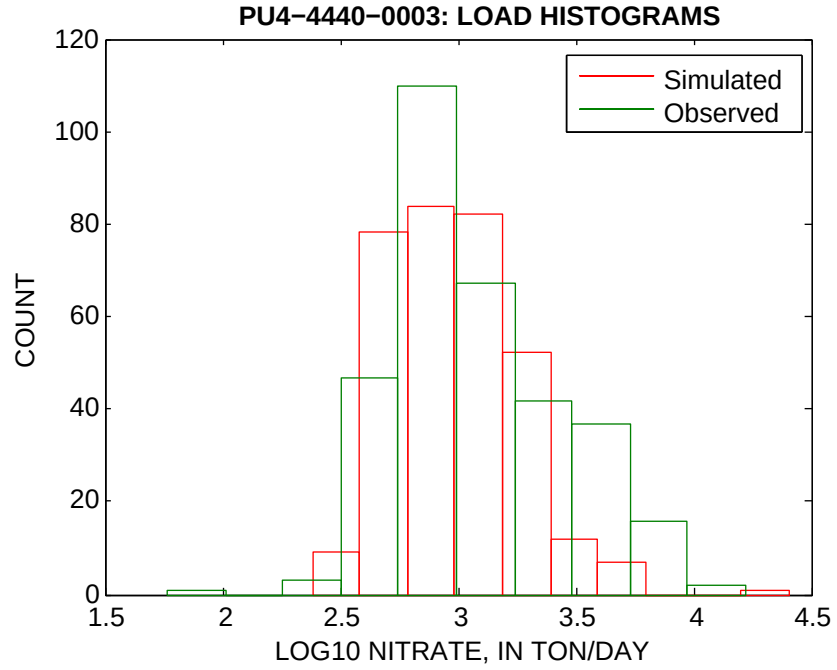


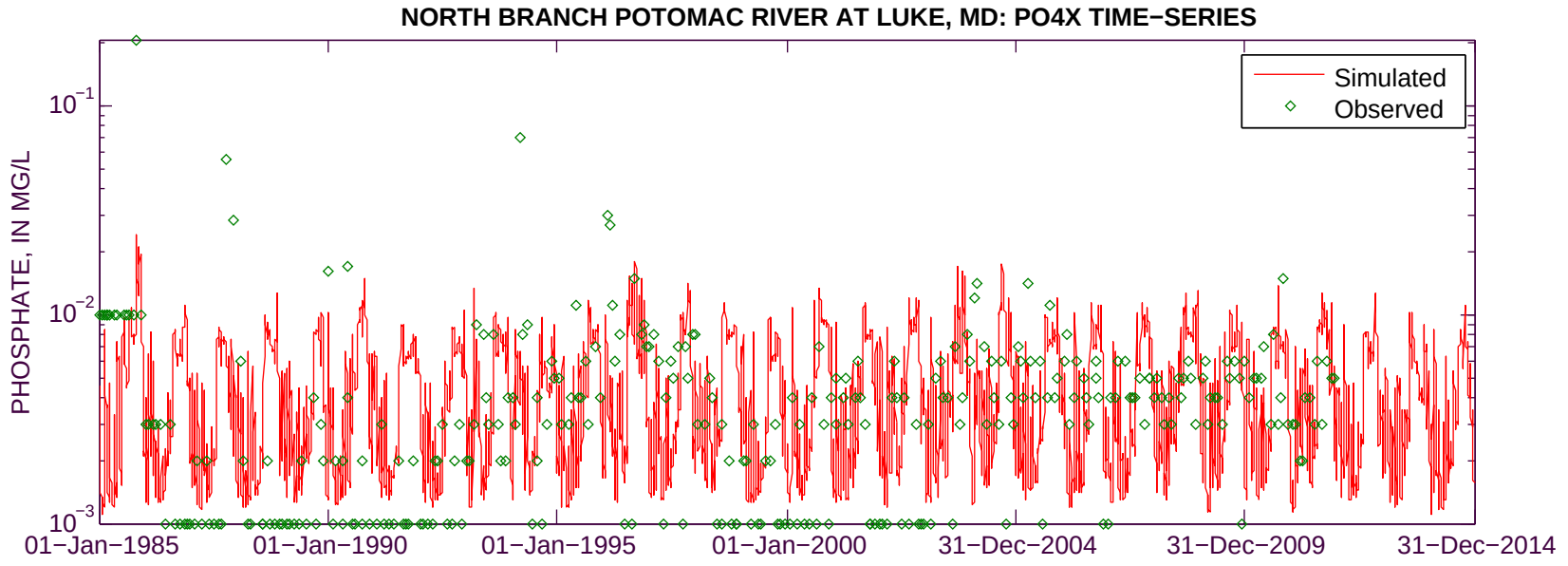
LOAD DATA
LOG10

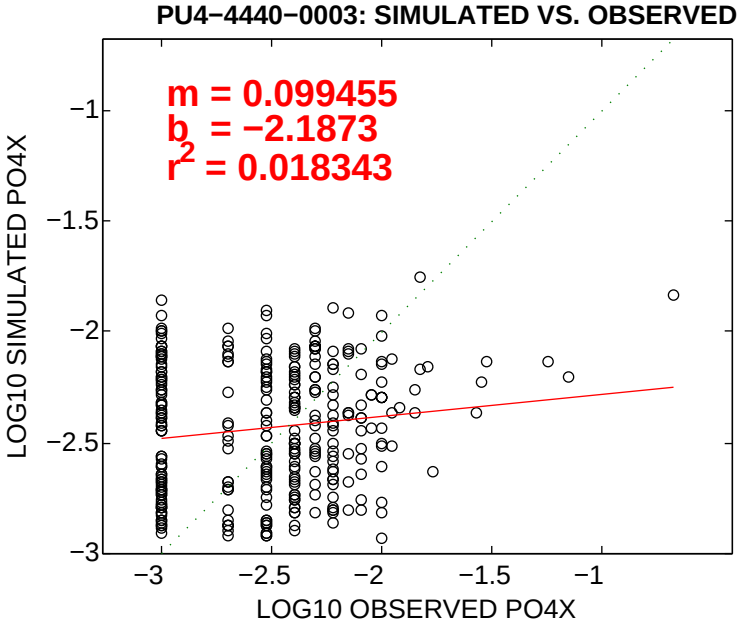


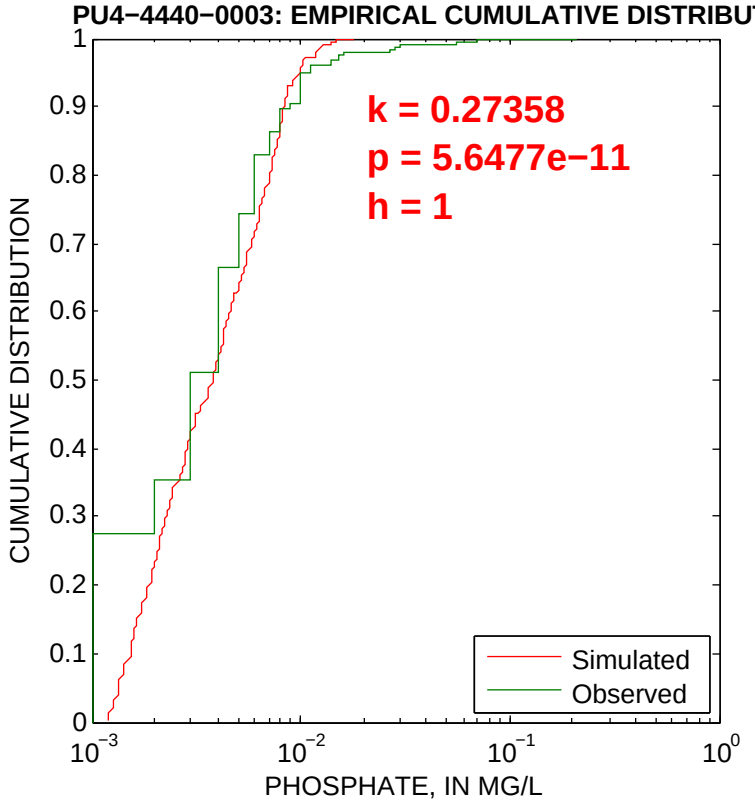












DATA SELECTION

scenario	file
P620171001WQ	PO4X.calib

plot: PO4X - phosphate

Dates: 1/1/1985 – 12/31/201

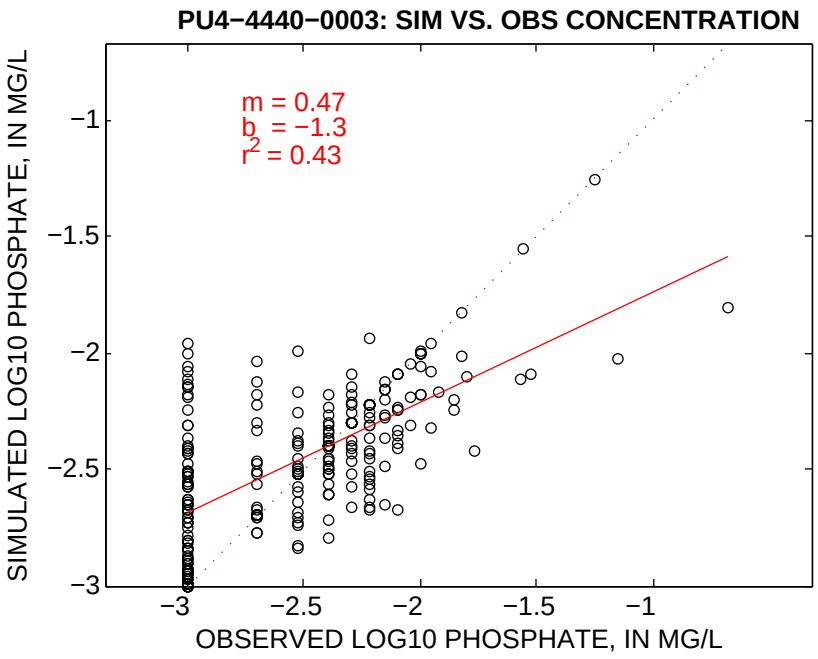
Drive	Directory	Observed
N/A	model	OBS20161101

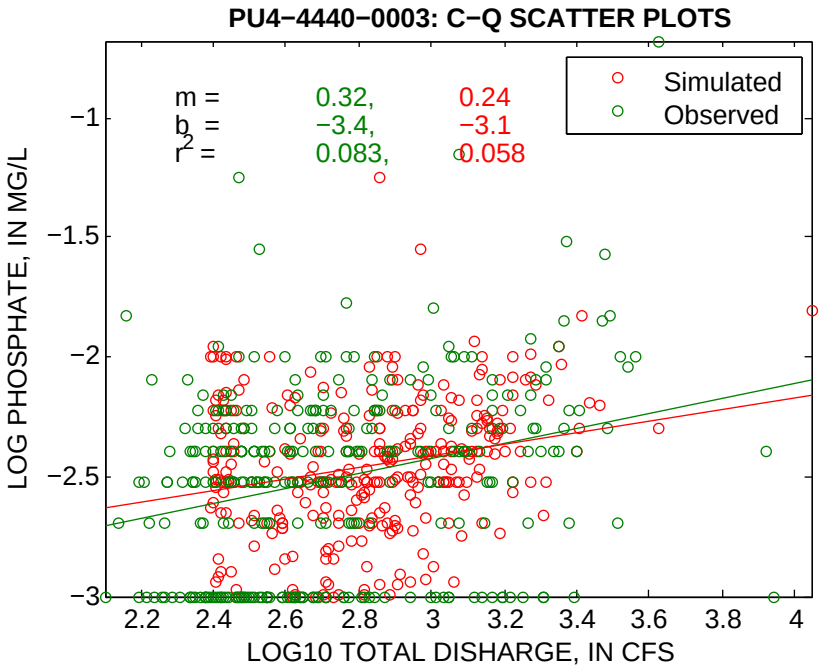
STATISTICS

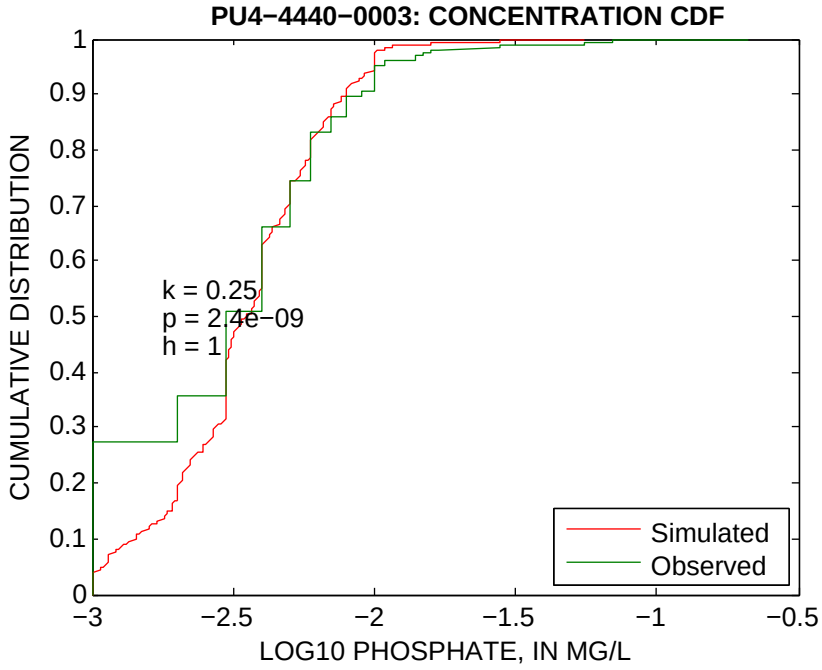
	n	318	318
		observe	simulate
min		0.001	0.0011742
		-3	-2.93026
mean		0.00520755	0.00449252
		-2.50726	-2.43662
media		0.003	0.003775
		-2.52288	-2.42308
max		0.21	0.017883
		-0.677781	-1.74756
varian		0.00016938	8.43643e-0
		0.147995	0.0798049
JB		0.001	0.001
		0.001	0.003582
		ra	log
%		-13.7306	-2.81743
err.va		0.00016104	0.203368
rel.std.err		0.950769	1.37415
mod.eff		0.0492314	-0.374154

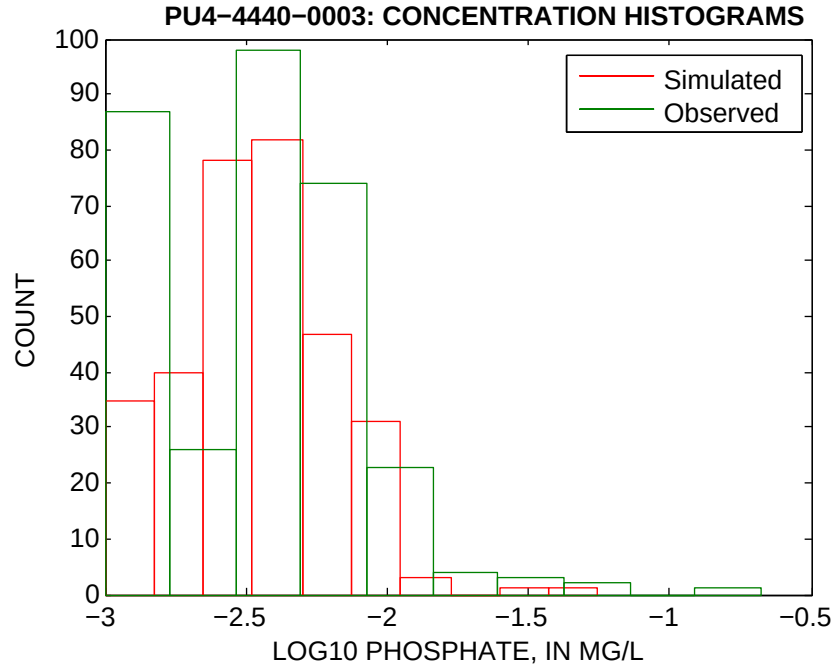
VERSION 2.1

ALL DATA
LOG10

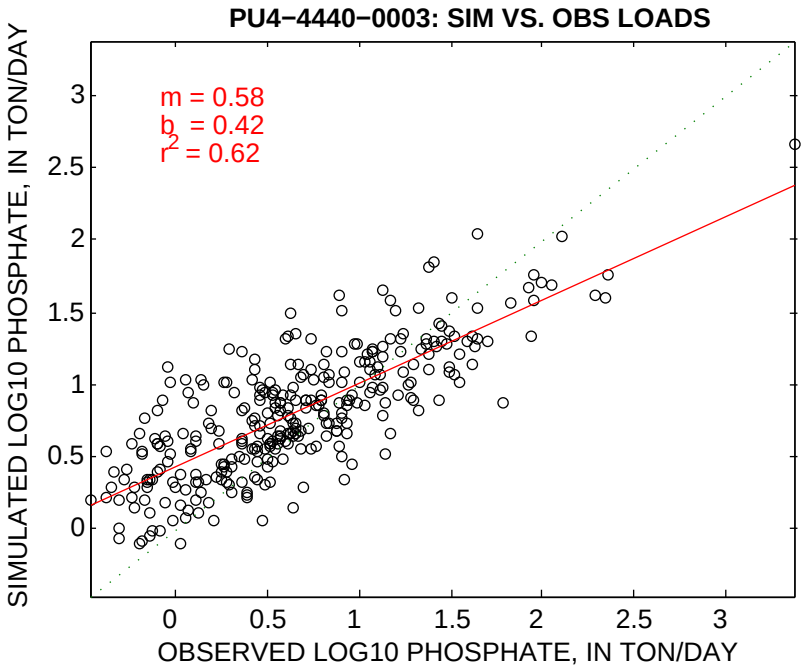


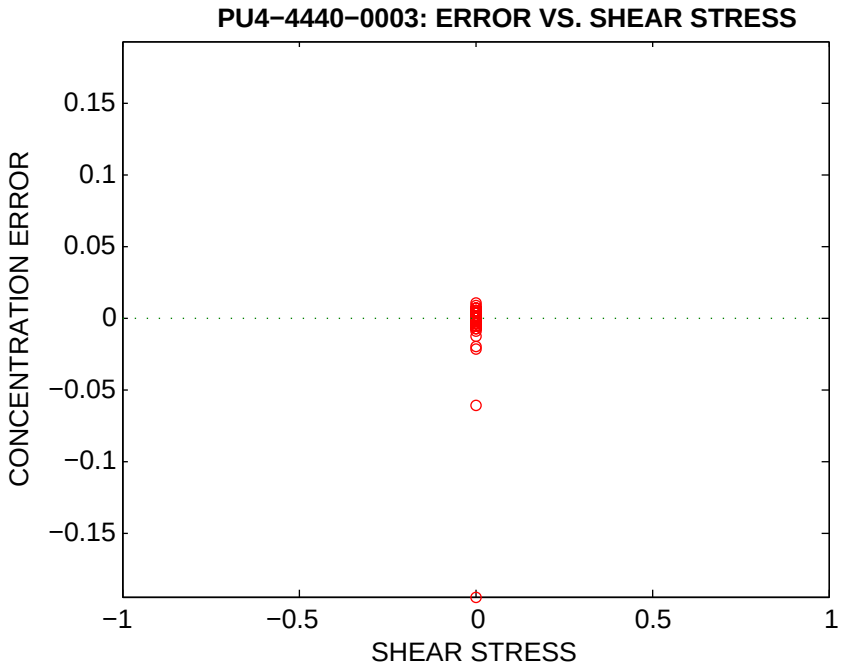


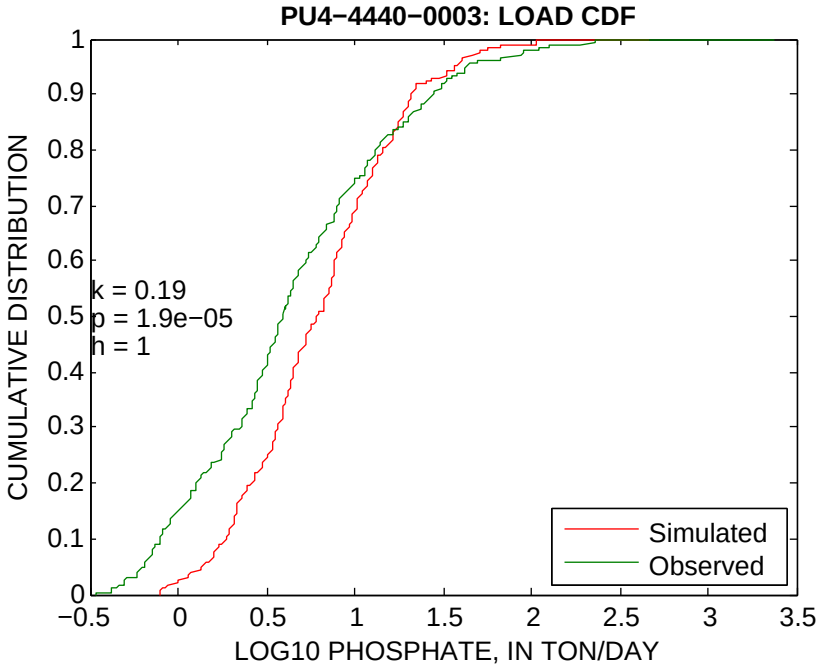


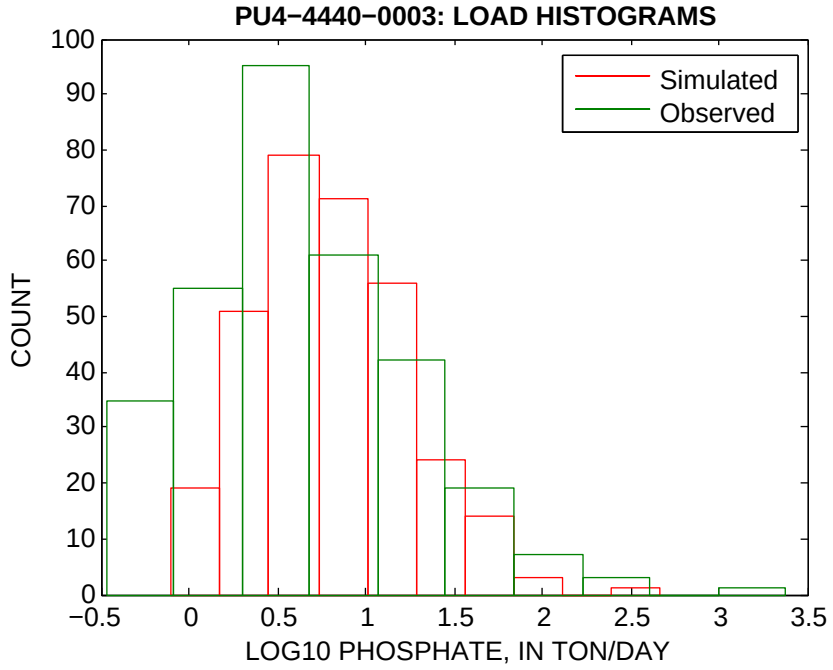


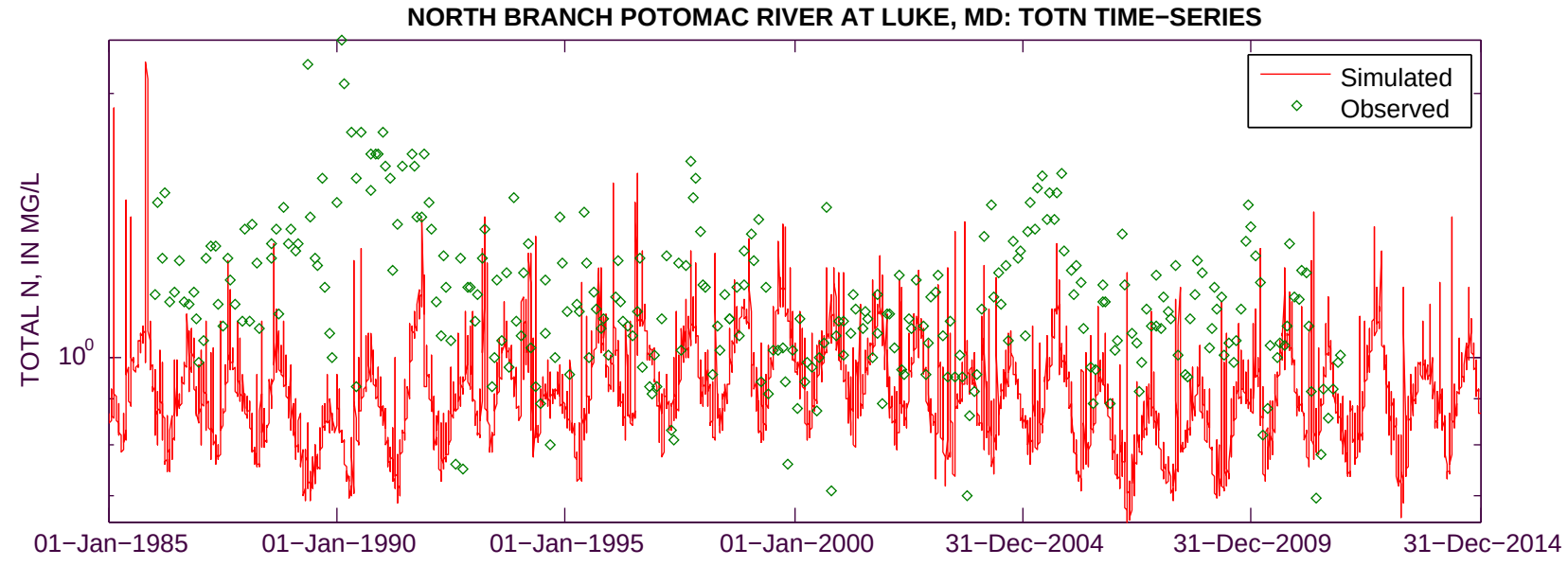
LOAD DATA
LOG10

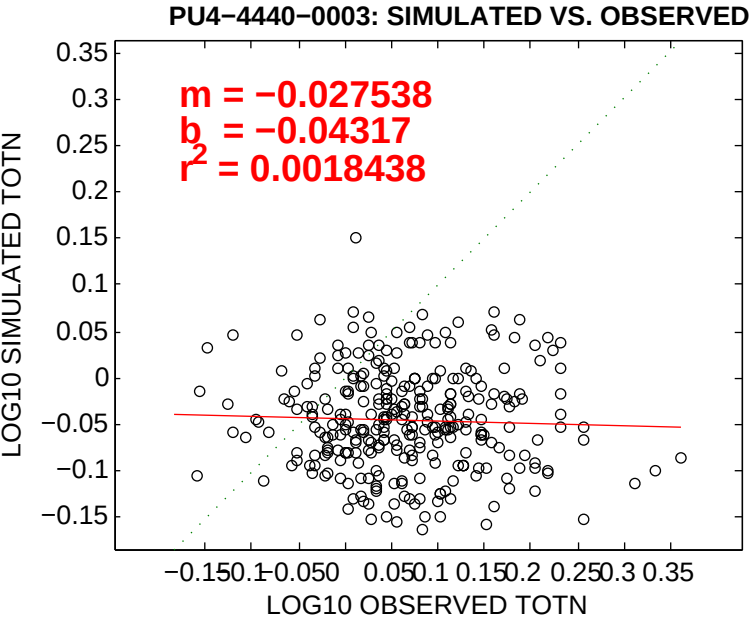


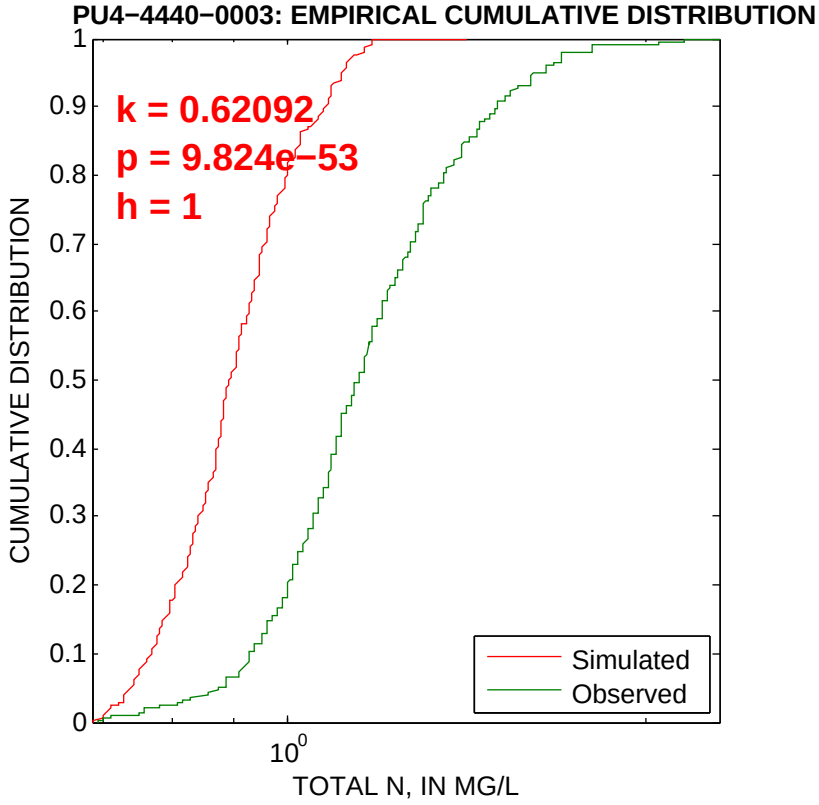












DATA SELECTION

scenario: P620171001WQ | file: TOTN.calib

plot: TOTN - total nitrogen

Dates: 1/1/1985 – 12/31/201

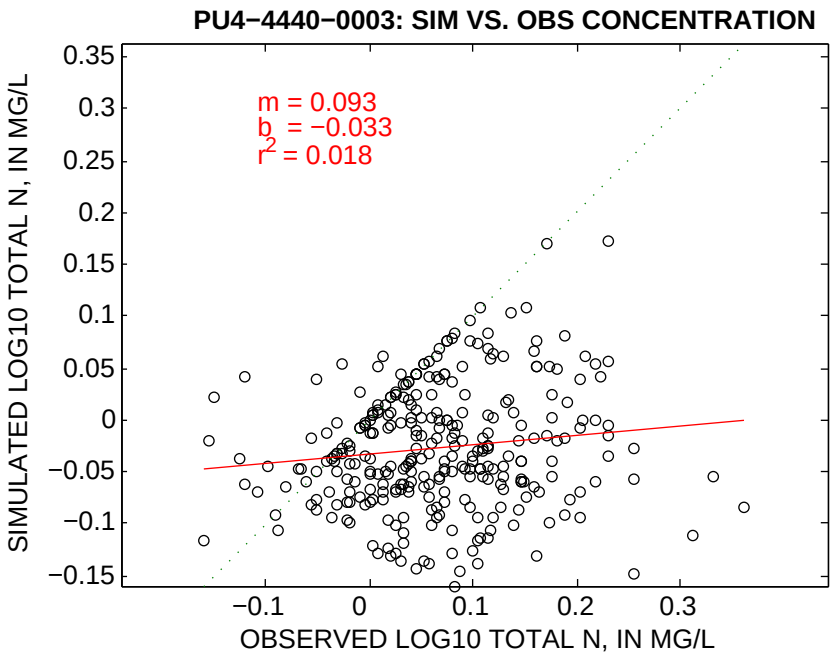
Drive | Directory: N/A | model | Observed: OBS20161101

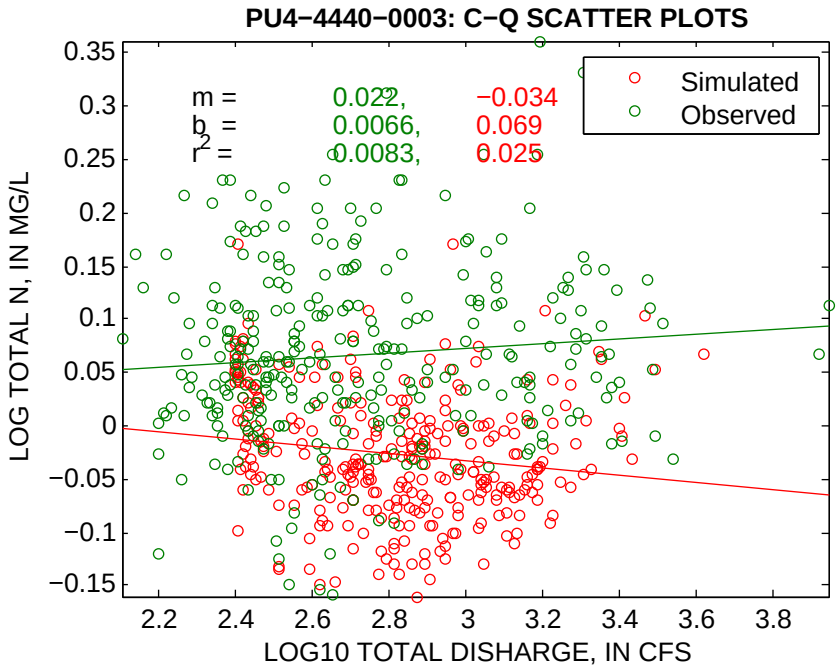
STATISTICS

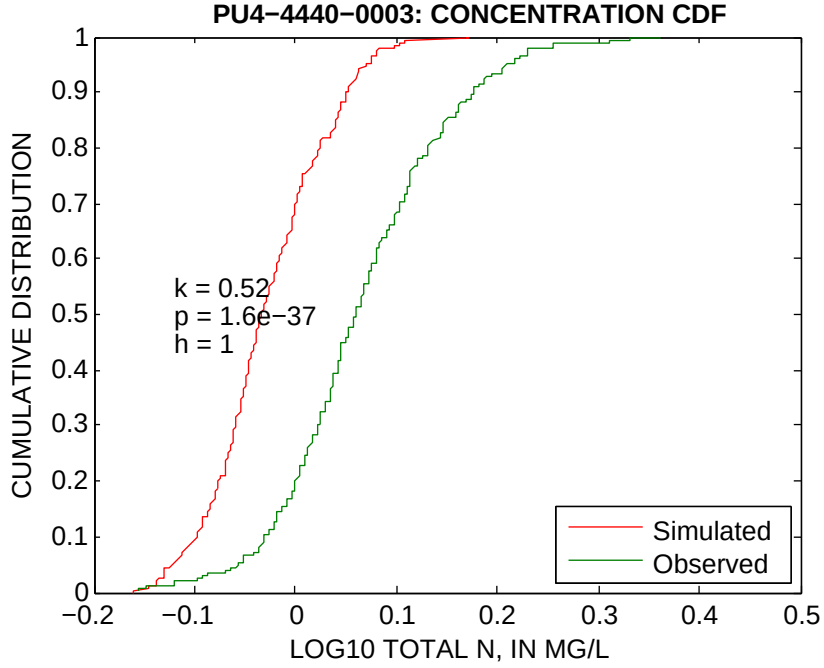
		observe	simulate
n		306	306
min		0.694	0.68539
		-0.158641	-0.164062
mean		1.18594	0.908422
		0.0659998	-0.0449878
media		1.15	0.896285
		0.0606978	-0.0475553
max		2.3	1.4167
		0.361728	0.151278
varian		0.055959	0.0127852
		0.00688257	0.00283067
JB		0.001	0.001736
		0.019670	0.261938
		ra	log
%		-23.4007	-168.164
err.va		0.148314	0.0224509
rel.std.err		2.6504	3.262
mod.eff		-1.6504	-2.262

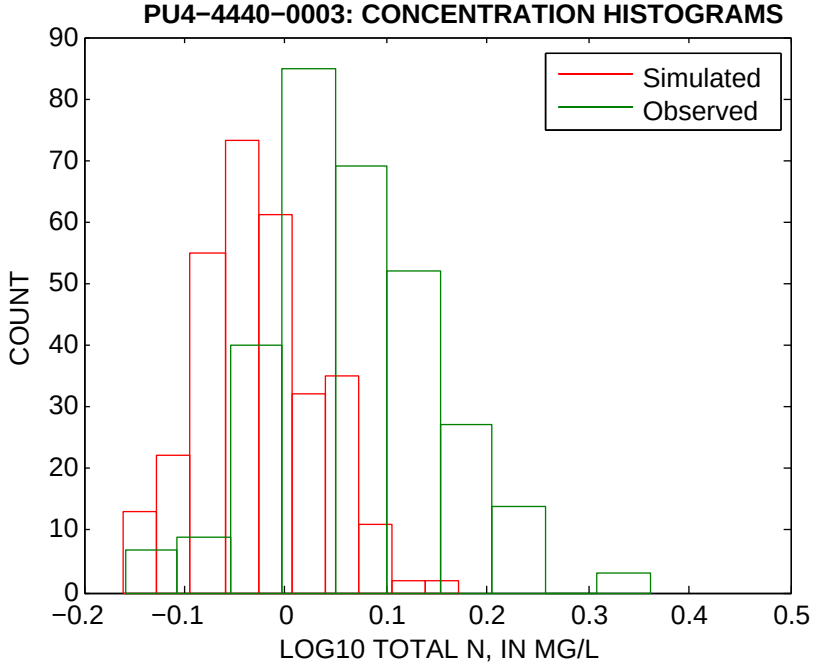
VERSION 2.1

ALL DATA
LOG10

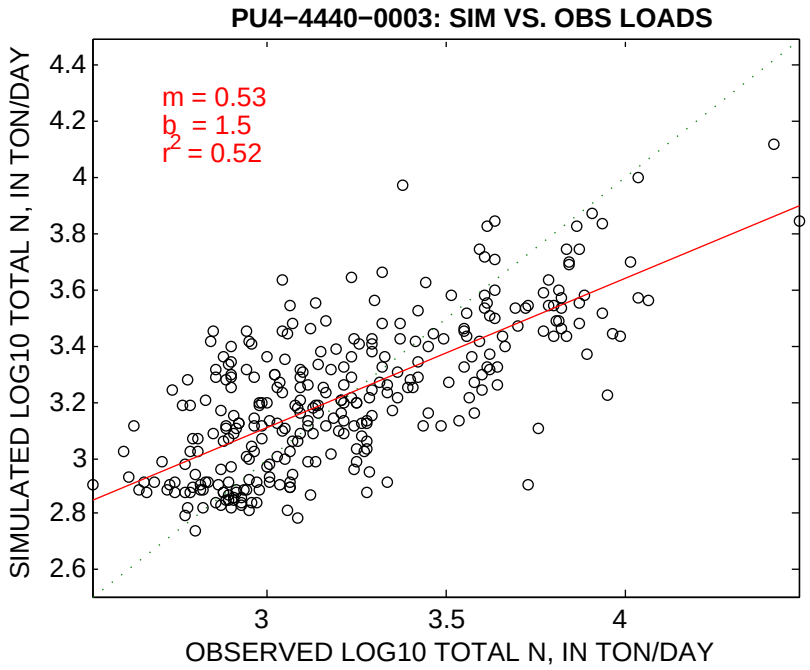


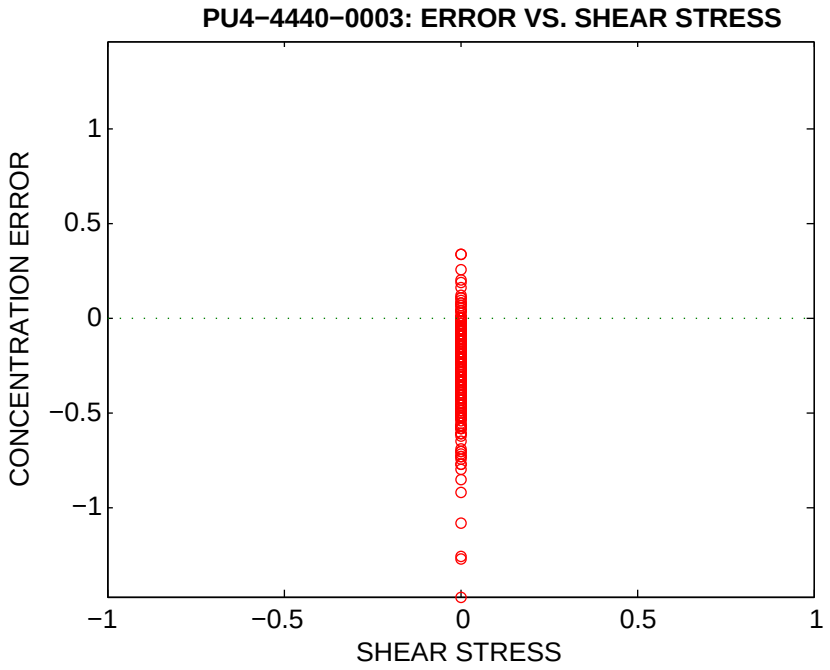


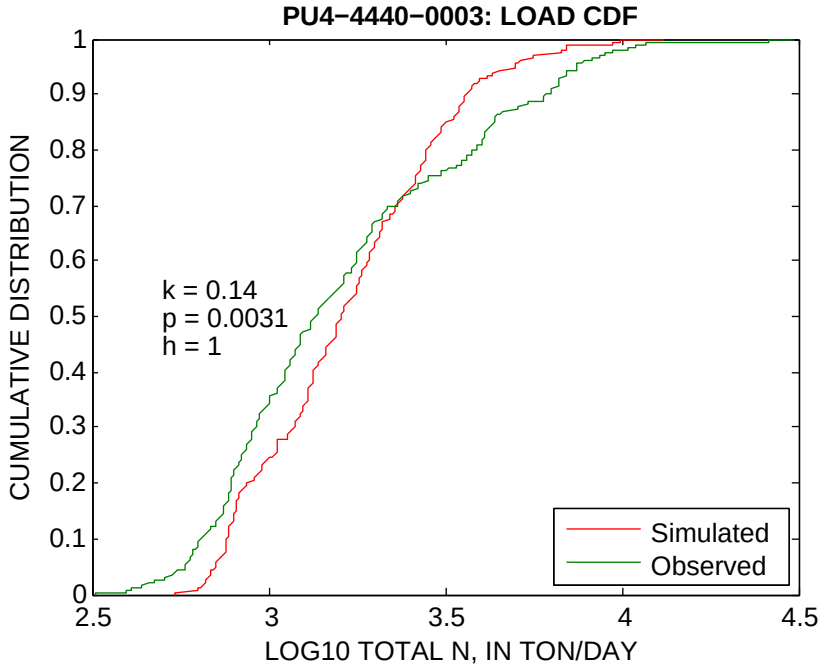


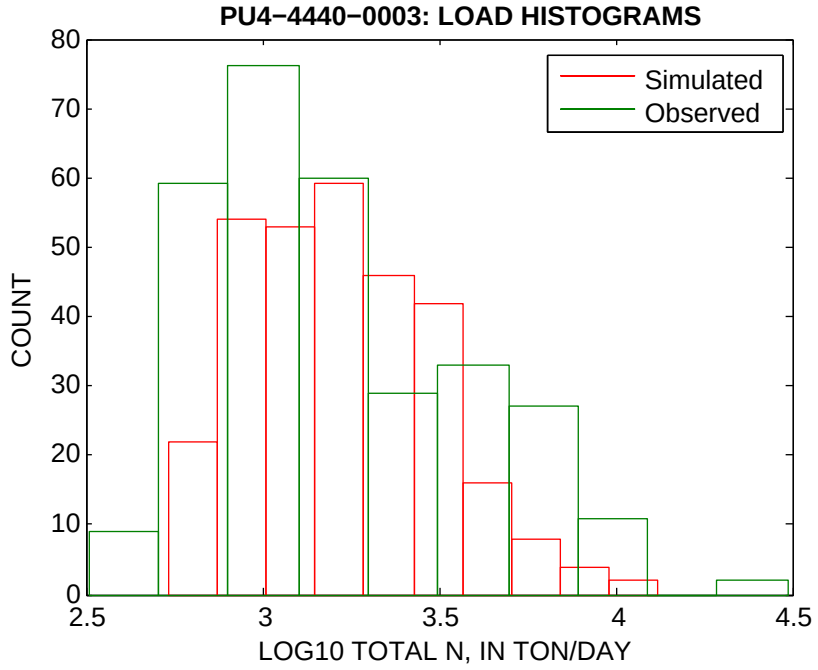


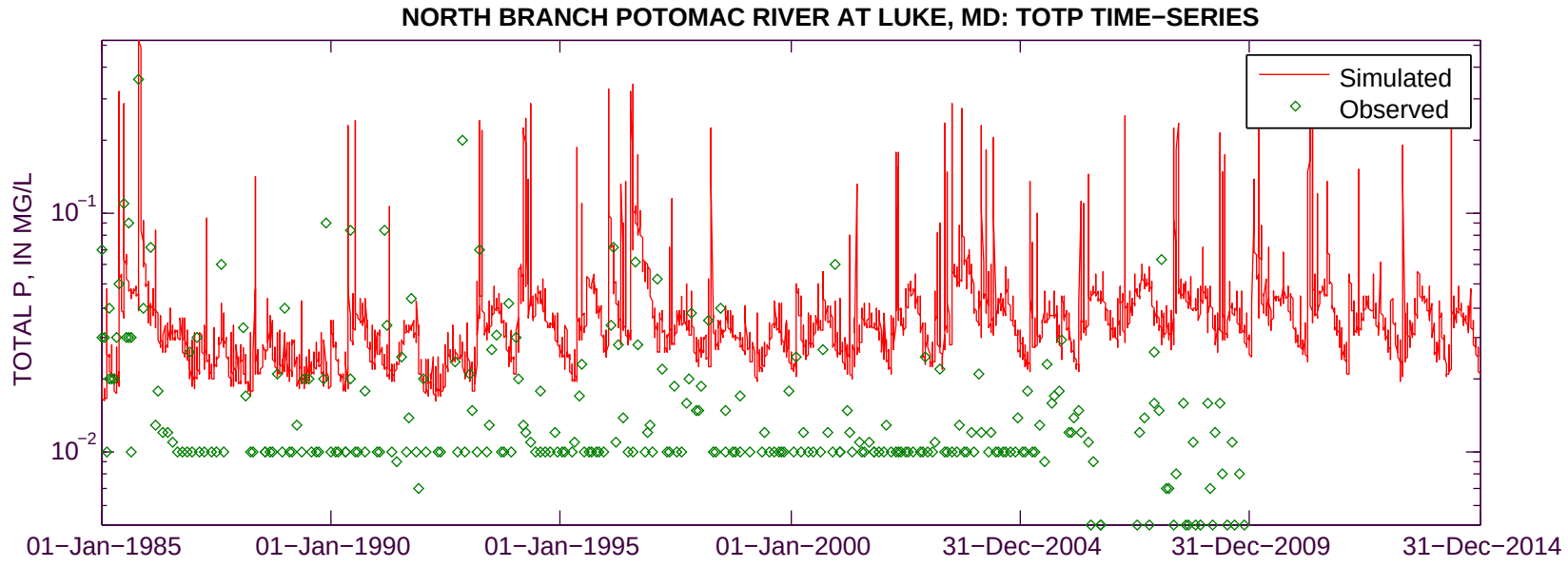
LOAD DATA
LOG10

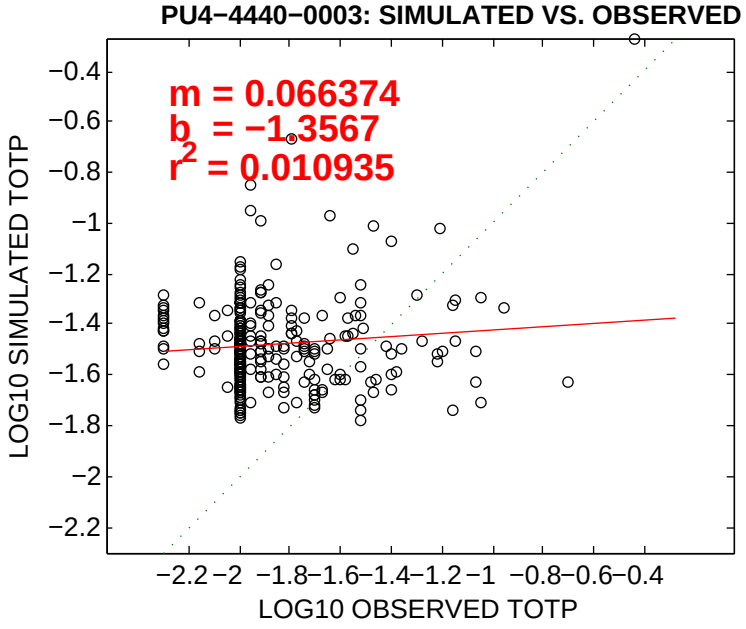


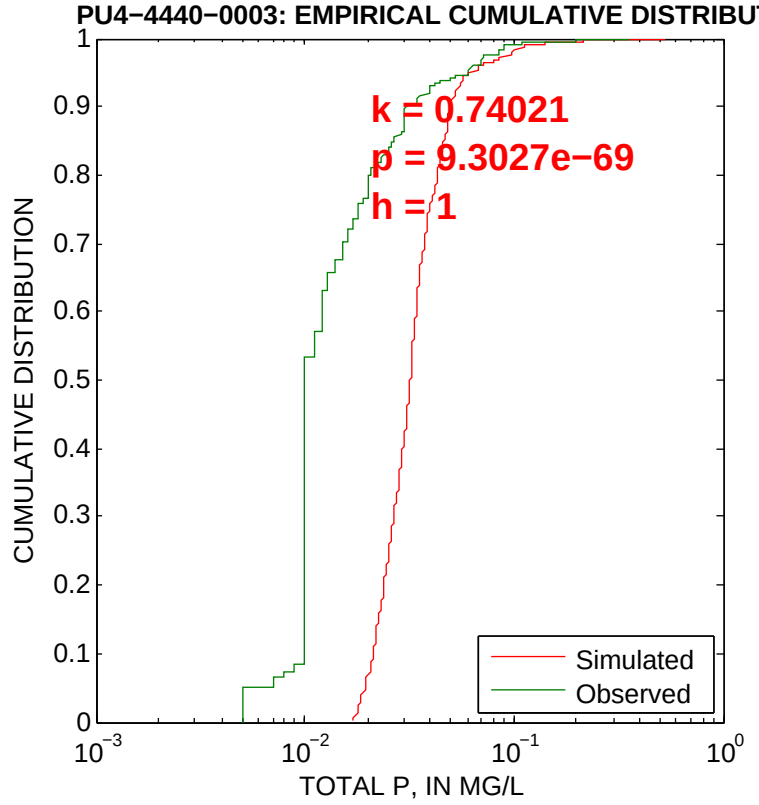












DATA SELECTION

scenario	file
P620171001WQ	TOTP.calib

plot: TOTP - total phosphorus

Dates: 1/1/1985 – 12/31/201

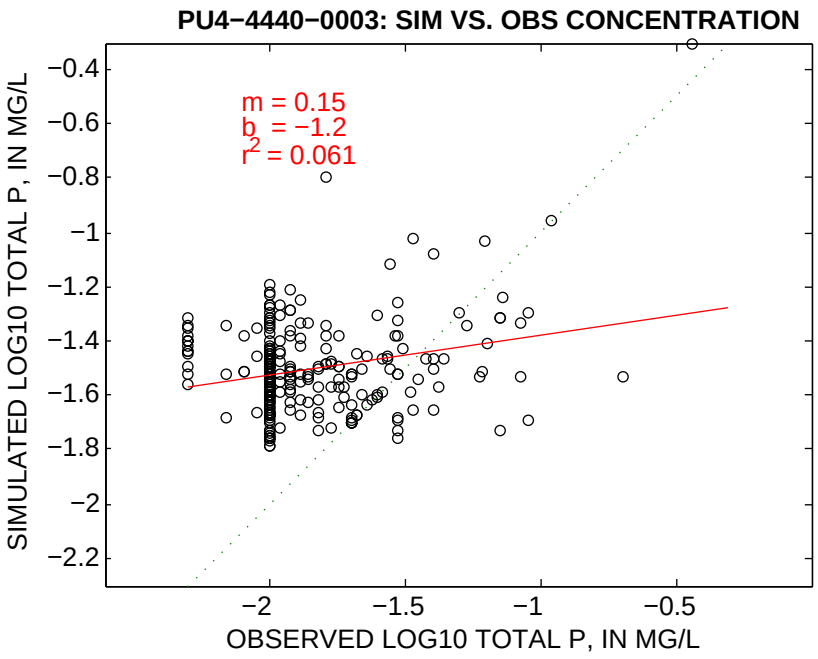
Drive	Directory	Observed
N/A	model	OBS20161101

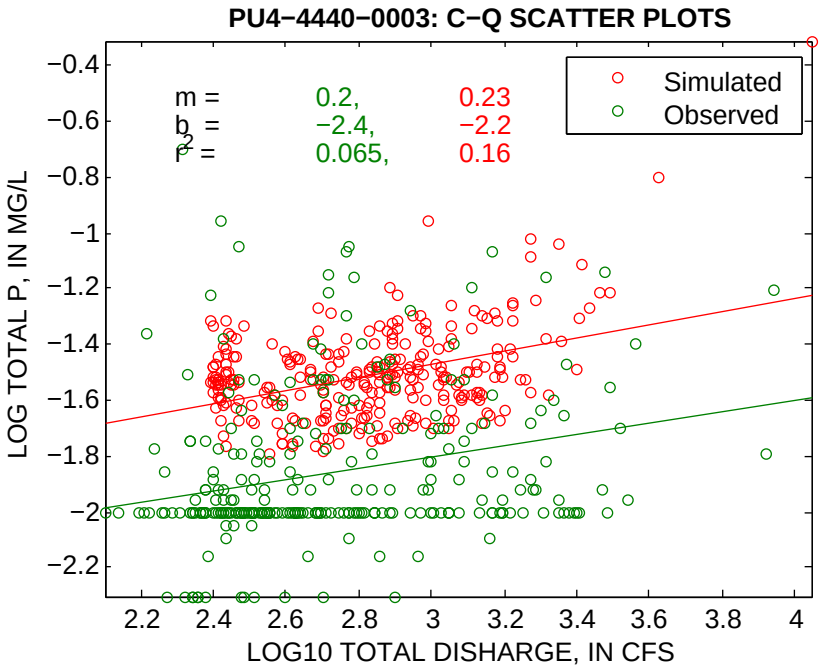
STATISTICS

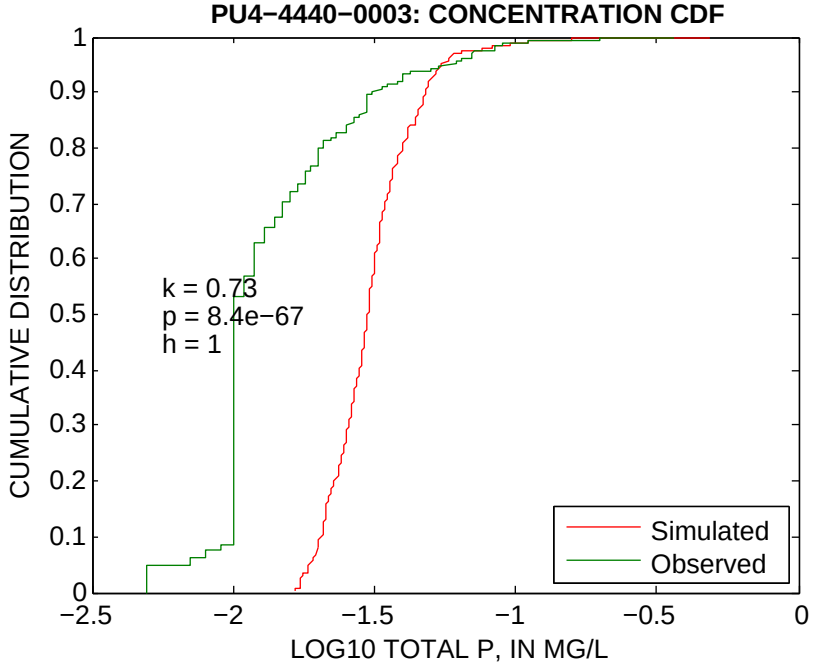
	n	observe	simulate
		281	281
min		0.005	0.016507
		-2.30103	-1.78233
mean		0.0189609	0.0374008
		-1.85612	-1.47991
media		0.01	0.032086
		-2	-1.49368
max		0.36	0.52903
		-0.443697	-0.27652
varian		0.00077955	0.00123133
		0.0784215	0.0315955
JB		0.001	0.001
		0.001	0.001
		ra	log
%		97.2525	-20.2688
err.va		0.00114118	0.241648
rel.std.err		1.46387	3.0814
mod.eff		-0.463872	-2.0814

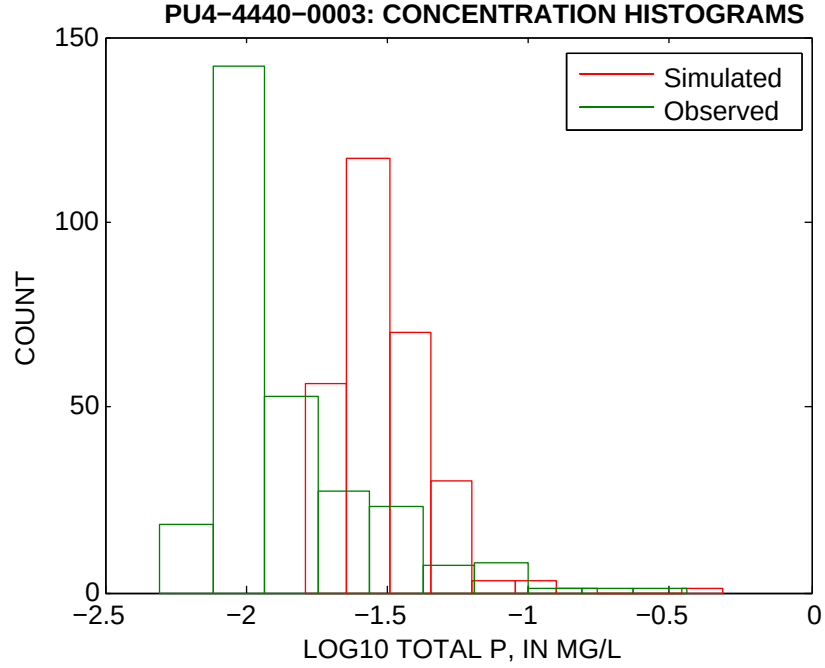
VERSION 2.1

ALL DATA
LOG10

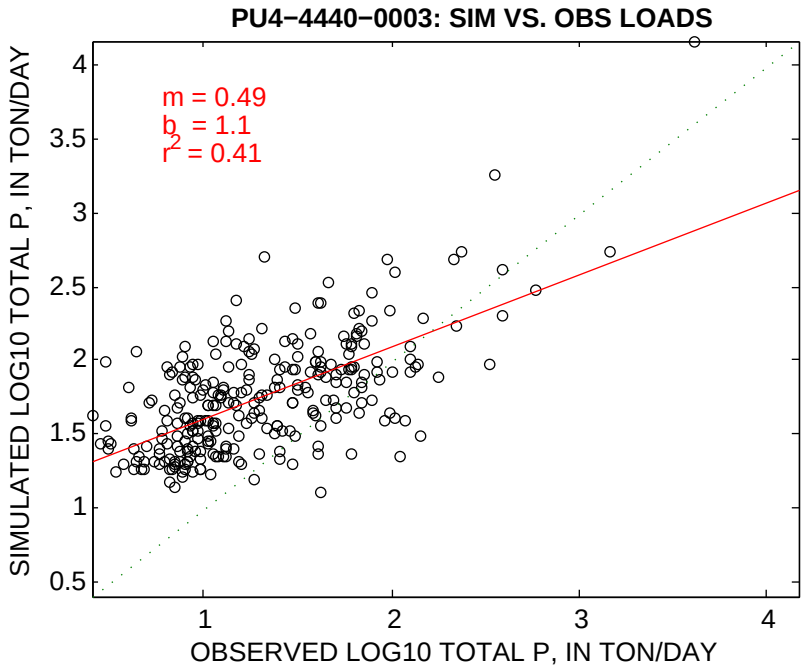


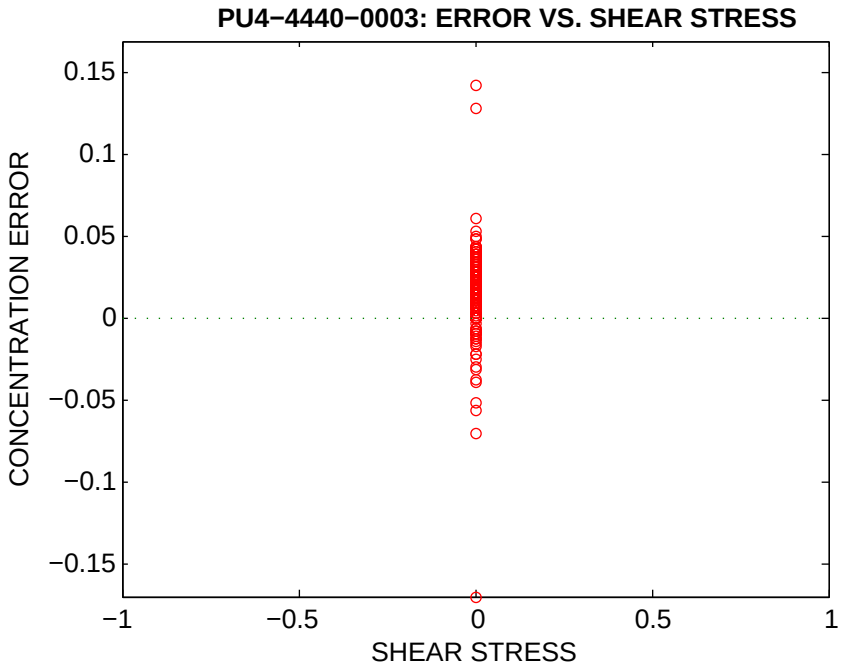


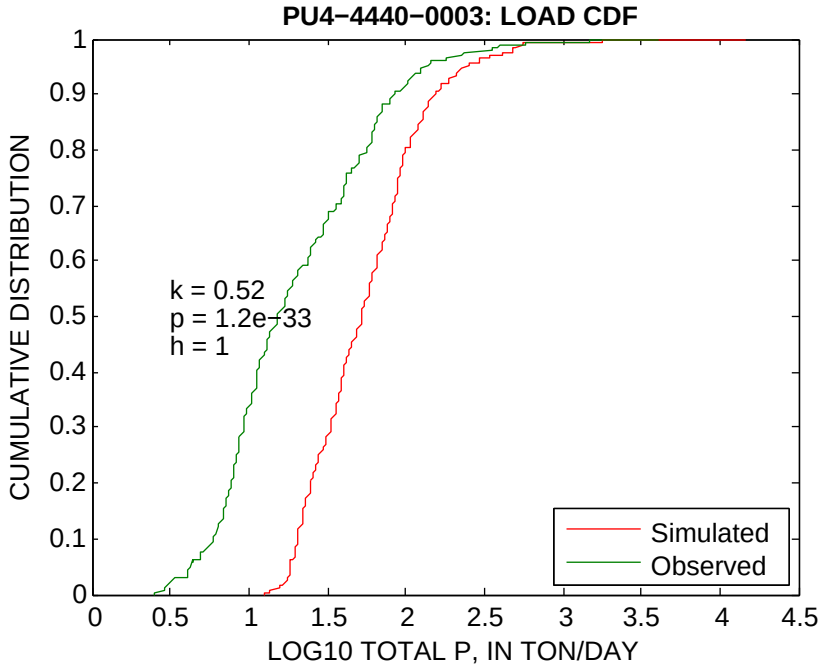


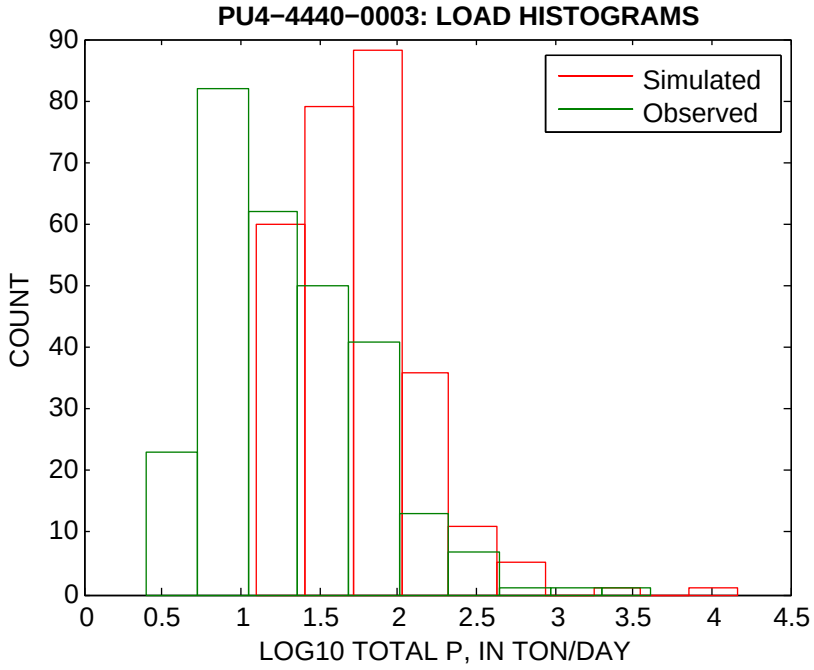


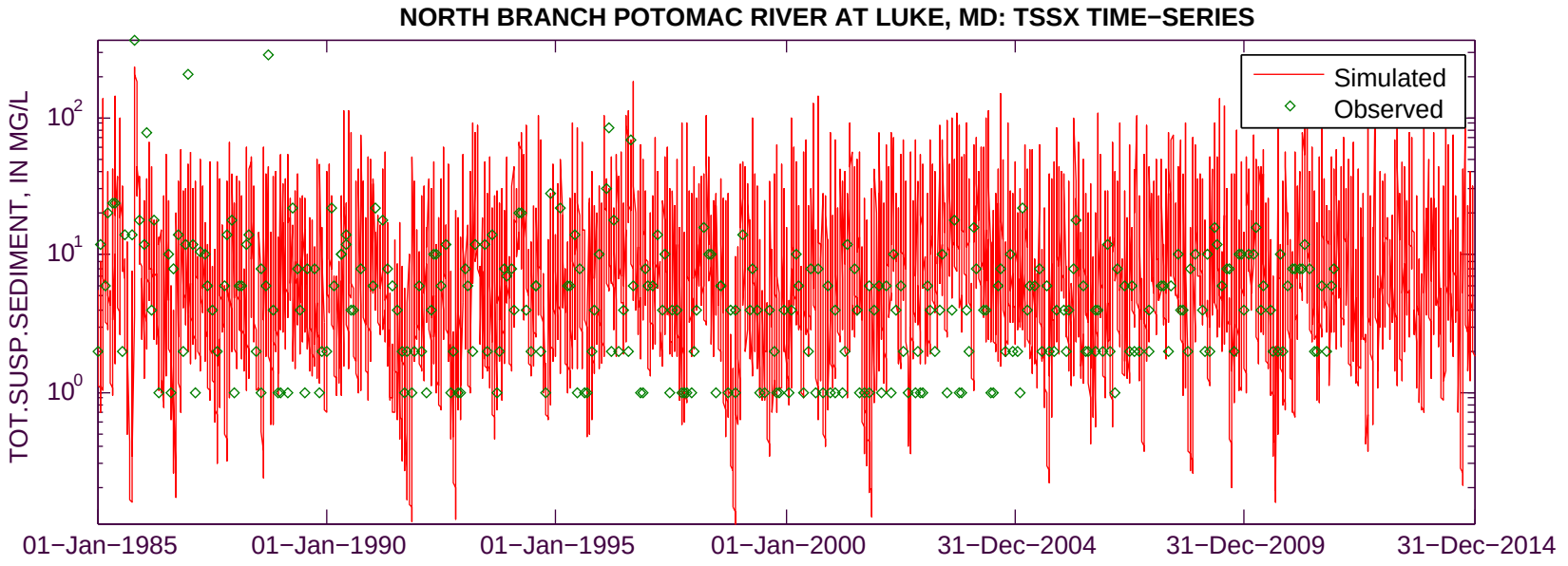
LOAD DATA
LOG10

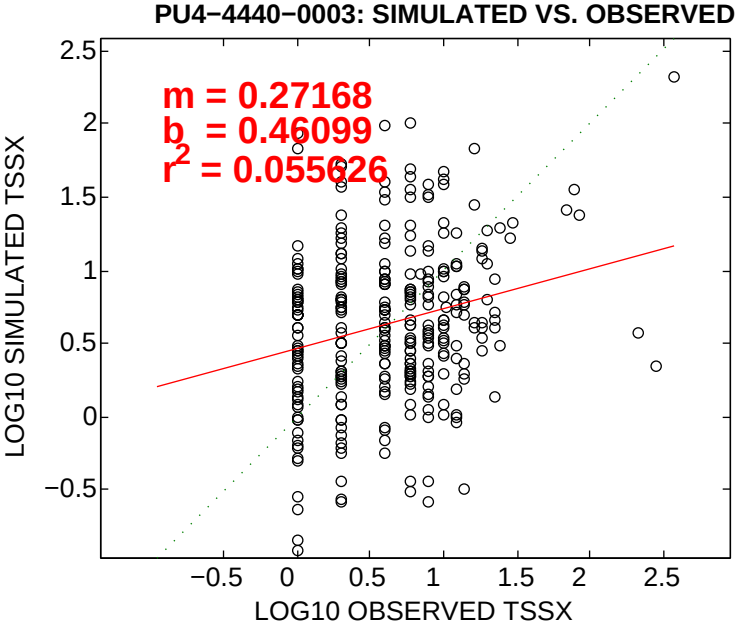


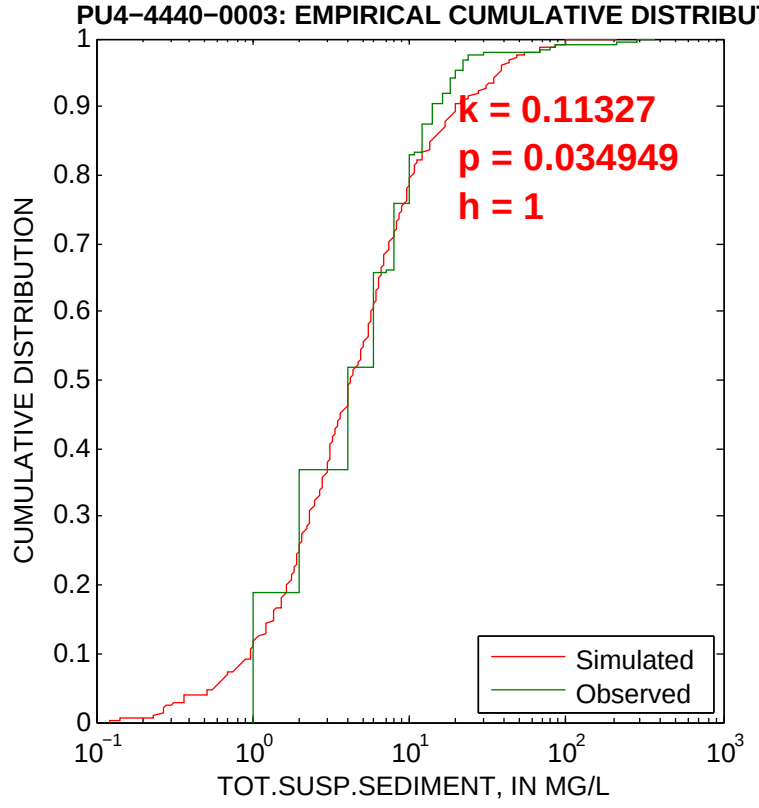












DATA SELECTION

scenario	file
P620171001WQ	TSSX.calib

plot: TSSX - total suspended ...

Dates: 1/1/1985 – 12/31/201

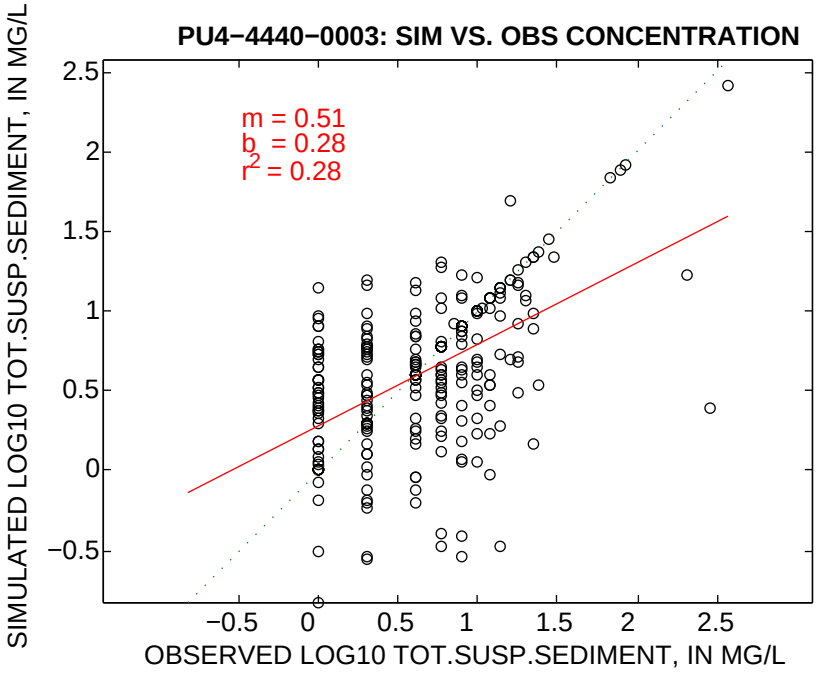
Drive	Directory	Observed
N/A	model	OBS20161101

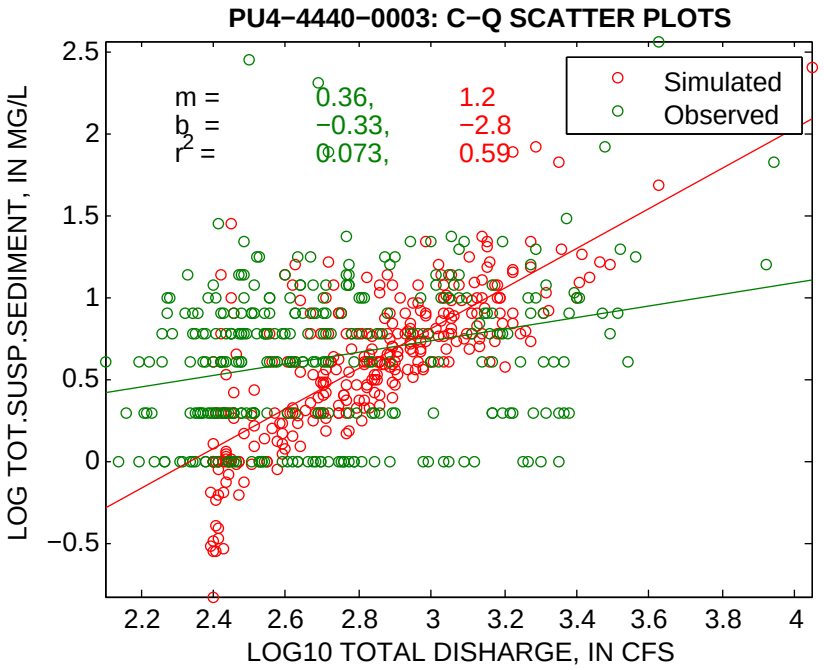
STATISTICS

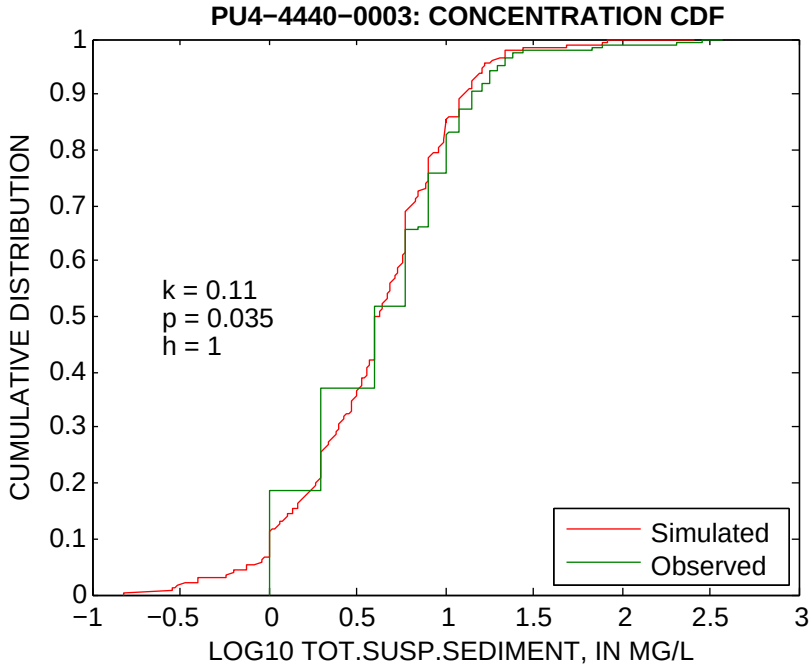
	n	observe	simulate
		309	309
min		1	0.12258
		0	-0.91158
mean		9.53269	9.39518
		0.638708	0.634517
media		4	4.2226
		0.60206	0.62558
max		372	206.59
		2.57054	2.31511
varian		884.467	313.608
		0.213909	0.28383
JB		0.001	0.001
		0.001	0.497992
		ra	log
%		-1.4425	-0.656174
err.va		715.274	0.381528
rel.std.err		0.808706	1.7836
mod.eff		0.191294	-0.7836

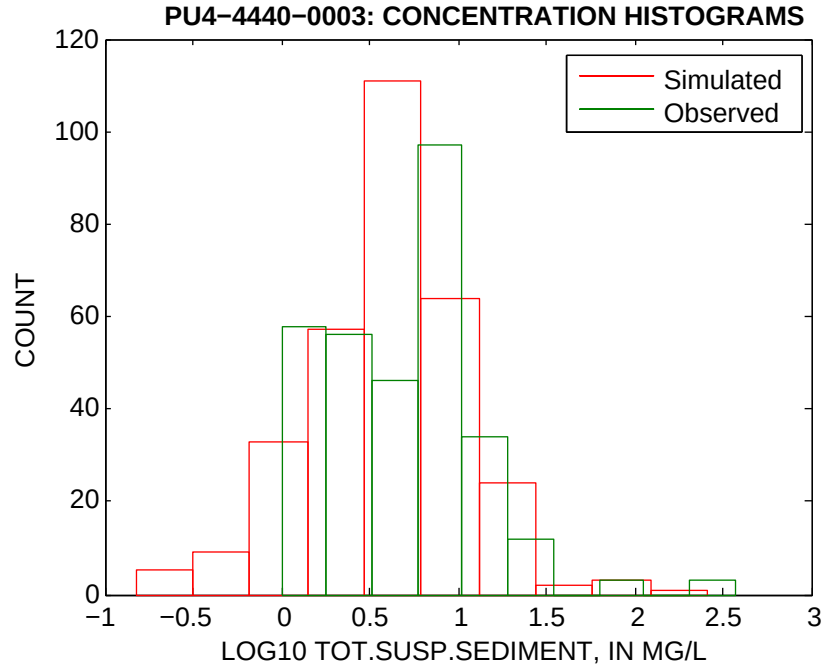
VERSION 2.1

ALL DATA
LOG10

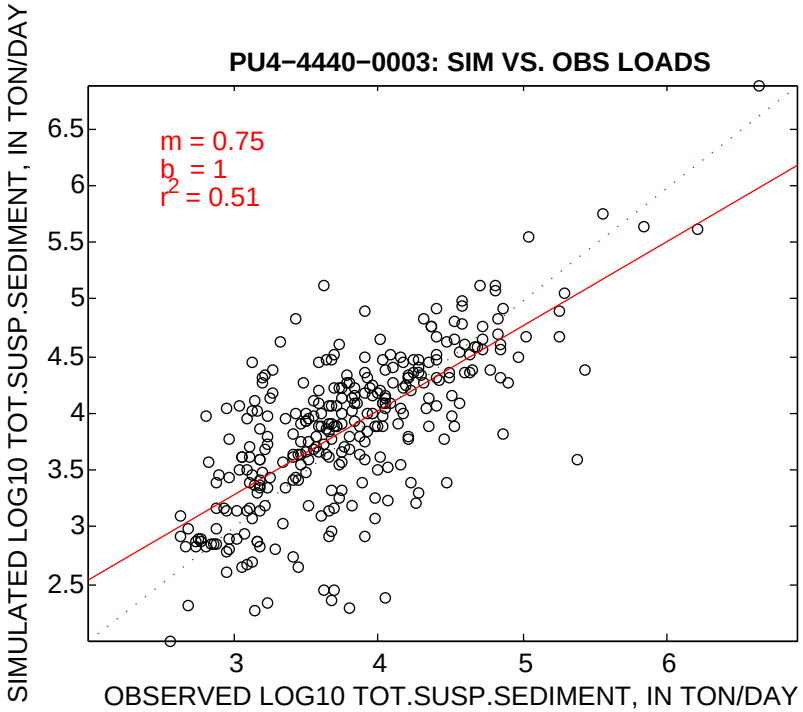


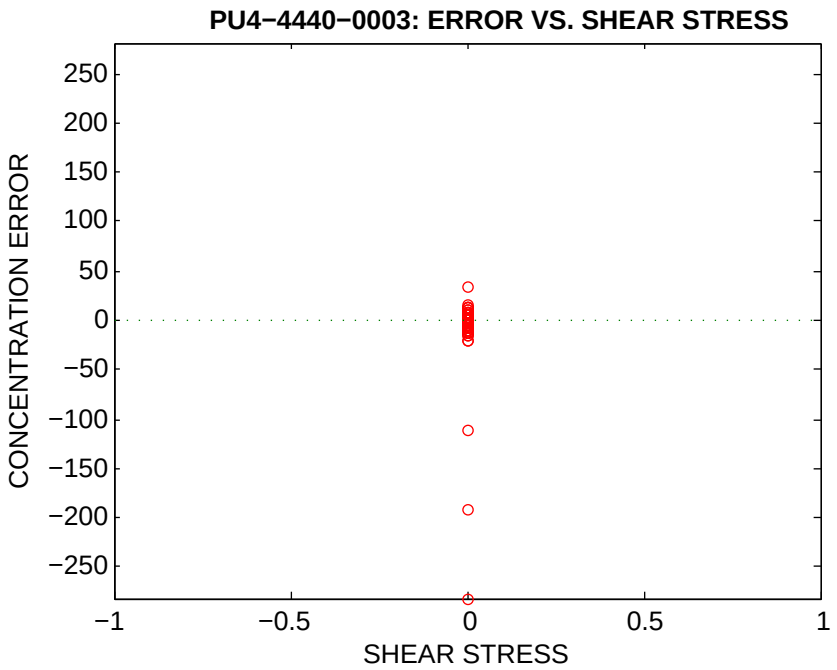


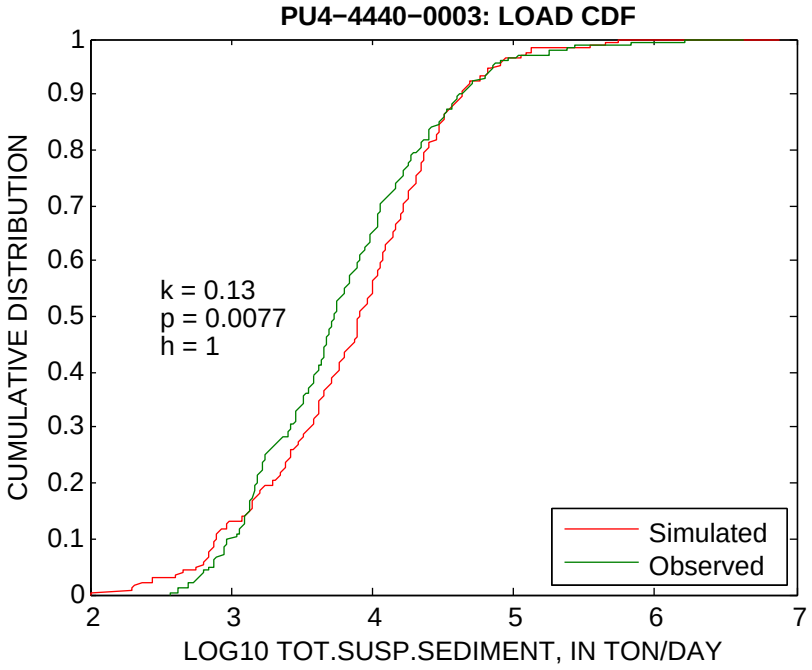


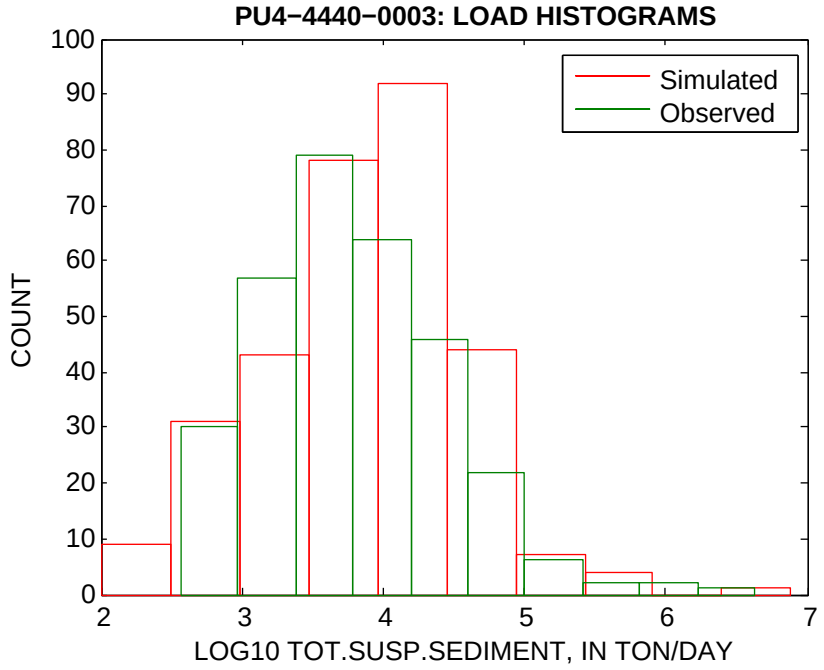


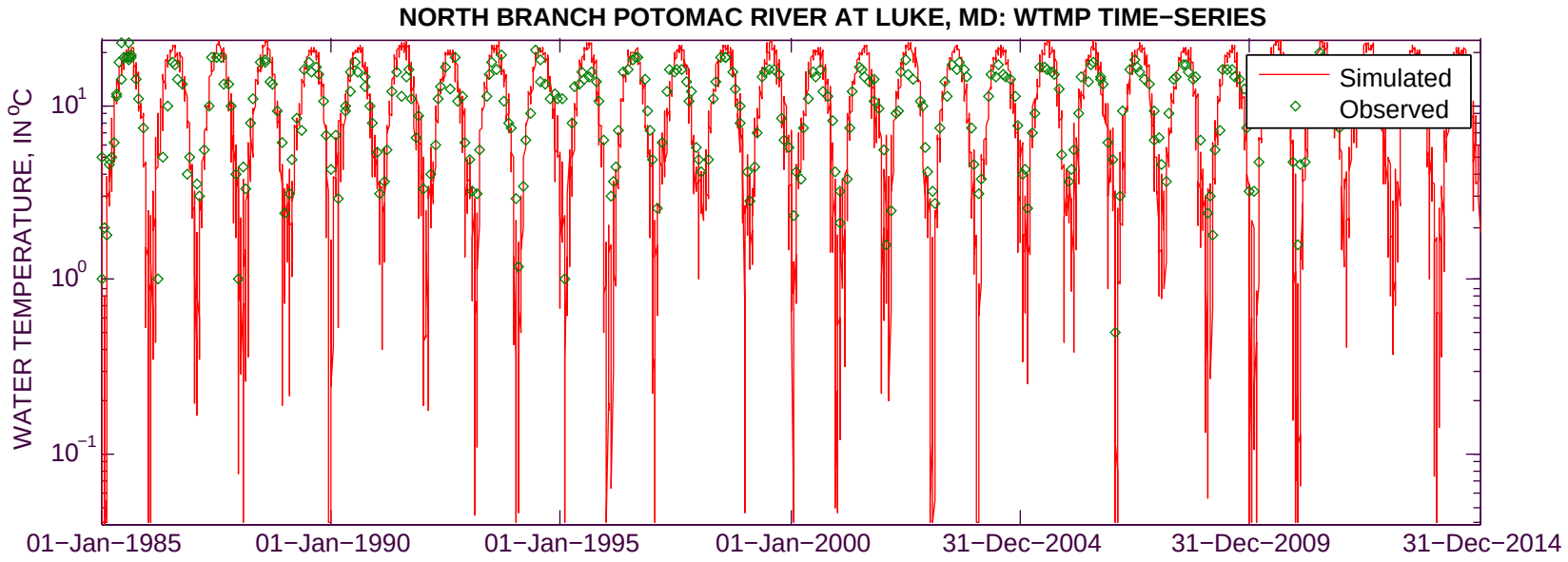
LOAD DATA
LOG10

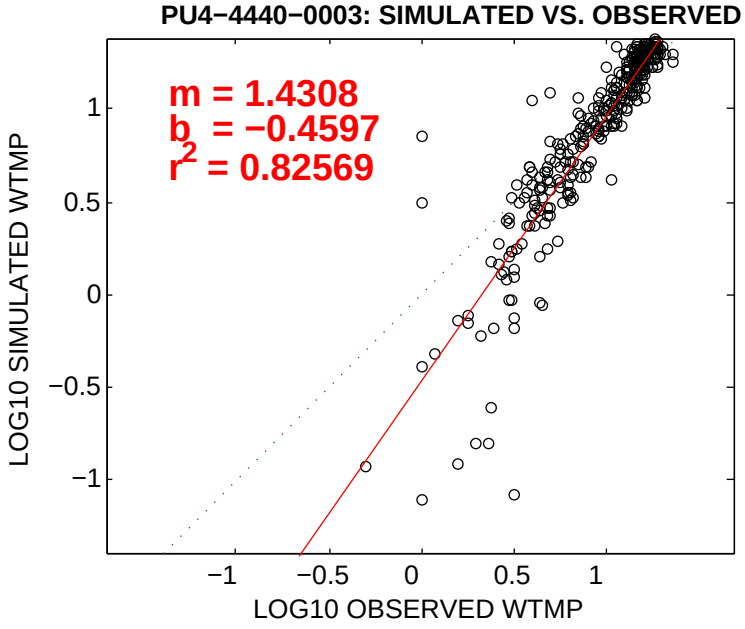


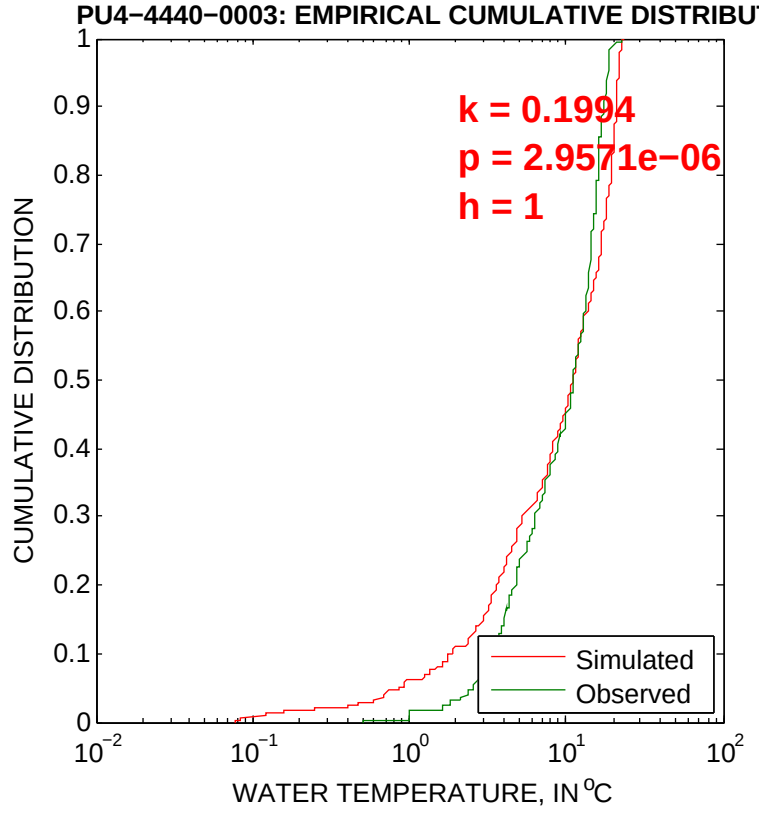












DATA SELECTION

scenario	file
P620171001WQ	WTMP.calib

plot: WTMP - water tempera...

Dates: 1/1/1985 – 12/31/201

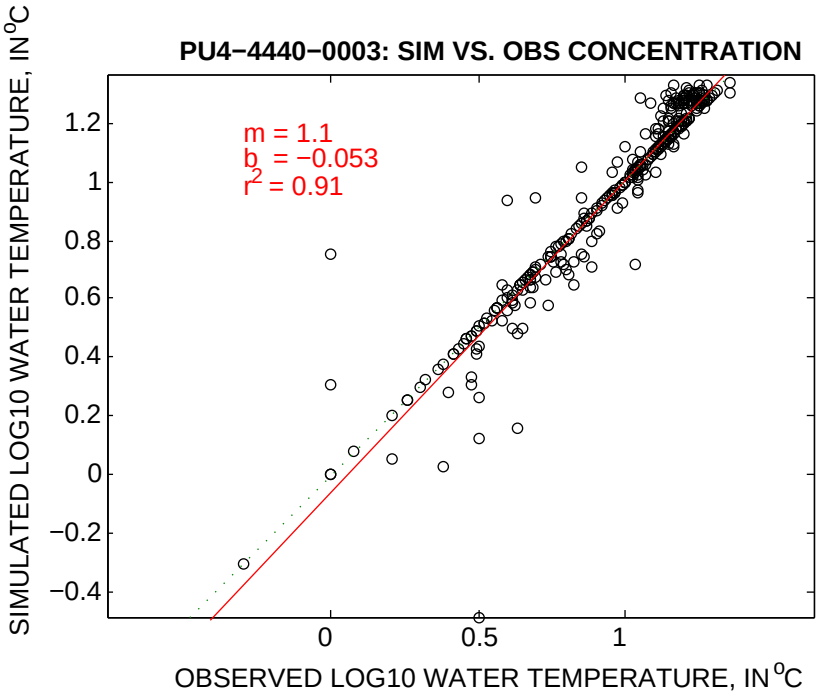
Drive	Directory	Observed
N/A	model	OBS20161101

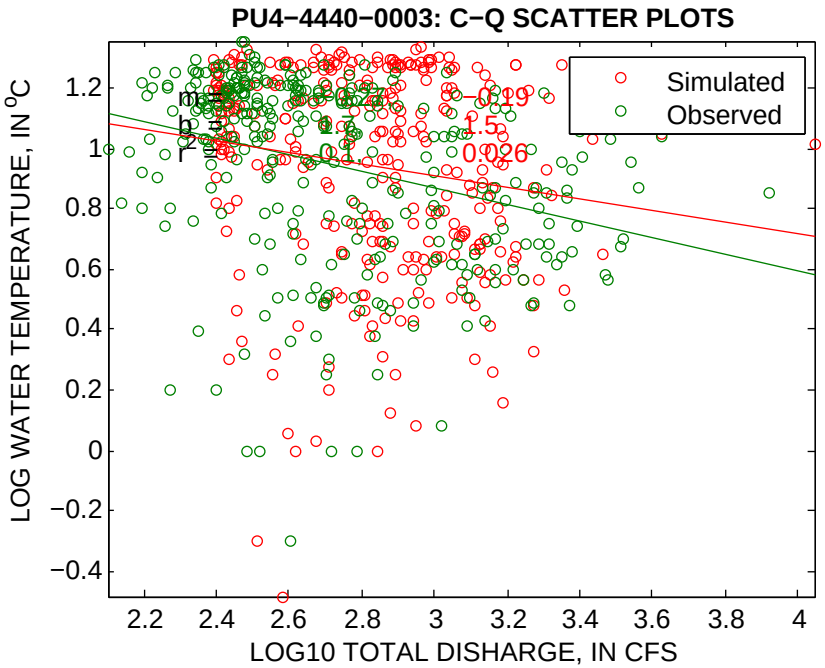
STATISTICS

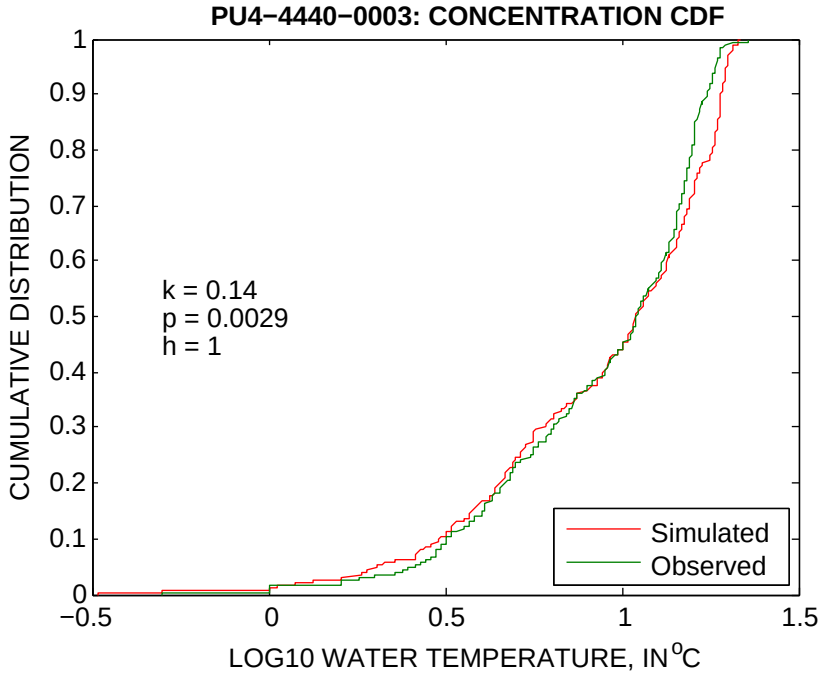
	n	observe	simulate
		331	331
min		0.5	0.077257
		-0.30103	-1.11206
mean		10.6099	11.2529
		0.94465	0.891899
media		11	11.136
		1.04139	1.04673
max		22.9	23.606
		1.35984	1.37302
varian		29.0667	50.3208
		0.0898335	0.222729
JB		0.001681	0.001
		0.001	0.001
		ra	log
% err.va		6.05997	-5.58422
		8.1458	0.0582872
rel.std.err		0.280245	0.648836
mod.eff		0.719755	0.351164

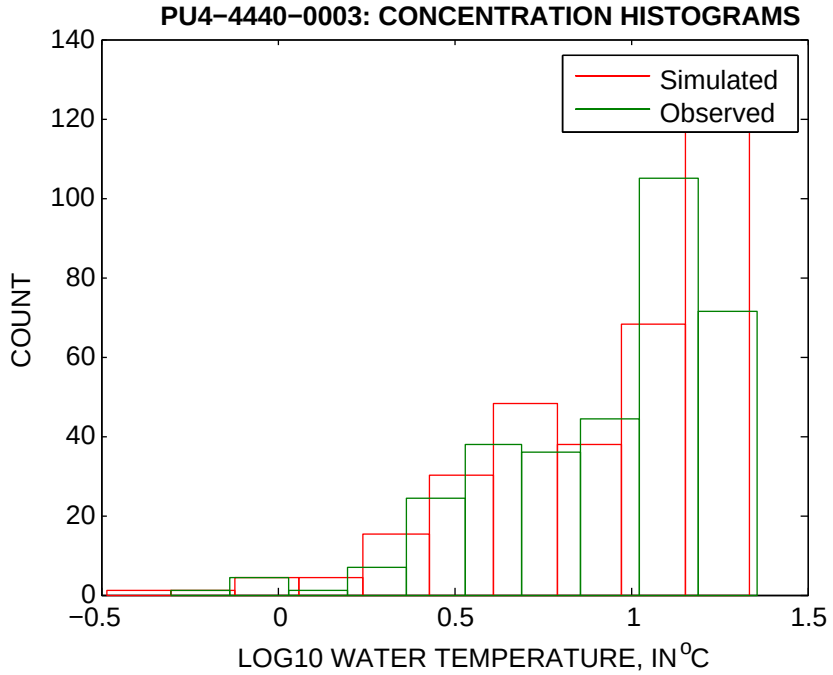
VERSION 2.1

ALL DATA
LOG10

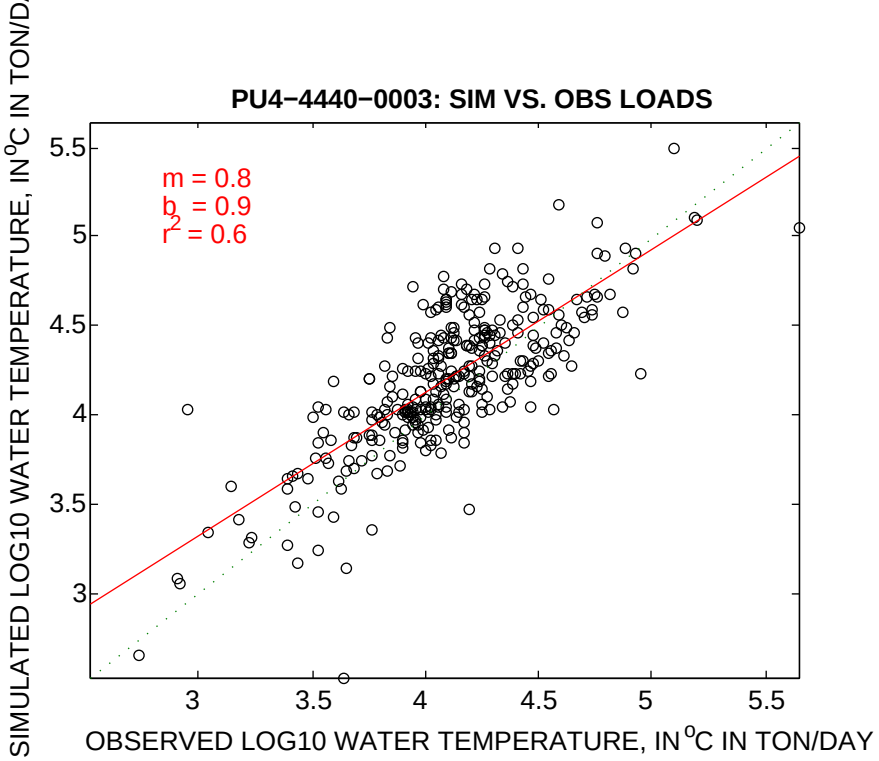




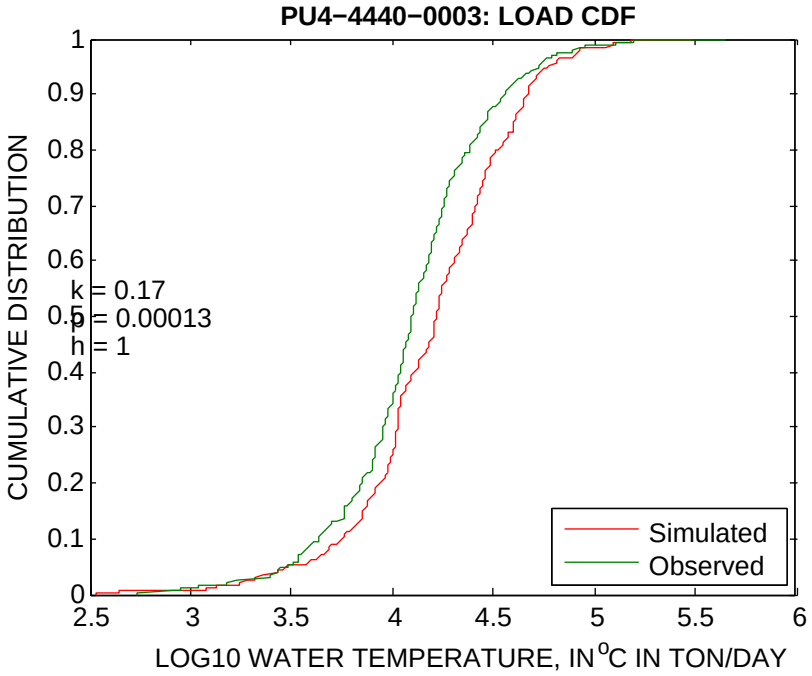


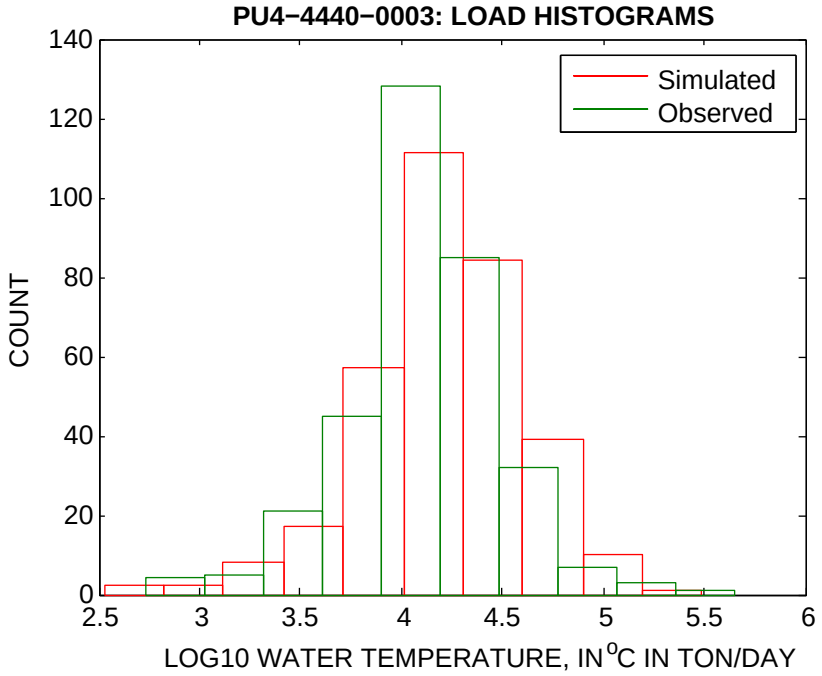


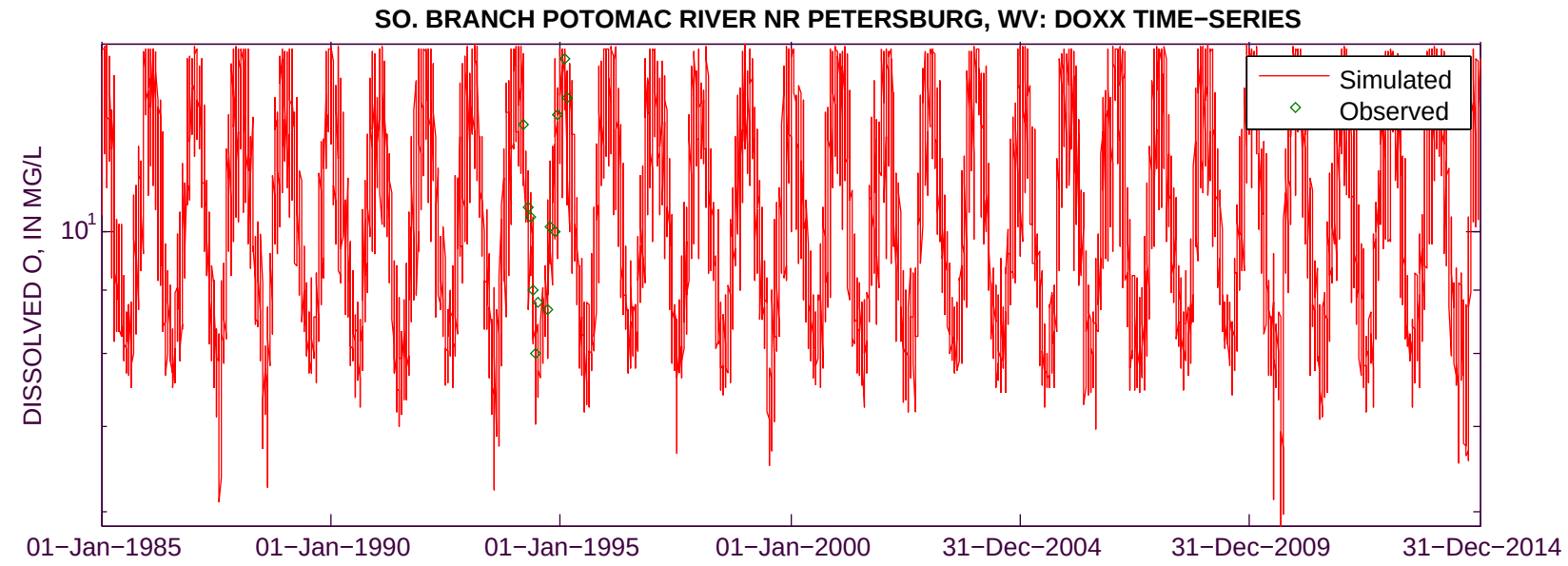
LOAD DATA
LOG10

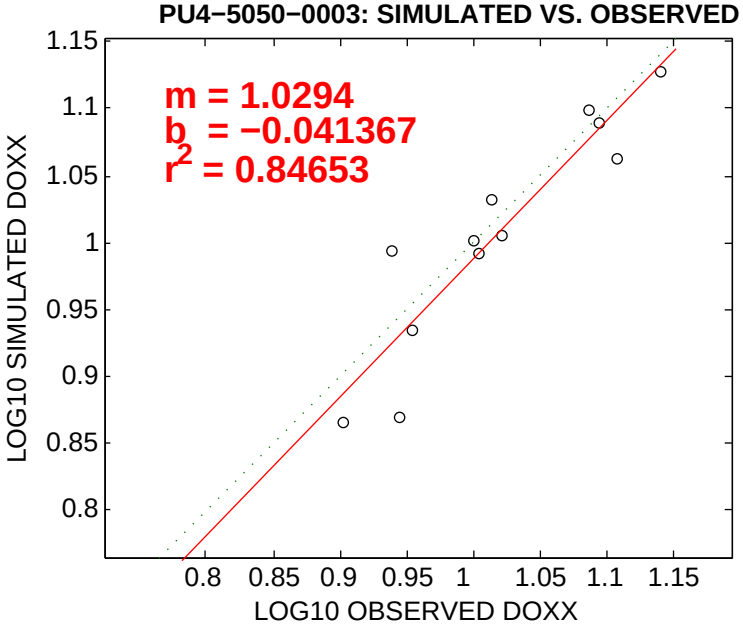


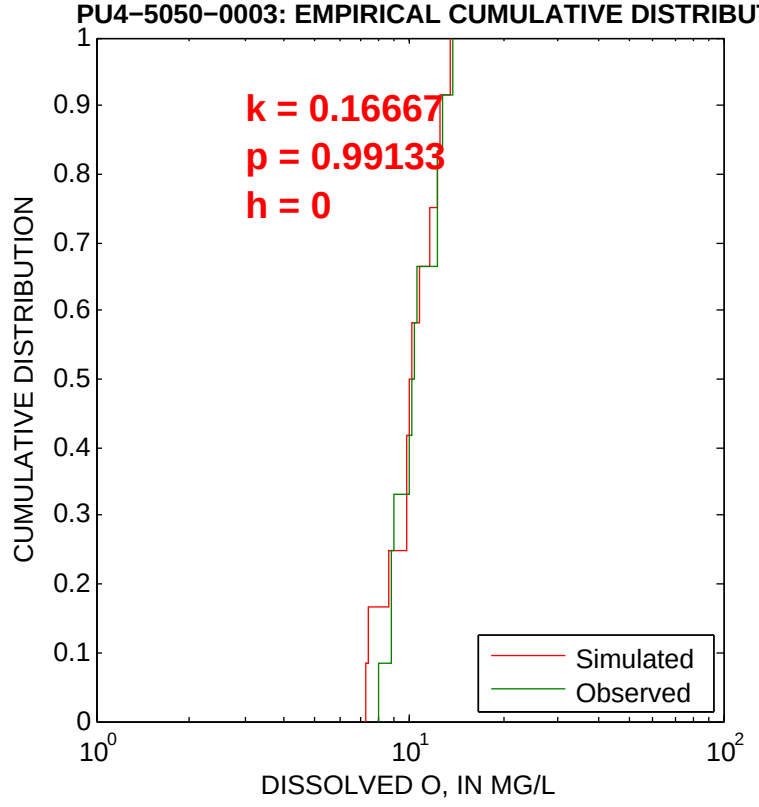












DATA SELECTION

scenario: P620171001WQ | file: DOXX.calib

plot: DOXX - dissolved oxygen

Dates: 1/1/1985 – 12/31/201

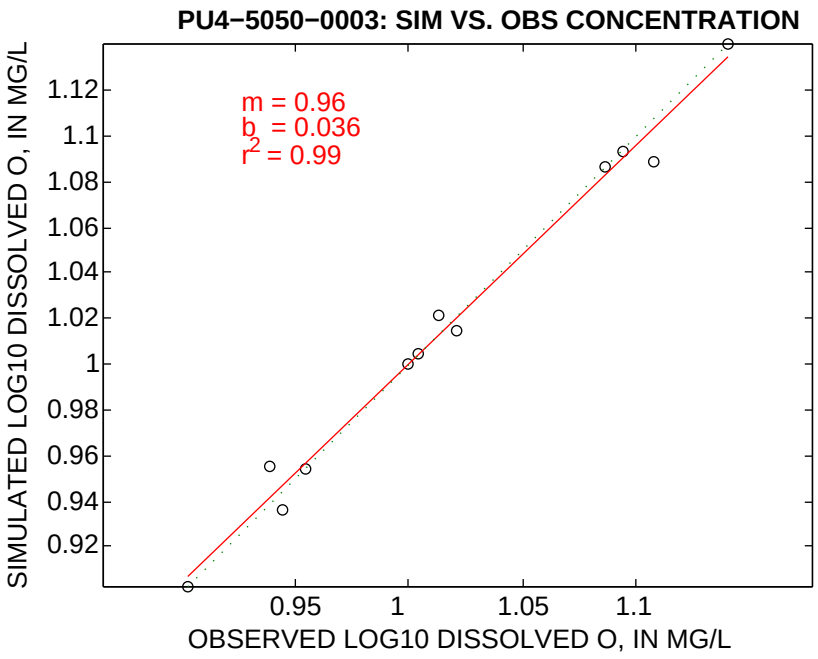
Drive: N/A | Directory: model | Observed: OBS20161101

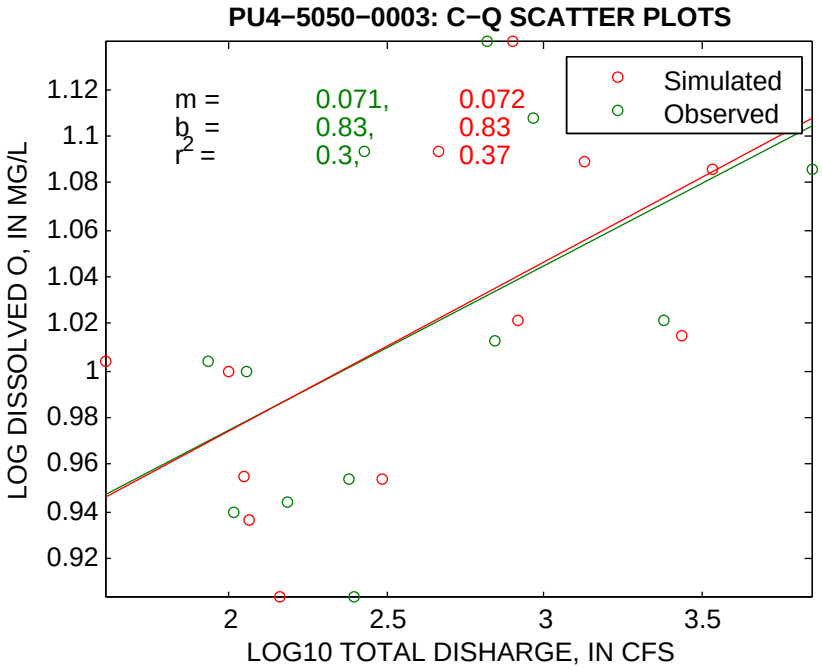
STATISTICS

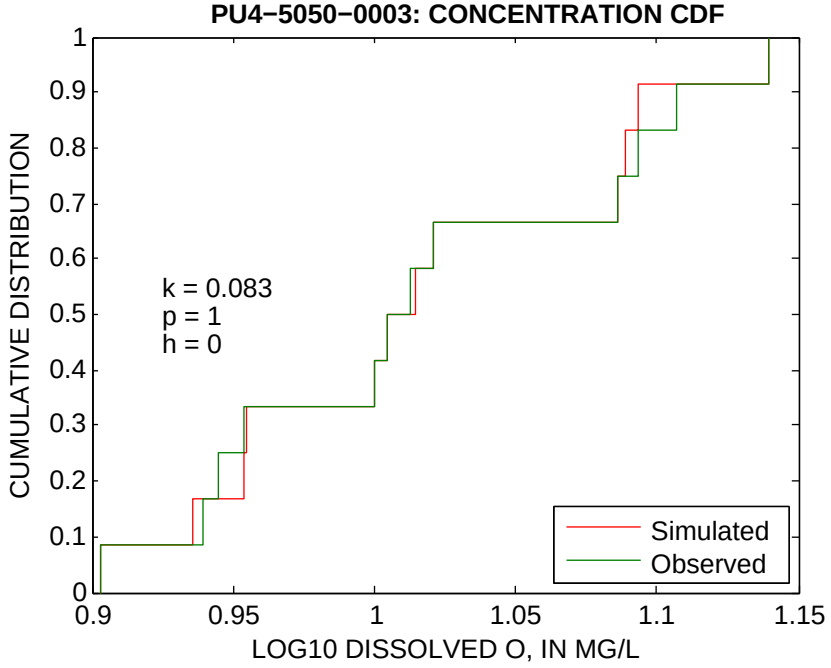
	n	12	12
		observe	simulate
min		8	7.3257
		0.90309	0.864849
mean		10.55	10.3061
		1.01721	1.00577
media		10.2	10.079
		1.00858	1.00341
max		13.8	13.403
		1.13988	1.1272
varian		3.43	3.74056
		0.00568621	0.00711808
JB		0.398944	0.5
		0.5	0.5
		ra	log
%		-2.31177	-1.12487
err.va		0.570025	0.00124014
rel.std.err		0.166188	0.218096
mod.eff		0.833812	0.781904

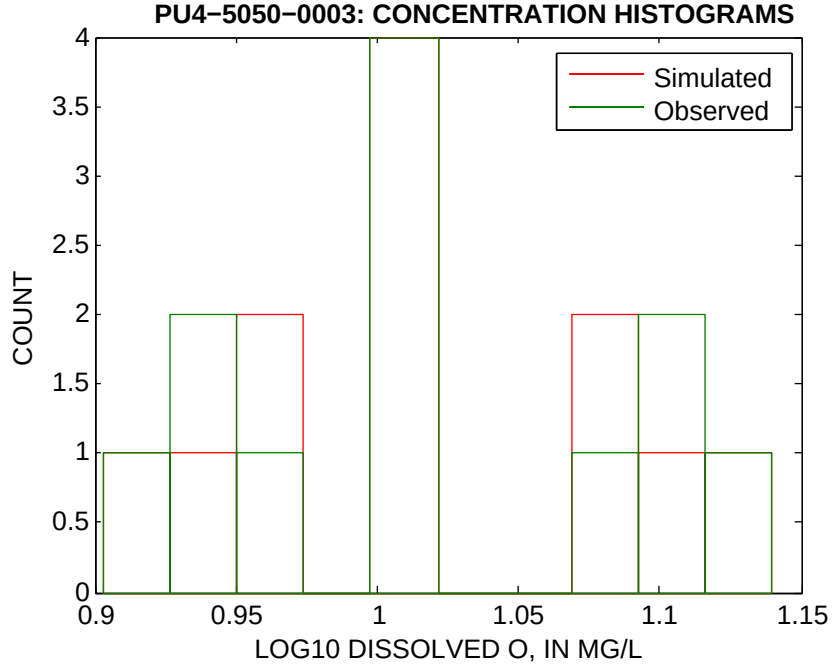
VERSION 2.1

ALL DATA
LOG10

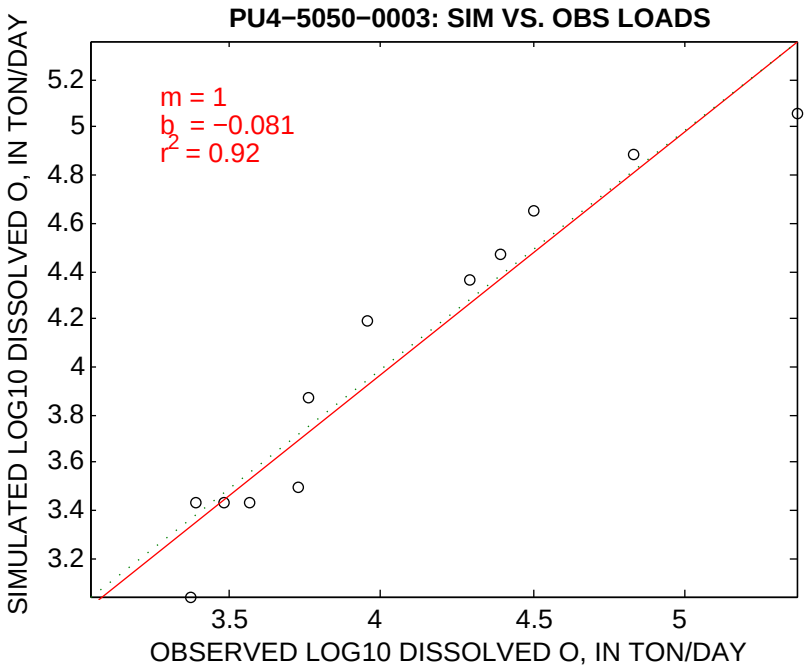


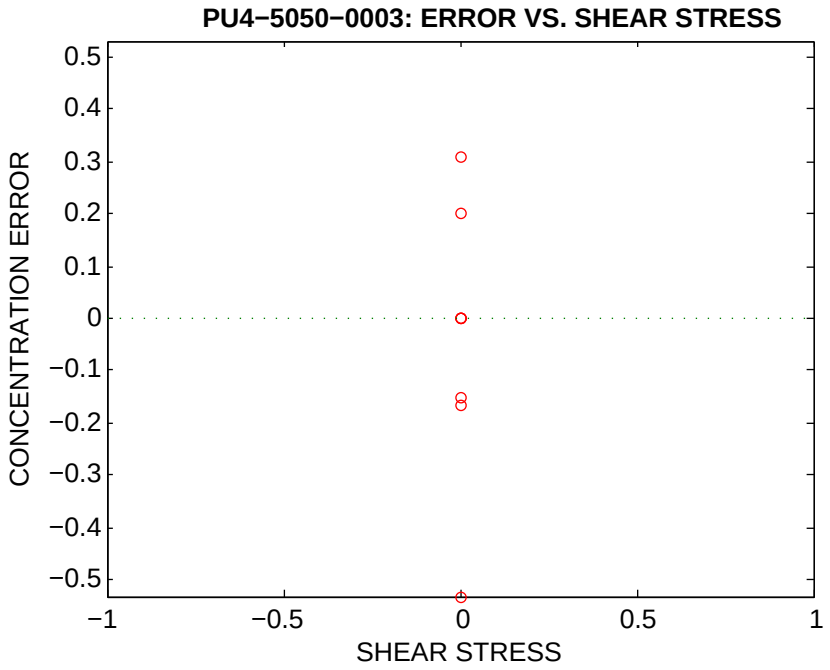


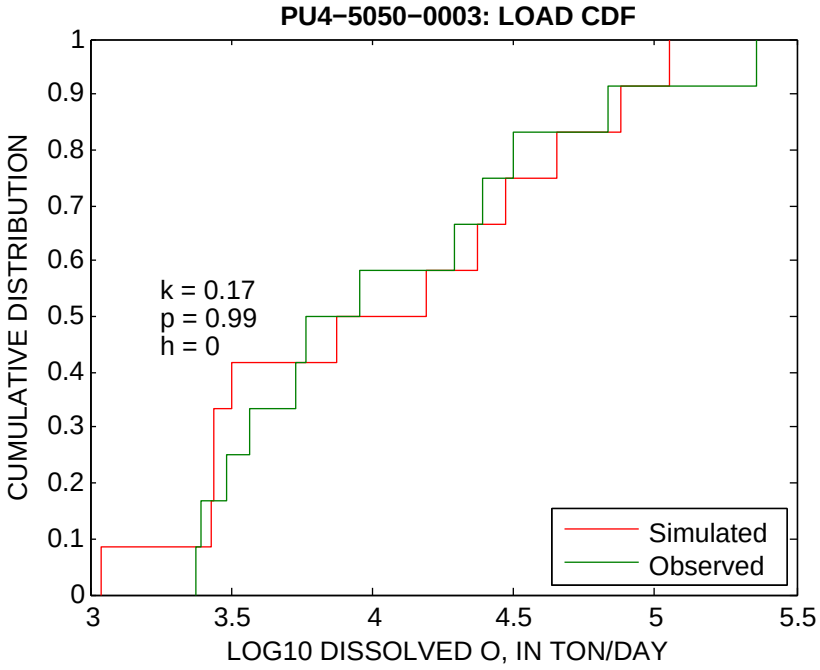


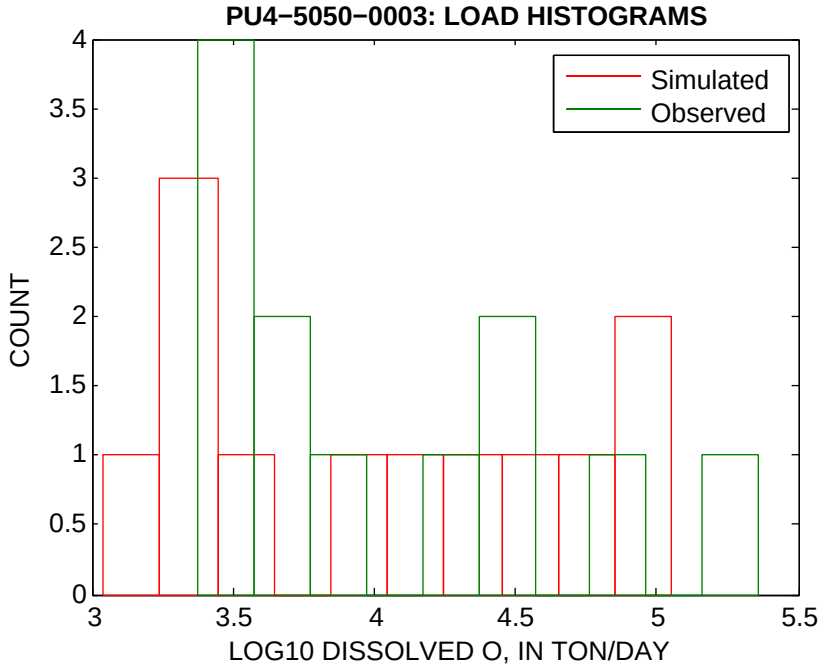


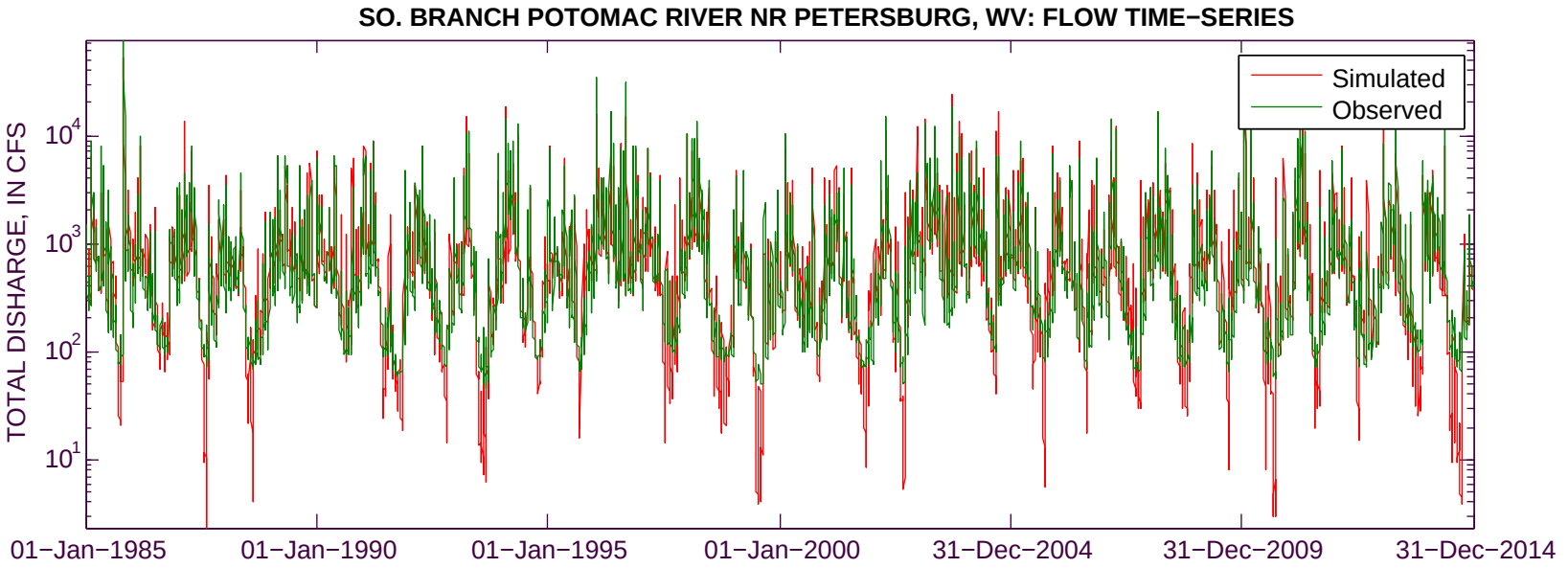
LOAD DATA
LOG10

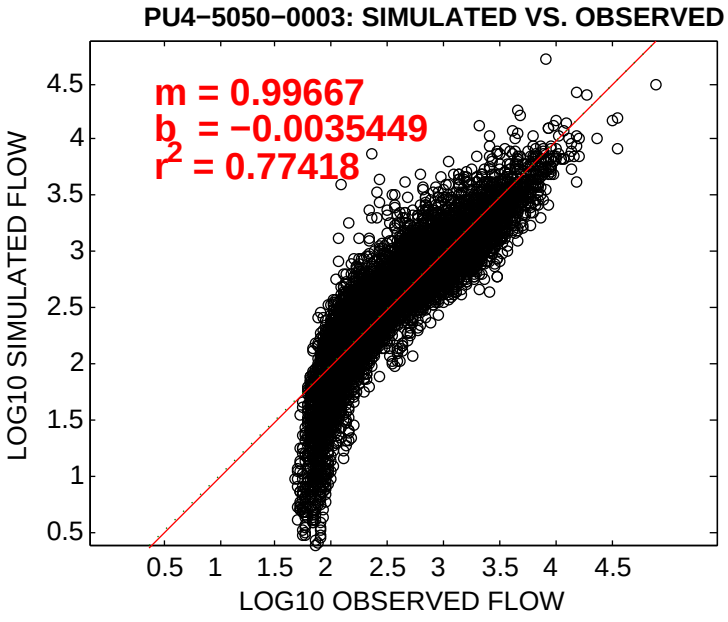


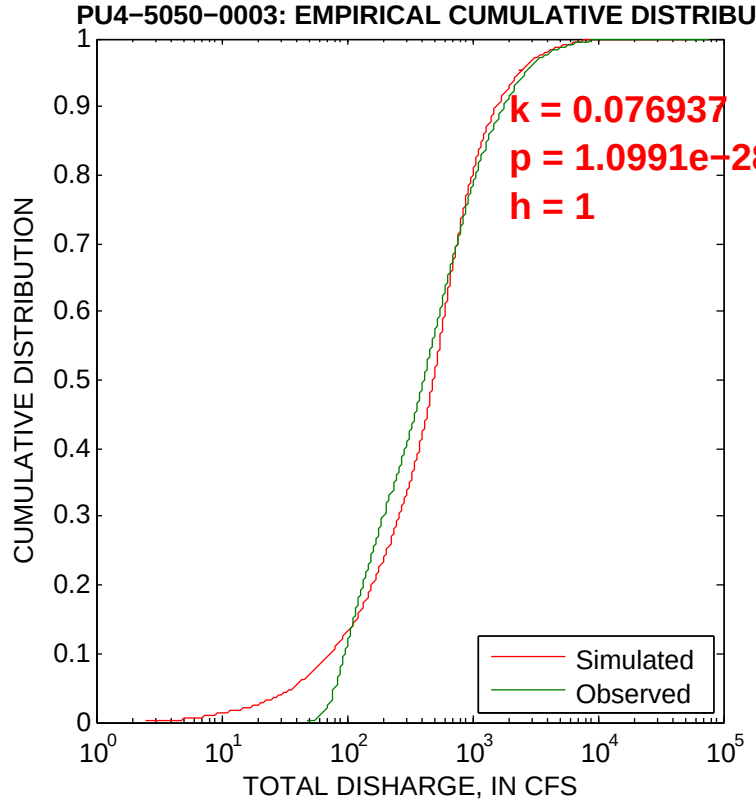












DATA SELECTION

scenario: P620171001WQ | file: FLOW.calib

plot: FLOW - total discharge

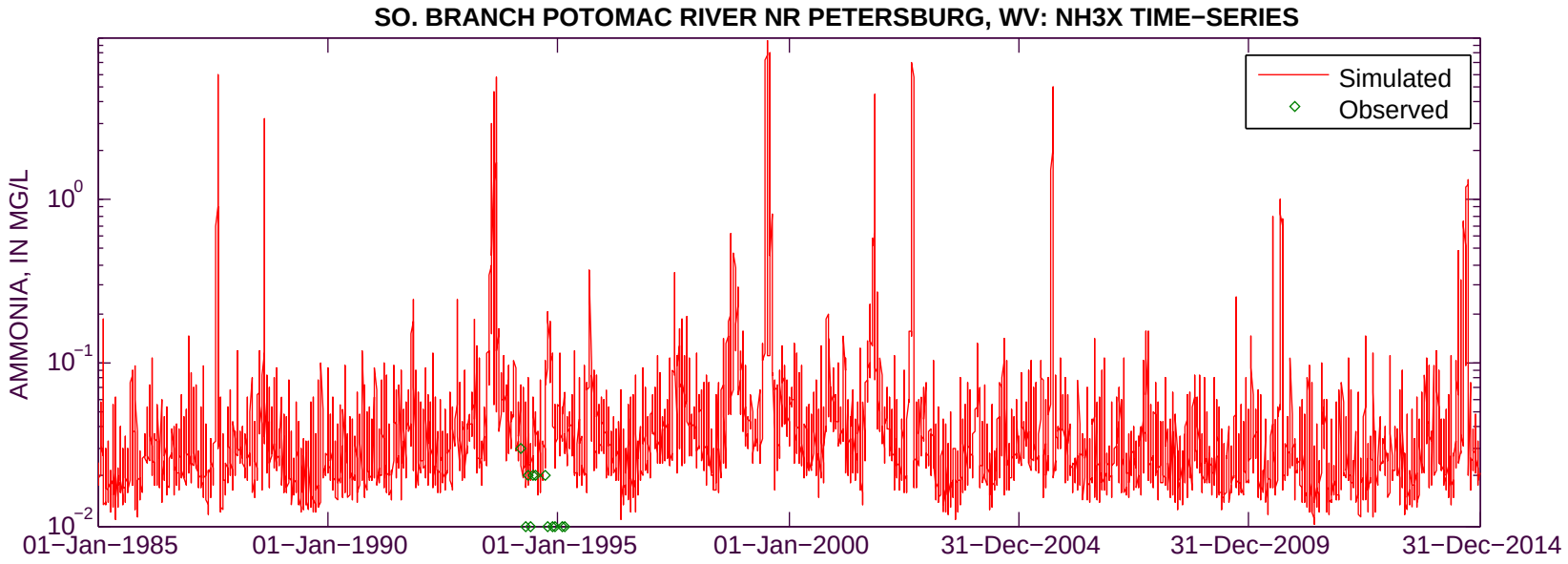
Dates: 1/1/1985 – 12/31/201

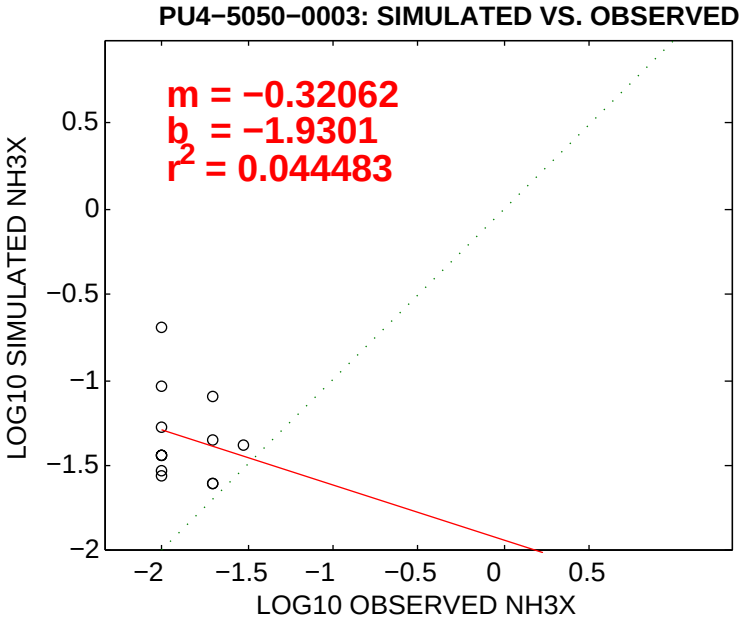
Drive | Directory: N/A | model | Observed: OBS20161101

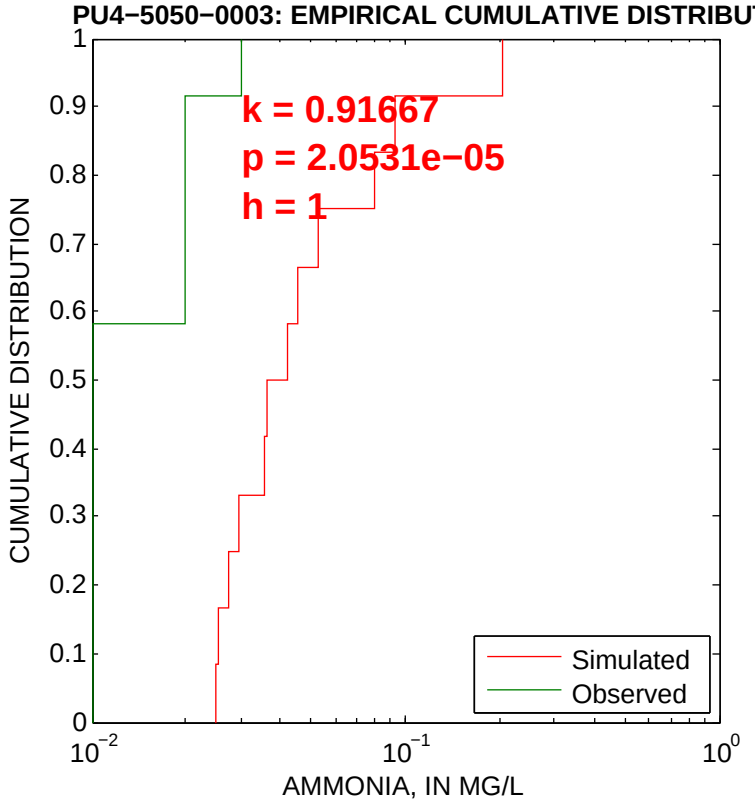
STATISTICS

		observe	simulate
n		10957	10957
min		46	2.3573
		1.66276	0.372415
mean		800.055	771.221
		2.61723	2.60498
media		413	494.74
		2.61595	2.69438
max		77000	53042
		4.88649	4.72462
varian		2.28589e+0	1.59661e+
		0.230467	0.295716
JB		0.001	0.001
		0.001	0.001
		ra	log
%		-3.60398	-0.468002
err.va		971994	0.0669312
rel.std.err		0.425215	0.290415
mod.eff		0.574785	0.709585

VERSION 2.1







DATA SELECTION

scenario	file
P620171001WQ	NH3X.calib

plot: NH3X - ammonia

Dates: 1/1/1985 – 12/31/201

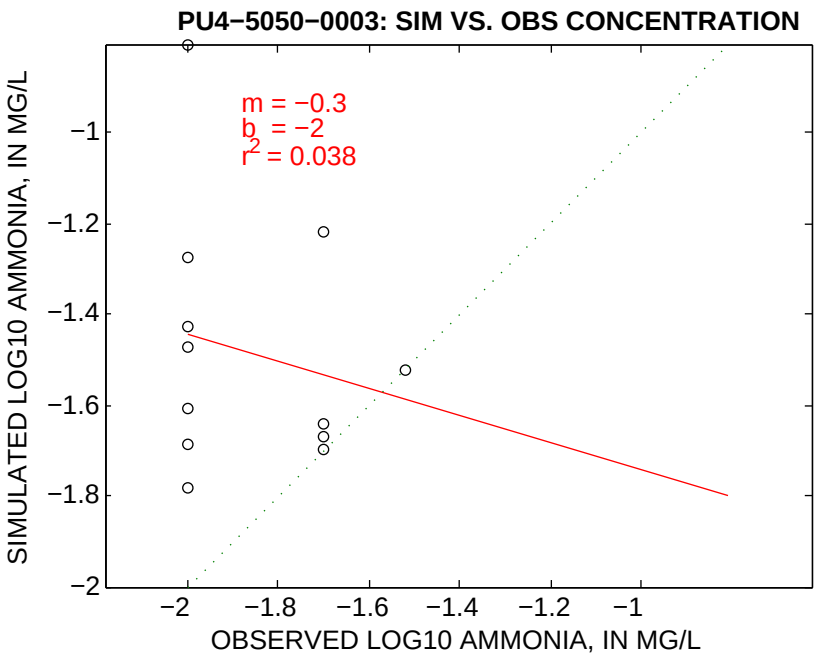
Drive	Directory	Observed
N/A	model	OBS20161101

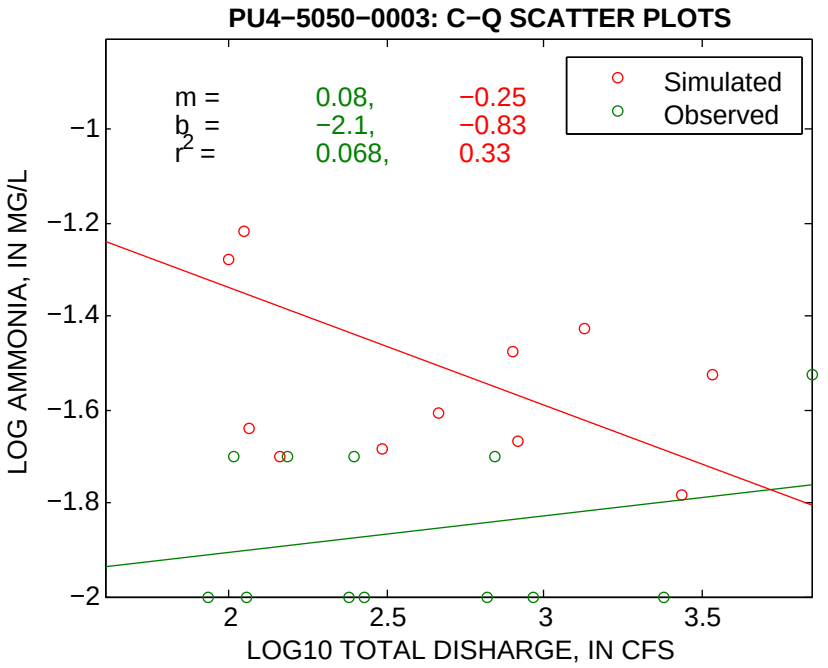
STATISTICS

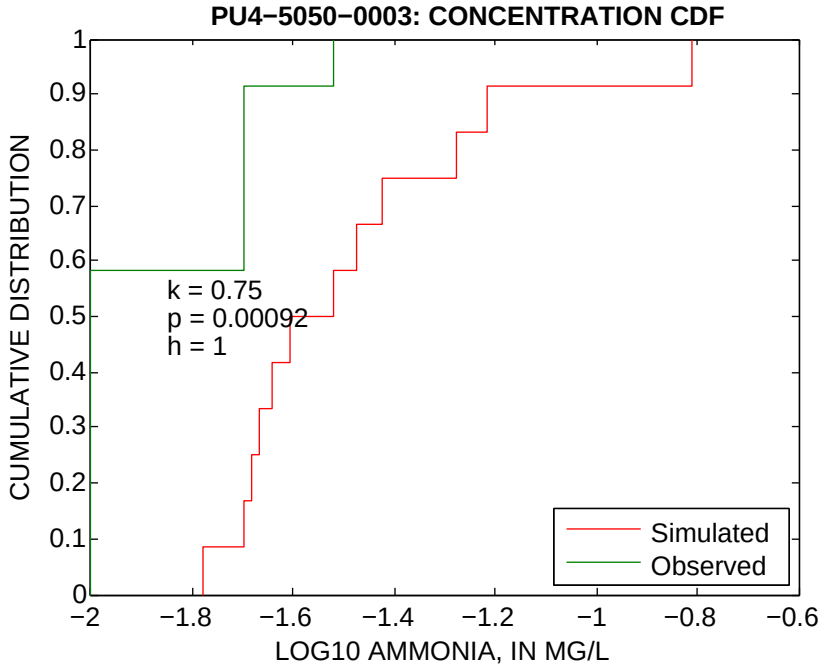
	n	observe	simulate
		12	12
min		0.01	0.02501
		-2	-1.60189
mean		0.015	0.0578509
		-1.8599	-1.33377
media		0.01	0.0390765
		-2	-1.40928
max		0.03	0.20265
		-1.52288	-0.693253
varian		4.54545e-0	0.00254103
		0.0322339	0.0744919
JB		0.104931	0.001
		0.140079	0.055375
		ra	log
%		285.673	-28.2881
err.va		0.00474924	0.429373
rel.std.err		104.483	13.3205
mod.eff		-103.483	-12.3205

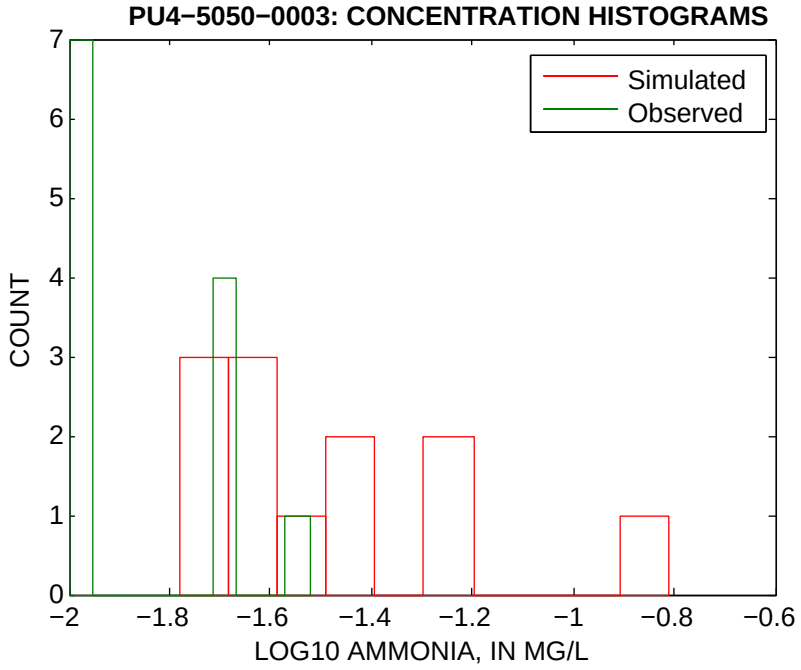
VERSION

ALL DATA
LOG10

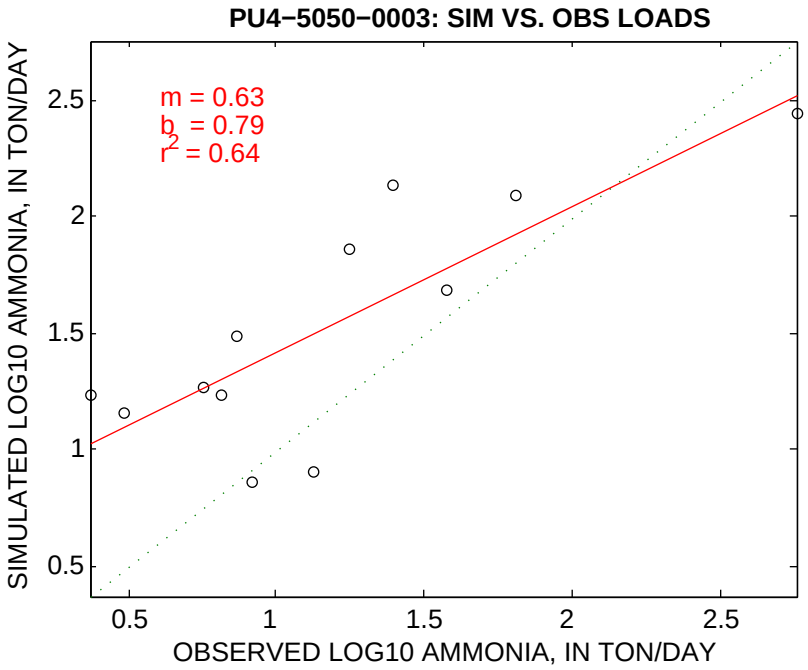


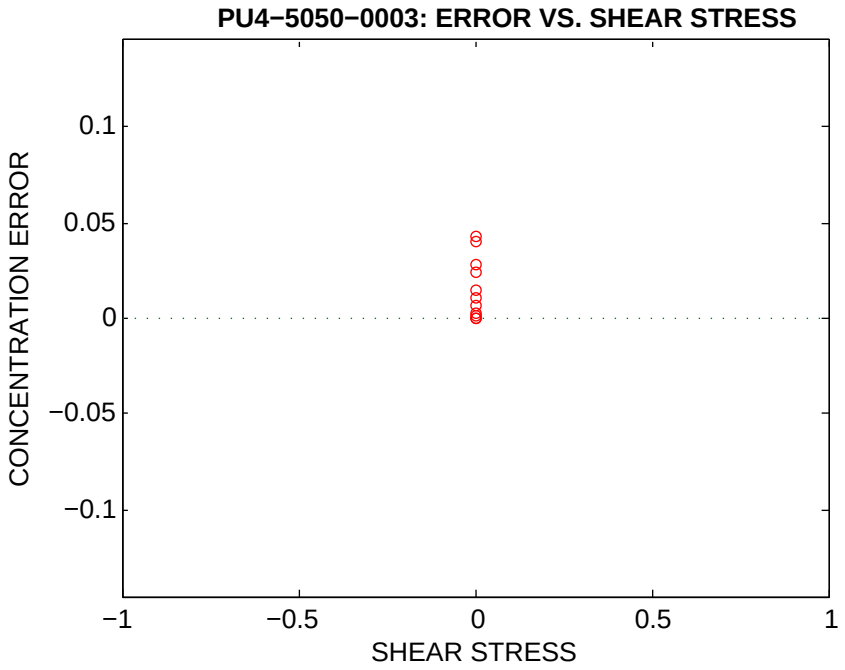


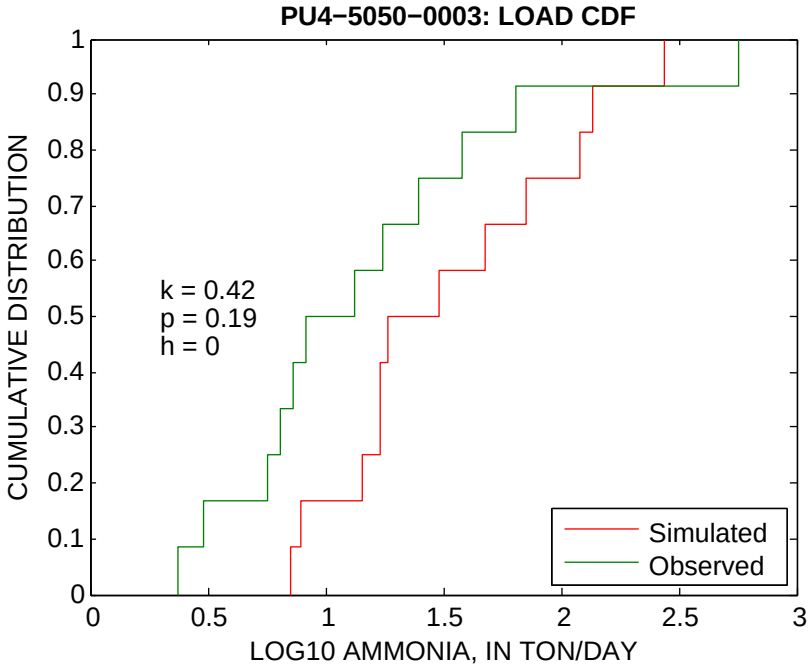


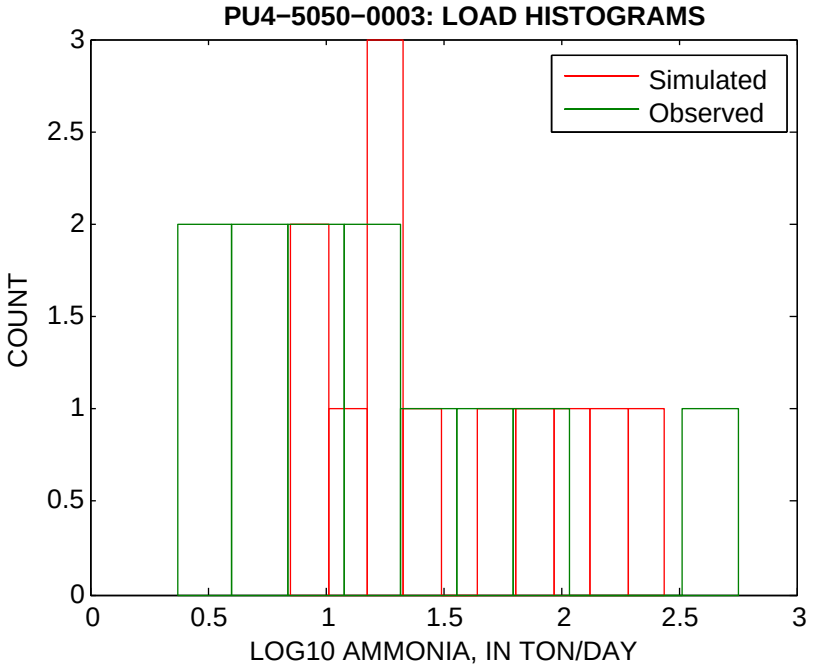


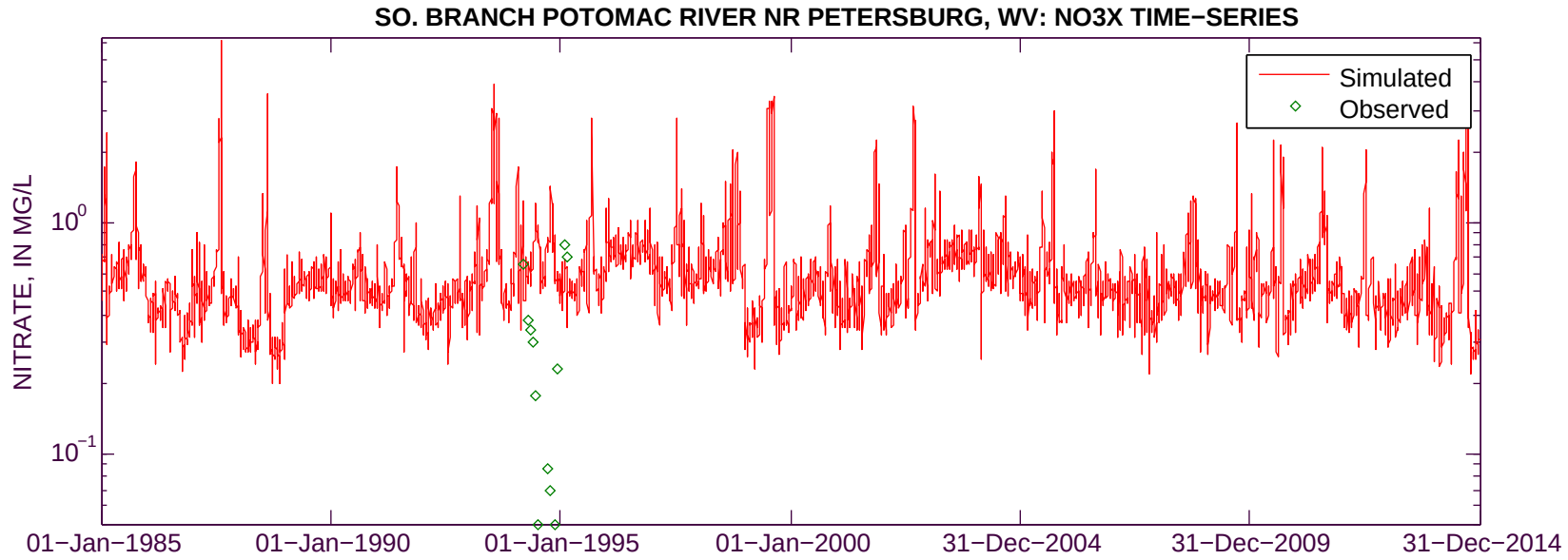
LOAD DATA
LOG10

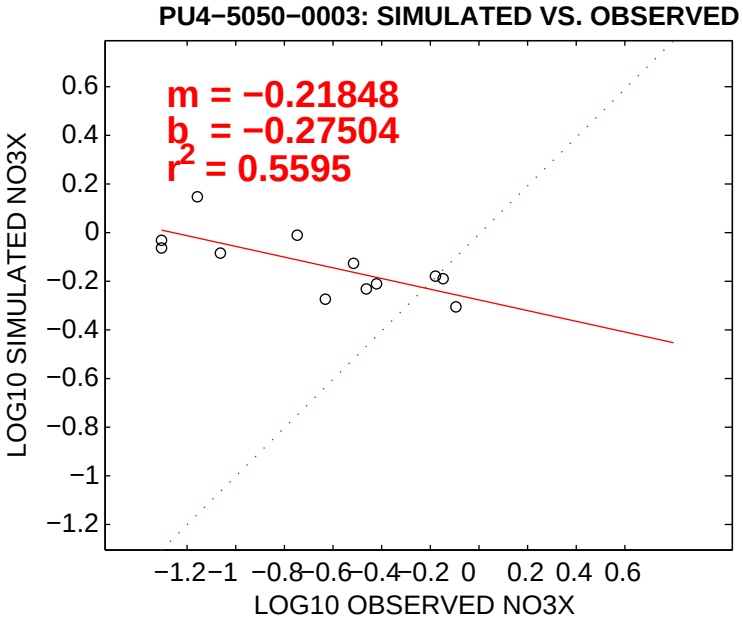


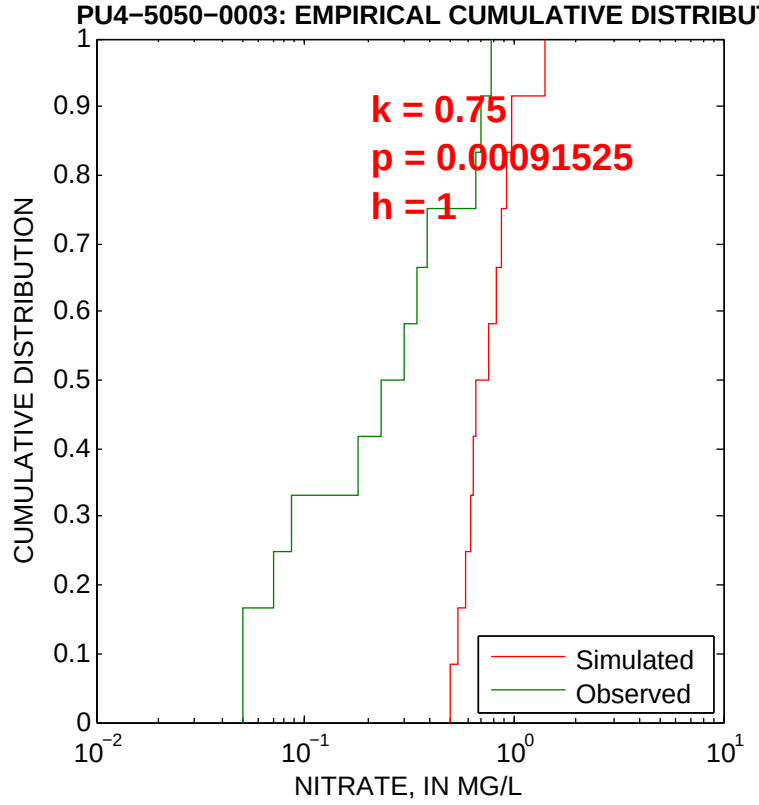












DATA SELECTION

scenario	file
P620171001WQ	NO3X.calib

plot: NO3X - nitrate

Dates 1/1/1985 12/31/201

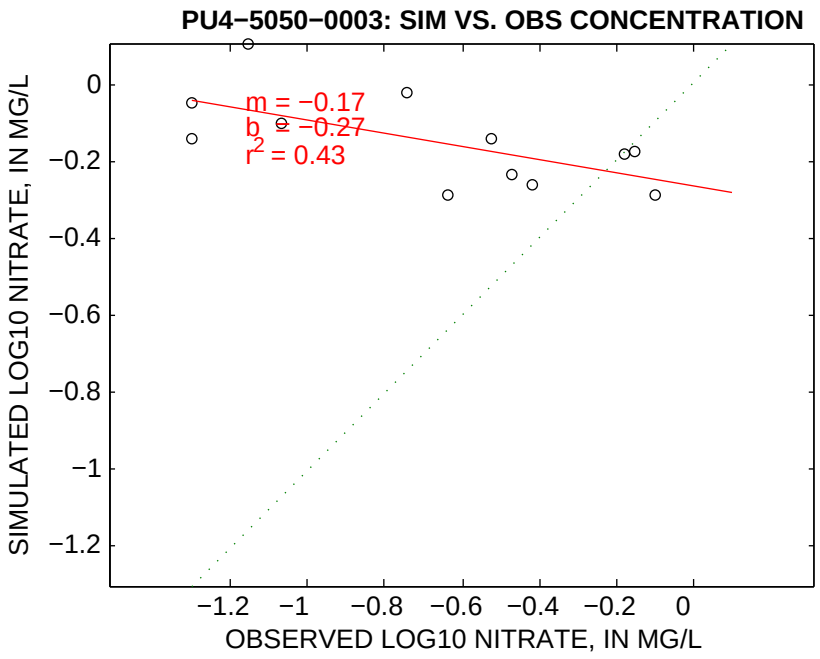
Drive	Directory	Observed
N/A	model	OBS20161101

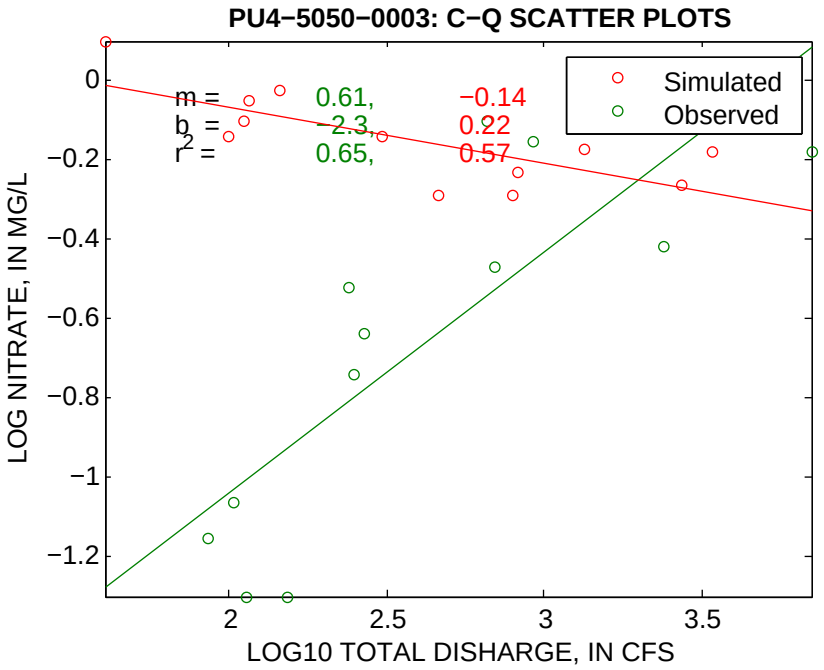
STATISTICS

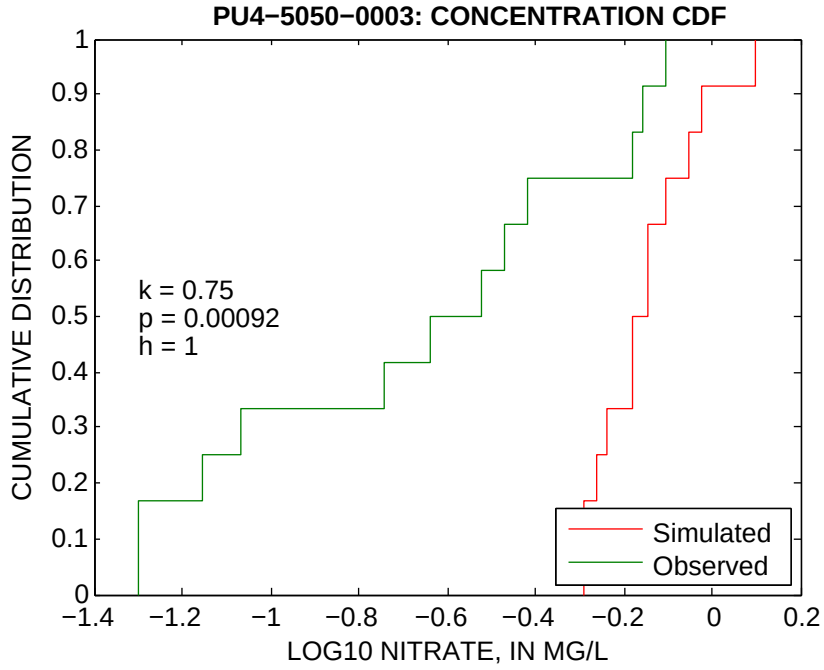
	n	12	12
		observe	simulate
min		0.05	0.49339
		-1.30103	-0.30681
mean		0.319667	0.77661
		-0.671234	-0.12839
media		0.265	0.70375
		-0.580575	-0.153505
max		0.79	1.4139
		-0.102373	0.150419
varian		0.0705504	0.0646927
		0.195121	0.0166461
JB		0.173623	0.028502
		0.302238	0.430925
		ra	log
%		142.944	-80.8725
err.va		0.450393	0.618495
rel.std.err		6.38399	3.1698
mod.eff		-5.38399	-2.1698

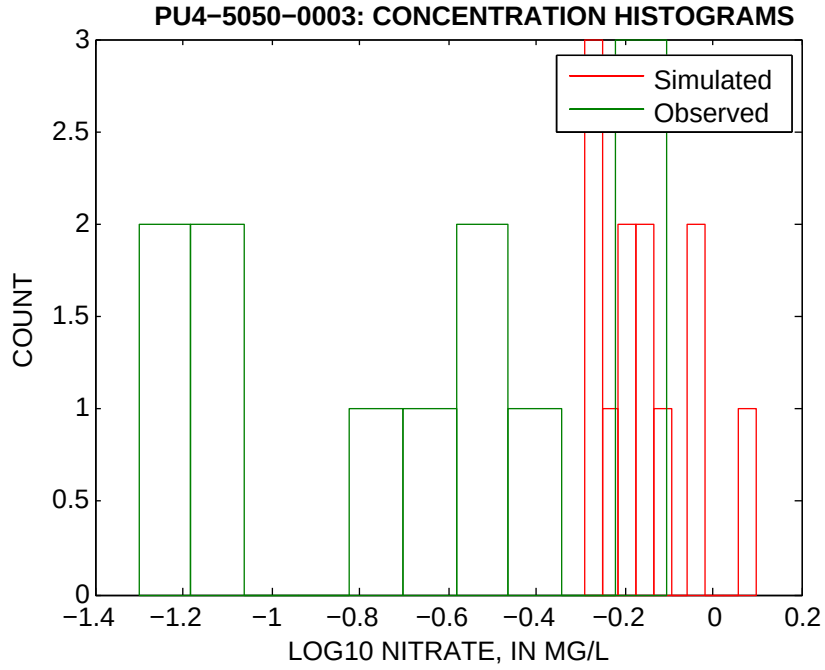
VERSION 2.1

ALL DATA
LOG10

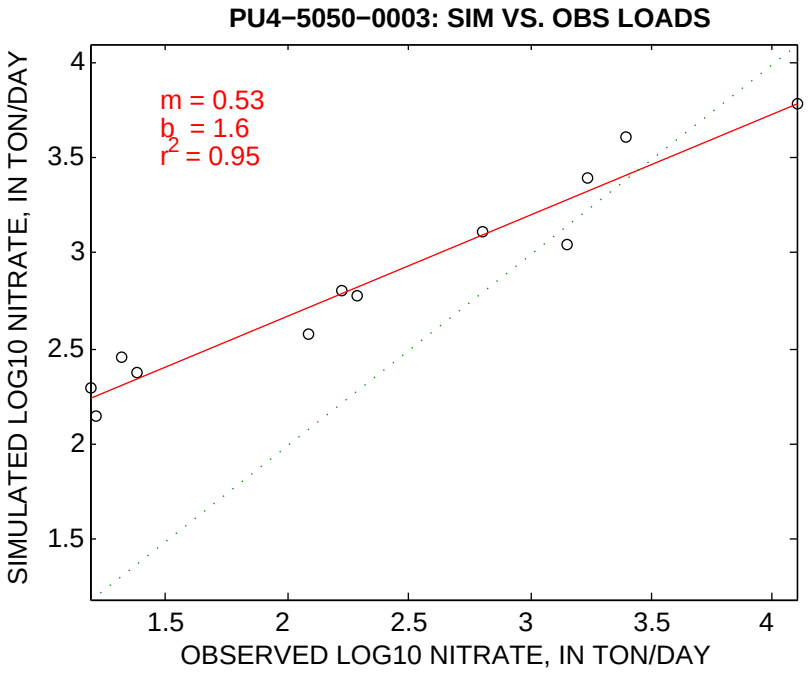


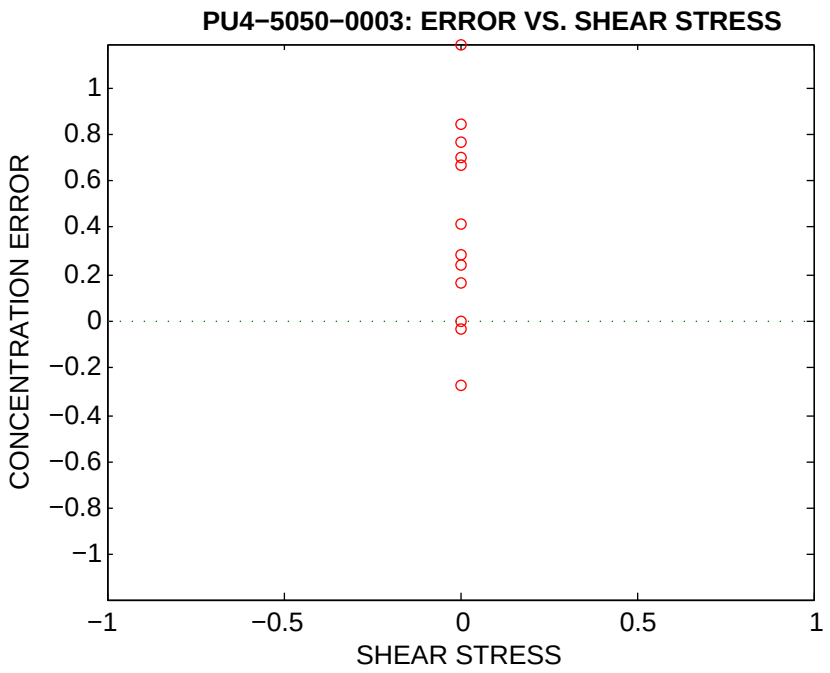


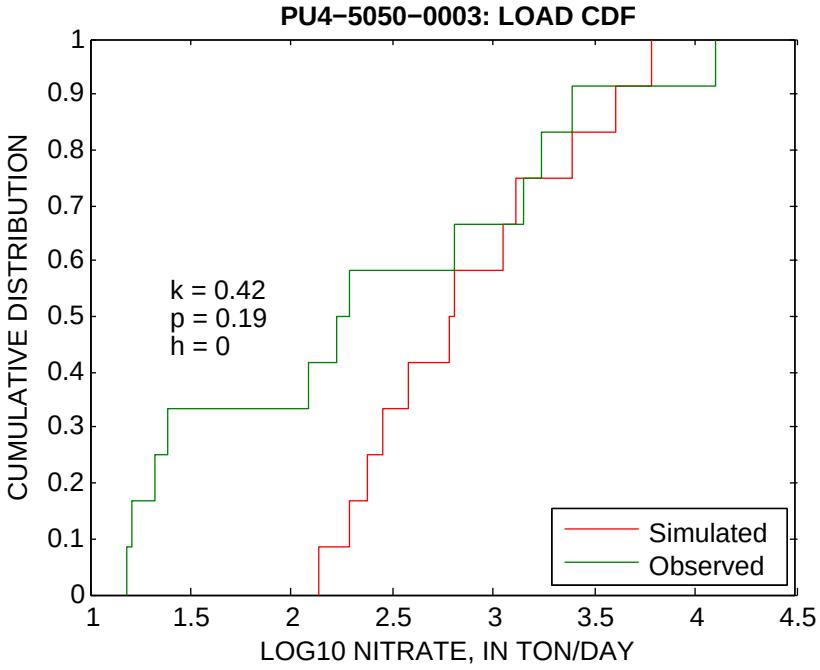


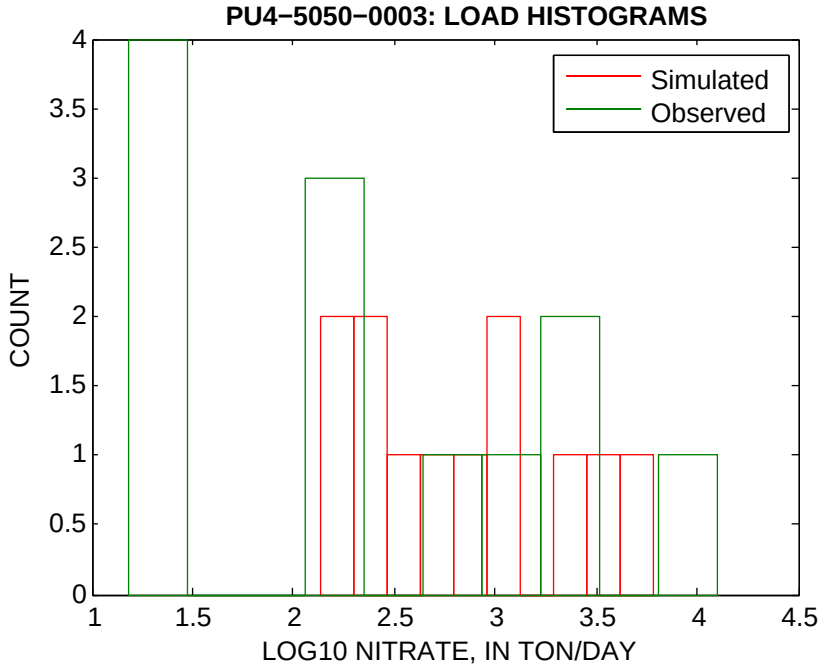


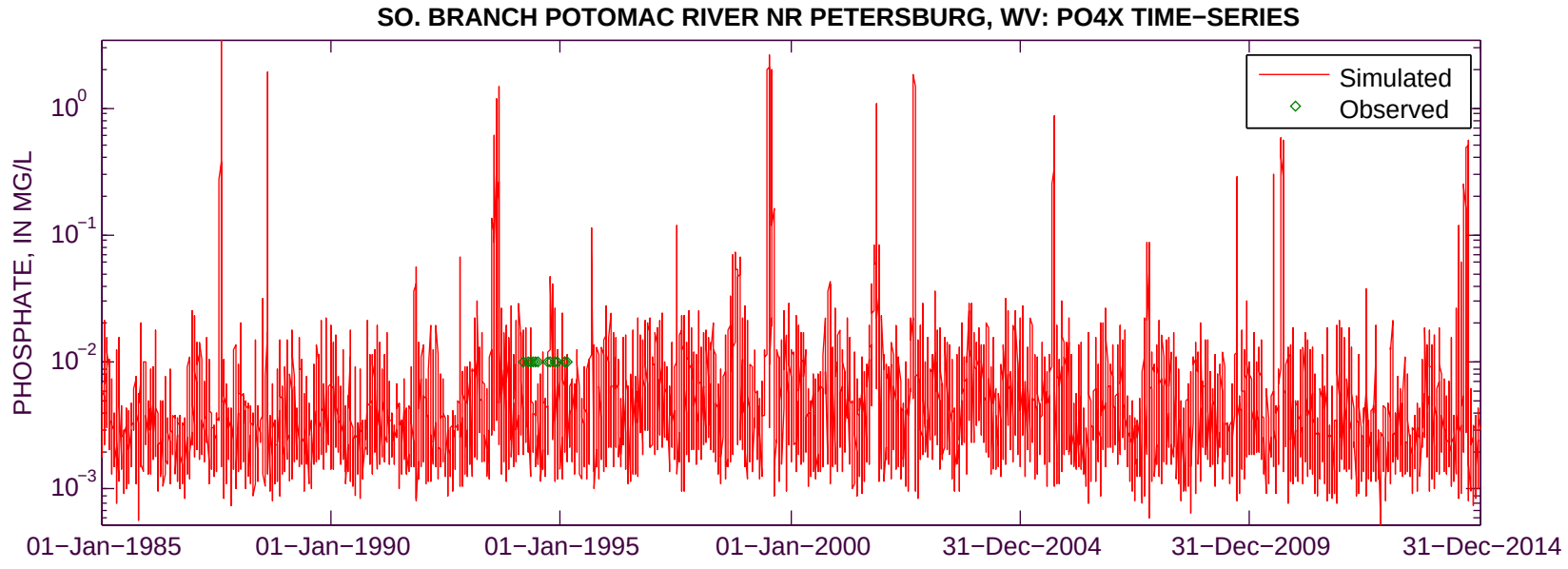
LOAD DATA
LOG10

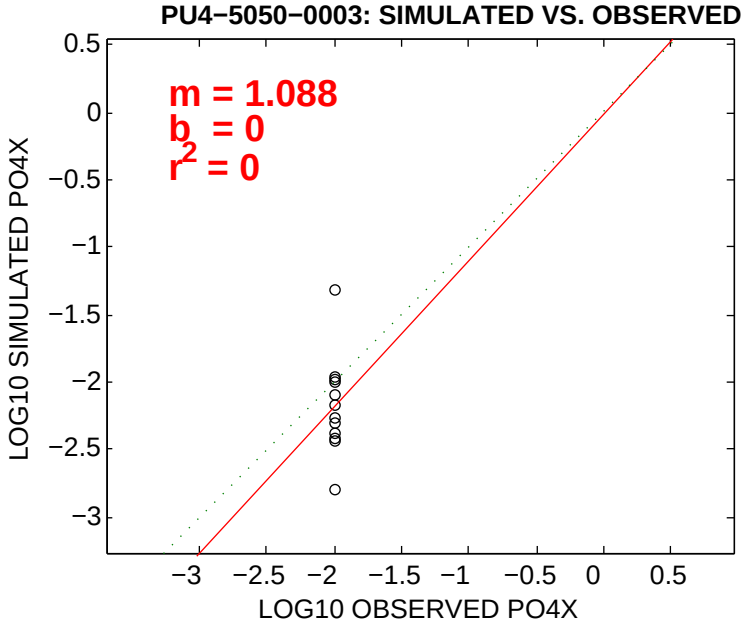


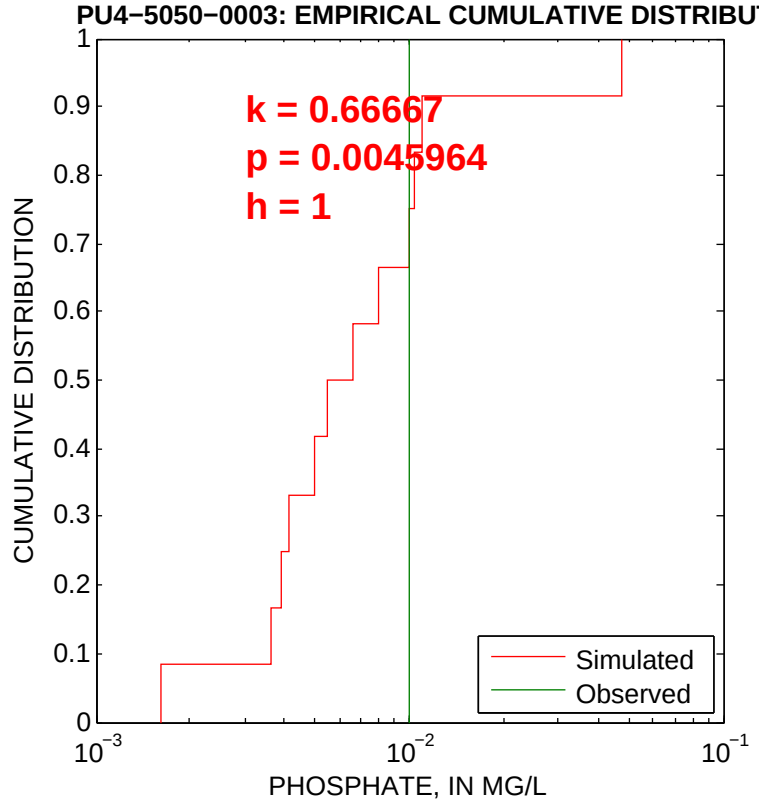












DATA SELECTION

scenario: P620171001WQ | file: PO4X.calib

plot: PO4X - phosphate

Dates: 1/1/1985 – 12/31/201

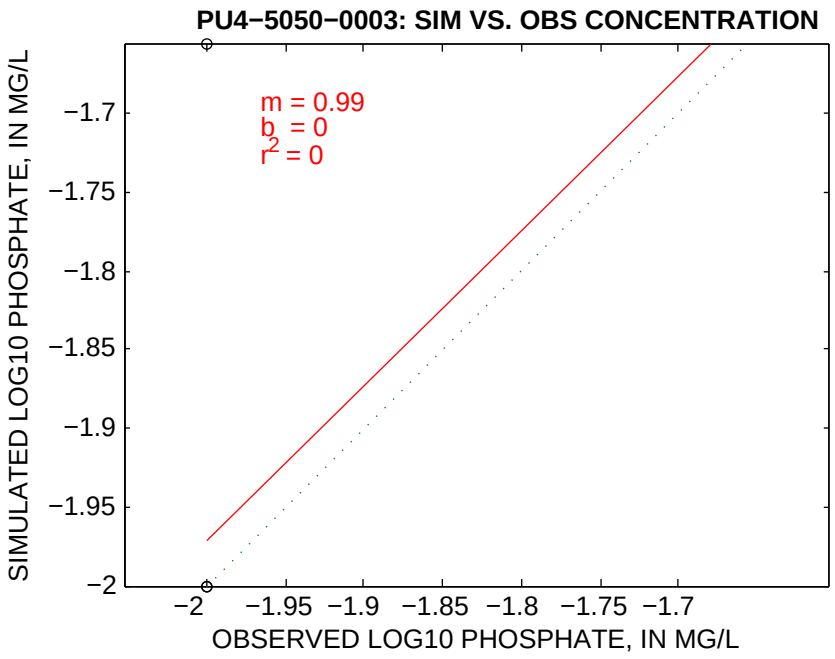
Drive | Directory | Observed: N/A | model | OBS20161101

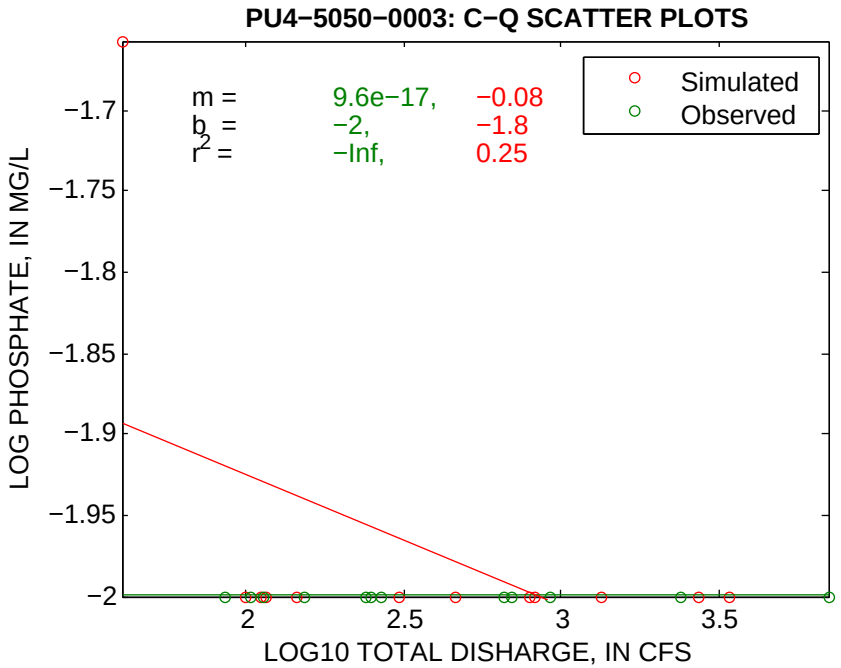
STATISTICS

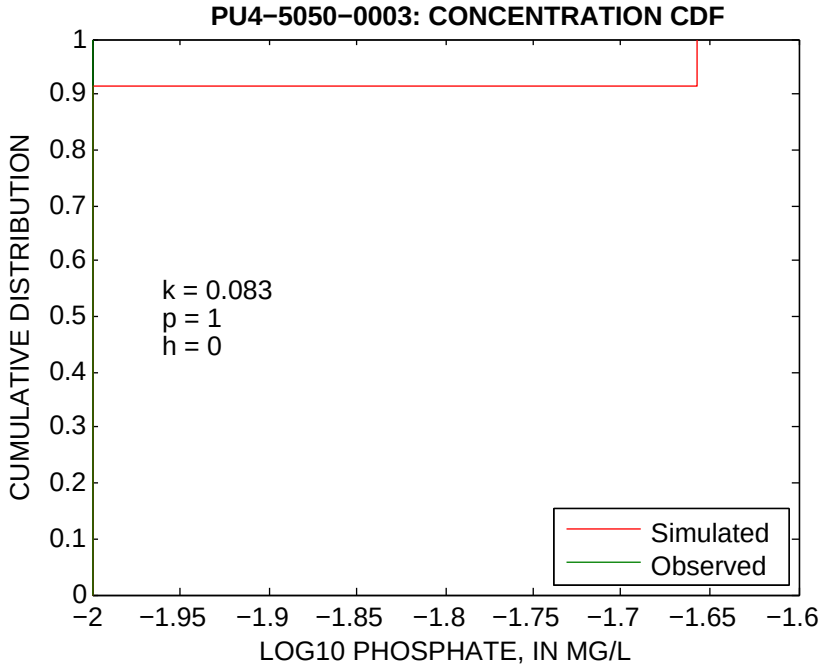
		observe	simulate
n		12	12
min		0.01	0.001618
		-2	-2.79102
mean		0.01	0.00981857
		-2	-2.17602
media		0.01	0.0060736
		-2	-2.21835
max		0.01	0.047908
		-2	-1.31959
varian		3.28284e-3	0.00015272
		0	0.129166
JB		0.029114	0.001
		NaN	0.098616
		ra	log
%		-1.81433	8.80104
err.va		0.00015276	0.162966
rel.std.err		65342e+3	Inf
mod.eff		-4.65342e+	-Inf

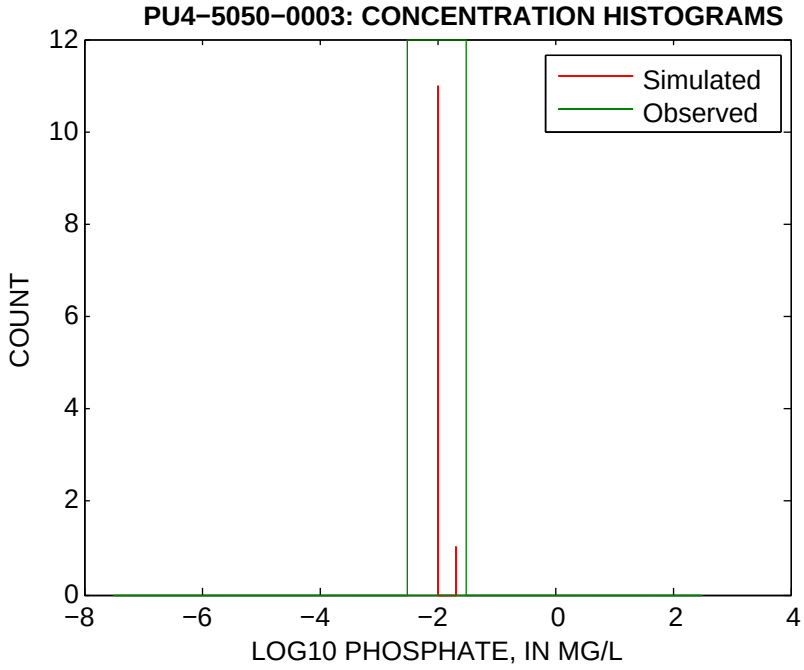
VERSION

ALL DATA
LOG10

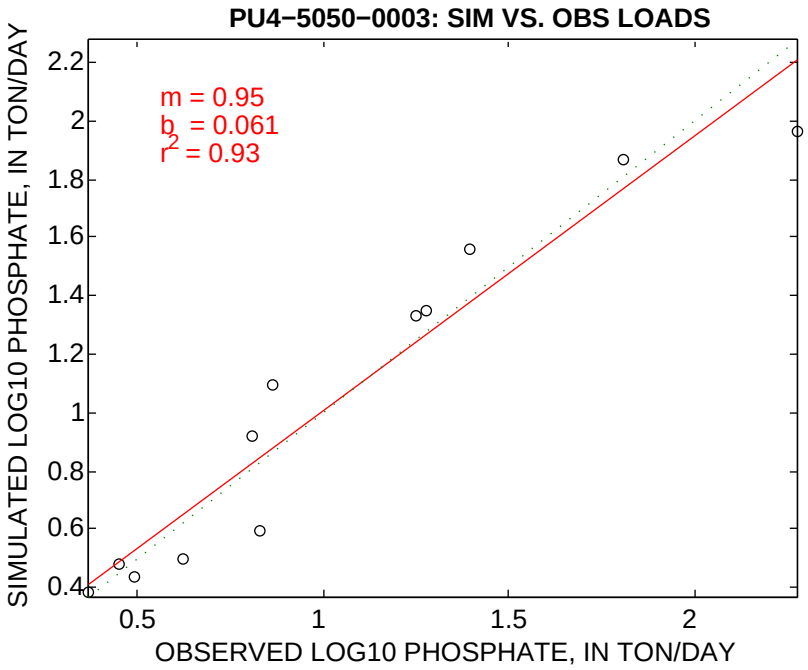


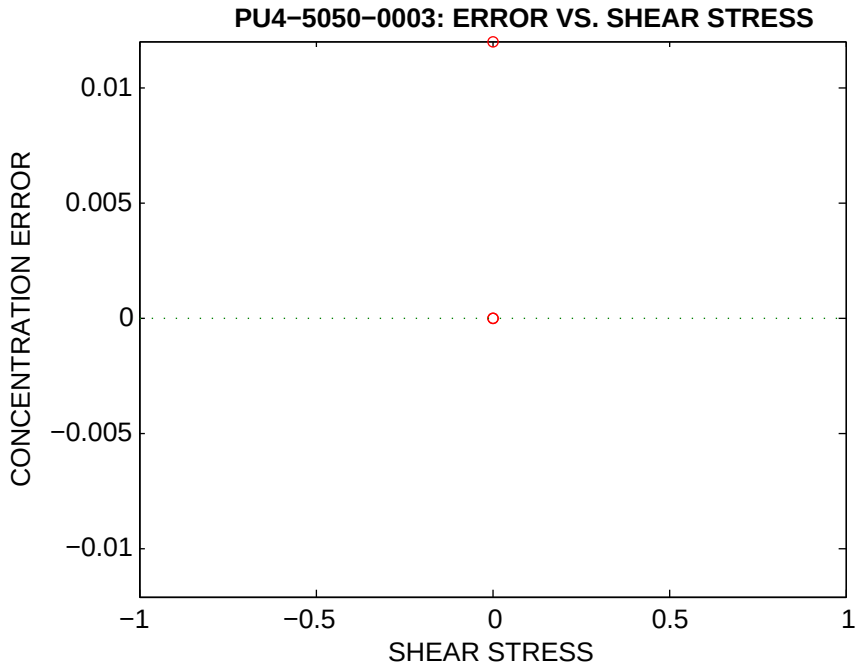


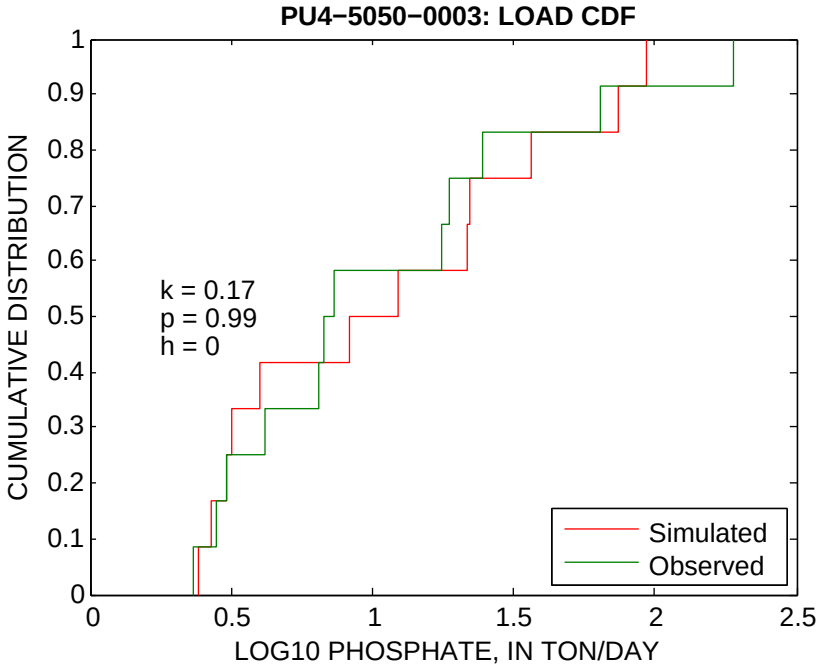


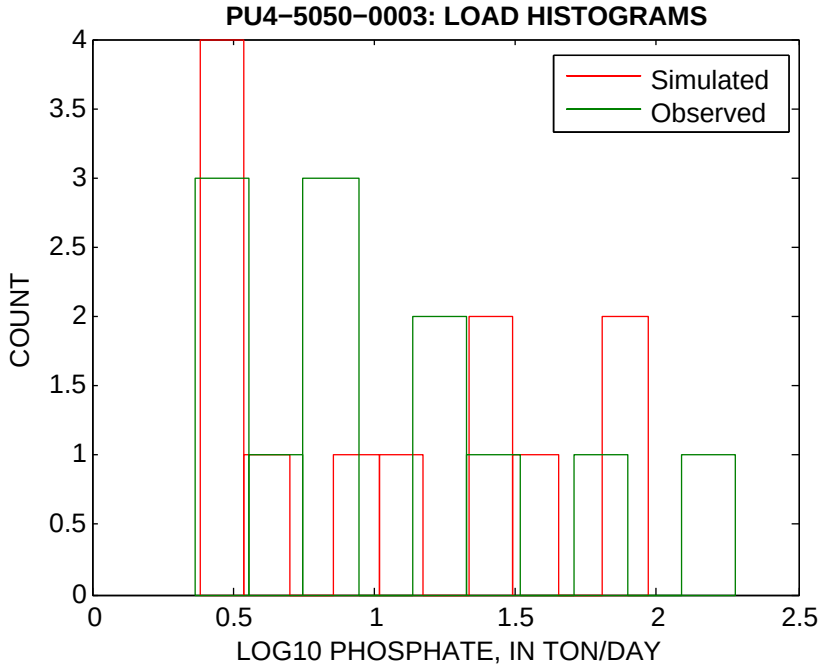


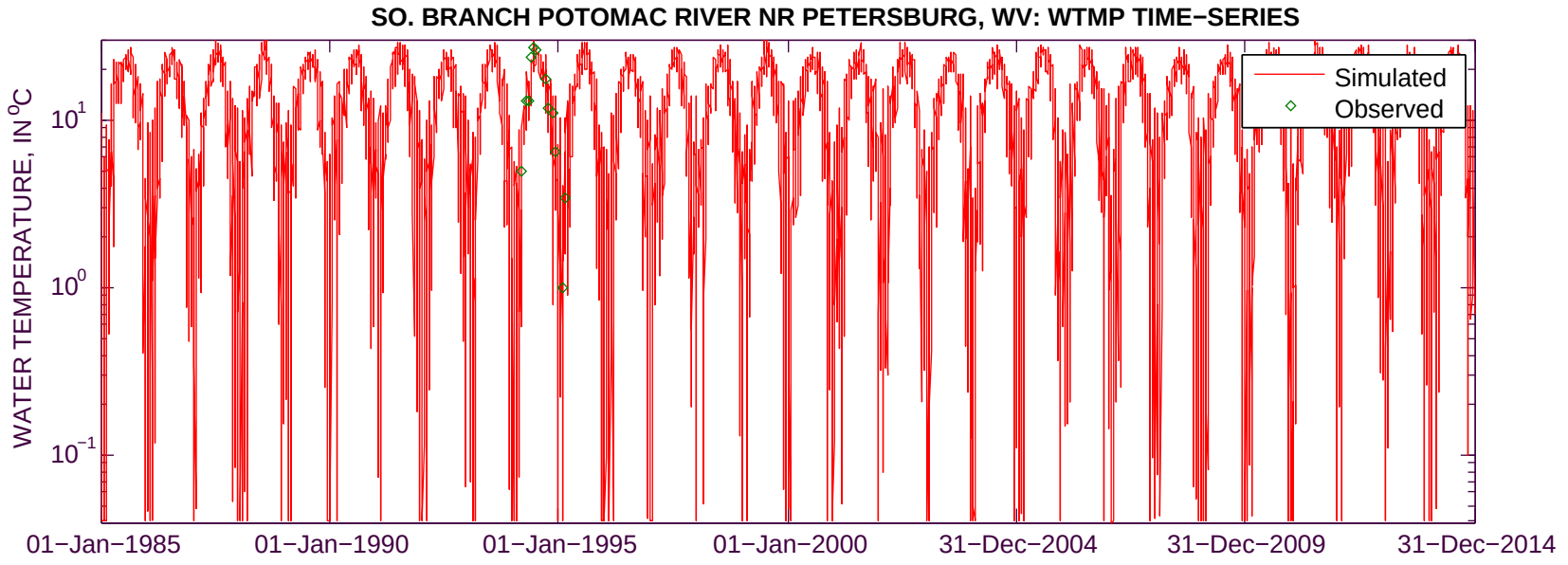
LOAD DATA
LOG10

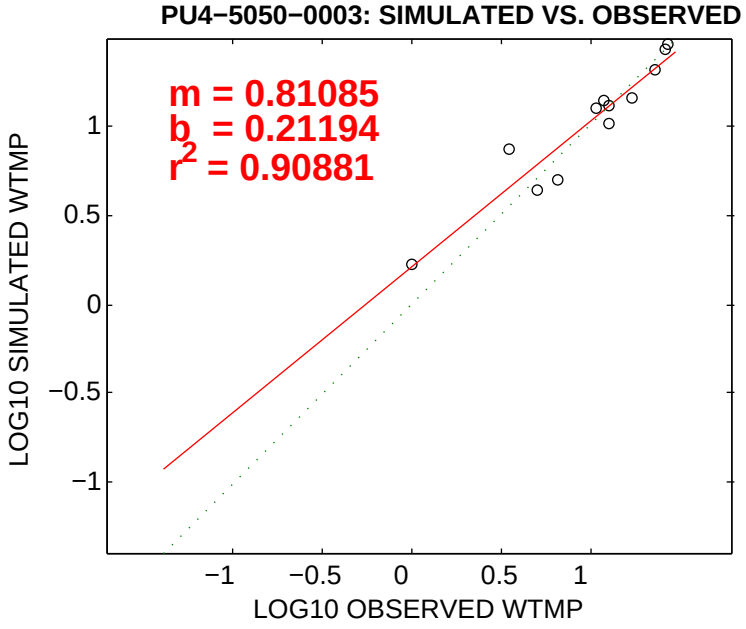


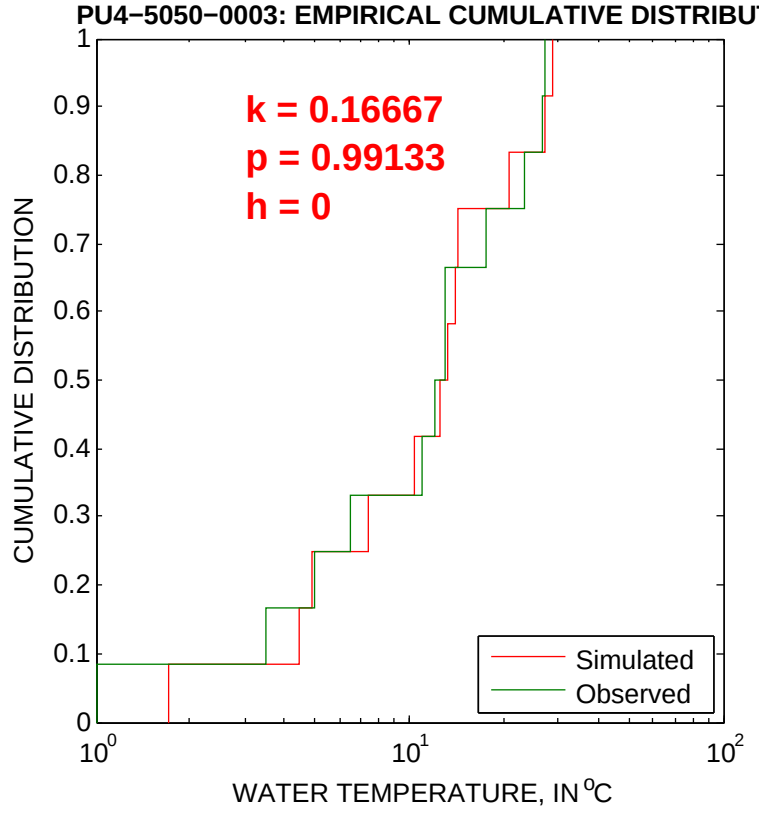












DATA SELECTION

scenario	file
P620171001WQ	WTMP.calib

plot: WTMP - water tempera...

Dates: 1/1/1985 – 12/31/201

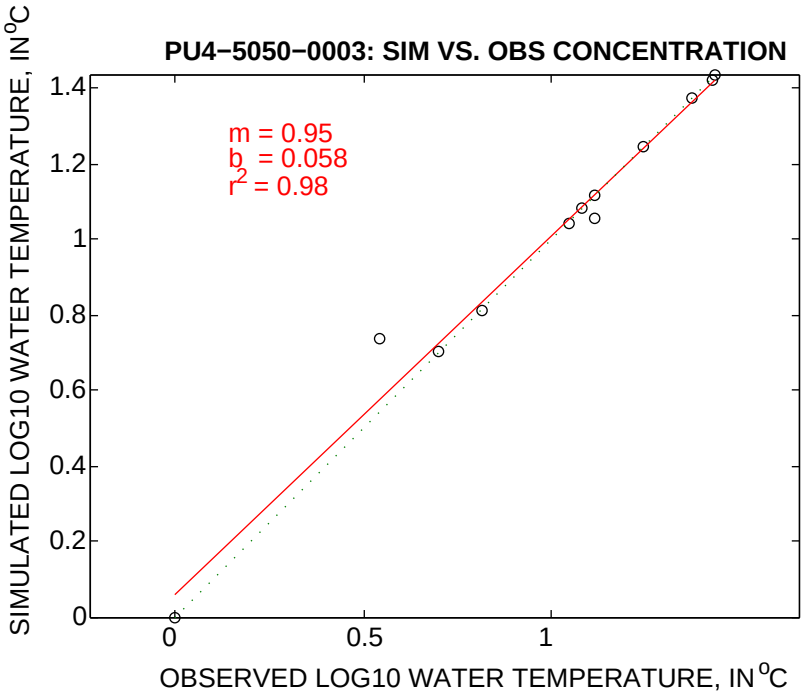
Drive	Directory	Observed
N/A	model	OBS20161101

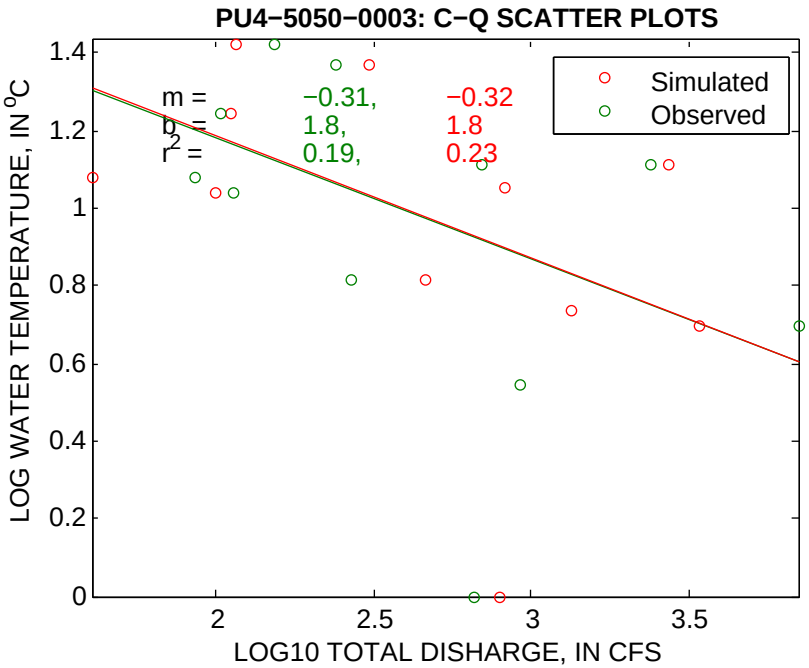
STATISTICS

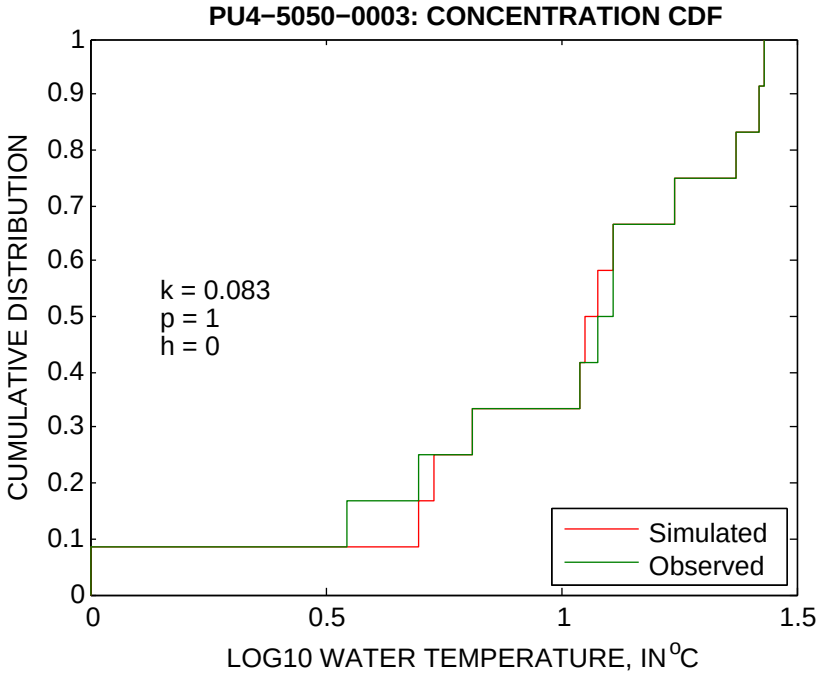
	n	12	12
		observe	simulate
min		1	1.6933
		0	0.228734
mean		13.2917	13.2551
		0.989427	1.01422
media		12.5	12.843
		1.09656	1.1085
max		27	28.714
		1.43136	1.45809
varian		77.5663	73.4011
		0.175279	0.126805
JB		☑ 0.446419	0.420624 ☑
		☑ 0.060737	0.191403 ☑
		ra	log
%		-0.275423	2.50564
err.va		4.84217	0.0185051
rel.std.err		0.0624263	0.105575
mod.eff		0.937574	0.894425

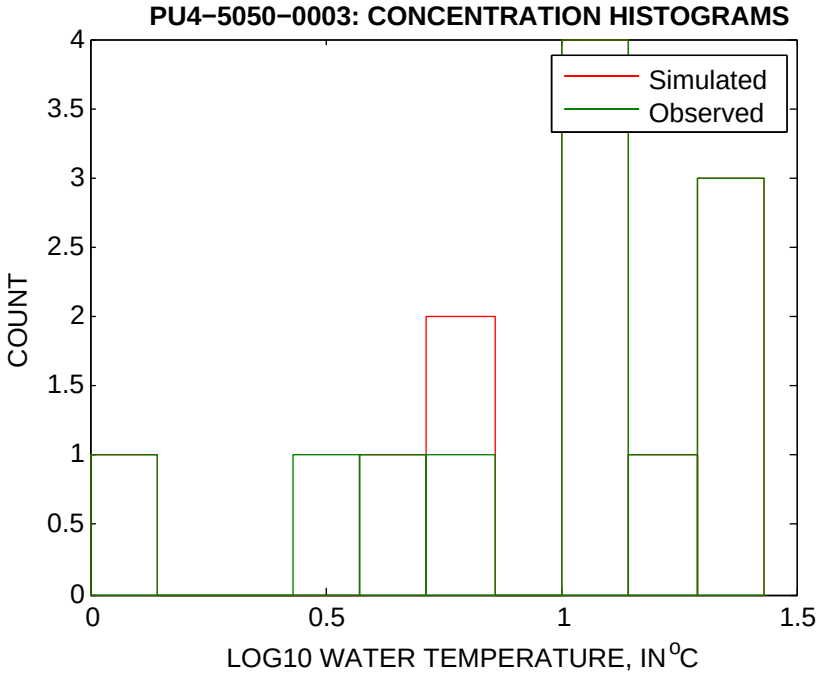
VERSION 2.1

ALL DATA
LOG10

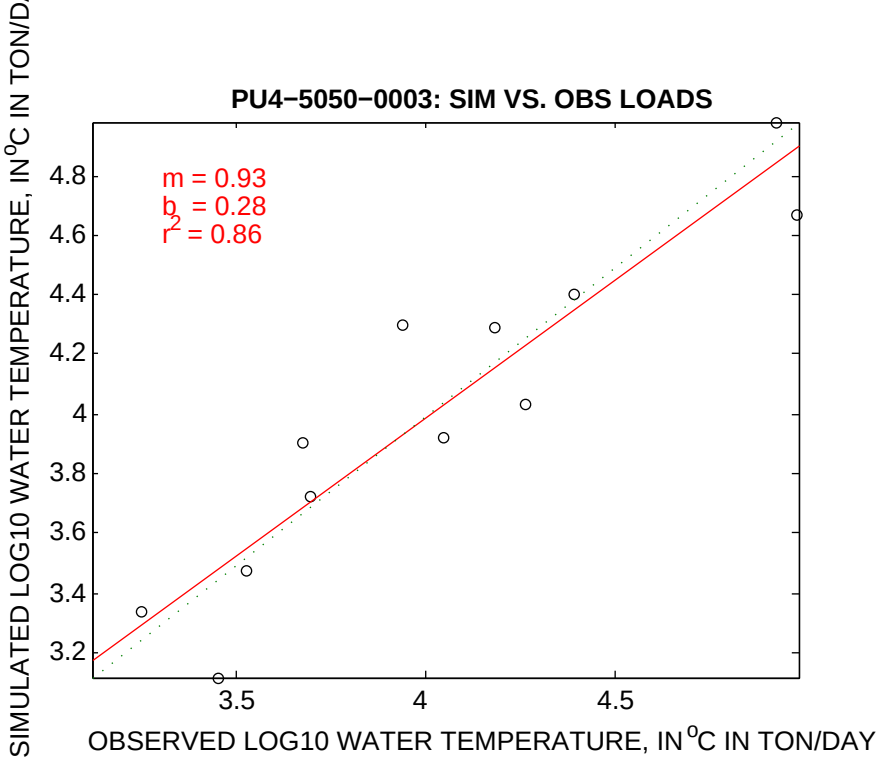




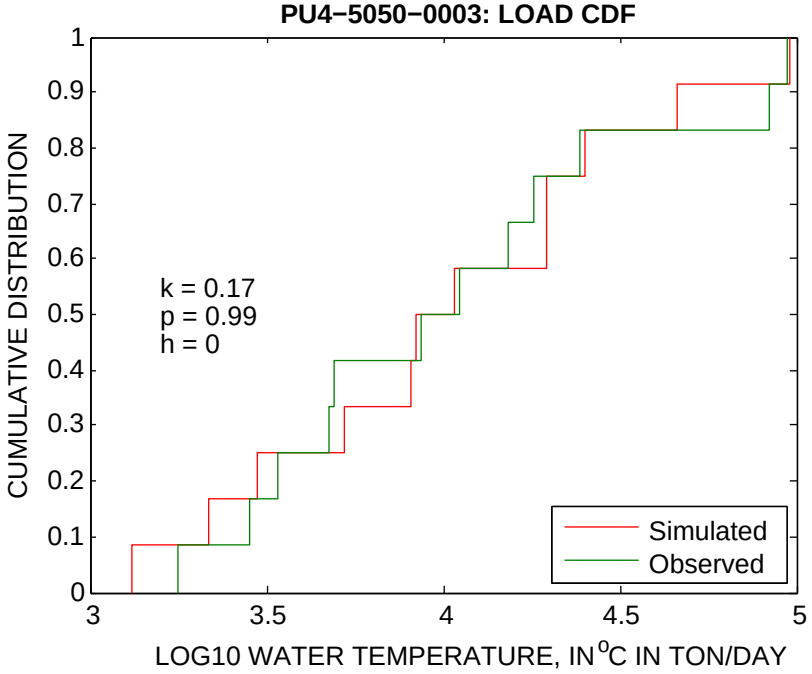


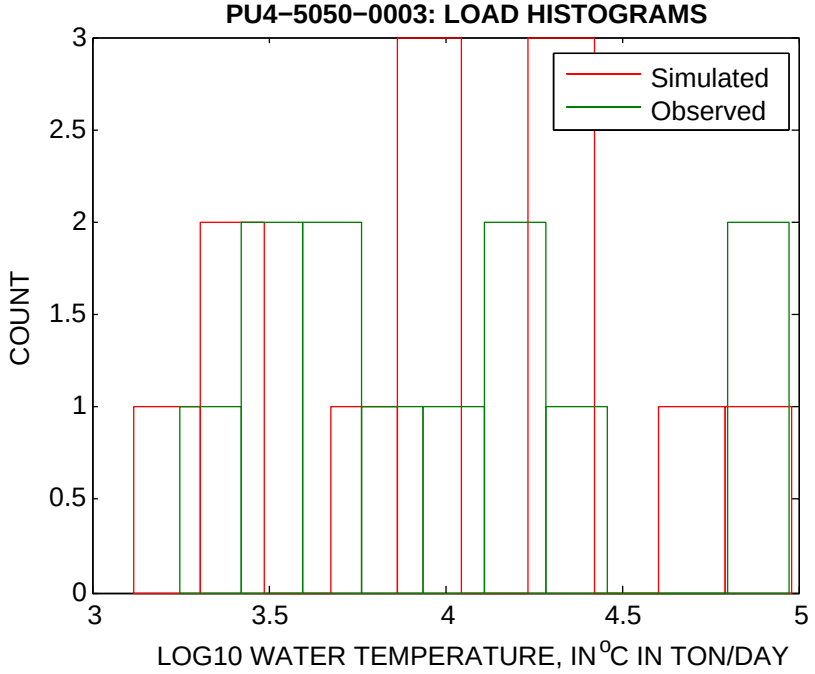


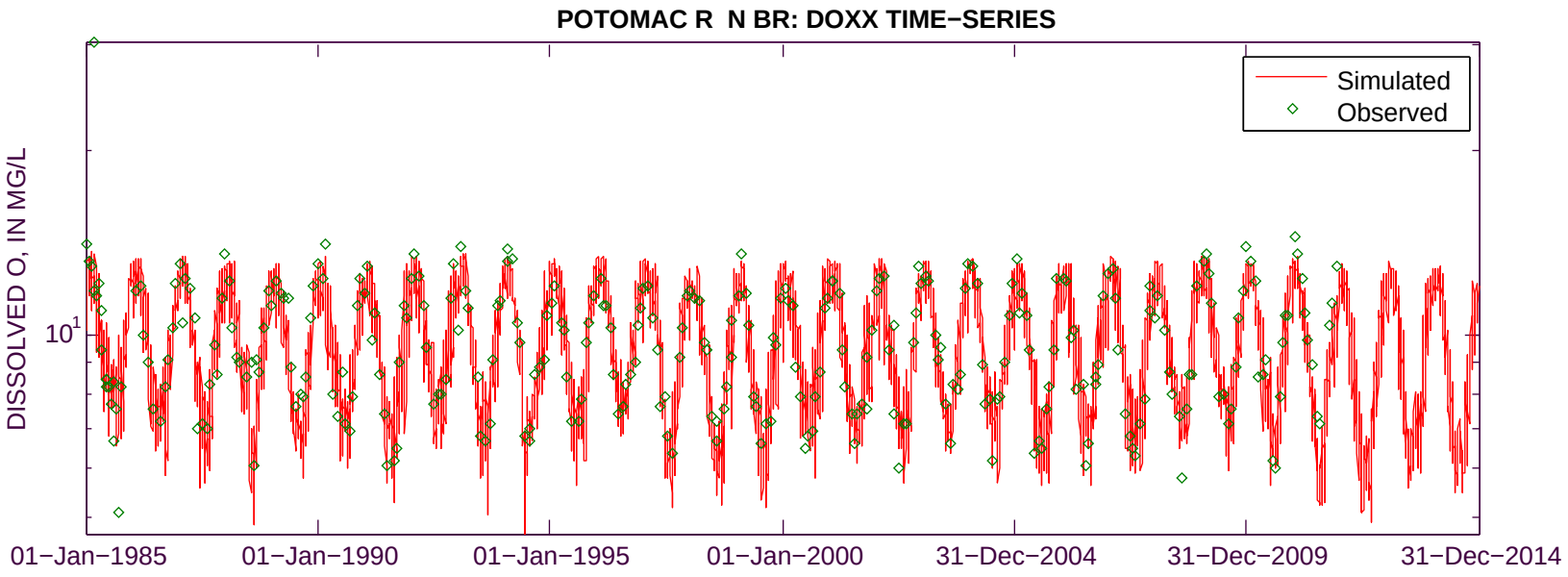
LOAD DATA
LOG10

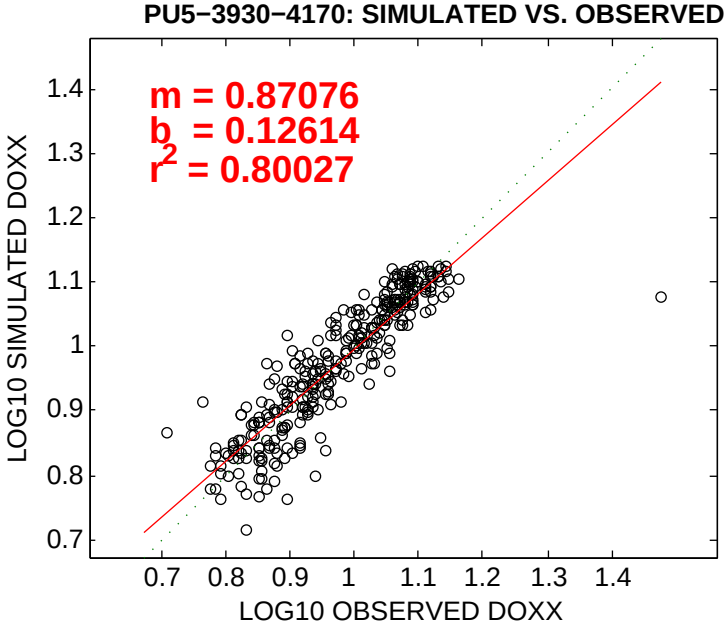


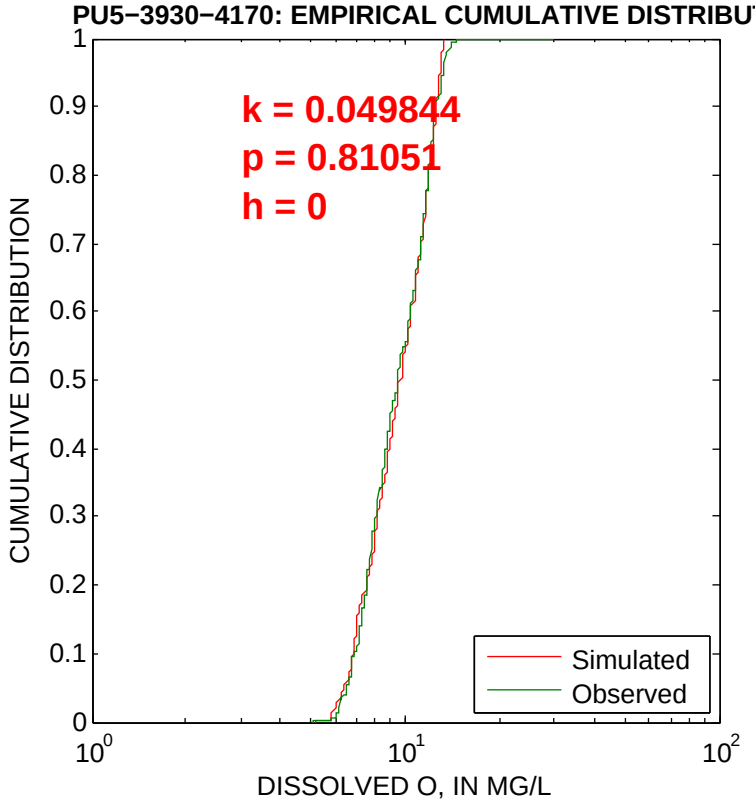












DATA SELECTION

scenario: P620171001WQ | file: DOXX.calib

plot: DOXX - dissolved oxygen

Dates: 1/1/1985 – 12/31/201

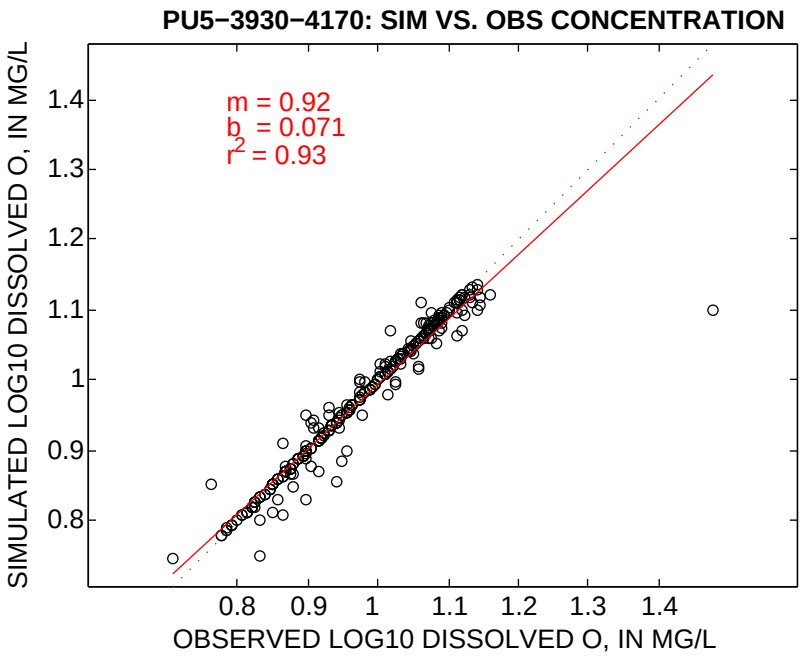
Drive: N/A | Directory: model | Observed: OBS20161101

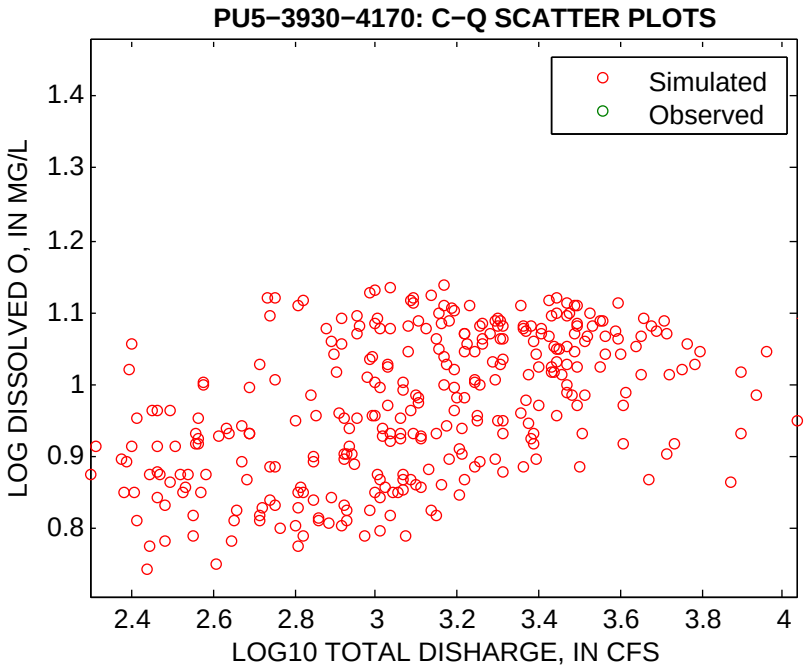
STATISTICS

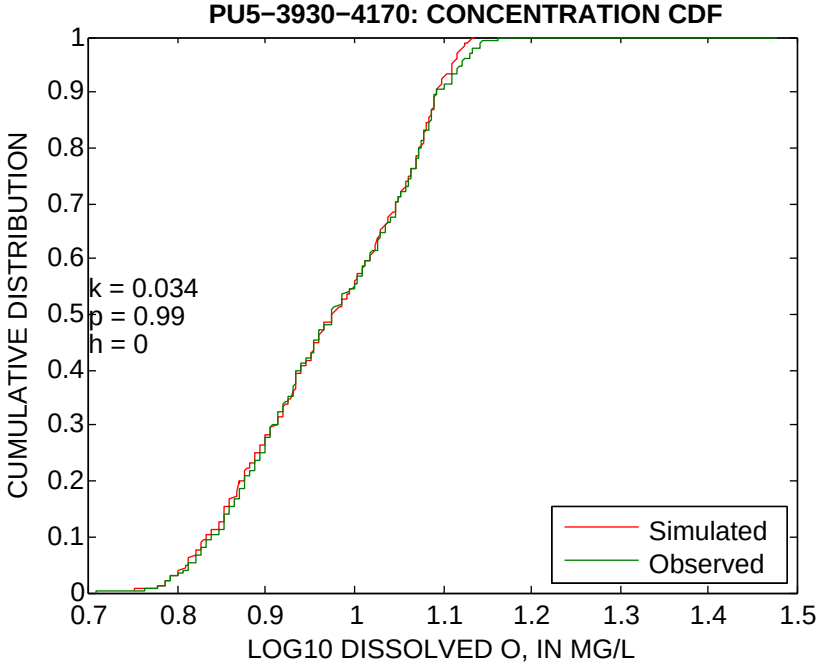
n	321	321
	observe	**simulate**
min	5.1	5.1917
	0.70757	0.71531
mean	9.71079	9.68729
	0.974945	0.975075
media	9.4	9.6841
	0.973128	0.986059
max	30	13.375
	1.47712	1.12629
varian	5.90055	4.58223
	0.0105332	0.0099797
JB	0.001	0.002032
	☑ 0.064530	0.002178
	ra	log
%	-0.24197	0.0133605
err.va	1.71742	0.00216919
rel.std.err	0.29106	0.205938
mod.eff	0.70894	0.794062

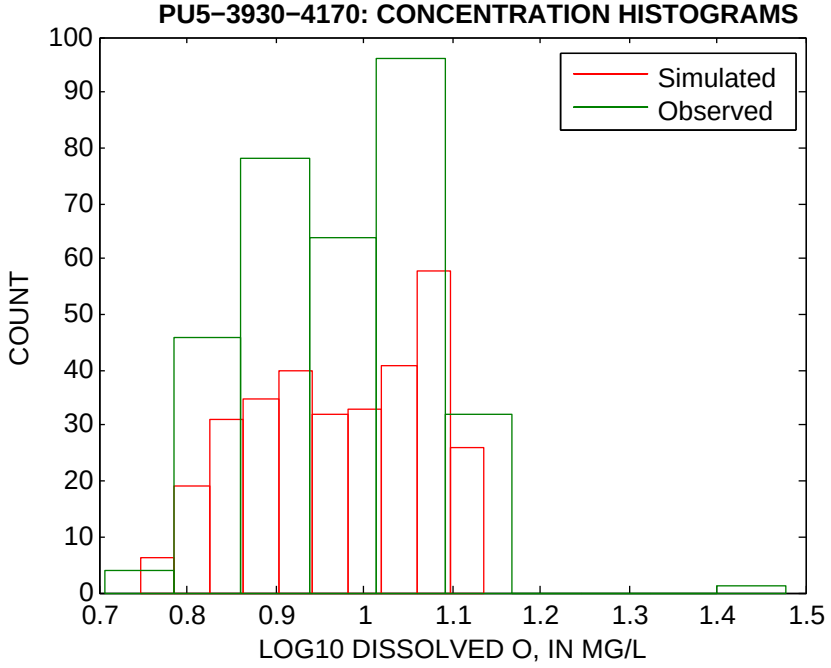
VERSION 2.1

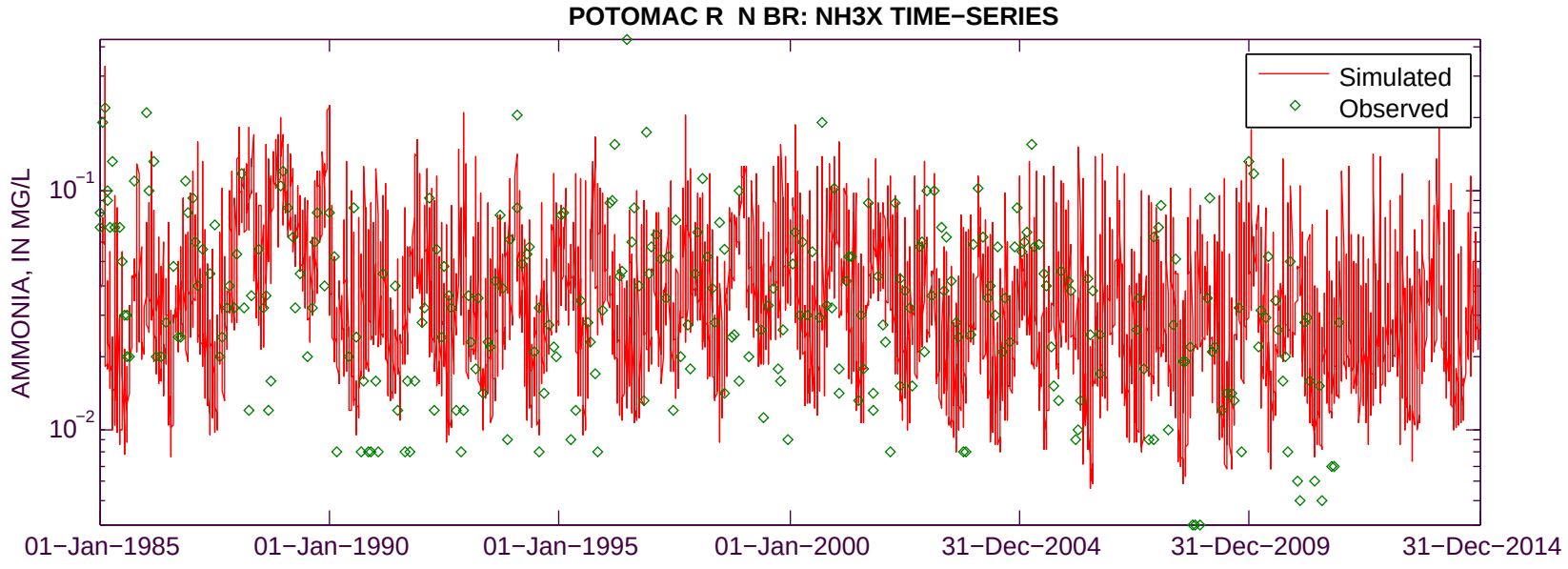
ALL DATA
LOG10

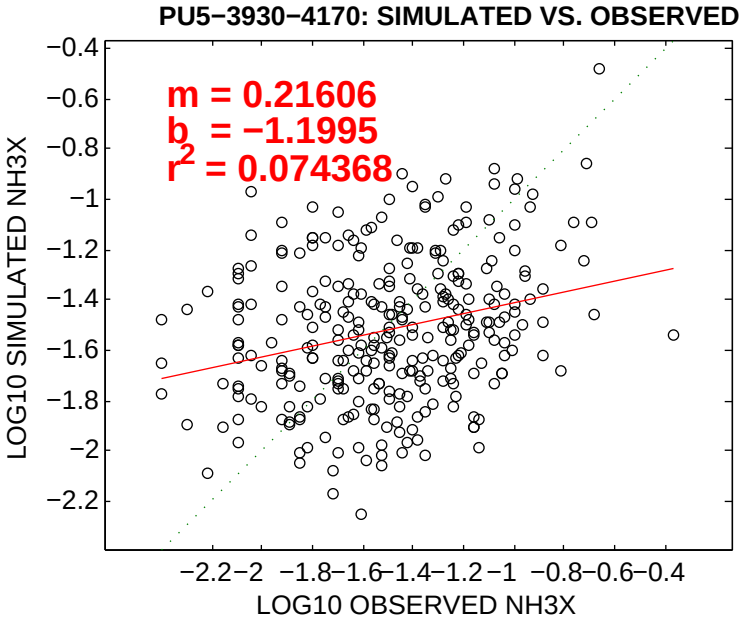


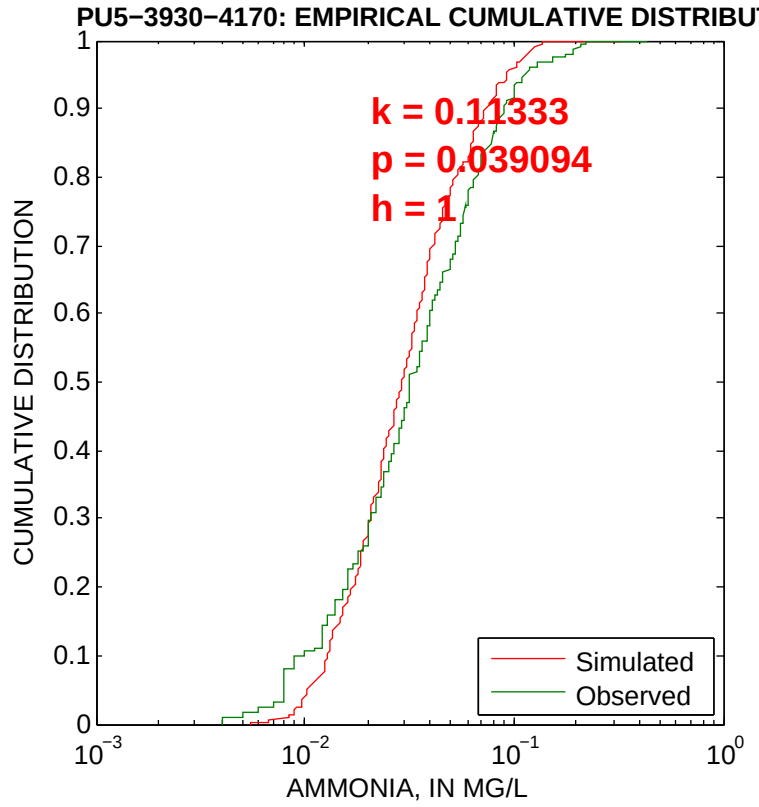












DATA SELECTION

scenario	file
P620171001WQ	NH3X.calib

plot: NH3X - ammonia

Dates: 1/1/1985 – 12/31/201

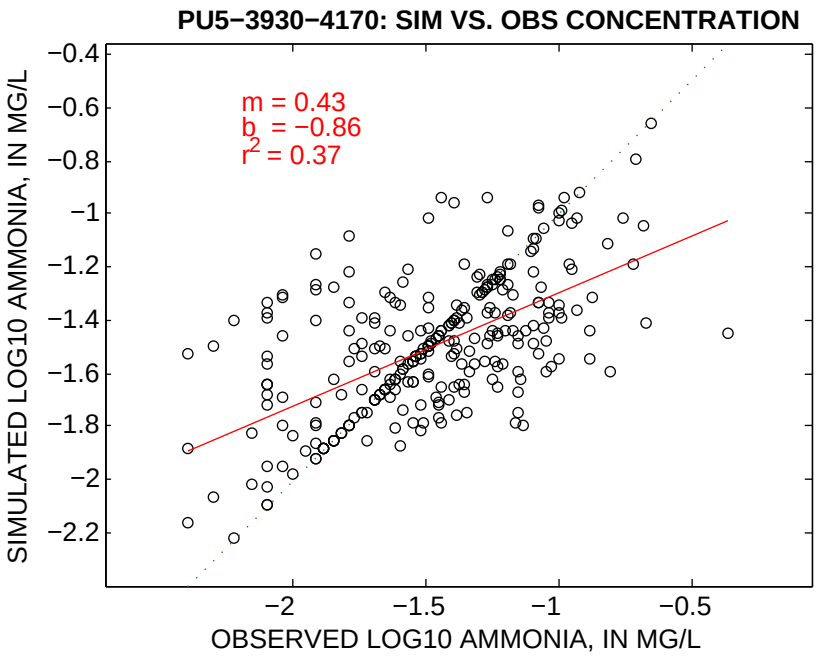
Drive	Directory	Observed
N/A	model	OBS20161101

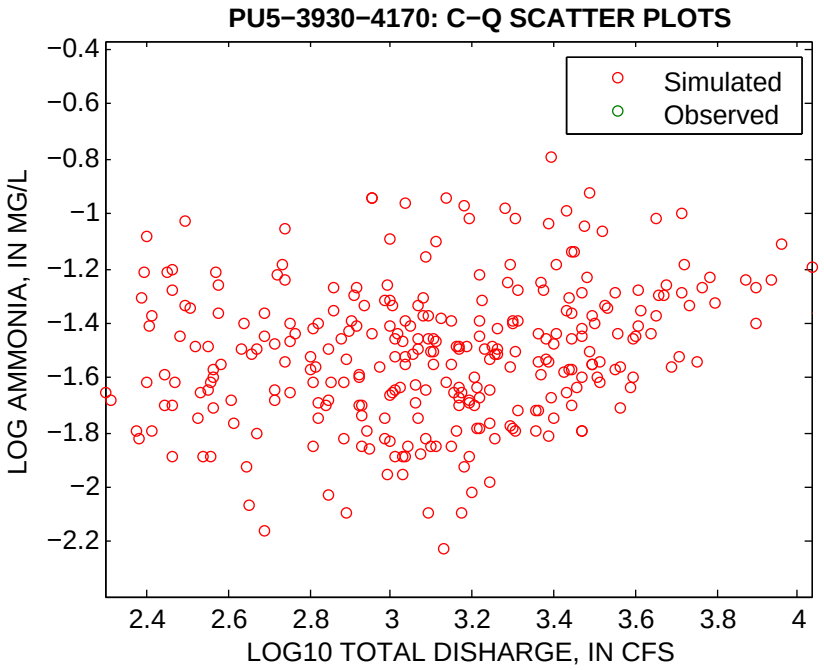
STATISTICS

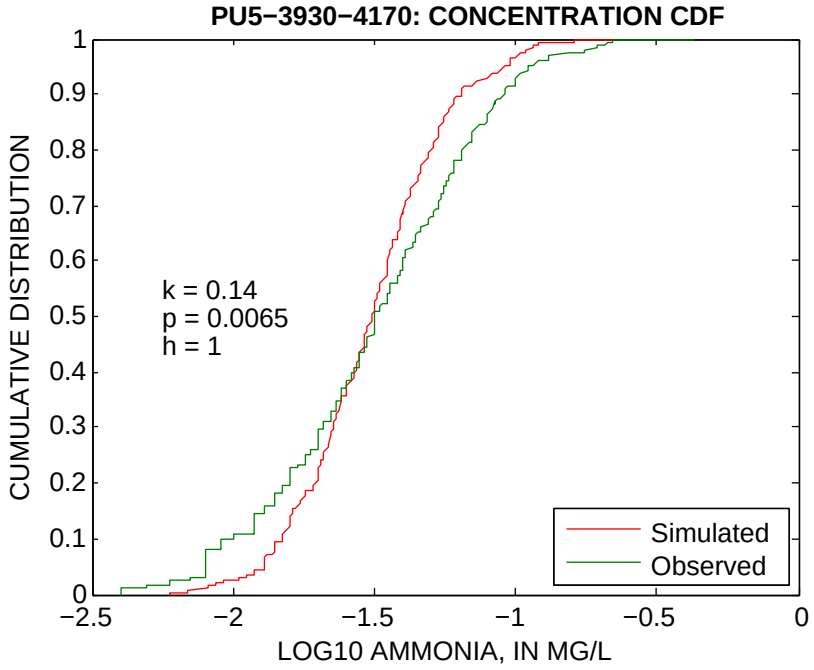
	n	300	300
		observe	simulate
min		0.004	0.0055768
		-2.39794	-2.25361
mean		0.0449633	0.0377616
		-1.49403	-1.52231
media		0.032	0.029094
		-1.49485	-1.53623
max		0.43	0.32753
		-0.366532	-0.484749
varian		0.00186224	0.00093639
		0.131217	0.0823701
JB		0.001	0.001
		0.5	0.147365
		ra	log
%		-16.0168	1.89275
err.va		0.00199218	0.157687
rel.std.err		1.06977	1.20172
mod.eff		-0.0697736	-0.201725

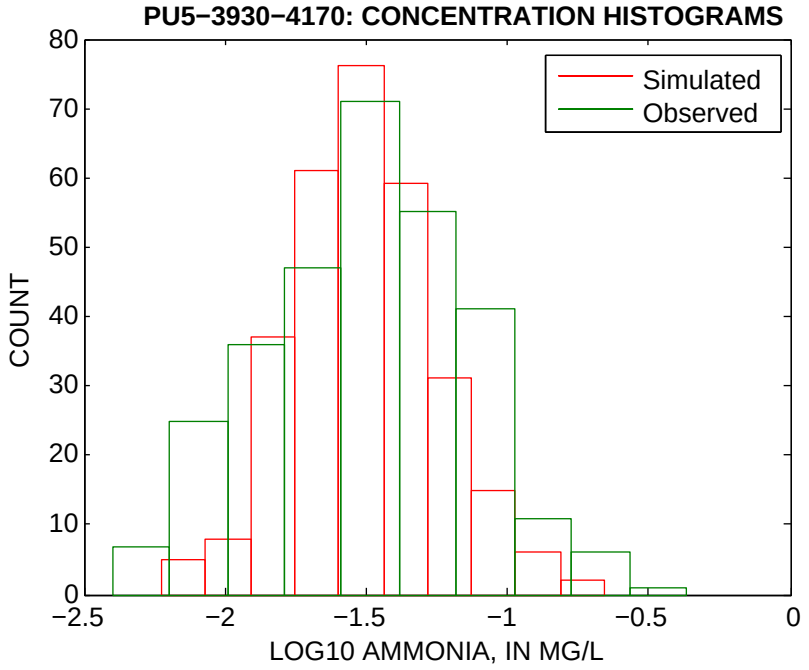
VERSION 2.1

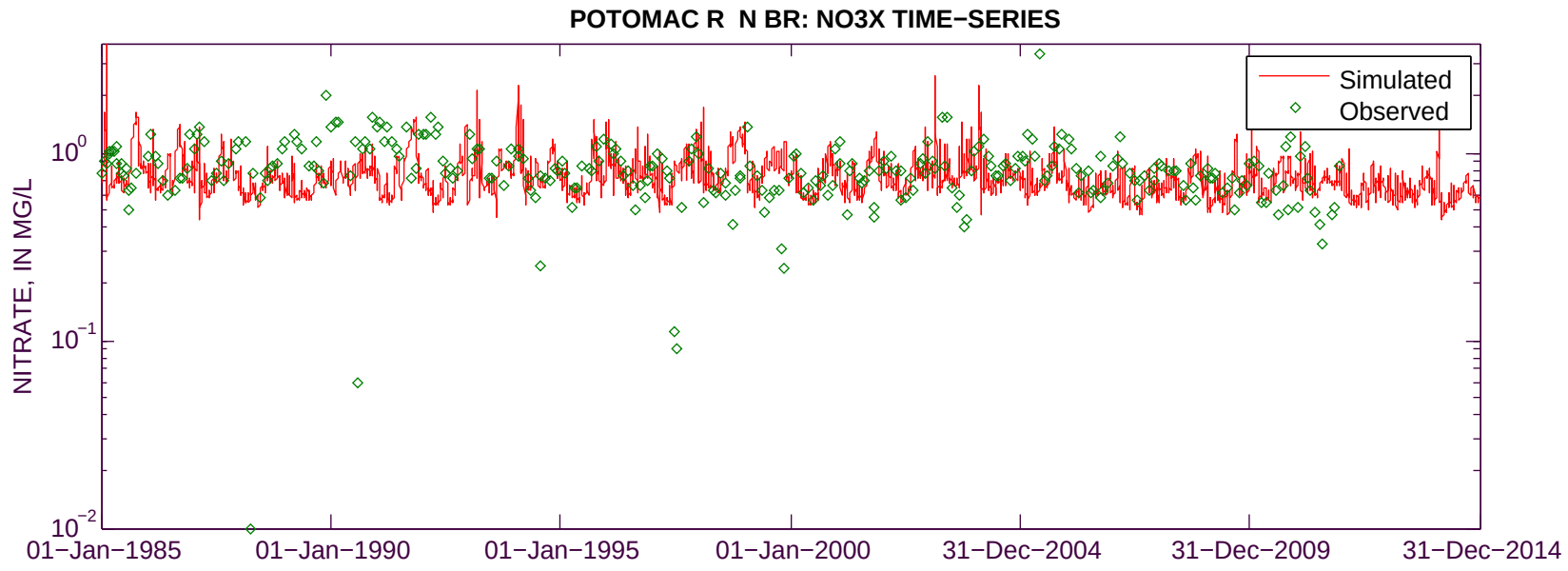
ALL DATA
LOG10

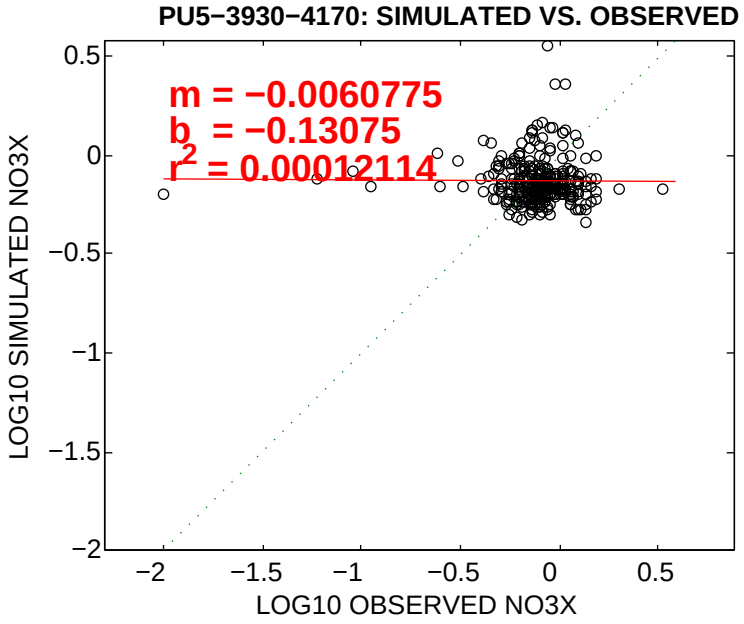


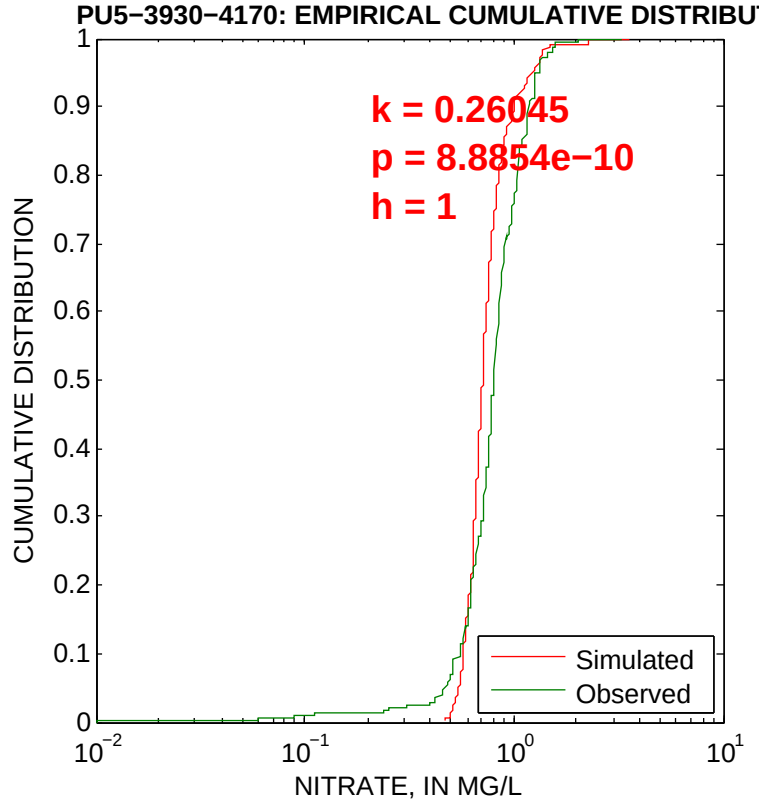












DATA SELECTION

scenario	file
P620171001WQ	NO3X.calib

plot: NO3X - nitrate

Dates: 1/1/1985 – 12/31/201

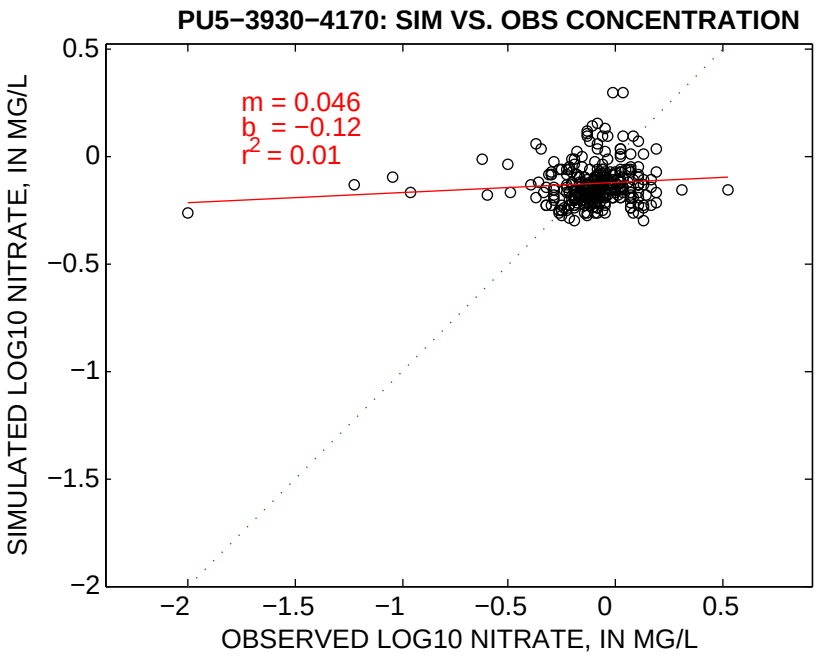
Drive	Directory	Observed
N/A	model	OBS20161101

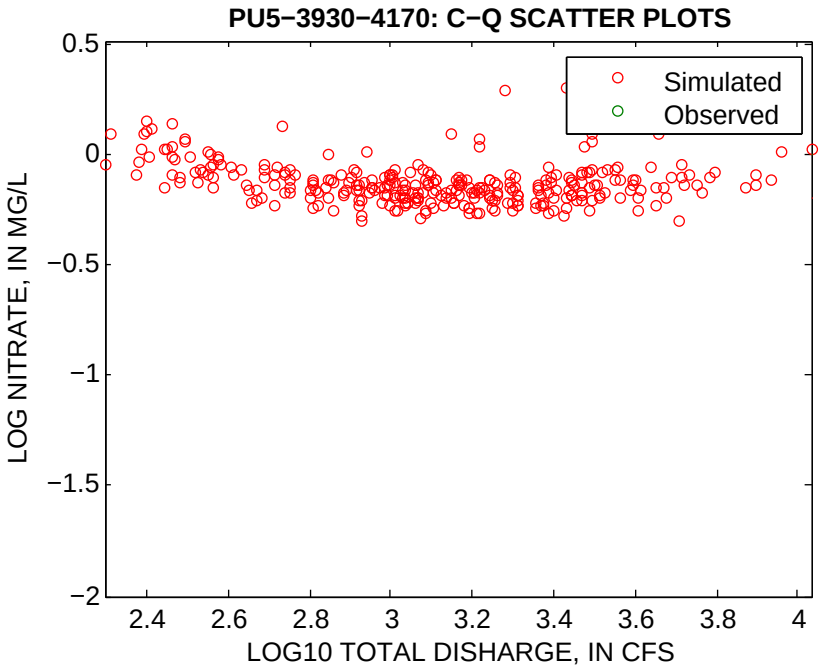
STATISTICS

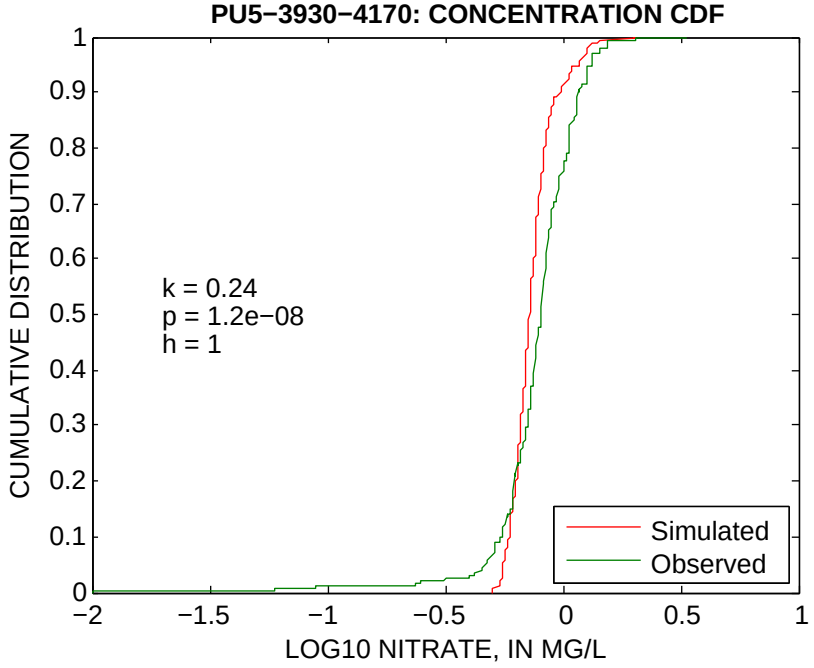
	n	observe	simulate
		311	311
min		0.01	0.45856
		-2	-0.338604
mean		0.842547	0.769935
		-0.106471	-0.130099
media		0.81	0.70828
		-0.091515	-0.149795
max		3.33	3.5739
		0.522444	0.553142
varian		0.0908369	0.0743584
		0.0394739	0.012036
JB		0.001	0.001
		0.001	0.001
		ra	log
%		-8.61811	22.1912
err.va		0.172048	0.0525498
rel.std.err		1.89403	1.33125
mod.eff		-0.894027	-0.331252

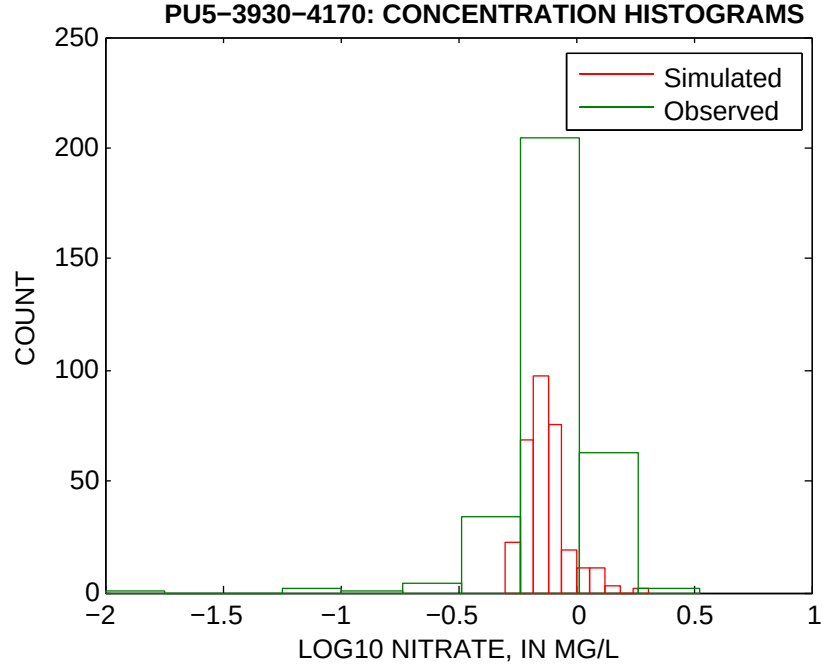
VERSION 2.1

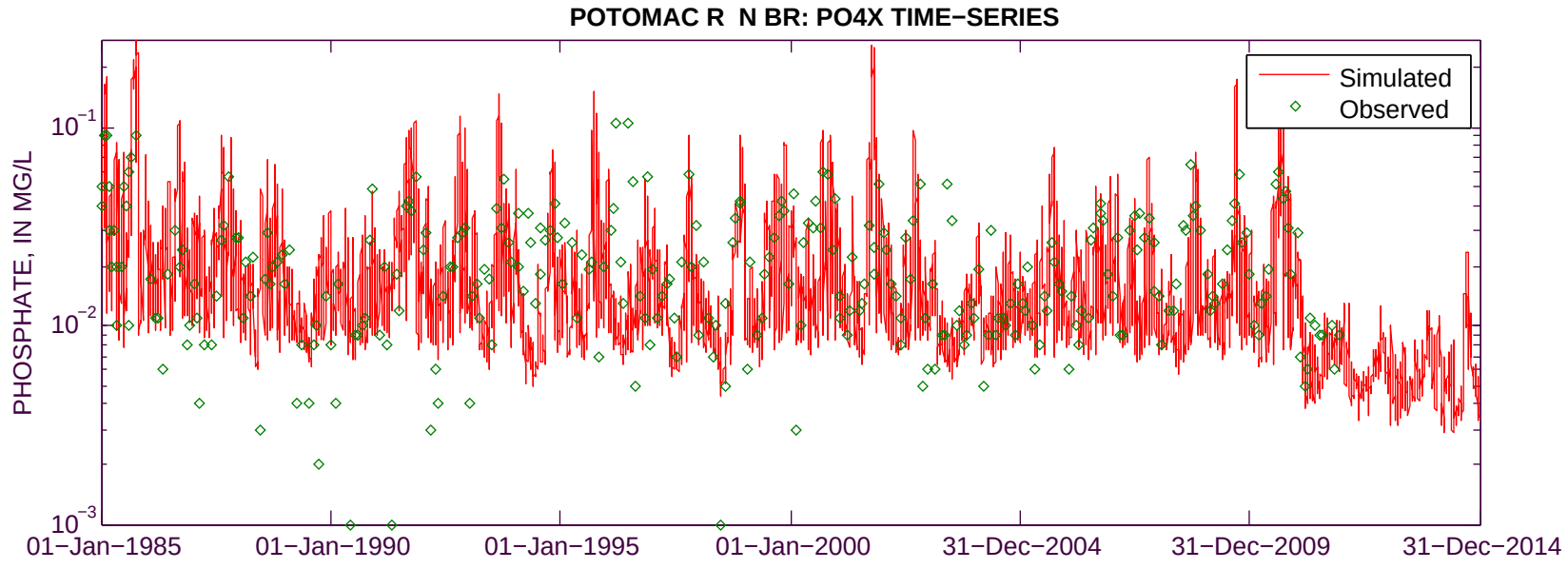
ALL DATA
LOG10

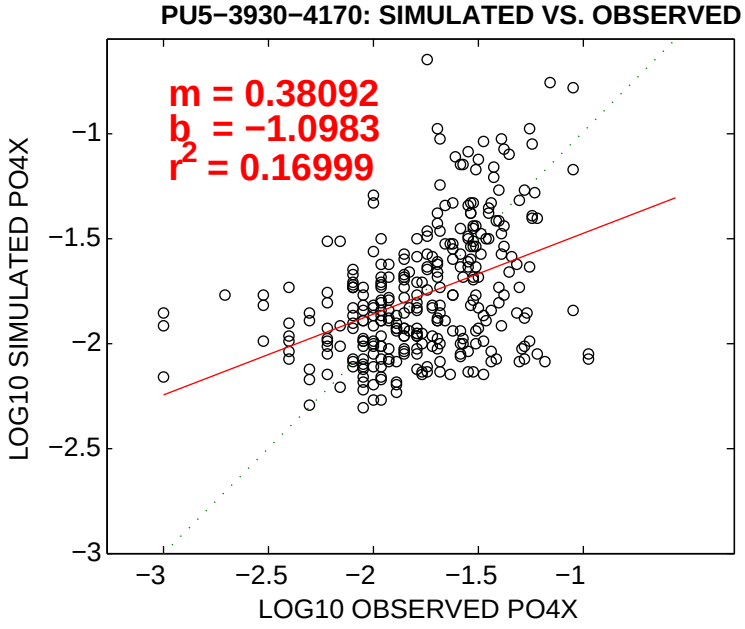


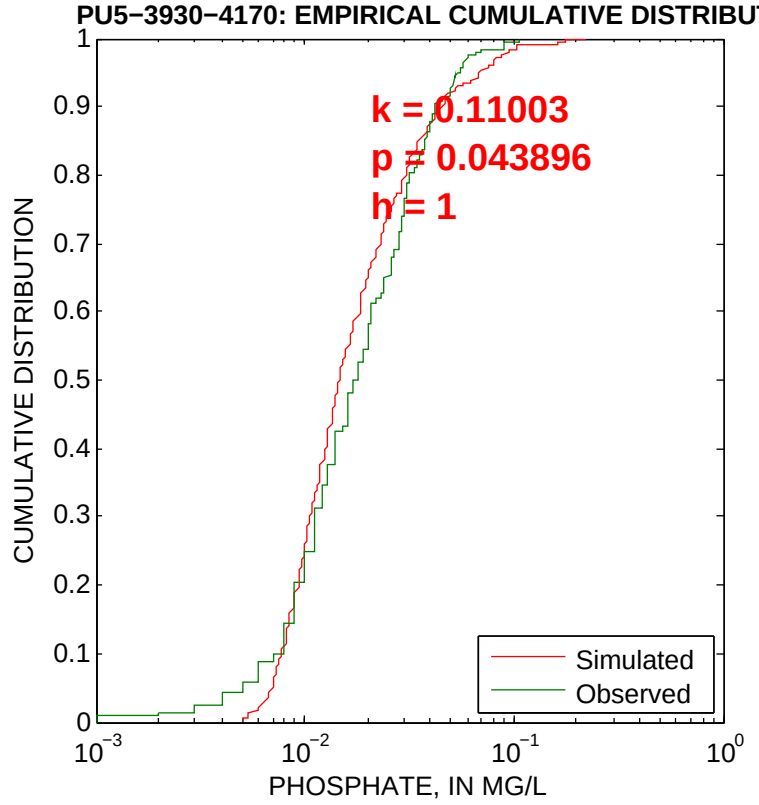












DATA SELECTION

scenario	file
P620171001WQ	PO4X.calib

plot: PO4X - phosphate

Dates: 1/1/1985 – 12/31/201

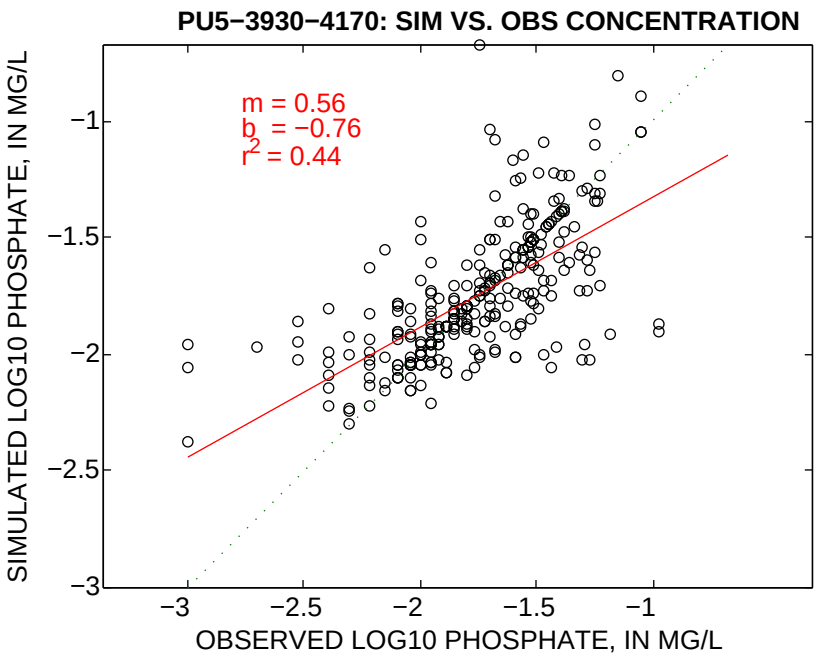
Drive: N/A | Directory: model | Observed: OBS20161101

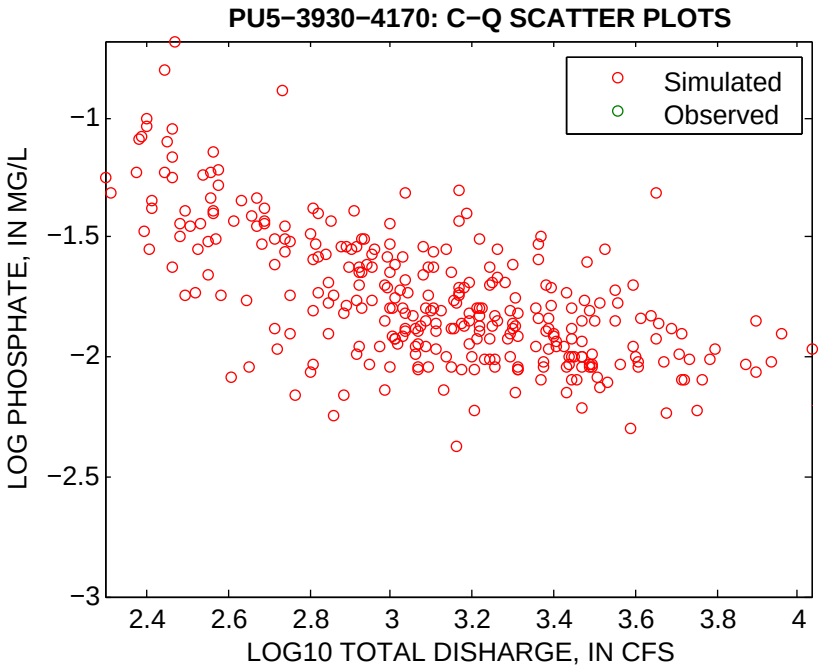
STATISTICS

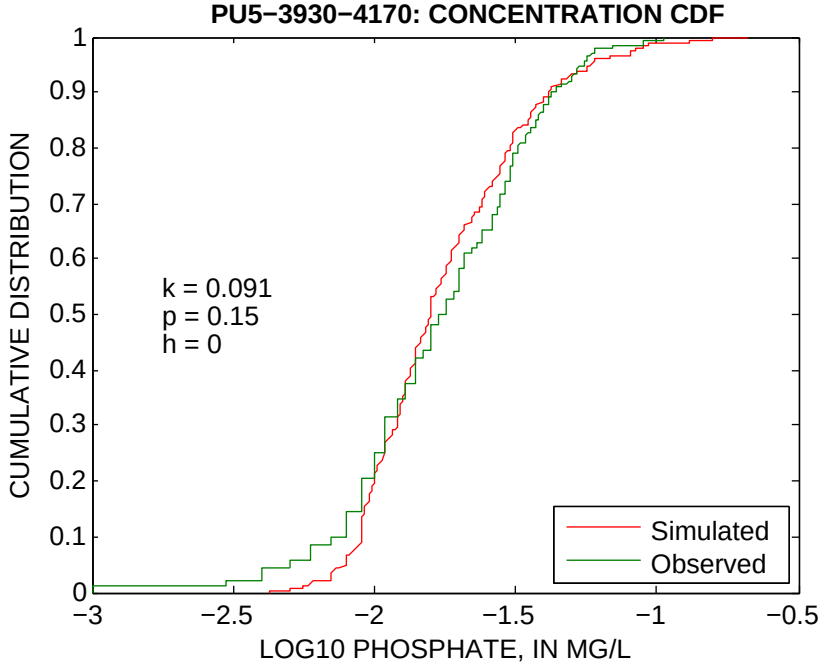
	n	observe	simulate
		309	309
min		0.001	0.0048723
		-3	-2.31227
mean		0.0223948	0.022914
		-1.76434	-1.77041
media		0.018	0.014772
		-1.74473	-1.83056
max		0.106	0.2203
		-0.974694	-0.656986
varian		0.00028588	0.00059665
		0.109942	0.0938412
JB		0.001	0.001
		0.001080	0.001
		ra	log
%		2.31849	0.343713
err.va		0.00057453	0.120063
rel.std.err		2.00965	1.09206
mod.eff		-1.00965	-0.0920566

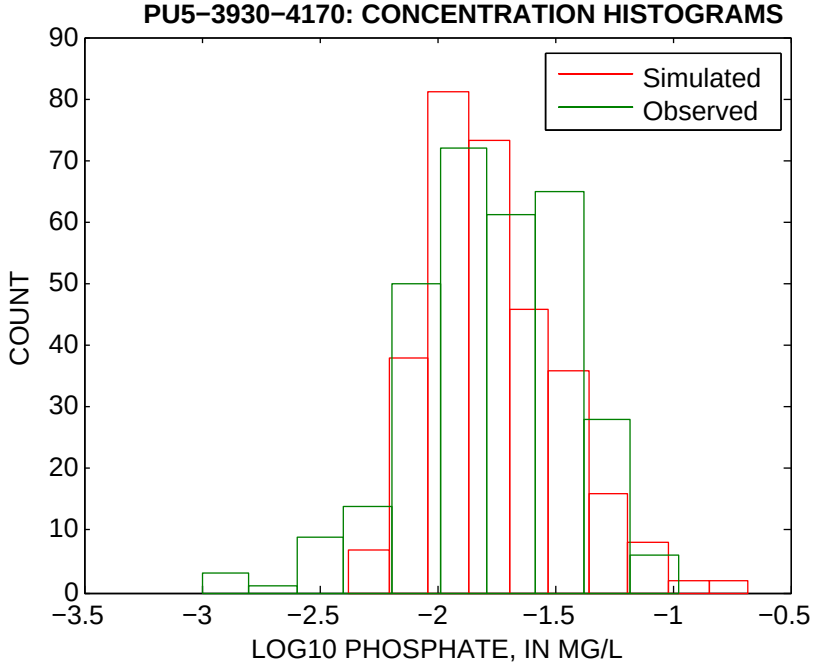
VERSION 2.1

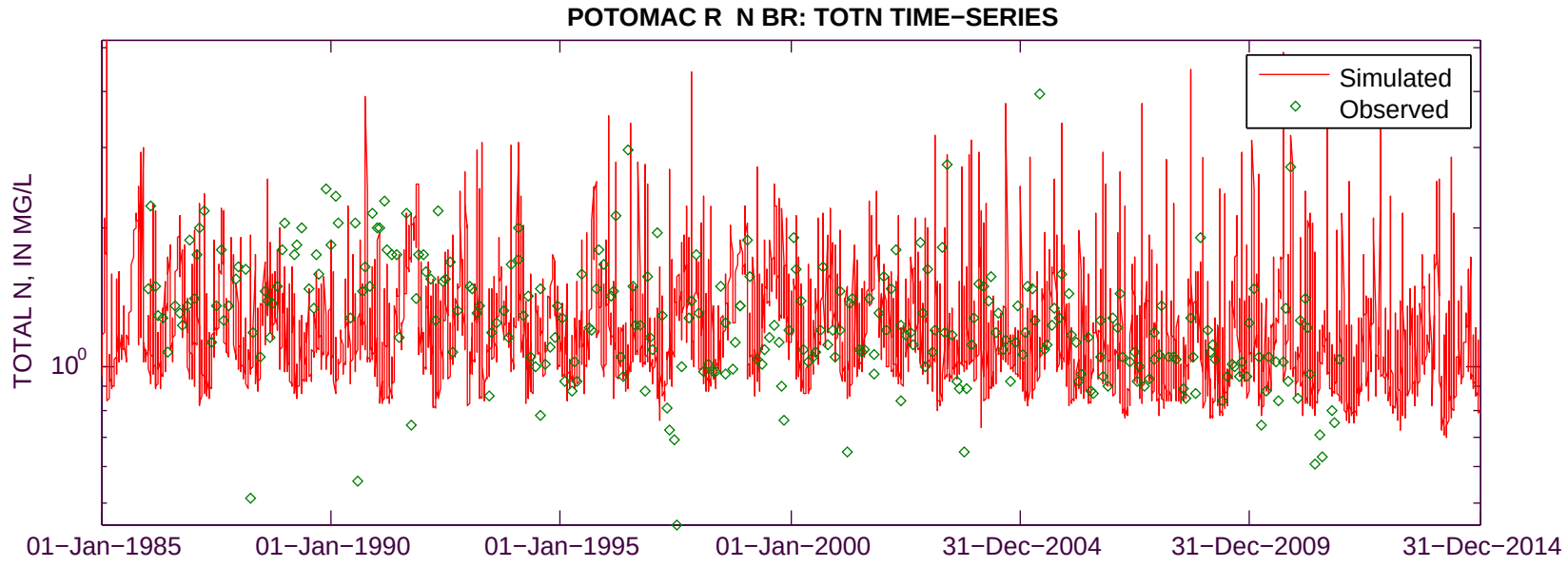
ALL DATA
LOG10

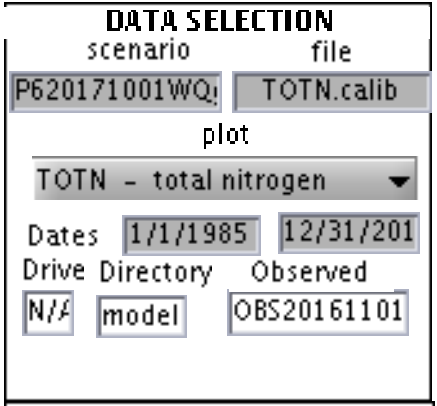


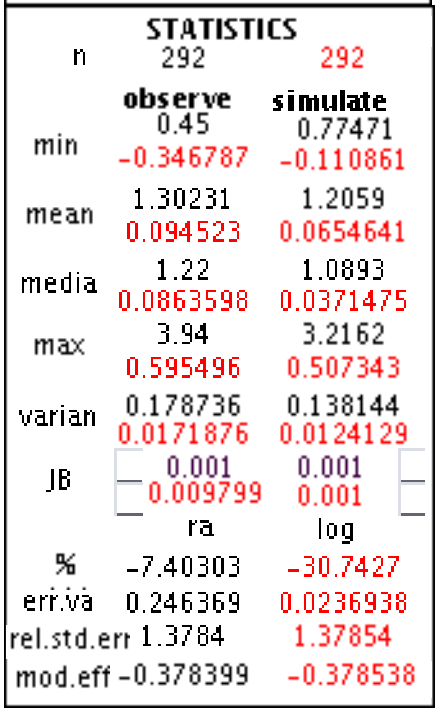


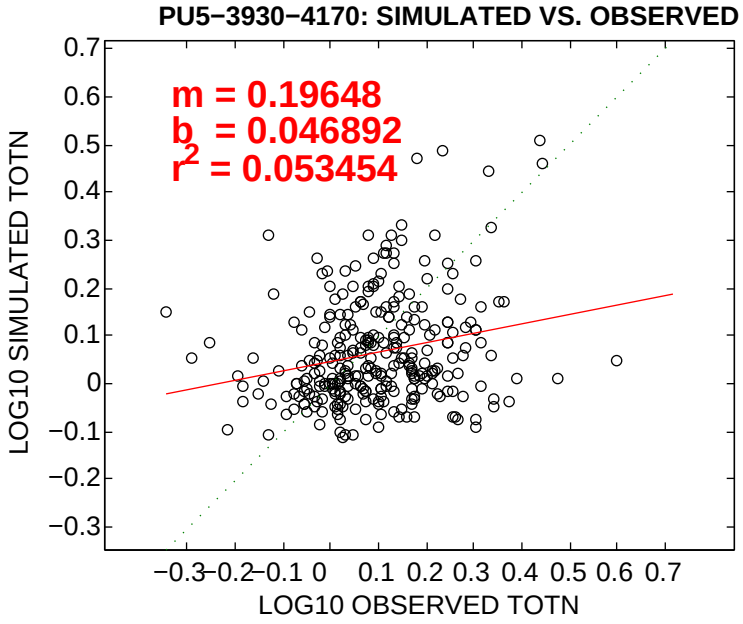


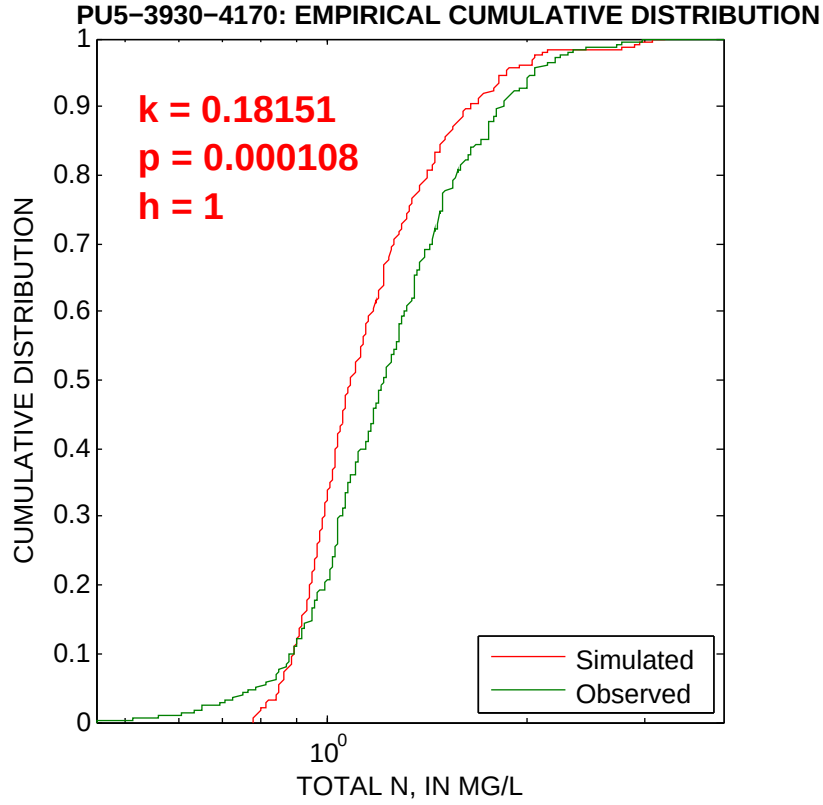



POTOMAC R N BR: TOTN TIME-SERIES
Simulated
Observed
TOTAL N, IN MG/L
10^0
01-Jan-1985
01-Jan-1990
01-Jan-1995
01-Jan-2000
31-Dec-2004
31-Dec-2009
31-Dec-2014


DATA SELECTION
scenario
file
P620171001WQ
TOTN.calib
plot
TOTN - total nitrogen
Dates
1/1/1985
12/31/201
Drive
Directory
Observed
N/A
model
OBS20161101

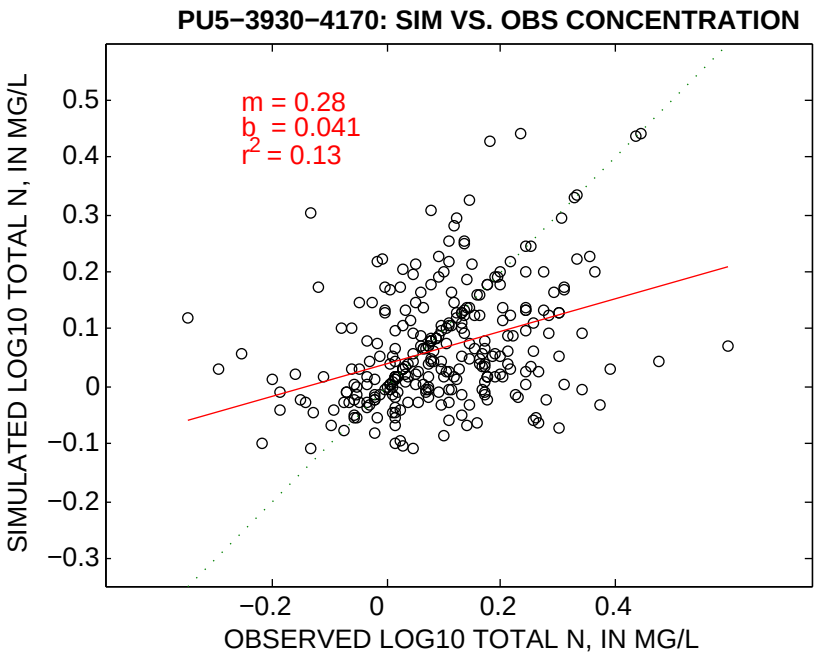

STATISTICS
n 292 292
observe simulate
min 0.45 0.77471
-0.346787 -0.110861
mean 1.30231 1.2059
0.094523 0.0654641
media 1.22 1.0893
0.0863598 0.0371475
max 3.94 3.2162
0.595496 0.507343
varian 0.178736 0.138144
0.0171876 0.0124129
JB 0.001 0.001
0.009799 0.001
ra log
% -7.40303 -30.7427
err.va 0.246369 0.0236938
rel.std.err 1.3784 1.37854
mod.eff -0.378399 -0.378538

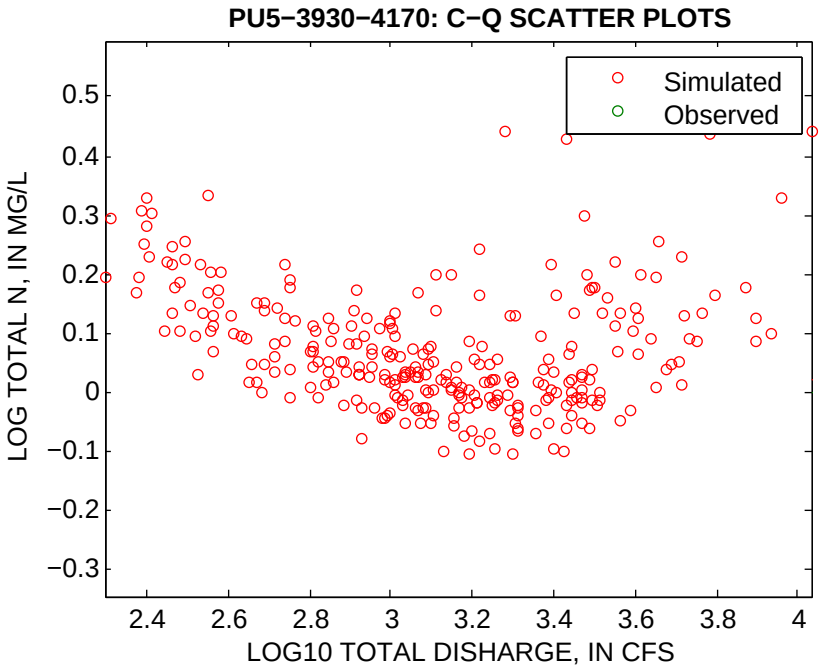

PU5-3930-4170: SIMULATED VS. OBSERVED
m = 0.19648
b = 0.046892
r^2 = 0.053454
LOG10 SIMULATED TOTN
LOG10 OBSERVED TOTN

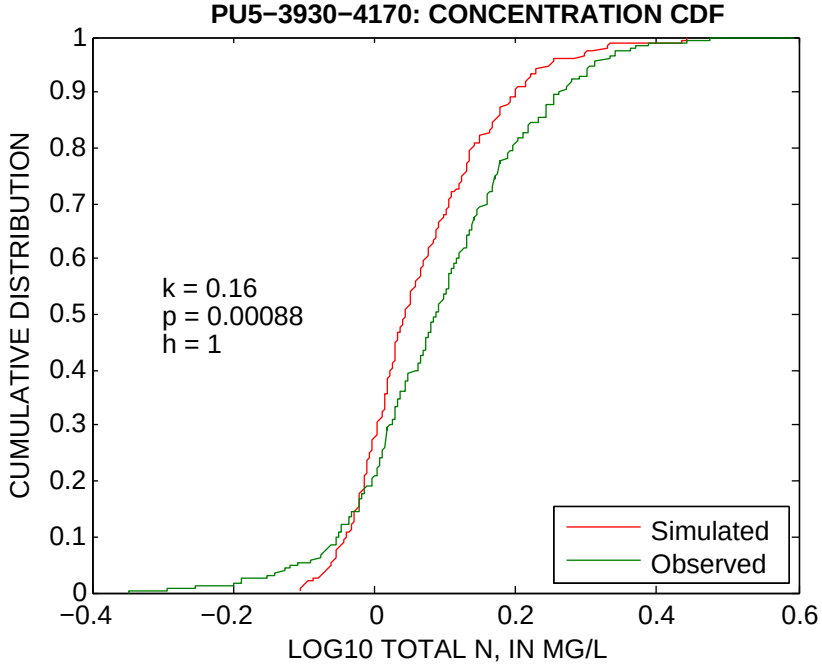

PU5-3930-4170: EMPIRICAL CUMULATIVE DISTRIBUTION
k = 0.18151
p = 0.000108
h = 1
Simulated
Observed
CUMULATIVE DISTRIBUTION
TOTAL N, IN MG/L

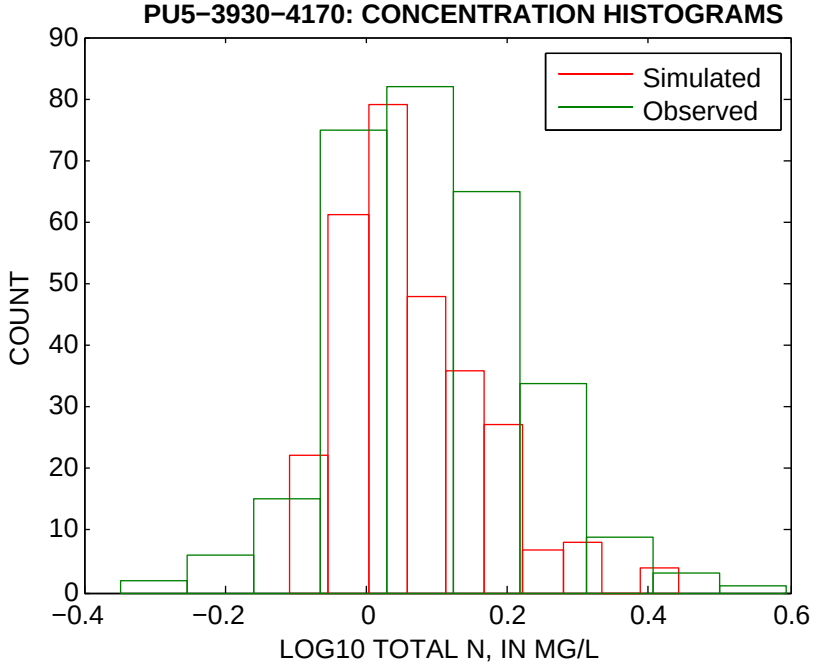
VERSION

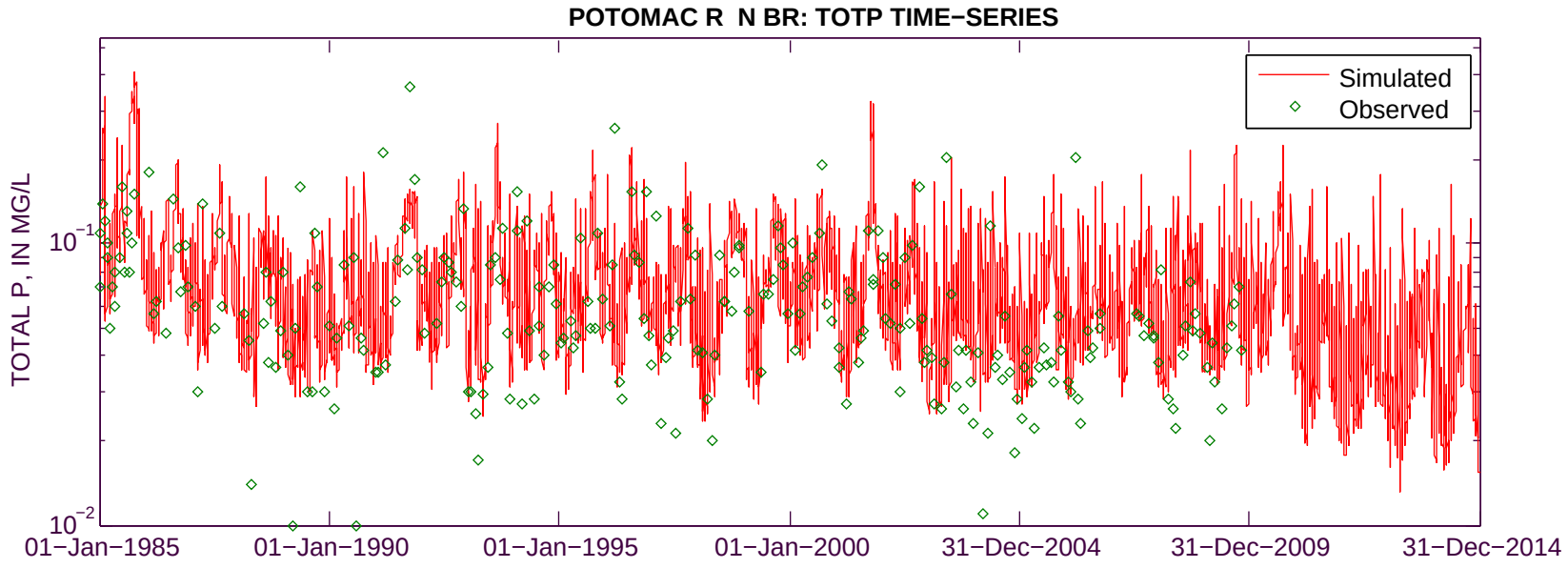
ALL DATA
LOG10

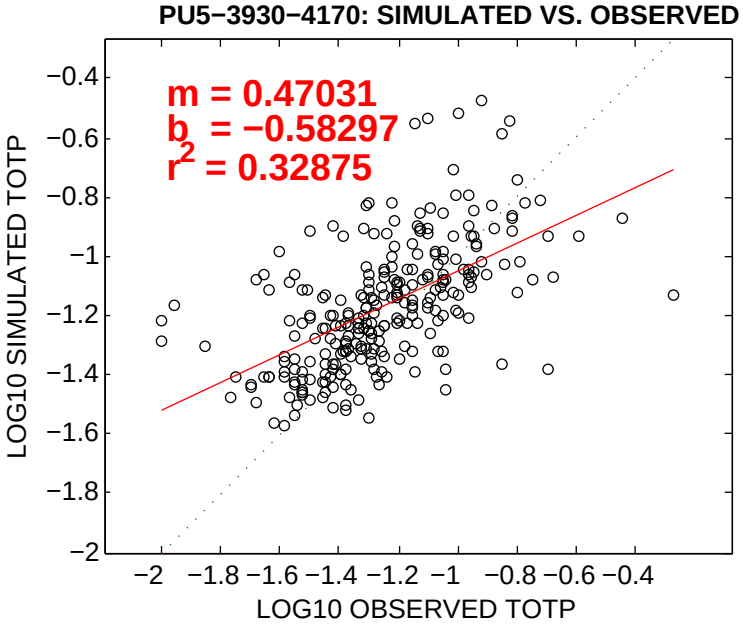


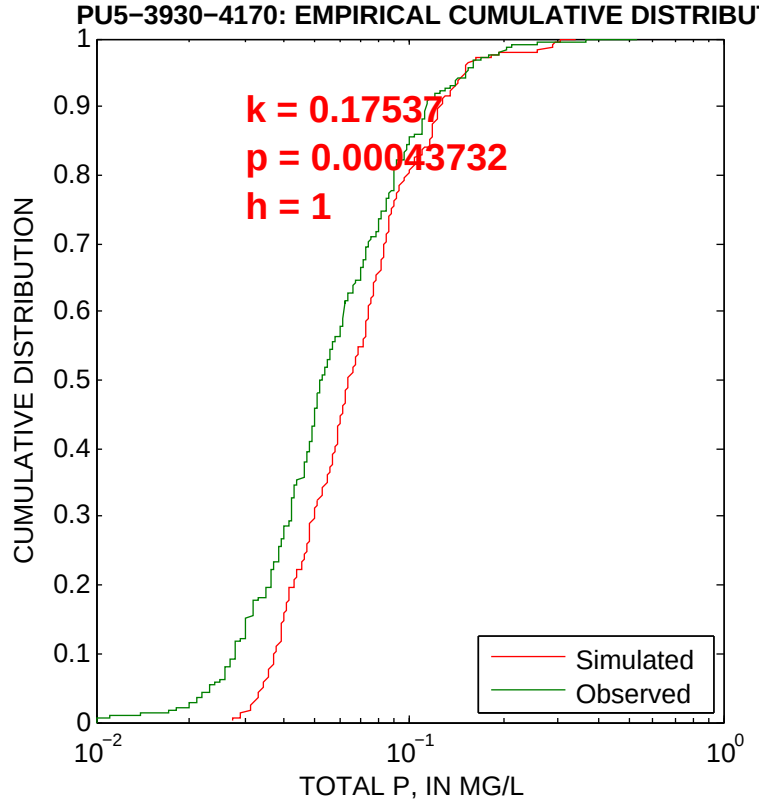












DATA SELECTION

scenario	file
P620171001WQ	TOTP.calib

plot: TOTP - total phosphorus

Dates: 1/1/1985 – 12/31/201

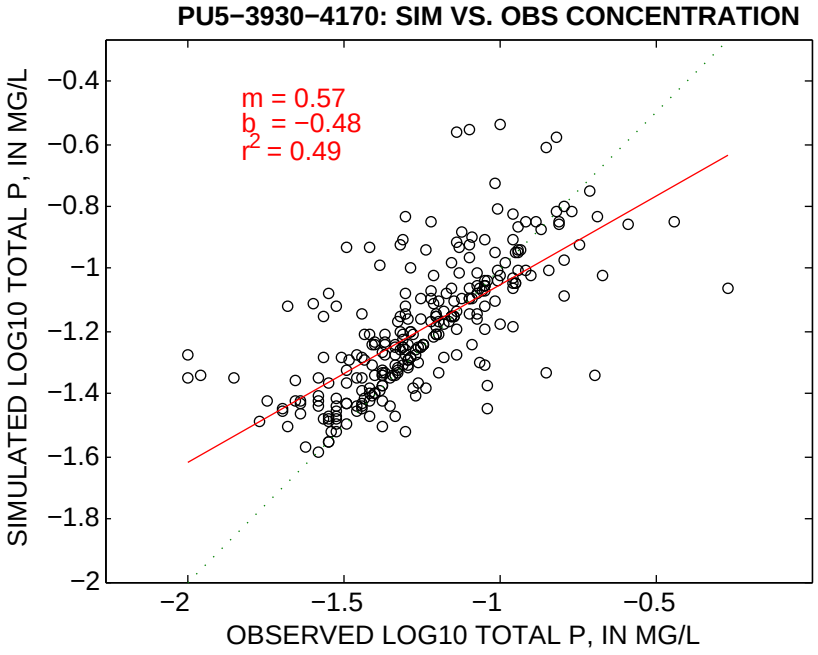
Drive	Directory	Observed
N/A	model	OBS20161101

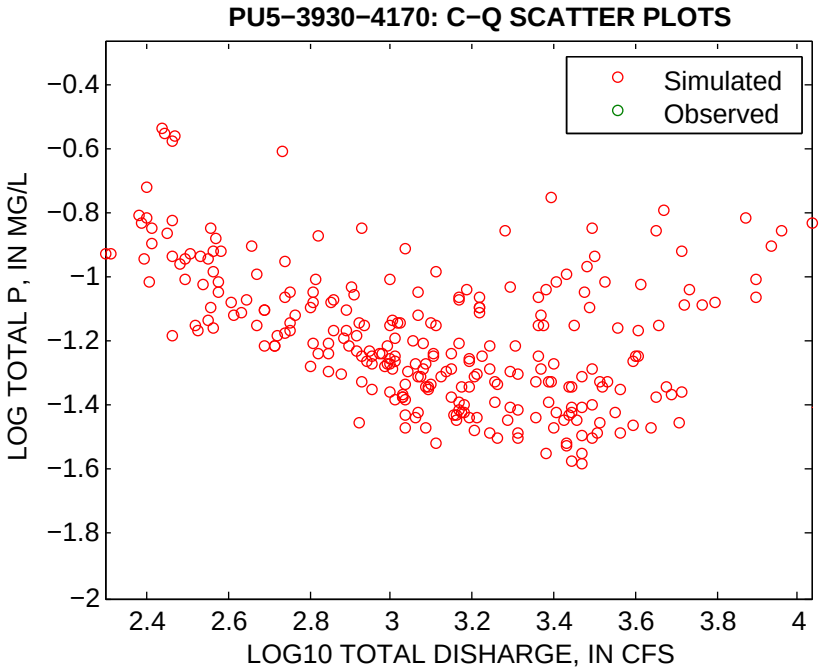
STATISTICS

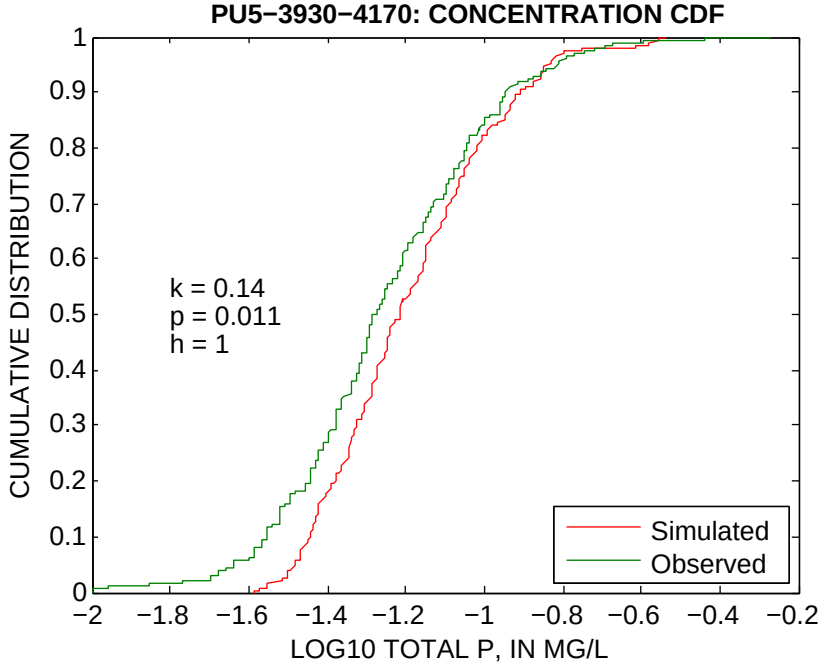
	n	268	268
		observe	simulate
min		0.01	0.026629
		-2	-1.57465
mean		0.0675522	0.076675
		-1.25164	-1.17162
media		0.0525	0.064099
		-1.27986	-1.19315
max		0.536	0.33786
		-0.270835	-0.471263
varian		0.00267947	0.00214117
		0.0660755	0.0444575
JB		0.001	0.001
		0.017130	0.003148
		ra	log
%		13.5047	-6.39266
err.va		0.00298993	0.0548074
rel.std.err		1.11587	0.829466
mod.eff		-0.115866	0.170534

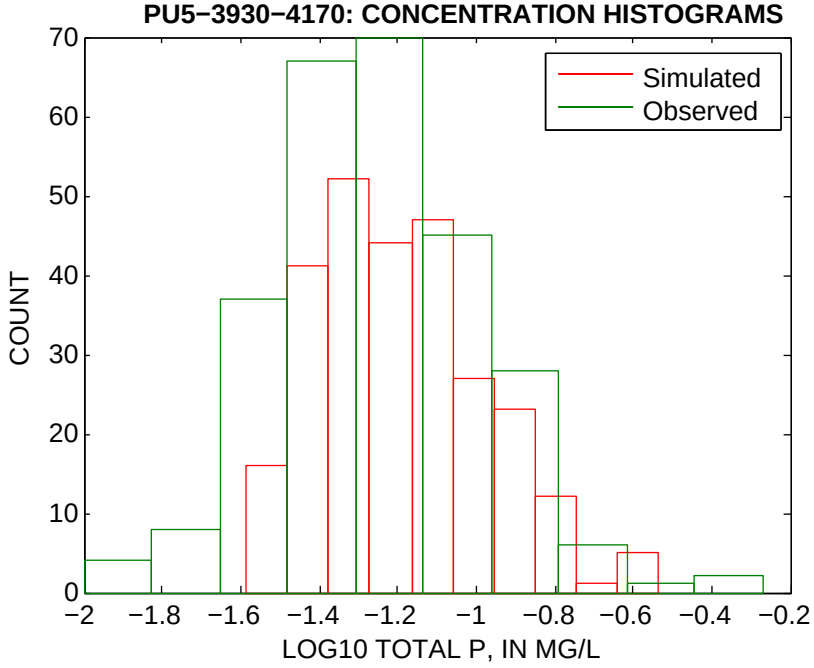
VERSION 2.1

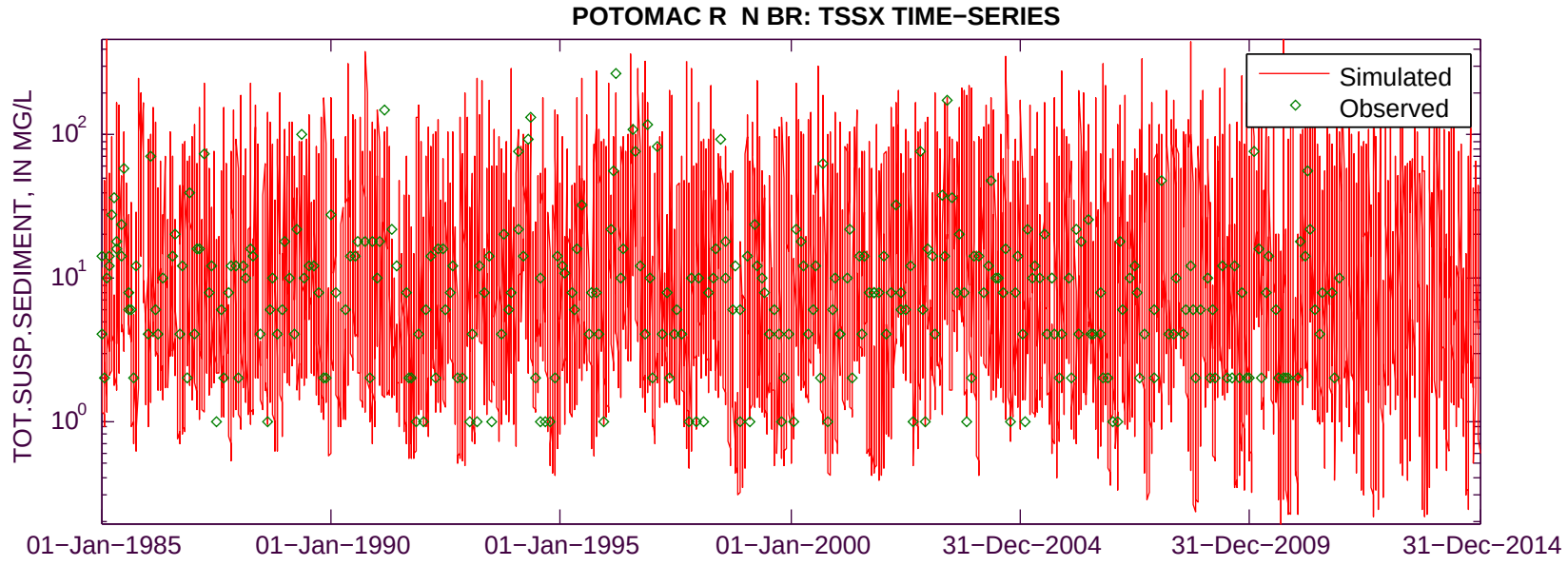
ALL DATA
LOG10

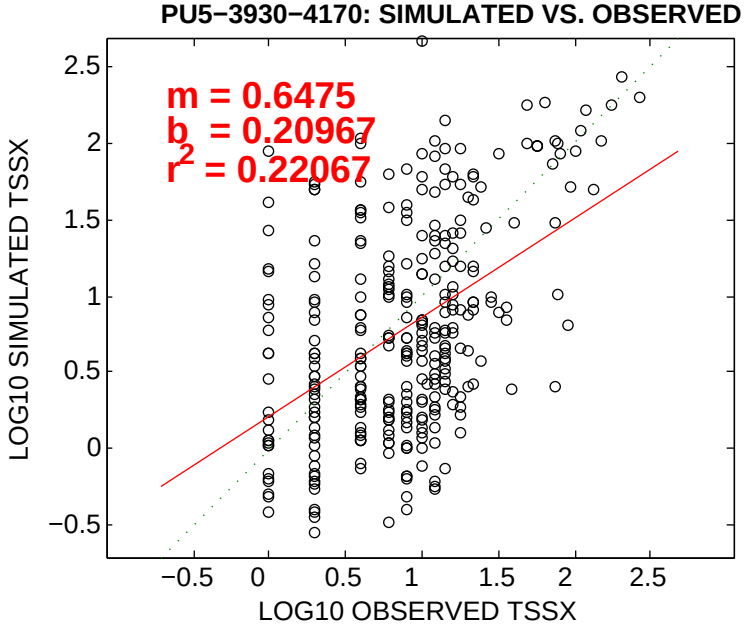


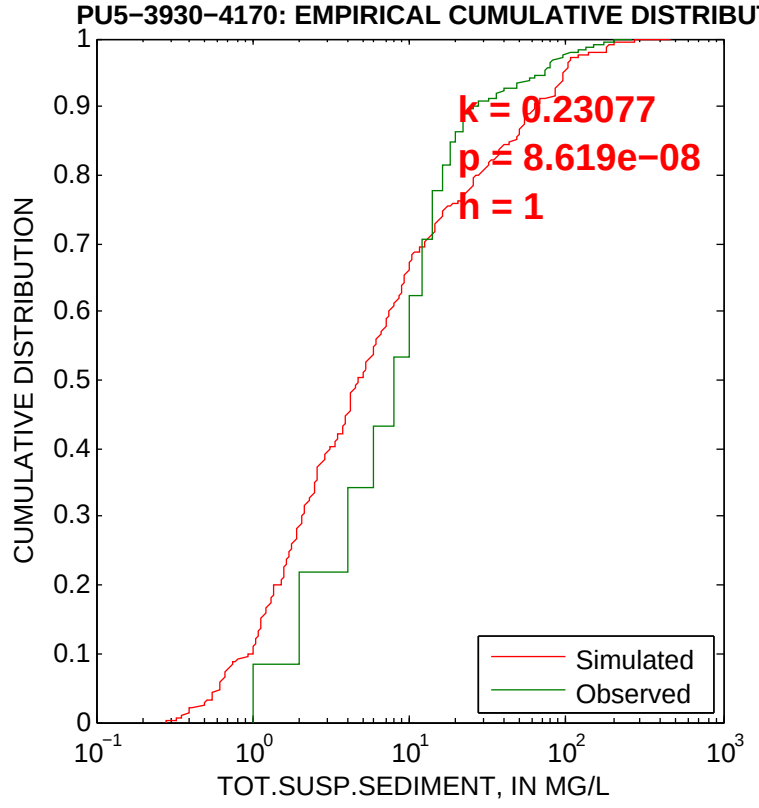












DATA SELECTION

scenario: P620171001WQ | file: TSSX.calib

plot: TSSX - total suspended ...

Dates: 1/1/1985 – 12/31/201

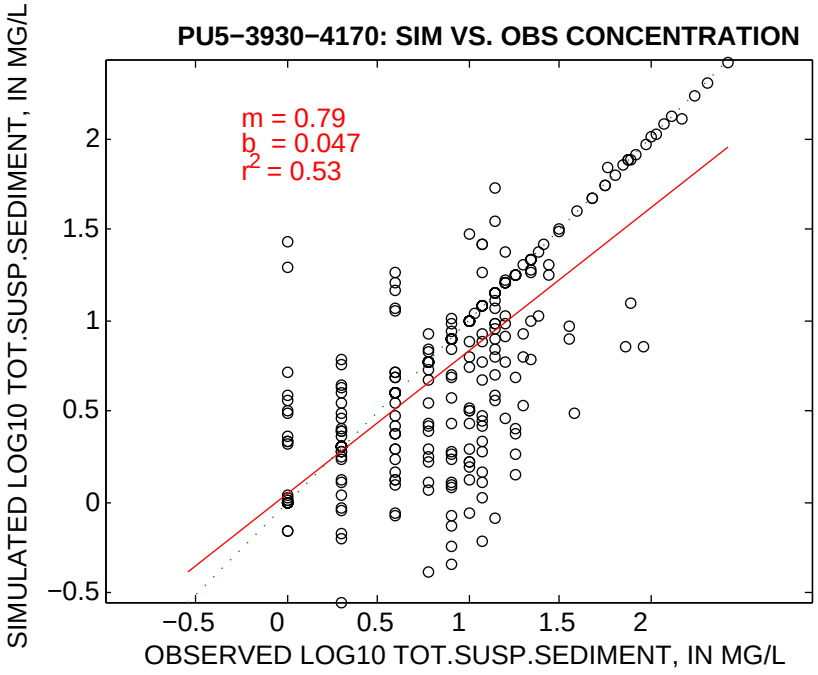
Drive | Directory: N/A | model | Observed: OBS20161101

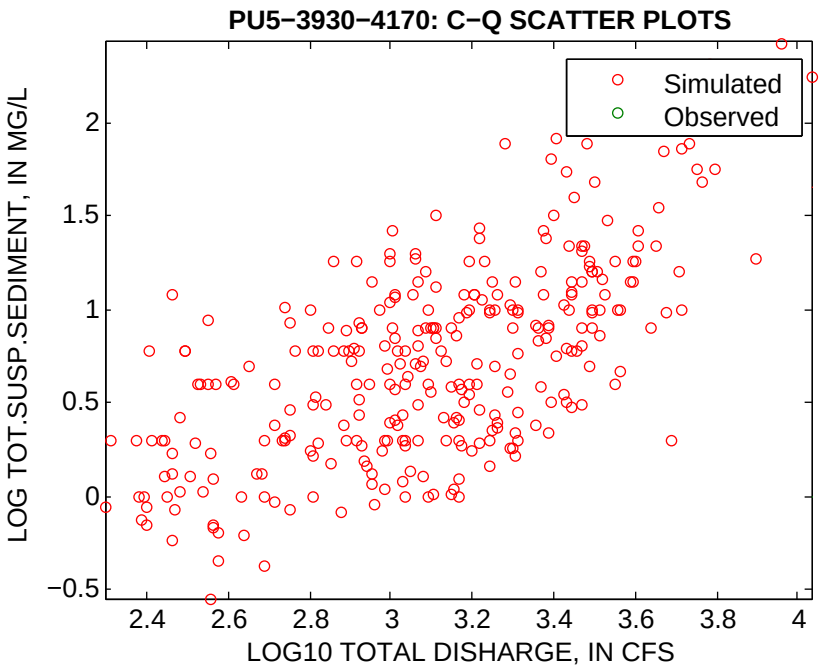
STATISTICS

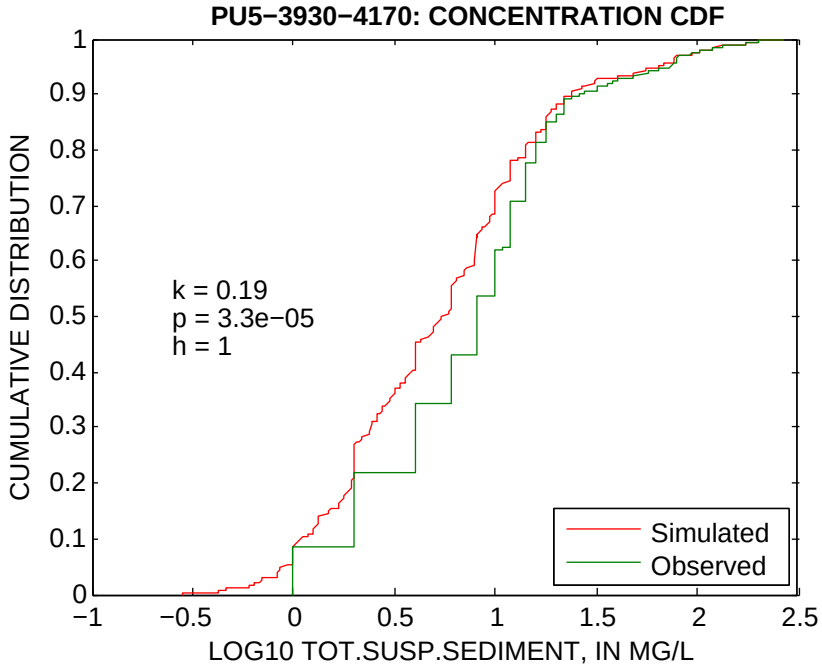
		observe	simulate
n		312	312
min		1	0.28262
		0	-0.548797
mean		15.7077	21.4385
		0.877898	0.778108
media		8	4.76465
		0.90309	0.678019
max		268	470.29
		2.42813	2.67237
varian		830.053	1981.74
		0.249136	0.473336
JB		0.001	0.001
	☑	0.099698	0.005857
		ra	log
%		36.4841	-11.3669
err.va		1400.88	0.409829
rel.std.err		1.68771	1.645
mod.eff		-0.687706	-0.644999

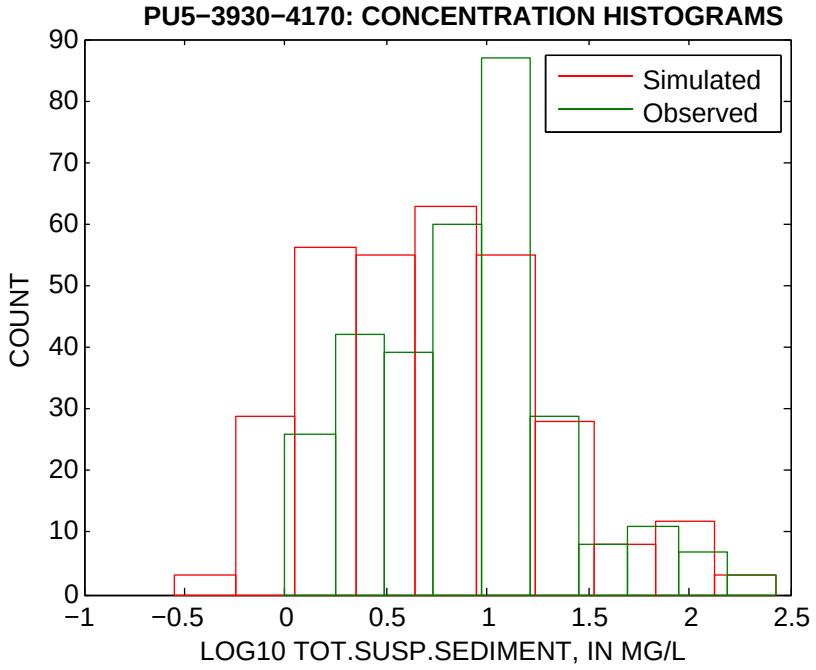
VERSION 2.1

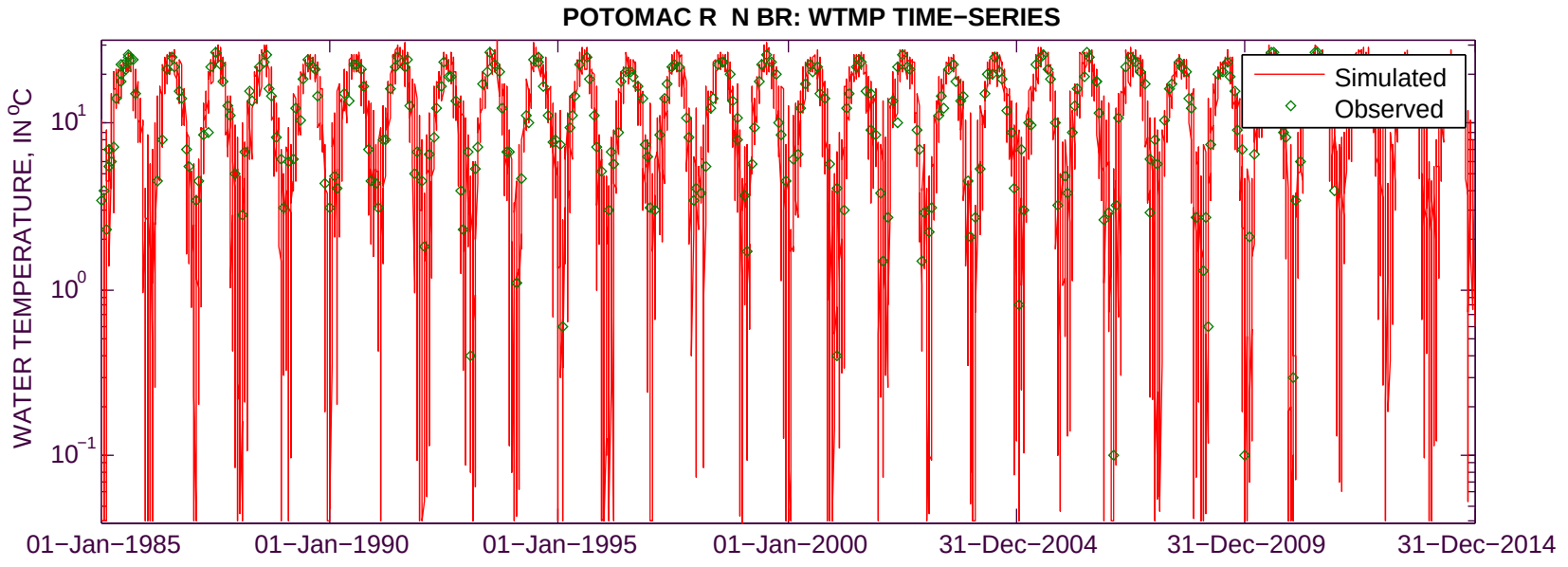
ALL DATA
LOG10

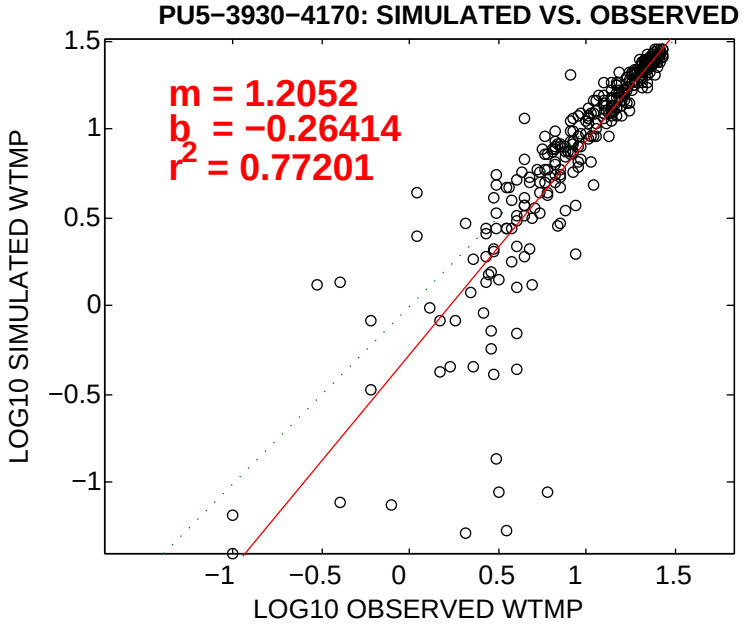


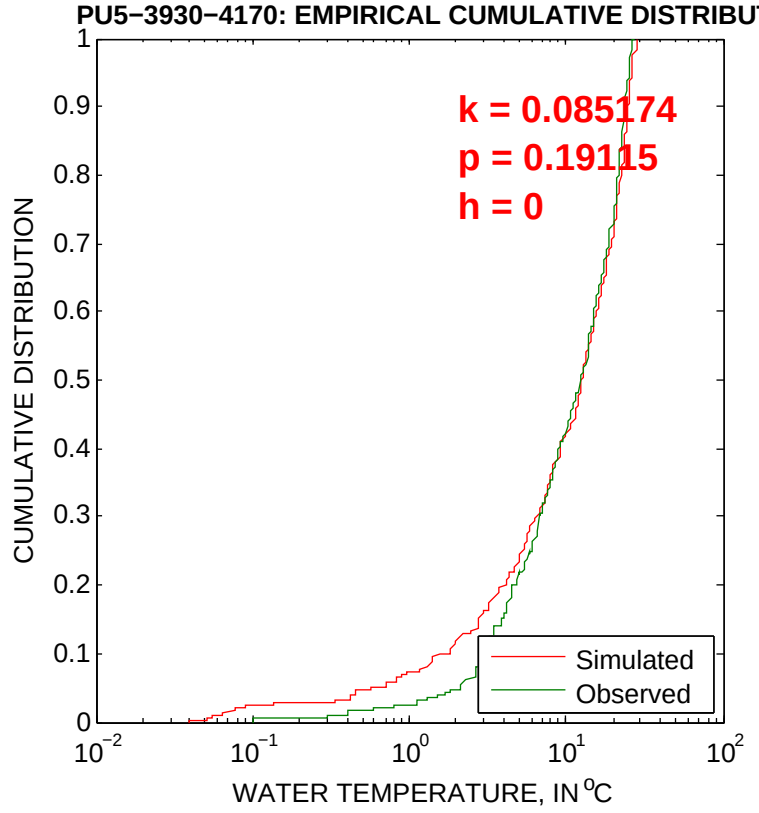












DATA SELECTION

scenario	file
P620171001WQ	WTMP.calib

plot: WTMP - water tempera...

Dates: 1/1/1985 – 12/31/201

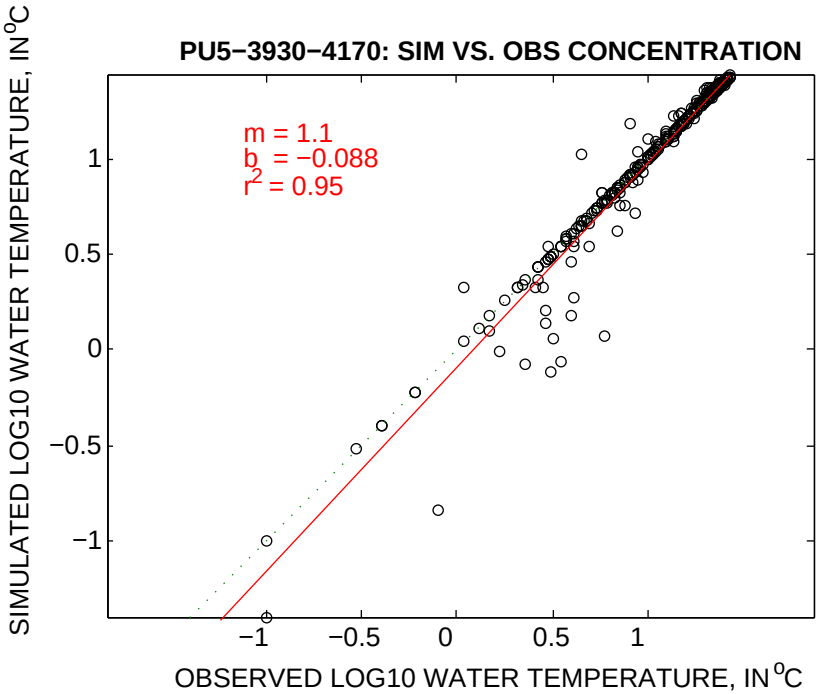
Drive	Directory	Observed
N/A	model	OBS20161101

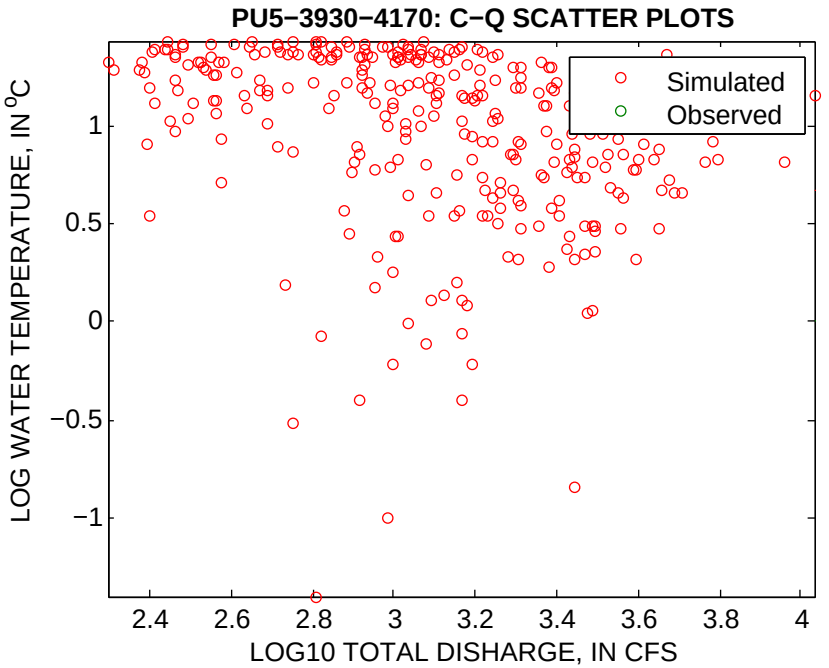
STATISTICS

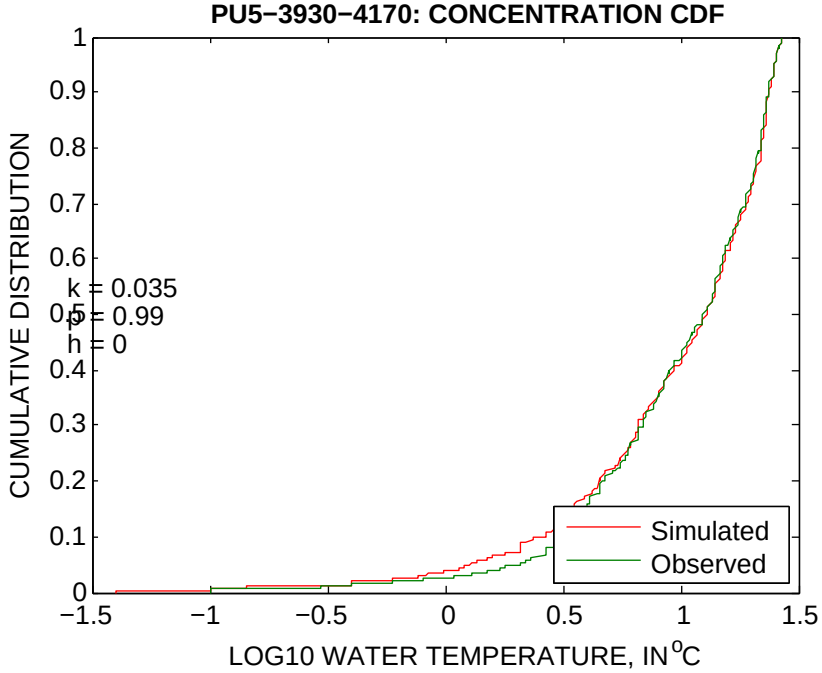
	n	observe	simulate
		317	317
min		0.1	0.040025
		-1	-1.39767
mean		12.9304	13.0696
		0.984076	0.921824
media		12.5	12.456
		1.09691	1.09538
max		27	28.523
		1.43136	1.4552
varian		61.1928	73.8197
		0.163443	0.307491
JB		0.001143	0.001140
		0.001	0.001
		ra	log
%		1.07632	-6.32587
err.va		4.87605	0.0808723
rel.std.err		0.796834	0.494805
mod.eff		0.920317	0.505195

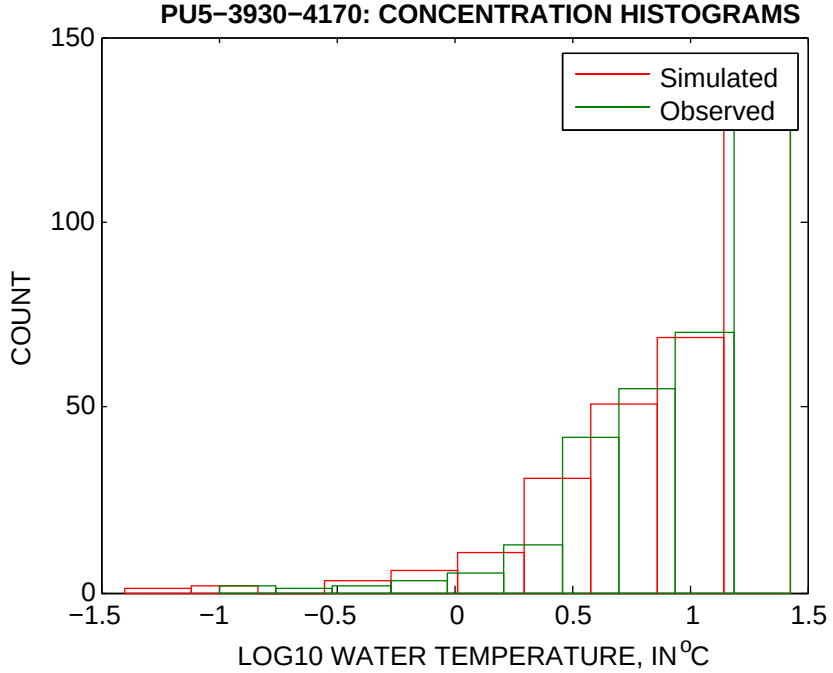
VERSION 2.1

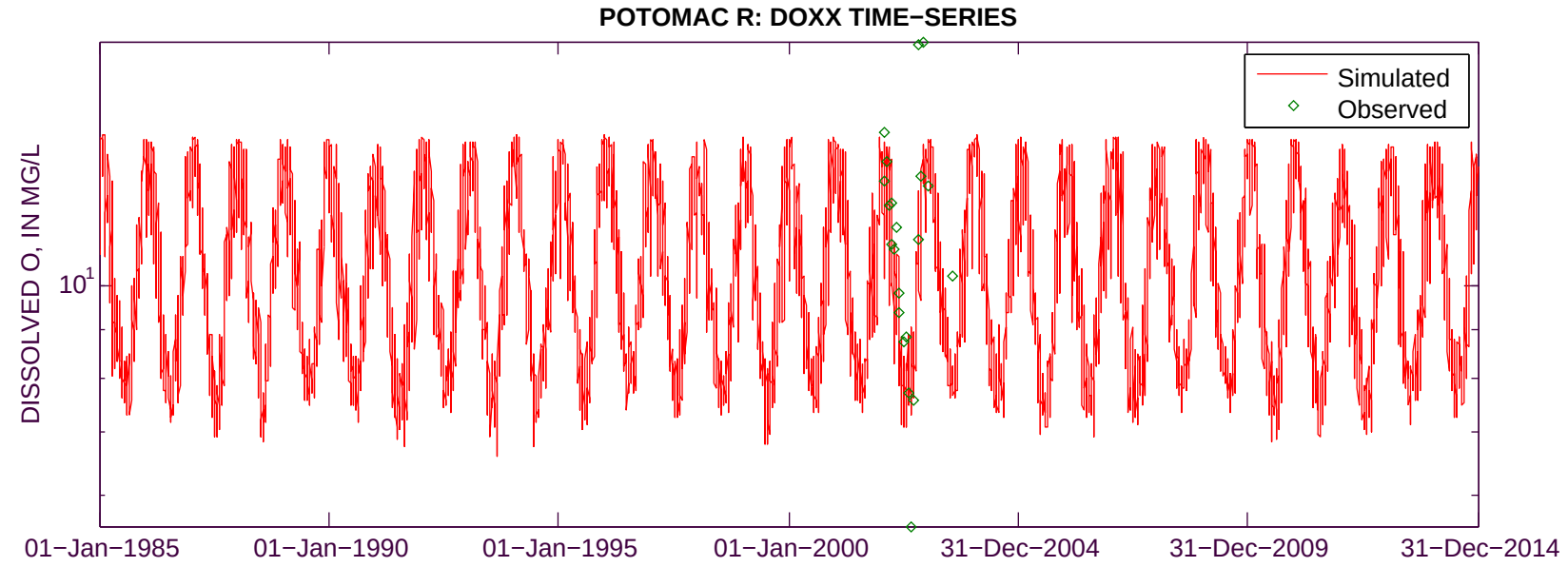
ALL DATA
LOG10

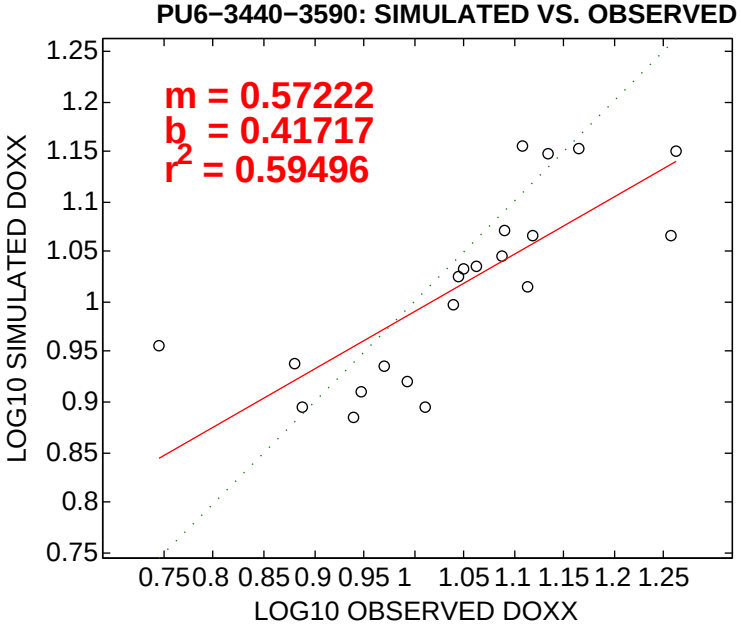


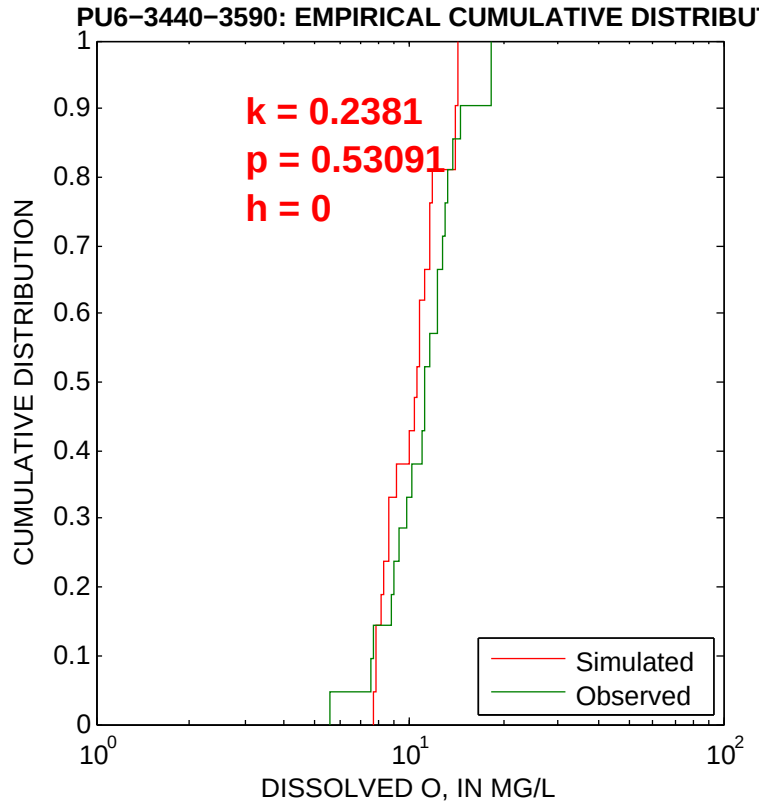












DATA SELECTION

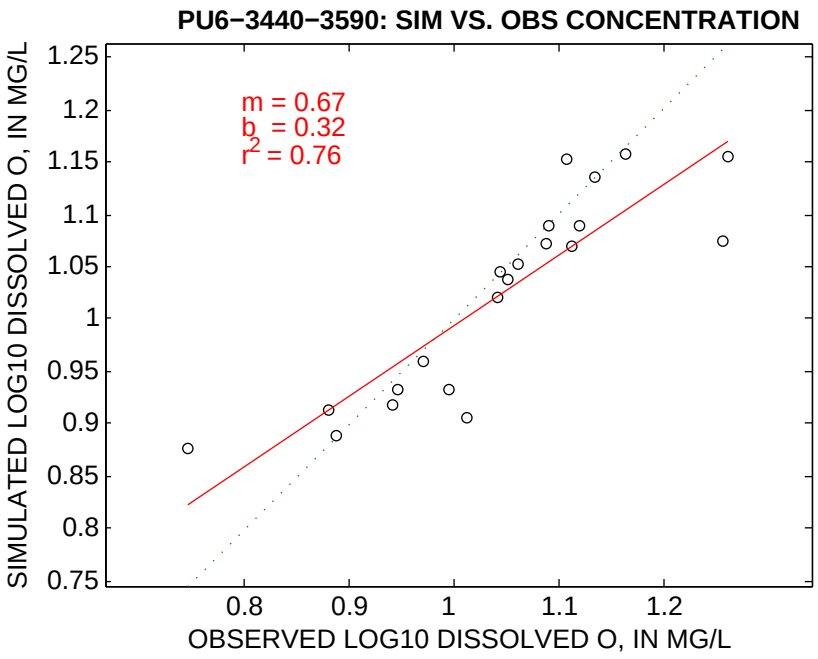
scenario: P620171001WQ
file: DOXX.calib
plot: DOXX - dissolved oxygen
Dates: 1/1/1985 12/31/201
Drive: N/A
Directory: model
Observed: OBS20161101

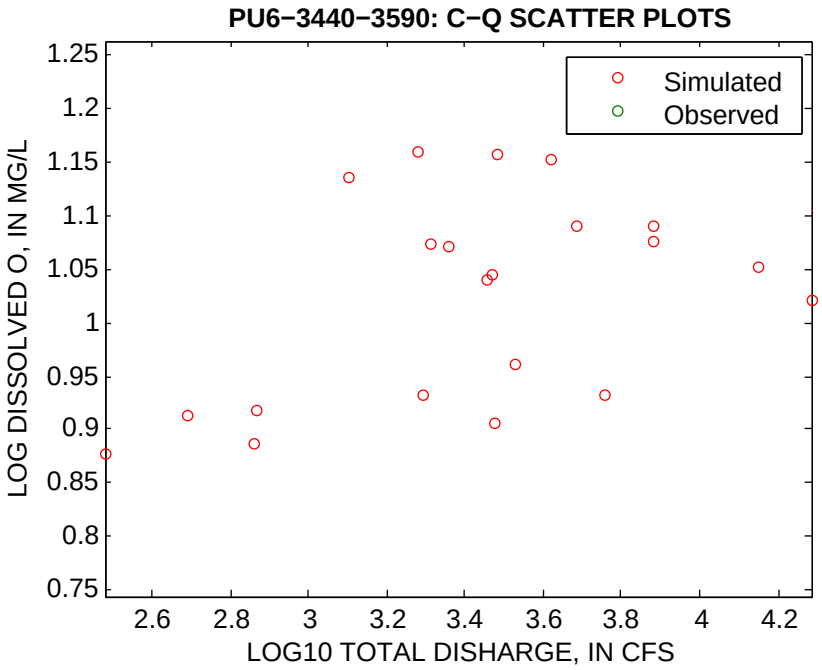
STATISTICS

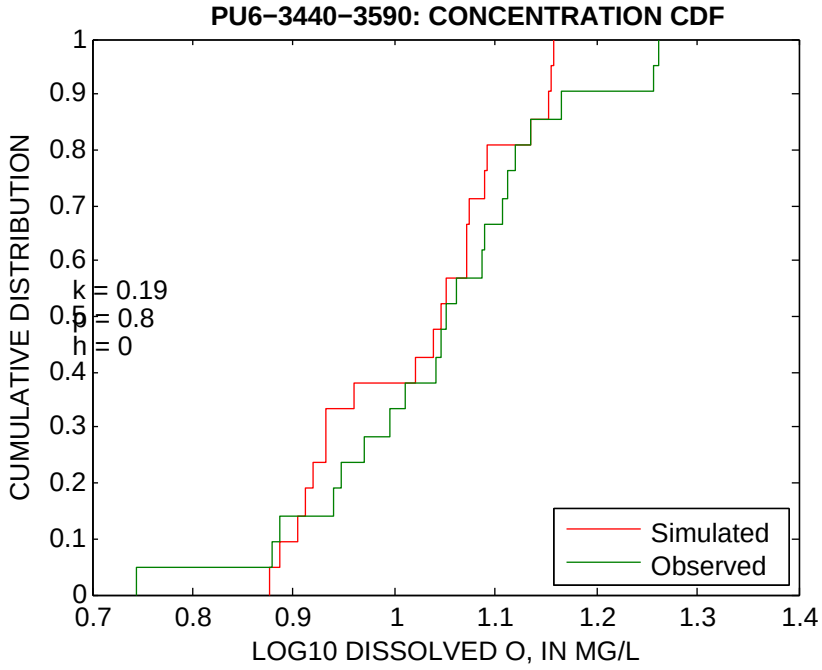
	n	21	21
		observe	simulate
min		5.56	7.6649
		0.745075	0.884506
mean		11.4714	10.5559
		1.04344	1.01424
media		11.23	10.588
		1.05038	1.02481
max		18.29	14.299
		1.26221	1.15531
varian		10.0306	5.06889
		0.0152373	0.00838581
JB	✓	0.5	0.239977 ✓
	✓	0.5	0.299804 ✓
		ra	log
%		-7.9809	-2.79815
err.va		4.85216	0.00708001
rel.std.err		0.483735	0.46465
mod.eff		0.516265	0.53535

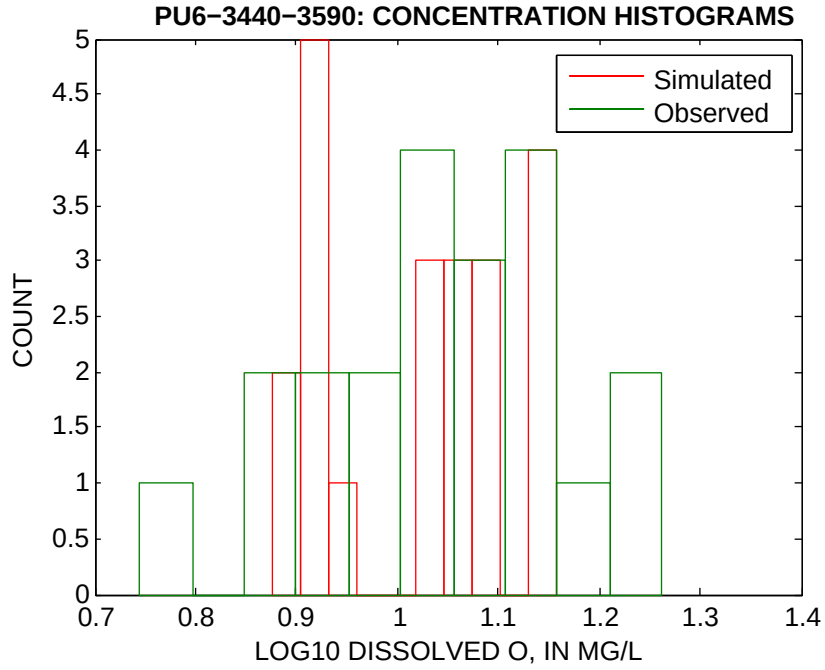
VERSION 2.1

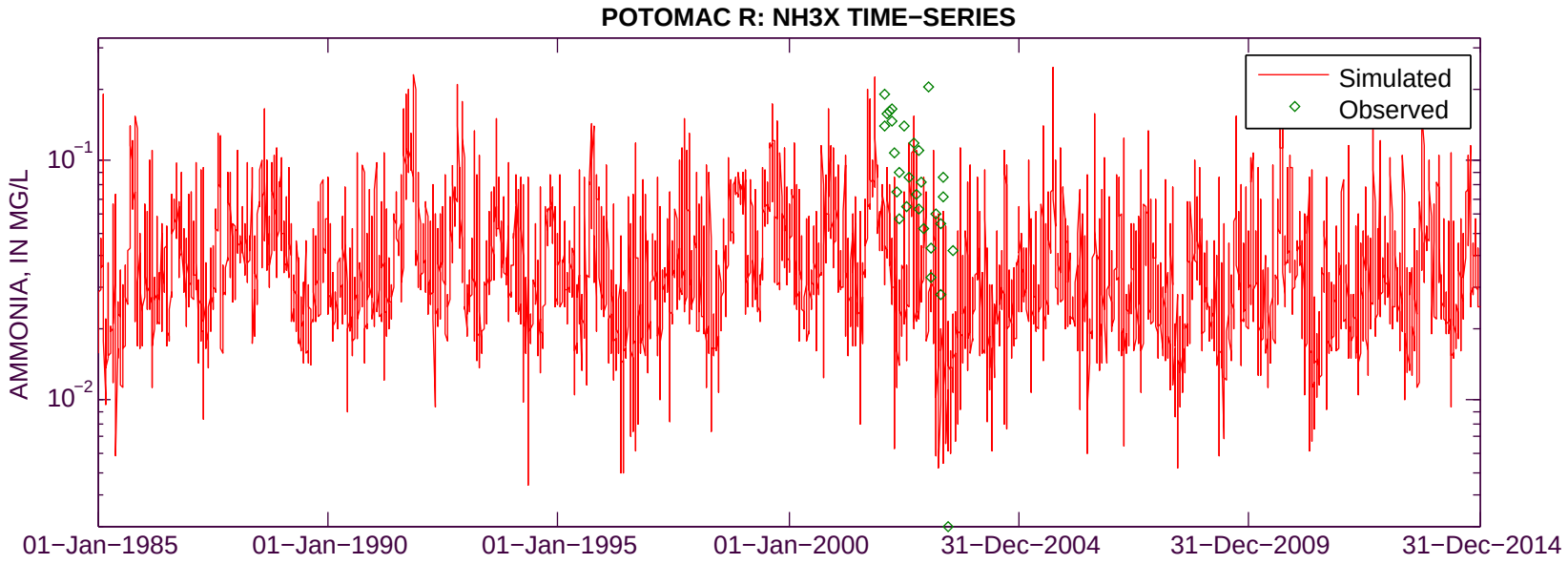
ALL DATA
LOG10

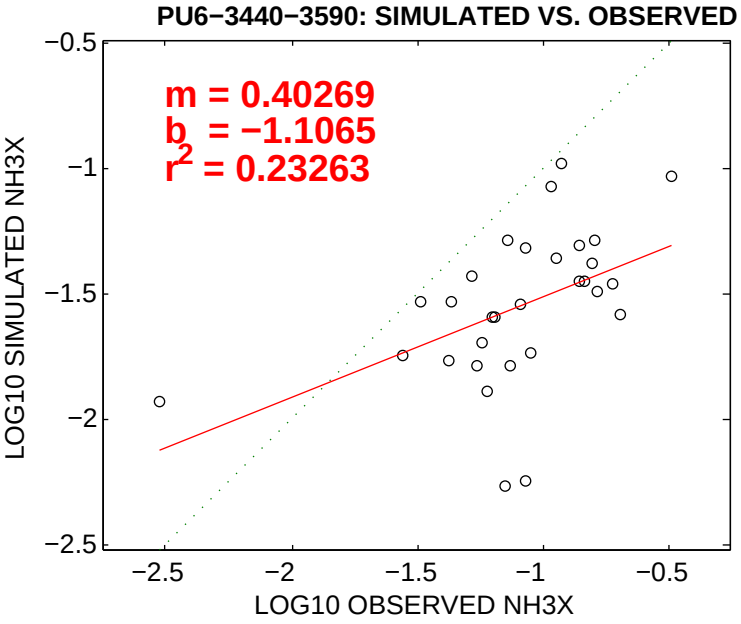


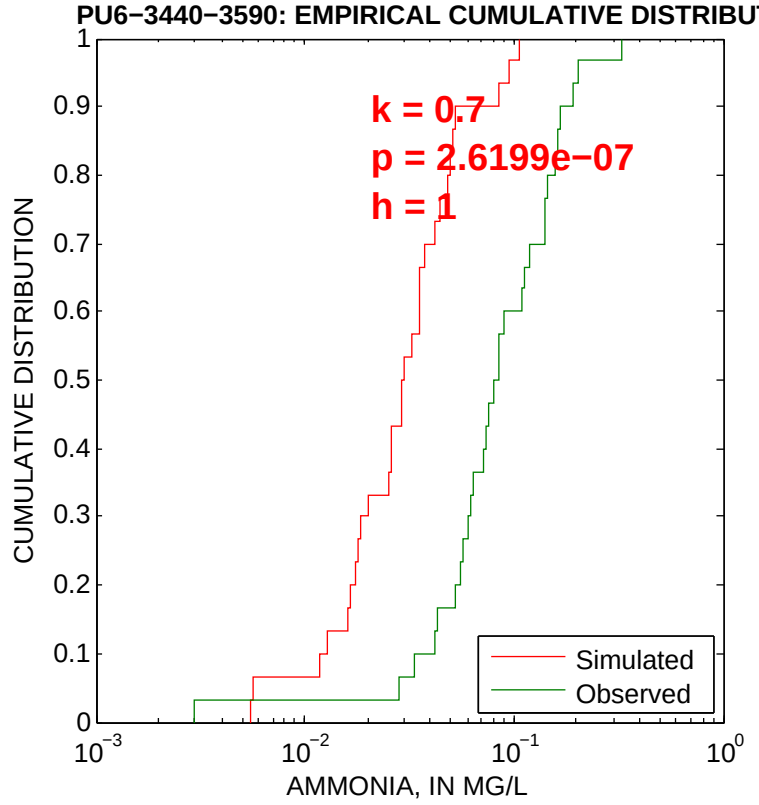












DATA SELECTION

scenario	file
P620171001WQ	NH3X.calib

plot: NH3X - ammonia

Dates: 1/1/1985 – 12/31/201

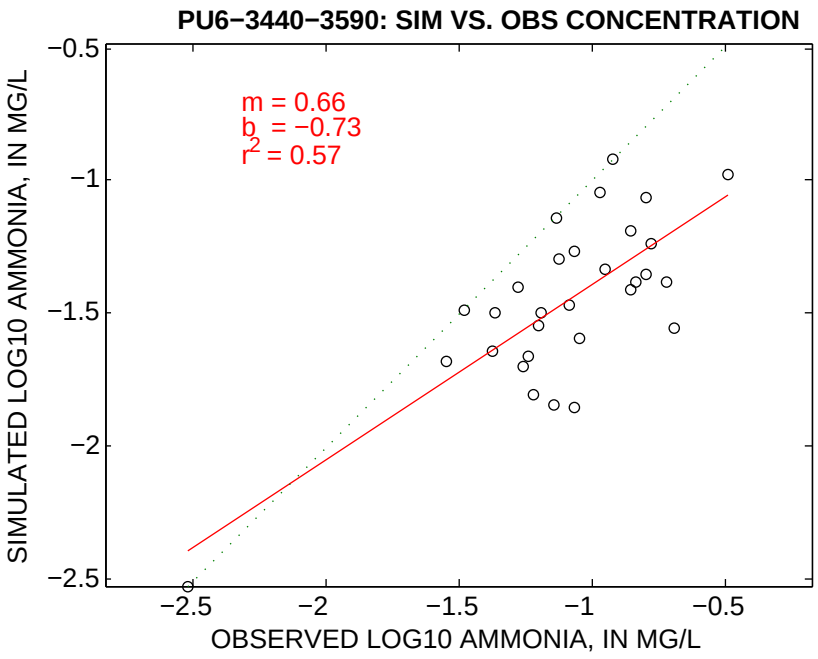
Drive	Directory	Observed
N/A	model	OBS20161101

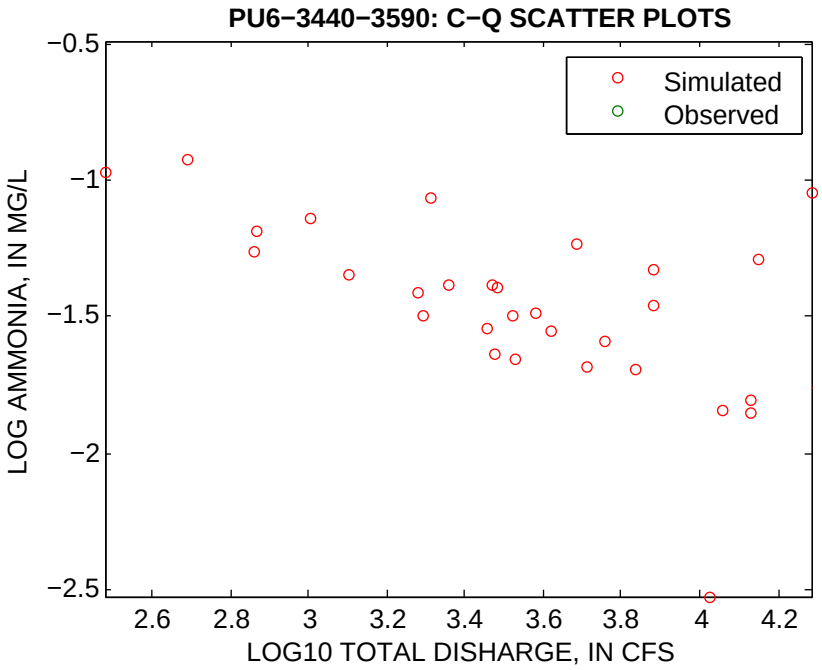
STATISTICS

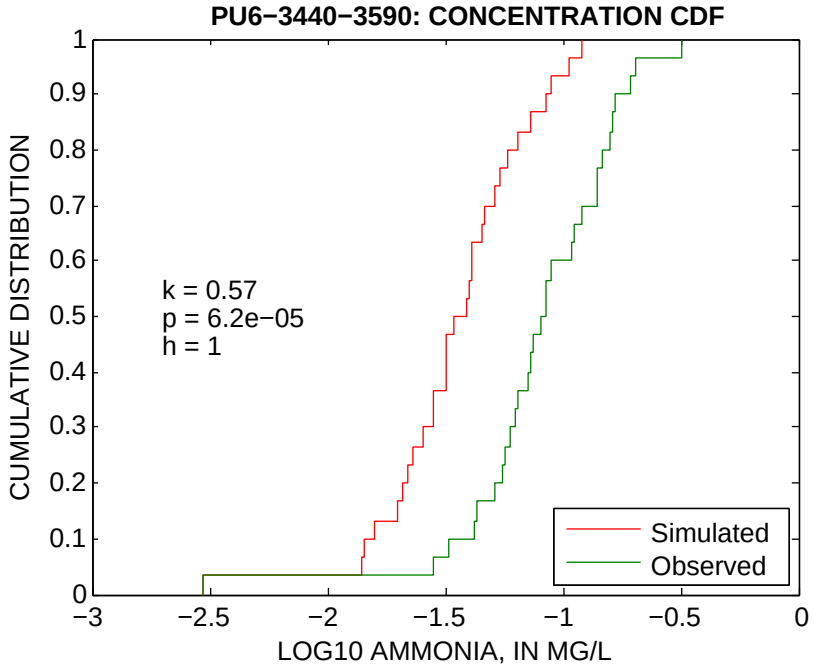
	n	30	30
		observe	simulate
min		0.003	0.0054868
		-2.52288	-2.26068
mean		0.1011	0.0351128
		-1.10122	-1.54997
media		0.0835	0.0294975
		-1.07851	-1.53022
max		0.324	0.10528
		-0.489455	-0.977654
varian		0.00434782	0.00058292
		0.1339	0.0933386
JB		0.004314	0.006366
		0.001	0.5
		ra	log
%		-65.2692	40.7504
err.va		0.00767486	0.327719
rel.std.err		1.76522	2.4475
mod.eff		-0.76522	-1.4475

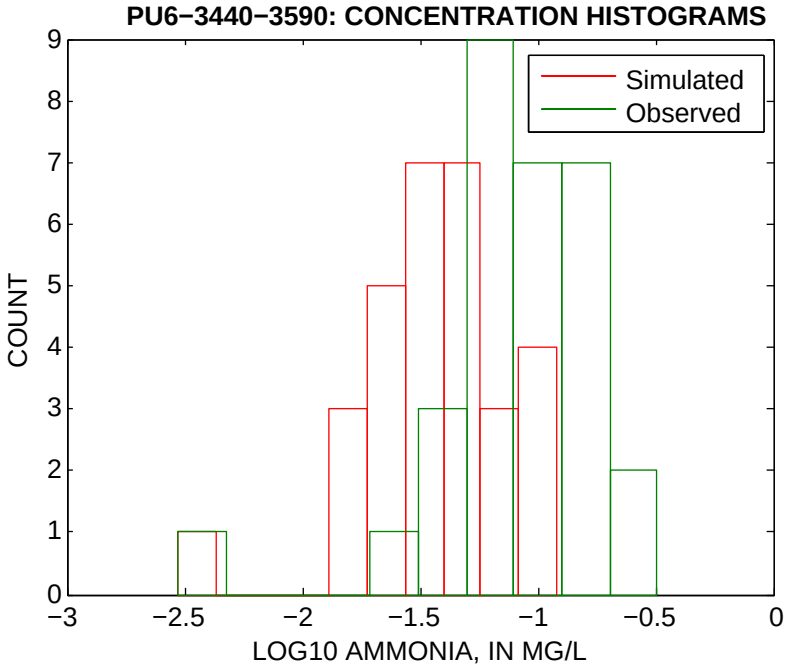
VERSION 2.1

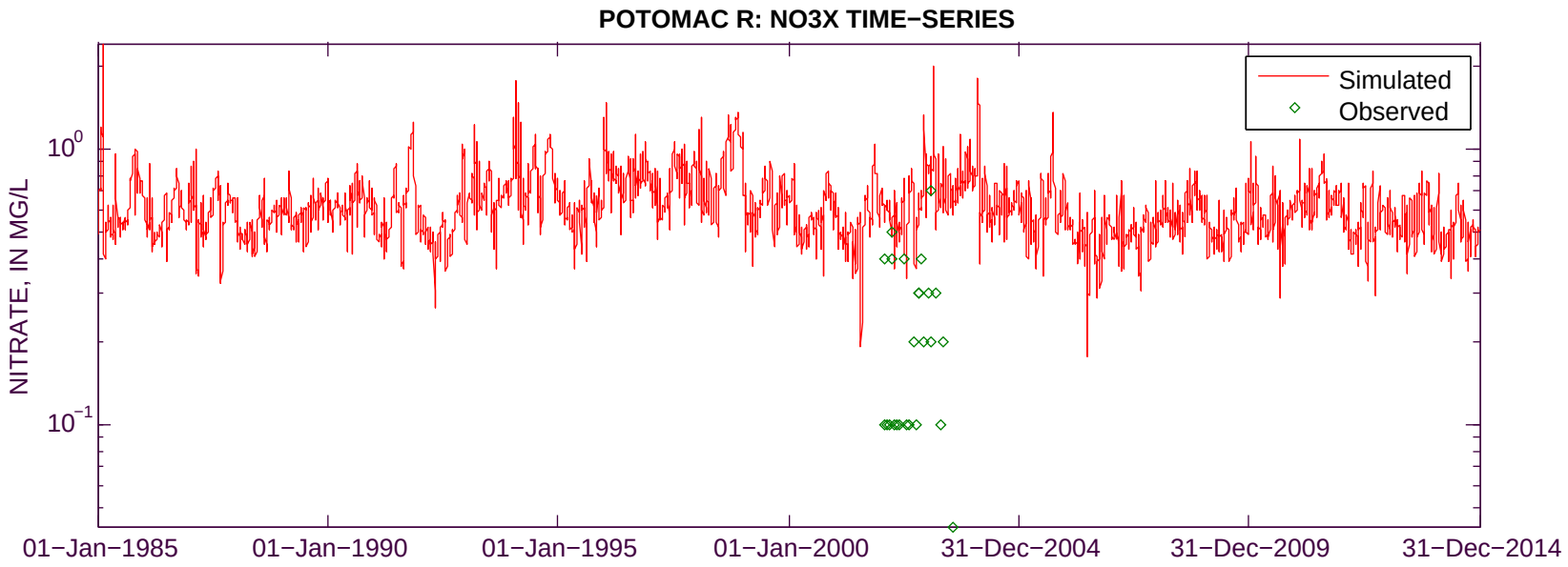
ALL DATA
LOG10

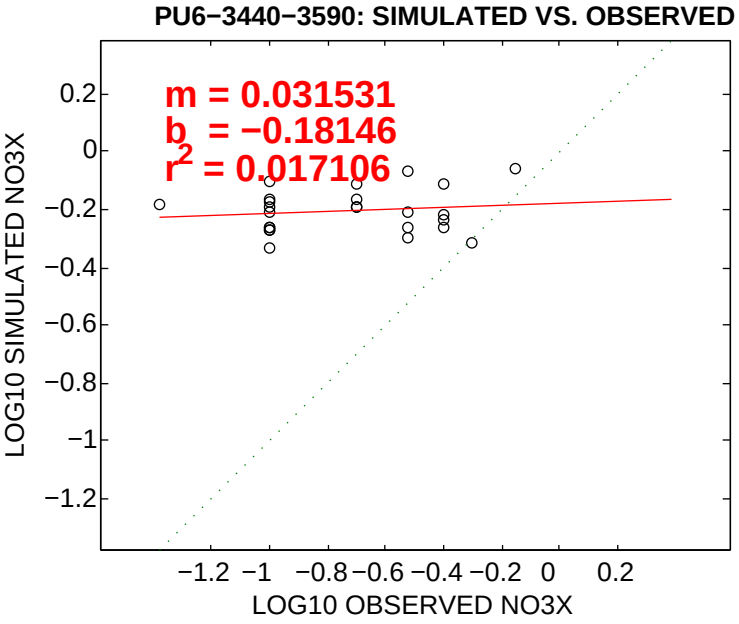


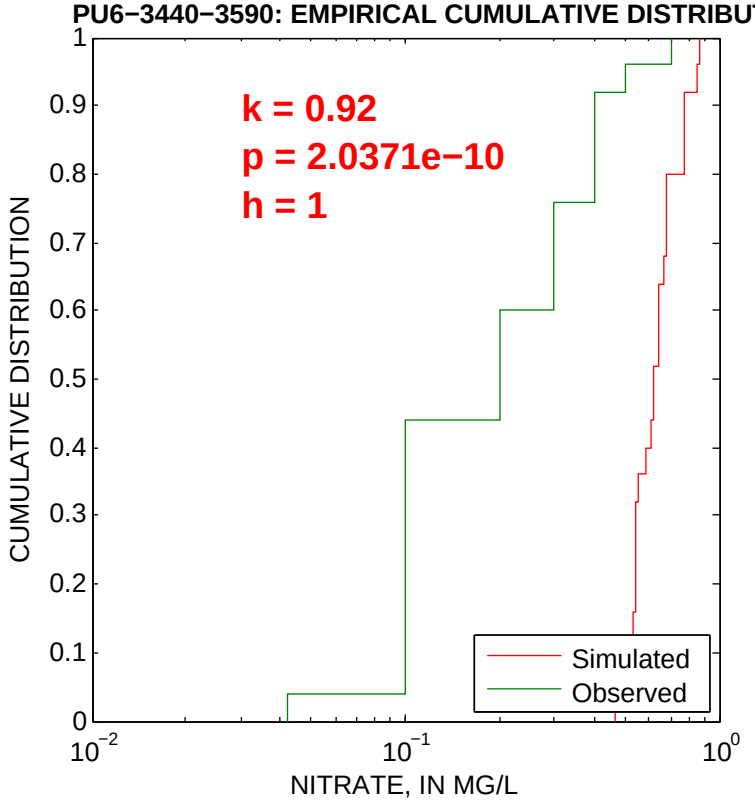












DATA SELECTION

scenario	file
P620171001WQ	NO3X.calib

plot: NO3X - nitrate

Dates: 1/1/1985 – 12/31/201

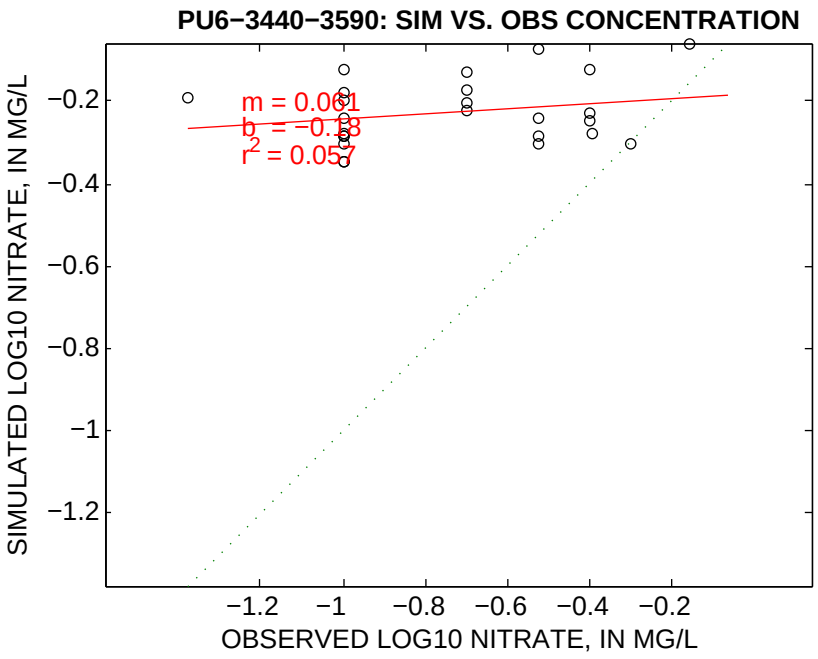
Drive	Directory	Observed
N/A	model	OBS20161101

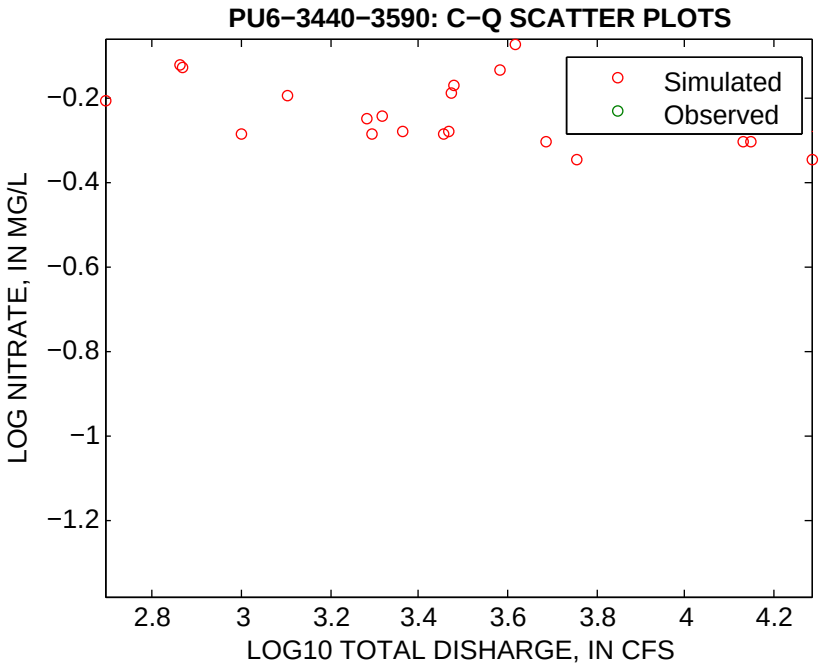
STATISTICS

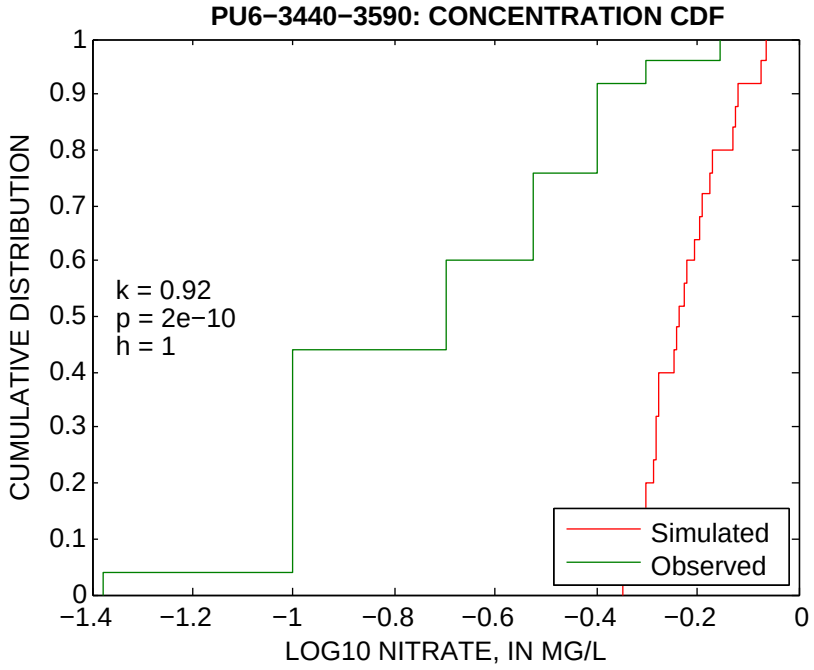
	n	25	25
		observe	simulate
min		0.042	0.46706
		-1.37675	-0.330627
mean		0.2338	0.633336
		-0.732343	-0.204554
media		0.2	0.62088
		-0.69897	-0.206992
max		0.7	0.874
		-0.154902	-0.0584886
varian		0.026567	0.0123146
		0.0950238	0.00552294
JB		0.034843	0.218802
		0.488589	0.5
		ra	log
%		170.888	-72.0685
err.va		0.197229	0.384723
rel.std.err		7.42384	4.0487
mod.eff		-6.42384	-3.0487

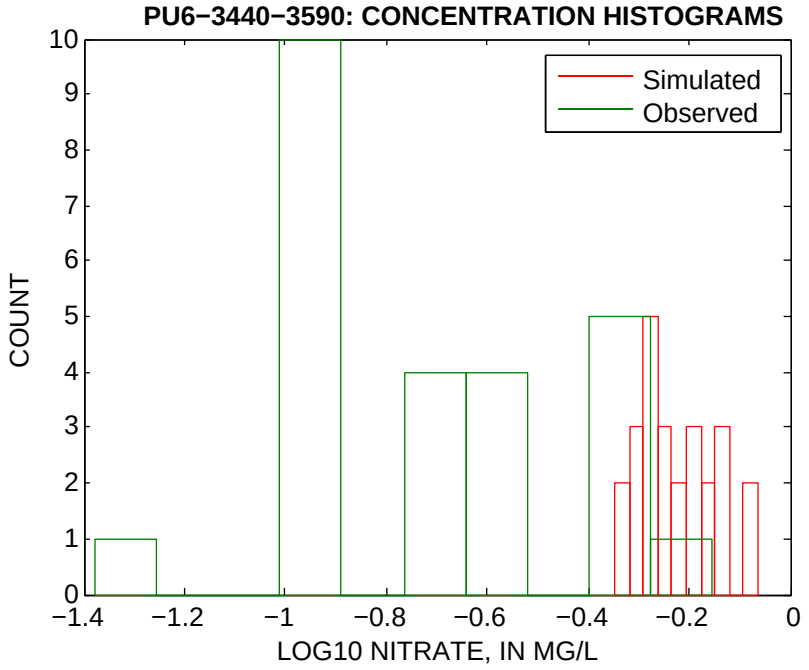
VERSION

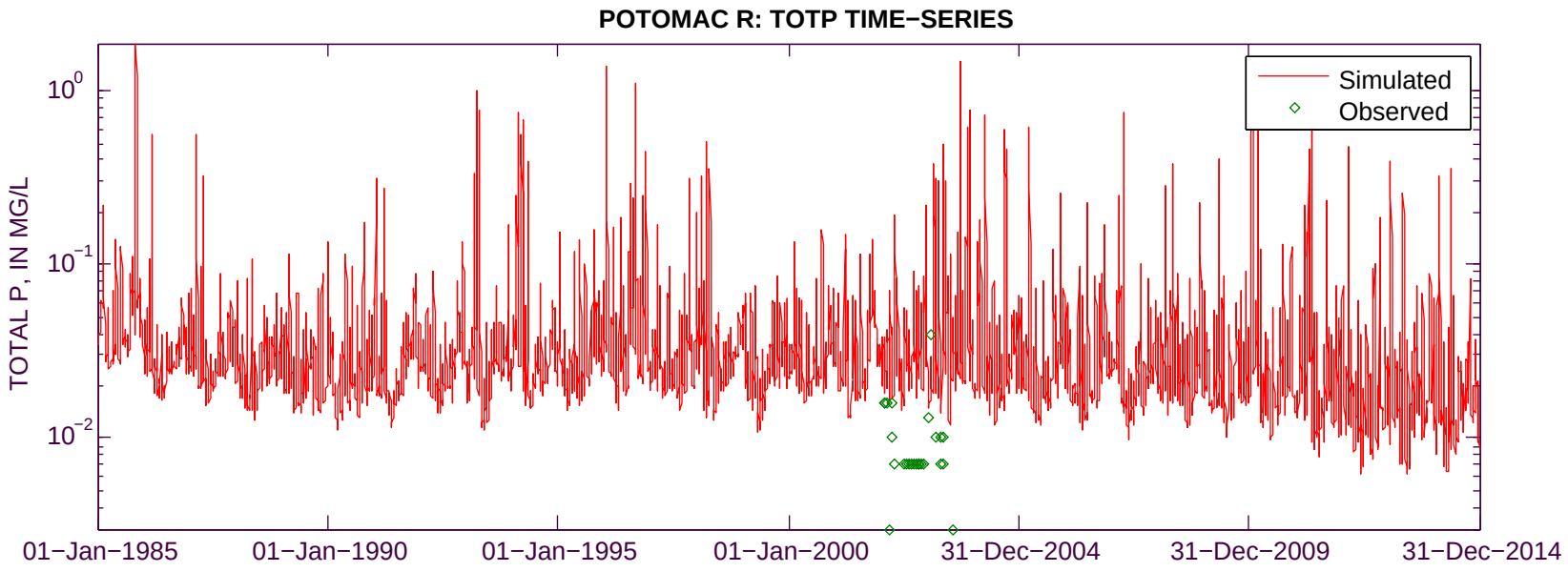
ALL DATA
LOG10

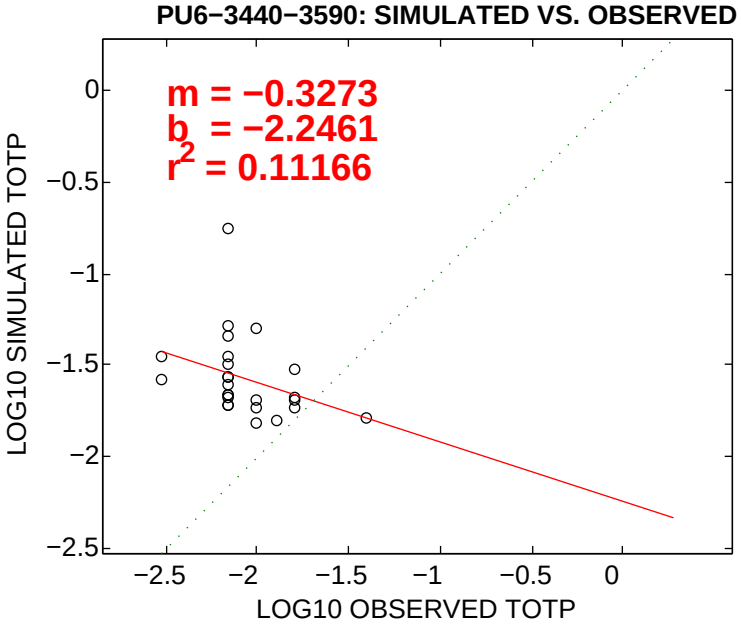


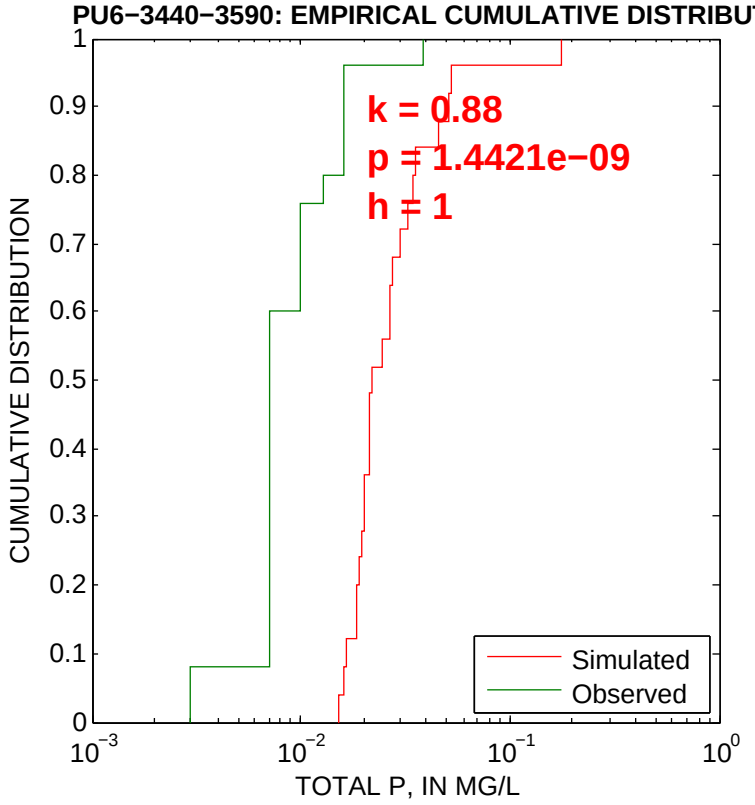












DATA SELECTION

scenario	file
P620171001WQ	TOTP.calib

plot: TOTP - total phosphorus

Dates: 1/1/1985 – 12/31/201

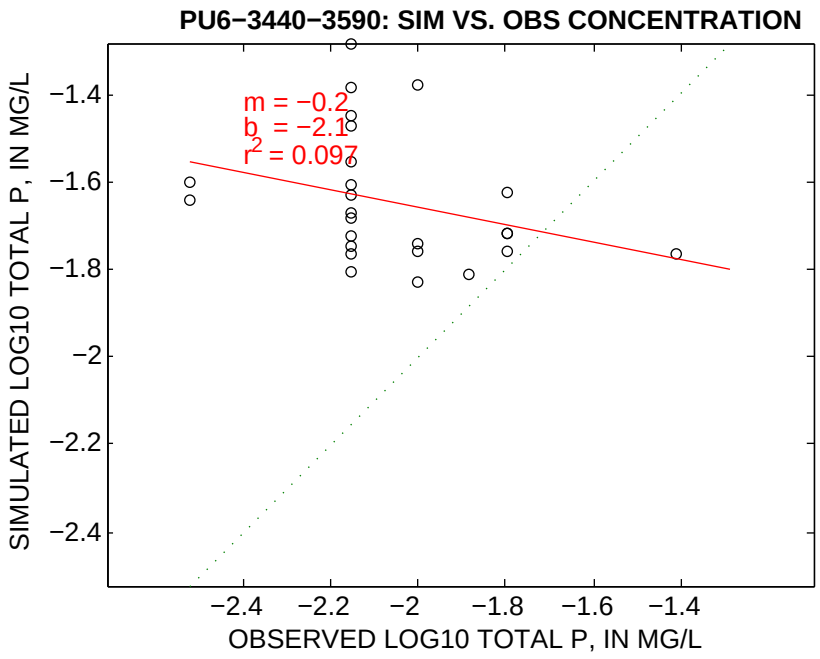
Drive	Directory	Observed
N/A	model	OBS20161101

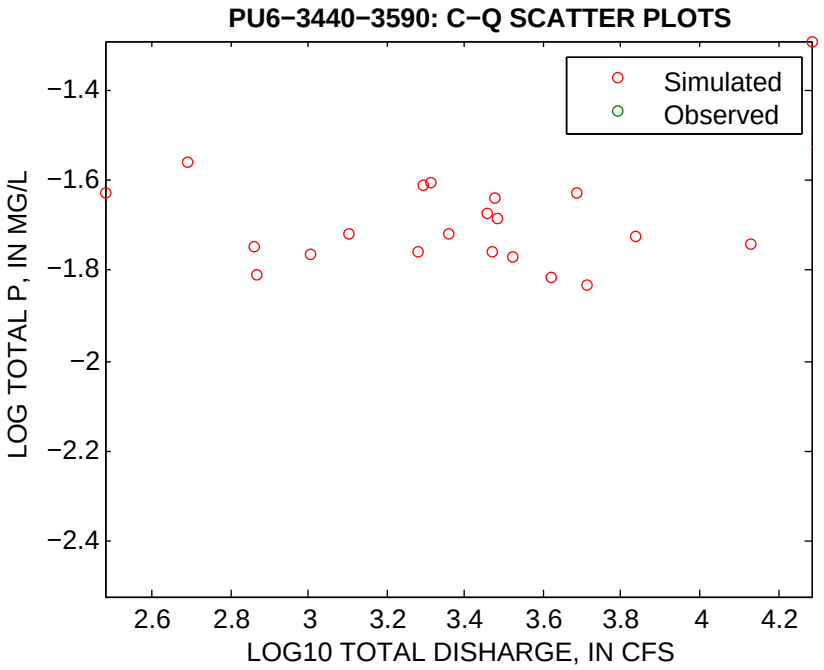
STATISTICS

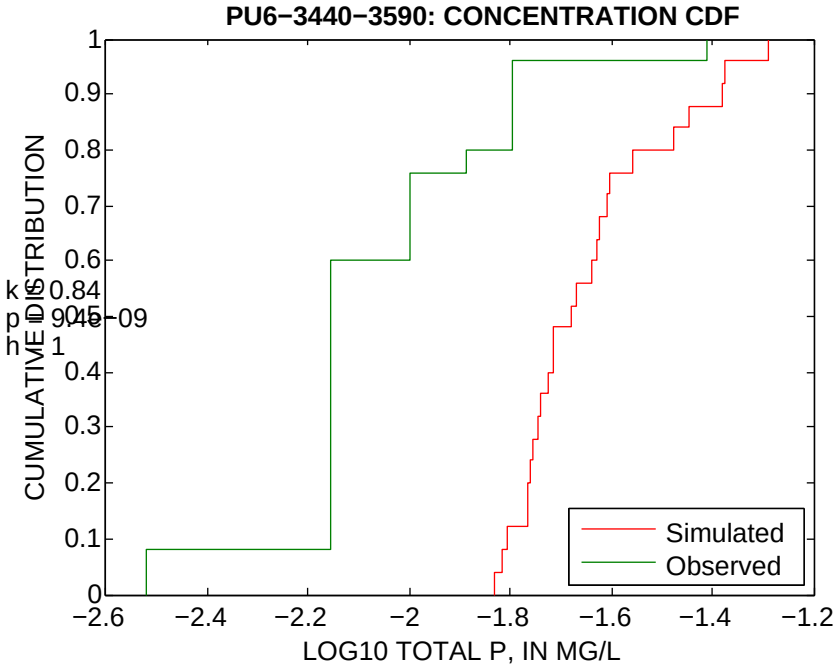
	n	25	25
		observe	simulate
min		0.003	0.015247
		-2.52288	-1.81682
mean		0.01012	0.0324694
		-2.06152	-1.57135
media		0.007	0.02213
		-2.1549	-1.65502
max		0.039	0.17686
		-1.40894	-0.75237
varian		5.036e-05	0.00101103
		0.0538799	0.0516932
JB		0.001	0.001
		0.074597	0.001
		ra	log
%		220.844	-23.7769
err.va		0.00166814	0.391115
rel.std.err		33.1242	7.25902
mod.eff		-32.1242	-6.25902

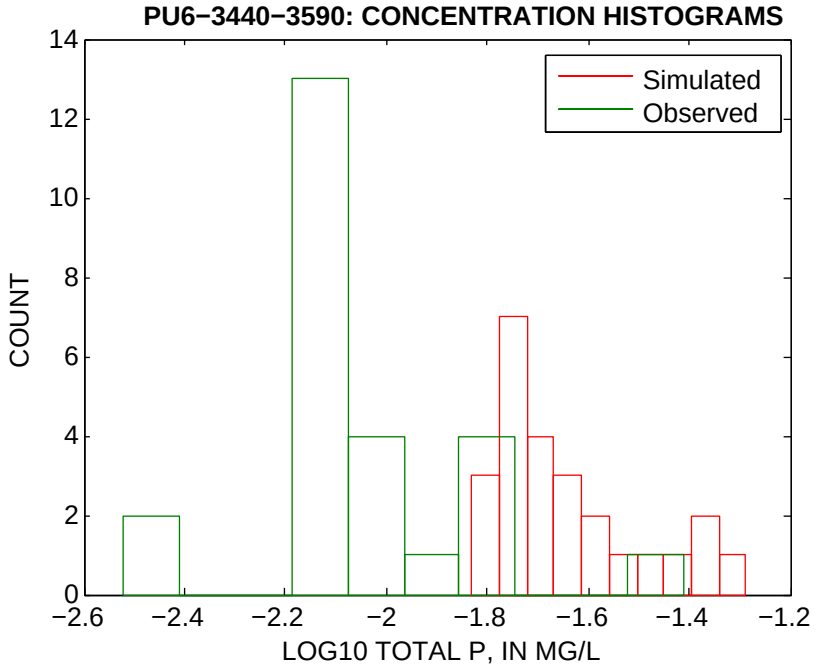
VERSION 2.1

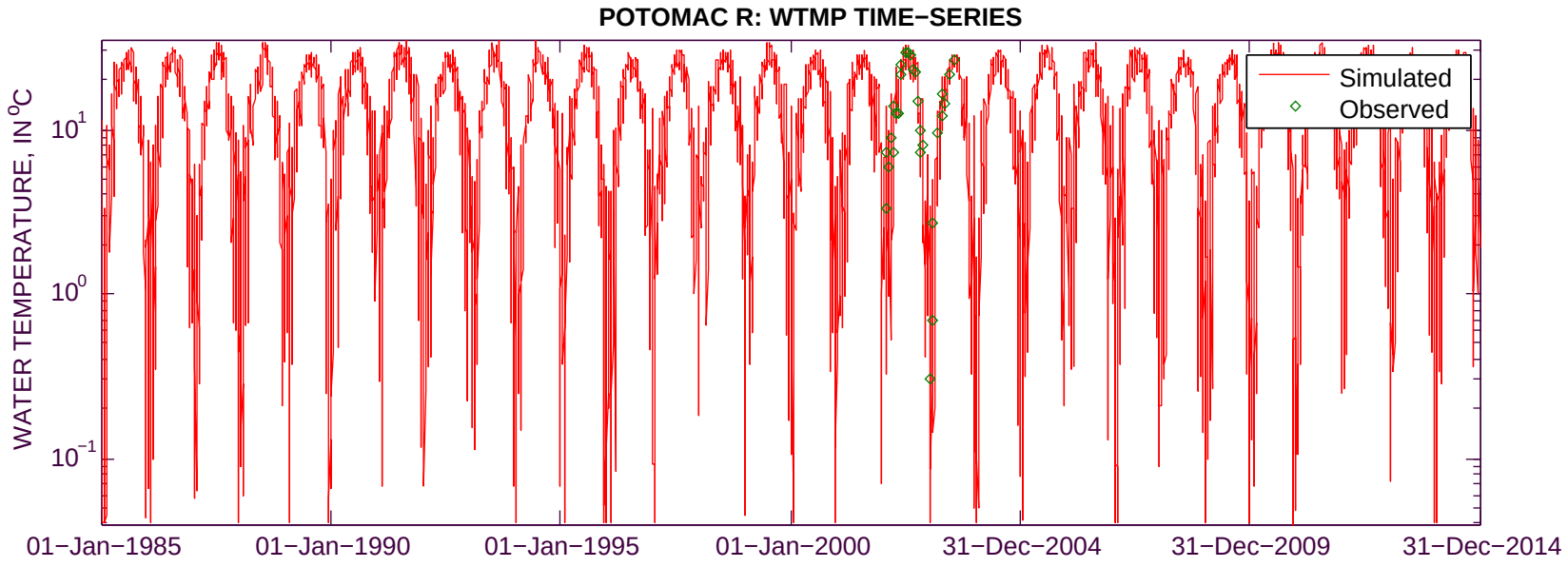
ALL DATA
LOG10

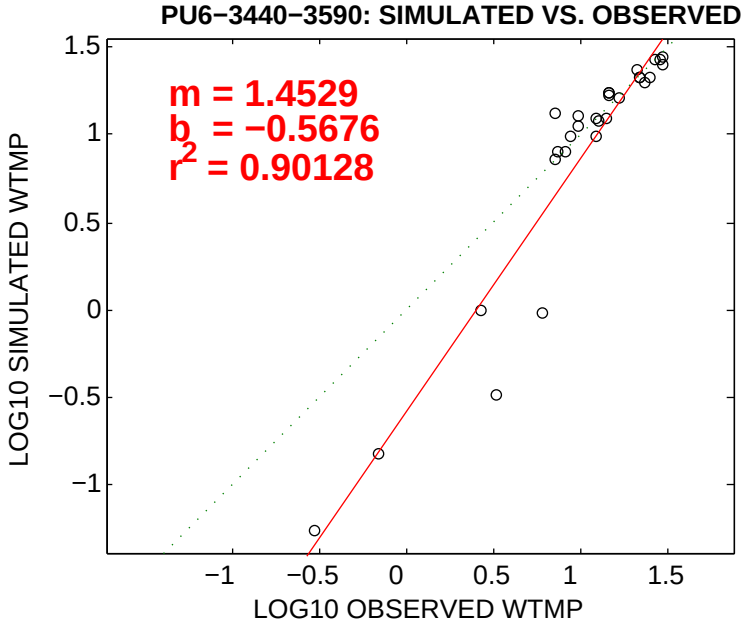


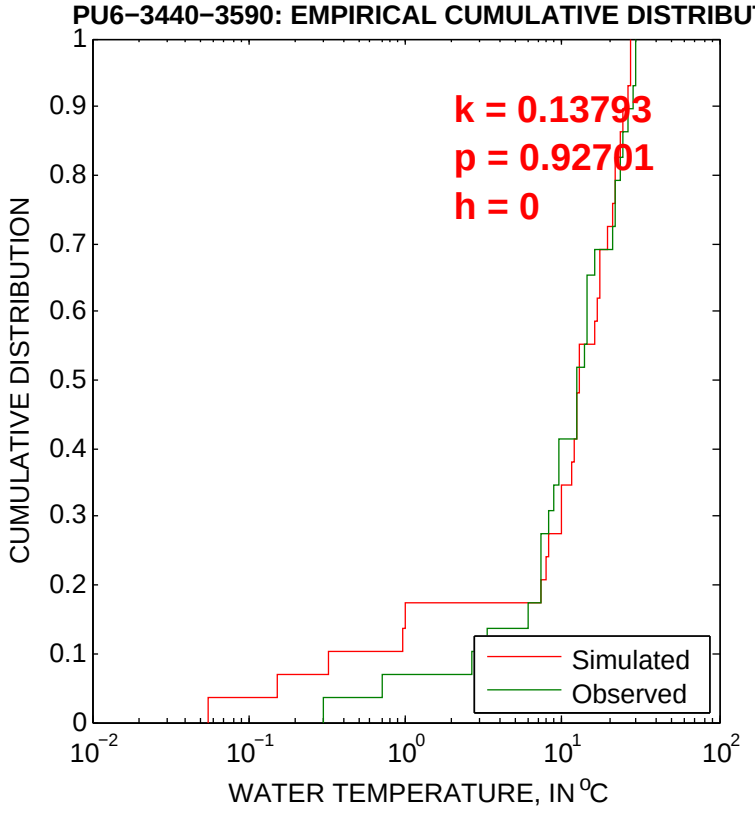












DATA SELECTION

scenario	file
P620171001WQ	WTMP.calib

plot: WTMP - water tempera...

Dates: 1/1/1985 – 12/31/201

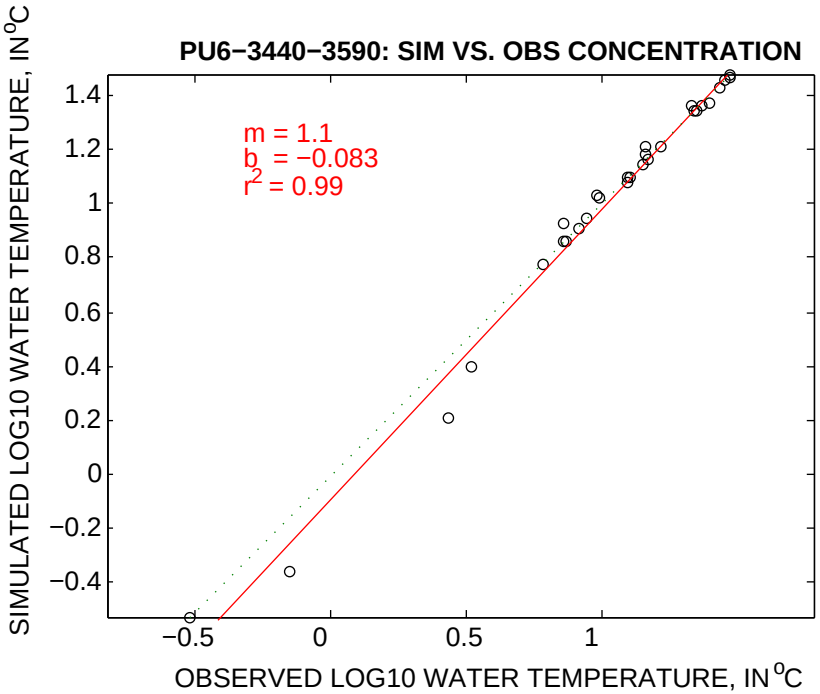
Drive	Directory	Observed
N/A	model	OBS20161101

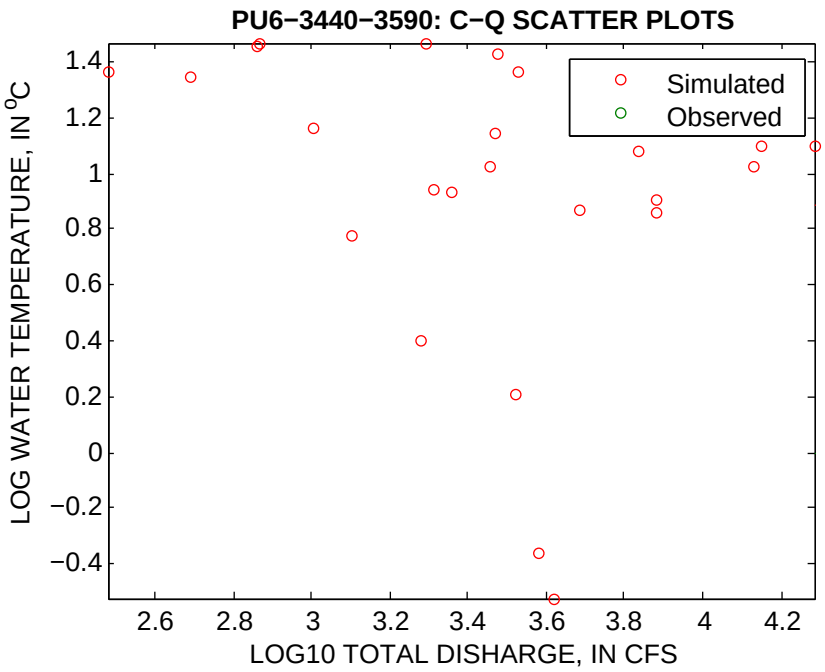
STATISTICS

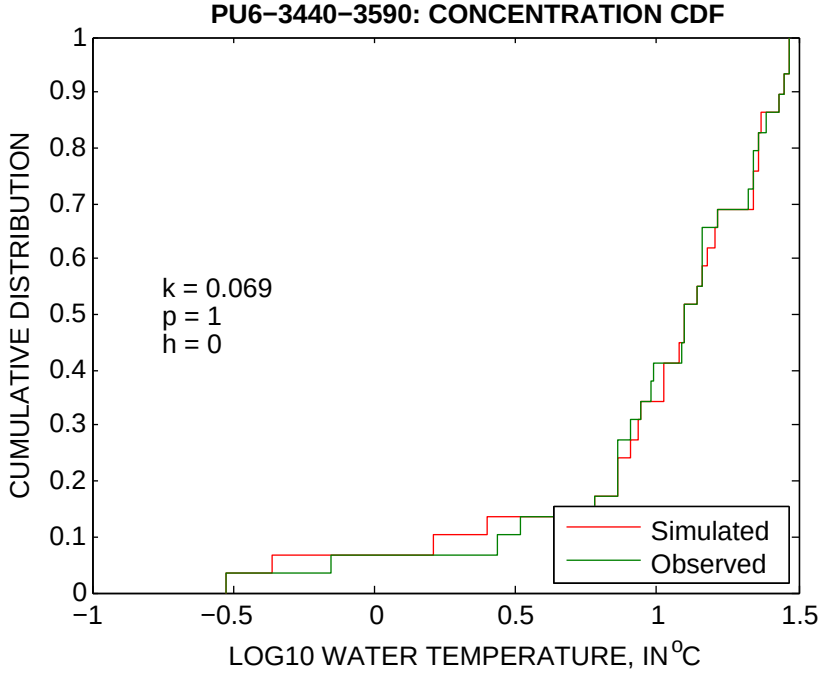
n	29	29
	observe	**simulate**
min	0.3	0.054905
	-0.522879	-1.26039
mean	14.069	13.8259
	1.00477	0.892212
media	12.5	13.043
	1.09691	1.11538
max	29.4	27.832
	1.46835	1.44454
varian	76.0322	73.0872
	0.212274	0.497157
JB	0.245643	0.393118
	0.001158	0.002007
	ra	log
%	-1.72792	-11.2025
err.va	5.98246	0.105739
rel.std.err	0.0786832	0.498125
mod.eff	0.921317	0.501875

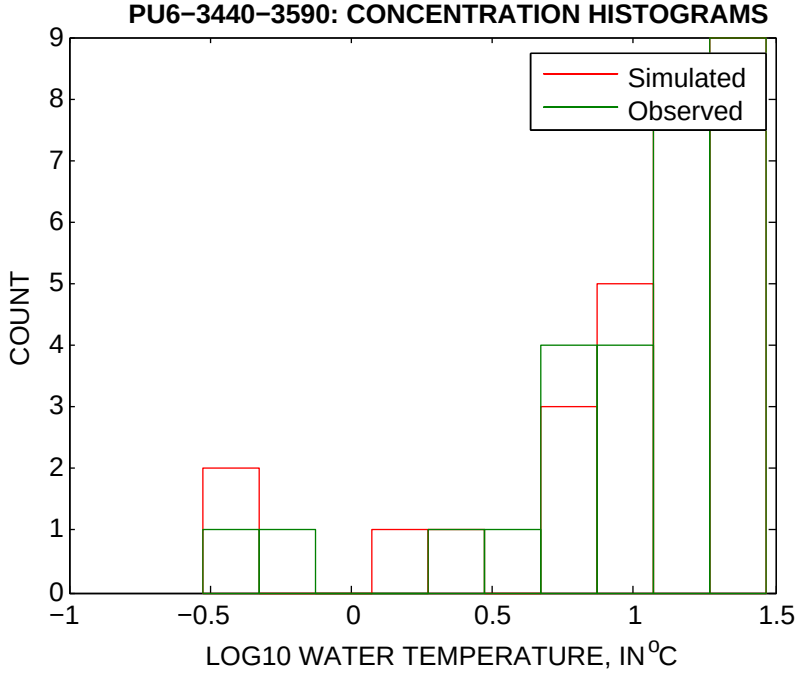
VERSION 3.1

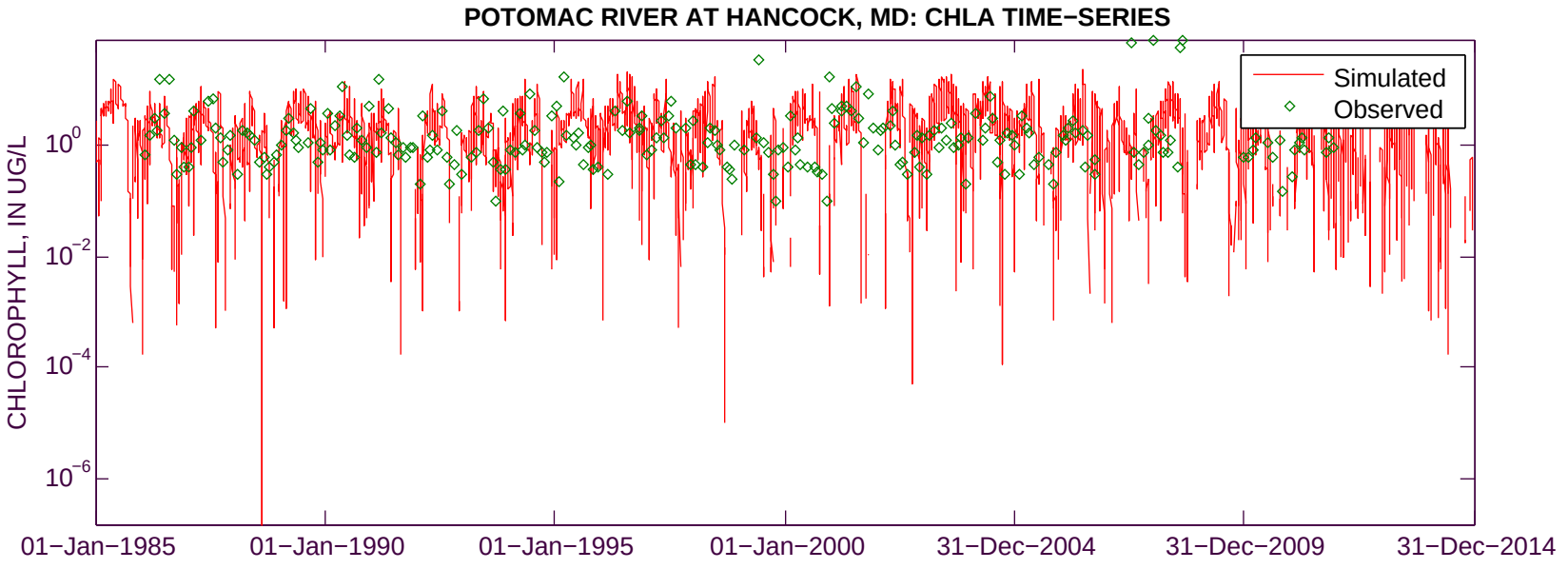
ALL DATA
LOG10

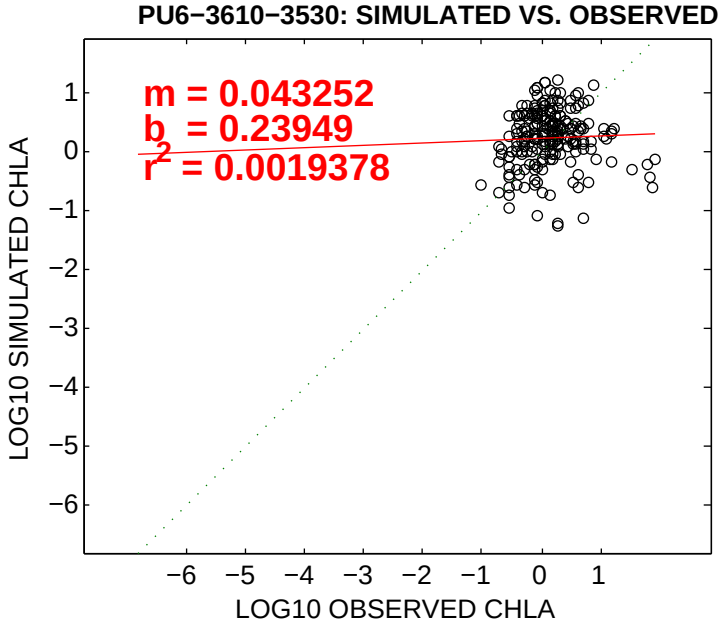


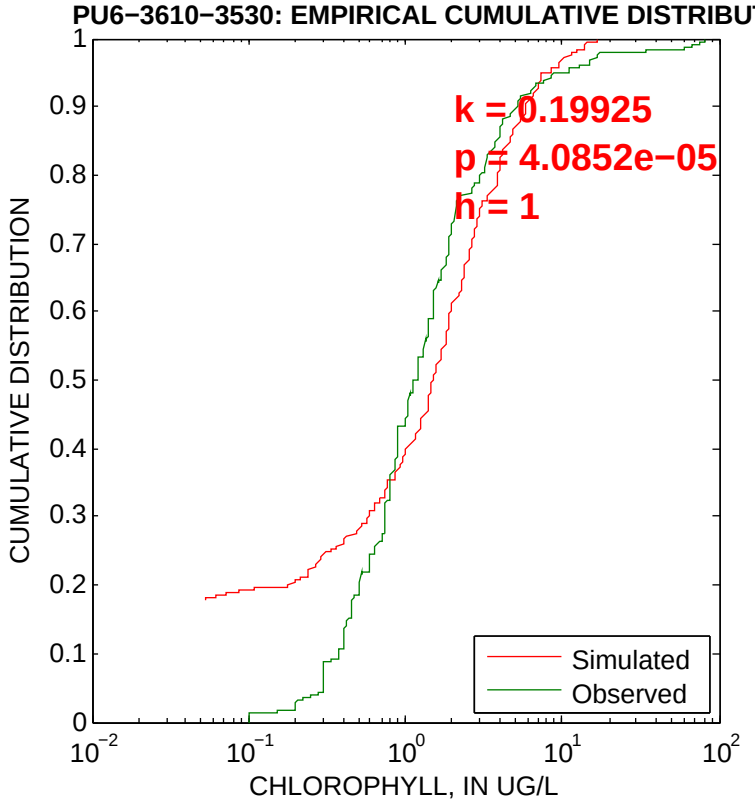












DATA SELECTION

scenario: P620171001WQ | file: CHLA.calib

plot: CHLA - chlorophyll A

Dates: 1/1/1985 – 12/31/201

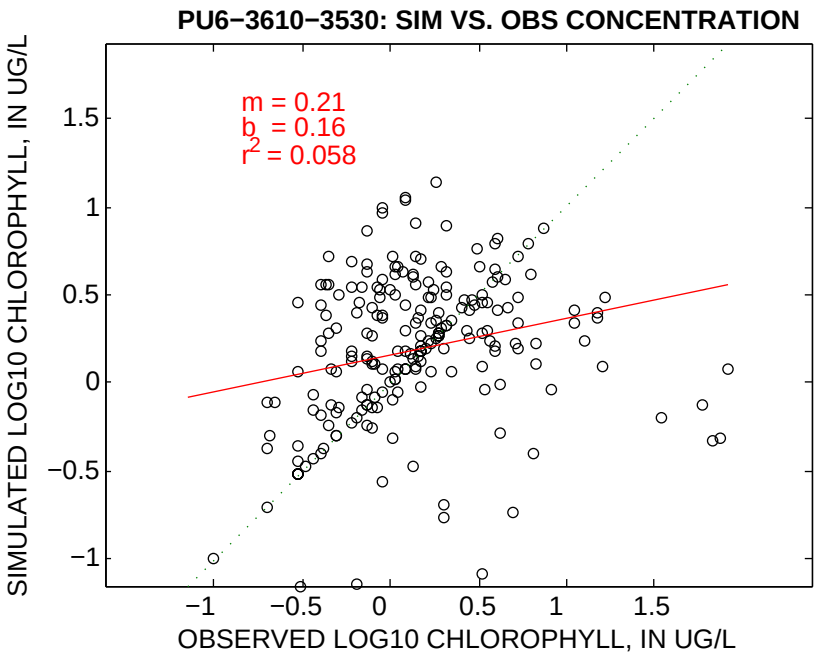
Drive: N/A | Directory: model | Observed: OBS20161101

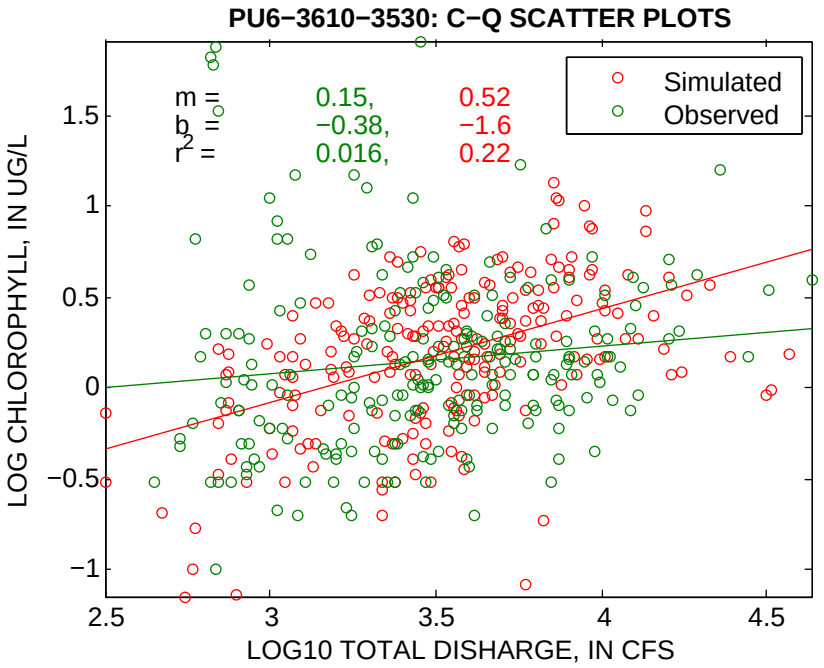
STATISTICS

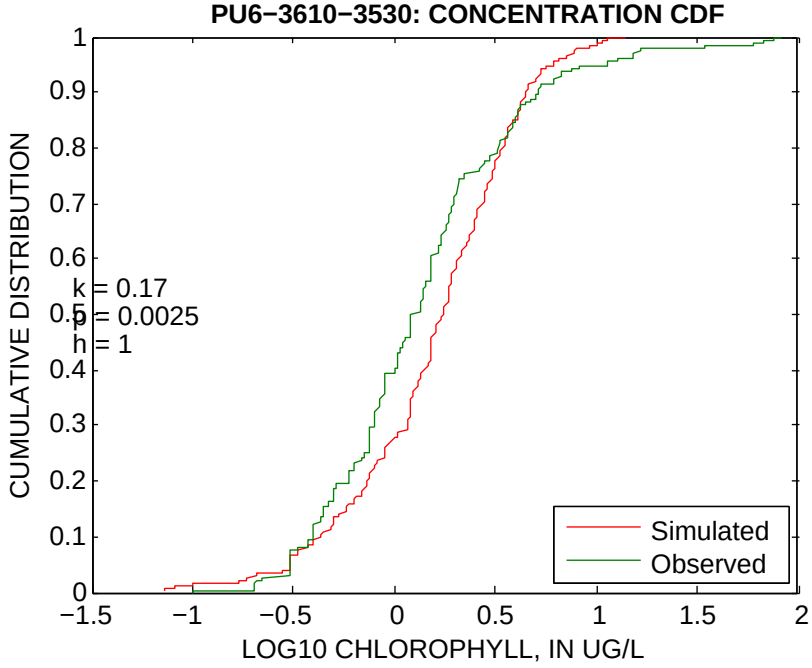
		observe	simulate
n		266	219
min		0.1	0
		-1	-1.27369
mean		3.19241	2.36008
		0.147507	0.245867
media		1.1585	1.49815
		0.117271	0.282463
max		82.236	17.069
		1.91506	1.23221
varian		82.7851	8.1022
		0.231628	0.22361
JB		0.001	0.001
		0.001	0.005067
		ra	log
%		-26.0722	66.6817
err.va		95.6245	0.444921
rel.std.err		1.15509	1.92084
mod.eff		-0.155092	-0.920843

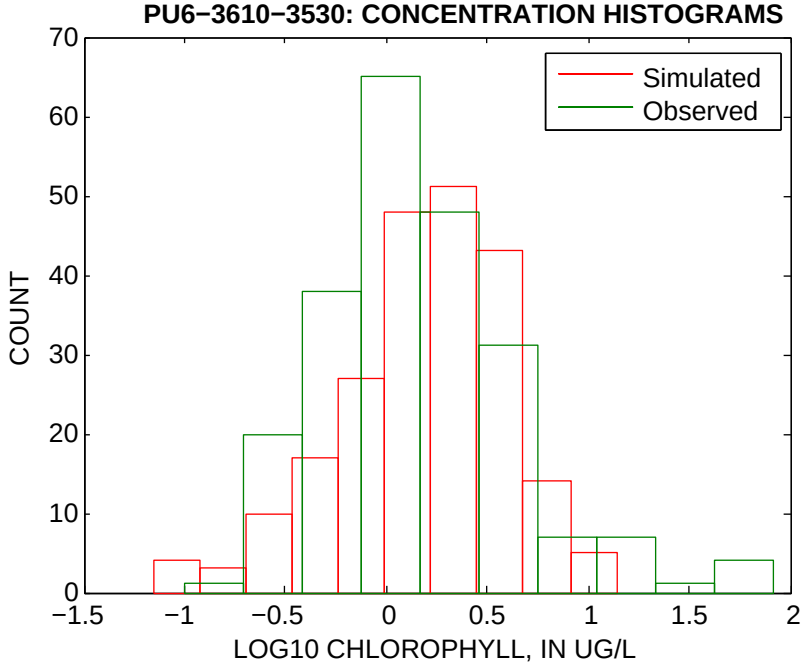
VERSION 2.1

ALL DATA
LOG10

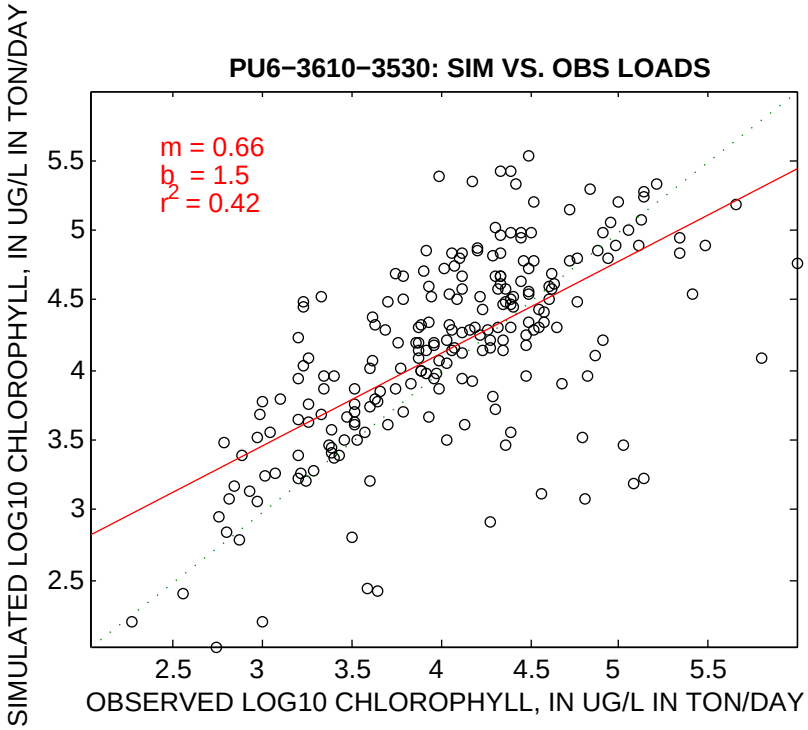


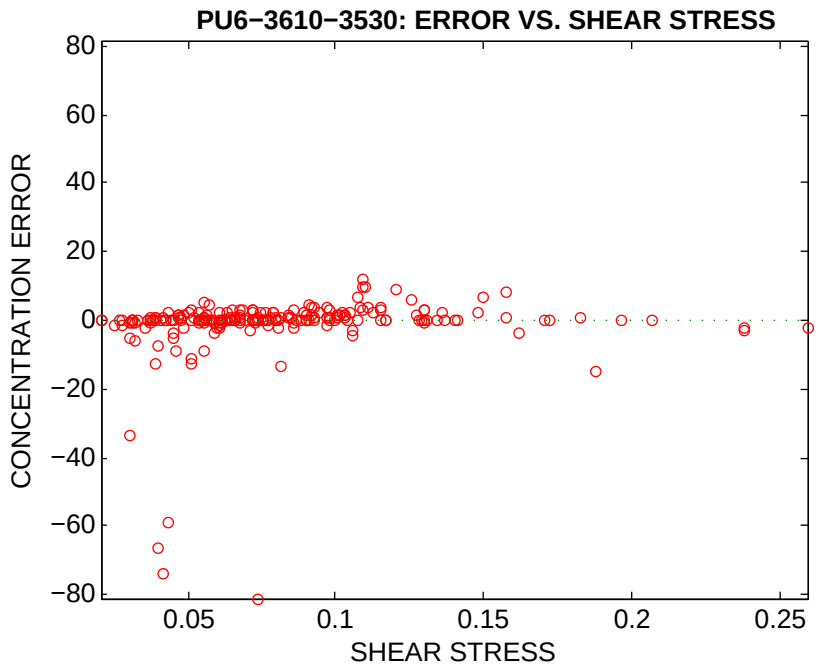


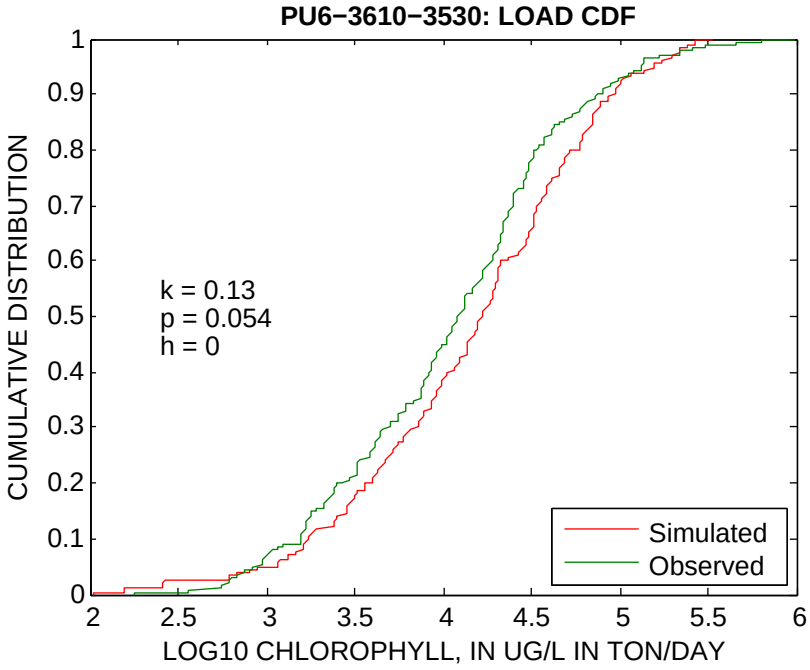


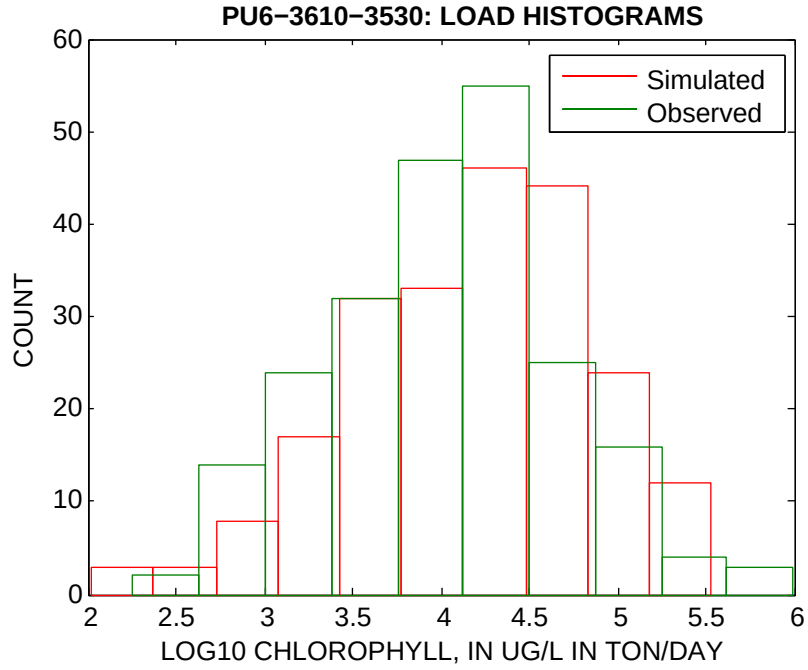


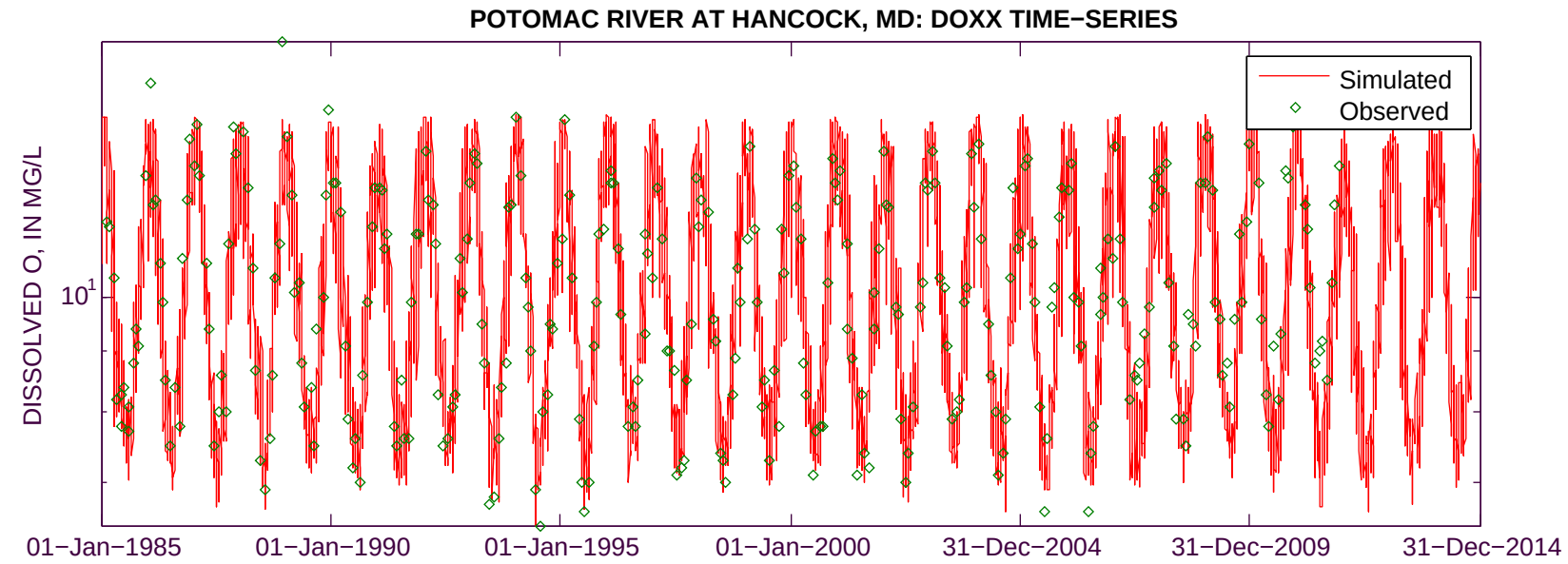
LOAD DATA
LOG10

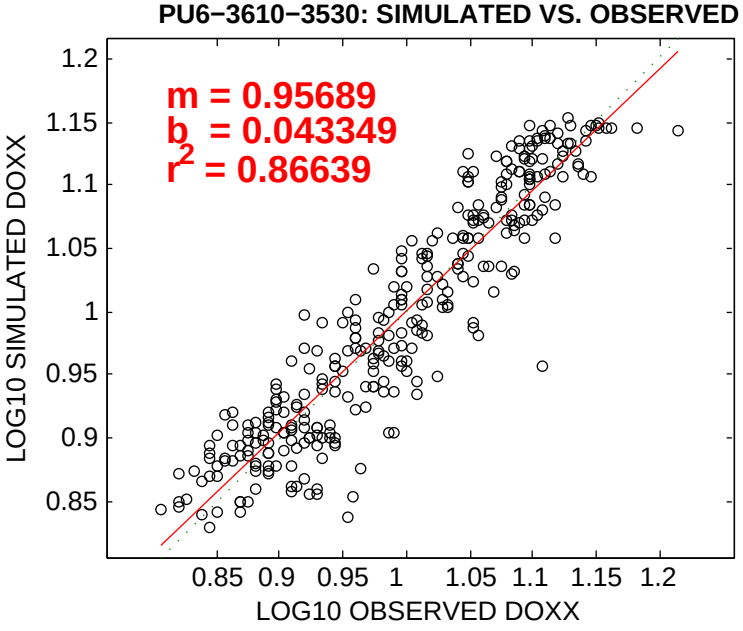


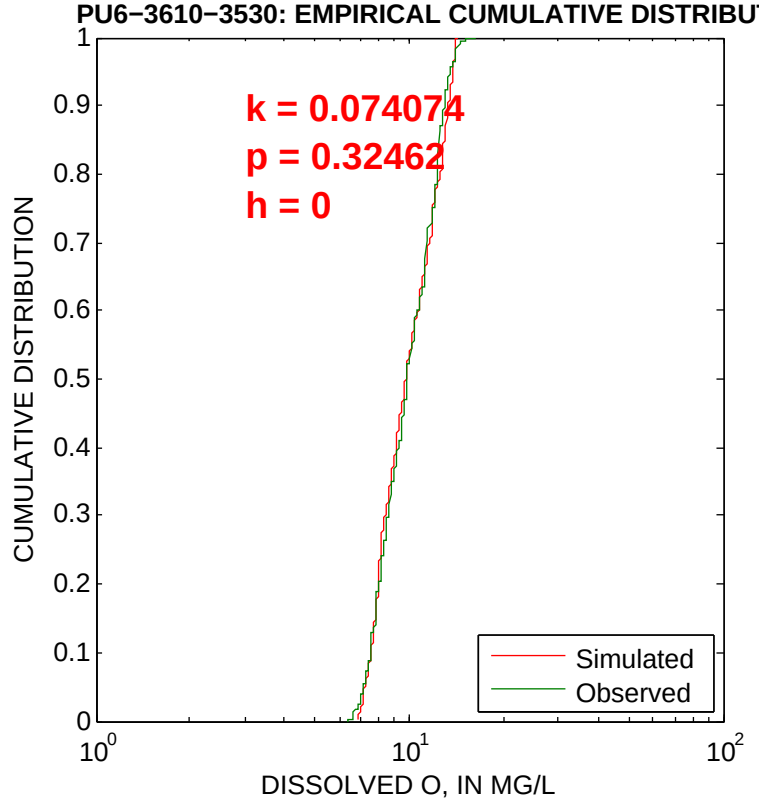












DATA SELECTION

scenario	file
P620171001WQ	DOXX.calib

plot: DOXX - dissolved oxygen

Dates: 1/1/1985 – 12/31/201

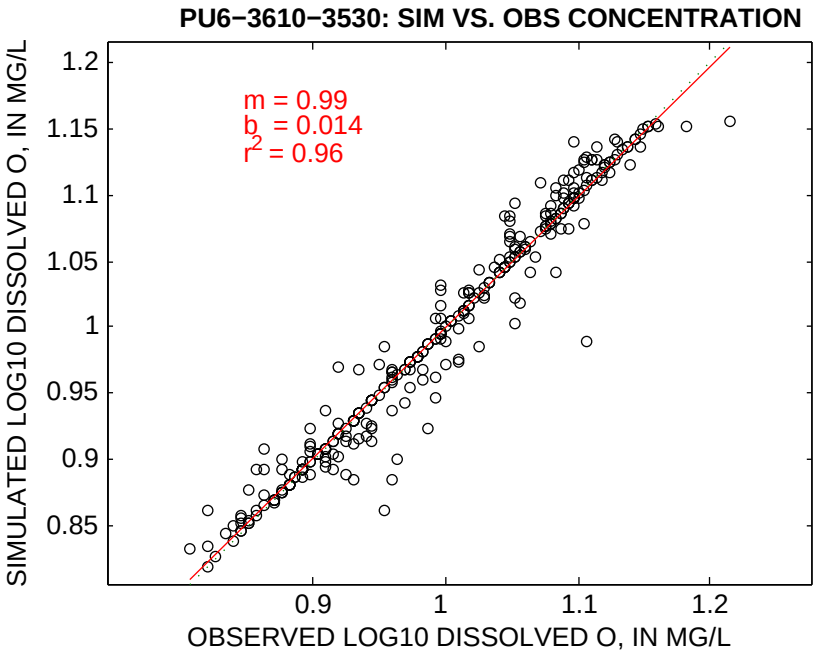
Drive	Directory	Observed
N/A	model	OBS20161101

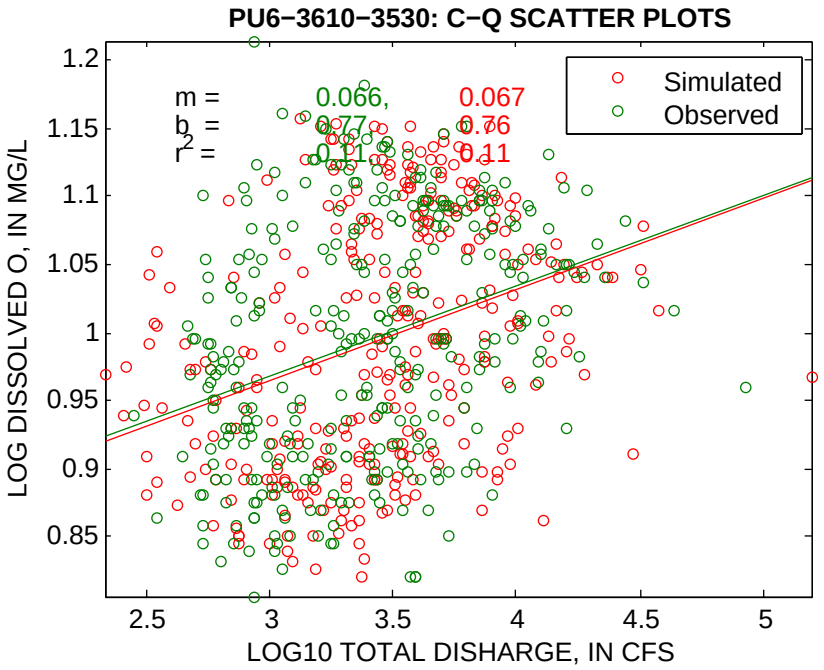
STATISTICS

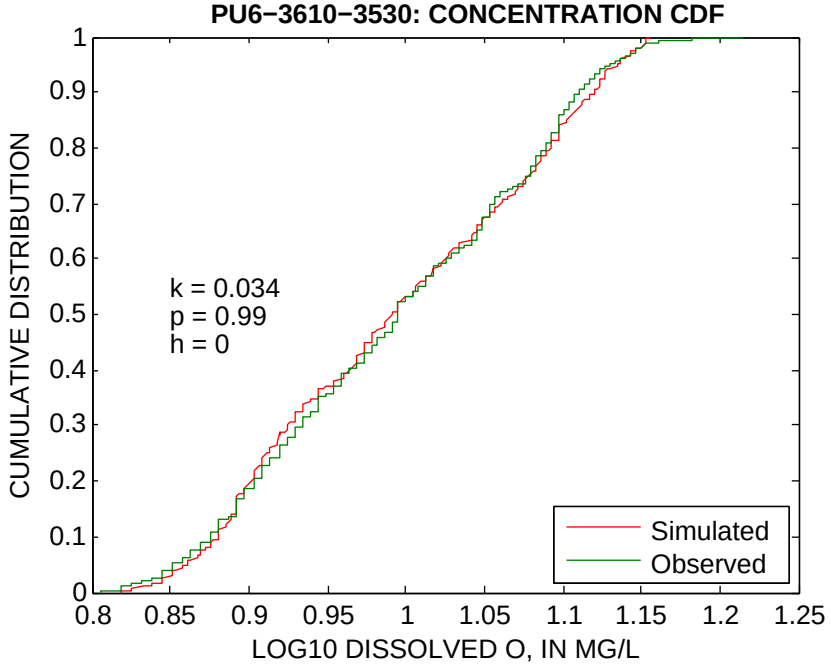
	n	observe	simulate
		324	324
min		6.4	6.7558
		0.80618	0.829677
mean		10.1048	10.1288
		0.995277	0.995721
media		9.9	9.763
		0.995635	0.989582
max		16.4	14.201
		1.21484	1.15232
varian		4.34521	4.68704
		0.00810228	0.00856291
JB		0.004495	0.001
		0.004335	0.001213
		ra	log
%		0.237966	0.0445424
err.va		0.616315	0.00115938
rel.std.err		0.141838	0.143093
mod.eff		0.858162	0.856907

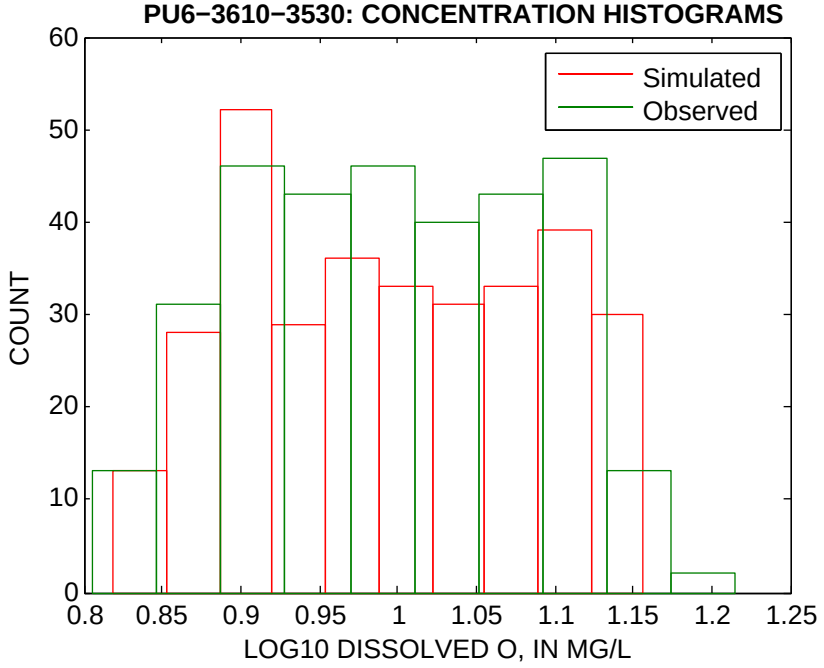
VERSION 2.1

ALL DATA
LOG10

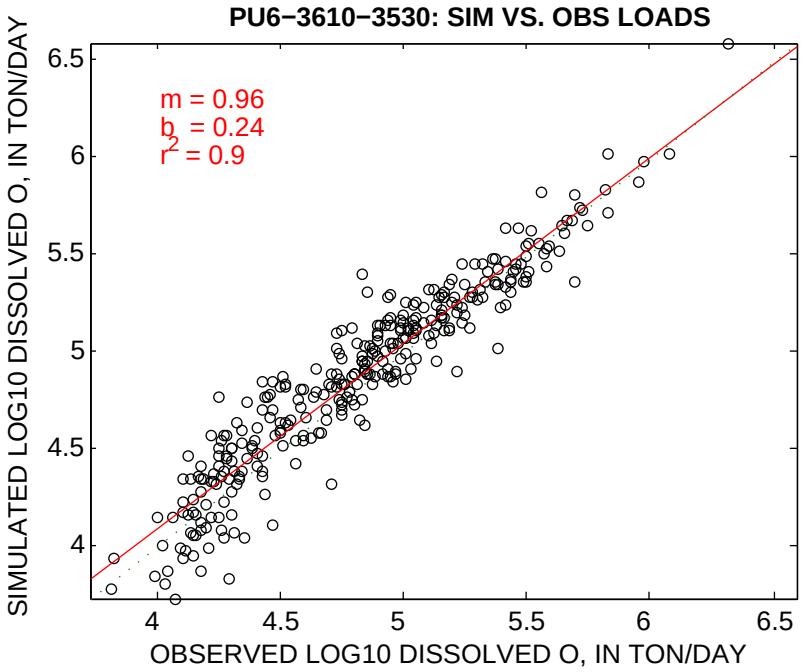


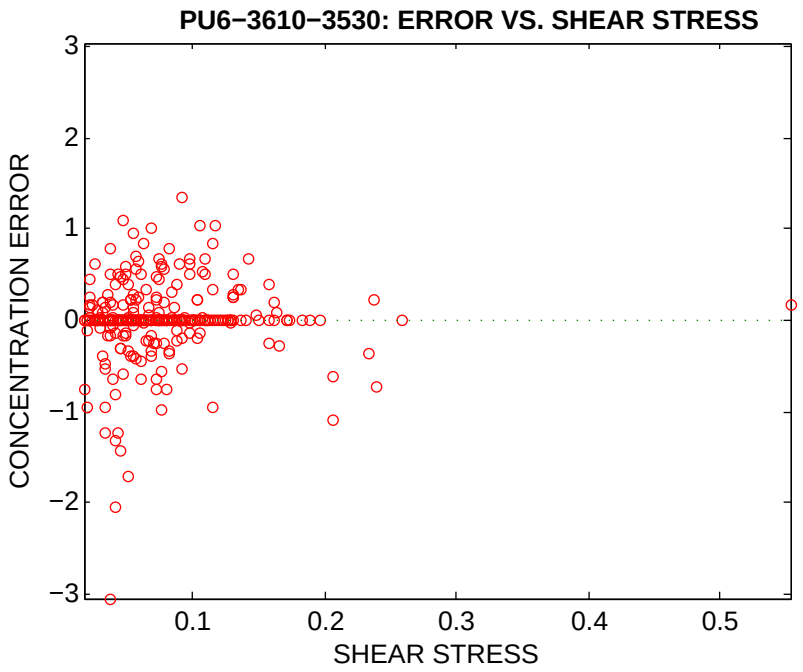


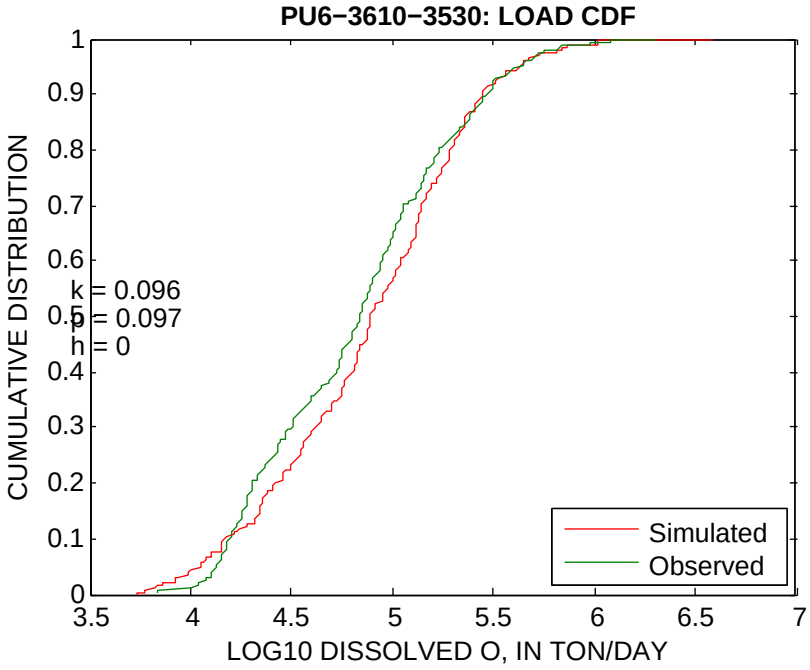


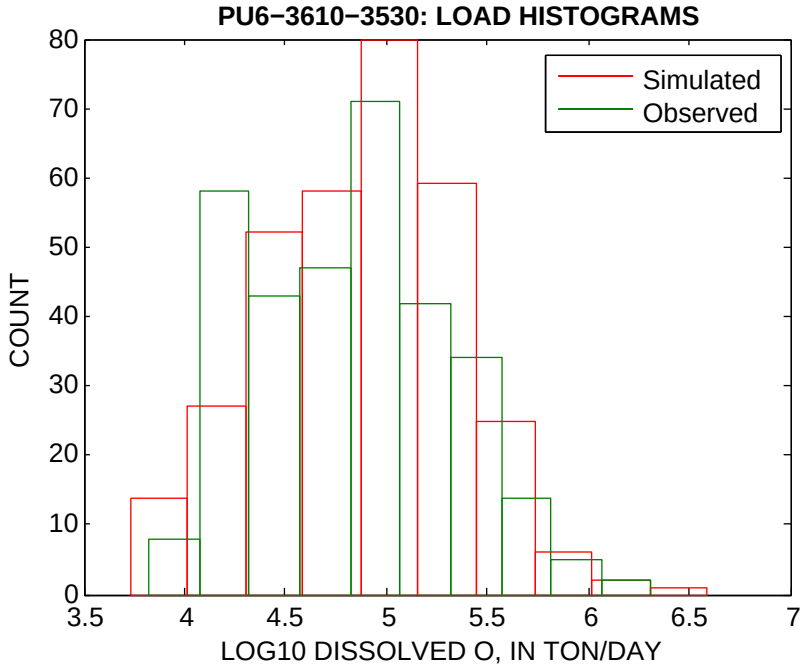


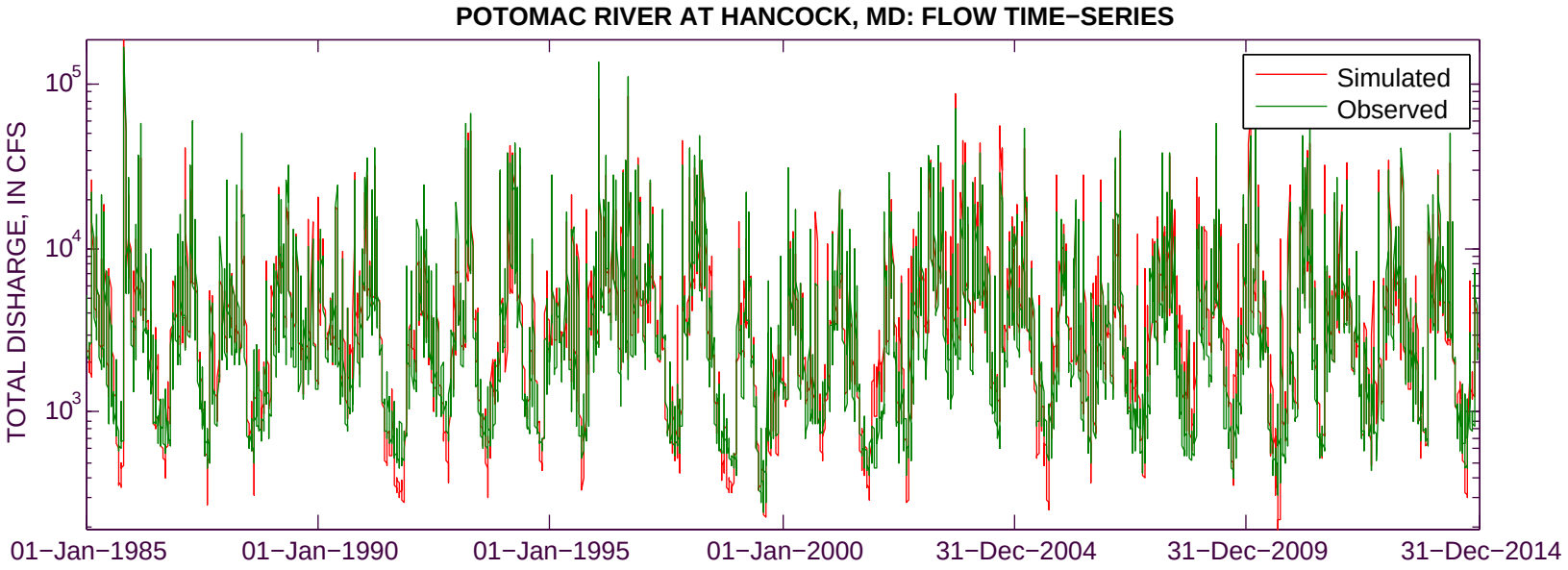
LOAD DATA
LOG10

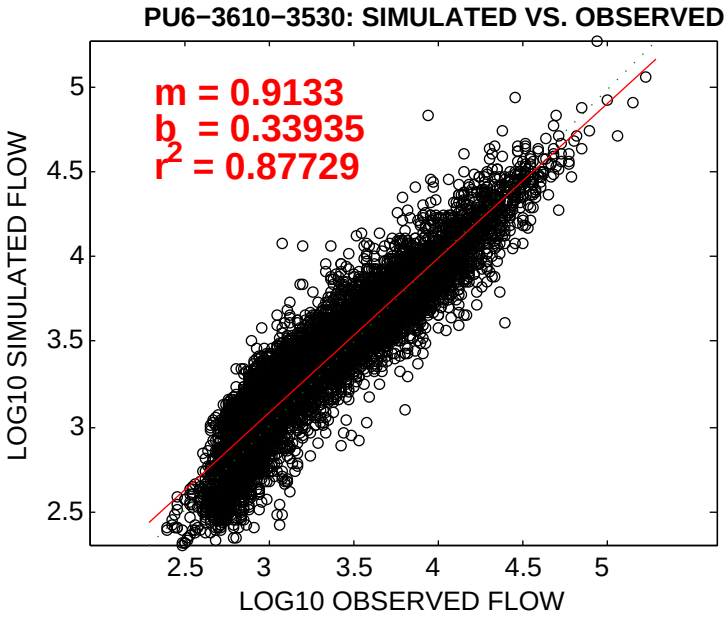


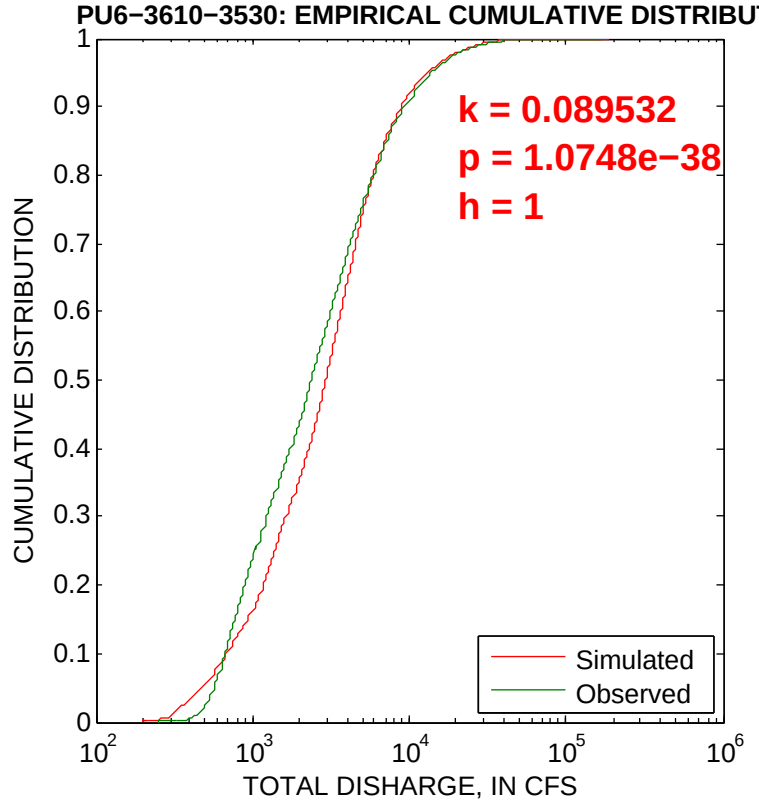












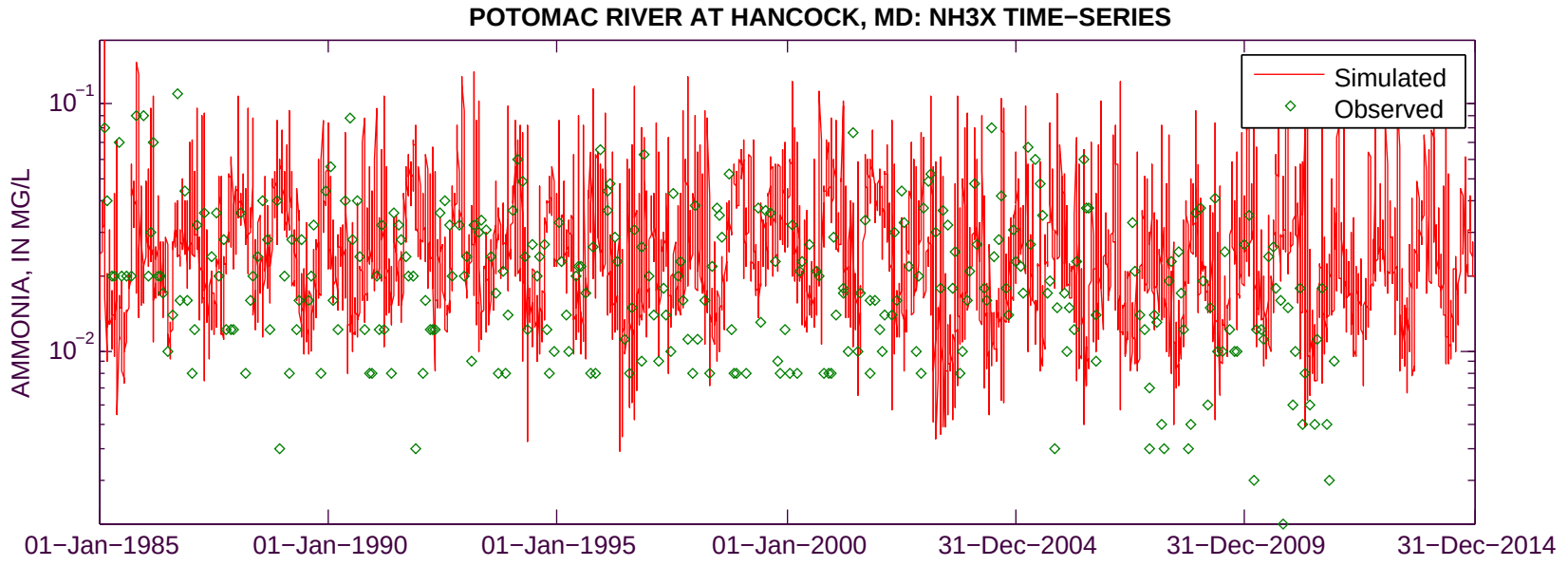
DATA SELECTION

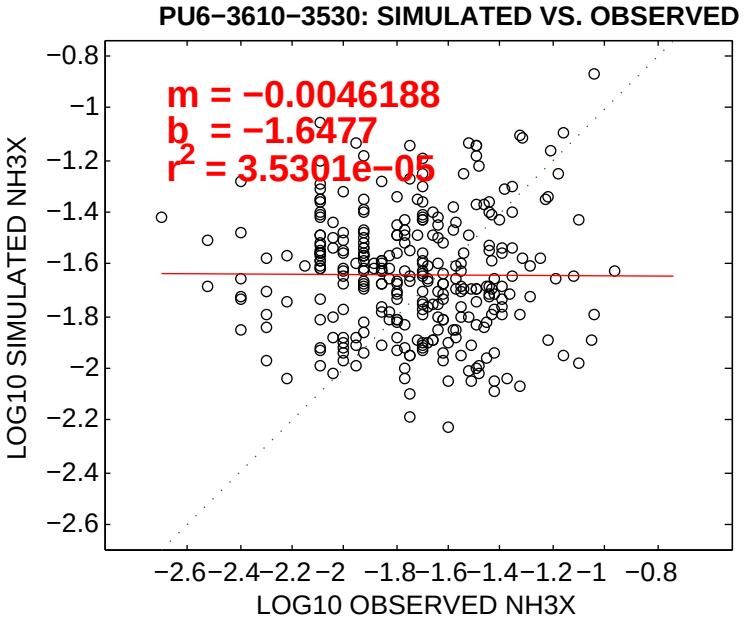
scenario: P620171001WQ
file: FLOW.calib
plot: FLOW - total discharge
Dates: 1/1/1985 12/31/201
Drive: N/A
Directory: model
Observed: OBS20161101

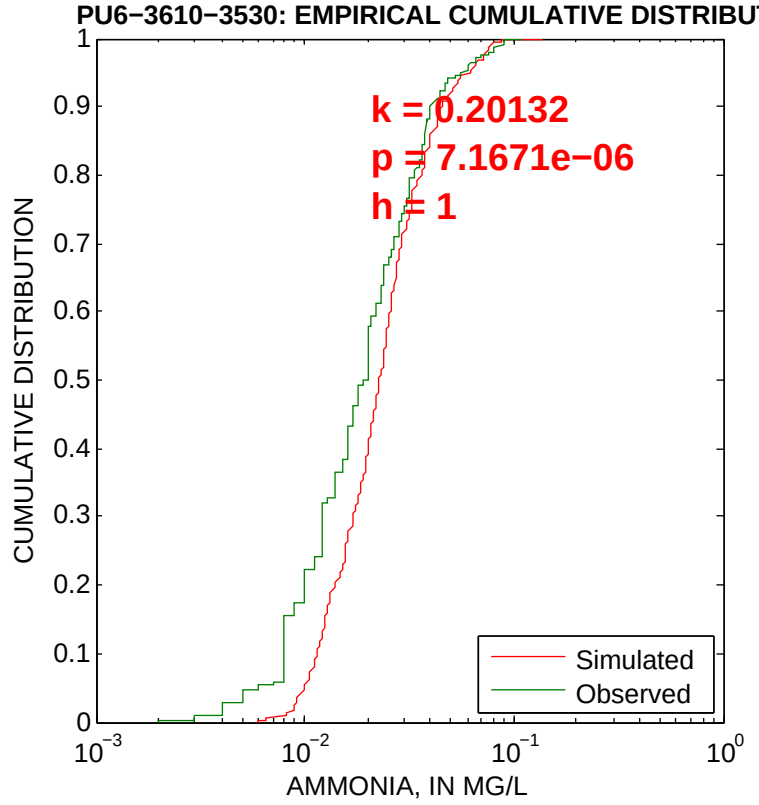
STATISTICS

	observe	simulate
n	10957	10957
min	250 2.39794	197.2 2.29491
mean	4234.46 3.38914	4382.35 3.43465
media	2380 3.37658	2934 3.46746
max	168000 5.22531	189620 5.27788
varian	3.75389e+0 0.191668	3.2753e+0 0.182236
JB	0.001 0.001	0.001 0.004814
	ra	log
%	3.49259	1.34285
err.va	7.61745e+0	0.0258746
rel.std.err	0.202922	0.134997
mod.eff	0.797078	0.865003

VERSION 2.1







DATA SELECTION

scenario: P620171001WQ; file: NH3X.calib

plot: NH3X - ammonia

Dates: 1/1/1985 – 12/31/201

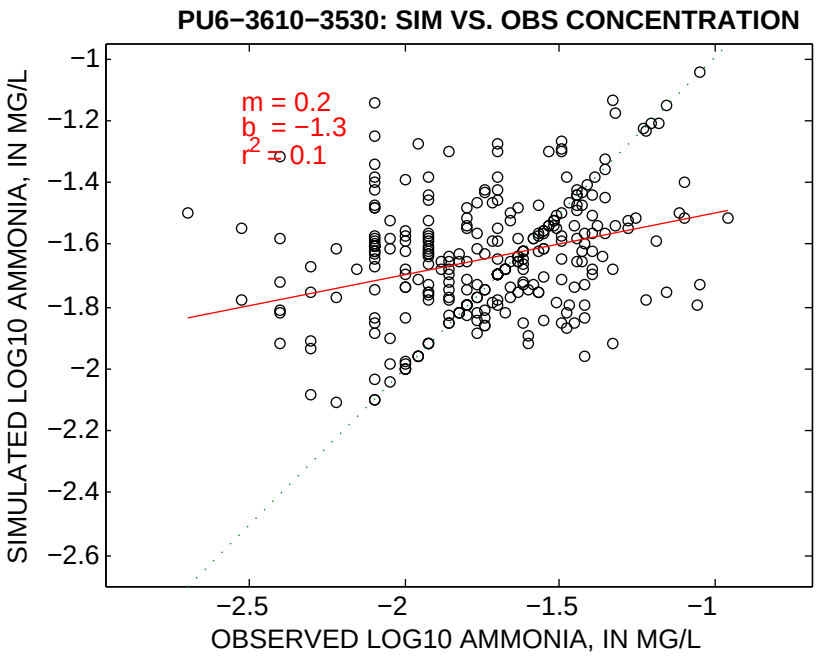
Drive: N/A; Directory: model; Observed: OBS20161101

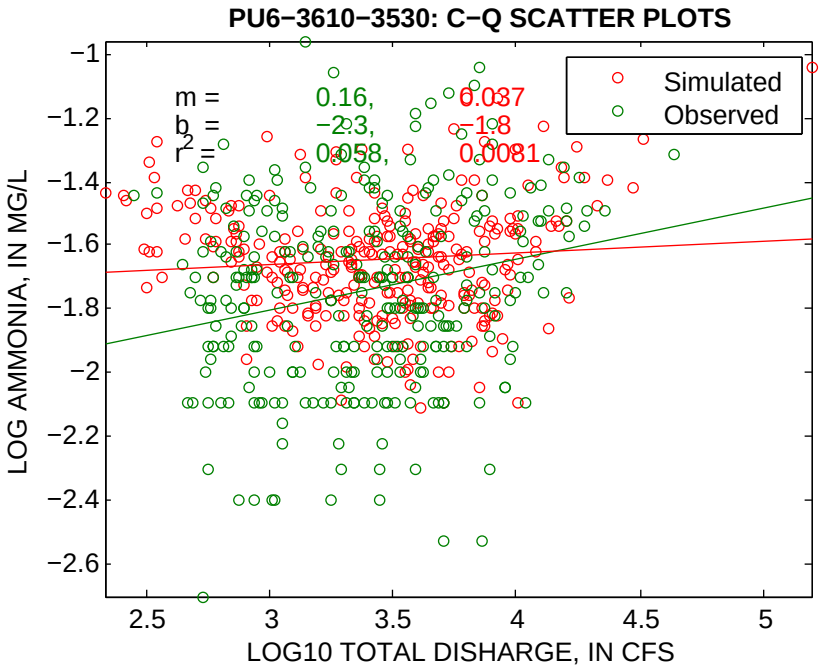
STATISTICS

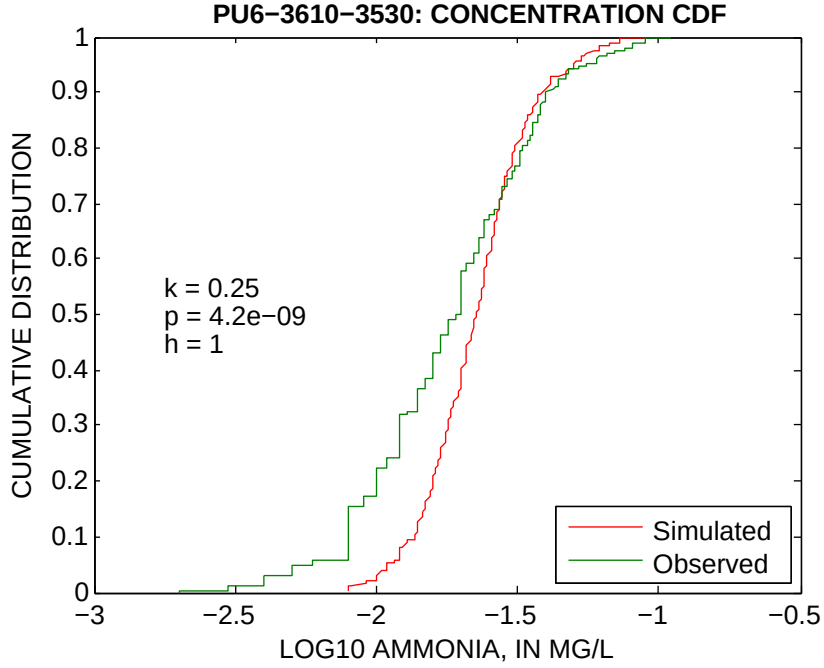
		observe	simulate
n		303	303
min		0.002	0.005912
		-2.69897	-2.22827
mean		0.0229175	0.0265763
		-1.73849	-1.63967
media		0.019	0.022695
		-1.72125	-1.64407
max		0.11	0.13541
		-0.958607	-0.868349
varian		0.00027534	0.00026185
		0.0887489	0.0536327
JB		0.001	0.001
	0.5		0.14785
	ra		log
%		15.965	-5.68428
err.va		0.00047679	0.152999
rel.std.err		1.73164	1.72396
mod.eff		-0.731639	-0.723957

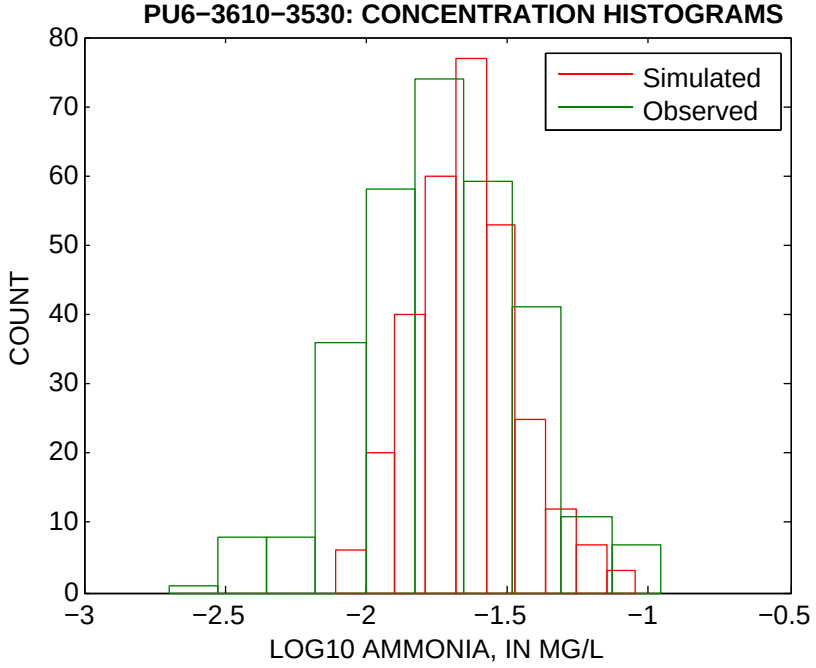
VERSION 2.1

ALL DATA
LOG10

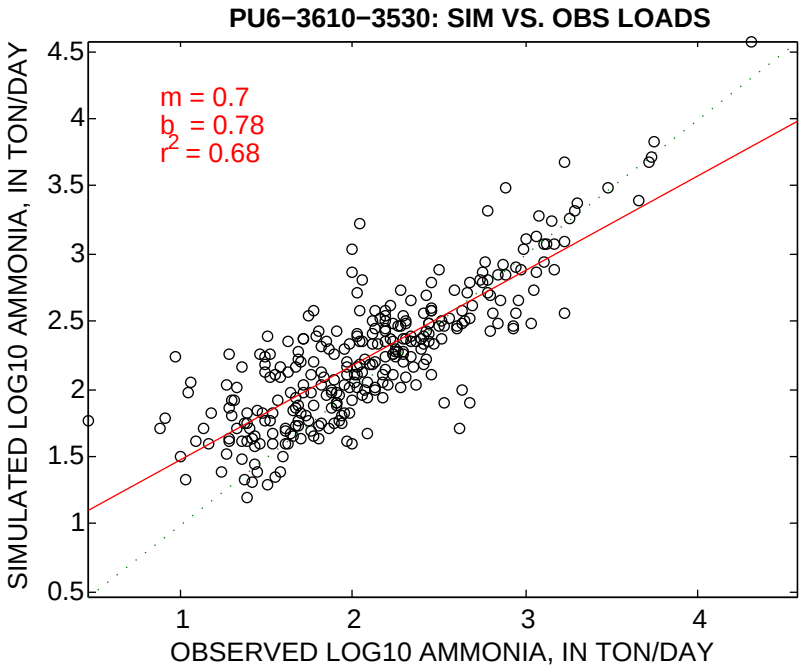


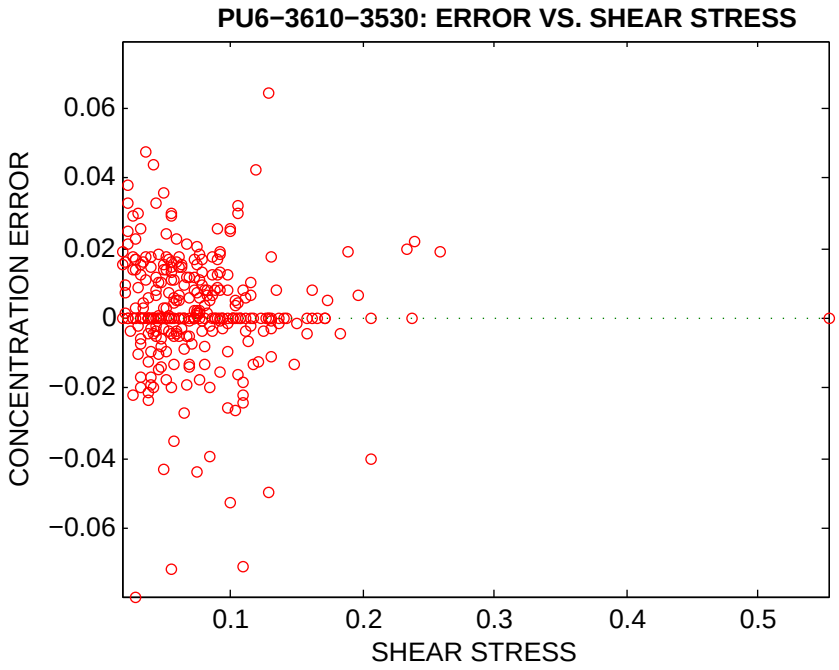


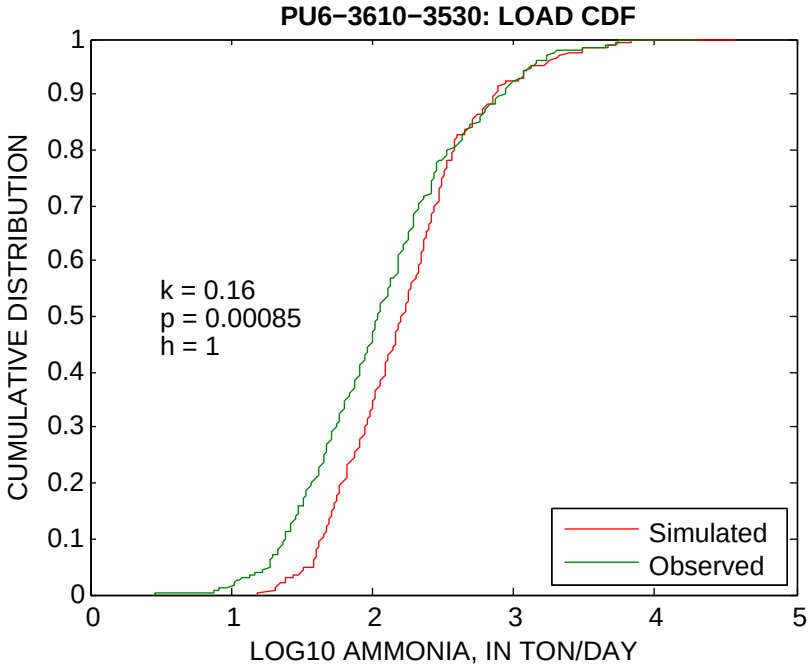


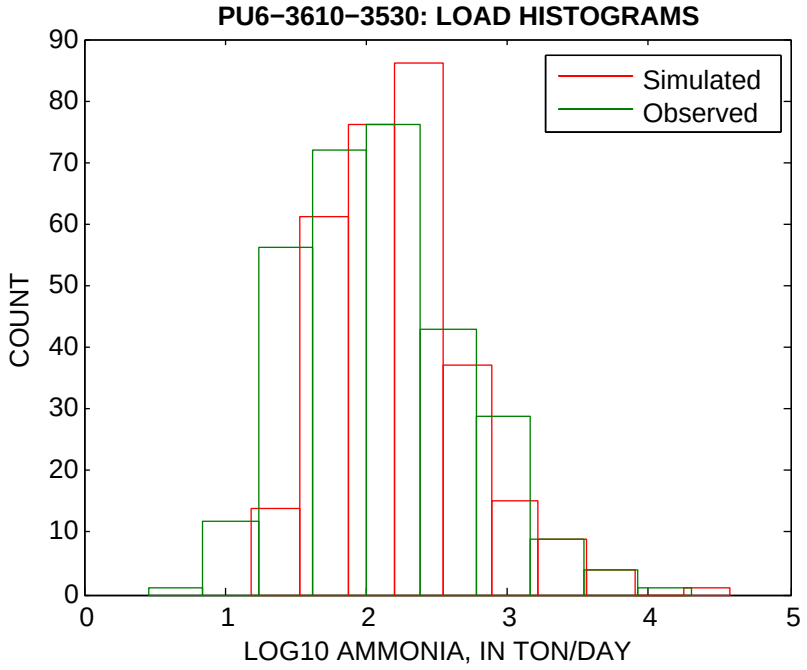


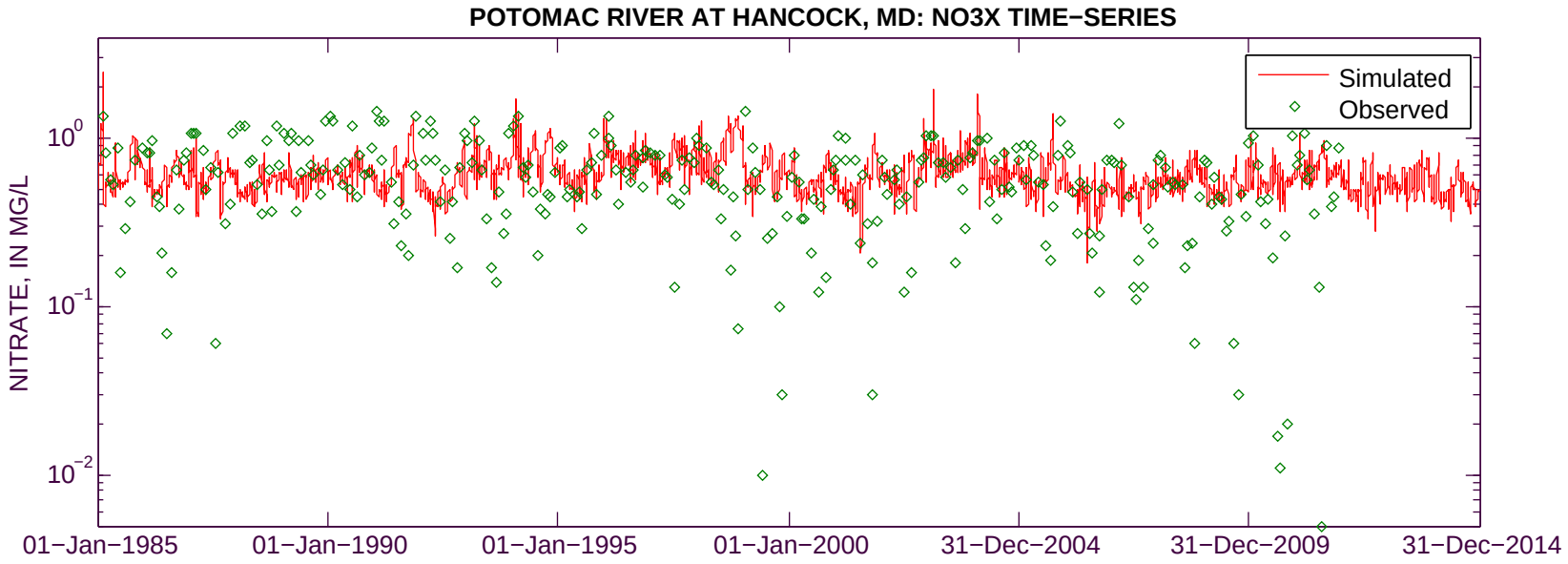
LOAD DATA
LOG10

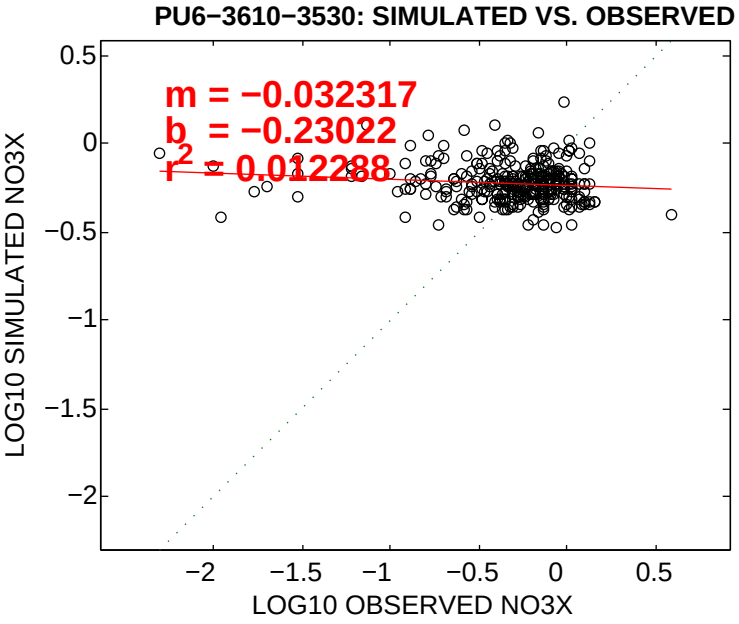


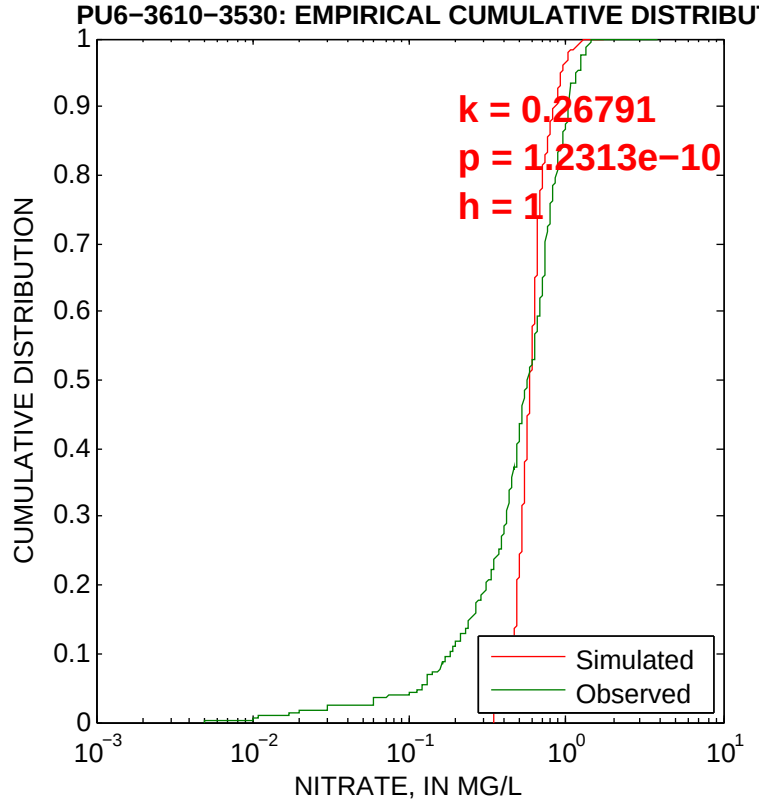












DATA SELECTION

scenario	file
P620171001WQ	NO3X.calib

plot: NO3X - nitrate

Dates: 1/1/1985 – 12/31/201

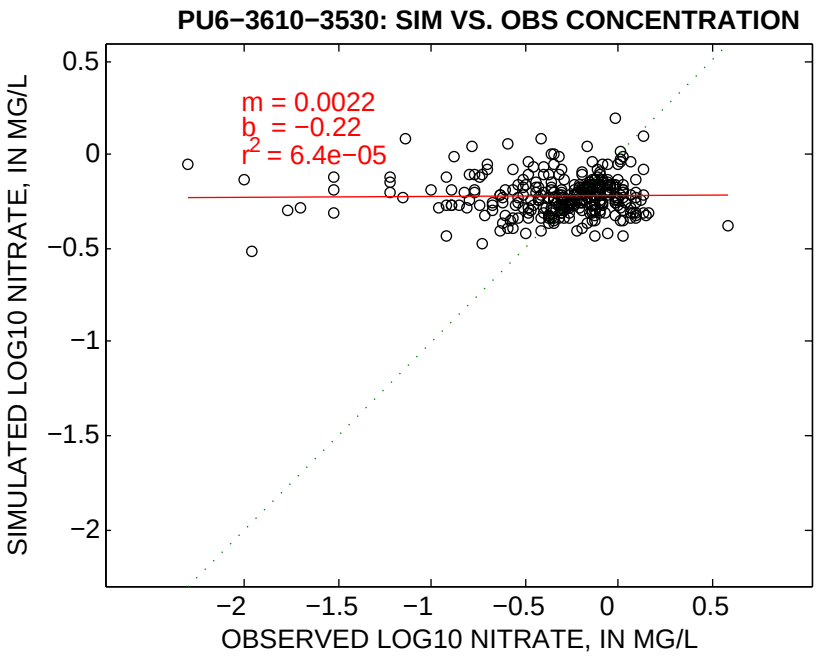
Drive Directory: N/A | Observed: model | OBS20161101

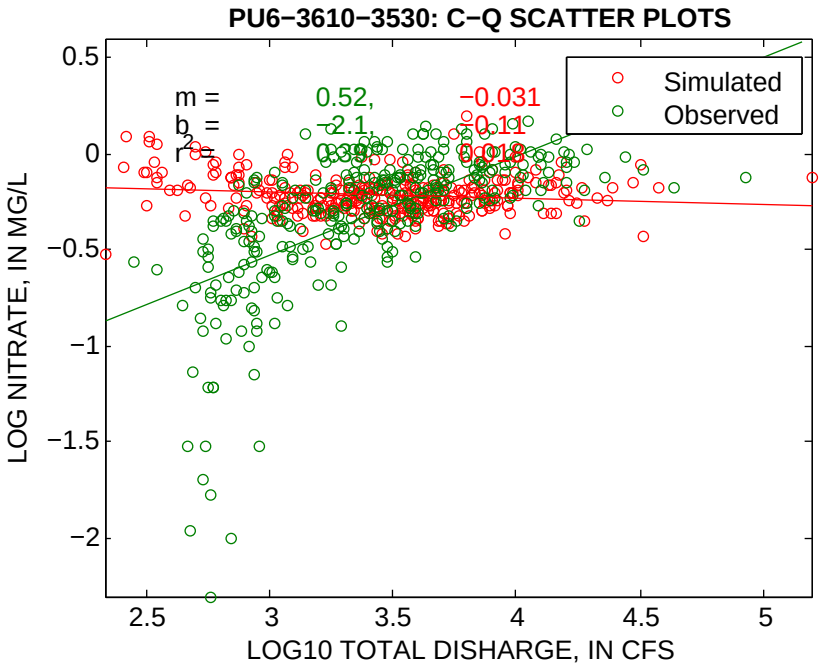
STATISTICS

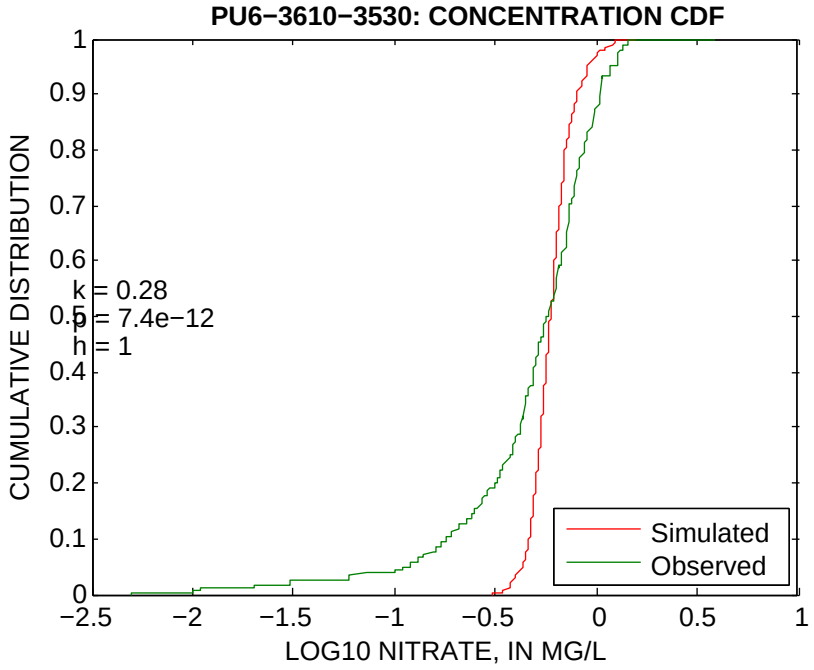
	n	321	321
		observe	simulate
min		0.005	0.34216
		-2.30103	-0.465771
mean		0.608299	0.621854
		-0.317519	-0.219957
media		0.58	0.59327
		-0.236572	-0.226748
max		3.86	1.7506
		0.586587	0.243187
varian		0.134376	0.0287899
		0.13195	0.0112145
JB		0.001	0.001
		0.001	0.001
		ra	log
%		2.22826	-30.7264
err.va		0.175935	0.161241
rel.std.err		1.30928	1.22199
mod.eff		-0.309281	-0.221986

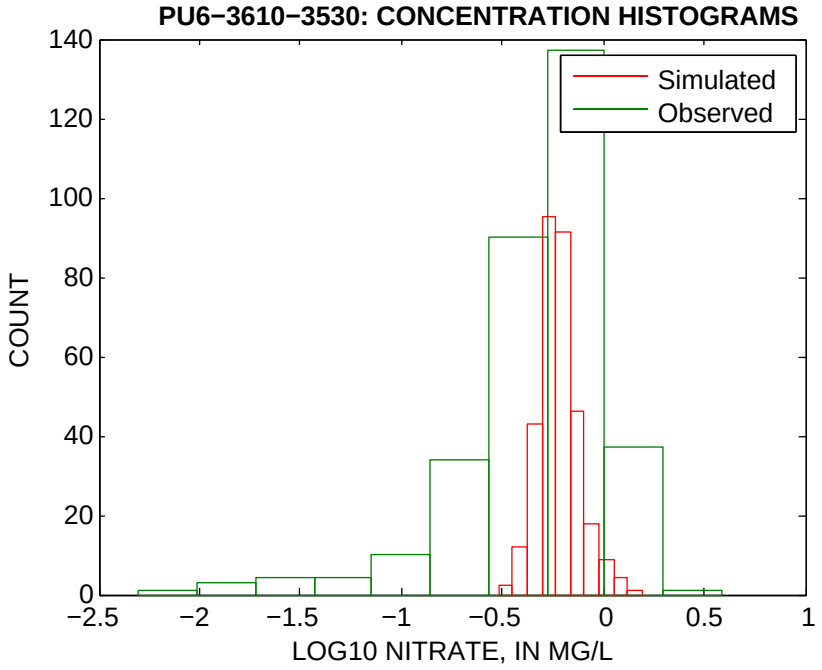
VERSION 2.1

ALL DATA
LOG10

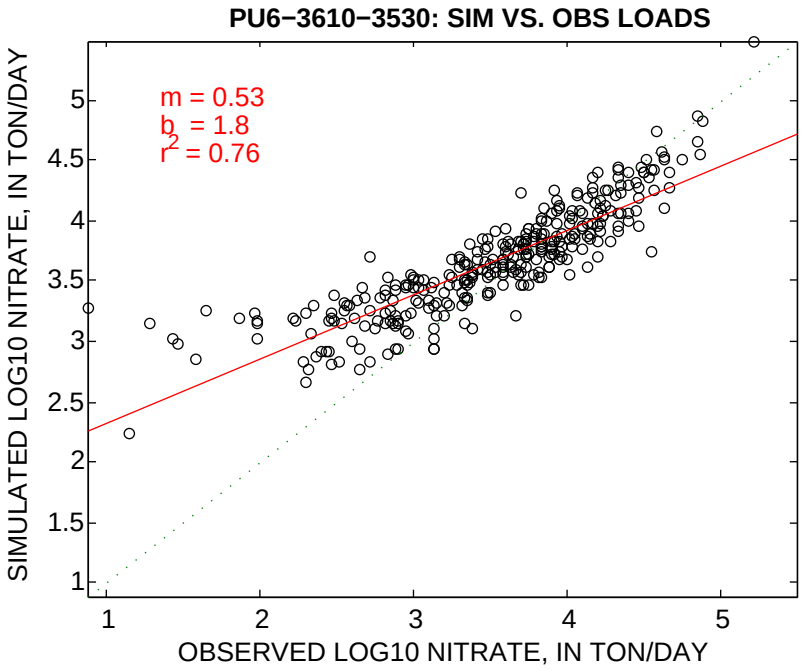


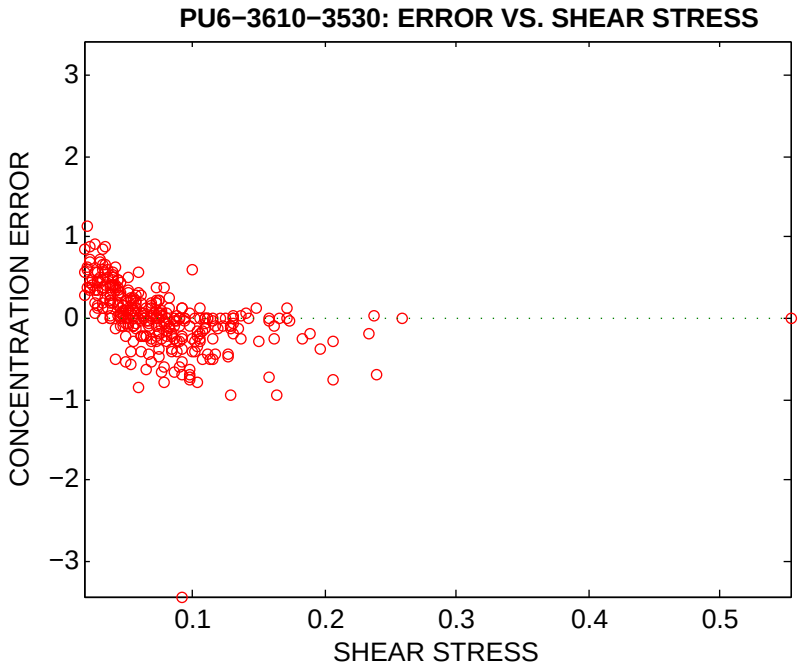


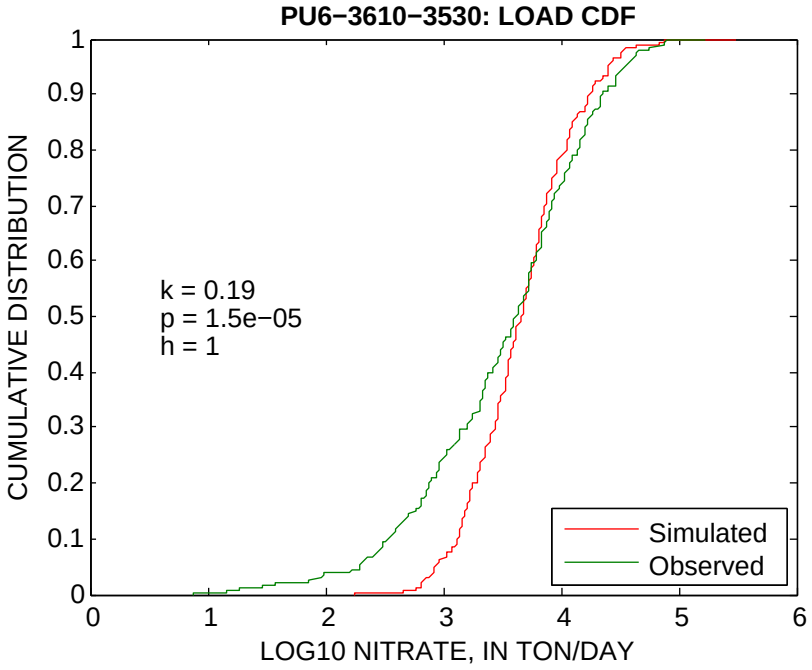


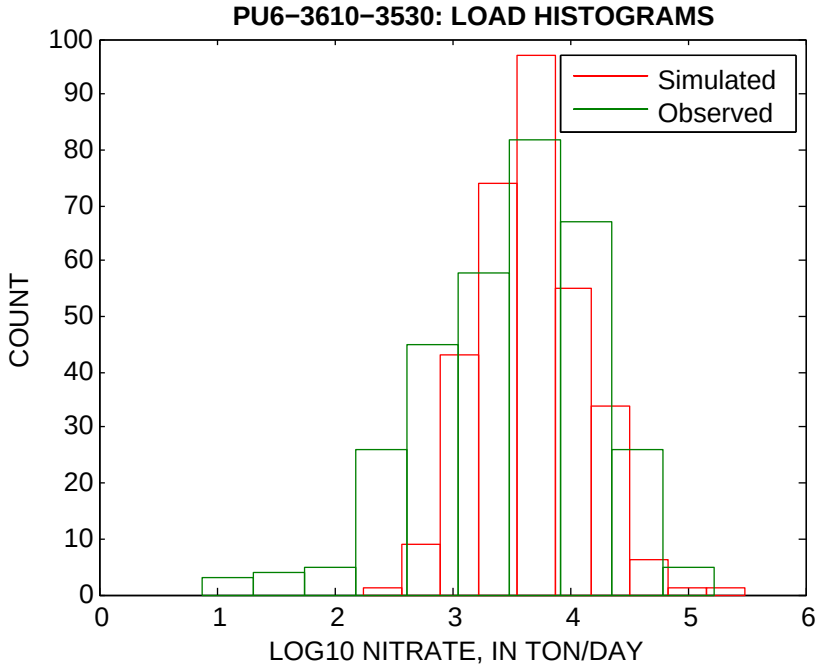


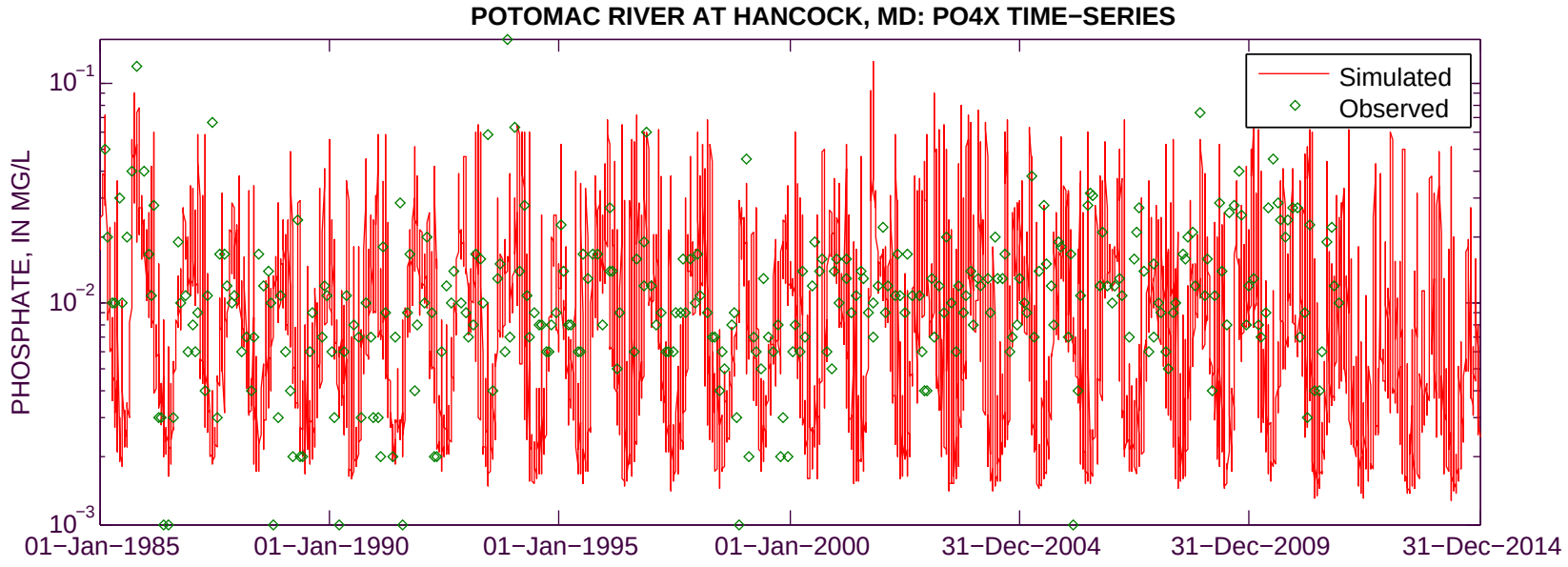
LOAD DATA
LOG10

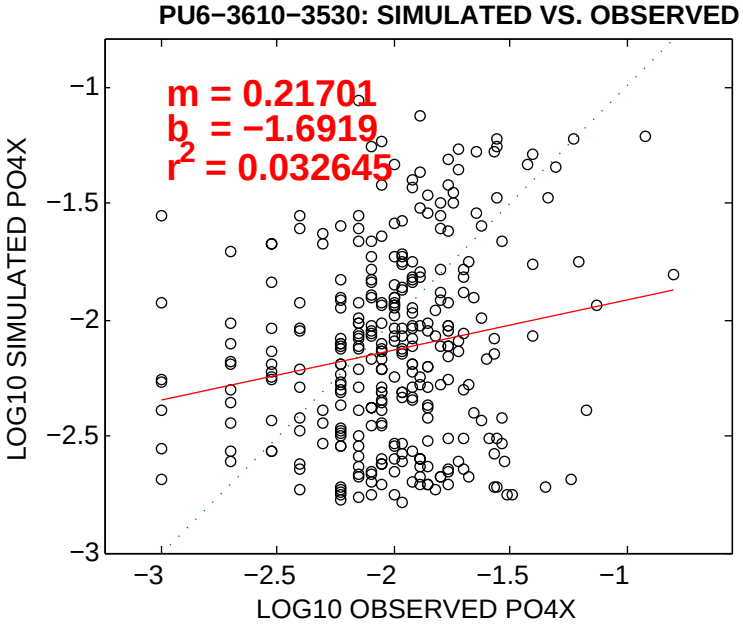


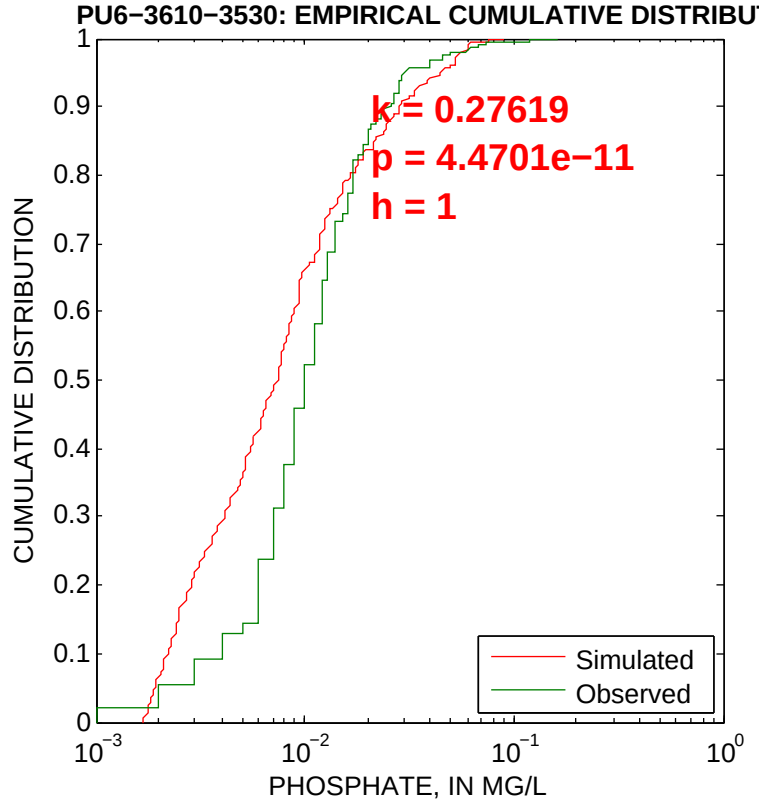












DATA SELECTION

scenario: P620171001WQ | file: PO4X.calib

plot: PO4X - phosphate

Dates: 1/1/1985 – 12/31/201

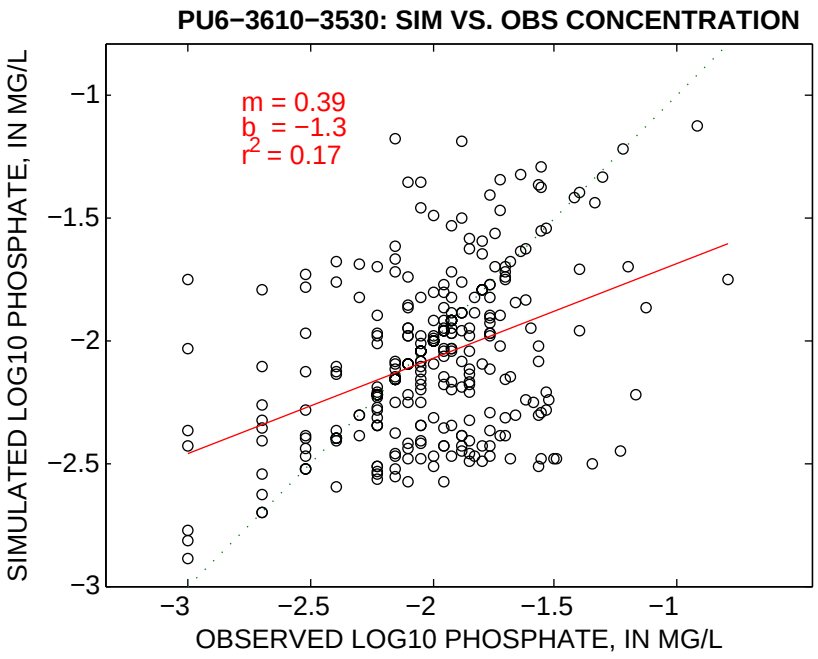
Drive: N/A | Directory: model | Observed: OBS20161101

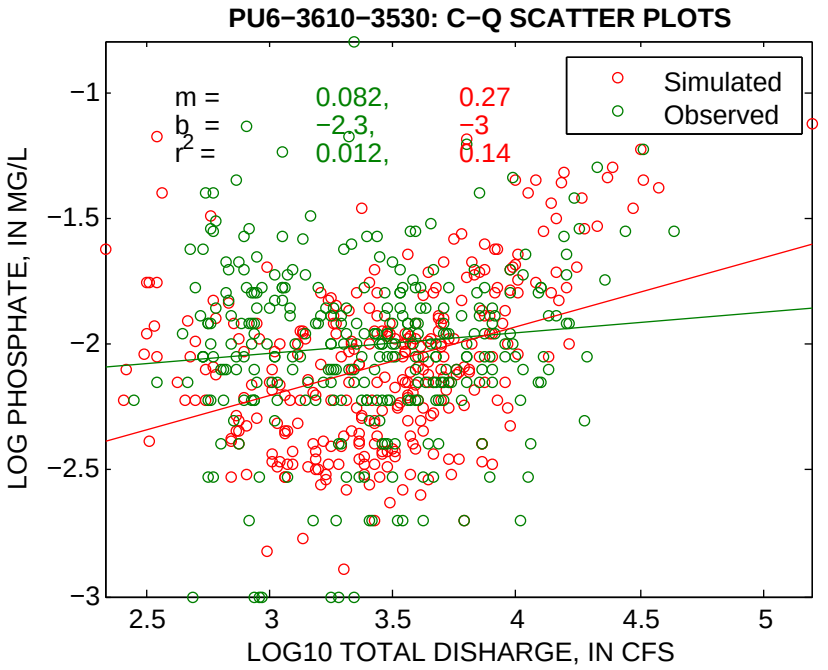
STATISTICS

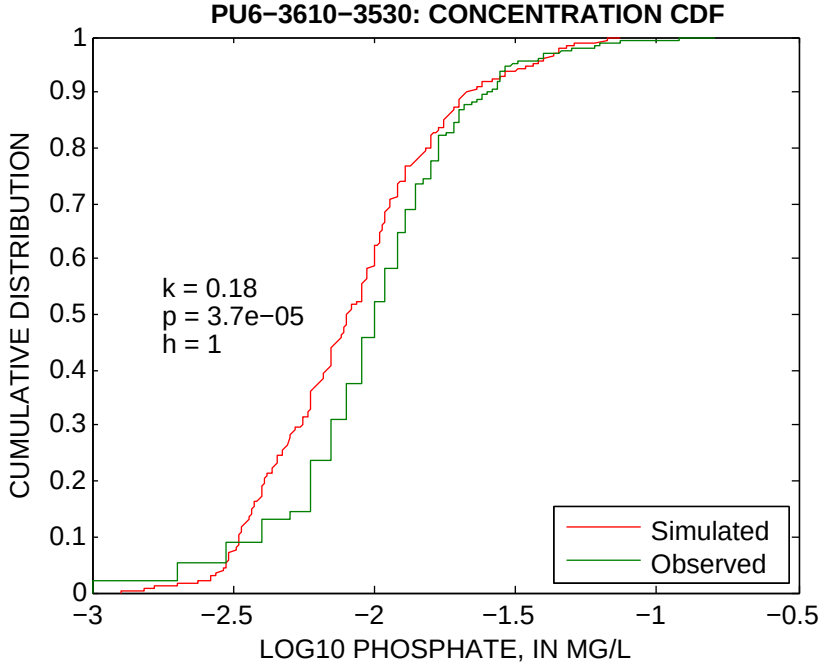
	n	315	315
		observe	simulate
min		0.001	0.0016638
		-3	-2.7789
mean		0.0134984	0.0119442
		-2.00468	-2.12696
media		0.01	0.0073617
		-2	-2.13302
max		0.161	0.088682
		-0.793174	-1.05216
varian		0.00021373	0.00018691
		0.115776	0.167013
JB		0.001	0.001
		0.001	0.007242
		ra	log
%		-11.5139	6.0995
err.va		0.00030175	0.24754
rel.std.err		1.41182	2.13809
mod.eff		-0.411818	-1.13809

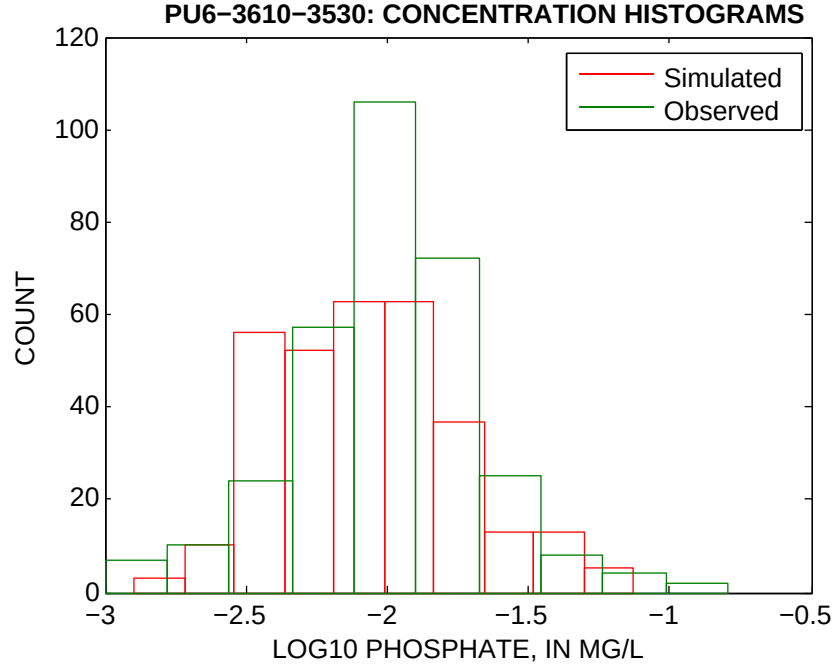
VERSION 2.1

ALL DATA
LOG10

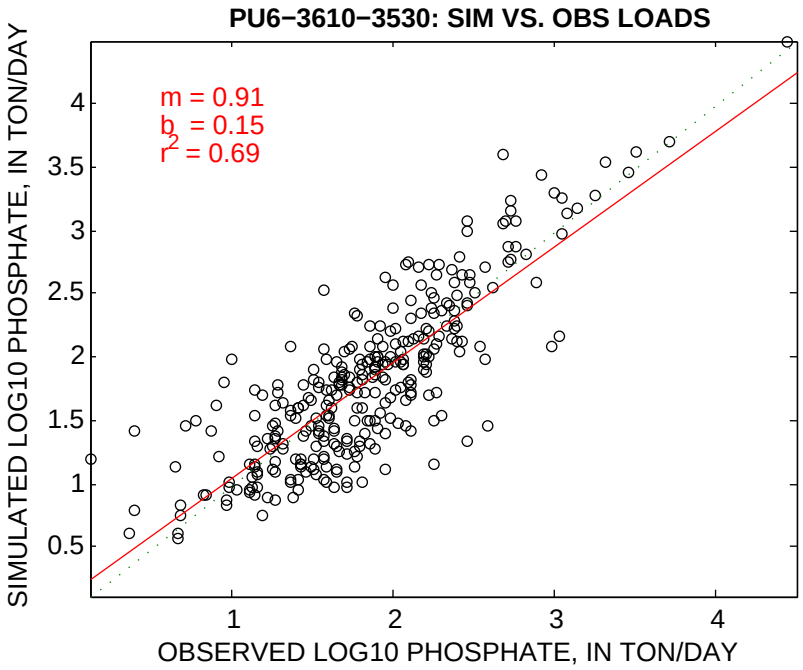


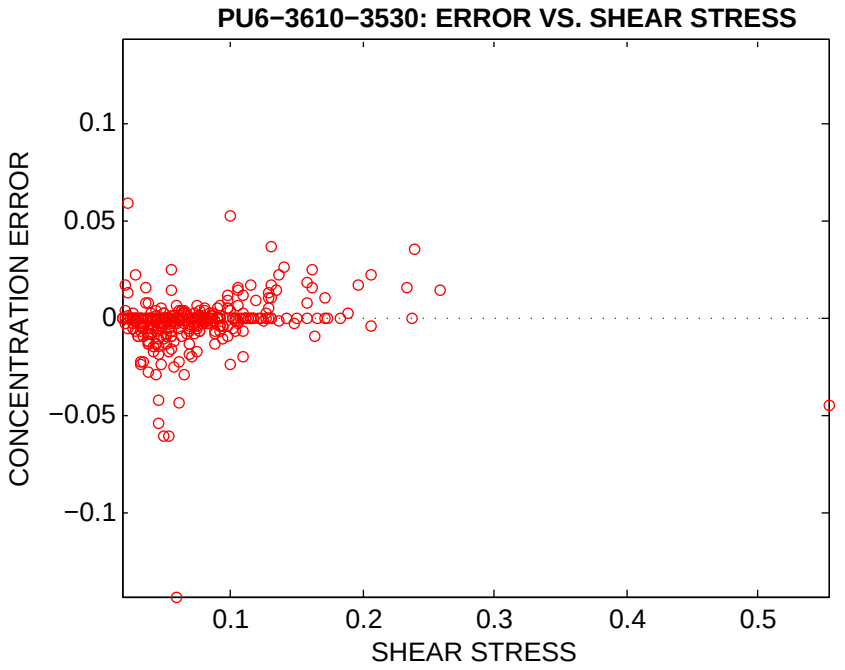


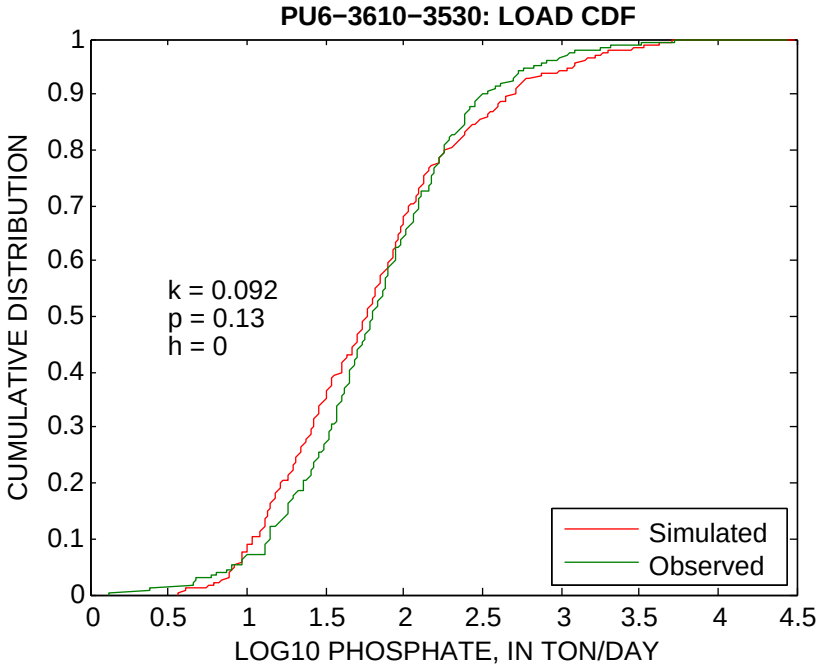


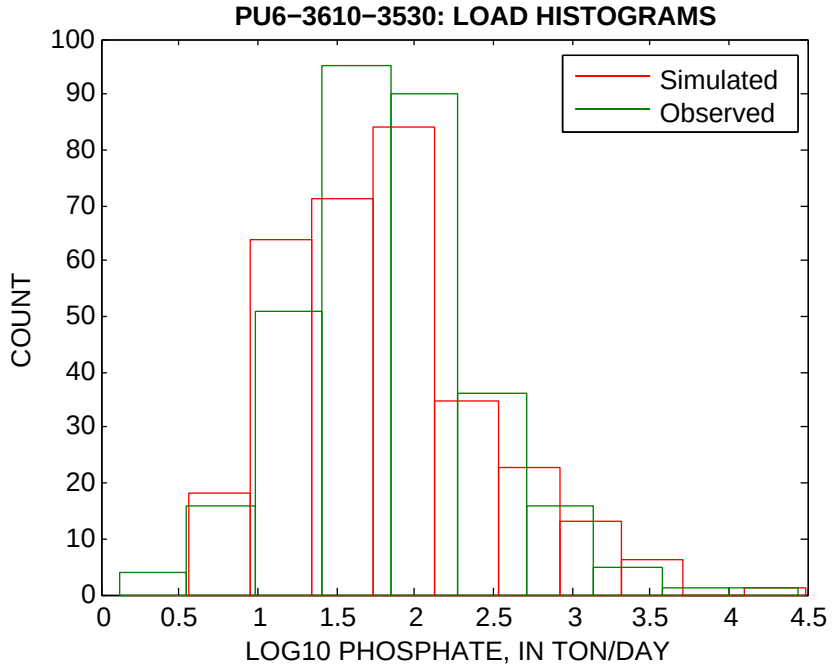


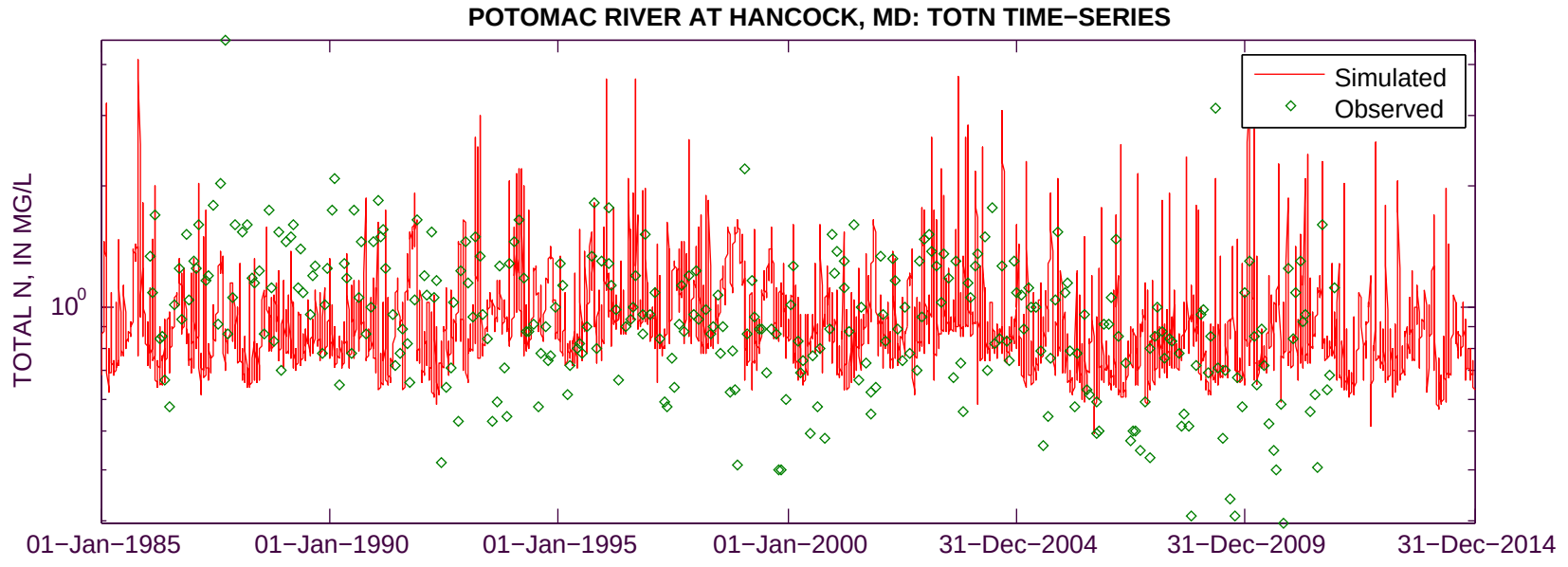
LOAD DATA
LOG10

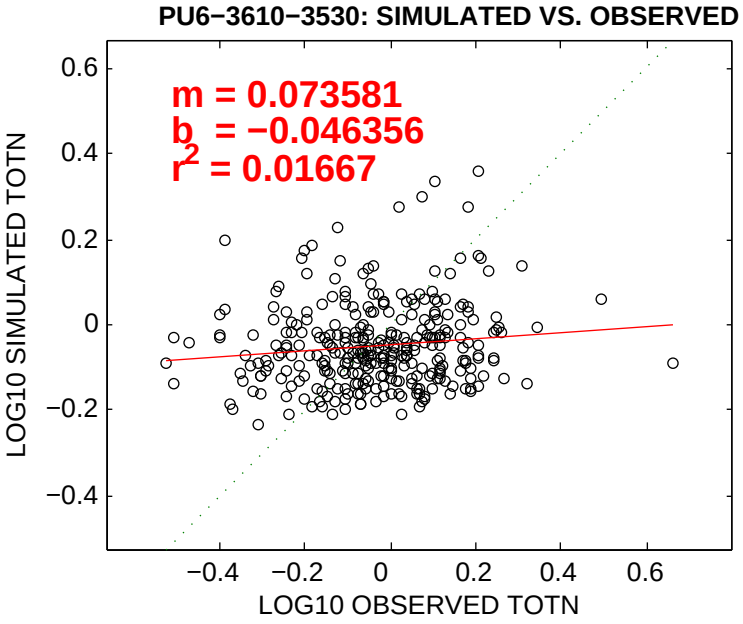


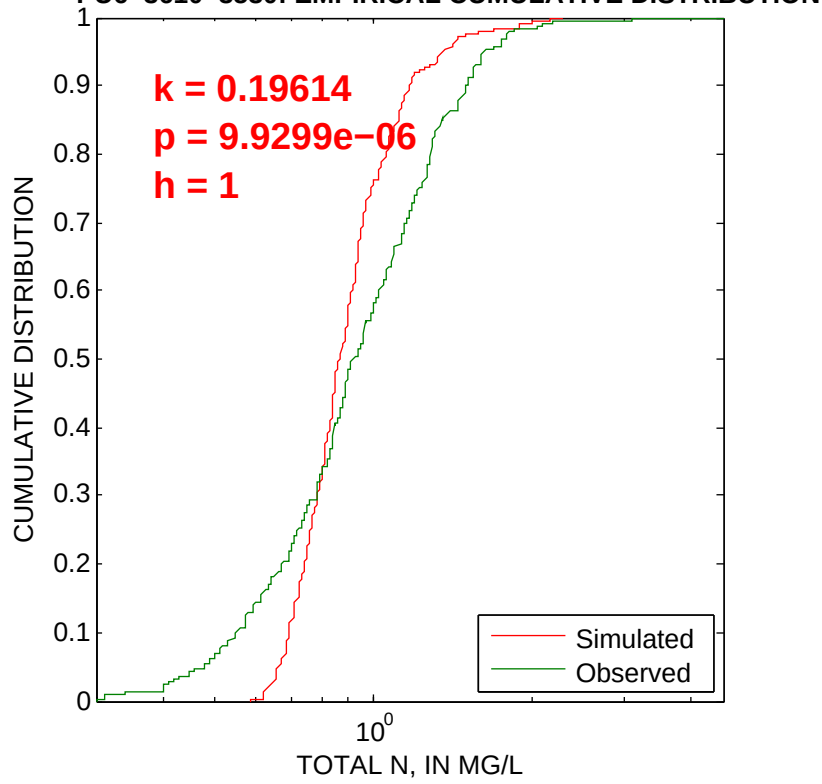












DATA SELECTION

scenario: P620171001WQ | file: TOTN.calib

plot: TOTN - total nitrogen

Dates: 1/1/1985 – 12/31/201

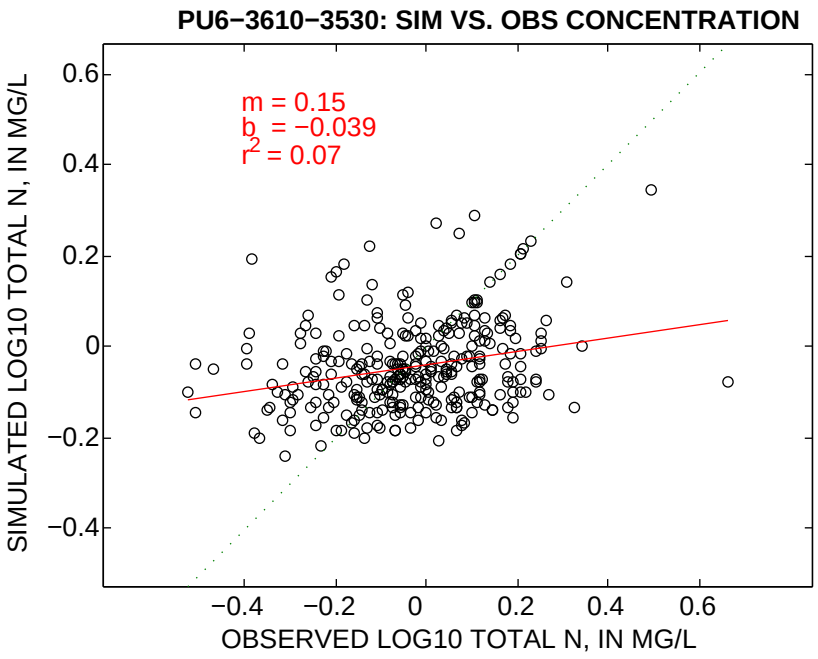
Drive: N/A | Directory: model | Observed: OBS20161101

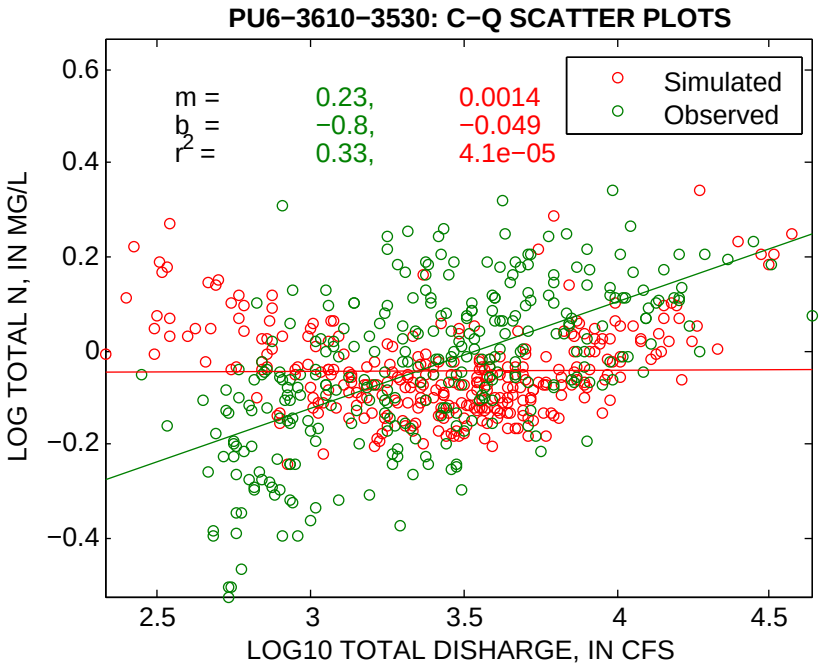
STATISTICS

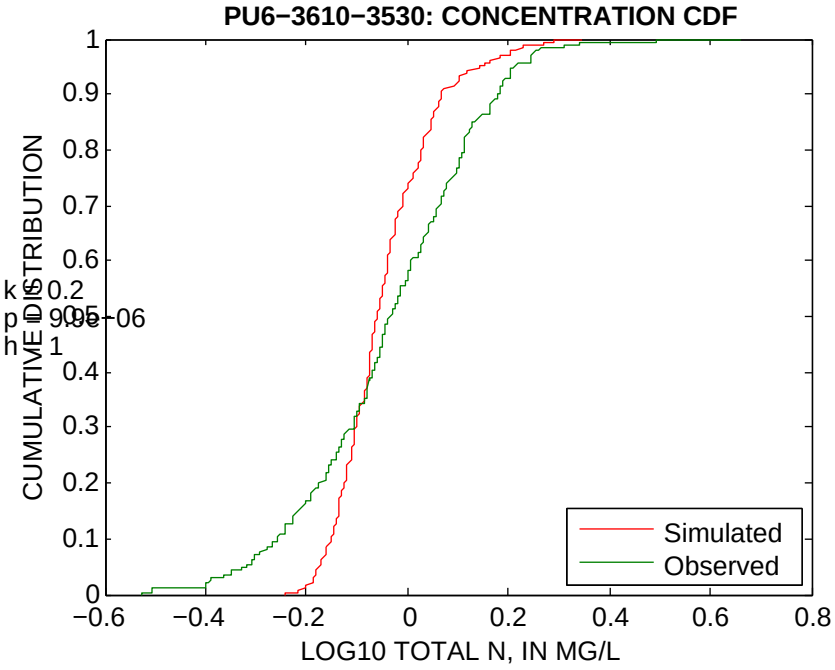
n	311	311
	observe	simulate
min	0.298	0.58568
	-0.525784	-0.23234
mean	0.999907	0.918532
	-0.0338565	-0.0488471
media	0.92	0.86314
	-0.0362122	-0.0639188
max	4.6	2.2956
	0.662758	0.360896
varian	0.183149	0.0578911
	0.0293392	0.00952908
JB	0.001	0.001
	0.066114	0.001
	ra	log
%	-8.13832	44.2769
err.va	0.222809	0.0347761
rel.std.err	1.21655	1.18531
mod.eff	-0.216547	-0.185312

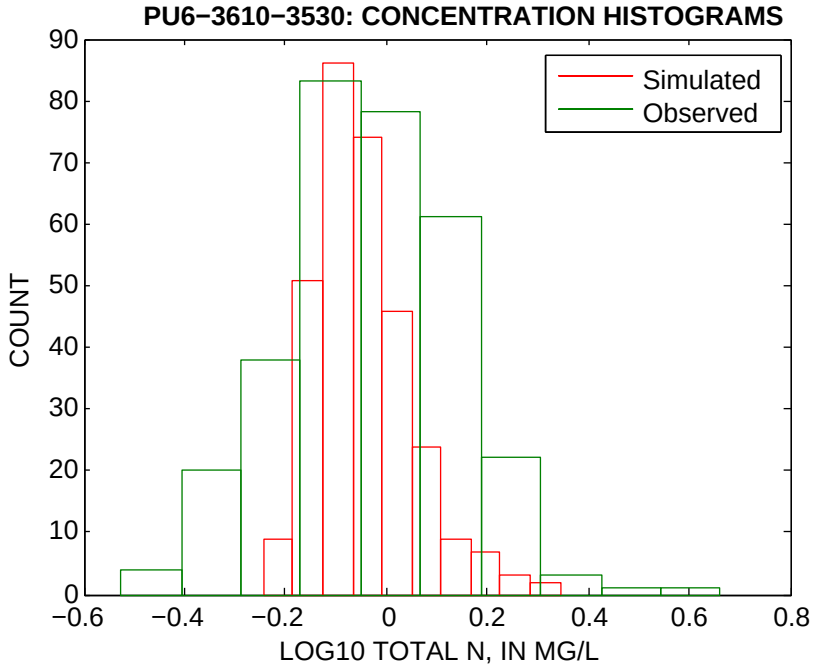
VERSION 2.1

ALL DATA
LOG10

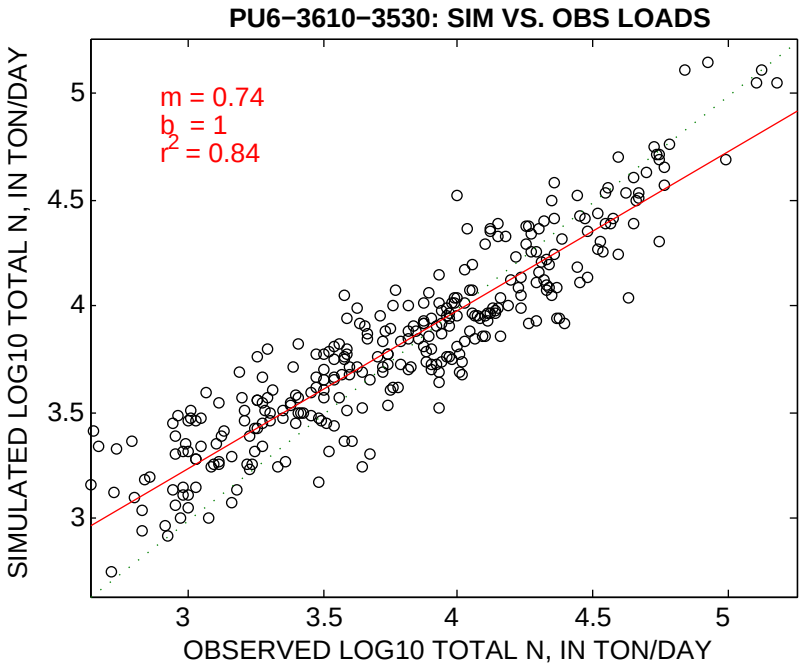


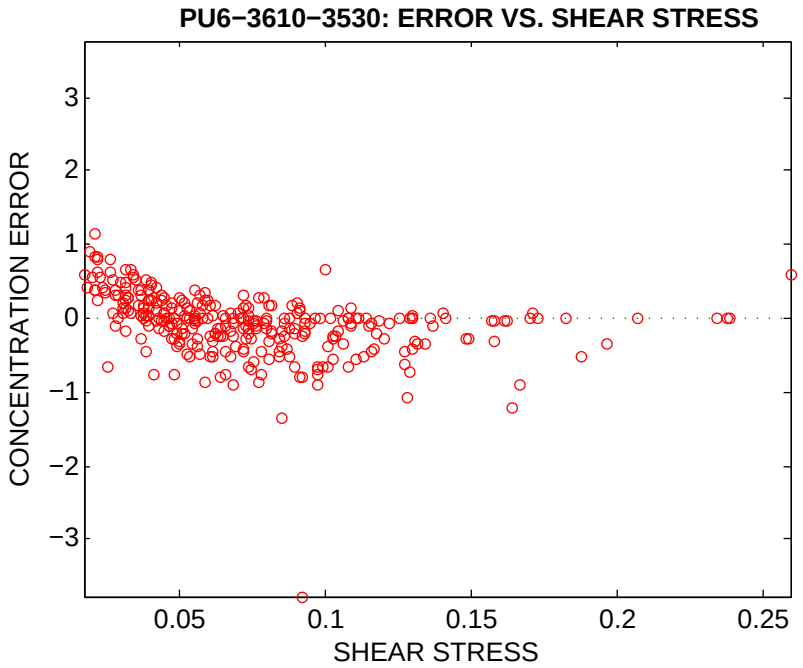


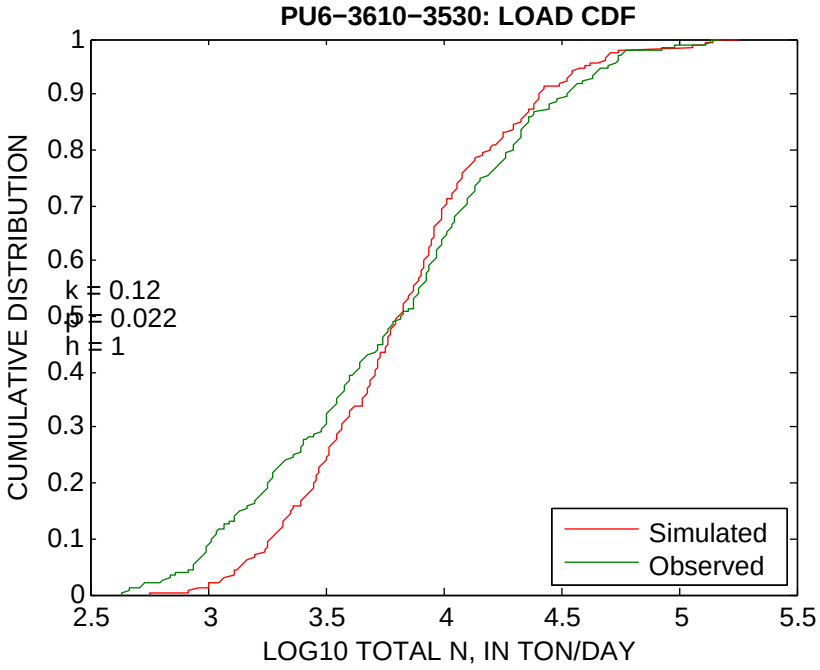


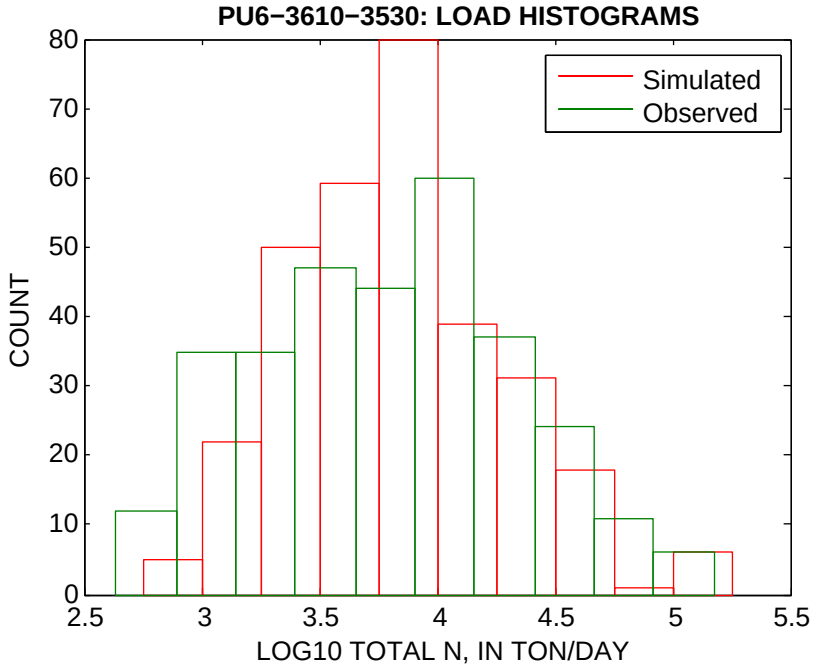


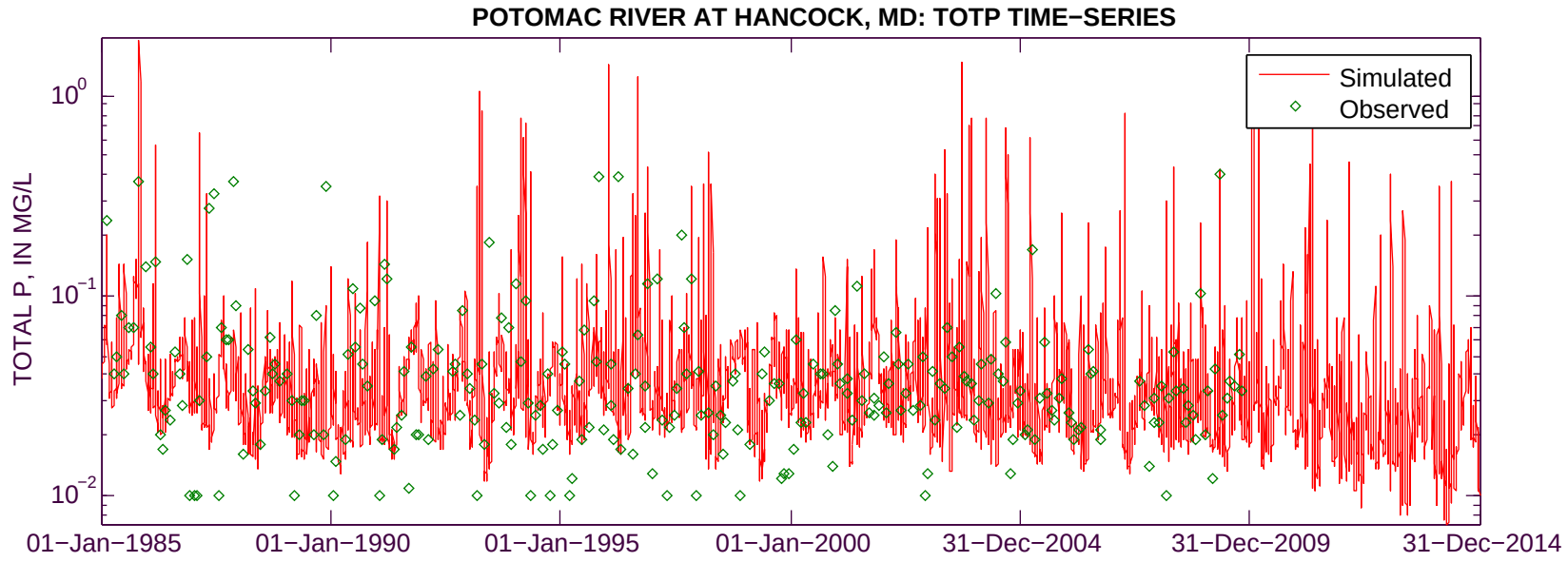
LOAD DATA
LOG10

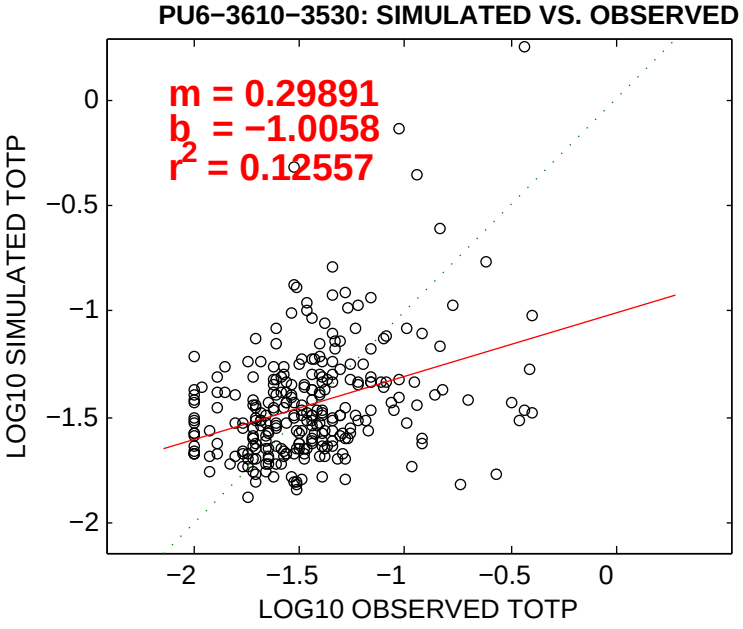


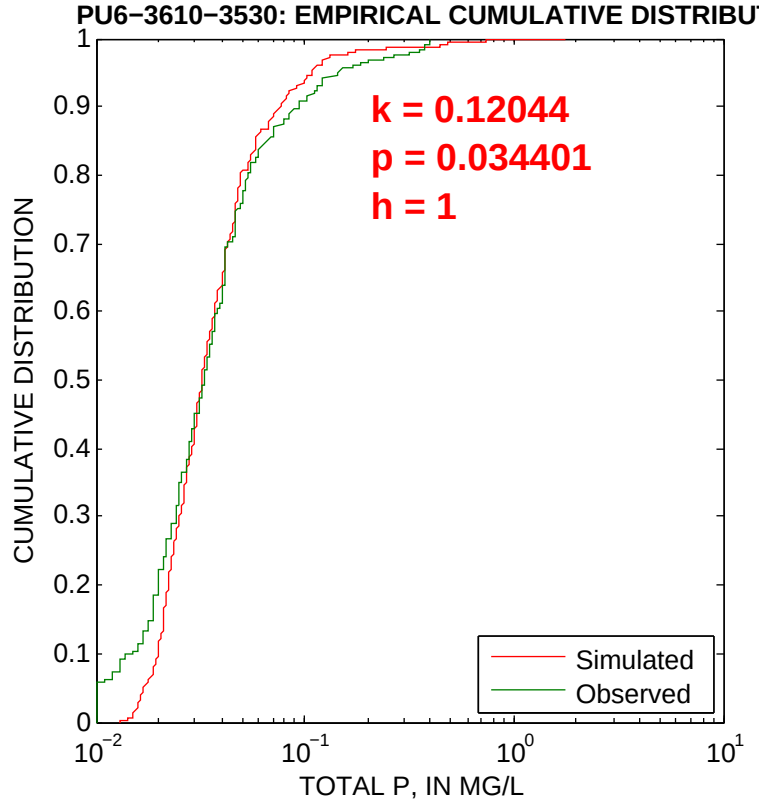












DATA SELECTION

scenario: P620171001WQ | file: TOTP.calib

plot: TOTP - total phosphorus

Dates: 1/1/1985 – 12/31/201

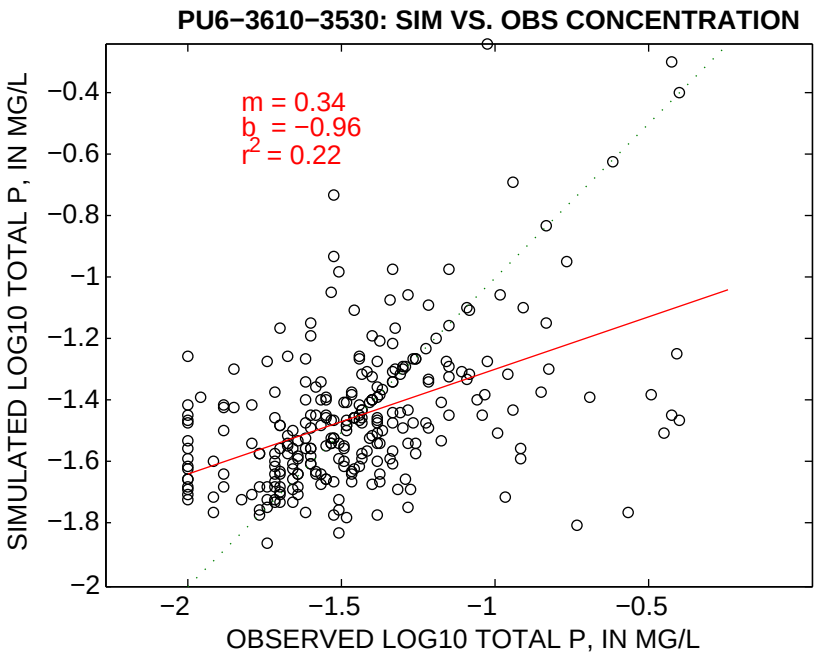
Drive: N/A | Directory: model | Observed: OBS20161101

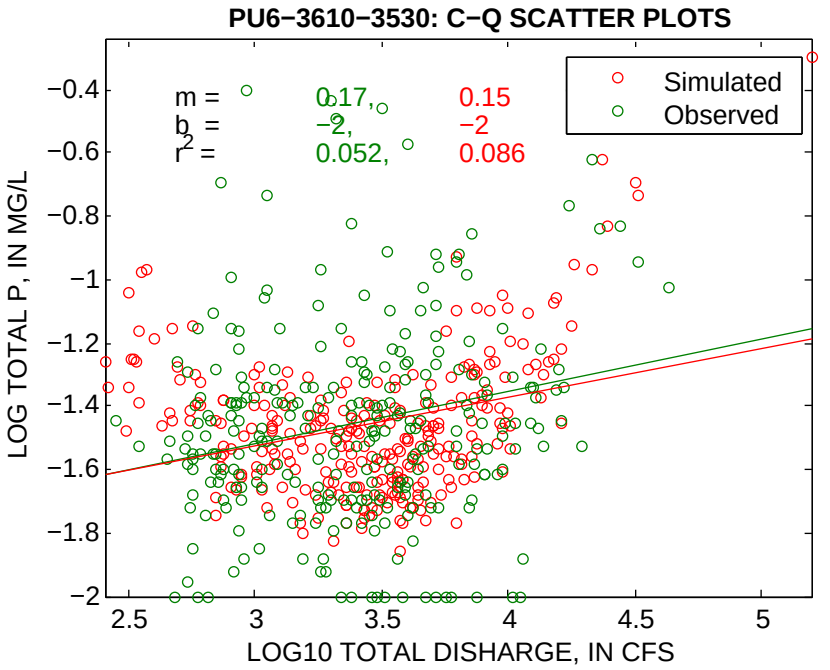
STATISTICS

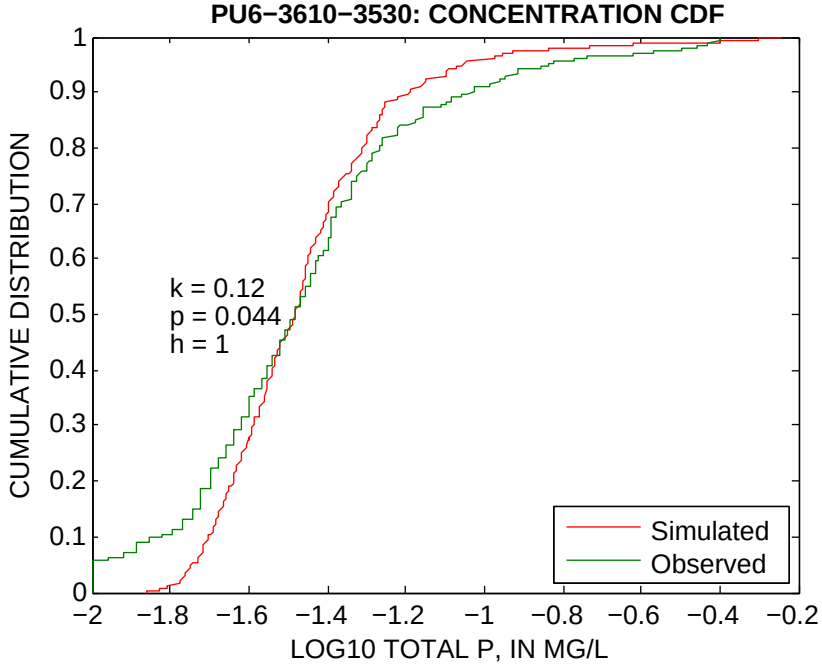
		observe	simulate
n		274	274
min		0.01	0.013215
		-2	-1.87893
mean		0.0500438	0.0522654
		-1.45513	-1.4408
media		0.033	0.032469
		-1.48149	-1.48853
max		0.399	1.7752
		-0.399027	0.249247
varian		0.00396091	0.0146726
		0.105266	0.0748994
JB		0.001	0.001
		0.001	0.001
		ra	log
%		4.43923	-0.985227
err.va		0.0134948	0.117441
rel.std.err		3.407	1.11566
mod.eff		-2.407	-0.115658

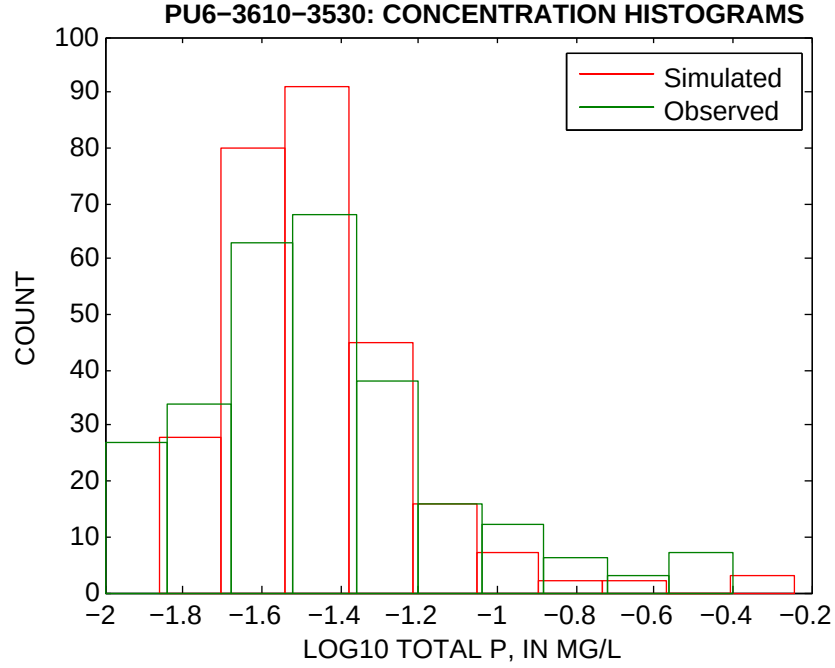
VERSION 2.1

ALL DATA
LOG10

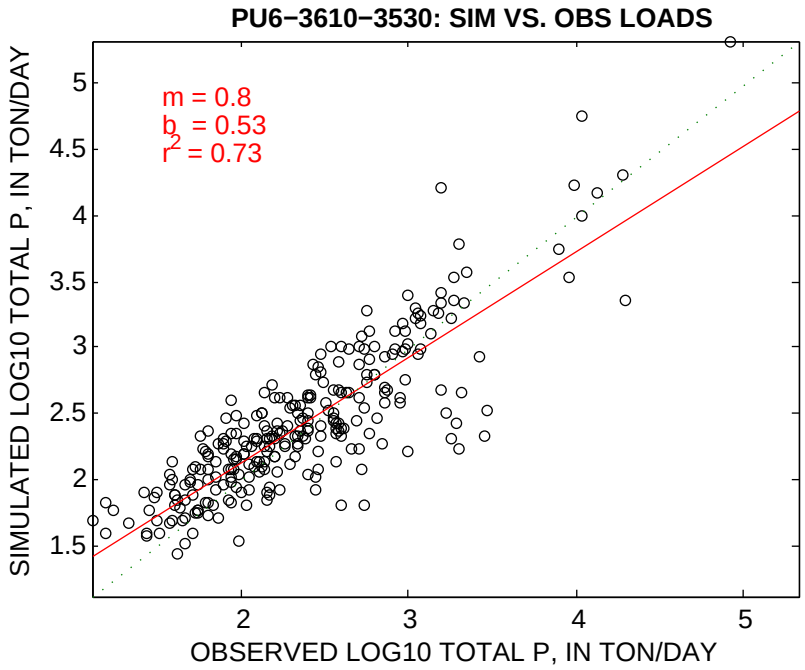


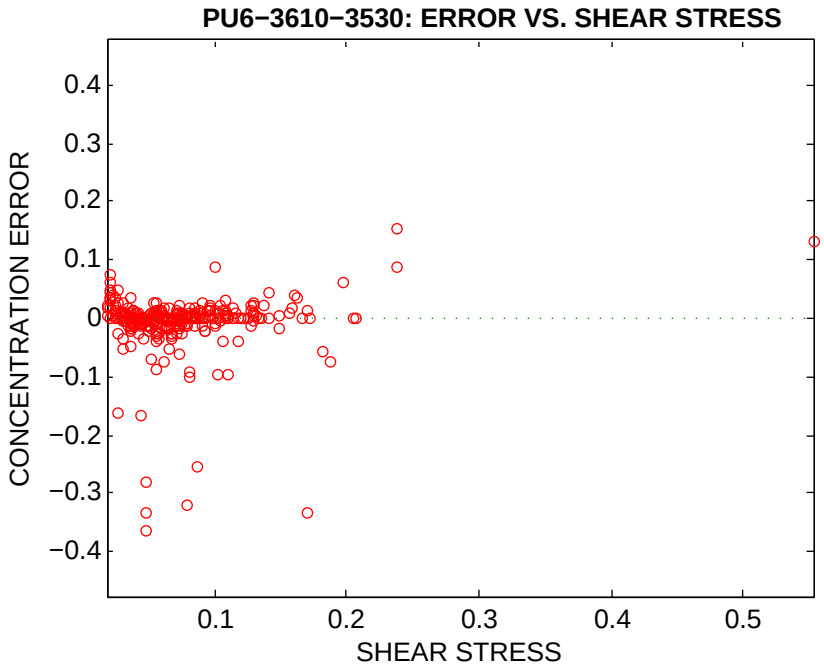


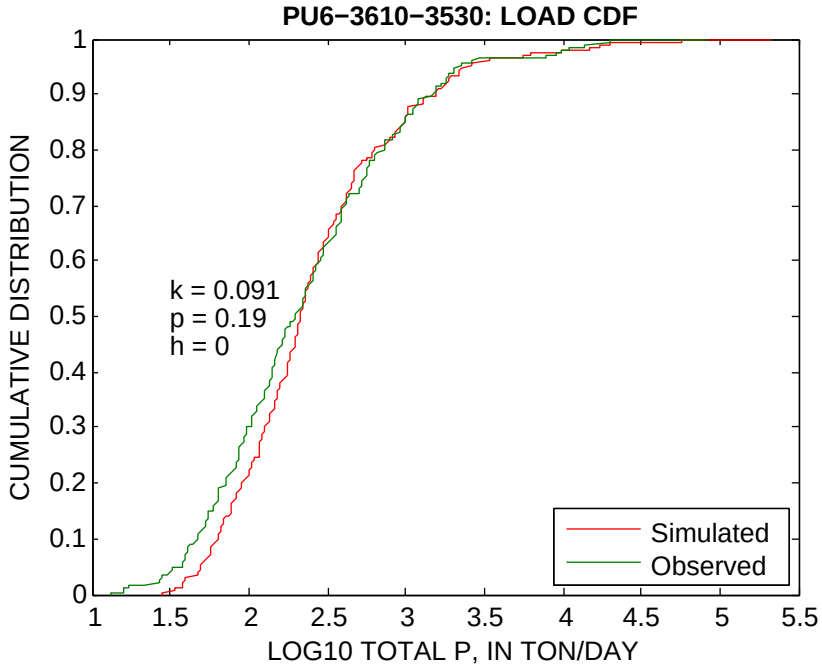


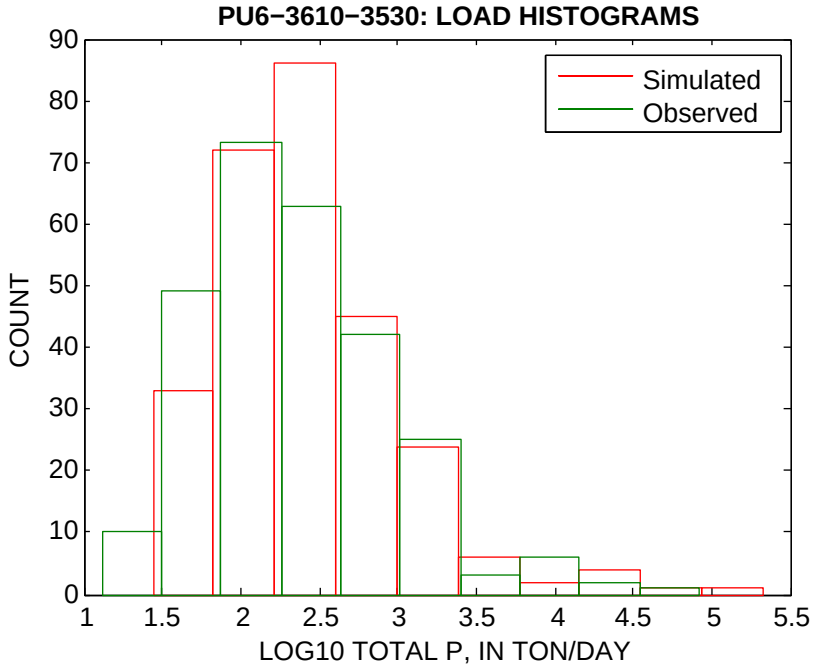


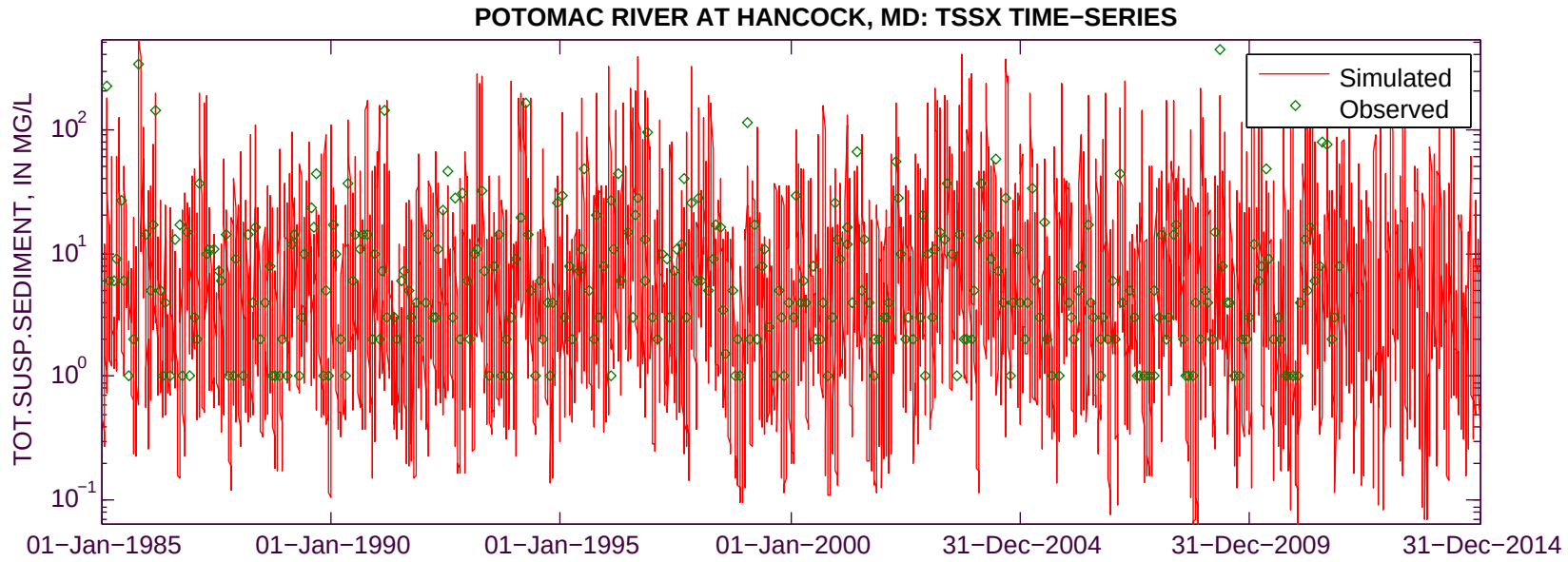
LOAD DATA
LOG10

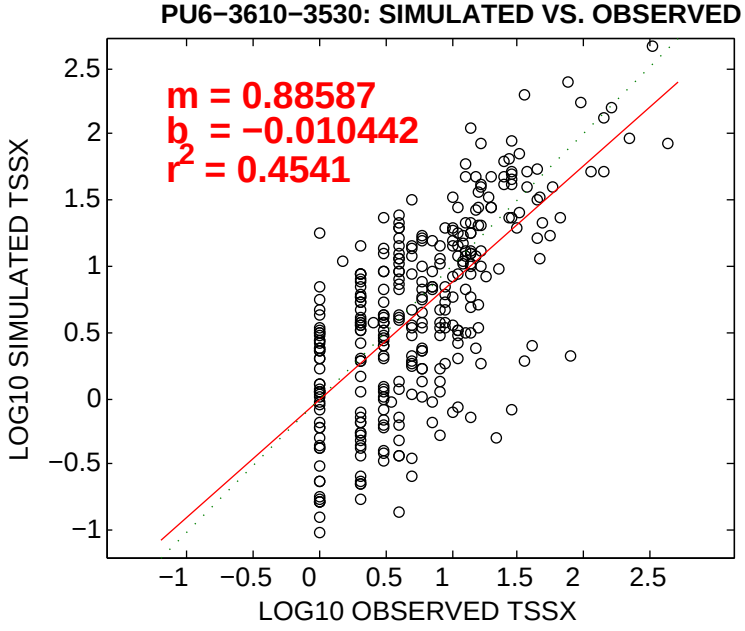


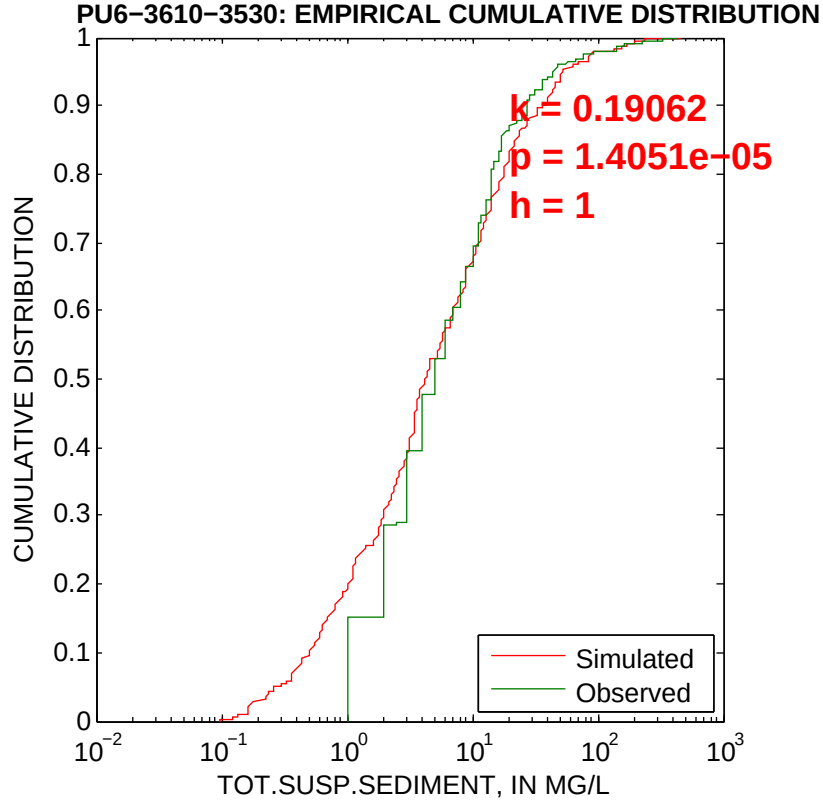












DATA SELECTION

scenario: P620171001WQ | file: TSSX.calib

plot: TSSX - total suspended ...

Dates: 1/1/1985 – 12/31/201

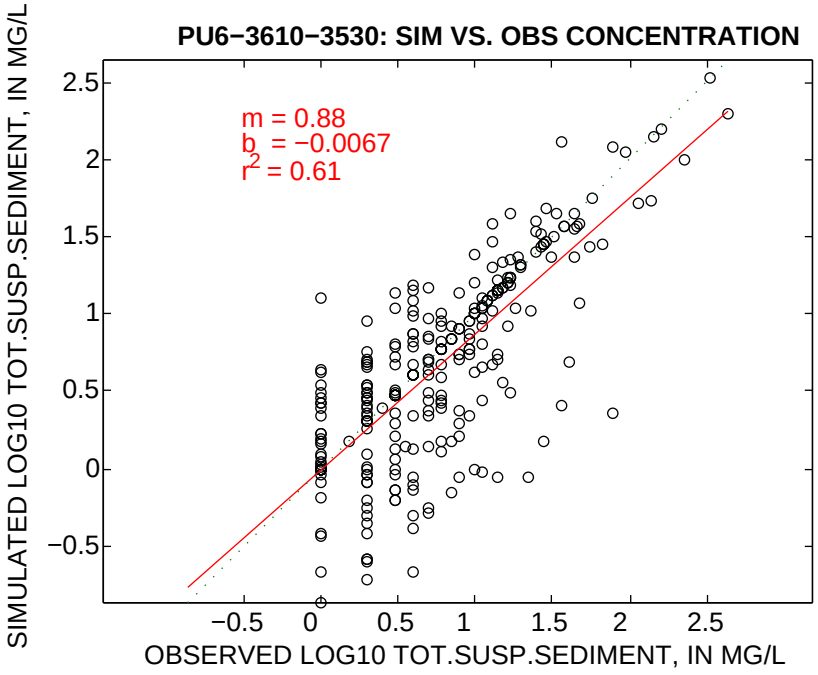
Drive: N/A | Directory: model | Observed: OBS20161101

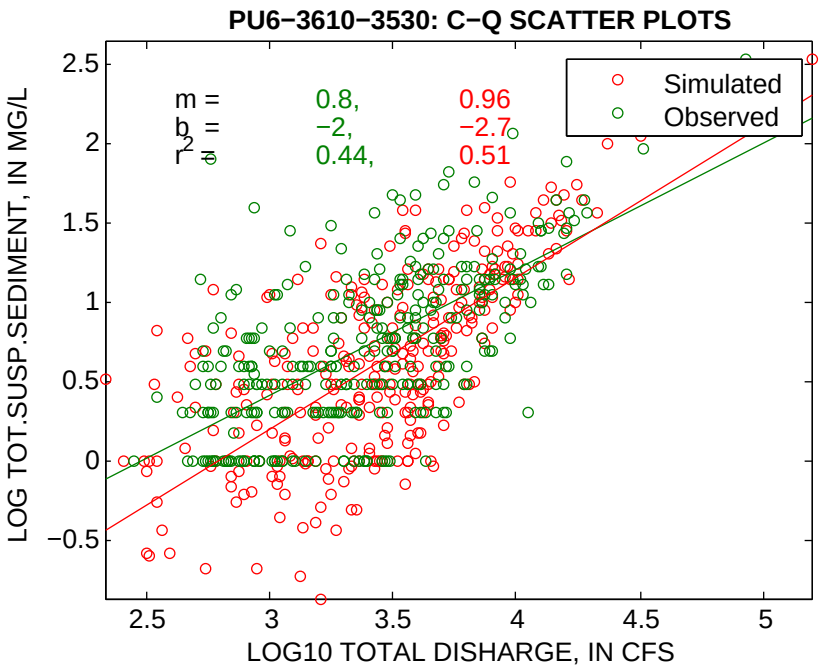
STATISTICS

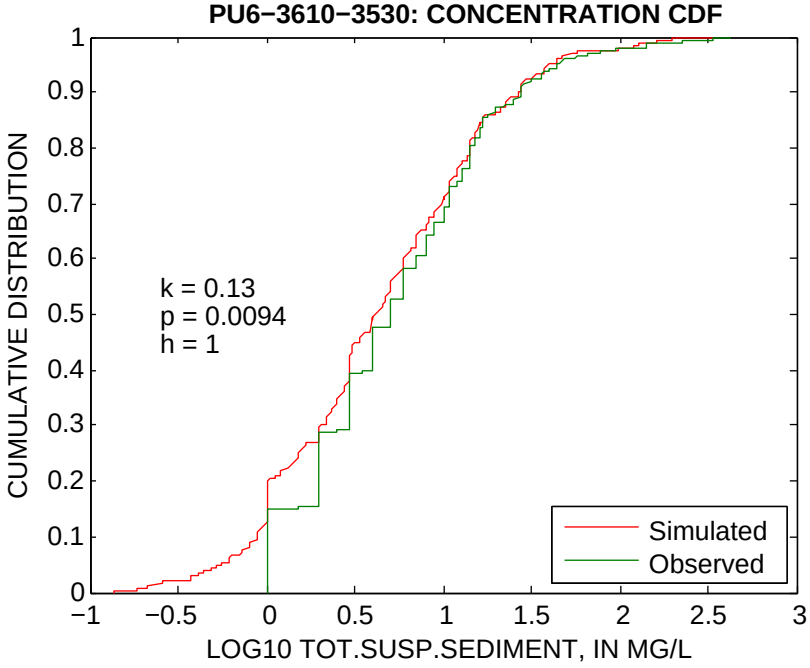
	n	observe	simulate
		320	320
min		1	0.095892
		0	-1.01822
mean		14.2047	15.1869
		0.74344	0.648149
media		5	4.28435
		0.69897	0.631883
max		432	467.28
		2.63548	2.66958
varian		1391.06	1394.46
		0.283326	0.489634
JB		0.001	0.001
		0.001854	0.345726
		ra	log
%		6.91452	-12.8176
err.va		889.623	0.280089
rel.std.err		0.639527	0.988575
mod.eff		0.360473	0.0114248

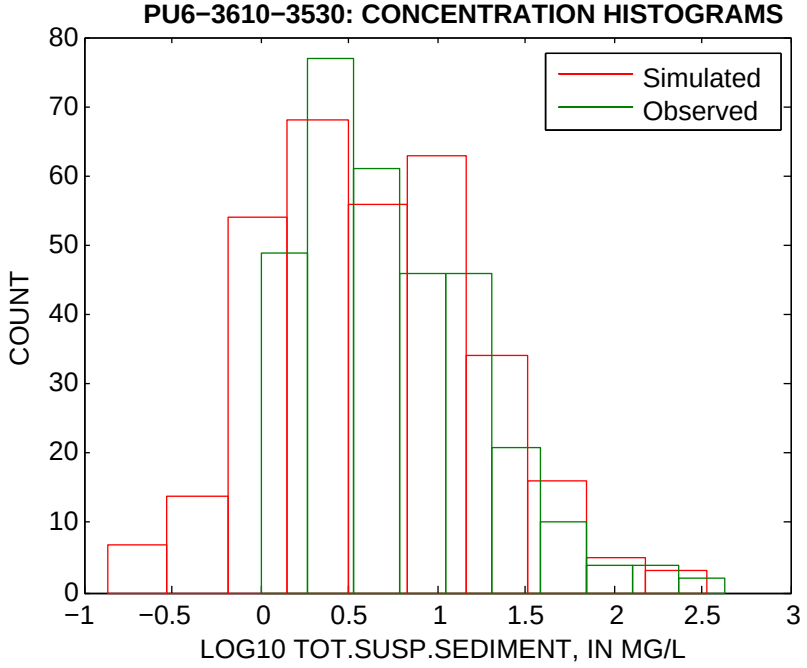
VERSION 2.1

ALL DATA
LOG10

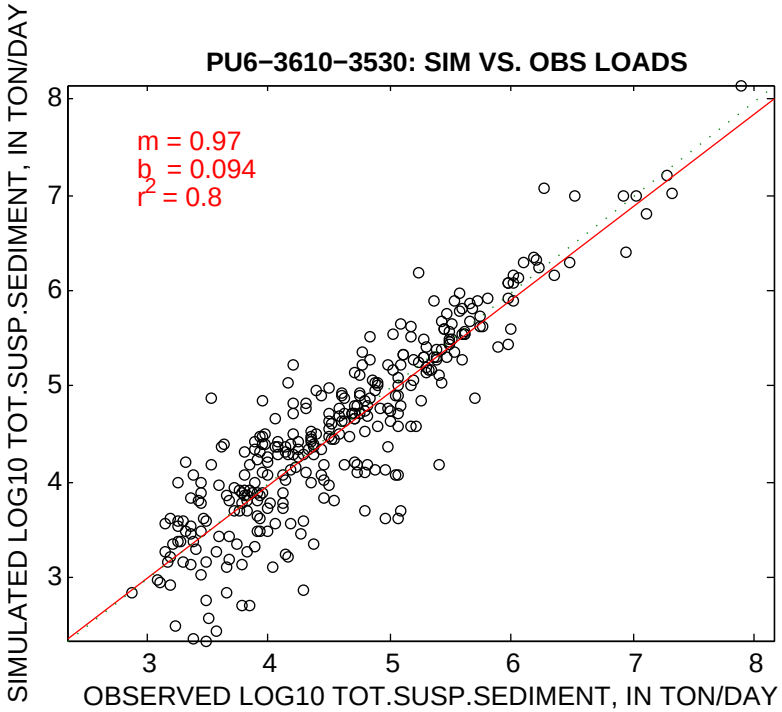


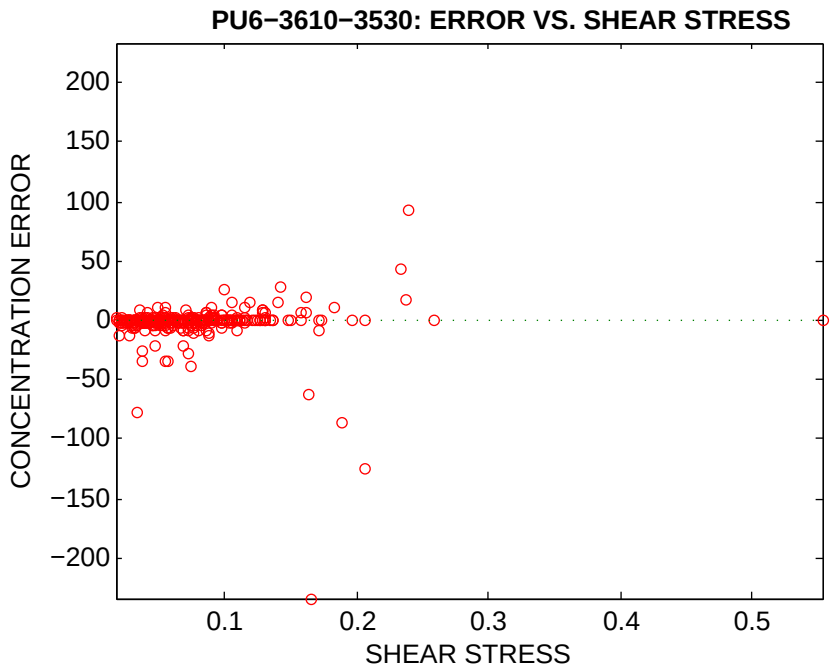


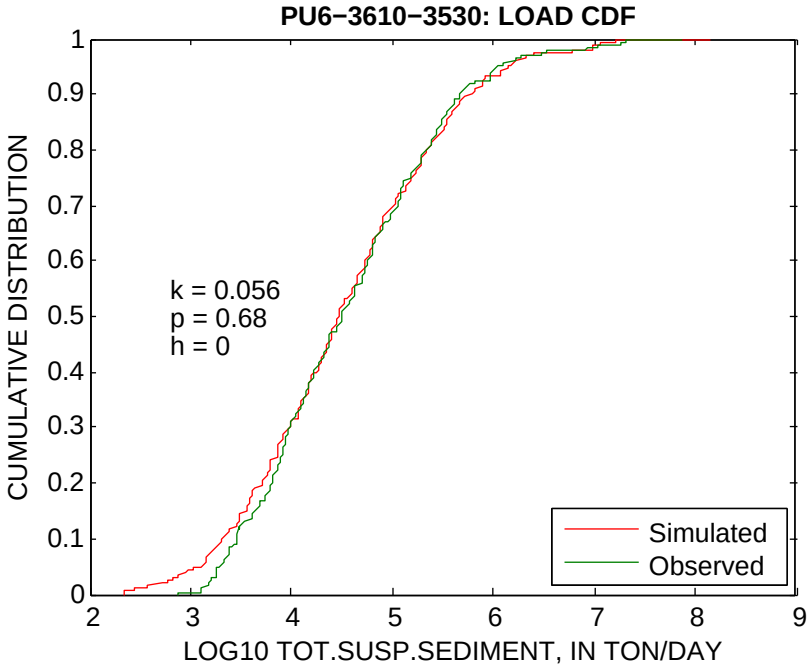


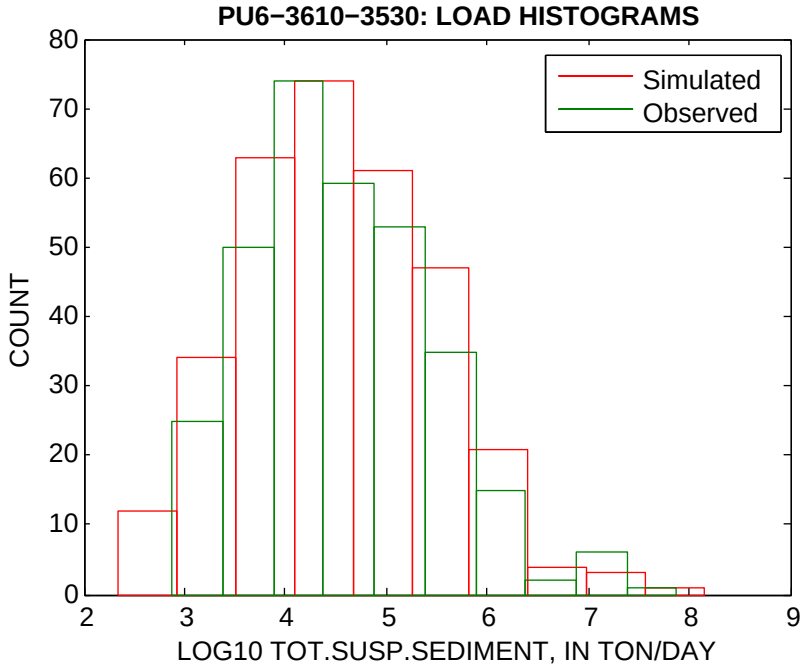


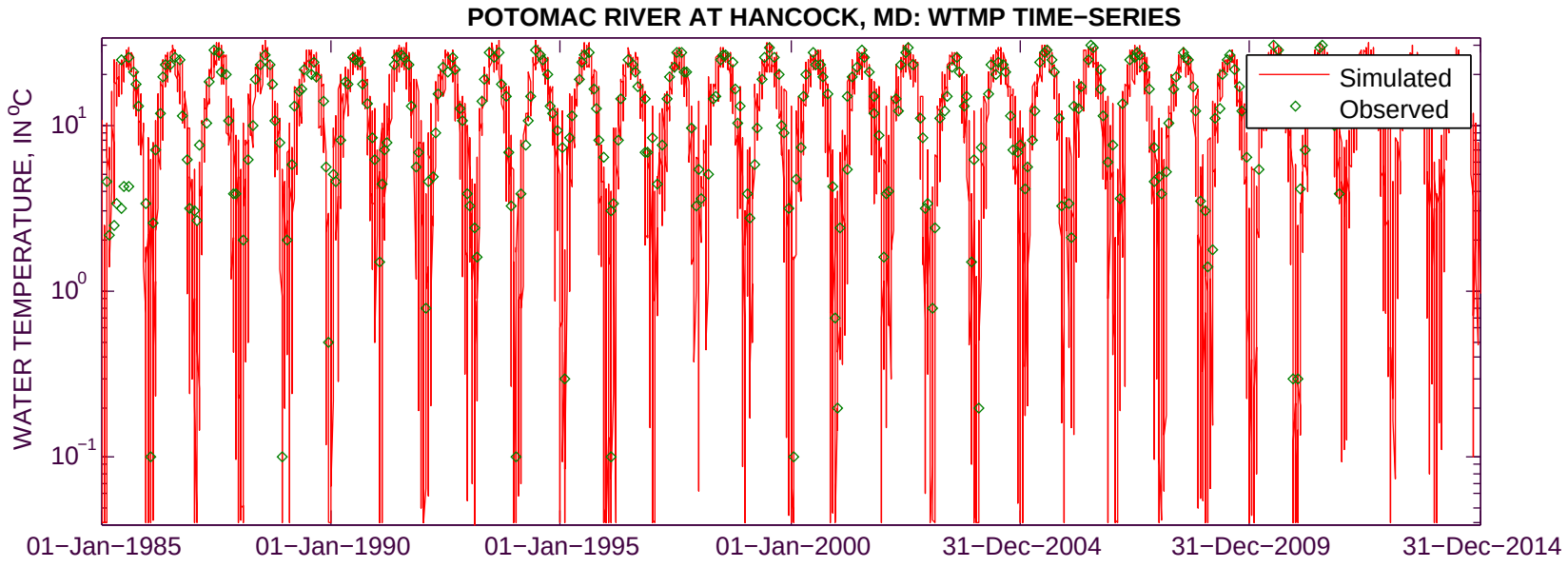
LOAD DATA
LOG10

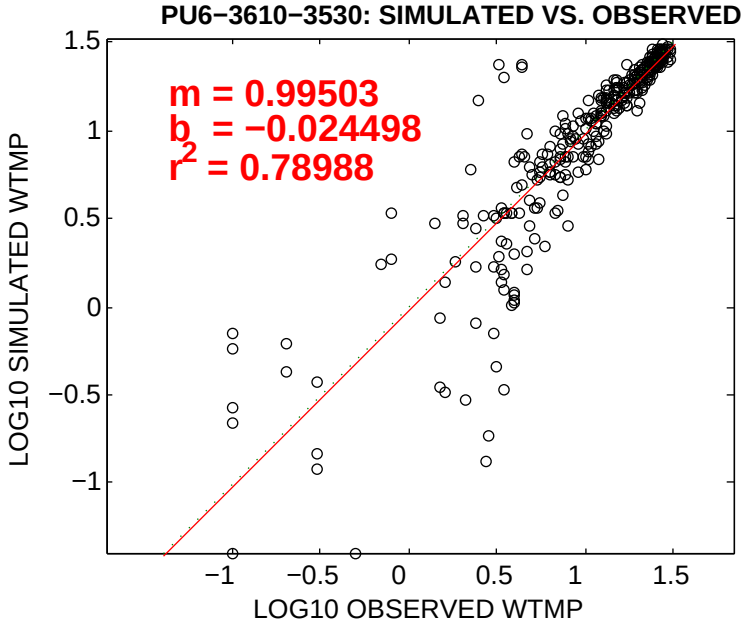


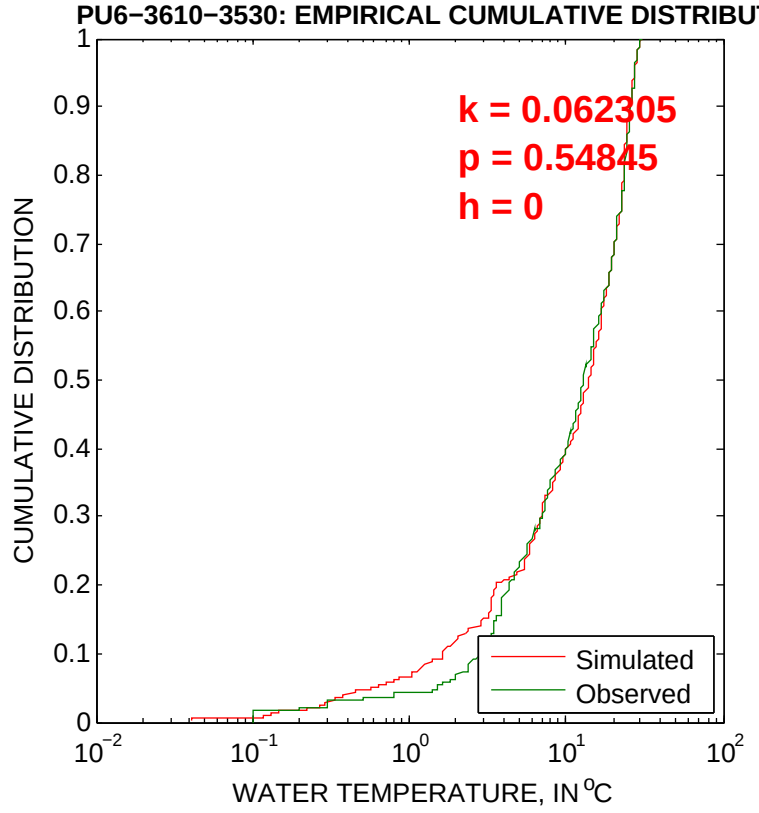












DATA SELECTION

scenario	file
P620171001WQ	WTMP.calib

plot: WTMP - water tempera...

Dates: 1/1/1985 — 12/31/201

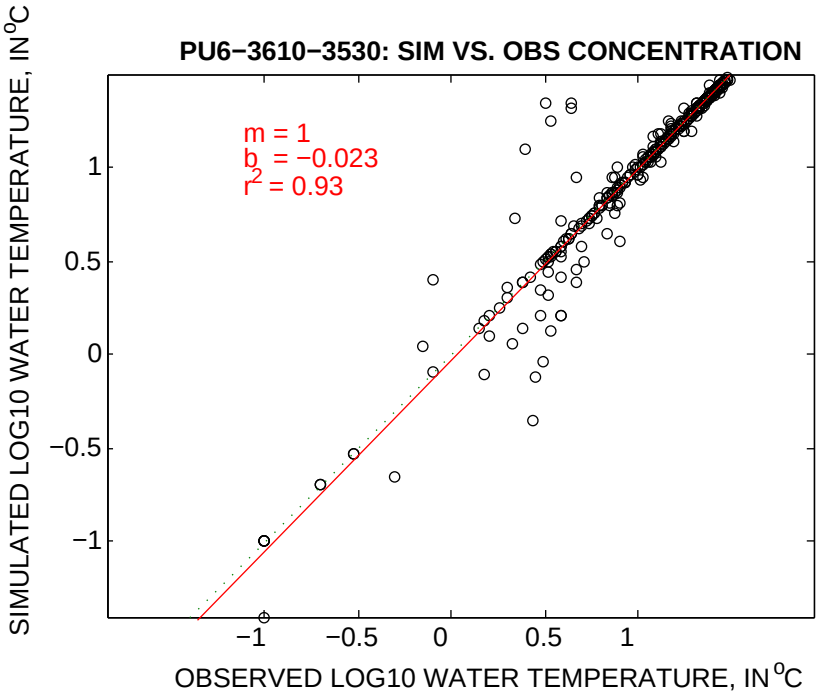
Drive	Directory	Observed
N/A	model	OBS20161101

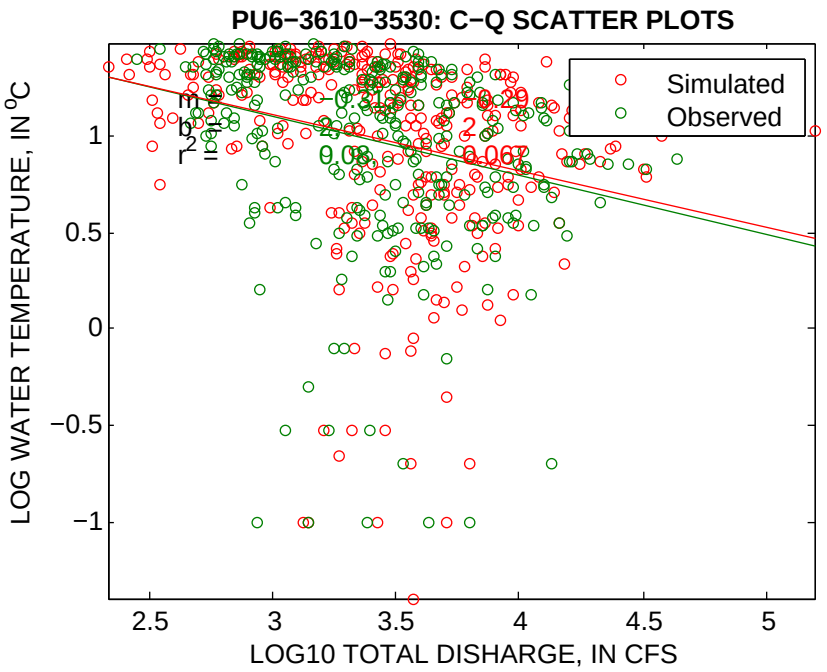
STATISTICS

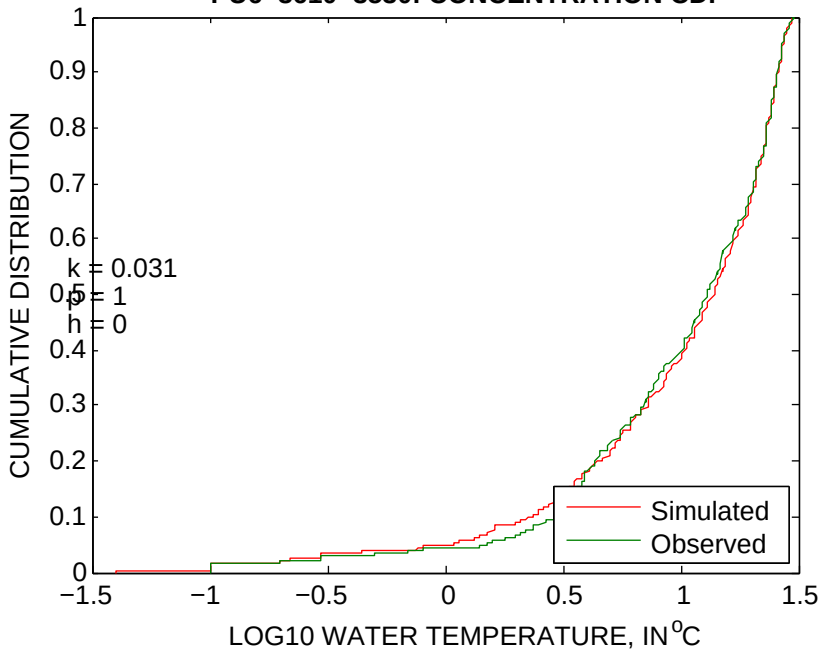
	n	observe	simulate
		321	321
min		0.1	0.040039
		-1	-1.39752
mean		13.8232	13.8132
		0.980245	0.950877
media		13.1	14.081
		1.11727	1.14863
max		30.699	30.939
		1.48712	1.49051
varian		77.7477	79.5683
		0.231265	0.289882
JB		0.001003	0.001205
		0.001	0.001
		ra	log
%		0.0720186	-2.99598
err.va		9.20909	0.0617801
rel.std.err		0.118448	0.26714
mod.eff		0.881552	0.73286

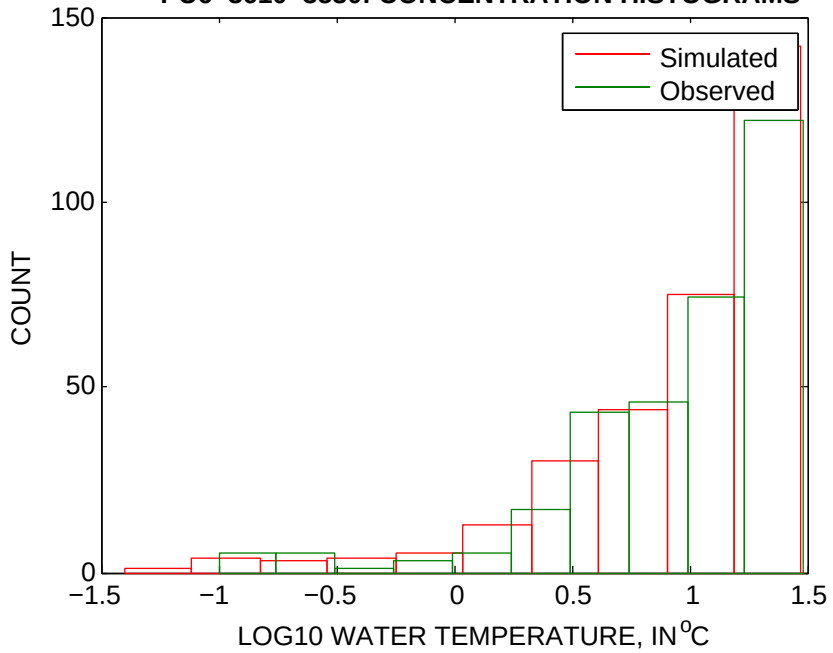
VERSION 2.1

ALL DATA
LOG10

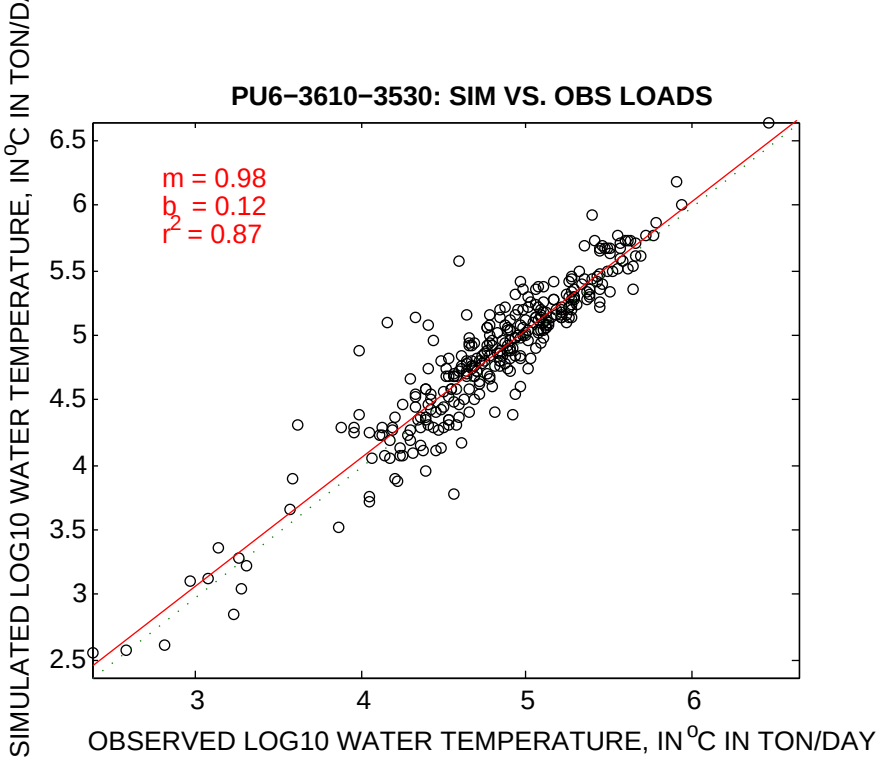


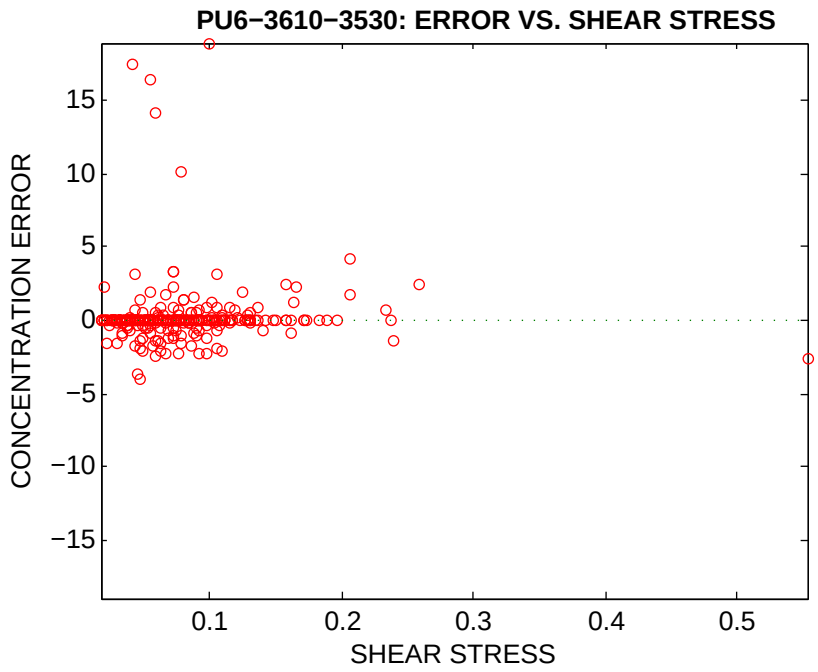


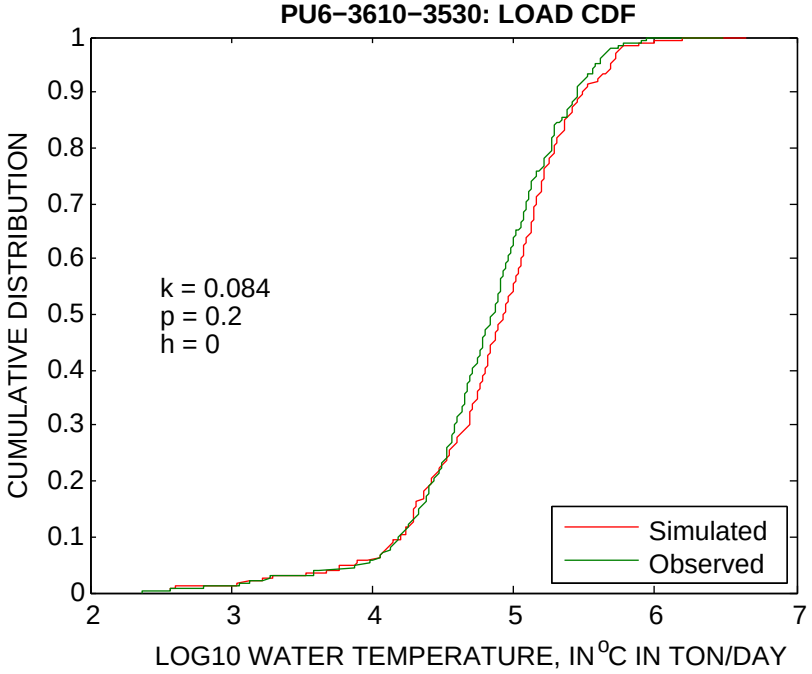


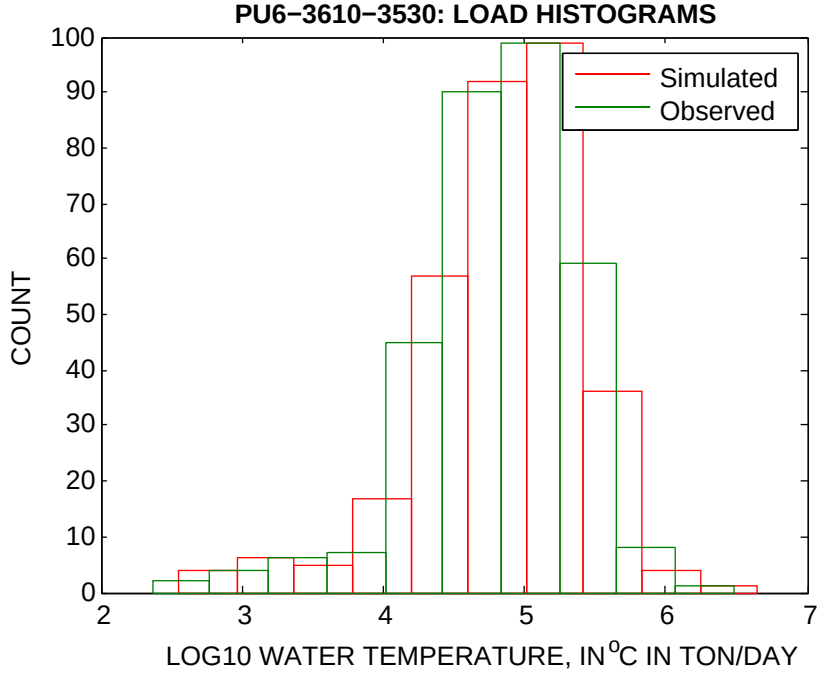


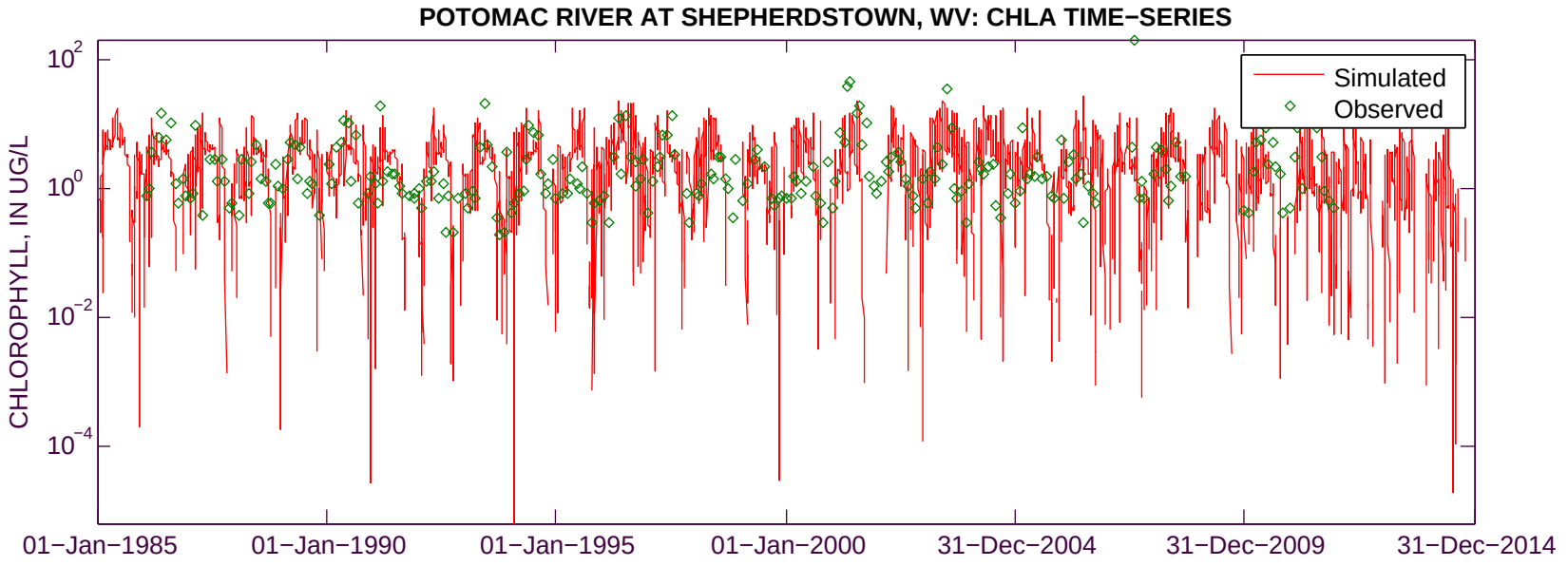
LOAD DATA
LOG10

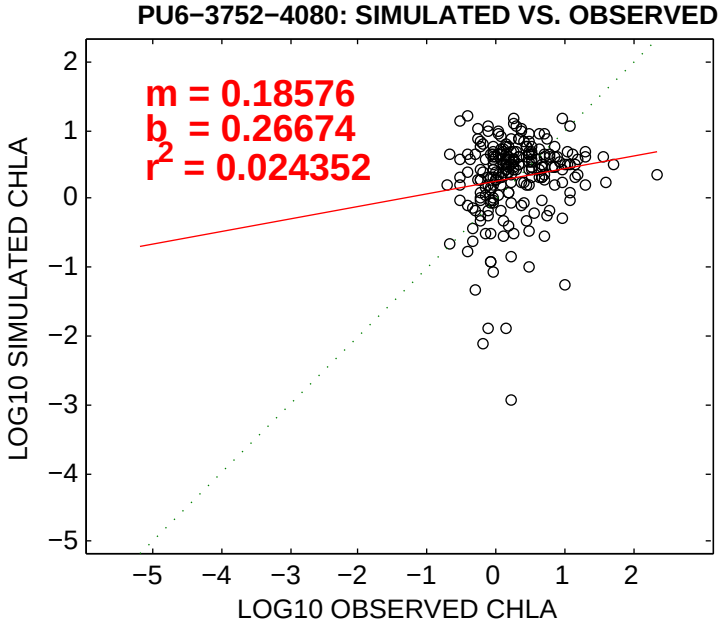


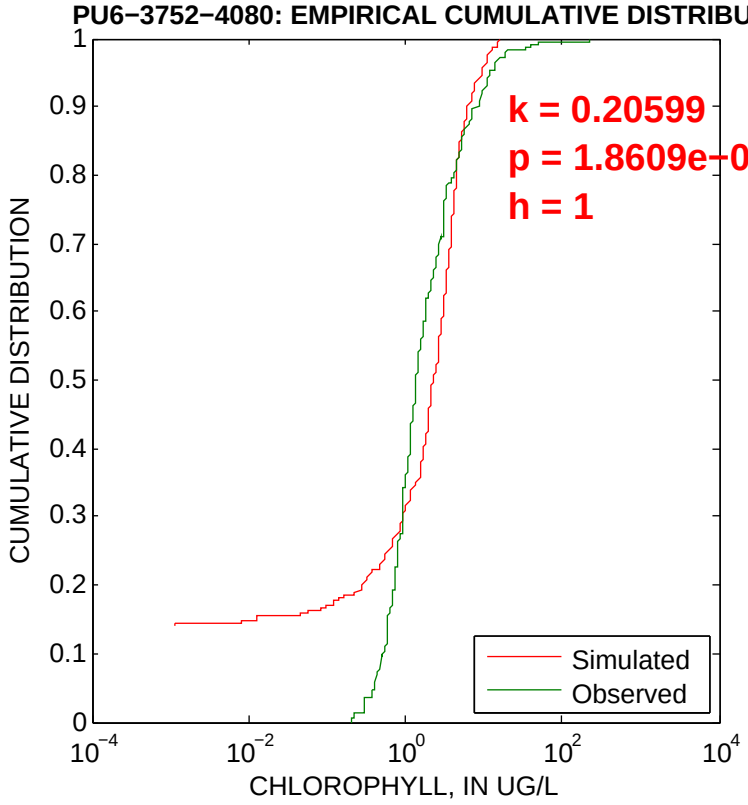












DATA SELECTION

scenario	file
P620171001WQ	CHLA.calib

plot: CHLA - chlorophyll A

Dates 1/1/1985 12/31/201

Drive Directory Observed

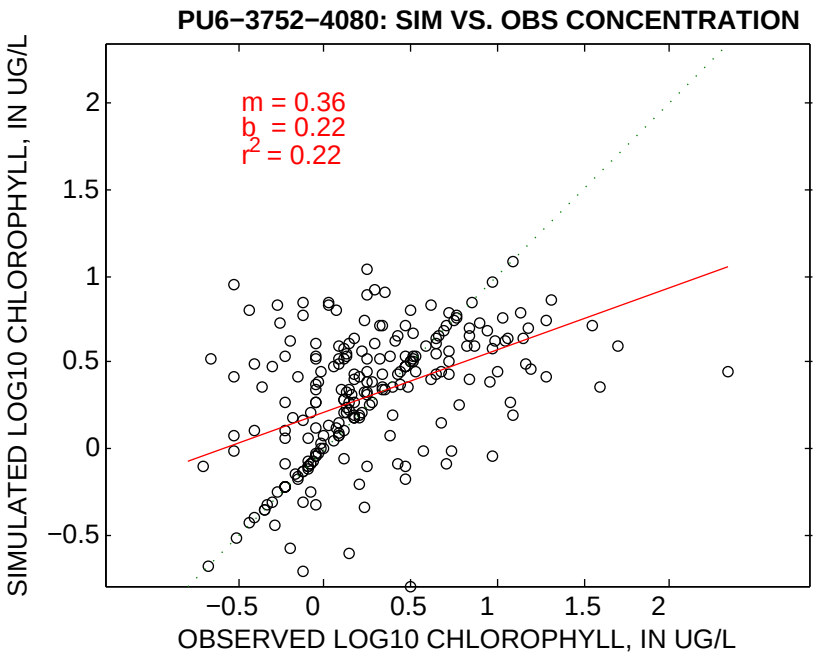
N/A model OBS20161101

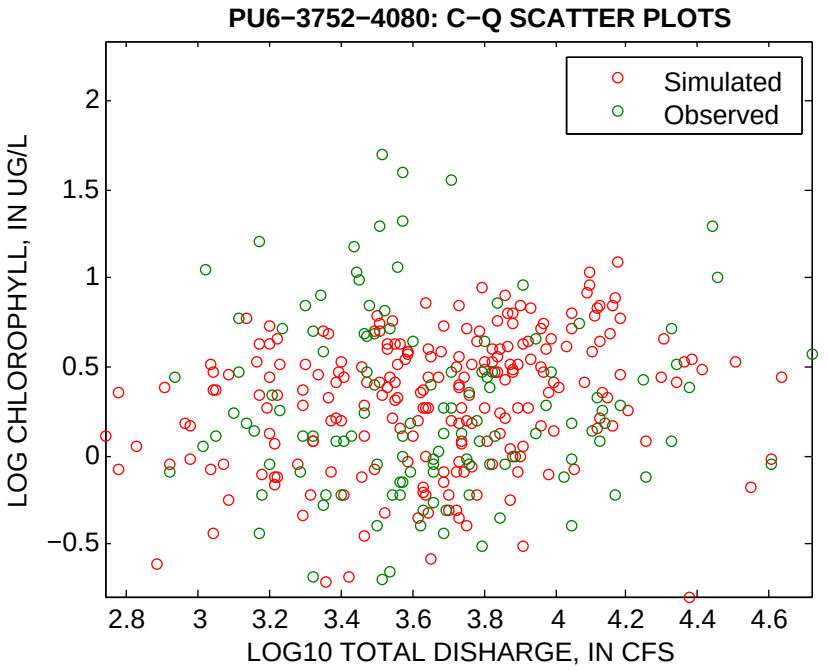
STATISTICS

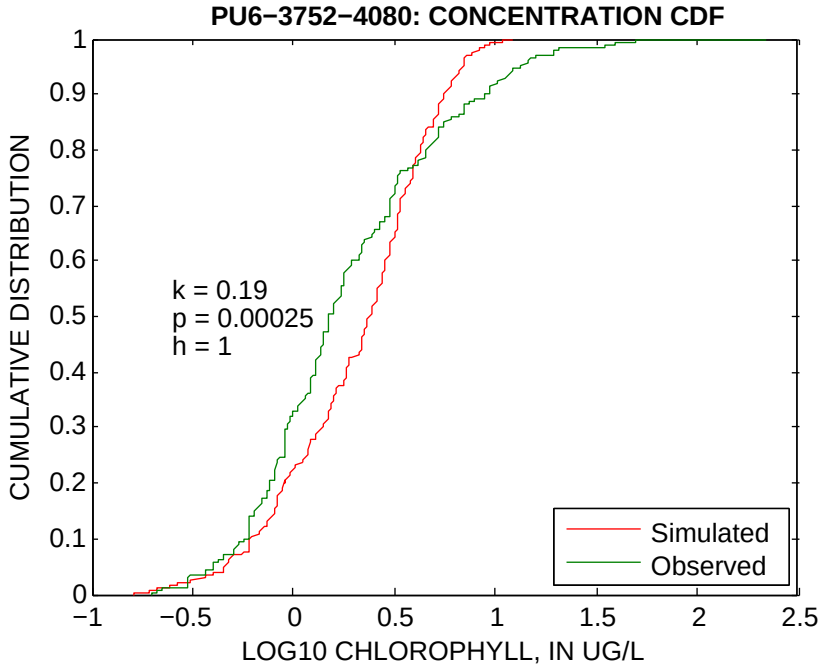
	observe	simulate
n	267	229
min	0.2	0
	-0.69897	-2.92926
mean	4.00239	2.91695
	0.271181	0.317118
media	1.4	2.2987
	0.176091	0.44753
max	216.804	16.64
	2.33607	1.22115
varian	200.046	8.78858
	0.228405	0.323647
JB	0.001	0.001
	0.001	0.001
	ra	log
%	-27.1199	16.9396
err.va	209.101	0.469315
rel.std.err	1.04526	2.05475
mod.eff	-0.0452617	-1.05475

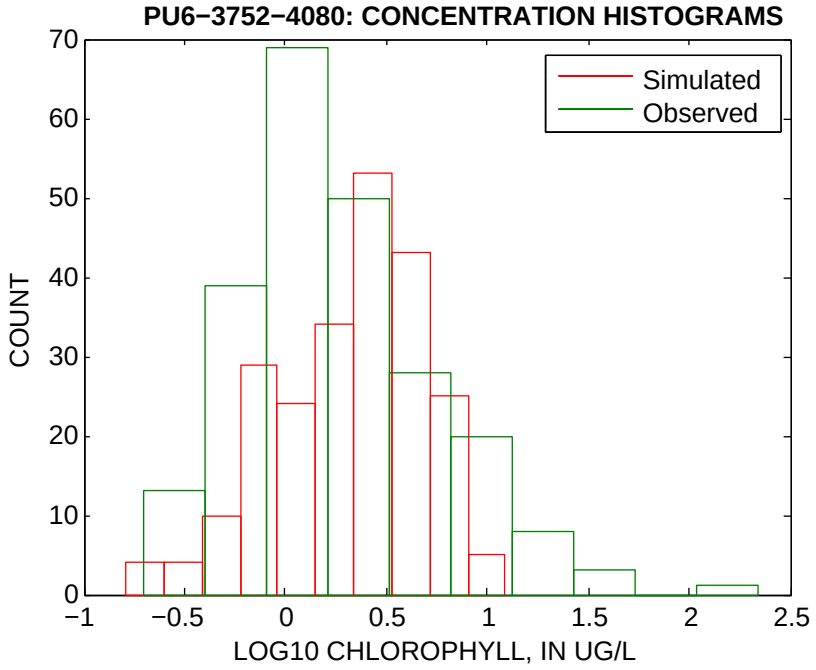
VERSION 2.1

ALL DATA
LOG10

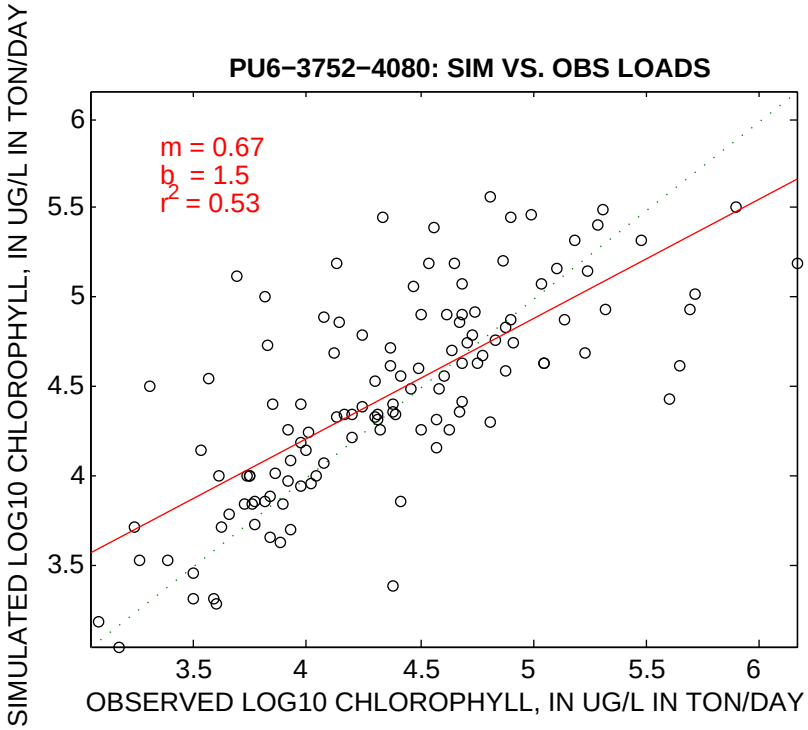


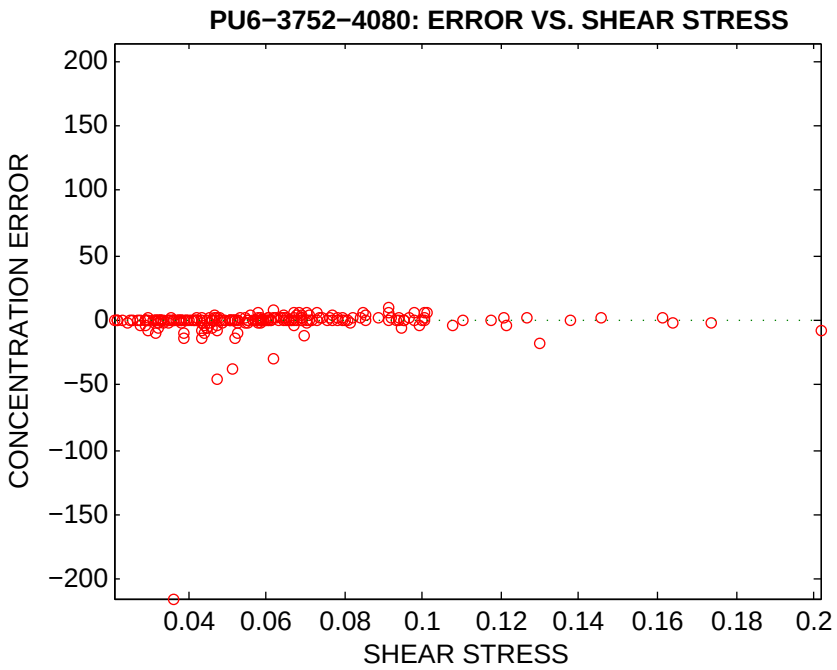


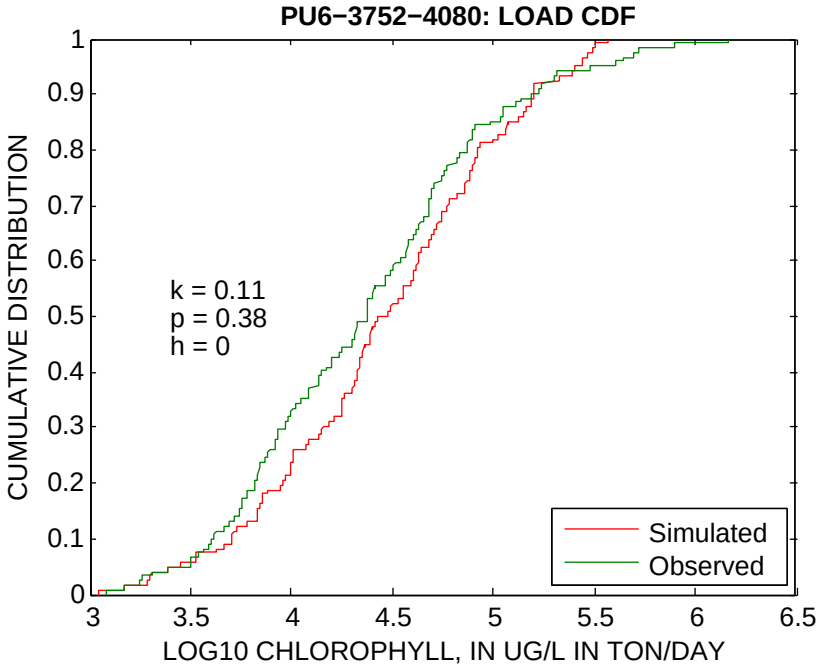


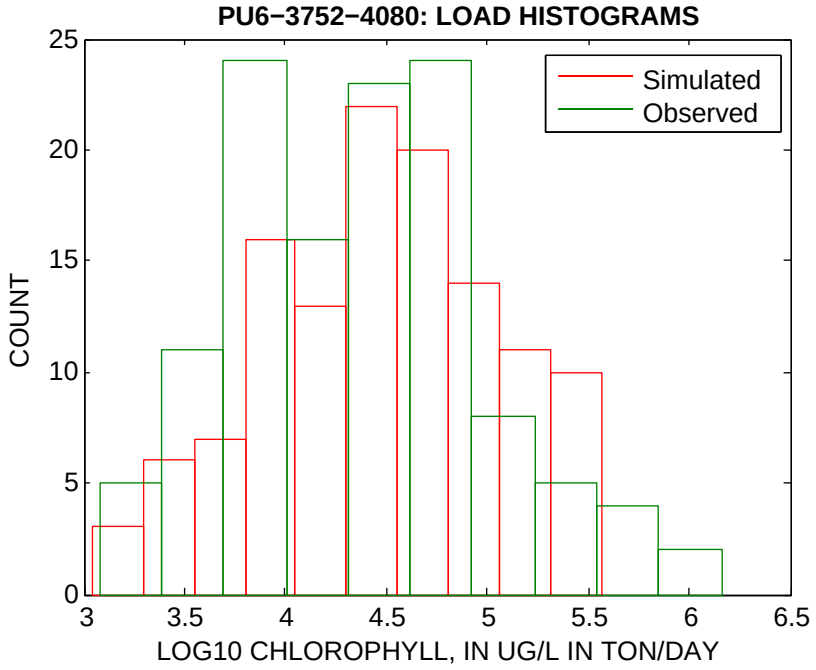


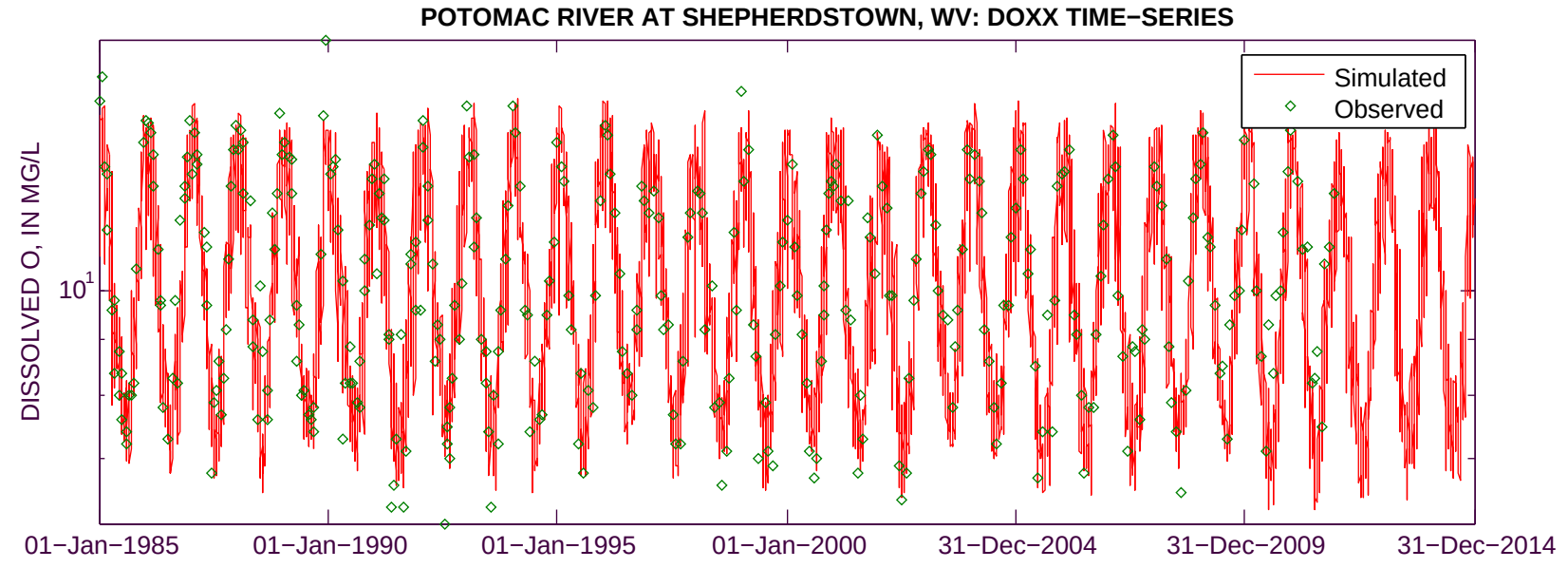
LOAD DATA
LOG10

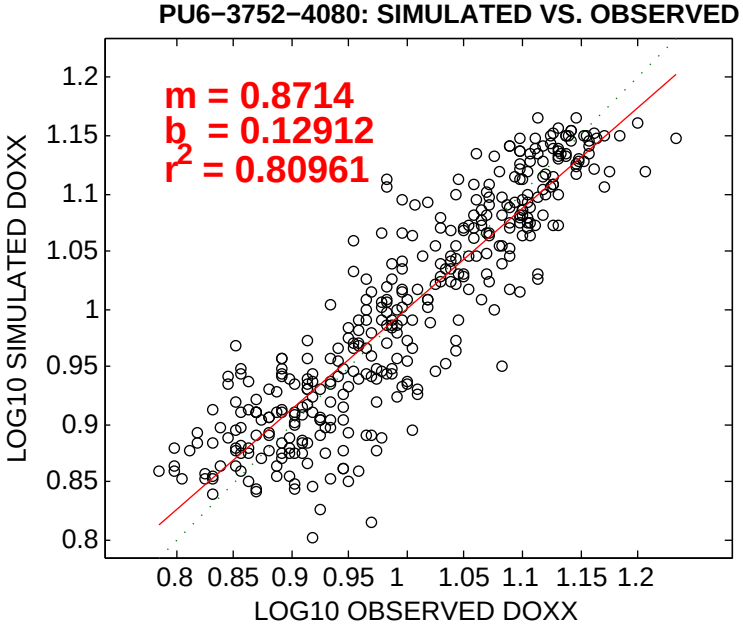


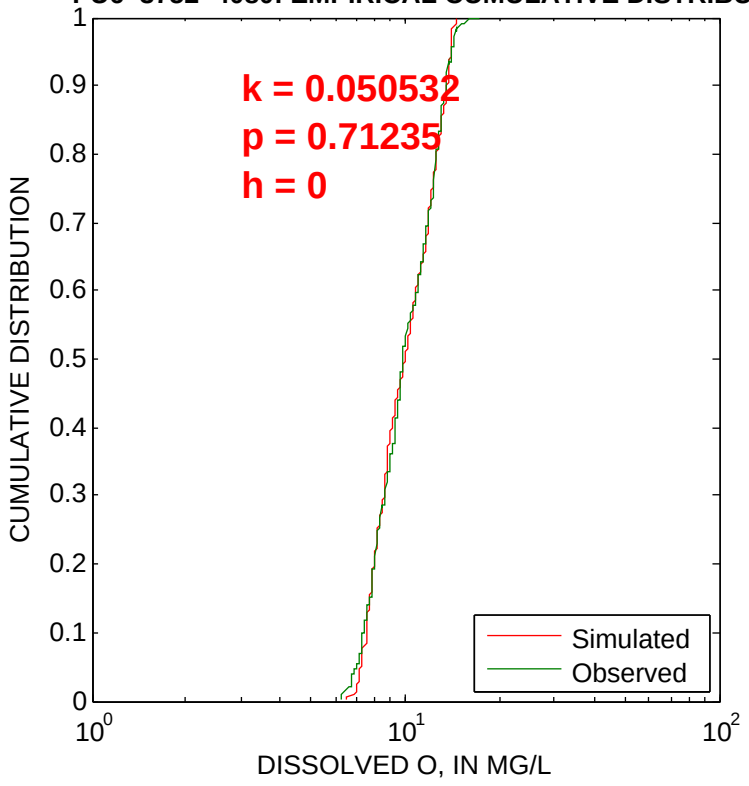












DATA SELECTION

scenario	file
P620171001WQ	DOXX.calib

plot: DOXX - dissolved oxygen

Dates: 1/1/1985 – 12/31/201

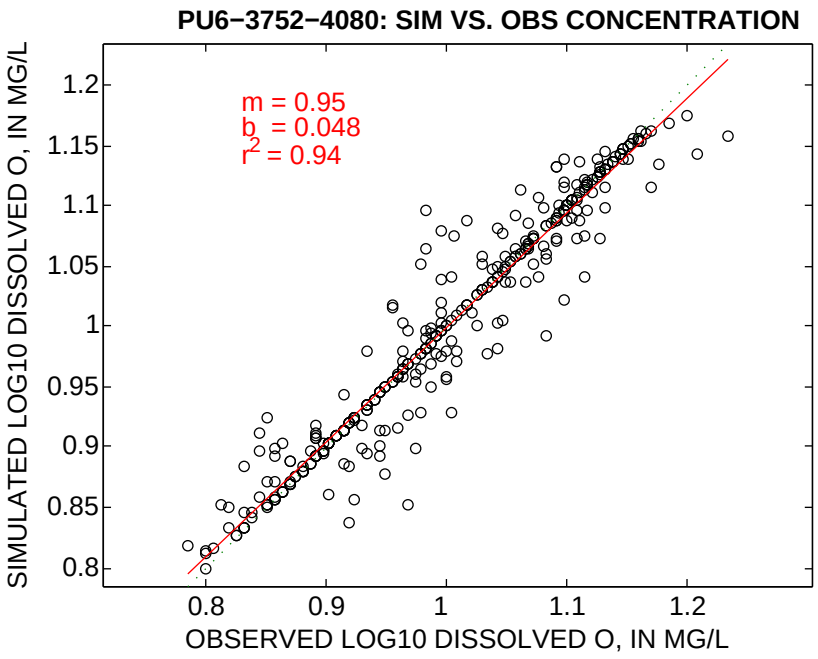
Drive	Directory	Observed
N/A	model	OBS20161101

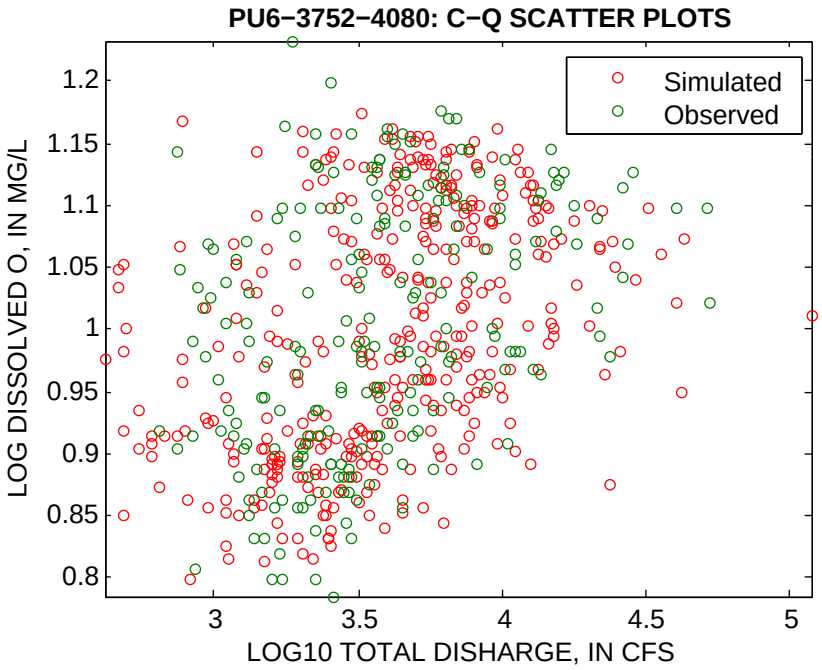
STATISTICS

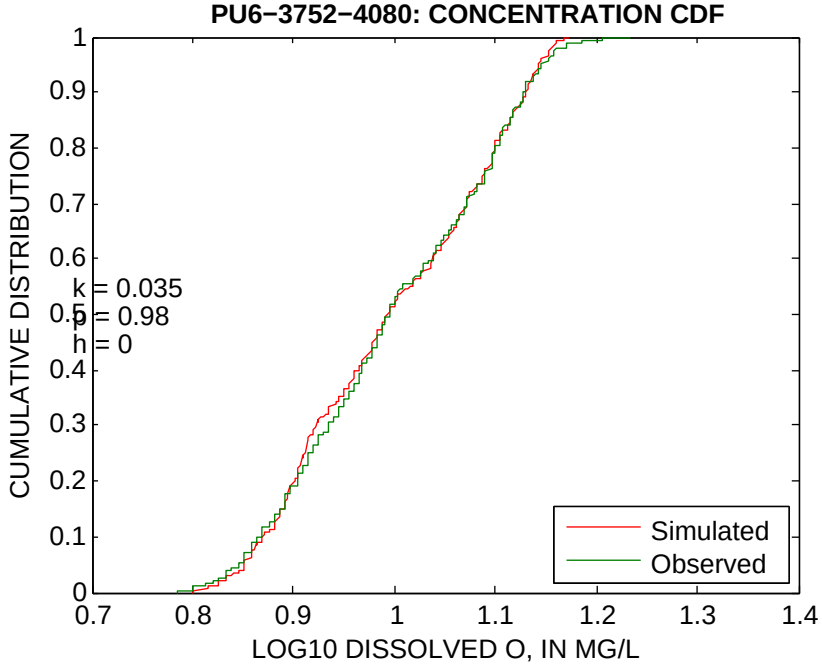
	n	376	376
		observe	simulate
min		6.1	6.3327
		0.78533	0.801589
mean		10.2578	10.2549
		0.999899	1.00043
media		9.9	9.98175
		0.995635	0.999207
max		17.1	14.664
		1.233	1.16625
varian		5.38518	5.07822
		0.00978219	0.00917472
JB		0.002299	0.001
		0.002907	0.001
		ra	log
%		0.0279239	0.0534411
err.va		0.981233	0.00190886
rel.std.err		0.18221	0.195137
mod.eff		0.81779	0.804863

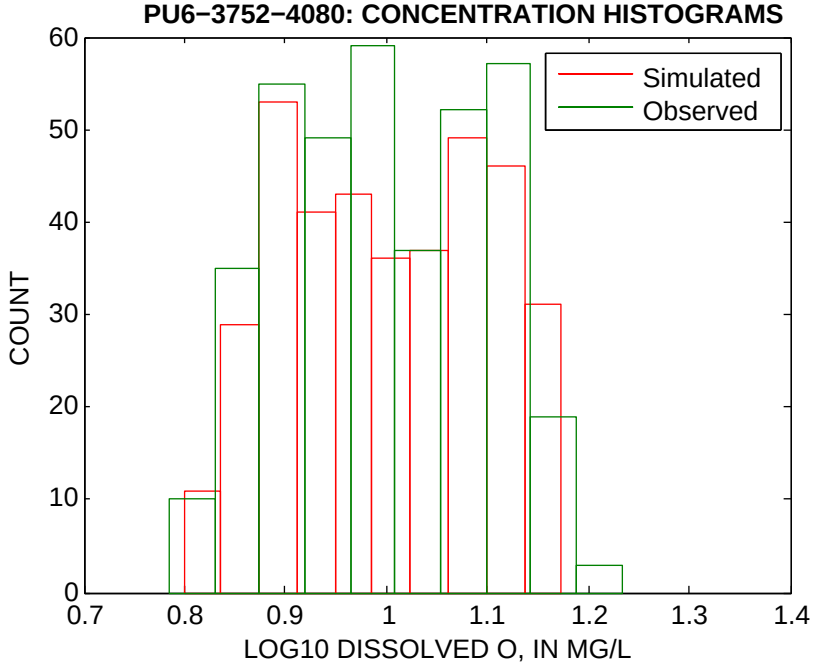
VERSION 2.1

ALL DATA
LOG10

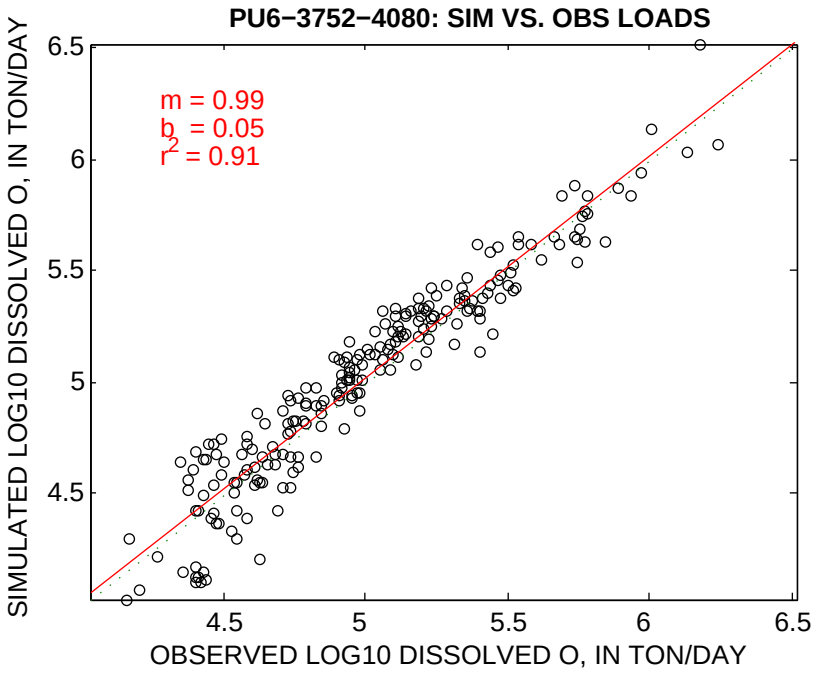




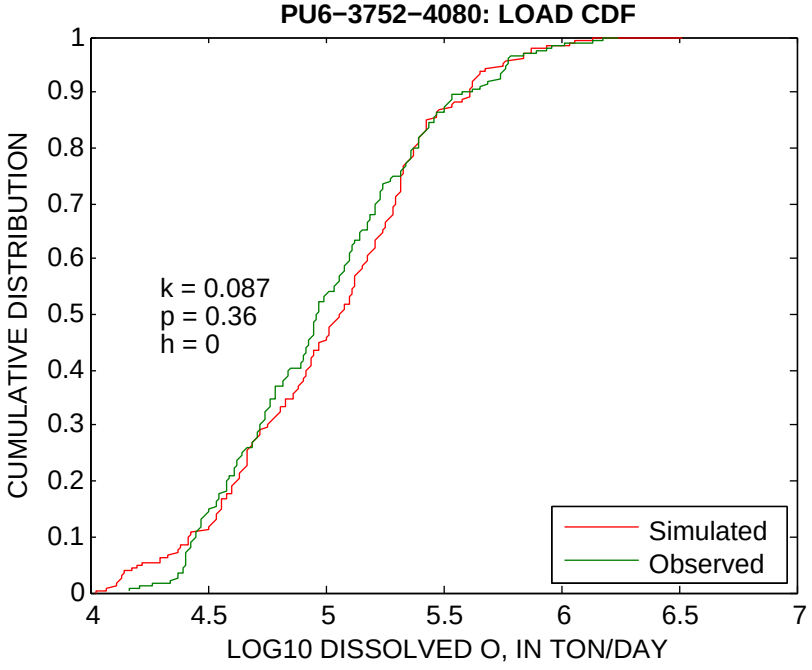


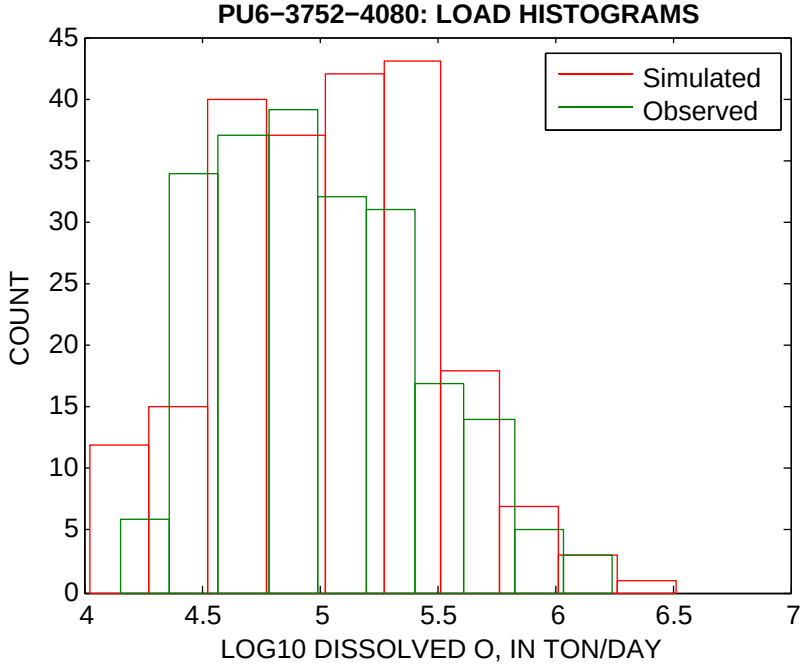


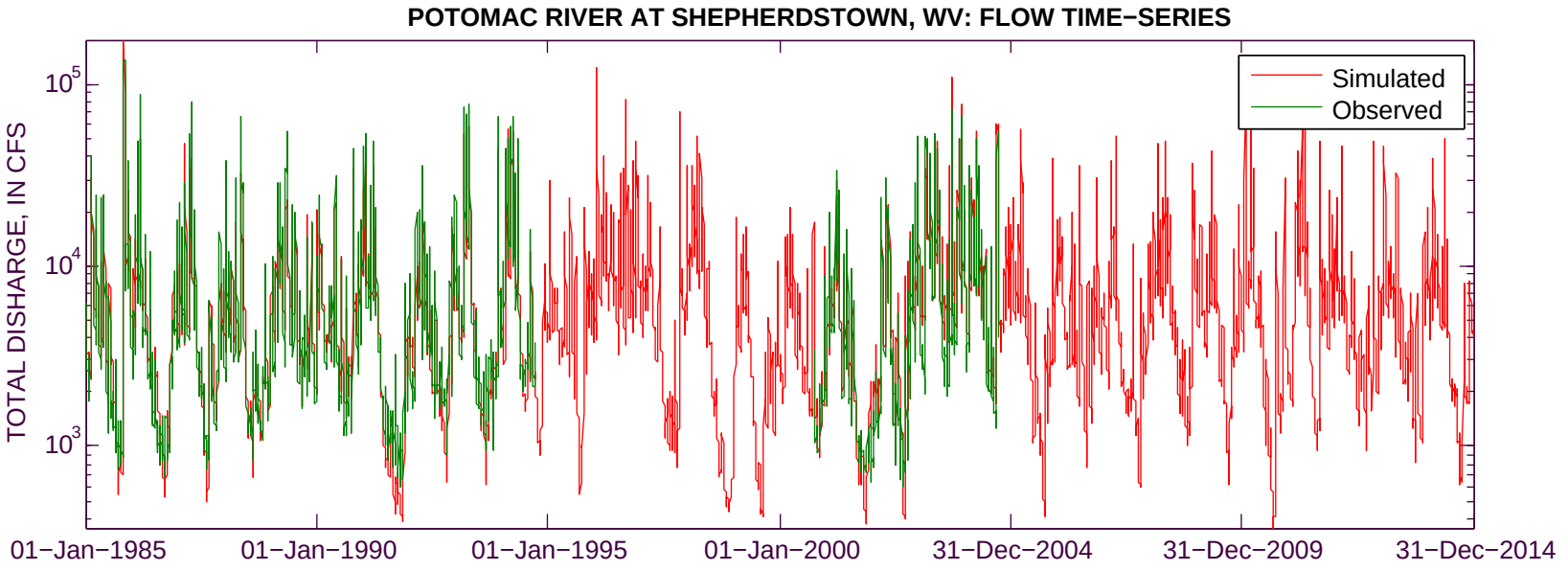
LOAD DATA
LOG10

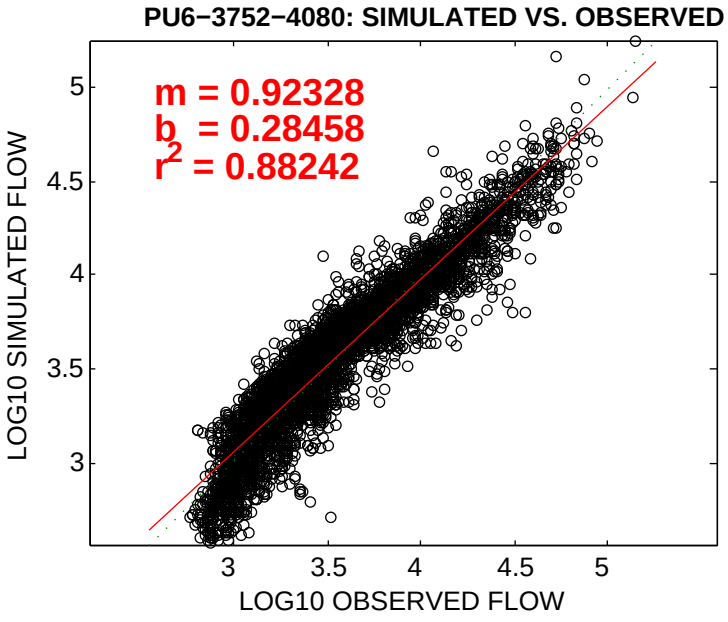


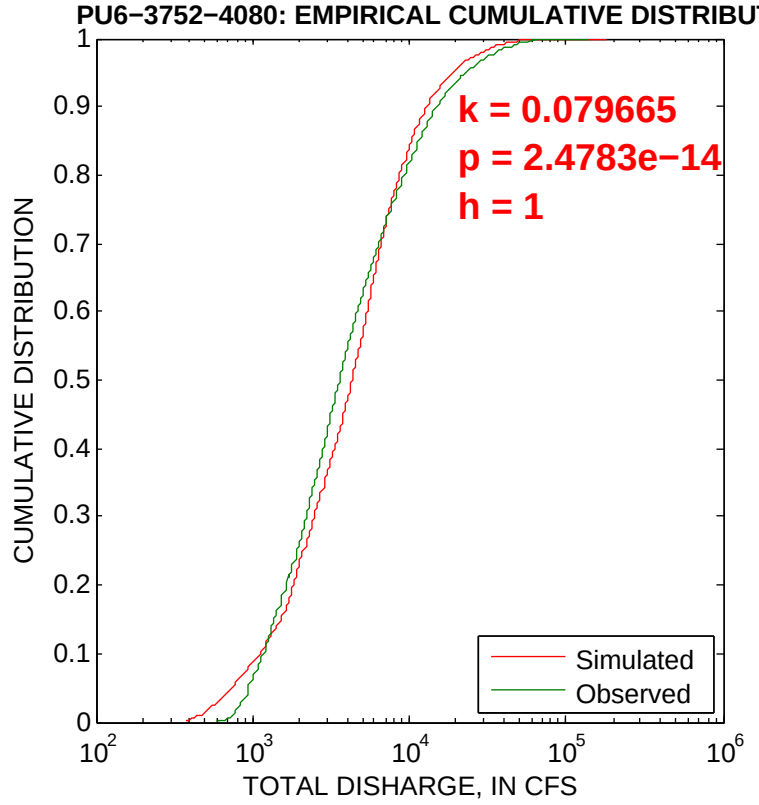












DATA SELECTION

scenario: P620171001WQ | file: FLOW.calib

plot: FLOW - total discharge

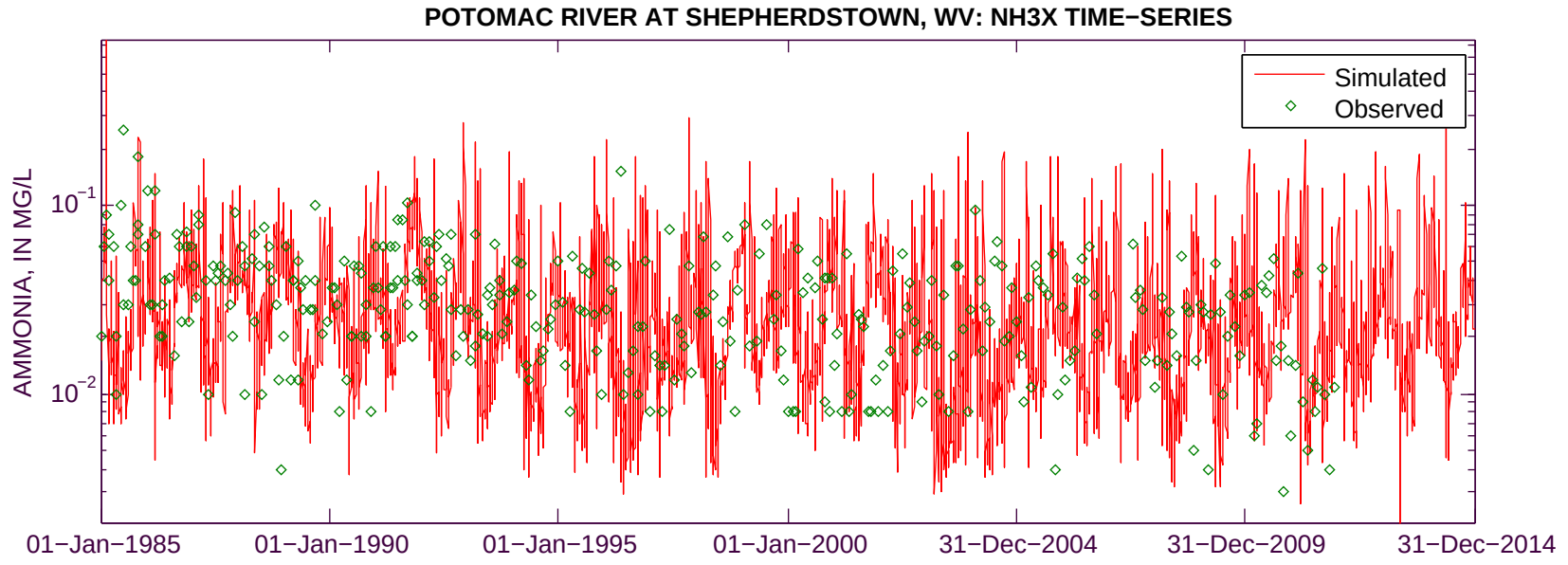
Dates: 1/1/1985 – 12/31/201

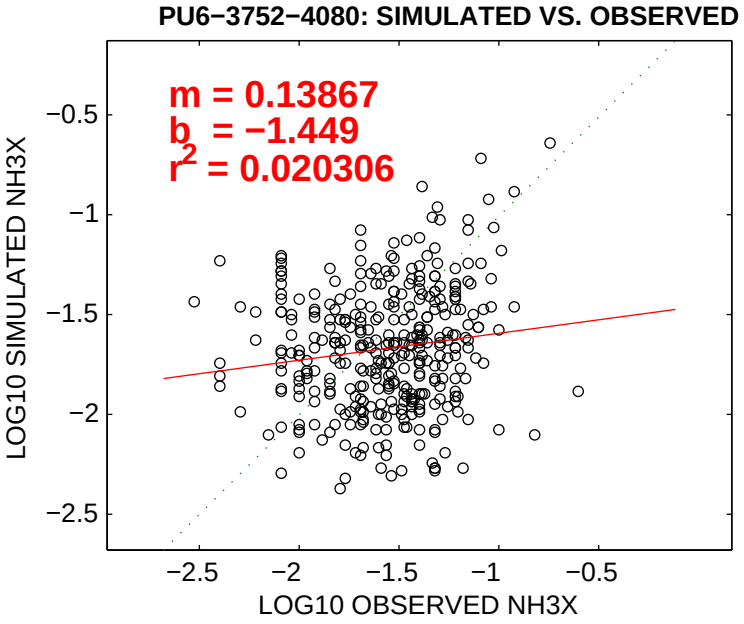
Drive | Directory | Observed: N/A | model | OBS20161101

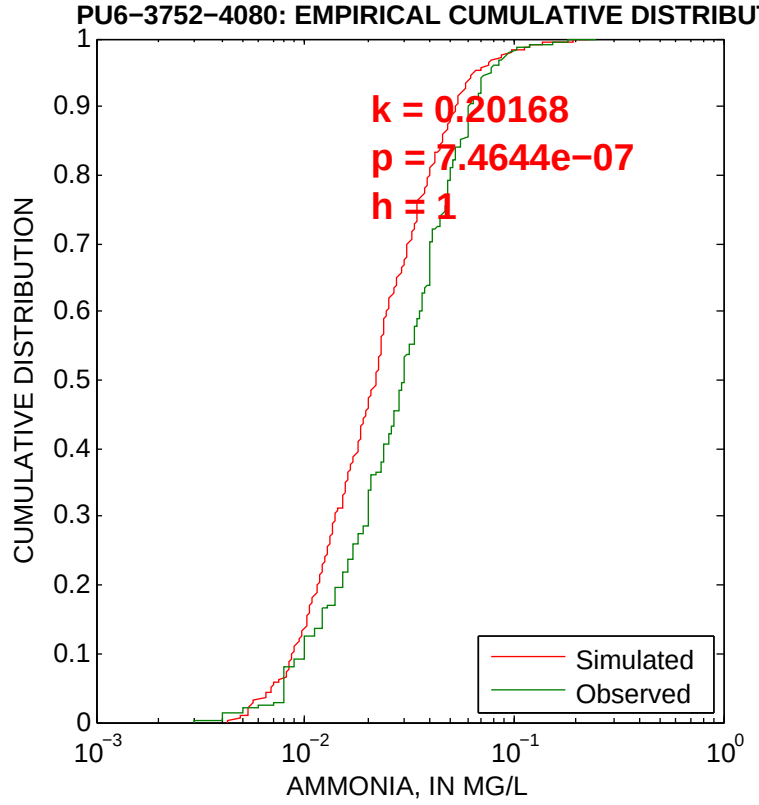
STATISTICS

	n	observe	simulate
		5021	5021
min		589	374.48
		2.77012	2.57343
mean		6715.36	6384.87
		3.60049	3.60883
media		3600	4335.9
		3.5563	3.63708
max		138000	178540
		5.13988	5.25174
varian		8.27924e+0	6.32557e+
		0.177508	0.171478
JB		0.001	0.001
		0.001	0.416869
		ra	log
%		-4.9214	0.231756
err.va		1.54799e+0	0.0212776
rel.std.err		0.186973	0.119869
mod.eff		0.813027	0.880131

VERSION 2.1







DATA SELECTION

scenario	file
P620171001WQ	NH3X.calib

plot: NH3X - ammonia

Dates: 1/1/1985 – 12/31/201

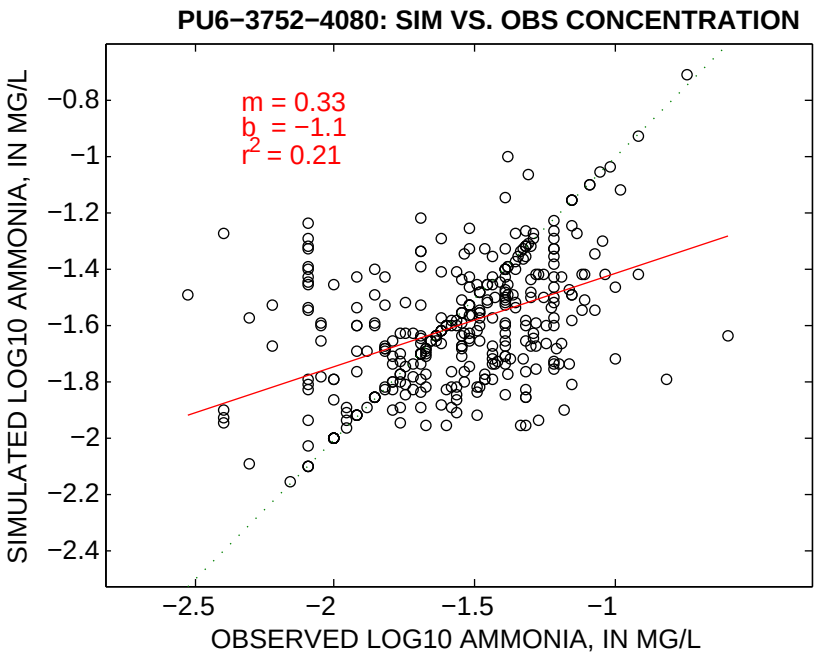
Drive	Directory	Observed
N/A	model	OBS20161101

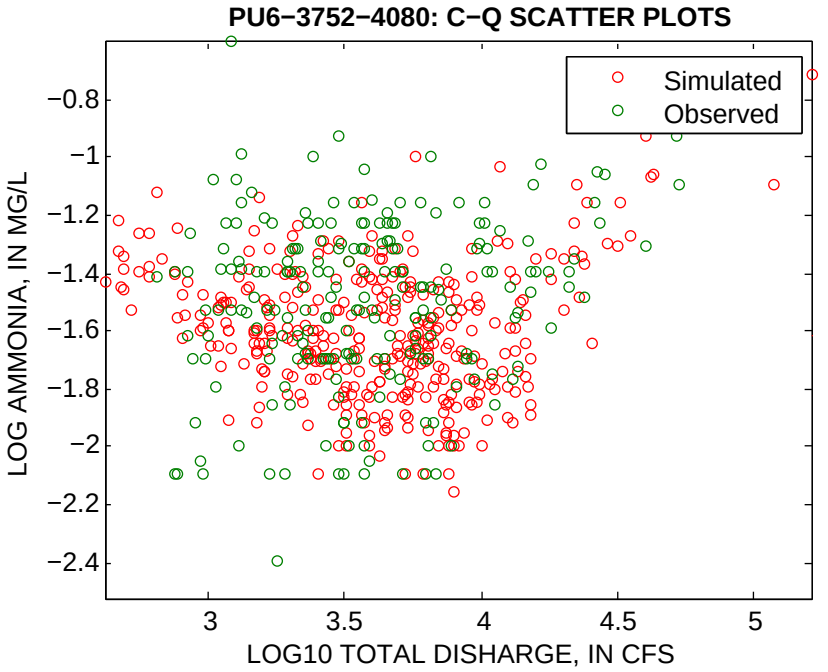
STATISTICS

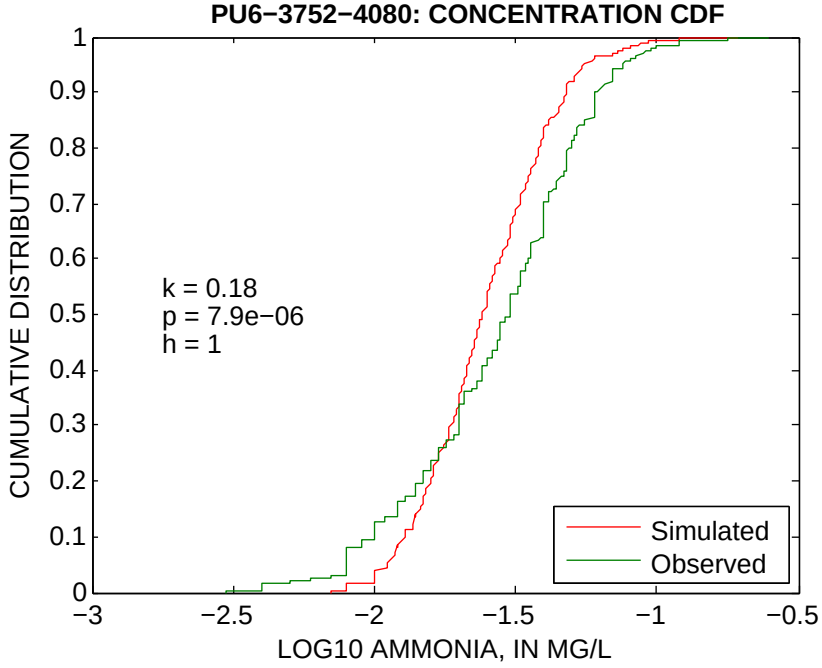
	n	357	357
		observe	simulate
min		0.003	0.0043226
		-2.52288	-2.36425
mean		0.0346807	0.0279757
		-1.56524	-1.66603
media		0.03	0.021789
		-1.52288	-1.66176
max		0.25	0.22918
		-0.60206	-0.639823
varian		0.00068099	0.00060578
		0.0984177	0.0931927
JB		0.001	0.001
		0.051752	0.159111
		ra	log
%		-19.3335	6.43877
err.va		0.00093603	0.174502
rel.std.err		1.37451	1.77307
mod.eff		-0.374507	-0.773072

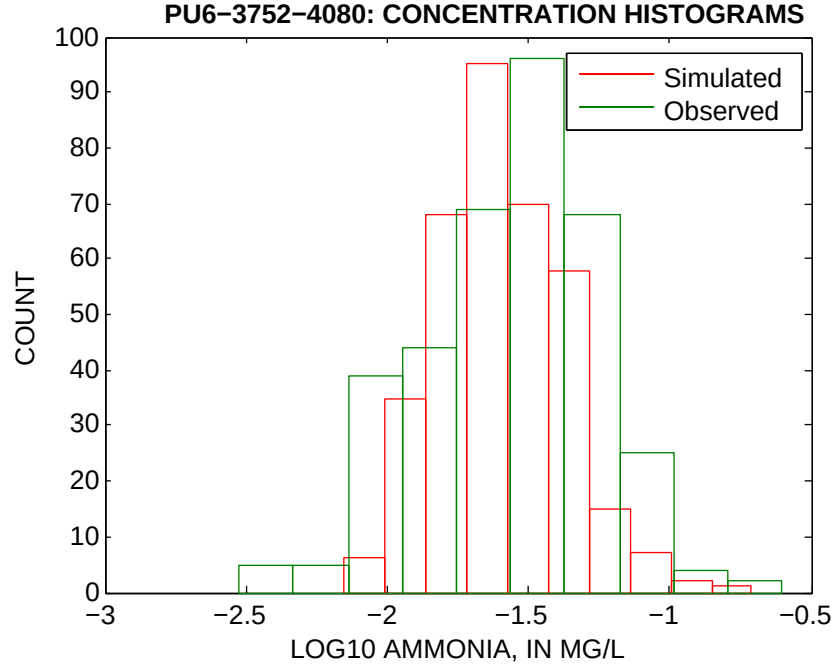
VERSION 2.1

ALL DATA
LOG10

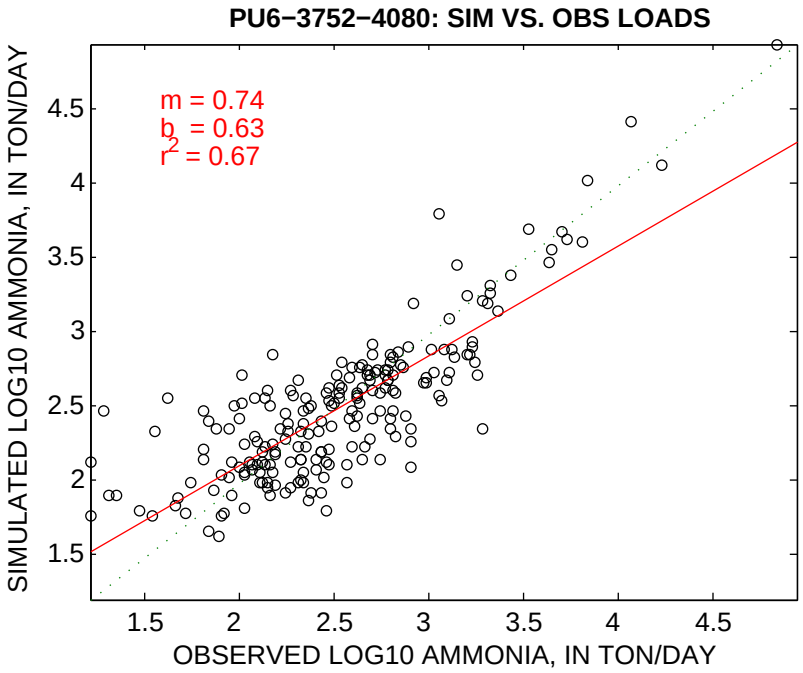


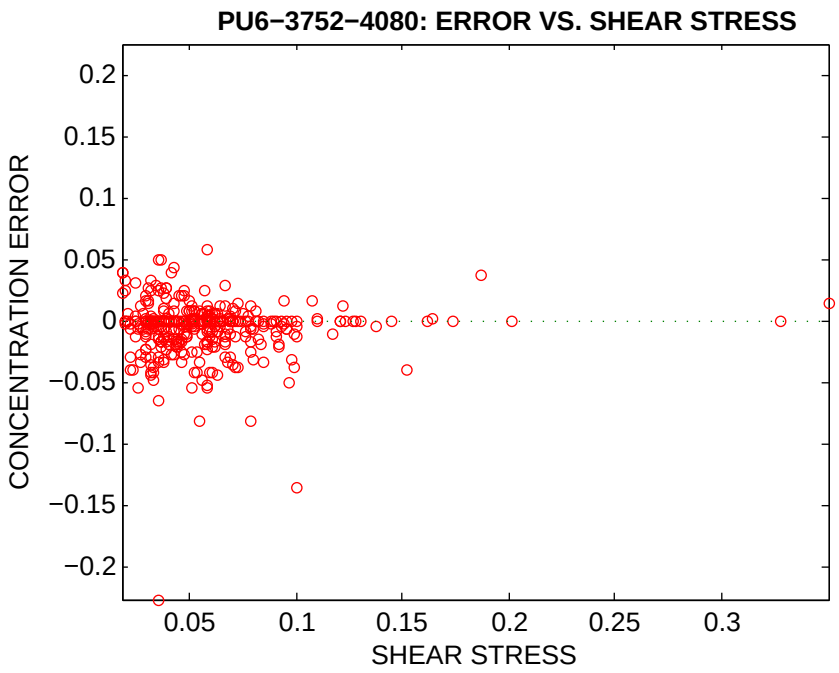


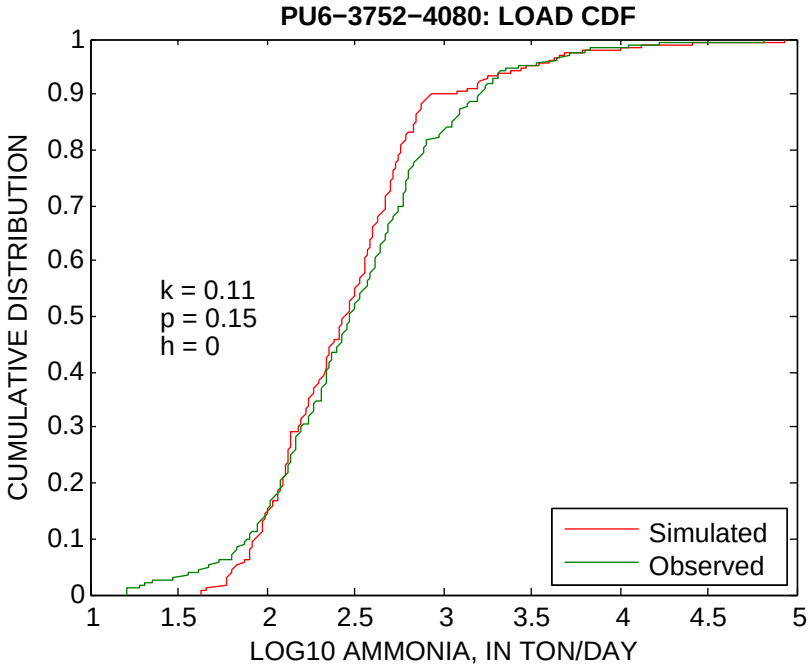


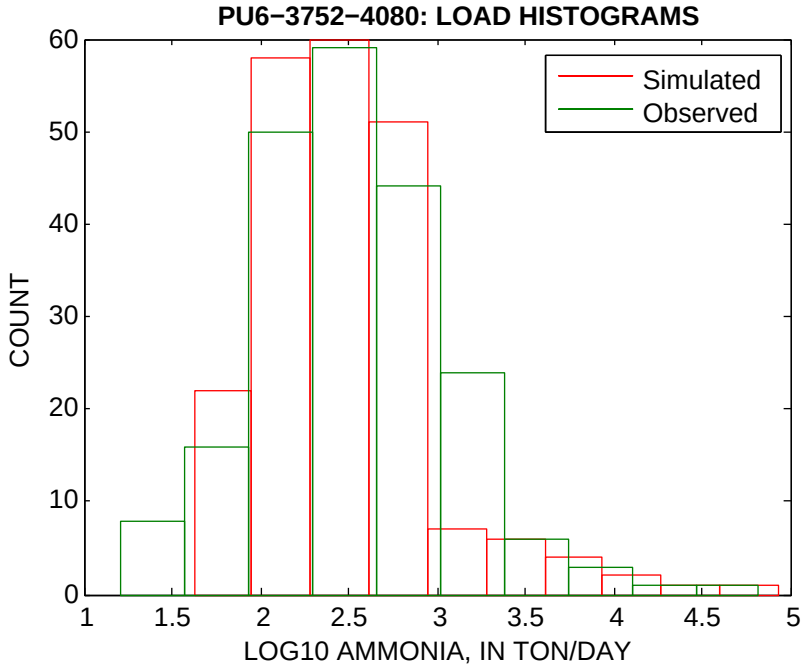


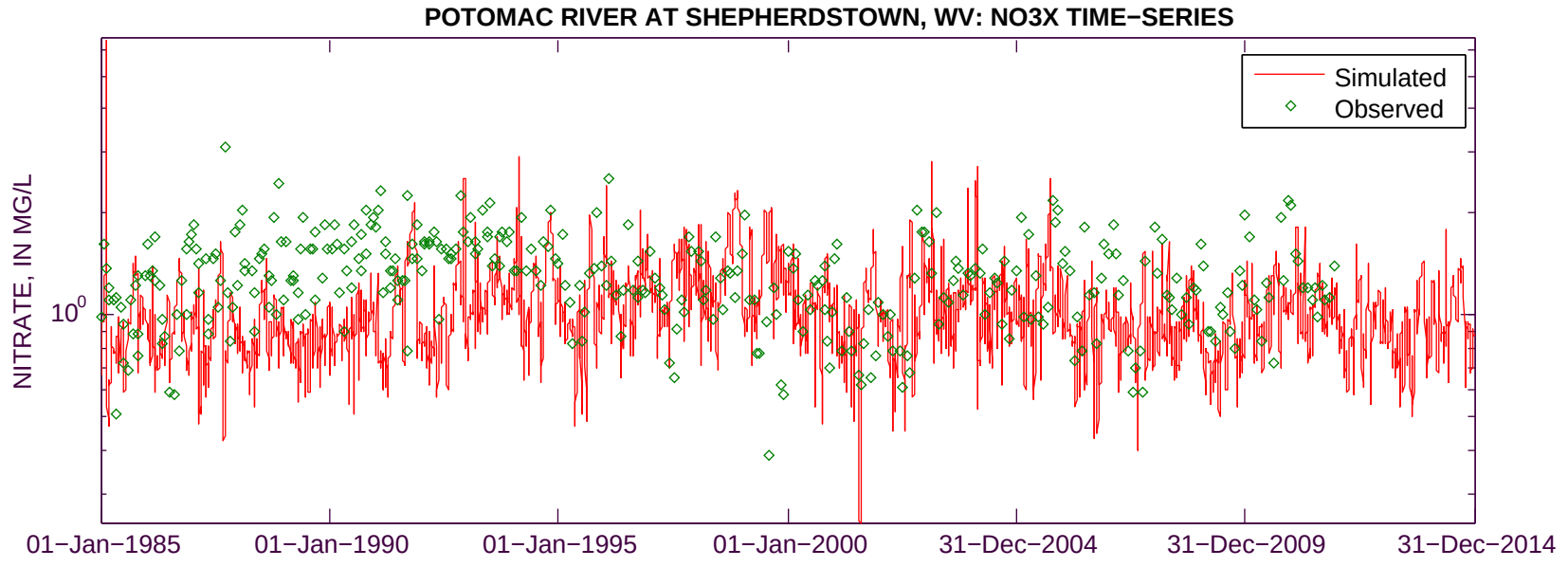
LOAD DATA
LOG10

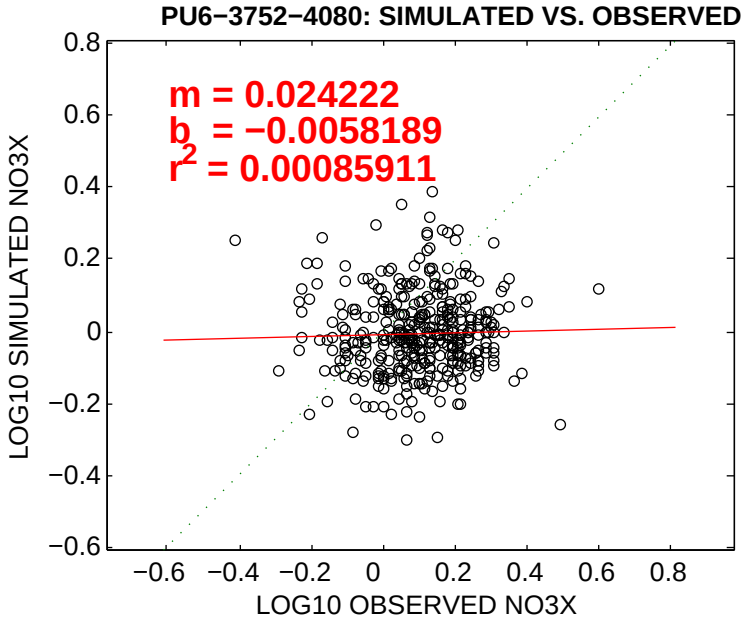


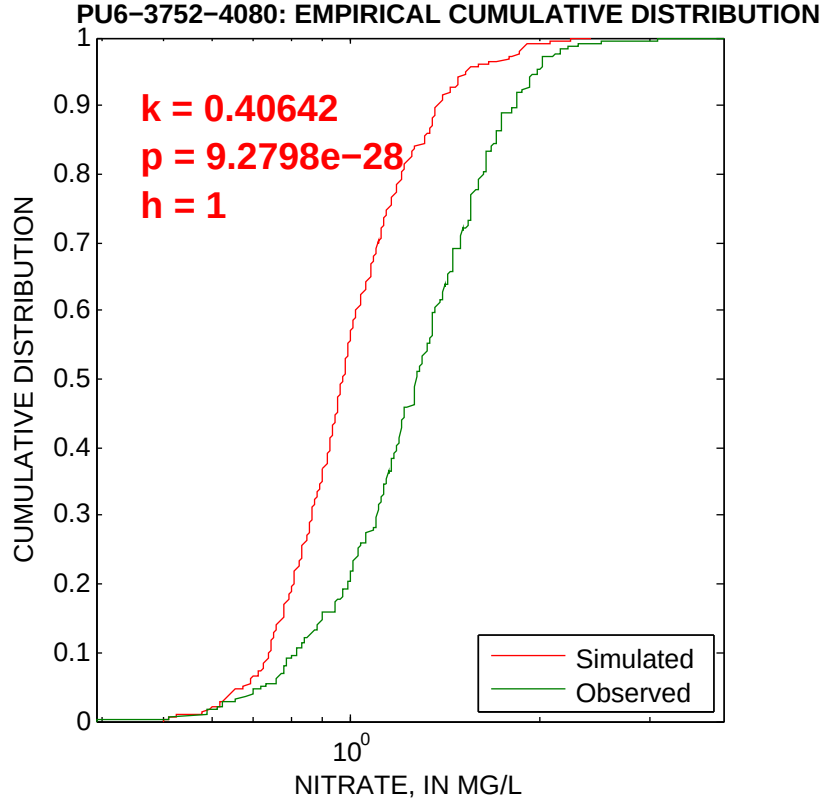












DATA SELECTION

scenario	file
P620171001WQ	NO3X.calib

plot: NO3X - nitrate

Dates: 1/1/1985 – 12/31/201

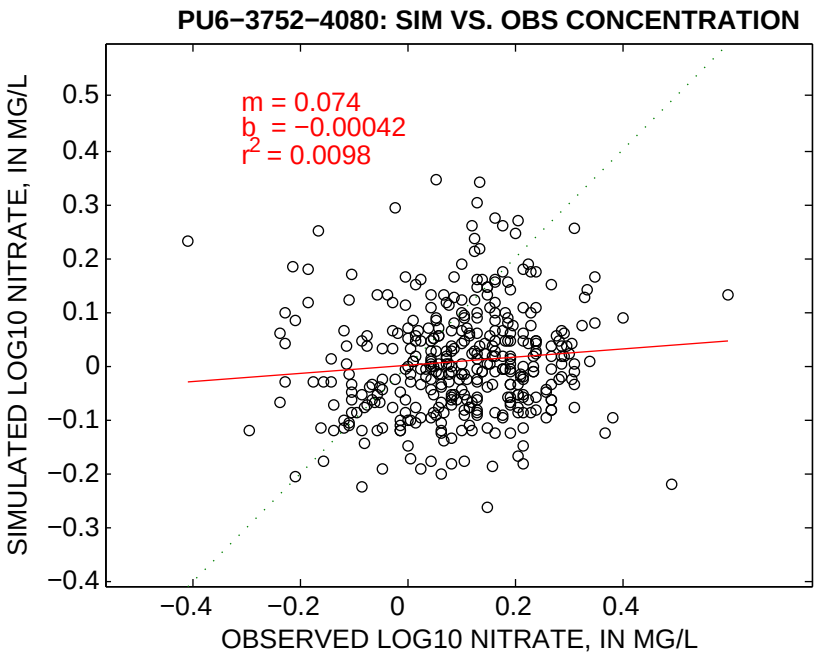
Drive	Directory	Observed
N/A	model	OBS20161101

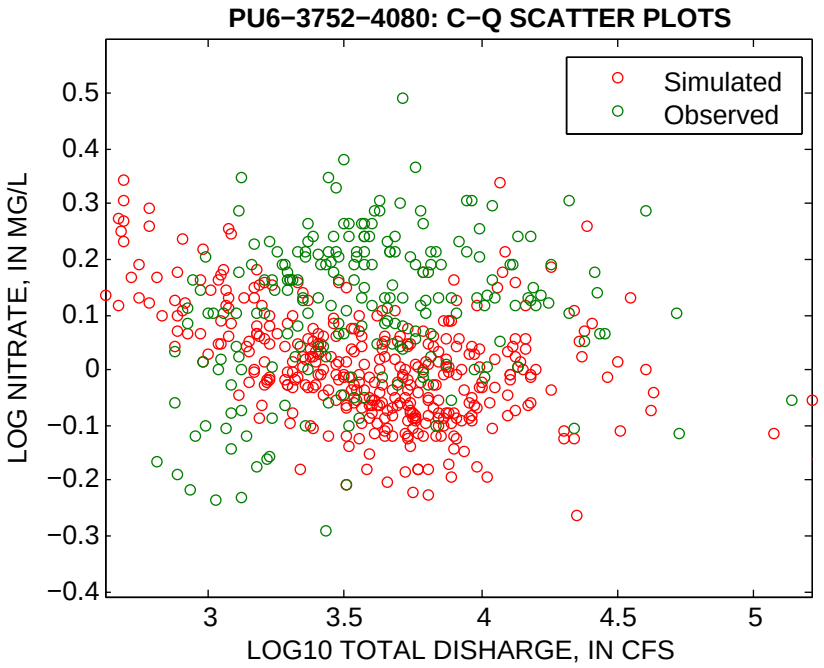
STATISTICS

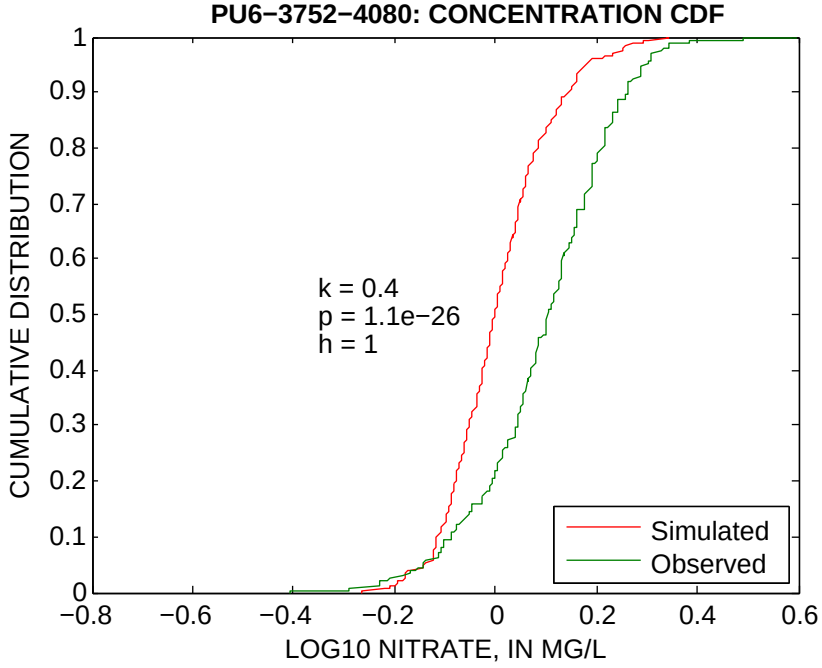
	n	374	374
		observe	simulate
min		0.39	0.50071
		-0.408935	-0.300414
mean		1.31164	1.02674
		0.0973073	-0.0034618
media		1.272	0.970255
		0.104487	-0.0131141
max		3.937	2.4251
		0.595165	0.38473
varian		0.166286	0.0816361
		0.0183251	0.0125147
JB		0.001	0.001
		0.010803	0.004165
		ra	log
%		-21.7211	-103.558
err.va		0.323515	0.0401337
rel.std.err		1.94554	2.1901
mod.eff		-0.945535	-1.1901

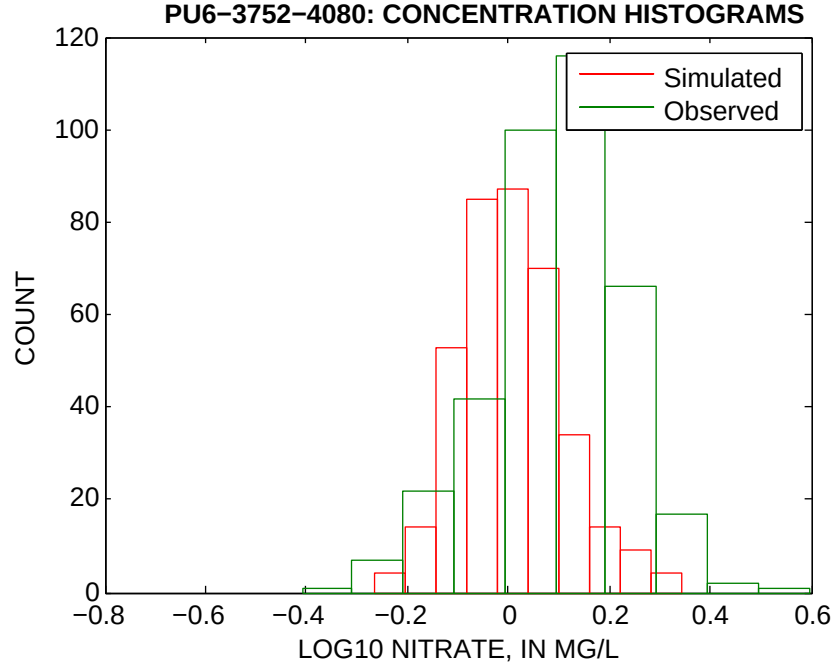
VERSION 2.1

ALL DATA
LOG10

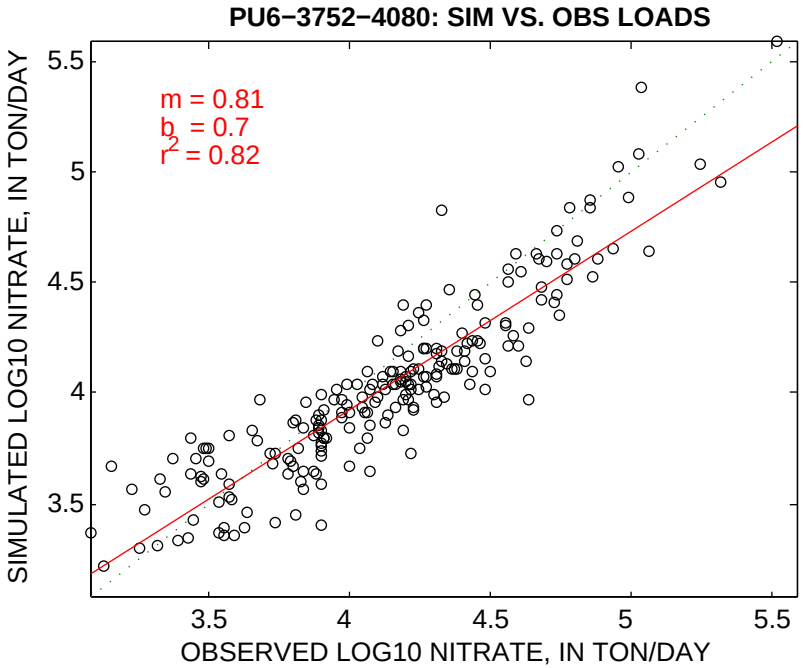


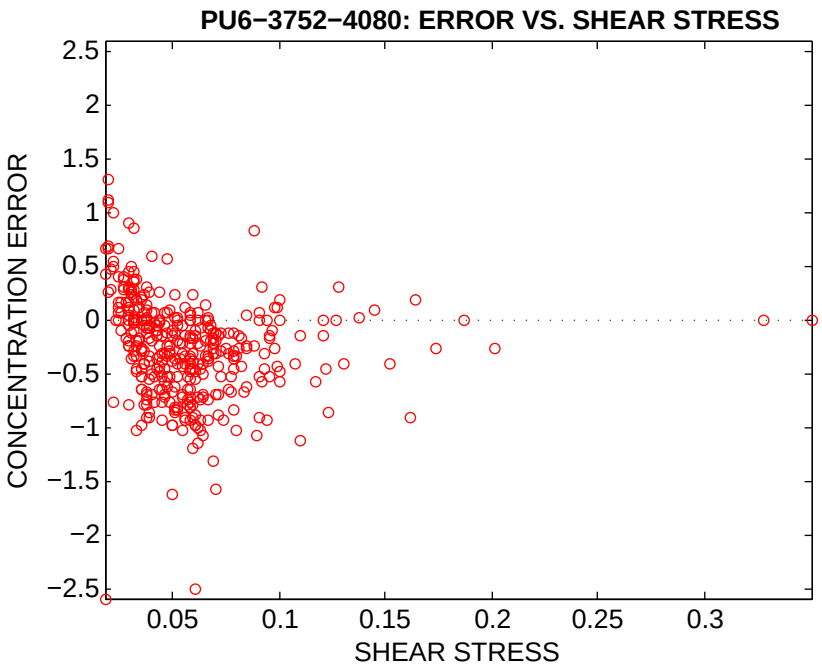


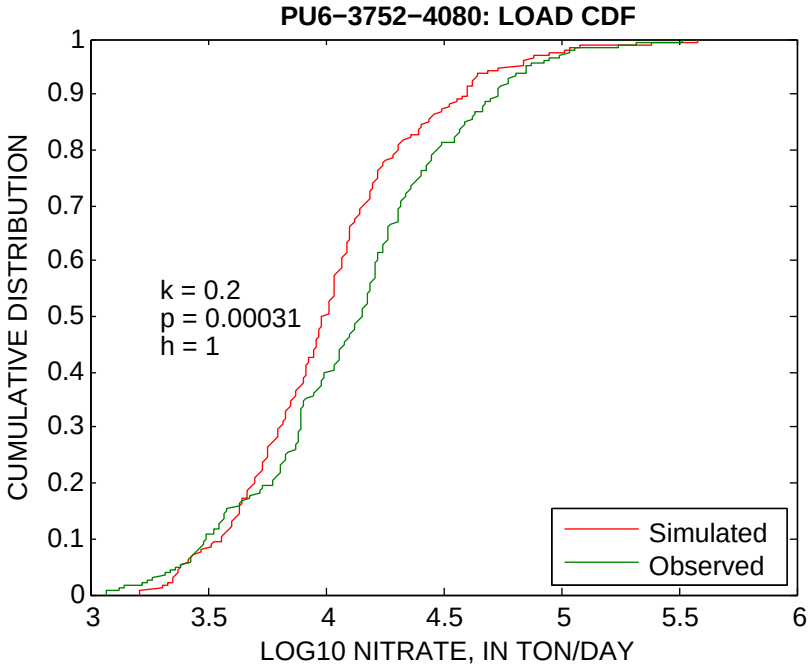


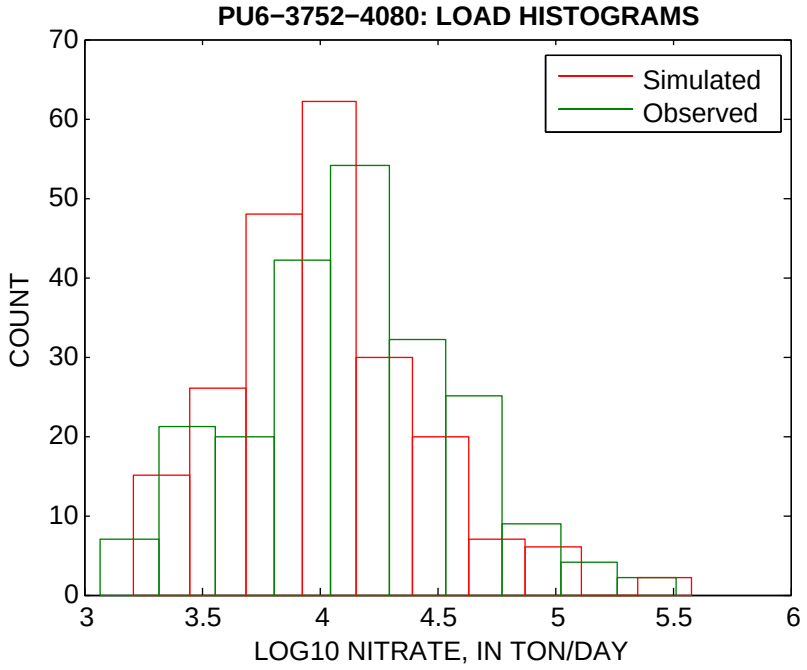


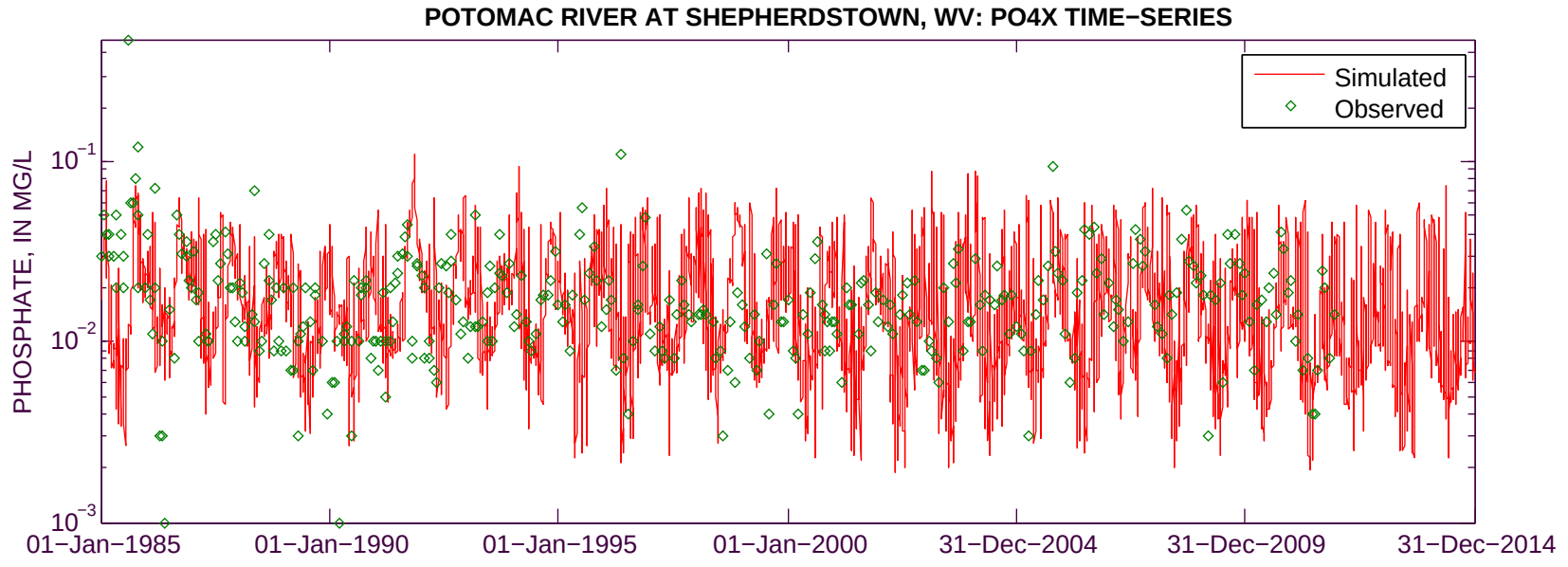
LOAD DATA
LOG10

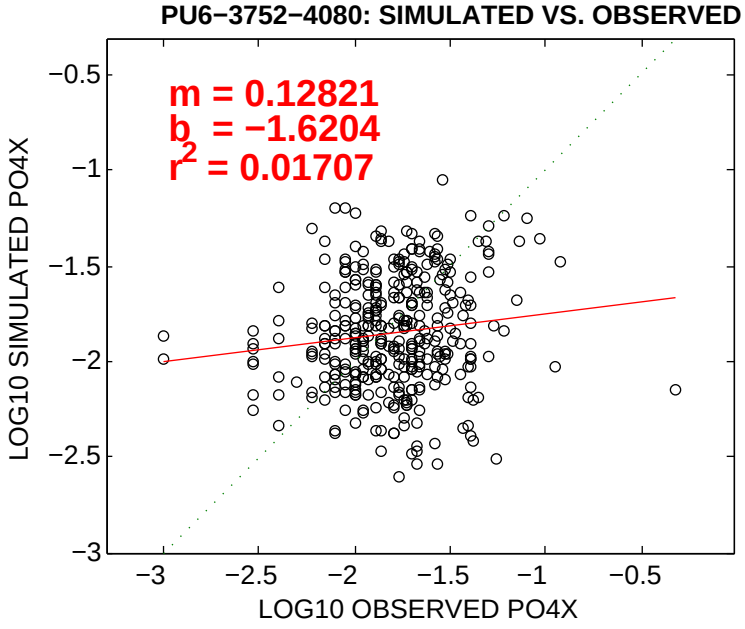


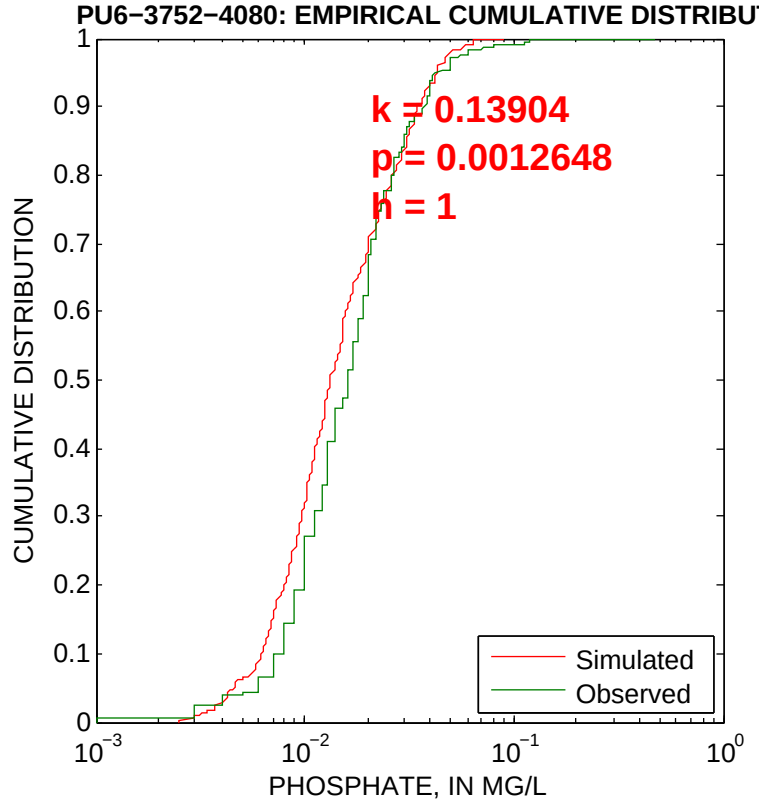












DATA SELECTION

scenario	file
P620171001WQ	PO4X.calib

plot: PO4X - phosphate

Dates: 1/1/1985 – 12/31/201

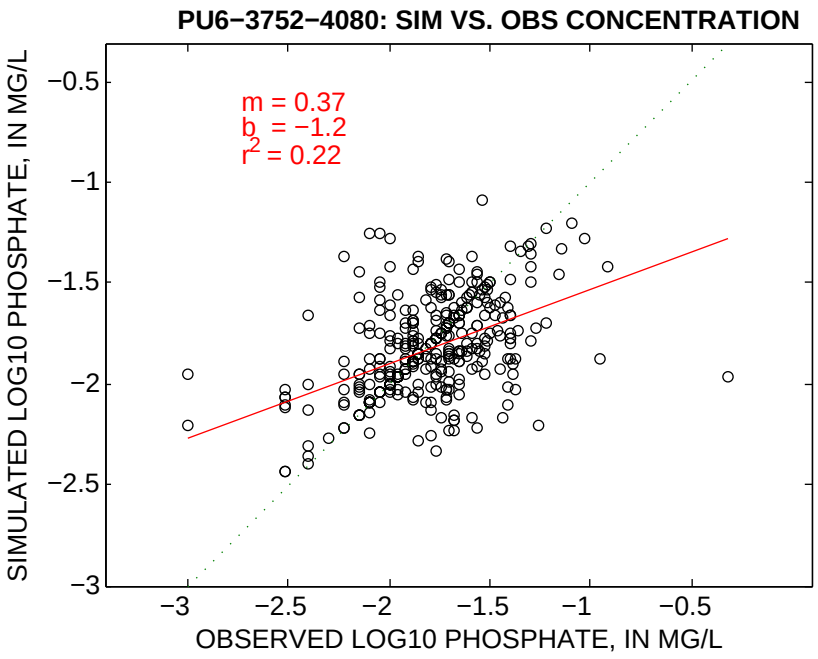
Drive	Directory	Observed
N/A	model	OBS20161101

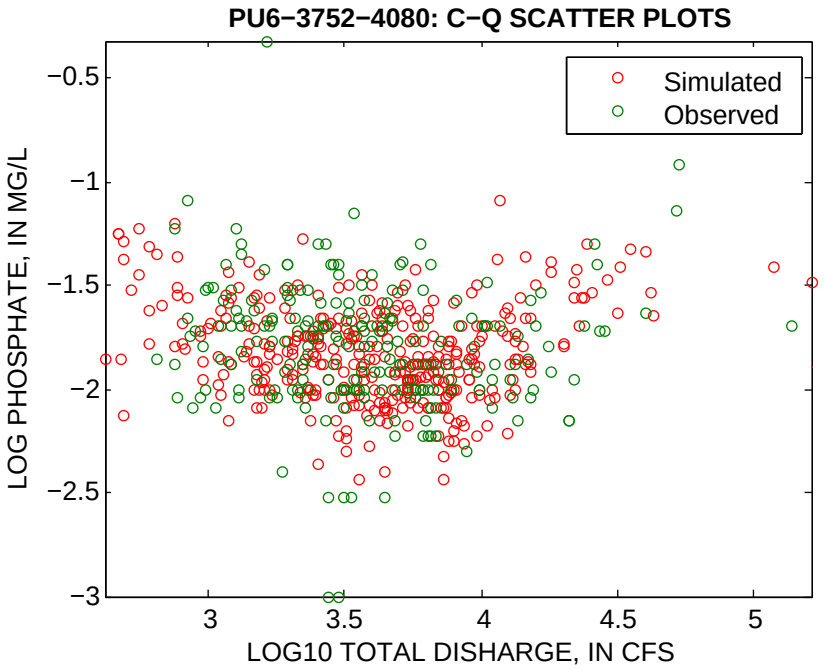
STATISTICS

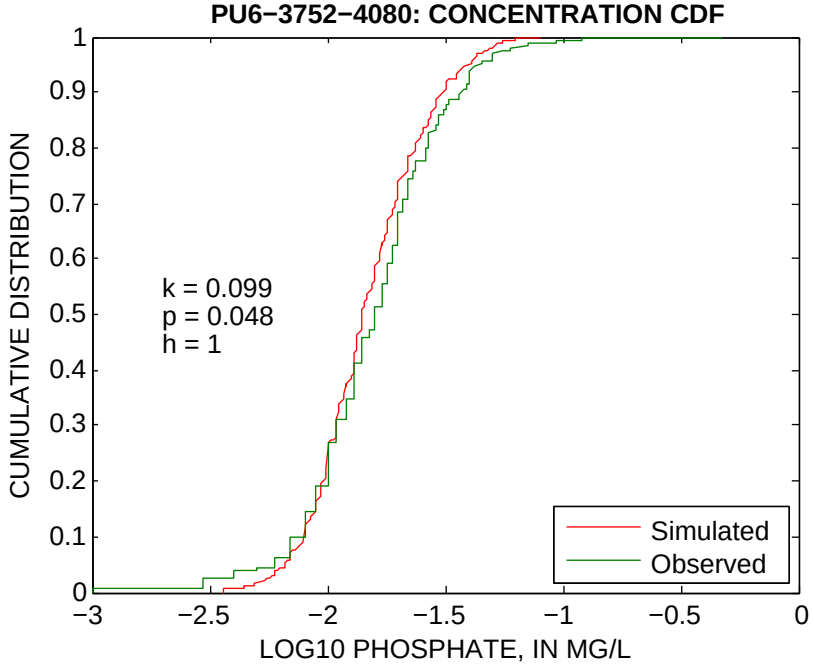
	n	374	374
		observe	simulate
min		0.001	0.0024965
		-3	-2.60267
mean		0.0205802	0.0176015
		-1.80142	-1.85134
media		0.016	0.0132315
		-1.79588	-1.8784
max		0.48	0.088561
		-0.318759	-1.05276
varian		0.00077402	0.00015751
		0.0880019	0.0847462
JB		0.001	0.001
		0.001	0.150682
		ra	log
%		-14.4739	2.77091
err.va		0.00089104	0.15268
rel.std.err		1.15118	1.73497
mod.eff		-0.15118	-0.734967

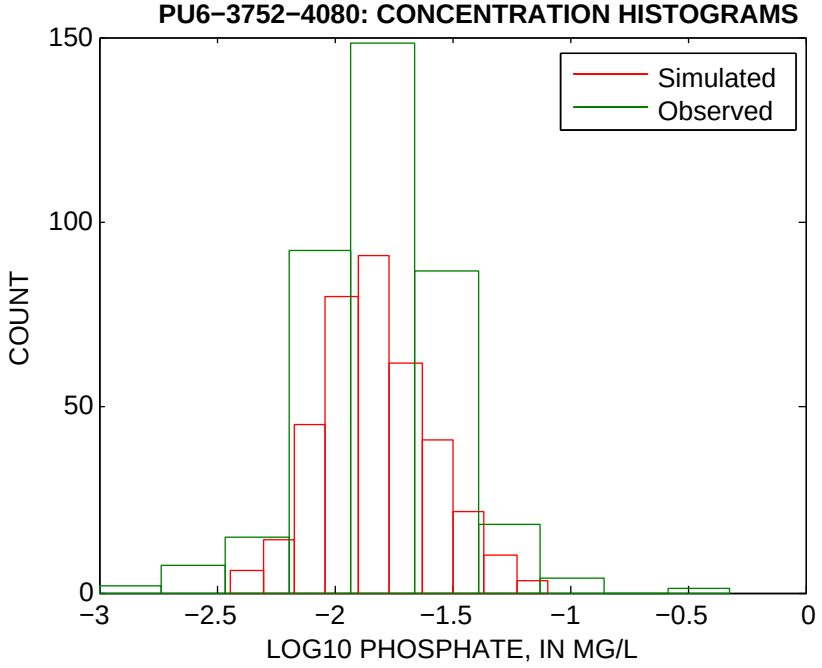
VERSION 3.1

ALL DATA
LOG10

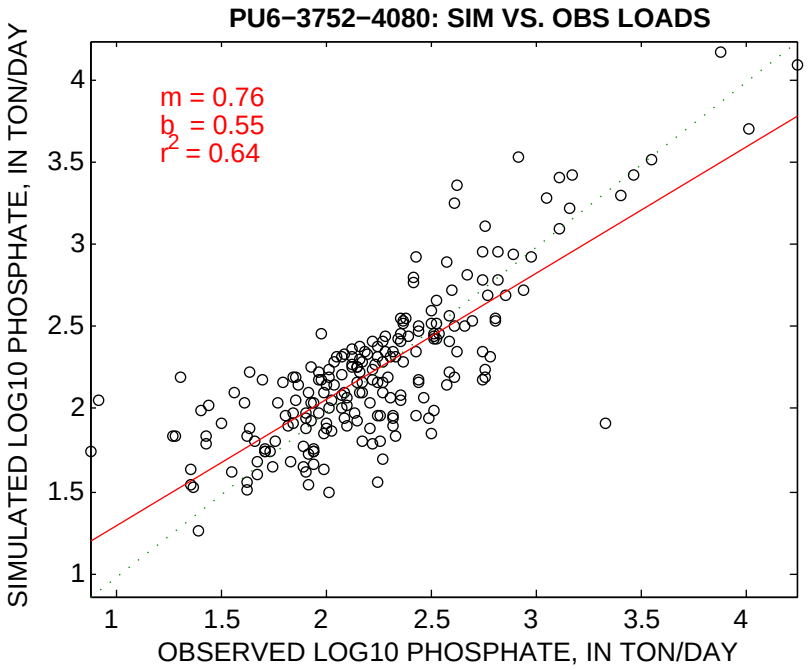


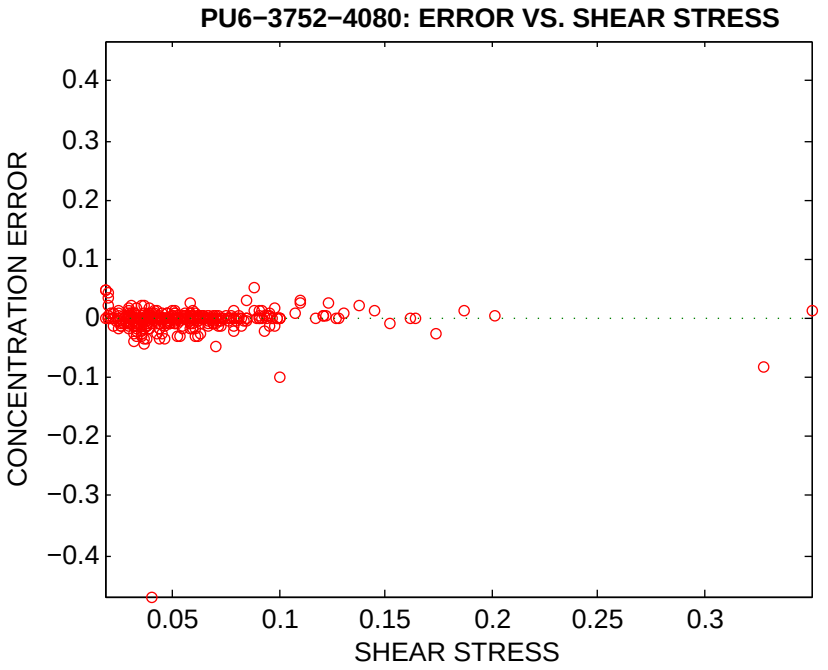


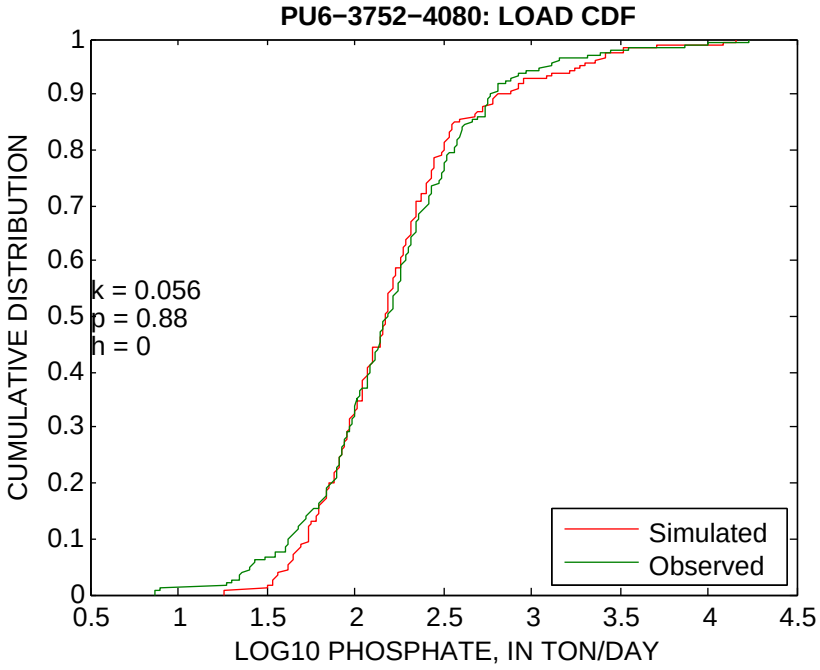


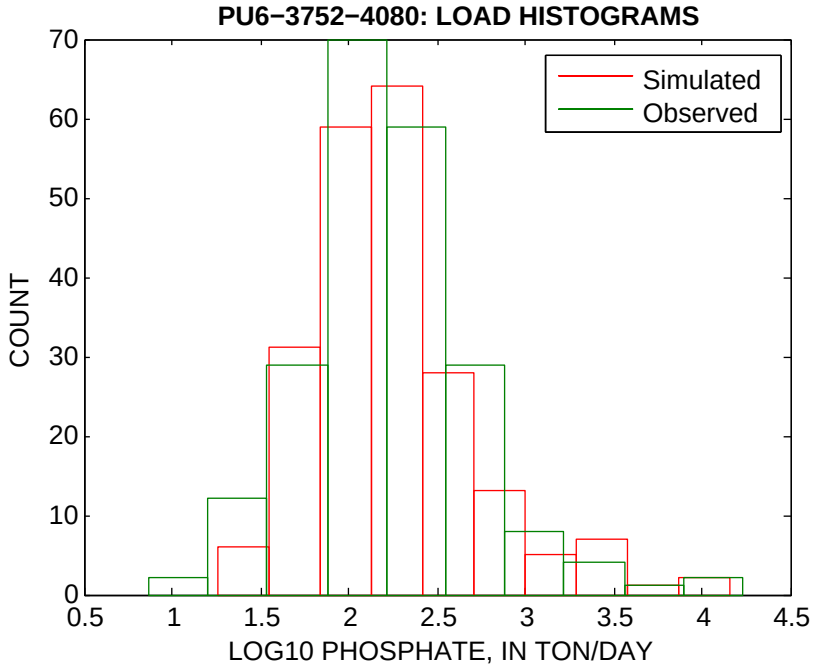


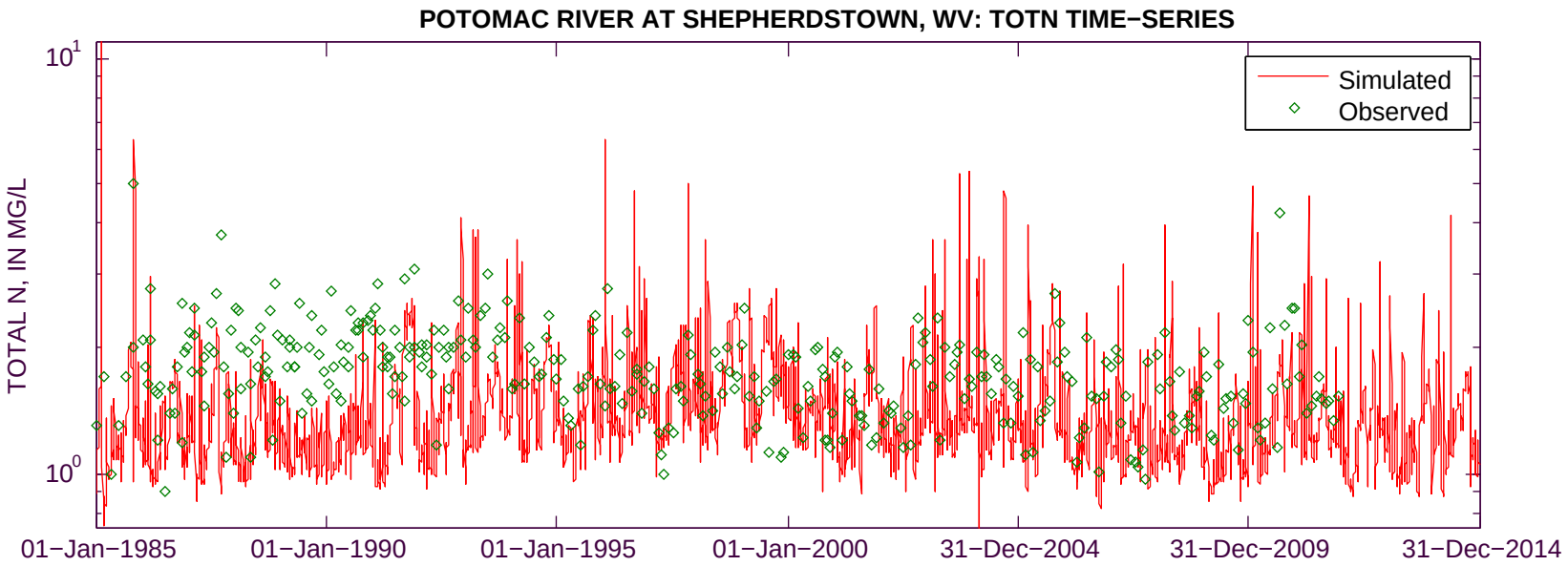
LOAD DATA
LOG10

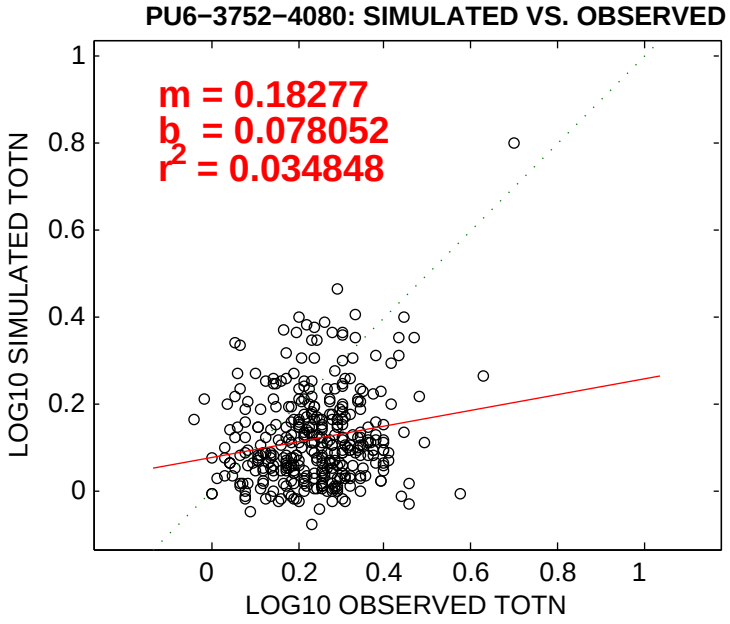


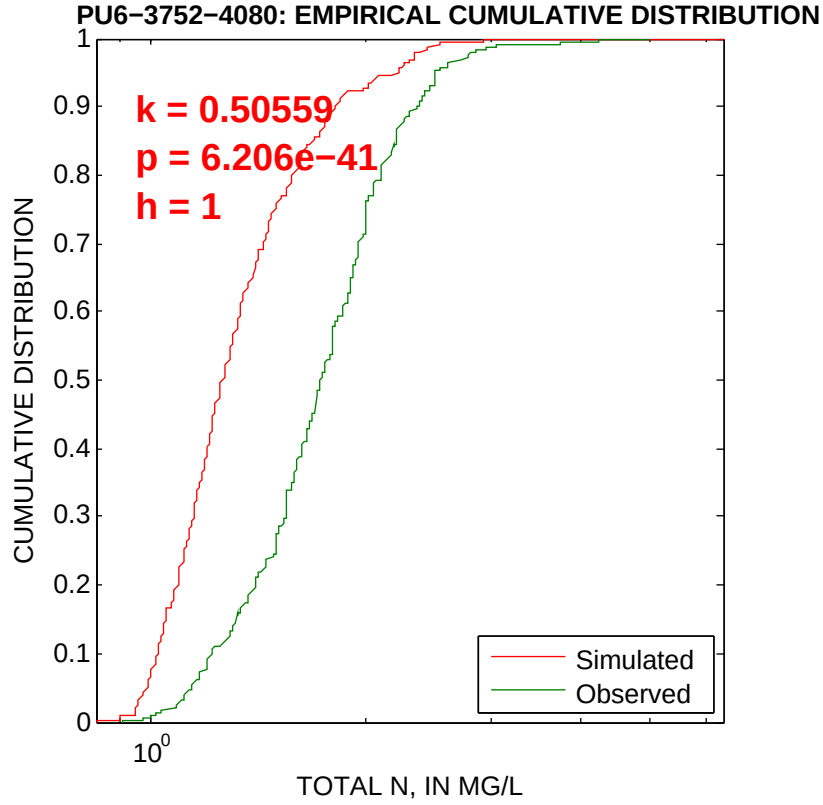












DATA SELECTION

scenario: P620171001WQ | file: TOTN.calib

plot: TOTN - total nitrogen

Dates: 1/1/1985 – 12/31/201

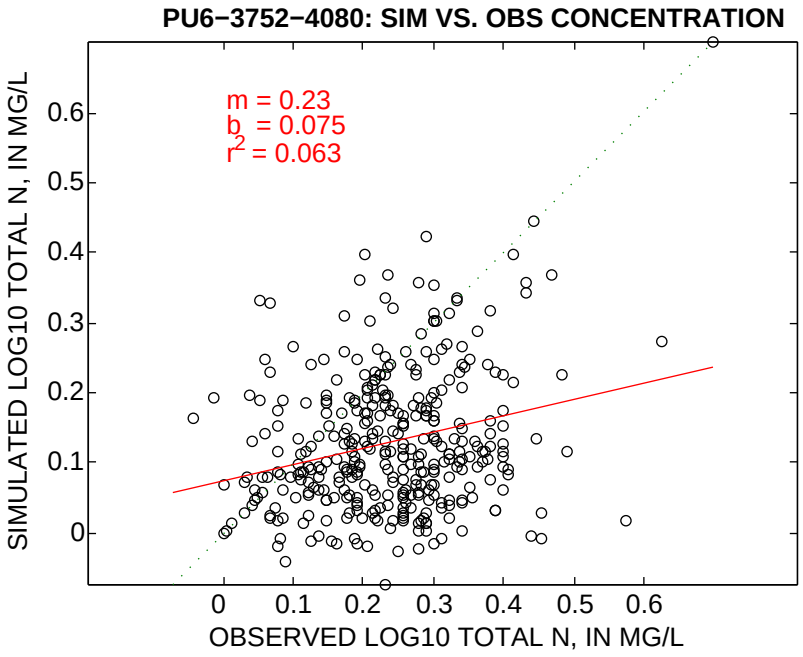
Drive: N/A | Directory: model | Observed: OBS20161101

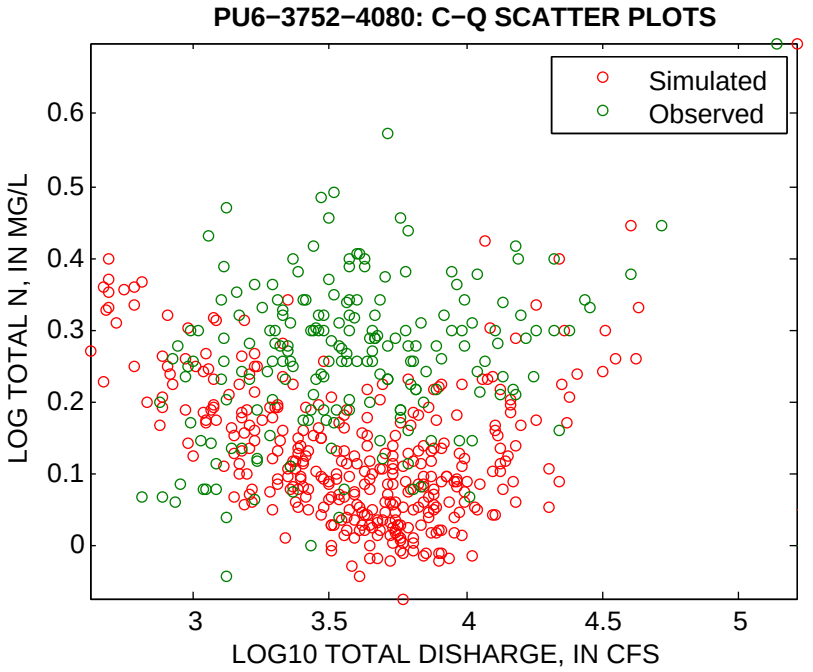
STATISTICS

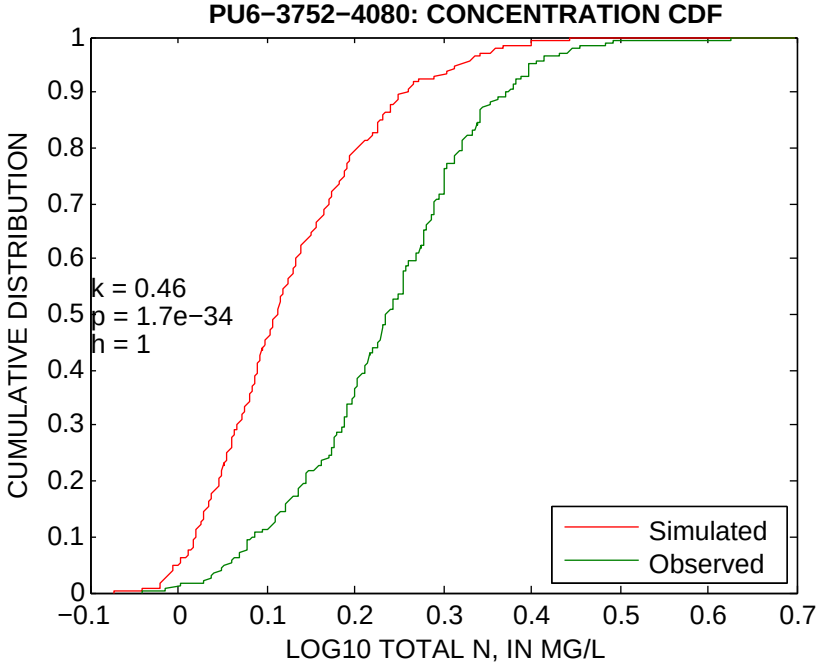
n	358	358
	observe	simulate
min	0.91	0.83338
	-0.0409586	-0.0791569
mean	1.7818	1.36832
	0.23701	0.121371
media	1.725	1.25515
	0.236787	0.0986956
max	5	6.3504
	0.69897	0.802801
varian	0.22648	0.190803
	0.0117569	0.0112706
JB	0.001	0.001
	0.006860	0.001
	ra	log
%	-23.2059	-48.7906
err.va	0.460753	0.0321395
rel.std.err	2.03441	2.73366
mod.eff	-1.03441	-1.73366

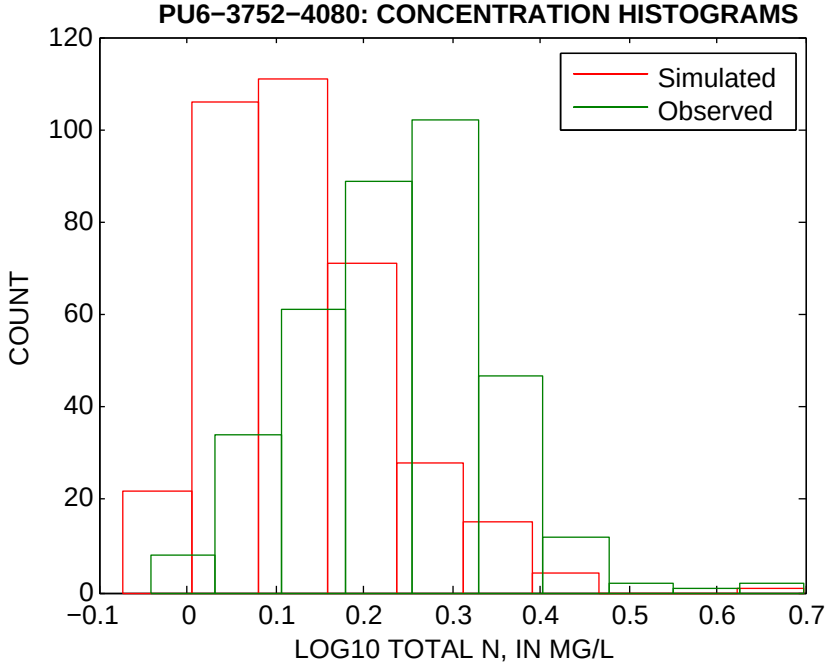
VERSION

ALL DATA
LOG10

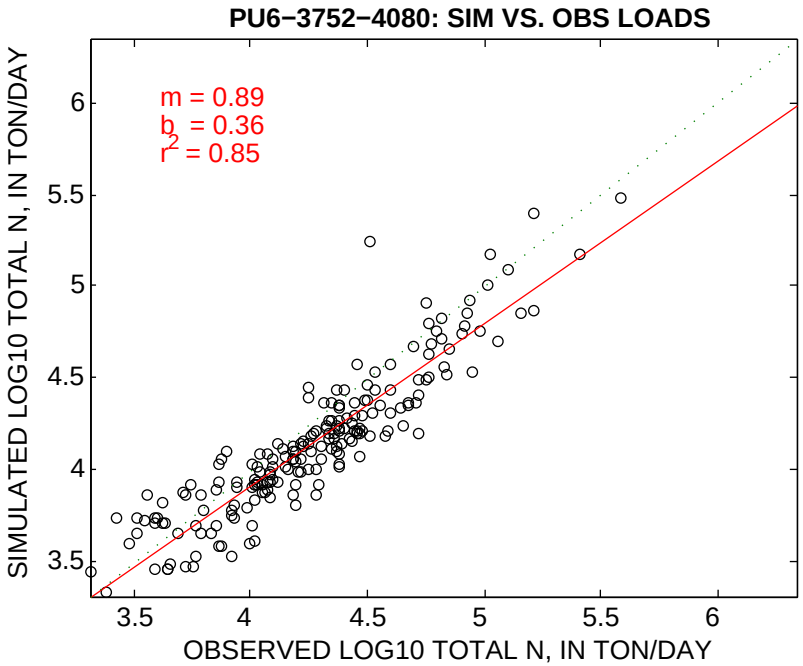


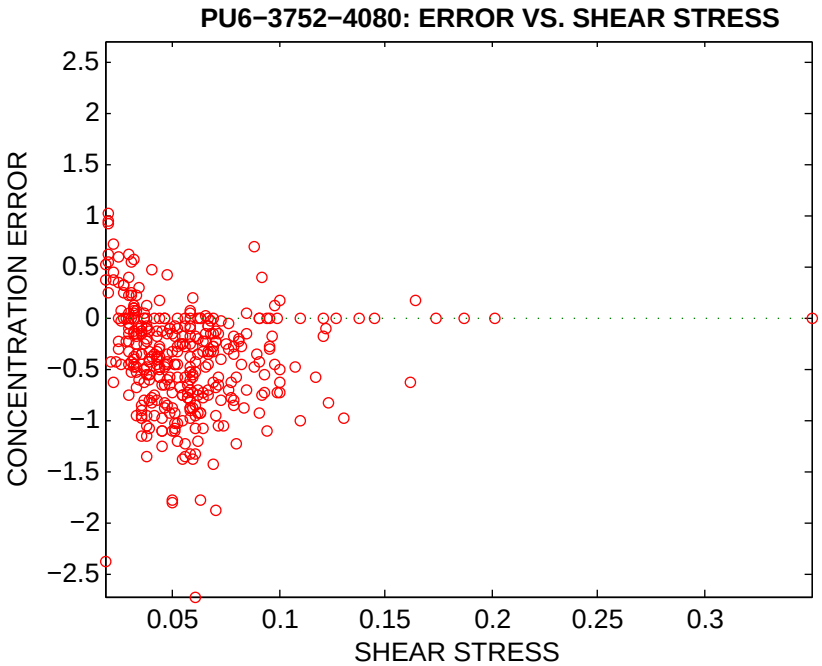


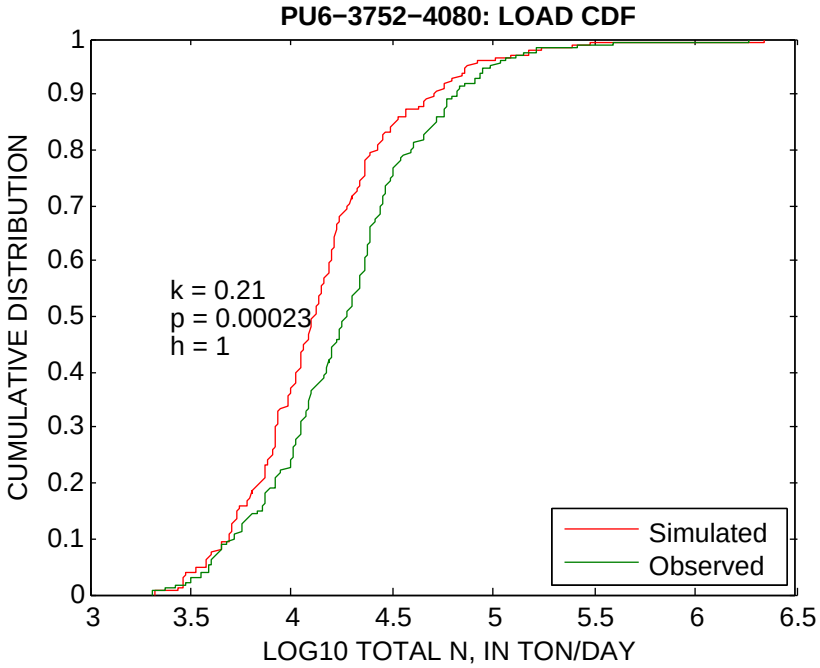


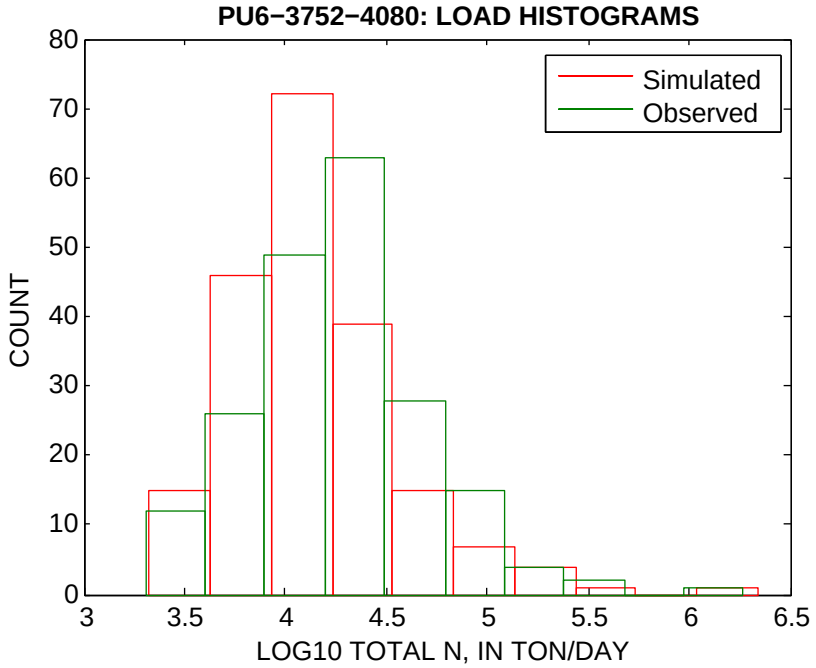


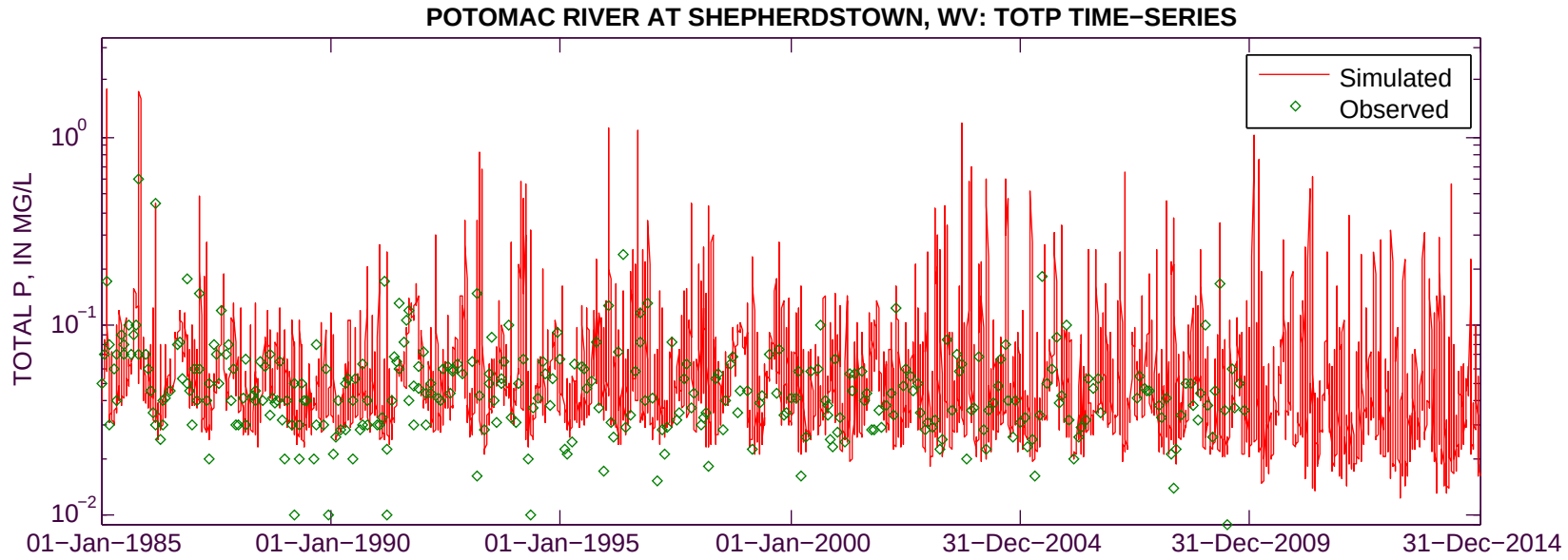
LOAD DATA
LOG10

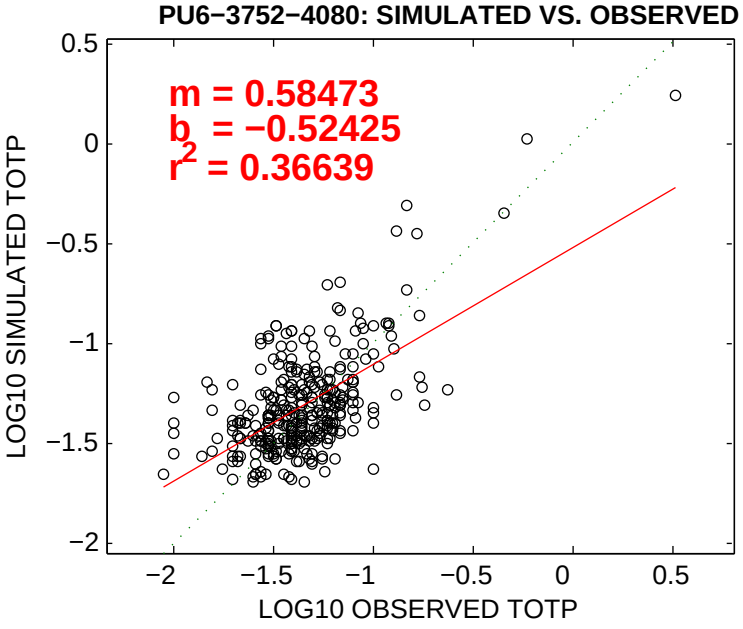


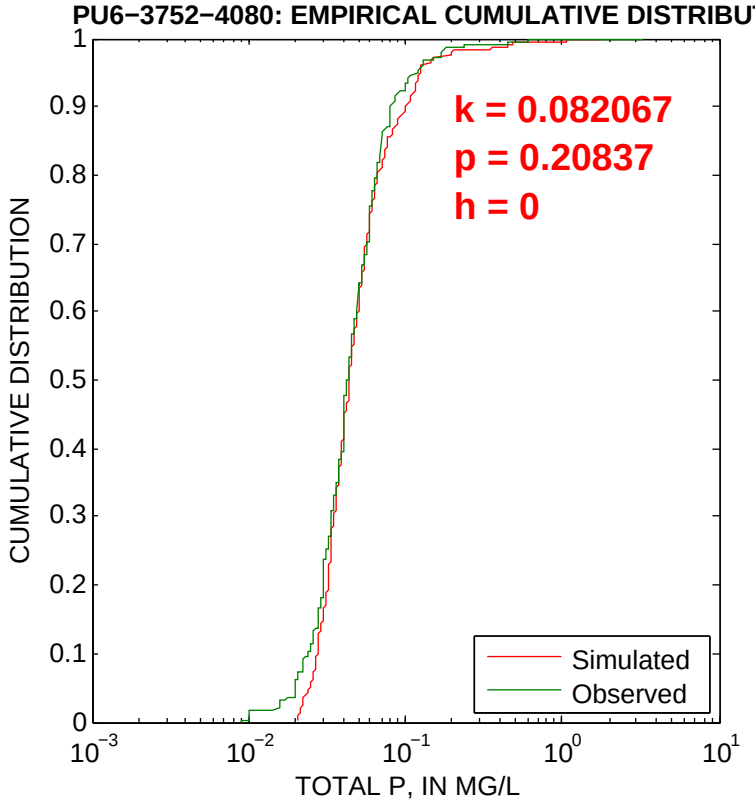












DATA SELECTION

scenario	file
P620171001WQ	TOTP.calib

plot: TOTP - total phosphorus

Dates: 1/1/1985 – 12/31/201

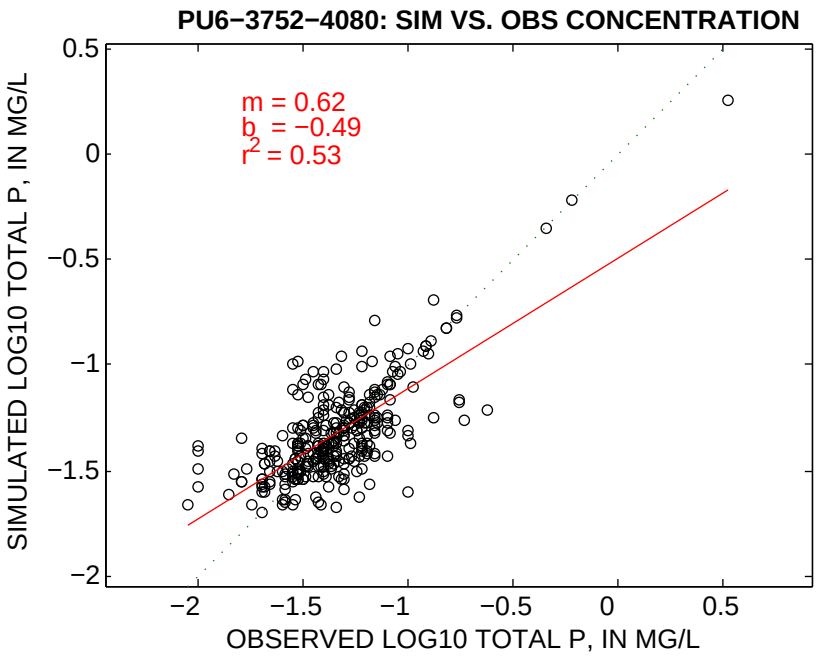
Drive	Directory	Observed
N/A	model	OBS20161101

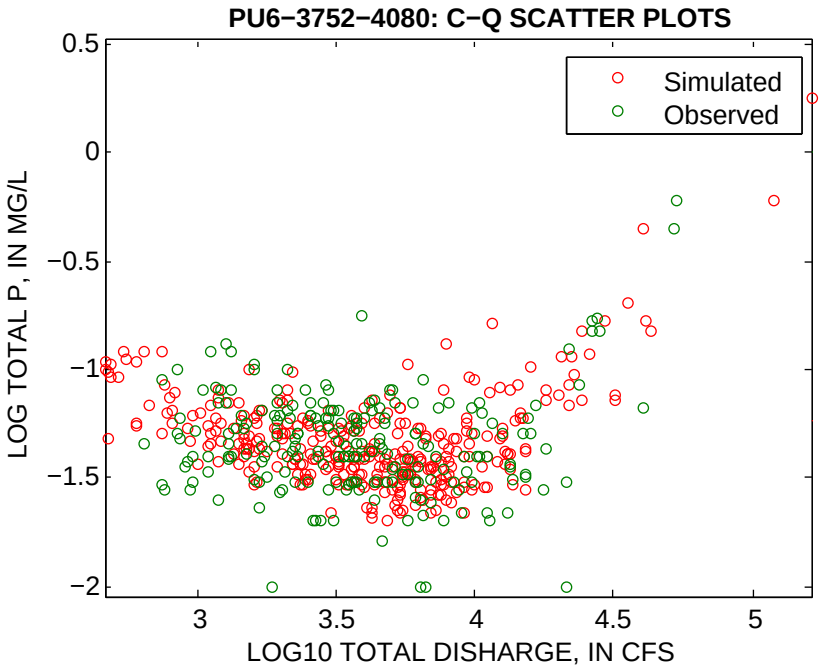
STATISTICS

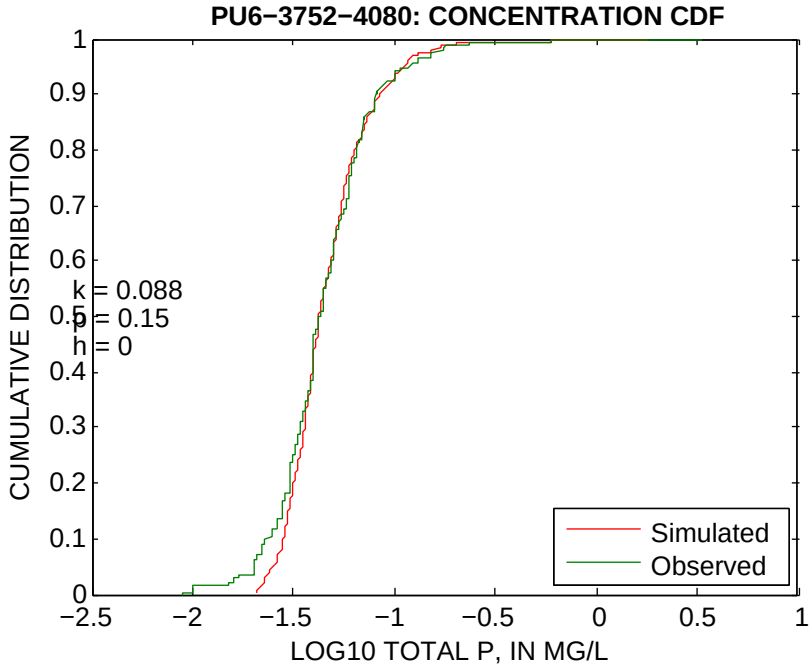
		observe	simulate
n		329	329
min		0.009	0.020061
		-2.04576	-1.69765
mean		0.0630517	0.0649258
		-1.34625	-1.31145
media		0.043	0.043876
		-1.36653	-1.35777
max		3.3	1.723
		0.518514	0.236285
varian		0.0343412	0.0139486
		0.0675822	0.0630667
JB		0.001	0.001
		0.001	0.001
		ra	log
%		2.97231	-2.58479
err.va		0.00985783	0.0526283
rel.std.err		0.287055	0.781688
mod.eff		0.712945	0.218312

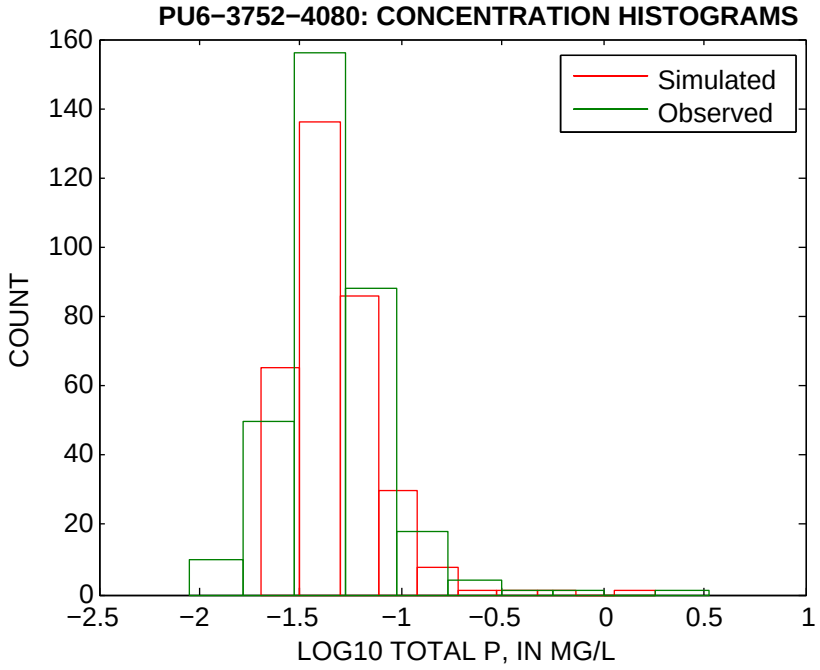
VERSION 2.1

ALL DATA
LOG10

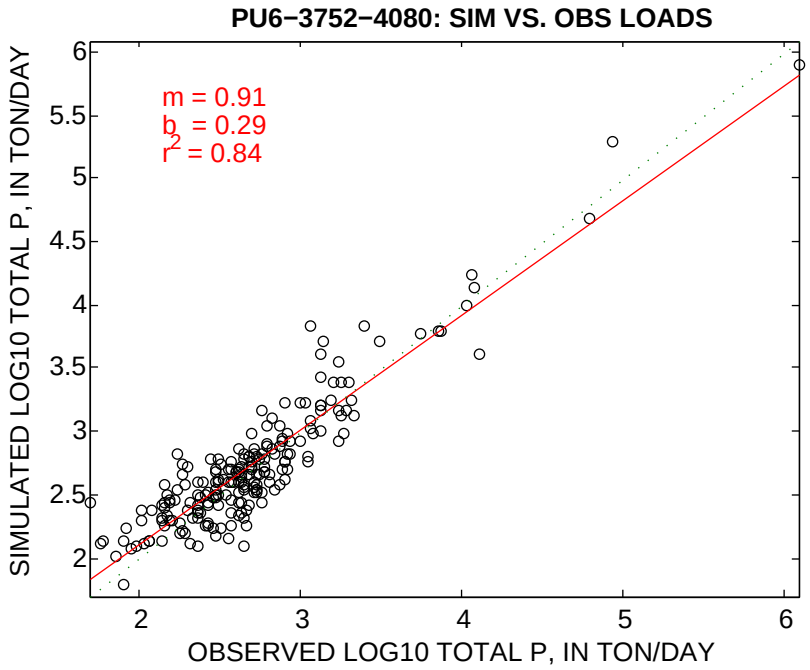


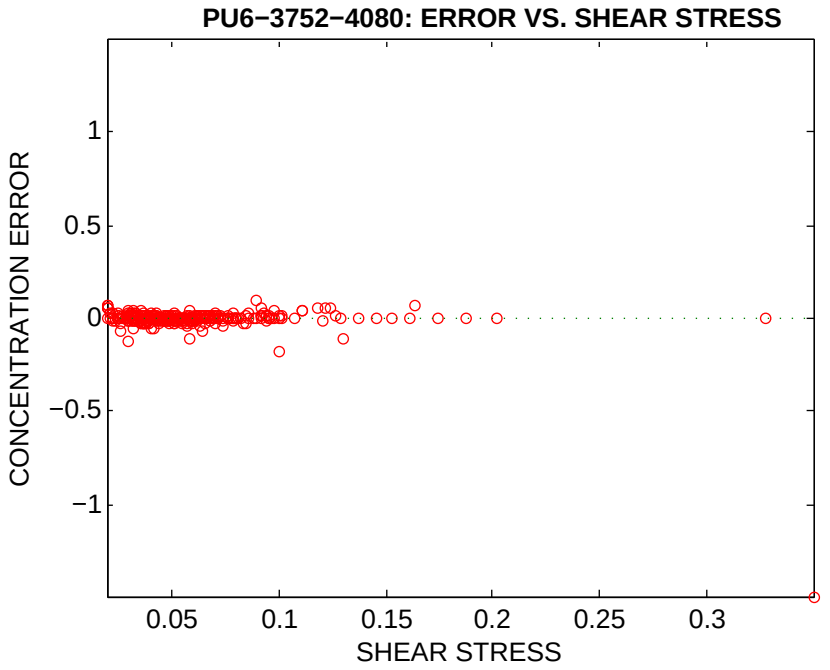


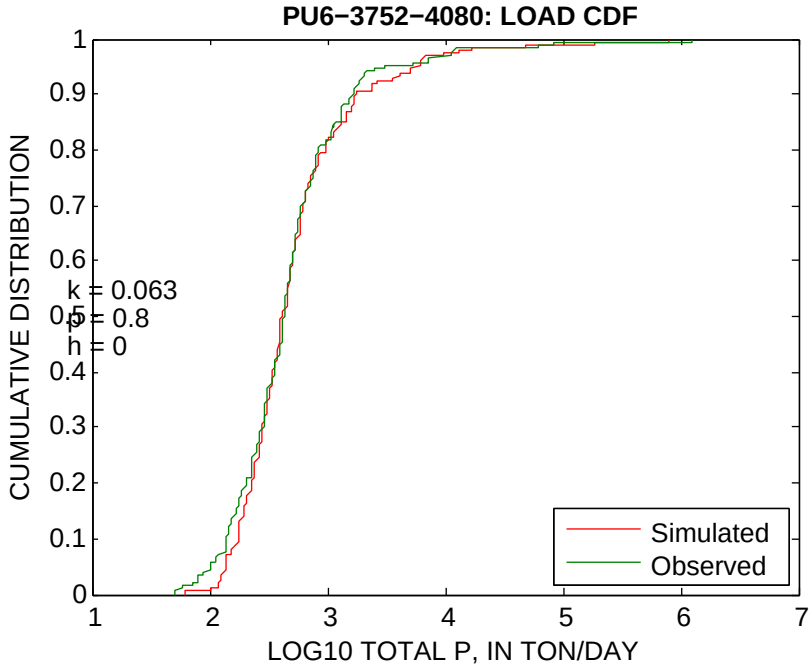


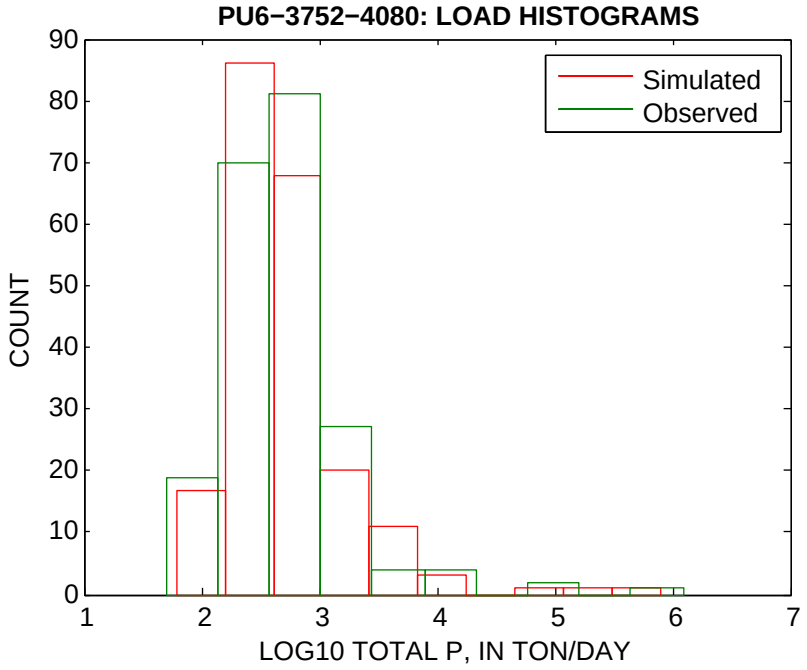


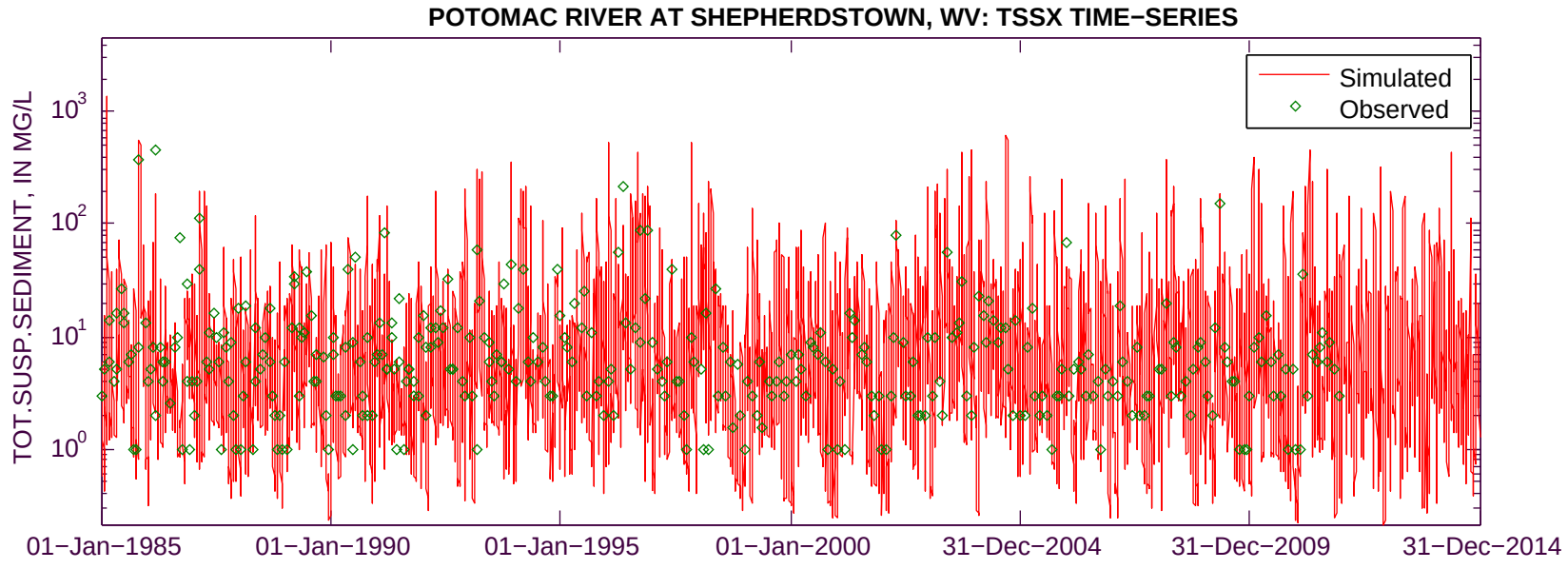
LOAD DATA
LOG10

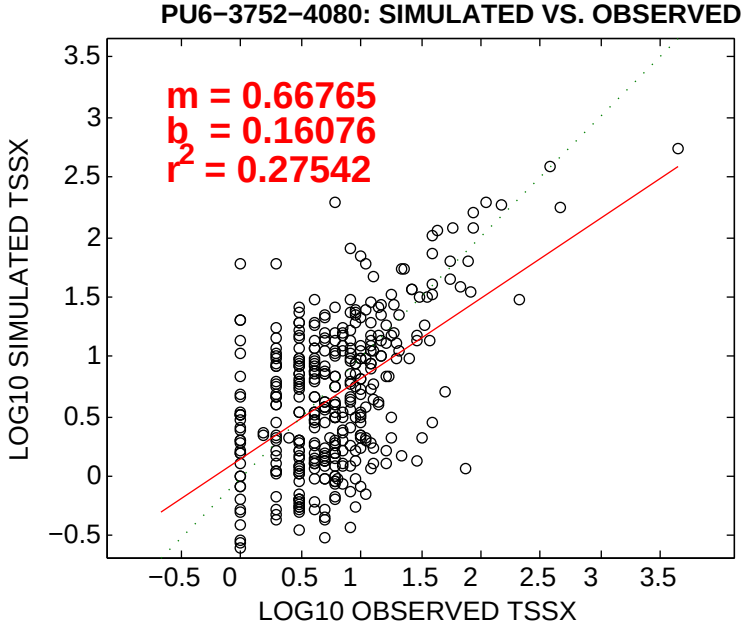


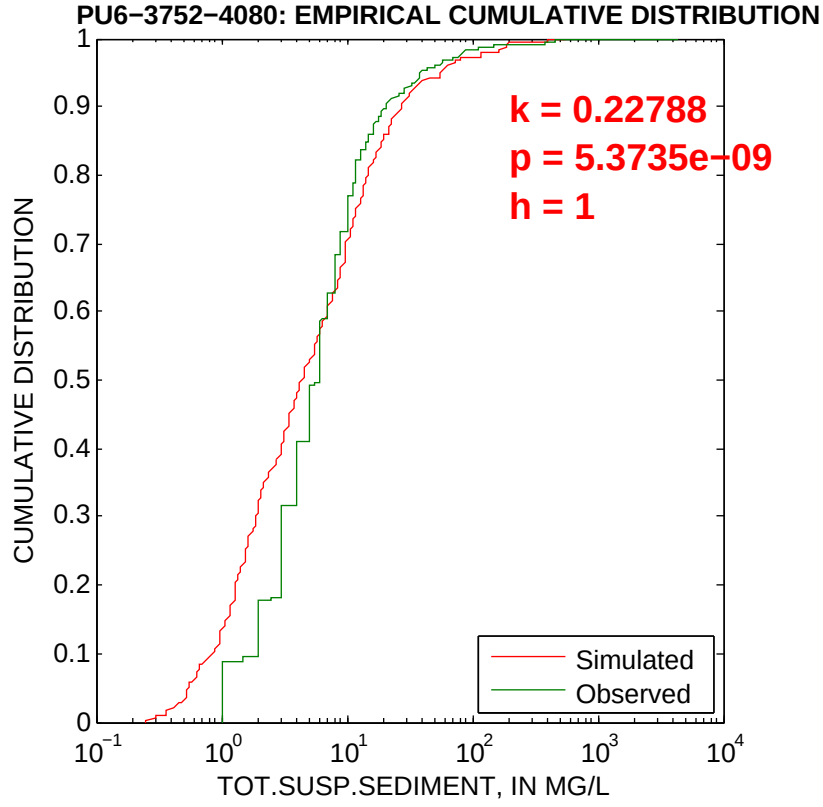












DATA SELECTION

scenario	file
P620171001WQ	TSSX.calib

plot: TSSX - total suspended ...

Dates 1/1/1985 12/31/201

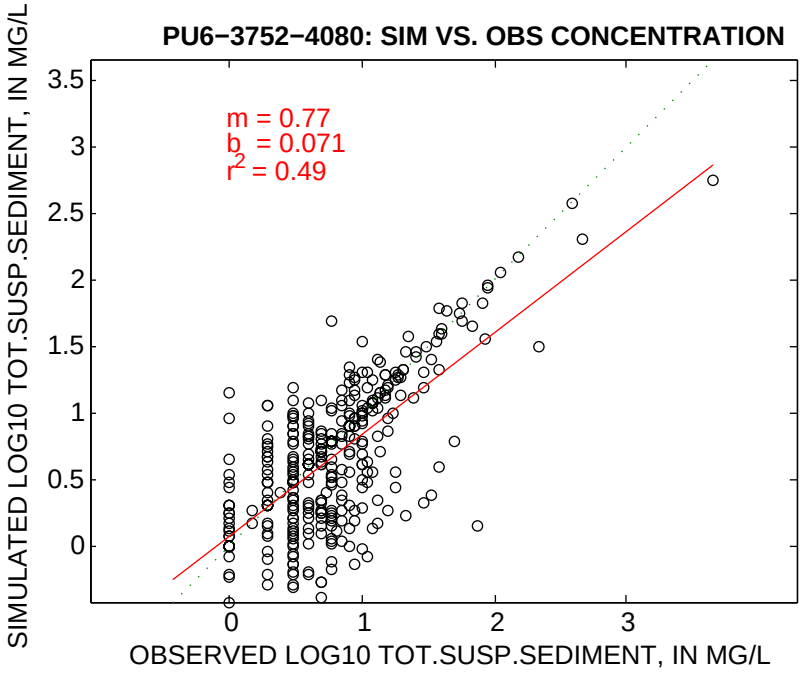
Drive	Directory	Observed
N/A	model	OBS20161101

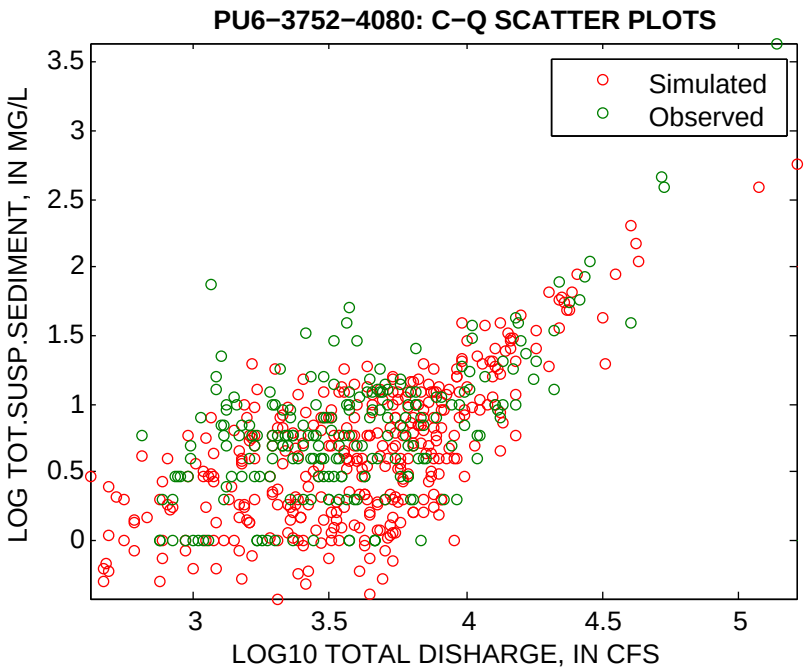
STATISTICS

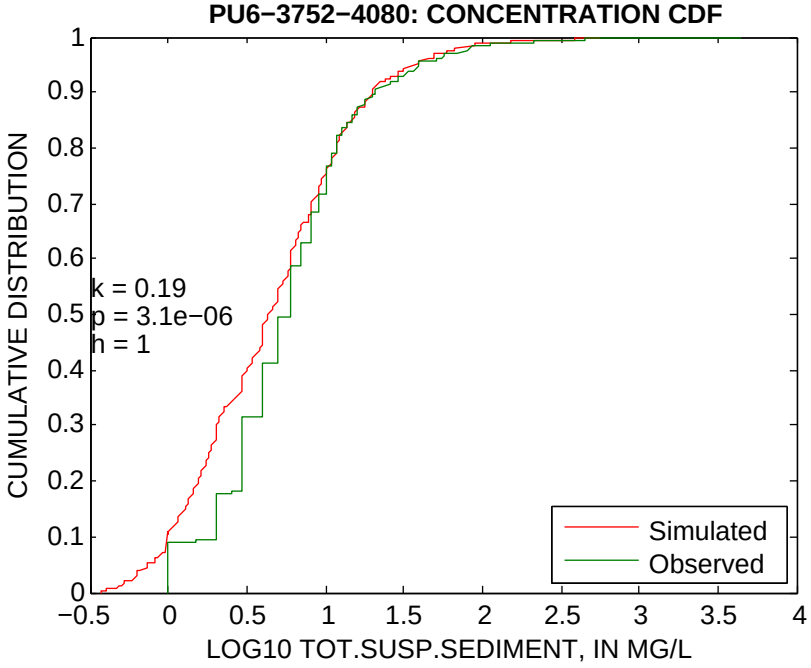
	n	373	373
		observe	simulate
min		1	0.24868
		0	-0.604359
mean		24.6206	15.0085
		0.77339	0.677109
media		6	4.3932
		0.778151	0.642781
max		4460	554.51
		3.64933	2.74391
varian		54284.5	1841.79
		0.230793	0.373526
JB		0.001	0.001
		0.001	0.013021
		ra	log
%		-39.0409	-12.4492
err.va		41617.3	0.305437
rel.std.err		0.766652	1.32342
mod.eff		0.233348	-0.323421

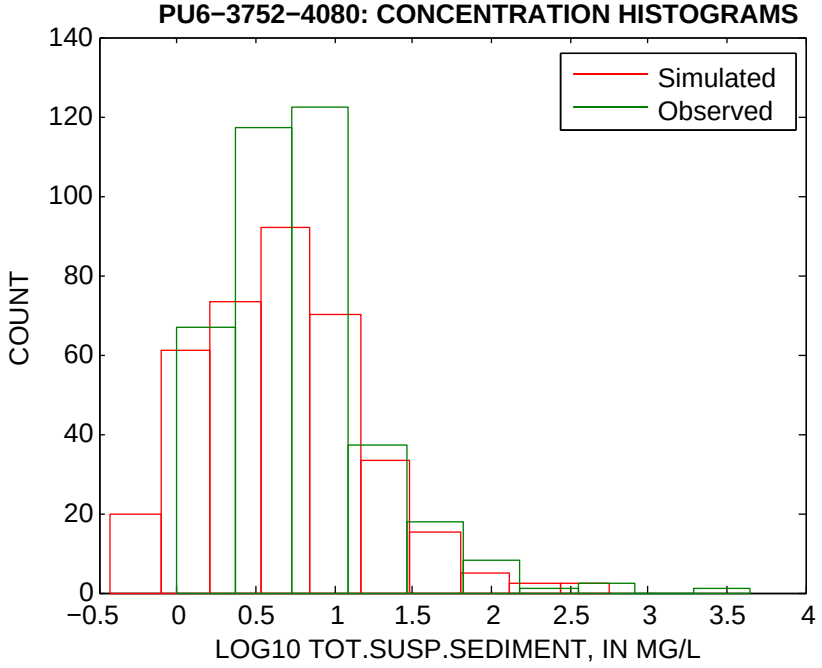
VERSION 3.1

ALL DATA
LOG10

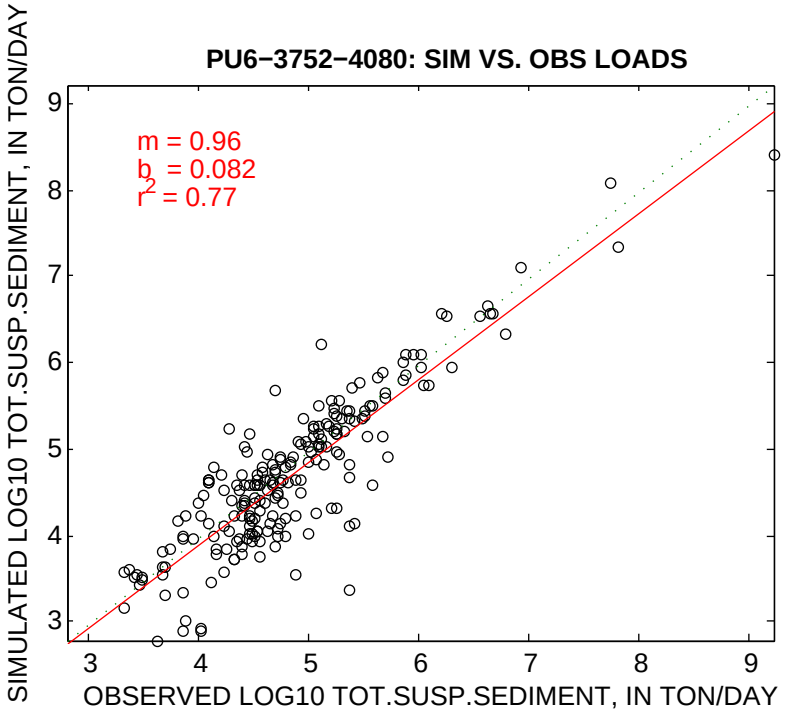


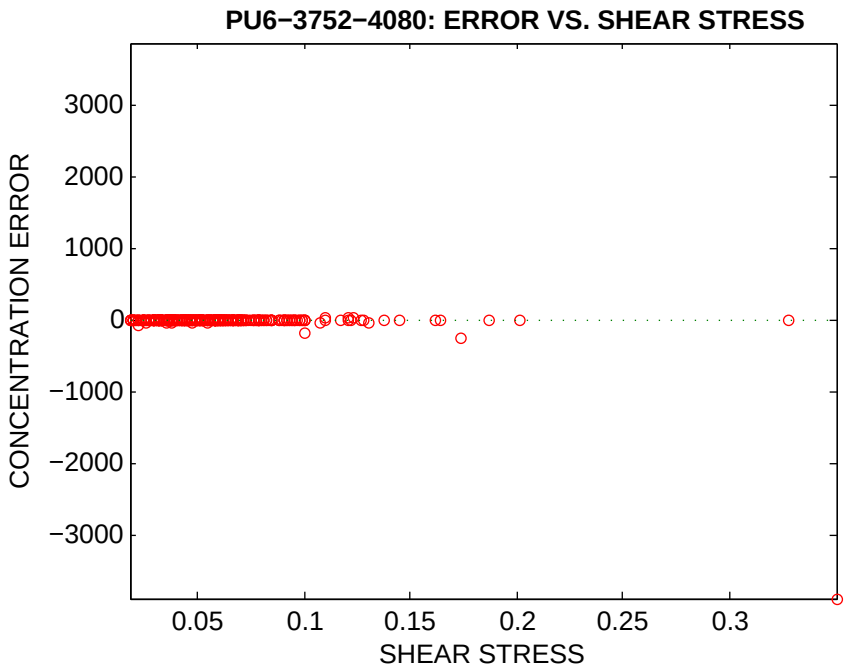


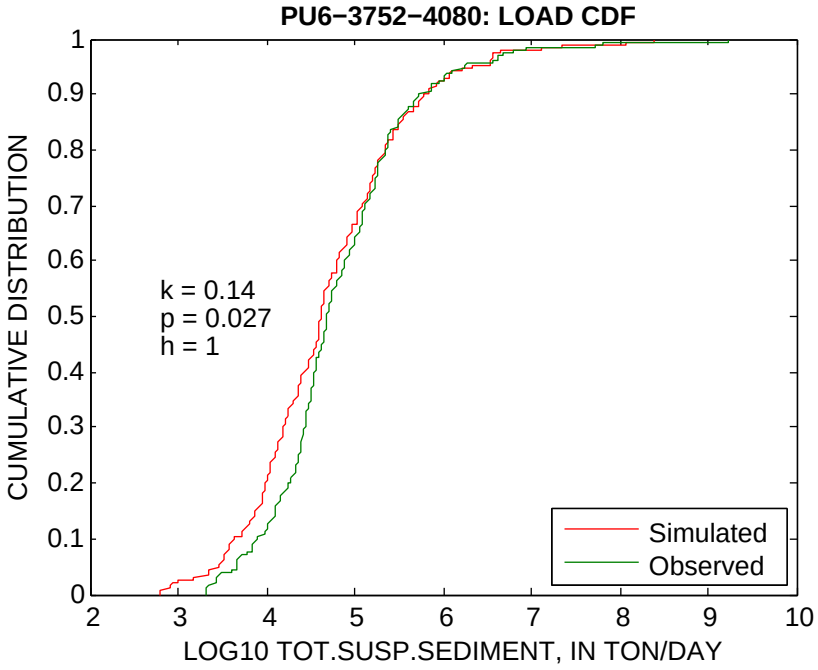


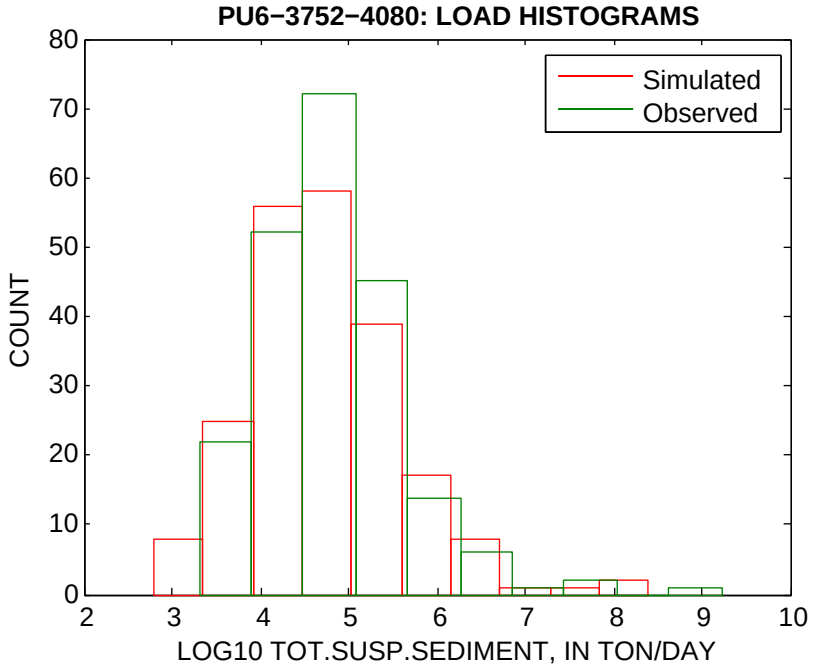


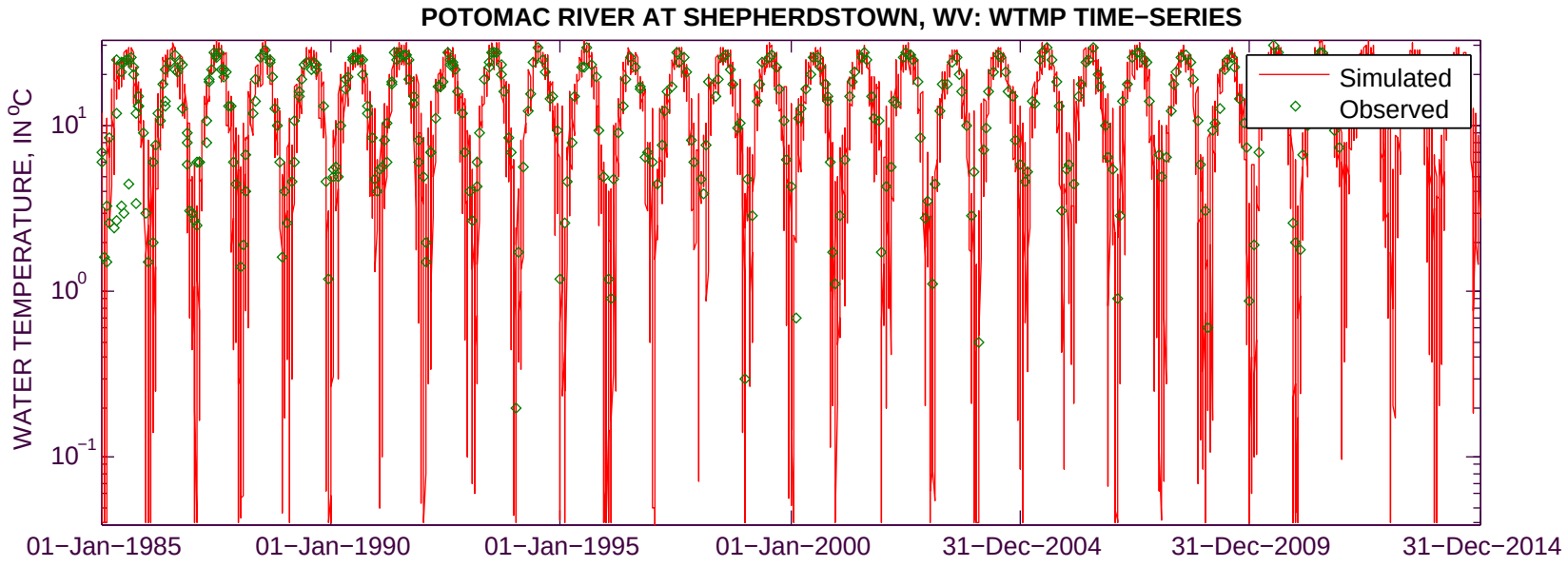
LOAD DATA
LOG10

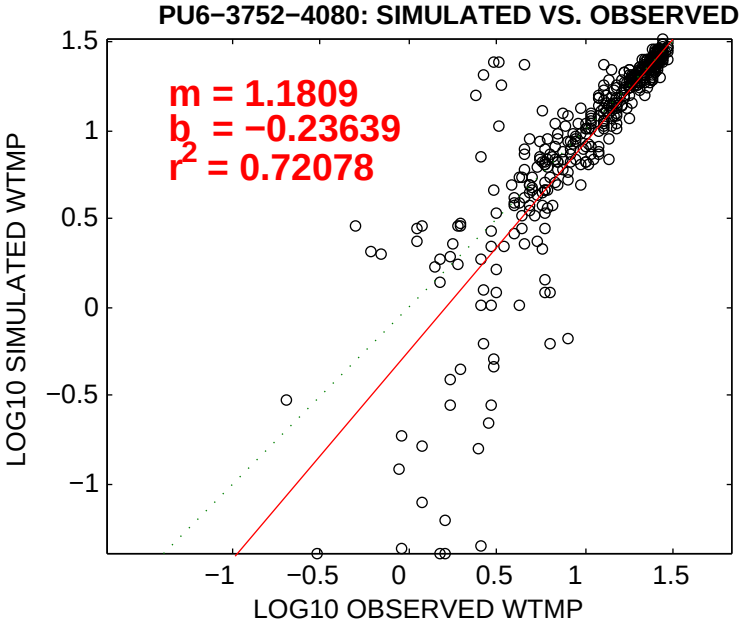


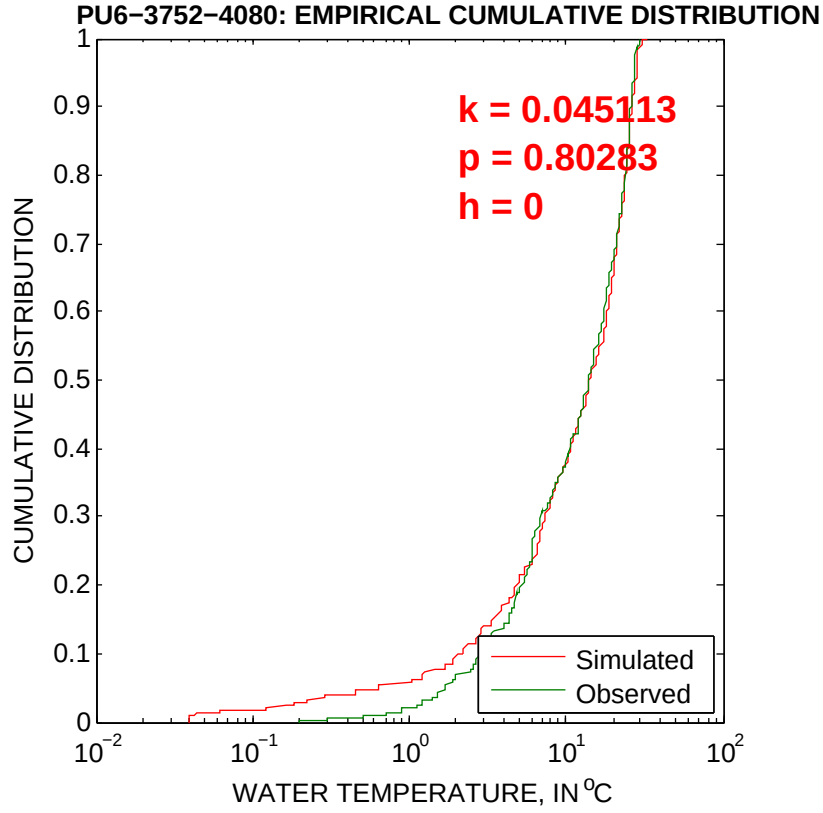












DATA SELECTION

scenario	file
P620171001WQ	WTMP.calib

plot: WTMP - water tempera...

Dates: 1/1/1985 – 12/31/201

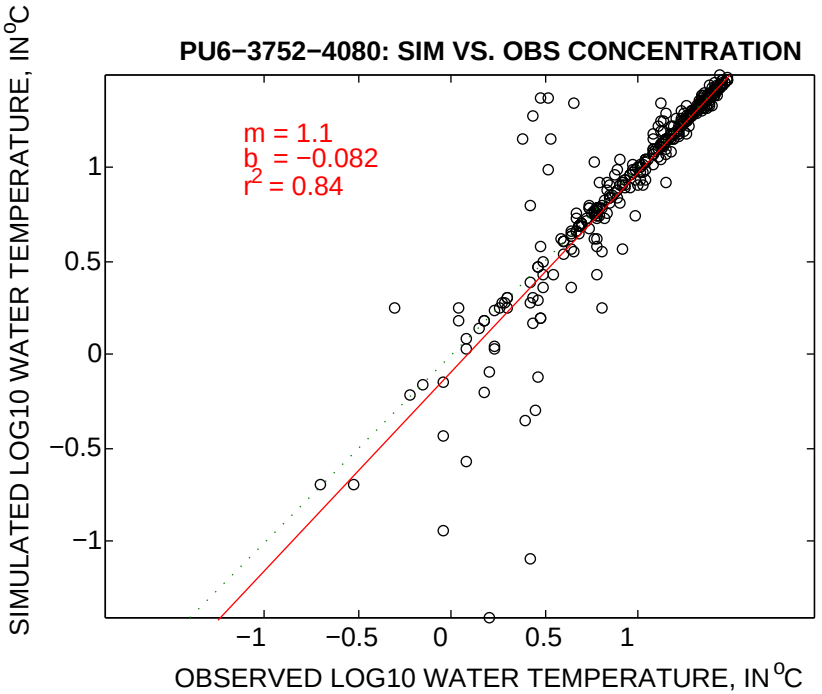
Drive	Directory	Observed
N/A	model	OBS20161101

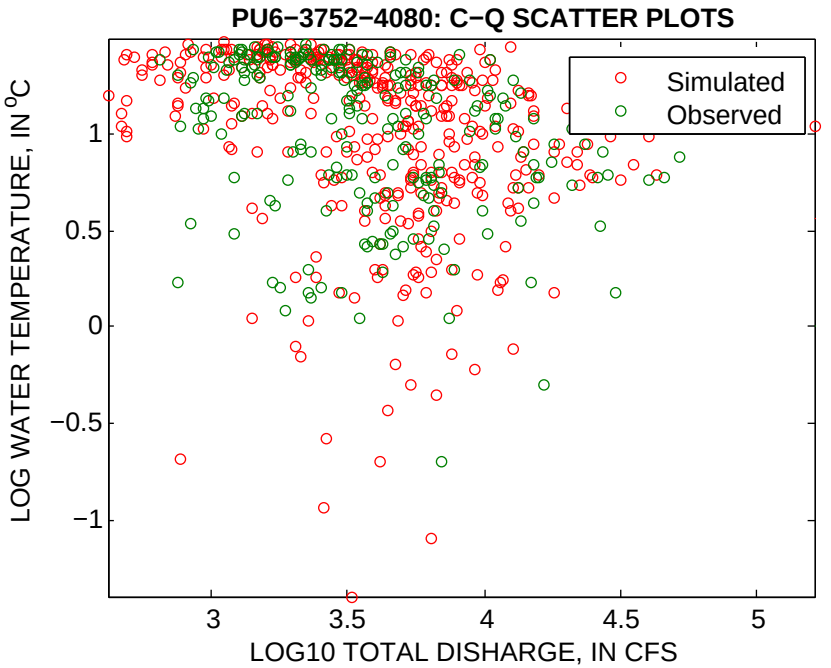
STATISTICS

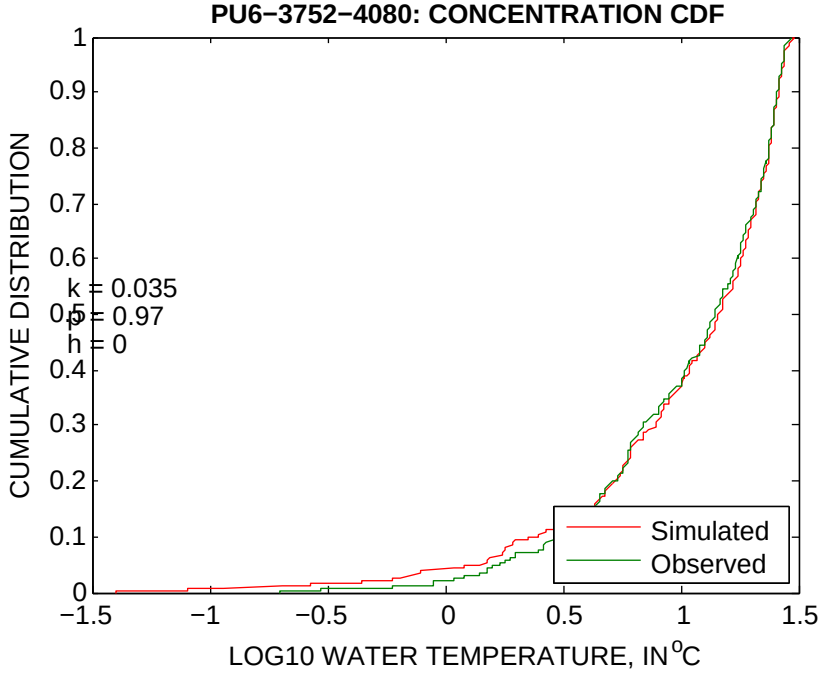
	n	399	399
		observe	simulate
min		0.2	0.040005
		-0.69897	-1.39789
mean		14.2793	14.4498
		1.02551	0.97467
media		14	14.124
		1.14613	1.14996
max		30	33.084
		1.47712	1.51962
varian		74.9417	82.3731
		0.157478	0.304695
JB		0.001	0.001
		0.001	0.001
		ra	log
%		1.19434	-4.95775
err.va		10.8749	0.0928224
rel.std.err		0.145112	0.589433
mod.eff		0.854888	0.410567

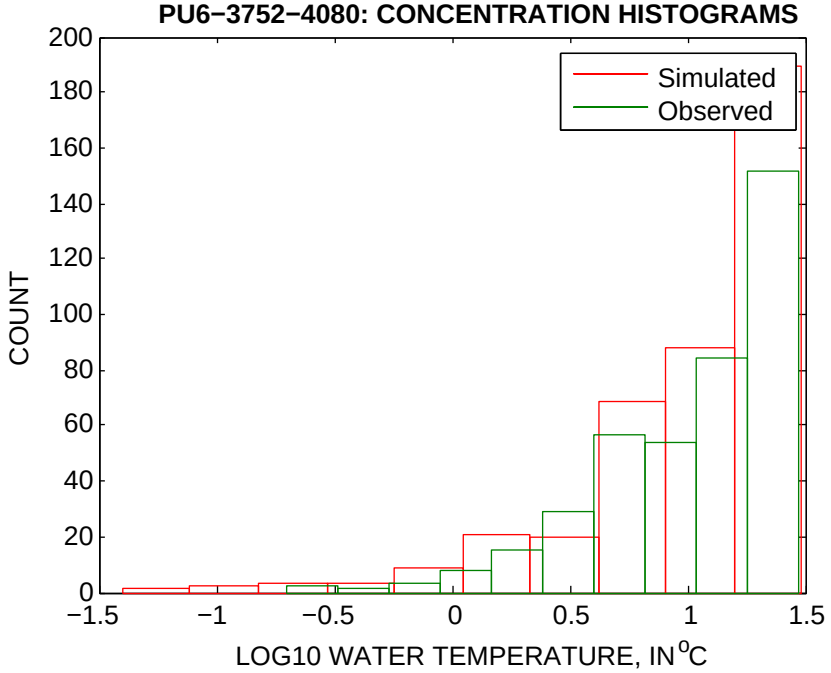
VERSION 2.1

ALL DATA
LOG10

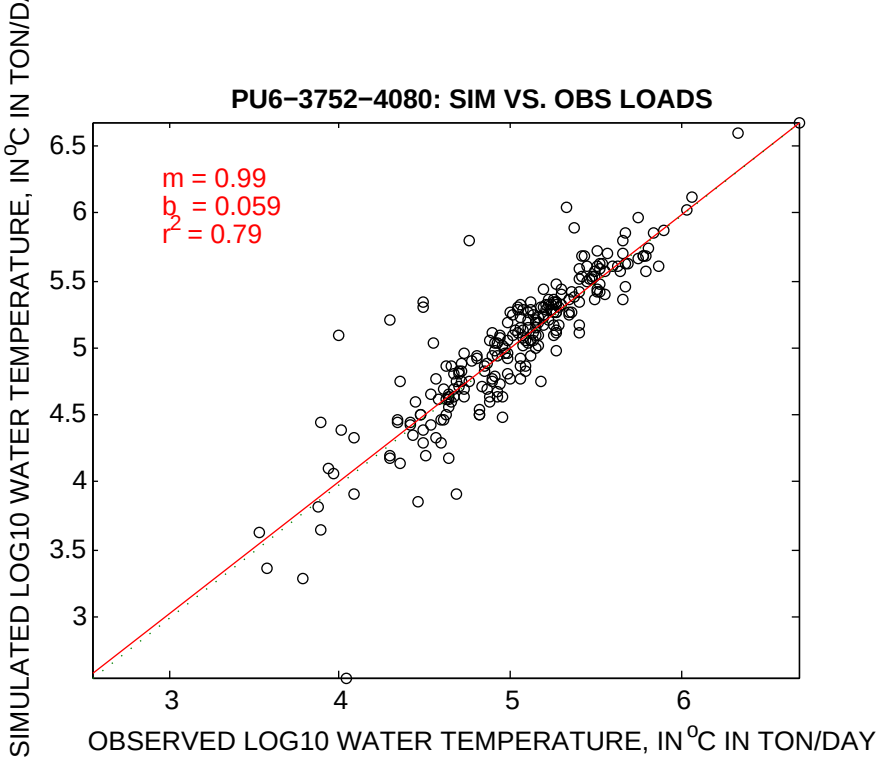


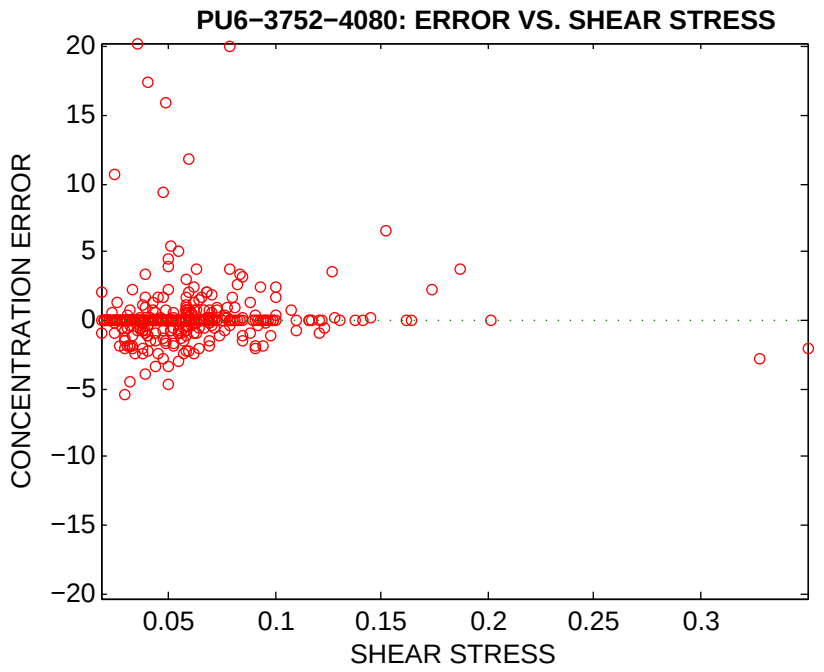


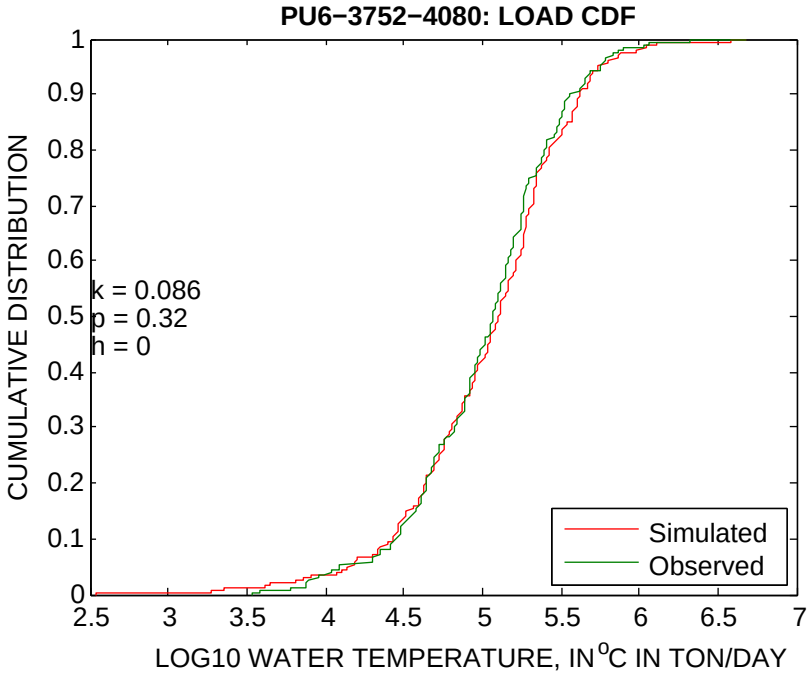


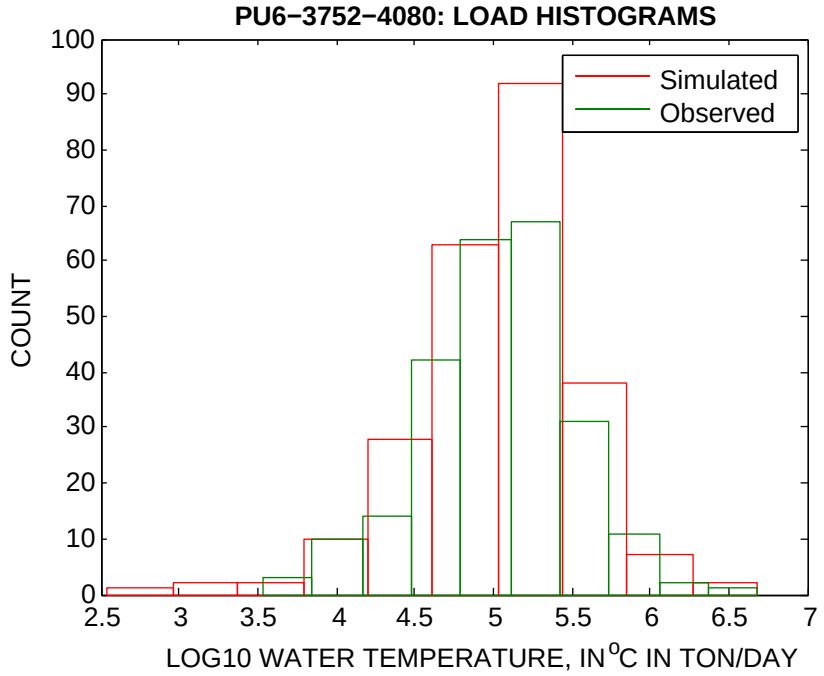


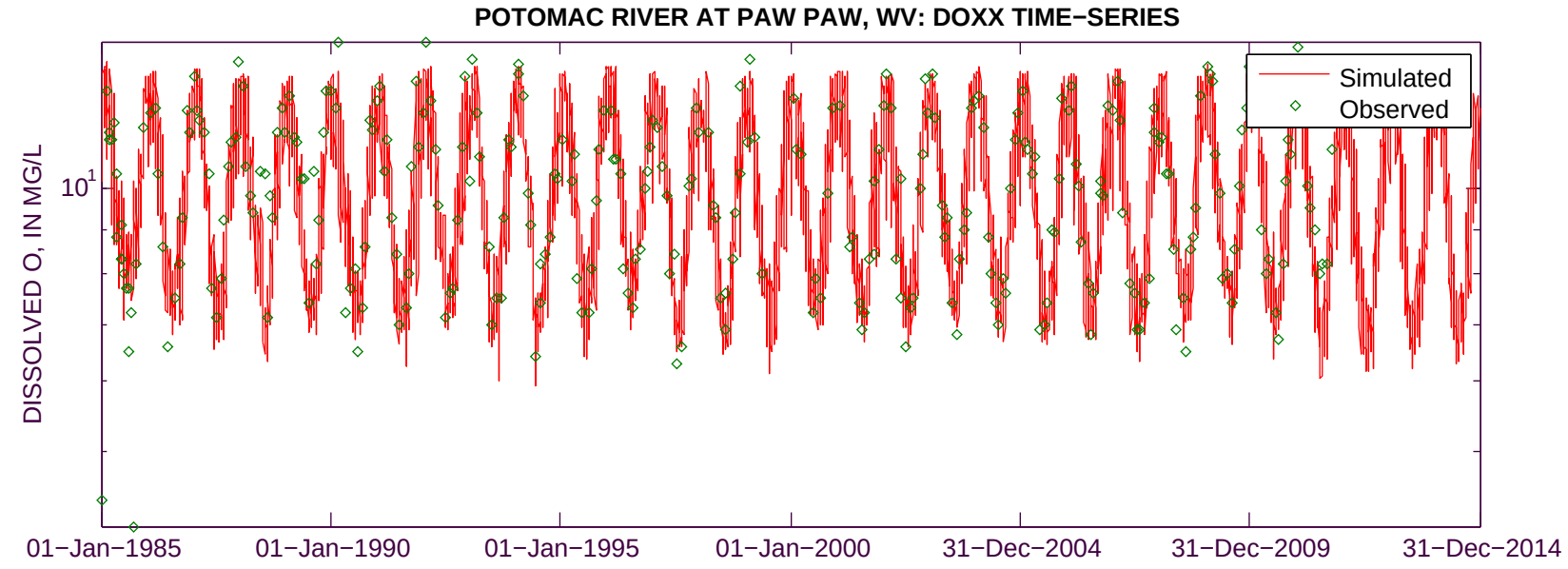
LOAD DATA
LOG10

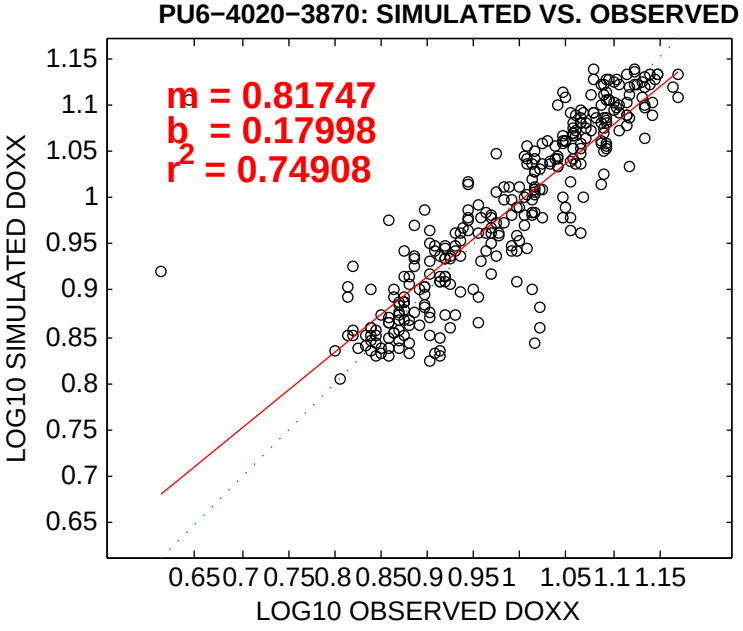


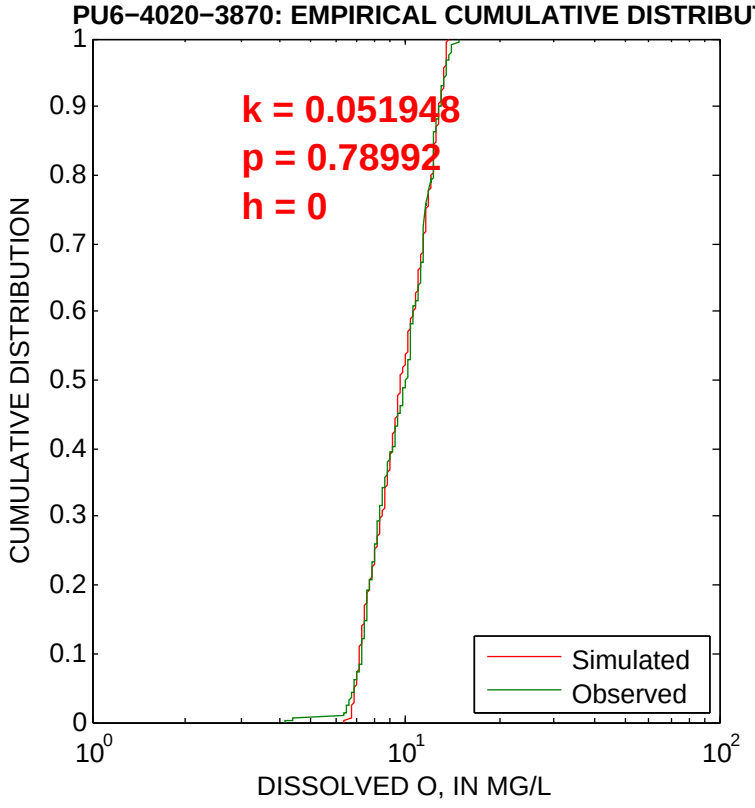












DATA SELECTION

scenario	file
P620171001WQ	DOXX.calib

plot: DOXX - dissolved oxygen

Dates: 1/1/1985 – 12/31/201

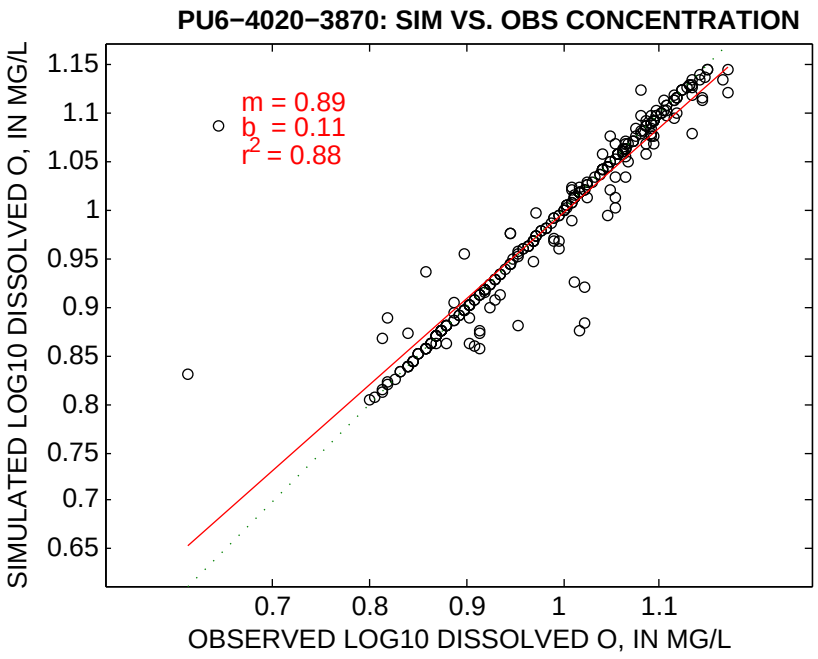
Drive	Directory	Observed
N/A	model	OBS20161101

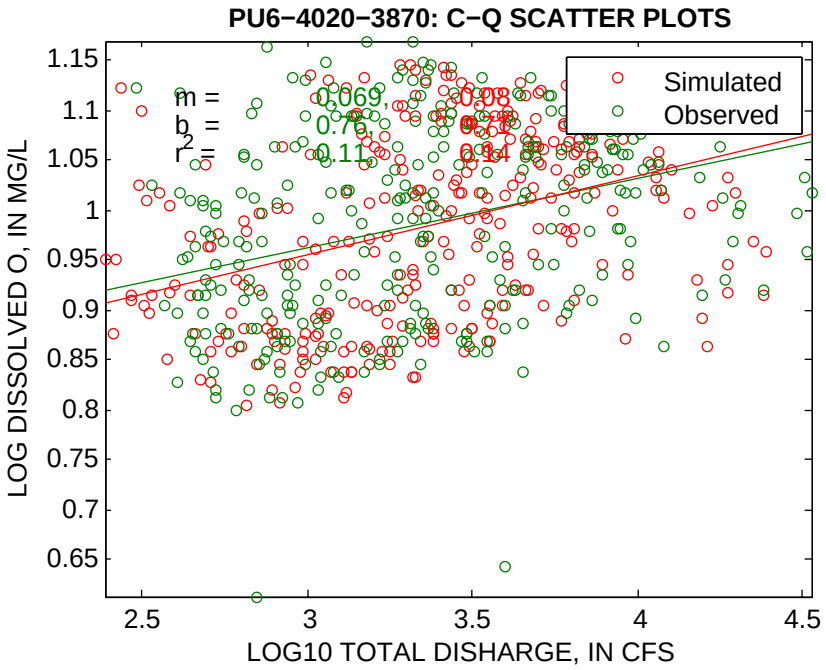
STATISTICS

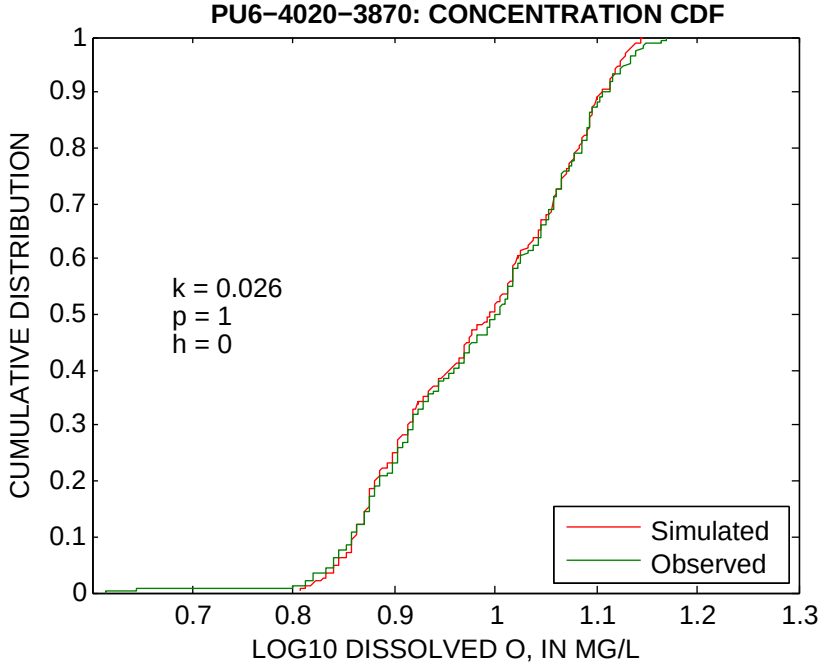
	n	observe	simulate
		308	308
min		4.1	6.369
		0.612784	0.804071
mean		9.95185	9.92458
		0.98706	0.986874
media		10.0495	9.6609
		1.00214	0.985017
max		14.8	13.756
		1.17026	1.13849
varian		4.75237	4.38733
		0.00972527	0.0086759
JB		0.009244	0.001705
		0.025672	0.001773
		ra	log
%		-0.274011	-0.0187634
err.va		1.00827	0.00250097
rel.std.err		0.212161	0.257162
mod.eff		0.787839	0.742838

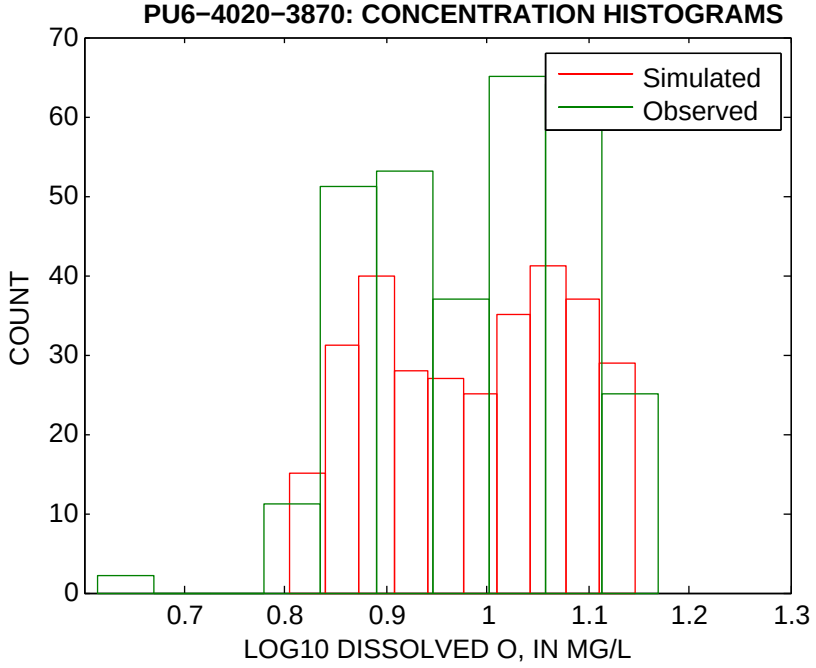
VERSION

ALL DATA
LOG10

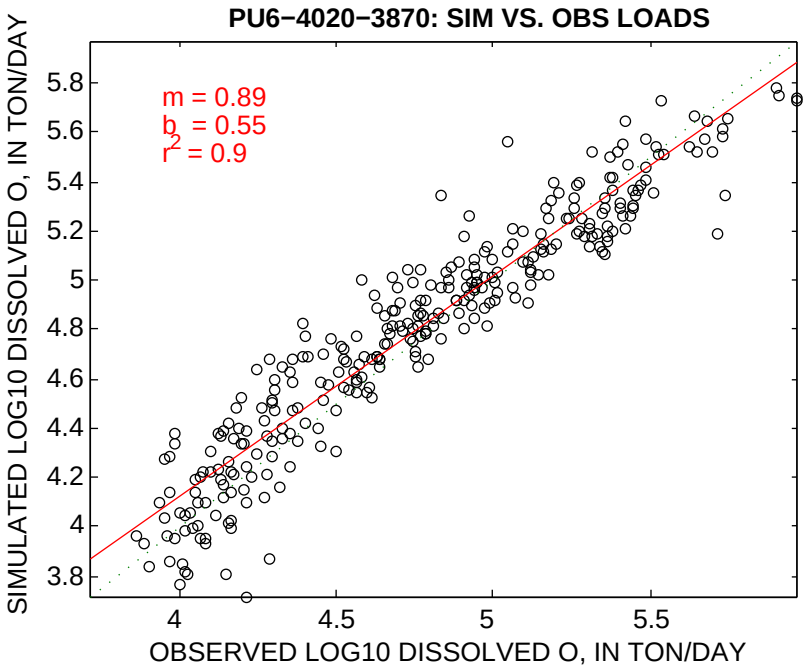


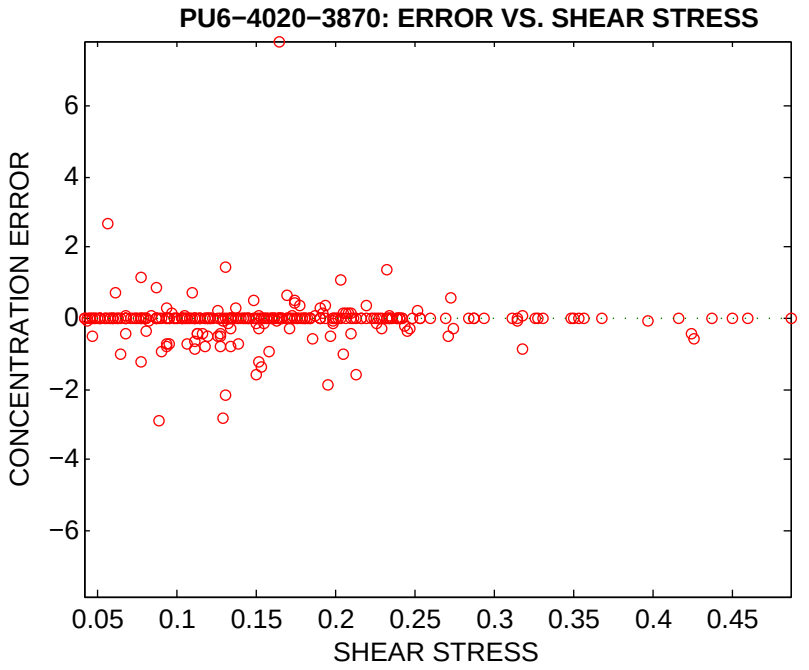


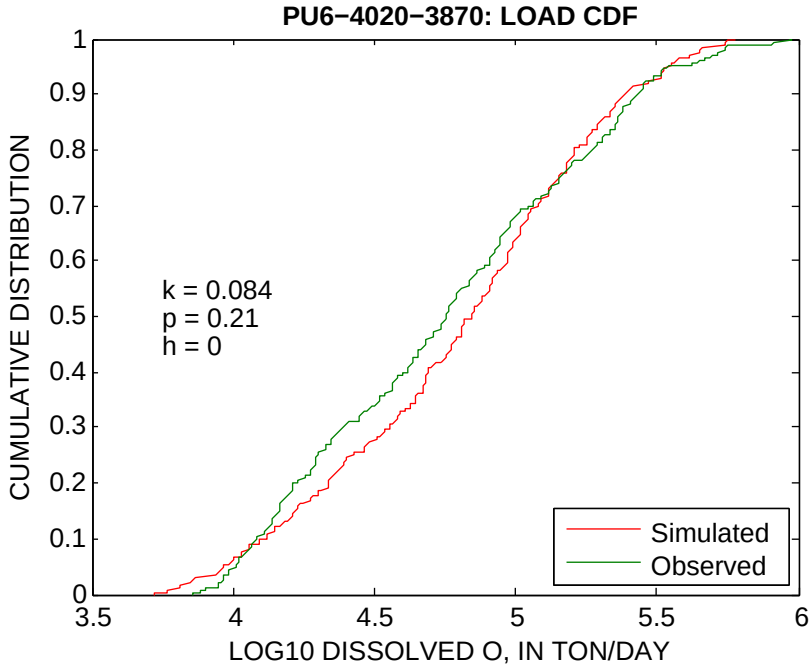


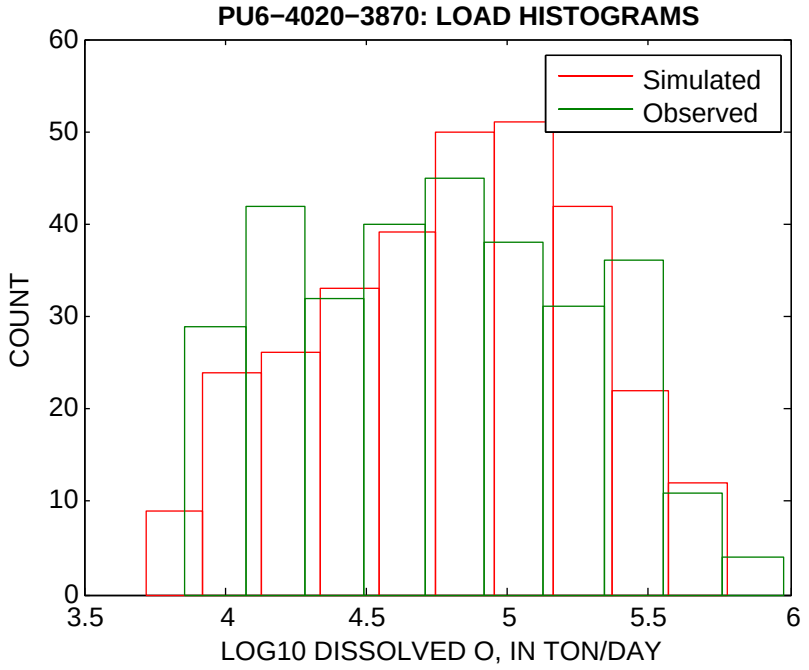


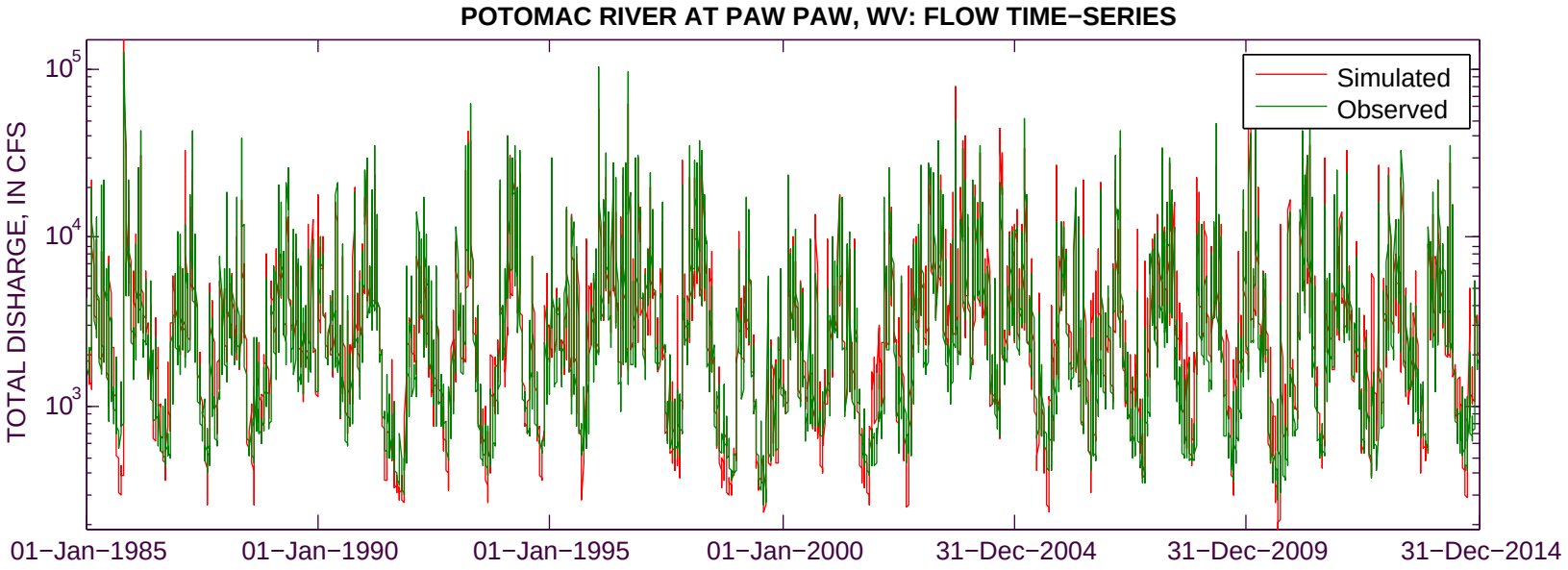
LOAD DATA
LOG10

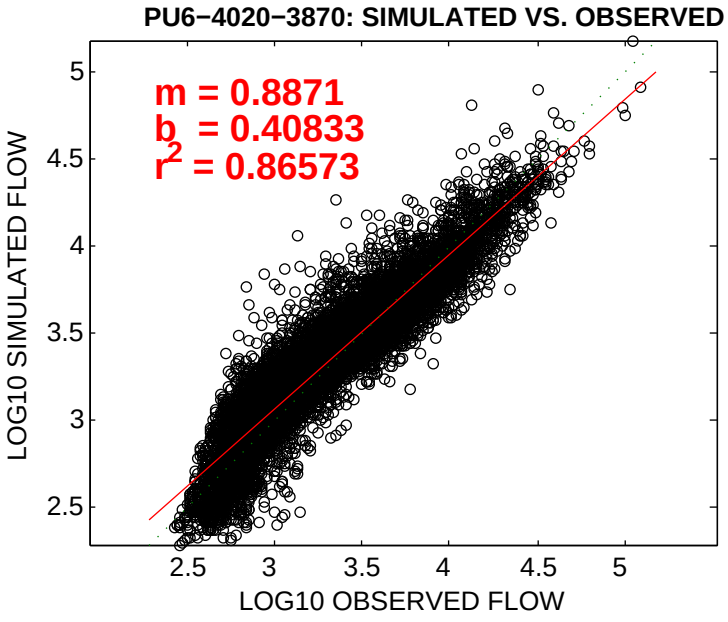


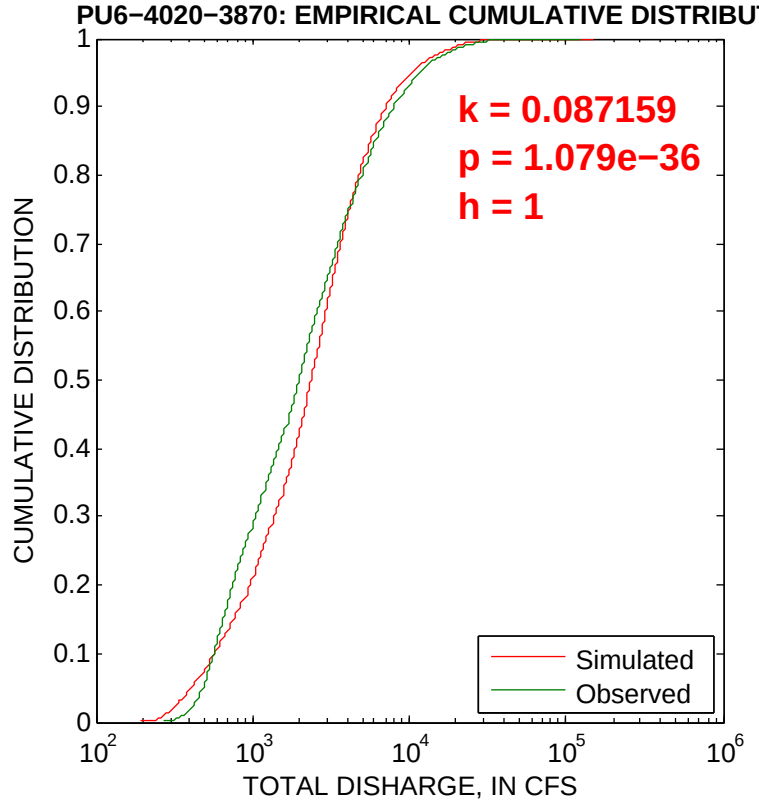












DATA SELECTION

scenario: P620171001WQ | file: FLOW.calib

plot: FLOW - total discharge

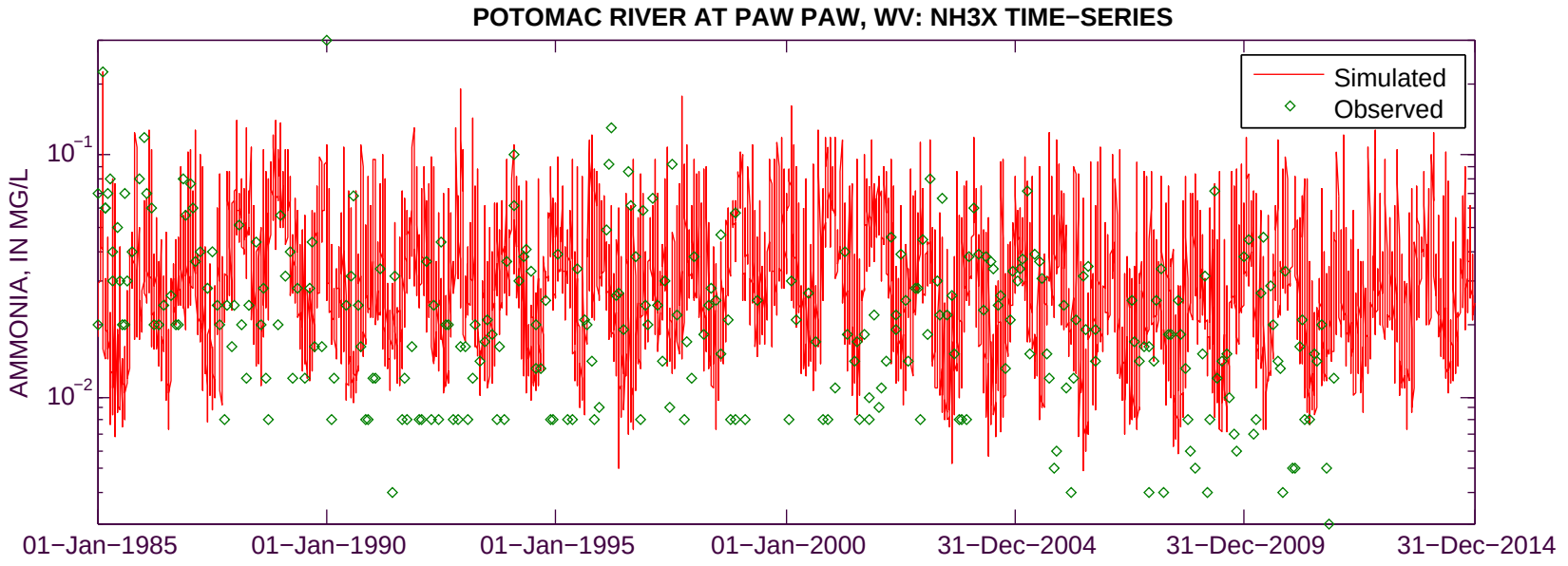
Dates: 1/1/1985 – 12/31/201

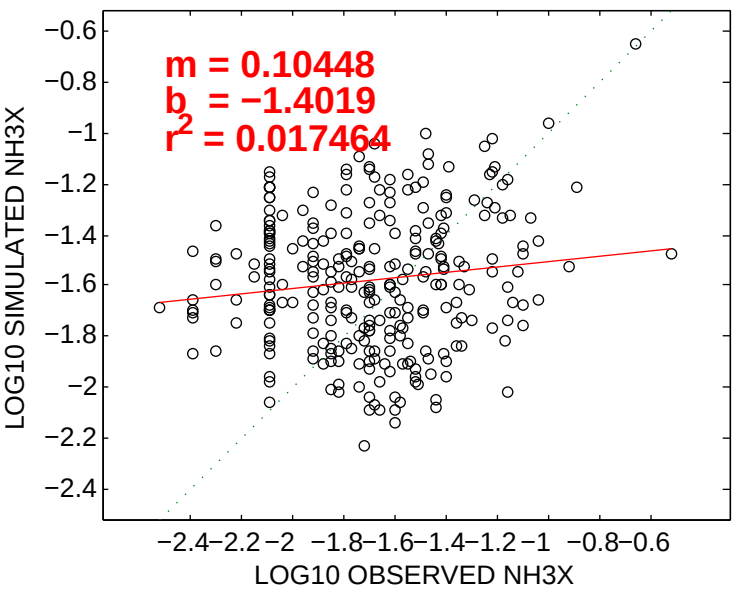
Drive: N/A | Directory: model | Observed: OBS20161101

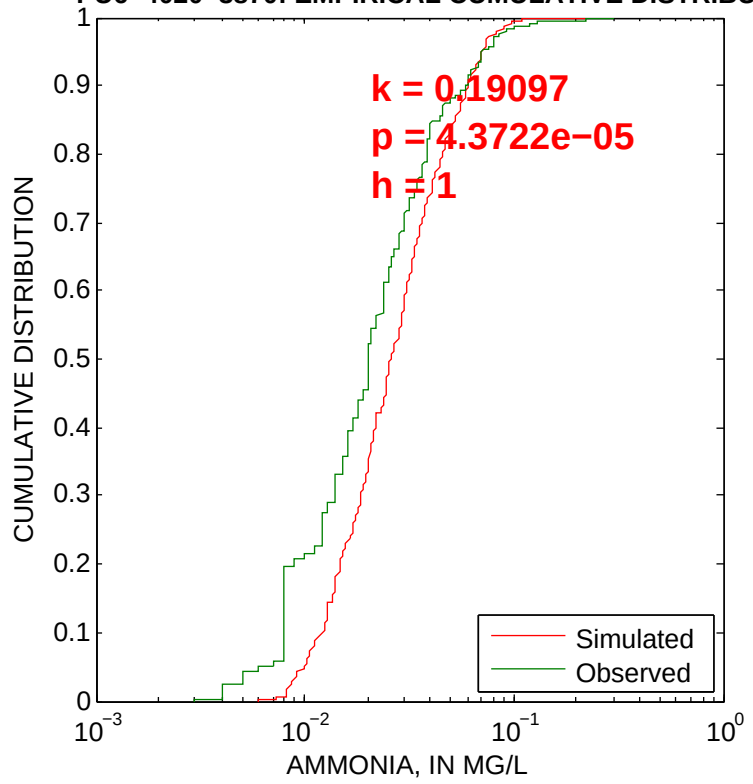
STATISTICS

		observe	simulate
n		10957	10957
min		261	188.87
		2.41664	2.27616
mean		3537.12	3505.63
		3.31203	3.34644
media		1990	2371.9
		3.29885	3.3751
max		125000	151910
		5.09691	5.18159
varian		2.54616e+0	1.99382e+
		0.190975	0.173598
JB		0.001	0.001
		0.001	0.003555
		ra	log
%		-0.890388	1.03903
err.va		4.99426e+0	0.026928
rel.std.err		0.196148	0.141002
mod.eff		0.803852	0.858998

VERSION 2.1







DATA SELECTION

scenario	file
P620171001WQ	NH3X.calib

plot: NH3X - ammonia

Dates: 1/1/1985 – 12/31/201

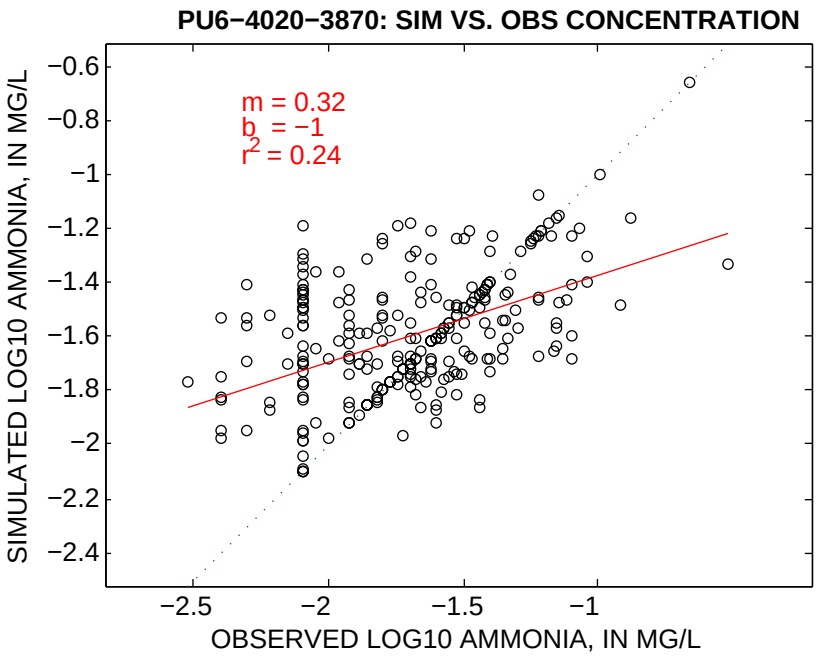
Drive Directory: N/A | model | Observed: OBS20161101

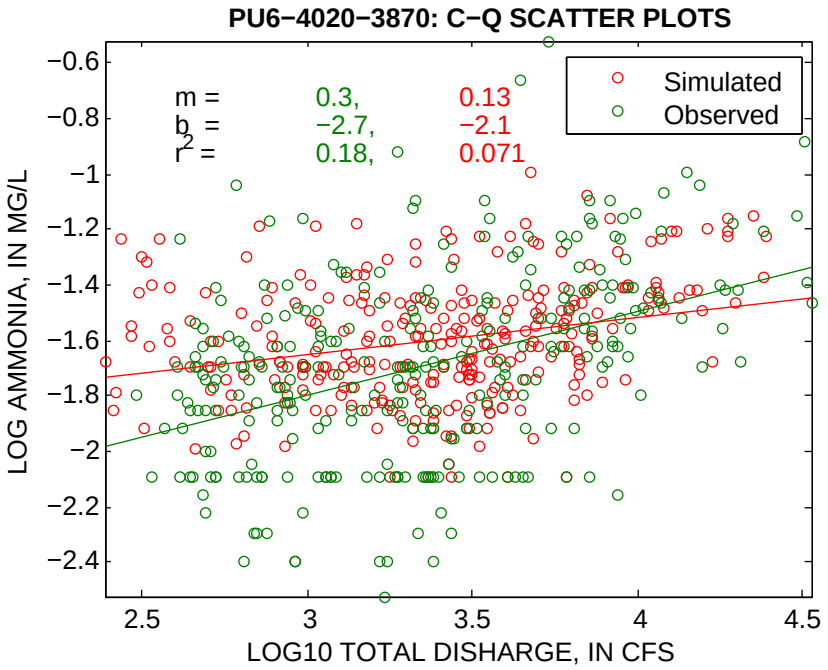
STATISTICS

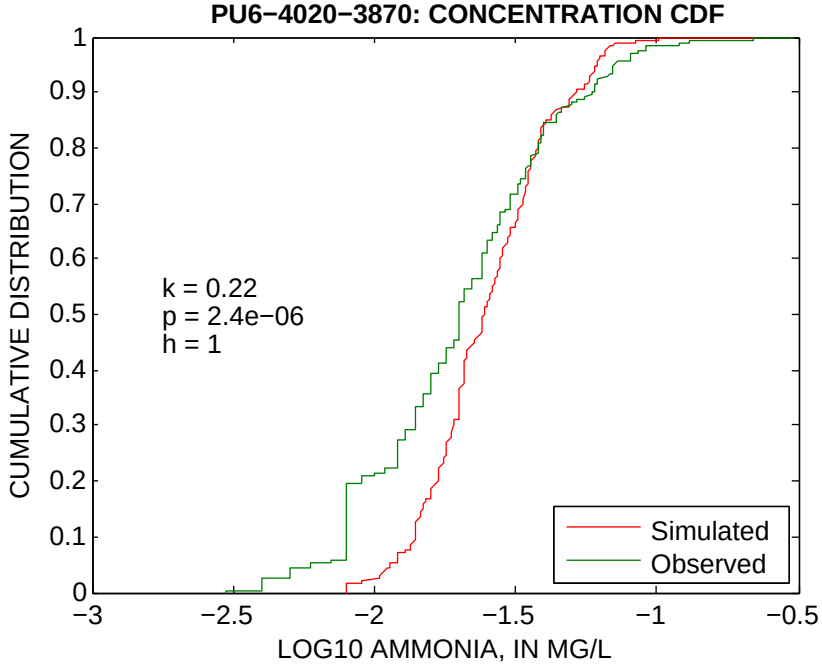
	n	288	288
		observe	simulate
min		0.003	0.0059736
		-2.52288	-2.22376
mean		0.0276875	0.0318748
		-1.69425	-1.57889
media		0.02	0.0258455
		-1.69897	-1.58763
max		0.304	0.2213
		-0.517126	-0.655019
varian		0.00082294	0.00049315
		0.112337	0.0702187
JB		0.001	0.001
		0.339247	0.269131
		ra	log
%		15.1234	-6.80908
err.va		0.00091611	0.172436
rel.std.err		1.11322	1.53499
mod.eff		-0.11322	-0.534994

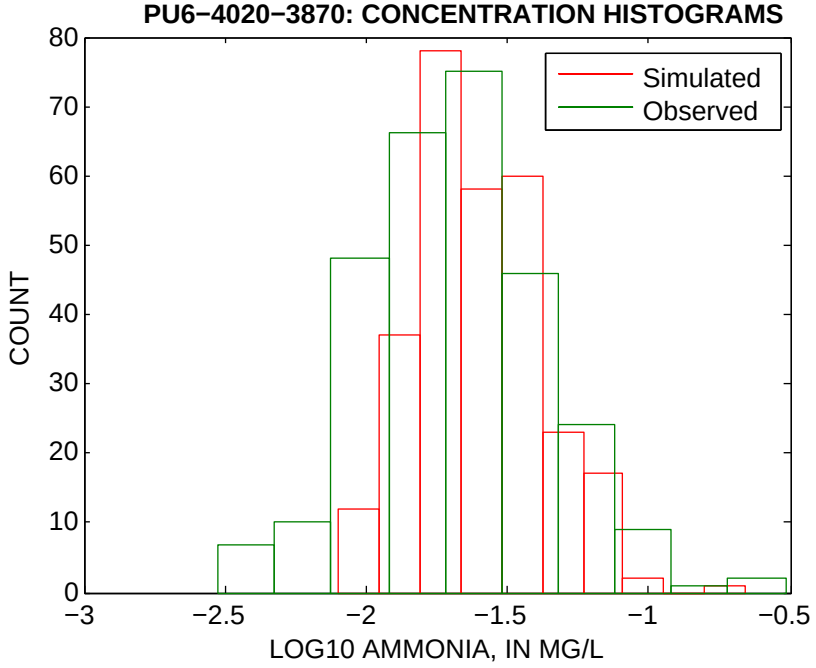
VERSION 2.1

ALL DATA
LOG10

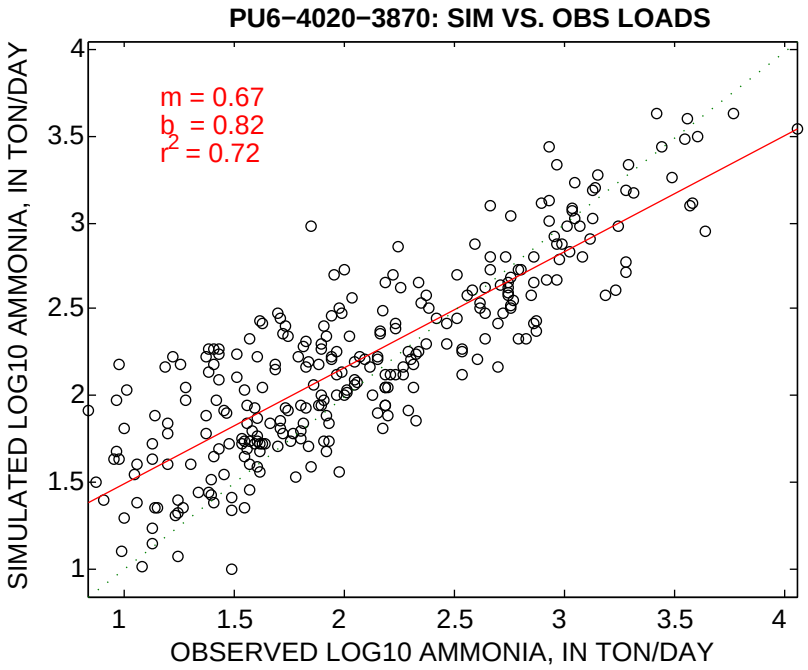


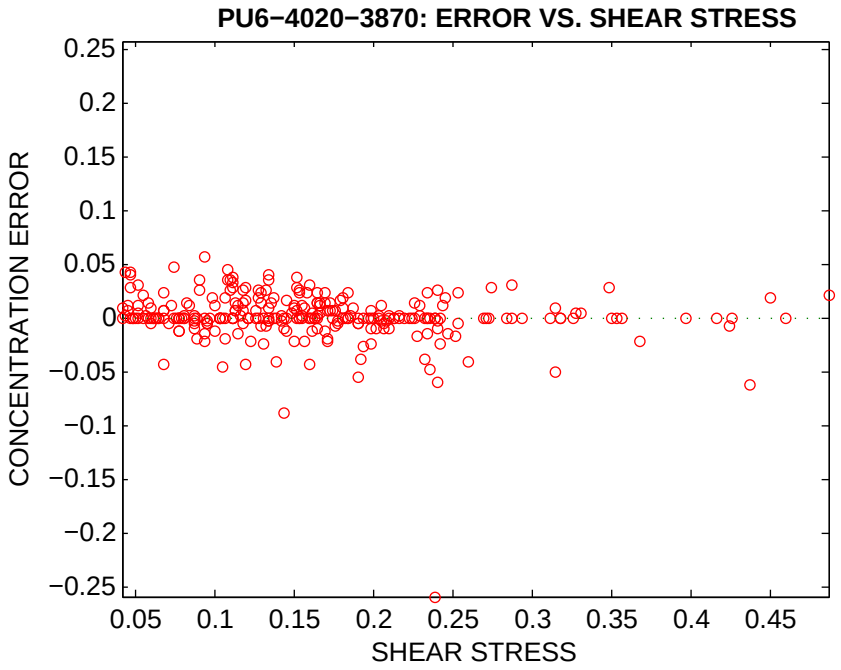


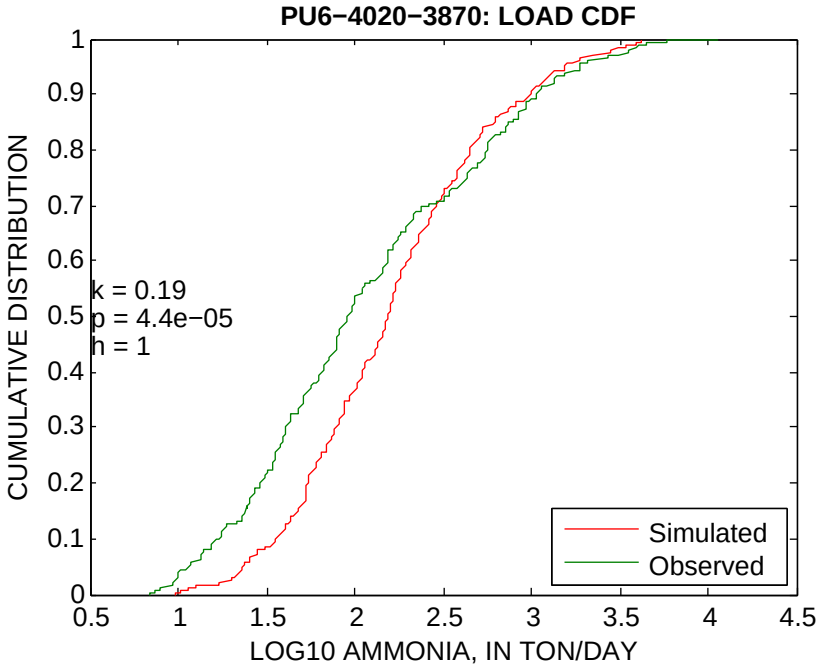


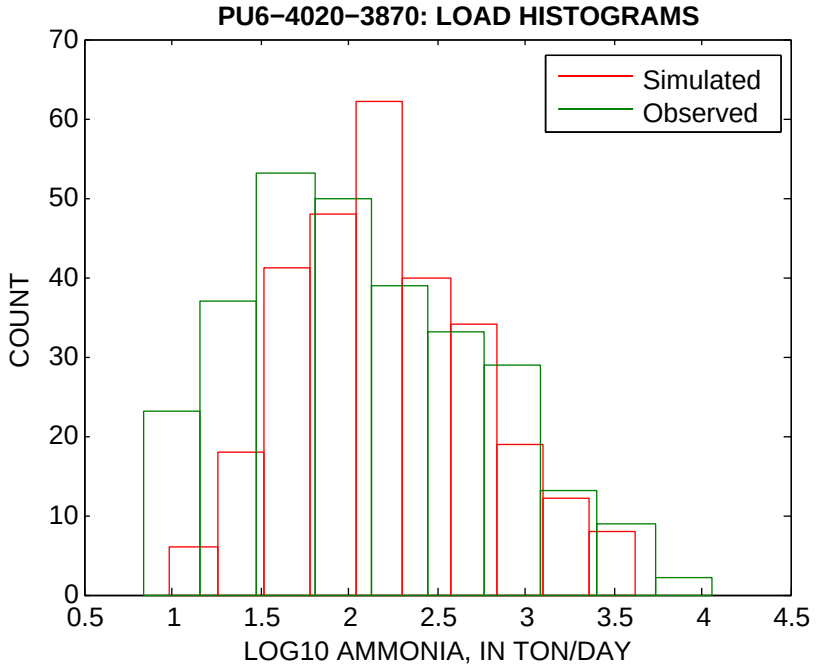


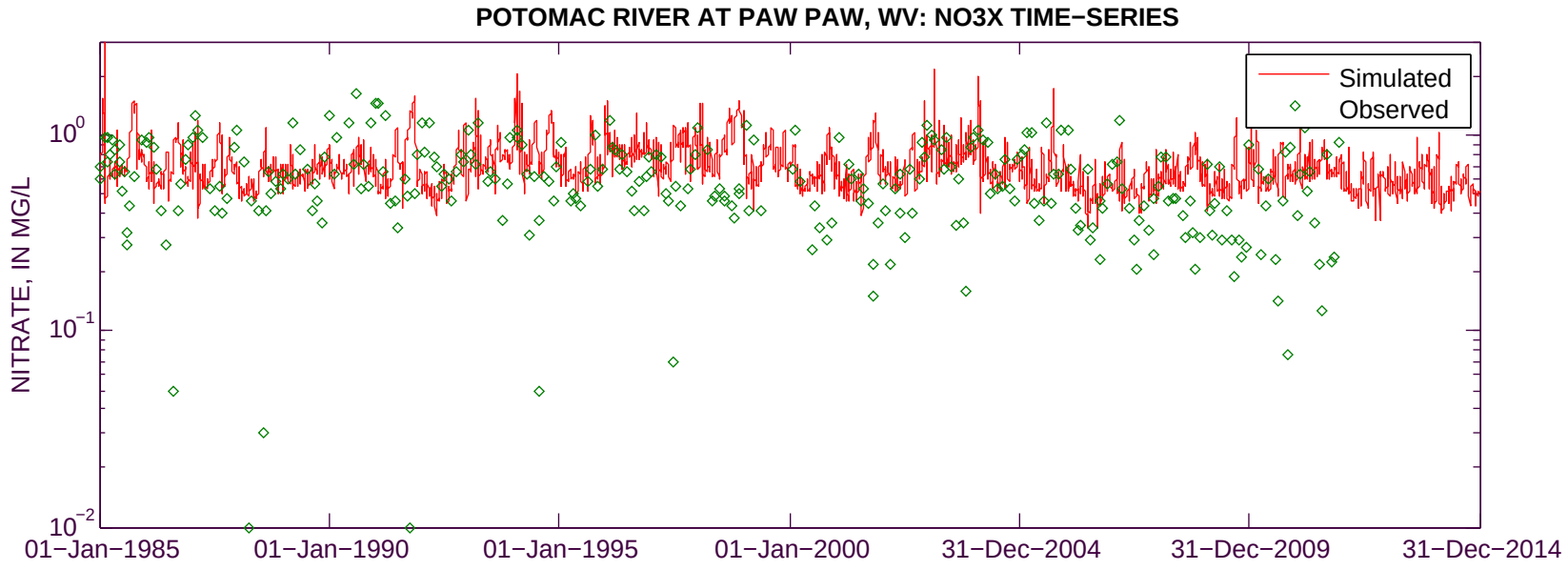
LOAD DATA
LOG10

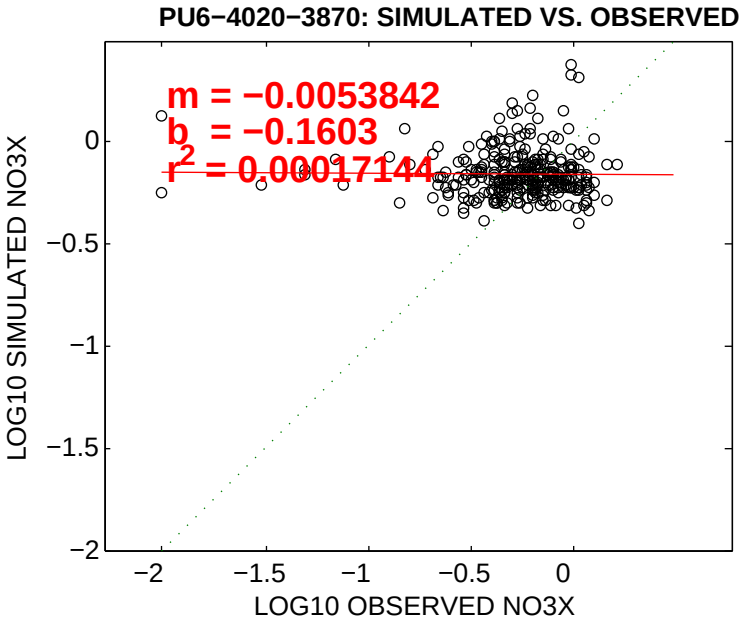


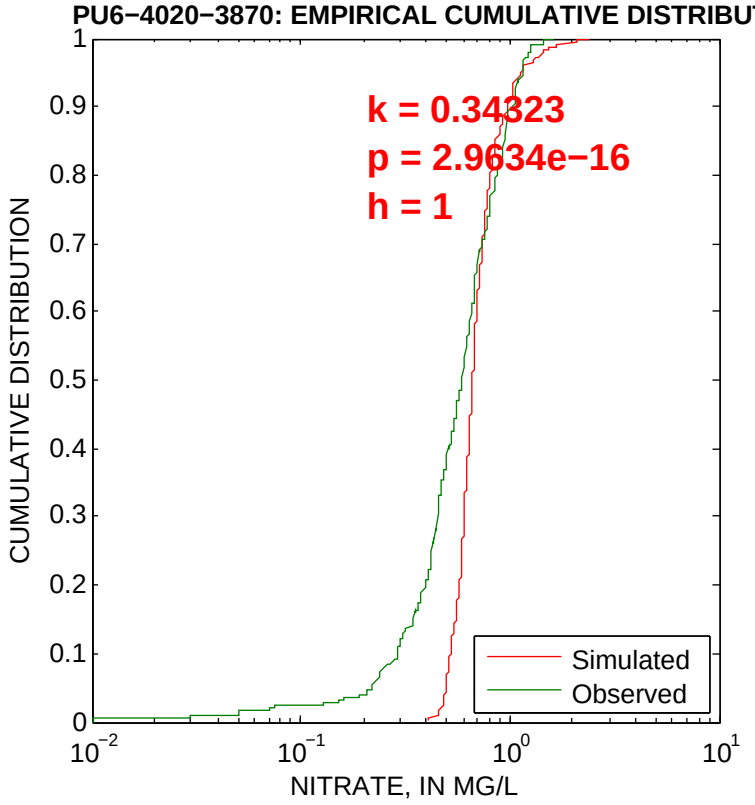












DATA SELECTION

scenario: P620171001WQ | file: NO3X.calib

plot: NO3X - nitrate

Dates: 1/1/1985 – 12/31/201

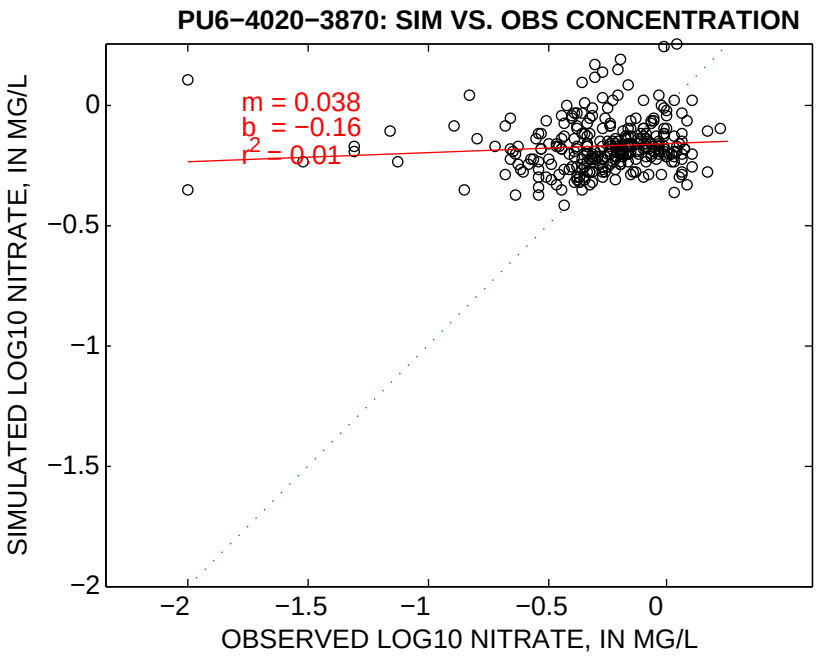
Drive | Directory | Observed: N/A | model | OBS20161101

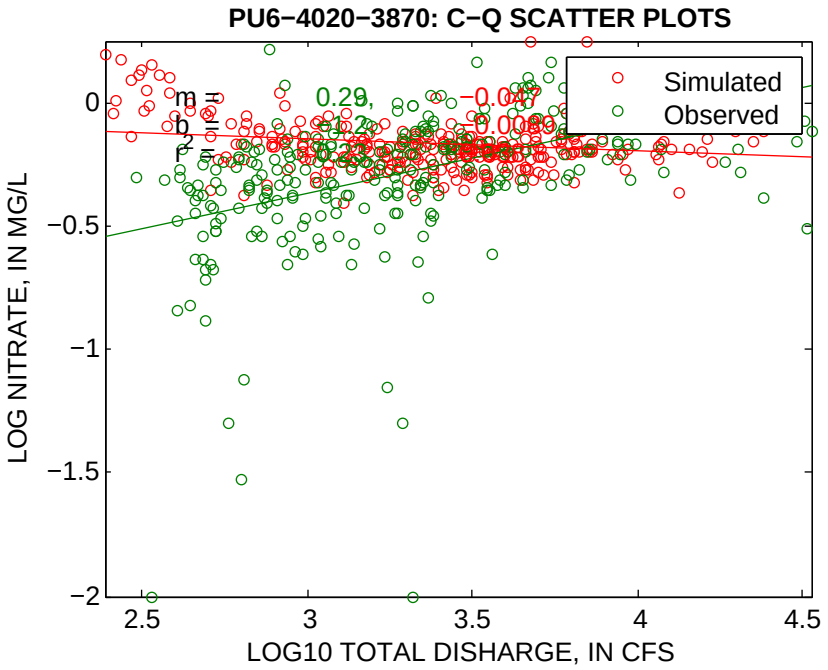
STATISTICS

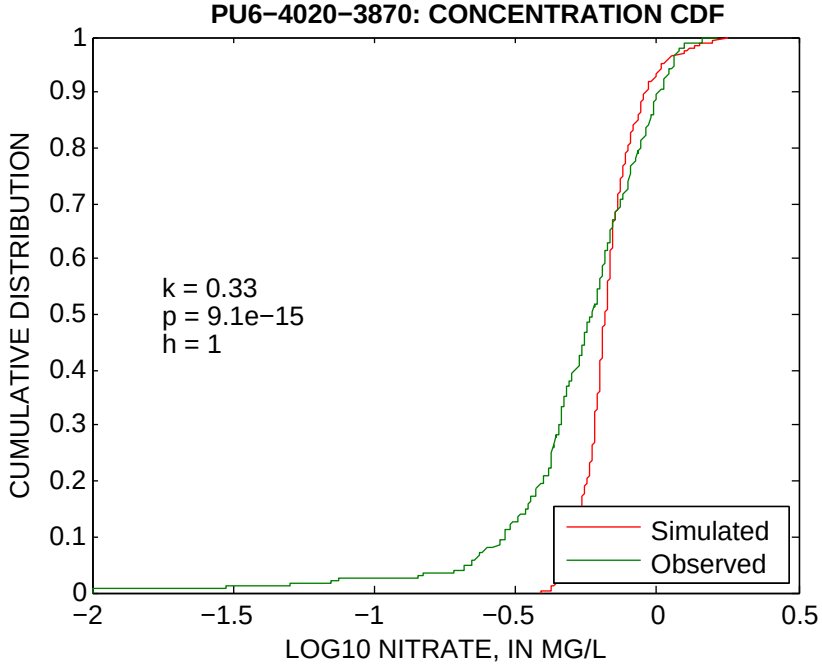
	n	observe	simulate
		303	303
min		0.01	0.39707
		-2	-0.401133
mean		0.621455	0.721549
		-0.268795	-0.158852
media		0.59	0.66353
		-0.229148	-0.178139
max		1.64	2.3816
		0.214844	0.376869
varian		0.0812611	0.0578758
		0.0772039	0.0130548
JB		0.008183	0.001
		0.001	0.001
		ra	log
%		16.1063	-40.902
err.va		0.145793	0.103217
rel.std.err		1.79413	1.33695
mod.eff		-0.794132	-0.336946

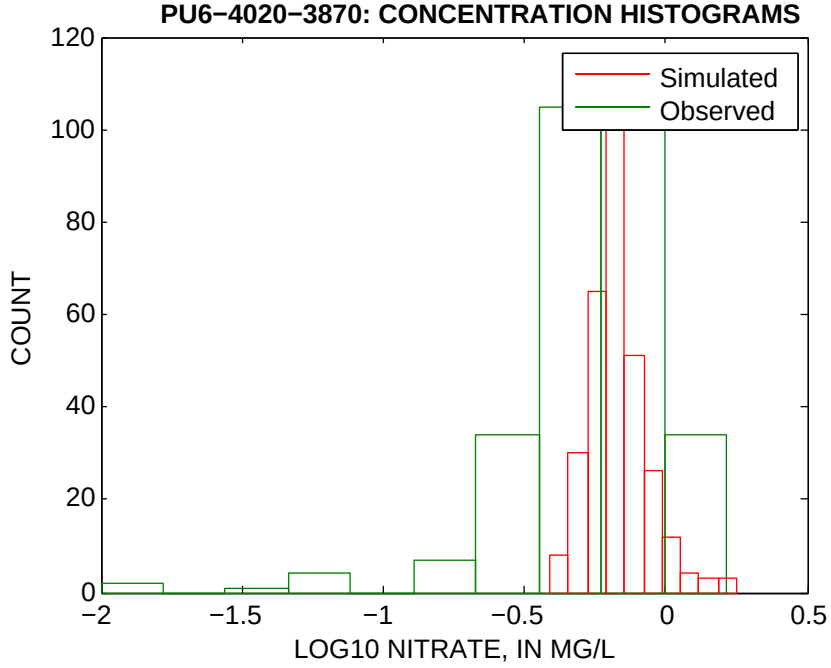
VERSION 2.1

ALL DATA
LOG10

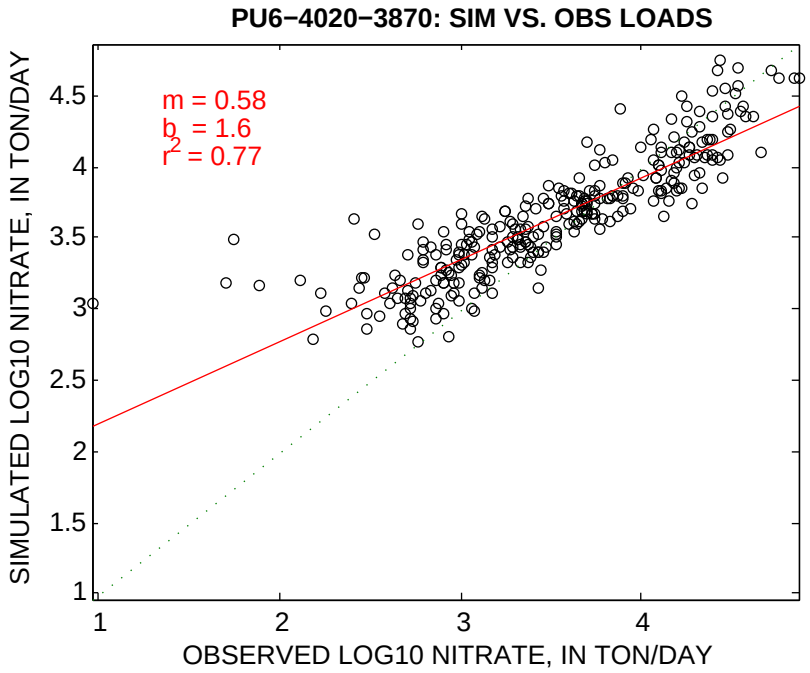


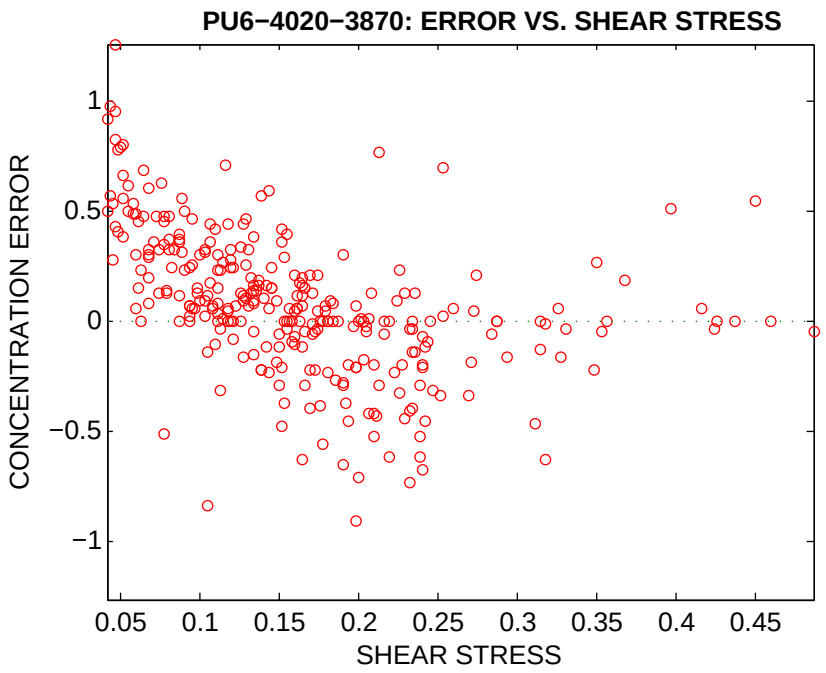


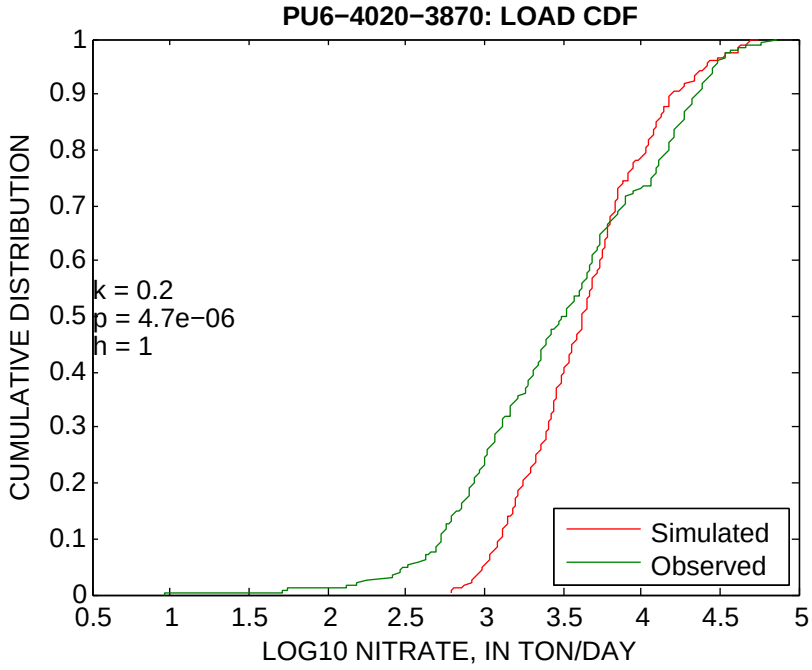


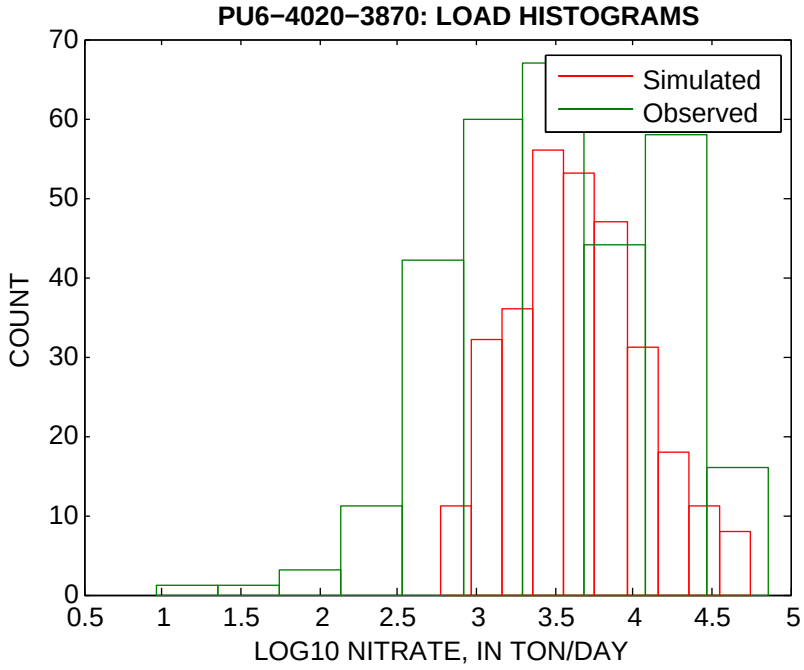


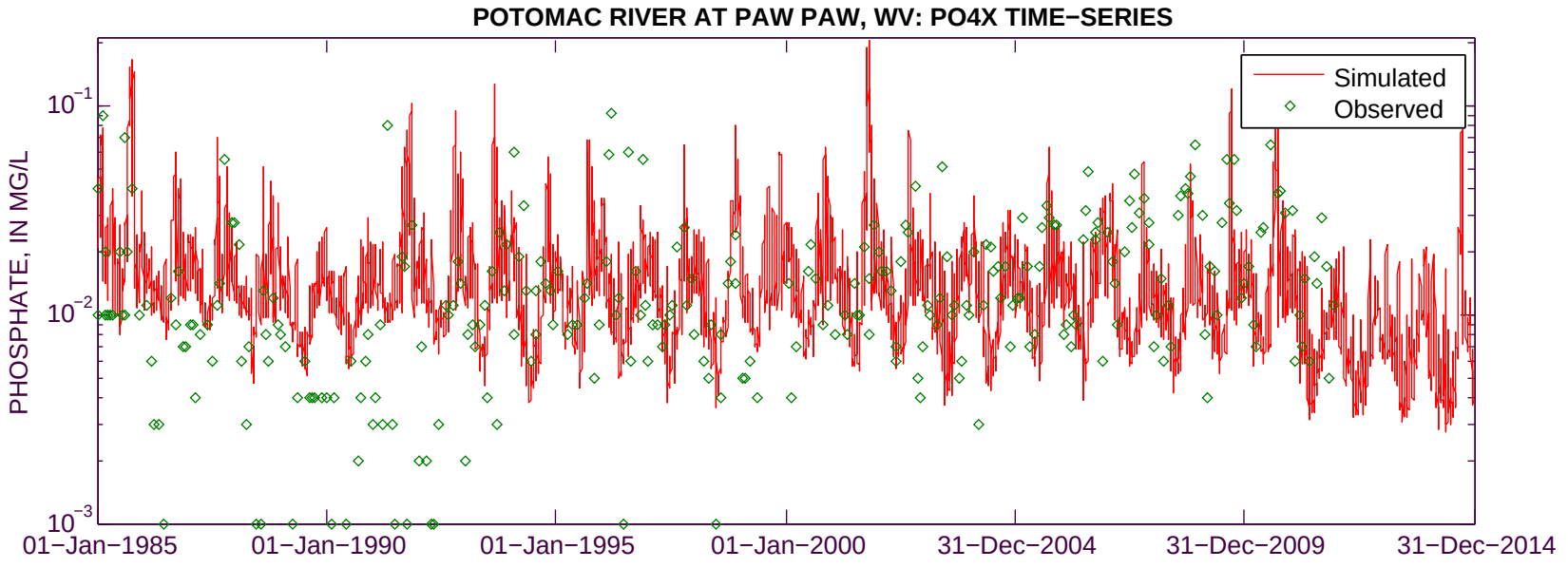
LOAD DATA
LOG10

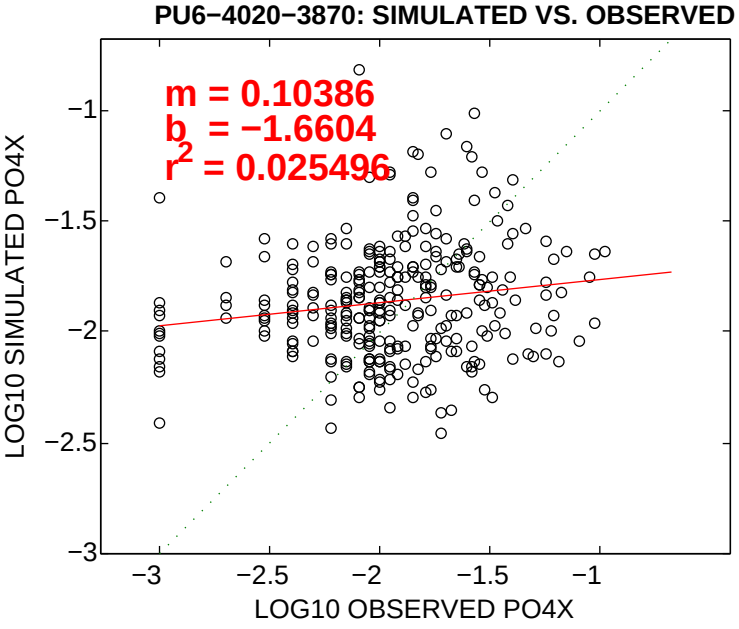


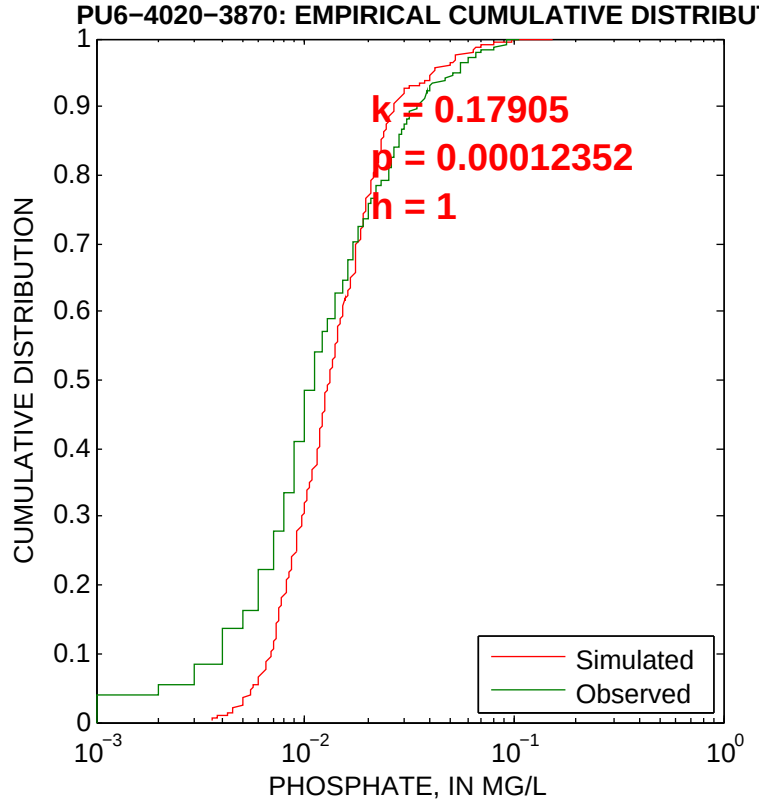












DATA SELECTION

scenario	file
P620171001WQ	PO4X.calib

plot: PO4X - phosphate

Dates: 1/1/1985 – 12/31/201

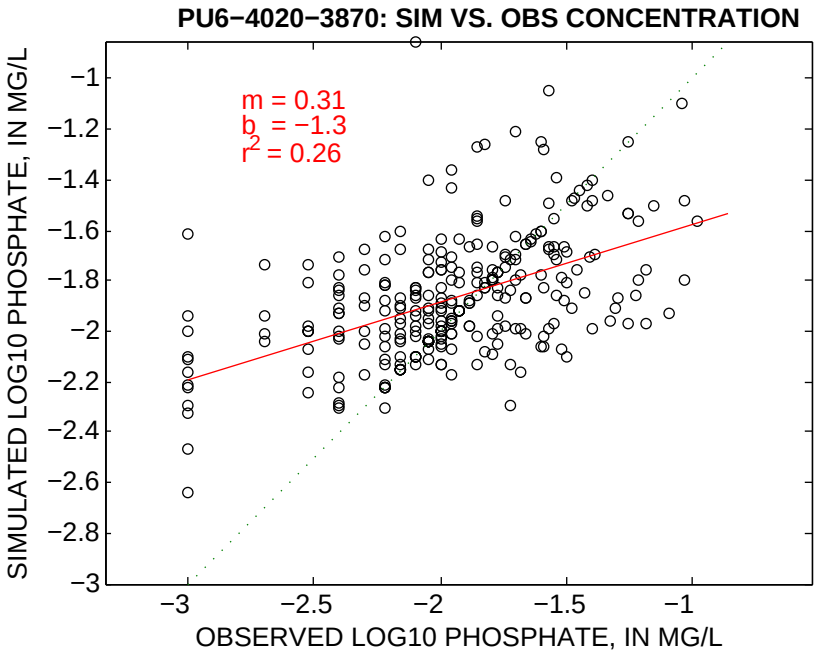
Drive	Directory	Observed
N/A	model	OBS20161101

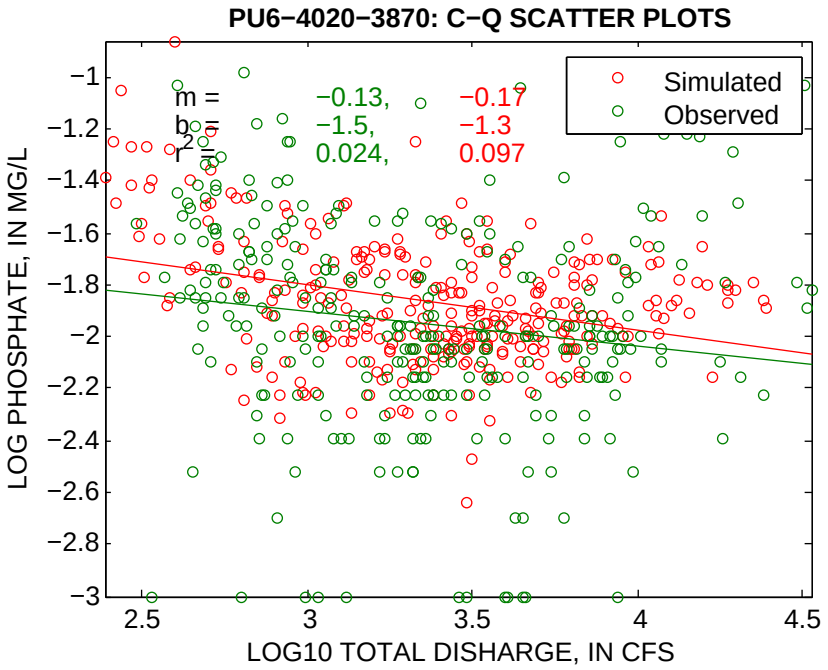
STATISTICS

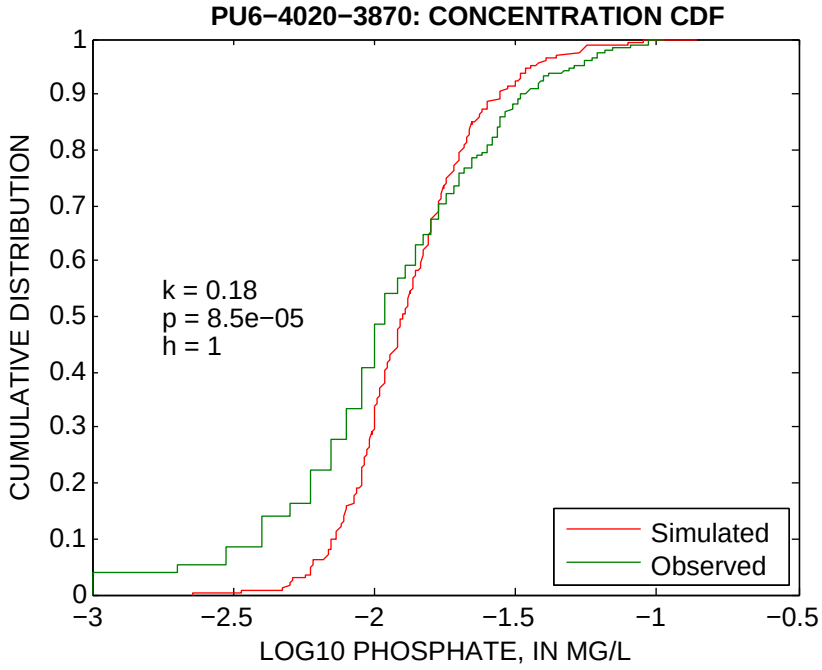
	n	observe	simulate
		296	296
min		0.001	0.0034699
		-3	-2.45968
mean		0.0165541	0.0168417
		-1.94949	-1.86284
media		0.011	0.0133085
		-1.95861	-1.87587
max		0.105	0.15283
		-0.978811	-0.815791
varian		0.00026862	0.00021194
		0.15876	0.067169
JB		0.001	0.001
		0.012056	0.001
		ra	log
%		1.7379	-4.44462
err.va		0.00044191	0.200484
rel.std.err		1.64514	1.26281
mod.eff		-0.645136	-0.262813

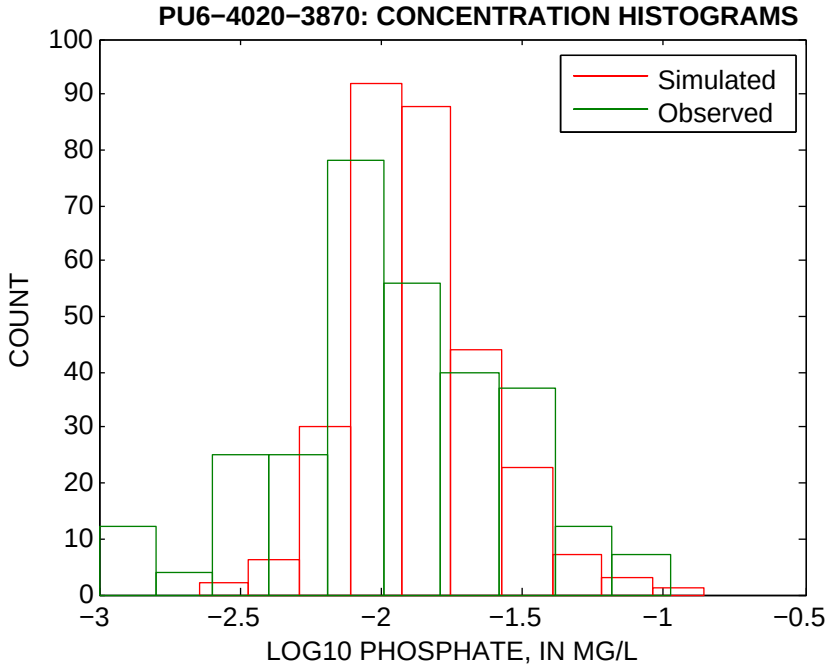
VERSION 2.1

ALL DATA
LOG10

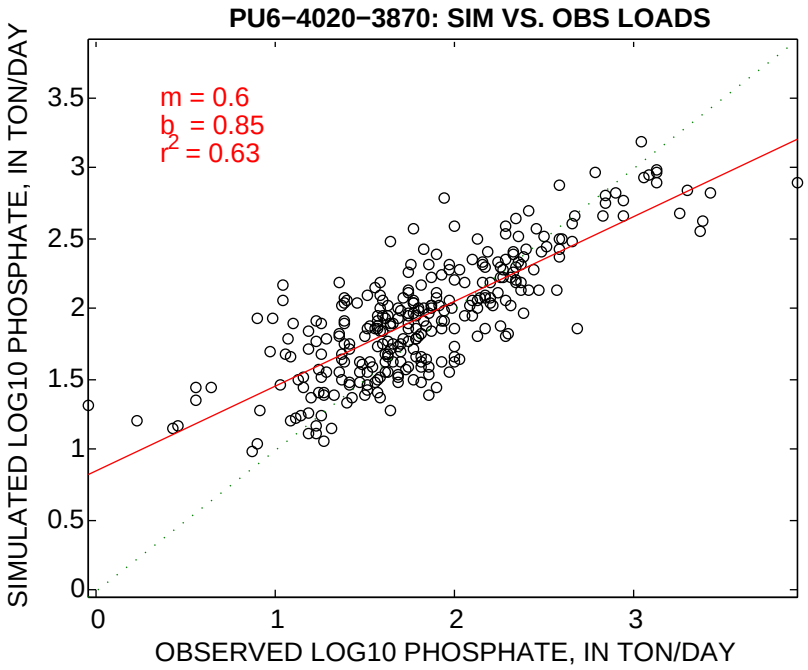


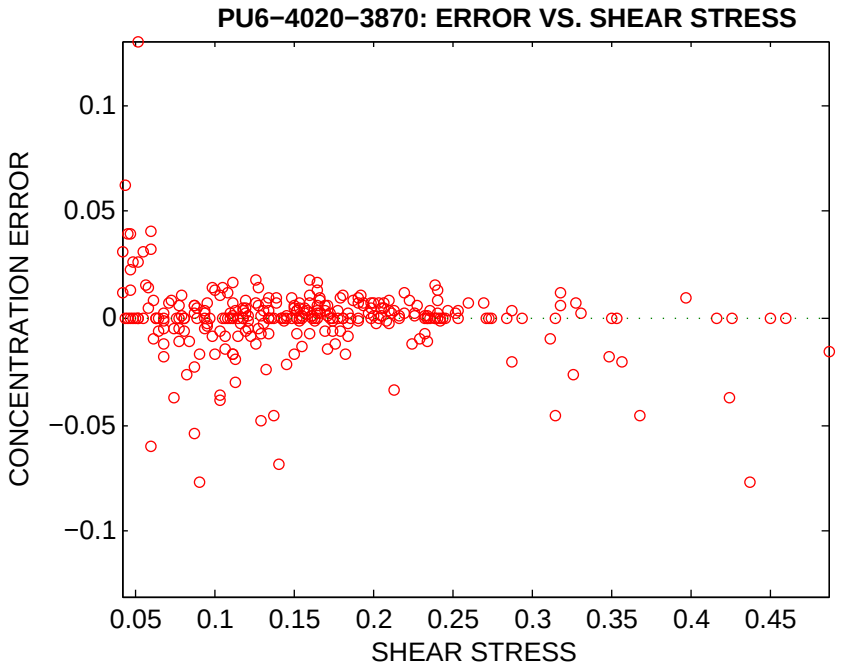


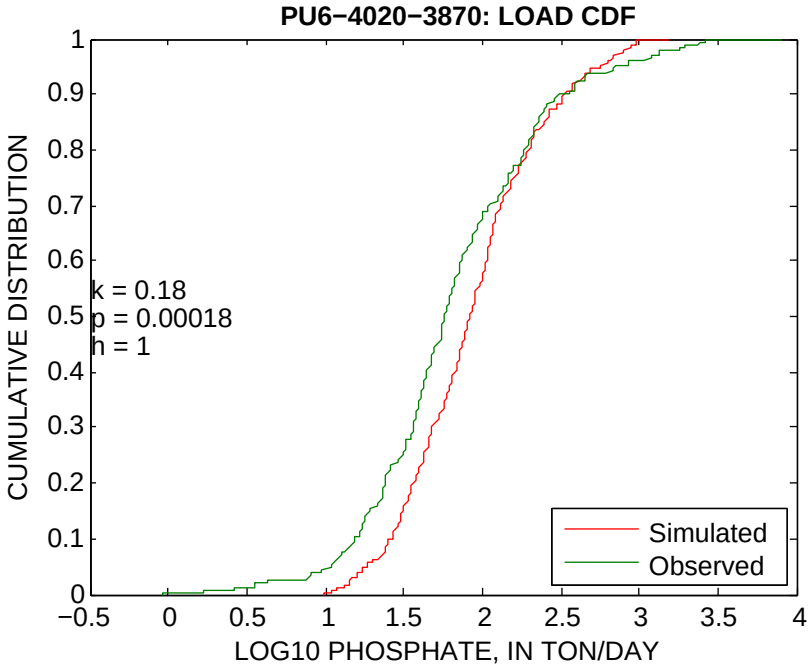


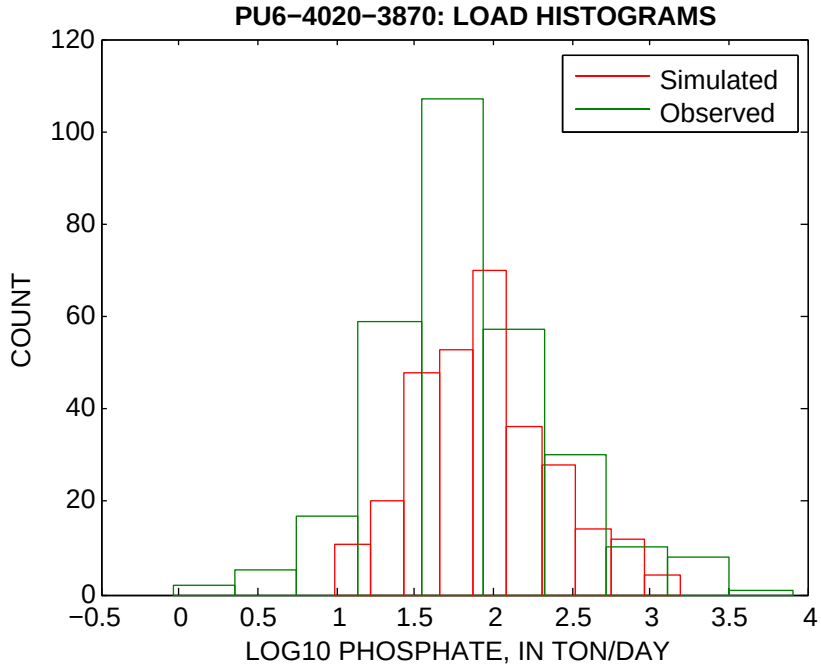


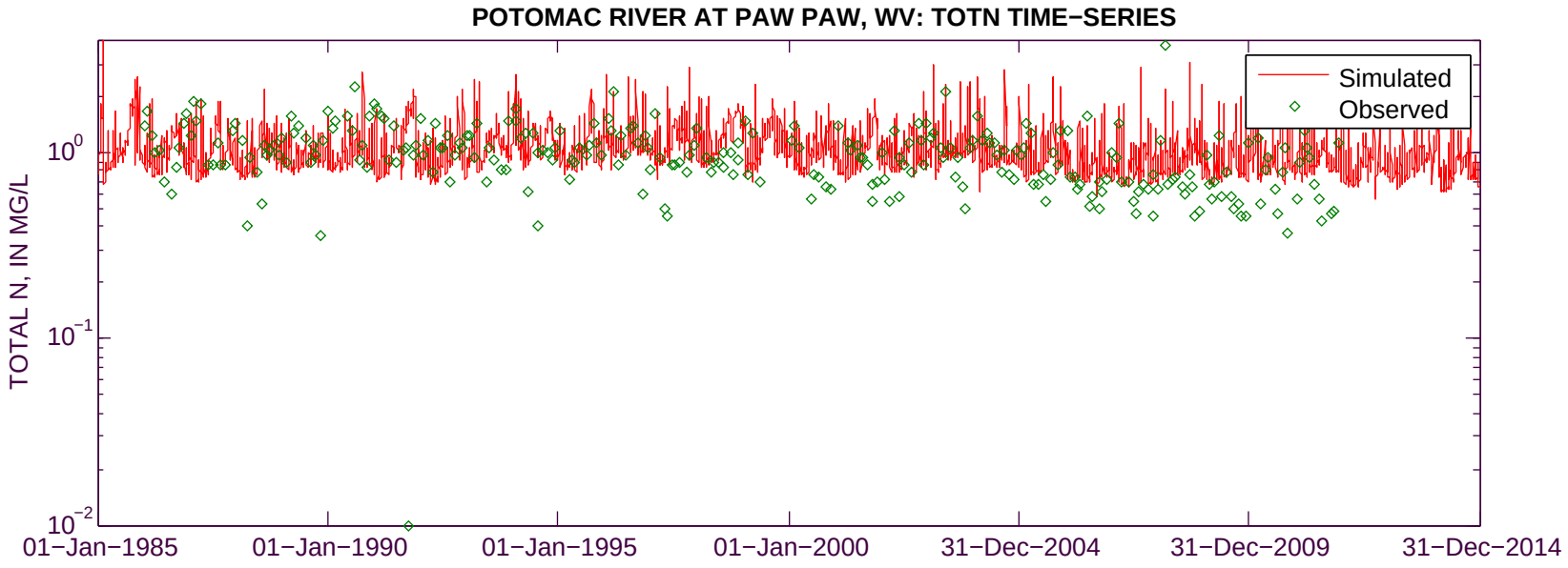
LOAD DATA
LOG10

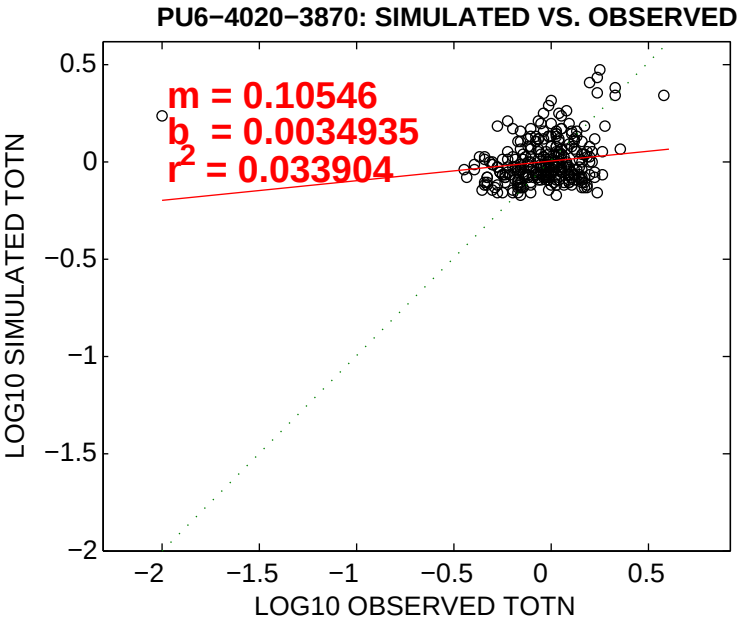


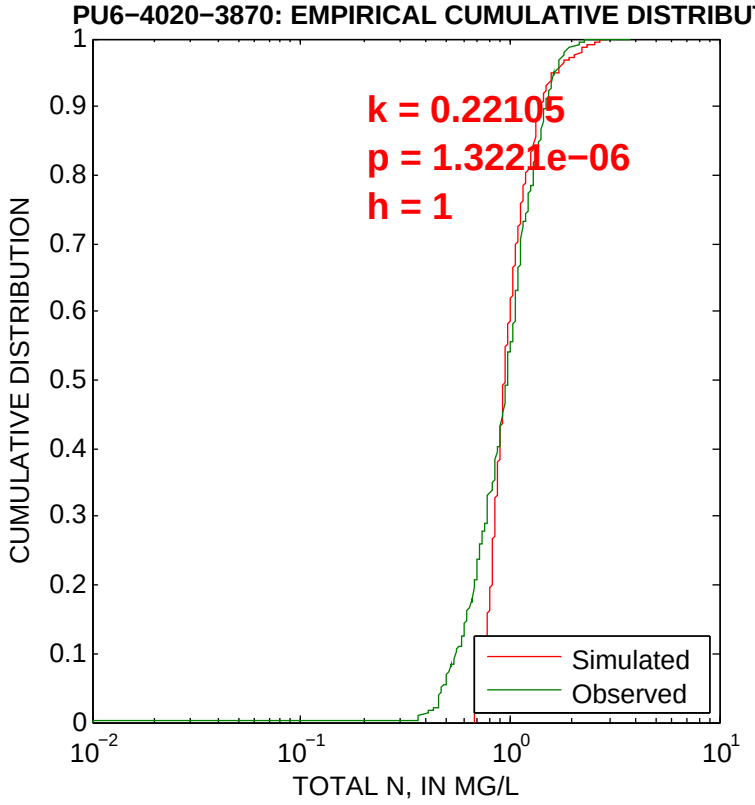












DATA SELECTION

scenario	file
P620171001WQ	TOTN.calib

plot: TOTN - total nitrogen

Dates: 1/1/1985 – 12/31/201

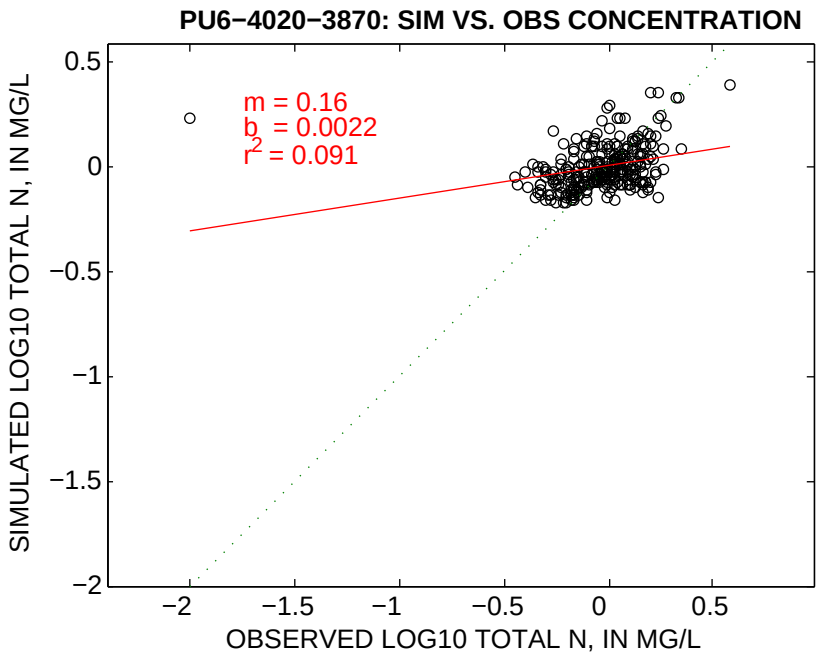
Drive	Directory	Observed
N/A	model	OBS20161101

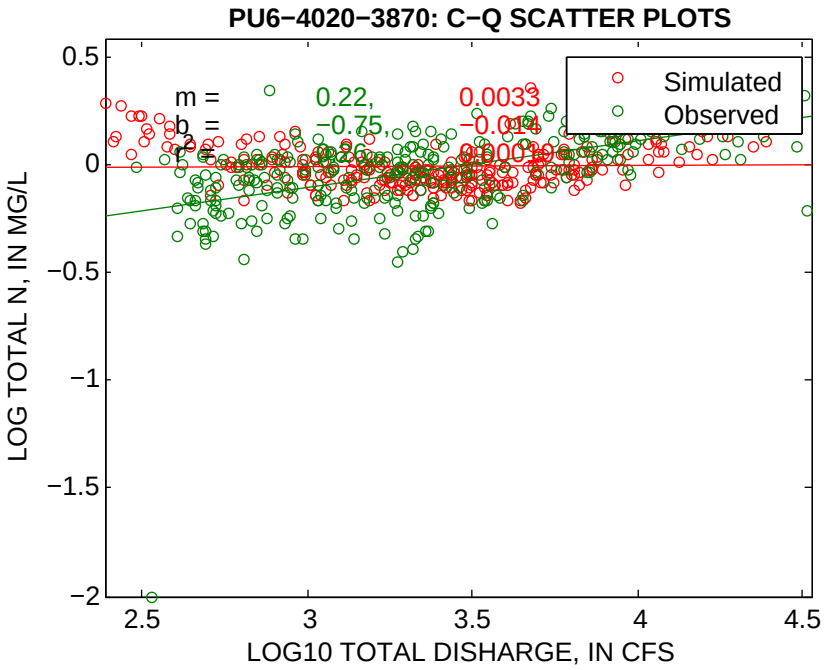
STATISTICS

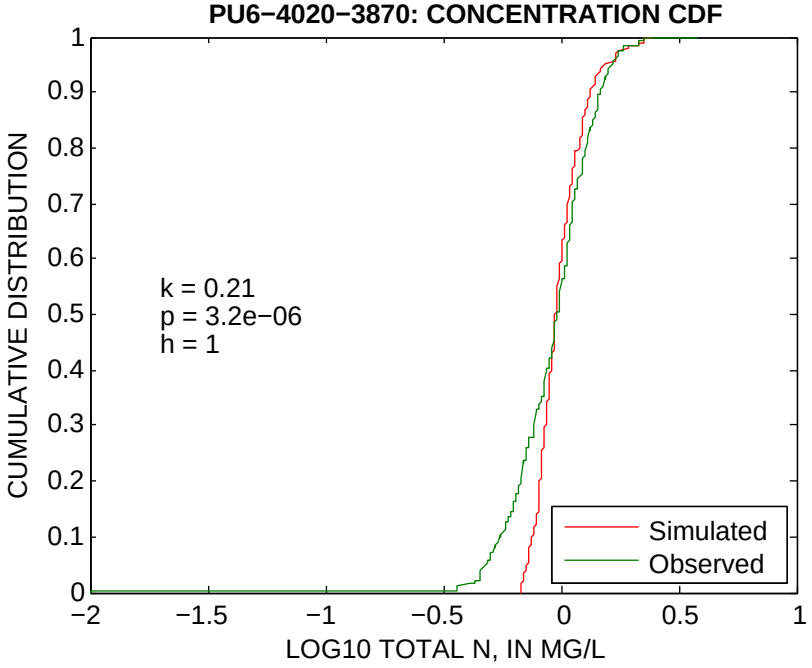
	n	observe	simulate
		285	285
min		0.01	0.67775
		-2	-0.16893
mean		1.00407	1.03938
		-0.0335793	-4.77351e-
media		0.97	0.94027
		-0.0132283	-0.0267474
max		3.8	2.9262
		0.579784	0.466304
varian		0.155883	0.110984
		0.0398021	0.0130567
JB		0.001	0.001
		0.001	0.001
		ra	log
%		3.51752	-99.8578
err.va		0.175894	0.045592
rel.std.err		1.12837	1.14547
mod.eff		-0.128374	-0.145468

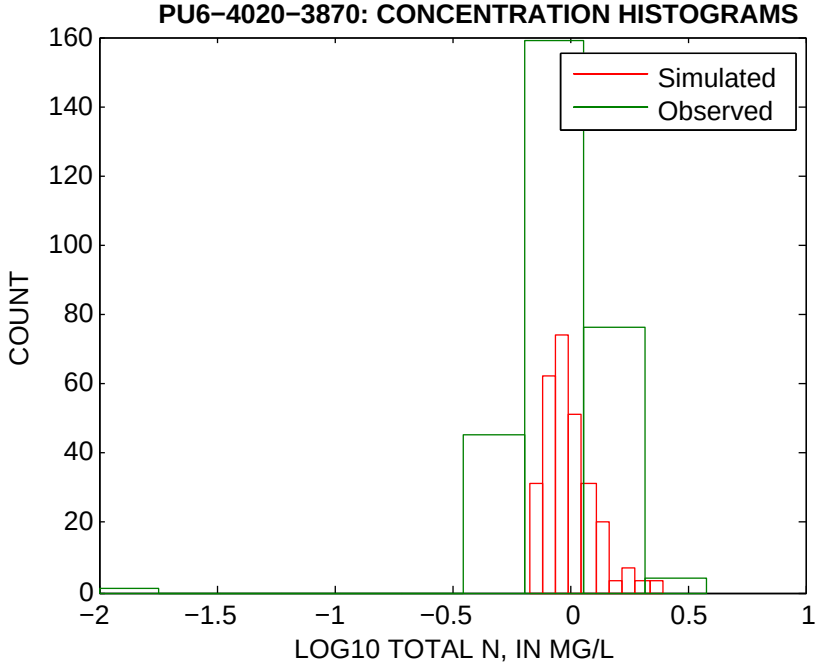
VERSION 2.1

ALL DATA
LOG10

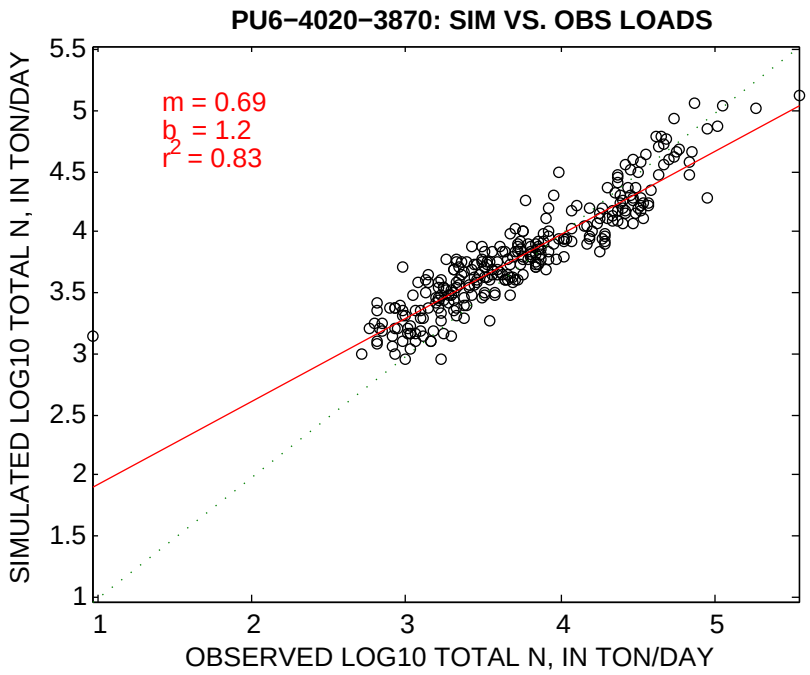


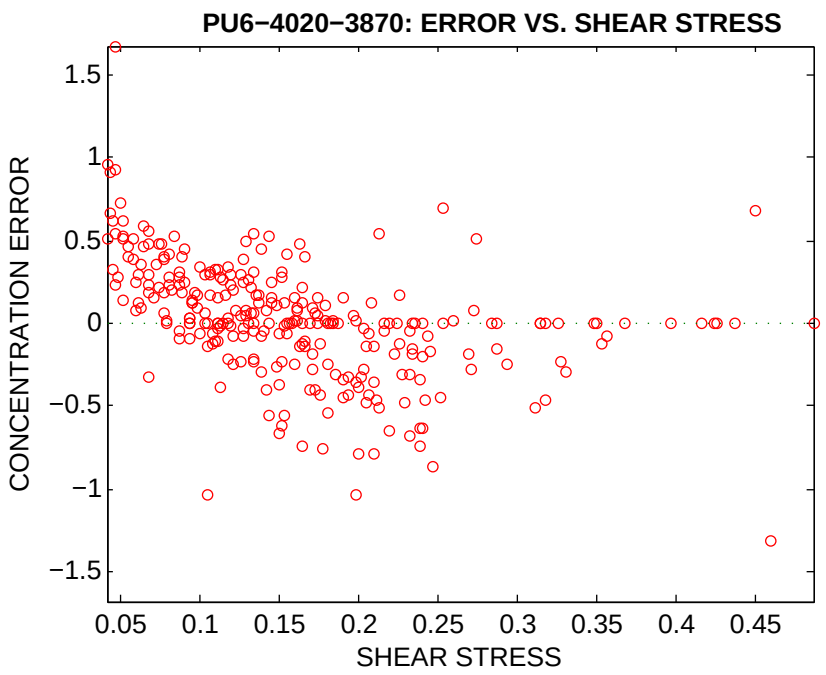


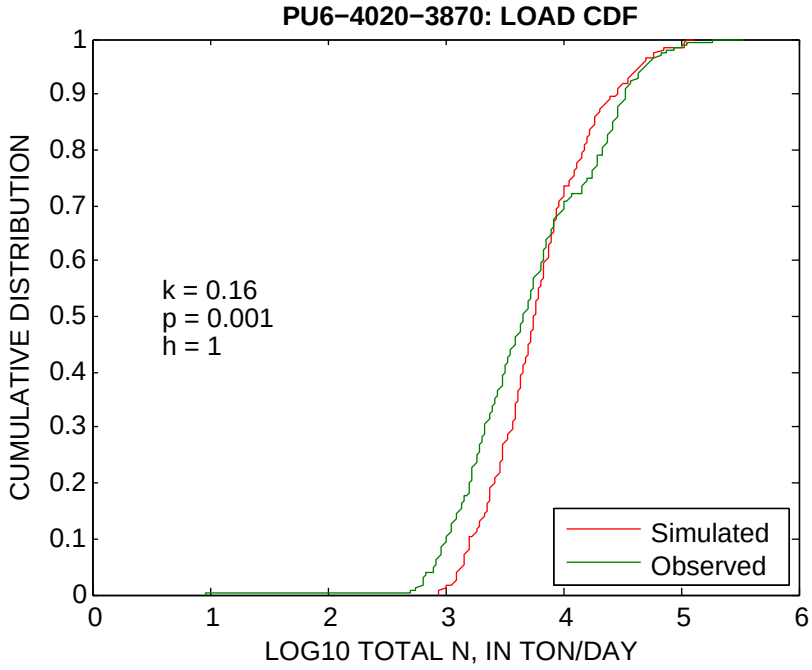


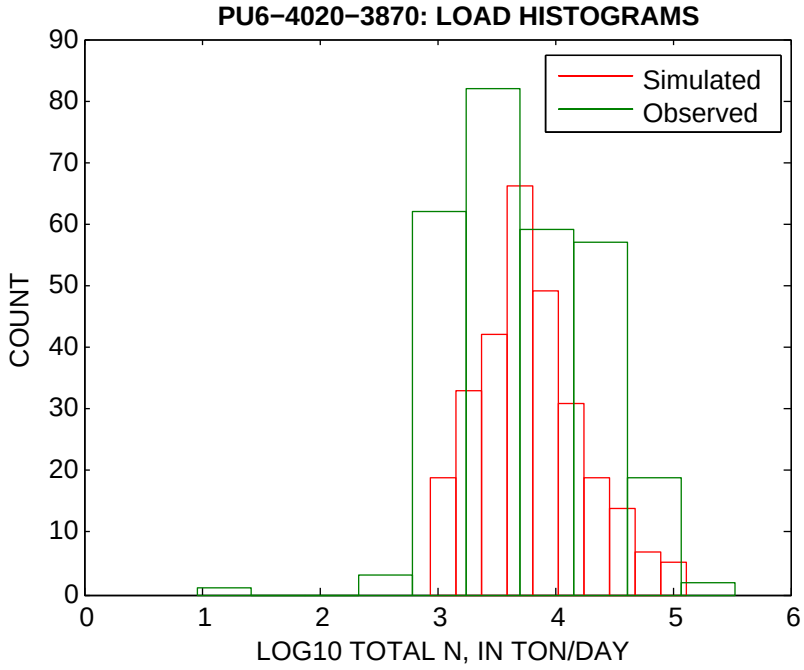


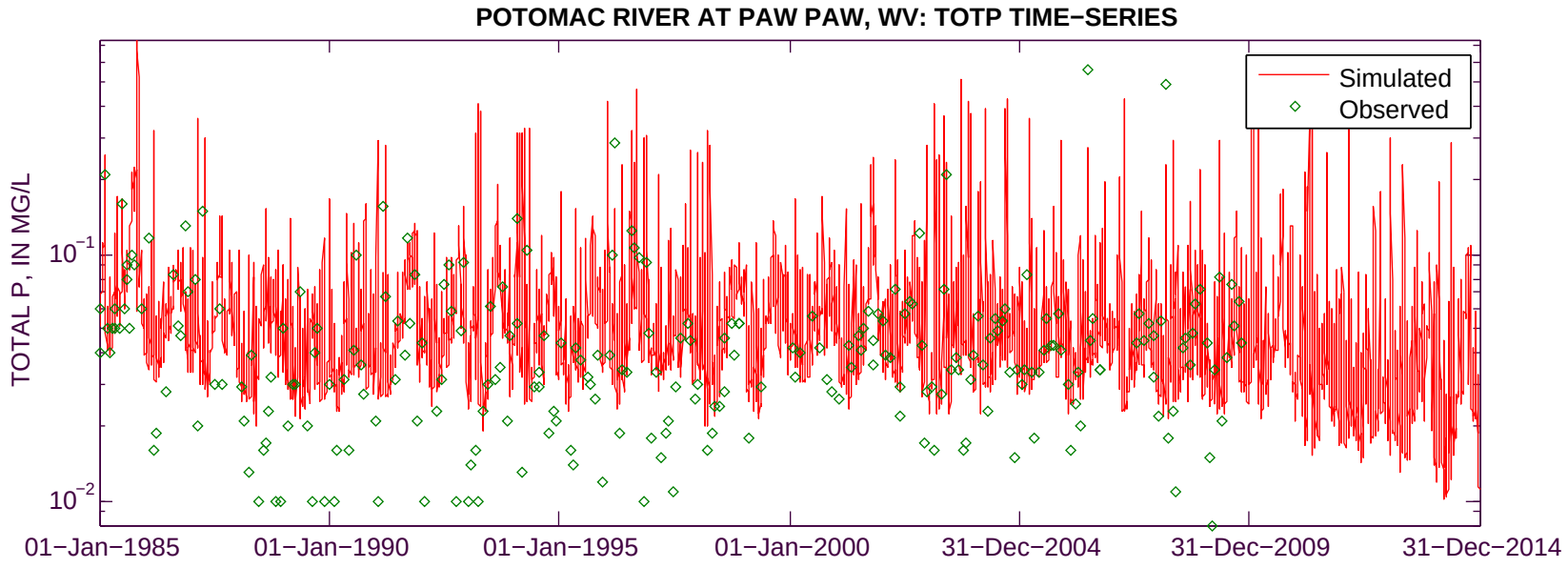
LOAD DATA
LOG10

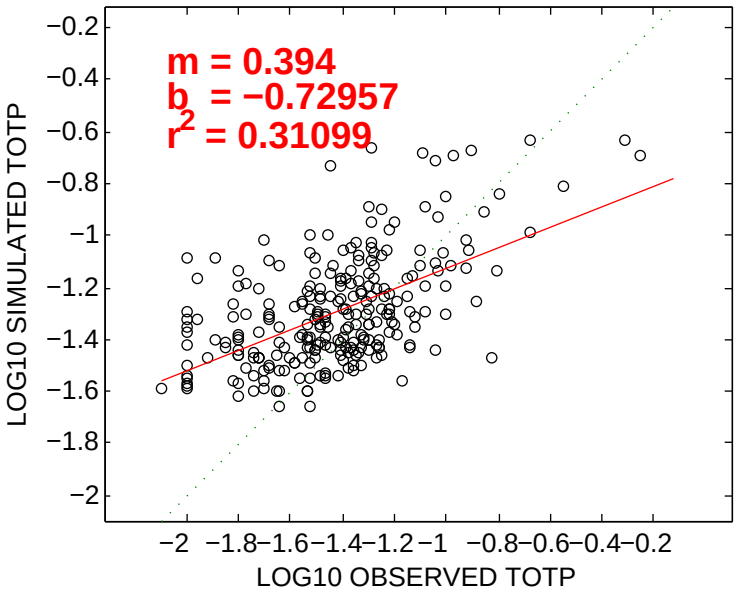


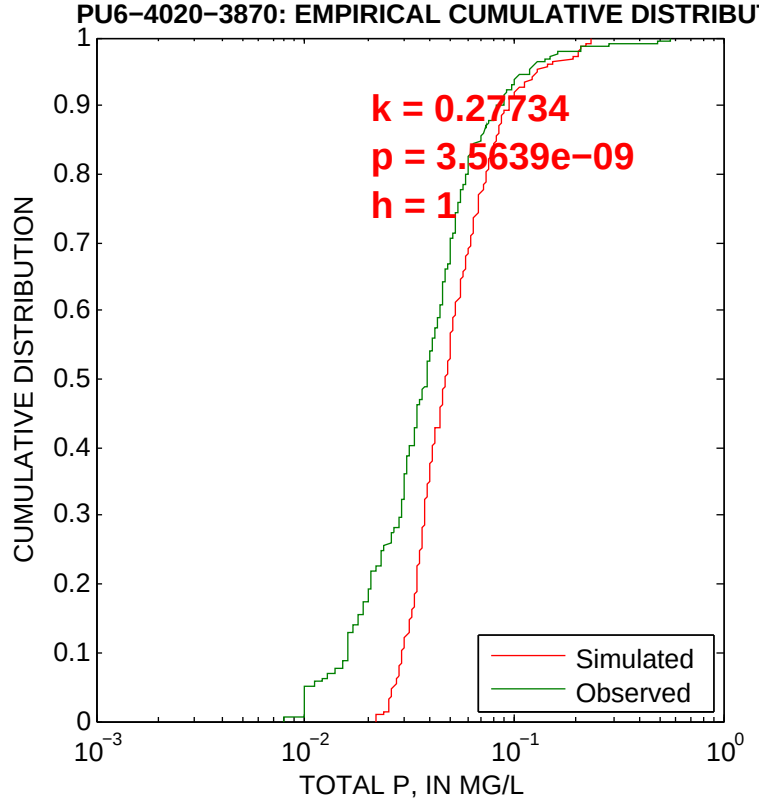












DATA SELECTION

scenario	file
P620171001WQ	TOTP.calib

plot: TOTP - total phosphorus

Dates: 1/1/1985 – 12/31/201

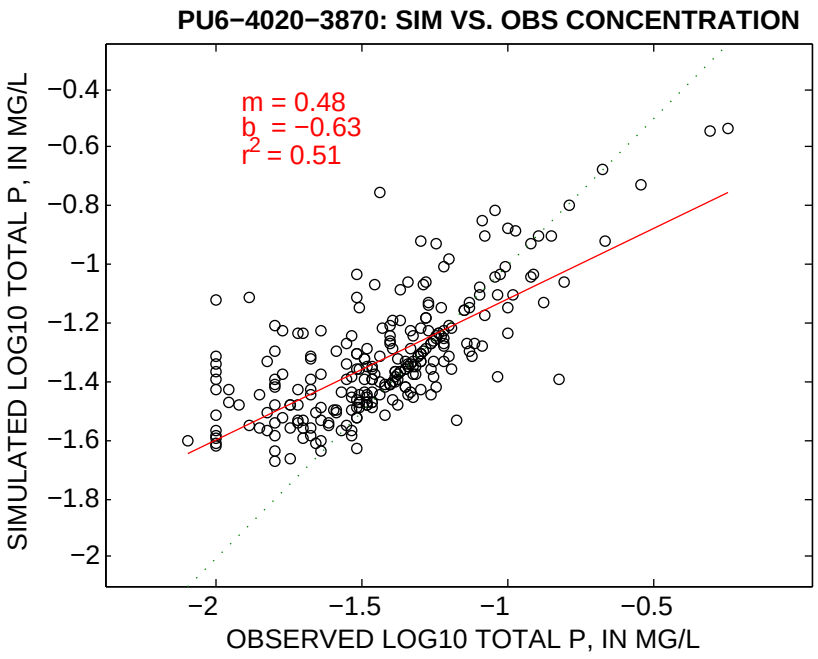
Drive	Directory	Observed
N/A	model	OBS20161101

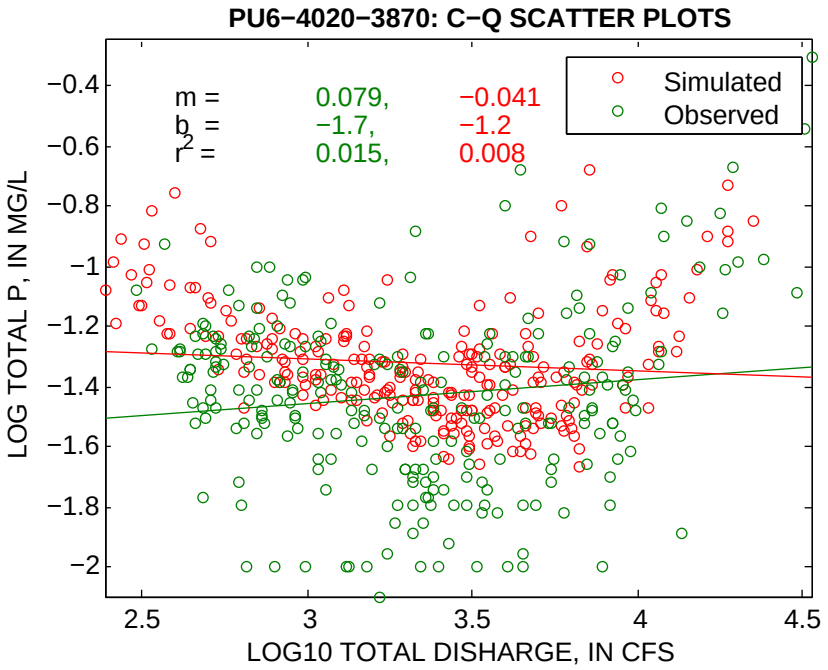
STATISTICS

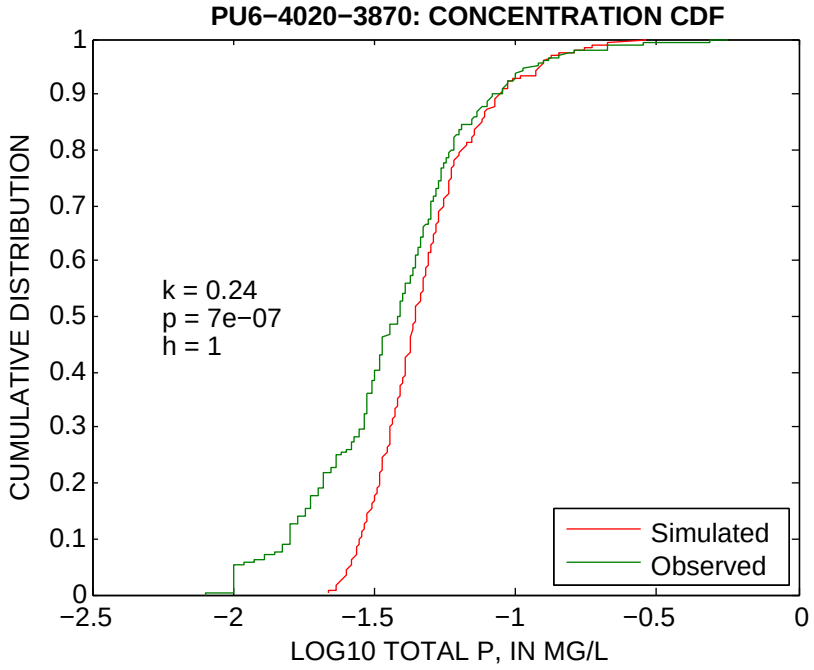
	n	256	256
		observe	simulate
min		0.008	0.021909
		-2.09691	-1.65938
mean		0.0490977	0.0585341
		-1.42815	-1.29226
media		0.0385	0.047528
		-1.41458	-1.32305
max		0.562	0.23315
		-0.250264	-0.632365
varian		0.00301081	0.00143216
		0.0895075	0.0446793
JB		0.001	0.001
		0.001541	0.001
		ra	log
%		19.2197	-9.51496
err.va		0.00200321	0.0821925
rel.std.err		0.665338	0.918275
mod.eff		0.334662	0.081725

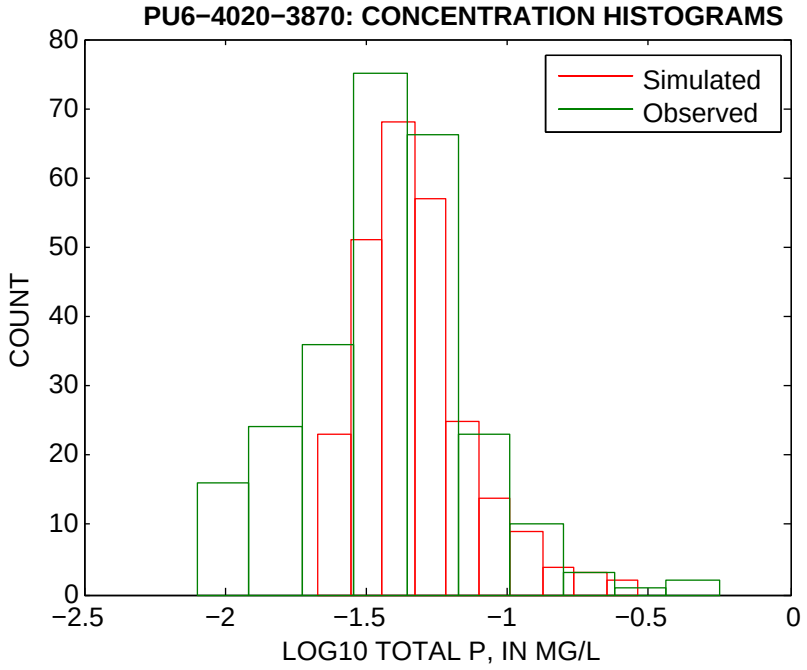
VERSION 2.1

ALL DATA
LOG10

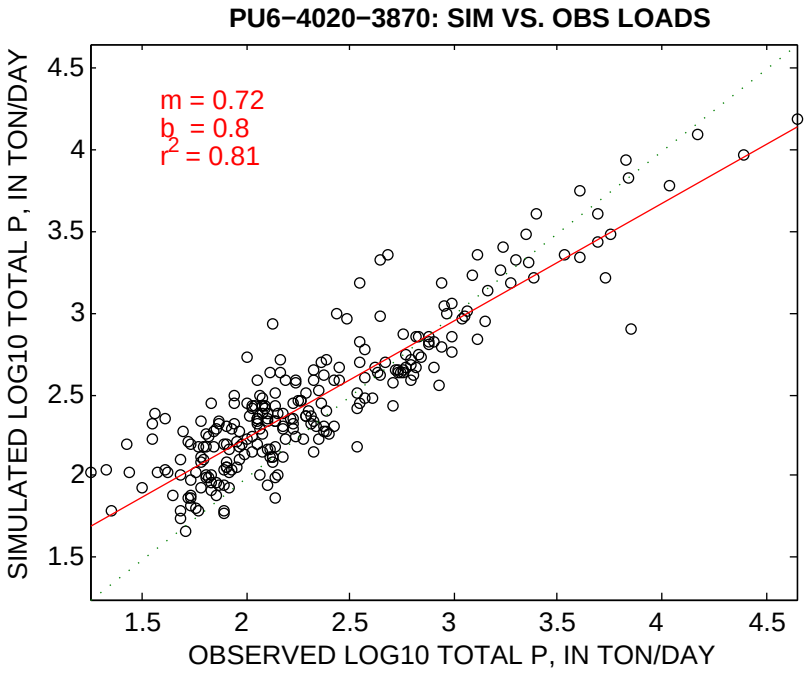


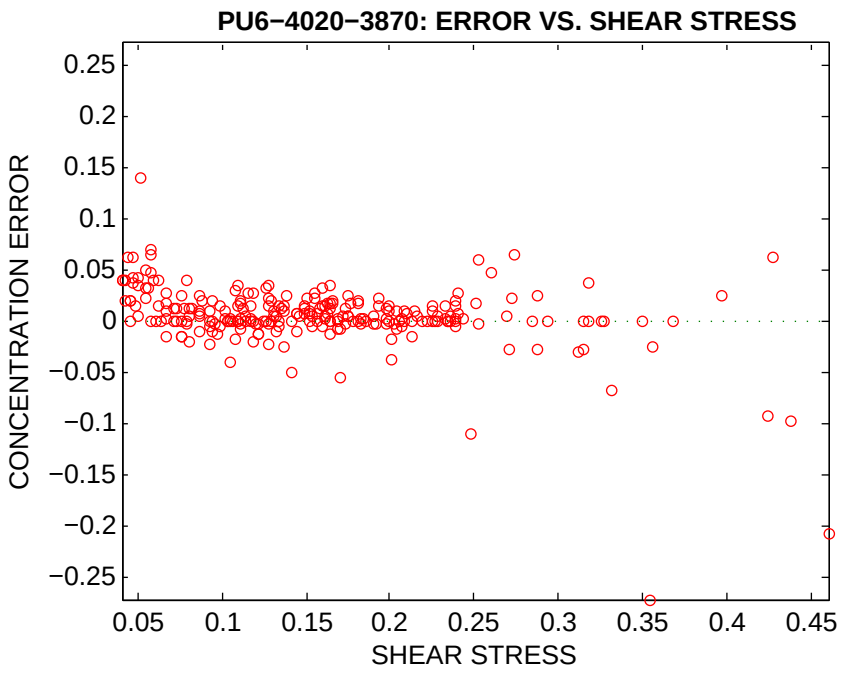


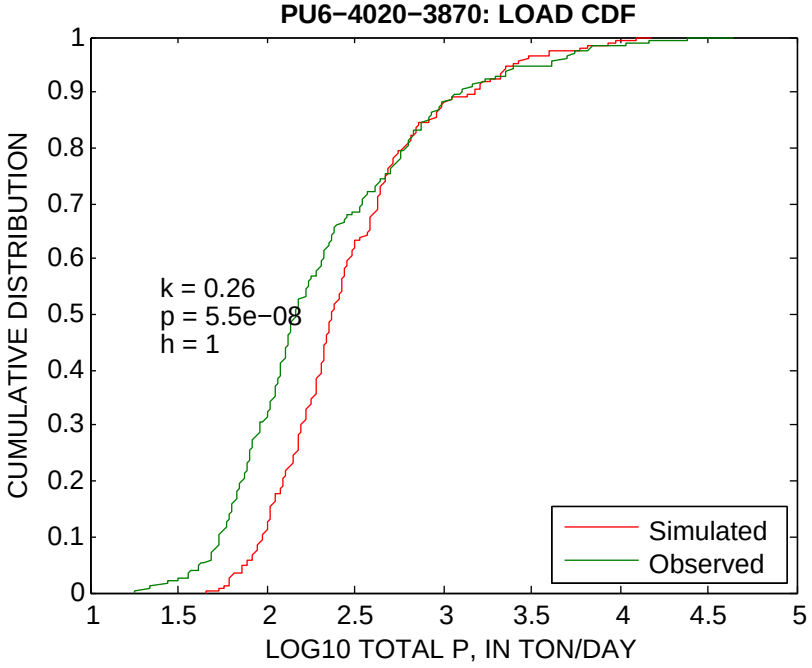


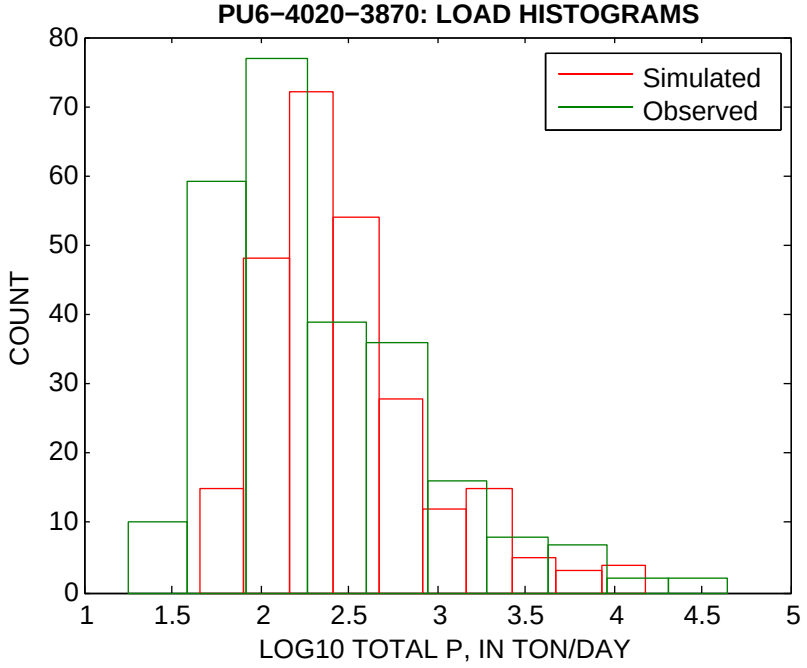


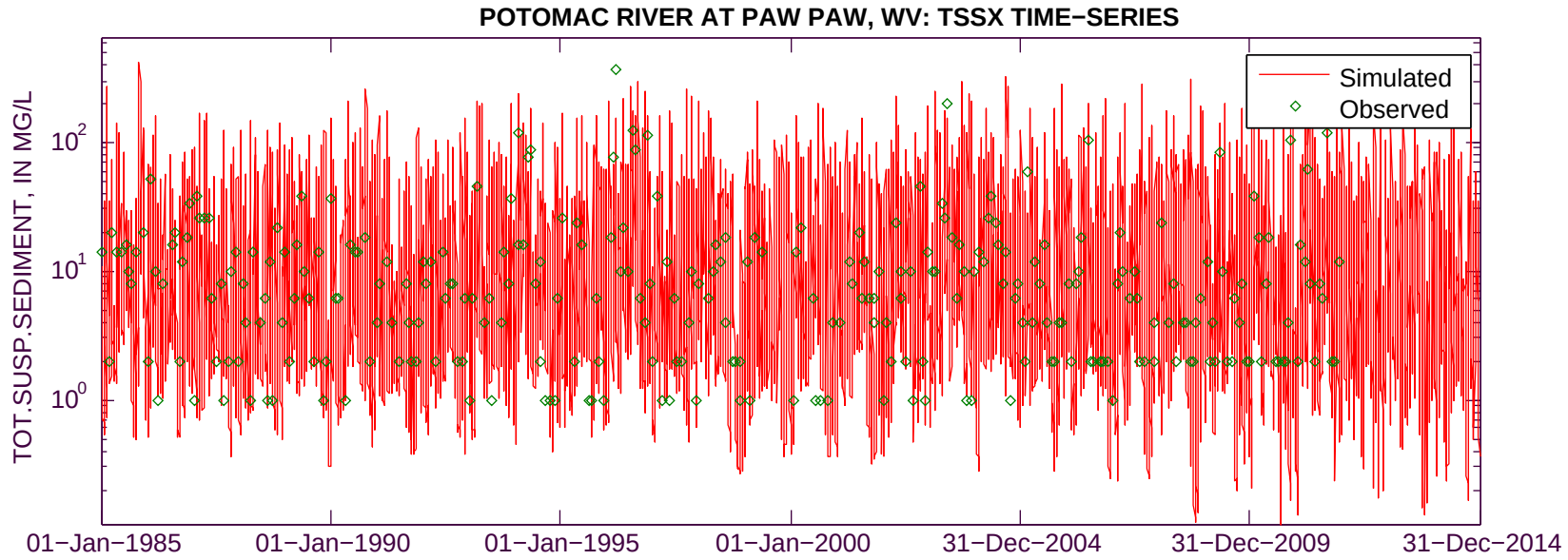
LOAD DATA
LOG10

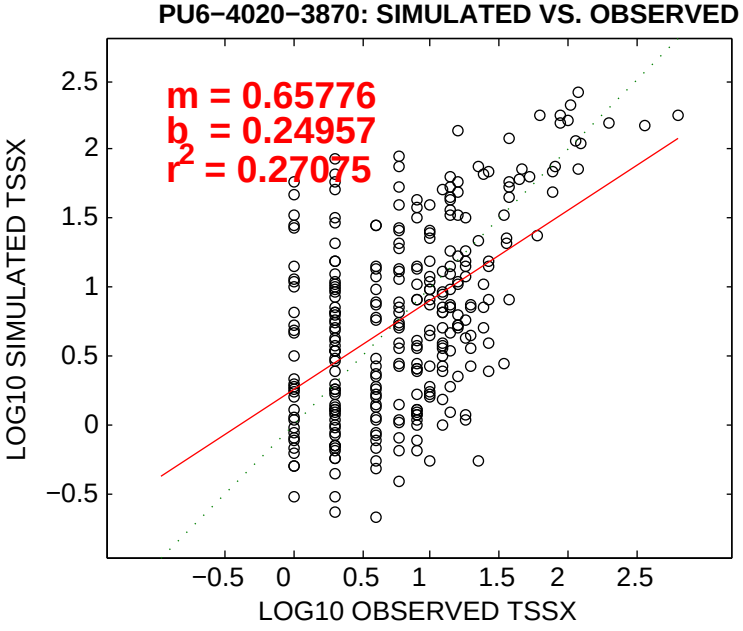


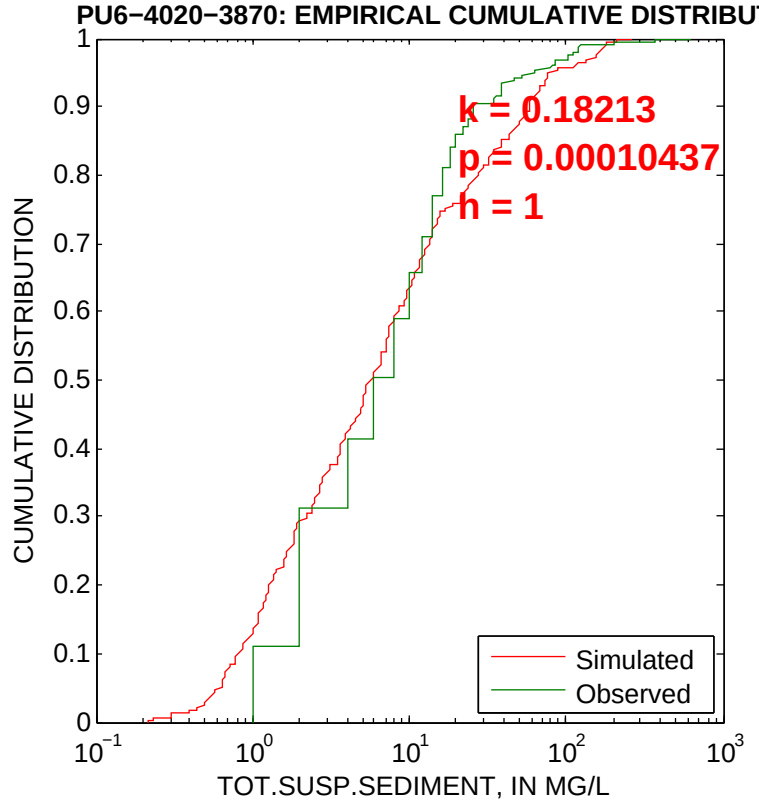












DATA SELECTION

scenario	file
P620171001WQ	TSSX.calib

plot: TSSX - total suspended ...

Dates: 1/1/1985 – 12/31/201

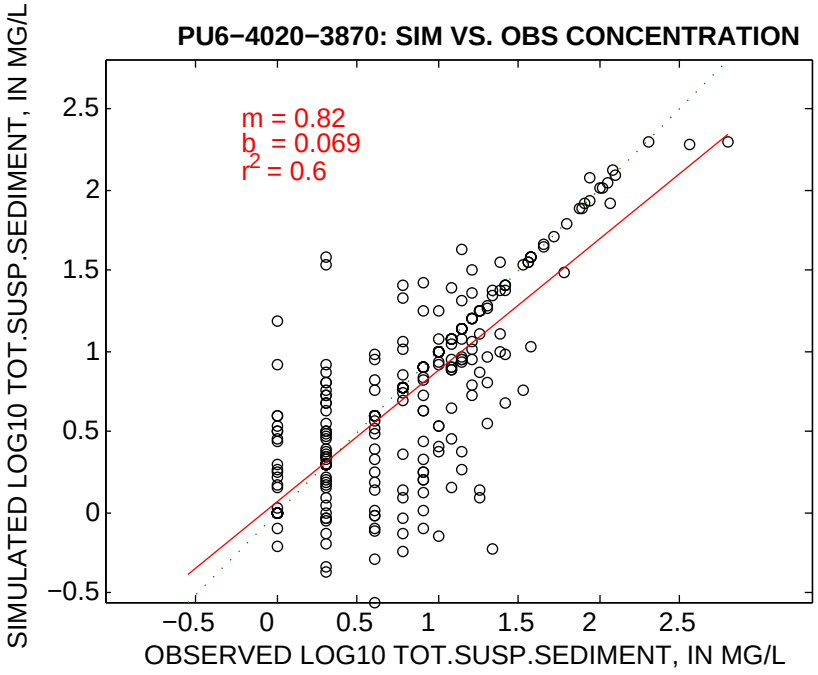
Drive	Directory	Observed
N/A	model	OBS20161101

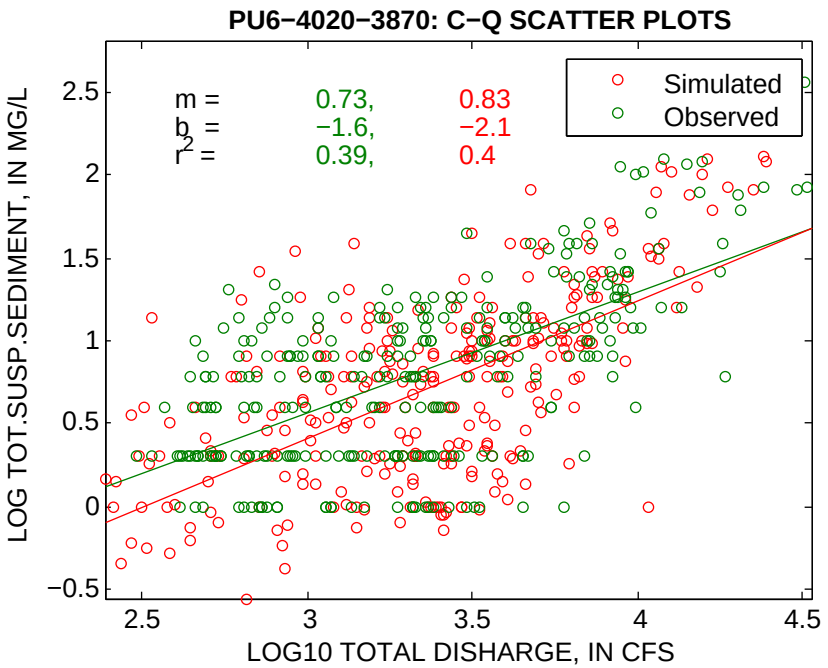
STATISTICS

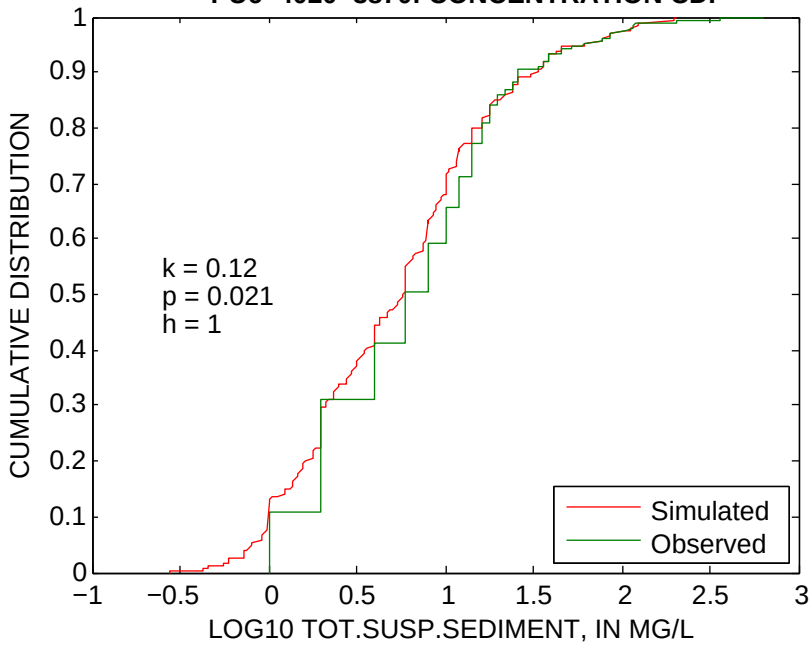
n	291	291
	observe	simulate
min	1	0.21537
	0	-0.666815
mean	16.8488	20.0656
	0.814691	0.785439
media	6	5.6843
	0.778151	0.754677
max	632	266.19
	2.80072	2.42519
varian	2256.92	1386.04
	0.291878	0.466401
JB	0.001	0.001
	0.009240	0.018102
	ra	log
%	19.0924	-3.59054
err.va	1467.96	0.375168
rel.std.err	0.650426	1.28536
mod.eff	0.349574	-0.28536

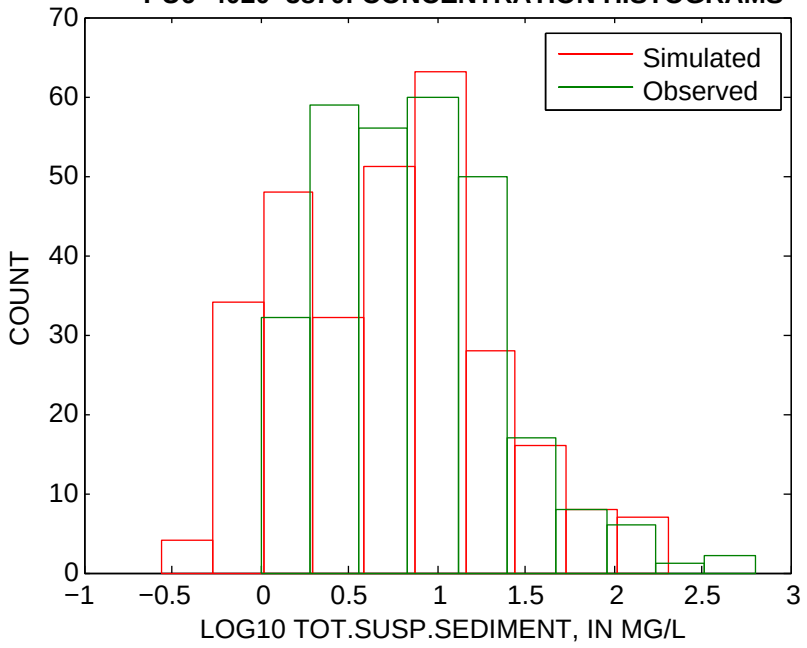
VERSION 2.1

ALL DATA
LOG10

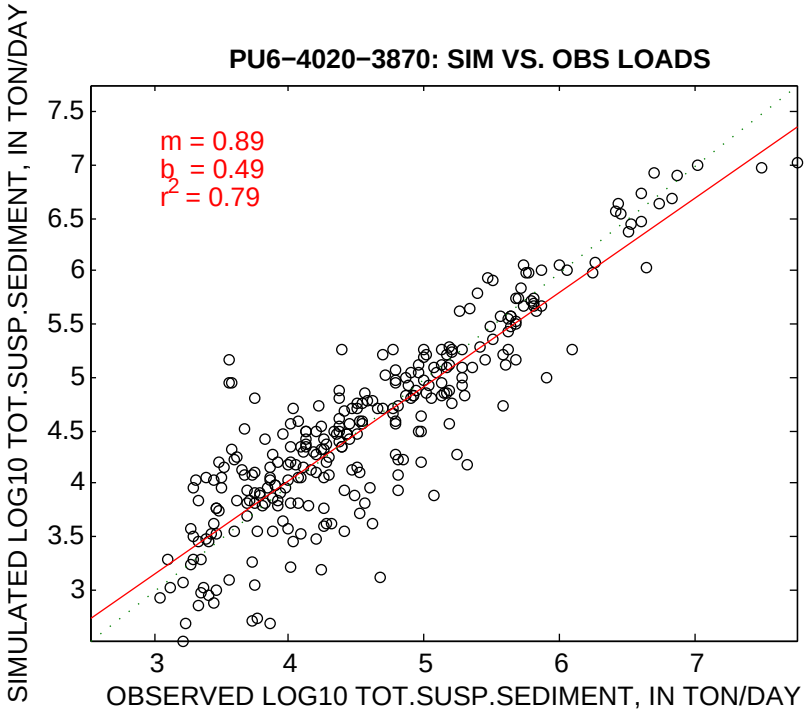


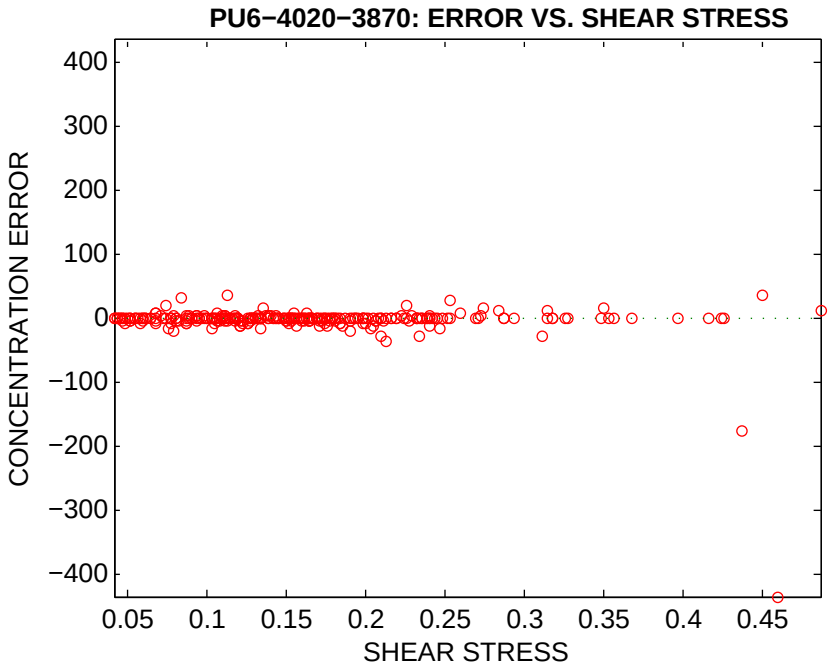


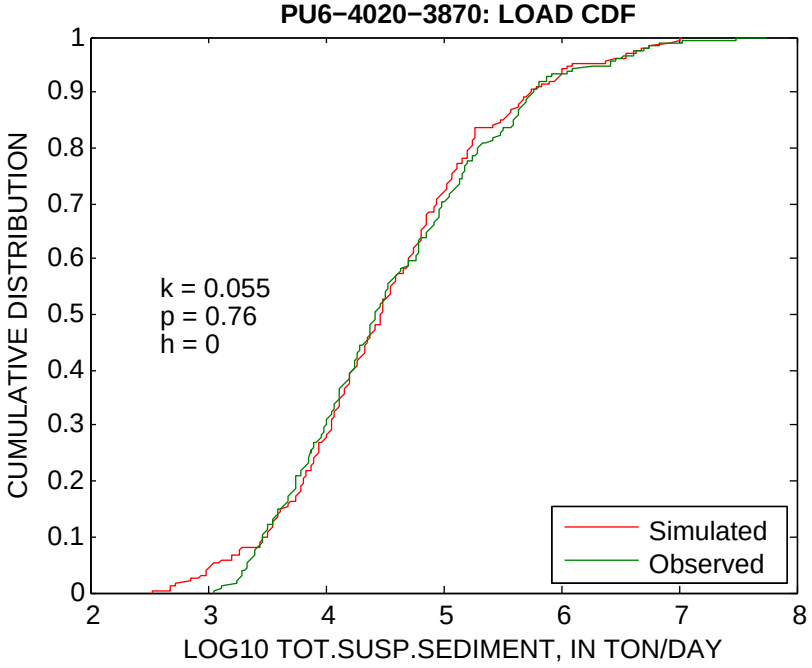


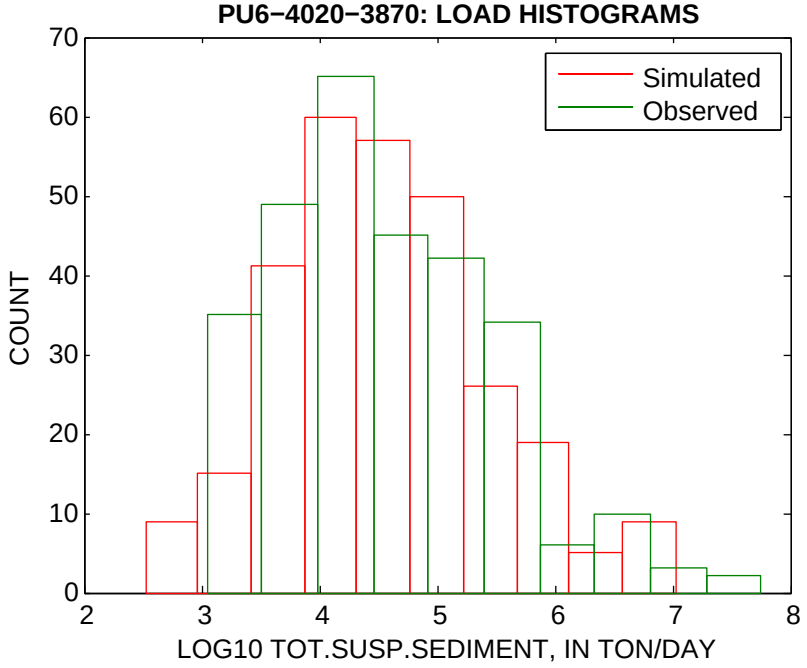


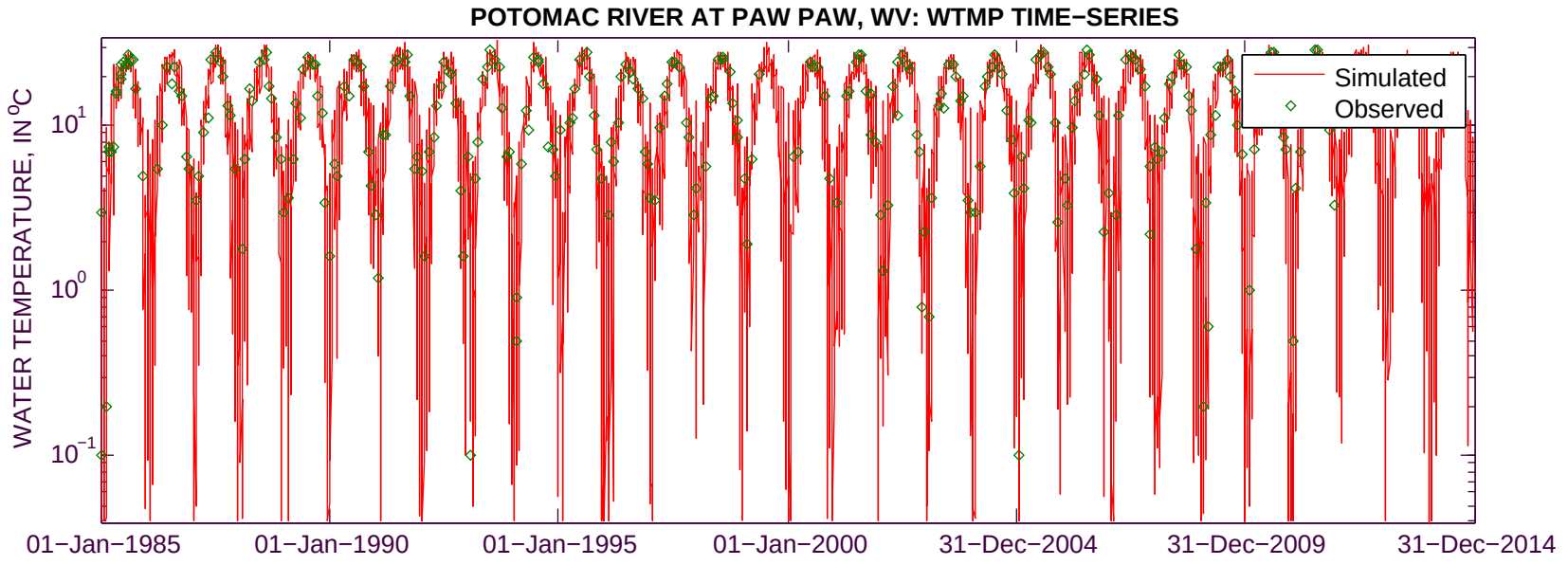
LOAD DATA
LOG10

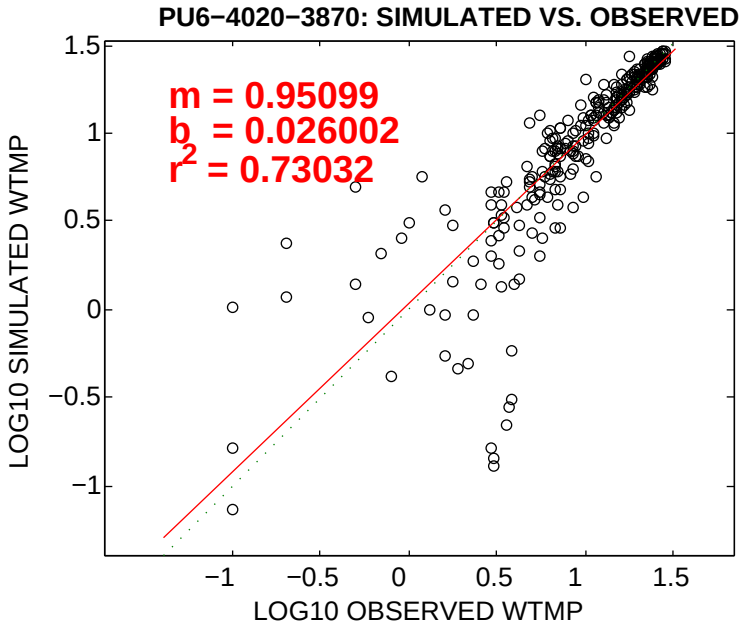


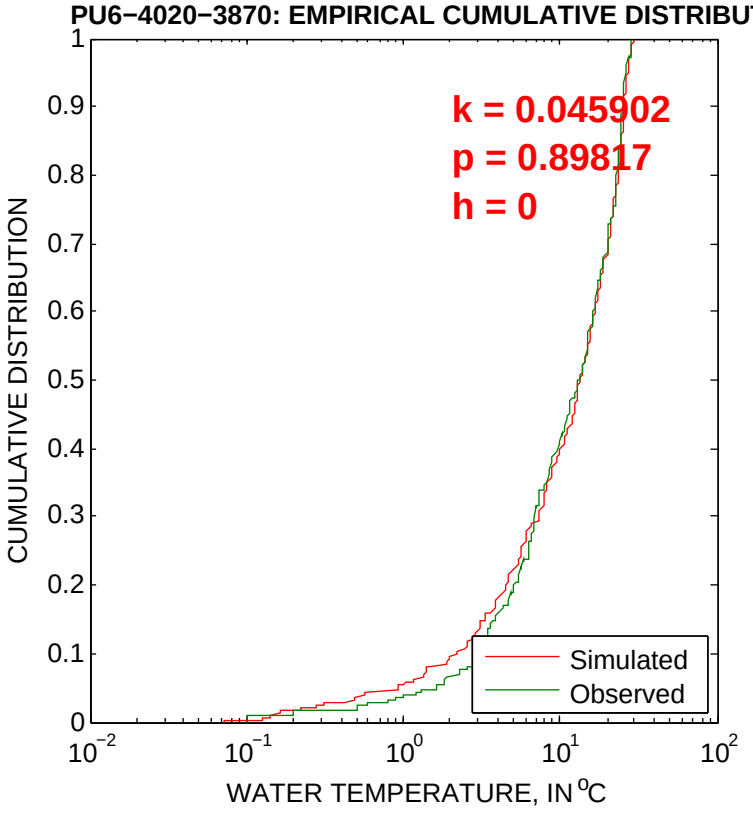












DATA SELECTION

scenario	file
P620171001WQ	WTMP.calib

plot: WTMP - water tempera...

Dates: 1/1/1985 – 12/31/201

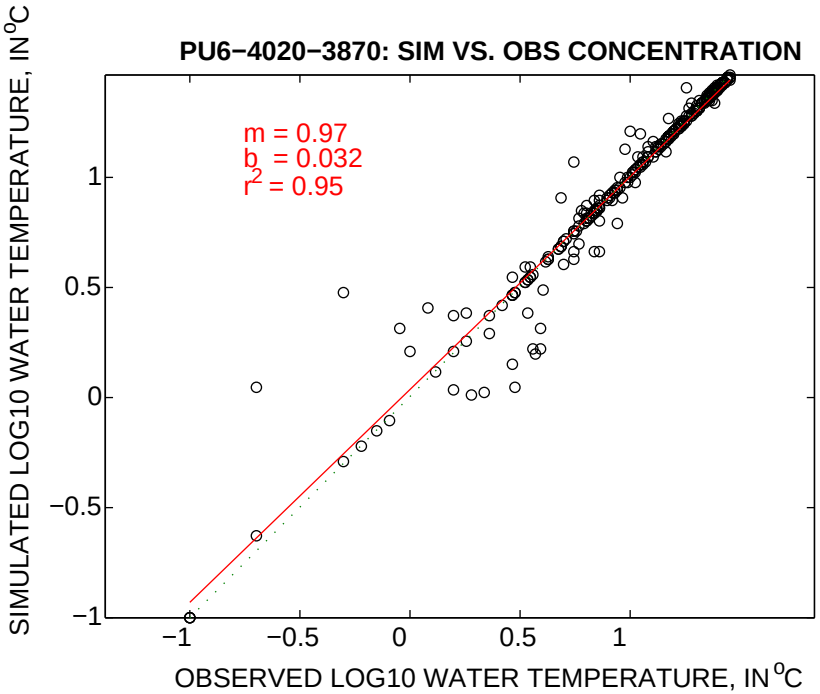
Drive	Directory	Observed
N/A	model	OBS20161101

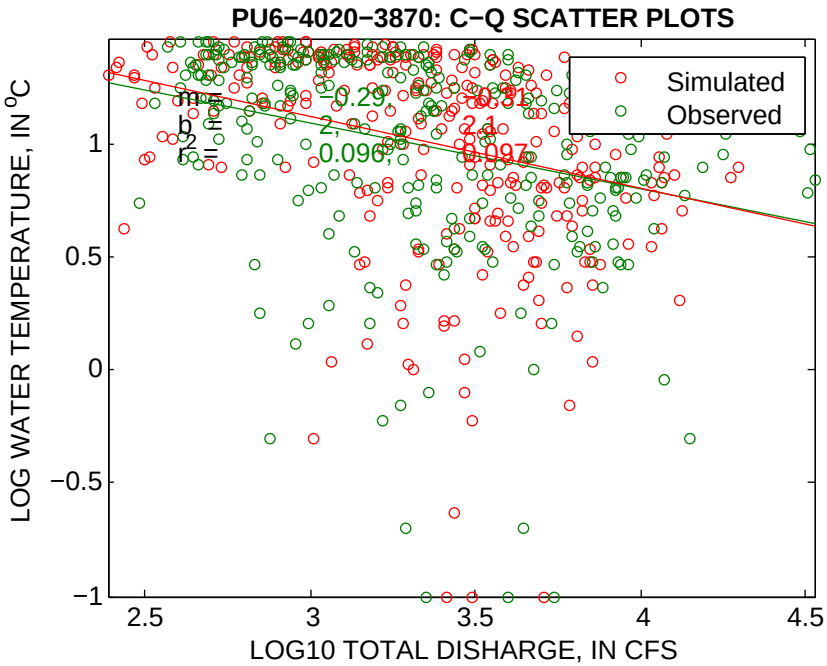
STATISTICS

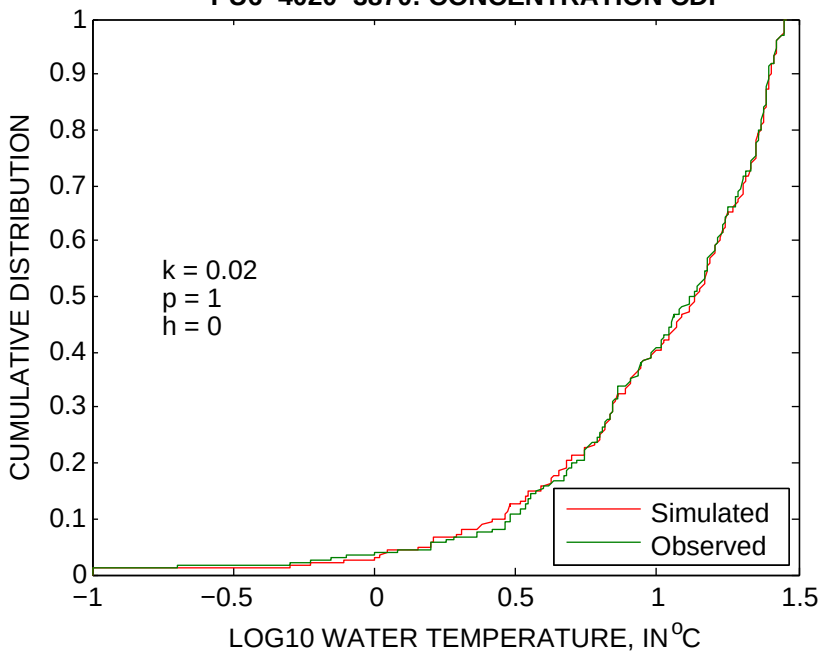
	n	observe	simulate
		305	305
min		0.1	0.072279
		-1	-1.14099
mean		13.6844	13.7614
		0.994147	0.971421
media		13.298	13.393
		1.12379	1.12688
max		28.5	29.538
		1.45484	1.47038
varian		70.9201	75.9876
		0.195309	0.241857
JB		0.001253	0.001424
		0.001	0.001
		ra	log
%		0.562212	-2.28591
err.va		4.9697	0.0662124
rel.std.err		0.0700746	0.339014
mod.eff		0.929925	0.660986

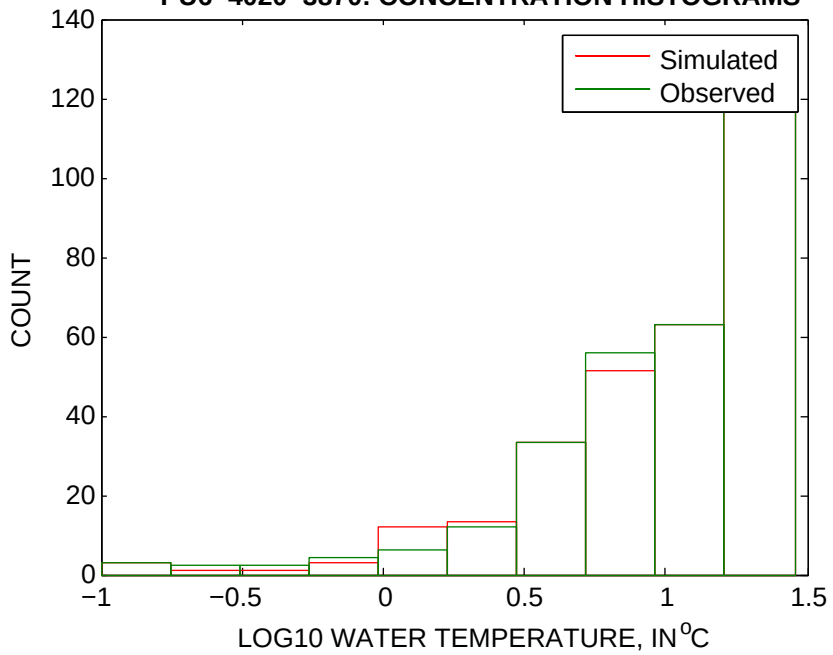
VERSION 2.1

ALL DATA
LOG10

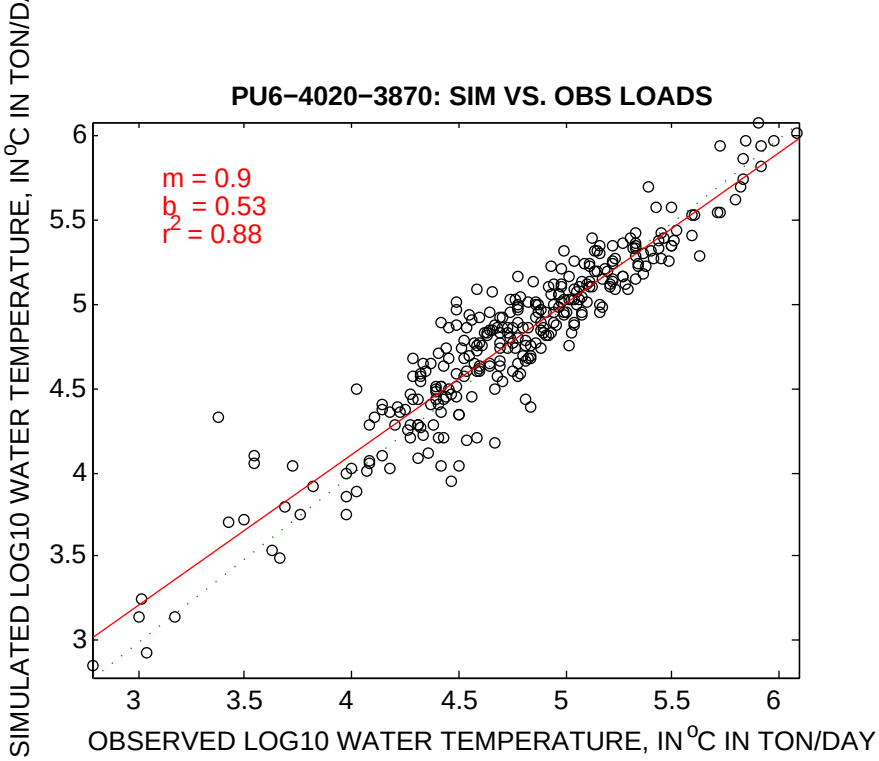


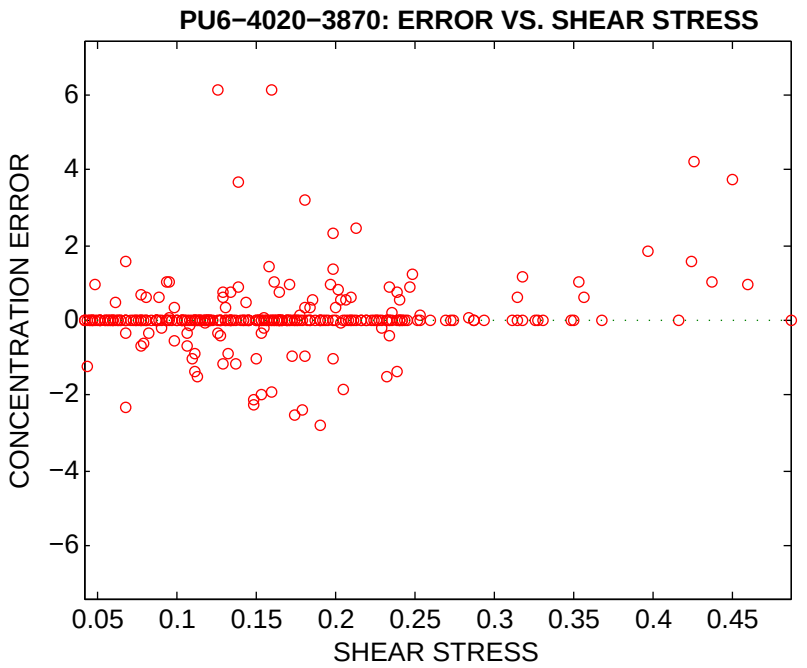


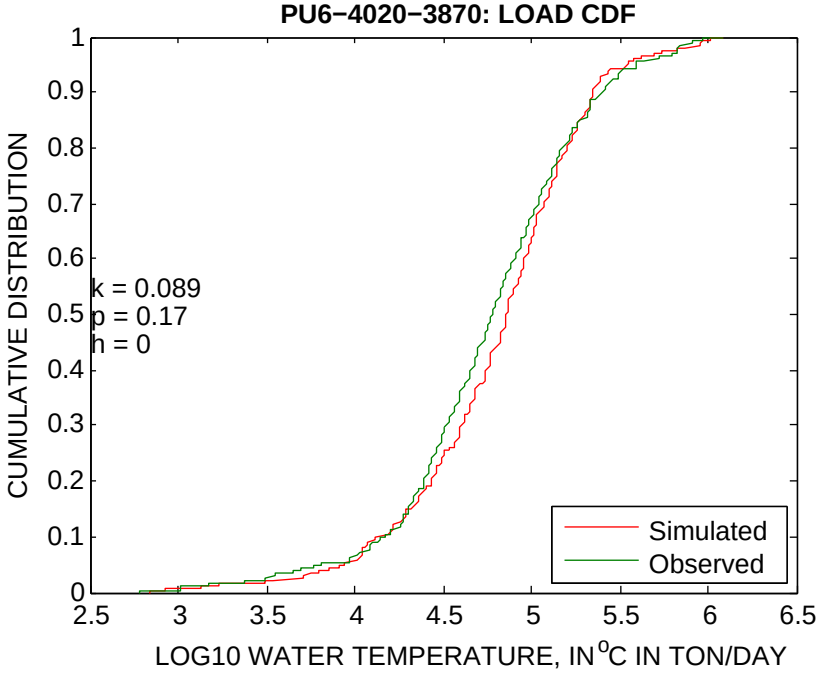


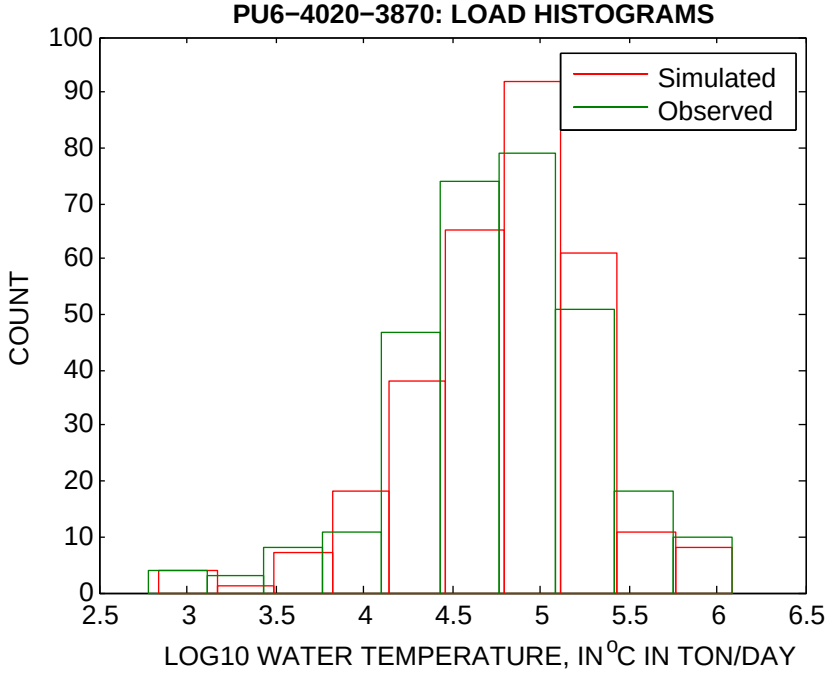


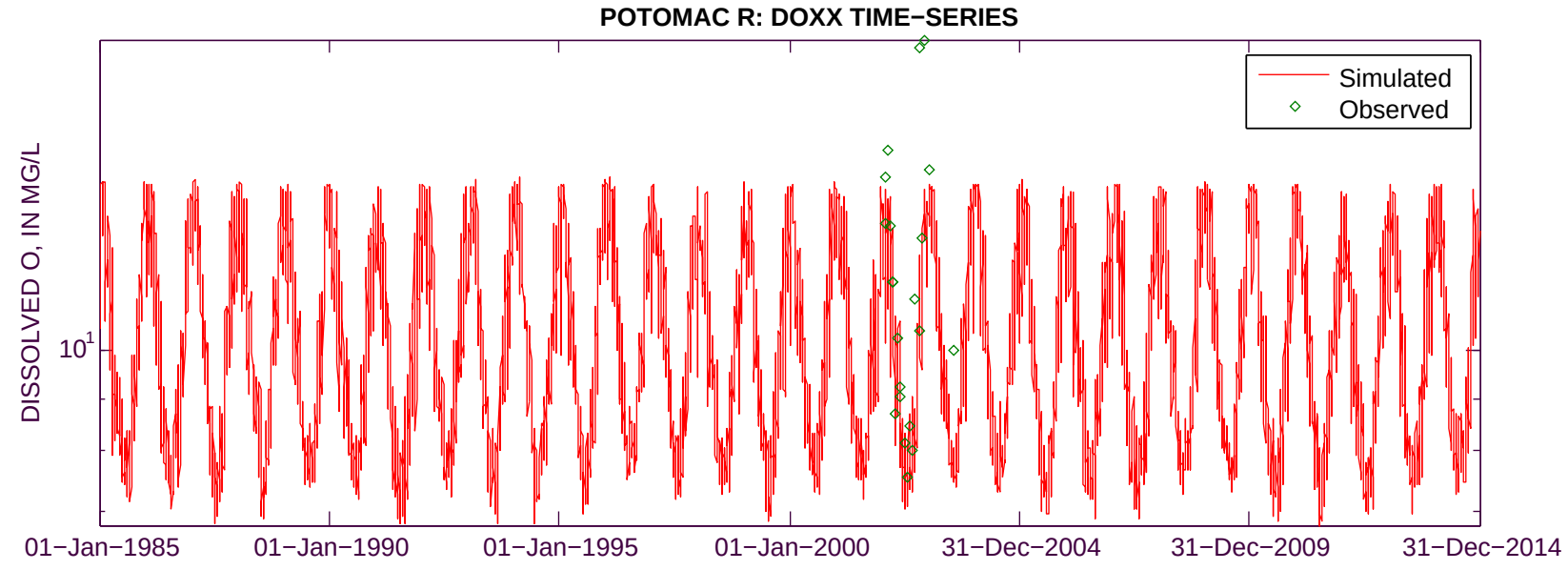
LOAD DATA
LOG10

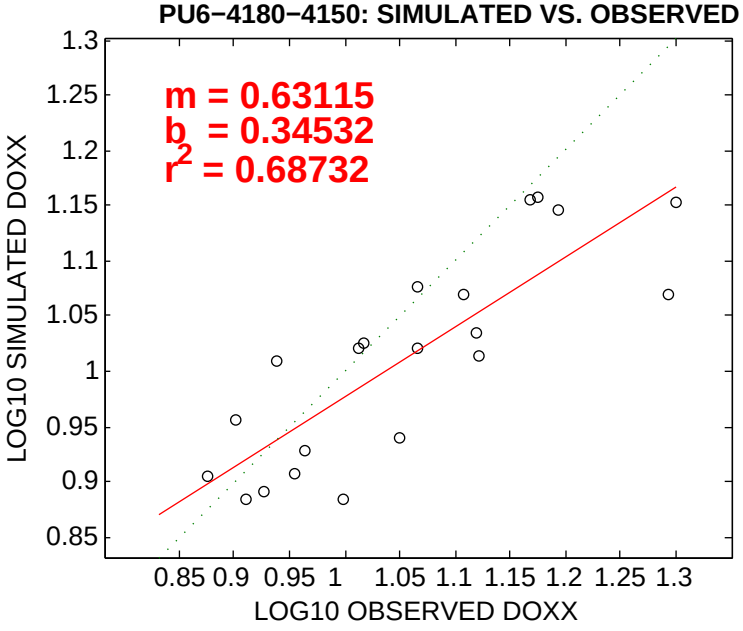


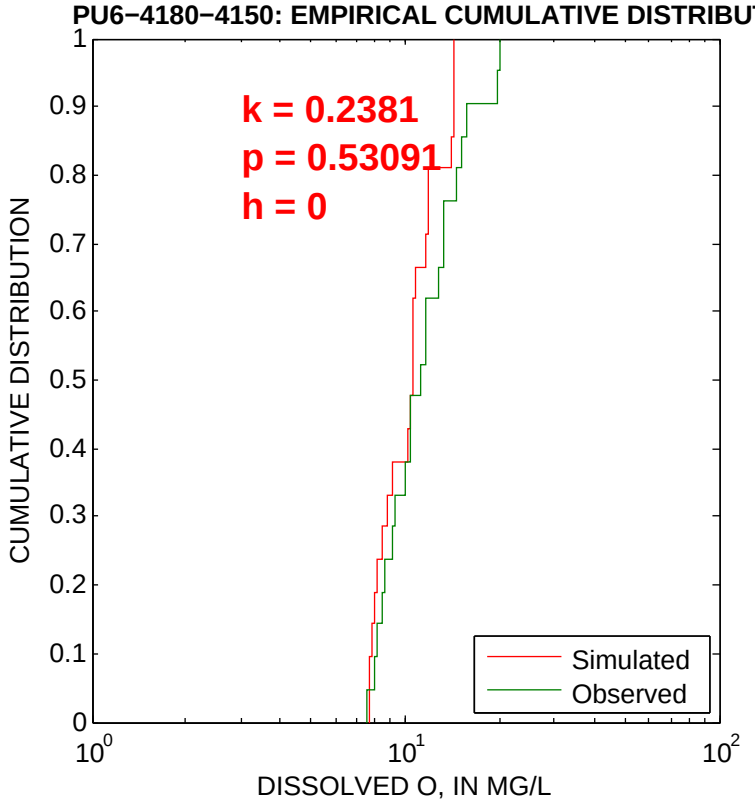












DATA SELECTION

scenario	file
P620171001WQ	DOXX.calib

plot: DOXX - dissolved oxygen

Dates: 1/1/1985 – 12/31/201

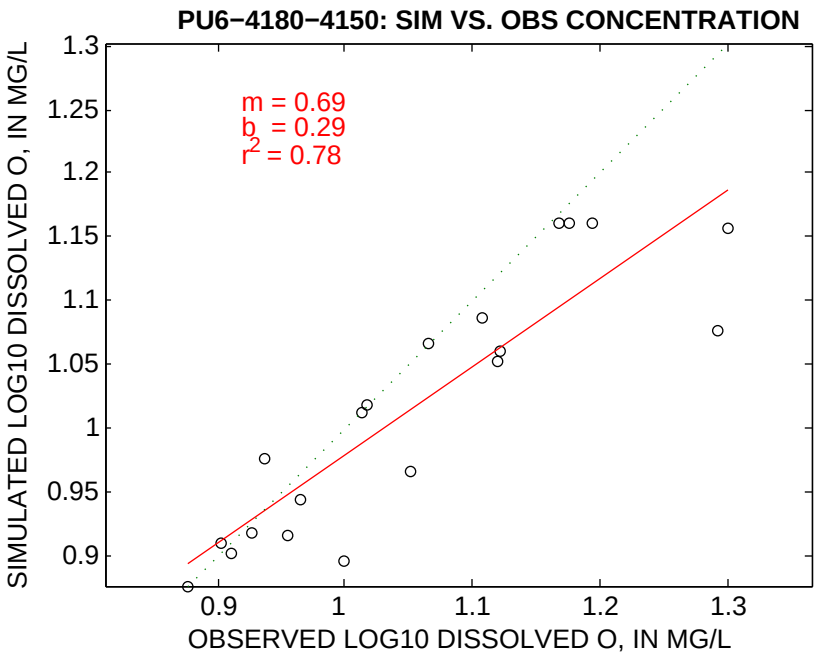
Drive	Directory	Observed
N/A	model	OBS20161101

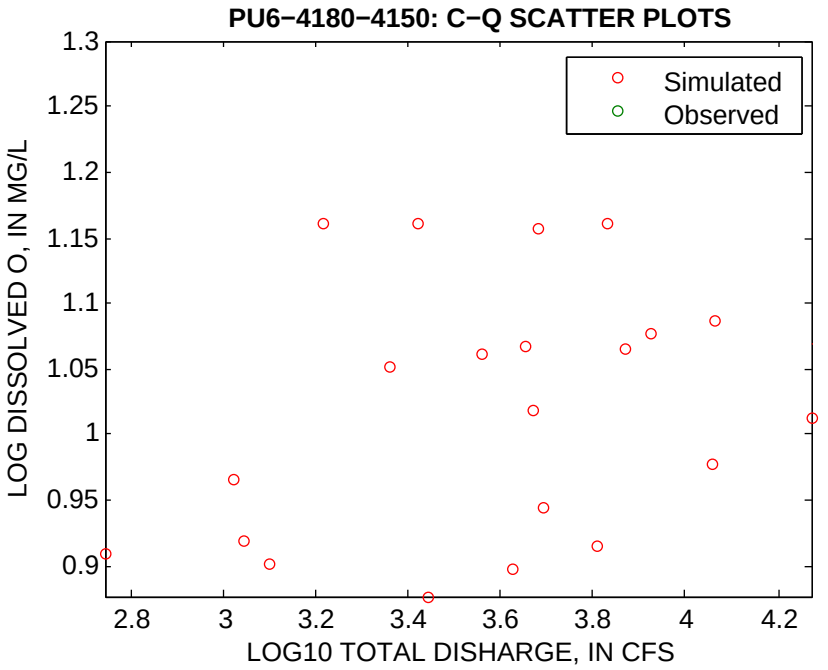
STATISTICS

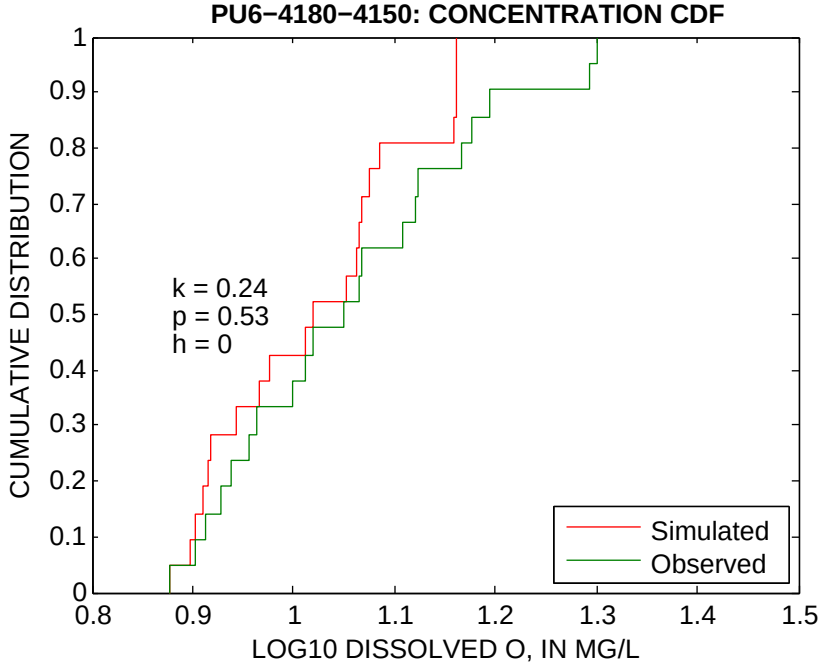
	n	21	21
		observe	simulate
min		7.53	7.6426
		0.876795	0.883241
mean		11.83	10.504
		1.05566	1.0116
media		11.24	10.485
		1.05077	1.02057
max		19.97	14.398
		1.30038	1.1583
varian		12.7812	5.29526
		0.0152537	0.00884066
JB		0.072725	0.233237
		0.363325	0.298042
		ra	log
%		-11.2091	-4.17355
err.va		6.67626	0.0068777
rel.std.err		0.522349	0.450889
mod.eff		0.477651	0.549111

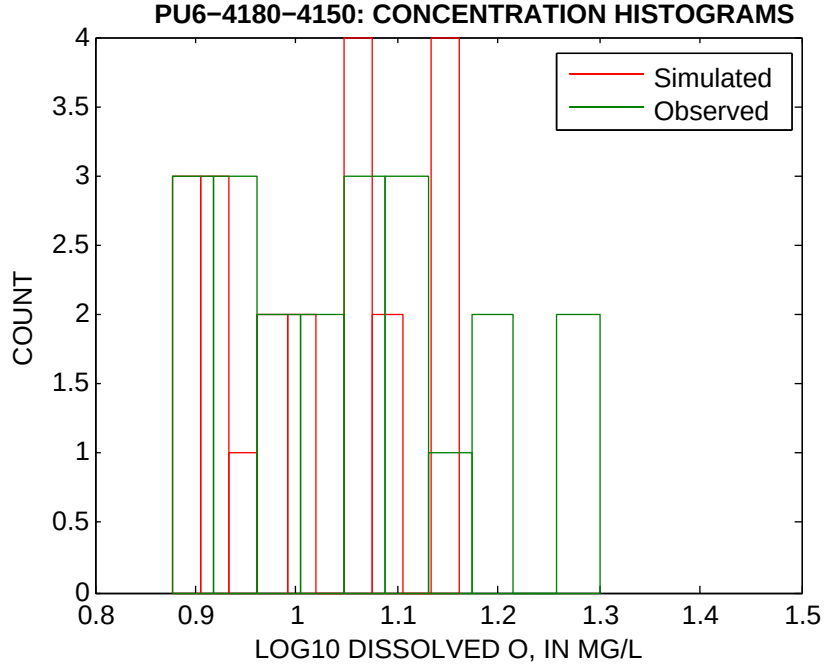
VERSION 2.1

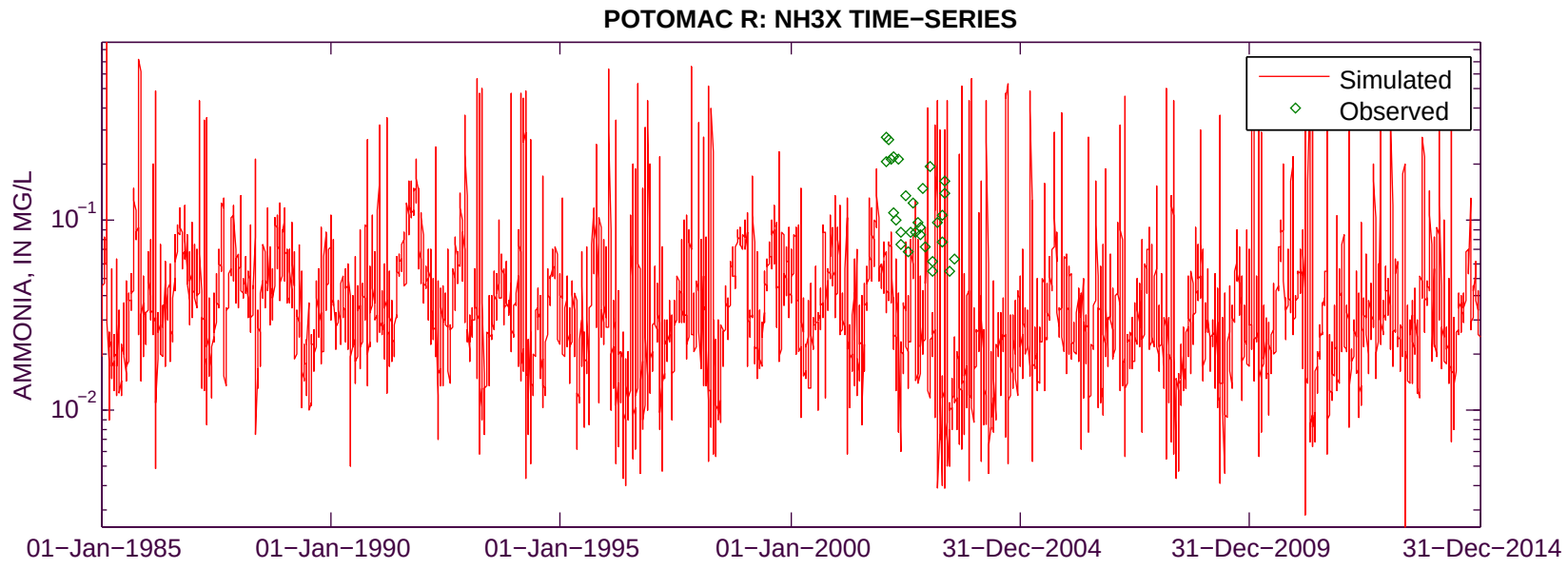
ALL DATA
LOG10

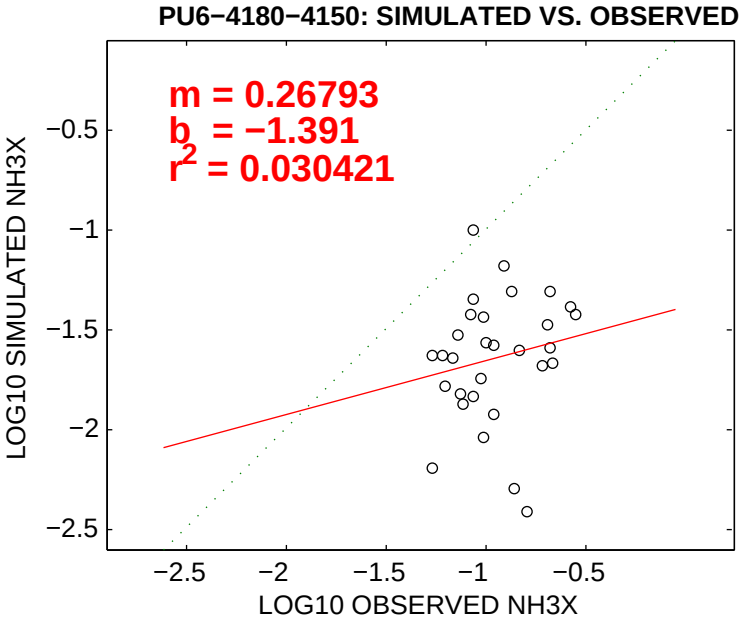


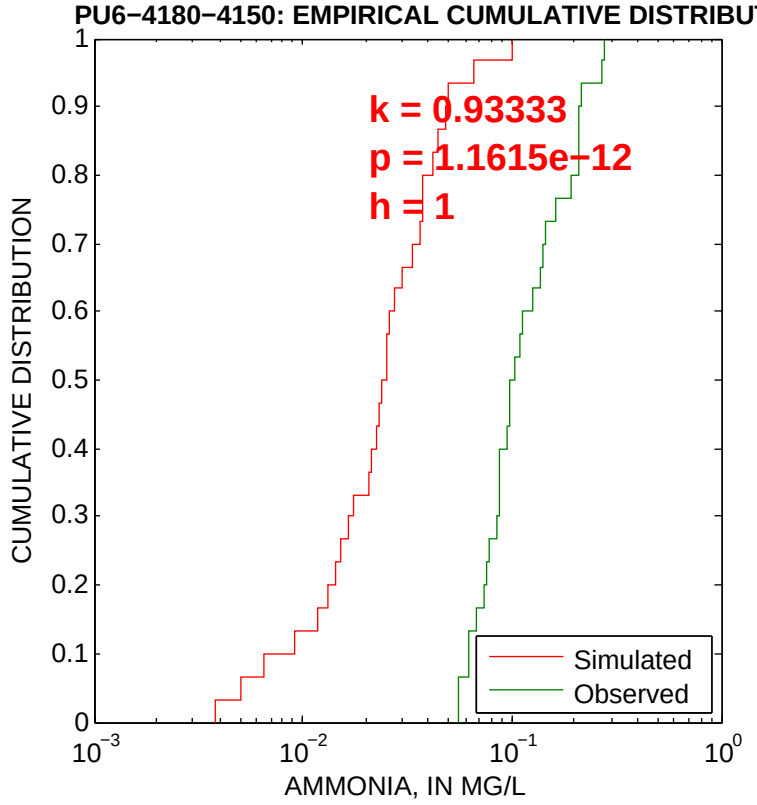












DATA SELECTION

scenario	file
P620171001WQ	NH3X.calib

plot: NH3X - ammonia

Dates: 1/1/1985 – 12/31/201

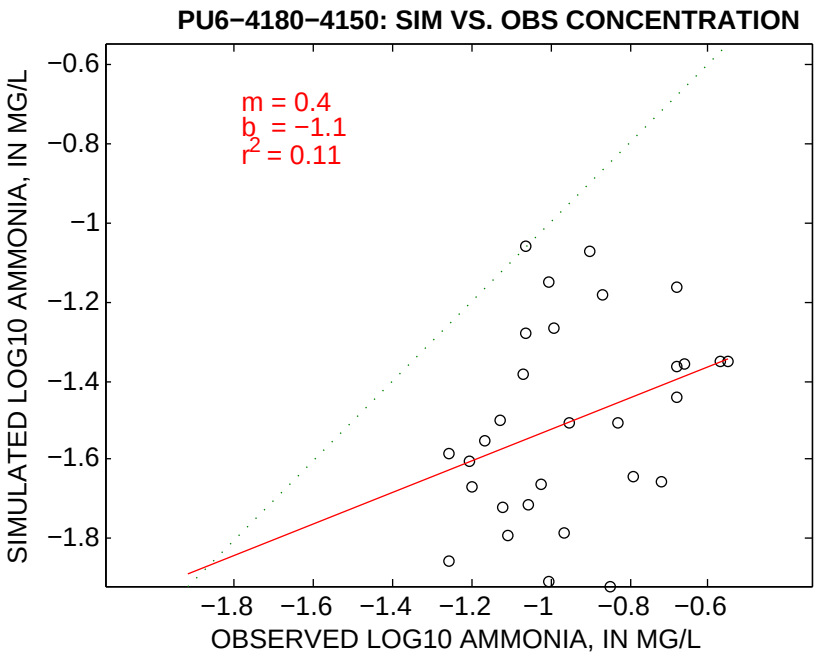
Drive	Directory	Observed
N/A	model	OBS20161101

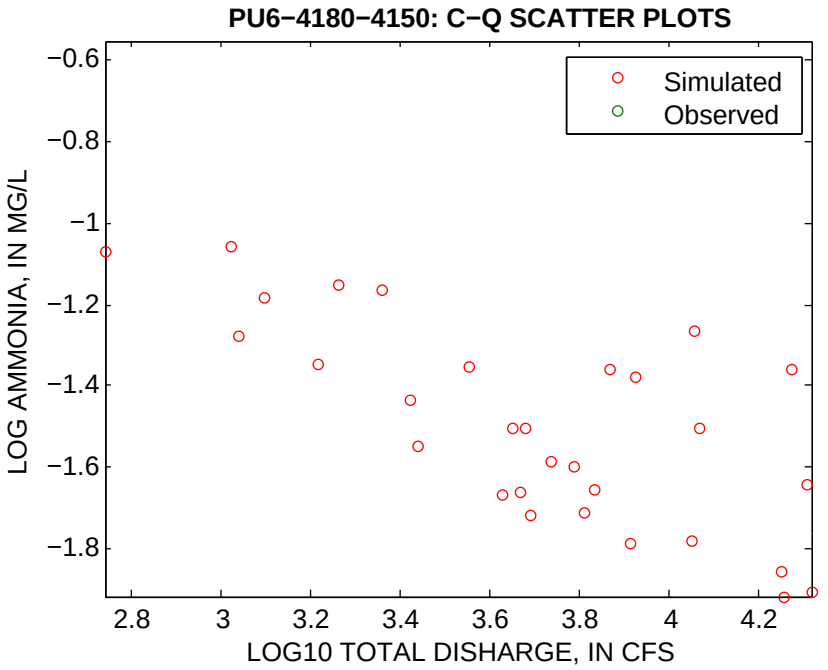
STATISTICS

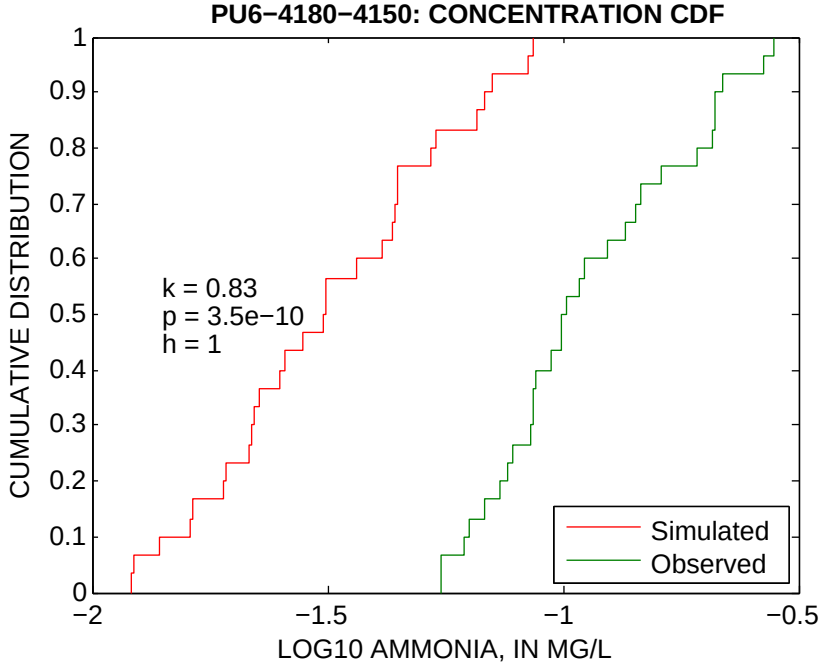
	n	30	30
		observe	simulate
min		0.055	0.0038465
		-1.25964	-2.41493
mean		0.1263	0.0284934
		-0.947611	-1.64487
media		0.1005	0.0243115
		-0.997882	-1.61432
max		0.281	0.099384
		-0.551294	-1.00268
varian		0.00408484	0.0003931
		0.042574	0.100467
JB		0.045499	0.001
		0.212461	0.287433
		ra	log
%		-77.4399	73.5803
err.va		0.0140222	0.623155
rel.std.err		3.43275	14.637
mod.eff		-2.43275	-13.637

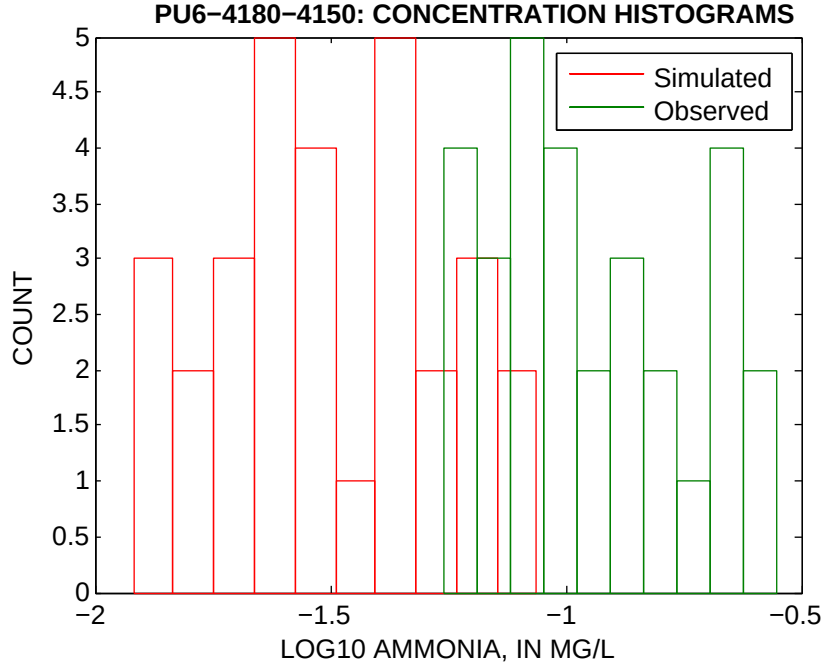
VERSION 2.1

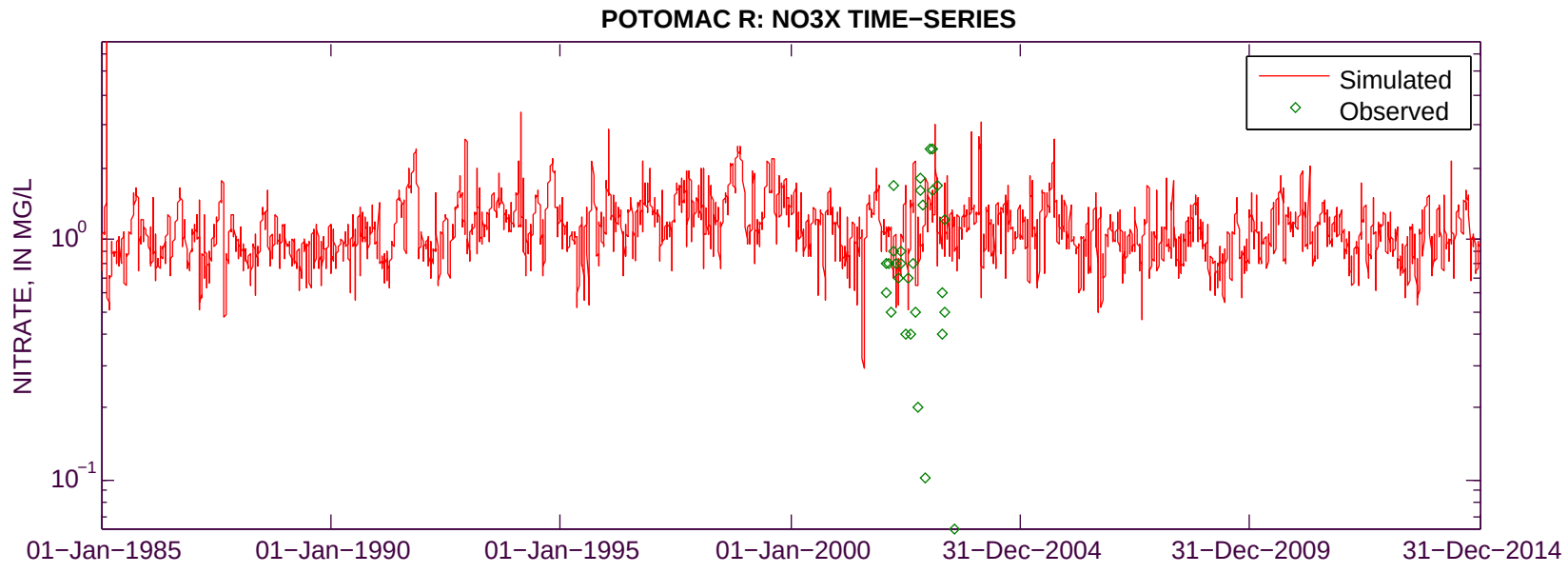
ALL DATA
LOG10

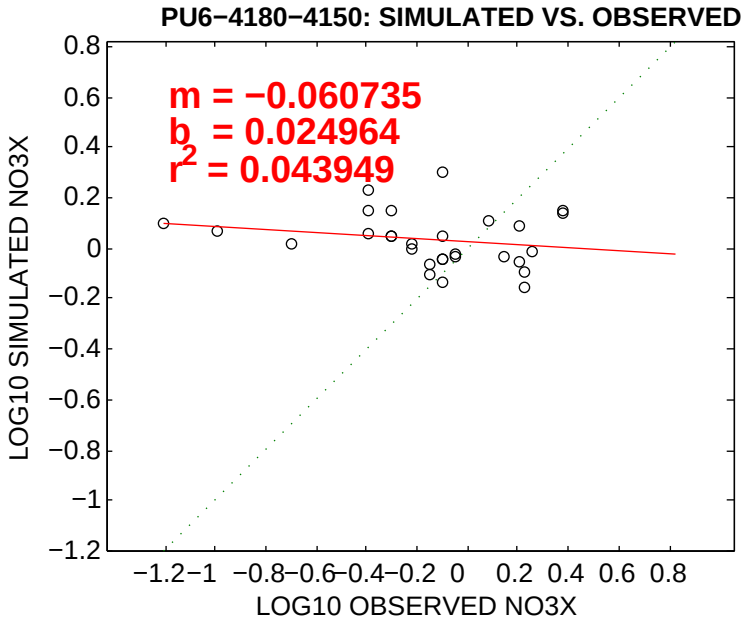


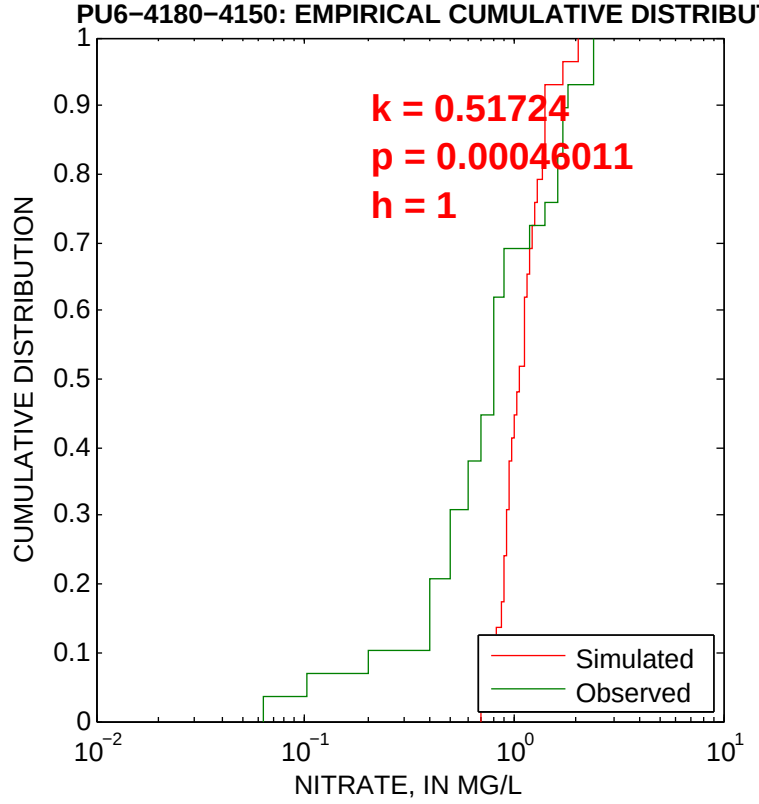












DATA SELECTION

scenario	file
P620171001WQ	NO3X.calib

plot: NO3X - nitrate

Dates: 1/1/1985 – 12/31/201

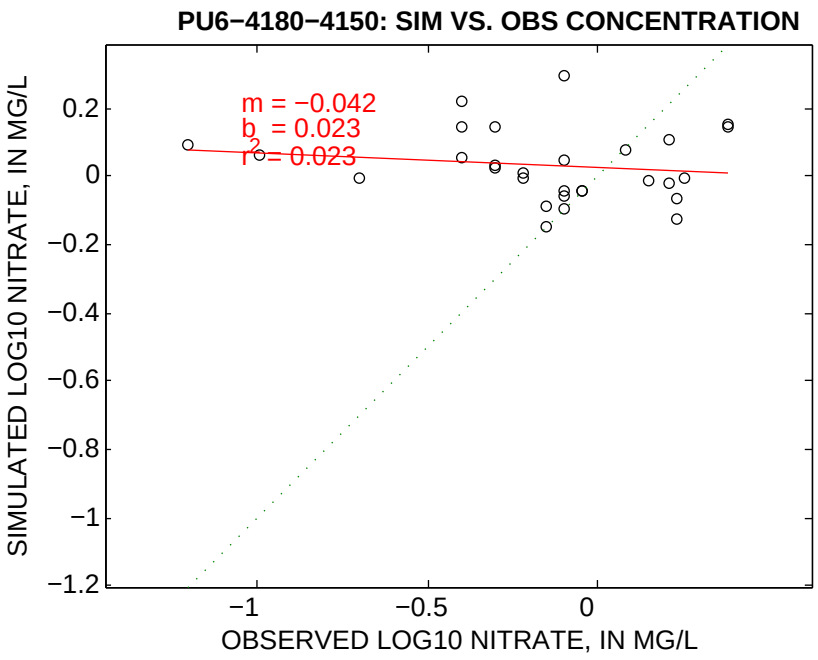
Drive	Directory	Observed
N/A	model	OBS20161101

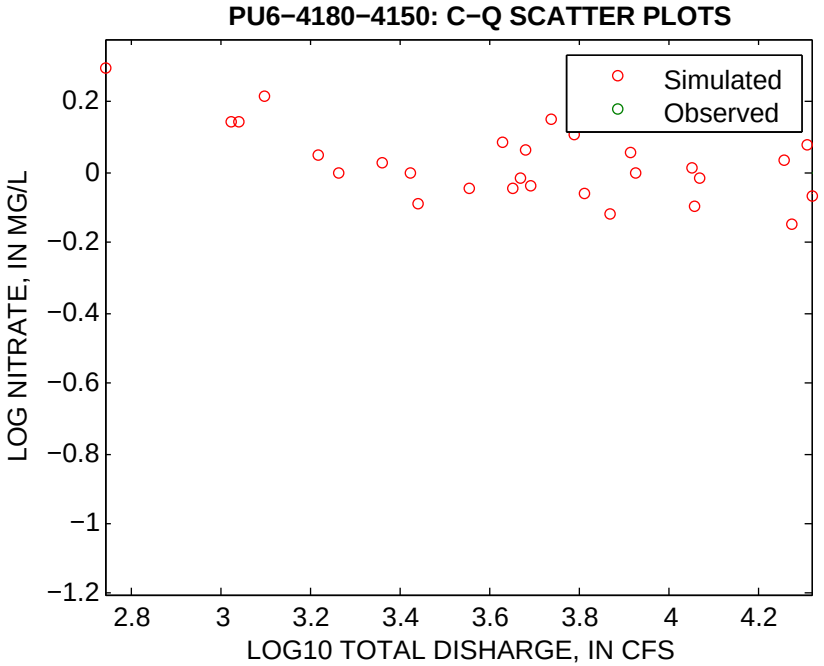
STATISTICS

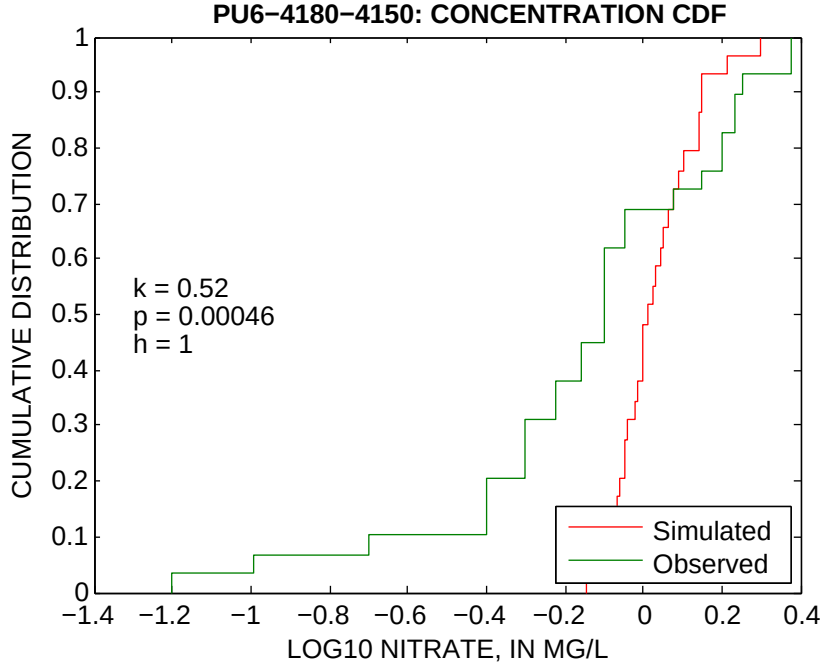
	n	29	29
		observe	simulate
min		0.063	0.69901
		-1.20066	-0.155517
mean		0.94031	1.11421
		-0.144977	0.0337687
media		0.8	1.0524
		-0.09691	0.0221808
max		2.4	2.0223
		0.380211	0.305846
varian		0.401002	0.0862959
		0.136351	0.0114442
JB		0.069549	0.014186
		0.023844	0.442618
		ra	log
%		18.4936	-123.292
err.va		0.555054	0.197449
rel.std.err		1.38417	1.44809
mod.eff		-0.384167	-0.44809

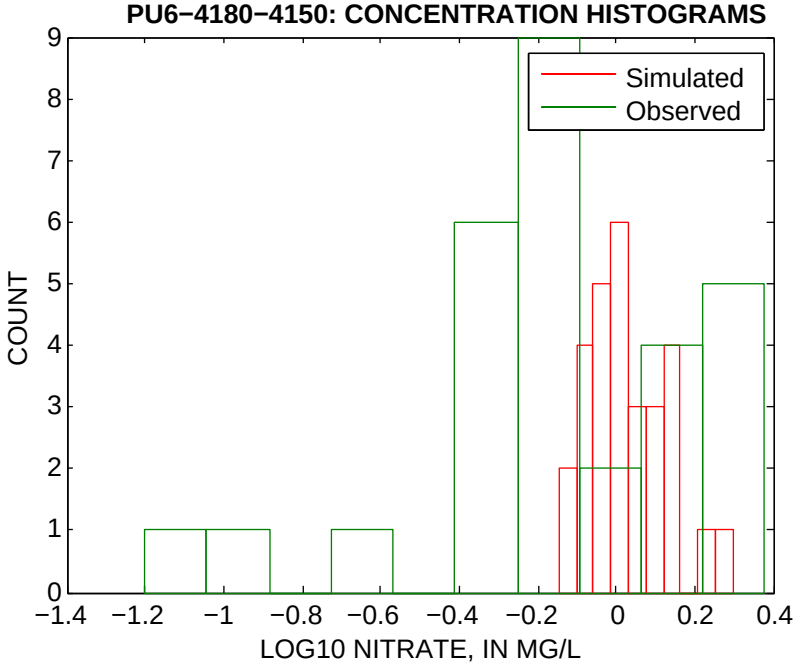
VERSION 2.1

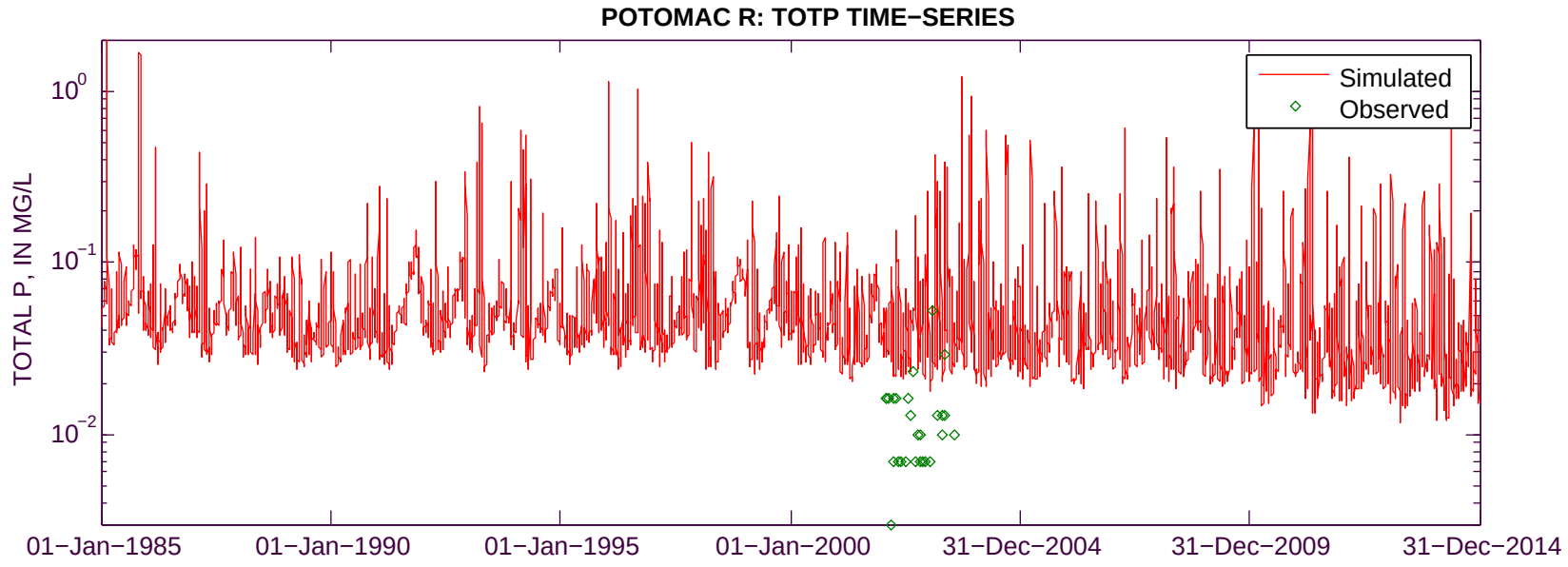
ALL DATA
LOG10

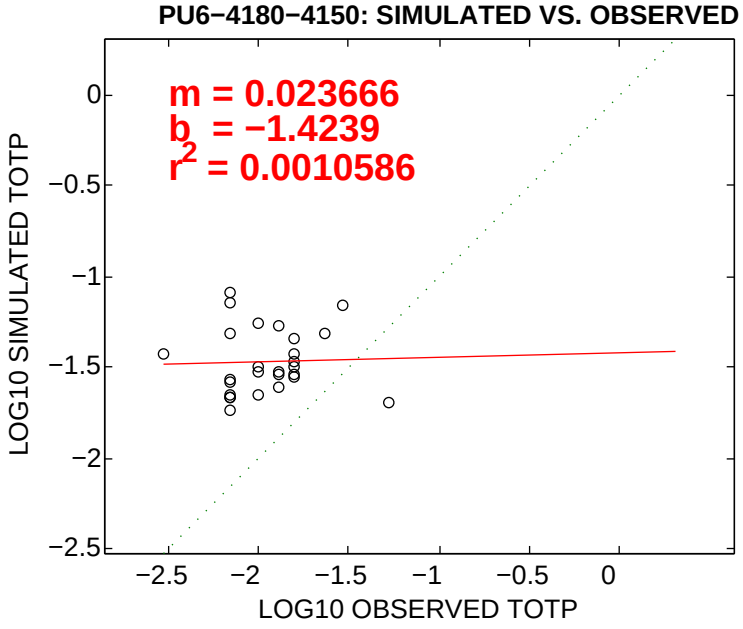


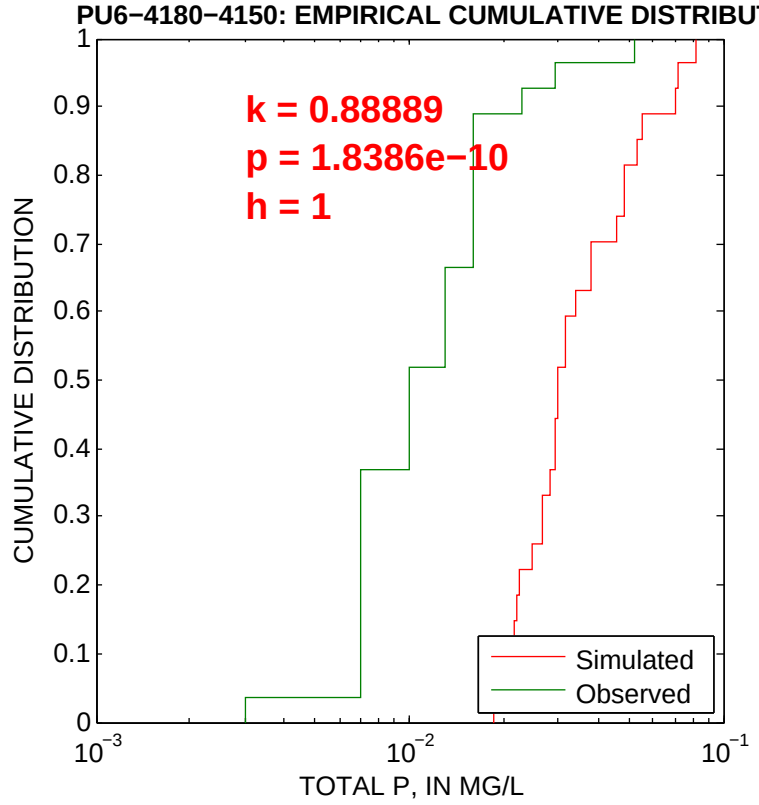












DATA SELECTION

scenario	file
P620171001WQ	TOTP.calib

plot: TOTP - total phosphorus

Dates: 1/1/1985 – 12/31/201

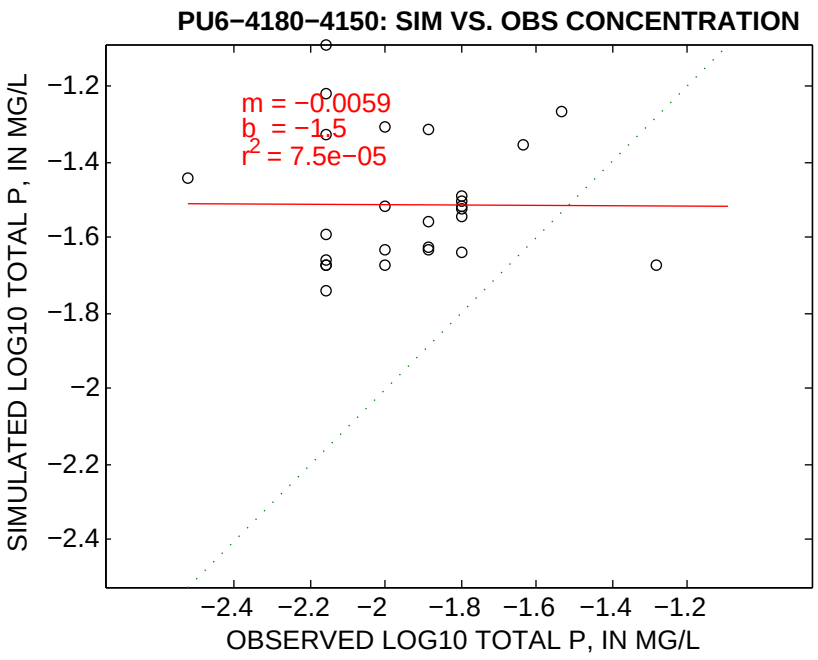
Drive	Directory	Observed
N/A	model	OBS20161101

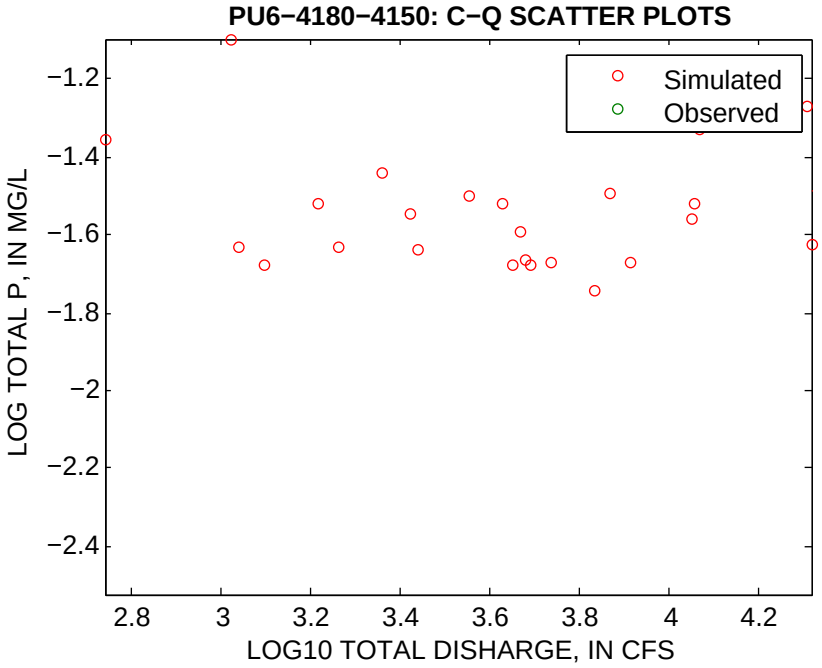
STATISTICS

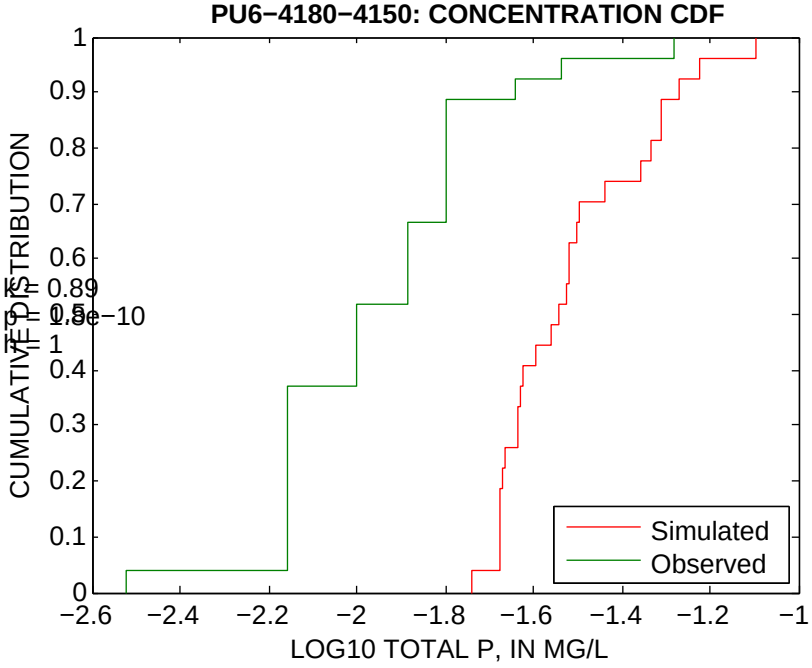
	n	27	27
		observe	simulate
min		0.003	0.018513
		-2.52288	-1.73252
mean		0.0132593	0.0369992
		-1.95172	-1.4701
media		0.01	0.029785
		-2	-1.526
max		0.052	0.082316
		-1.284	-1.08452
varian		9.18917e-0	0.00029406
		0.0609867	0.0322646
JB		0.001	0.022271
		0.211175	0.145985
		ra	log
%		179.044	-24.6767
err.va		0.00097700	0.331244
rel.std.err		10.6321	5.43141
mod.eff		-9.63213	-4.43141

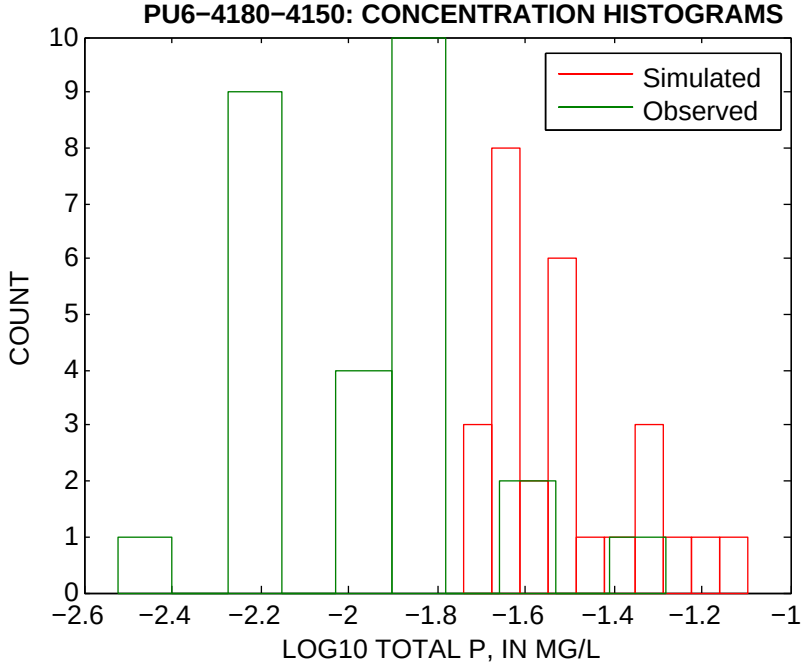
VERSION

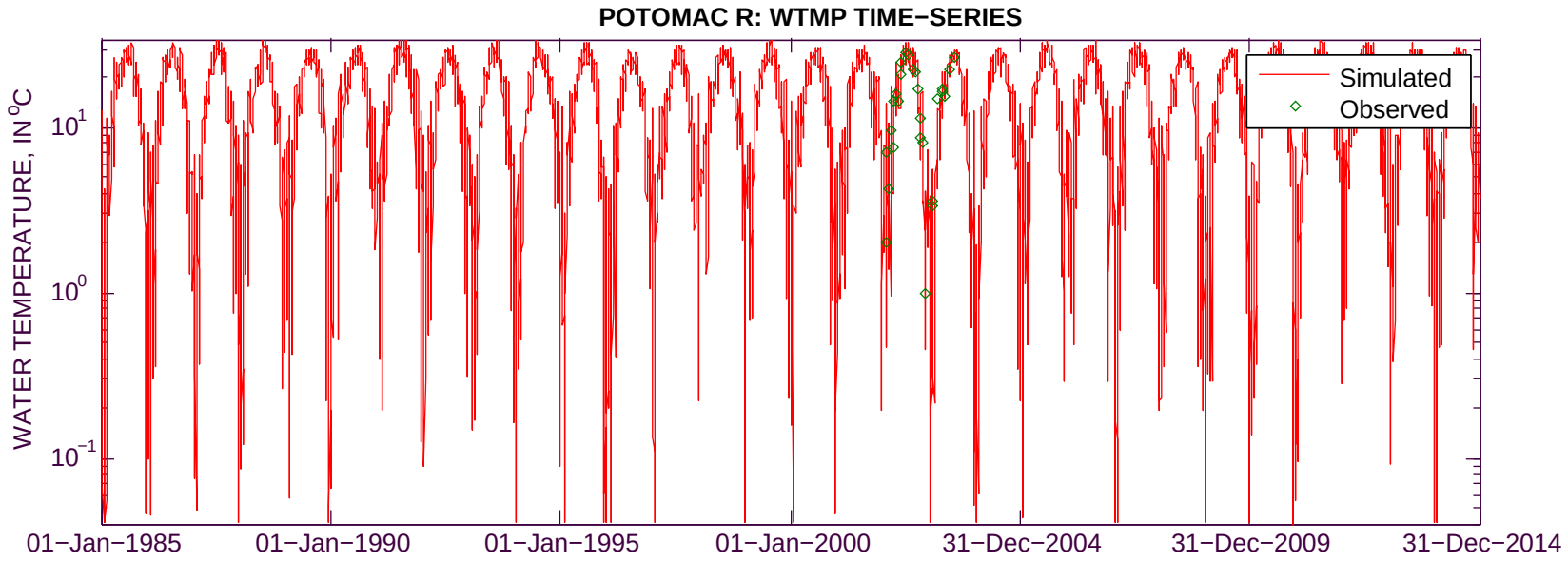
ALL DATA
LOG10

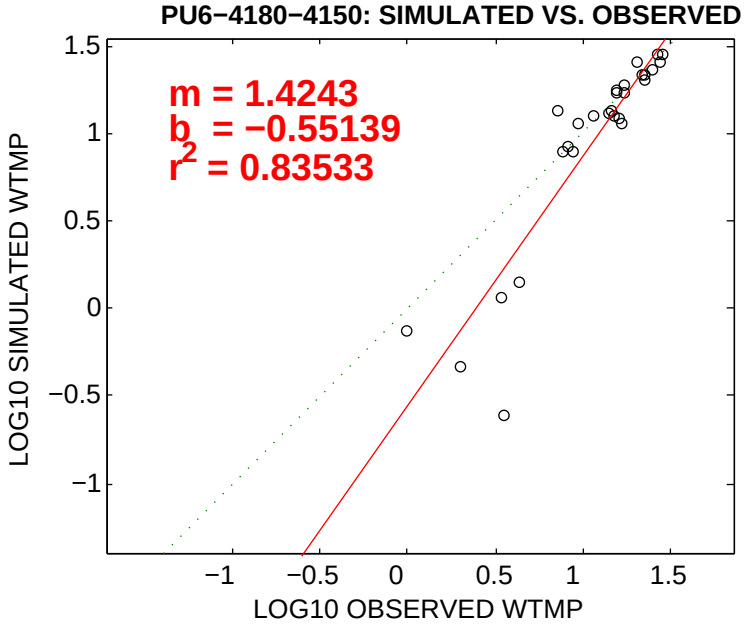


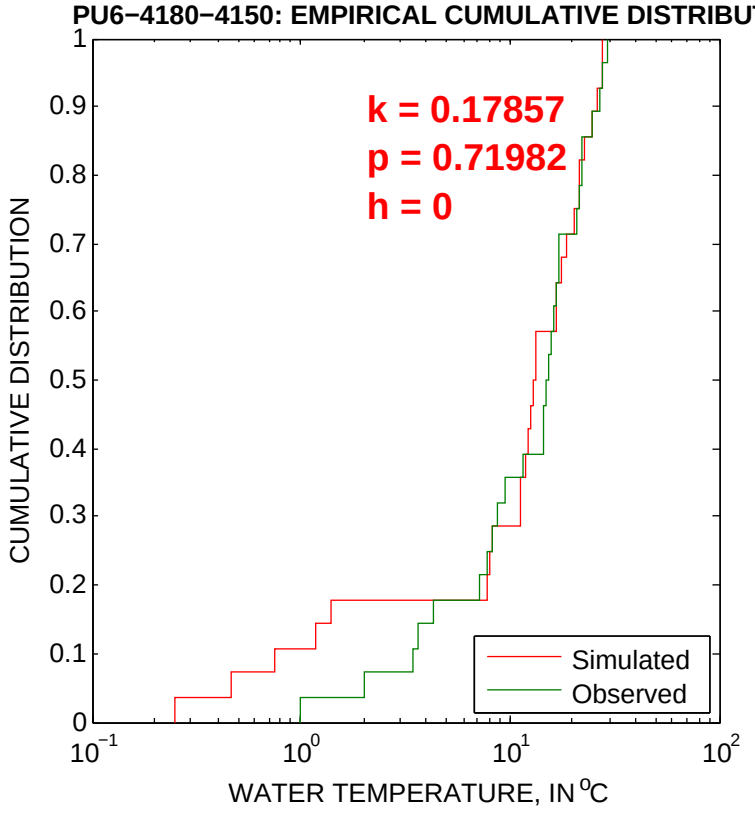












DATA SELECTION

scenario: P620171001WQ | file: WTMP.calib

plot: WTMP - water tempera...

Dates: 1/1/1985 – 12/31/201

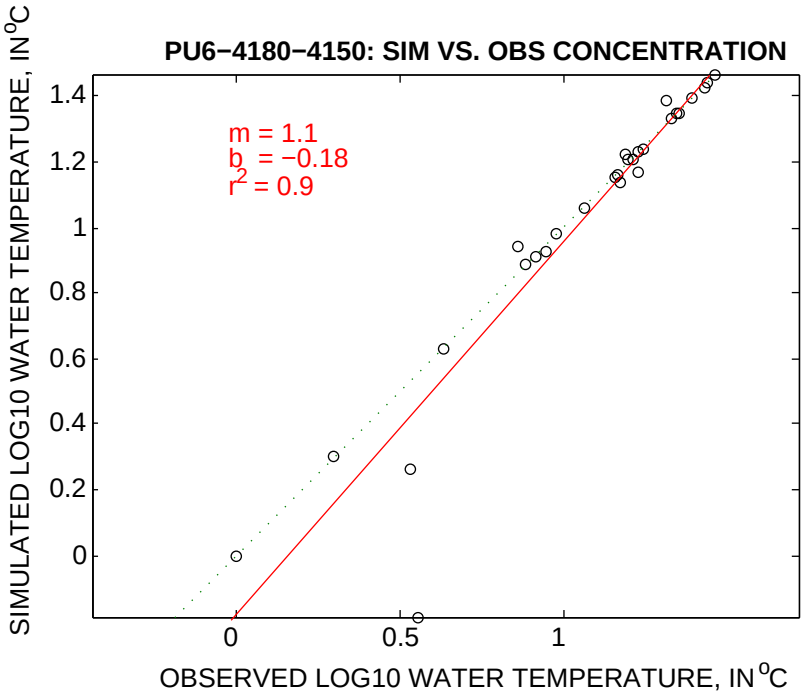
Drive: N/A | Directory: model | Observed: OBS20161101

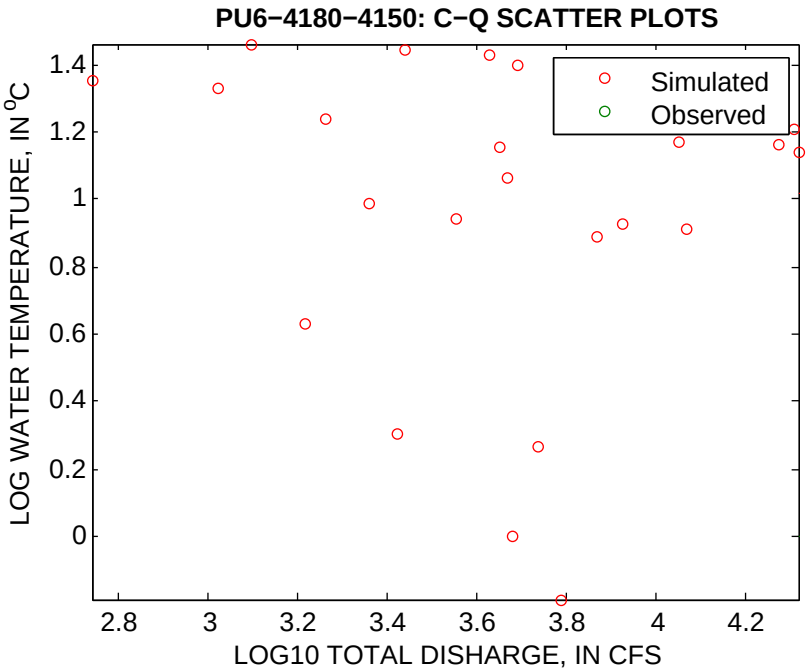
STATISTICS

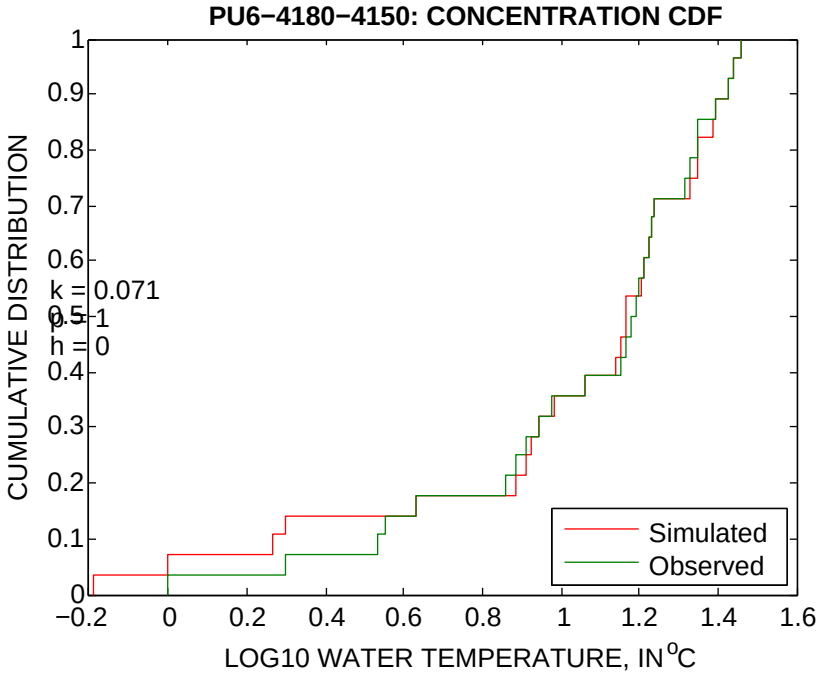
		observe	simulate
n		28	28
min		1	0.24921
		0	-0.603435
mean		14.4607	13.9493
		1.05447	0.950497
media		15.25	13.0715
		1.18321	1.11627
max		29	28.11
		1.4624	1.44886
varian		65.4891	72.069
		0.132198	0.321049
JB		0.410822	0.486272
		0.015378	0.007172
		ra	log
%		-3.53635	-9.86013
err.va		6.22666	0.0878768
rel.std.err		0.0950793	0.664734
mod.eff		0.904921	0.335266

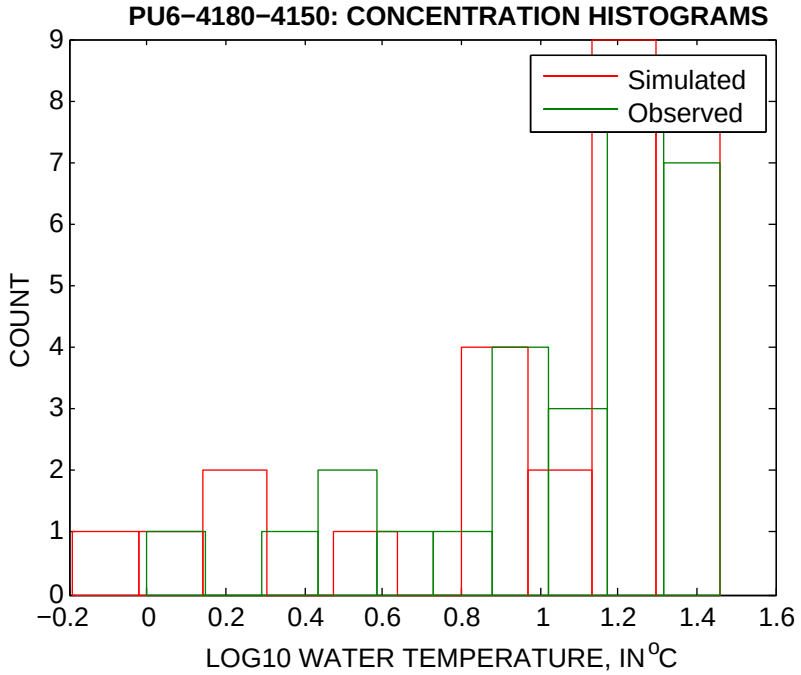
VERSION 2.1

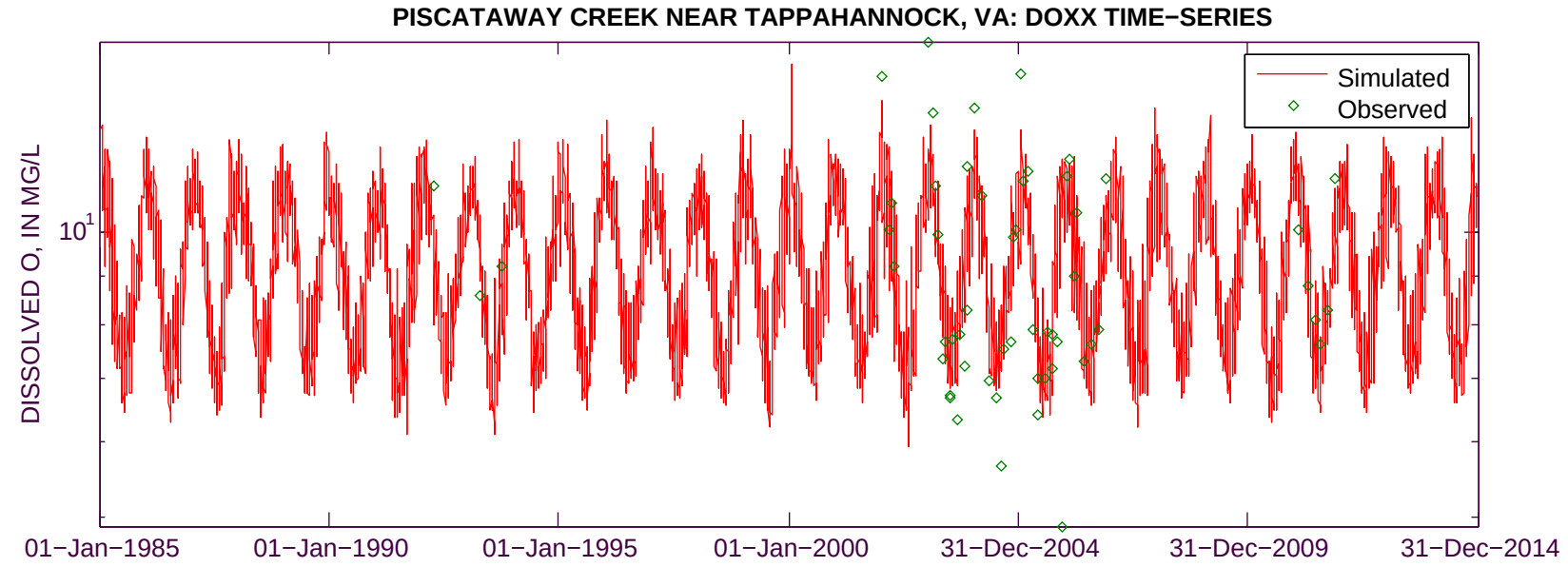
ALL DATA
LOG10

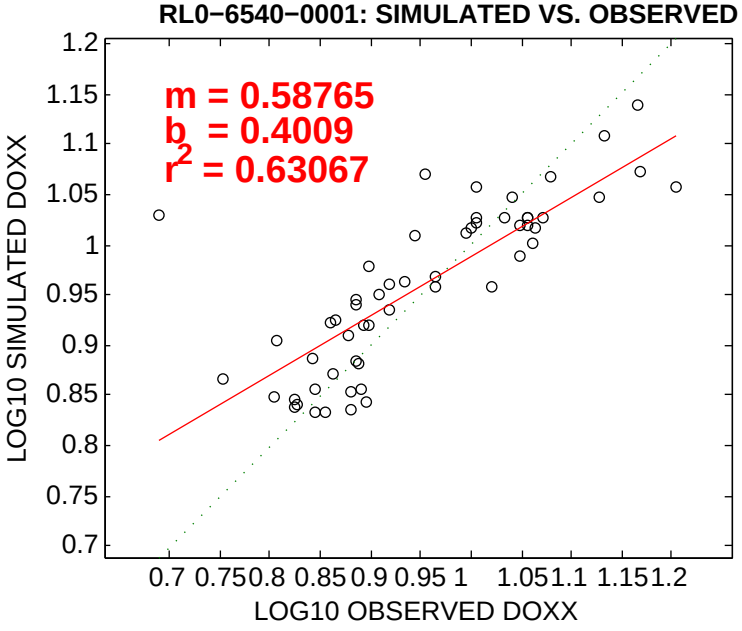


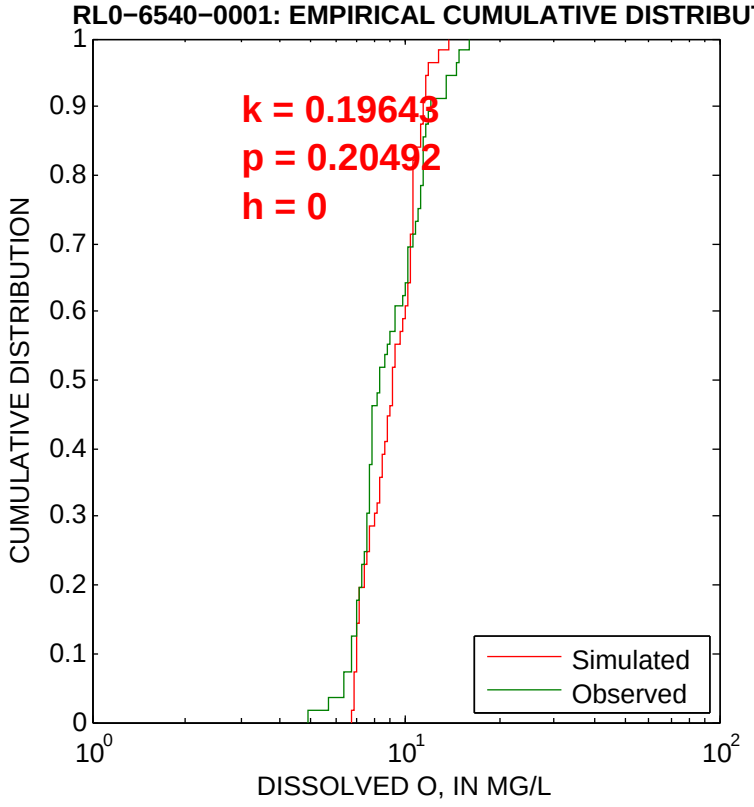












DATA SELECTION

scenario	file
P620171001WQ	DOXX.calib

plot: DOXX - dissolved oxygen

Dates: 1/1/1985 – 12/31/201

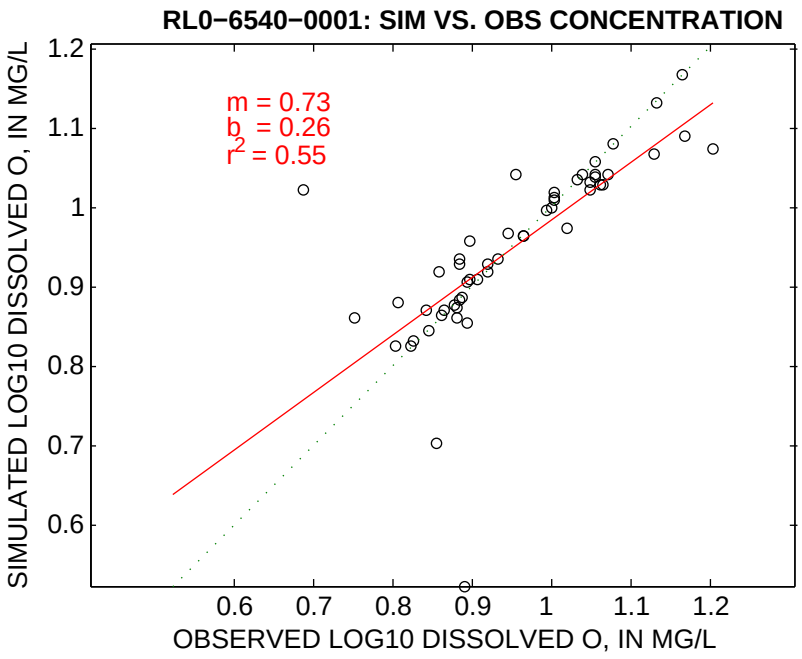
Drive	Directory	Observed
N/A	model	OBS20161101

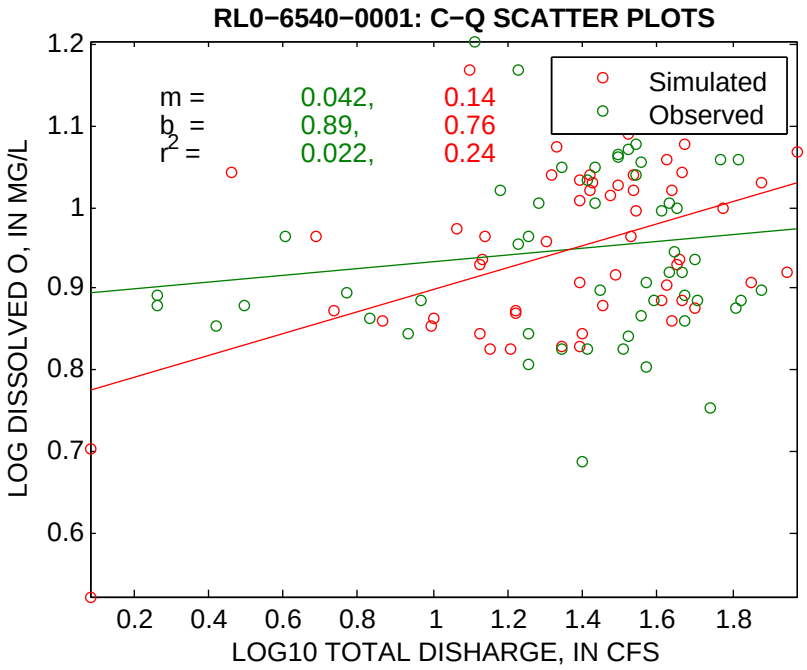
STATISTICS

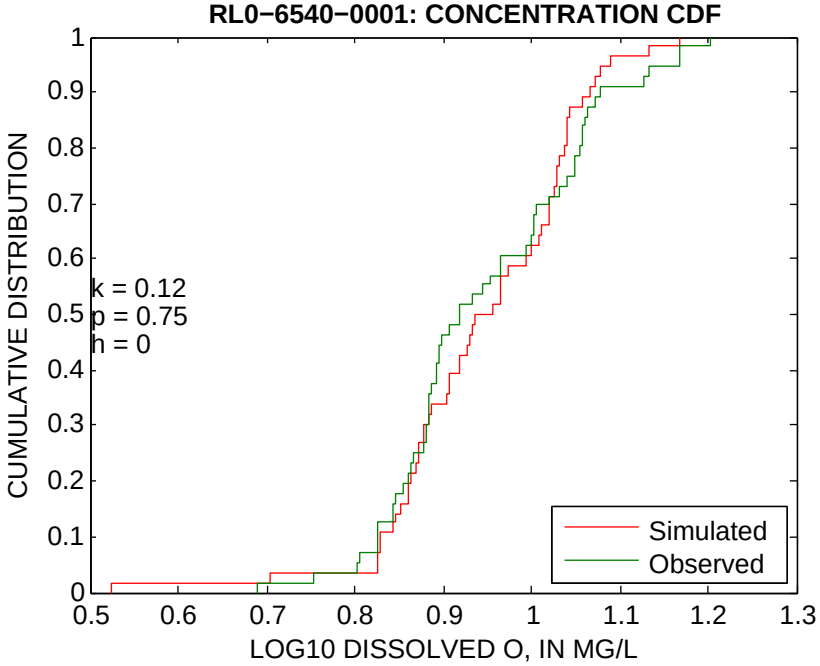
	n	56	56
		observe	simulate
min		4.89	6.7976
		0.689309	0.832356
mean		9.17634	9.24451
		0.948428	0.958248
media		8.3	9.0922
		0.919078	0.958668
max		15.99	13.807
		1.20385	1.1401
varian		5.95606	3.06706
		0.012355	0.00676517
JB		0.037906	0.225114
		0.473933	0.143043
		ra	log
%		0.742846	1.03536
err.va		2.04721	0.00469751
rel.std.err		0.343719	0.380211
mod.eff		0.656281	0.619789

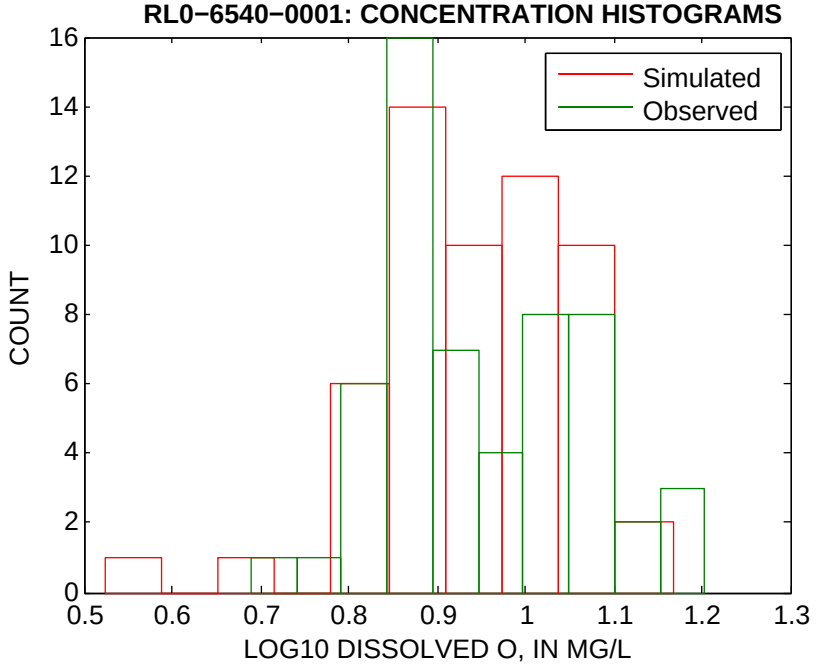
VERSION 2.1

ALL DATA
LOG10

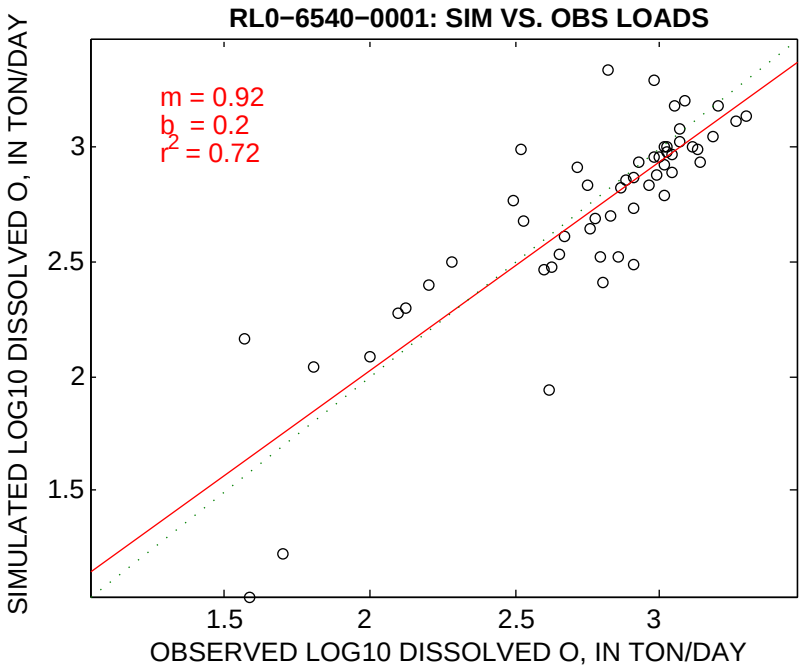


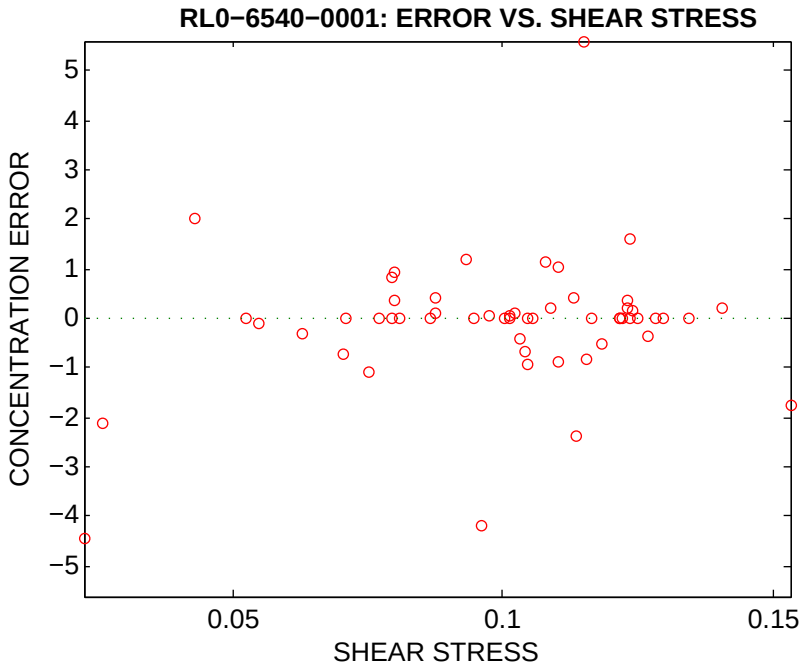


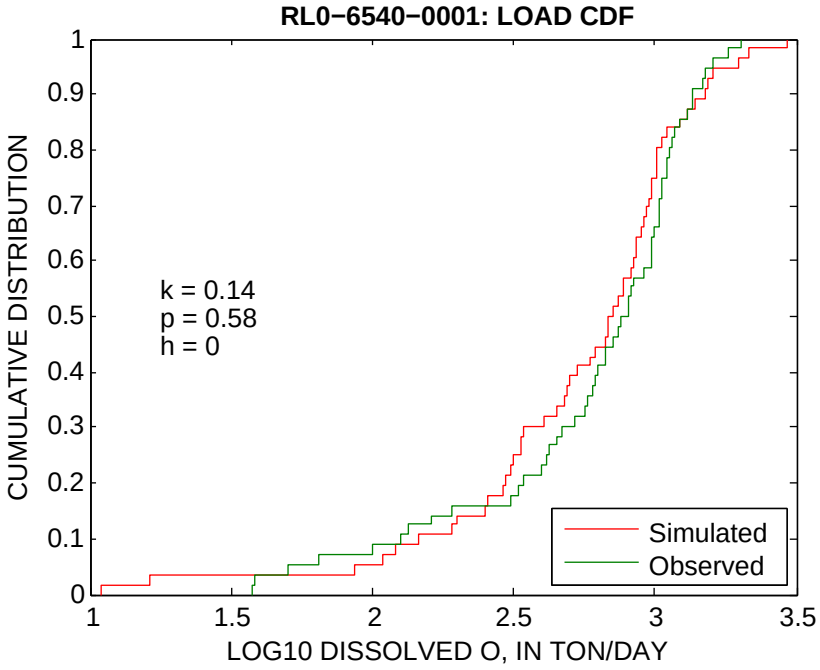


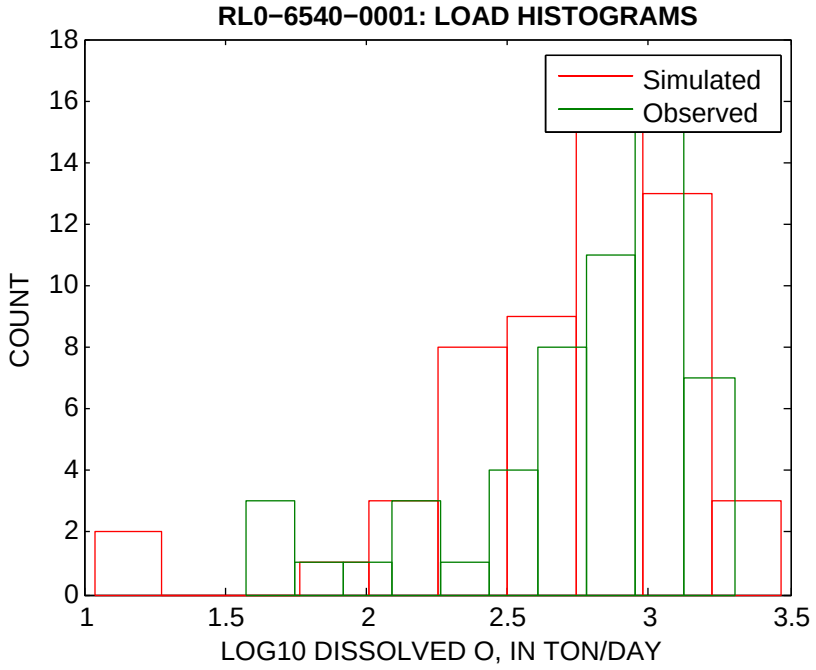


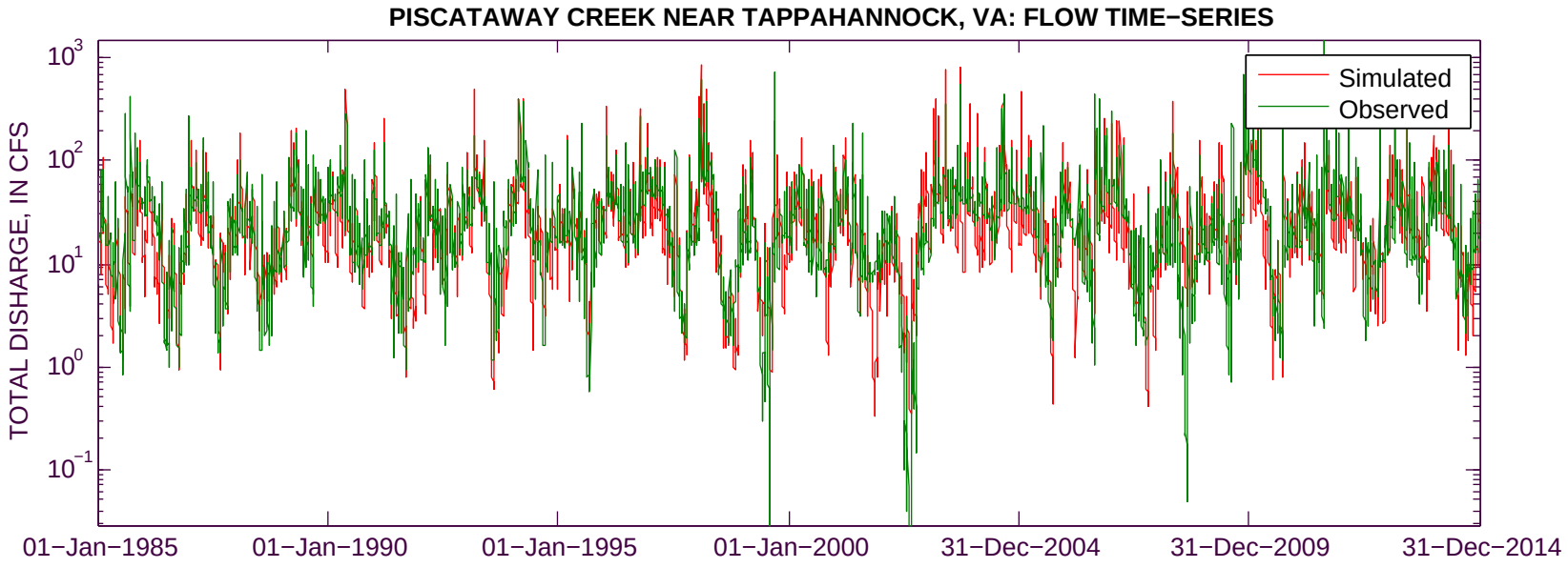
LOAD DATA
LOG10

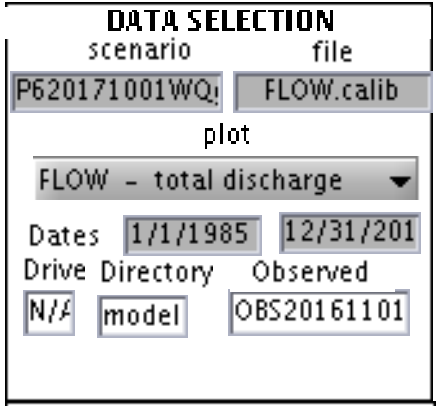


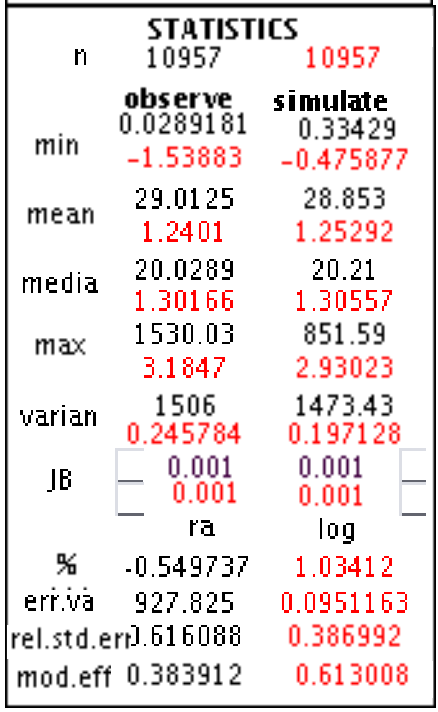


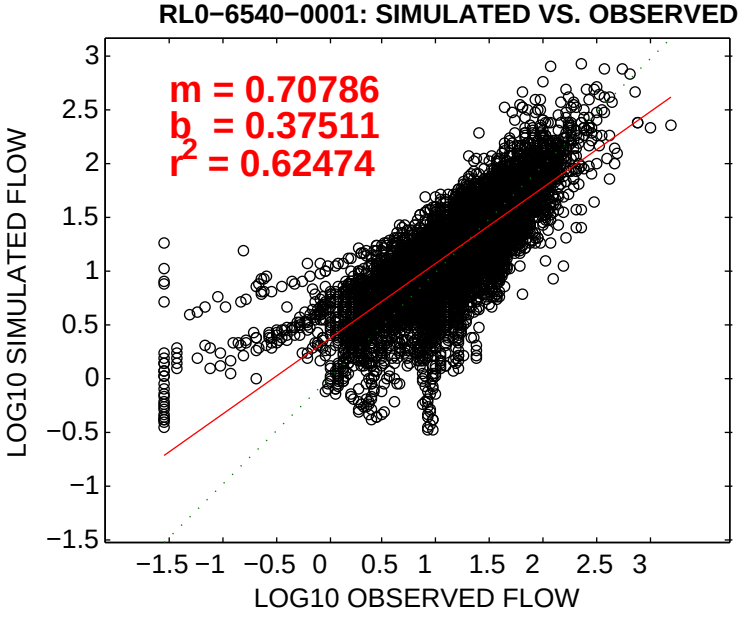


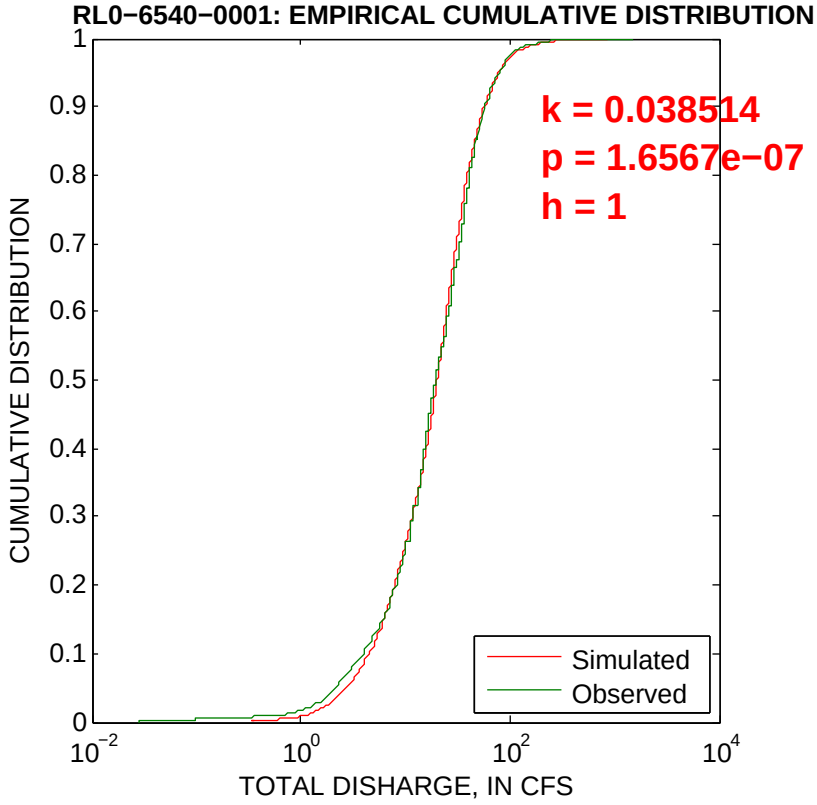



PISCATAWAY CREEK NEAR TAPPAHANNOCK, VA: FLOW TIME-SERIES
TOTAL DISHARGE, IN CFS
Simulated
Observed
01-Jan-1985
01-Jan-1990
01-Jan-1995
01-Jan-2000
31-Dec-2004
31-Dec-2009
31-Dec-2014

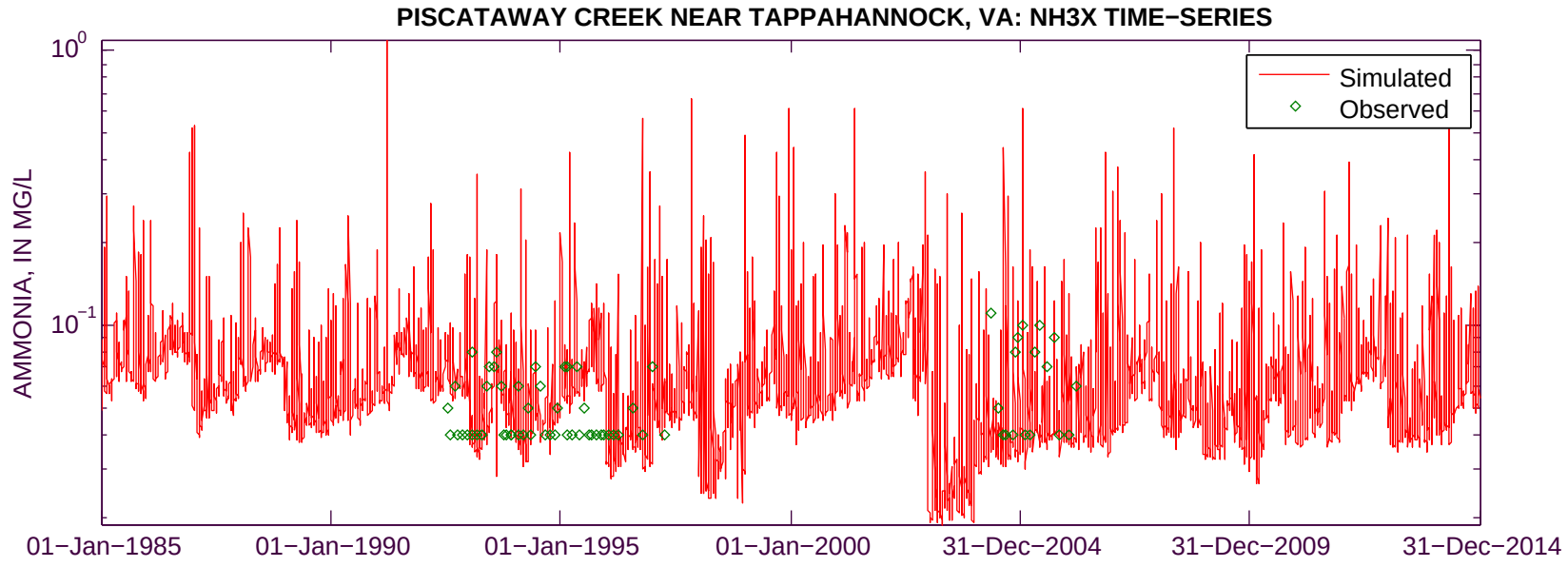

DATA SELECTION
scenario
file
P620171001WQ
FLOW.calib
plot
FLOW - total discharge
Dates
1/1/1985
12/31/201
Drive
Directory
Observed
N/A
model
OBS20161101

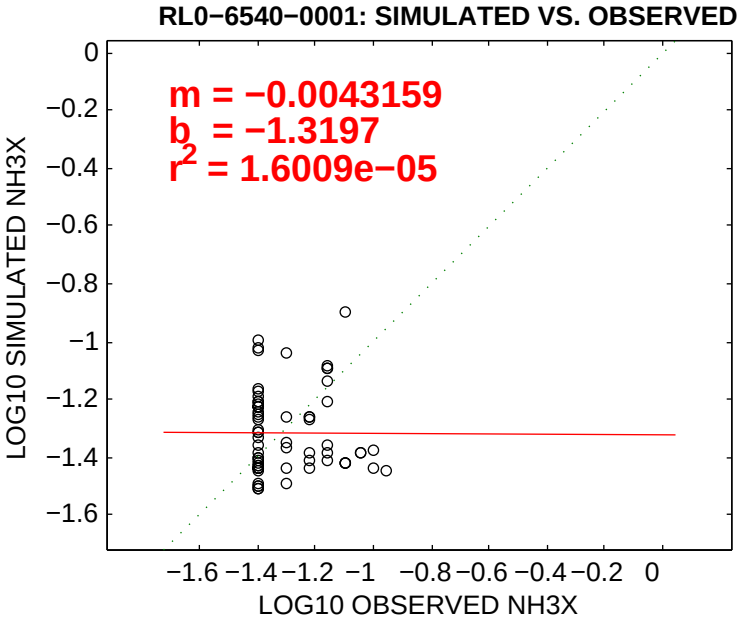

STATISTICS
n 10957 10957
observe simulate
min 0.0289181 0.33429
-1.53883 -0.475877
mean 29.0125 28.853
1.2401 1.25292
media 20.0289 20.21
1.30166 1.30557
max 1530.03 851.59
3.1847 2.93023
varian 1506 1473.43
0.245784 0.197128
JB 0.001 0.001
0.001 0.001
ra log
% -0.549737 1.03412
err.va 927.825 0.0951163
rel.std.err 0.616088 0.386992
mod.eff 0.383912 0.613008

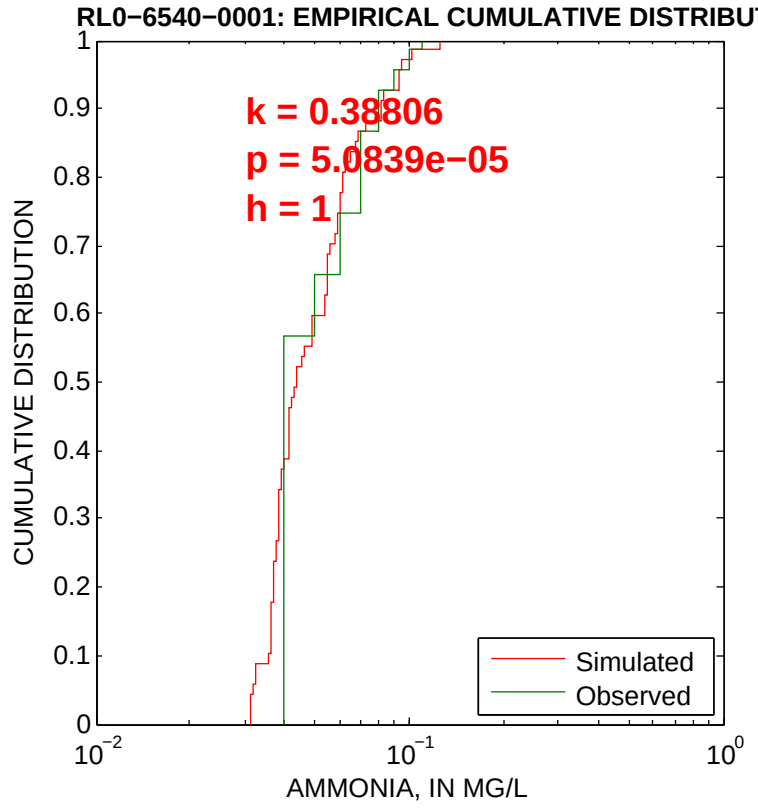

RL0-6540-0001: SIMULATED VS. OBSERVED
m = 0.70786
b = 0.37511
r2 = 0.62474
LOG10 SIMULATED FLOW
LOG10 OBSERVED FLOW


RL0-6540-0001: EMPIRICAL CUMULATIVE DISTRIBUTION
k = 0.038514
p = 1.6567e-07
h = 1
CUMULATIVE DISTRIBUTION
TOTAL DISHARGE, IN CFS
Simulated
Observed

VERSION 2.1







DATA SELECTION

scenario	file
P620171001WQ	NH3X.calib

plot: NH3X - ammonia

Dates: 1/1/1985 – 12/31/201

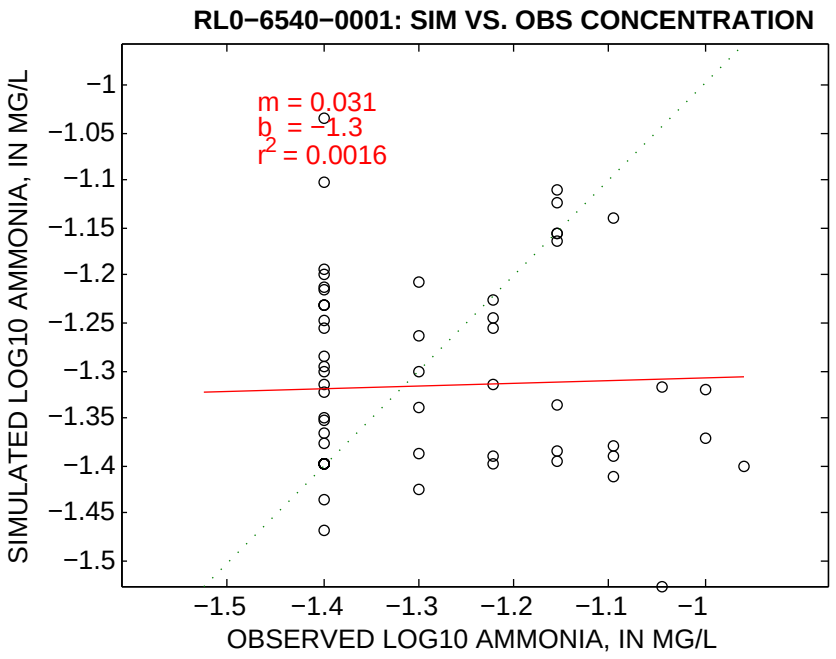
Drive	Directory	Observed
N/A	model	OBS20161101

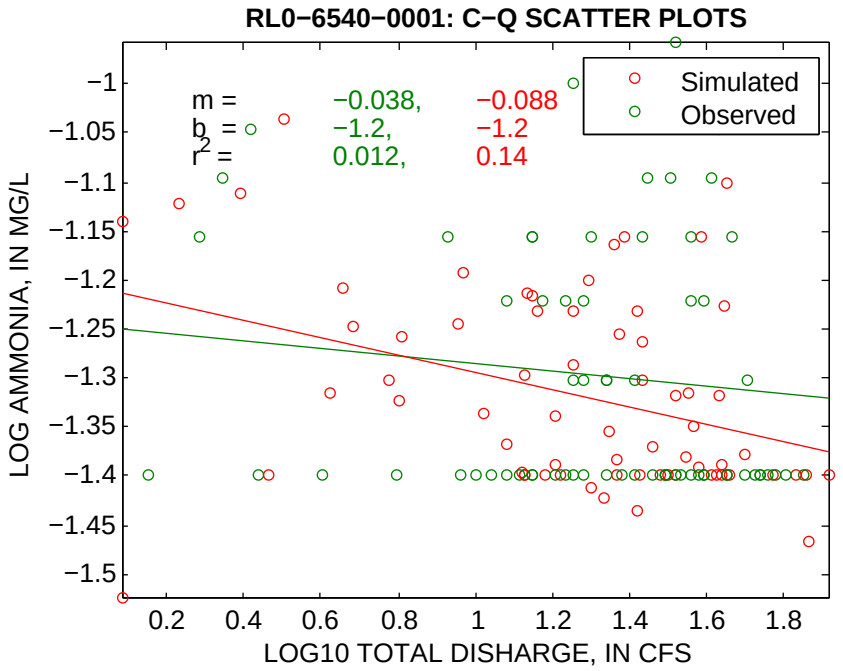
STATISTICS

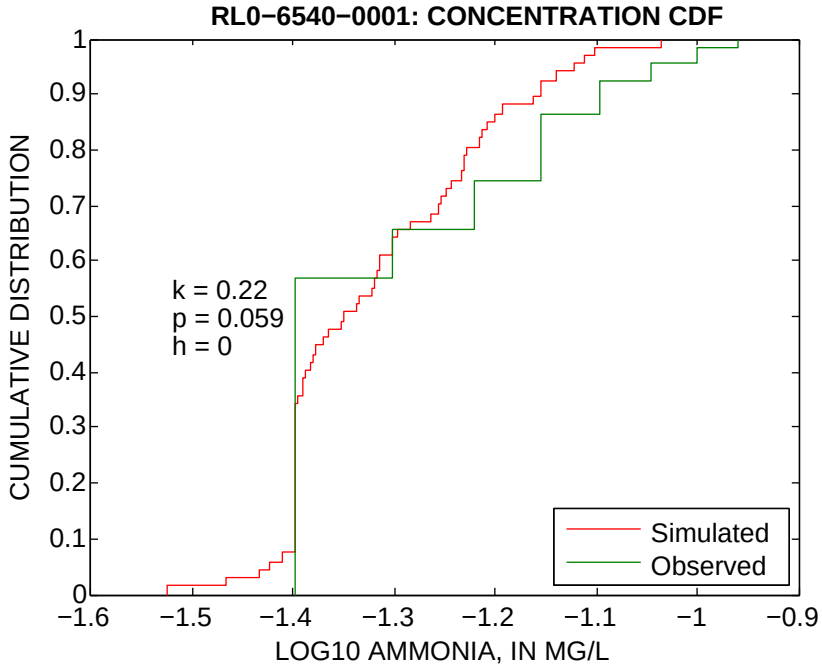
	n	67	67
		observe	simulate
min		0.04	0.031158
		-1.39794	-1.50643
mean		0.0529851	0.0514186
		-1.29755	-1.31411
media		0.04	0.043732
		-1.39794	-1.3592
max		0.11	0.12613
		-0.958607	-0.899182
varian		0.00033943	0.00038034
		0.0175757	0.0204506
JB		0.003480	0.001
		0.014432	0.026127
		ra	log
%		-2.95639	1.2764
err.va		0.00072582	0.0384564
rel.std.err		2.1383	2.18805
mod.eff		-1.1383	-1.18805

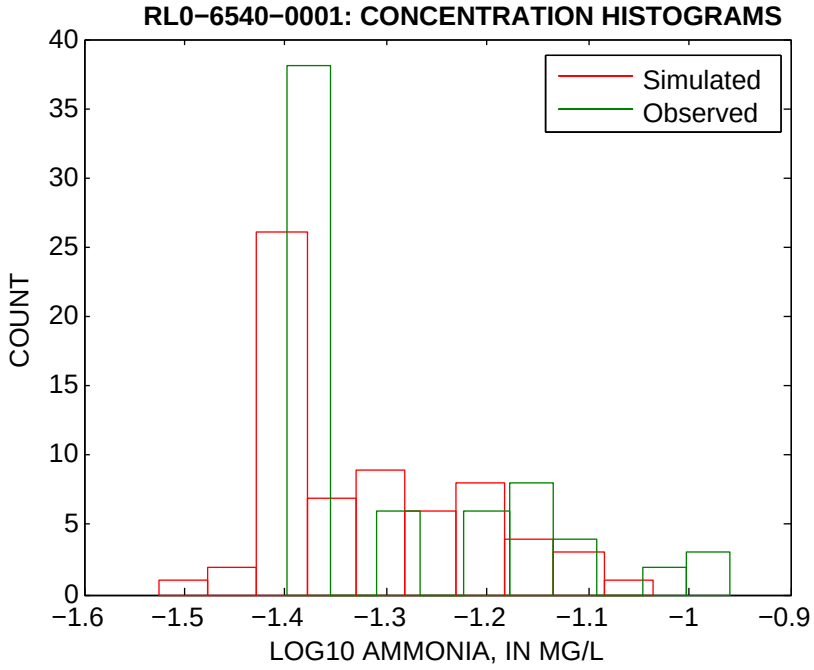
VERSION 2.1

ALL DATA
LOG10

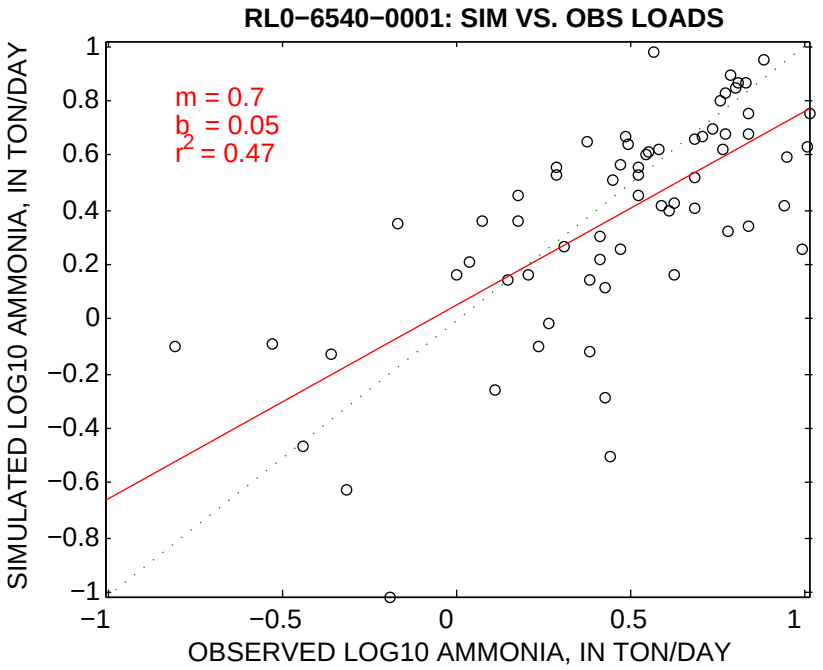


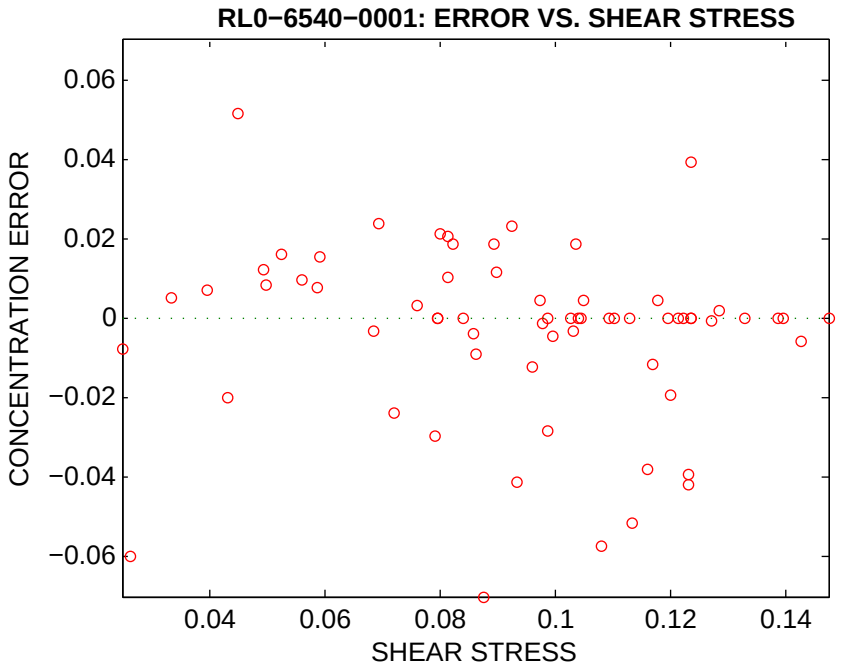


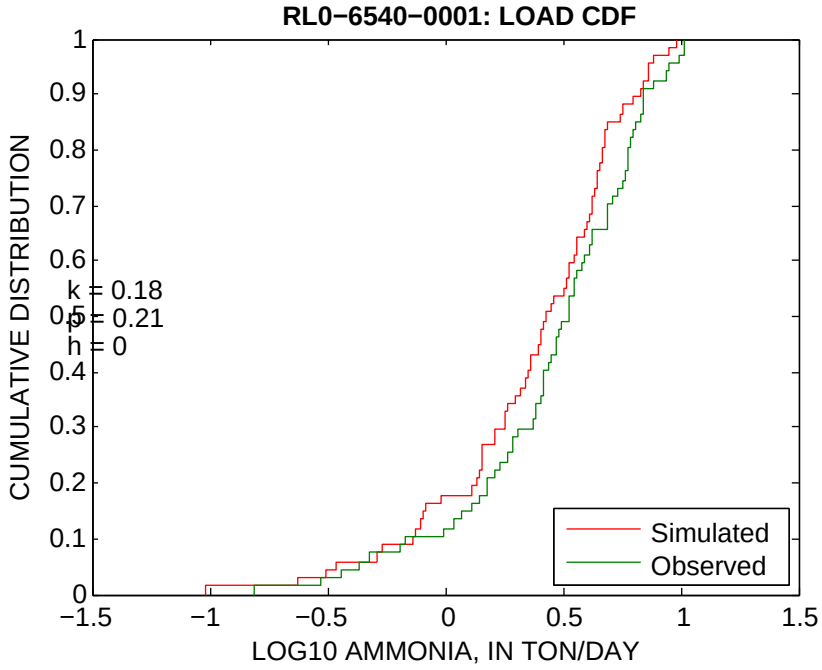


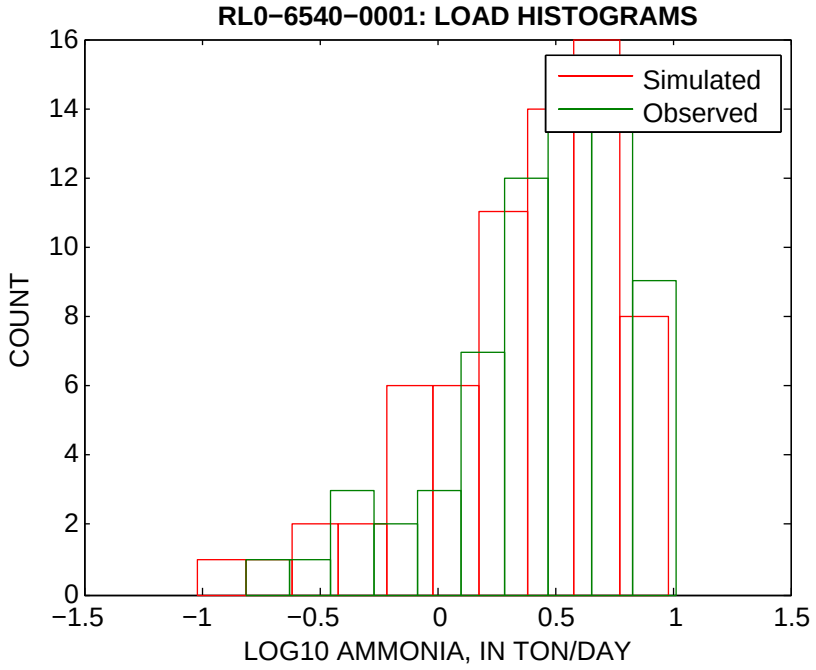


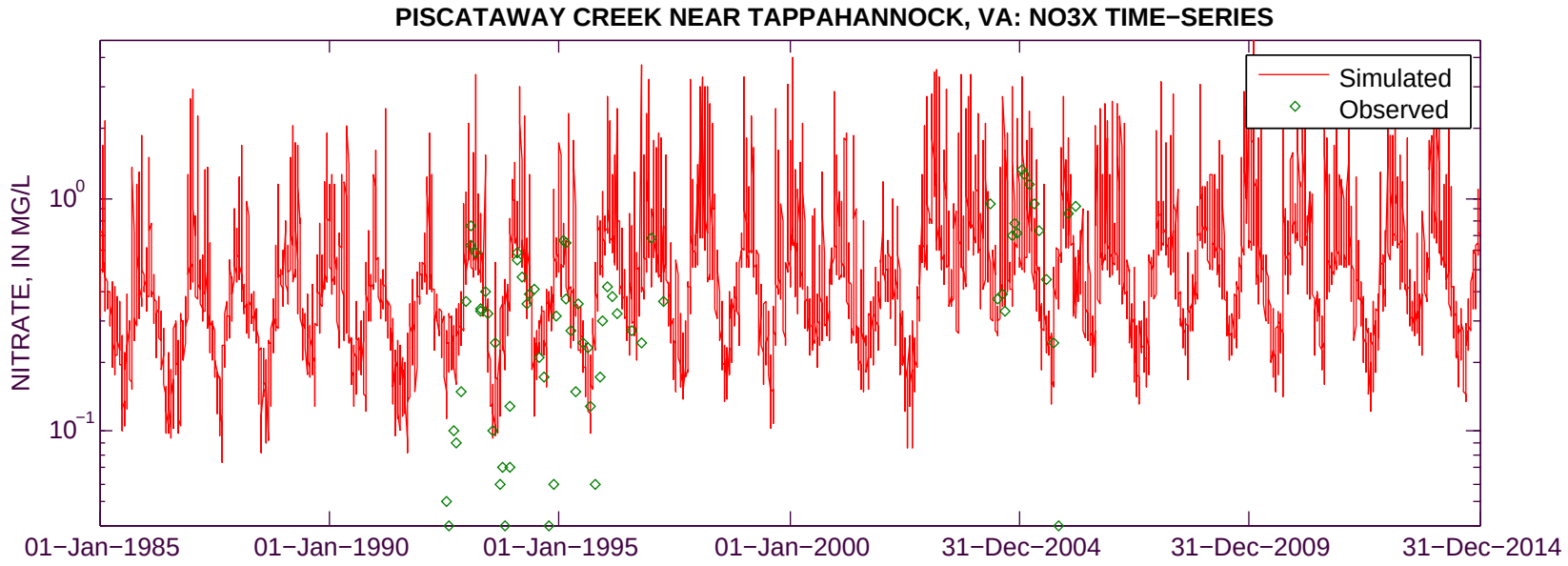
LOAD DATA
LOG10

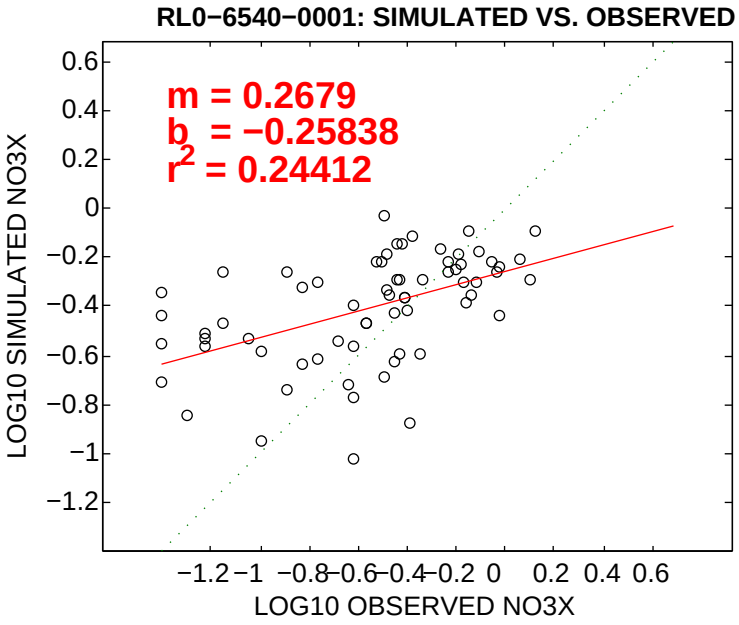


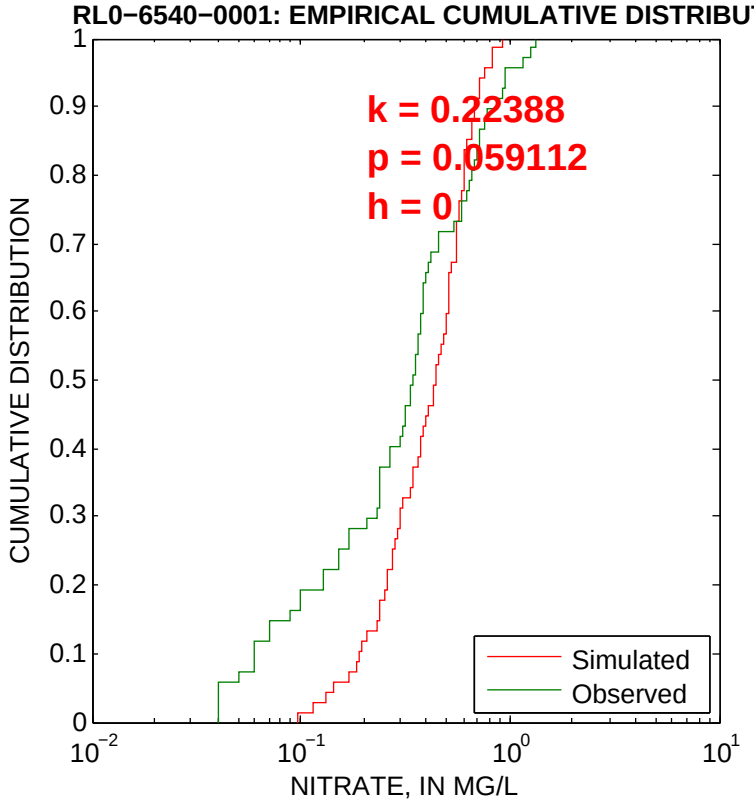












DATA SELECTION

scenario: P620171001WQ | file: NO3X.calib

plot: NO3X - nitrate

Dates: 1/1/1985 – 12/31/201

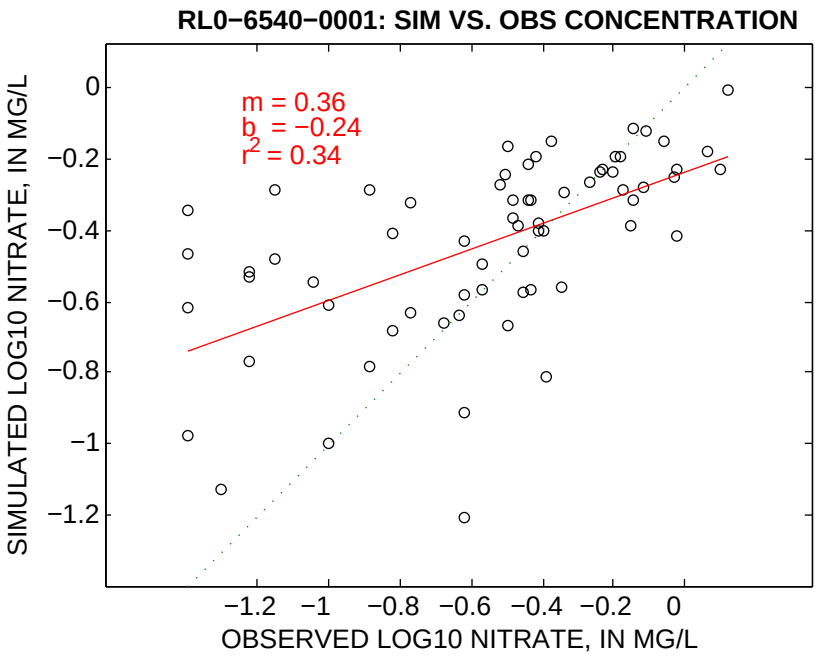
Drive | Directory | Observed: N/A | model | OBS20161101

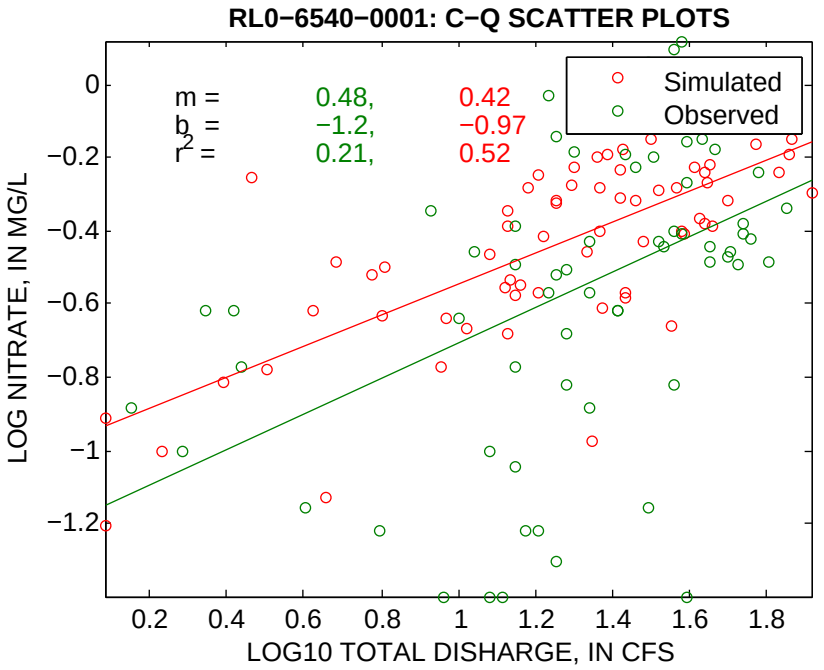
STATISTICS

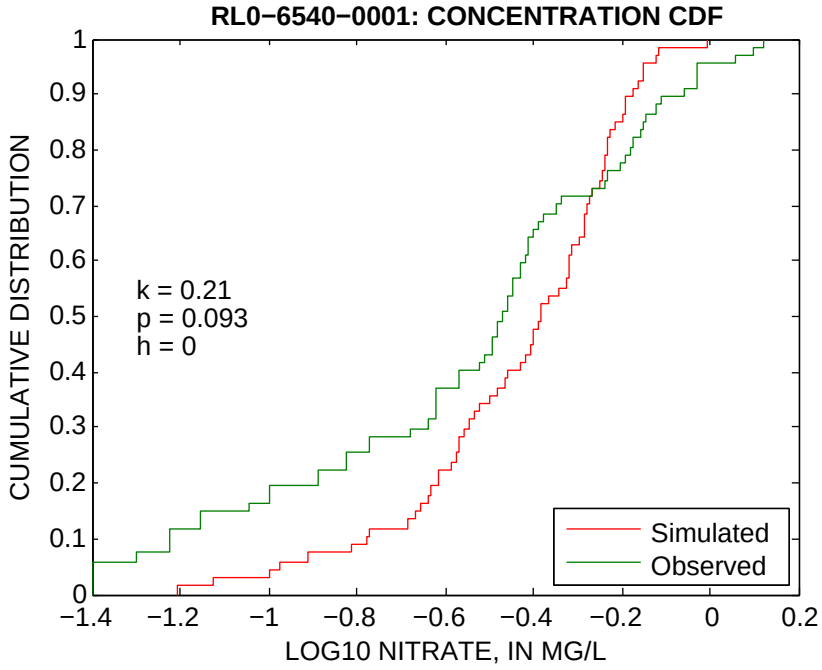
	n	67	67
		observe	simulate
min		0.04	0.096234
		-1.39794	-1.01667
mean		0.399254	0.439057
		-0.552659	-0.406434
media		0.34	0.4443
		-0.468521	-0.352324
max		1.32	0.92447
		0.120574	-0.0341072
varian		0.0945282	0.0369484
		0.166324	0.0488997
JB		0.007927	0.311542
		0.06541	0.043409
		ra	log
%		9.96947	-26.4585
err.va		0.0712006	0.147813
rel.std.err		0.75322	0.888704
mod.eff		0.24678	0.111296

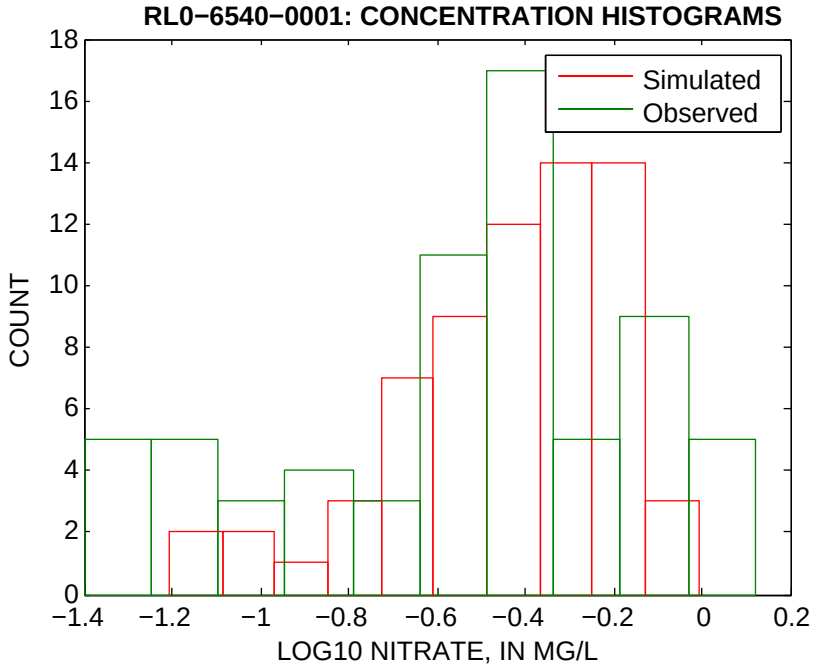
VERSION 2.1

ALL DATA
LOG10

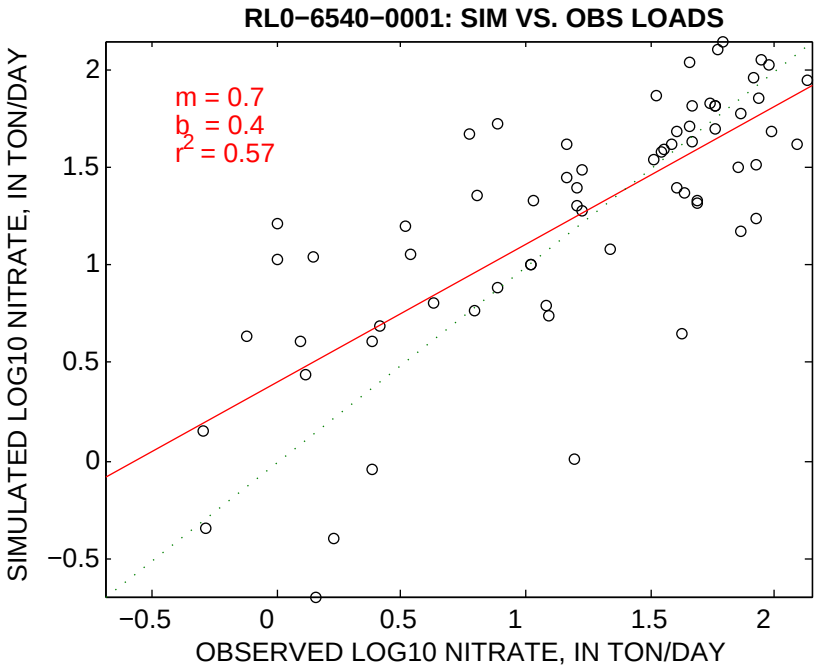


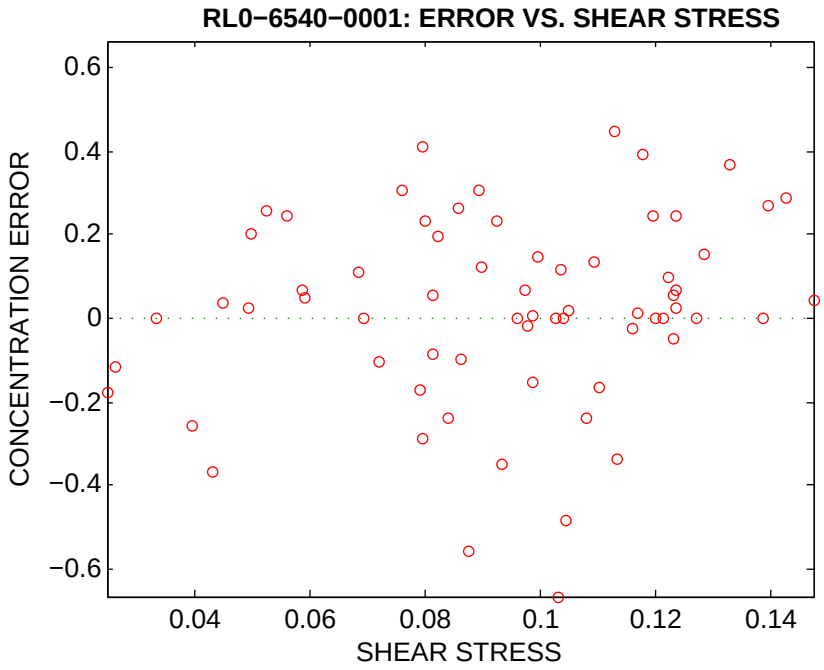


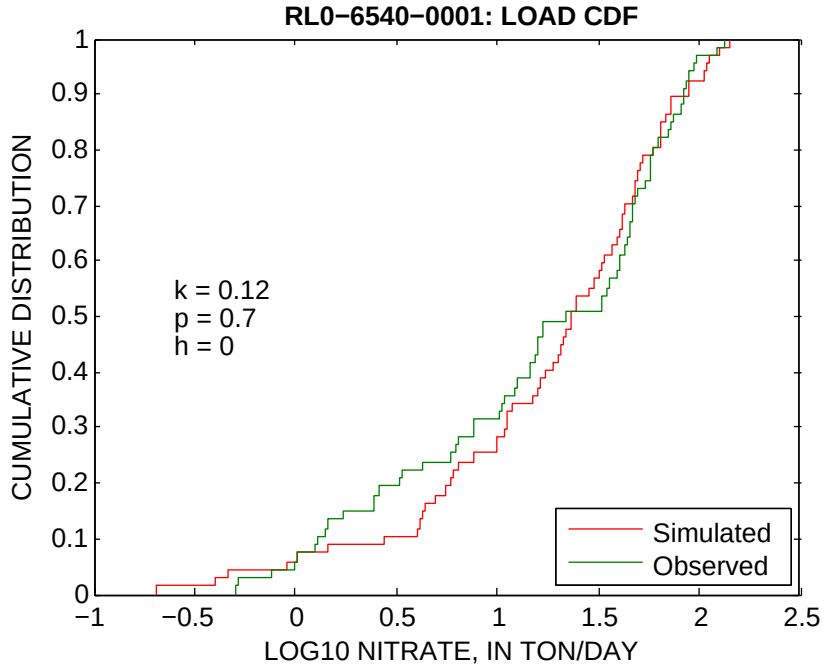


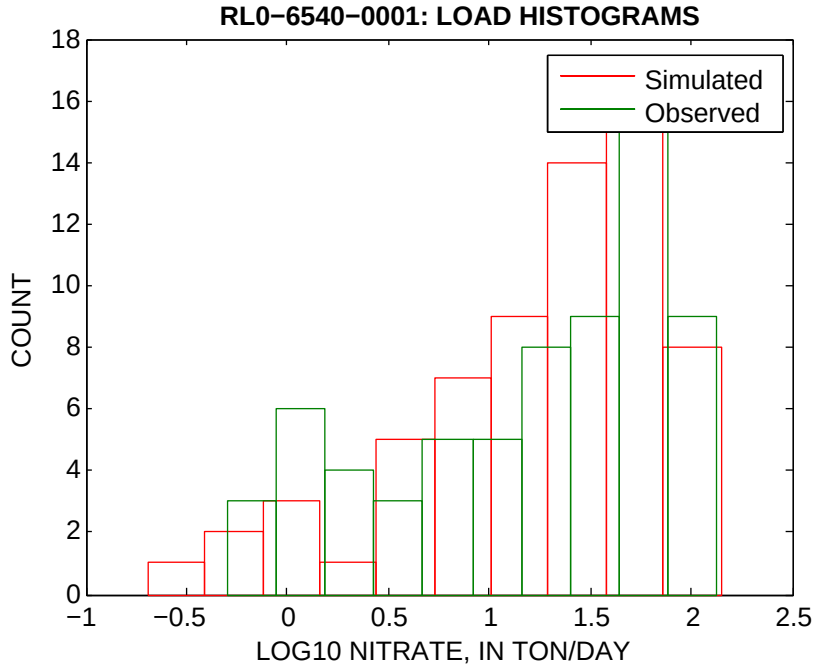


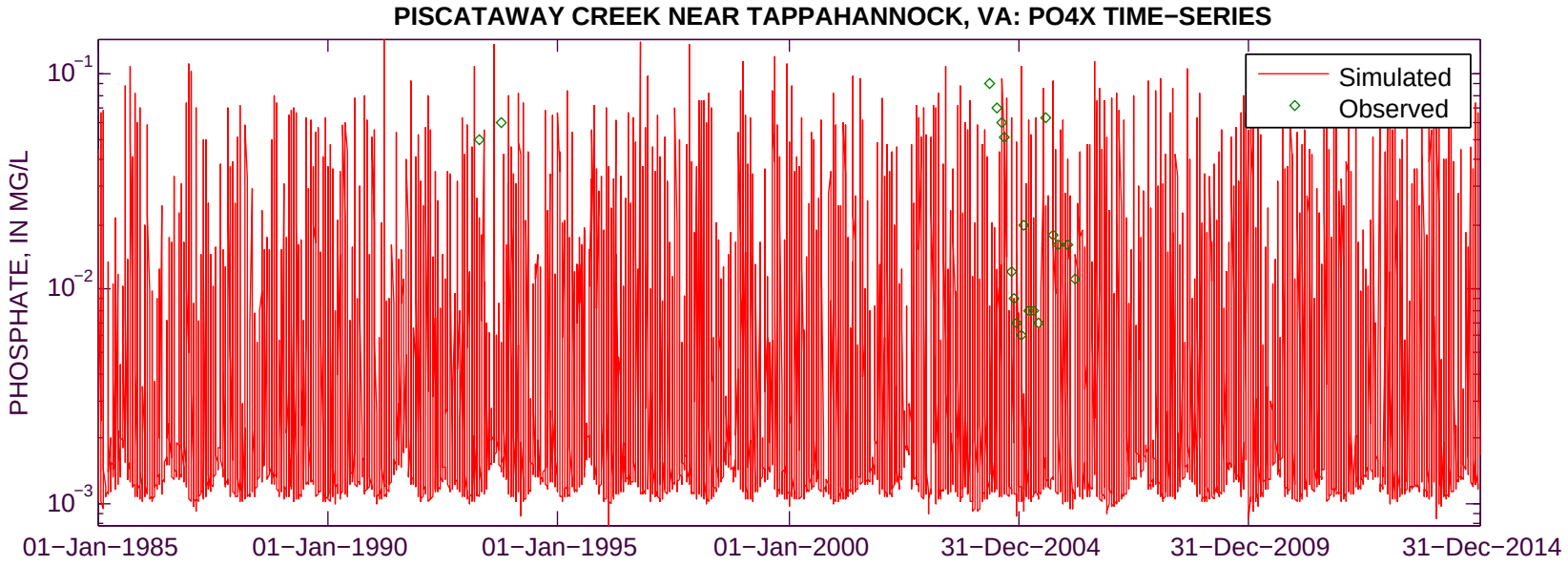
LOAD DATA
LOG10

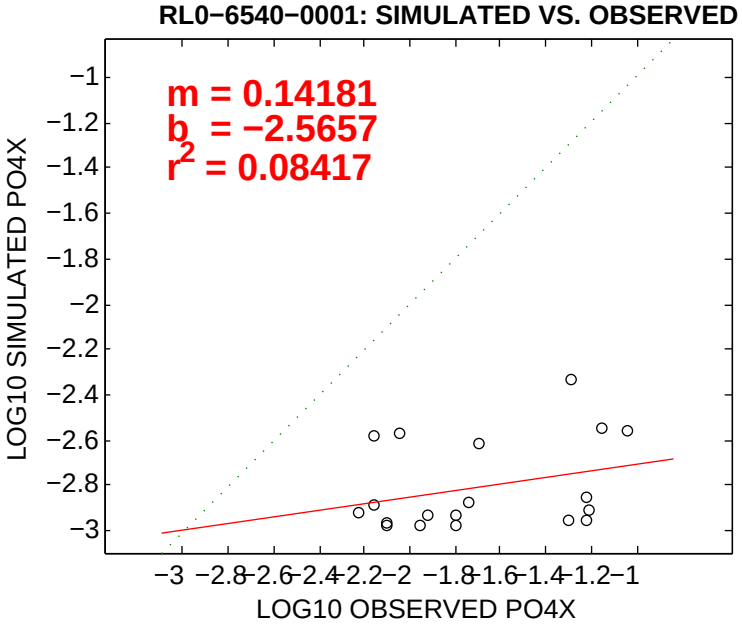


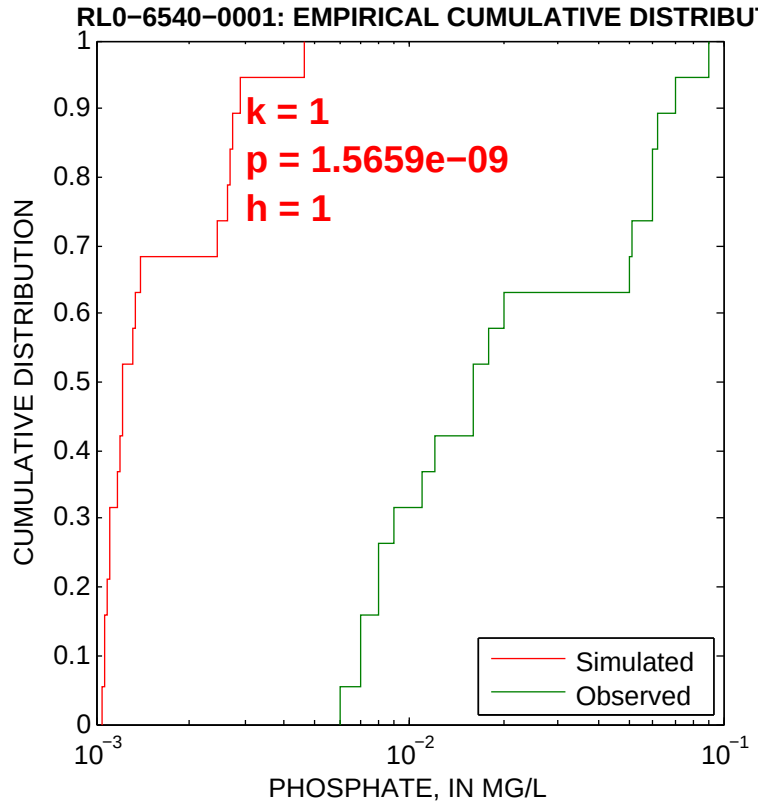












DATA SELECTION

scenario	file
P620171001WQ	PO4X.calib

plot: PO4X - phosphate

Dates: 1/1/1985 – 12/31/201

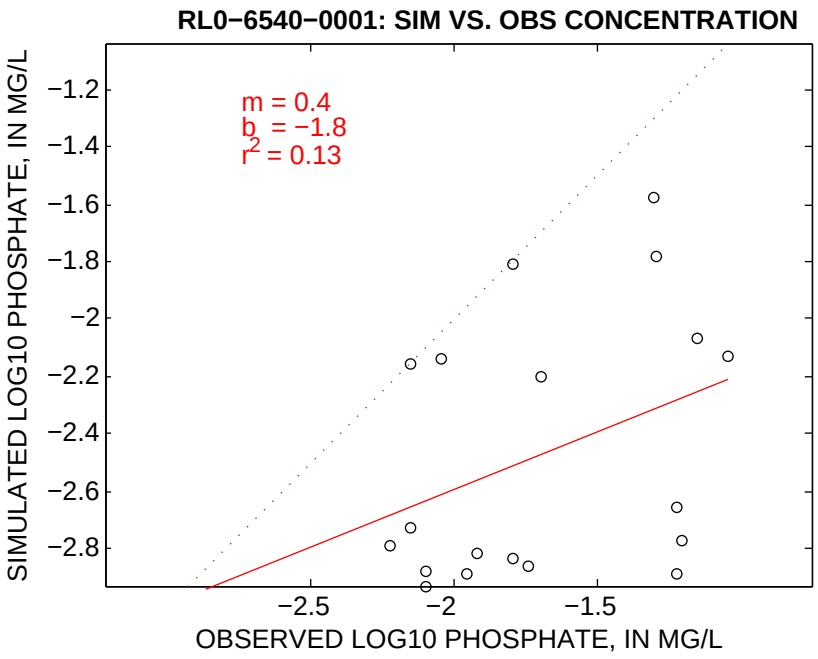
Drive	Directory	Observed
N/A	model	OBS20161101

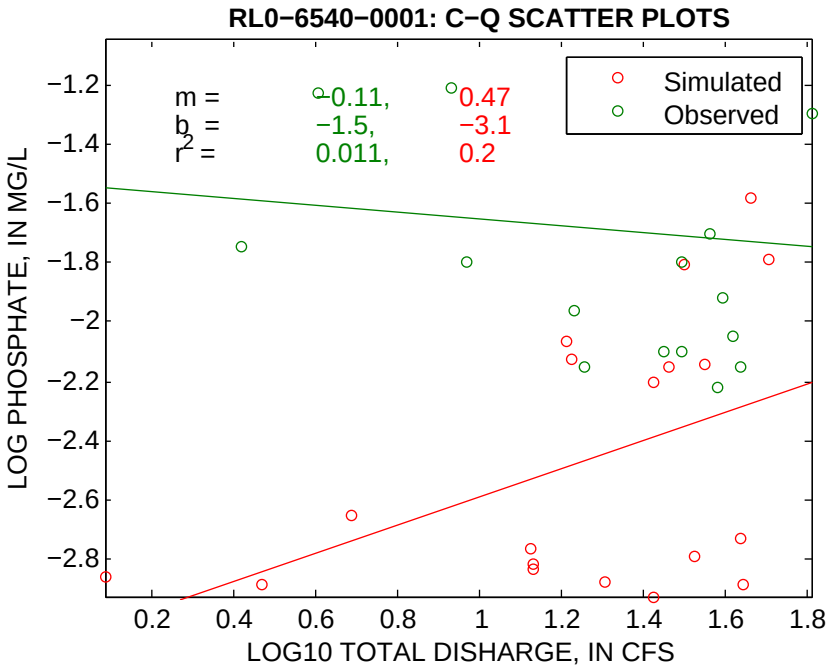
STATISTICS

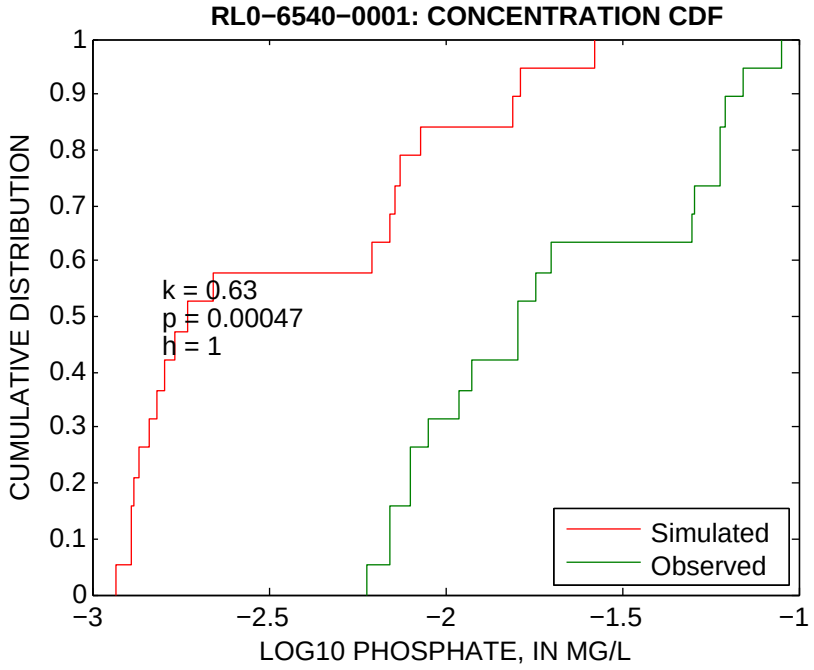
	n	19	19
		observe	simulate
min		0.006	0.0010573
		-2.22185	-2.9758
mean		0.0305789	0.00175243
		-1.69113	-2.8055
media		0.016	0.0012233
		-1.79588	-2.91247
max		0.09	0.0046161
		-1.04576	-2.33572
varian		0.00073459	9.45282e-0
		0.166973	0.0398922
JB		0.089125	0.008741
		0.1211	0.064047
		ra	log
%		-94.2692	65.8949
err.va		0.00159521	1.47032
rel.std.err		2.17157	8.80574
mod.eff		-1.17157	-7.80574

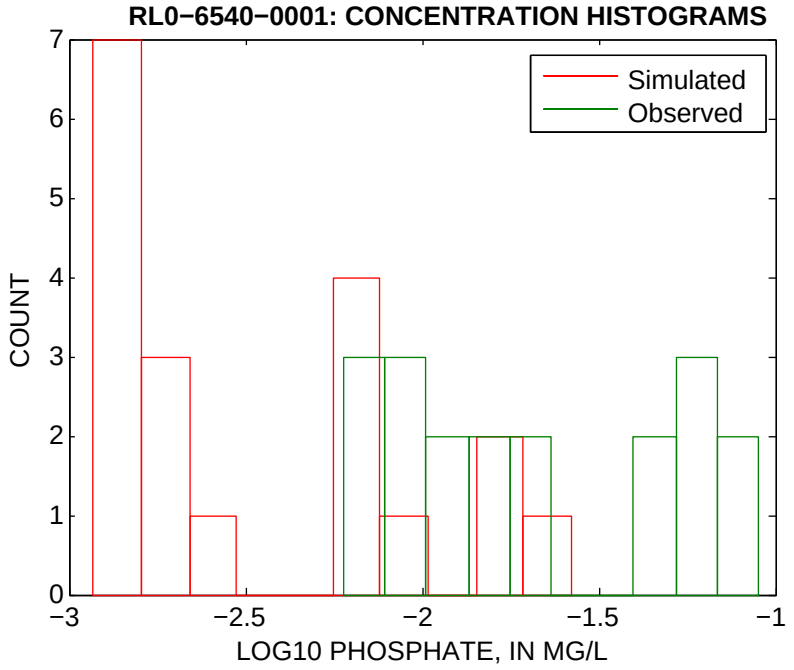
VERSION 2.1

ALL DATA
LOG10

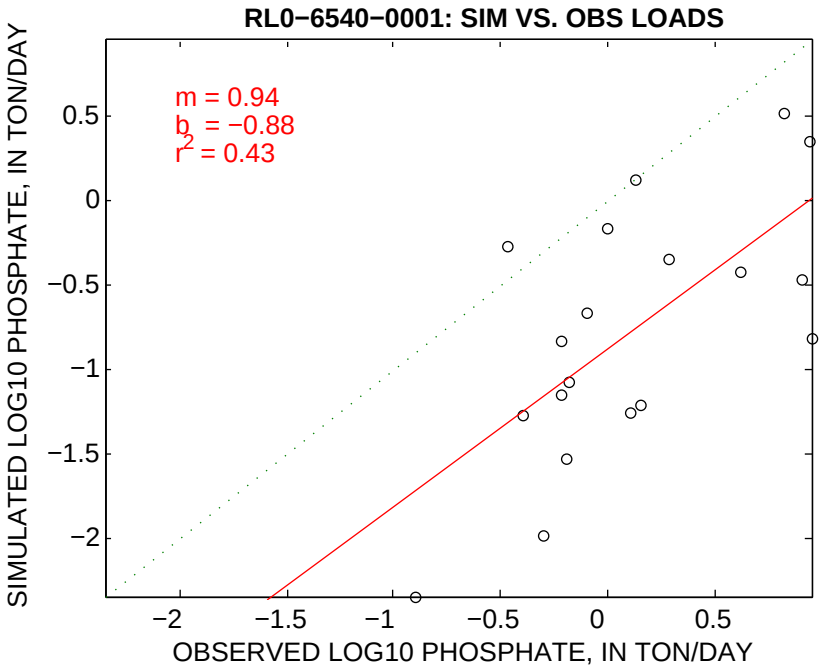


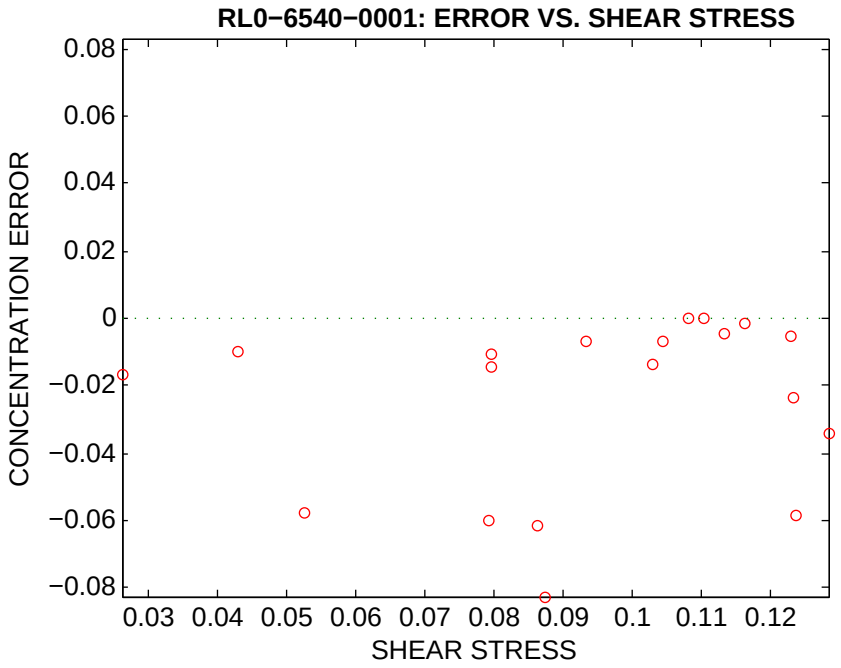


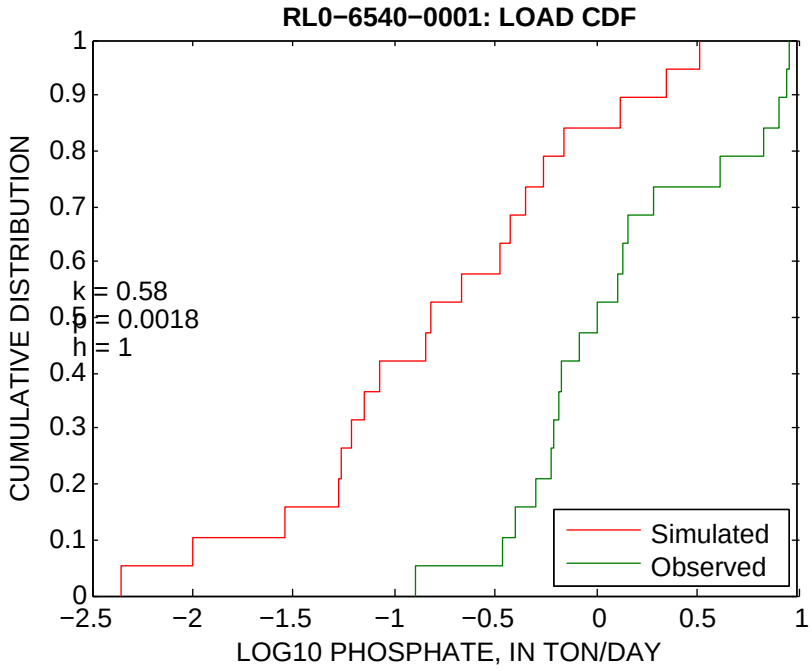


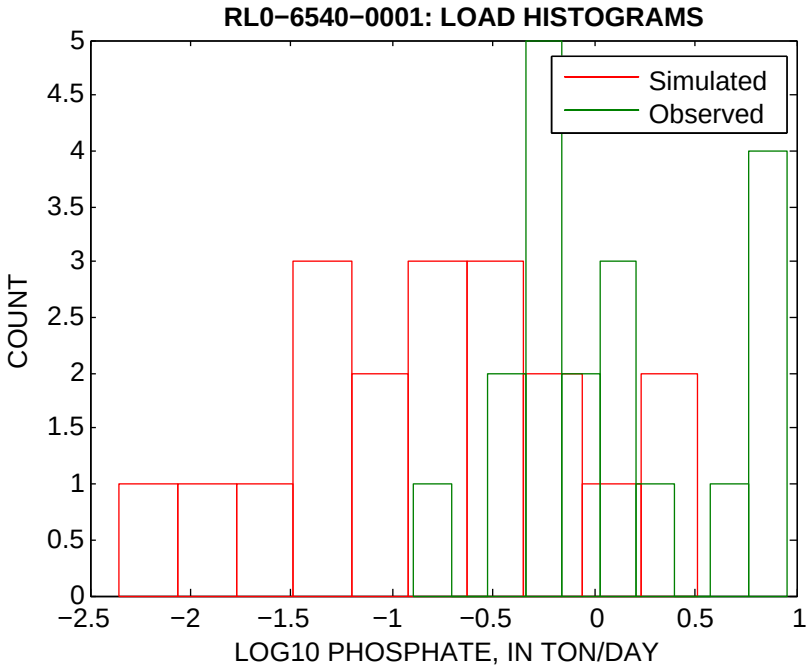


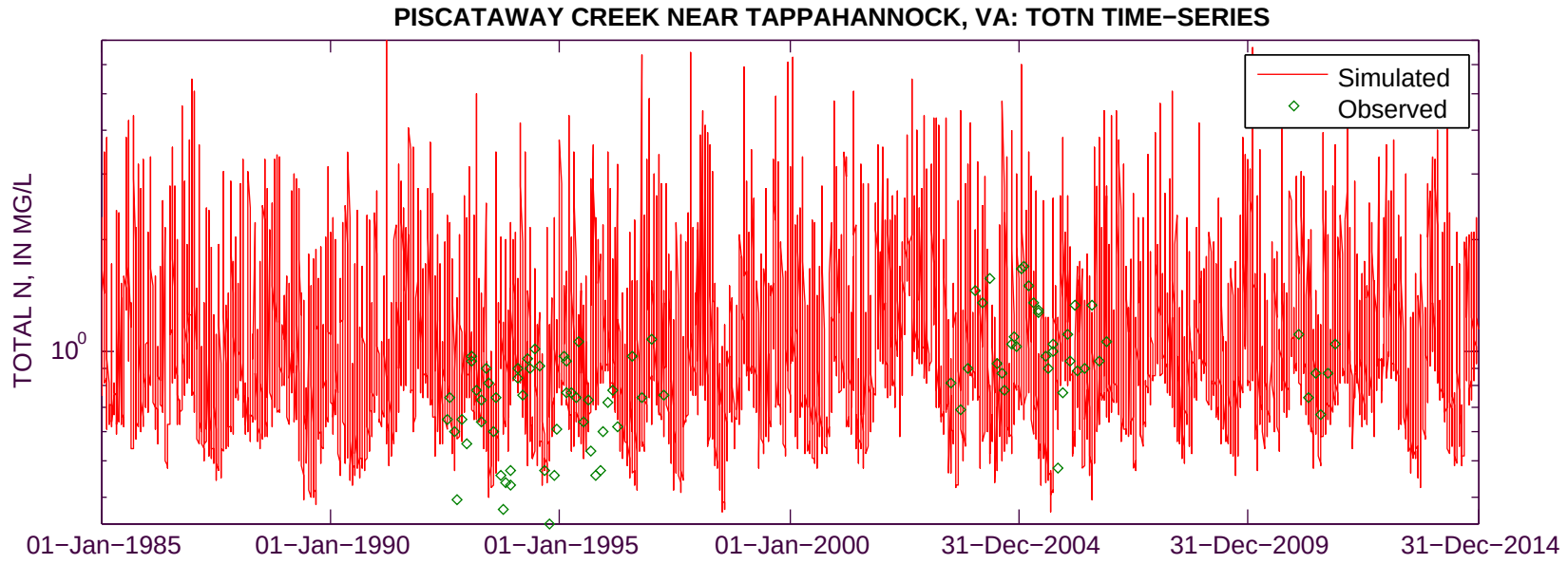
LOAD DATA
LOG10

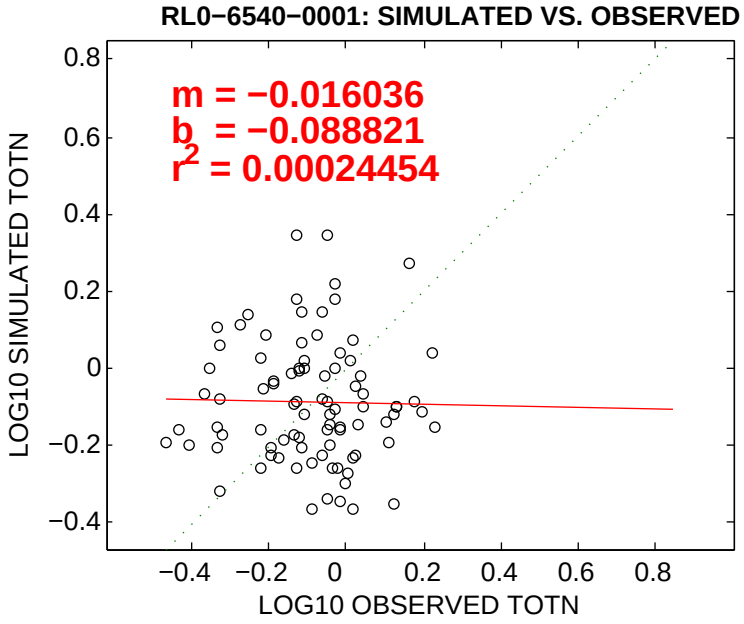


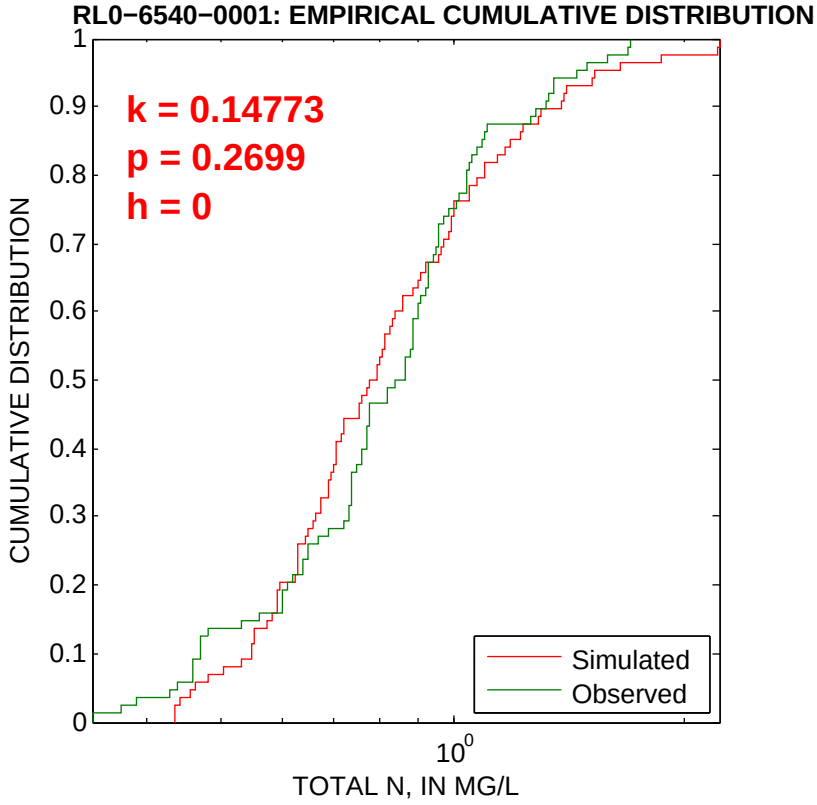












DATA SELECTION

scenario	file
P620171001WQ	TOTN.calib

plot: TOTN - total nitrogen

Dates: 1/1/1985 – 12/31/201

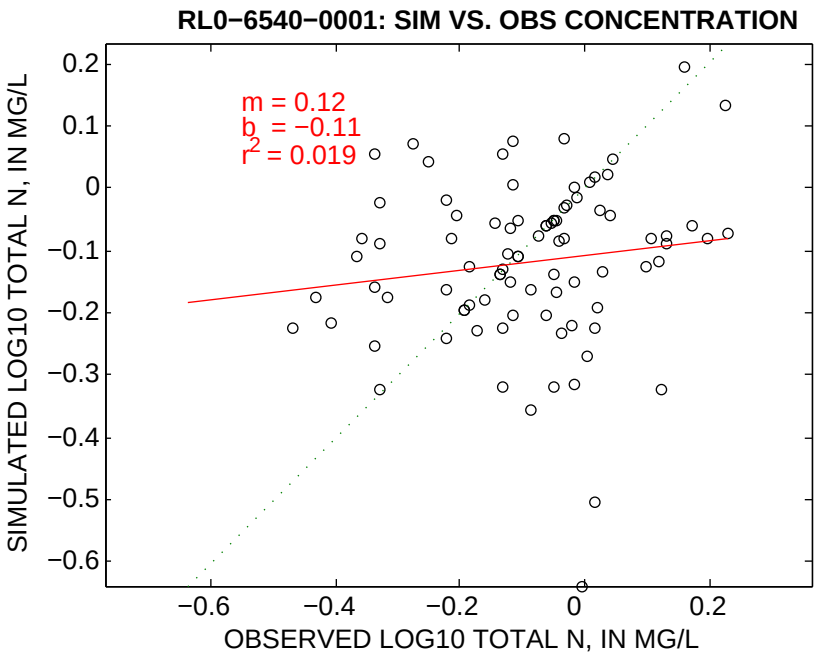
Drive	Directory	Observed
N/A	model	OBS20161101

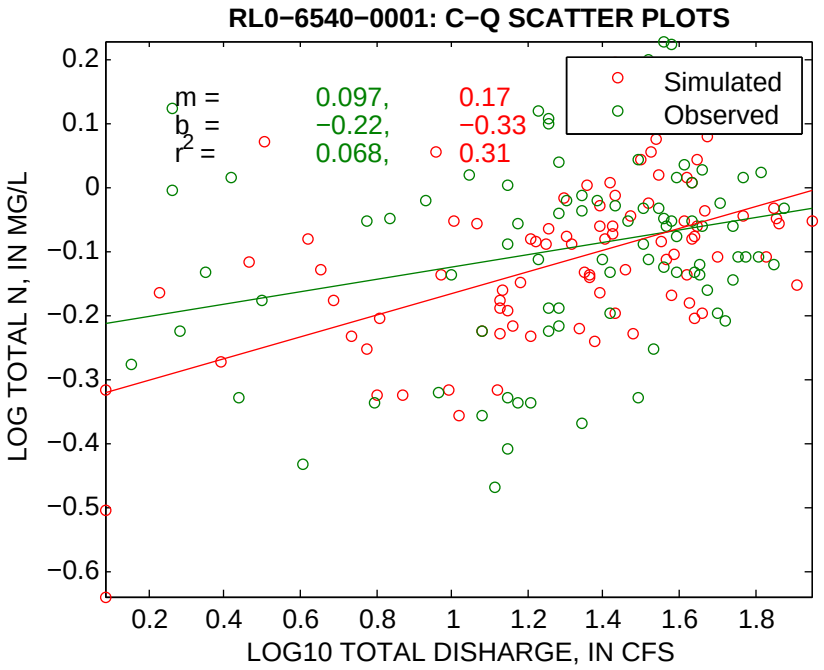
STATISTICS

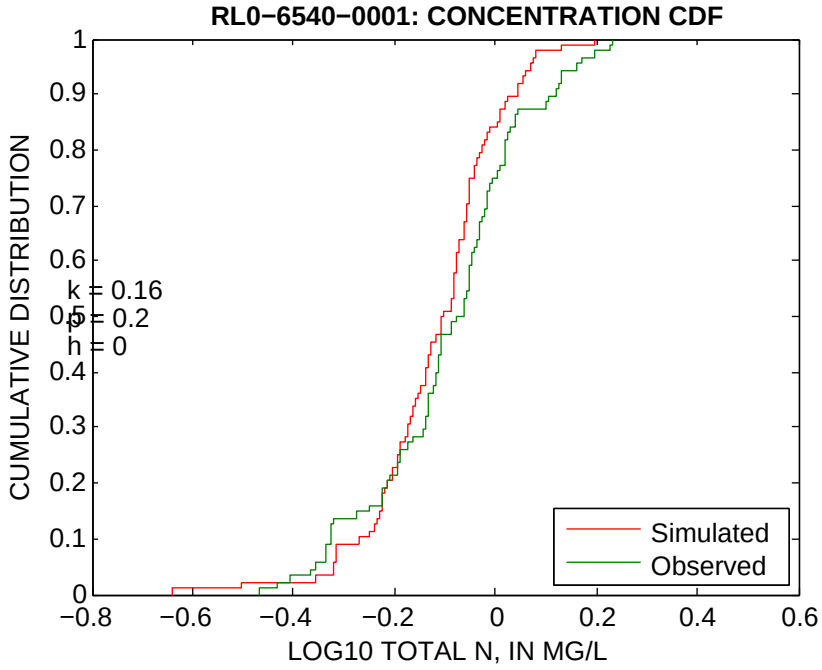
	n	observe	simulate
		88	88
min		0.34	0.43463
		-0.468521	-0.36188
mean		0.8575	0.875674
		-0.0923909	-0.0873391
media		0.855	0.787625
		-0.0681007	-0.103697
max		1.7	2.2098
		0.230449	0.344353
varian		0.0869615	0.127768
		0.0232238	0.0244218
JB		0.024767	0.001
		0.5	0.060745
		ra	log
%		2.11939	-5.46781
err.va		0.217489	0.0484162
rel.std.err		2.50098	2.08477
mod.eff		-1.50098	-1.08477

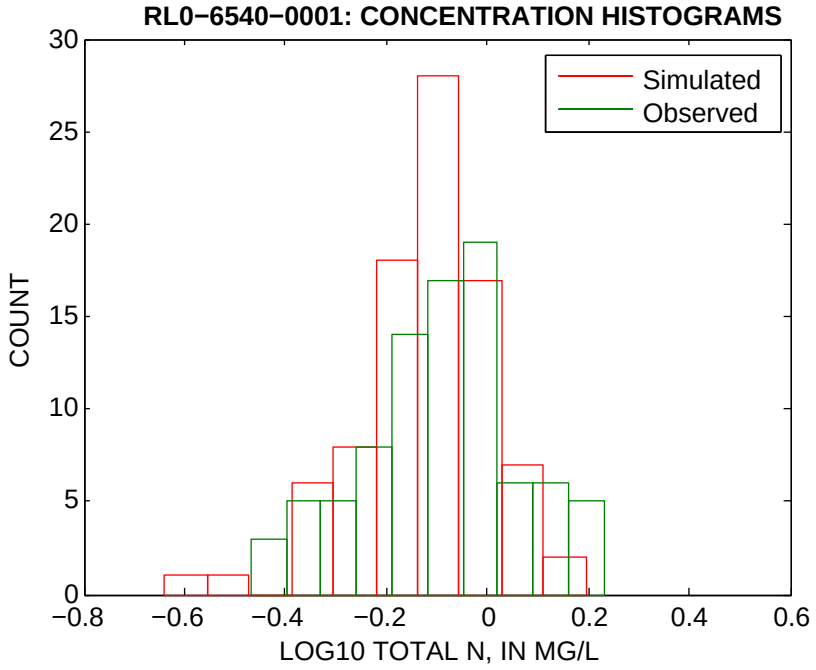
VERSION 2.1

ALL DATA
LOG10

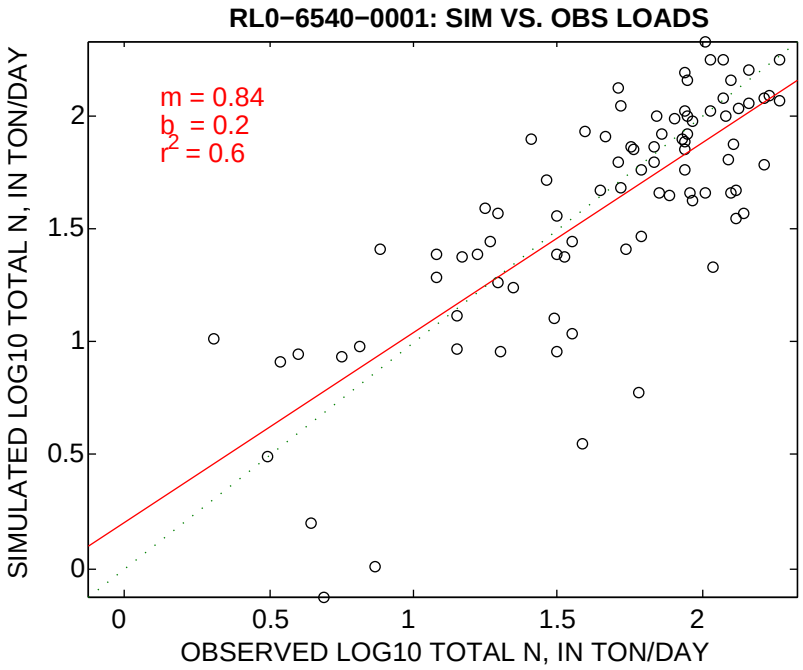


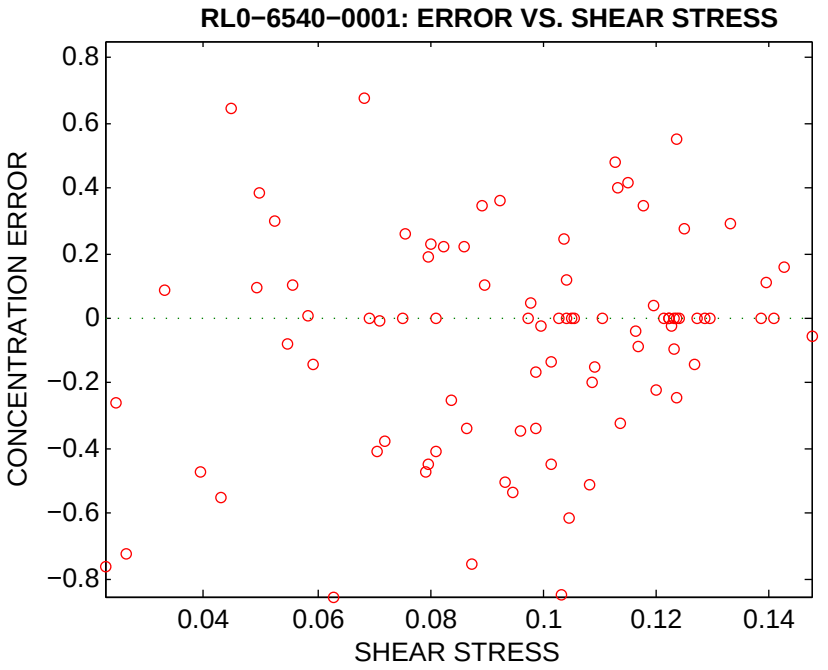


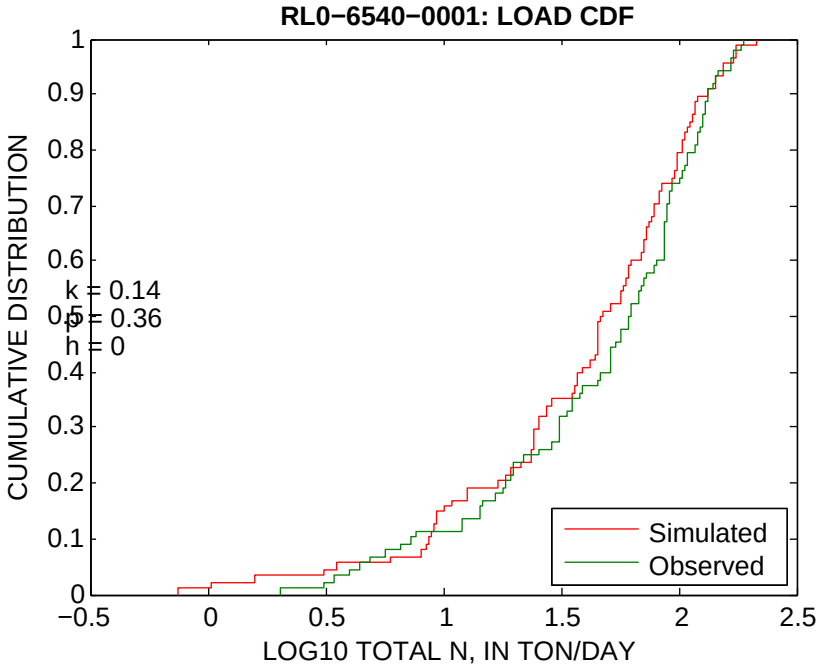


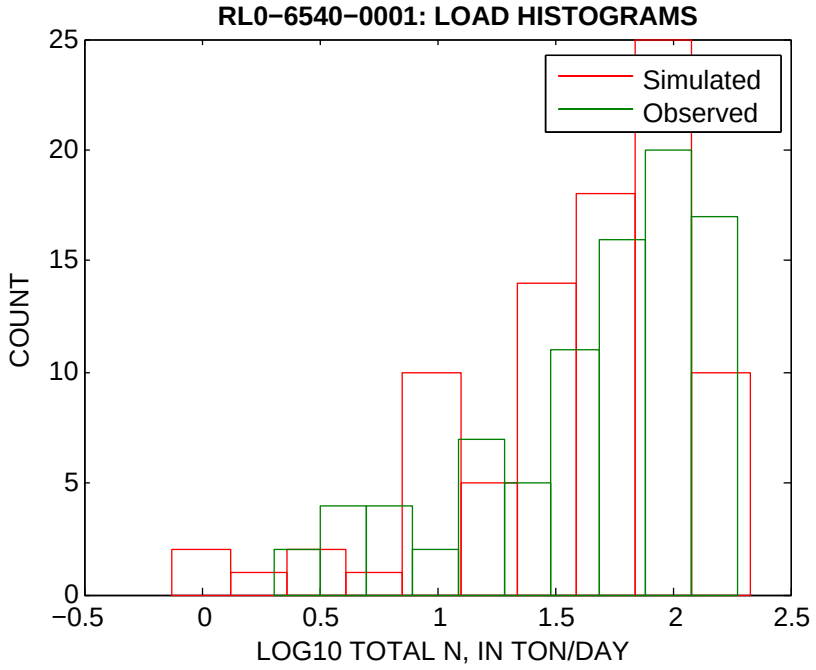


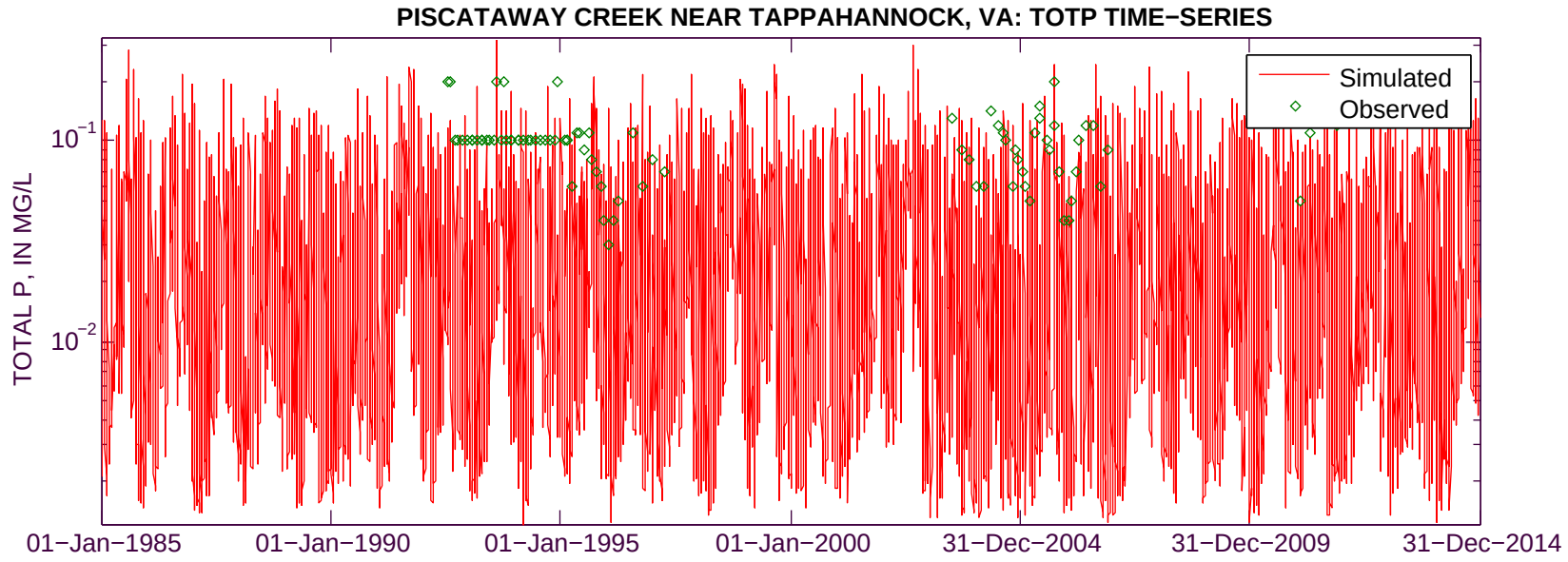
LOAD DATA
LOG10

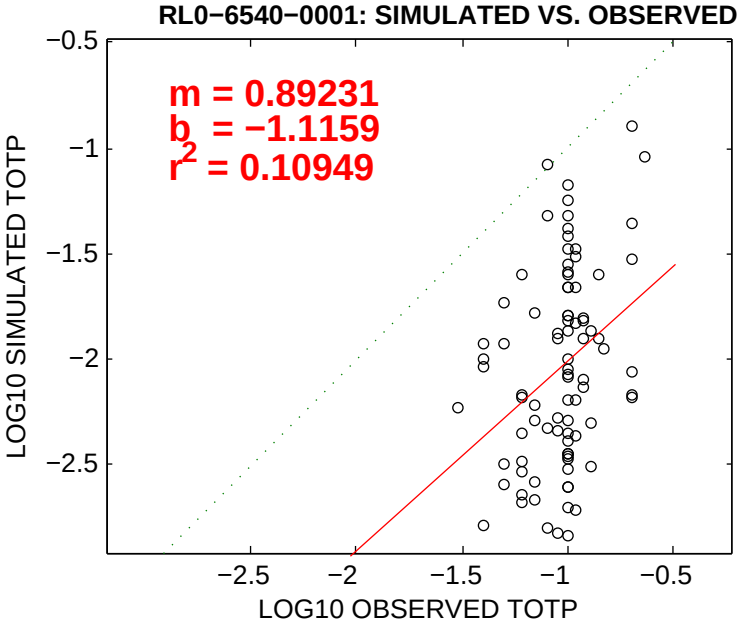


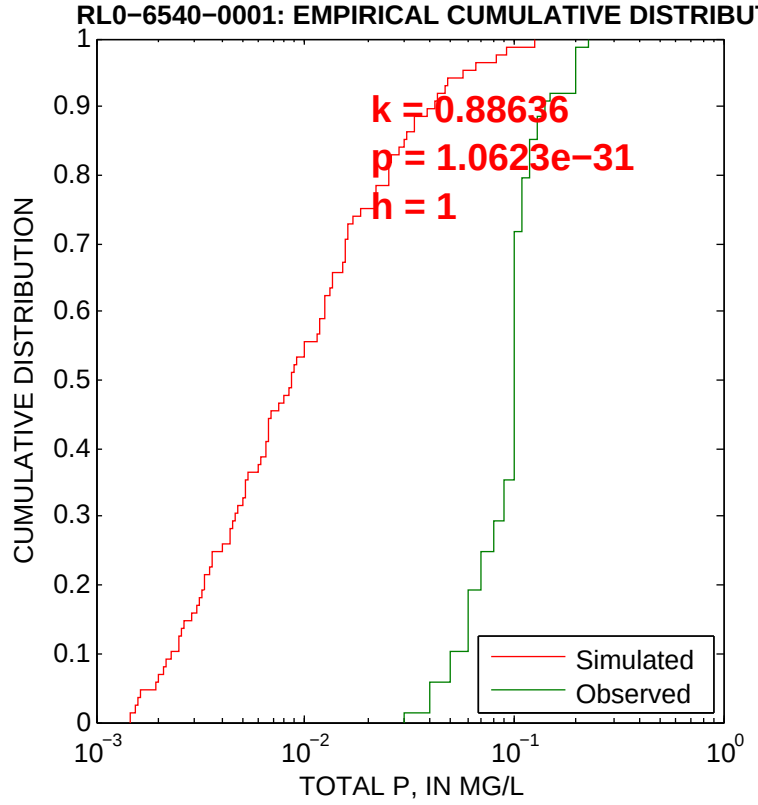












DATA SELECTION

scenario	file
P620171001WQ	TOTP.calib

plot: TOTP - total phosphorus

Dates	1/1/1985	12/31/201

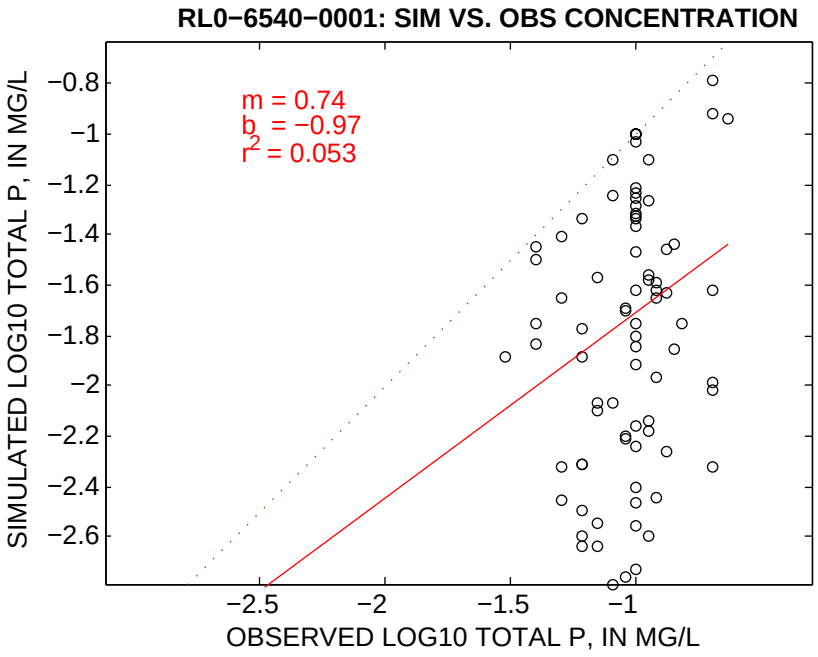
Drive	Directory	Observed
N/A	model	OBS20161101

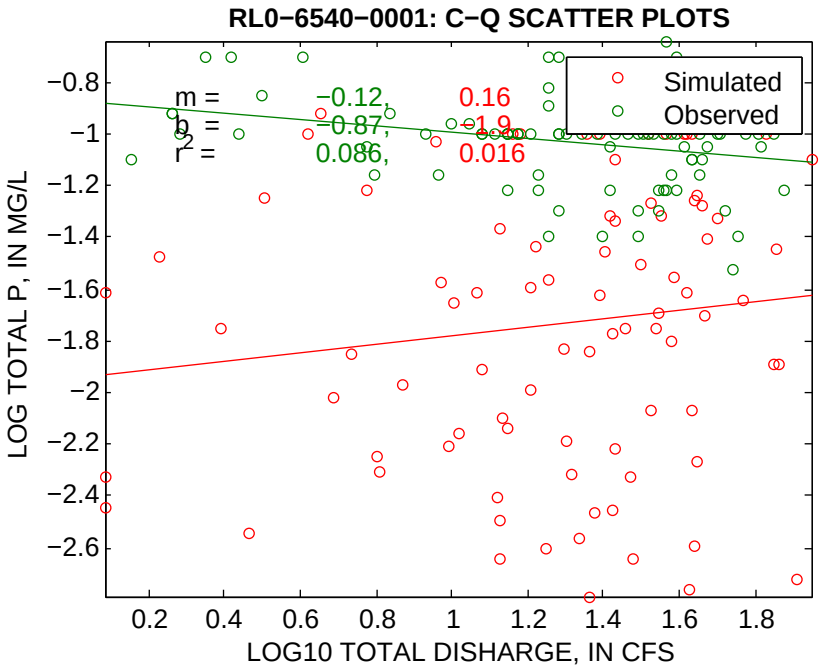
STATISTICS

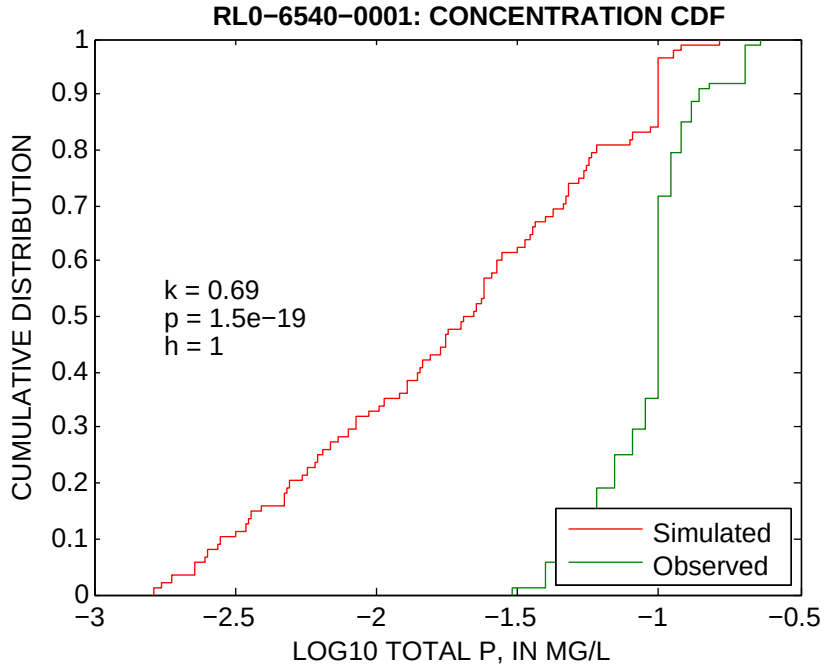
	n	88	88
		observe	simulate
min		0.03	0.0014675
		-1.52288	-2.83342
mean		0.100114	0.0164181
		-1.03205	-2.03677
media		0.1	0.00860845
		-1	-2.06509
max		0.23	0.1274
		-0.638272	-0.894831
varian		0.00157125	0.00044773
		0.029554	0.214919
JB		0.001124	0.001
		0.195934	0.155075
		ra	log
%		-83.6006	97.3515
err.va		0.00844595	1.2128
rel.std.err		5.3753	41.0366
mod.eff		-4.3753	-40.0366

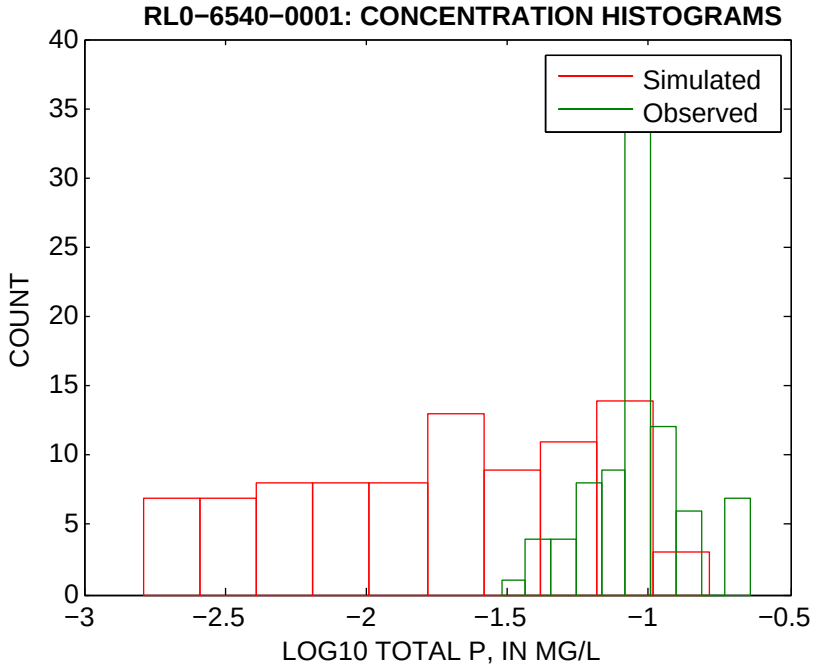
VERSION 2.1

ALL DATA
LOG10

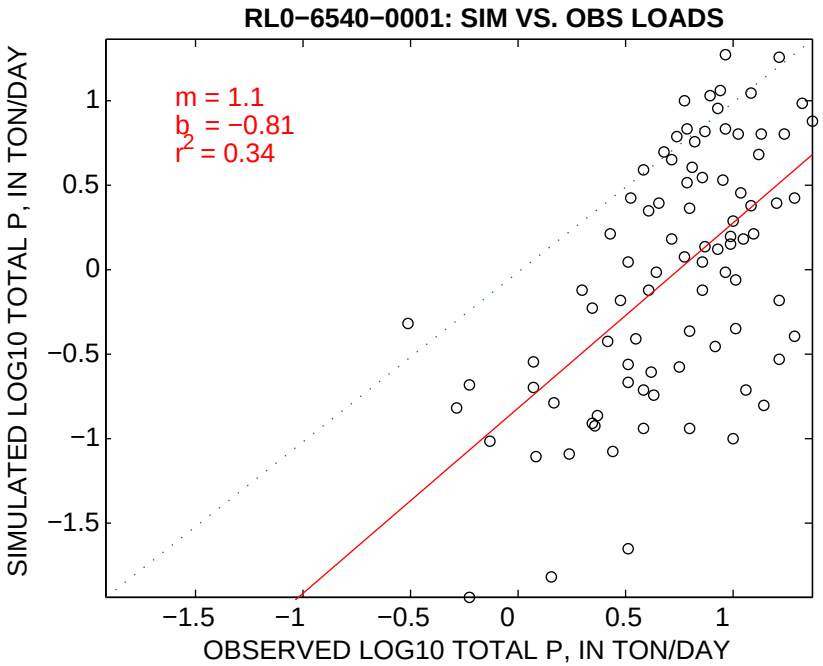


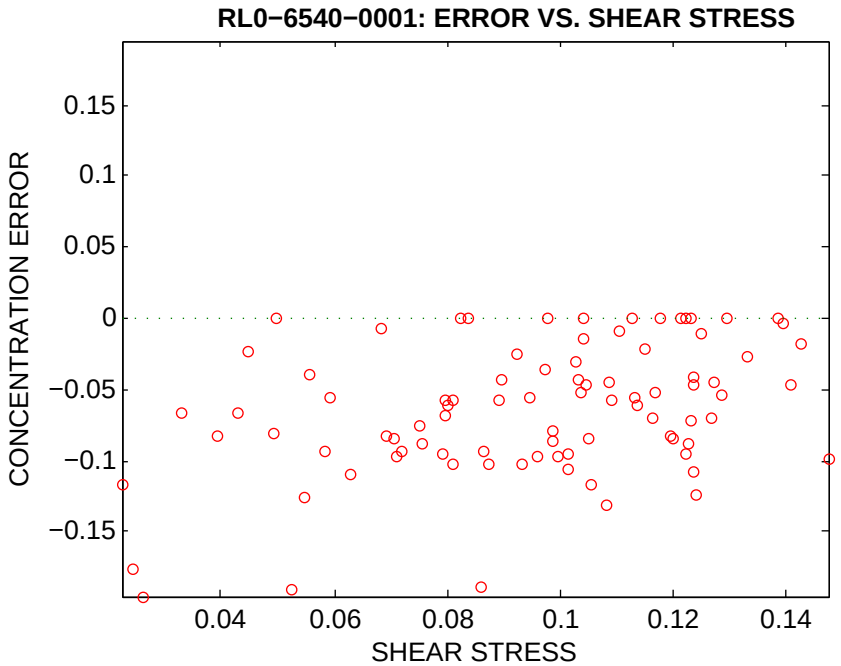


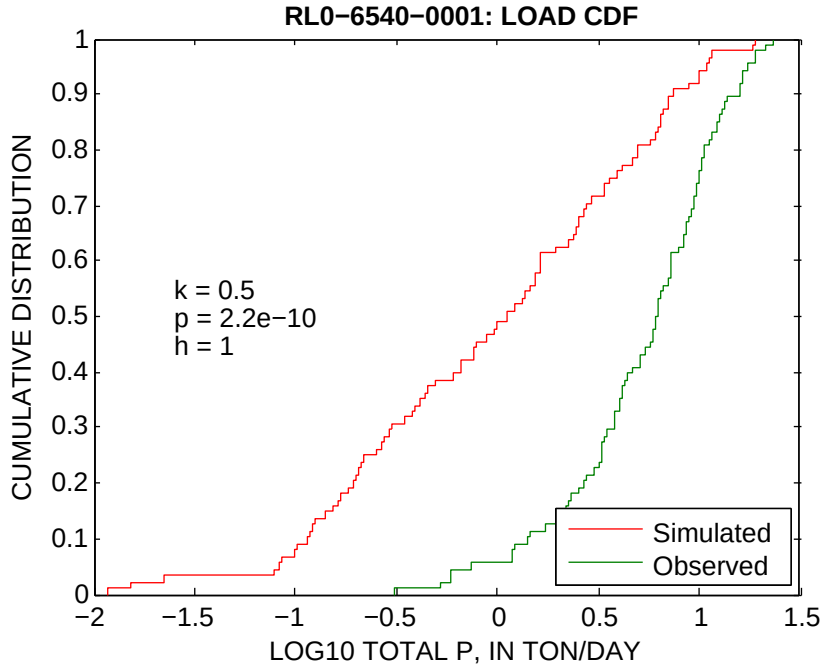


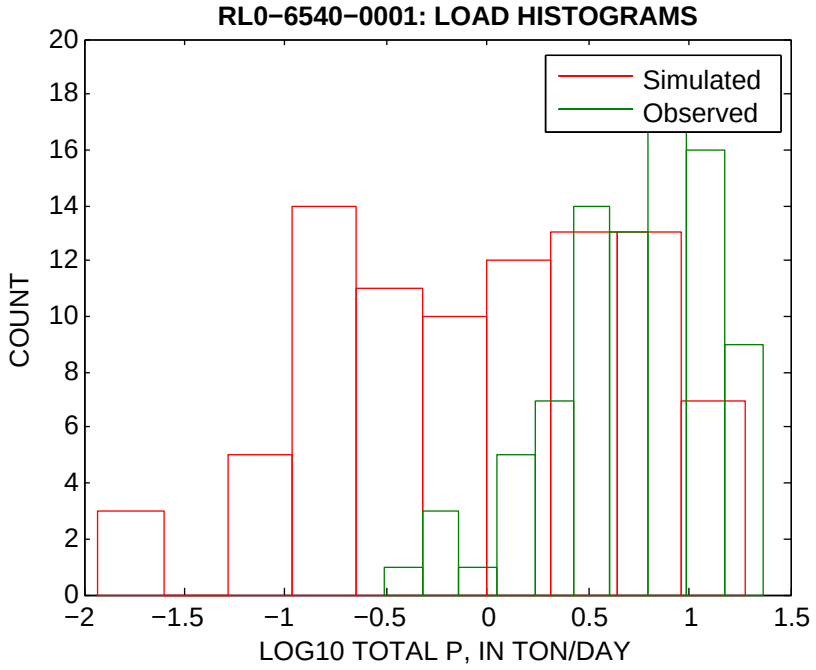


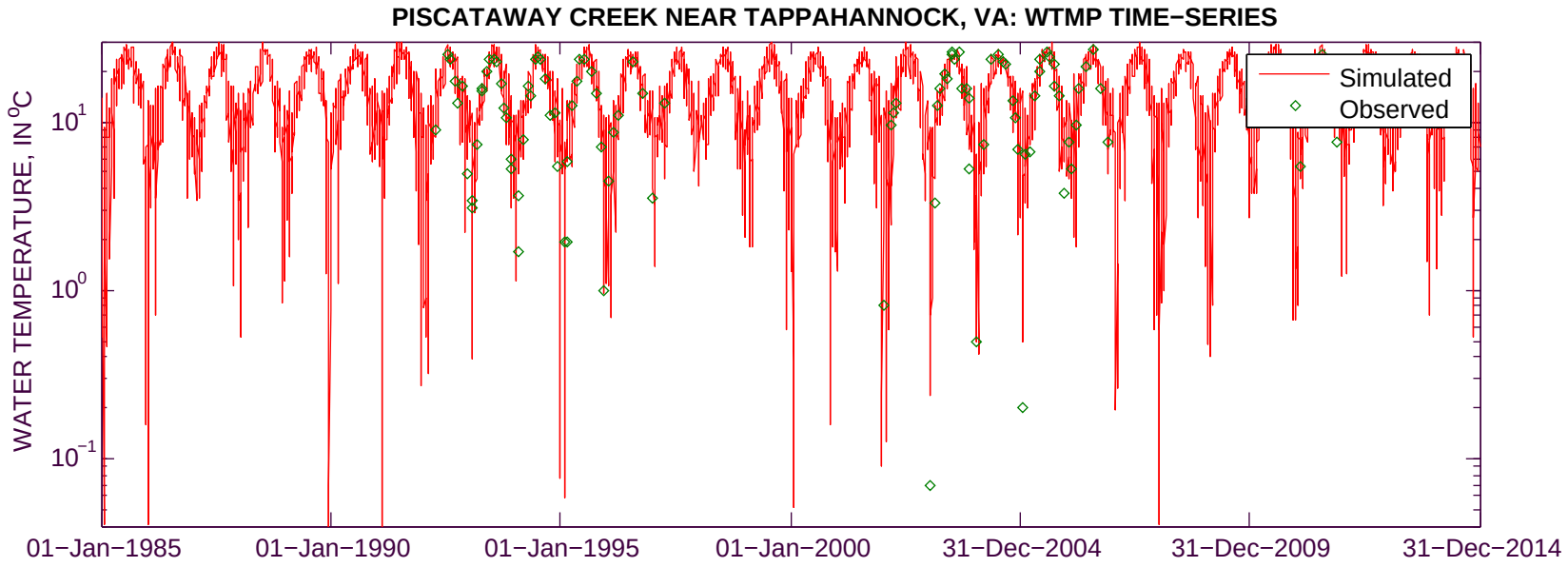
LOAD DATA
LOG10

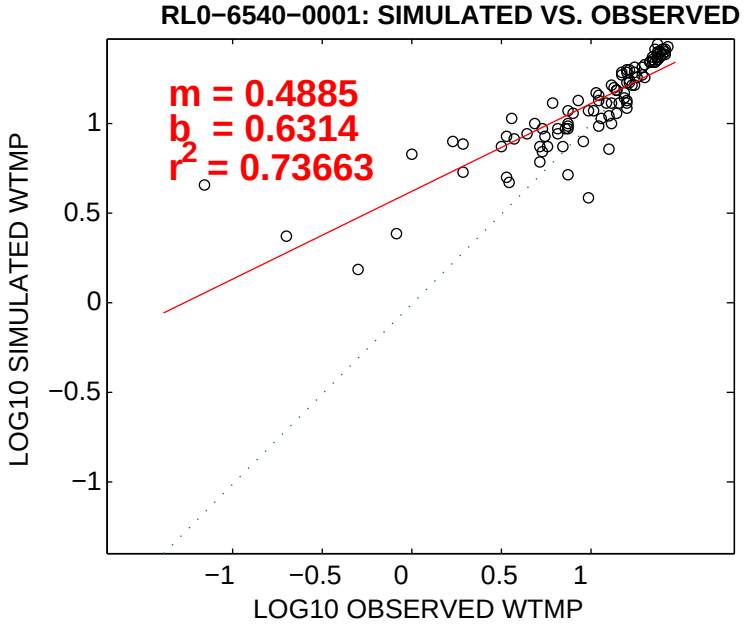


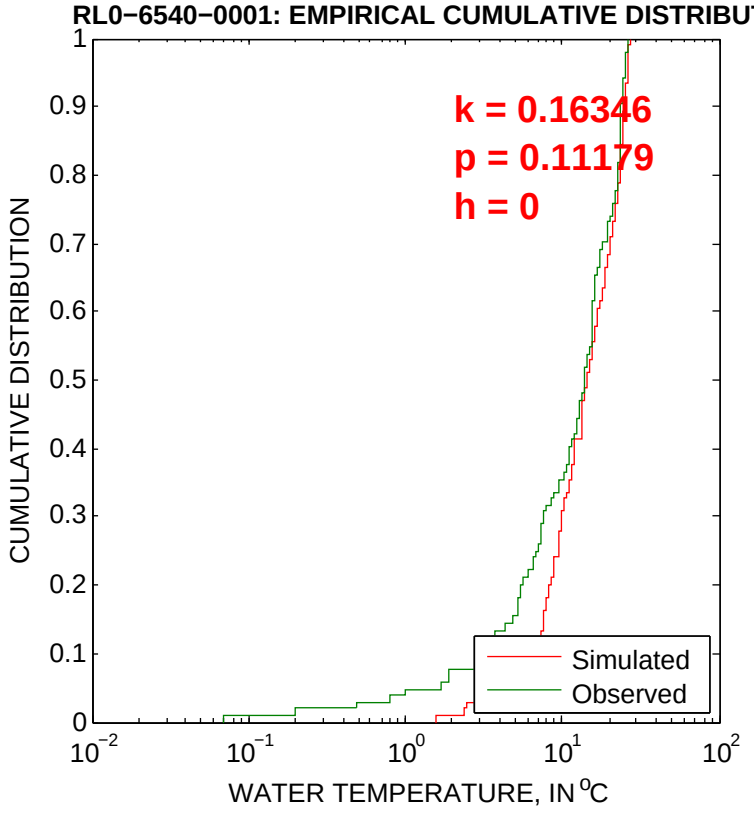












DATA SELECTION

scenario	file
P620171001WQ	WTMP.calib

plot: WTMP - water tempera...

Dates: 1/1/1985 – 12/31/201

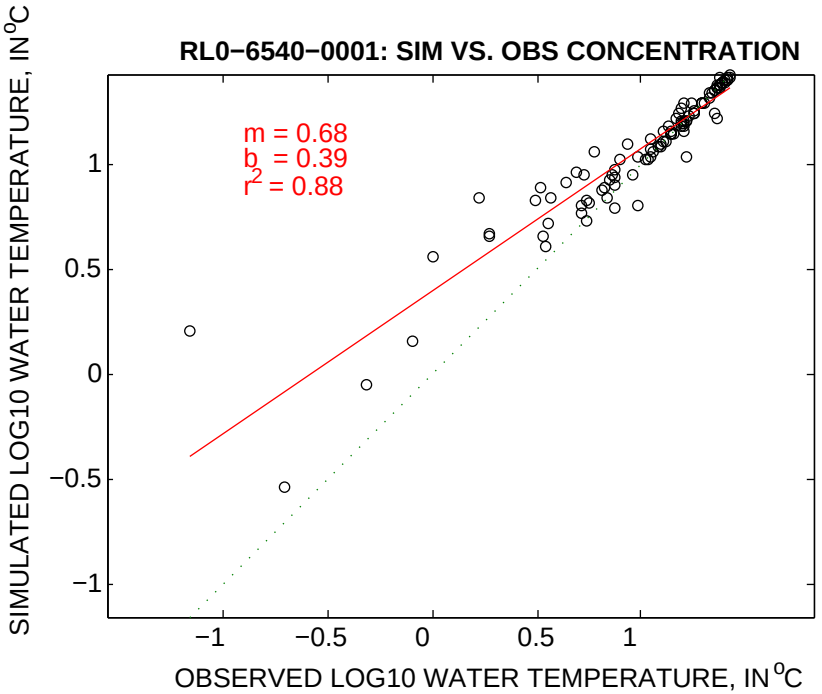
Drive	Directory	Observed
N/A	model	OBS20161101

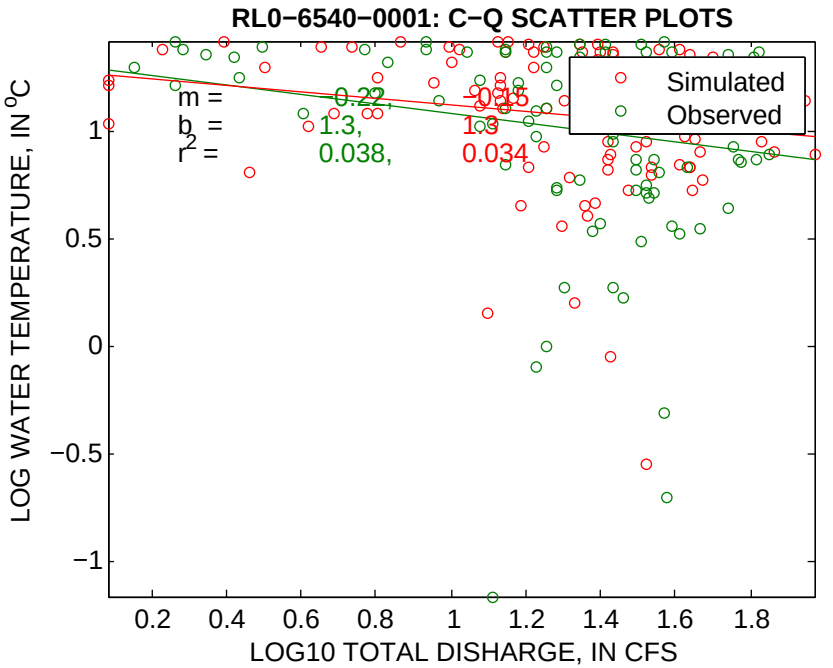
STATISTICS

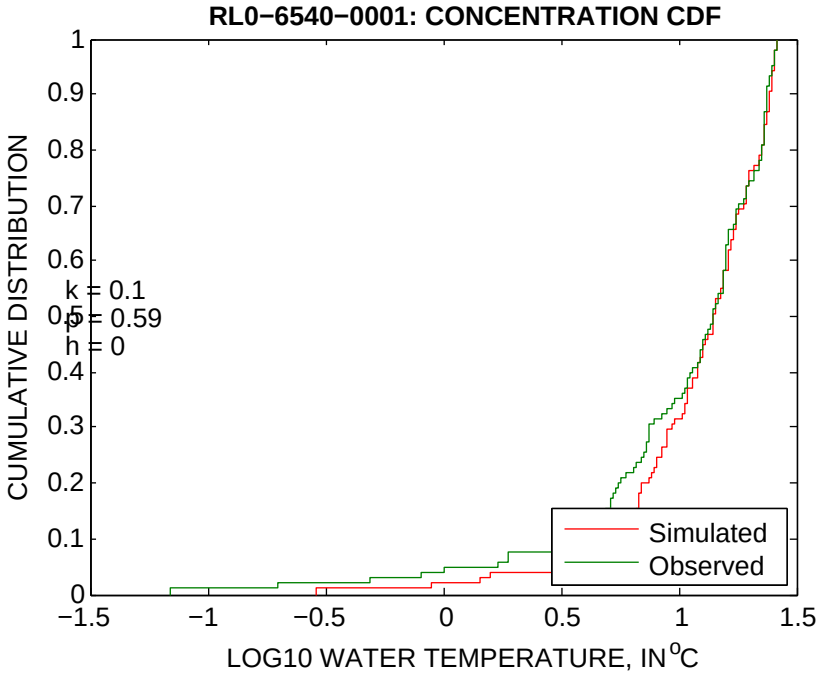
	n	104	104
		observe	simulate
min		0.07	1.5715
		-1.1549	0.196314
mean		13.6376	15.2078
		1.00324	1.12149
media		13.96	14.462
		1.14489	1.16019
max		26.4	27.703
		1.4216	1.44253
varian		59.5721	50.0975
		0.198178	0.0642008
JB		0.038839	0.040296
		0.001	0.001742
		ra	log
%		11.5139	11.7862
err.va		8.49751	0.0828751
rel.std.err		0.142642	0.418186
mod.eff		0.857358	0.581814

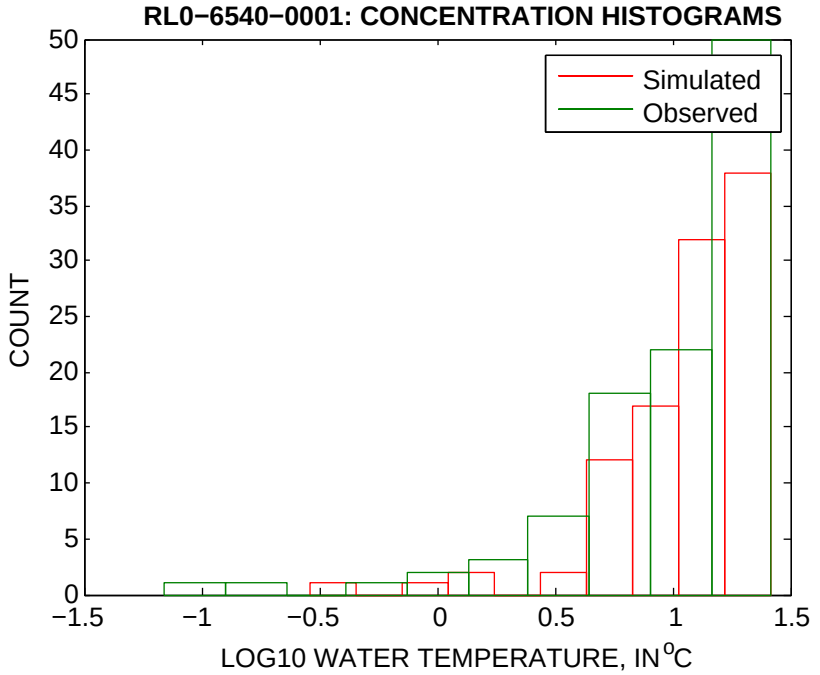
VERSION 2.1

ALL DATA
LOG10

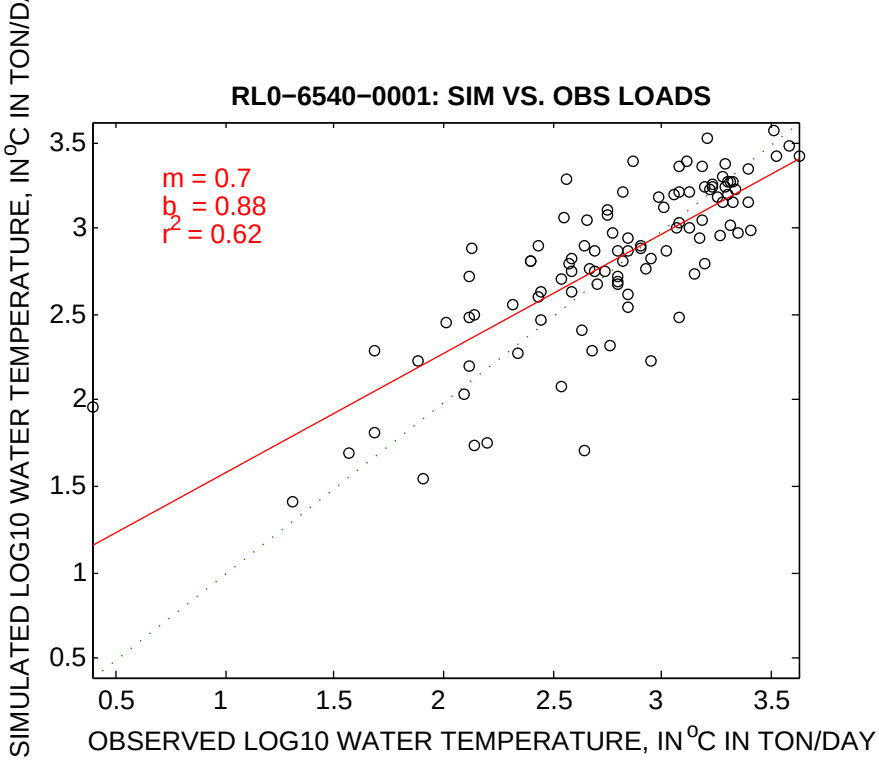


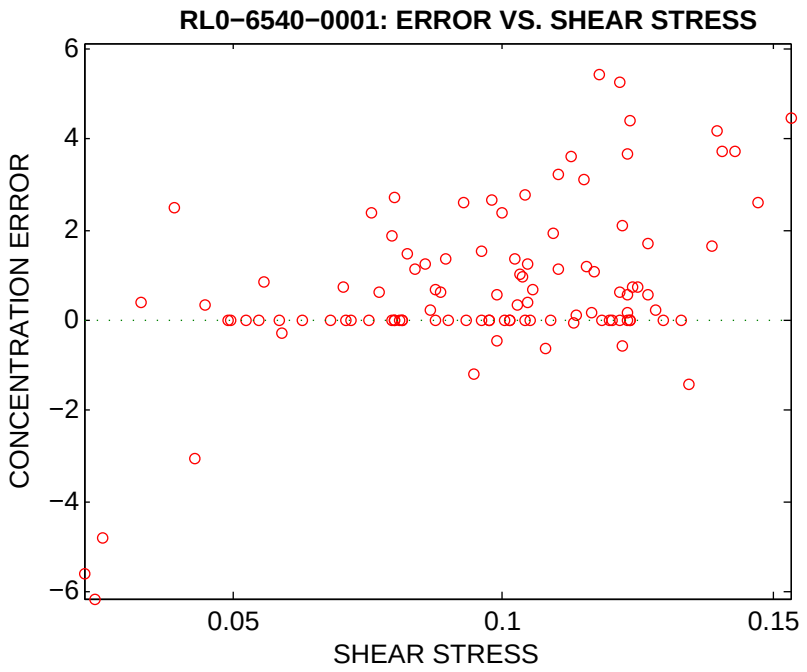


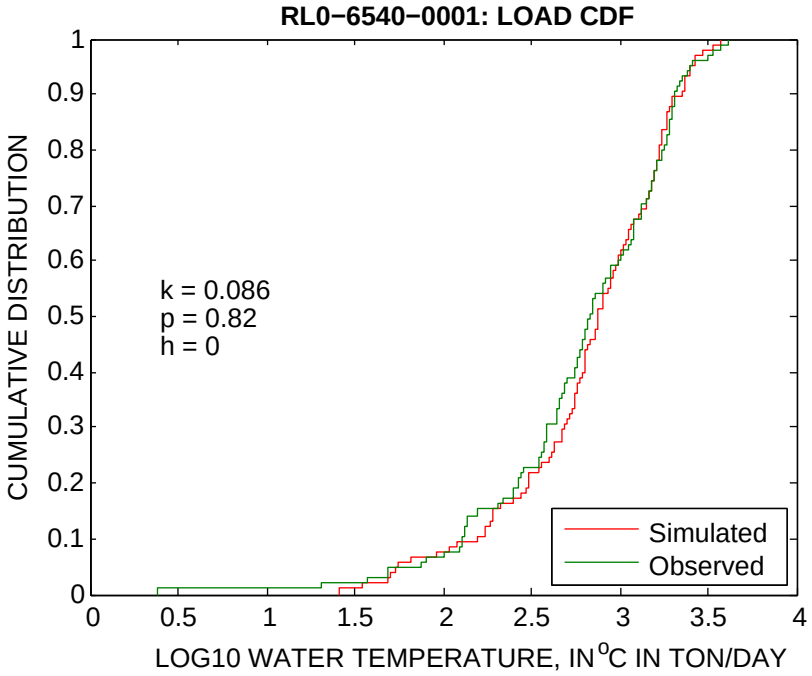


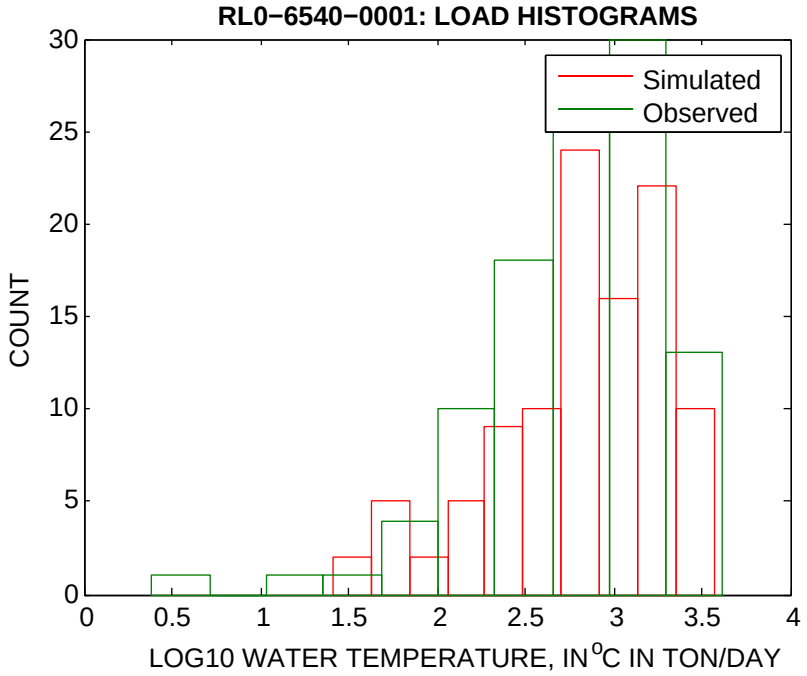


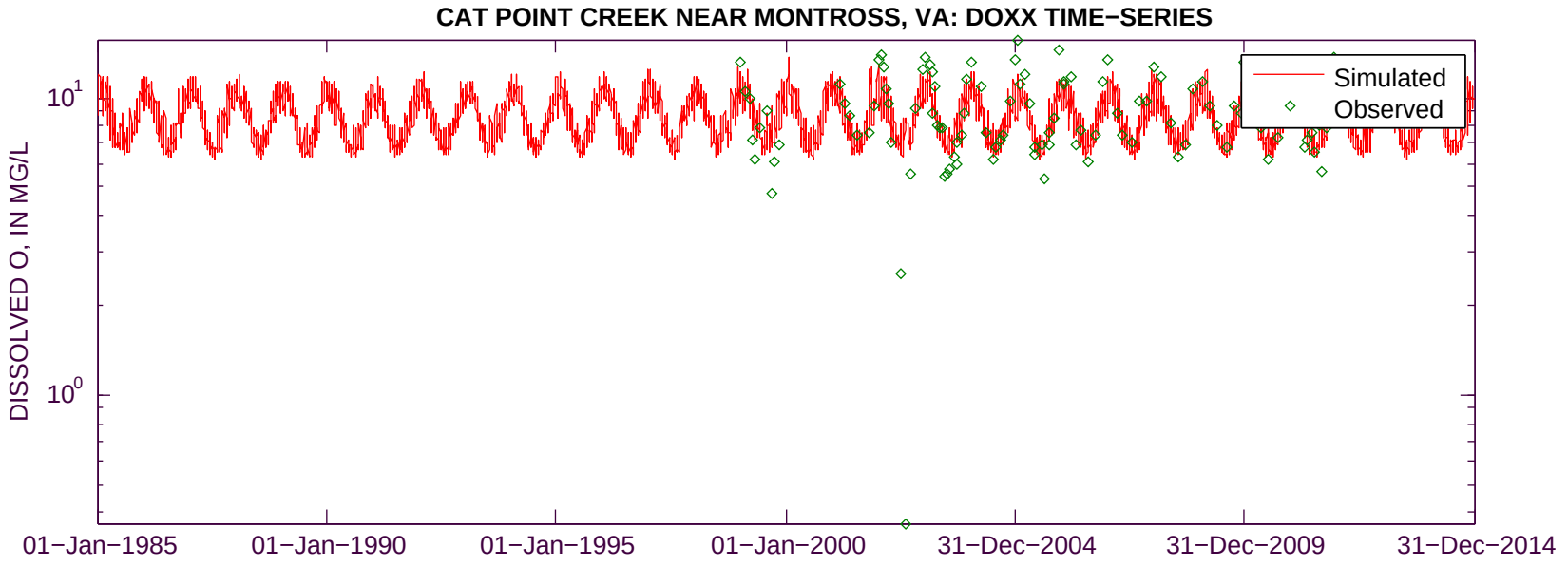
LOAD DATA
LOG10

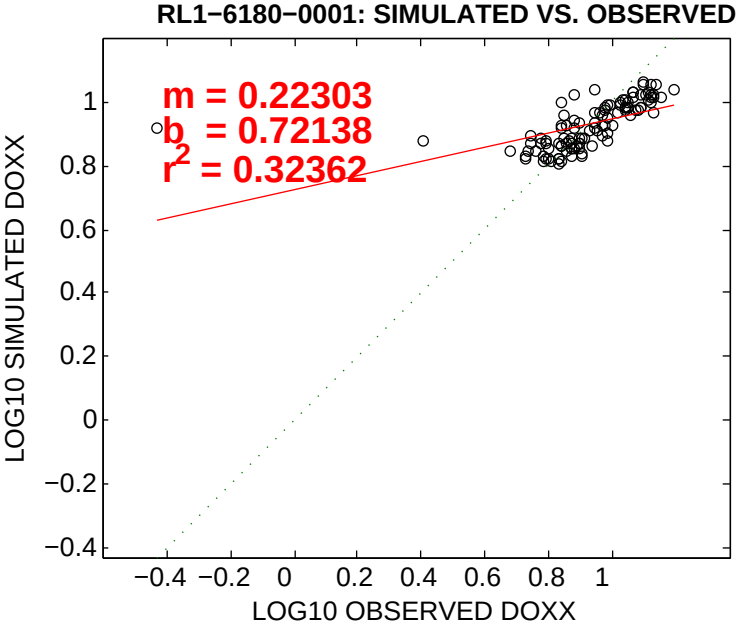


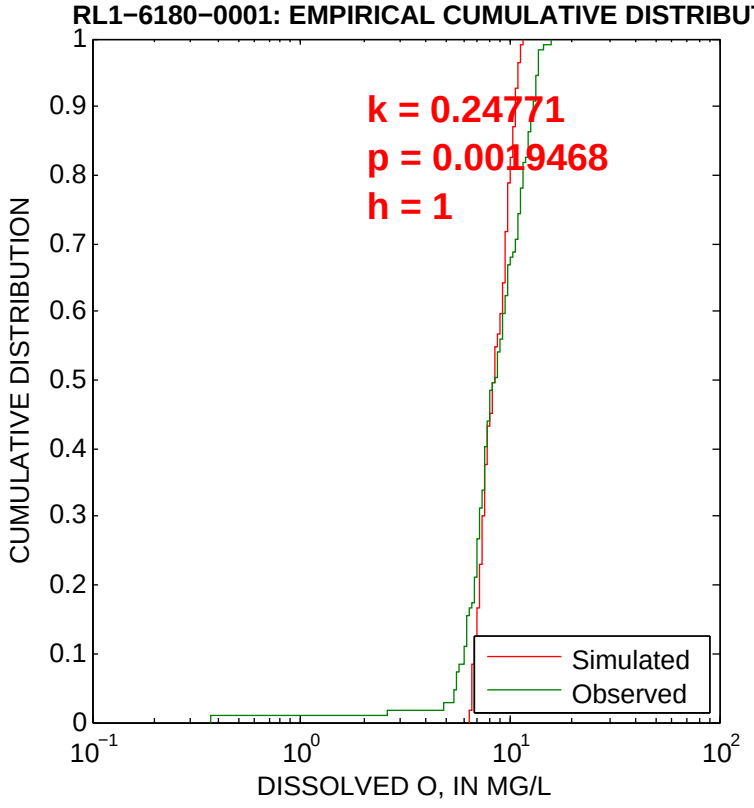












DATA SELECTION

scenario: P620171001WQ | file: DOXX.calib

plot: DOXX - dissolved oxygen

Dates: 1/1/1985 – 12/31/201

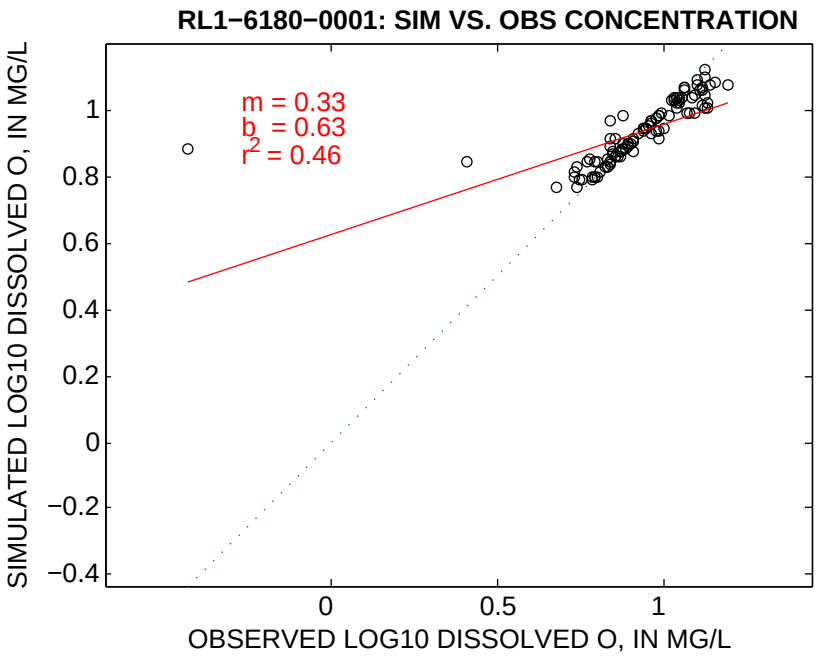
Drive: N/A | Directory: model | Observed: OBS20161101

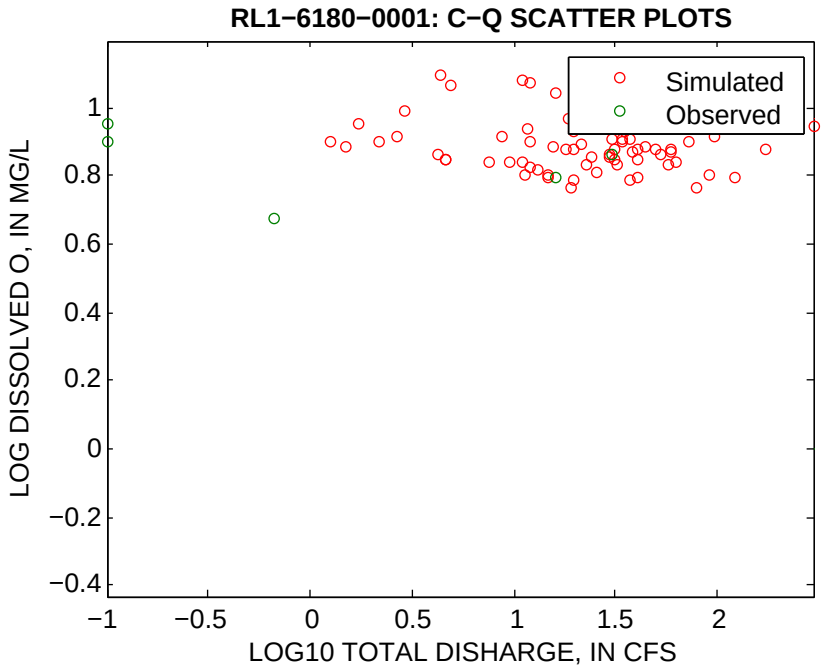
STATISTICS

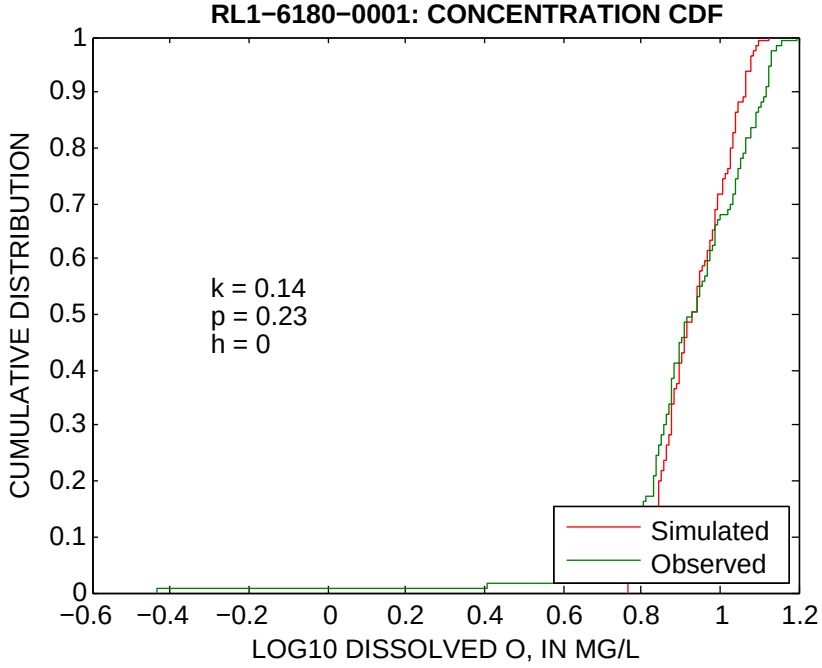
	n	109	109
		observe	simulate
min		0.37	6.4431
		-0.431798	0.809095
mean		8.97899	8.58692
		0.92557	0.927806
media		8.46	8.4762
		0.92737	0.928201
max		15.73	11.483
		1.19673	1.06006
varian		7.57193	2.07656
		0.0343548	0.00528057
JB	☑	0.5	0.025824
	☐	0.001	0.026315
		ra	log
%		-4.3665	0.241555
err.va		3.45711	0.0243161
rel.std.err		0.45657	0.707794
mod.eff		0.54343	0.292206

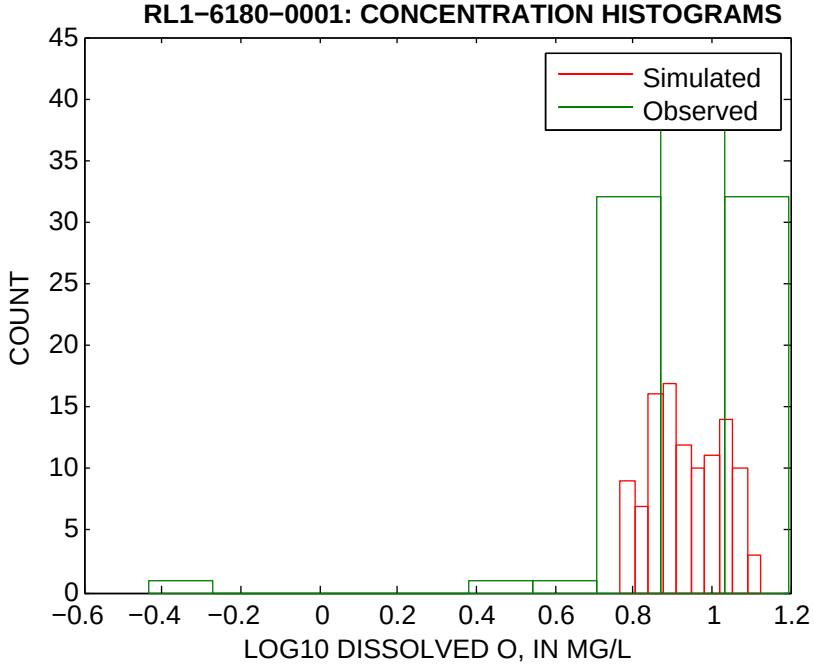
VERSION 2.1

ALL DATA
LOG10

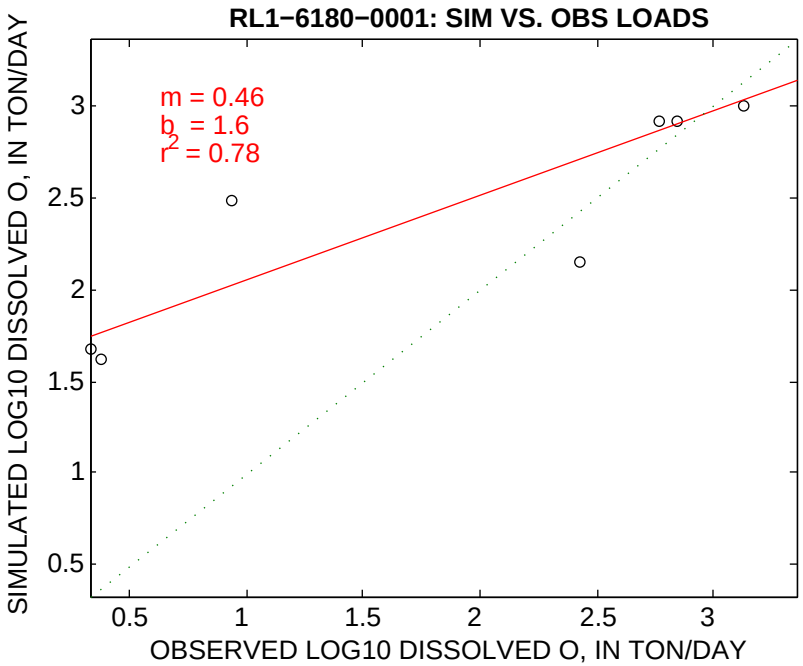


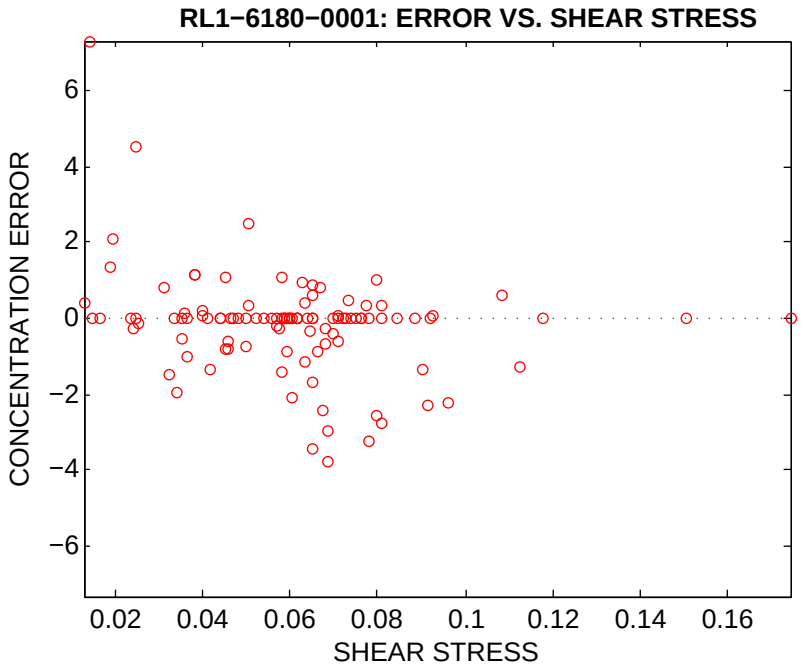


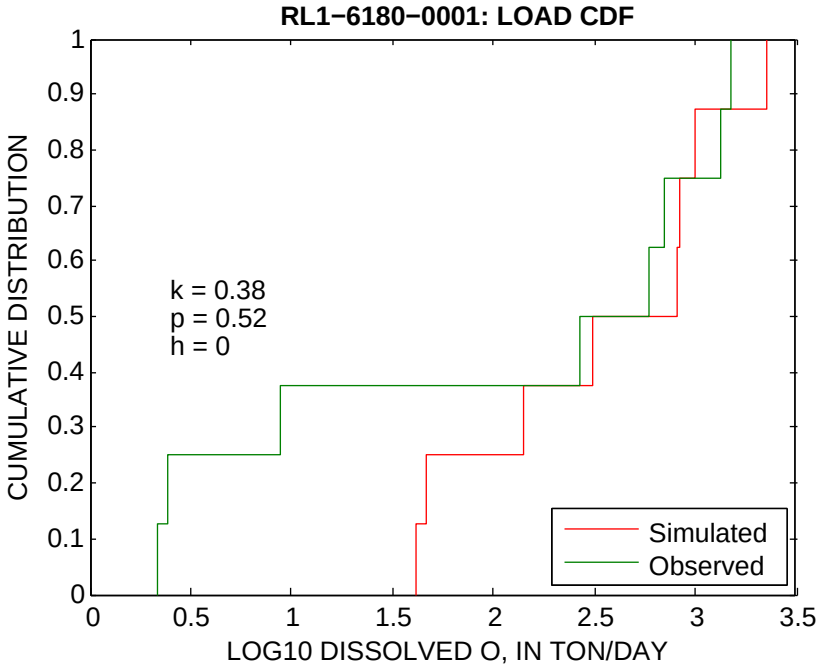


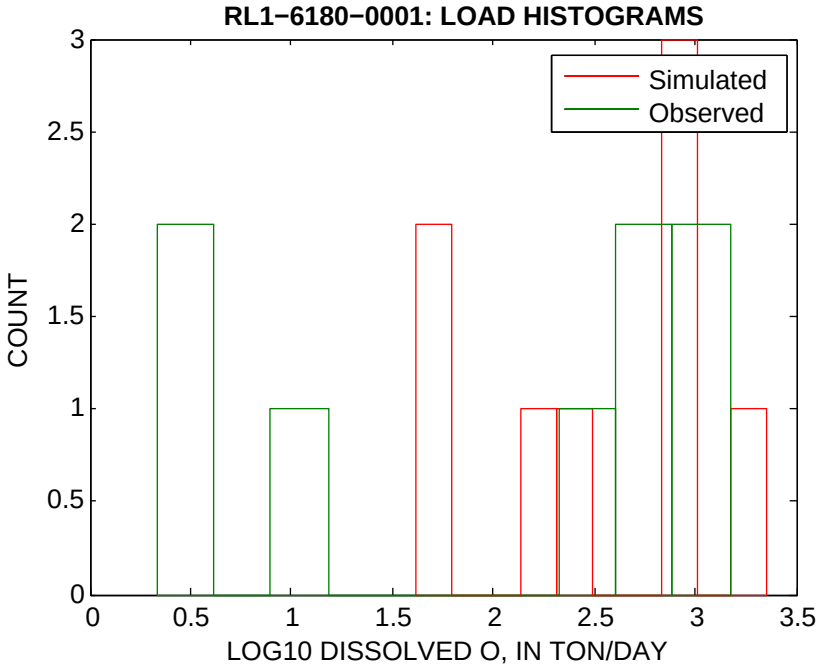


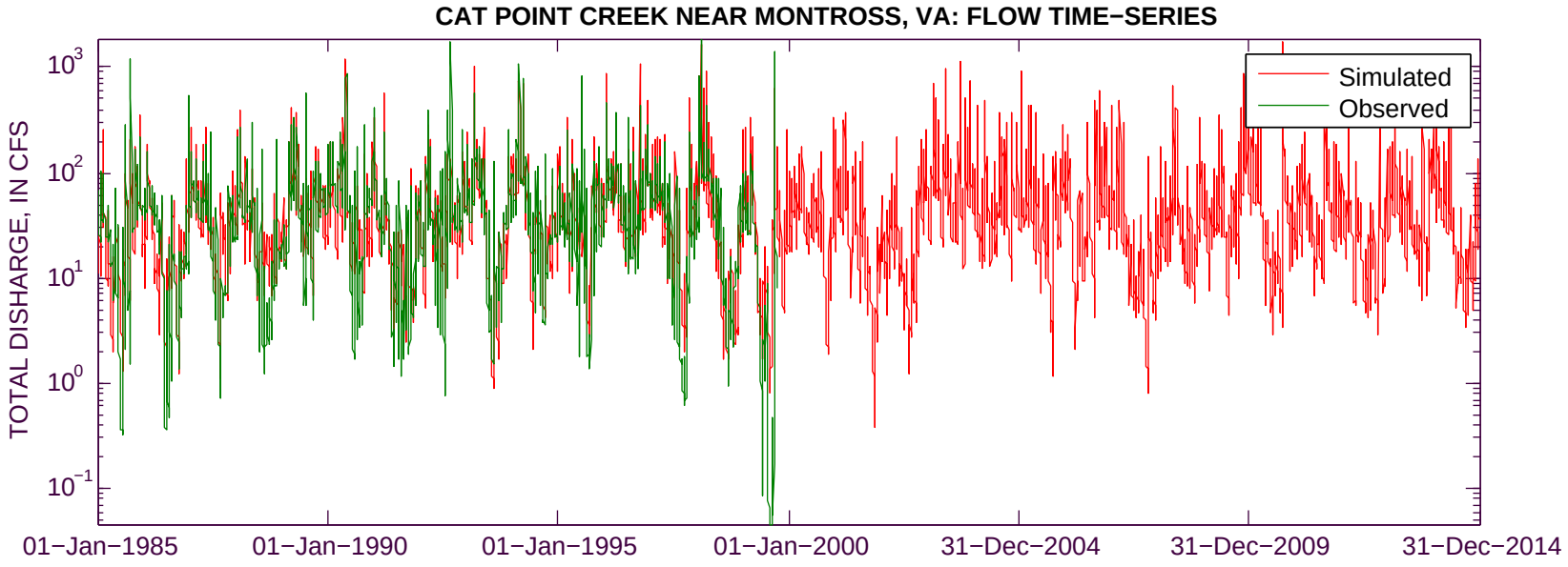
LOAD DATA
LOG10

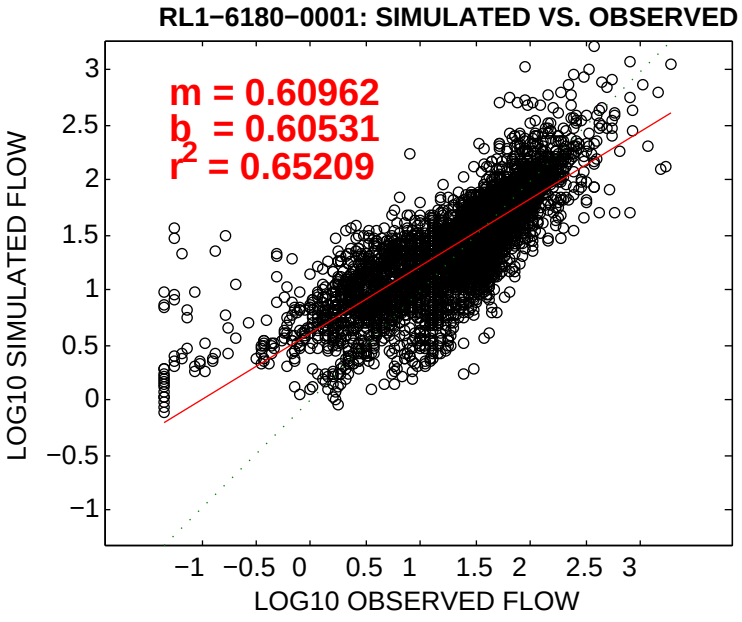


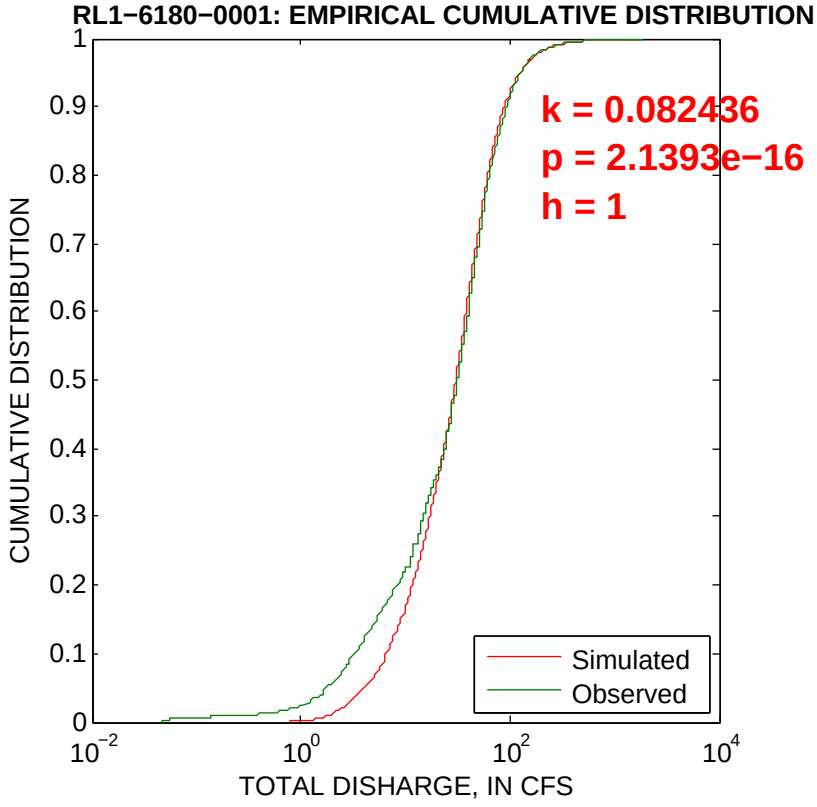












DATA SELECTION

scenario: P620171001WQ | file: FLOW.calib

plot: FLOW - total discharge

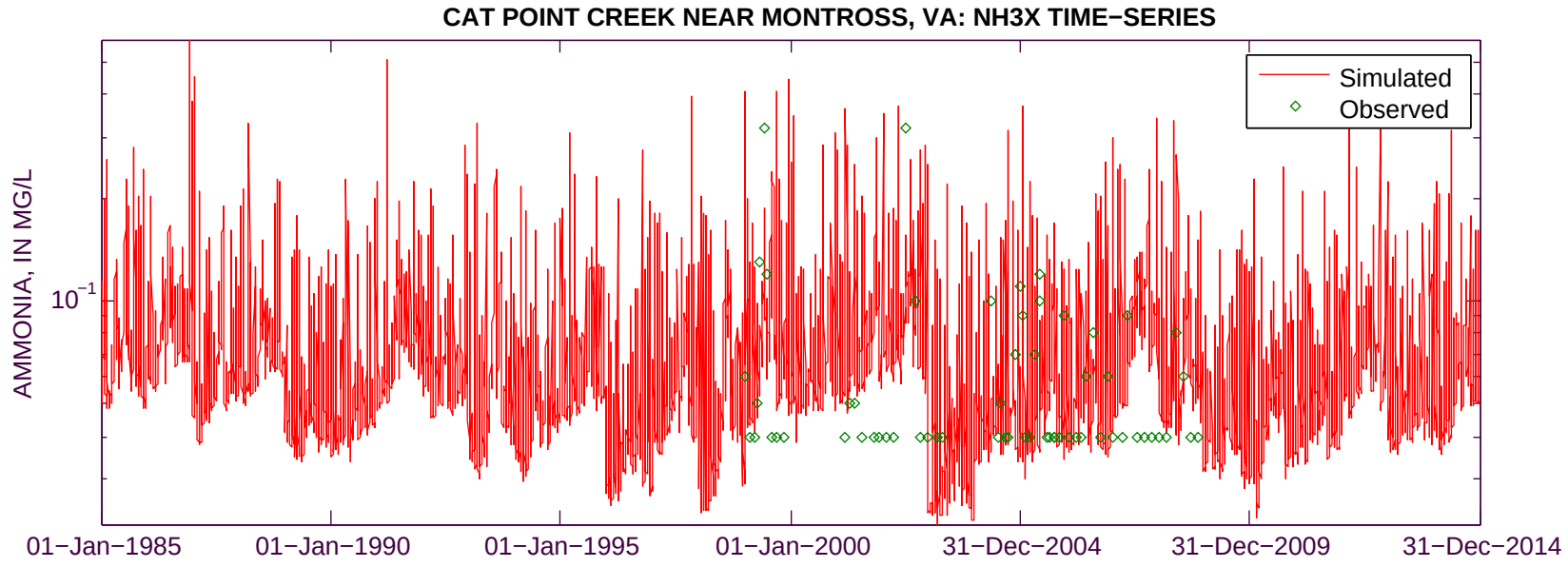
Dates: 1/1/1985 – 12/31/201

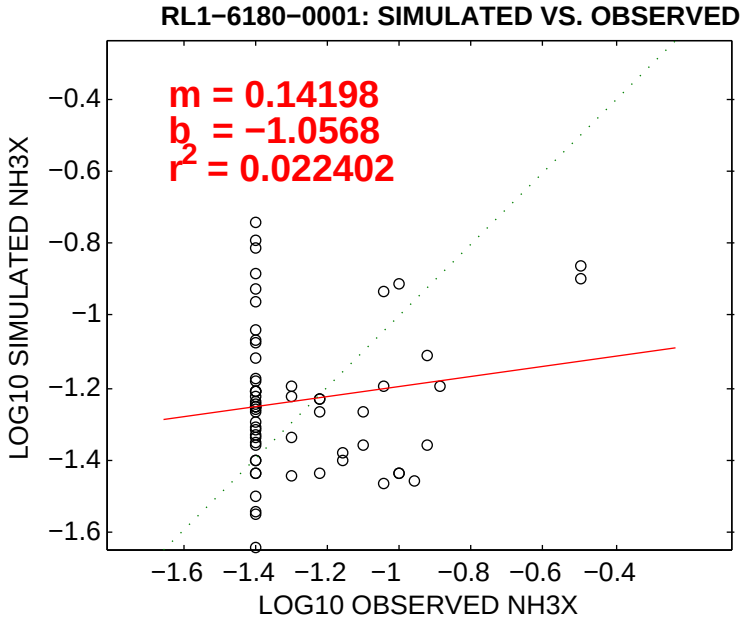
Drive: N/A | Directory: model | Observed: OBS20161101

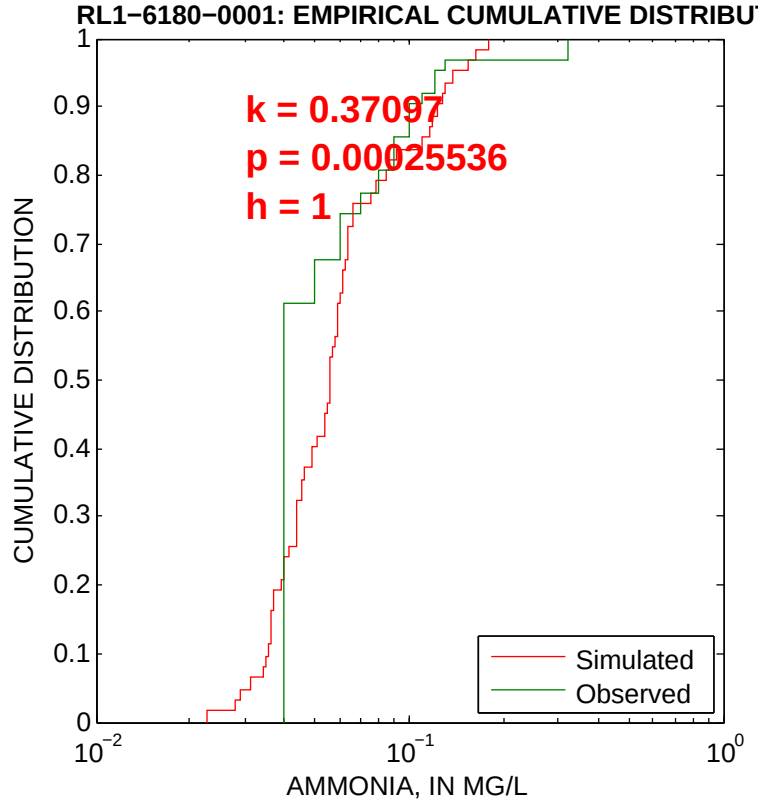
STATISTICS

	observe	simulate
n	5386	5386
min	0.0460204	0.78604
	-1.33705	-0.104555
mean	46.0276	45.7343
	1.36337	1.43645
media	31.046	30.4845
	1.49201	1.48408
max	1890.05	1657.4
	3.27647	3.21943
varian	5710.2	4770.35
	0.356717	0.203299
JB	0.001	0.001
	0.001	0.001
	ra	log
%	-0.63716	5.3602
err.va	3797.26	0.130433
rel.std.err	0.664996	0.365648
mod.eff	0.335004	0.634352

VERSION 2.1







DATA SELECTION

scenario	file
P620171001WQ	NH3X.calib

plot: NH3X - ammonia

Dates: 1/1/1985 – 12/31/201

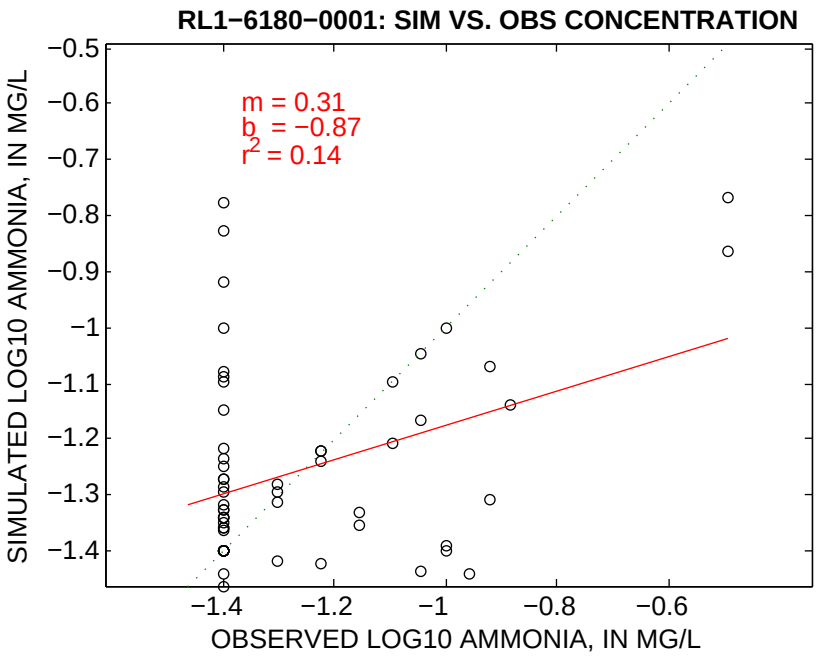
Drive	Directory	Observed
N/A	model	OBS20161101

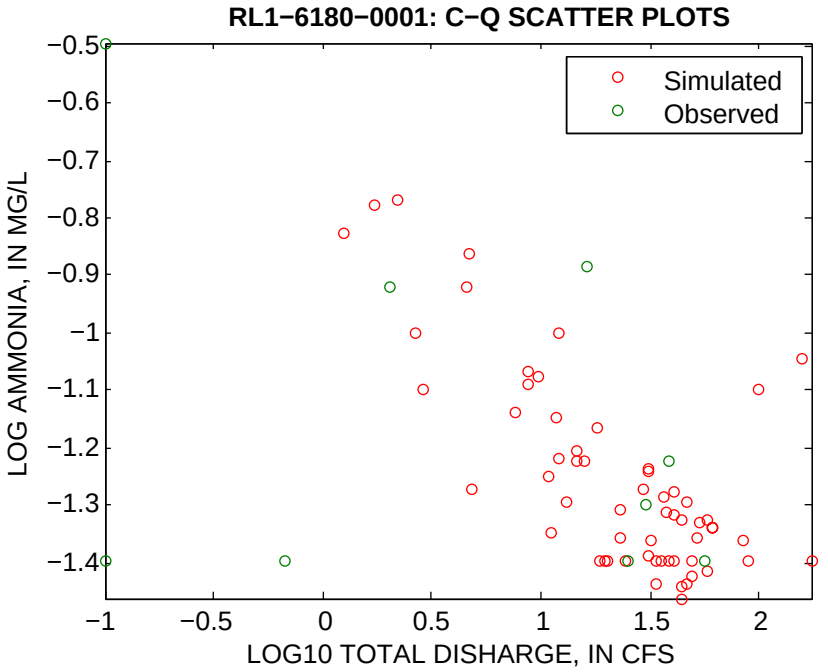
STATISTICS

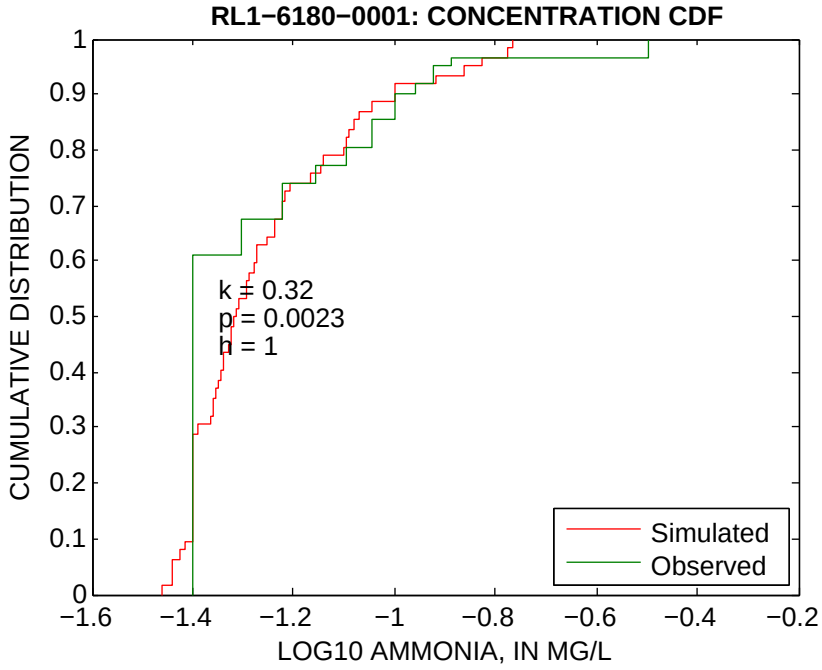
	n	62	62
		observe	simulate
min		0.04	0.022649
		-1.39794	-1.64495
mean		0.0637097	0.0651397
		-1.26662	-1.23665
media		0.04	0.0555345
		-1.39794	-1.25544
max		0.32	0.18011
		-0.49485	-0.744462
varian		0.00283683	0.00124914
		0.0455794	0.0410161
JB		0.001	0.001215
		0.001	0.076359
		ra	log
%		2.24456	-2.36559
err.va		0.00307339	0.0745649
rel.std.err		1.08339	1.63594
mod.eff		-0.0833874	-0.635936

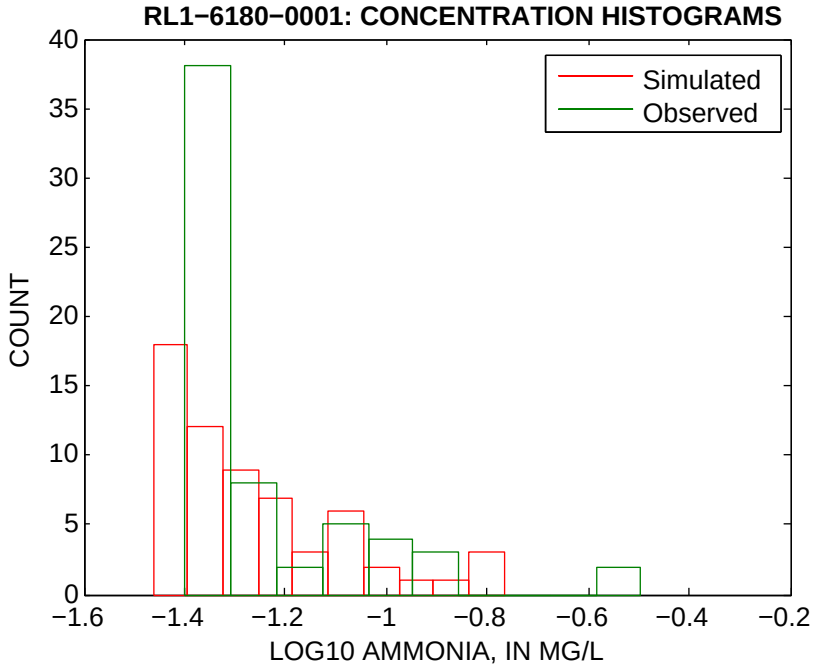
VERSION 2.1

ALL DATA
LOG10

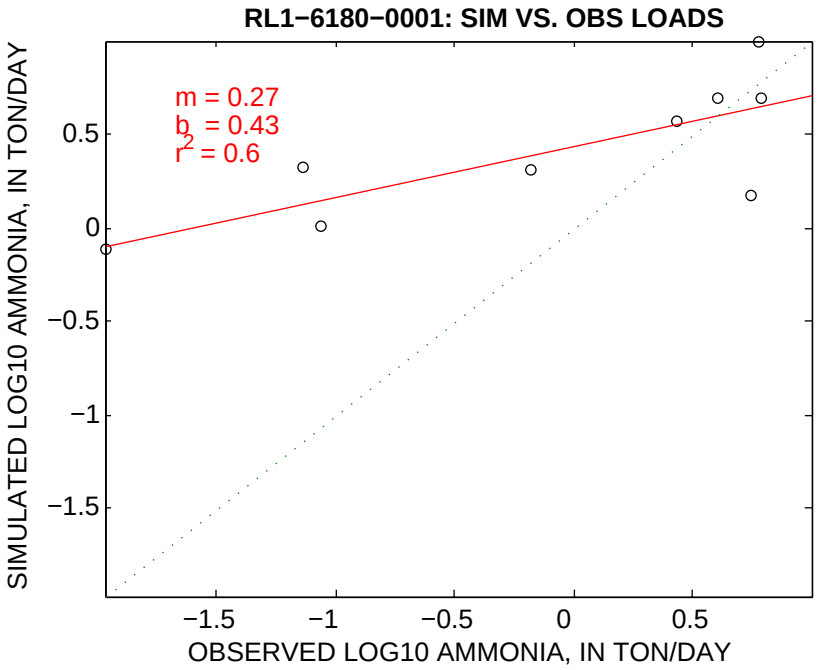


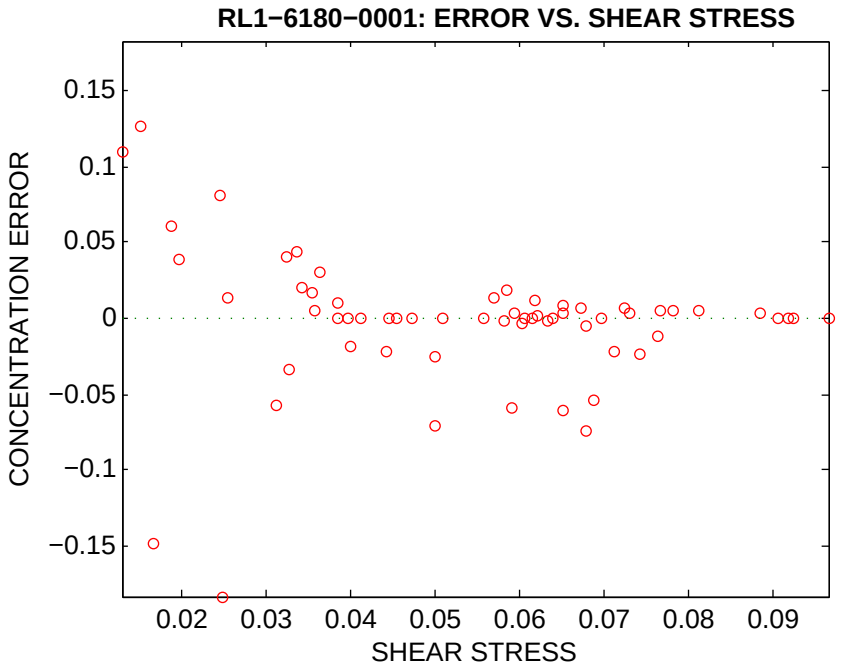


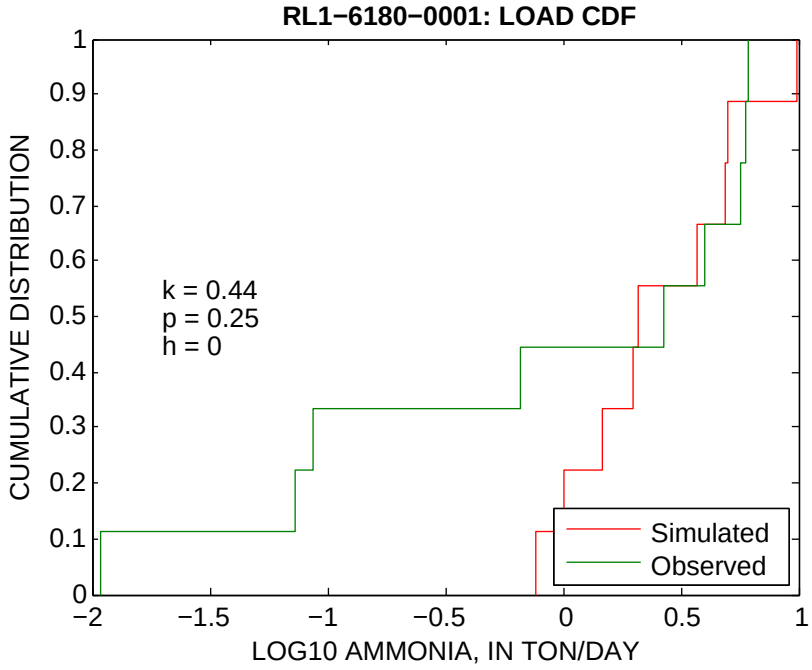


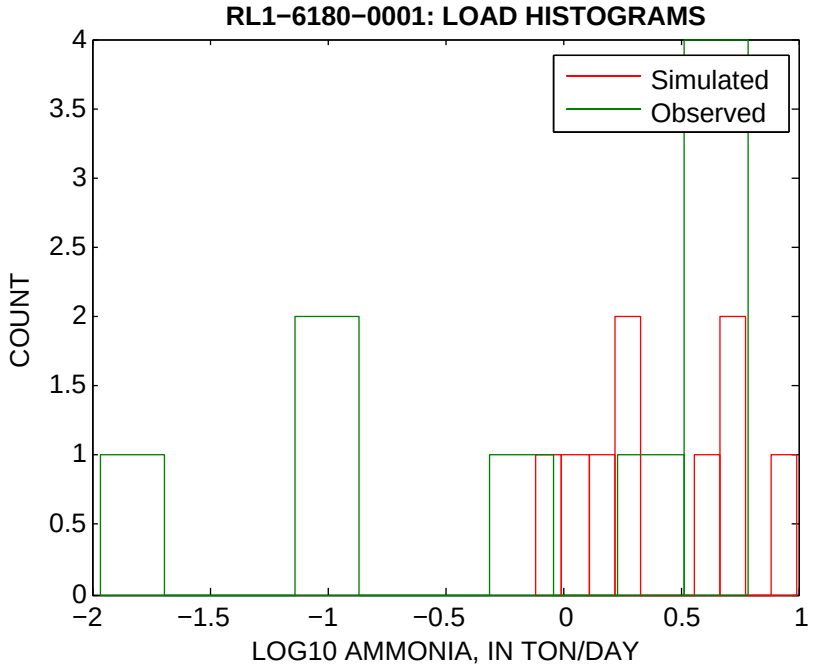


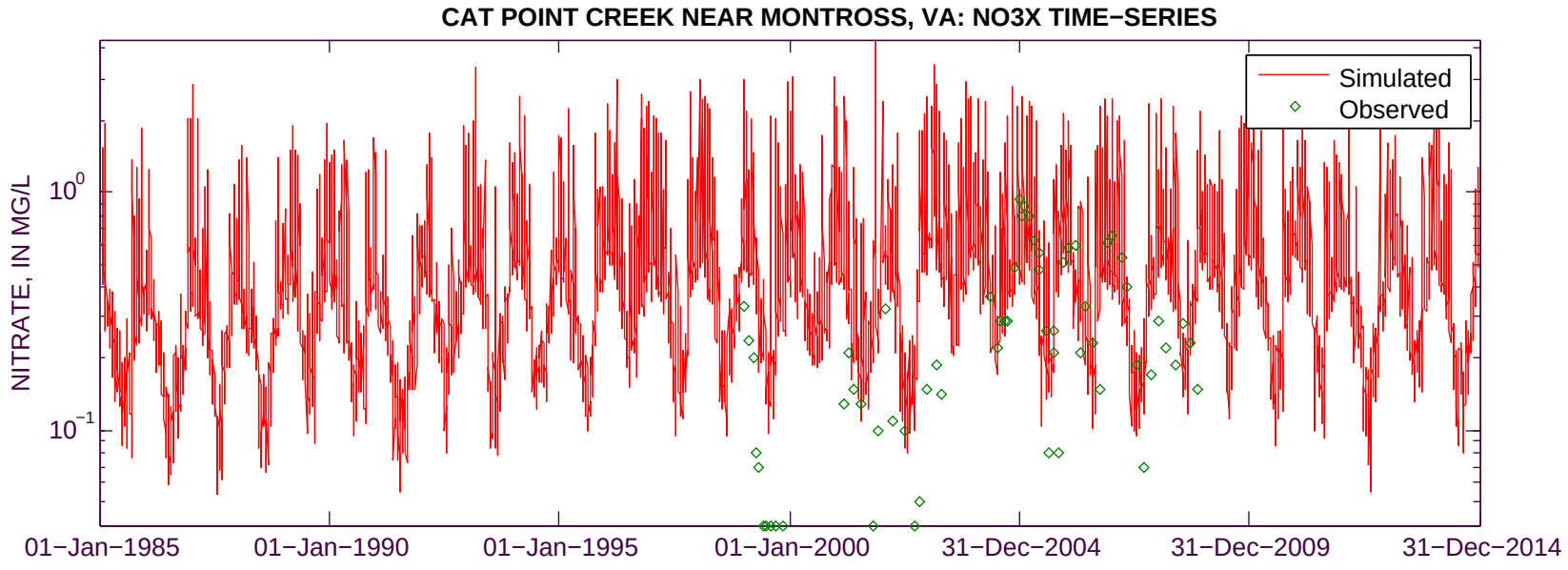
LOAD DATA
LOG10

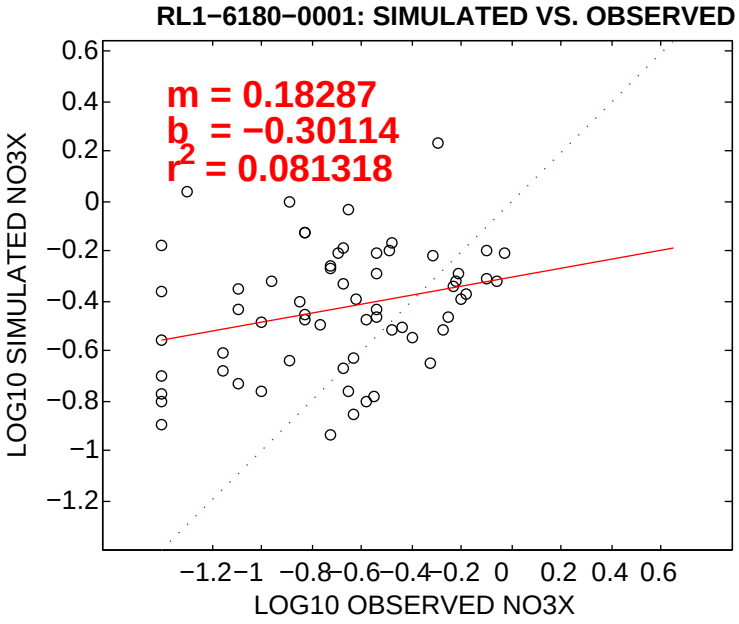


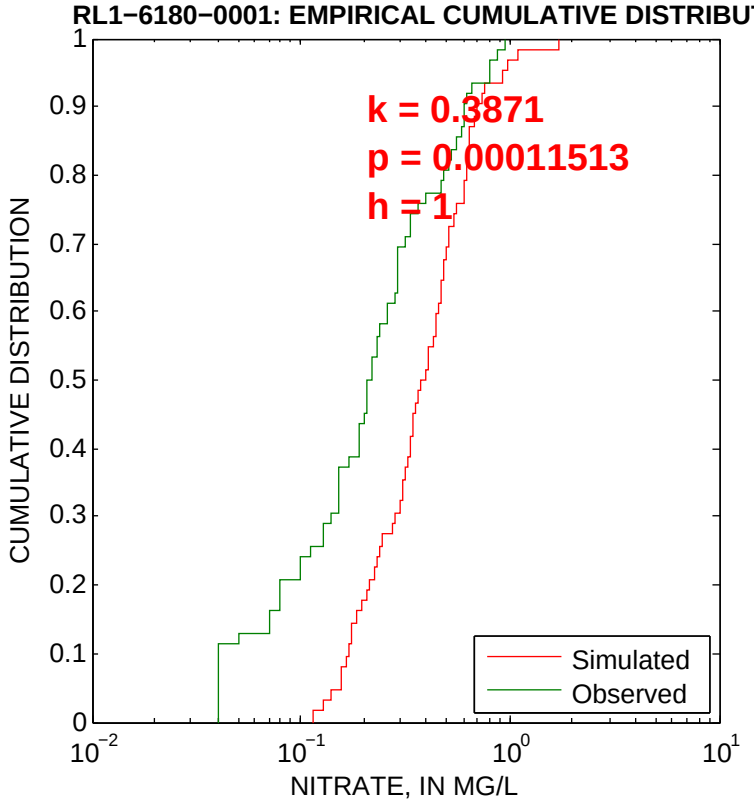












DATA SELECTION

scenario	file
P620171001WQ	NO3X.calib

plot: NO3X - nitrate

Dates: 1/1/1985 – 12/31/201

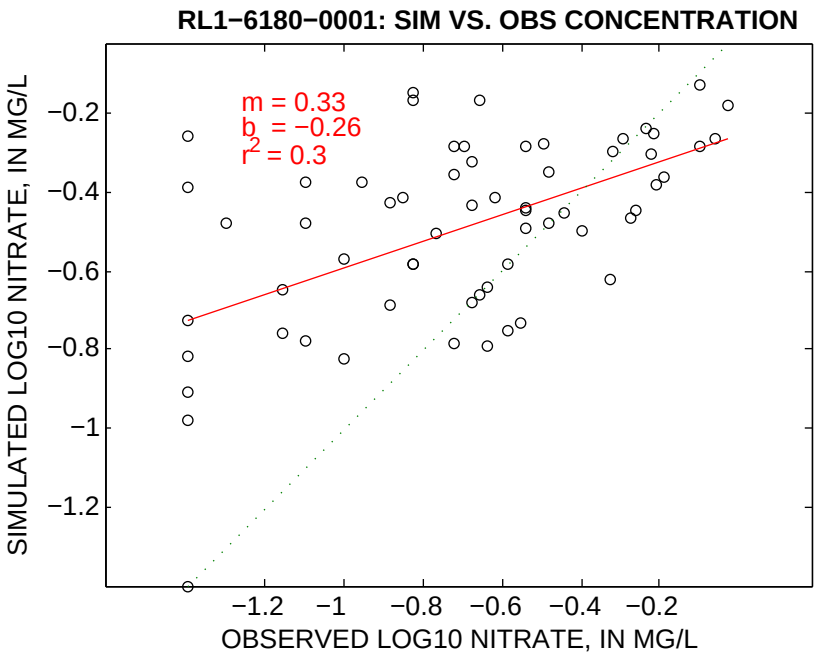
Drive	Directory	Observed
N/A	model	OBS20161101

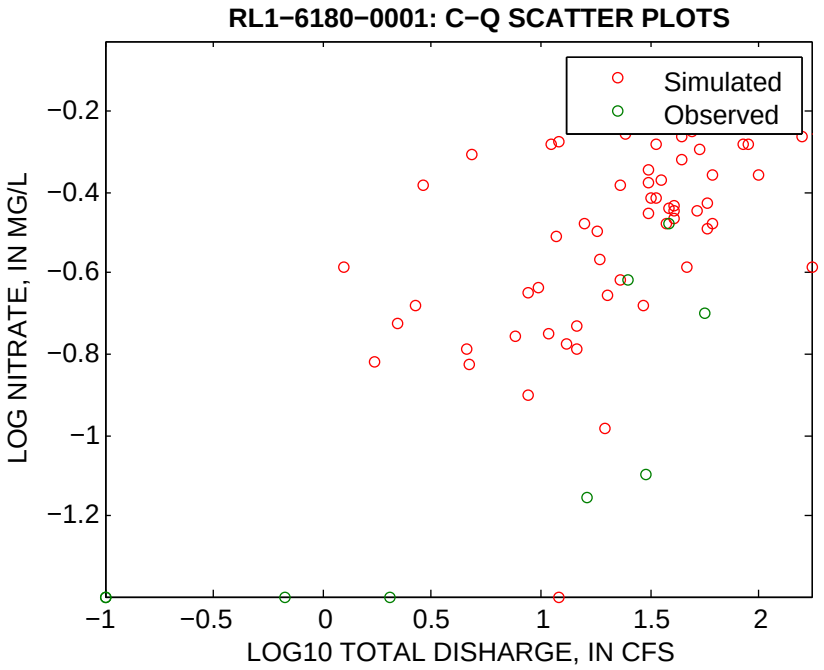
STATISTICS

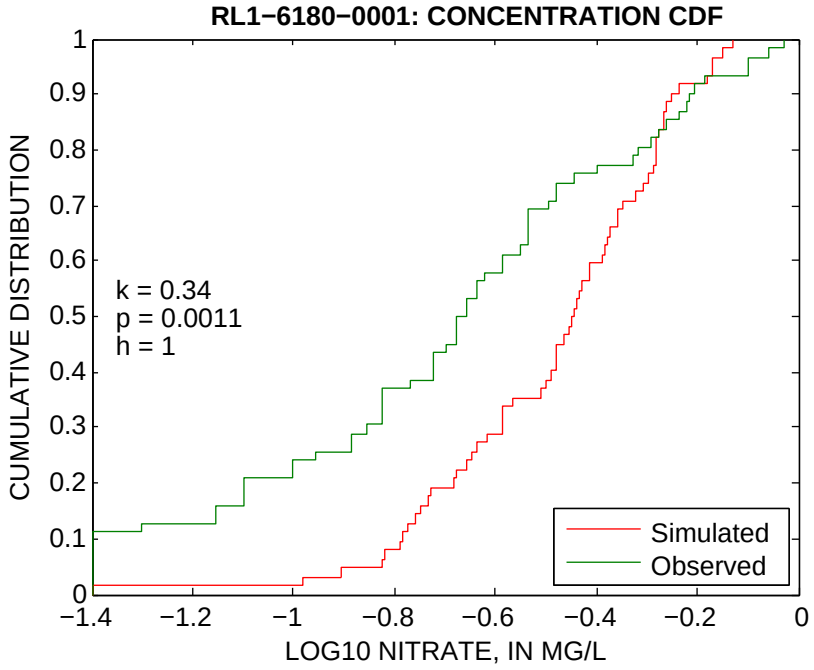
	n	62	62
		observe	simulate
min		0.04	0.11555
		-1.39794	-0.93723
mean		0.28129	0.43714
		-0.700655	-0.42927
media		0.215	0.384795
		-0.667679	-0.415051
max		0.94	1.7158
		-0.0268721	0.234467
varian		0.0513557	0.0737335
		0.149672	0.0615487
JB		0.006894	0.001
		0.196343	0.5
		ra	log
%		55.4053	-38.733
err.va		0.125507	0.231338
rel.std.err		2.44388	1.54563
mod.eff		-1.44388	-0.545634

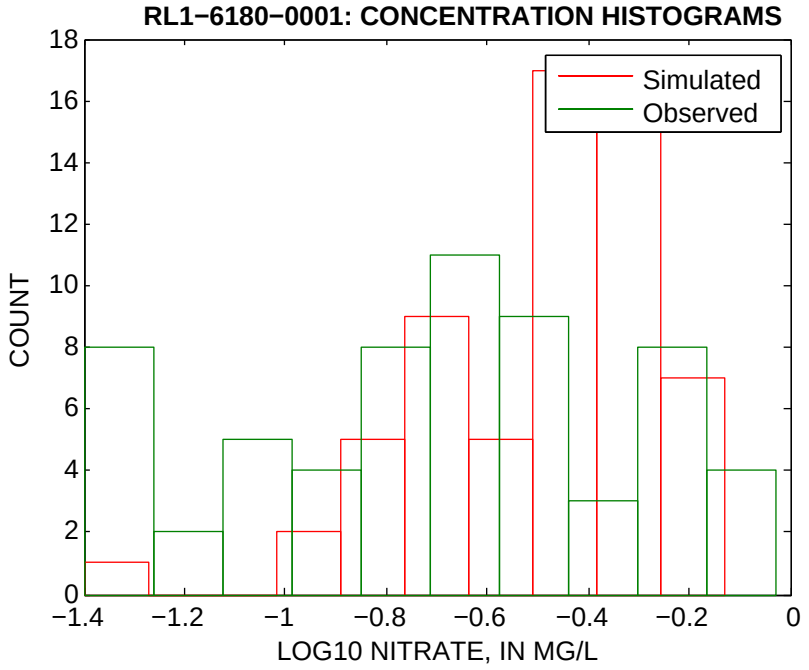
VERSION 2.1

ALL DATA
LOG10

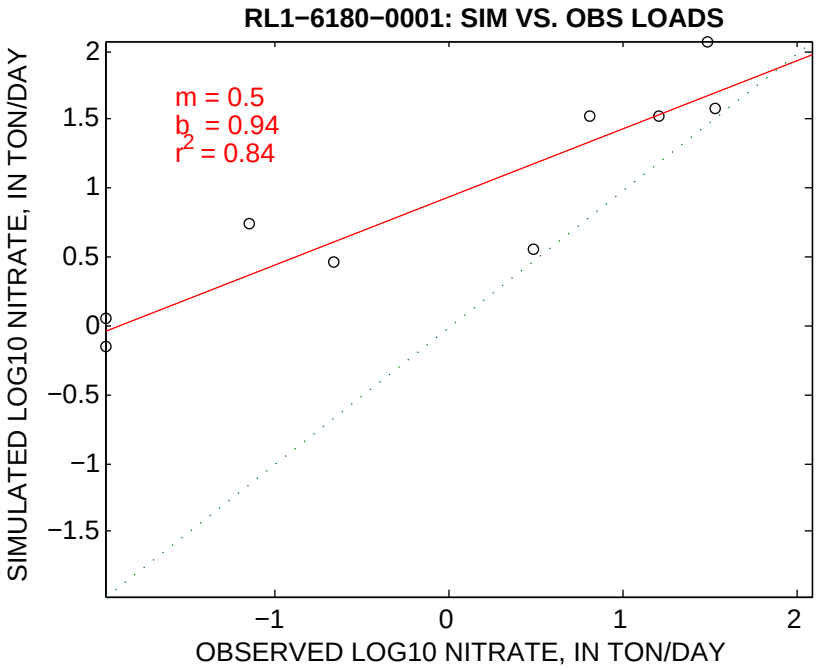


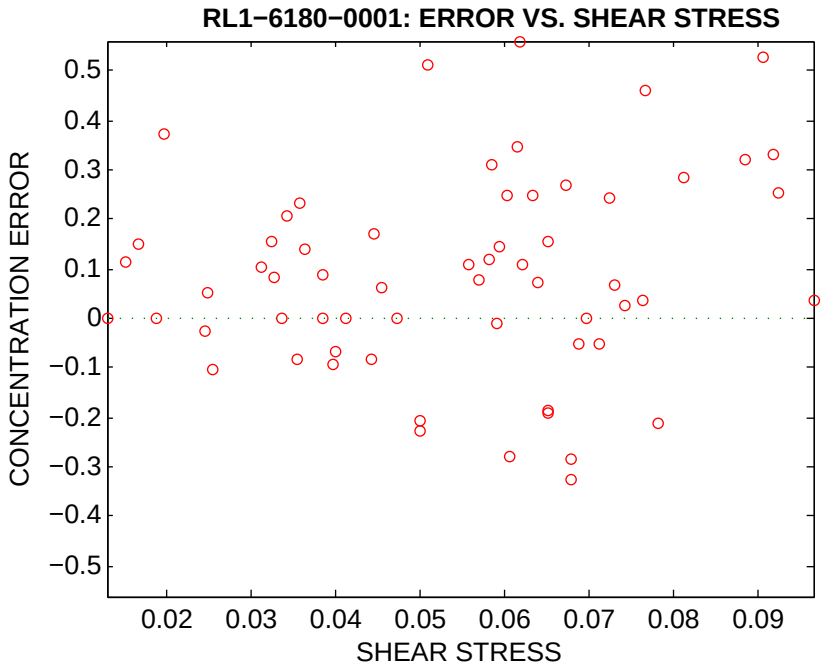


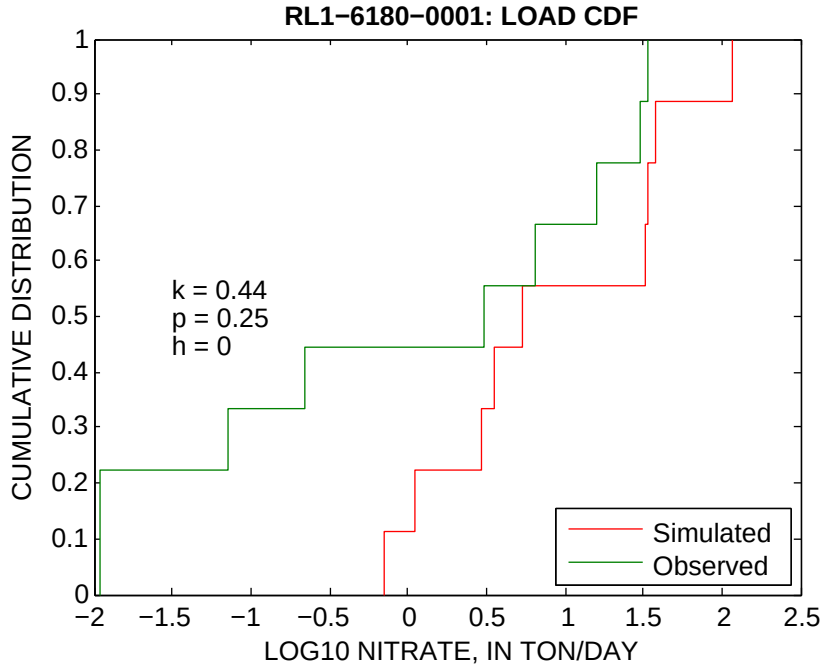


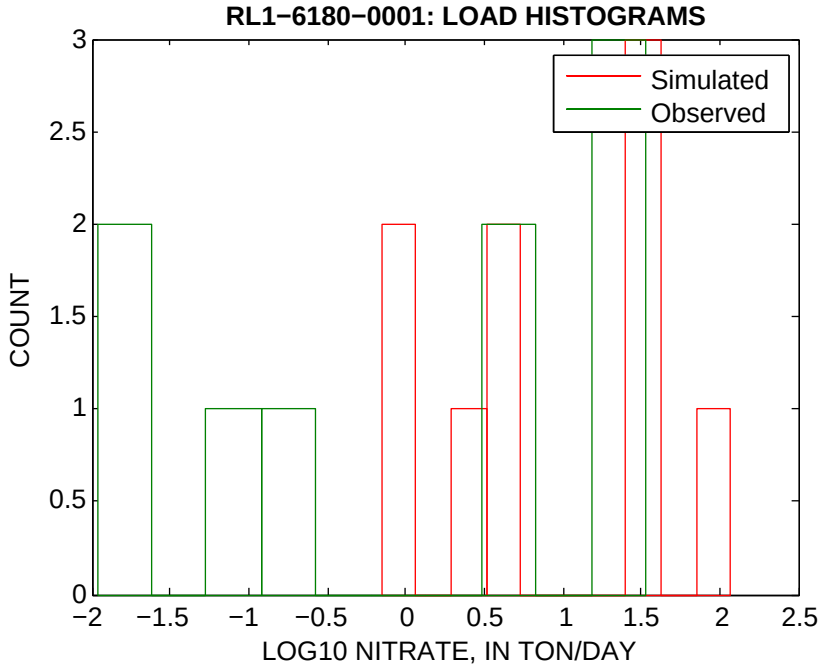


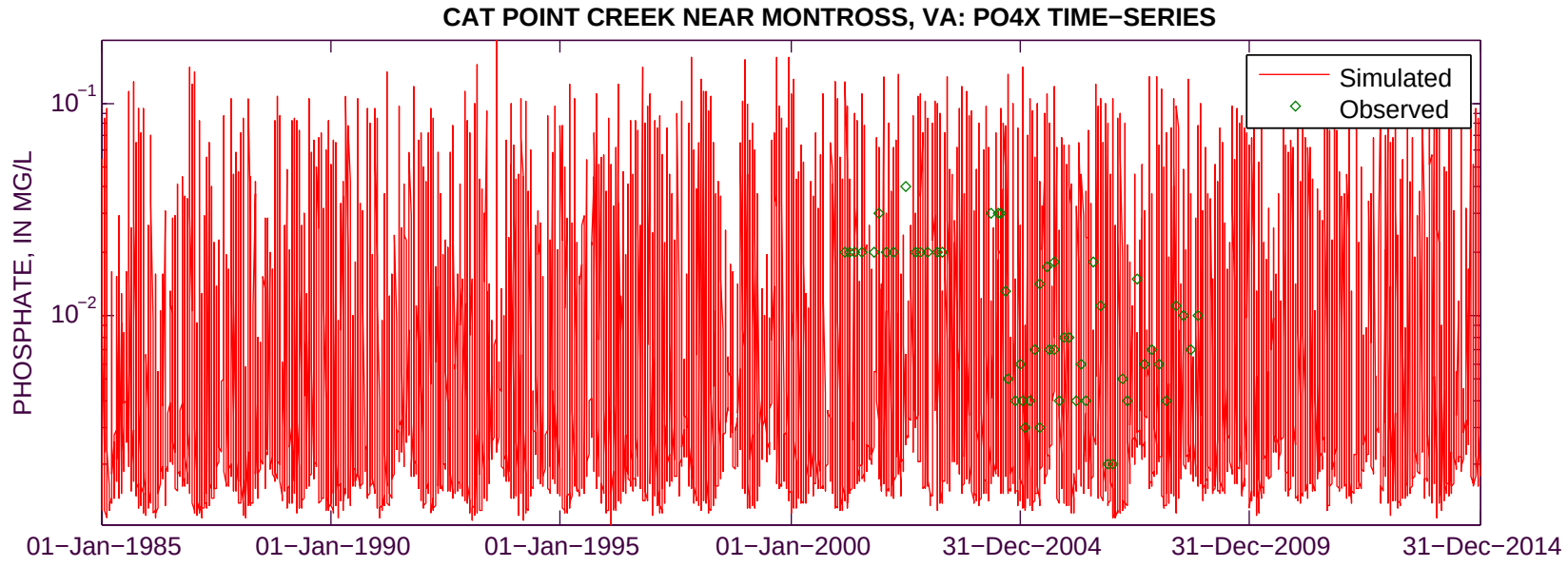
LOAD DATA
LOG10

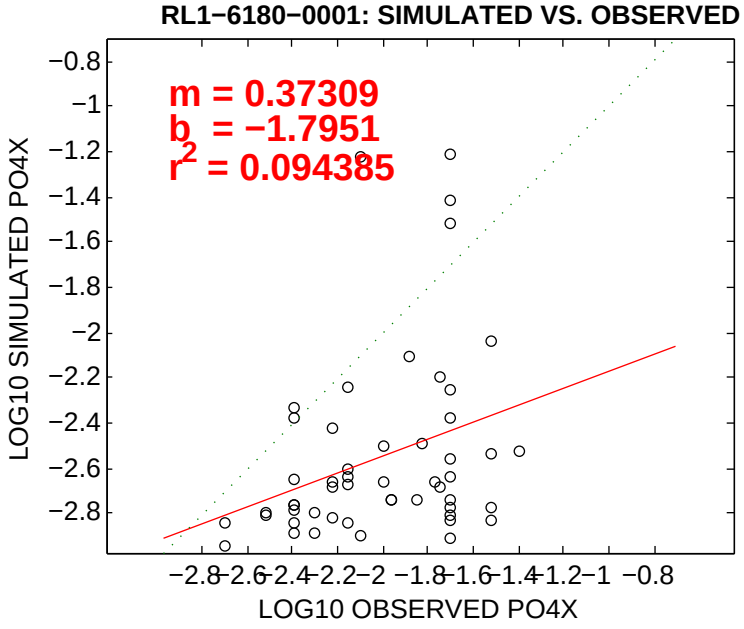


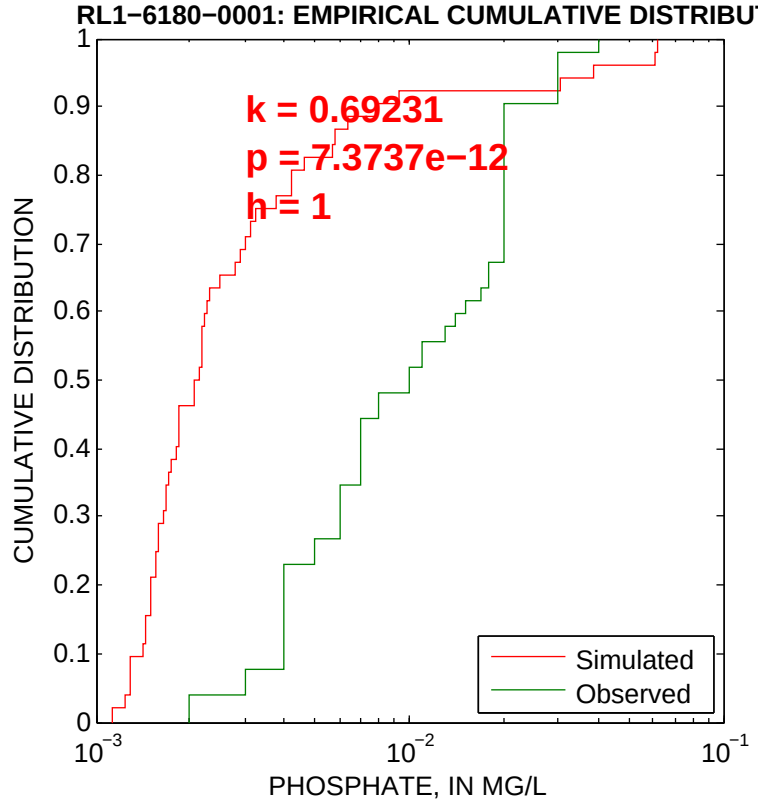












DATA SELECTION

scenario	file
P620171001WQ	PO4X.calib

plot: PO4X - phosphate

Dates	1/1/1985	12/31/201

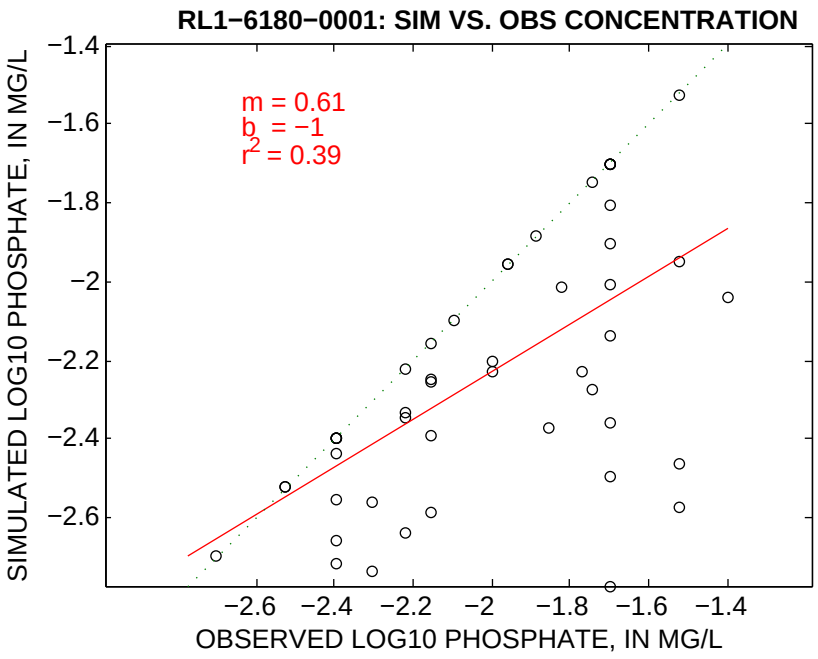
Drive	Directory	Observed
N/A	model	OBS20161101

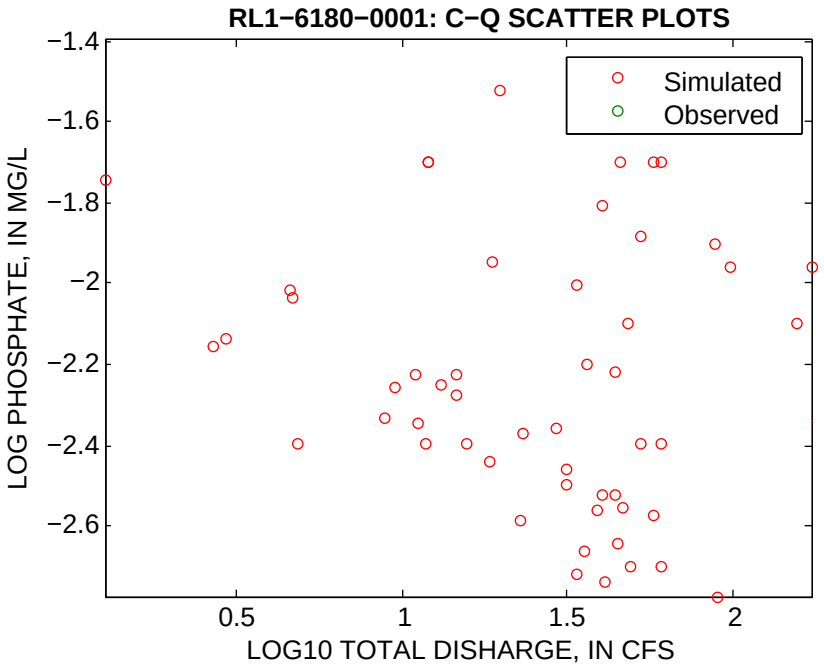
STATISTICS

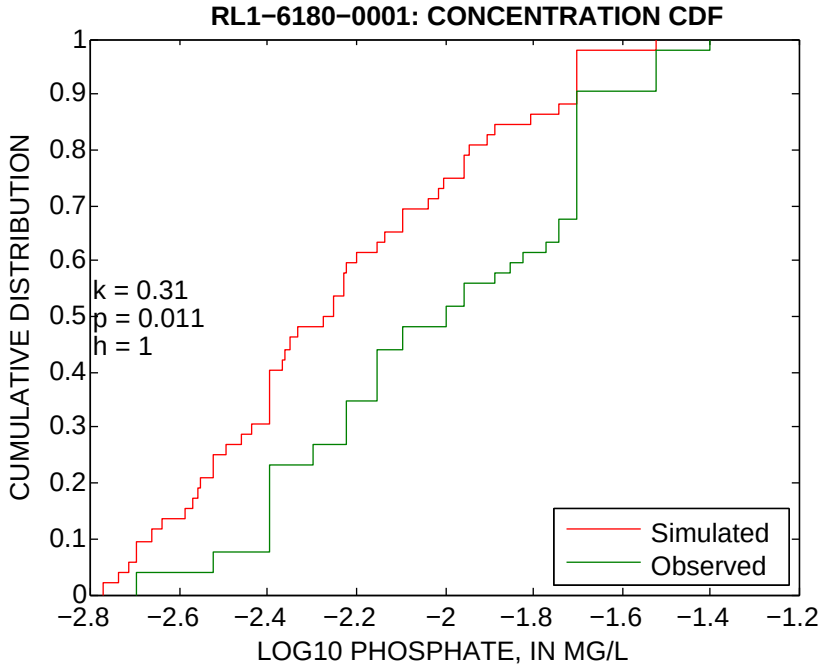
	n	52	52
		observe	simulate
min		0.002	0.0011328
		-2.69897	-2.94585
mean		0.0127692	0.00610608
		-2.0135	-2.54634
media		0.01	0.00211225
		-2	-2.67532
max		0.04	0.062252
		-1.39794	-1.20585
varian		8.25732e-0	0.00016614
		0.115899	0.170924
JB		0.034011	0.001
		0.126724	0.001
		ra	log
%		-52.1813	26.4632
err.va		0.00026201	0.489824
rel.std.err		3.17311	4.2263
mod.eff		-2.17311	-3.2263

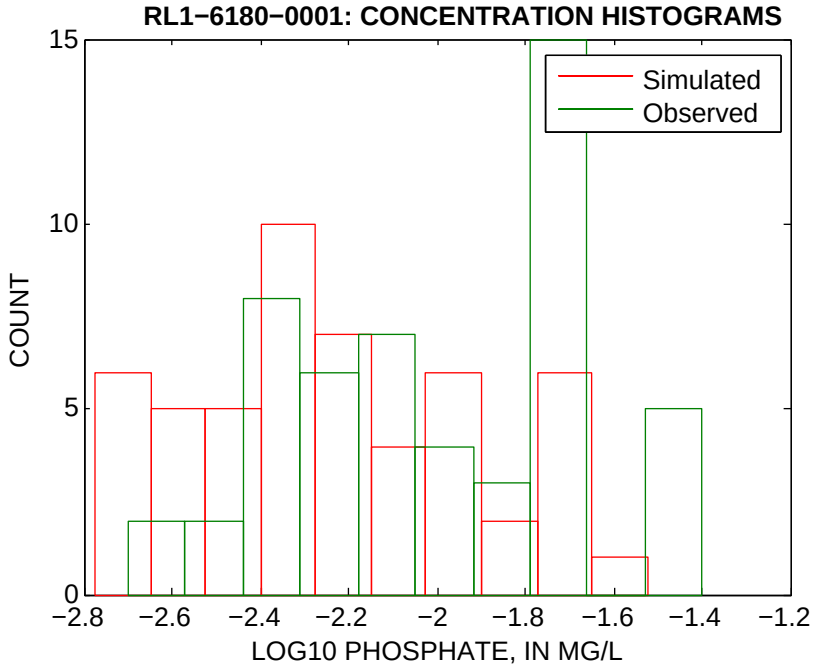
VERSION

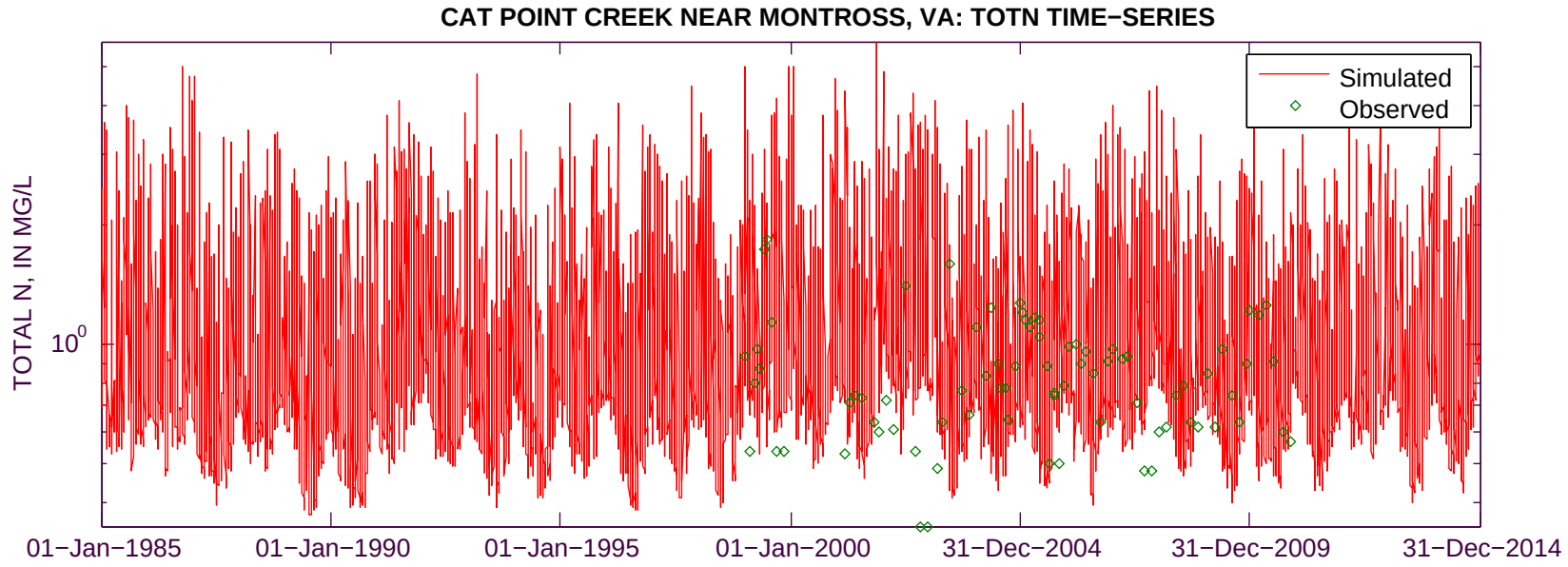
ALL DATA
LOG10

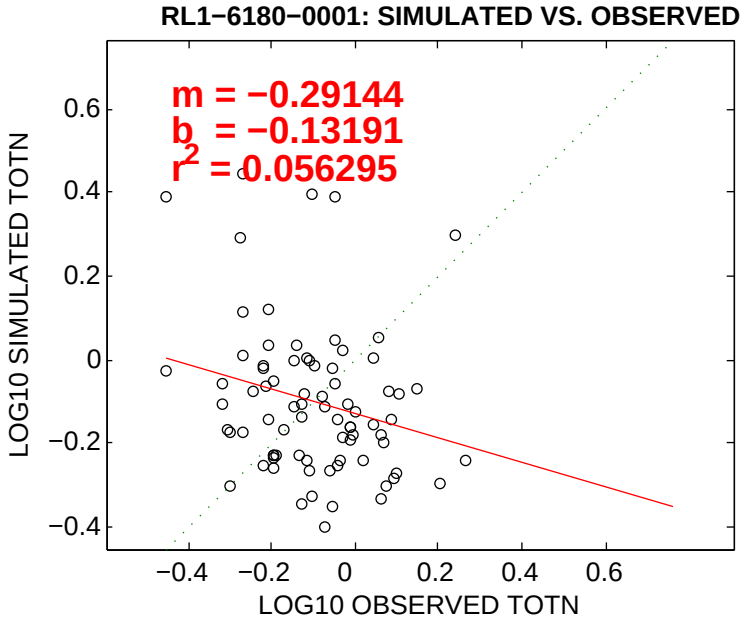


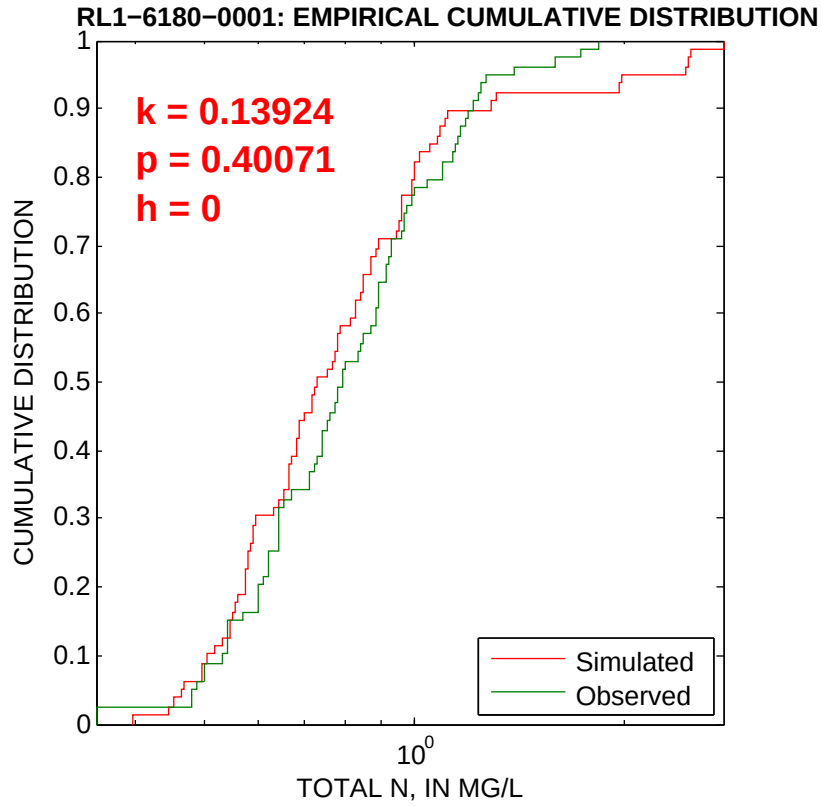


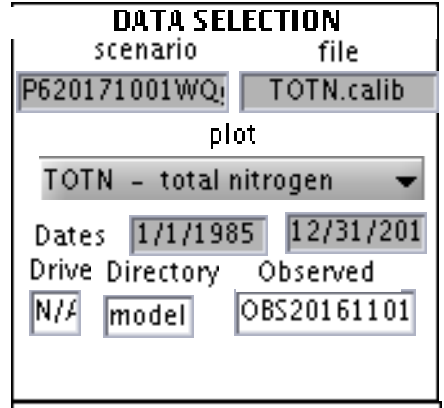


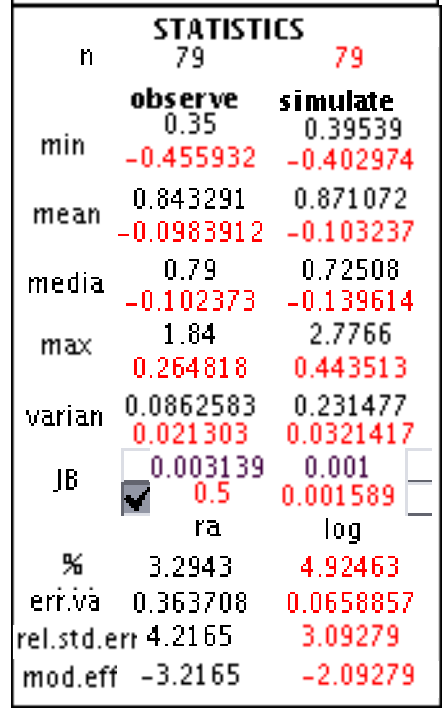



CAT POINT CREEK NEAR MONTROSS, VA: TOTN TIME-SERIES
Simulated
Observed
TOTAL N, IN MG/L
10^0
01-Jan-1985
01-Jan-1990
01-Jan-1995
01-Jan-2000
31-Dec-2004
31-Dec-2009
31-Dec-2014


RL1-6180-0001: SIMULATED VS. OBSERVED
m = -0.29144
b = -0.13191
r^2 = 0.056295
LOG10 SIMULATED TOTN
LOG10 OBSERVED TOTN

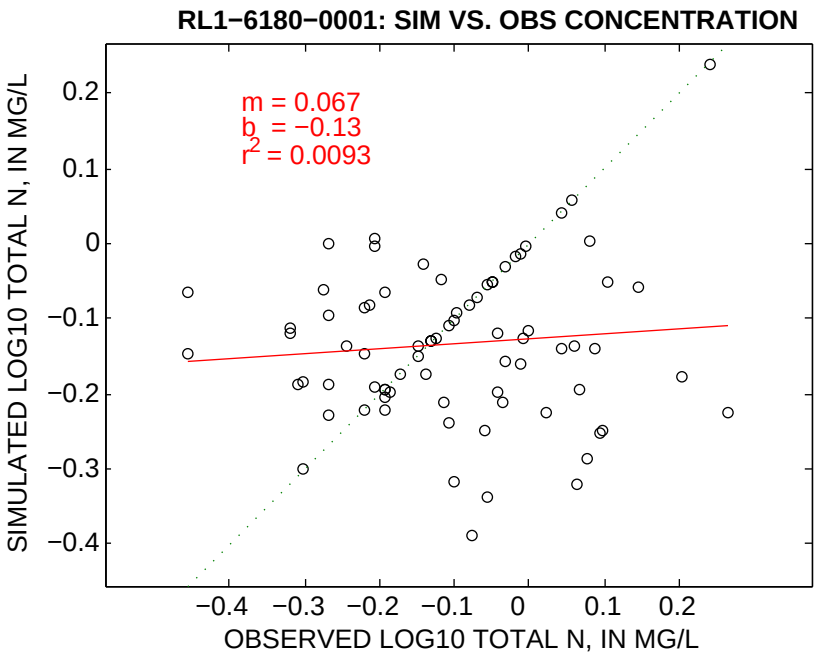

RL1-6180-0001: EMPIRICAL CUMULATIVE DISTRIBUTION
k = 0.13924
p = 0.40071
h = 0
Simulated
Observed
CUMULATIVE DISTRIBUTION
10^0
TOTAL N, IN MG/L

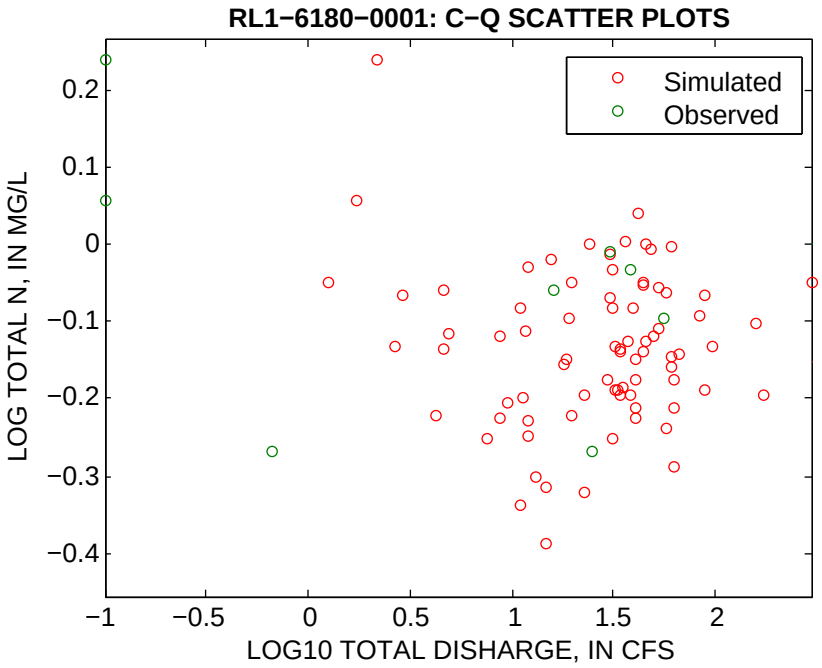

DATA SELECTION
scenario
file
P620171001WQ
TOTN.calib
plot
TOTN - total nitrogen
Dates
1/1/1985
12/31/201
Drive
Directory
Observed
N/A
model
OBS20161101

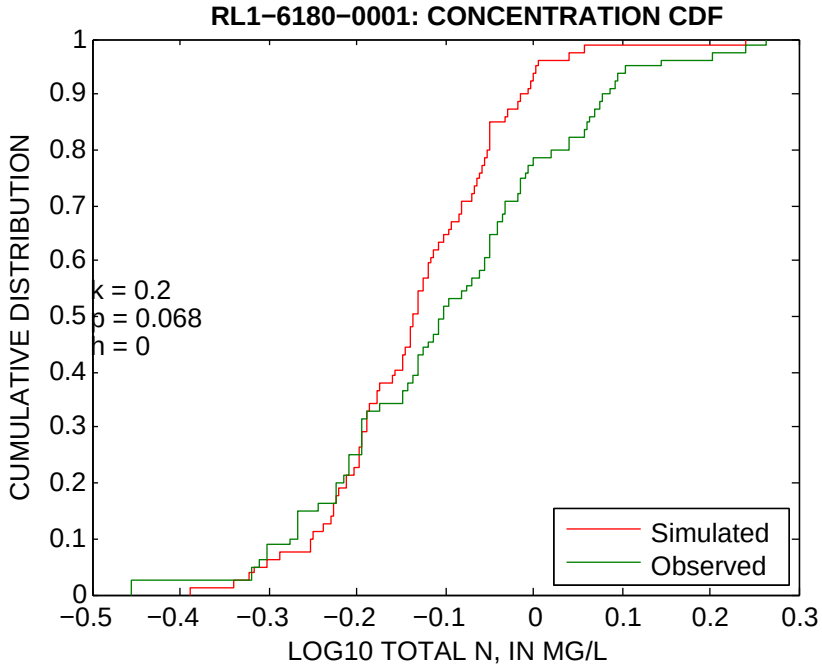

STATISTICS
n
79
79
observe
simulate
min
0.35
0.39539
-0.455932
-0.402974
mean
0.843291
0.871072
-0.0983912
-0.103237
media
0.79
0.72508
-0.102373
-0.139614
max
1.84
2.7766
0.264818
0.443513
varian
0.0862583
0.231477
0.021303
0.0321417
JB
0.003139
0.001
0.5
0.001589
ra
log
%
3.2943
4.92463
err.va
0.363708
0.0658857
rel.std.err
4.2165
3.09279
mod.eff
-3.2165
-2.09279

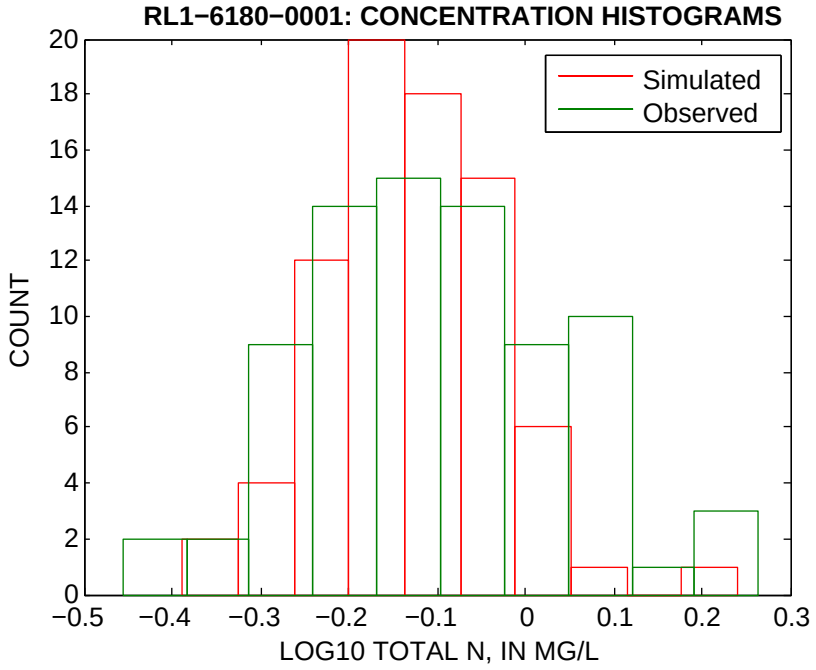
VERSION

ALL DATA
LOG10

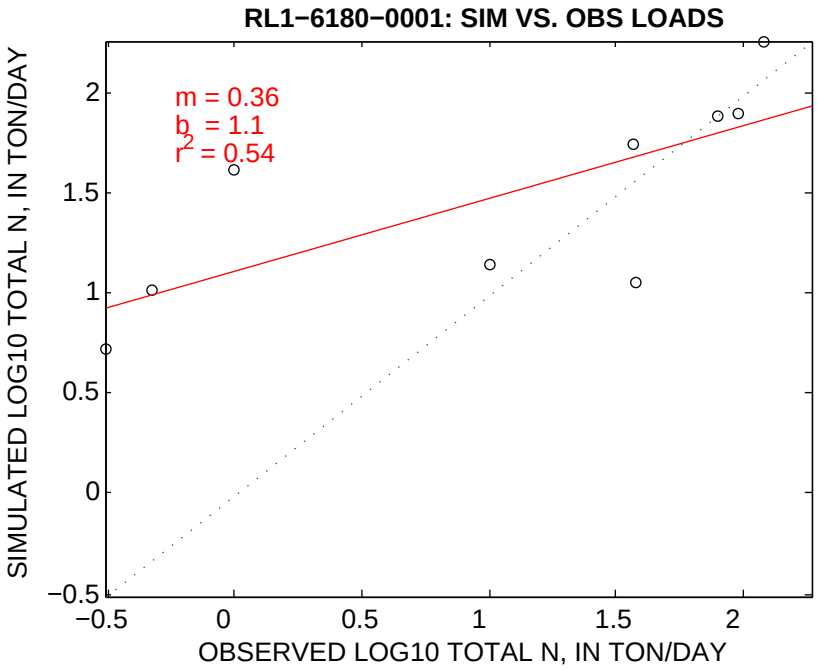


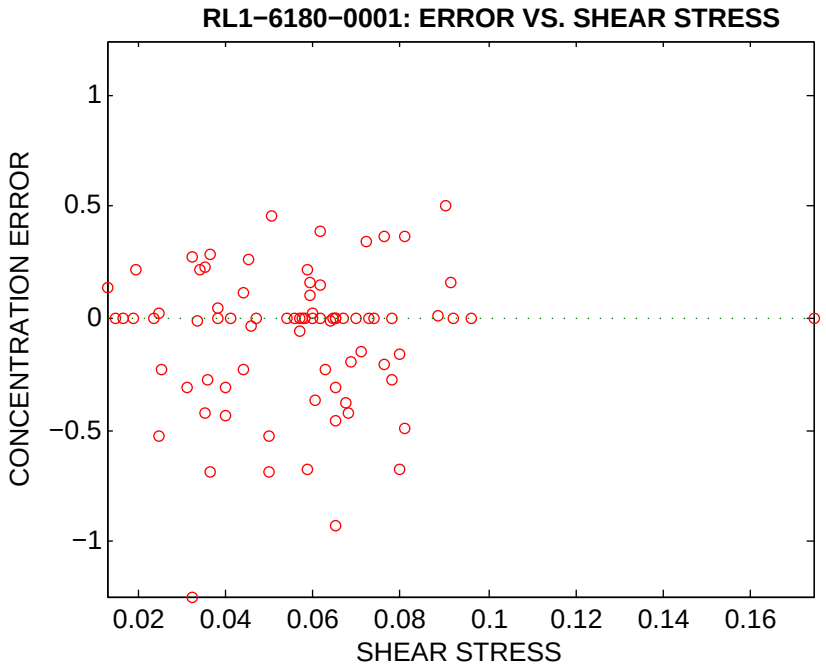


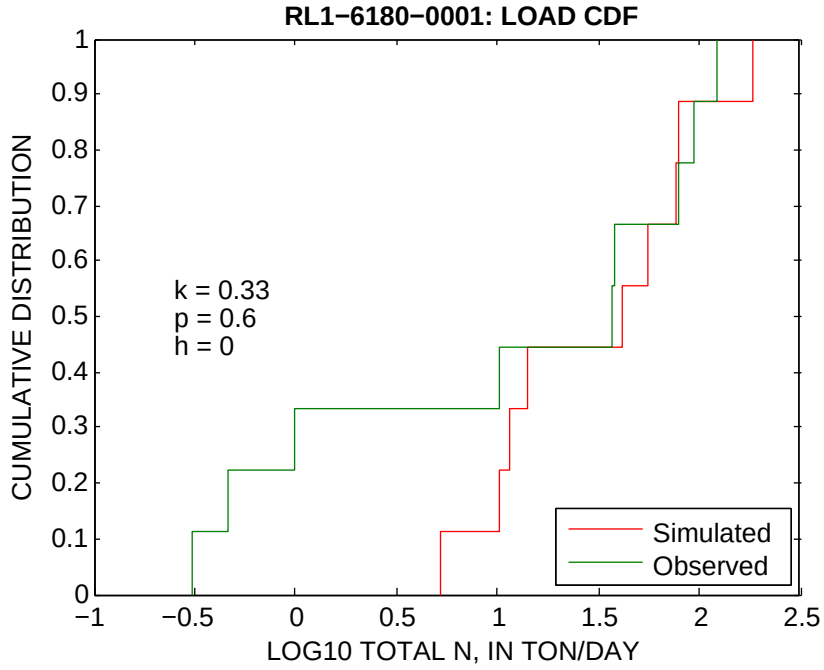


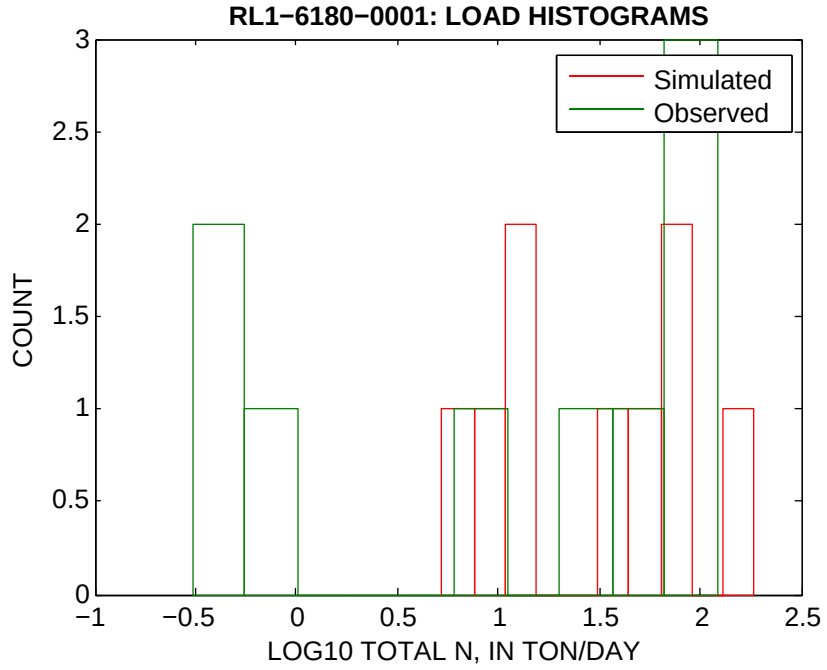


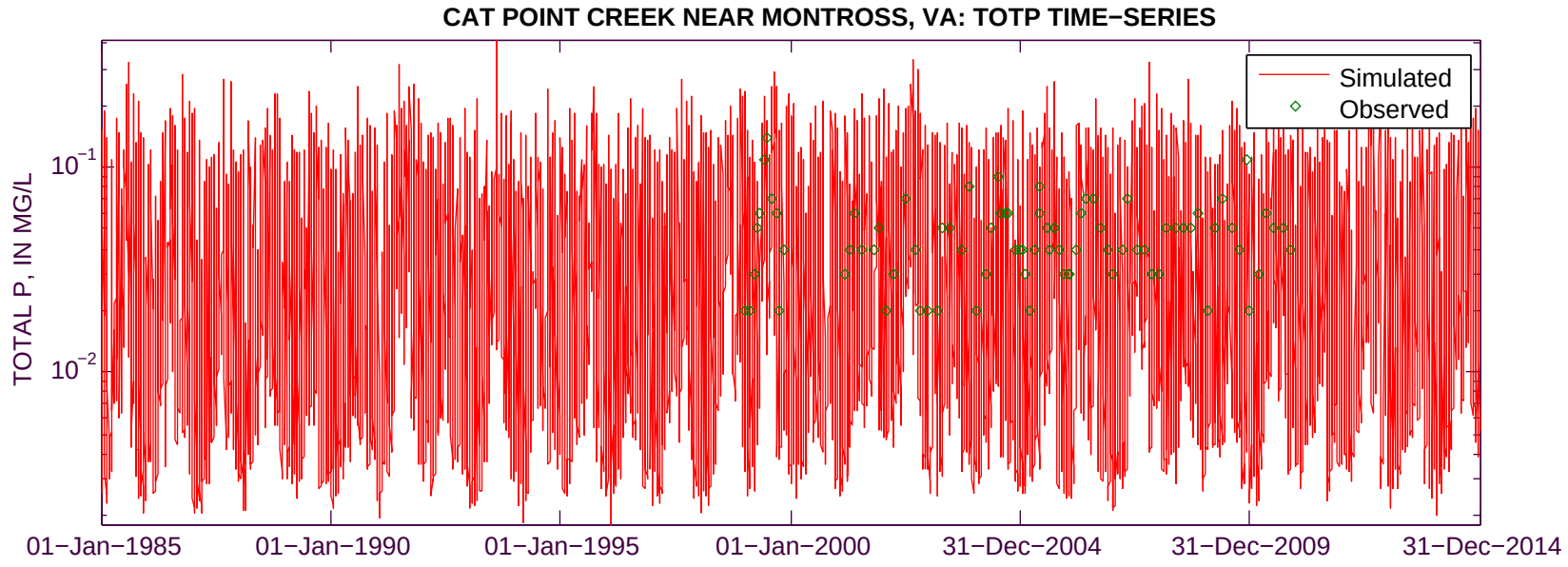
LOAD DATA
LOG10

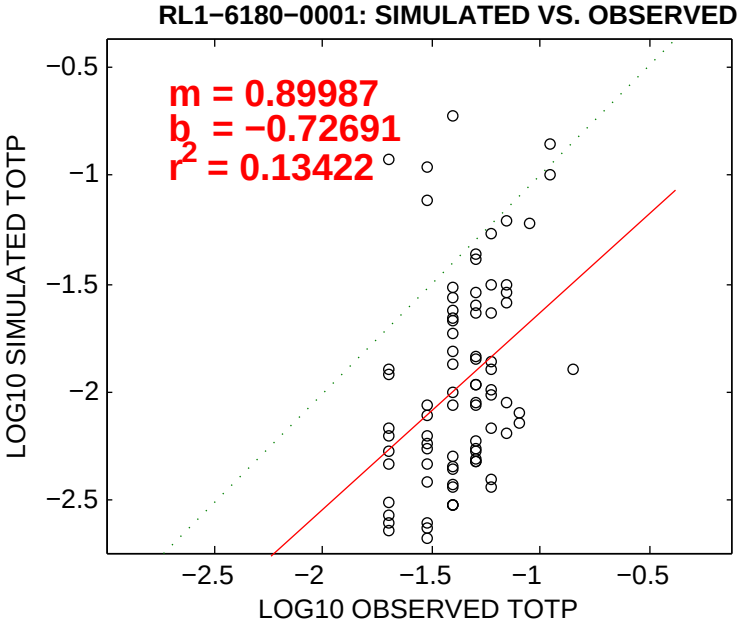


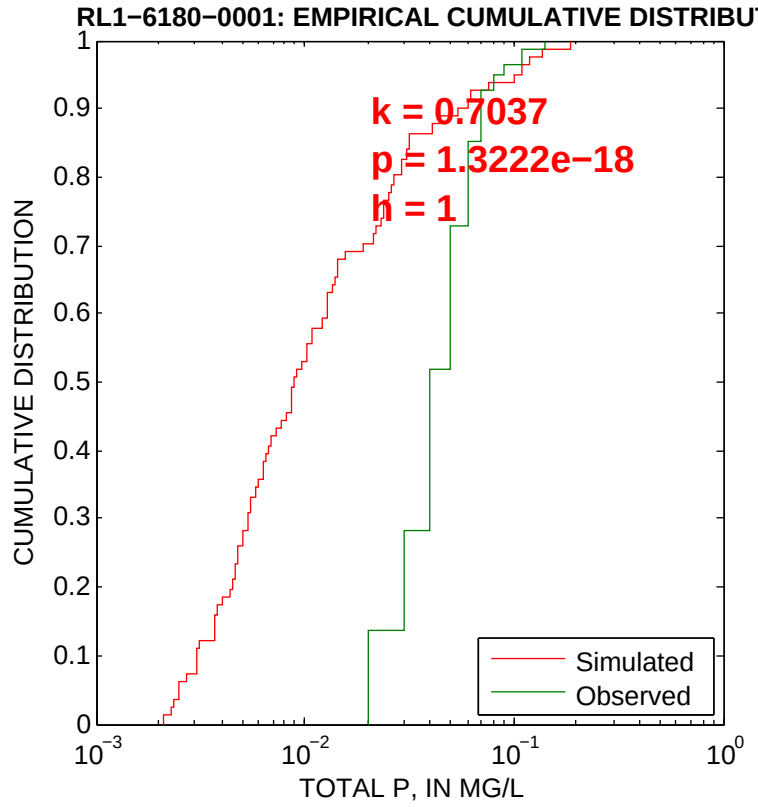












DATA SELECTION

scenario	file
P620171001WQ	TOTP.calib

plot: TOTP - total phosphorus

Dates: 1/1/1985 – 12/31/201

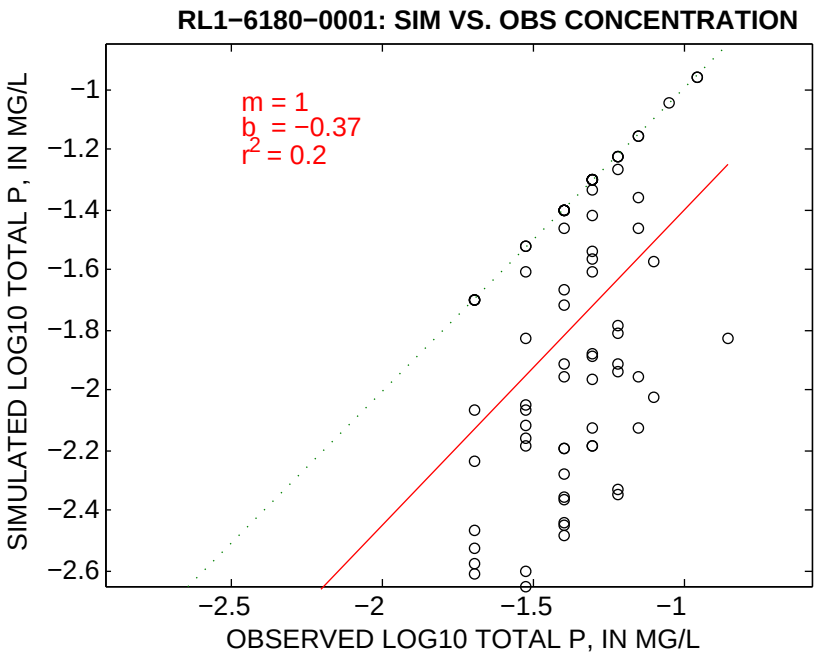
Drive: N/A | Directory: model | Observed: OBS20161101

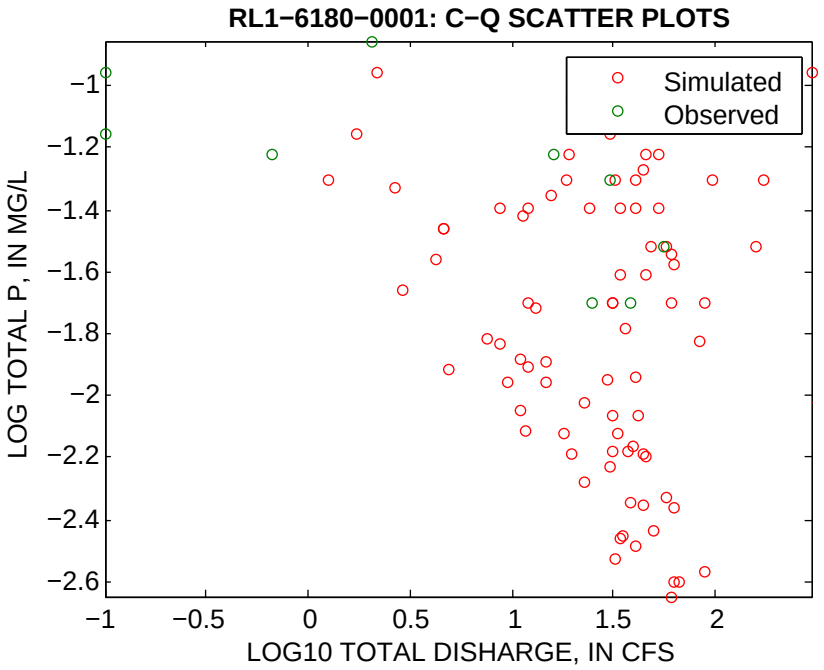
STATISTICS

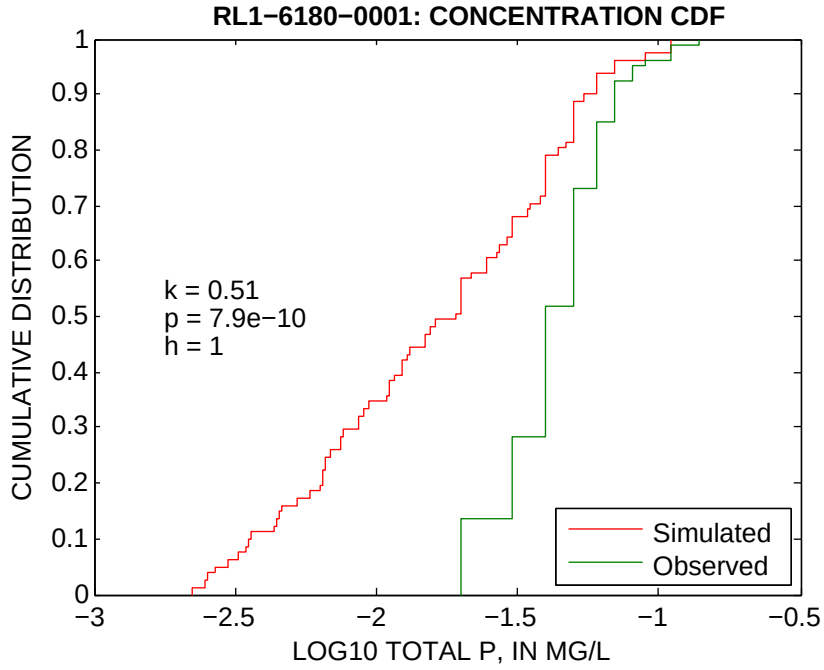
	n	81	81
		observe	simulate
min		0.02	0.002135
		-1.69897	-2.6706
mean		0.0471605	0.0215549
		-1.3679	-1.95785
media		0.04	0.0089457
		-1.39794	-2.04839
max		0.14	0.18712
		-0.853872	-0.72788
varian		0.00047558	0.00107404
		0.0365312	0.220393
JB		0.001	0.001
		0.5	0.037824
		ra	log
%		-54.2947	43.1277
err.va		0.00186081	0.543564
rel.std.err		3.91267	14.8795
mod.eff		-2.91267	-13.8795

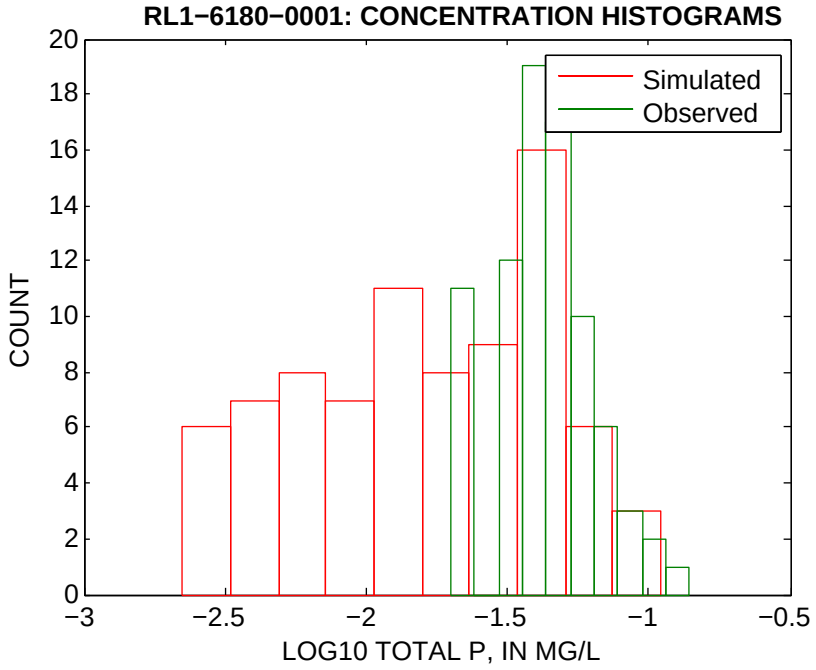
VERSION 2.1

ALL DATA
LOG10

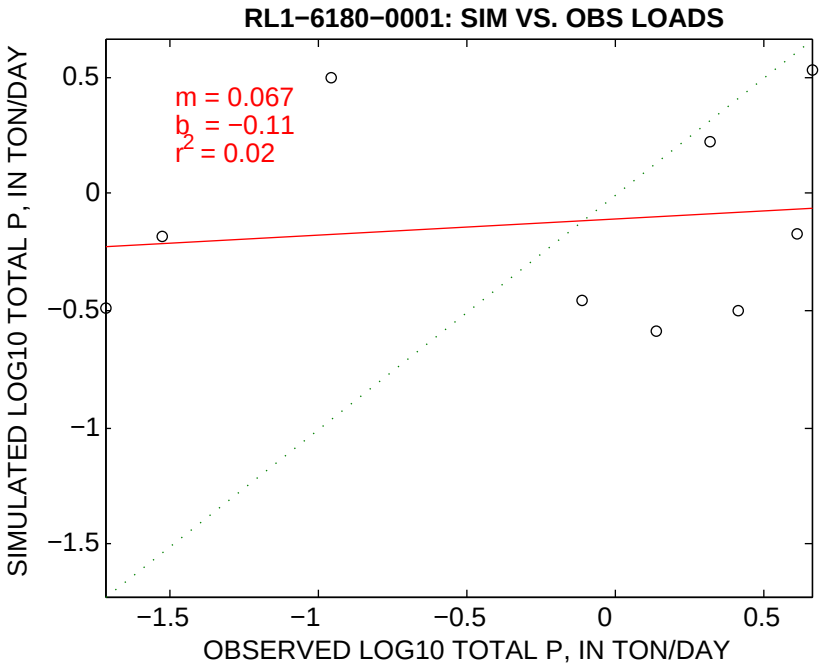


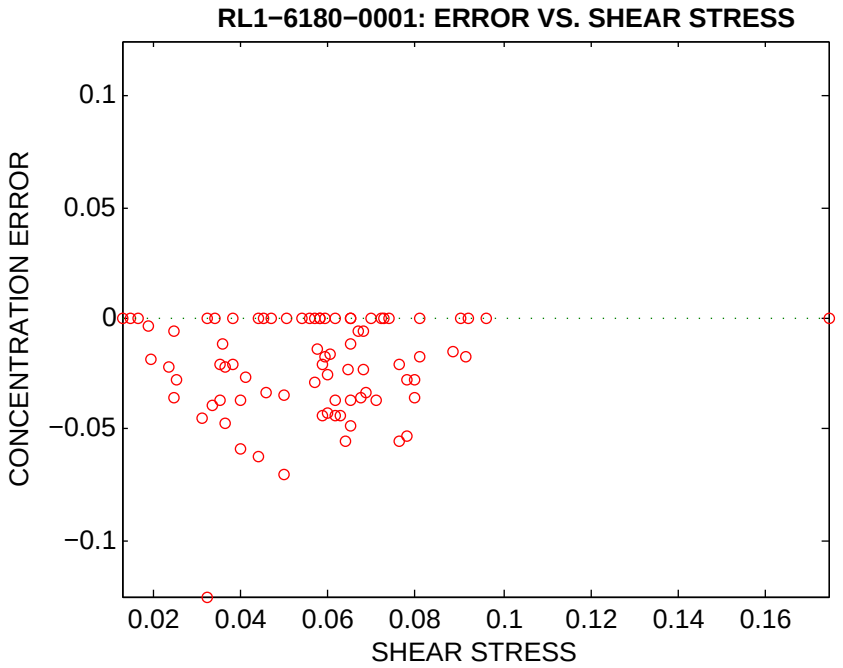


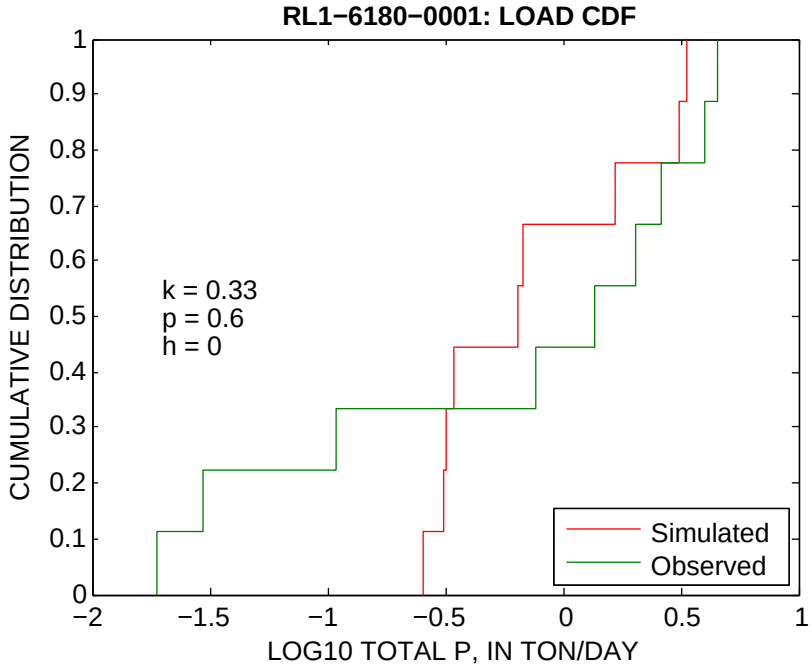


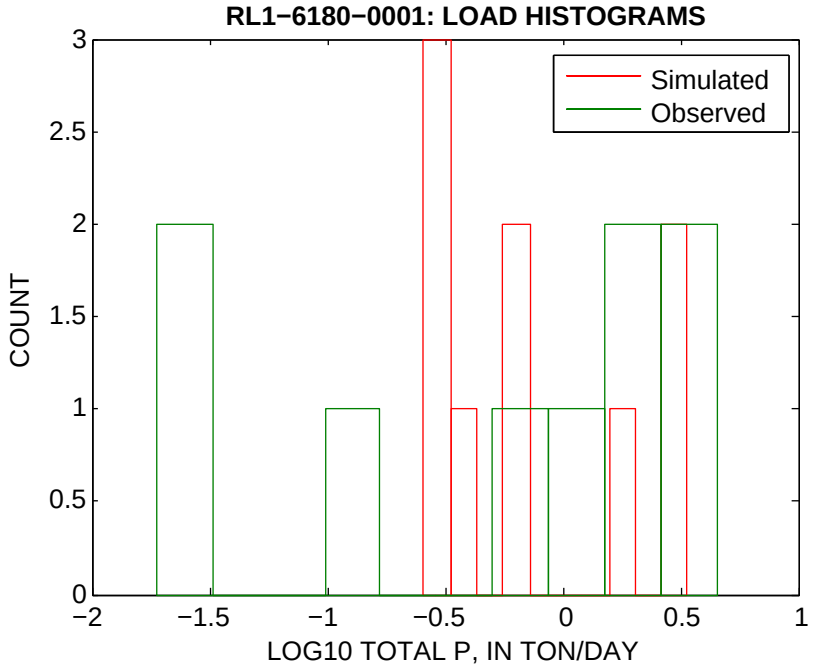


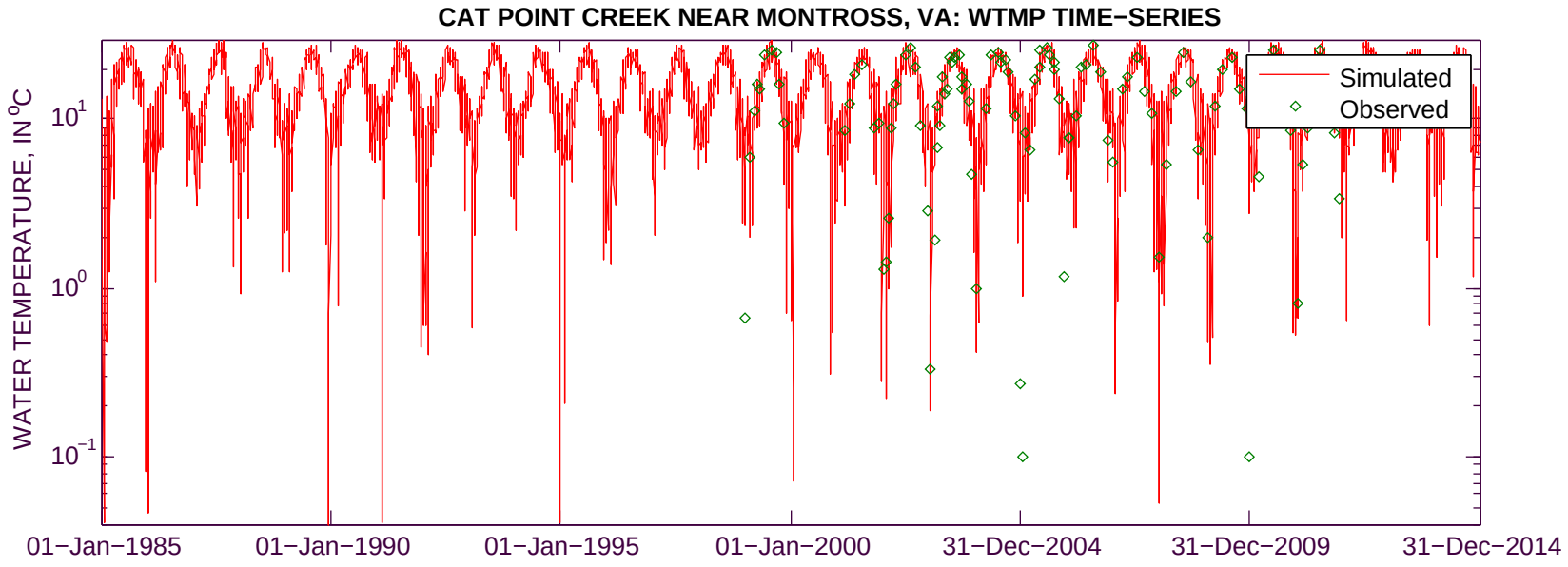
LOAD DATA
LOG10

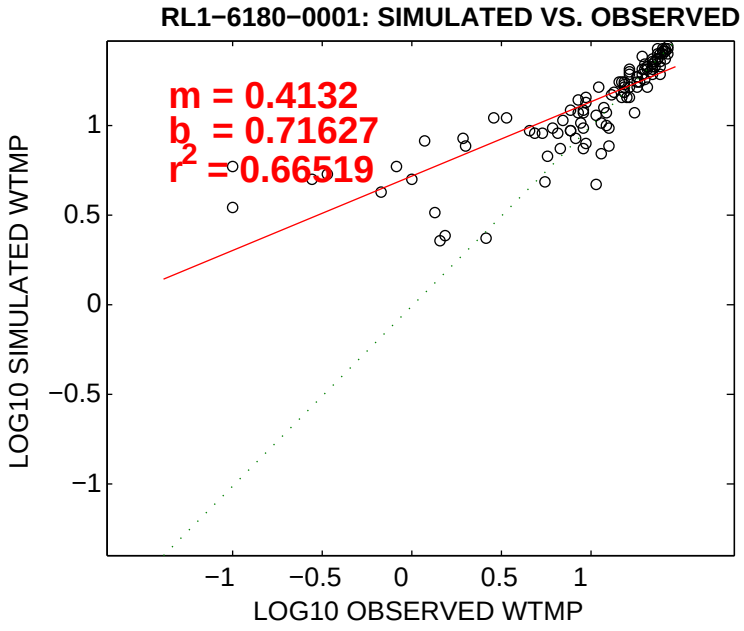


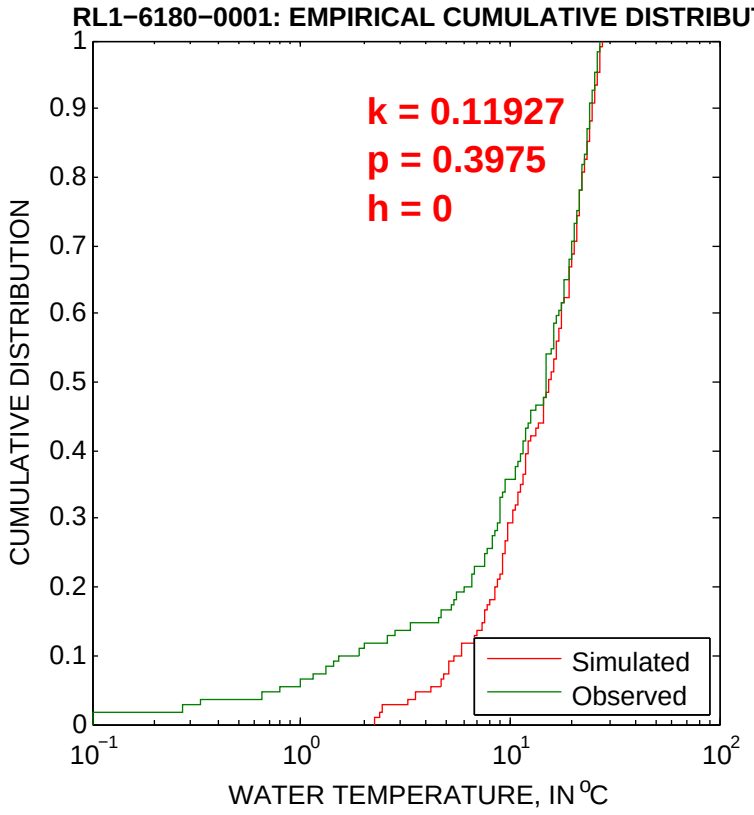












DATA SELECTION

scenario	file
P620171001WQ	WTMP.calib

plot: WTMP - water tempera...

Dates 1/1/1985 12/31/201

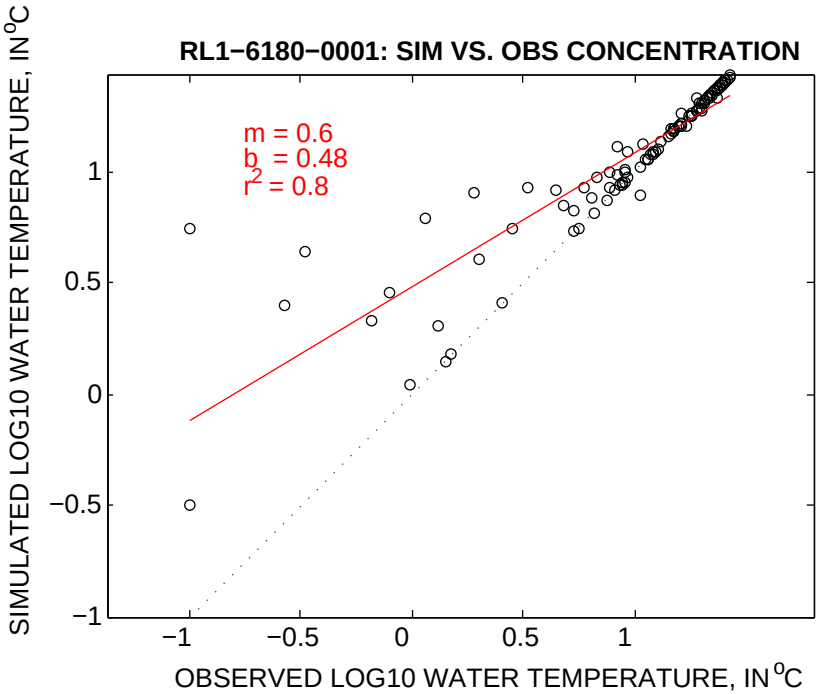
Drive	Directory	Observed
N/A	model	OBS20161101

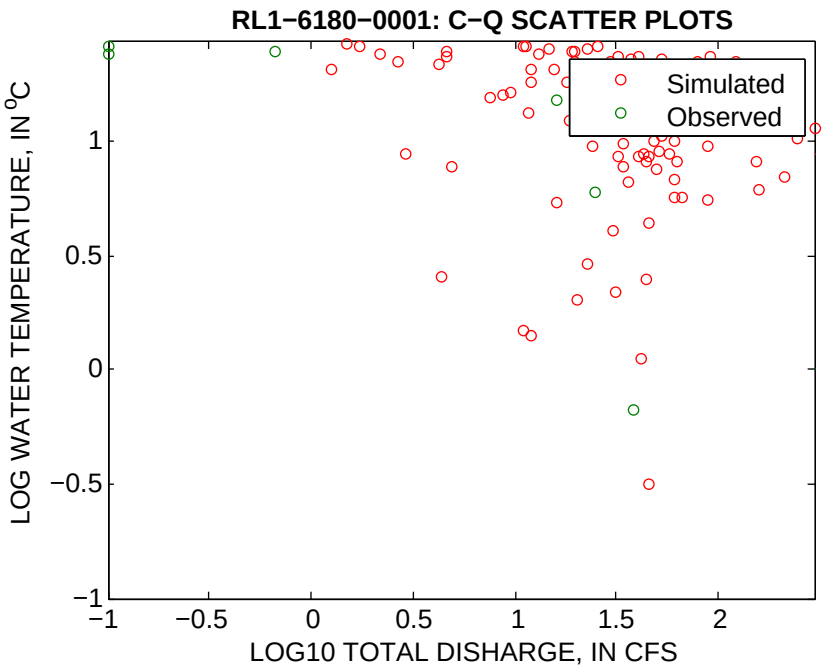
STATISTICS

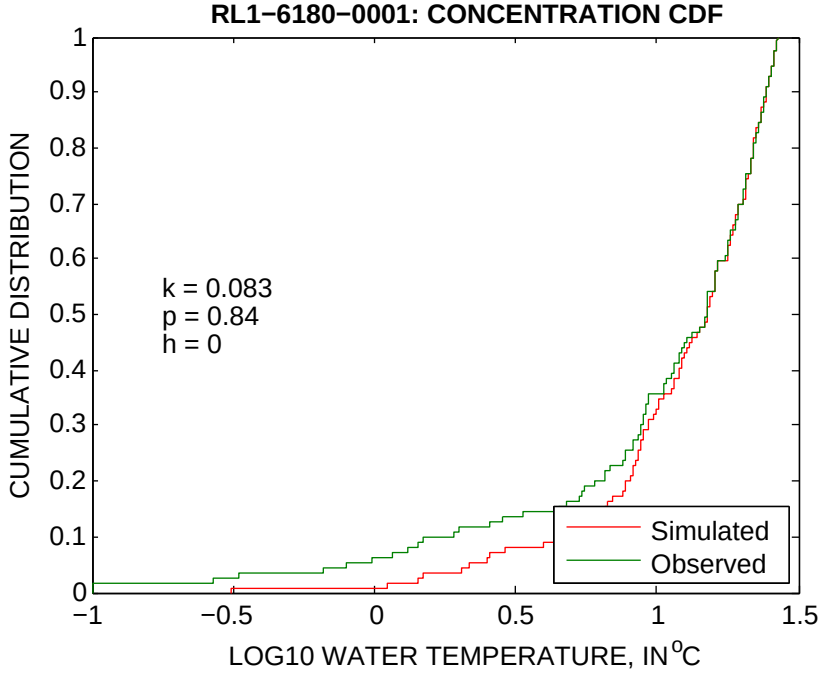
	observe	simulate
n	109	109
min	0.1	2.2659
	-1	0.355241
mean	13.9736	15.3227
	0.985889	1.12363
media	14.97	15.377
	1.17522	1.18687
max	27	28.1
	1.43136	1.44871
varian	64.2753	49.9829
	0.256149	0.065744
JB	0.034326	0.043700
	0.001	0.003411
	ra	log
%	9.65464	13.9715
err.va	9.60626	0.129362
rel.std.err	0.149455	0.505029
mod.eff	0.850545	0.494971

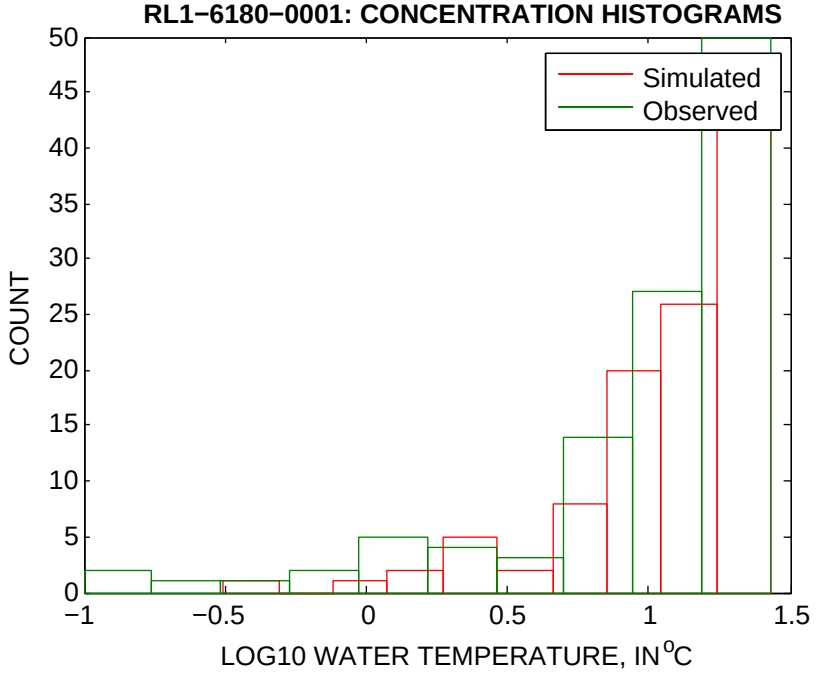
VERSION 2.1

ALL DATA
LOG10

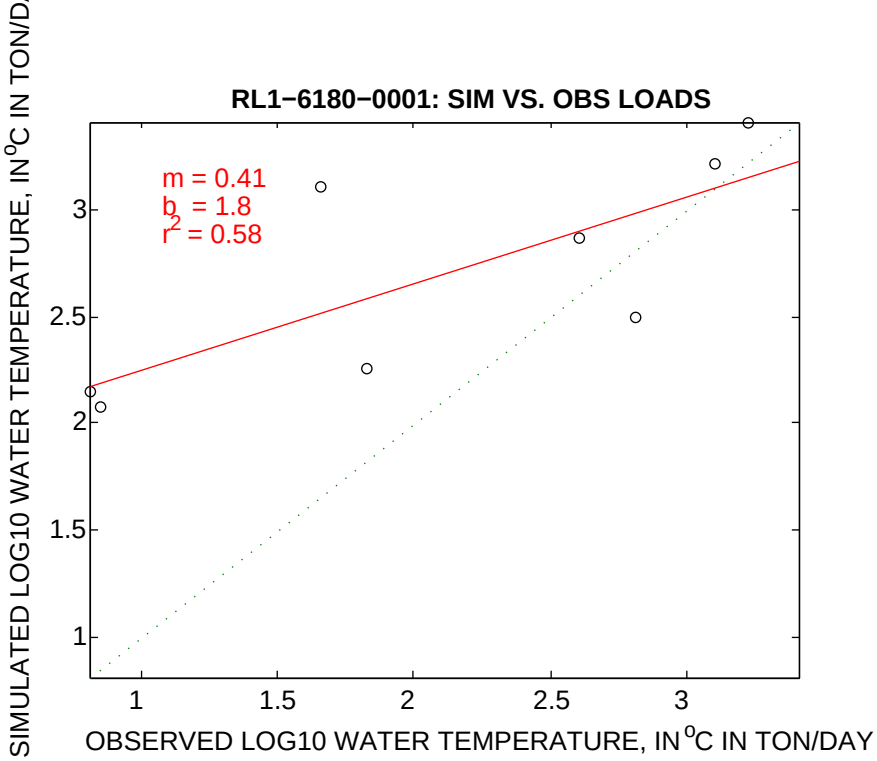


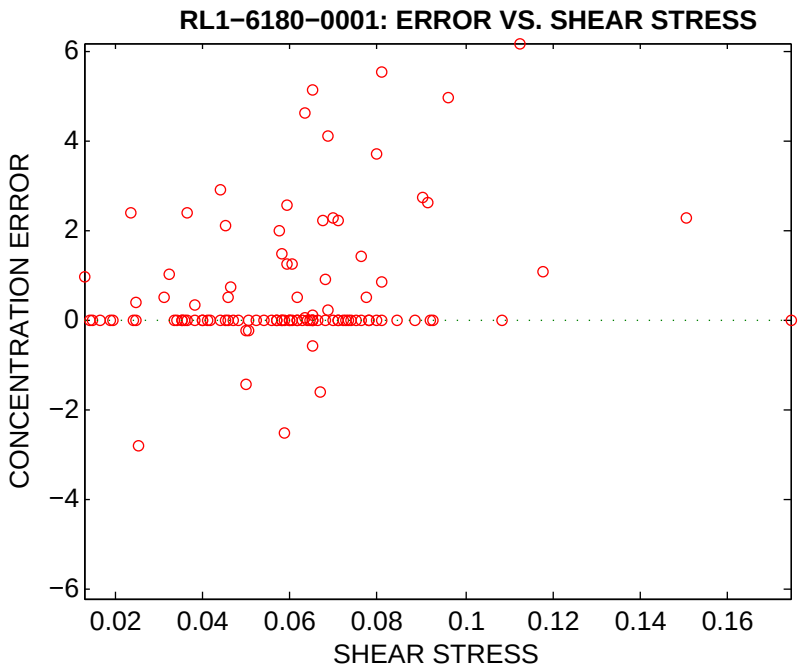


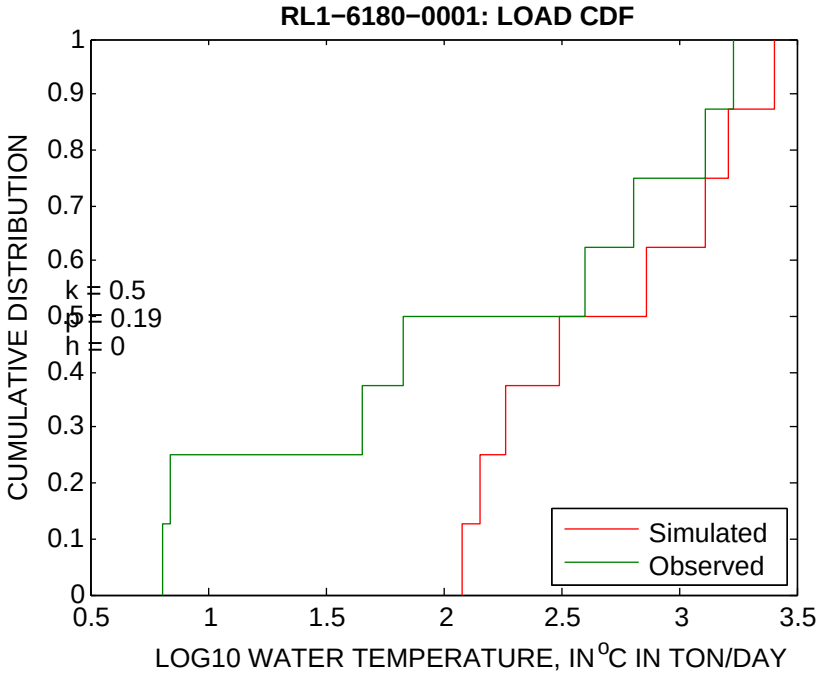


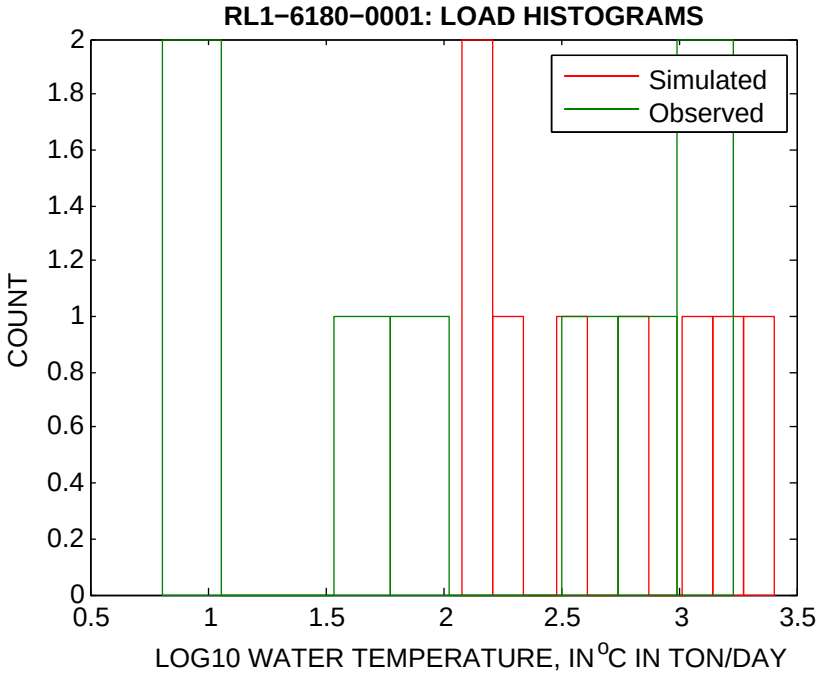


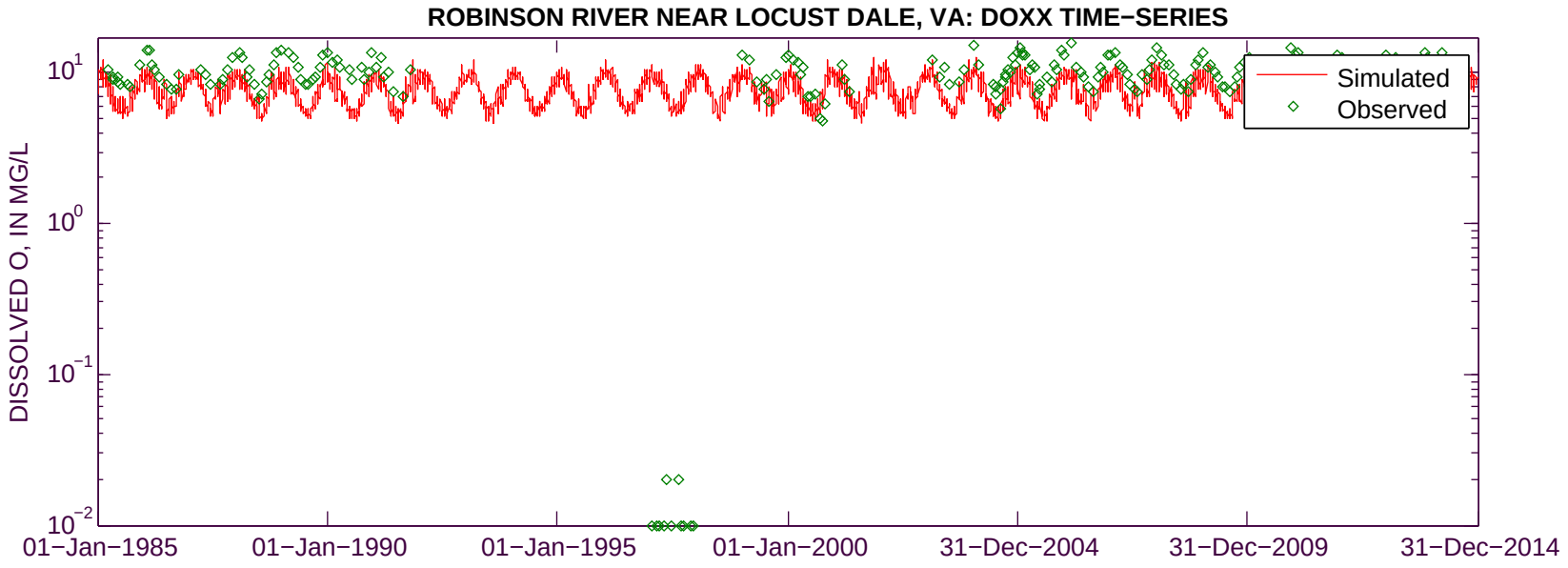
LOAD DATA
LOG10

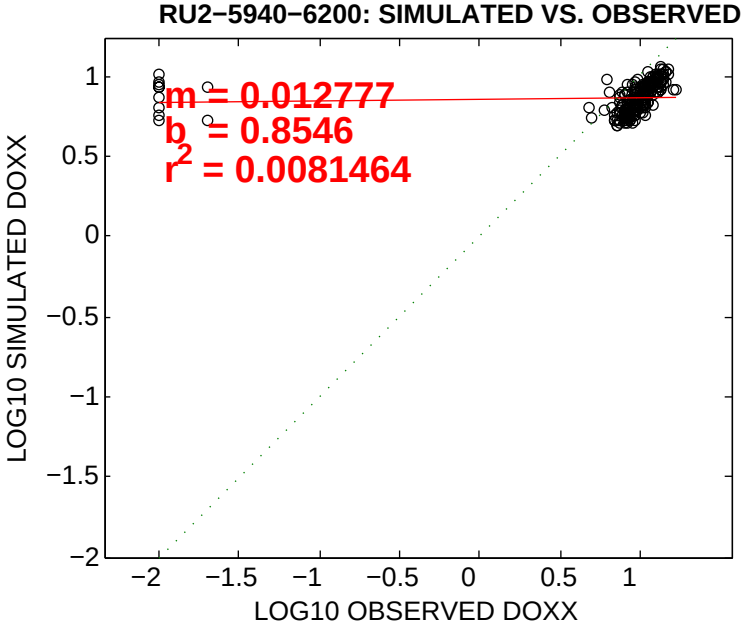


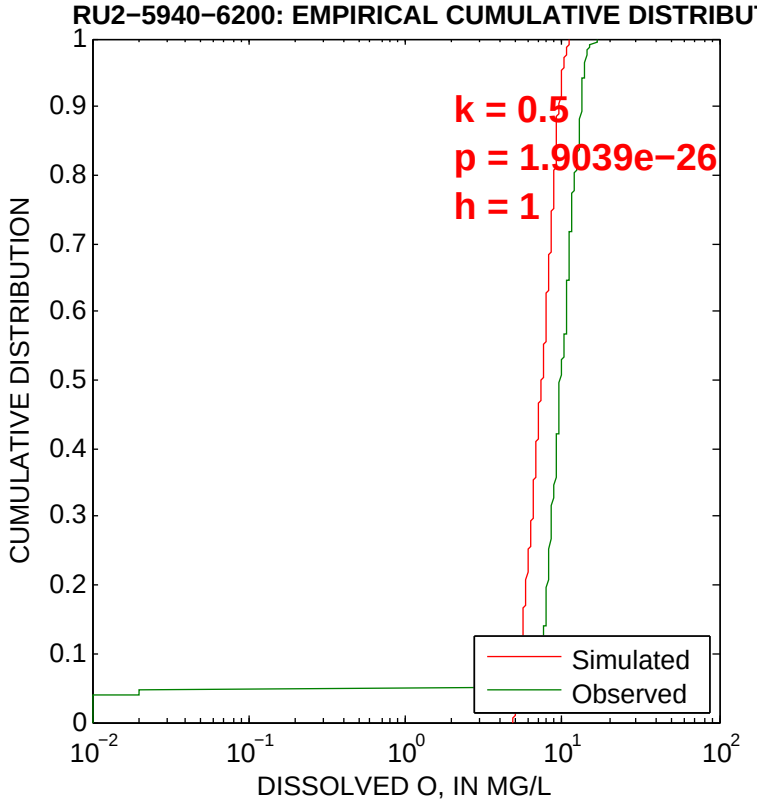












DATA SELECTION

scenario: P620171001WQ | file: DOXX.calib

plot: DOXX - dissolved oxygen

Dates: 1/1/1985 – 12/31/201

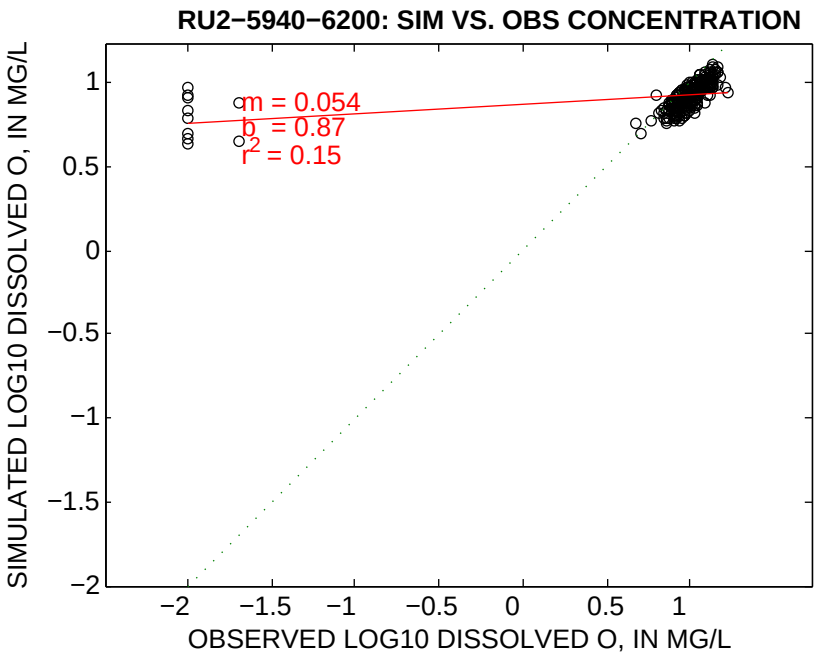
Drive: N/A | Directory: model | Observed: OBS20161101

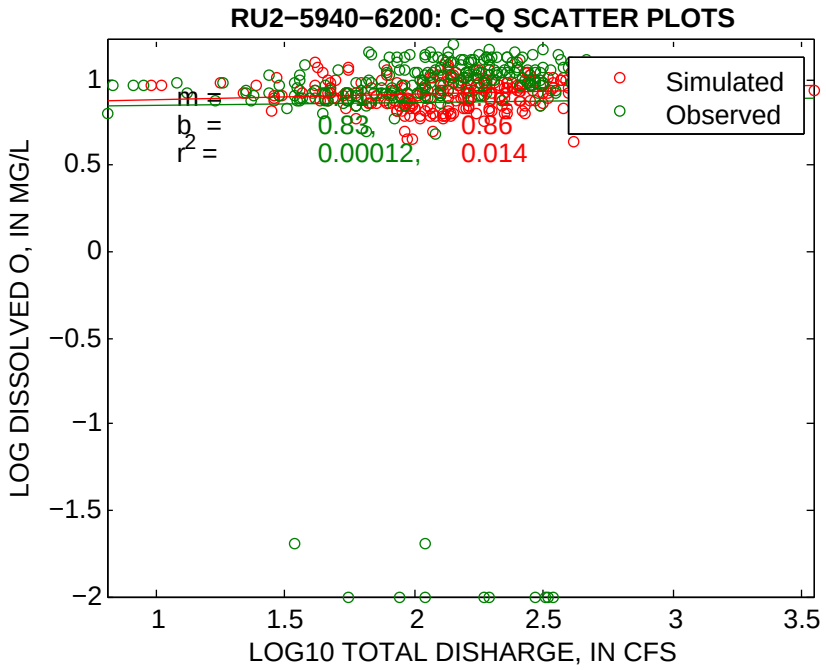
STATISTICS

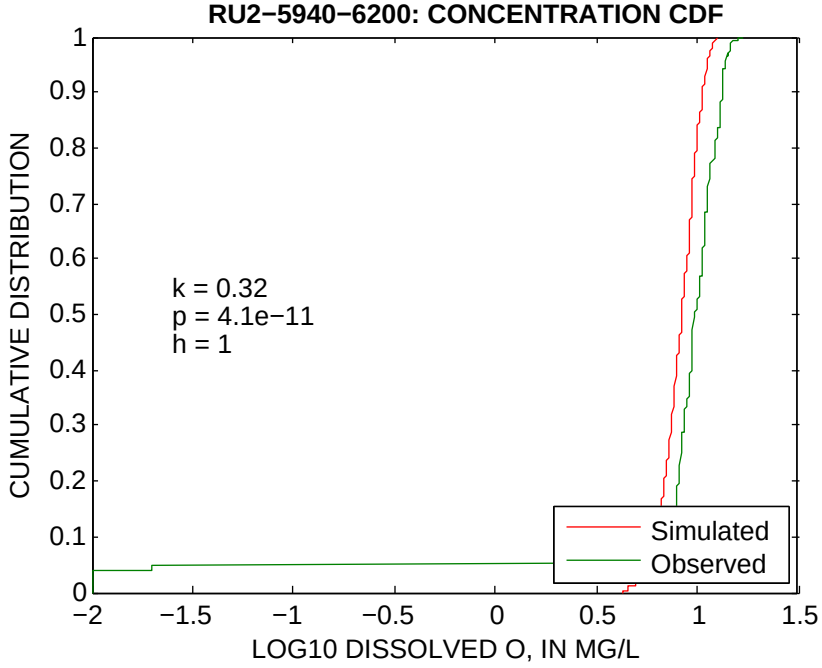
n	234	234
	observe	simulate
min	0.01	4.9351
	-2	0.693296
mean	9.76476	7.49427
	0.862219	0.865616
media	9.8	7.4986
	0.991226	0.874974
max	16.76	11.281
	1.22427	1.05235
varian	9.19202	2.35138
	0.399432	0.00800441
JB	0.001	0.014769
	0.001	0.013003
	ra	log
%	-23.2519	0.393903
err.va	12.0104	0.397241
rel.std.err	1.30661	0.994515
mod.eff	-0.306608	0.00548533

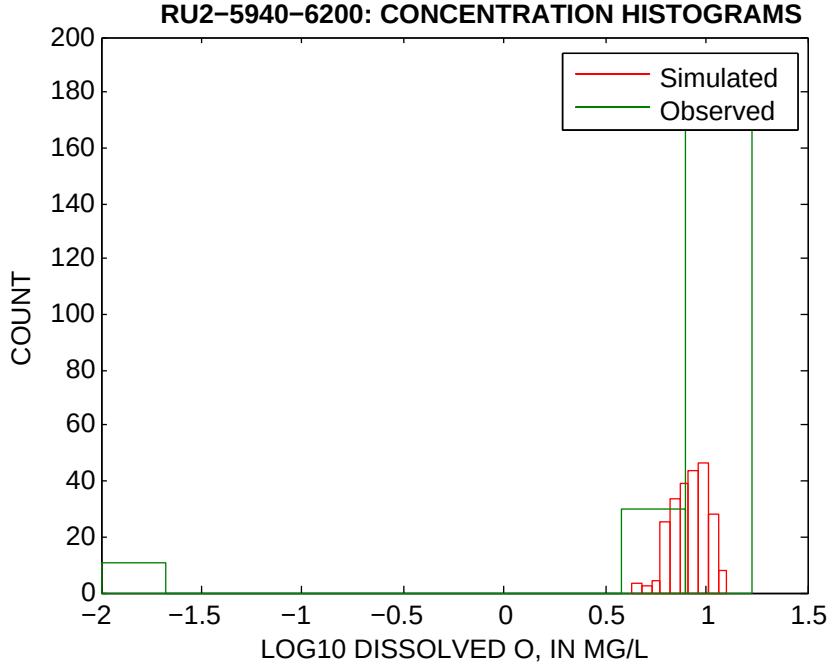
VERSION 2.1

ALL DATA
LOG10

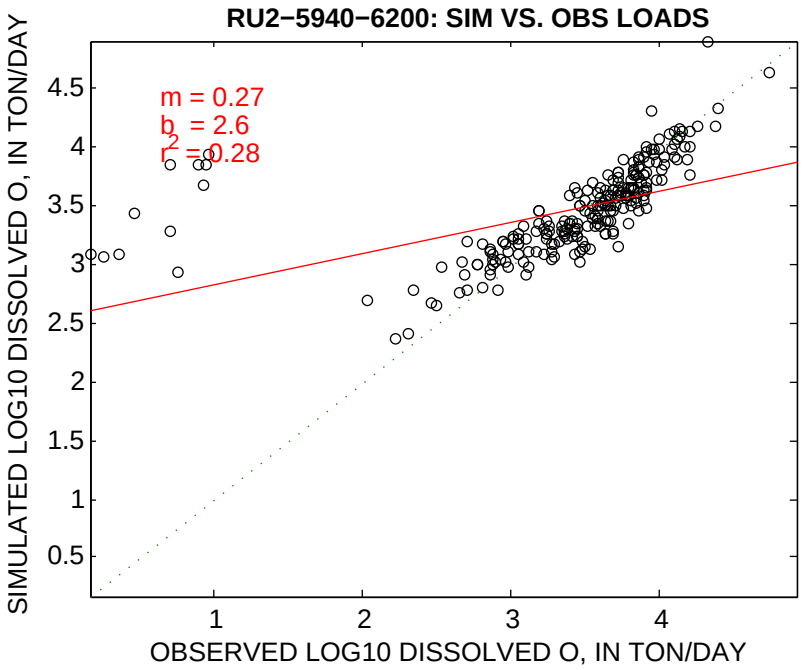


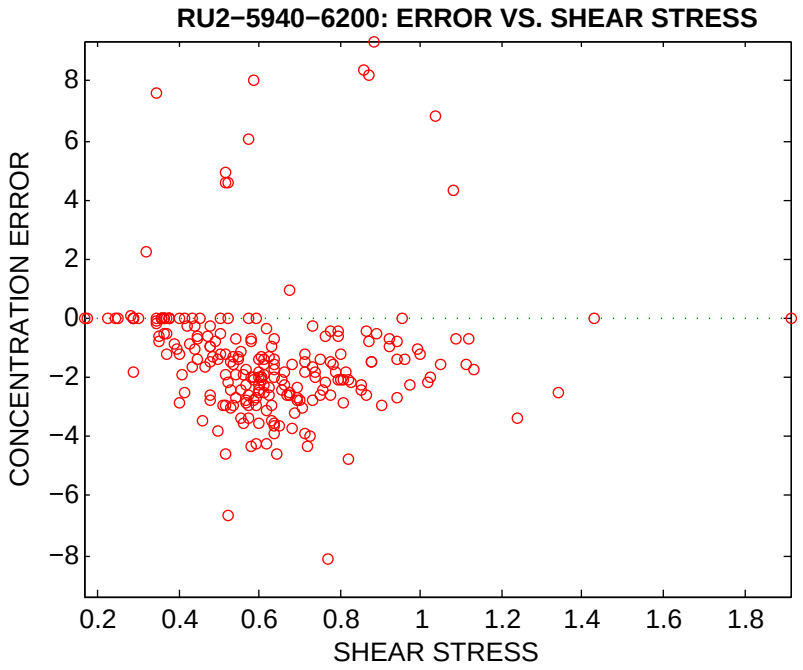


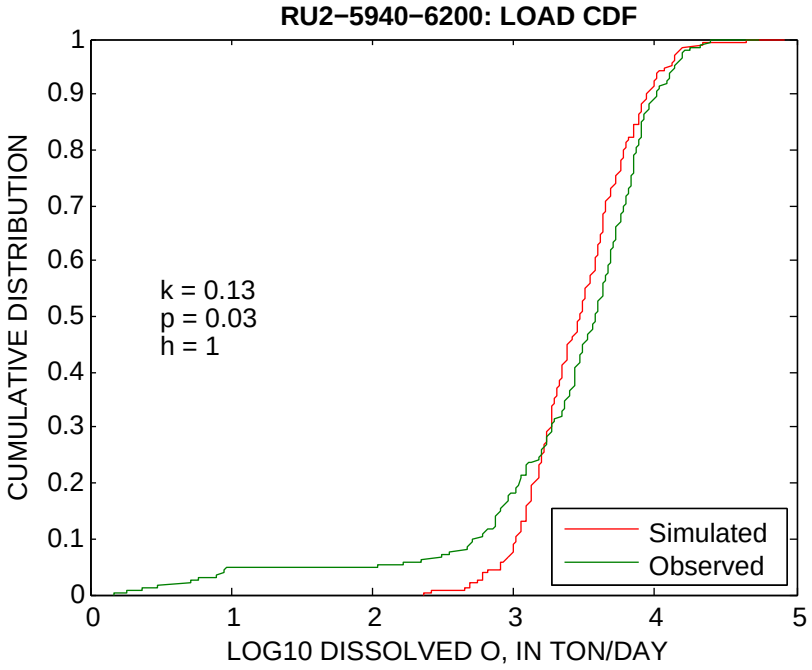


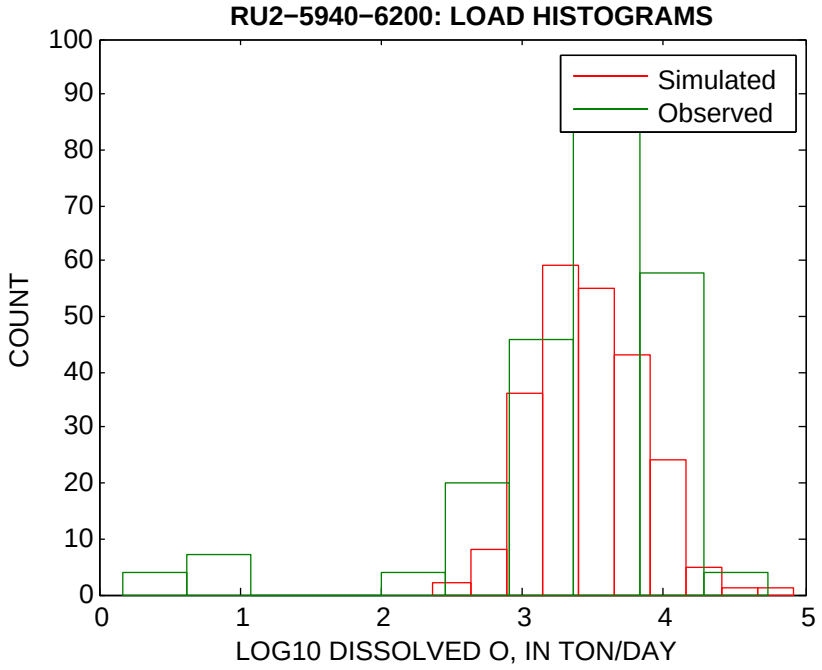


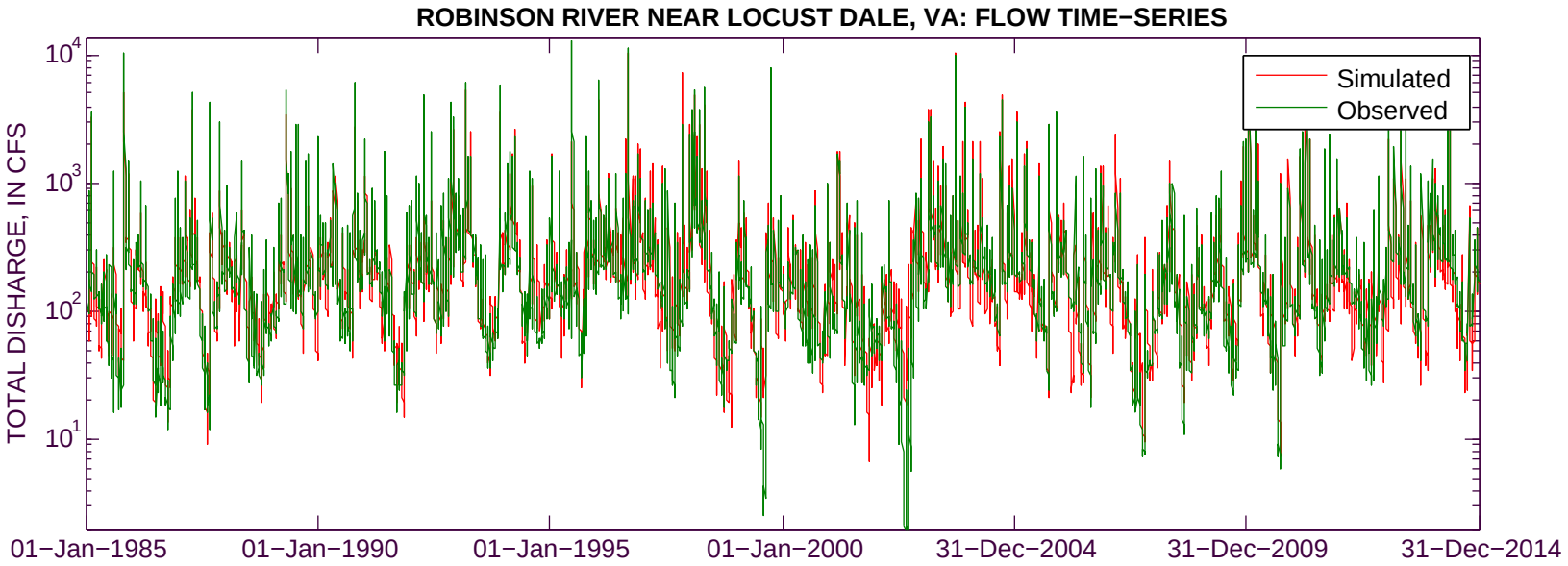
LOAD DATA
LOG10

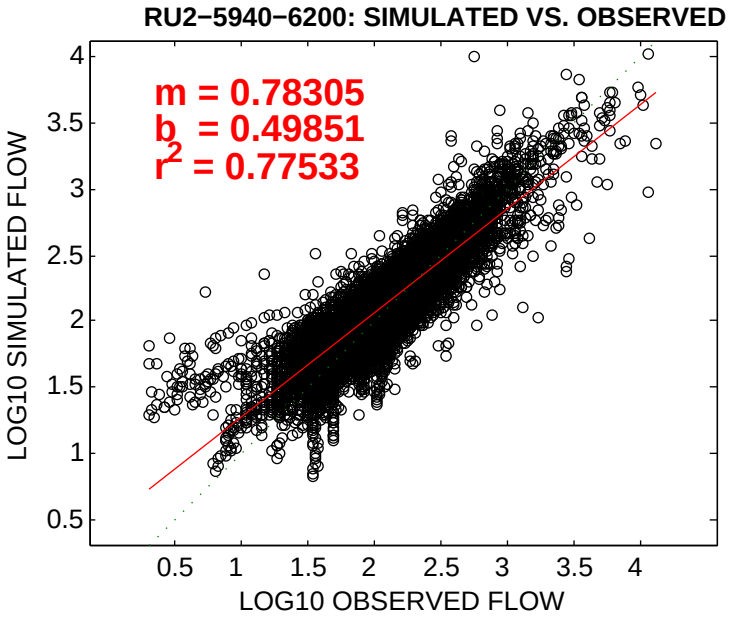


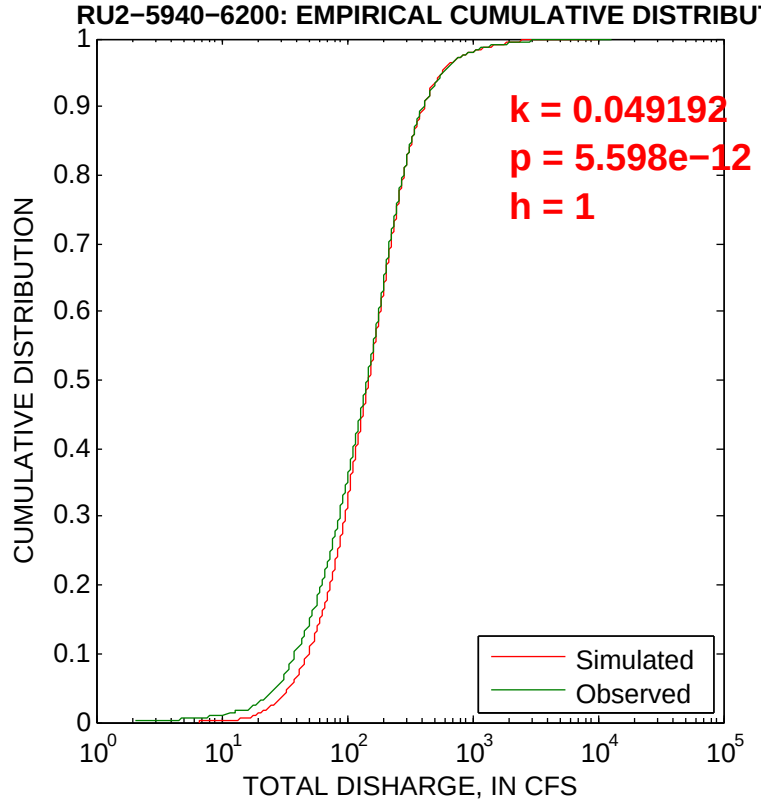












DATA SELECTION

scenario	file
P620171001WQ	FLOW.calib

plot: FLOW - total discharge

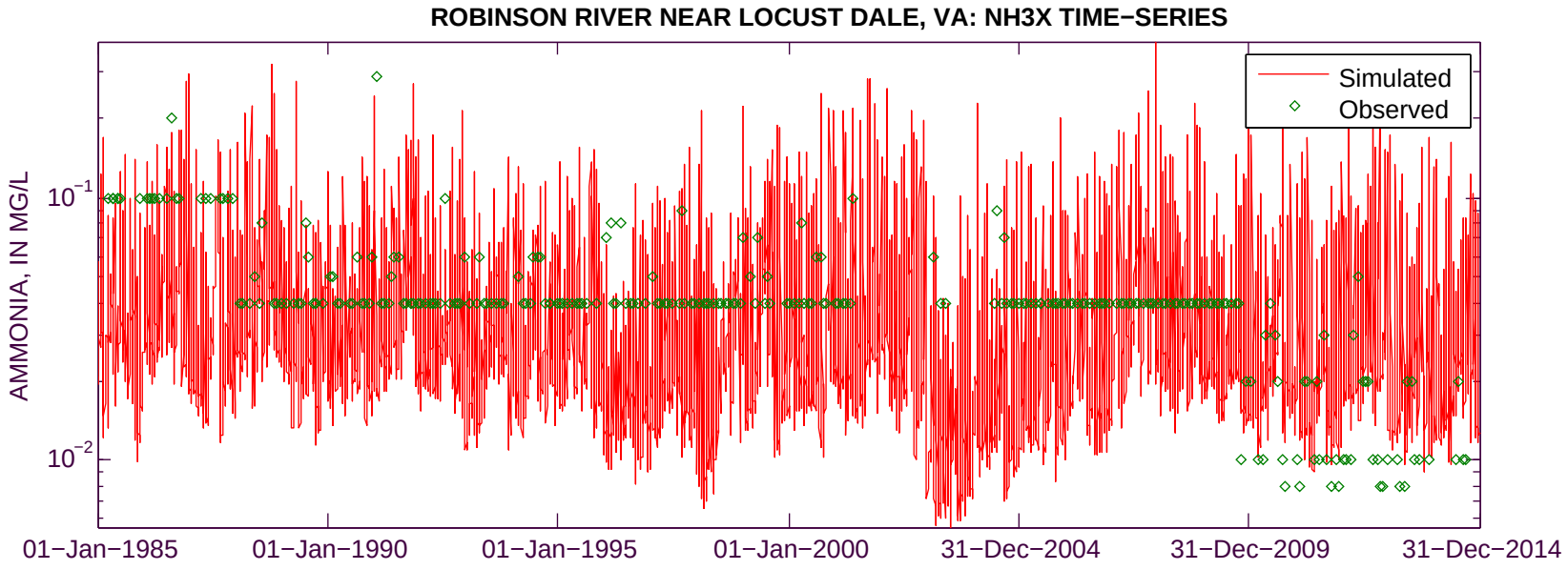
Dates: 1/1/1985 – 12/31/201

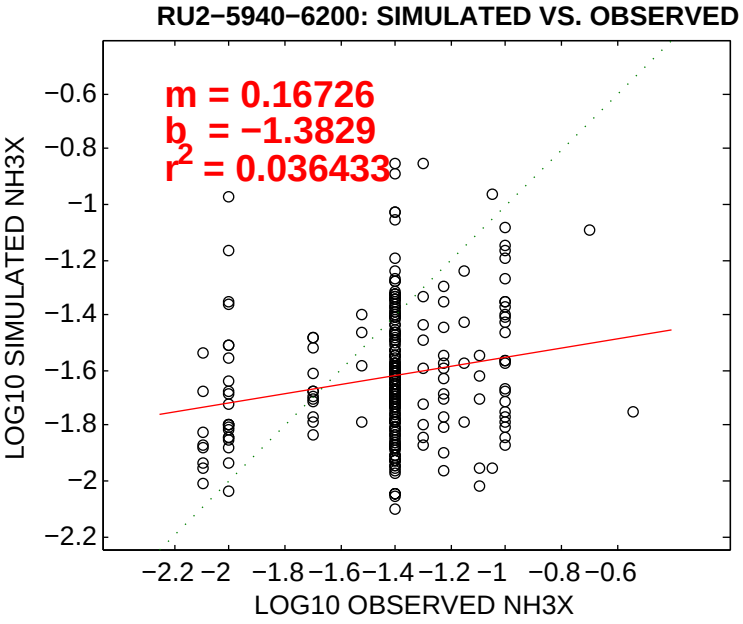
Drive	Directory	Observed
N/A	model	OBS20161101

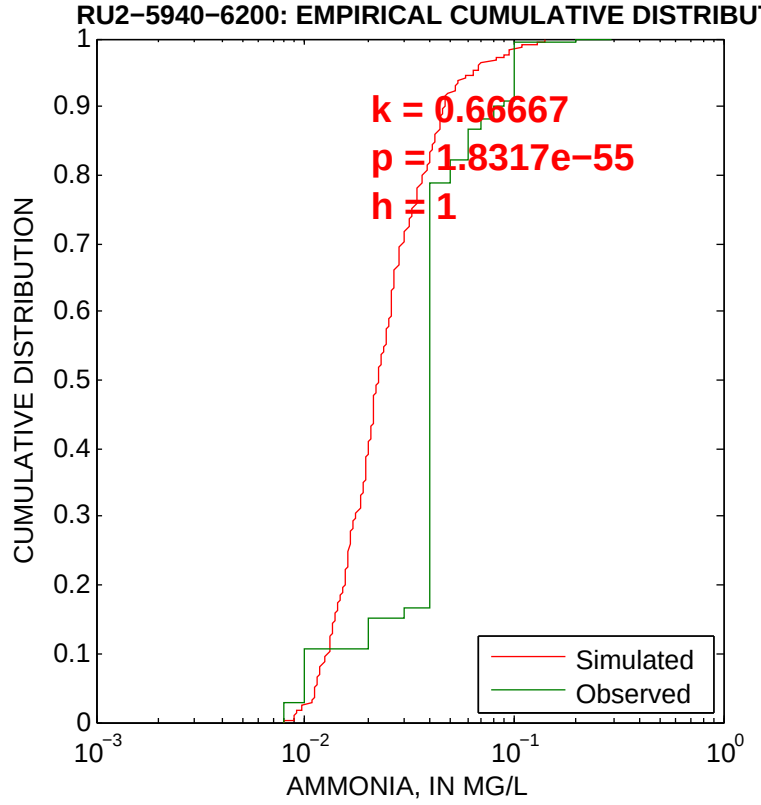
STATISTICS

	n	observe	simulate
		10957	10957
min		2	6.8072
		0.30103	0.832969
mean		227.275	225.729
		2.13534	2.17059
media		146	151.18
		2.16435	2.17949
max		13200	10416
		4.12057	4.0177
varian		196000	124548
		0.179386	0.141868
JB		0.001	0.001
		0.001	0.001
		ra	log
%		-0.680266	1.65095
err.va		78654	0.0415595
rel.std.err		0.401296	0.231677
mod.eff		0.598704	0.768323

VERSION 2.1







DATA SELECTION

scenario	file
P620171001WQ	NH3X.calib

plot: NH3X - ammonia

Dates: 1/1/1985 – 12/31/201

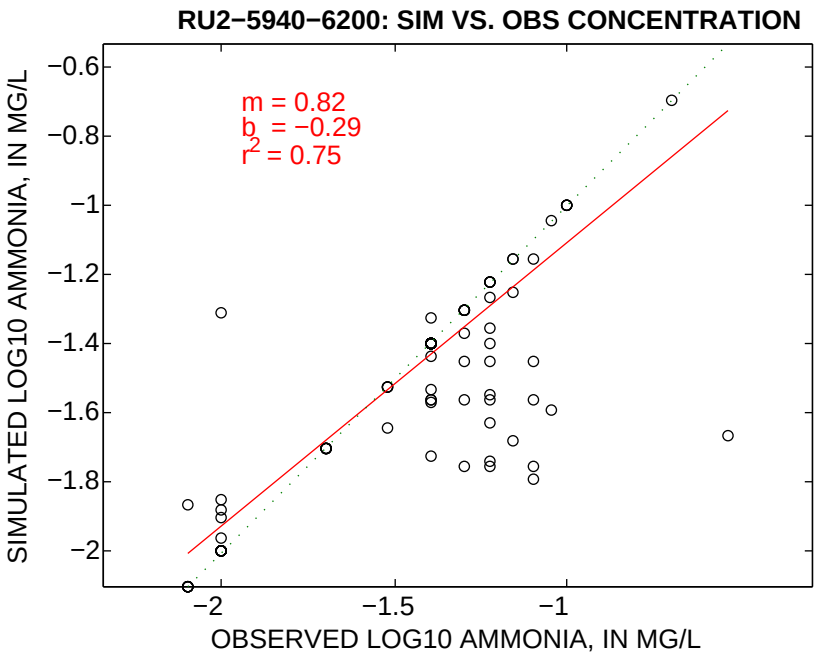
Drive	Directory	Observed
N/A	model	OBS20161101

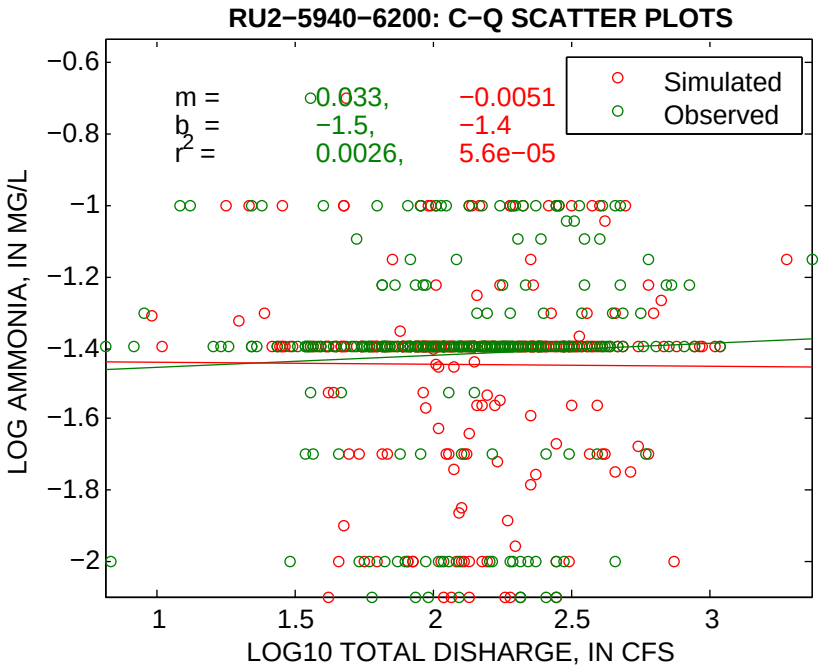
STATISTICS

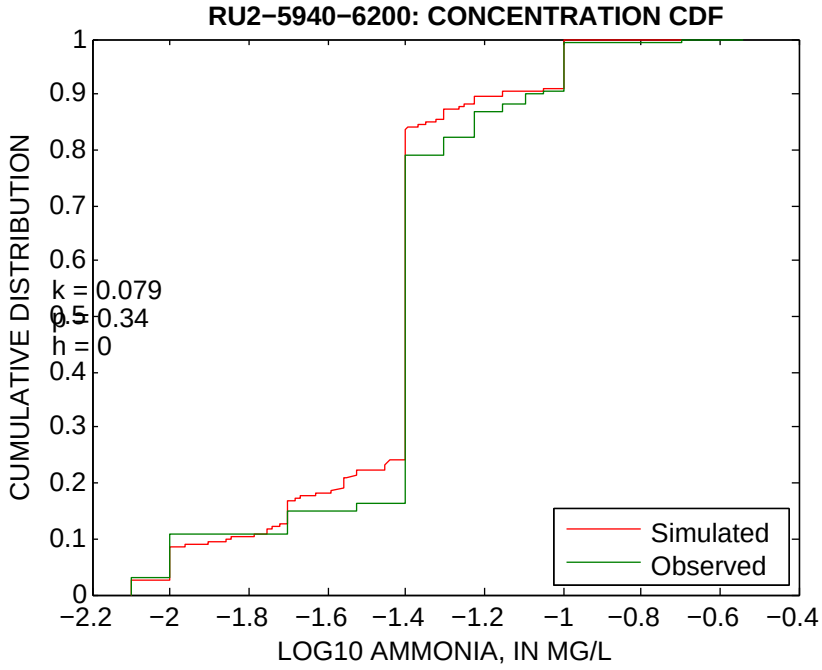
	n	279	279
		observe	simulate
min		0.008	0.0079119
		-2.09691	-2.10172
mean		0.0451039	0.0281712
		-1.41764	-1.62006
media		0.04	0.022387
		-1.39794	-1.65
max		0.29	0.13943
		-0.537602	-0.855644
varian		0.00080260	0.00039132
		0.0697082	0.0535272
JB		0.001	0.001
		0.001	0.001
		ra	log
%		-37.5416	14.2788
err.va		0.00130419	0.141039
rel.std.err		1.62494	2.02327
mod.eff		-0.624943	-1.02327

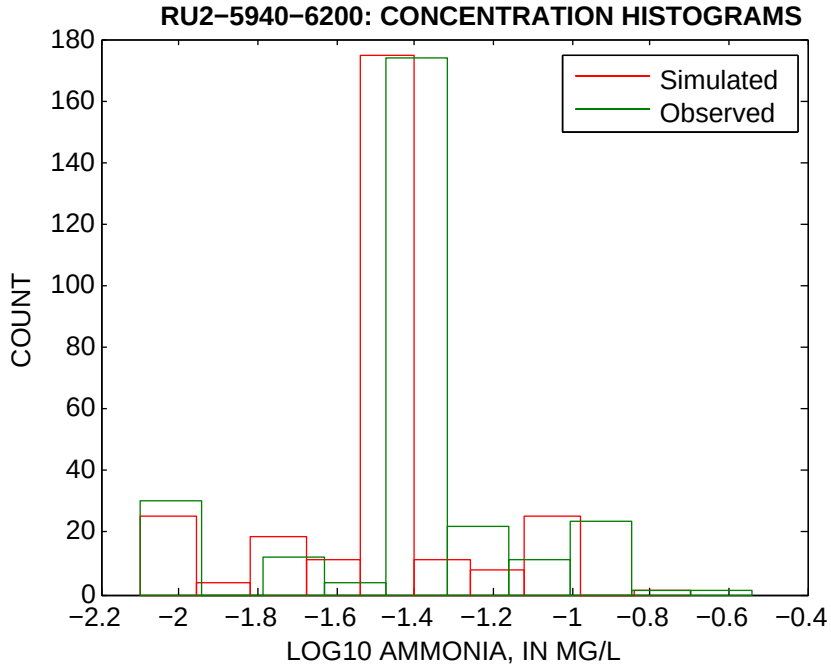
VERSION 2.1

ALL DATA
LOG10

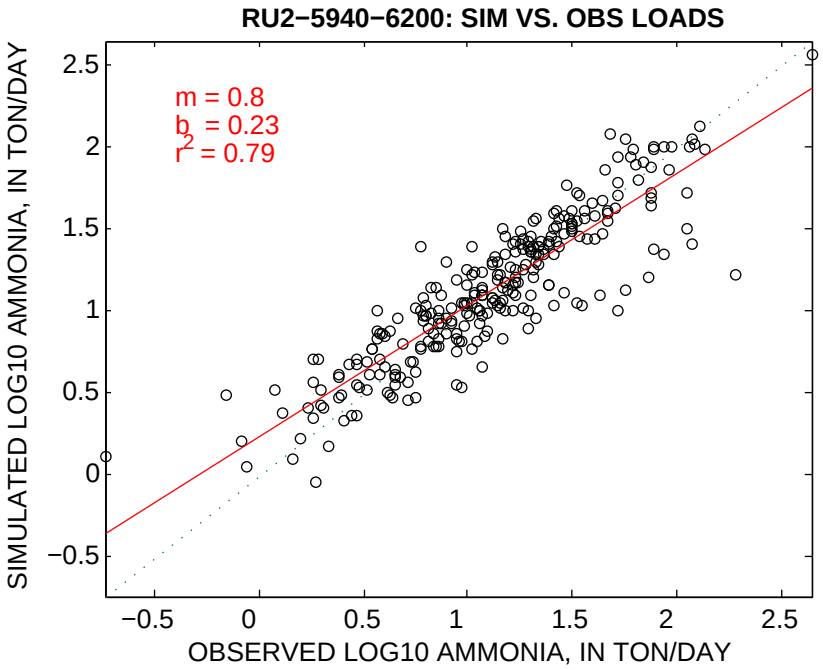


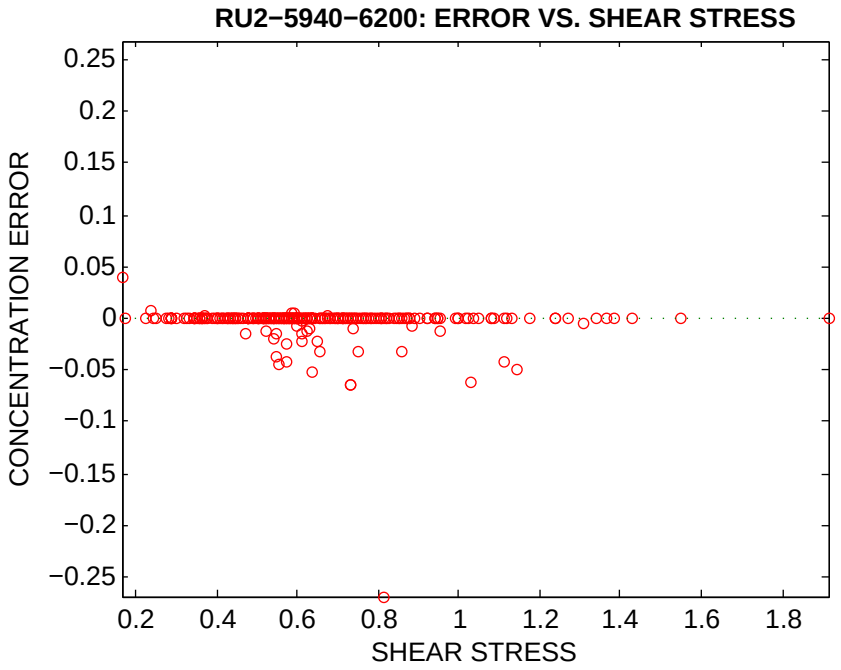


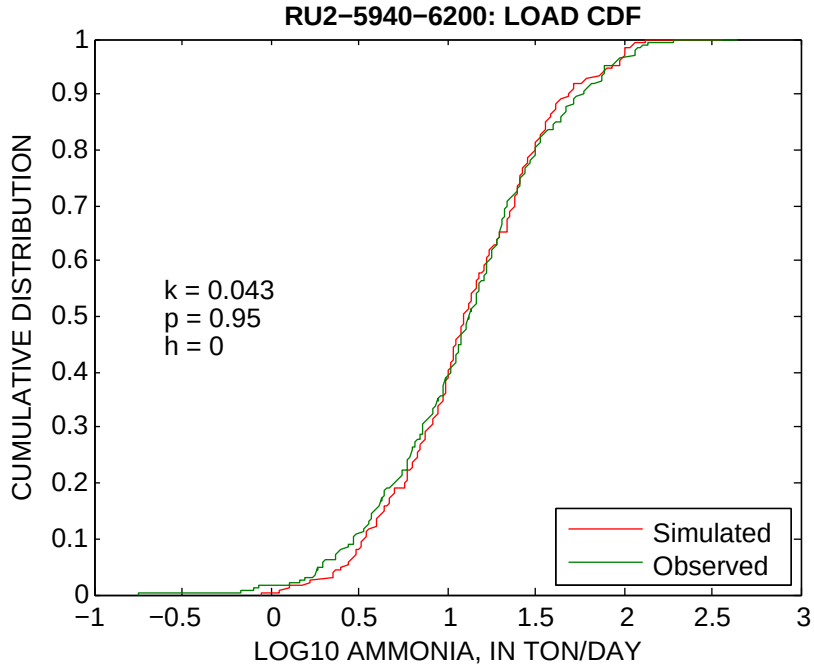


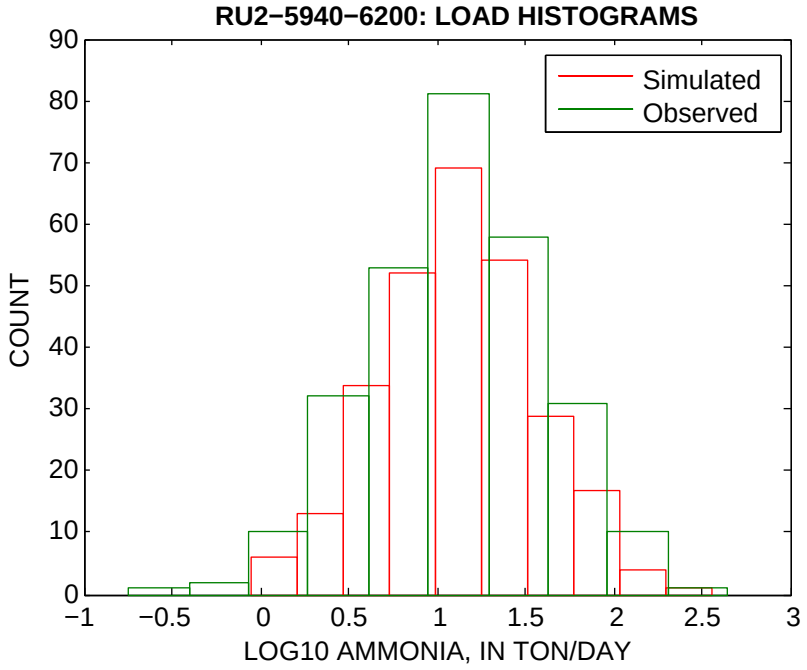


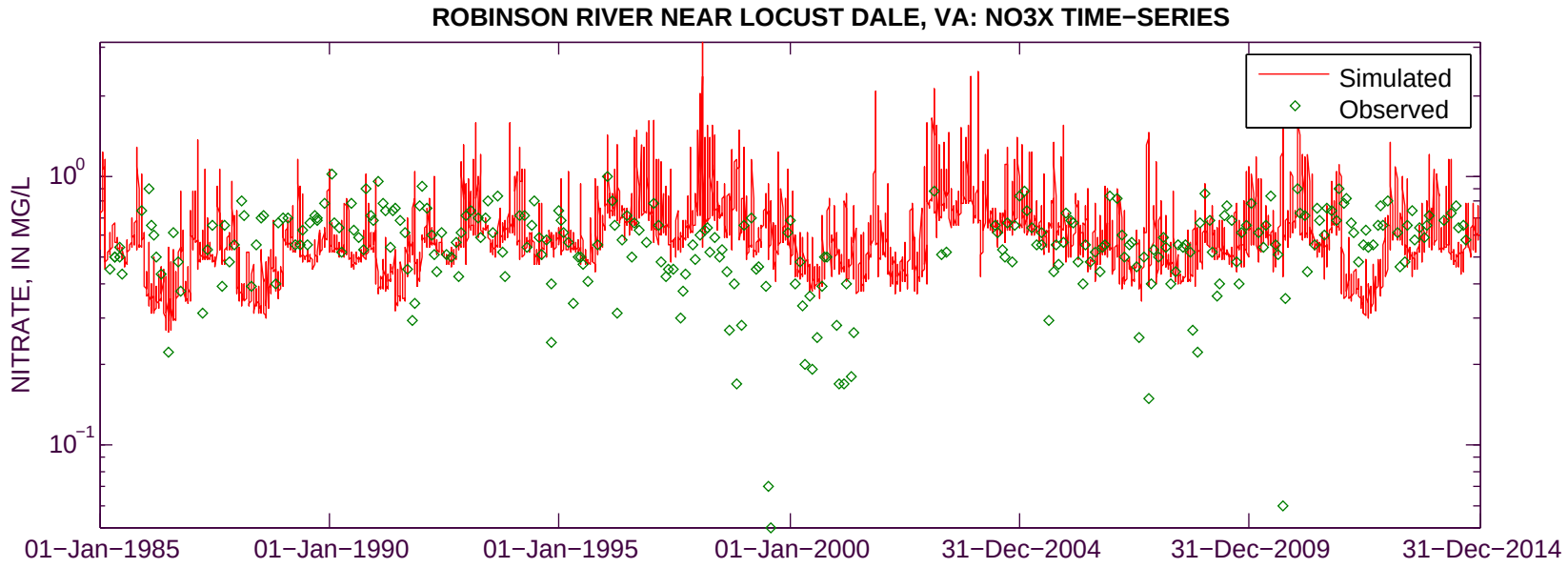
LOAD DATA
LOG10

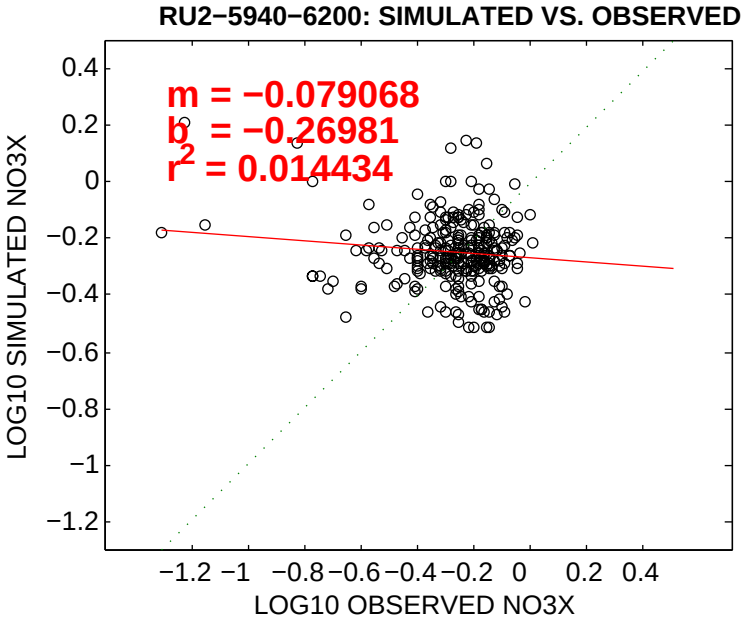


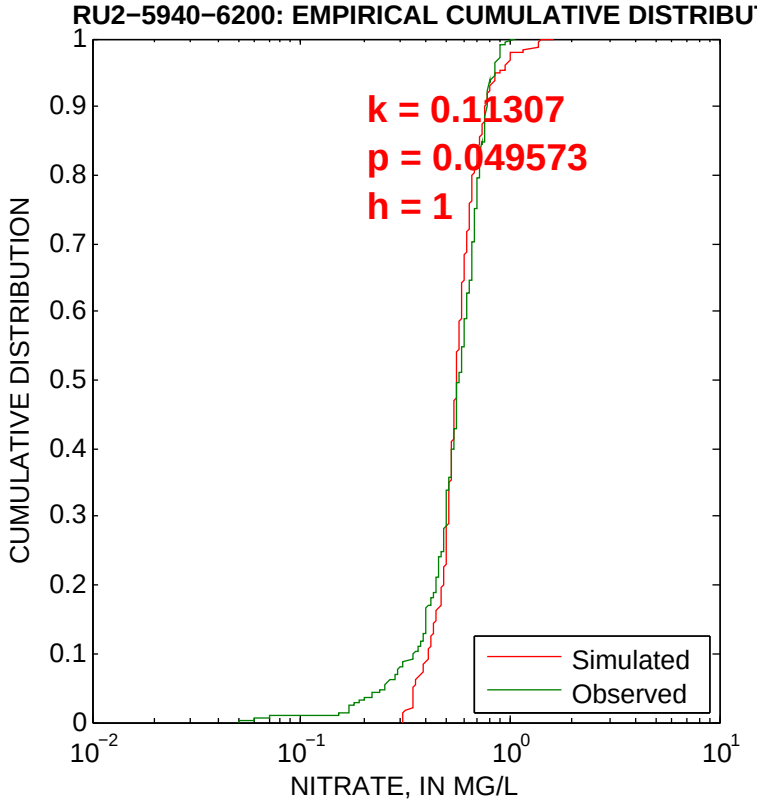












DATA SELECTION

scenario: P620171001WQ | file: NO3X.calib

plot: NO3X - nitrate

Dates: 1/1/1985 – 12/31/201

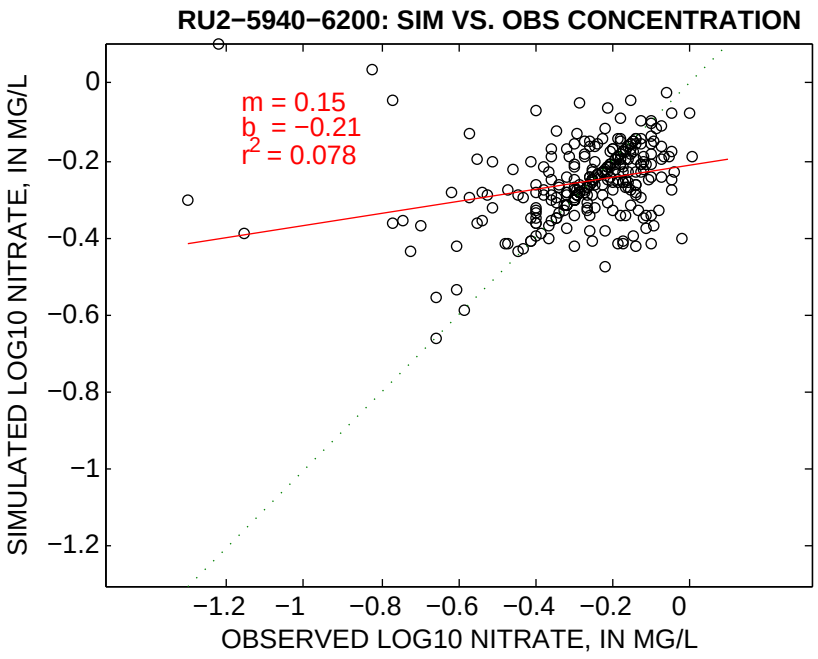
Drive | Directory | Observed: N/A | model | OBS20161101

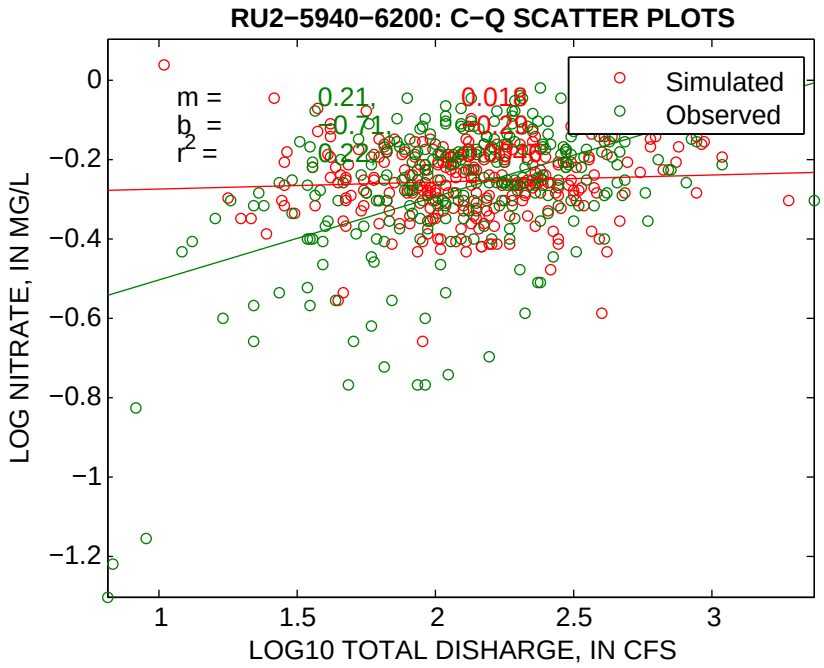
STATISTICS

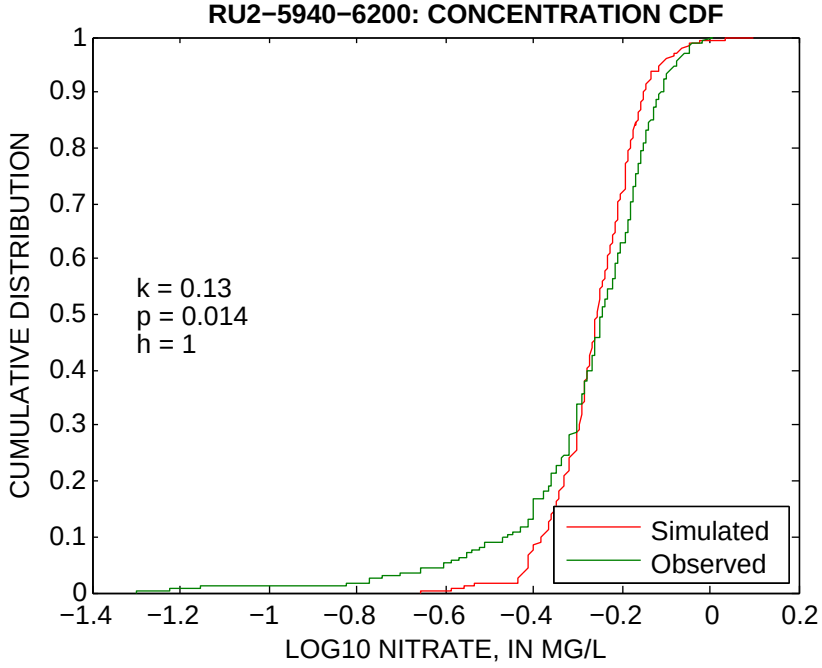
	n	observe	simulate
		283	283
min		0.05	0.30664
		-1.30103	-0.513371
mean		0.568551	0.586552
		-0.273099	-0.248213
media		0.57	0.55491
		-0.244125	-0.255777
max		1.02	1.6157
		0.00860017	0.208361
varian		0.0297869	0.0319913
		0.0312552	0.0135377
JB		0.041945	0.001
		0.001	0.001
		ra	log
%		3.1661	-9.11247
err.va		0.0679437	0.0503569
rel.std.err		2.28099	1.61116
mod.eff		-1.28099	-0.611155

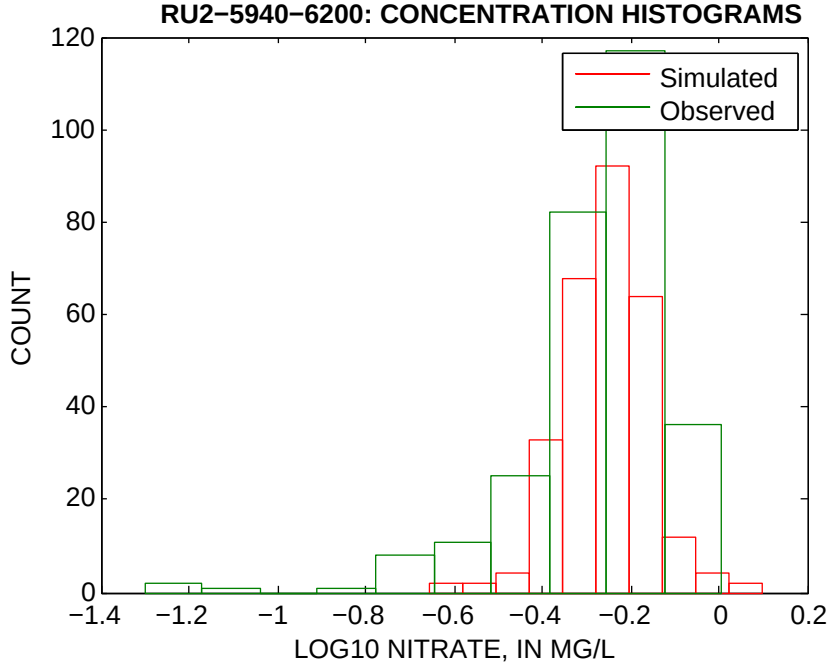
VERSION 2.1

ALL DATA
LOG10

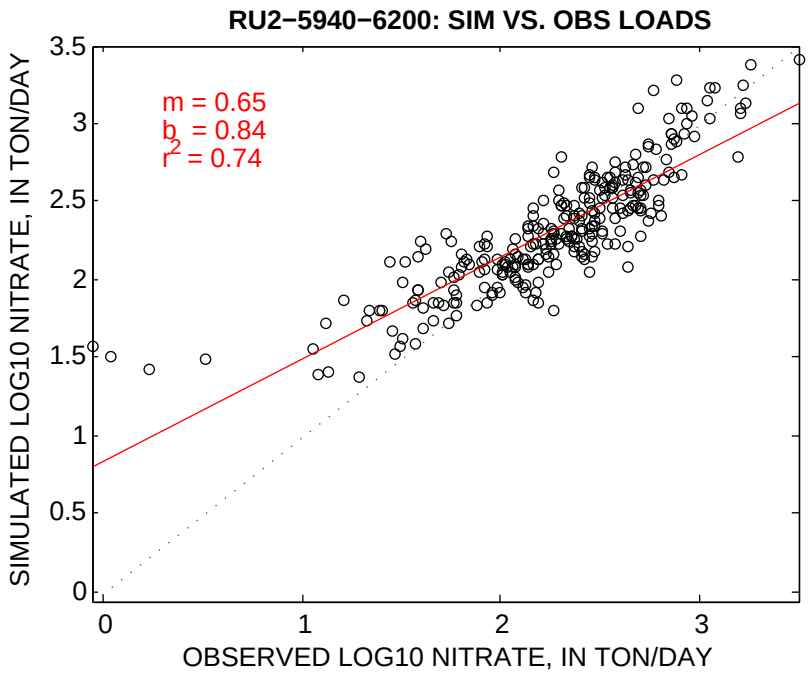


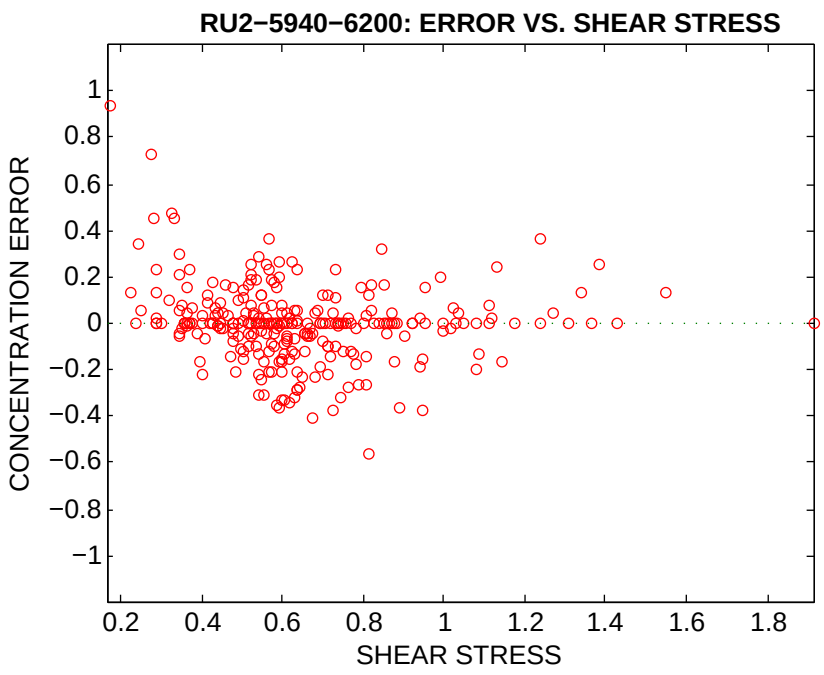


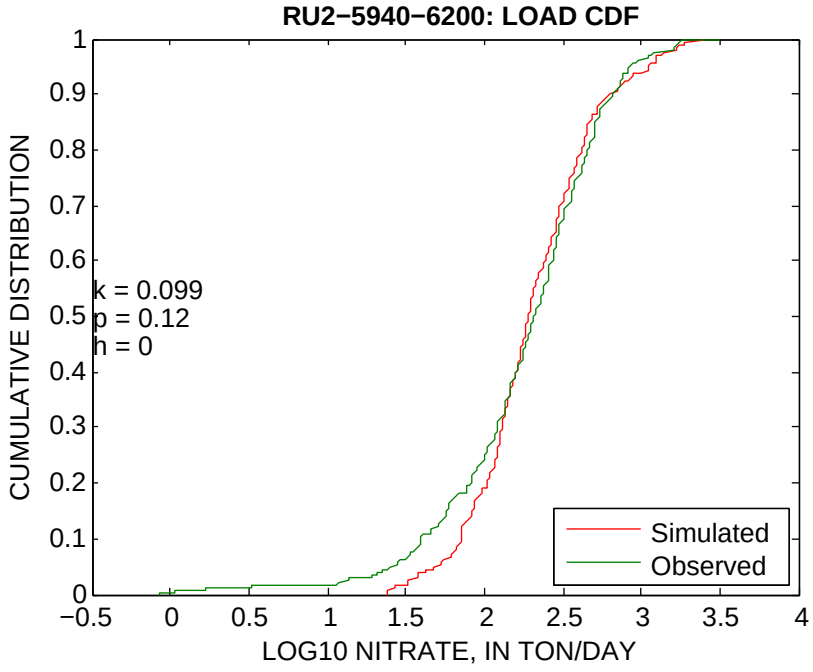


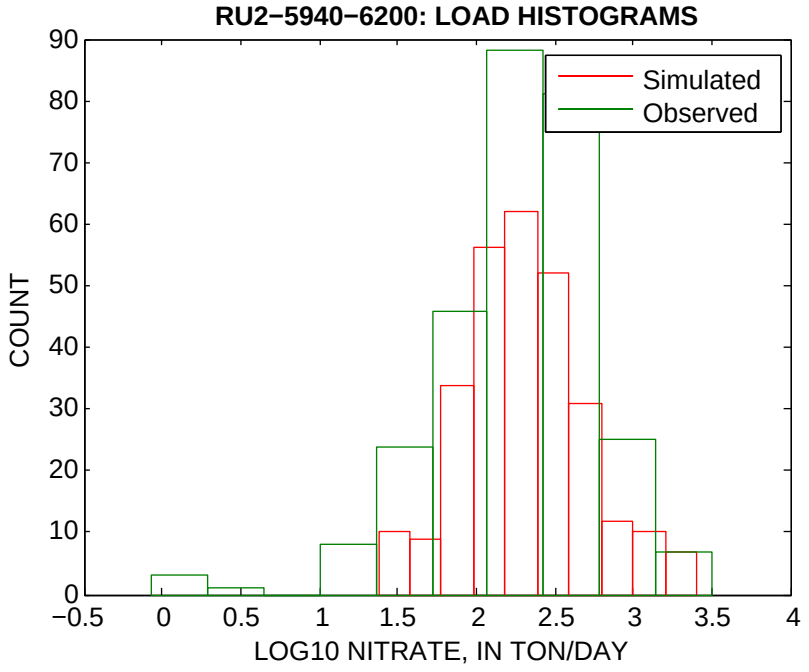


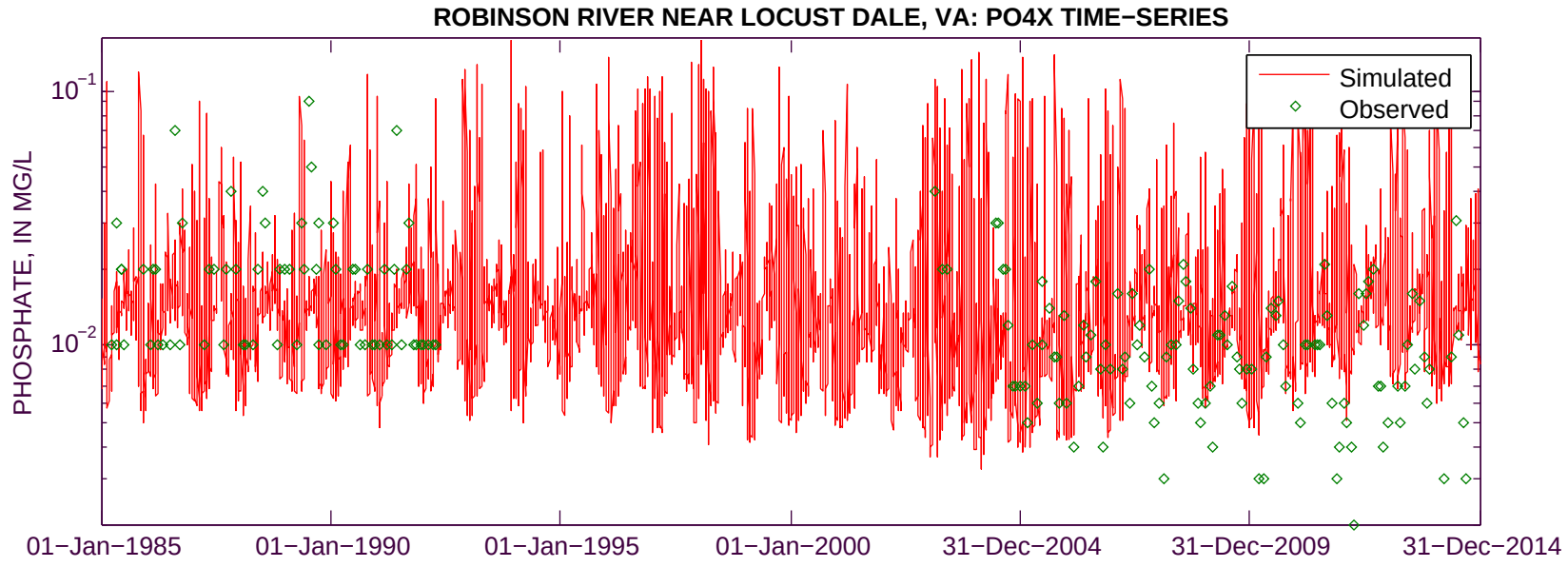
LOAD DATA
LOG10

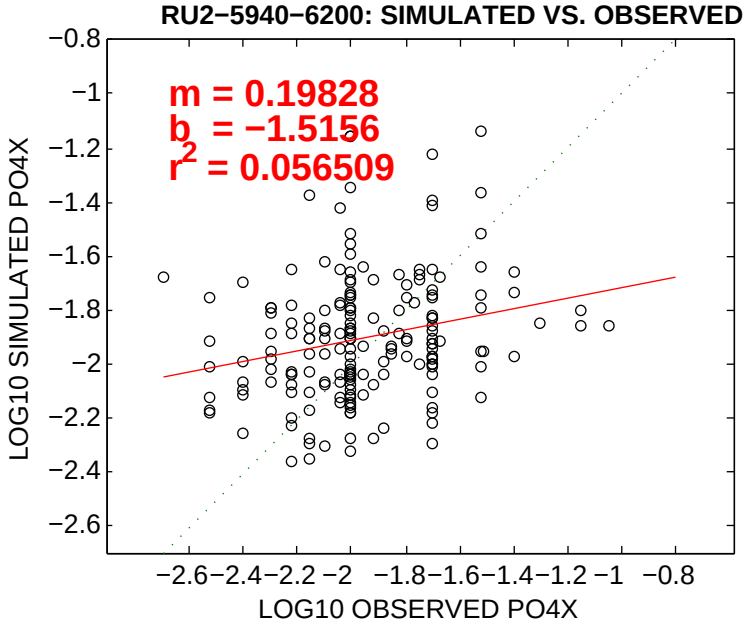


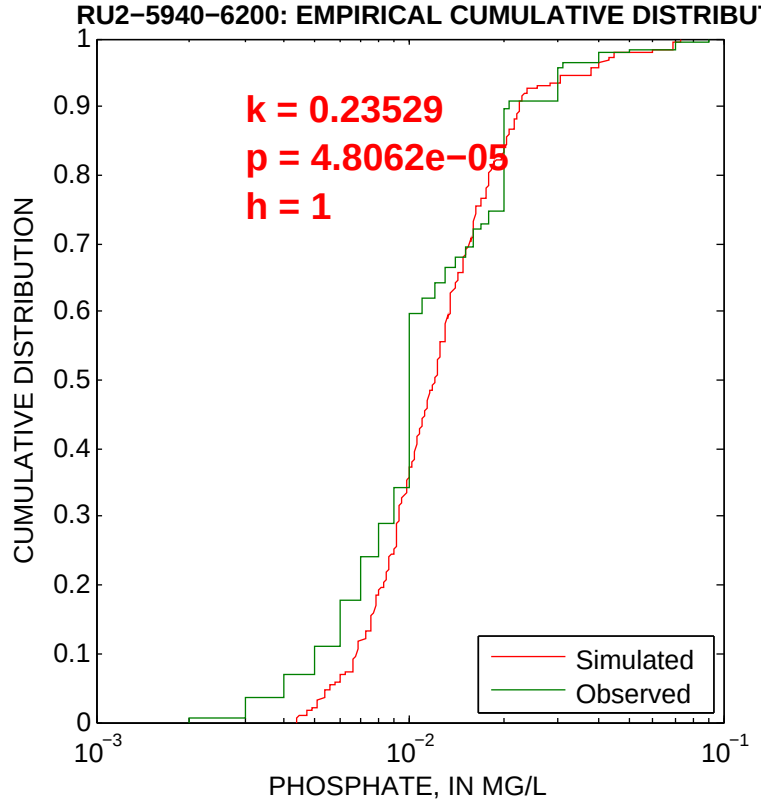












DATA SELECTION

scenario	file
P620171001WQ	PO4X.calib

plot: PO4X - phosphate

Dates: 1/1/1985 12/31/201

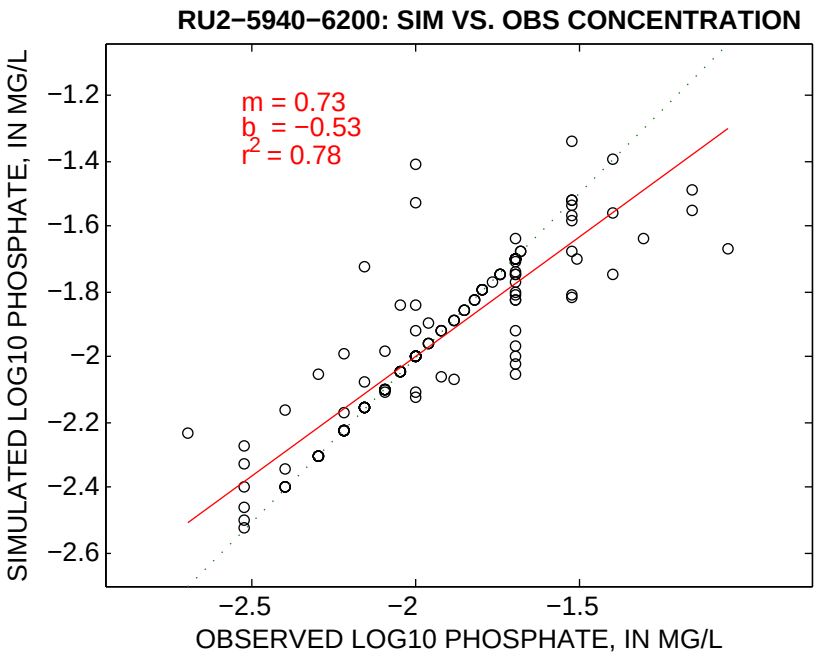
Drive	Directory	Observed
N/A	model	OBS20161101

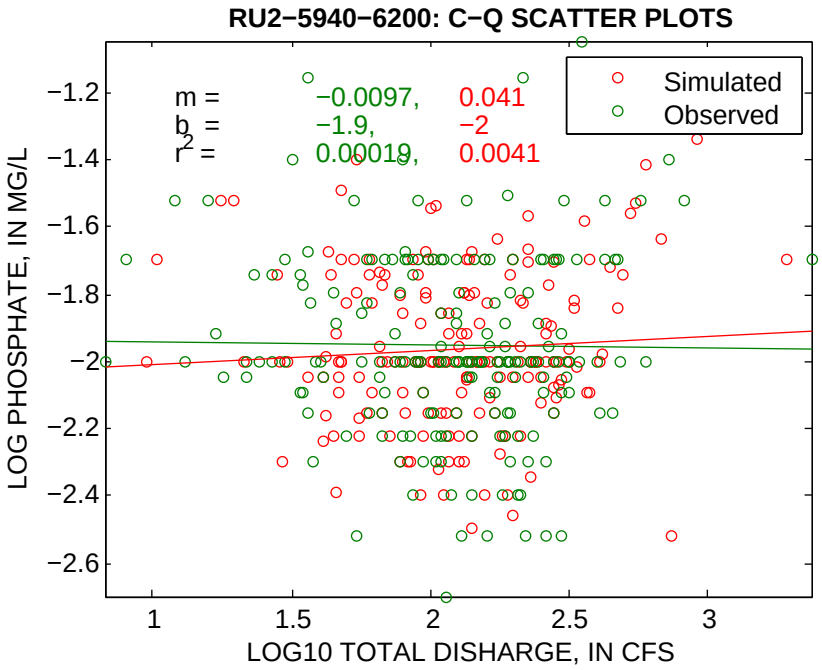
STATISTICS

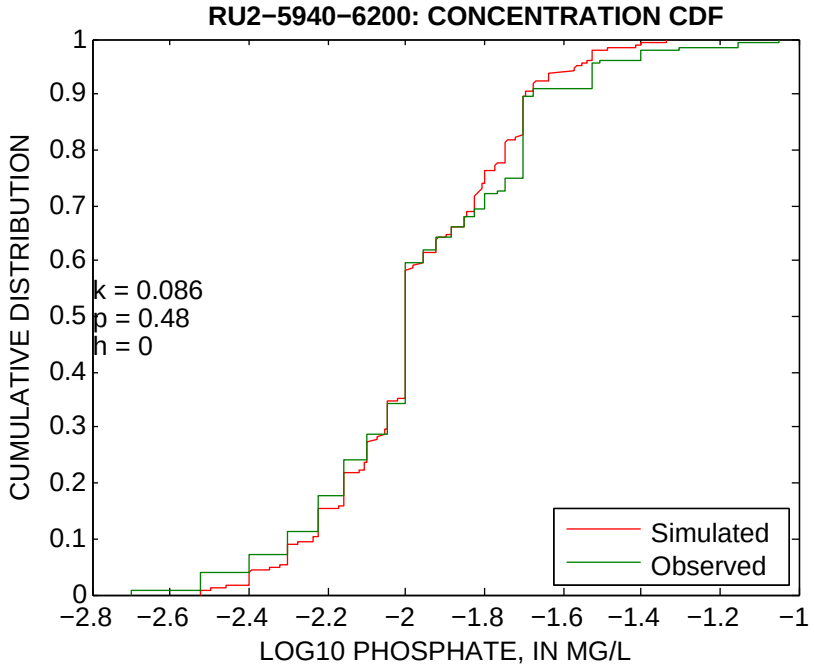
		observe	simulate
n		187	187
min		0.002	0.0043655
		-2.69897	-2.35997
mean		0.0138235	0.0146996
		-1.95346	-1.90296
media		0.01	0.012079
		-2	-1.91797
max		0.09	0.073413
		-1.04576	-1.13423
varian		0.00012921	0.00011504
		0.0757865	0.0527288
JB		0.001	0.001
		0.048386	0.001
		ra	log
%		6.33774	-2.58559
err.va		0.00021113	0.101026
rel.std.err		1.63401	1.33303
mod.eff		-0.634013	-0.33303

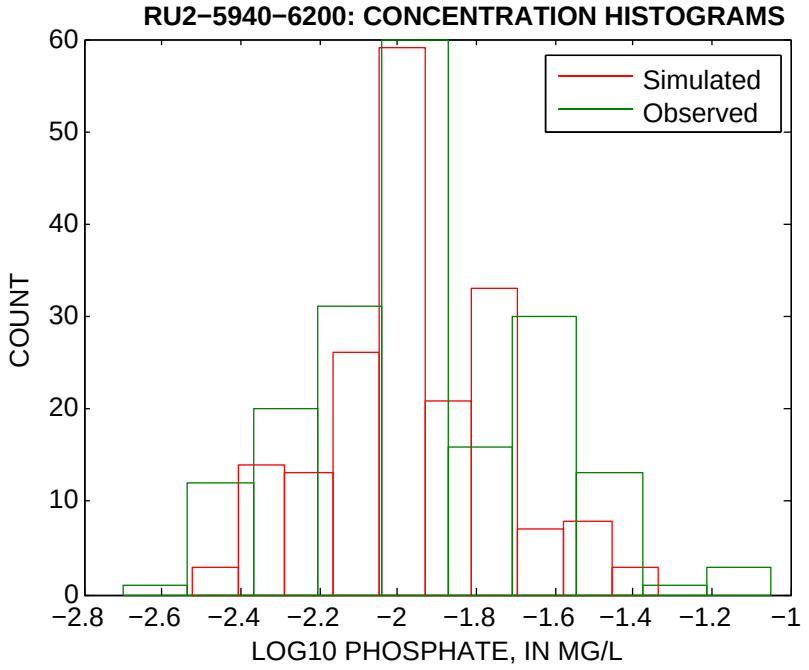
VERSION 2.1

ALL DATA
LOG10

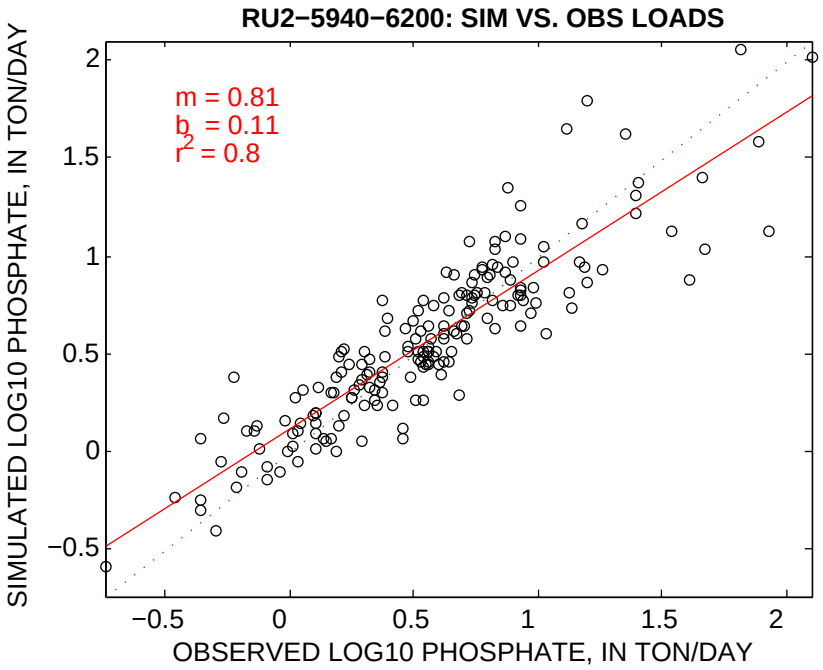


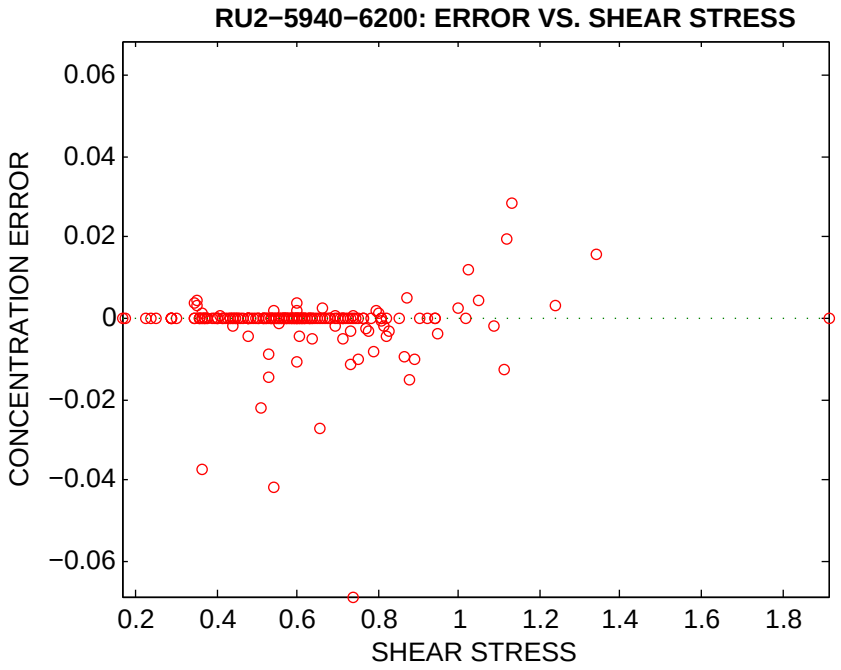


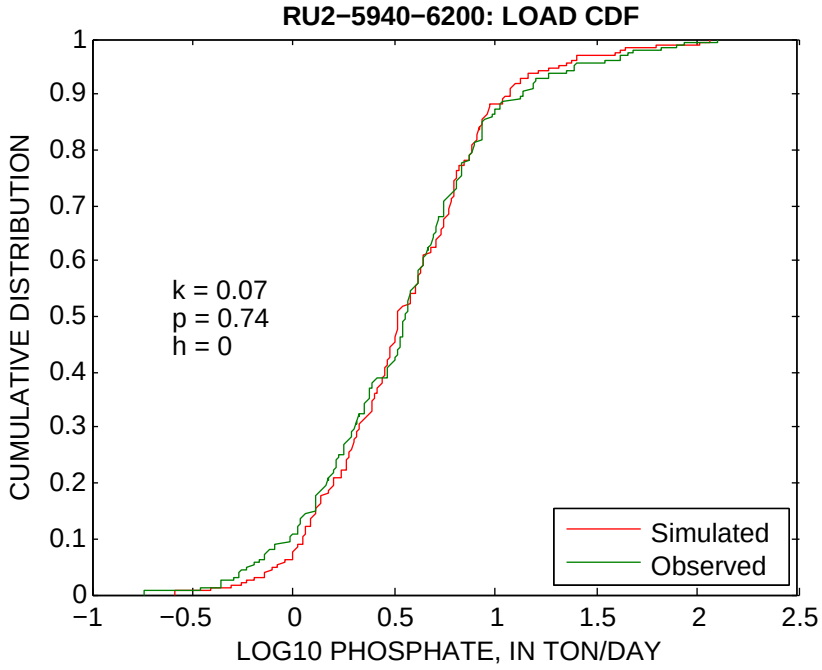


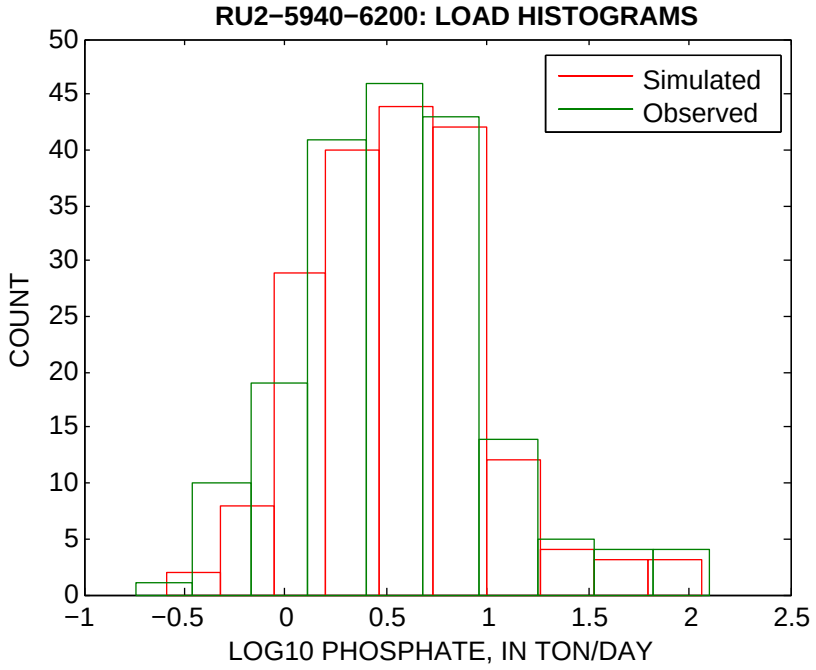


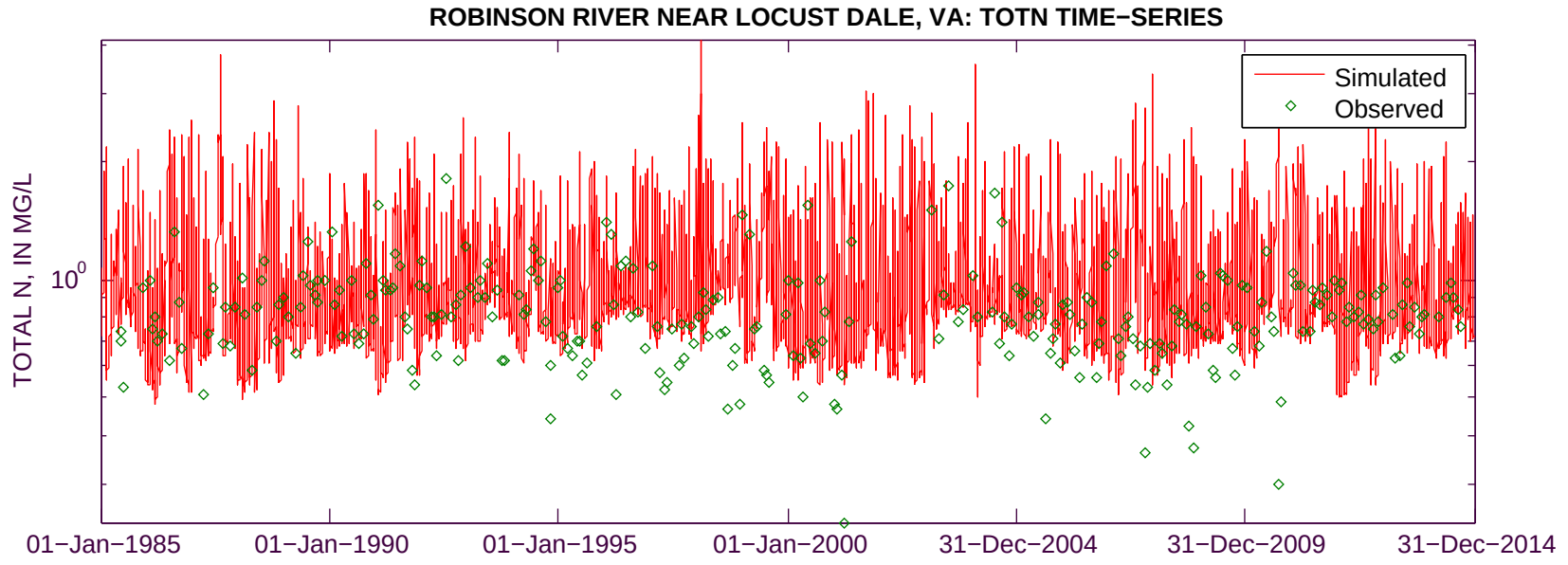
LOAD DATA
LOG10

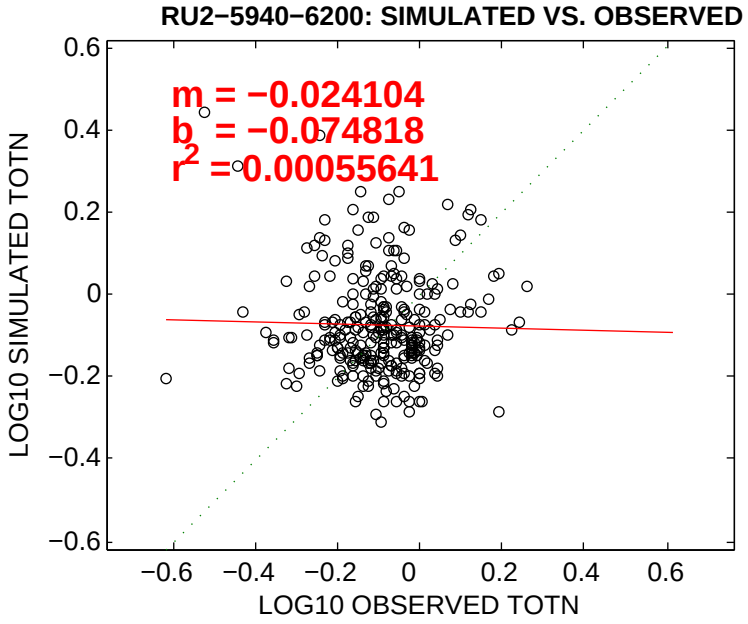


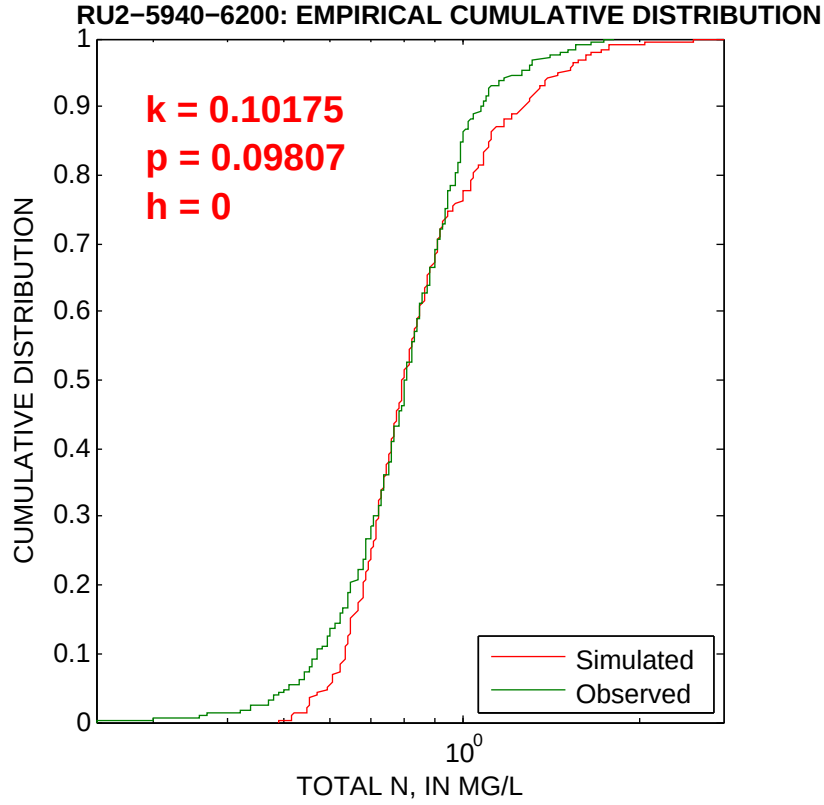












DATA SELECTION

scenario	file
P620171001WQ	TOTN.calib

plot: TOTN - total nitrogen

Dates: 1/1/1985 – 12/31/201

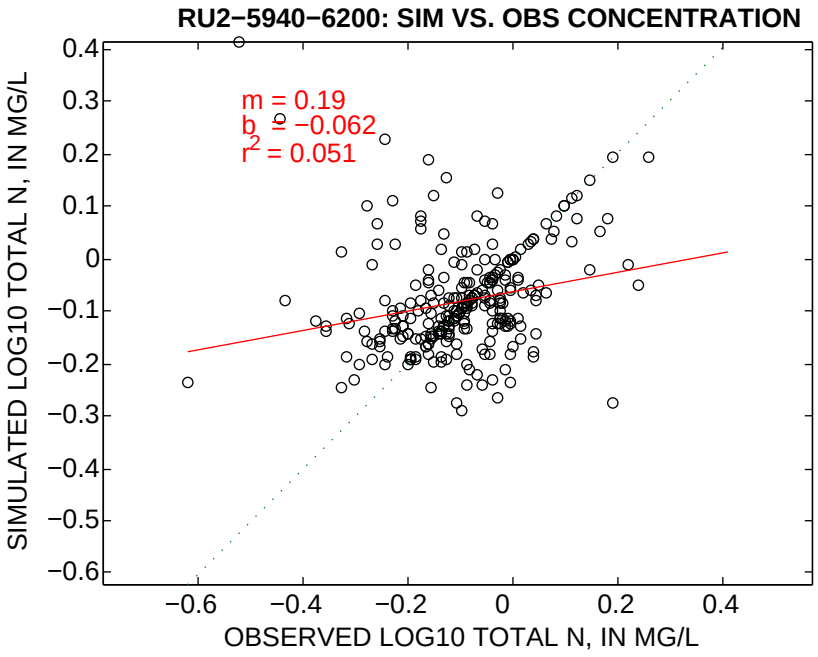
Drive	Directory	Observed
N/A	model	OBS20161101

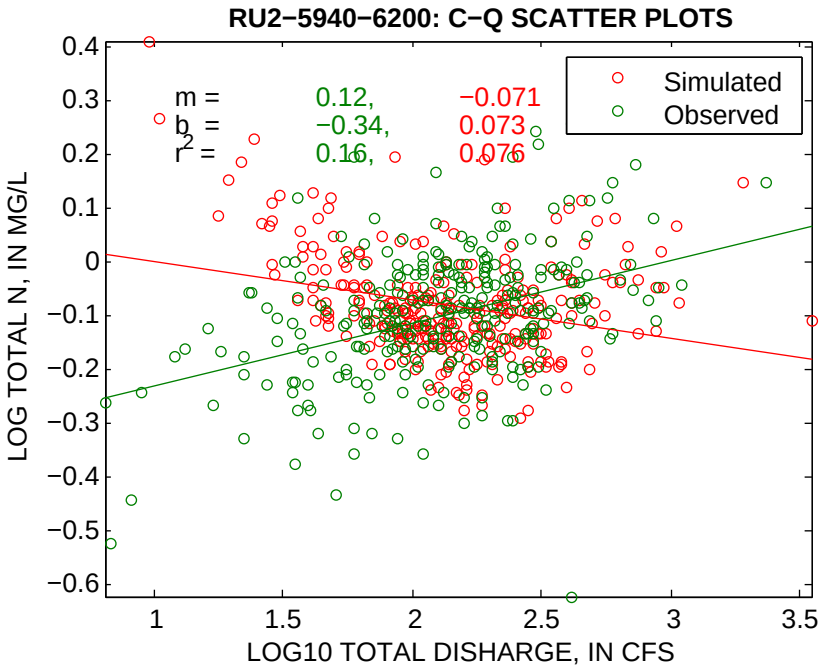
STATISTICS

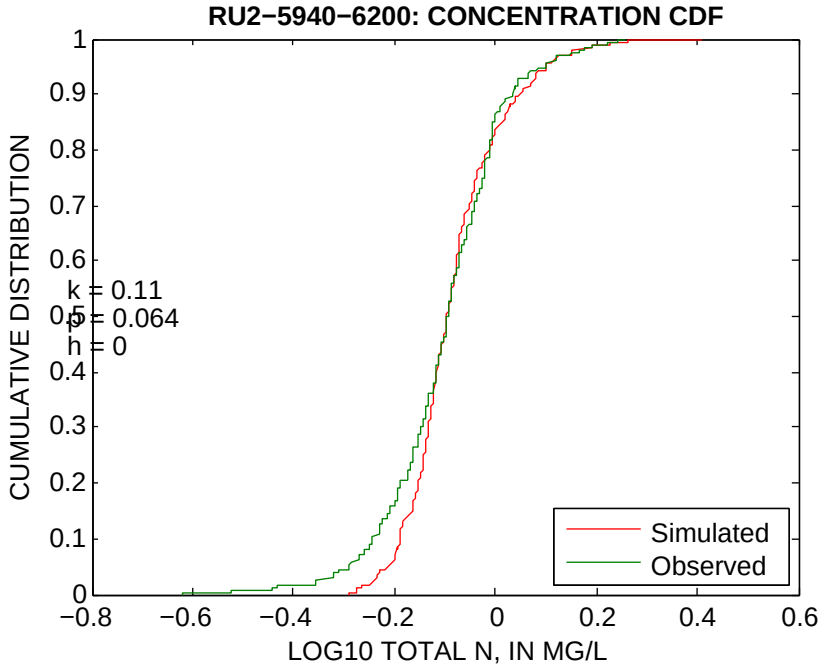
	n	285	285
		observe	simulate
min		0.24	0.49199
		-0.619789	-0.308044
mean		0.827404	0.883747
		-0.0981686	-0.072452
media		0.81	0.79691
		-0.091515	-0.0985907
max		1.81	2.764
		0.257679	0.441538
varian		0.0518862	0.0882808
		0.0141269	0.0147515
JB		0.001	0.001
		0.001	0.001
		ra	log
%		6.80969	-26.1964
err.va		0.14507	0.0302231
rel.std.err		2.79593	2.1394
mod.eff		-1.79593	-1.1394

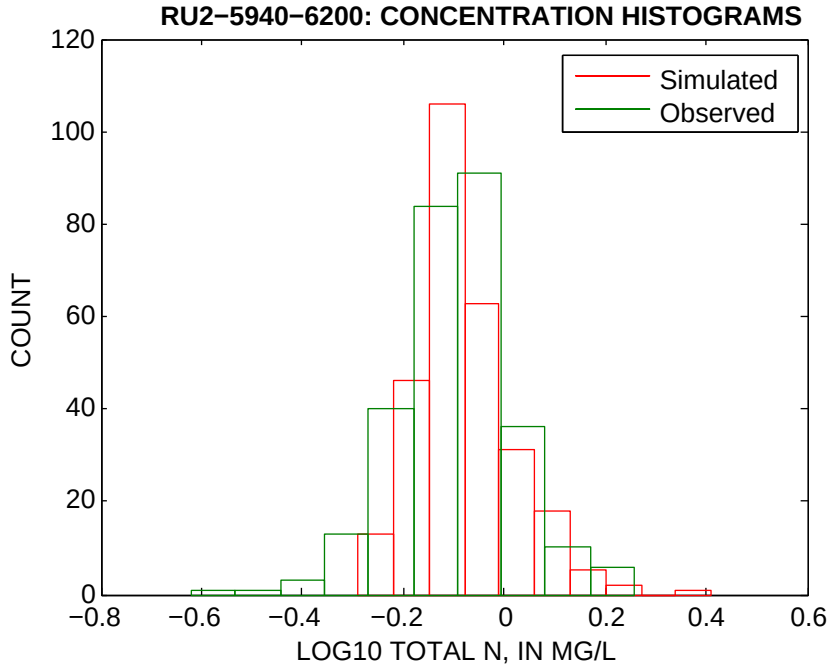
VERSION 2.1

ALL DATA
LOG10

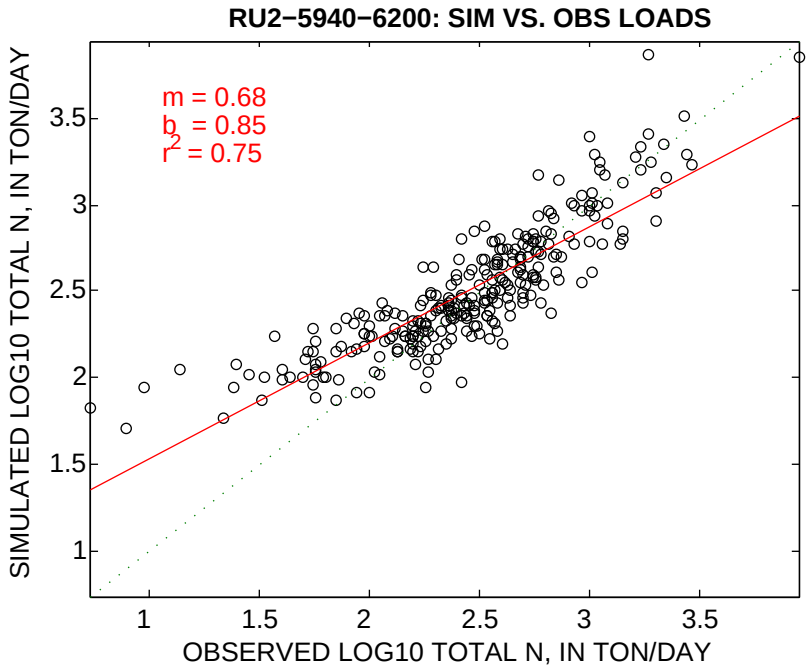


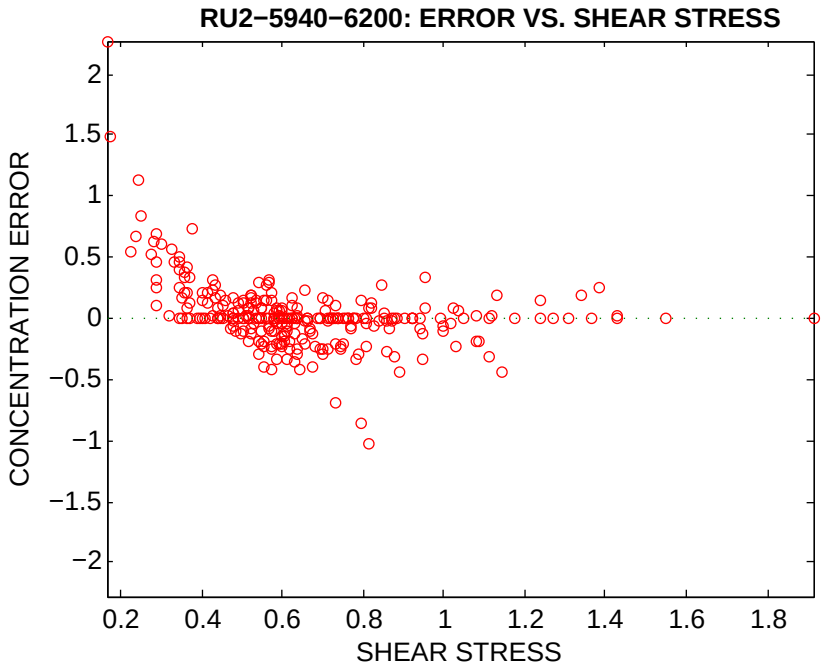


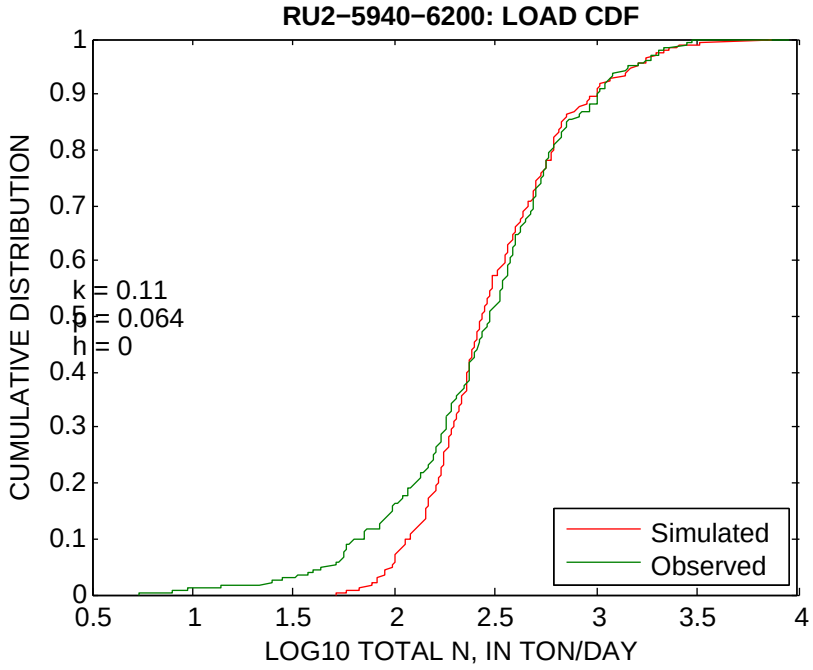


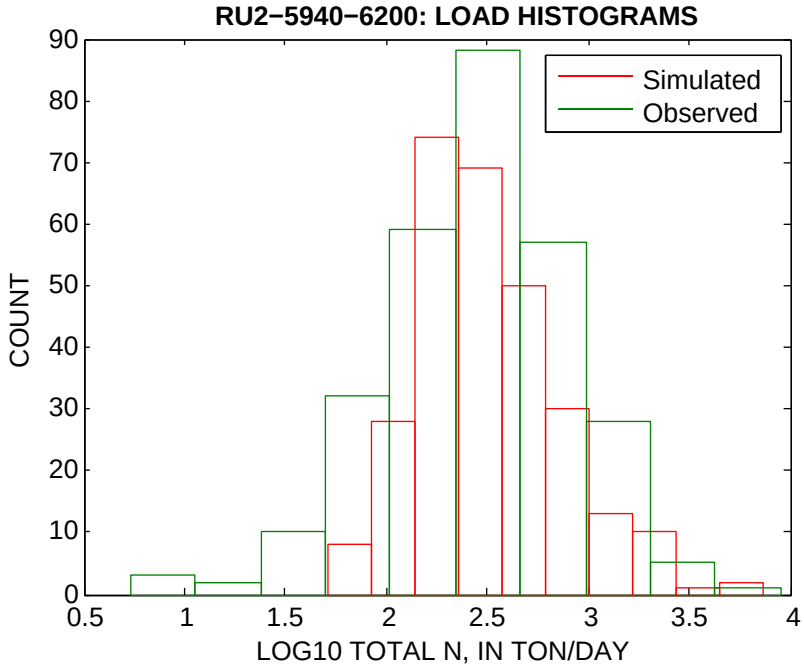


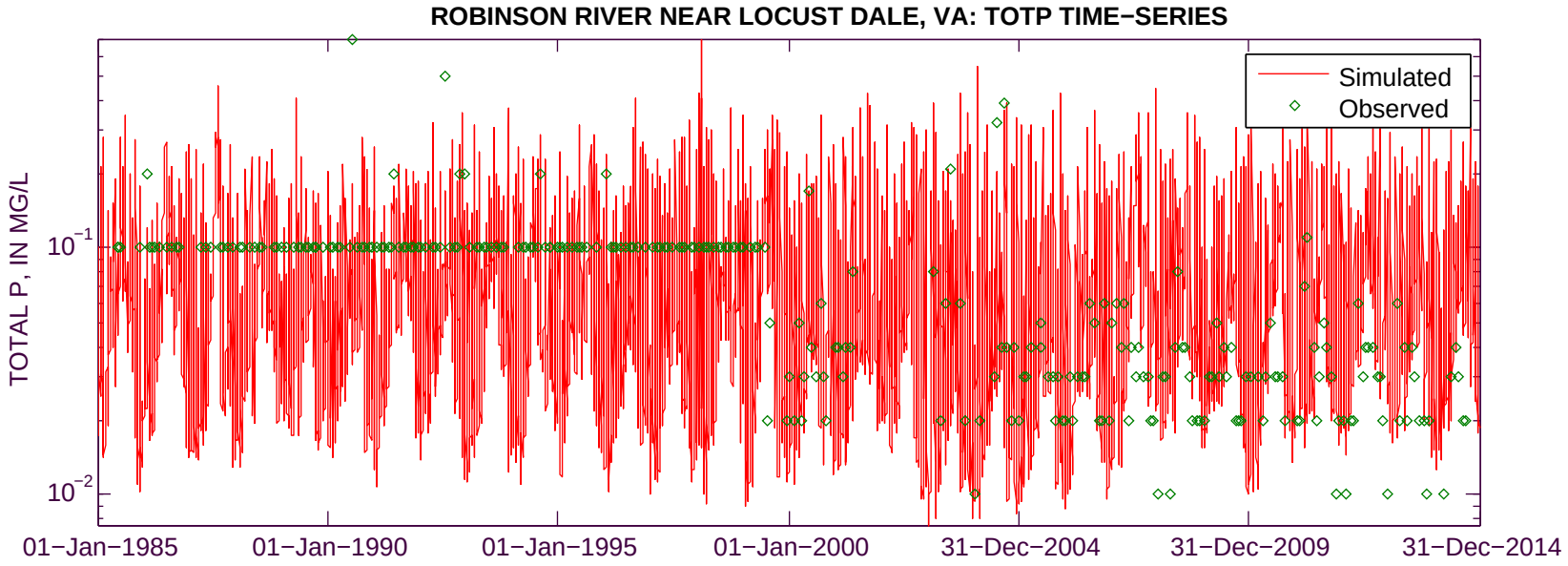
LOAD DATA
LOG10

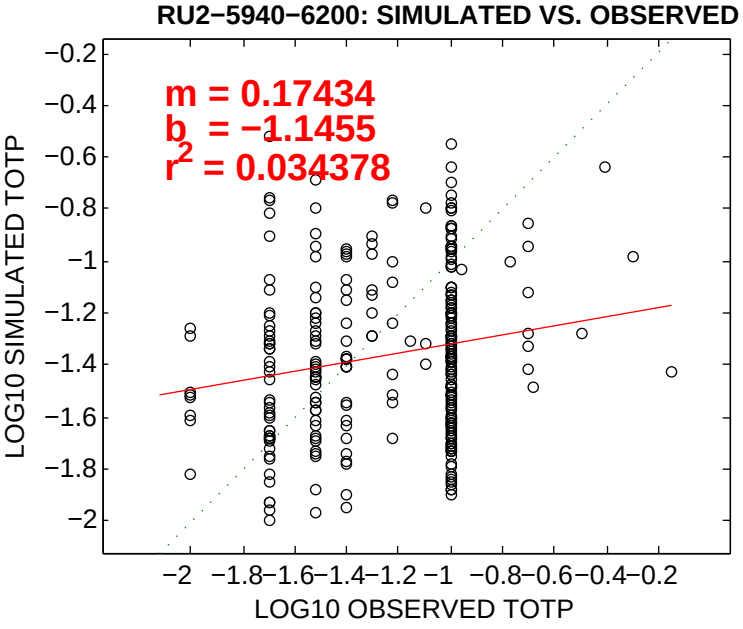


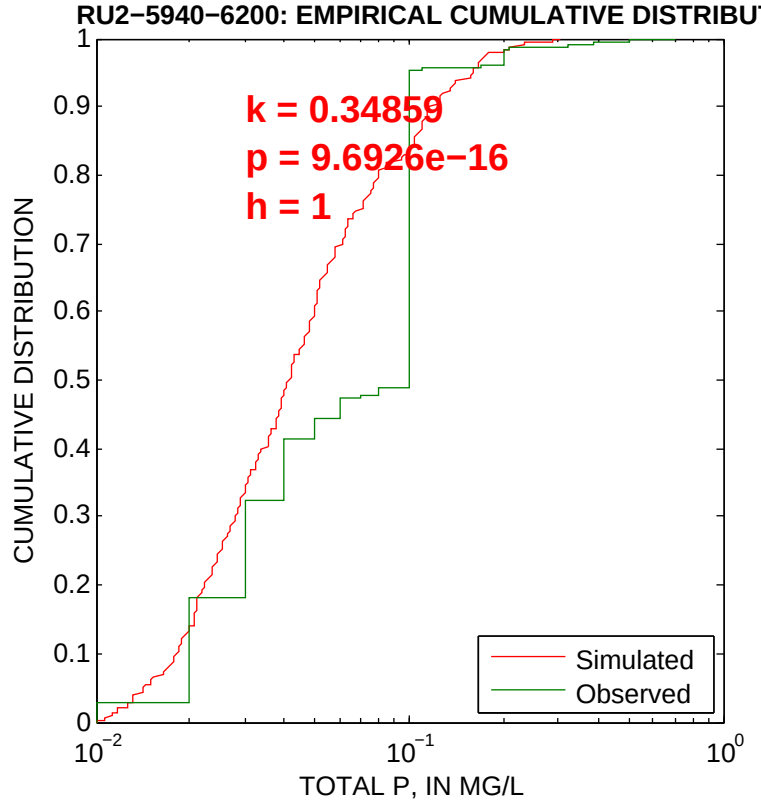












DATA SELECTION

scenario	file
P620171001WQ	TOTP.calib

plot: TOTP - total phosphorus

Dates: 1/1/1985 – 12/31/201

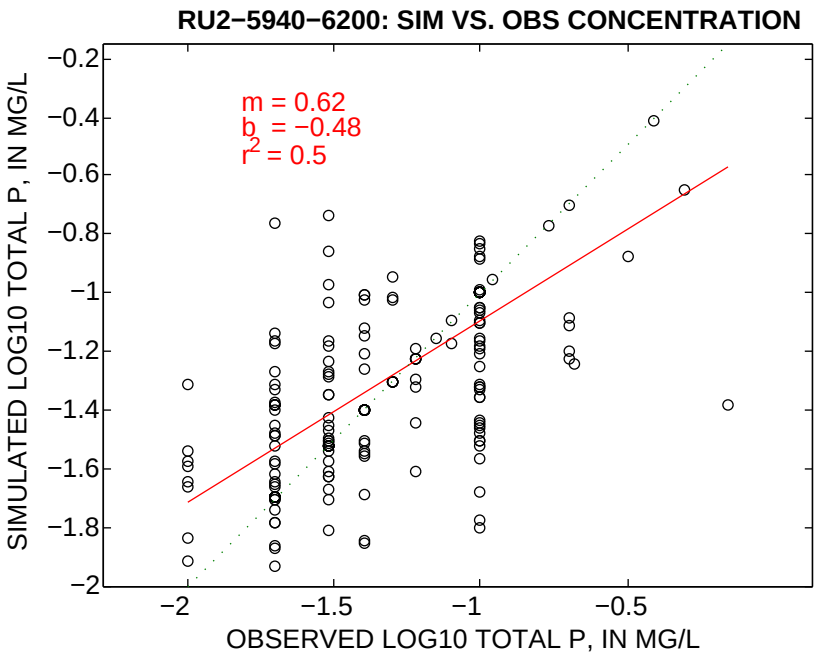
Drive	Directory	Observed
N/A	model	OBS20161101

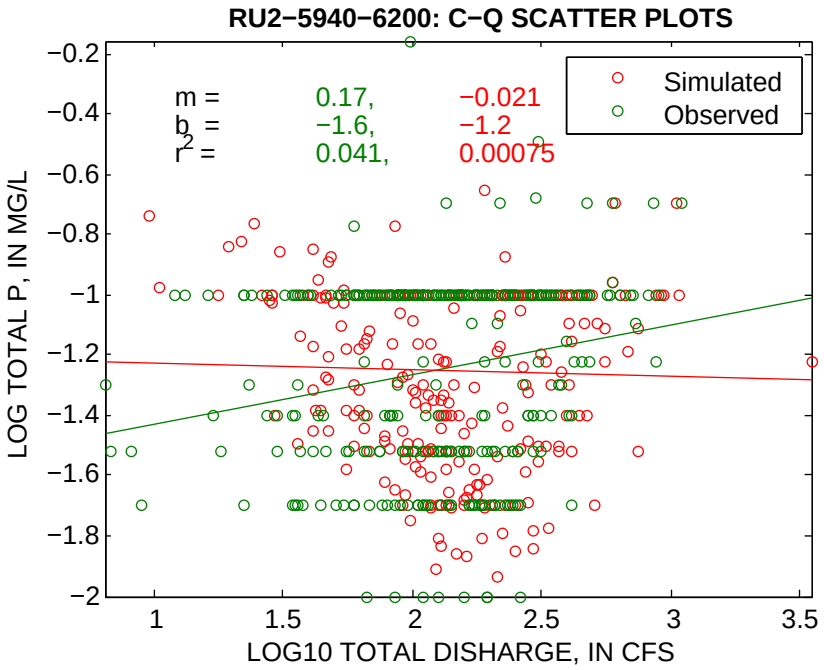
STATISTICS

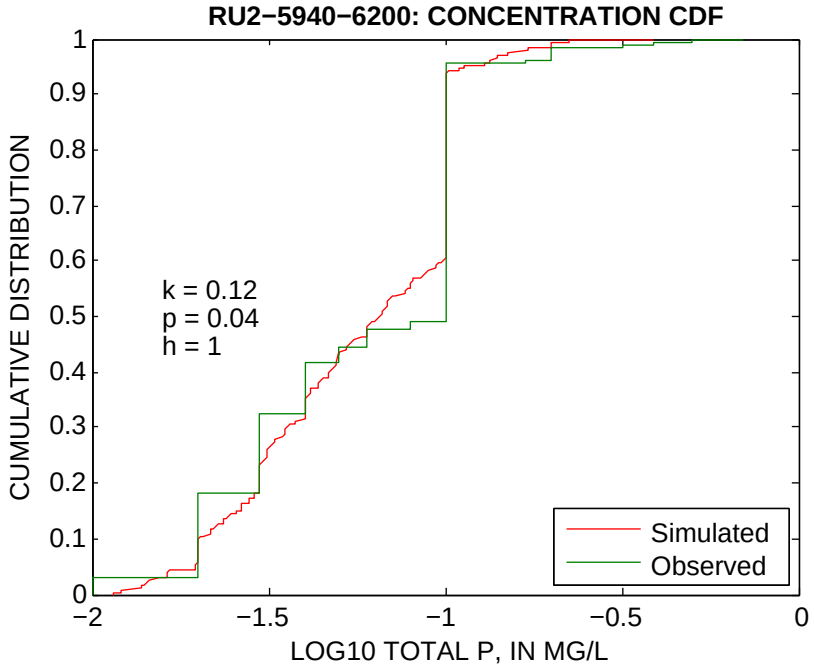
	n	observe	simulate
		284	284
min		0.01	0.010121
		-2	-1.99478
mean		0.0748239	0.0568039
		-1.24587	-1.36275
media		0.1	0.041174
		-1	-1.38538
max		0.7	0.30184
		-0.154902	-0.520223
varian		0.00431834	0.00223236
		0.109935	0.0971978
JB		0.001	0.001
		0.12907	0.025466
		ra	log
%		-24.0832	9.38147
err.va		0.00602073	0.18251
rel.std.err		1.39422	1.66016
mod.eff		-0.394222	-0.660157

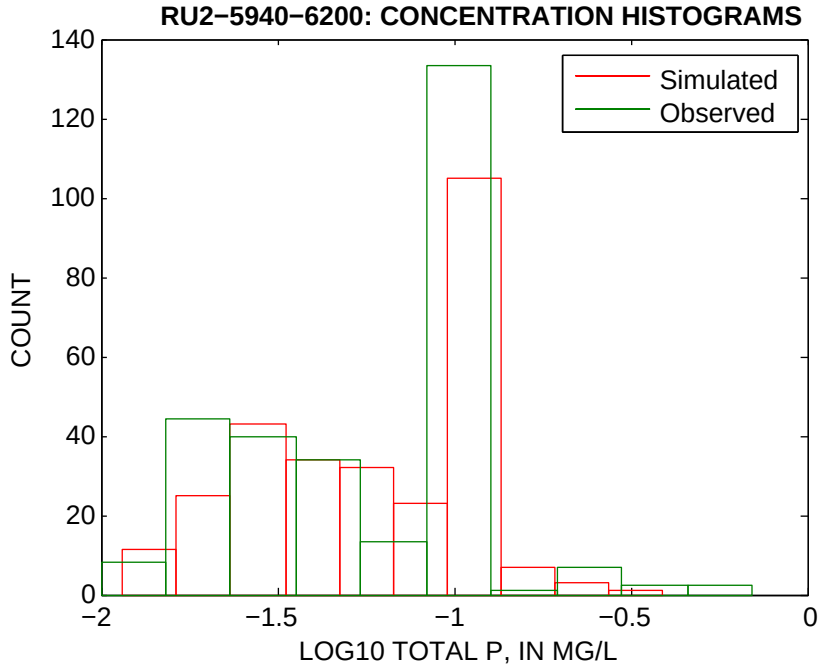
VERSION 2.1

ALL DATA
LOG10

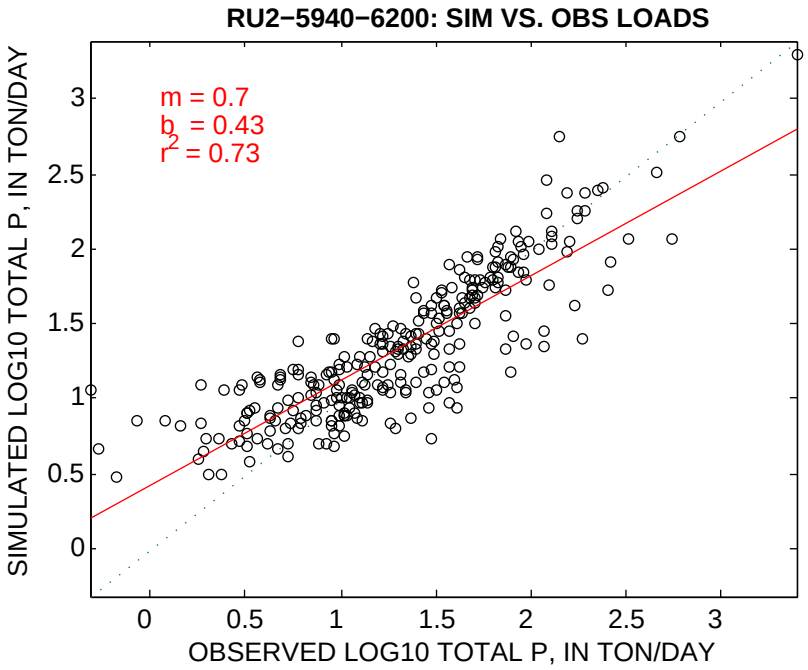


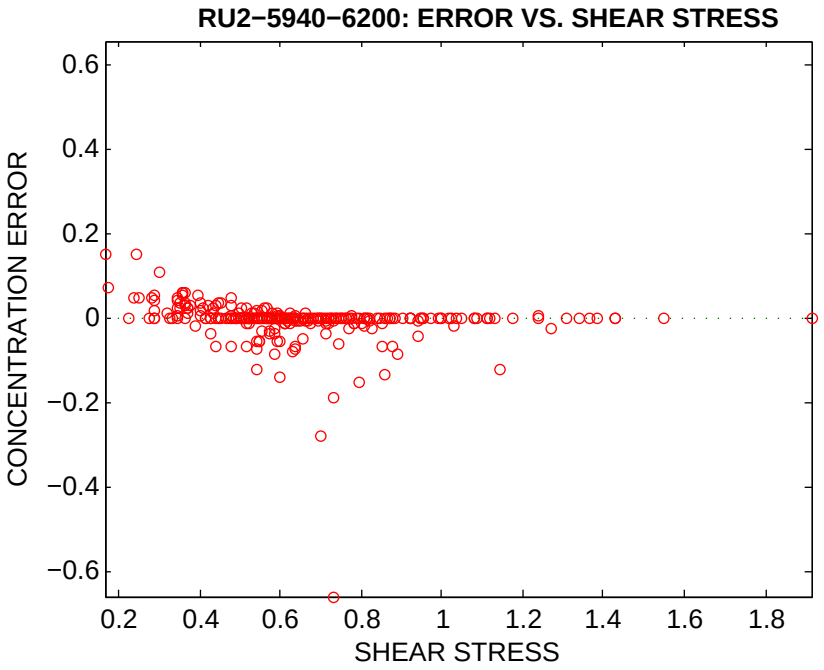


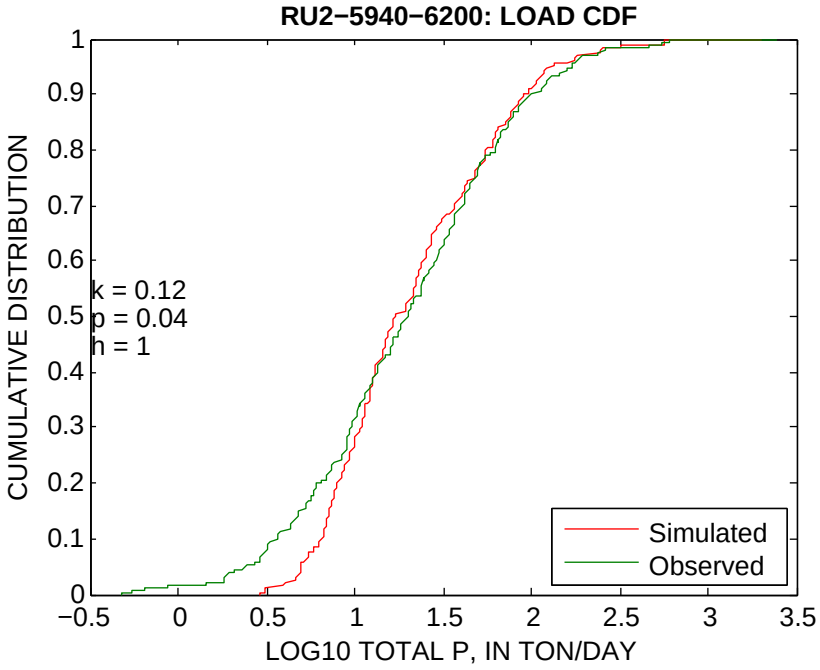


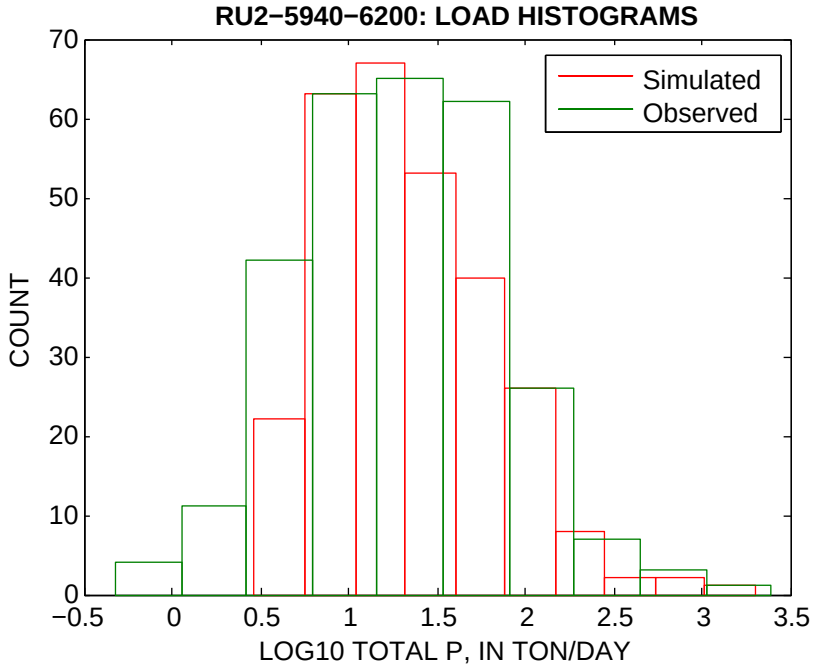


LOAD DATA
LOG10

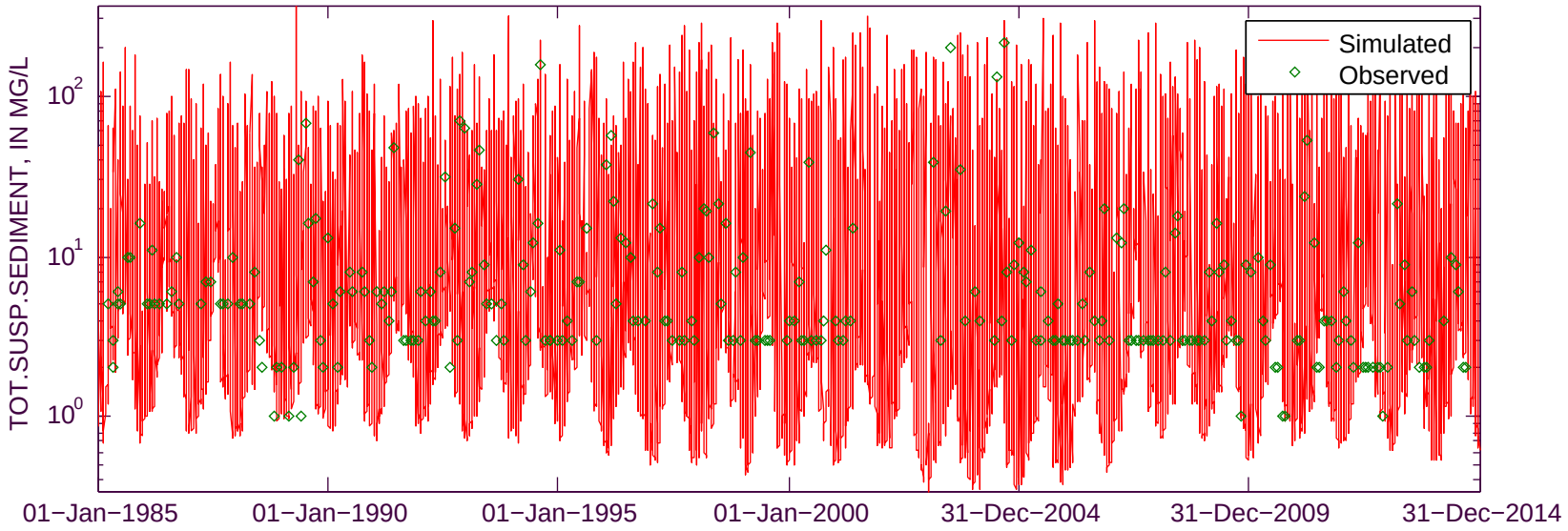




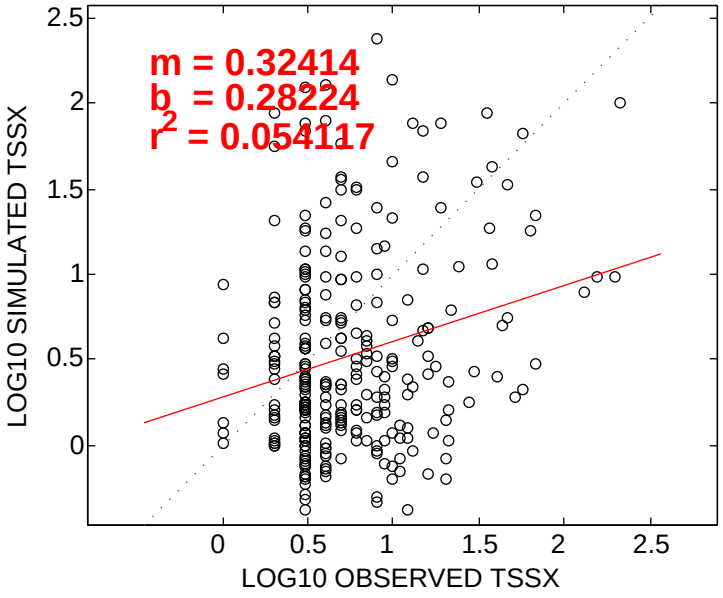




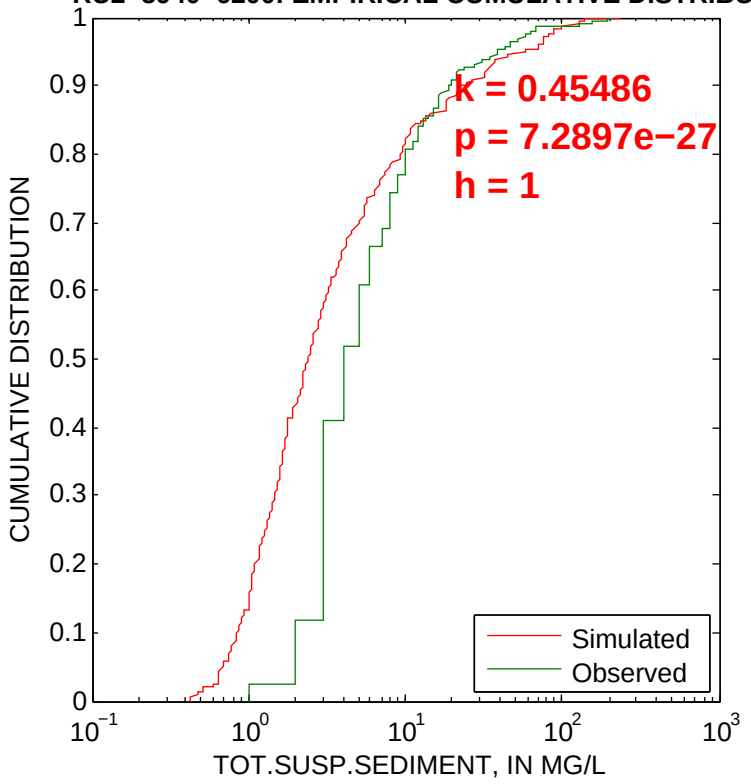
ROBINSON RIVER NEAR LOCUST DALE, VA: TSSX TIME-SERIES



RU2-5940-6200: SIMULATED VS. OBSERVED



RU2-5940-6200: EMPIRICAL CUMULATIVE DISTRIBUTION



DATA SELECTION

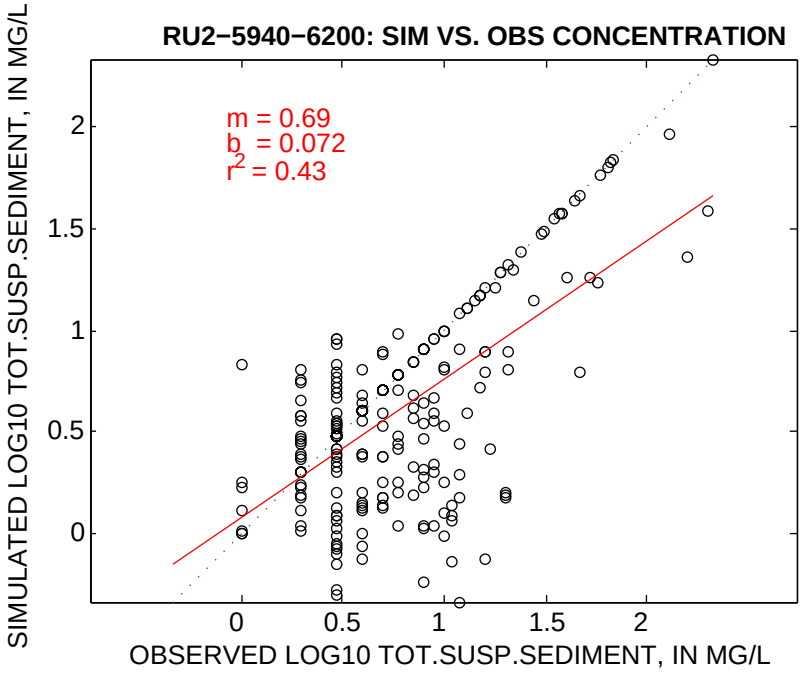
scenario: P620171001WQ
file: TSSX.calib
plot: TSSX - total suspended ...
Dates: 1/1/1985 12/31/201
Drive: N/A
Directory: model
Observed: OBS20161101

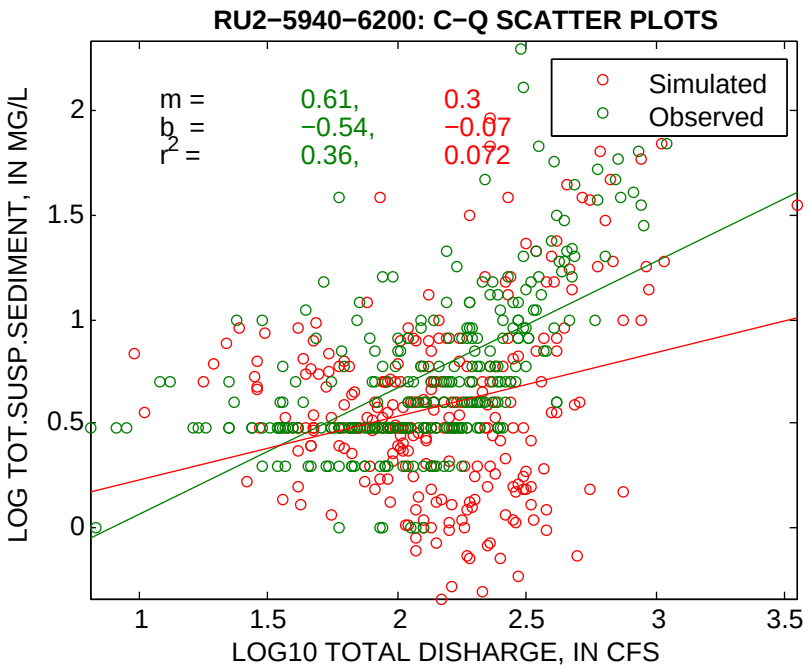
STATISTICS

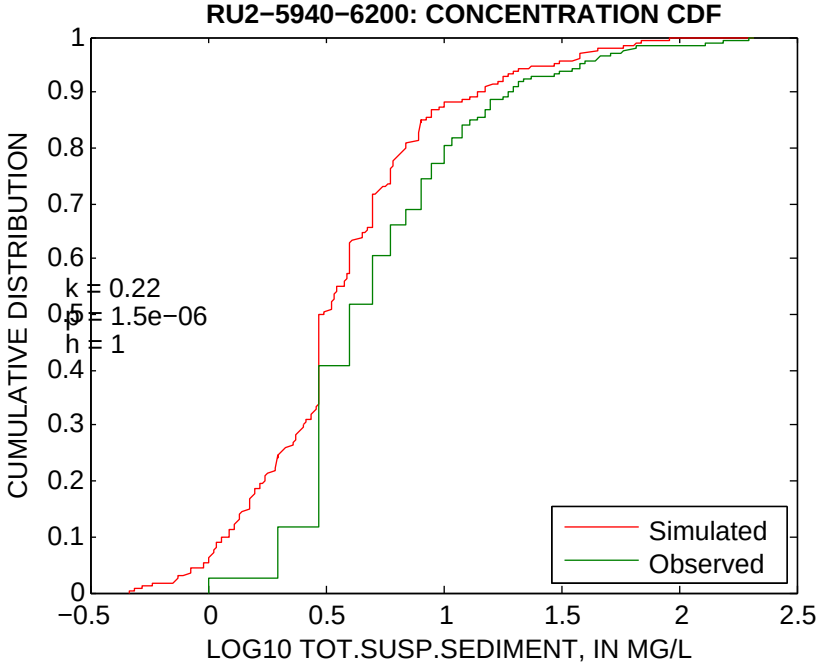
		observe	simulate
n		288	288
min		1	0.42147
		0	-0.375233
mean		10.5451	10.3337
		0.74244	0.522888
media		4	2.42015
		0.60206	0.383835
max		211	238.18
		2.32428	2.37691
varian		508.953	600.727
		0.16527	0.320861
JB		0.001	0.001
		0.001	0.001
		ra	log
%		-2.00462	-29.5717
err.va		921.226	0.427362
rel.std.err		1.81004	2.58584
mod.eff		-0.810042	-1.58584

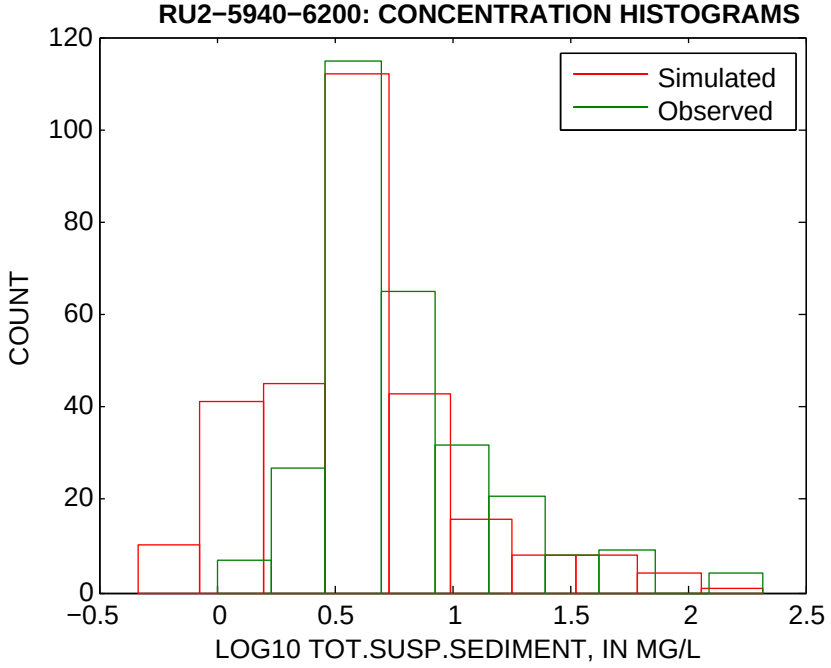
VERSION 2.1

ALL DATA
LOG10

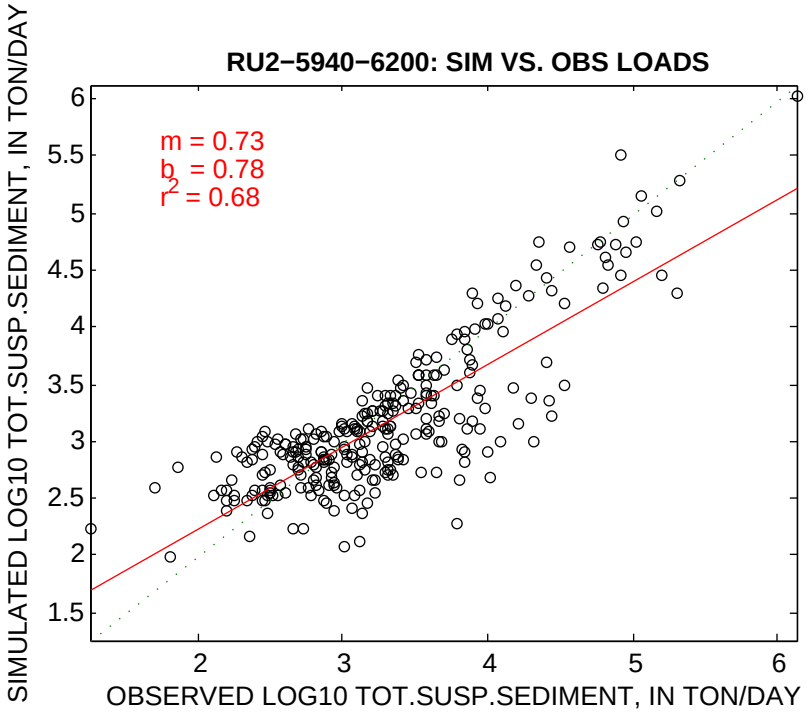


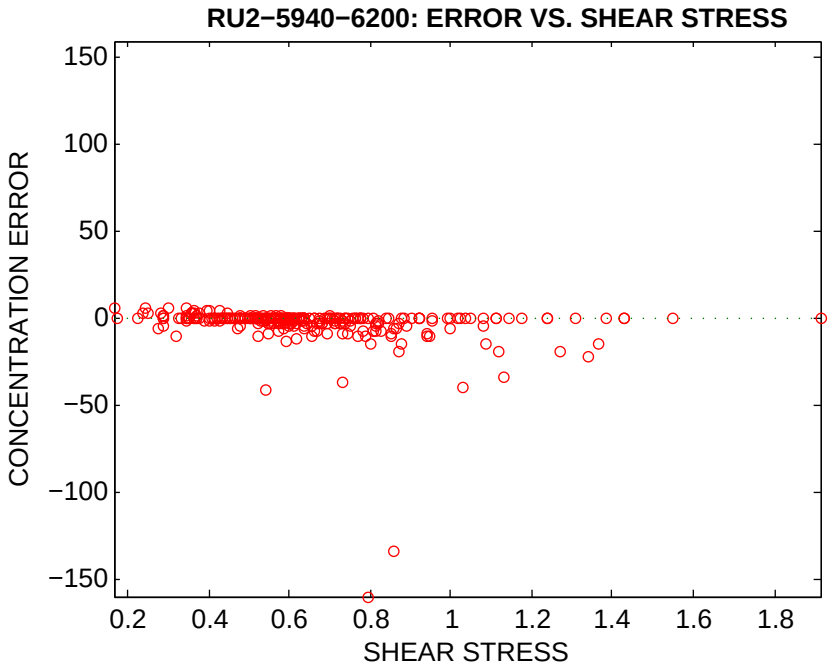


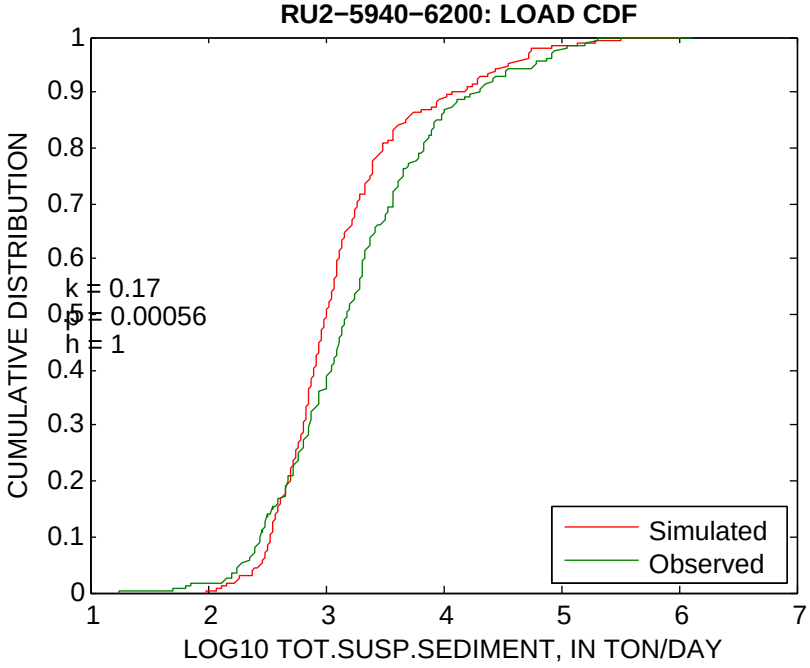


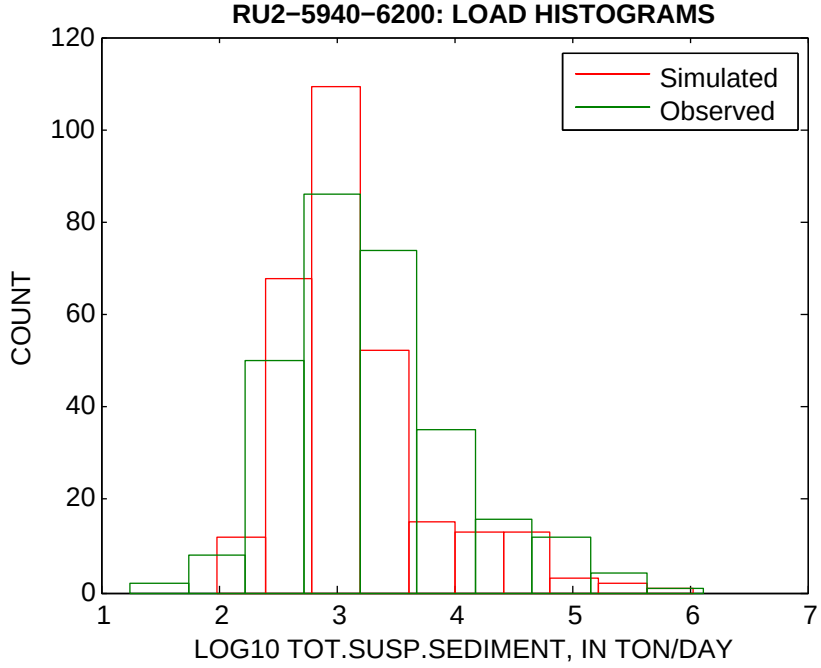


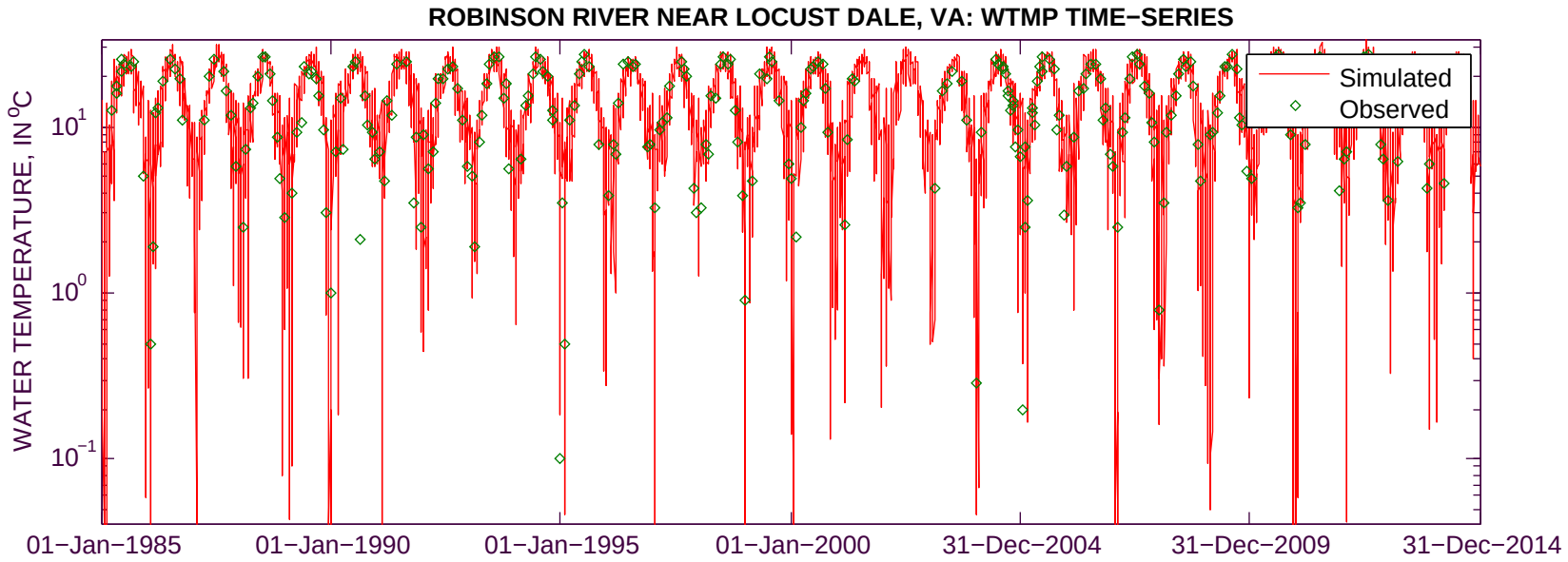
LOAD DATA
LOG10

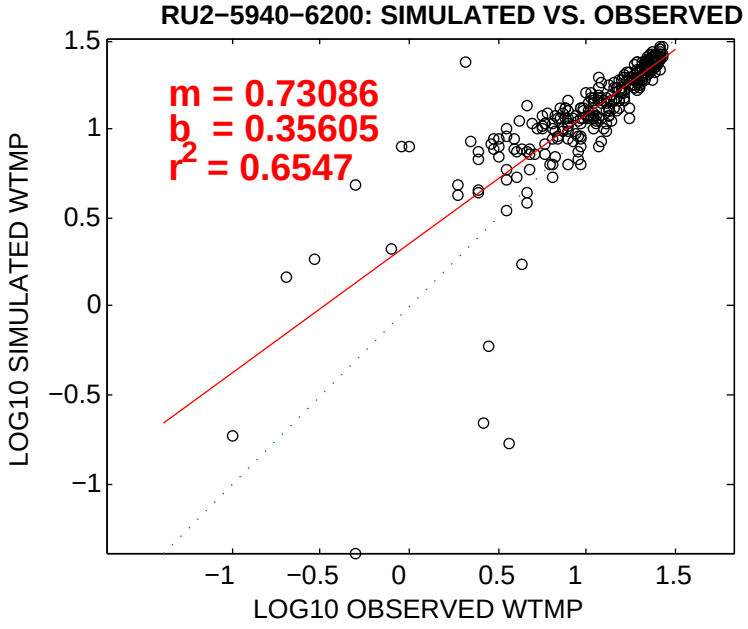


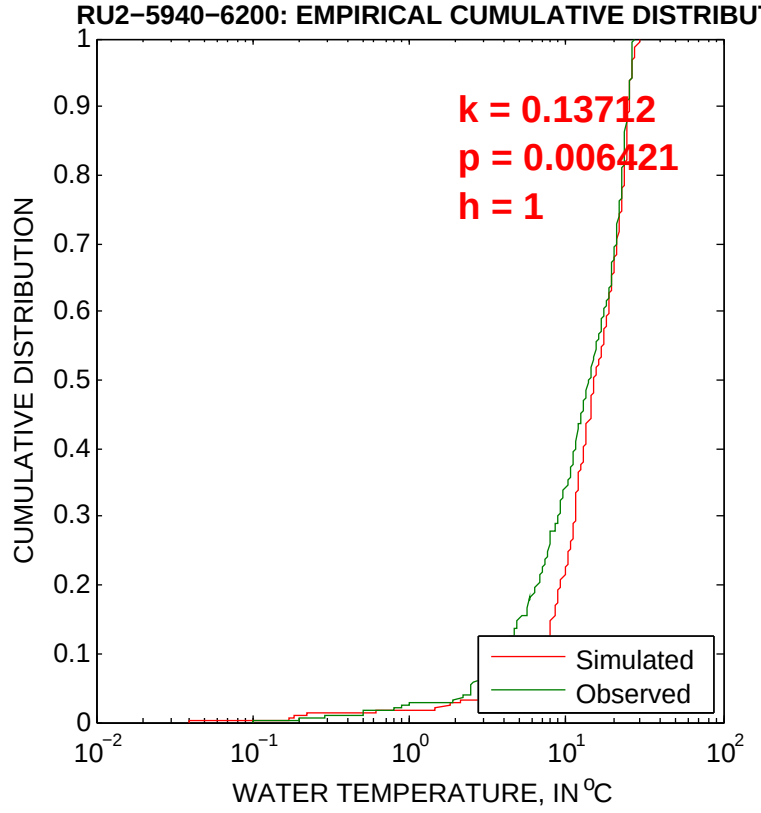












DATA SELECTION

scenario	file
P620171001WQ	WTMP.calib

plot: WTMP - water tempera...

Dates: 1/1/1985 – 12/31/201

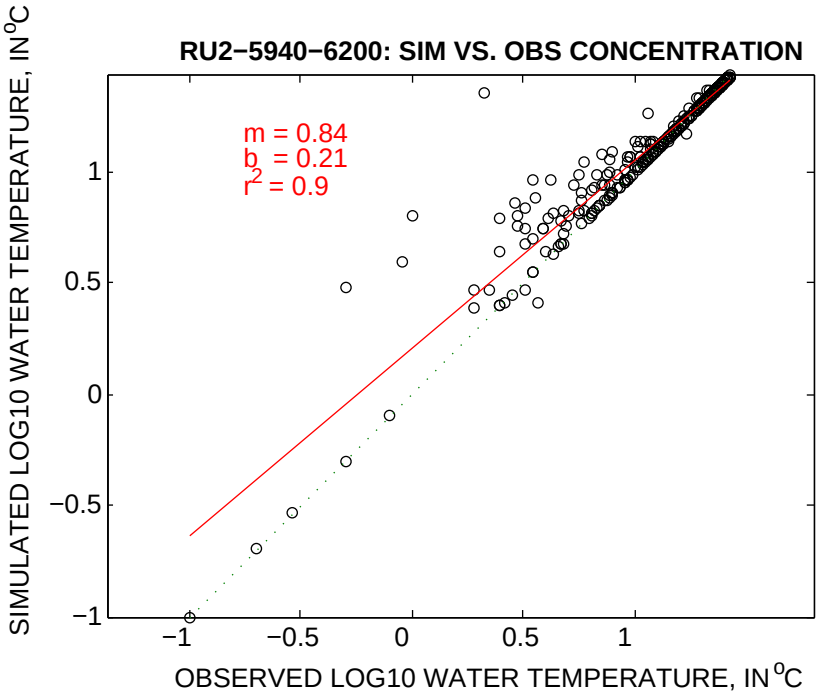
Drive	Directory	Observed
N/A	model	OBS20161101

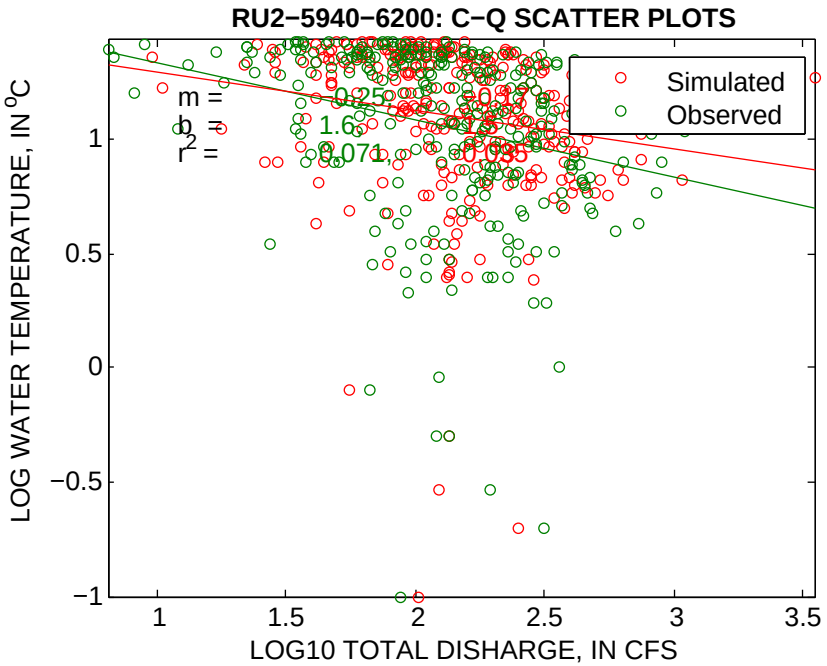
STATISTICS

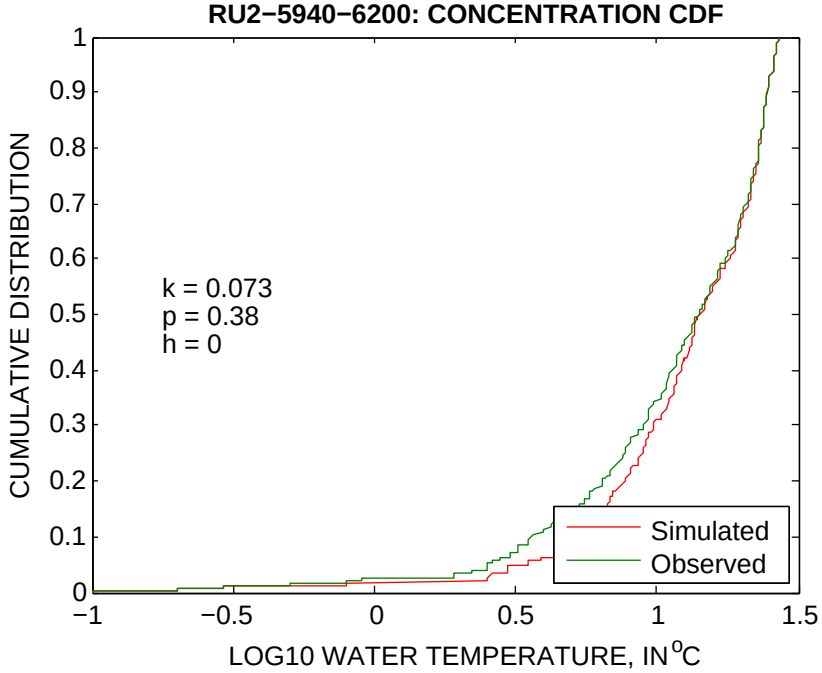
	n	299	299
		observe	simulate
min		0.1	0.040085
		-1	-1.39702
mean		14.4697	15.899
		1.05446	1.12671
media		14.11	15.148
		1.14953	1.18036
max		27	29.752
		1.43136	1.47352
varian		60.9595	49.7287
		0.140304	0.114473
JB		0.001698	0.008125
		0.001	0.001
		ra	log
%		9.87796	6.85205
err.va		10.105	0.0549285
rel.std.err		0.165766	0.391496
mod.eff		0.834234	0.608504

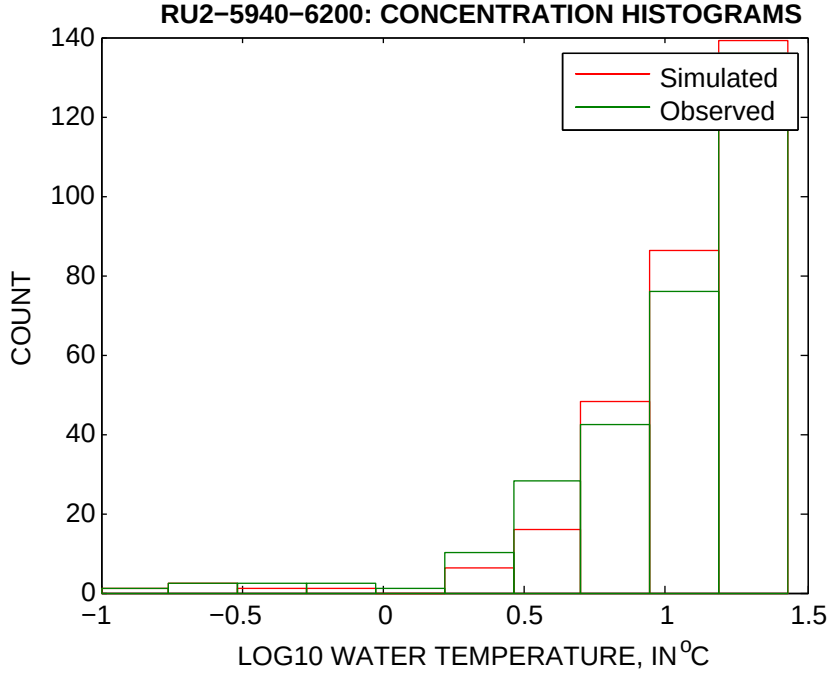
VERSION 2.1

ALL DATA
LOG10

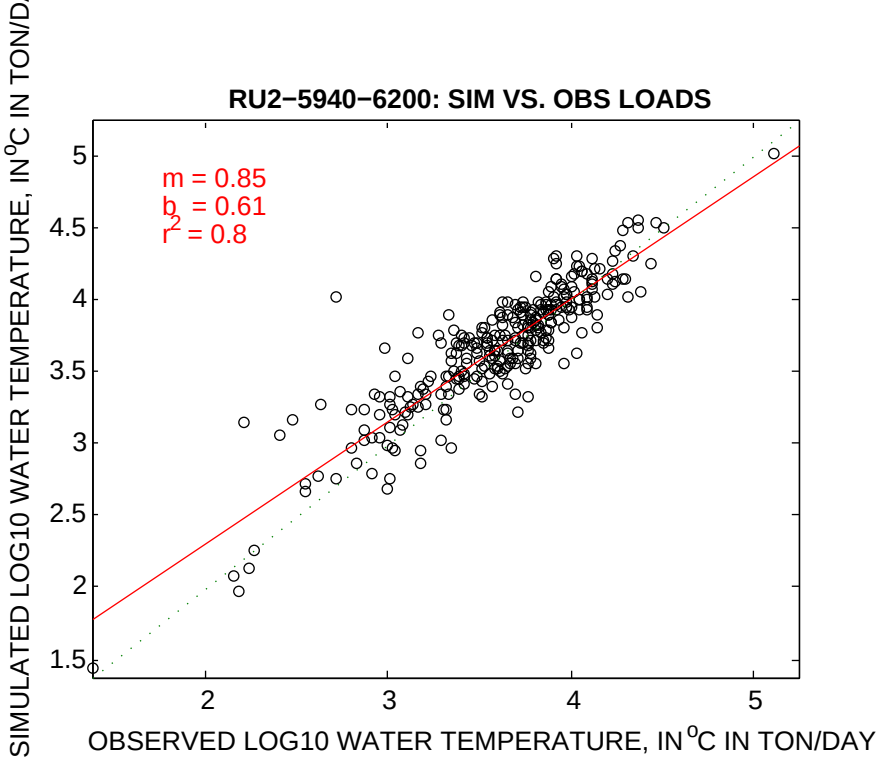


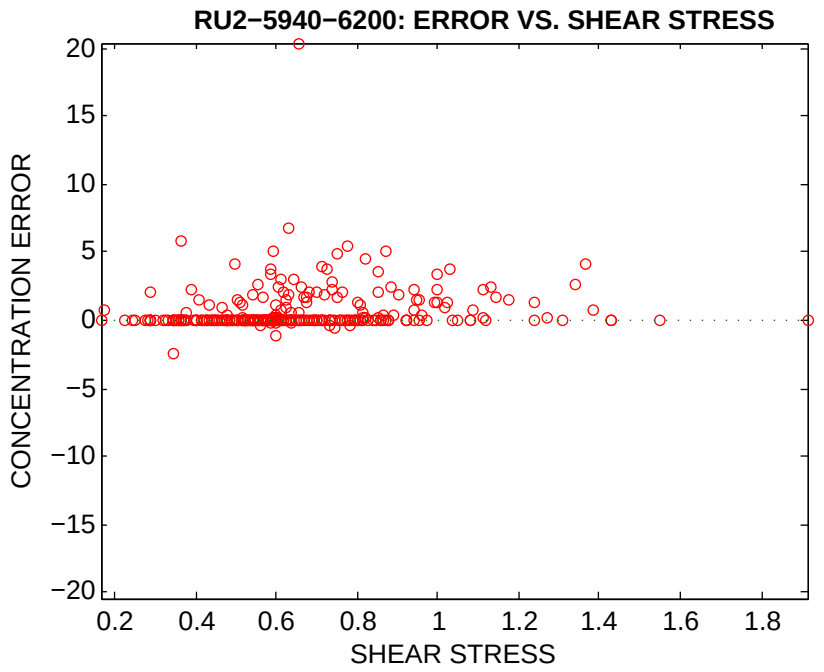


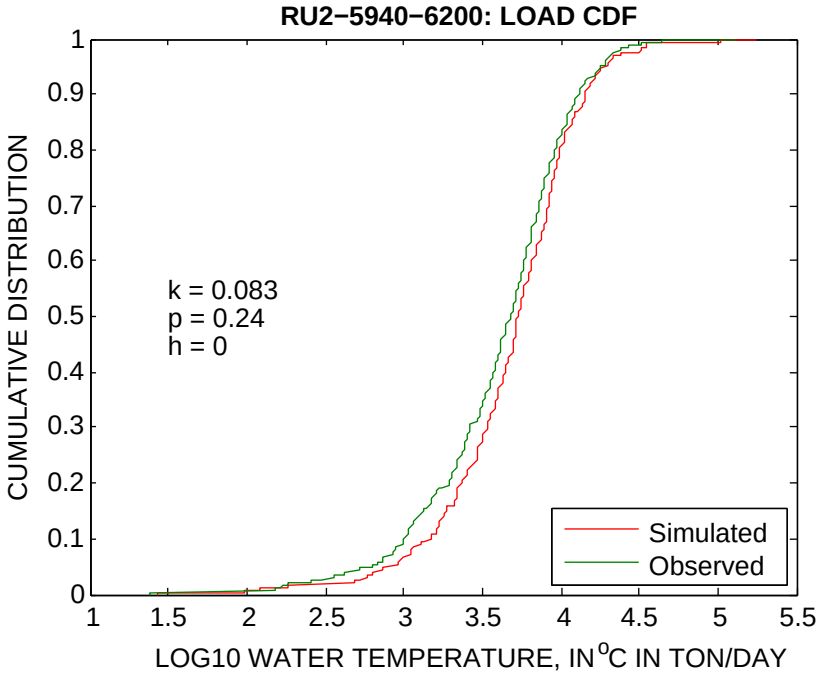


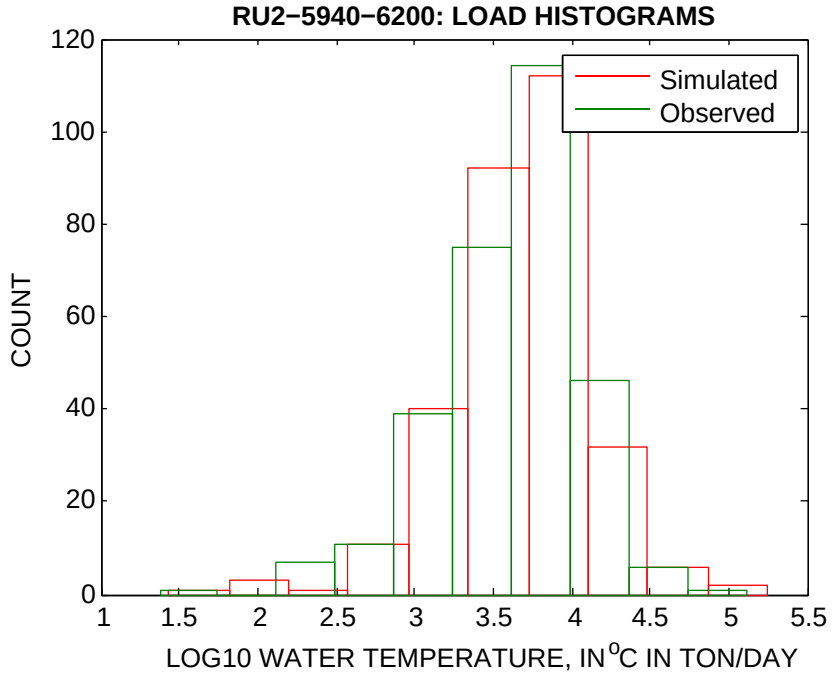


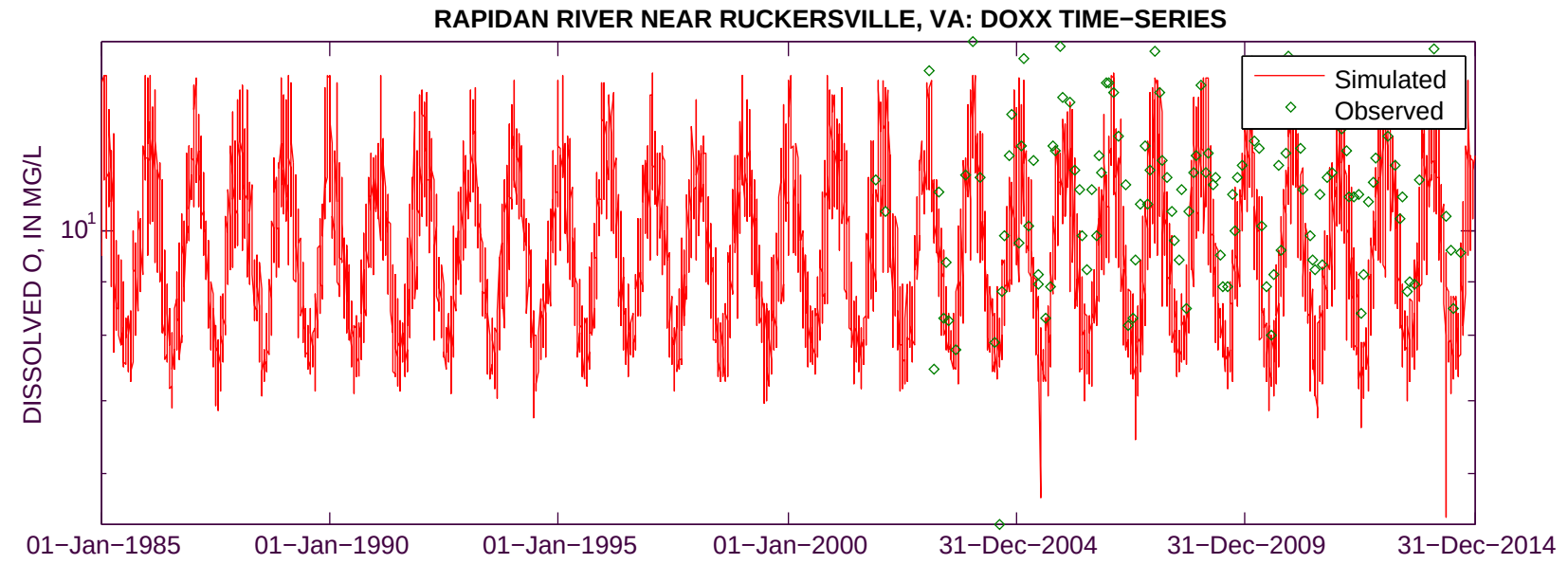
LOAD DATA
LOG10

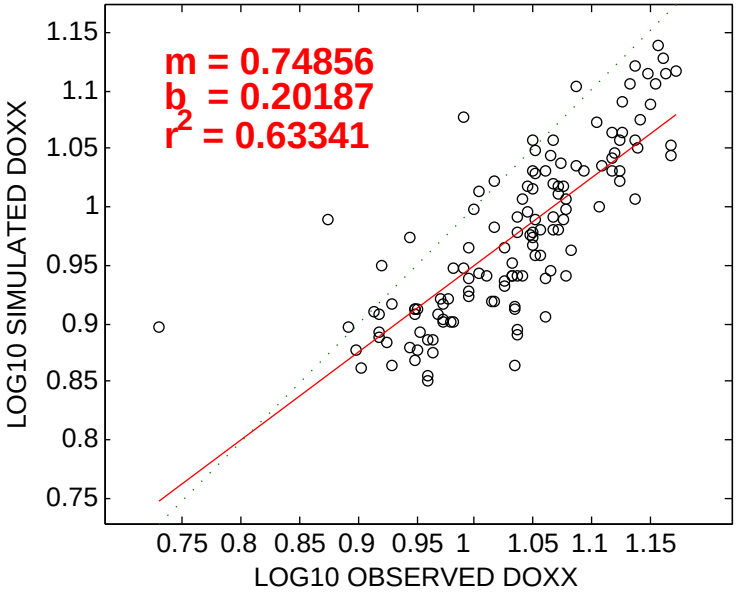


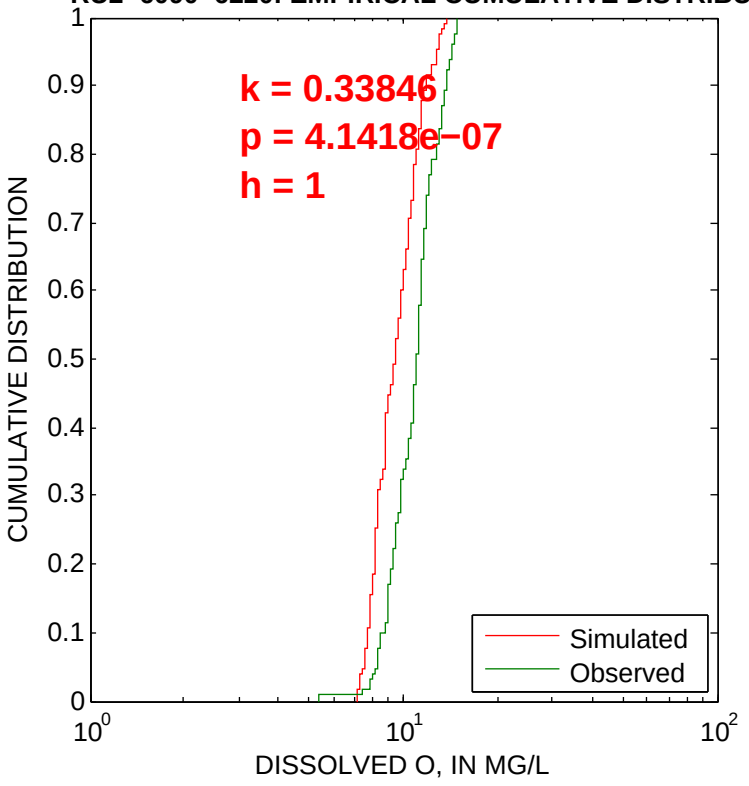












DATA SELECTION

scenario: P620171001WQ | file: DOXX.calib

plot: DOXX - dissolved oxygen

Dates: 1/1/1985 – 12/31/201

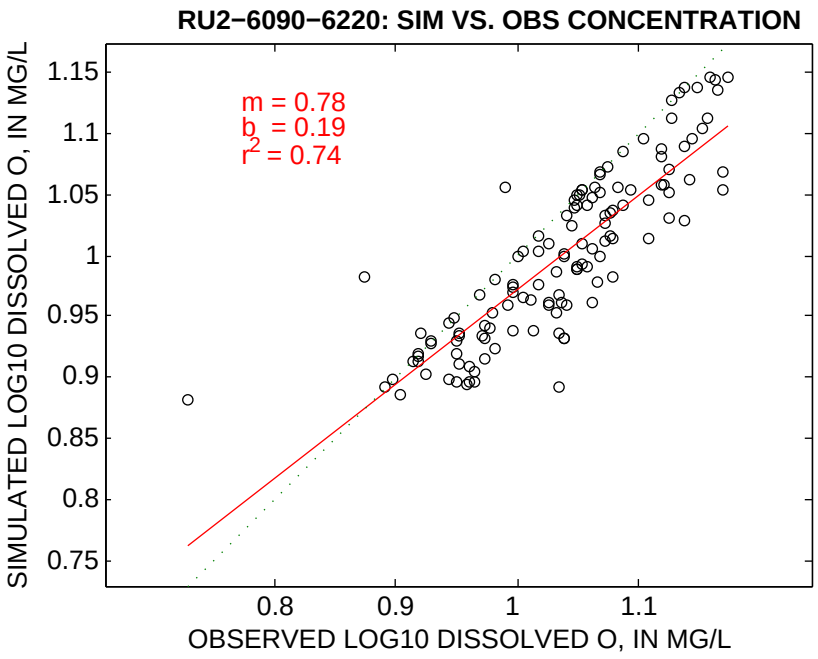
Drive: N/A | Directory: model | Observed: OBS20161101

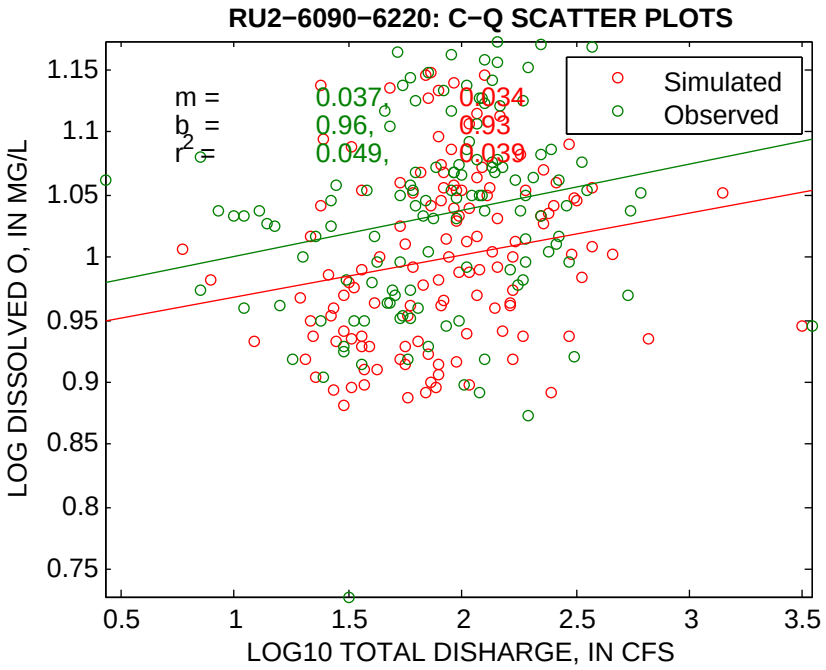
STATISTICS

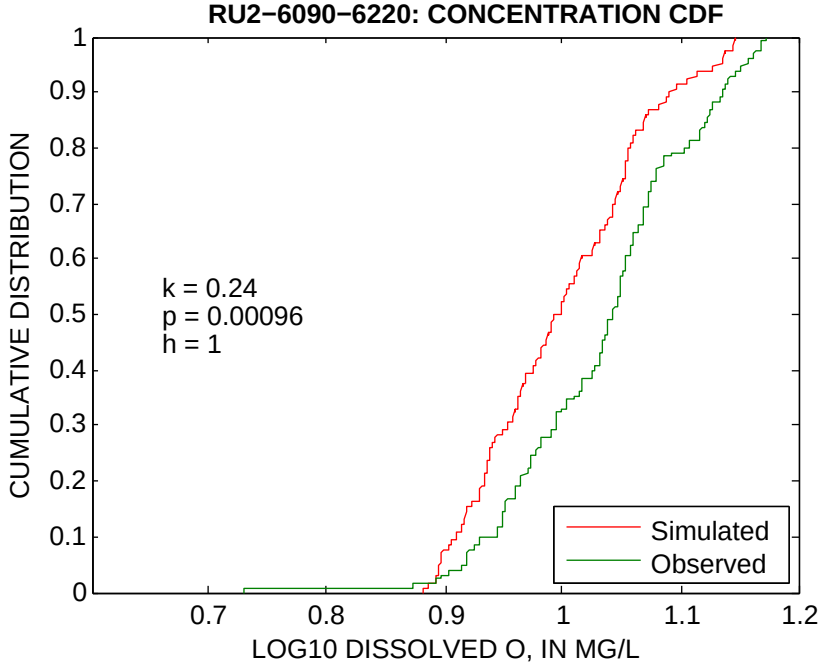
		observe	simulate
n		130	130
min		5.36	7.1076
		0.729165	0.851723
mean		10.9822	9.5941
		1.03422	0.976045
media		11	9.4064
		1.04139	0.973423
max		14.89	13.734
		1.17289	1.1378
varian		3.48741	2.63244
		0.00581311	0.00514255
JB	☑	0.5	0.022408
	☐	0.024158	0.044674
		ra	log
%		-12.6392	-5.62528
err.va		3.08626	0.00566363
rel.std.err		0.884973	0.974285
mod.eff		0.115027	0.025715

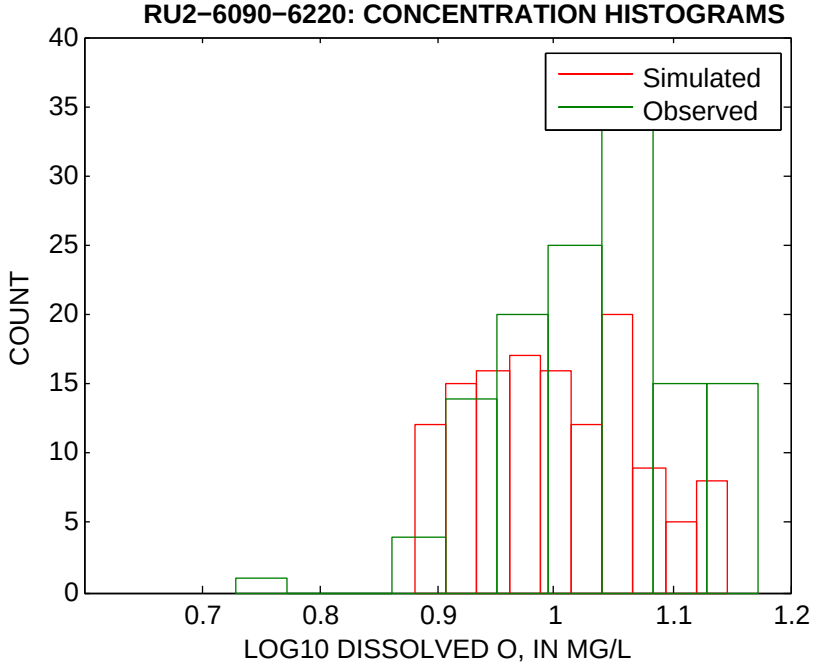
VERSION 2.1

ALL DATA
LOG10

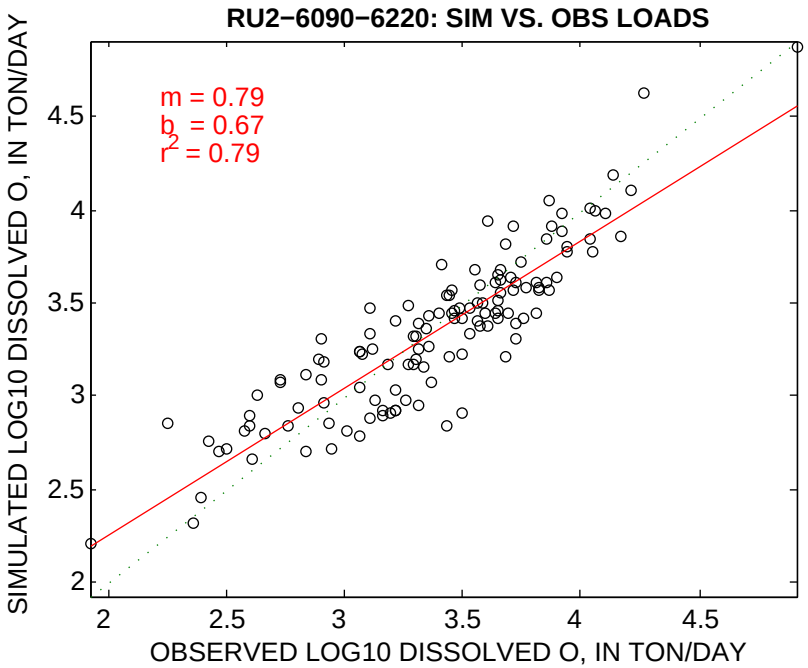


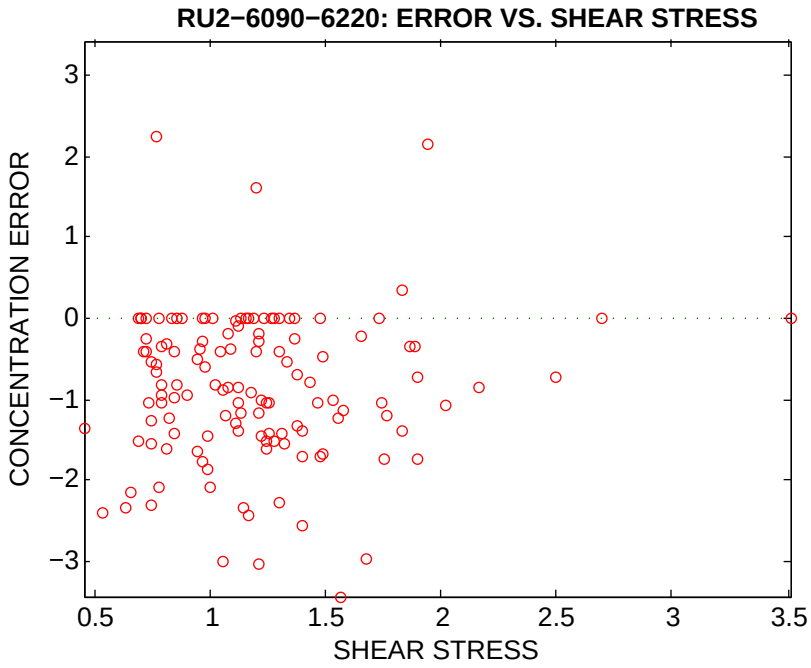


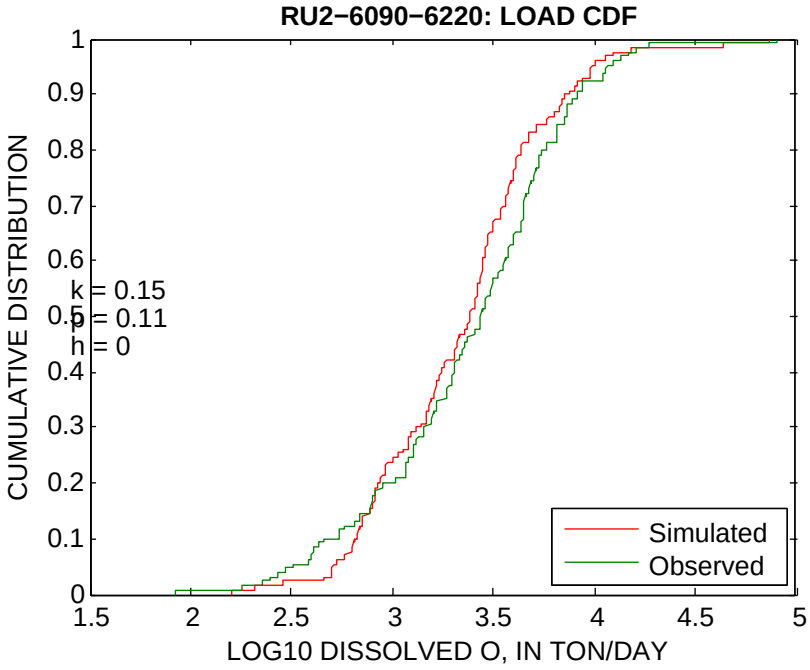


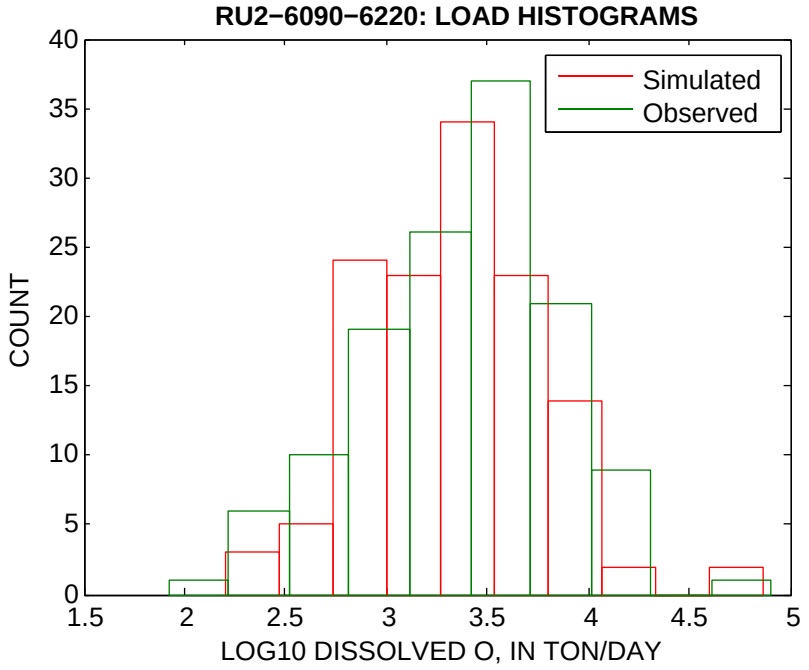


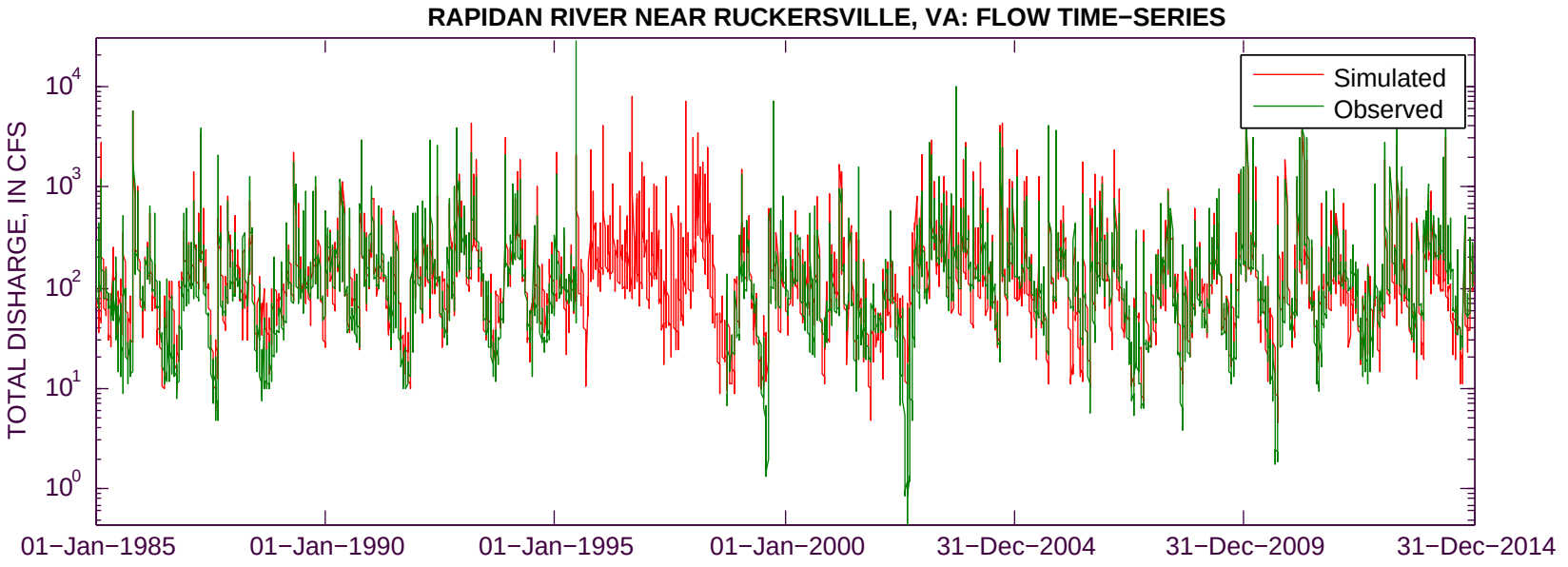
LOAD DATA
LOG10

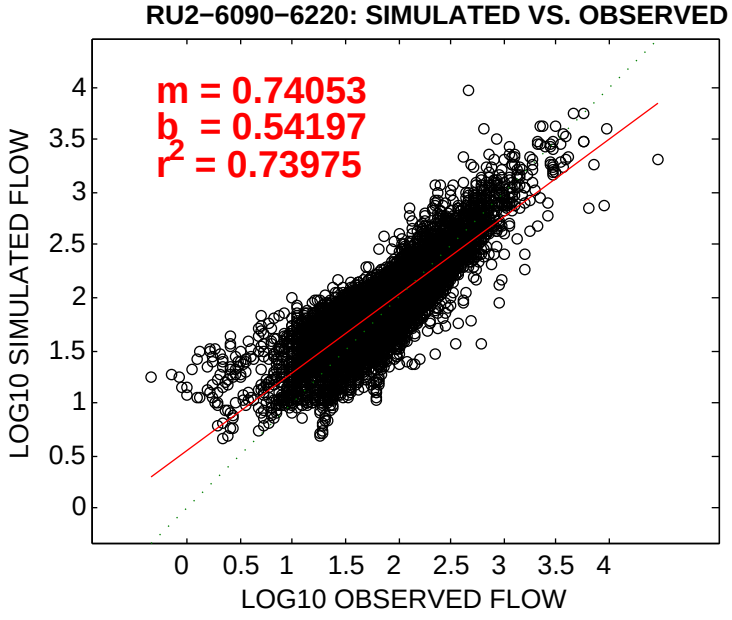


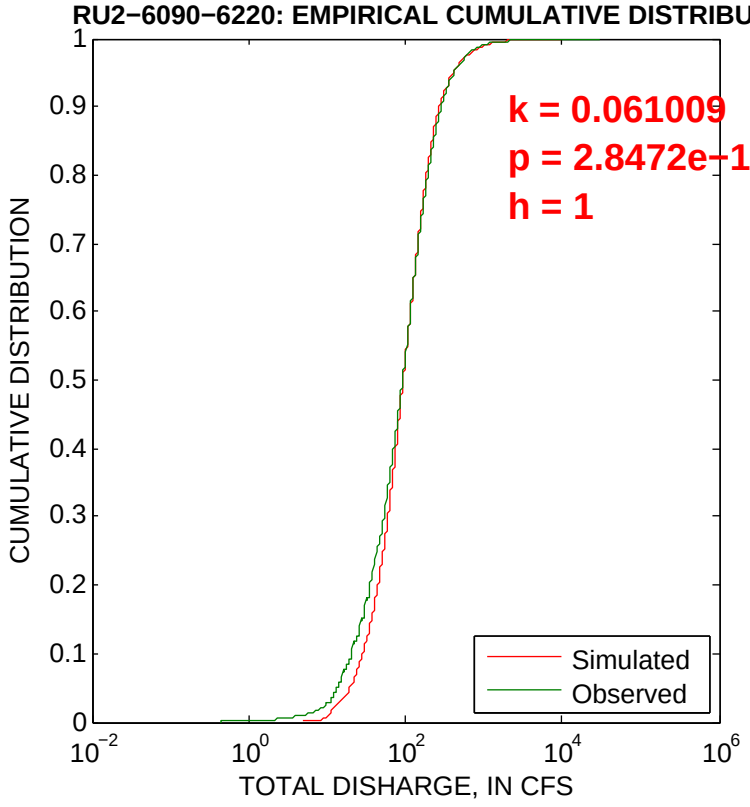












DATA SELECTION

scenario: P620171001WQ | file: FLOW.calib

plot: FLOW - total discharge

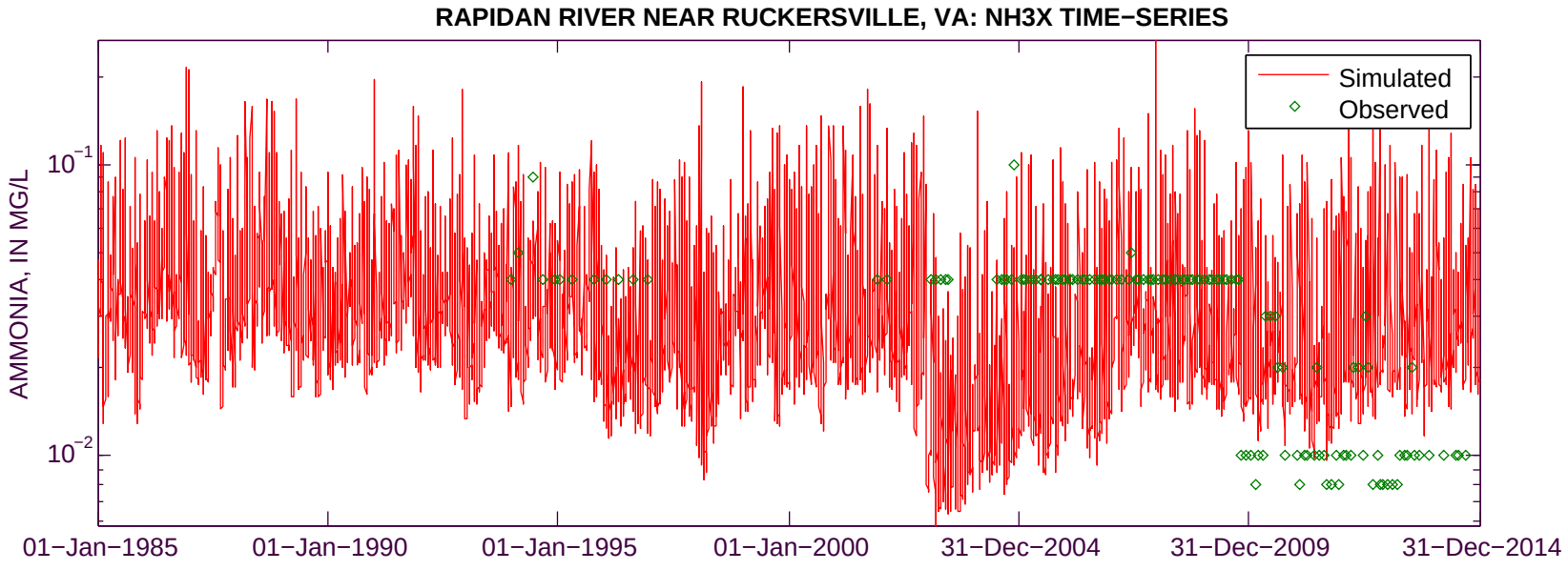
Dates: 1/1/1985 – 12/31/201

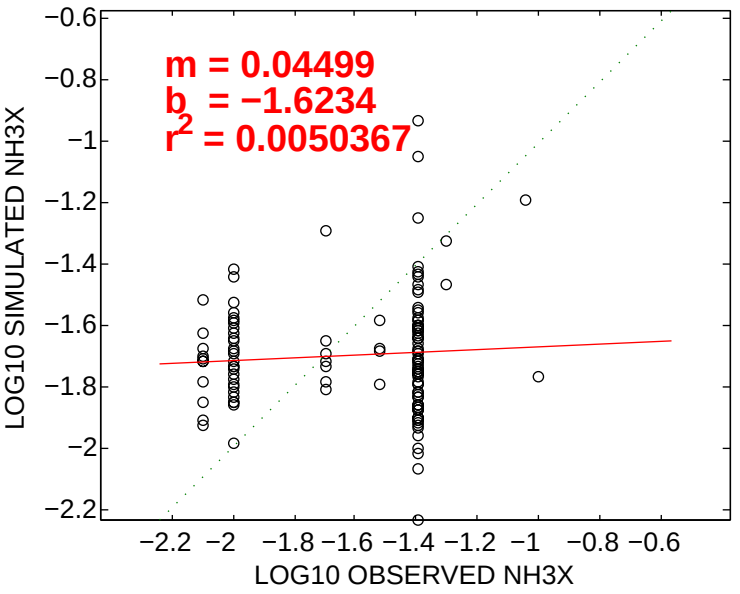
Drive: N/A | Directory: model | Observed: OBS20161101

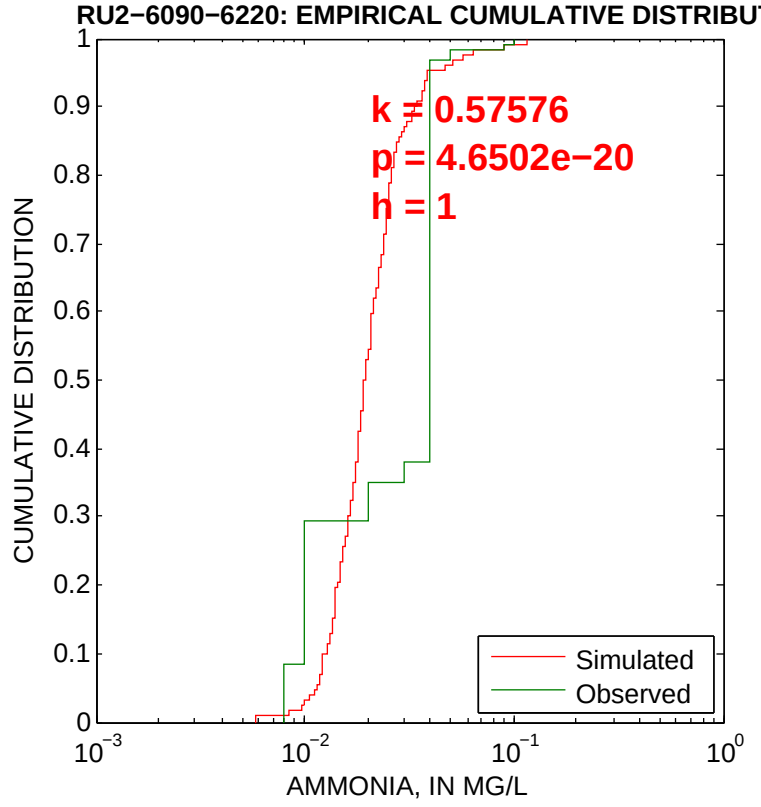
STATISTICS

	observe	simulate
n	9769	9769
min	0.45	4.5179
	-0.346787	0.654937
mean	154.383	151.448
	1.92923	1.97062
media	93	93.935
	1.96848	1.97283
max	29400	9608
	4.46835	3.98263
varian	178095	71035.8
	0.217008	0.160869
JB	0.001	0.001
	0.001	0.001
	ra	log
%	-1.90134	2.14547
err.va	120173	0.0581889
rel.std.err	0.674767	0.268142
mod.eff	0.325233	0.731858

VERSION







DATA SELECTION

scenario	file
P620171001WQ	NH3X.calib

plot: NH3X - ammonia

Dates: 1/1/1985 – 12/31/201

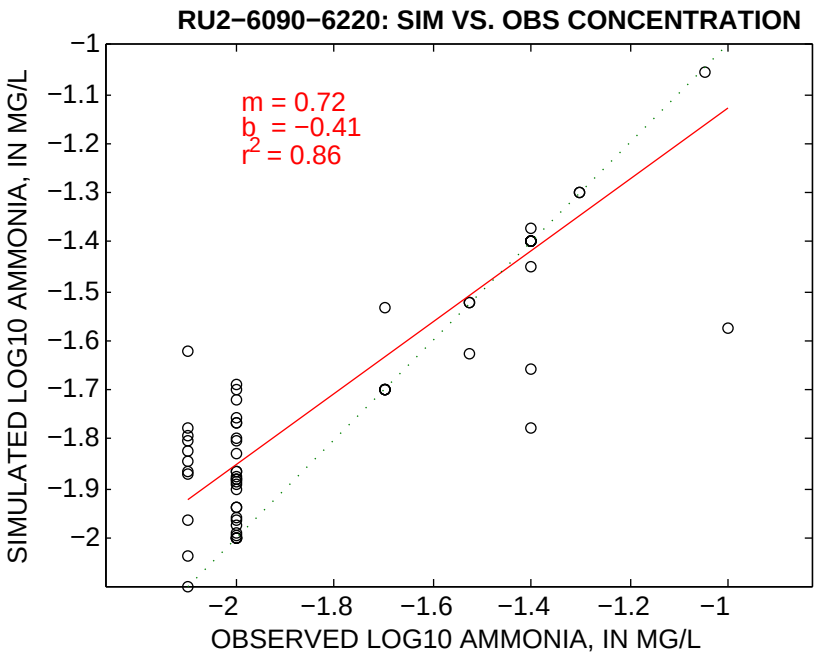
Drive	Directory	Observed
N/A	model	OBS20161101

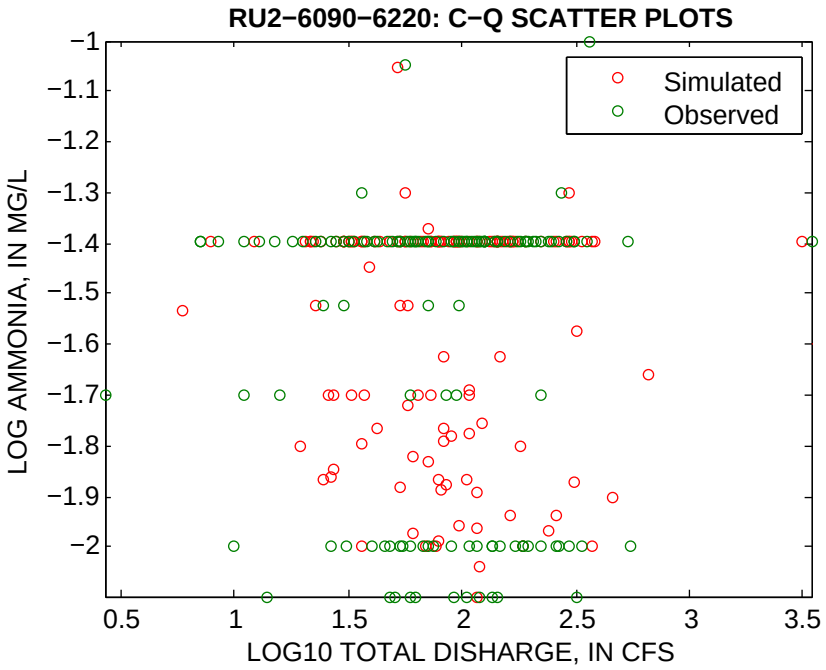
STATISTICS

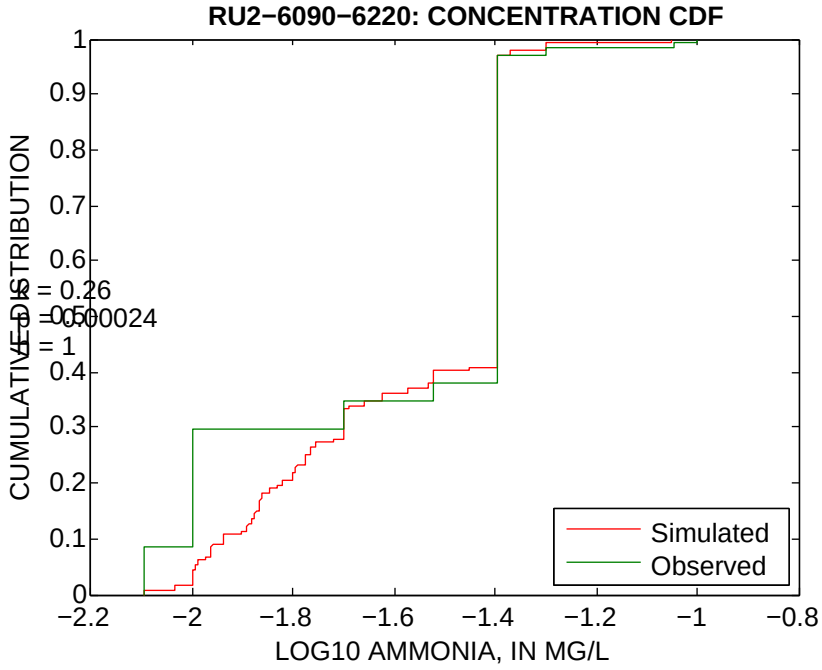
	n	observe	simulate
		132	132
min		0.008	0.005791
		-2.09691	-2.23725
mean		0.0305909	0.0224552
		-1.5965	-1.69521
media		0.04	0.019264
		-1.39794	-1.71526
max		0.1	0.11713
		-1	-0.931332
varian		0.00026166	0.00018525
		0.0863924	0.0347178
JB		0.001476	0.001
		0.004723	0.001
		ra	log
%		-26.5952	6.18331
err.va		0.00044448	0.123156
rel.std.err		1.6987	1.42554
mod.eff		-0.698705	-0.425542

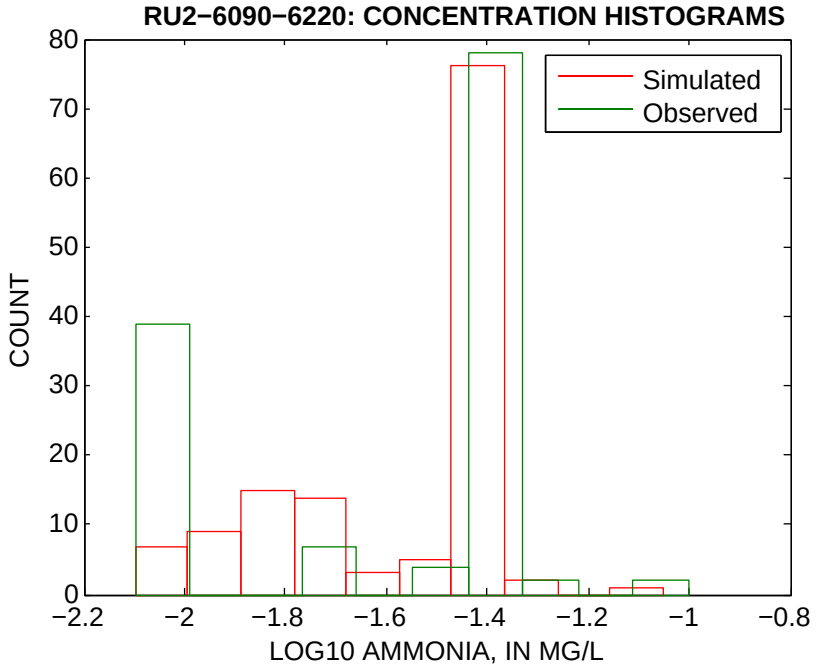
VERSION 2.1

ALL DATA
LOG10

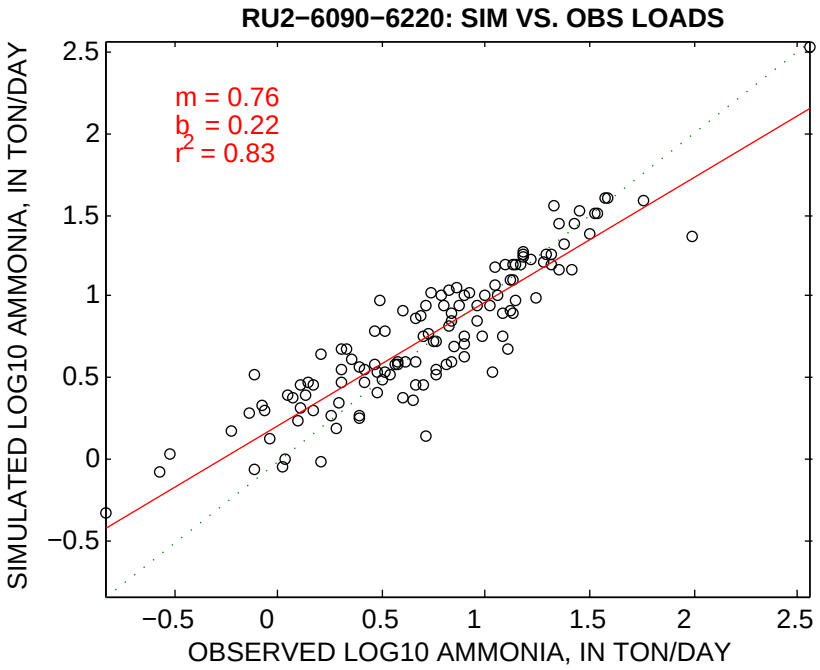


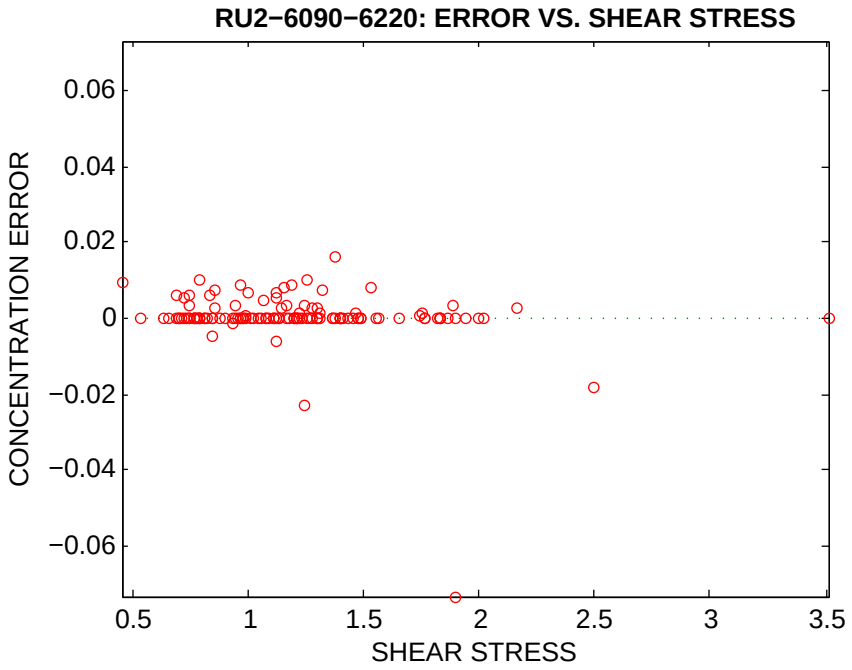


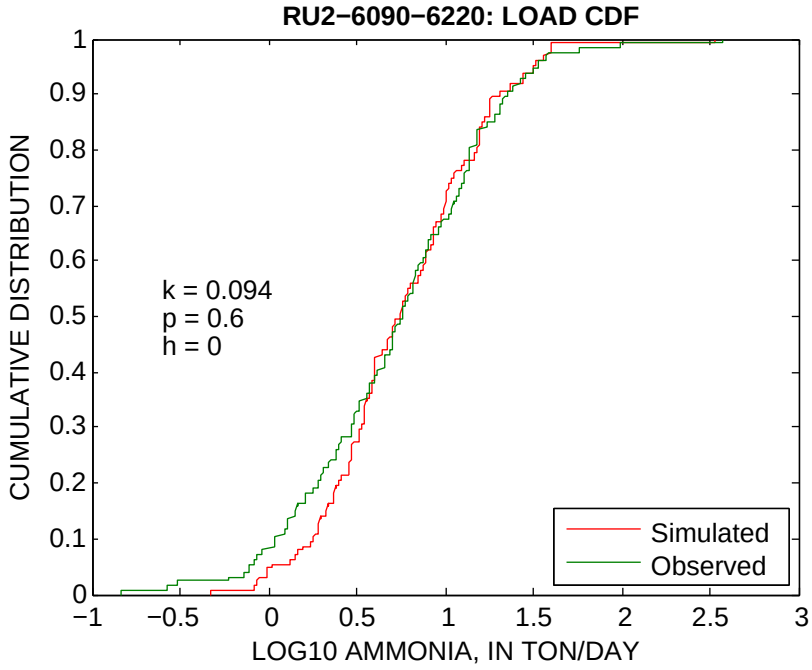


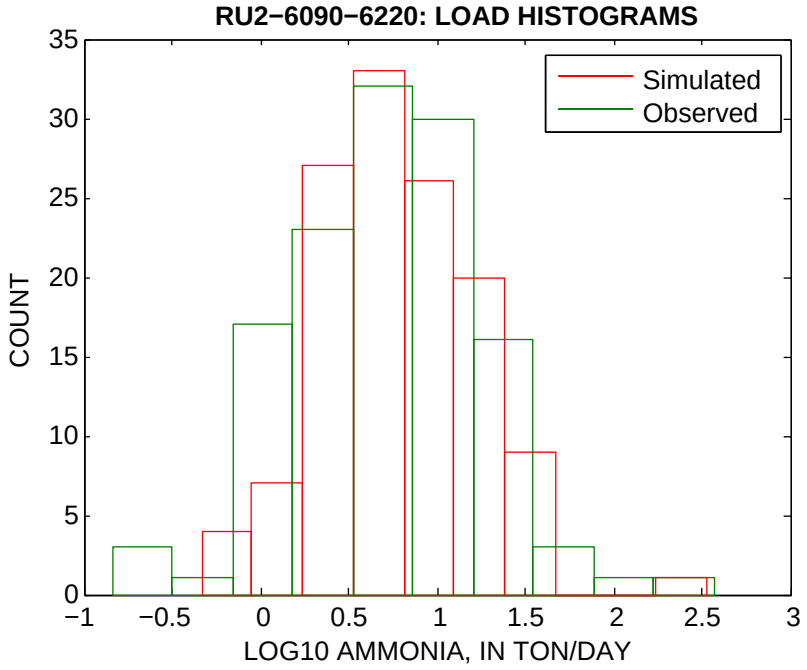


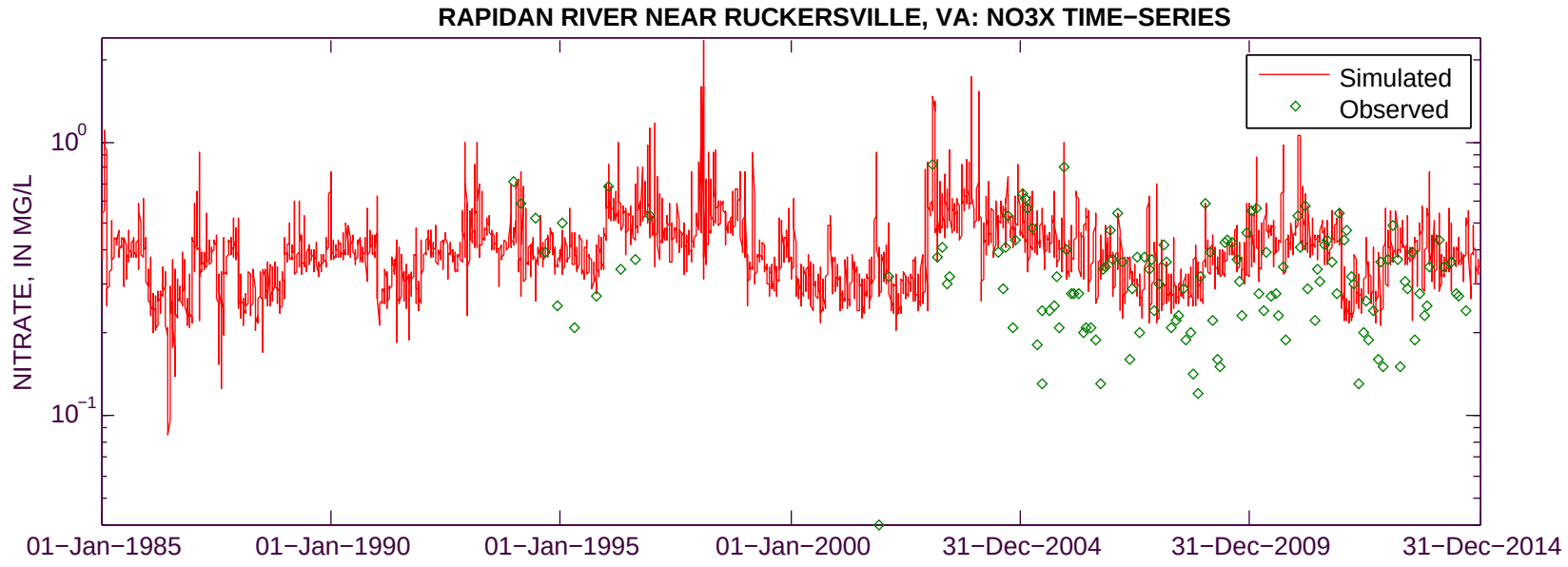
LOAD DATA
LOG10

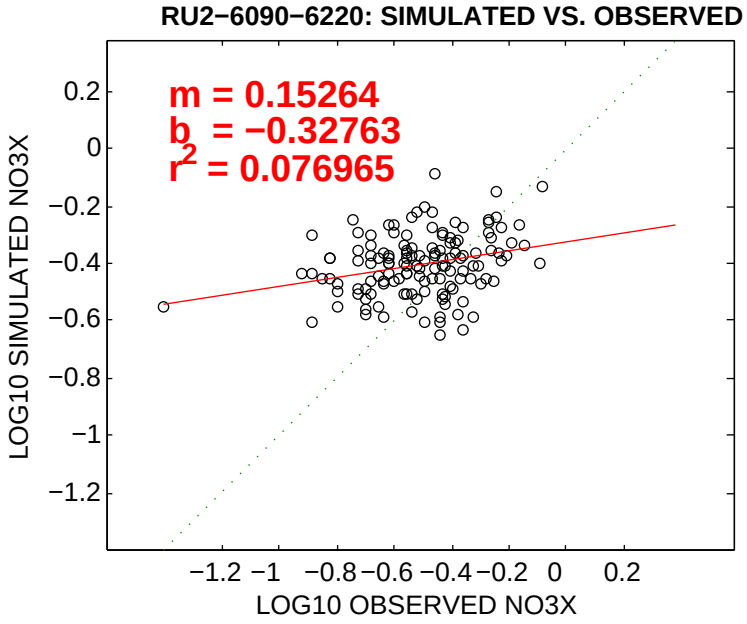


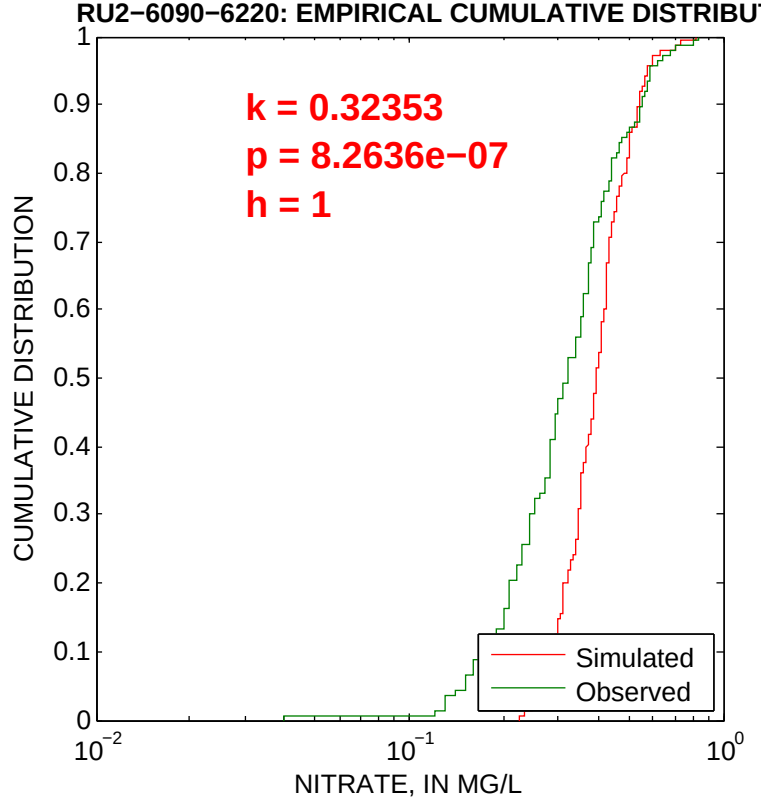












DATA SELECTION

scenario	file
P620171001WQ	NO3X.calib

plot: NO3X - nitrate

Dates: 1/1/1985 – 12/31/201

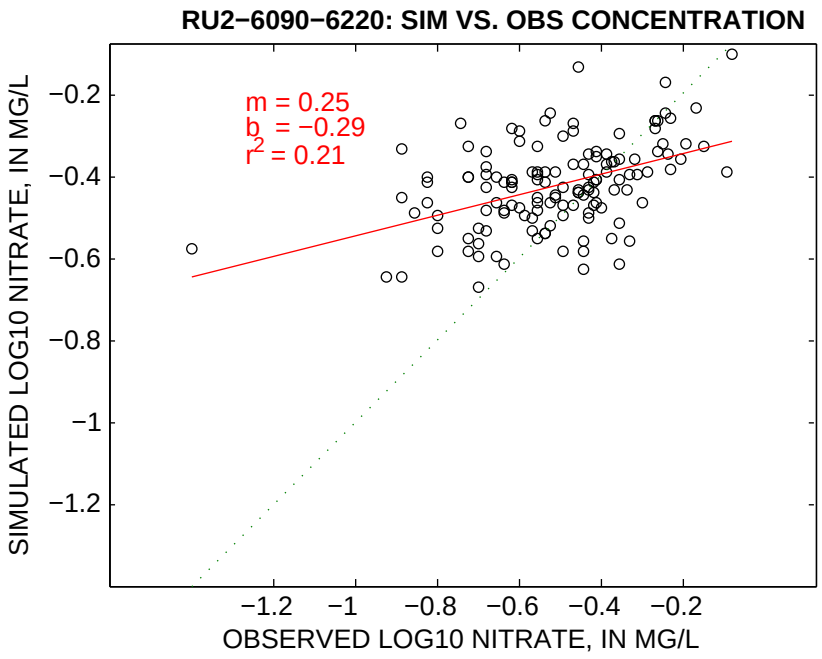
Drive	Directory	Observed
N/A	model	OBS20161101

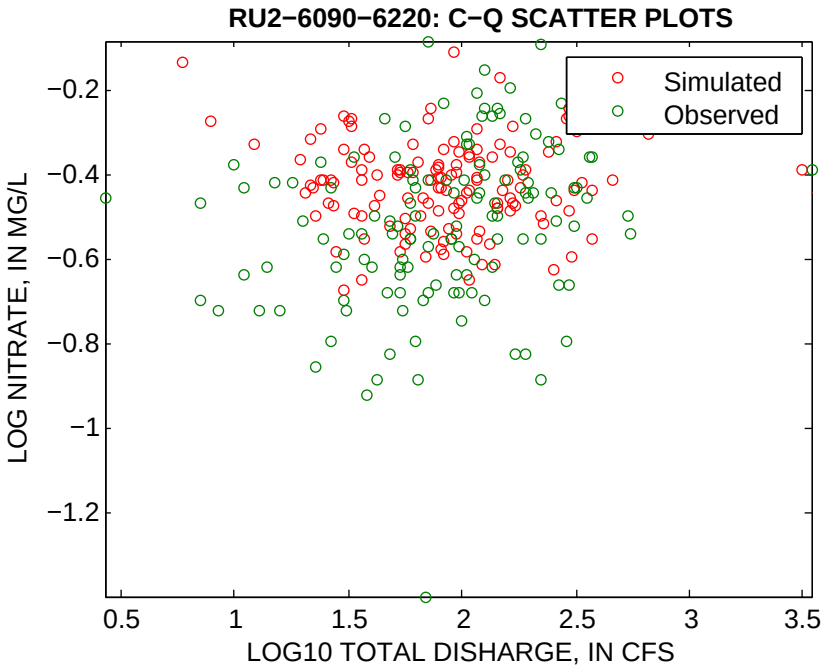
STATISTICS

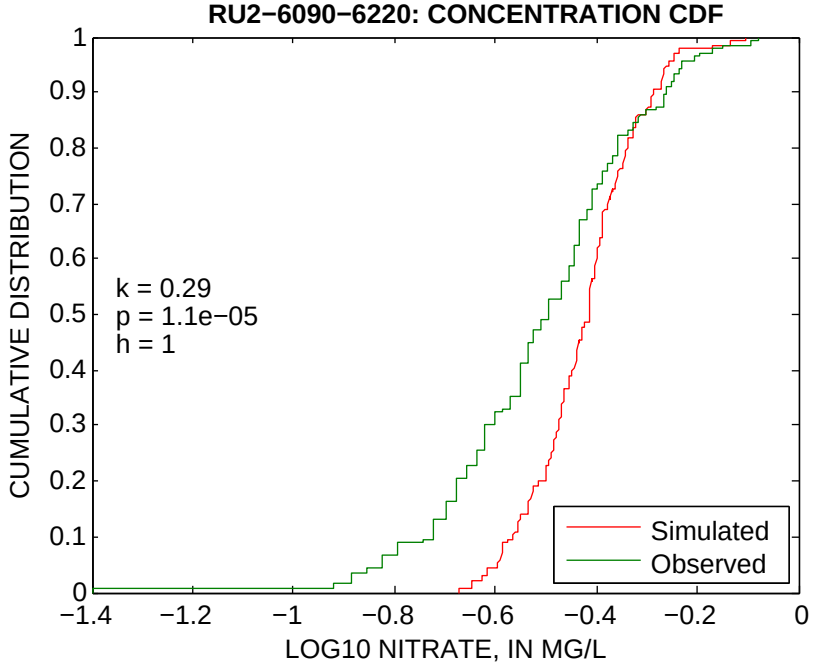
	n	136	136
		observe	simulate
min		0.04	0.22438
		-1.39794	-0.649016
mean		0.338456	0.405225
		-0.510441	-0.40554
media		0.32	0.396215
		-0.49485	-0.40207
max		0.83	0.82375
		-0.0809219	-0.0842046
varian		0.0205865	0.0106409
		0.0378397	0.0114553
JB		0.002425	0.001
		0.001	0.5
		ra	log
%		19.7277	-20.551
err.va		0.026481	0.0488287
rel.std.err		1.28633	1.29041
mod.eff		-0.28633	-0.290412

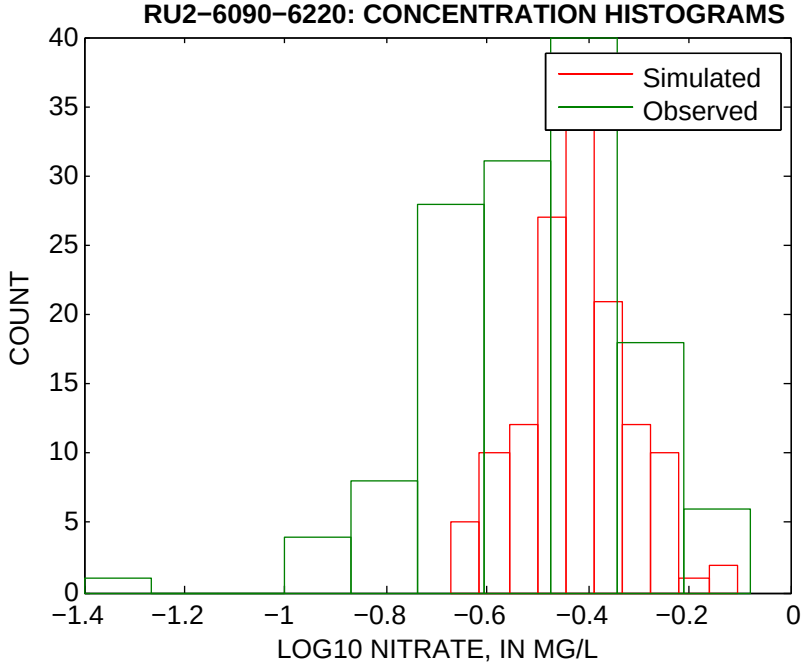
VERSION 2.1

ALL DATA
LOG10

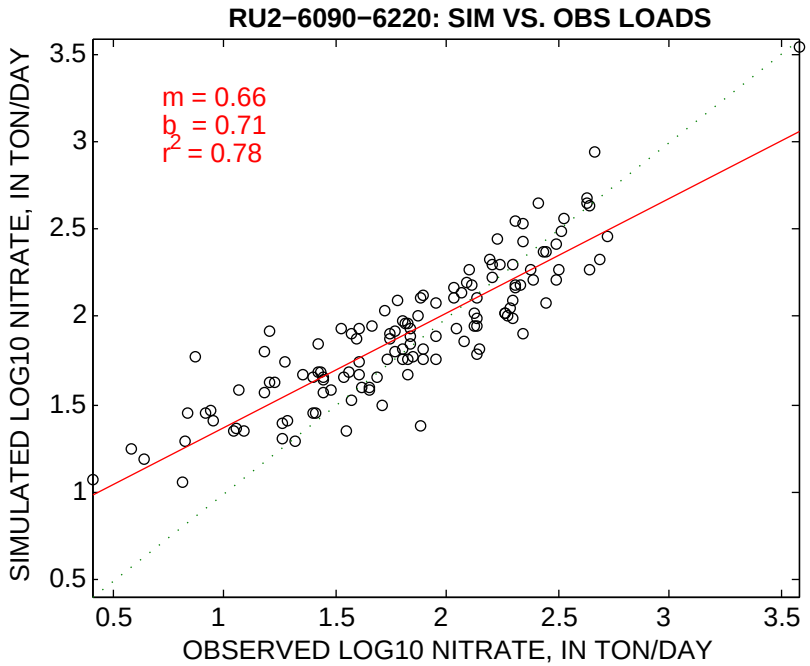


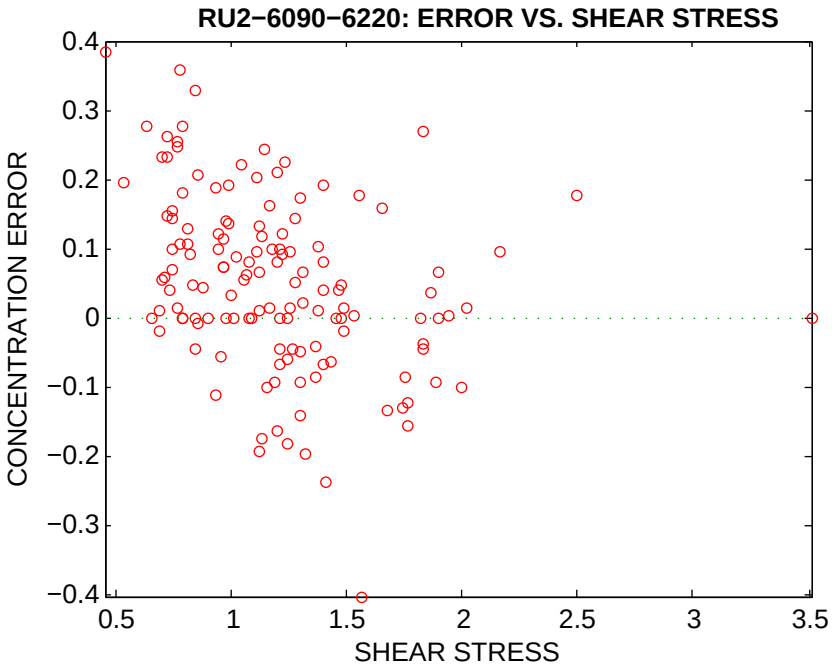


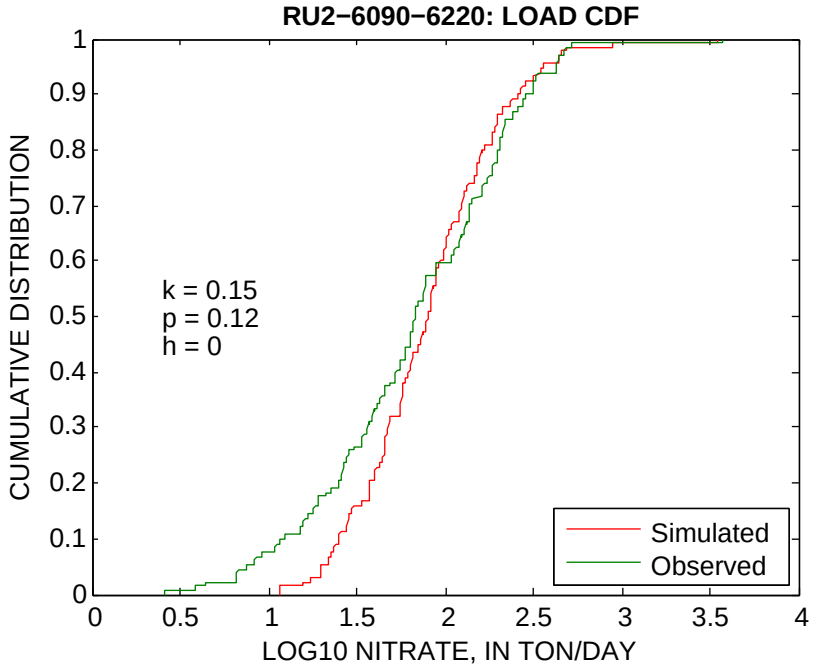


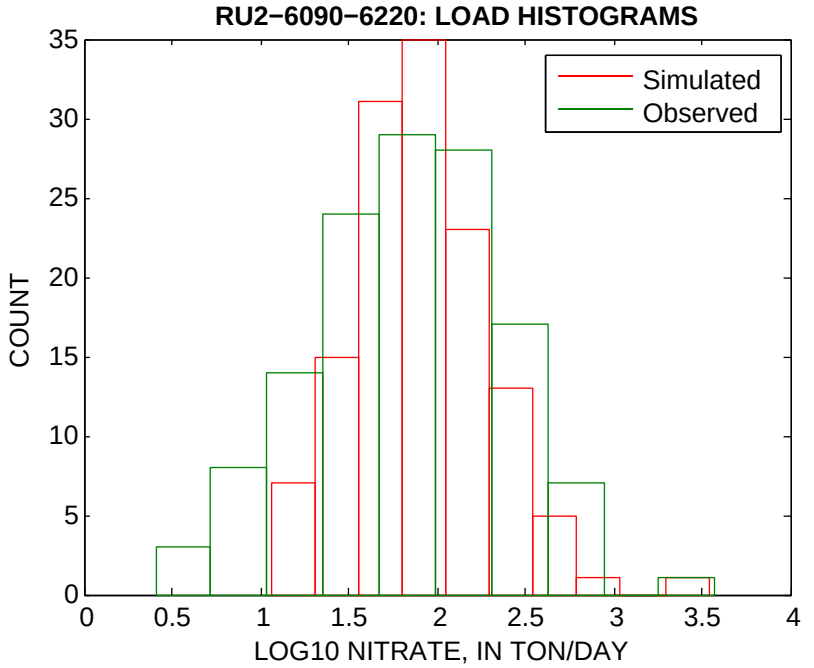


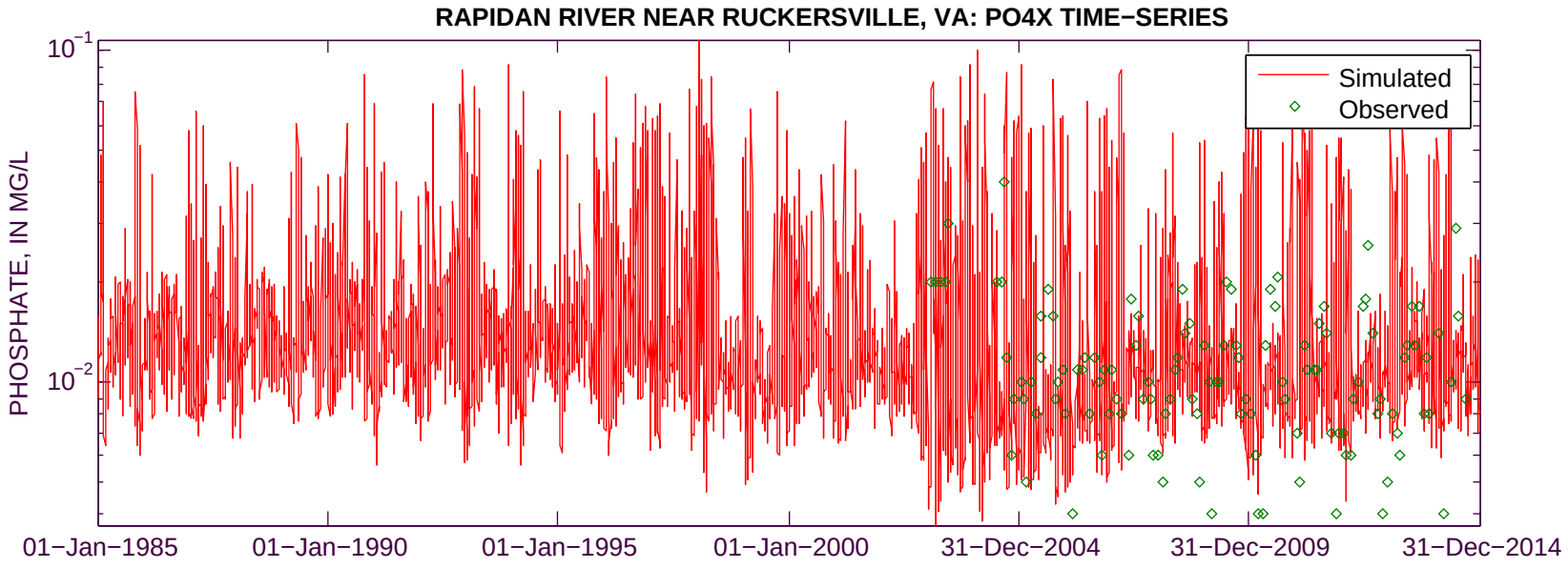
LOAD DATA
LOG10

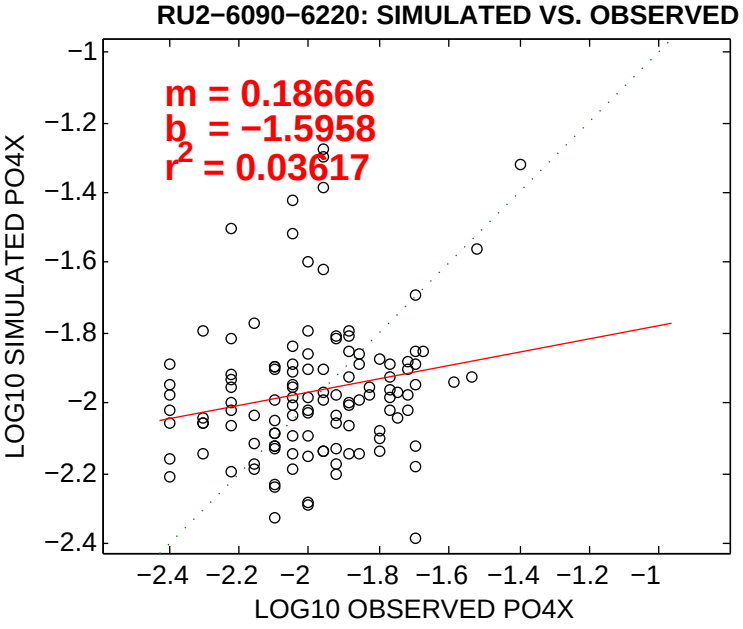


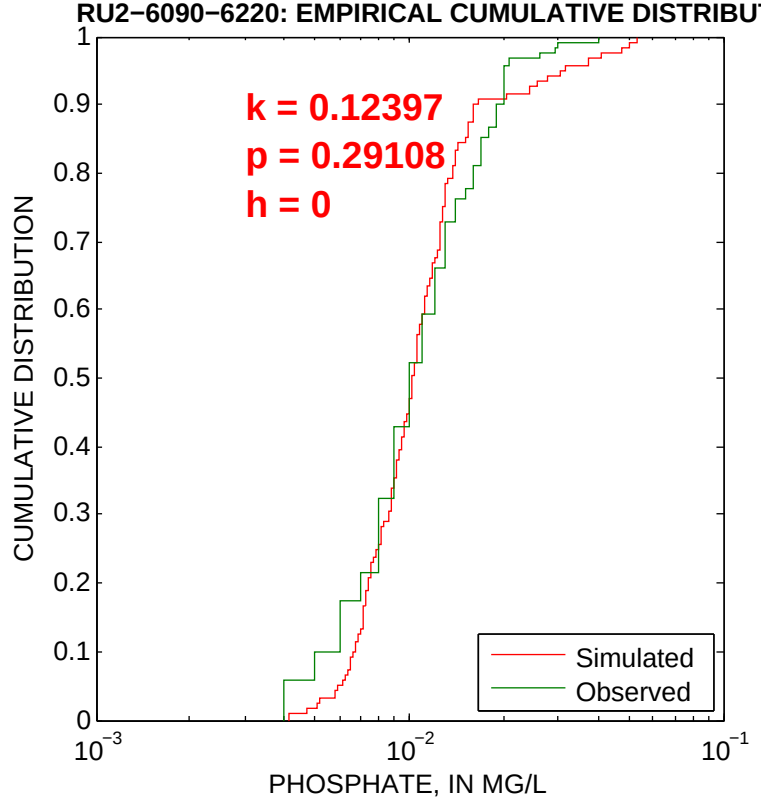












DATA SELECTION

scenario: P620171001WQ | file: PO4X.calib

plot: PO4X - phosphate

Dates: 1/1/1985 – 12/31/201

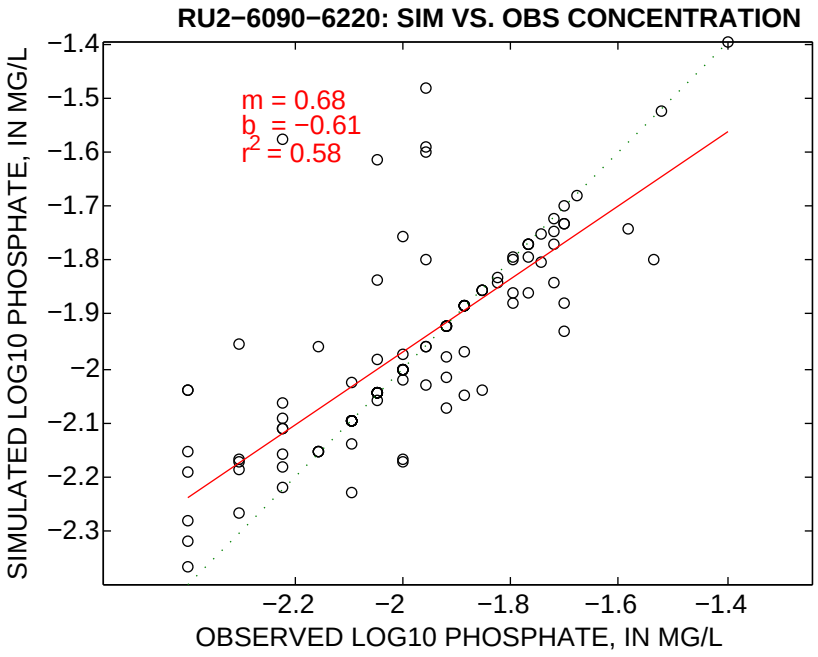
Drive: N/A | Directory: model | Observed: OBS20161101

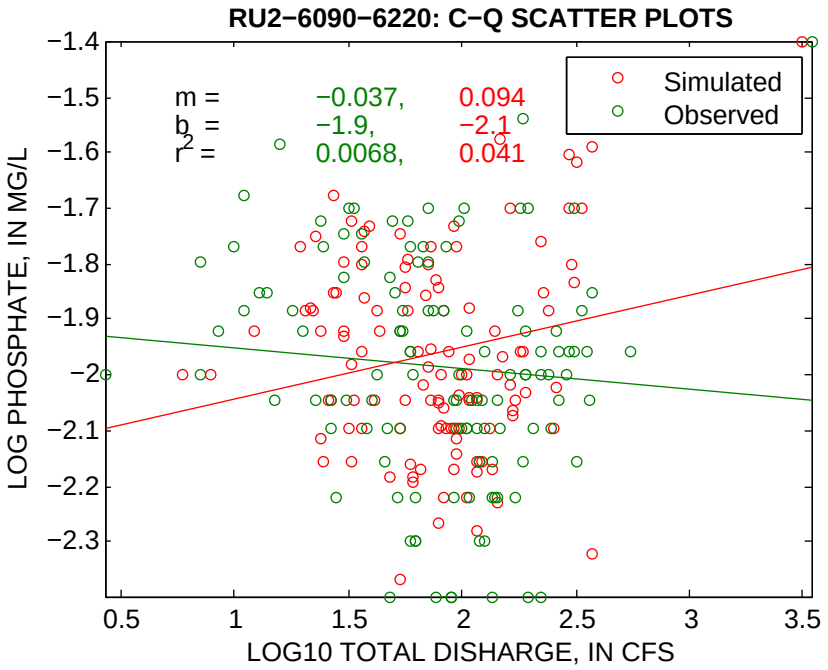
STATISTICS

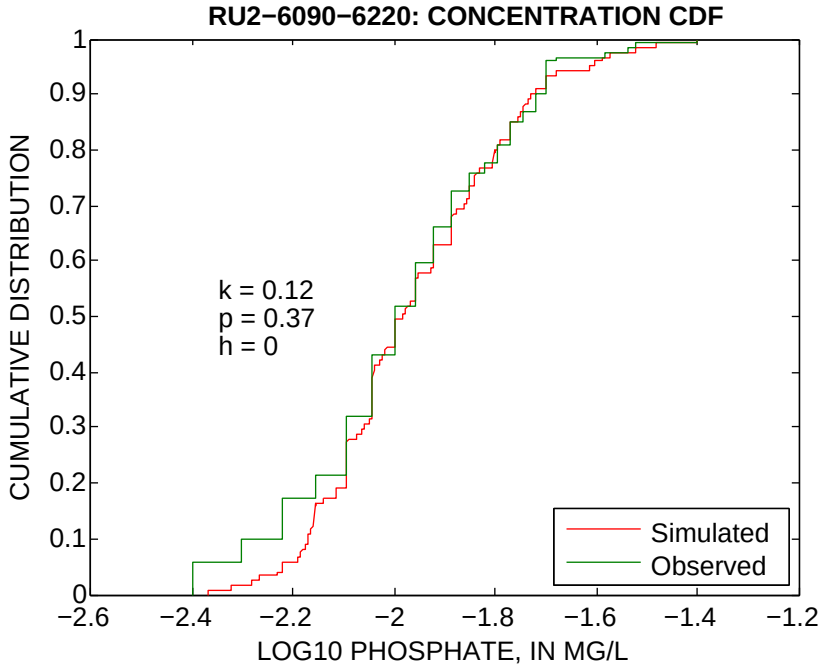
n	121	121
	observe	simulate
min	0.004	0.0041344
	-2.39794	-2.38359
mean	0.0116116	0.0123599
	-1.98415	-1.96619
media	0.01	0.010282
	-2	-1.98792
max	0.04	0.052966
	-1.39794	-1.276
varian	3.43562e-0	7.146e-05
	0.0428994	0.0413252
JB	0.001	0.001
	0.5	0.001
	ra	log
%	6.4451	-0.904908
err.va	8.36586e-0	0.0685342
rel.std.err	2.43504	1.59756
mod.eff	-1.43504	-0.597556

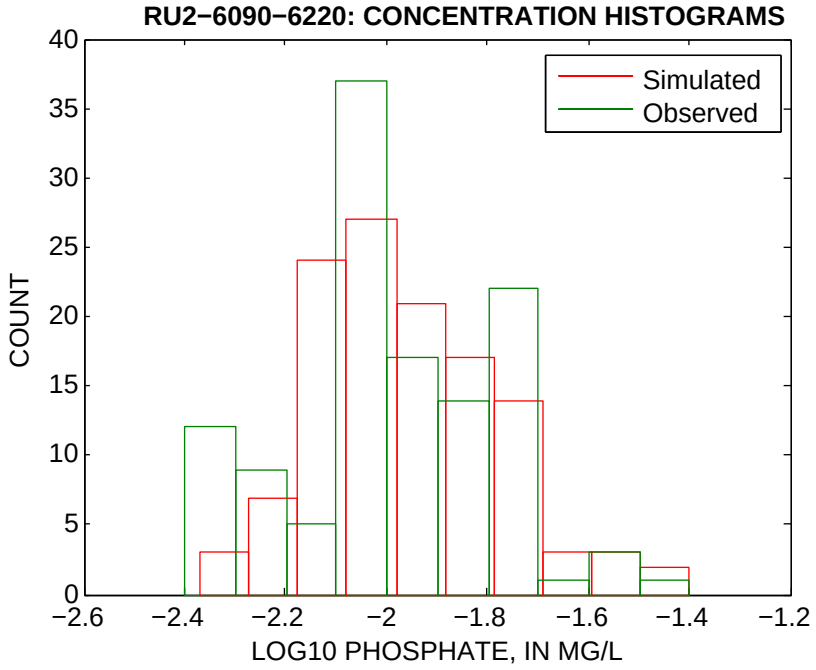
VERSION 2.1

ALL DATA
LOG10

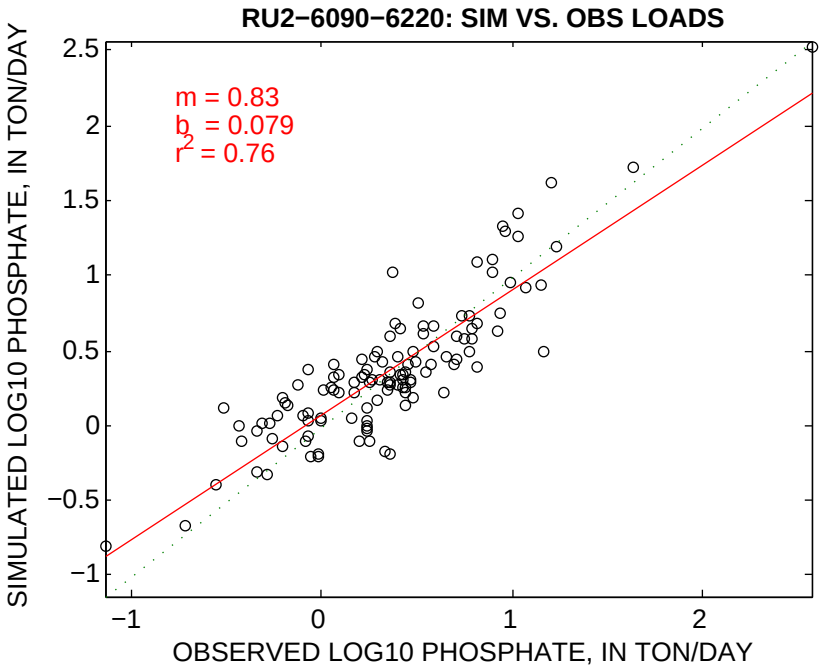


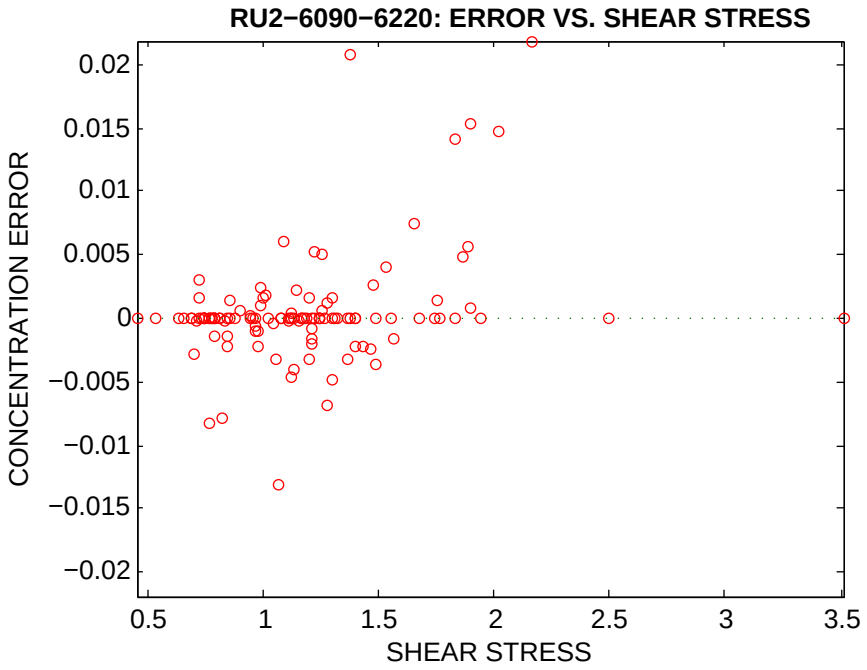


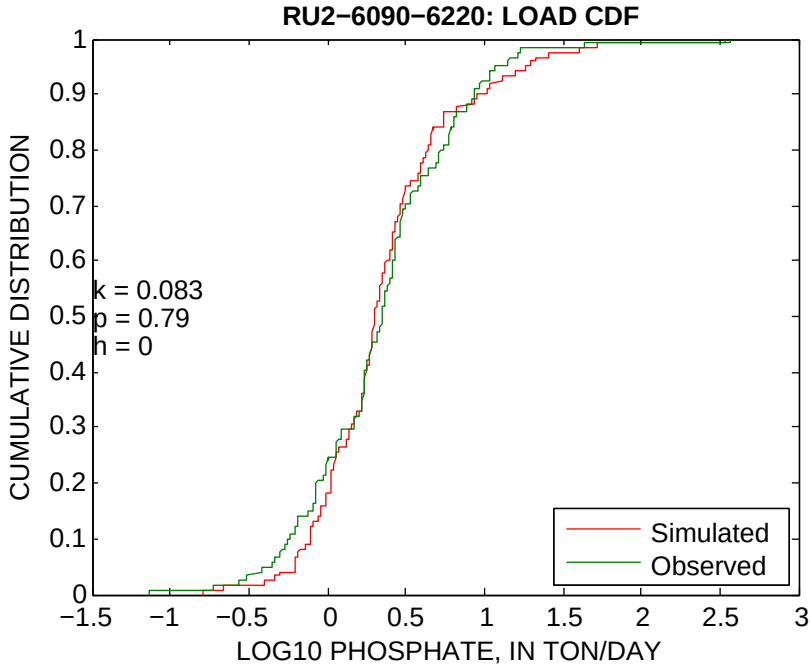


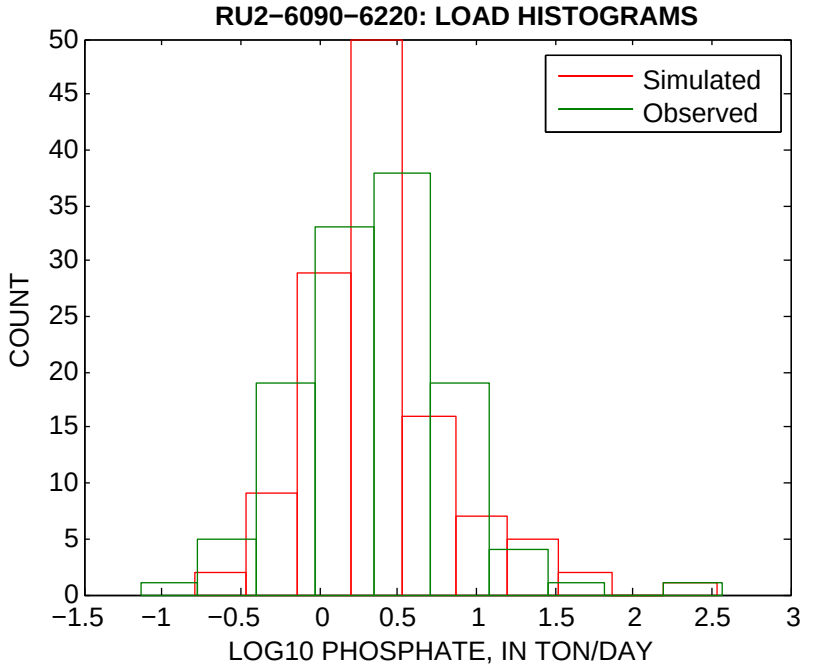


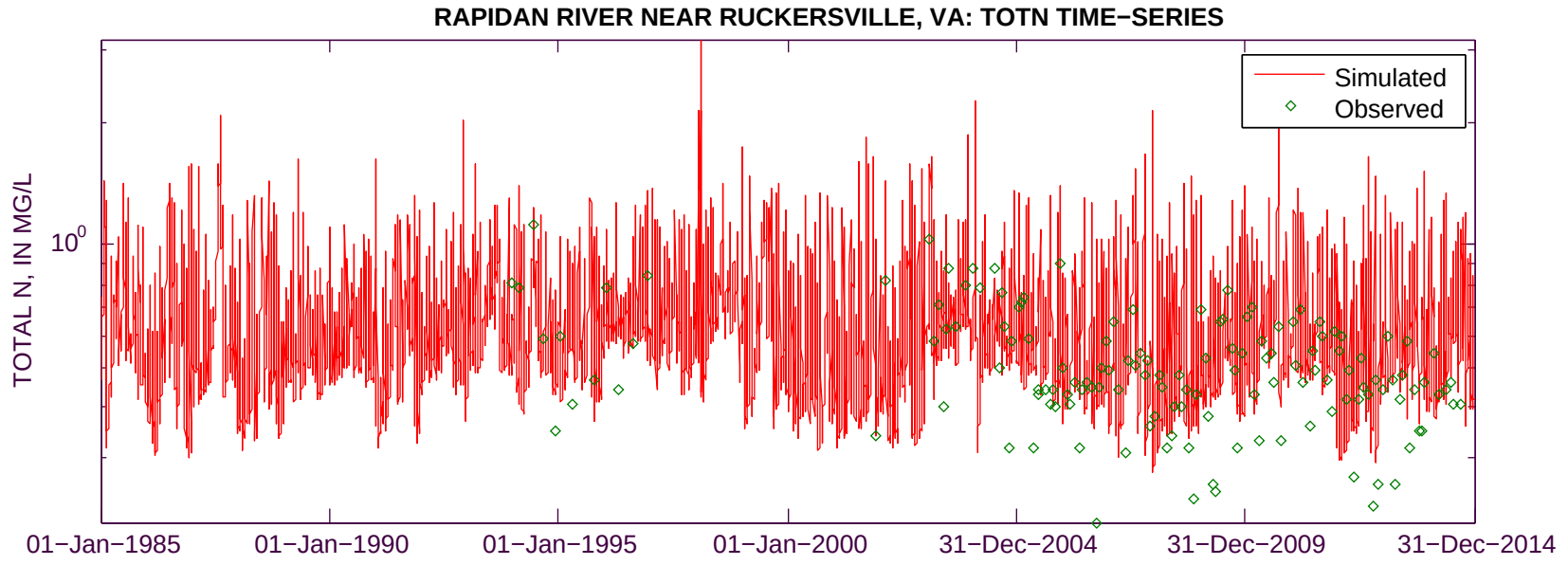
LOAD DATA
LOG10

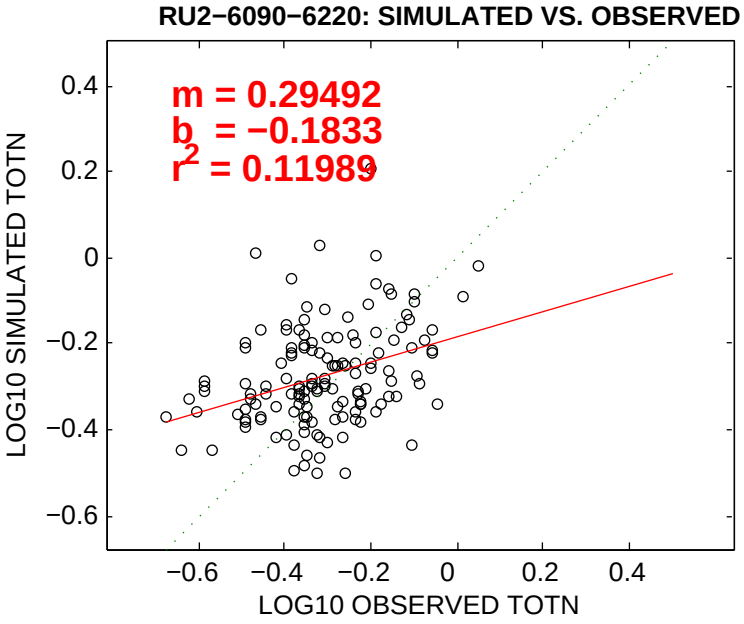


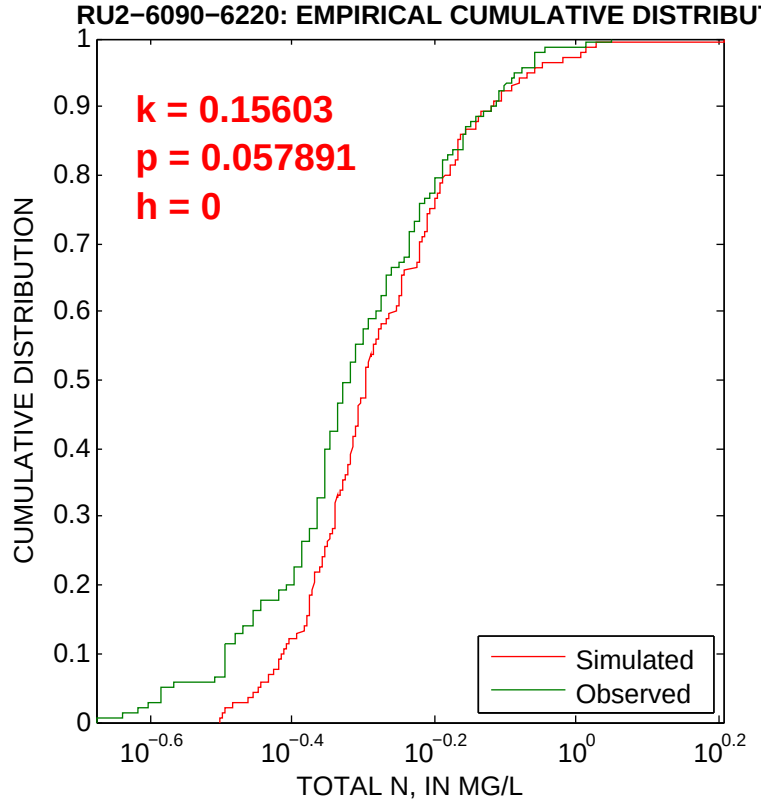












DATA SELECTION

scenario	file
P620171001WQ	TOTN.calib

plot: TOTN - total nitrogen

Dates 1/1/1985 12/31/201

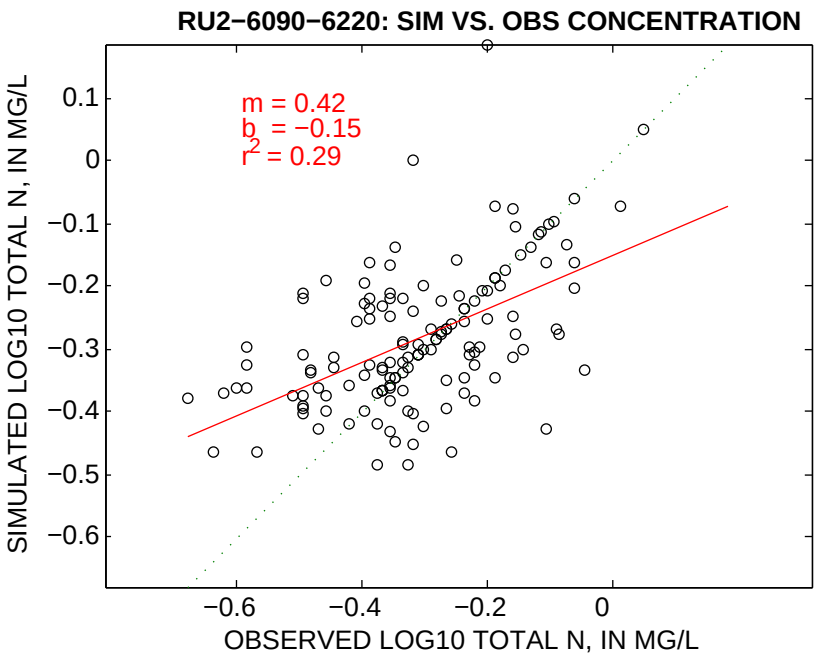
Drive	Directory	Observed
N/A	model	OBS20161101

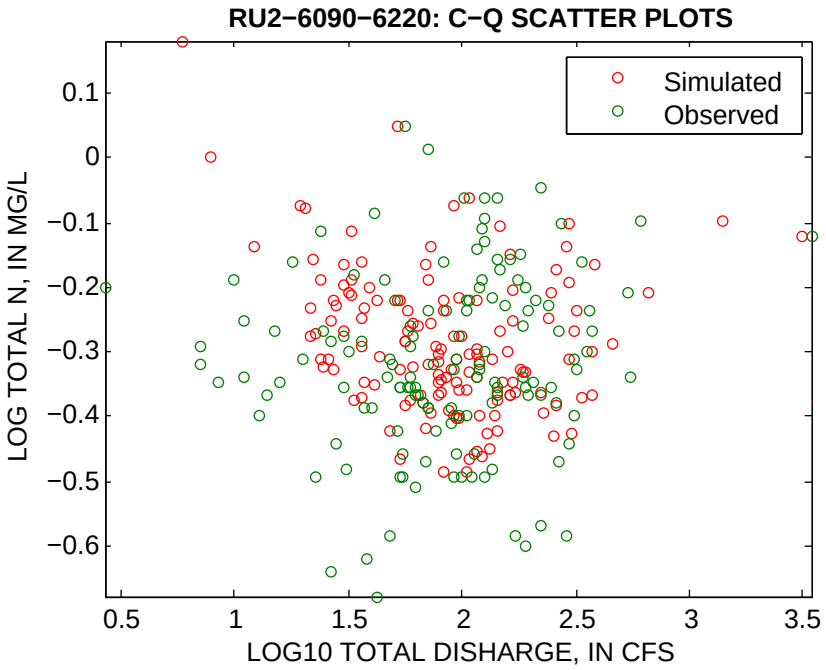
STATISTICS

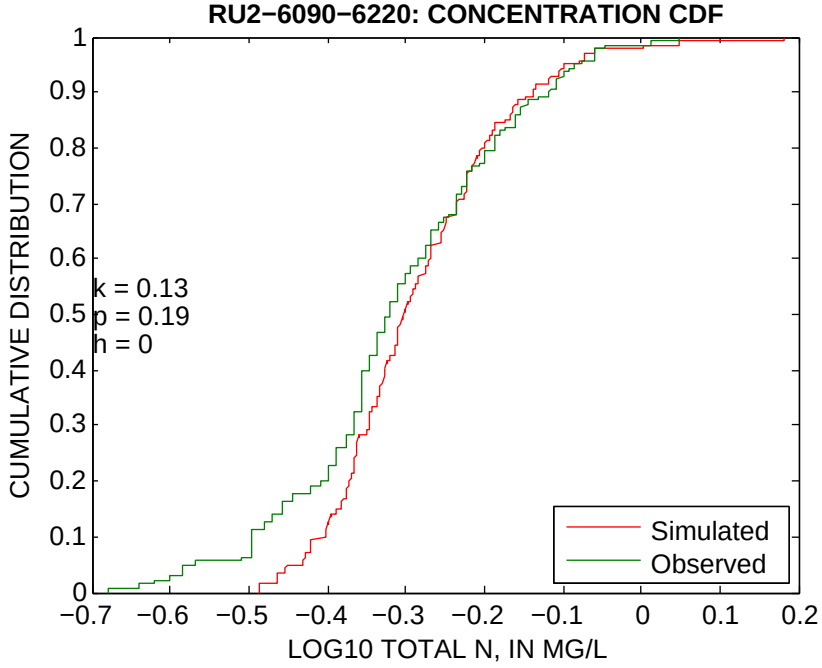
	n	141	141
		observe	simulate
min		0.21	0.31533
		-0.677781	-0.501235
mean		0.514326	0.552527
		-0.310667	-0.274918
media		0.48	0.50524
		-0.318759	-0.296502
max		1.12	1.6077
		0.049218	0.206205
varian		0.0277647	0.0303254
		0.0193029	0.0140044
JB		0.002552	0.001
		0.5	0.002030
		ra	log
%		7.42739	-11.5071
err.va		0.0398573	0.0232086
rel.std.err		1.43554	1.20234
mod.eff		-0.435537	-0.20234

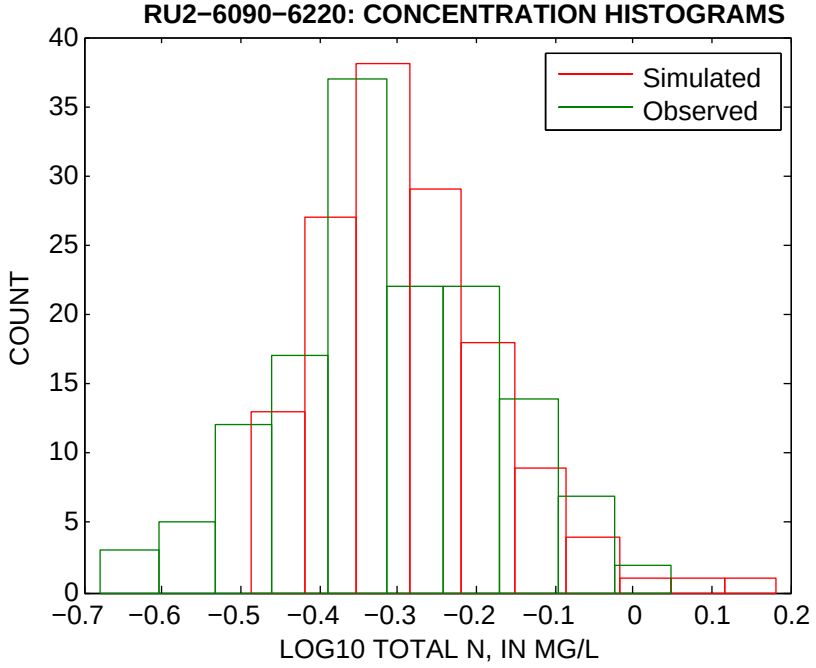
VERSION 2.1

ALL DATA
LOG10

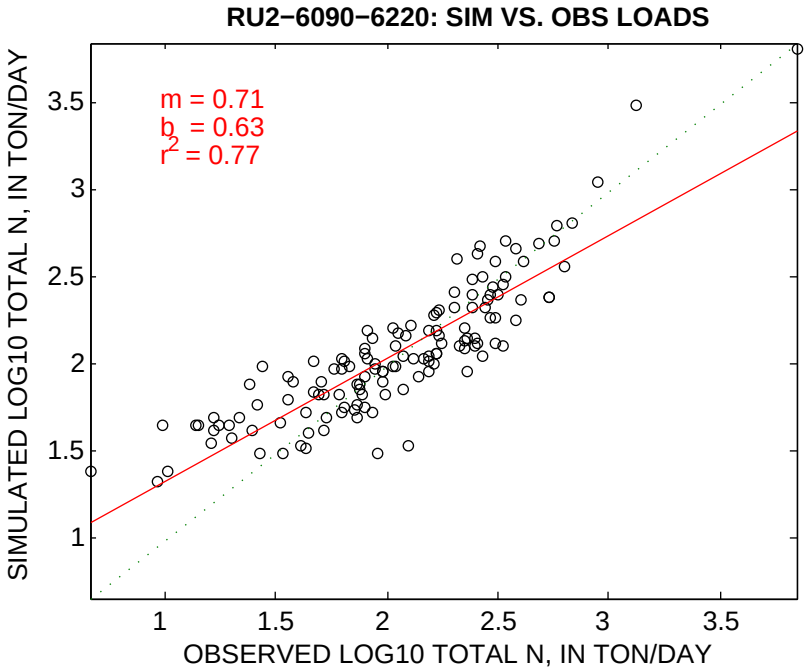


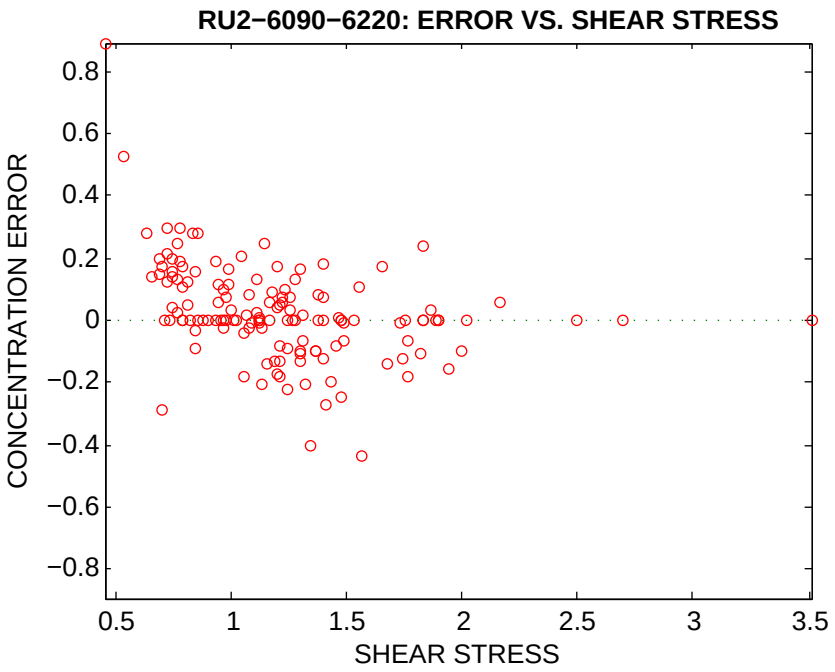


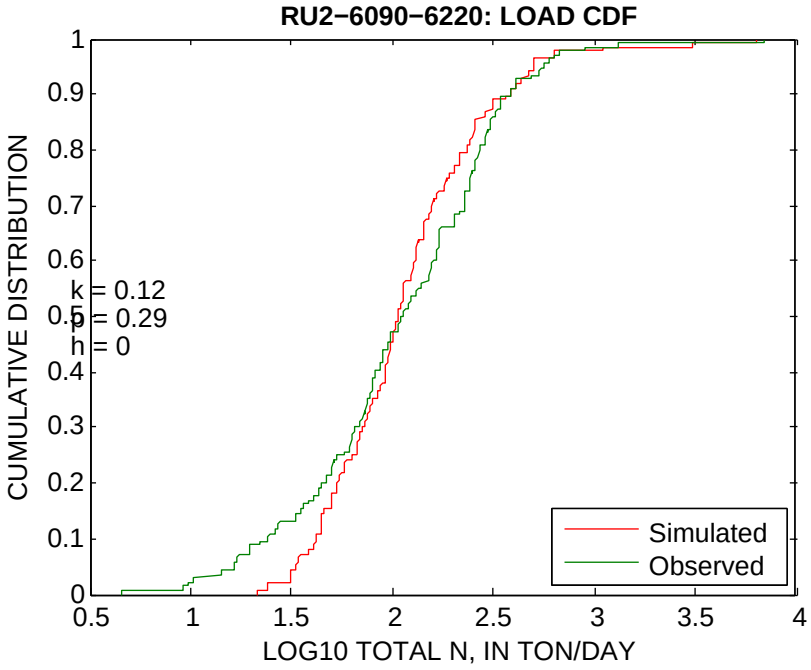


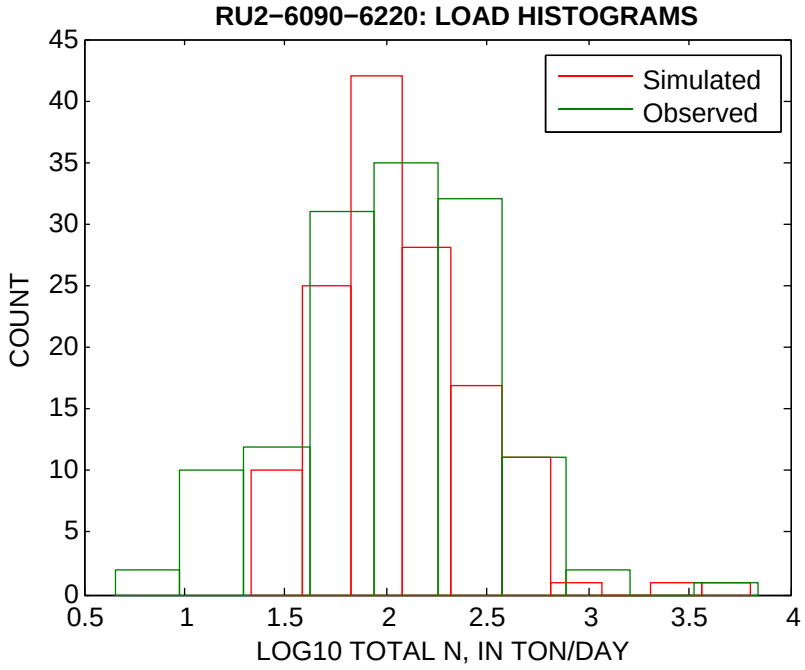


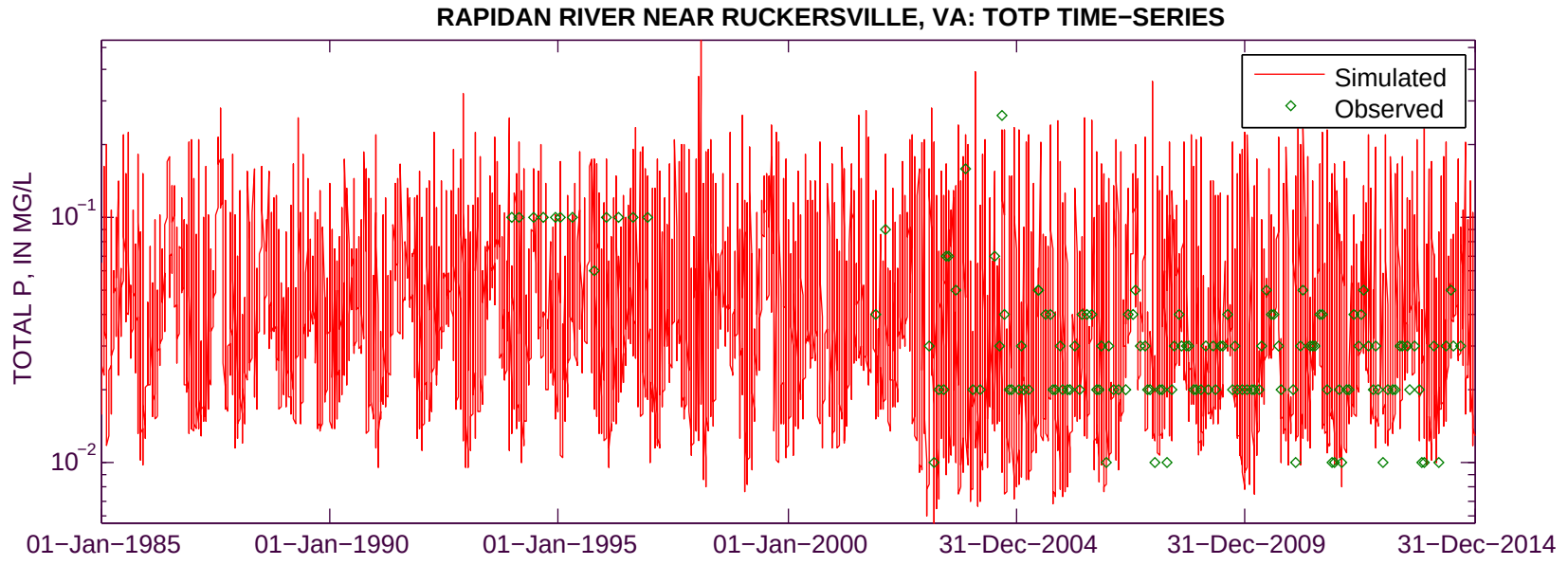
LOAD DATA
LOG10

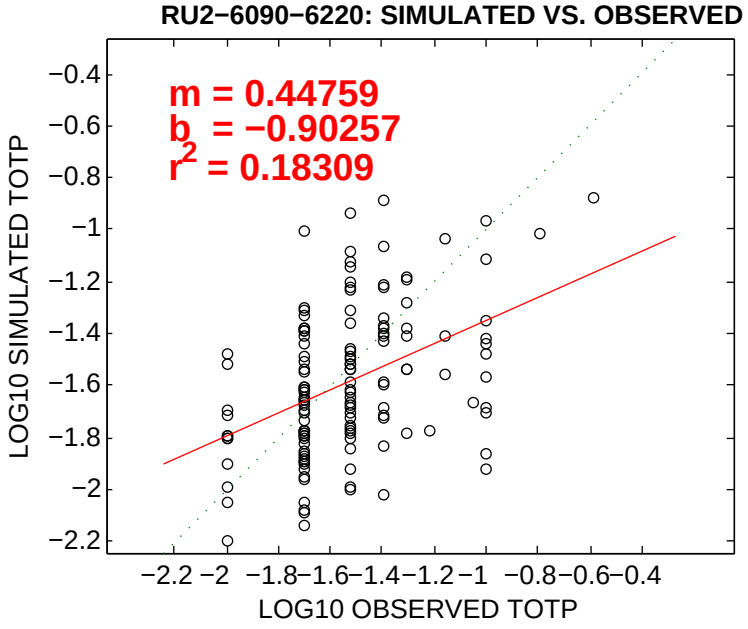


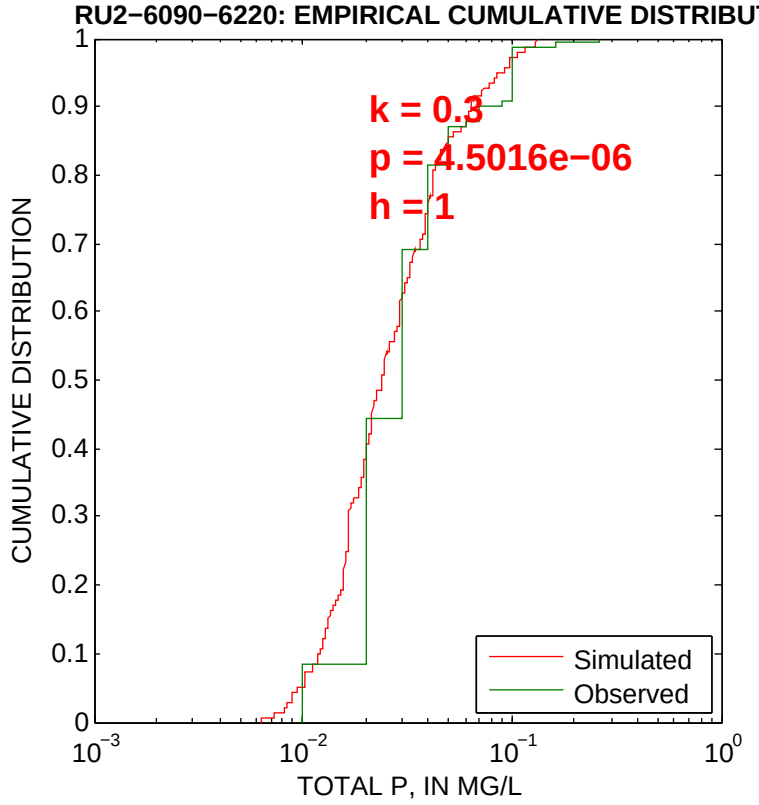












DATA SELECTION

scenario	file
P620171001WQ	TOTP.calib

plot: TOTP - total phosphorus

Dates: 1/1/1985 – 12/31/201

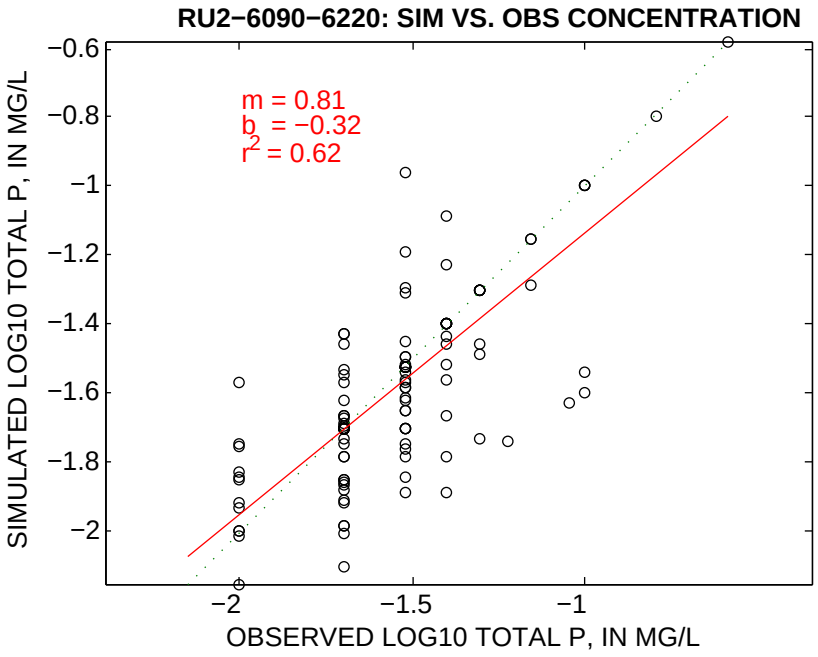
Drive	Directory	Observed
N/A	model	OBS20161101

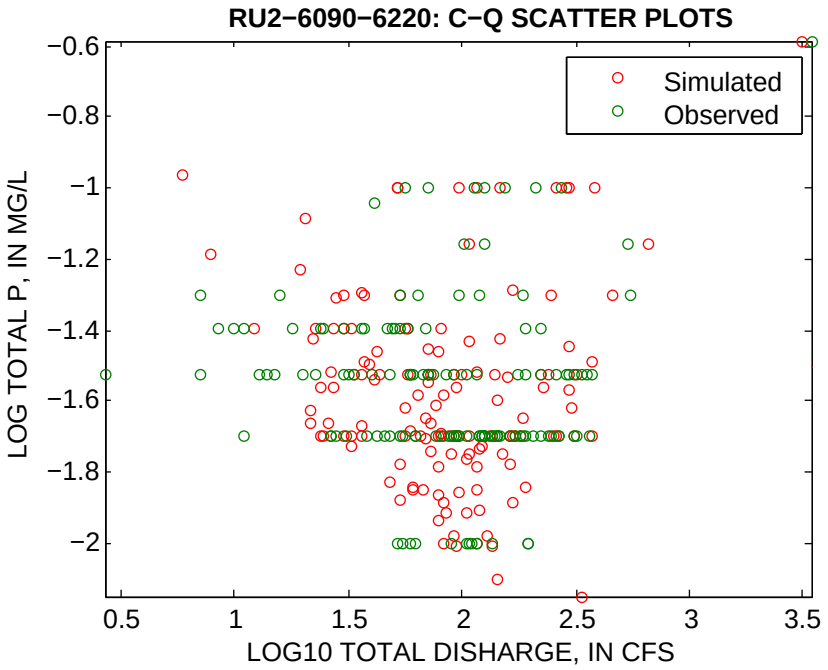
STATISTICS

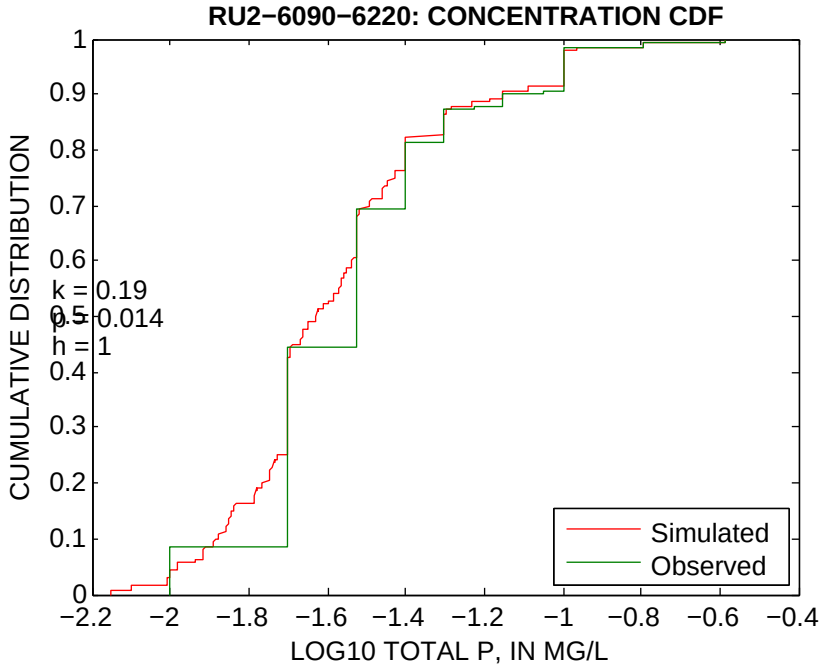
	n	observe	simulate
		140	140
min		0.01	0.0063384
		-2	-2.19802
mean		0.0366429	0.0322372
		-1.5324	-1.58846
media		0.03	0.023987
		-1.52288	-1.62003
max		0.26	0.13368
		-0.585027	-0.873934
varian		0.00101814	0.00060766
		0.0724357	0.0792616
JB		0.001	0.001
		0.005961	0.092361
		ra	log
%		-12.0233	3.65863
err.va		0.0009341	0.0900196
rel.std.err		0.917453	1.24275
mod.eff		0.0825475	-0.242752

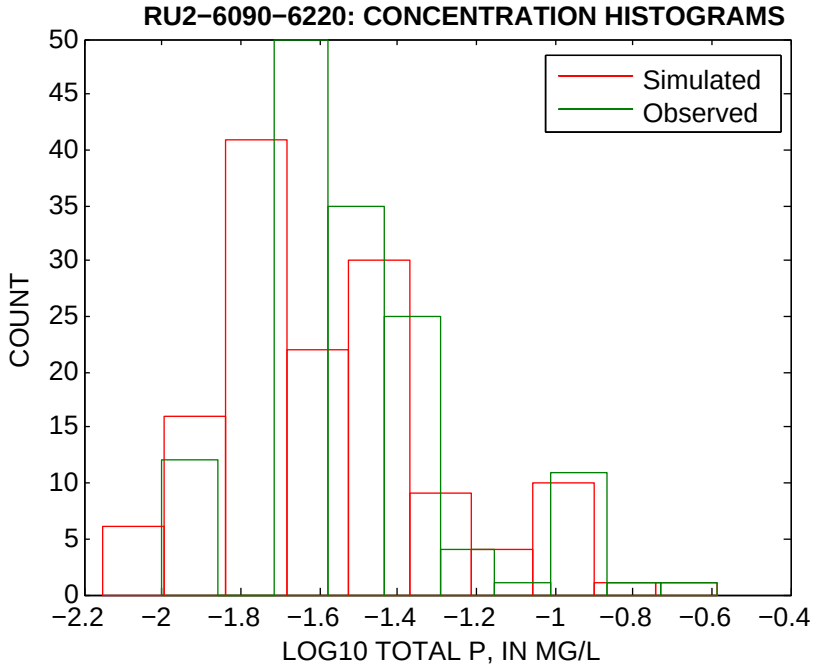
VERSION 2.1

ALL DATA
LOG10

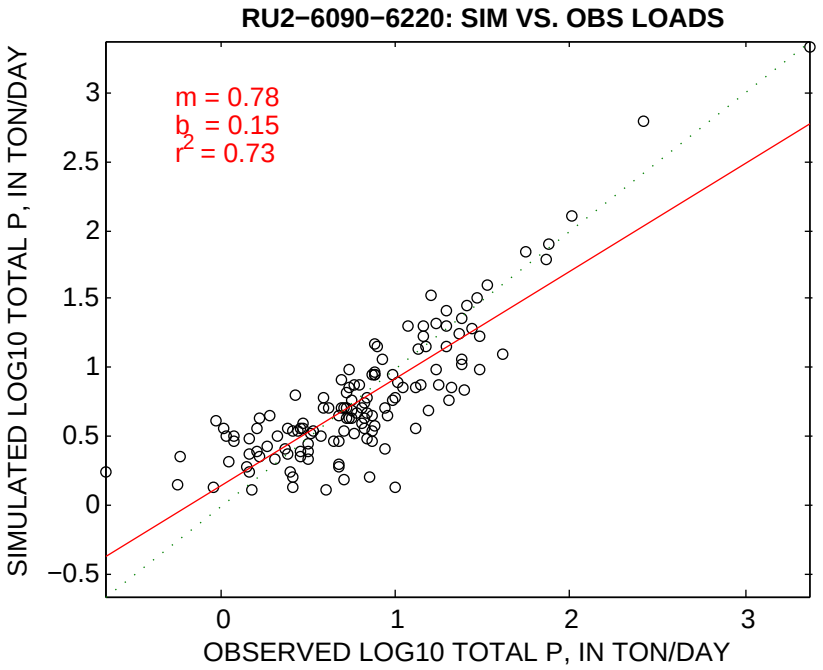


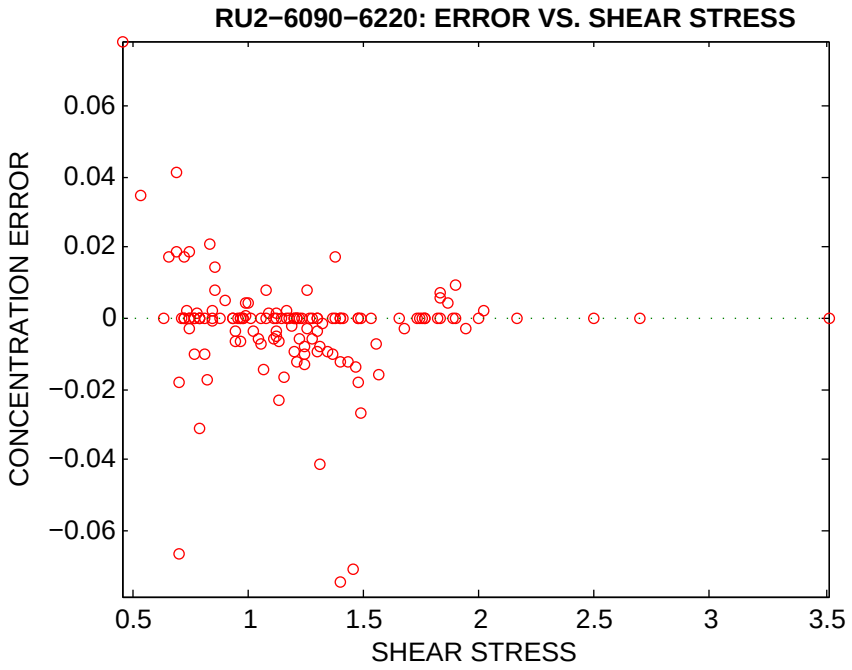


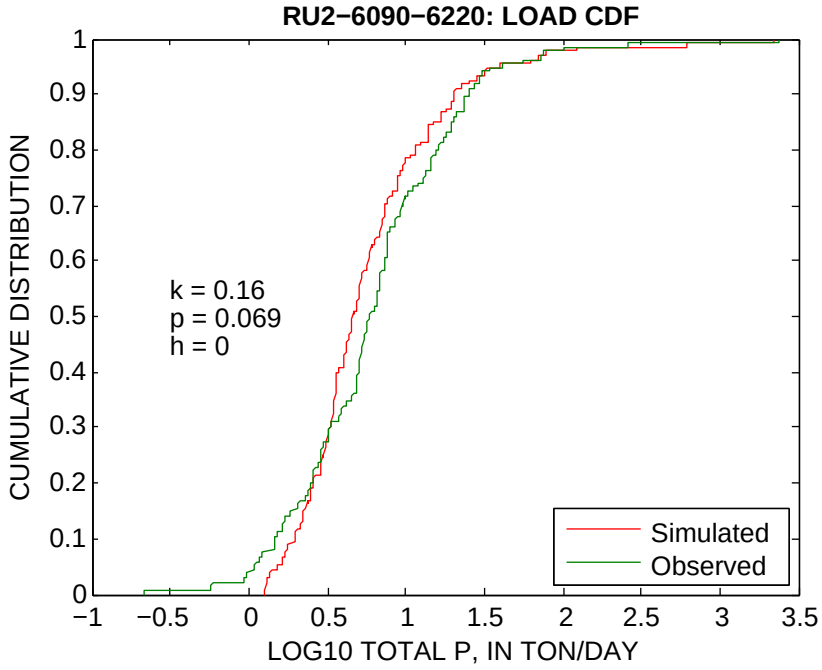


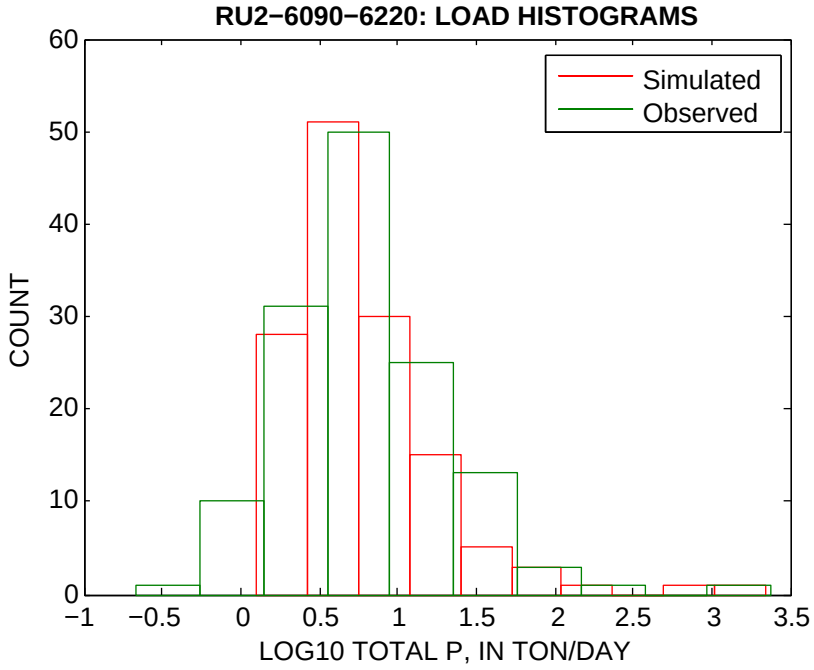


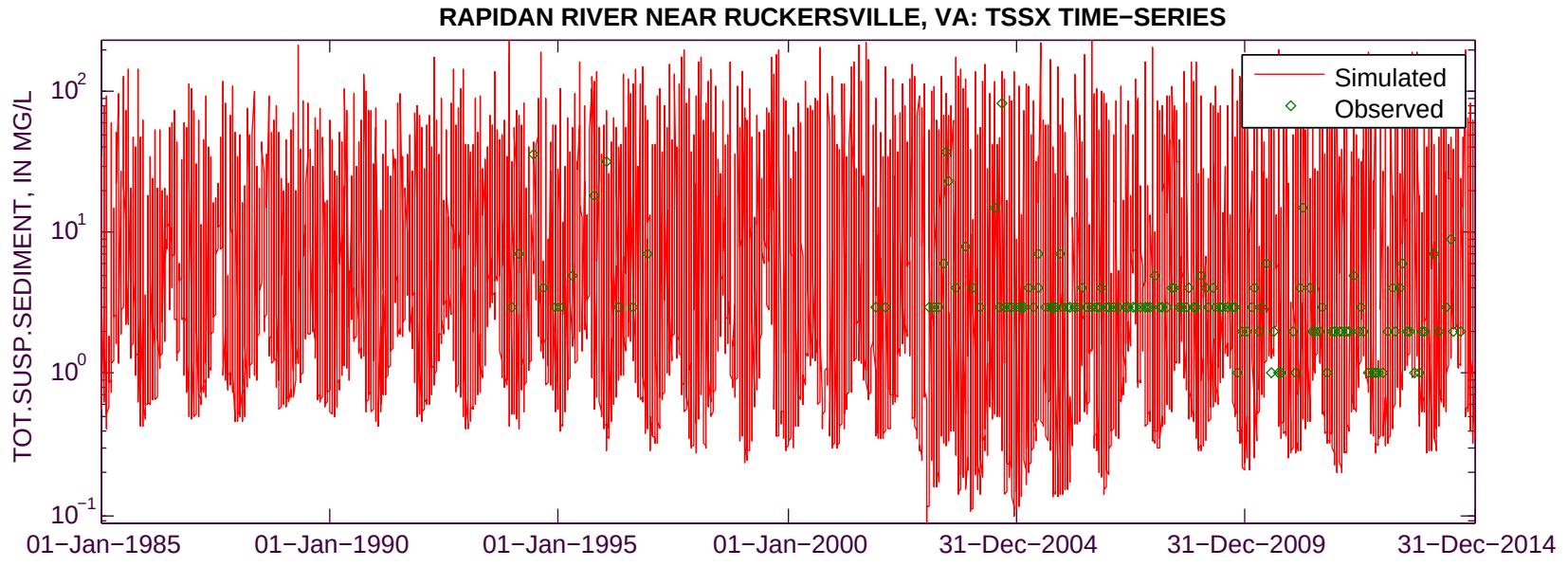
LOAD DATA
LOG10

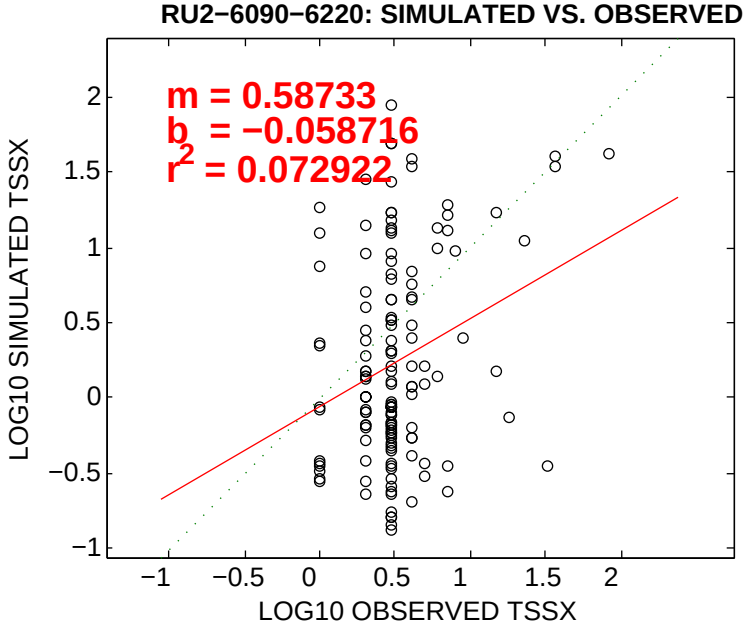


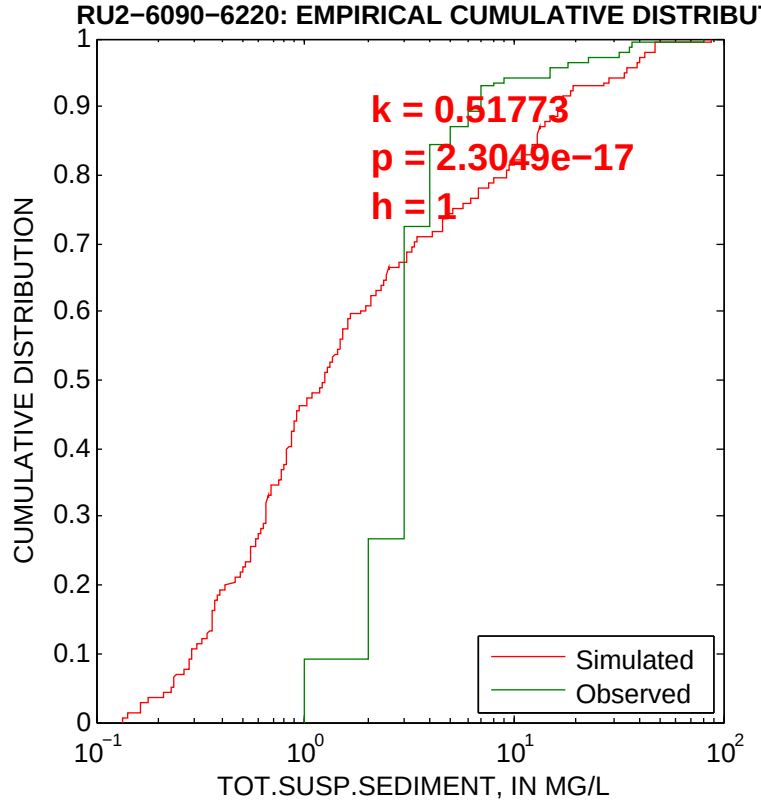












DATA SELECTION

scenario: P620171001WQ | file: TSSX.calib

plot: TSSX - total suspended ...

Dates: 1/1/1985 | 12/31/201

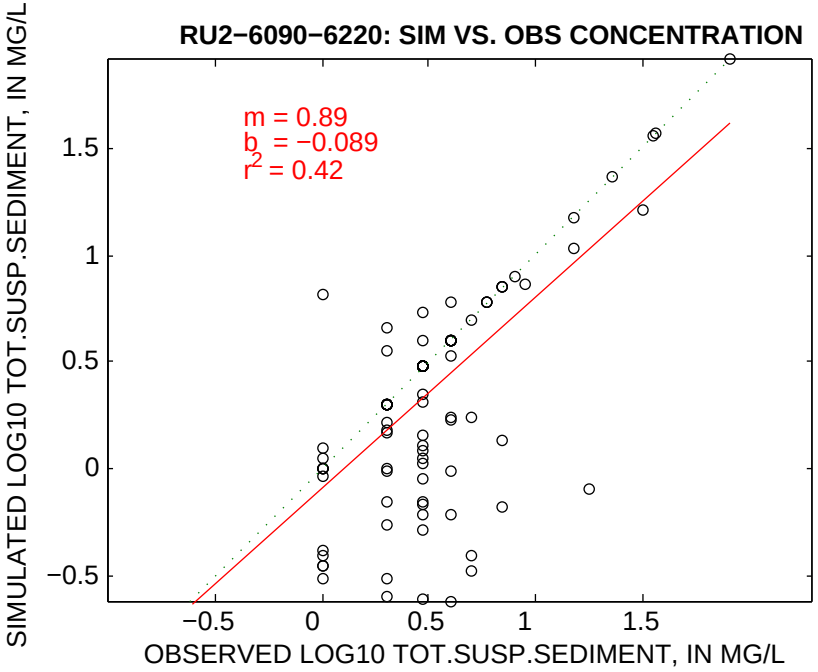
Drive | Directory: N/A | model | Observed: OBS20161101

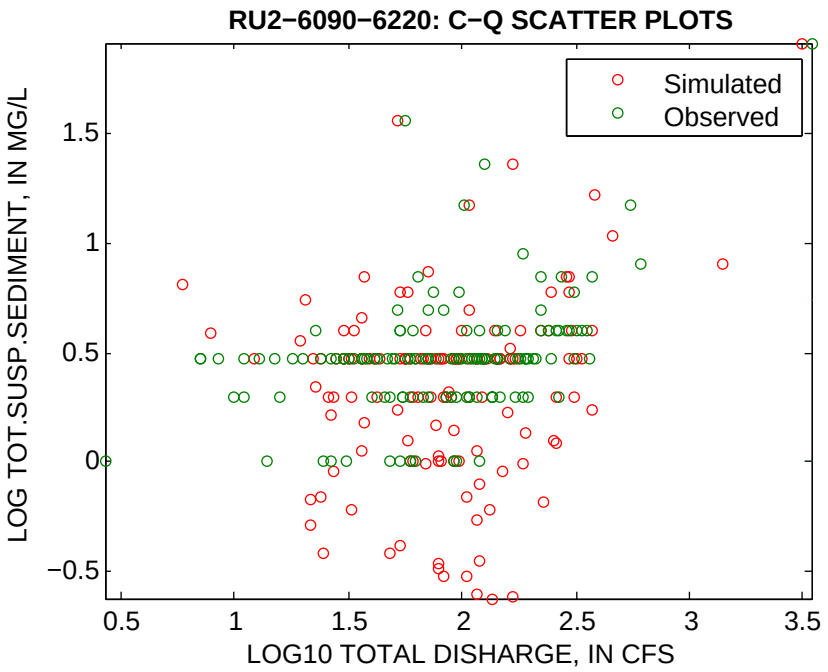
STATISTICS

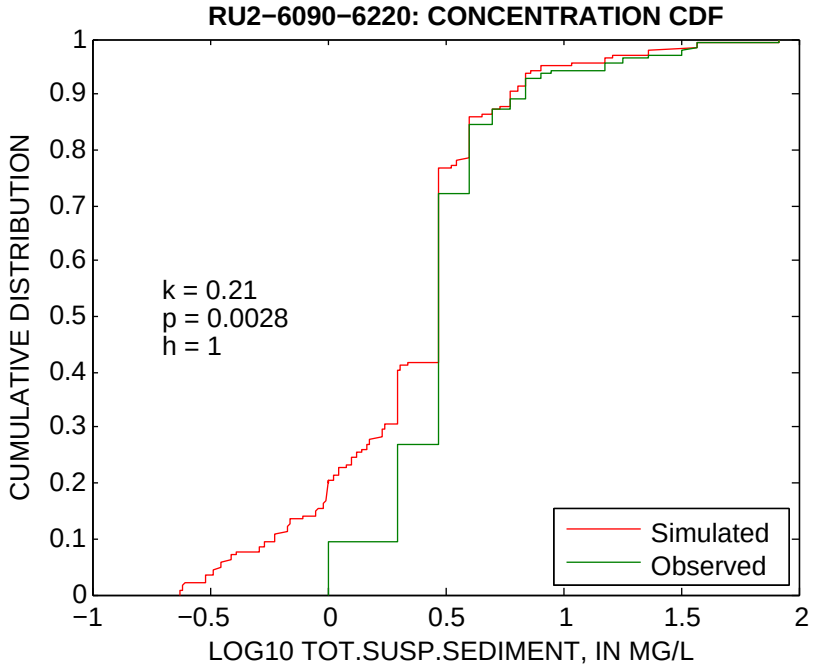
		observe	simulate
n		141	141
min		1	0.13475
		0	-0.870471
mean		4.75887	6.08515
		0.503705	0.237122
media		3	1.2516
		0.477121	0.0974656
max		82	88.402
		1.91381	1.94646
varian		72.0129	144.567
		0.0949739	0.449263
JB		0.001	0.001
		0.001	0.016064
		ra	log
%		27.8698	-52.9244
err.va		146.759	0.504249
rel.std.err		2.03795	5.30935
mod.eff		-1.03795	-4.30935

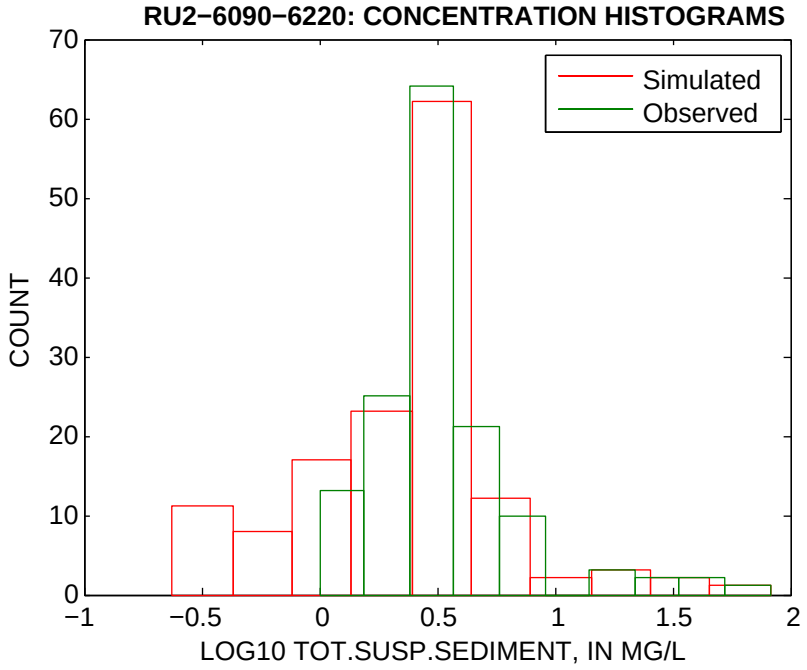
VERSION 2.1

ALL DATA
LOG10

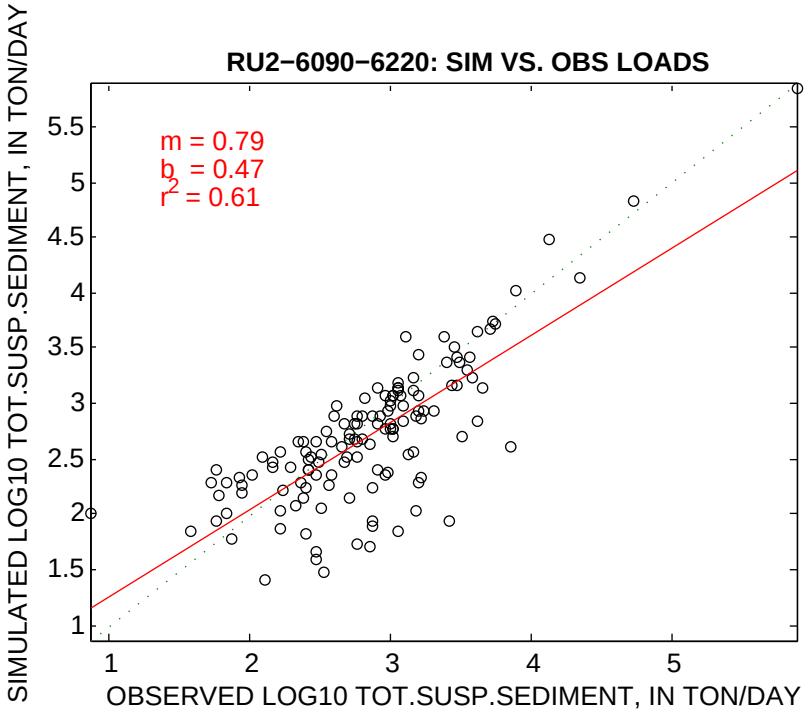


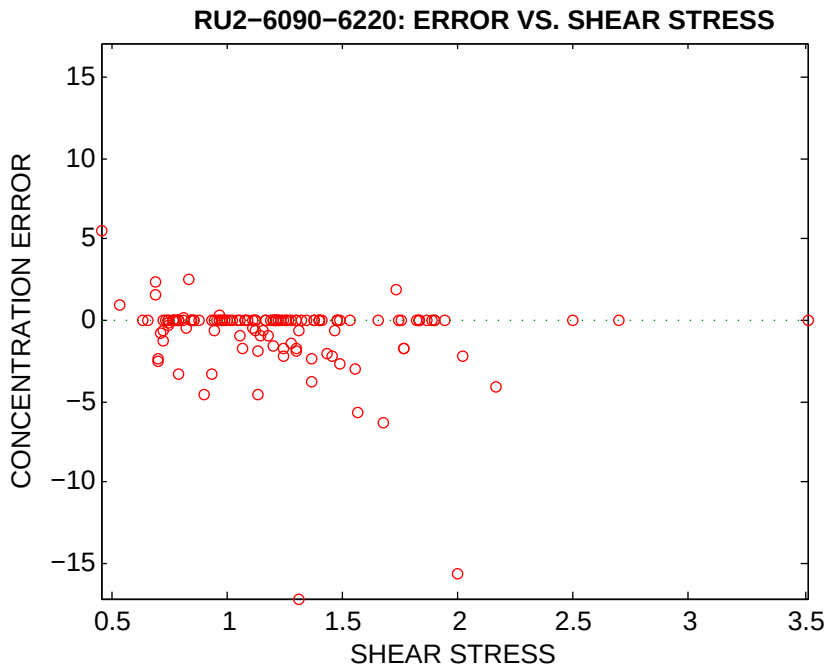


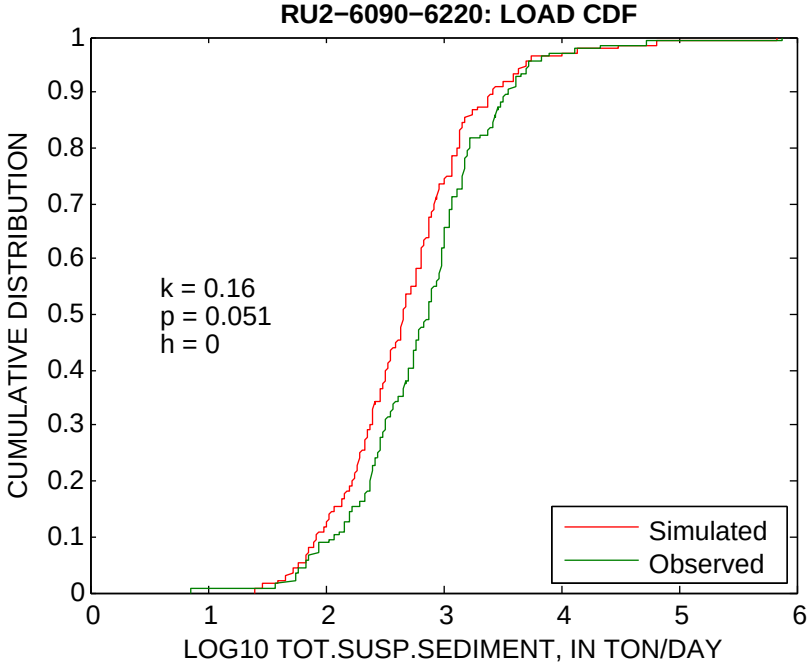


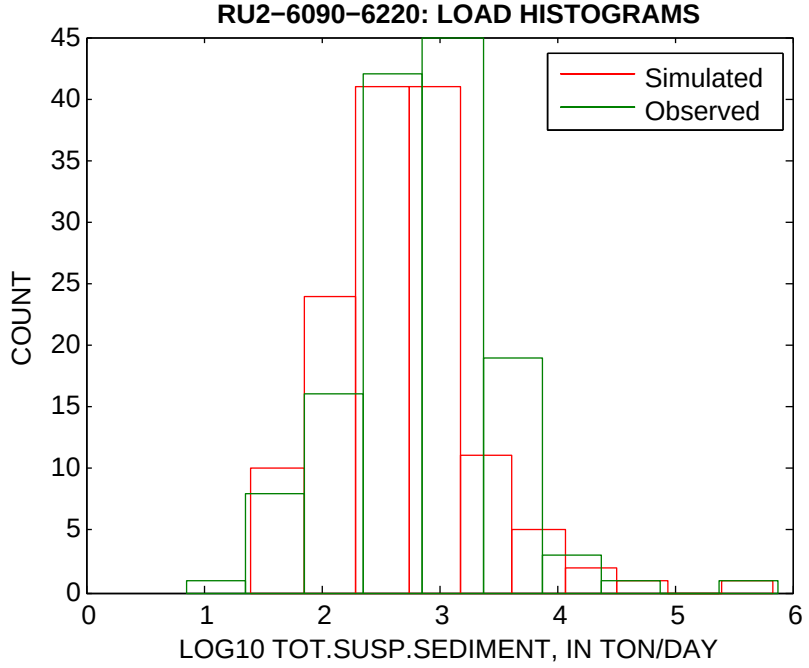


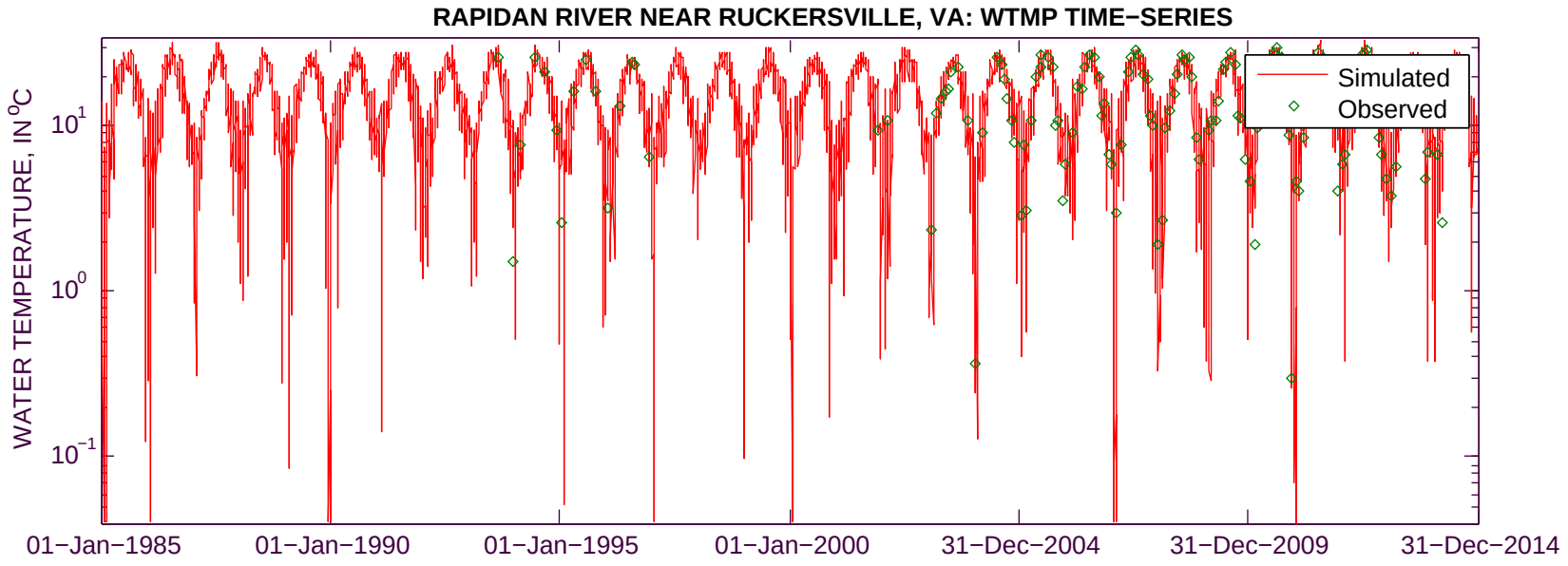
LOAD DATA
LOG10

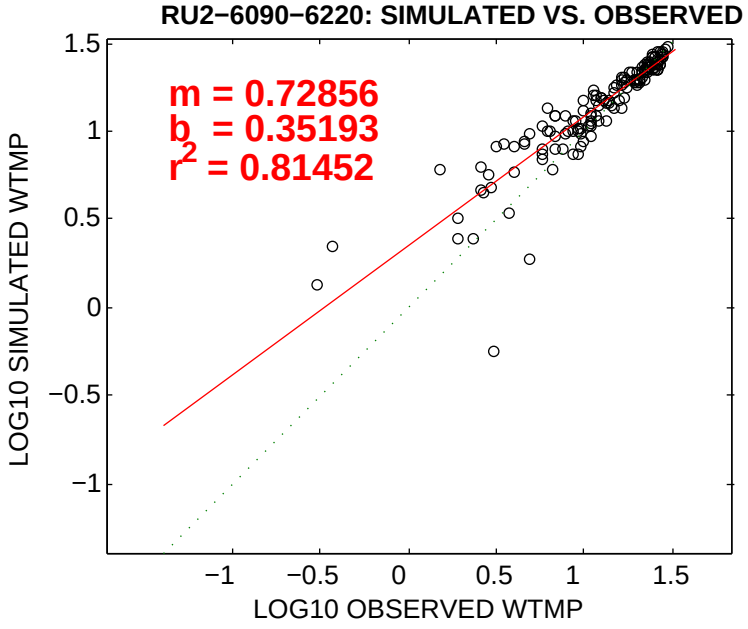


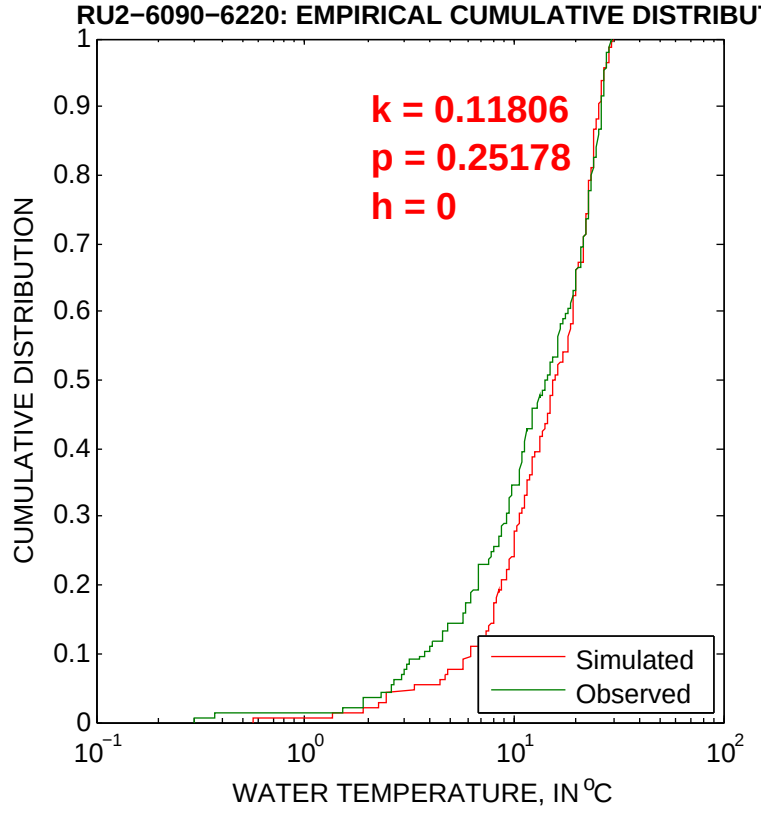












DATA SELECTION

scenario	file
P620171001WQ	WTMP.calib

plot: WTMP - water tempera...

Dates: 1/1/1985 — 12/31/201

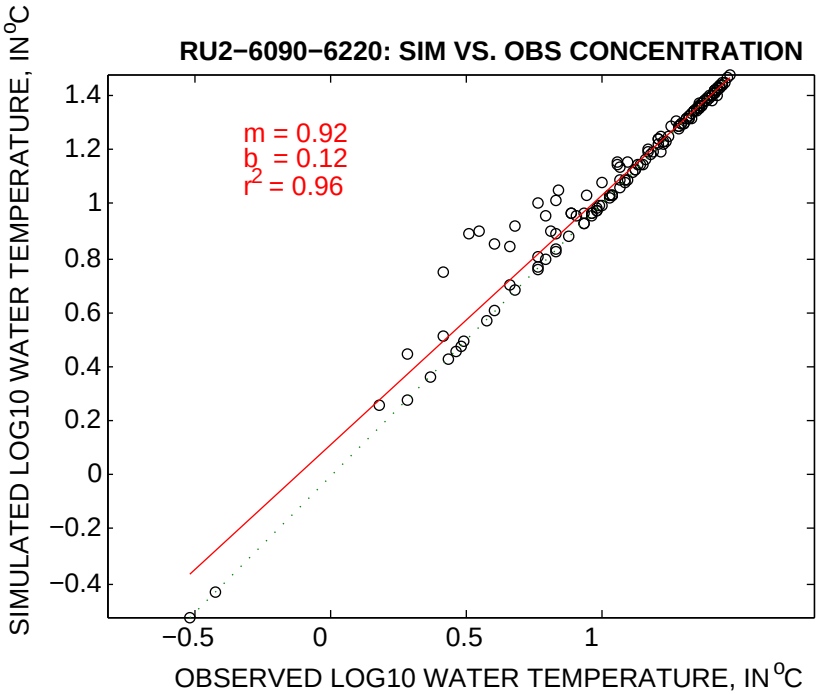
Drive	Directory	Observed
N/A	model	OBS20161101

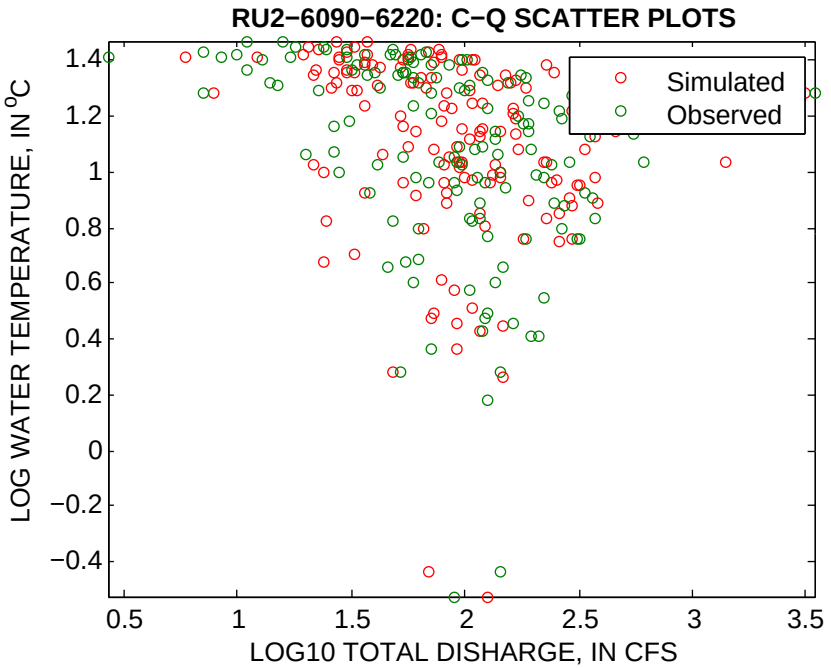
STATISTICS

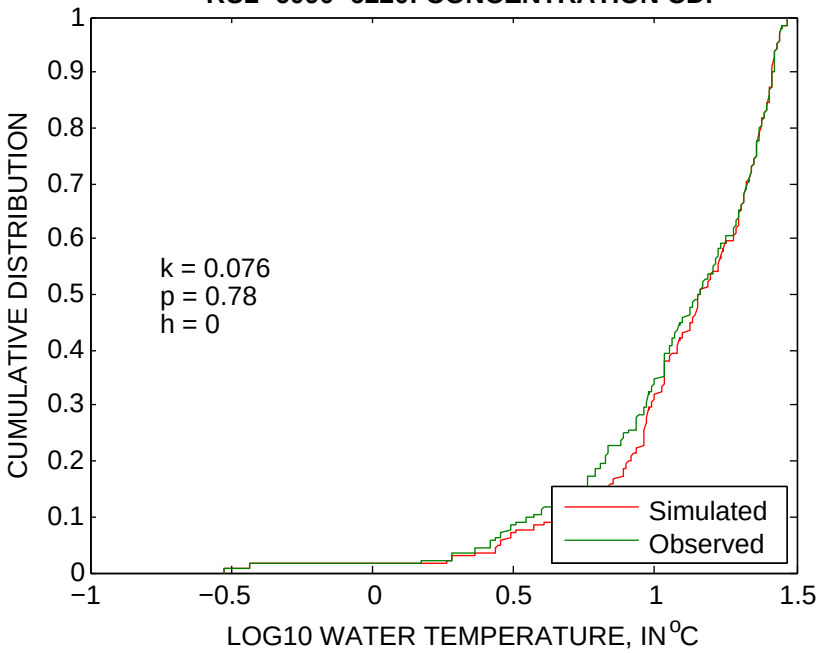
	n	144	144
		observe	simulate
min		0.3	0.56536
		-0.522879	-0.247675
mean		14.9748	15.9635
		1.07096	1.13219
media		14.3	15.5855
		1.15529	1.19272
max		29.7	29.95
		1.47276	1.4764
varian		68.7993	55.5877
		0.129565	0.0844333
JB		0.015449	0.03134
		0.001	0.001
		ra	log
%		6.6024	5.7171
err.va		6.18487	0.0289818
rel.std.err		0.0898973	0.223686
mod.eff		0.910103	0.776314

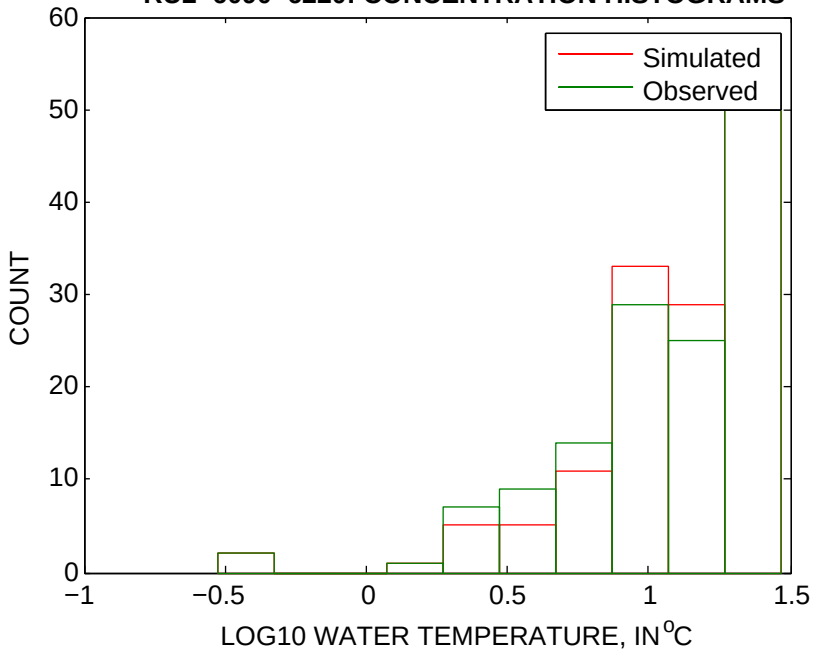
VERSION 2.1

ALL DATA
LOG10

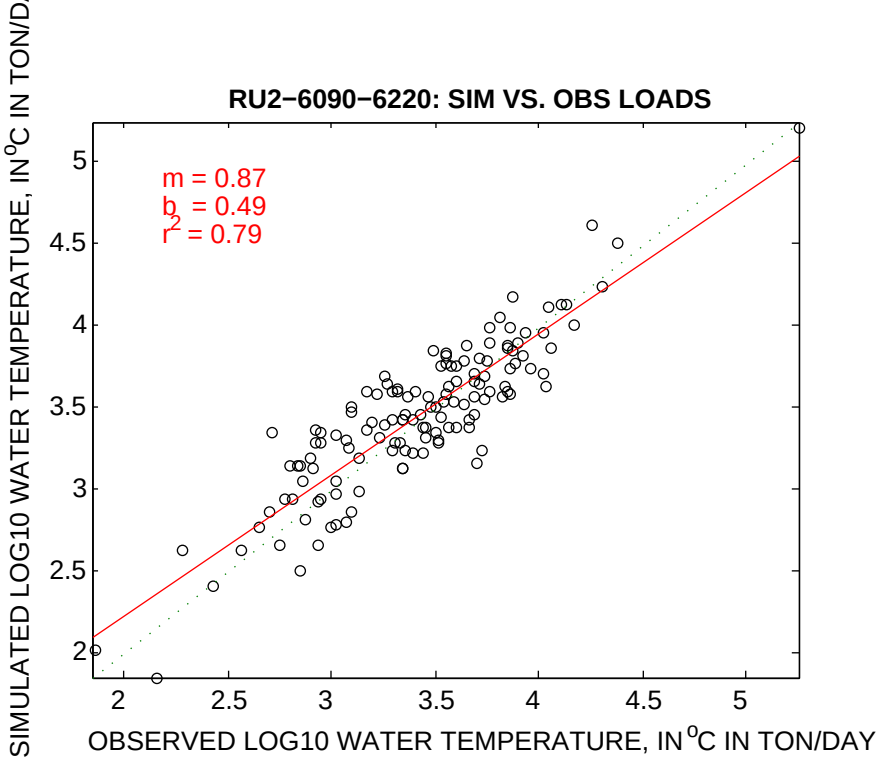


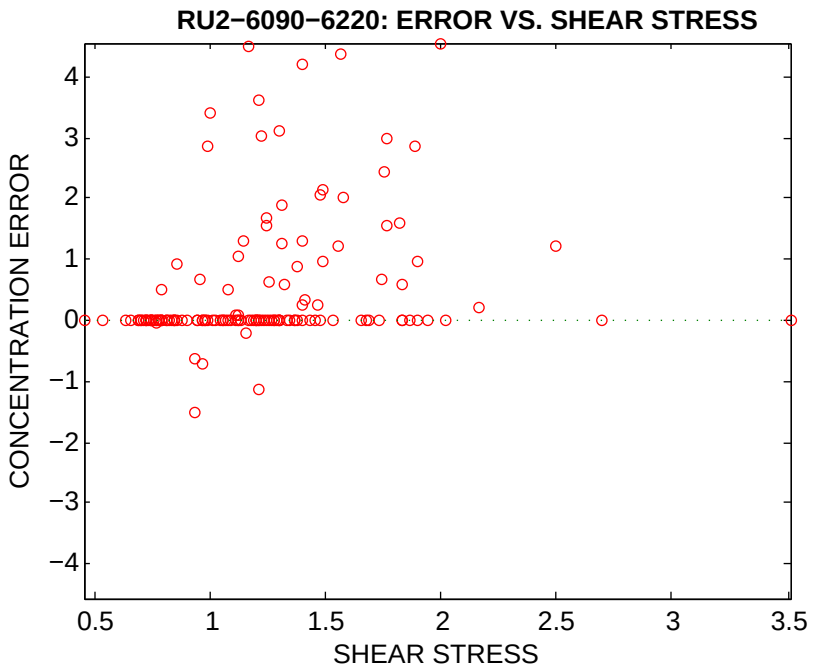


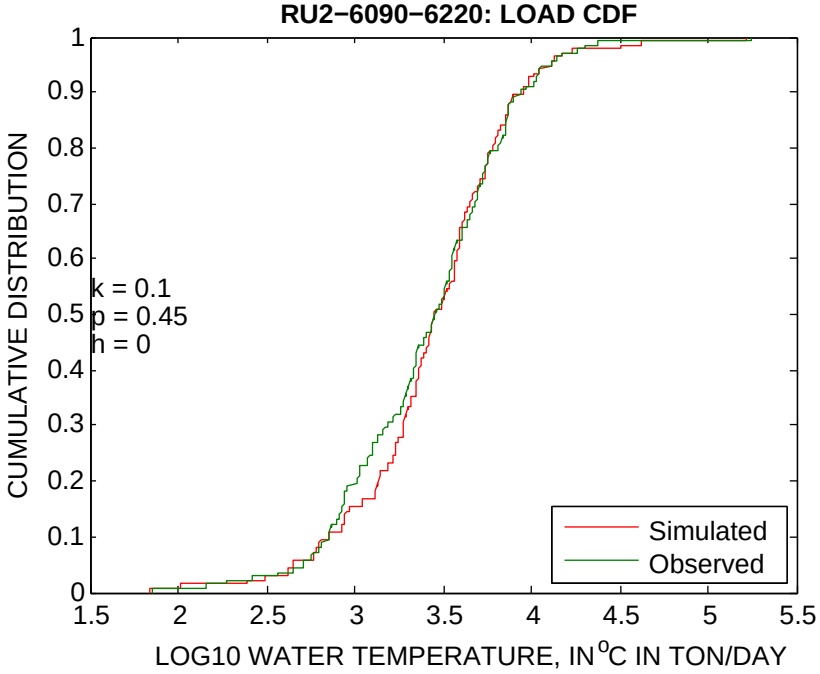


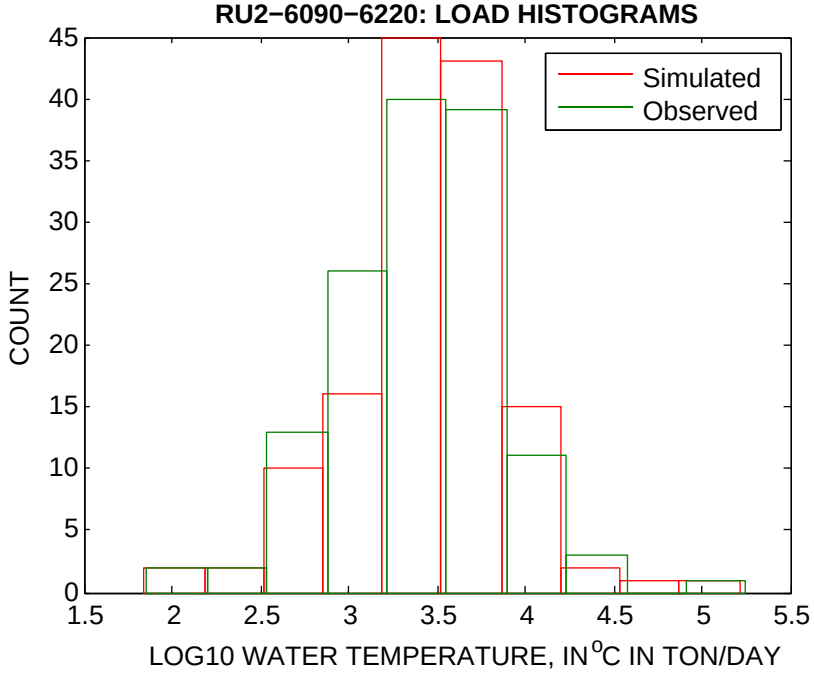


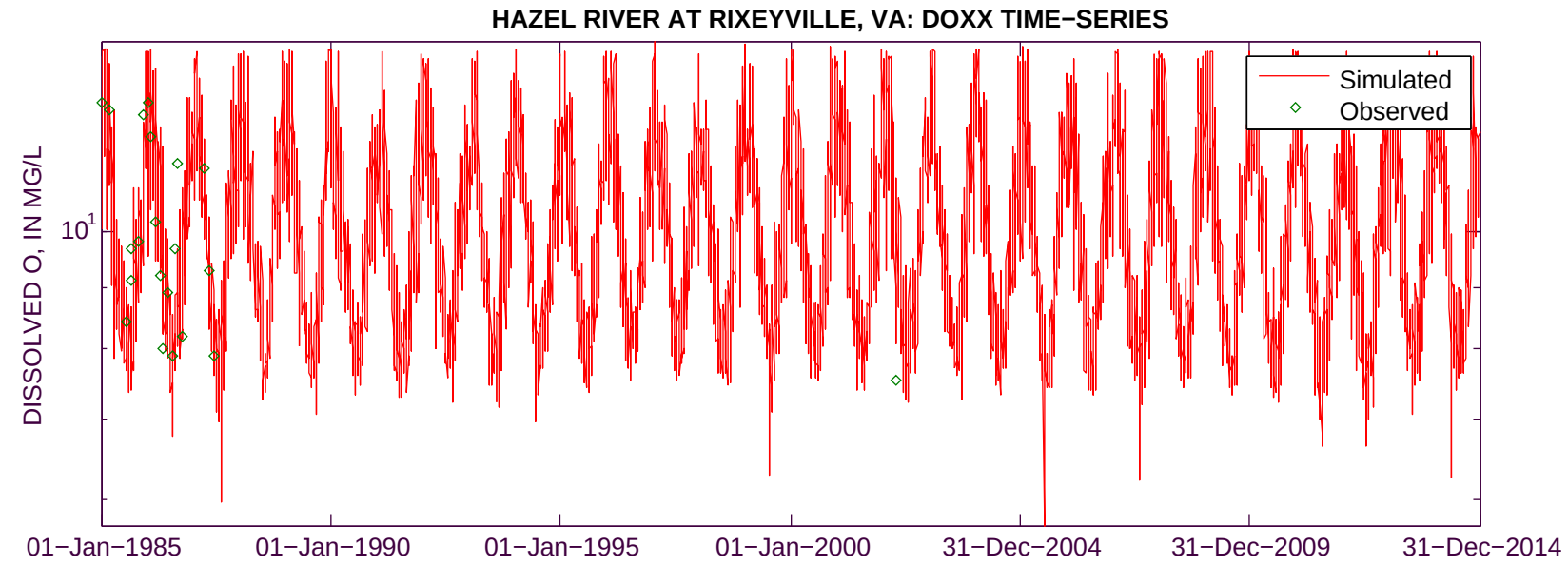
LOAD DATA
LOG10

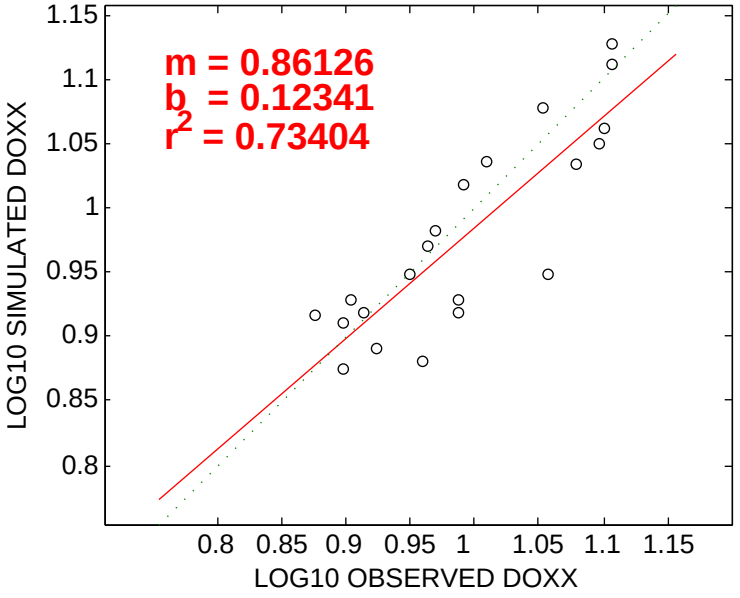


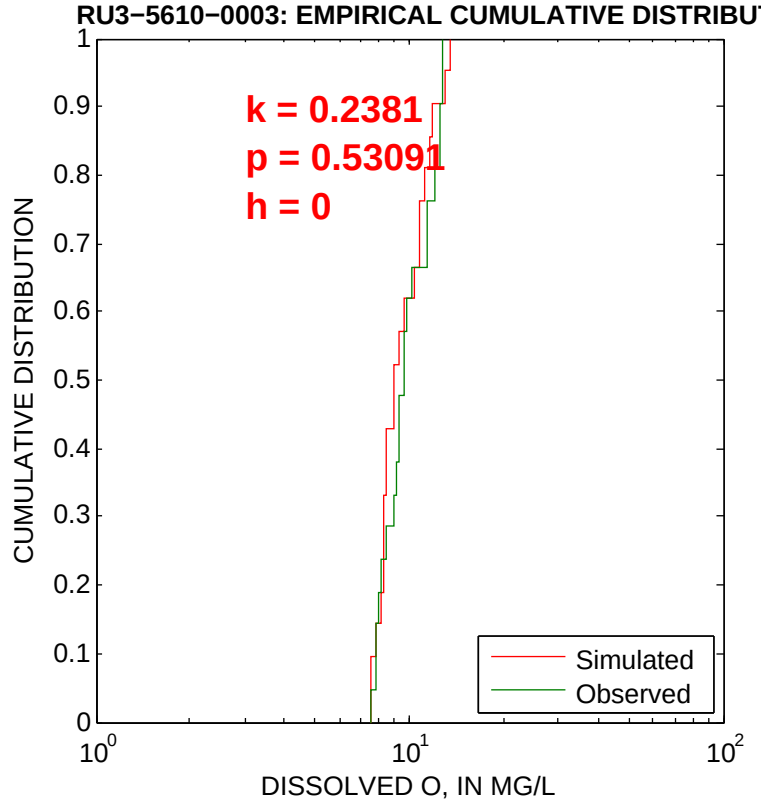












DATA SELECTION

scenario	file
P620171001WQ	DOXX.calib

plot: DOXX - dissolved oxygen

Dates 1/1/1985 12/31/201

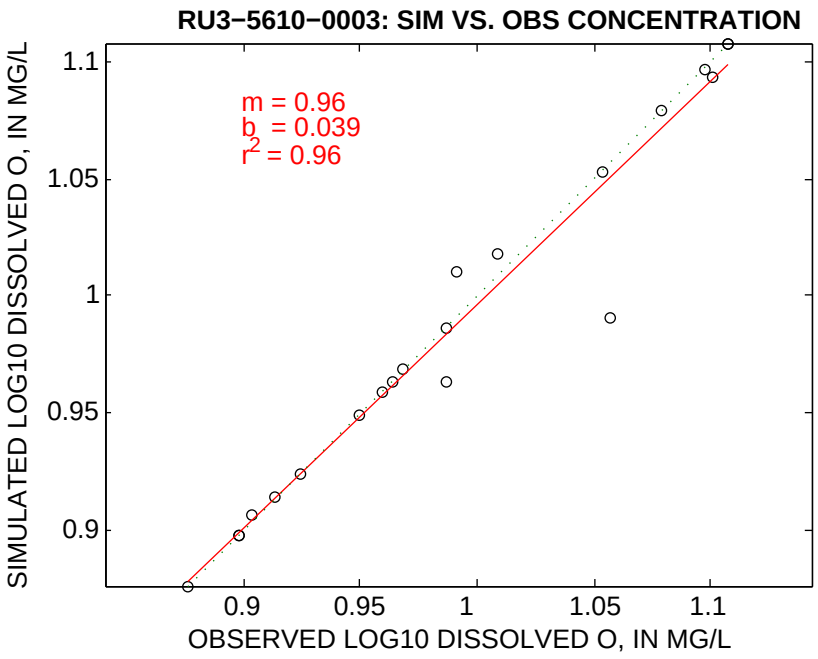
Drive	Directory	Observed
N/A	model	OBS20161101

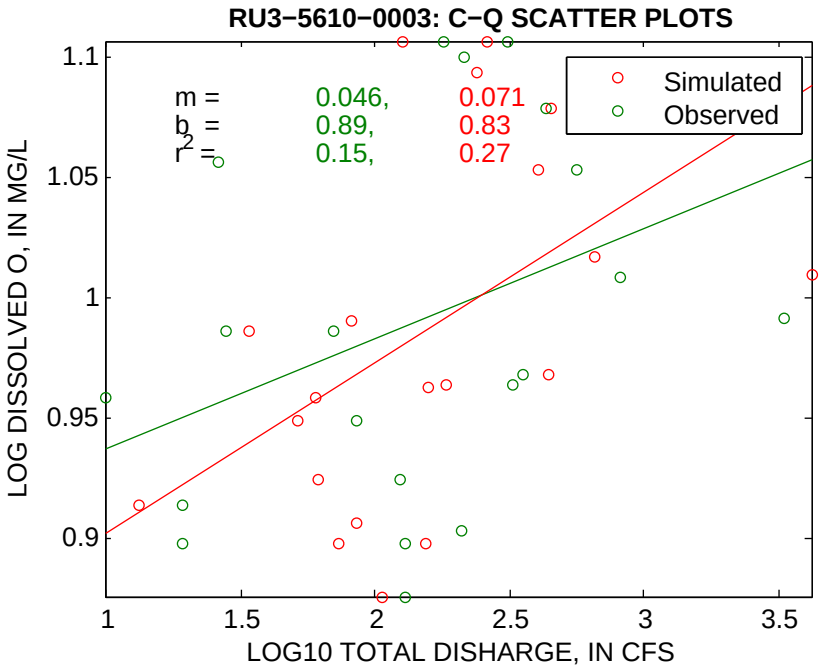
STATISTICS

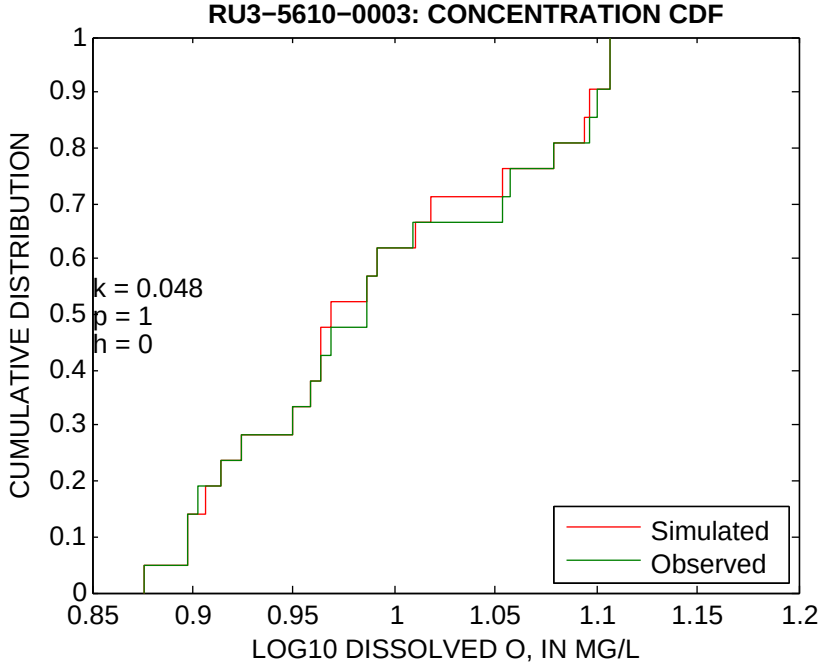
	n	21	21
		observe	simulate
min		7.52	7.4811
		0.876218	0.873965
mean		9.96286	9.64653
		0.99179	0.977604
media		9.7	8.8787
		0.986772	0.948349
max		12.8	13.399
		1.10721	1.12707
varian		3.22457	3.2035
		0.00596218	0.00602497
JB		0.153283	0.126495
		0.204811	0.176484
		ra	log
%		-3.17503	-1.43039
err.va		0.972688	0.00192849
rel.std.err		0.301649	0.323454
mod.eff		0.698351	0.676546

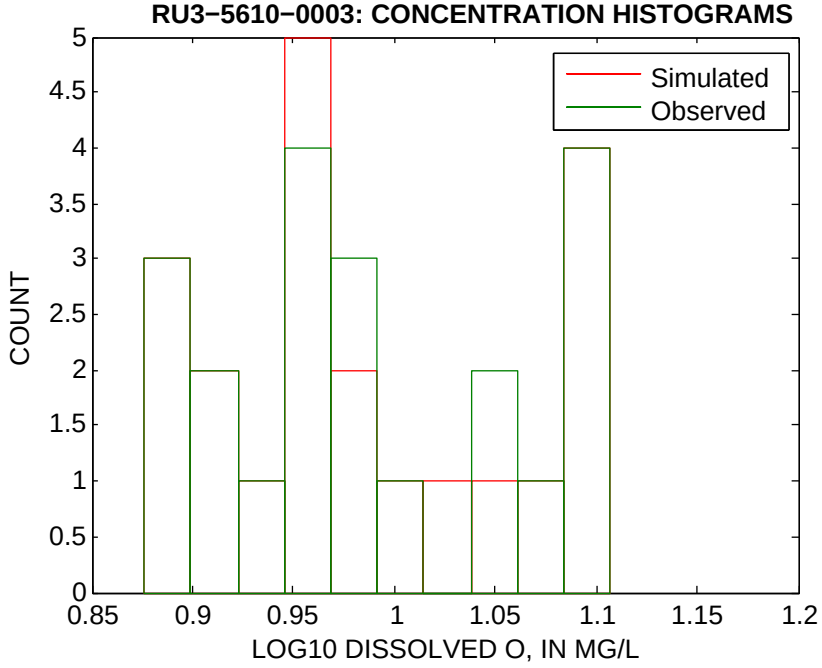
VERSION 2.1

ALL DATA
LOG10

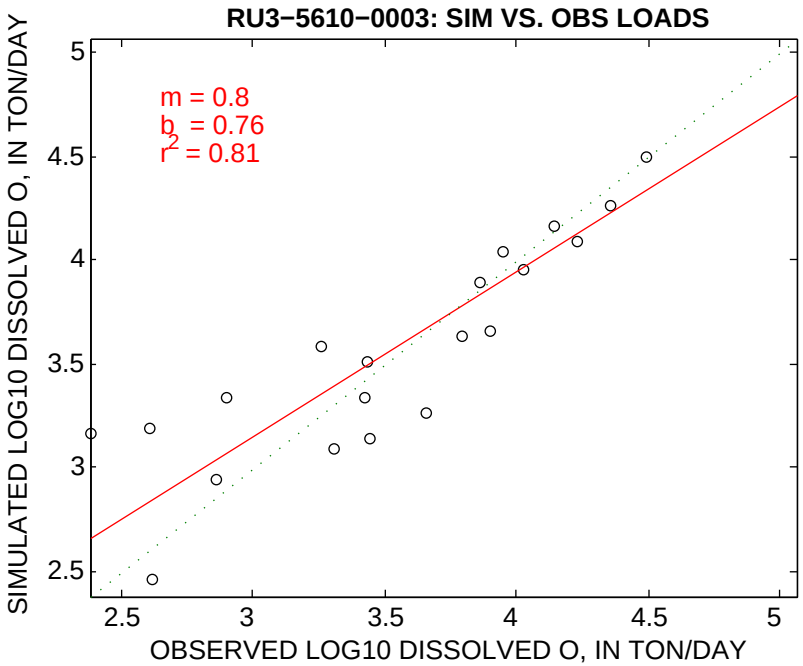


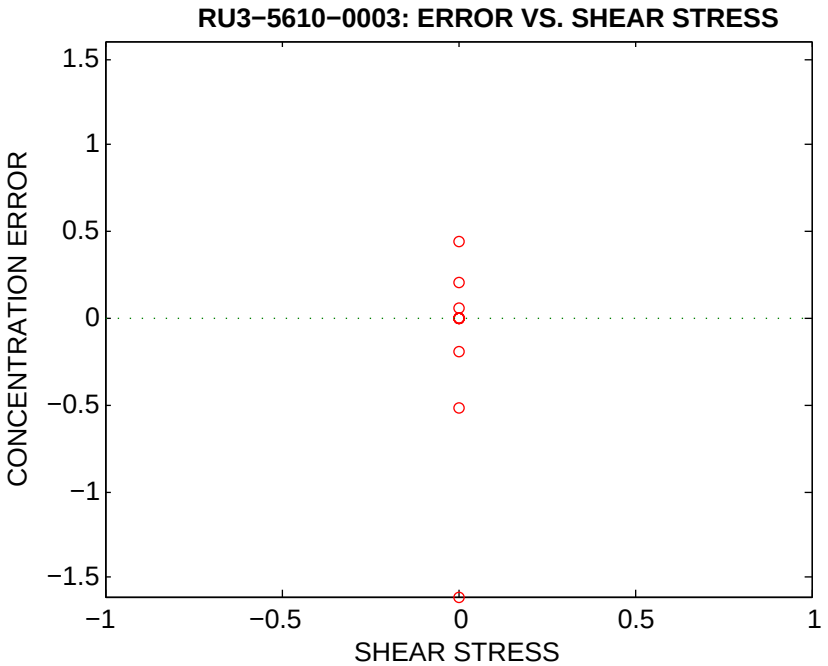


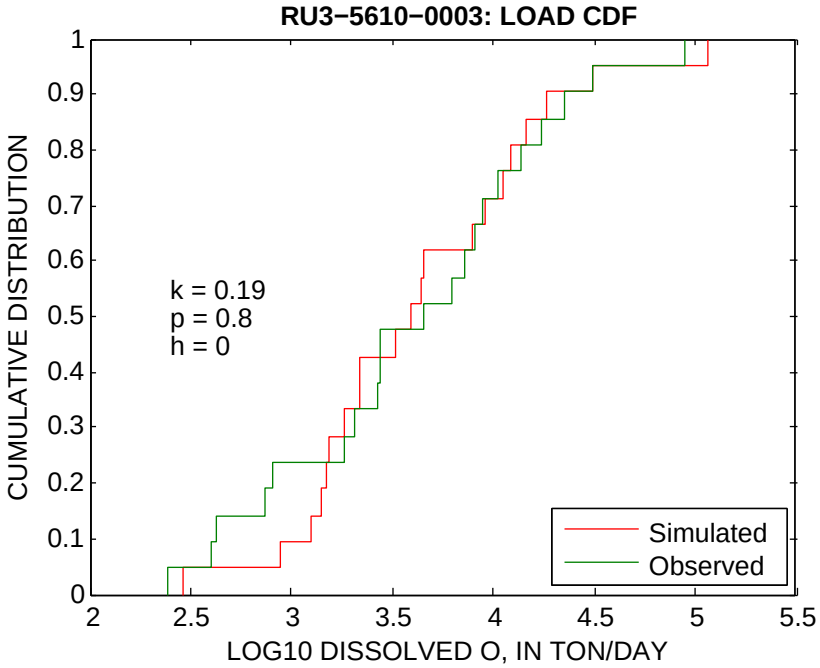


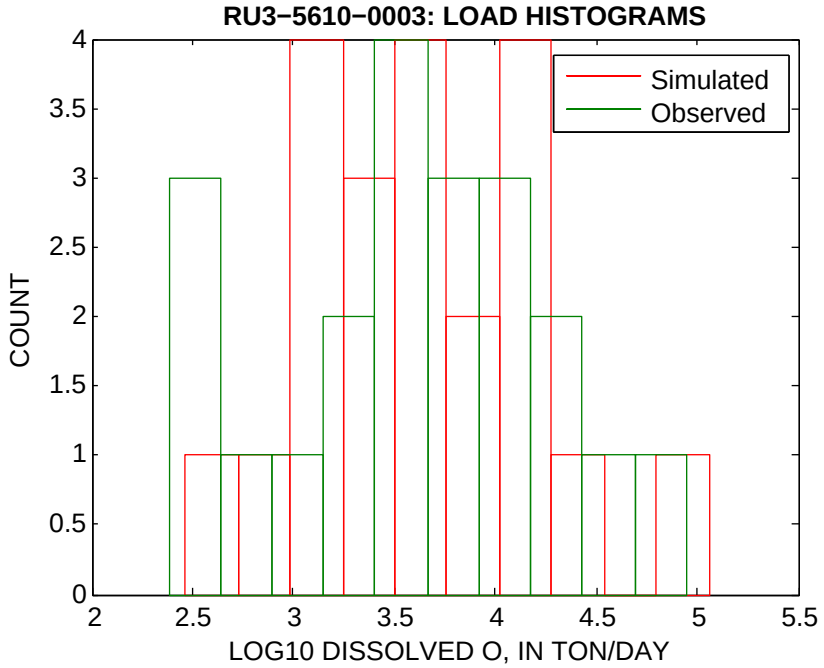


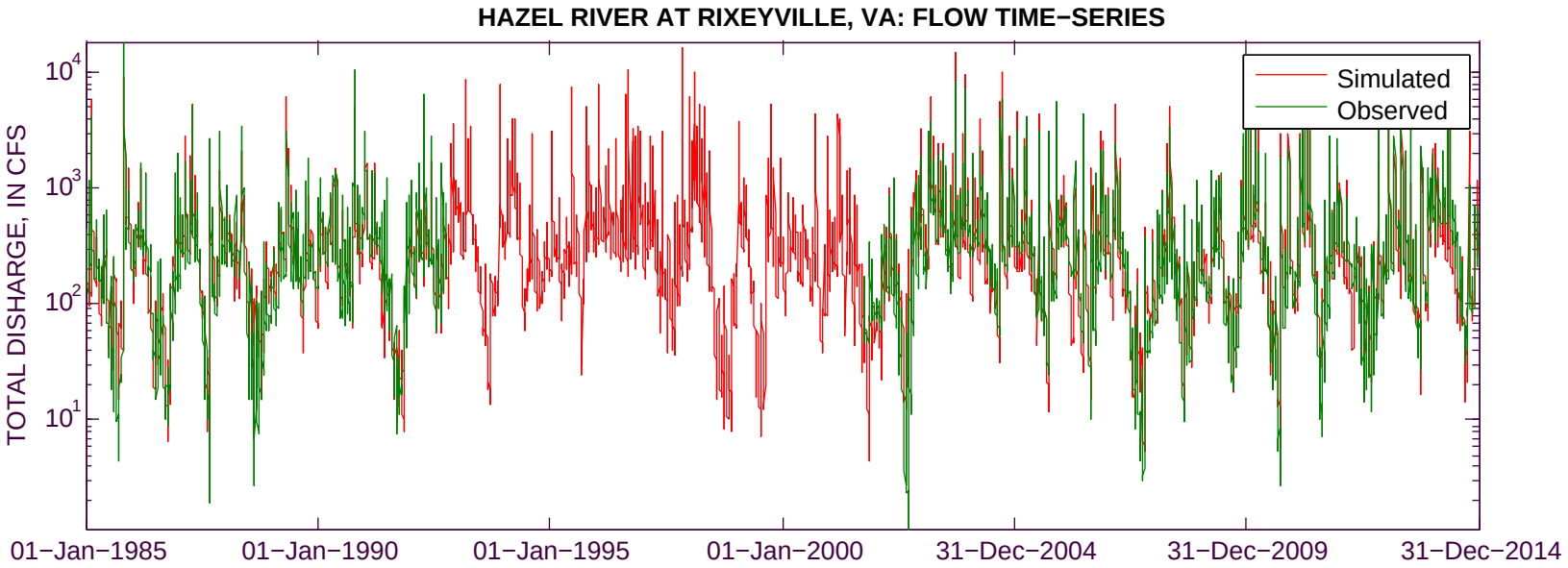
LOAD DATA
LOG10

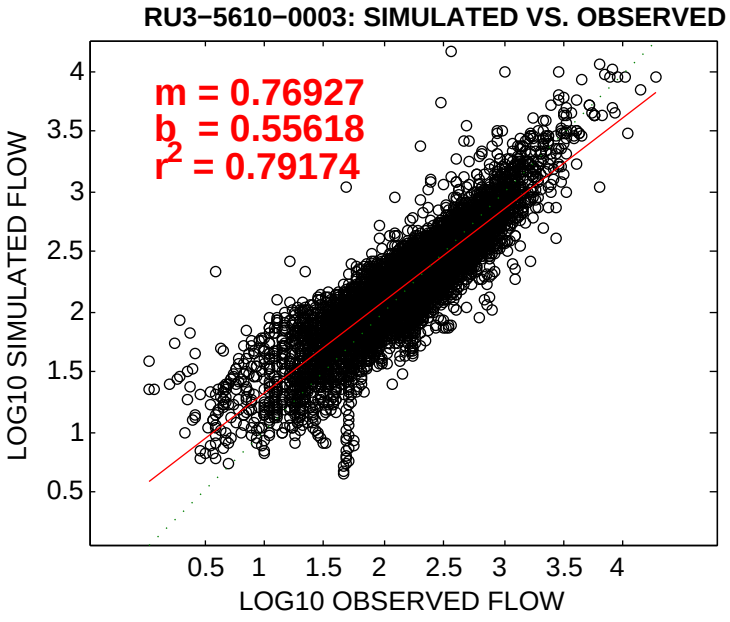


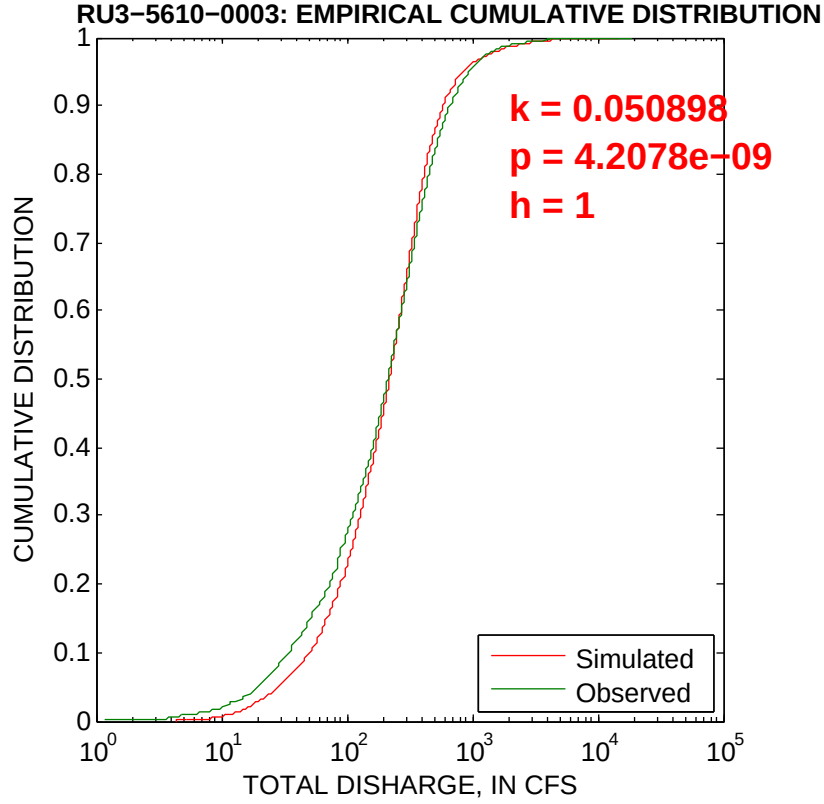












DATA SELECTION

scenario	file
P620171001WQ	FLOW.calib

plot: FLOW - total discharge

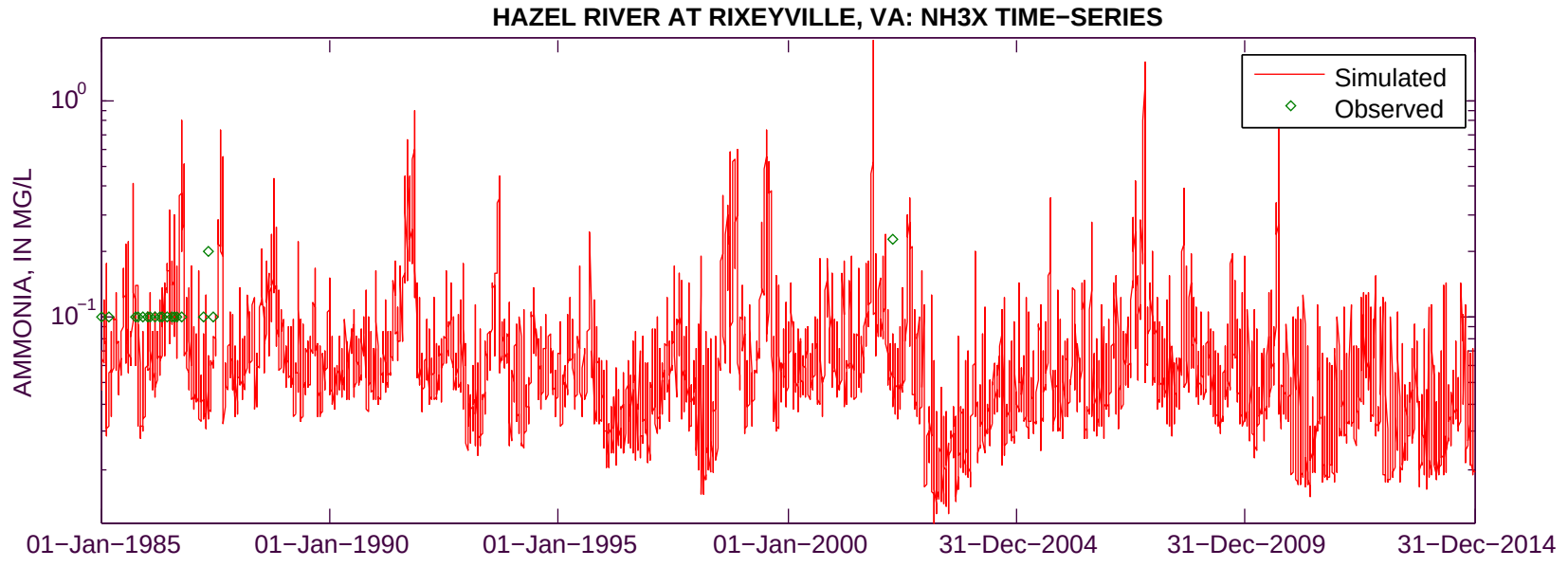
Dates: 1/1/1985 – 12/31/201

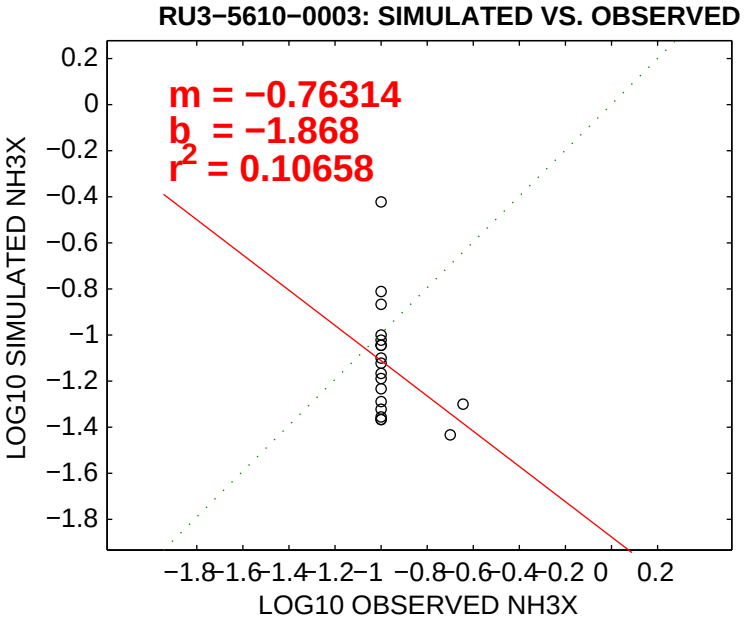
Drive	Directory	Observed
N/A	model	OBS20161101

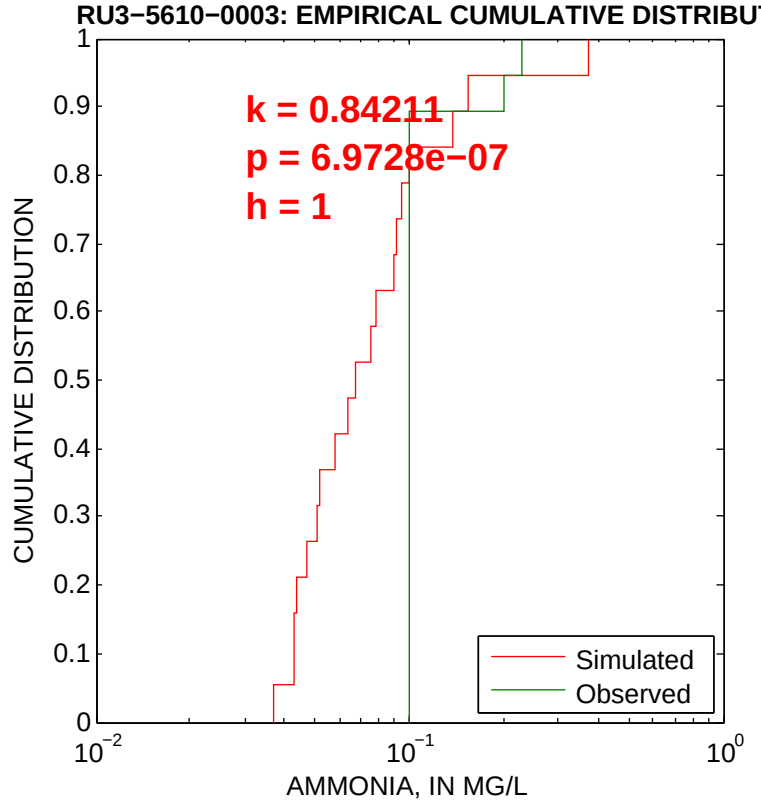
STATISTICS

n	7682	7682
	observe	simulate
min	1.1	4.4636
	0.0413927	0.649685
mean	334.818	332.564
	2.25569	2.29141
media	216	220.265
	2.33445	2.34295
max	18500	14585
	4.26717	4.16391
varian	323797	336774
	0.268367	0.200587
JB	0.001	0.001
	0.001	0.001
	ra	log
%	-0.673119	1.58343
err.va	135572	0.0573368
rel.std.err	0.418695	0.21365
mod.eff	0.581305	0.78635

VERSION 2.1







DATA SELECTION

scenario	file
P620171001WQ	NH3X.calib

plot: NH3X - ammonia

Dates: 1/1/1985 – 12/31/201

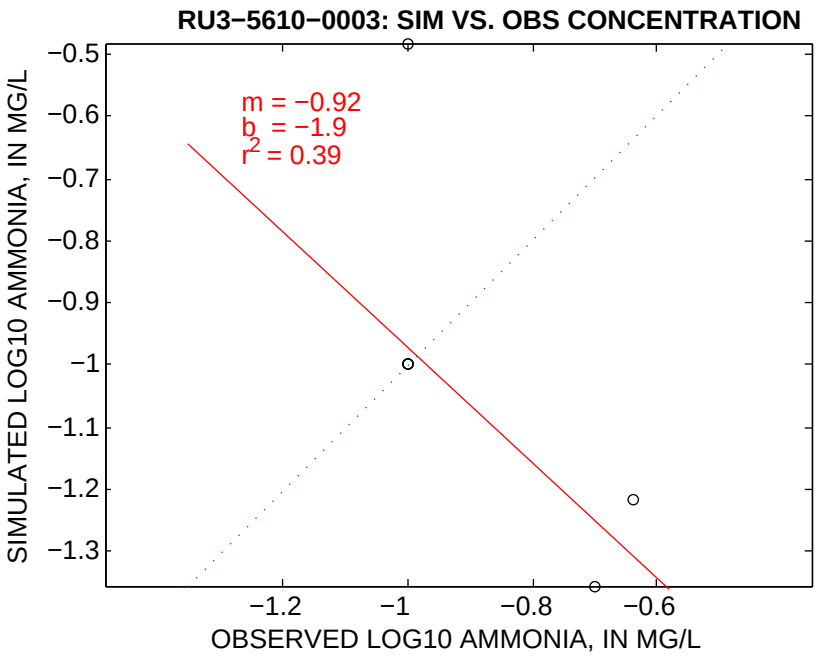
Drive: N/A Directory: model Observed: OBS20161101

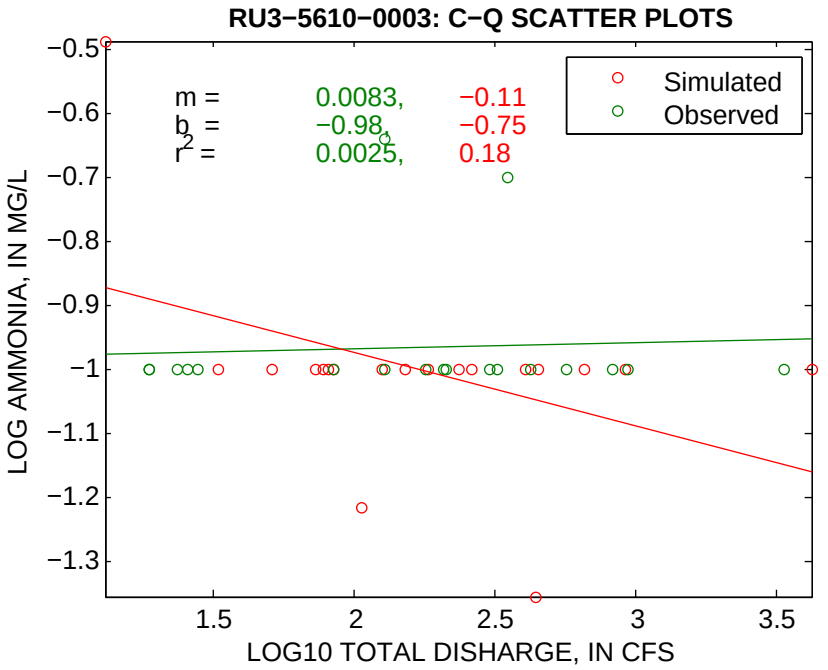
STATISTICS

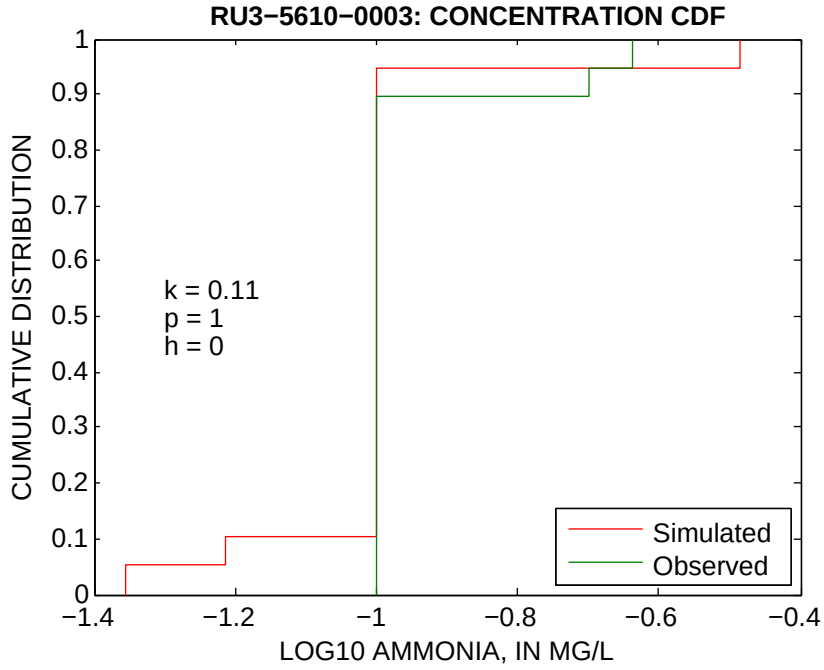
	n	observe	simulate
		19	19
min		0.1	0.036617
		-1	-1.43632
mean		0.112105	0.0894245
		-0.965118	-1.13152
media		0.1	0.067698
		-1	-1.16942
max		0.23	0.37598
		-0.638272	-0.424835
varian		0.00133977	0.00584824
		0.0110193	0.0602151
JB		0.001	0.001
		0.001	0.017255
		ra	log
%		-20.2316	17.2414
err.va		0.00887934	0.11728
rel.std.err		6.62753	10.6432
mod.eff		-5.62753	-9.64315

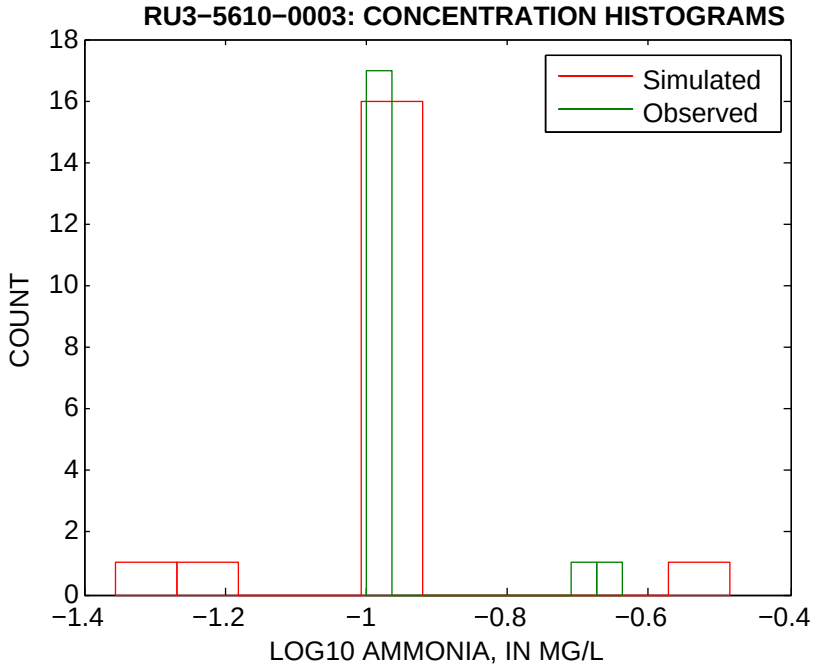
VERSION 2.1

ALL DATA
LOG10

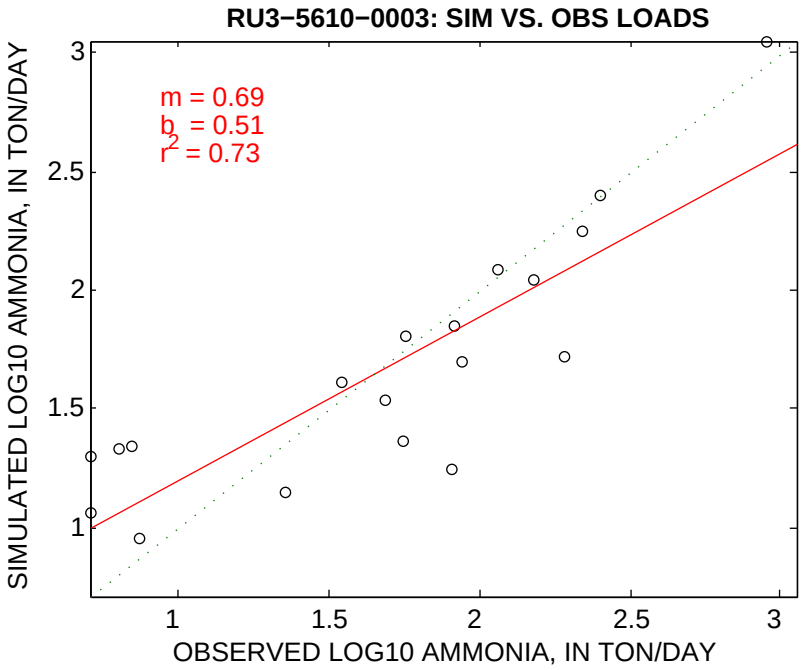


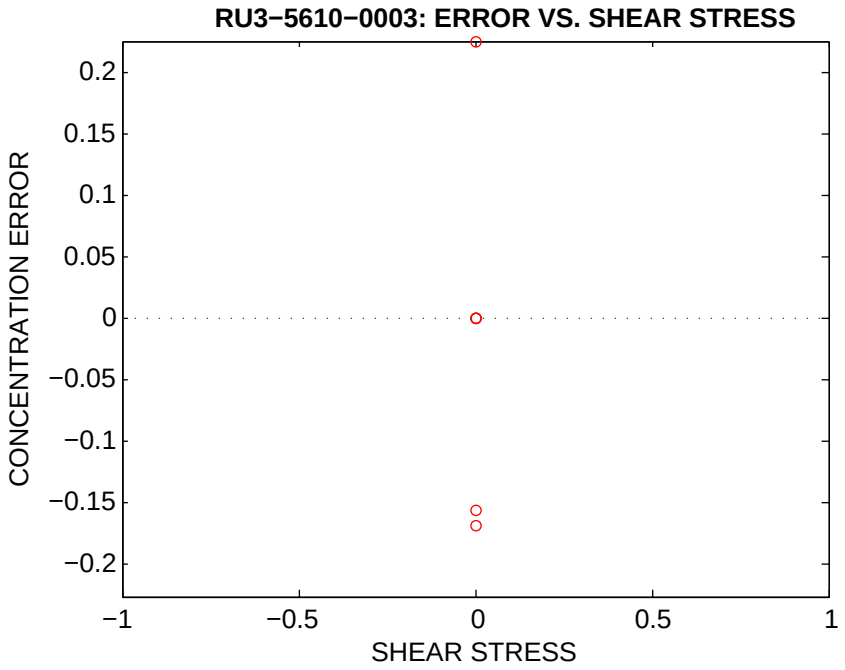


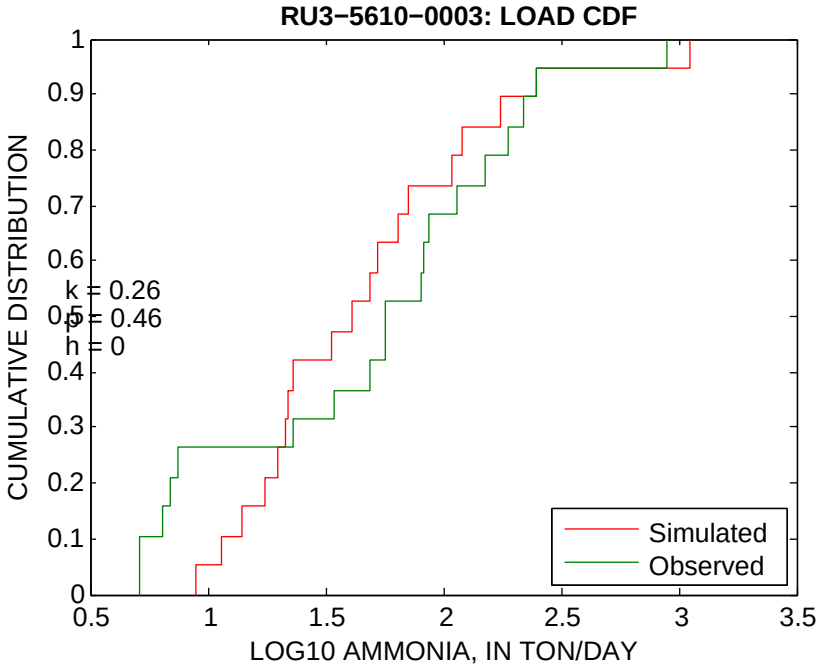


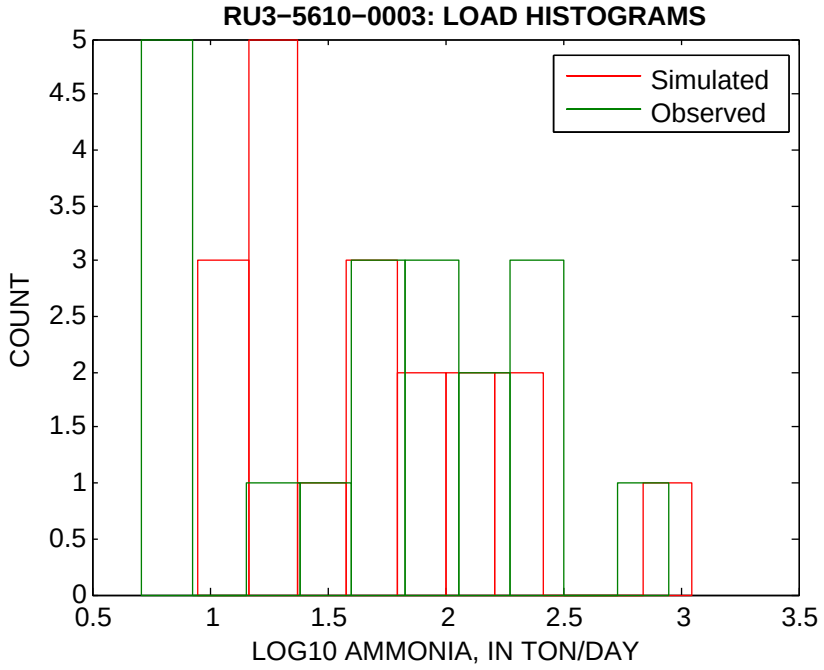


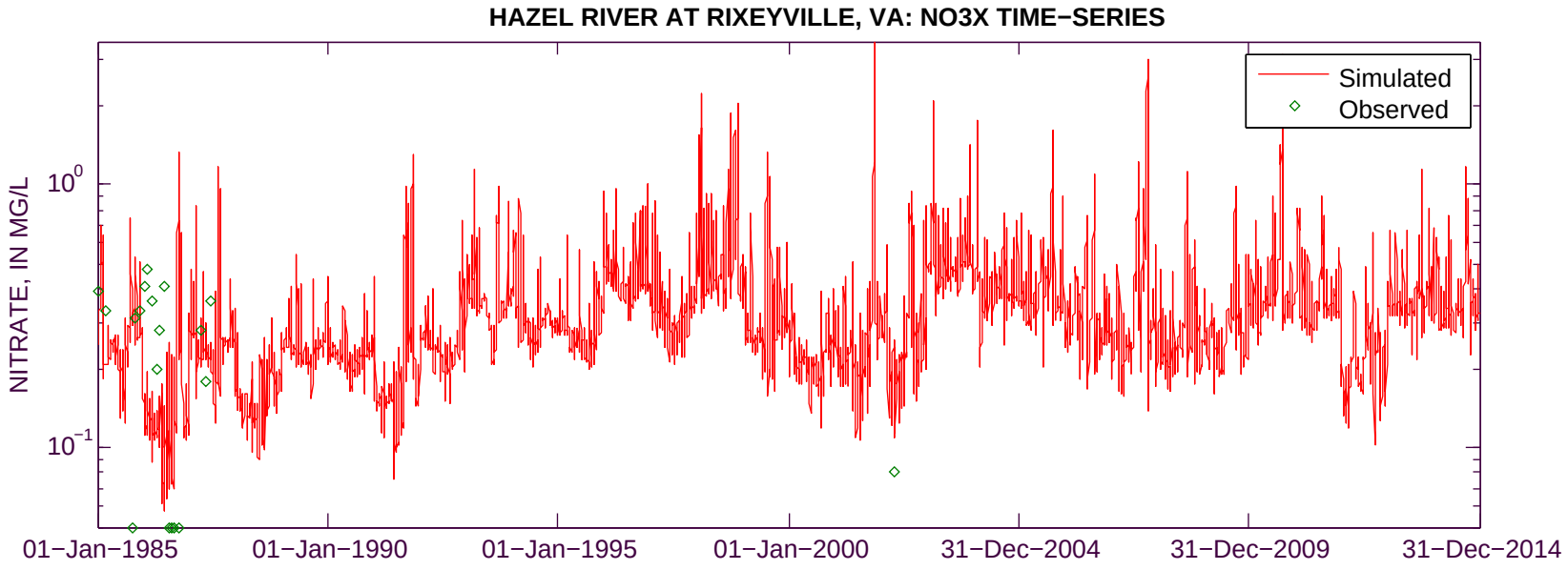
LOAD DATA
LOG10

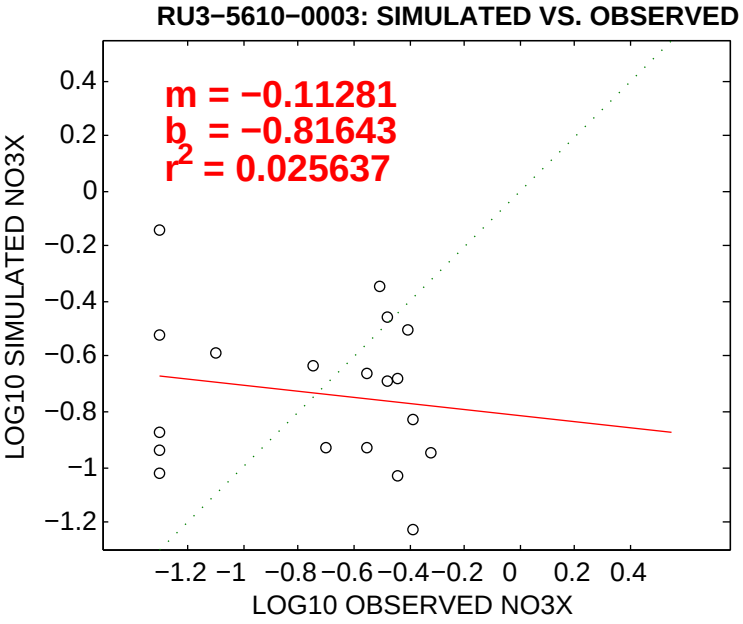


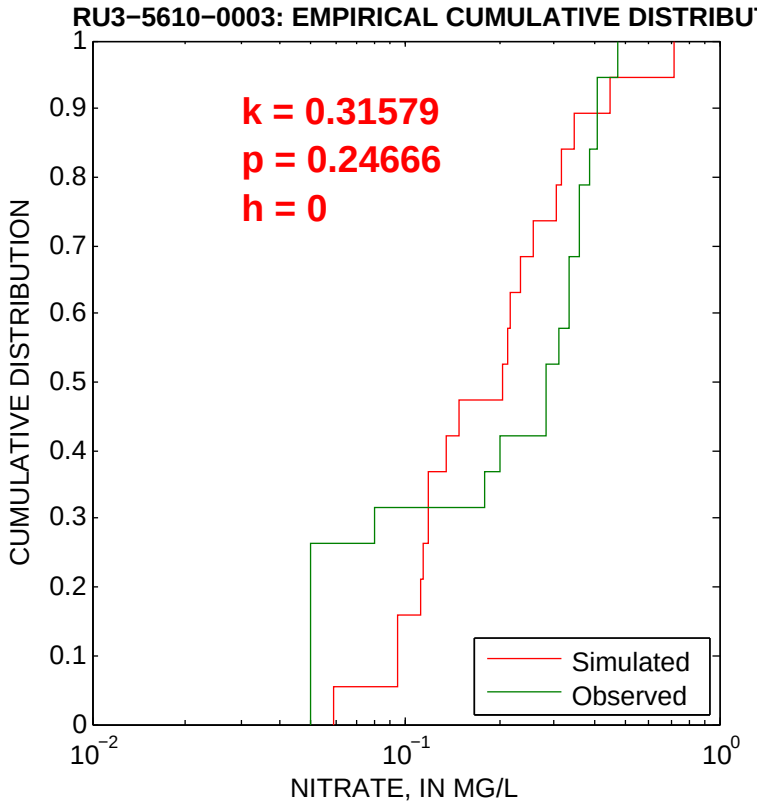












DATA SELECTION

scenario: P620171001WQ; file: NO3X.calib

plot: NO3X - nitrate

Dates: 1/1/1985 – 12/31/201

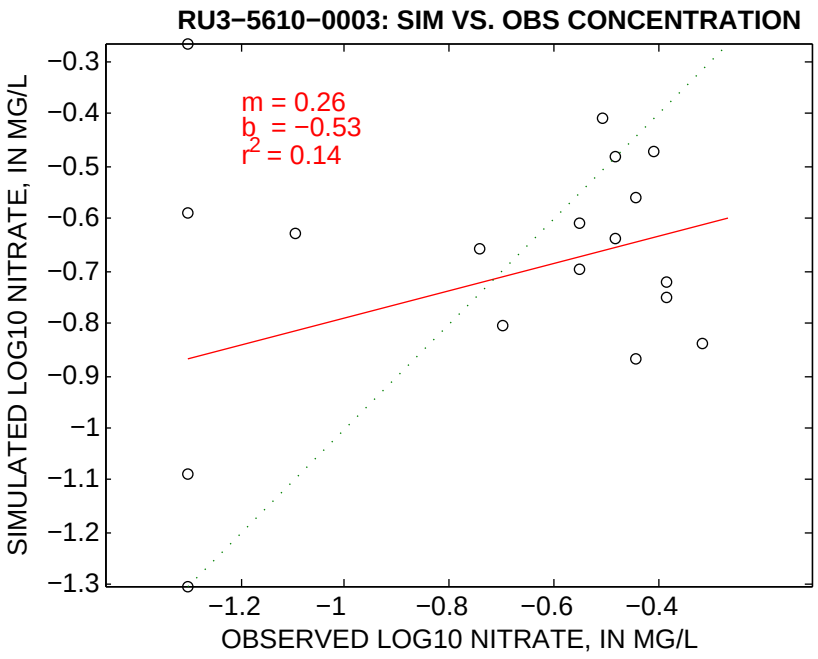
Drive: N/A; Directory: model; Observed: OBS20161101

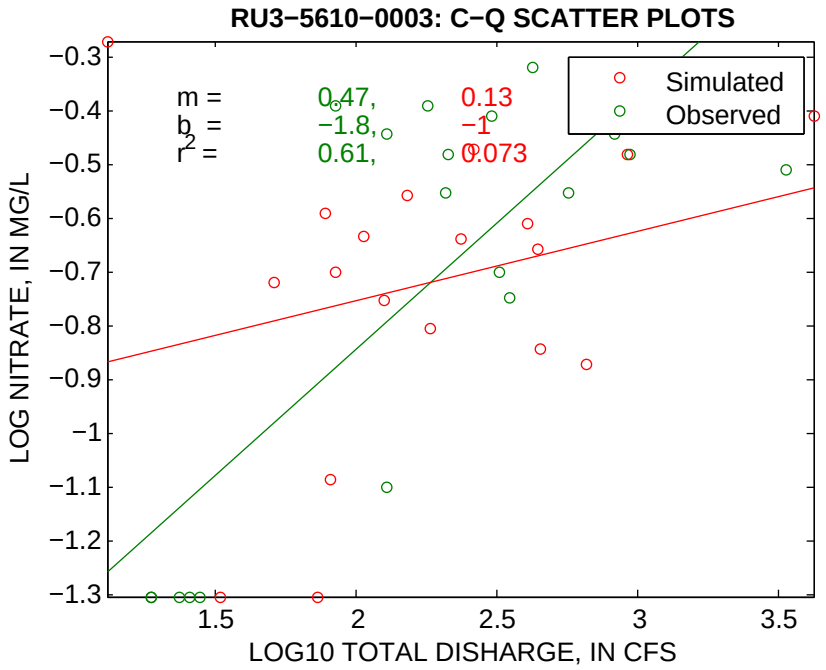
STATISTICS

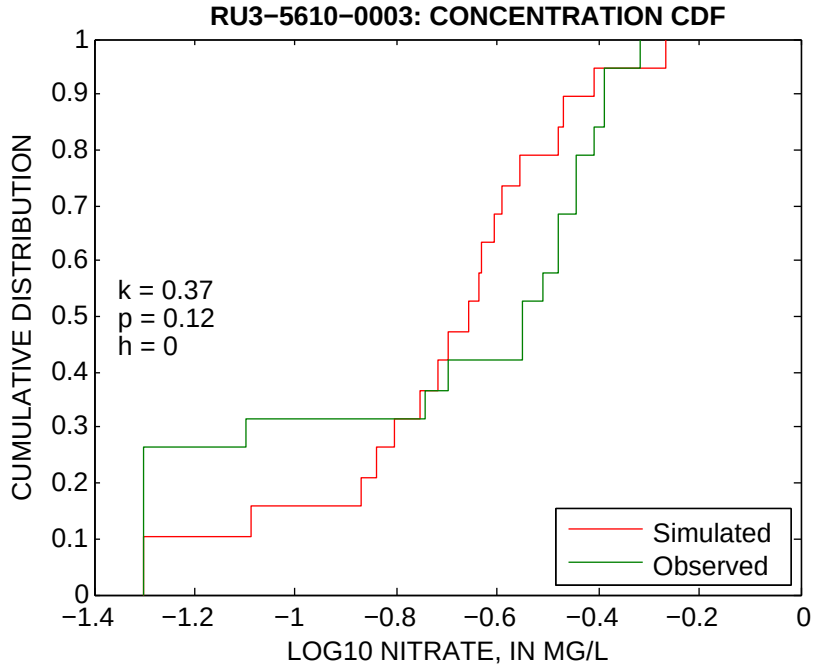
	n	19	19
		observe	simulate
min		0.05	0.059381
		-1.30103	-1.22635
mean		0.244737	0.224311
		-0.737504	-0.733228
media		0.28	0.20521
		-0.552842	-0.687801
max		0.48	0.72481
		-0.318759	-0.139776
varian		0.0223263	0.0253152
		0.148419	0.0736795
JB		0.158618	0.002287
		0.078703	0.5
		ra	log
%		-8.34596	-0.579715
err.va		0.0591732	0.255605
rel.std.err		2.65038	1.72219
mod.eff		-1.65038	-0.722187

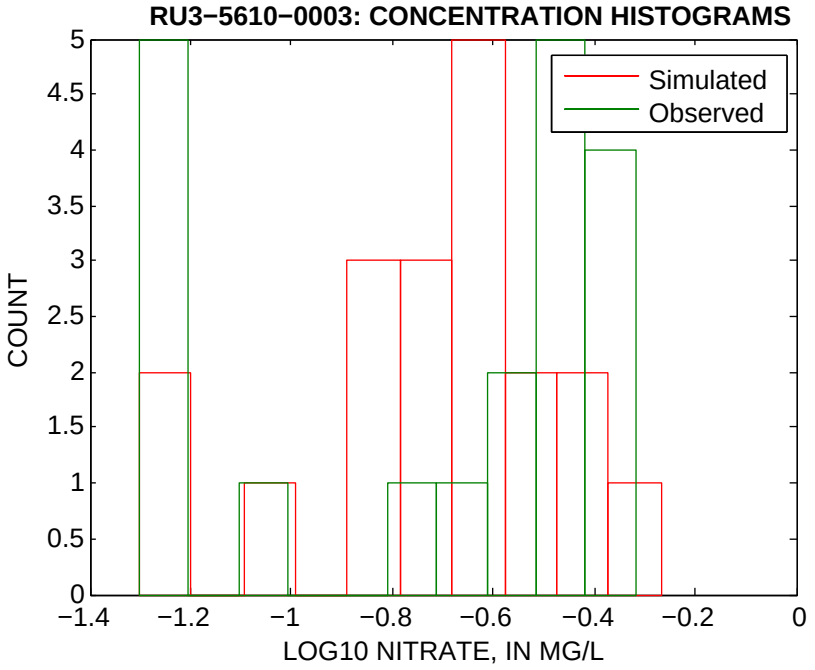
VERSION 2.1

ALL DATA
LOG10

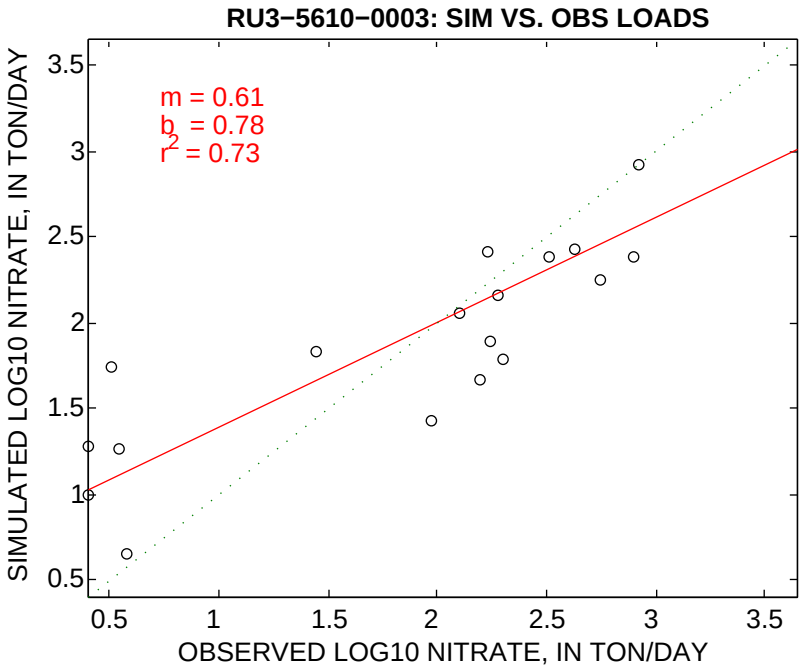


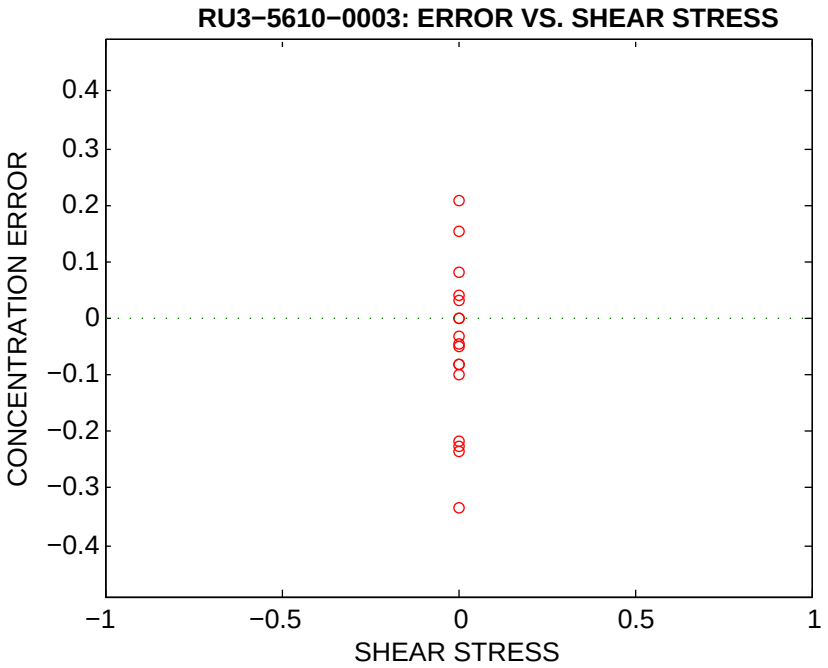


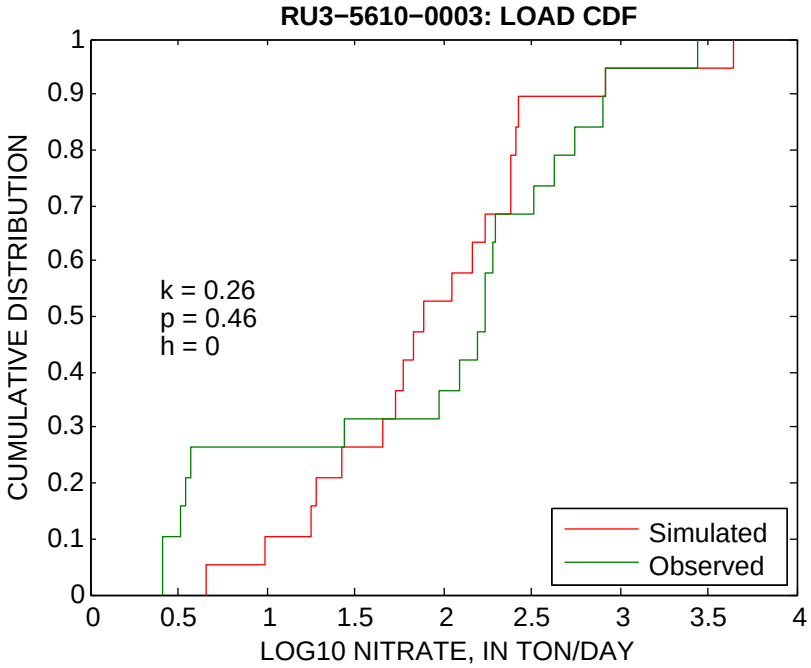


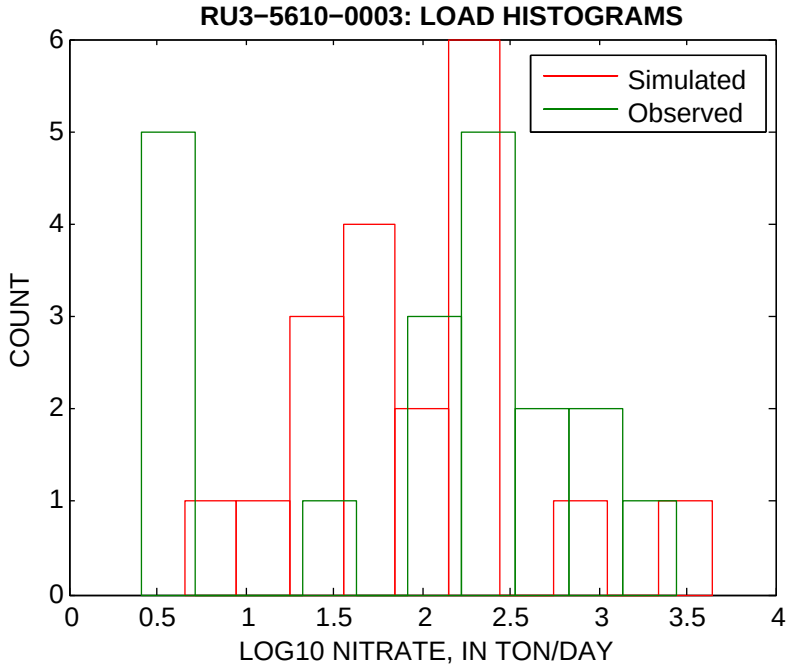


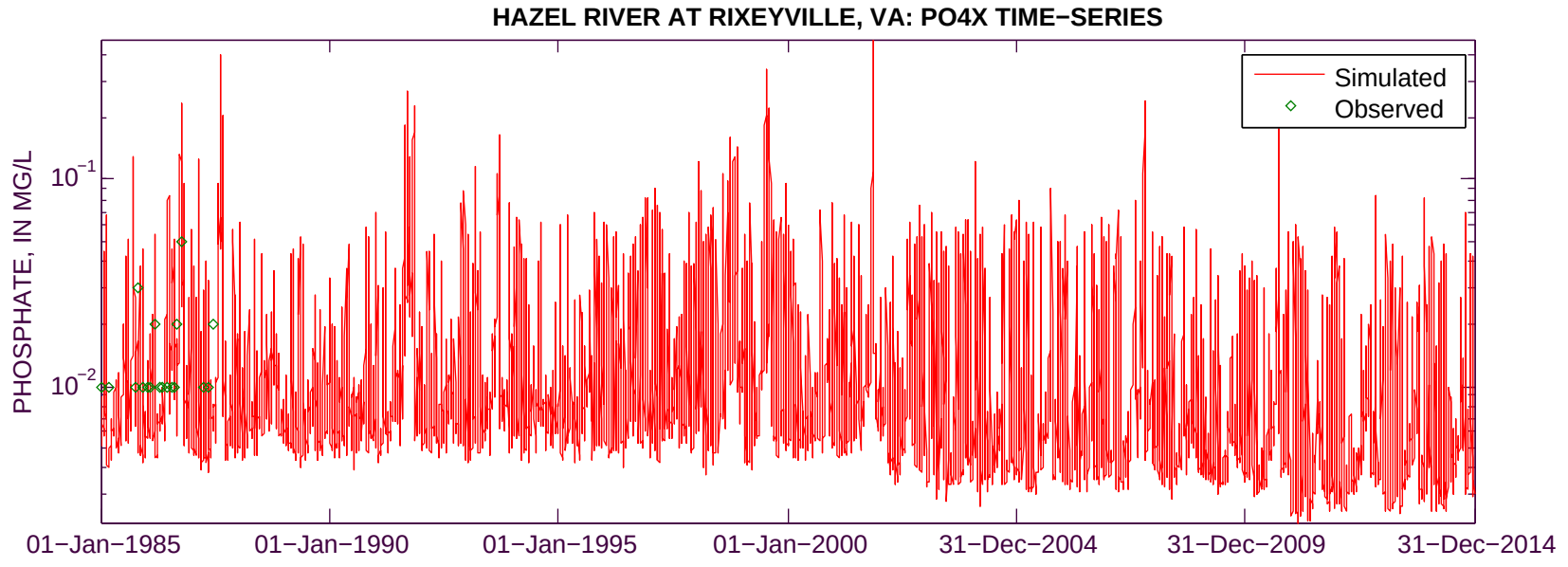
LOAD DATA
LOG10

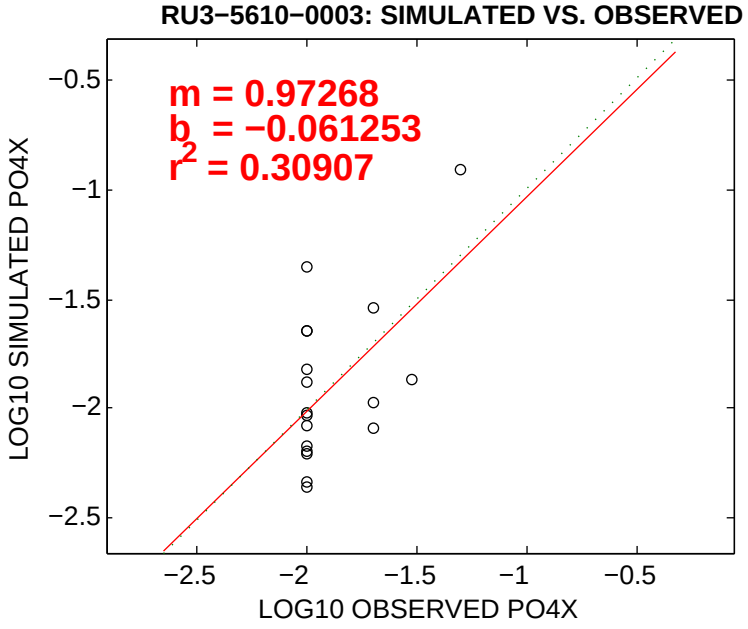


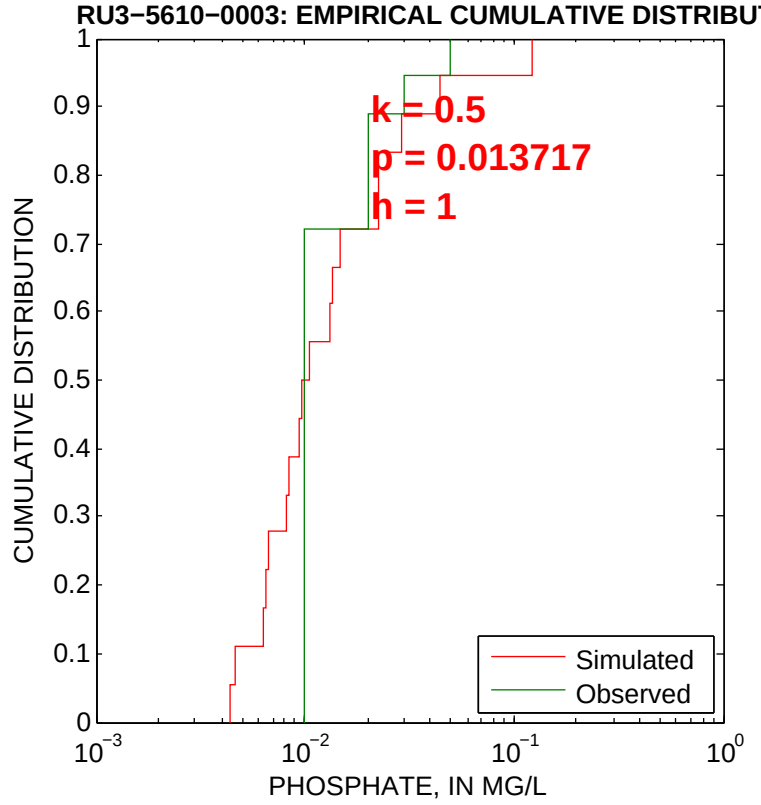












DATA SELECTION

scenario	file
P620171001WQ	PO4X.calib

plot: PO4X - phosphate

Dates	1/1/1985	12/31/201

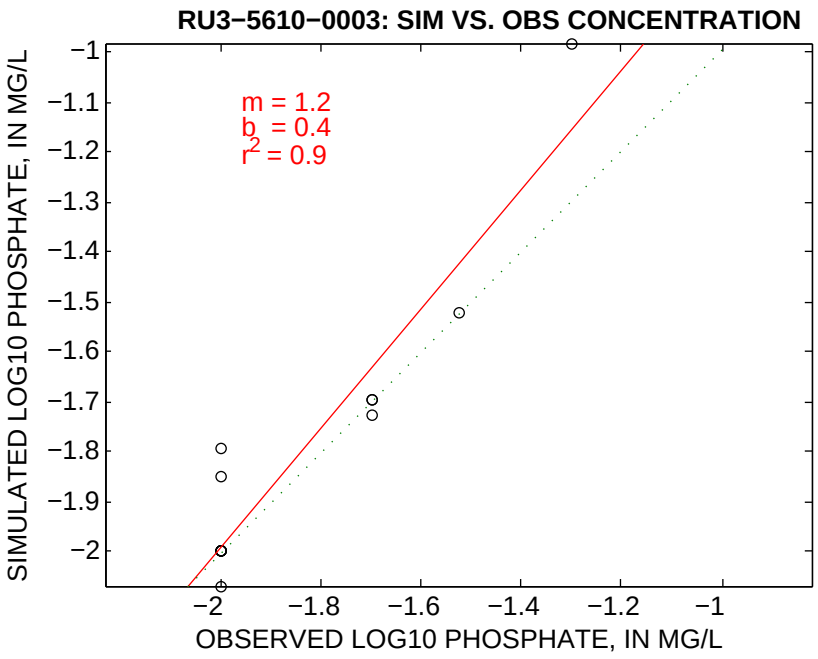
Drive	Directory	Observed
N/A	model	OBS20161101

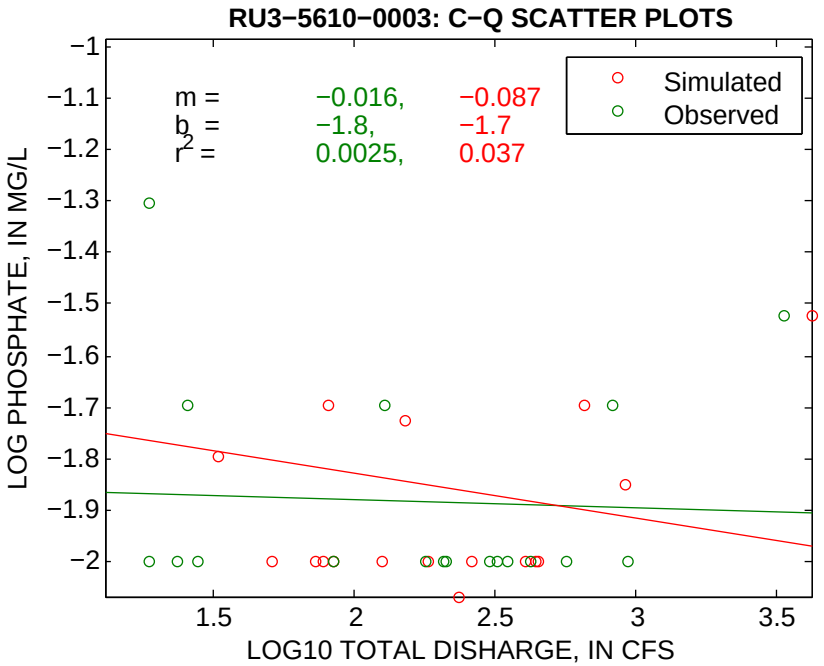
STATISTICS

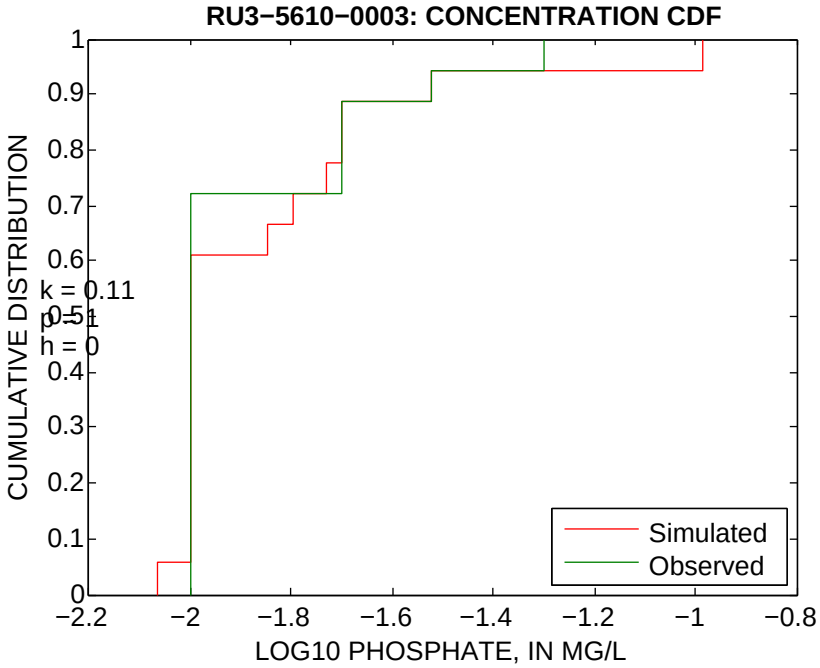
n	18	18
	observe	simulate
min	0.01 -2	0.0044161 -2.35496
mean	0.015 -1.88449	0.0198859 -1.89426
media	0.01 -2	0.0101945 -1.99213
max	0.05 -1.30103	0.12333 -0.908931
varian	0.00010882 0.0439938	0.00076778 0.134671
JB	0.001 0.009711	0.001 0.036891
	ra	log
%	32.5725	0.518642
err.va	0.00044385	0.0931817
rel.std.err	4.07865	2.11806
mod.eff	-3.07865	-1.11806

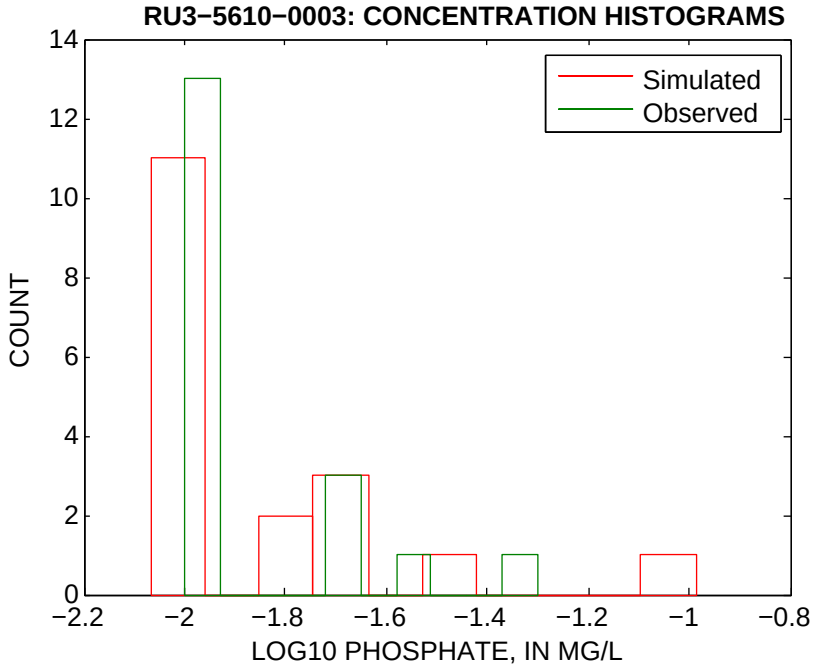
VERSION 2.1

ALL DATA
LOG10

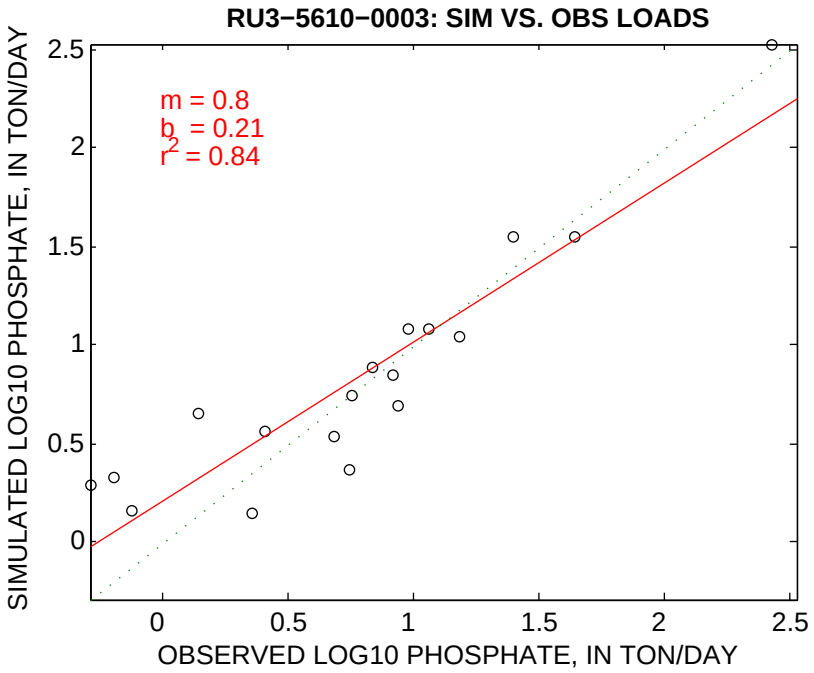


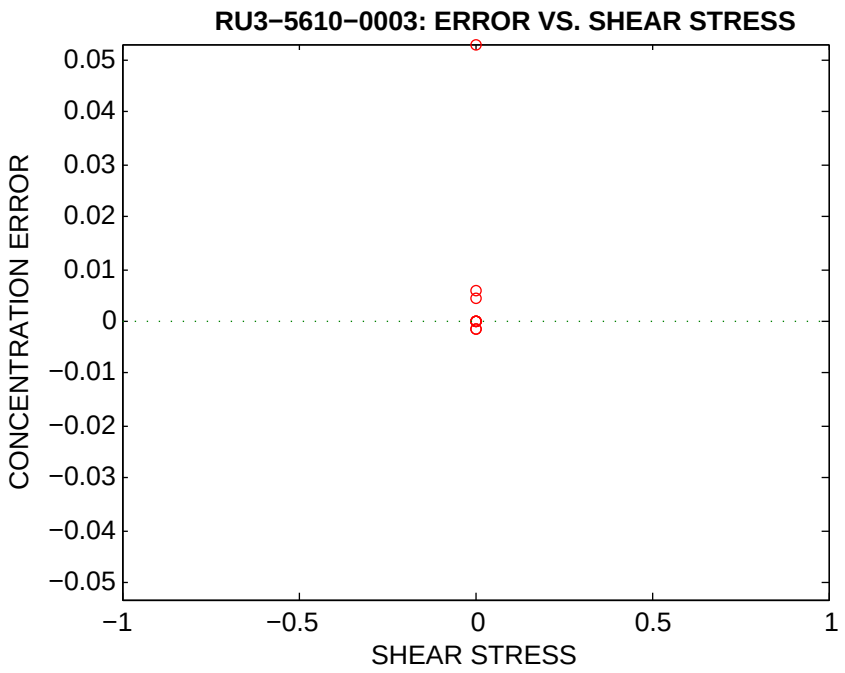


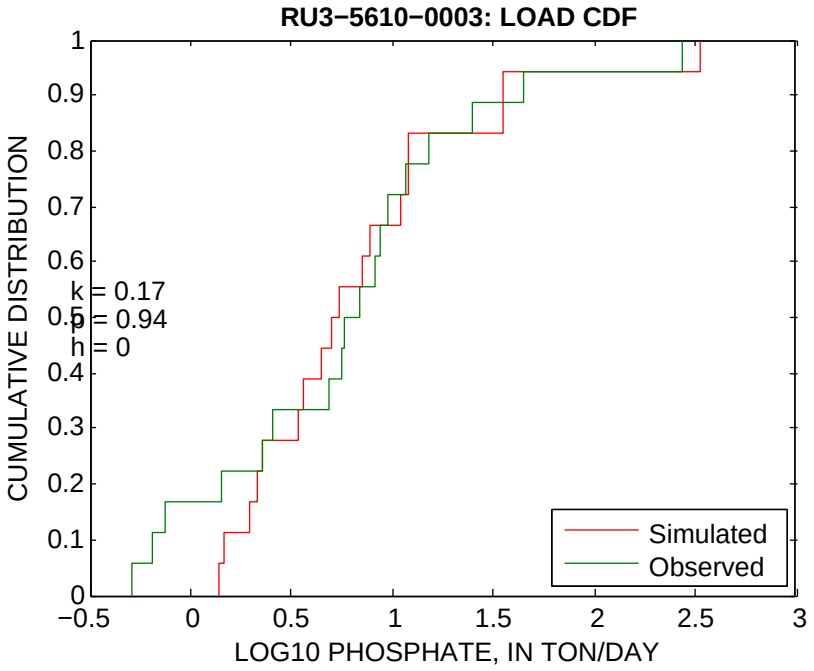


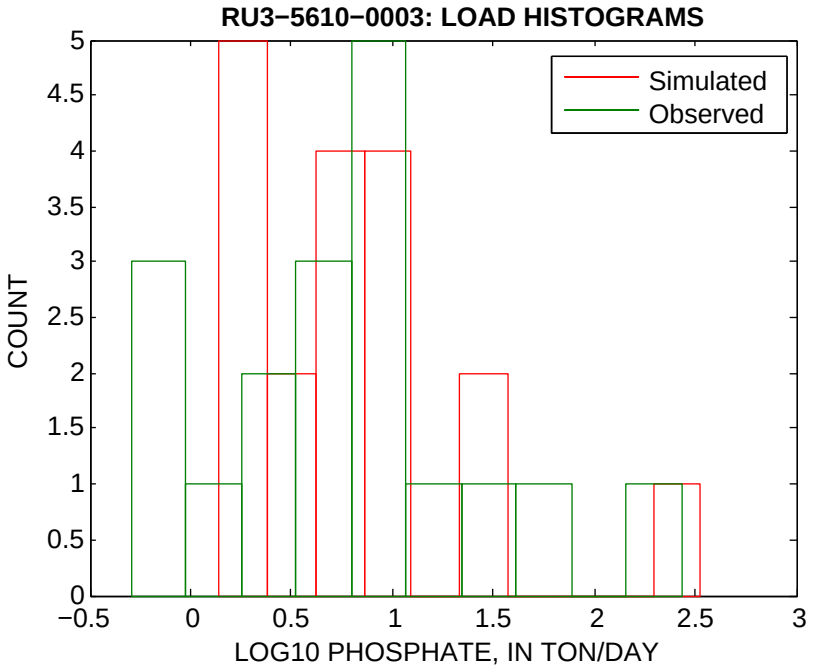


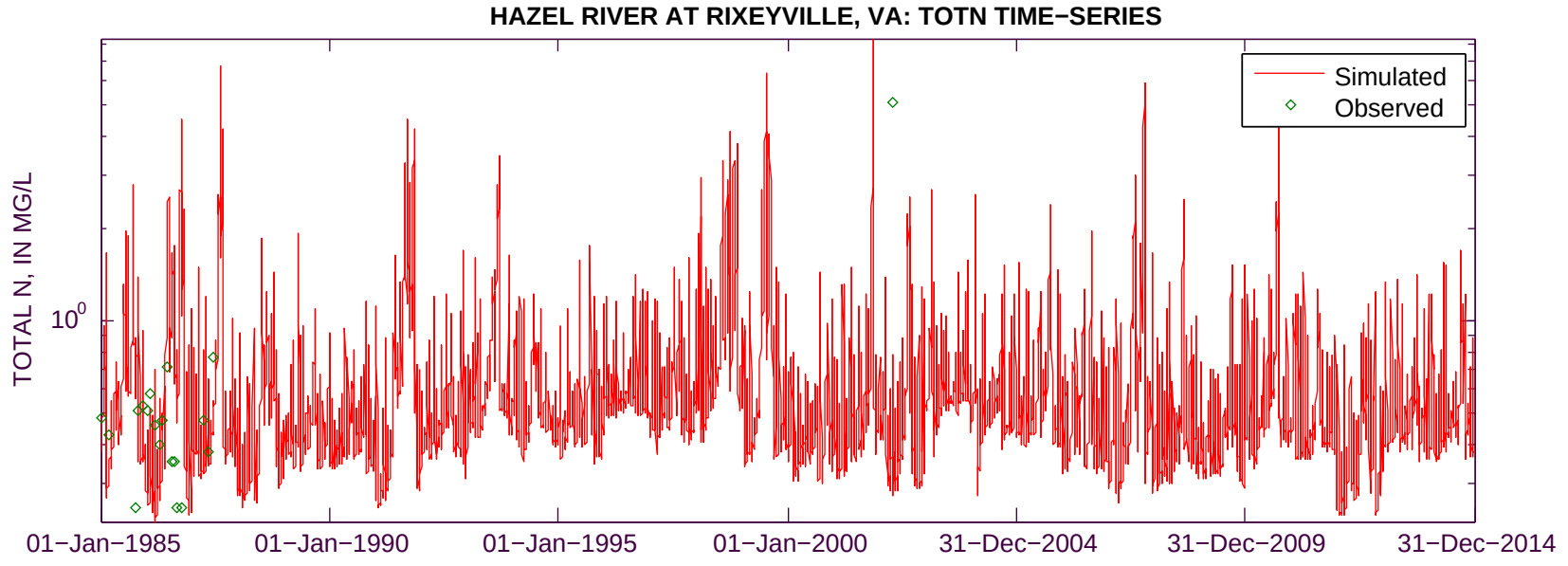
LOAD DATA
LOG10

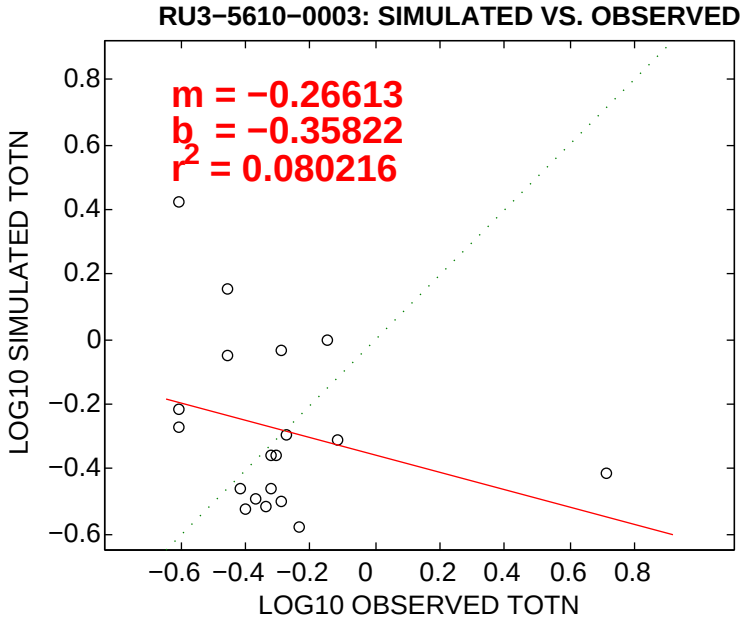


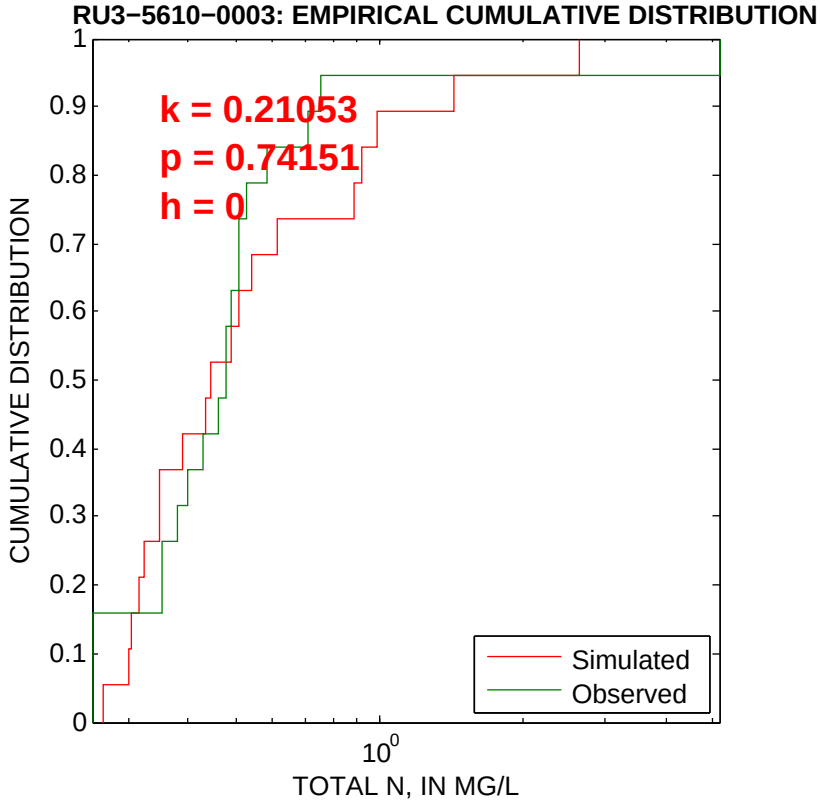












DATA SELECTION

scenario	file
P620171001WQ	TOTN.calib

plot: TOTN - total nitrogen

Dates: 1/1/1985 – 12/31/201

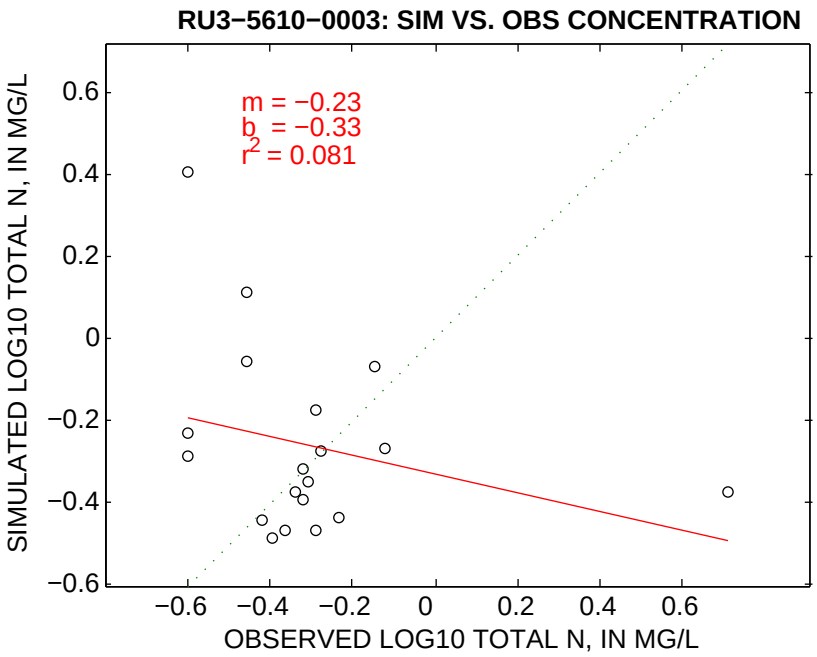
Drive	Directory	Observed
N/A	model	OBS20161101

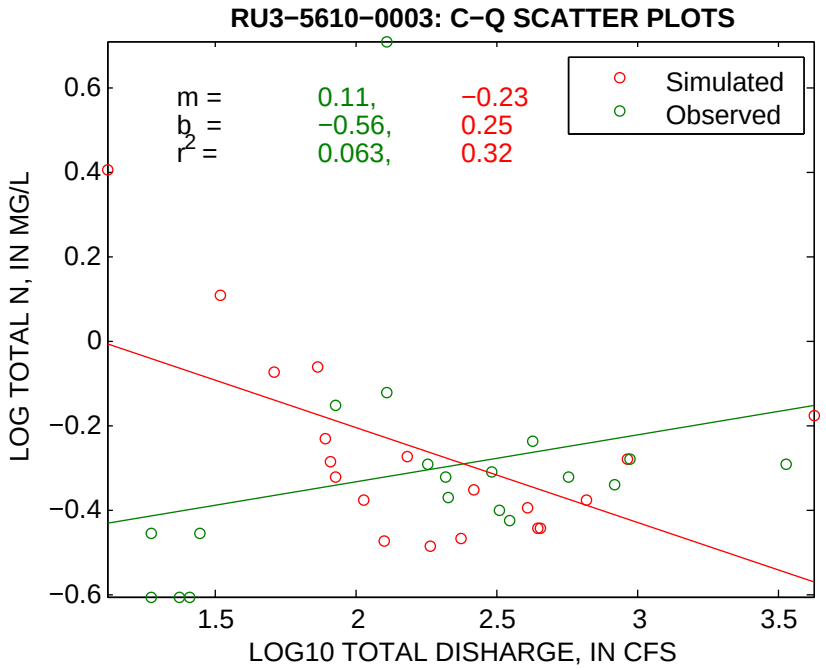
STATISTICS

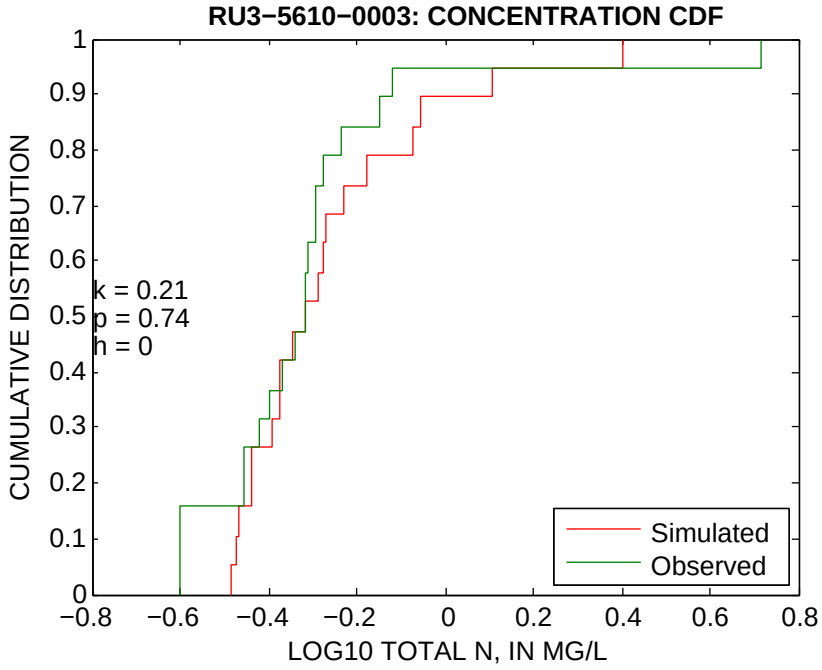
	n	19	19
		observe	simulate
min		0.25	0.26474
		-0.60206	-0.57718
mean		0.702632	0.657912
		-0.307266	-0.276443
media		0.48	0.44172
		-0.318759	-0.354853
max		5.18	2.6377
		0.71433	0.421225
varian		1.19476	0.324487
		0.080065	0.0706928
JB		0.001	0.001
		0.001	0.038742
		ra	log
%		-6.36464	-10.0312
err.va		1.71782	0.194376
rel.std.err		1.43779	2.42773
mod.eff		-0.437791	-1.42773

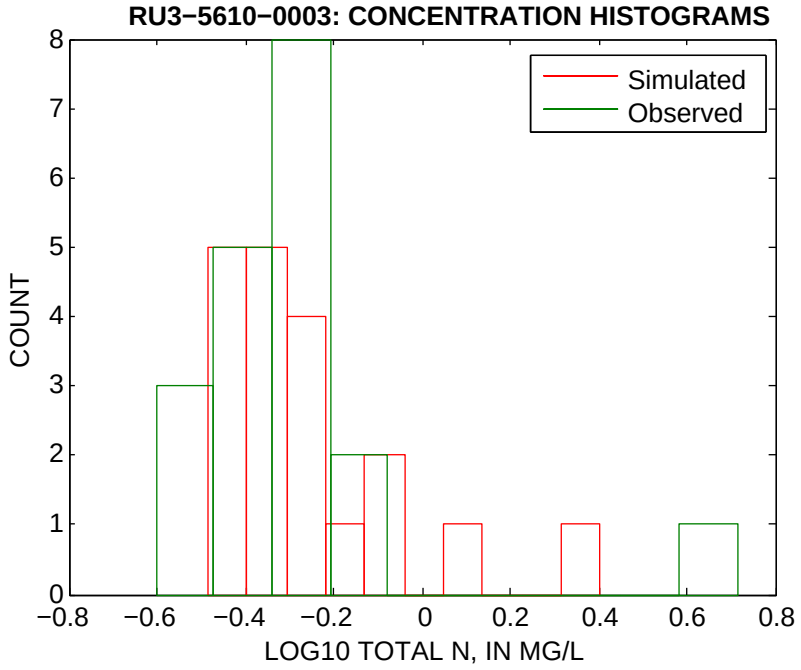
VERSION 2.1

ALL DATA
LOG10

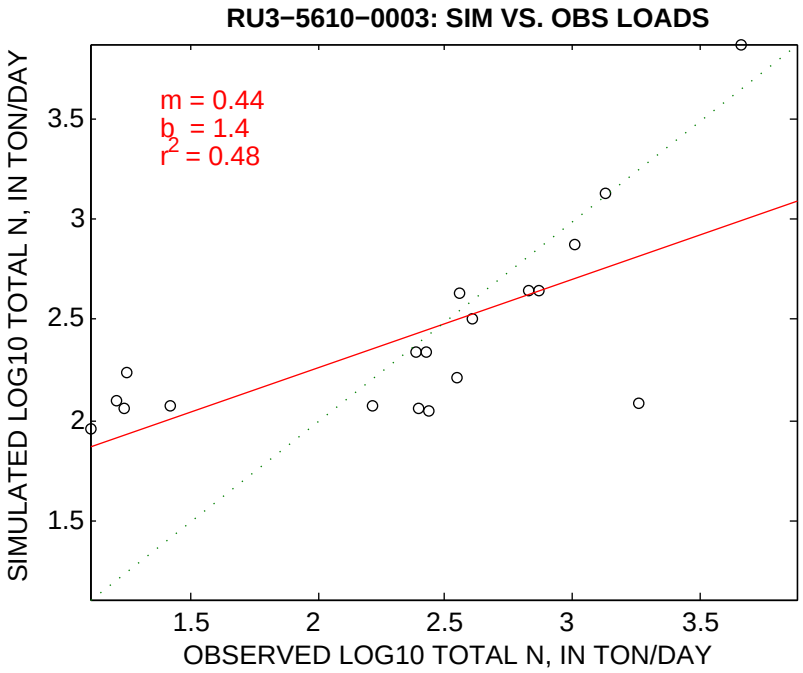


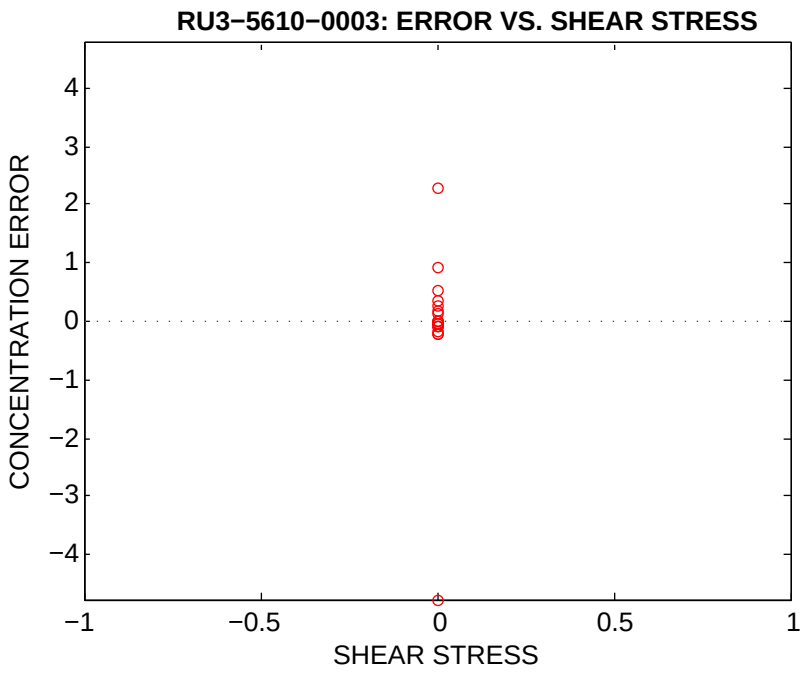


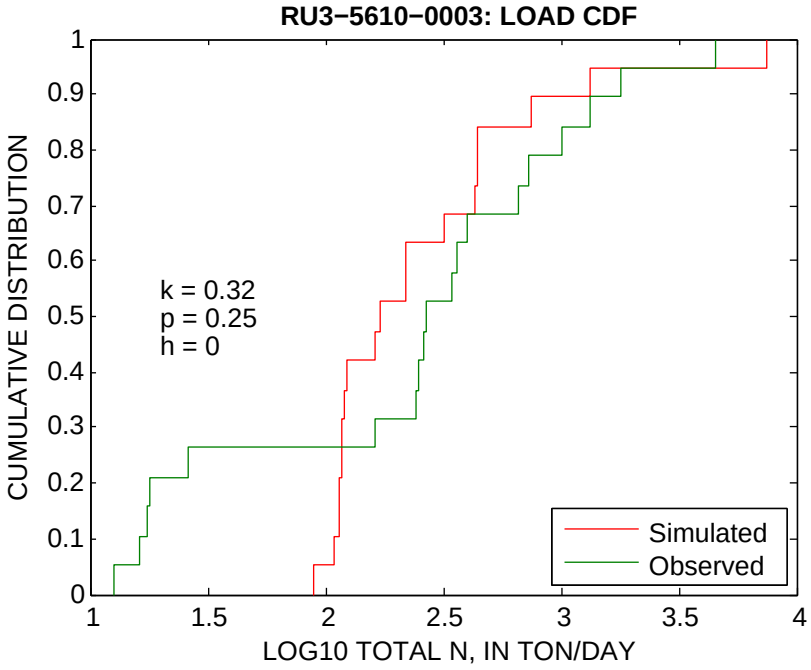


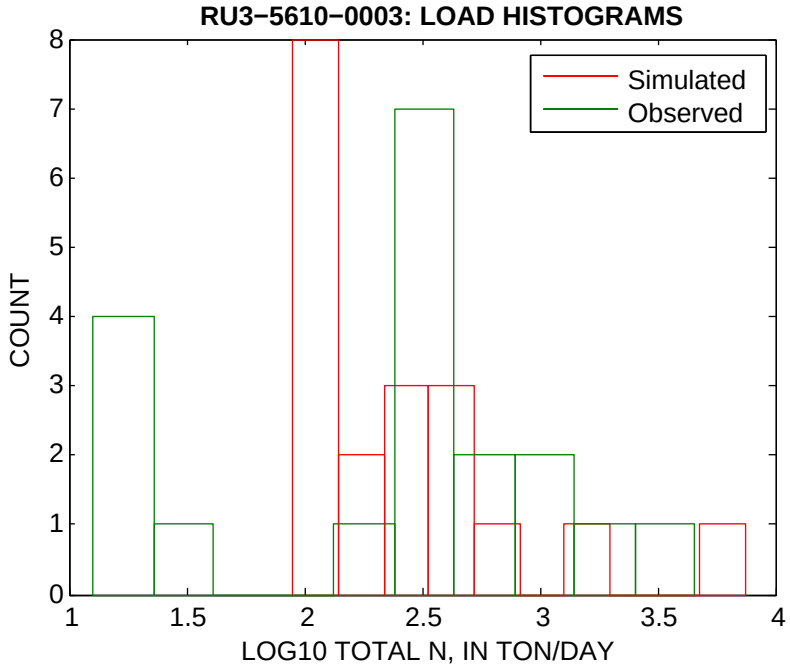


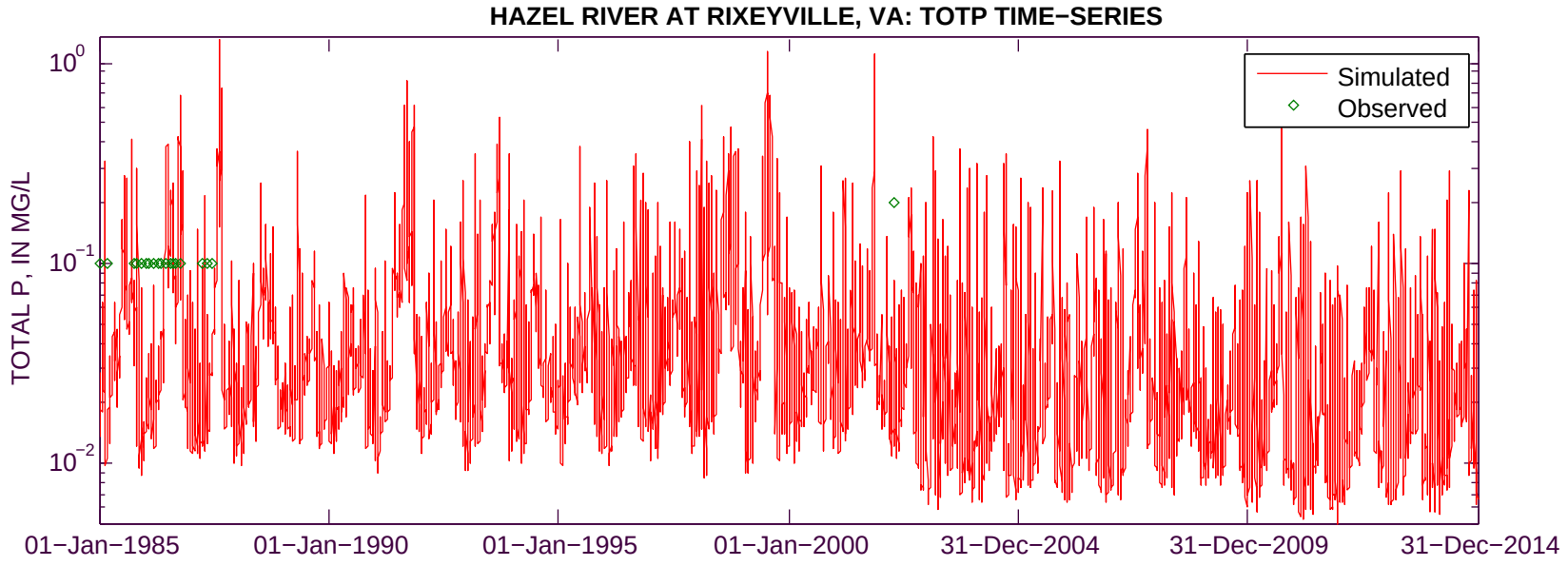
LOAD DATA
LOG10

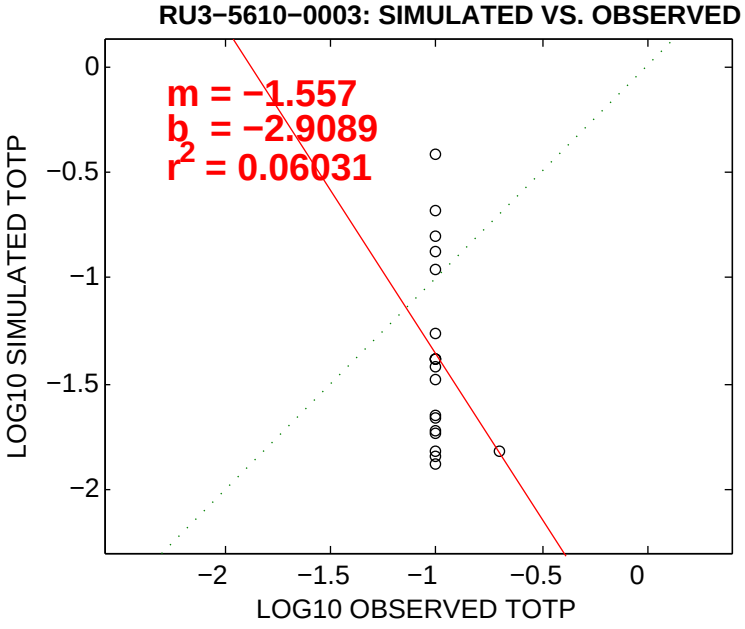


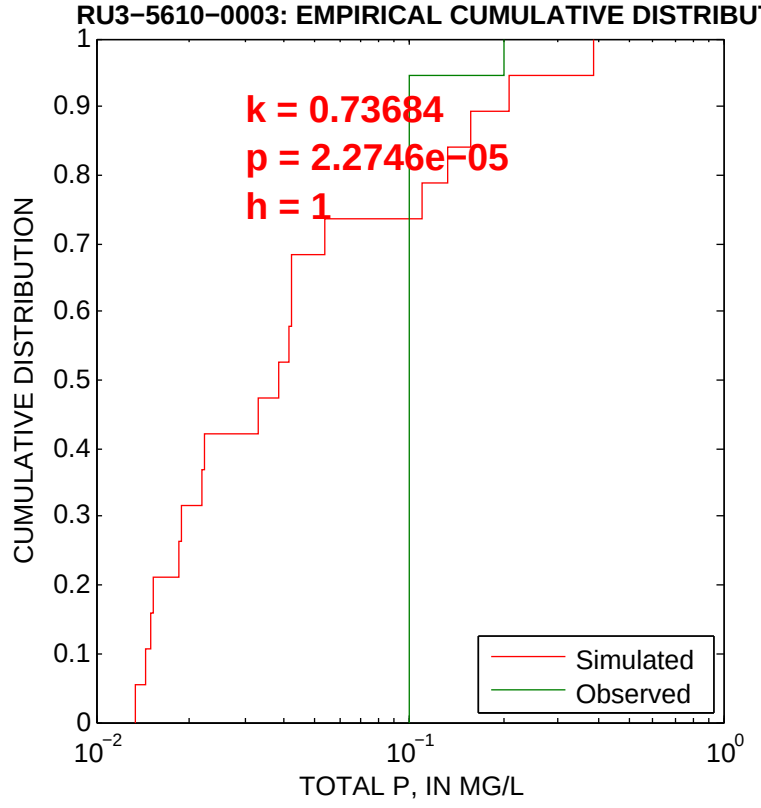












DATA SELECTION

scenario: P620171001WQ | file: TOTP.calib

plot: TOTP - total phosphorus

Dates: 1/1/1985 – 12/31/201

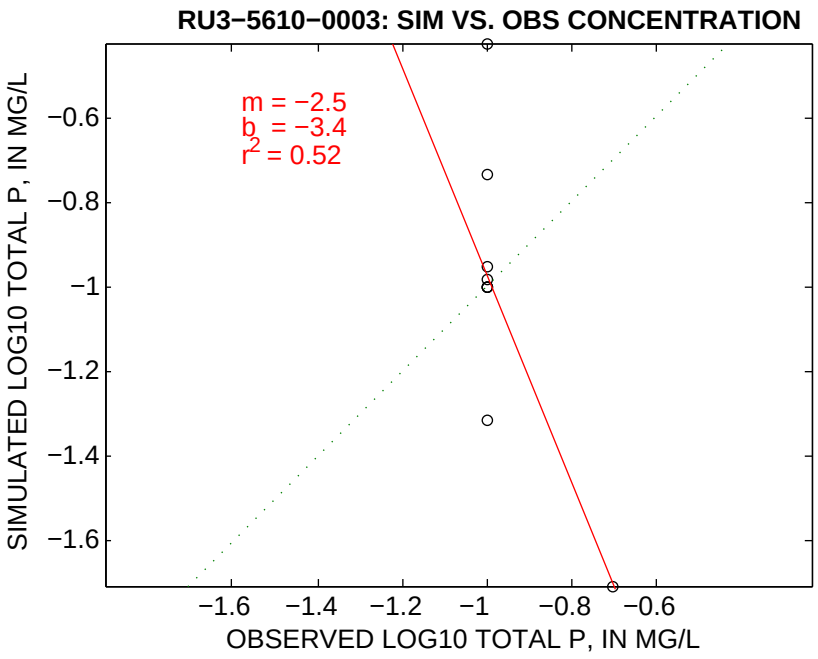
Drive: N/A | Directory: model | Observed: OBS20161101

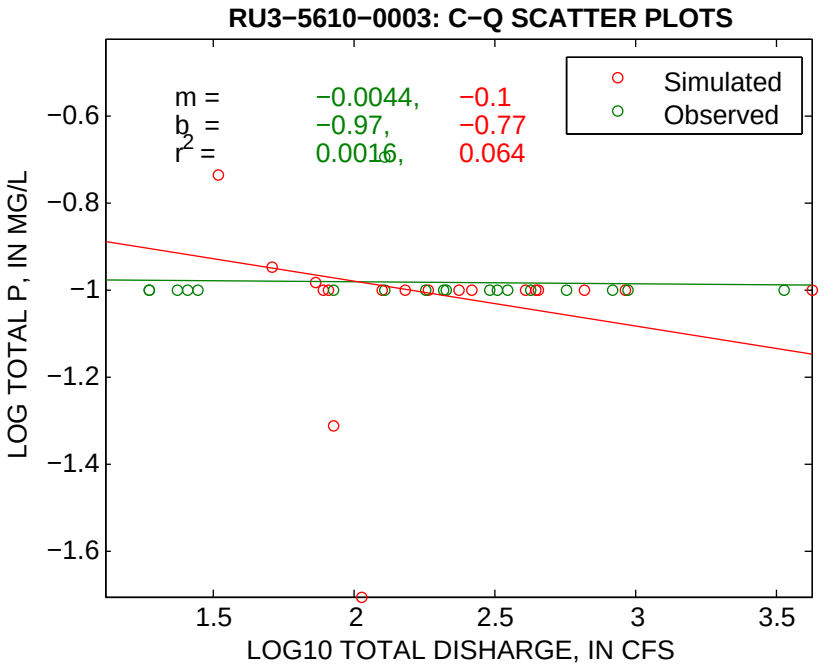
STATISTICS

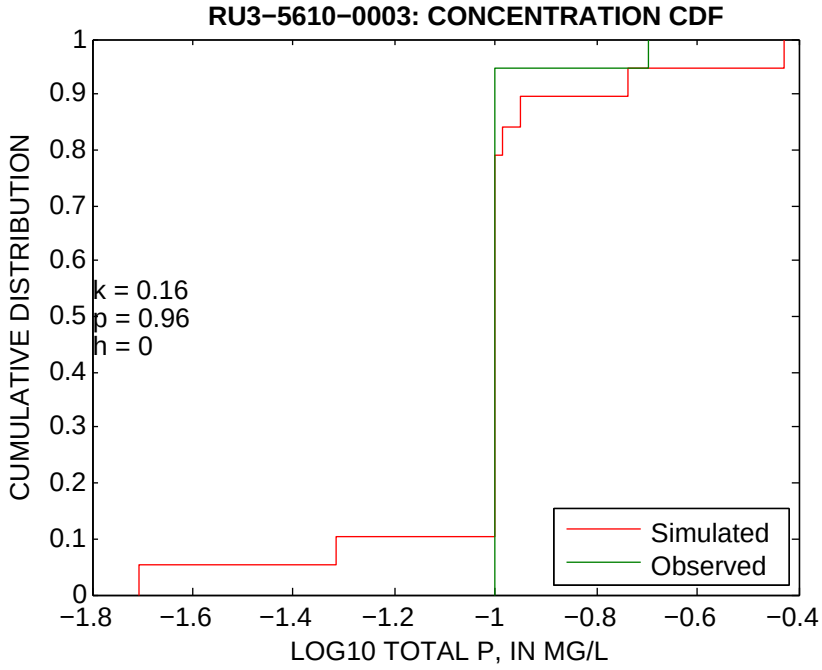
	observe	simulate
n	19	19
min	0.1 -1	0.013338 -1.87491
mean	0.105263 -0.984156	0.0729534 -1.37657
media	0.1 -1	0.038299 -1.41681
max	0.2 -0.69897	0.3852 -0.414314
varian	0.00052631 0.00476942	0.00884866 0.191726
JB	0.001 0.001	0.001 0.122442
	ra	log
%	-30.6942	39.8734
err.va	0.0111196	0.373894
rel.std.err	21.1272	78.3939
mod.eff	-20.1272	-77.3939

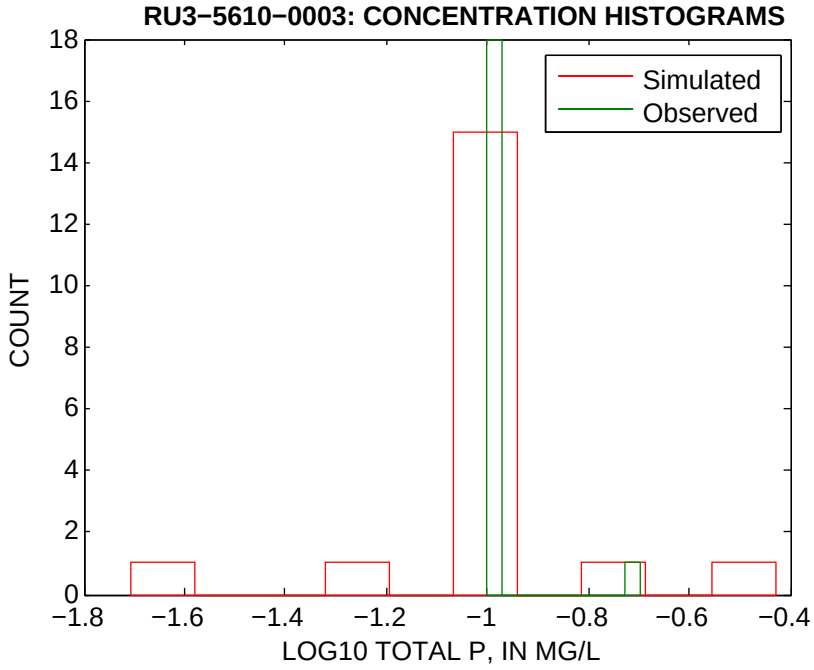
VERSION 2.1

ALL DATA
LOG10

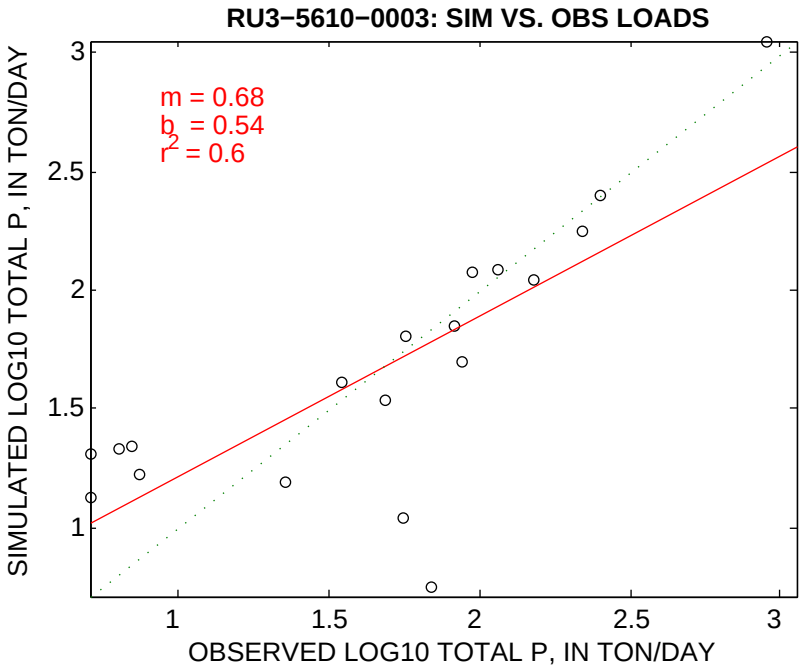


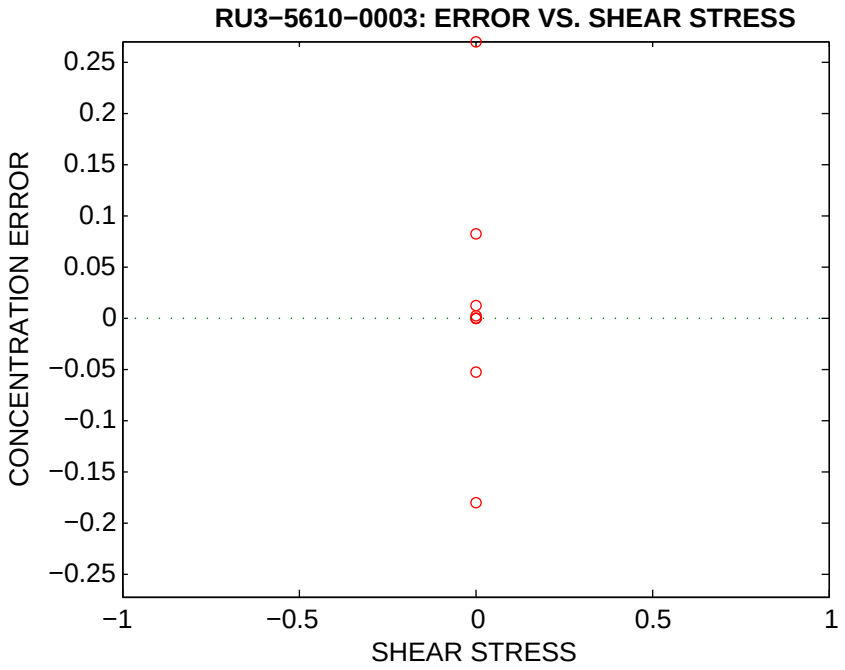


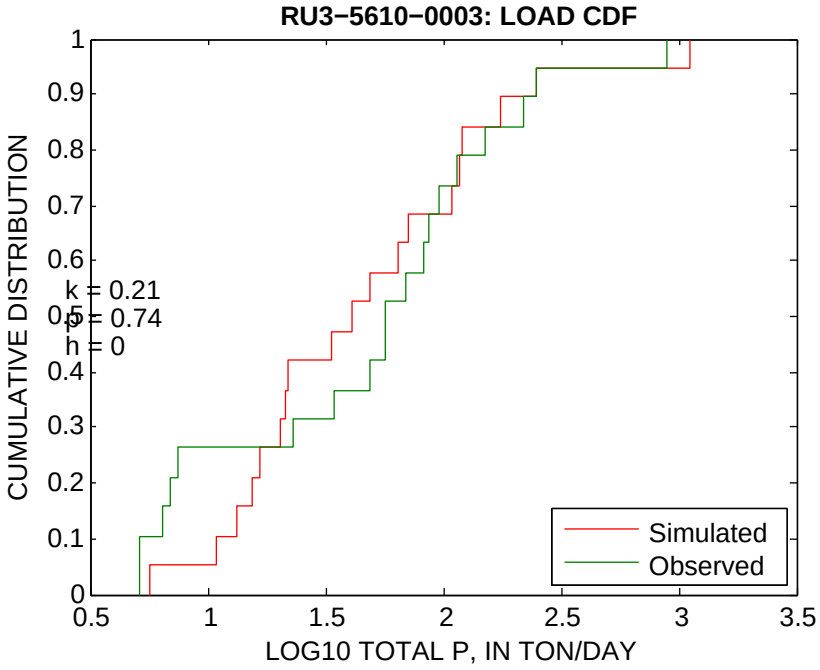


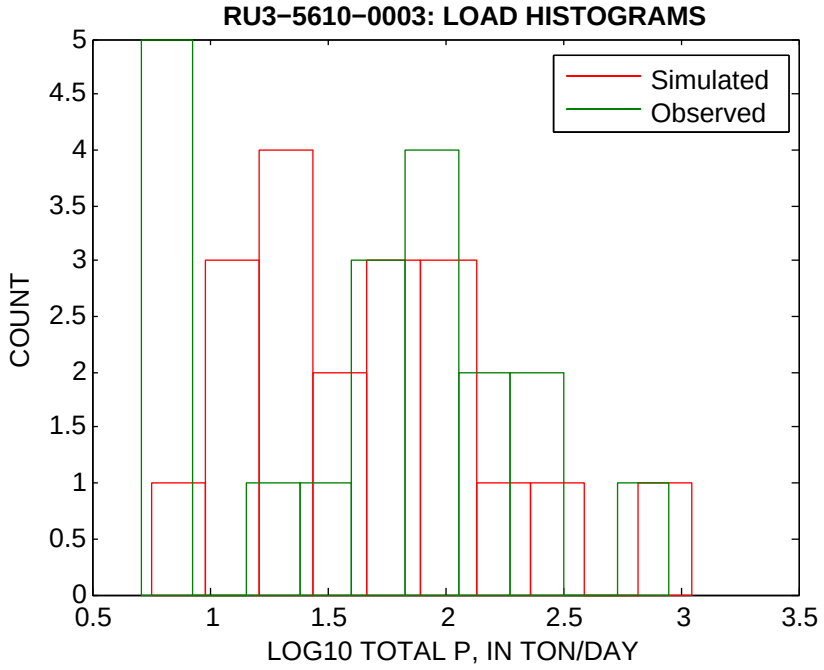


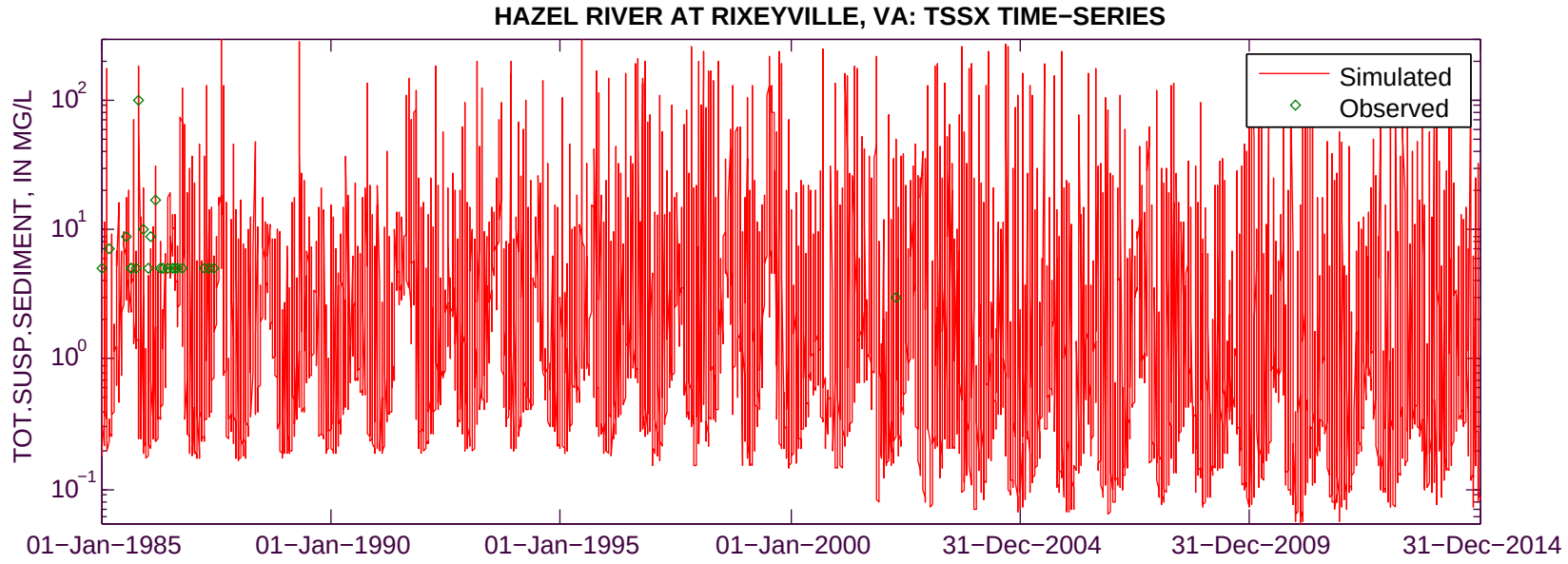
LOAD DATA
LOG10

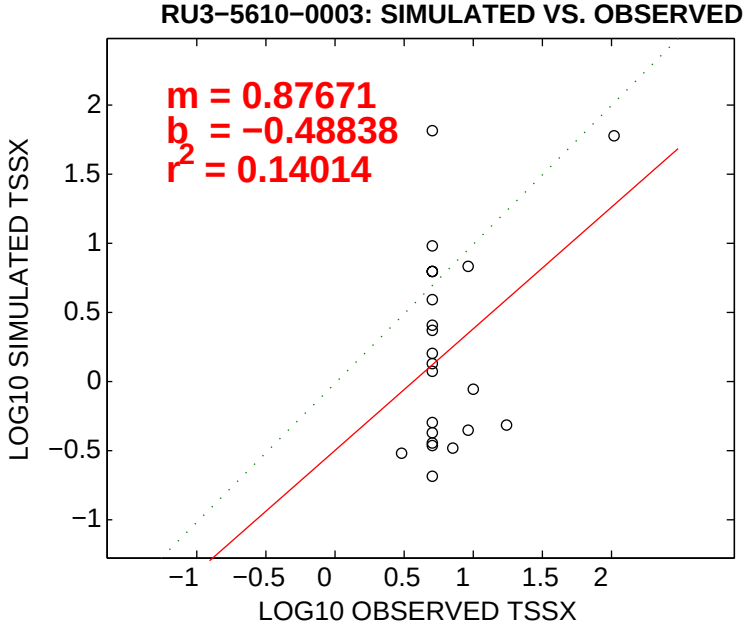


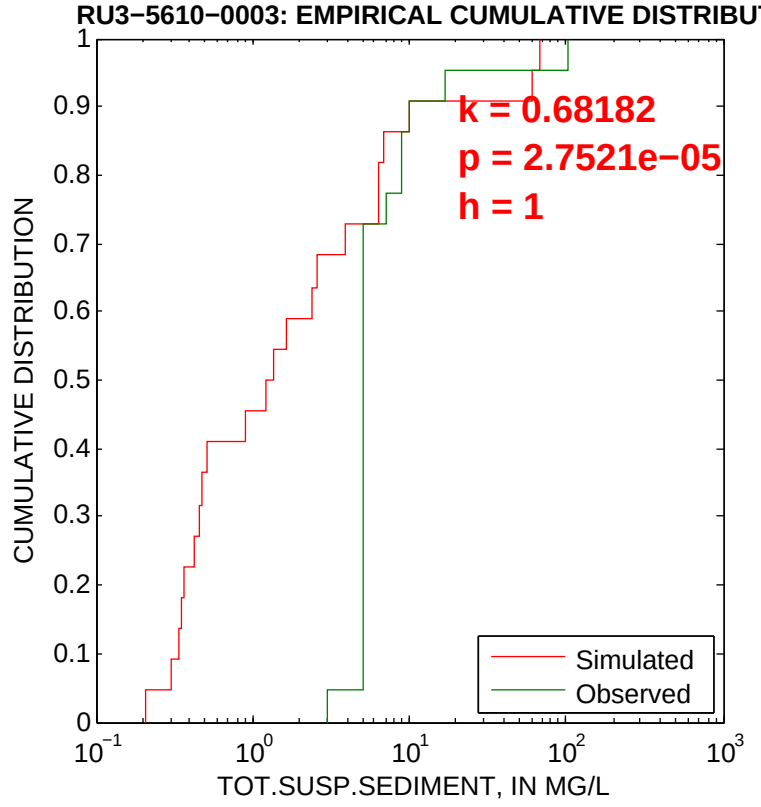












DATA SELECTION

scenario	file
P620171001WQ	TSSX.calib

plot: TSSX - total suspended ...

Dates 1/1/1985 12/31/201

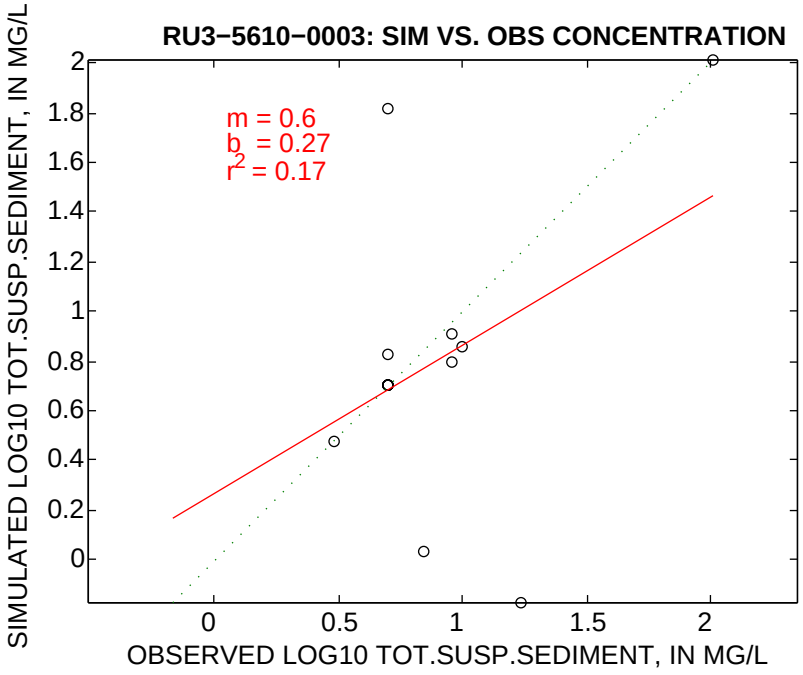
Drive	Directory	Observed
N/A	model	OBS20161101

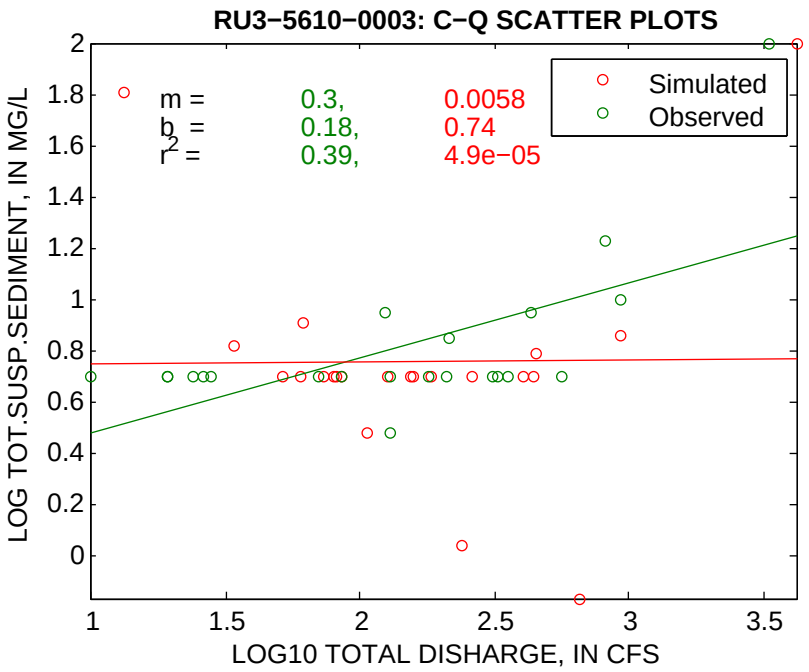
STATISTICS

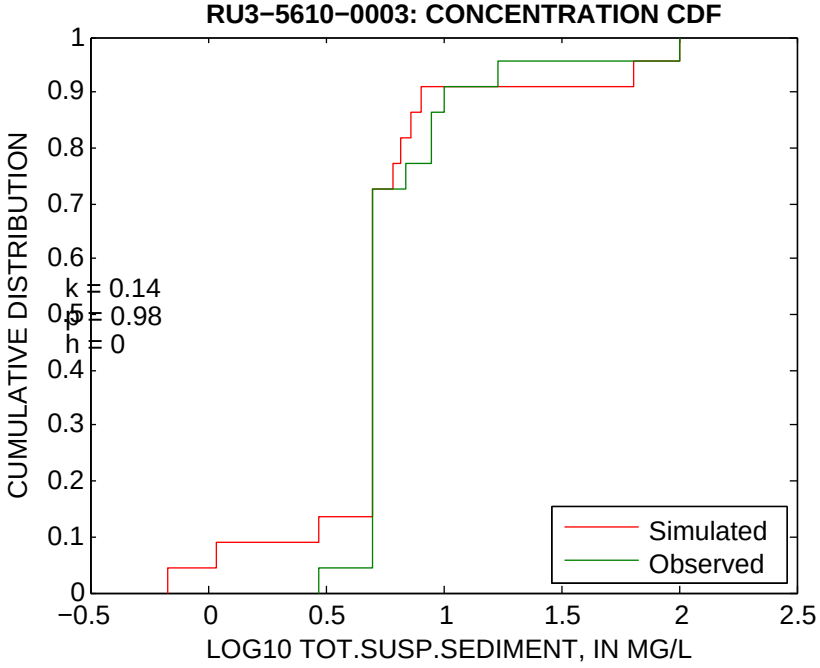
	n	22	22
		observe	simulate
min		3	0.21202
		0.477121	-0.673623
mean		10.5455	7.96944
		0.816105	0.22711
media		5	1.2931
		0.69897	0.11095
max		102	67.566
		2.0086	1.82973
varian		425.784	338.07
		0.0946317	0.51901
JB		0.001	0.001
		0.001	0.099924
		ra	log
%		-24.4278	-72.1715
err.va		300.178	0.811147
rel.std.err		0.705001	8.57162
mod.eff		0.294999	-7.57162

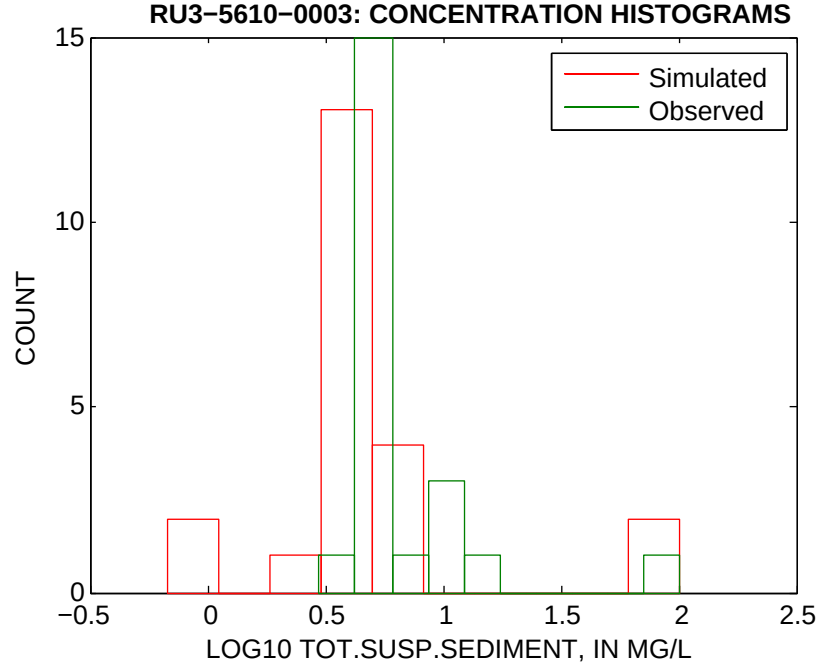
VERSION 2.1

ALL DATA
LOG10

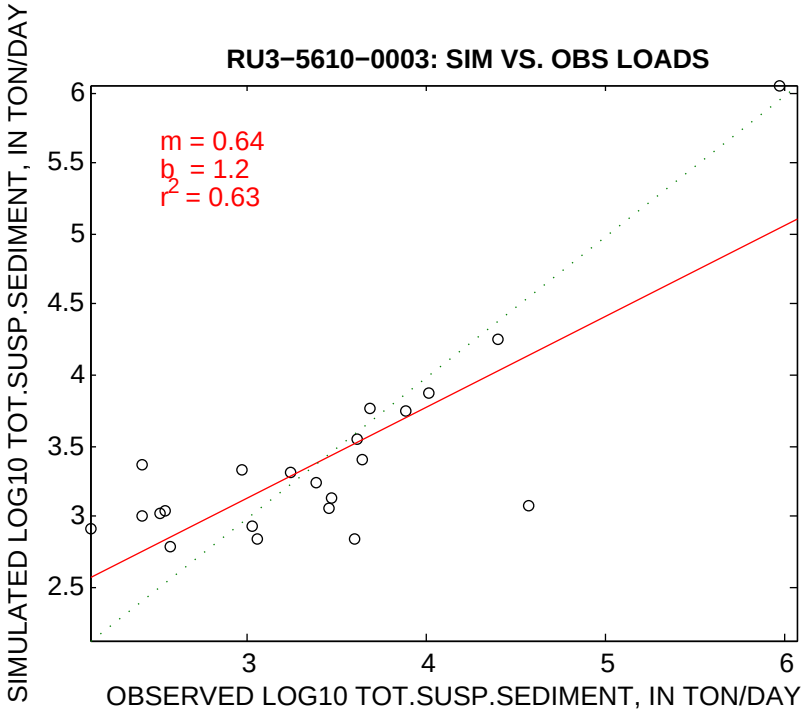


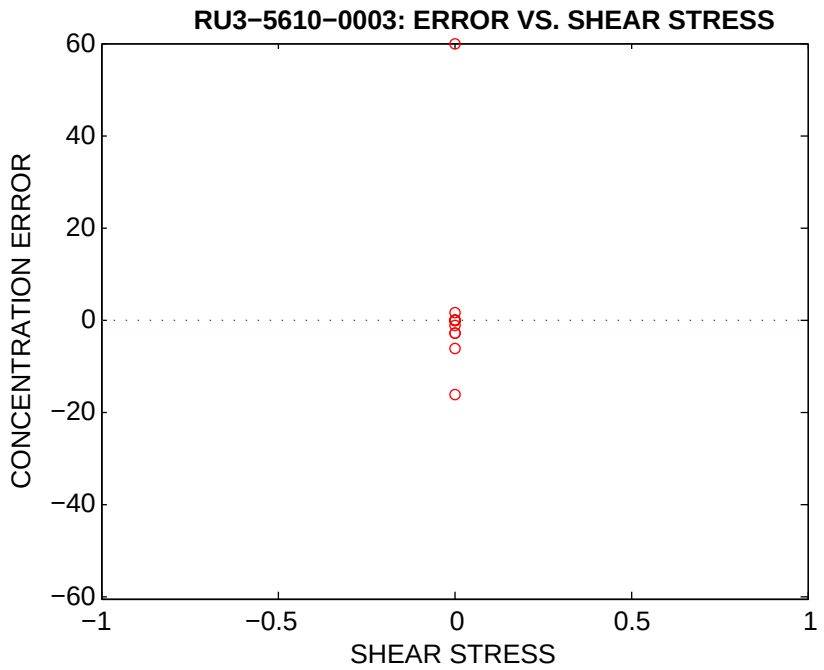


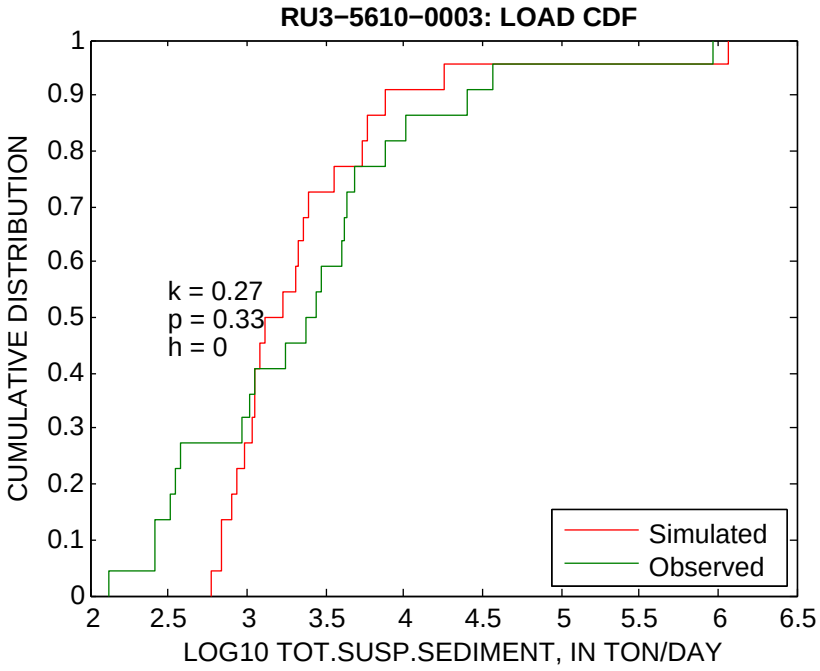


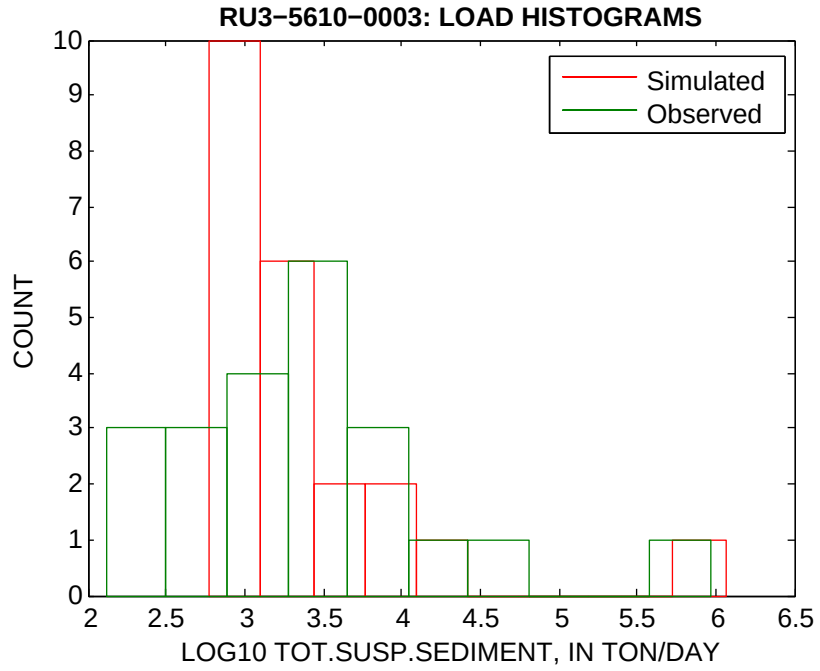


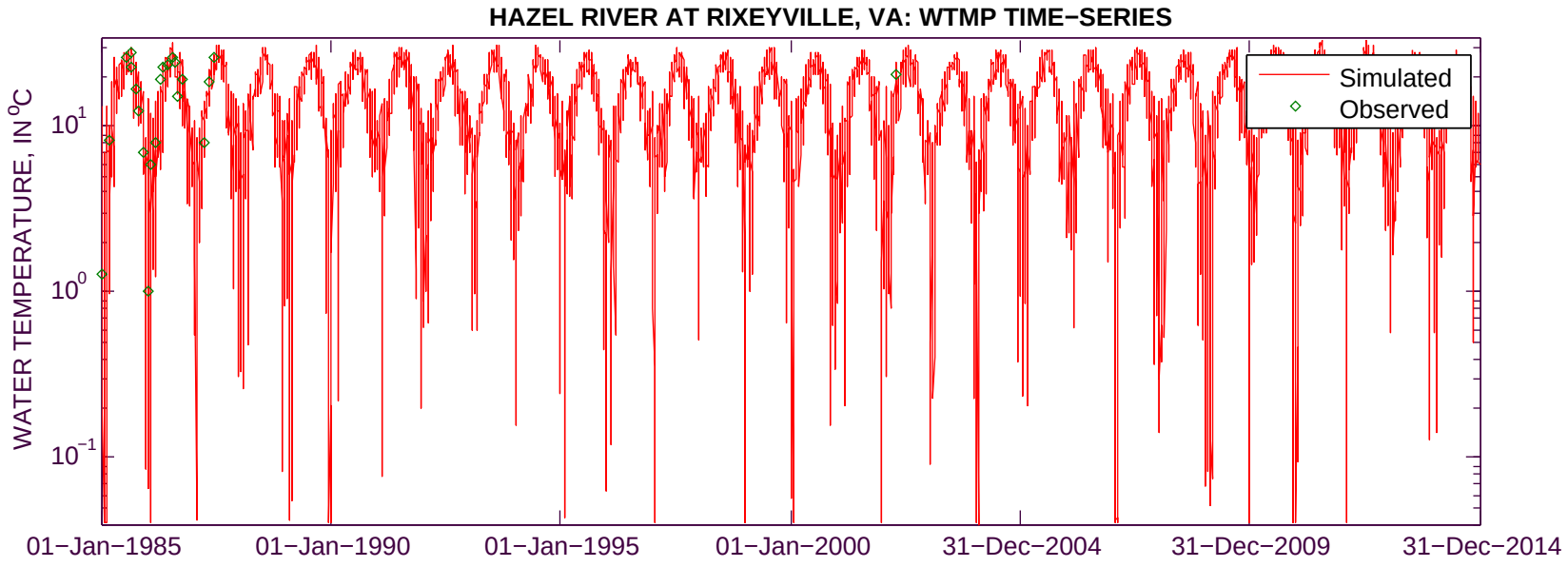
LOAD DATA
LOG10

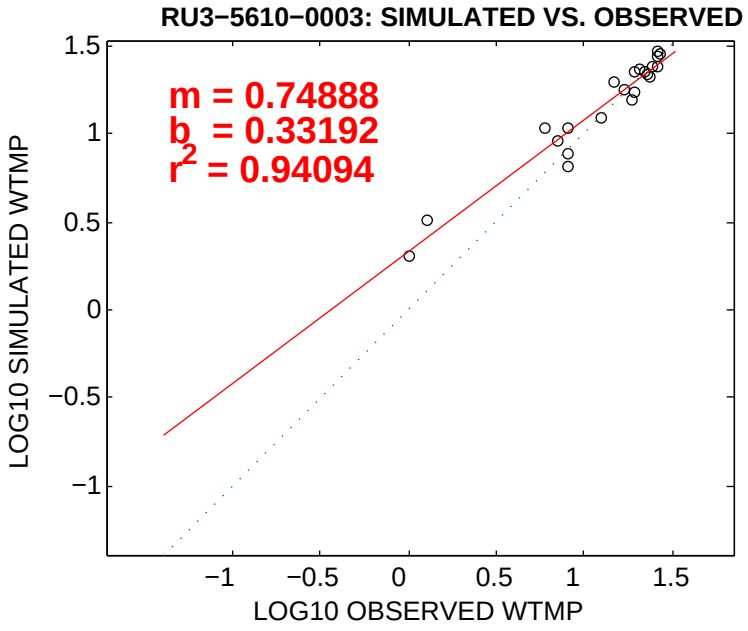


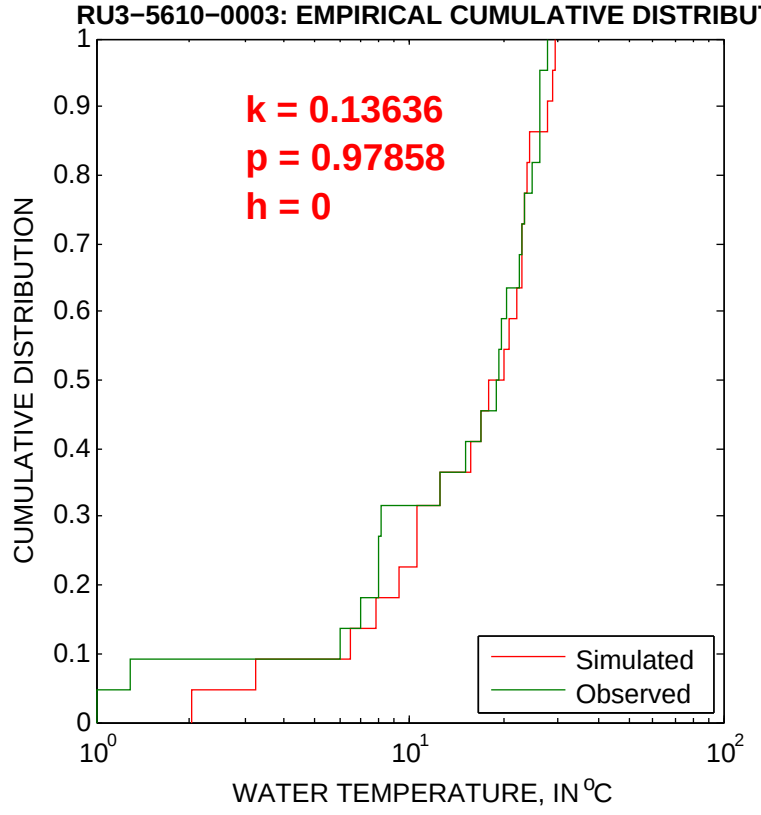












DATA SELECTION

scenario	file
P620171001WQ	WTMP.calib

plot: WTMP - water tempera...

Dates: 1/1/1985 – 12/31/201

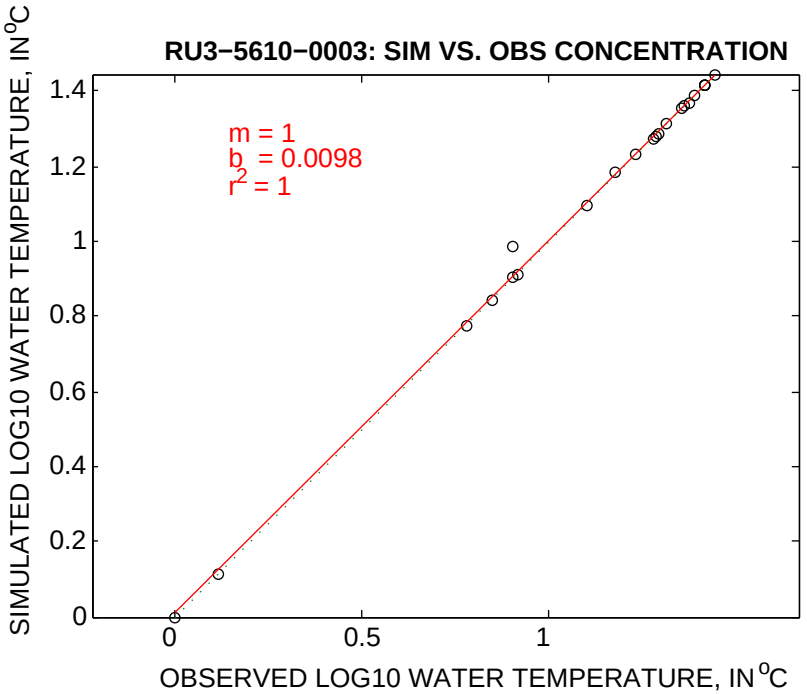
Drive: N/A Directory: model Observed: OBS20161101

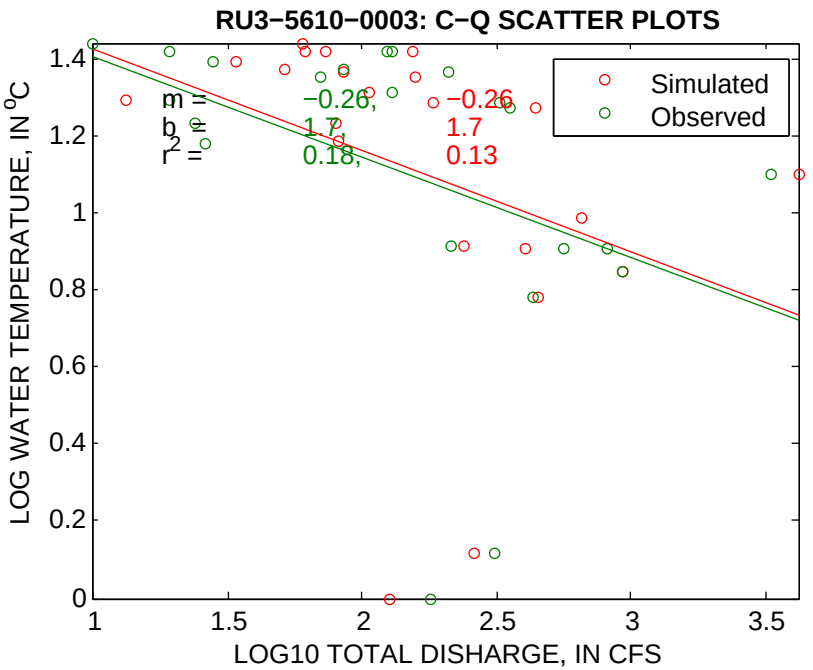
STATISTICS

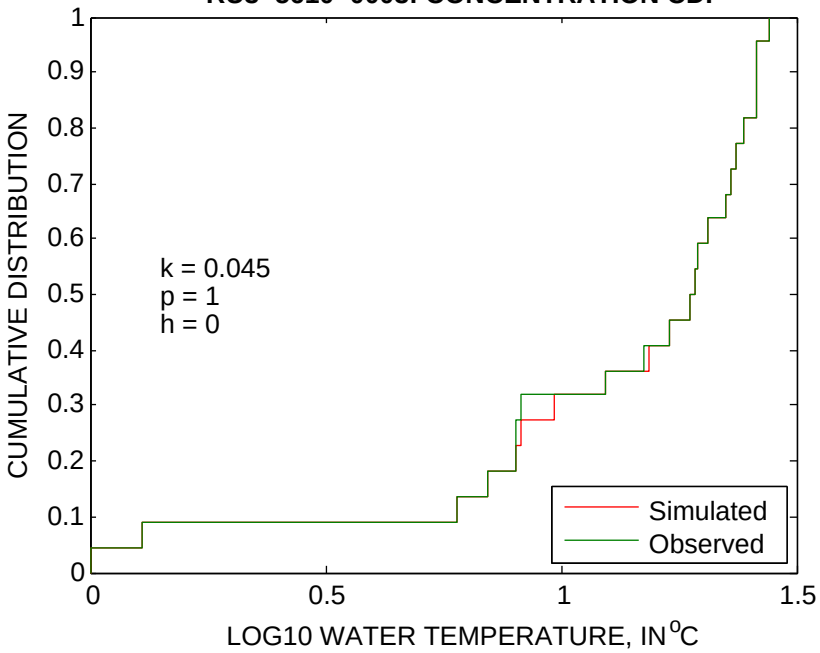
	n	22	22
		observe	simulate
min		1	2.035
		0	0.308564
mean		16.4195	17.1939
		1.10373	1.15848
media		19	18.9805
		1.27873	1.27773
max		27.6	29.291
		1.44091	1.46673
varian		72.7847	67.5855
		0.158802	0.0946486
JB		0.152996	0.244564
		0.005302	0.015087
		ra	log
%		4.71603	4.9599
err.va		5.97612	0.018744
rel.std.err		0.0821068	0.118034
mod.eff		0.917893	0.881966

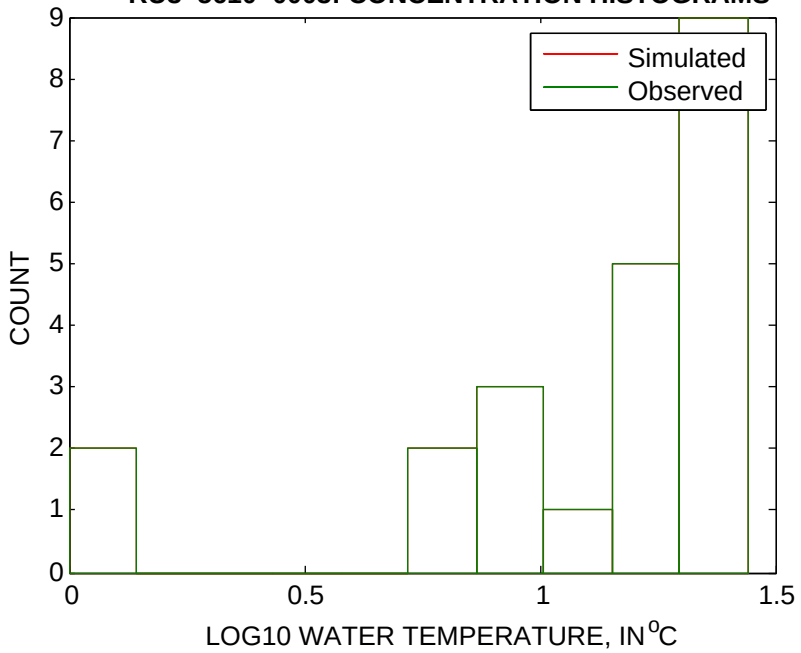
VERSION 2.1

ALL DATA
LOG10

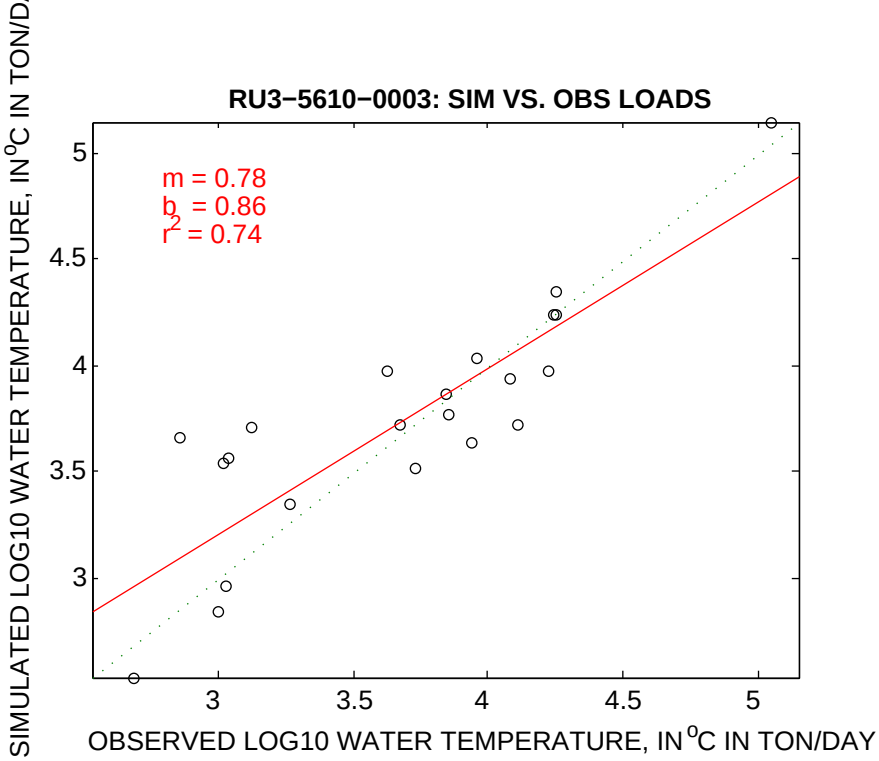


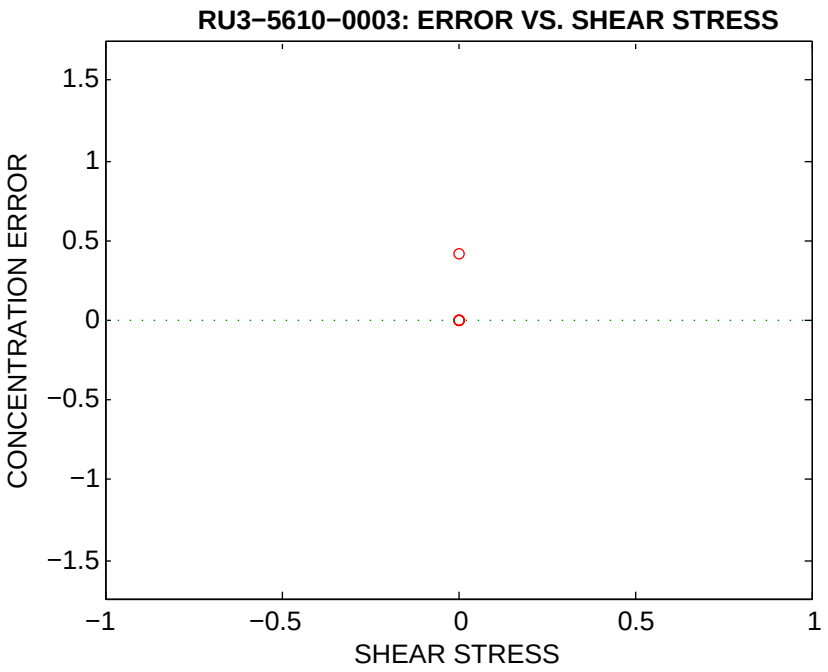


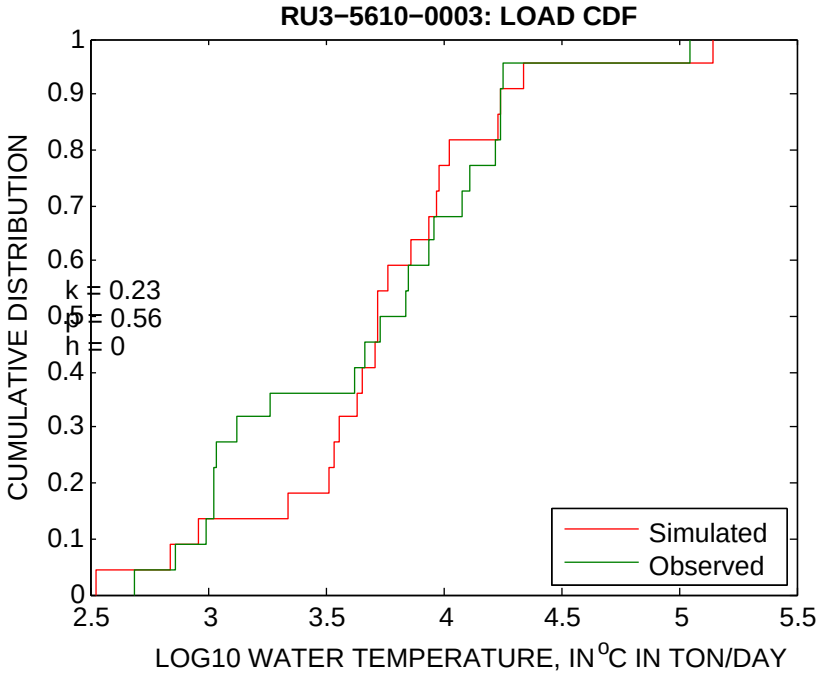


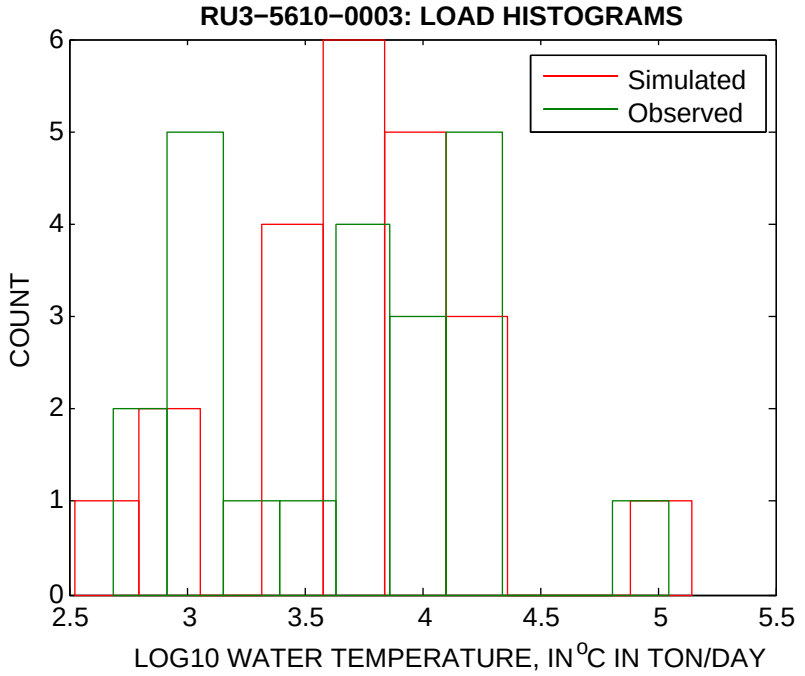


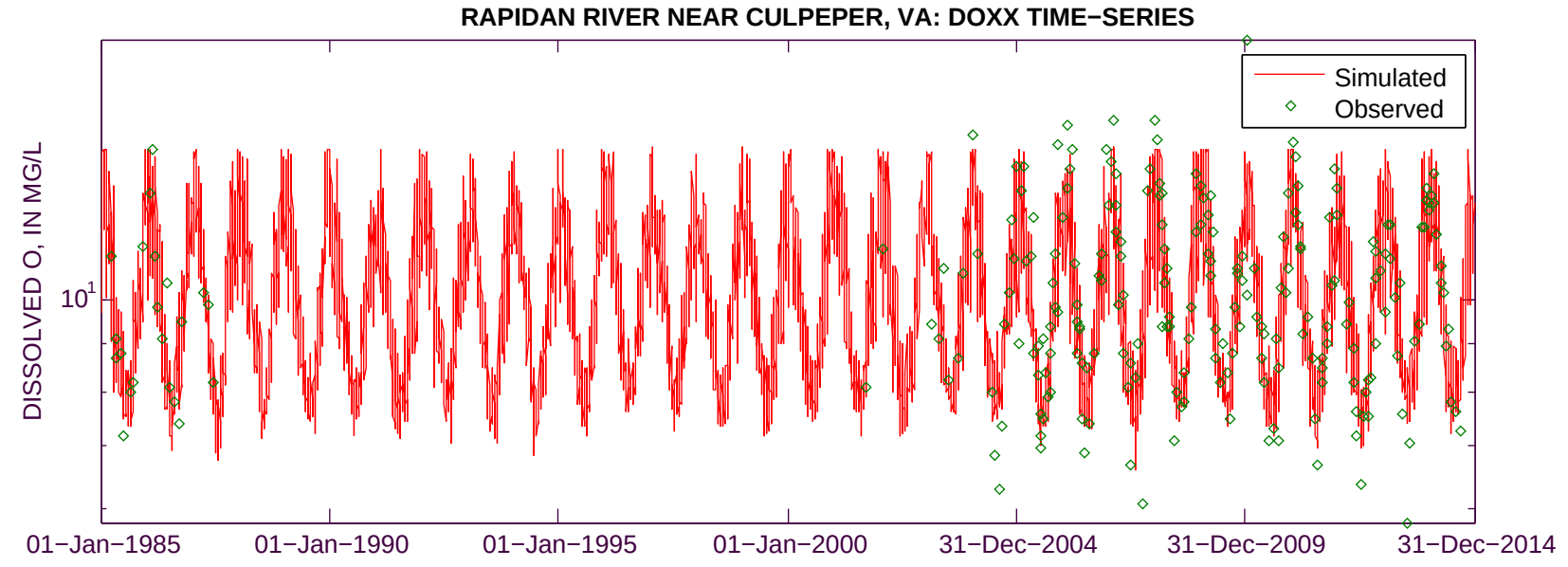
LOAD DATA
LOG10

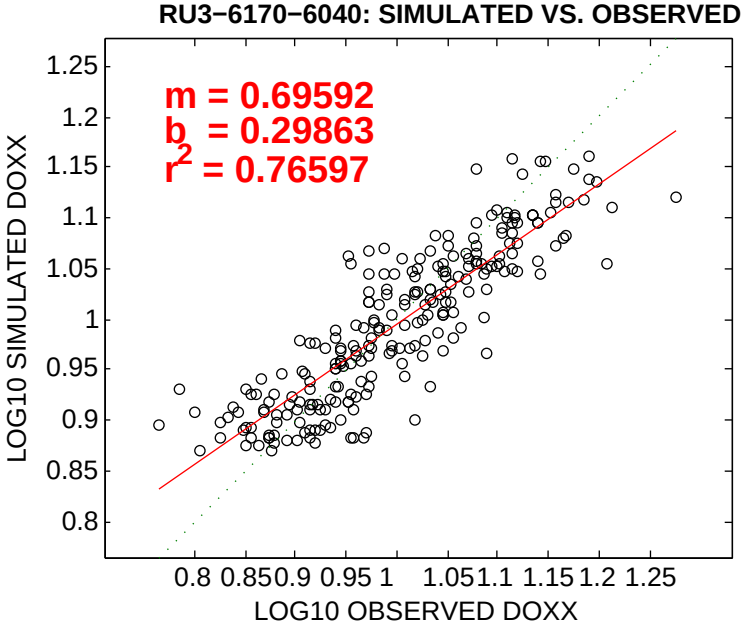


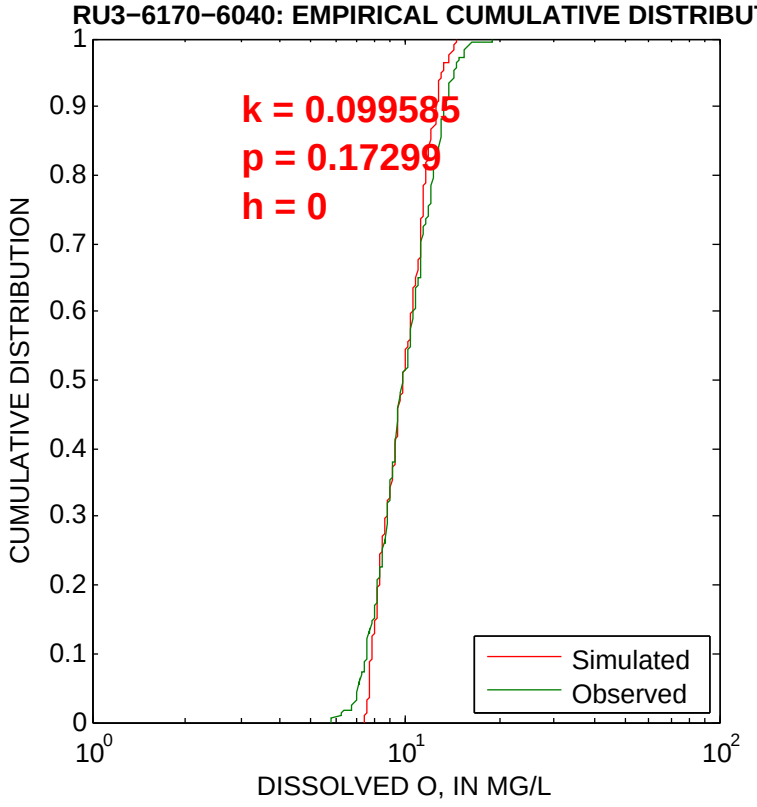












DATA SELECTION

scenario: P620171001WQ | file: DOXX.calib

plot: DOXX - dissolved oxygen

Dates: 1/1/1985 – 12/31/201

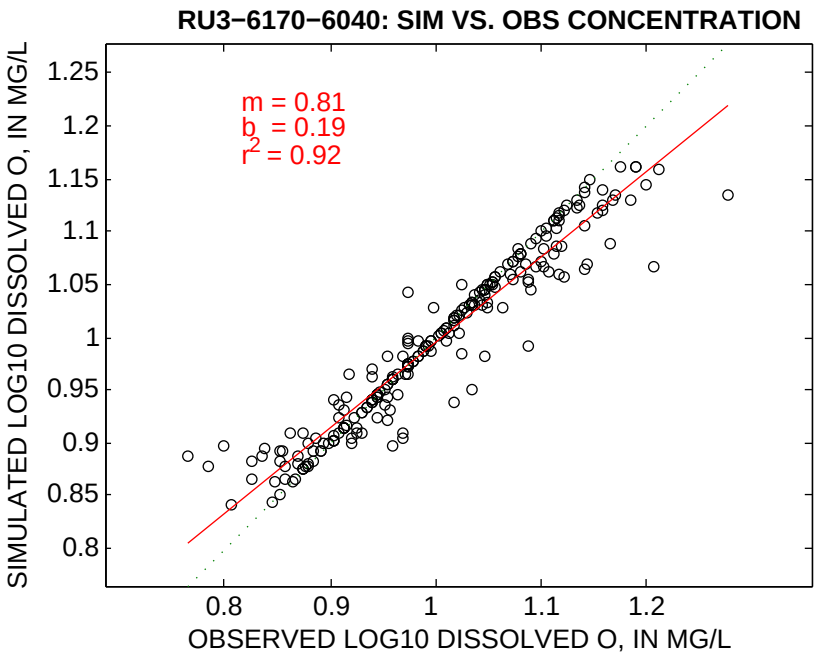
Drive: N/A | Directory: model | Observed: OBS20161101

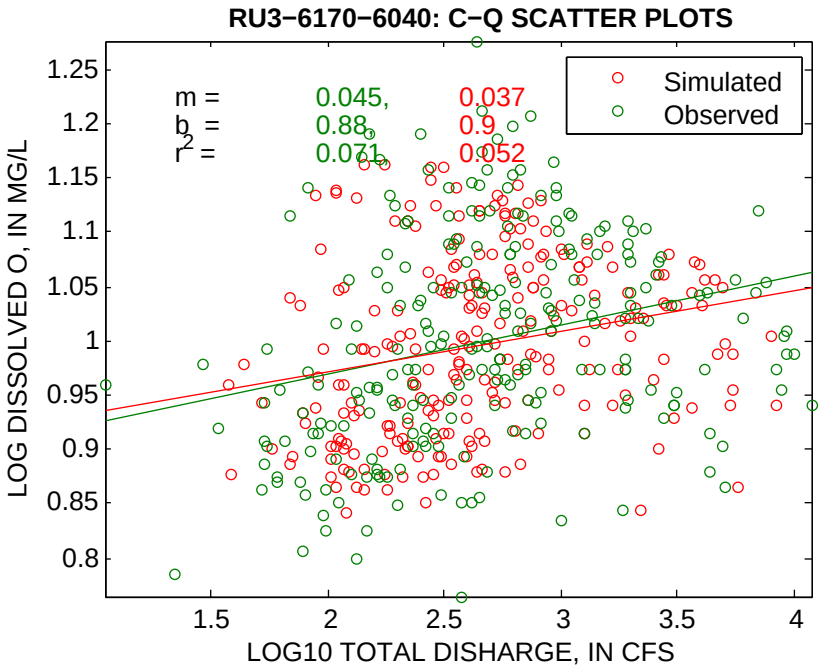
STATISTICS

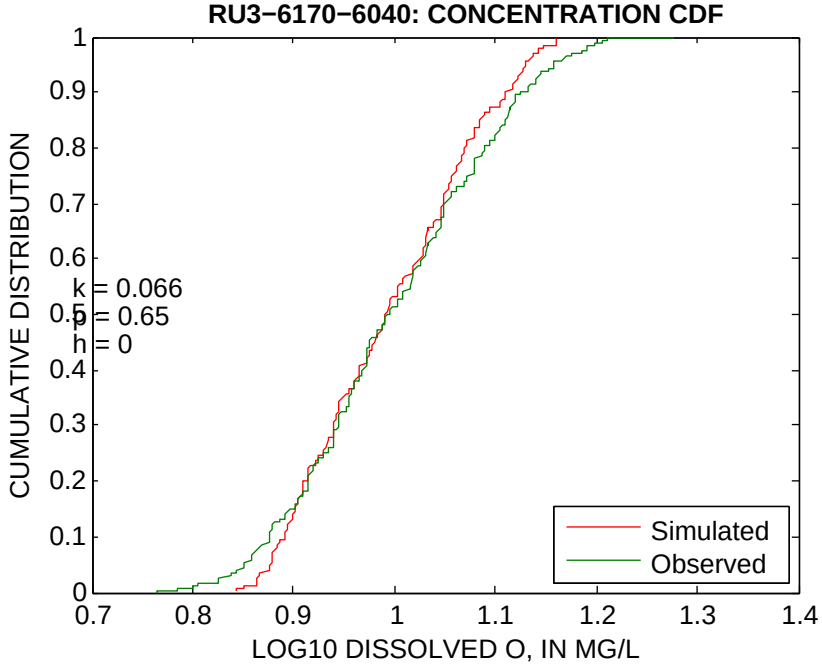
n	241	241
	observe	simulate
min	5.82	7.403
	0.764923	0.869408
mean	10.2647	10.0407
	1.00069	0.995029
media	9.9	9.821
	0.995635	0.992156
max	18.9	14.478
	1.27646	1.16071
varian	5.33986	3.19486
	0.0092374	0.00584055
JB	0.005163	0.008600
	0.133779	0.009939
	ra	log
%	-2.18185	-0.565678
err.va	1.37468	0.00225321
rel.std.err	0.257437	0.243923
mod.eff	0.742563	0.756077

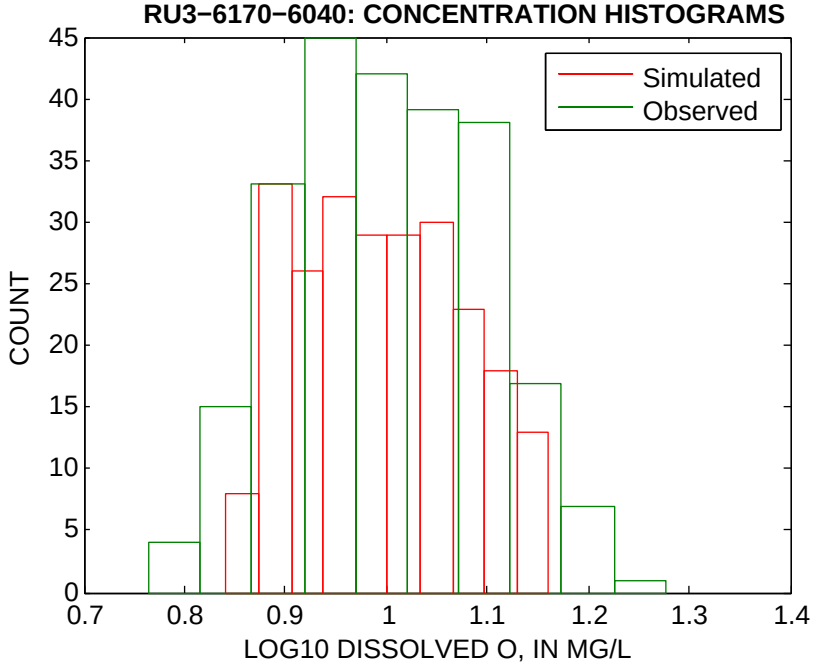
VERSION 2.1

ALL DATA
LOG10

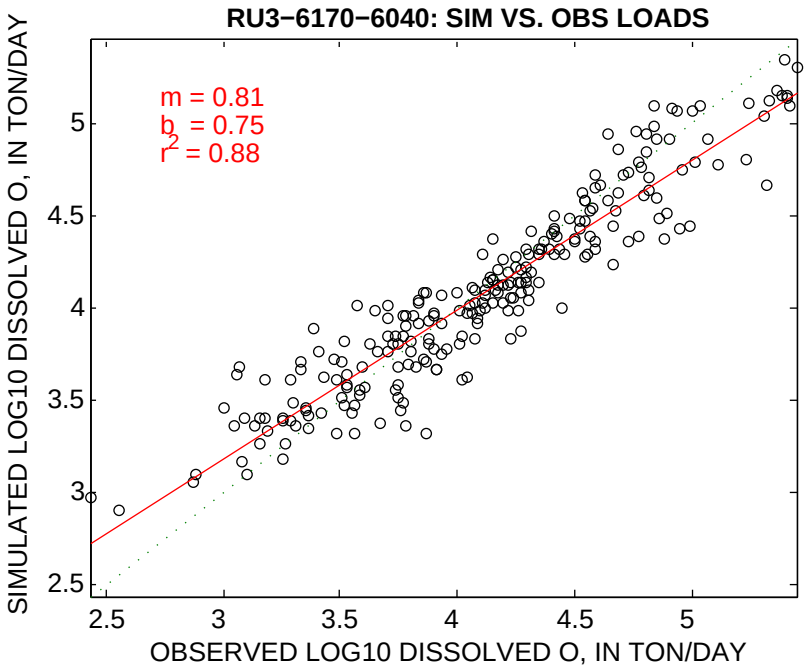


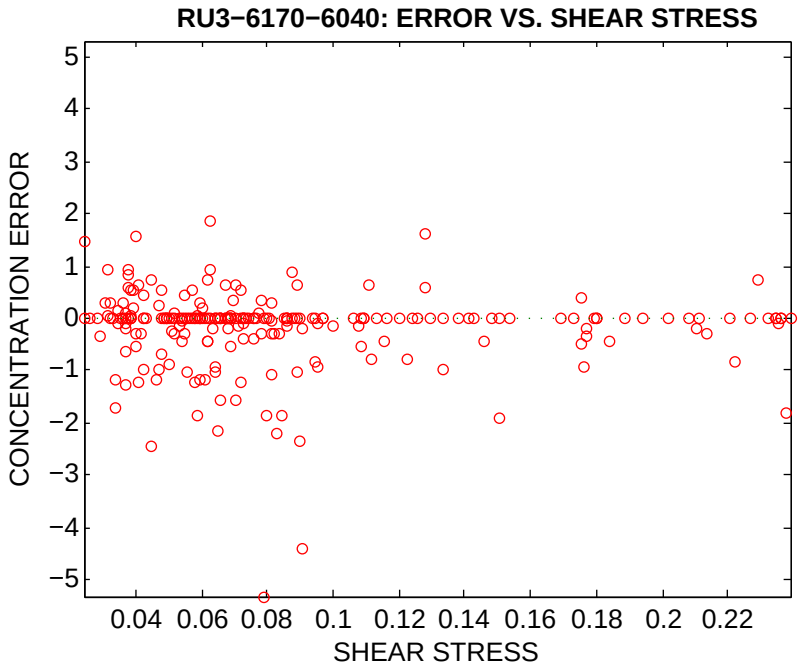


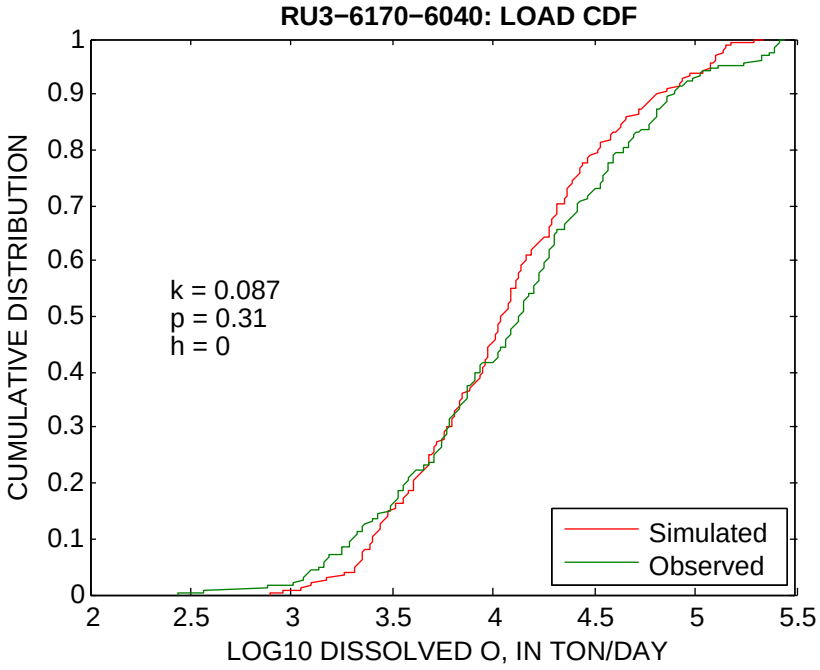


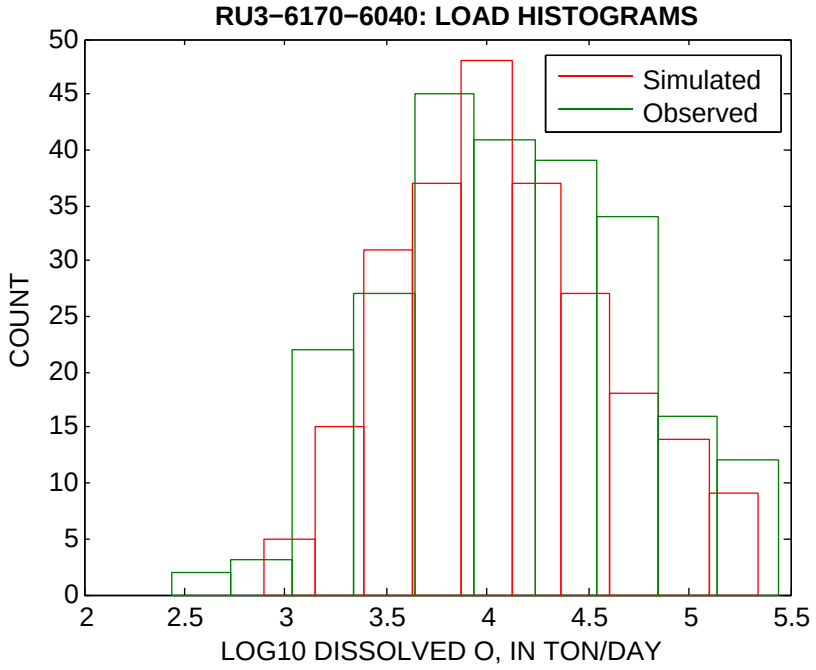


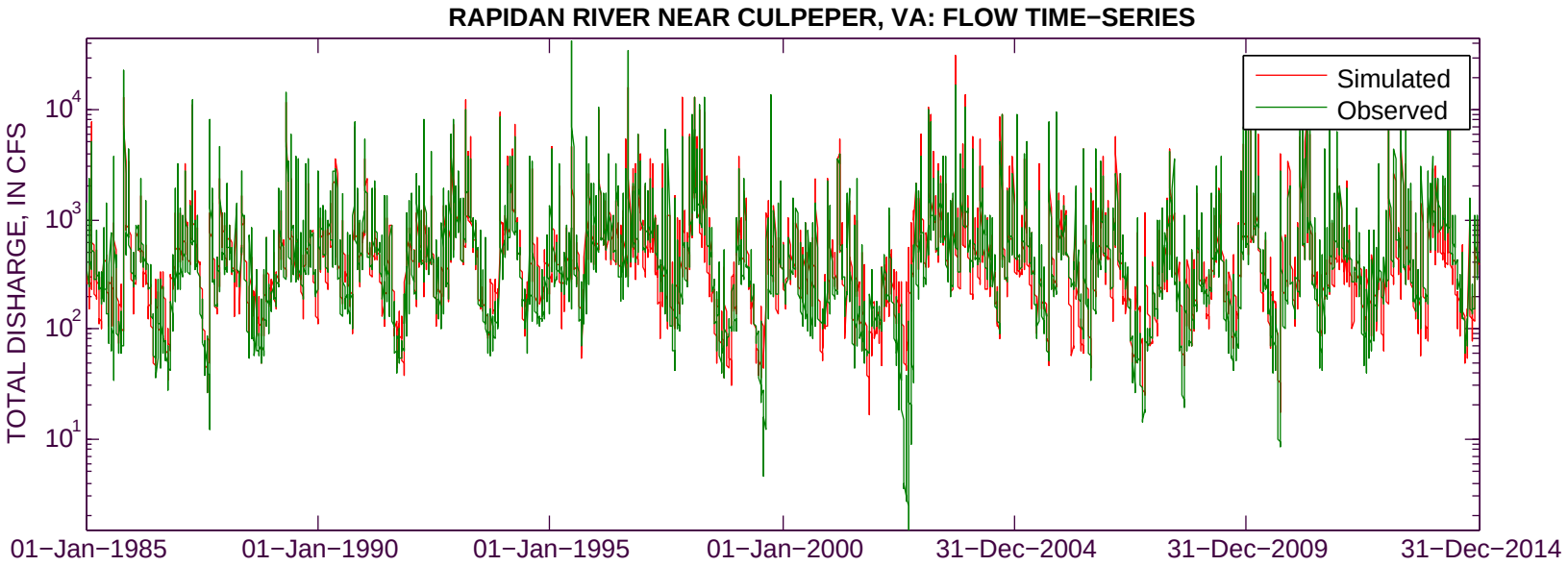
LOAD DATA
LOG10

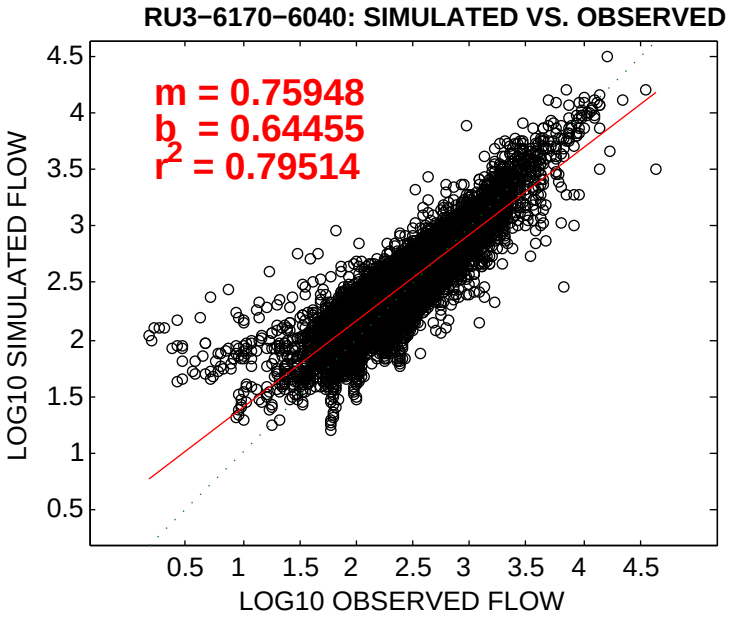


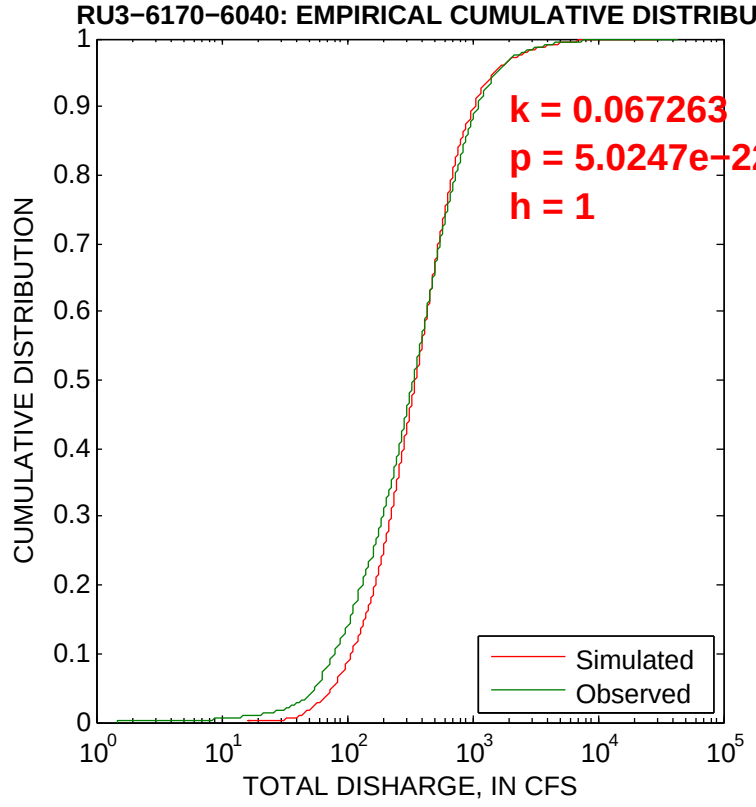












DATA SELECTION

scenario: P620171001WQ | file: FLOW.calib

plot: FLOW - total discharge

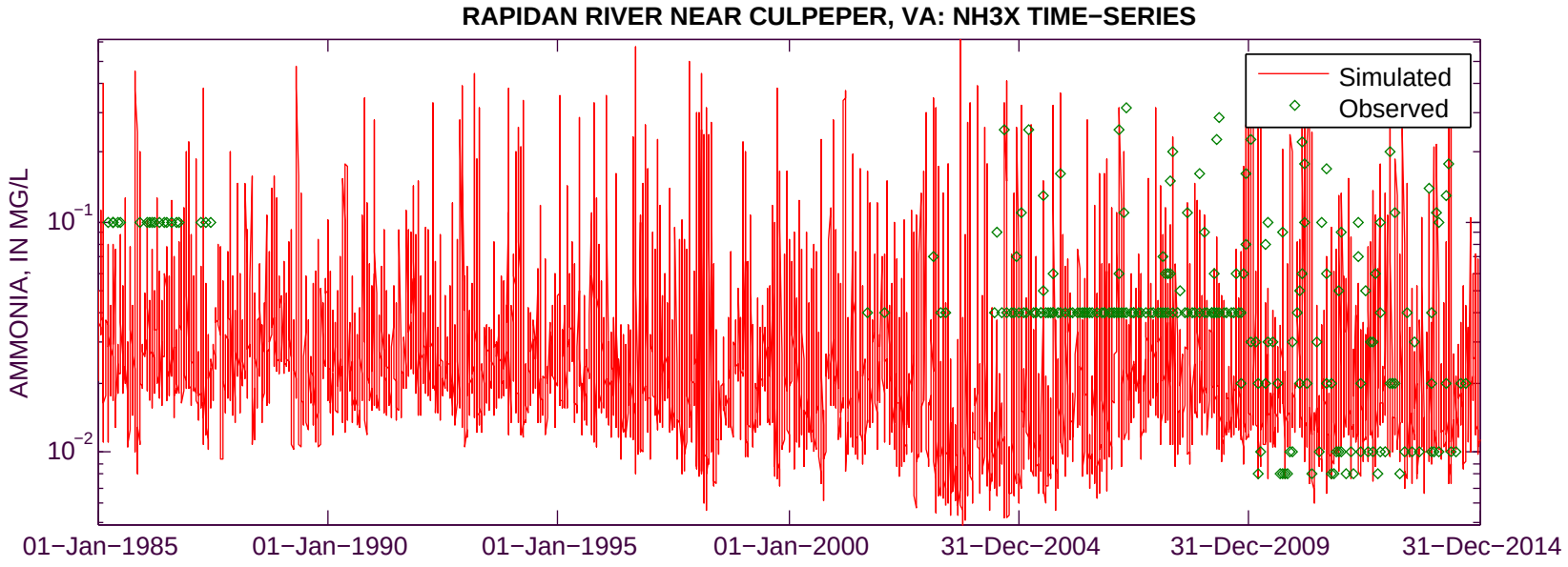
Dates: 1/1/1985 – 12/31/201

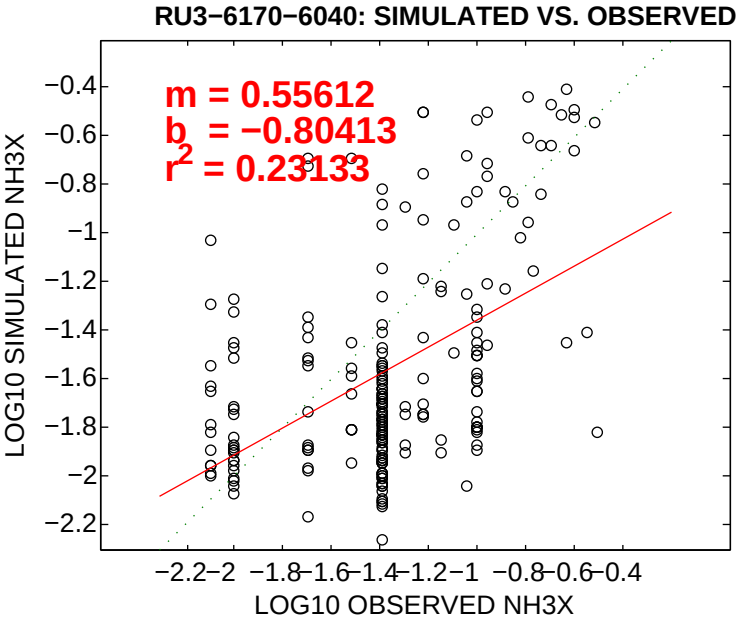
Drive: N/A | Directory: model | Observed: OBS20161101

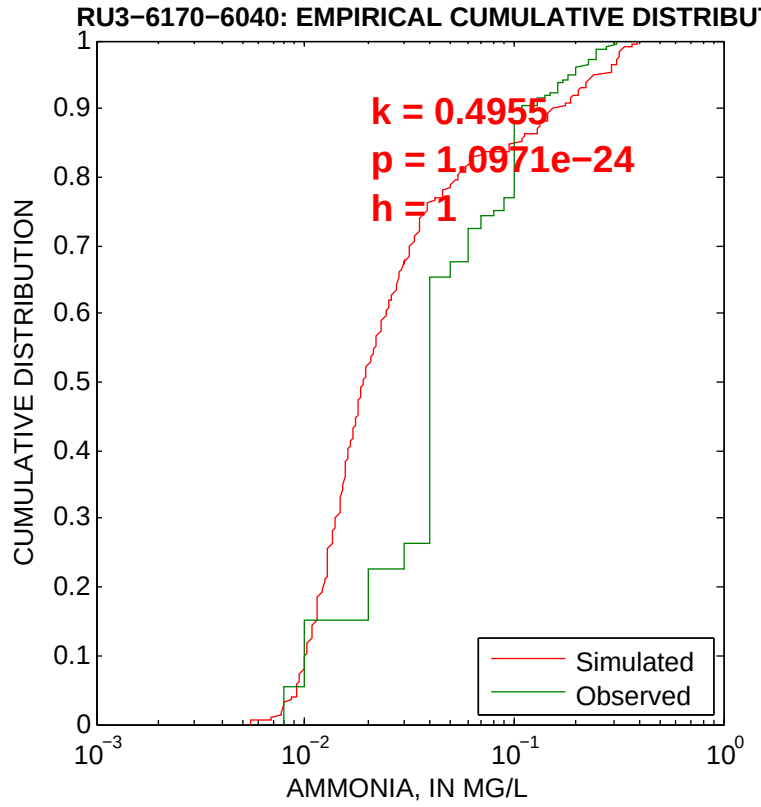
STATISTICS

		observe	simulate
n		10957	10957
min		1.5	16.243
		0.176091	1.21067
mean		566.945	562.246
		2.50446	2.54665
media		343	357.3
		2.53529	2.55303
max		43500	30424
		4.63849	4.48322
varian		1.12631e+0	841374
		0.215971	0.156671
JB		0.001	0.001
		0.001	0.001
		ra	log
%		-0.828771	1.68444
err.va		390803	0.046369
rel.std.err		0.346976	0.2147
mod.eff		0.653024	0.7853

VERSION 2.1







DATA SELECTION

scenario: P620171001WQ | file: NH3X.calib

plot: NH3X - ammonia

Dates: 1/1/1985 – 12/31/201

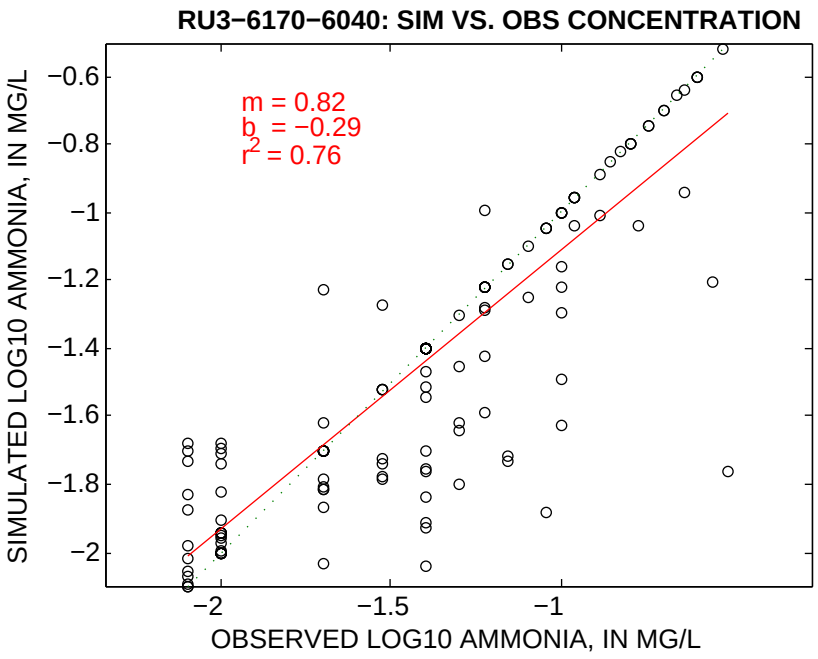
Drive | Directory | Observed: N/A | model | OBS20161101

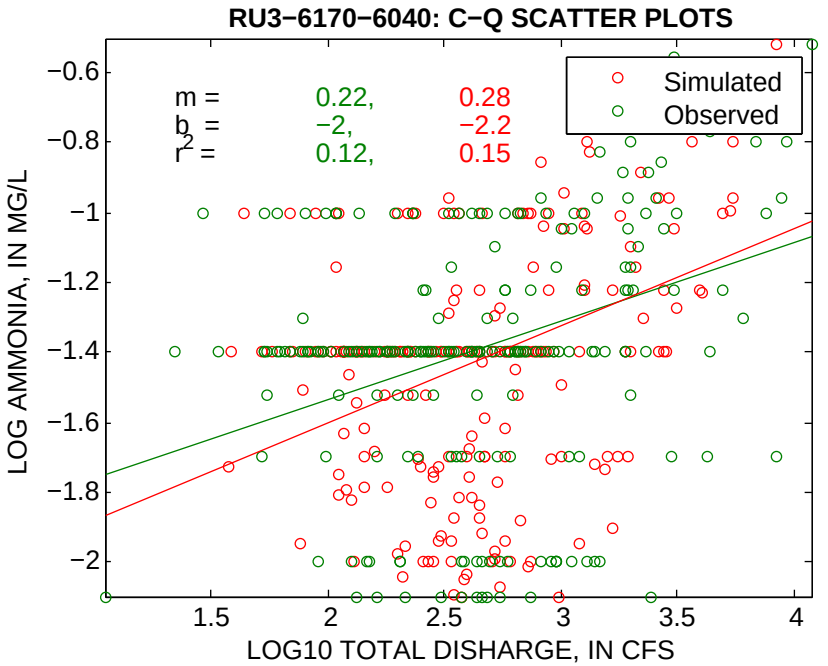
STATISTICS

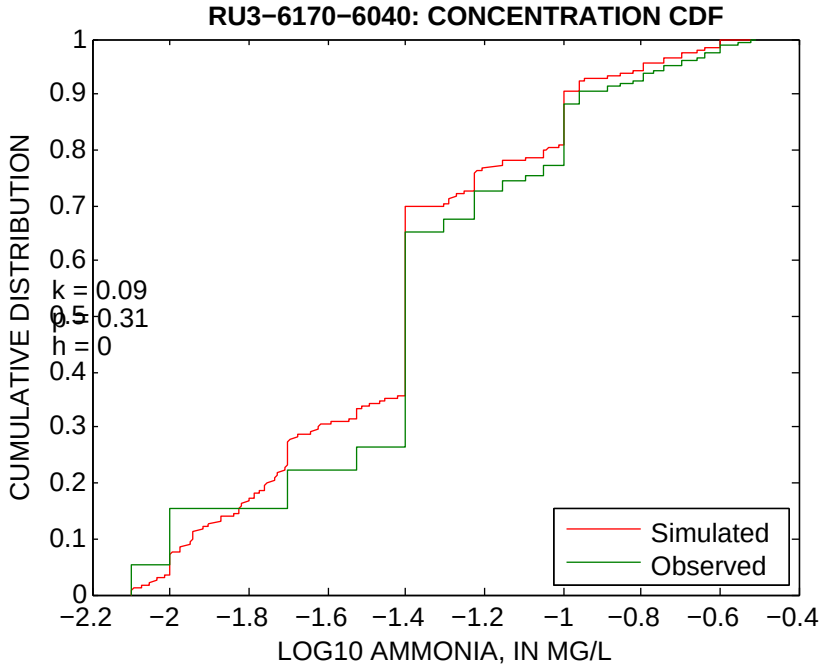
	n	observe	simulate
		222	222
min		0.008	0.0054698
		-2.09691	-2.26203
mean		0.0602973	0.0519761
		-1.37761	-1.57024
media		0.04	0.0191565
		-1.39794	-1.71768
max		0.31	0.39334
		-0.508638	-0.405232
varian		0.0032033	0.00616378
		0.144331	0.192952
JB		0.001	0.001
		0.5	0.001
		ra	log
% err.va		-13.8002	13.983
		0.0042182	0.214028
rel.std.err		1.31683	1.4829
mod.eff		-0.316832	-0.482895

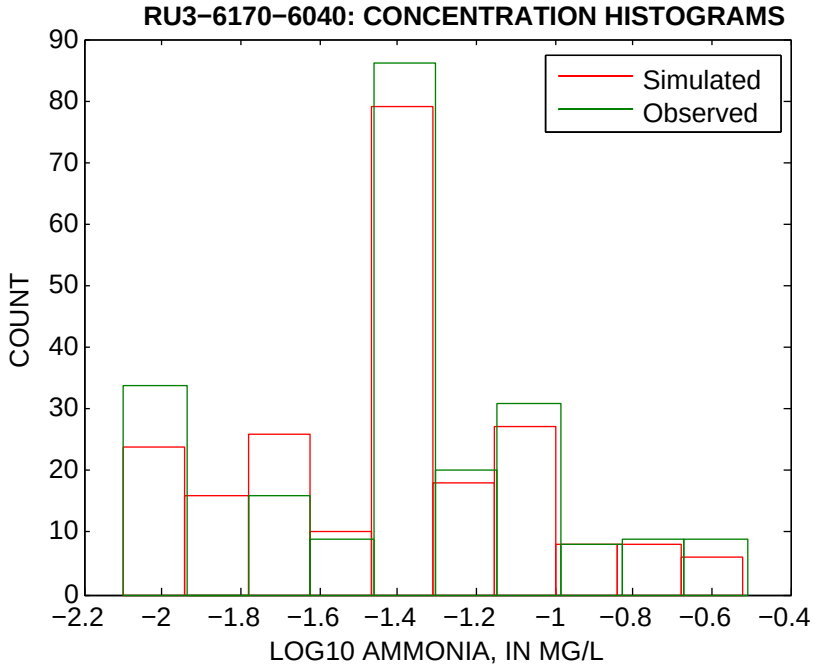
VERSION 2.1

ALL DATA
LOG10

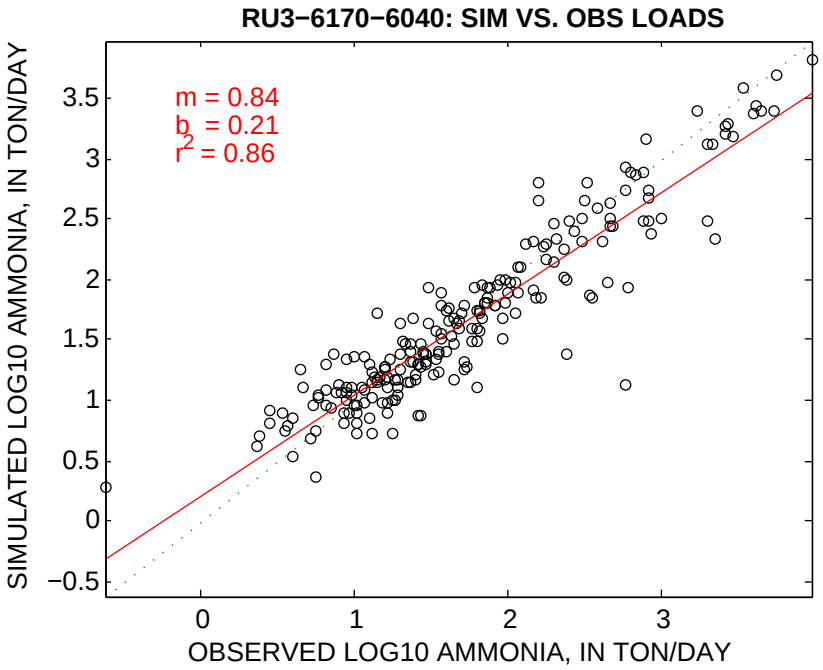


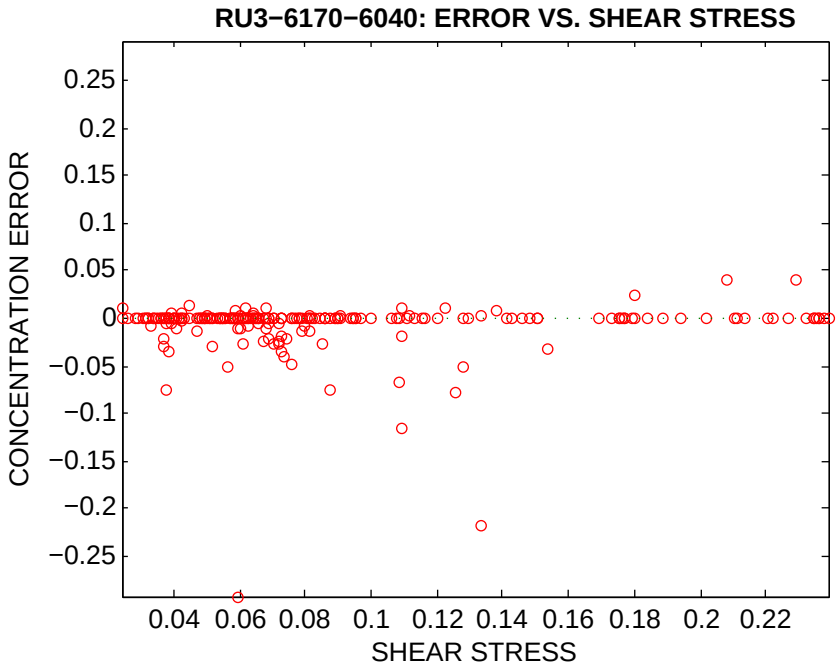


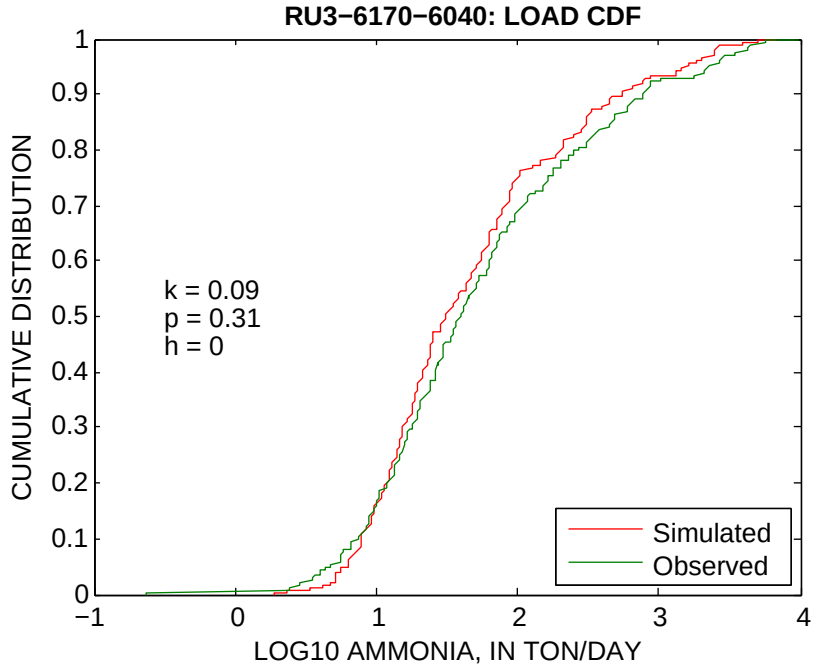


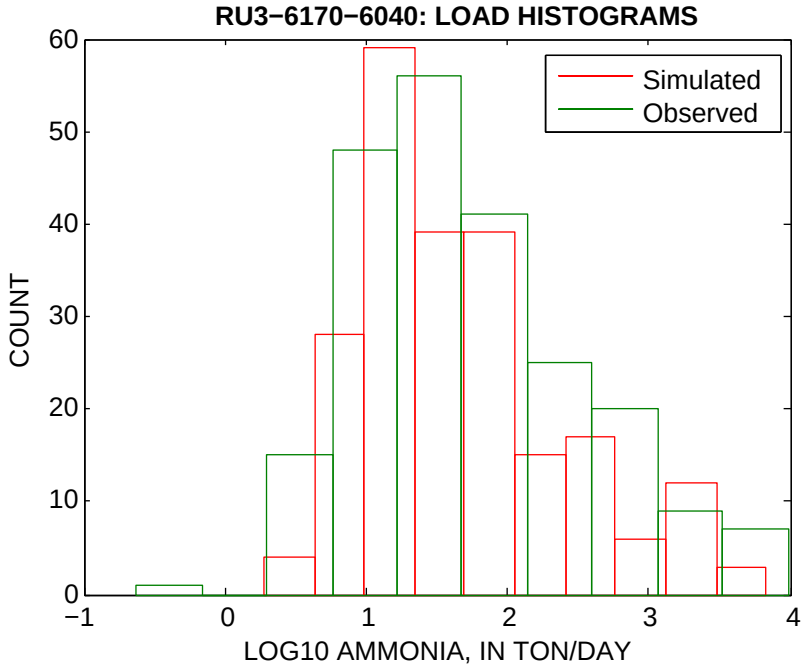


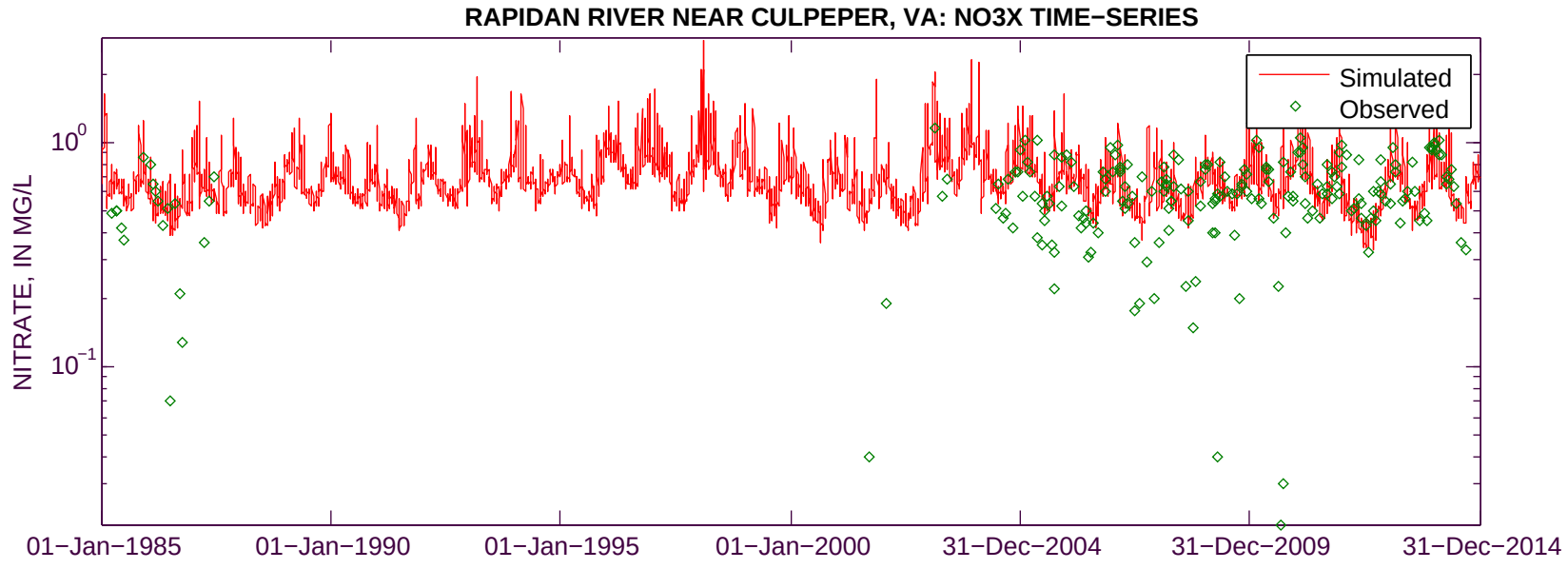
LOAD DATA
LOG10

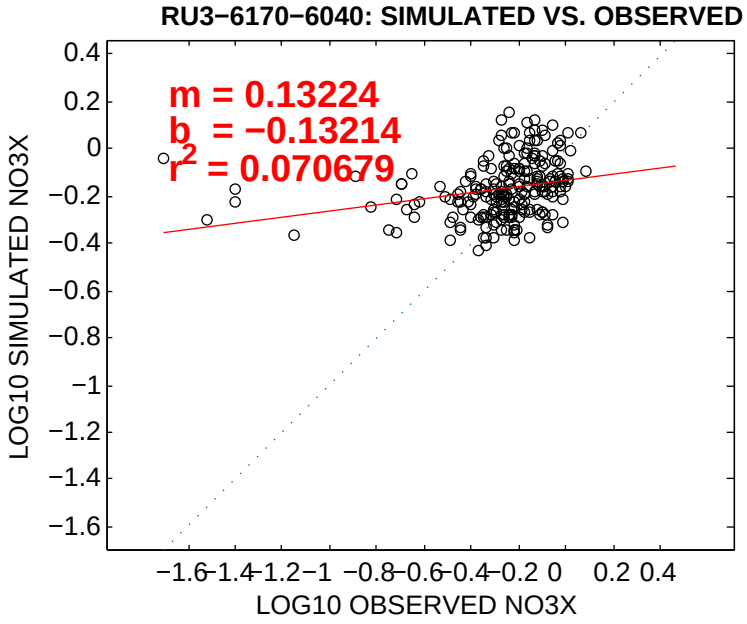


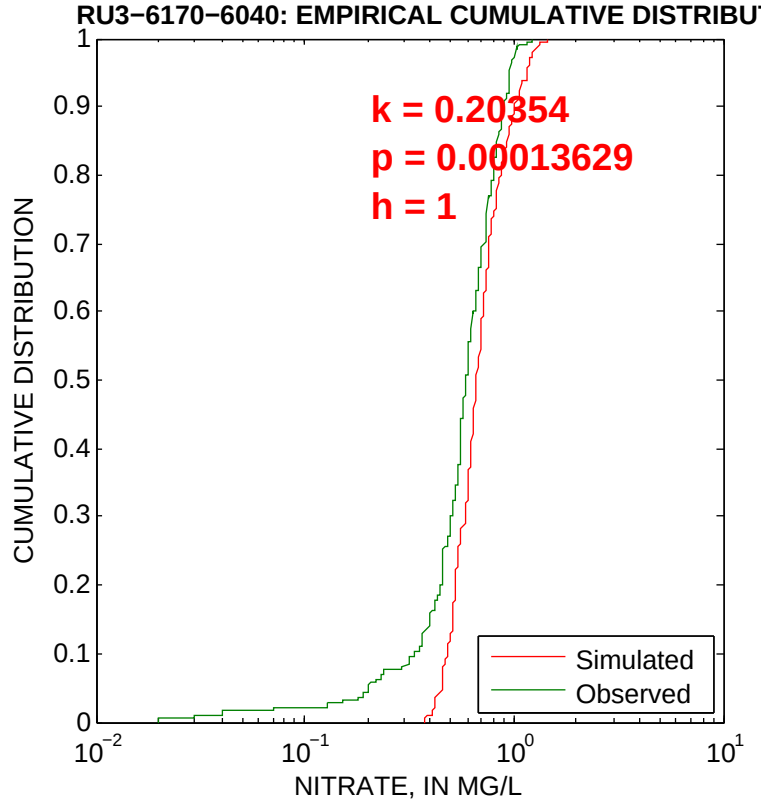












DATA SELECTION

scenario: P620171001WQ | file: NO3X.calib

plot: NO3X - nitrate

Dates: 1/1/1985 – 12/31/201

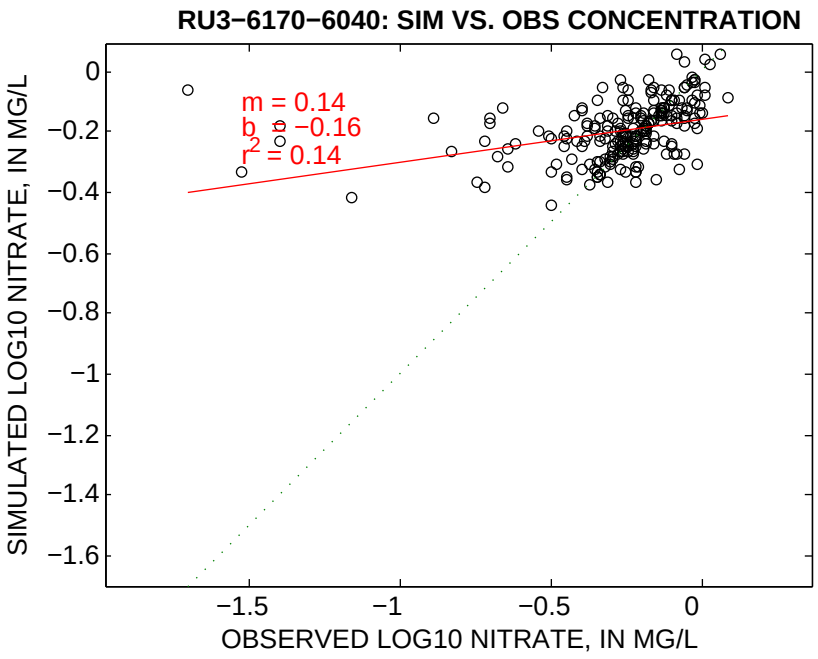
Drive: N/A | Directory: model | Observed: OBS20161101

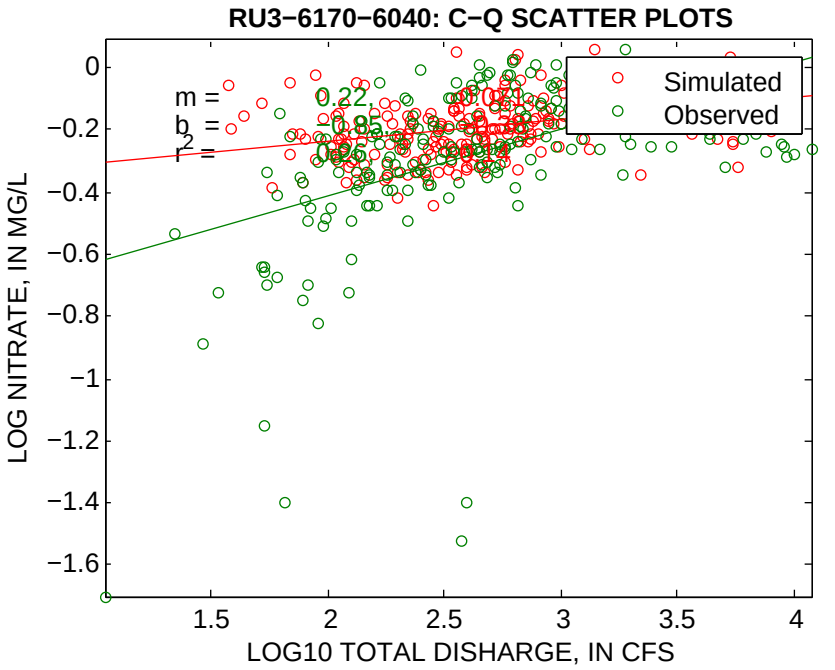
STATISTICS

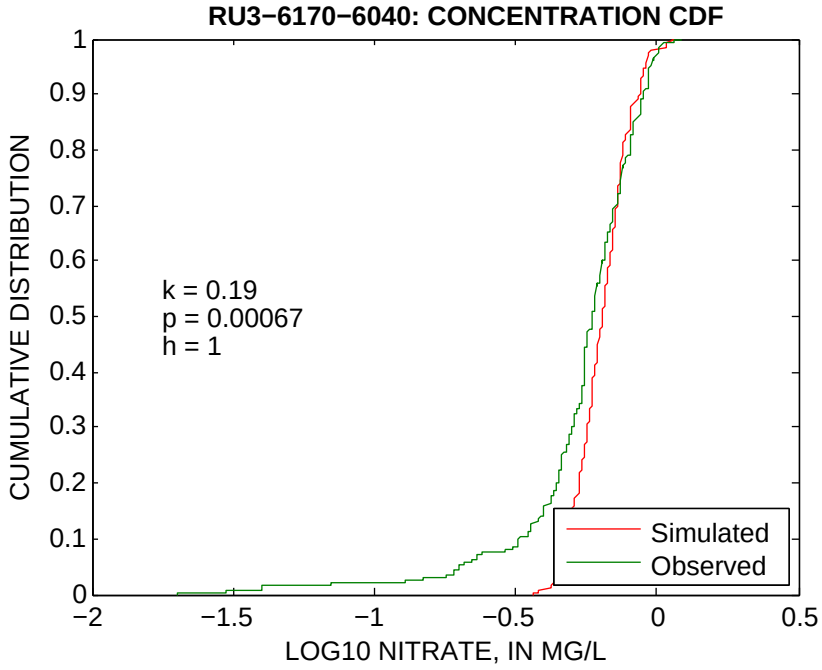
n	226	226
	observe	simulate
min	0.02	0.37392
	-1.69897	-0.427221
mean	0.603466	0.708253
	-0.265453	-0.167241
media	0.59	0.664365
	-0.229148	-0.177593
max	1.22	1.4407
	0.0863598	0.158574
varian	0.0488354	0.0440689
	0.0596509	0.0147587
JB	0.5	0.001
	0.001	0.047759
	ra	log
%	17.3641	-36.9979
err.va	0.0716671	0.0683217
rel.std.err	1.46752	1.14536
mod.eff	-0.467523	-0.145358

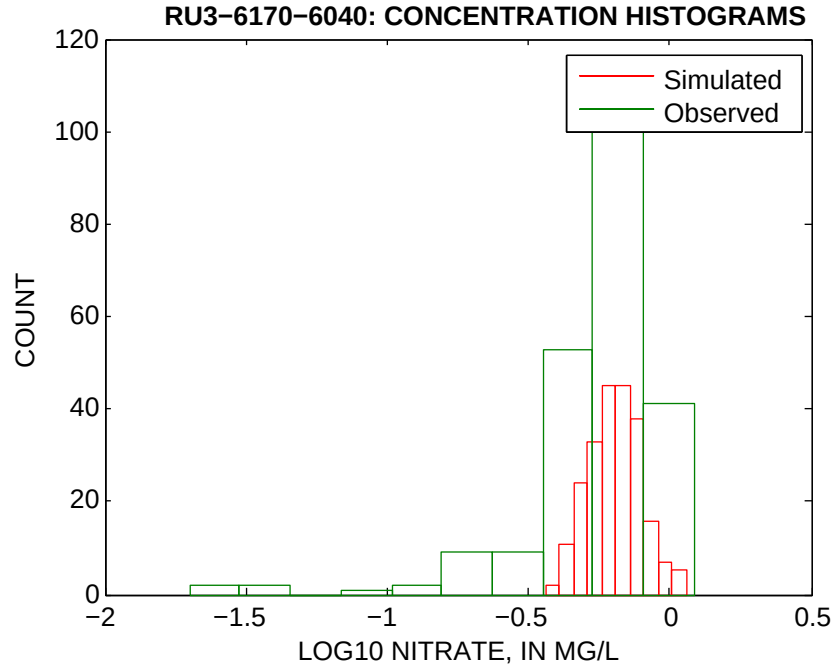
VERSION 2.1

ALL DATA
LOG10

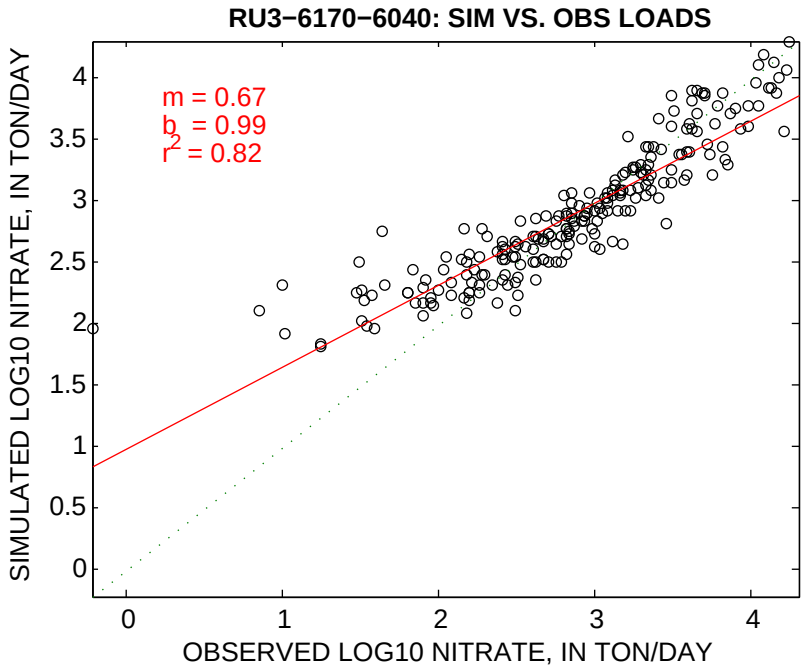


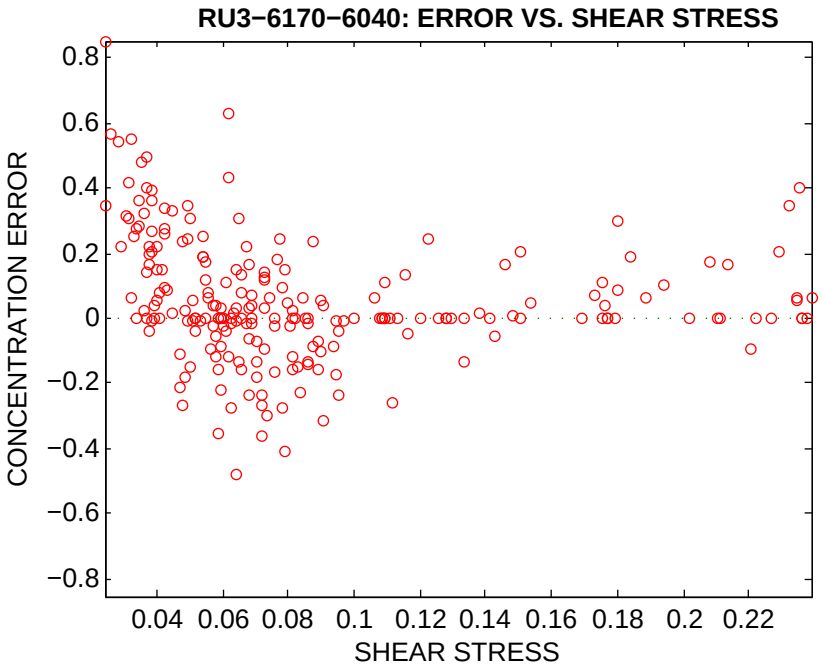


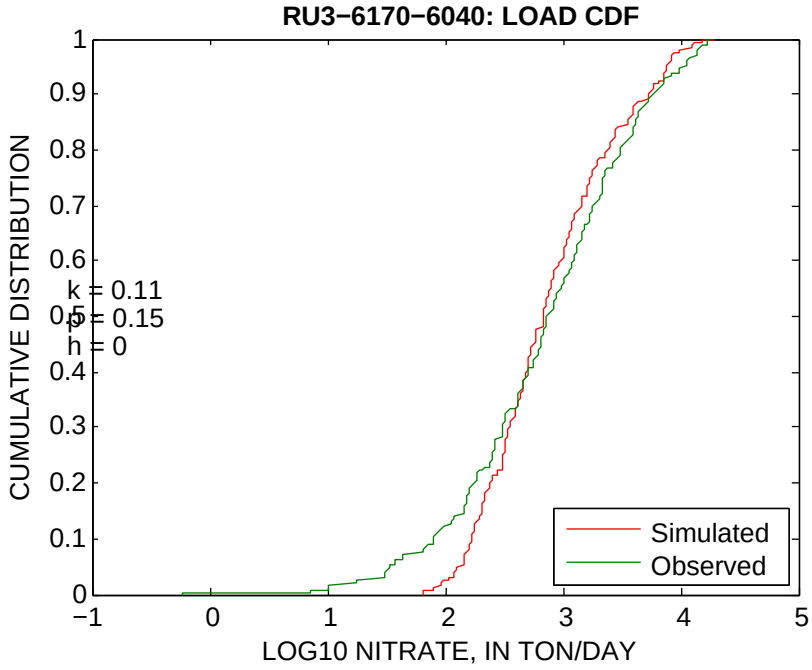


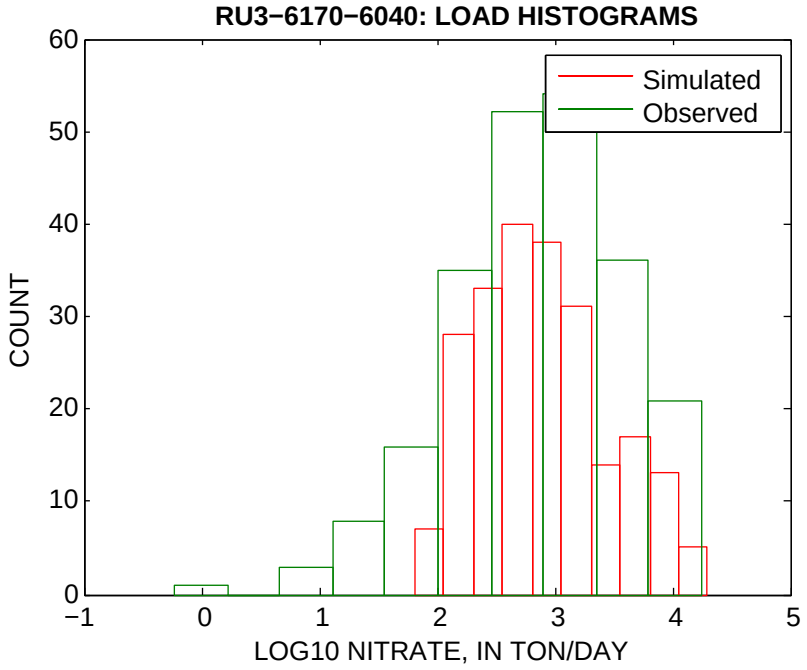


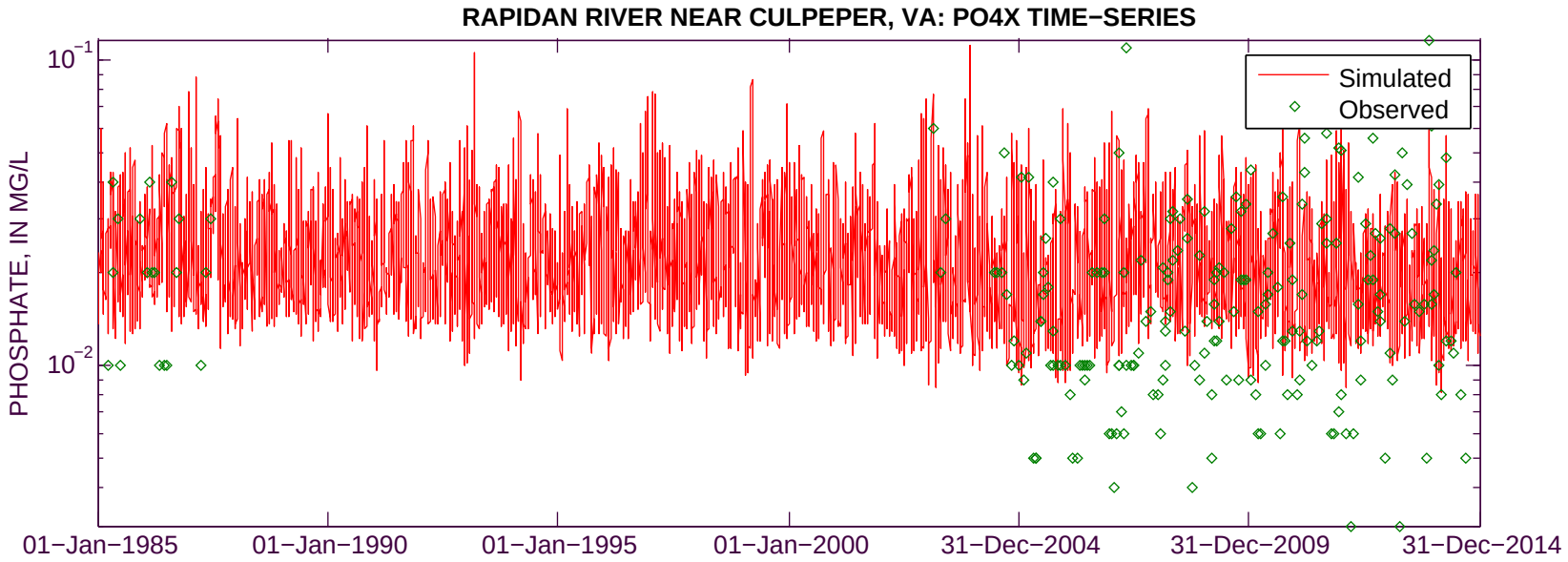
LOAD DATA
LOG10

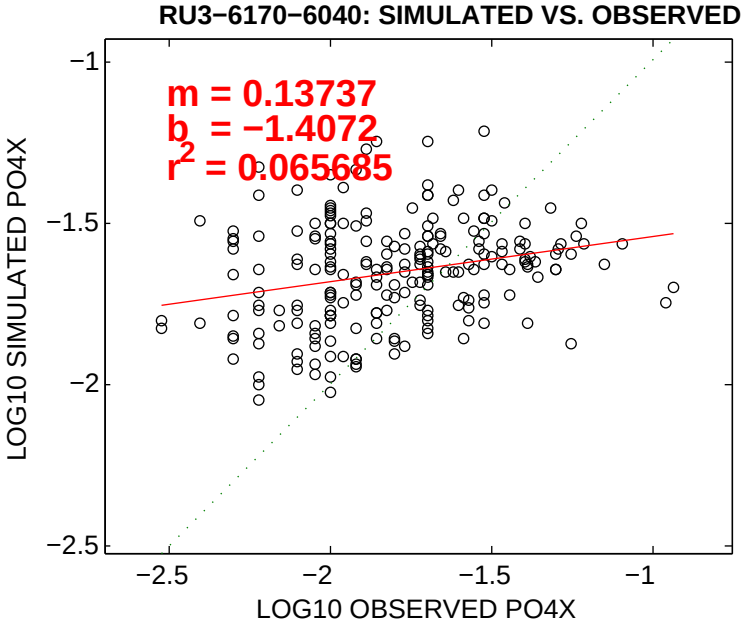


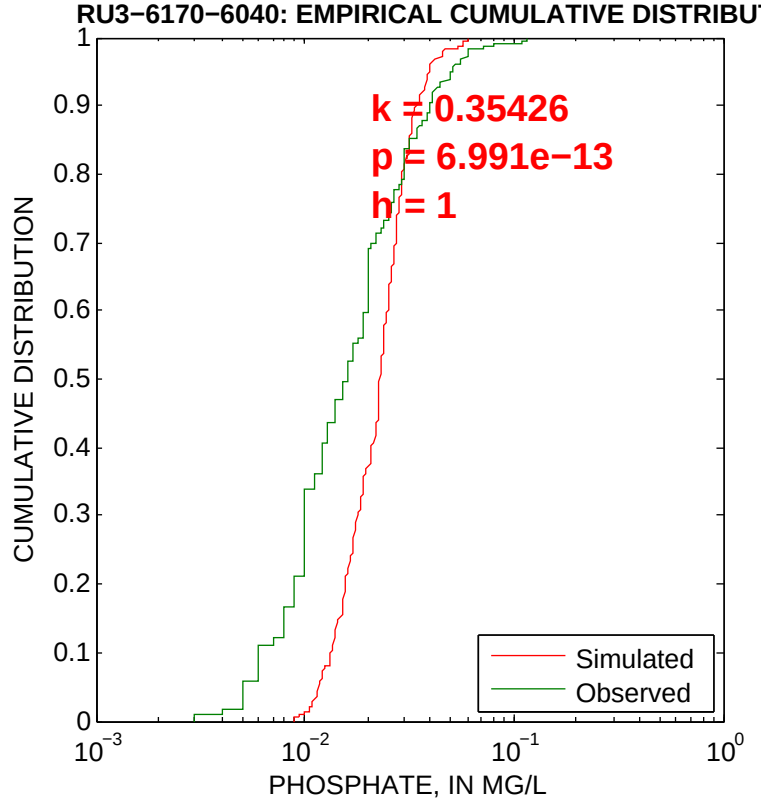












DATA SELECTION

scenario: P620171001WQ | file: PO4X.calib

plot: PO4X - phosphate

Dates: 1/1/1985 – 12/31/201

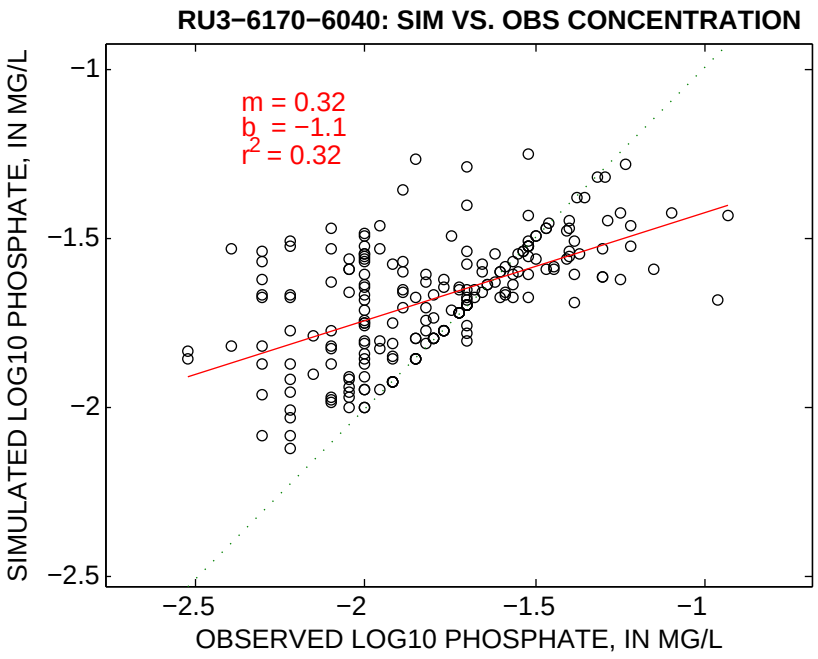
Drive | Directory | Observed: N/A | model | OBS20161101

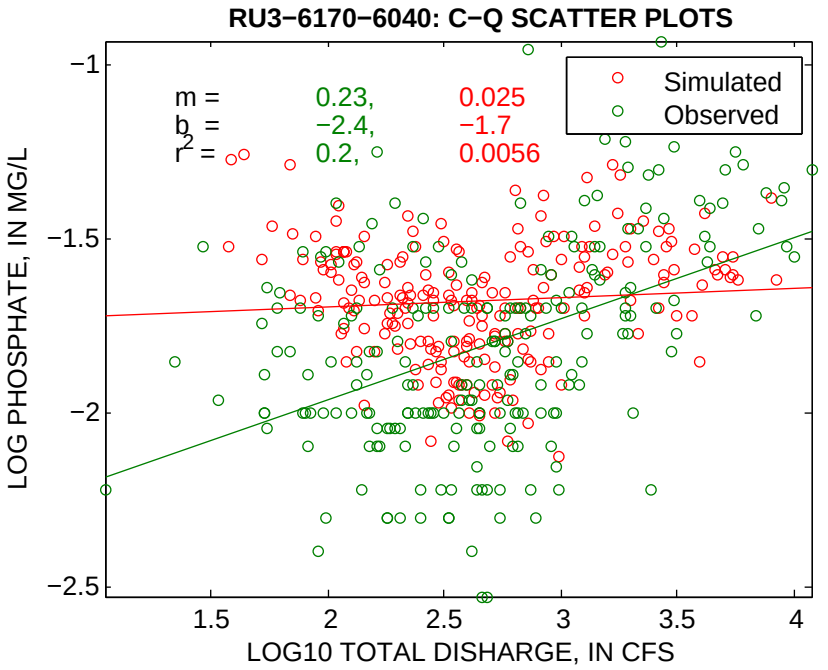
STATISTICS

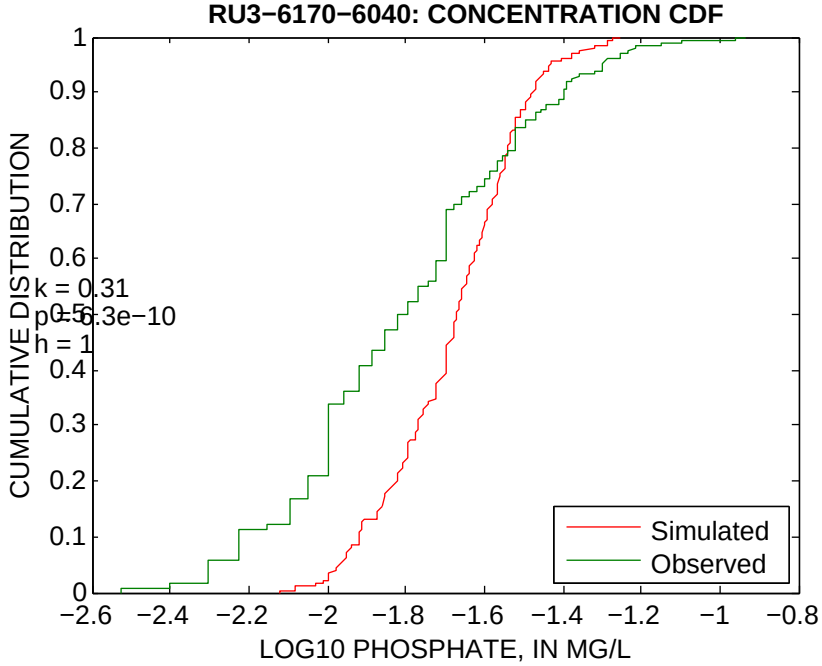
	n	observe	simulate
		223	223
min		0.003	0.0089493
		-2.52288	-2.04821
mean		0.0202152	0.0237004
		-1.80035	-1.65455
media		0.016	0.022992
		-1.79588	-1.63842
max		0.117	0.060581
		-0.931814	-1.21766
varian		0.00026354	8.0377e-05
		0.0894754	0.0257057
JB		0.001	0.001
		0.330169	0.5
		ra	log
%		17.2404	-8.09803
err.va		0.00032136	0.11195
rel.std.err		1.21938	1.25118
mod.eff		-0.219384	-0.251178

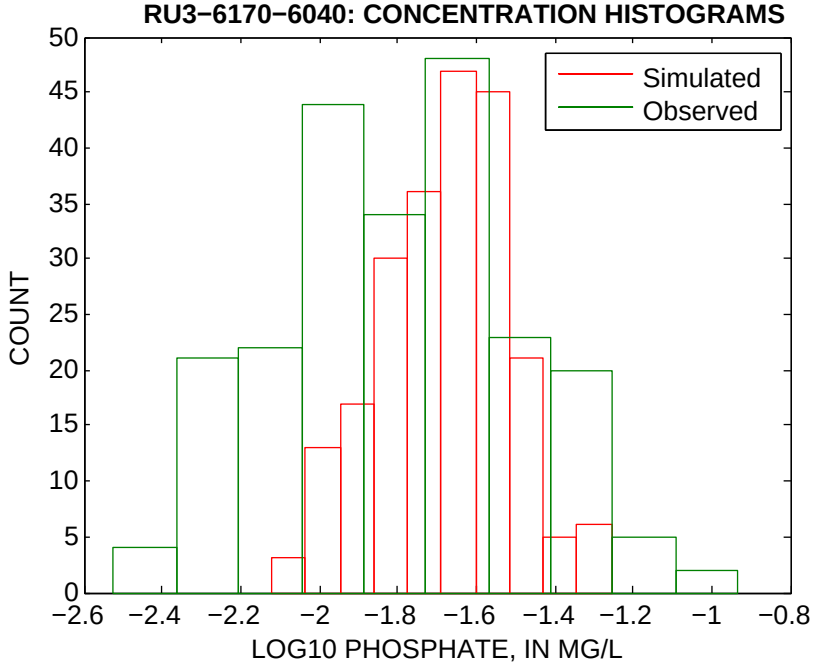
VERSION 2.1

ALL DATA
LOG10

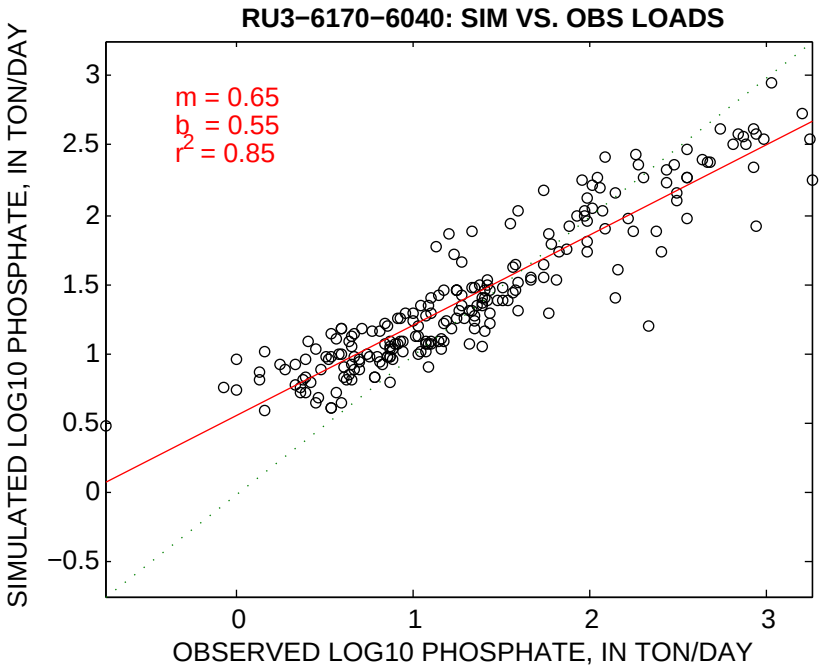


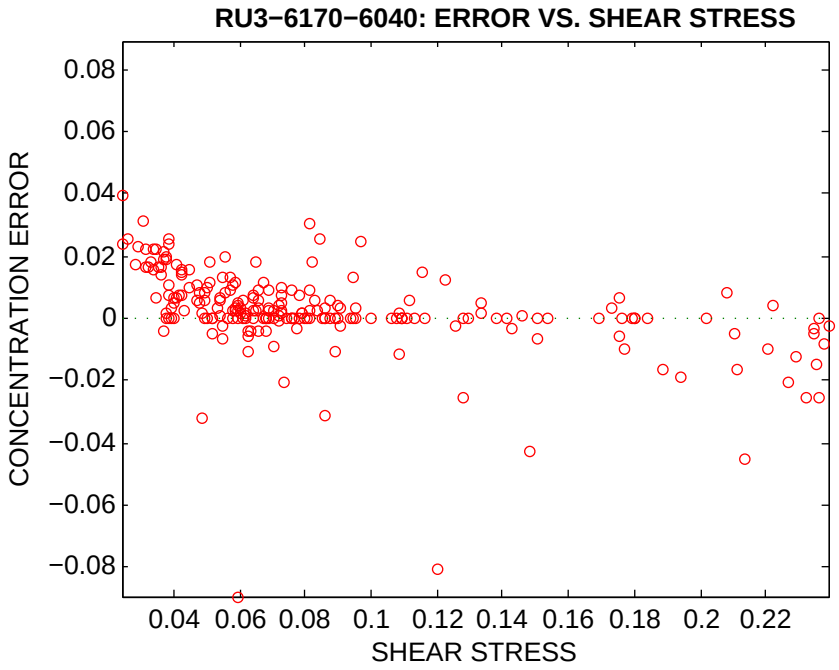


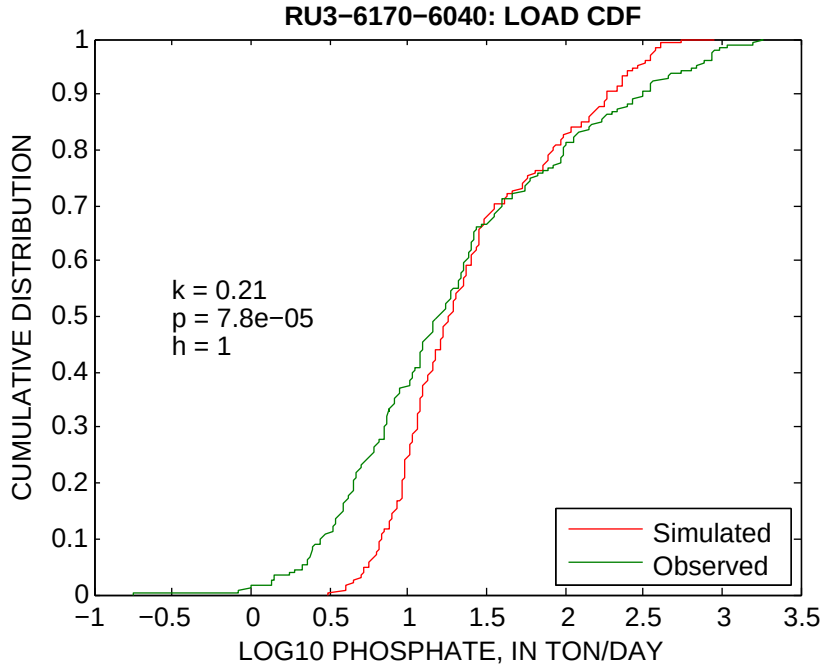


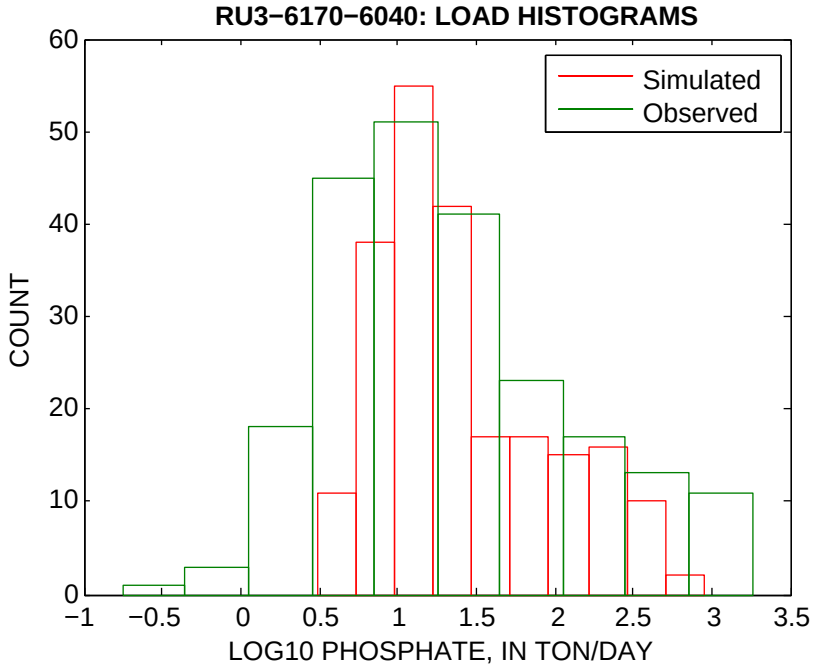


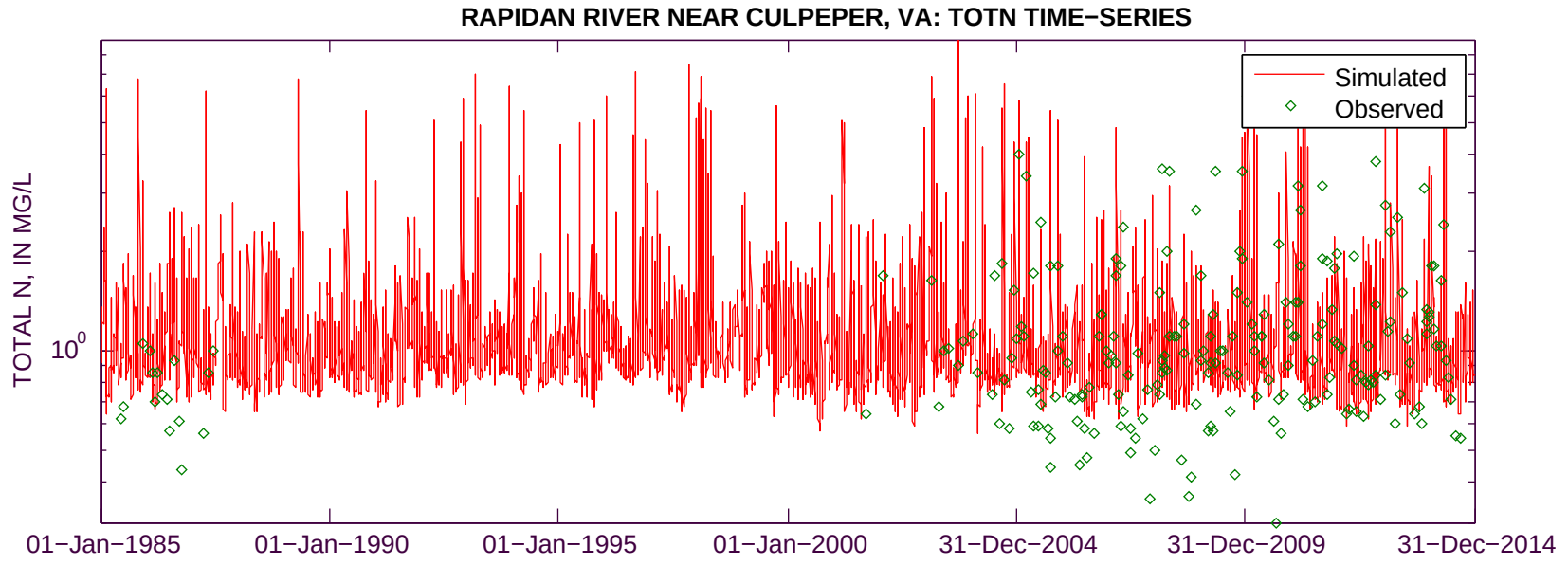
LOAD DATA
LOG10

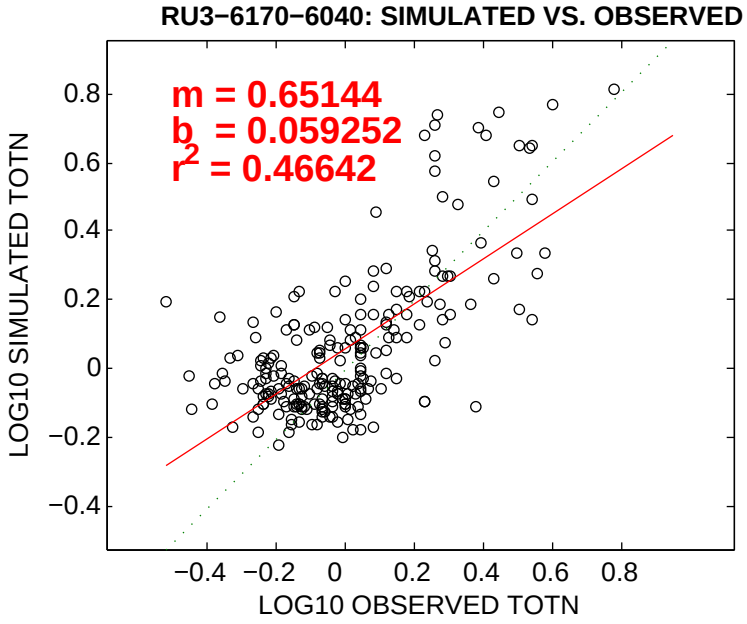


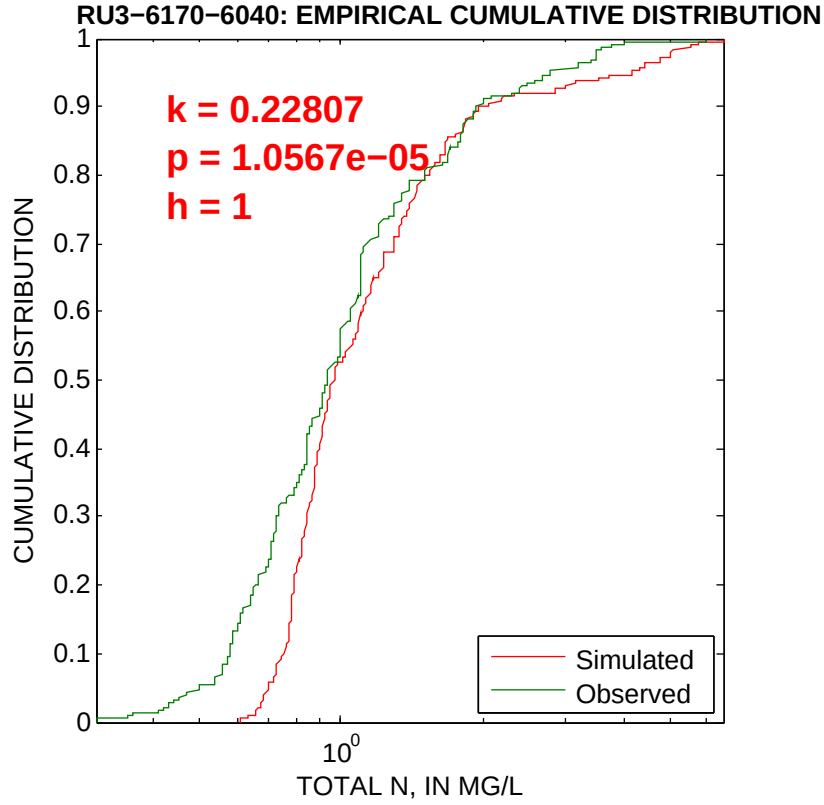












DATA SELECTION

scenario	file
P620171001WQ	TOTN.calib

plot: TOTN - total nitrogen

Dates: 1/1/1985 – 12/31/201

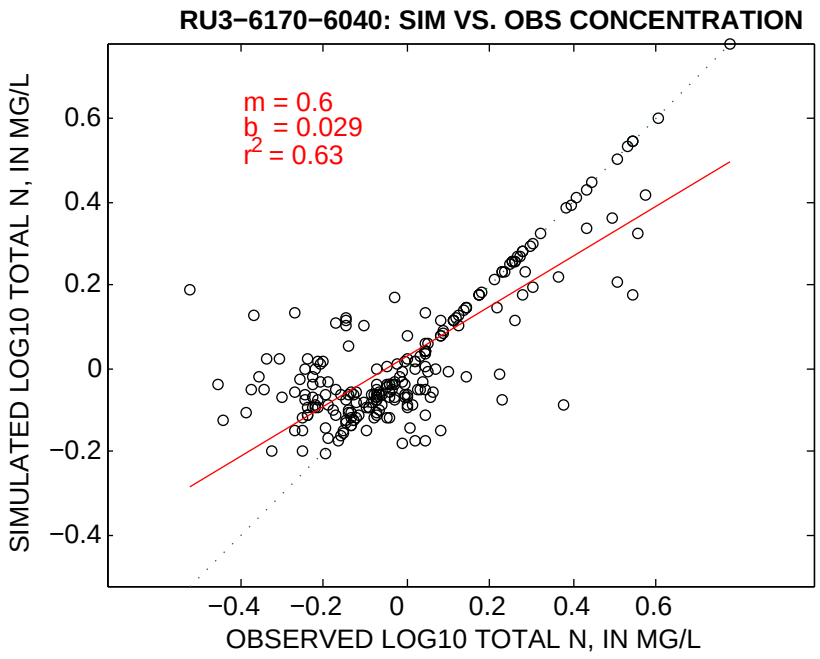
Drive	Directory	Observed
N/A	model	OBS20161101

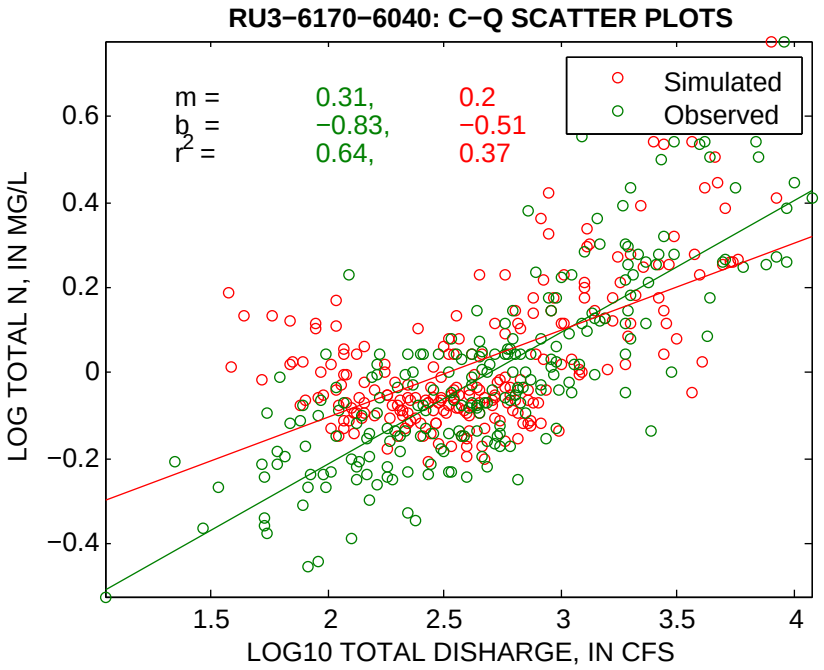
STATISTICS

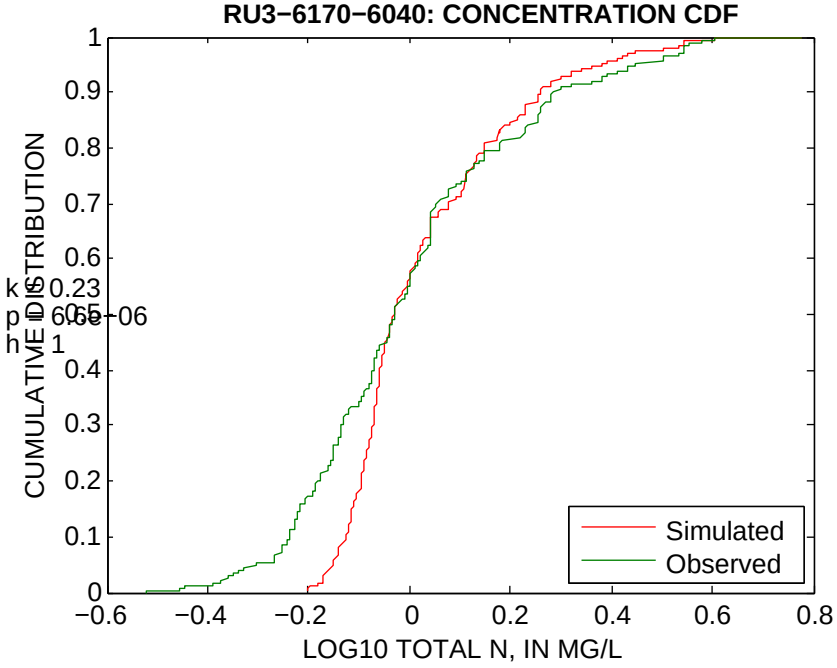
	n	observe	simulate
		228	228
min		0.3	0.60717
		-0.522879	-0.21669
mean		1.16537	1.34283
		0.00215809	0.0606579
media		0.935	0.965855
		-0.0291946	-0.0150927
max		6	6.5027
		0.778151	0.813094
varian		0.586293	1.02709
		0.0496016	0.0451306
JB		0.001	0.001
		0.001606	0.001
		ra	log
%		15.2286	2710.72
err.va		0.516032	0.0335442
rel.std.err		0.88016	0.676273
mod.eff		0.11984	0.323727

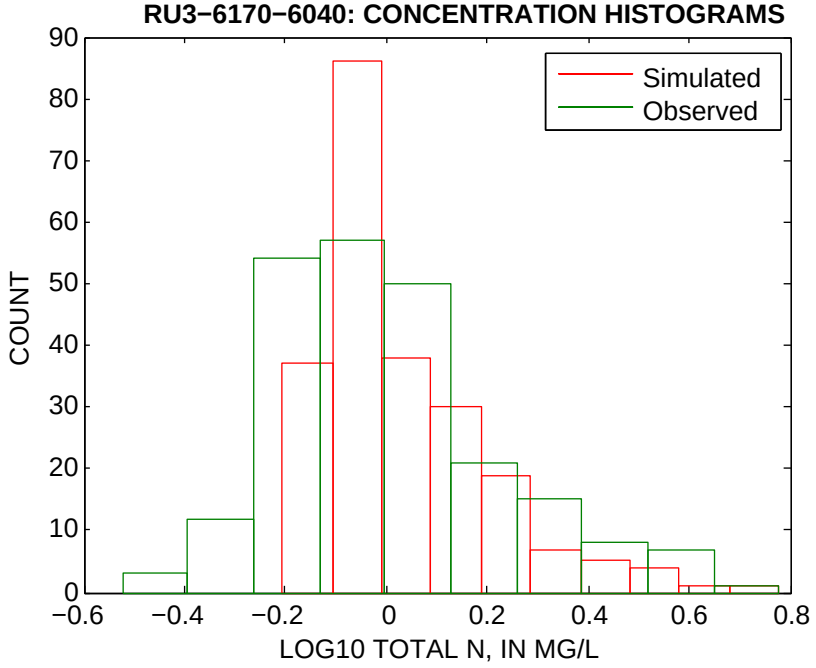
VERSION 2.1

ALL DATA
LOG10

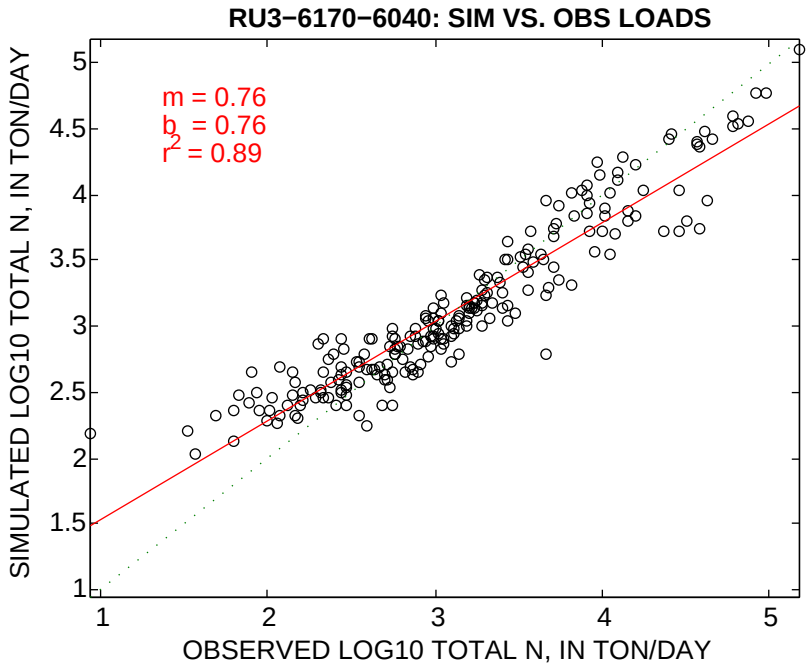


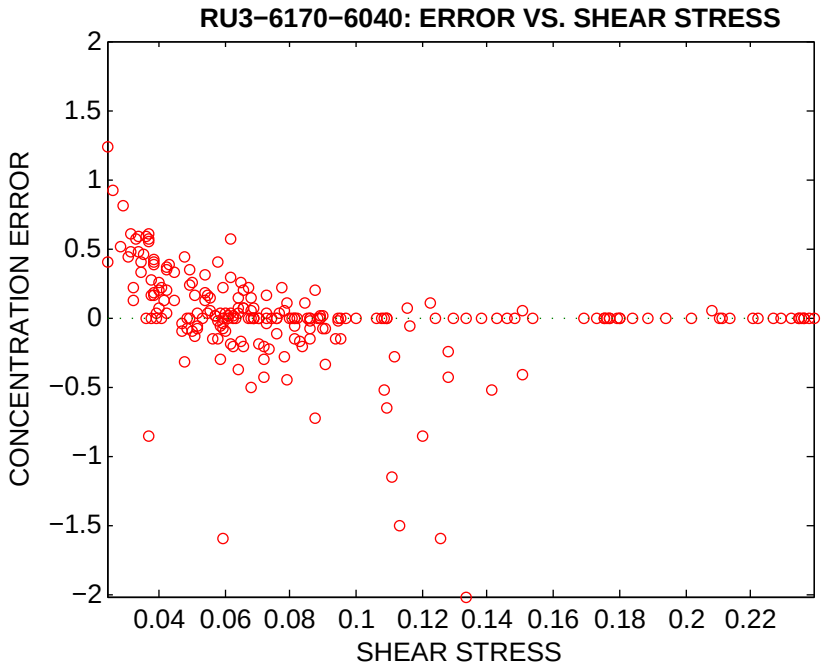


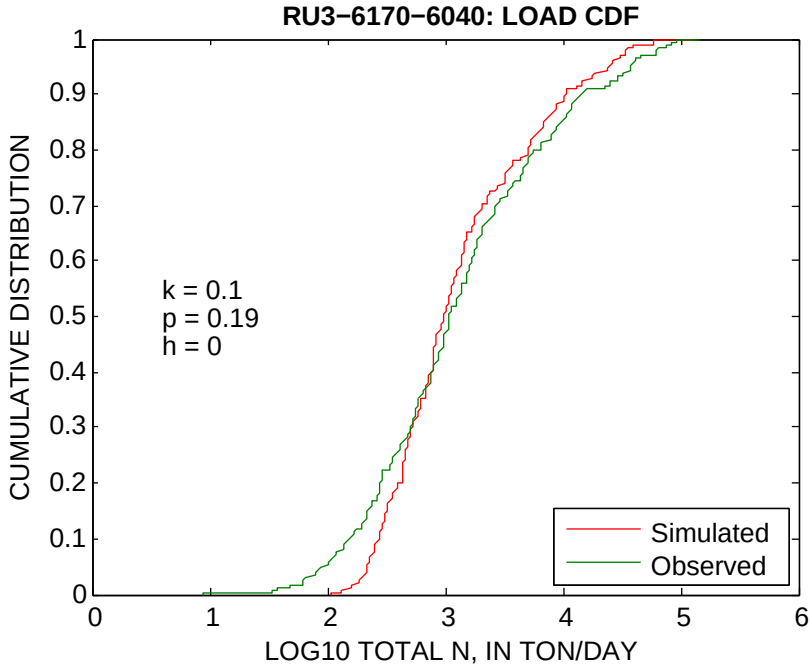


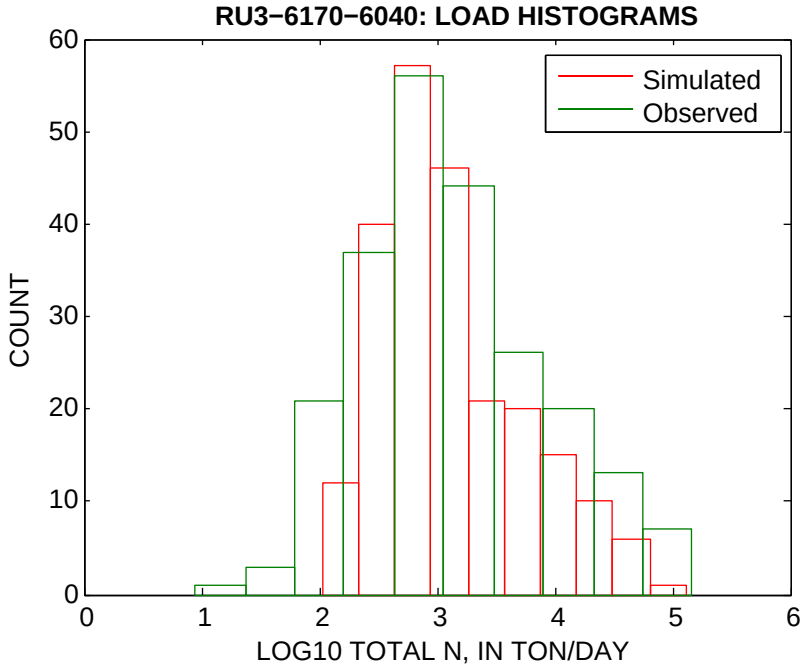


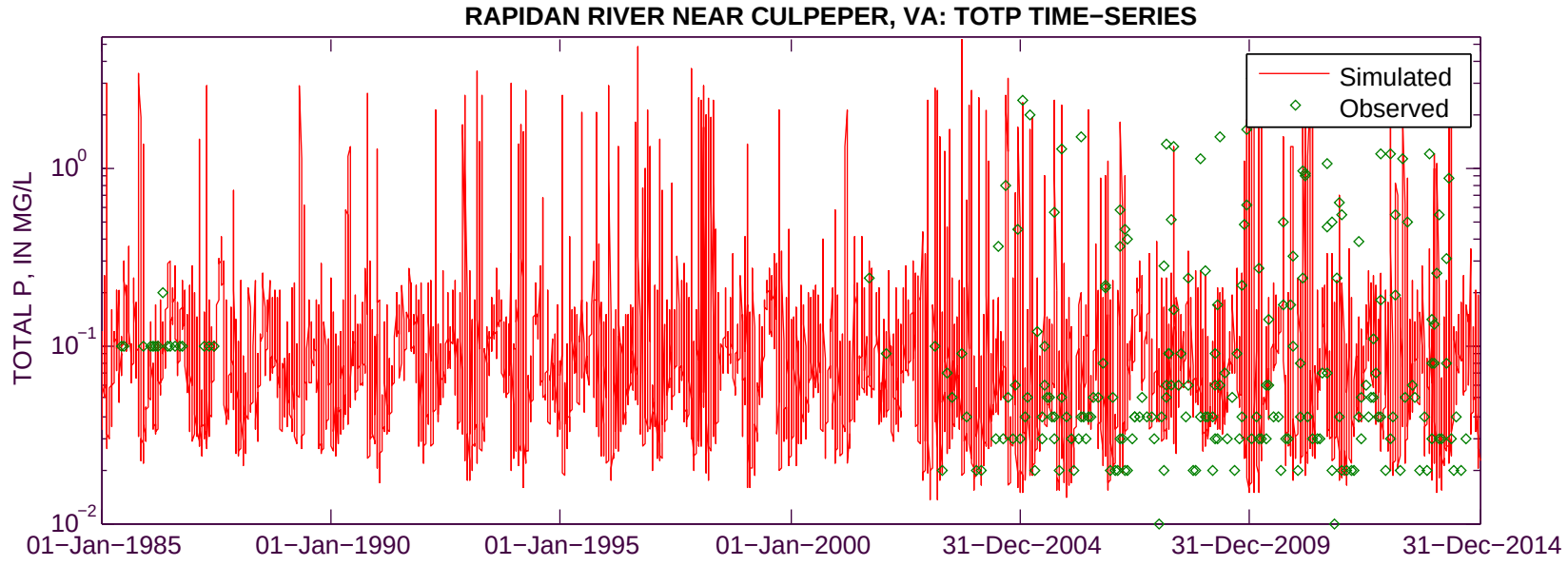
LOAD DATA
LOG10

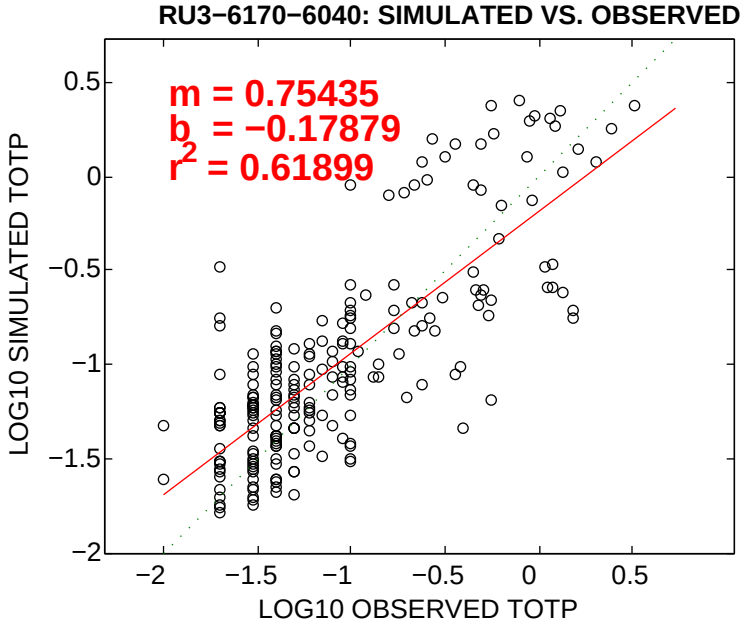


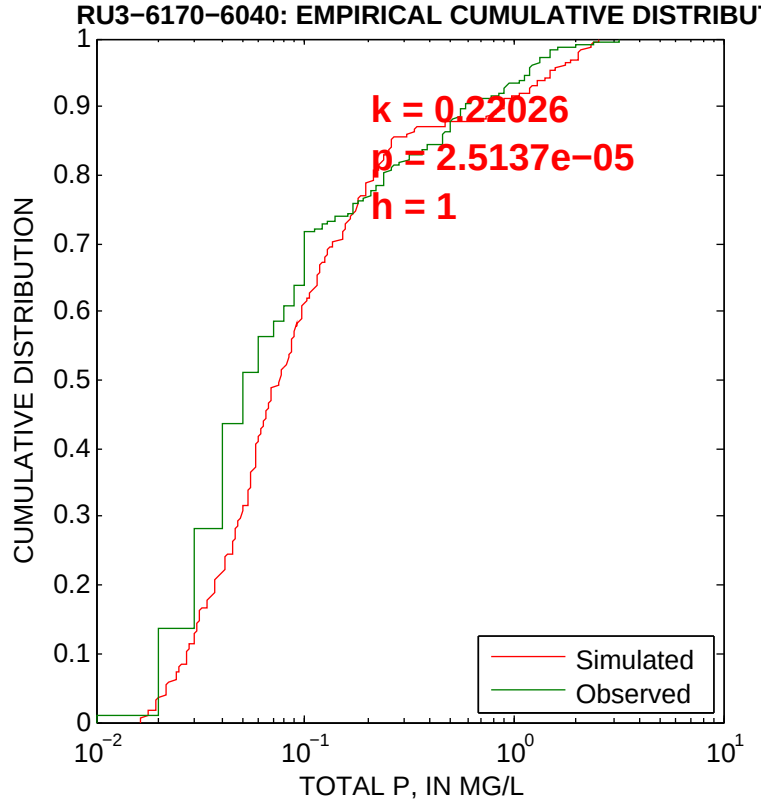












DATA SELECTION

scenario	file
P620171001WQ	TOTP.calib

plot: TOTP - total phosphorus

Dates: 1/1/1985 – 12/31/201

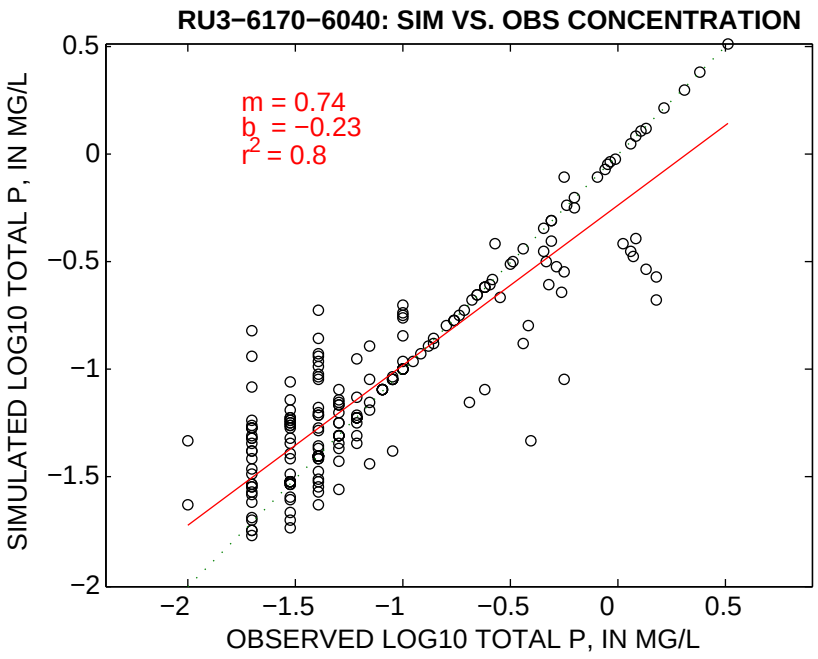
Drive	Directory	Observed
N/A	model	OBS20161101

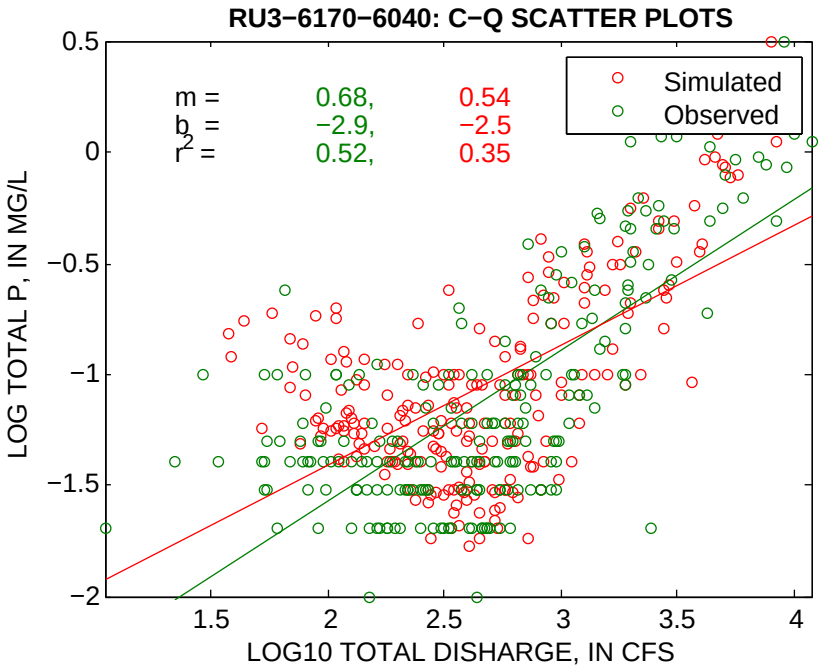
STATISTICS

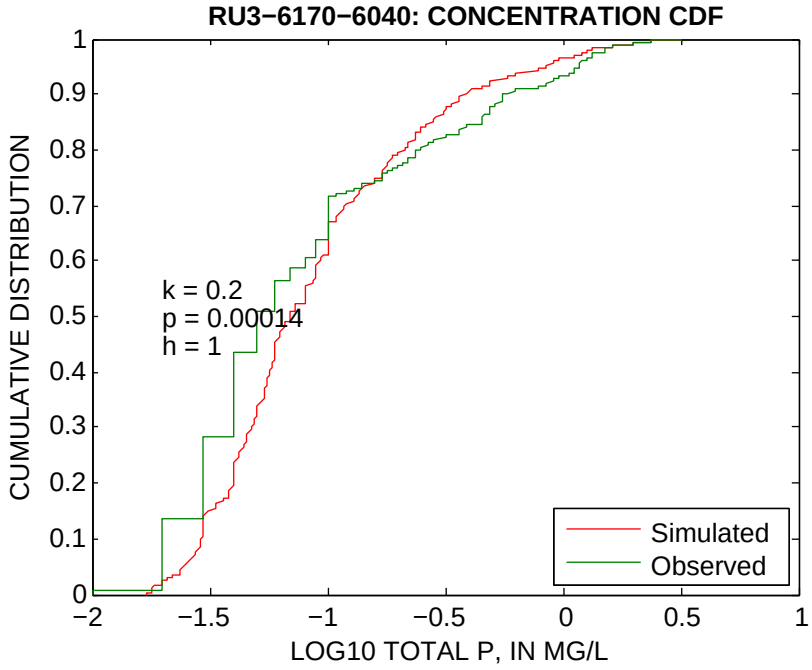
	n	observe	simulate
		227	227
min		0.01	0.01626
		-2	-1.78888
mean		0.219119	0.260231
		-1.08866	-1.00002
media		0.05	0.077287
		-1.30103	-1.11189
max		3.21	2.5745
		0.506505	0.410693
varian		0.175559	0.246046
		0.300792	0.27652
JB		0.001	0.001
		0.001	0.001
		ra	log
%		18.7626	-8.14252
err.va		0.143757	0.131401
rel.std.err		0.818855	0.436851
mod.eff		0.181145	0.563149

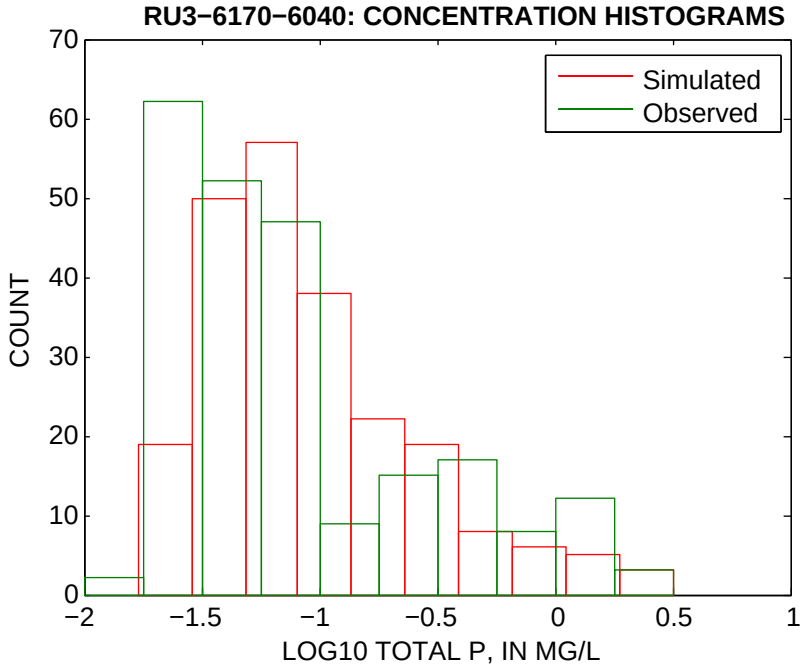
VERSION 2.1

ALL DATA
LOG10

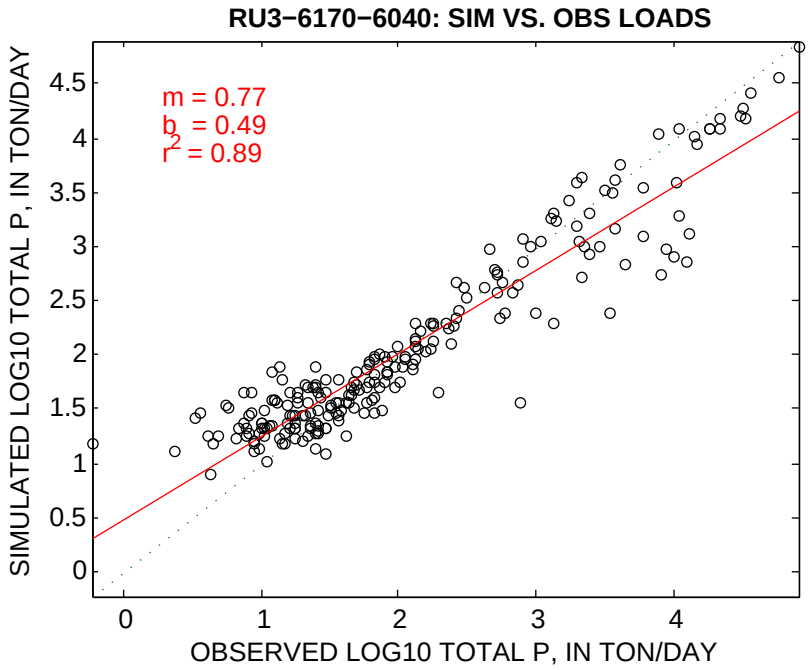


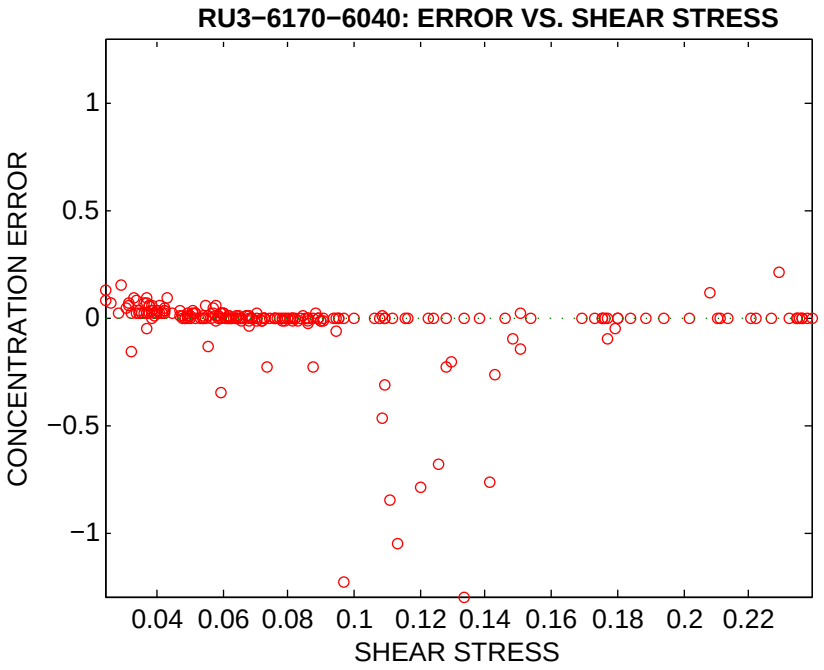


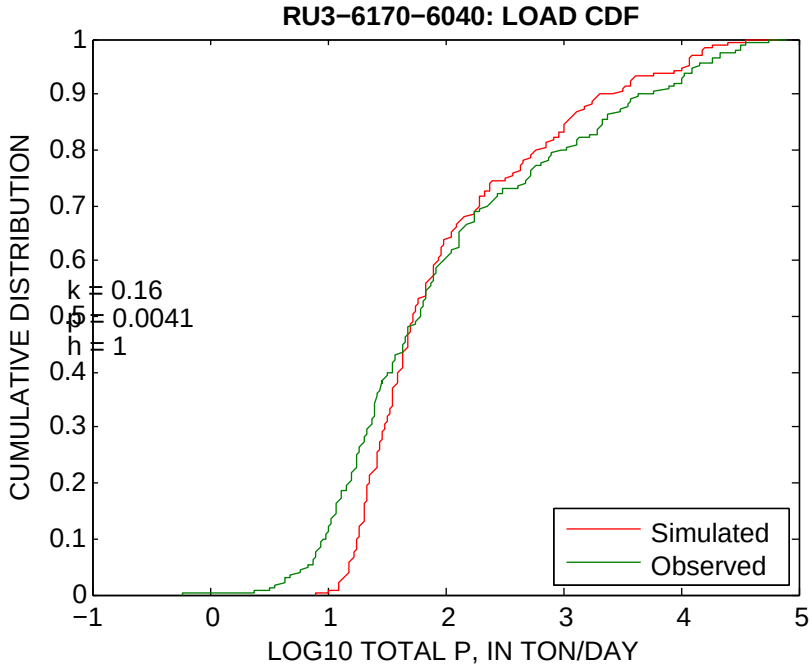


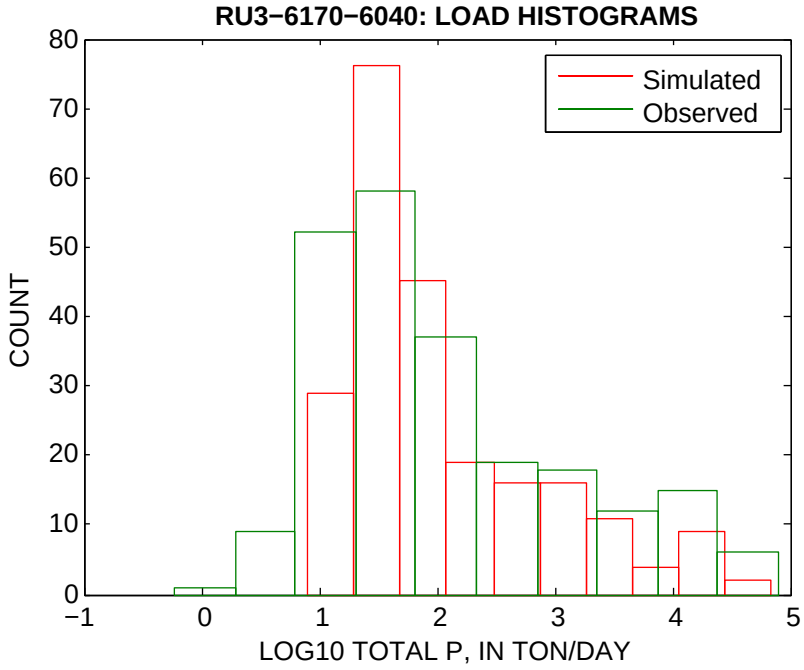


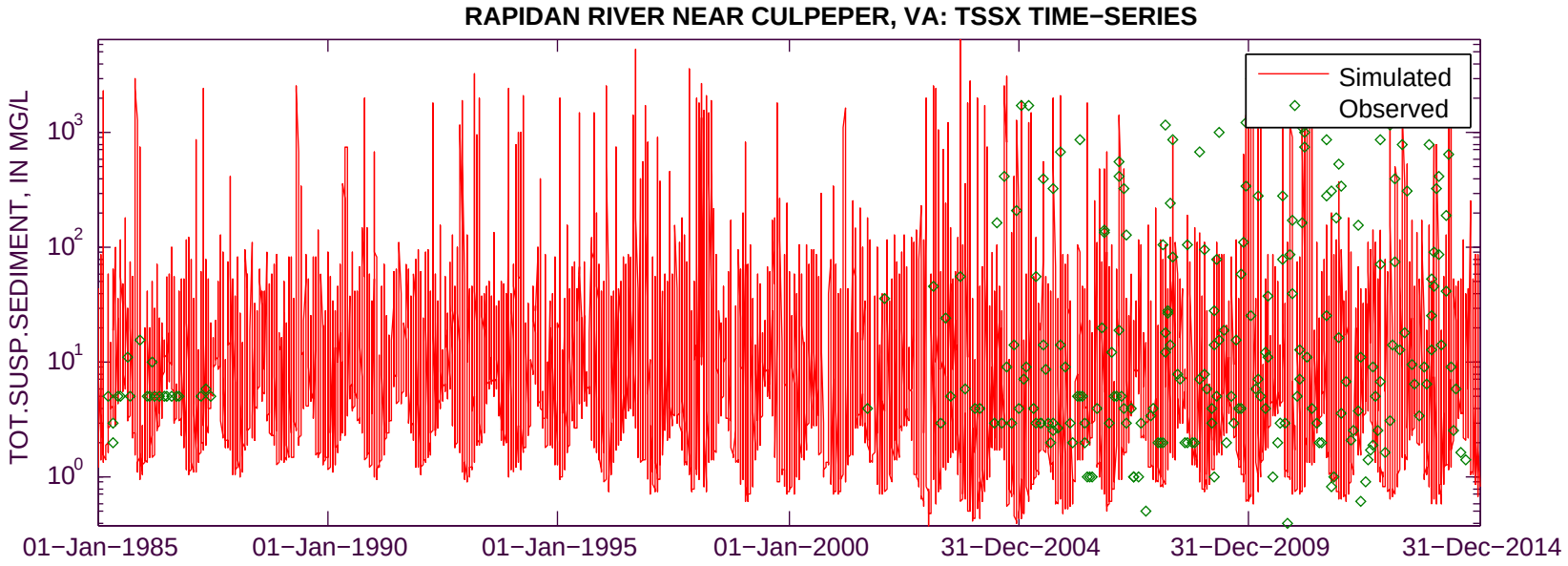
LOAD DATA
LOG10

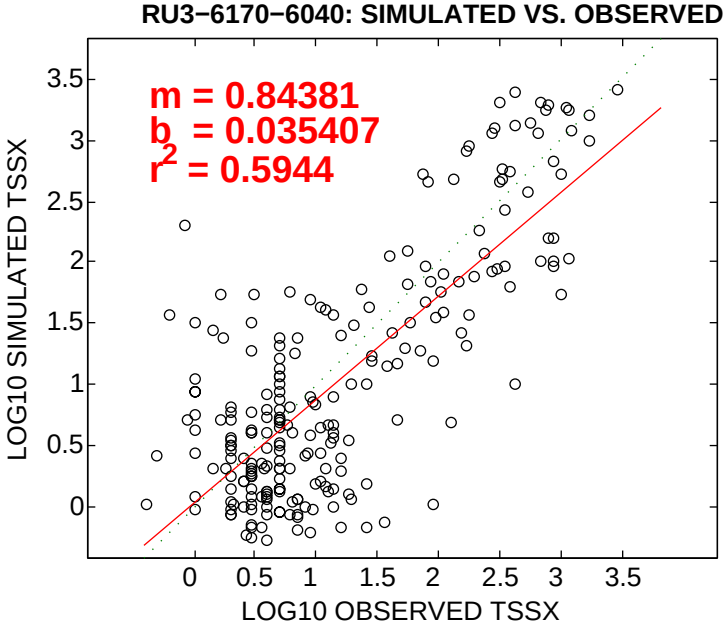


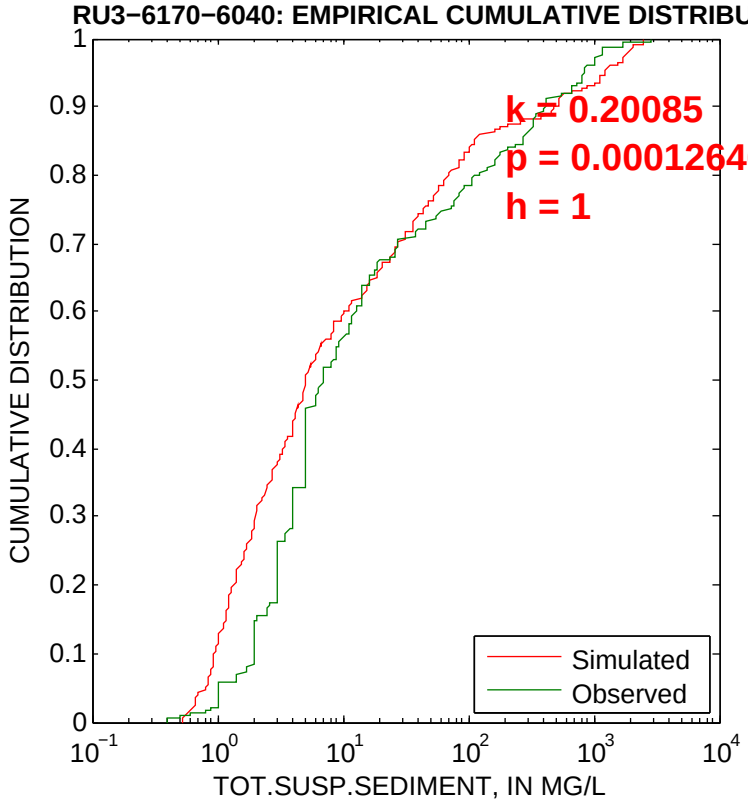












DATA SELECTION

scenario	file
P620171001WQ	TSSX.calib

plot: TSSX - total suspended ...

Dates: 1/1/1985 – 12/31/201

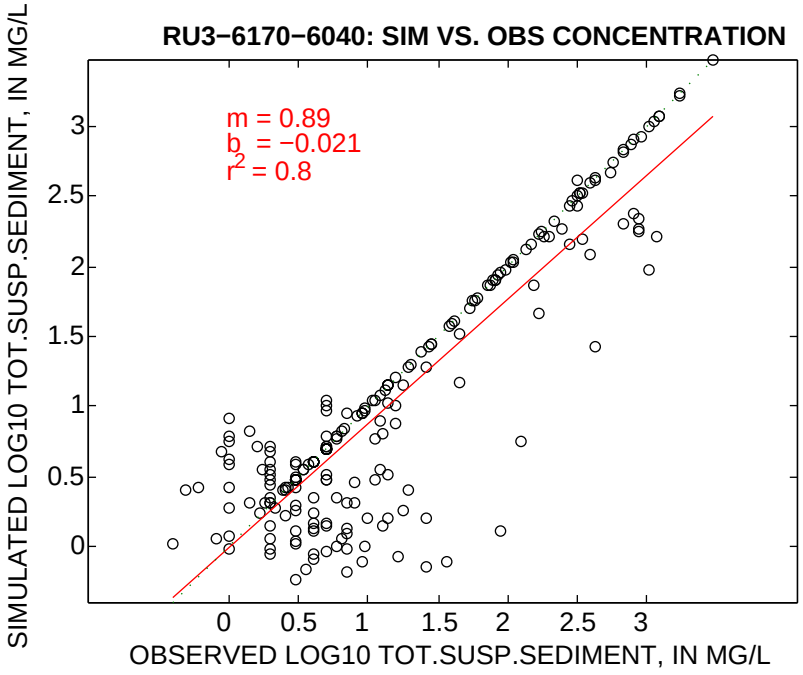
Drive	Directory	Observed
N/A	model	OBS20161101

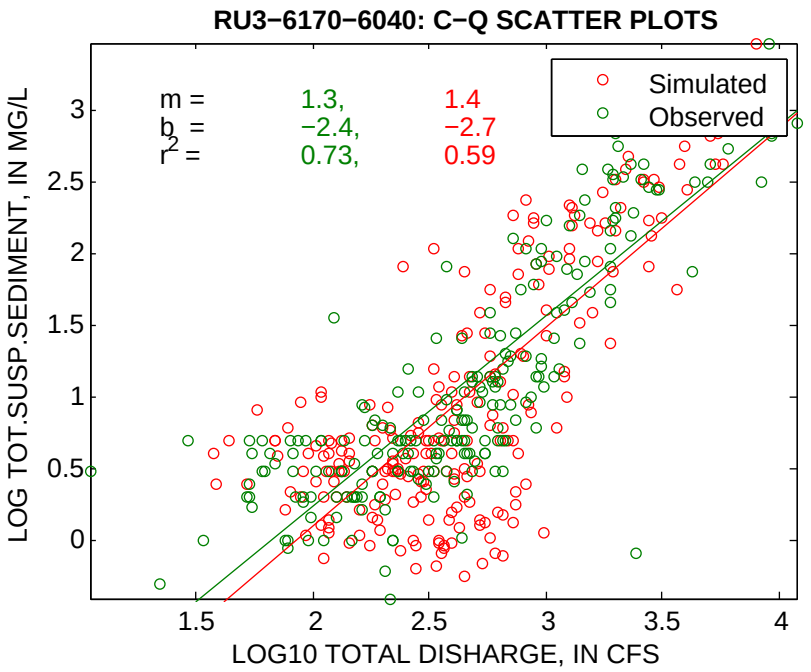
STATISTICS

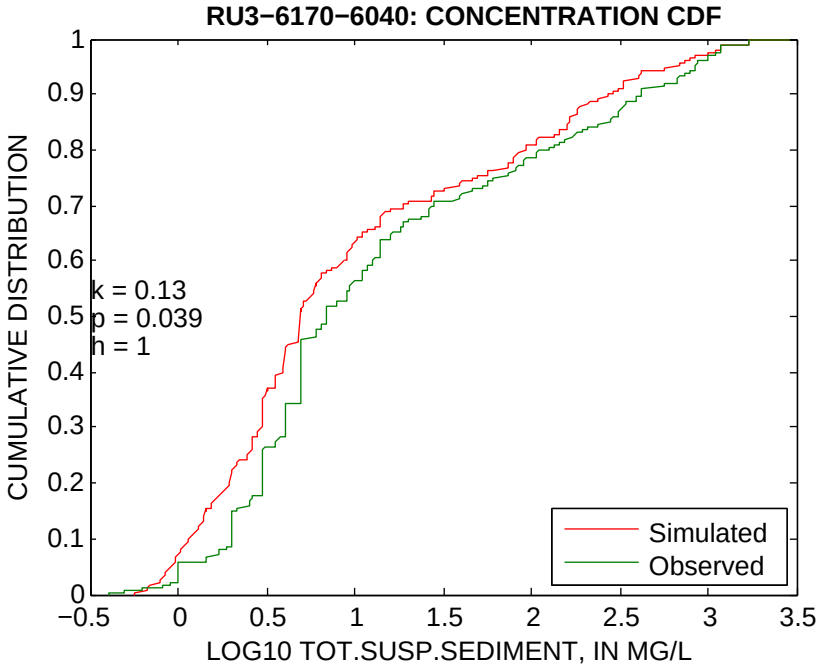
	n	observe	simulate
		234	234
min		0.4	0.53457
		-0.39794	-0.271995
mean		135.561	160.345
		1.16934	1.02211
media		7	5.14155
		0.845098	0.71109
max		2940	2551.4
		3.46835	3.40678
varian		115085	196721
		0.803175	0.962103
JB		0.001	0.001
		0.001164	0.001
		ra	log
%		18.2822	-12.591
err.va		100108	0.431593
rel.std.err		0.869868	0.537359
mod.eff		0.130132	0.462641

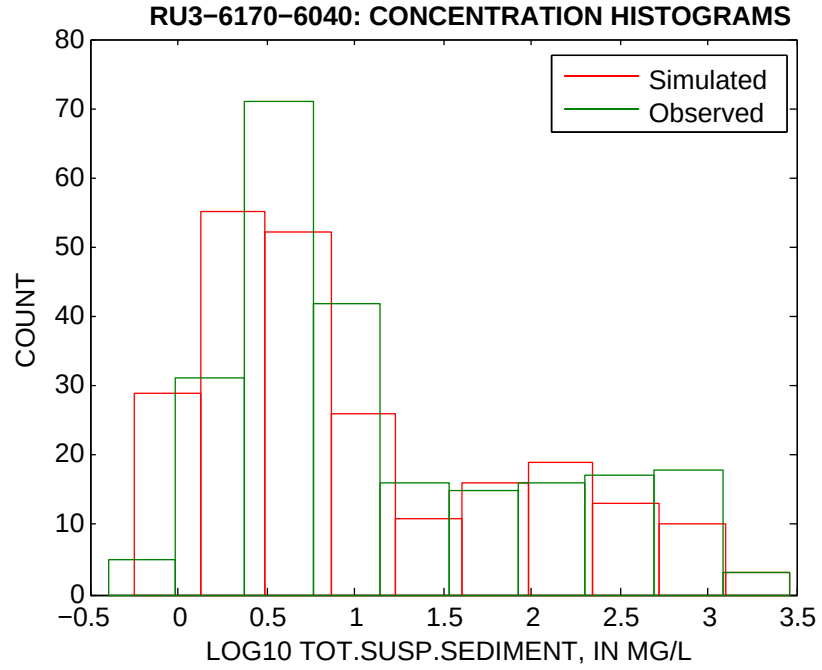
VERSION 2.1

ALL DATA
LOG10

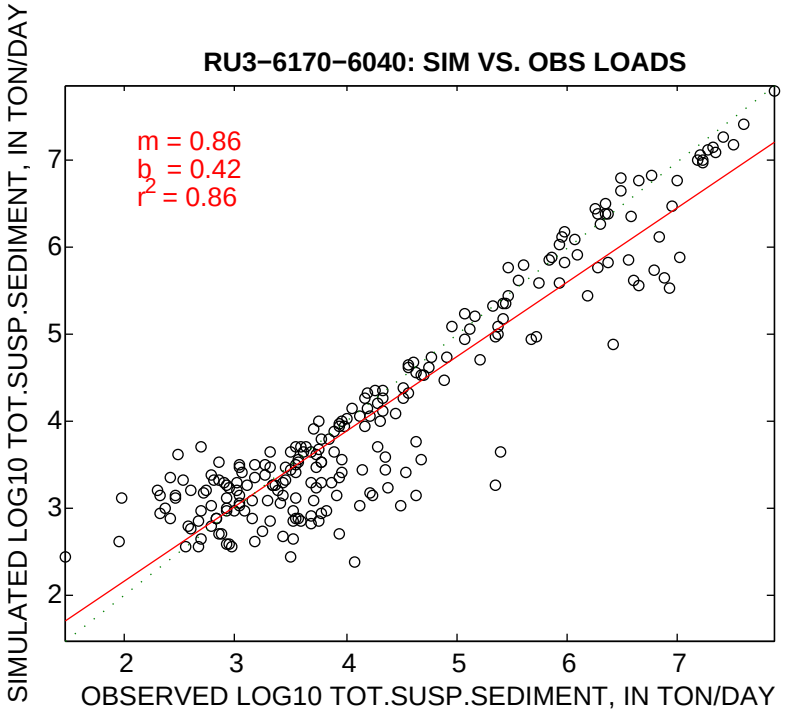


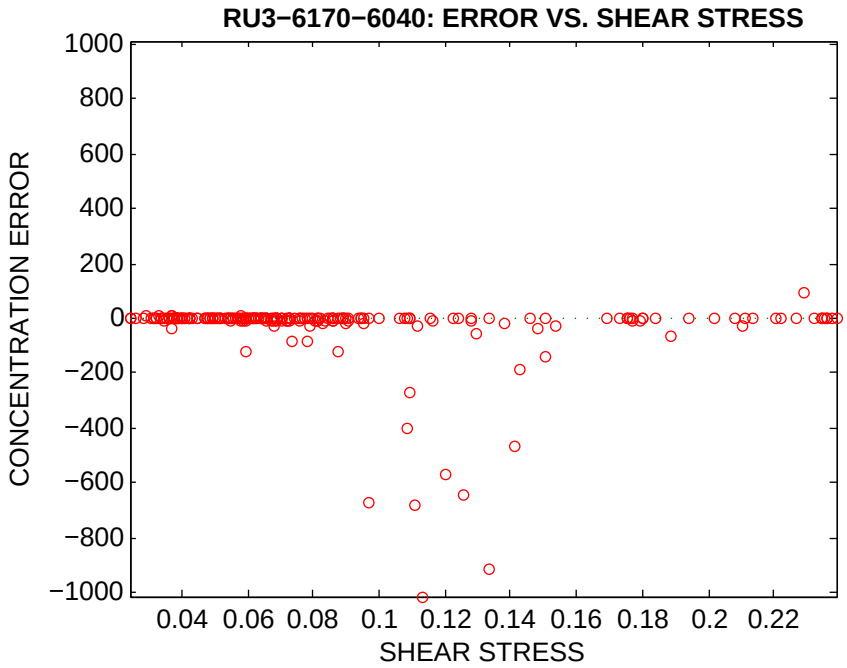


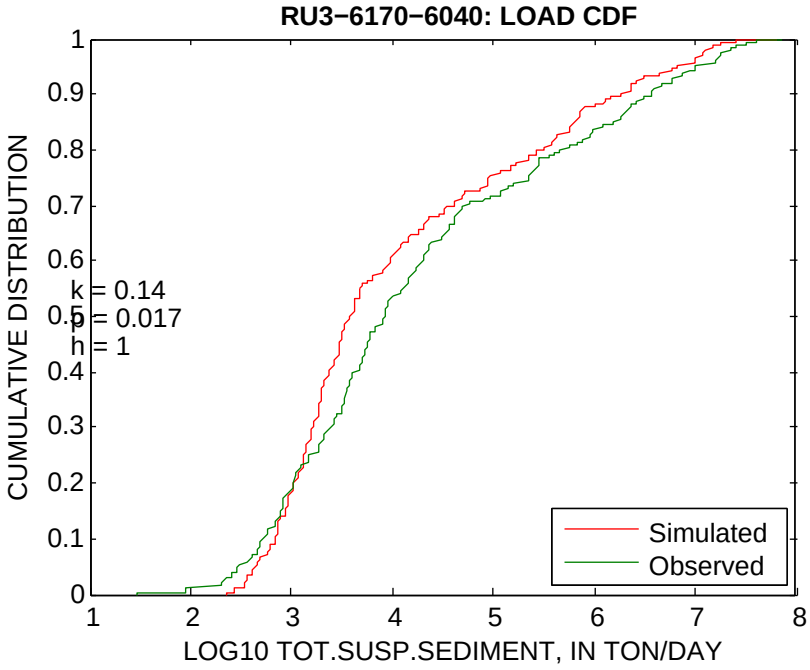


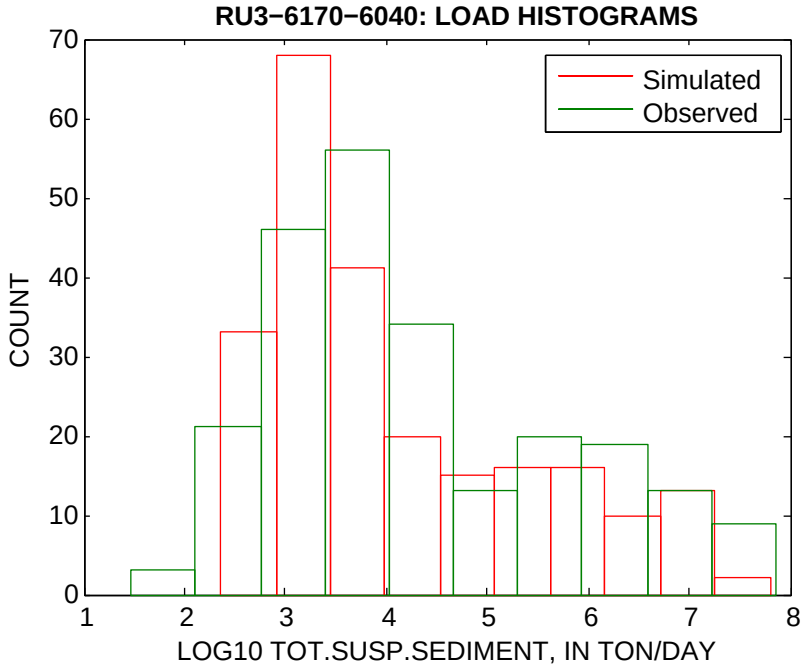


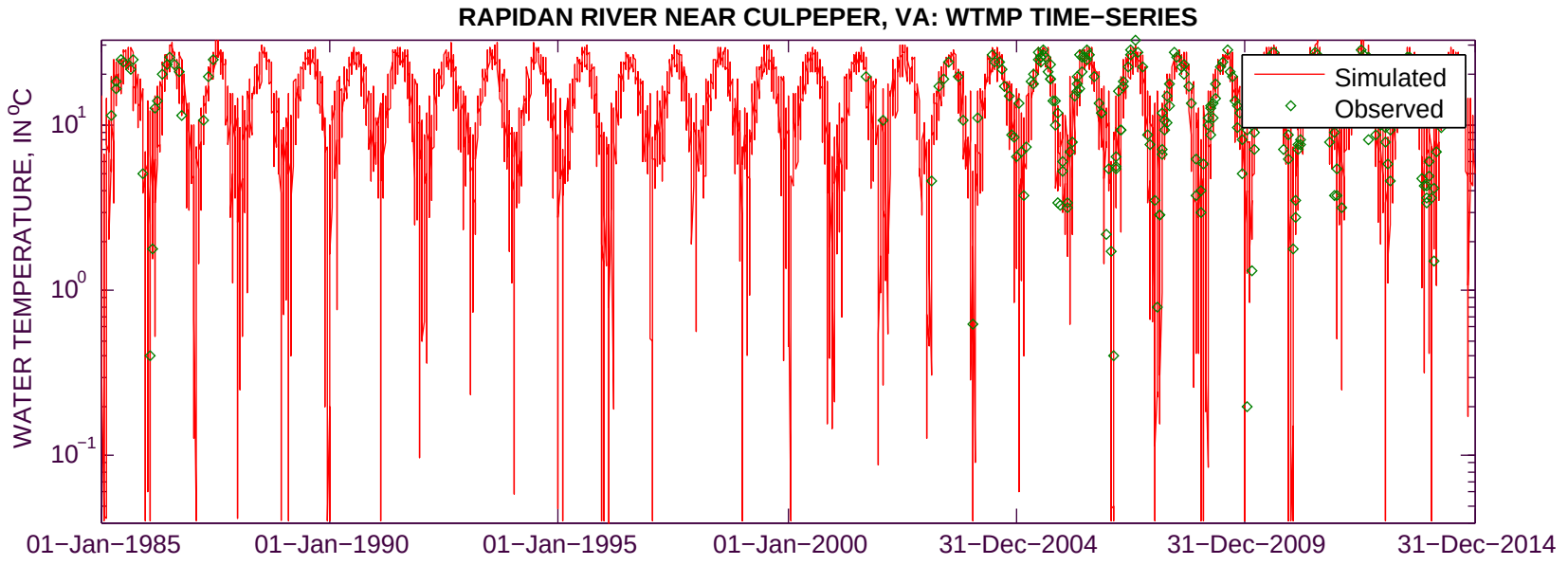
LOAD DATA
LOG10

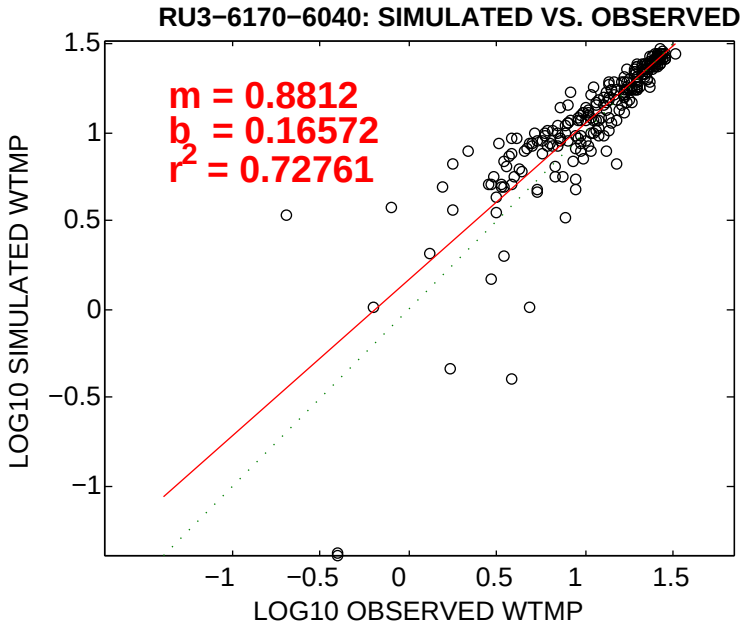


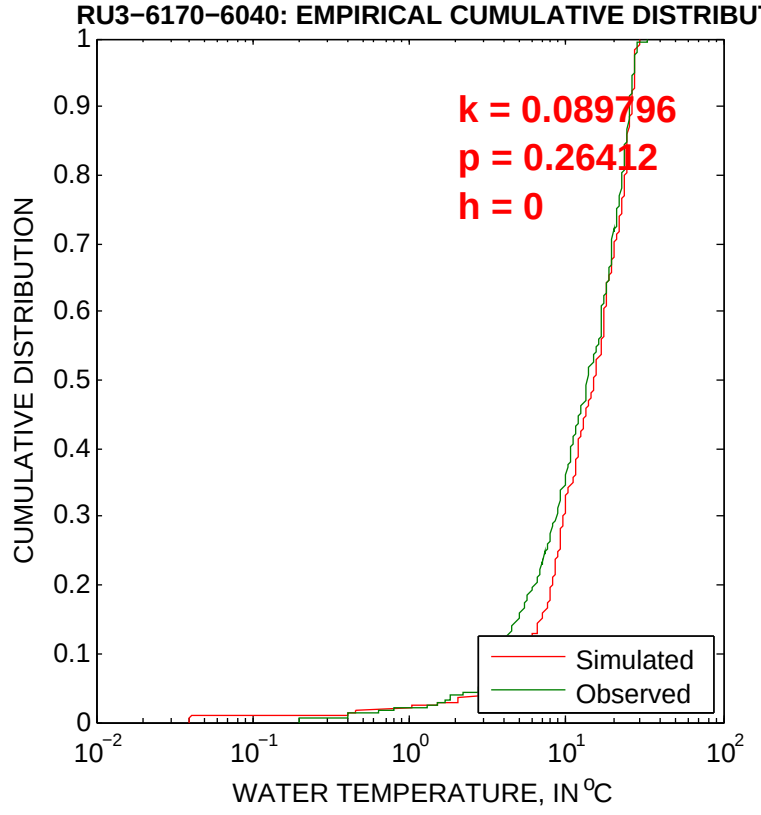












DATA SELECTION

scenario	file
P620171001WQ	WTMP.calib

plot: WTMP - water tempera...

Dates 1/1/1985 12/31/201

Drive Directory: N/A model

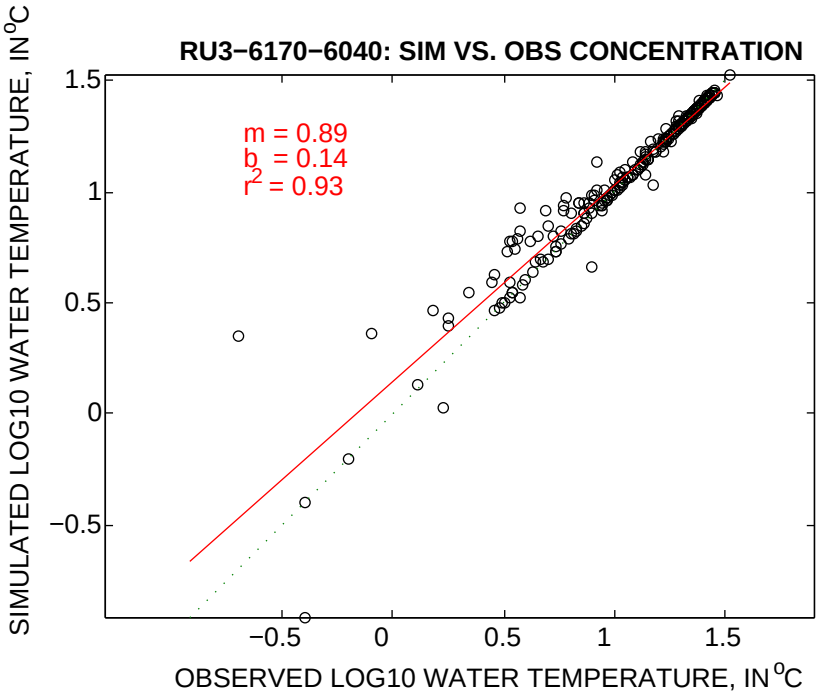
Observed: OBS20161101

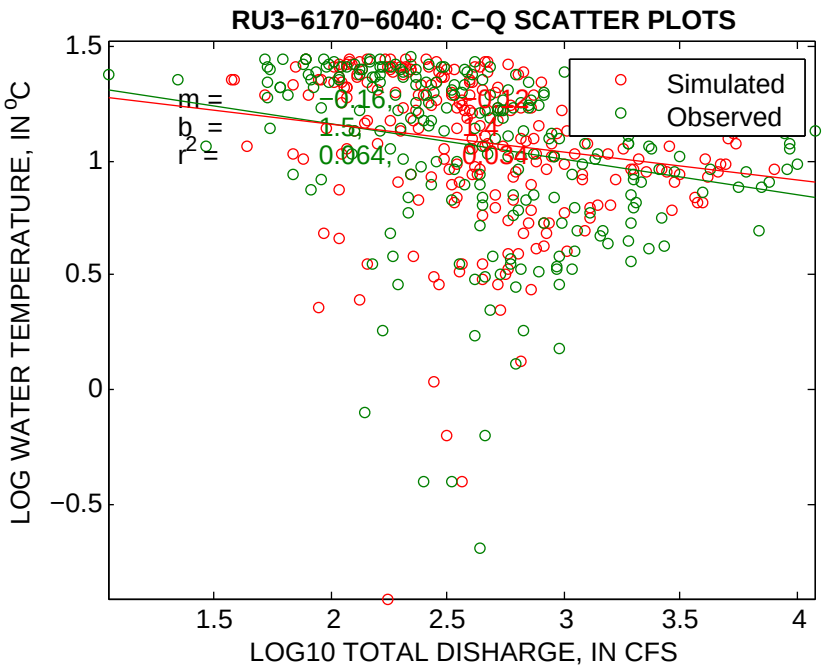
STATISTICS

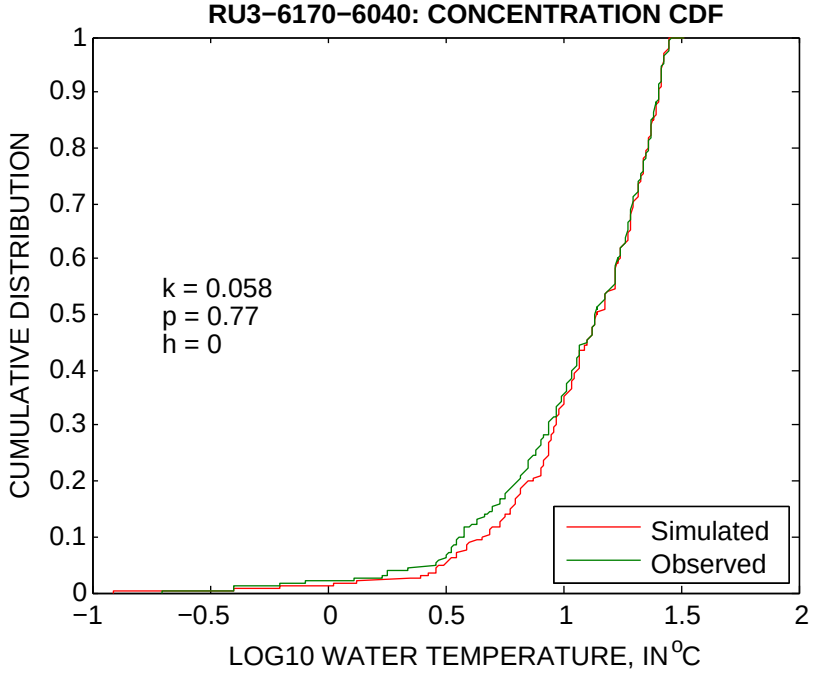
		observe	simulate
n		245	245
min		0.2	0.04011
		-0.69897	-1.39675
mean		14.3952	15.3551
		1.0512	1.09203
media		13.67	15.176
		1.13577	1.18116
max		33	29.553
		1.51851	1.4706
varian		65.0509	59.9124
		0.133524	0.142498
JB		0.005420	0.007311
		0.001	0.001
		ra	log
%		6.66814	3.88464
err.va		7.40316	0.0423732
rel.std.err		0.113806	0.317345
mod.eff		0.886194	0.682655

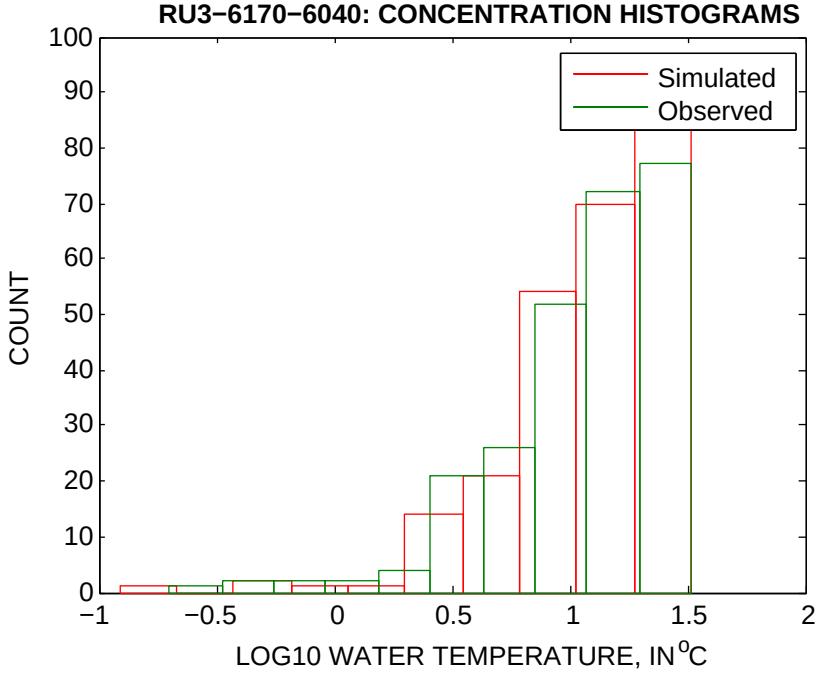
VERSION 2.1

ALL DATA
LOG10

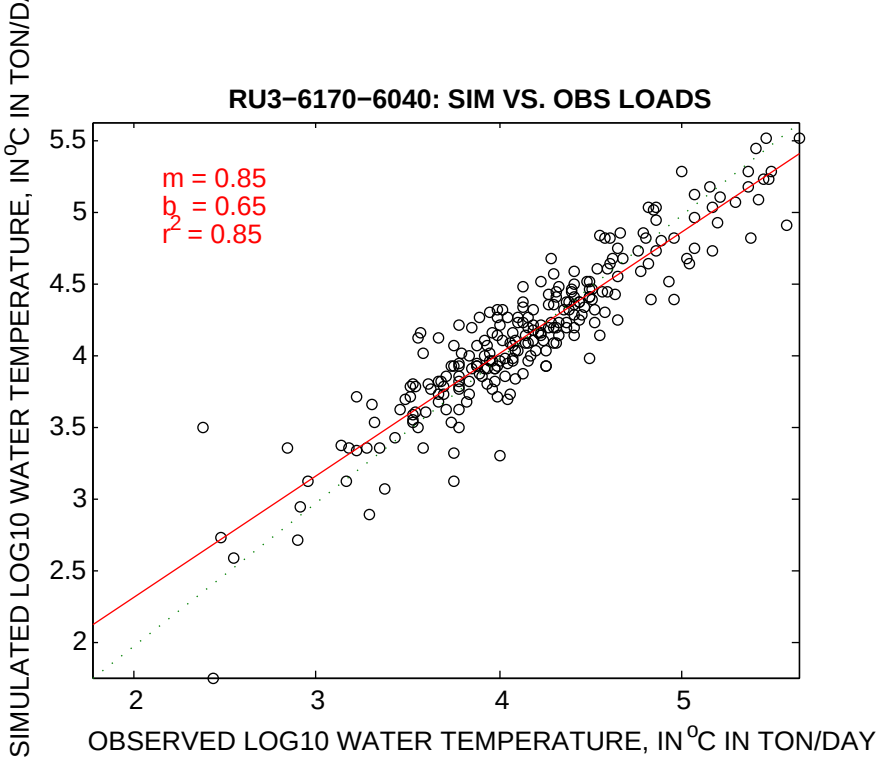


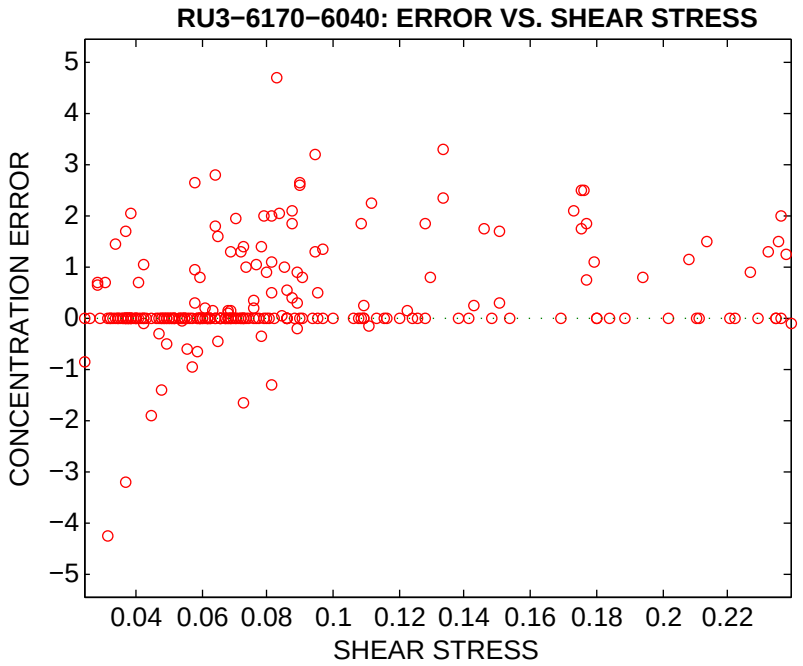


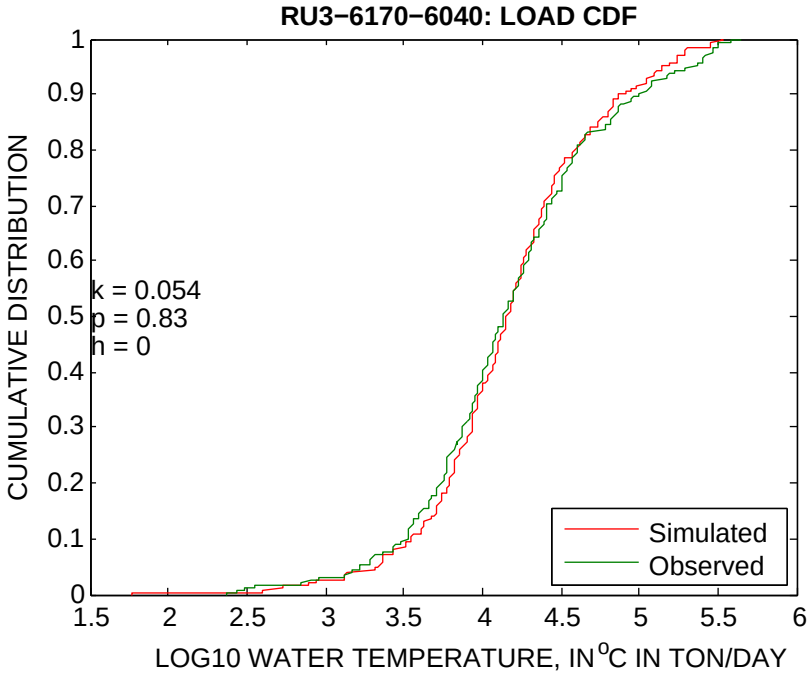


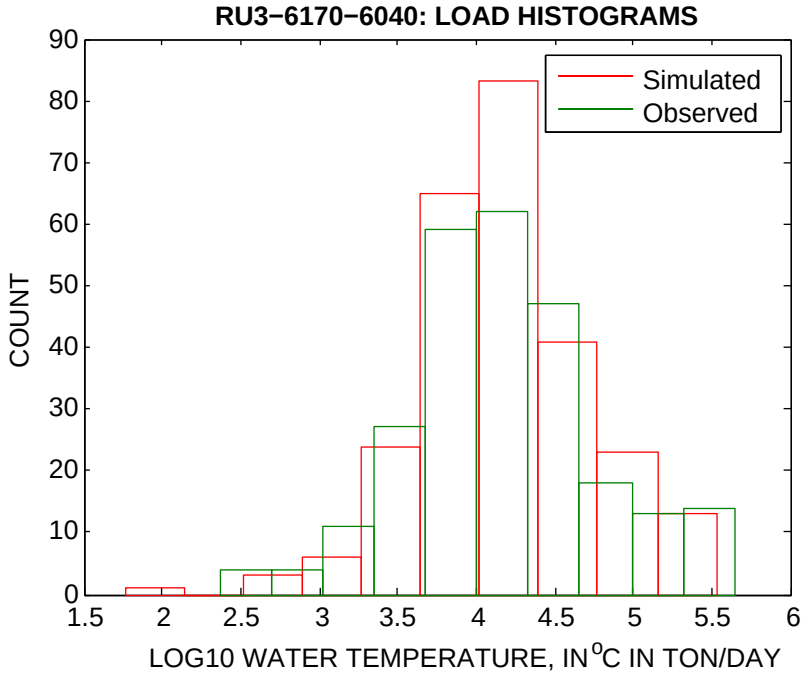


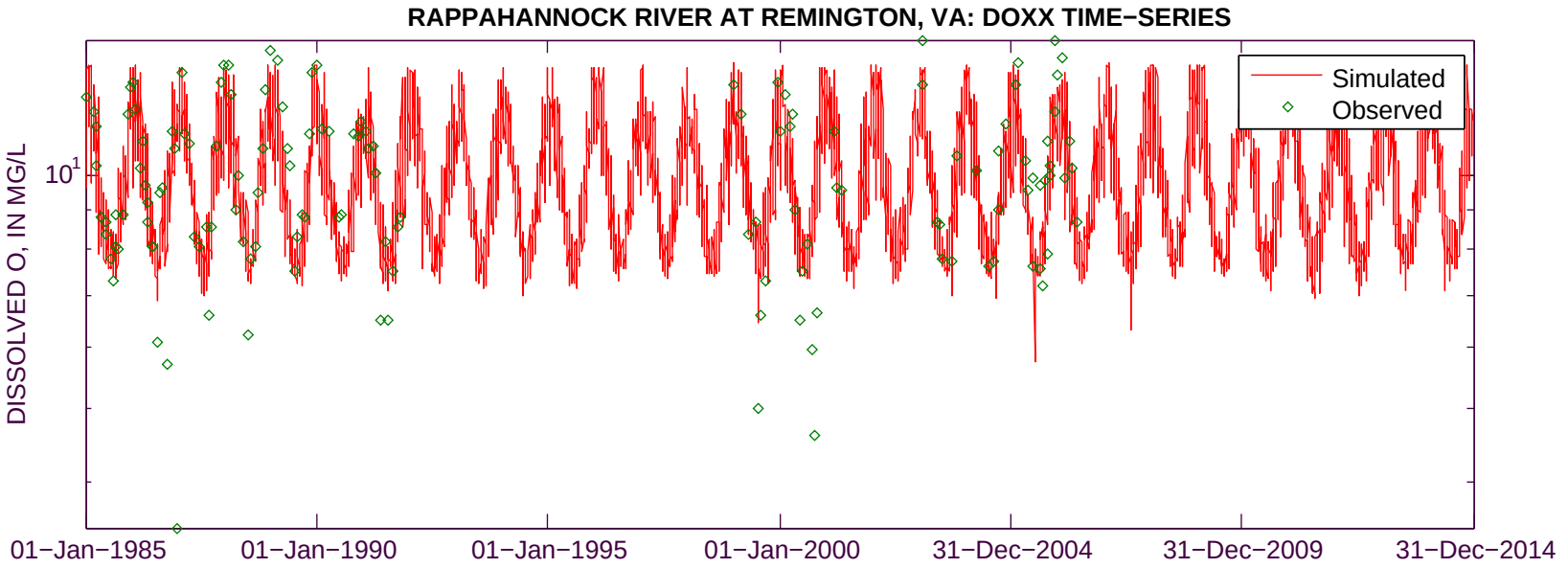
LOAD DATA
LOG10

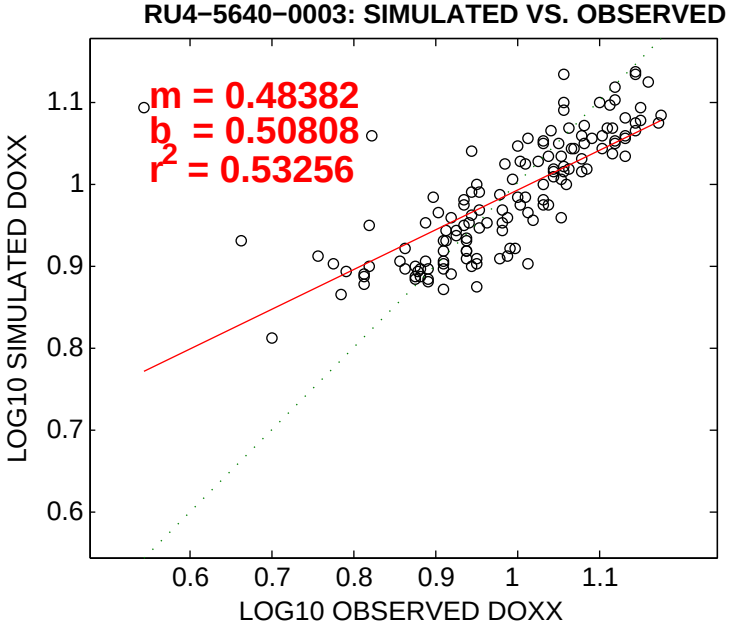


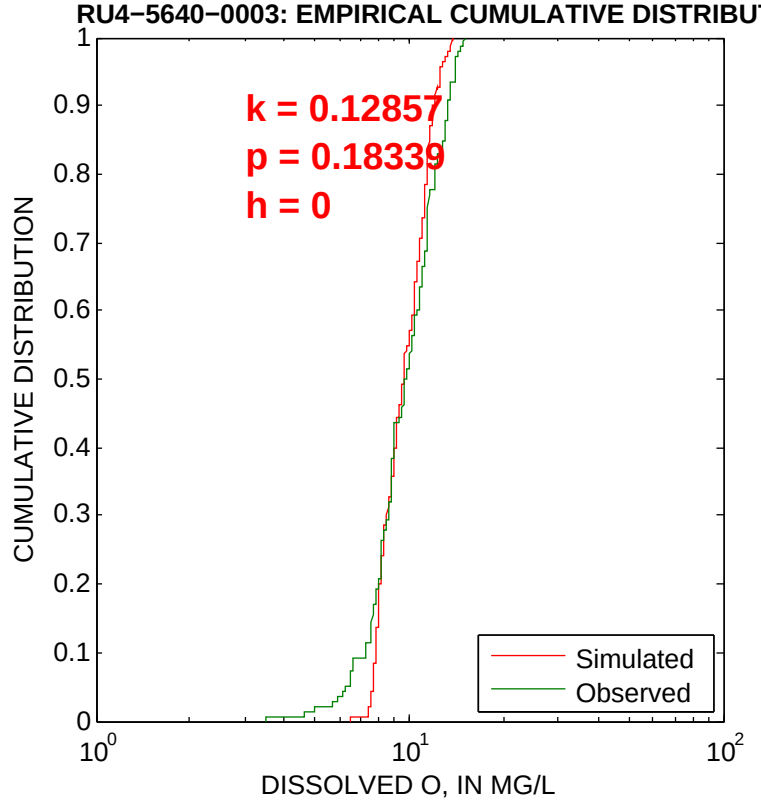












DATA SELECTION

scenario	file
P620171001WQ	DOXX.calib

plot: DOXX - dissolved oxygen

Dates: 1/1/1985 – 12/31/201

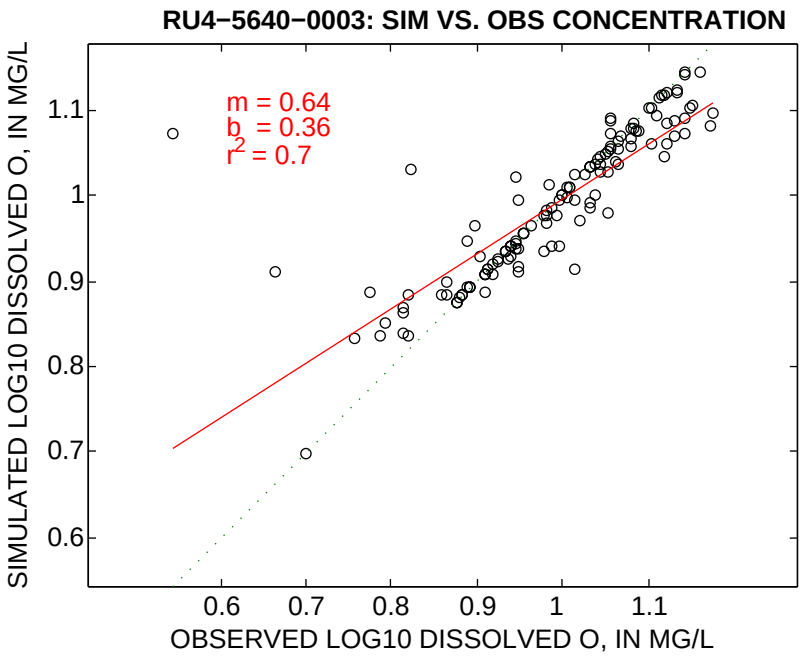
Drive	Directory	Observed
N/A	model	OBS20161101

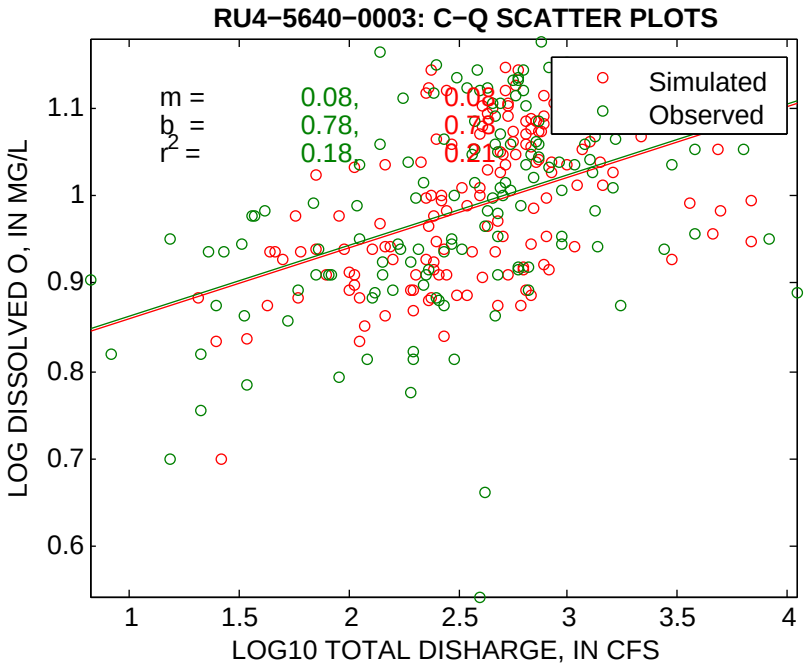
STATISTICS

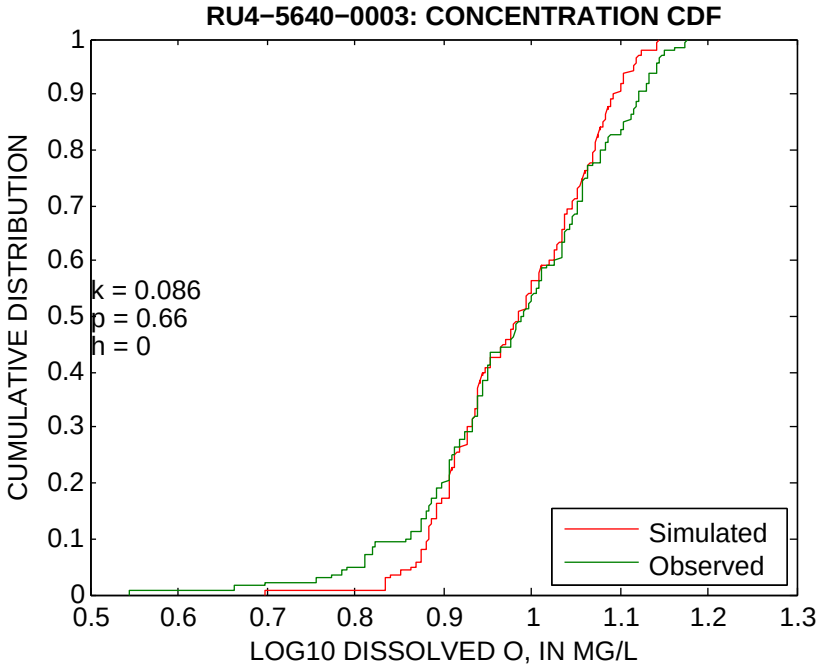
	n	140	140
		observe	simulate
min		3.5	6.4651
		0.544068	0.810575
mean		9.93589	9.77959
		0.983983	0.984149
media		9.765	9.5741
		0.989665	0.981098
max		14.99	13.655
		1.1758	1.13529
varian		5.59802	2.77032
		0.0122397	0.00537975
JB		0.395764	0.030458
		0.004106	0.038676
		ra	log
%		-1.57308	0.0168203
err.va		2.22802	0.00577592
rel.std.err		0.398001	0.471902
mod.eff		0.601999	0.528098

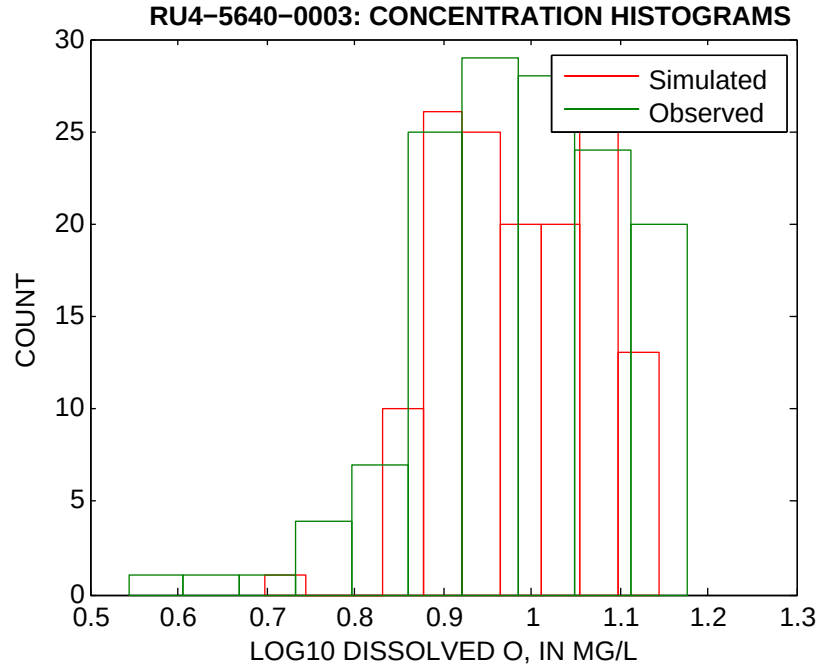
VERSION

ALL DATA
LOG10

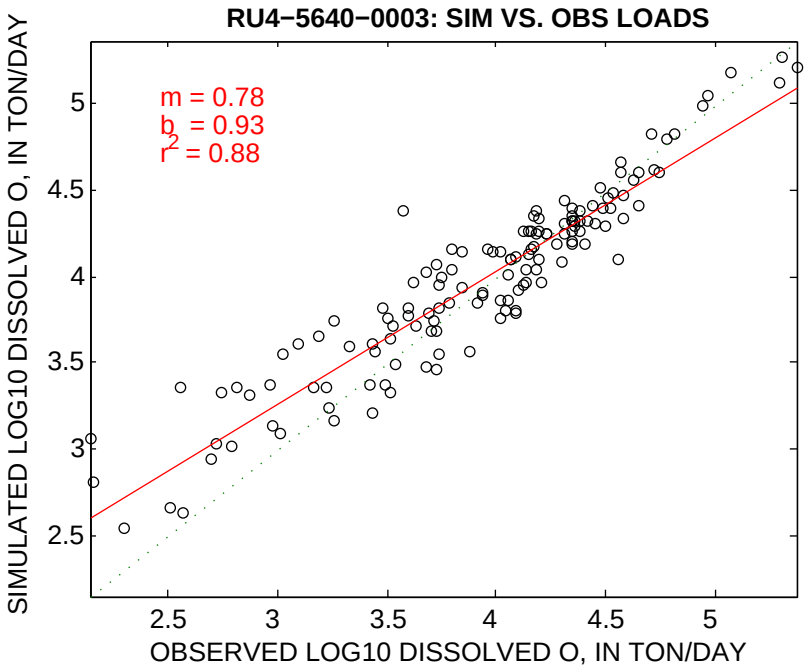




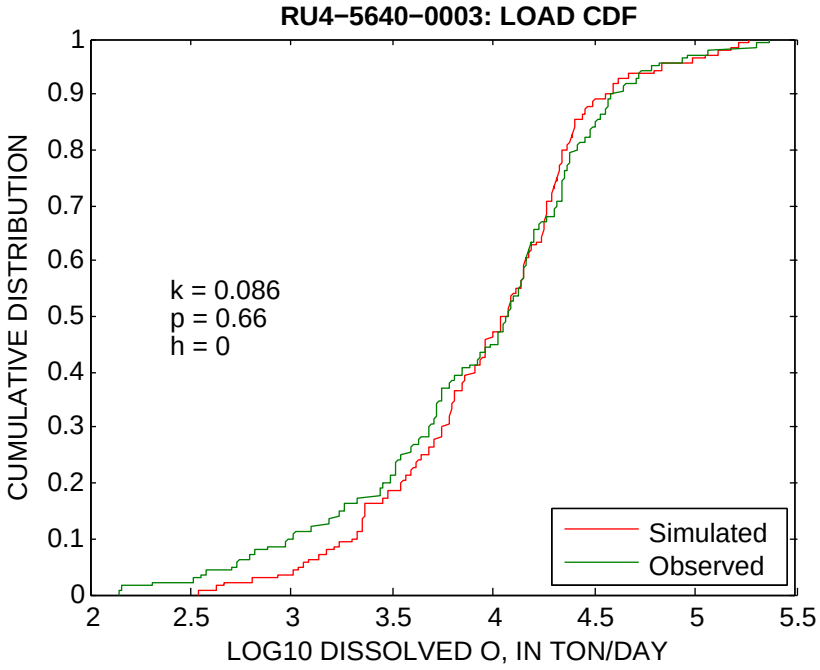


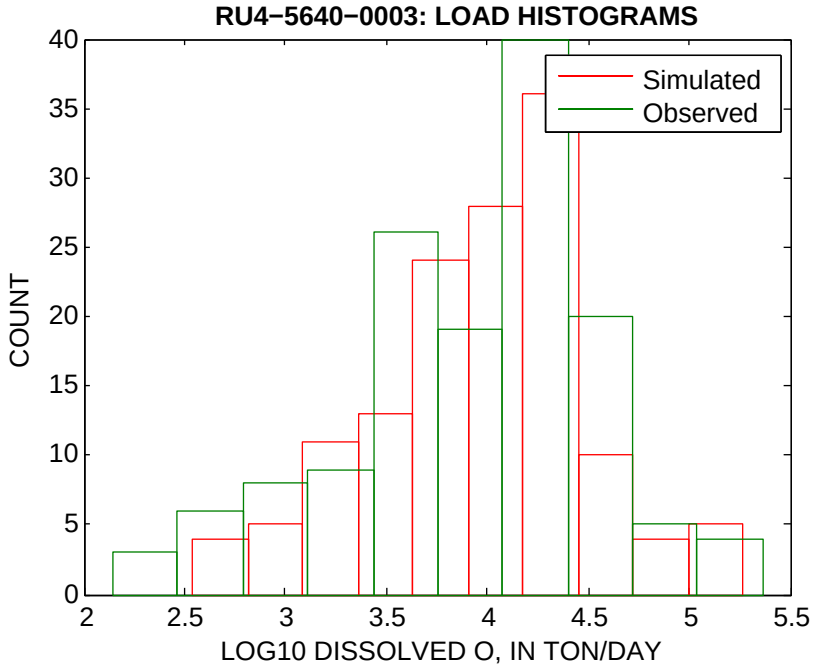


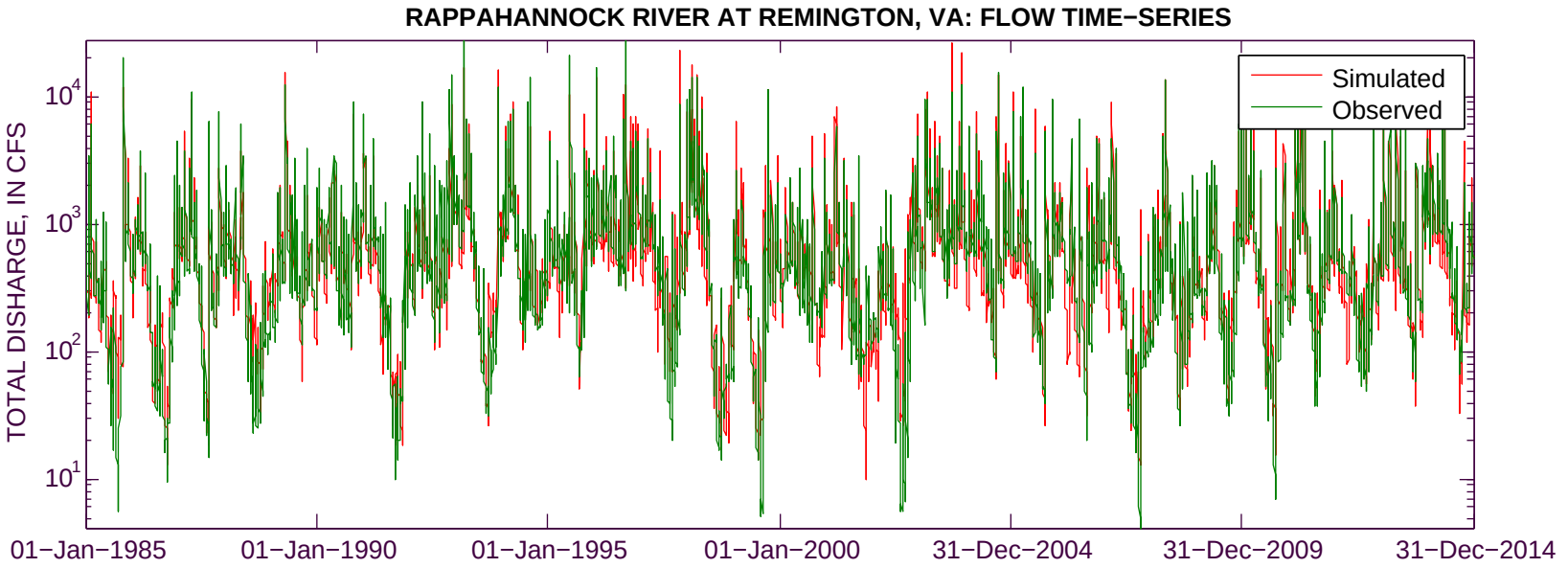
LOAD DATA
LOG10

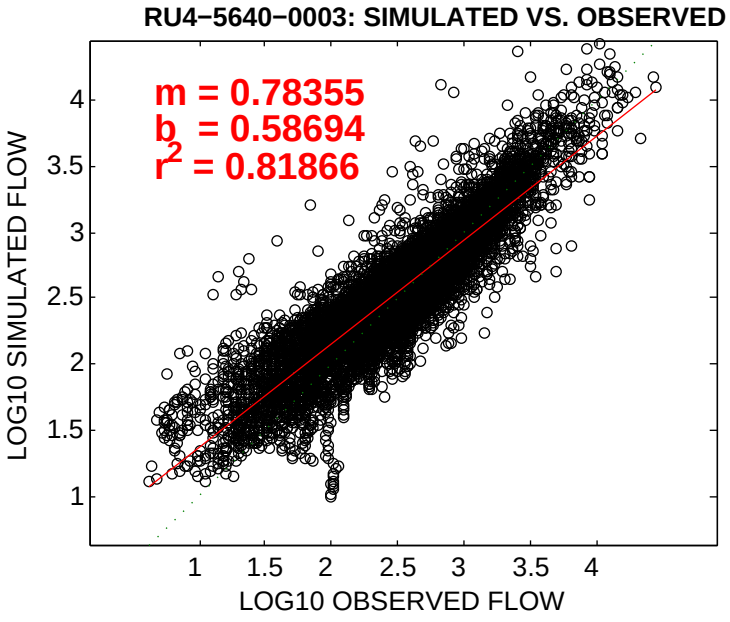


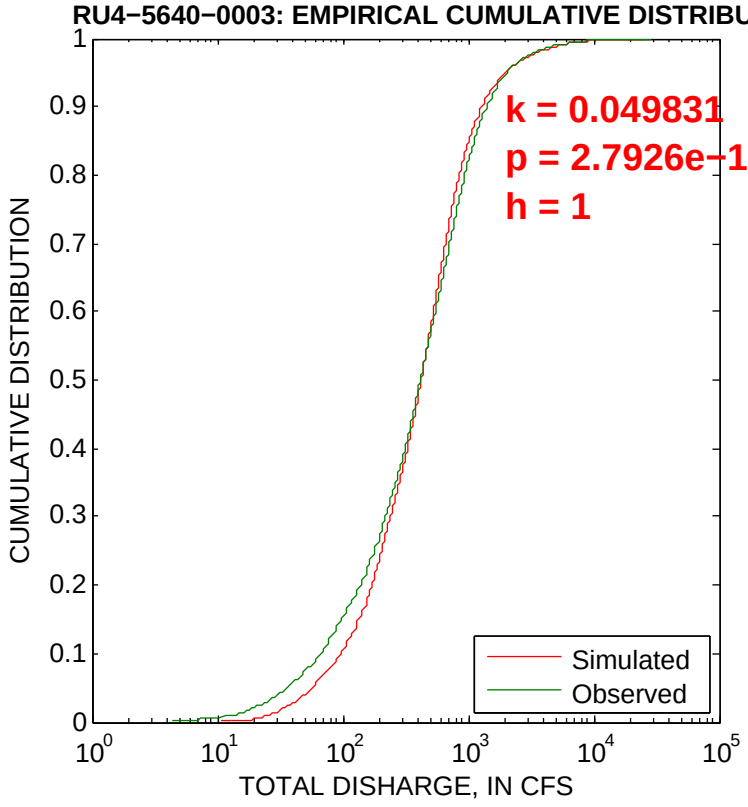












DATA SELECTION

scenario: P620171001WQ | file: FLOW.calib

plot: FLOW - total discharge

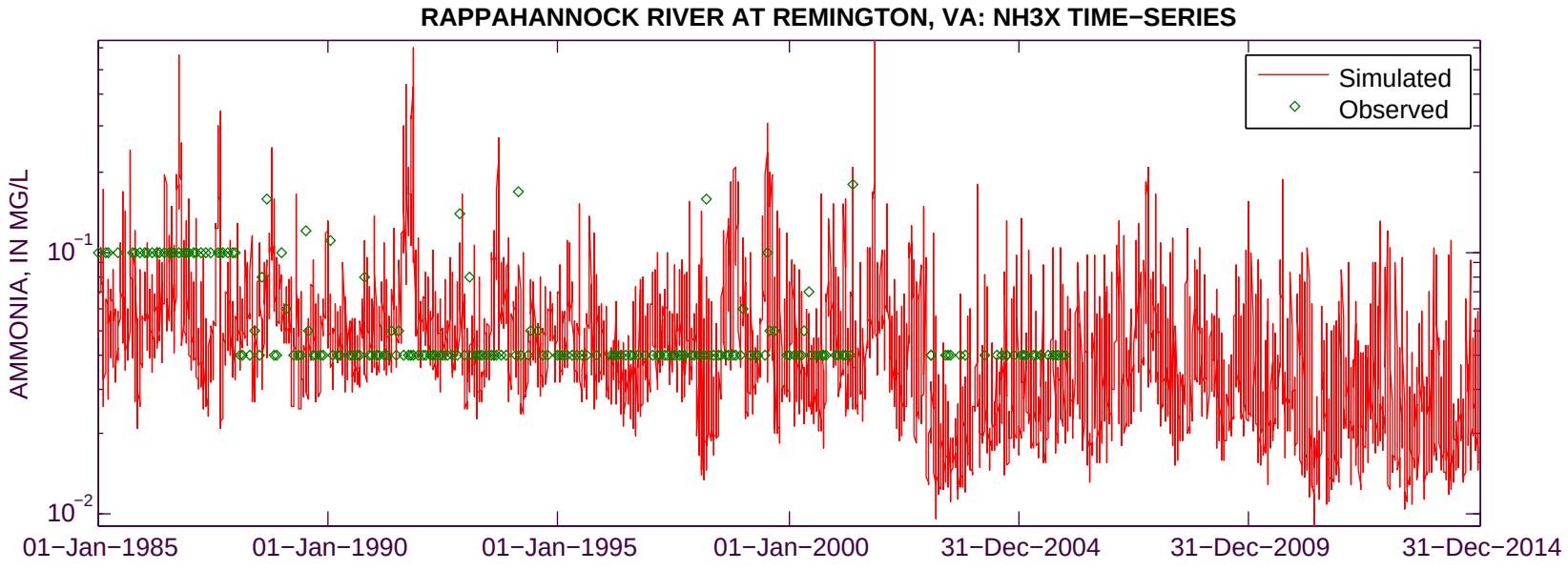
Dates: 1/1/1985 – 12/31/201

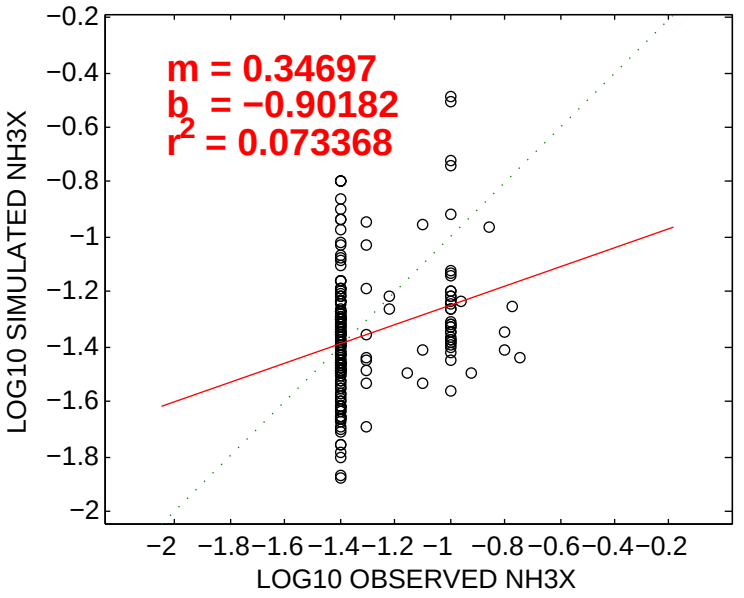
Drive: N/A | Directory: model | Observed: OBS20161101

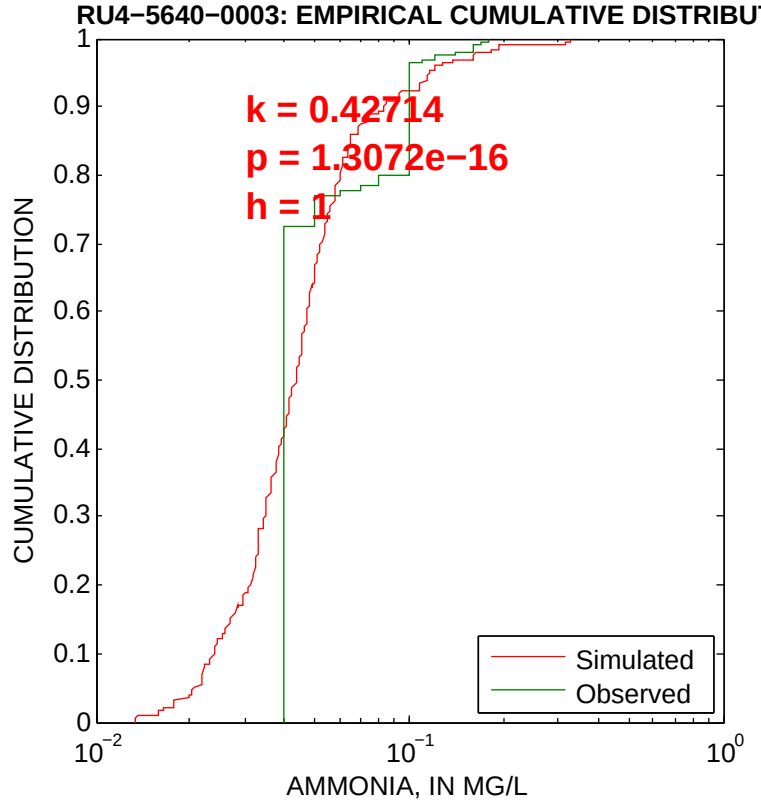
STATISTICS

		observe	simulate
n		10957	10957
min		4.2	10.097
		0.623249	1.00419
mean		700.362	693.032
		2.55749	2.59086
media		420	425.3
		2.62325	2.6287
max		28200	26565
		4.45025	4.42431
varian		1.36162e+0	1.42681e+
		0.283199	0.212382
JB		0.001	0.001
		0.001	0.001
		ra	log
%		-1.04657	1.30463
err.va		503463	0.0528941
rel.std.err		0.369754	0.186774
mod.eff		0.630246	0.813226

VERSION 2.1







DATA SELECTION

scenario	file
P620171001WQ	NH3X.calib

plot: NH3X - ammonia

Dates: 1/1/1985 – 12/31/201

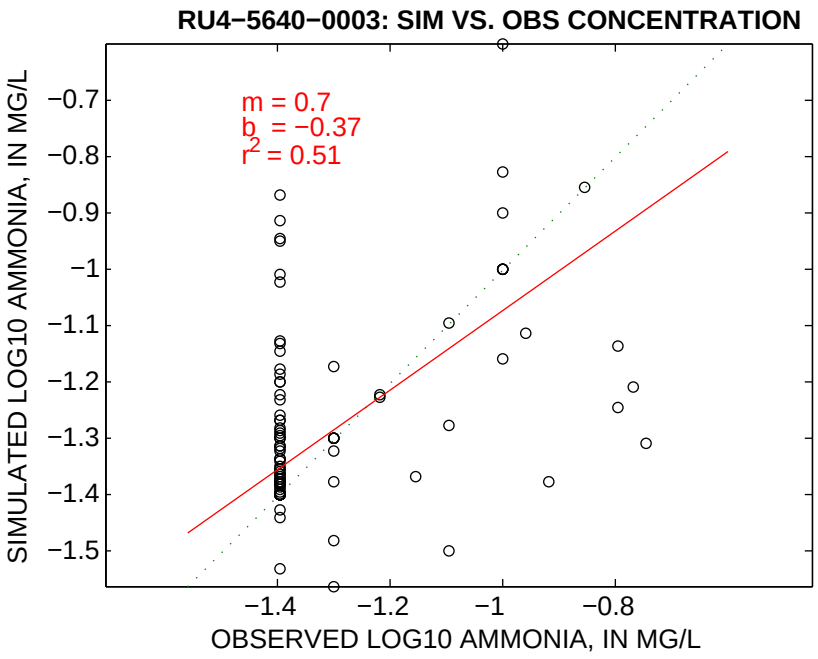
Drive	Directory	Observed
N/A	model	OBS20161101

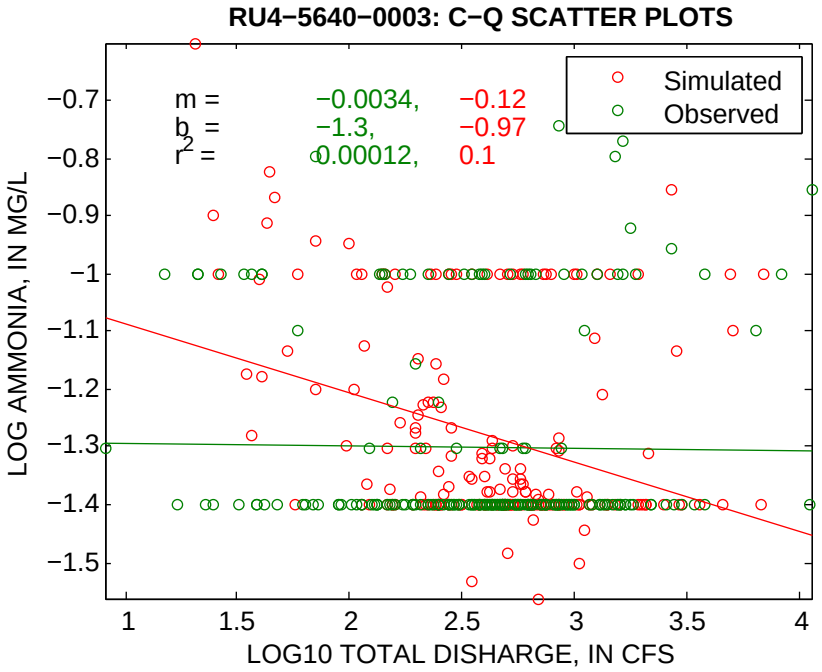
STATISTICS

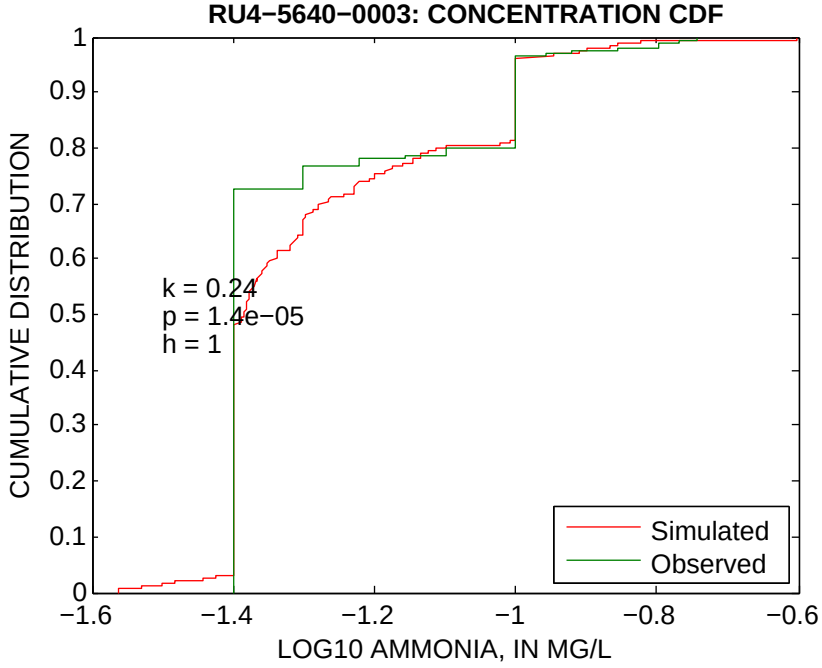
	n	199	199
		observe	simulate
min		0.04	0.013379
		-1.39794	-1.87358
mean		0.0551759	0.0519225
		-1.30021	-1.35295
media		0.04	0.043364
		-1.39794	-1.36287
max		0.18	0.3282
		-0.744727	-0.483861
varian		0.00084327	0.00154279
		0.0306345	0.0502688
JB		0.001	0.001
		0.001	0.001
		ra	log
%		-5.89639	4.05684
err.va		0.00187617	0.0624408
rel.std.err		2.22486	2.03825
mod.eff		-1.22486	-1.03825

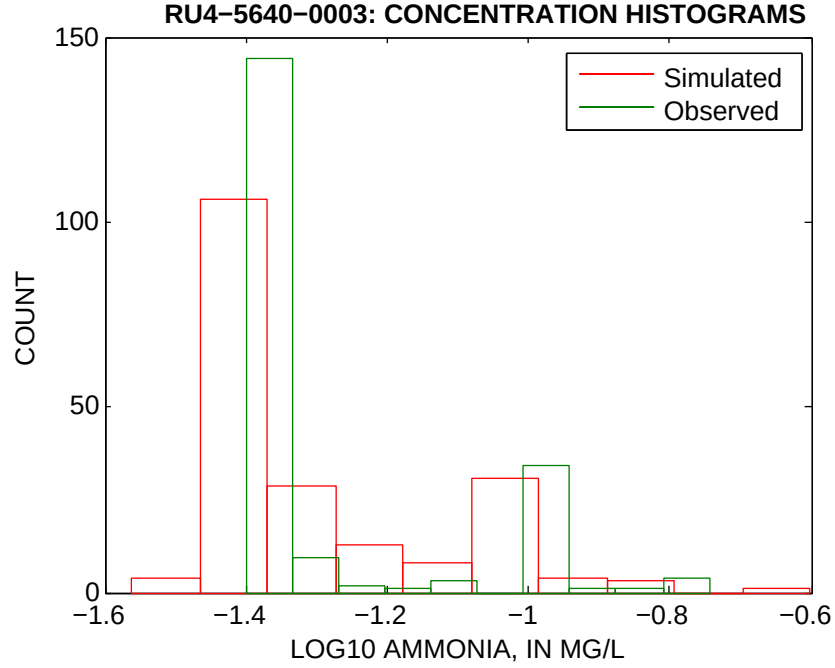
VERSION 2.1

ALL DATA
LOG10

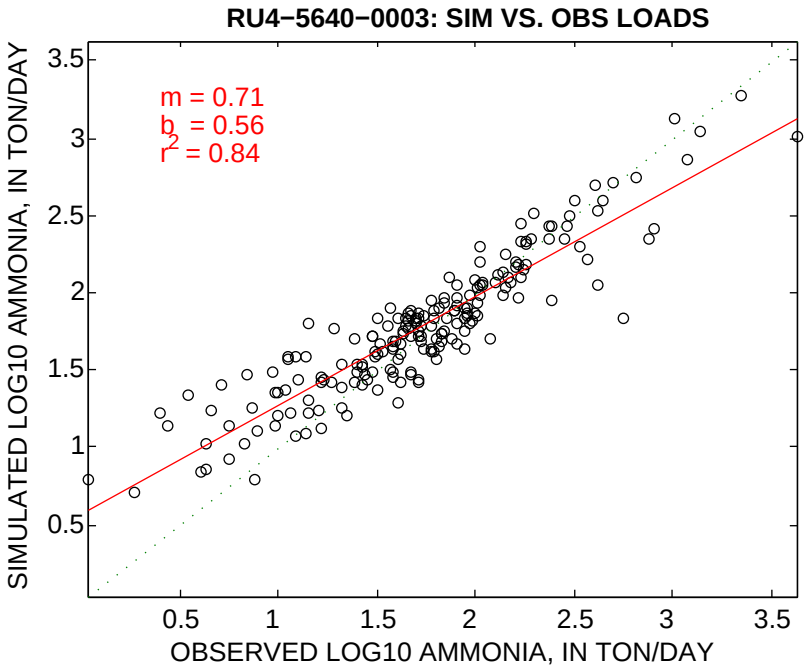




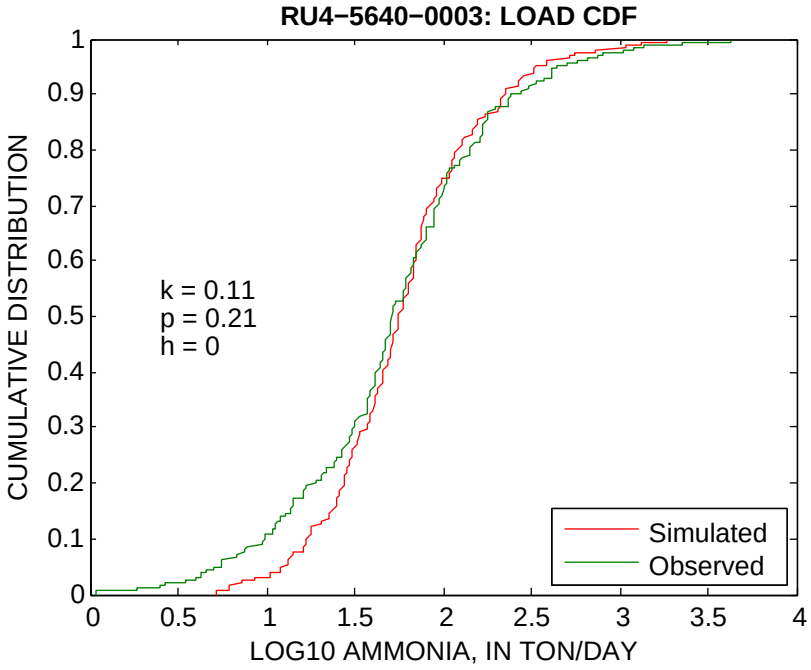


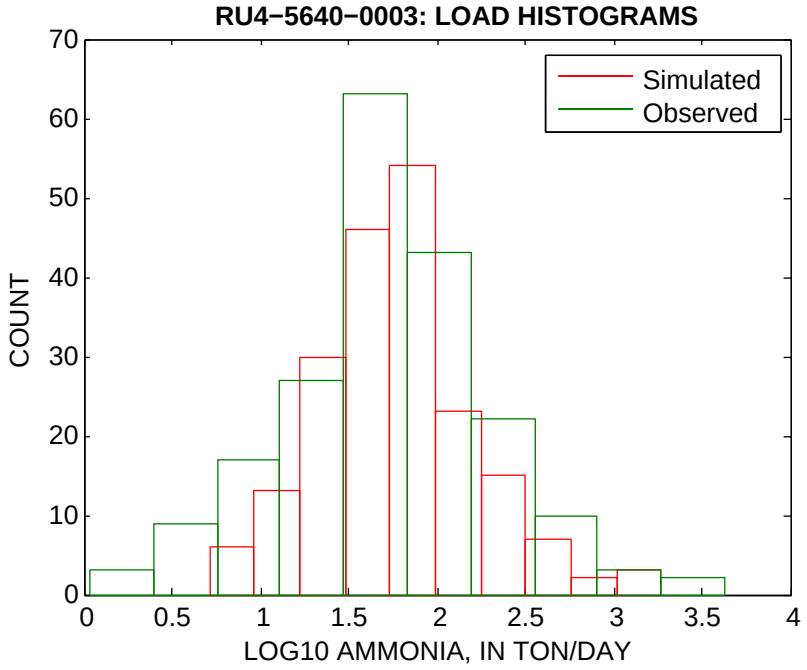


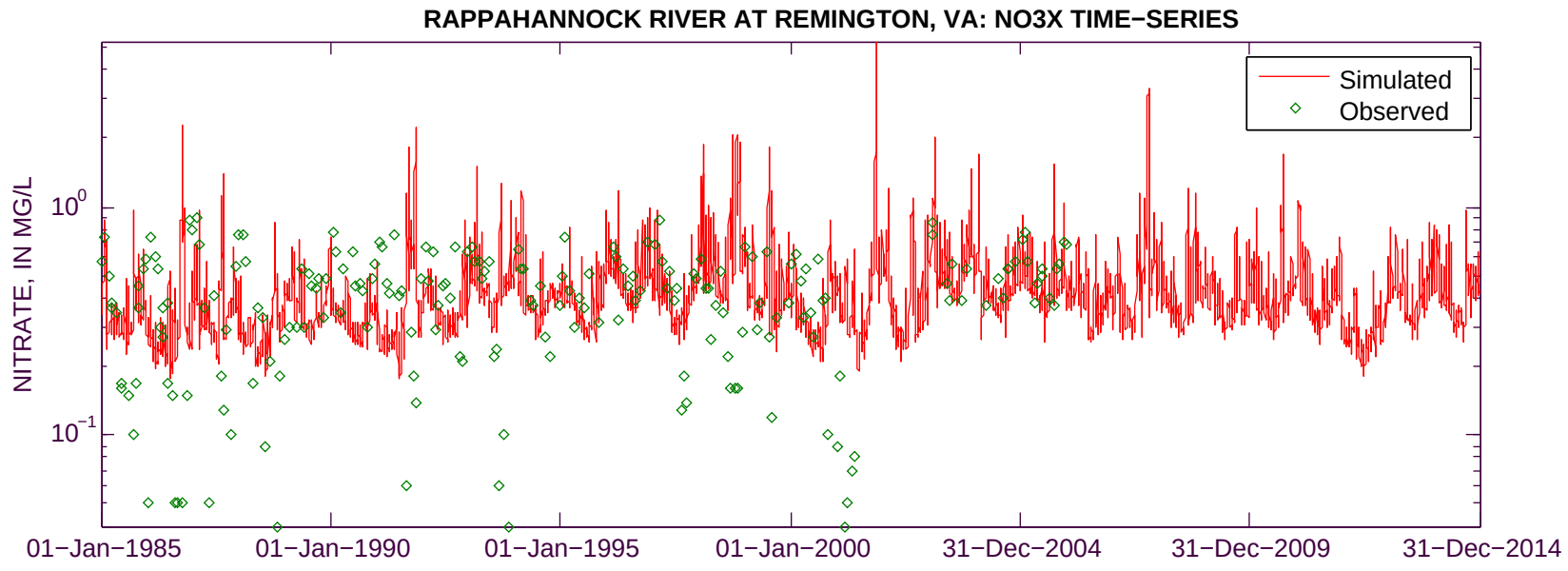
LOAD DATA
LOG10

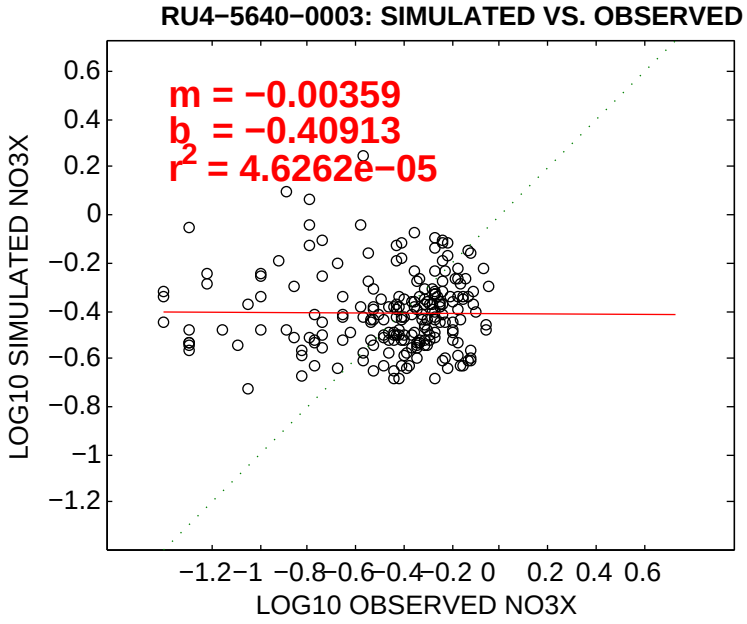


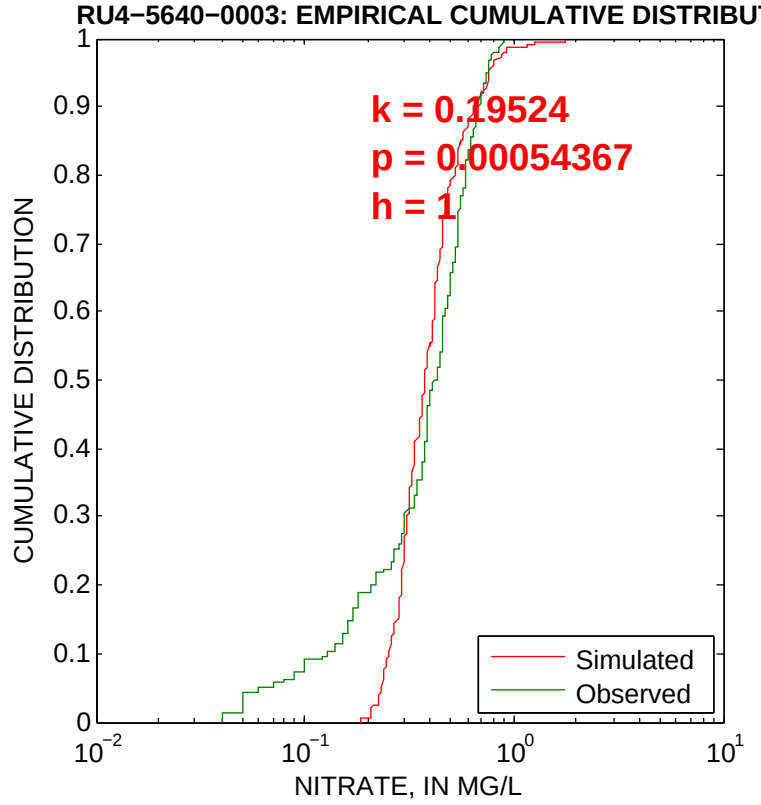












DATA SELECTION

scenario	file
P620171001WQ	NO3X.calib

plot: NO3X - nitrate

Dates: 1/1/1985 – 12/31/201

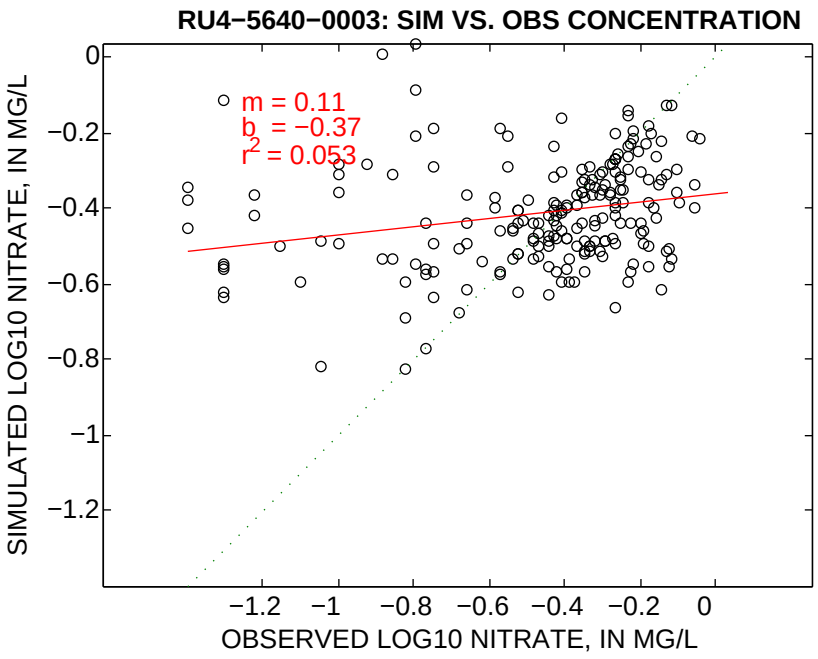
Drive	Directory	Observed
N/A	model	OBS20161101

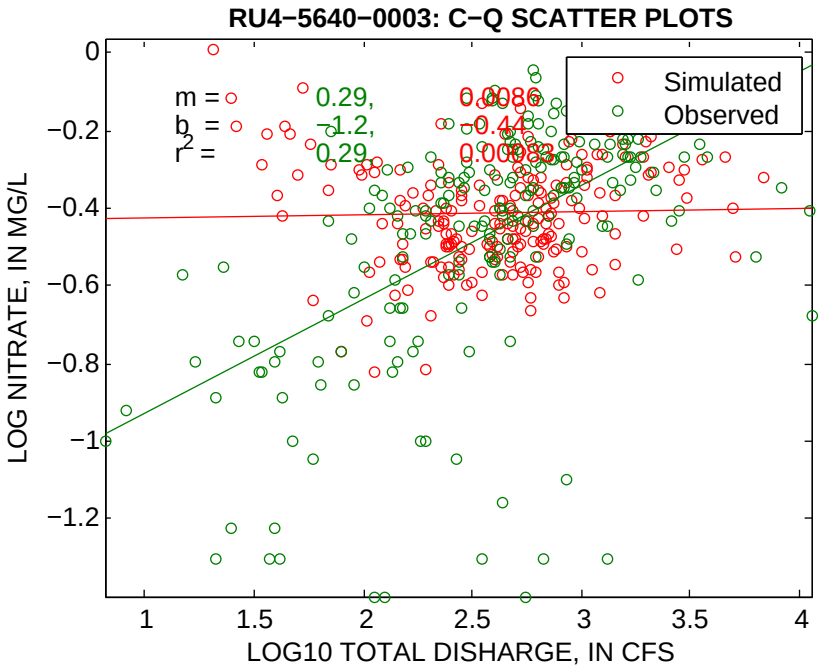
STATISTICS

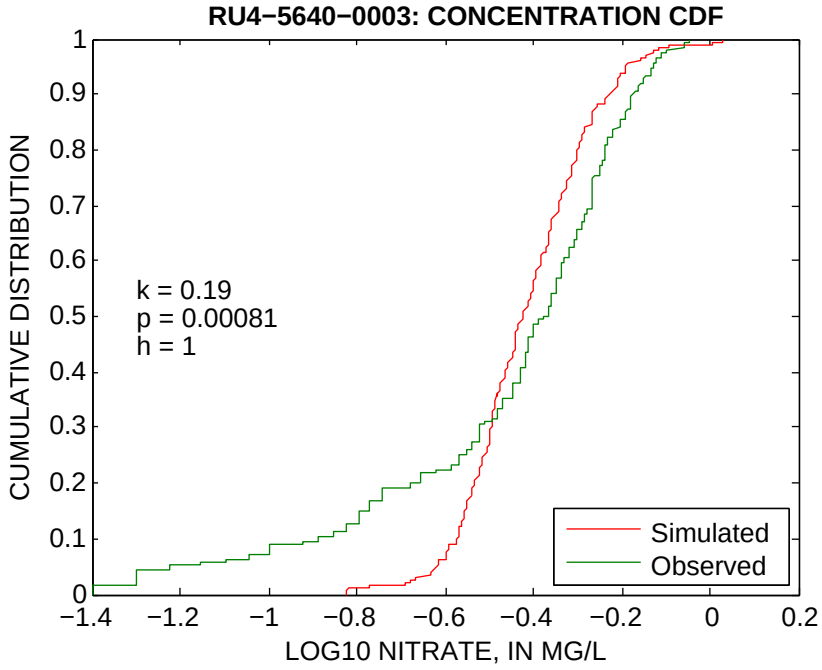
	n	210	210
		observe	simulate
min		0.04	0.18699
		-1.39794	-0.728182
mean		0.413714	0.422005
		-0.462385	-0.40747
media		0.425	0.373415
		-0.371641	-0.427809
max		0.9	1.7515
		-0.0457575	0.24341
varian		0.0409287	0.036987
		0.0924602	0.0257584
JB		0.139453	0.001
		0.001	0.001
		ra	log
%		2.00391	-11.8765
err.va		0.0807376	0.121913
rel.std.err		1.97264	1.31854
mod.eff		-0.97264	-0.318541

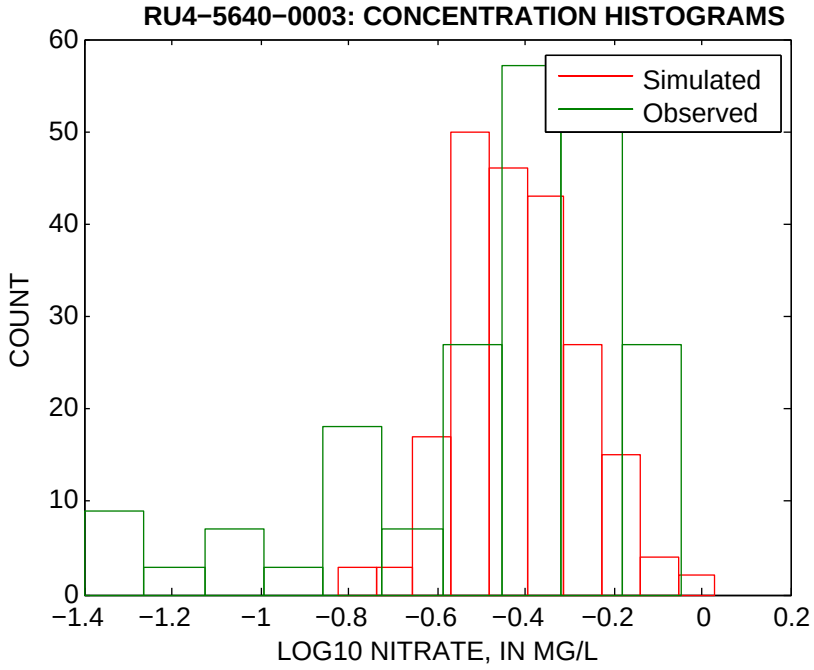
VERSION

ALL DATA
LOG10

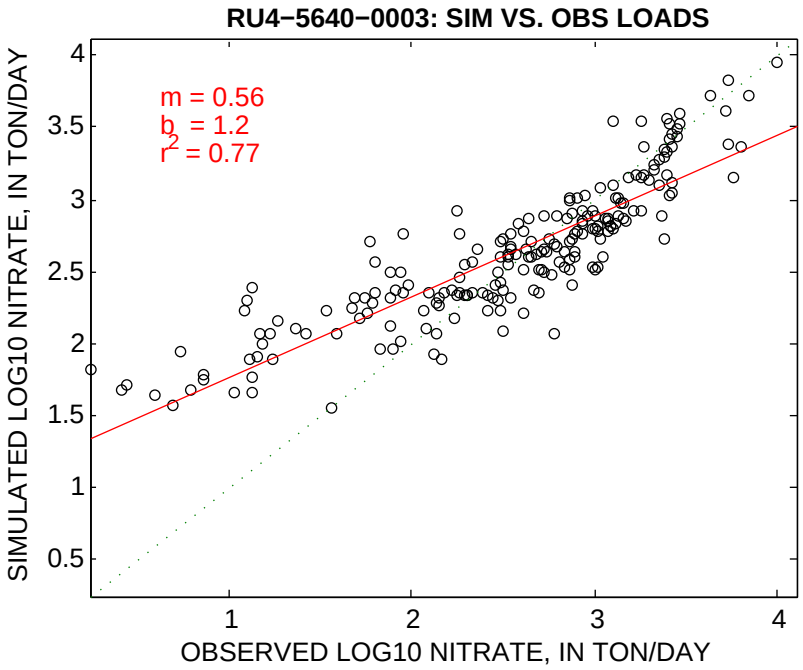


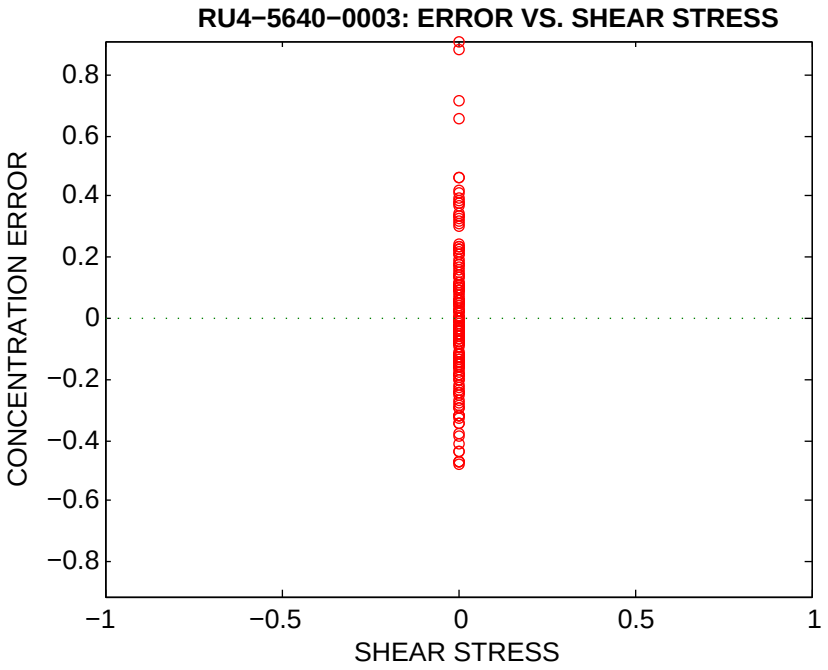


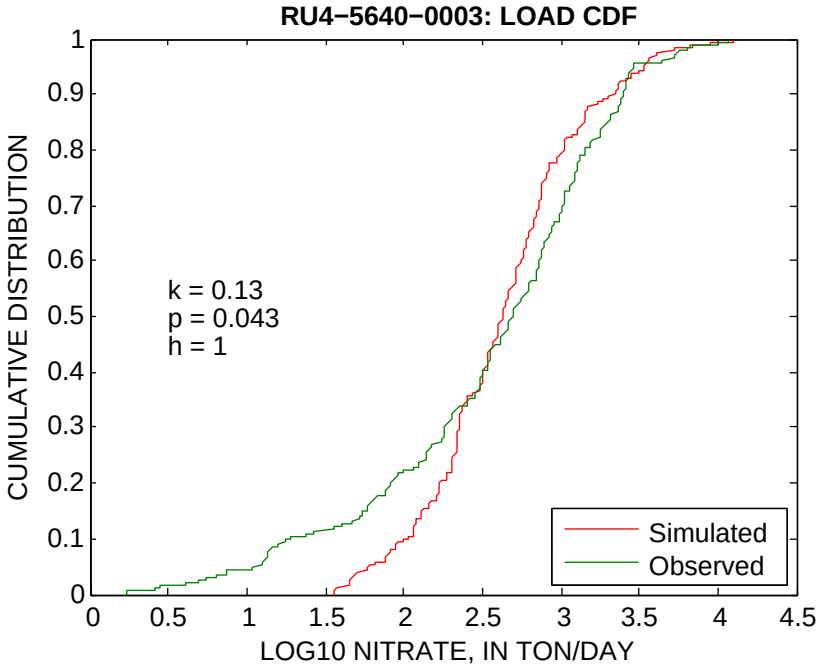


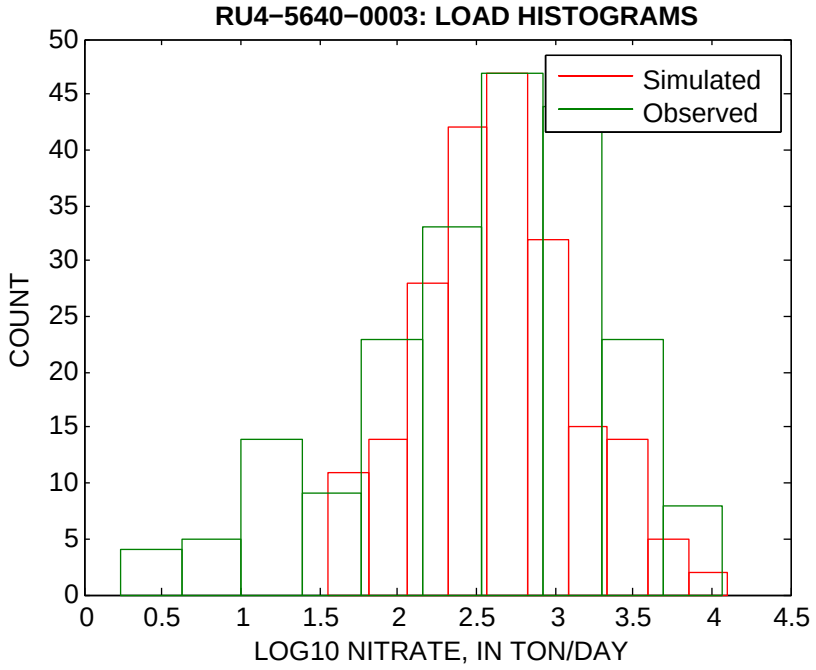


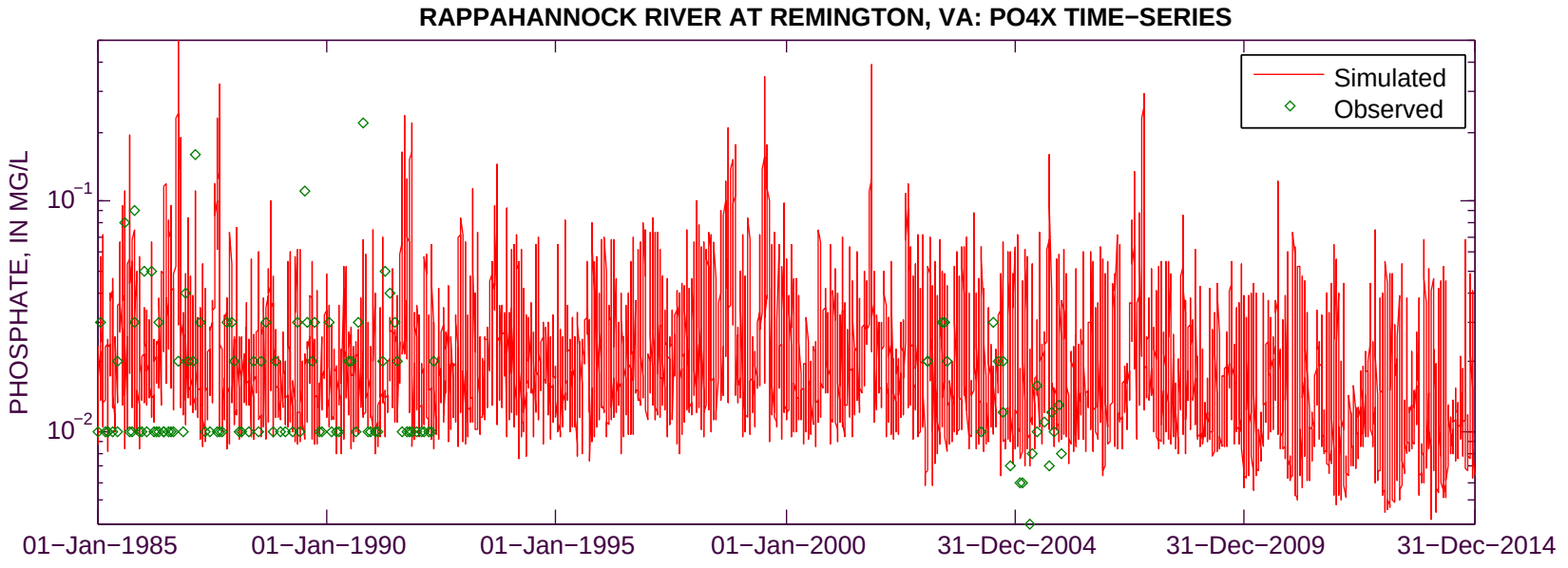
LOAD DATA
LOG10

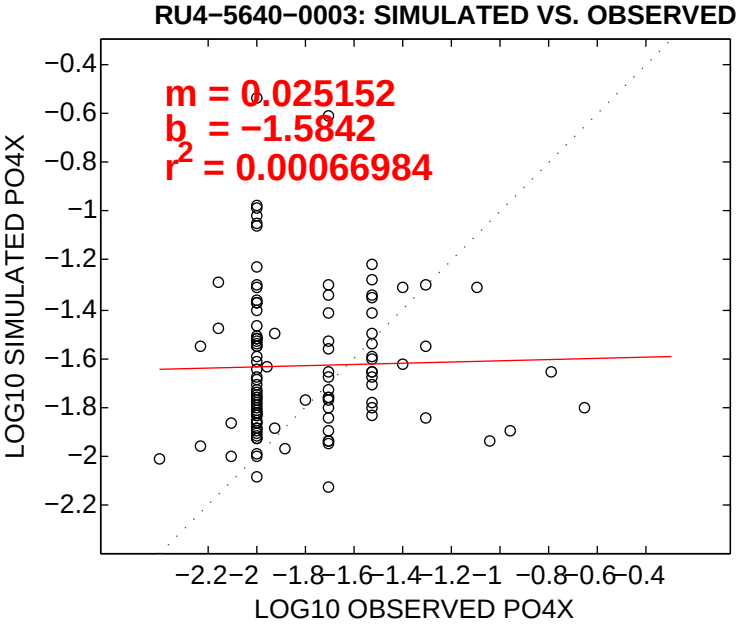


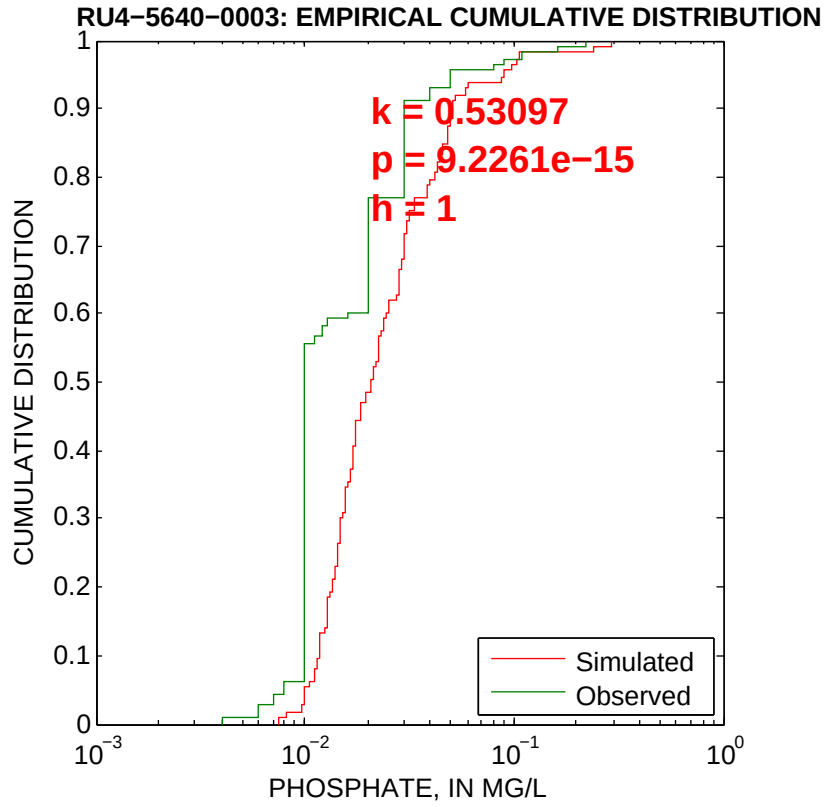












DATA SELECTION

scenario	file
P620171001WQ	PO4X.calib

plot: PO4X - phosphate

Dates: 1/1/1985 – 12/31/201

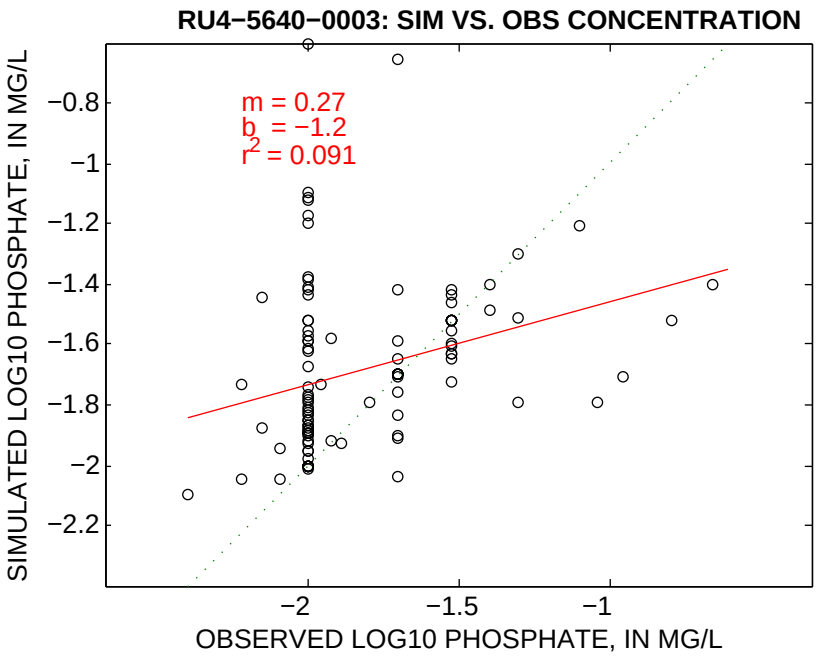
Drive	Directory	Observed
N/A	model	OBS20161101

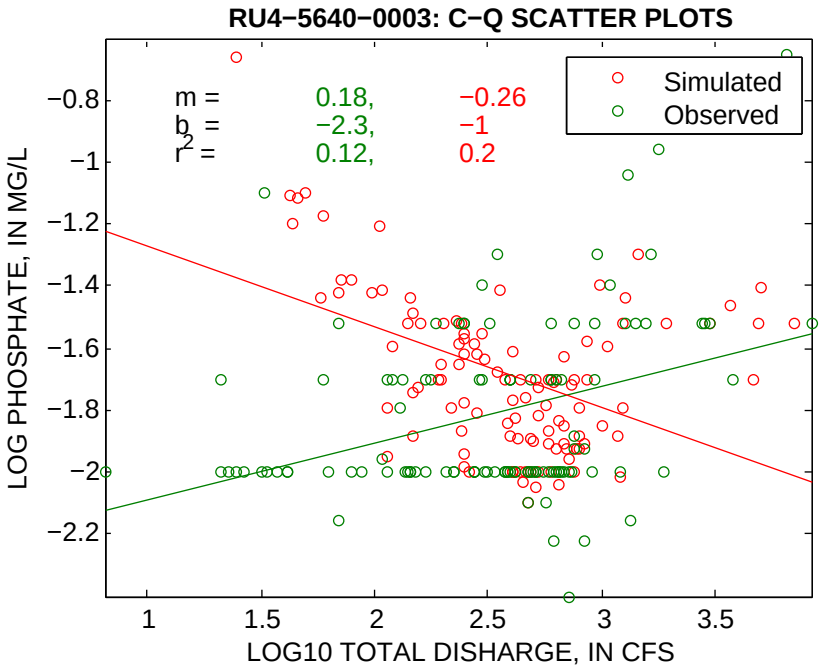
STATISTICS

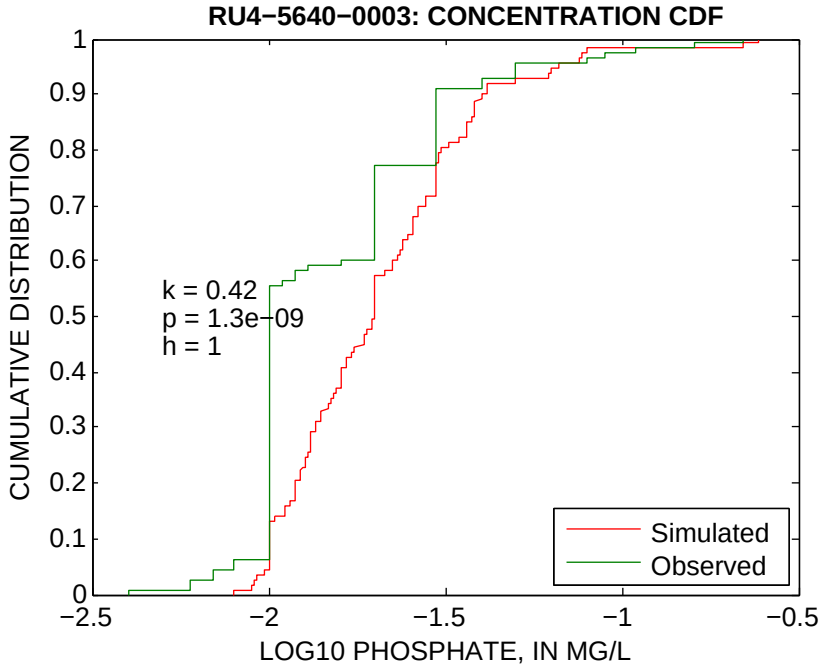
n	113	113
	observe	simulate
min	0.004	0.0074989
	-2.39794	-2.125
mean	0.0214159	0.0314101
	-1.81175	-1.62976
media	0.01	0.020925
	-2	-1.67933
max	0.22	0.29032
	-0.657577	-0.537123
varian	0.00078769	0.00140035
	0.0893328	0.0843692
JB	0.001	0.001
	0.001	0.001
	ra	log
%	46.6668	-10.0451
err.va	0.00240677	0.202625
rel.std.err	3.05547	2.2682
mod.eff	-2.05547	-1.2682

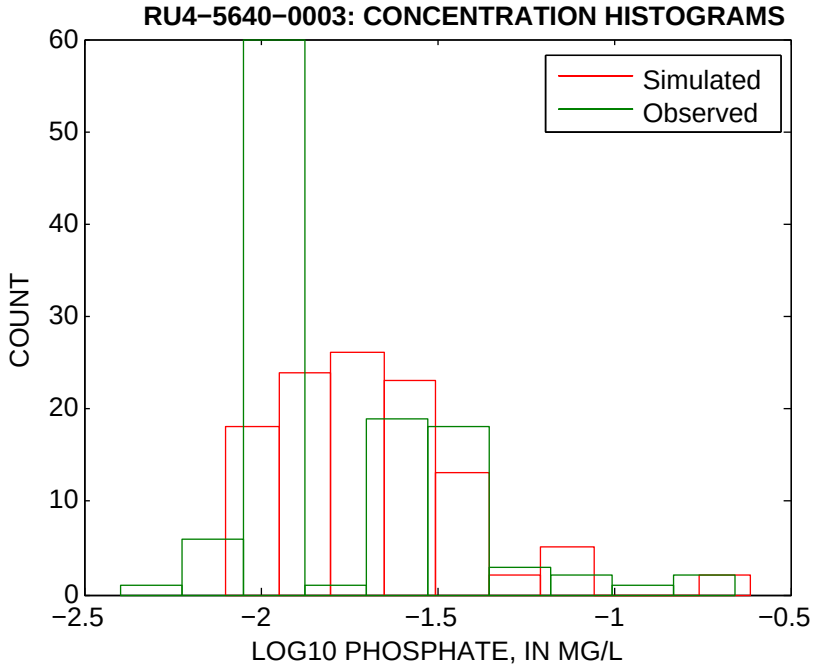
VERSION 2.1

ALL DATA
LOG10

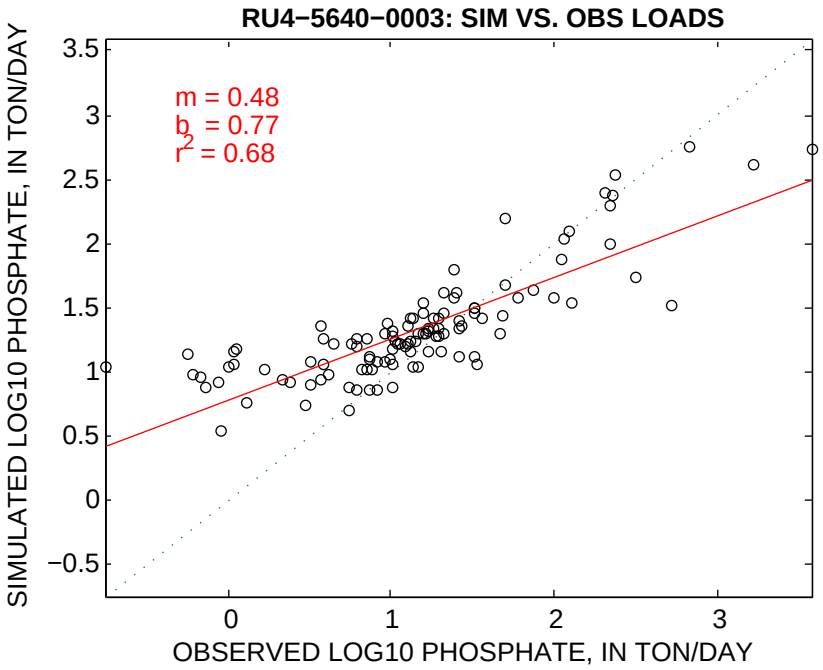


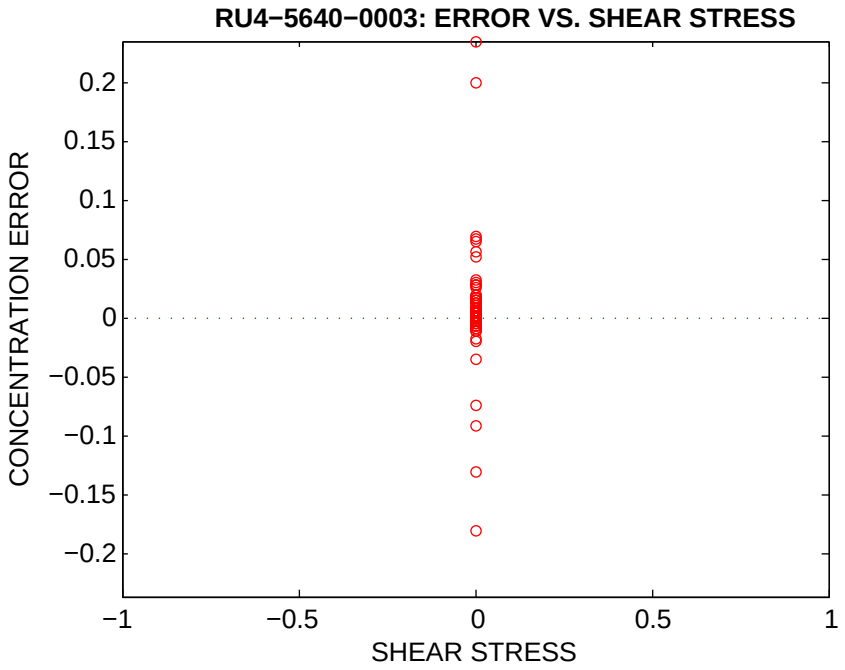


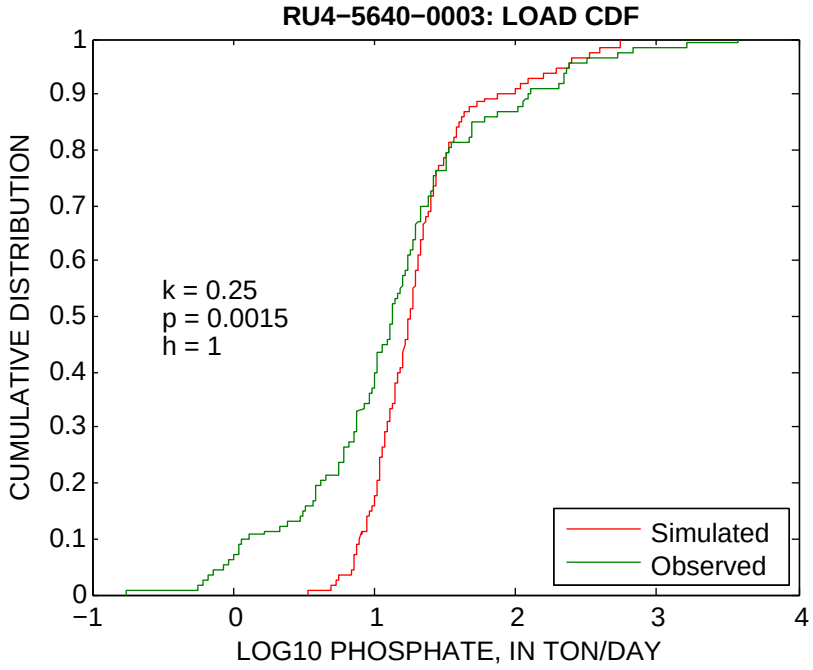


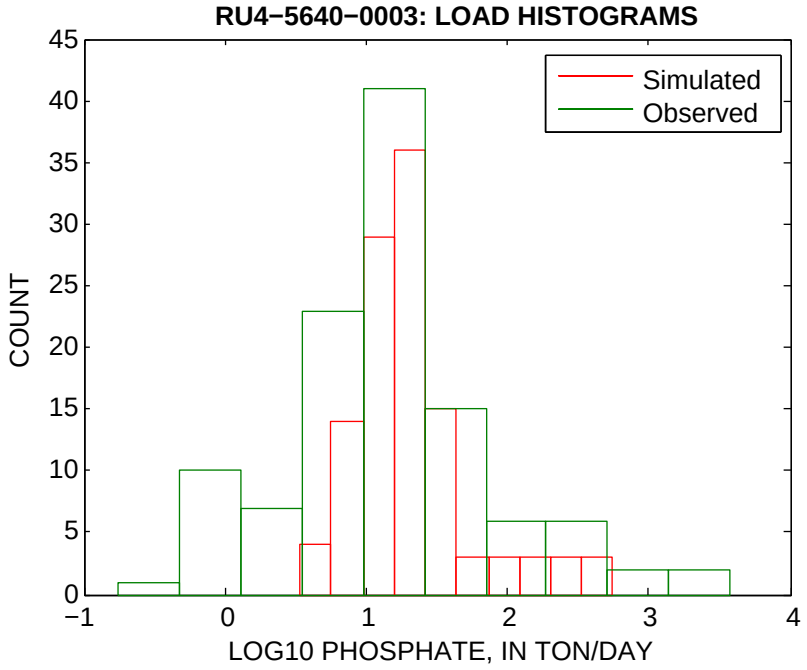


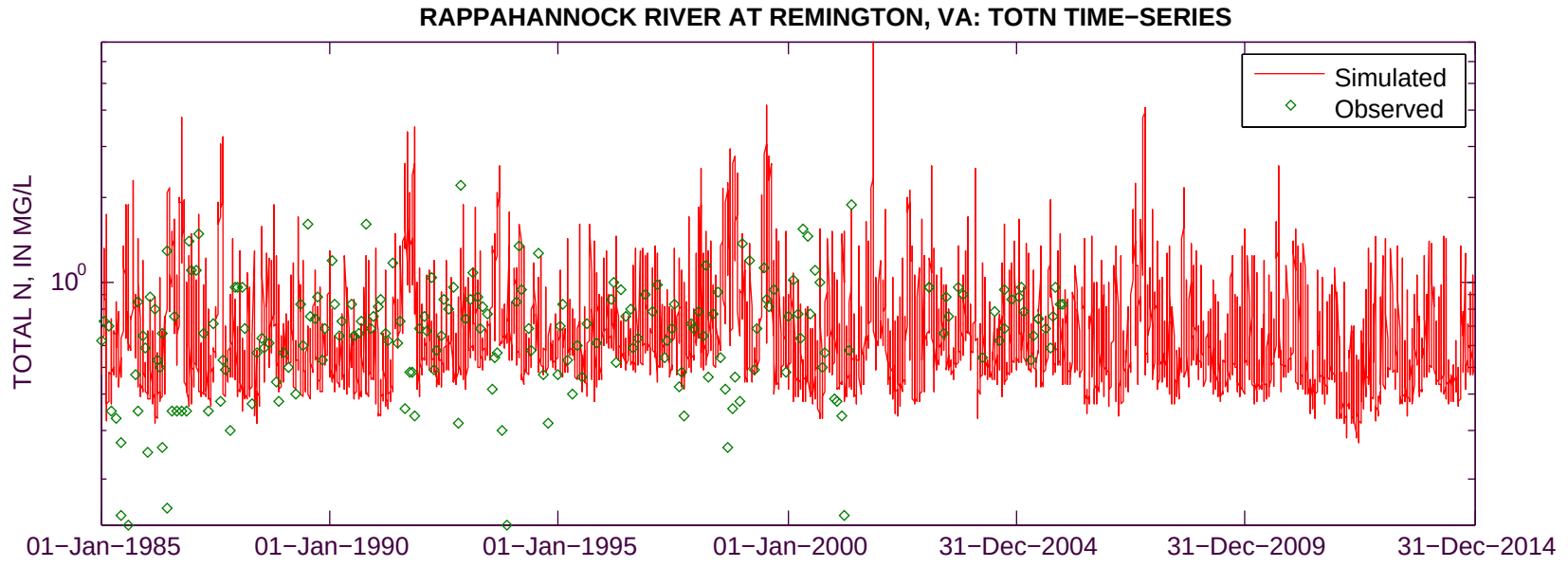
LOAD DATA
LOG10

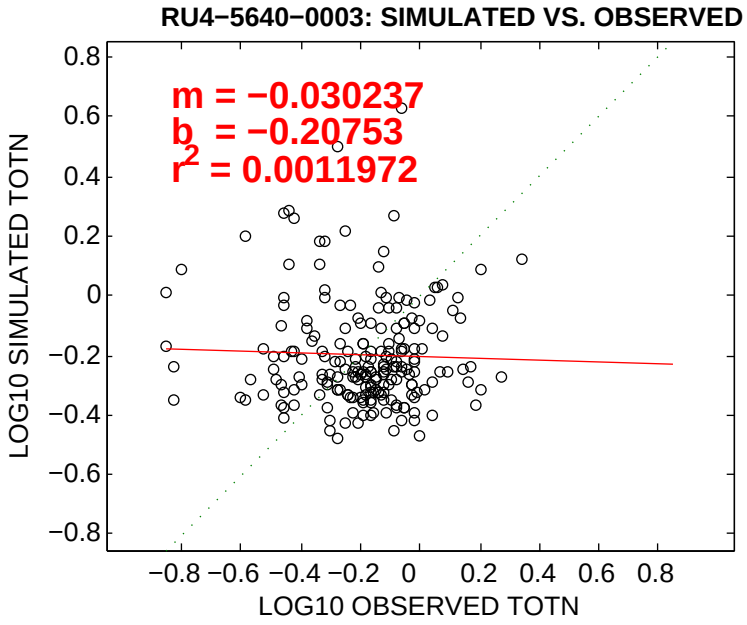


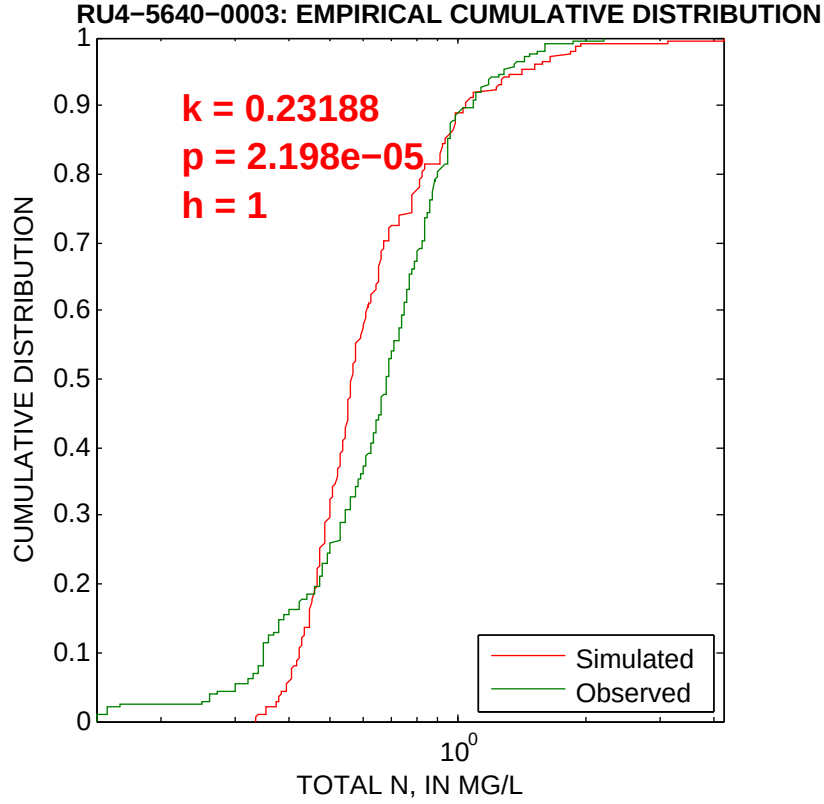












DATA SELECTION

scenario	file
P620171001WQ	TOTN.calib

plot: TOTN - total nitrogen

Dates: 1/1/1985 – 12/31/201

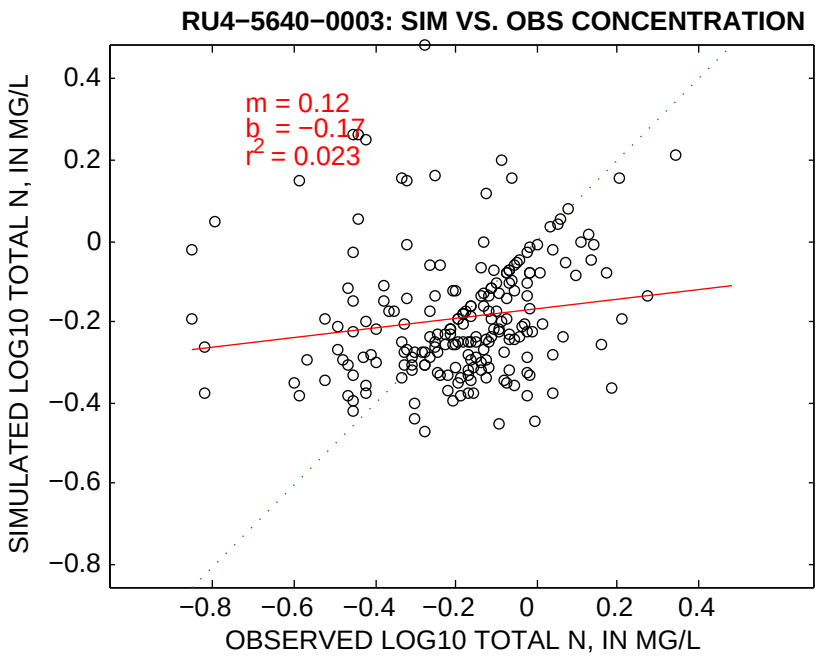
Drive	Directory	Observed
N/A	model	OBS20161101

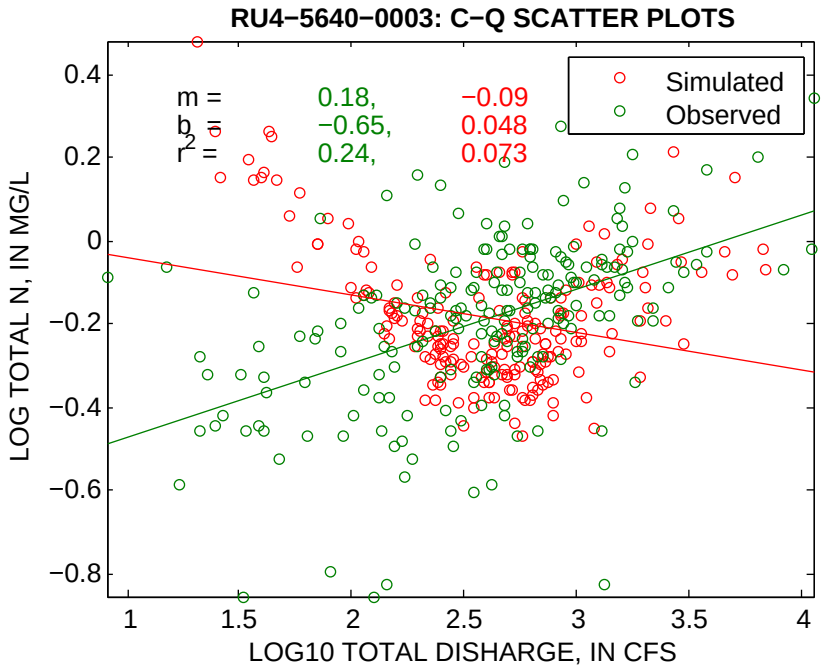
STATISTICS

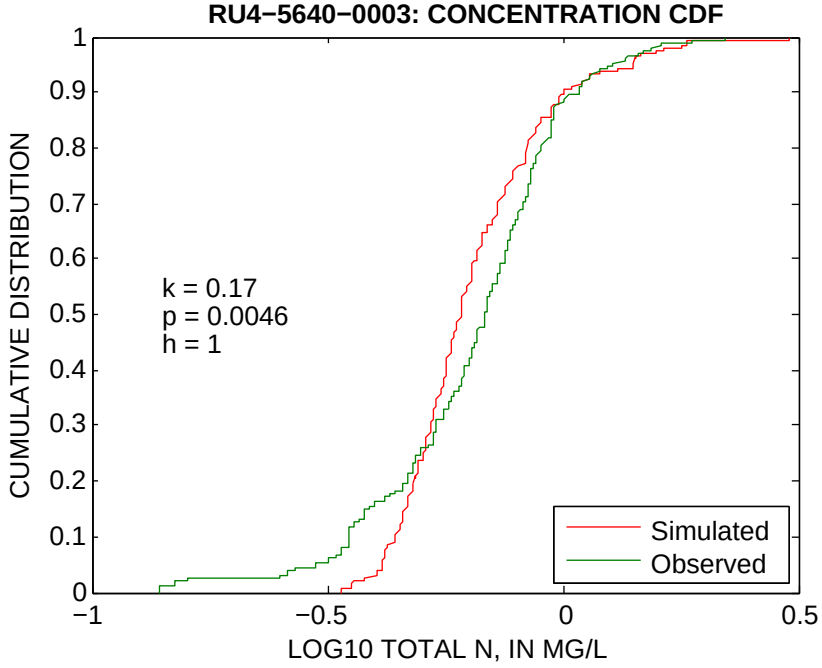
	n	207	207
		observe	simulate
min		0.14	0.33259
		-0.853872	-0.478091
mean		0.708744	0.695161
		-0.19176	-0.20173
media		0.68	0.56252
		-0.167491	-0.249862
max		2.21	4.2162
		0.344392	0.624921
varian		0.096222	0.180009
		0.0401433	0.030655
JB		0.001	0.001
		0.001	0.001
		ra	log
%		-1.91655	5.1993
err.va		0.277024	0.0733258
rel.std.err		2.87901	1.8266
mod.eff		-1.87901	-0.826602

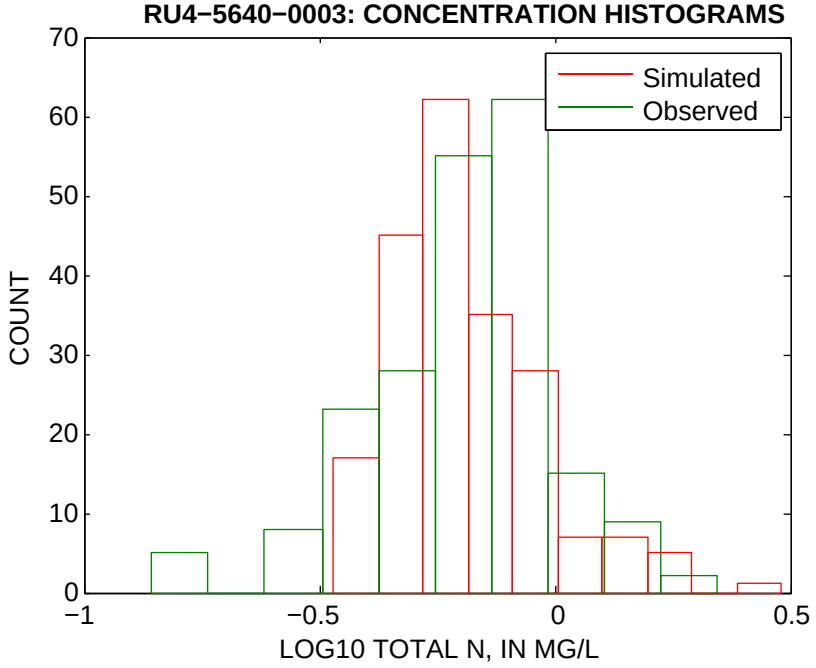
VERSION 2.1

ALL DATA
LOG10

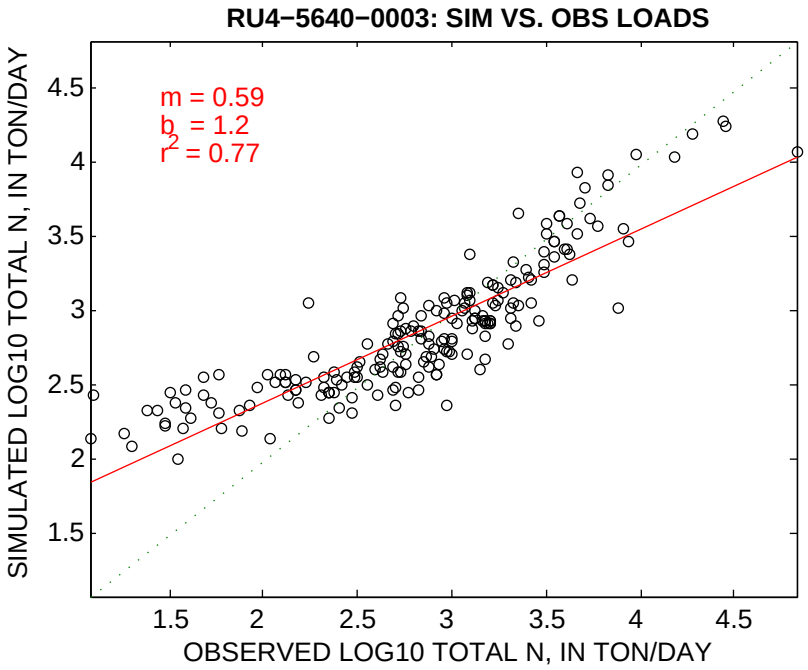


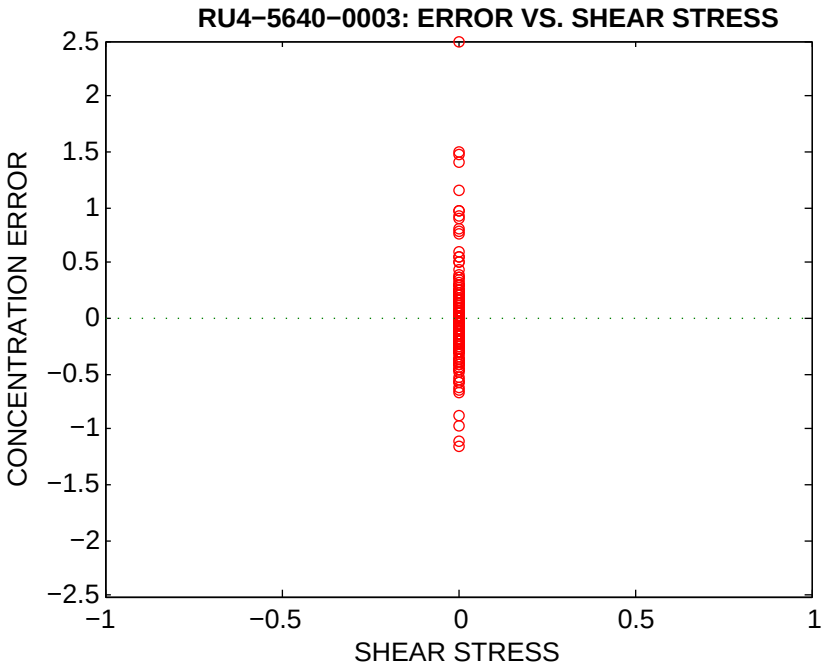


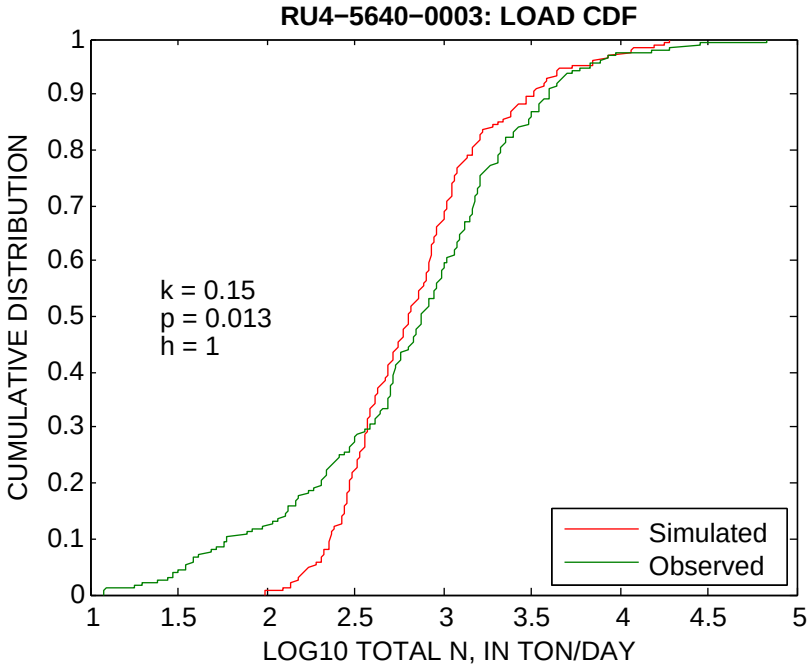


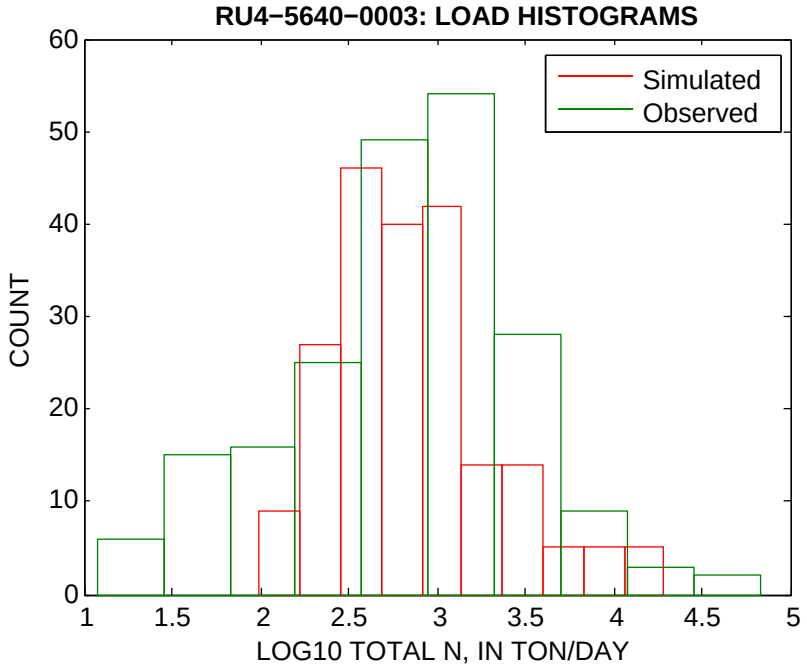


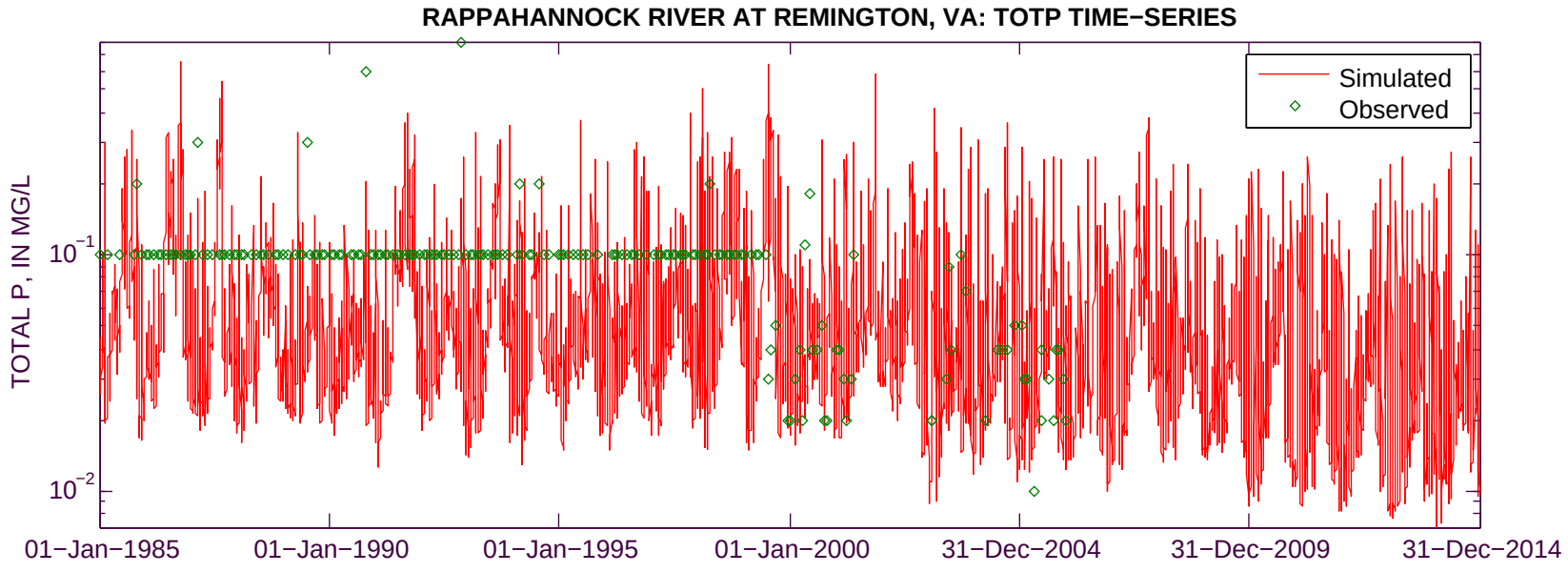
LOAD DATA
LOG10

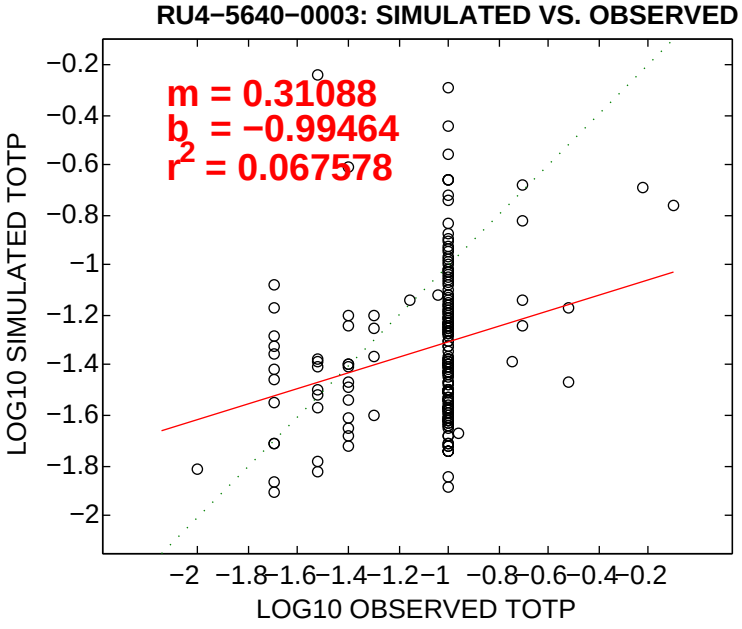


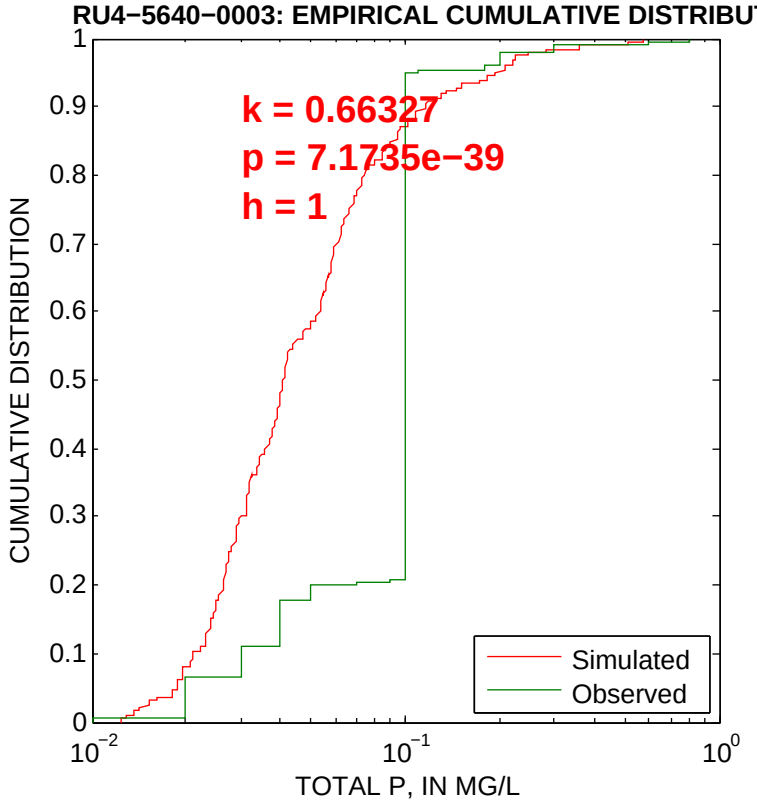












DATA SELECTION

scenario	file
P620171001WQ	TOTP.calib

plot: TOTP - total phosphorus

Dates: 1/1/1985 – 12/31/201

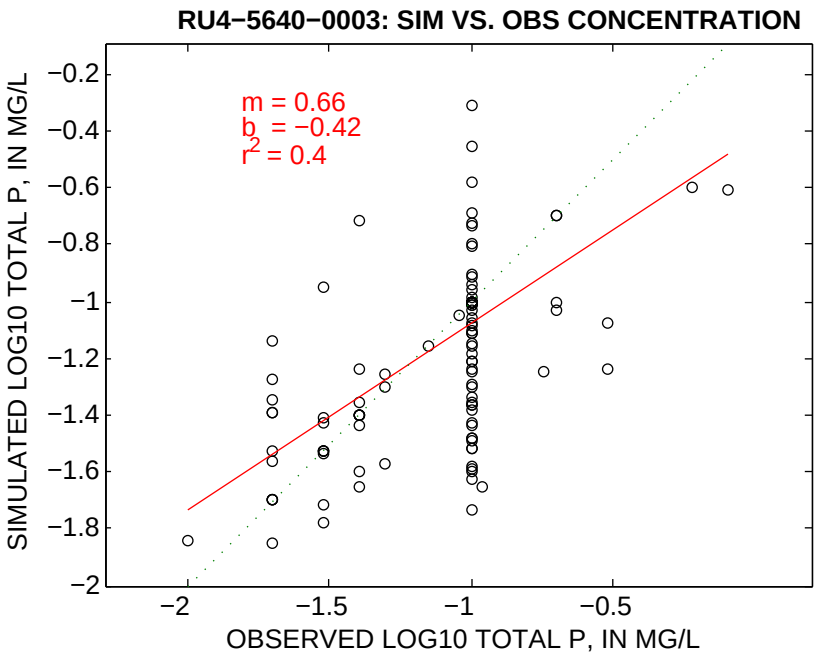
Drive	Directory	Observed
N/A	model	OBS20161101

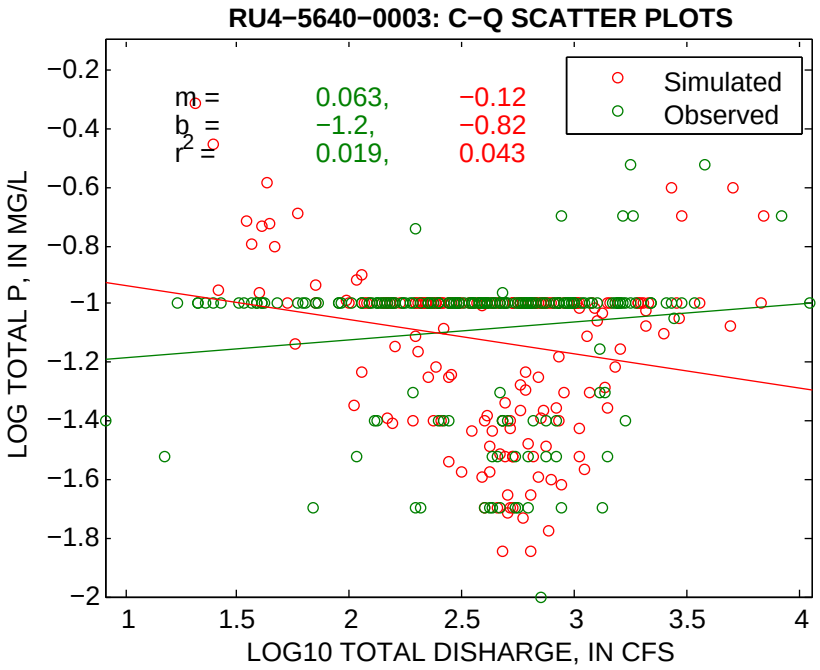
STATISTICS

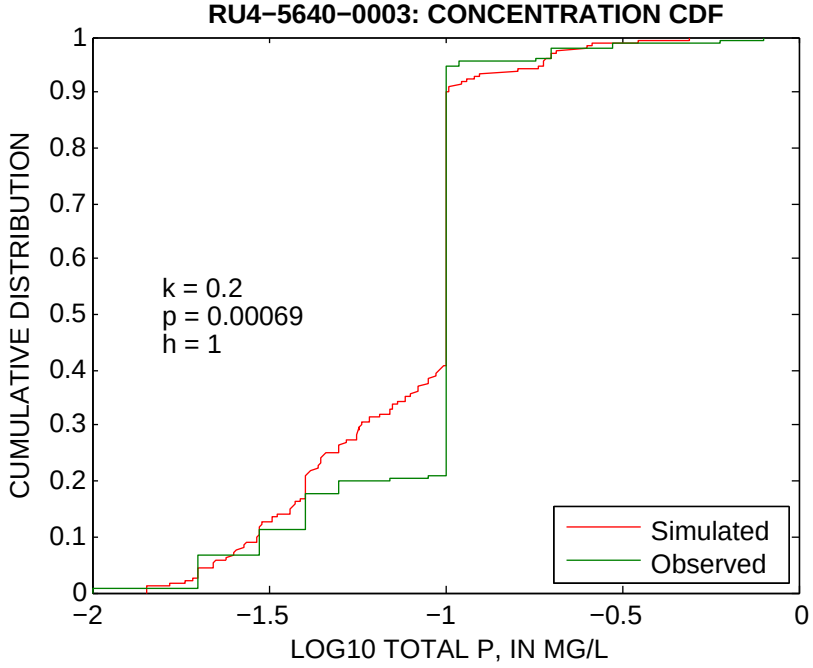
	n	196	196
		observe	simulate
min		0.01	0.012309
		-2	-1.90978
mean		0.0968878	0.063154
		-1.08436	-1.33175
media		0.1	0.0409405
		-1	-1.38785
max		0.8	0.57622
		-0.09691	-0.239412
varian		0.0053918	0.00502606
		0.0650322	0.0930061
JB		0.001	0.001
		0.001	0.001
		ra	log
%		-34.8174	22.814
err.va		0.00965126	0.179118
rel.std.err		1.78999	2.75429
mod.eff		-0.789988	-1.75429

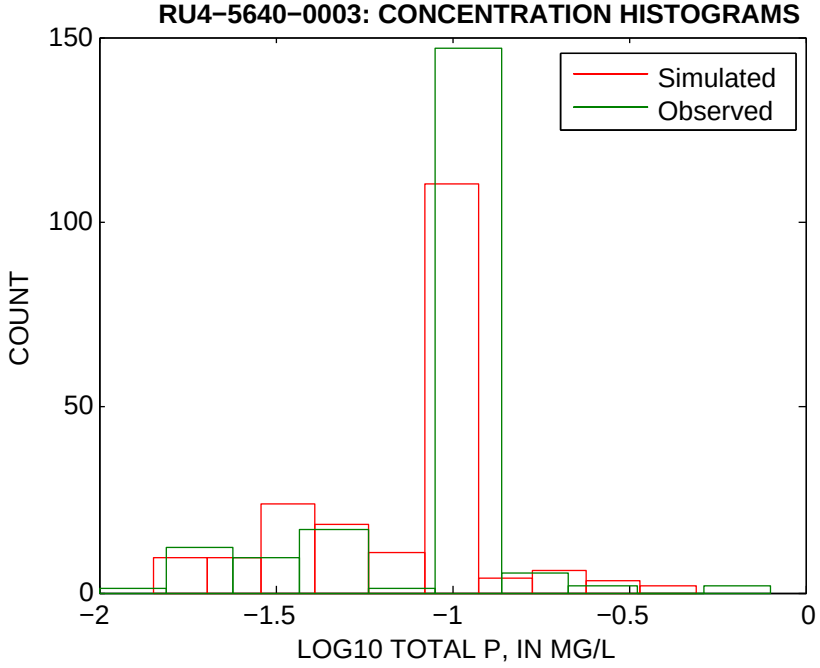
VERSION 2.1

ALL DATA
LOG10

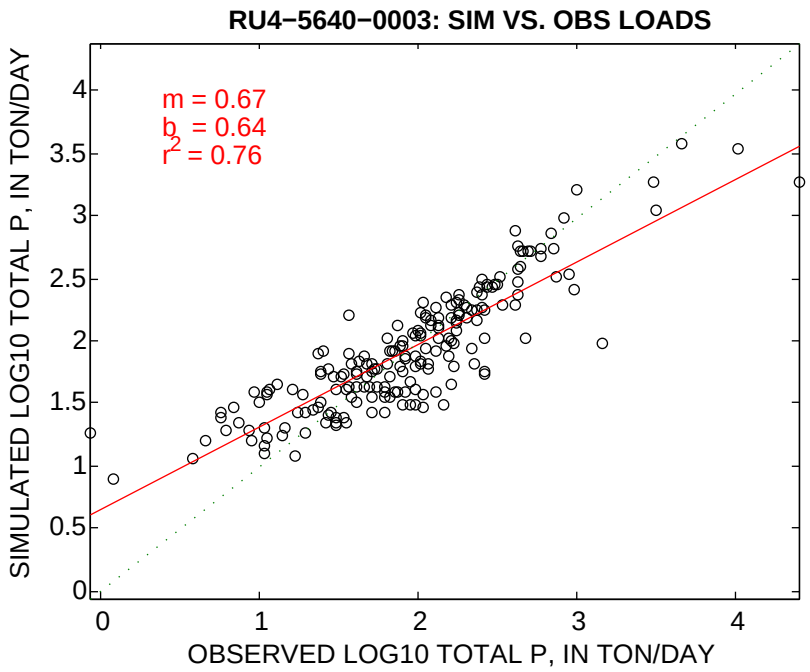


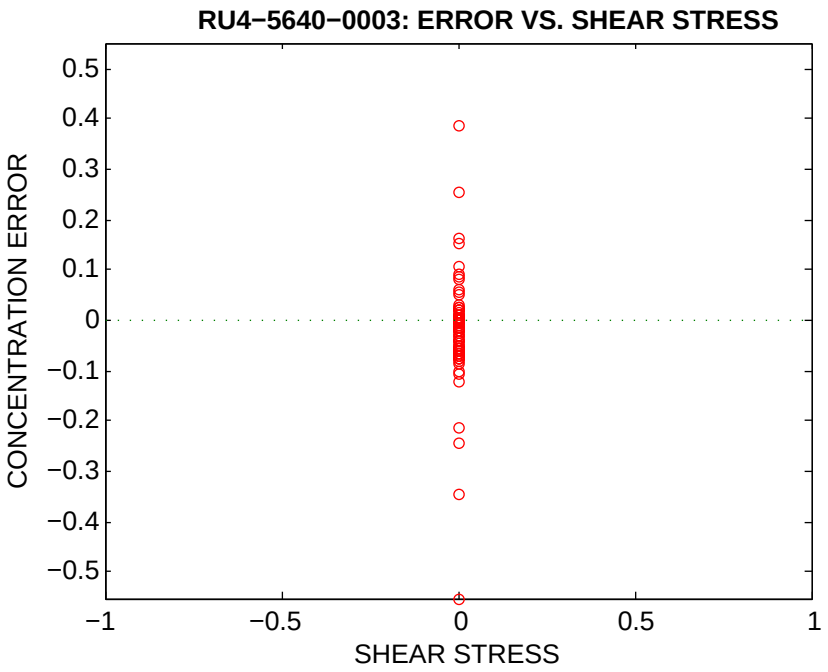


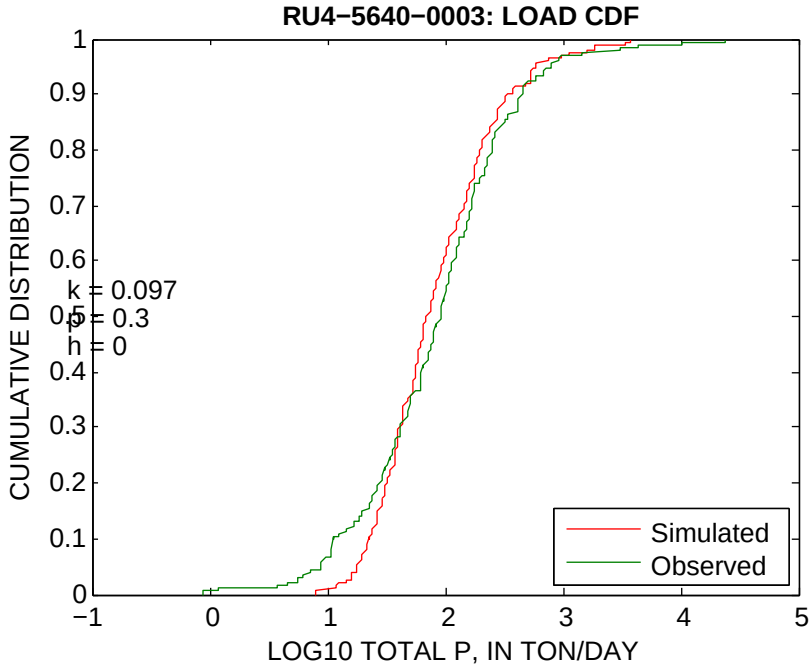


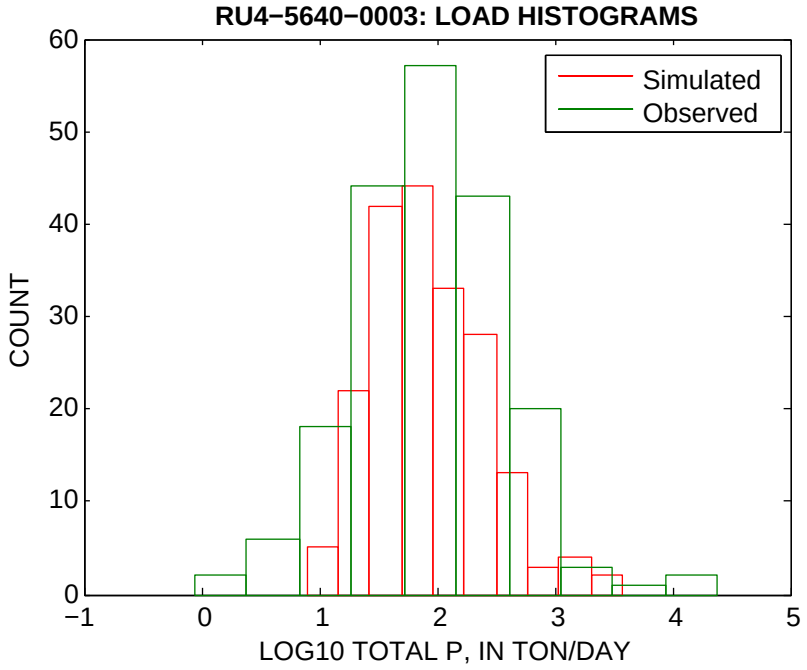


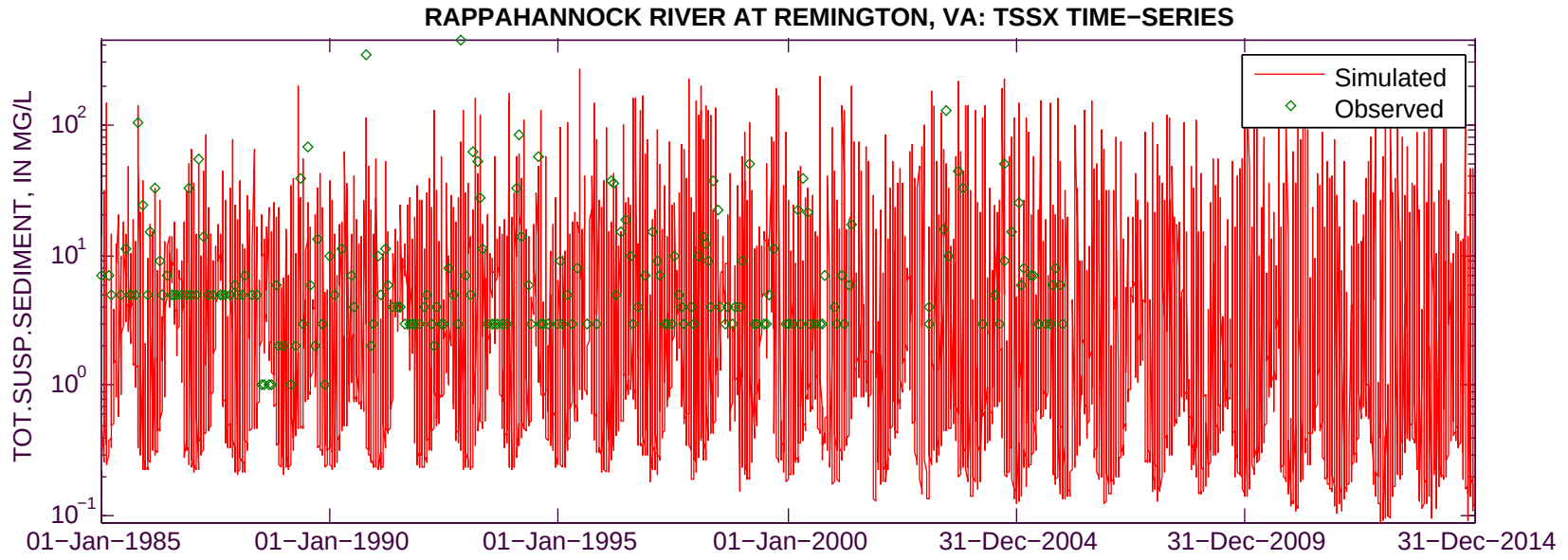
LOAD DATA
LOG10

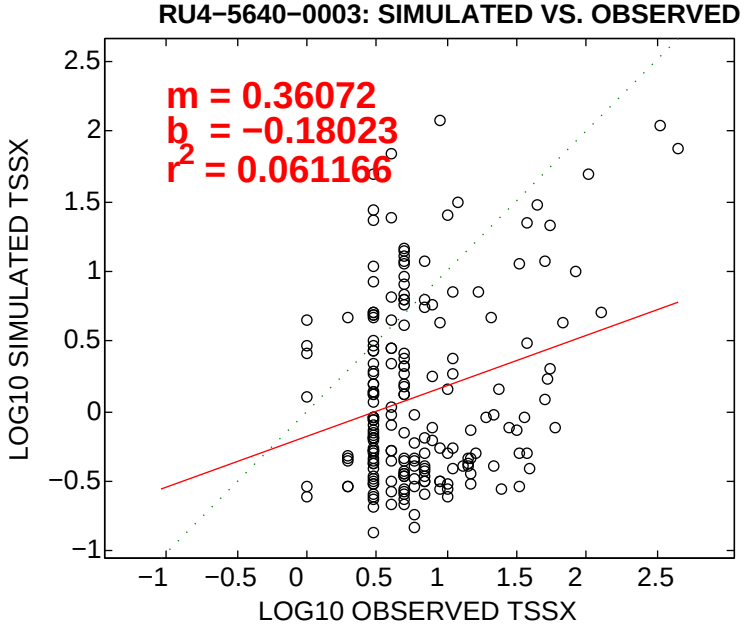


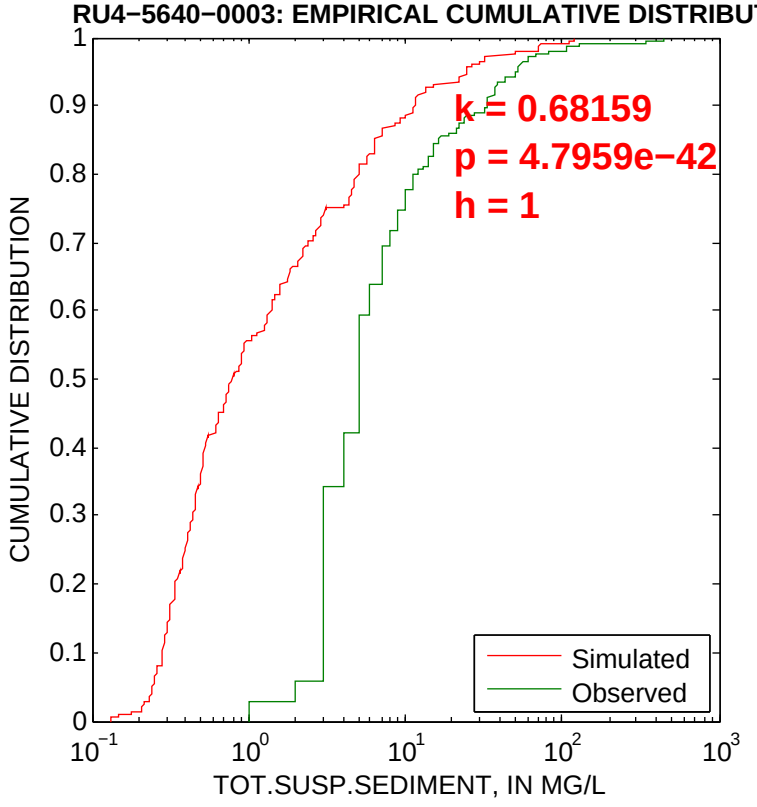












DATA SELECTION

scenario	file
P620171001WQ	TSSX.calib

plot: TSSX - total suspended ...

Dates 1/1/1985 12/31/201

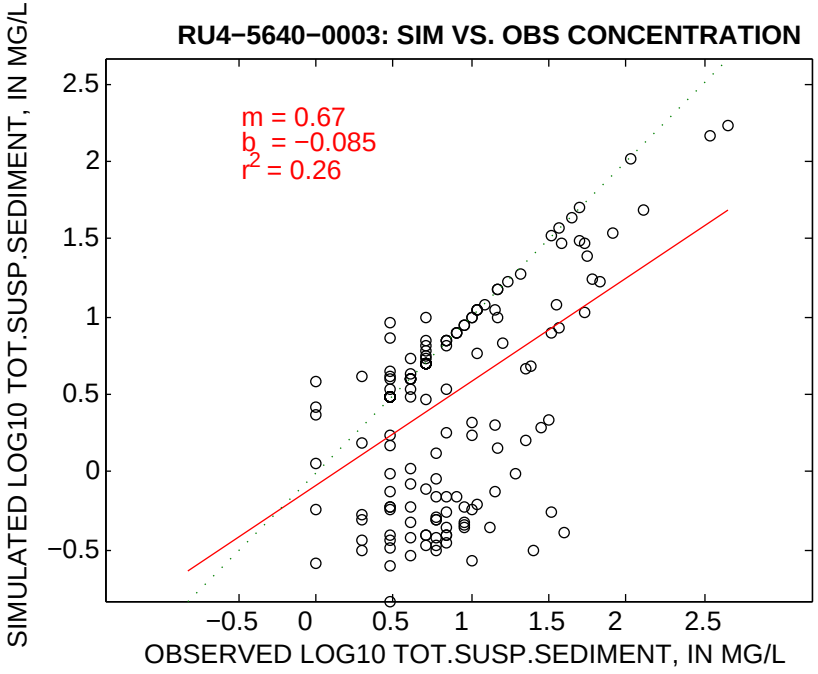
Drive	Directory	Observed
N/A	model	OBS20161101

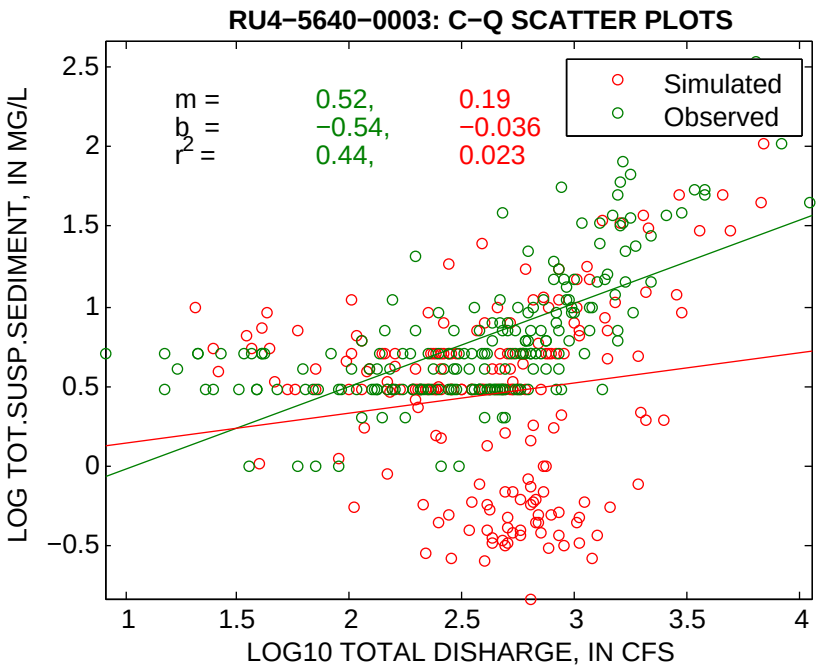
STATISTICS

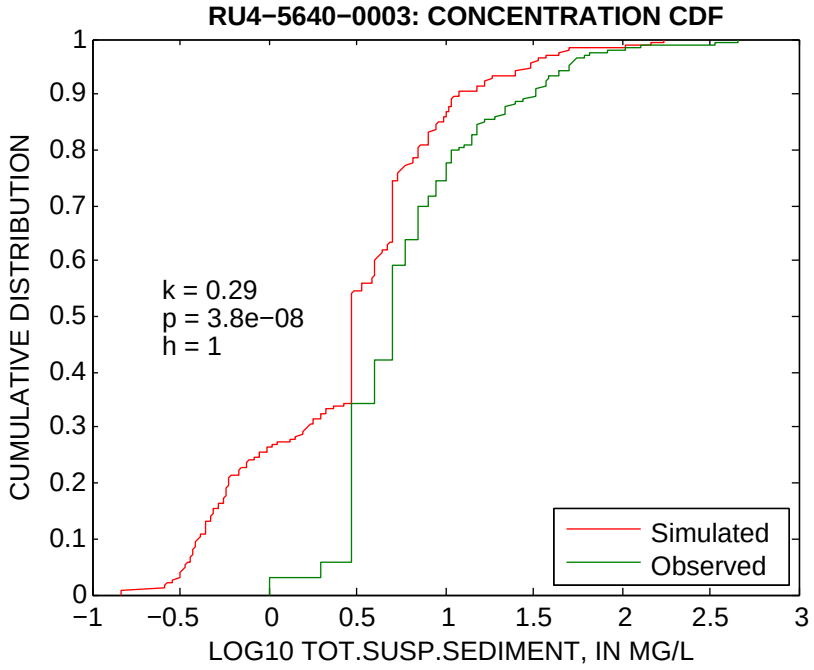
	n	201	201
		observe	simulate
min		1	0.13456
		0	-0.871084
mean		14.6468	5.36755
		0.802902	0.109394
media		5	0.79892
		0.69897	-0.0974967
max		451	119.32
		2.65418	2.07671
varian		1786.42	220.236
		0.197695	0.42057
JB		0.001	0.001
		0.001	0.001
		ra	log
%		-63.3534	-86.3751
err.va		1375.82	0.958995
rel.std.err		0.770154	4.85088
mod.eff		0.229846	-3.85088

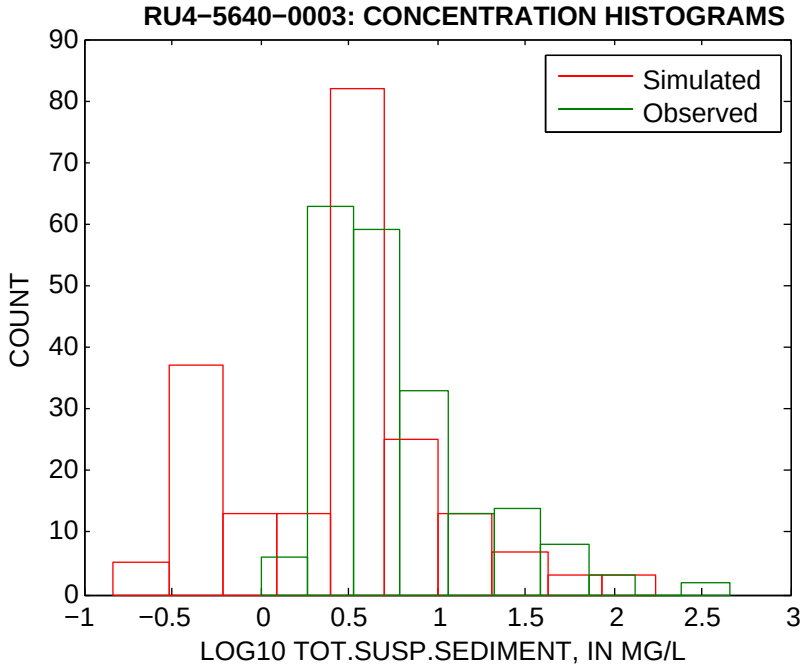
VERSION 2.1

ALL DATA
LOG10

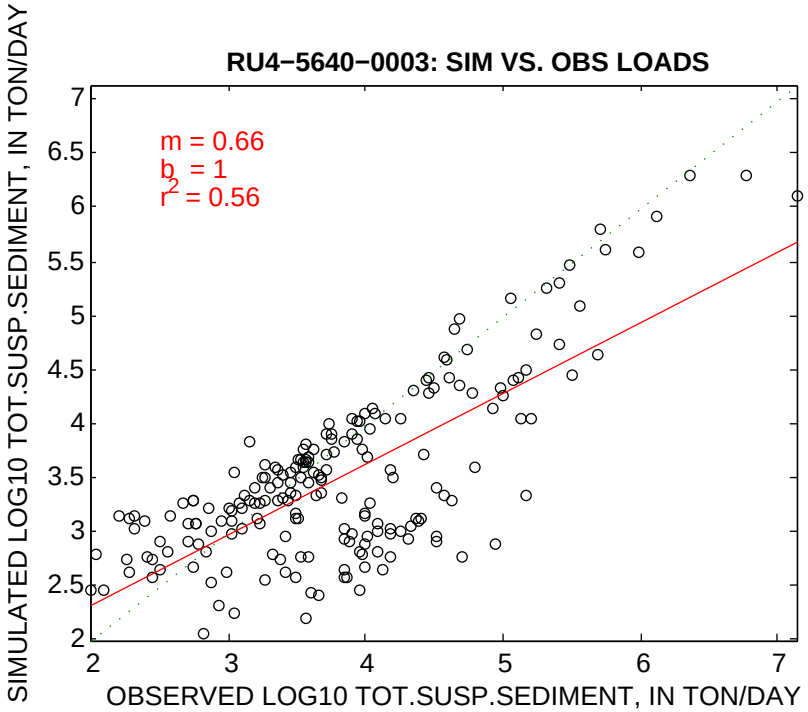


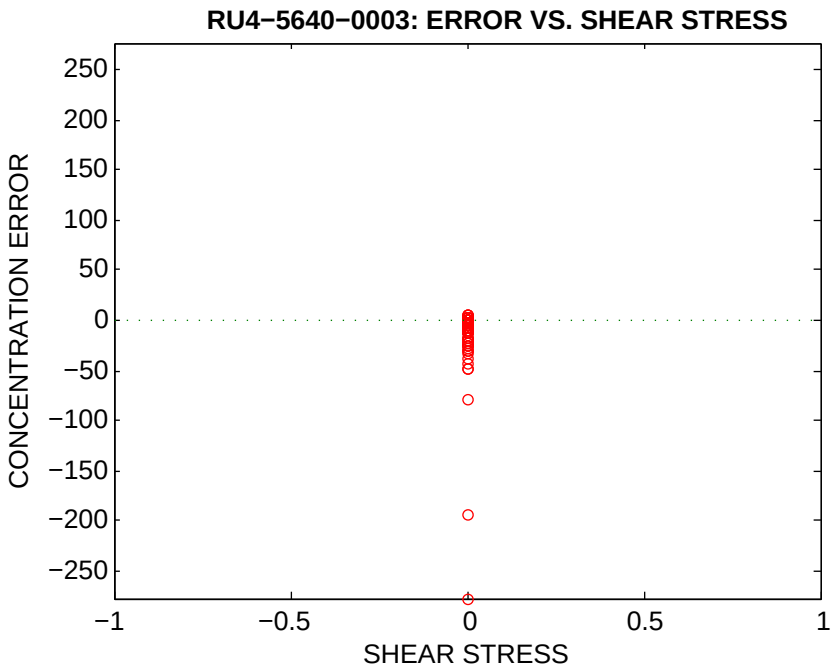


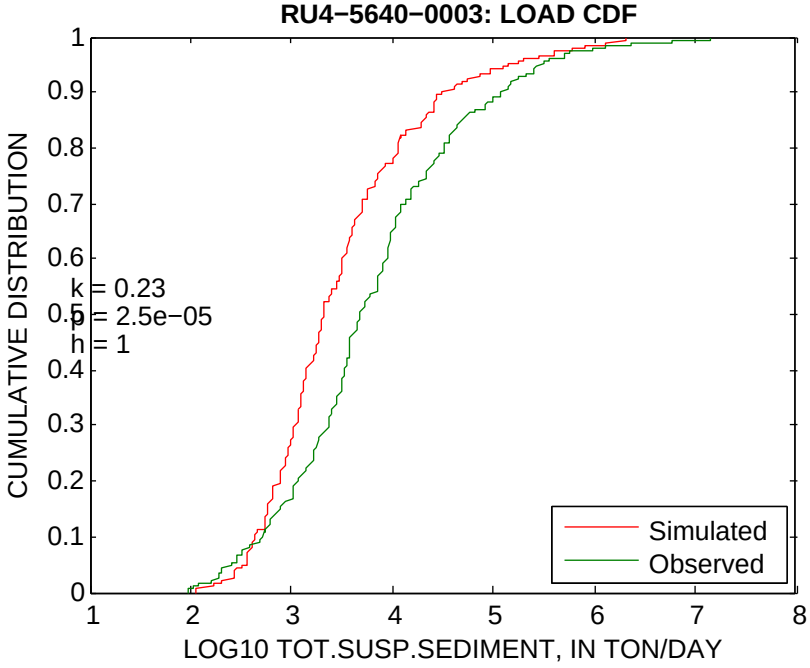


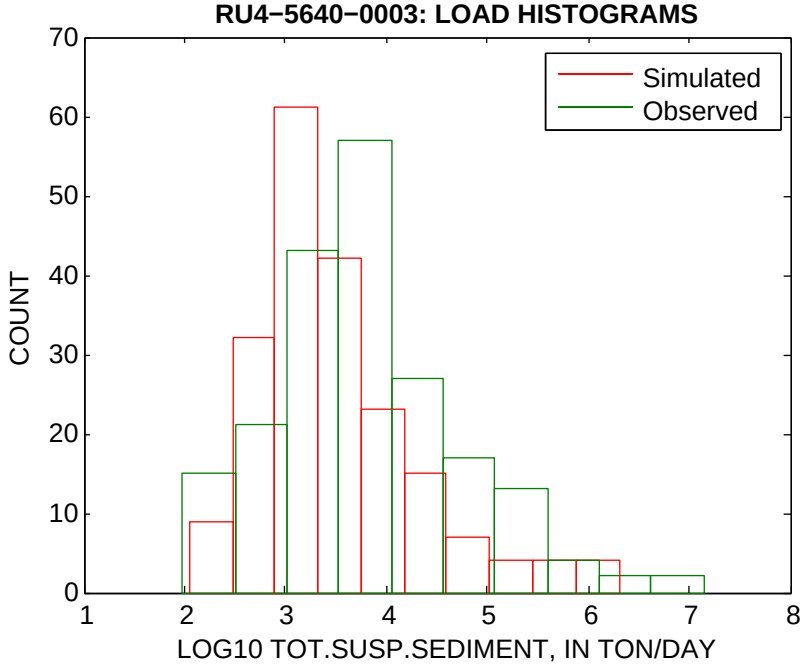


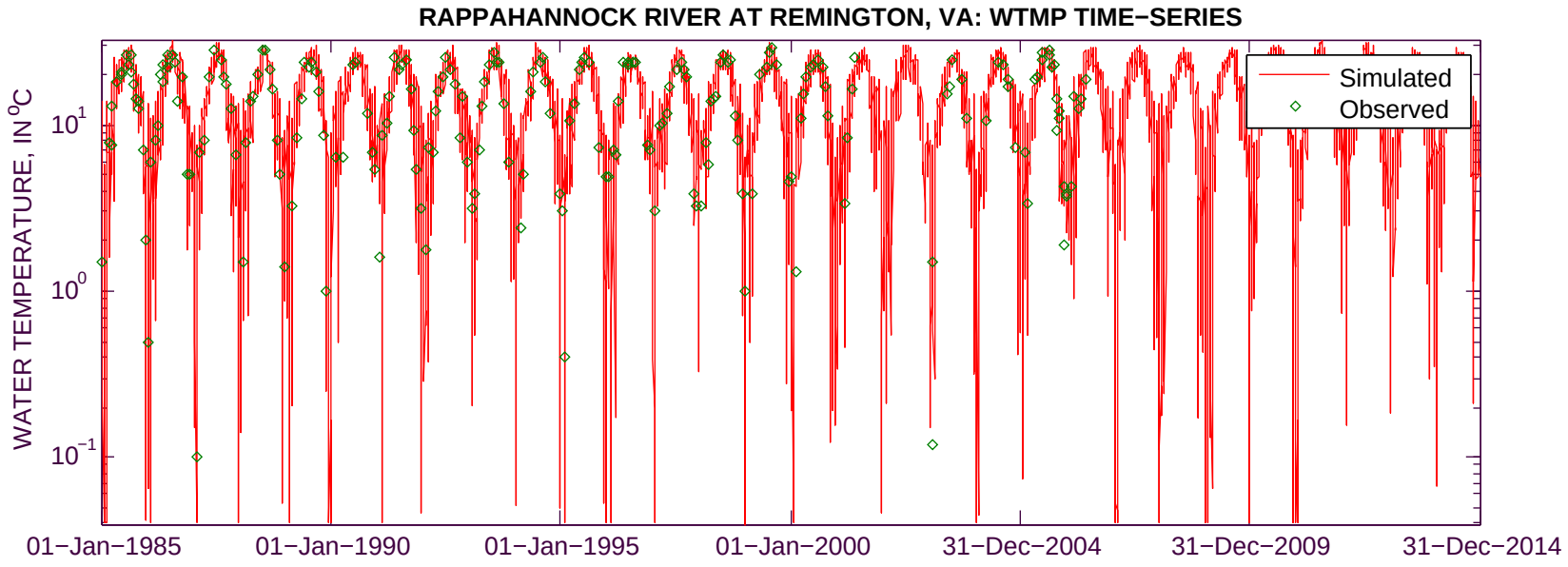
LOAD DATA
LOG10

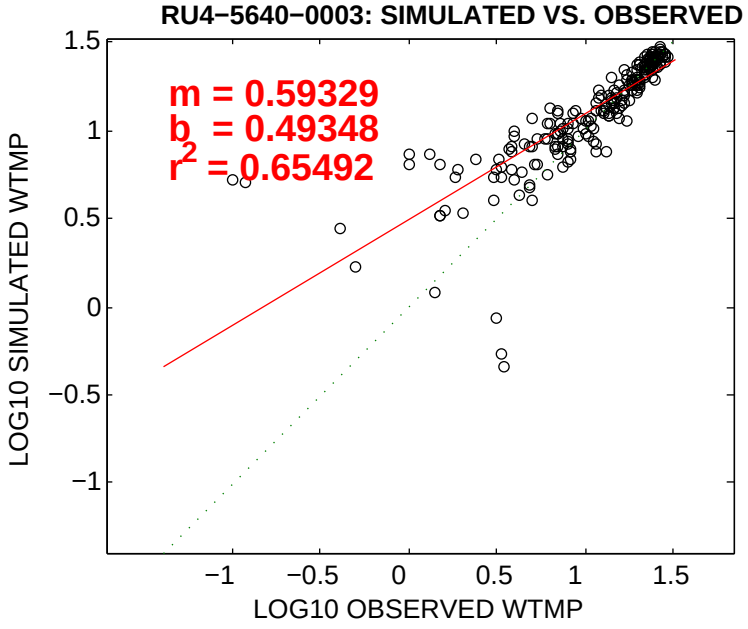


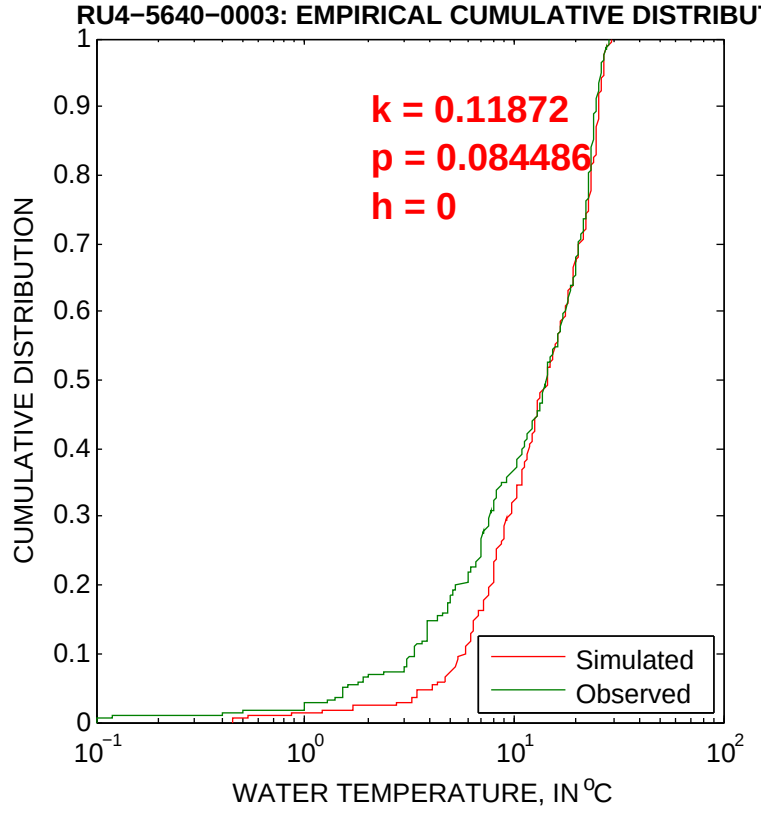












DATA SELECTION

scenario	file
P620171001WQ	WTMP.calib

plot: WTMP - water tempera...

Dates: 1/1/1985 – 12/31/201

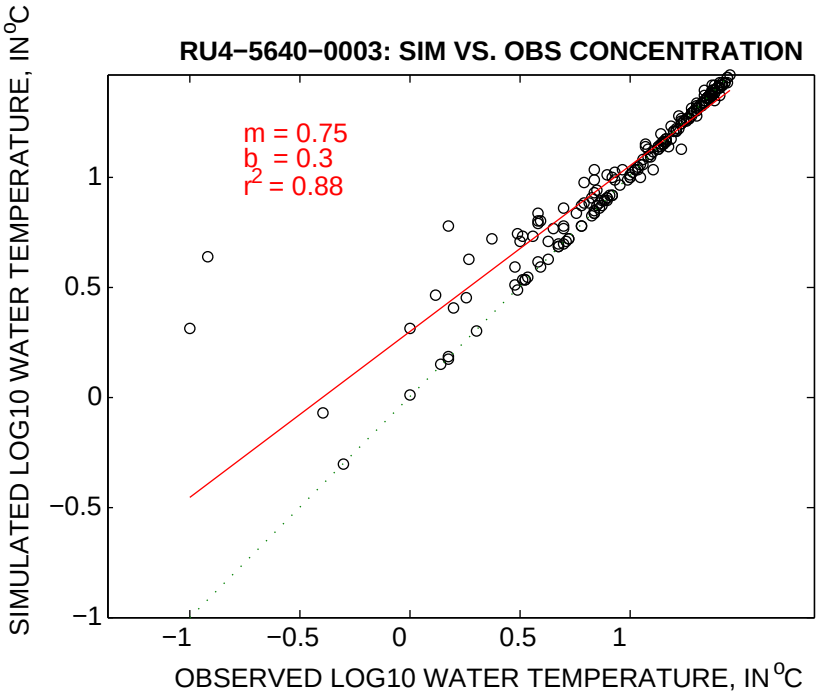
Drive	Directory	Observed
N/A	model	OBS20161101

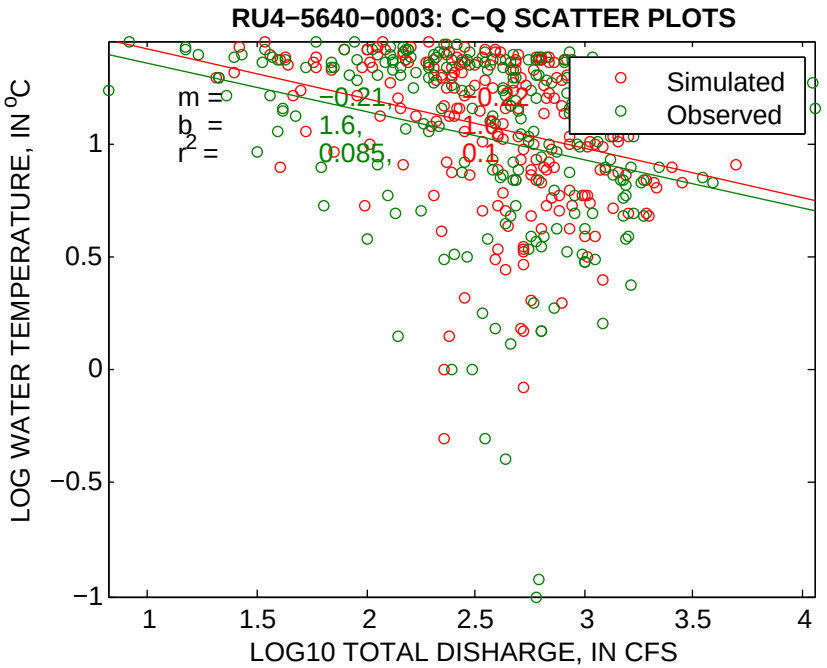
STATISTICS

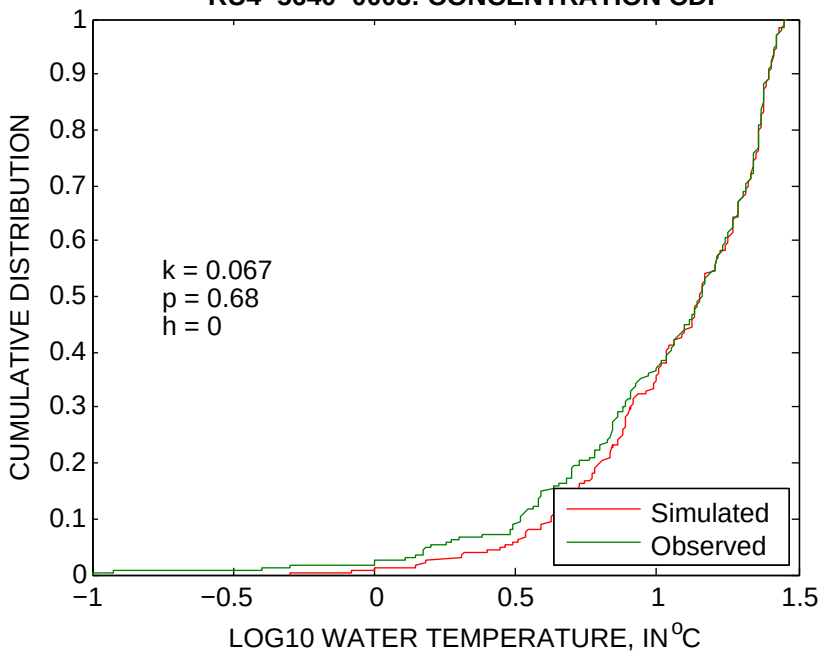
	n	observe	simulate
		219	219
min		0.1	0.4526
		-1	-0.344285
mean		14.2287	15.1662
		1.02645	1.10246
media		14.3	14.39
		1.15534	1.15806
max		28.8	29.719
		1.45939	1.47303
varian		67.9192	58.2956
		0.170868	0.0918336
JB		0.004313	0.006258
		0.001	0.001
		ra	log
%		6.58866	7.40474
err.va		6.87691	0.0657573
rel.std.err		0.101251	0.384842
mod.eff		0.898749	0.615158

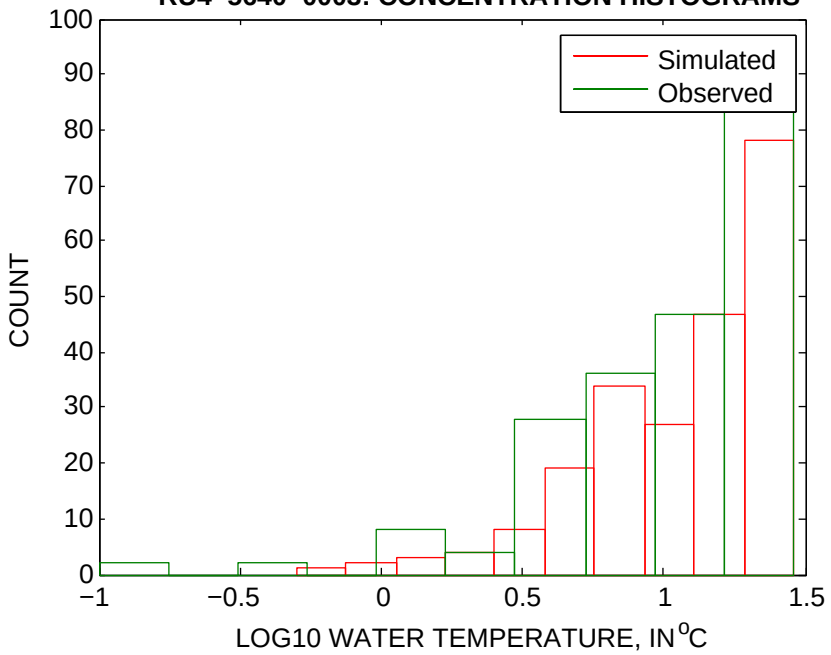
VERSION 2.1

ALL DATA
LOG10

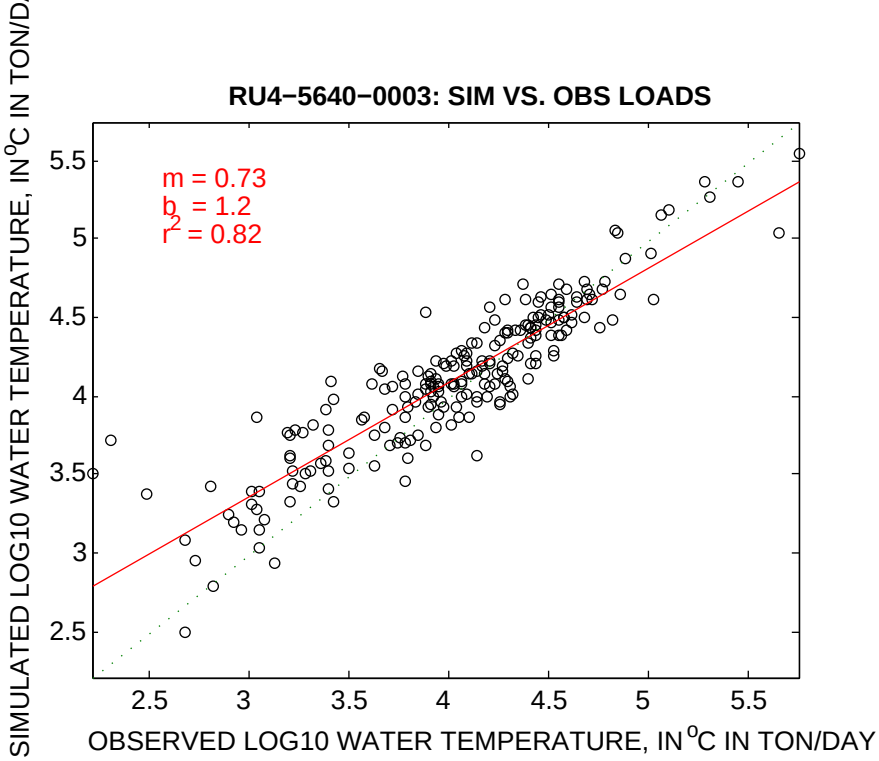




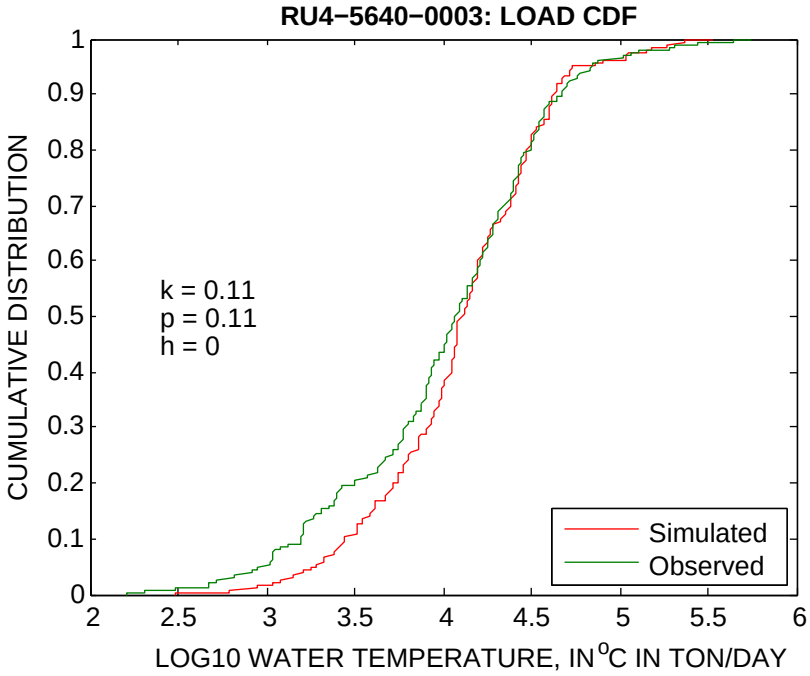


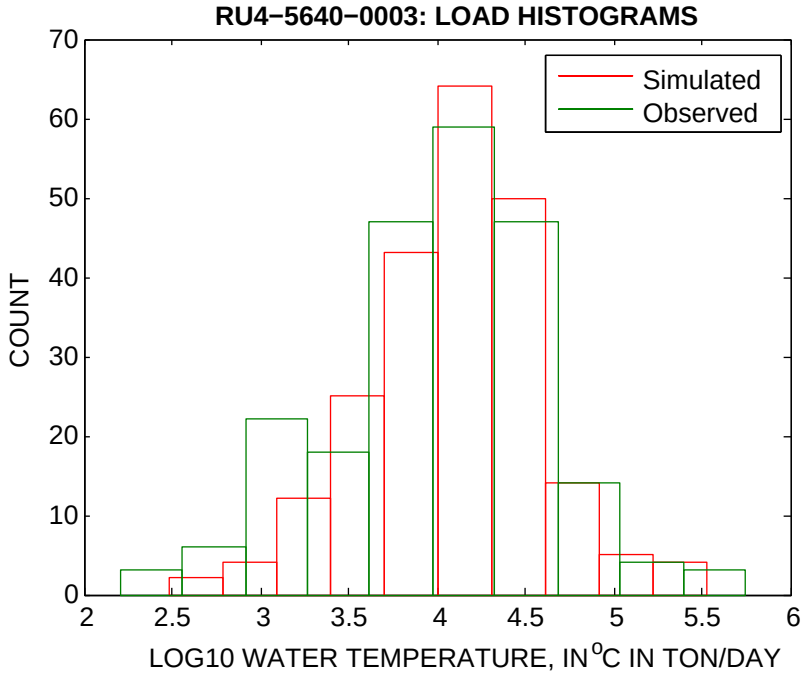


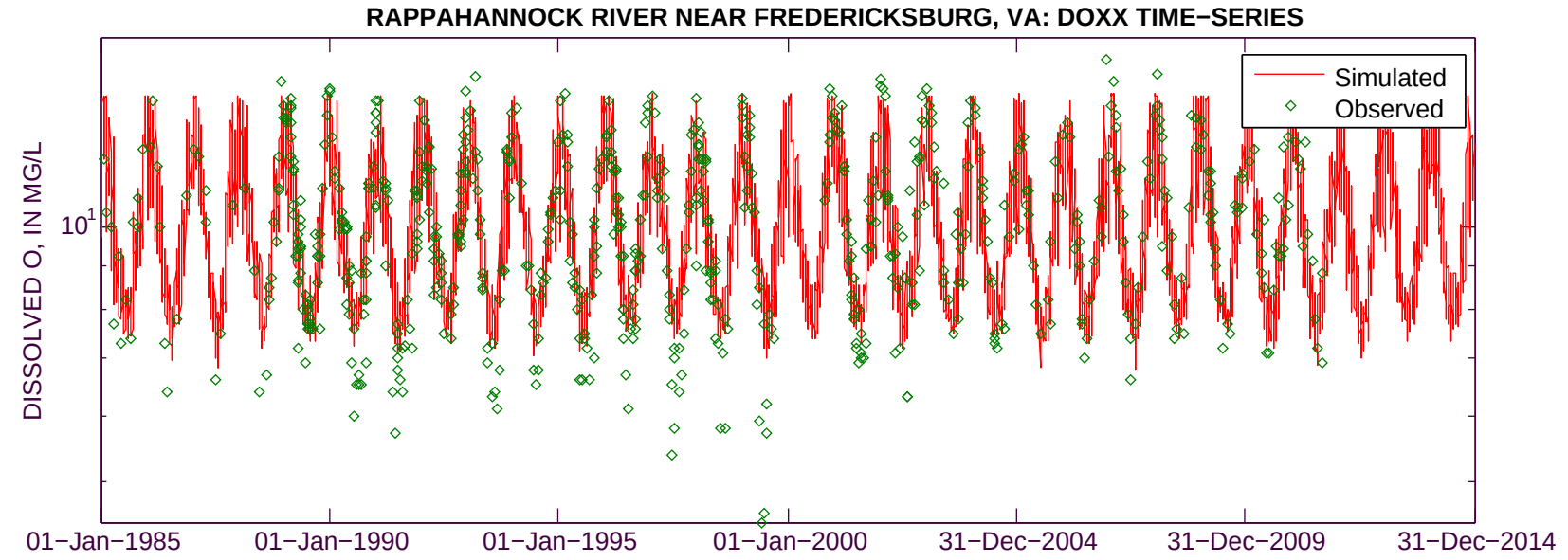
LOAD DATA
LOG10

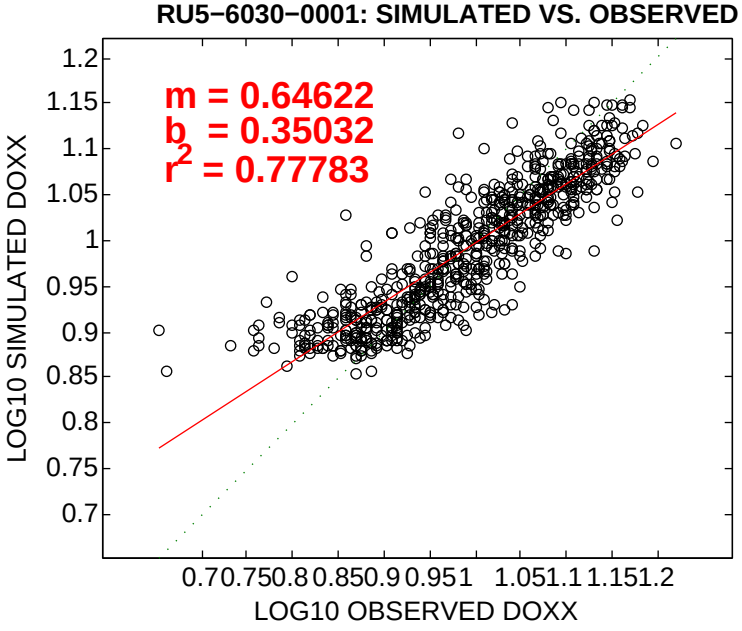


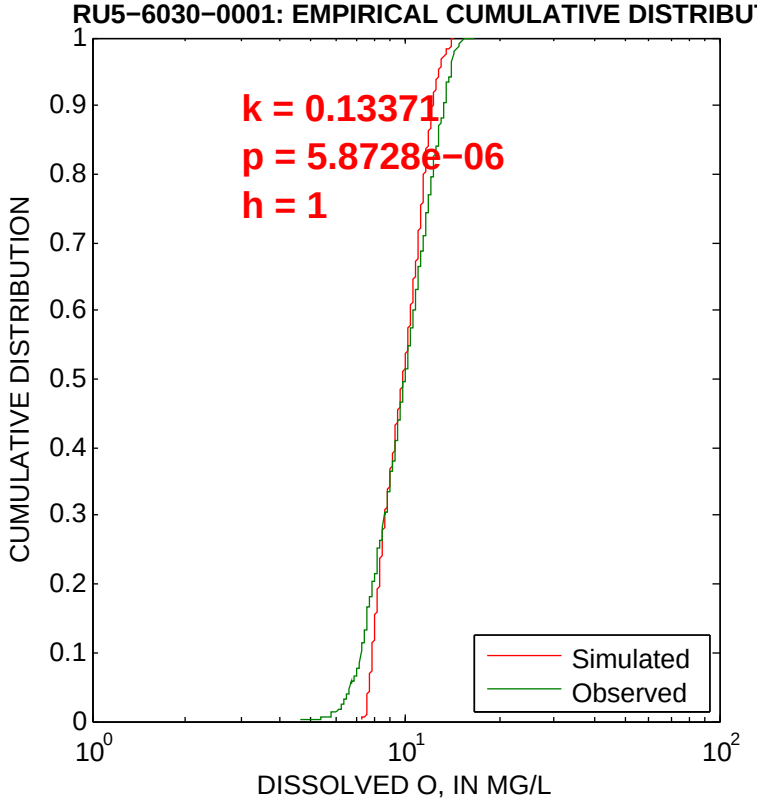












DATA SELECTION

scenario	file
P620171001WQ	DOXX.calib

plot: DOXX - dissolved oxygen

Dates: 1/1/1985 – 12/31/201

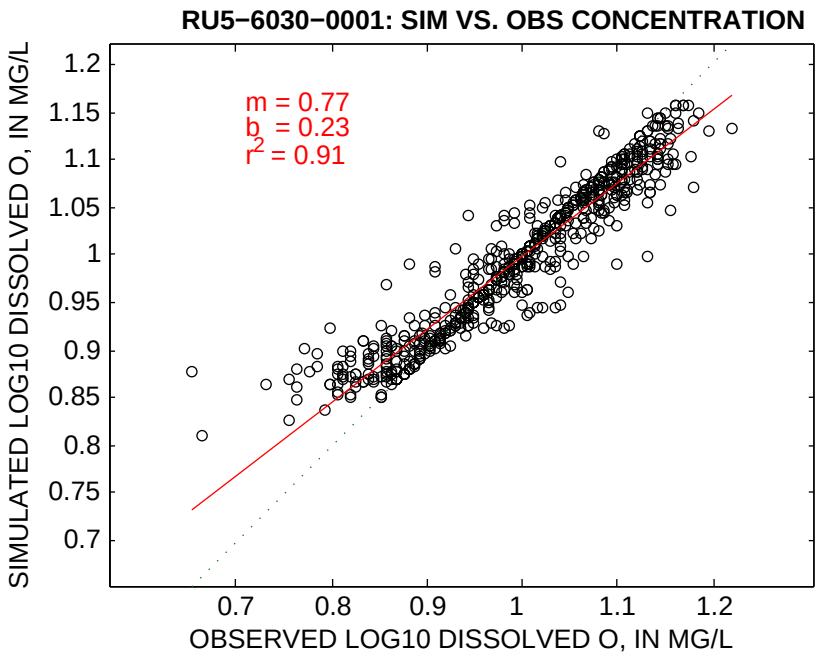
Drive	Directory	Observed
N/A	model	OBS20161101

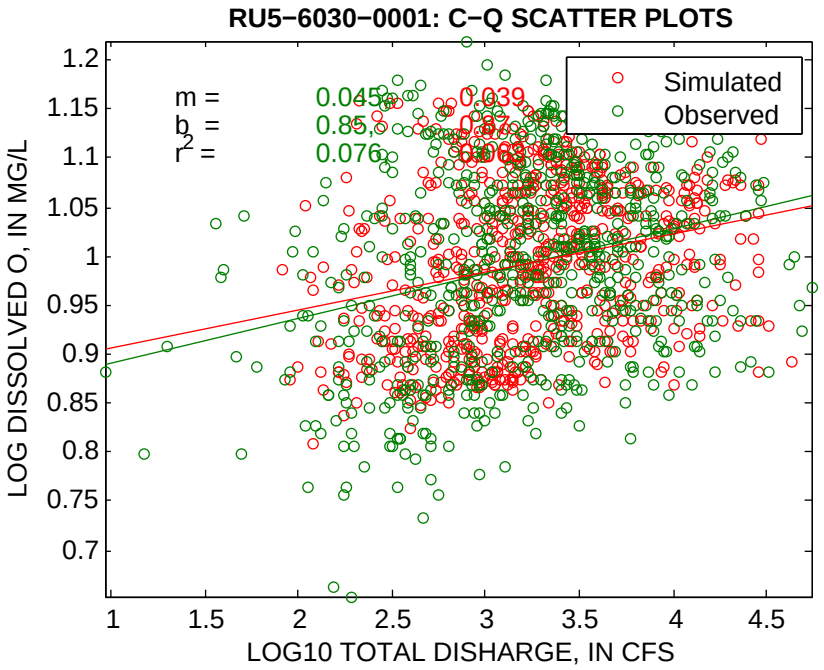
STATISTICS

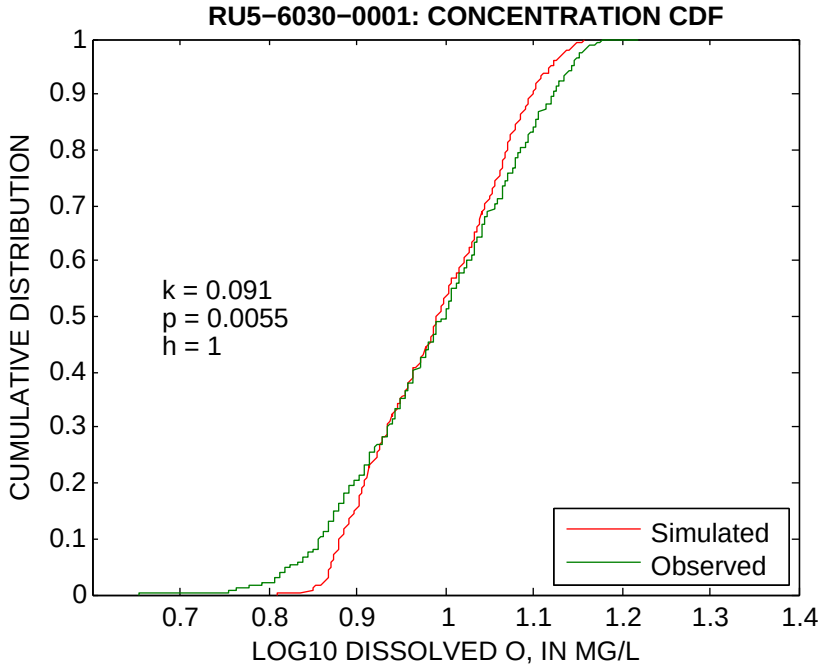
	n	observe	simulate
		703	703
min		4.5	7.146
		0.653213	0.854063
mean		10.0841	9.95014
		0.992497	0.991697
media		10	9.8486
		1	0.993374
max		16.6	14.266
		1.22011	1.1543
varian		5.07819	2.8333
		0.00989553	0.0053127
JB		0.001	0.001
		0.002424	0.001
		ra	log
%		-1.32814	-0.0806315
err.va		1.21318	0.00241948
rel.std.err		0.2389	0.244502
mod.eff		0.7611	0.755498

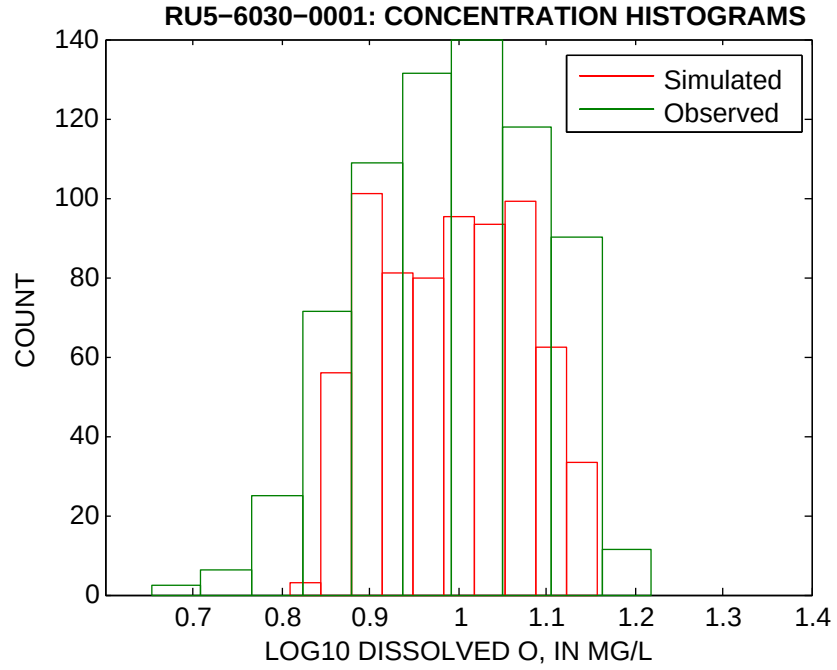
VERSION 2.1

ALL DATA
LOG10

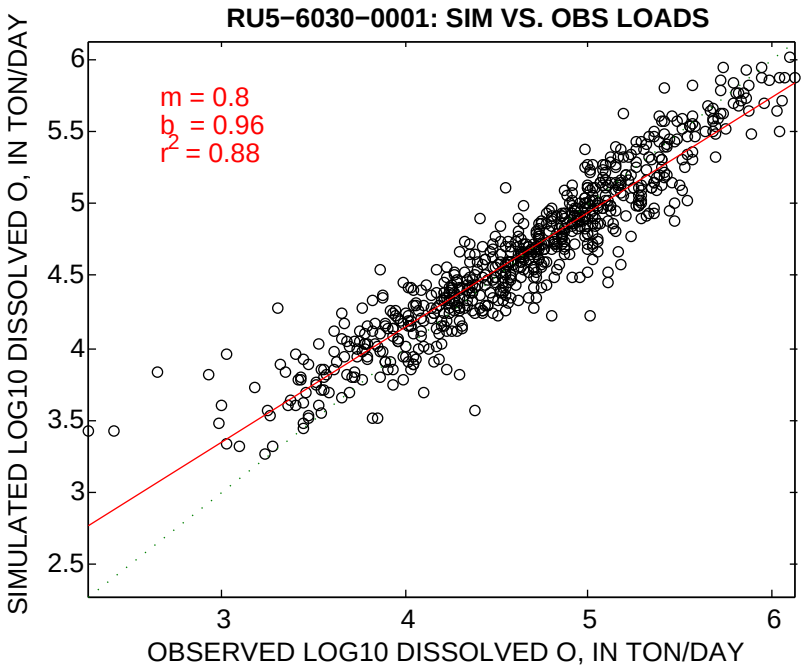


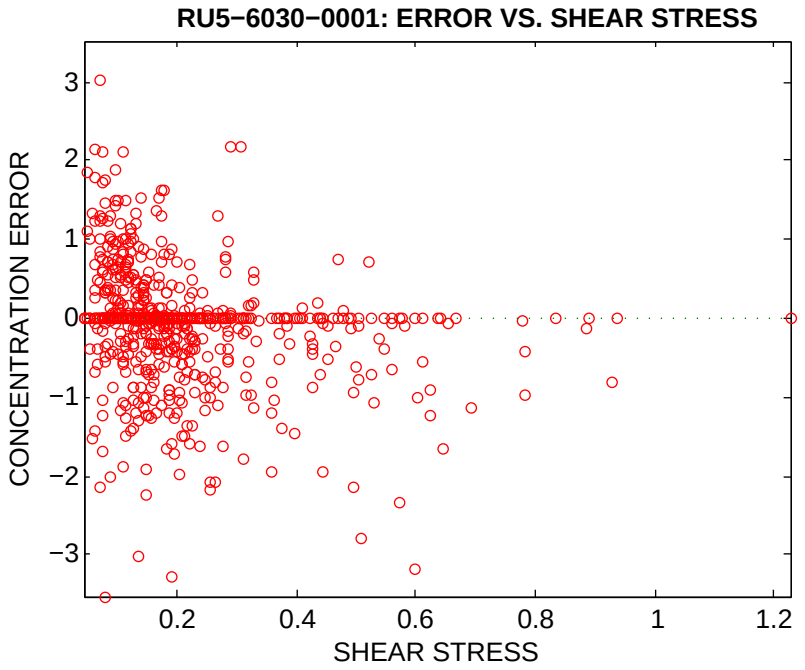


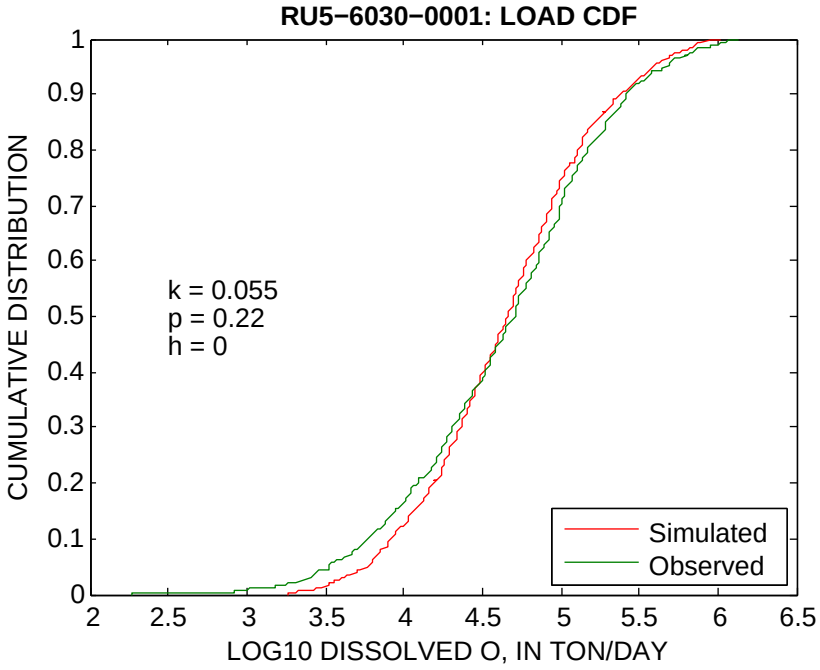


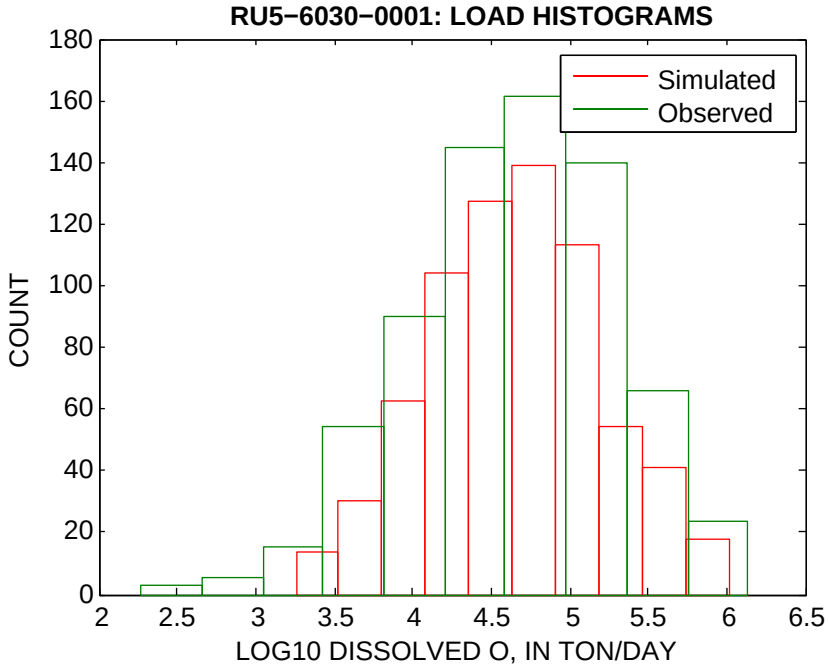


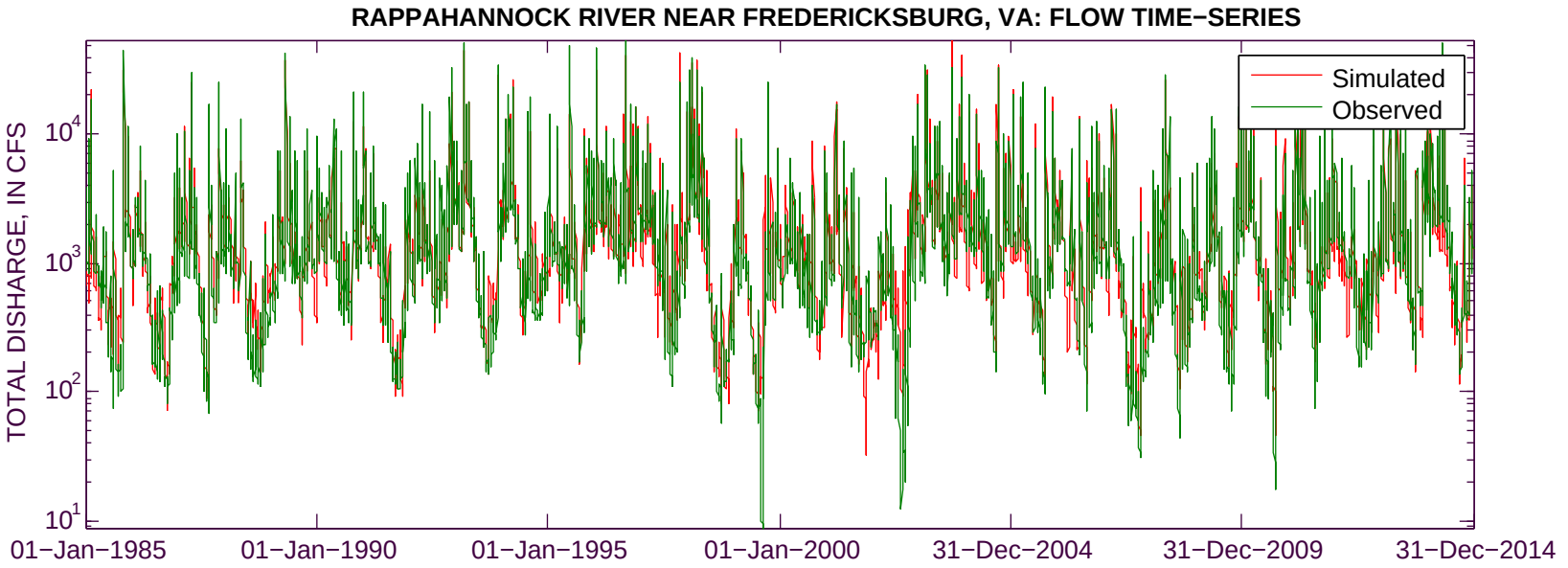
LOAD DATA
LOG10

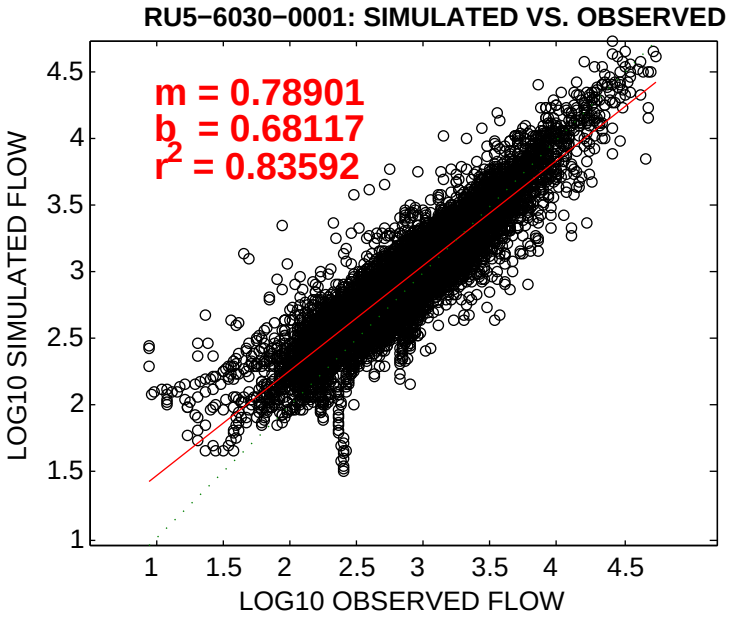


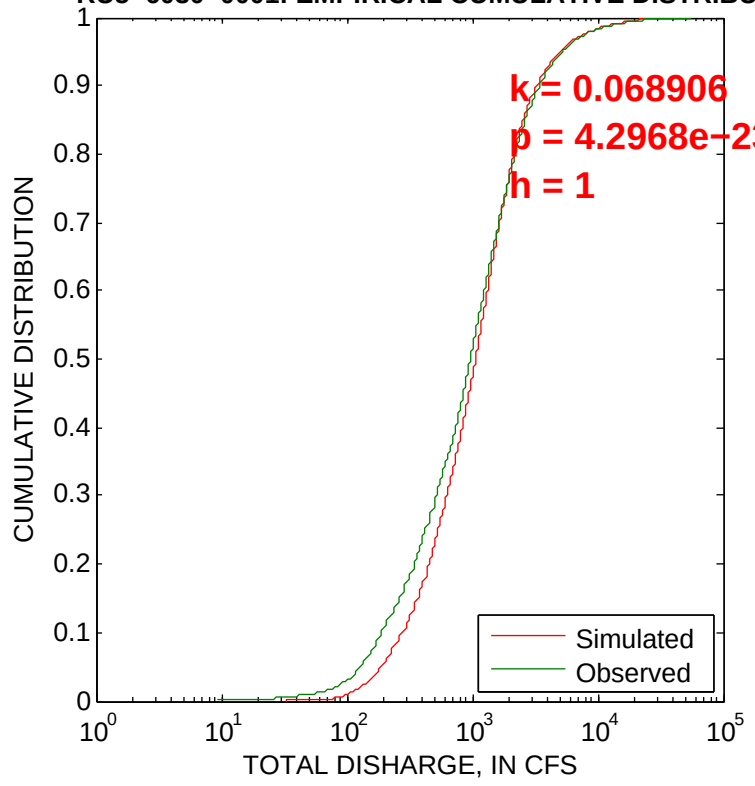












DATA SELECTION

scenario: P620171001WQ | file: FLOW.calib

plot: FLOW - total discharge

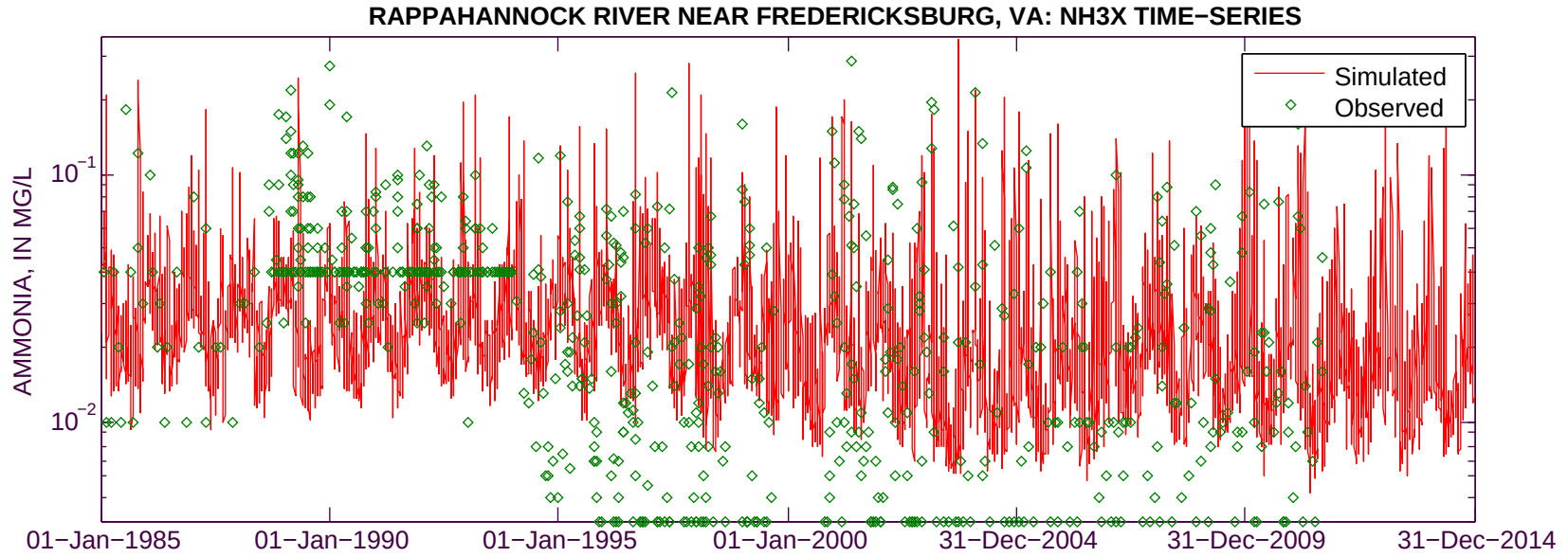
Dates: 1/1/1985 | 12/31/201

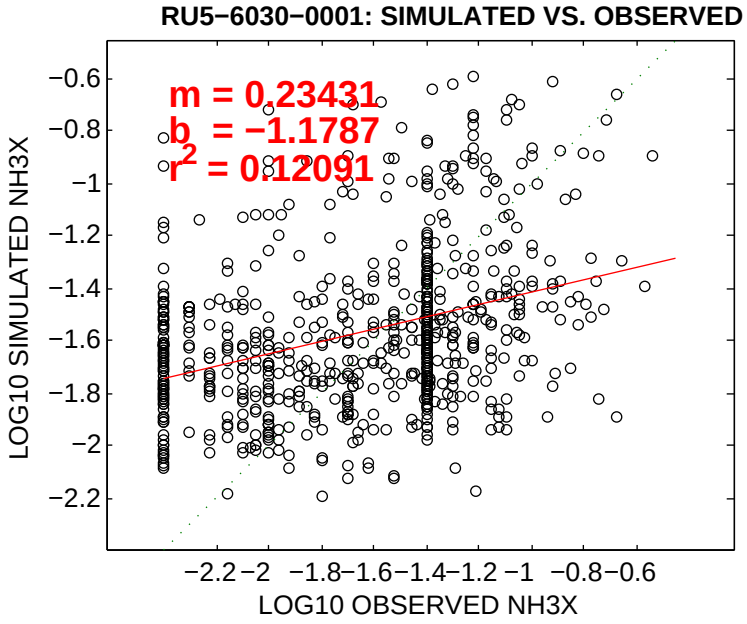
Drive | Directory: model | Observed: OBS20161101

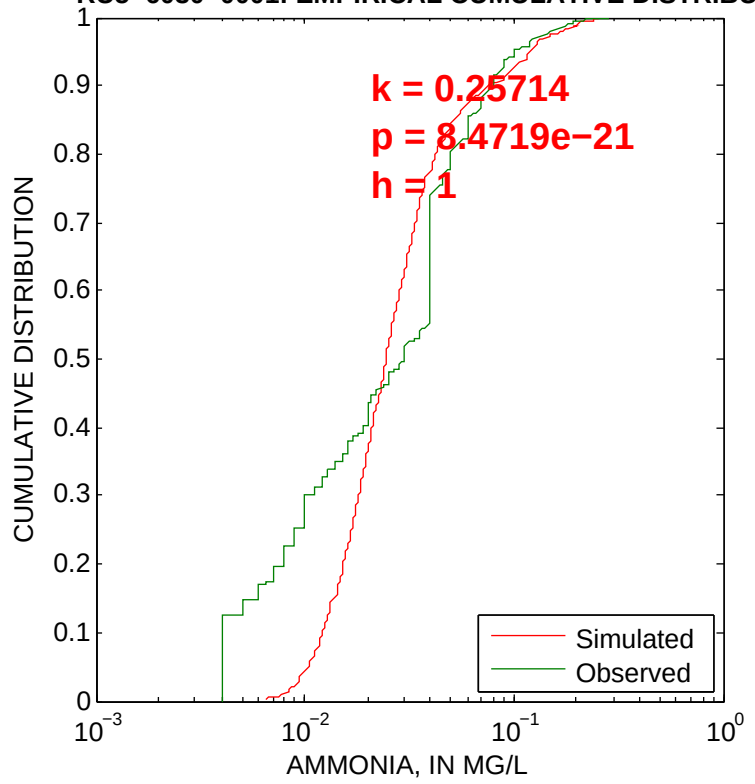
STATISTICS

		observe	simulate
n		10957	10957
min		8.8	32.474
		0.944483	1.51154
mean		1720.16	1736.84
		2.95283	3.011
media		971	1070.9
		2.98722	3.02975
max		54600	52516
		4.73719	4.72029
varian		9.04535e+0	7.76303e+
		0.248292	0.184913
JB		0.001	0.001
		0.001	0.001
		ra	log
%		0.969933	1.96995
err.va		1.9332e+06	0.0447767
rel.std.err		0.213723	0.180339
mod.eff		0.786277	0.819661

VERSION 2.1







DATA SELECTION

scenario	file
P620171001WQ	NH3X.calib

plot: NH3X - ammonia

Dates: 1/1/1985 – 12/31/201

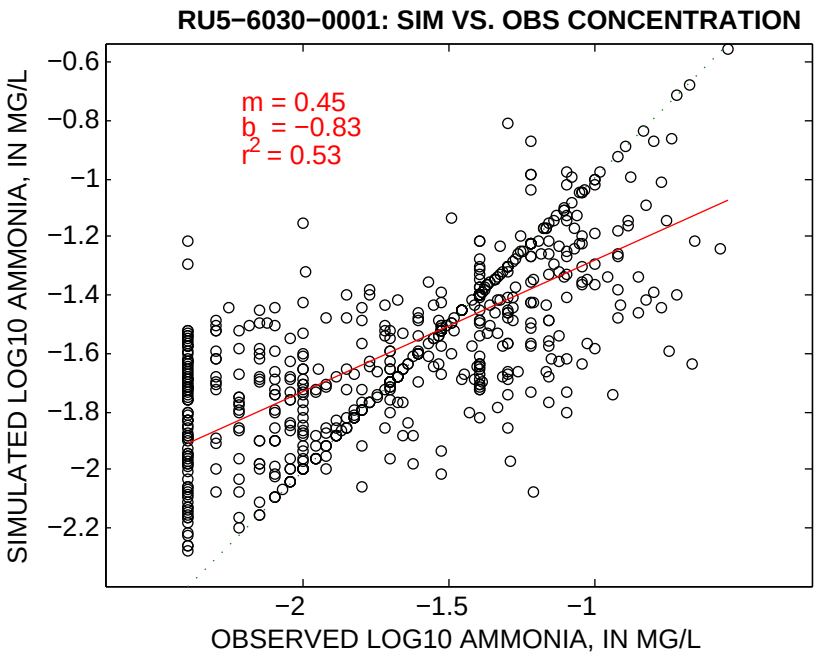
Drive	Directory	Observed
N/A	model	OBS20161101

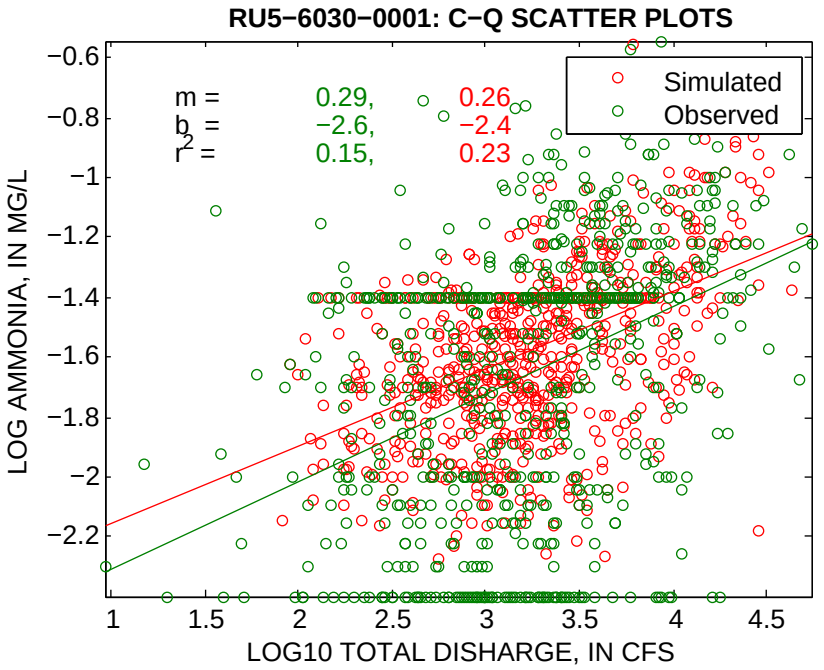
STATISTICS

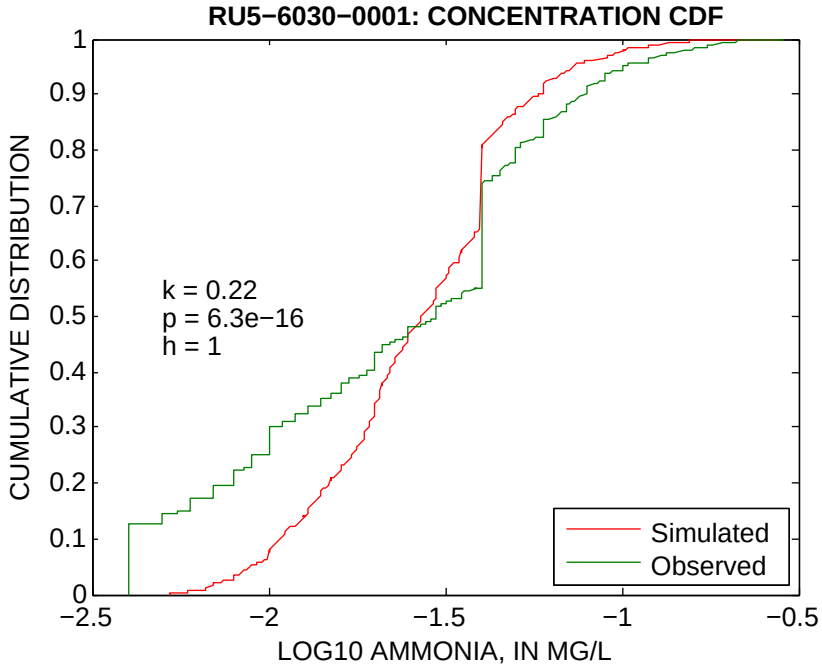
	n	700	700
		observe	simulate
min		0.004	0.0063871
		-2.39794	-2.1947
mean		0.0361191	0.0366632
		-1.65285	-1.56599
media		0.03	0.0244155
		-1.52288	-1.61233
max		0.287	0.25618
		-0.542118	-0.591455
varian		0.00136366	0.00139881
		0.206799	0.0939036
JB		0.001	0.001
		0.001	0.001
		ra	log
%		1.50635	-5.25528
err.va		0.00187838	0.211346
rel.std.err		1.37746	1.02199
mod.eff		-0.377461	-0.0219898

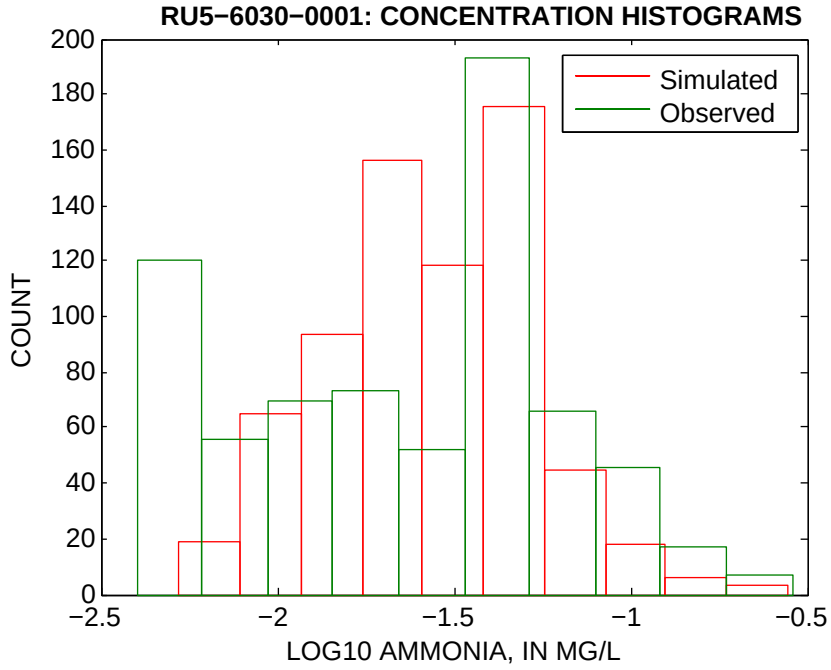
VERSION 2.1

ALL DATA
LOG10

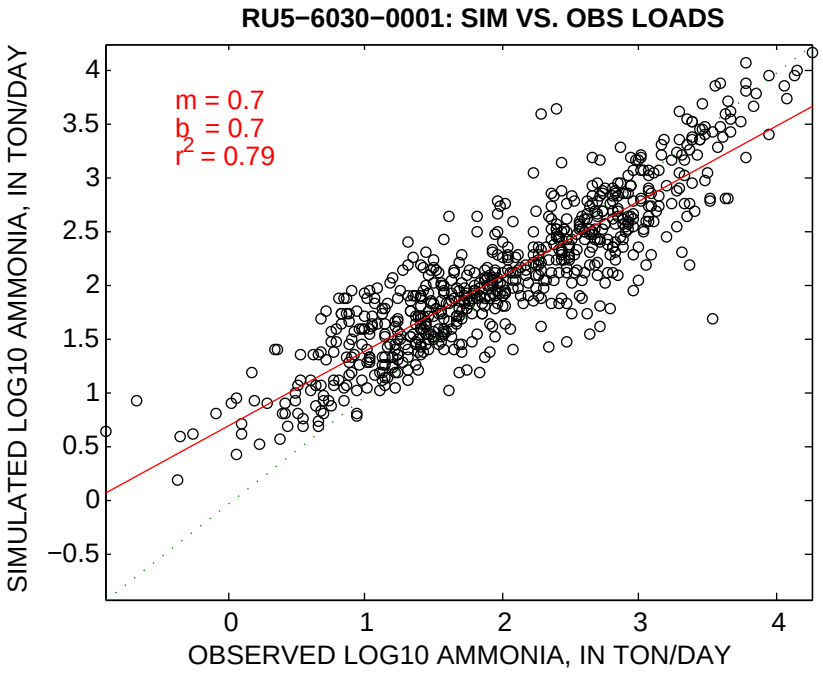


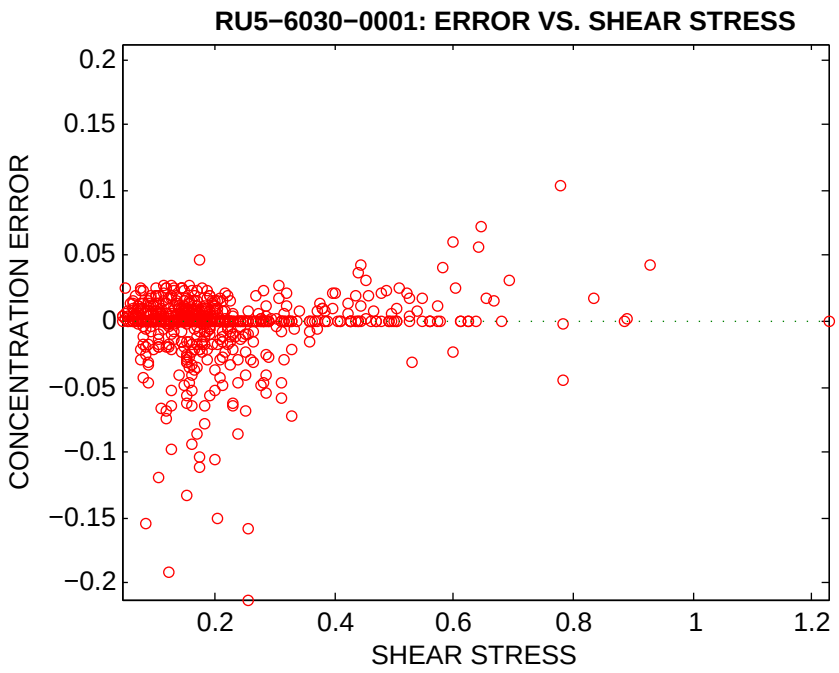


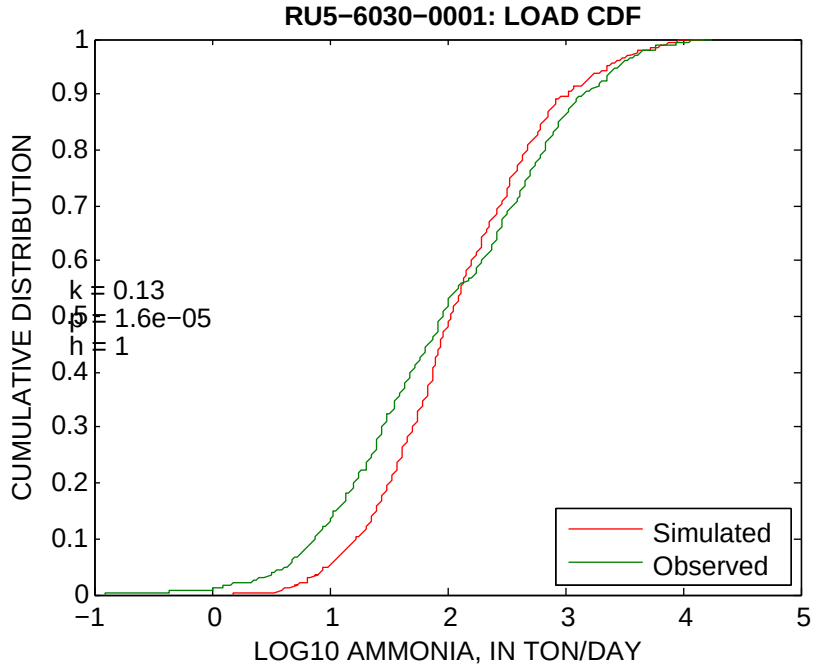


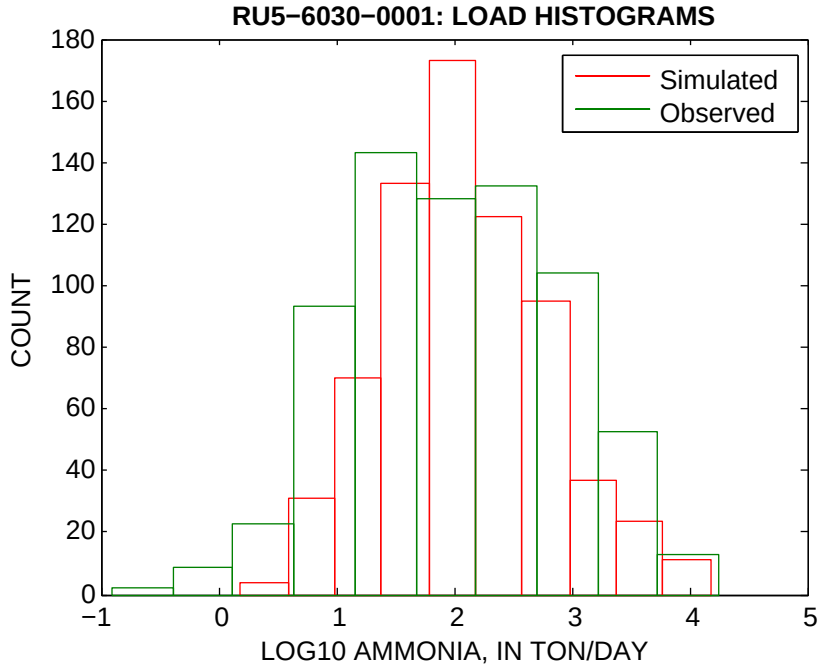


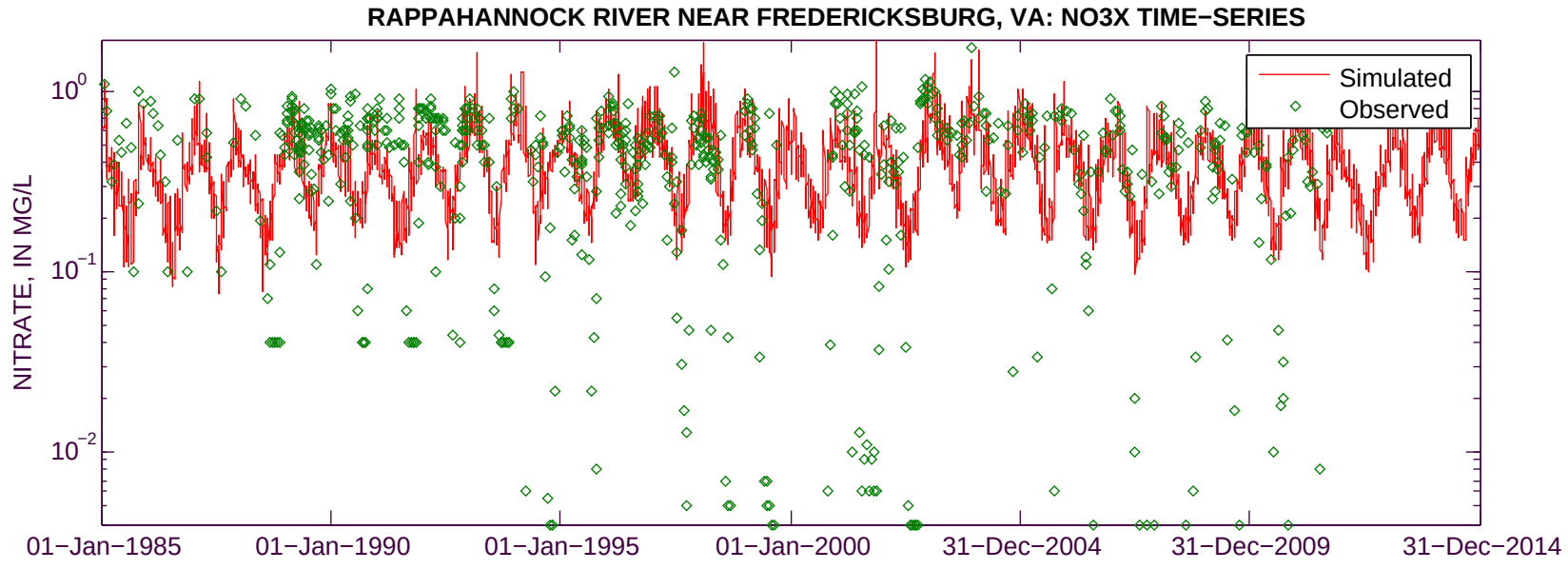
LOAD DATA
LOG10

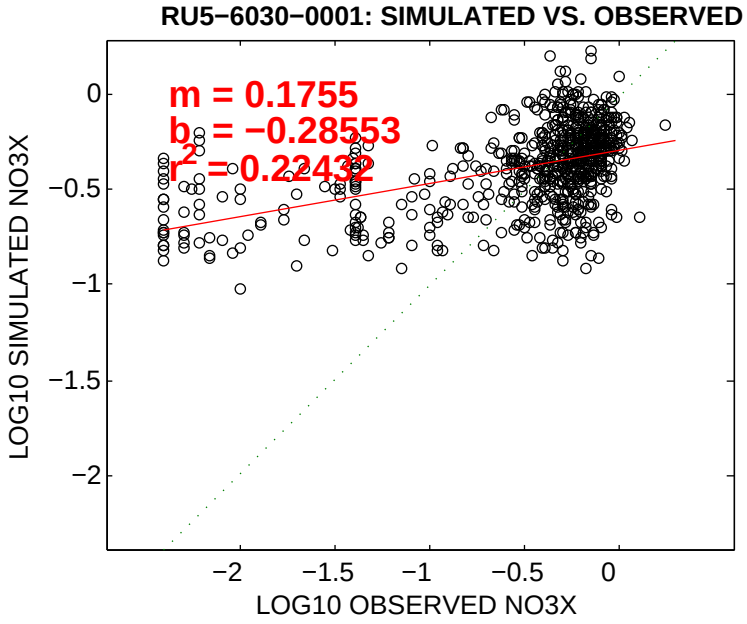


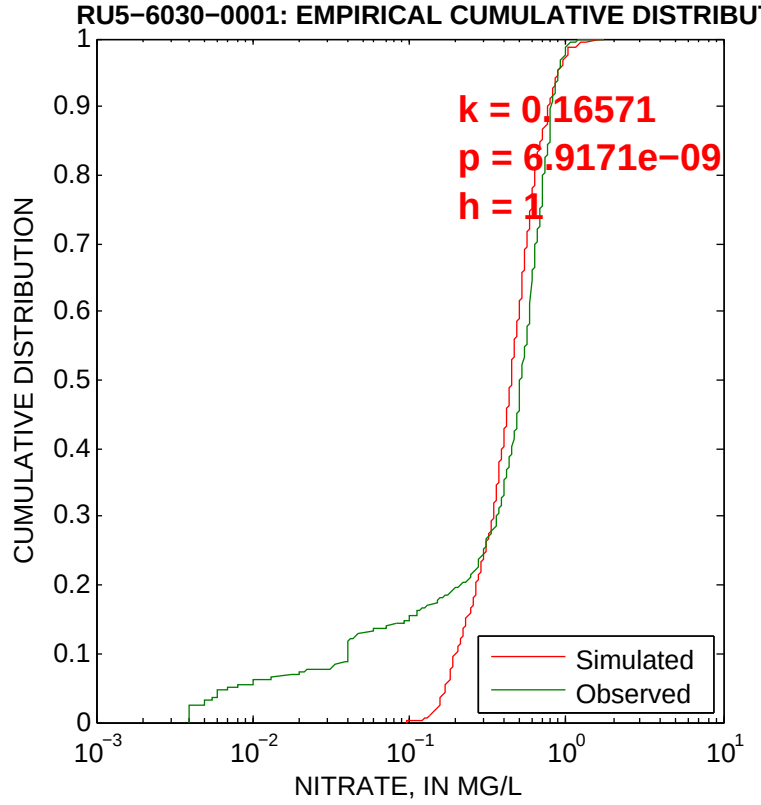












DATA SELECTION

scenario: P620171001WQ | file: NO3X.calib

plot: NO3X - nitrate

Dates: 1/1/1985 – 12/31/201

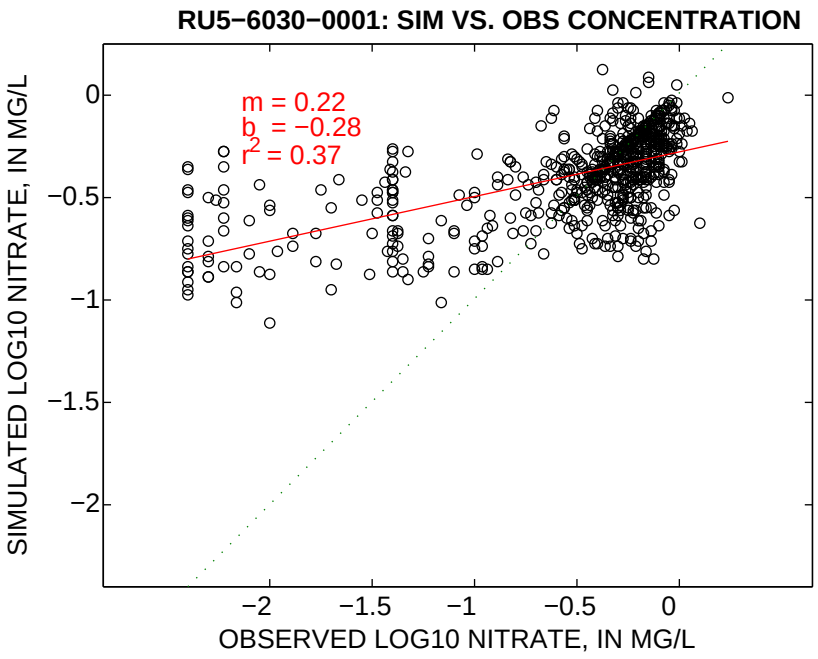
Drive: N/A | Directory: model | Observed: OBS20161101

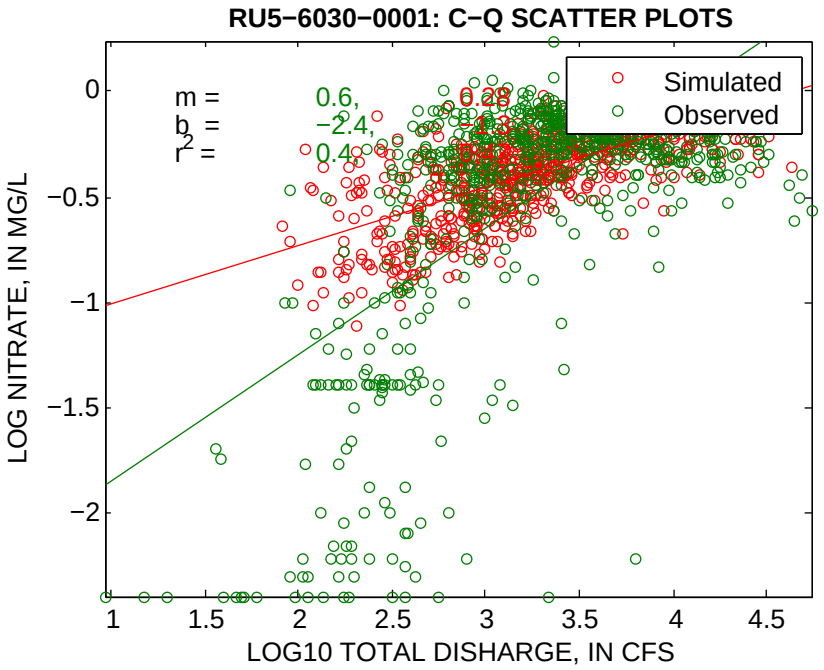
STATISTICS

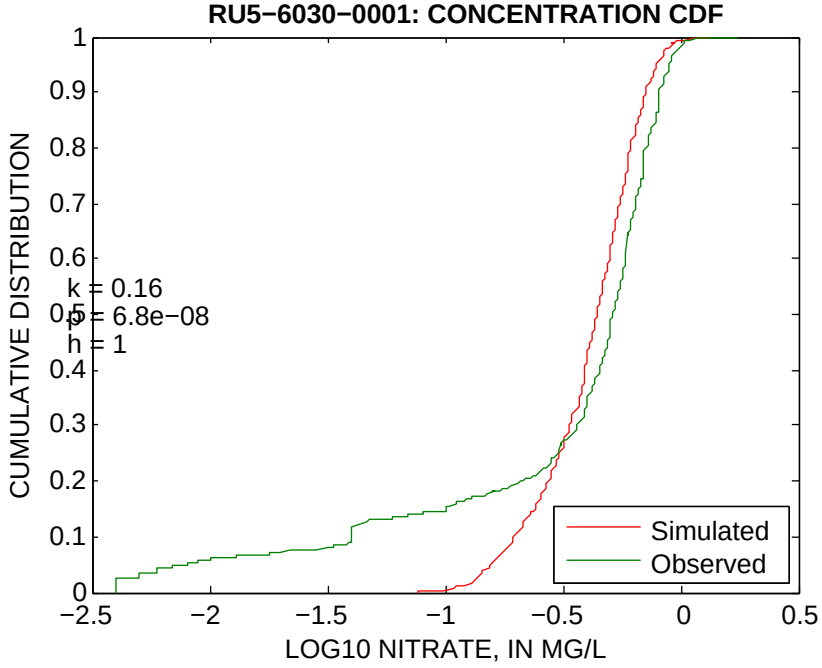
		observe	simulate
n		700	700
min		0.004	0.096873
		-2.39794	-1.0138
mean		0.487079	0.475437
		-0.506031	-0.374341
media		0.5185	0.4464
		-0.285251	-0.350276
max		1.75	1.7136
		0.243038	0.233909
varian		0.0778056	0.0538285
		0.342744	0.0470583
JB		0.305299	0.001
		0.001	0.007016
		ra	log
%		-2.39013	-26.0242
err.va		0.077835	0.286869
rel.std.err		1.00038	0.836979
mod.eff		-0.0003768	0.163021

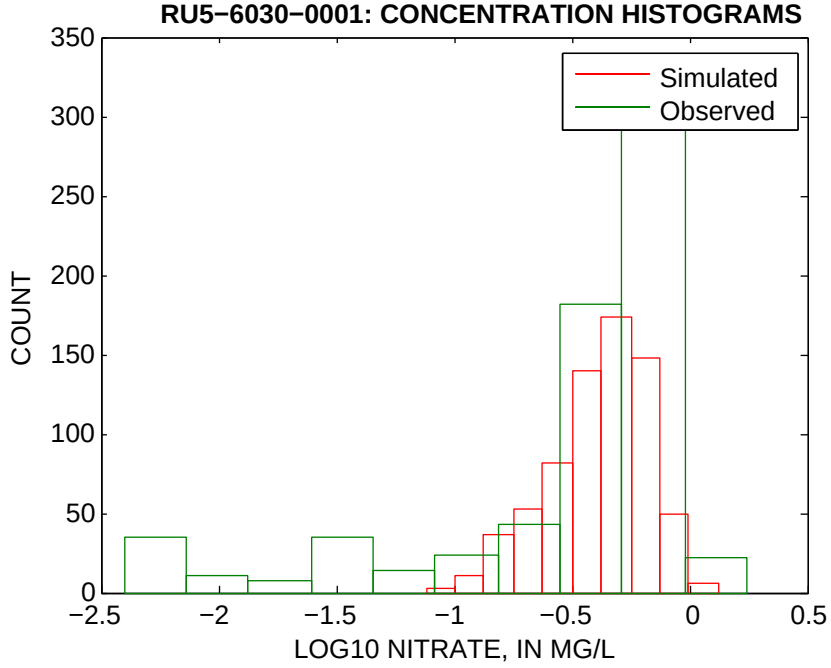
VERSION 2.1

ALL DATA
LOG10

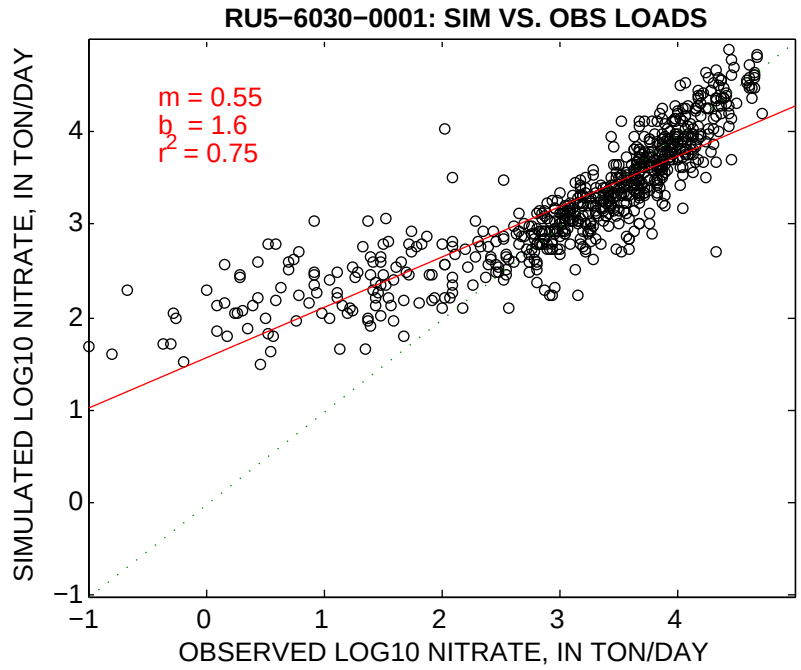


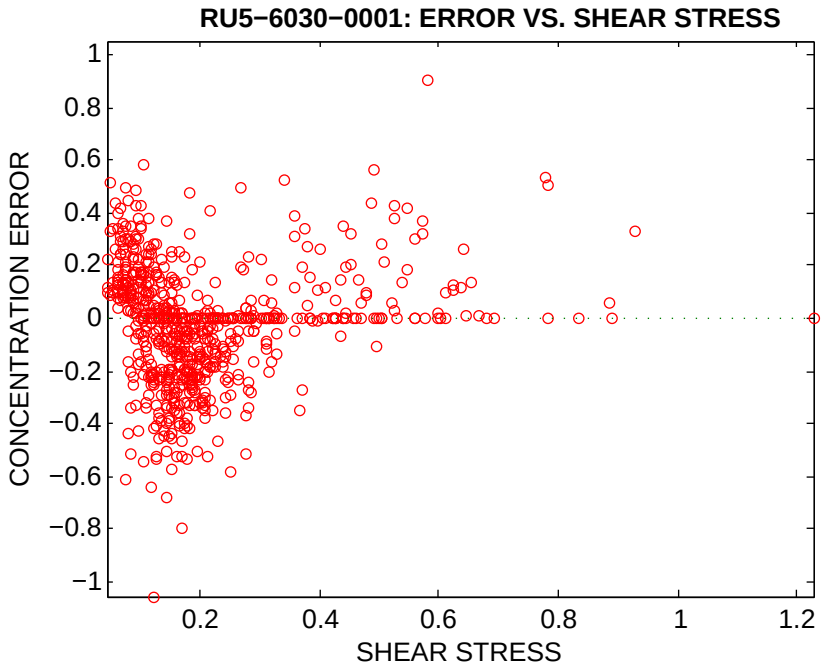


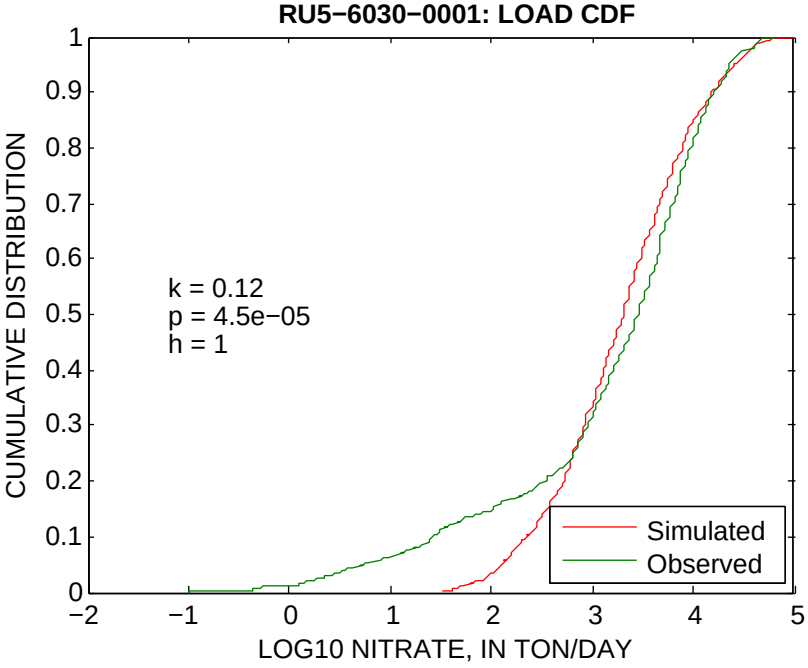


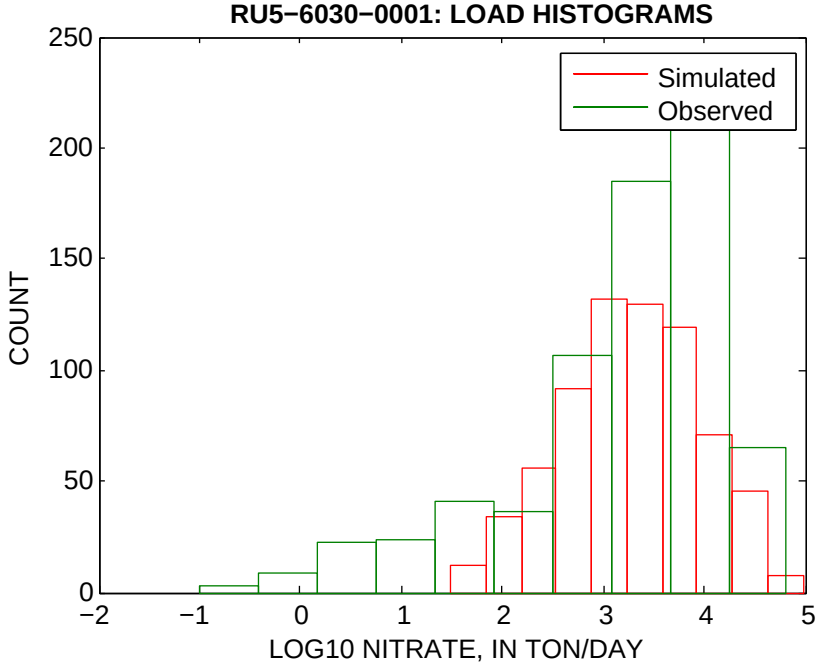


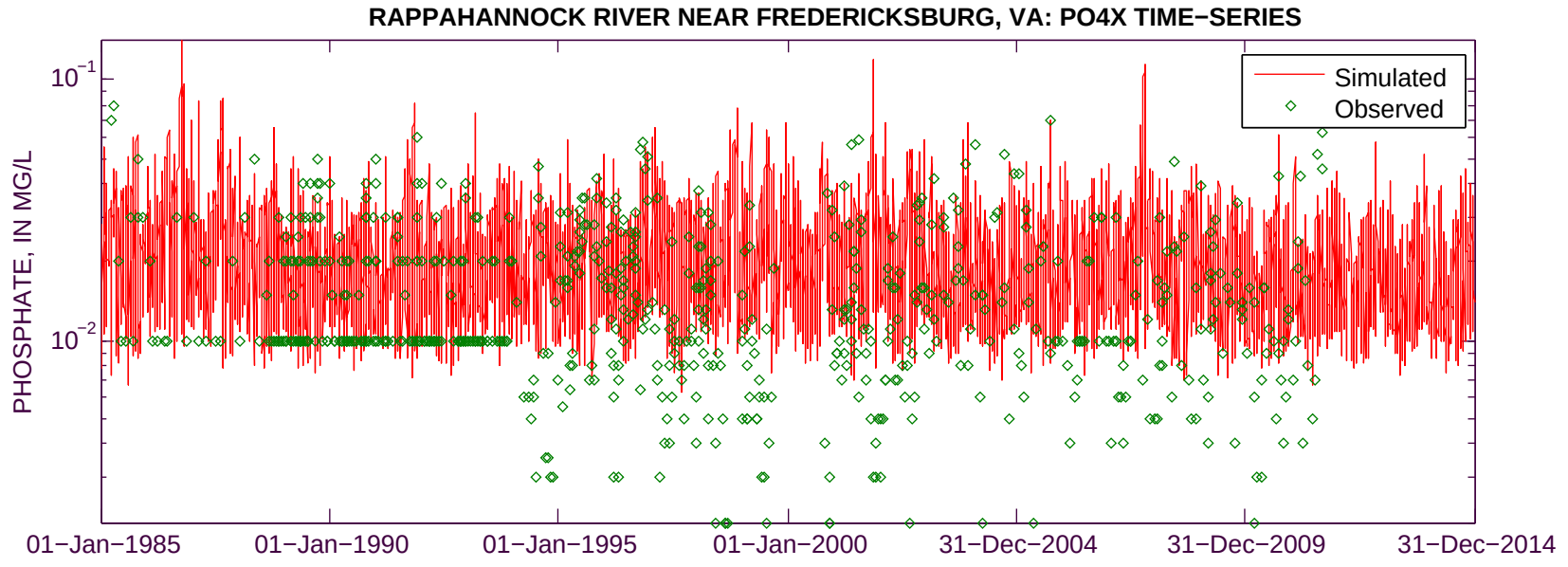
LOAD DATA
LOG10

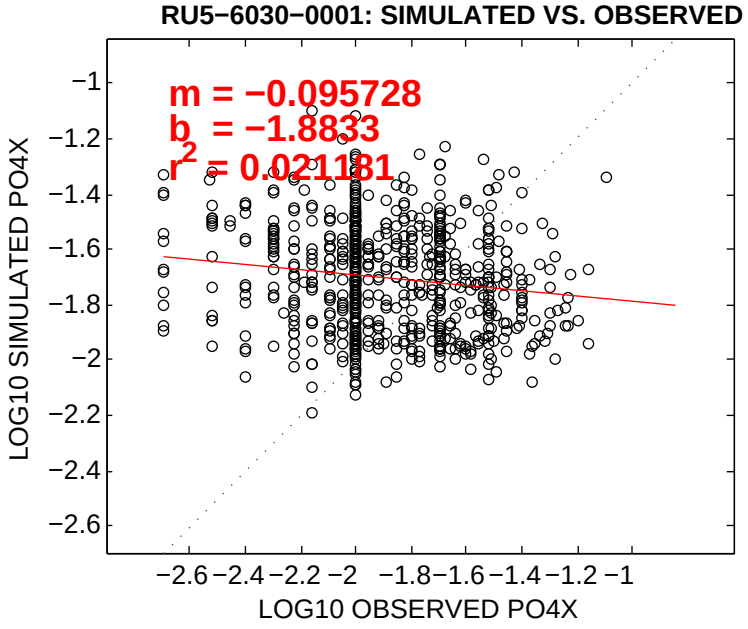


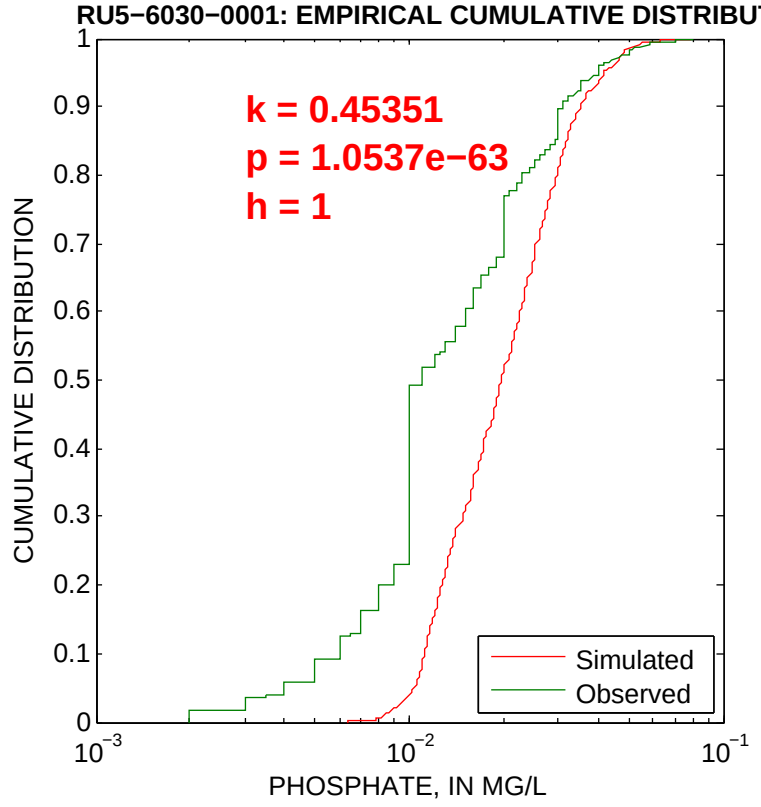












DATA SELECTION

scenario: P620171001WQ; file: PO4X.calib

plot: PO4X - phosphate

Dates: 1/1/1985 – 12/31/201

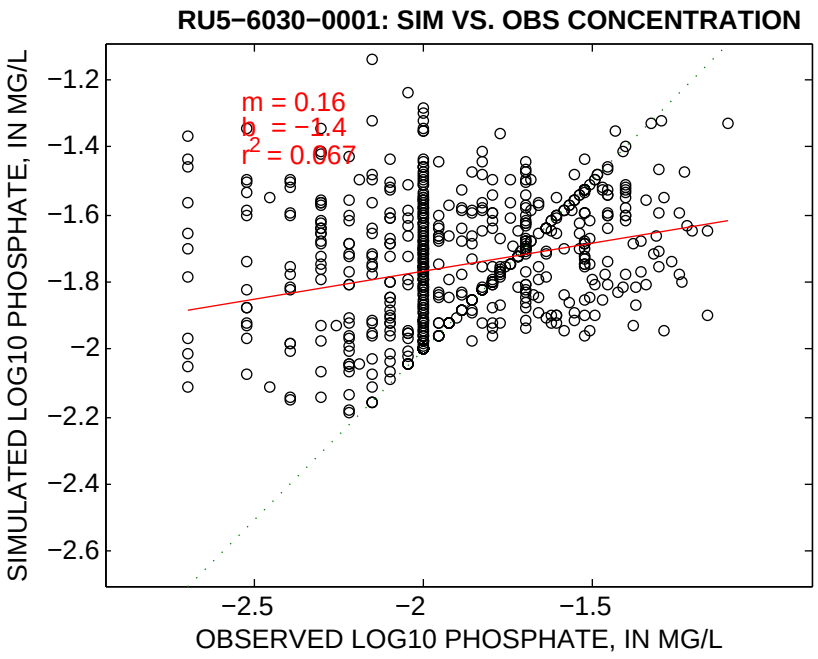
Drive: N/A; Directory: model; Observed: OBS20161101

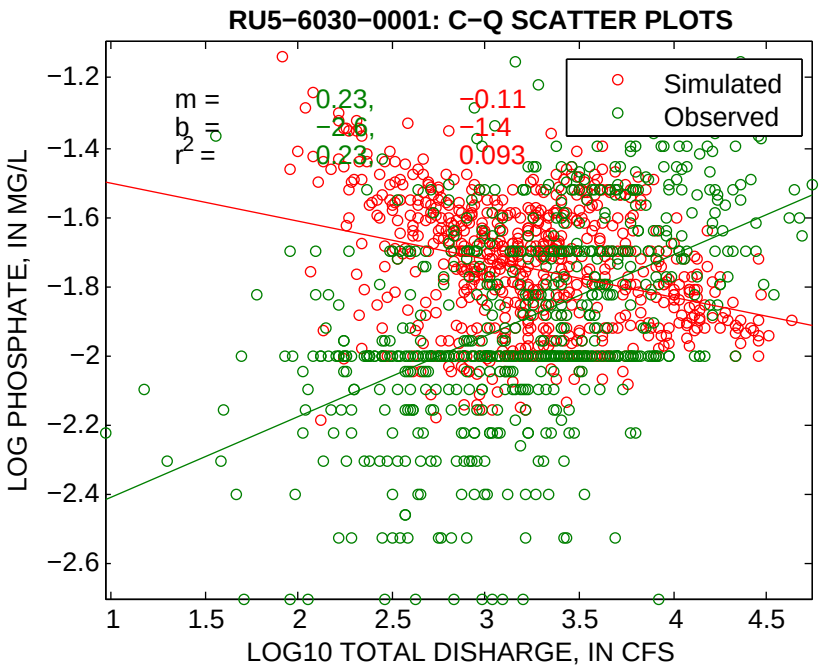
STATISTICS

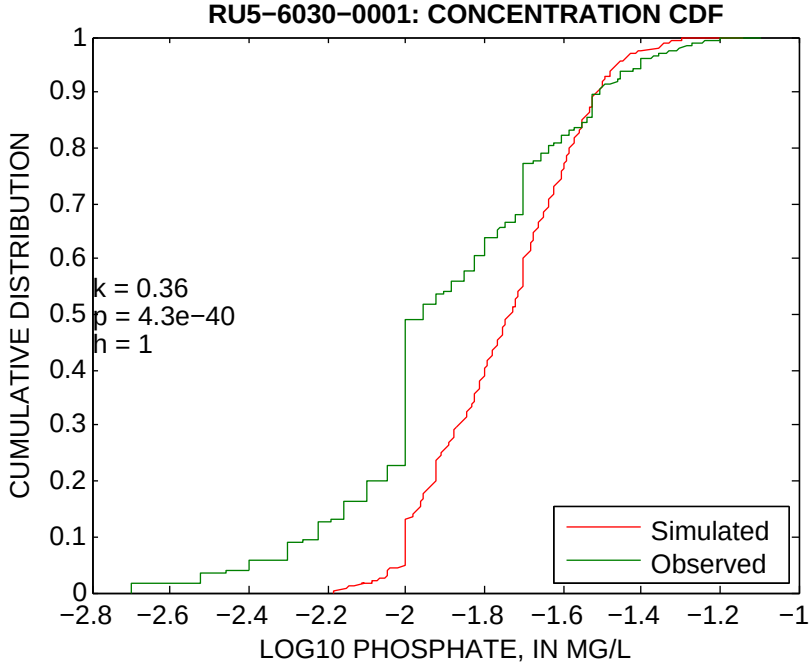
		observe	simulate
n		699	699
min		0.002	0.0063679
		-2.69897	-2.196
mean		0.0162591	0.0219312
		-1.88553	-1.70277
media		0.011	0.019697
		-1.95861	-1.7056
max		0.08	0.079025
		-1.09691	-1.10224
varian		0.00013380	0.00010801
		0.0864571	0.0374059
JB		0.001	0.001
	☑	0.322948	0.003808
		ra	log
%		34.8853	-9.69279
err.va		0.00030507	0.173865
rel.std.err		2.27994	2.011
mod.eff		-1.27994	-1.011

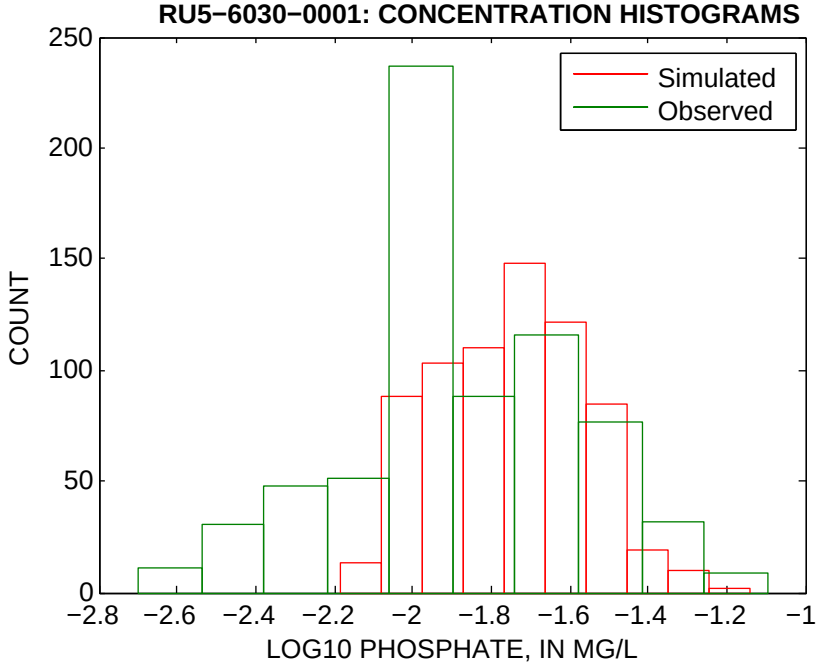
VERSION 2.1

ALL DATA
LOG10

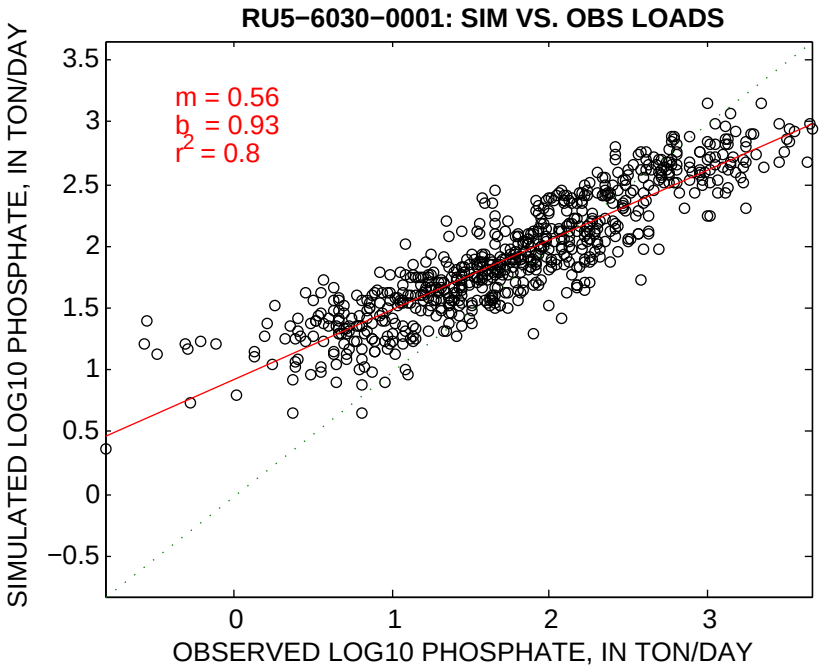


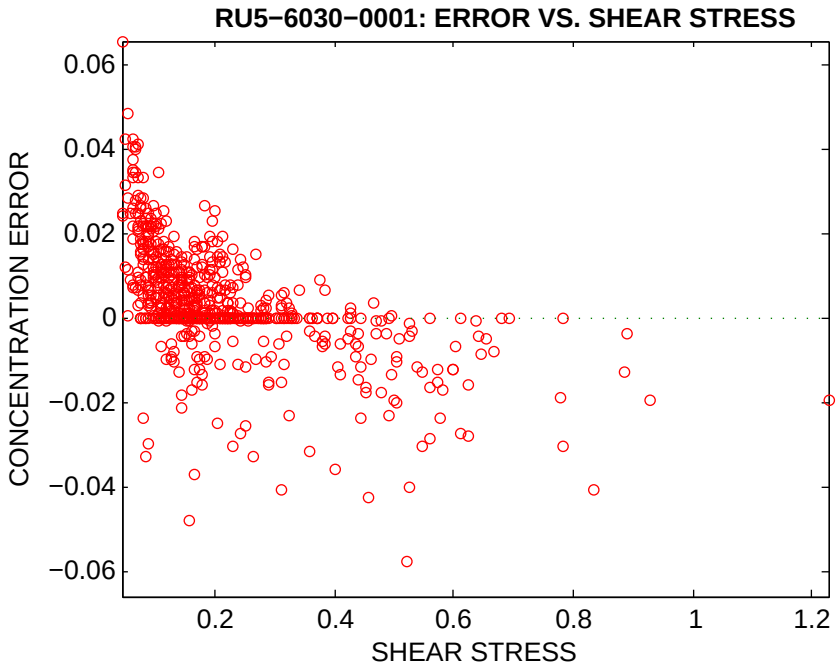


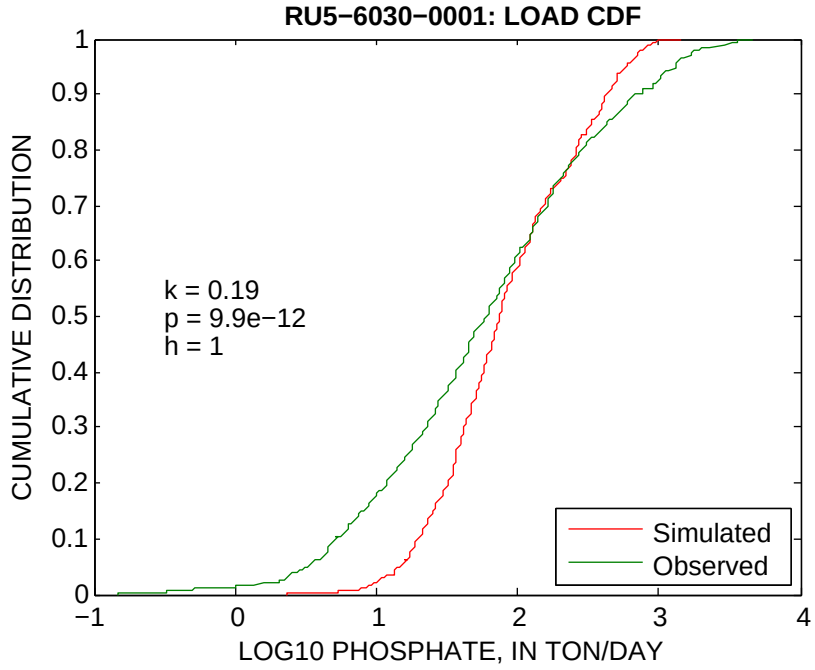


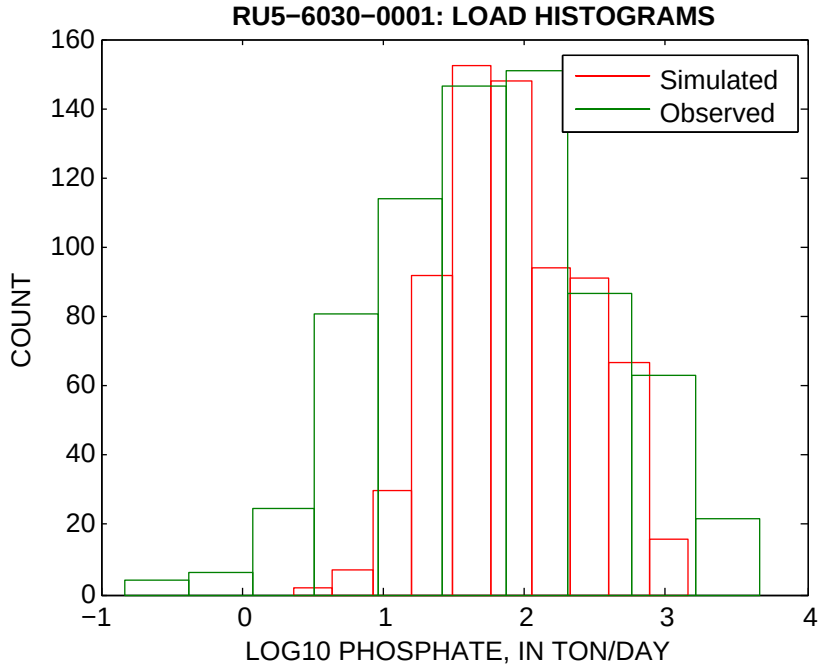


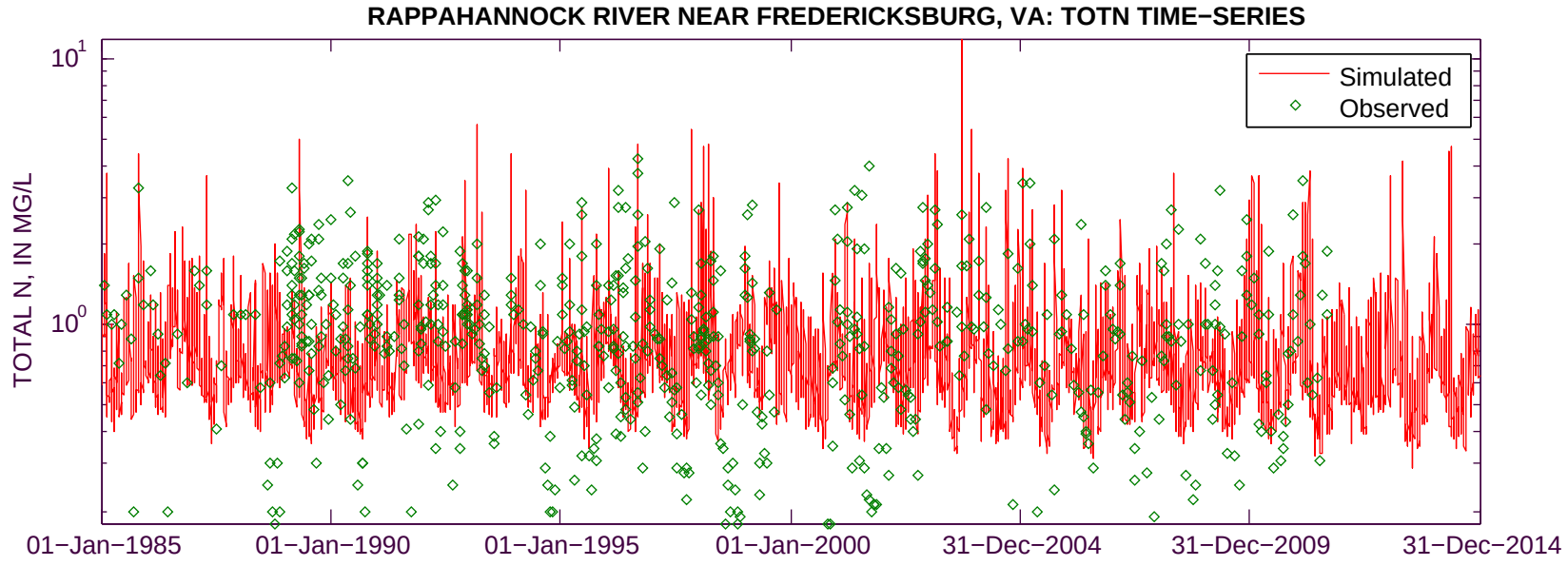
LOAD DATA
LOG10

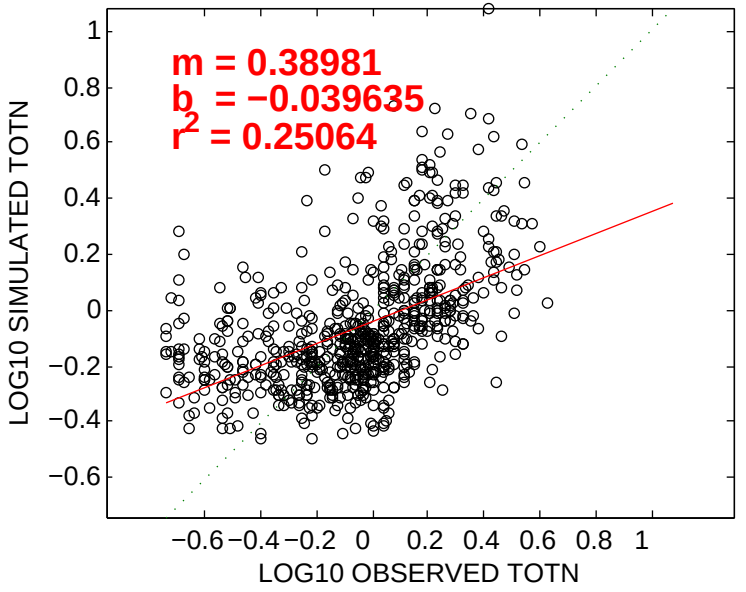


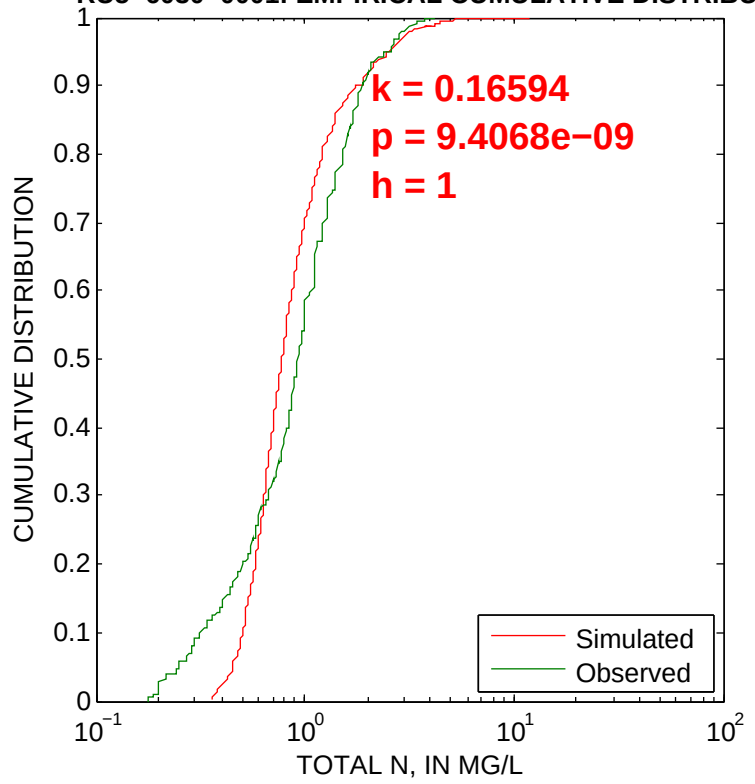












DATA SELECTION

scenario: P620171001WQ; file: TOTN.calib

plot: TOTN - total nitrogen

Dates: 1/1/1985 – 12/31/201

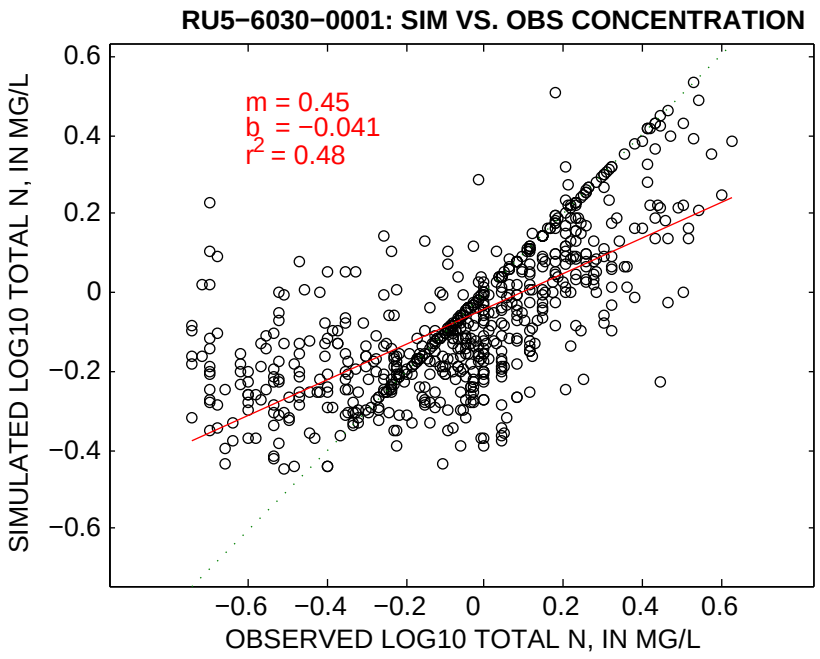
Drive: N/A; Directory: model; Observed: OBS20161101

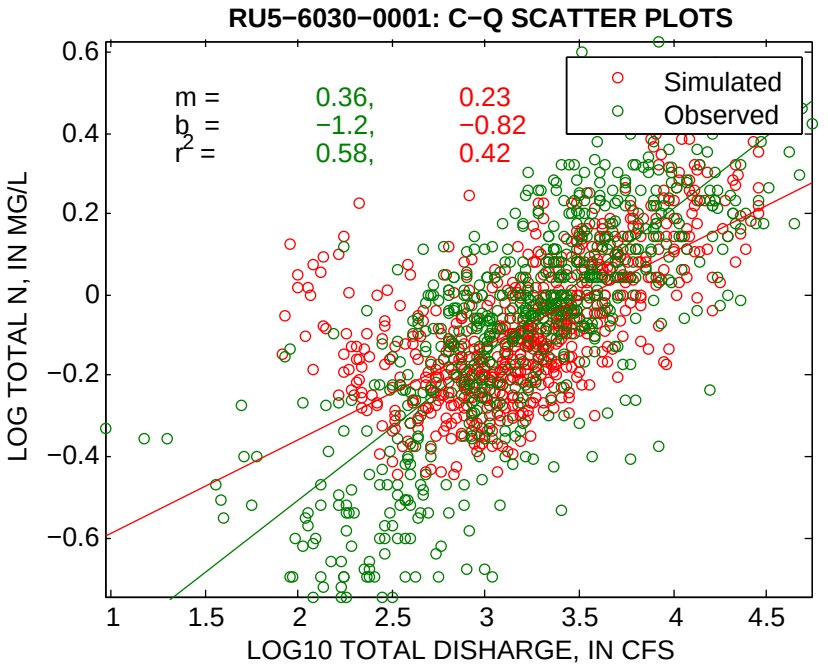
STATISTICS

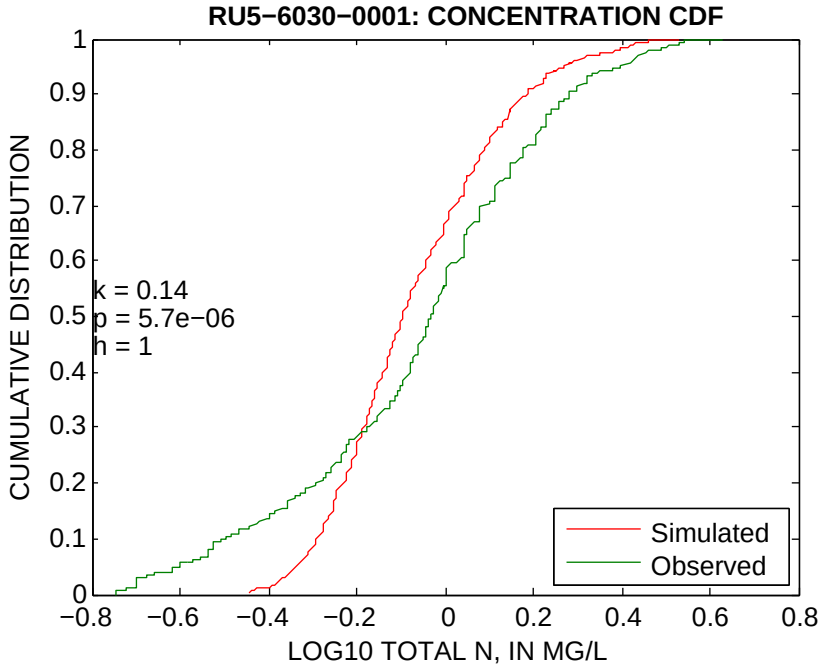
	observe	simulate
n	687	687
min	0.18	0.34661
	-0.744727	-0.460159
mean	1.06504	1.01872
	-0.0593011	-0.0627507
media	0.93	0.78231
	-0.0315171	-0.106621
max	4.25	12.036
	0.628389	1.08048
varian	0.455367	0.665079
	0.0818627	0.0496292
JB	0.001	0.001
	0.002659	0.001
	ra	log
%	-4.34848	5.81718
err.va	0.615321	0.0676819
rel.std.err	1.35126	0.826774
mod.eff	-0.351264	0.173226

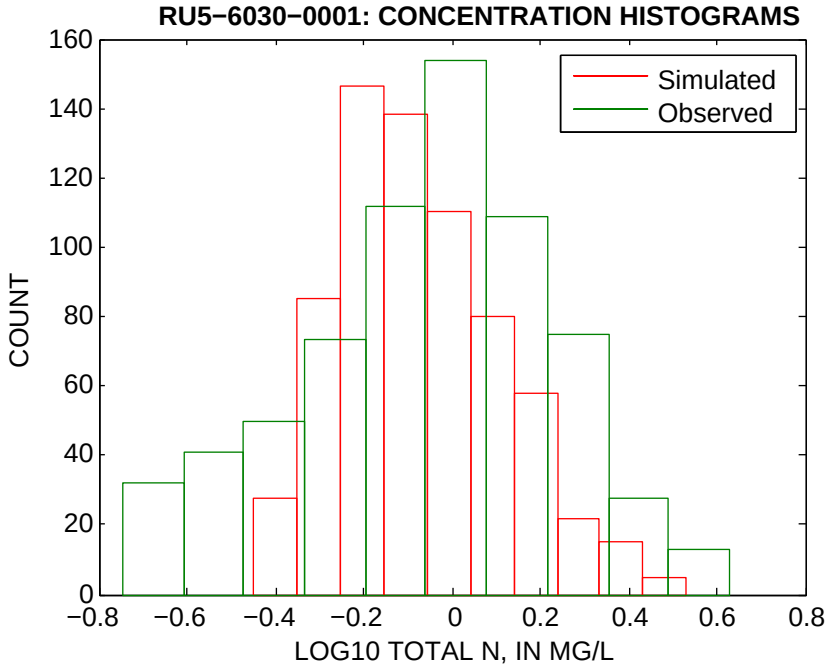
VERSION 2.1

ALL DATA
LOG10

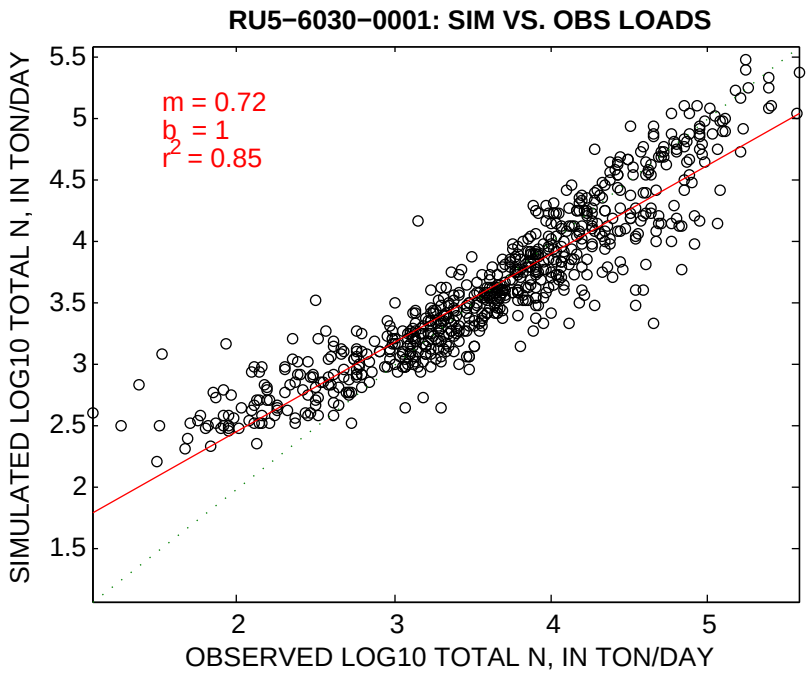


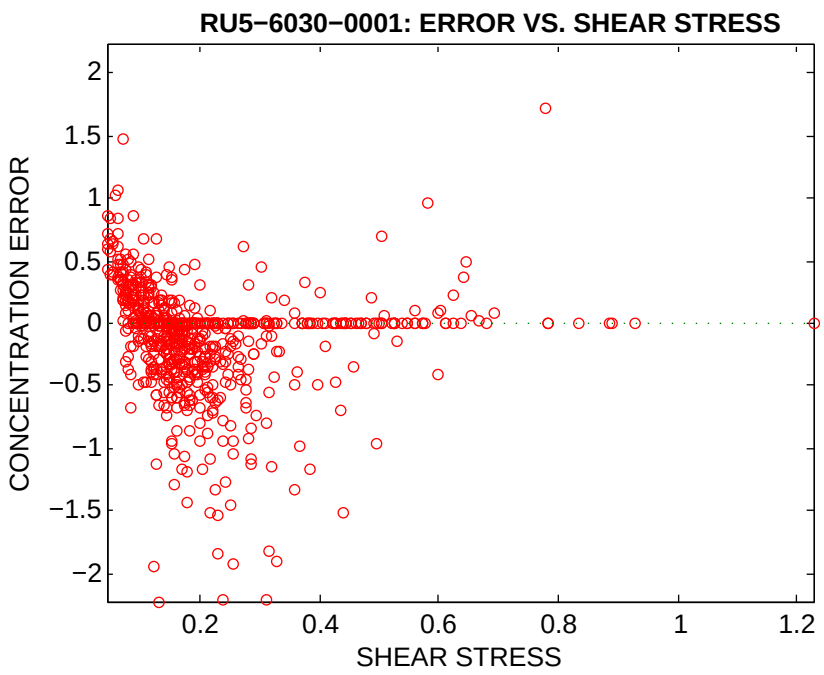


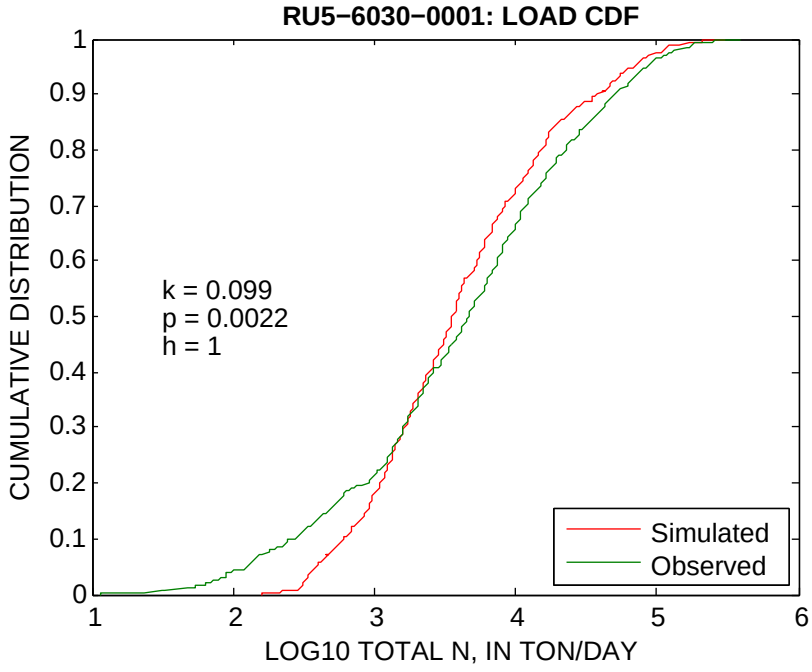


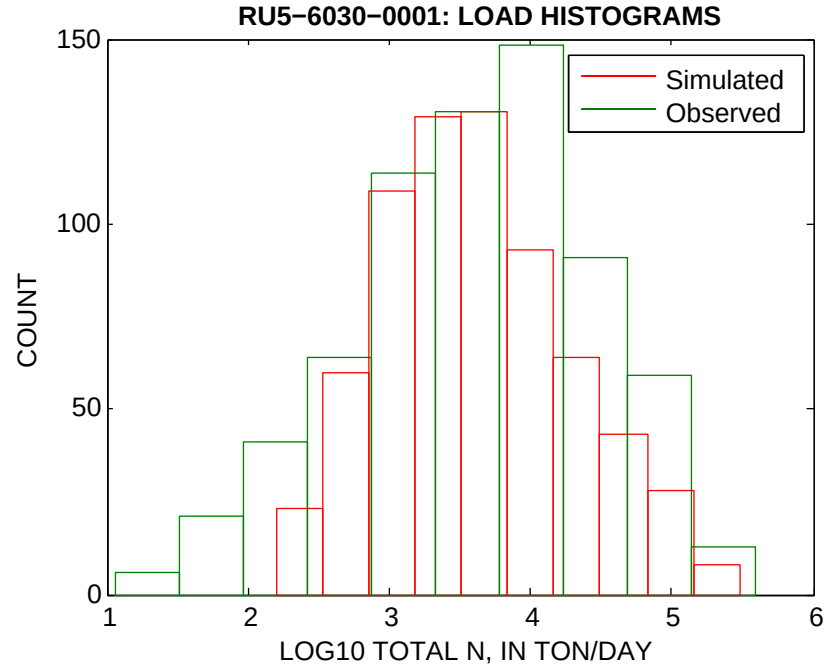


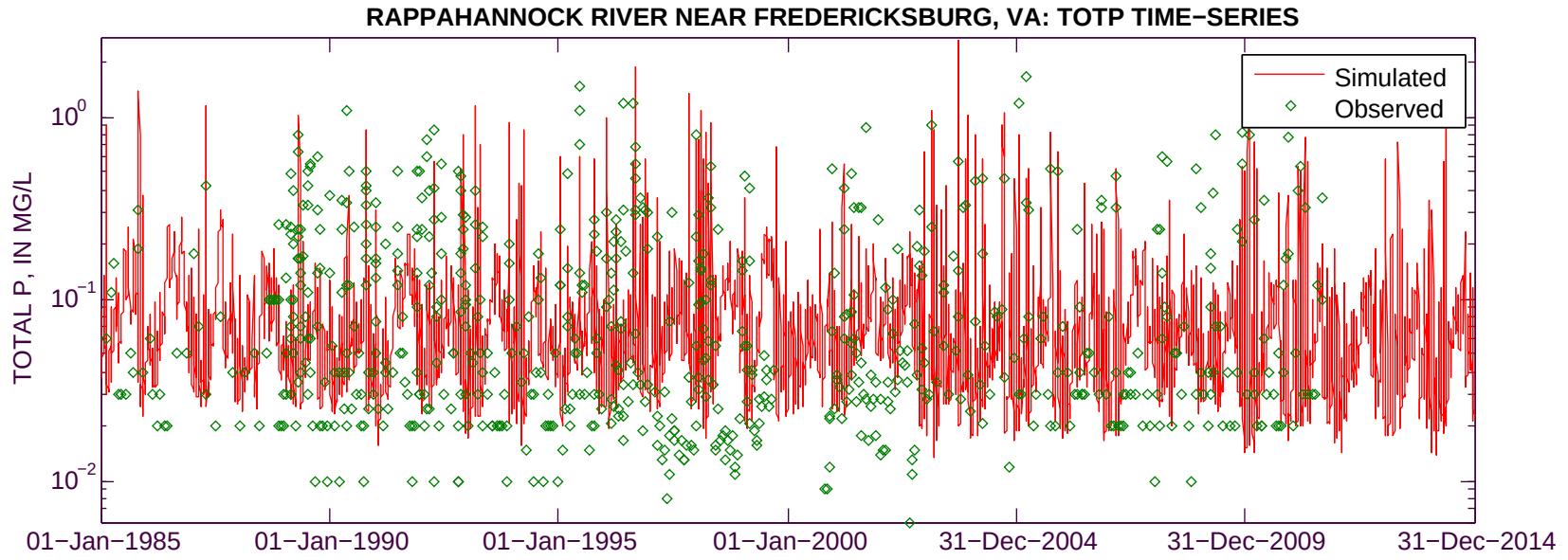
LOAD DATA
LOG10

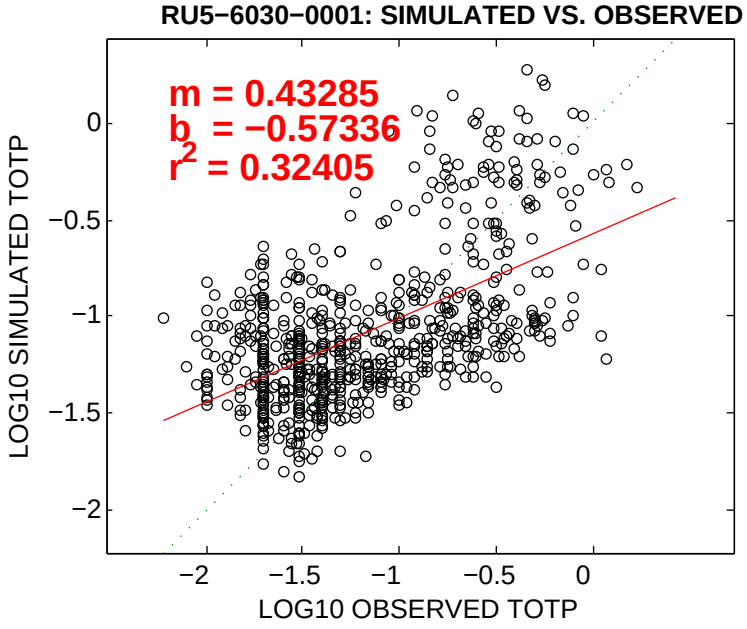


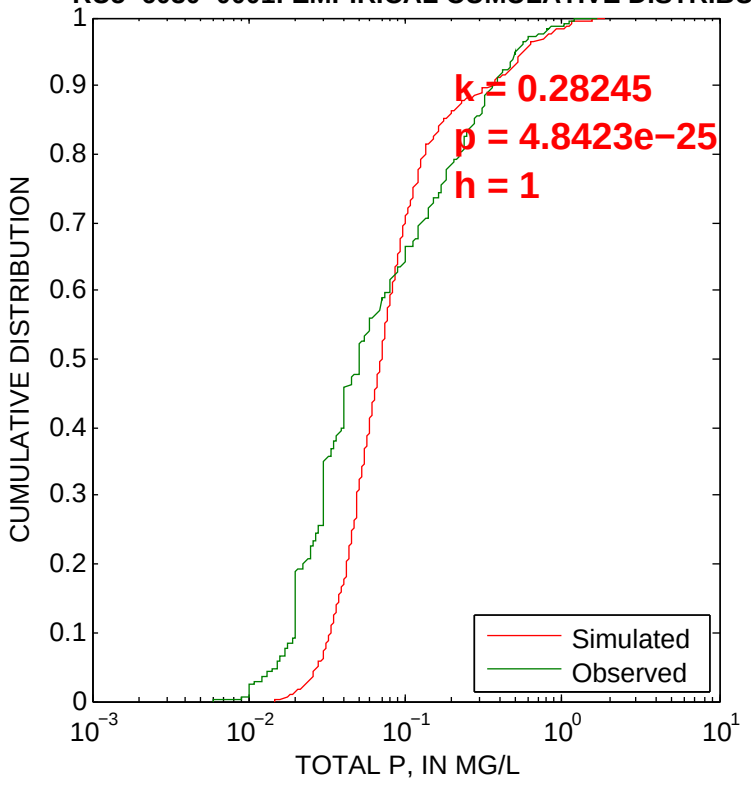












DATA SELECTION

scenario	file
P620171001WQ	TOTP.calib

plot: TOTP - total phosphorus

Dates: 1/1/1985 – 12/31/201

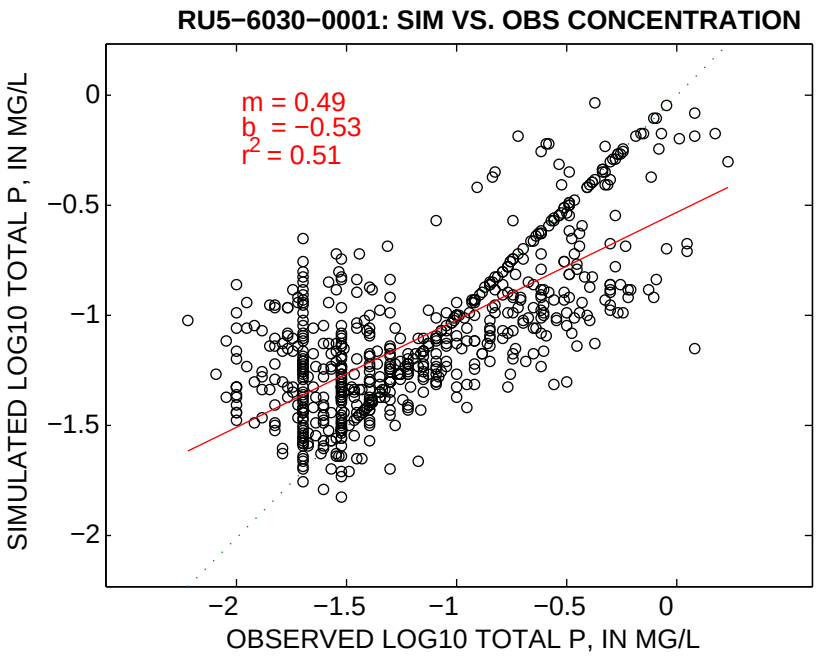
Drive	Directory	Observed
N/A	model	OBS20161101

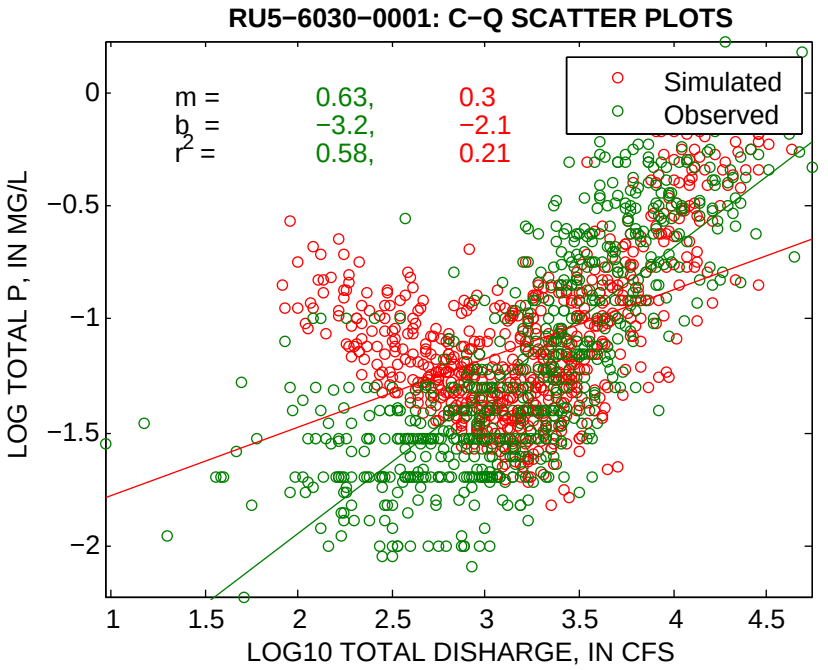
STATISTICS

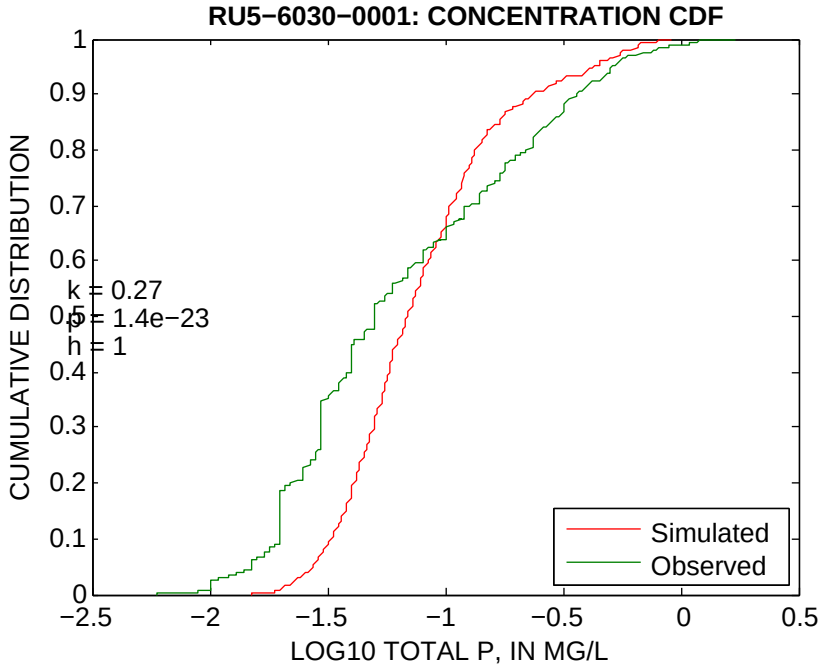
		observe	simulate
n		701	701
min		0.006	0.014827
		-2.22185	-1.82895
mean		0.137806	0.14047
		-1.17486	-1.0819
media		0.05	0.070596
		-1.30103	-1.15122
max		1.7	1.8738
		0.230449	0.272723
varian		0.0404056	0.0473393
		0.254735	0.147284
JB		0.001	0.001
		0.001	0.001
		ra	log
%		1.93327	-7.9117
err.va		0.0473434	0.190146
rel.std.err		1.1717	0.746445
mod.eff		-0.171704	0.253555

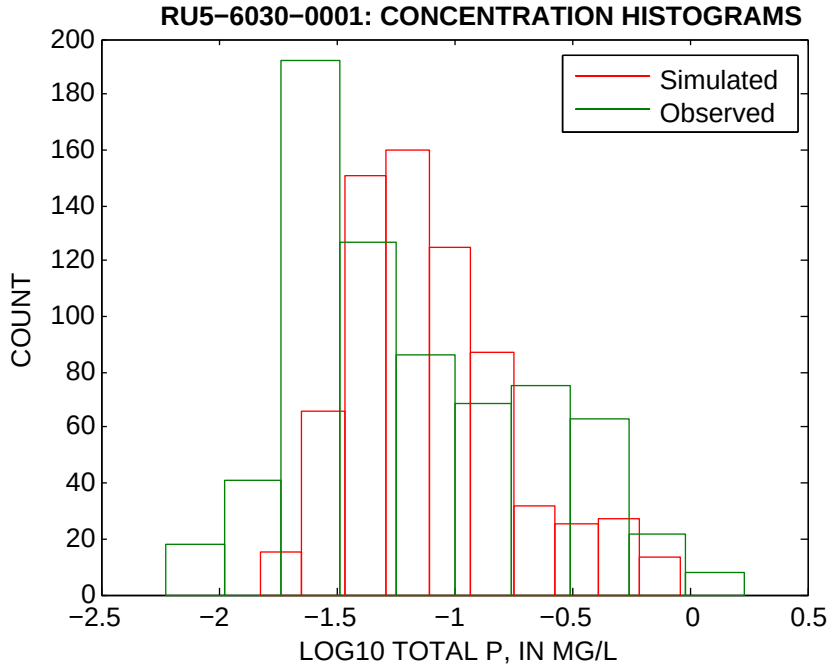
VERSION 2.1

ALL DATA
LOG10

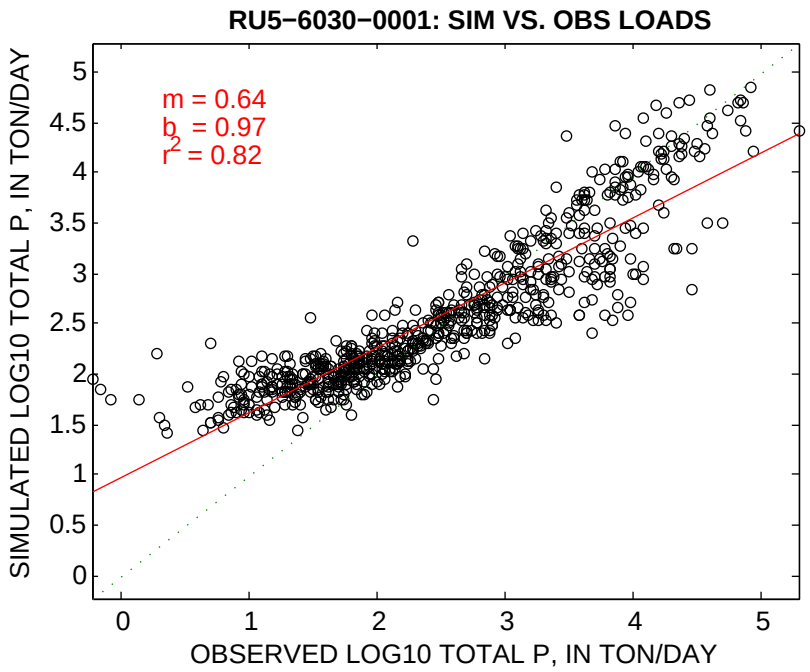


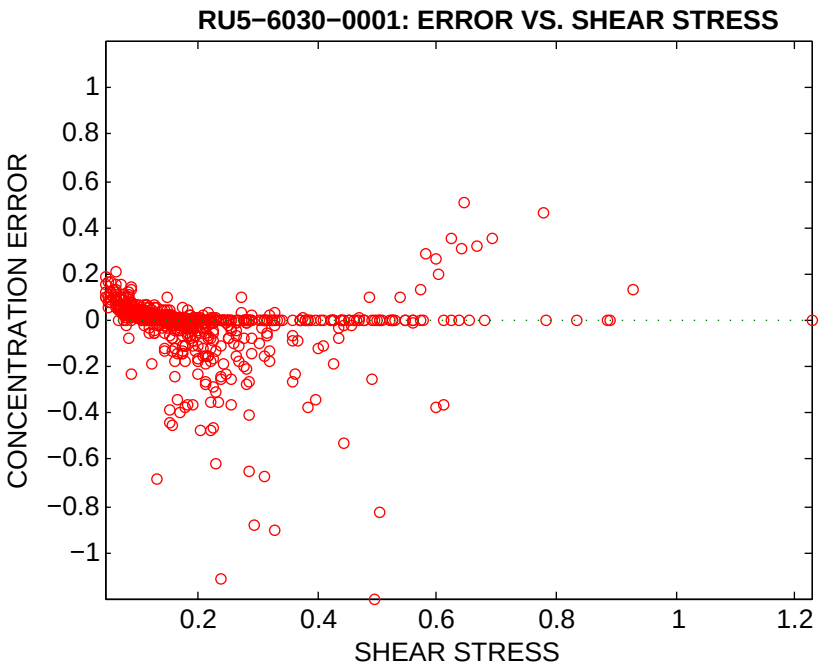


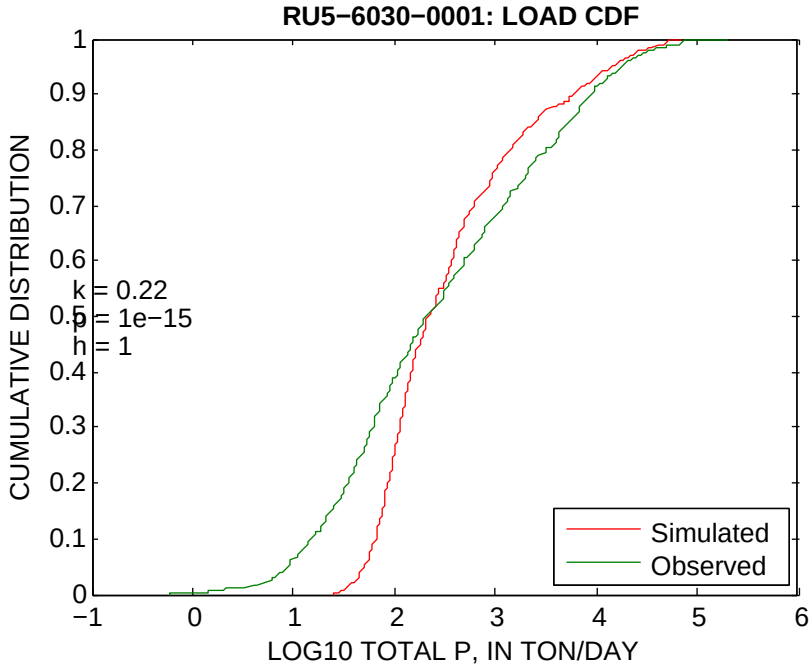


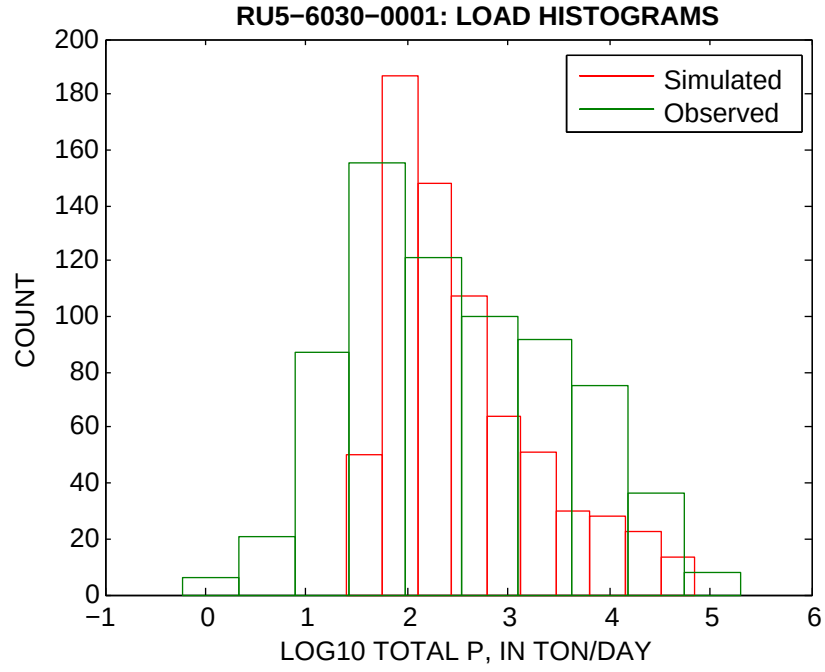


LOAD DATA
LOG10

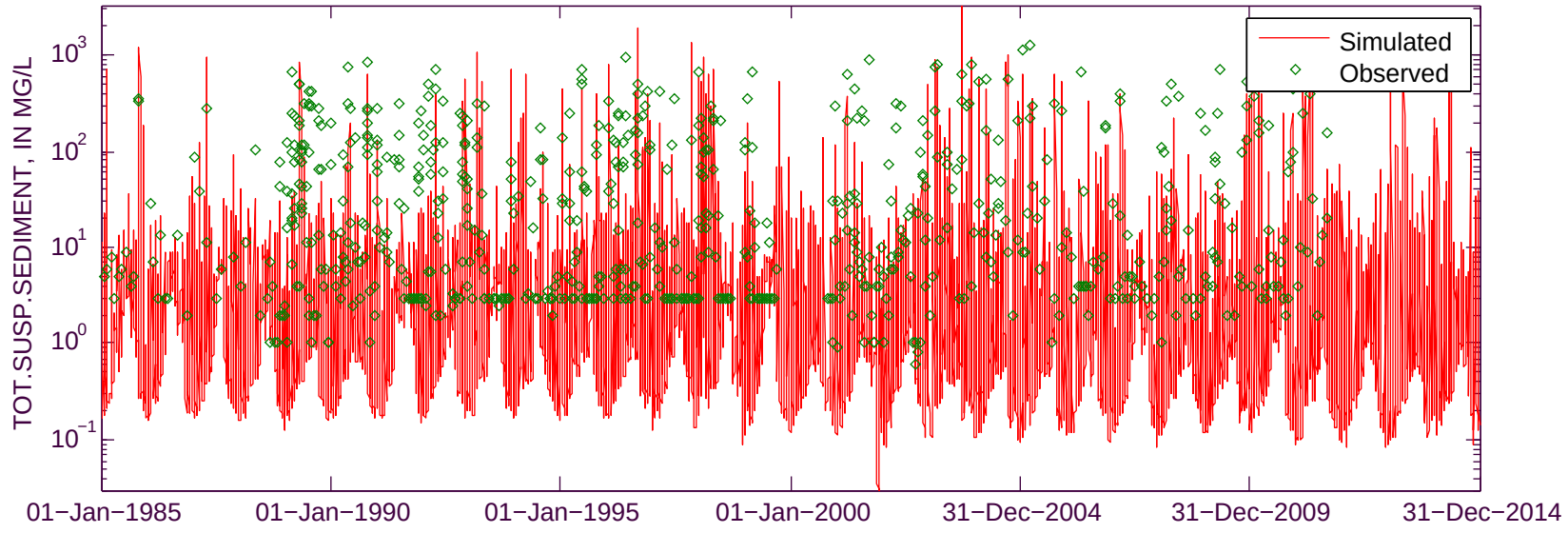




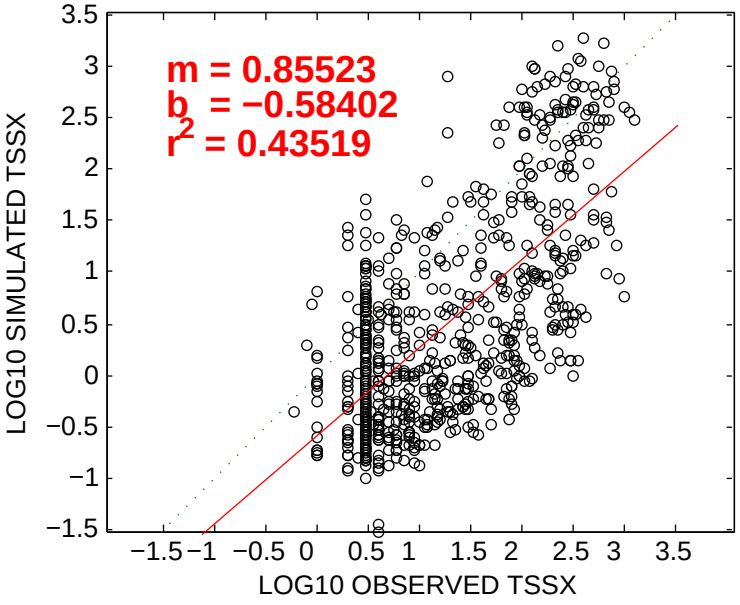




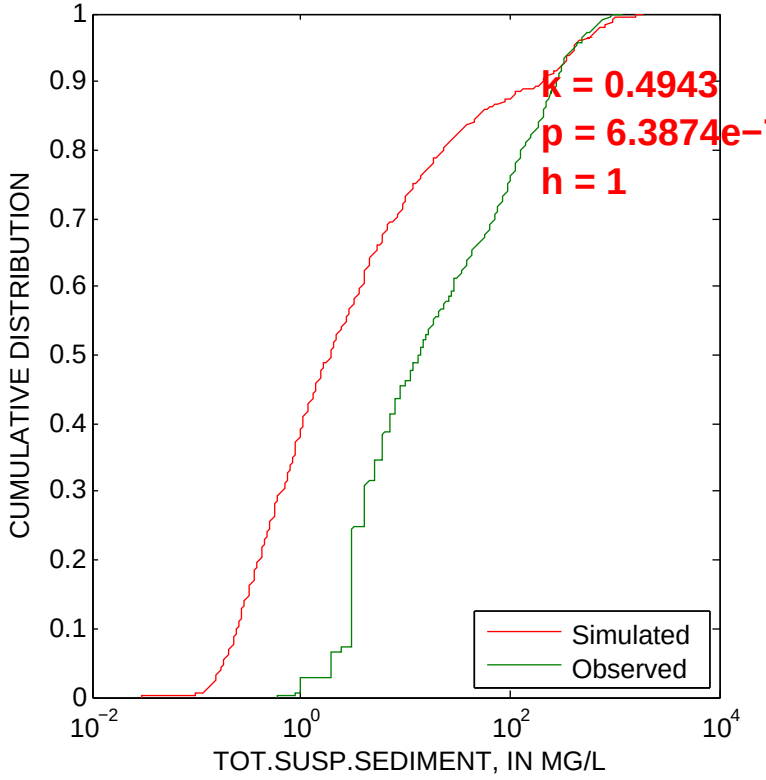
RAPPAHANNOCK RIVER NEAR FREDERICKSBURG, VA: TSSX TIME-SERIES



RU5-6030-0001: SIMULATED VS. OBSERVED



RU5-6030-0001: EMPIRICAL CUMULATIVE DISTRIBUTION



DATA SELECTION

scenario	file
P620171001WQ	TSSX.calib

plot: TSSX - total suspended ...

Dates: 1/1/1985 – 12/31/201

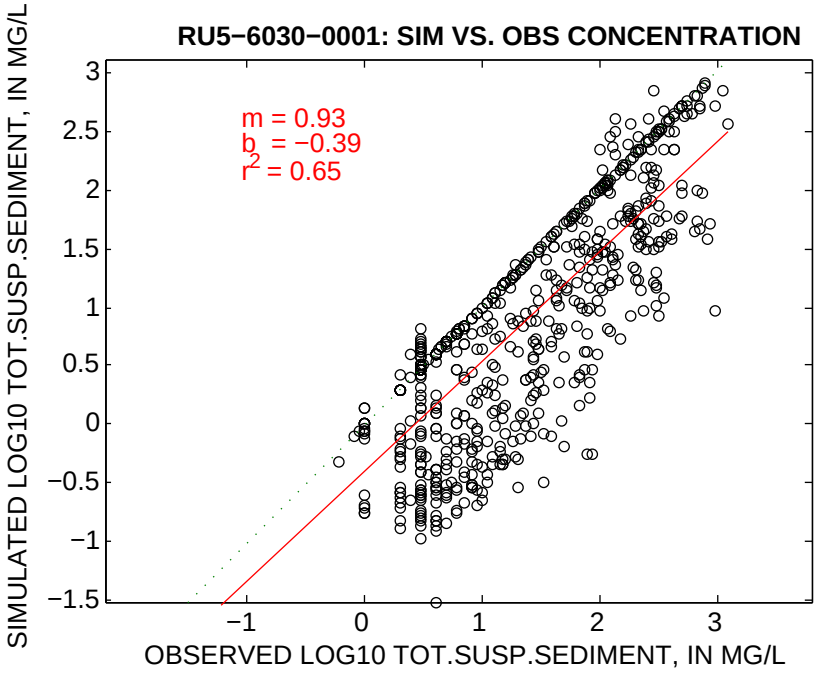
Drive	Directory	Observed
N/A	model	OBS20161101

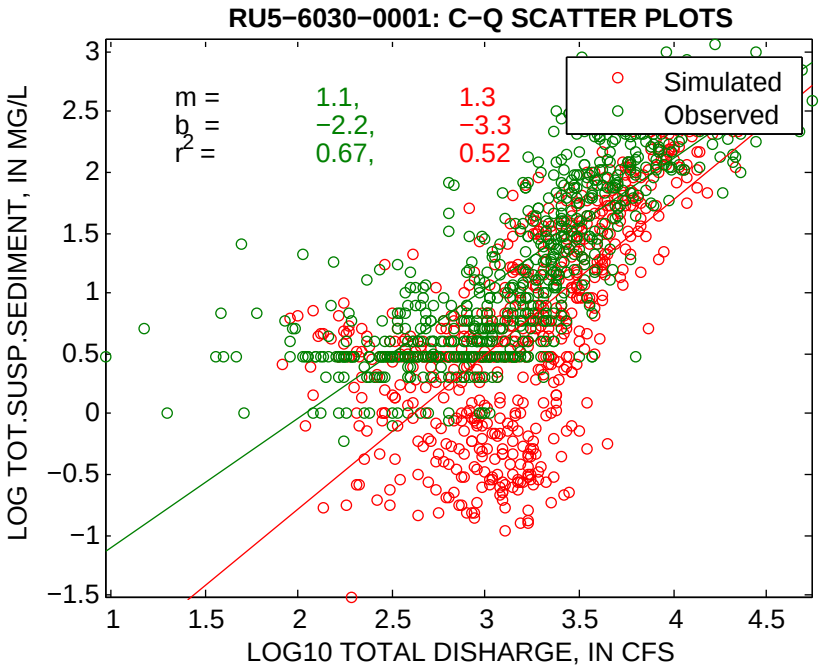
STATISTICS

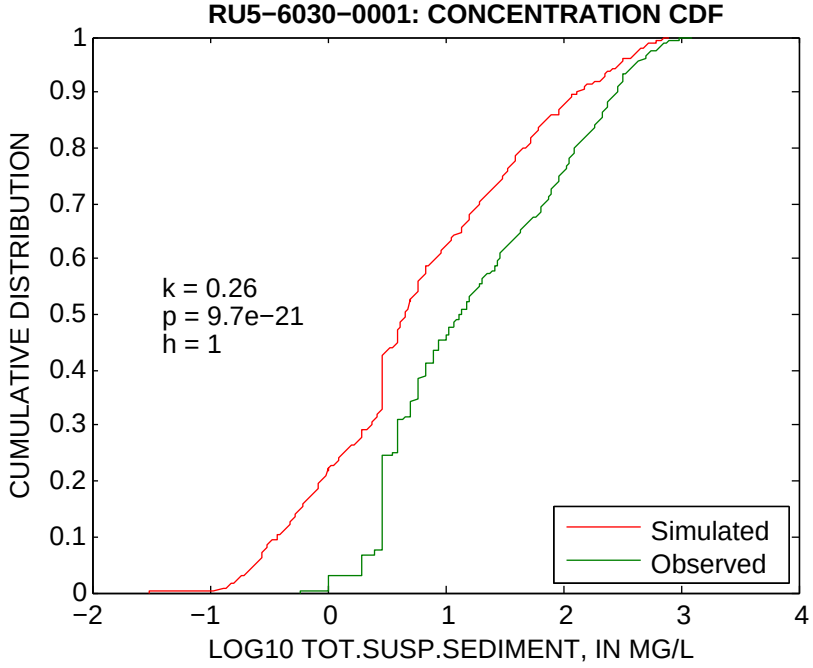
	n	702	702
		observe	simulate
min		0.6	0.030062
		-0.221849	-1.52198
mean		89.0267	64.7929
		1.28871	0.518118
media		13	1.93375
		1.11394	0.286396
max		1240	1922.7
		3.09342	3.28391
varian		27116.5	39550.6
		0.633749	1.06515
JB		0.001	0.001
		0.001	0.001
		ra	log
%		-27.2208	-59.7955
err.va		36757.3	1.20954
rel.std.err		1.35553	1.90855
mod.eff		-0.355533	-0.908551

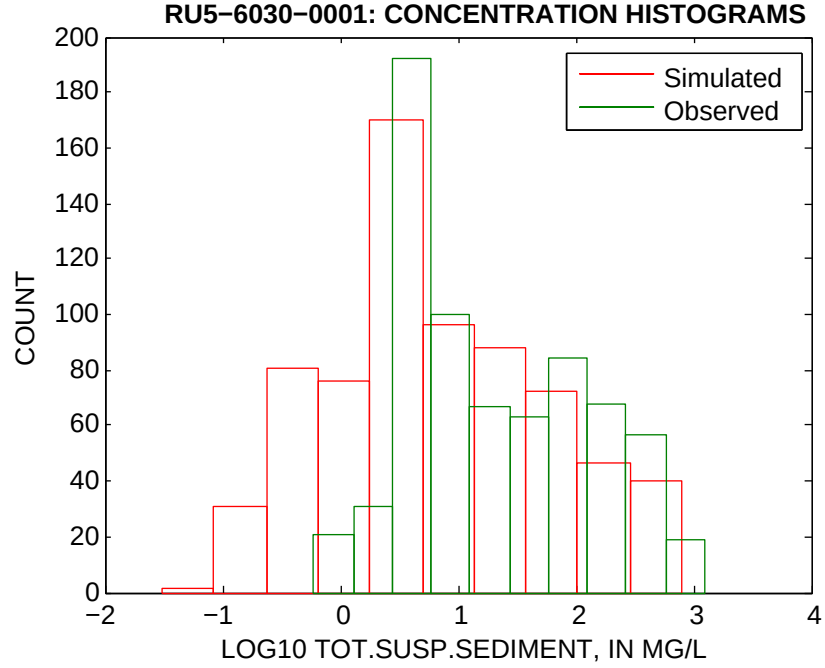
VERSION 3.1

ALL DATA
LOG10

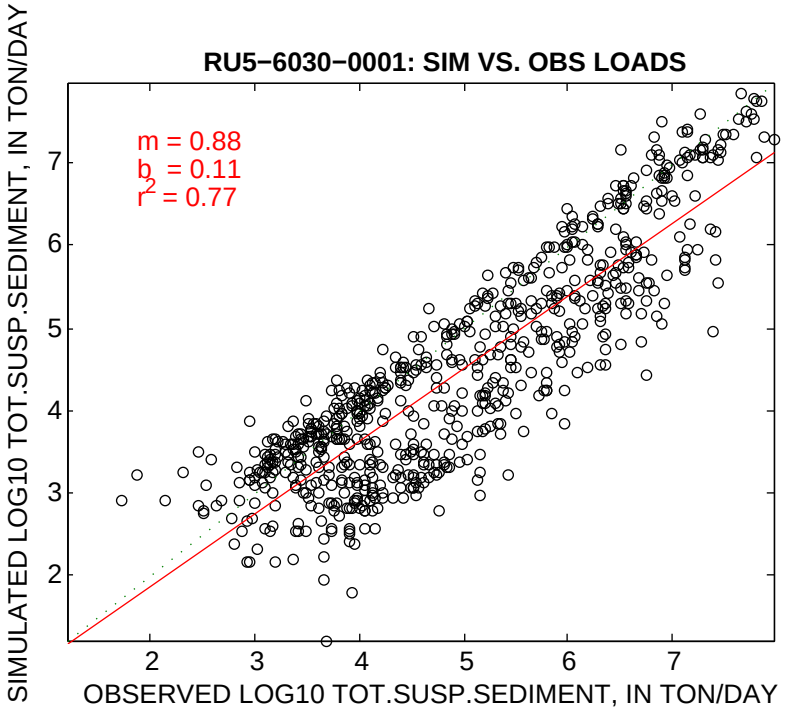


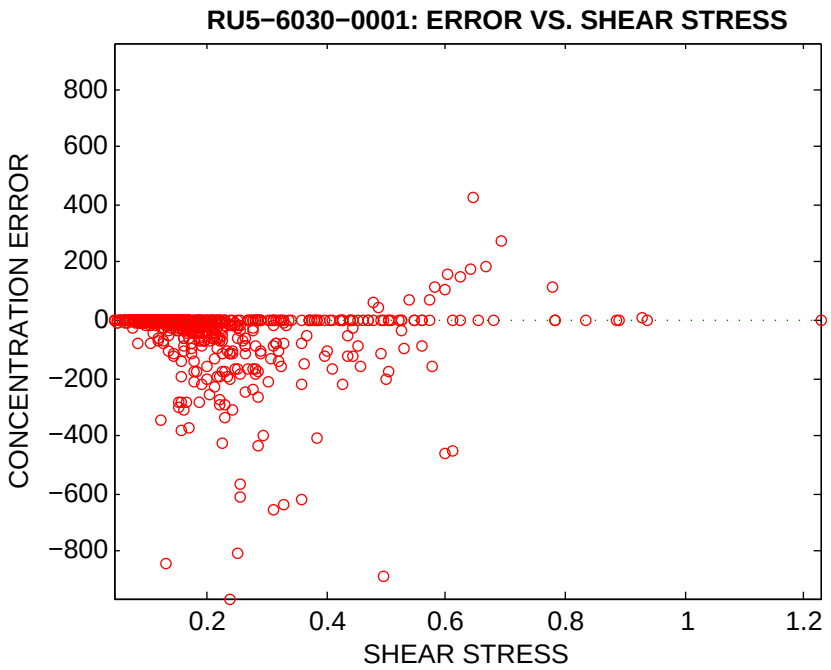


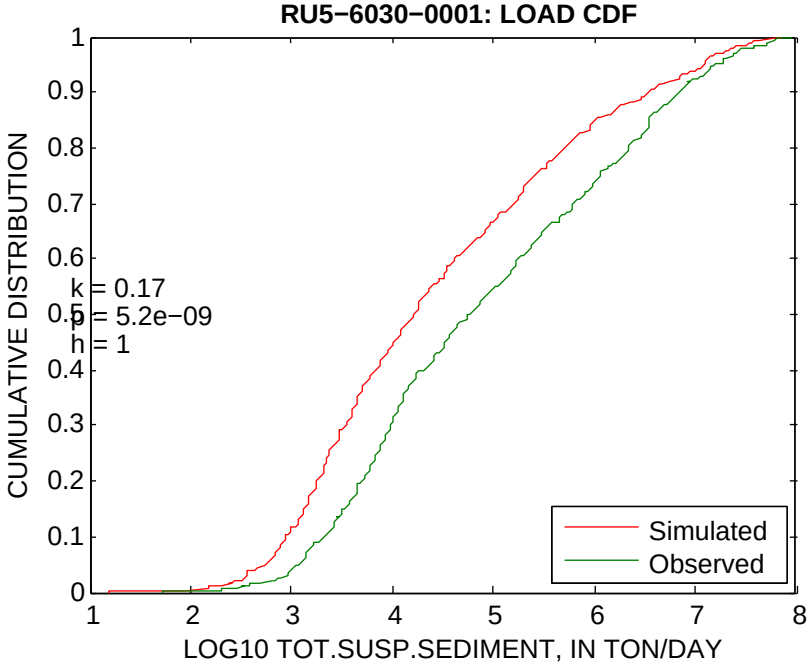


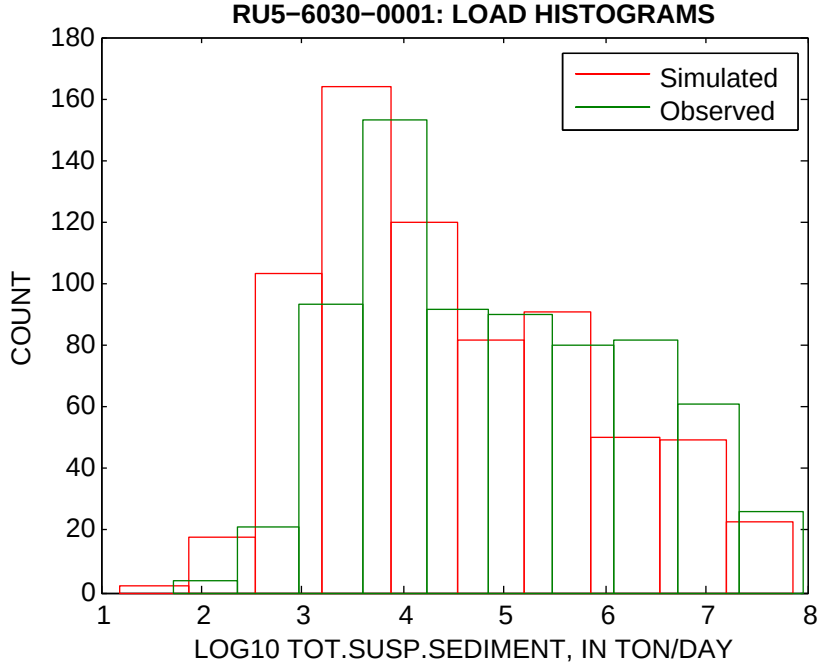


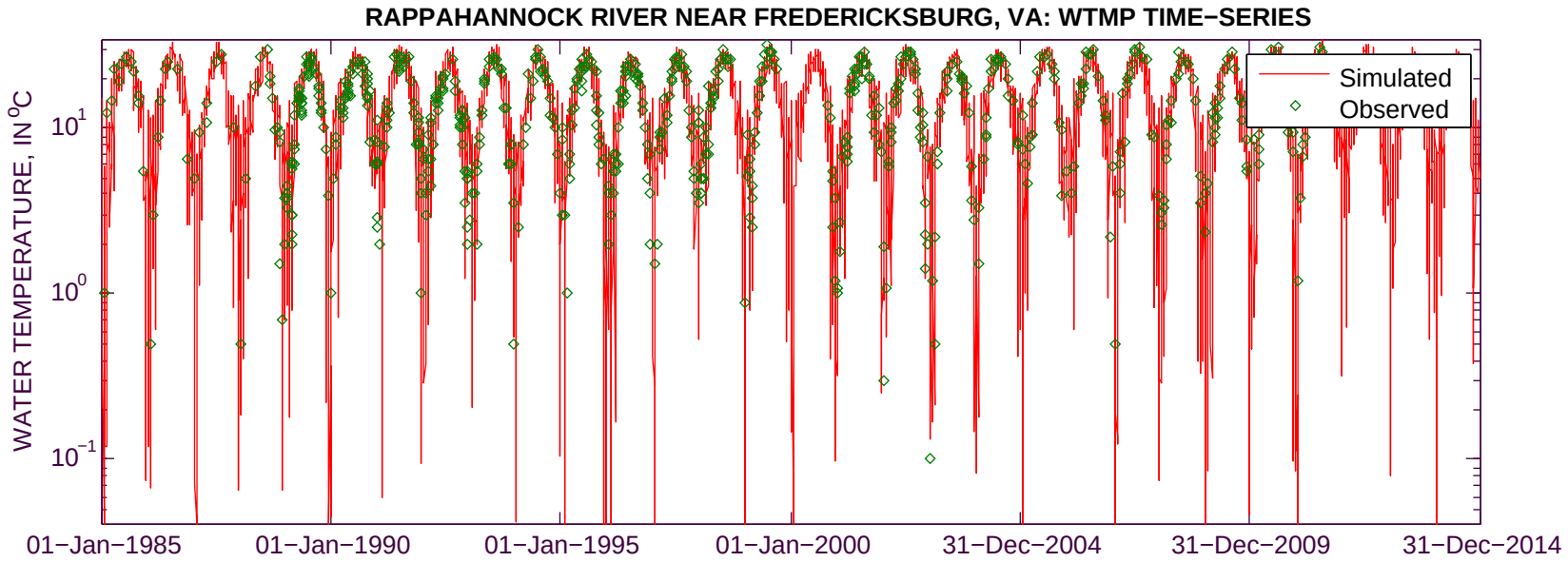
LOAD DATA
LOG10

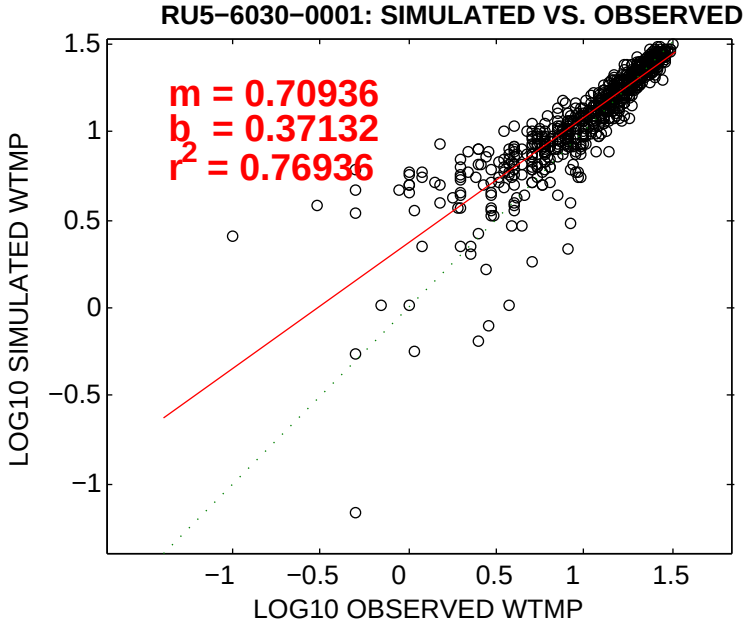


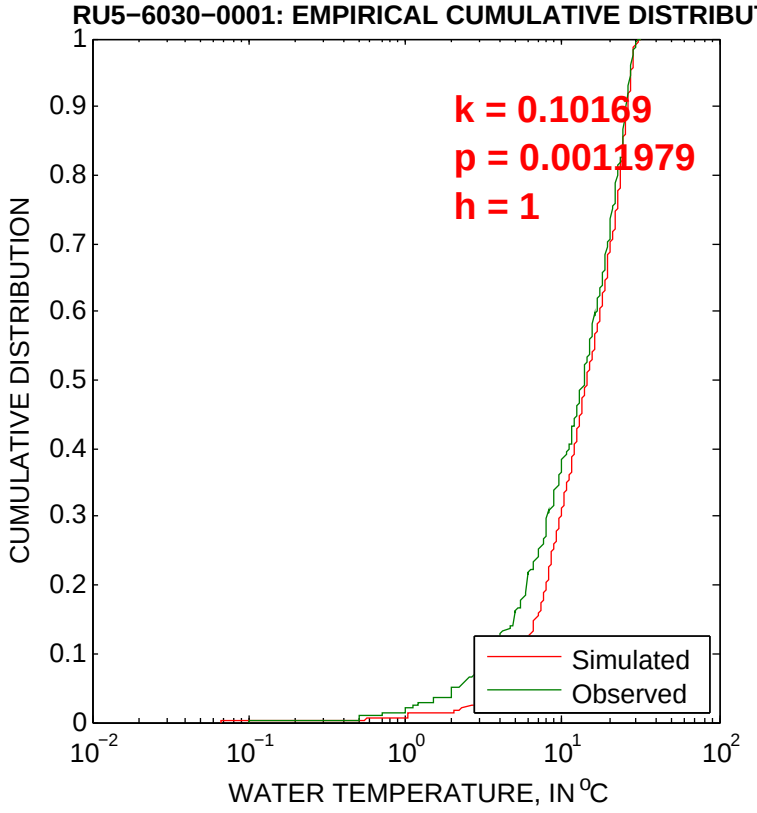












DATA SELECTION

scenario	file
P620171001WQ	WTMP.calib

plot: WTMP - water tempera...

Dates: 1/1/1985 – 12/31/201

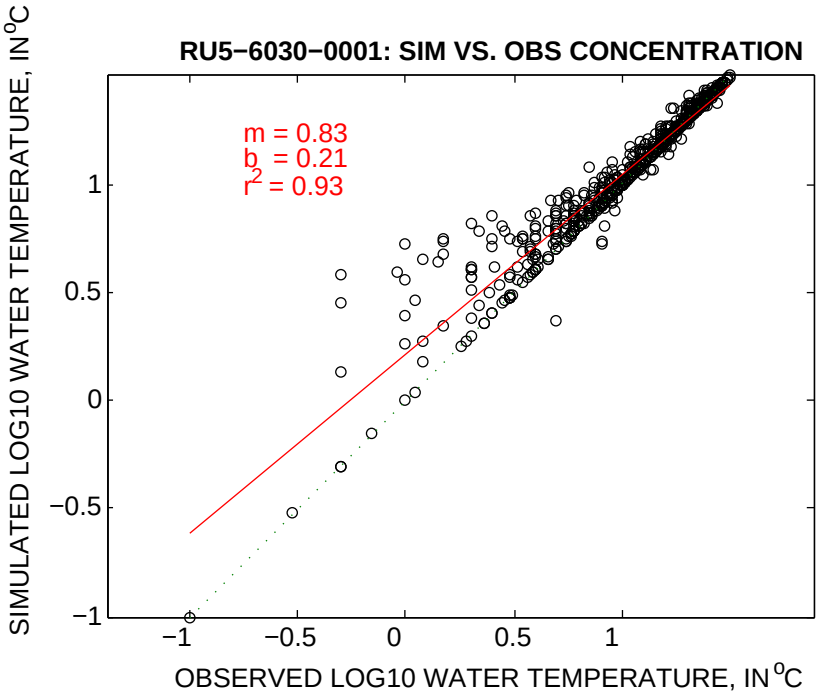
Drive	Directory	Observed
N/A	model	OBS20161101

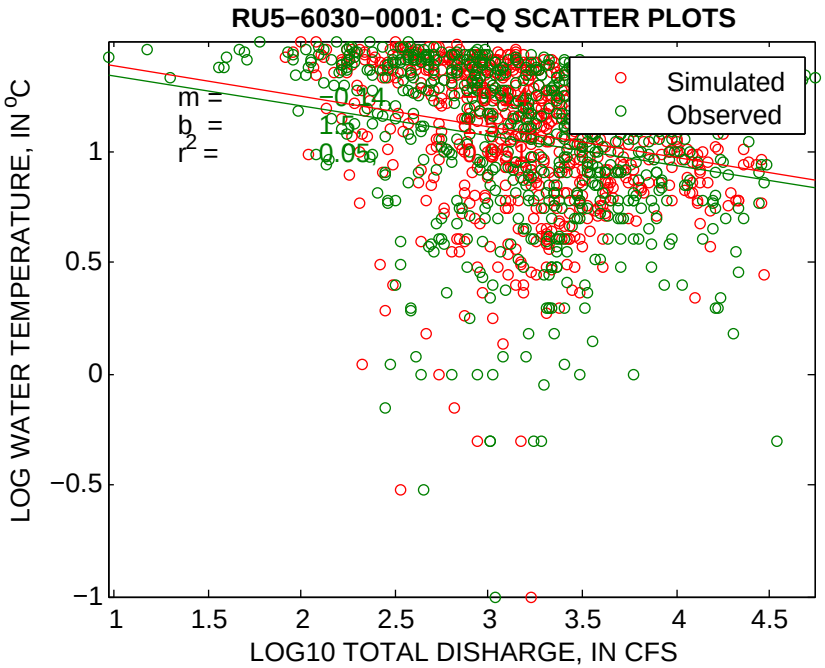
STATISTICS

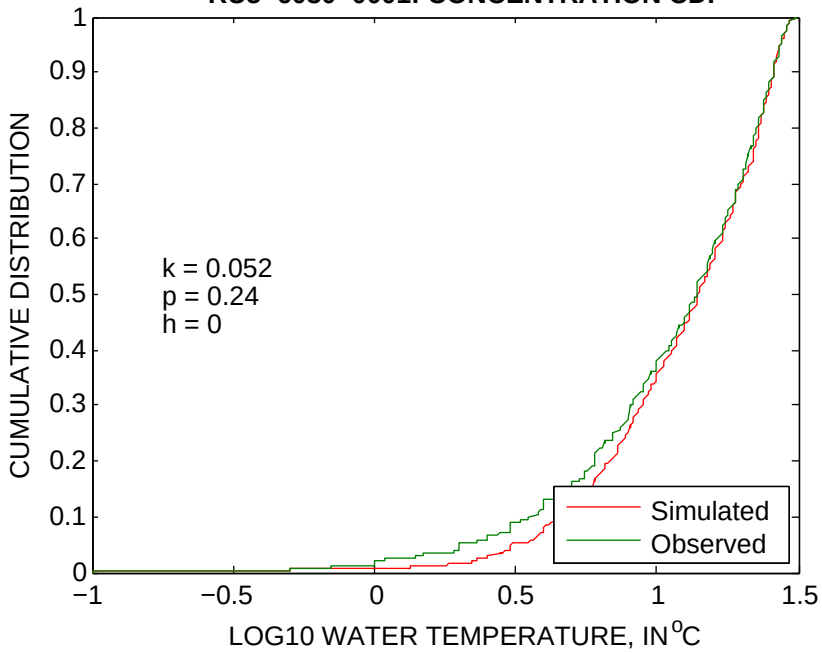
n	708	708
	observe	**simulate**
min	0.1	0.067556
	-1	-1.17034
mean	14.2391	15.3743
	1.04379	1.11175
media	14	14.421
	1.14613	1.159
max	31.6	31.398
	1.49969	1.4969
varian	66.9444	59.1896
	0.13262	0.0867387
JB	0.001	0.001
	0.001	0.001
	ra	log
%	7.97223	6.51046
err.va	6.91839	0.0358325
rel.std.err	0.103345	0.270189
mod.eff	0.896655	0.729811

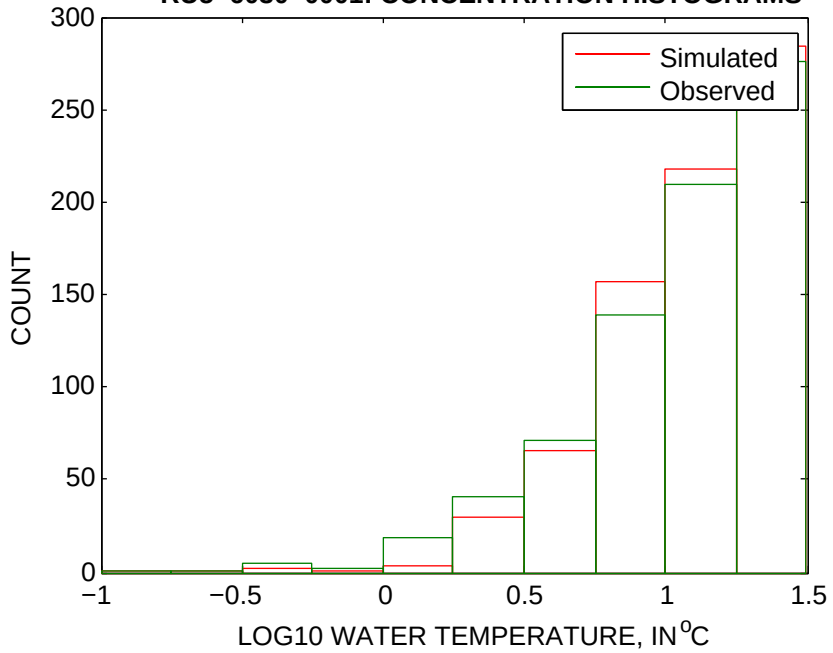
VERSION 2.1

ALL DATA
LOG10

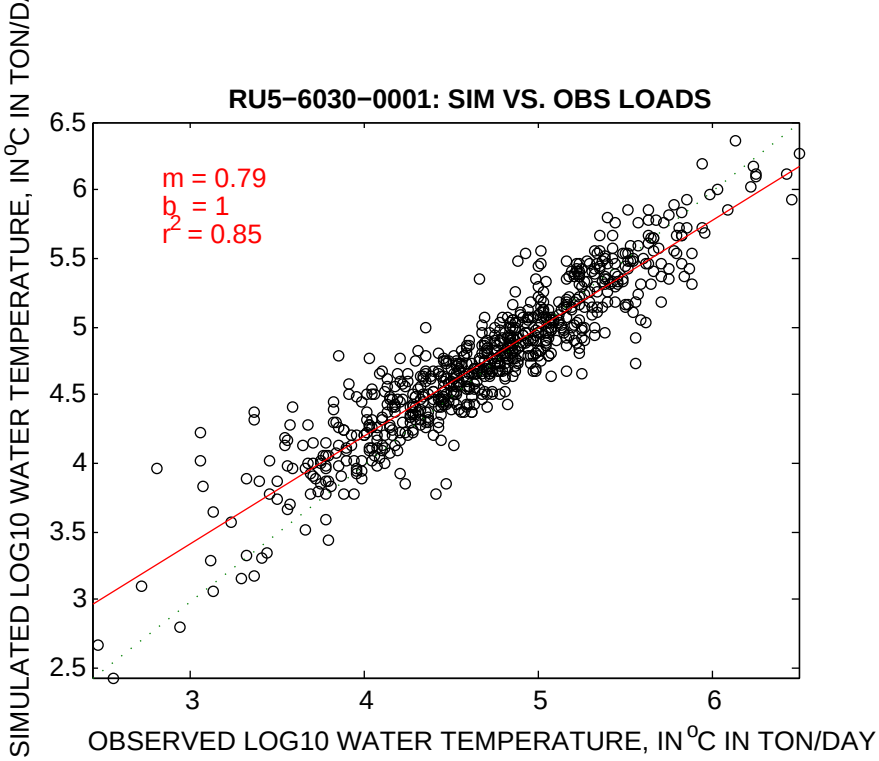


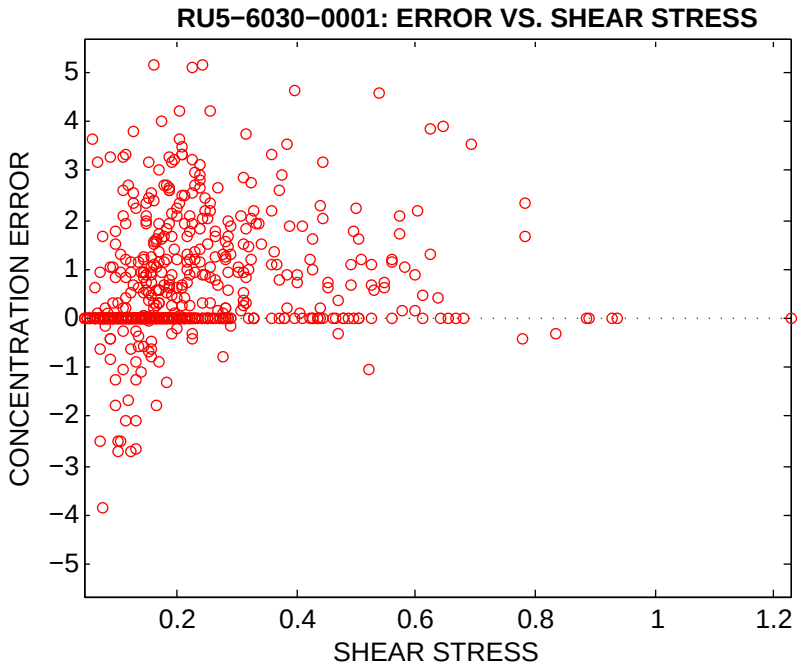


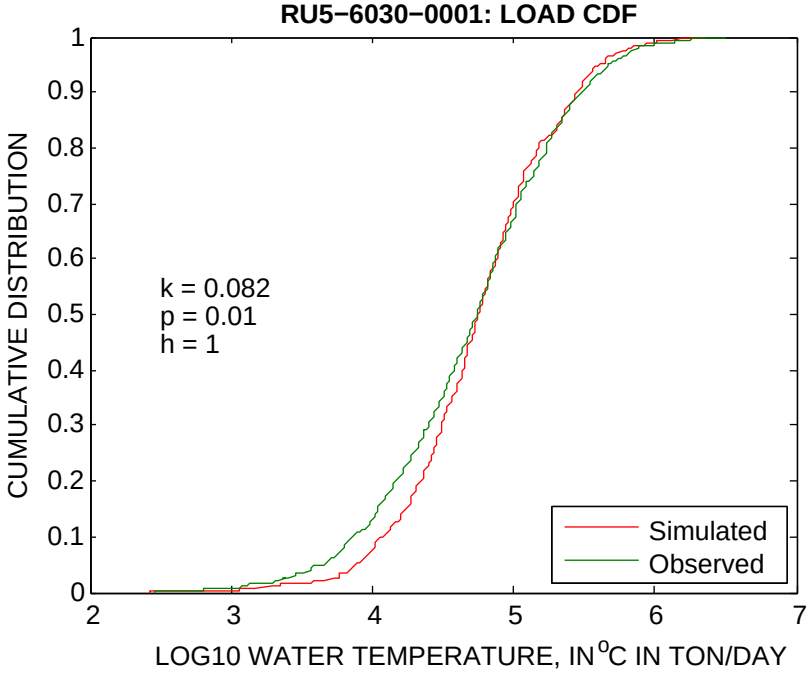


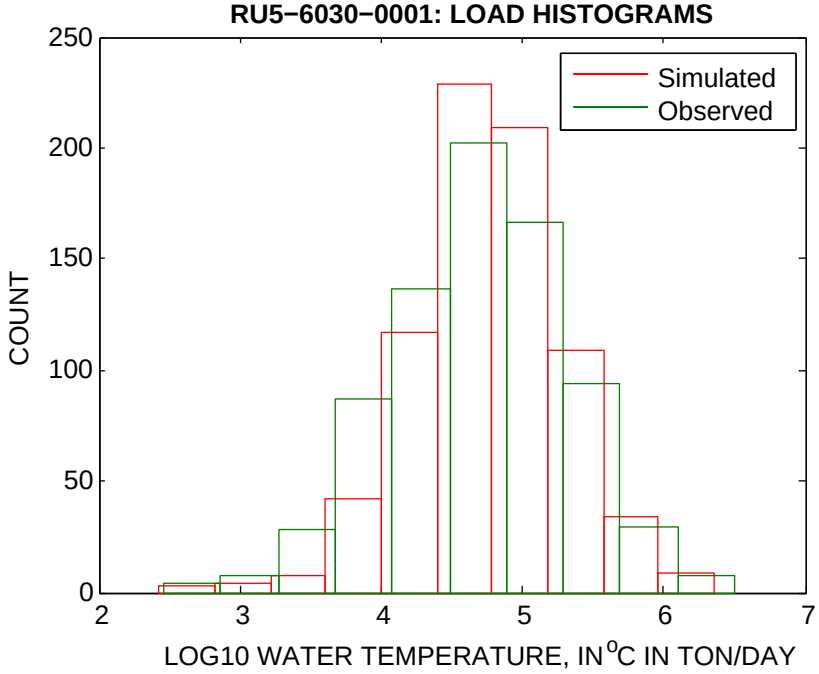


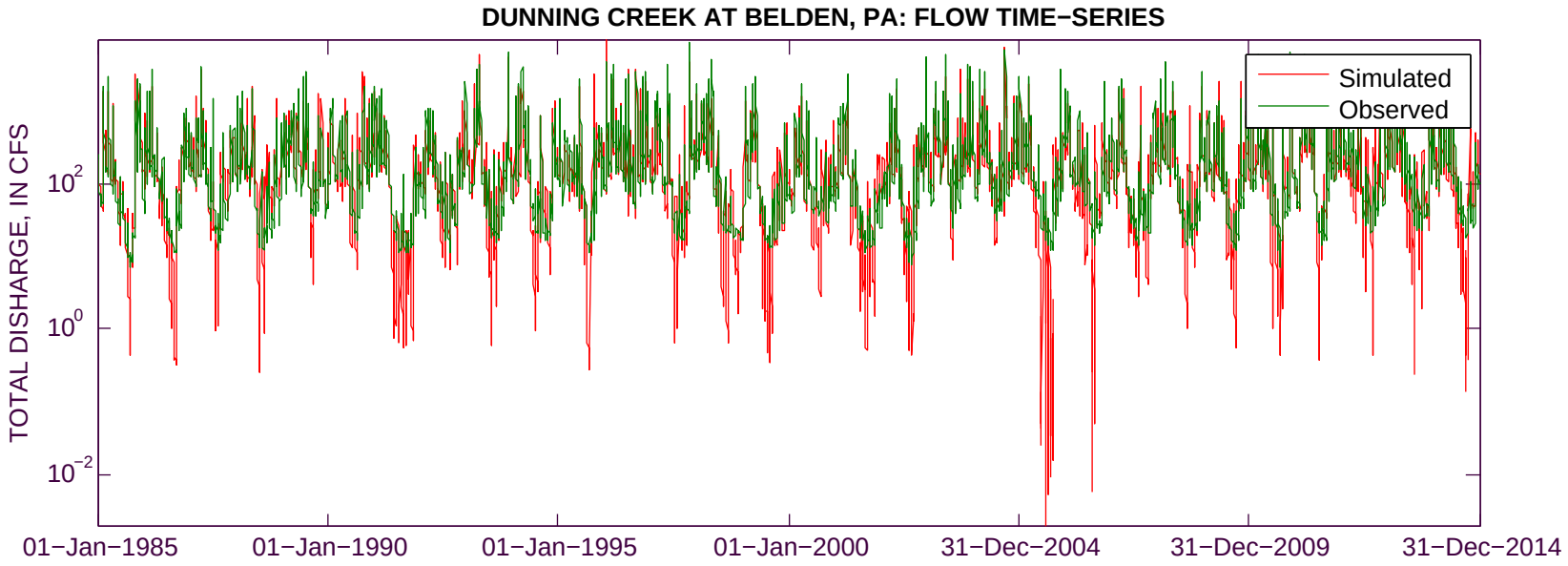
LOAD DATA
LOG10

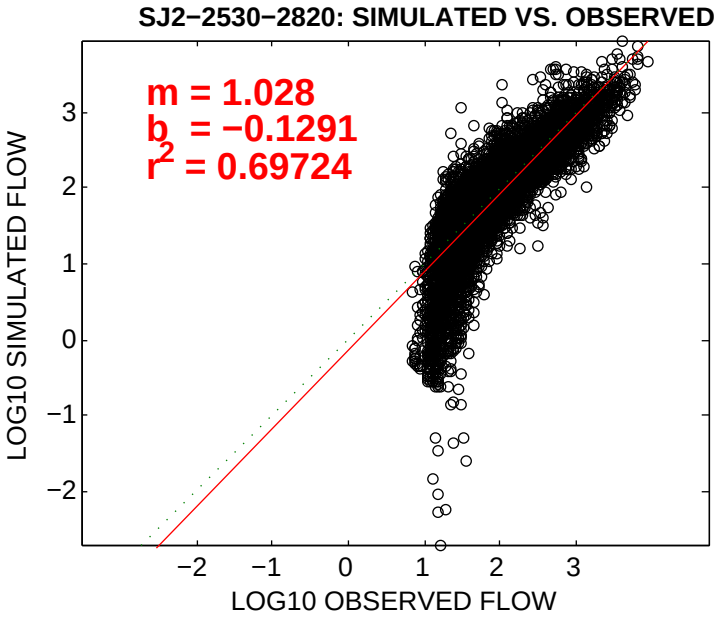


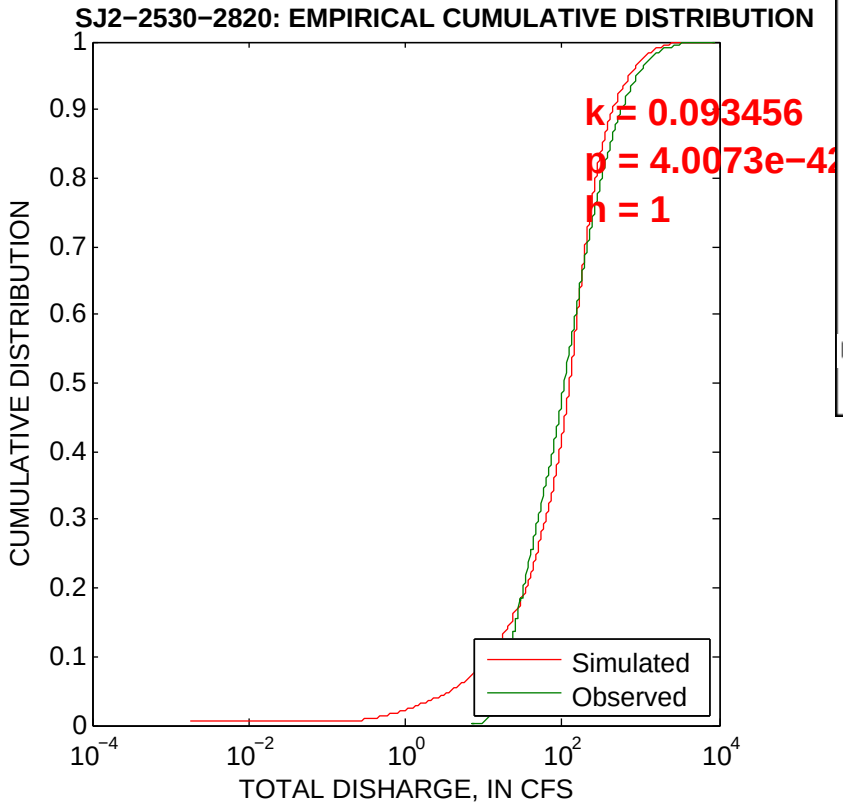












DATA SELECTION

scenario	file
P620171001WQ	FLOW.calib

plot: FLOW - total discharge

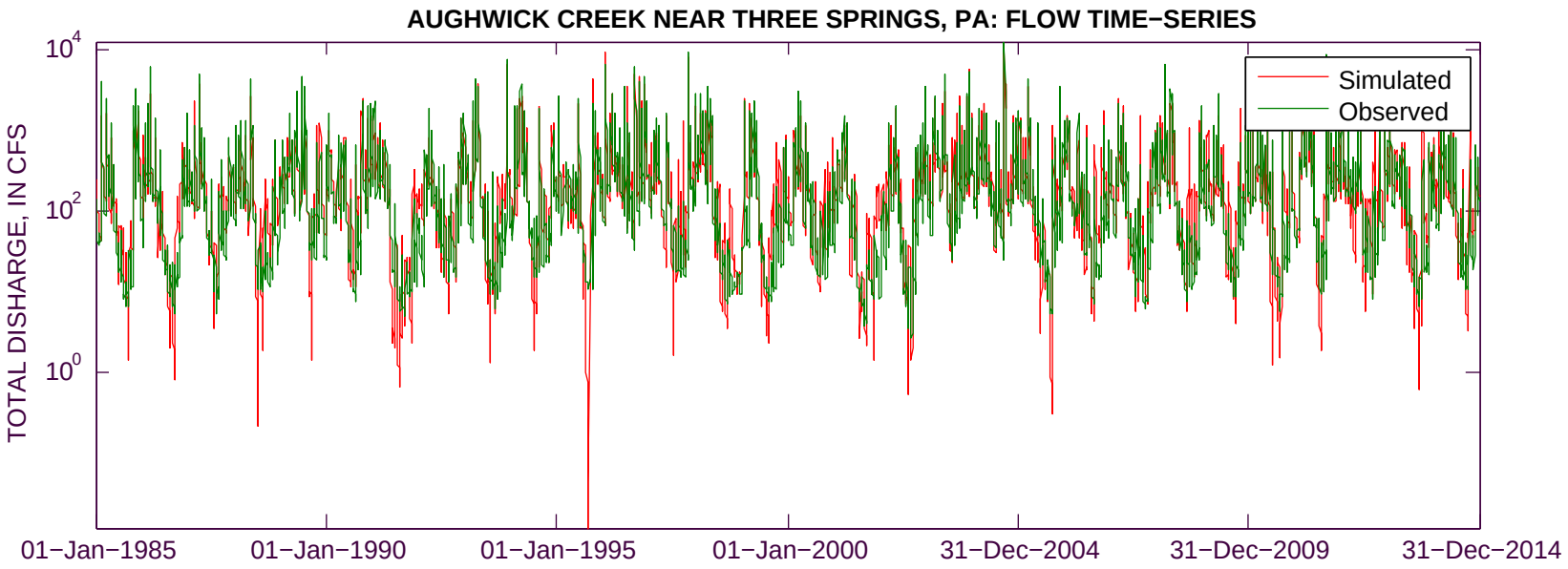
Dates: 1/1/1985 – 12/31/201

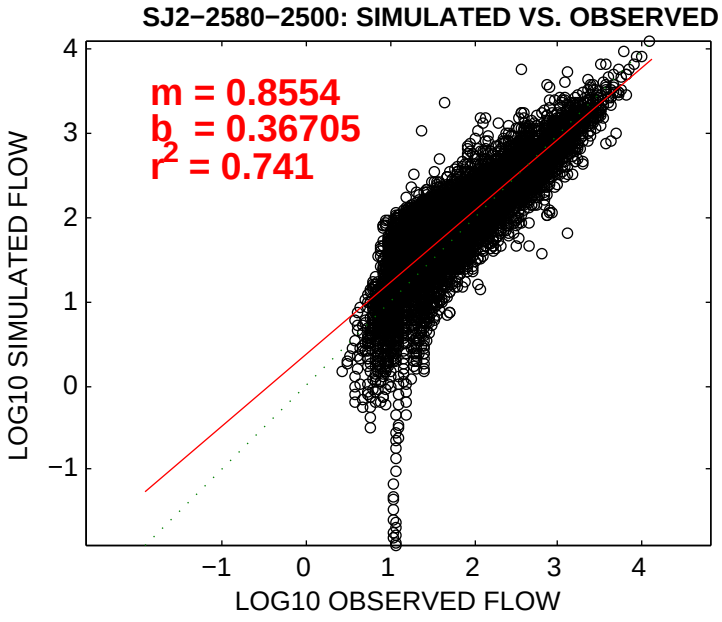
Drive	Directory	Observed
N/A	model	OBS20161101

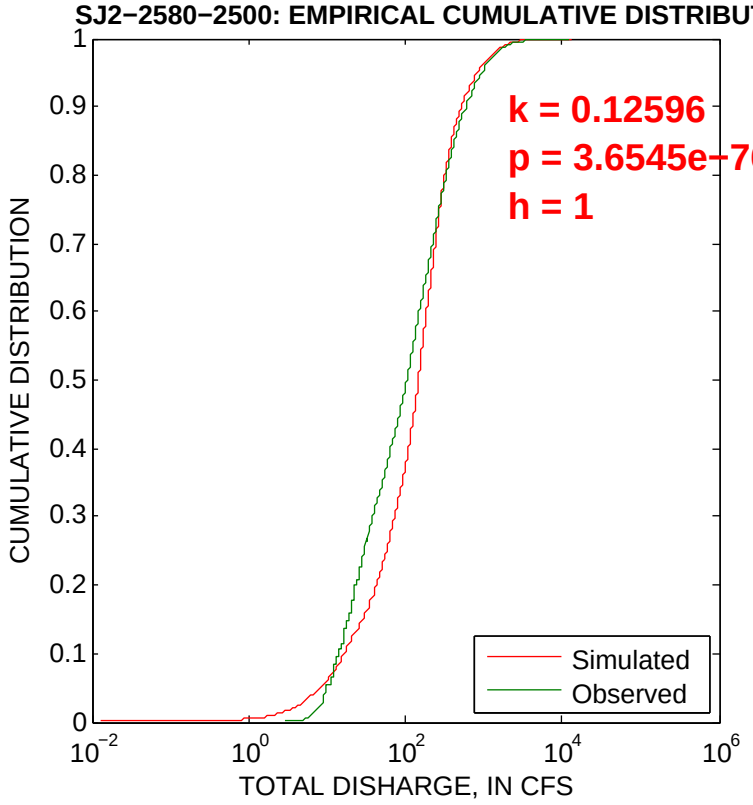
STATISTICS

n	10957	10904
	observe	simulate
min	7	0
	0.845098	-2.73422
mean	246.679	212.934
	2.04226	1.97026
media	108	125.52
	2.03743	2.10257
max	8830	9022.2
	3.94596	3.95531
varian	205778	130577
	0.291095	0.441169
JB	0.001	0.001
	0.001	0.001
	ra	log
%	-13.6797	-3.52561
err.va	75250.3	0.138981
rel.std.err	0.365687	0.477442
mod.eff	0.634313	0.522558

VERSION







DATA SELECTION

scenario: P620171001WQ | file: FLOW.calib

plot: FLOW - total discharge

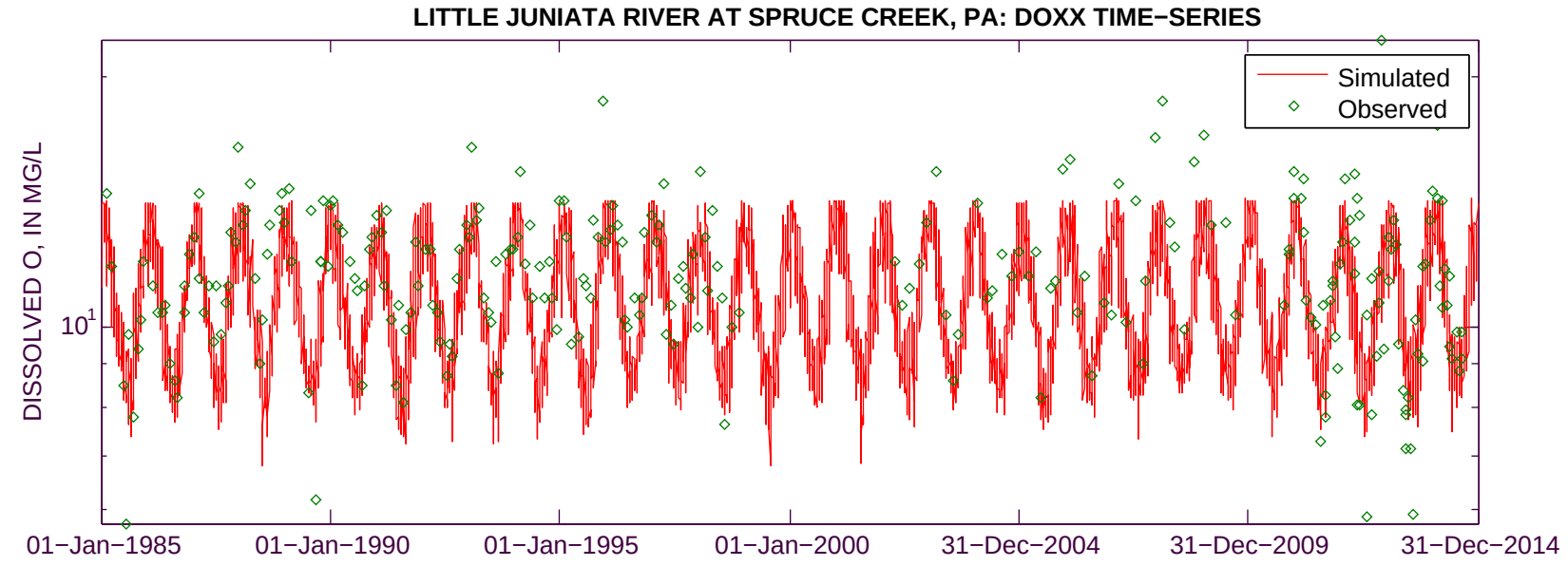
Dates: 1/1/1985 | 12/31/201

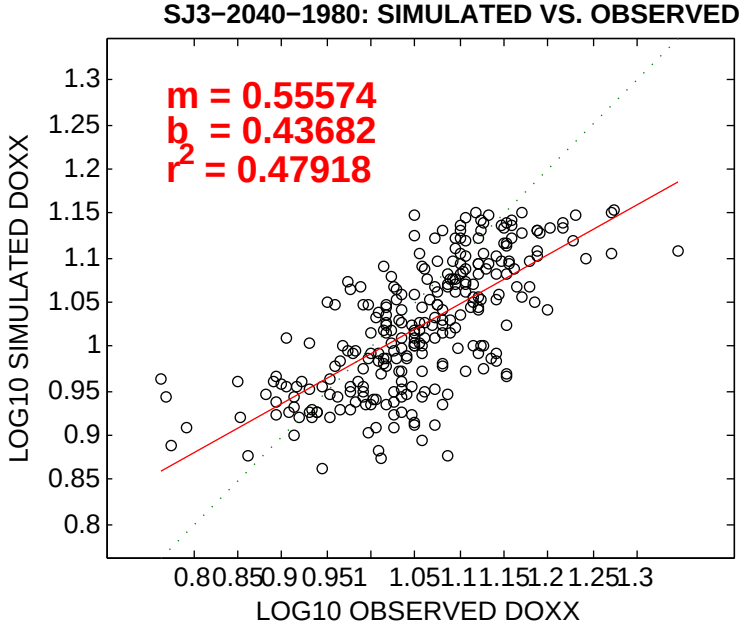
Drive: N/A | Directory: model | Observed: OBS20161101

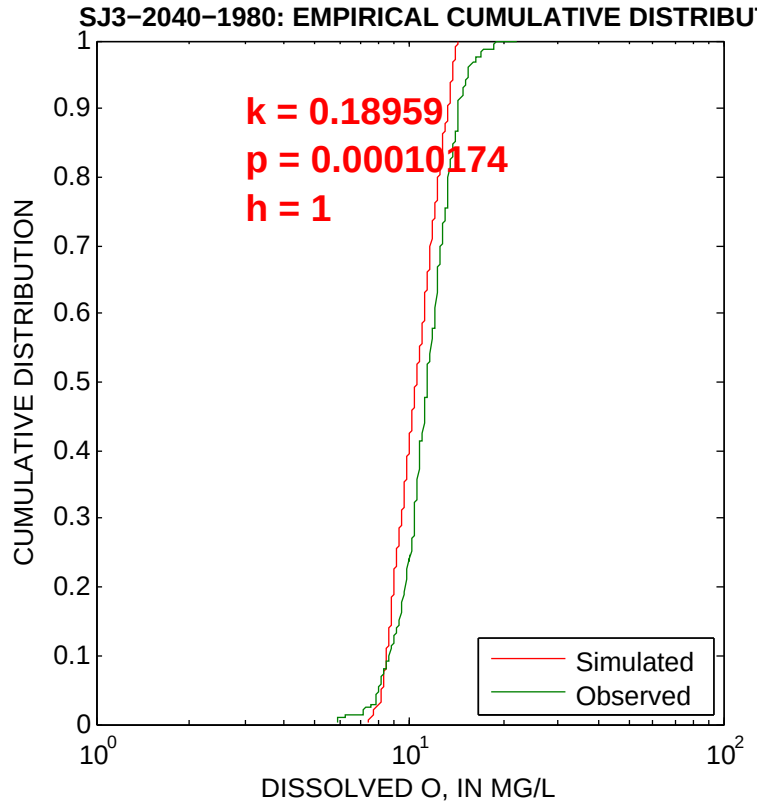
STATISTICS

n	10956	10956
	observe	simulate
min	2.7	0.012256
	0.431364	-1.91165
mean	248.595	251.321
	1.98469	2.06475
media	105	147.95
	2.02119	2.17011
max	12400	12859
	4.09342	4.10921
varian	225468	189304
	0.37613	0.371417
JB	0.001	0.001
	0.001	0.001
	ra	log
%	1.09663	4.03435
err.va	50746	0.110474
rel.std.err	0.22507	0.293711
mod.eff	0.77493	0.706289

VERSION







DATA SELECTION

scenario	file
P620171001WQ	DOXX.calib

plot: DOXX - dissolved oxygen

Dates: 1/1/1985 – 12/31/201

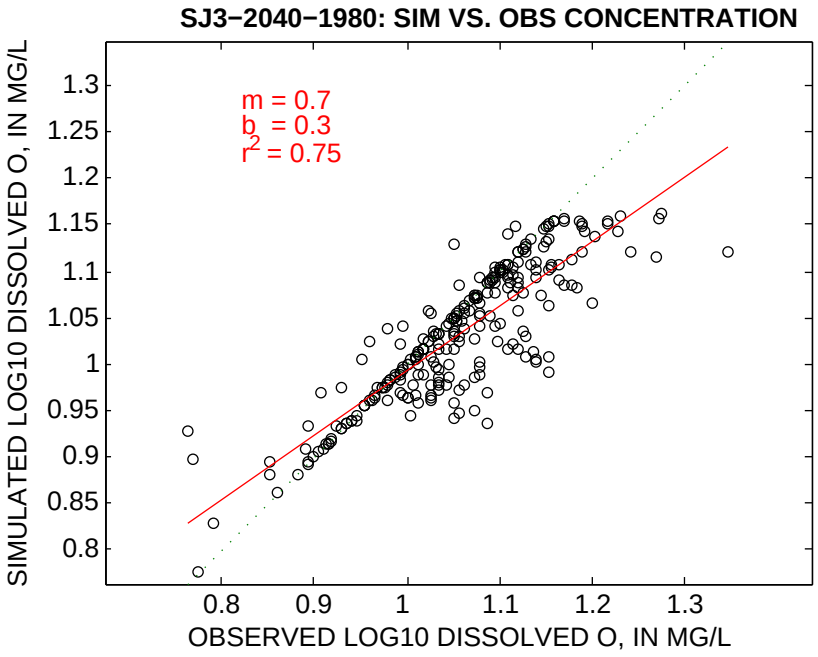
Drive	Directory	Observed
N/A	model	OBS20161101

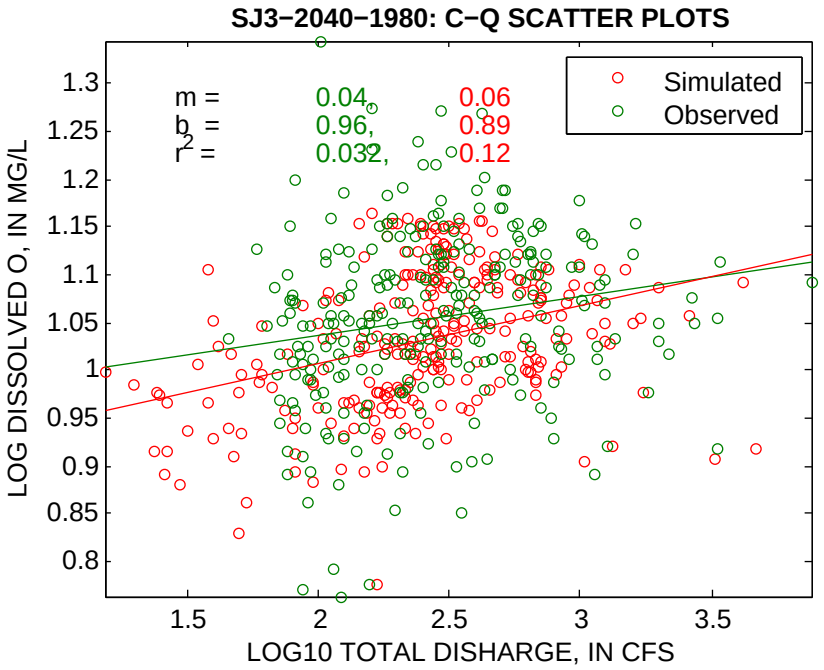
STATISTICS

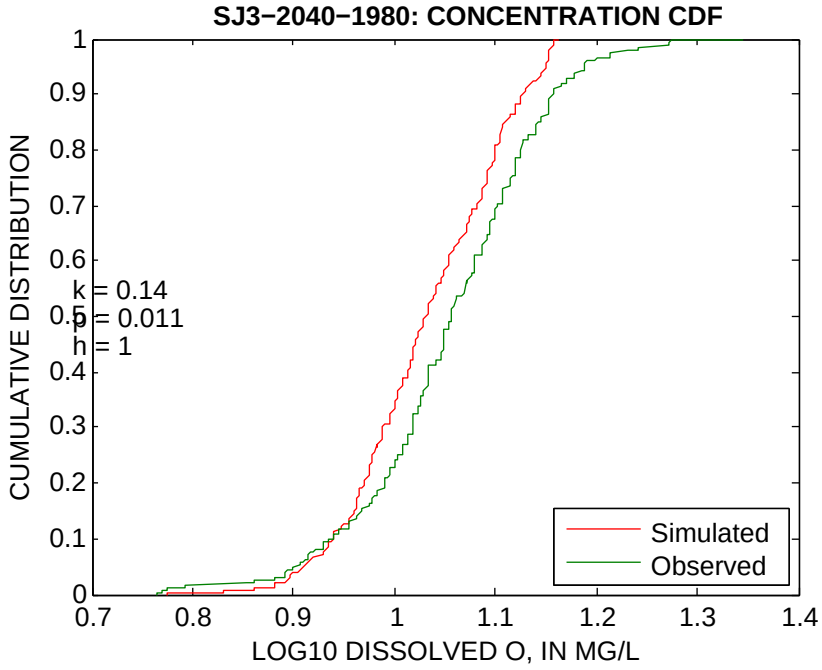
	n	269	269
		observe	simulate
min		5.8	7.2917
		0.763428	0.862829
mean		11.595	10.6949
		1.0552	1.02324
media		11.4	10.558
		1.0569	1.02358
max		22.16	14.268
		1.34557	1.15436
varian		5.6084	3.13253
		0.00805583	0.00519233
JB		0.001	0.006845
		0.011495	0.010143
		ra	log
%		-7.76298	-3.0286
err.va		3.71102	0.00531933
rel.std.err		0.661691	0.660308
mod.eff		0.338309	0.339692

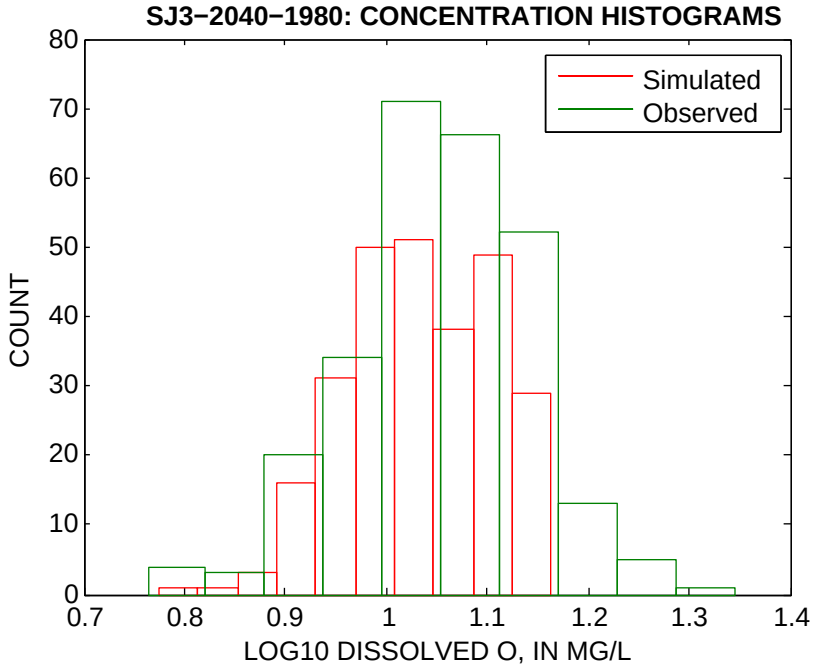
VERSION 2.1

ALL DATA
LOG10

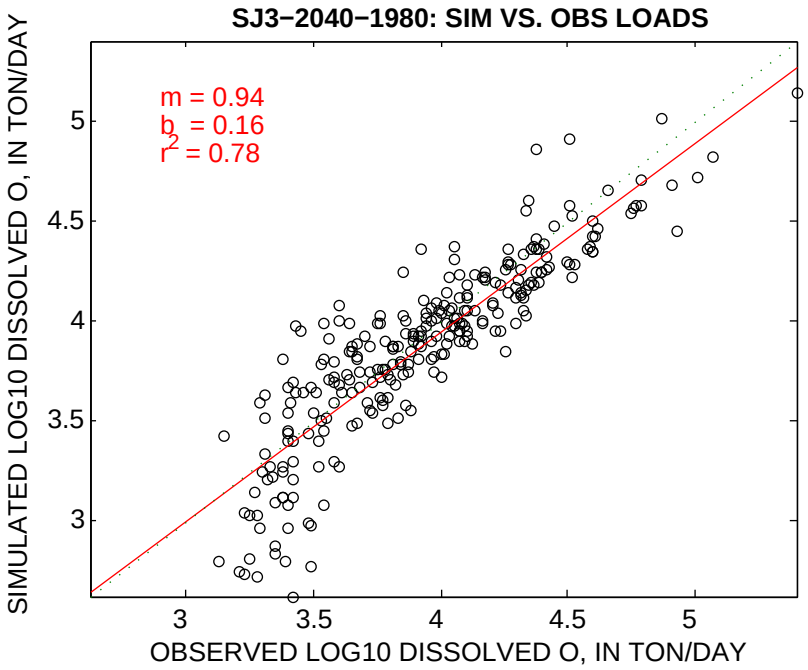


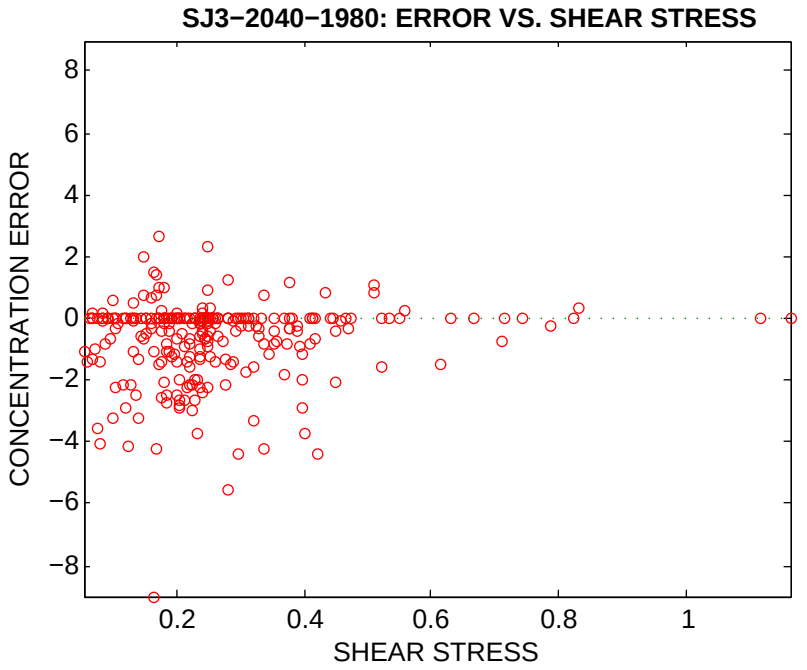


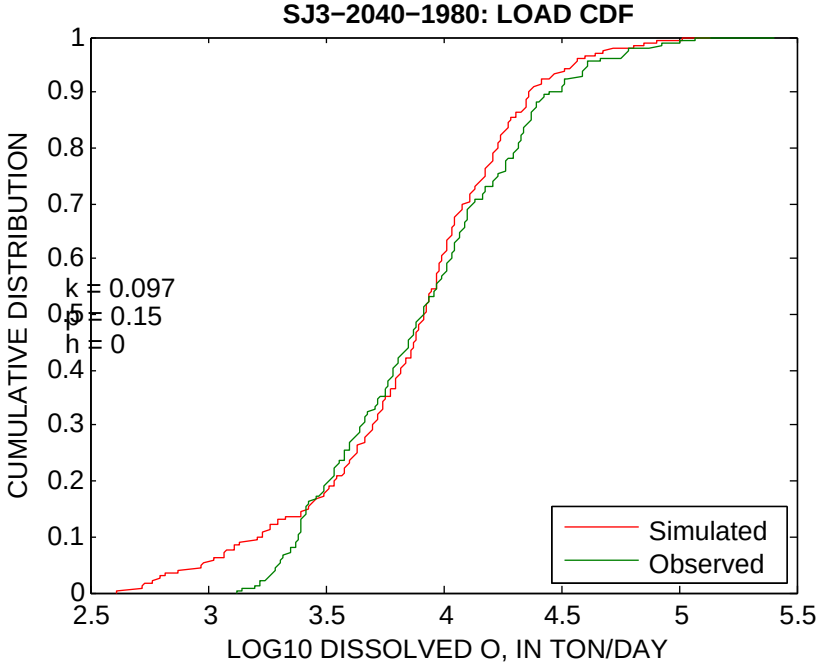


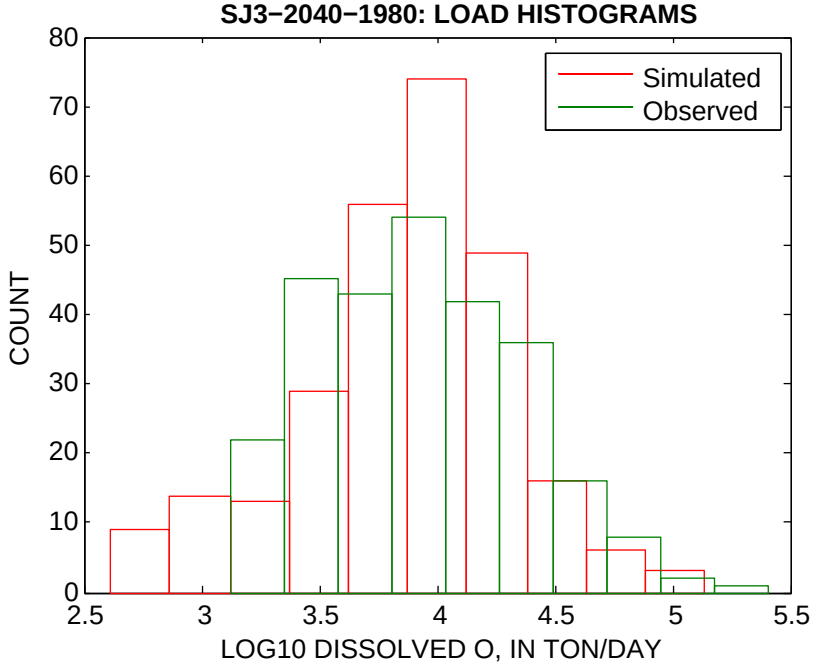


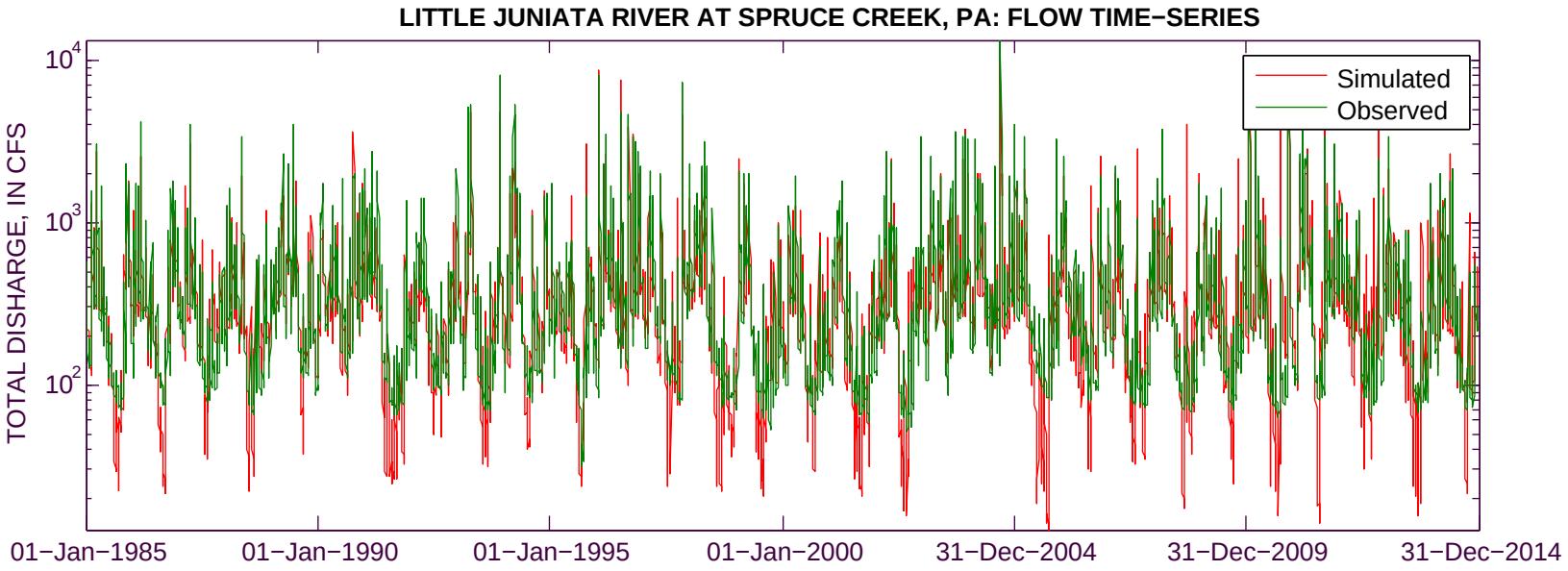
LOAD DATA
LOG10

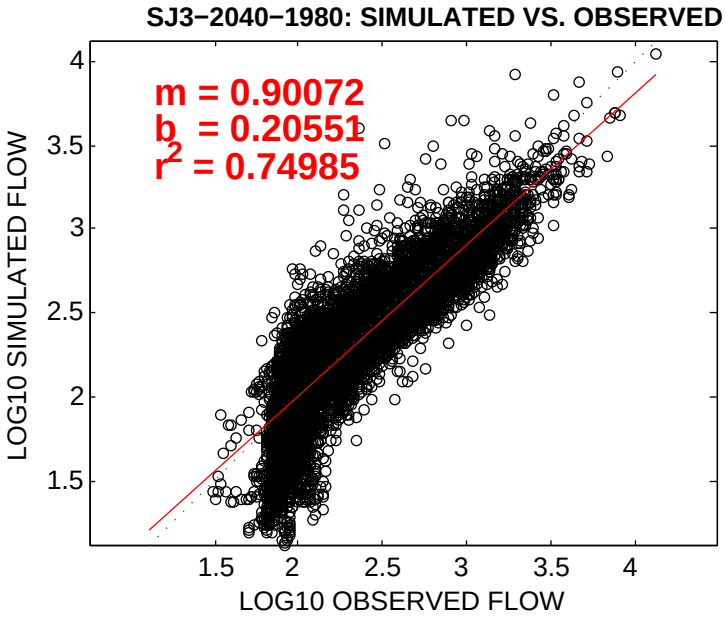


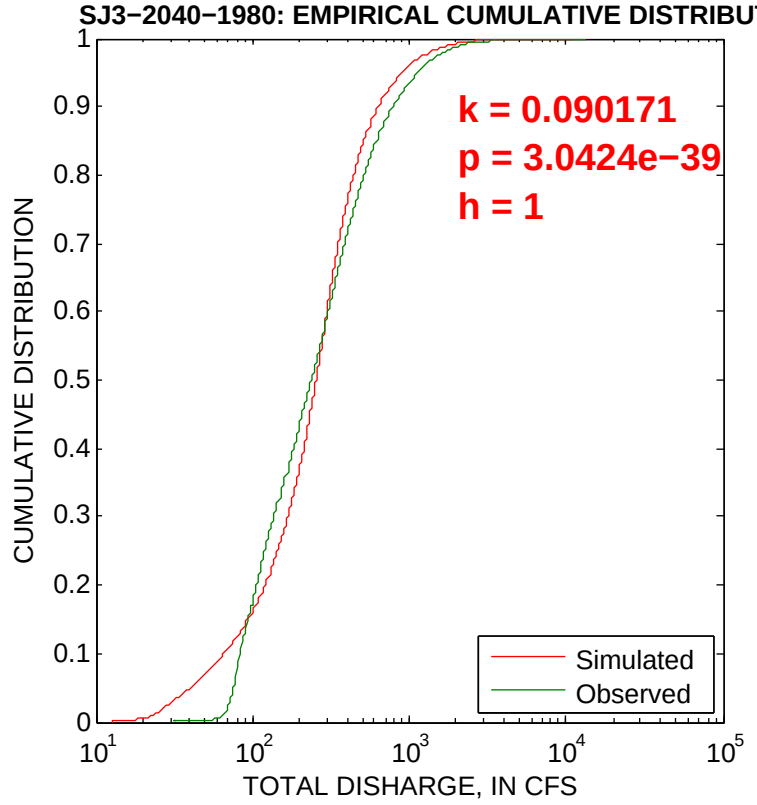












DATA SELECTION

scenario: P620171001WQ | file: FLOW.calib

plot: FLOW - total discharge

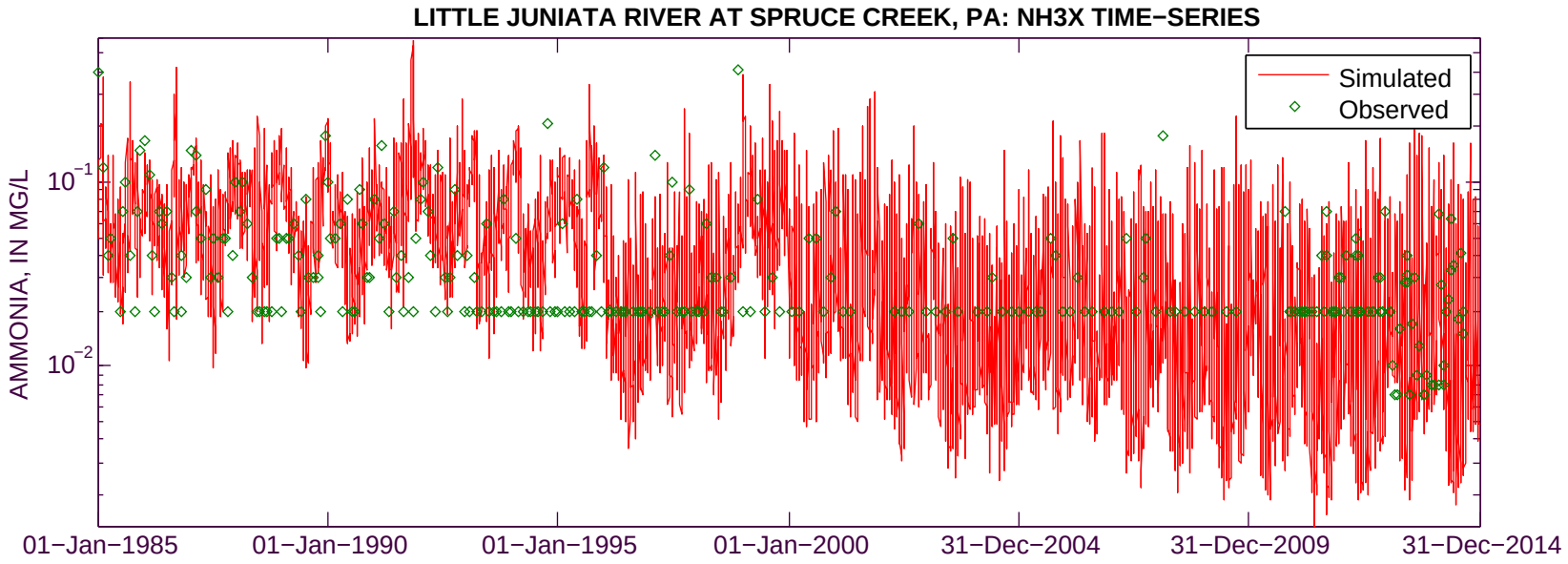
Dates: 1/1/1985 – 12/31/201

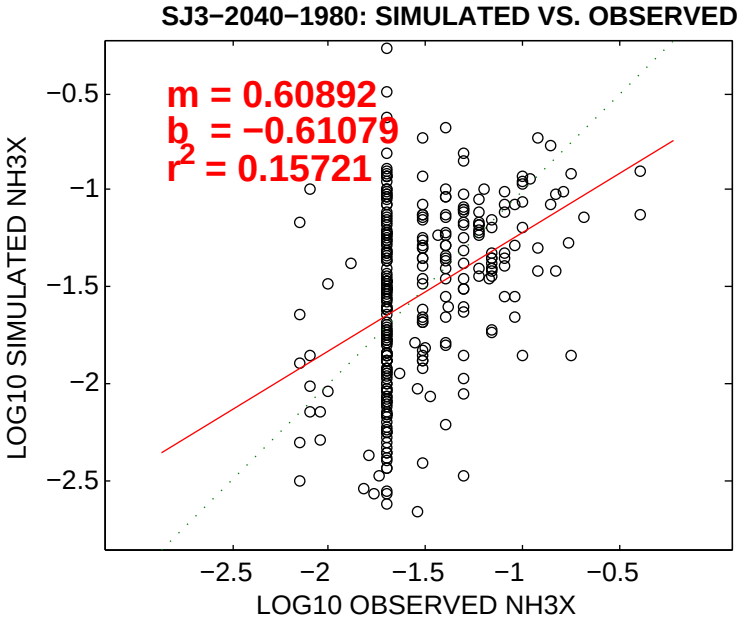
Drive: N/A | Directory: model | Observed: OBS20161101

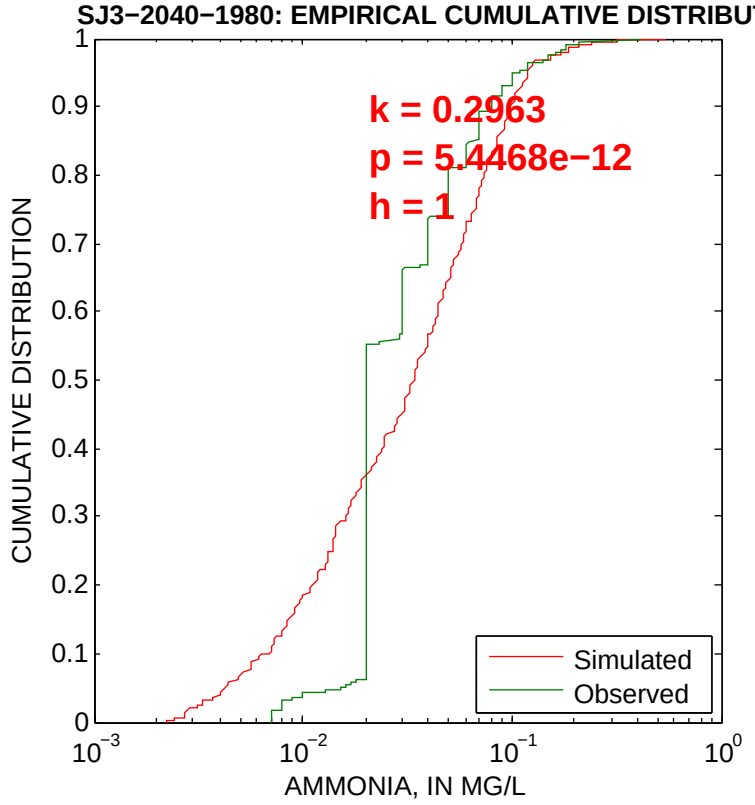
STATISTICS

		observe	simulate
n		10957	10957
min		31	12.857
		1.49136	1.10914
mean		376.496	337.872
		2.39632	2.36392
media		239	254.66
		2.3784	2.40596
max		13400	10931
		4.1271	4.03866
varian		228945	156936
		0.13884	0.150217
JB		0.001	0.001
		0.001	0.001
		ra	log
%		-10.2588	-1.35218
err.va		64545.2	0.0399954
rel.std.err		0.281924	0.288068
mod.eff		0.718076	0.711932

VERSION 2.1







DATA SELECTION

scenario	file
P620171001WQ	NH3X.calib

plot: NH3X - ammonia

Dates: 1/1/1985 – 12/31/201

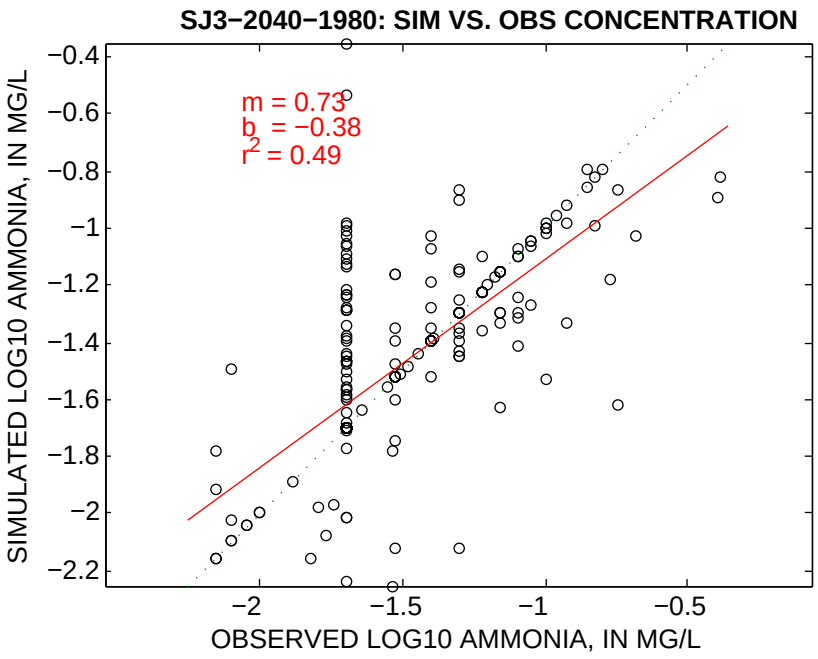
Drive	Directory	Observed
N/A	model	OBS20161101

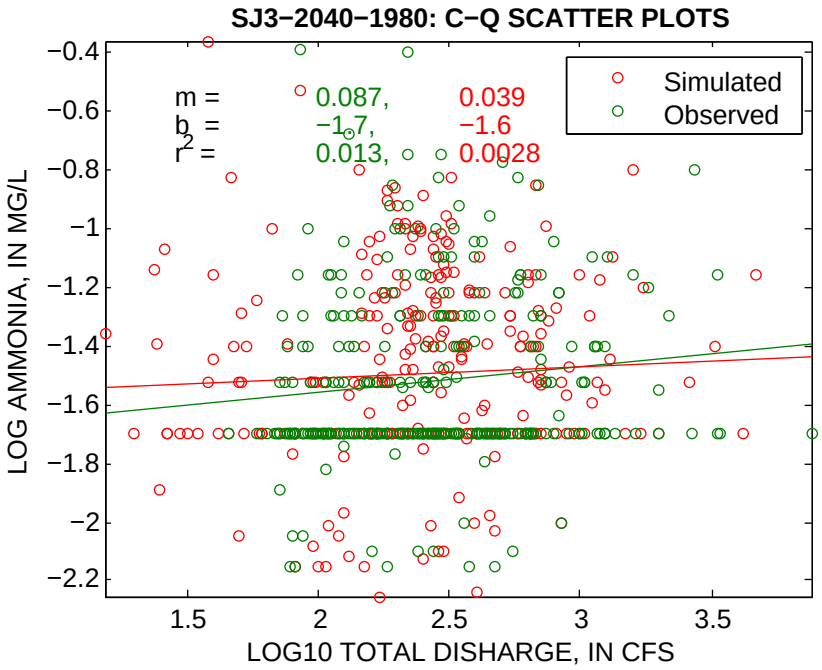
STATISTICS

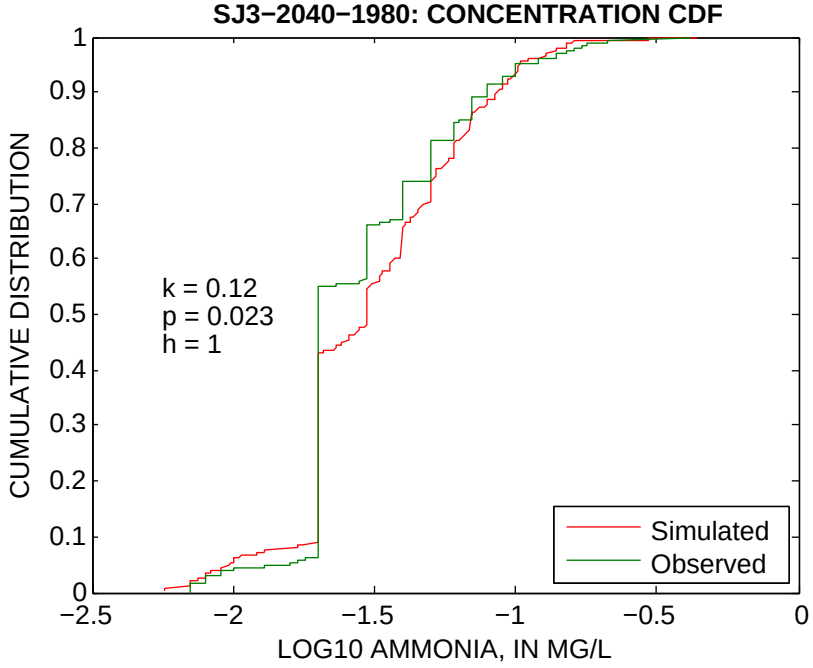
	n	297	297
		observe	simulate
min		0.007	0.002211
		-2.1549	-2.65541
mean		0.0400471	0.0469128
		-1.52269	-1.53799
media		0.02	0.033925
		-1.69897	-1.46948
max		0.41	0.54825
		-0.387216	-0.261021
varian		0.00193711	0.00266316
		0.0880779	0.207735
JB		0.001	0.001
		0.001	0.025605
		ra	log
%		17.144	1.00458
err.va		0.00367752	0.188782
rel.std.err		1.89846	2.14336
mod.eff		-0.898457	-1.14336

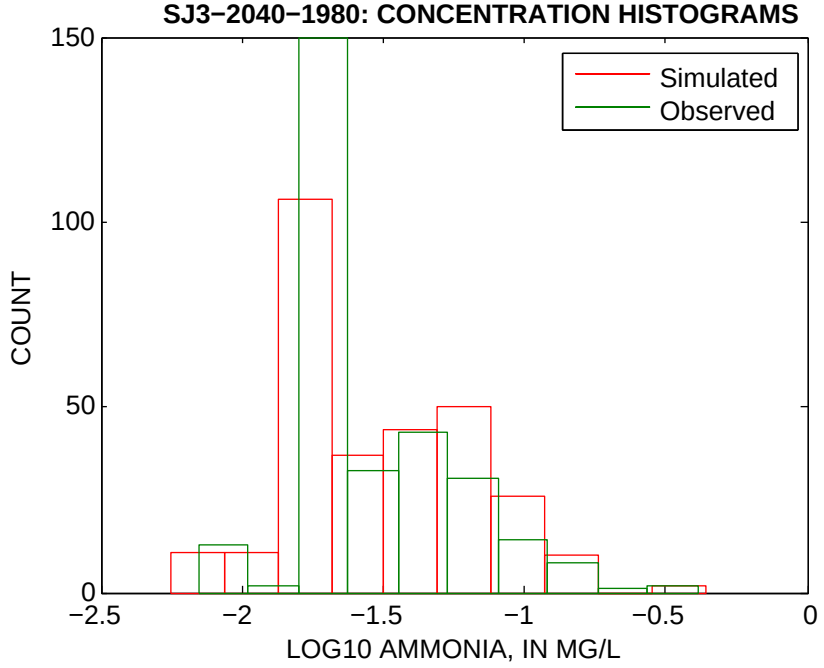
VERSION 2.1

ALL DATA
LOG10

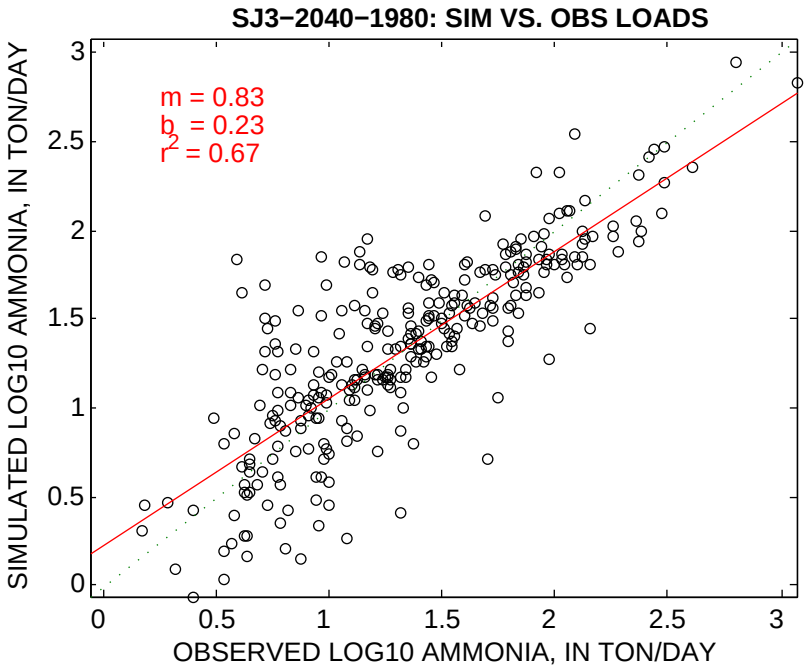


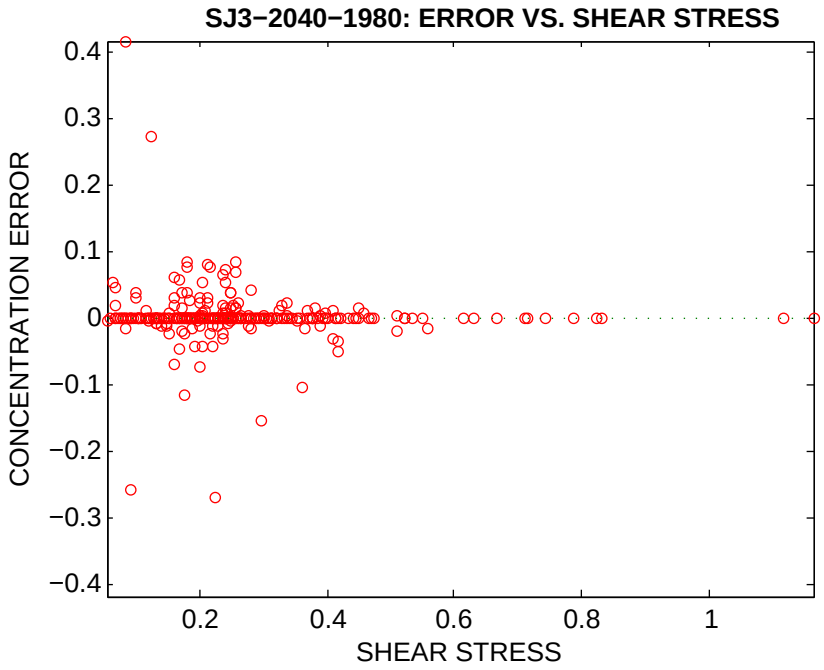


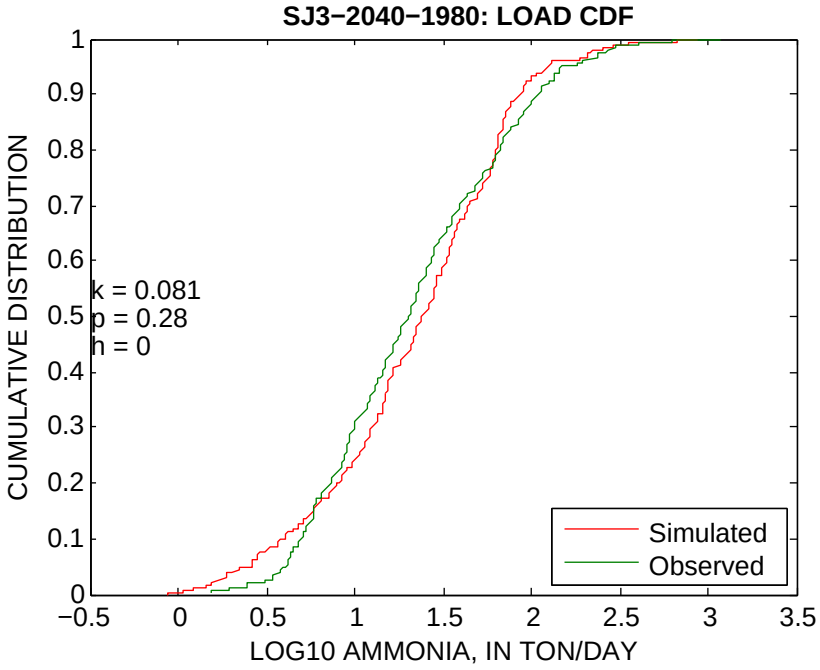


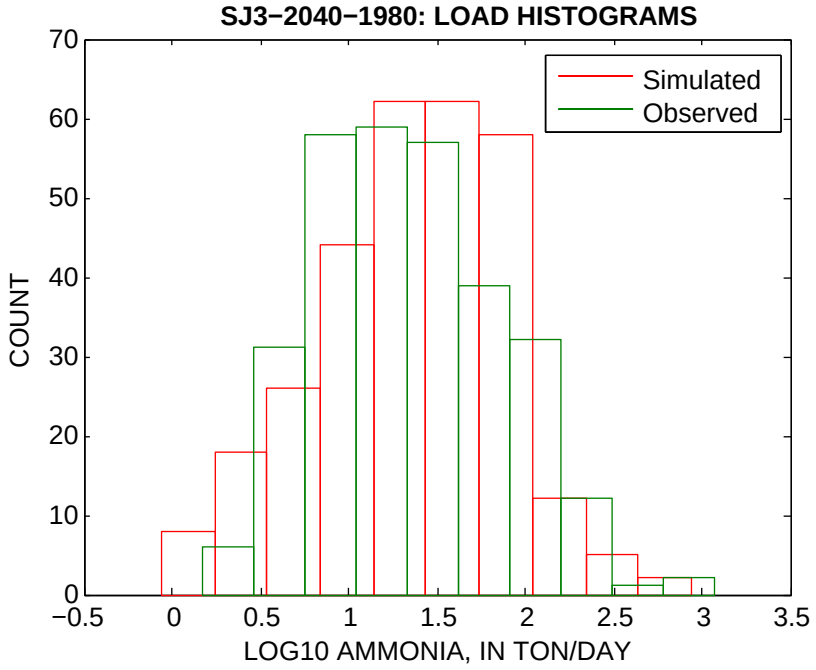


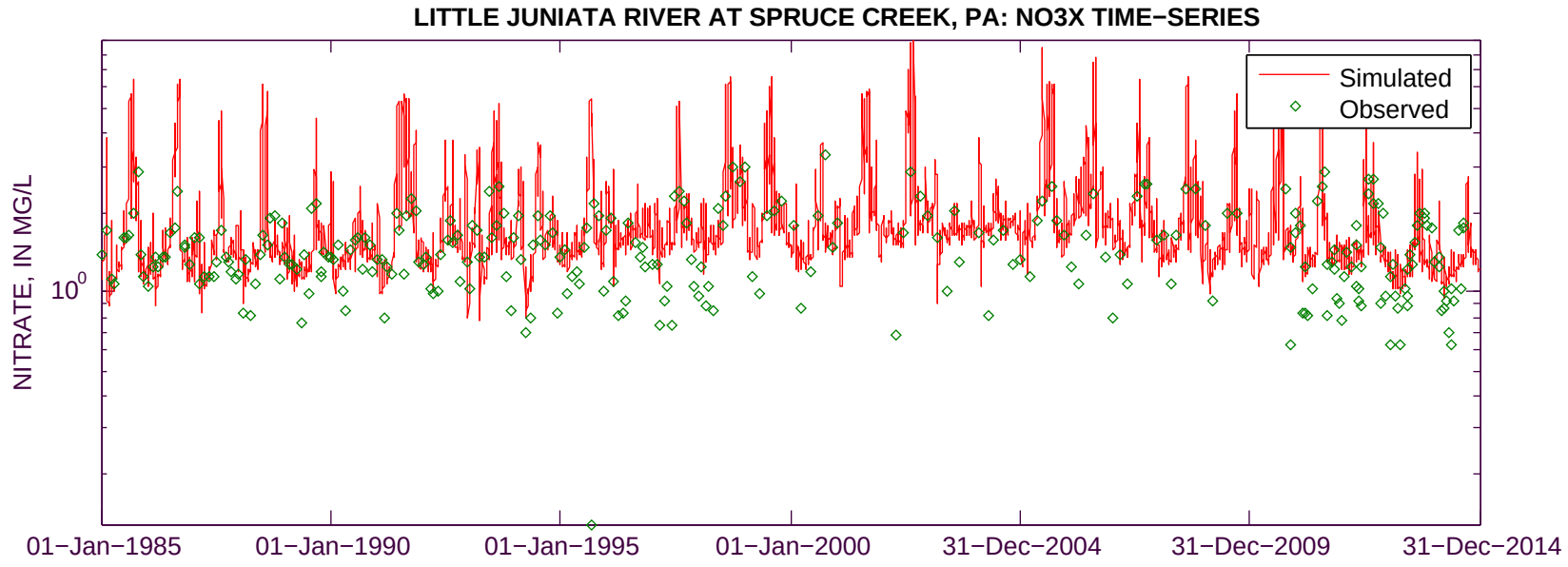
LOAD DATA
LOG10

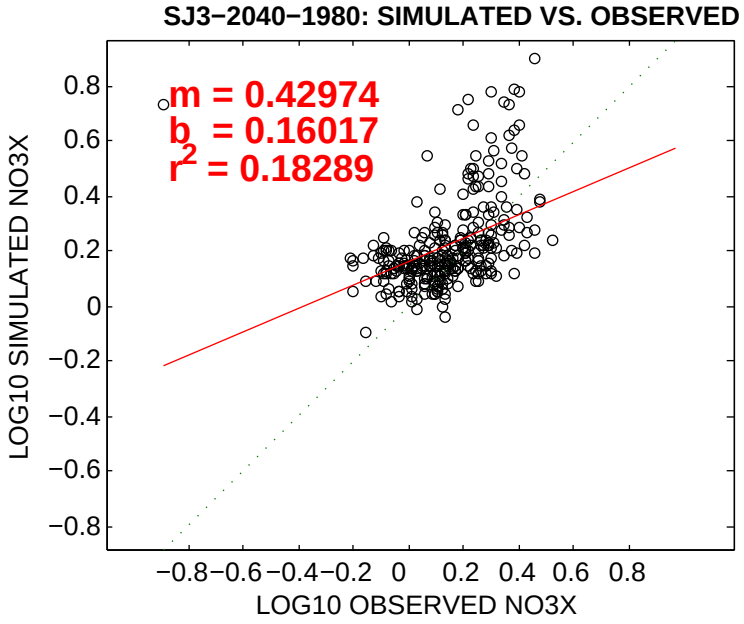


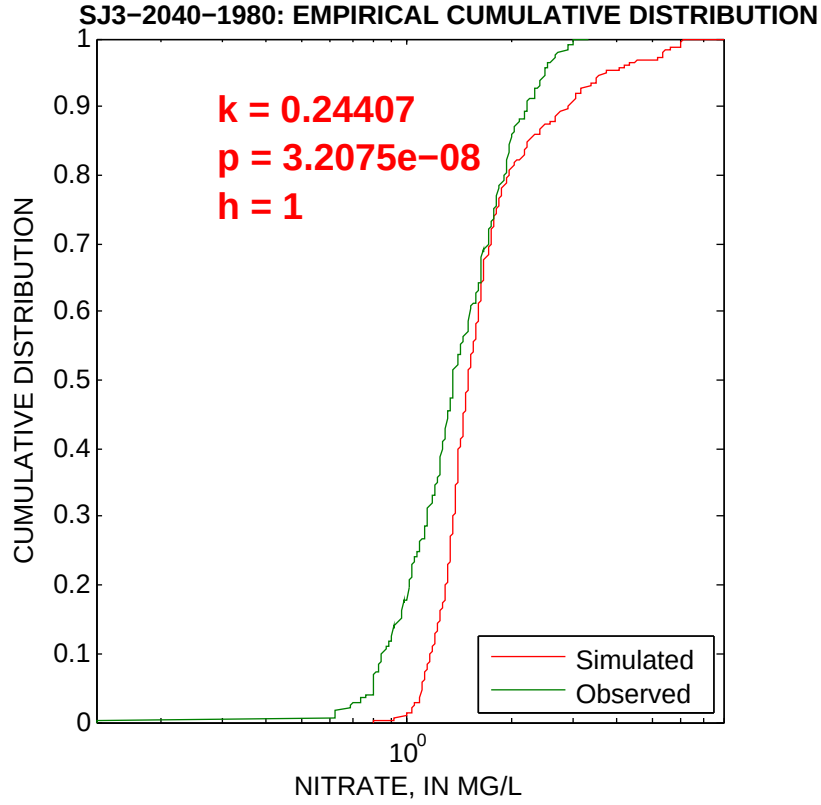












DATA SELECTION

scenario	file
P620171001WQ	NO3X.calib

plot: NO3X - nitrate

Dates: 1/1/1985 – 12/31/201

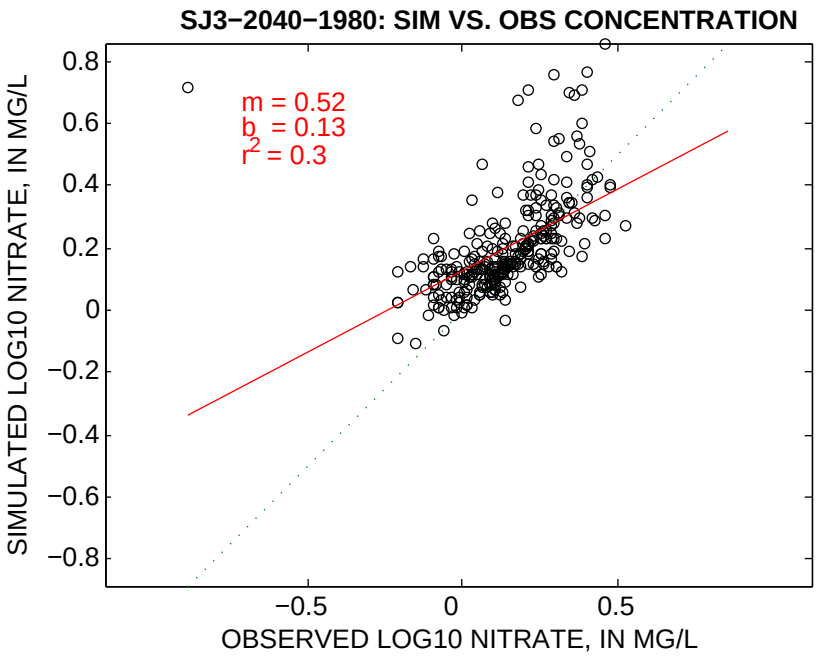
Drive	Directory	Observed
N/A	model	OBS20161101

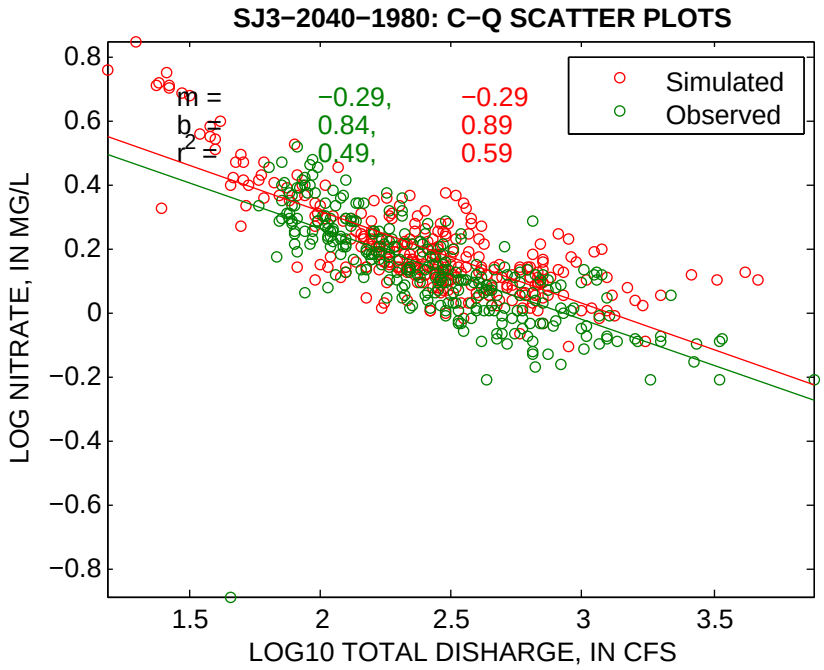
STATISTICS

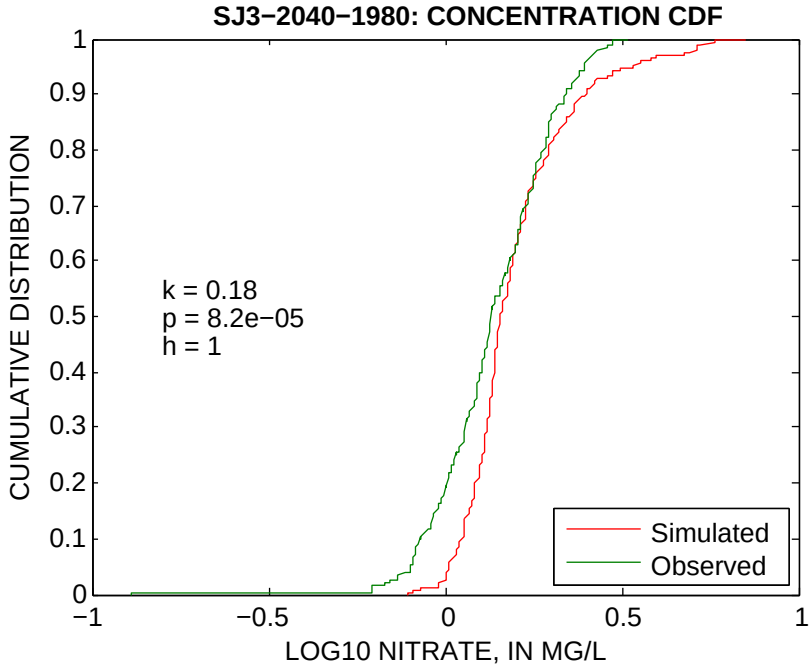
	n	295	295
		observe	simulate
min		0.13	0.80273
		-0.886057	-0.0954305
mean		1.47072	1.80985
		0.139591	0.220157
media		1.36	1.502
		0.133539	0.17667
max		3.31	7.9684
		0.519828	0.901371
varian		0.272852	0.938289
		0.0260808	0.0263353
JB		0.001	0.001
		0.001	0.001
		ra	log
%		23.0587	57.7158
err.va		0.864602	0.0365133
rel.std.err		3.16876	1.4
mod.eff		-2.16876	-0.400005

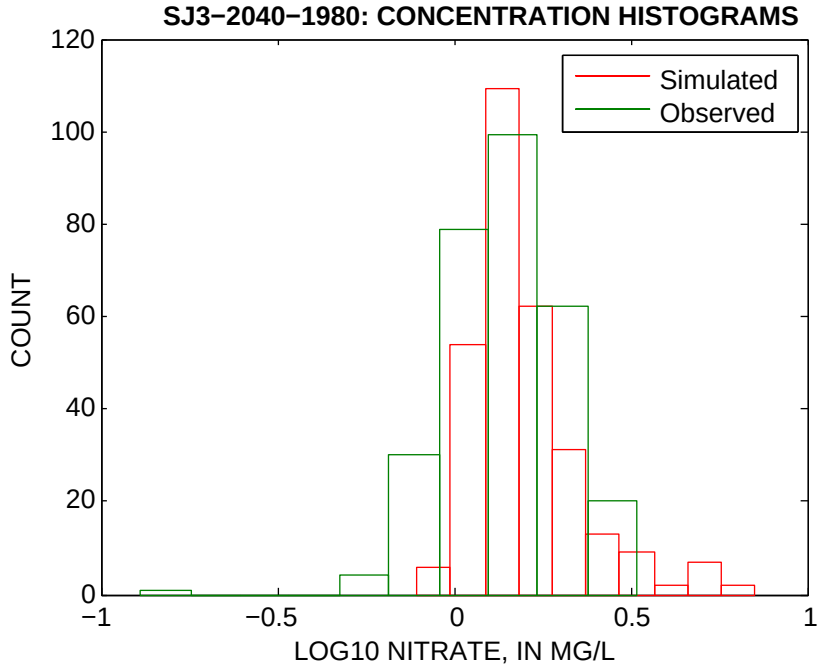
VERSION 2.1

ALL DATA
LOG10

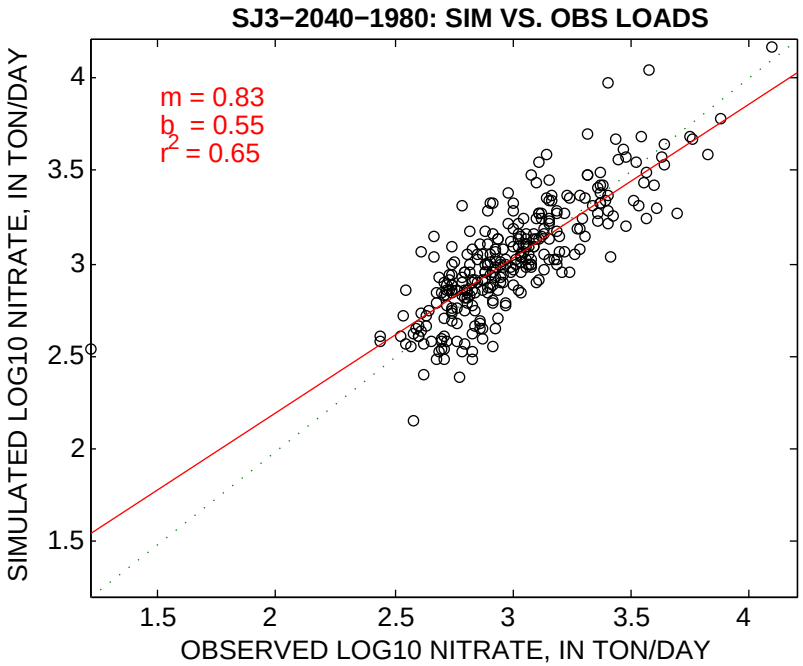


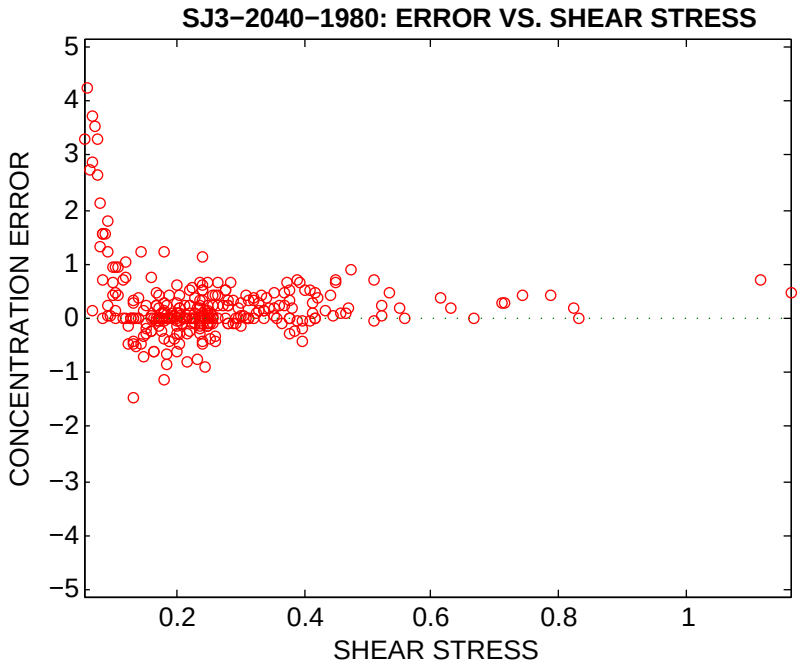


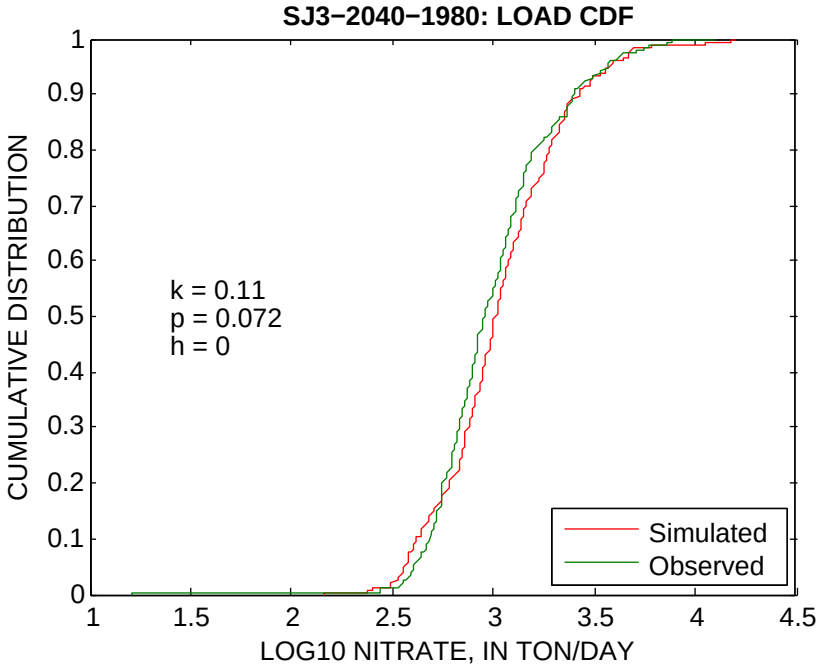


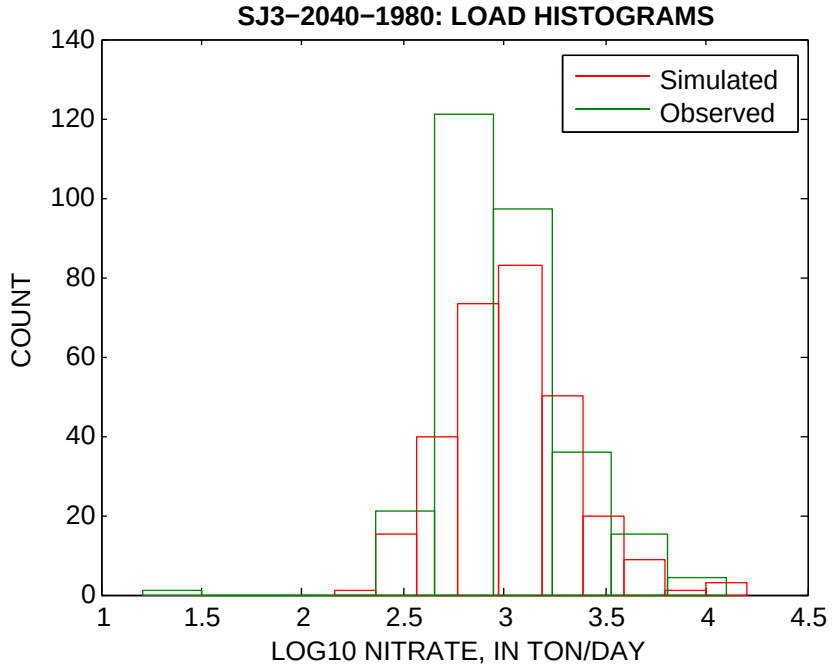


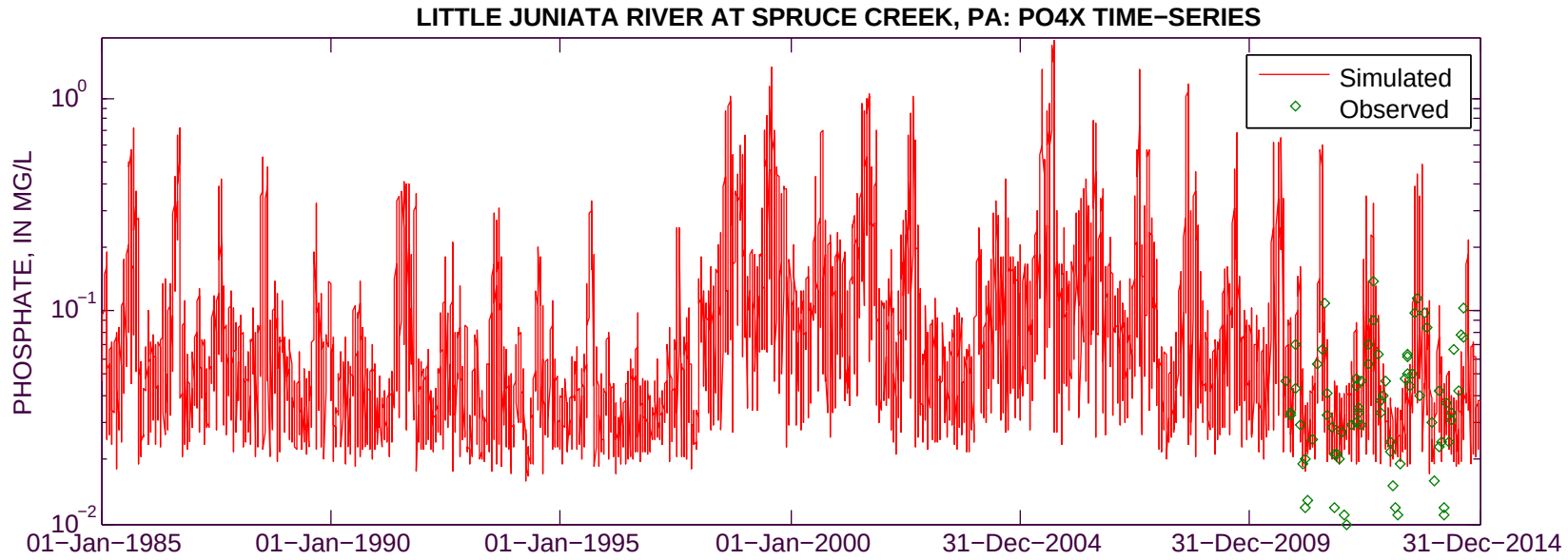
LOAD DATA
LOG10

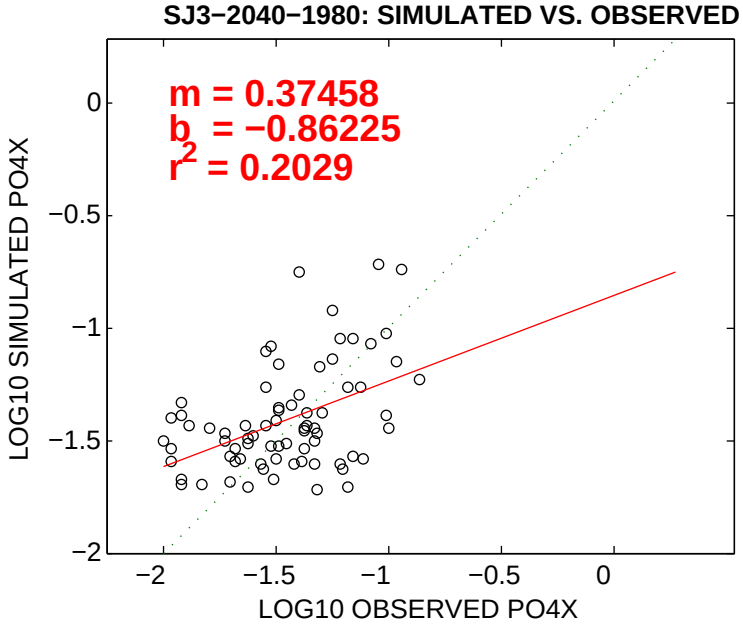


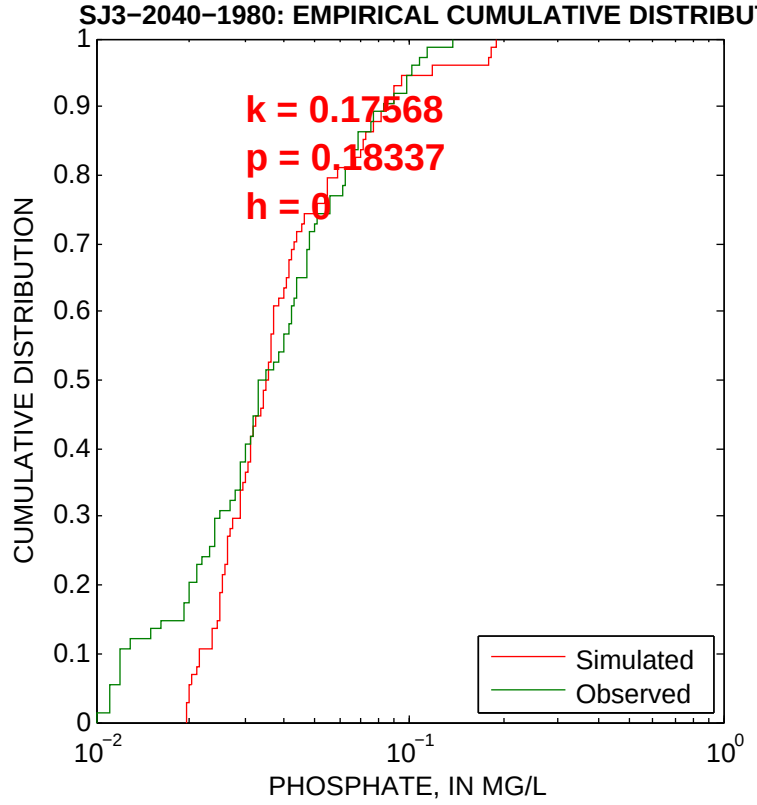












DATA SELECTION

scenario	file
P620171001WQ	PO4X.calib

plot: PO4X - phosphate

Dates: 1/1/1985 – 12/31/201

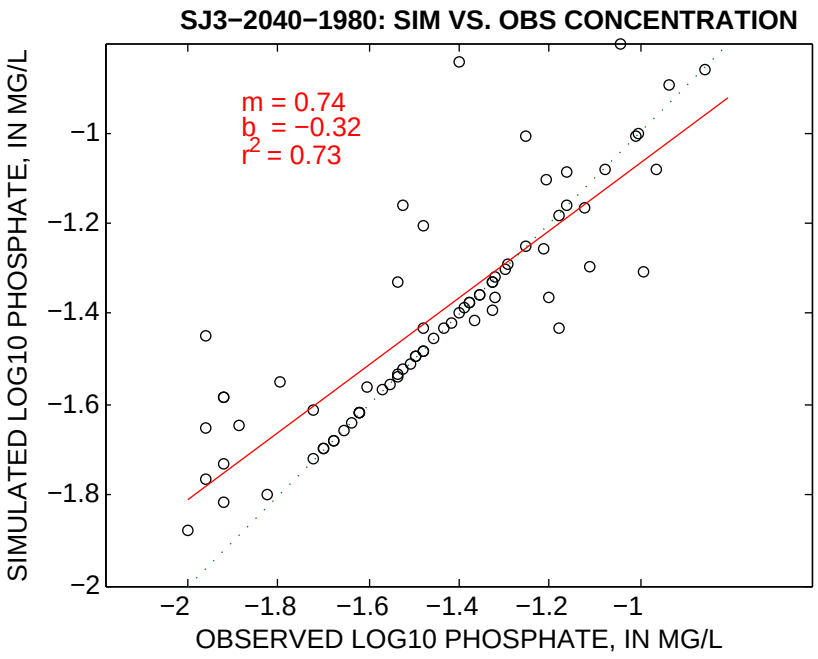
Drive	Directory	Observed
N/A	model	OBS20161101

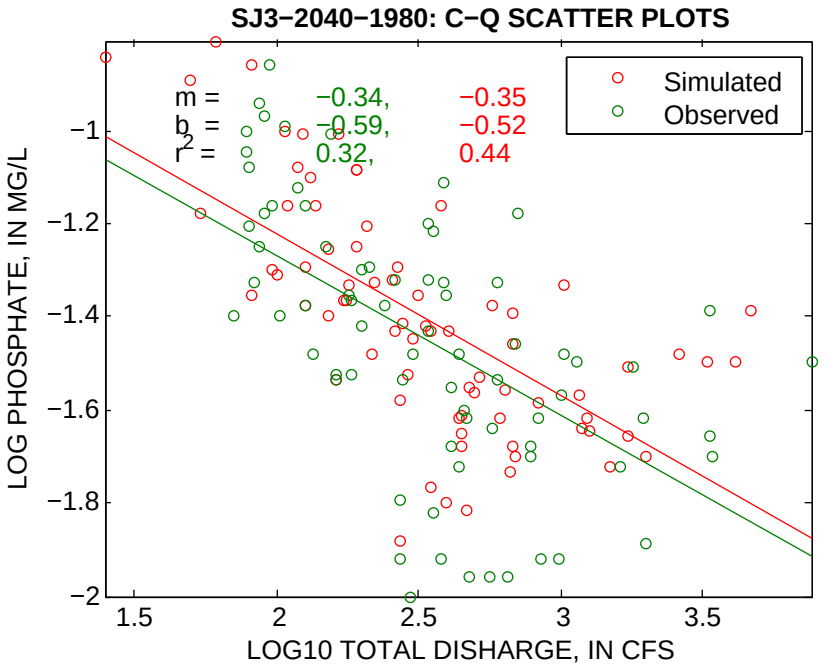
STATISTICS

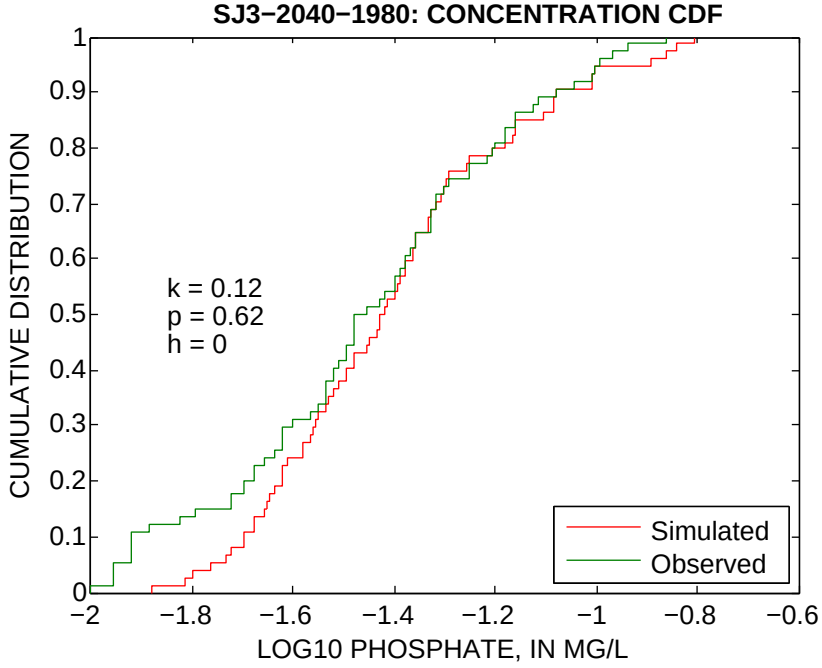
	n	74	74
		observe	simulate
min		0.01	0.019314
		-2	-1.71413
mean		0.0427432	0.0465198
		-1.4555	-1.40745
media		0.034	0.0351415
		-1.46871	-1.45421
max		0.138	0.18999
		-0.860121	-0.721269
varian		0.00077112	0.00123174
		0.0787522	0.0544606
JB		0.002141	0.001
		0.44516	0.004298
		ra	log
%		8.83547	-3.30097
err.va		0.001107	0.0765543
rel.std.err		1.43557	0.97209
mod.eff		-0.435569	0.0279097

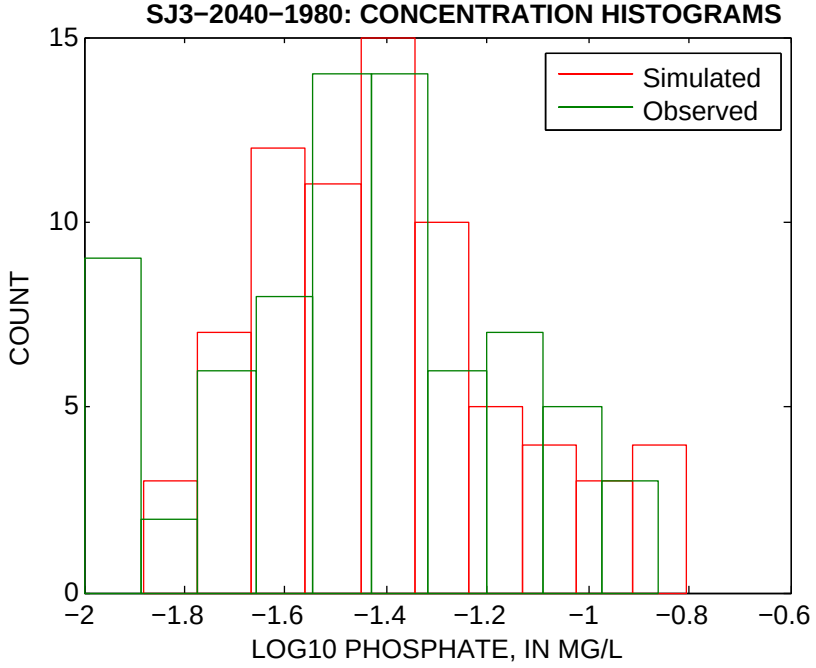
VERSION 2.1

ALL DATA
LOG10

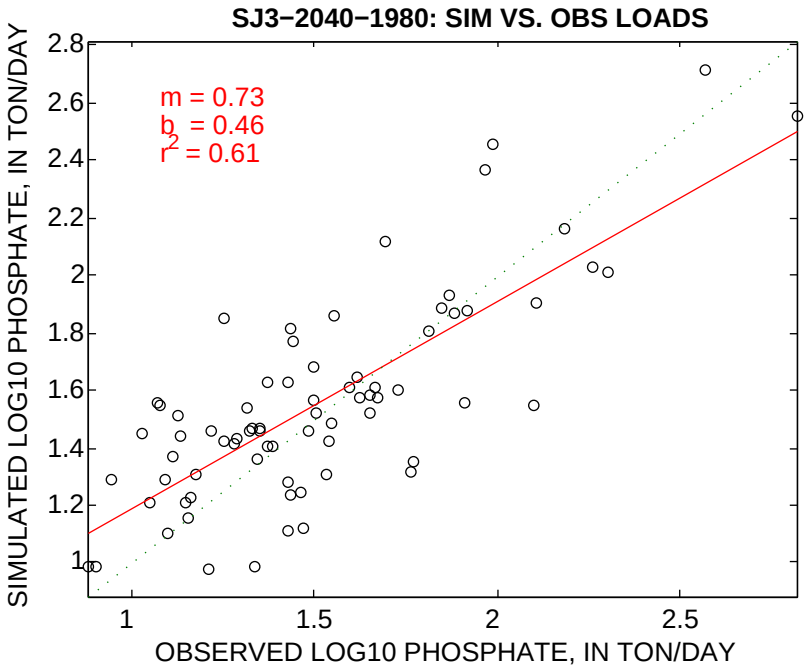


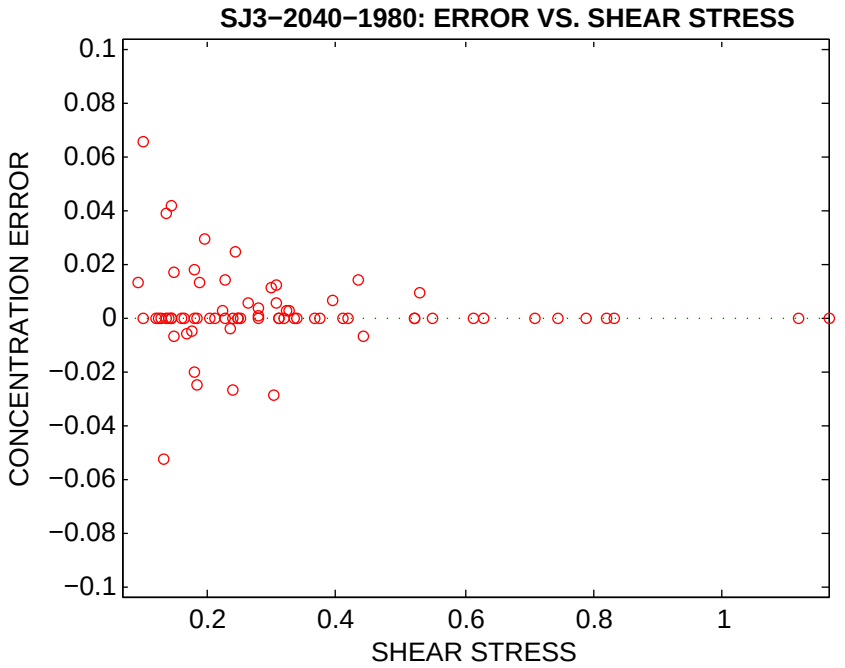


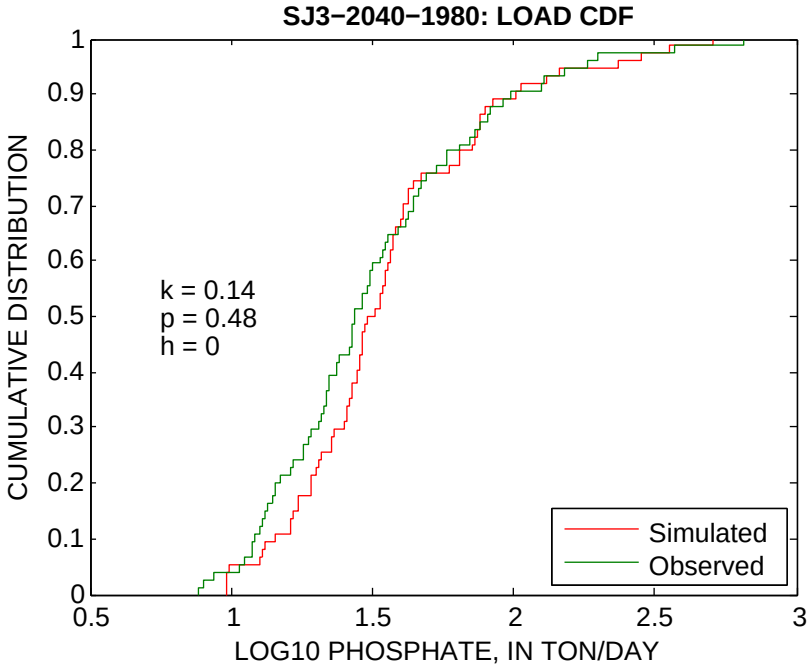


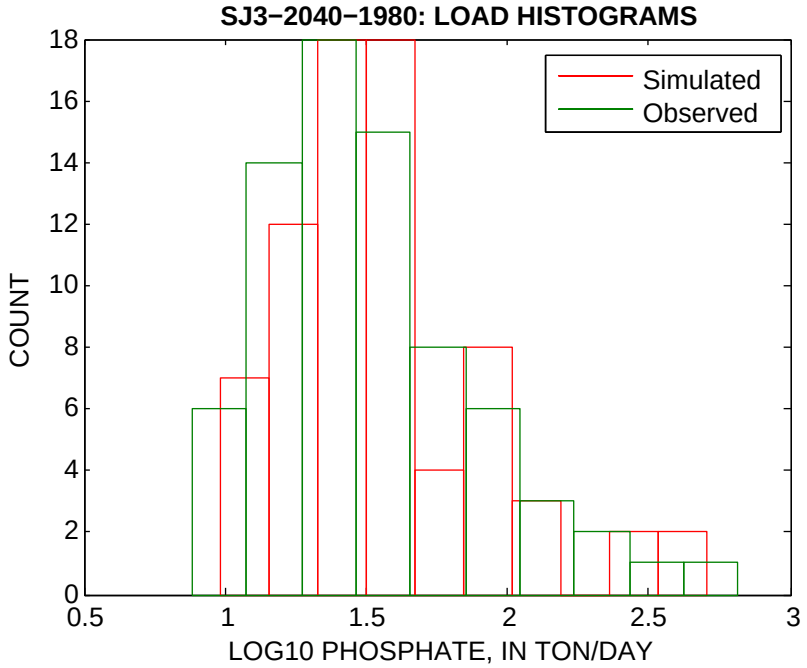


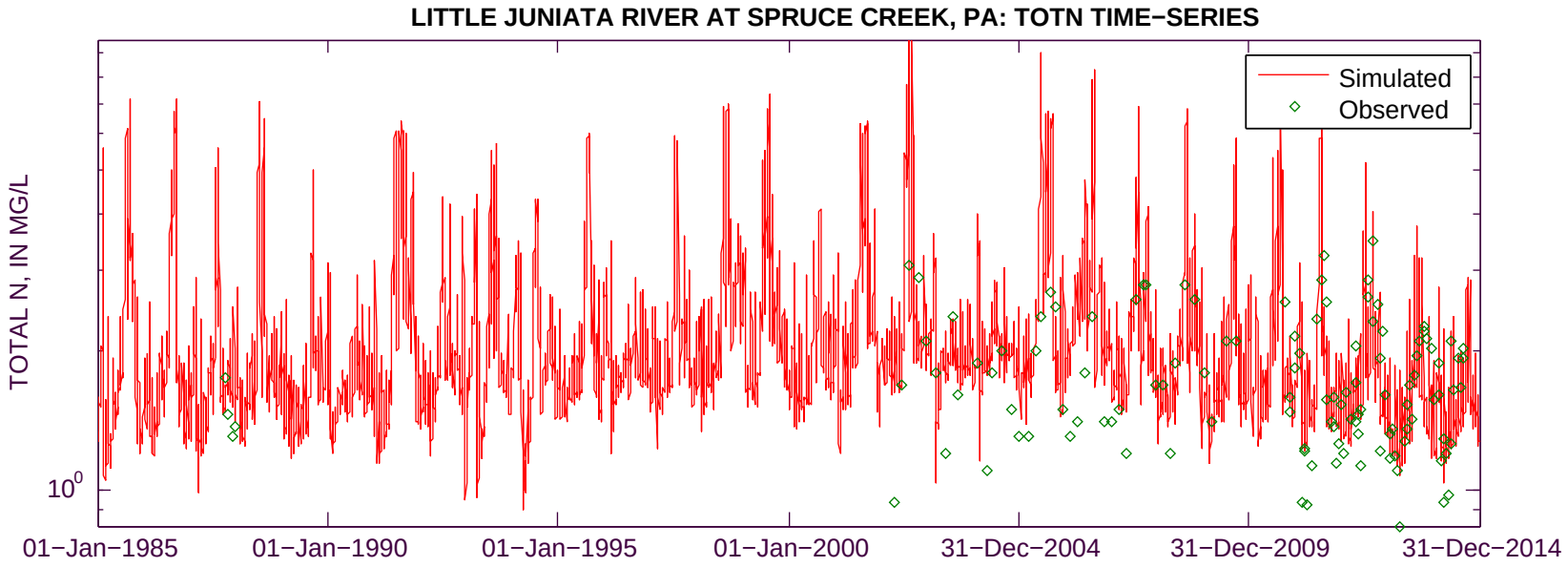
LOAD DATA
LOG10











DATA SELECTION

scenario	file
P620171001WQ	TOTN.calib

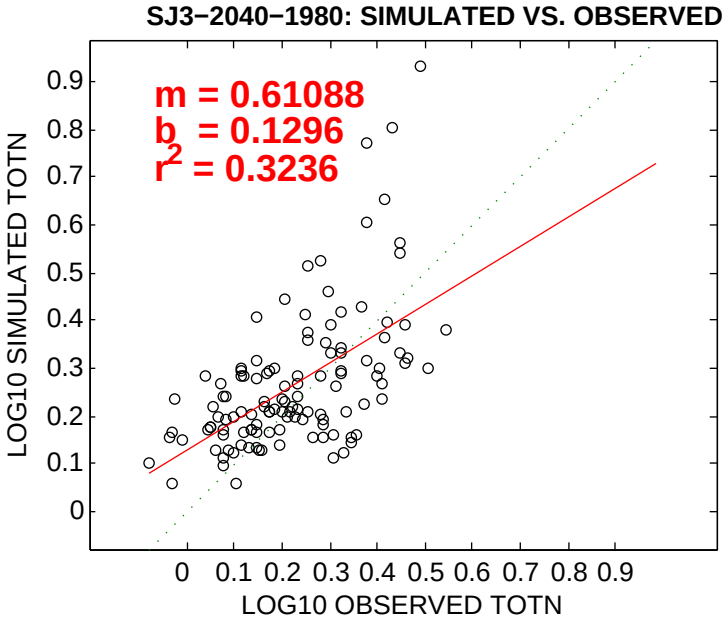
plot: TOTN - total nitrogen

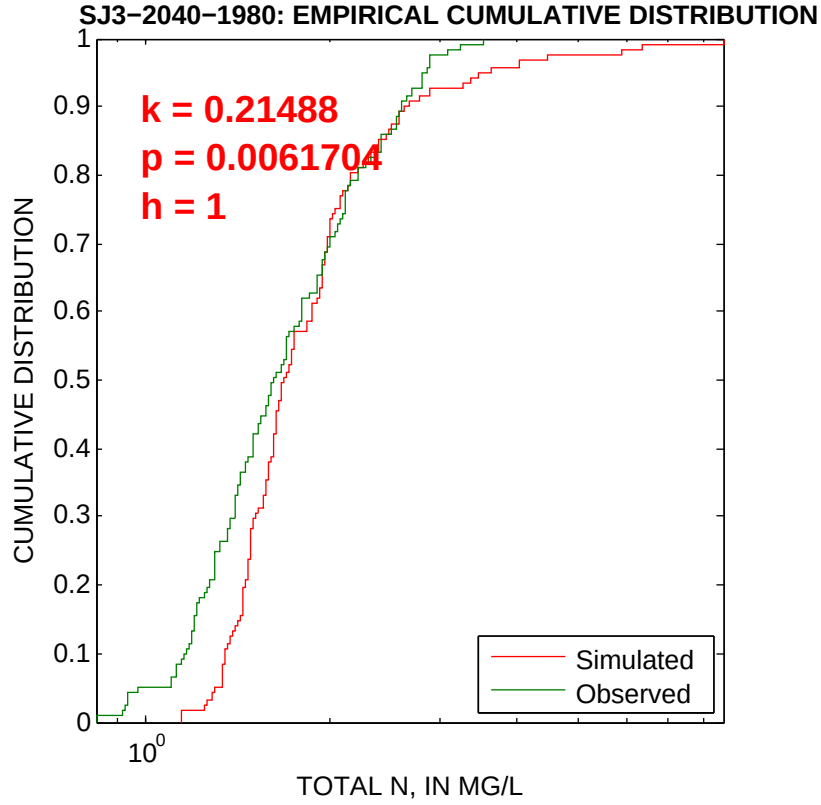
Dates: 1/1/1985 – 12/31/201

Drive	Directory	Observed
N/A	model	OBS20161101

STATISTICS

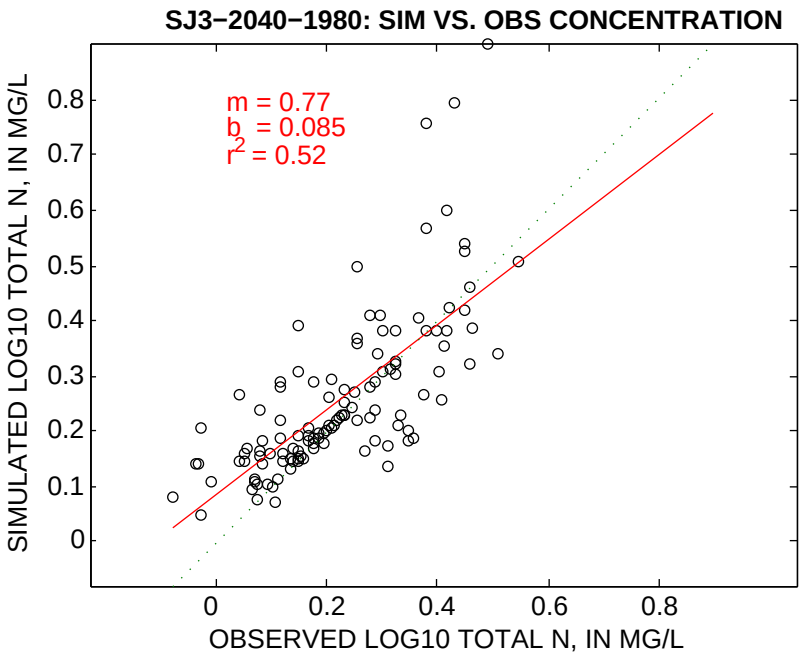
	n	observe	simulate
		121	121
min		0.832	1.1425
		-0.0798767	0.0578562
mean		1.75722	1.98067
		0.223637	0.266214
media		1.61	1.6703
		0.206826	0.222794
max		3.52	8.6101
		0.546543	0.935008
varian		0.319105	0.994586
		0.0183416	0.0211512
JB		0.010086	0.001
		0.203552	0.001
		ra	log
%		12.7157	19.0386
err.va		0.780437	0.0189118
rel.std.err		2.44571	1.03109
mod.eff		-1.44571	-0.0310892

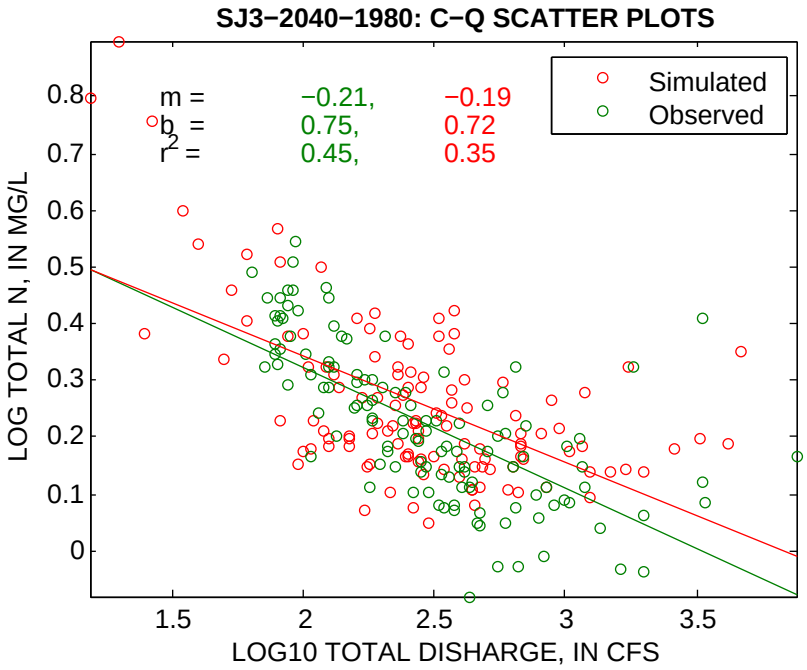


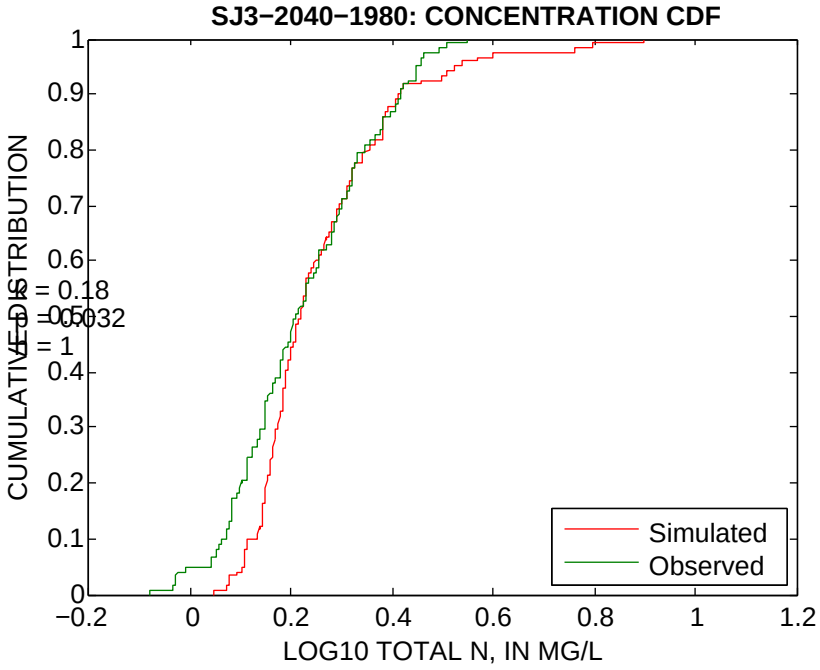


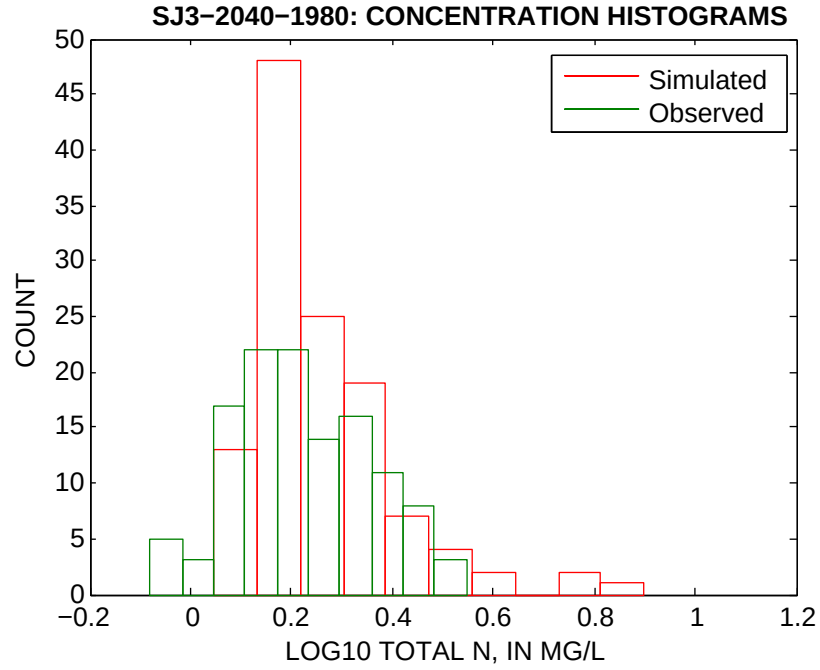
VERSION 2.1

ALL DATA
LOG10

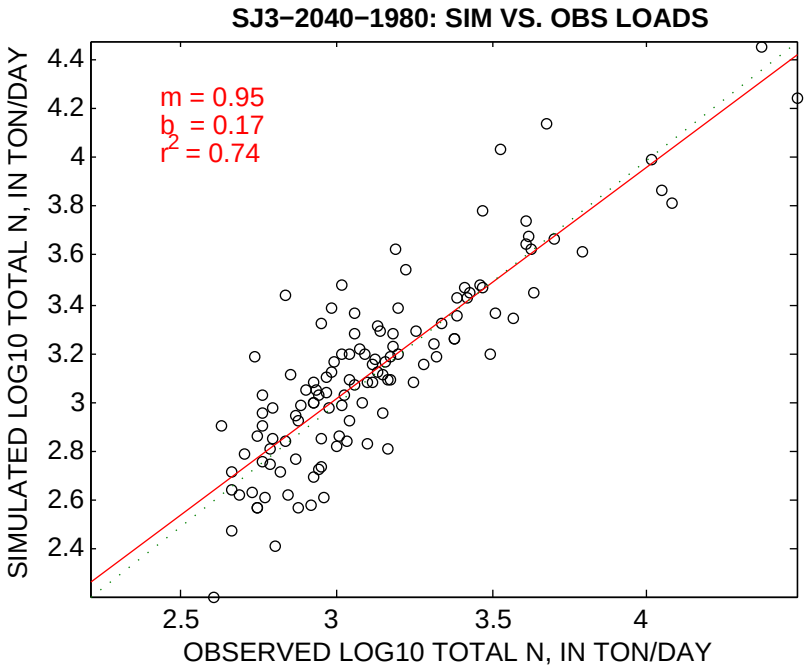


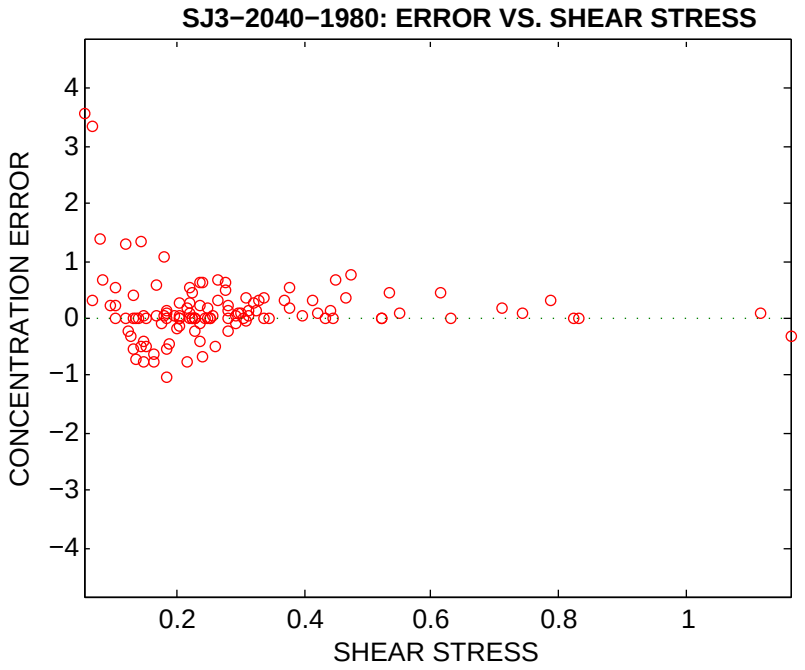


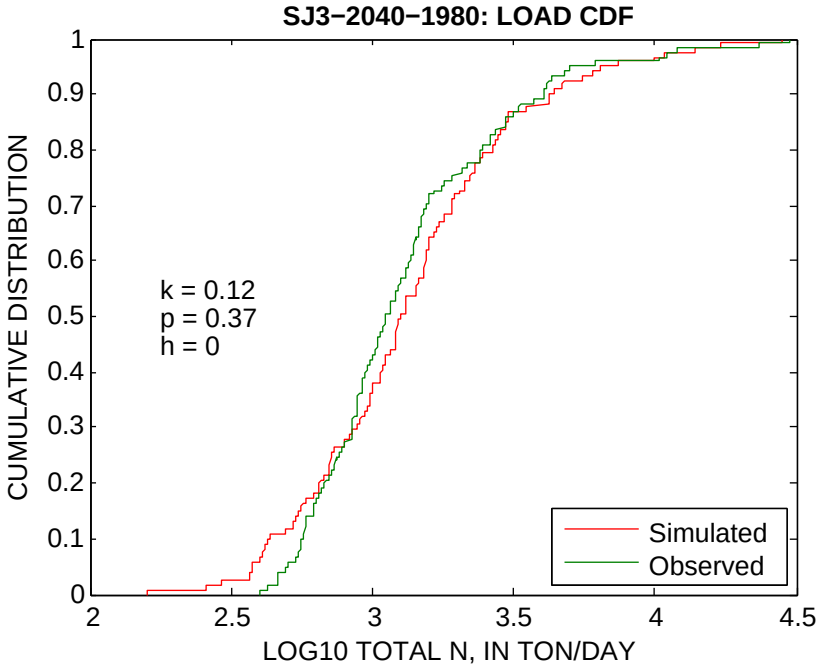


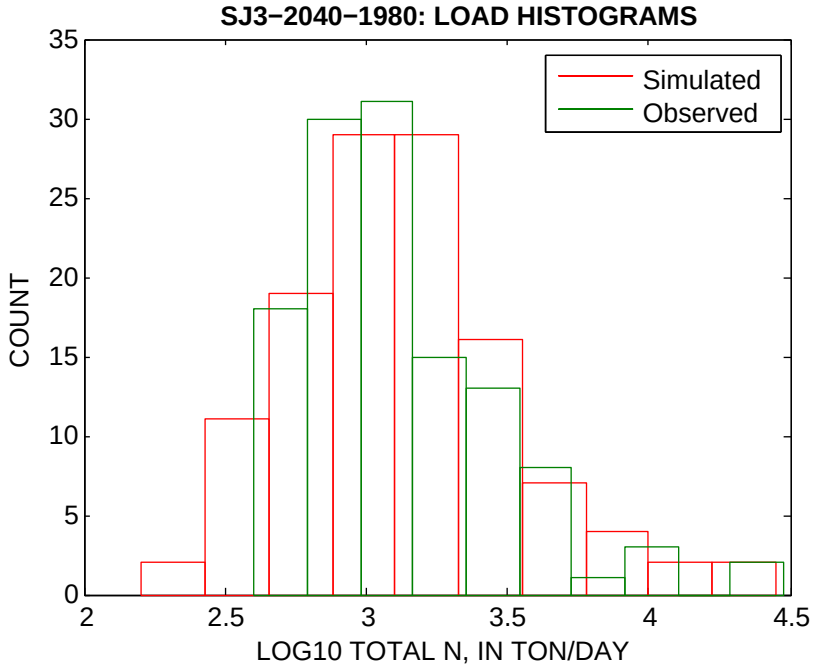


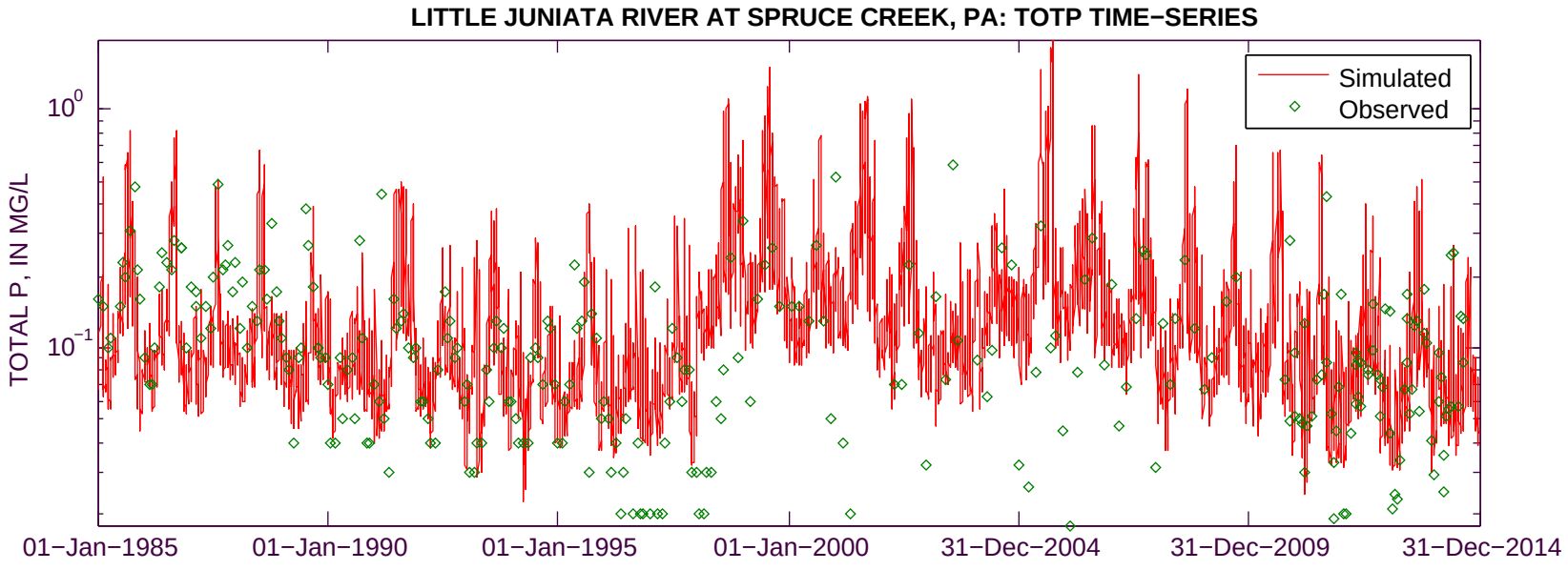
LOAD DATA
LOG10

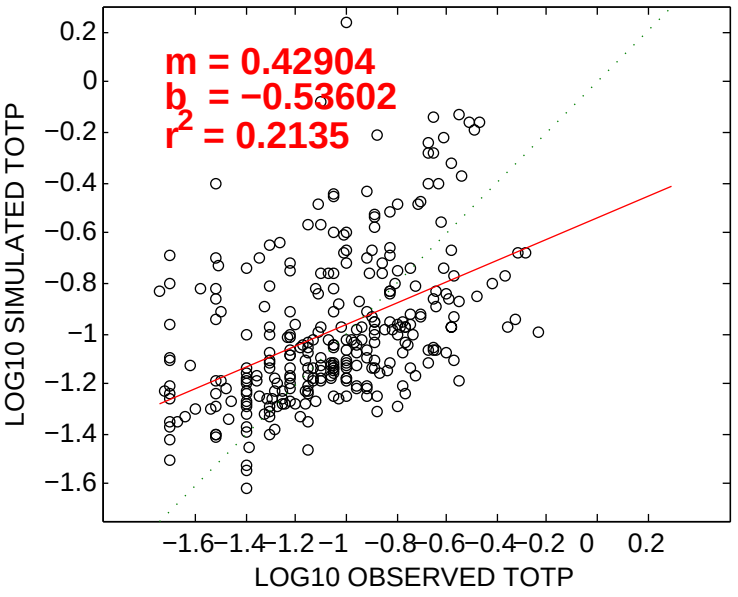


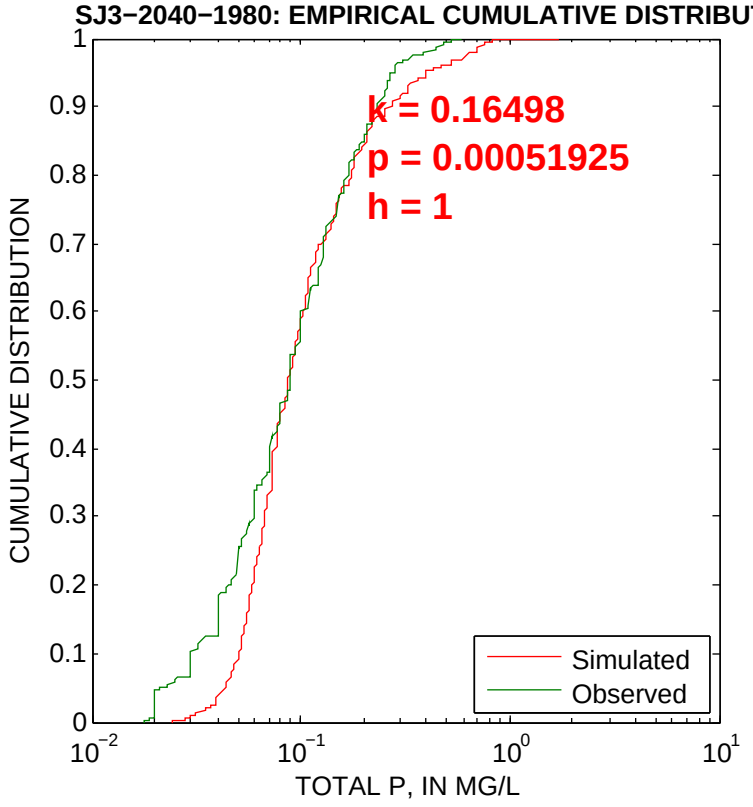












DATA SELECTION

scenario	file
P620171001WQ	TOTP.calib

plot: TOTP - total phosphorus

Dates: 1/1/1985 – 12/31/201

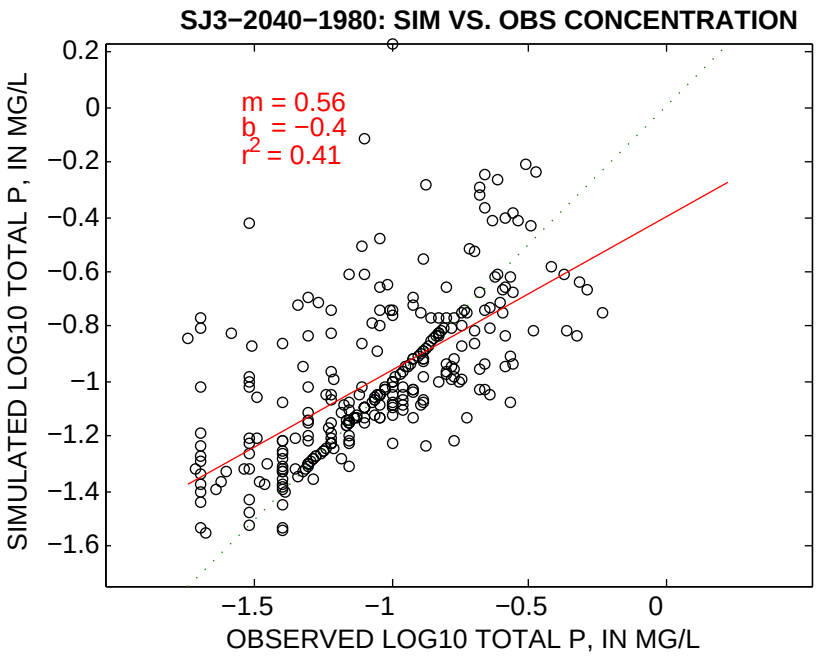
Drive	Directory	Observed
N/A	model	OBS20161101

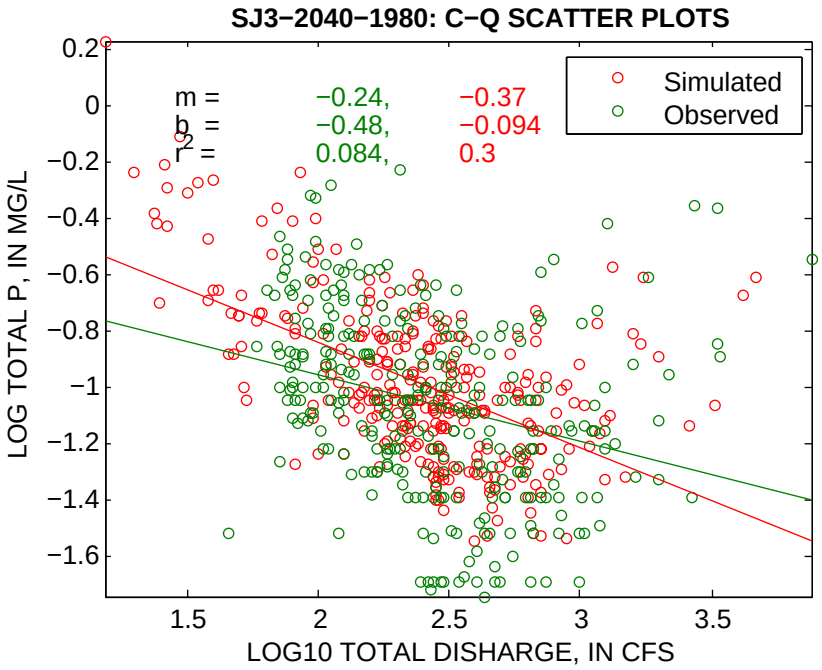
STATISTICS

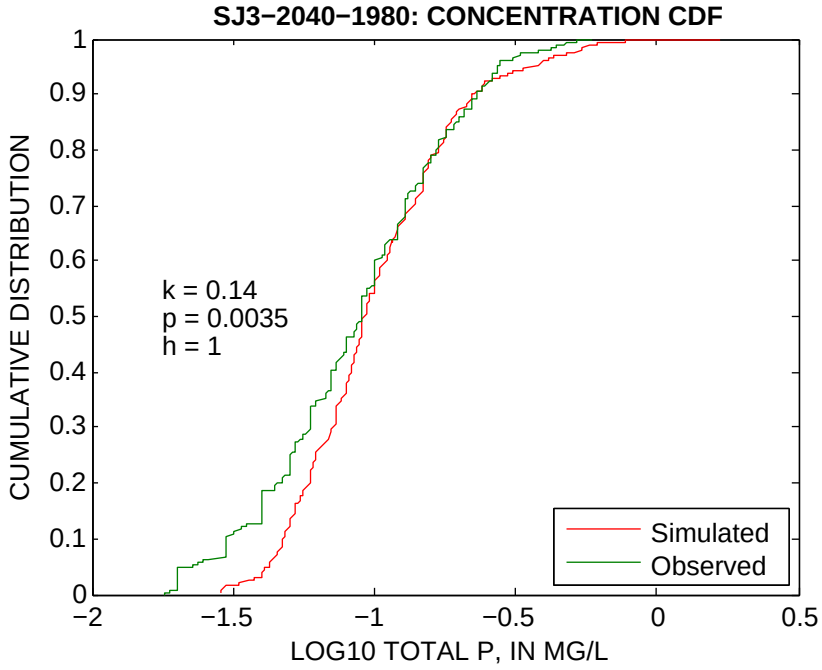
	n	observe	simulate
		297	297
min		0.018	0.024401
		-1.74473	-1.61259
mean		0.113714	0.138167
		-1.06111	-0.991279
media		0.09	0.087417
		-1.04576	-1.0584
max		0.586	1.7378
		-0.232102	0.24
varian		0.00811287	0.0253998
		0.104164	0.0898075
JB		0.001	0.001
		0.216509	0.001
		ra	log
%		21.5045	-6.58071
err.va		0.0253818	0.109483
rel.std.err		3.12858	1.05106
mod.eff		-2.12858	-0.0510627

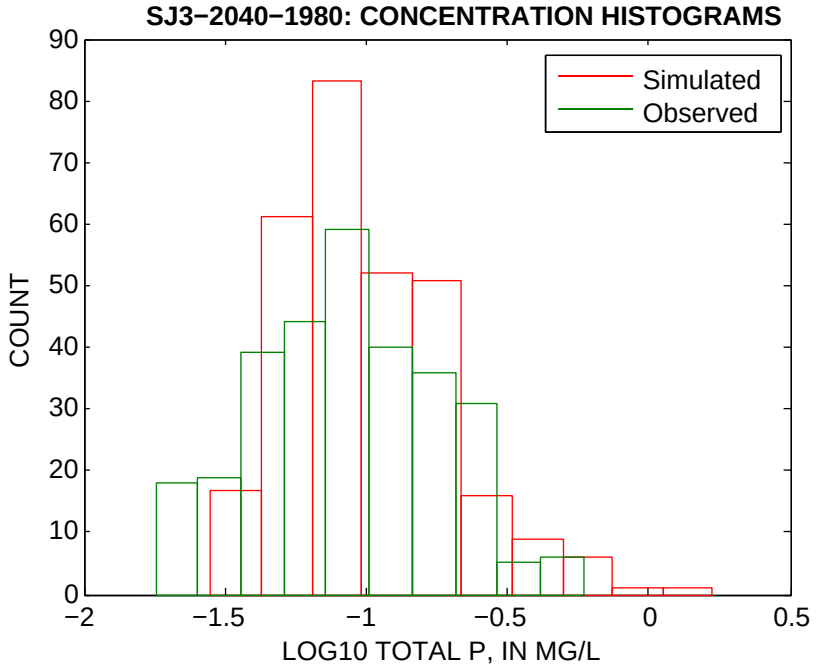
VERSION 2.1

ALL DATA
LOG10

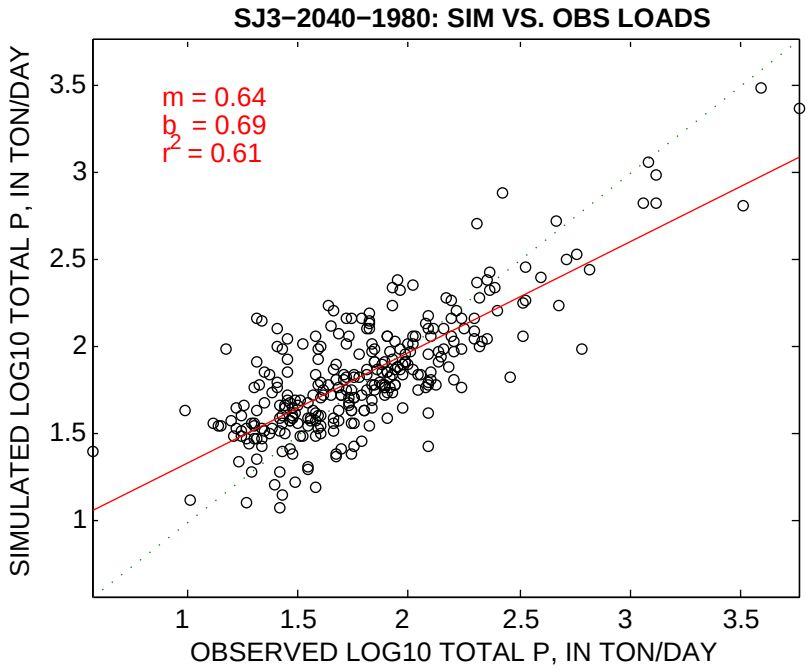


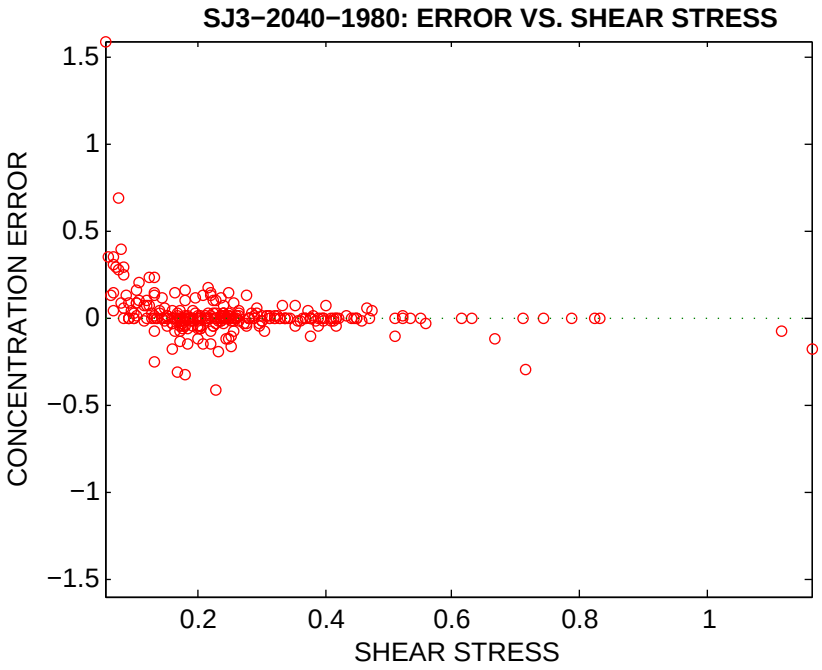


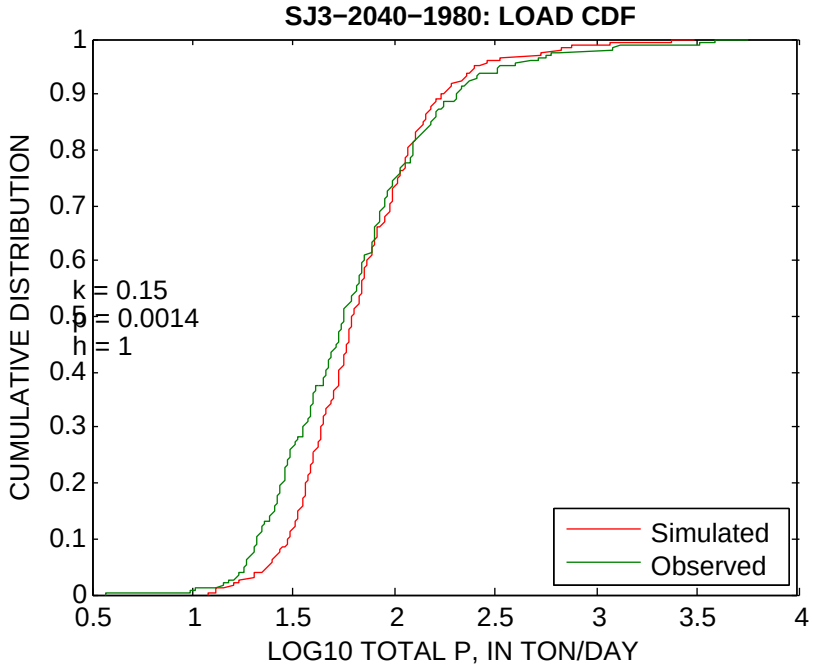


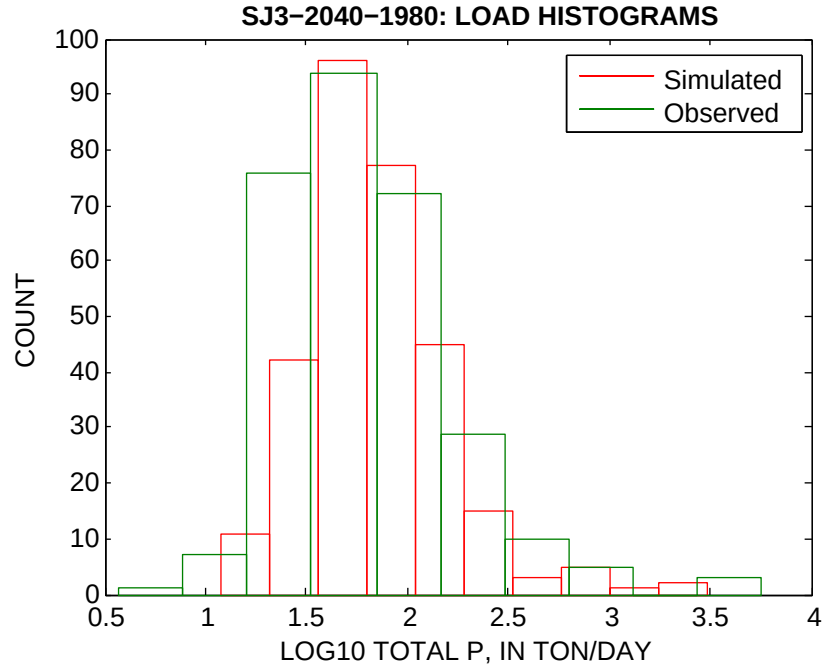


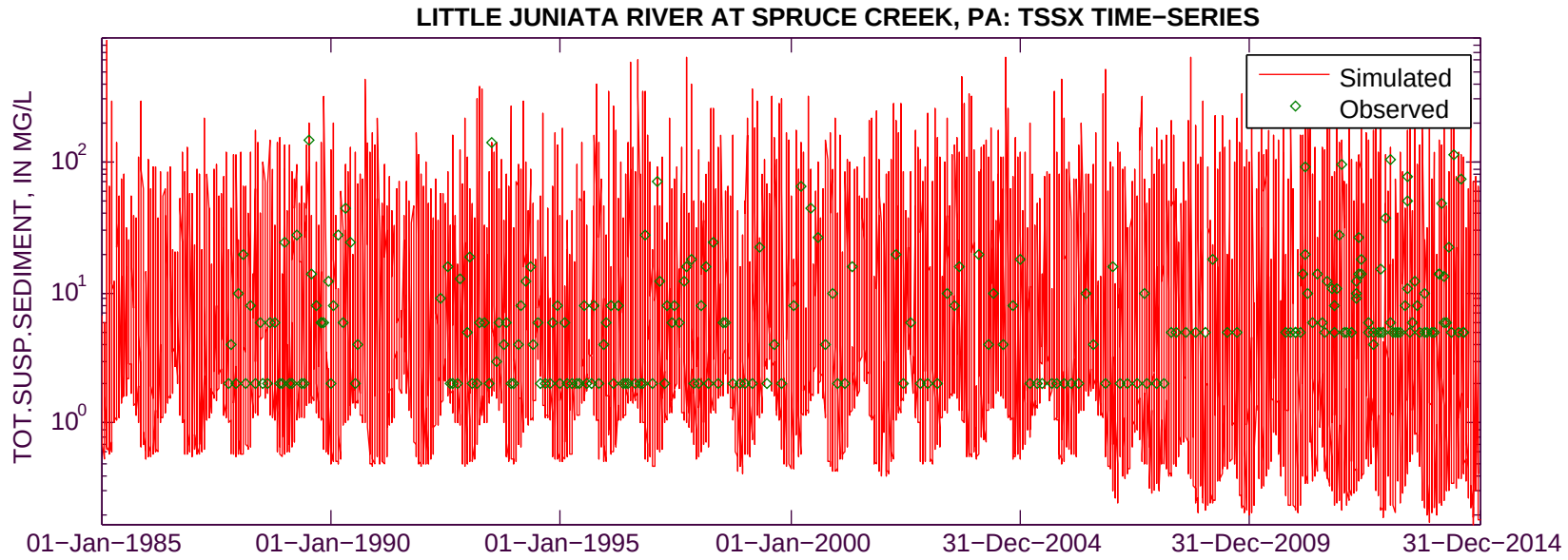
LOAD DATA
LOG10

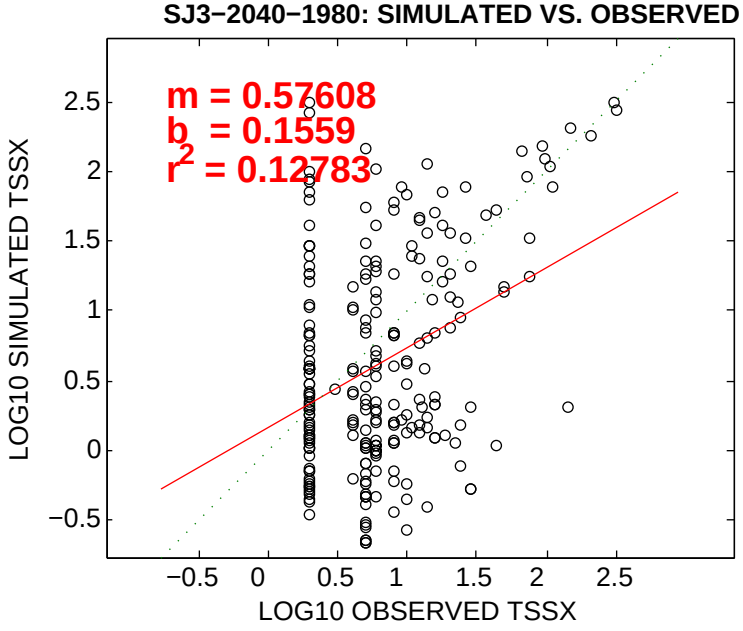


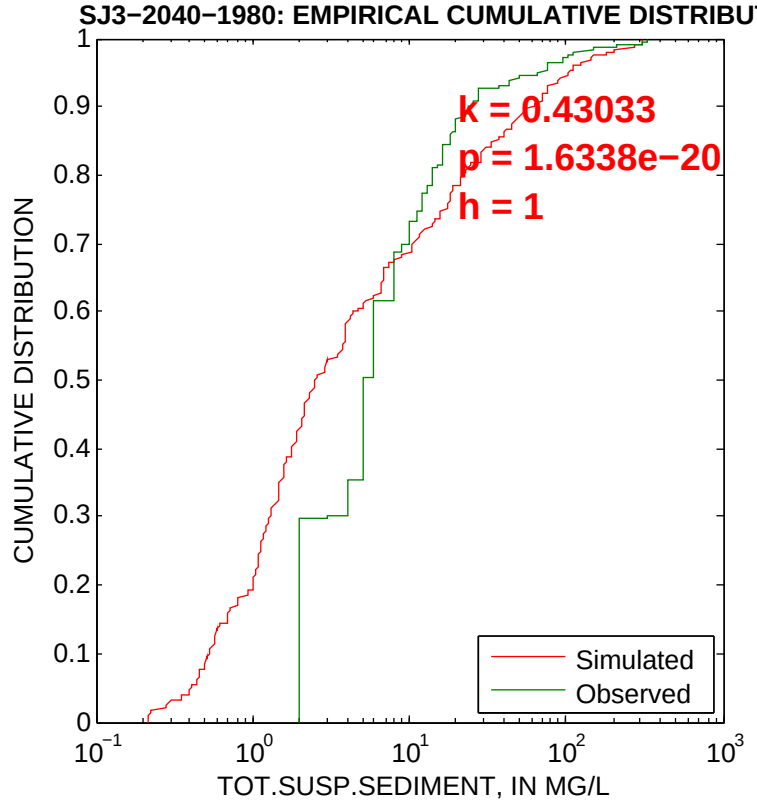












DATA SELECTION

scenario	file
P620171001WQ	TSSX.calib

plot: TSSX - total suspended ...

Dates: 1/1/1985 – 12/31/201

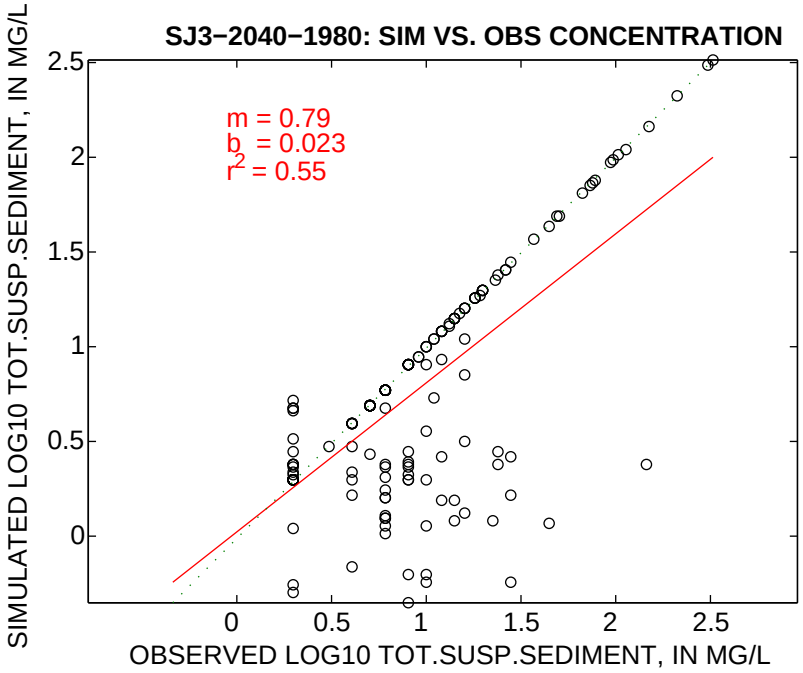
Drive	Directory	Observed
N/A	model	OBS20161101

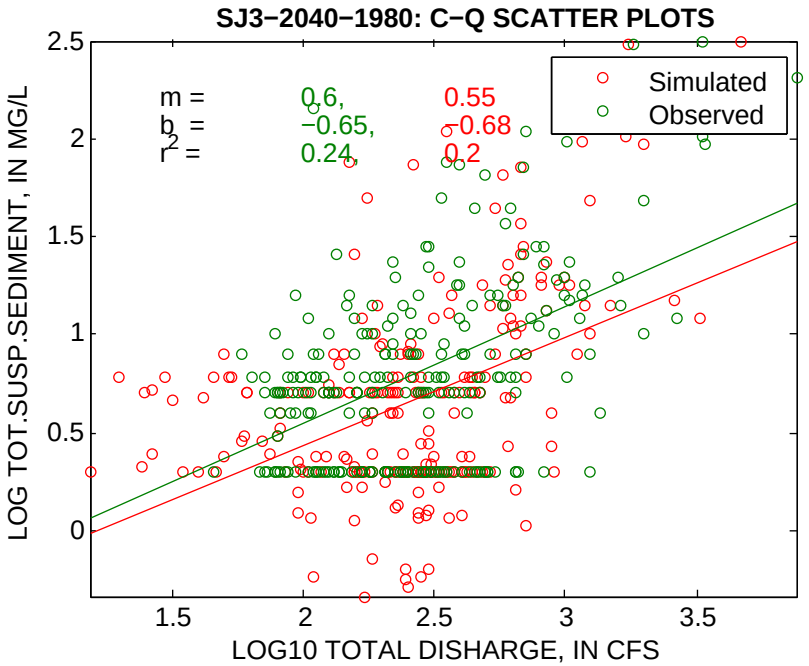
STATISTICS

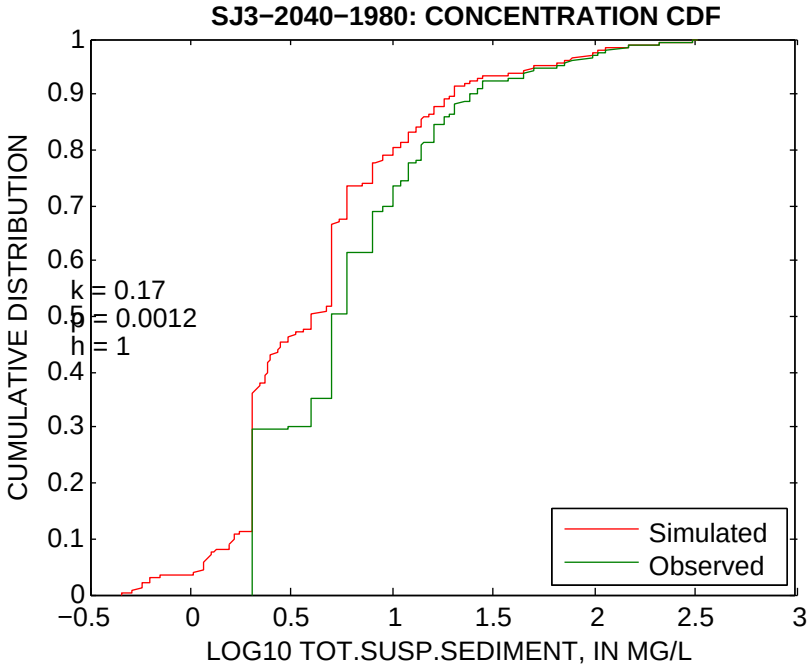
	n	244	244
		observe	simulate
min		2	0.2134
		0.30103	-0.670806
mean		15.034	20.6066
		0.805647	0.620016
media		5	2.5395
		0.69897	0.404704
max		324	308.71
		2.51055	2.48955
varian		1328.1	2199.95
		0.224797	0.583628
JB		0.001	0.001
		0.001	0.004455
		ra	log
%		37.0667	-23.0413
err.va		1341.84	0.584022
rel.std.err		1.01034	2.59799
mod.eff		-0.0103383	-1.59799

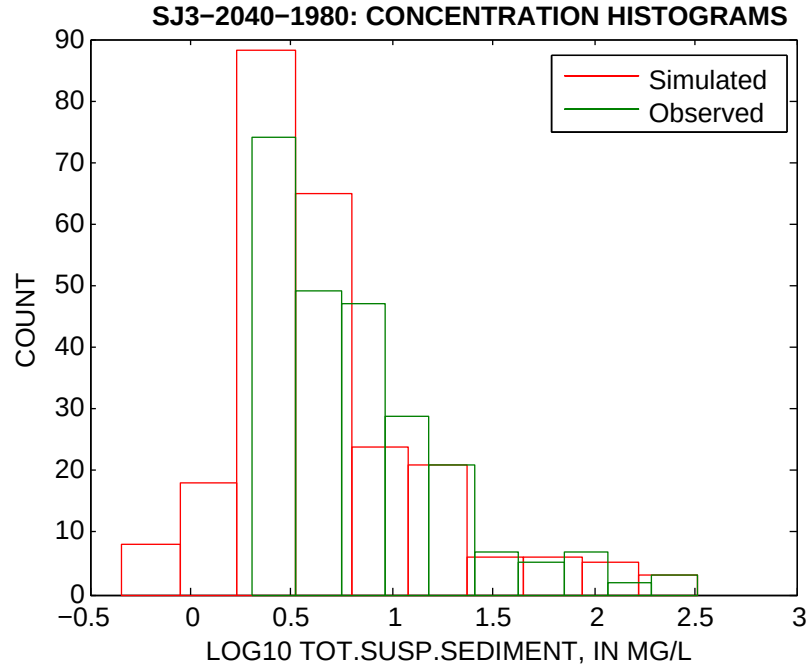
VERSION 2.1

ALL DATA
LOG10

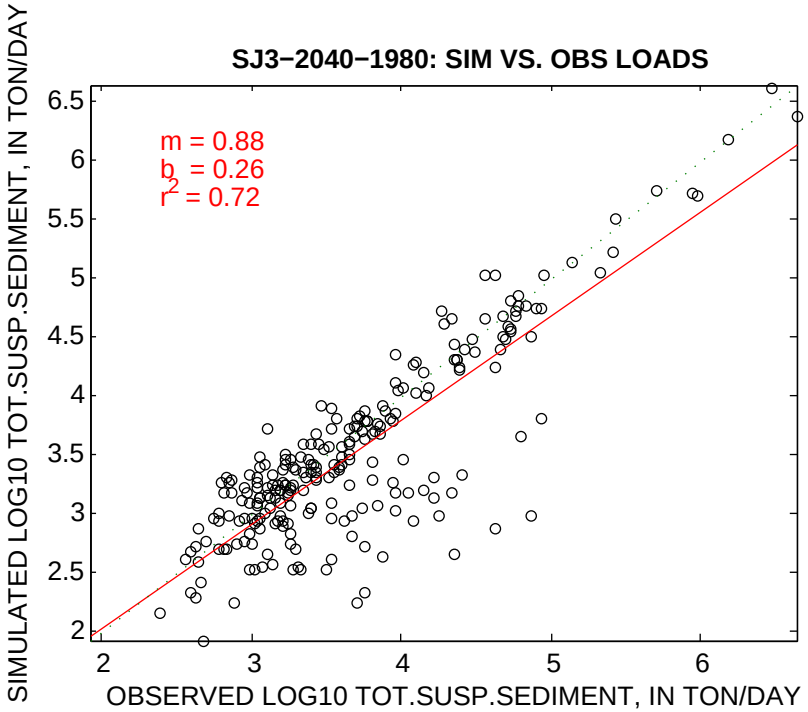


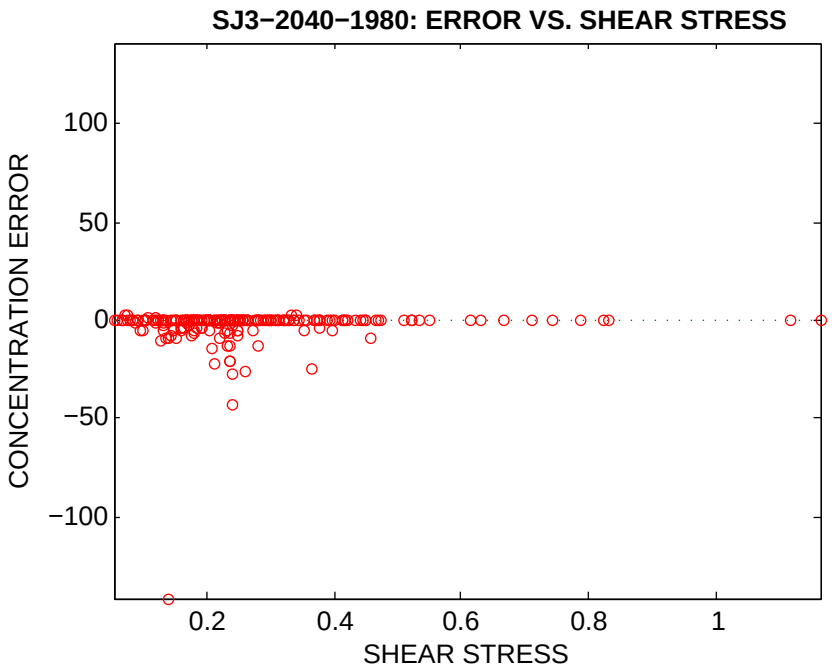


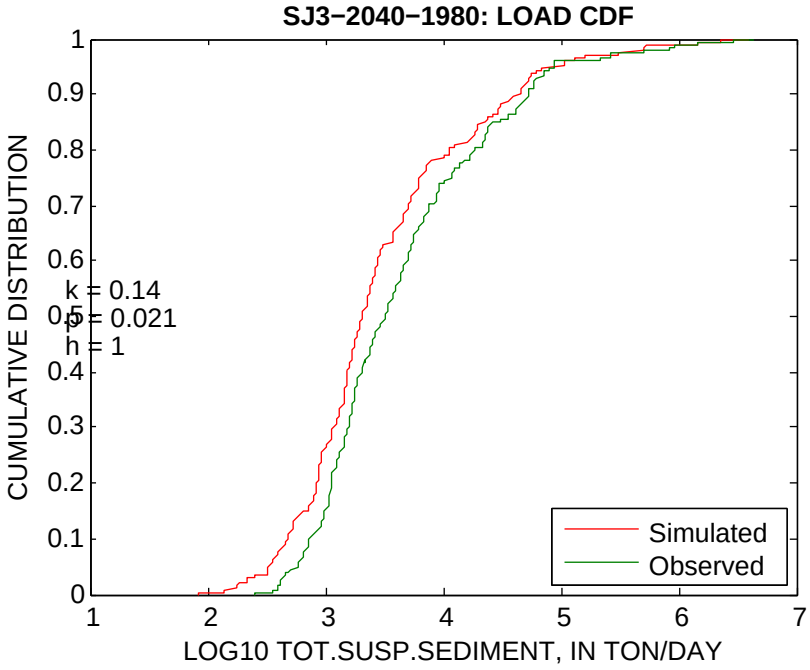


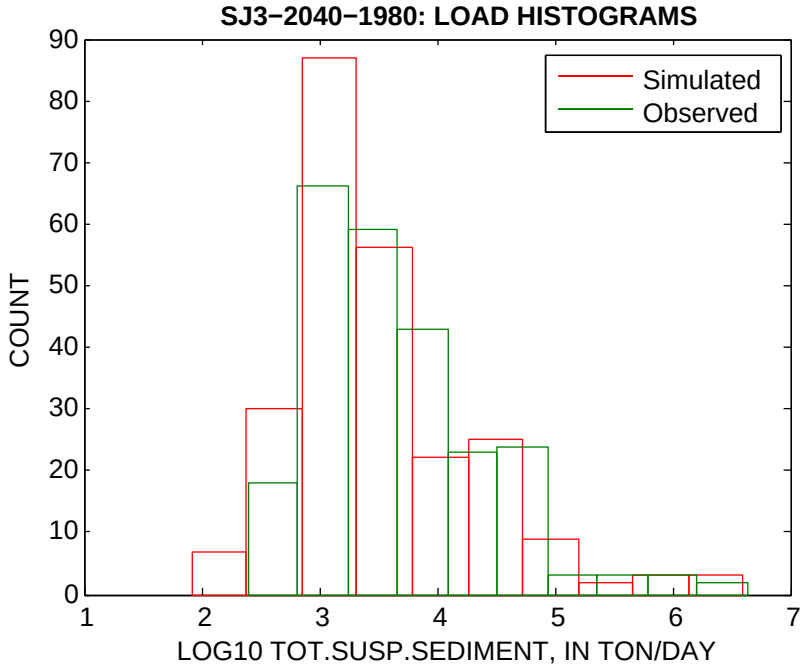


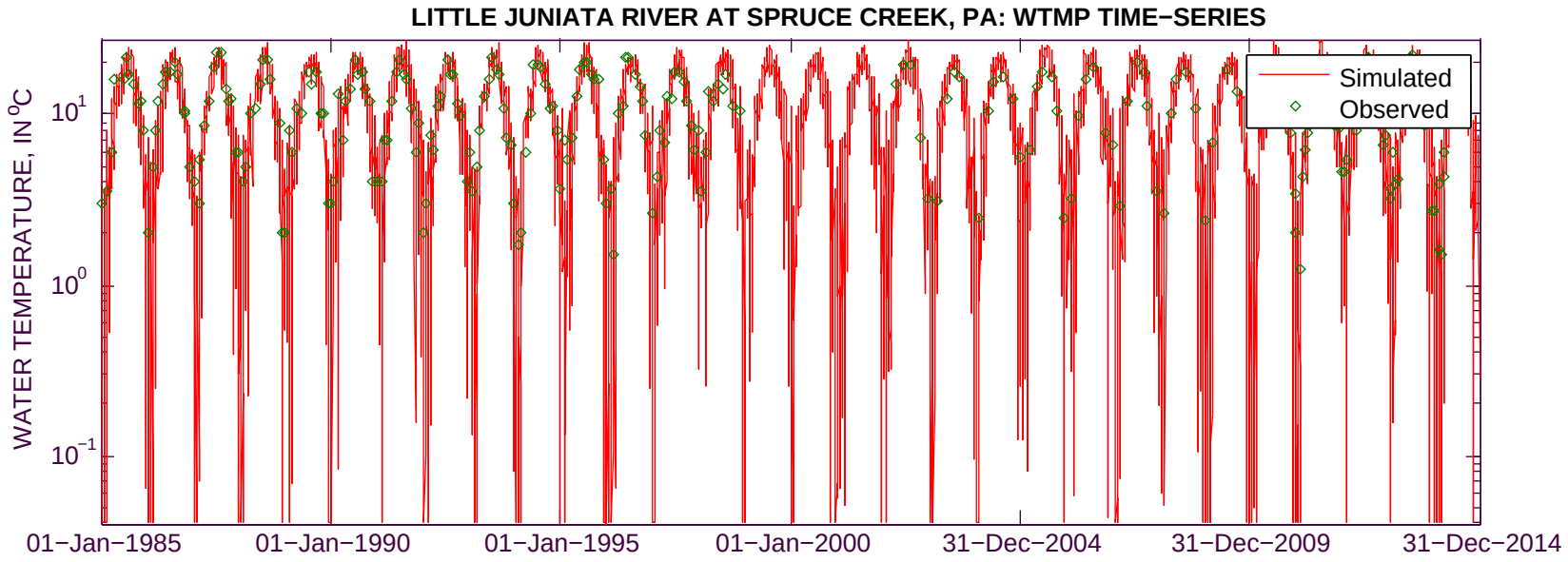
LOAD DATA
LOG10

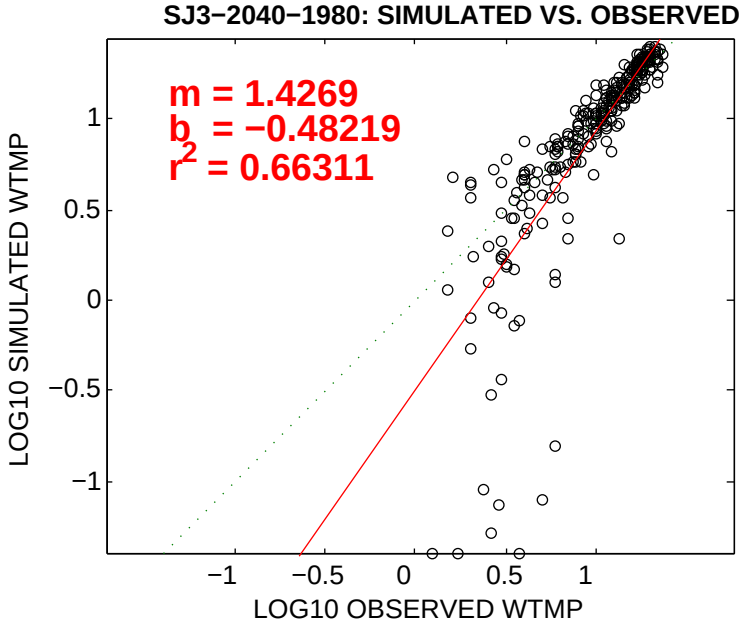


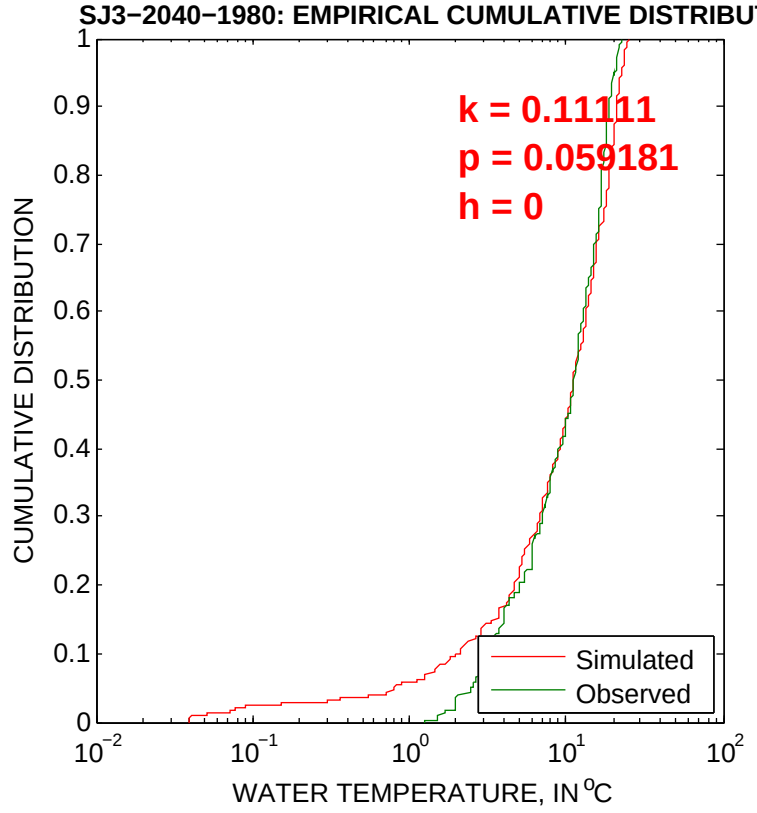












DATA SELECTION

scenario	file
P620171001WQ	WTMP.calib

plot: WTMP - water tempera...

Dates 1/1/1985 12/31/201

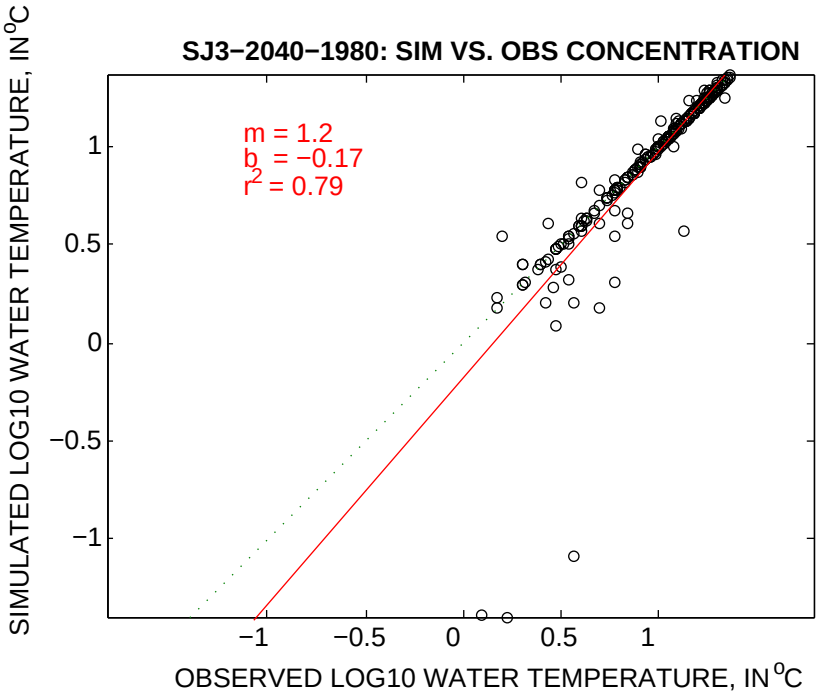
Drive	Directory	Observed
N/A	model	OBS20161101

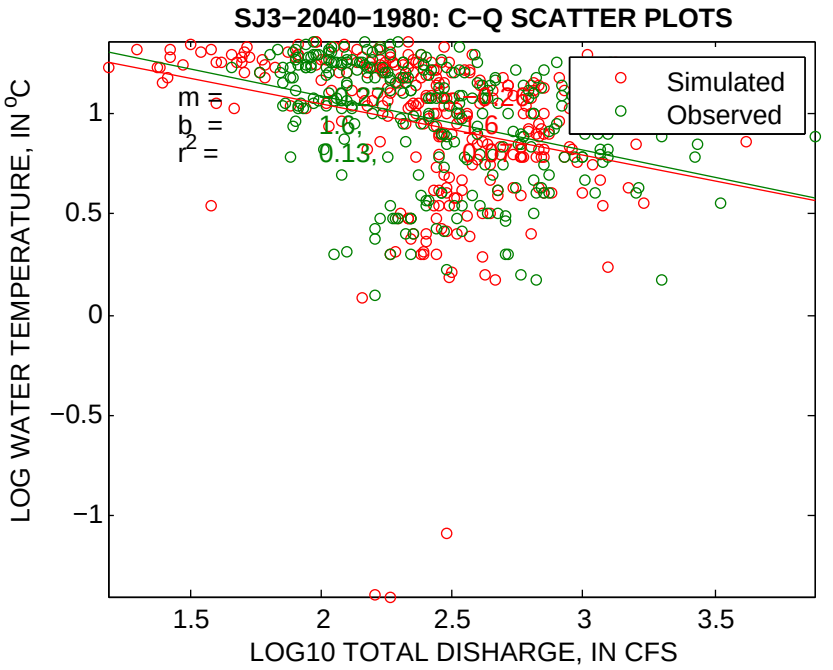
STATISTICS

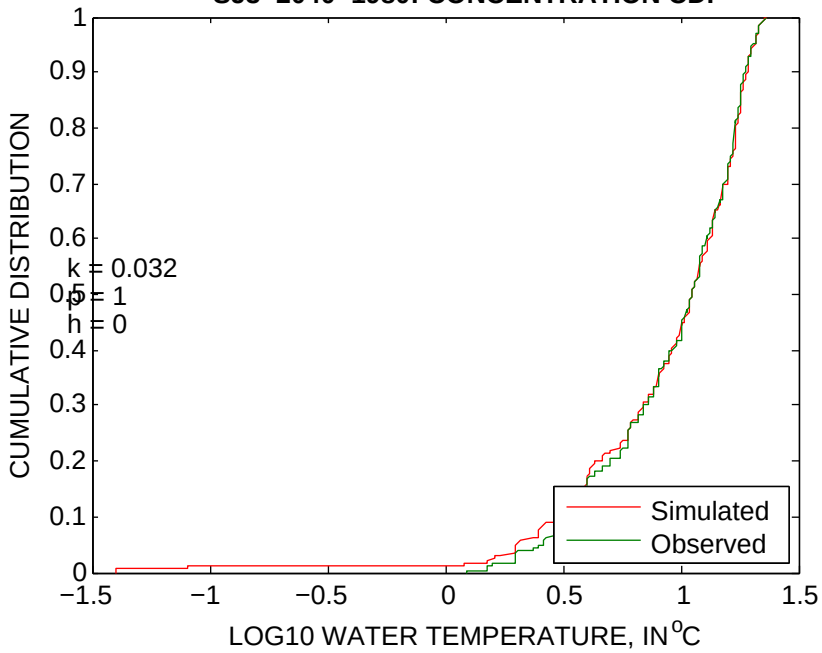
n	279	279
	observe	simulate
min	1.25	0.039969
	0.09691	-1.39828
mean	11.2199	11.5336
	0.968912	0.900333
media	11.3	11.108
	1.05308	1.04564
max	23	25.415
	1.36173	1.40509
varian	34.1415	48.1613
	0.0865771	0.265823
JB	0.004198	0.004800
	0.001	0.001
	ra	log
%	2.79583	-7.07795
err.va	5.52004	0.11005
rel.std.err	0.161681	1.27112
mod.eff	0.838319	-0.271121

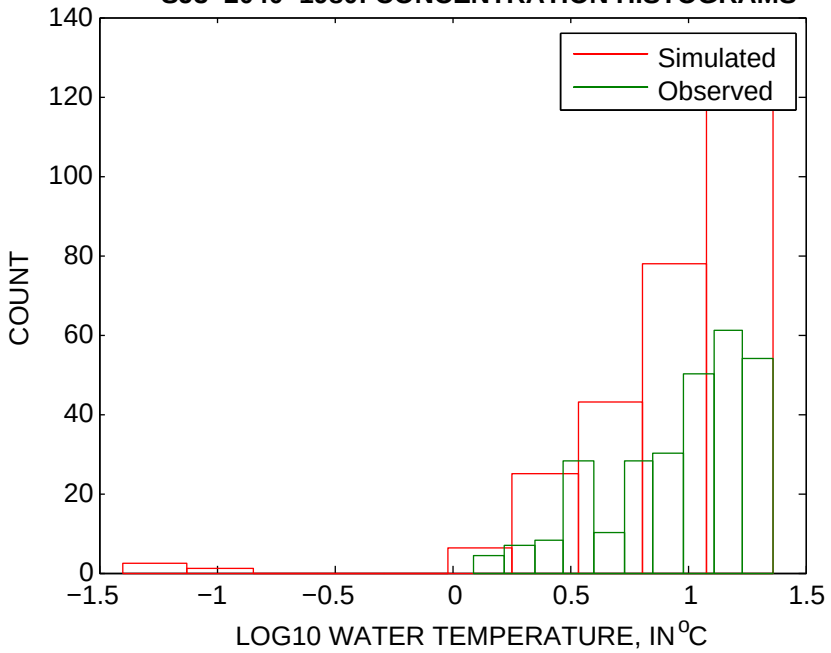
VERSION 2.1

ALL DATA
LOG10

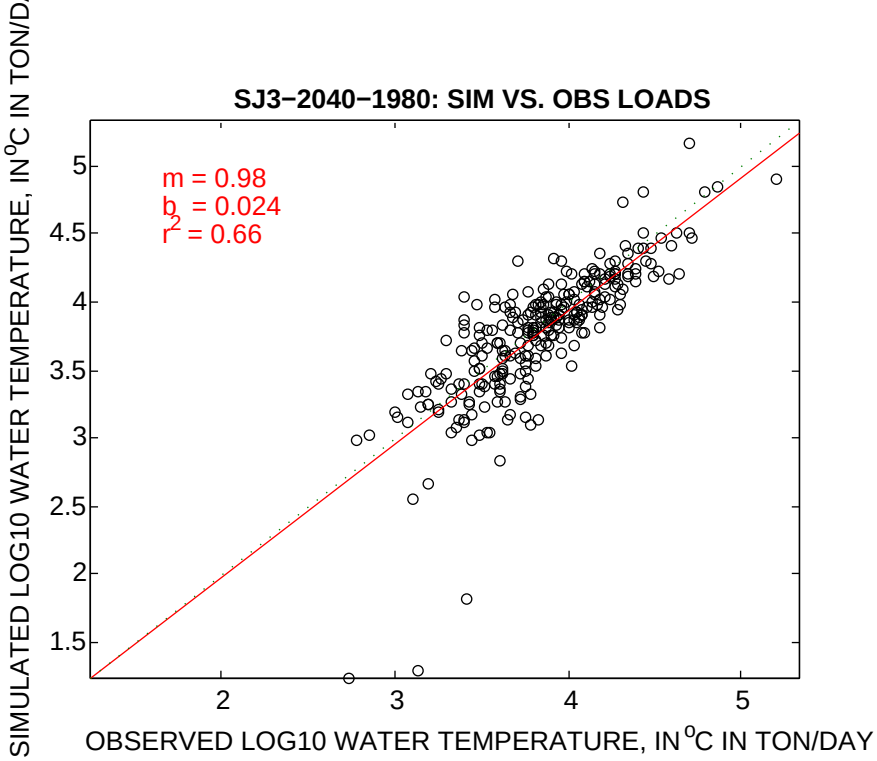


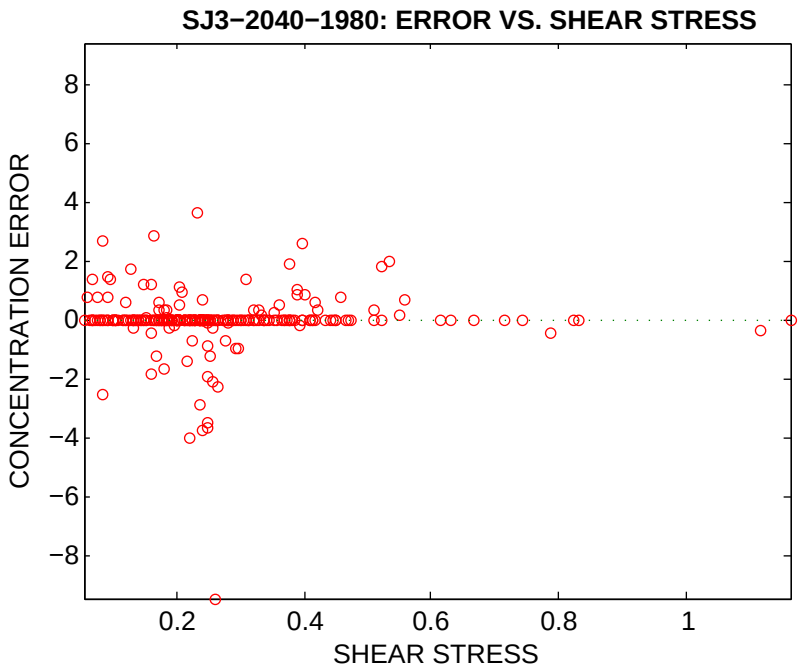


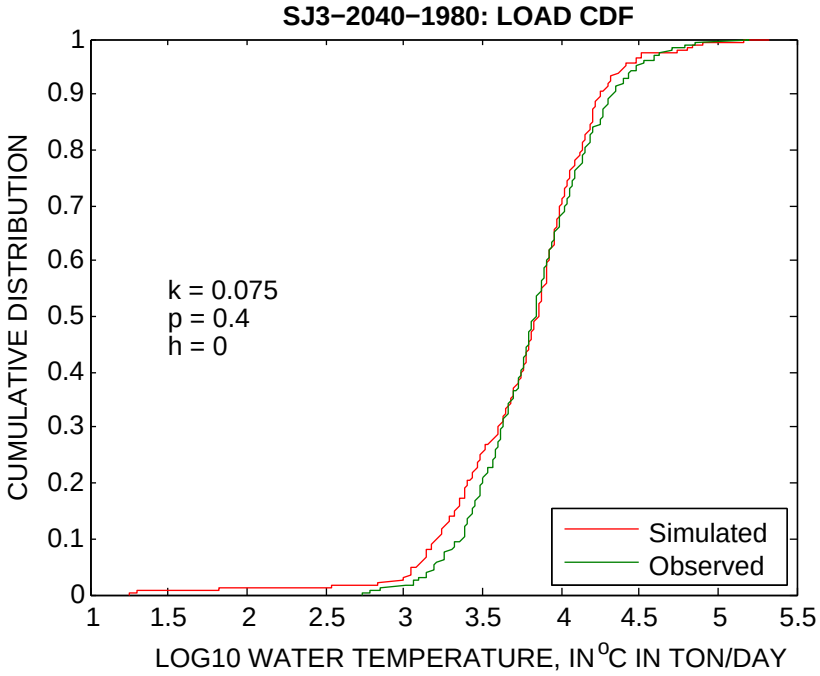


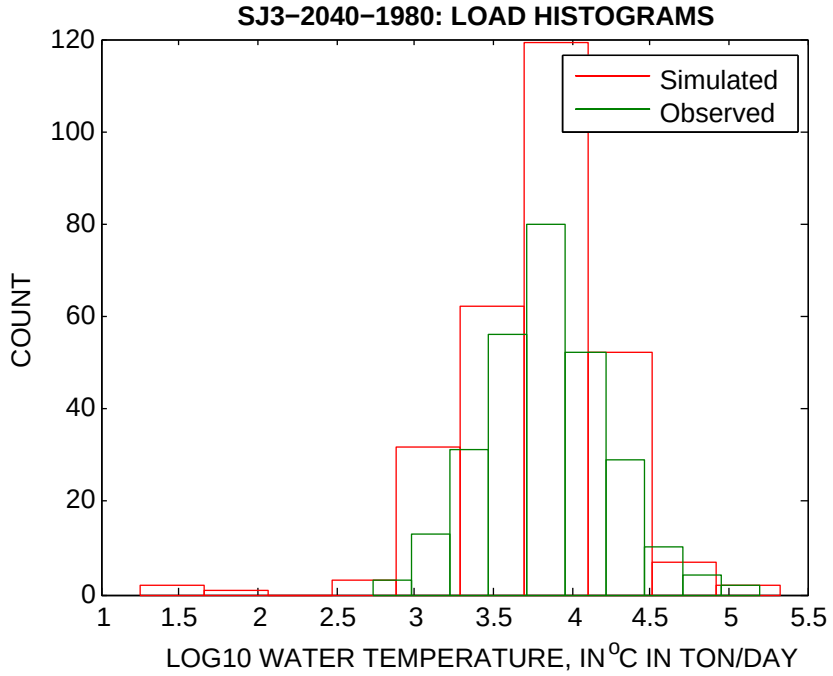


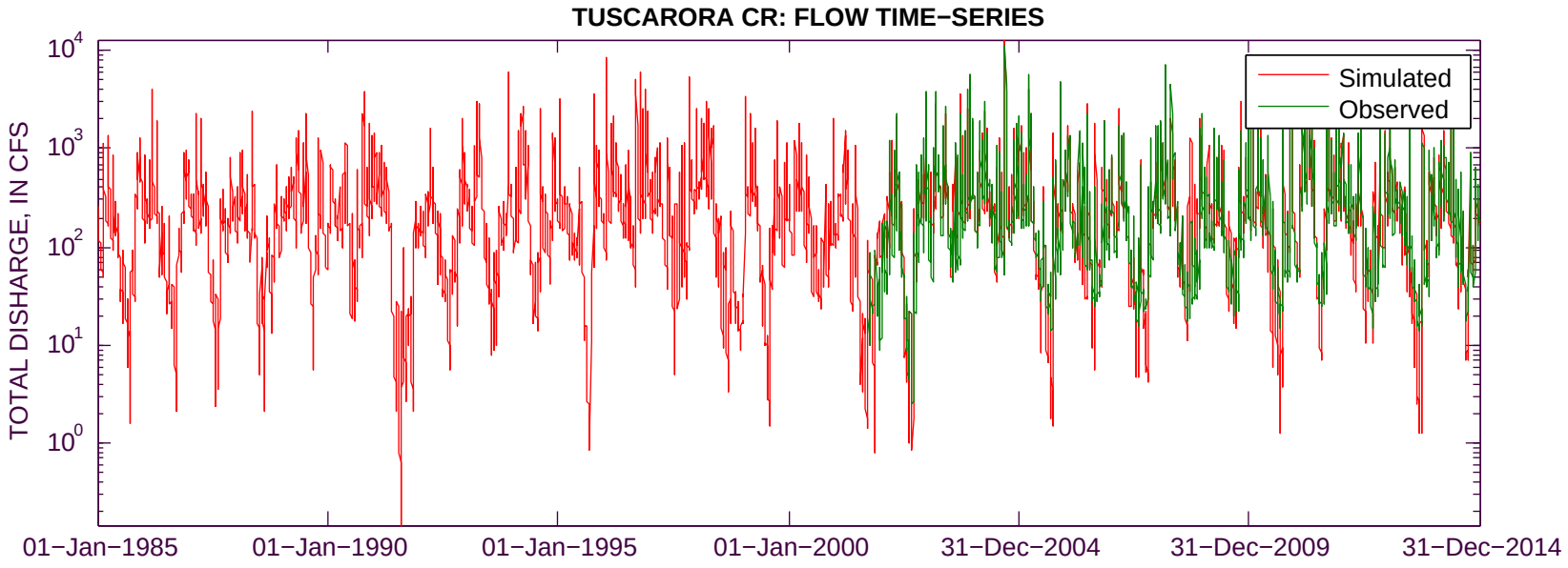
LOAD DATA
LOG10

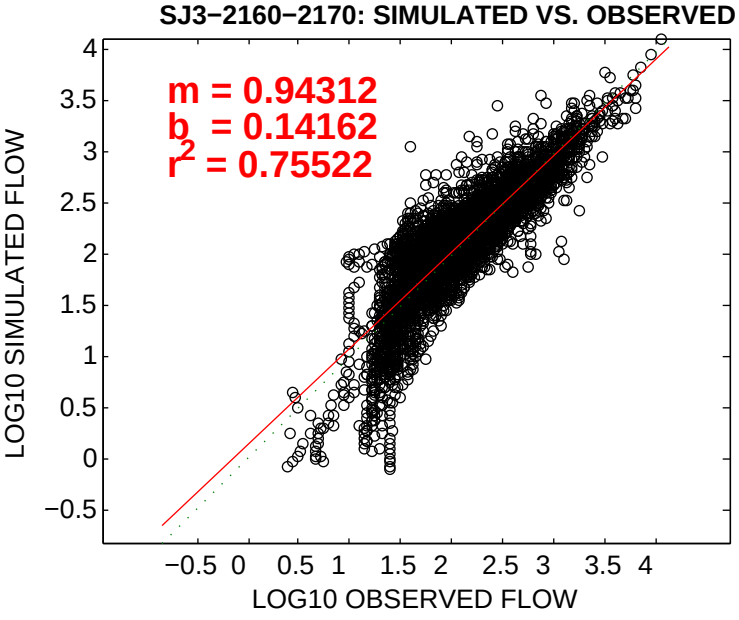


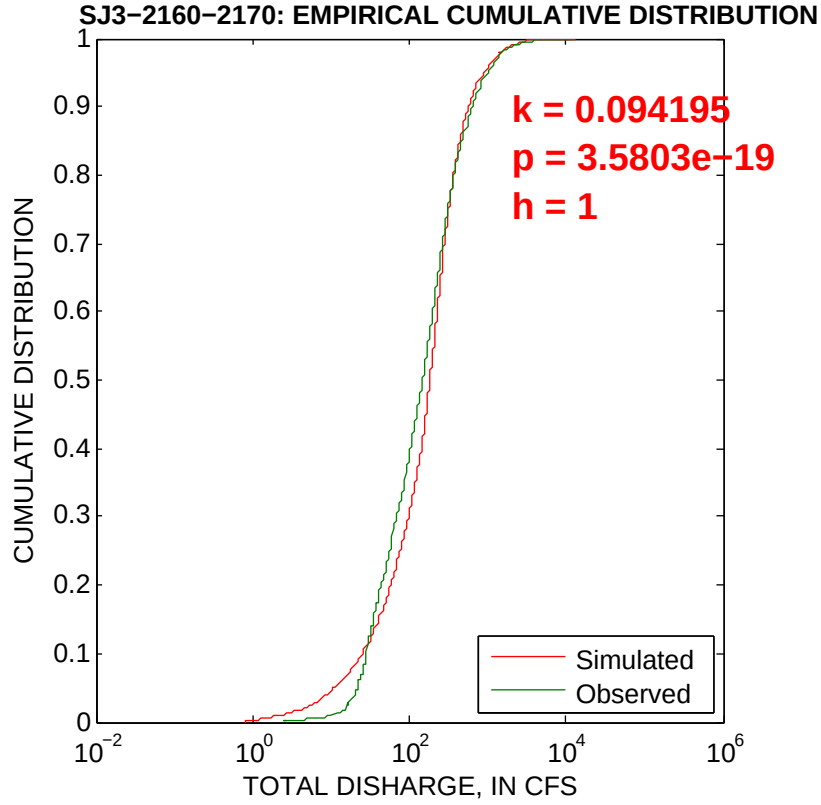












DATA SELECTION

scenario: P620171001WQ | file: FLOW.calib

plot: FLOW - total discharge

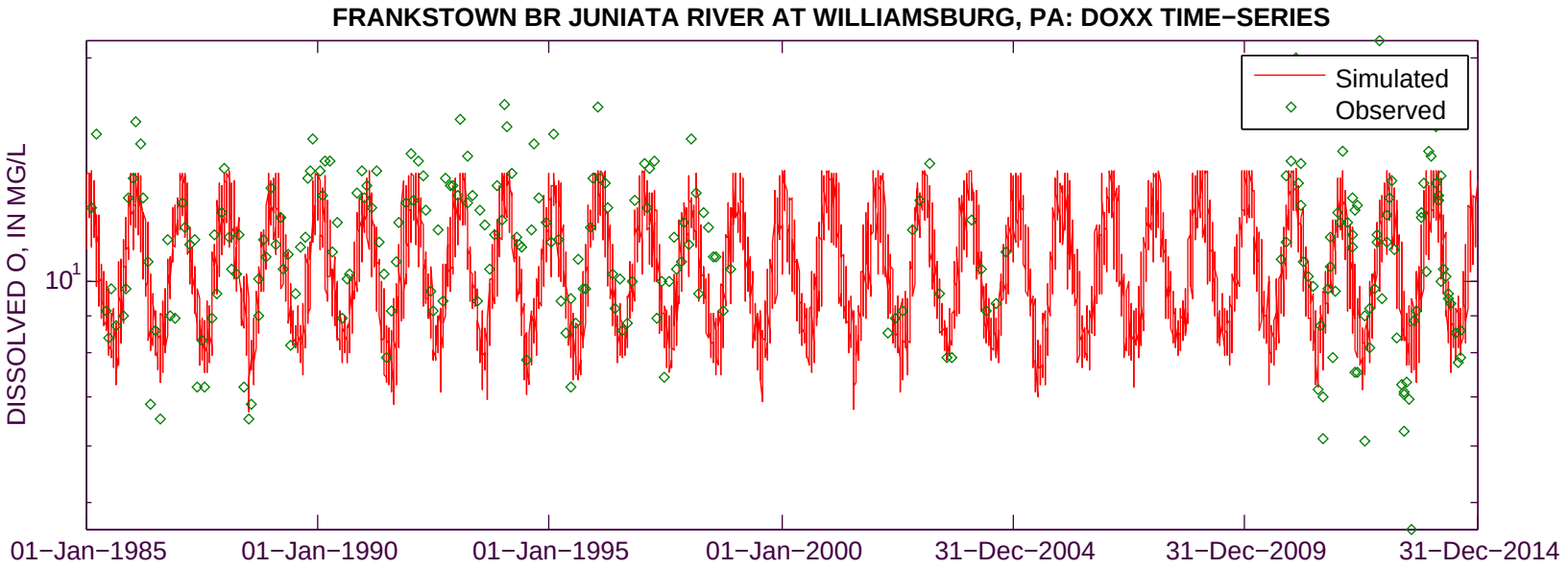
Dates: 1/1/1985 – 12/31/201

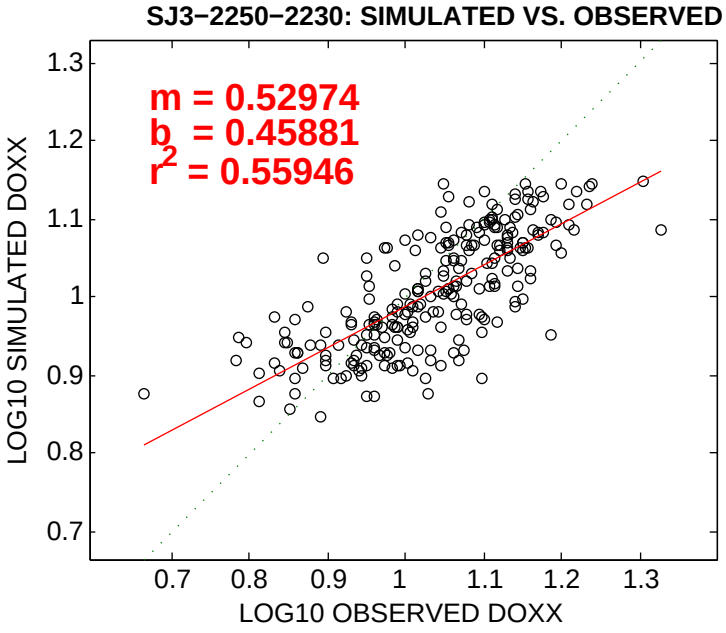
Drive: N/A | Directory: model | Observed: OBS20161101

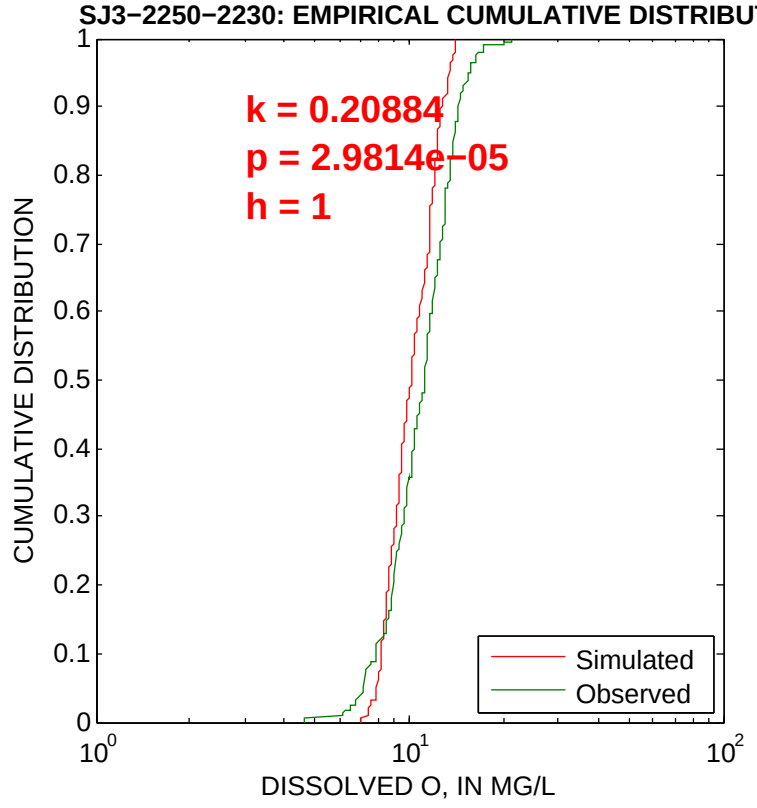
STATISTICS

		observe	simulate
n		4841	4841
min		2.5	0.79414
		0.39794	-0.100103
mean		288.663	288.495
		2.14417	2.16383
media		150	183.94
		2.17609	2.26468
max		11300	13226
		4.05308	4.12143
varian		269613	224081
		0.273004	0.321536
JB		0.001	0.001
	☑	0.062194	0.001
		ra	log
%		0.0581496	0.916903
err.va		53560.1	0.0799757
rel.std.err		0.198655	0.292947
mod.eff		0.801345	0.707053

VERSION 2.1







DATA SELECTION

scenario: P620171001WQ | file: DOXX.calib

plot: DOXX - dissolved oxygen

Dates: 1/1/1985 – 12/31/201

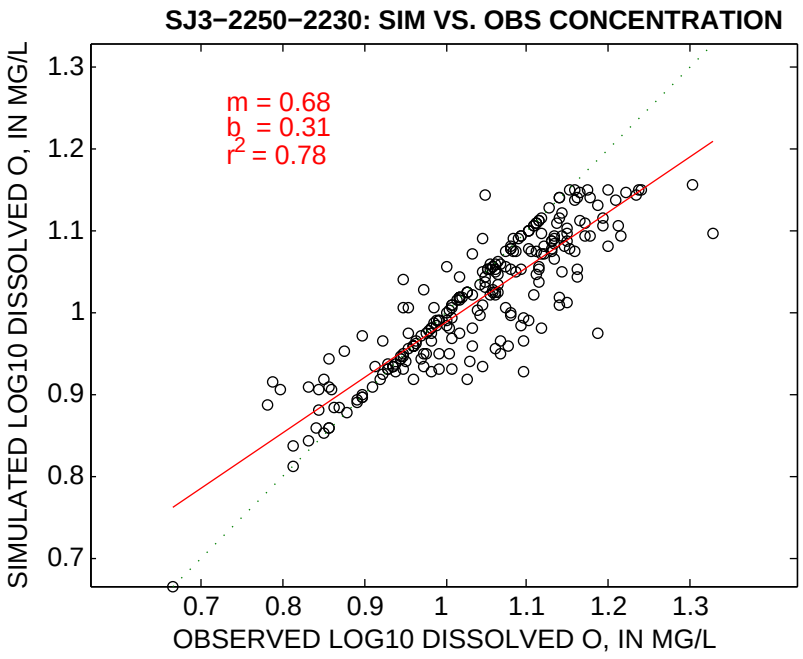
Drive: N/A | Directory: model | Observed: OBS20161101

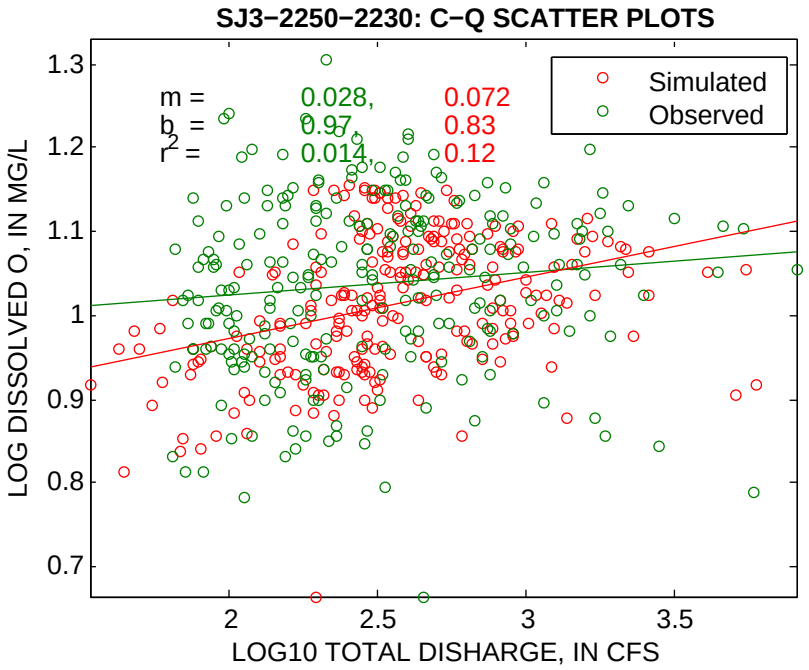
STATISTICS

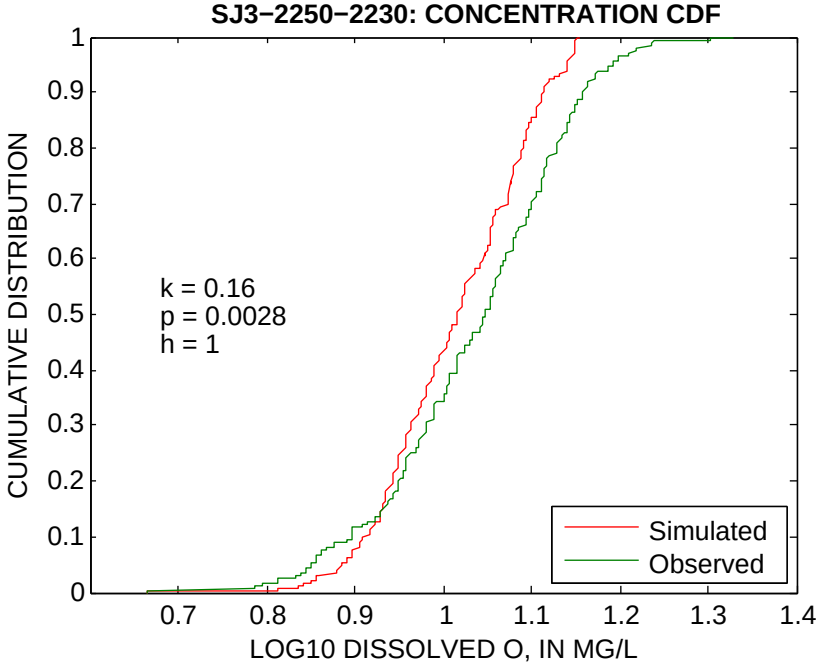
		observe	simulate
n		249	249
min		4.63	7.0244
		0.665581	0.846609
mean		11.2016	10.3388
		1.03706	1.00818
media		11.2	10.151
		1.04922	1.00651
max		21.26	14.144
		1.32756	1.15057
varian		6.93151	3.11748
		0.0109359	0.00548554
JB		0.023080	0.007396
	☑	0.087510	0.010091
		ra	log
%		-7.70252	-2.78417
err.va		3.8203	0.00567203
rel.std.err		0.551149	0.518662
mod.eff		0.448851	0.481338

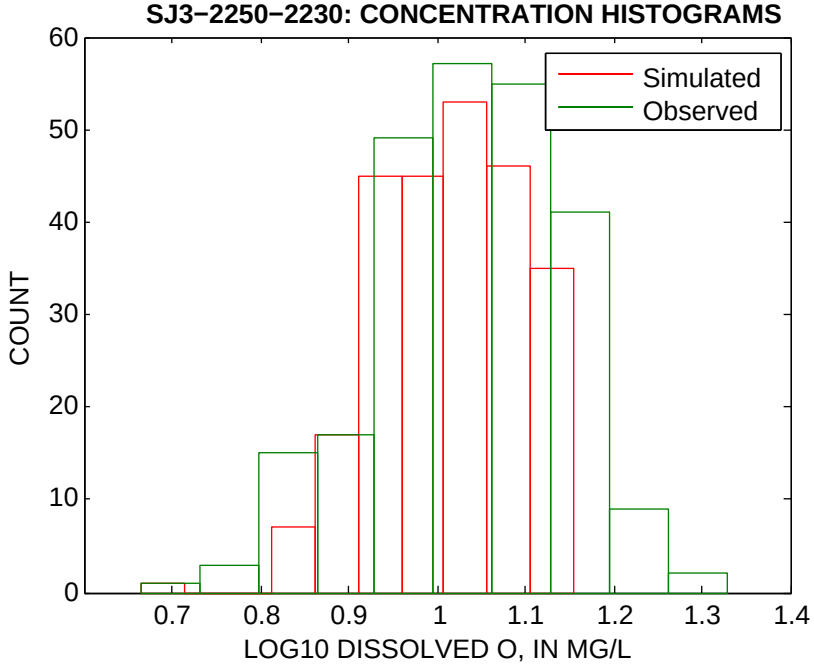
VERSION 2.1

ALL DATA
LOG10

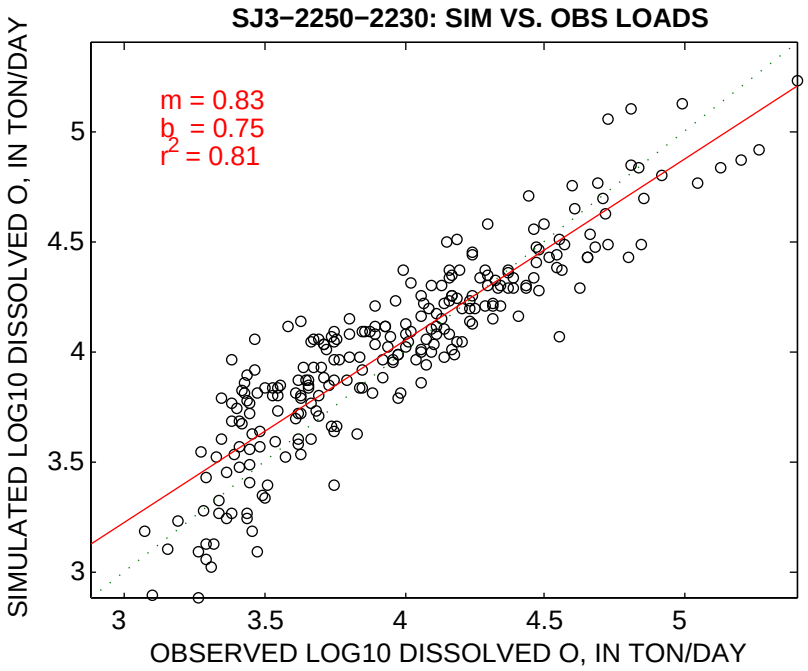


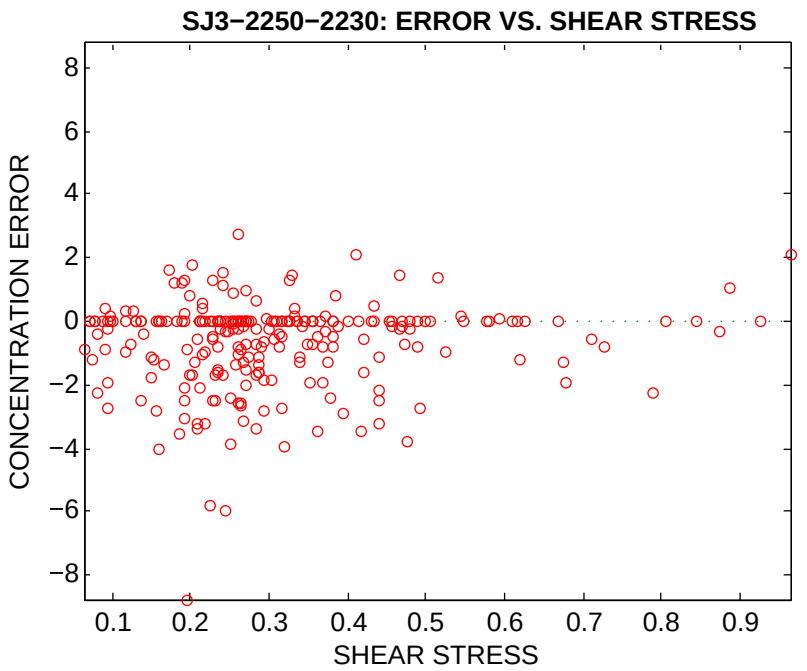


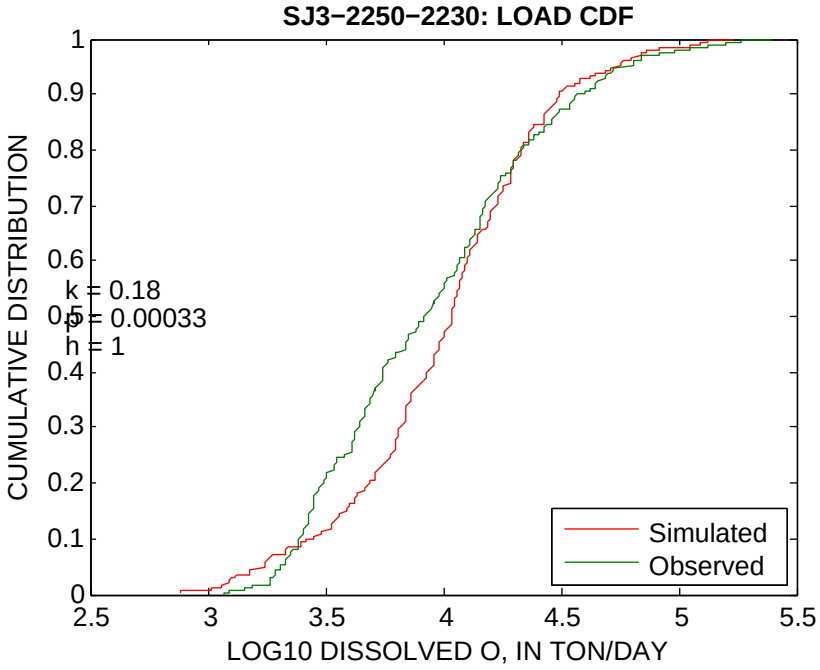


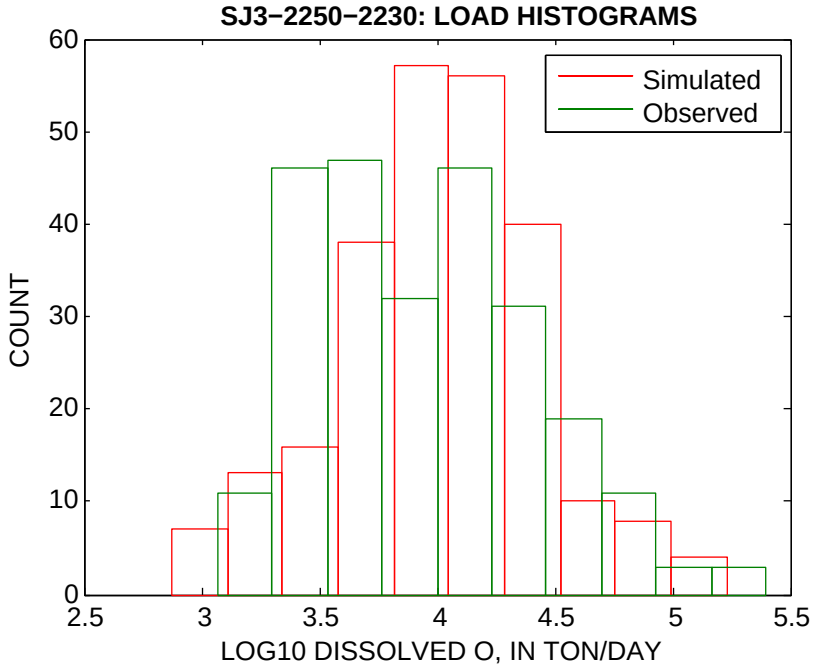


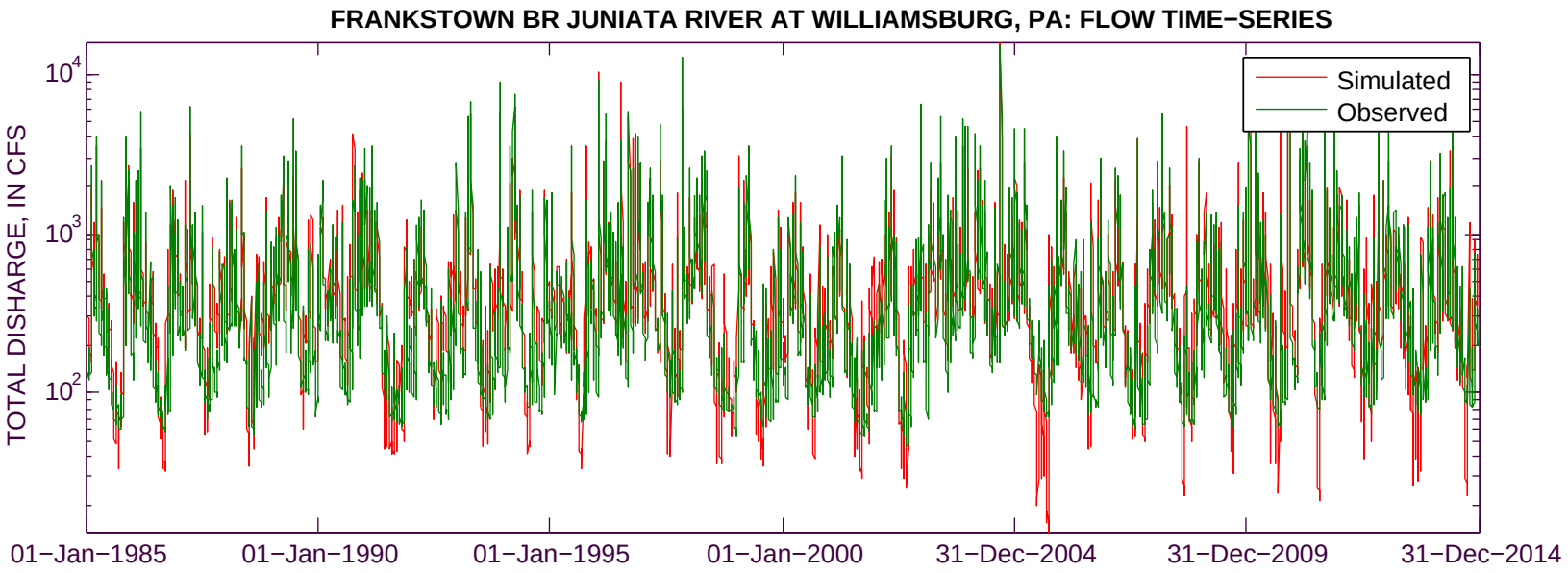
LOAD DATA
LOG10

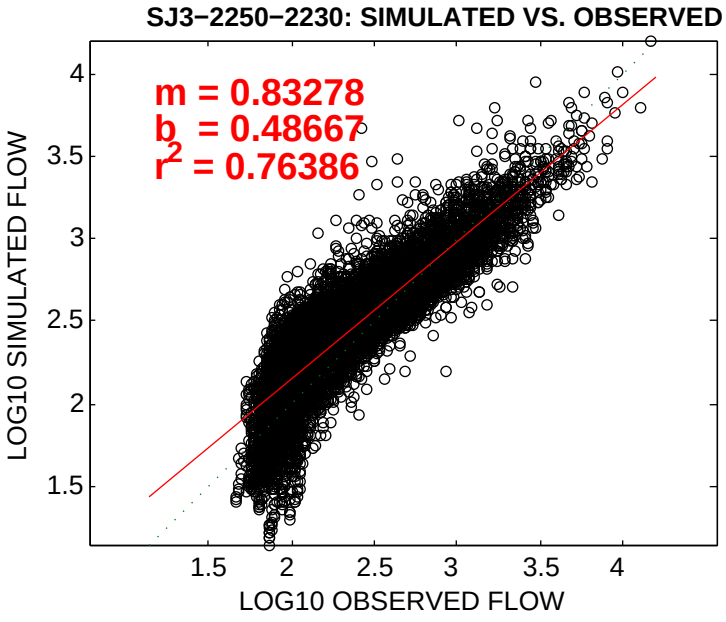


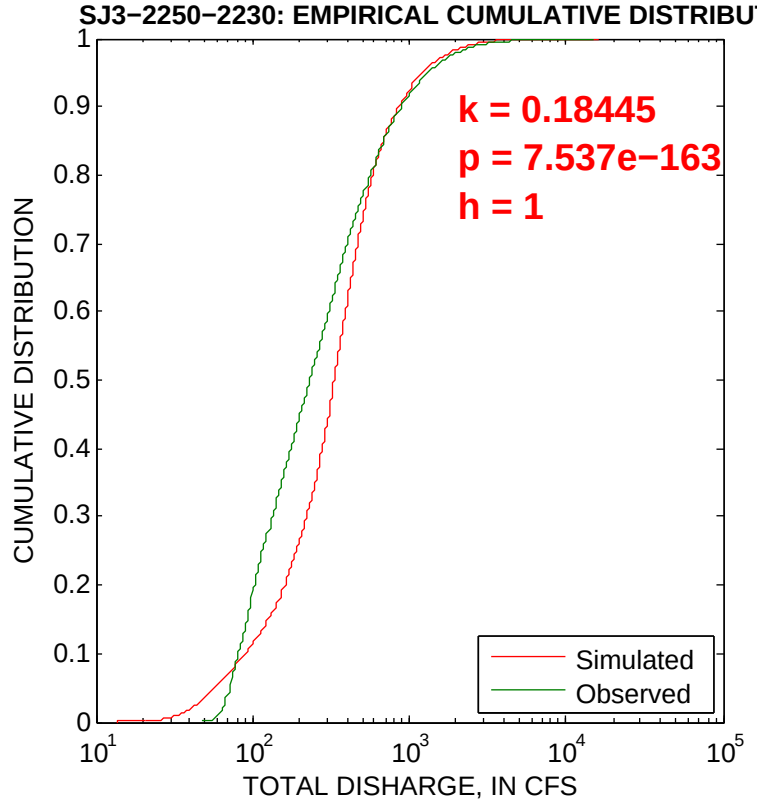












DATA SELECTION

scenario	file
P620171001WQ	FLOW.calib

plot: FLOW - total discharge

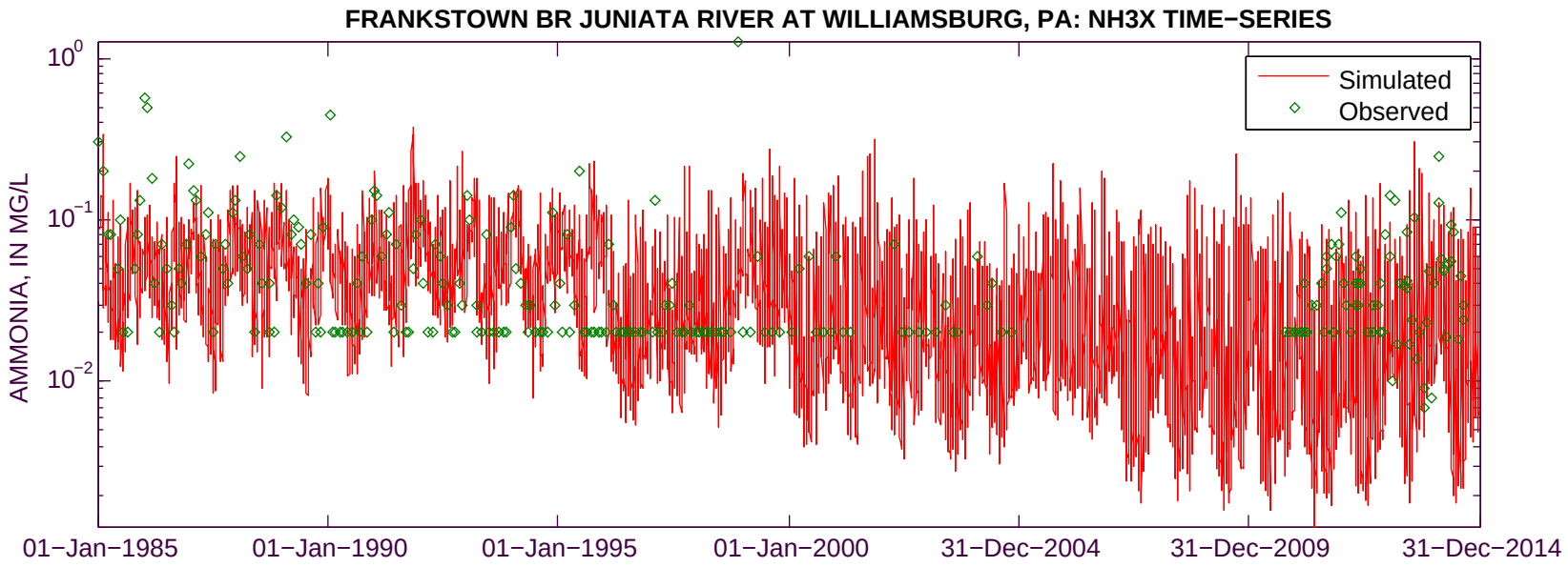
Dates: 1/1/1985 – 12/31/201

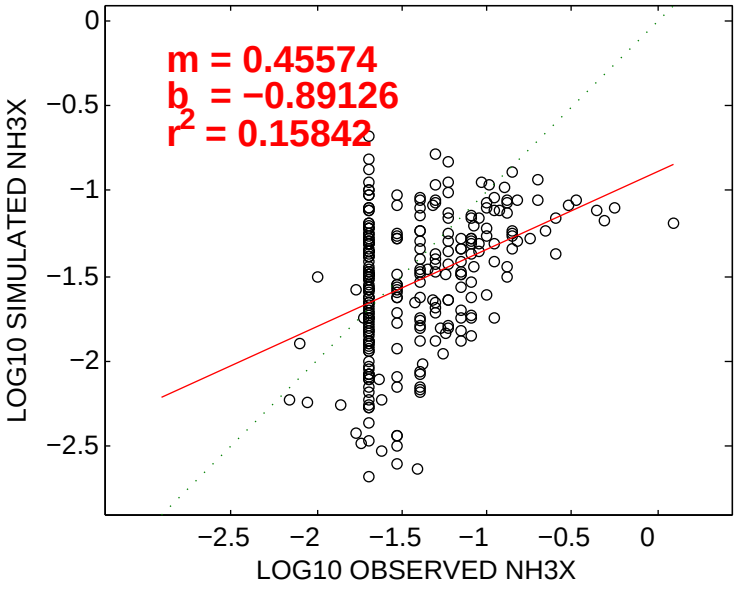
Drive	Directory	Observed
N/A	model	OBS20161101

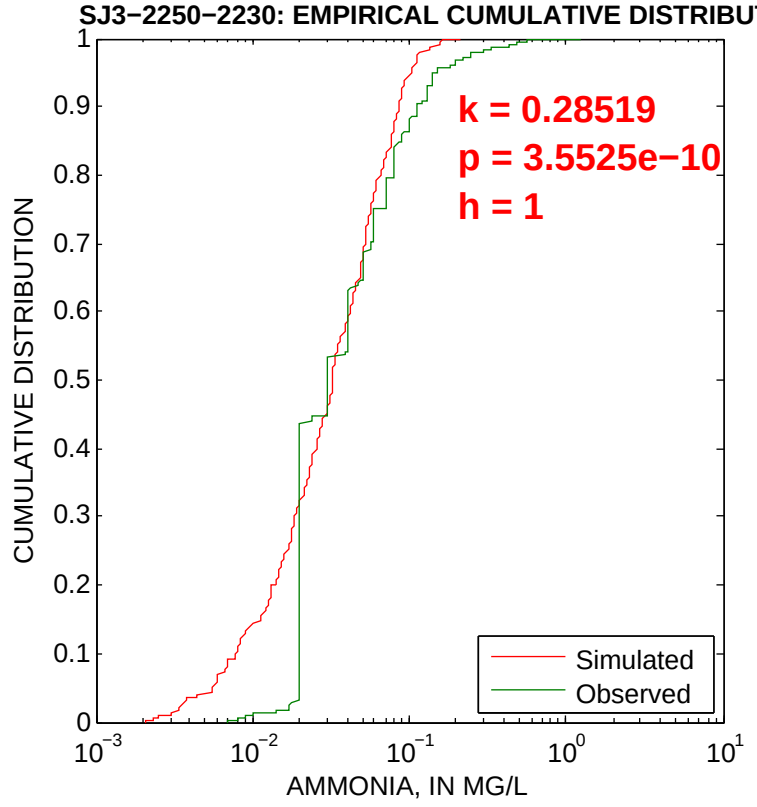
STATISTICS

	n	observe	simulate
		10957	10957
min		46	13.739
		1.66276	1.13796
mean		416.409	450.357
		2.40511	2.48959
media		233	333.25
		2.36736	2.52277
max		15000	15882
		4.17609	4.20091
varian		373141	277275
		0.160885	0.14607
JB		0.001	0.001
		0.001	0.001
		ra	log
%		8.15253	3.51257
err.va		89998.2	0.0461301
rel.std.err		0.241191	0.286727
mod.eff		0.758809	0.713273

VERSION 2.1







DATA SELECTION

scenario	file
P620171001WQ	NH3X.calib

plot: NH3X - ammonia

Dates: 1/1/1985 – 12/31/201

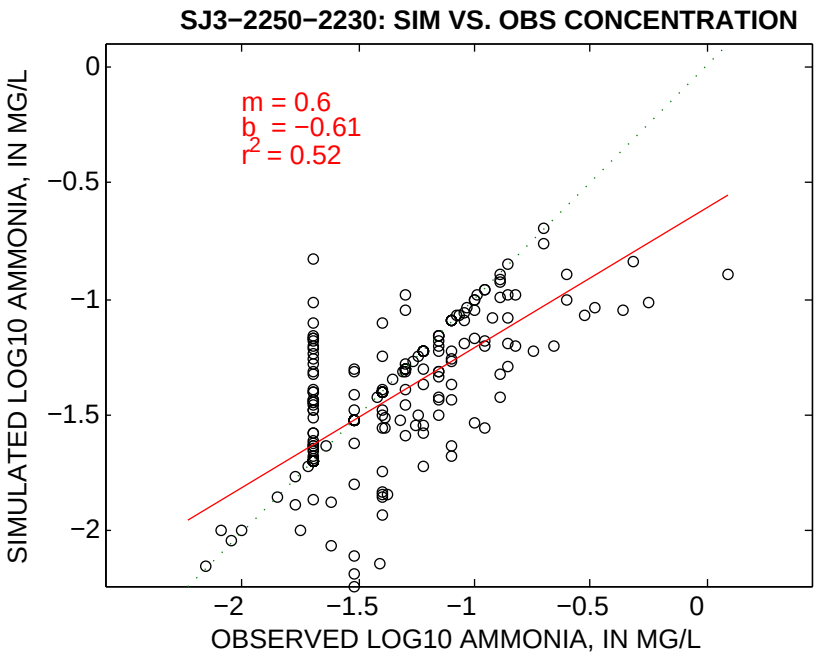
Drive	Directory	Observed
N/A	model	OBS20161101

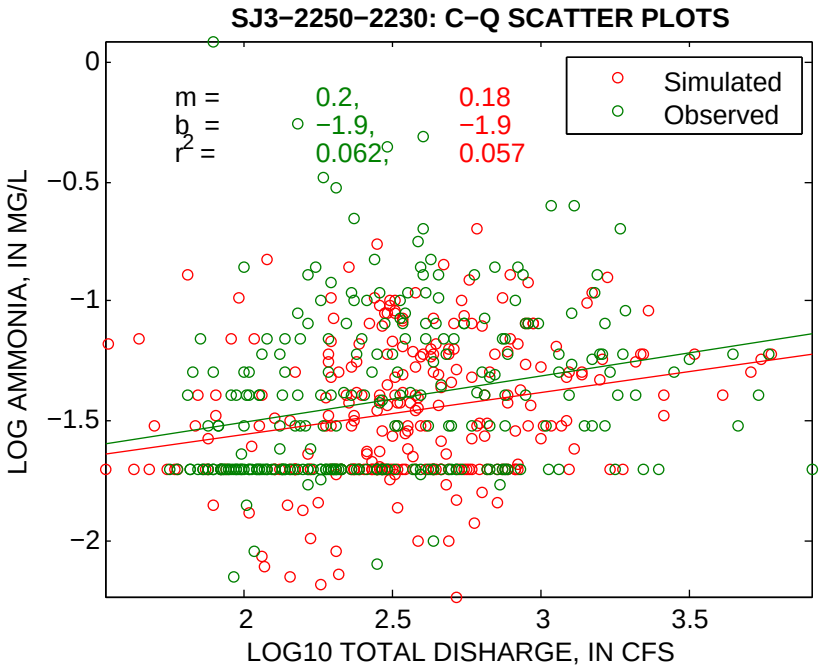
STATISTICS

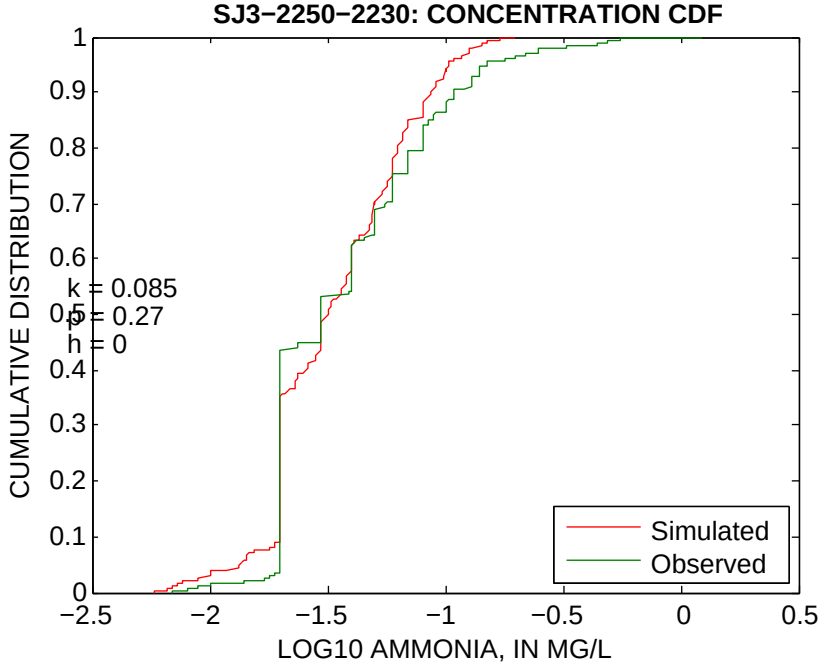
	n	270	270
		observe	simulate
min		0.007	0.0021169
		-2.1549	-2.6743
mean		0.0589963	0.0412324
		-1.41696	-1.53702
media		0.03	0.03272
		-1.52288	-1.48519
max		1.24	0.21328
		0.0934217	-0.67105
varian		0.00966168	0.0010879
		0.12069	0.158229
JB		0.001	0.001
		0.001	0.006308
		ra	log
%		-30.1102	8.47323
err.va		0.00948316	0.183382
rel.std.err		0.981523	1.51945
mod.eff		0.0184772	-0.519454

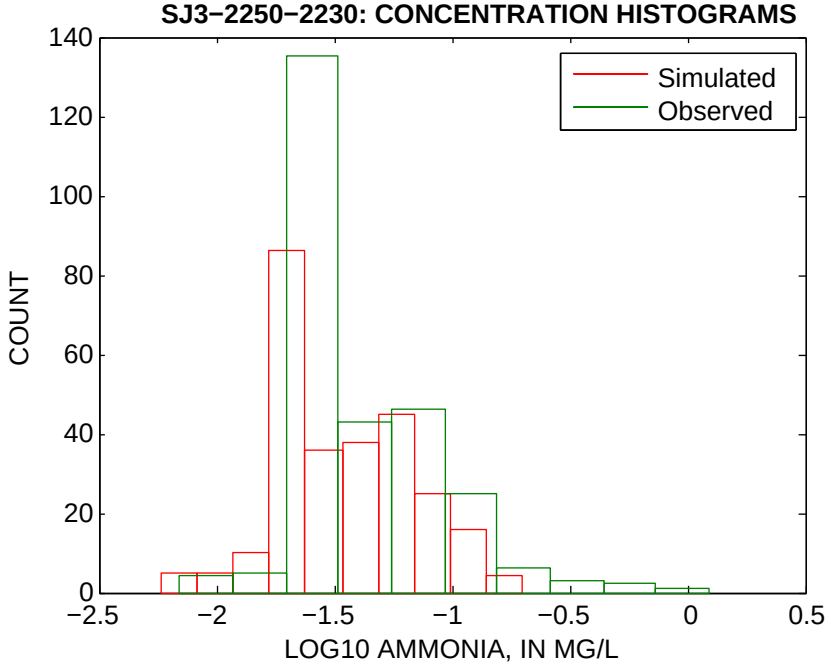
VERSION 2.1

ALL DATA
LOG10

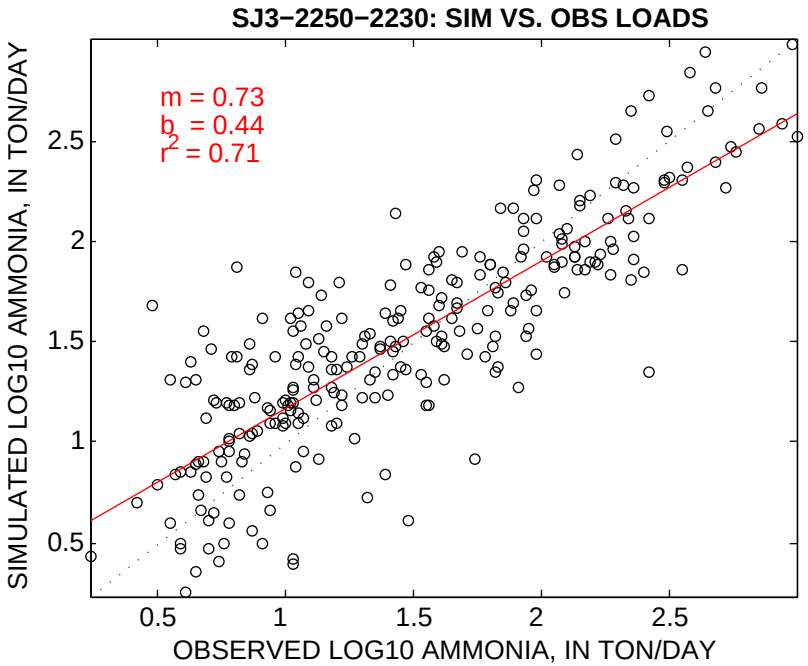


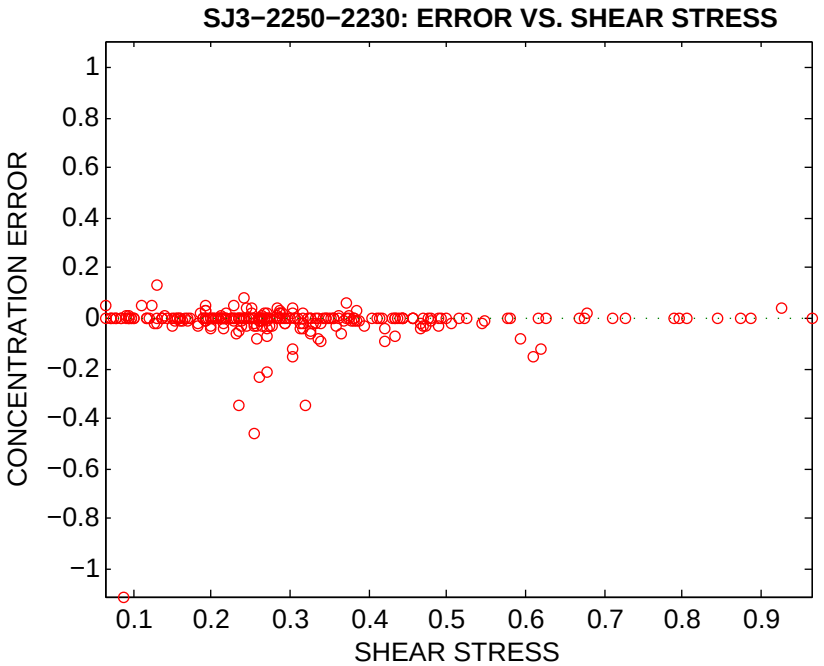


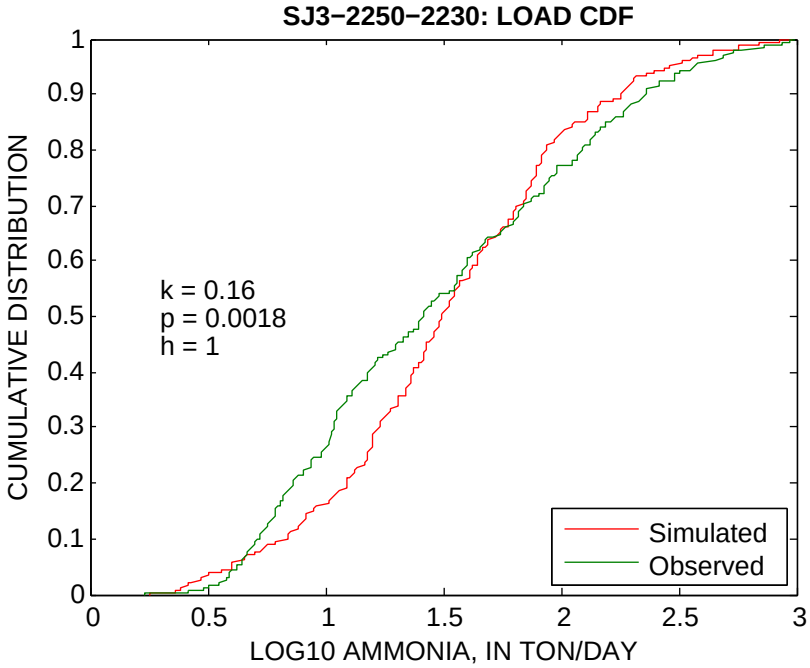


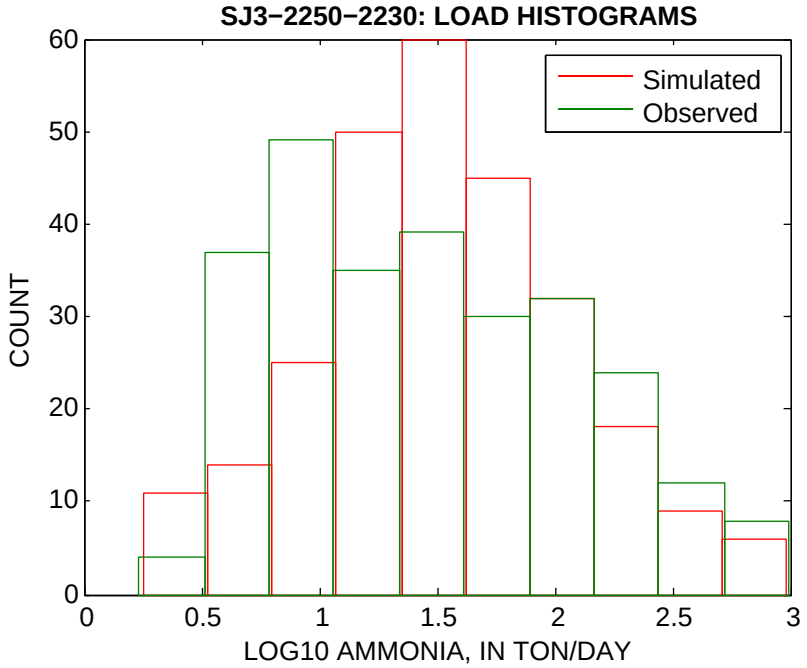


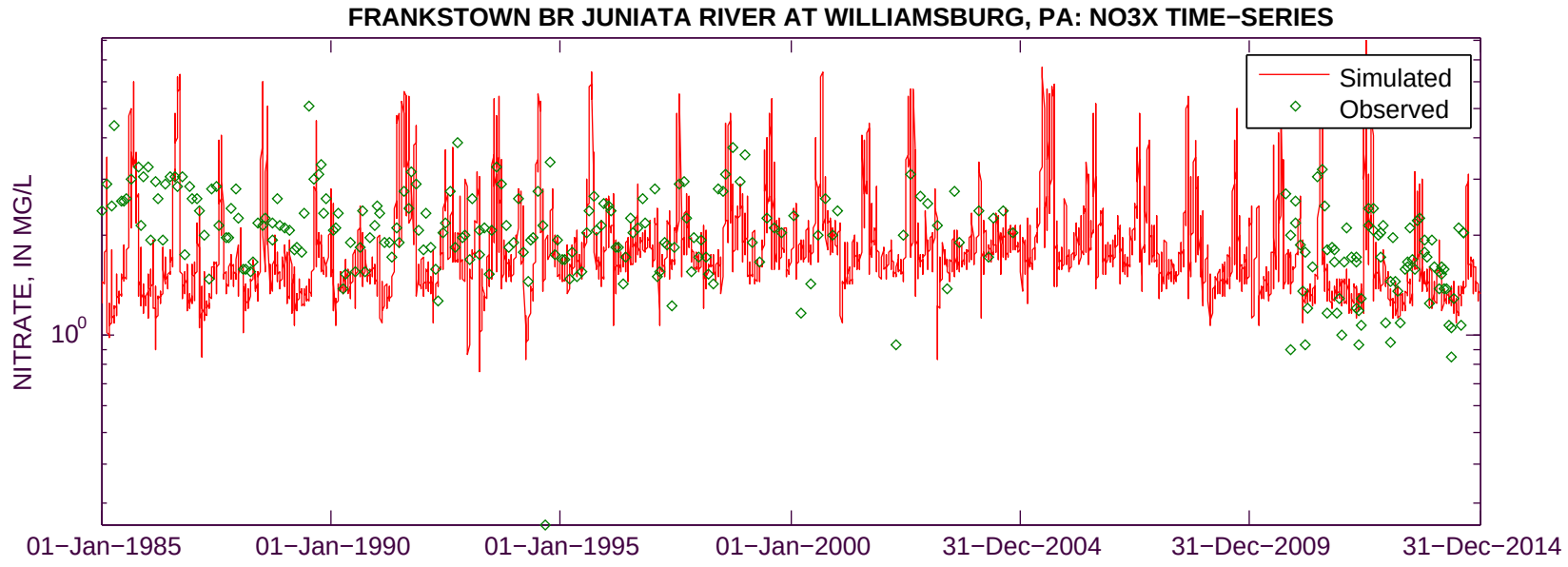
LOAD DATA
LOG10

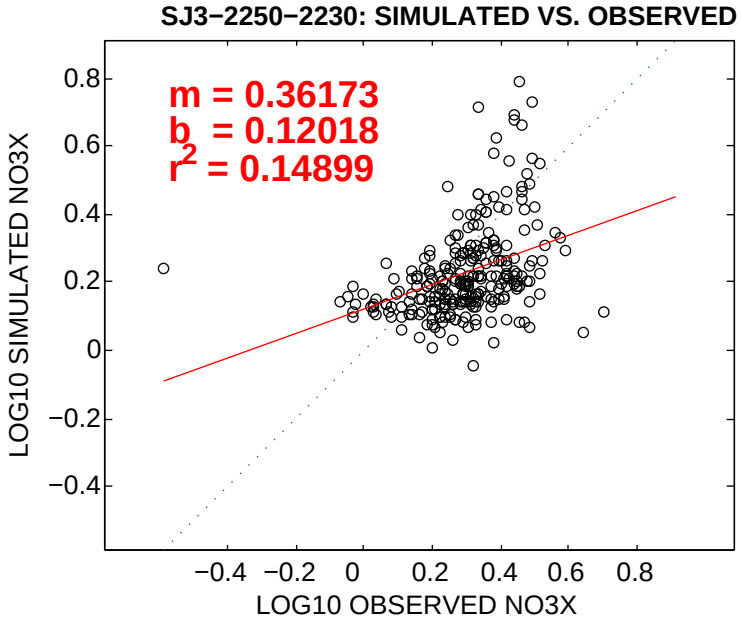


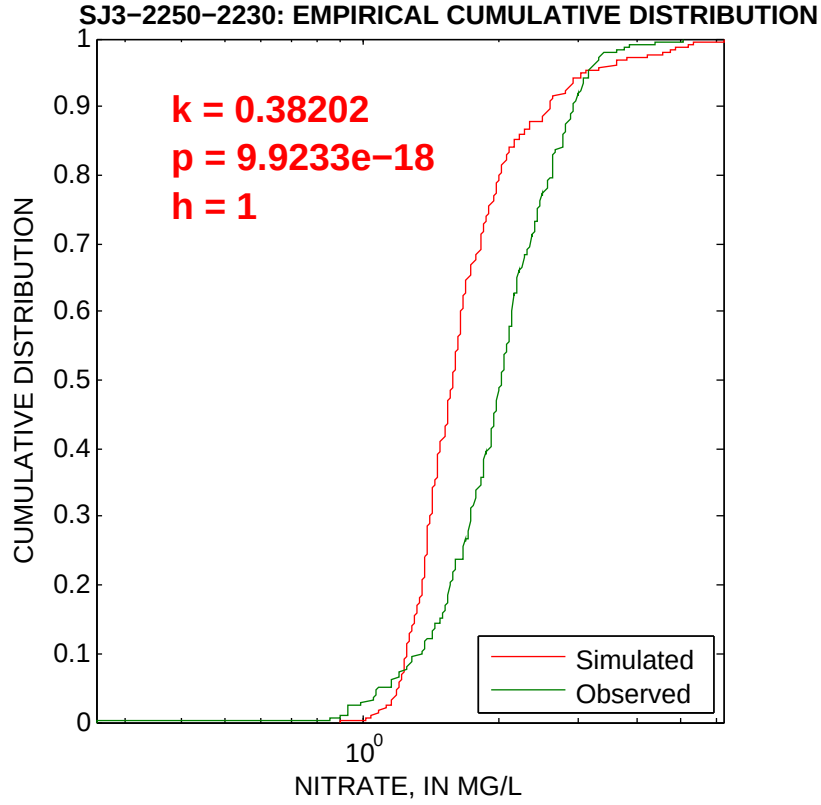












DATA SELECTION

scenario	file
P620171001WQ	NO3X.calib

plot: NO3X - nitrate

Dates: 1/1/1985 – 12/31/201

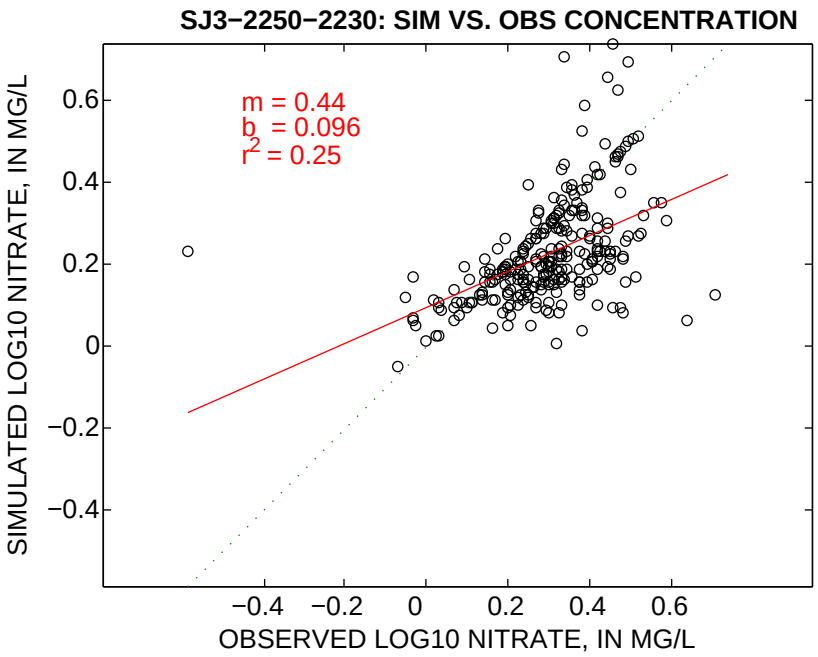
Drive	Directory	Observed
N/A	model	OBS20161101

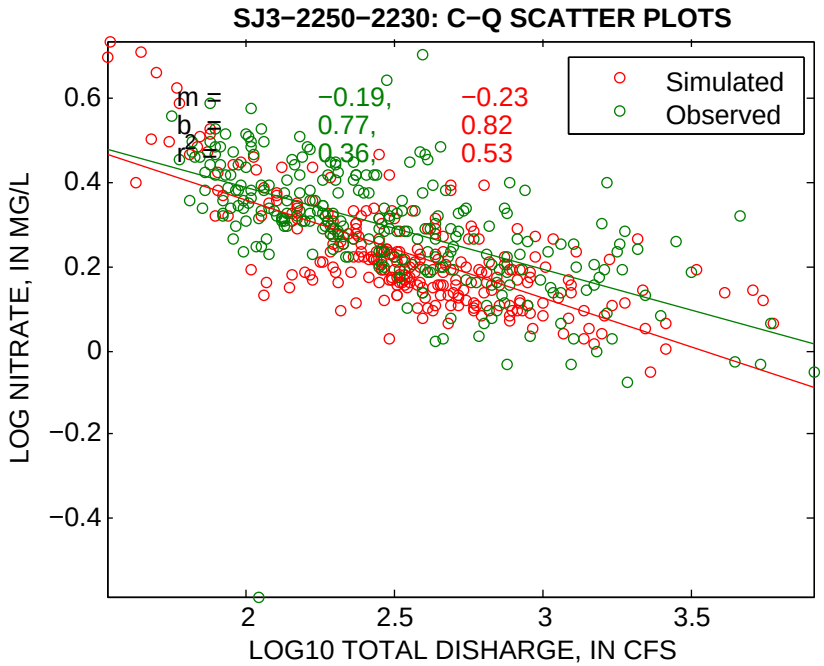
STATISTICS

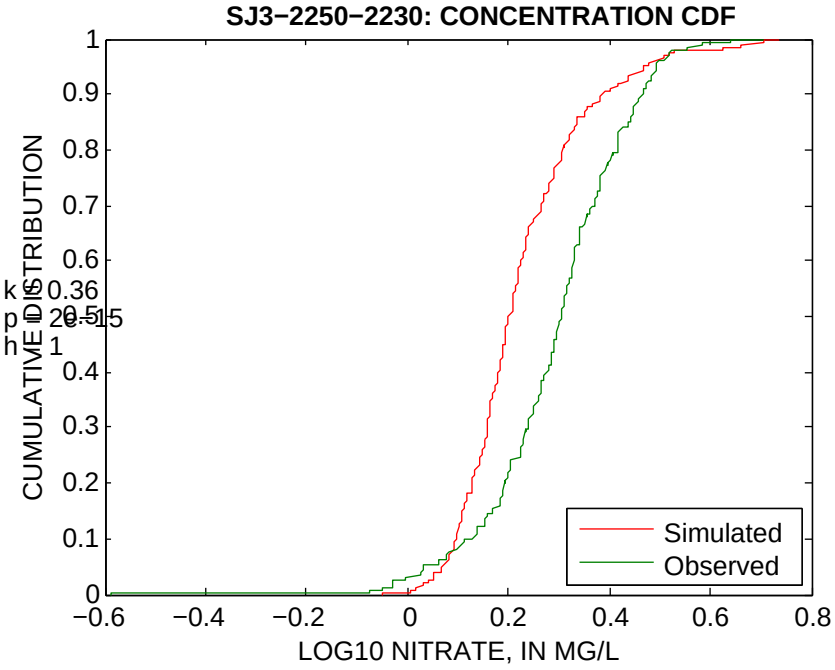
		observe	simulate
n		267	267
min		0.26	0.89628
		-0.585027	-0.0475563
mean		2.07467	1.78336
		0.295515	0.227076
media		2.03	1.5802
		0.307496	0.198712
max		5.06	6.1931
		0.704151	0.791908
varian		0.40416	0.529406
		0.0203303	0.0178549
JB		0.001	0.001
		0.001	0.001
		ra	log
%		-14.0416	-23.1592
err.va		0.677162	0.0281784
rel.std.err		1.67548	1.38603
mod.eff		-0.675481	-0.38603

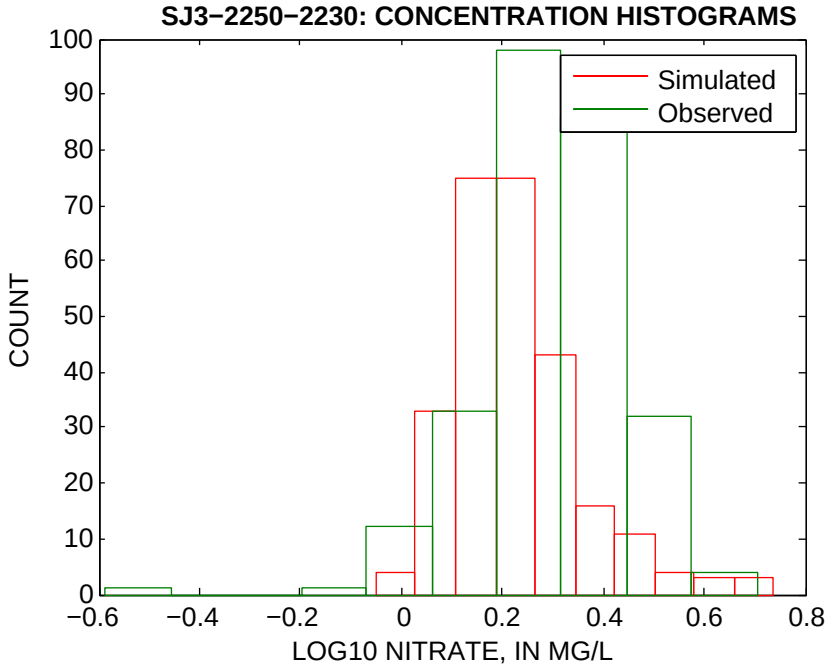
VERSION 2.1

ALL DATA
LOG10

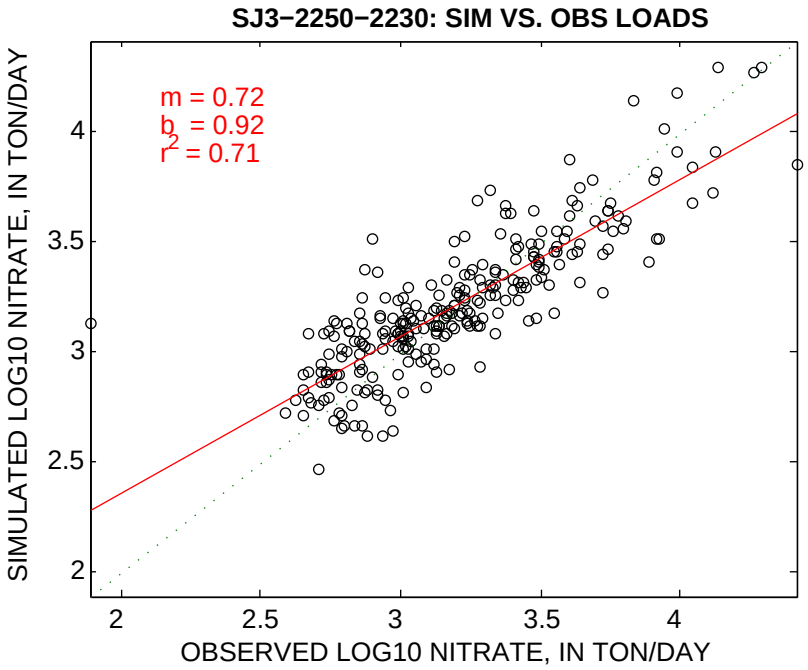


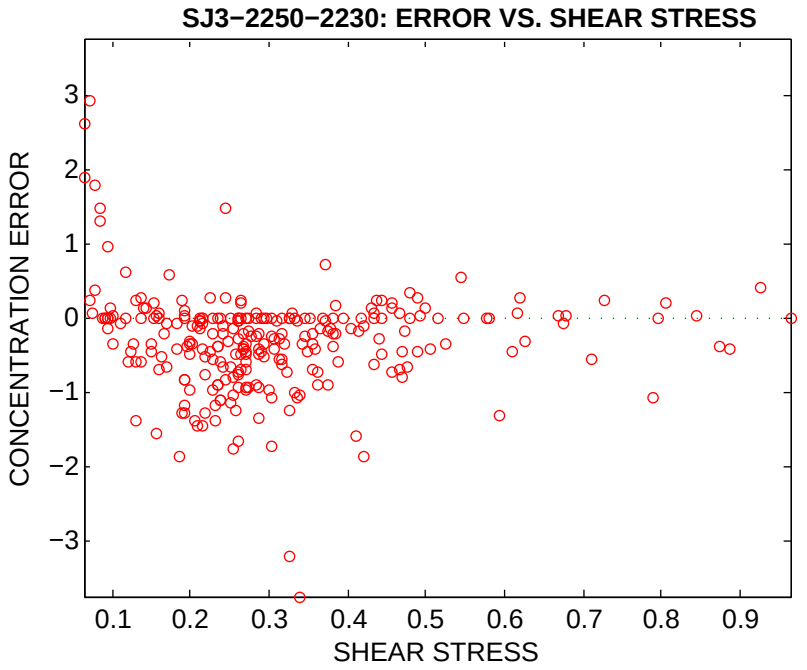


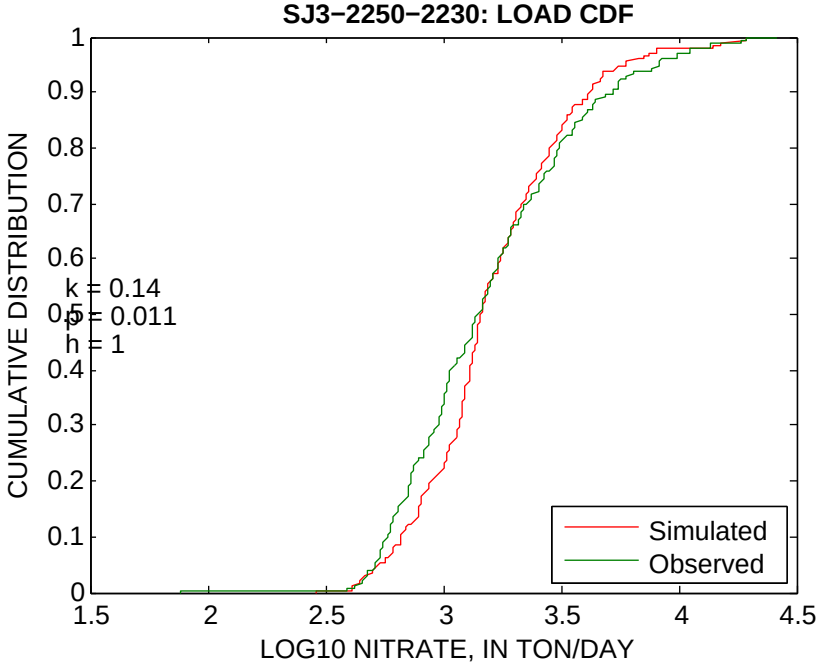


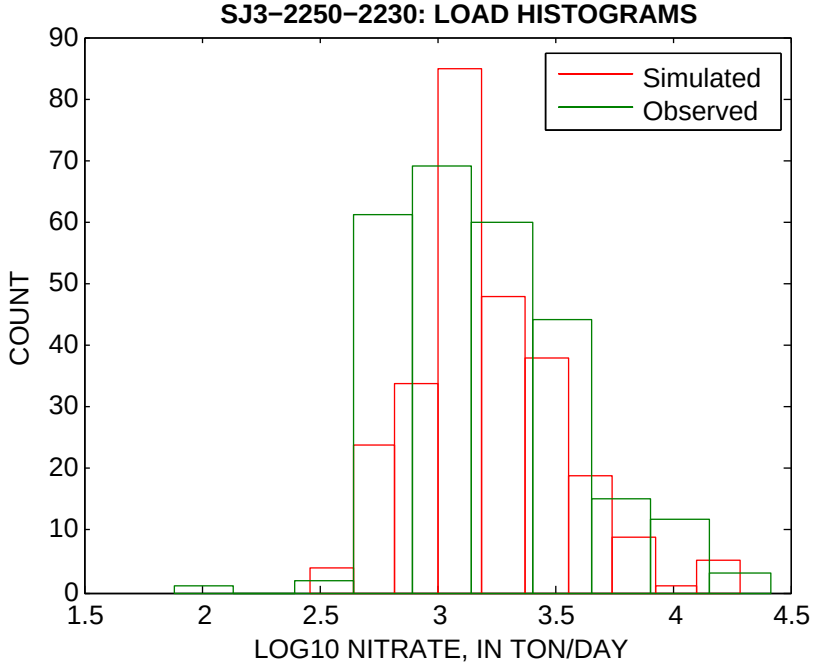


LOAD DATA
LOG10

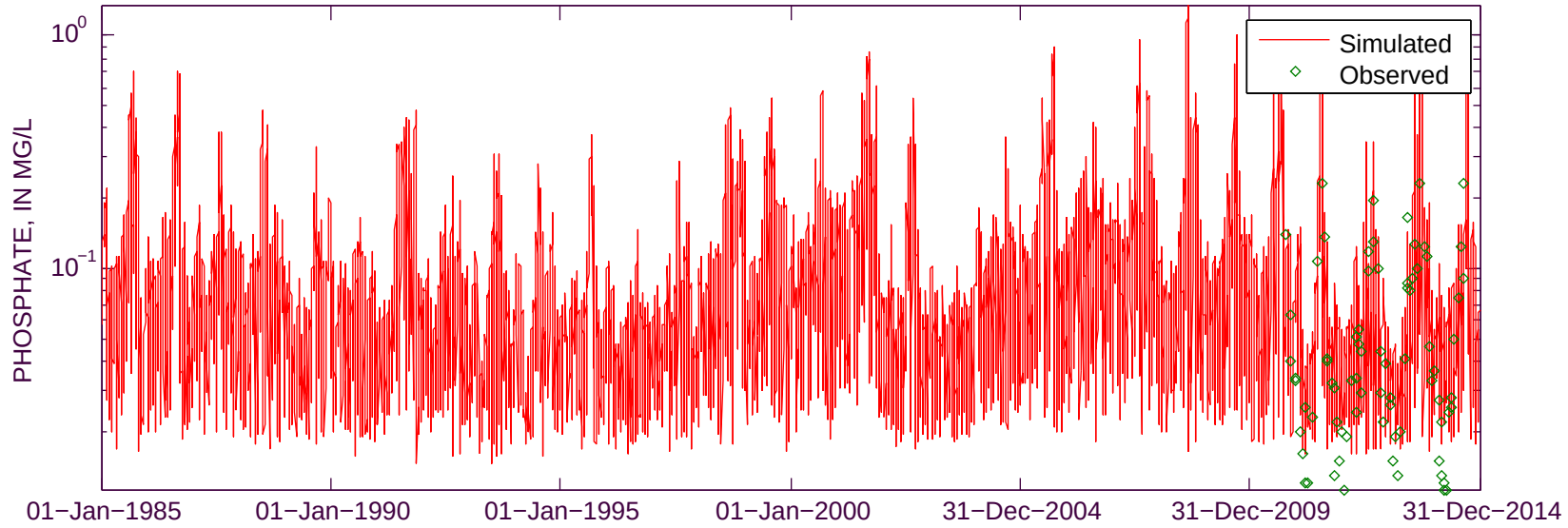




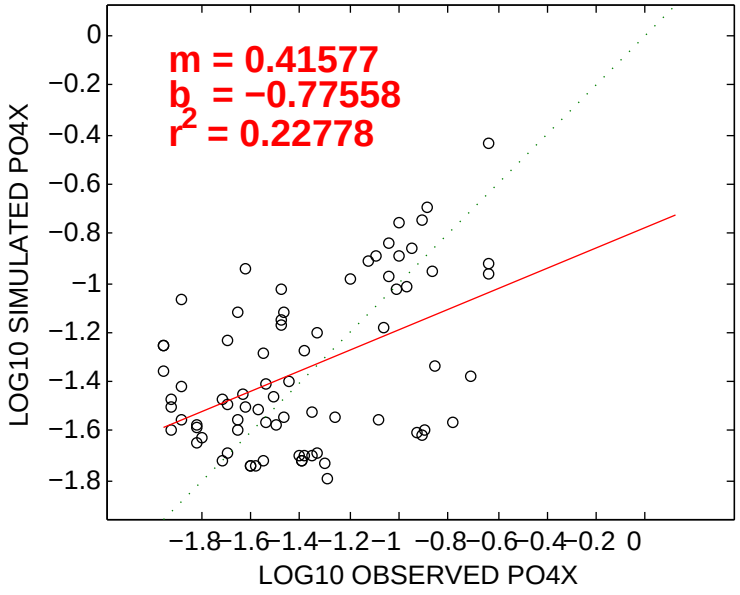




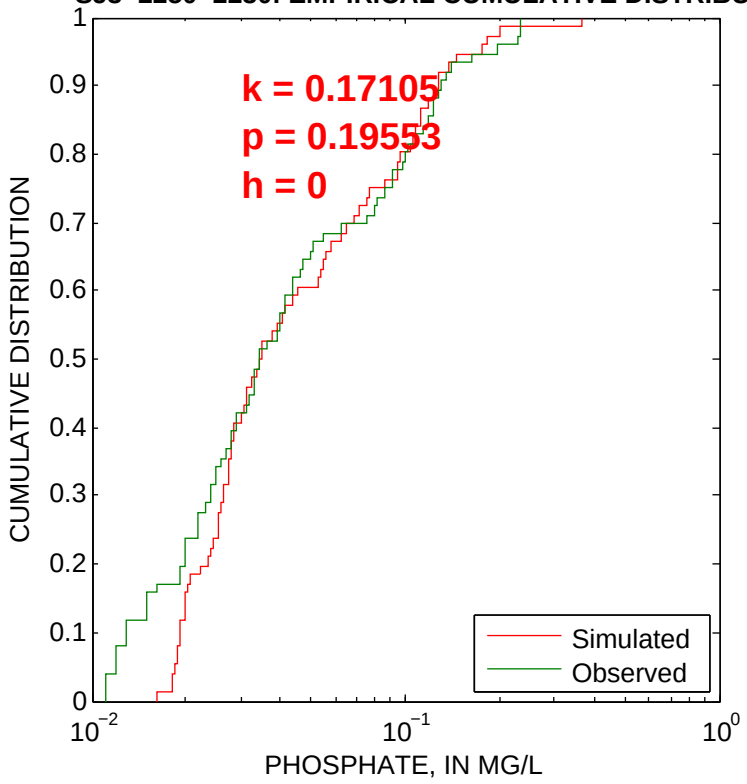
FRANKSTOWN BR JUNIATA RIVER AT WILLIAMSBURG, PA: PO4X TIME-SERIES



SJ3-2250-2230: SIMULATED VS. OBSERVED



SJ3-2250-2230: EMPIRICAL CUMULATIVE DISTRIBUTION



DATA SELECTION

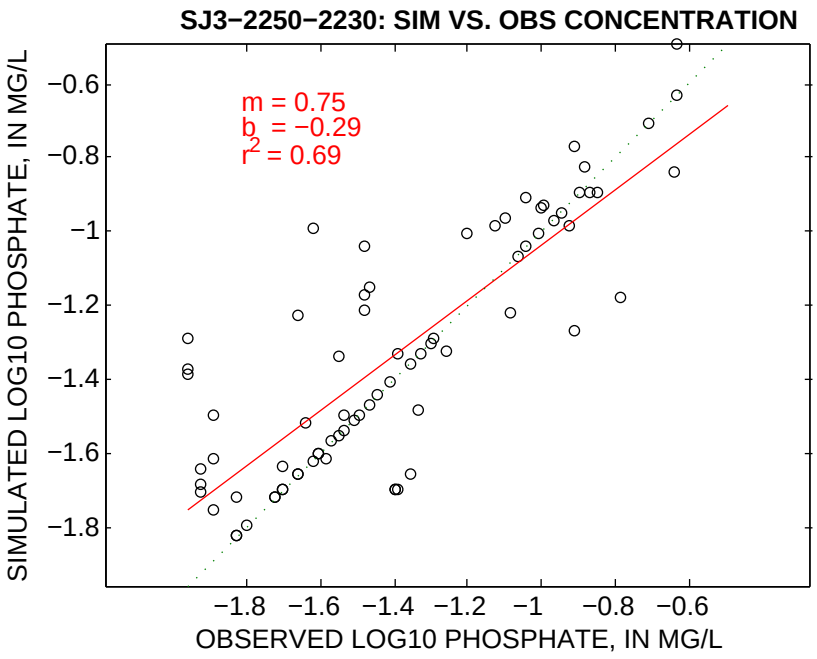
scenario: P620171001WQ
file: PO4X.calib
plot: PO4X - phosphate
Dates: 1/1/1985 12/31/201
Drive: N/A
Directory: model
Observed: OBS20161101

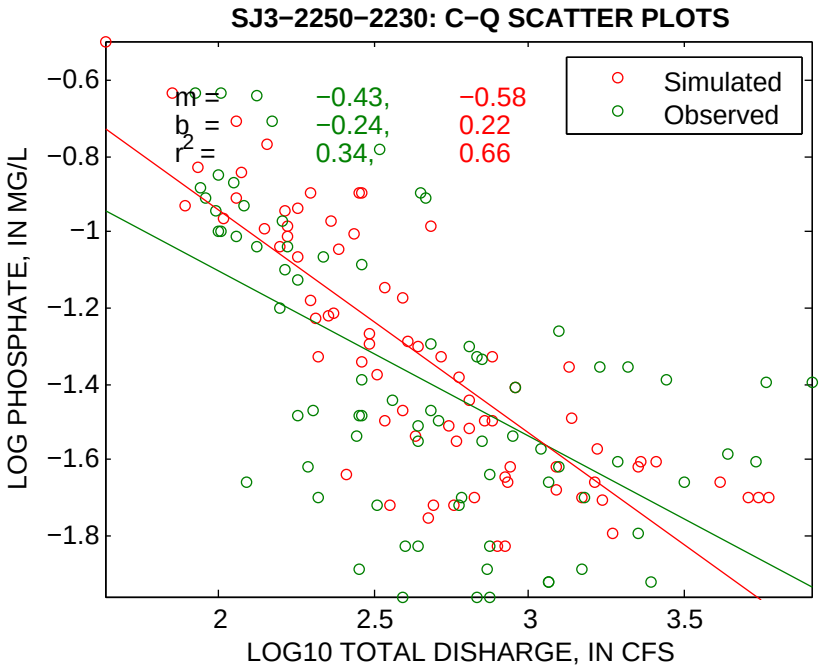
STATISTICS

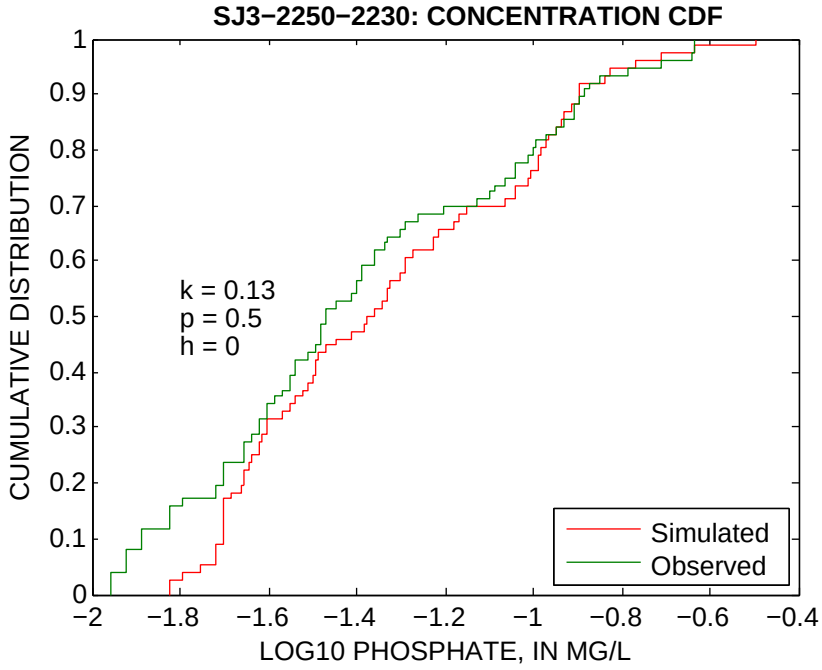
		observe	simulate
n		76	76
min		0.011	0.016164
		-1.95861	-1.79145
mean		0.0587368	0.0600292
		-1.39156	-1.35414
media		0.034	0.034348
		-1.46852	-1.46413
max		0.233	0.36402
		-0.632644	-0.438875
varian		0.00301958	0.00320659
		0.136922	0.103911
JB		0.001	0.001
		0.078125	0.034533
		ra	log
%		2.20034	-2.68857
err.va		0.00261397	0.128395
rel.std.err		1.865672	0.937722
mod.eff		0.134328	0.0622784

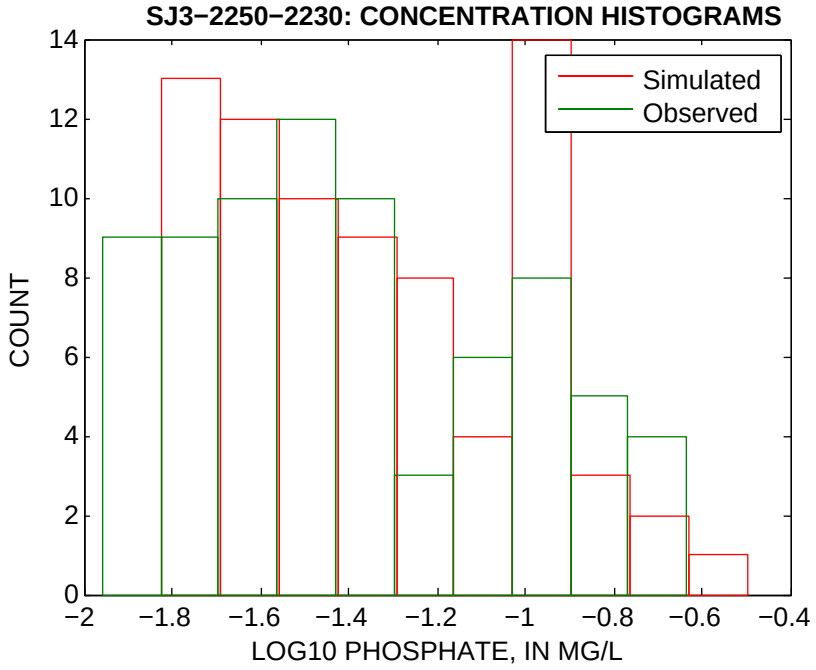
VERSION 2.1

ALL DATA
LOG10

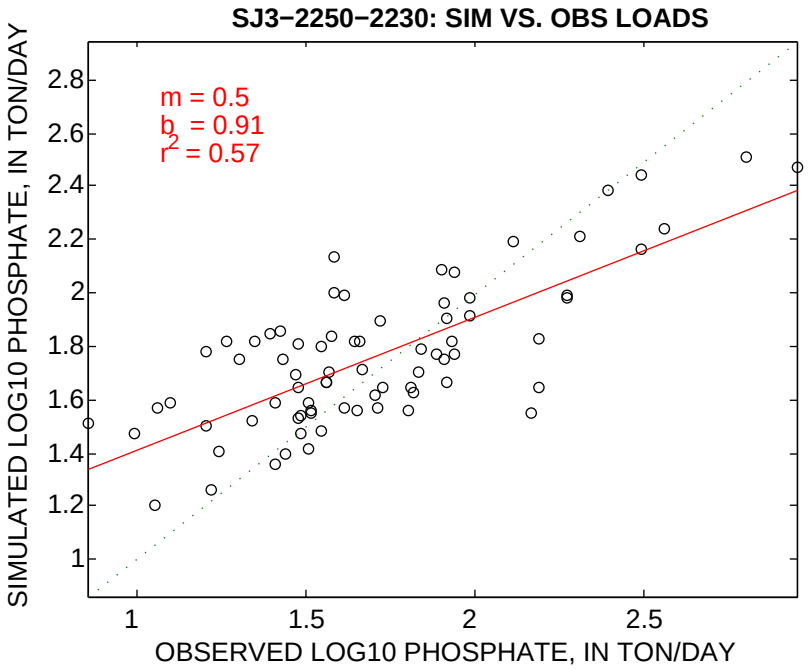


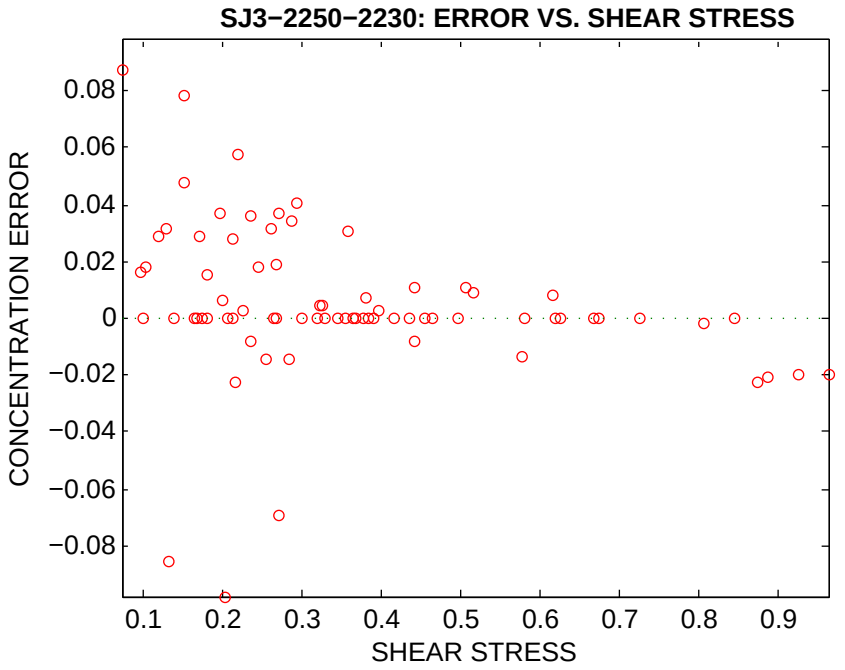


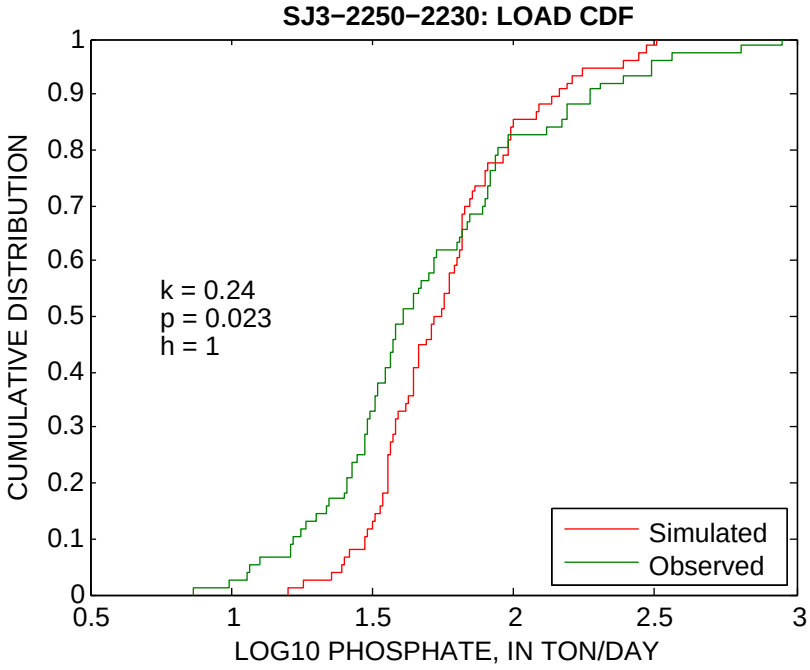


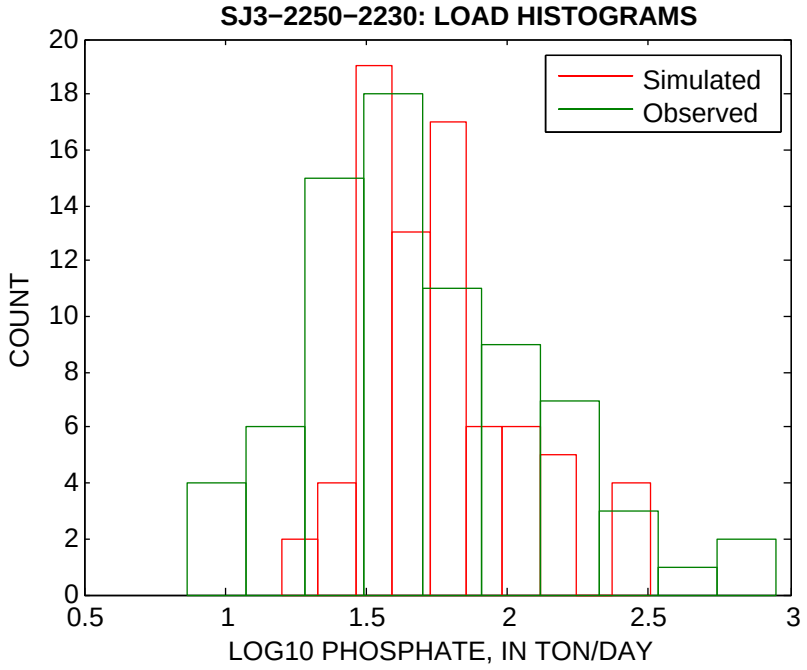


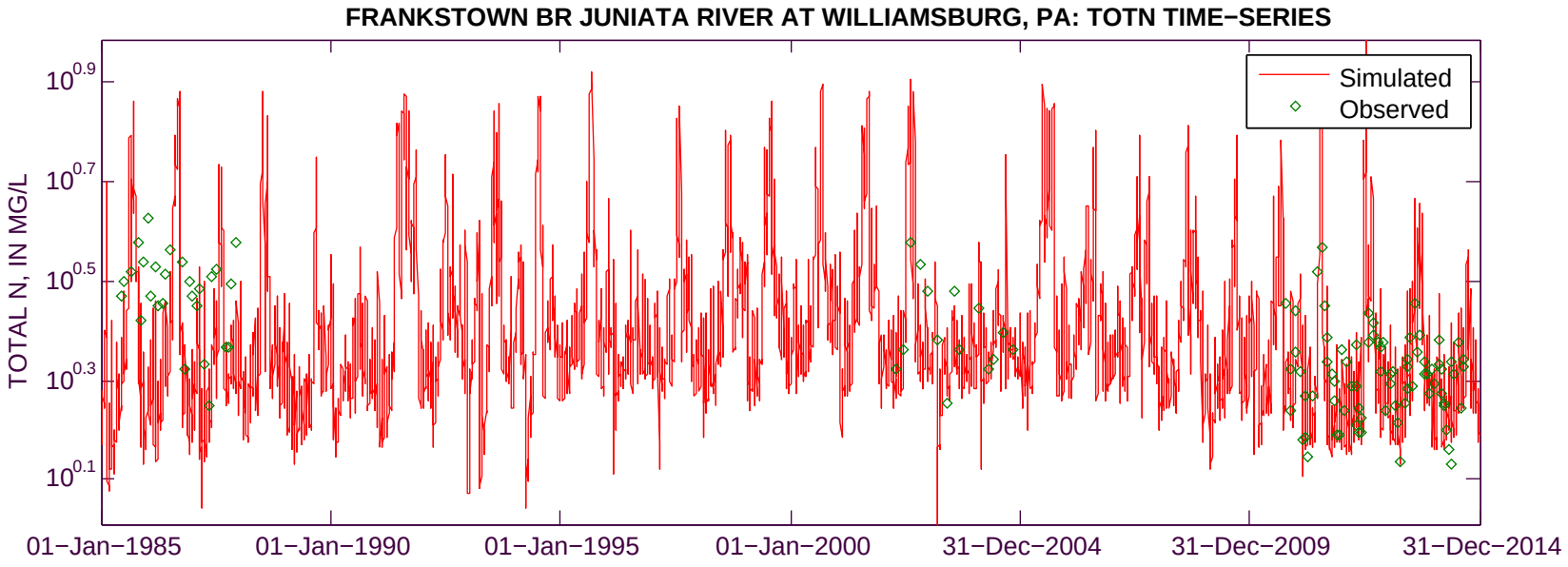
LOAD DATA
LOG10

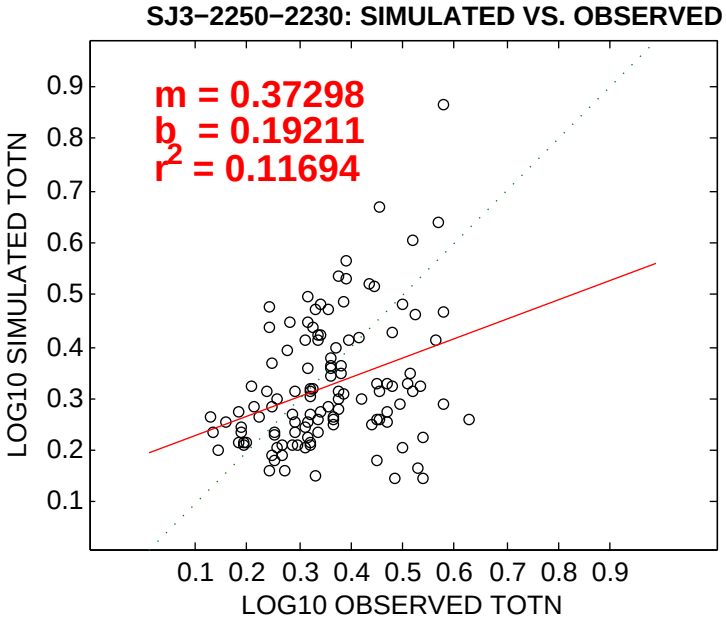


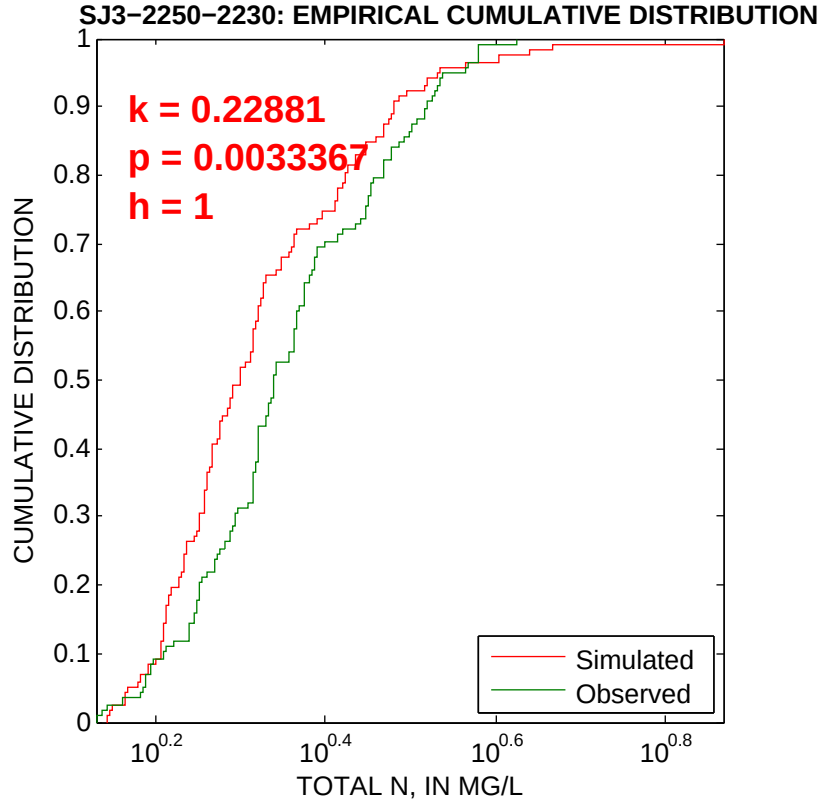












DATA SELECTION

scenario	file
P620171001WQ	TOTN.calib

plot: TOTN - total nitrogen

Dates: 1/1/1985 – 12/31/201

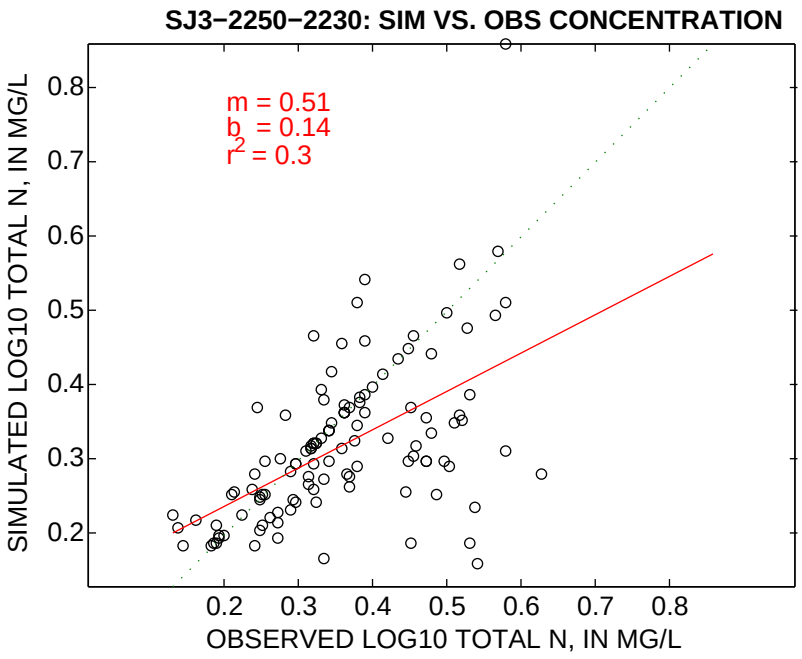
Drive	Directory	Observed
N/A	model	OBS20161101

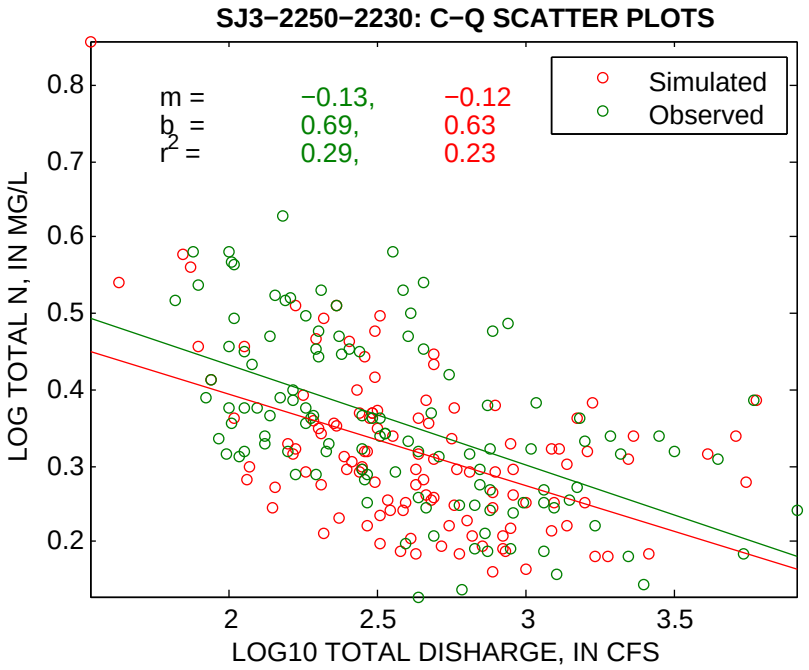
STATISTICS

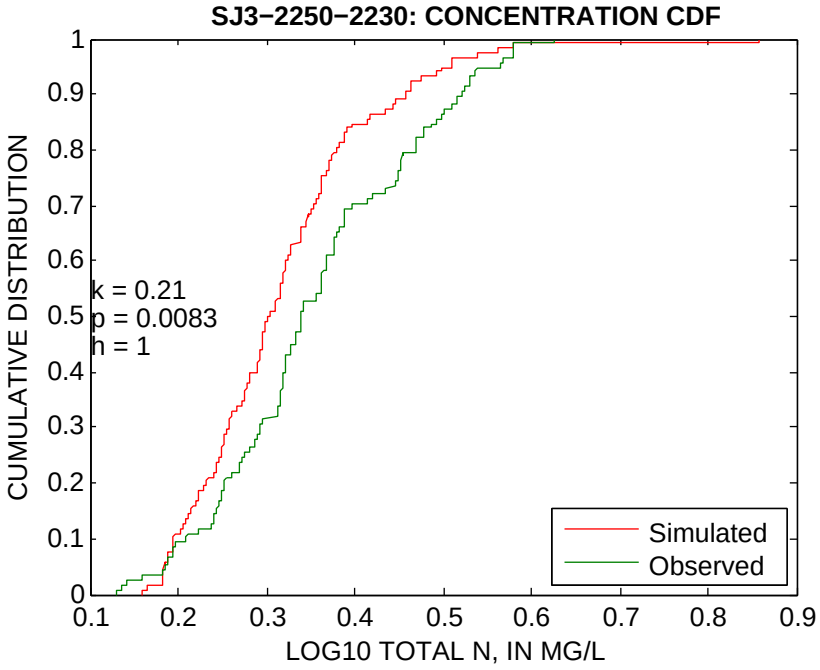
	n	118	118
		observe	simulate
min		1.347	1.3943
		0.129368	0.144356
mean		2.35016	2.2107
		0.356484	0.325068
media		2.1845	1.9955
		0.339351	0.300052
max		4.23	7.3858
		0.62634	0.868398
varian		0.394823	0.620271
		0.0125862	0.0149729
JB		0.012394	0.001
		0.174446	0.001
		ra	log
%		-5.93403	-8.81273
err.va		0.690956	0.0191658
rel.std.err		1.75004	1.52276
mod.eff		-0.75004	-0.52276

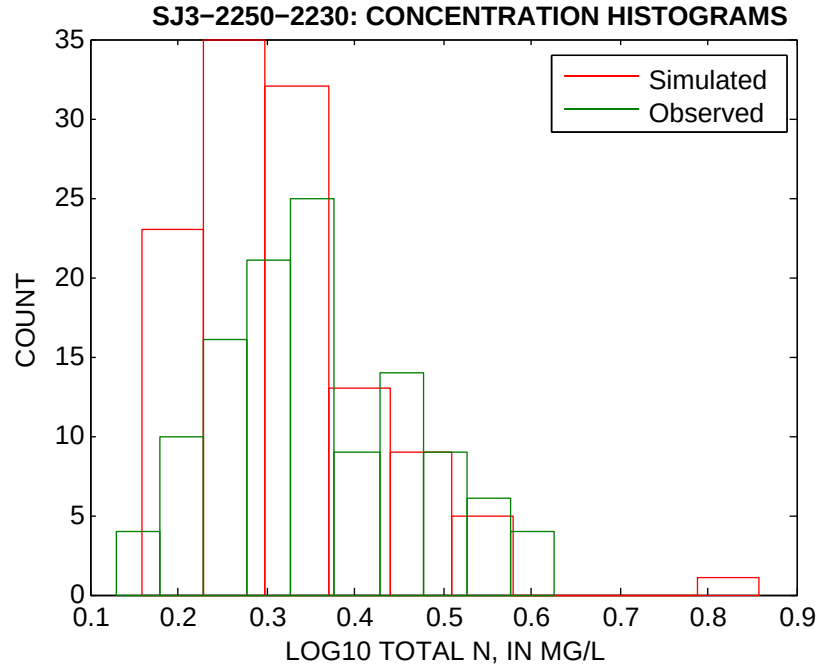
VERSION 2.1

ALL DATA
LOG10

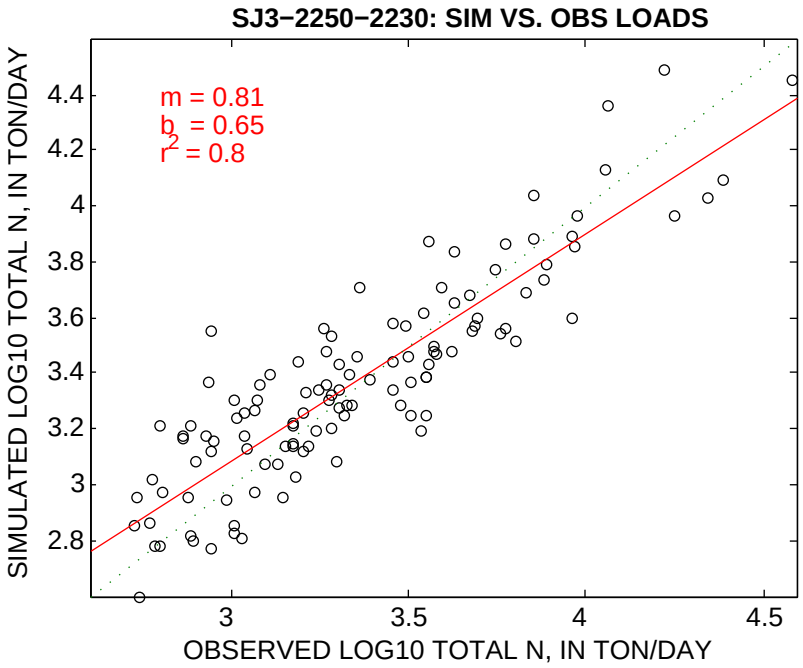


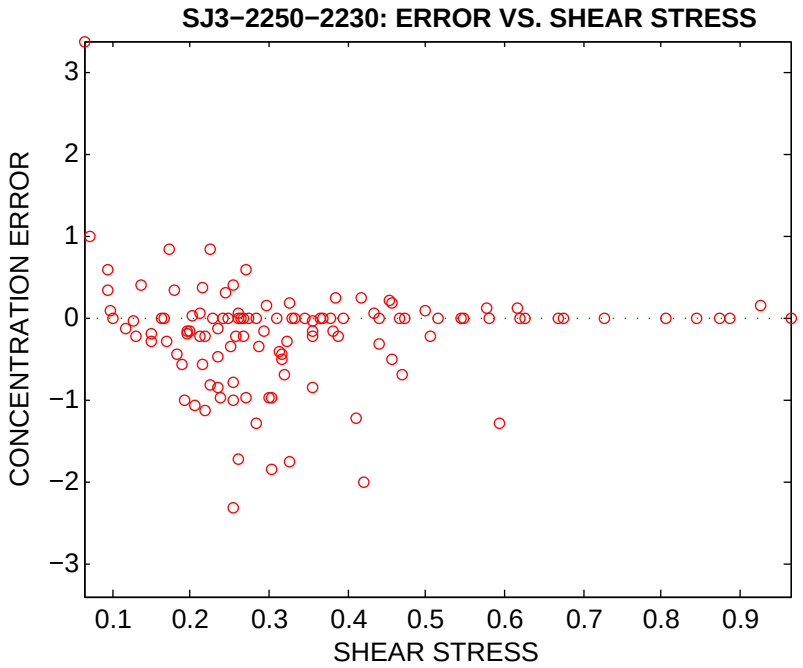


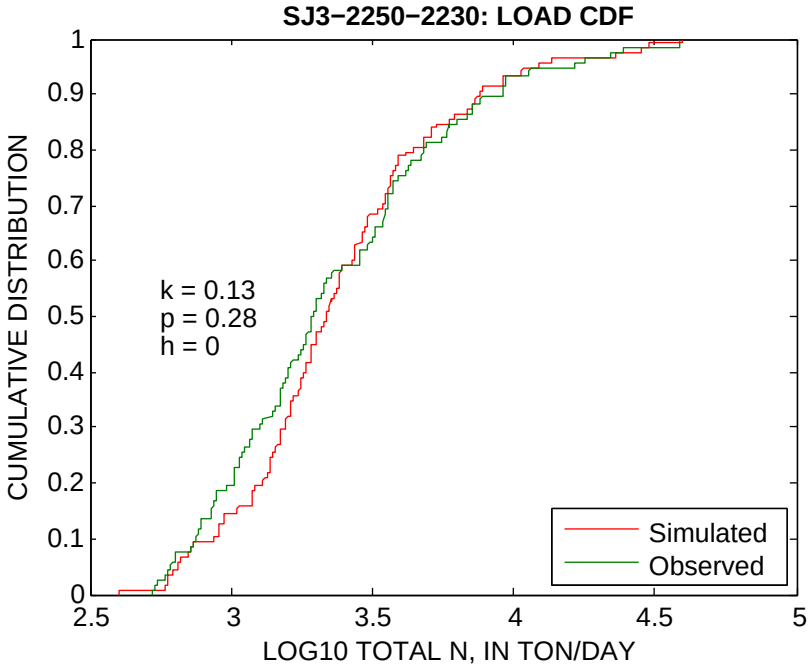


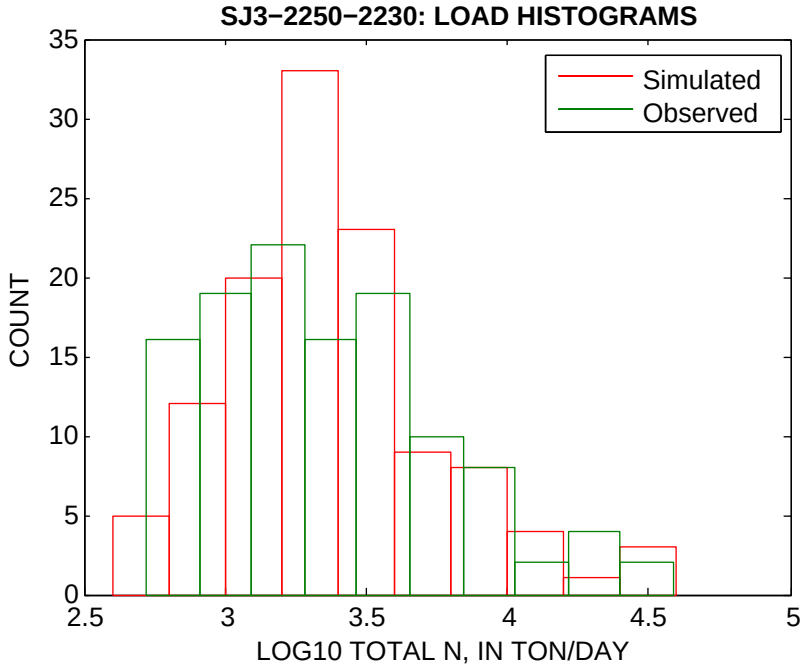


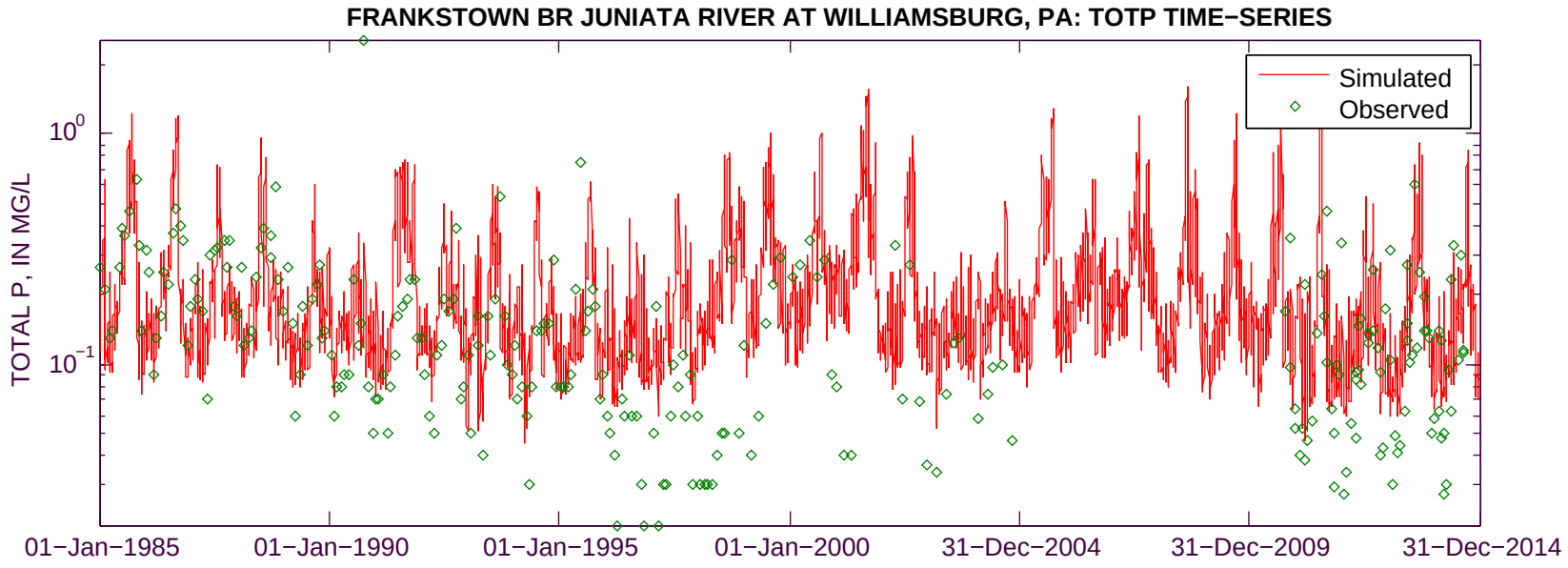
LOAD DATA
LOG10

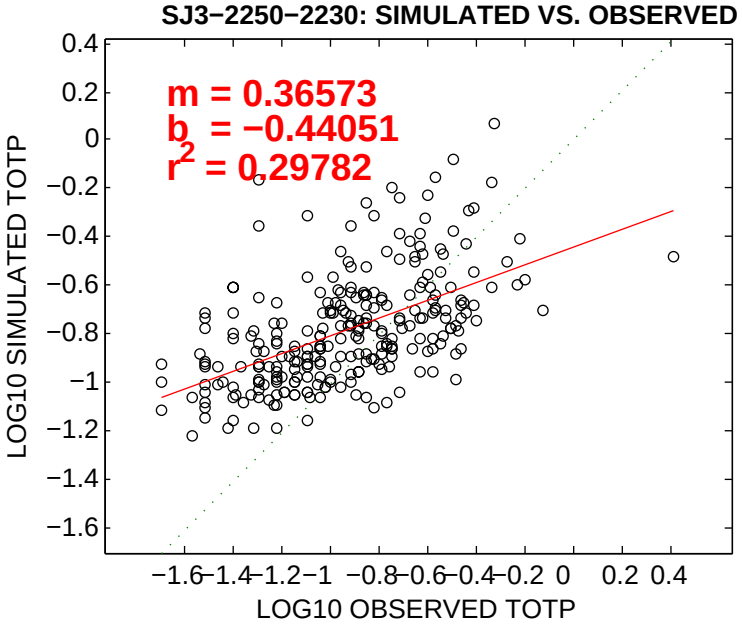


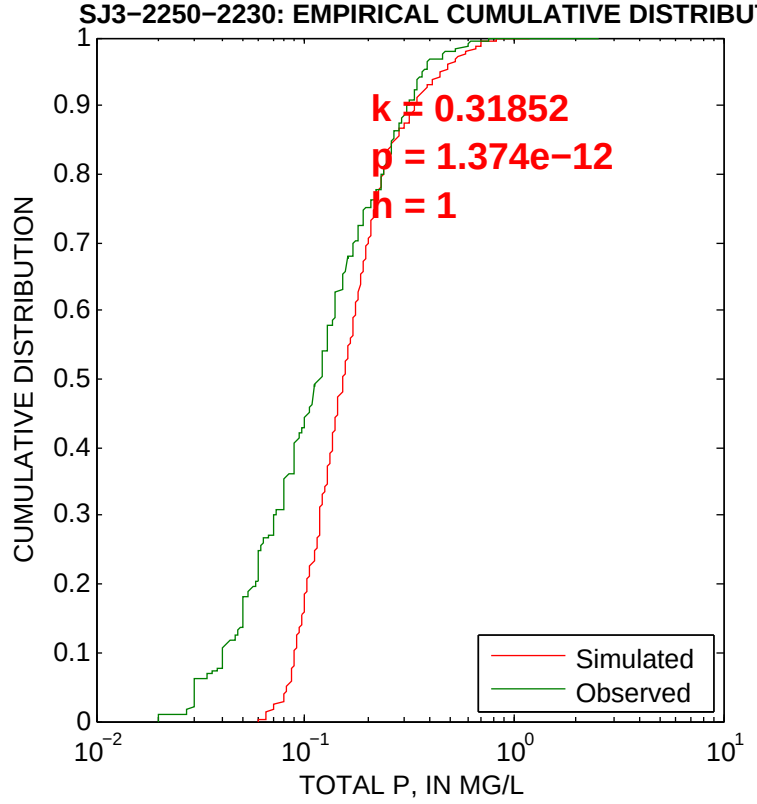












DATA SELECTION

scenario	file
P620171001WQ	TOTP.calib

plot: TOTP - total phosphorus

Dates: 1/1/1985 – 12/31/201

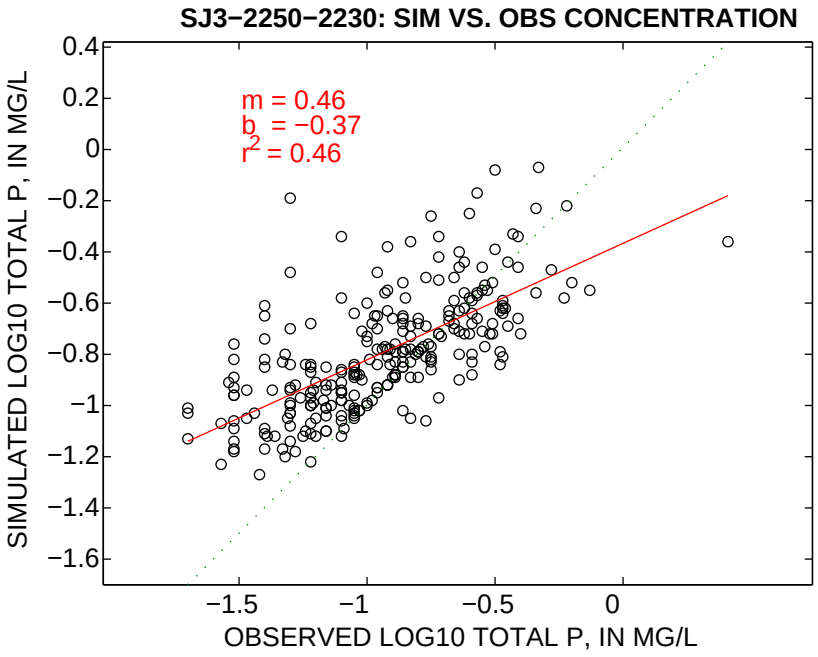
Drive	Directory	Observed
N/A	model	OBS20161101

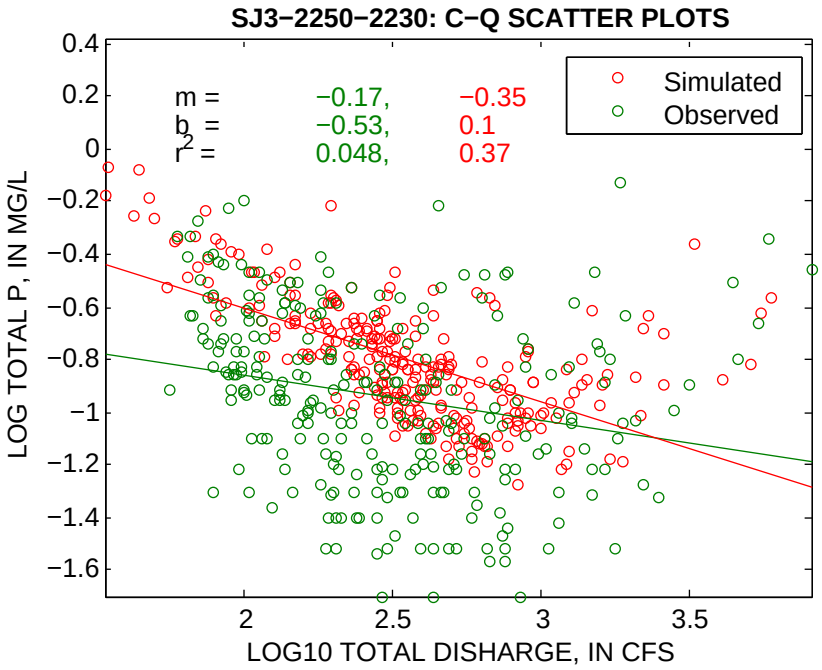
STATISTICS

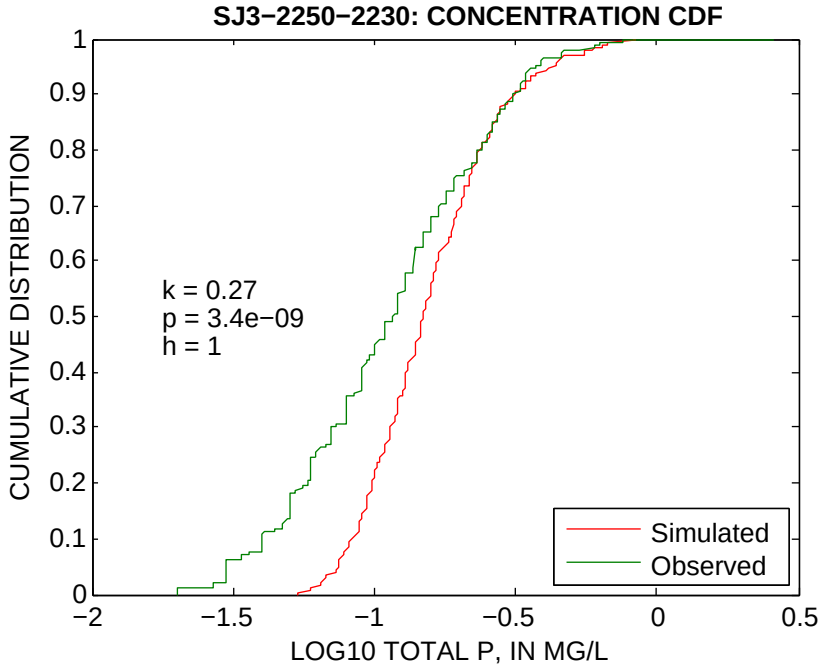
	n	270	270
		observe	simulate
min		0.02	0.060116
		-1.69897	-1.22101
mean		0.158207	0.192103
		-0.94217	-0.785089
media		0.1175	0.153625
		-0.929966	-0.813539
max		2.58	1.1759
		0.41162	0.0703704
varian		0.0357182	0.0183007
		0.115011	0.0516553
JB		0.001	0.001
		0.3963	0.001
		ra	log
%		21.4249	-16.6723
err.va		0.0384593	0.107306
rel.std.err		1.07674	0.933011
mod.eff		-0.0767435	0.0669889

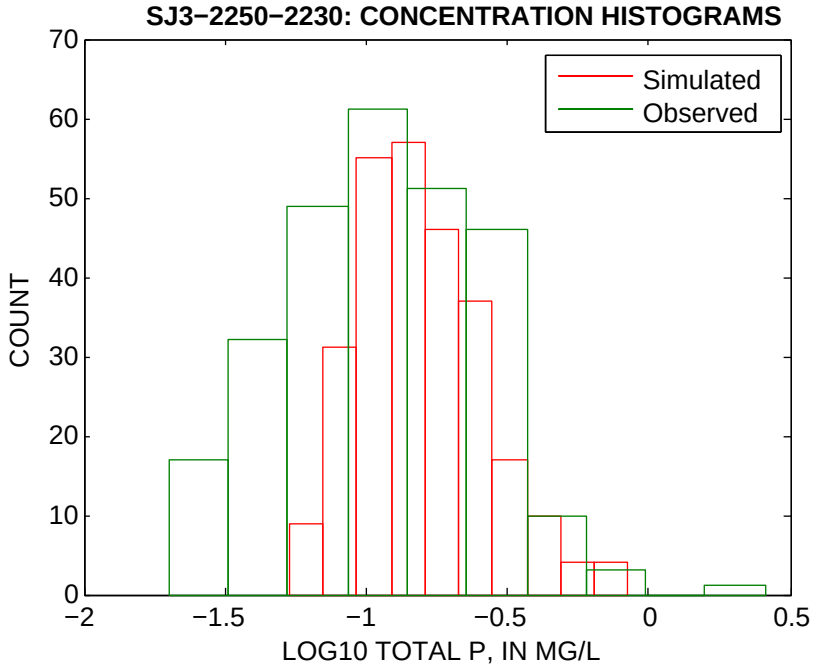
VERSION 2.1

ALL DATA
LOG10

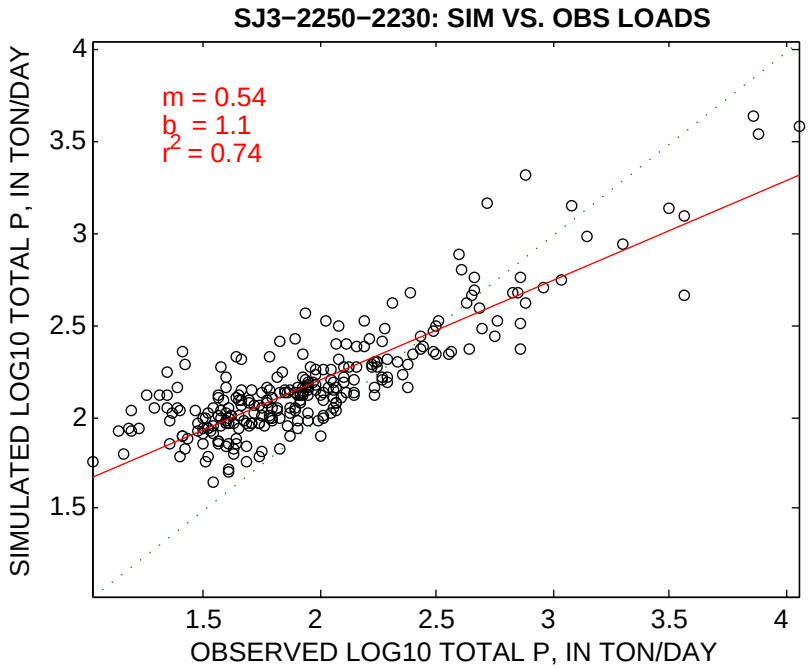


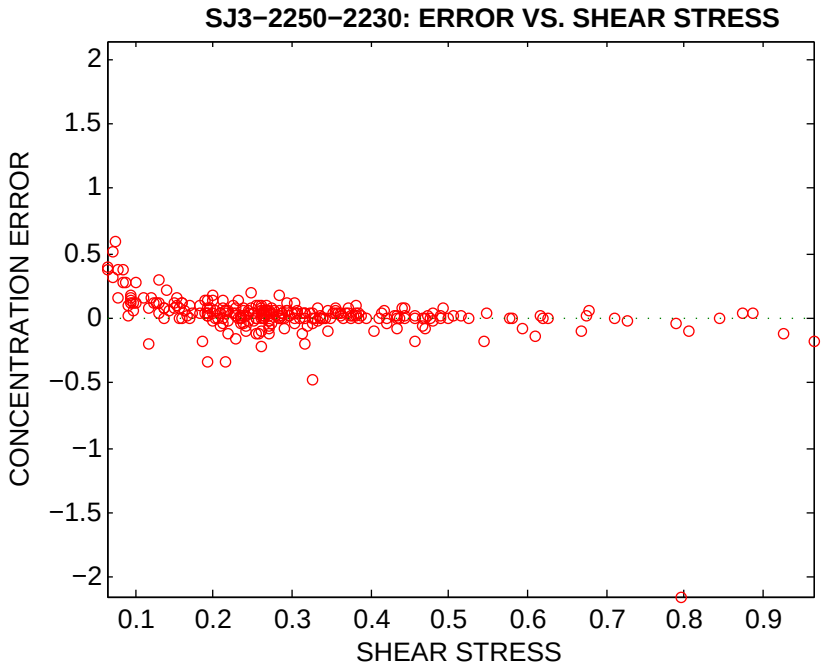


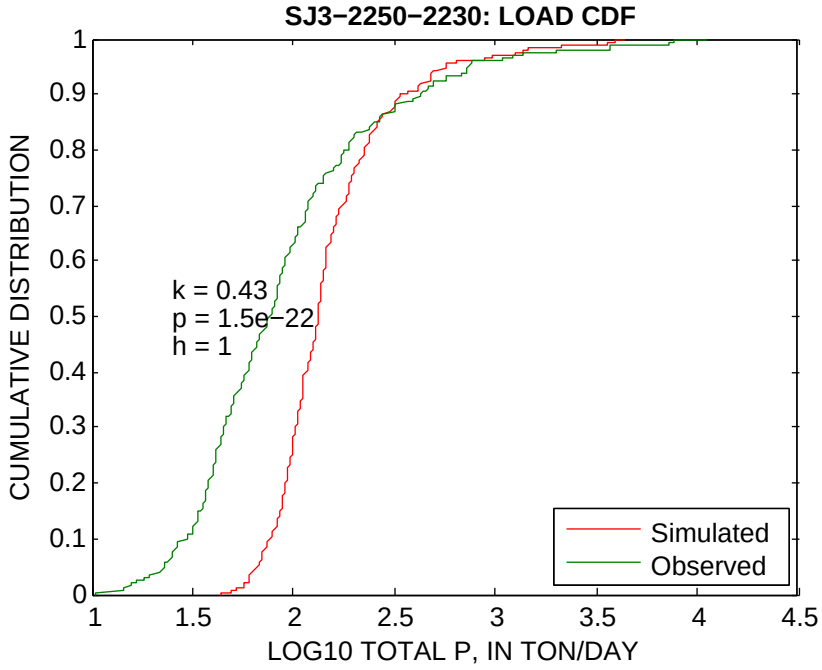


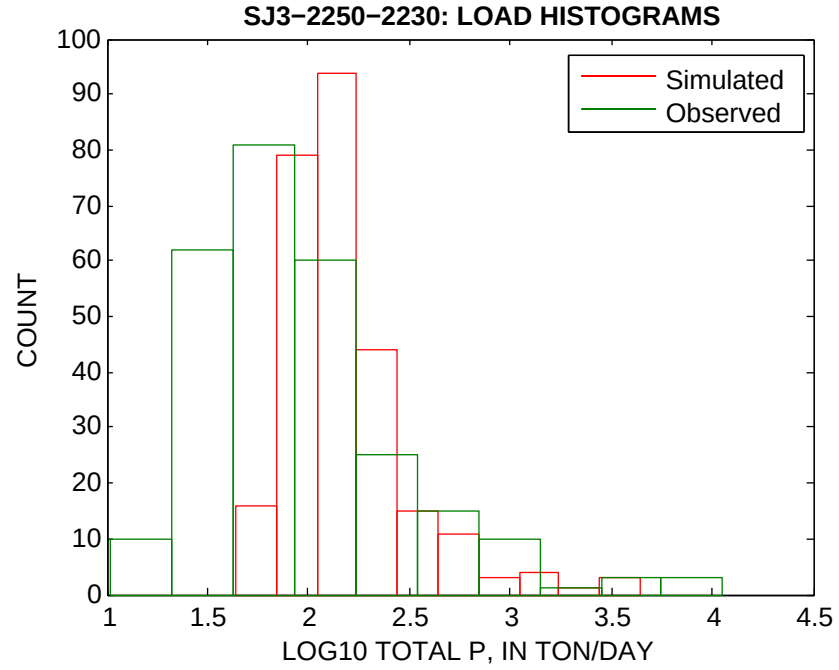


LOAD DATA
LOG10

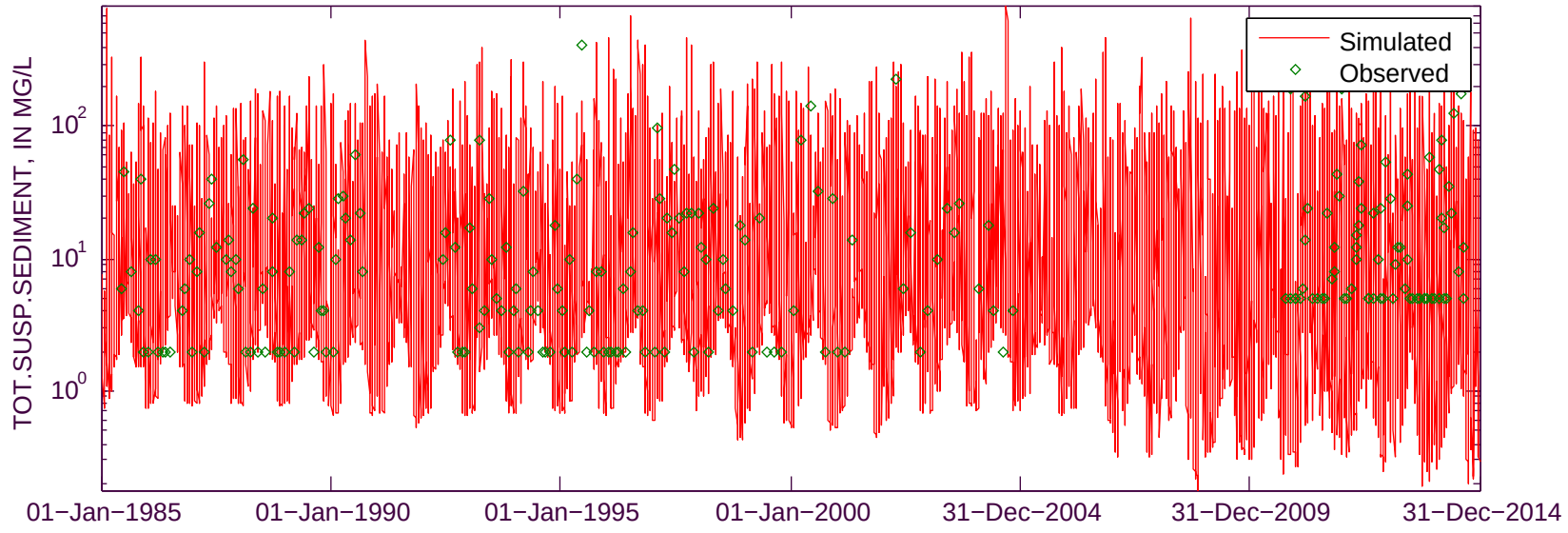




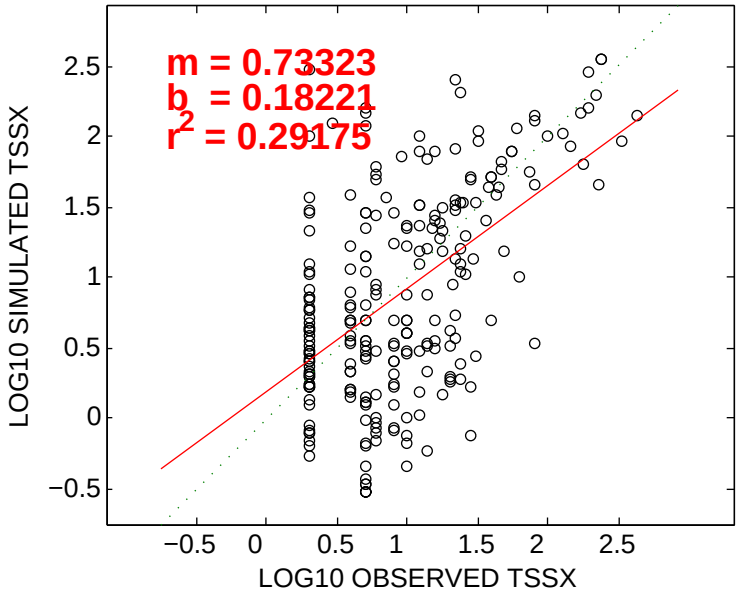




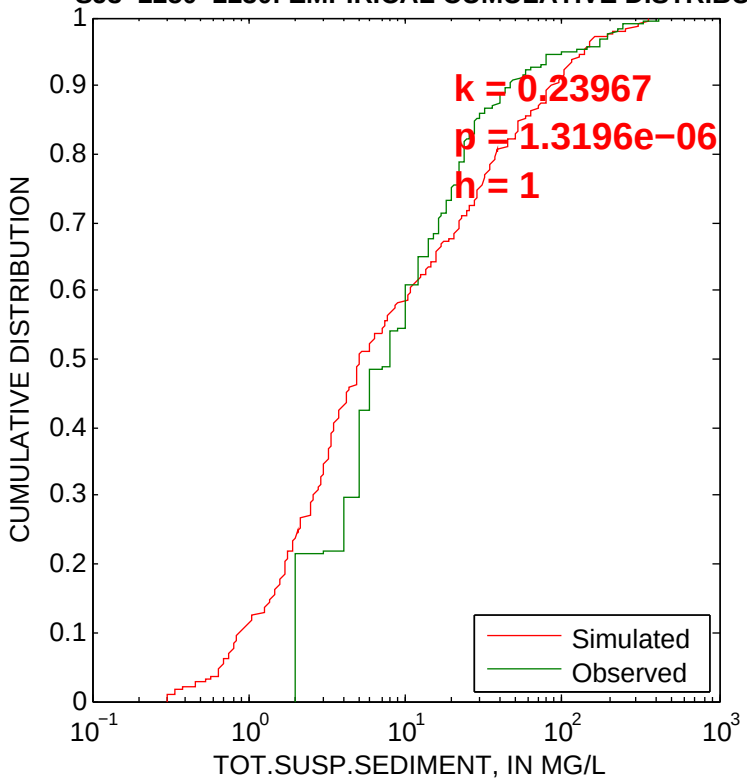
FRANKSTOWN BR JUNIATA RIVER AT WILLIAMSBURG, PA: TSSX TIME-SERIES



SJ3-2250-2230: SIMULATED VS. OBSERVED



SJ3-2250-2230: EMPIRICAL CUMULATIVE DISTRIBUTION



DATA SELECTION

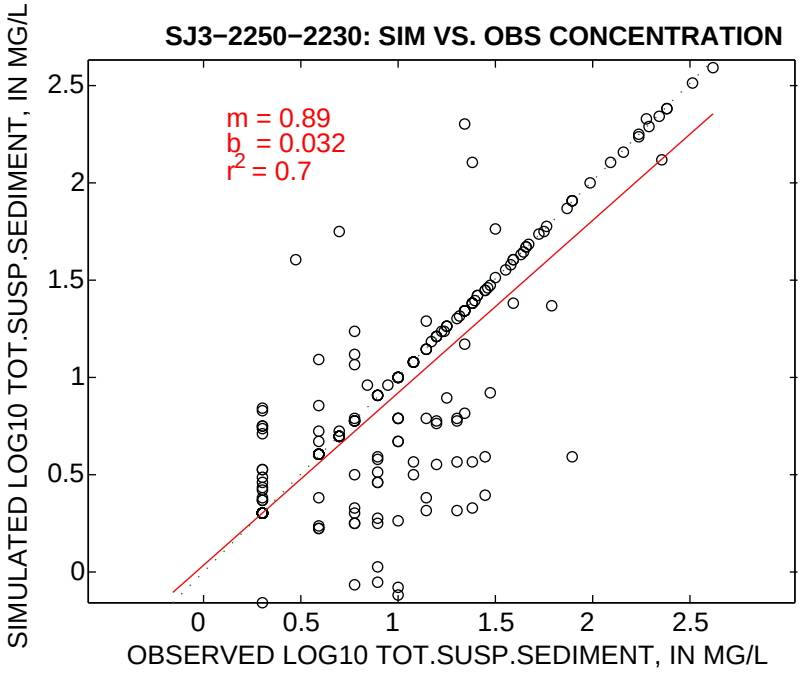
scenario: P620171001WQ
file: TSSX.calib
plot: TSSX - total suspended ...
Dates: 1/1/1985 12/31/201
Drive: N/A
Directory: model
Observed: OBS20161101

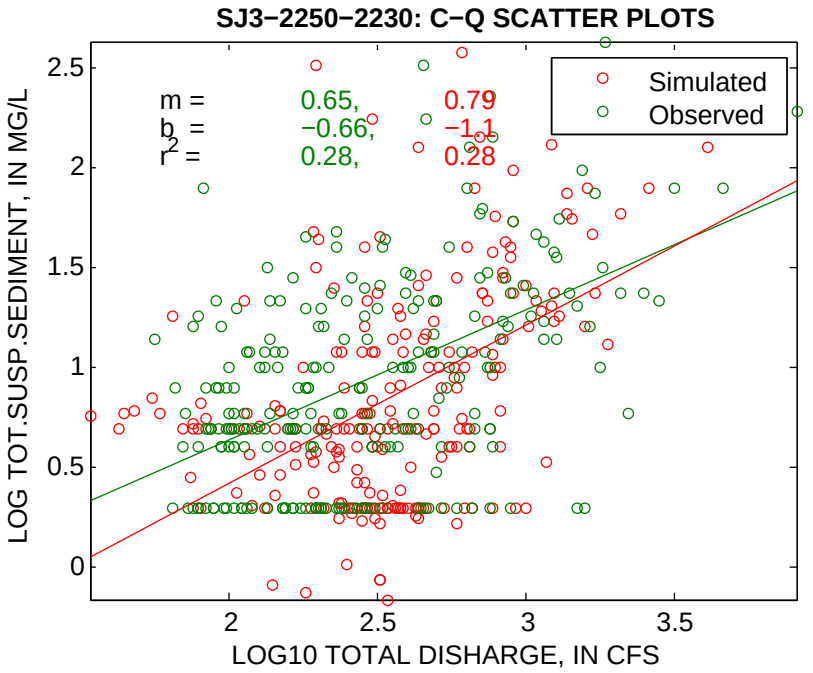
STATISTICS

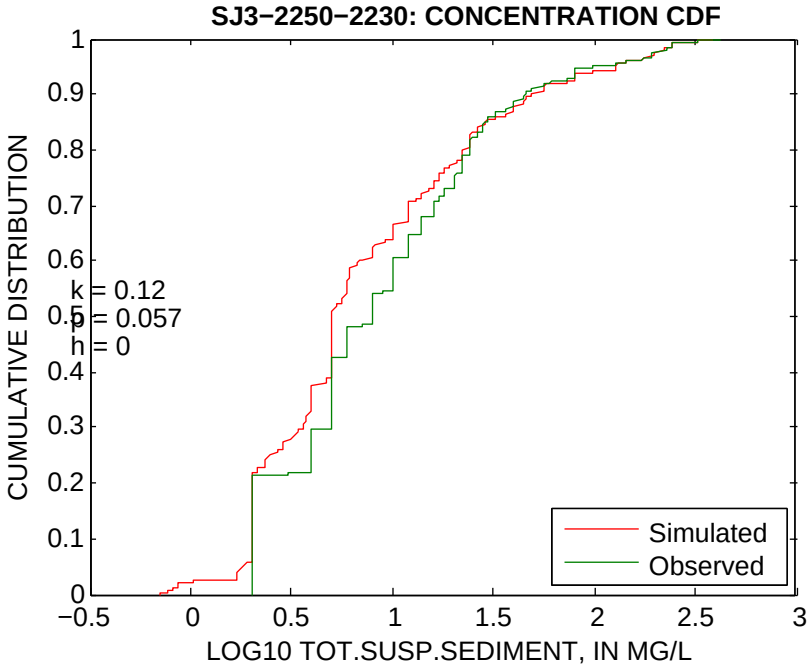
n	242	242
	observe	**simulate**
min	2	0.30014
	0.30103	-0.522676
mean	23.8107	29.3067
	0.957427	0.884231
media	8	5.0549
	0.90309	0.703711
max	420	352.52
	2.62325	2.54718
varian	2652.38	3100.47
	0.291676	0.53749
JB	0.001	0.001
	0.001392	0.013027
	ra	log
%	23.0819	-7.64505
err.va	2351.1	0.406813
rel.std.err	0.88641	1.39474
mod.eff	0.11359	-0.394743

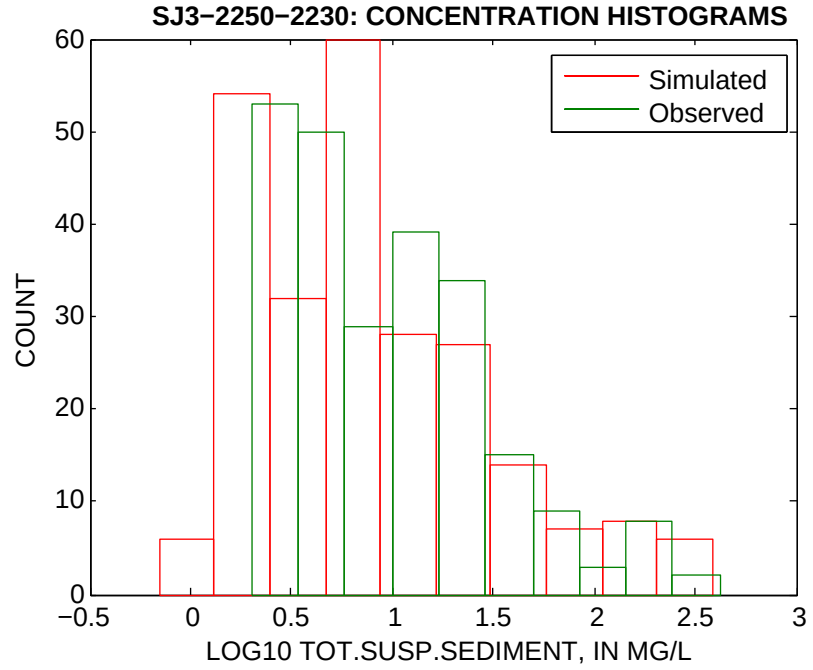
VERSION 2.1

ALL DATA
LOG10

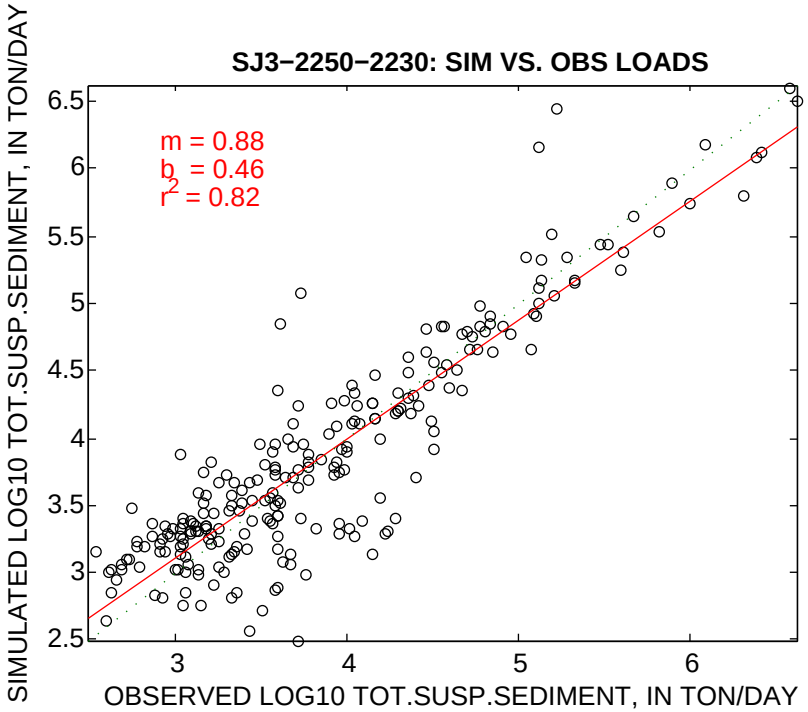


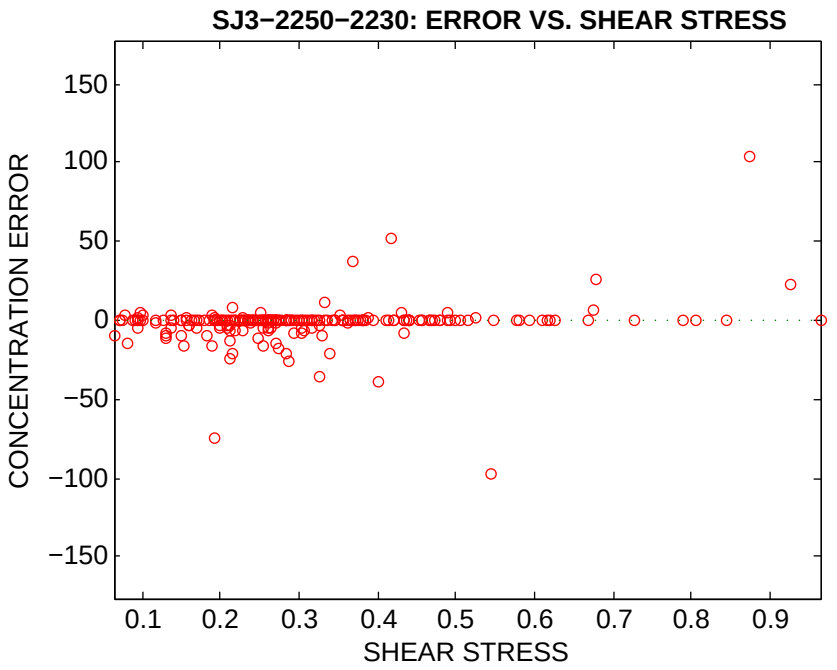


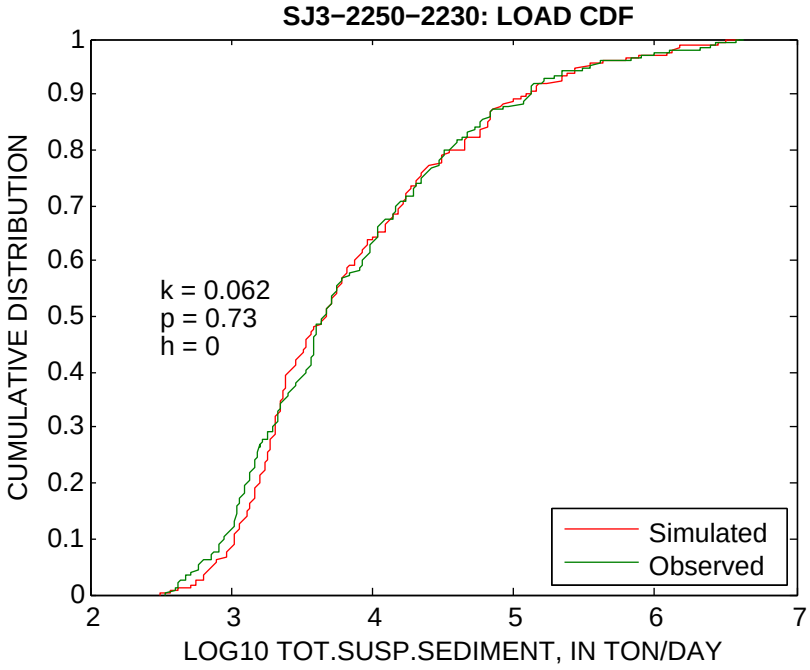


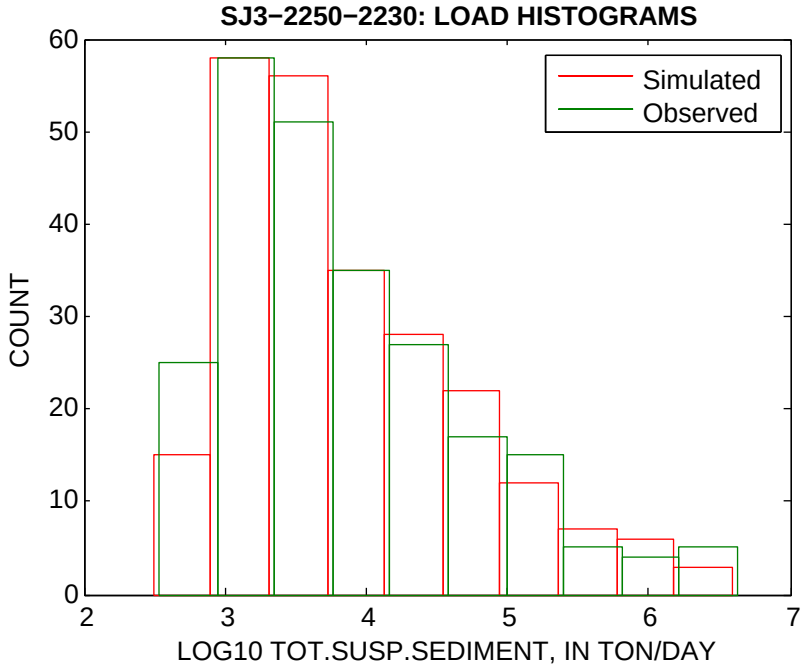


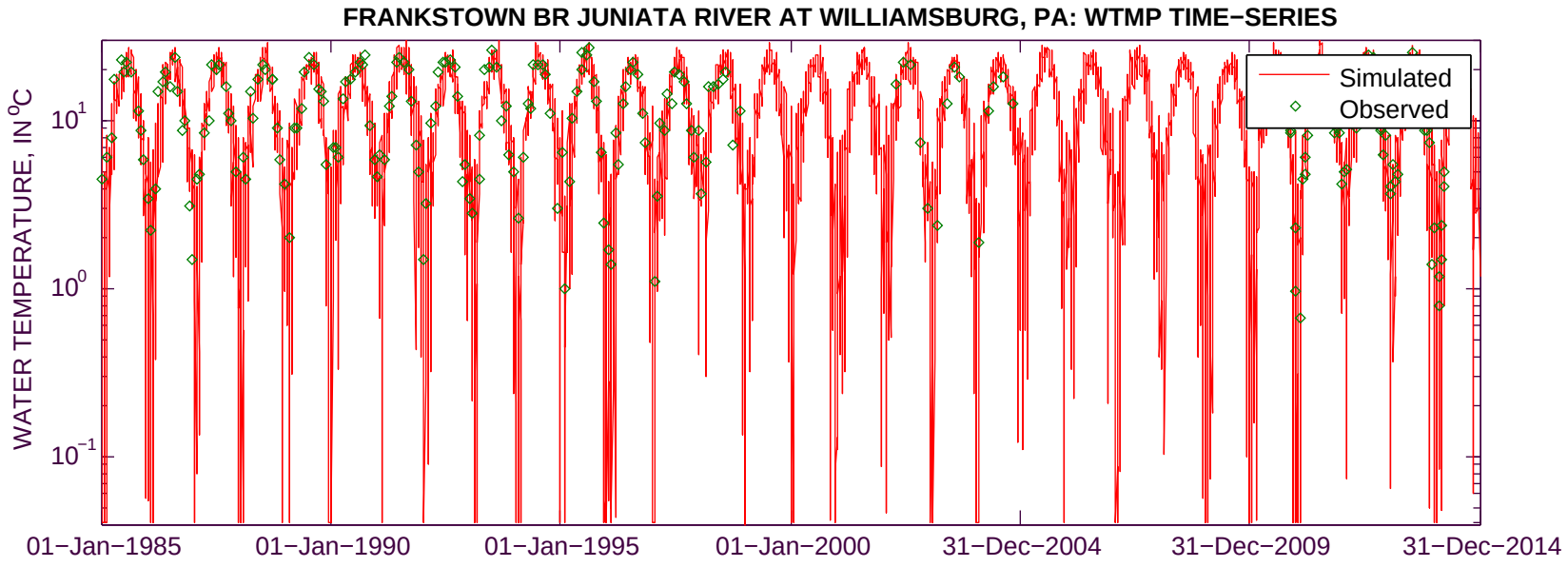
LOAD DATA
LOG10

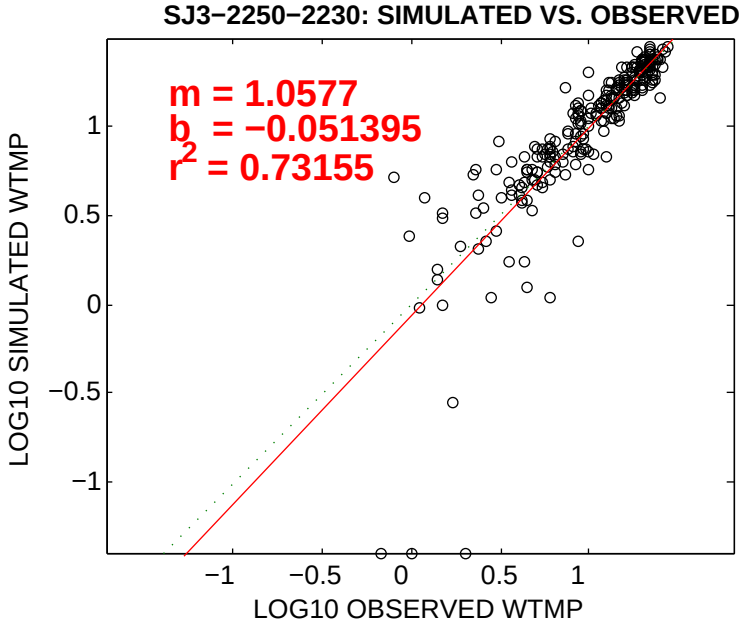


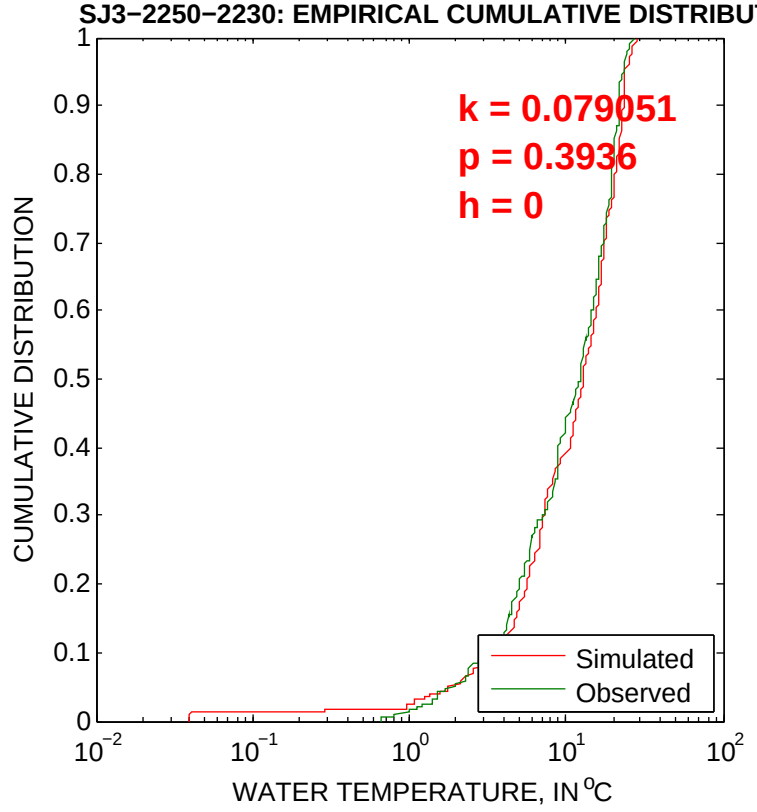












DATA SELECTION

scenario: P620171001WQ | file: WTMP.calib

plot: WTMP - water tempera...

Dates: 1/1/1985 – 12/31/201

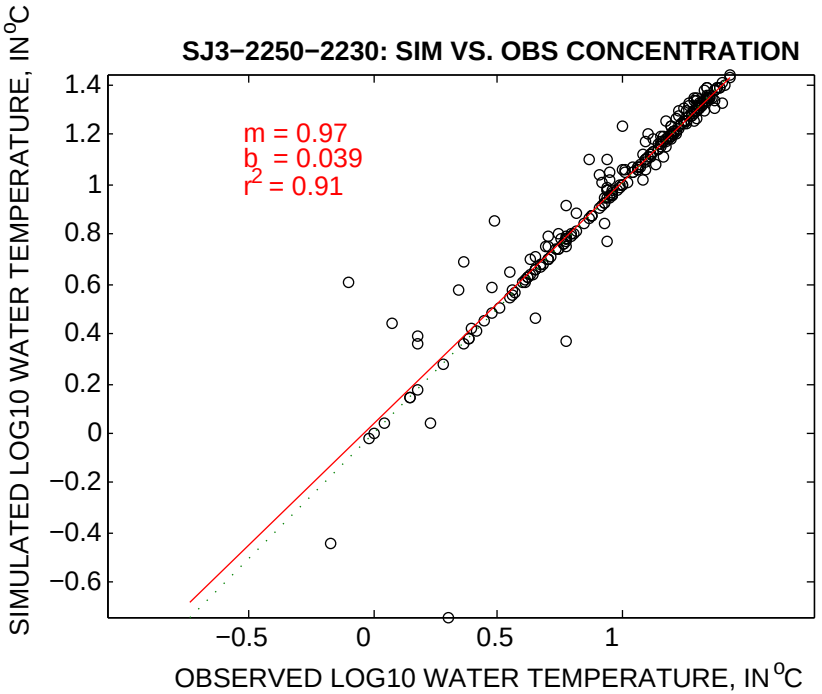
Drive: N/A | Directory: model | Observed: OBS20161101

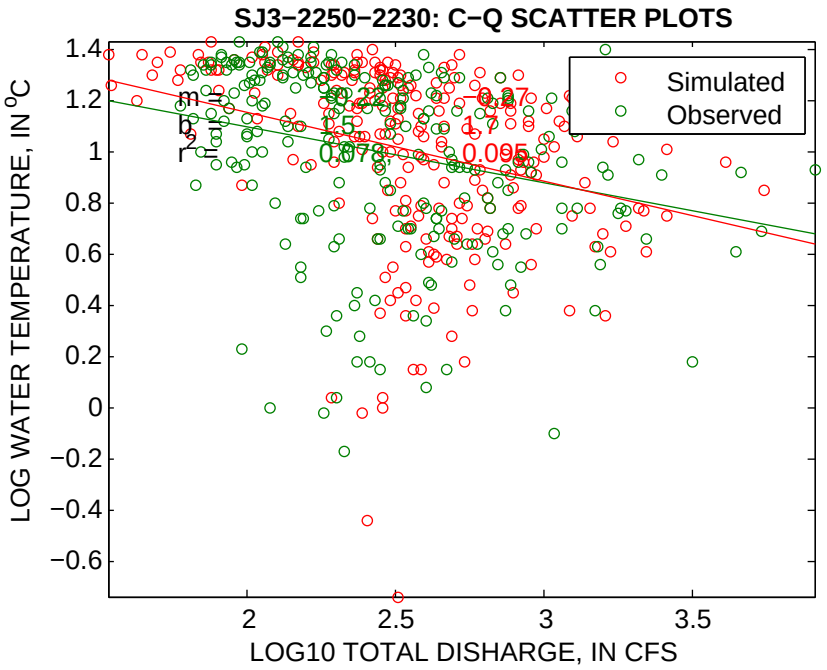
STATISTICS

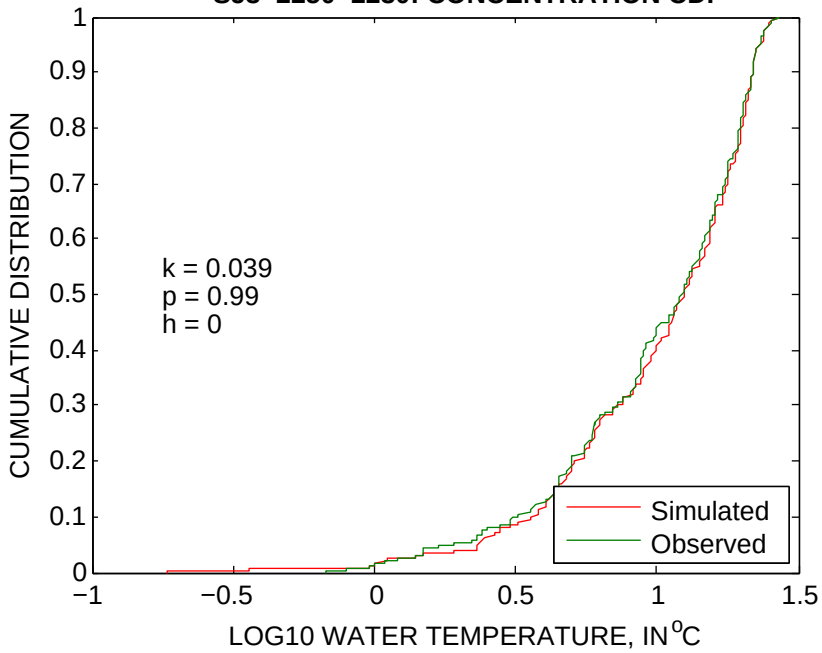
		observe	simulate
n		253	253
min		0.67	0.040015
		-0.173925	-1.39778
mean		12.3256	12.9938
		0.987019	0.992542
media		12.3	12.782
		1.08991	1.1066
max		27	28.157
		1.43136	1.44959
varian		49.1855	54.1181
		0.118487	0.181186
JB		0.004361	0.005465
		0.001	0.001
		ra	log
%		5.42125	0.559505
err.va		6.99336	0.049064
rel.std.err		0.142183	0.414087
mod.eff		0.857817	0.585913

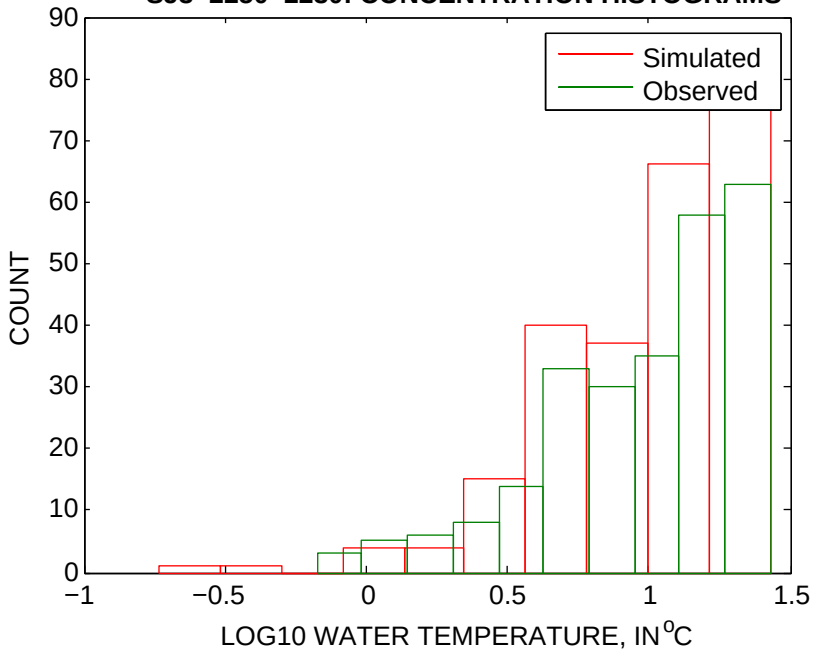
VERSION 2.1

ALL DATA
LOG10

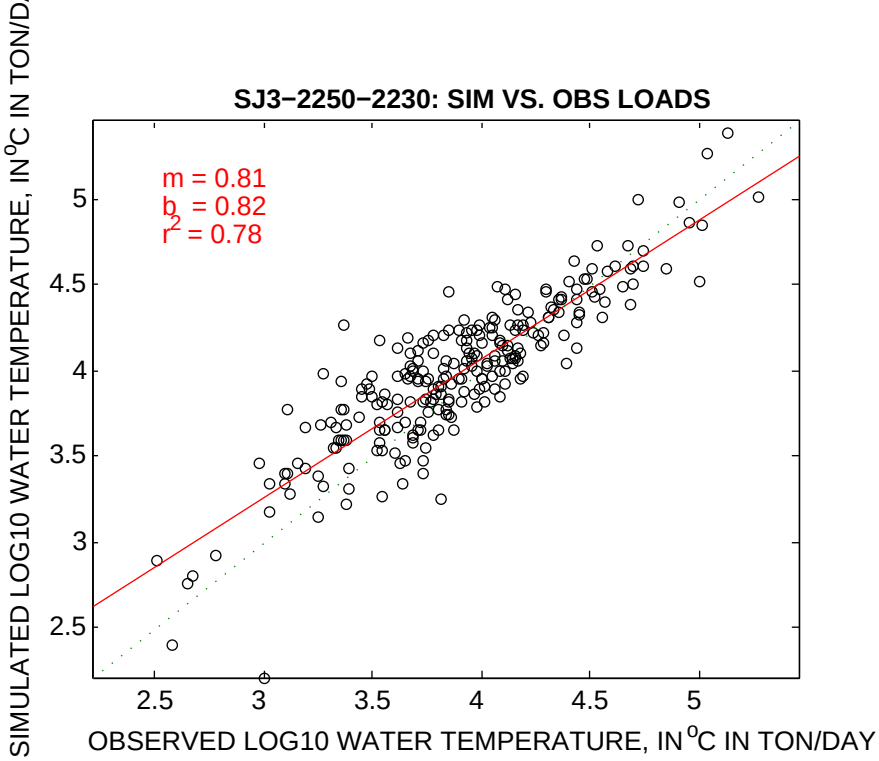


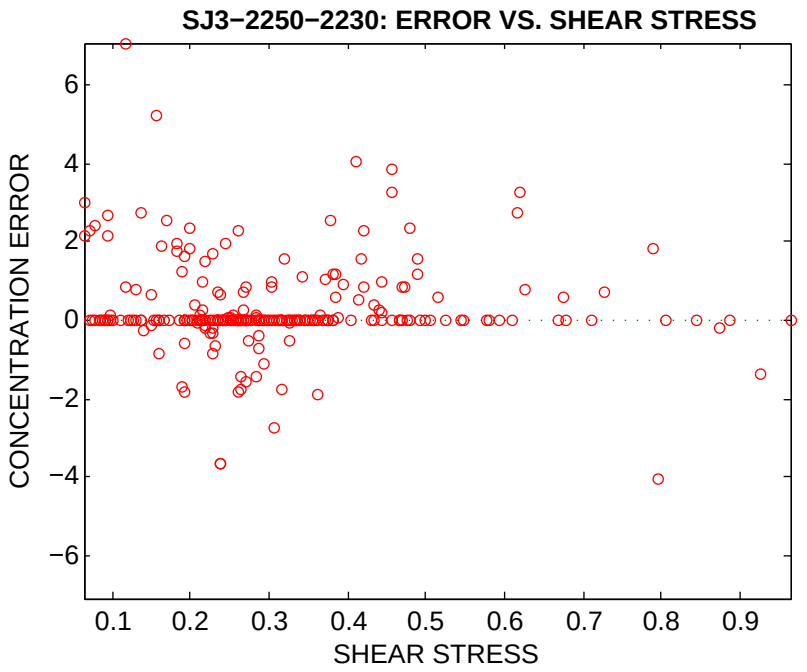


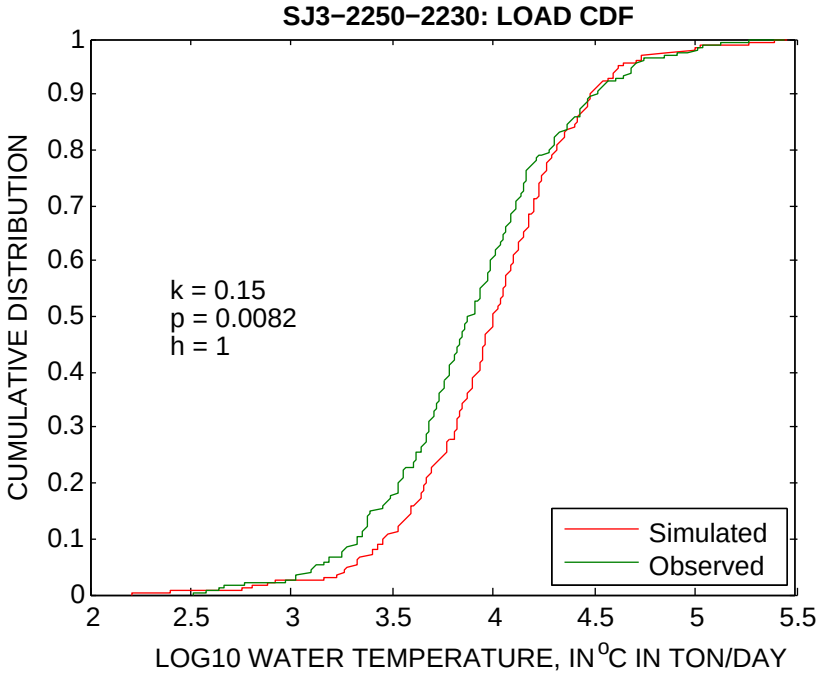


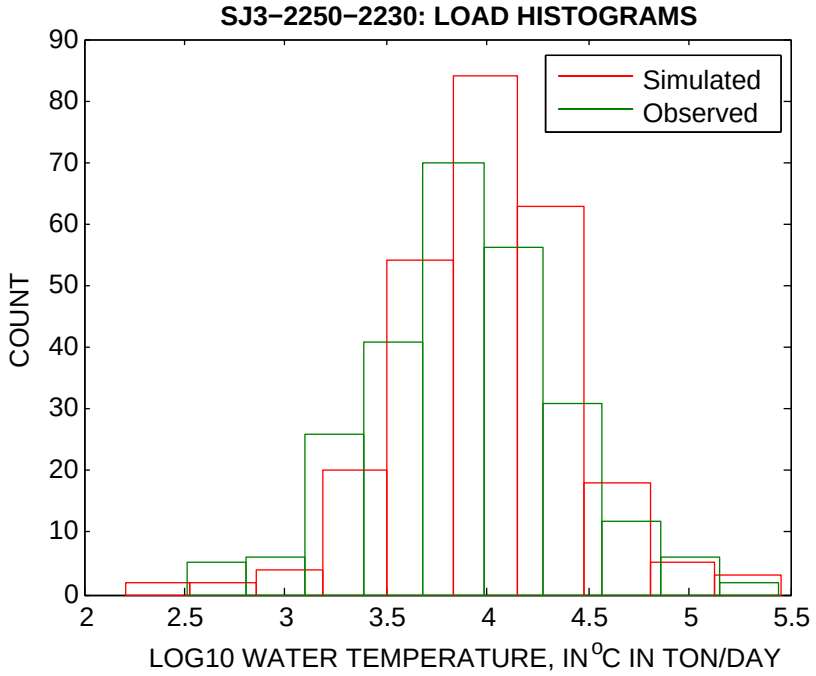


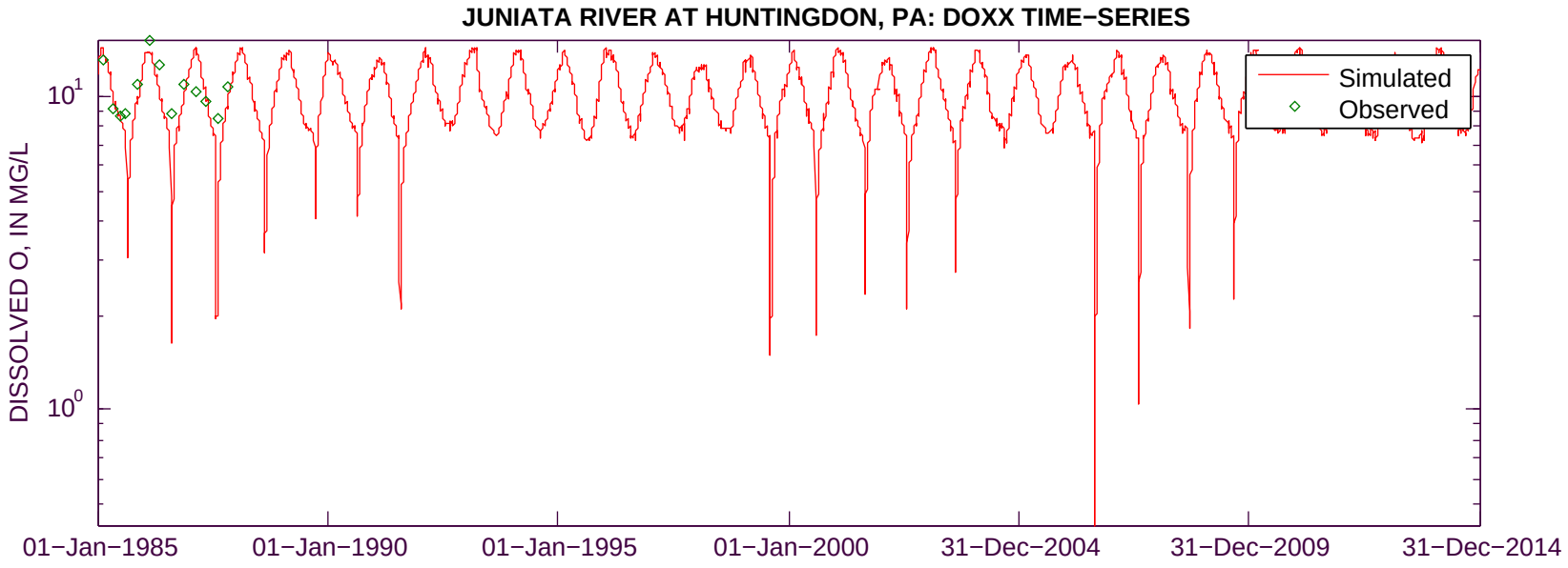
LOAD DATA
LOG10

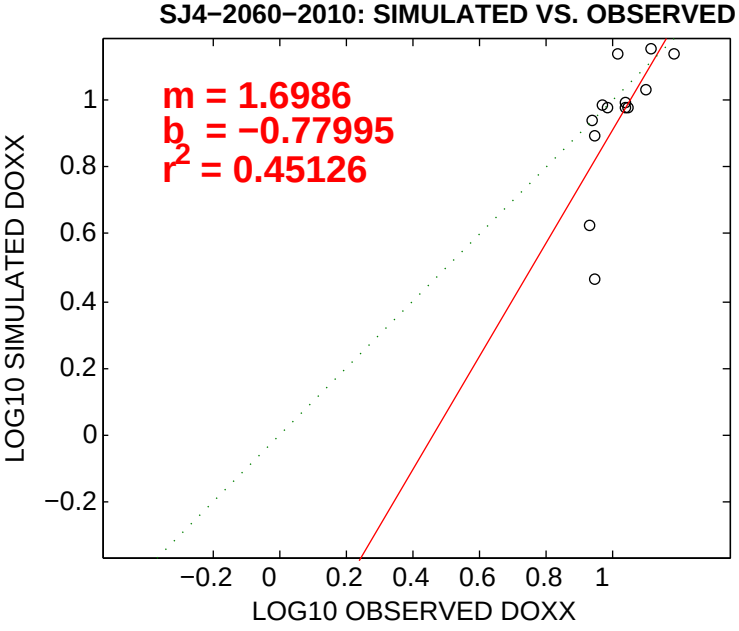


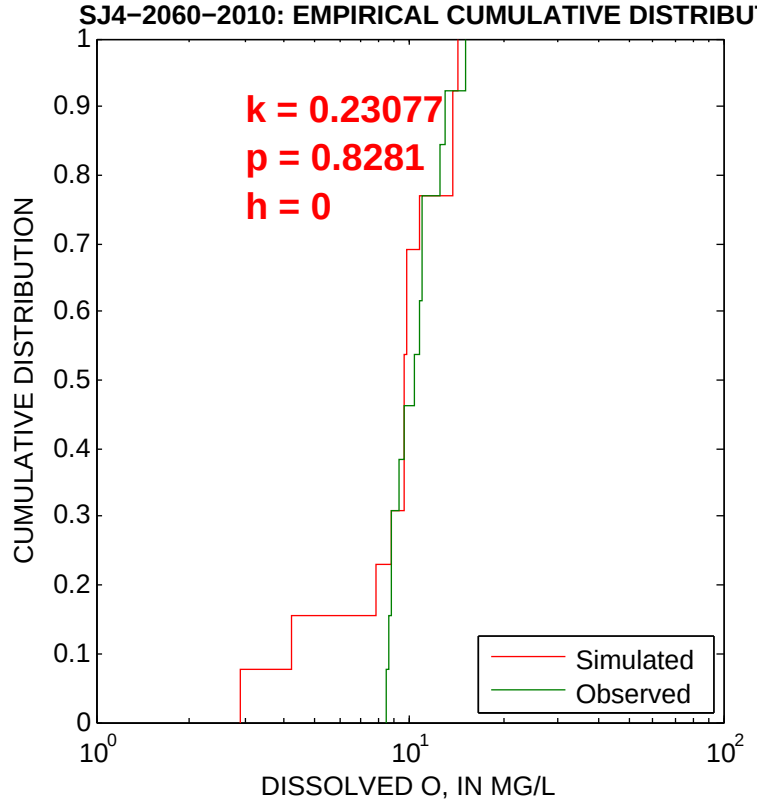












DATA SELECTION

scenario	file
P620171001WQ	DOXX.calib

plot: DOXX - dissolved oxygen

Dates: 1/1/1985 – 12/31/201

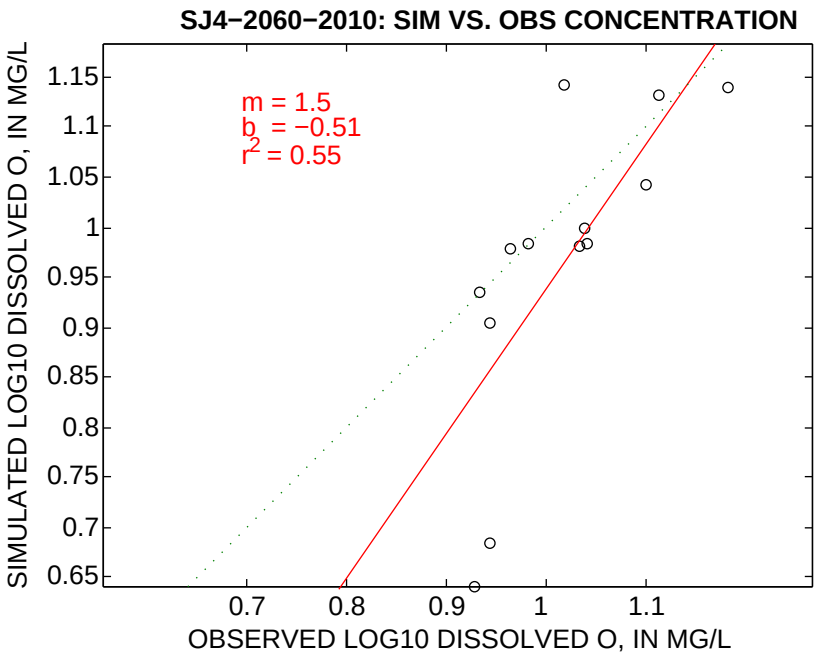
Drive	Directory	Observed
N/A	model	OBS20161101

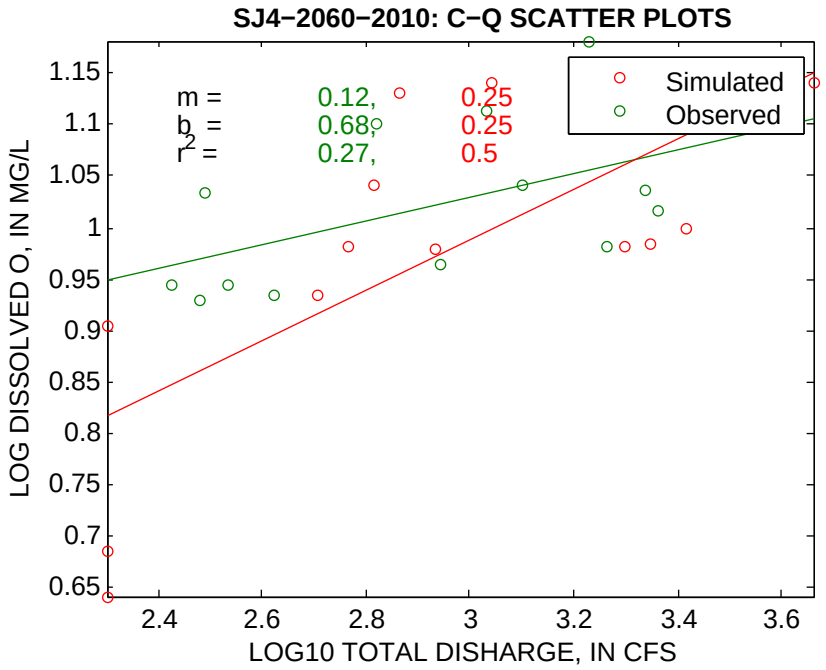
STATISTICS

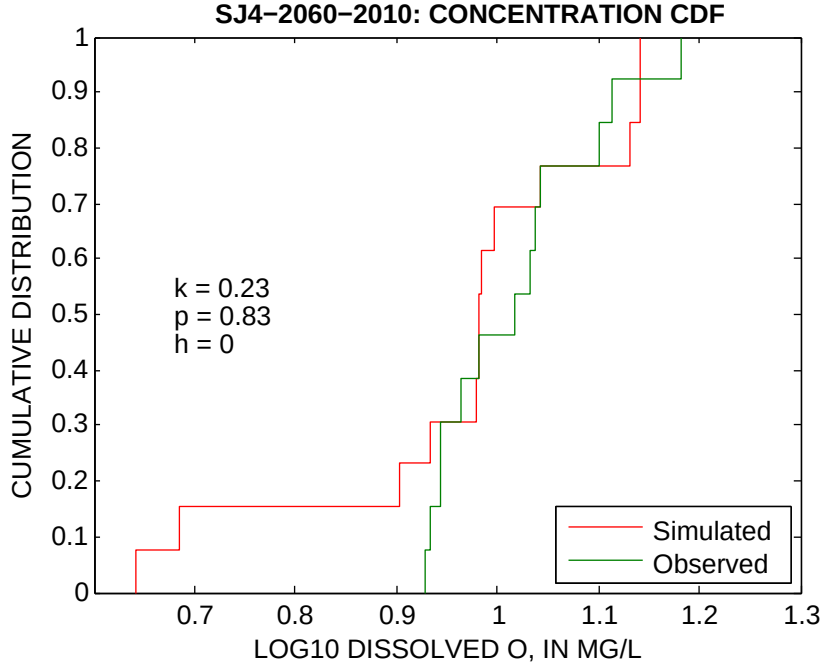
	n	13	13
		observe	simulate
min		8.5	2.9171
		0.929419	0.464951
mean		10.5692	9.60346
		1.01726	0.948011
media		10.4	9.5873
		1.01703	0.981696
max		15.2	14.316
		1.18184	1.15582
varian		4.09064	11.424
		0.00615294	0.0393423
JB		0.094386	0.5
		0.262821	0.025077
		ra	log
%		-9.13755	-6.80739
err.va		6.49308	0.029787
rel.std.err		1.5873	4.84109
mod.eff		-0.587302	-3.84109

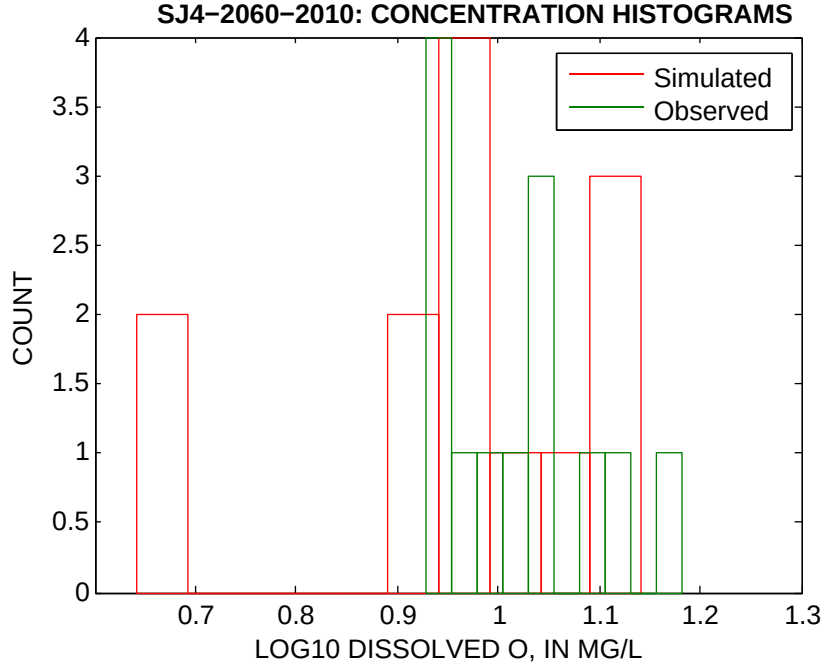
VERSION 2.1

ALL DATA
LOG10

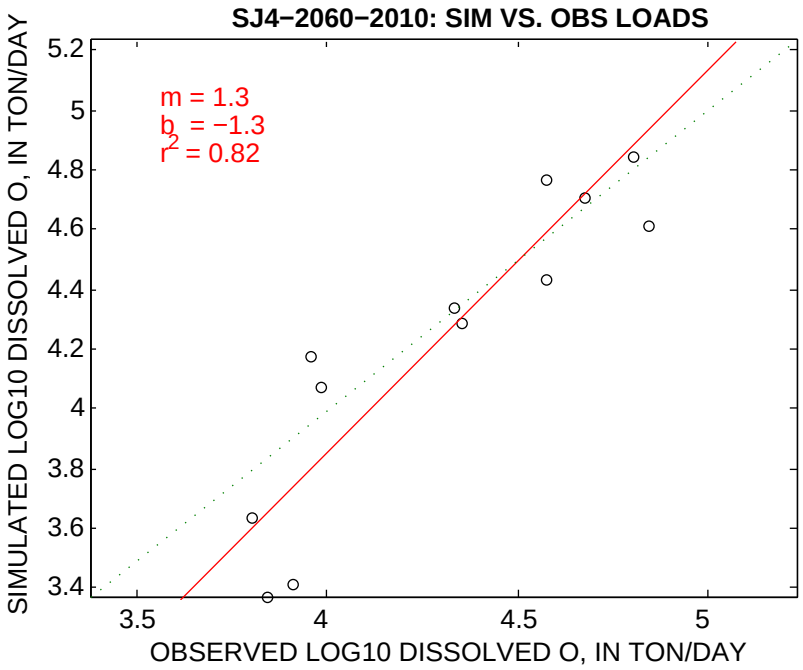


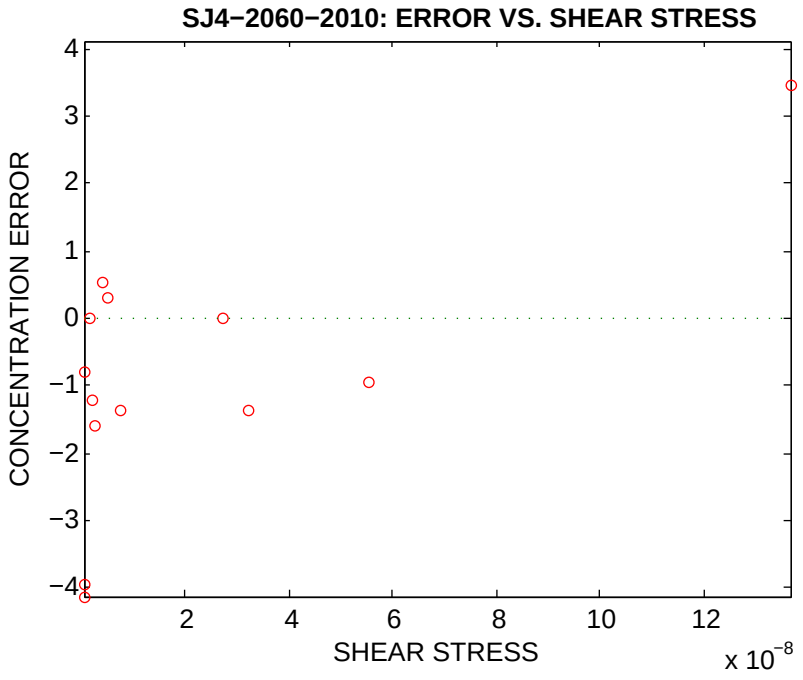


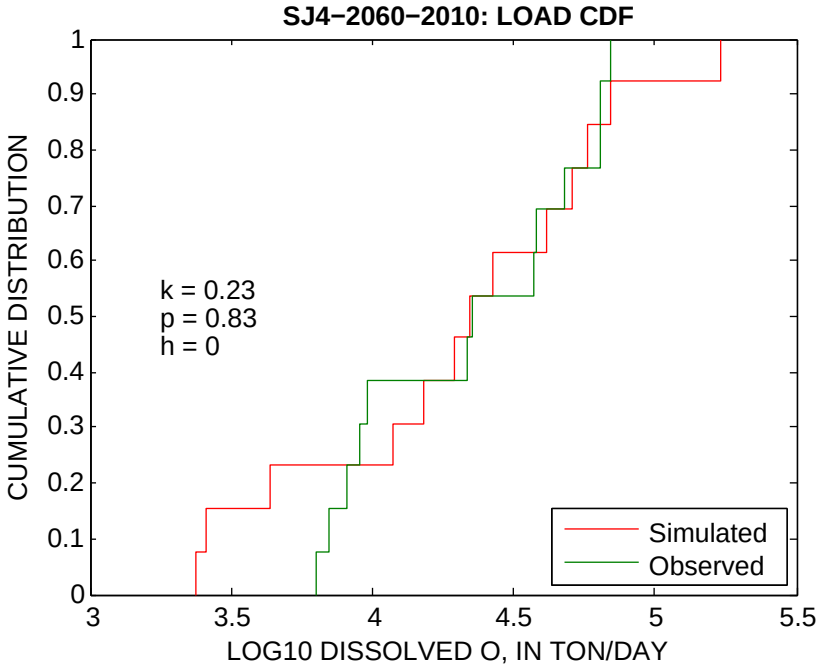


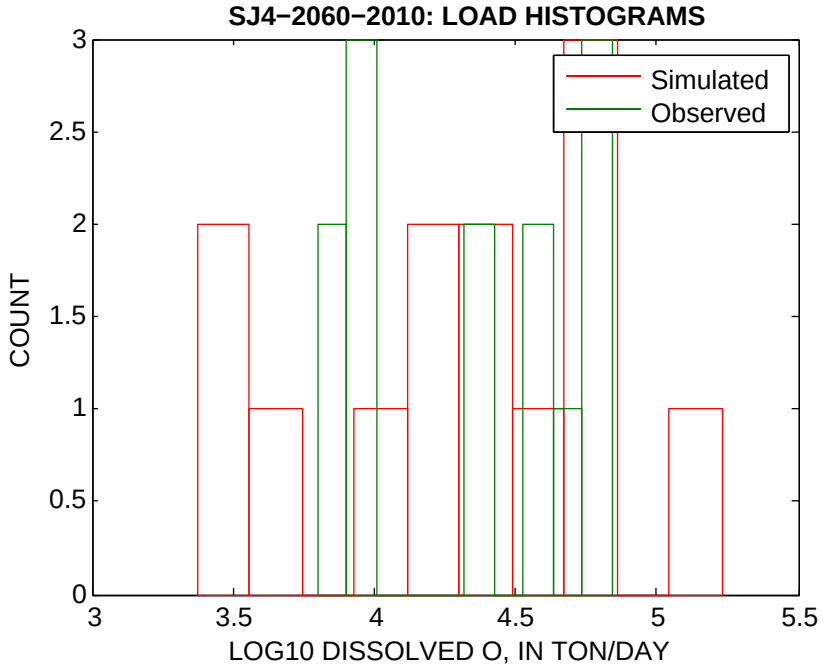


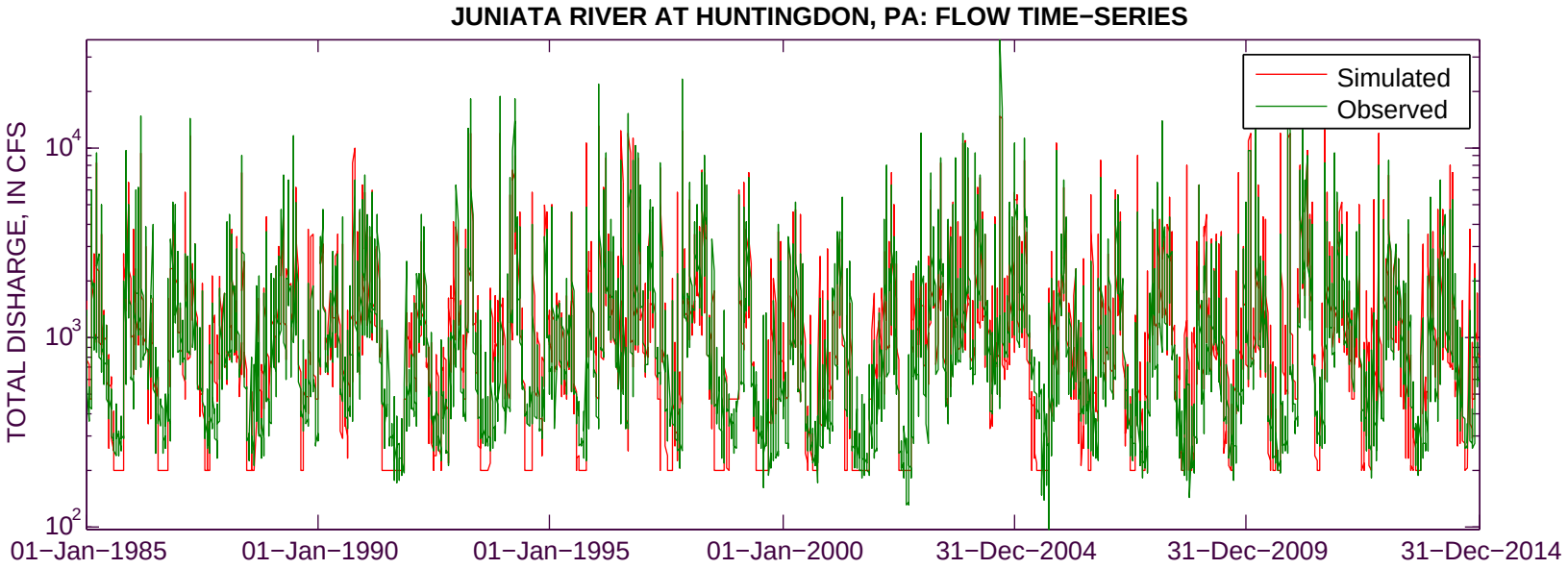
LOAD DATA
LOG10

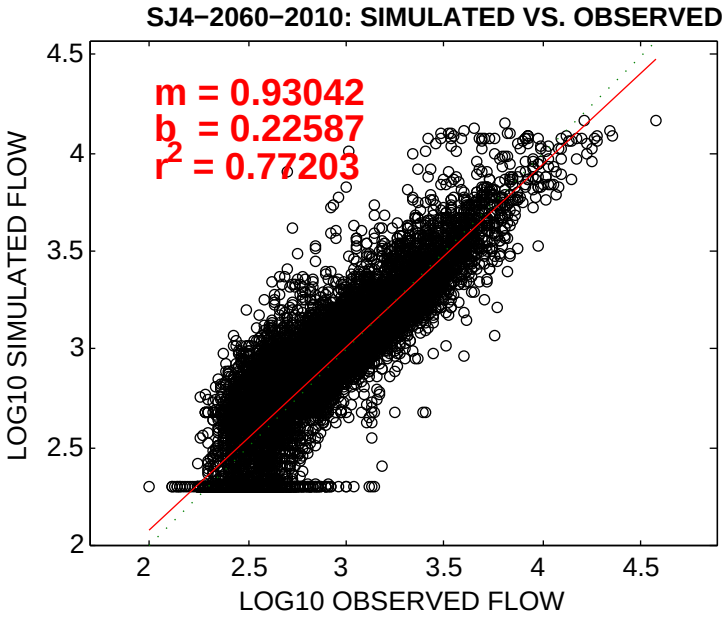


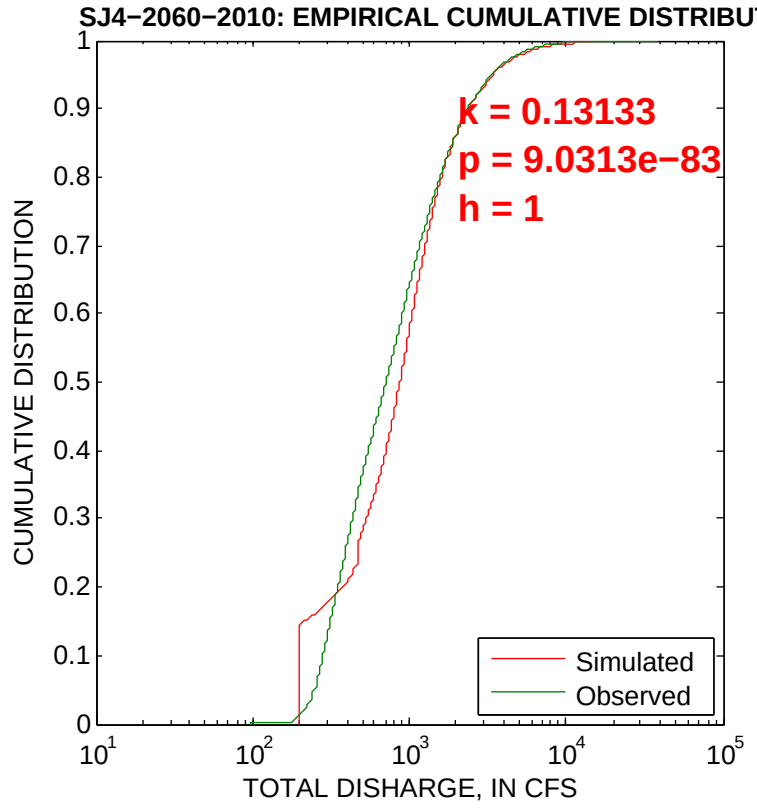












DATA SELECTION

scenario: P620171001WQ | file: FLOW.calib

plot: FLOW - total discharge

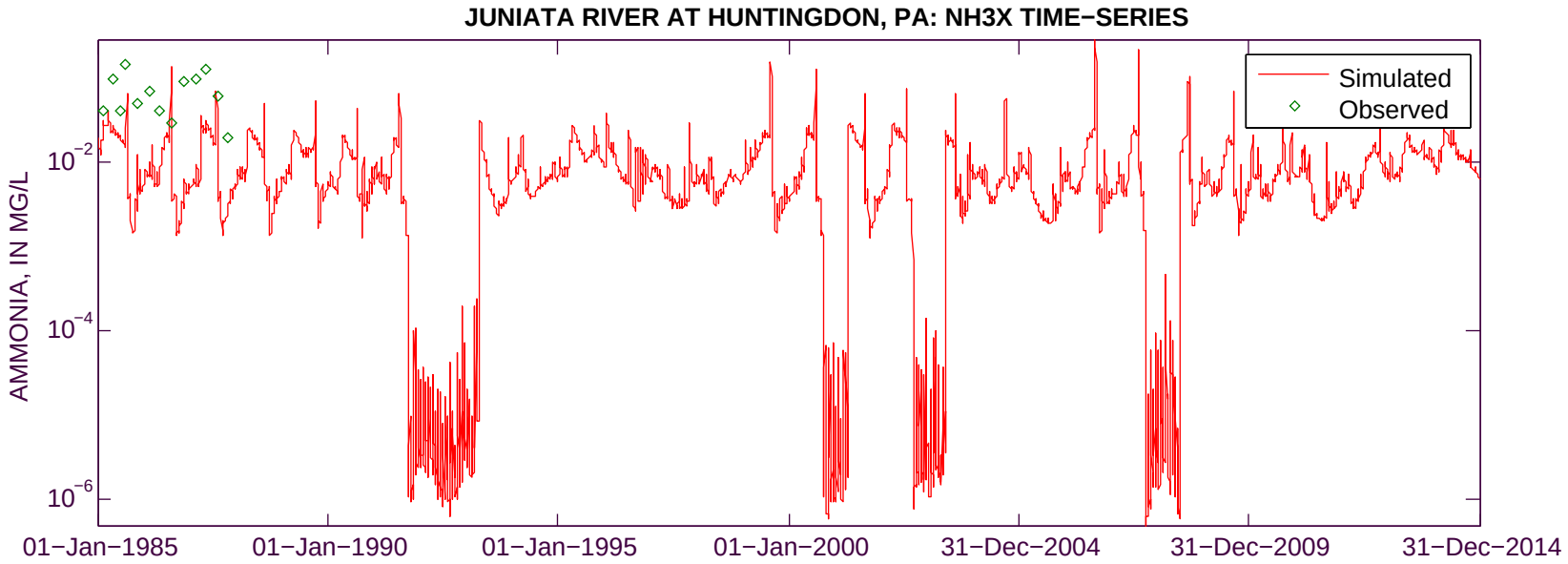
Dates: 1/1/1985 | 12/31/201

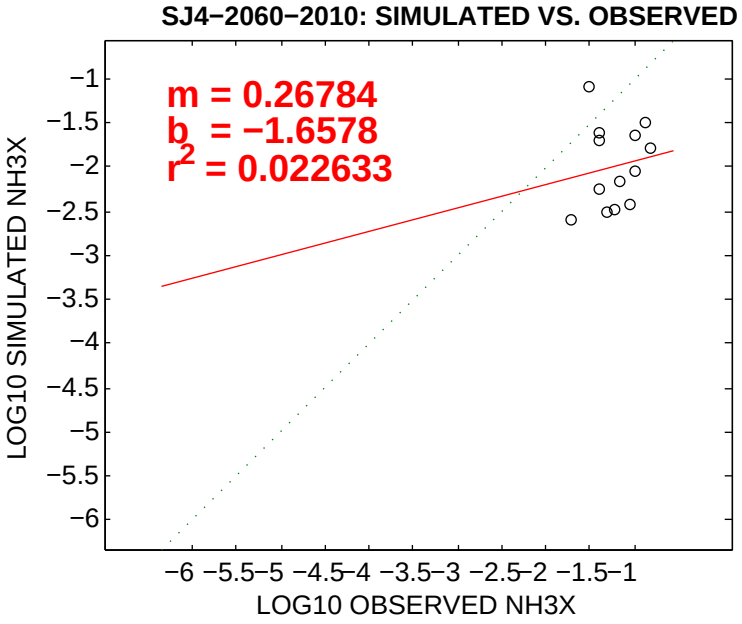
Drive: N/A | Directory: model | Observed: OBS20161101

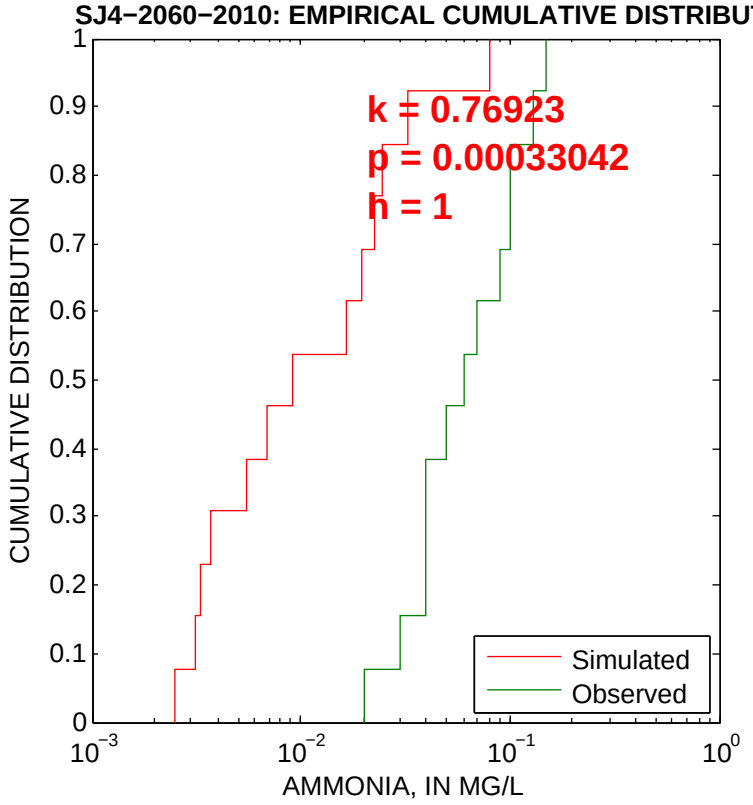
STATISTICS

		observe	simulate
n		10957	10957
min		99	200
		1.99564	2.30103
mean		1141.53	1212.56
		2.88682	2.91184
media		714	873.31
		2.8537	2.94117
max		37700	14787
		4.57634	4.16988
varian		1.99712e+0	1.8809e+0
		0.129844	0.145596
JB		0.001	0.001
		0.001	0.001
		ra	log
%		6.22166	0.866583
err.va		591332	0.0344464
rel.std.err		0.296093	0.265292
mod.eff		0.703907	0.734708

VERSION 2.1







DATA SELECTION

scenario	file
P620171001WQ	NH3X.calib

plot: NH3X - ammonia

Dates: 1/1/1985 – 12/31/201

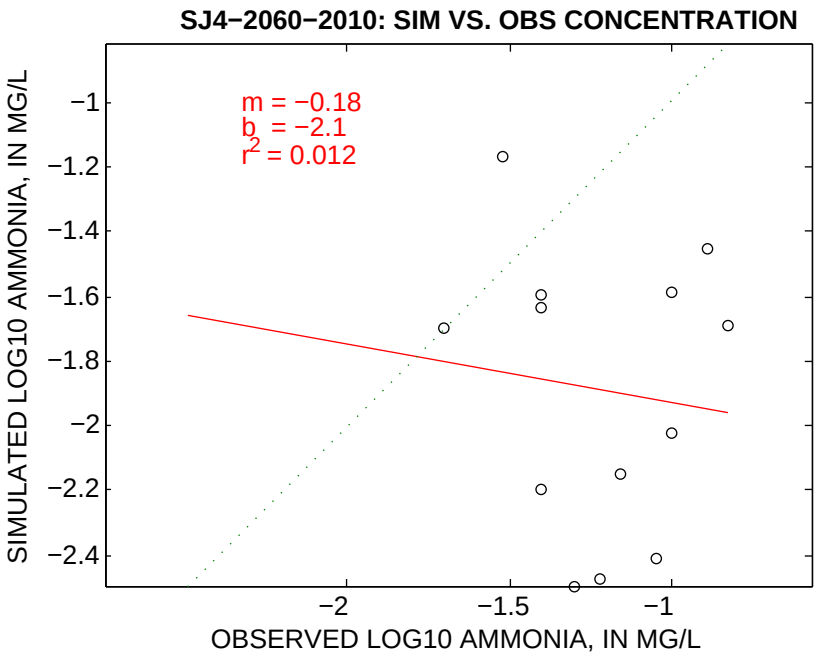
Drive	Directory	Observed
N/A	model	OBS20161101

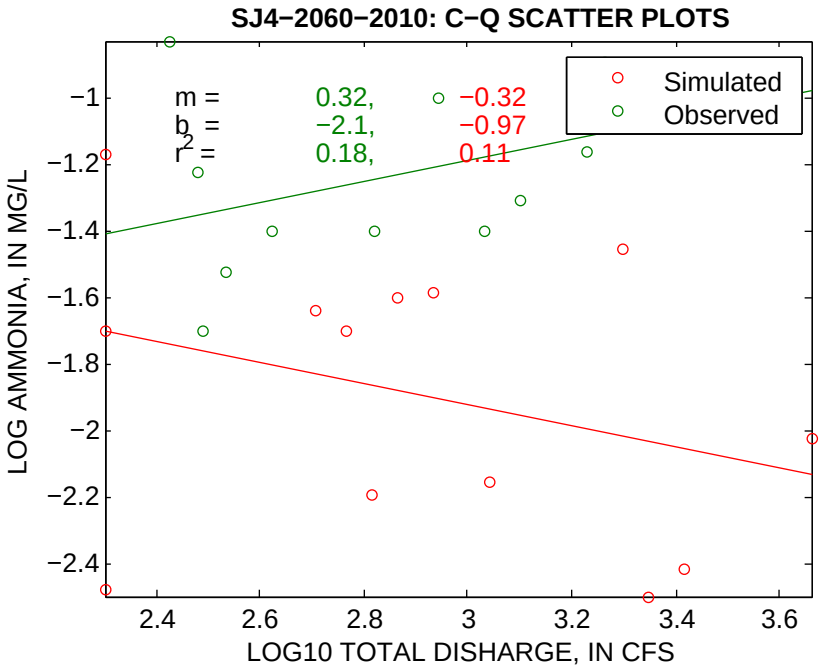
STATISTICS

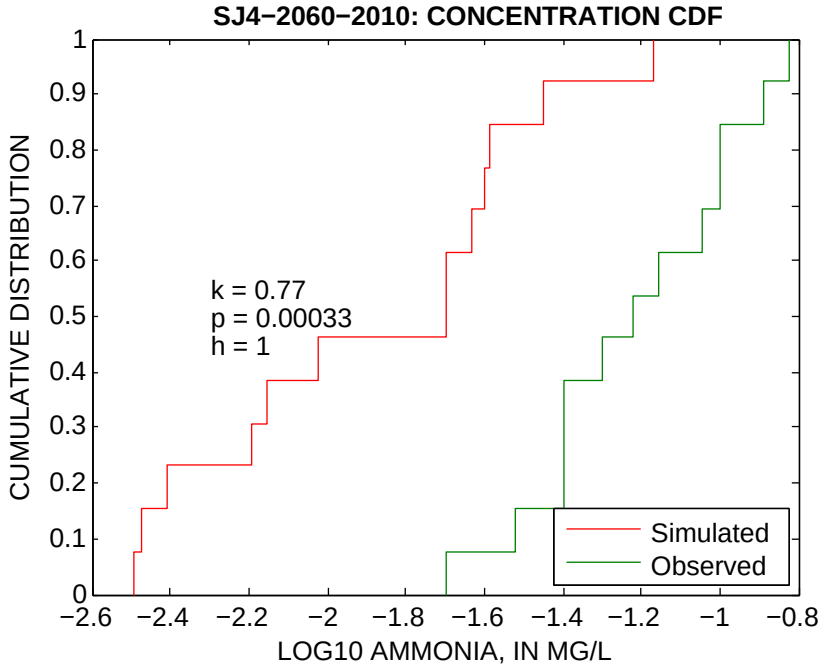
	n	13	13
		observe	simulate
min		0.02	0.0025021
		-1.69897	-2.6017
mean		0.0707692	0.0177234
		-1.21917	-1.98434
media		0.06	0.0091535
		-1.22185	-2.03841
max		0.15	0.080506
		-0.823909	-1.09417
varian		0.00162436	0.00045124
		0.0685417	0.217263
JB		0.260053	0.001
		0.5	0.5
		ra	log
%		-74.956	62.7617
err.va		0.00526048	0.883363
rel.std.err		3.2385	12.888
mod.eff		-2.2385	-11.888

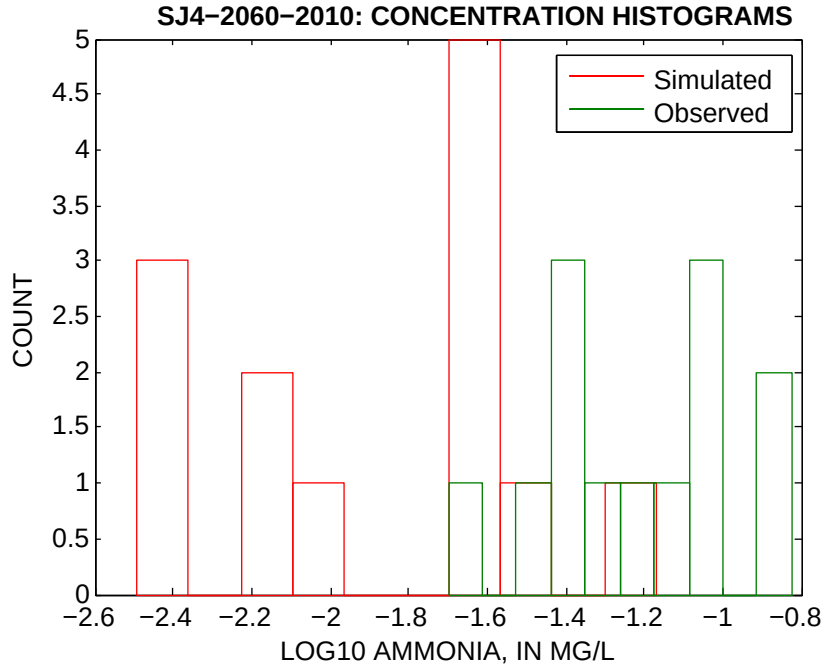
VERSION 2.1

ALL DATA
LOG10

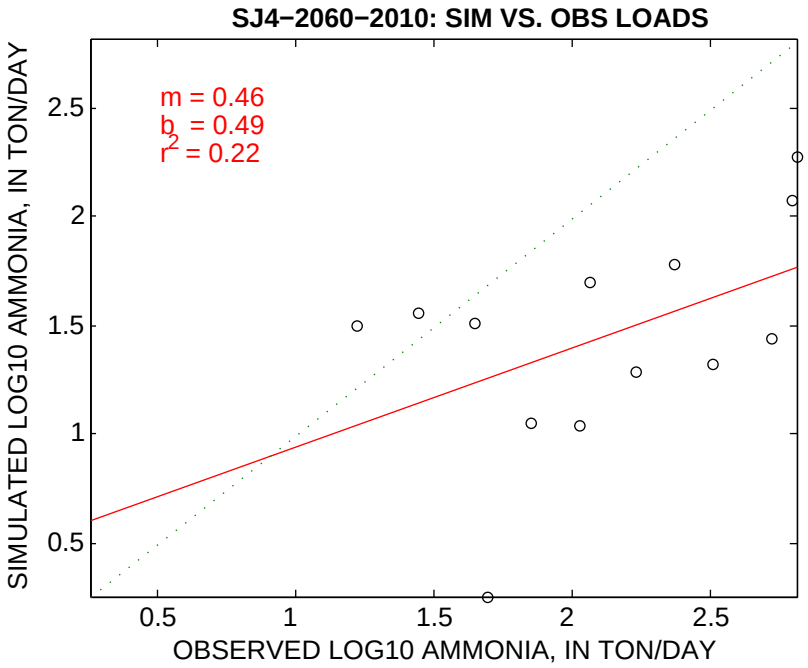


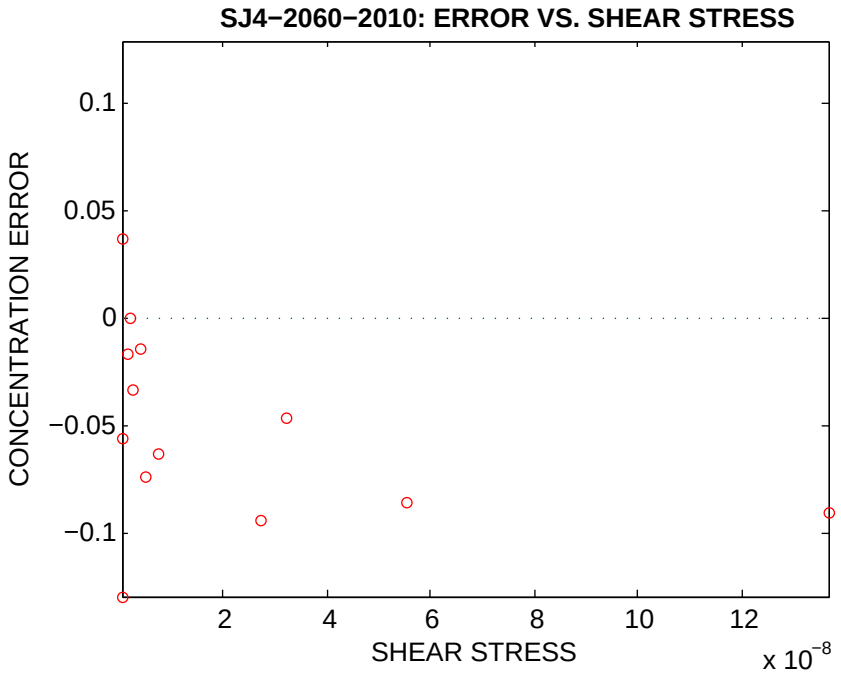


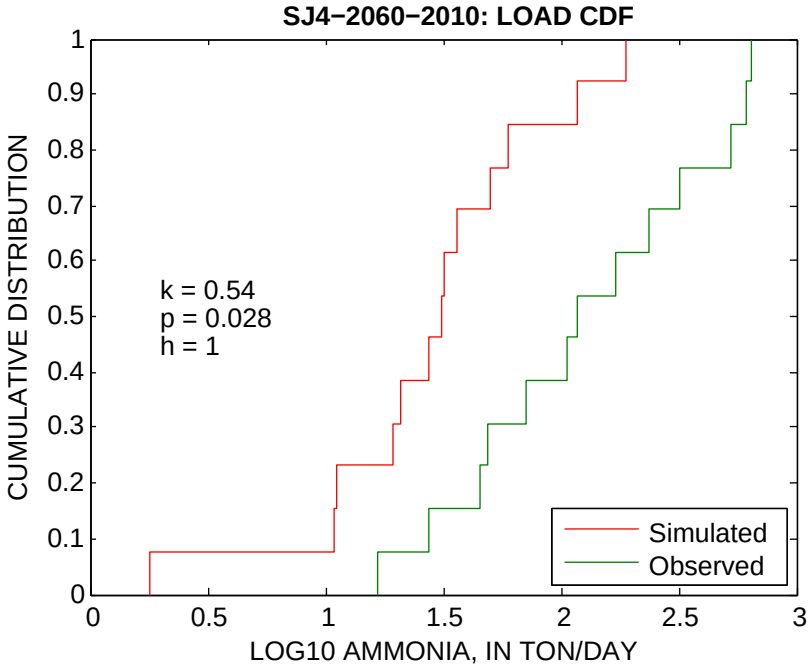


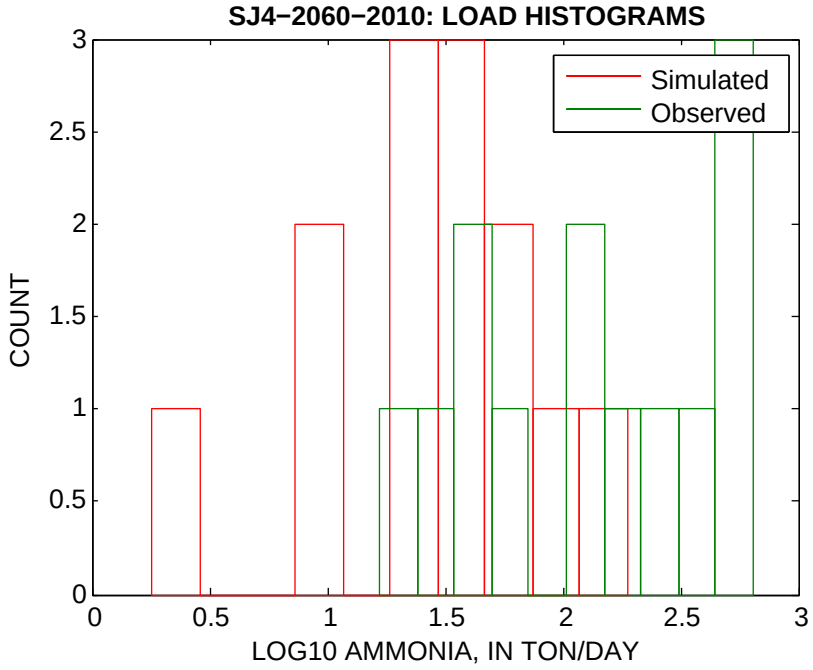


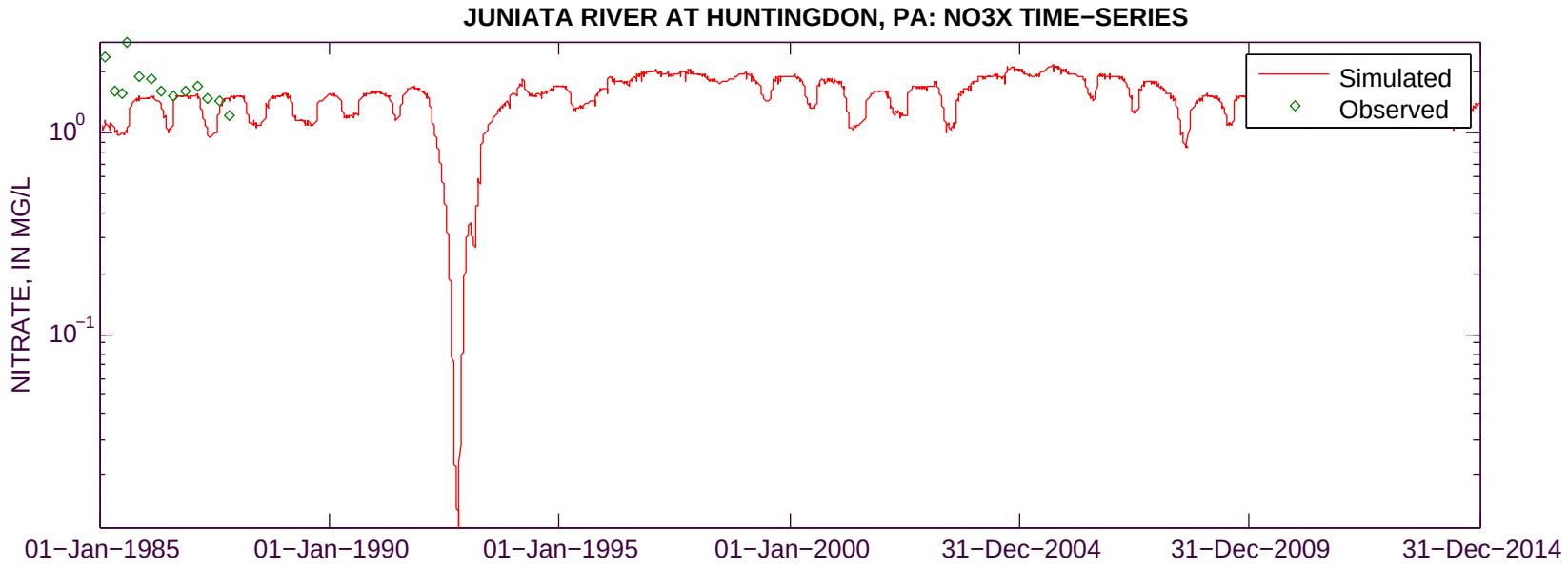
LOAD DATA
LOG10

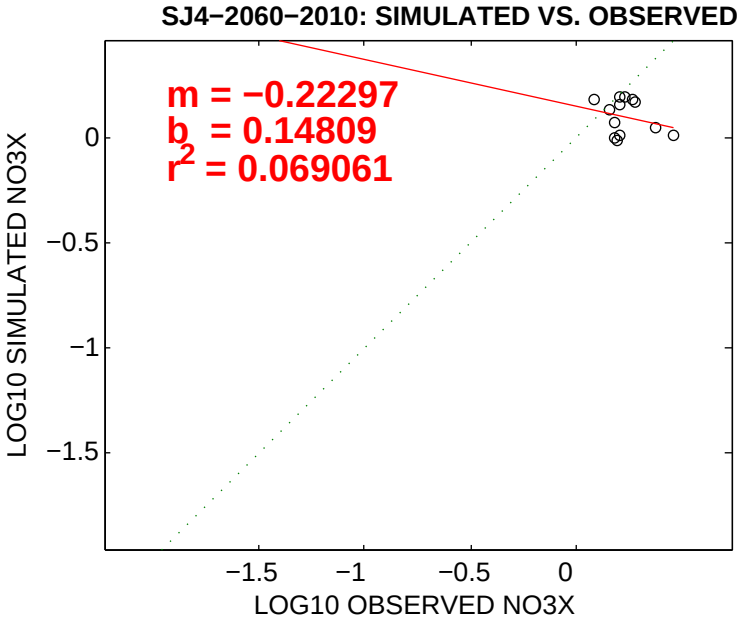


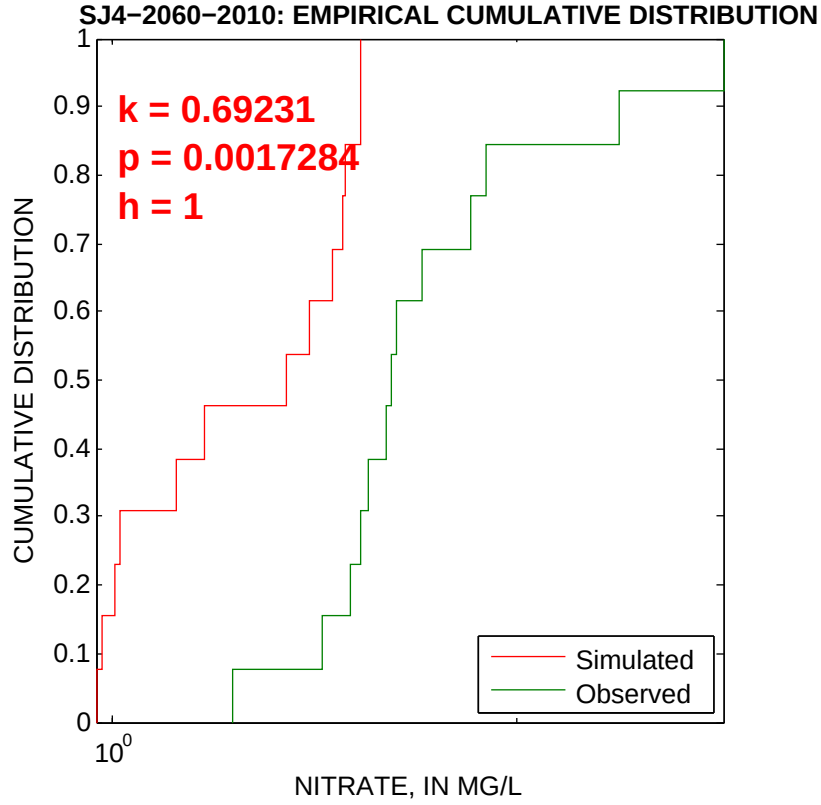












DATA SELECTION

scenario	file
P620171001WQ	NO3X.calib

plot: NO3X - nitrate

Dates: 1/1/1985 – 12/31/201

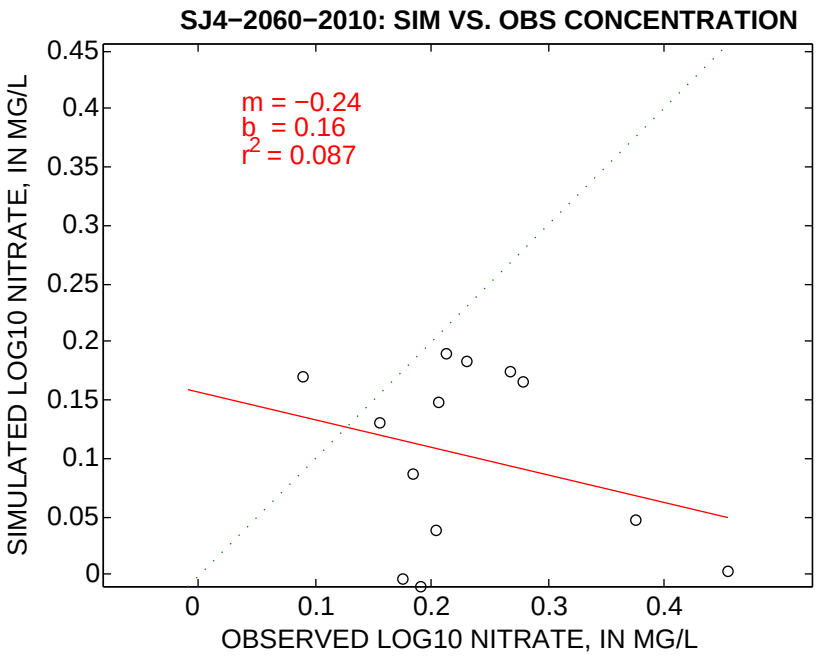
Drive	Directory	Observed
N/A	model	OBS20161101

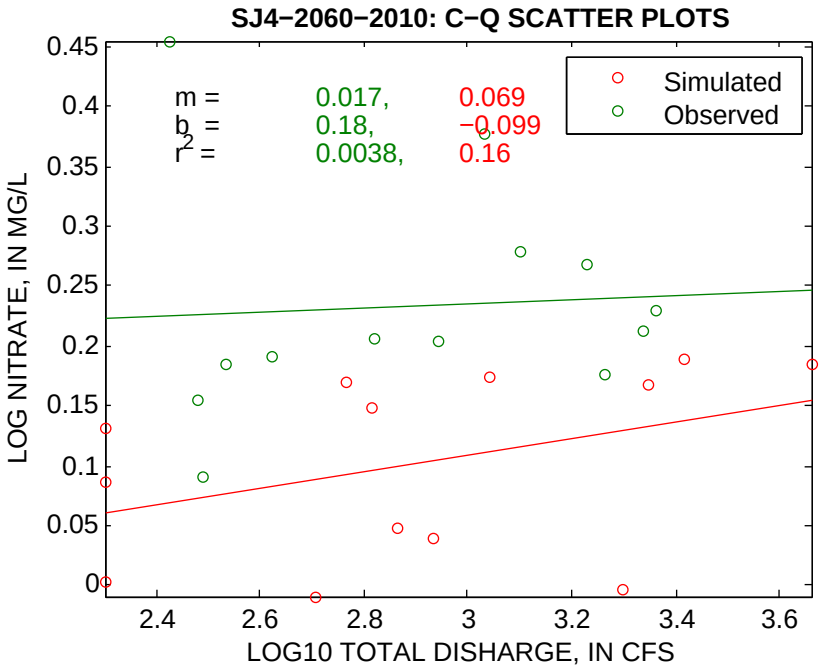
STATISTICS

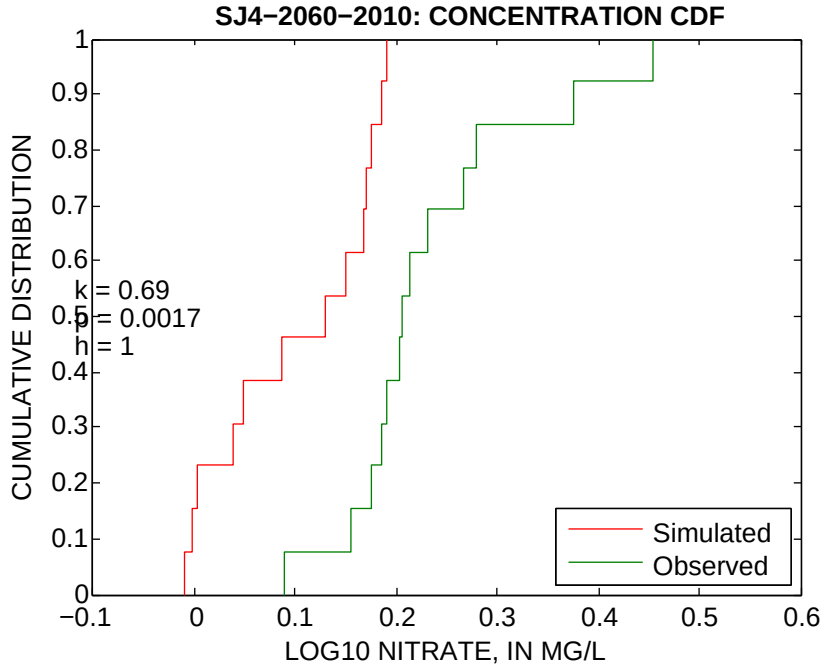
	n	13	13
		observe	simulate
min		1.23	0.97021
		0.0899051	-0.0131343
mean		1.75077	1.26759
		0.232868	0.0961641
media		1.61	1.3464
		0.206826	0.129174
max		2.85	1.5308
		0.454845	0.184918
varian		0.185174	0.0524749
		0.00907916	0.00653568
JB		0.015327	0.127281
		0.066451	0.126044
		ra	log
%		-27.5981	-58.7045
err.va		0.547921	0.0399088
rel.std.err		2.95895	4.39565
mod.eff		-1.95895	-3.39565

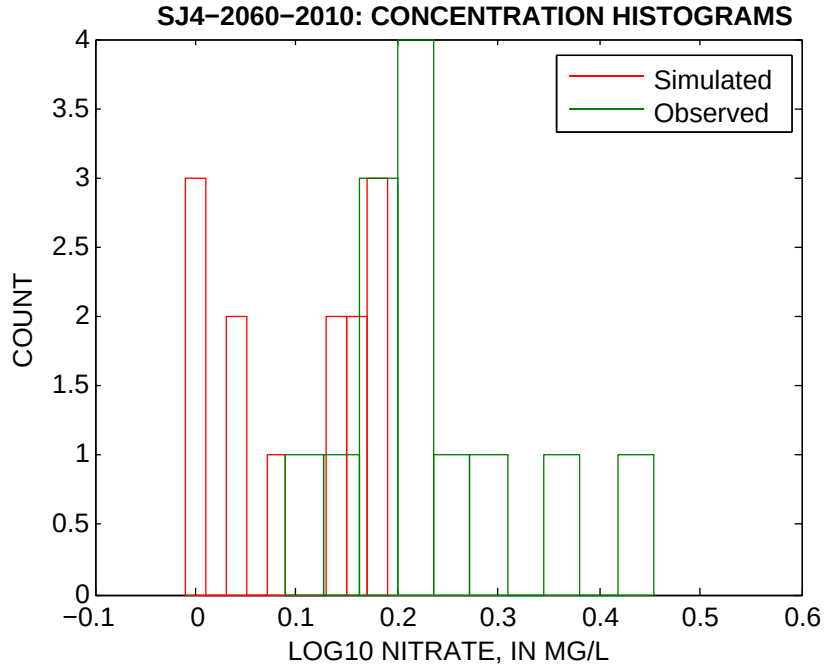
VERSION 2.1

ALL DATA
LOG10

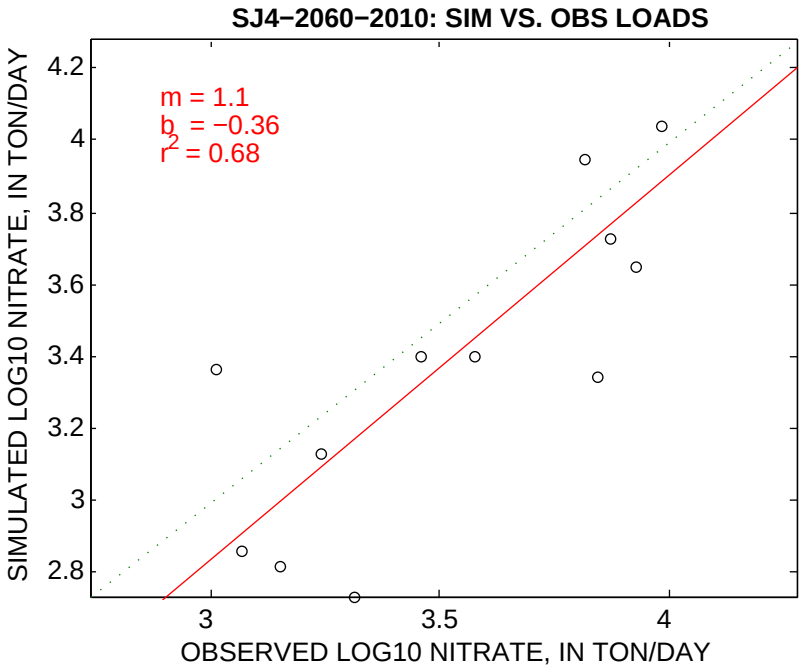


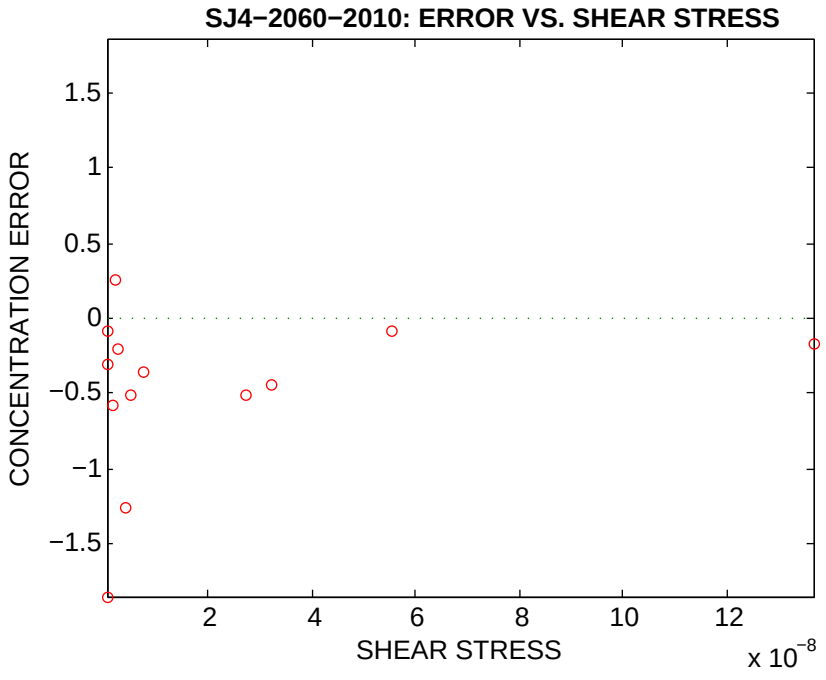


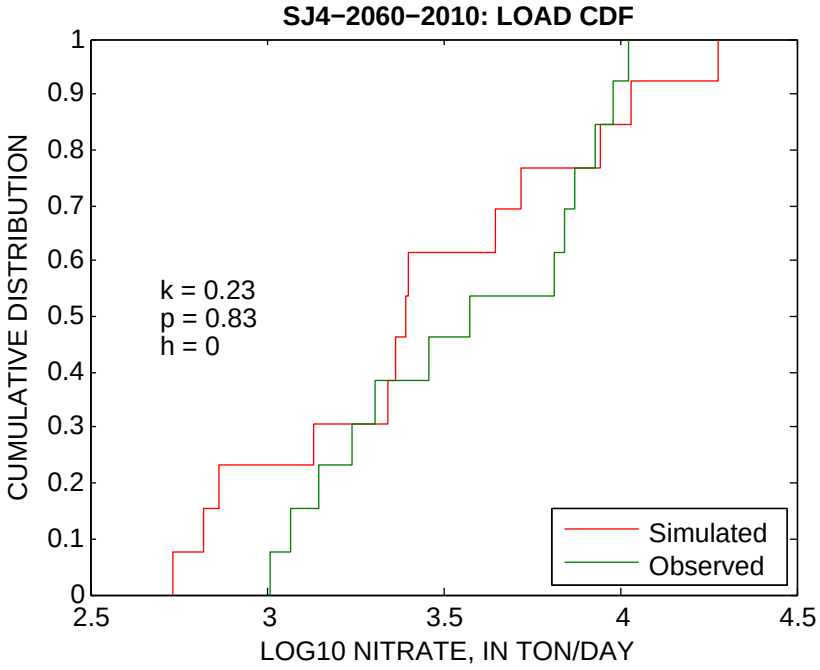


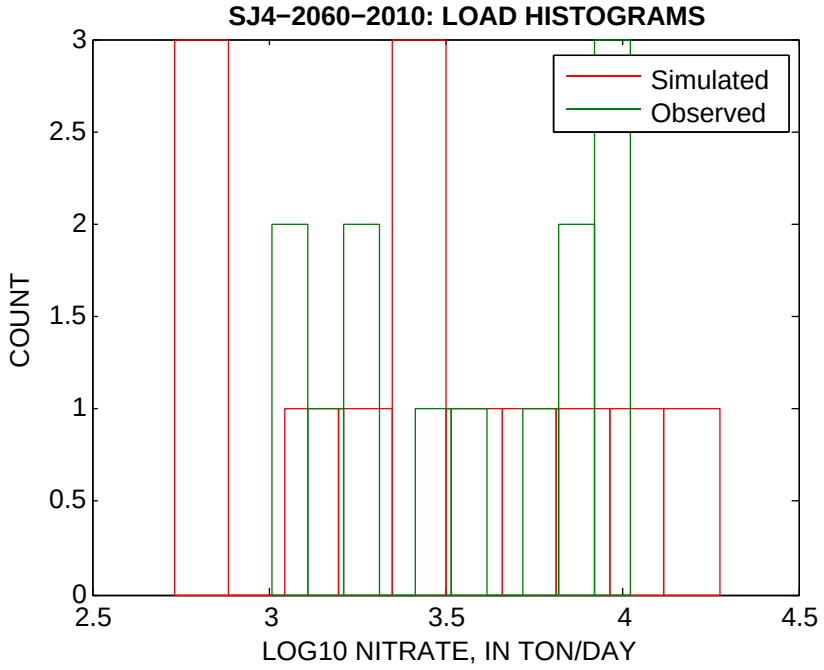


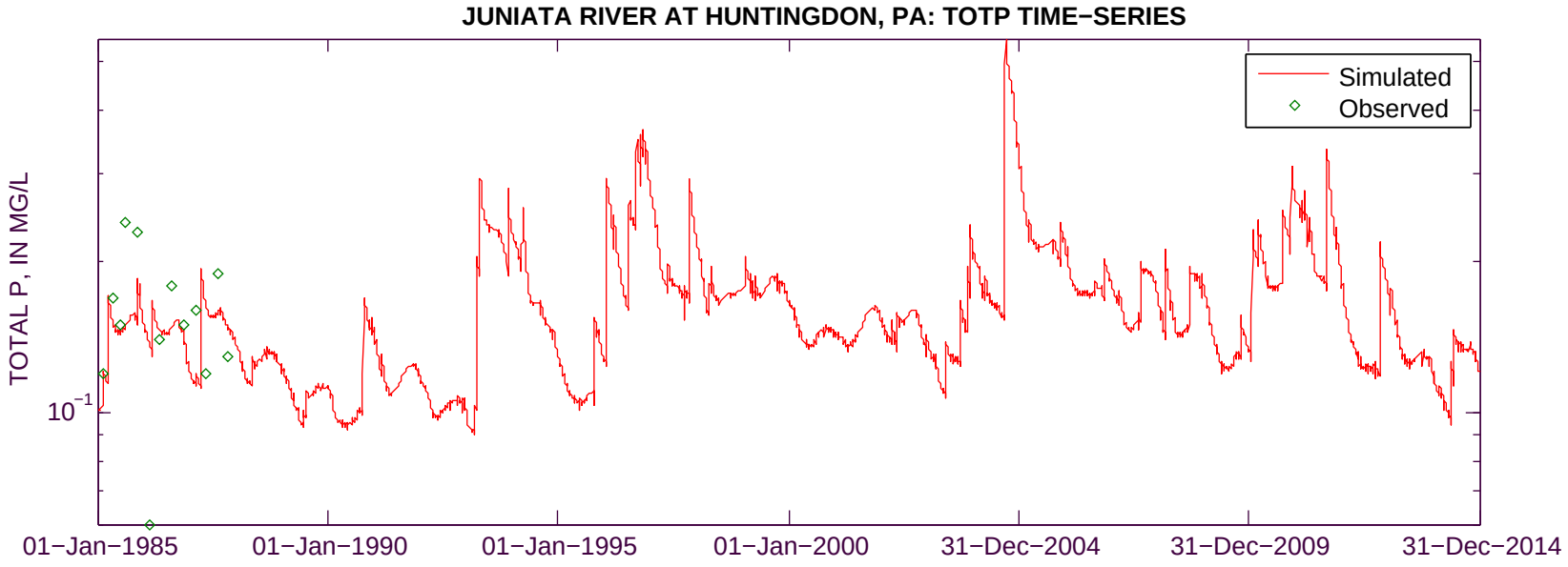
LOAD DATA
LOG10

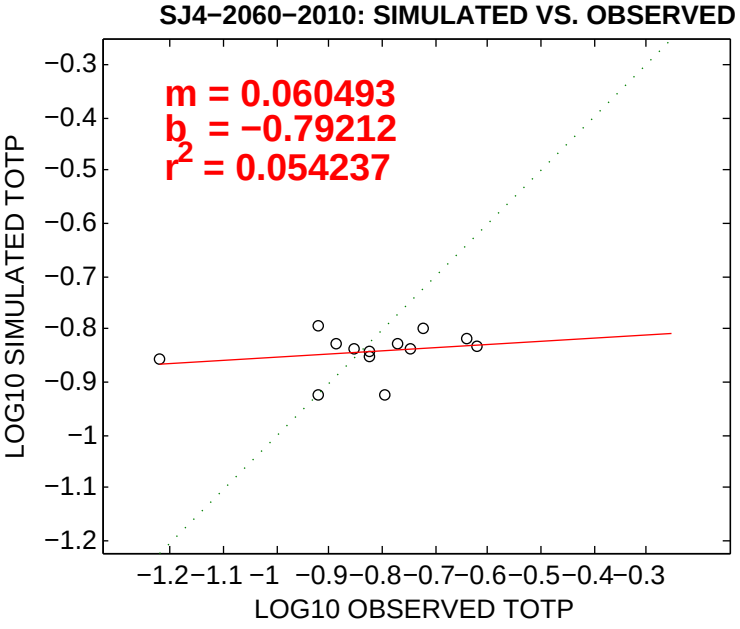


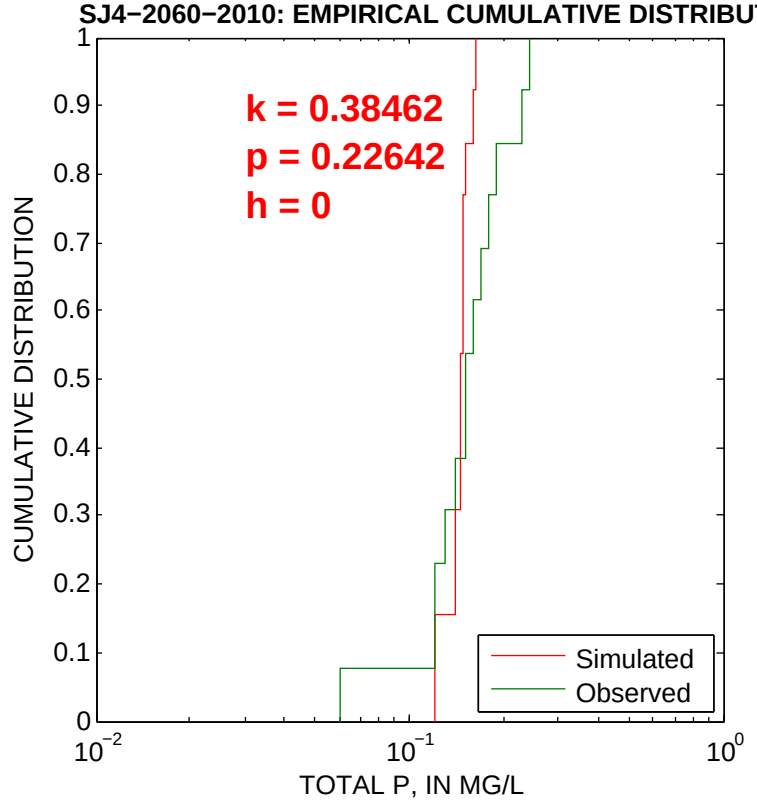












DATA SELECTION

scenario	file
P620171001WQ	TOTP.calib

plot: TOTP - total phosphorus

Dates: 1/1/1985 – 12/31/201

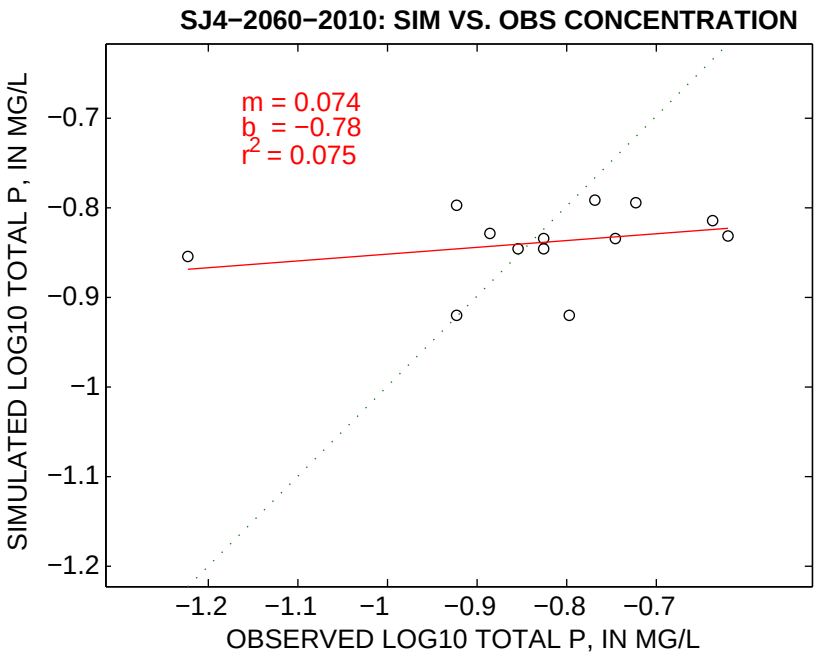
Drive	Directory	Observed
N/A	model	OBS20161101

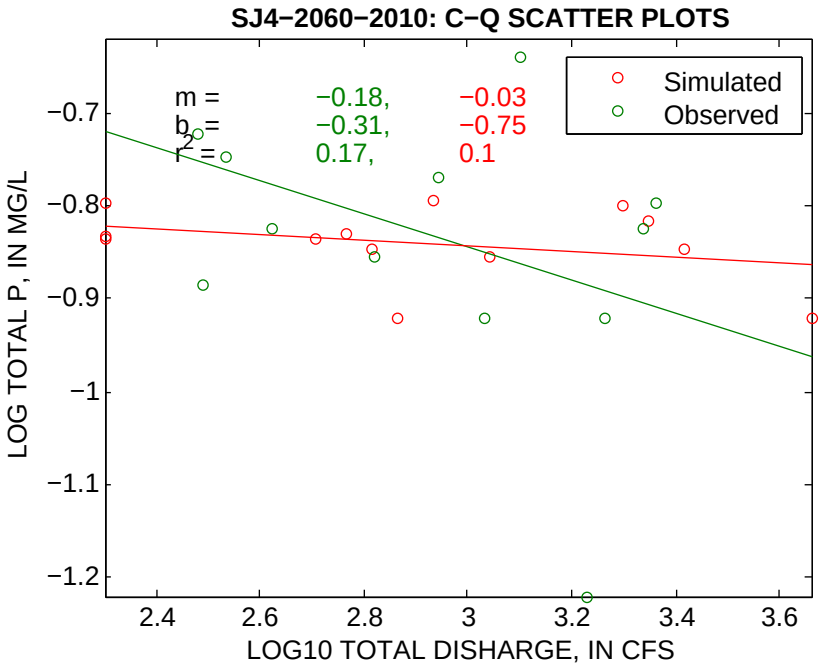
STATISTICS

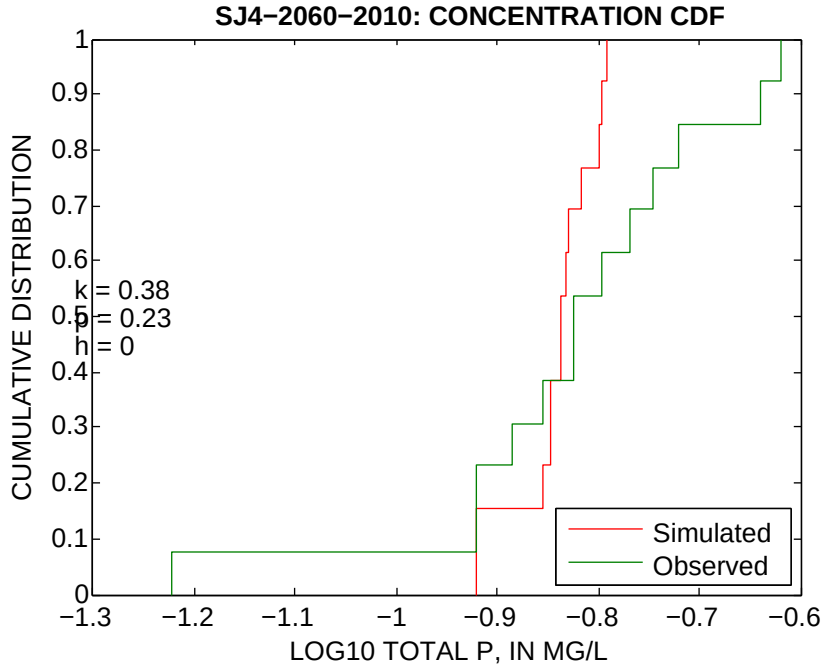
	observe	simulate
n	13	13
min	0.06	0.11973
	-1.22185	-0.921797
mean	0.156923	0.144383
	-0.826208	-0.842097
media	0.15	0.14636
	-0.823909	-0.834578
max	0.24	0.1616
	-0.619789	-0.791559
varian	0.00227308	0.00015796
	0.0232089	0.0015659
JB	0.5	0.114756
	0.027807	0.066379
	ra	log
%	-7.99118	1.92315
err.va	0.00228206	0.0222403
rel.std.err	1.00395	0.958269
mod.eff	-0.0039524	0.0417309

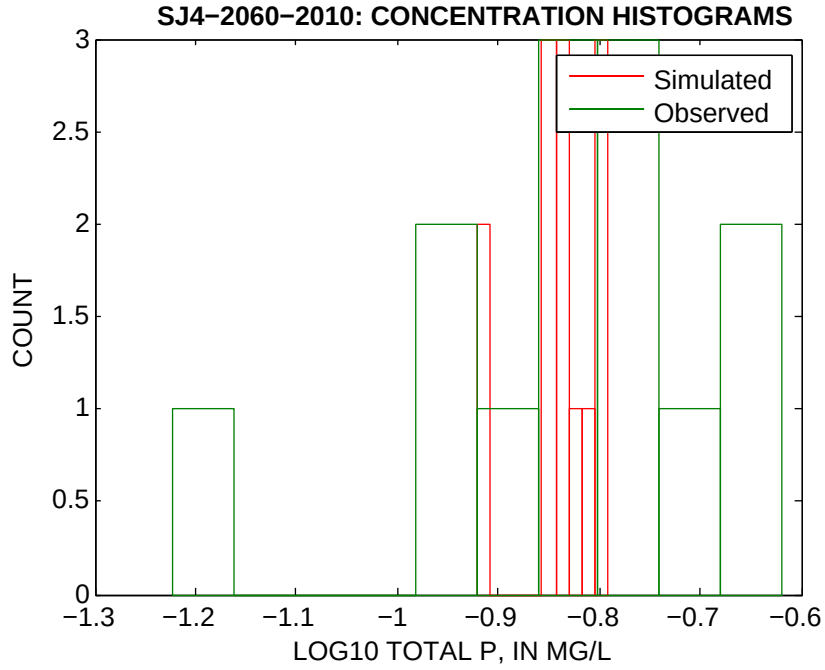
VERSION

ALL DATA
LOG10

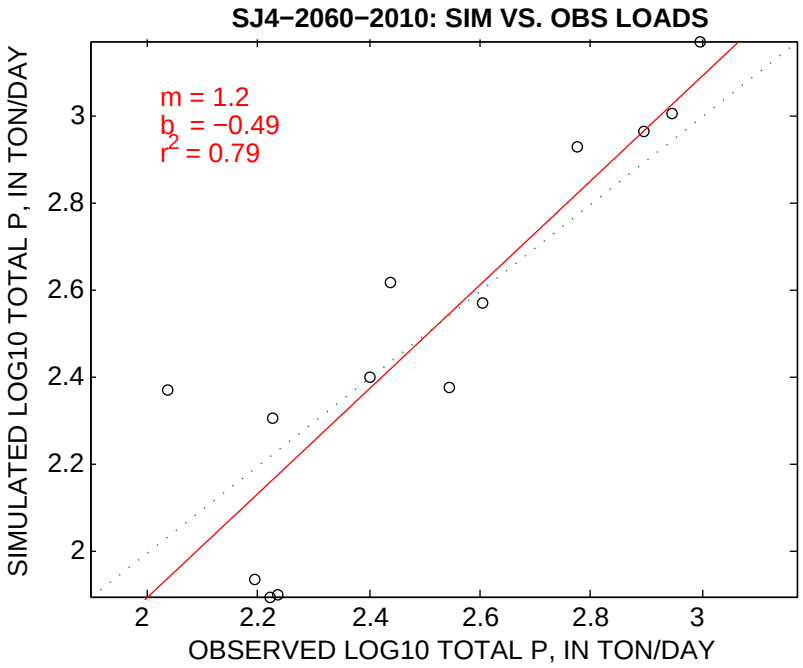


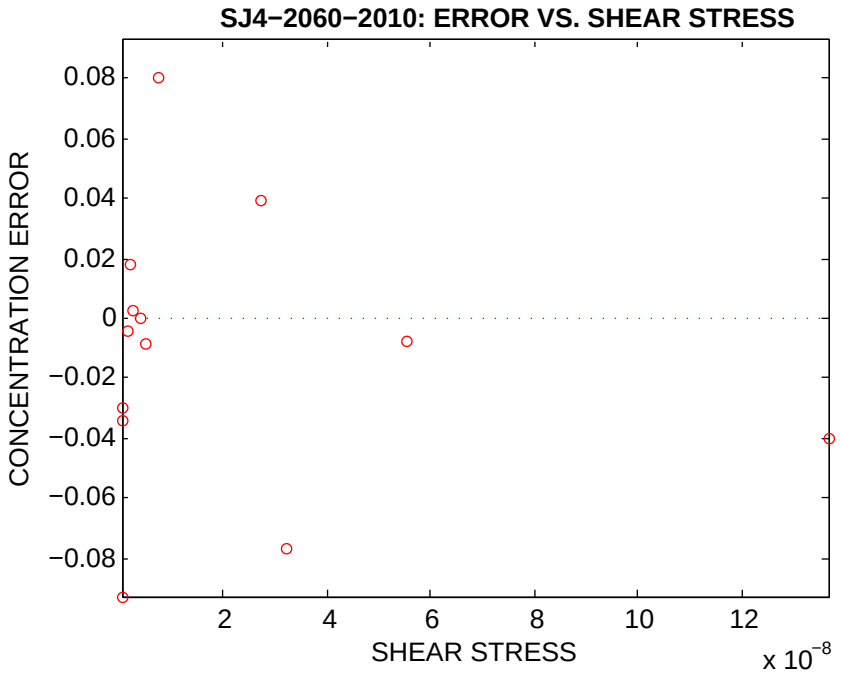


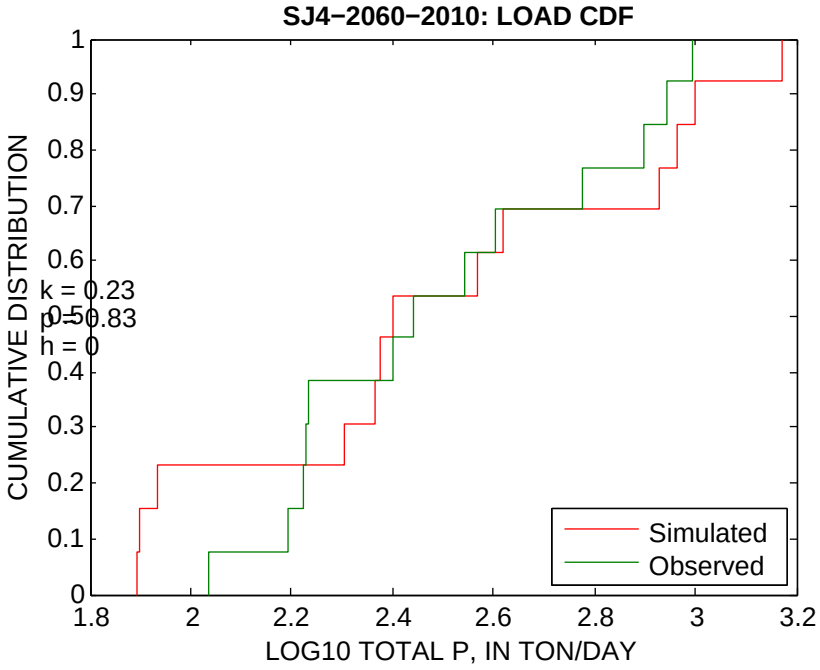


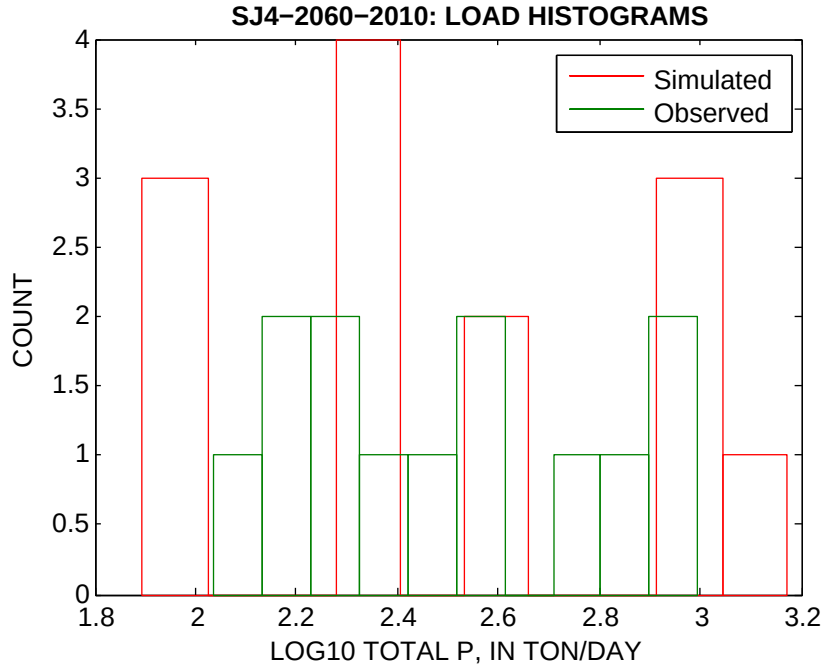


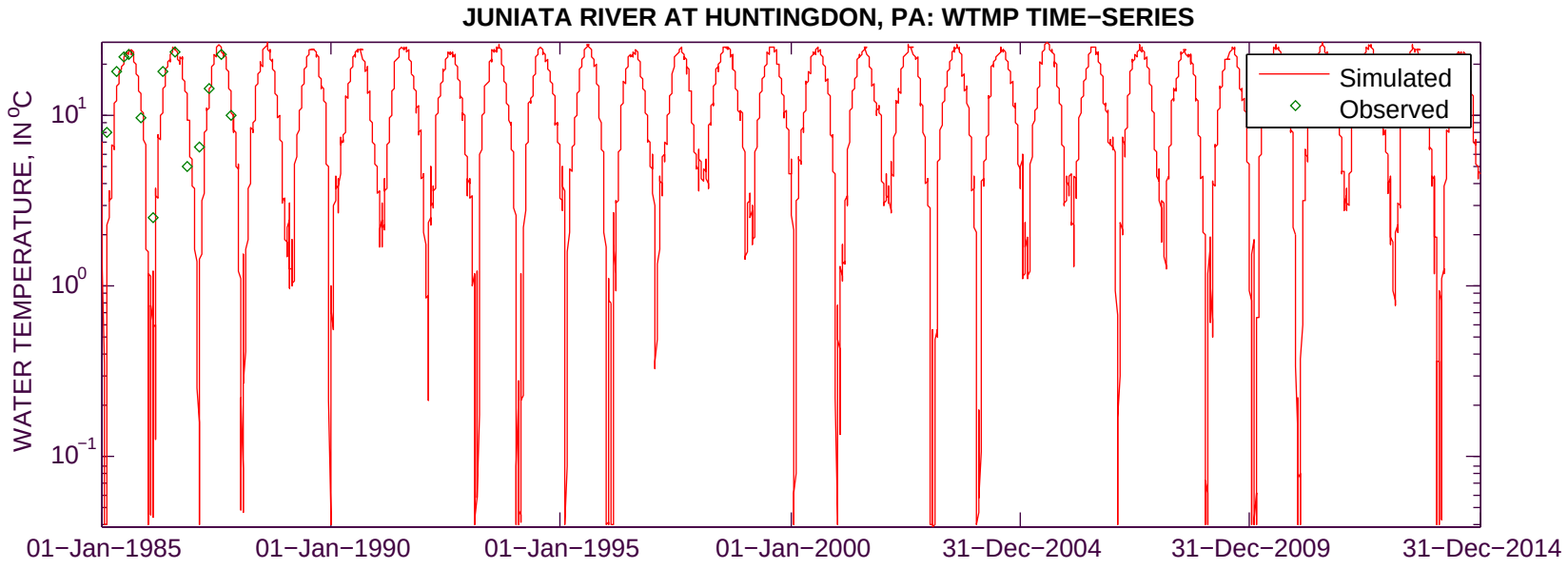
LOAD DATA
LOG10

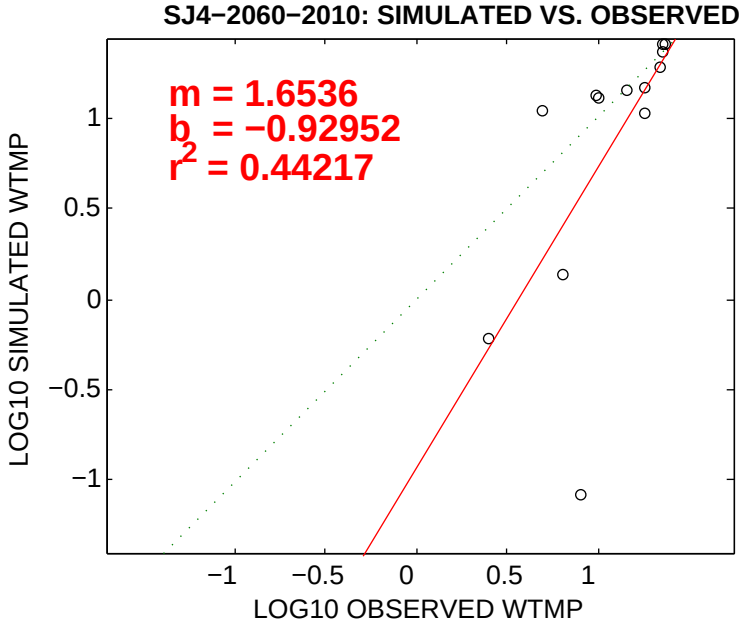


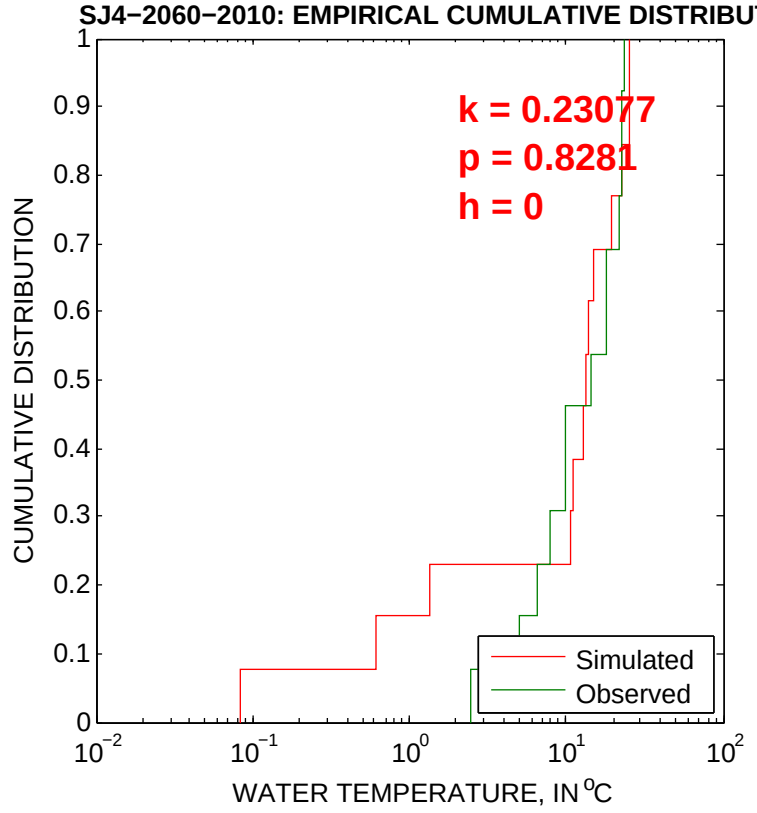












DATA SELECTION

scenario	file
P620171001WQ	WTMP.calib

plot: WTMP - water tempera...

Dates 1/1/1985 12/31/201

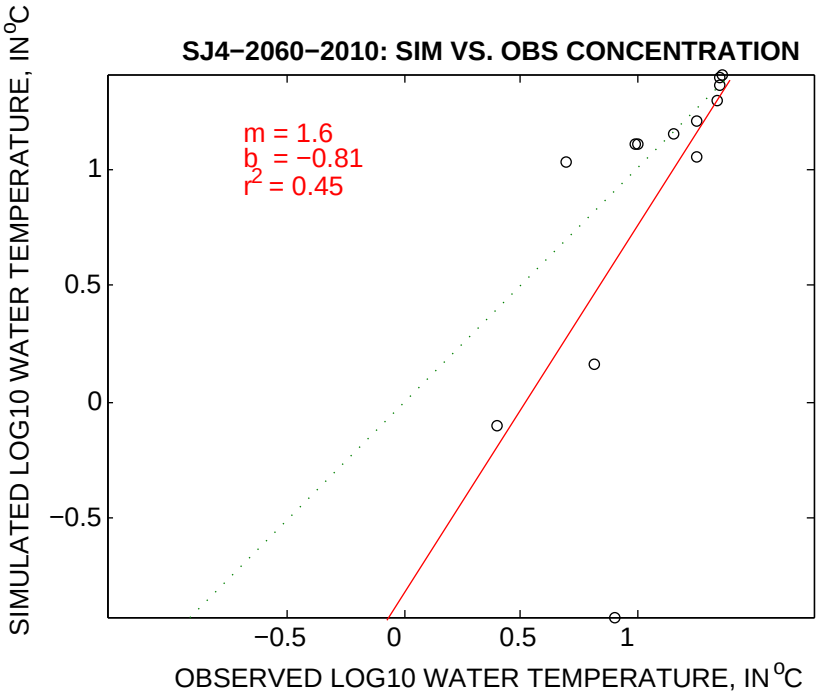
Drive	Directory	Observed
N/A	model	OBS20161101

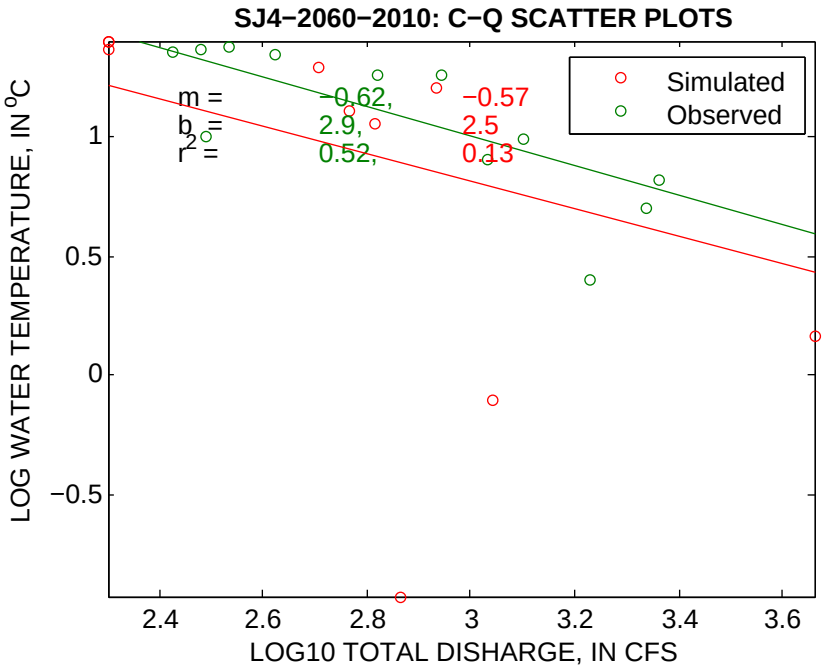
STATISTICS

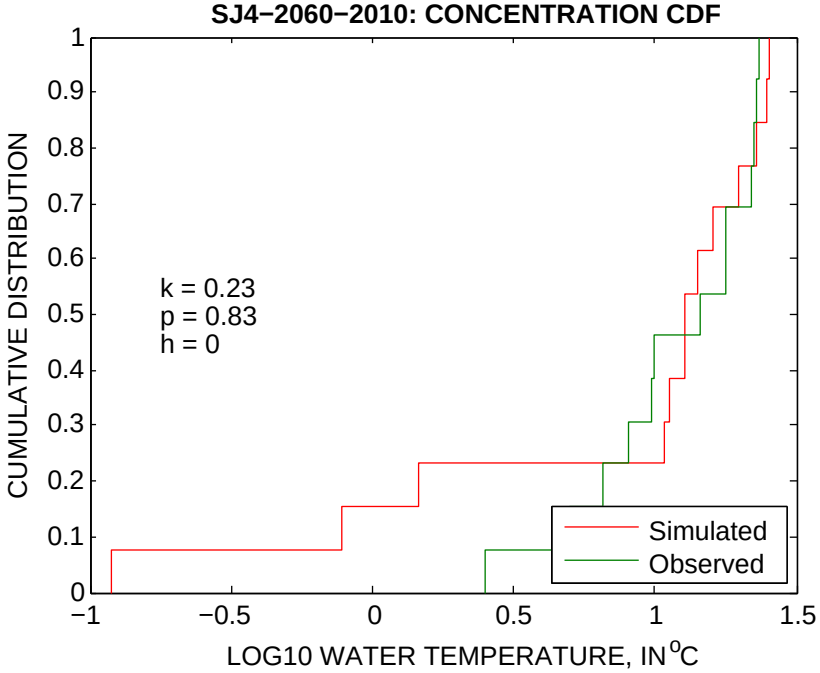
	n	13	13
		observe	simulate
min		2.5	0.084175
		0.39794	-1.07482
mean		14.1	13.1694
		1.0695	0.838991
media		14.5	13.15
		1.16137	1.11893
max		23.5	25.211
		1.37107	1.40159
varian		56.5633	75.5946
		0.0917475	0.567361
JB		0.22917	0.5
		0.140379	0.013728
		ra	log
%		-6.60025	-21.5527
err.va		19.003	0.413243
rel.std.err		0.33596	4.50413
mod.eff		0.66404	-3.50413

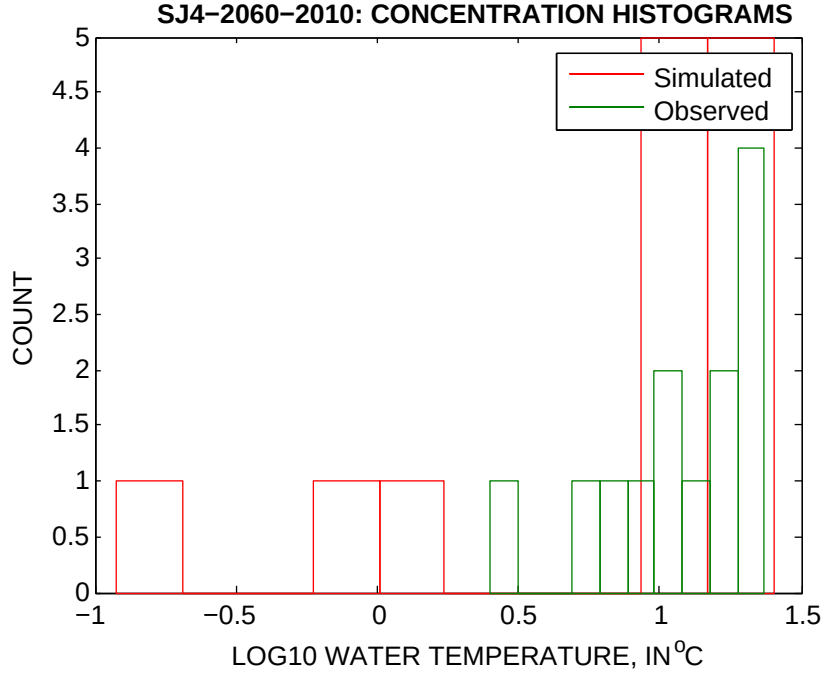
VERSION 2.1

ALL DATA
LOG10

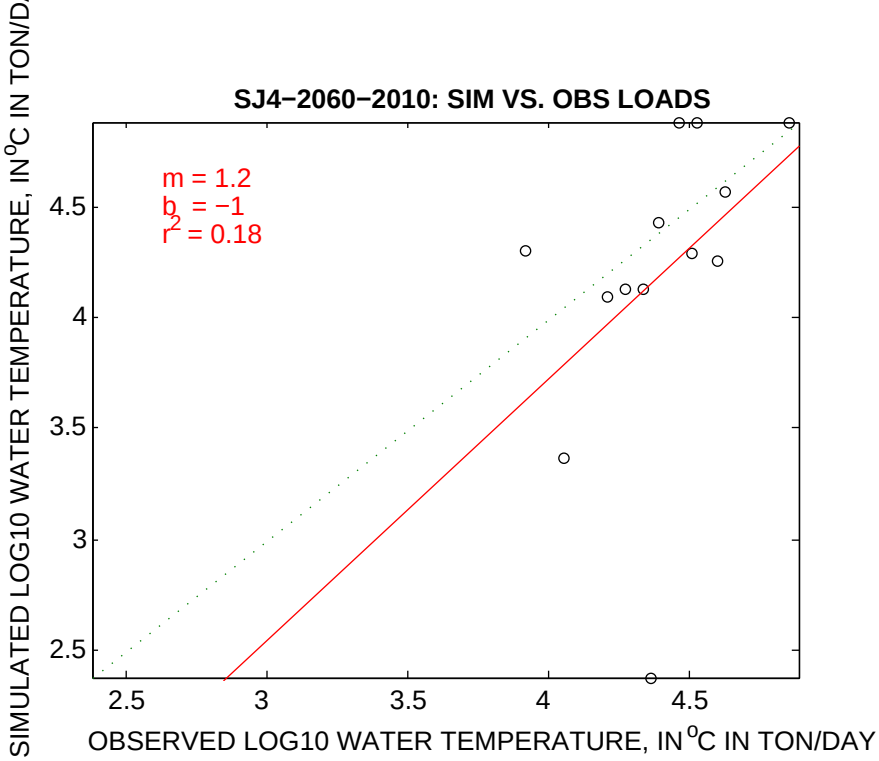


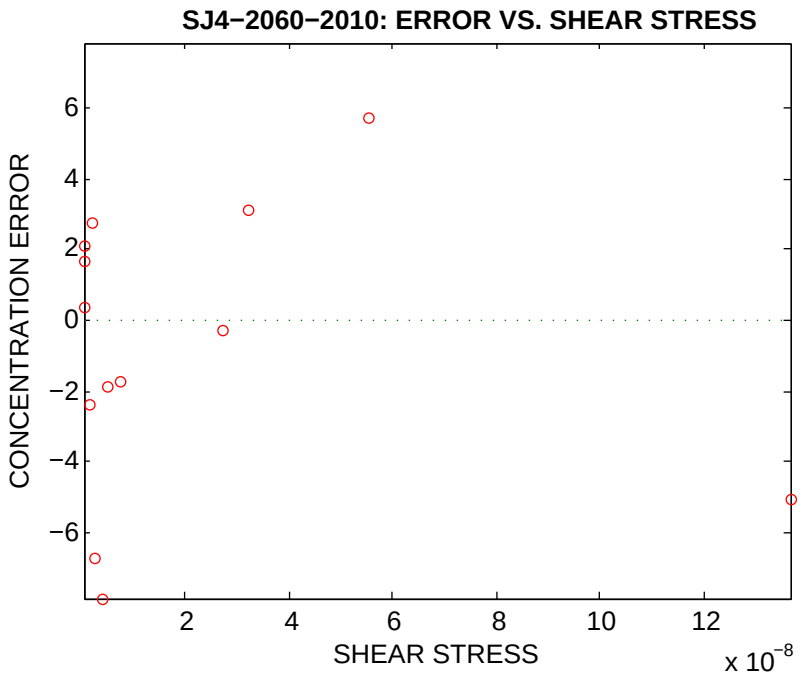


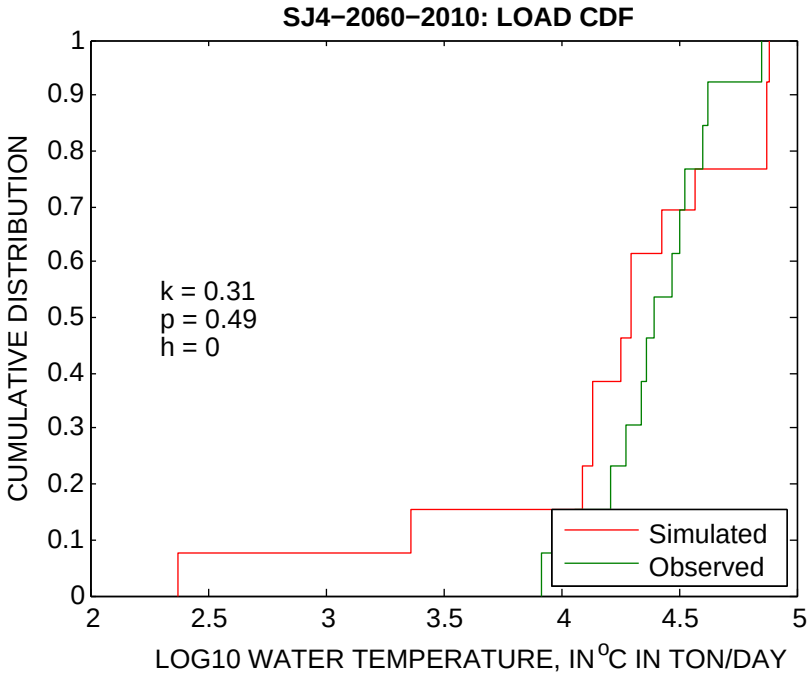


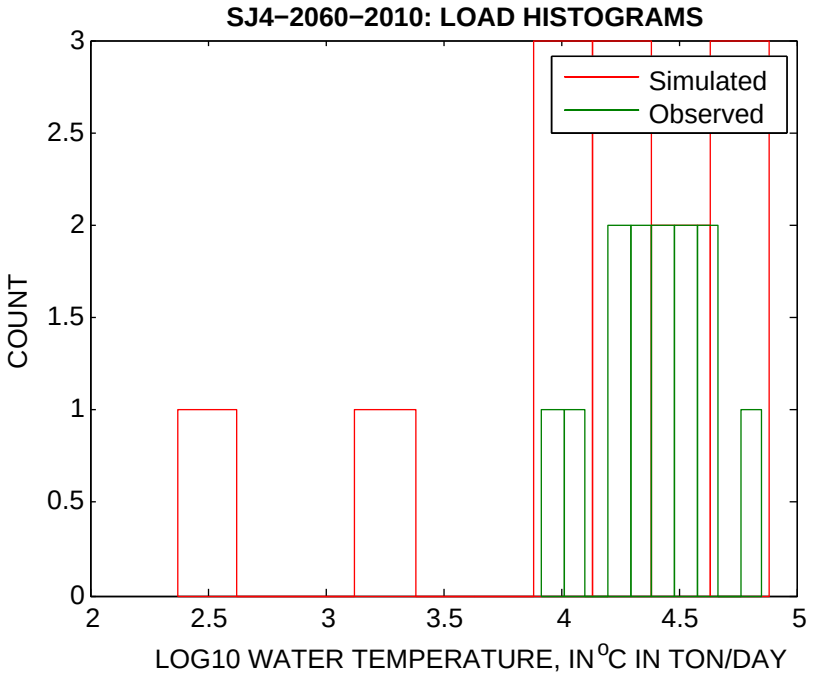


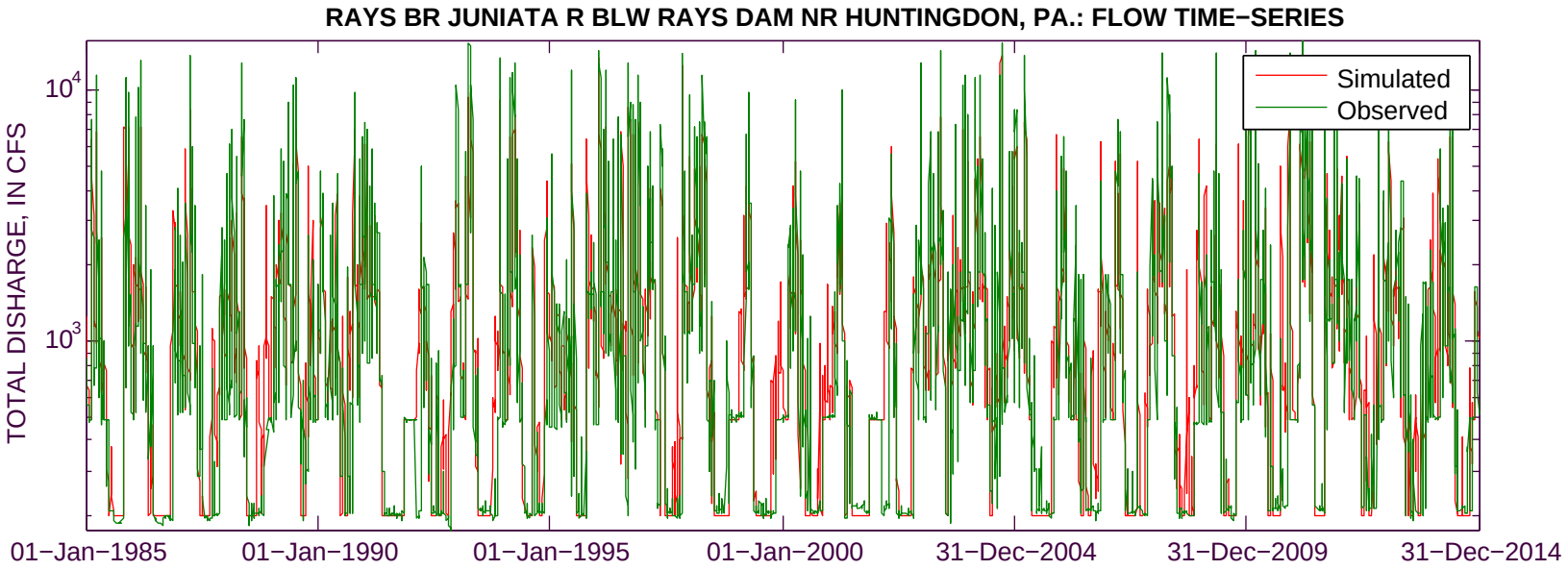
LOAD DATA
LOG10

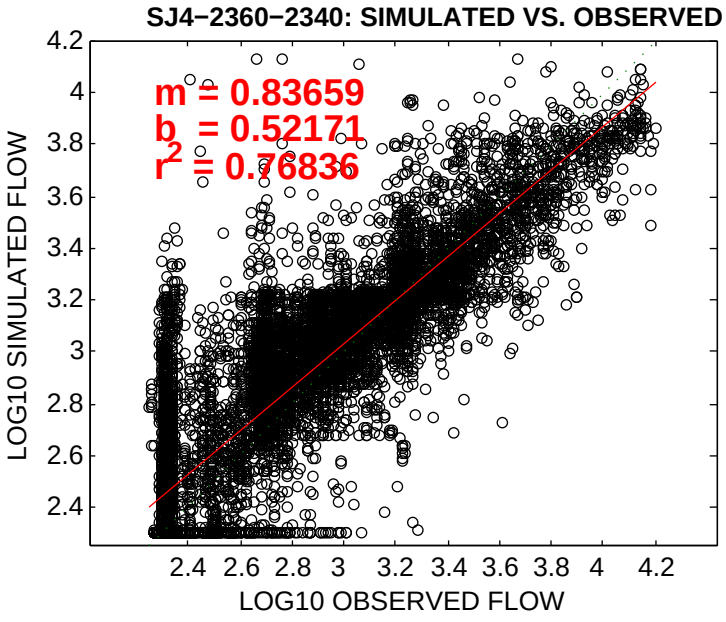


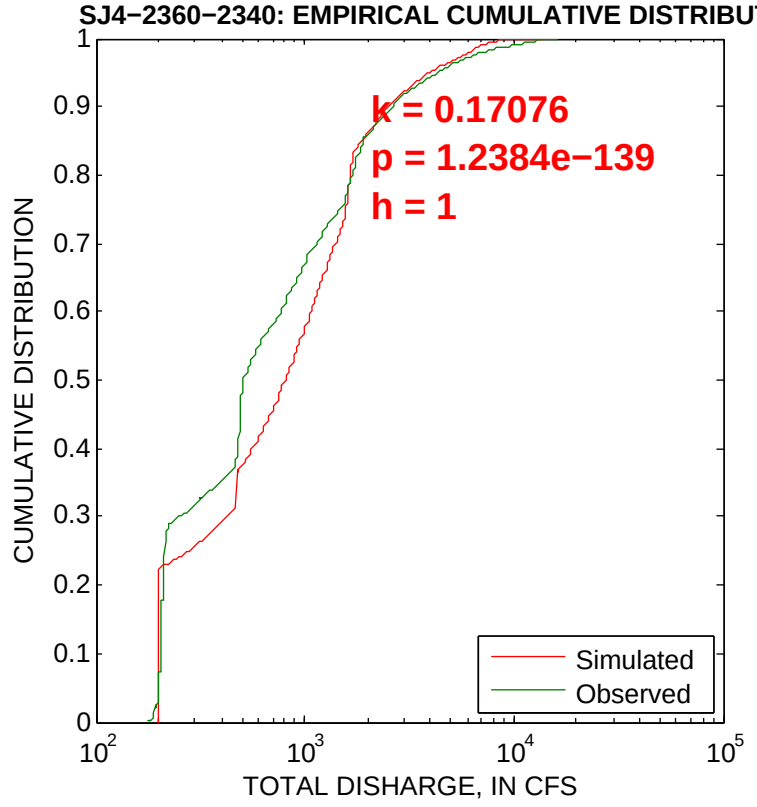












DATA SELECTION

scenario	file
P620171001WQ	FLOW.calib

plot: FLOW - total discharge

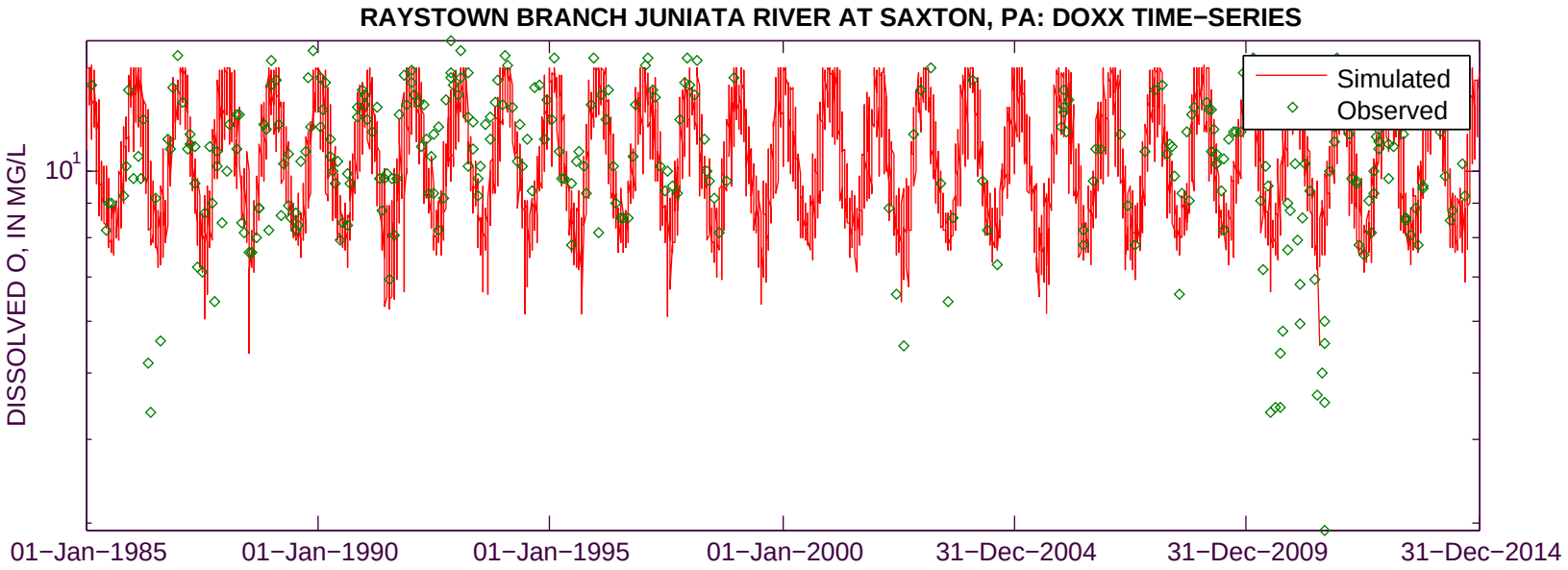
Dates: 1/1/1985 – 12/31/201

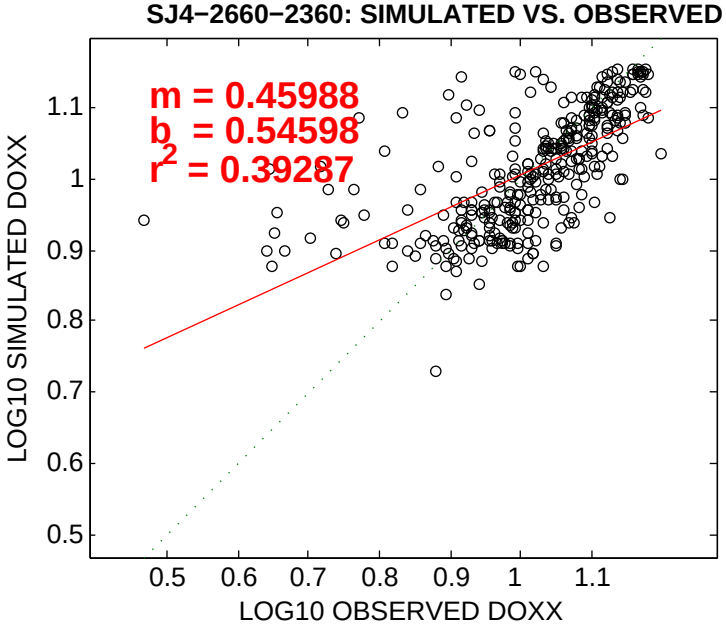
Drive	Directory	Observed
N/A	model	OBS20161101

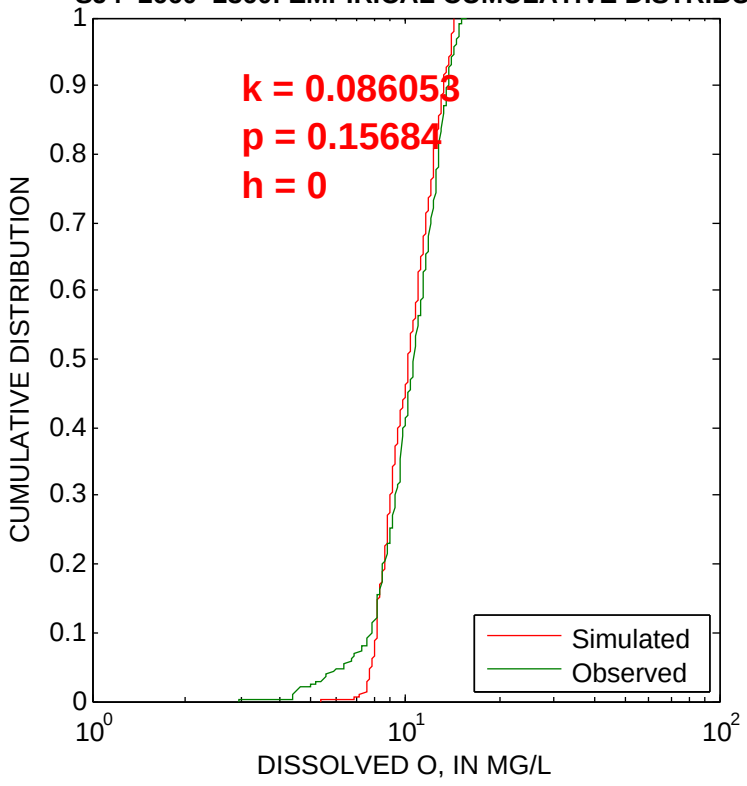
STATISTICS

	n	observe	simulate
		10957	10957
min		177	200
		2.24797	2.30103
mean		1193.26	1216.21
		2.81213	2.8743
media		510	809.57
		2.70757	2.90825
max		16000	13666
		4.20412	4.13564
varian		3.15481e+0	1.97786e+
		0.200431	0.182569
JB		0.001	0.001
		0.001	0.001
		ra	log
%		1.92381	2.2109
err.va		977523	0.0515089
rel.std.err		0.309852	0.25699
mod.eff		0.690148	0.74301

VERSION 2.1







DATA SELECTION

scenario	file
P620171001WQ	DOXX.calib

plot: DOXX - dissolved oxygen

Dates: 1/1/1985 – 12/31/201

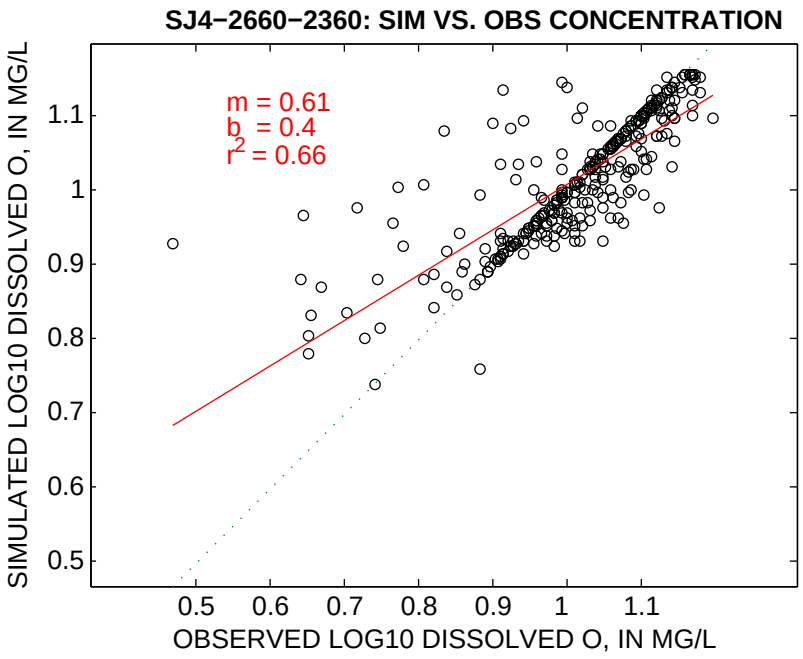
Drive	Directory	Observed
N/A	model	OBS20161101

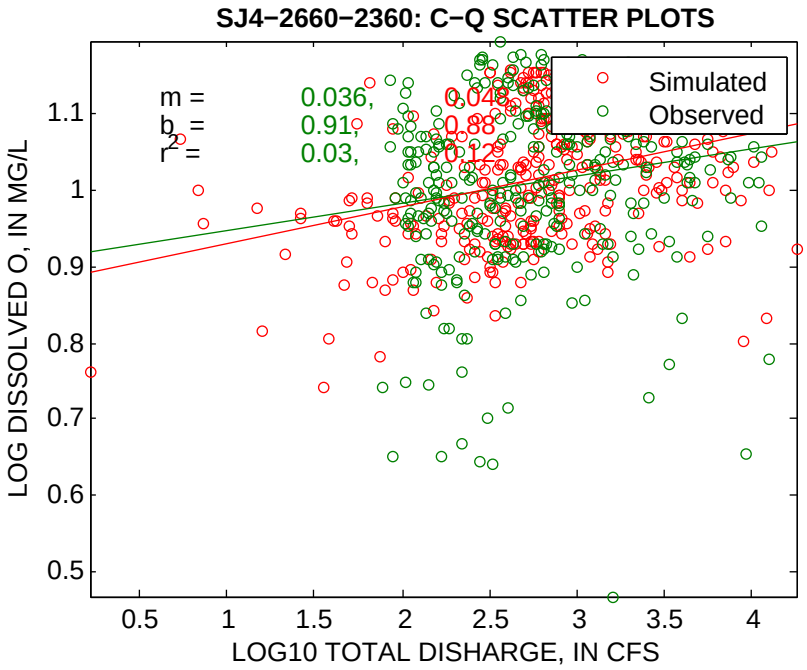
STATISTICS

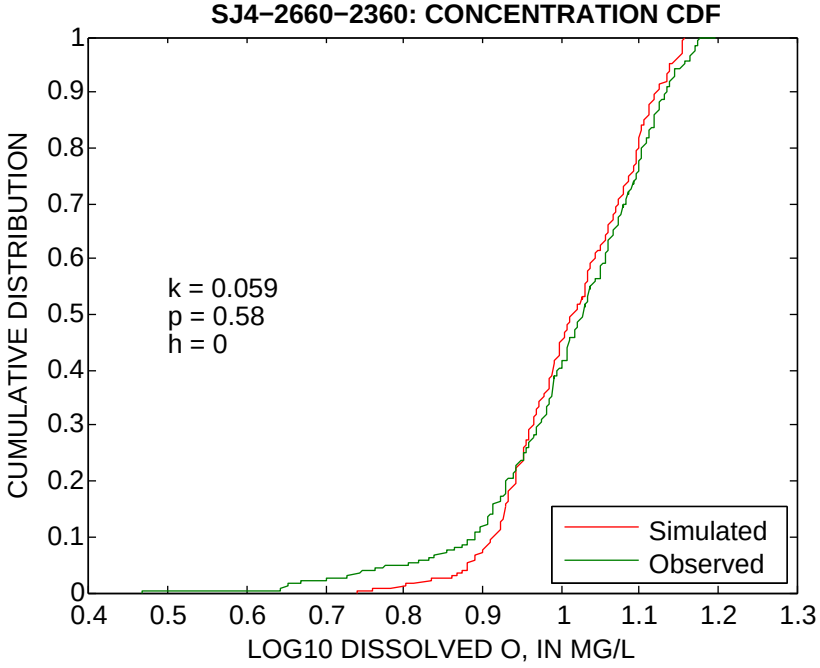
	n	337	337
		observe	simulate
min		2.94	5.3873
		0.468347	0.731371
mean		10.6103	10.4562
		1.01287	1.01178
media		10.7	10.244
		1.02938	1.01047
max		15.7222	14.315
		1.19651	1.15579
varian		5.73721	3.82155
		0.0123511	0.00664884
JB		0.027572	0.003016
		0.001	0.013270
		ra	log
%		-1.45213	-0.107776
err.va		3.17707	0.00764114
rel.std.err		0.553766	0.618659
mod.eff		0.446234	0.381341

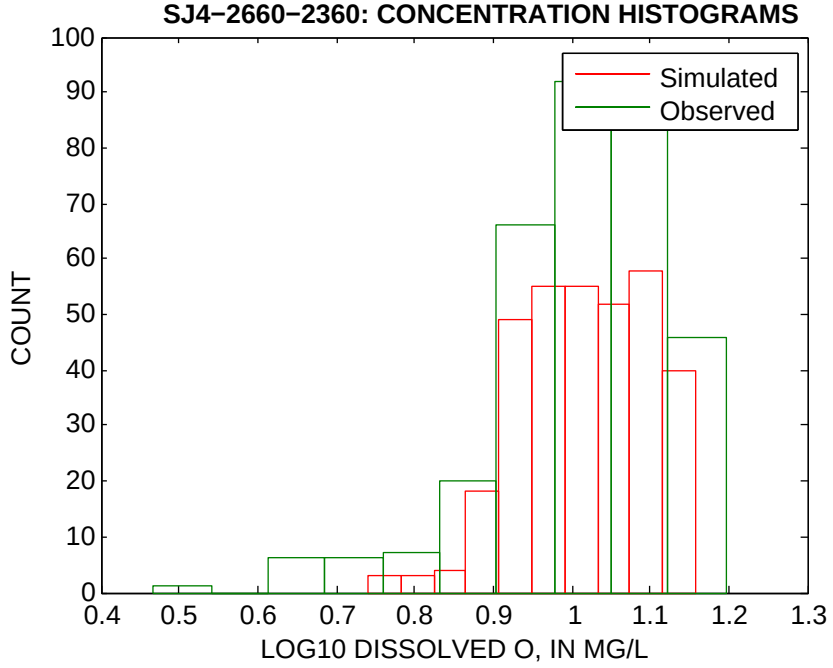
VERSION 2.1

ALL DATA
LOG10

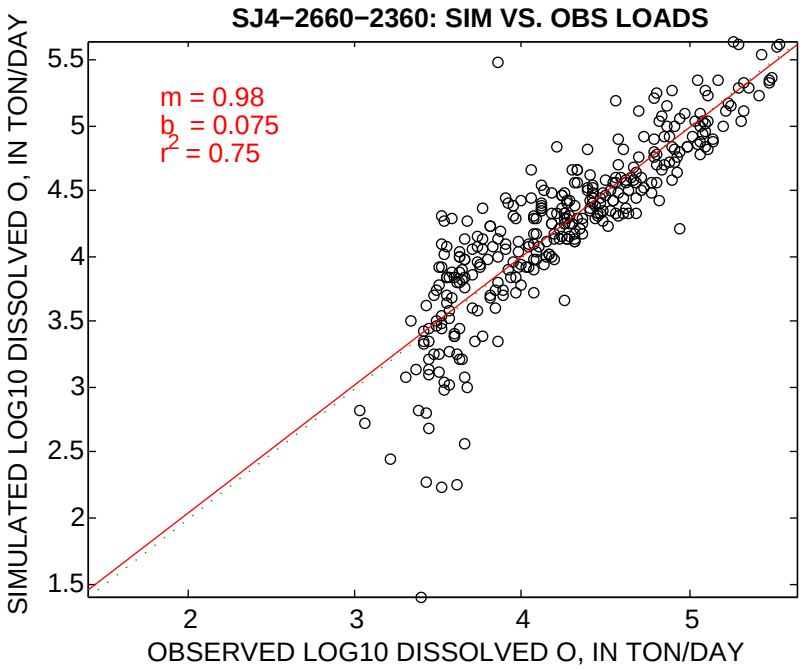


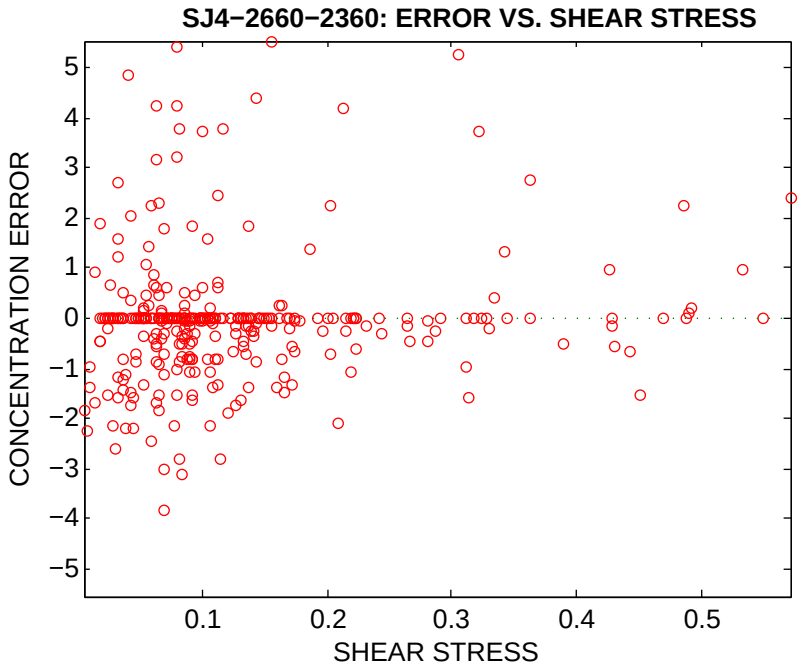


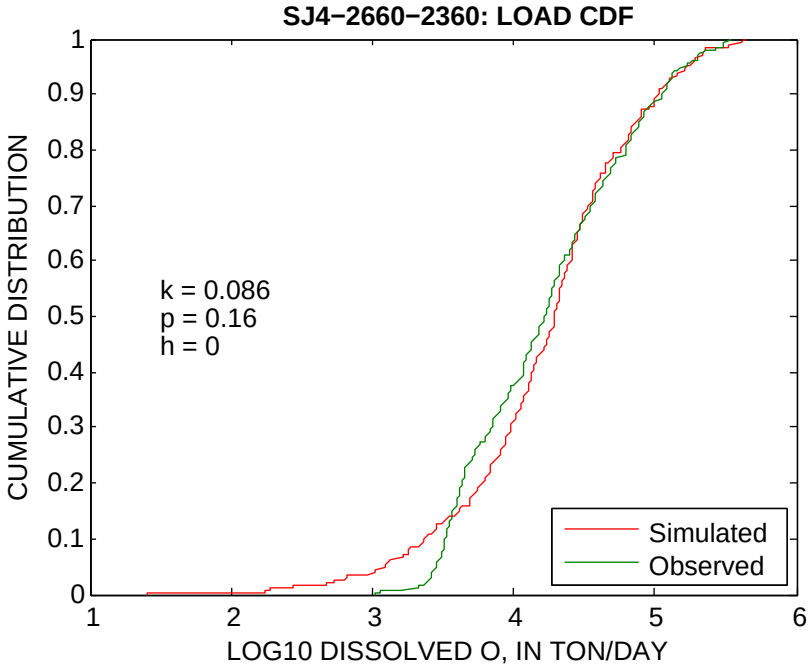


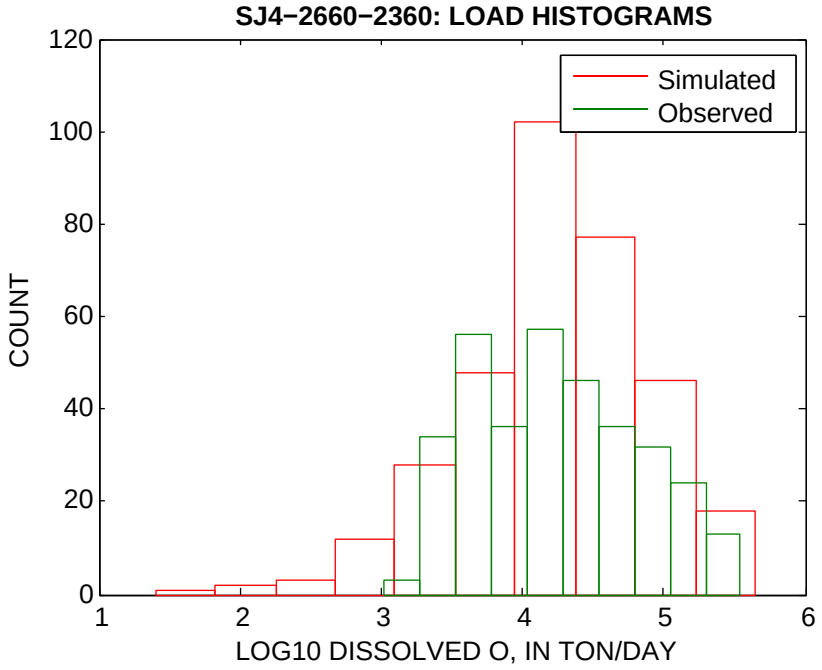


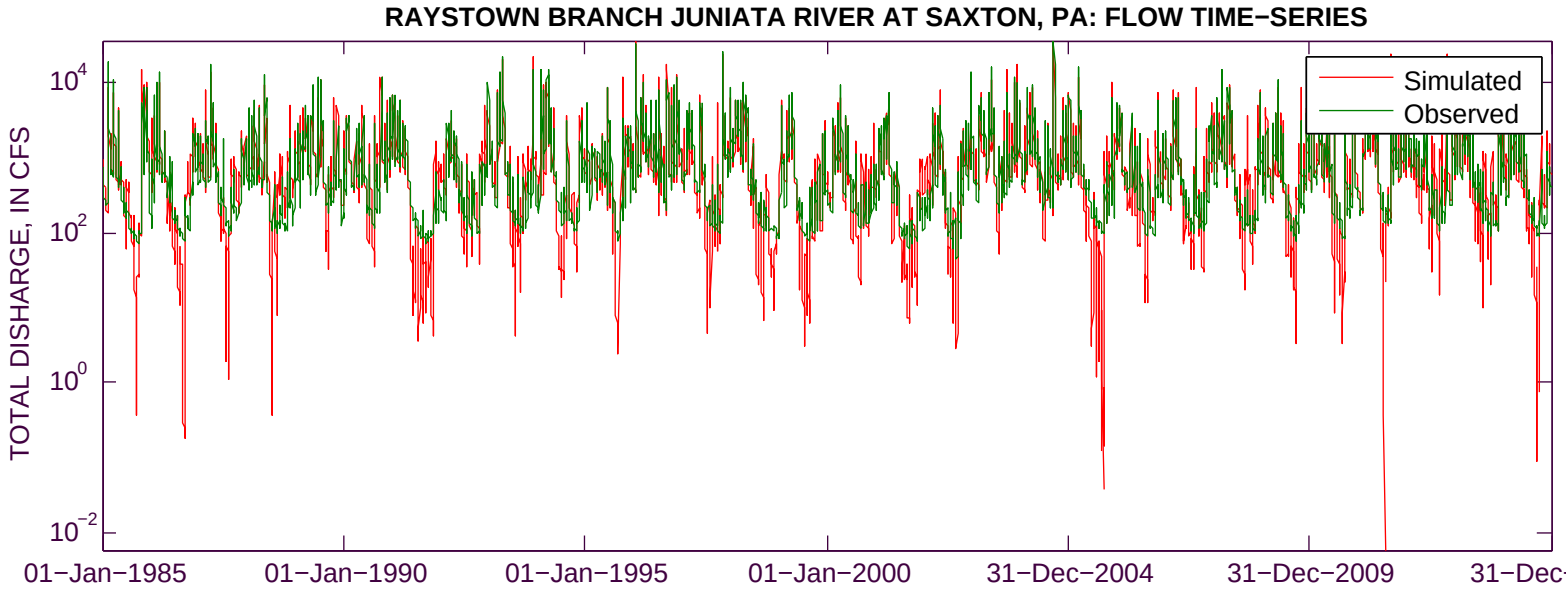
LOAD DATA
LOG10

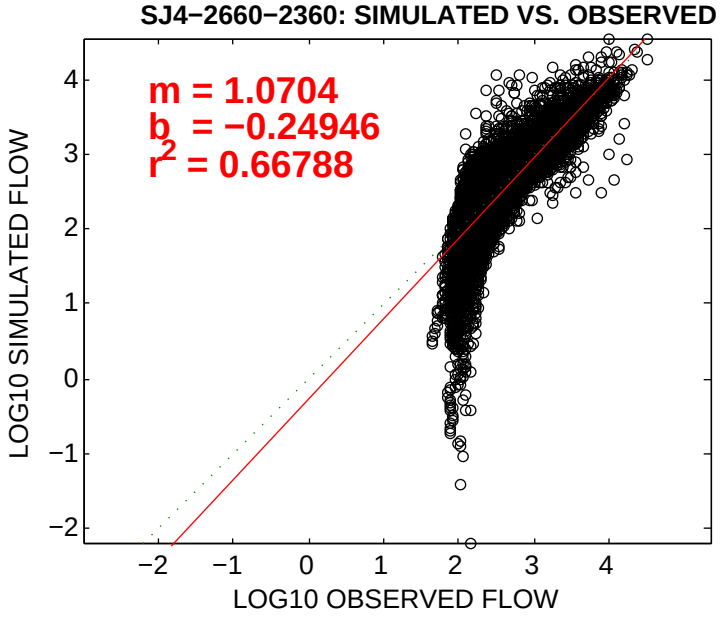


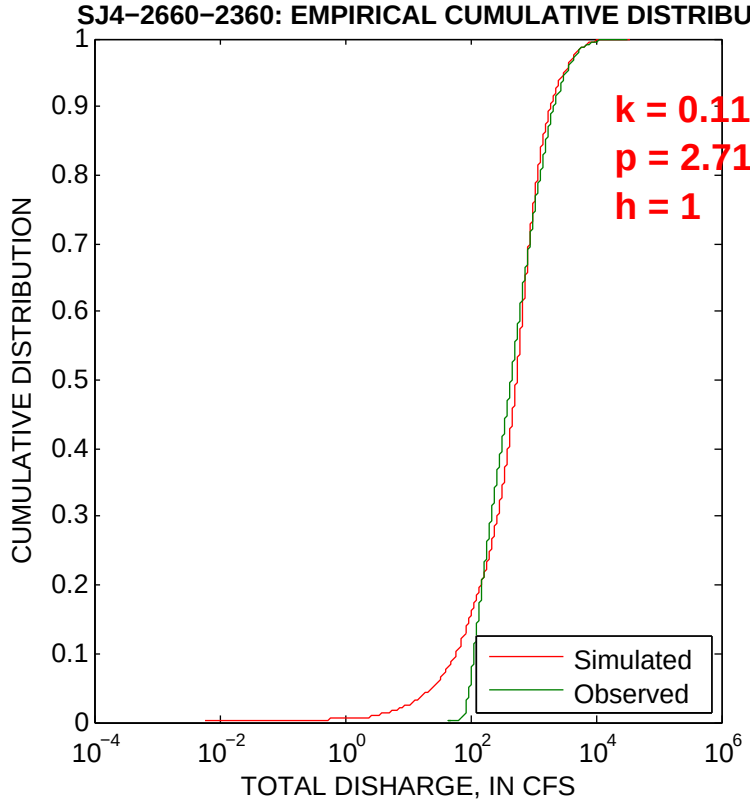












DATA SELECTION

scenario	file
P620171001WQ	FLOW.calib

plot: FLOW - total discharge

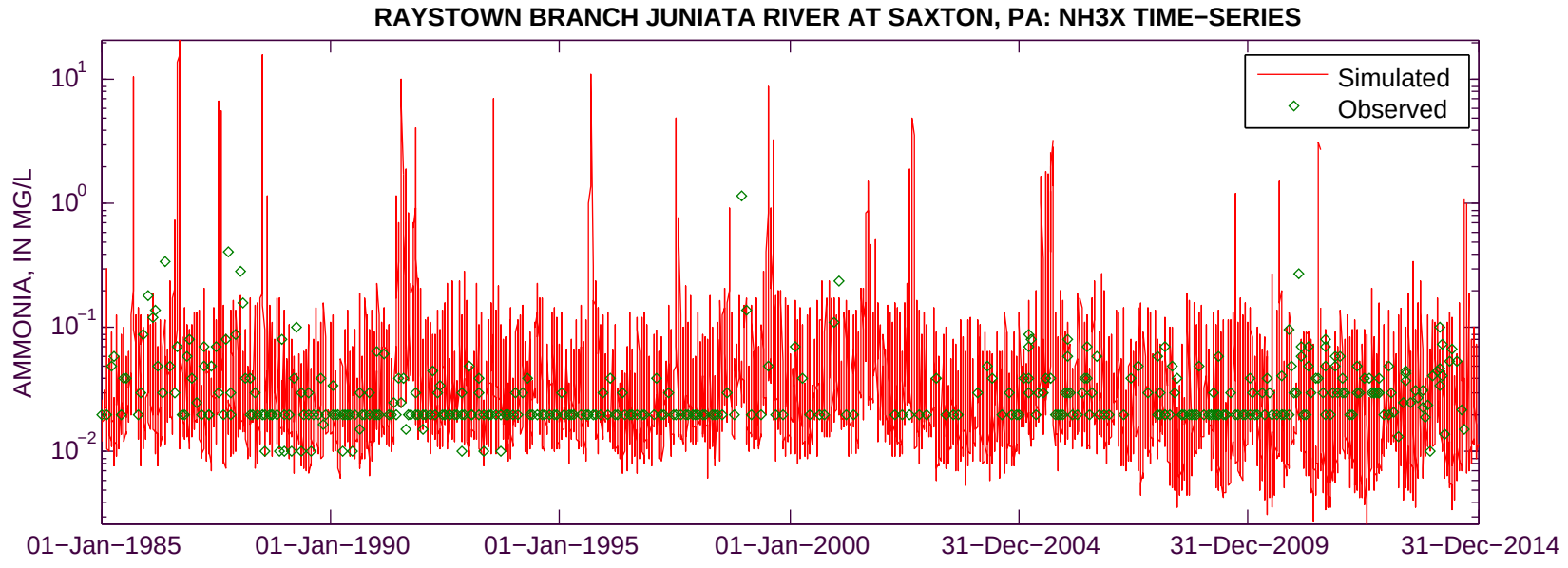
Dates: 1/1/1985 – 12/31/201

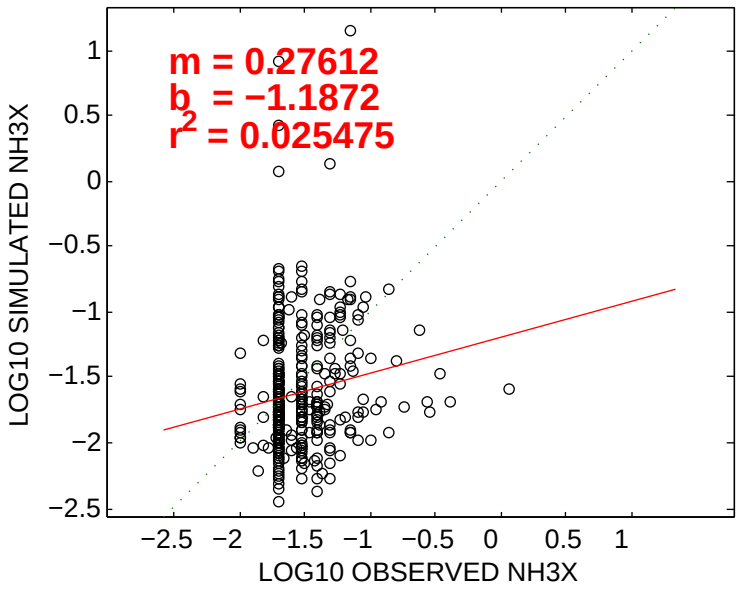
Drive	Directory	Observed
N/A	model	OBS20161101

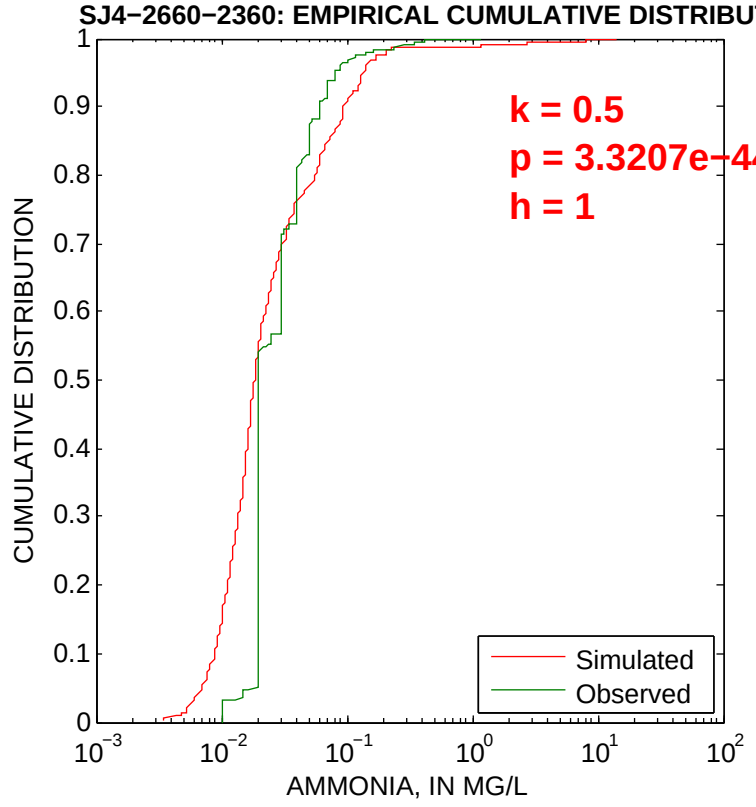
STATISTICS

		observe	simulate
n		10957	10941
min		44	0
		1.64345	-2.2093
mean		951.356	925.139
		2.68327	2.62263
media		456	553.32
		2.65992	2.7439
max		32800	35305
		4.51587	4.54784
varian		2.39796e+0	2.28536e+
		0.237686	0.407728
JB		0.001	0.001
		0.001	0.001
		ra	log
%		-2.75577	-2.25997
err.va		948911	0.140269
rel.std.err		0.395716	0.590143
mod.eff		0.604284	0.409857

VERSION







DATA SELECTION

scenario	file
P620171001WQ	NH3X.calib

plot: NH3X - ammonia

Dates: 1/1/1985 – 12/31/201

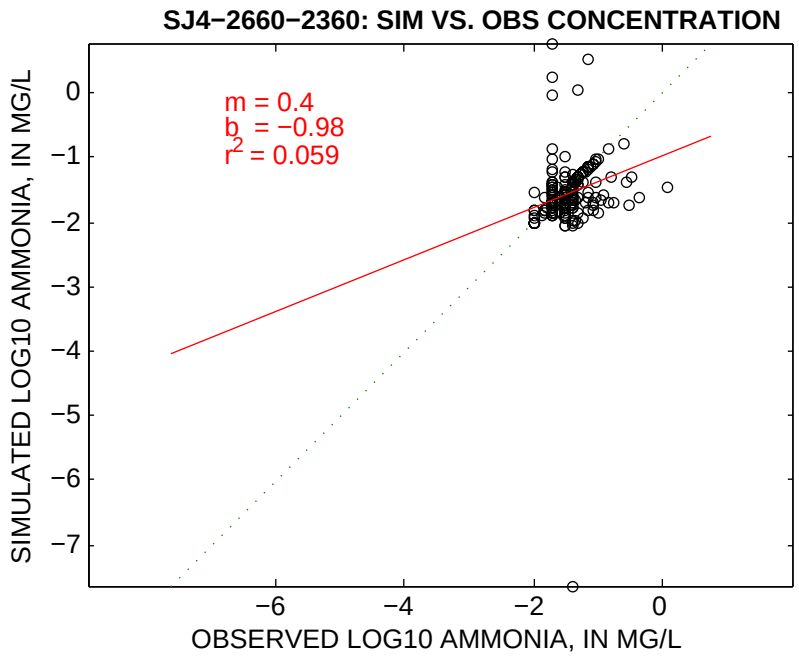
Drive	Directory	Observed
N/A	model	OBS20161101

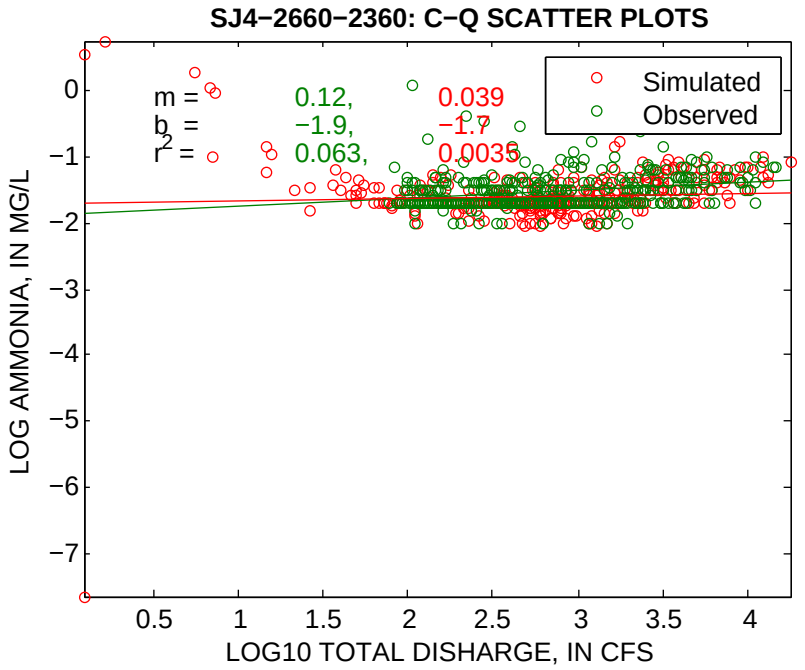
STATISTICS

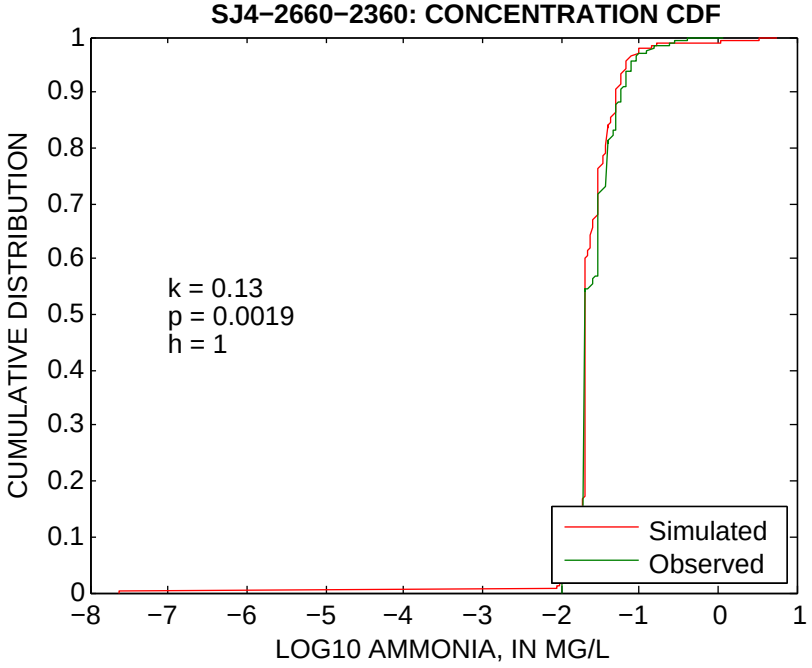
	n	observe	simulate
		396	395
min		0.01 -2	0 -2.45406
mean		0.0381324 -1.54662	0.10395 -1.61428
media		0.02 -1.69897	0.0184335 -1.73414
max		1.16 0.064458	13.943 1.14436
varian		0.00470975 0.067802	0.684423 0.202913
JB		0.001 0.001	0.001 0.001
		ra	log
%		172.603	4.37472
err.va		0.692064	0.237862
rel.std.err		146.943	3.50818
mod.eff		-145.943	-2.50818

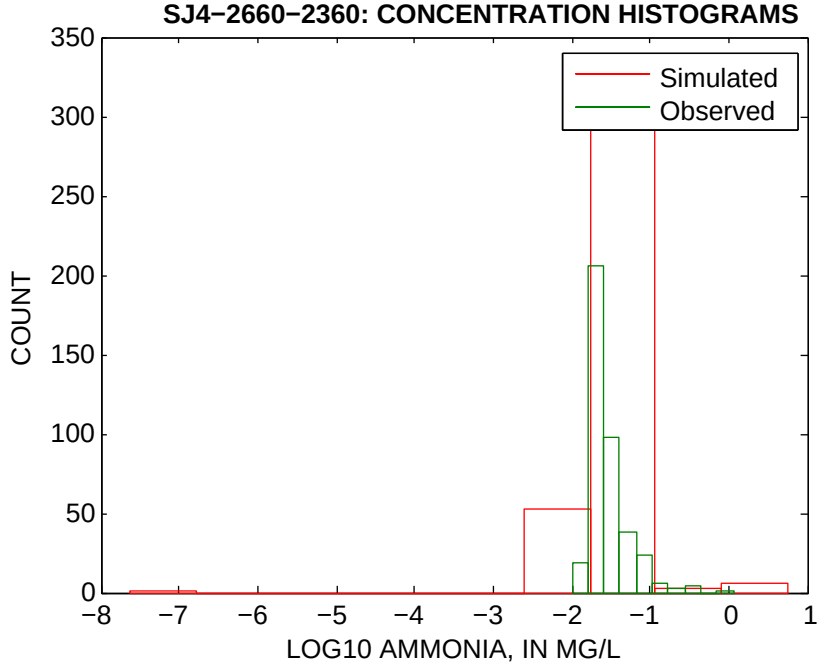
VERSION 2.1

ALL DATA
LOG10

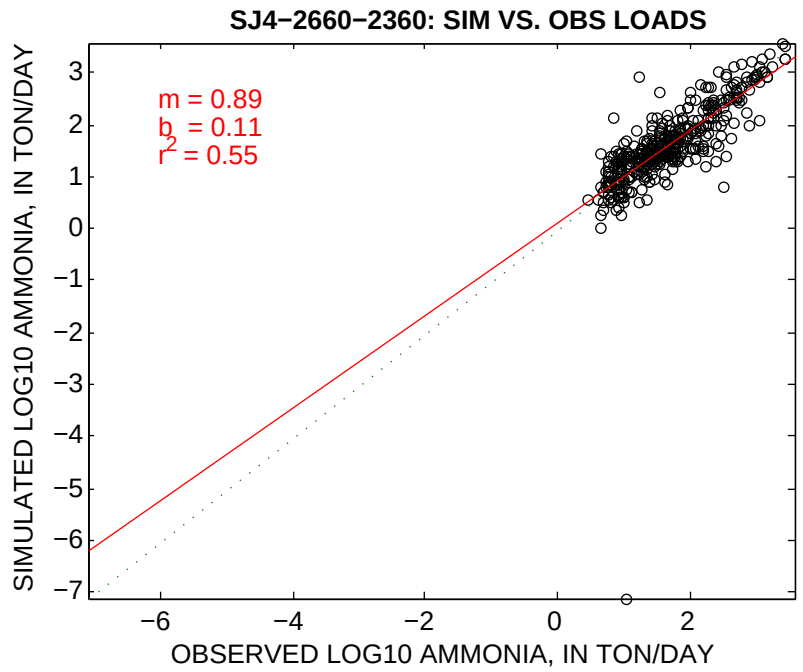


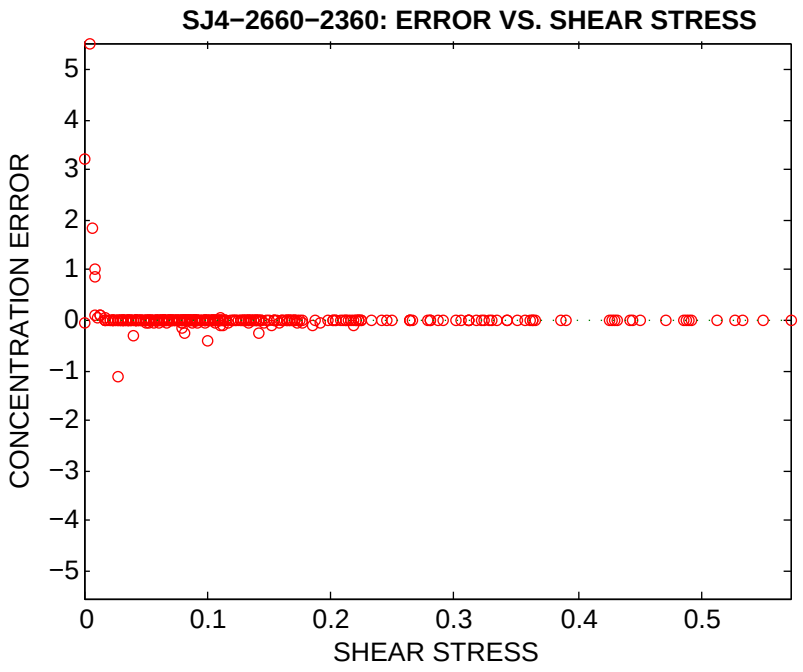


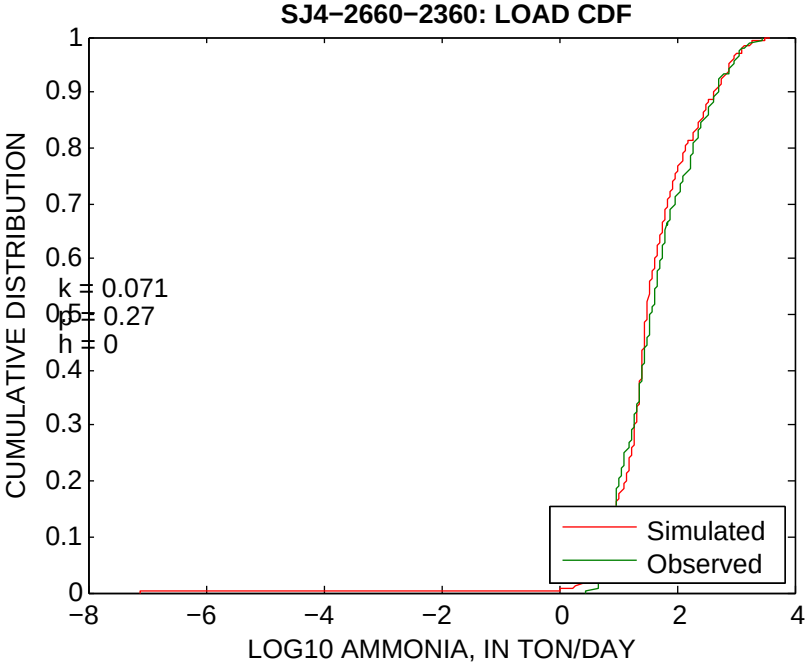


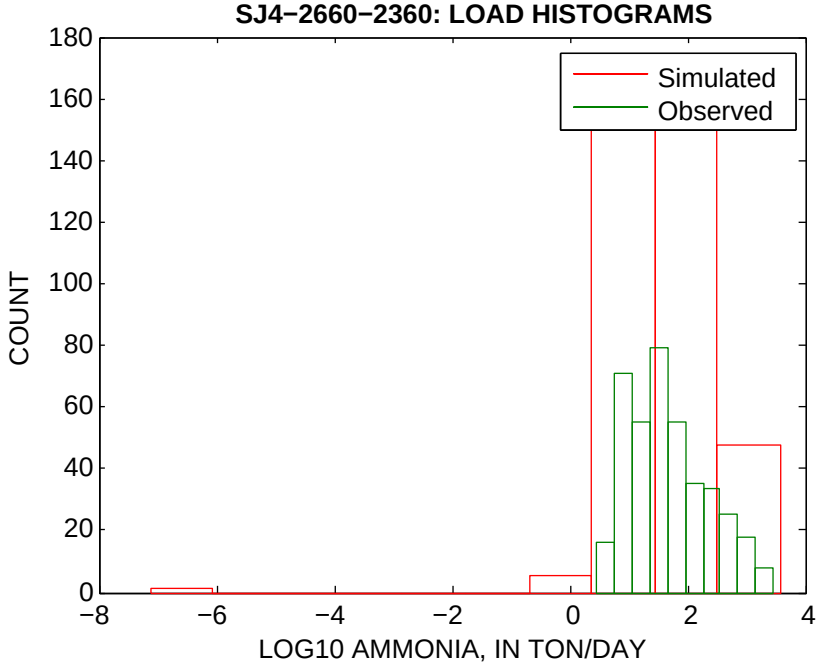


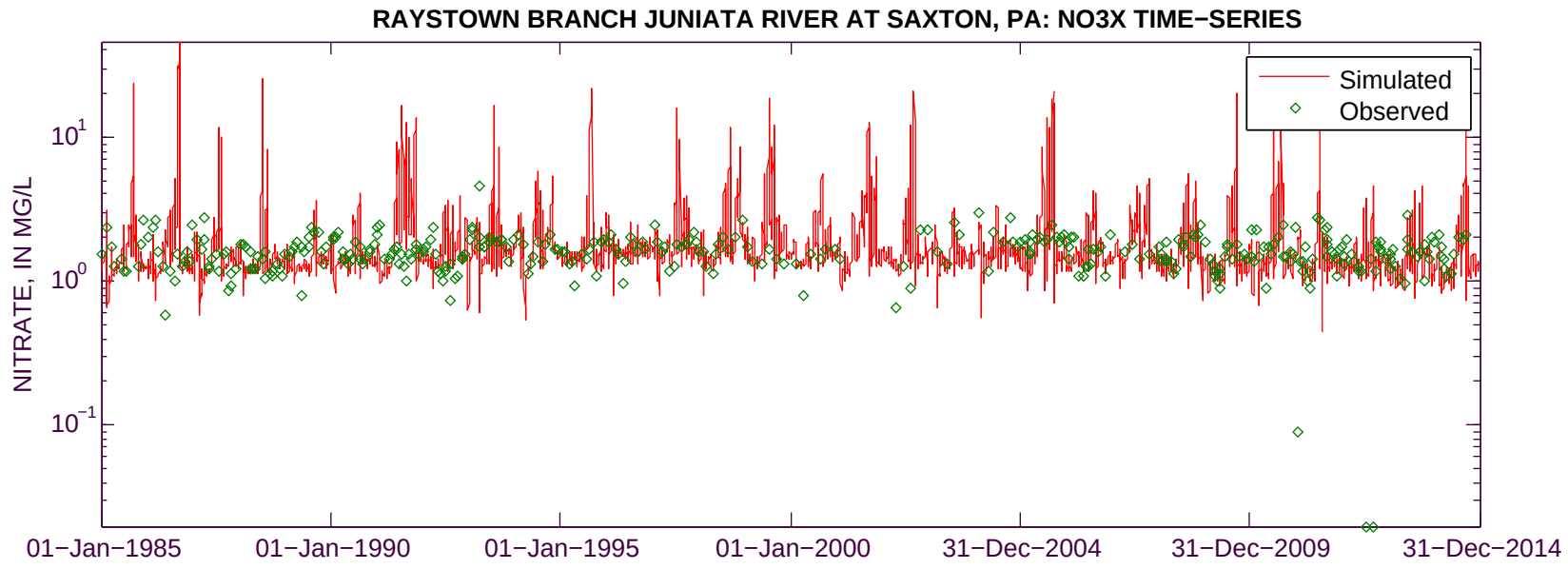
LOAD DATA
LOG10

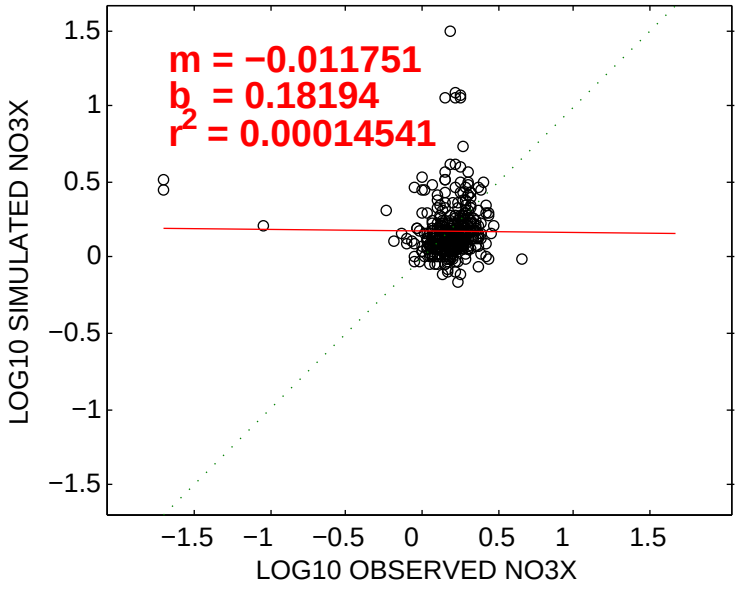


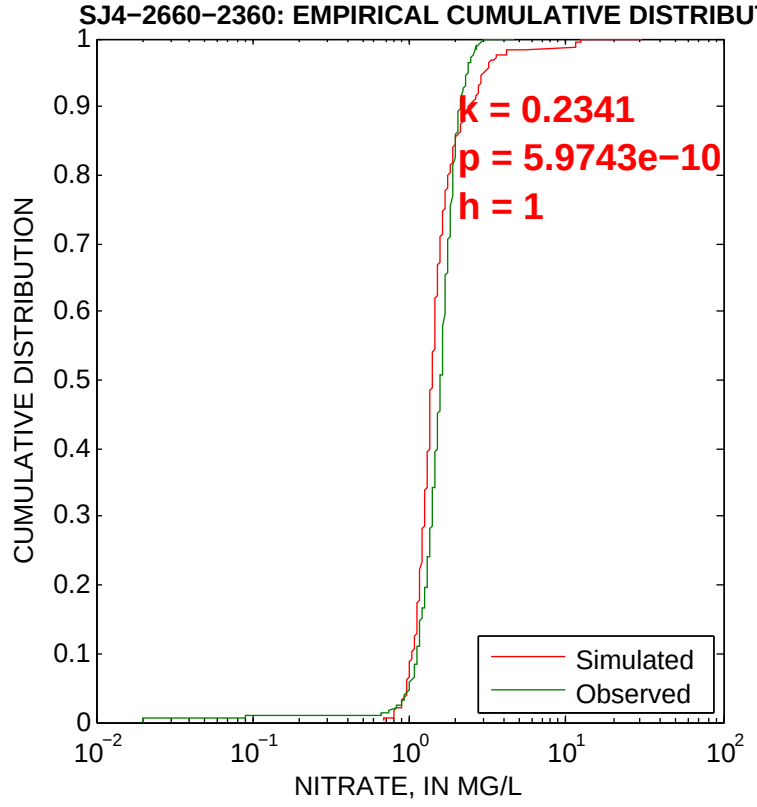












DATA SELECTION

scenario	file
P620171001WQ	NO3X.calib

plot: NO3X - nitrate

Dates: 1/1/1985 – 12/31/201

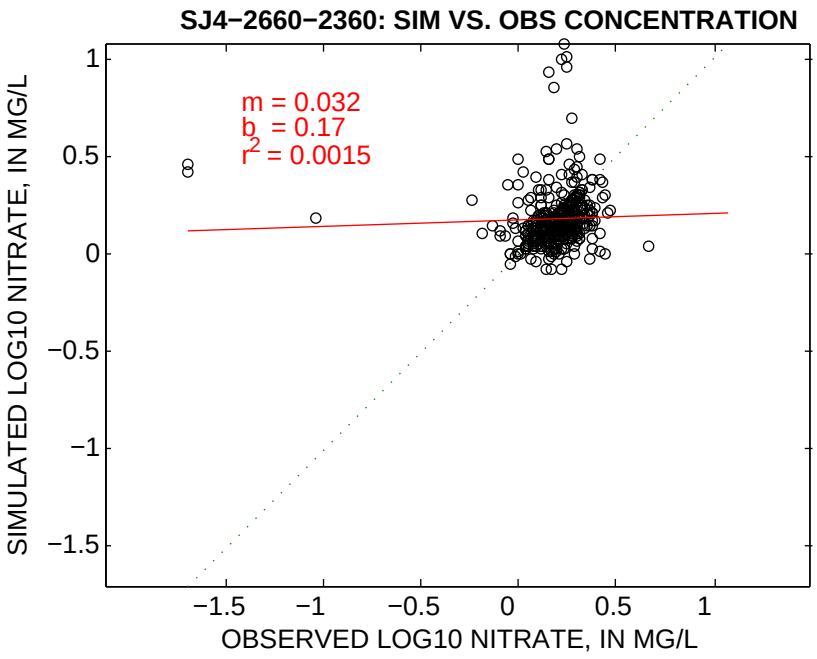
Drive	Directory	Observed
N/A	model	OBS20161101

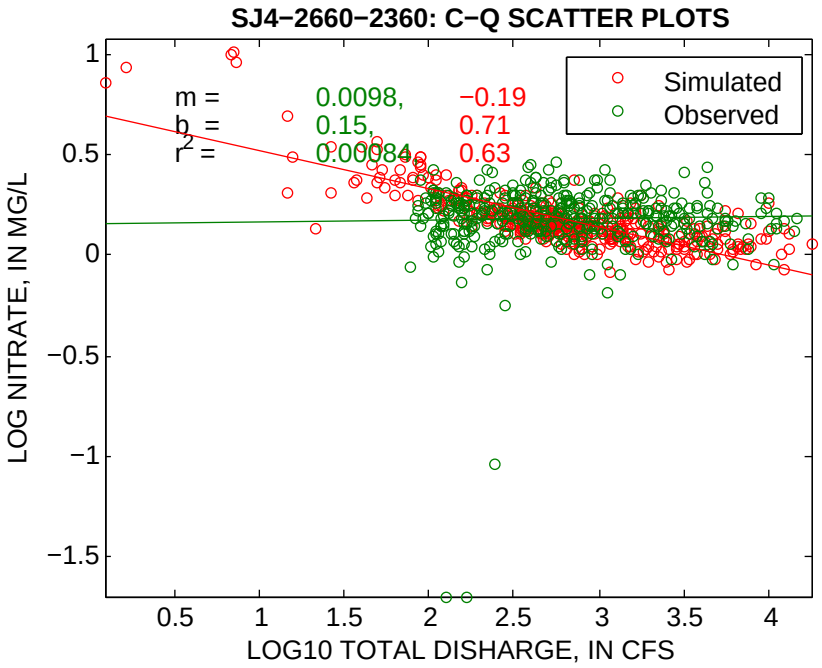
STATISTICS

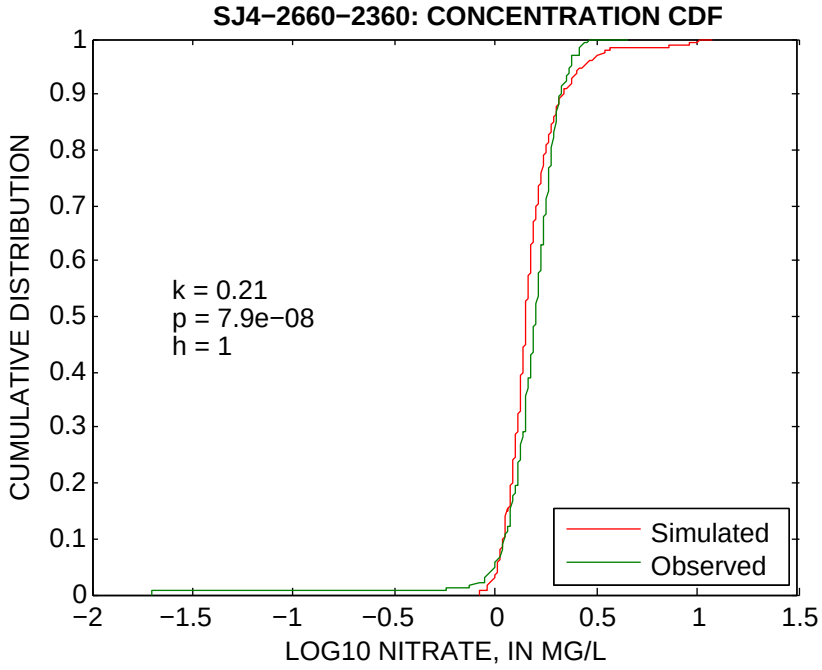
	n	393	392
		observe	simulate
min		0.02	0
		-1.69897	-0.166324
mean		1.60809	1.74306
		0.181967	0.179804
media		1.58	1.3895
		0.198657	0.143093
max		4.59	30.849
		0.661813	1.48924
varian		0.197682	3.79872
		0.034521	0.032782
JB		0.001	0.001
		0.001	0.001
		ra	log
%		8.39294	-1.18828
err.va		3.98035	0.068119
rel.std.err		20.1351	1.97326
mod.eff		-19.1351	-0.973264

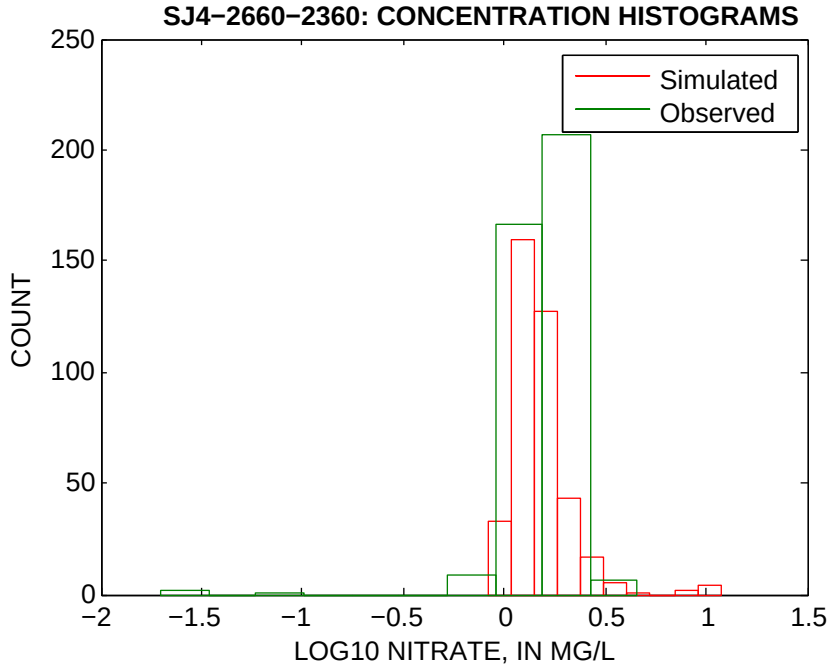
VERSION

ALL DATA
LOG10

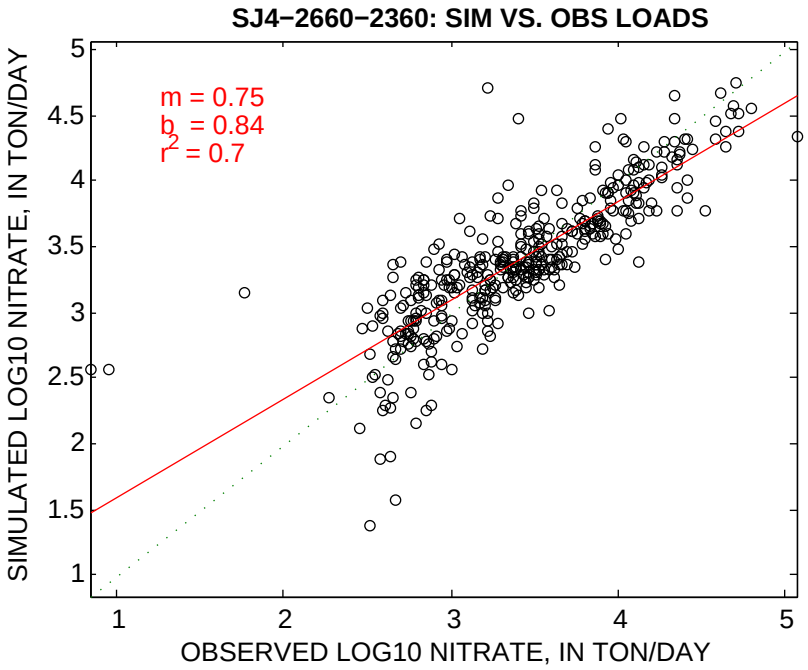


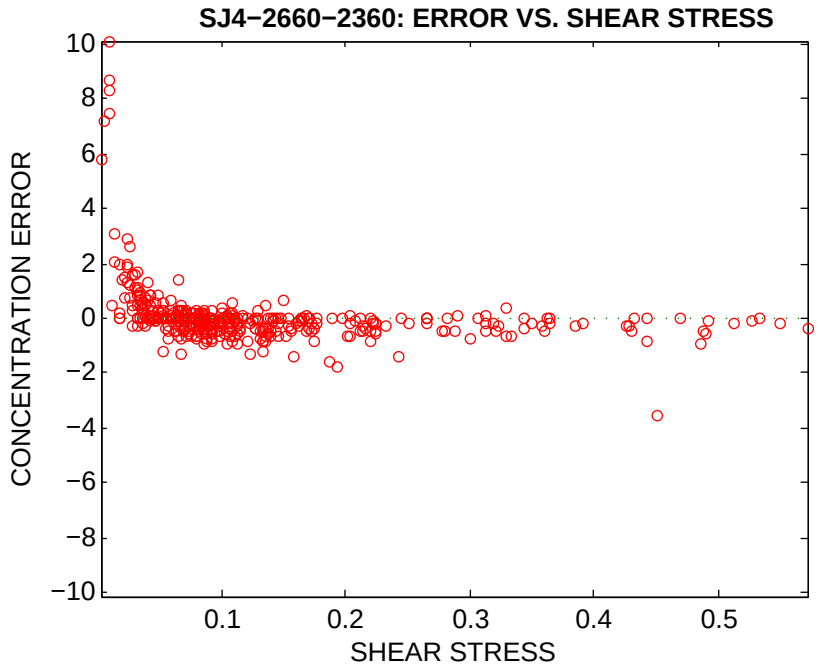


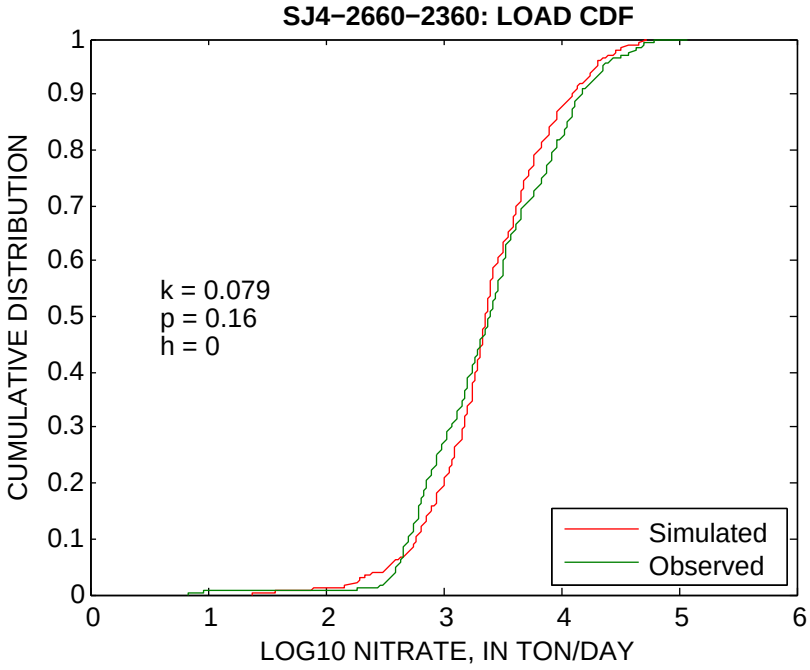


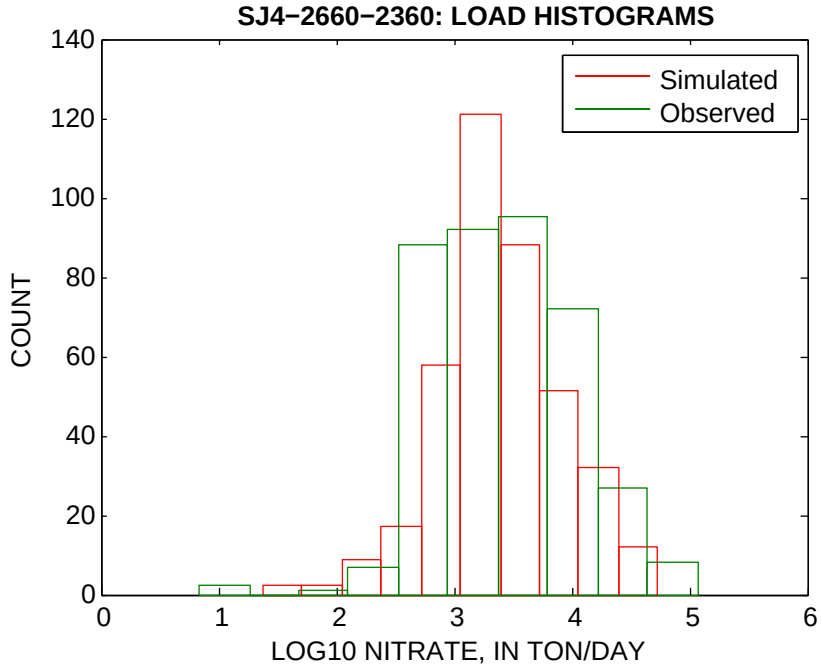


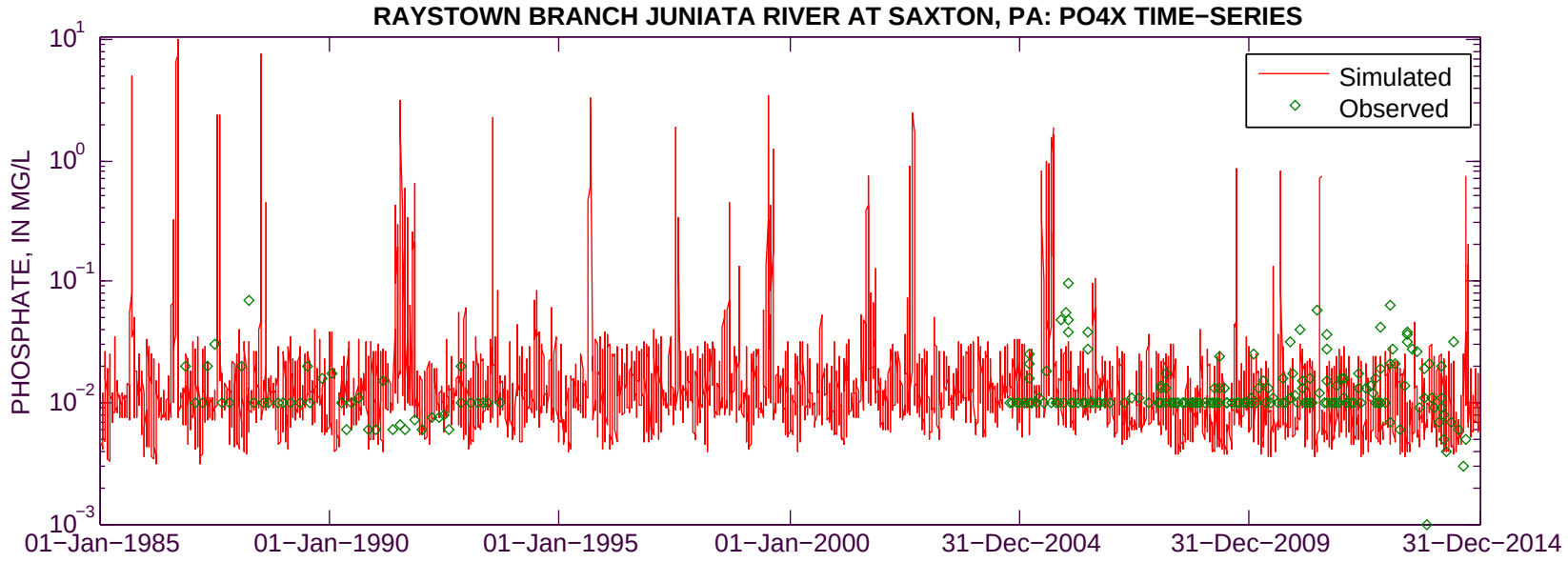
LOAD DATA
LOG10

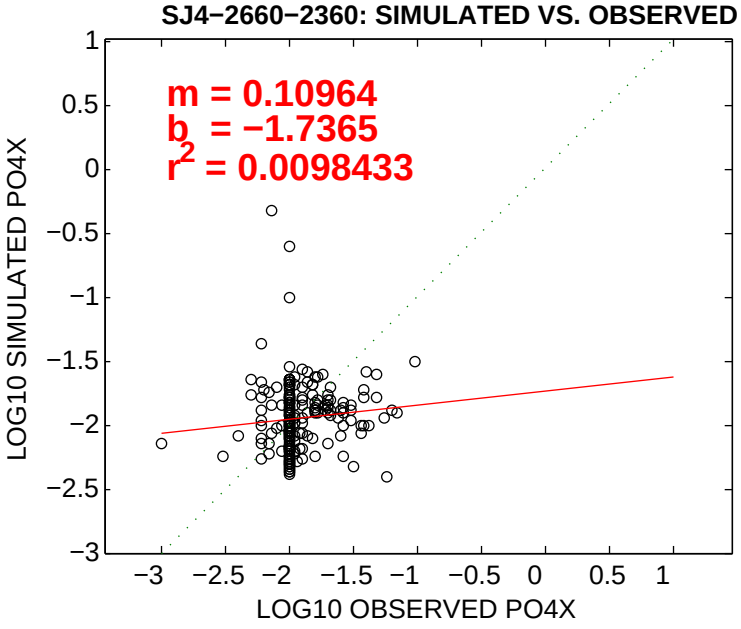


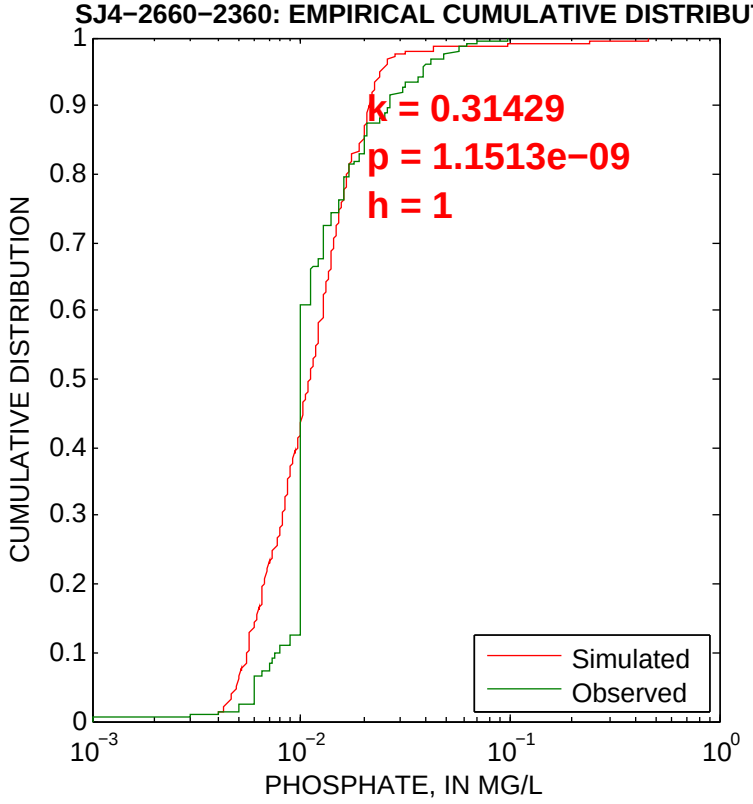












DATA SELECTION

scenario: P620171001WQ | file: PO4X.calib

plot: PO4X - phosphate

Dates: 1/1/1985 – 12/31/201

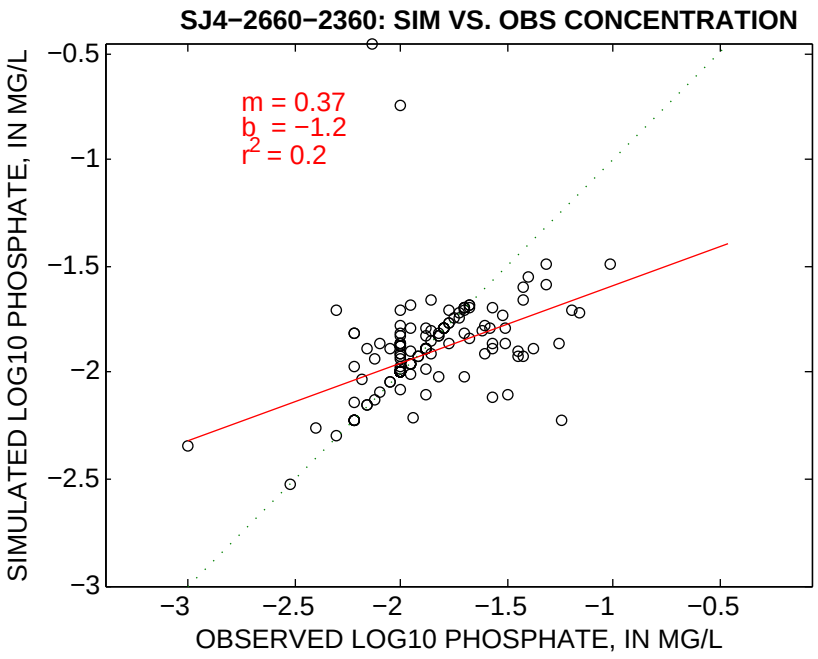
Drive: N/A | Directory: model | Observed: OBS20161101

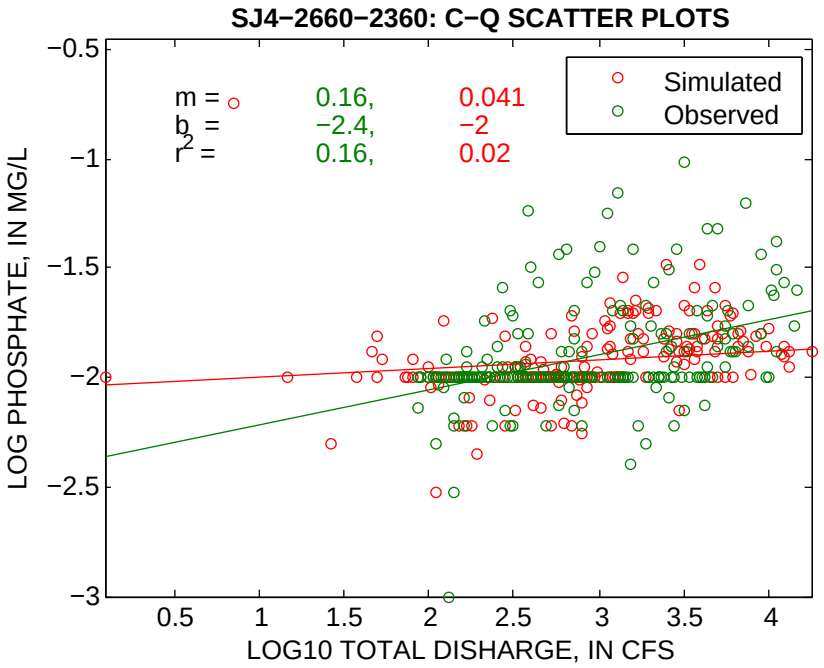
STATISTICS

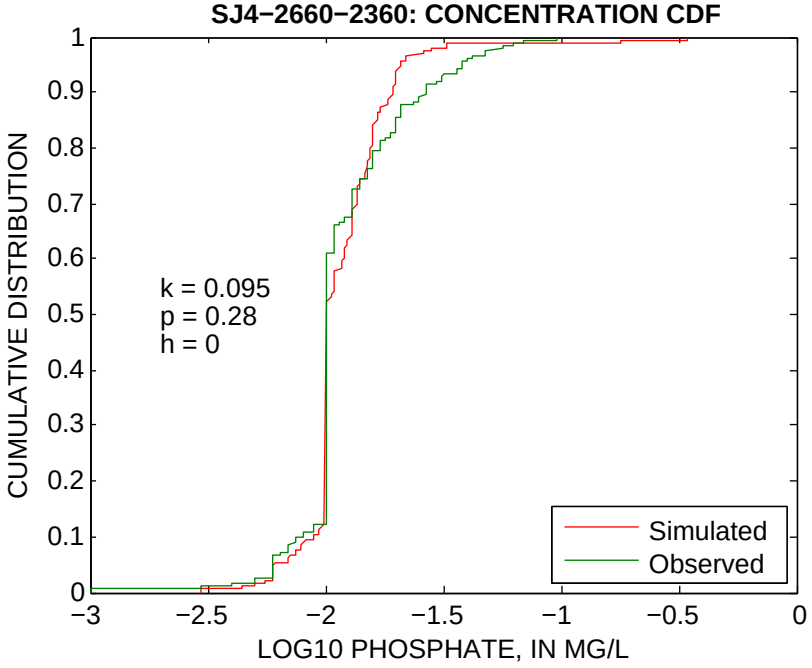
		observe	simulate
n		210	209
min		0.001	0
		-3	-2.4103
mean		0.0146016	0.0157601
		-1.91229	-1.94615
media		0.01	0.010999
		-2	-1.95833
max		0.097	0.46071
		-1.01323	-0.336572
varian		0.00013712	0.00127545
		0.0567097	0.0692595
JB		0.001	0.001
		0.001	0.001
		ra	log
%		7.93397	1.77065
err.va		0.00143267	0.114686
rel.std.err		10.4478	2.02233
mod.eff		-9.44777	-1.02233

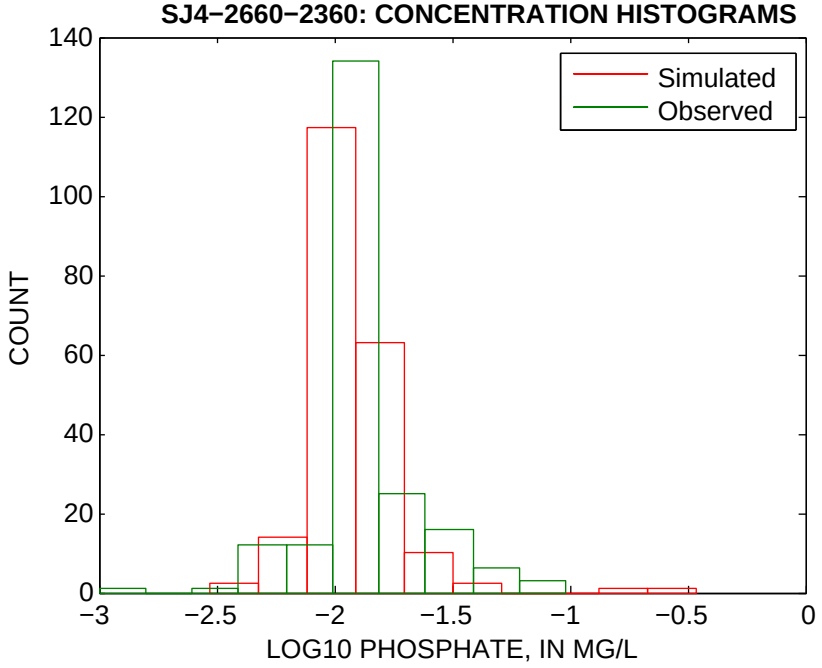
VERSION 2.1

ALL DATA
LOG10

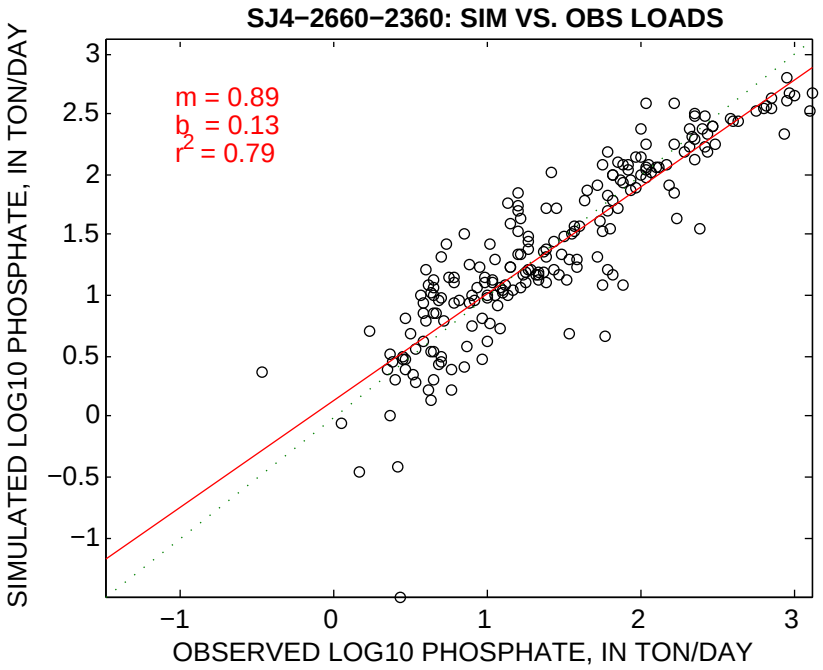


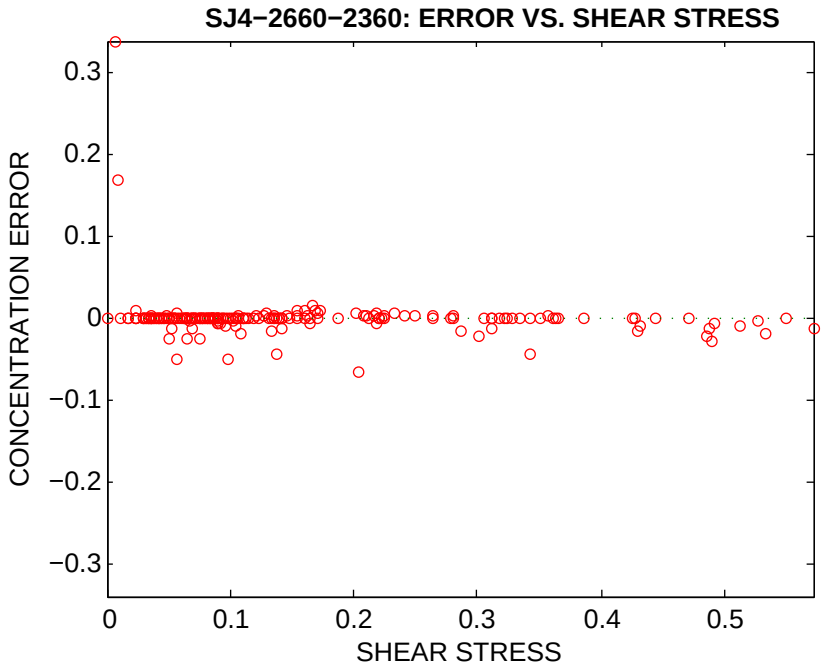


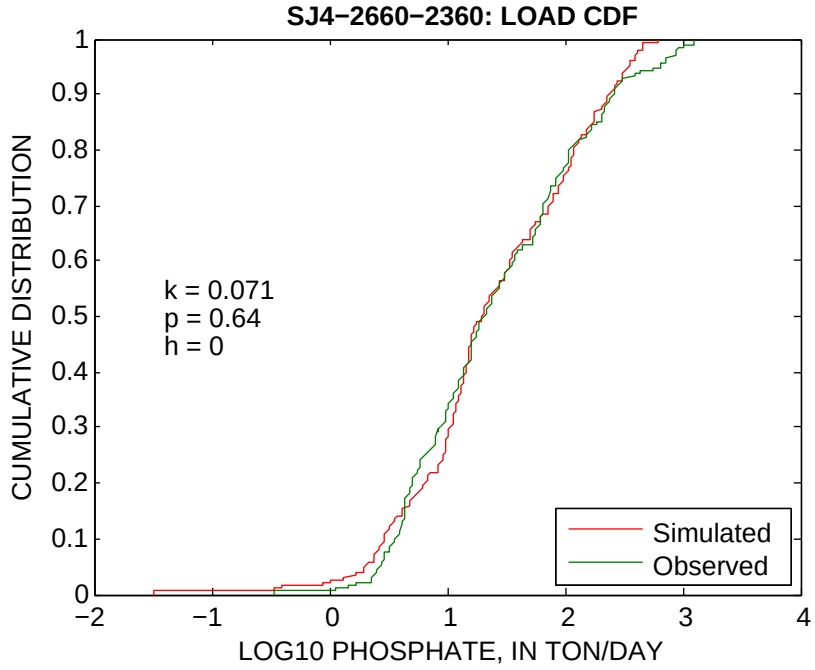


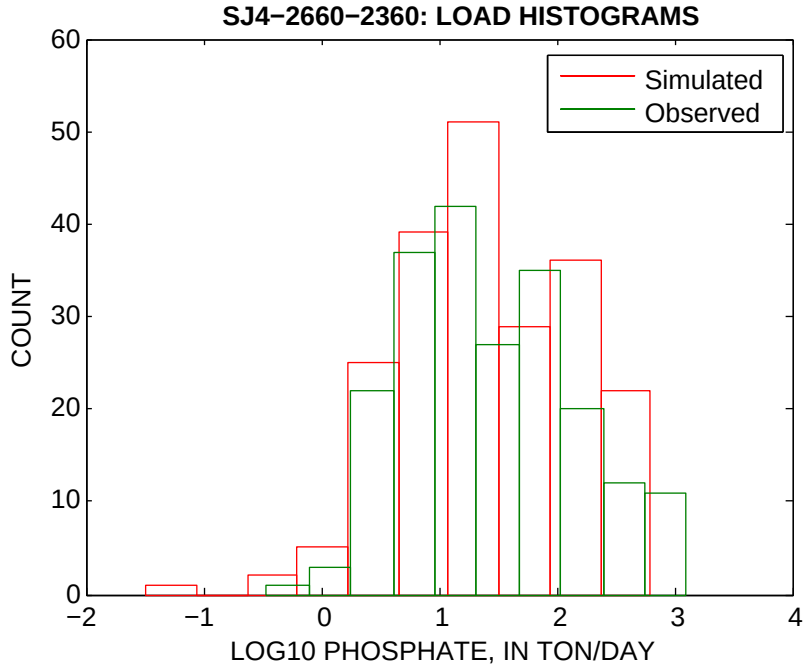


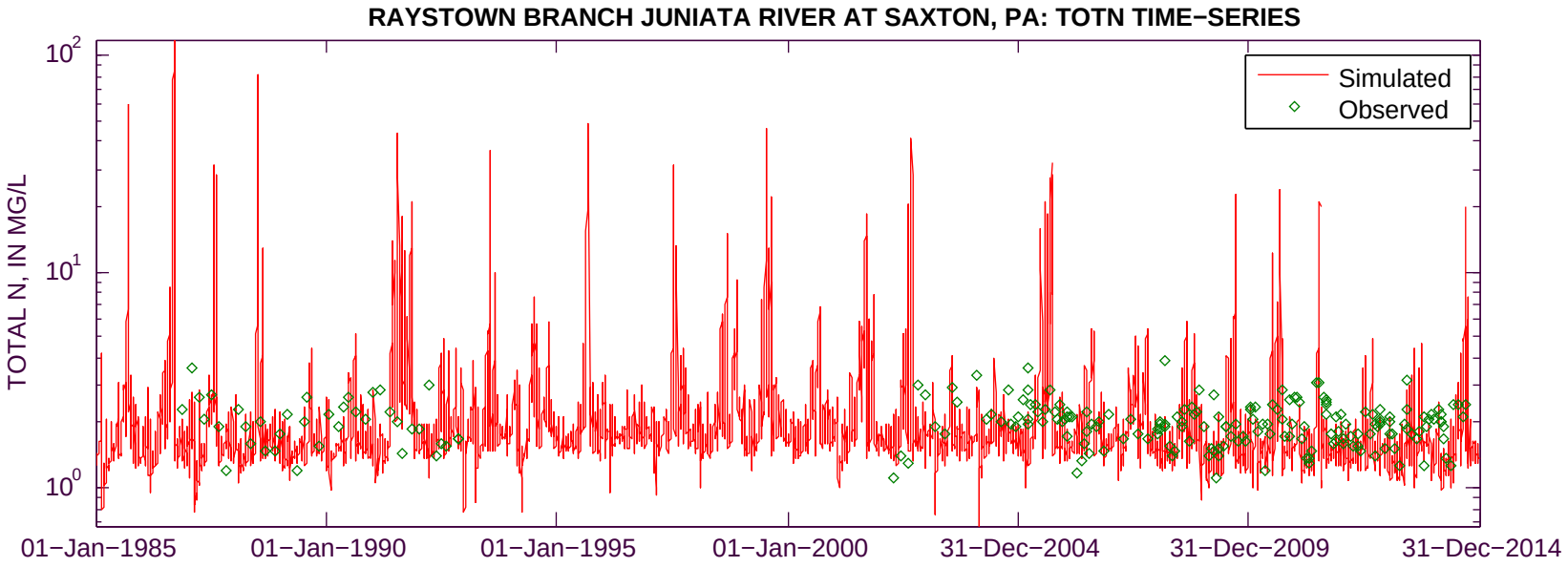
LOAD DATA
LOG10

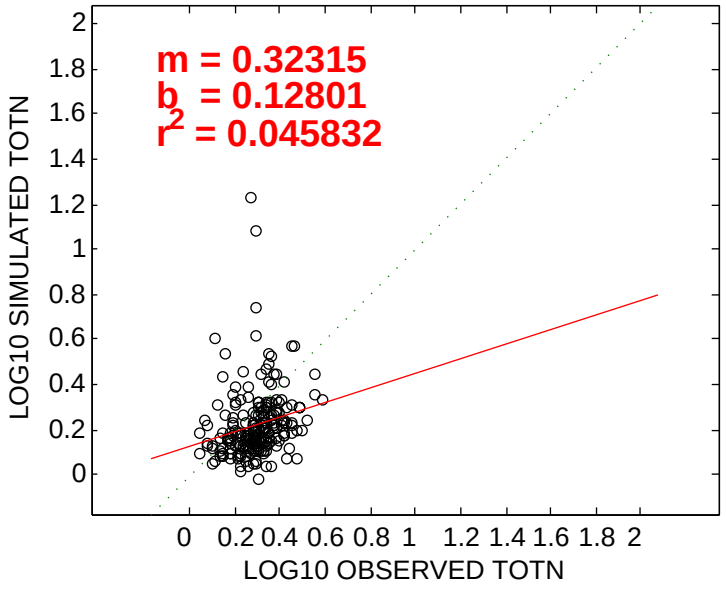


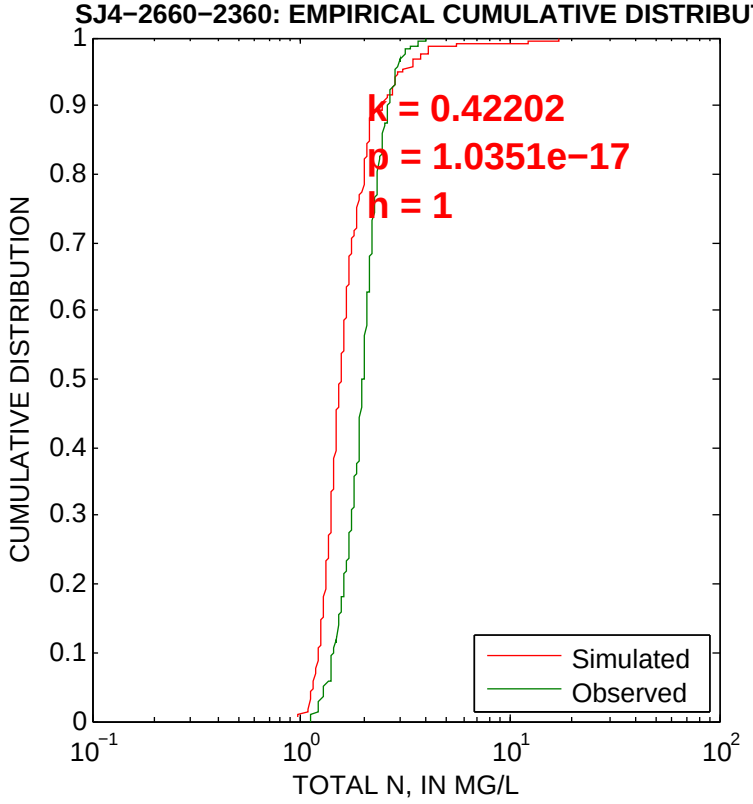












DATA SELECTION

scenario: P620171001WQ | file: TOTN.calib

plot: TOTN - total nitrogen

Dates: 1/1/1985 – 12/31/201

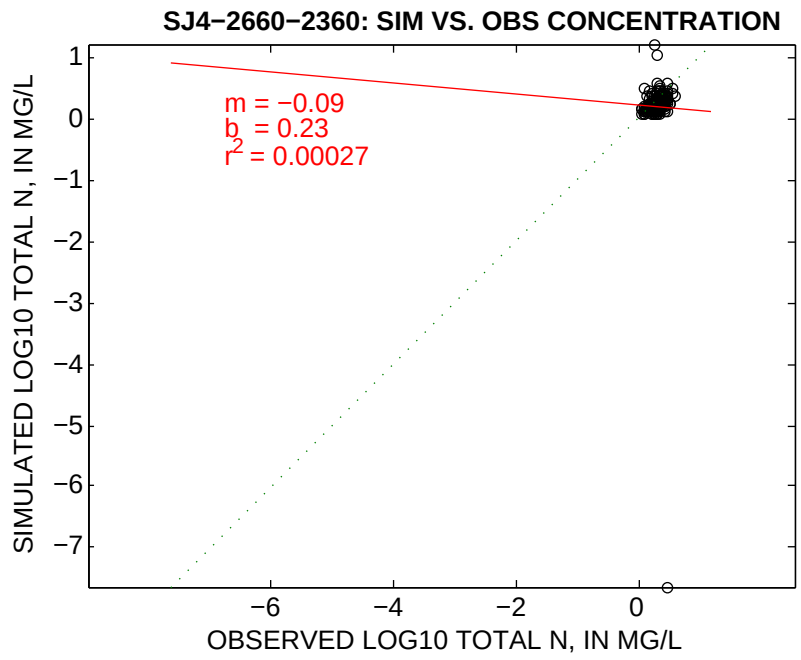
Drive: N/A | Directory: model | Observed: OBS20161101

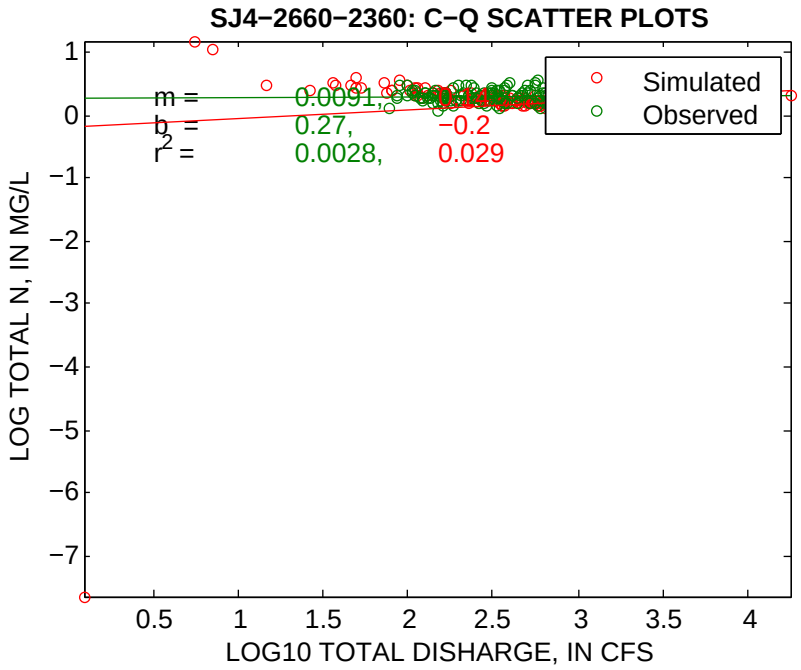
STATISTICS

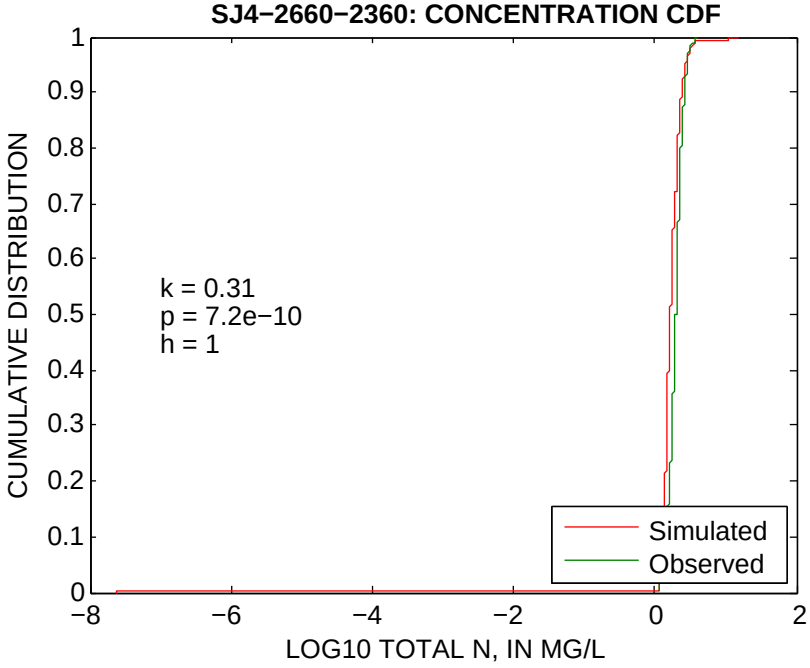
		observe	simulate
n		218	217
min		1.1	0
		0.0413927	-0.0130984
mean		2.01878	1.82171
		0.29269	0.222592
media		1.985	1.5487
		0.296665	0.190416
max		3.92	17.122
		0.593286	1.23355
varian		0.227682	1.94631
		0.0101012	0.0230156
JB		0.001	0.001
		0.5	0.001
		ra	log
%		-9.76181	-23.9496
err.va		2.11938	0.0315248
rel.std.err		9.30851	3.1209
mod.eff		-8.30851	-2.1209

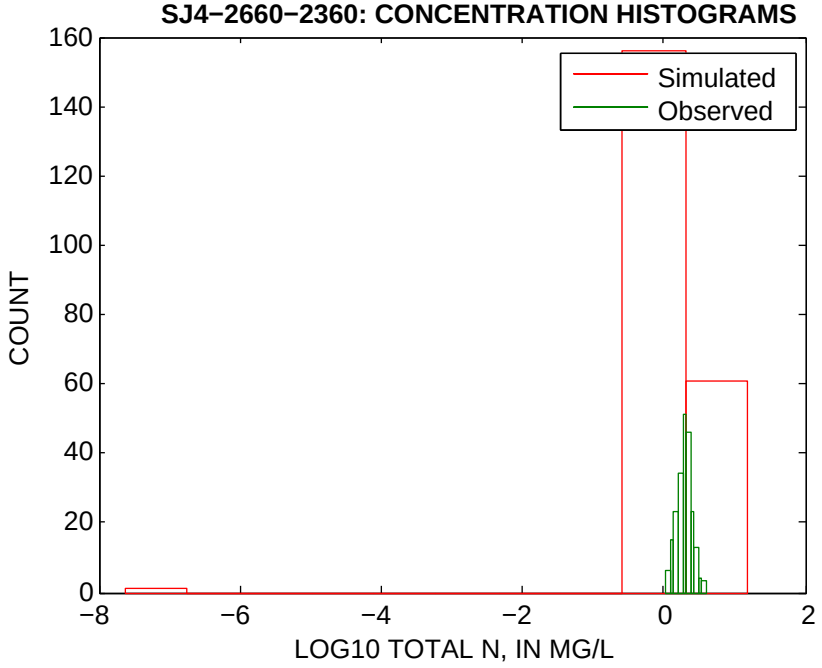
VERSION 2.1

ALL DATA
LOG10

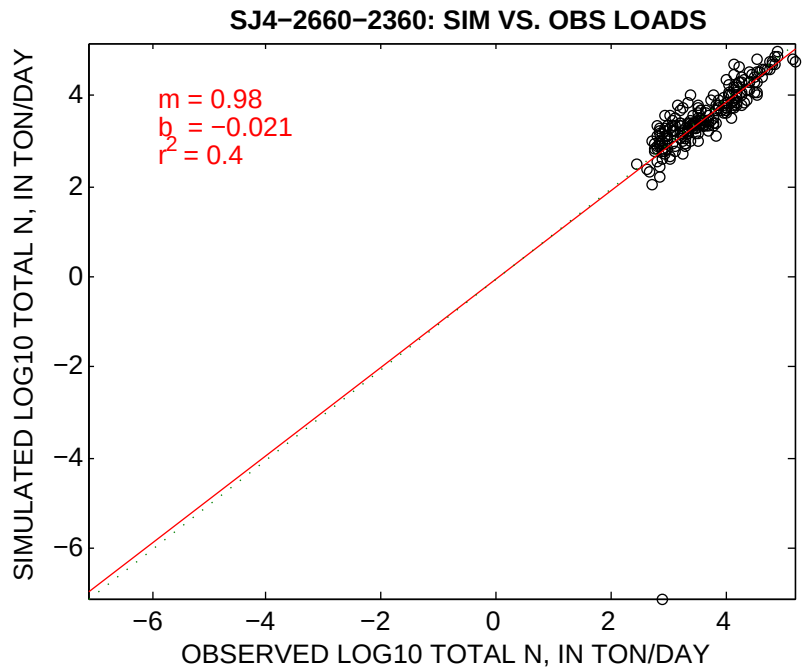


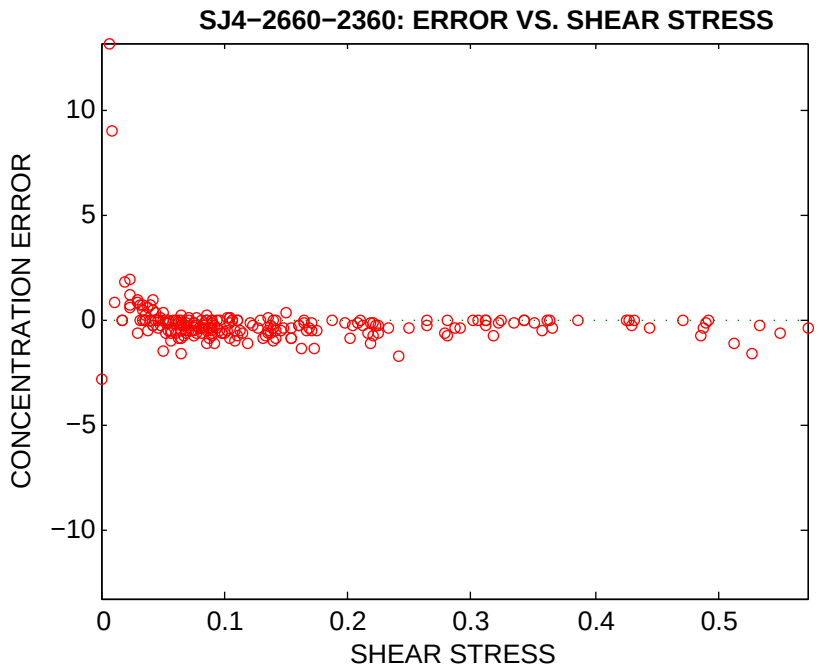


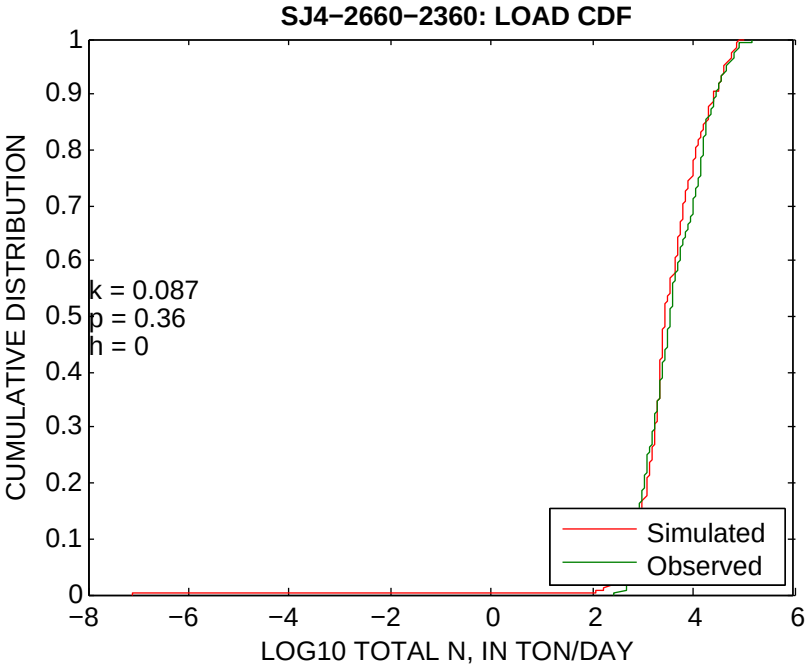


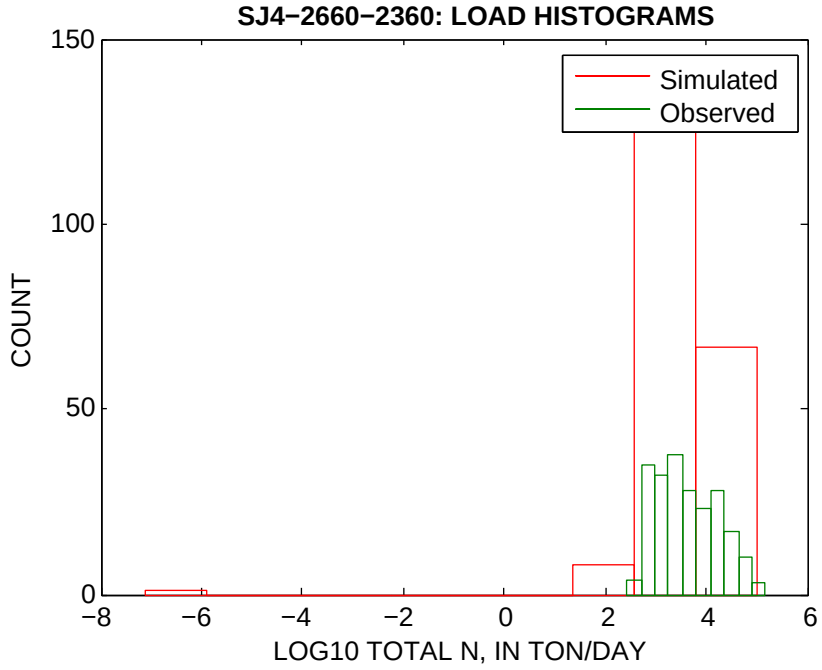


LOAD DATA
LOG10

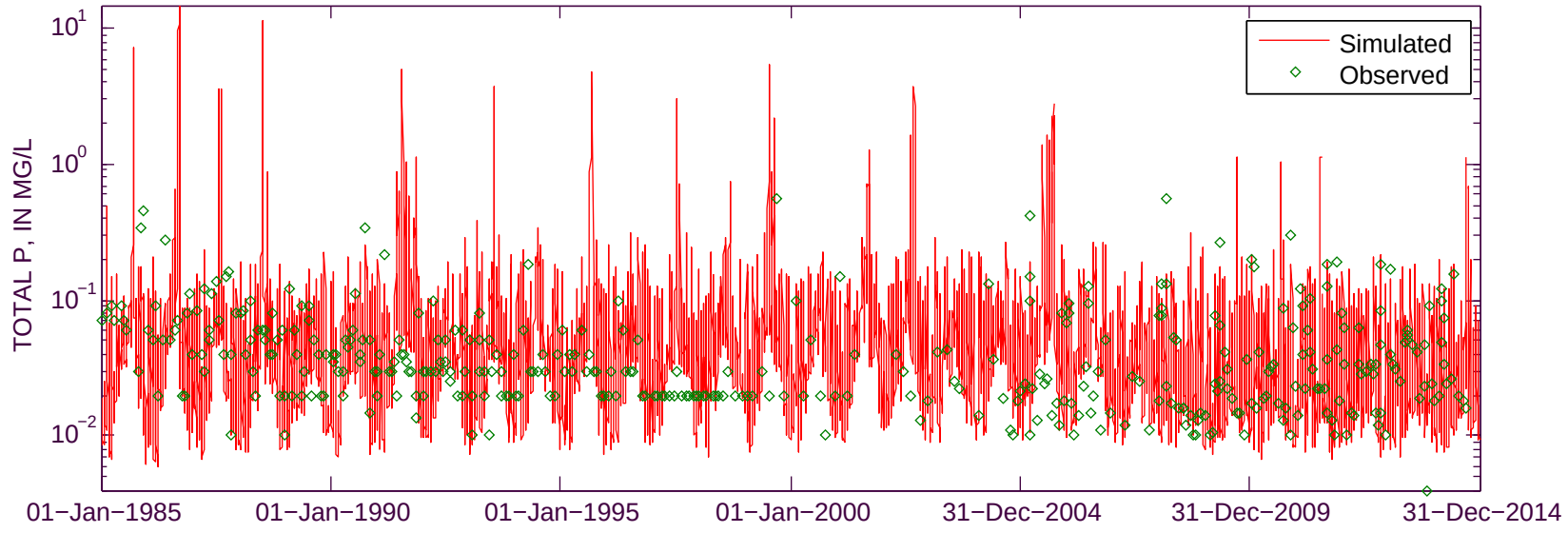




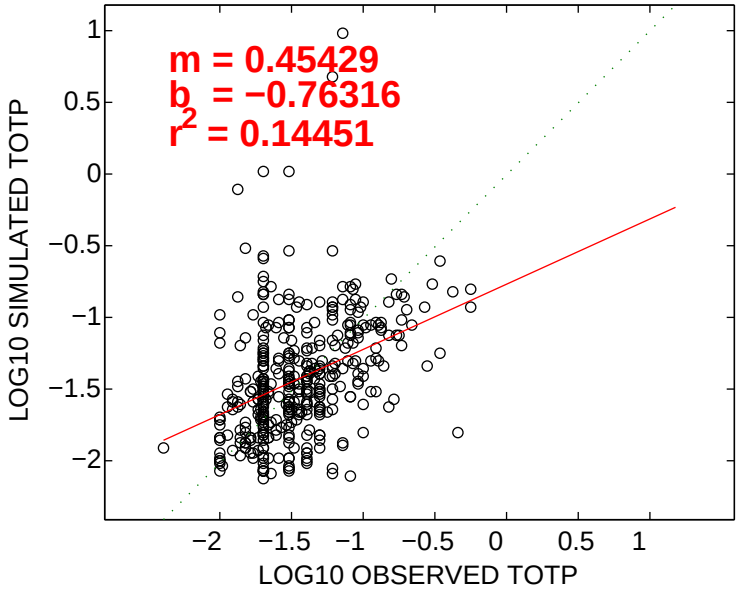




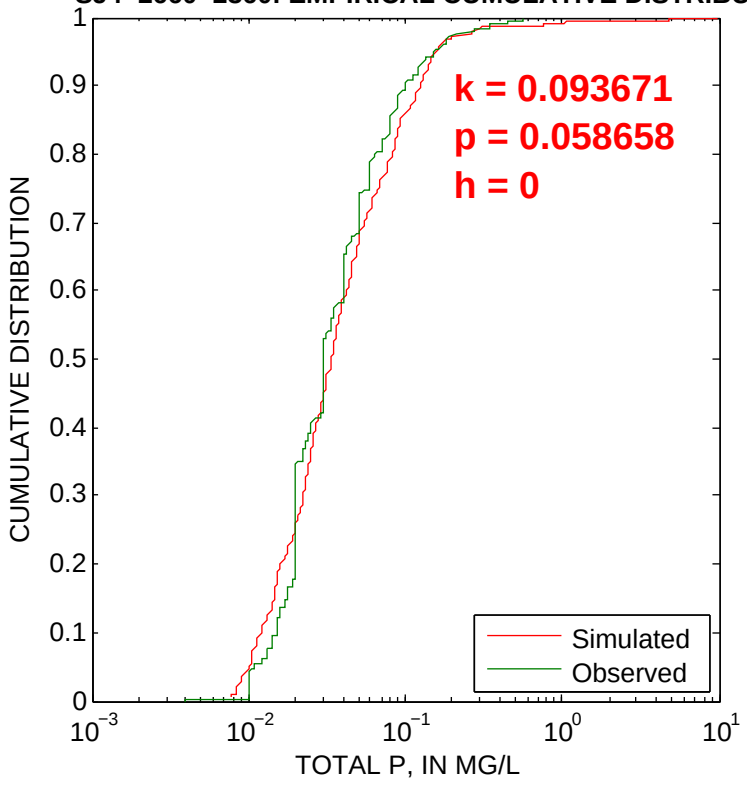
RAYSTOWN BRANCH JUNIATA RIVER AT SAXTON, PA: TOTP TIME-SERIES



SJ4-2660-2360: SIMULATED VS. OBSERVED



SJ4-2660-2360: EMPIRICAL CUMULATIVE DISTRIBUTION



DATA SELECTION

scenario: P620171001WQ | file: TOTP.calib

plot: TOTP - total phosphorus

Dates: 1/1/1985 | 12/31/201

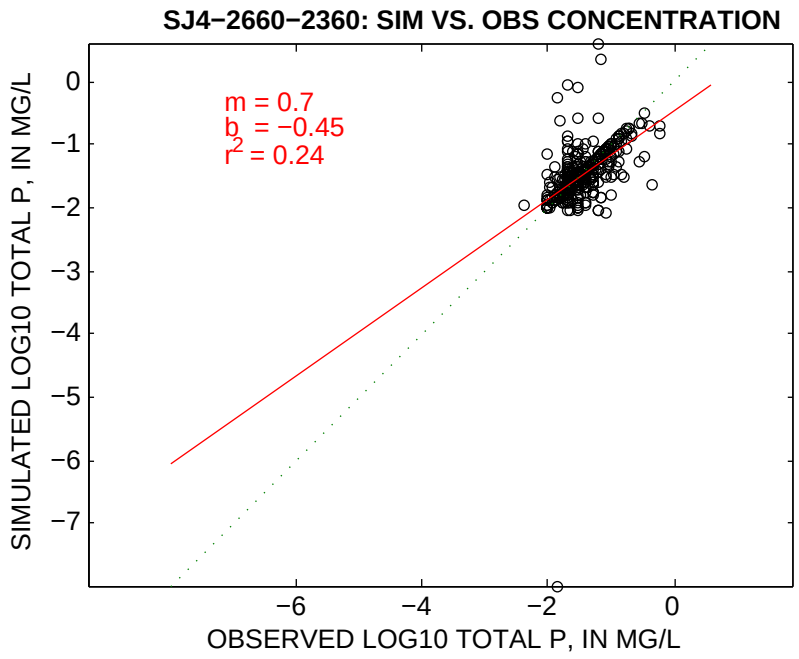
Drive: N/A | Directory: model | Observed: OBS20161101

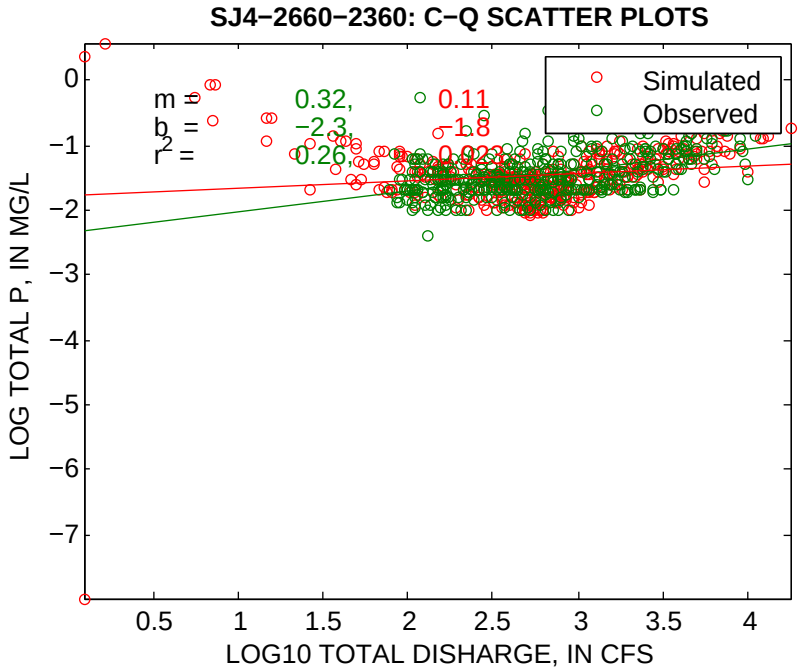
STATISTICS

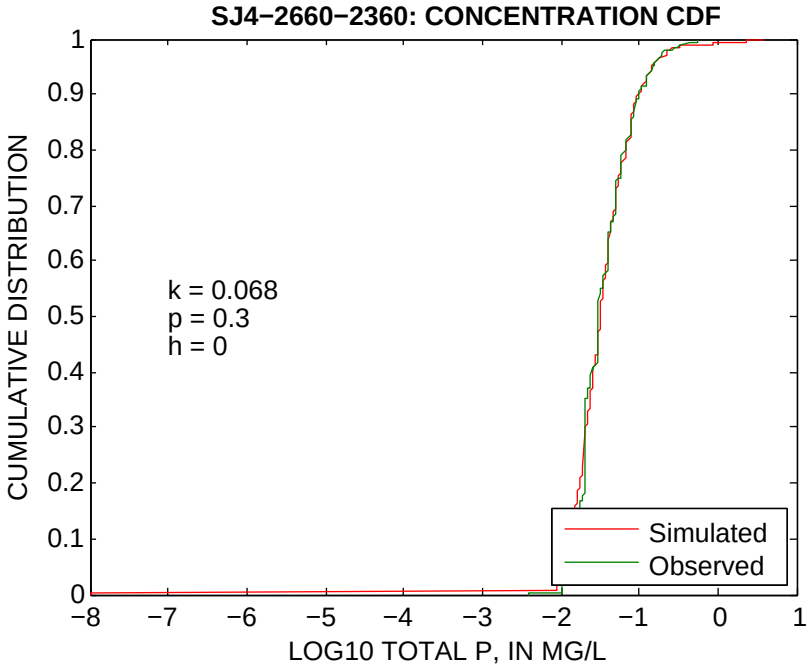
		observe	simulate
n		395	394
min		0.004	0
		-2.39794	-2.12815
mean		0.0514769	0.0941256
		-1.45365	-1.42354
media		0.03	0.03396
		-1.52288	-1.46857
max		0.567	9.6584
		-0.246417	0.984905
varian		0.0042961	0.29815
		0.118383	0.169066
JB		0.001	0.001
		0.001	0.001
		ra	log
%		82.85	-2.07154
err.va		0.301395	0.180798
rel.std.err		70.1555	1.52723
mod.eff		-69.1555	-0.527231

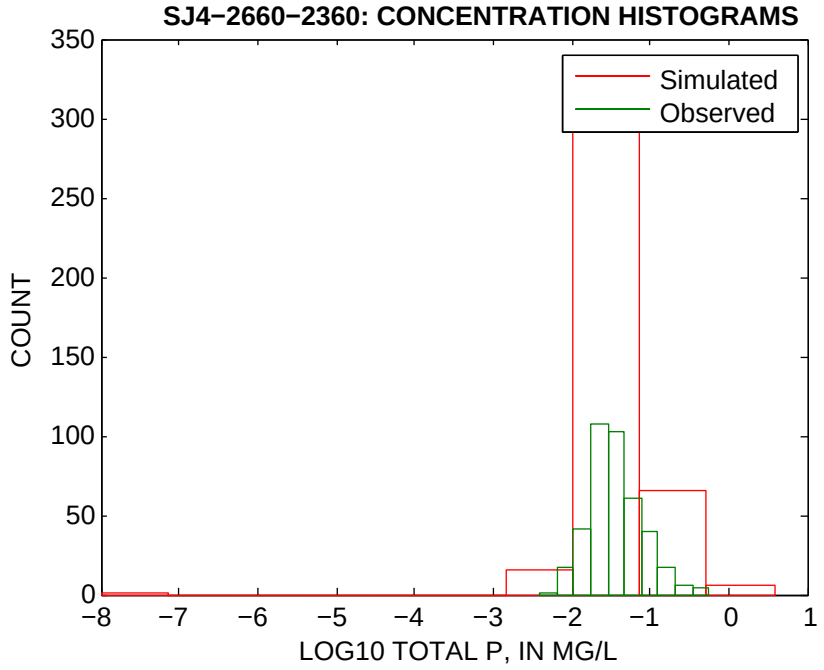
VERSION 2.1

ALL DATA
LOG10

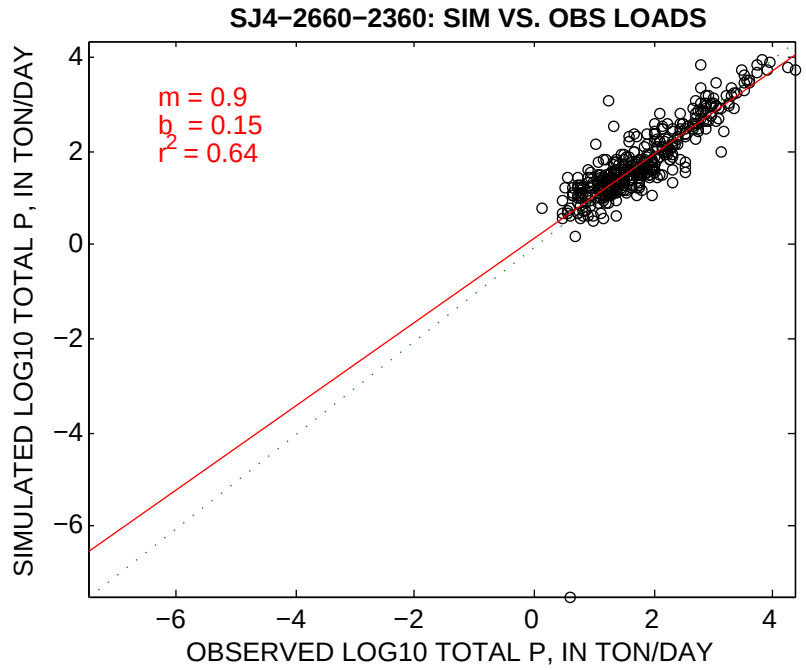


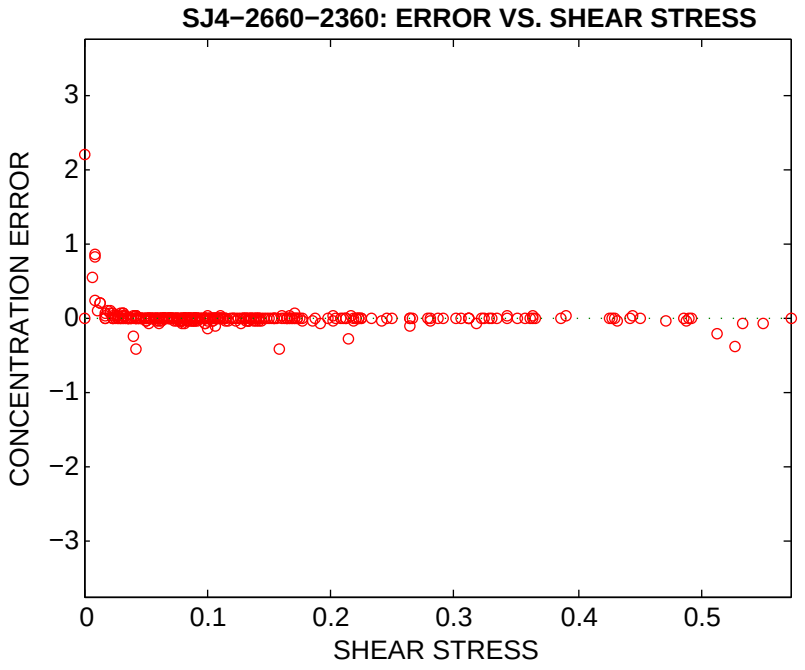


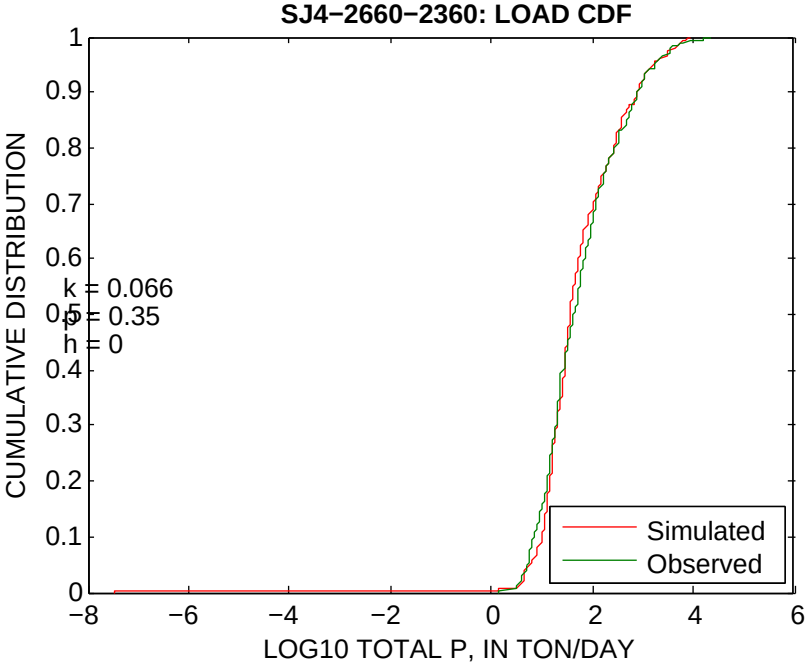


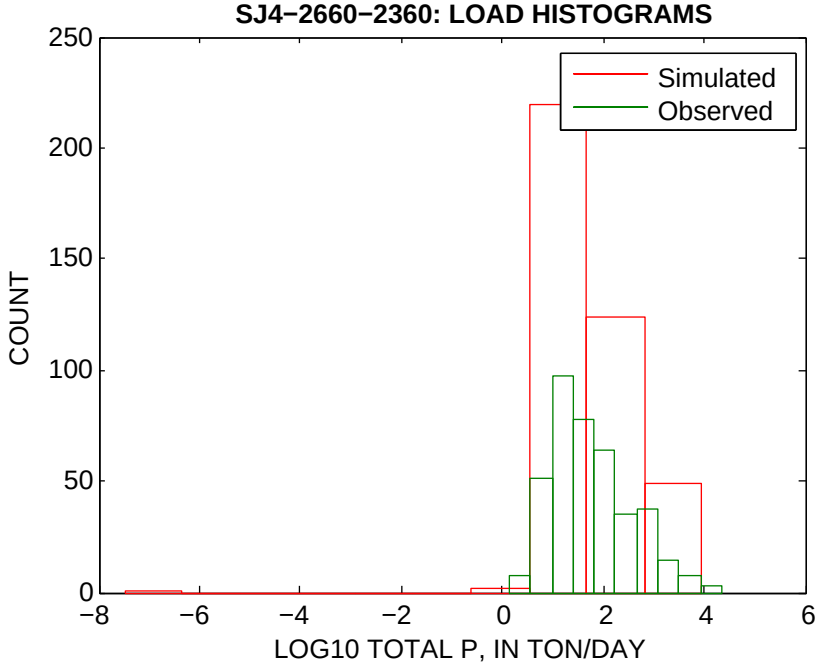


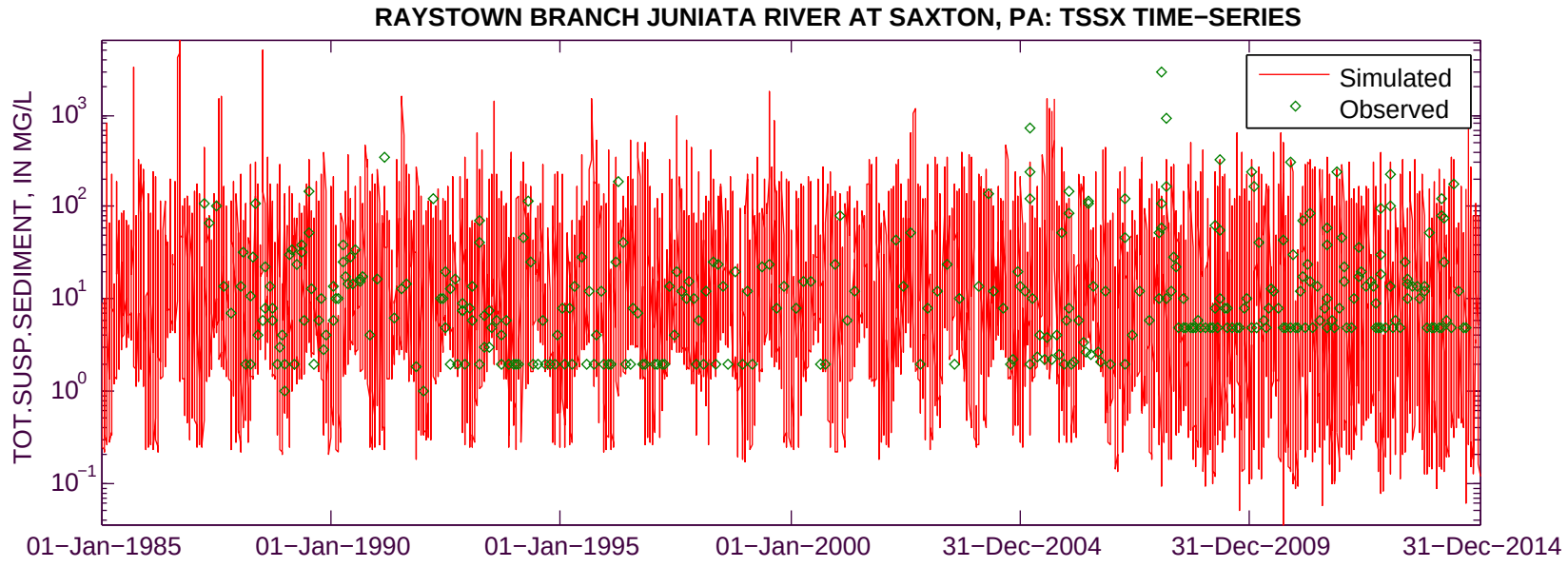
LOAD DATA
LOG10

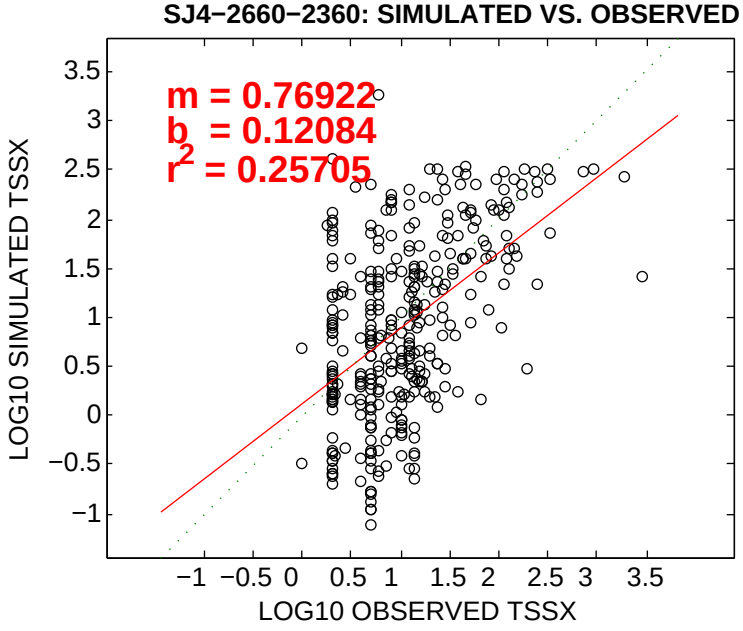


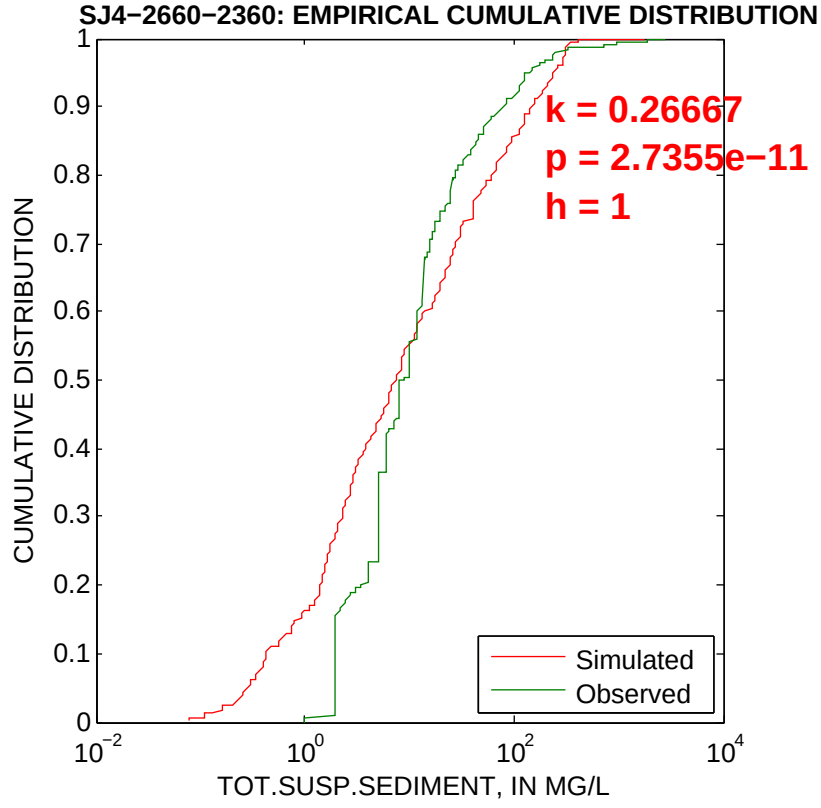












DATA SELECTION

scenario: P620171001WQ | file: TSSX.calib

plot: TSSX - total suspended ...

Dates: 1/1/1985 – 12/31/201

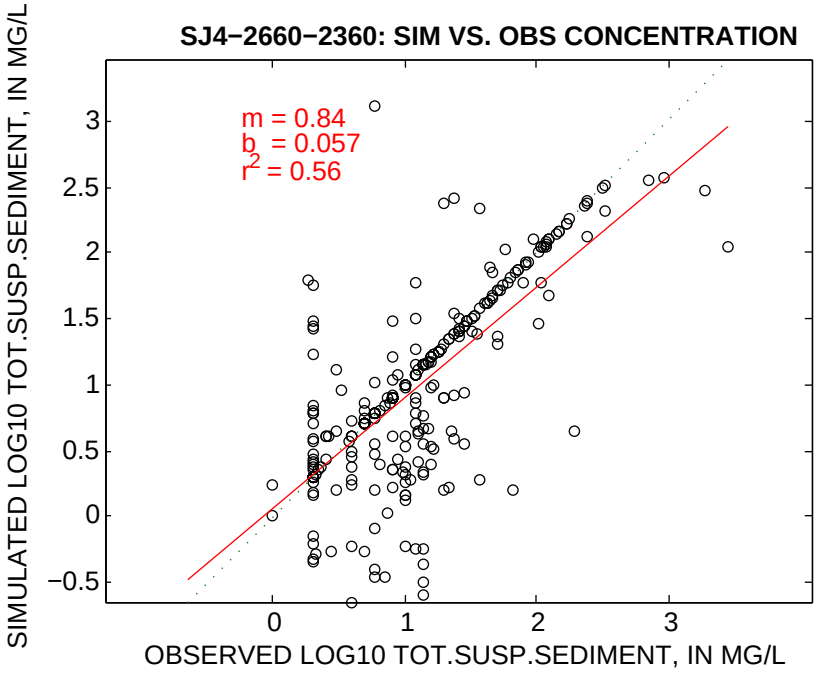
Drive: N/A | Directory: model | Observed: OBS20161101

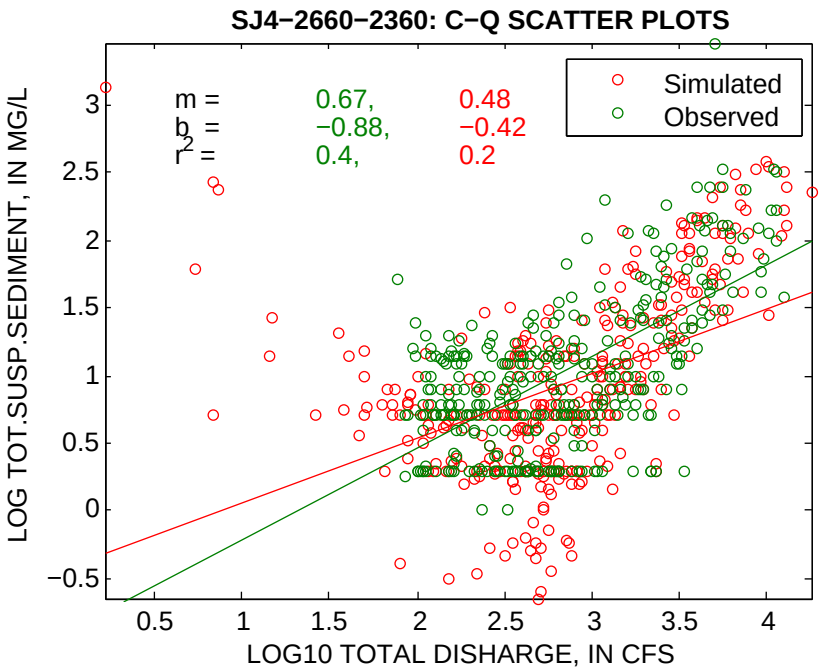
STATISTICS

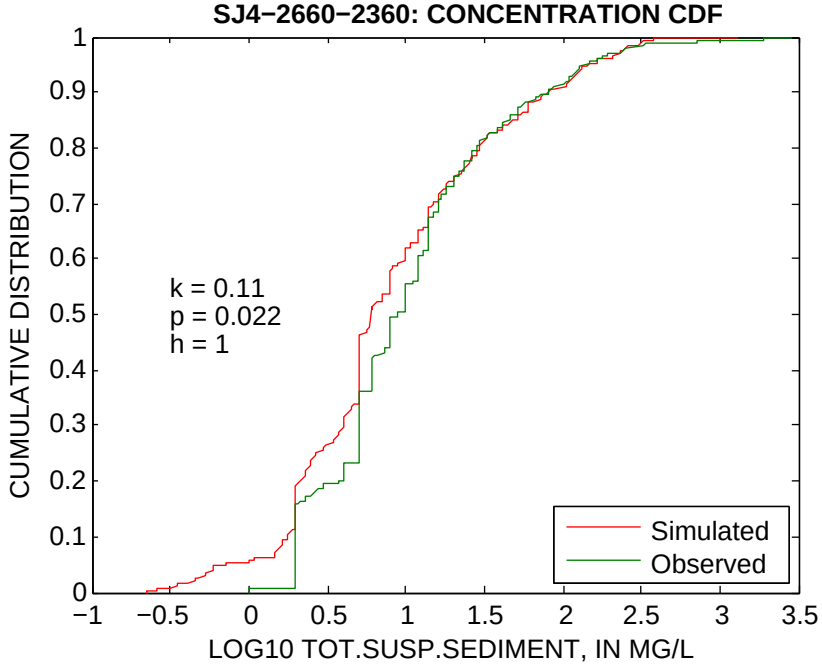
		observe	simulate
n		345	344
min		1	0
		0	-1.10627
mean		44.2417	47.997
		1.03378	0.916052
media		9	7.5331
		0.954243	0.880062
max		2862	1802.7
		3.45667	3.25592
varian		39647.5	14958.4
		0.350202	0.806128
JB		0.001	0.001
		0.001	0.014192
		ra	log
%		8.4882	-11.3884
err.va		46681.2	0.631467
rel.std.err		1.1774	1.80315
mod.eff		-0.177404	-0.803153

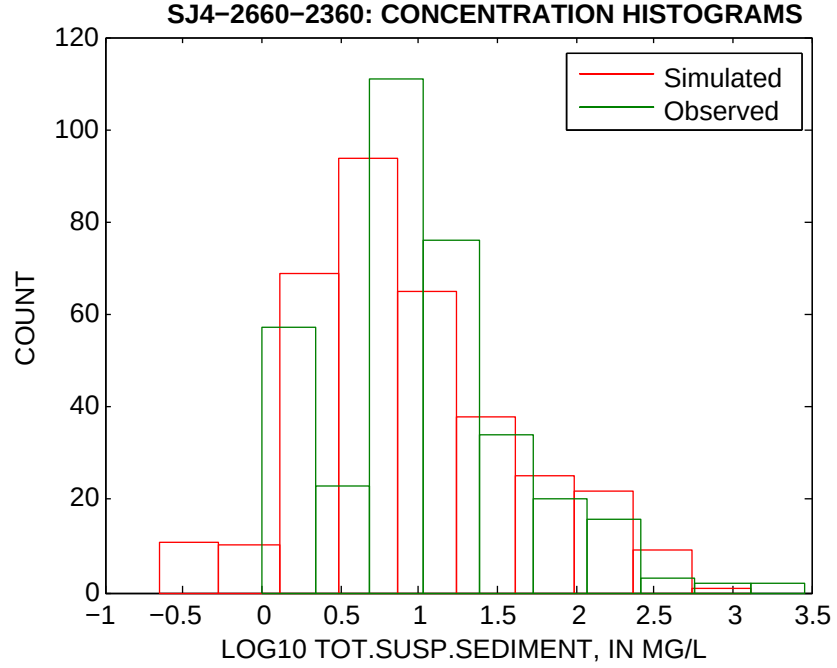
VERSION 2.1

ALL DATA
LOG10

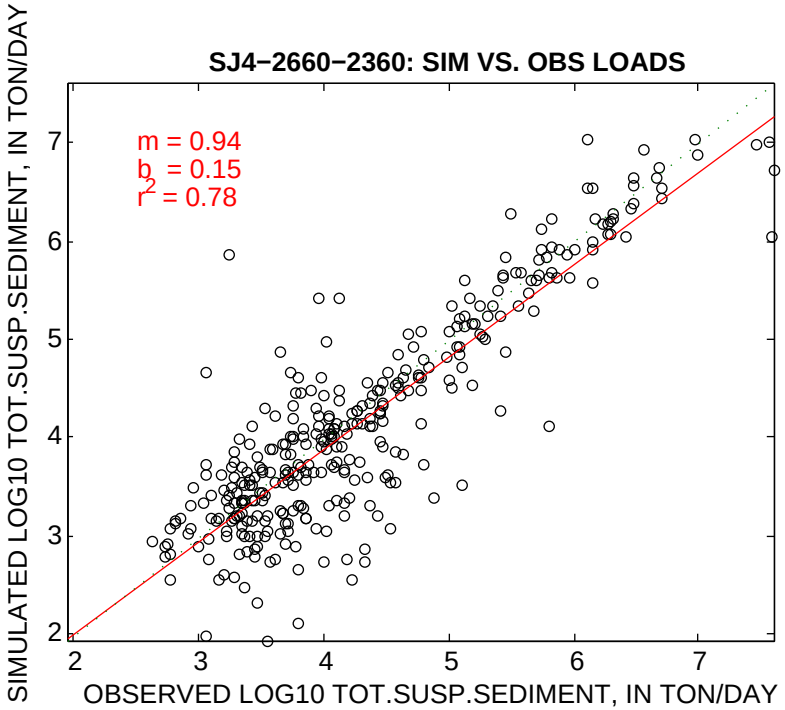


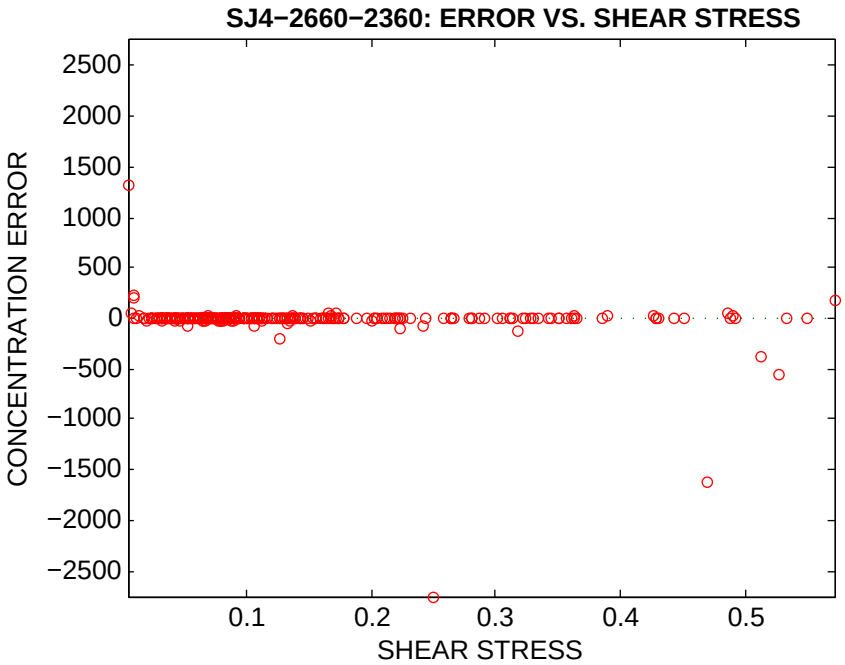


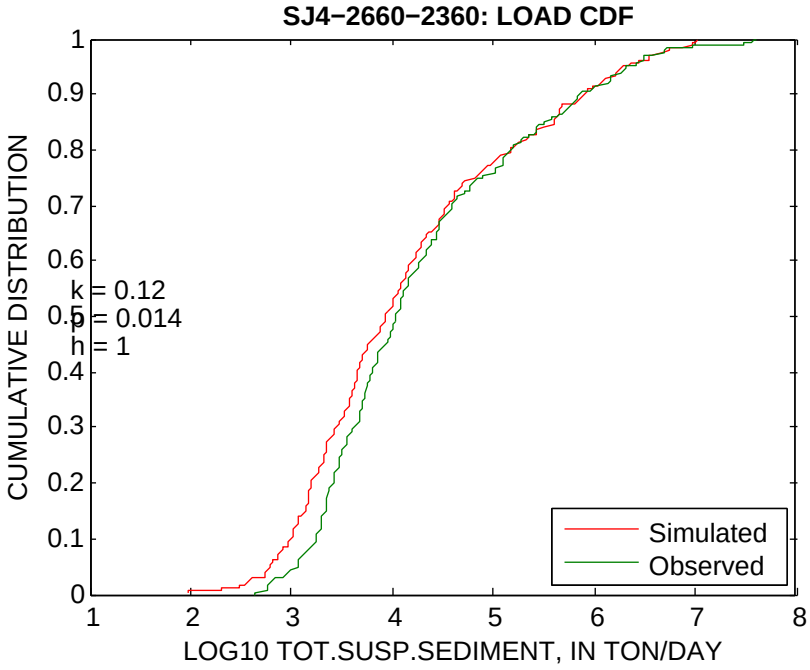


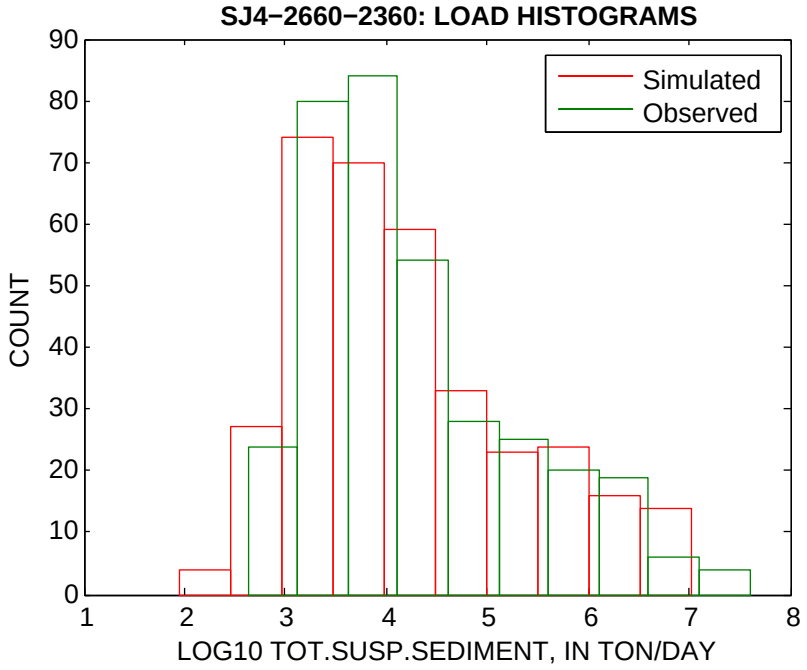


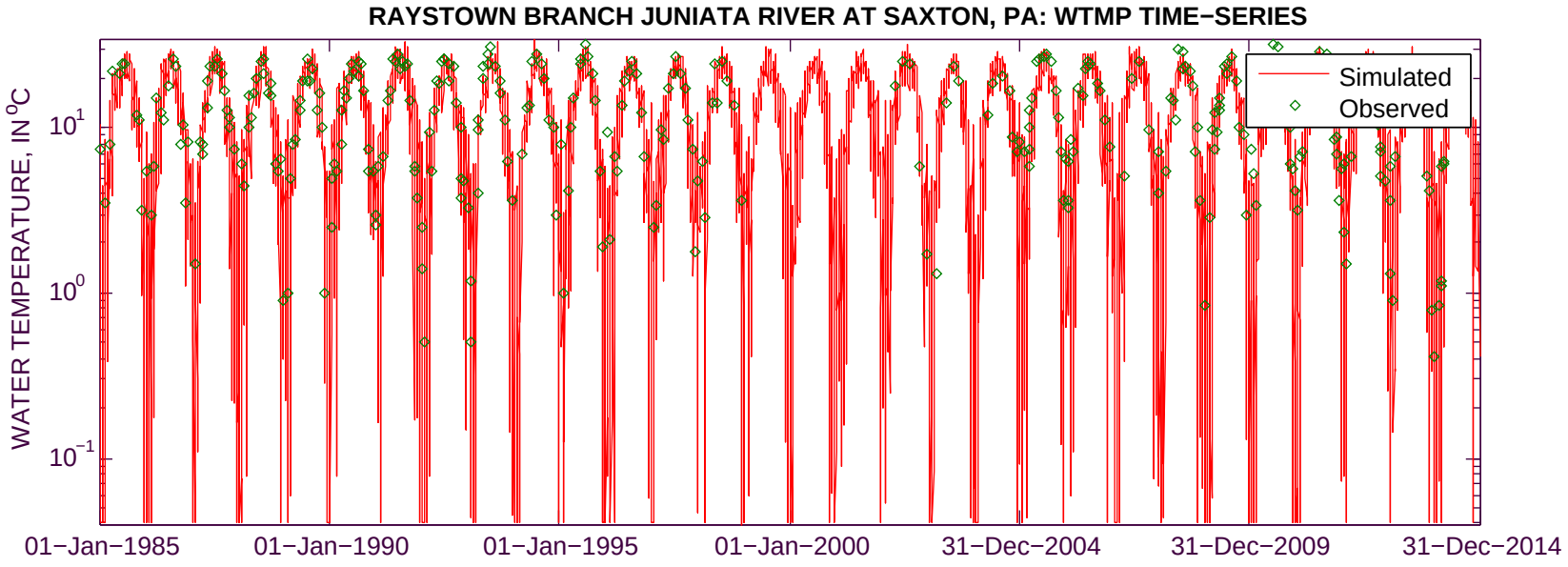
LOAD DATA
LOG10

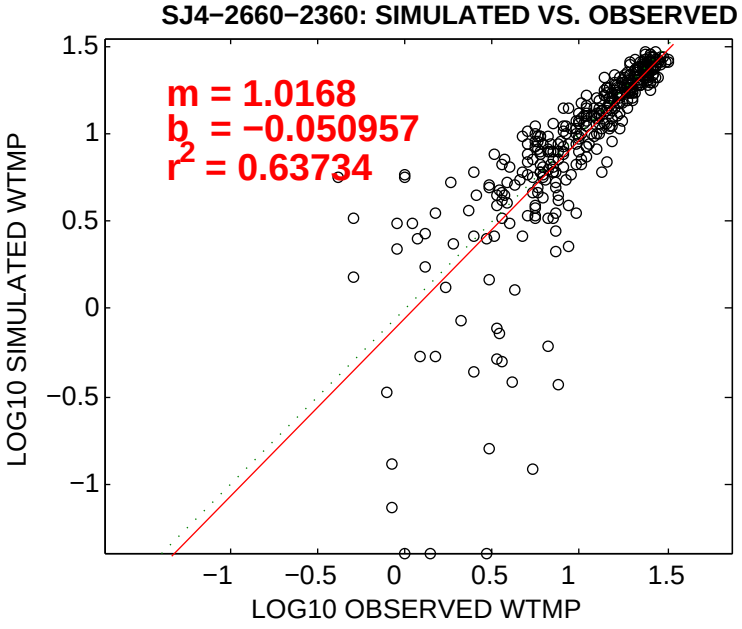


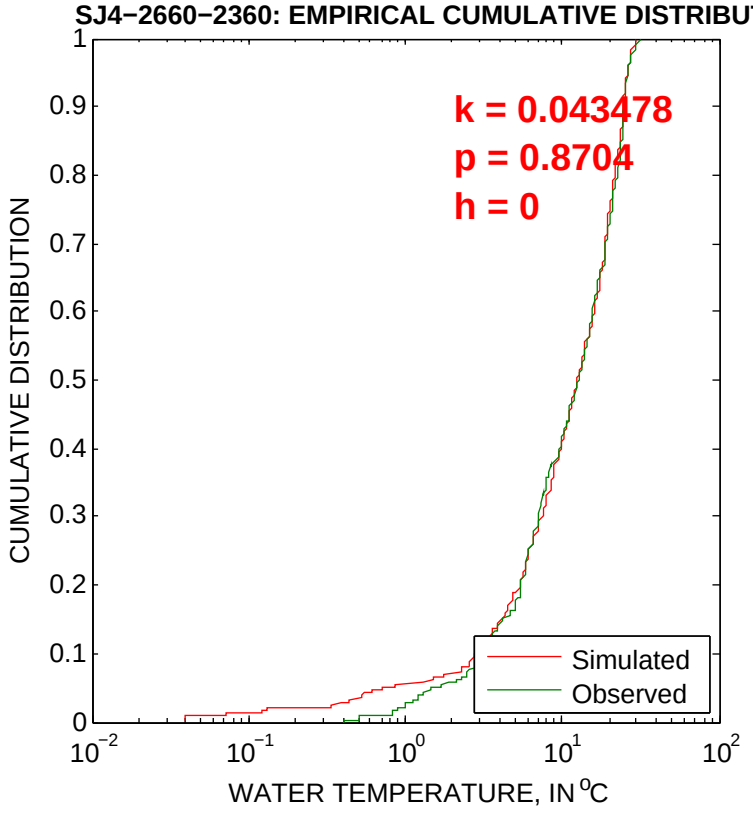












DATA SELECTION

scenario	file
P620171001WQ	WTMP.calib

plot: WTMP - water tempera...

Dates 1/1/1985 12/31/201

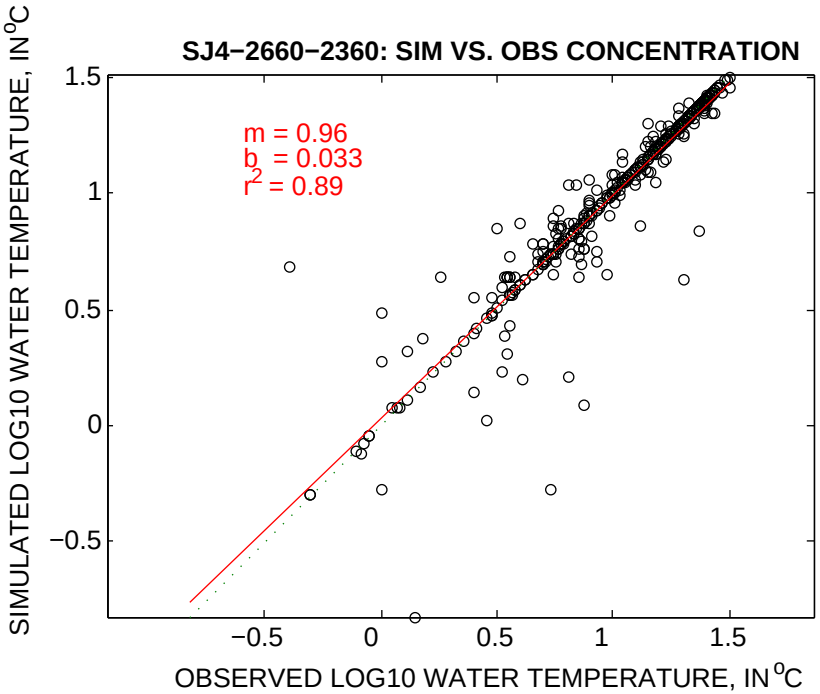
Drive	Directory	Observed
N/A	model	OBS20161101

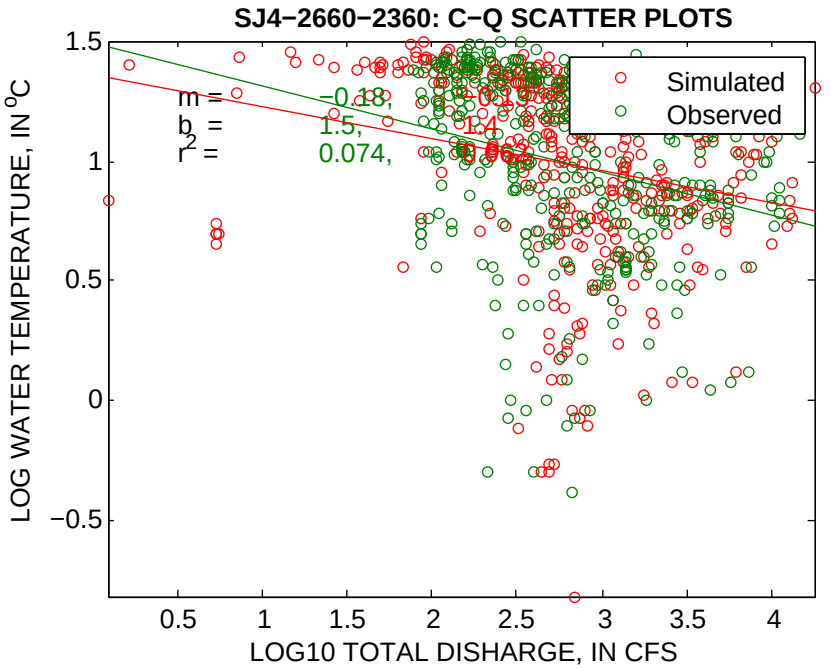
STATISTICS

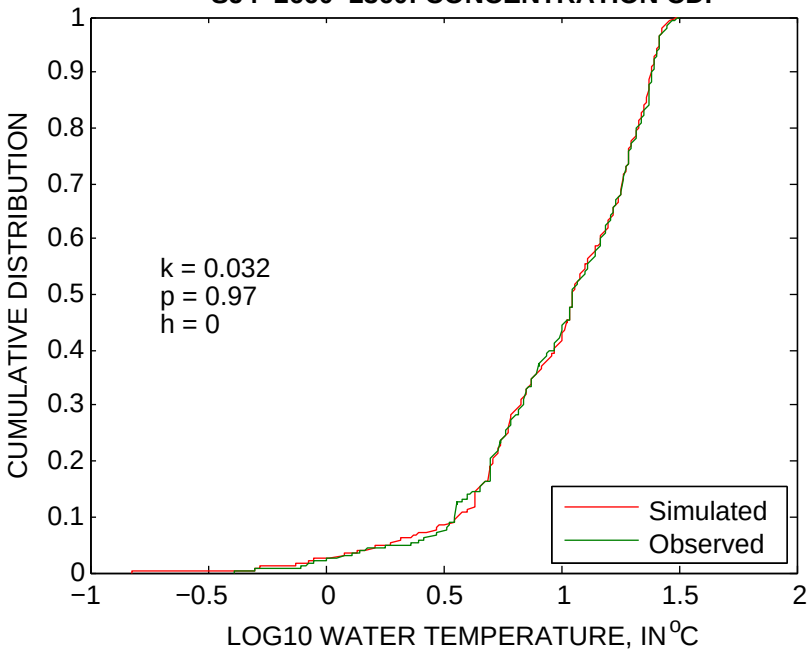
	n	368	367
		observe	simulate
min		0.41	0
		-0.387216	-1.39757
mean		13.523	13.2998
		1.00846	0.974404
media		12.95	12.5825
		1.11059	1.10041
max		31.9	29.409
		1.50379	1.46848
varian		67.884	65.4011
		0.14367	0.233043
JB		0.001	0.001199
		0.001	0.001
		ra	log
%		-1.65084	-3.3768
err.va		9.94799	0.0857196
rel.std.err		0.146544	0.596644
mod.eff		0.853456	0.403356

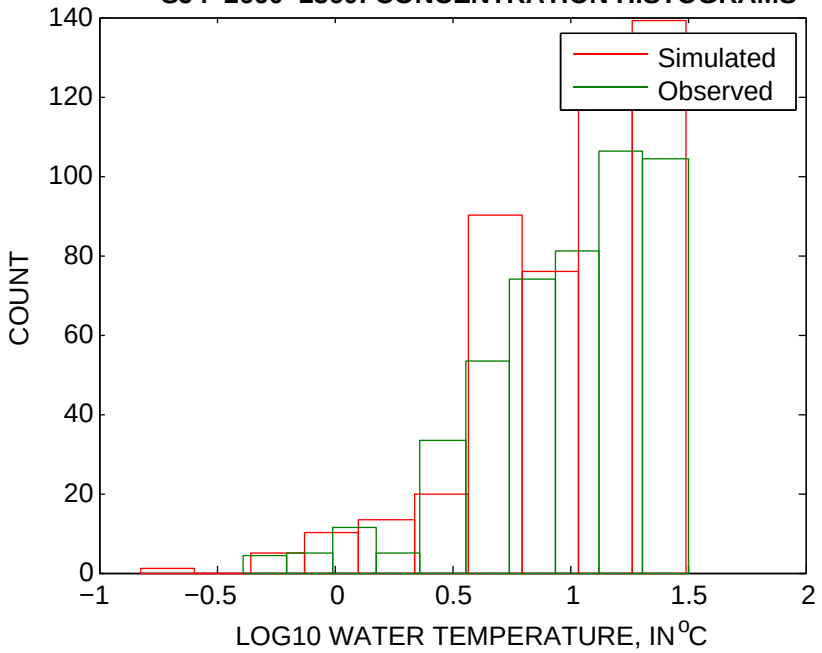
VERSION 2.1

ALL DATA
LOG10

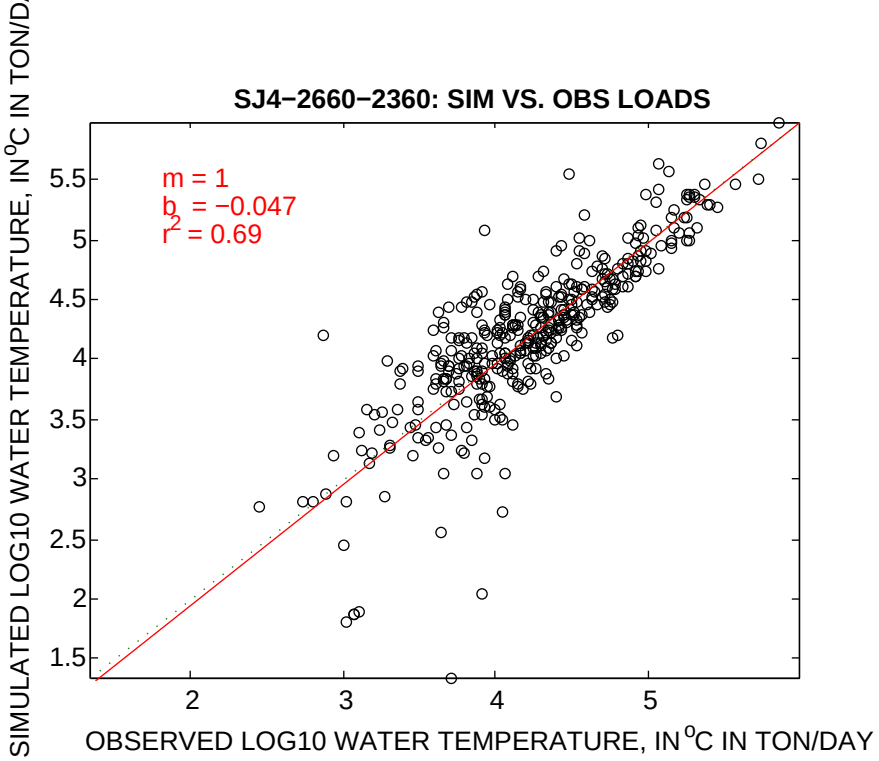


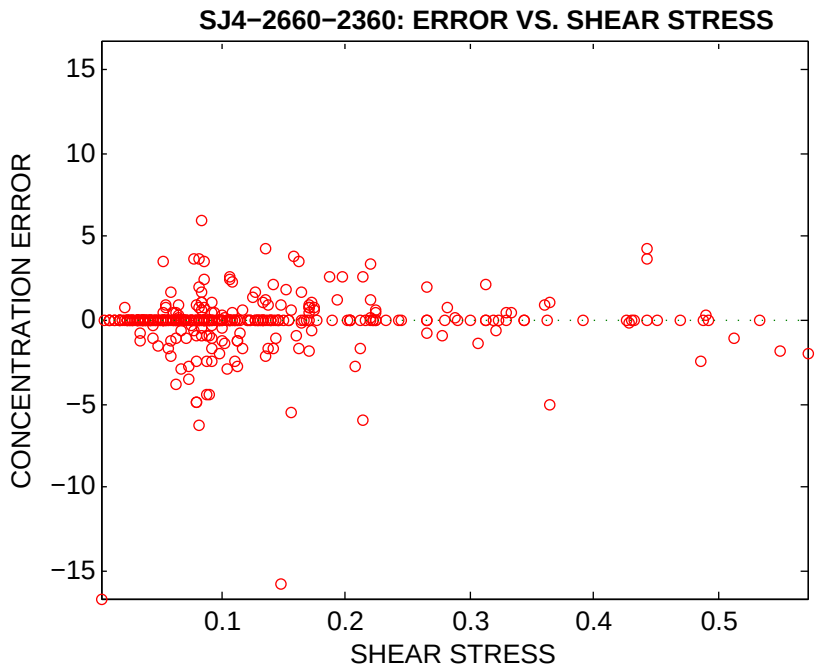


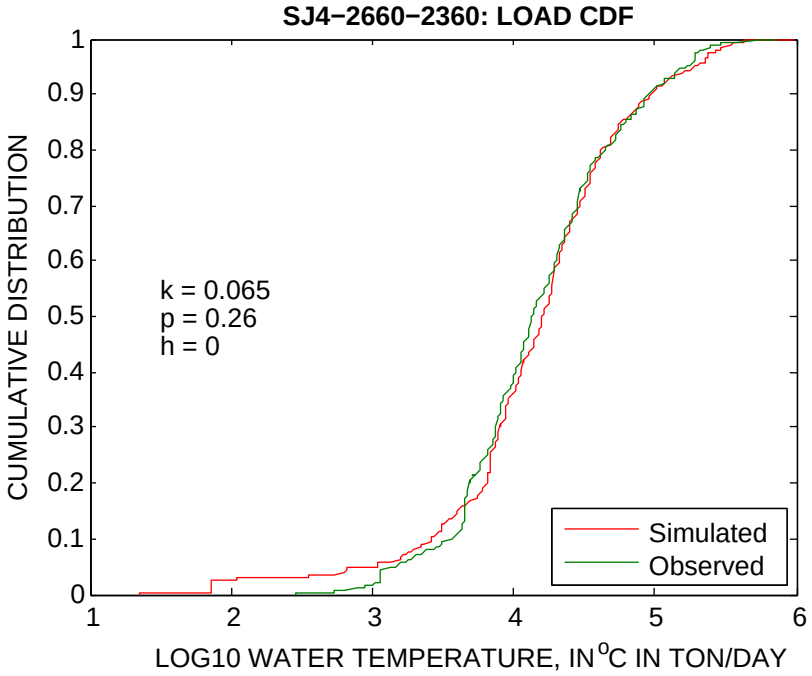


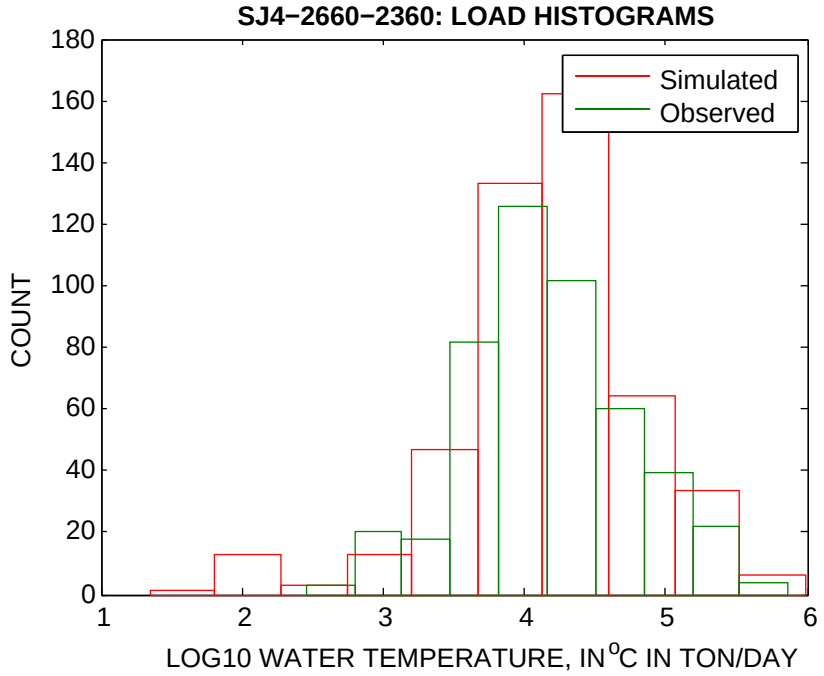


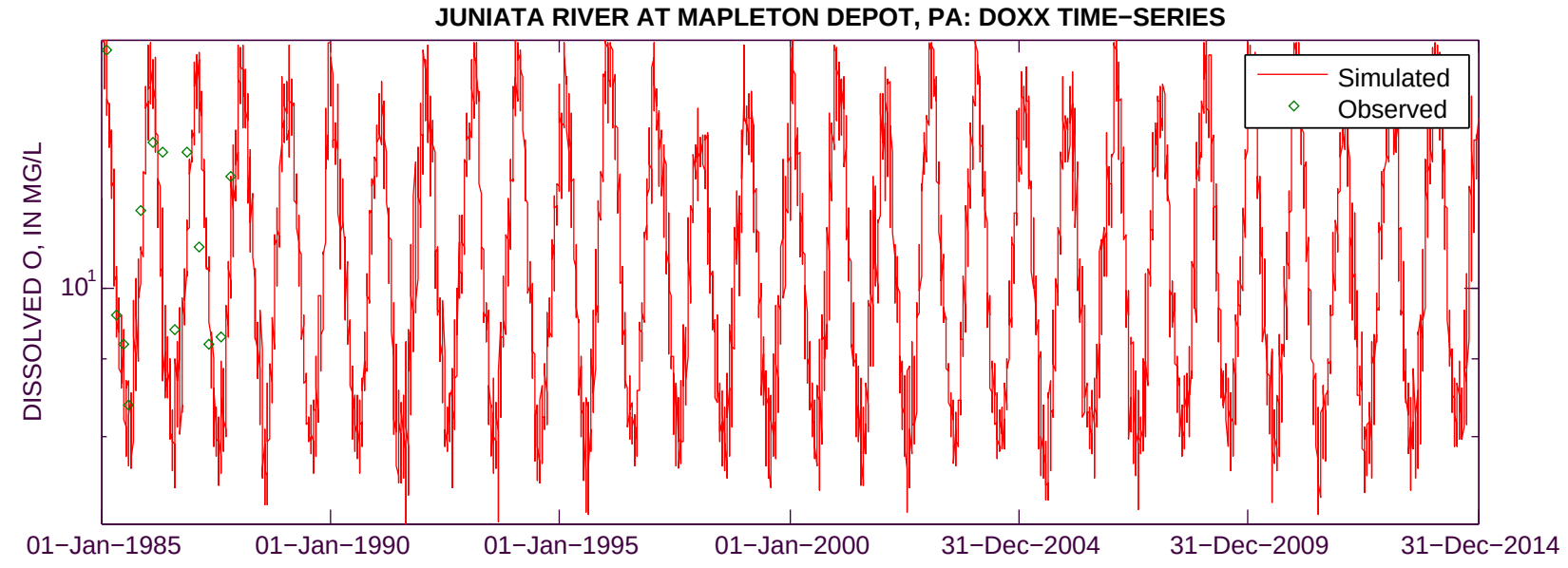
LOAD DATA
LOG10

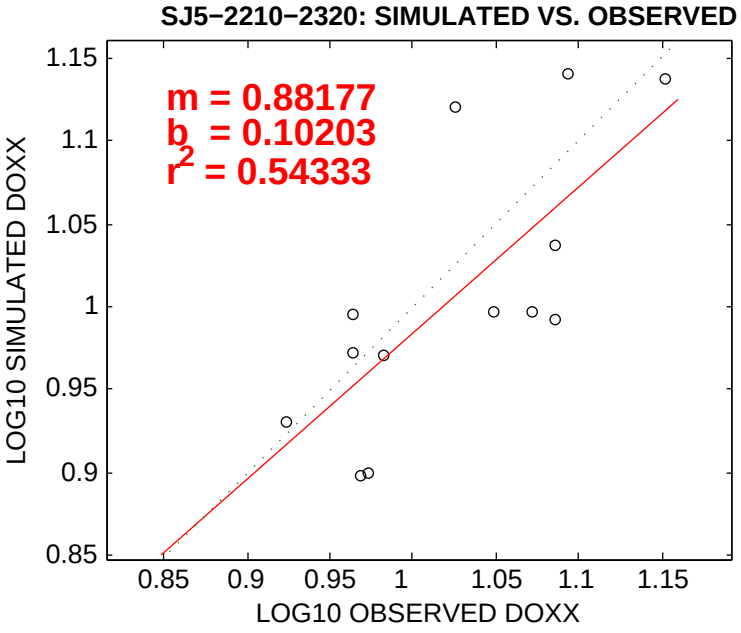


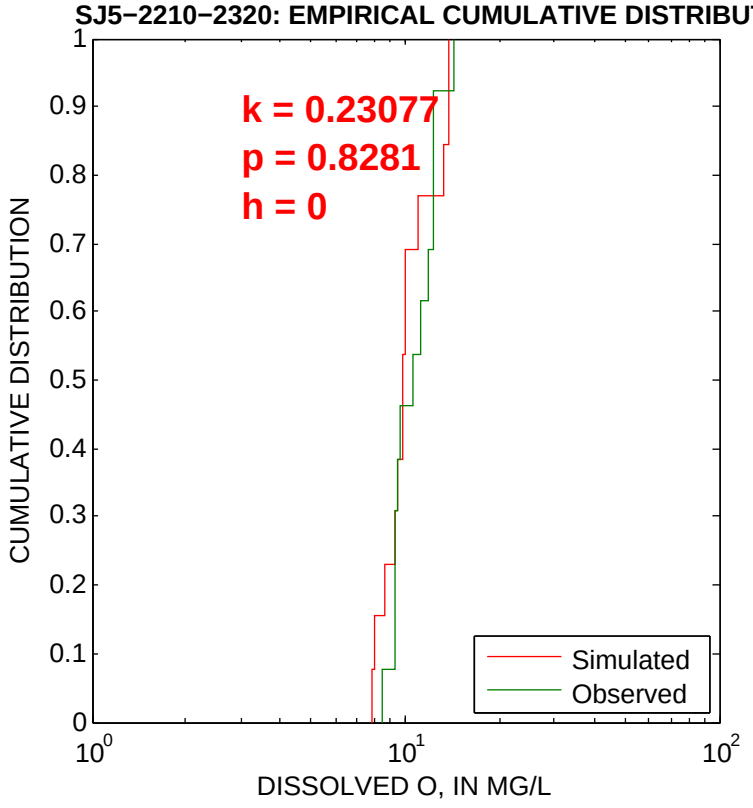












DATA SELECTION

scenario	file
P620171001WQ	DOXX.calib

plot: DOXX - dissolved oxygen

Dates 1/1/1985 12/31/201

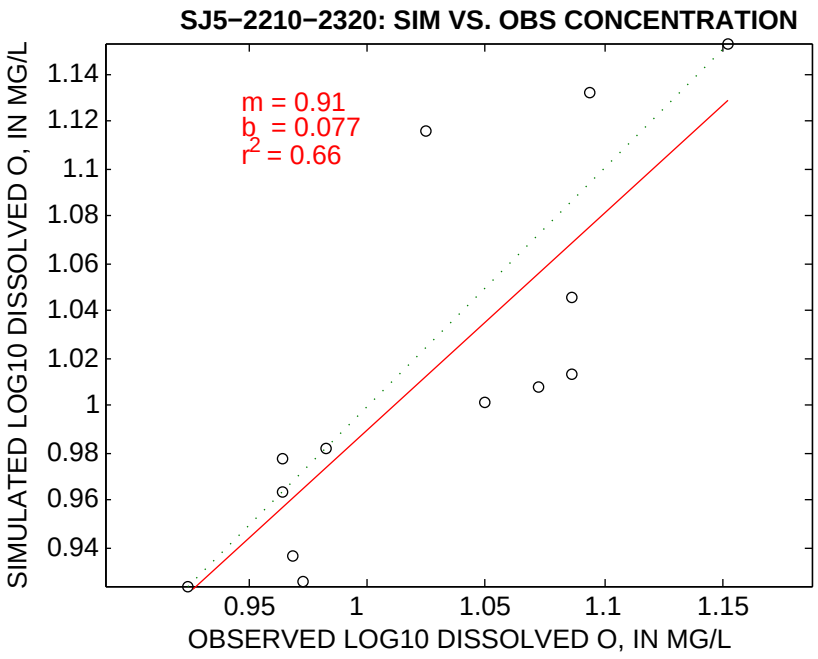
Drive	Directory	Observed
N/A	model	OBS20161101

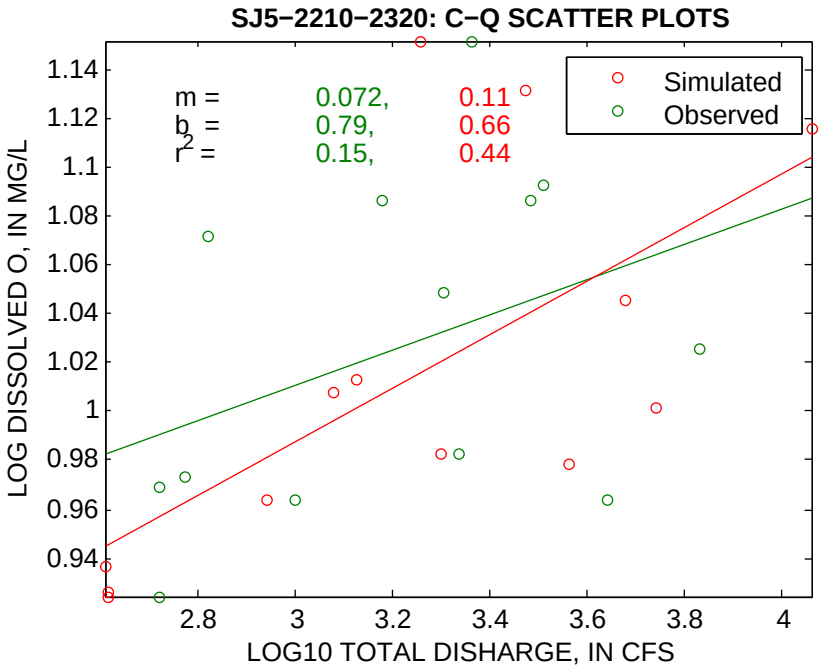
STATISTICS

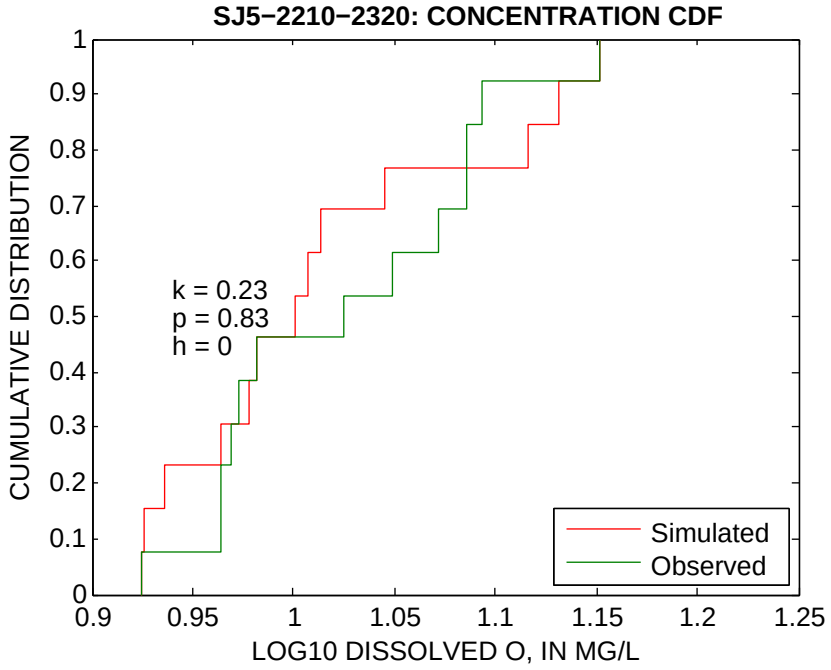
n	13	13
	observe	simulate
min	8.4	7.9039
	0.924279	0.897841
mean	10.7462	10.3336
	1.0262	1.0069
media	10.6	9.8881
	1.02531	0.995113
max	14.2	13.839
	1.15229	1.1411
varian	2.97769	4.14115
	0.00471075	0.00674112
JB	✓0.463114	0.169788 ✓
	✓0.477521	0.412014 ✓
	ra	log
%	-3.83944	-1.88073
err.va	2.17053	0.00354784
rel.std.err	0.728932	0.753137
mod.eff	0.271068	0.246863

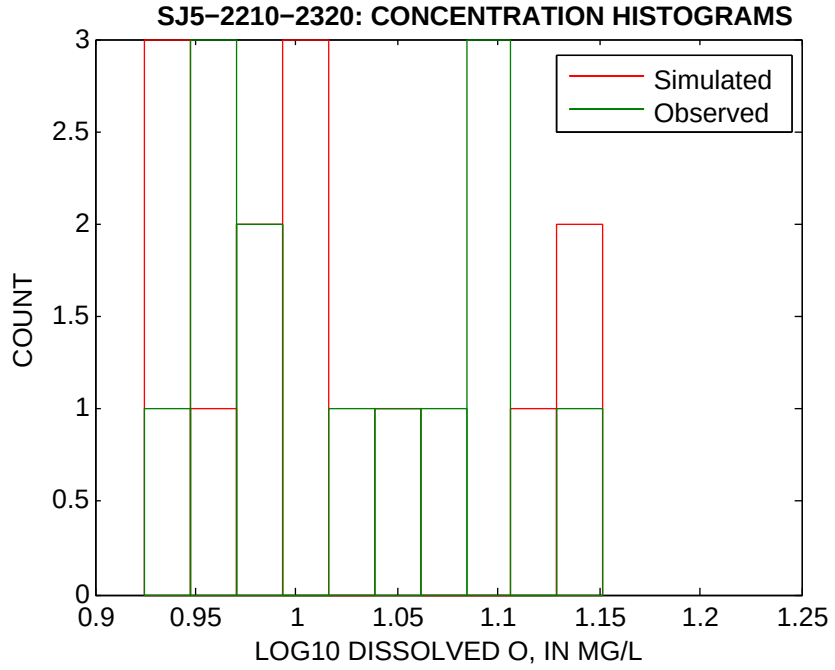
VERSION 2.1

ALL DATA
LOG10

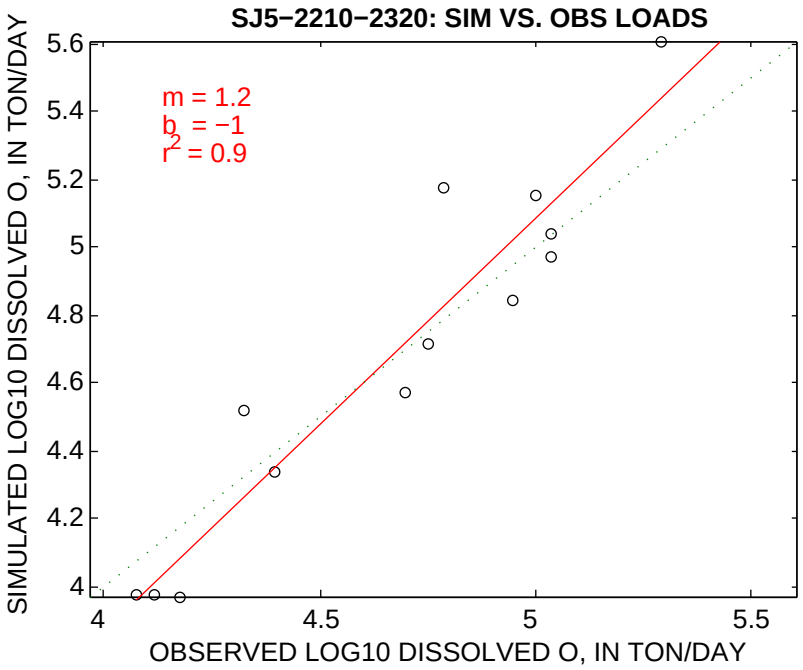




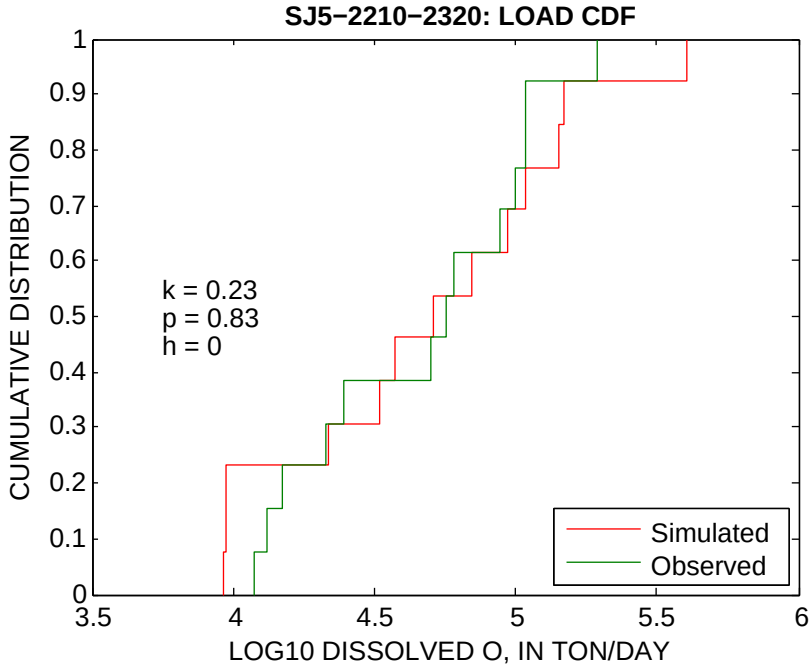


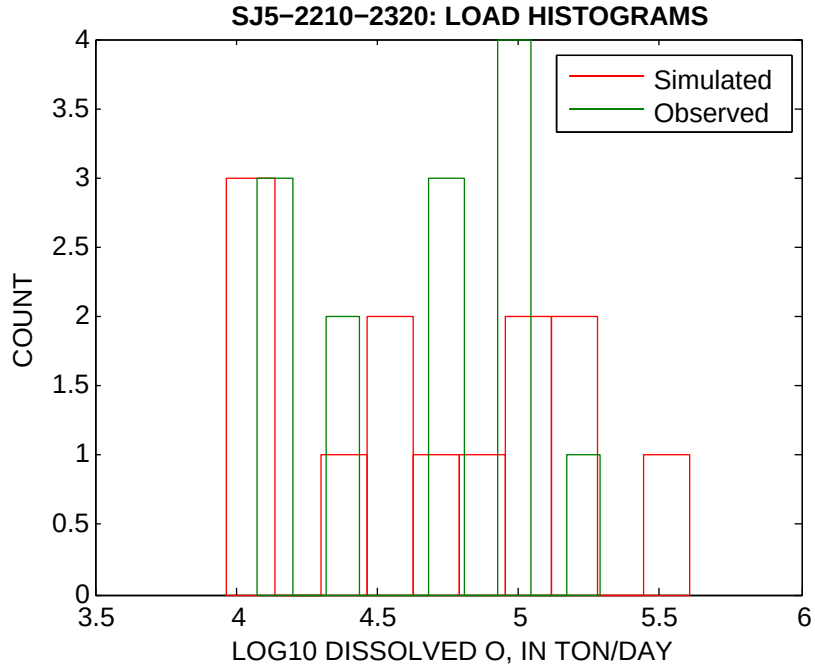


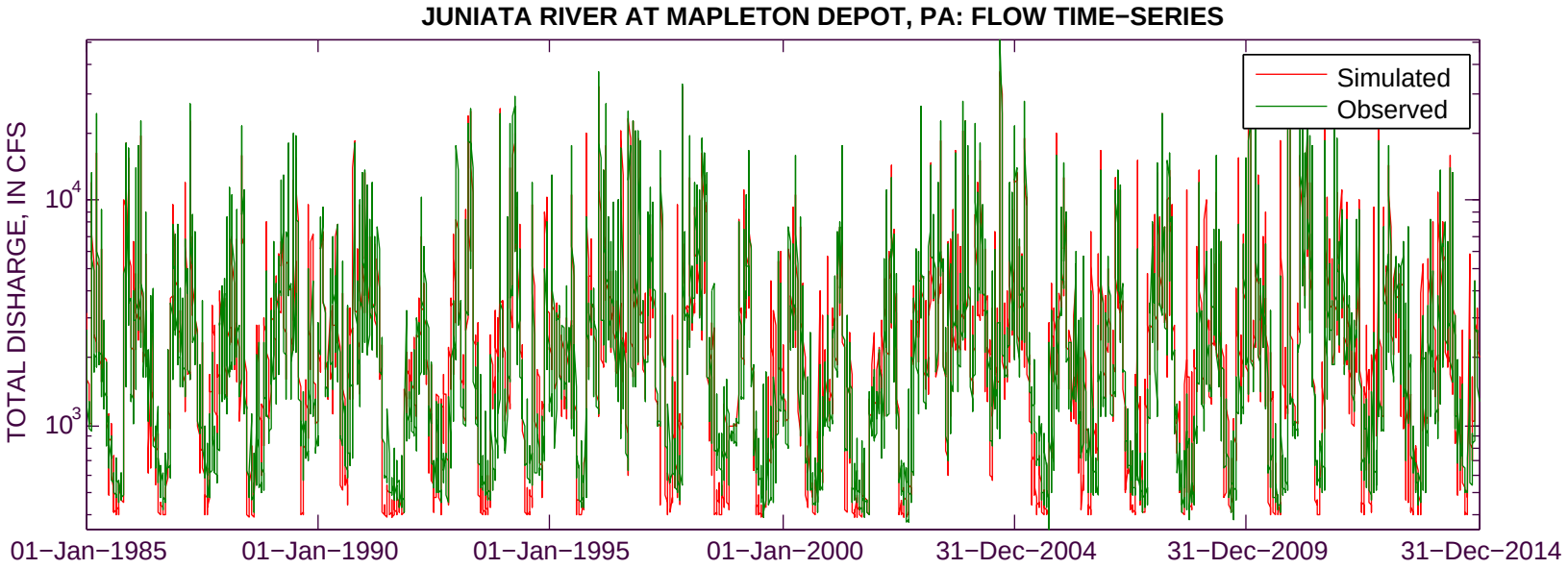
LOAD DATA
LOG10

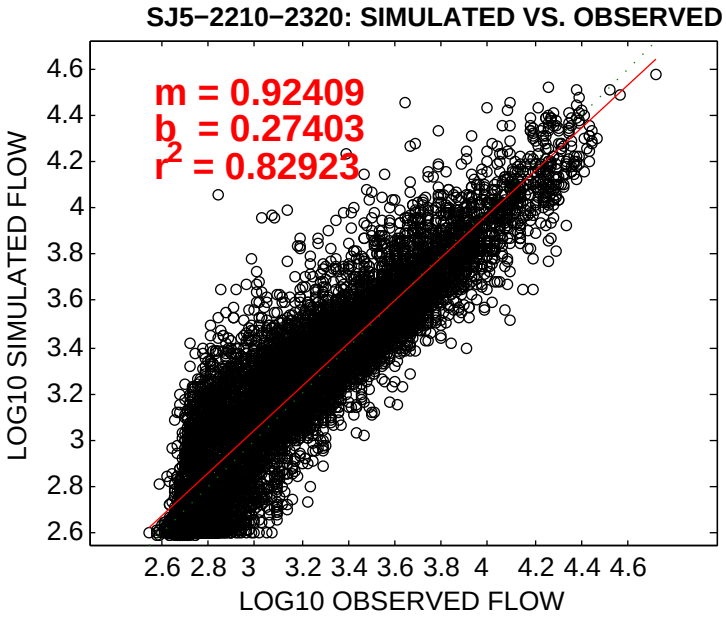


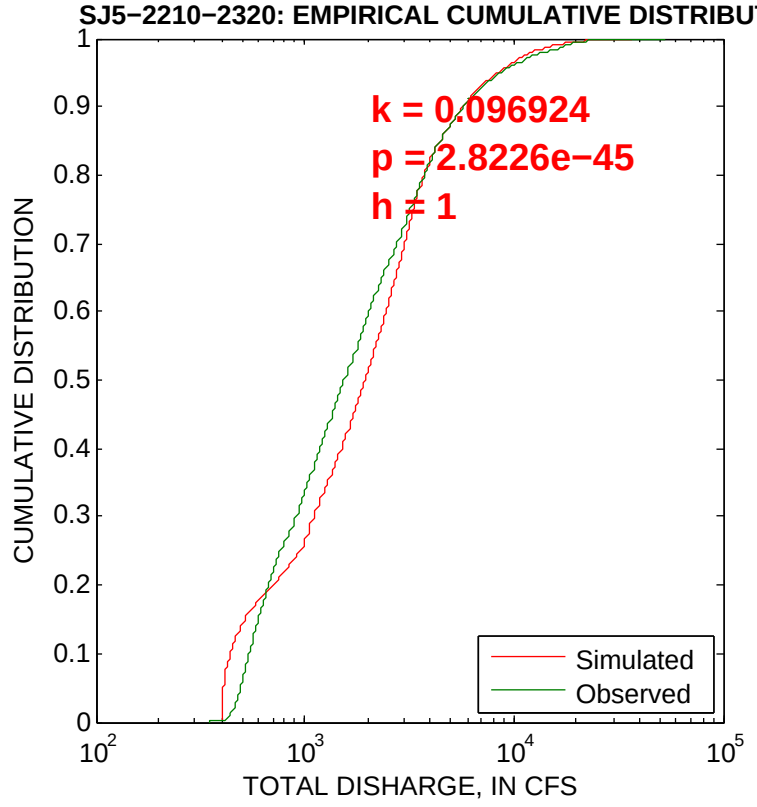












DATA SELECTION

scenario: P620171001WQ | file: FLOW.calib

plot: FLOW - total discharge

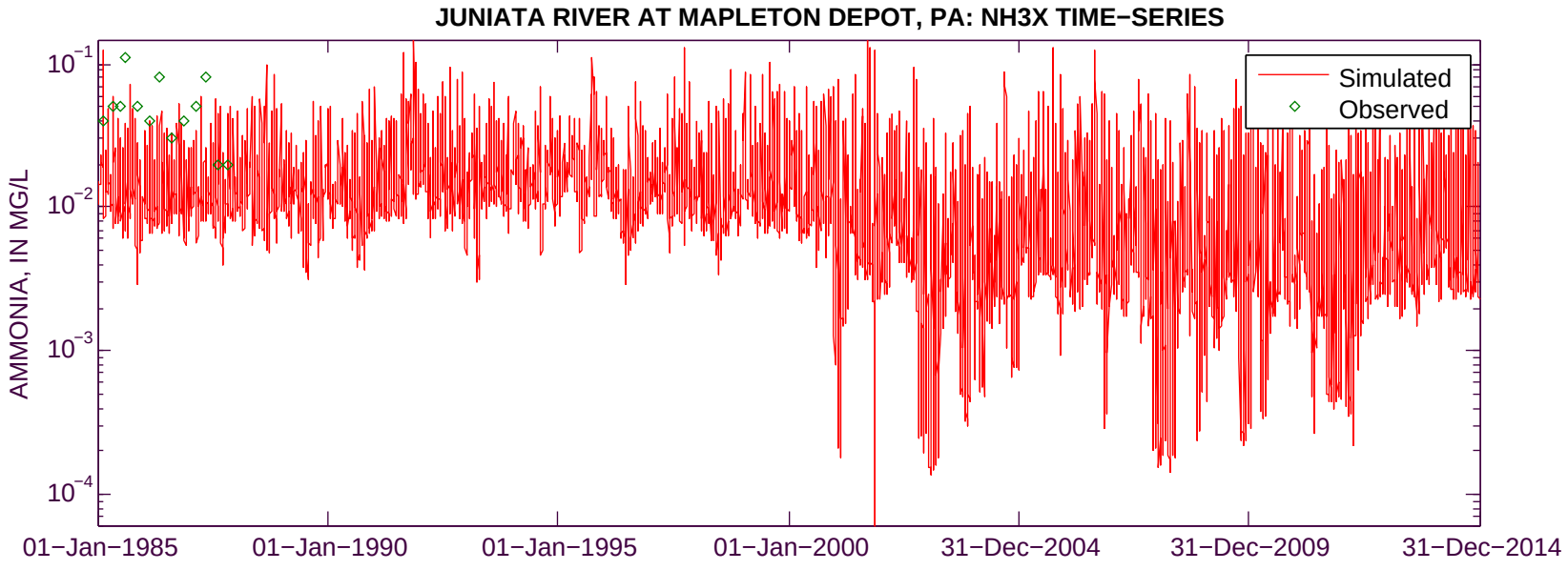
Dates: 1/1/1985 | 12/31/201

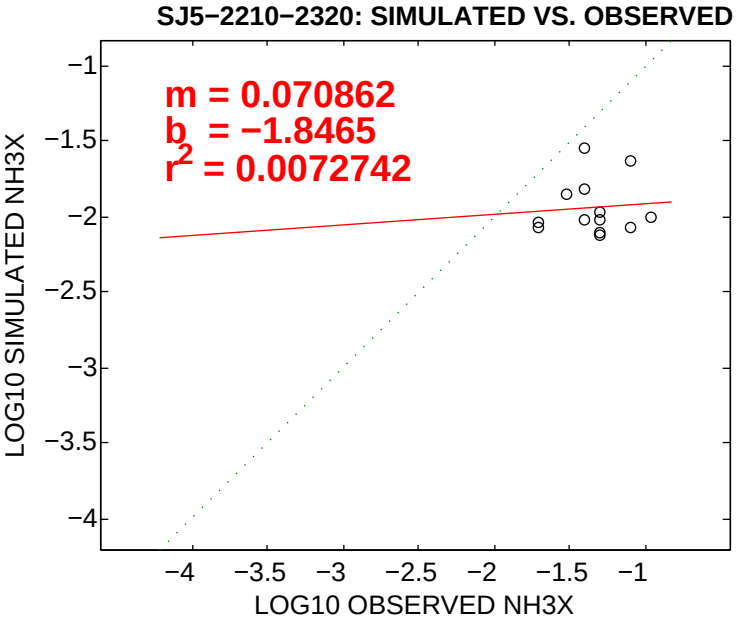
Drive | Directory: model | Observed: OBS20161101

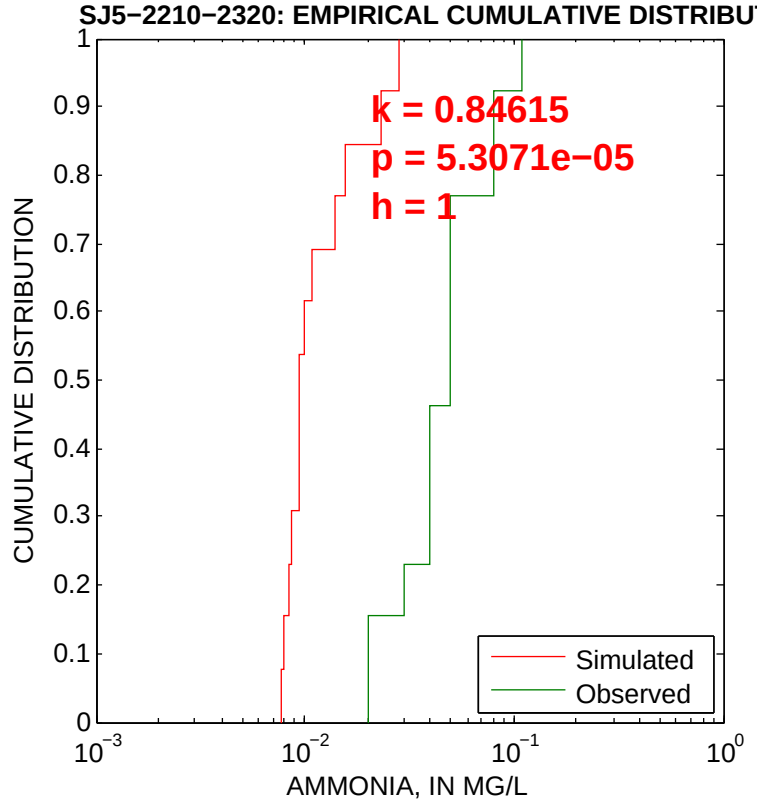
STATISTICS

		observe	simulate
n		10957	10957
min		351	396.23
		2.54531	2.59795
mean		2690.04	2774.16
		3.22834	3.2573
media		1550	1955.7
		3.19033	3.2913
max		52500	37156
		4.72016	4.57003
varian		1.12906e+0	9.57452e+
		0.156441	0.161103
JB		0.001	0.001
		0.001	0.001
		ra	log
%		3.12697	0.89703
err.va		2.30399e+0	0.0292522
rel.std.err		0.204063	0.186985
mod.eff		0.795937	0.813015

VERSION 2.1







DATA SELECTION

scenario	file
P620171001WQ	NH3X.calib

plot: NH3X - ammonia

Dates: 1/1/1985 – 12/31/201

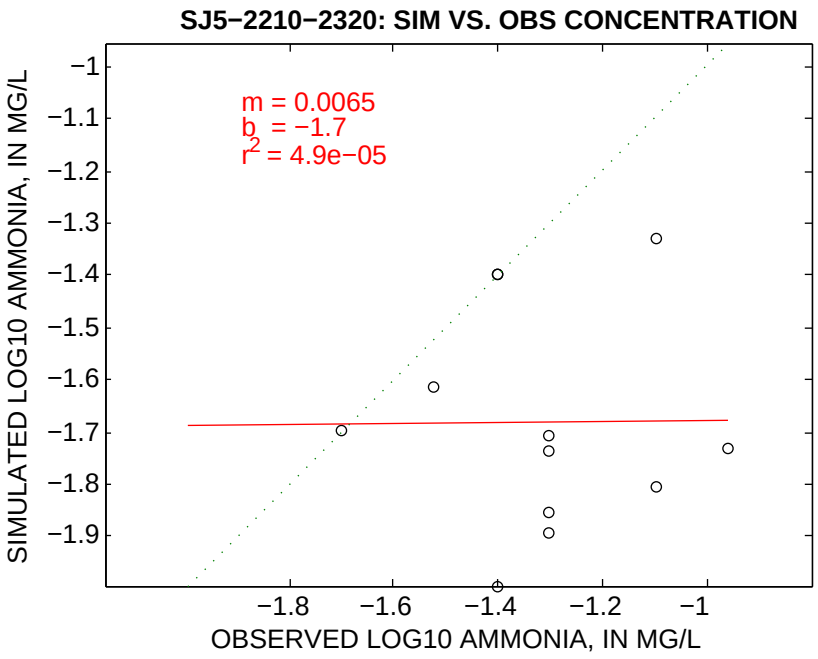
Drive	Directory	Observed
N/A	model	OBS20161101

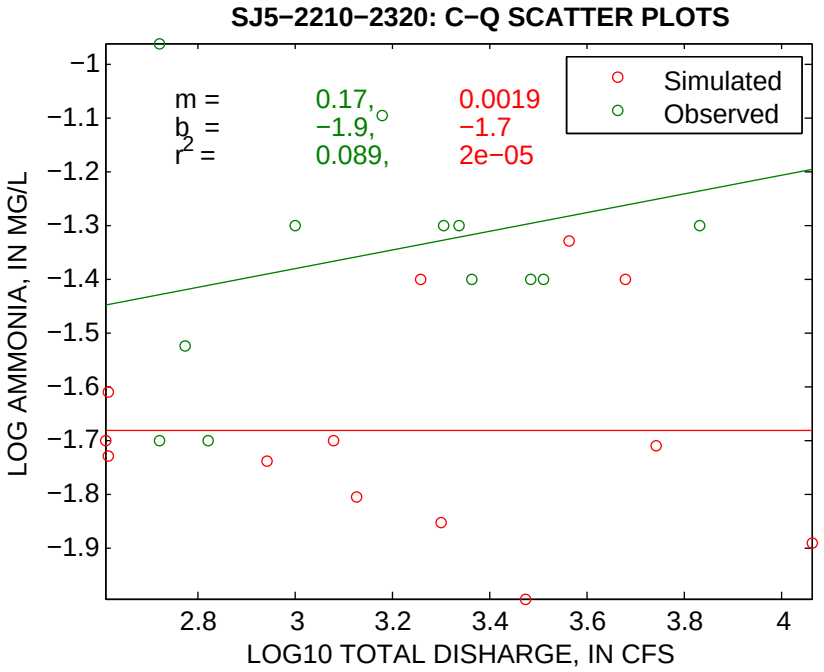
STATISTICS

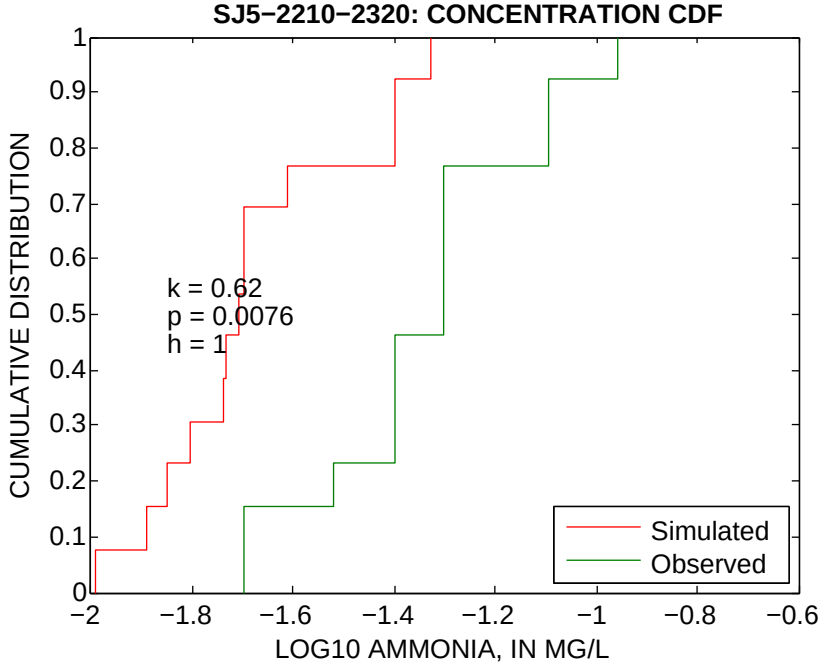
n	13	13
	observe	simulate
min	0.02	0.007633
	-1.69897	-2.1173
mean	0.0507692	0.0125405
	-1.34394	-1.94177
media	0.05	0.0094265
	-1.30103	-2.02565
max	0.11	0.028417
	-0.958607	-1.54642
varian	0.00065769	4.16175e-0
	0.0475628	0.0328327
JB	0.089957	0.014857
	0.5	0.053052
	ra	log
%	-75.2989	44.4835
err.va	0.00226889	0.460839
rel.std.err	3.44977	9.68906
mod.eff	-2.44977	-8.68906

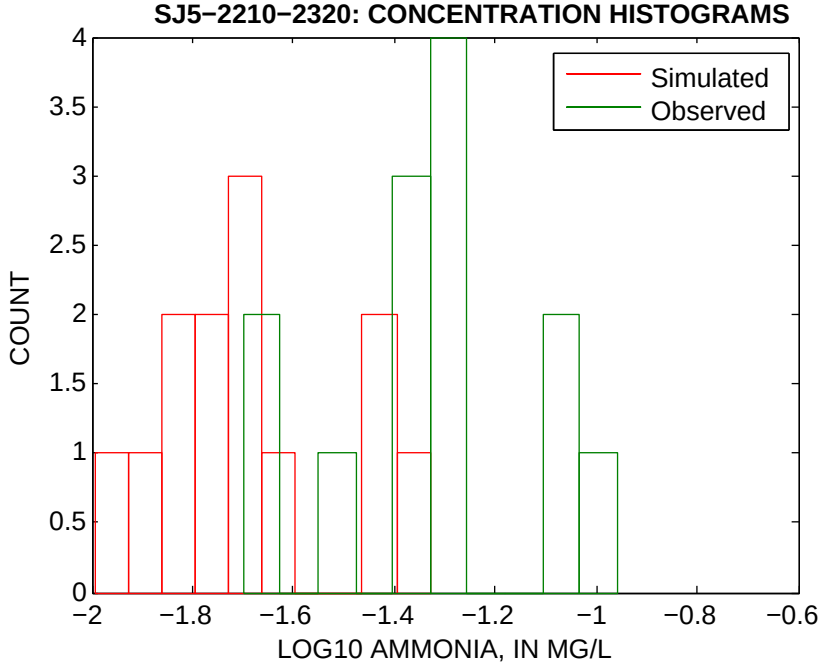
VERSION 2.1

ALL DATA
LOG10

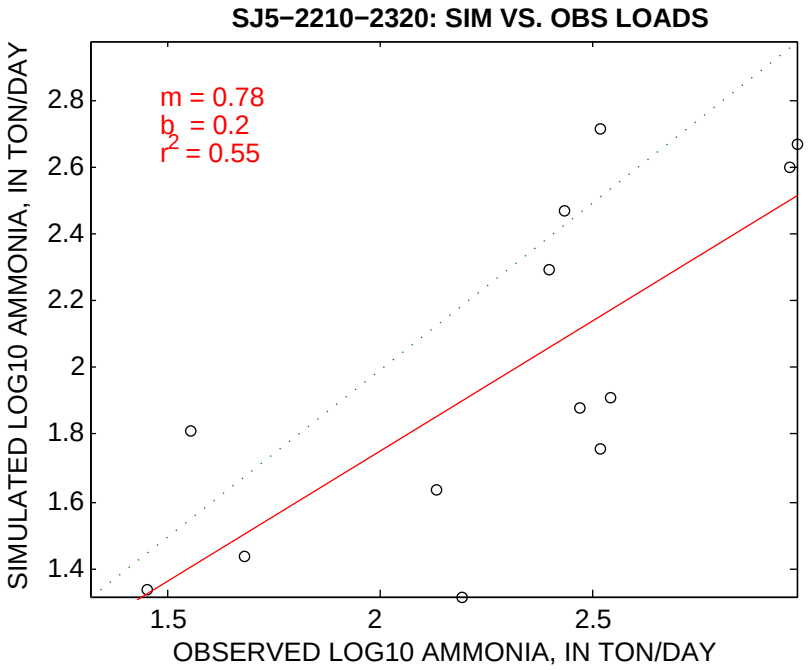


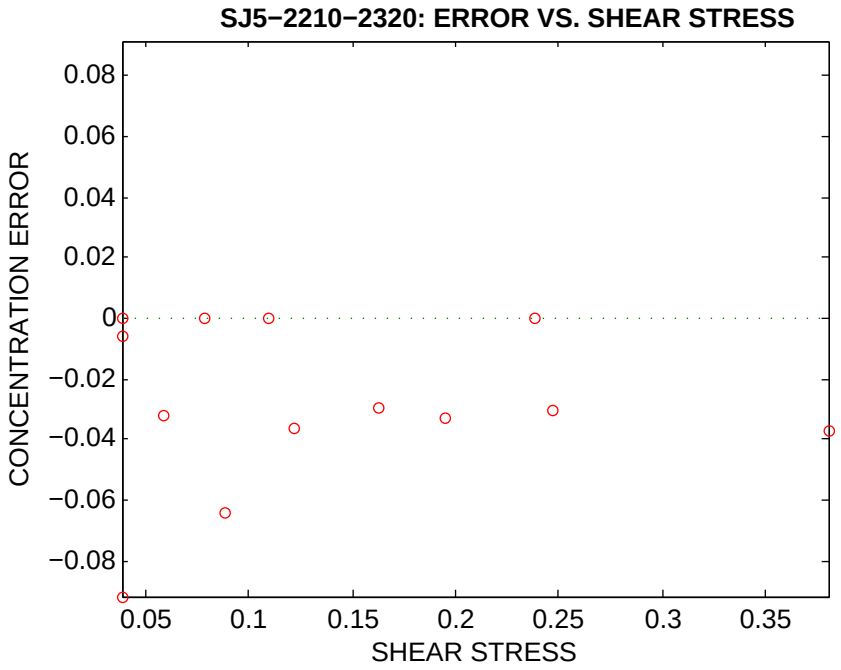


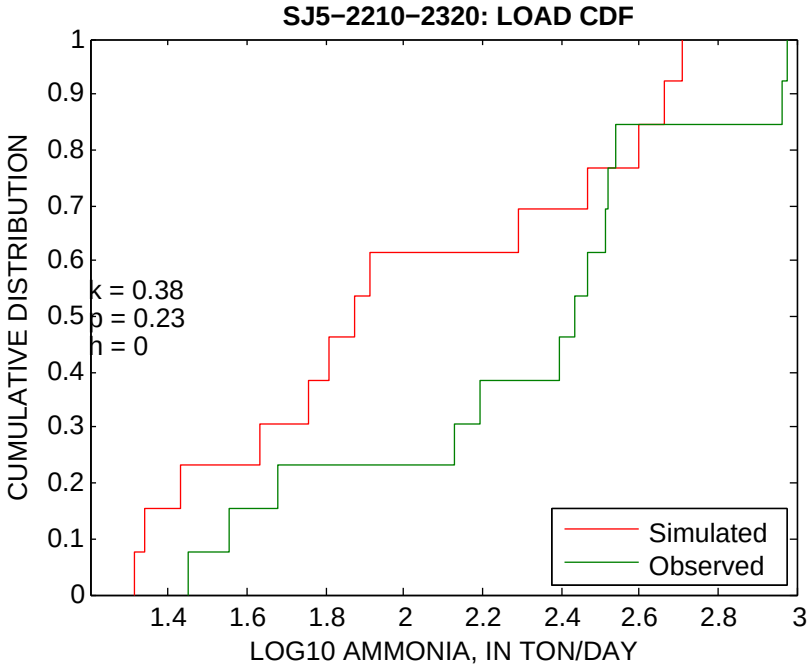


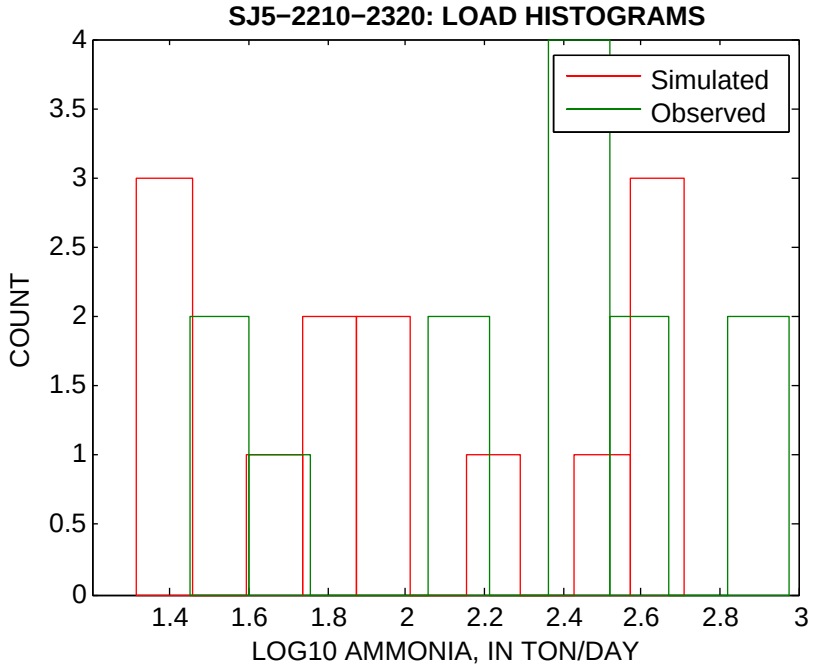


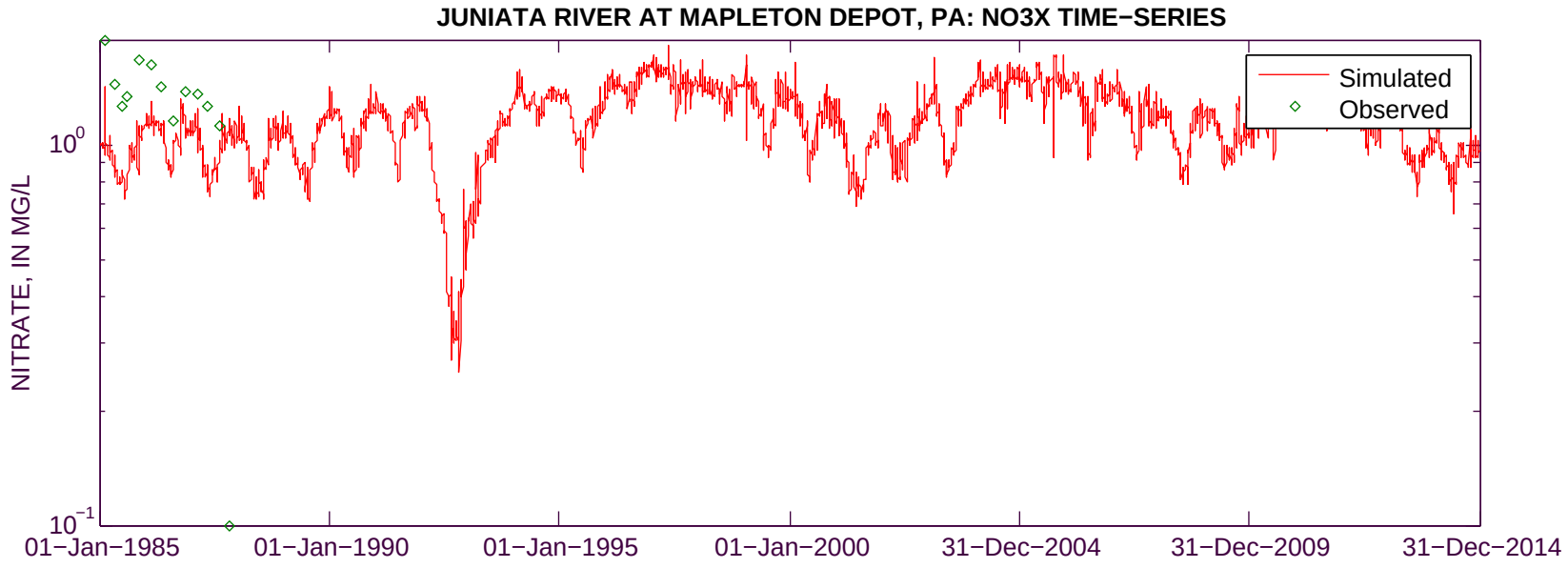
LOAD DATA
LOG10

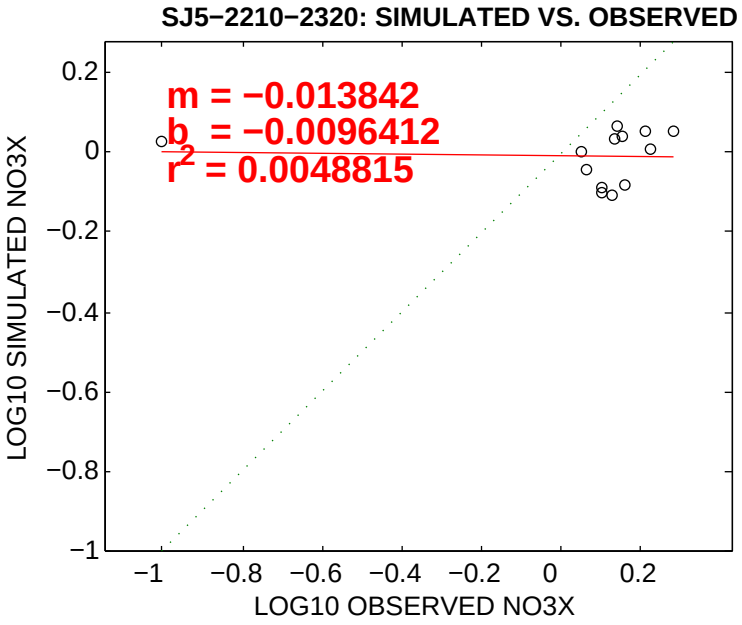


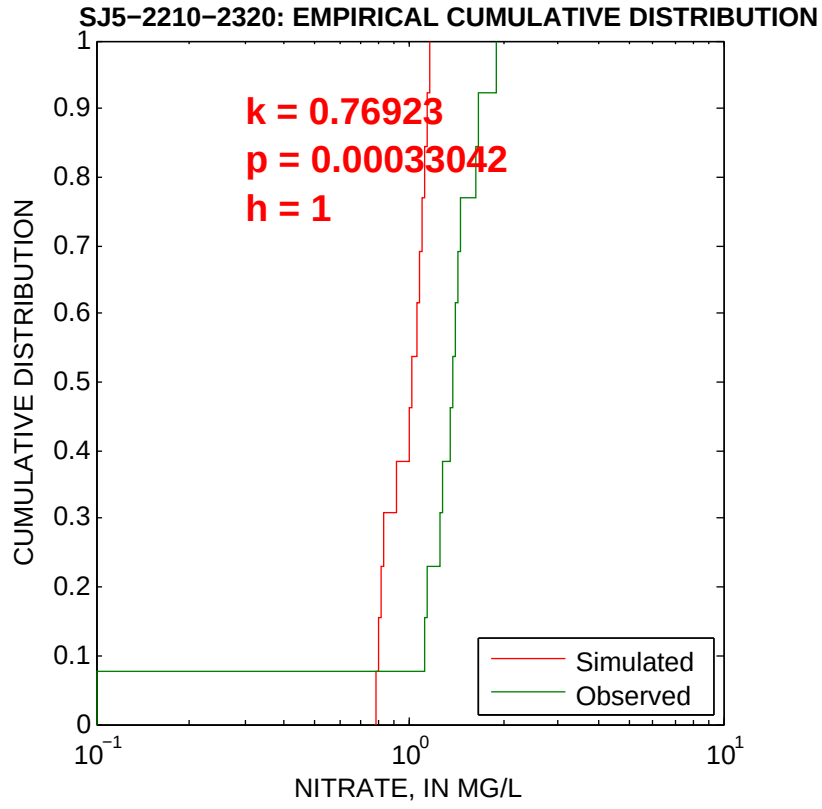












DATA SELECTION

scenario	file
P620171001WQ	NO3X.calib

plot: NO3X - nitrate

Dates: 1/1/1985 – 12/31/201

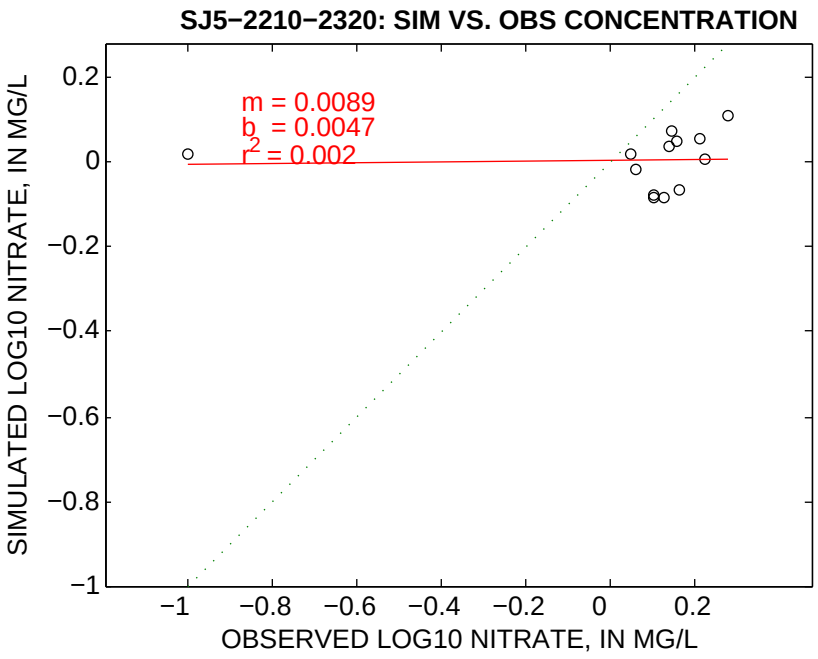
Drive	Directory	Observed
N/A	model	OBS20161101

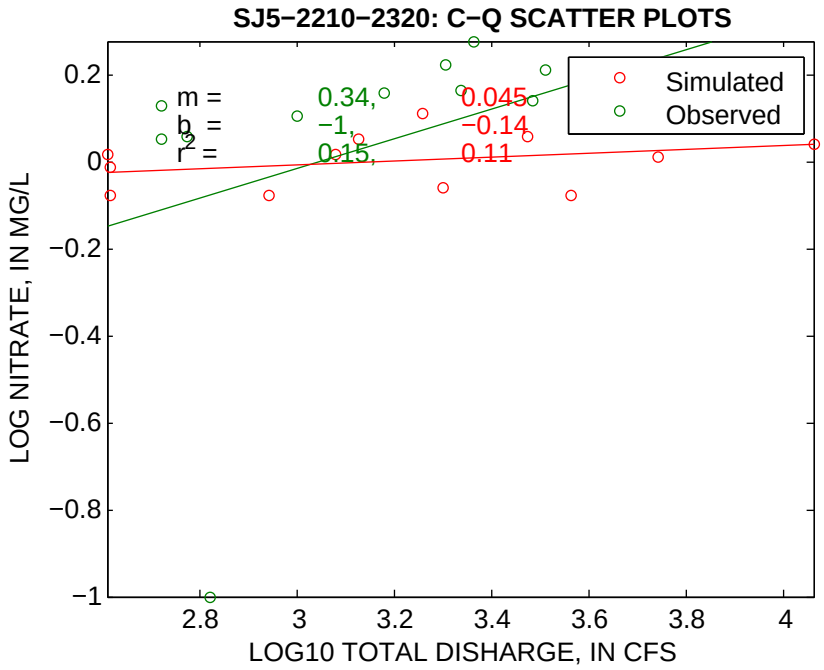
STATISTICS

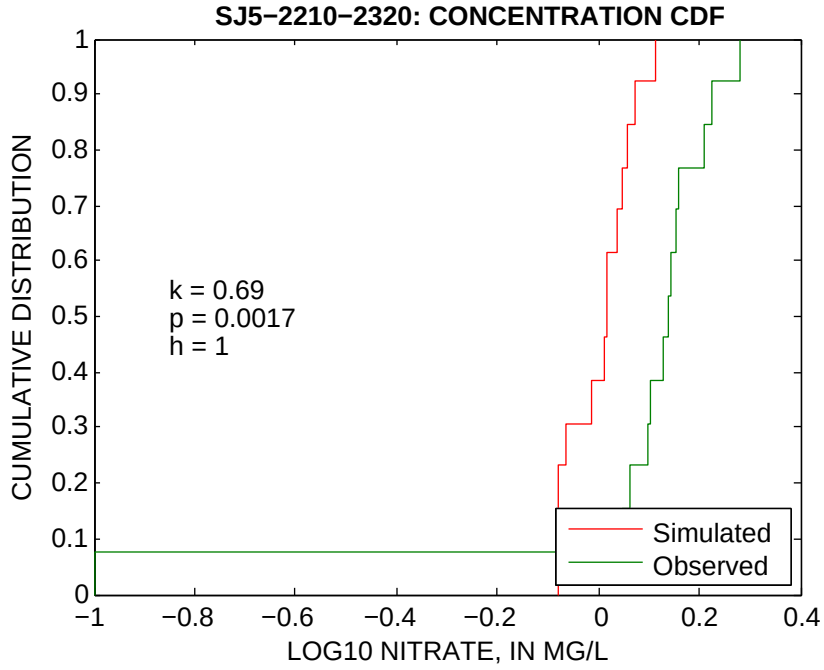
	n	13	13
		observe	simulate
min		0.1	0.7831
		-1	-0.106183
mean		1.31385	0.985939
		0.0577917	-0.0104411
media		1.37	1.018
		0.136721	0.00774778
max		1.9	1.1612
		0.278754	0.064907
varian		0.179559	0.0199226
		0.105111	0.00412563
JB		0.002249	0.162431
		0.001	0.144668
		ra	log
%		-24.9578	-118.067
err.va		0.30169	0.117191
rel.std.err		1.68017	1.11492
mod.eff		-0.680174	-0.114918

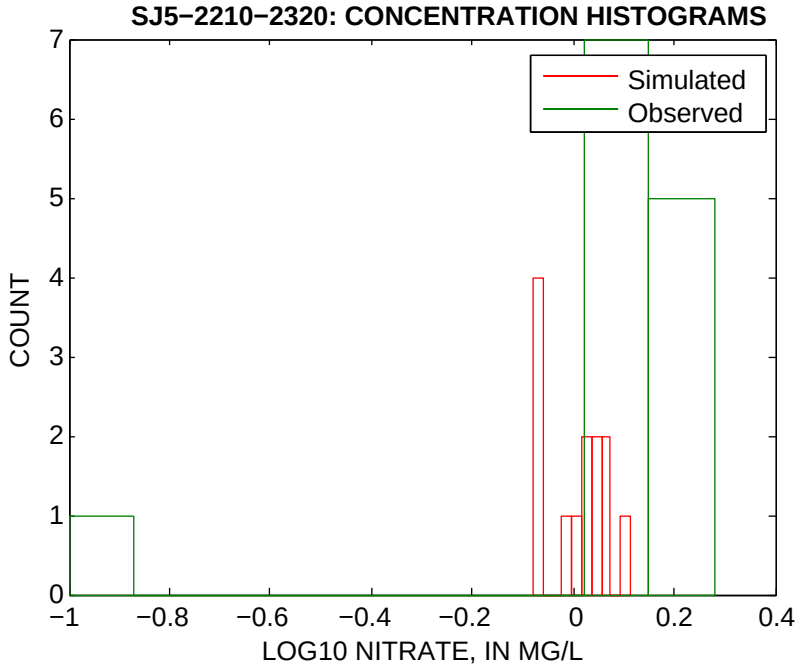
VERSION 2.1

ALL DATA
LOG10

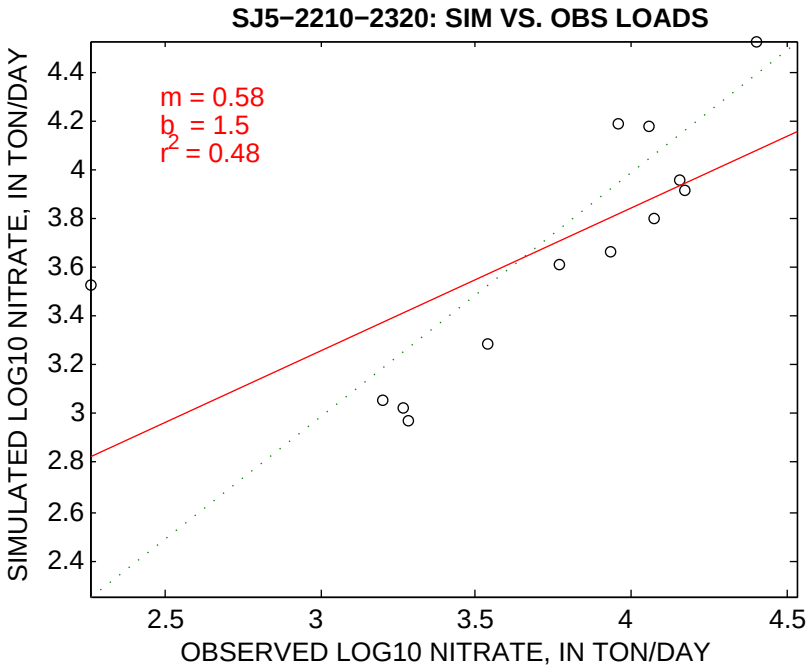


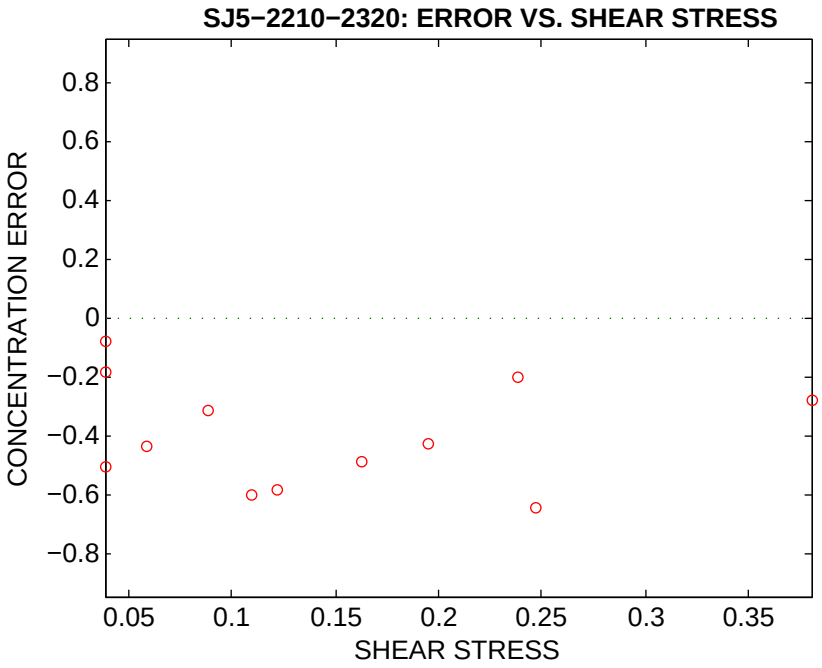


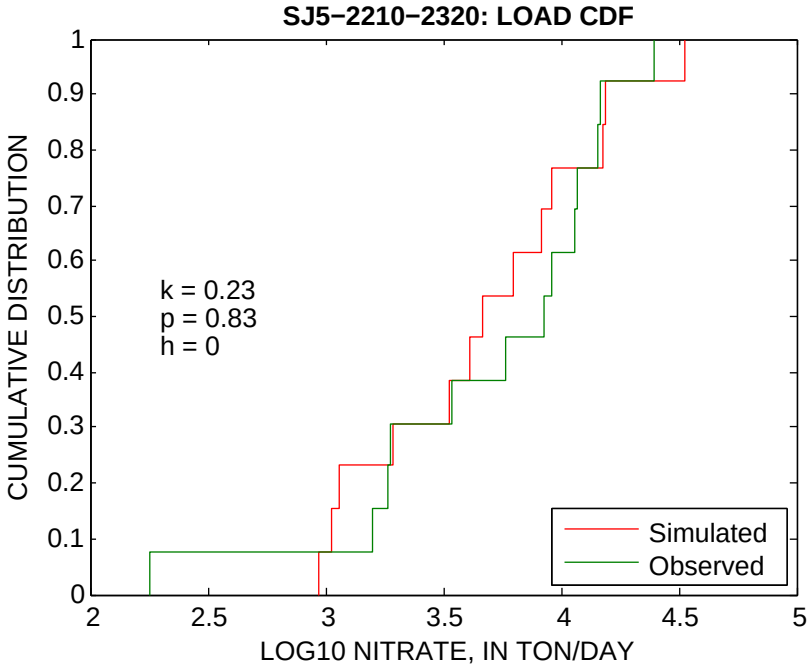


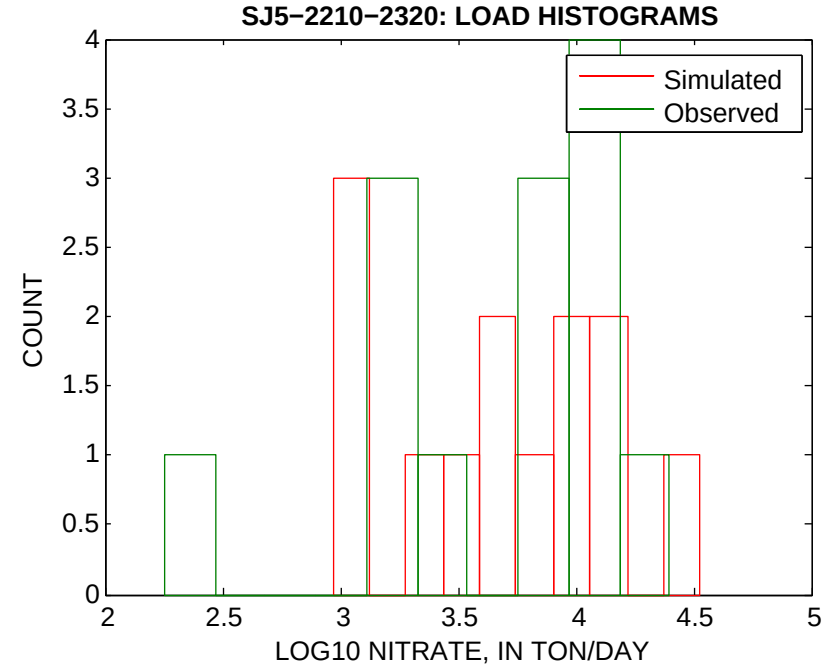


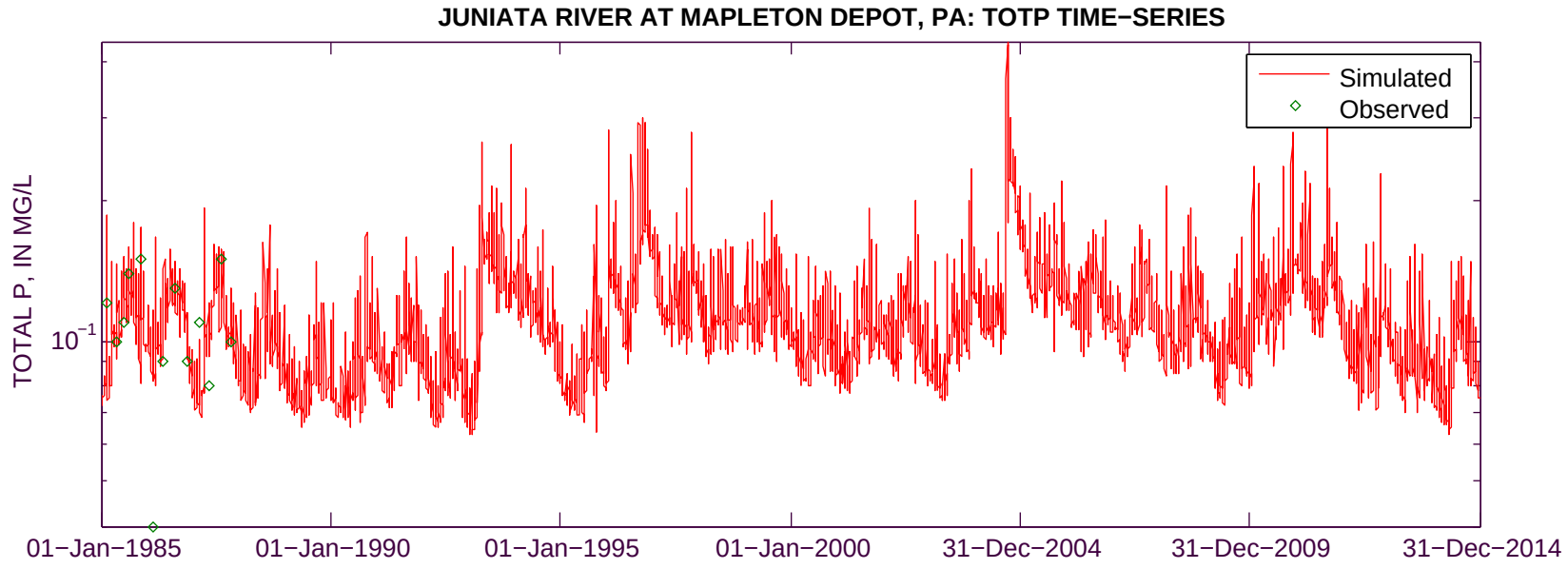
LOAD DATA
LOG10

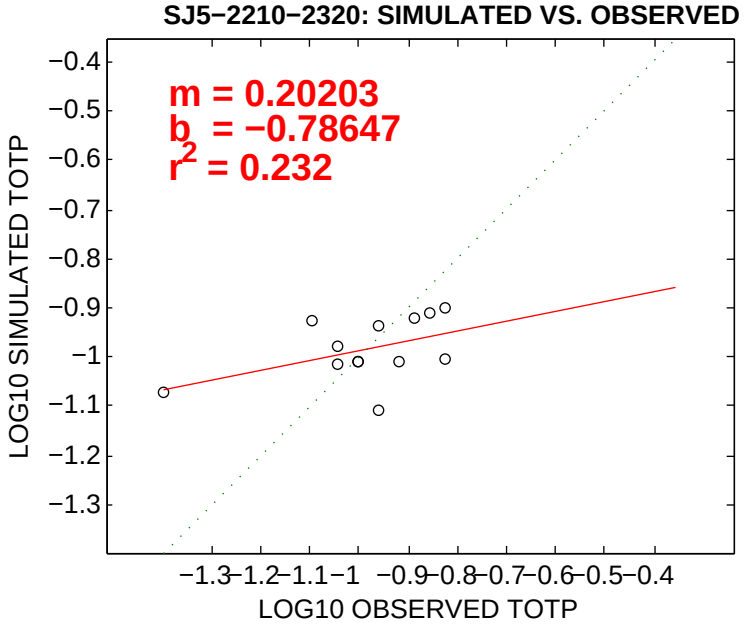


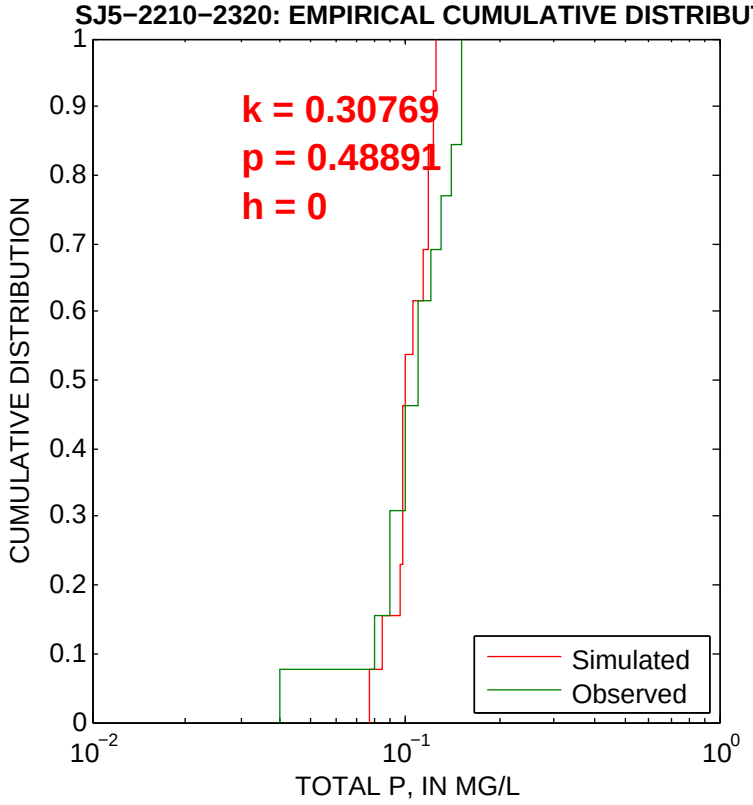












DATA SELECTION

scenario: P620171001WQ | file: TOTP.calib

plot: TOTP - total phosphorus

Dates: 1/1/1985 – 12/31/201

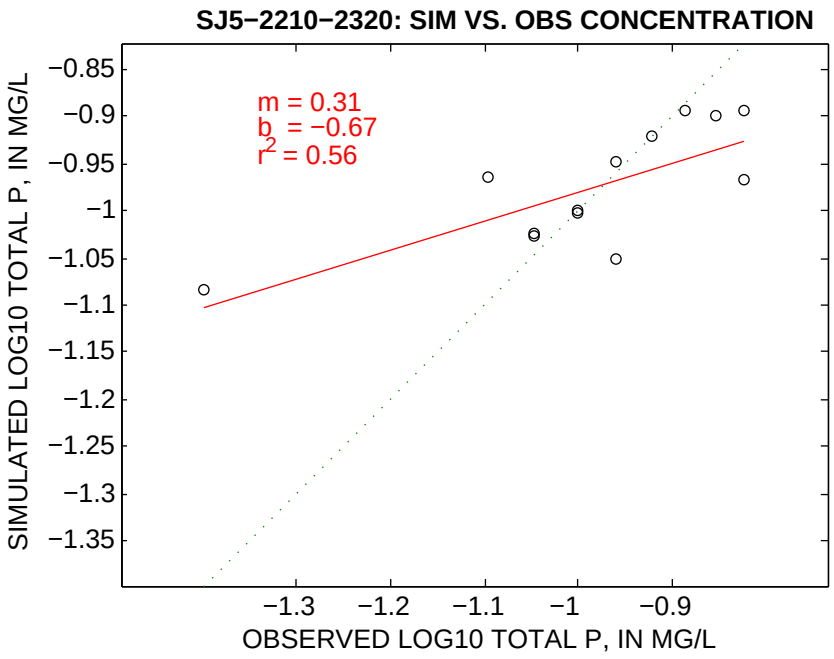
Drive: N/A | Directory: model | Observed: OBS20161101

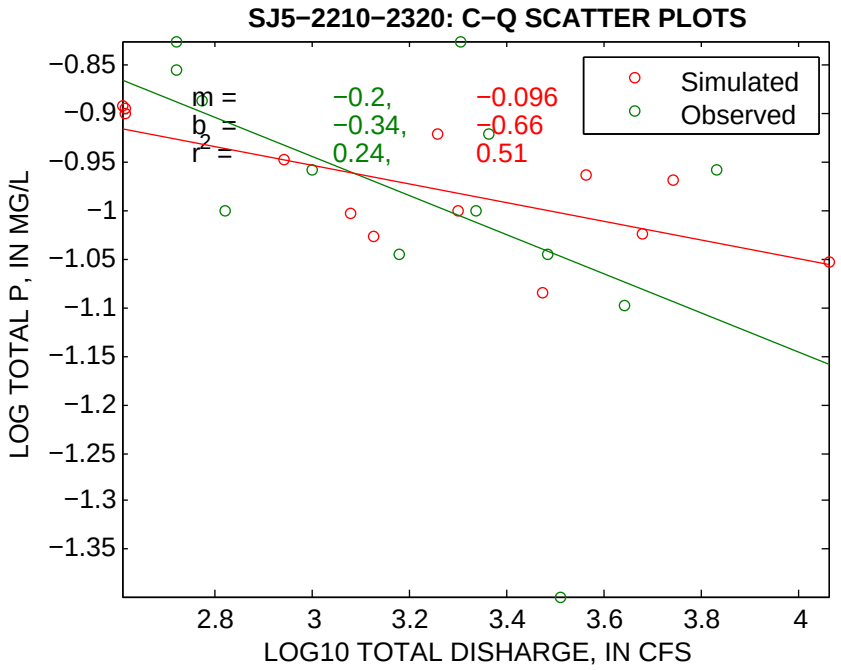
STATISTICS

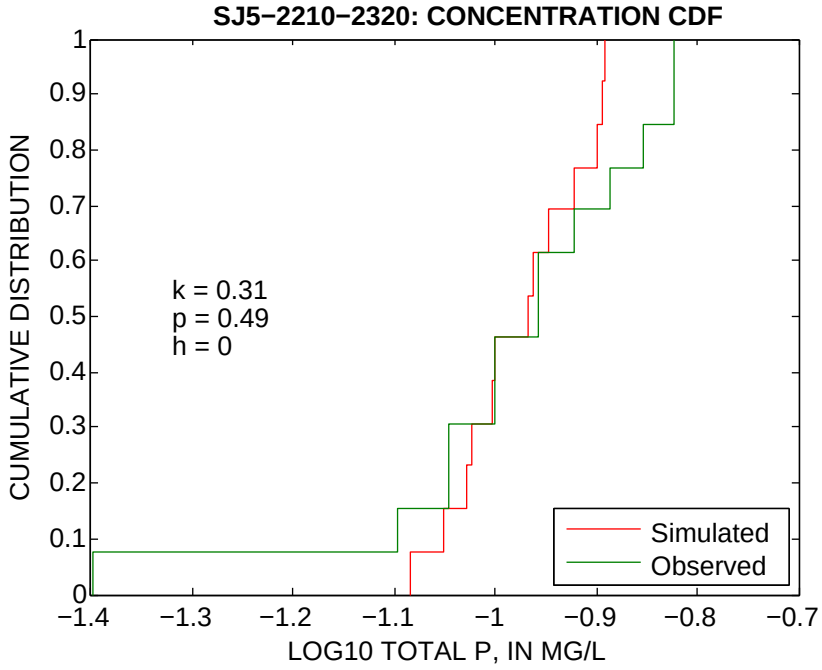
	n	13	13
		observe	simulate
min		0.04	0.077456
		-1.39794	-1.11094
mean		0.108462	0.104381
		-0.98555	-0.985582
media		0.11	0.099312
		-0.958607	-1.003
max		0.15	0.12511
		-0.823909	-0.902708
varian		0.00094743	0.00022037
		0.0229392	0.00403569
JB		0.5	0.5
		0.009084	0.5
		ra	log
%		-3.76227	0.003301
err.va		0.00073390	0.0177061
rel.std.err		0.774618	0.771871
mod.eff		0.225382	0.228129

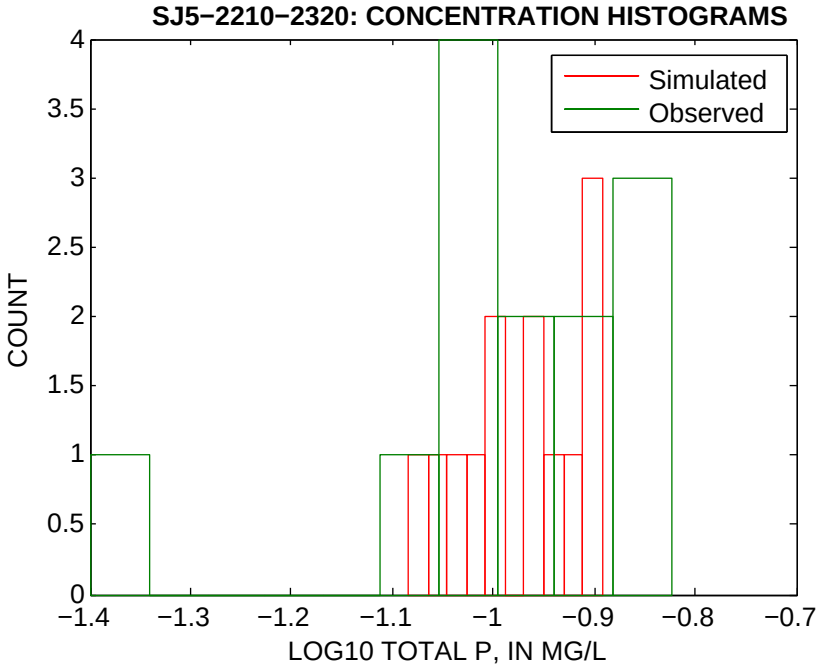
VERSION

ALL DATA
LOG10

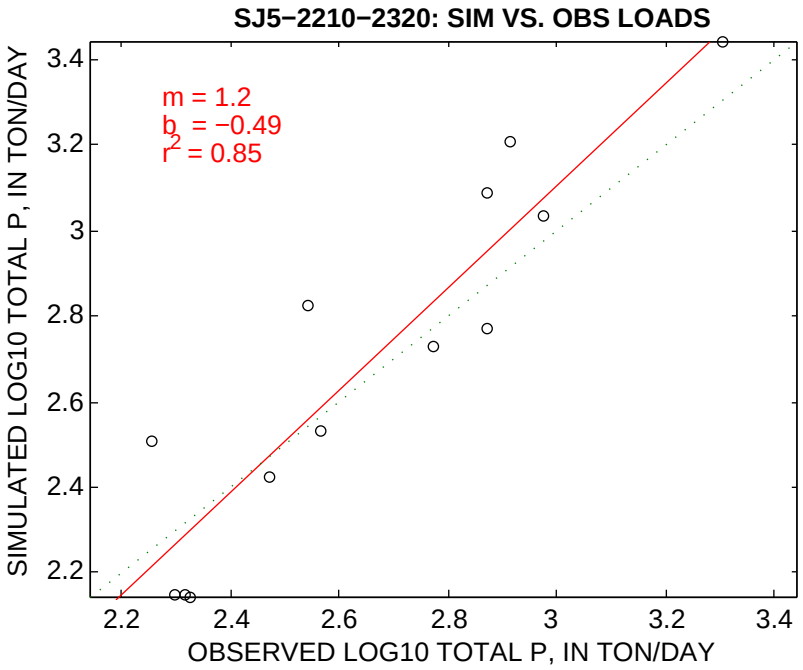


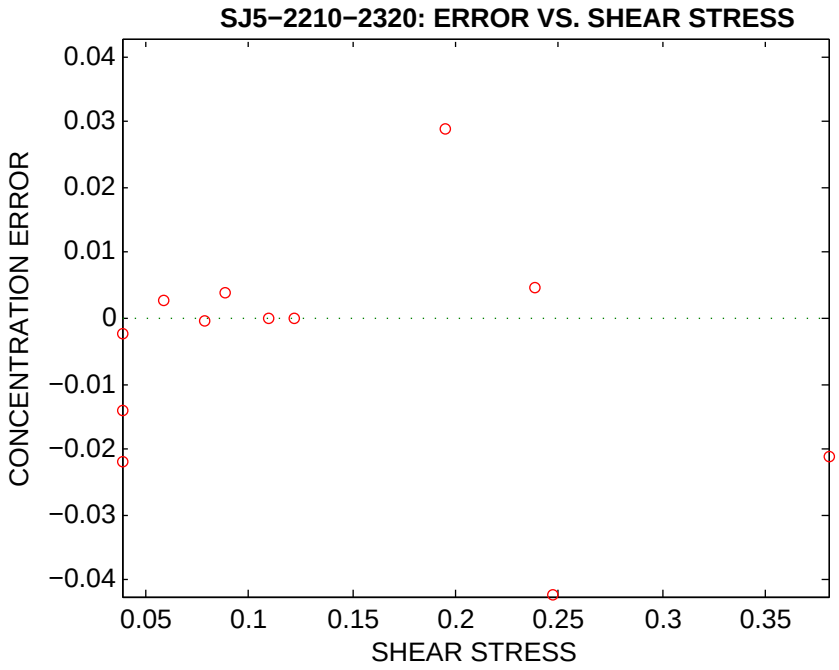


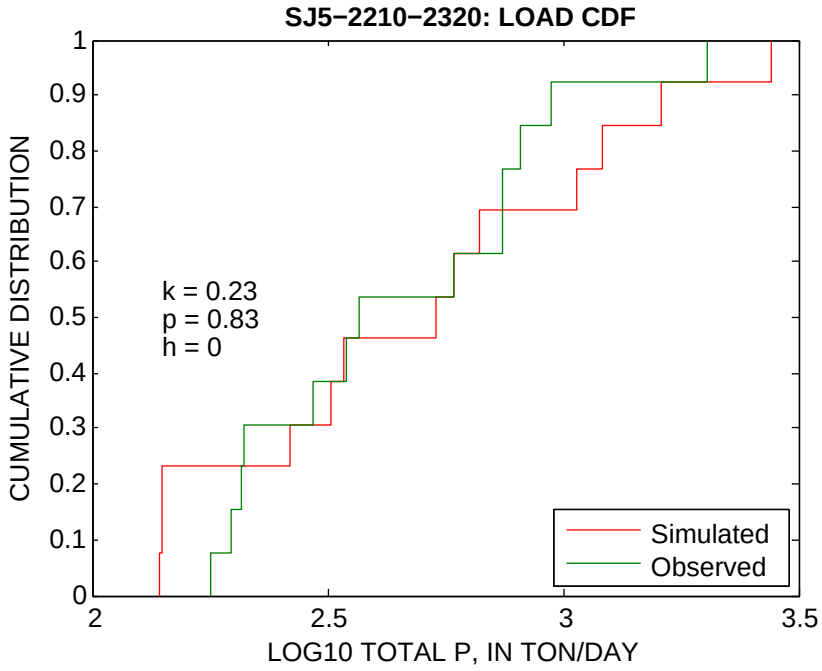


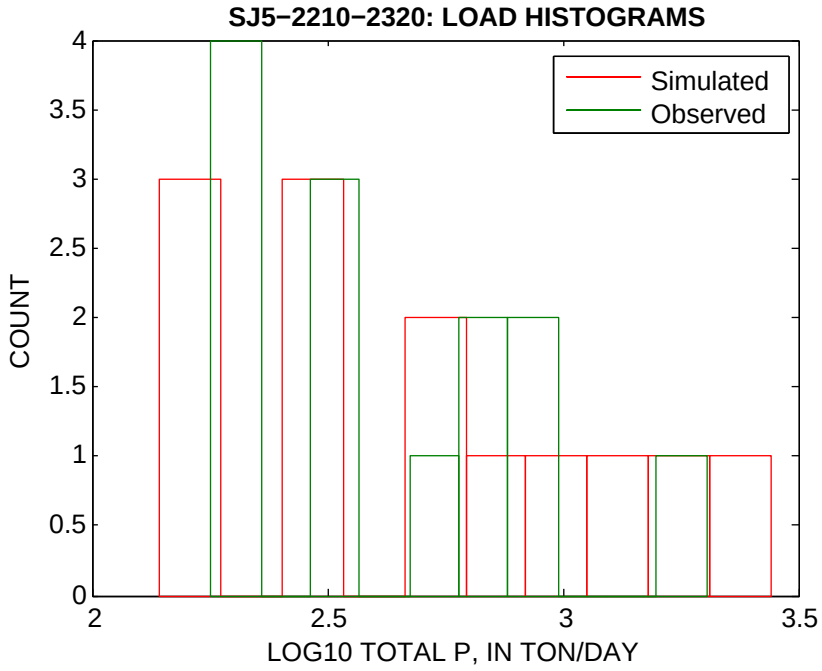


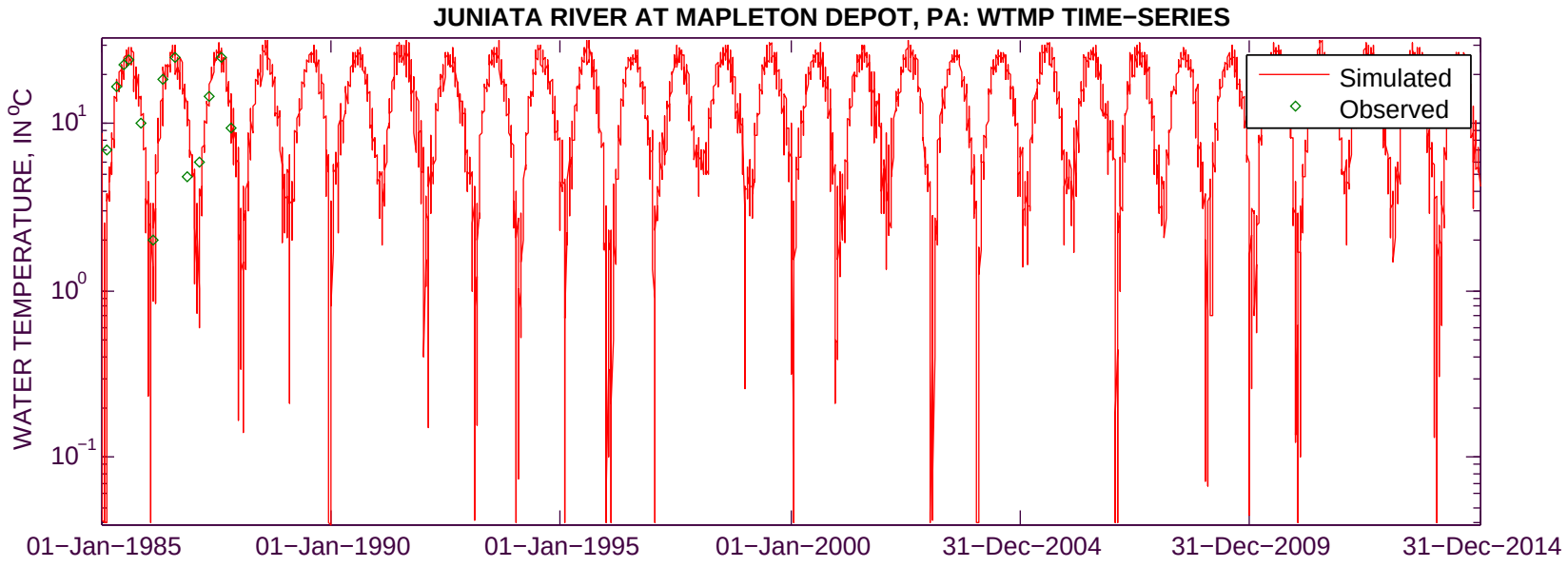
LOAD DATA
LOG10

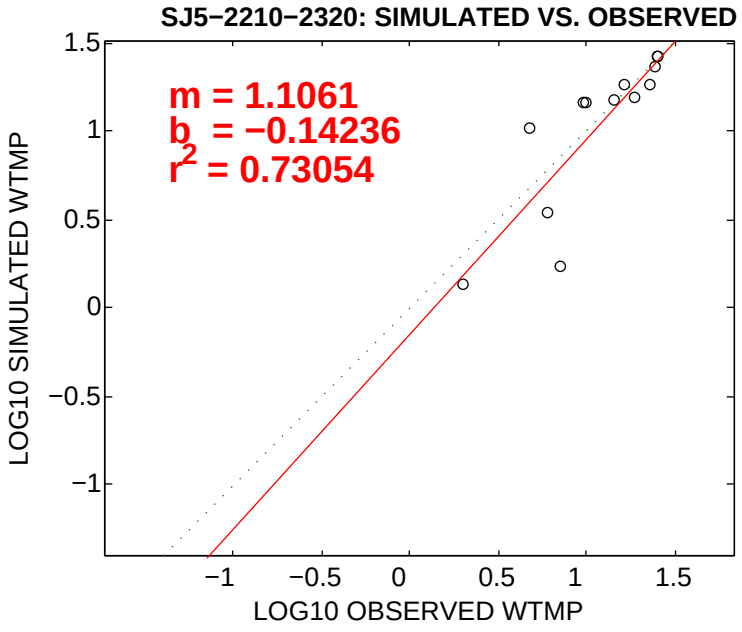


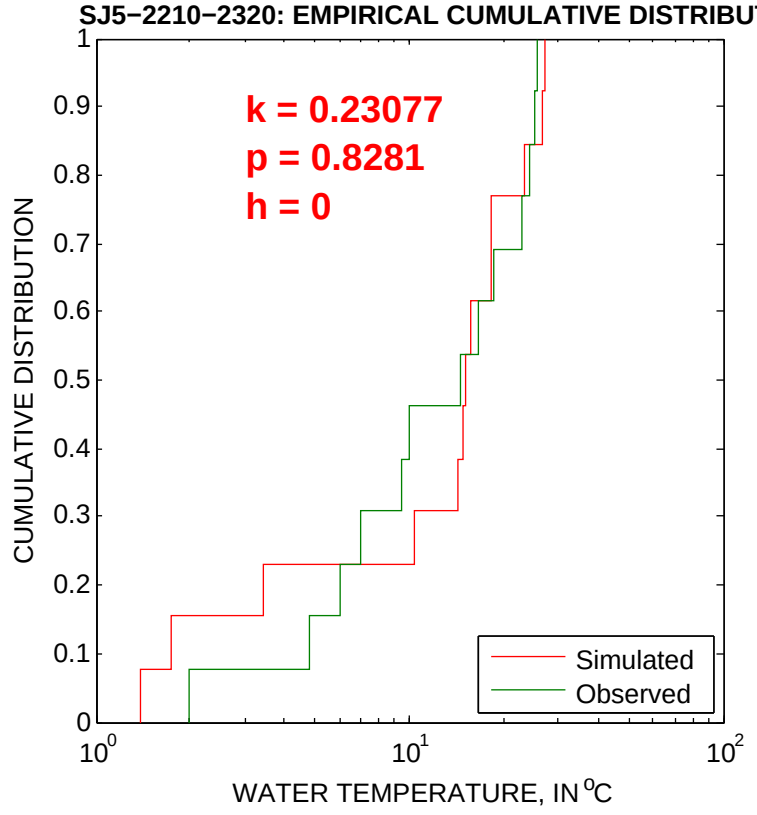












DATA SELECTION

scenario	file
P620171001WQ	WTMP.calib

plot: WTMP - water tempera...

Dates: 1/1/1985 – 12/31/201

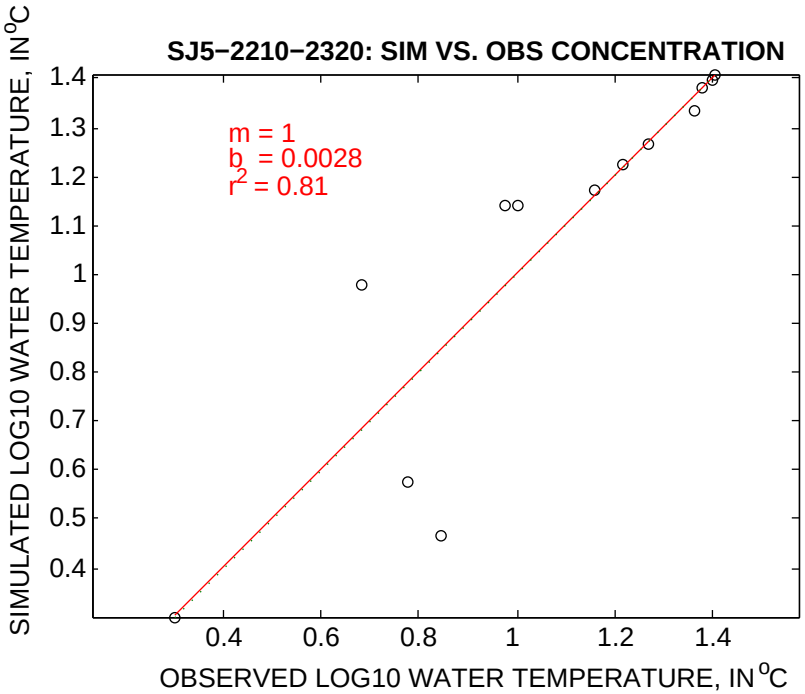
Drive	Directory	Observed
N/A	model	OBS20161101

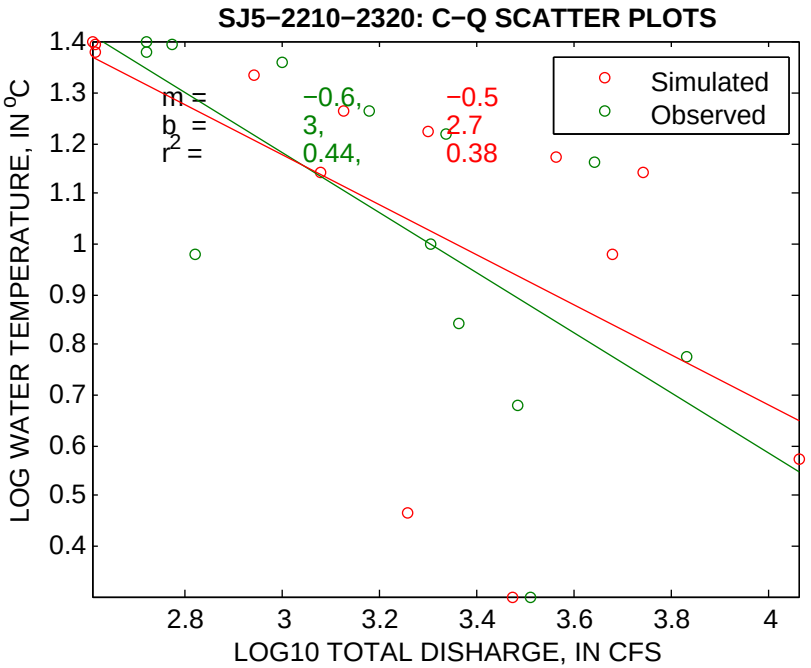
STATISTICS

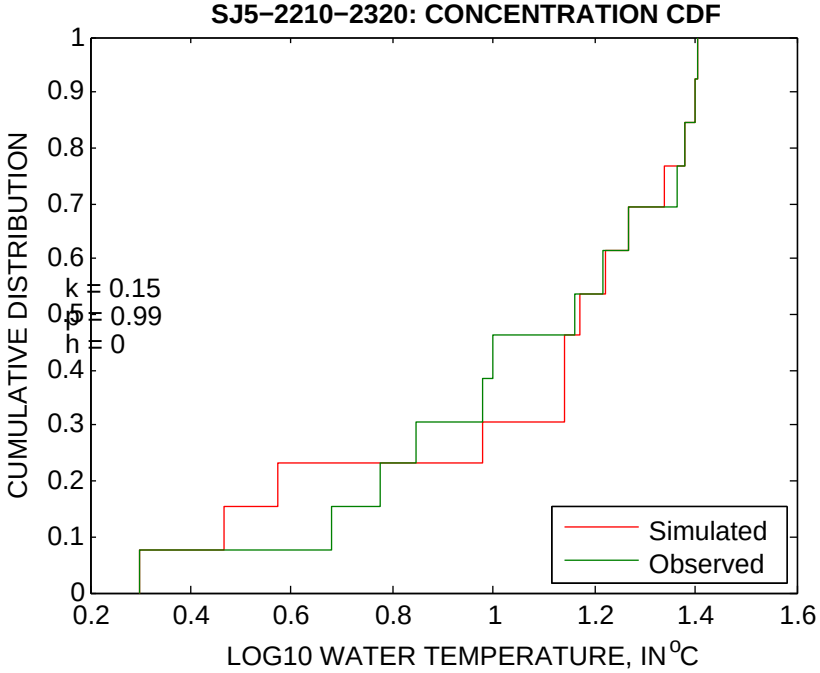
	n	13	13
		observe	simulate
min		2	1.3841
		0.30103	0.141167
mean		14.3231	14.6382
		1.05954	1.02961
media		14.5	15.221
		1.16137	1.18244
max		25.4	26.848
		1.40483	1.42891
varian		69.6036	73.4833
		0.113347	0.189833
JB		0.249158	0.5
		0.141164	0.052426
		ra	log
%		2.19979	-2.82446
err.va		12.6188	0.0533999
rel.std.err		0.181295	0.471117
mod.eff		0.818705	0.528883

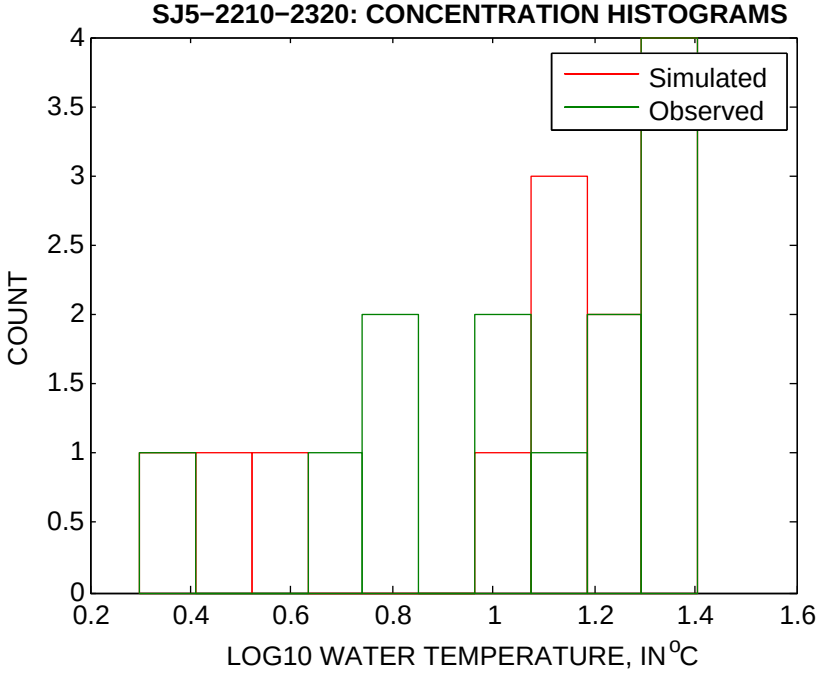
VERSION 2.1

ALL DATA
LOG10

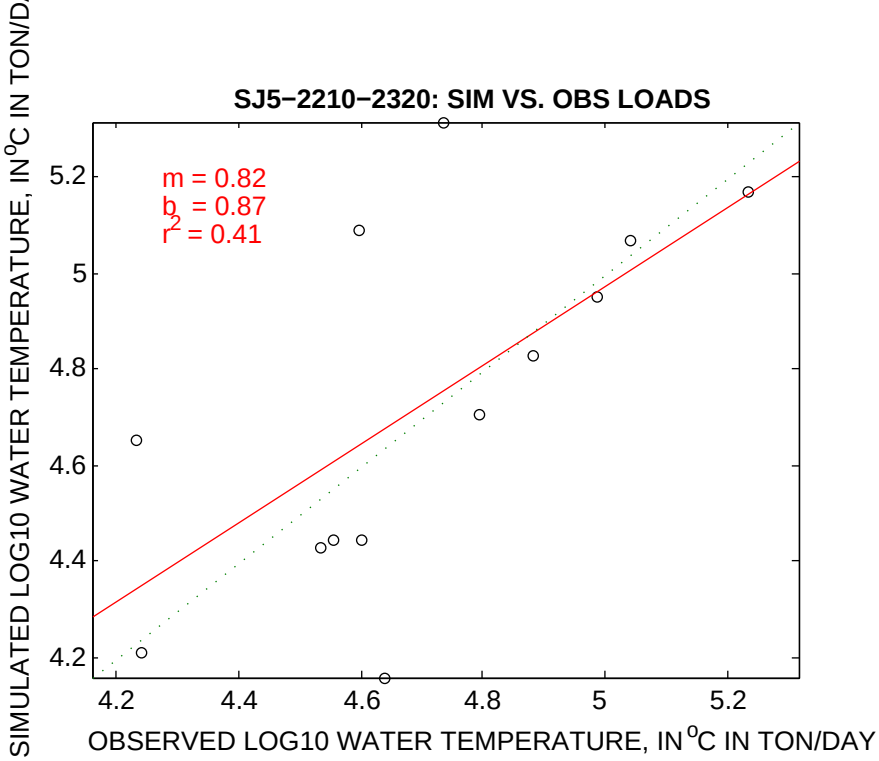


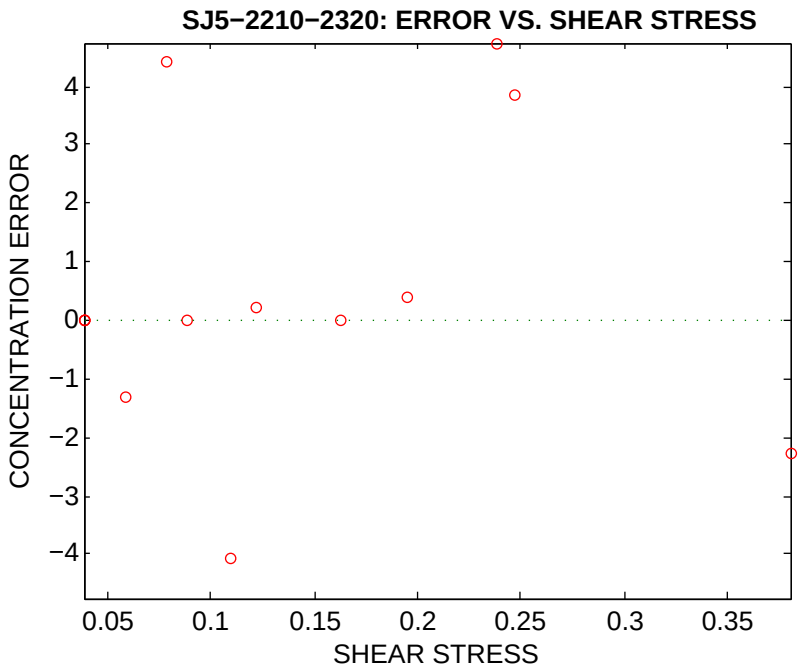


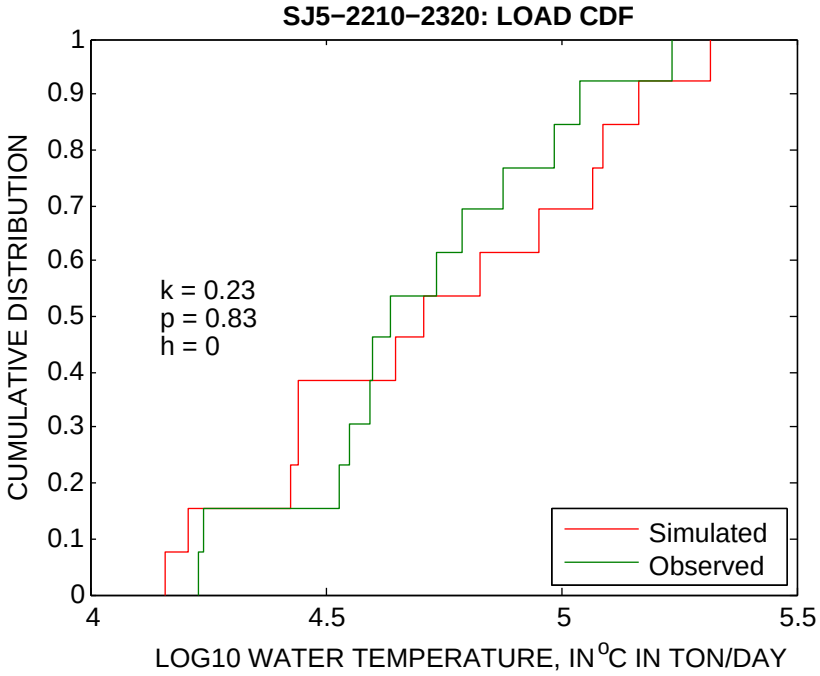


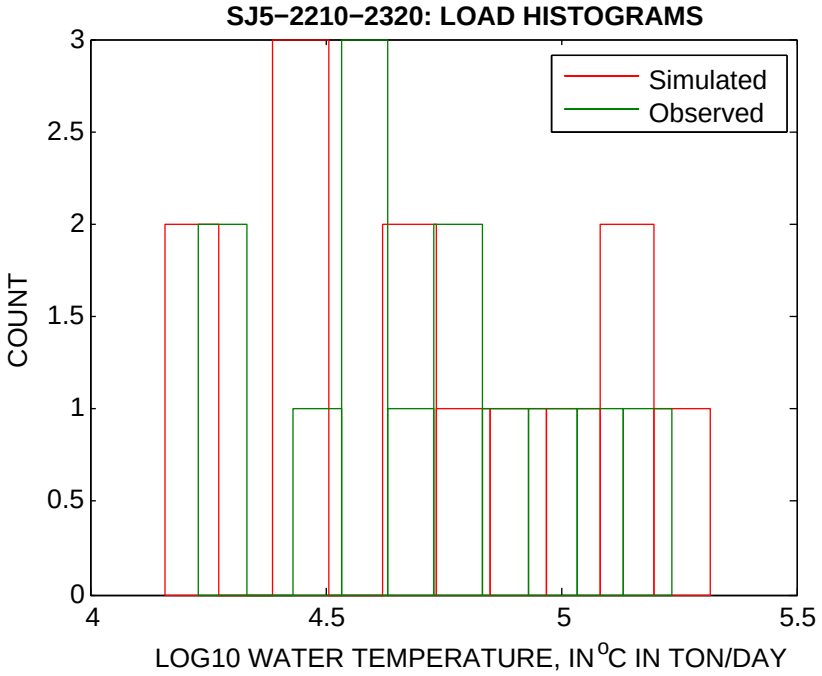


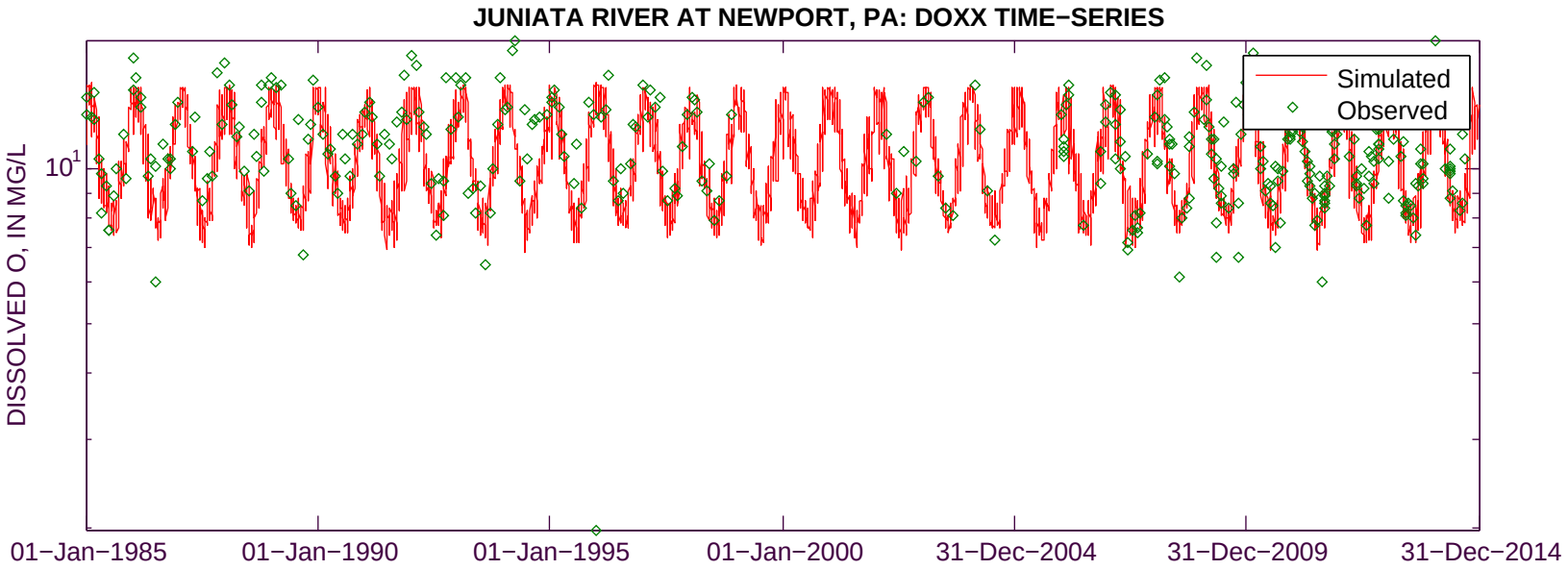
LOAD DATA
LOG10

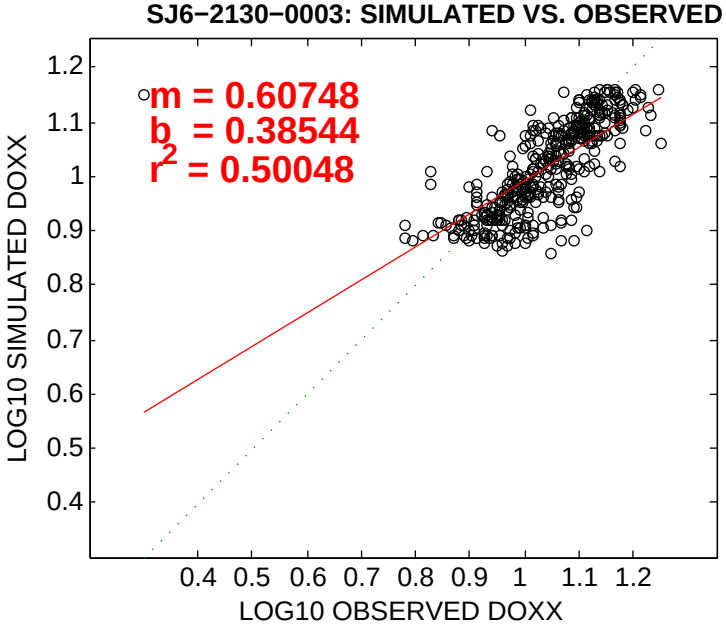


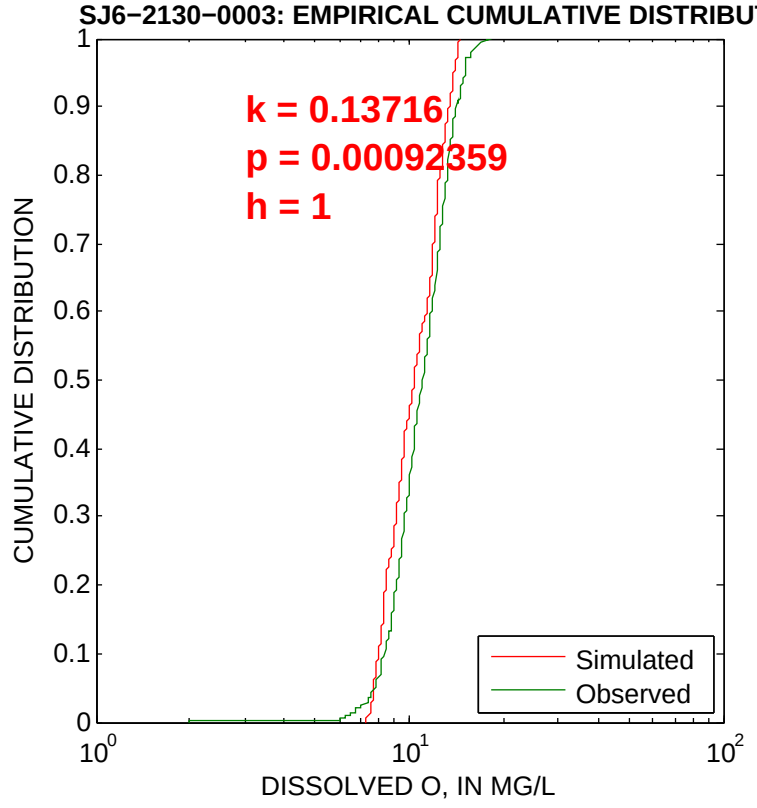












DATA SELECTION

scenario: P620171001WQ | file: DOXX.calib

plot: DOXX - dissolved oxygen

Dates: 1/1/1985 – 12/31/201

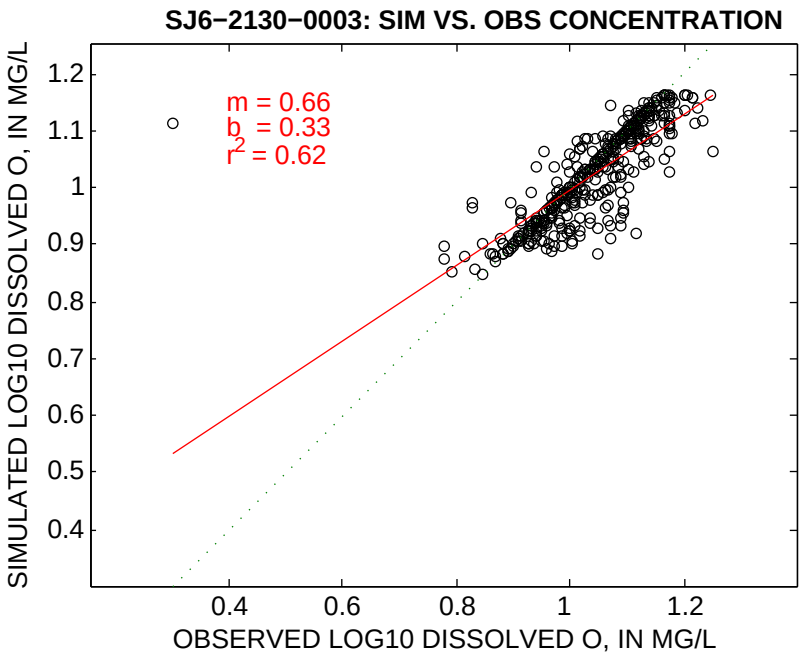
Drive: N/A | Directory: model | Observed: OBS20161101

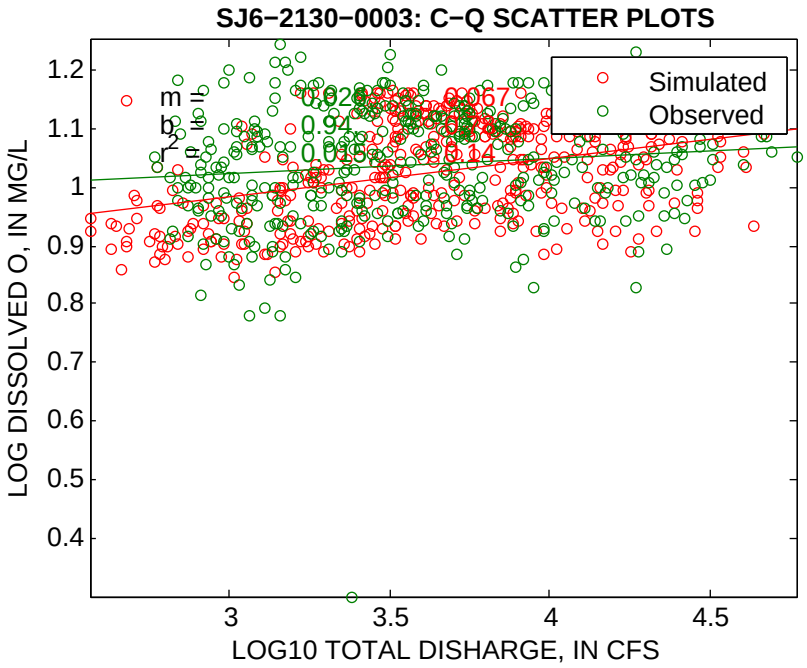
STATISTICS

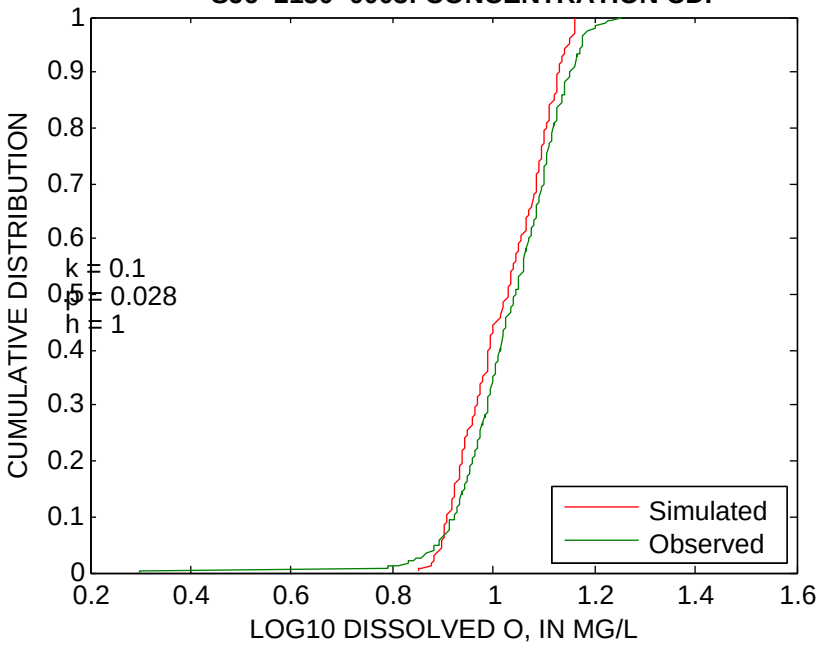
	n	401	401
		observe	simulate
min		2	7.1975
		0.30103	0.857182
mean		11.1701	10.5666
		1.03798	1.016
media		11.1	10.378
		1.04532	1.01611
max		17.8	14.444
		1.25042	1.15969
varian		5.37039	4.05876
		0.00942574	0.00695016
JB		0.5	0.001
		0.001	0.001
		ra	log
%		-5.40307	-2.11786
err.va		2.5939	0.00540842
rel.std.err		0.483001	0.573793
mod.eff		0.516999	0.426207

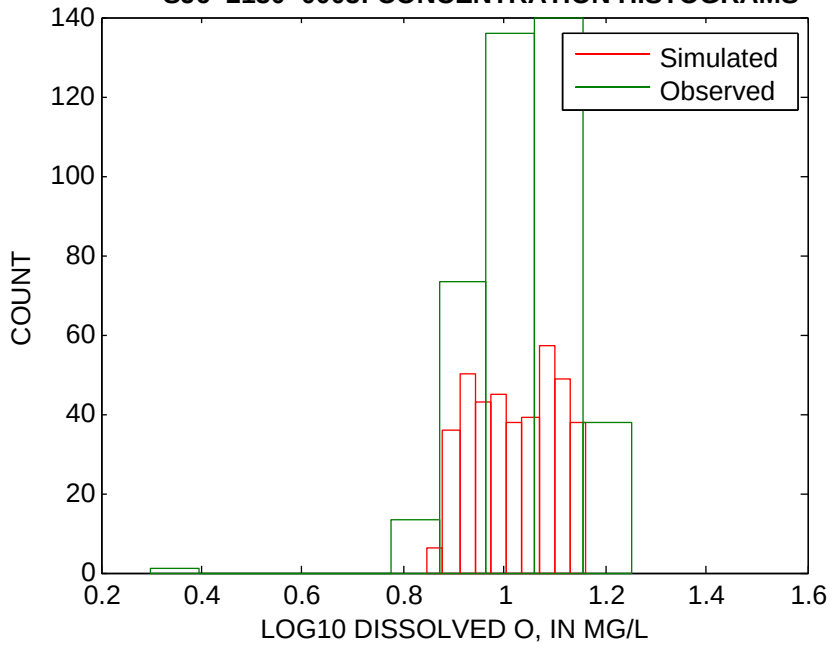
VERSION 2.1

ALL DATA
LOG10

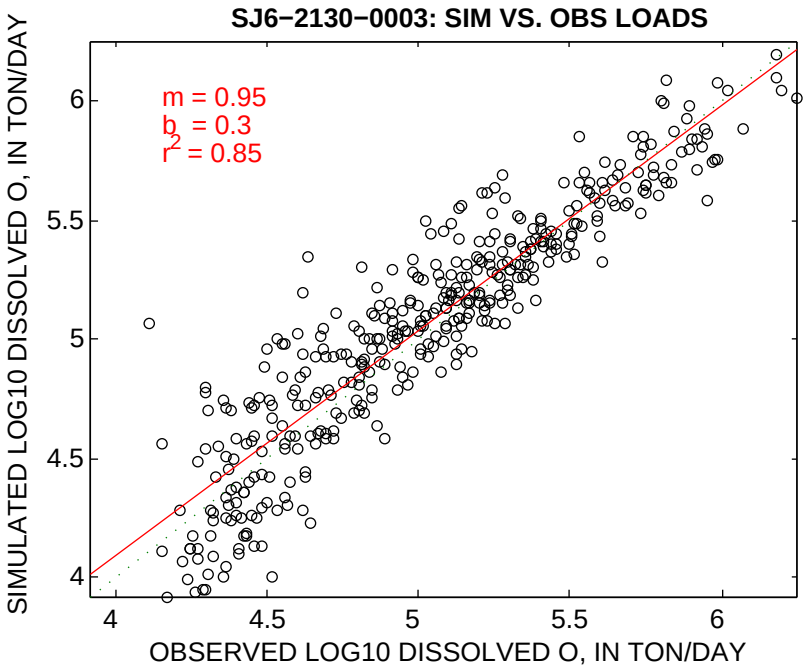




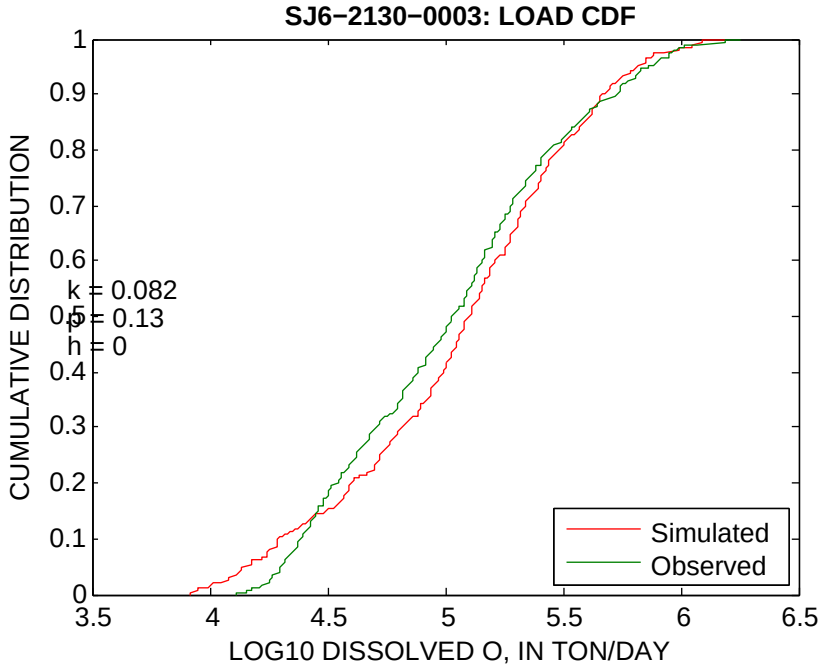


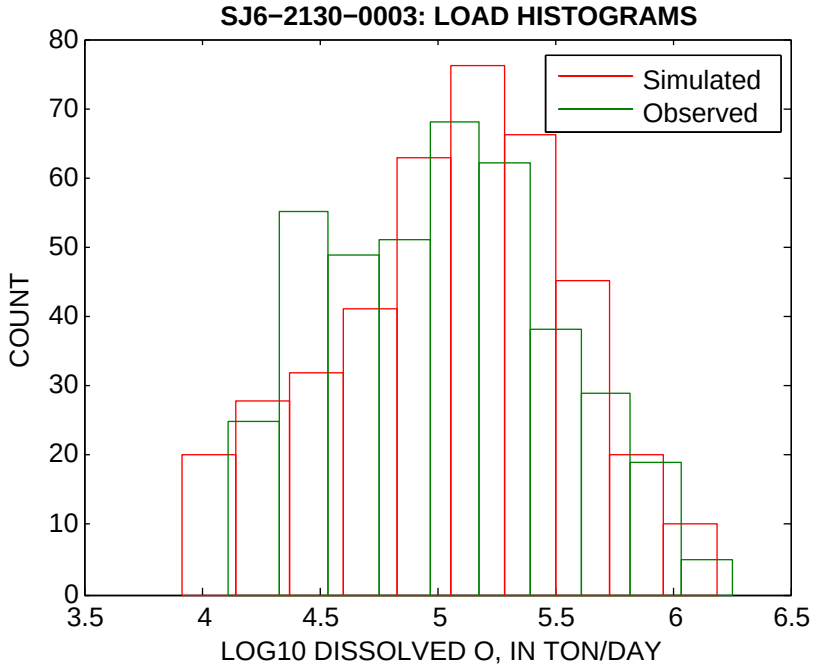


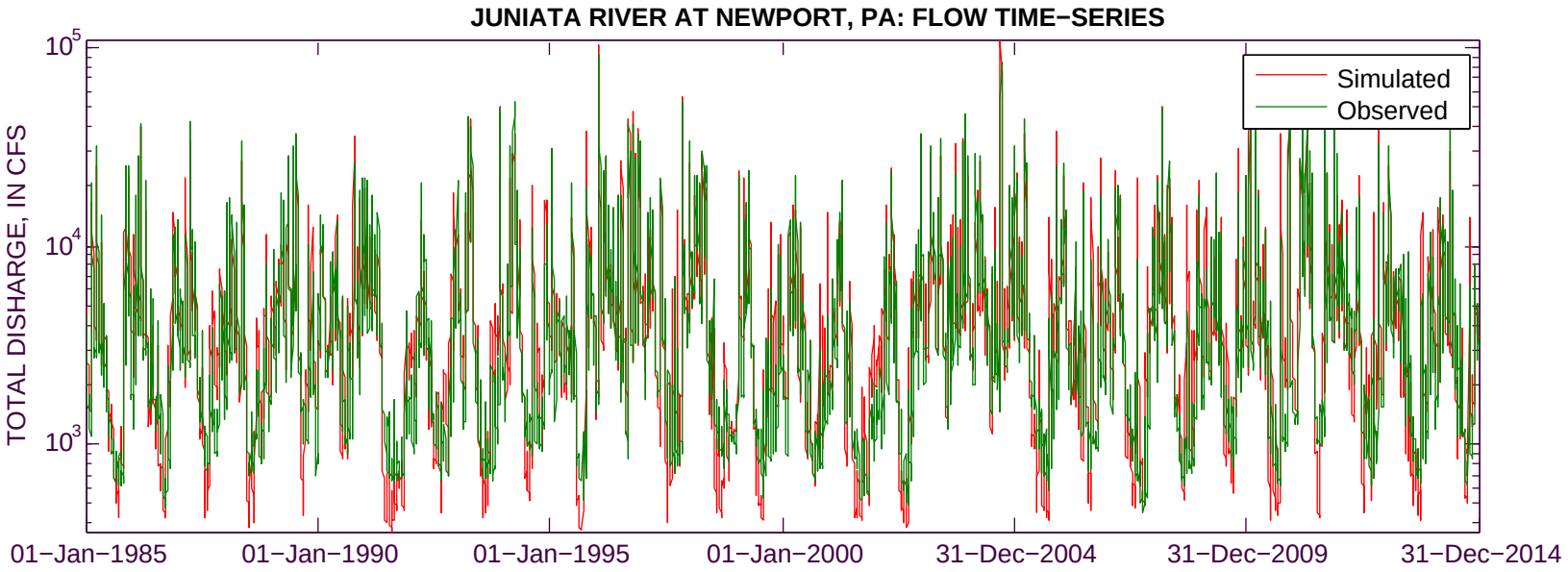
LOAD DATA
LOG10

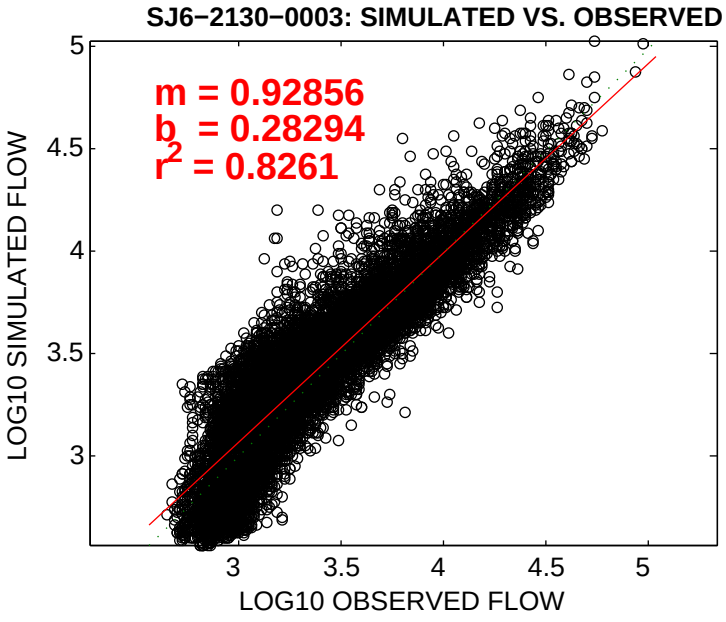


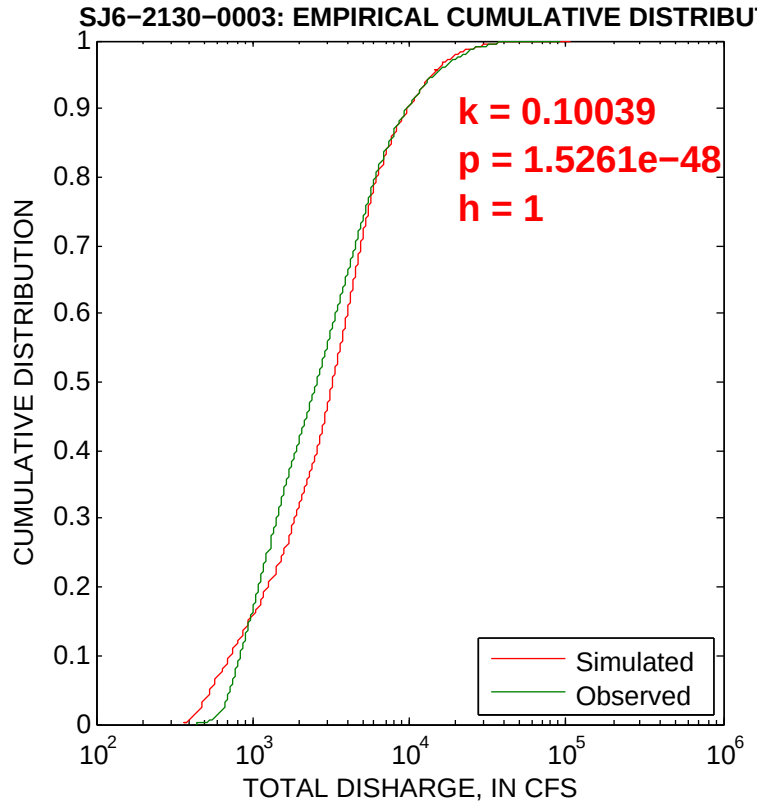












DATA SELECTION

scenario: P620171001WQ | file: FLOW.calib

plot: FLOW - total discharge

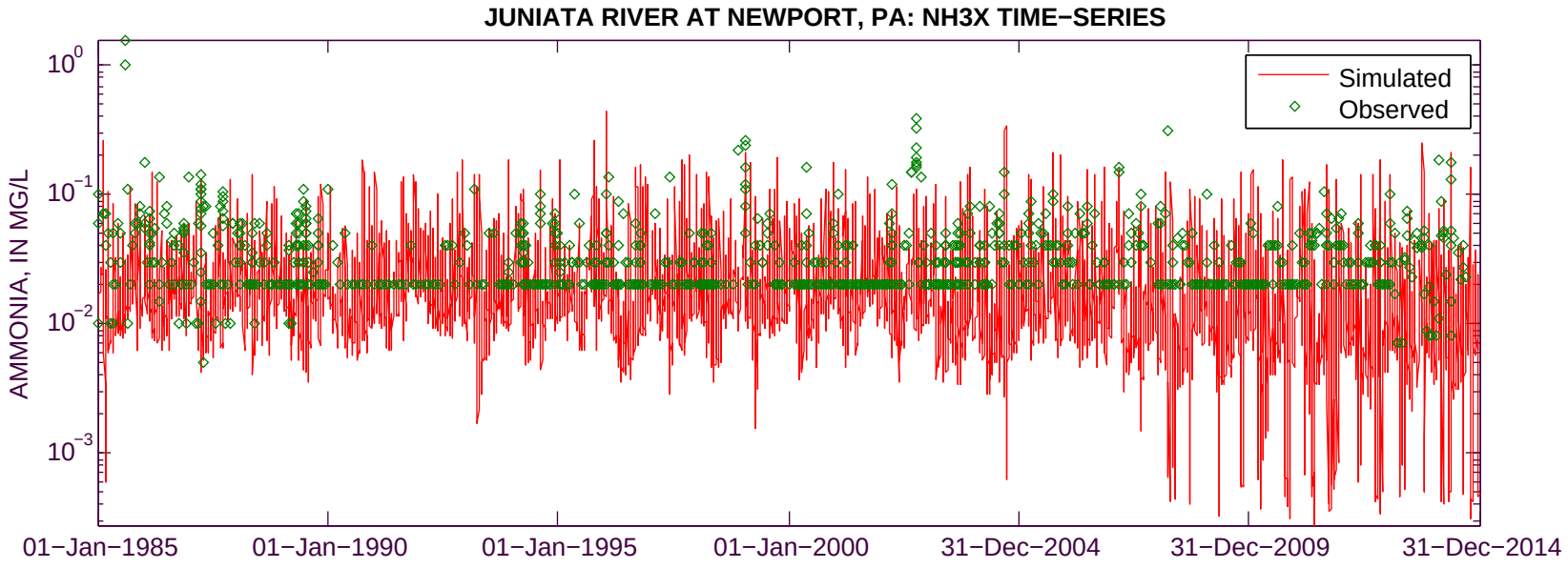
Dates: 1/1/1985 – 12/31/201

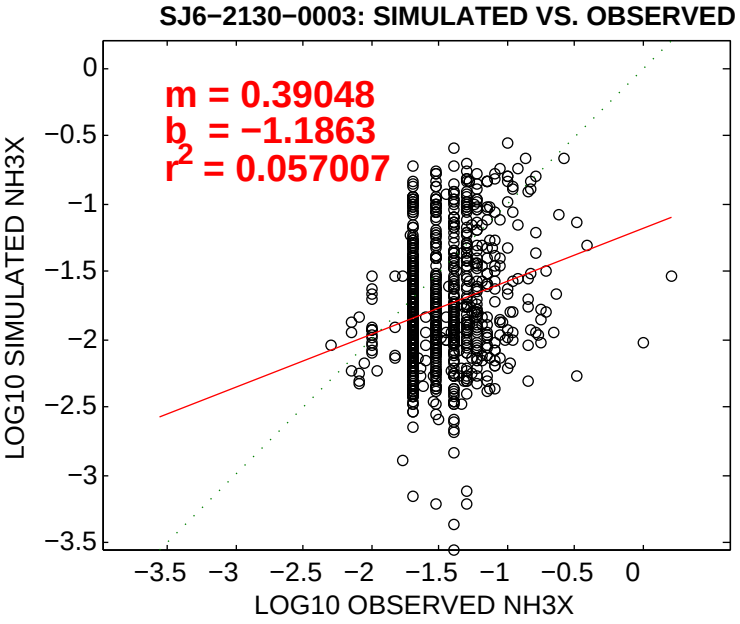
Drive: N/A | Directory: model | Observed: OBS20161101

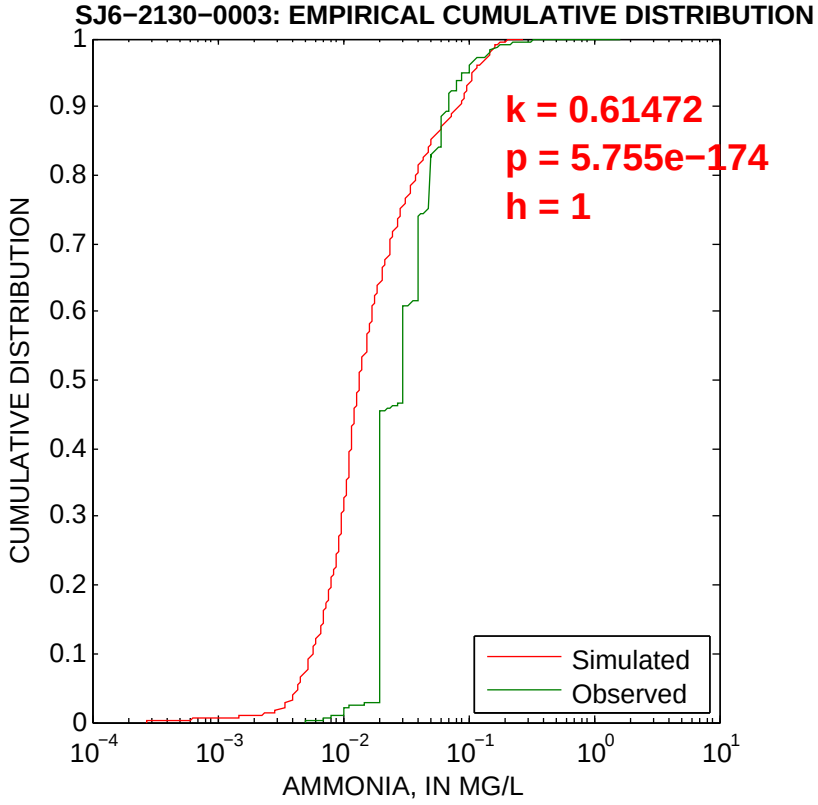
STATISTICS

n	10957	10957
	observe	simulate
min	447	364.73
	2.65031	2.56197
mean	4424.11	4657.36
	3.43656	3.47402
media	2590	3260.2
	3.4133	3.51324
max	92300	107290
	4.9652	5.03056
varian	3.1385e+07	2.95731e+
	0.166114	0.173379
JB	0.001	0.001
	0.001	0.001
	ra	log
%	5.27238	1.08978
err.va	5.88363e+0	0.0324005
rel.std.err	0.187467	0.19505
mod.eff	0.812533	0.80495

VERSION 2.1







DATA SELECTION

scenario	file
P620171001WQ	NH3X.calib

plot: NH3X - ammonia

Dates: 1/1/1985 – 12/31/201

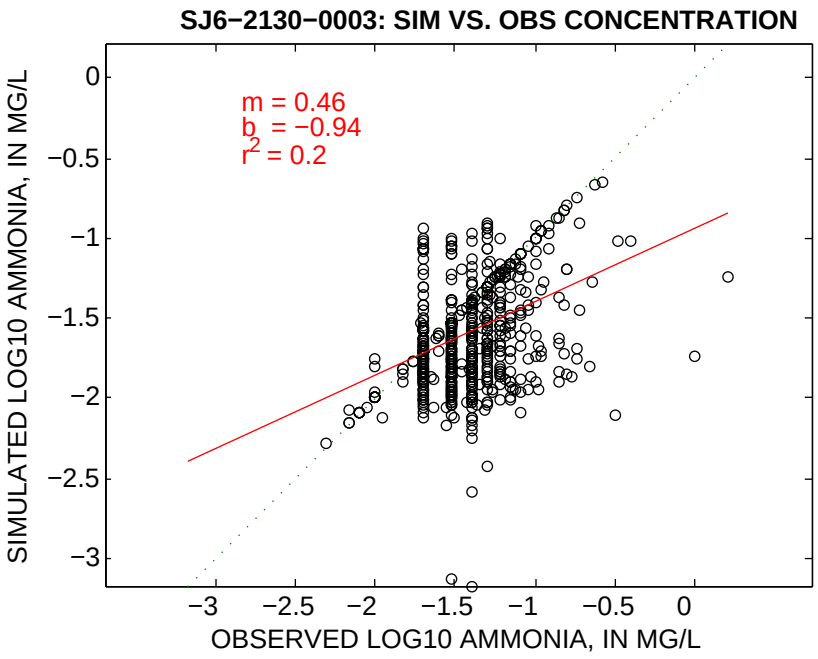
Drive: N/A | Directory: model | Observed: OBS20161101

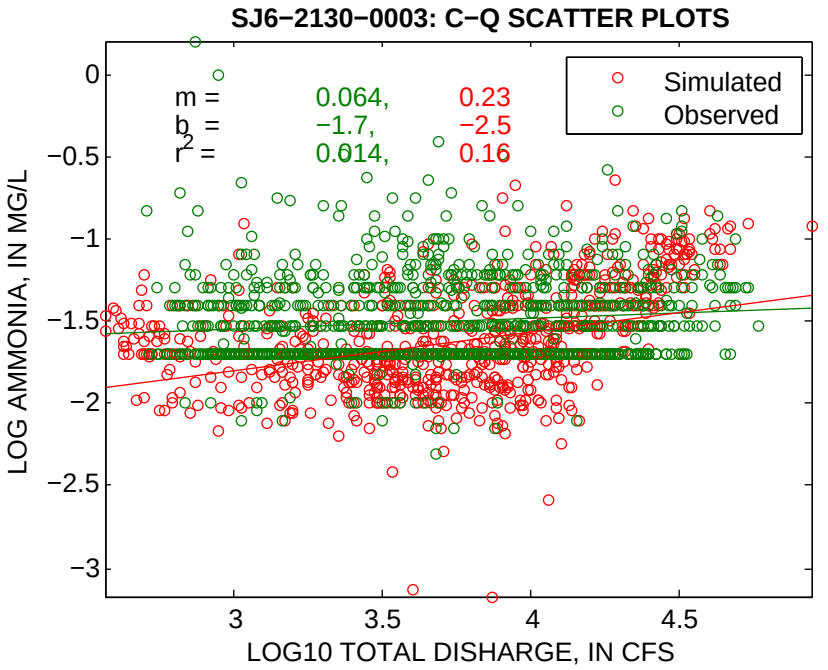
STATISTICS

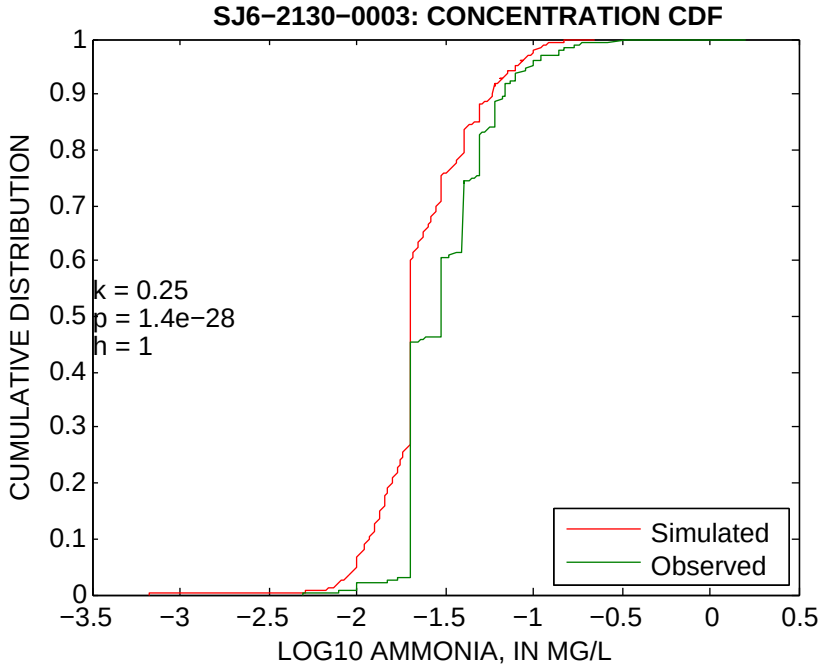
	observe	simulate
n	1046	1046
min	0.005 -2.30103	0.0002785 -3.55517
mean	0.0410014 -1.49935	0.0289608 -1.77179
media	0.03 -1.52288	0.013579 -1.86713
max	1.6 0.20412	0.27576 -0.559469
varian	0.00433722 0.0692871	0.00137365 0.18532
JB	0.001 0.001	0.001 0.001
	ra	log
%	-29.3663	18.1708
err.va	0.00528631	0.274793
rel.std.err	1.21883	3.966
mod.eff	-0.218825	-2.966

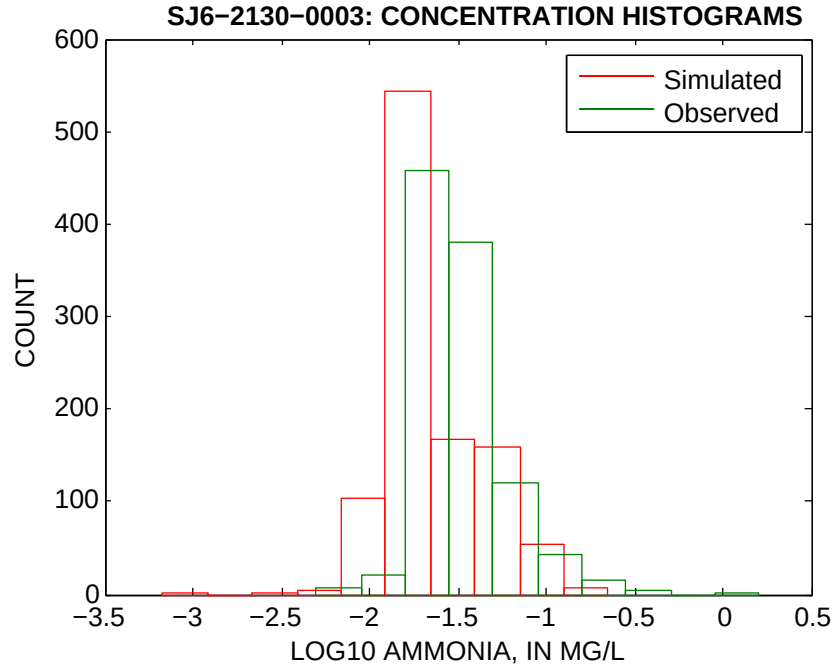
VERSION 2.1

ALL DATA
LOG10

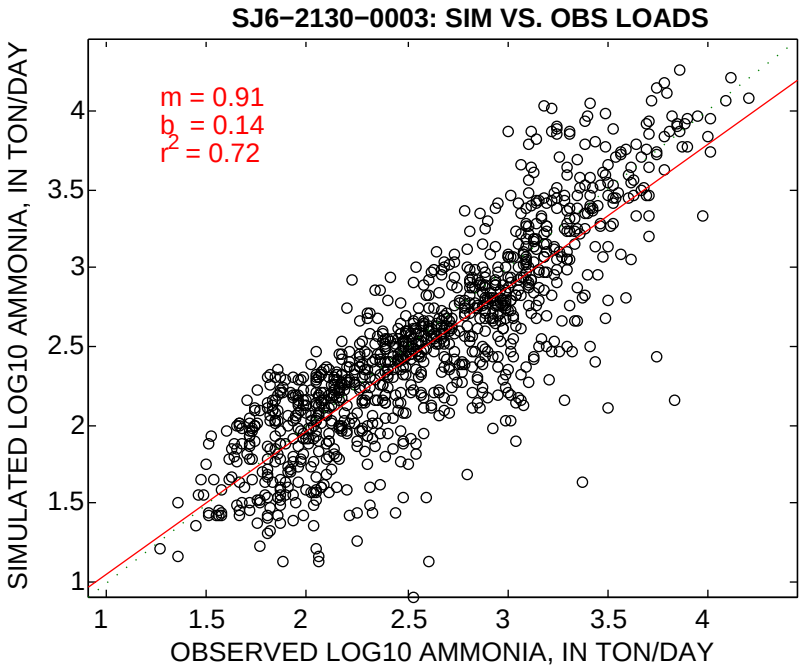


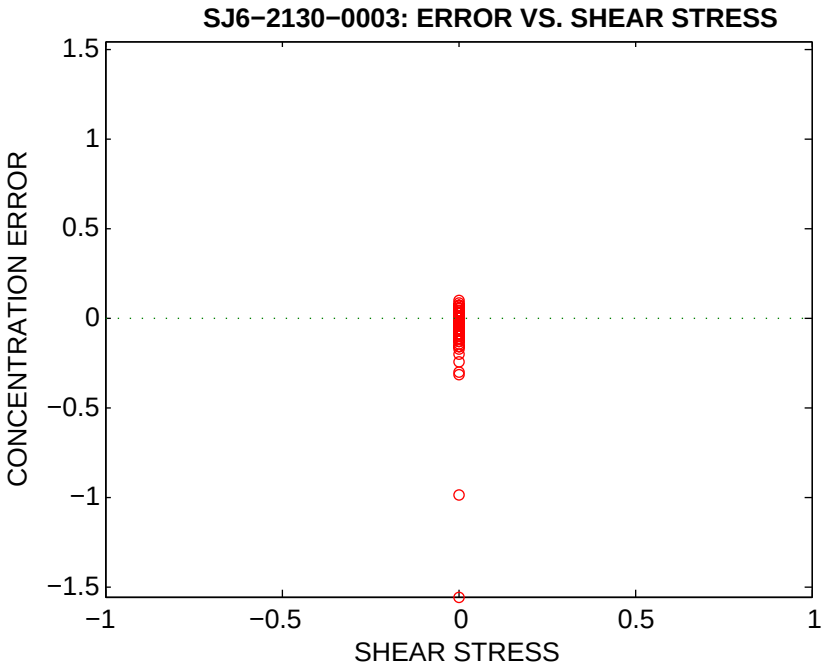


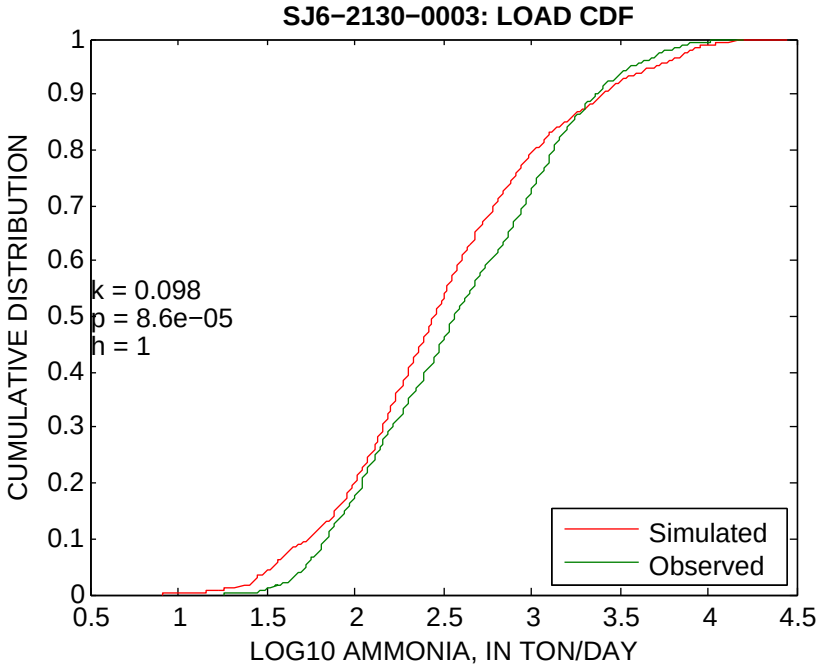


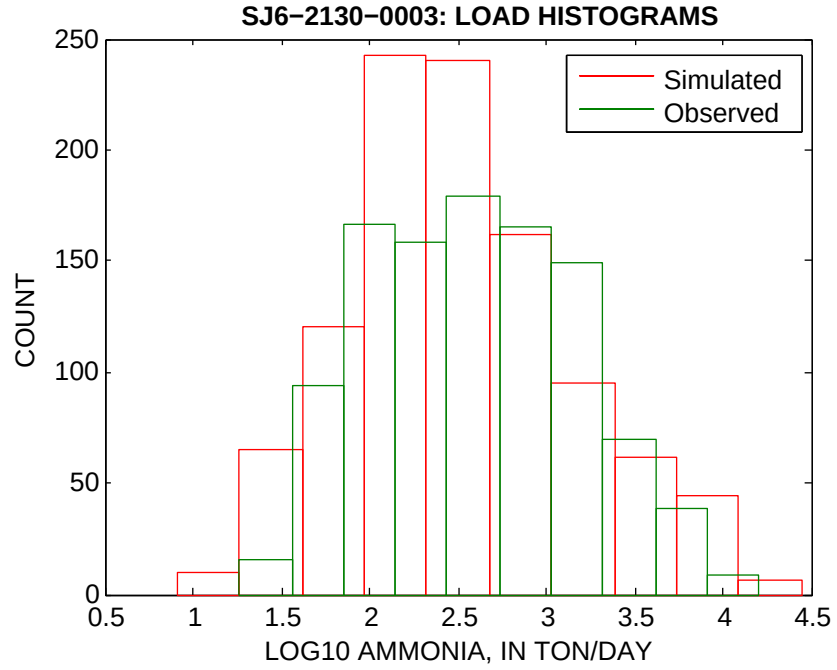


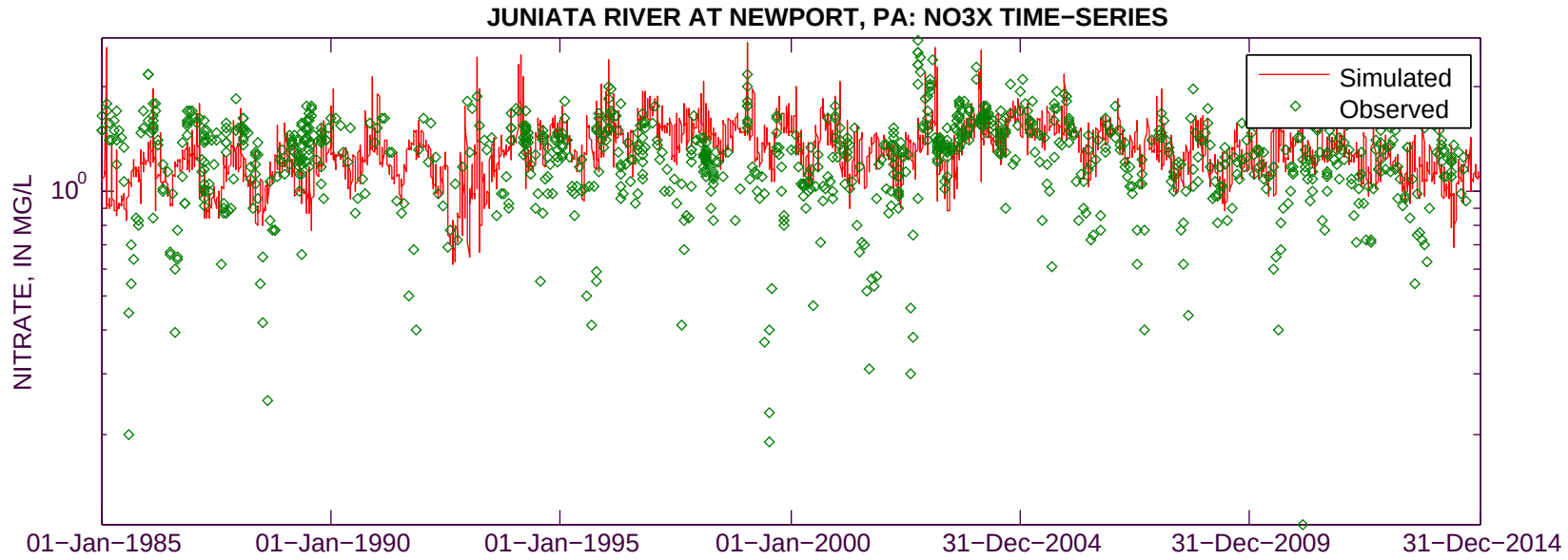
LOAD DATA
LOG10

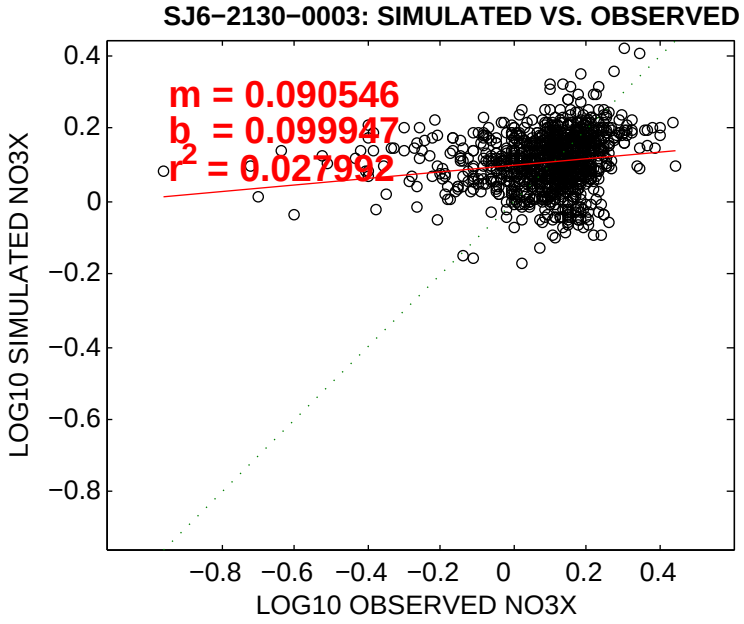


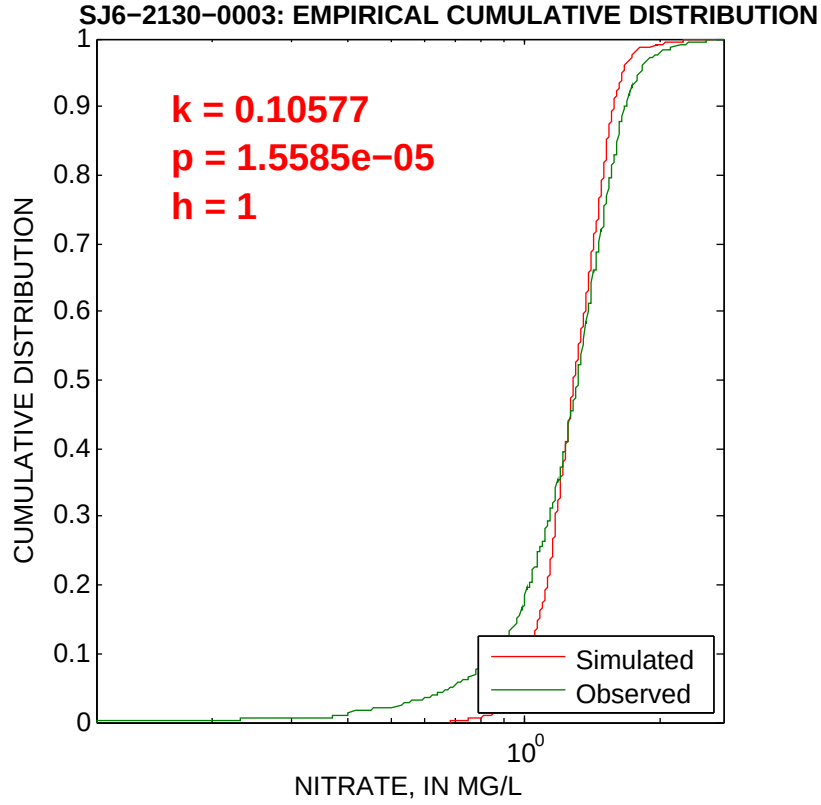












DATA SELECTION

scenario	file
P620171001WQ	NO3X.calib

plot: NO3X - nitrate

Dates: 1/1/1985 – 12/31/201

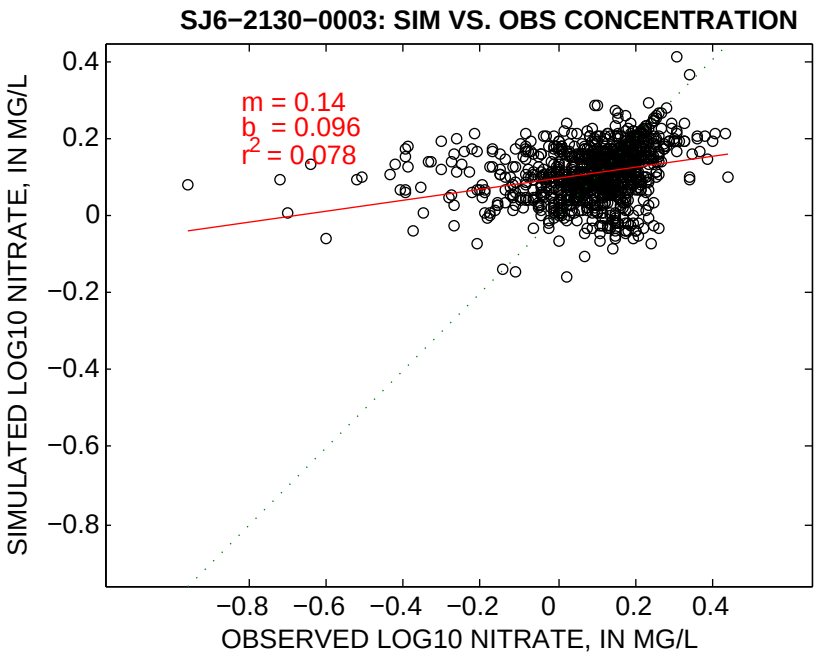
Drive	Directory	Observed
N/A	model	OBS20161101

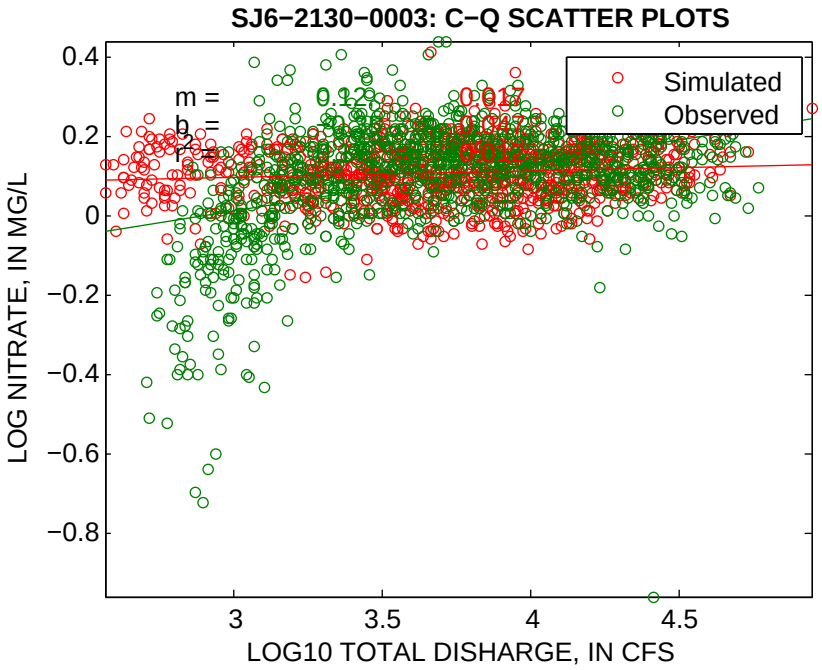
STATISTICS

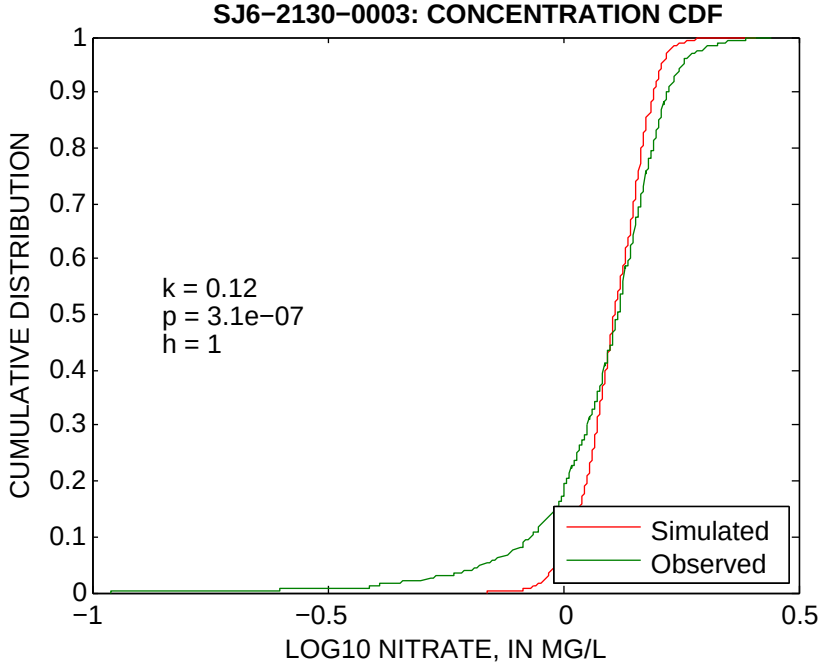
	observe	simulate
n	1040	1040
min	0.11	0.67639
	-0.958607	-0.169803
mean	1.28879	1.30272
	0.0907289	0.108162
media	1.31	1.2853
	0.117271	0.109004
max	2.76	2.6405
	0.440909	0.421686
varian	0.12077	0.0528623
	0.0199791	0.00585172
JB	0.001	0.001
	0.001	0.001524
	ra	log
%	1.08038	19.2146
err.va	0.137137	0.022517
rel.std.err	1.13552	1.12703
mod.eff	-0.135523	-0.127026

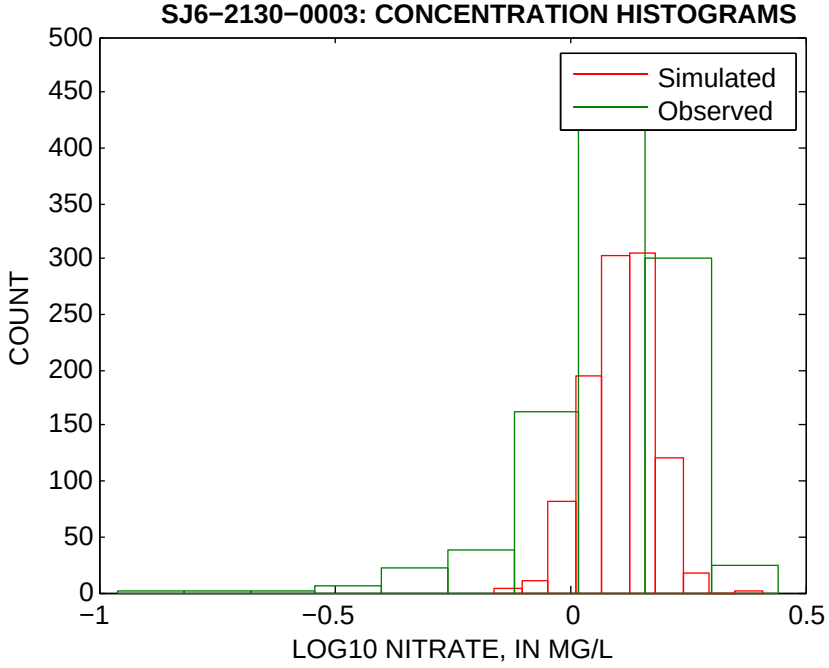
VERSION 2.1

ALL DATA
LOG10

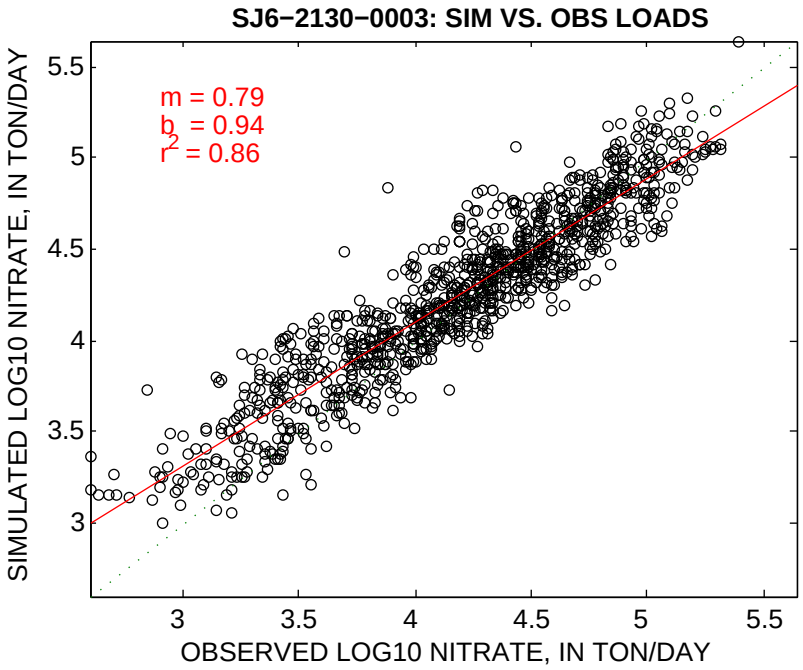




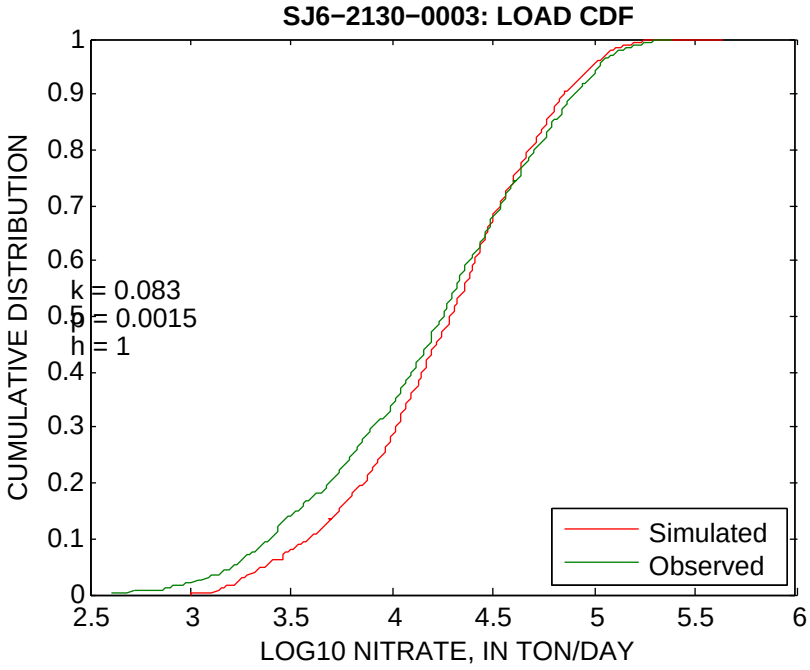


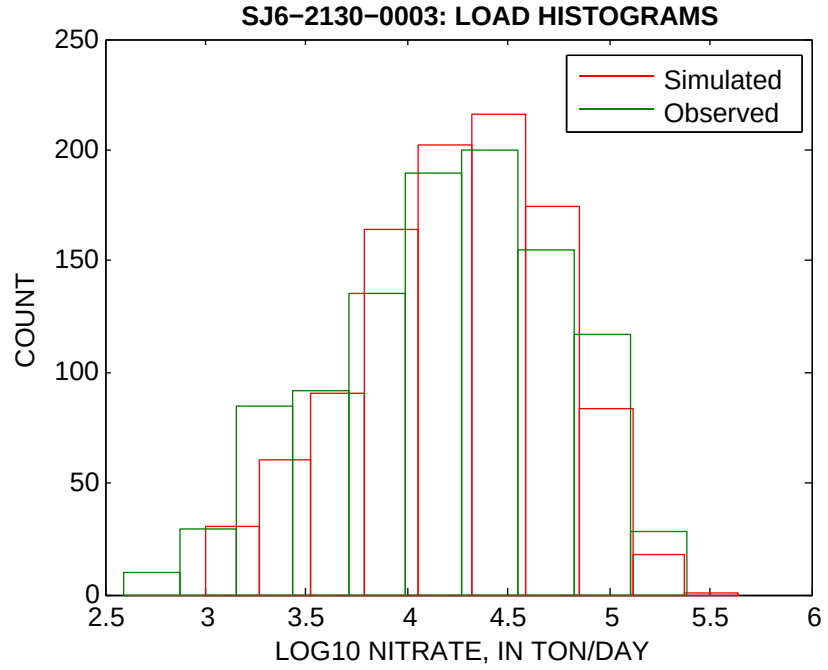


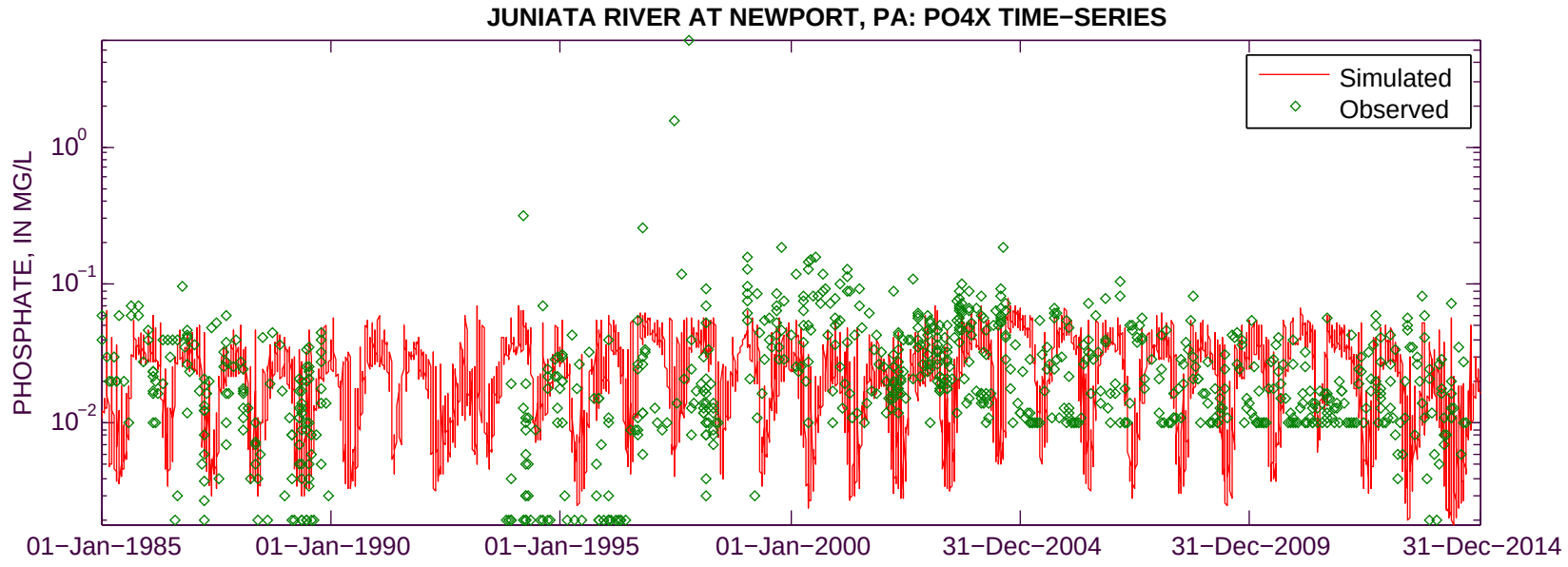
LOAD DATA
LOG10

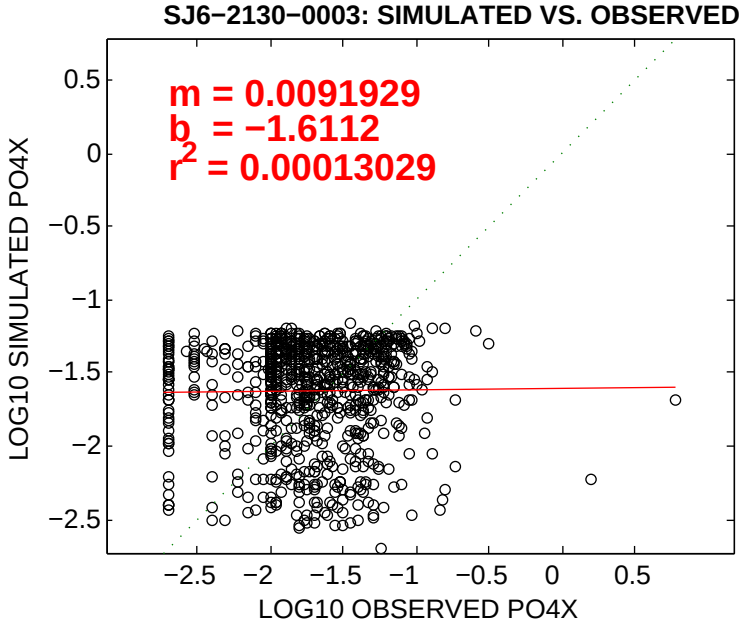


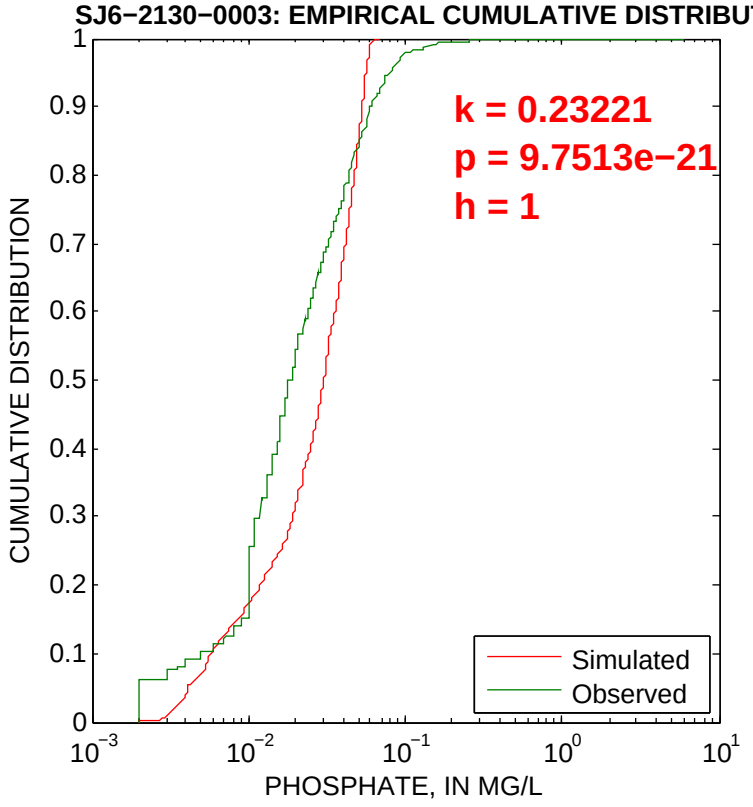












DATA SELECTION

scenario	file
P620171001WQ	PO4X.calib

plot: PO4X - phosphate

Dates: 1/1/1985 – 12/31/201

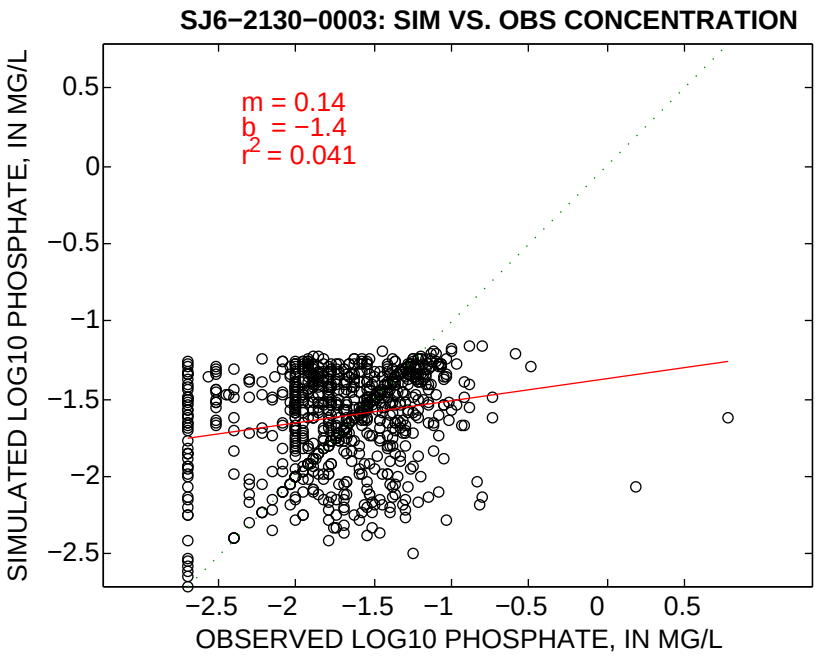
Drive	Directory	Observed
N/A	model	OBS20161101

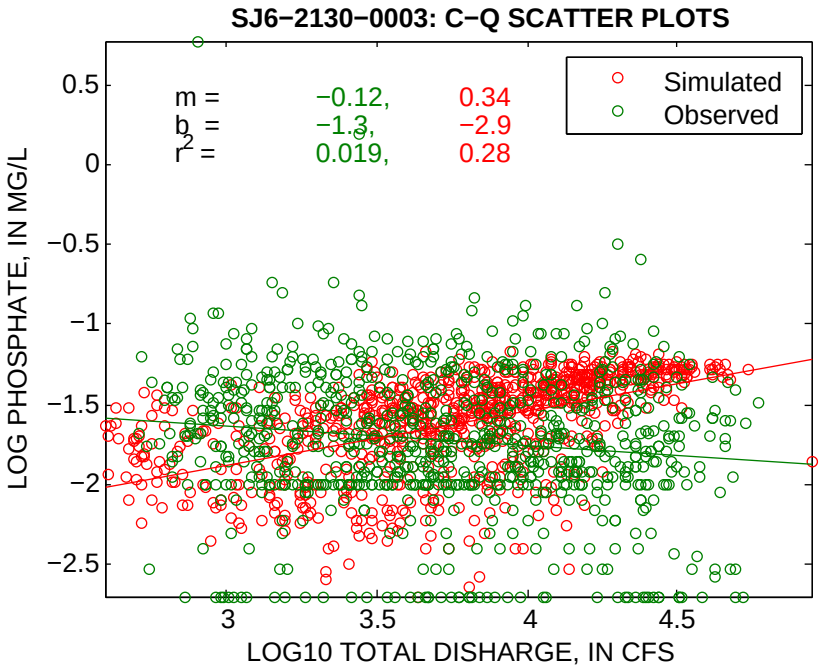
STATISTICS

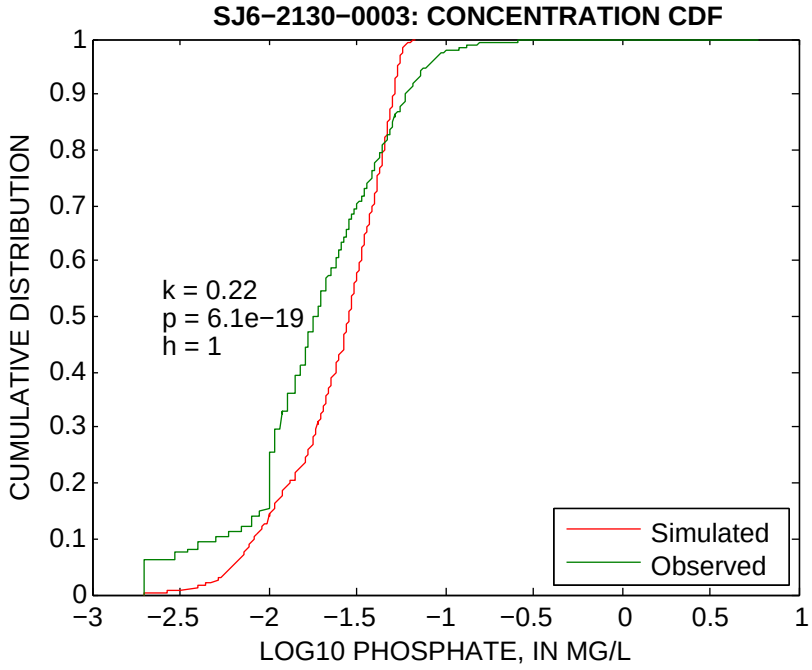
	n	observe	simulate
		857	857
min		0.002	0.0019751
		-2.69897	-2.70441
mean		0.0368462	0.0301439
		-1.72808	-1.62706
media		0.0183627	0.030328
		-1.73606	-1.51816
max		6	0.06782
		0.778151	-1.16864
varian		0.0451079	0.00028554
		0.188524	0.122285
JB		0.001	0.001
		0.001	0.001
		ra	log
%		-18.1898	-5.84569
err.va		0.0455968	0.31756
rel.std.err		1.01084	1.68445
mod.eff		-0.0108368	-0.684453

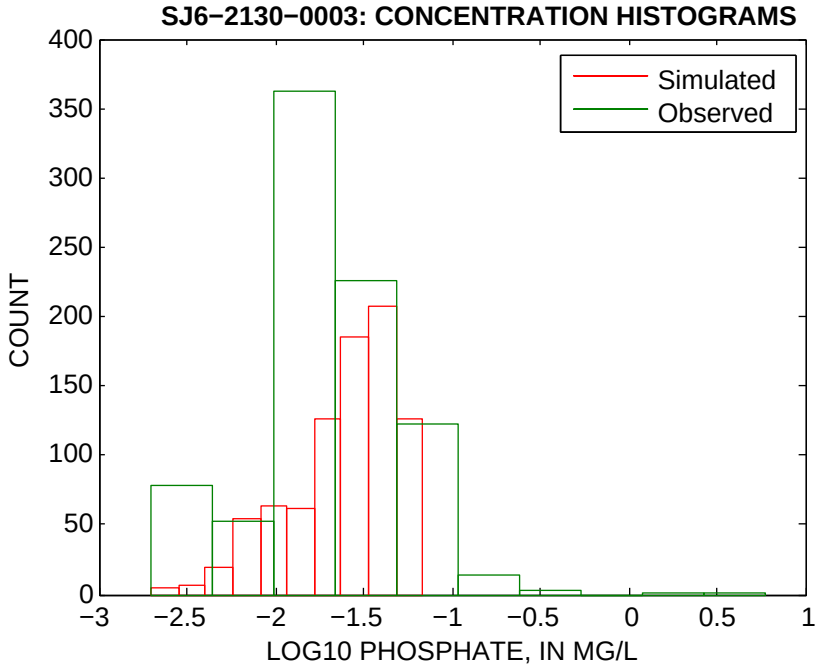
VERSION 2.1

ALL DATA
LOG10

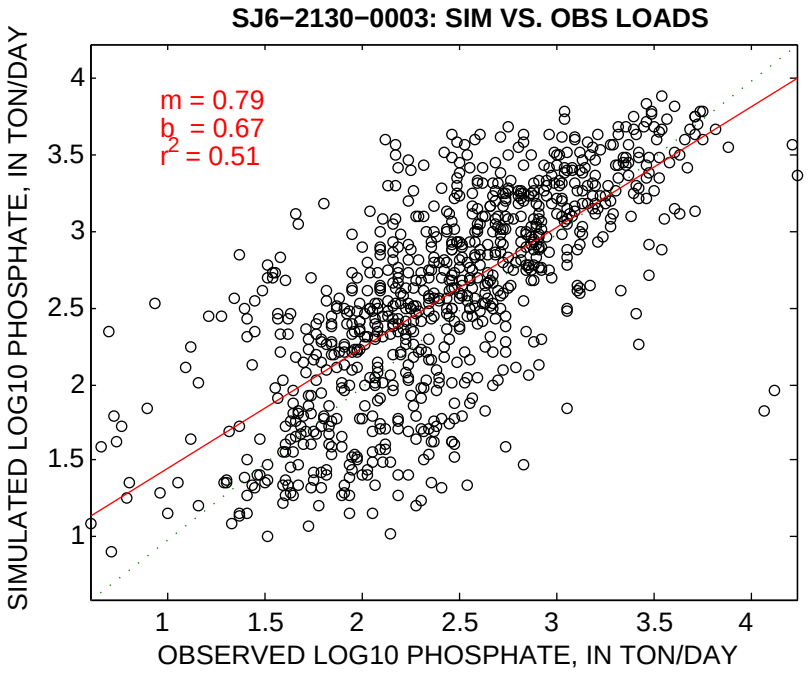


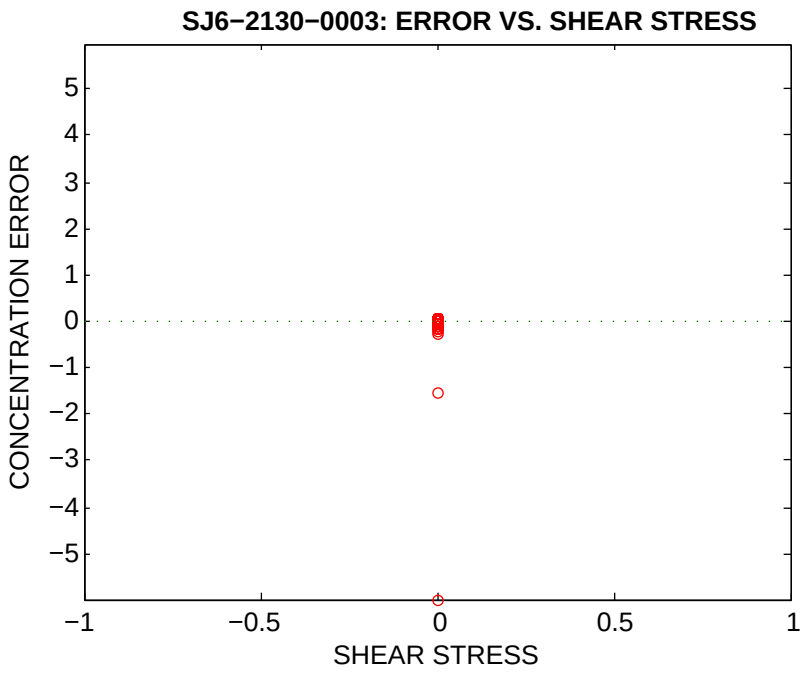


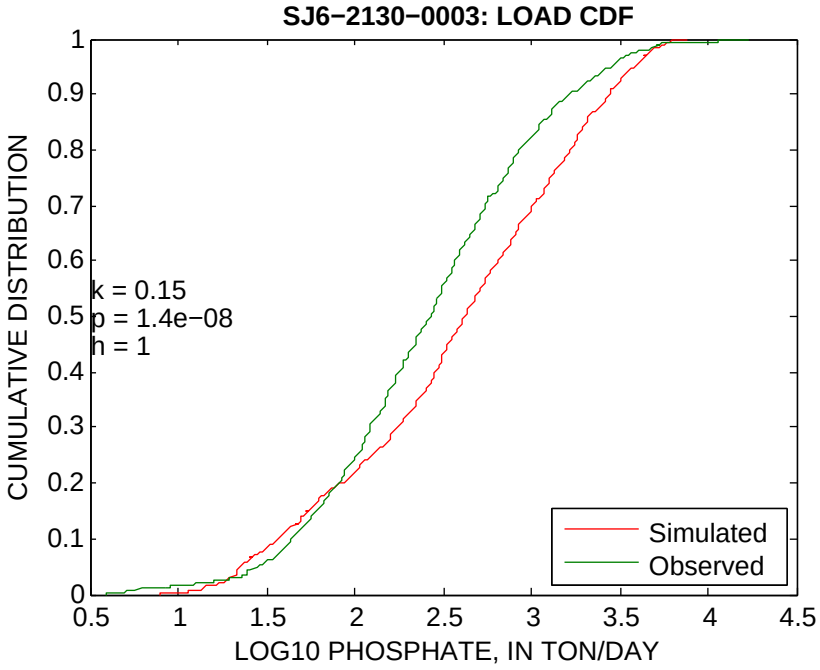


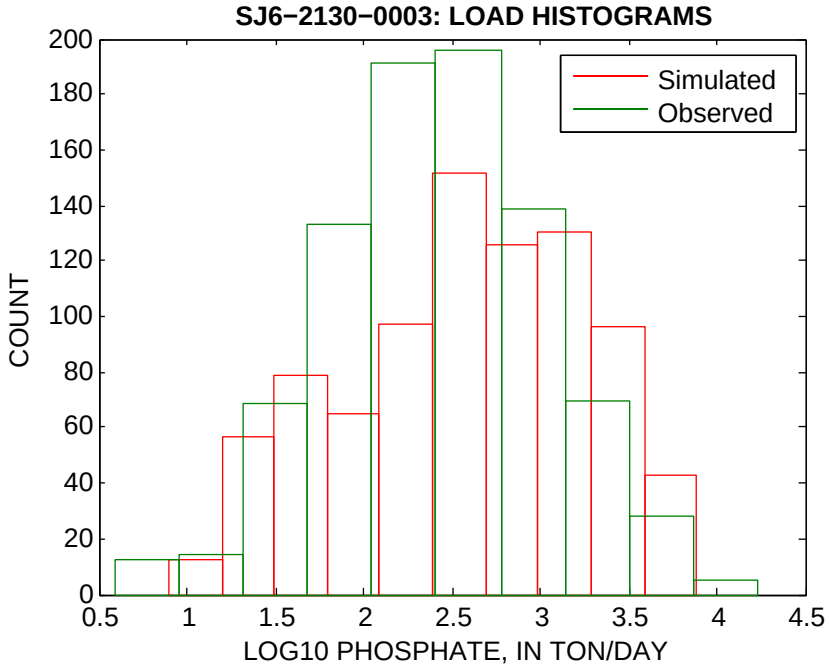


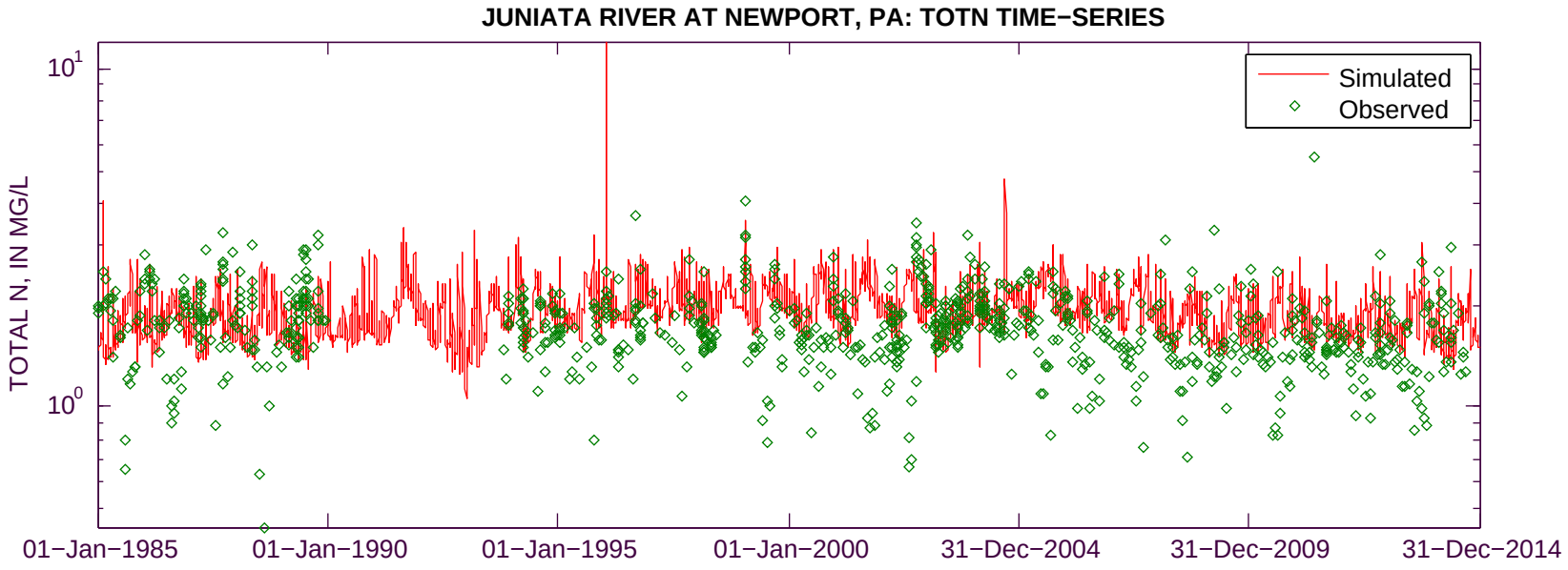
LOAD DATA
LOG10

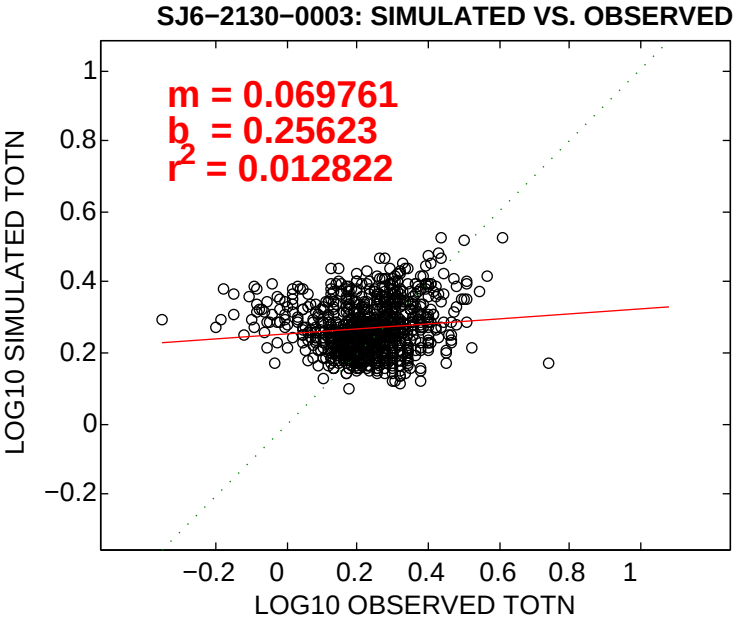


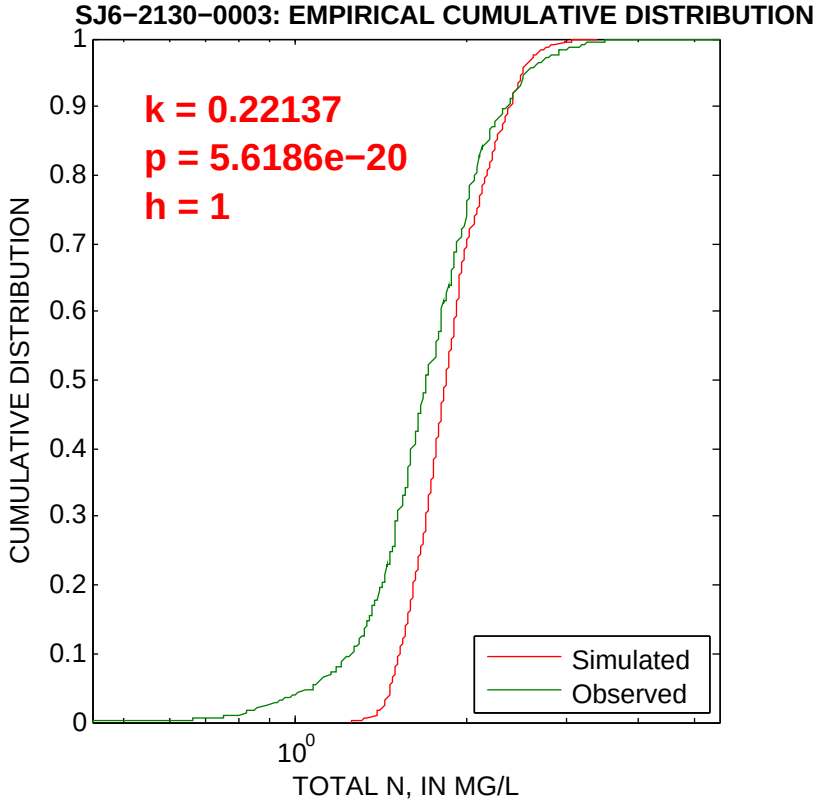












DATA SELECTION

scenario	file
P620171001WQ	TOTN.calib

plot: TOTN - total nitrogen

Dates: 1/1/1985 – 12/31/201

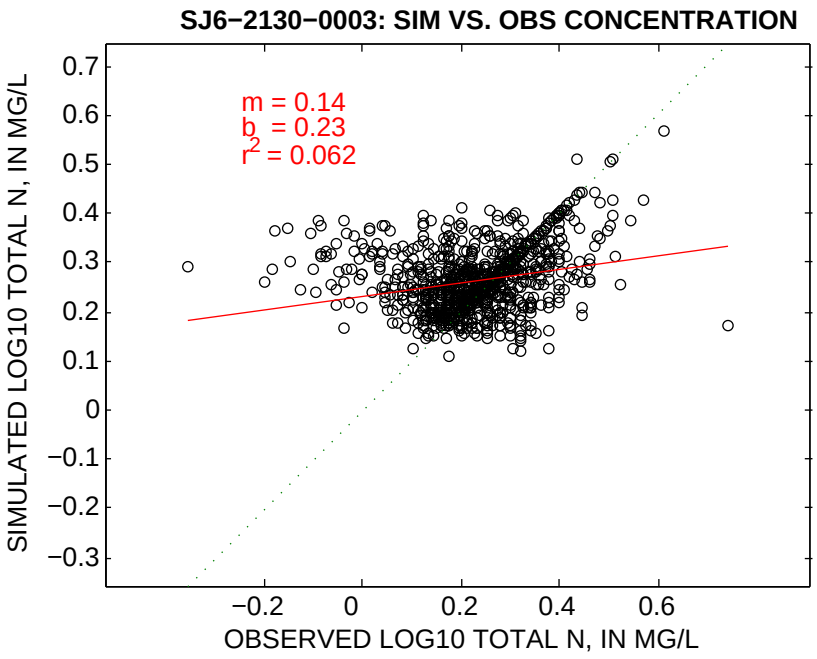
Drive	Directory	Observed
N/A	model	OBS20161101

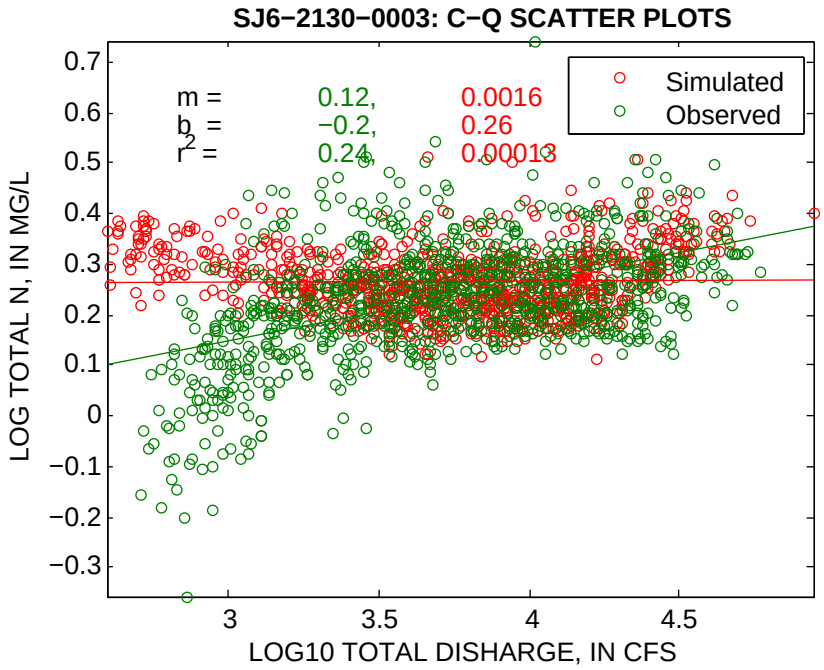
STATISTICS

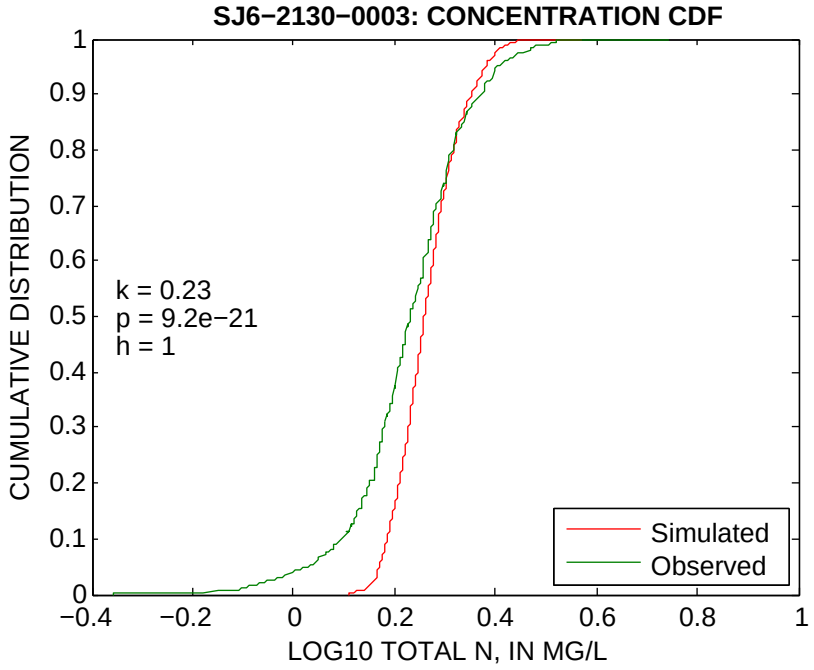
	n	908	908
		observe	simulate
min		0.44	1.2596
		-0.356547	0.100233
mean		1.75934	1.89838
		0.230095	0.272286
media		1.7	1.83705
		0.230449	0.264121
max		5.53	3.3827
		0.742725	0.529263
varian		0.223118	0.108025
		0.0136042	0.00516337
JB		0.001	0.001
		0.001	0.001
		ra	log
%		7.9024	18.3361
err.va		0.293347	0.0186515
rel.std.err		1.31476	1.37101
mod.eff		-0.314762	-0.371011

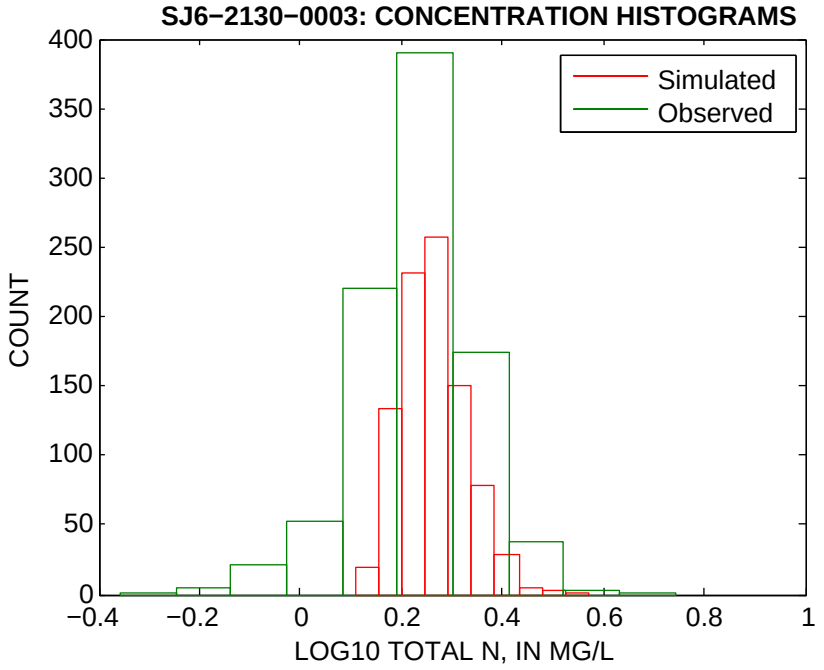
VERSION 2.1

ALL DATA
LOG10

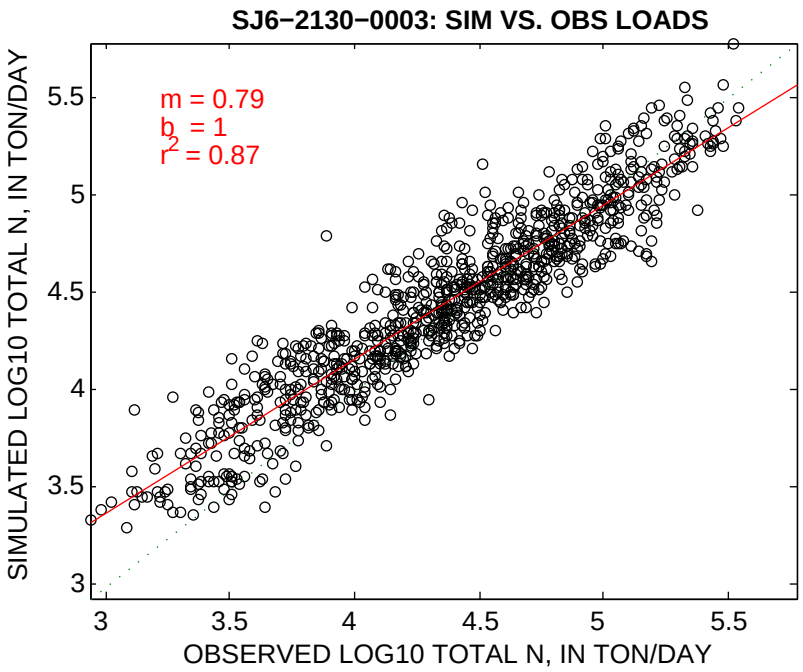


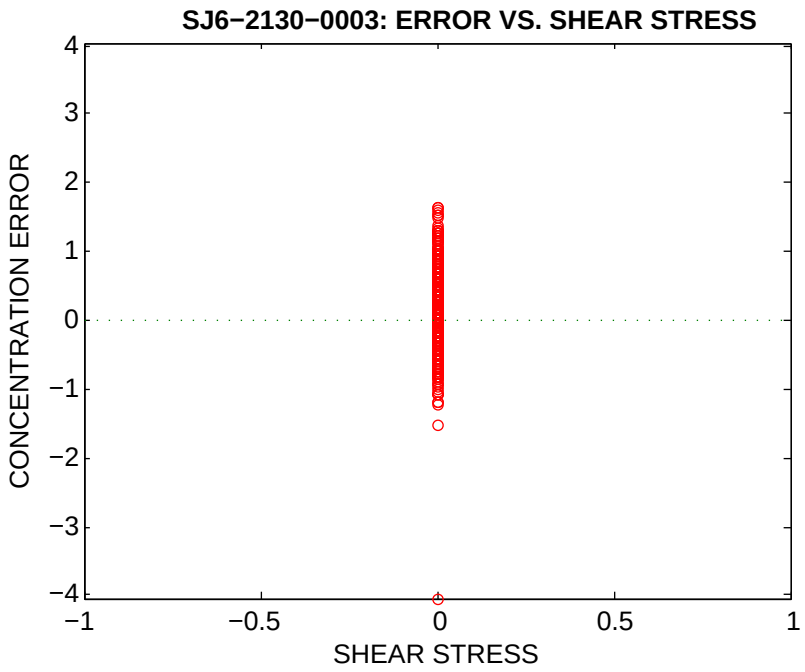


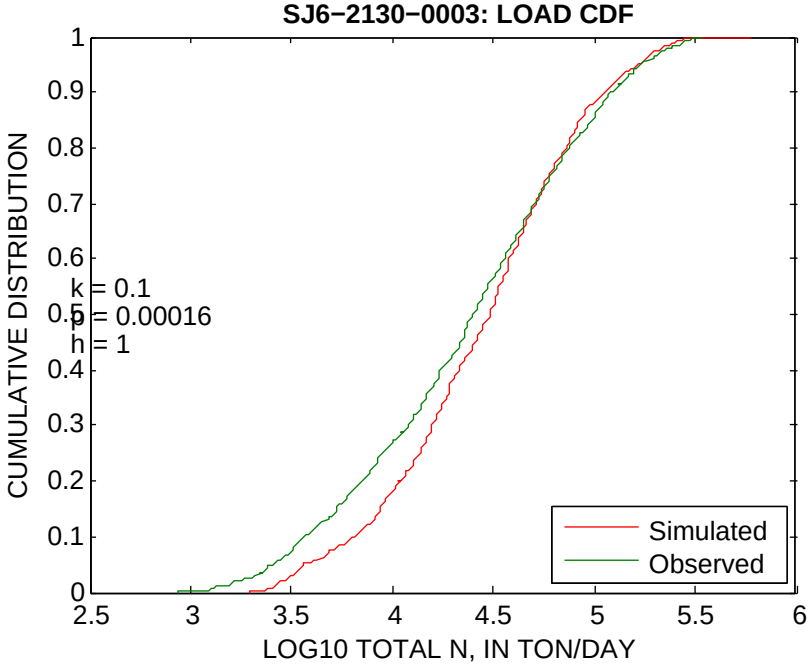


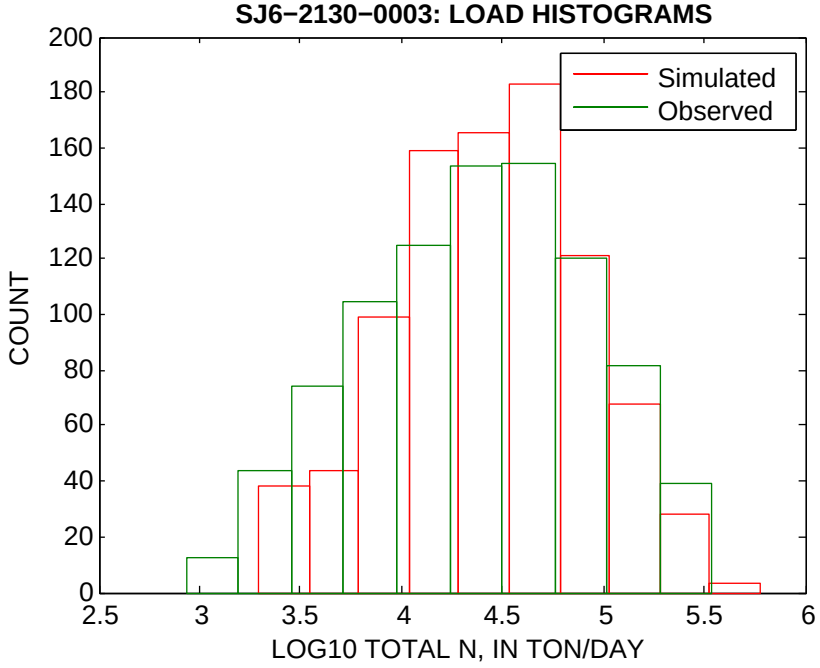


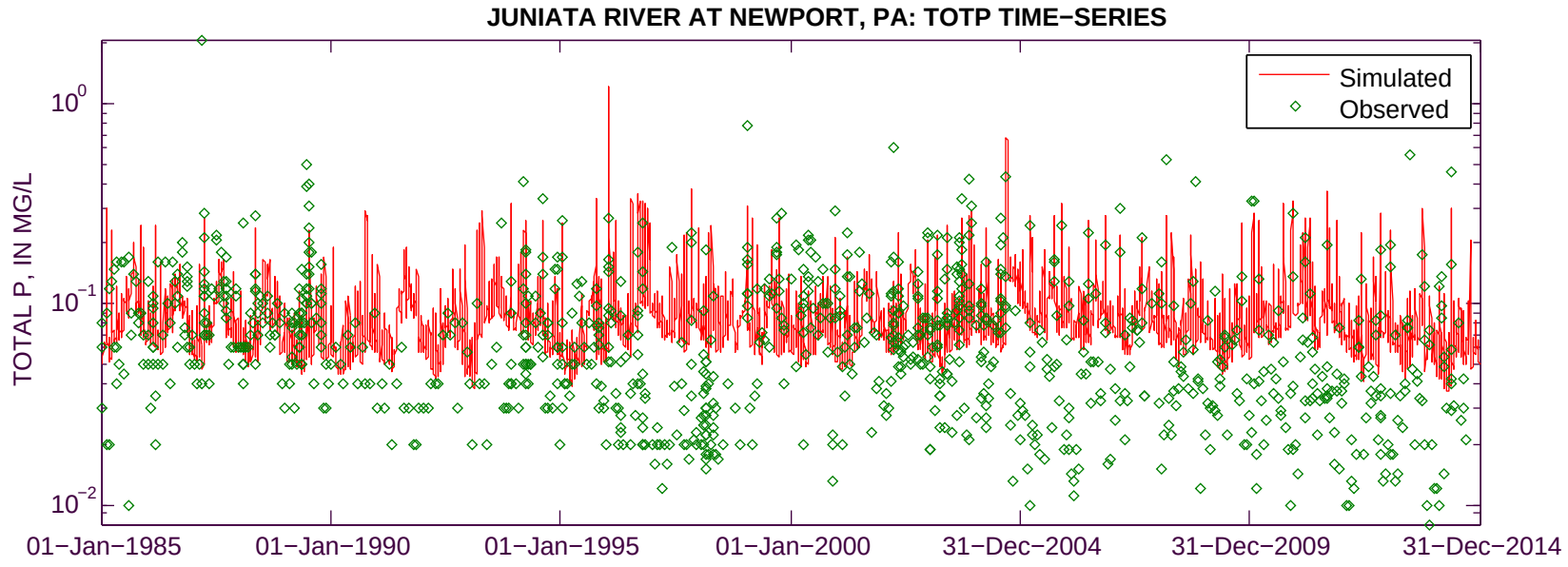
LOAD DATA
LOG10

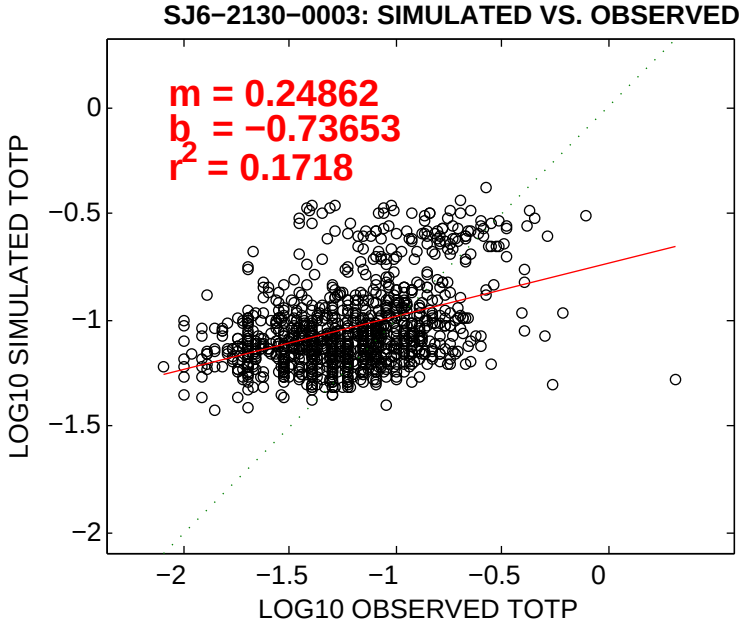


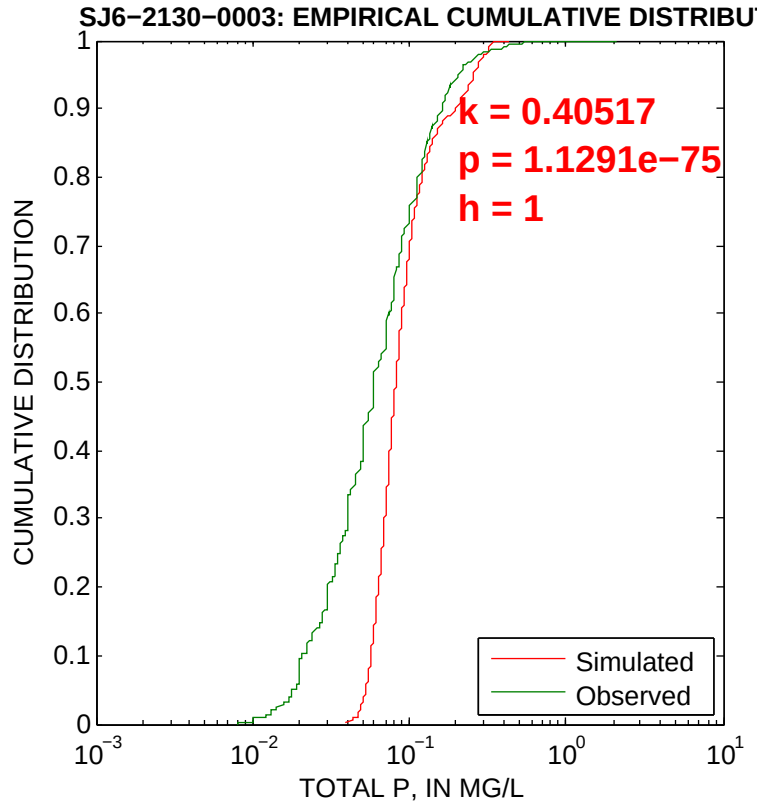












DATA SELECTION

scenario	file
P620171001WQ	TOTP.calib

plot: TOTP - total phosphorus

Dates: 1/1/1985 – 12/31/201

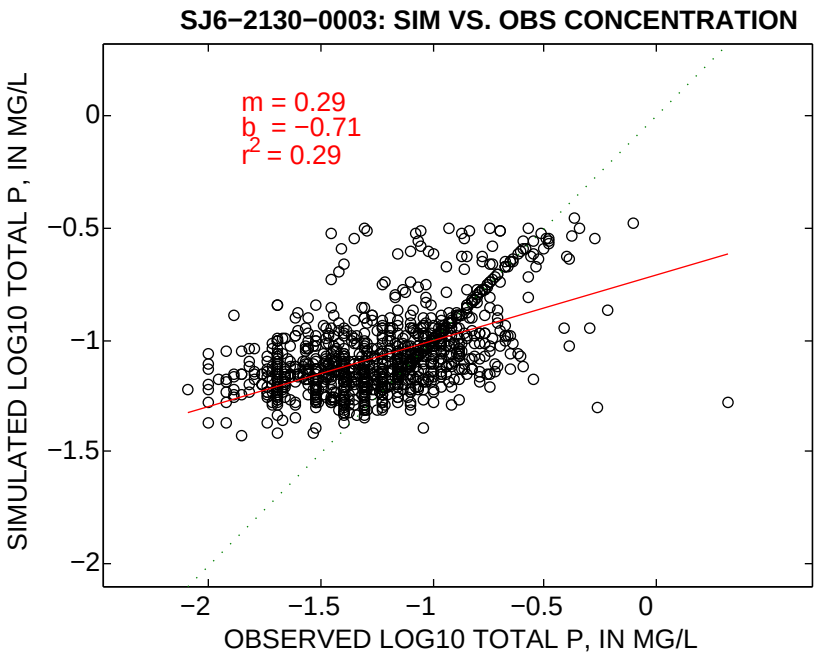
Drive	Directory	Observed
N/A	model	OBS20161101

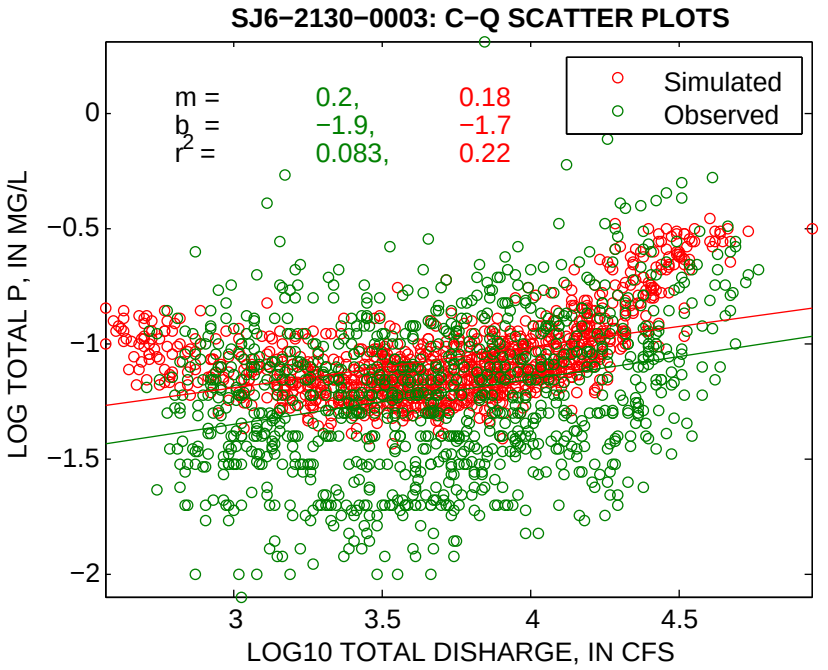
STATISTICS

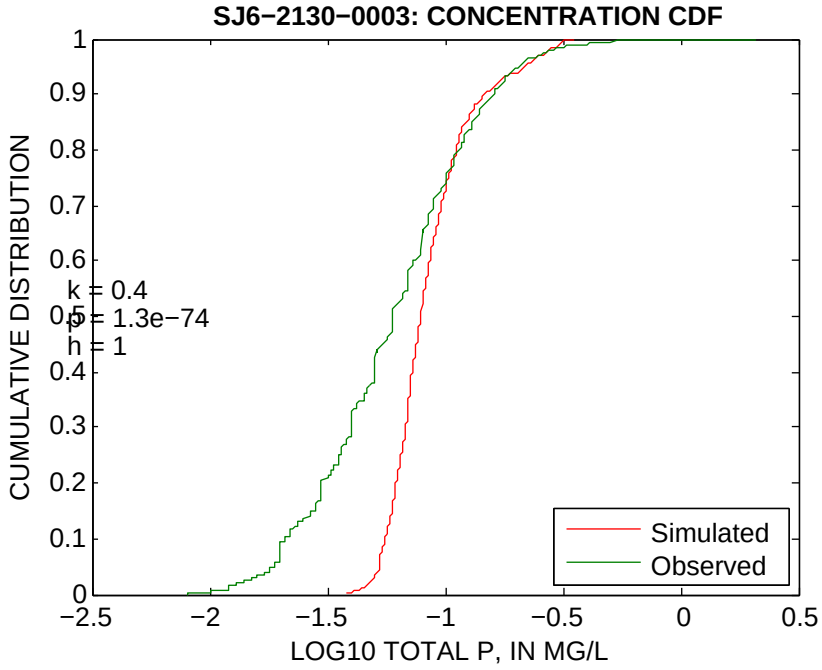
	n	1044	1044
		observe	simulate
min		0.008	0.037468
		-2.09691	-1.42634
mean		0.0825989	0.103301
		-1.21748	-1.03921
media		0.06	0.08254
		-1.22185	-1.08334
max		2.09	0.42585
		0.320146	-0.370743
varian		0.00909458	0.00383519
		0.109542	0.0394102
JB		0.001	0.001
		0.041356	0.001
		ra	log
%		25.063	-14.6426
err.va		0.0096973	0.126296
rel.std.err		1.06627	1.15294
mod.eff		-0.0662728	-0.152942

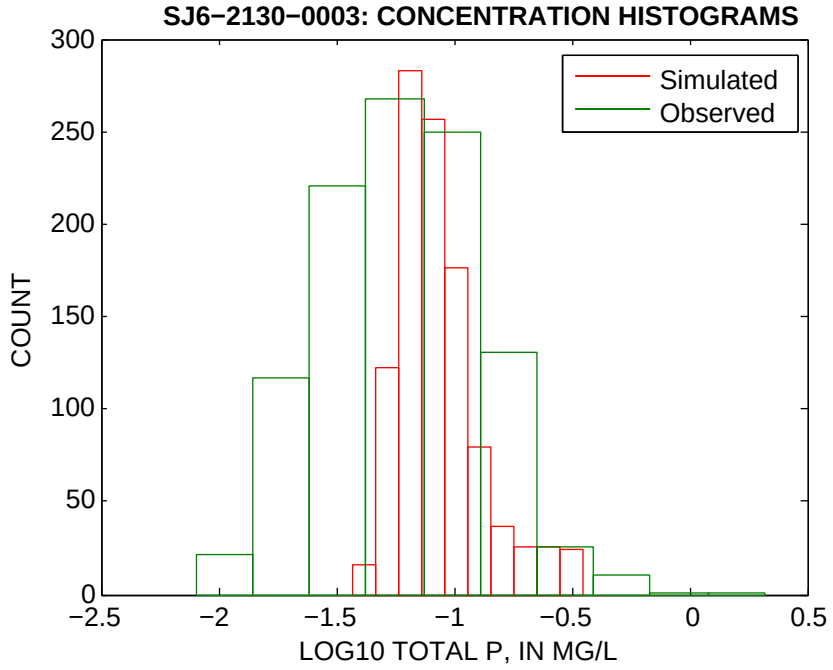
VERSION 2.1

ALL DATA
LOG10

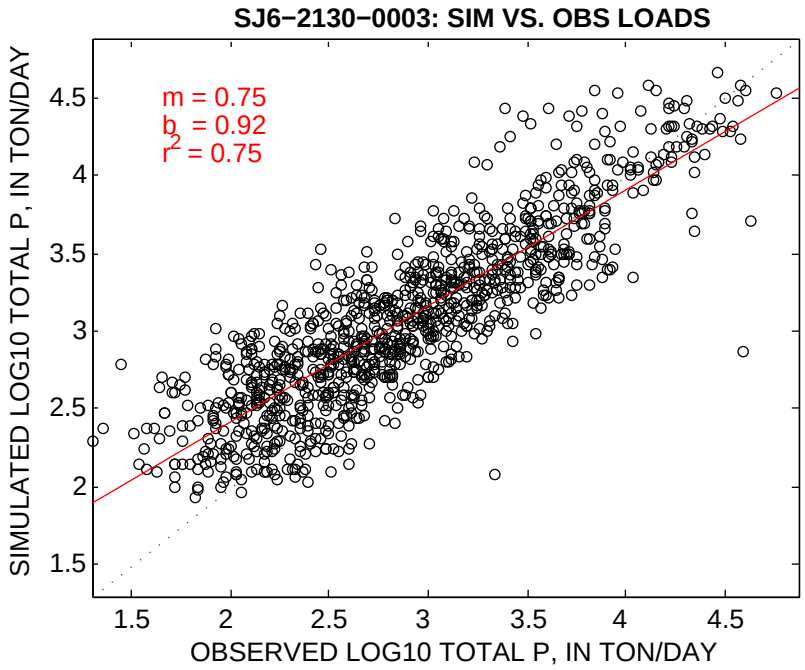


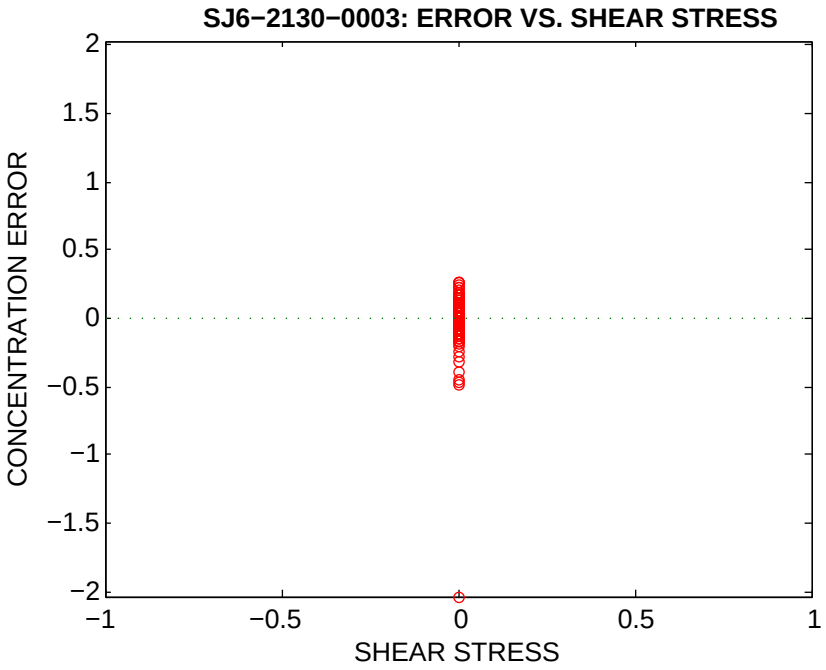


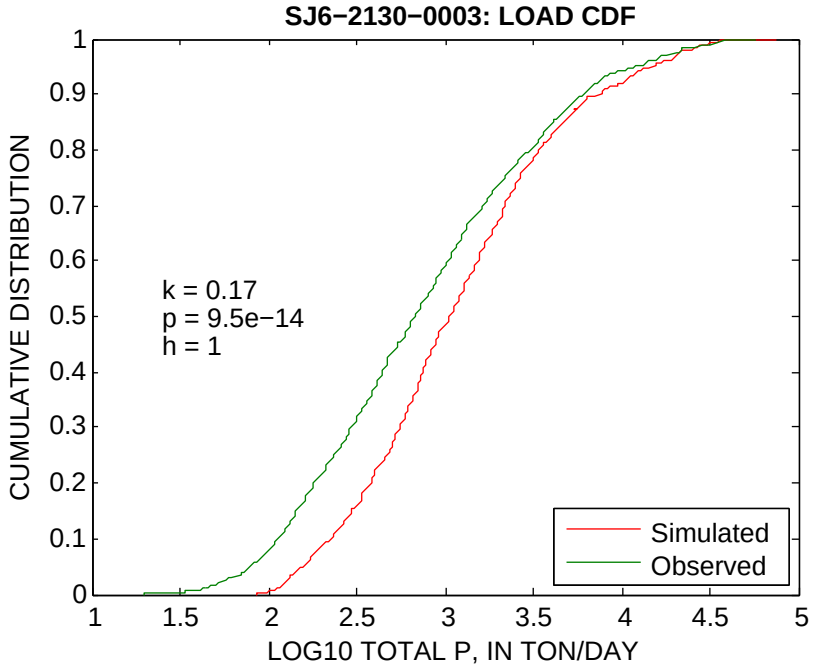


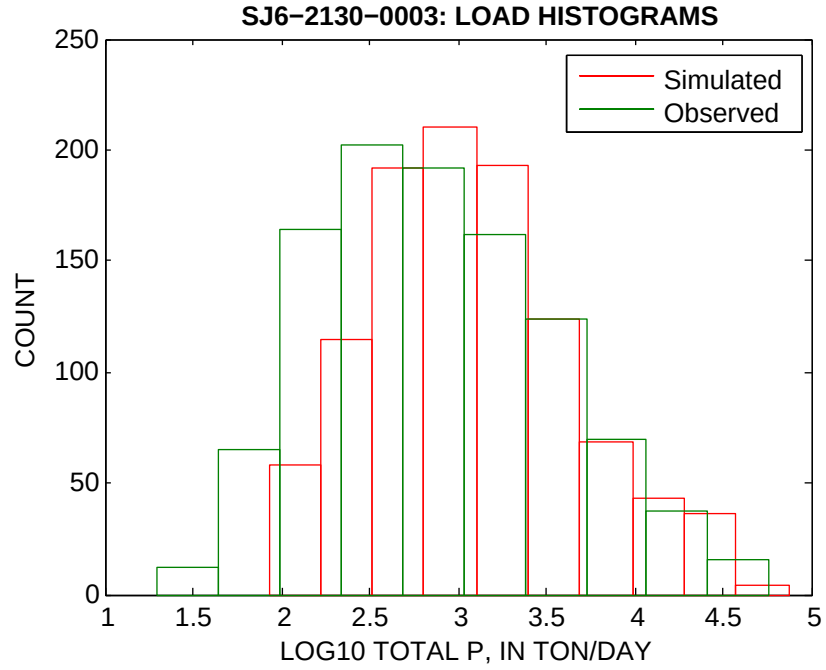


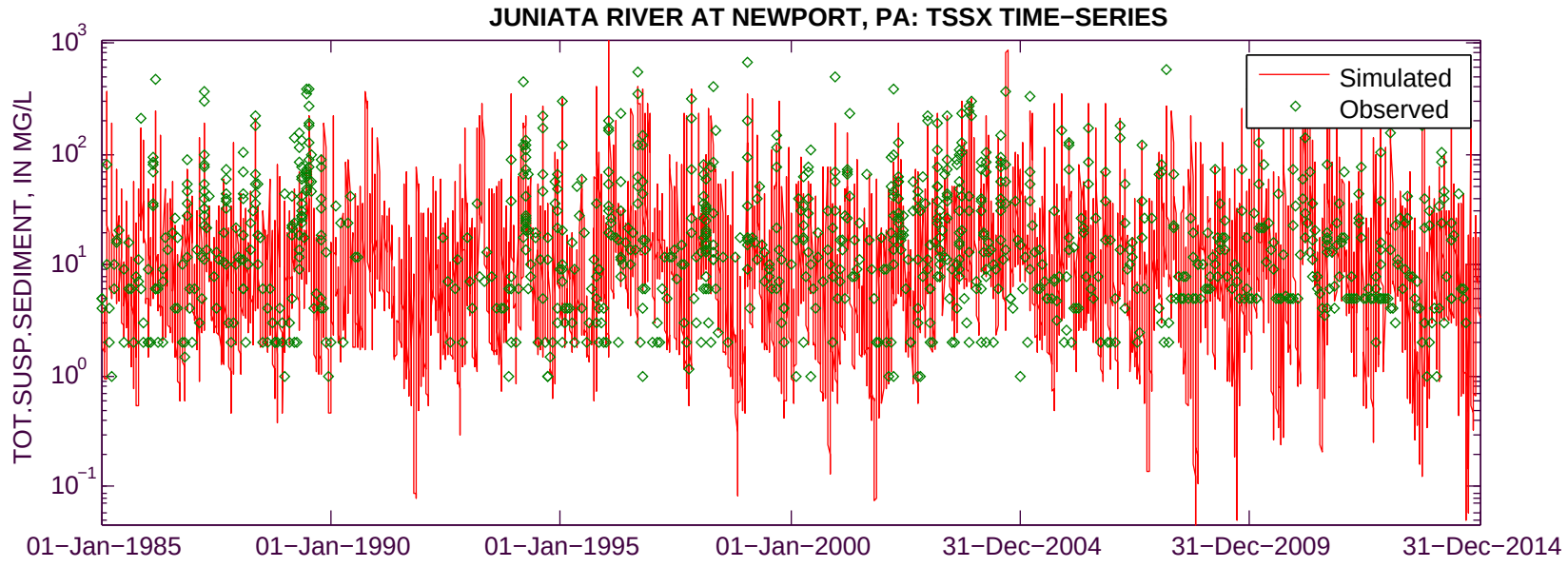
LOAD DATA
LOG10

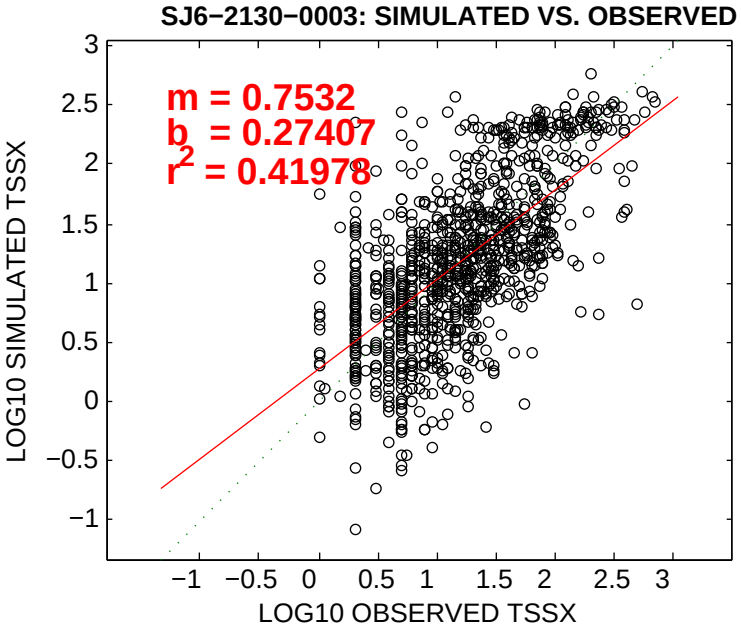


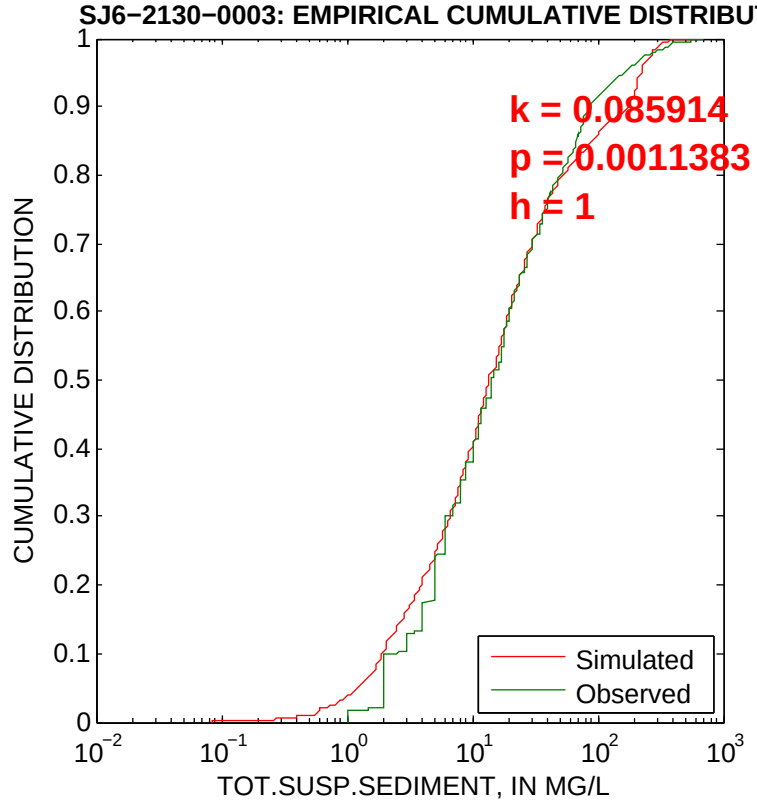












DATA SELECTION

scenario	file
P620171001WQ	TSSX.calib

plot: TSSX - total suspended ...

Dates: 1/1/1985 – 12/31/201

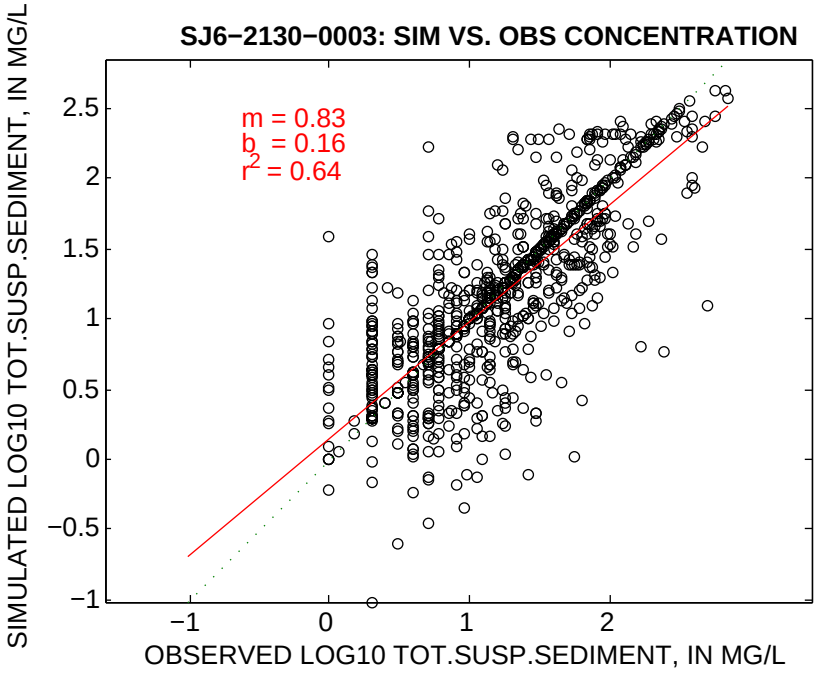
Drive	Directory	Observed
N/A	model	OBS20161101

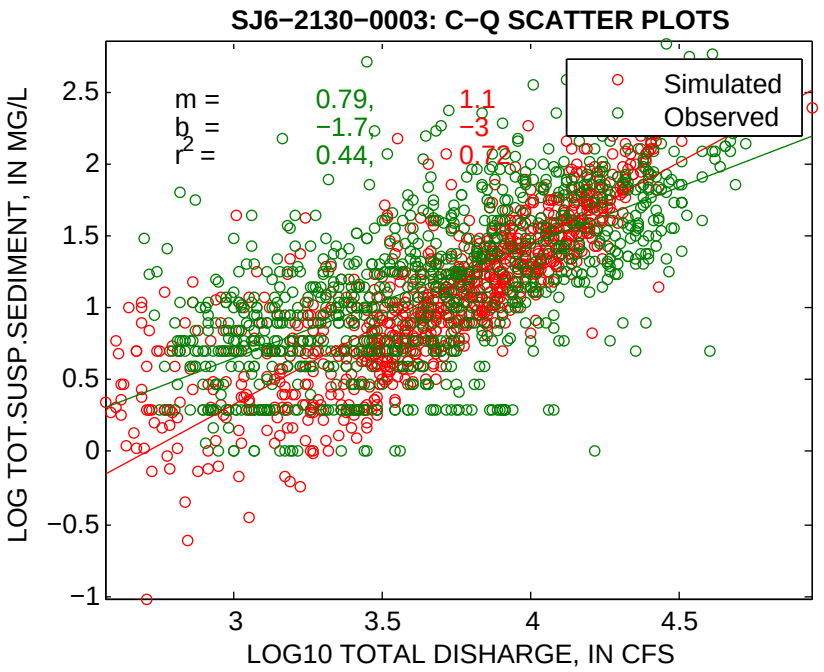
STATISTICS

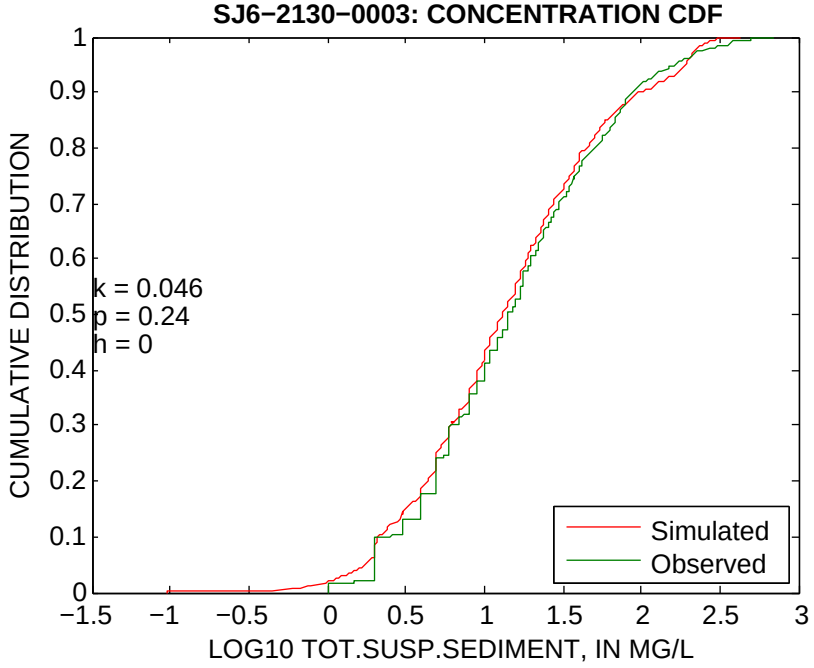
	n	1001	1001
		observe	simulate
min		1	0.084357
		0	-1.07388
mean		39.0722	45.089
		1.18923	1.1698
media		14	13.731
		1.14613	1.1377
max		687	591.08
		2.83696	2.77165
varian		5226.14	5589.82
		0.337504	0.456127
JB		0.001	0.001
		0.001018	0.036486
		ra	log
%		15.3993	-1.63358
err.va		4248.49	0.285589
rel.std.err		0.812931	0.846181
mod.eff		0.187069	0.153819

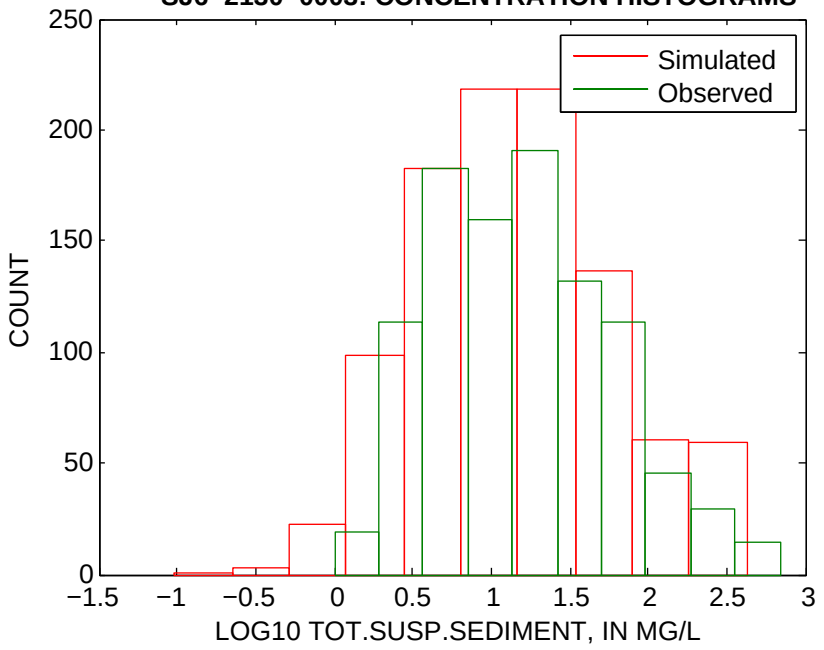
VERSION 2.1

ALL DATA
LOG10

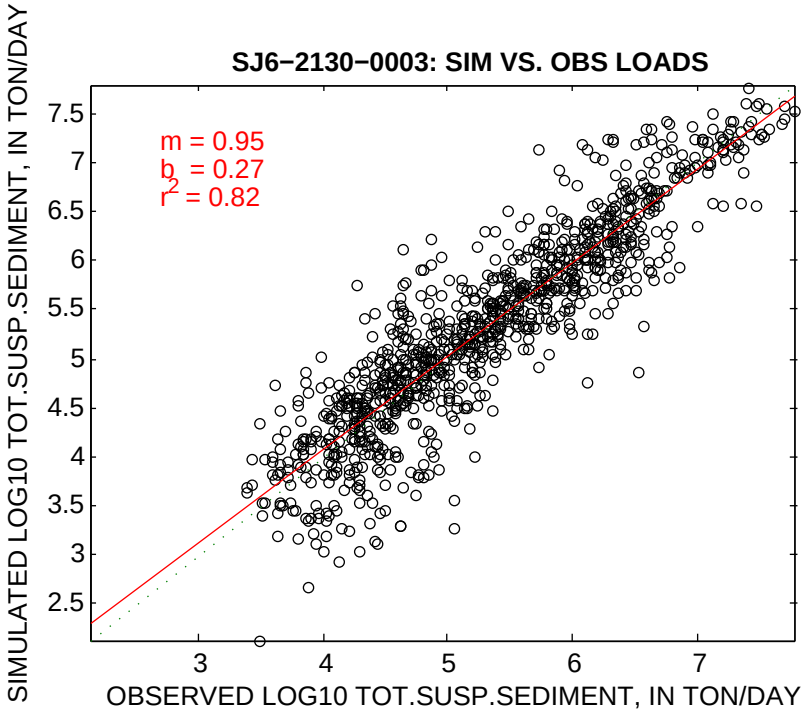




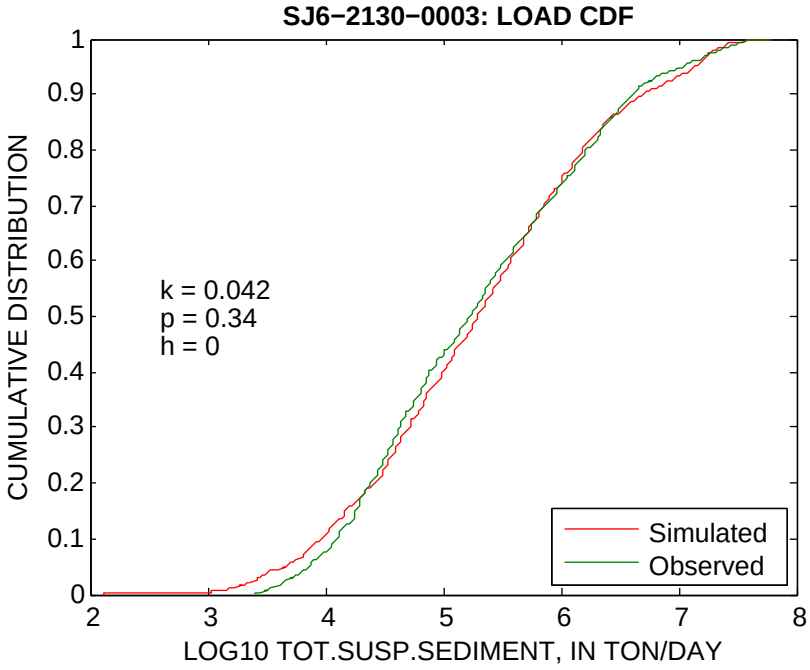


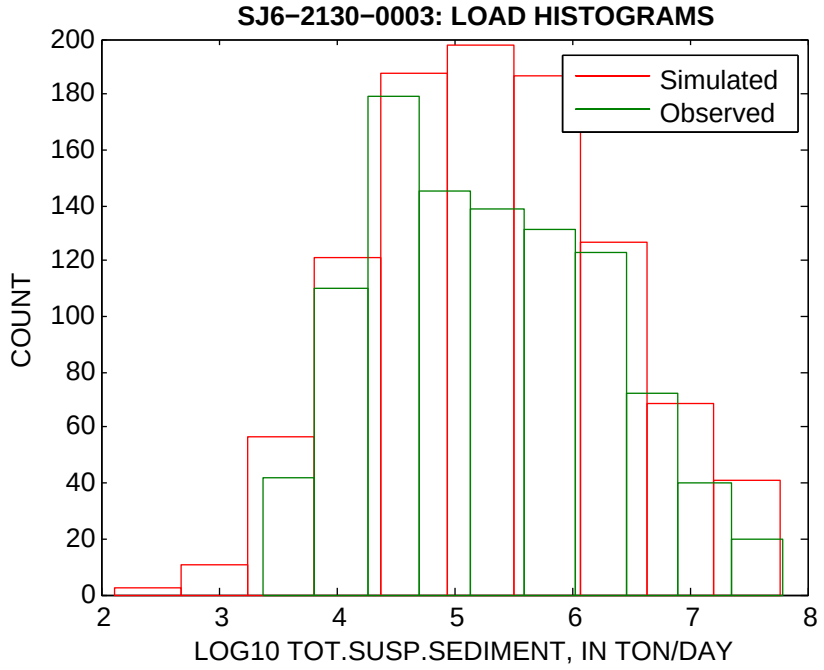


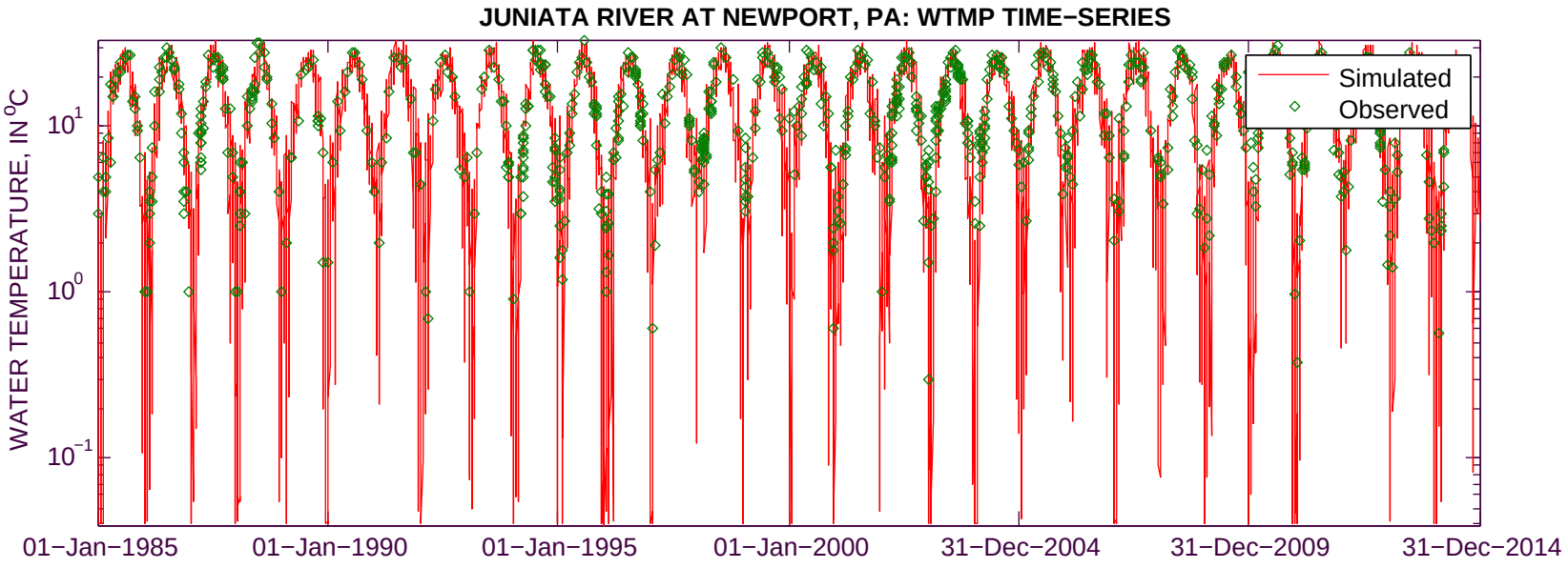
LOAD DATA
LOG10

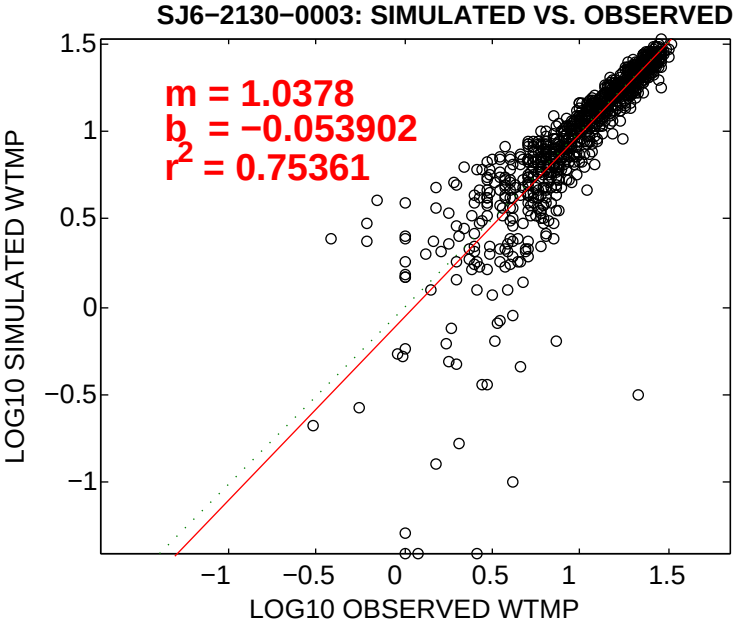


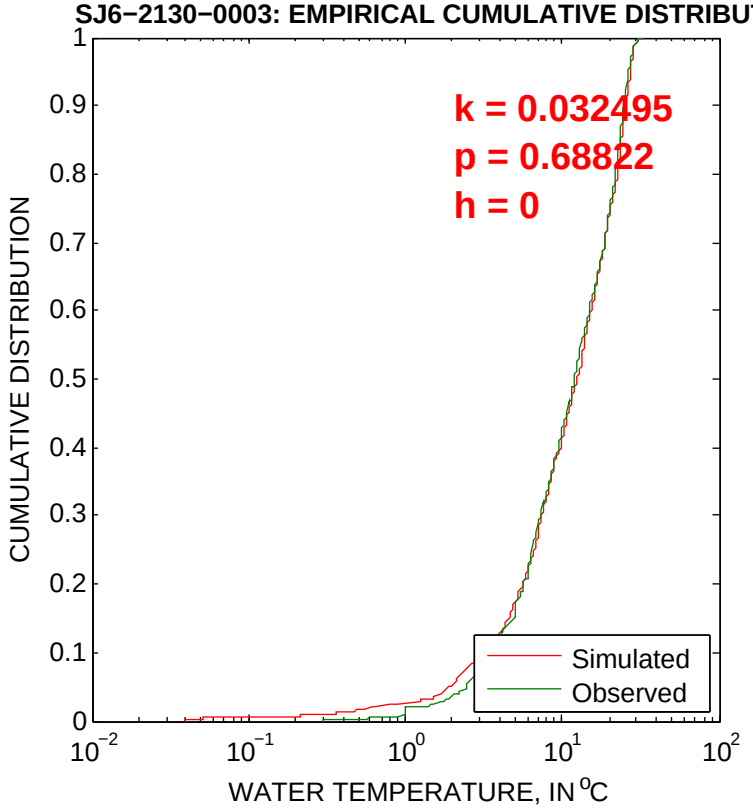












DATA SELECTION

scenario	file
P620171001WQ	WTMP.calib

plot: WTMP - water tempera...

Dates 1/1/1985 12/31/201

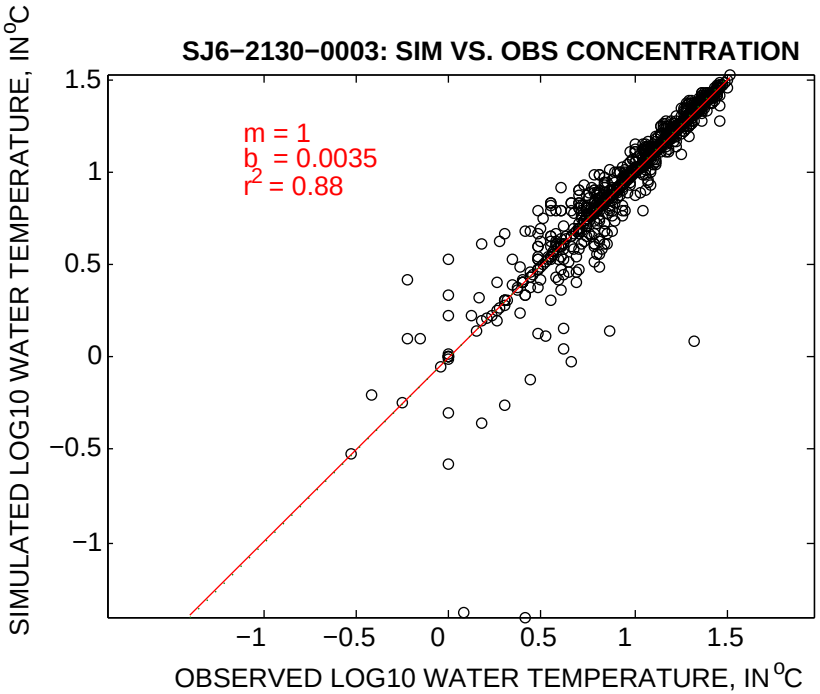
Drive	Directory	Observed
N/A	model	OBS20161101

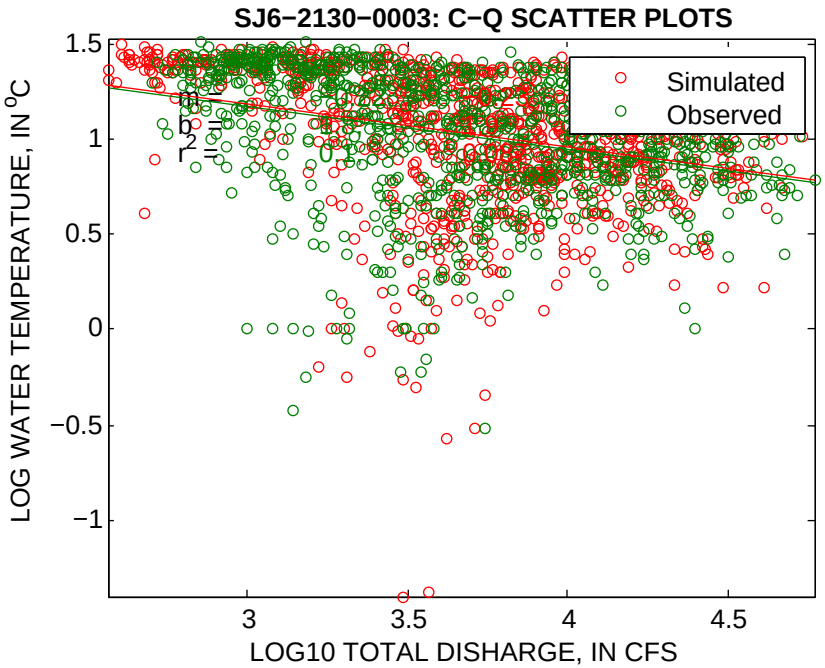
STATISTICS

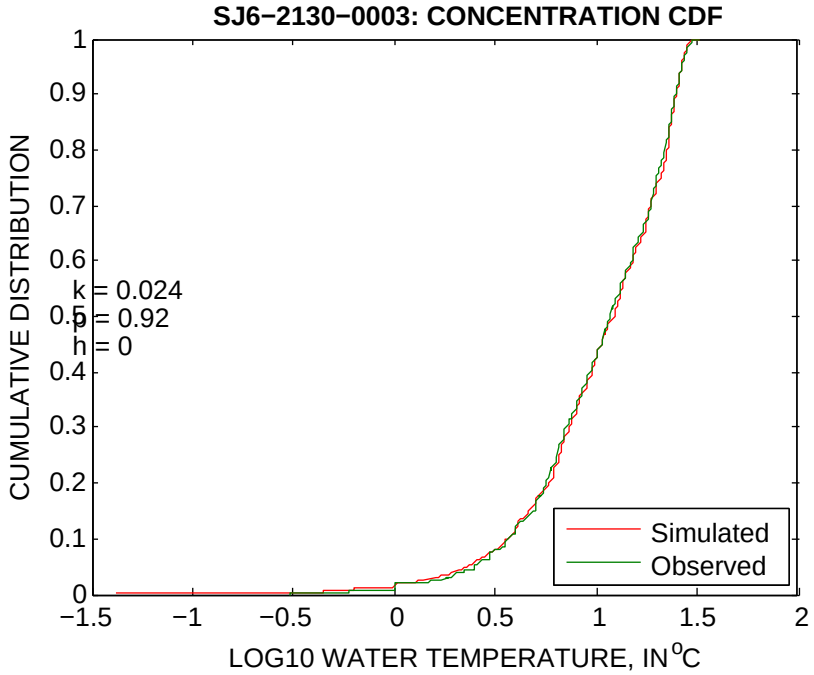
	n	observe	simulate
		954	954
min		0.3	0.040027
		-0.522879	-1.39765
mean		13.3756	13.5332
		1.02039	1.00504
media		12	12.5145
		1.07918	1.09741
max		32.7	33.591
		1.51455	1.52622
varian		63.6042	67.1764
		0.11769	0.168194
JB		0.001	0.001
		0.001	0.001
		ra	log
%		1.17844	-1.50397
err.va		5.48097	0.0418458
rel.std.err		0.086173	0.355558
mod.eff		0.913827	0.644442

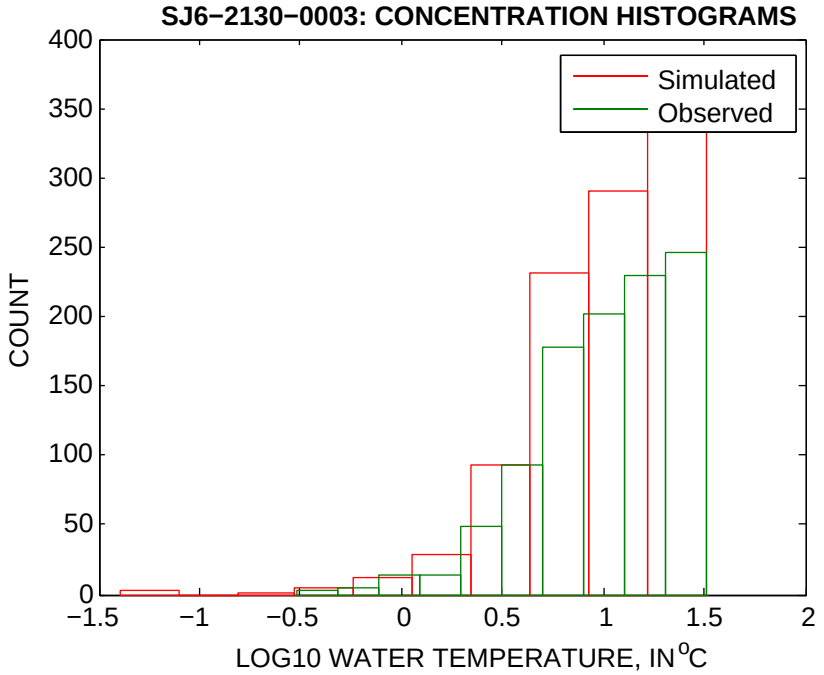
VERSION 2.1

ALL DATA
LOG10

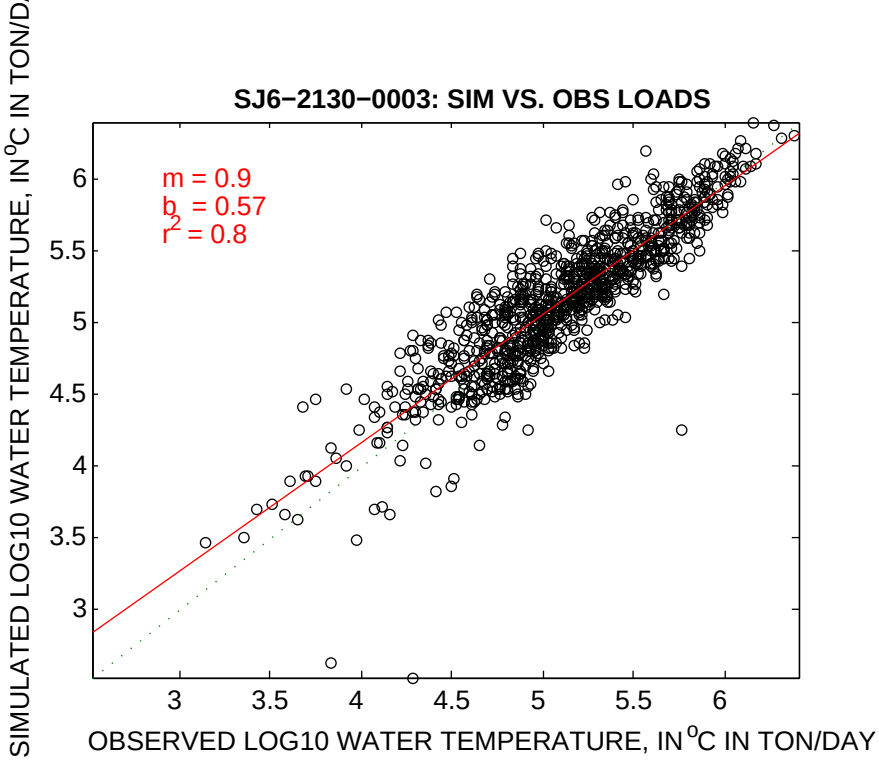


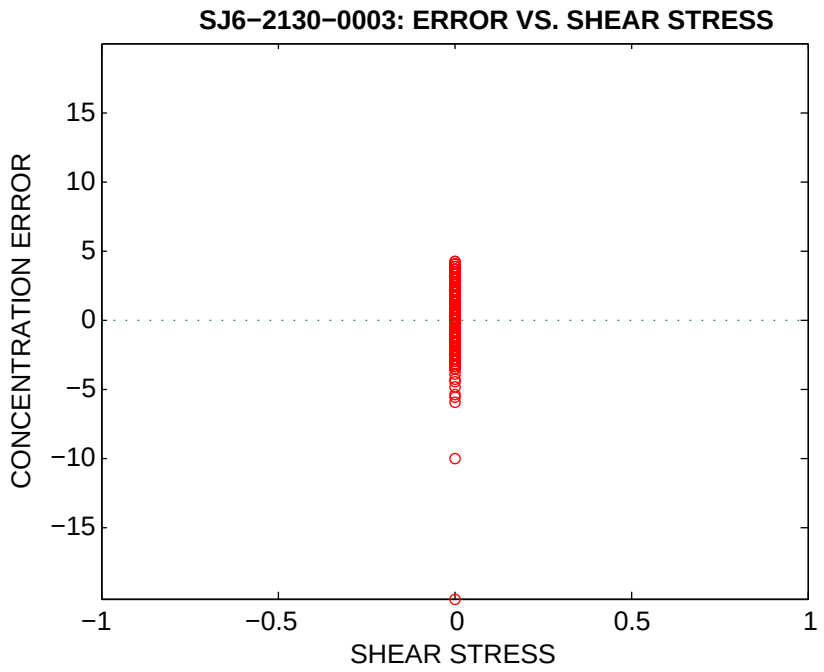


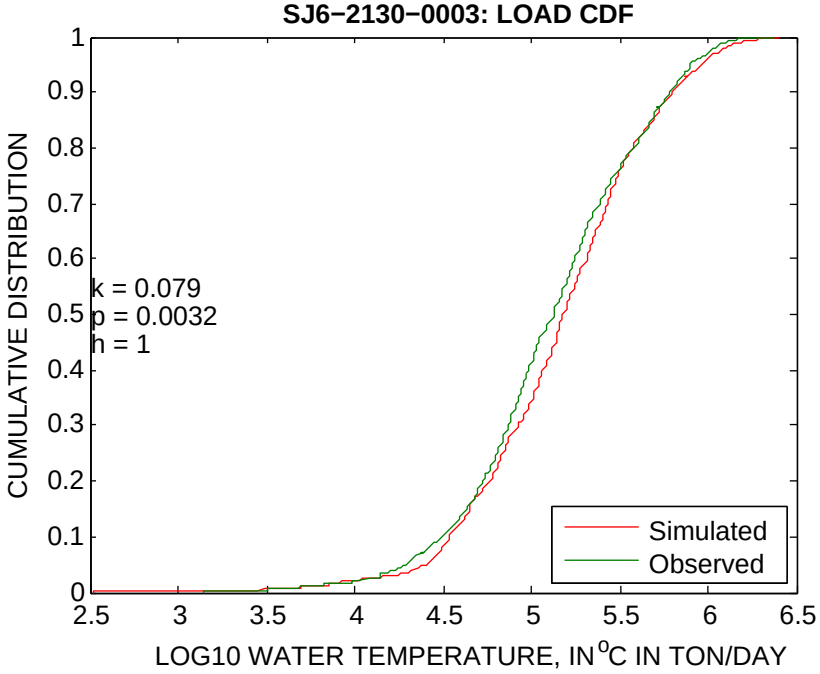


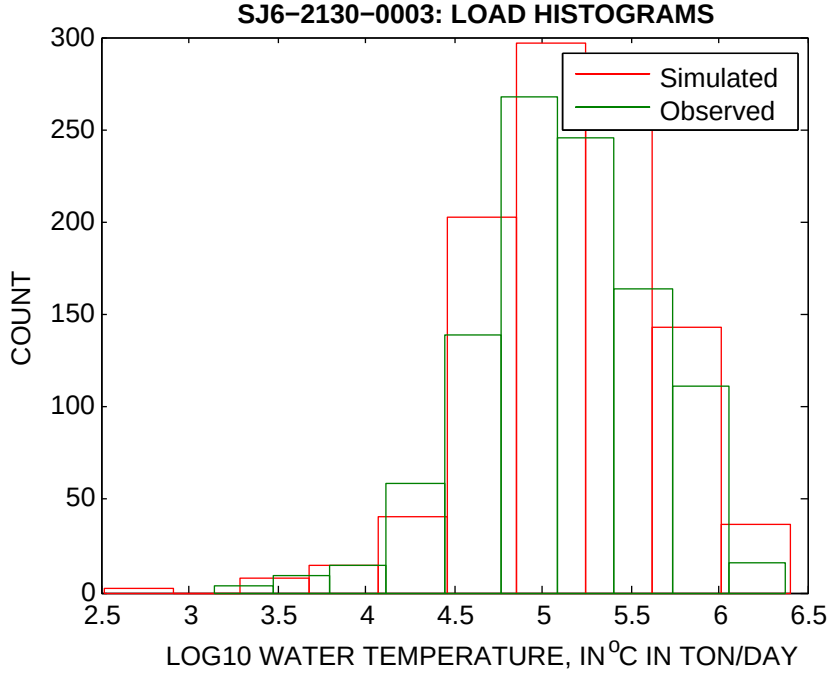


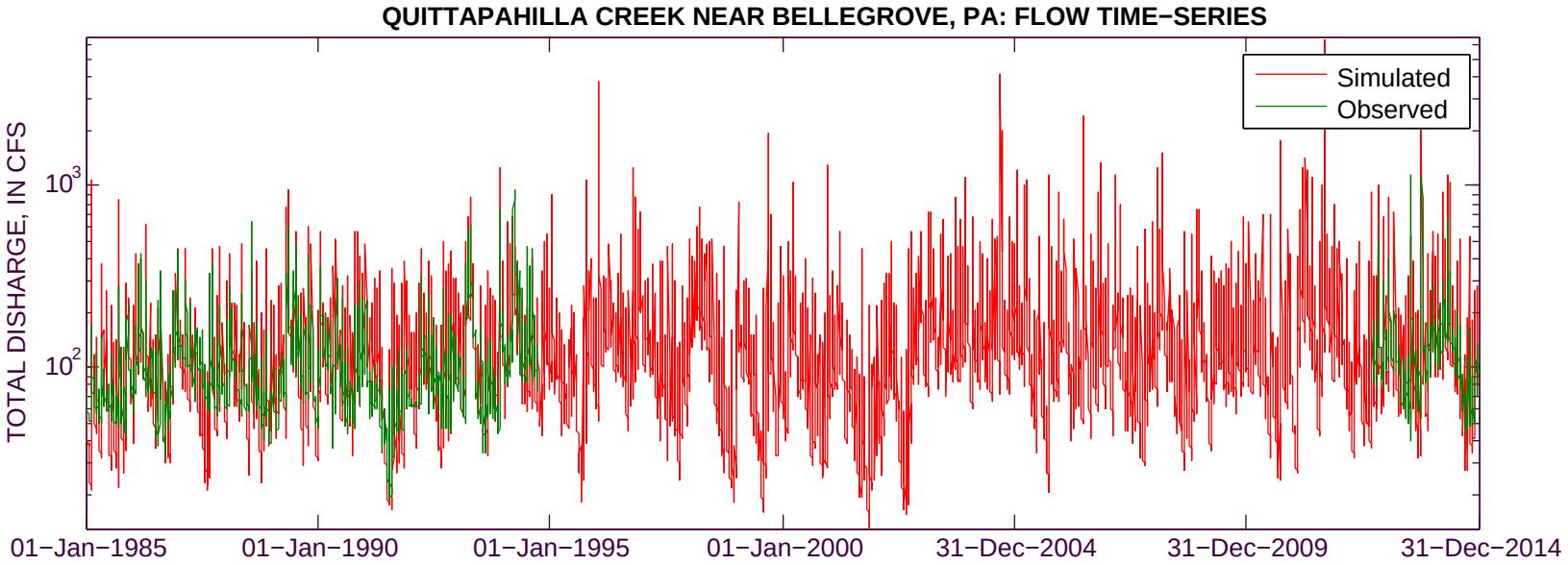
LOAD DATA
LOG10

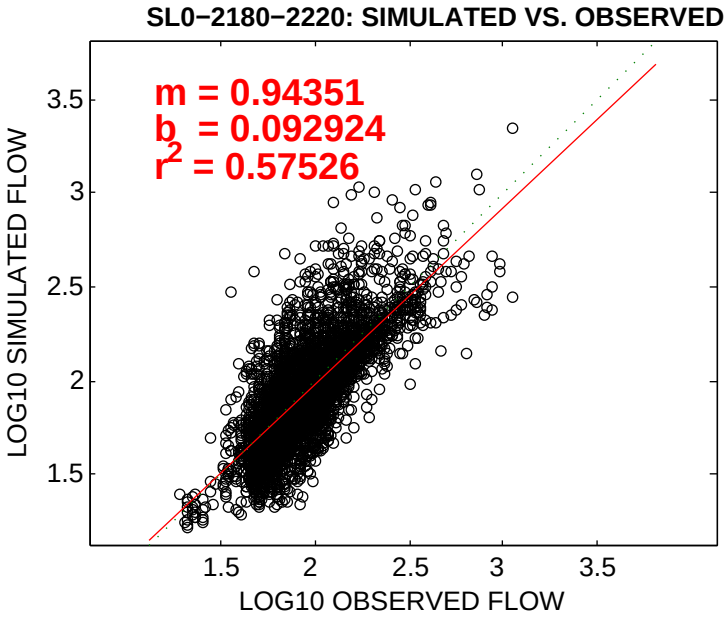


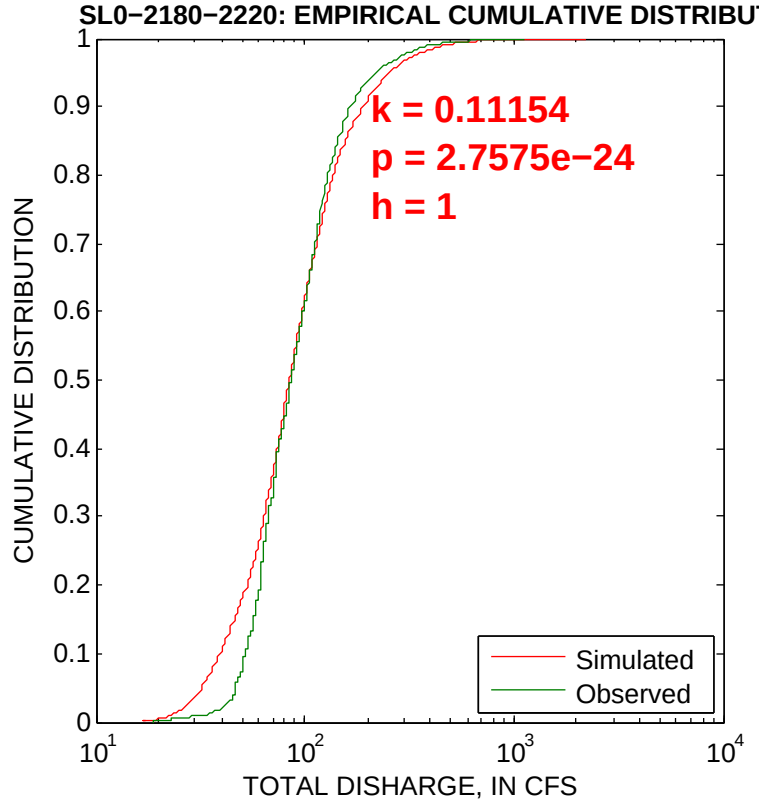












DATA SELECTION

scenario: P620171001WQ | file: FLOW.calib

plot: FLOW - total discharge

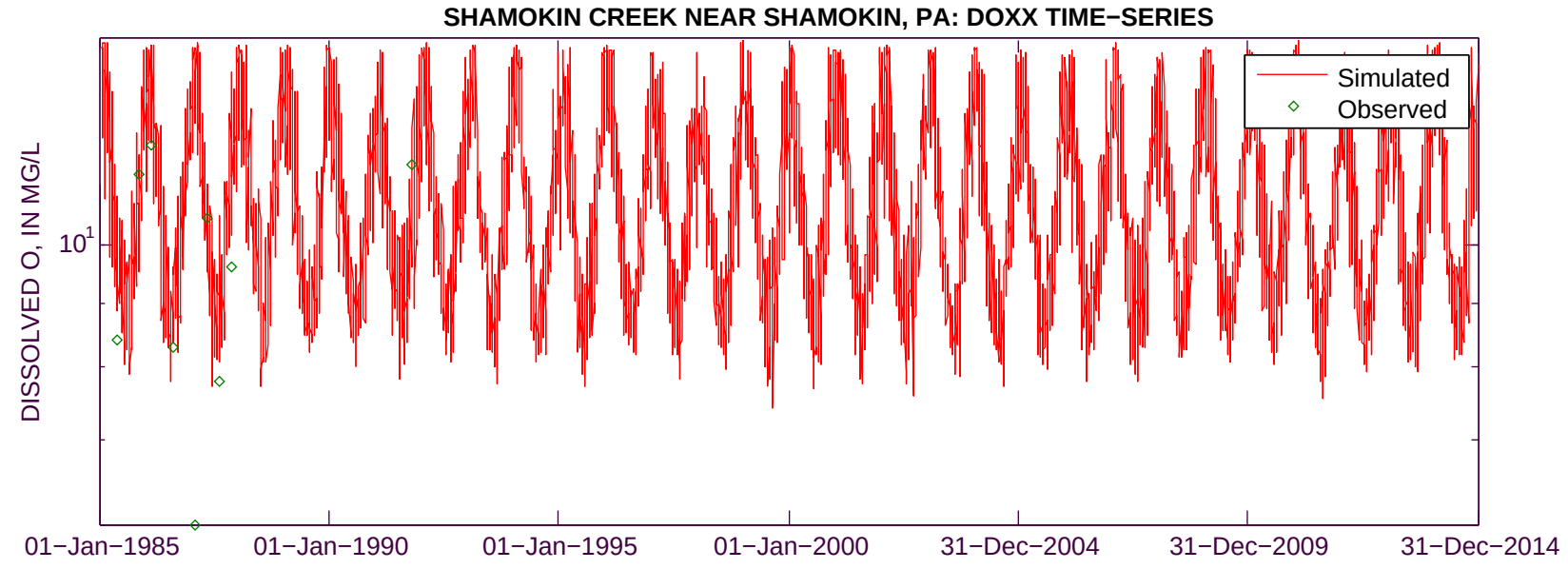
Dates: 1/1/1985 – 12/31/201

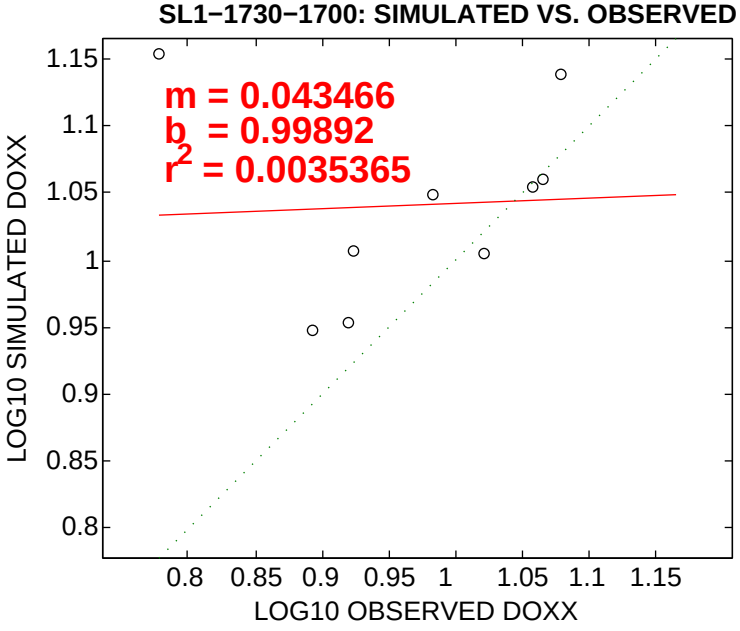
Drive: N/A | Directory: model | Observed: OBS20161101

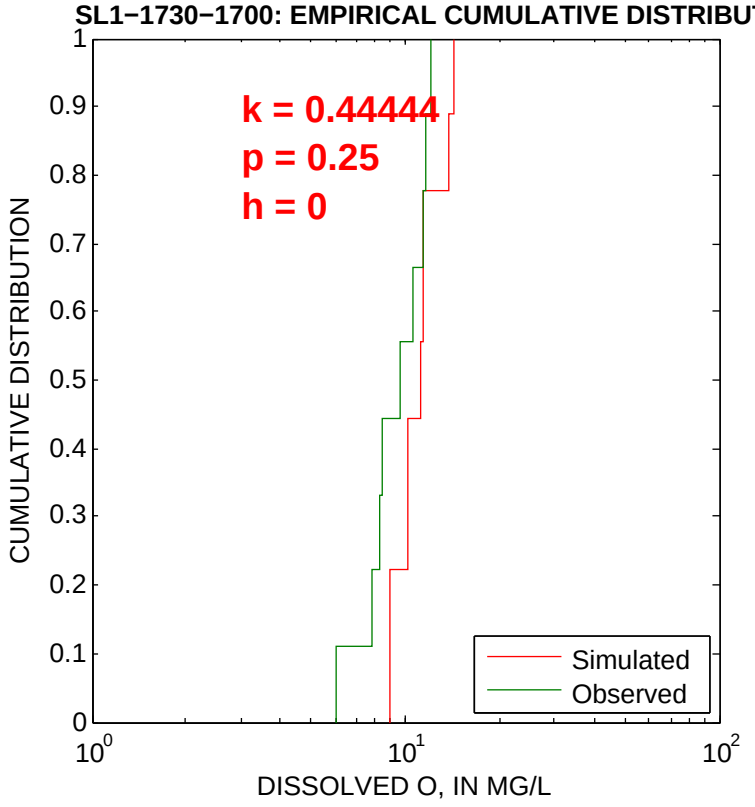
STATISTICS

		observe	simulate
n		4393	4393
min		19	16.621
		1.27875	1.22066
mean		104.96	108.075
		1.95746	1.9398
media		86	84.672
		1.9345	1.92774
max		1140	2208.7
		3.0569	3.34414
varian		5908.2	9361.5
		0.0470608	0.0728261
JB		0.001	0.001
		0.001	0.001
		ra	log
%		2.9678	-0.90215
err.va		5608.58	0.0313944
rel.std.err		0.949287	0.667103
mod.eff		0.0507134	0.332897

VERSION 2.1







DATA SELECTION

scenario	file
P620171001WQ	DOXX.calib

plot: DOXX - dissolved oxygen

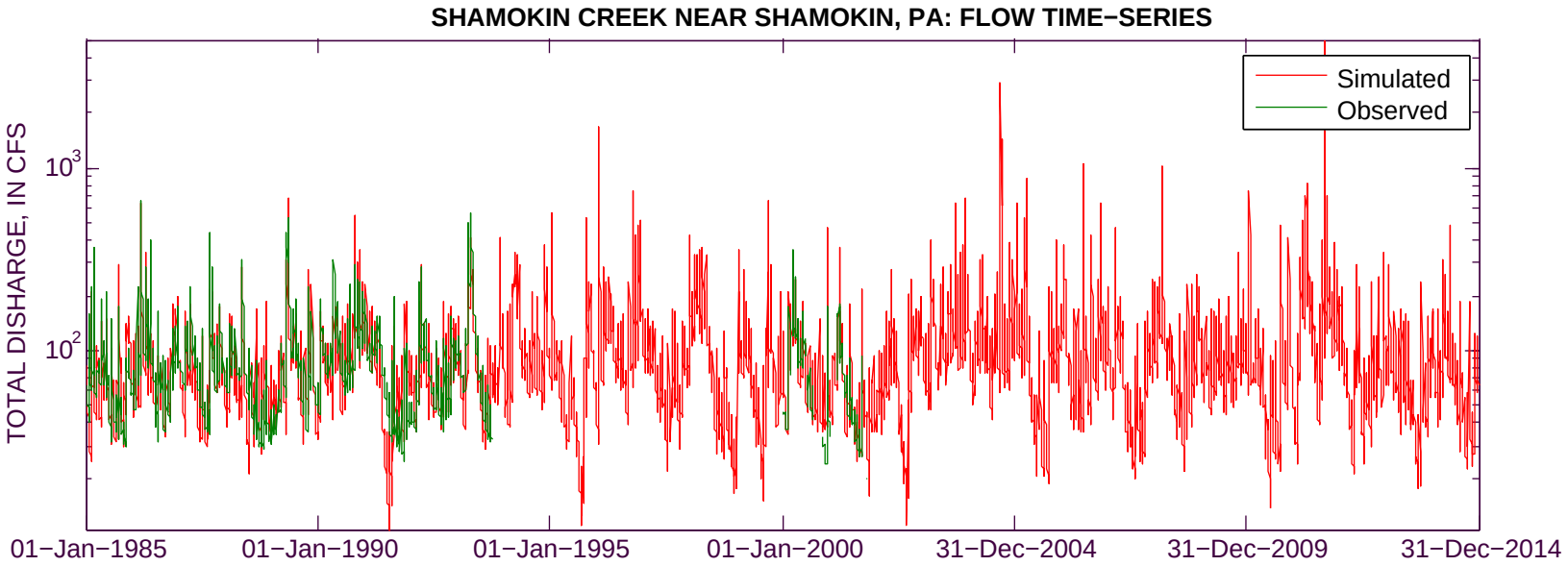
Dates: 1/1/1985 – 12/31/201

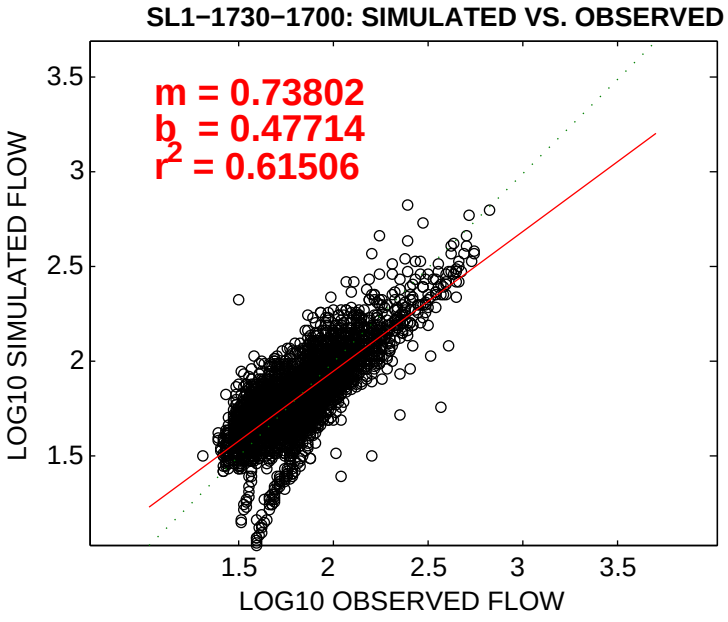
Drive	Directory	Observed
N/A	model	OBS20161101

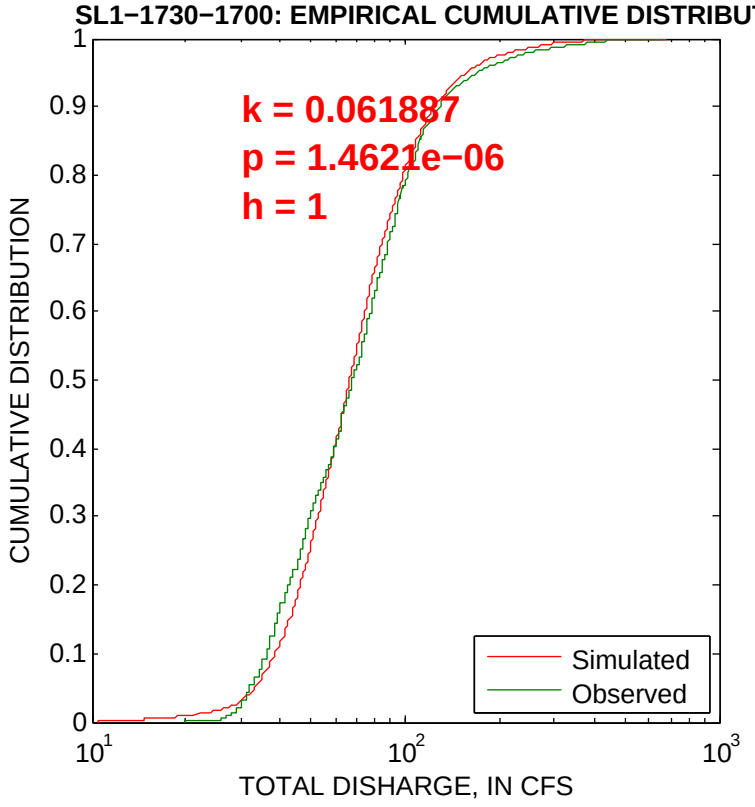
STATISTICS

	observe	simulate
n	9	9
min	6 0.778151	8.8789 0.948359
mean	9.51111 0.968623	11.1293 1.04102
media	9.6 0.982271	11.182 1.04852
max	12 1.07918	14.287 1.15494
varian	4.13361 0.00983847	3.60089 0.00525585
JB	0.5 0.479787	0.5 0.5
	ra	log
%	17.0133	7.47394
err.va	9.87807	0.0201351
rel.std.err	2.38969	2.04657
mod.eff	-1.38969	-1.04657

VERSION 2.1







DATA SELECTION

scenario: P620171001WQ | file: FLOW.calib

plot: FLOW - total discharge

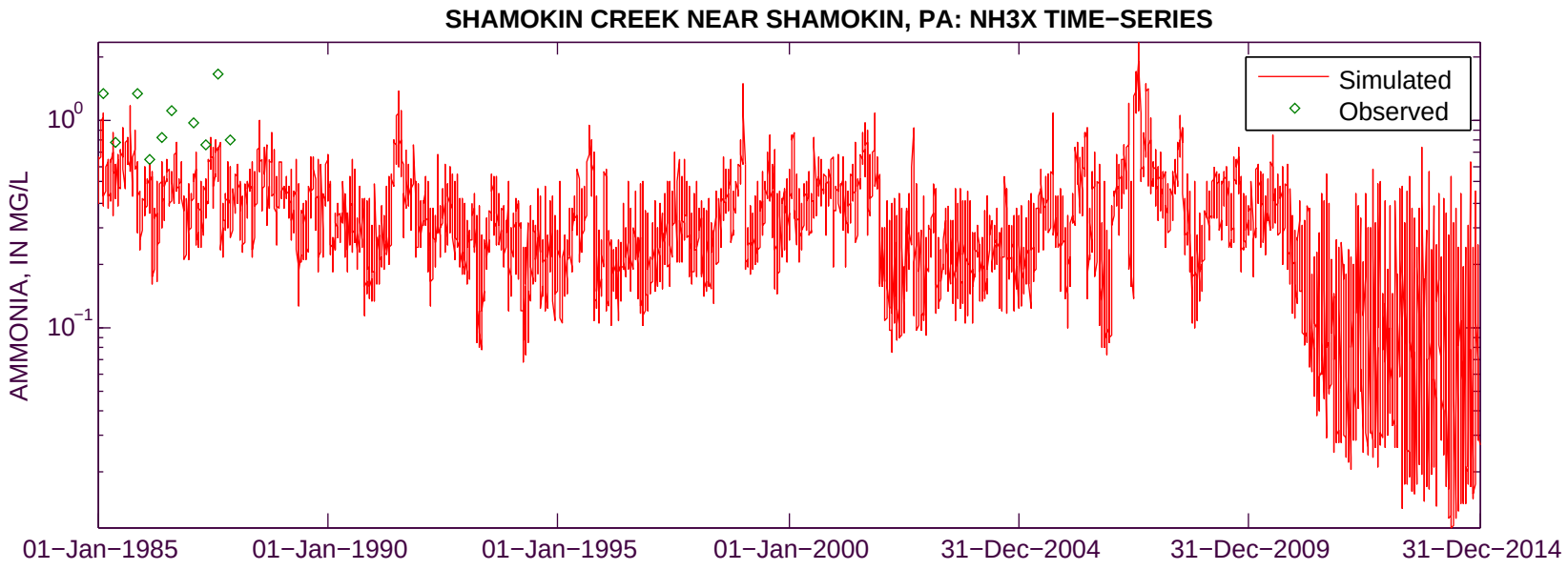
Dates: 1/1/1985 – 12/31/201

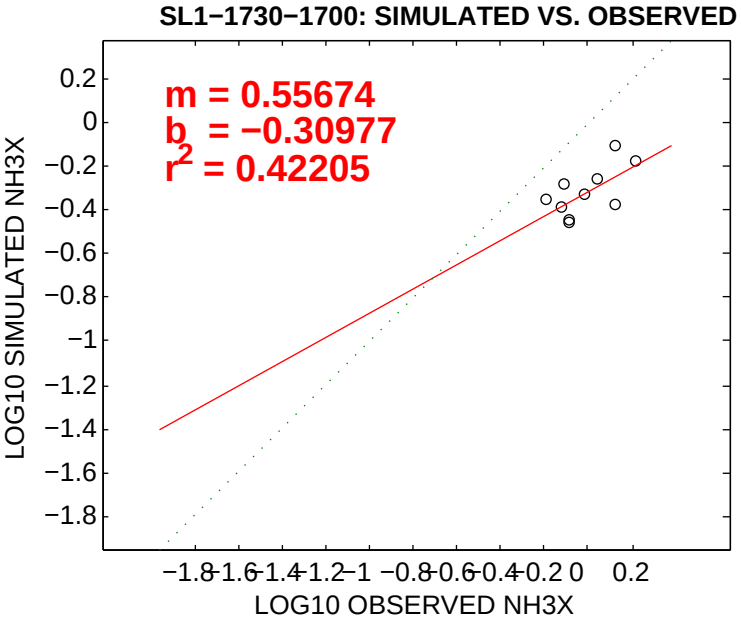
Drive: N/A | Directory: model | Observed: OBS20161101

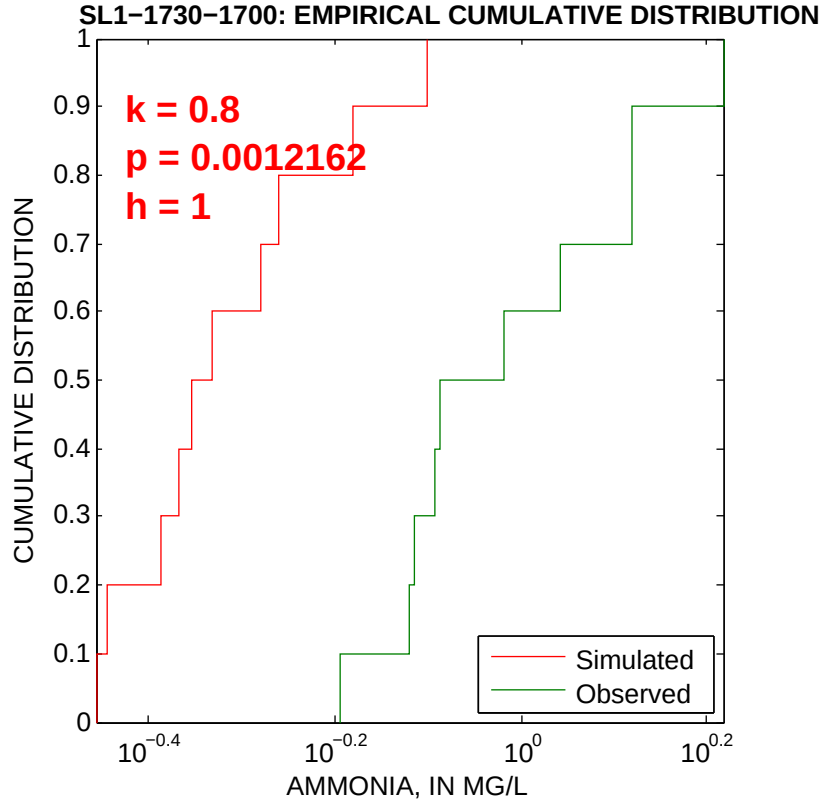
STATISTICS

	observe	simulate
n	3668	3668
min	20 1.30103	10.517 1.02189
mean	80.5788 1.8387	77.8646 1.83413
media	68 1.83251	66.5905 1.82341
max	656 2.8169	678.05 2.83126
varian	3231.84 0.0517021	2402.56 0.0457853
JB	0.001 0.001	0.001 0.001
	ra	log
%	-3.36838	-0.248378
err.va	1021.21	0.0211943
rel.std.err	0.315983	0.409931
mod.eff	0.684017	0.590069

VERSION 2.1







DATA SELECTION

scenario	file
P620171001WQ	NH3X.calib

plot: NH3X - ammonia

Dates: 1/1/1985 – 12/31/201

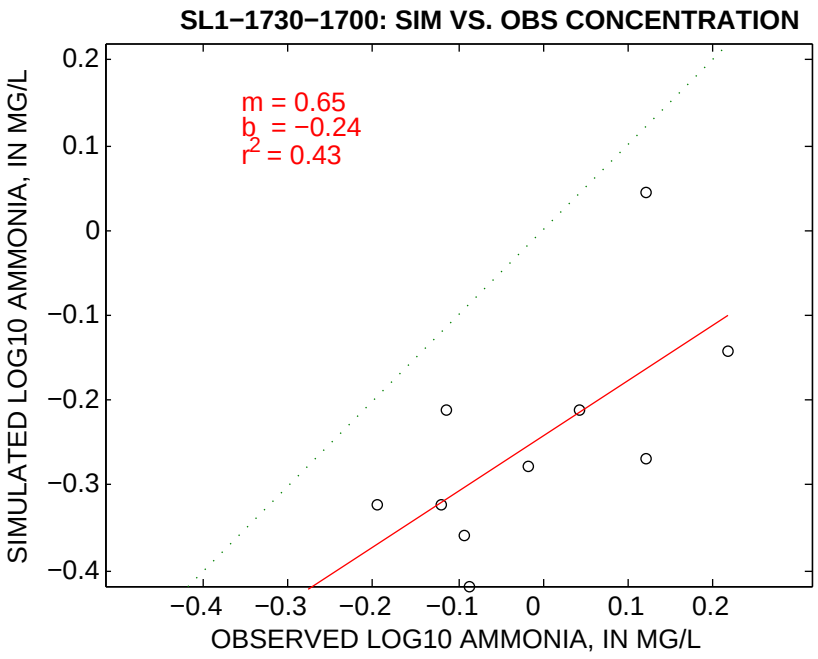
Drive	Directory	Observed
N/A	model	OBS20161101

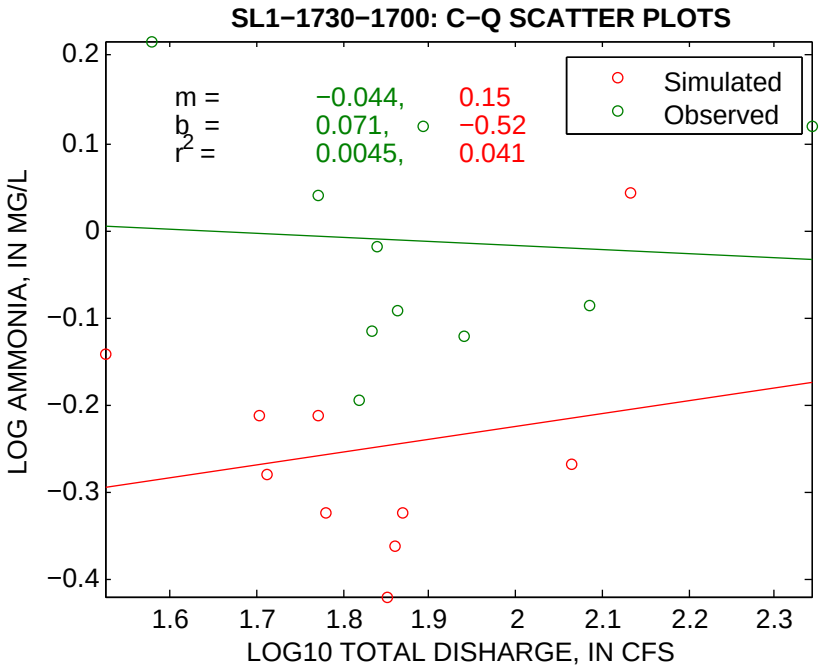
STATISTICS

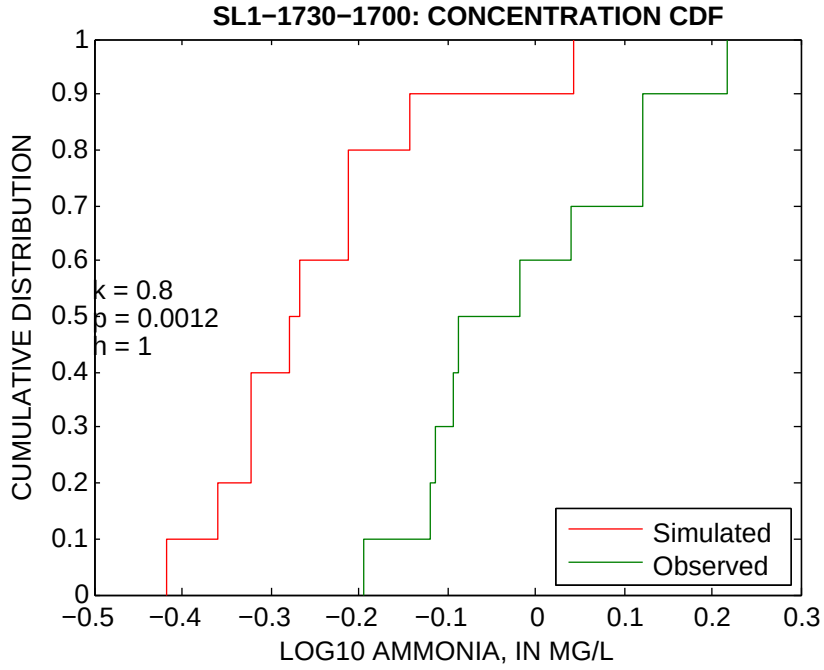
	n	10	10
		observe	simulate
min		0.64	0.34874
		-0.19382	-0.457498
mean		1.015	0.498138
		-0.0121921	-0.316554
media		0.89	0.45465
		-0.0519575	-0.342456
max		1.65	0.79241
		0.217484	-0.10105
varian		0.105028	0.0194753
		0.0174862	0.0128419
JB		0.224861	0.10258
		0.469438	0.473397
		ra	log
%		-50.9224	2496.39
err.va		0.360708	0.113787
rel.std.err		3.43441	6.50724
mod.eff		-2.43441	-5.50724

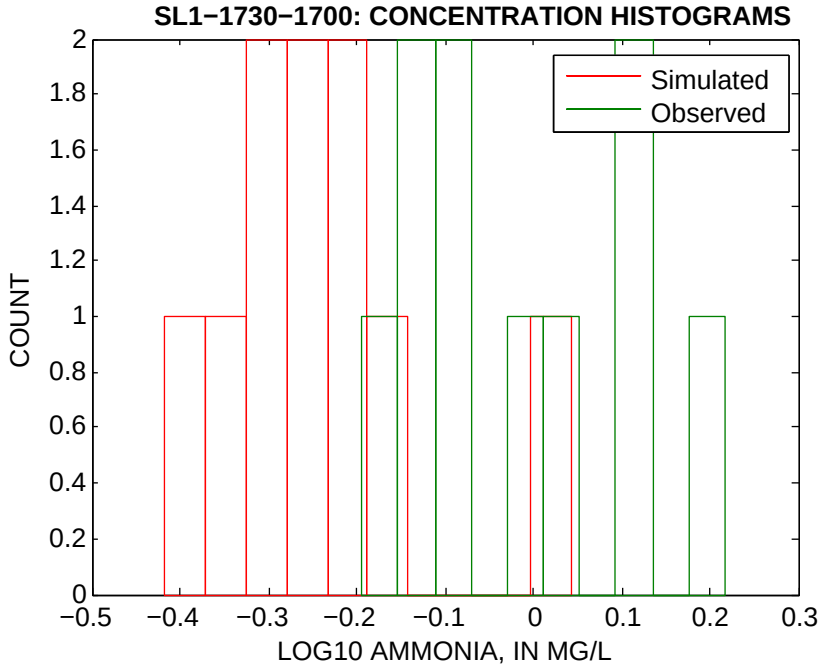
VERSION 2.1

ALL DATA
LOG10

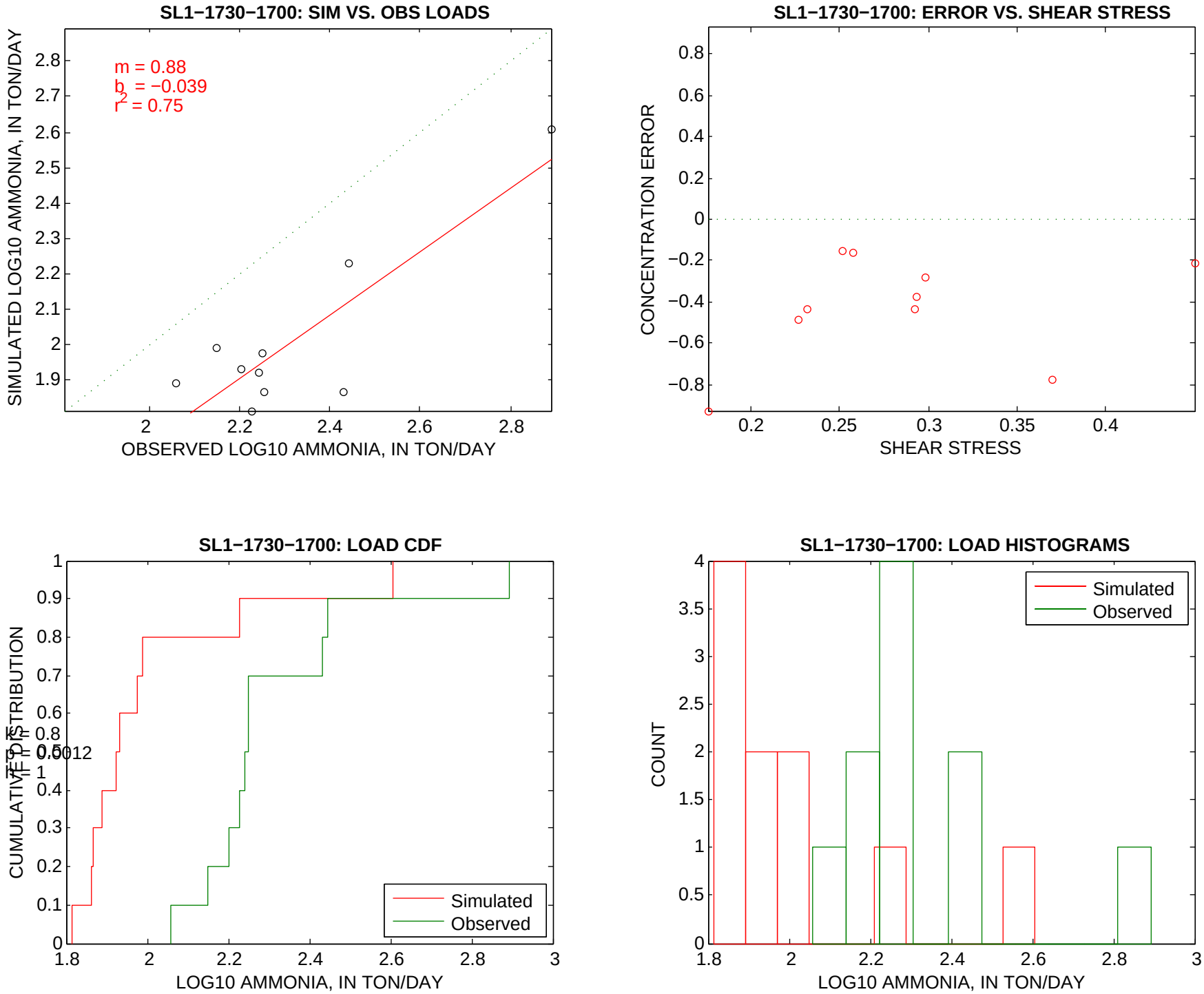


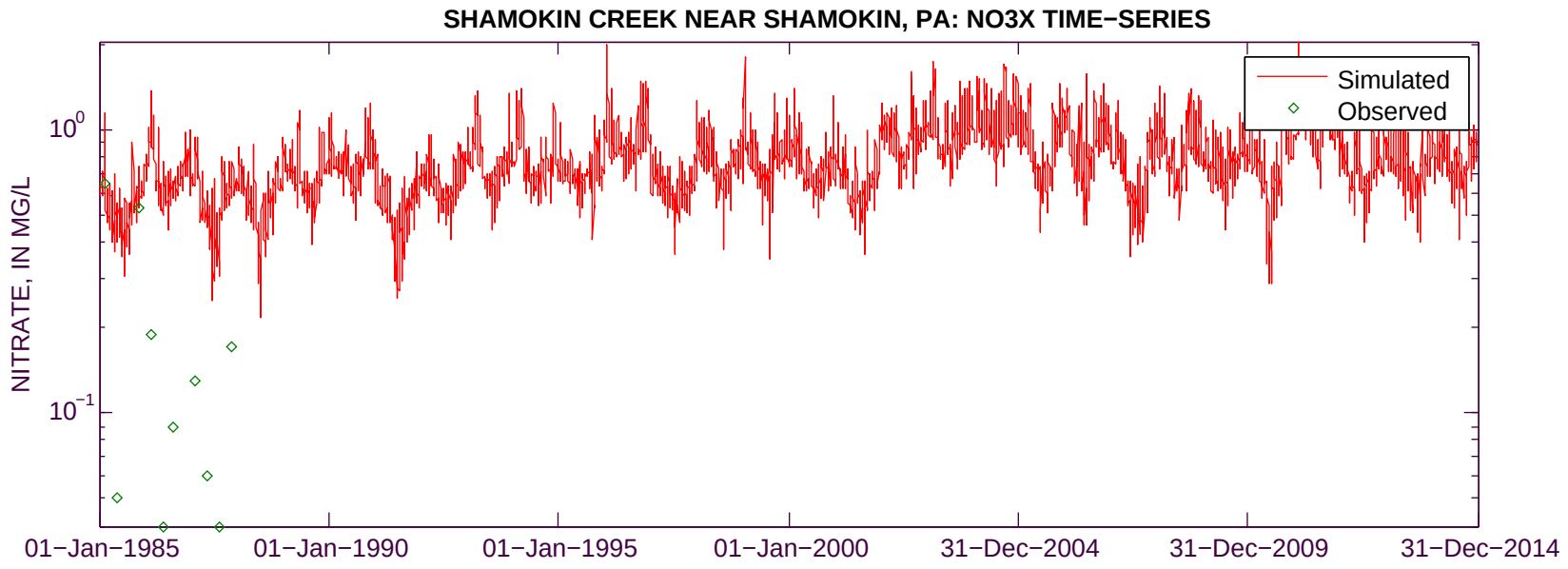


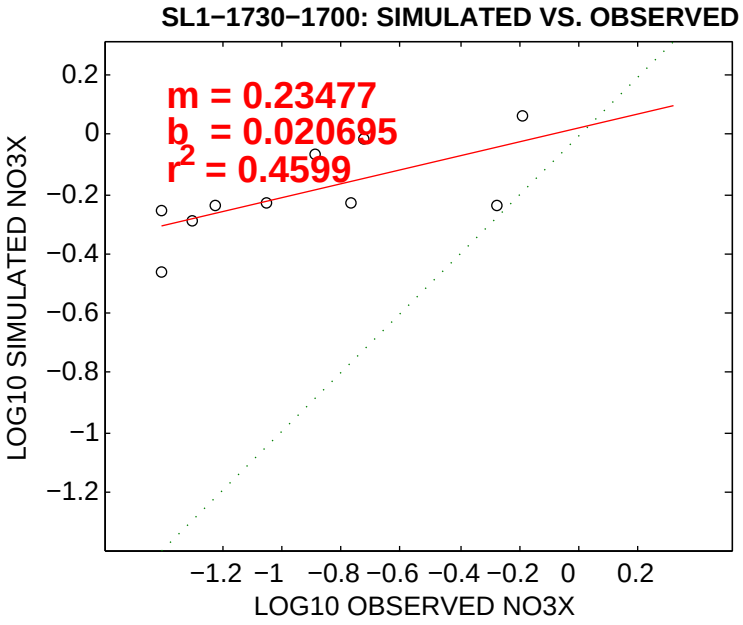


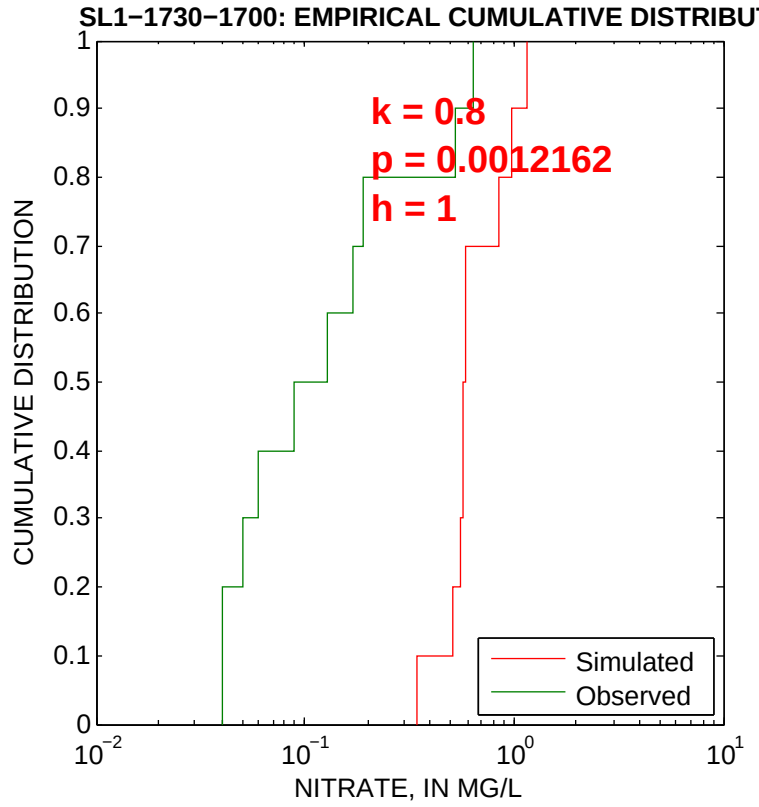


LOAD DATA
LOG10









DATA SELECTION

scenario	file
P620171001WQ	NO3X.calib

plot: NO3X - nitrate

Dates: 1/1/1985 – 12/31/201

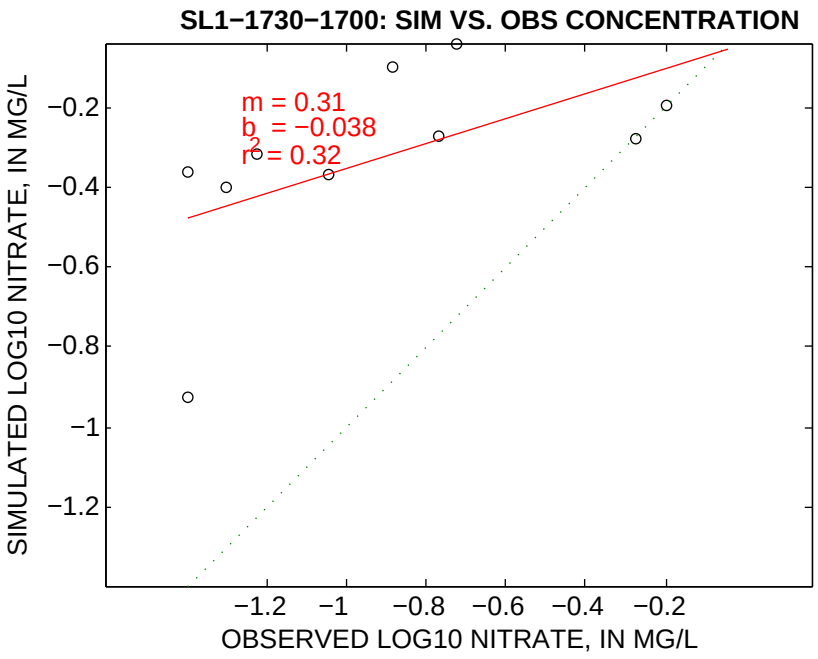
Drive	Directory	Observed
N/A	model	OBS20161101

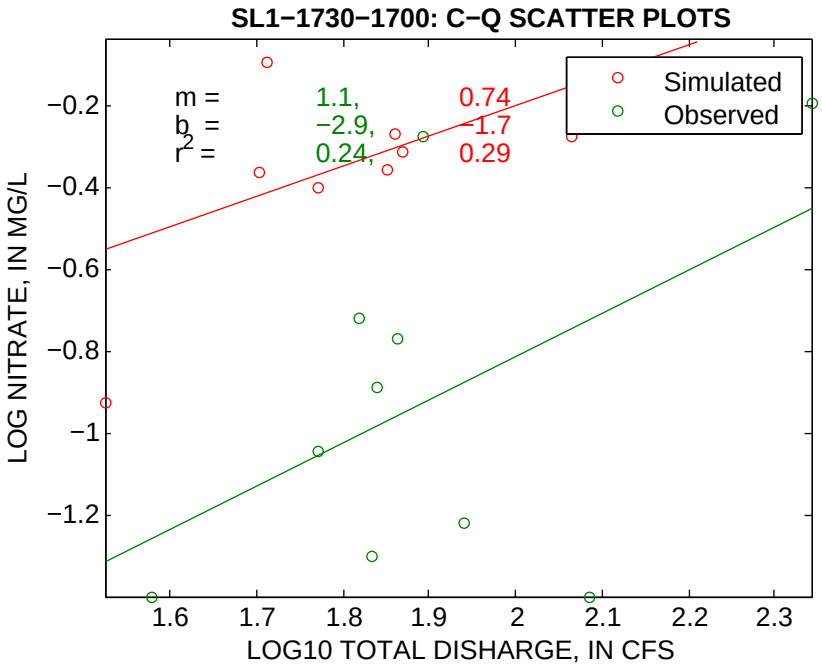
STATISTICS

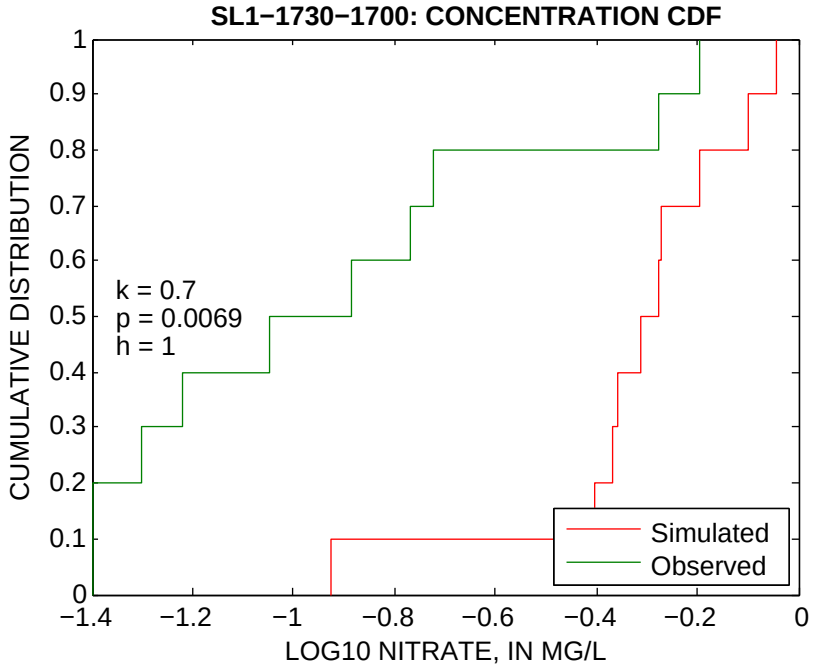
	n	10	10
		observe	simulate
min		0.04	0.34475
		-1.39794	-0.462496
mean		0.194	0.673644
		-0.921091	-0.195548
media		0.11	0.583315
		-0.965907	-0.234109
max		0.64	1.148
		-0.19382	0.0599419
varian		0.0459378	0.0588909
		0.190519	0.0228327
JB		0.037368	0.204895
		0.359638	0.5
		ra	log
%		247.239	-78.77
err.va		0.297953	0.7088
rel.std.err		6.48601	3.72036
mod.eff		-5.48601	-2.72036

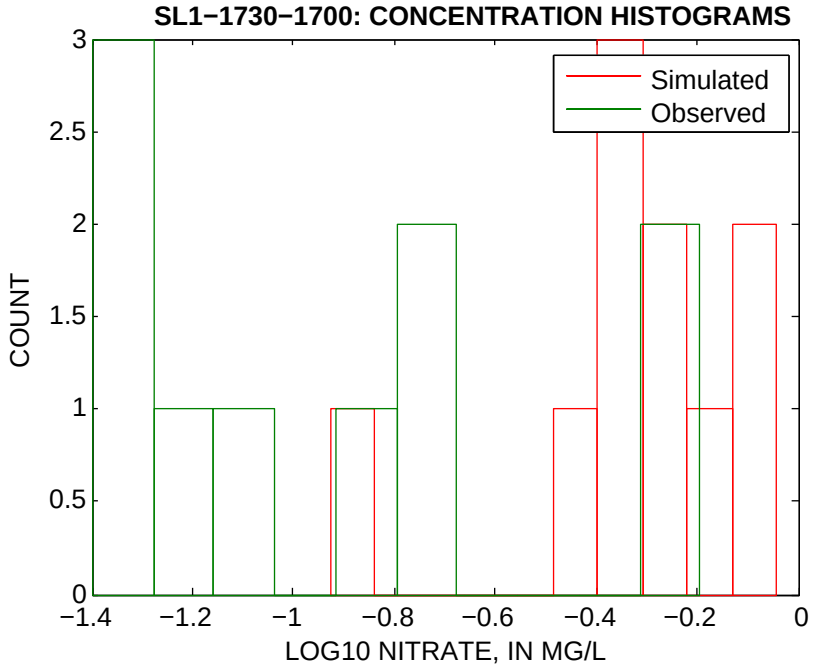
VERSION

ALL DATA
LOG10

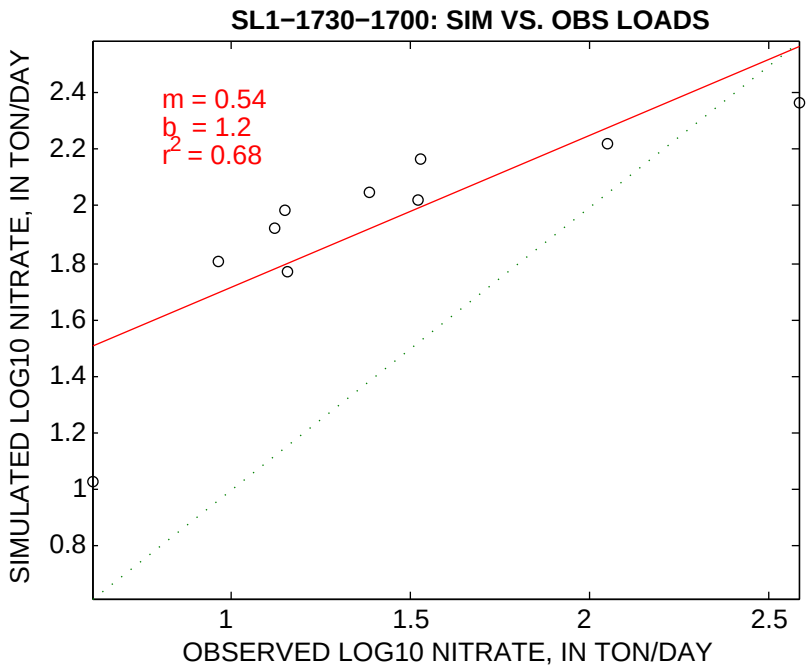


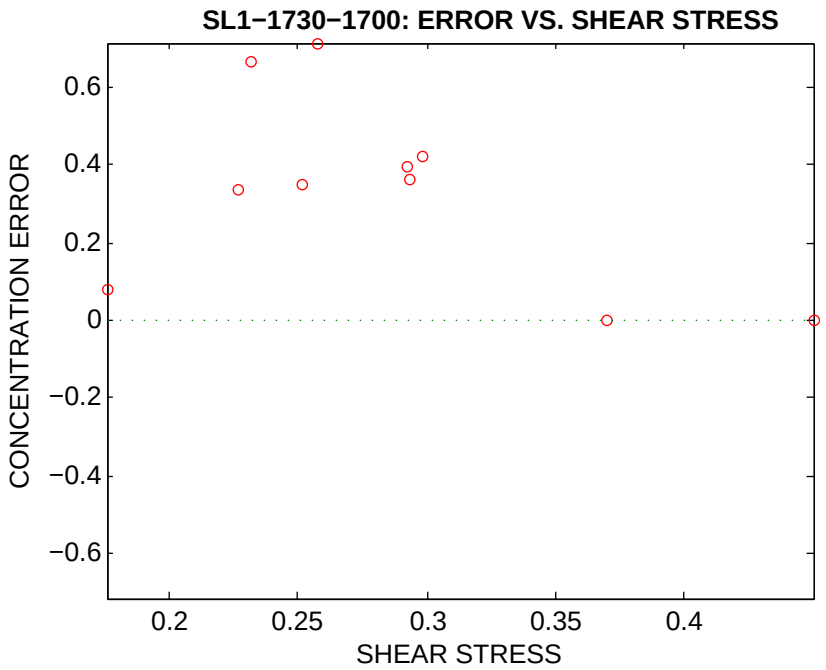


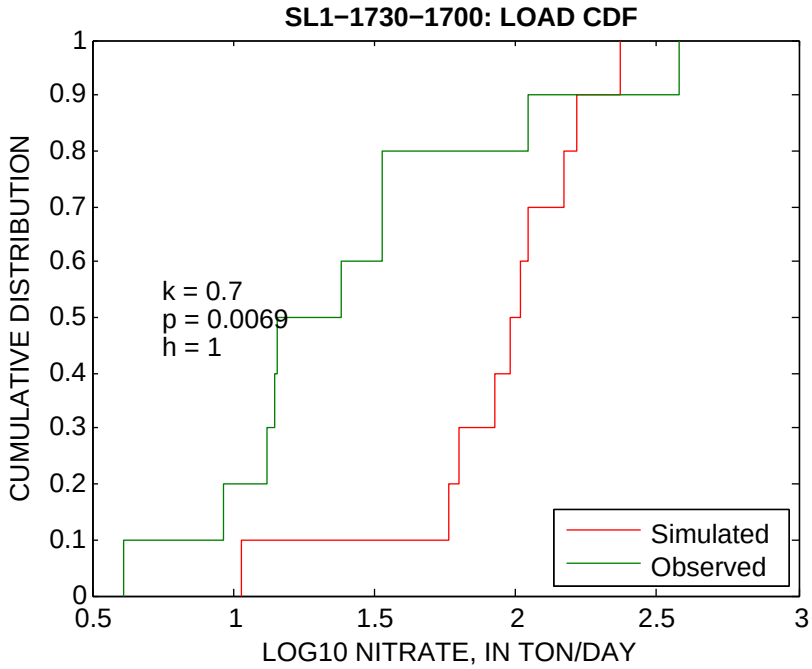


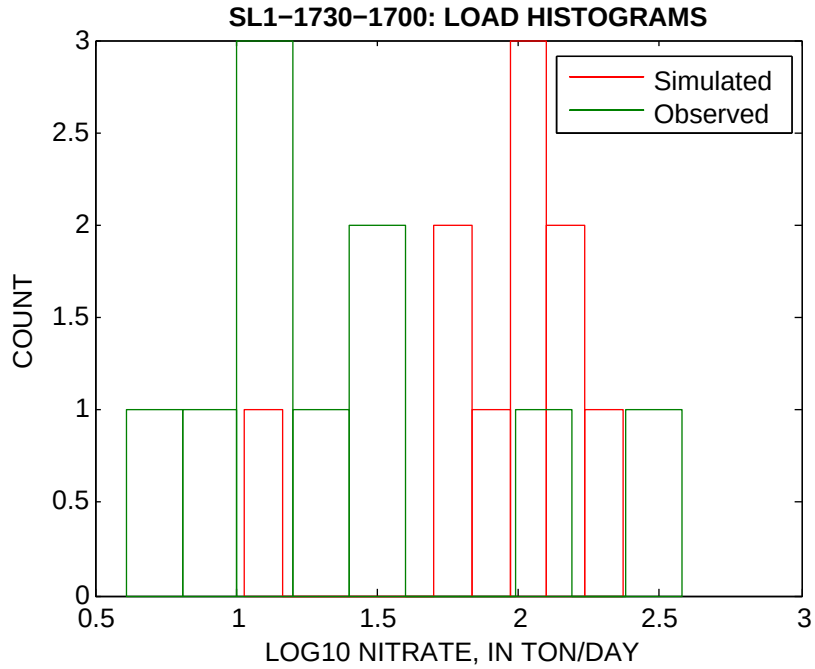


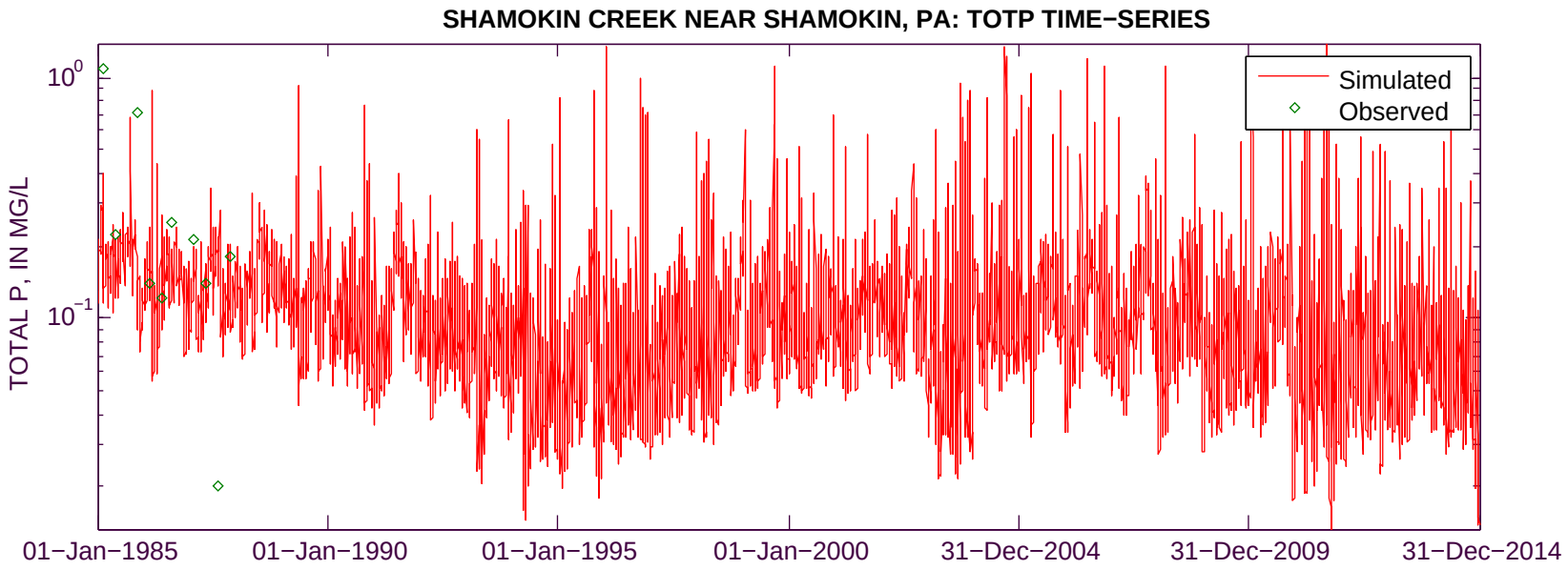
LOAD DATA
LOG10

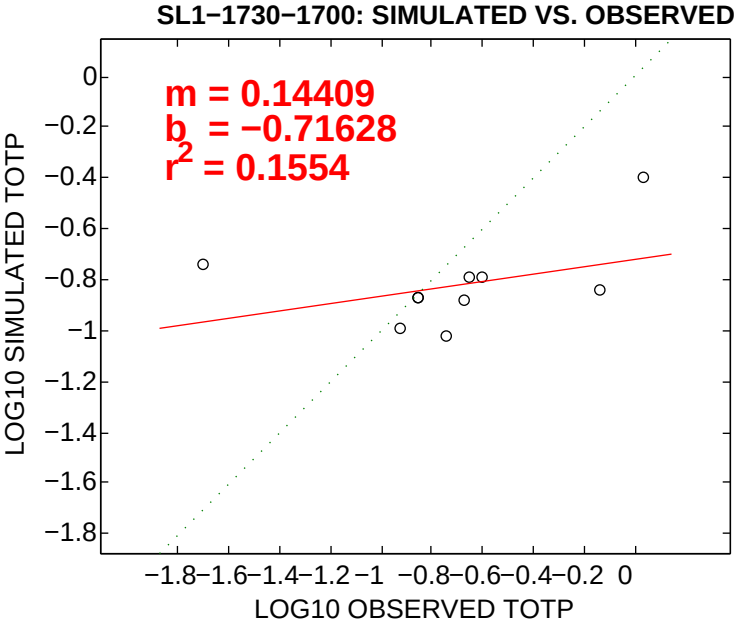


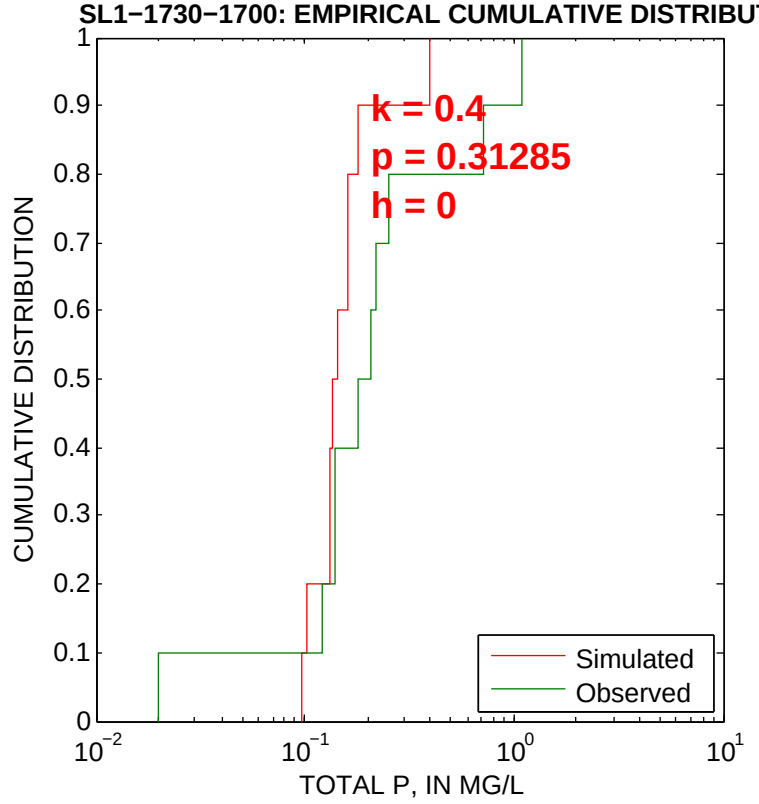












DATA SELECTION

scenario: P620171001WQ | file: TOTP.calib

plot: TOTP - total phosphorus

Dates: 1/1/1985 – 12/31/201

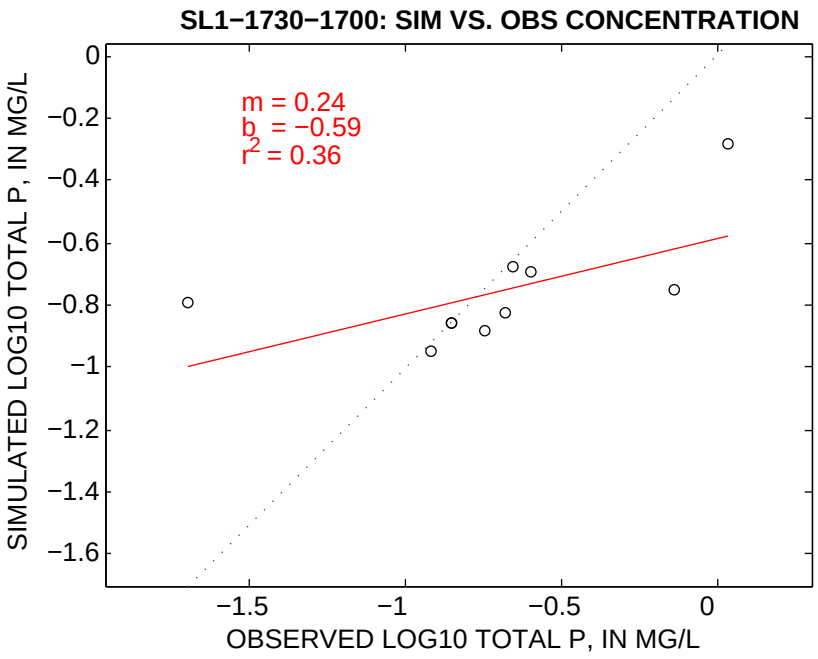
Drive | Directory: model | Observed: OBS20161101

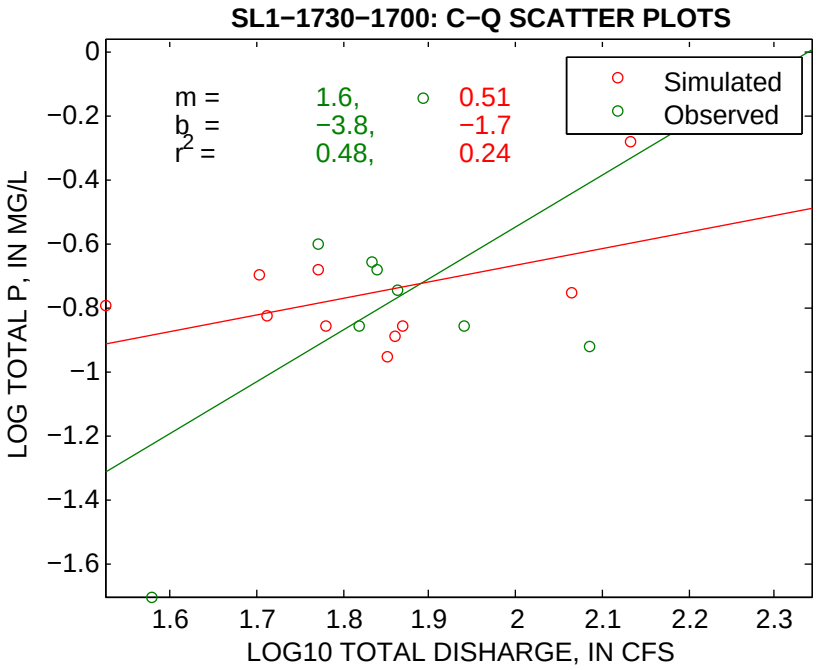
STATISTICS

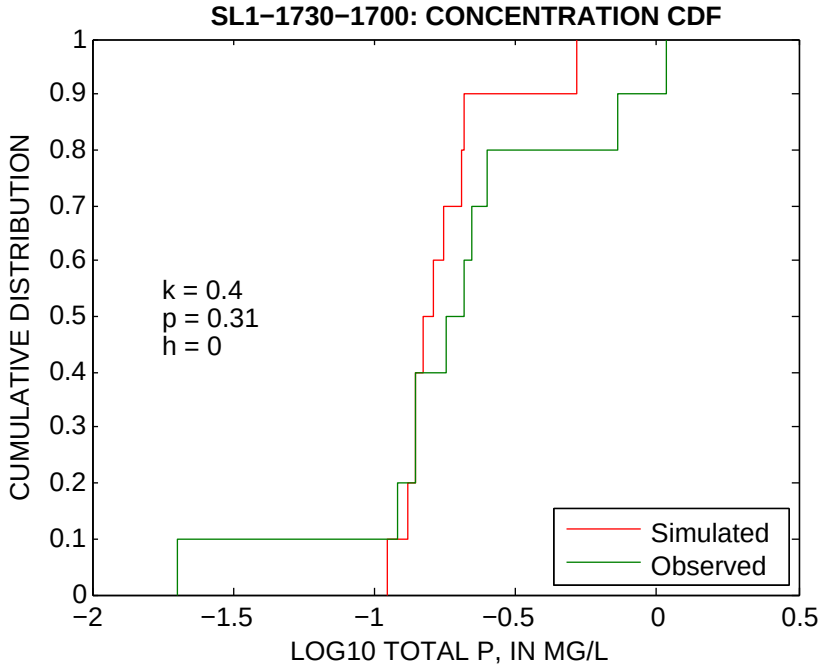
	n	10	10
		observe	simulate
min		0.02	0.095743
		-1.69897	-1.01889
mean		0.308	0.164823
		-0.711892	-0.81886
media		0.195	0.14039
		-0.711254	-0.852853
max		1.08	0.39722
		0.0334238	-0.400969
varian		0.108618	0.00736469
		0.217229	0.0290227
JB		0.015442	0.001
		0.5	0.015181
		ra	log
%		-46.4859	15.0259
err.va		0.0942294	0.196364
rel.std.err		0.867532	0.90395
mod.eff		0.132468	0.0960497

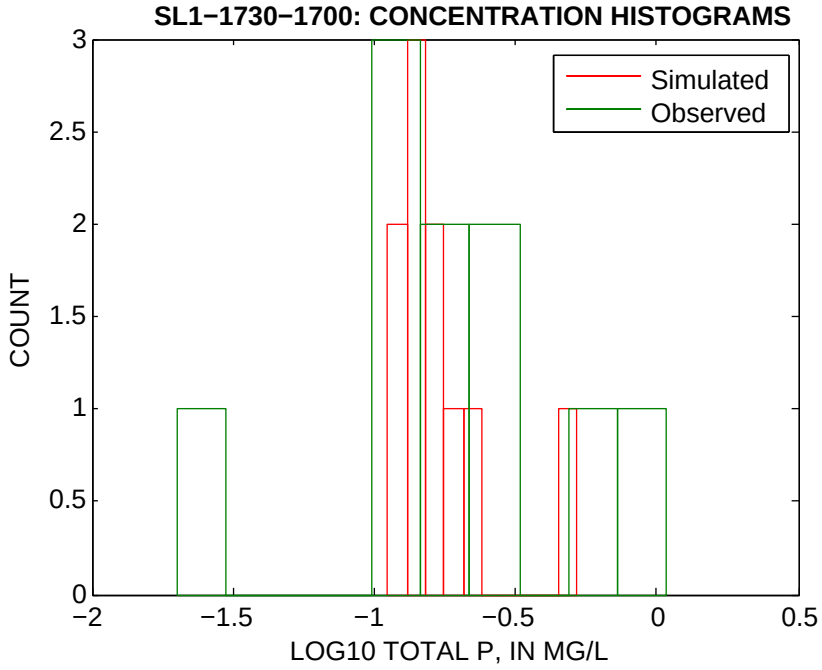
VERSION

ALL DATA
LOG10

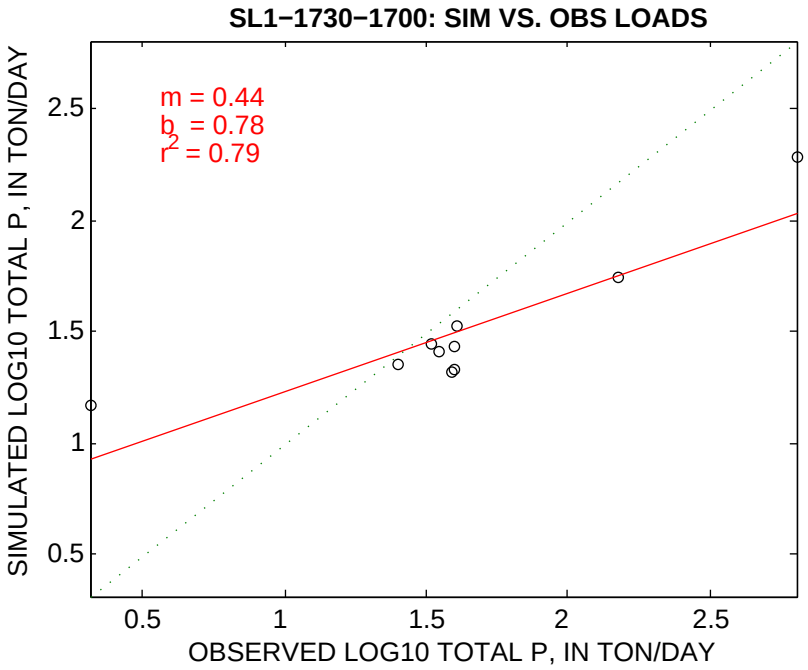


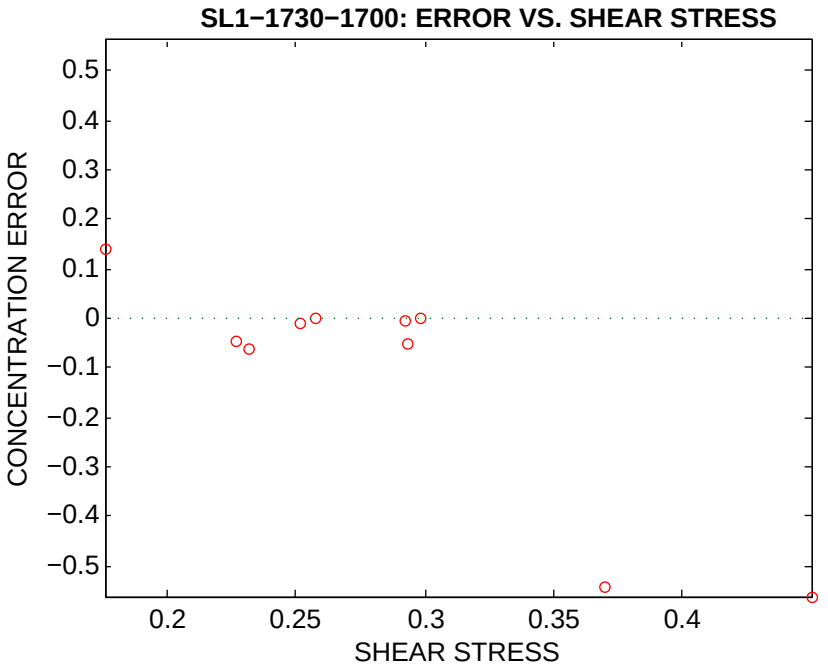


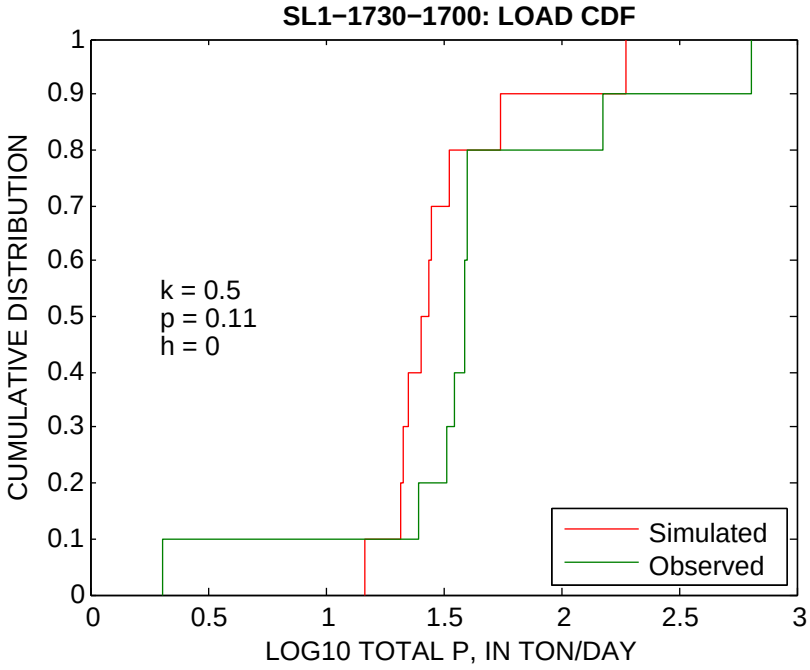


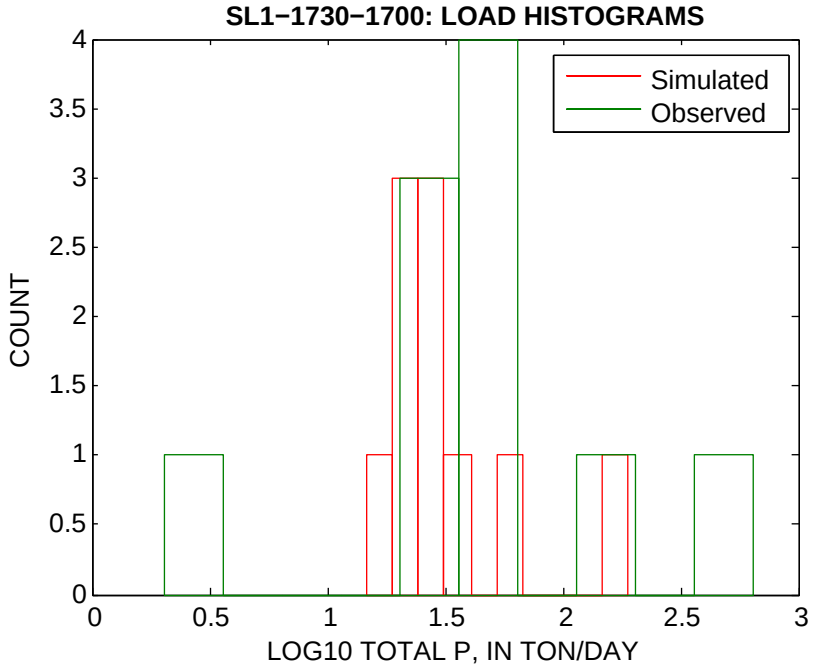


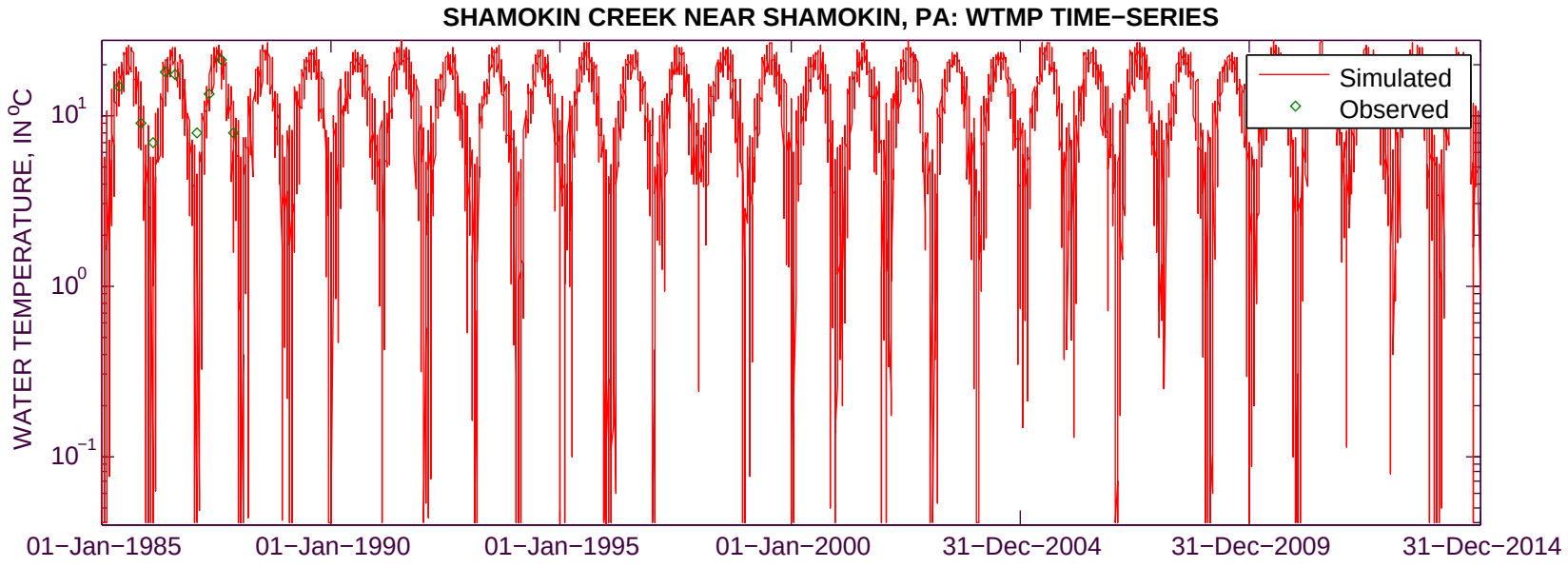
LOAD DATA
LOG10

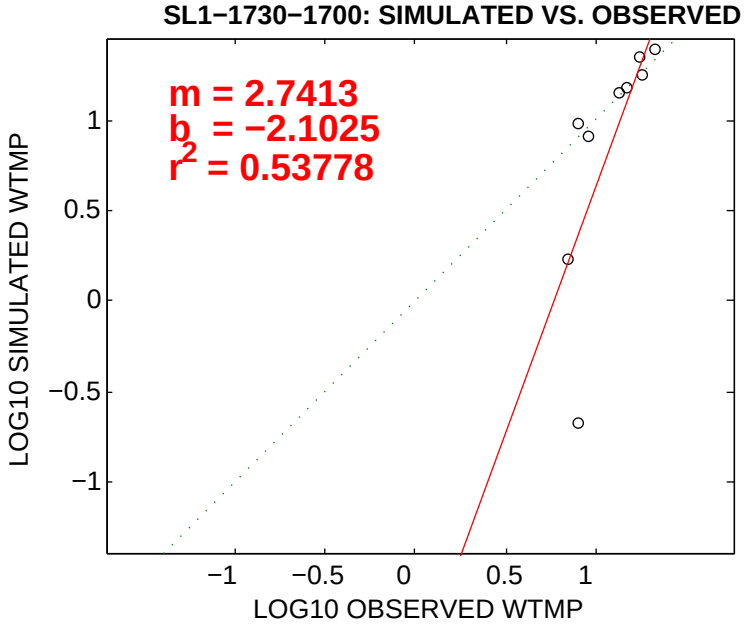


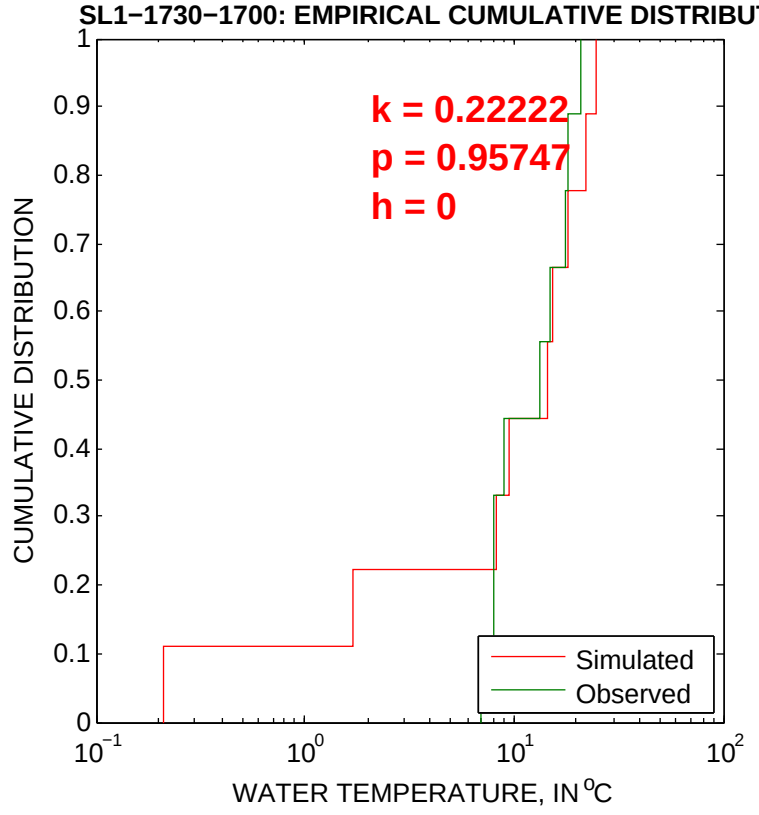












DATA SELECTION

scenario	file
P620171001WQ	WTMP.calib

plot: WTMP - water tempera...

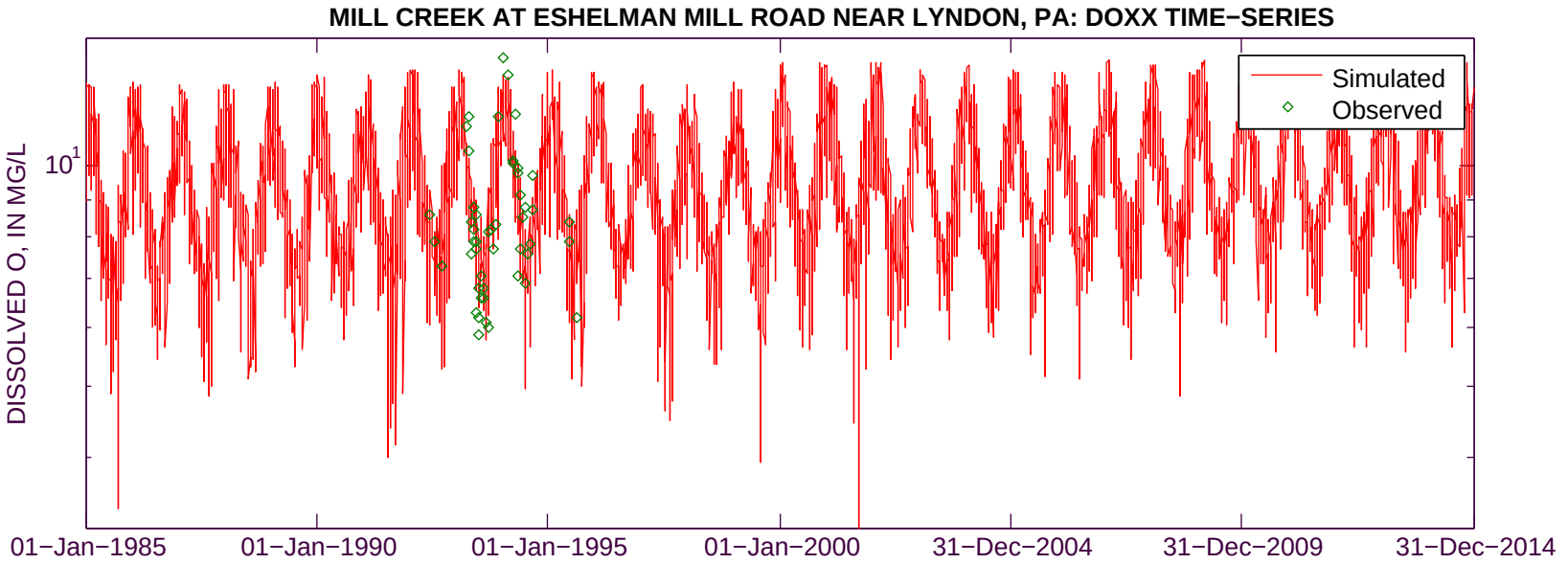
Dates 1/1/1985 12/31/201

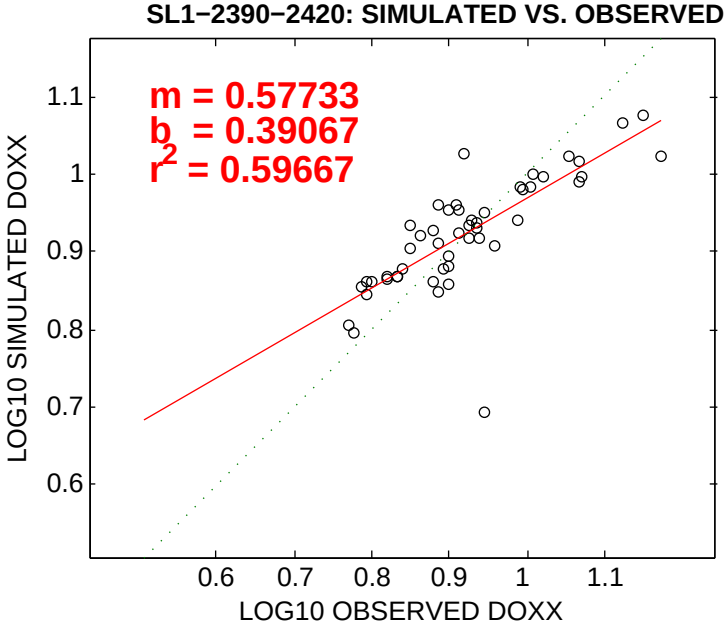
Drive	Directory	Observed
N/A	model	OBS20161101

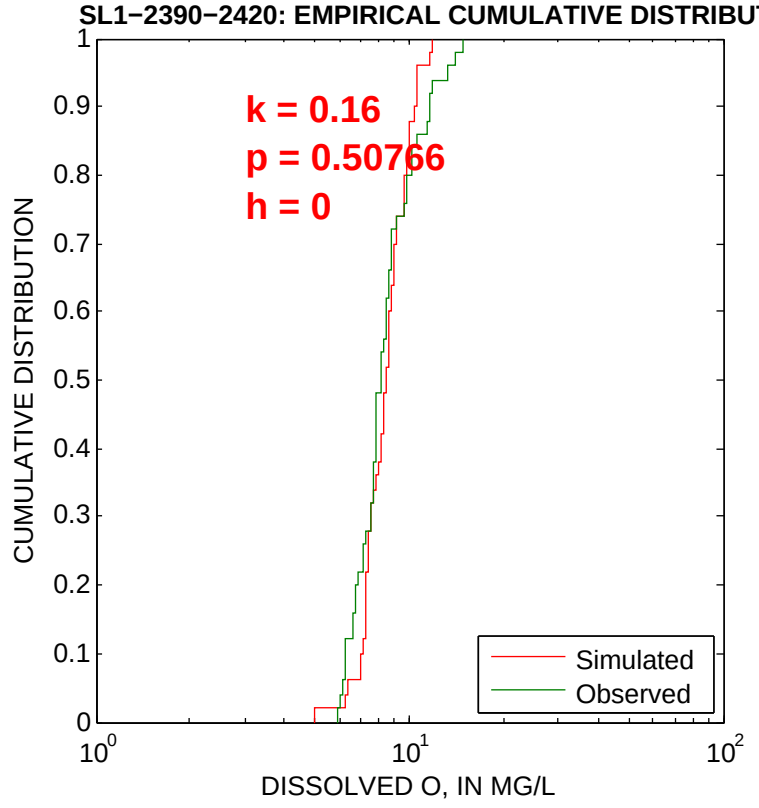
STATISTICS

	n	9	9
		observe	simulate
min		7	0.2087
		0.845098	-0.680478
mean		13	12.6126
		1.08139	0.861895
media		13.5	14.319
		1.13033	1.15591
max		21	24.431
		1.32222	1.38794
varian		26.9375	71.3523
		0.0326637	0.45642
JB		0.32684	0.5
		0.234516	0.018487
		ra	log
%		-2.97966	-20.2972
err.va		15.649	0.364201
rel.std.err		0.580936	11.15
mod.eff		0.419064	-10.15

VERSION 2.1







DATA SELECTION

scenario	file
P620171001WQ	DOXX.calib

plot: DOXX - dissolved oxygen

Dates: 1/1/1985 – 12/31/201

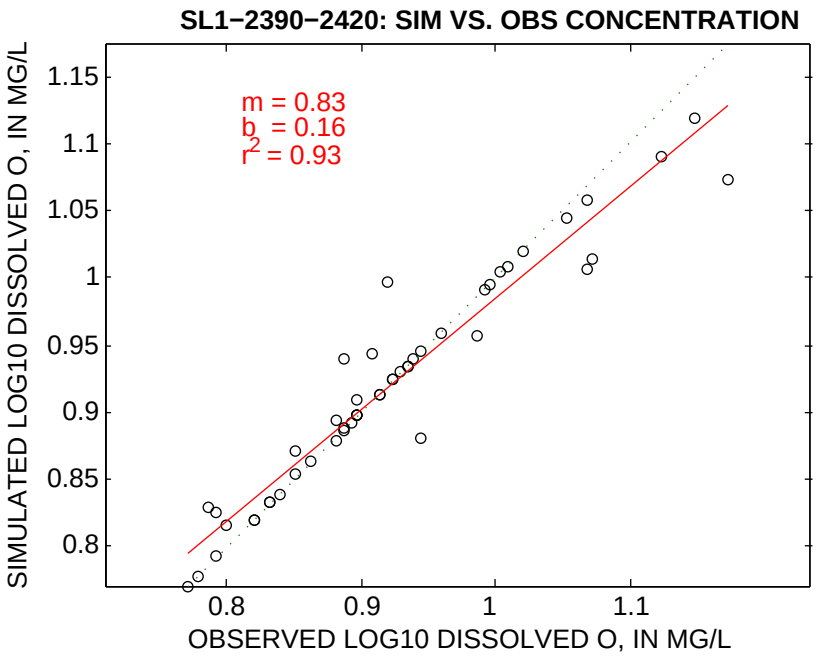
Drive	Directory	Observed
N/A	model	OBS20161101

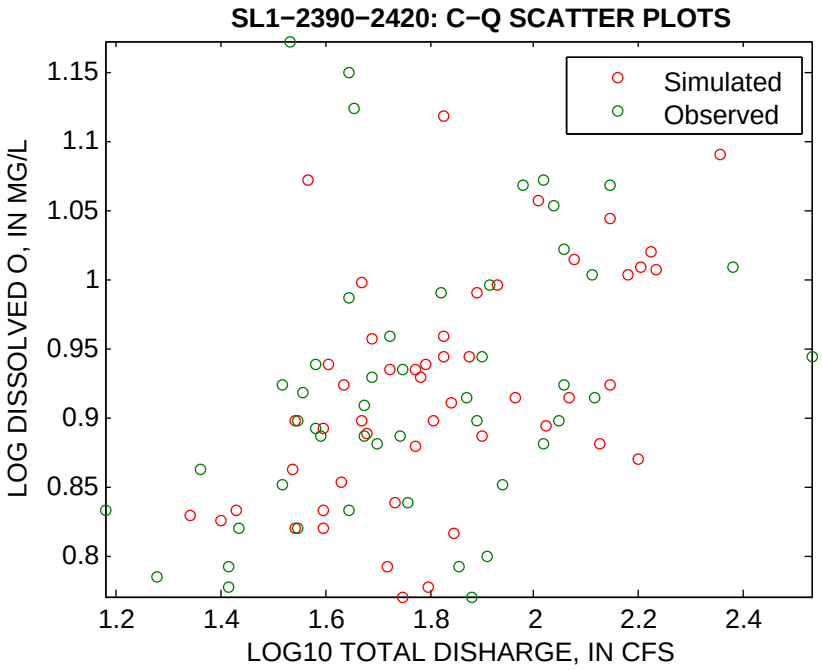
STATISTICS

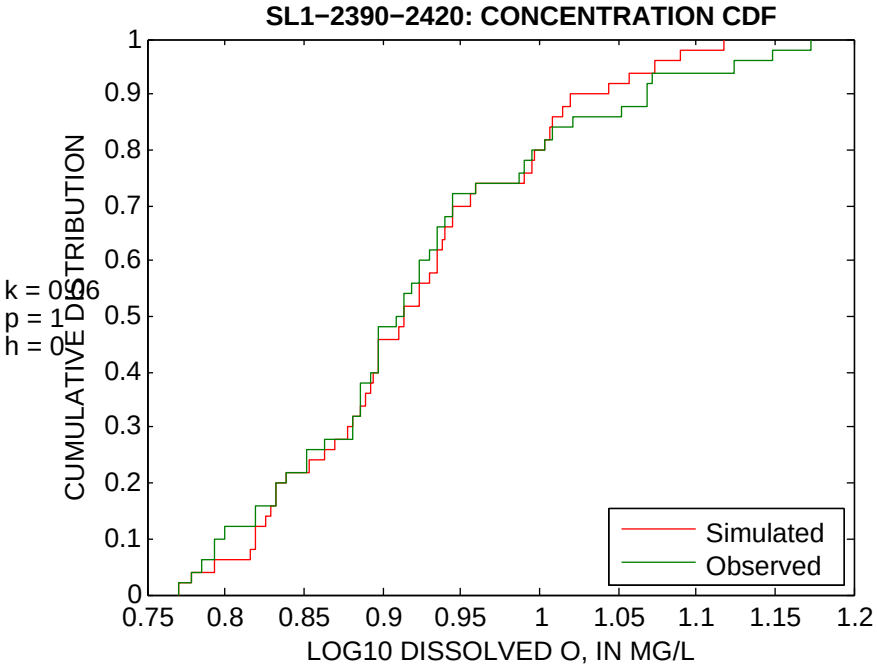
	n	50	50
		observe	simulate
min		5.9	4.9478
		0.770852	0.694412
mean		8.586	8.4953
		0.92272	0.923383
media		8.15	8.4427
		0.911149	0.926479
max		14.9	11.929
		1.17319	1.0766
varian		4.29225	1.93164
		0.00935568	0.00522628
JB		0.006737	0.5
		0.077574	0.198321
		ra	log
%		-1.05642	0.0719193
err.va		1.55707	0.00377975
rel.std.err		0.362762	0.404006
mod.eff		0.637238	0.595994

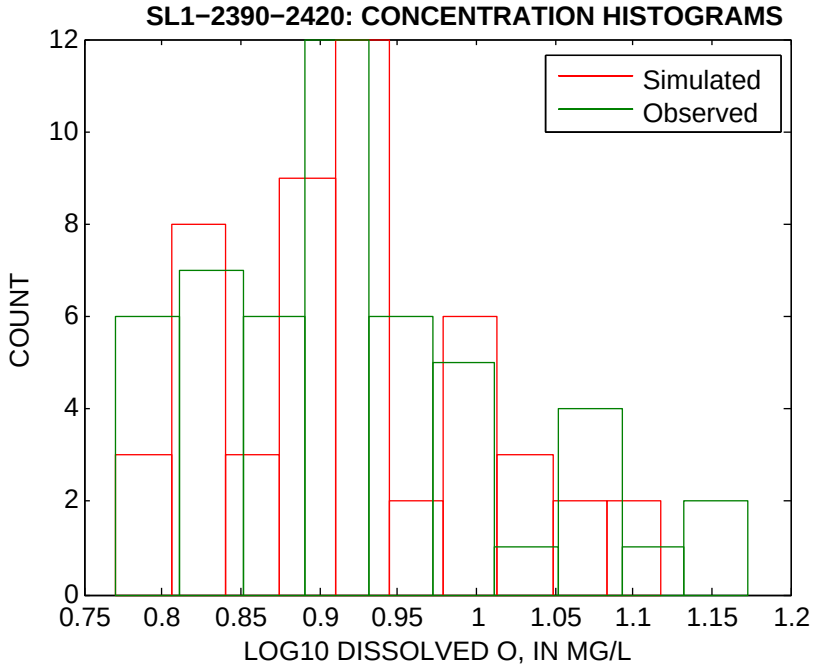
VERSION 2.1

ALL DATA
LOG10

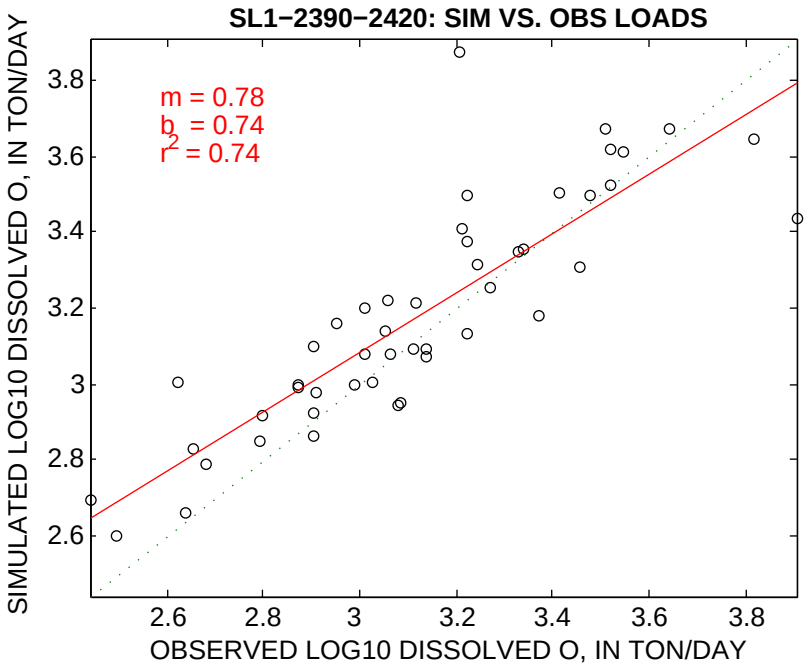


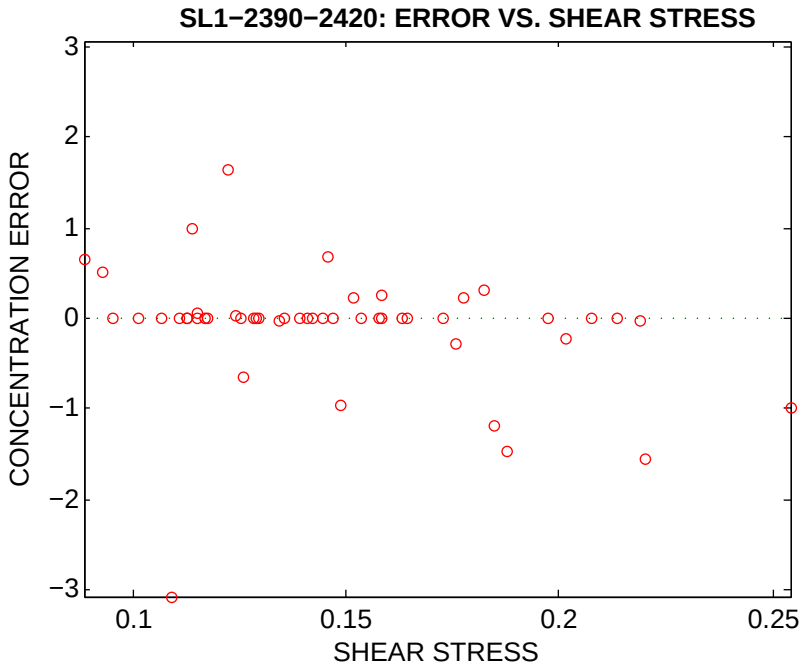


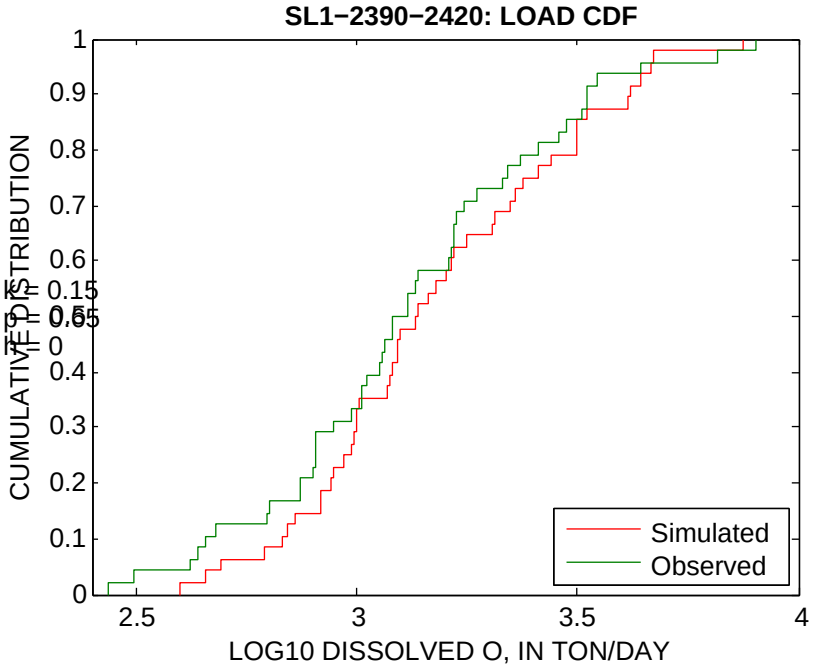


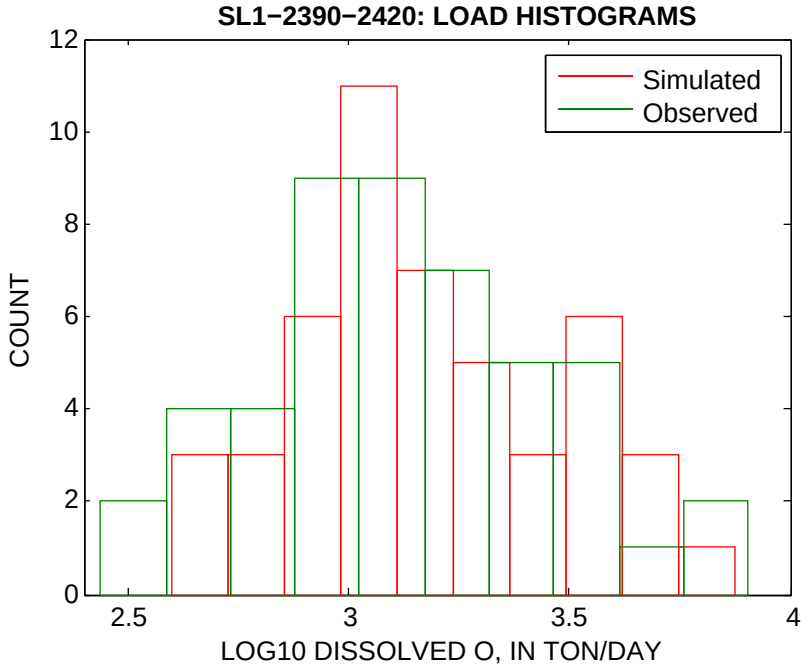


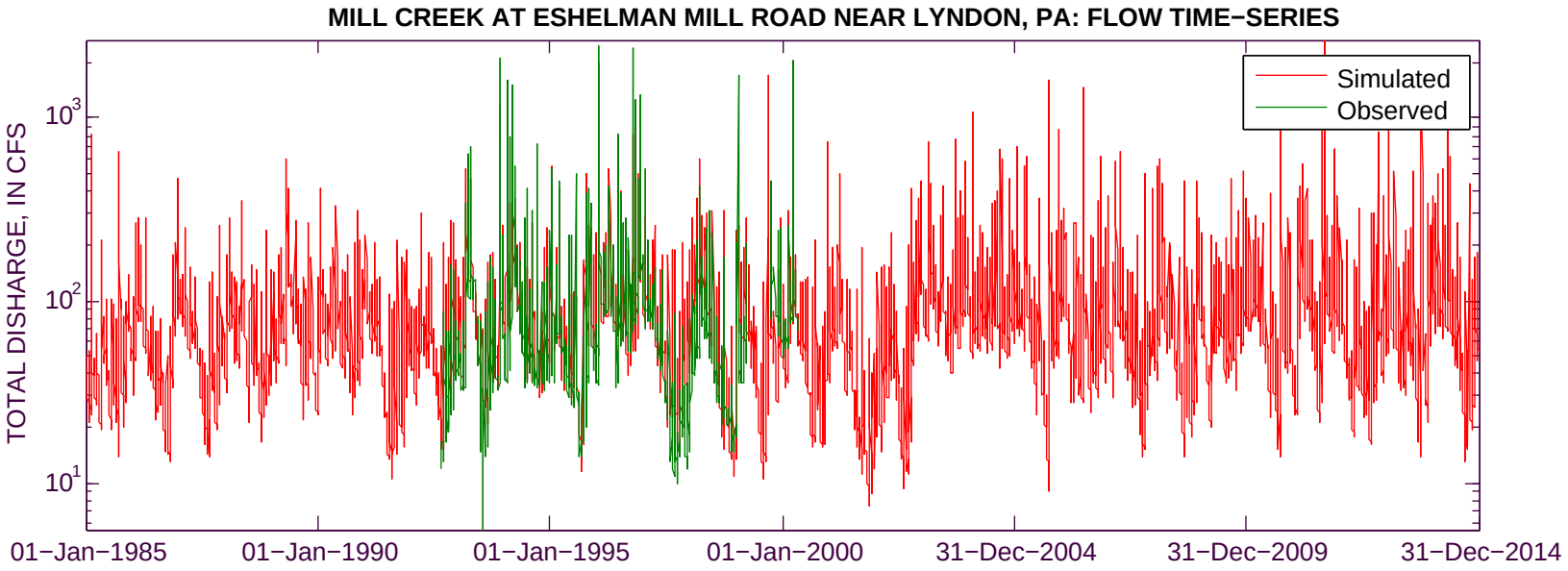
LOAD DATA
LOG10

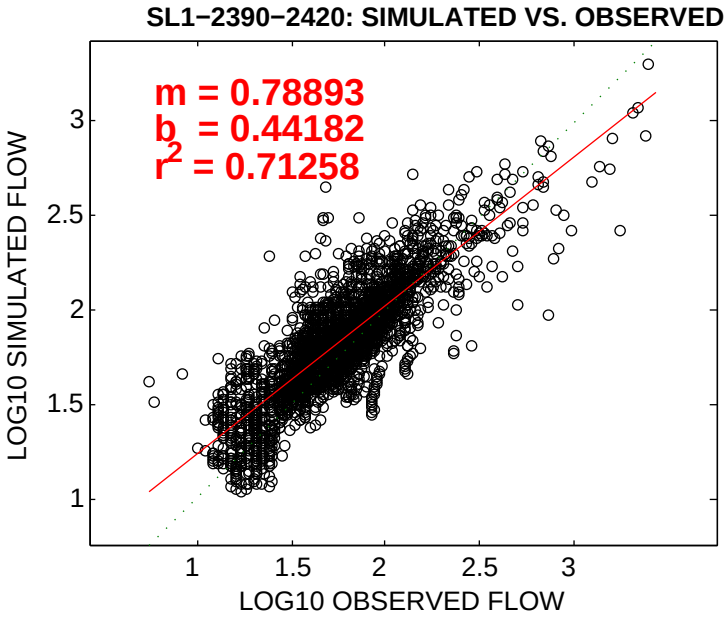


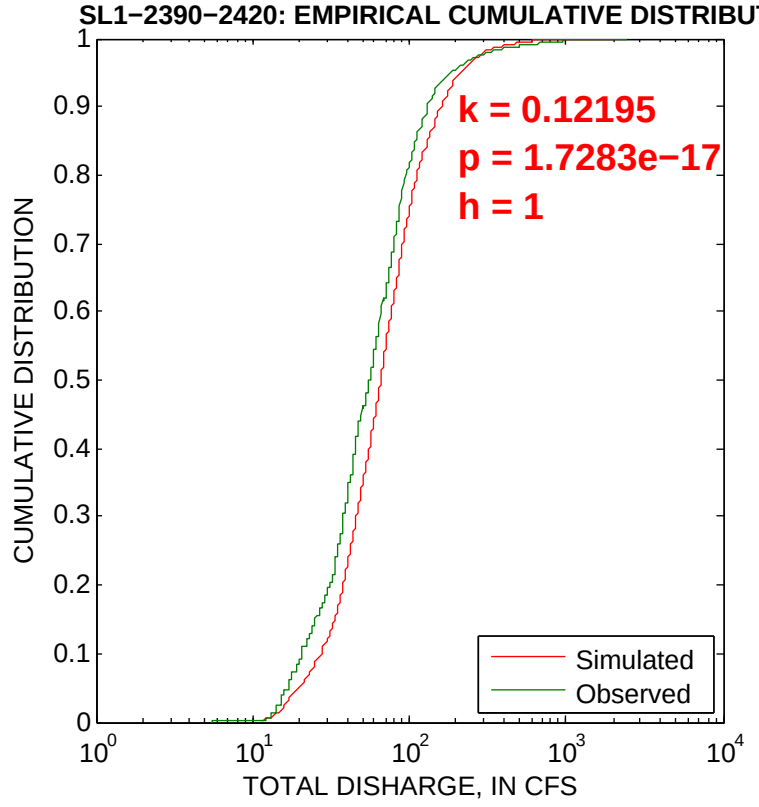












DATA SELECTION

scenario	file
P620171001WQ	FLOW.calib

plot: FLOW - total discharge

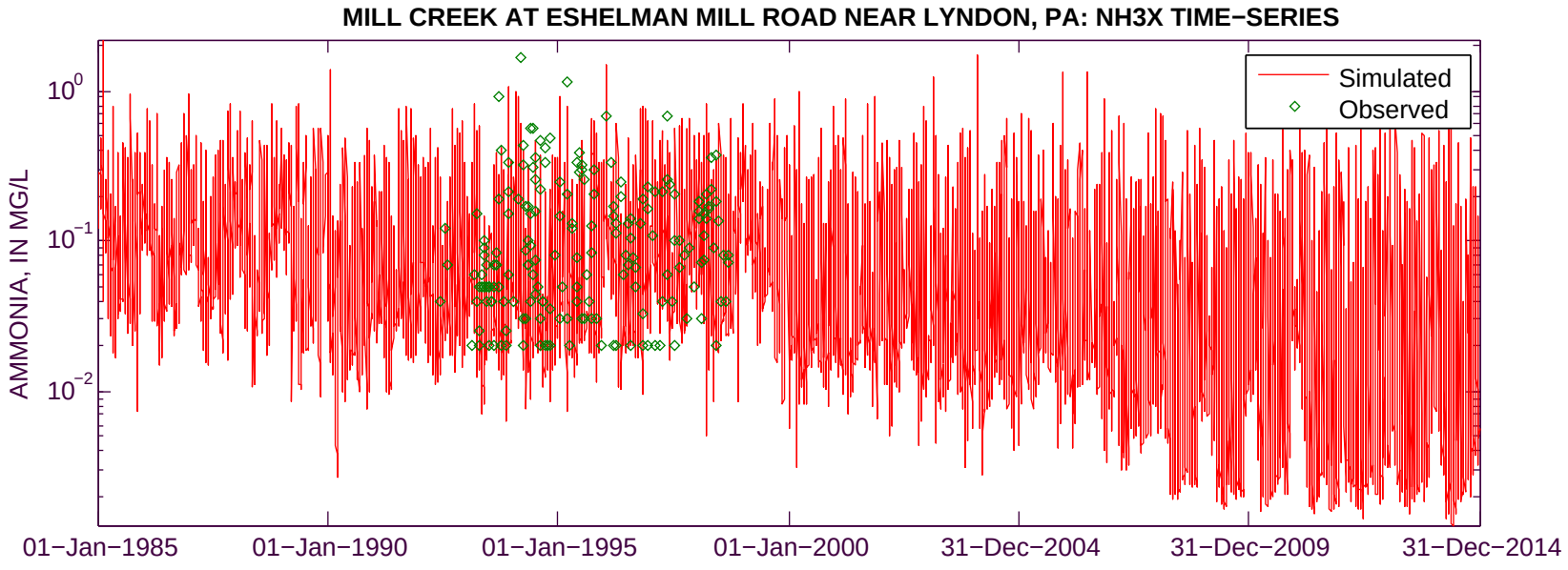
Dates 1/1/1985 12/31/201

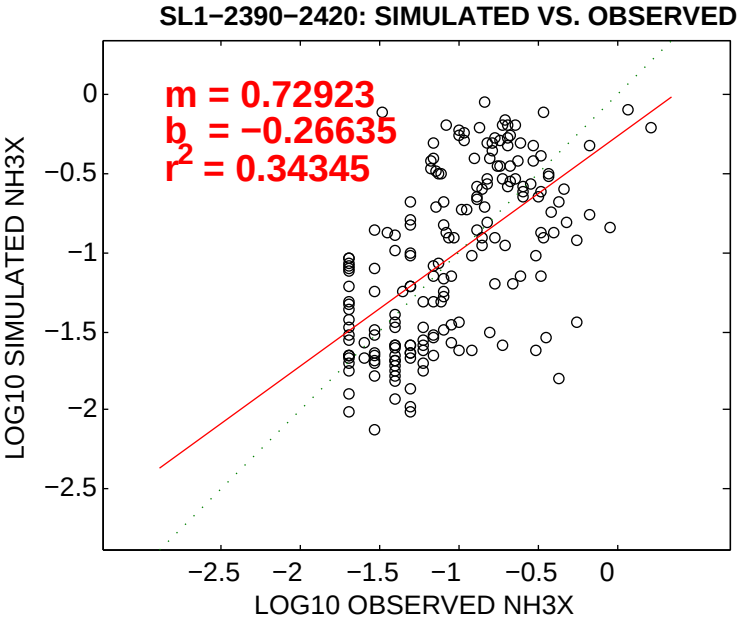
Drive	Directory	Observed
N/A	model	OBS20161101

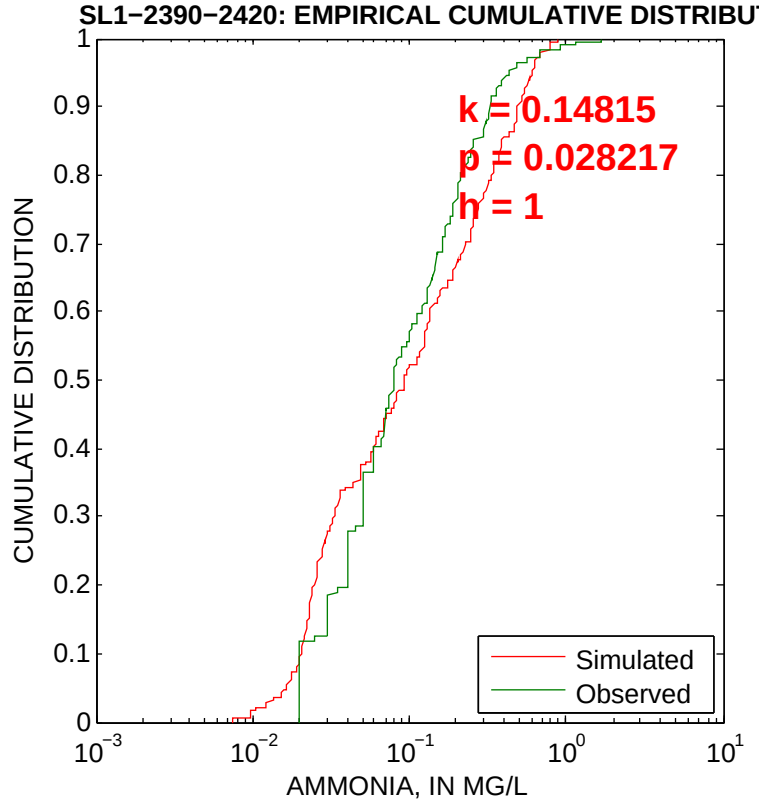
STATISTICS

	observe	simulate
n	2624	2624
min	5.6	11.014
	0.748188	1.04195
mean	80.0232	86.5248
	1.74724	1.82026
media	55	65.9385
	1.74036	1.81914
max	2450	2015
	3.38917	3.30428
varian	17291	7900.81
	0.106639	0.0931437
JB	0.001	0.001
	0.001	0.001
	ra	log
%	8.1246	4.17918
err.va	6290.07	0.0368562
rel.std.err	0.363777	0.345617
mod.eff	0.636223	0.654383

VERSION 2.1







DATA SELECTION

scenario	file
P620171001WQ	NH3X.calib

plot: NH3X - ammonia

Dates: 1/1/1985 – 12/31/201

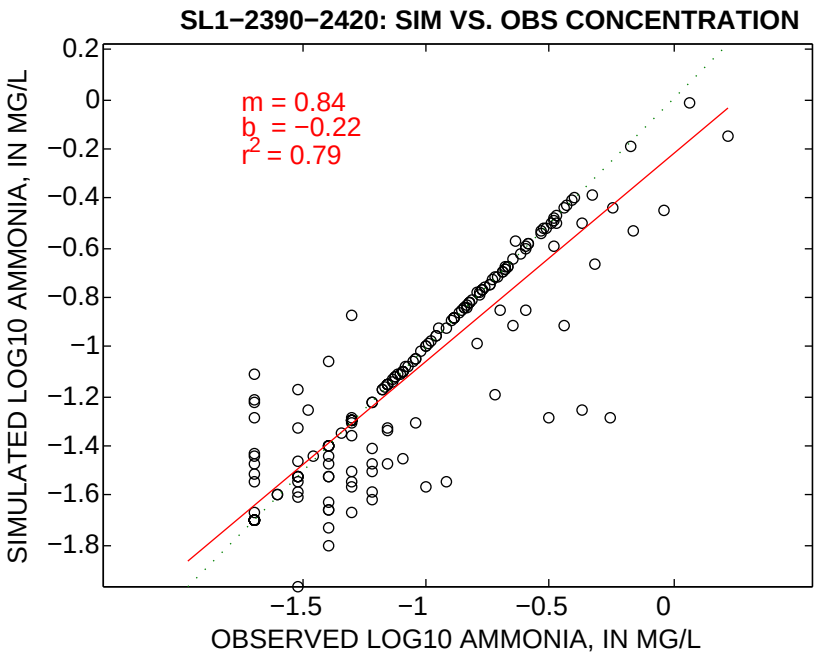
Drive	Directory	Observed
N/A	model	OBS20161101

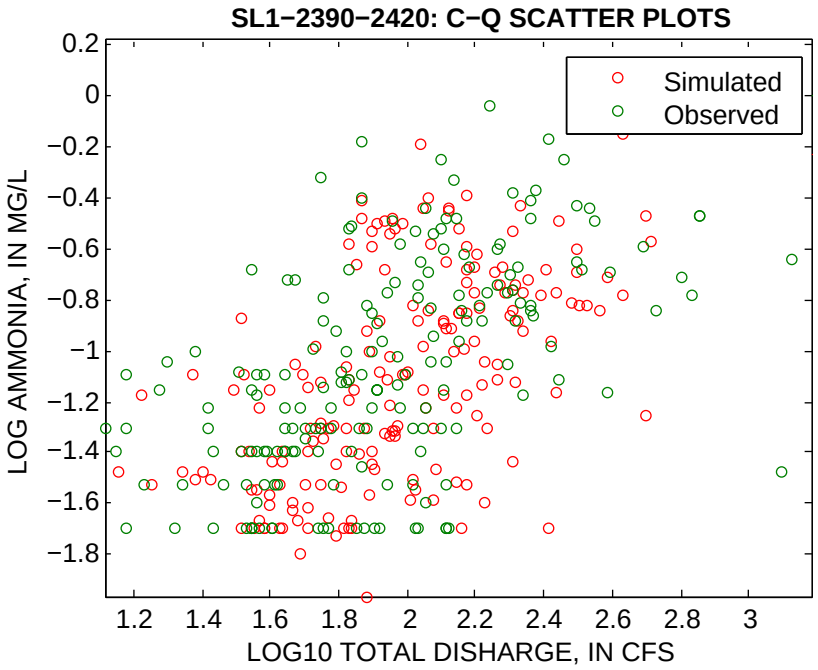
STATISTICS

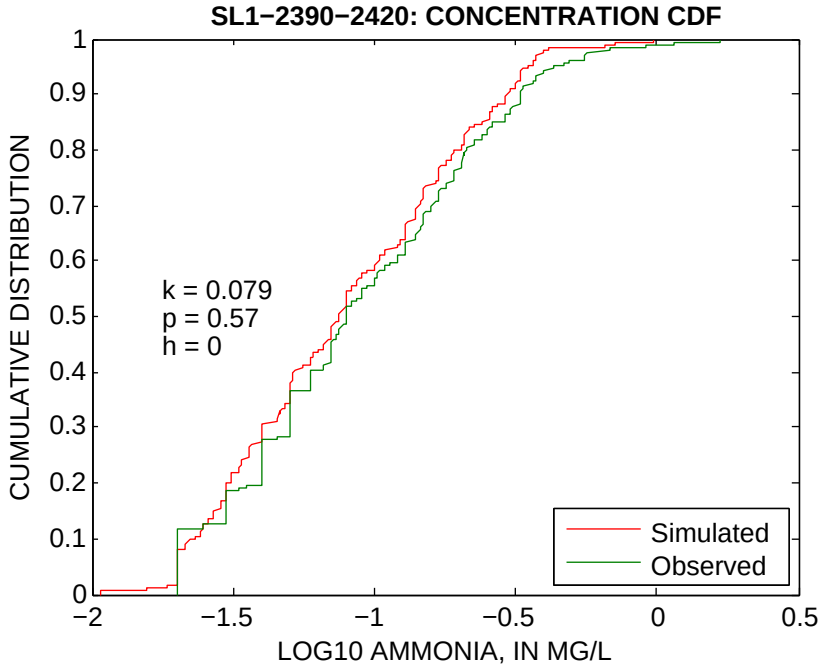
	observe	simulate
n	189	189
min	0.02 -1.69897	0.0074757 -2.12635
mean	0.149075 -1.05046	0.181841 -1.03237
media	0.08 -1.09691	0.093729 -1.02813
max	1.66 0.220108	0.89846 -0.0465013
varian	0.0373749 0.186118	0.0397948 0.288168
JB	0.001 0.053802	0.001 0.009236
	ra	log
%	21.9798	-1.72234
err.va	0.0489619	0.203171
rel.std.err	1.31002	1.09162
mod.eff	-0.310021	-0.0916235

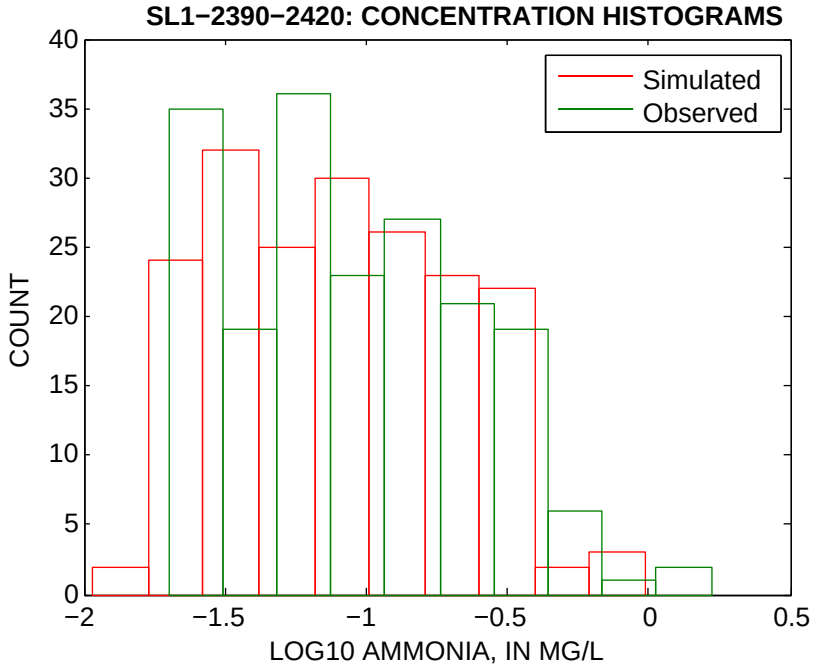
VERSION 2.1

ALL DATA
LOG10

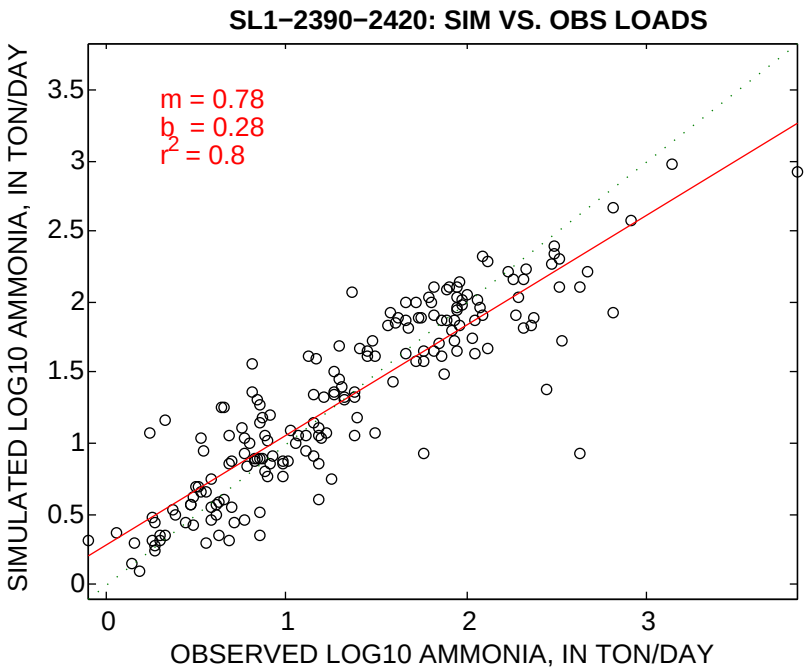


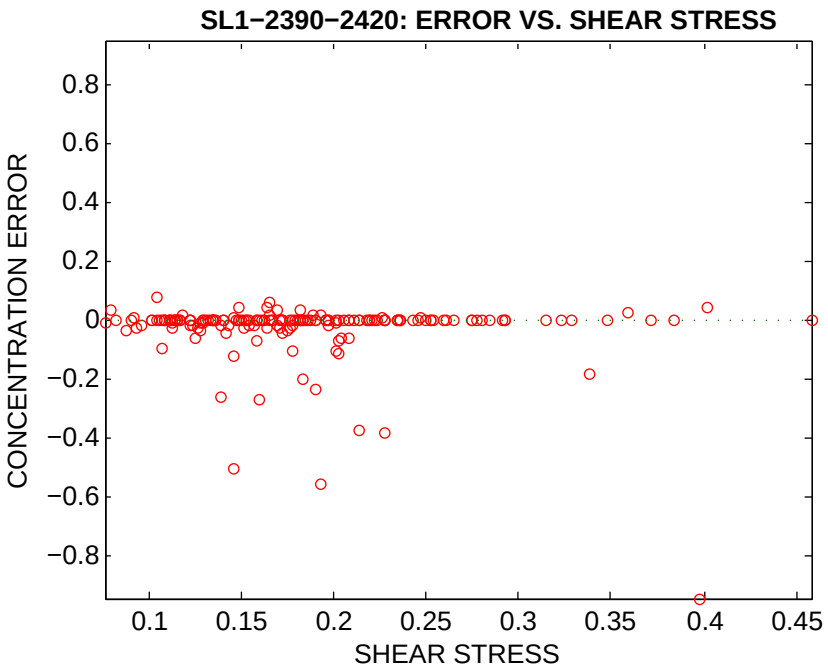


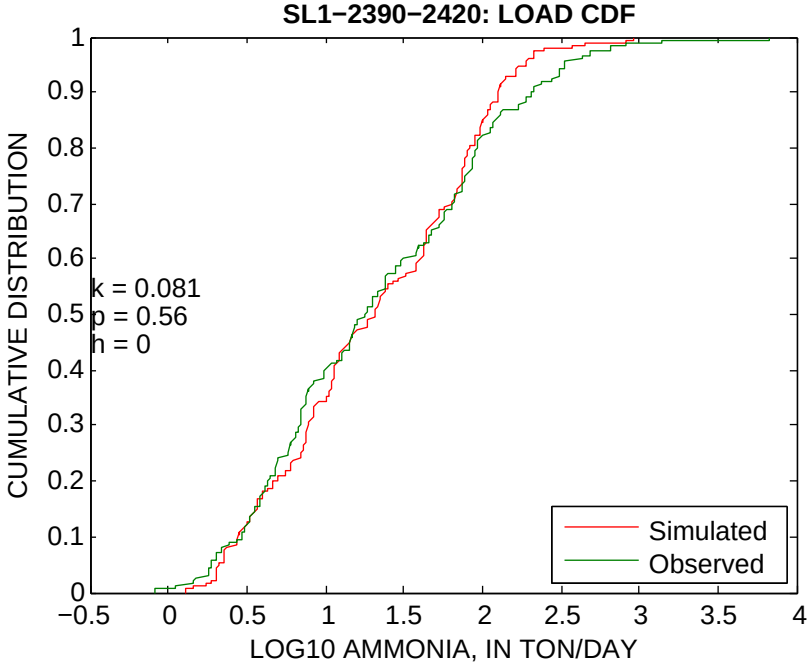


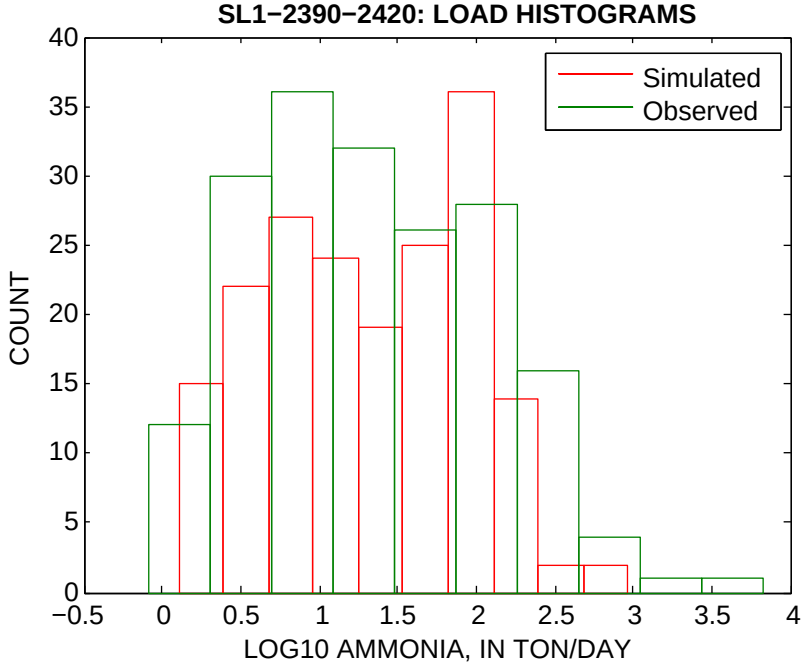


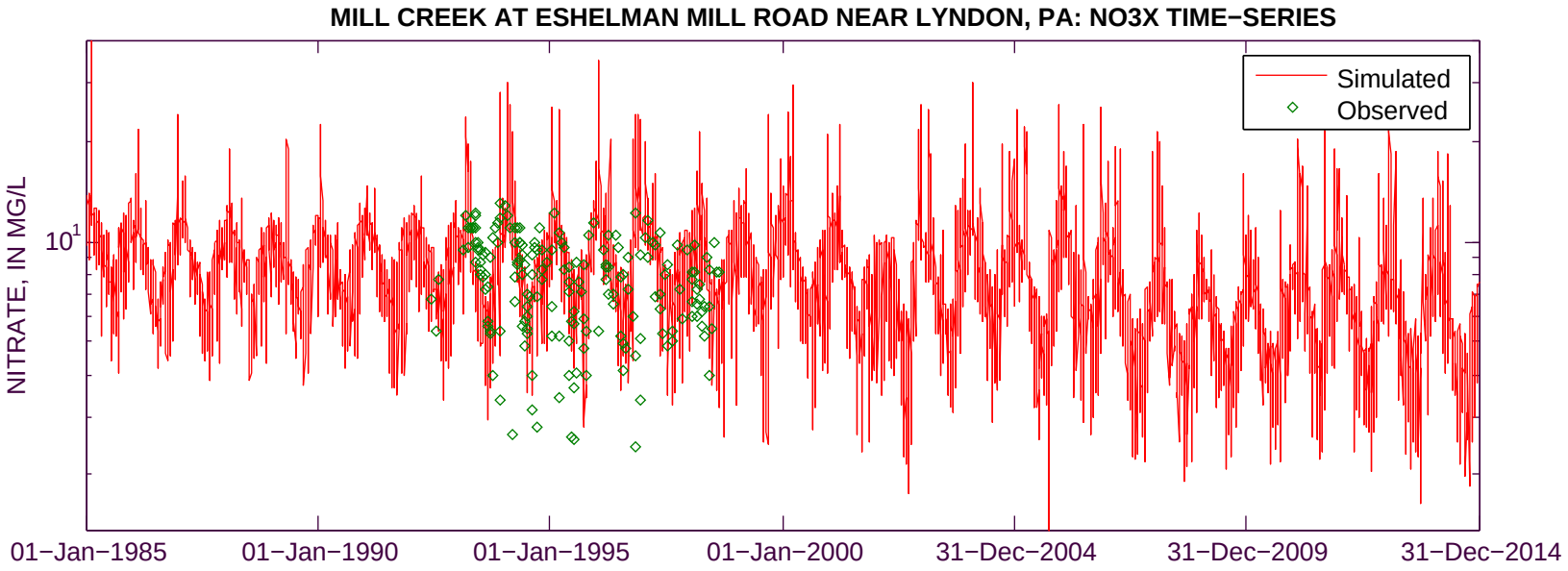
LOAD DATA
LOG10

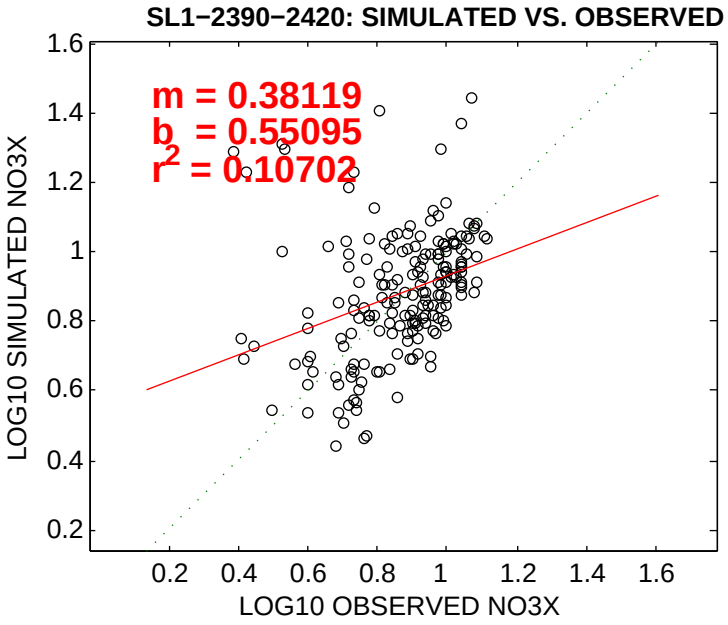


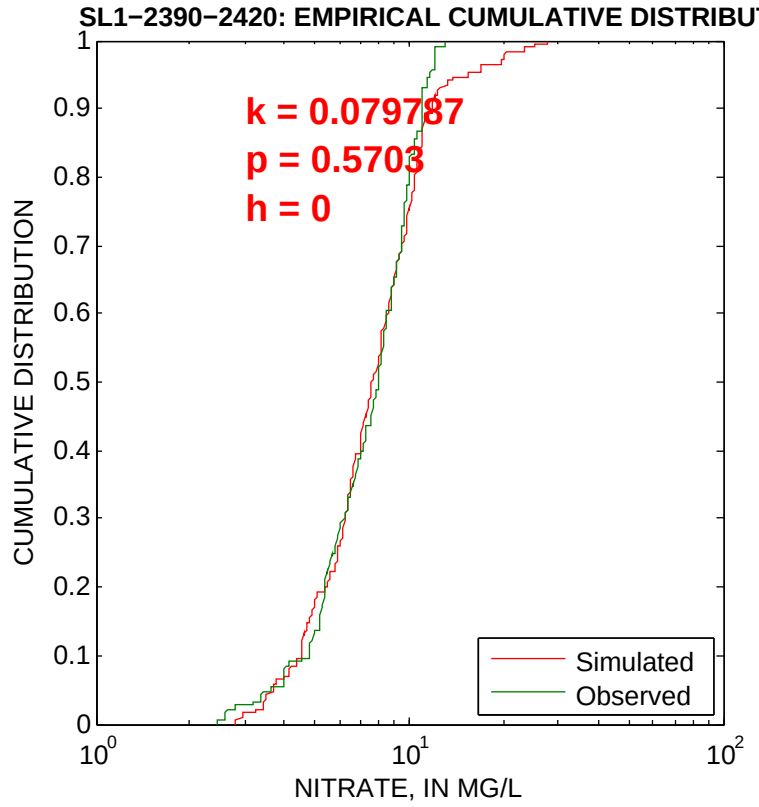












DATA SELECTION

scenario: P620171001WQ; file: NO3X.calib

plot: NO3X - nitrate

Dates: 1/1/1985 – 12/31/201

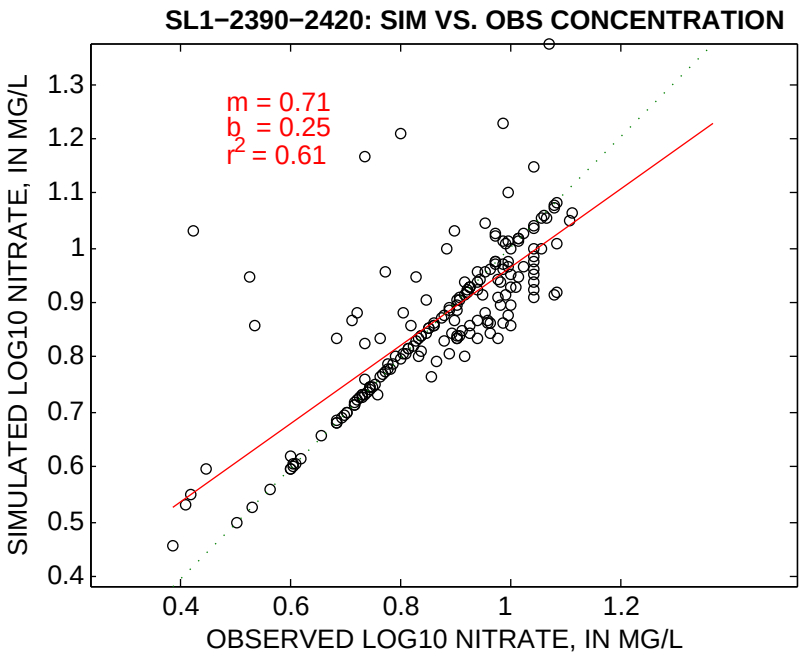
Drive: N/A; Directory: model; Observed: OBS20161101

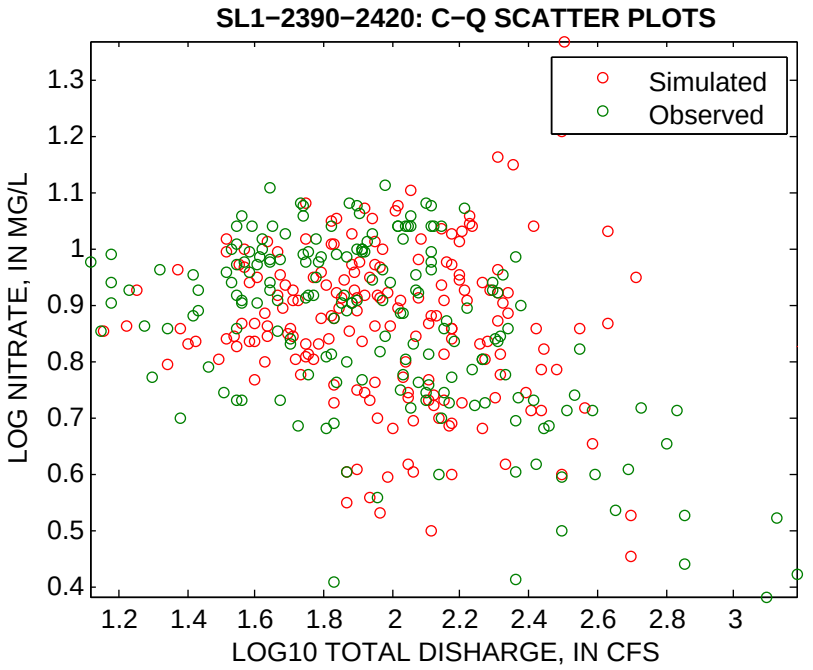
STATISTICS

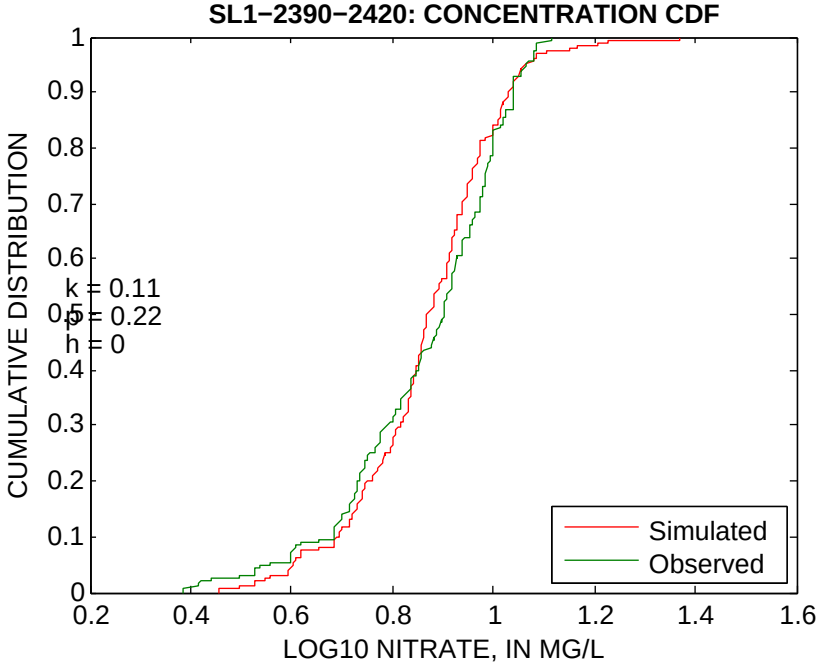
		observe	simulate
n		188	188
min		2.42	2.7731
		0.383815	0.442966
mean		7.76831	8.31424
		0.865118	0.88072
media		7.99	7.62015
		0.902547	0.881961
max		13	27.488
		1.11394	1.43914
varian		5.99853	15.0335
		0.0243766	0.0330985
JB		0.064026	0.001
		0.001564	0.245202
		ra	log
%		7.0277	1.80352
err.va		16.4607	0.0391356
rel.std.err		2.74412	1.60546
mod.eff		-1.74412	-0.605456

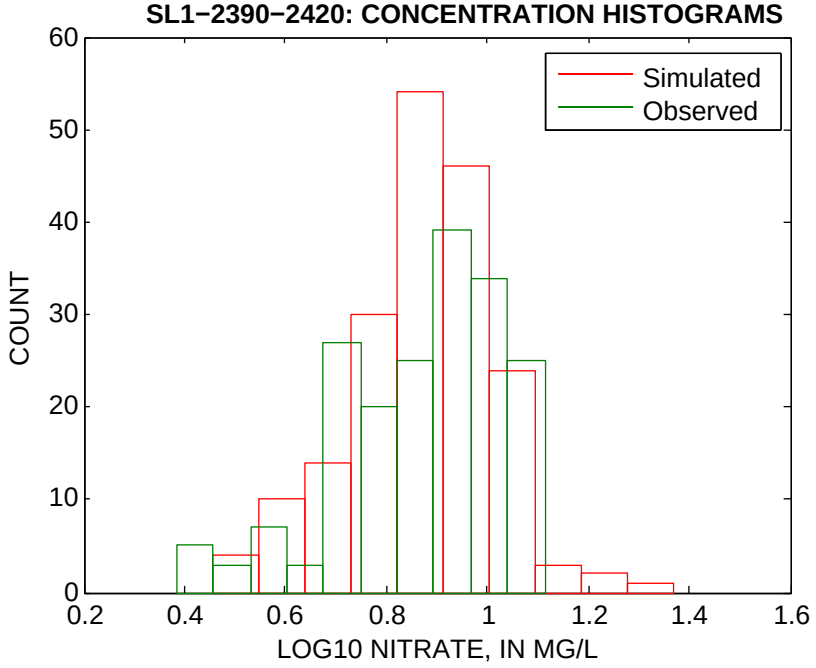
VERSION 2.1

ALL DATA
LOG10

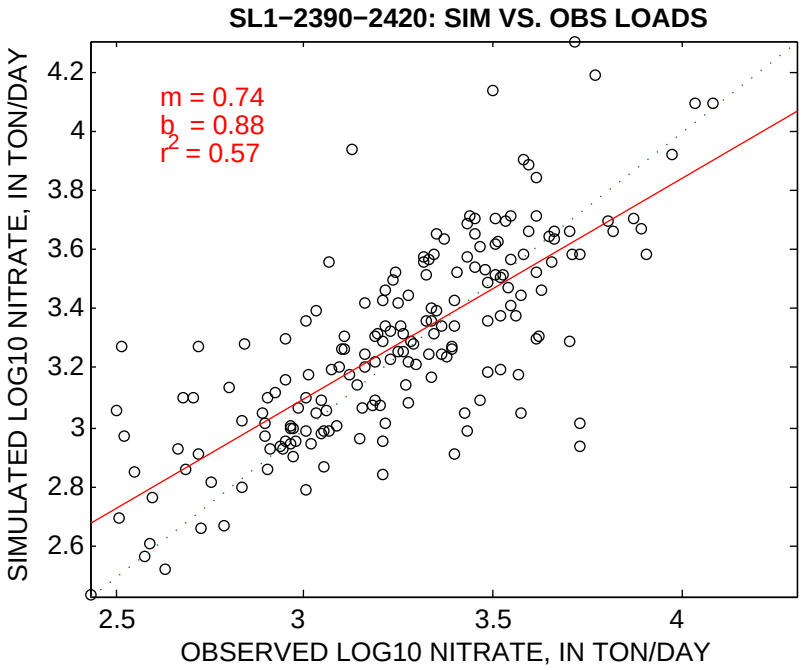


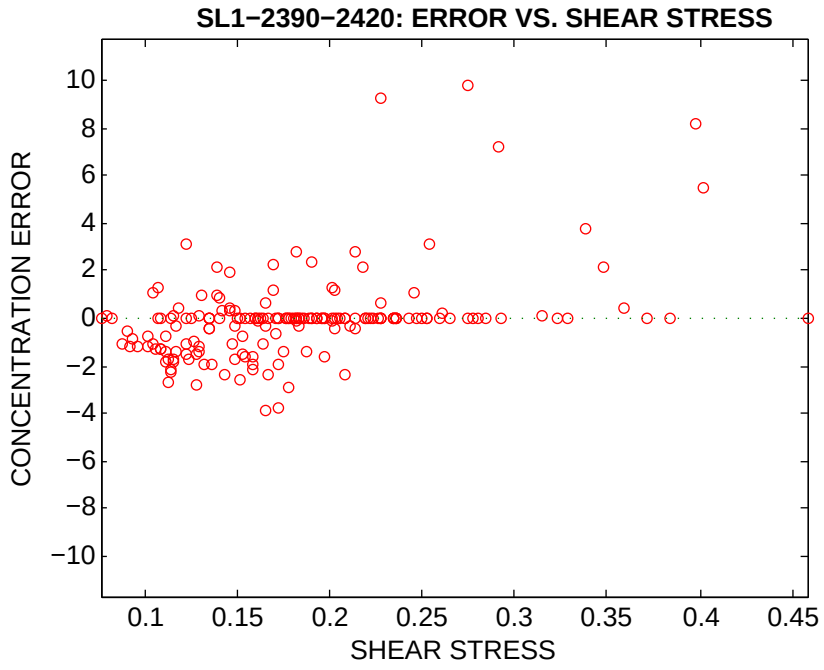


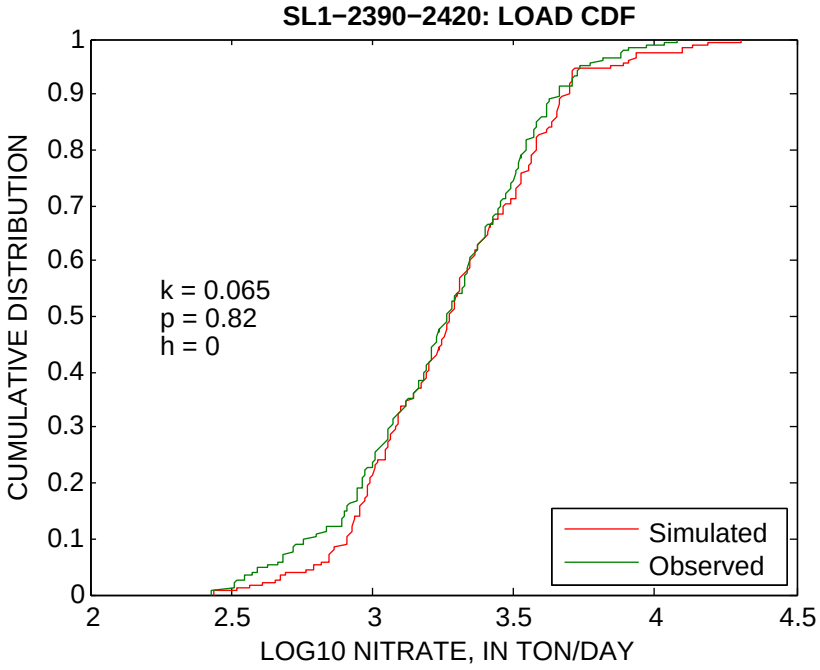


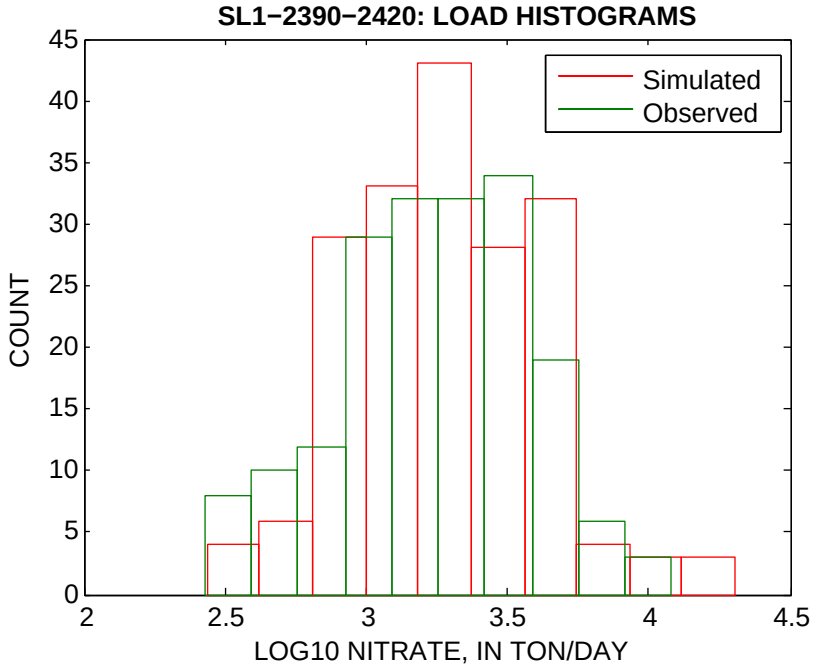


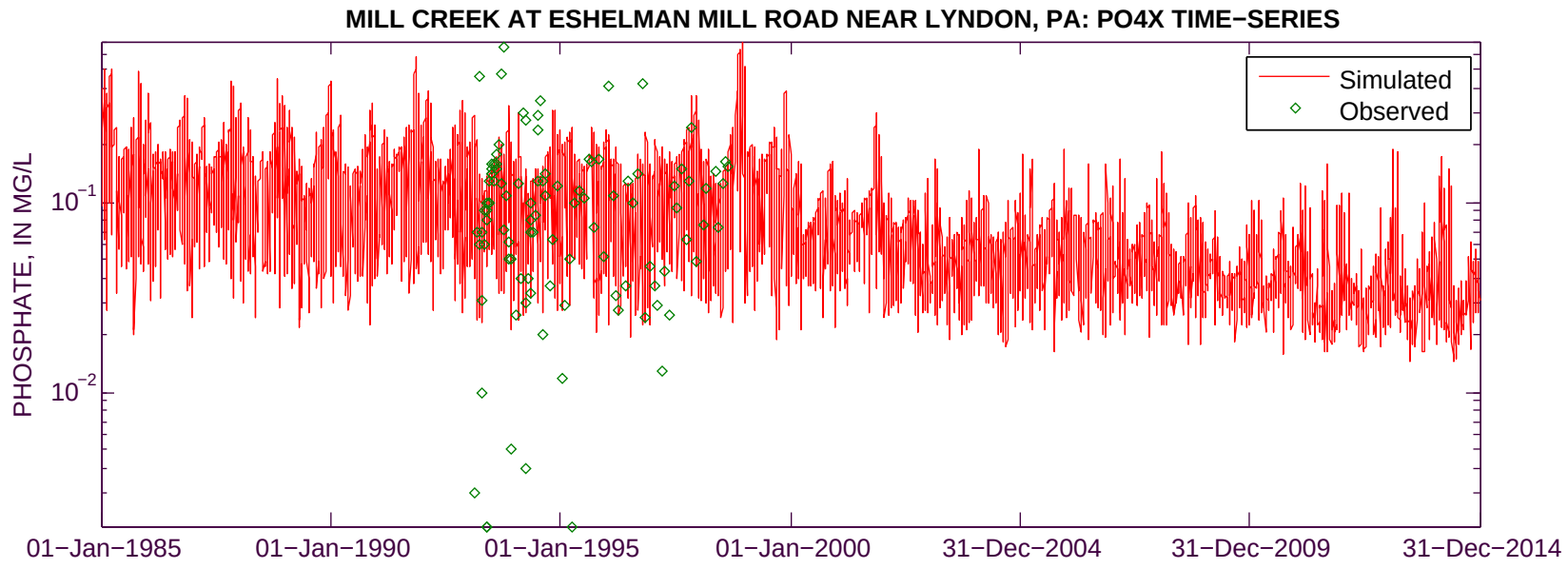
LOAD DATA
LOG10

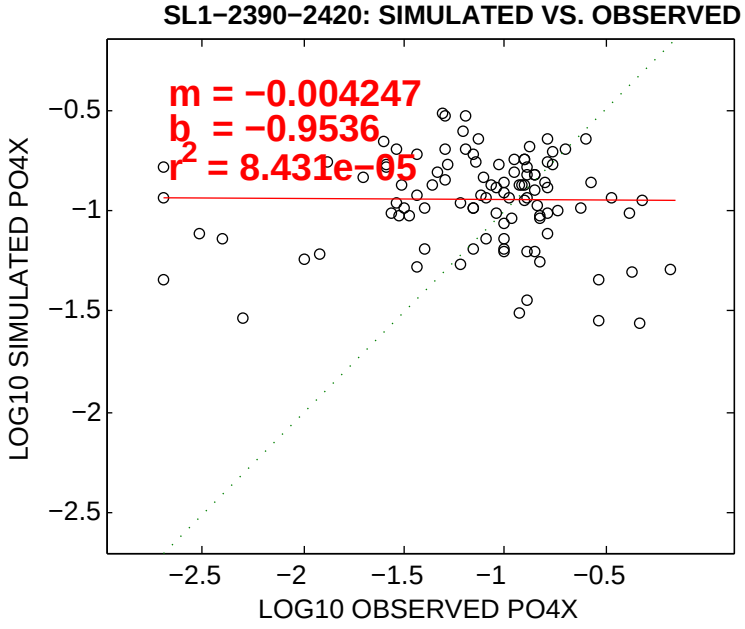


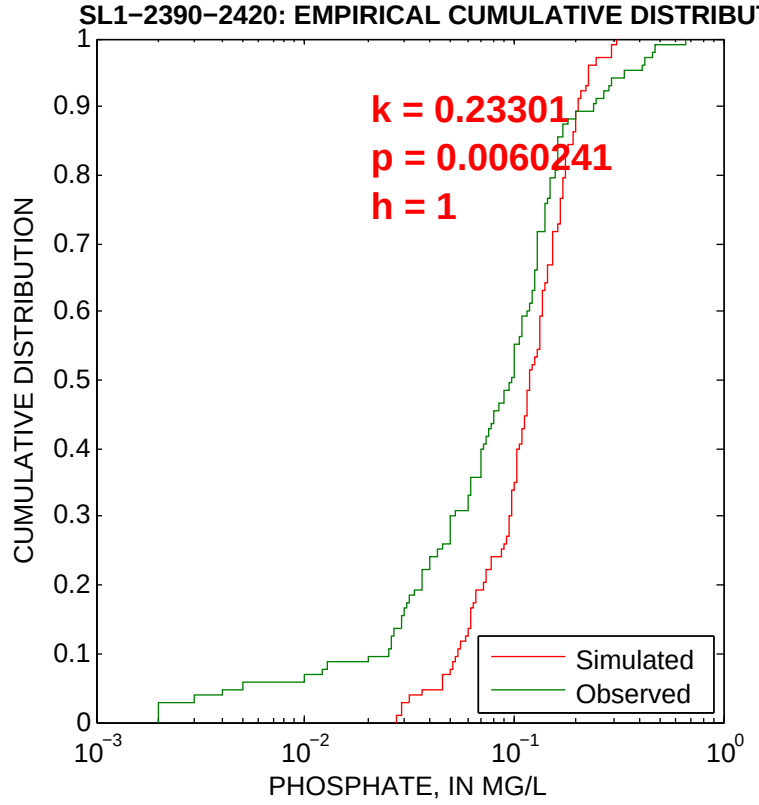












DATA SELECTION

scenario	file
P620171001WQ	PO4X.calib

plot: PO4X - phosphate

Dates: 1/1/1985 – 12/31/201

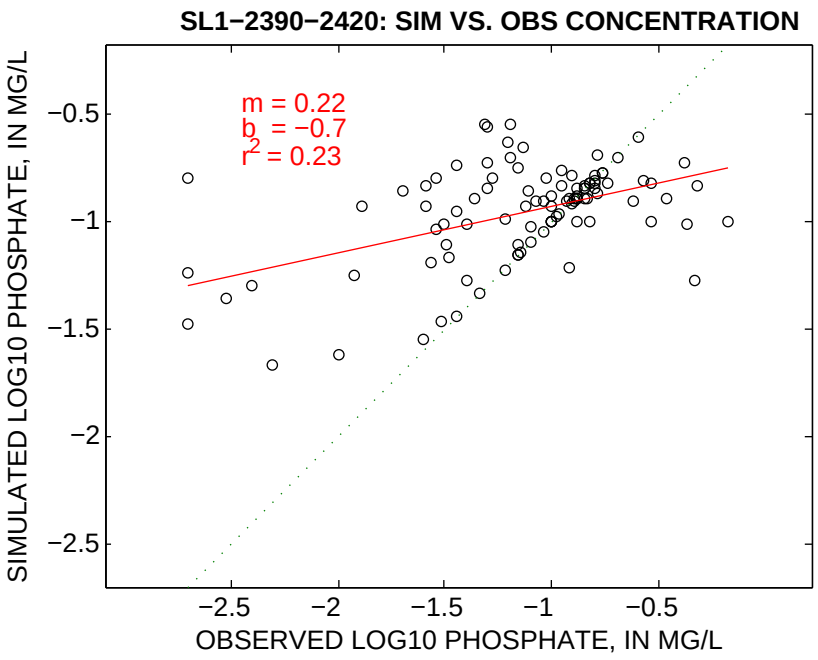
Drive	Directory	Observed
N/A	model	OBS20161101

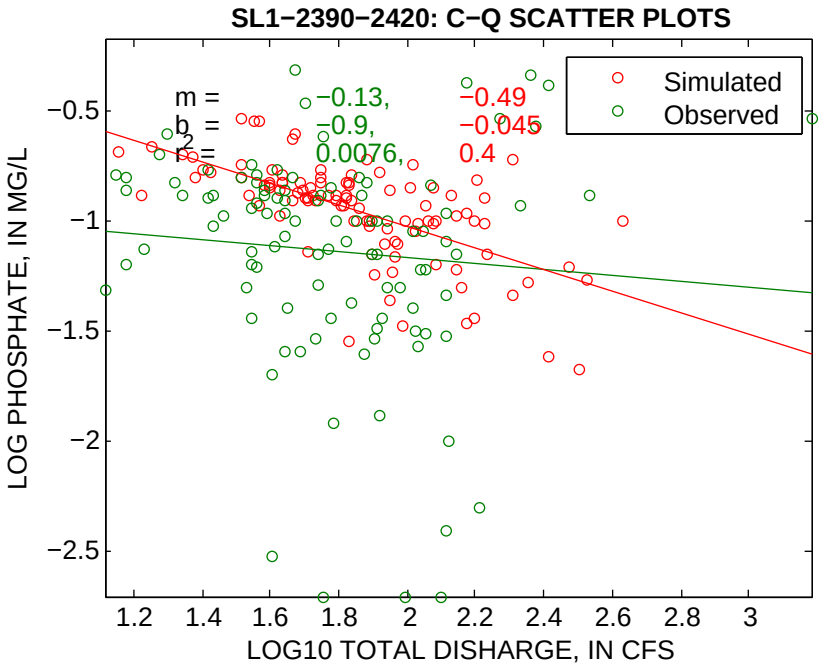
STATISTICS

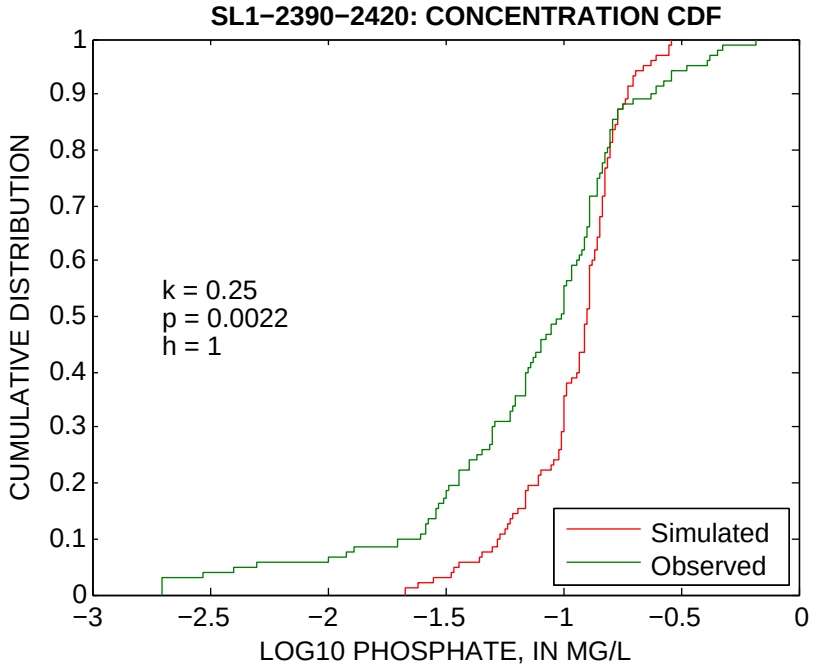
	n	observe	simulate
		103	103
min		0.002	0.027595
		-2.69897	-1.55917
mean		0.11567	0.127353
		-1.13702	-0.948773
media		0.099	0.11856
		-1.00436	-0.926062
max		0.66	0.30656
		-0.180456	-0.513485
varian		0.0120126	0.00360063
		0.246912	0.0528246
JB		0.001	0.027296
		0.001	0.030188
		ra	log
%		10.1004	-16.5564
err.va		0.0184828	0.33762
rel.std.err		1.53862	1.36737
mod.eff		-0.538621	-0.367368

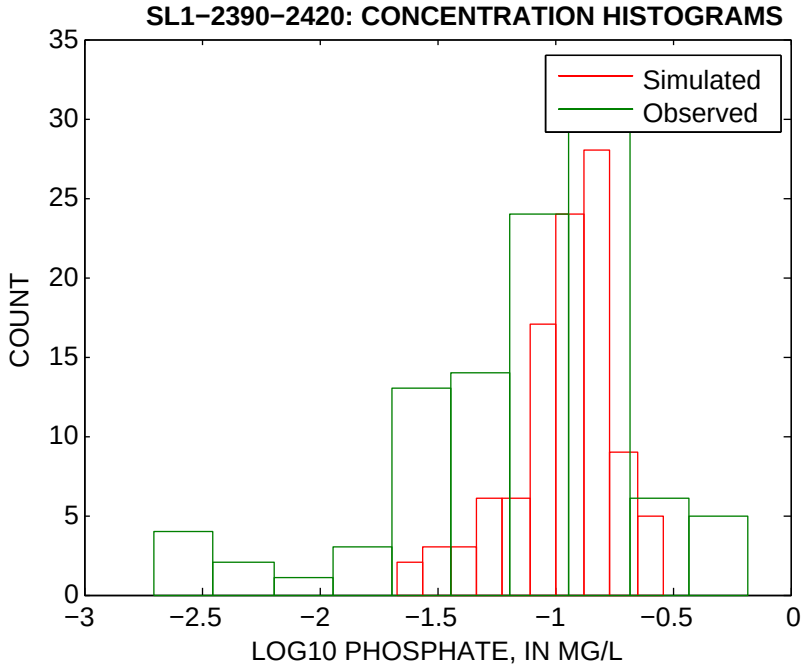
VERSION 2.1

ALL DATA
LOG10

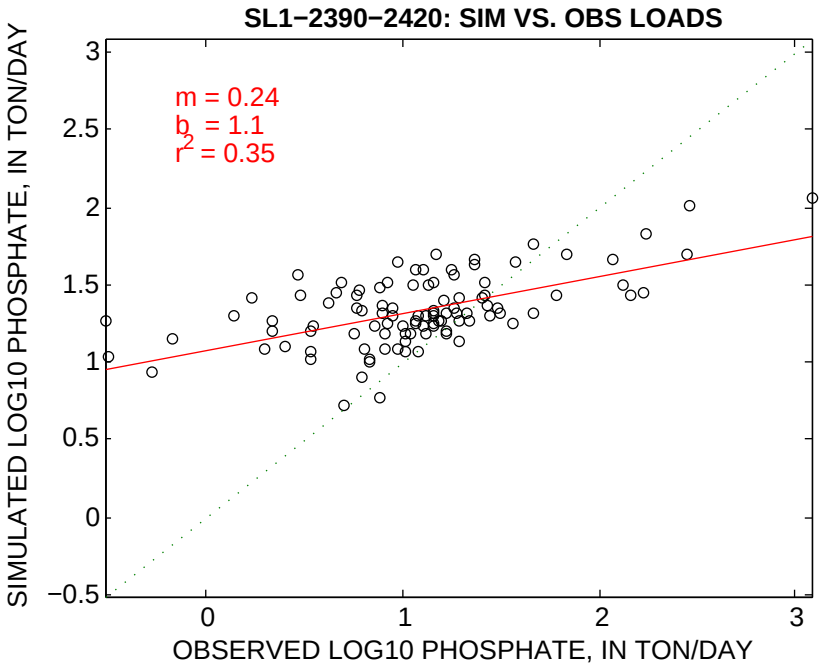


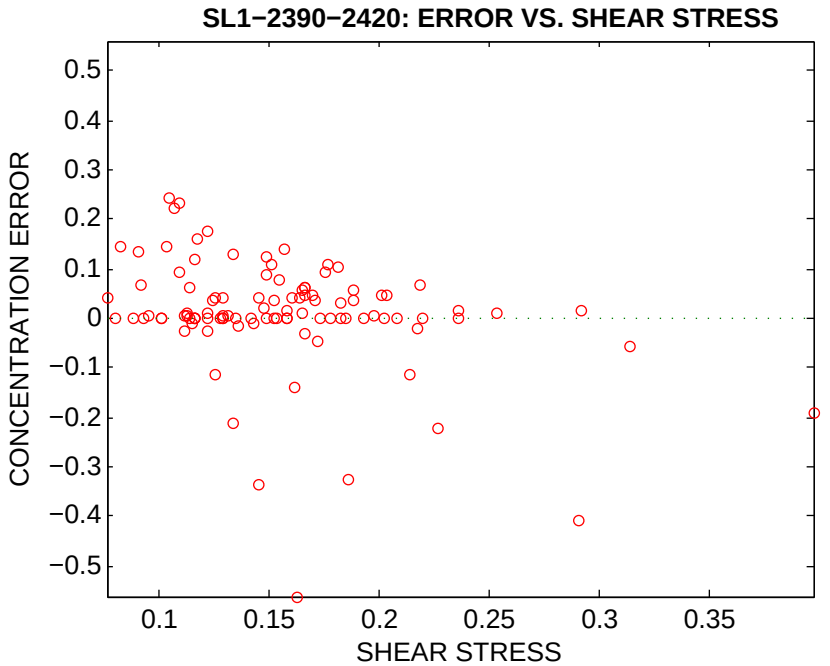


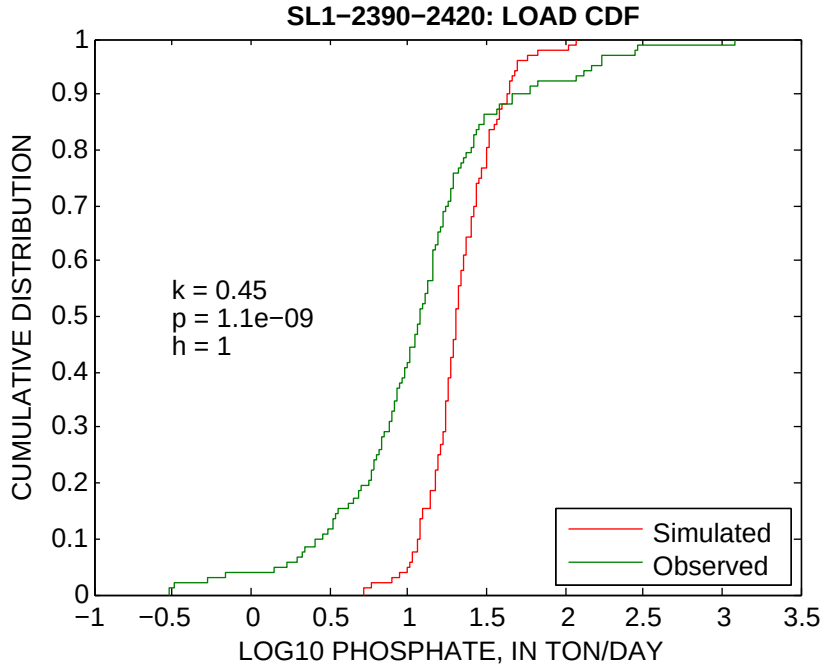


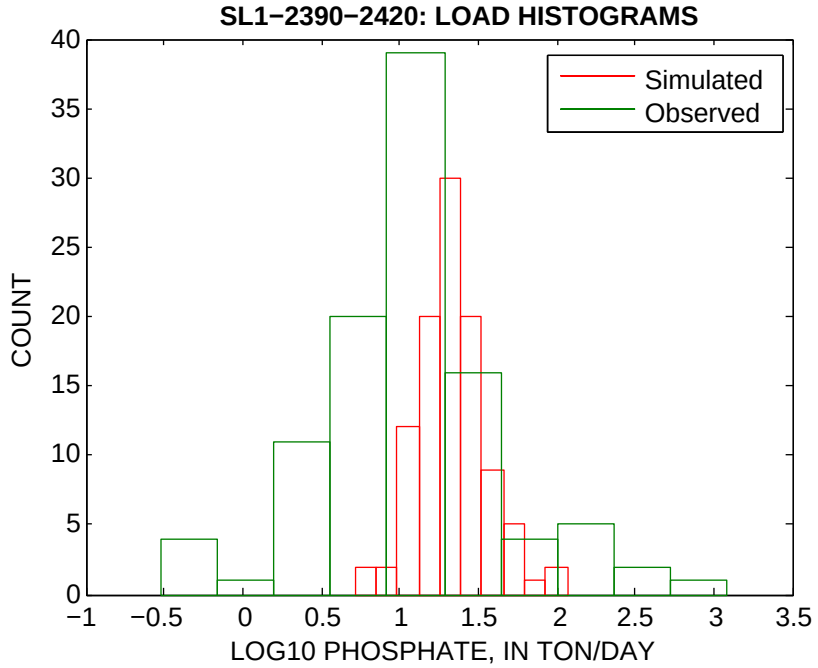


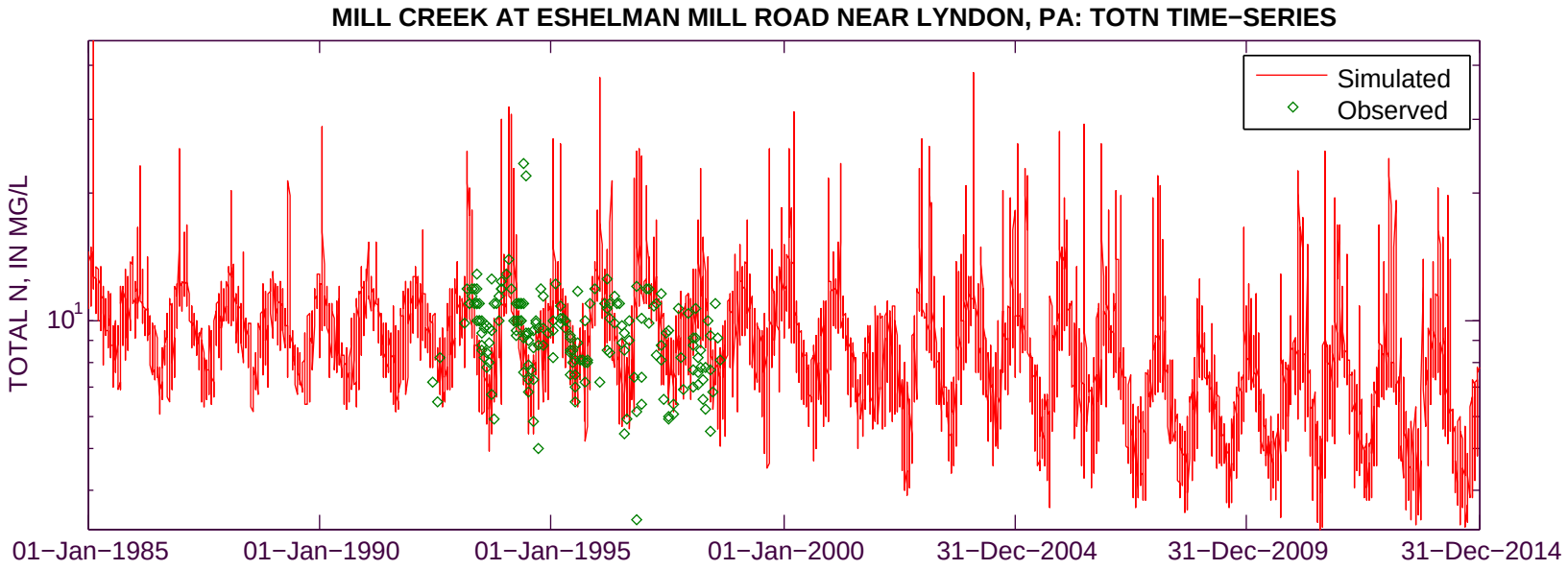
LOAD DATA
LOG10

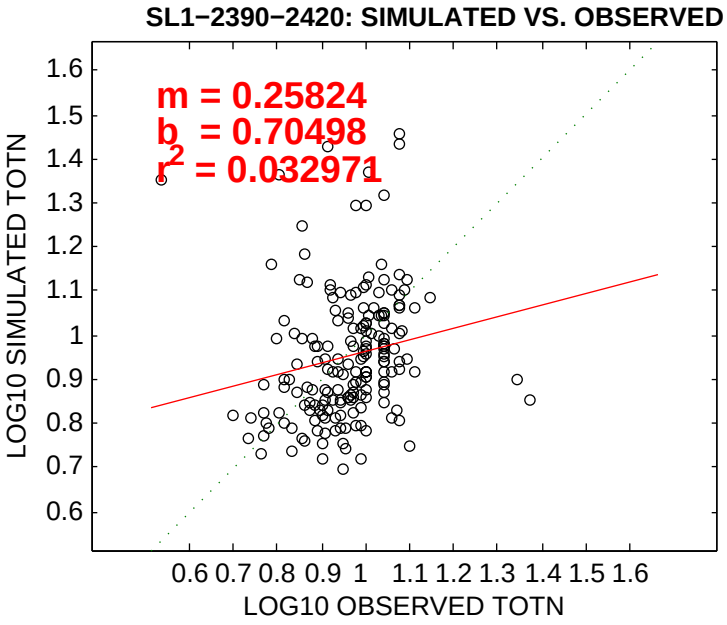


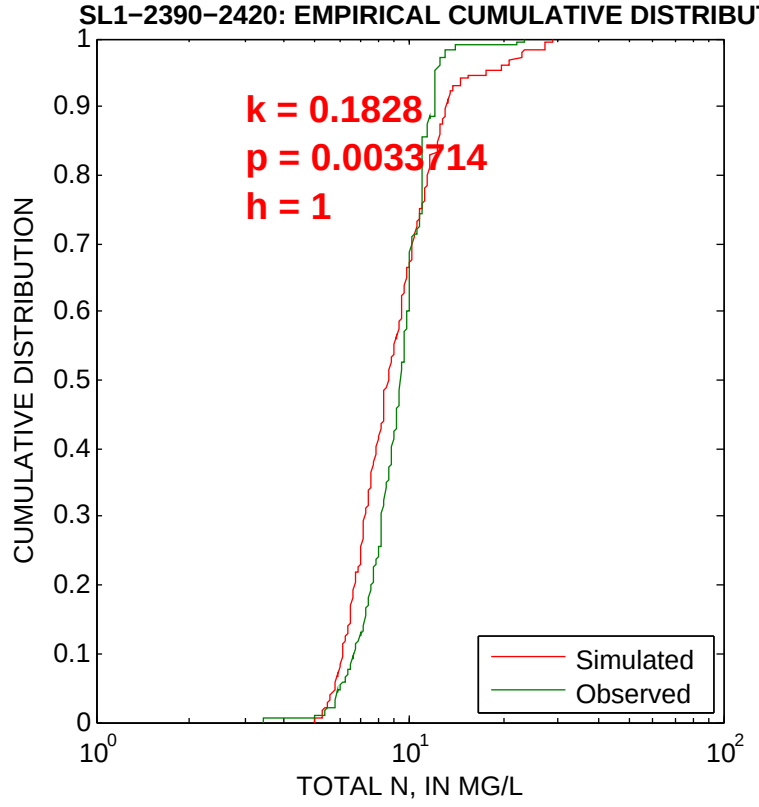












DATA SELECTION

scenario	file
P620171001WQ	TOTN.calib

plot: TOTN - total nitrogen

Dates: 1/1/1985 – 12/31/201

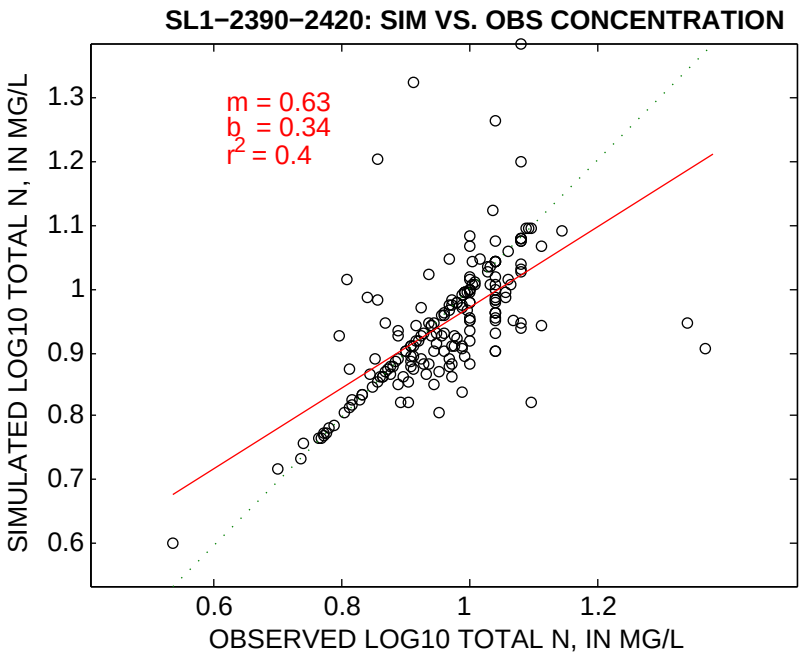
Drive	Directory	Observed
N/A	model	OBS20161101

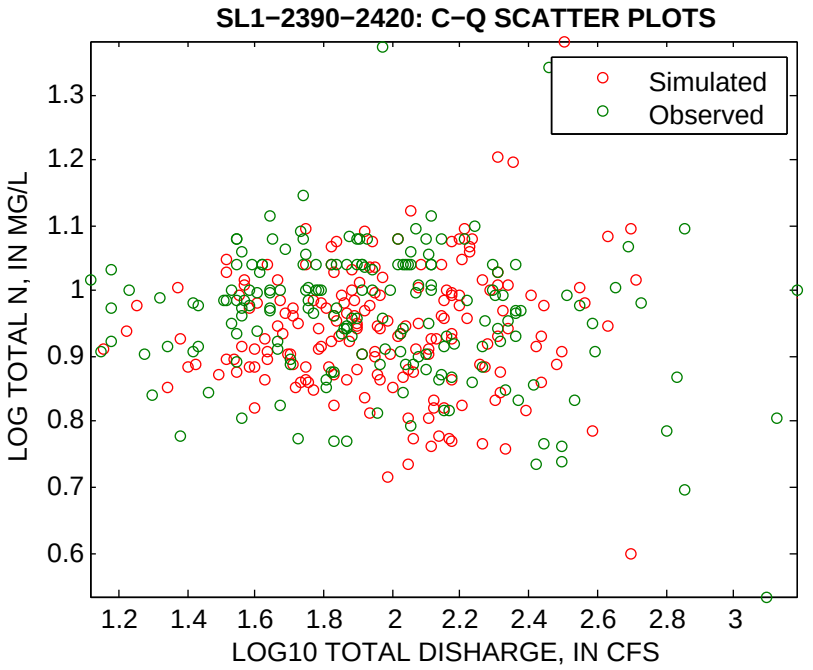
STATISTICS

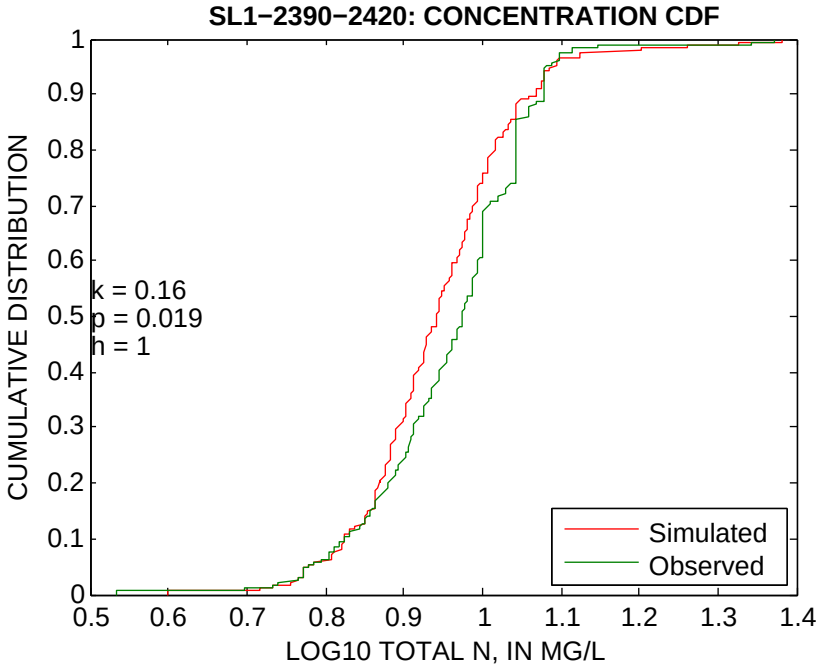
	n	observe	simulate
		186	186
min		3.42	4.9729
		0.534026	0.69661
mean		9.40373	9.56968
		0.961104	0.953172
media		9.4	8.6414
		0.973128	0.936582
max		23.5	28.505
		1.37107	1.45492
varian		5.44267	15.9707
		0.0106439	0.0215287
JB		0.001	0.001
		0.001	0.001
		ra	log
%		1.76477	-0.825346
err.va		19.2862	0.0267384
rel.std.err		3.54352	2.5121
mod.eff		-2.54352	-1.5121

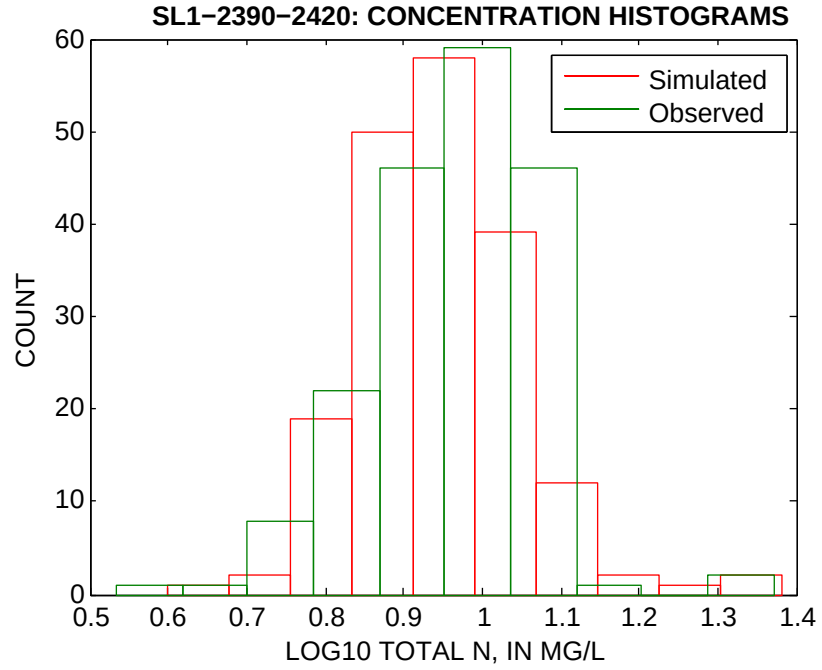
VERSION 2.1

ALL DATA
LOG10

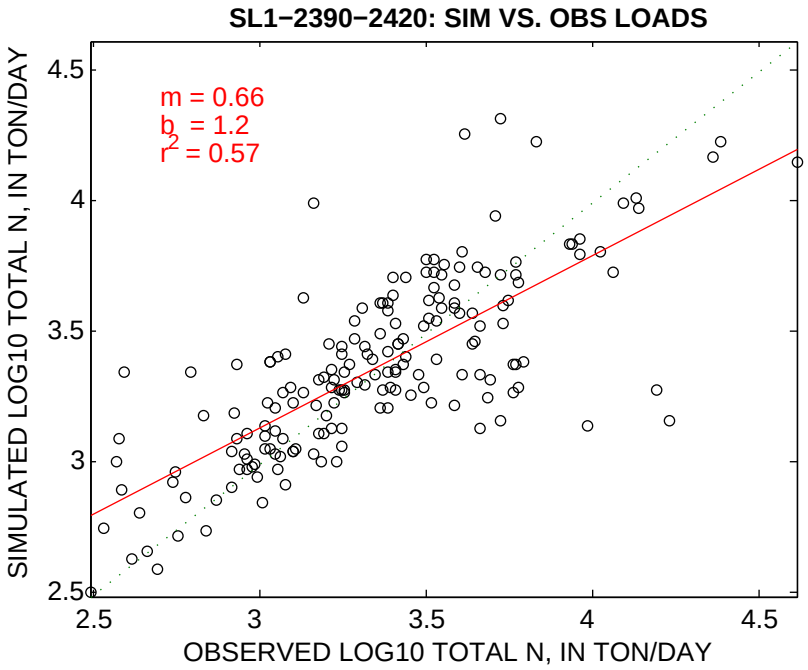


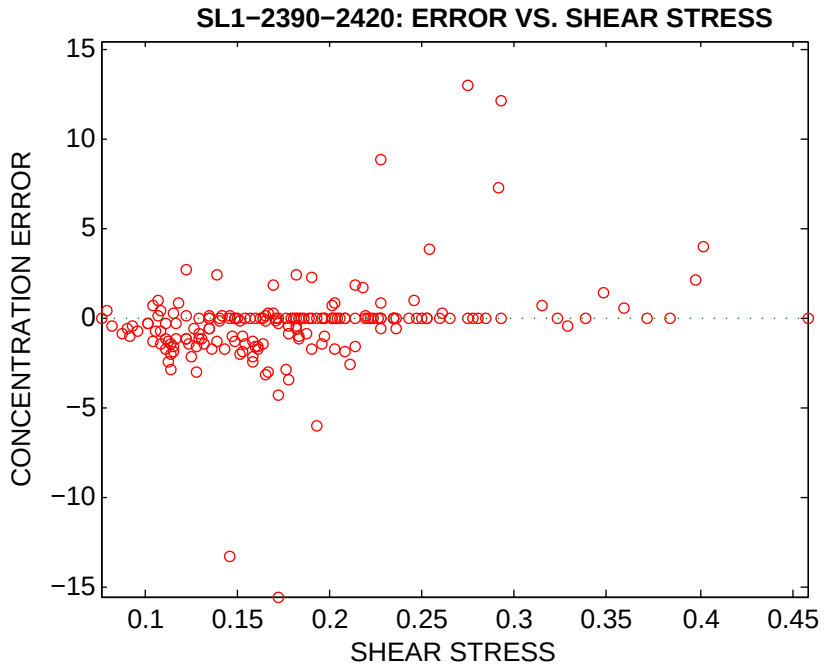


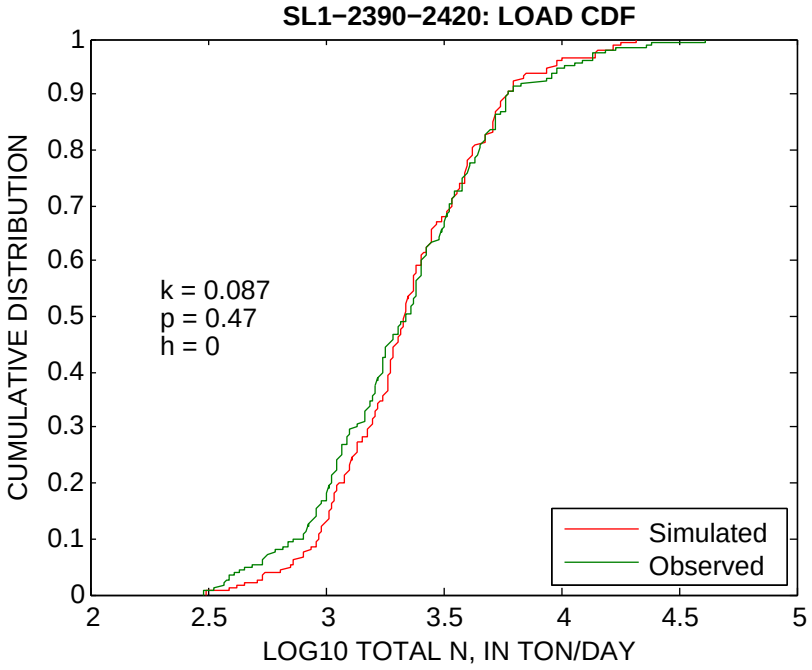


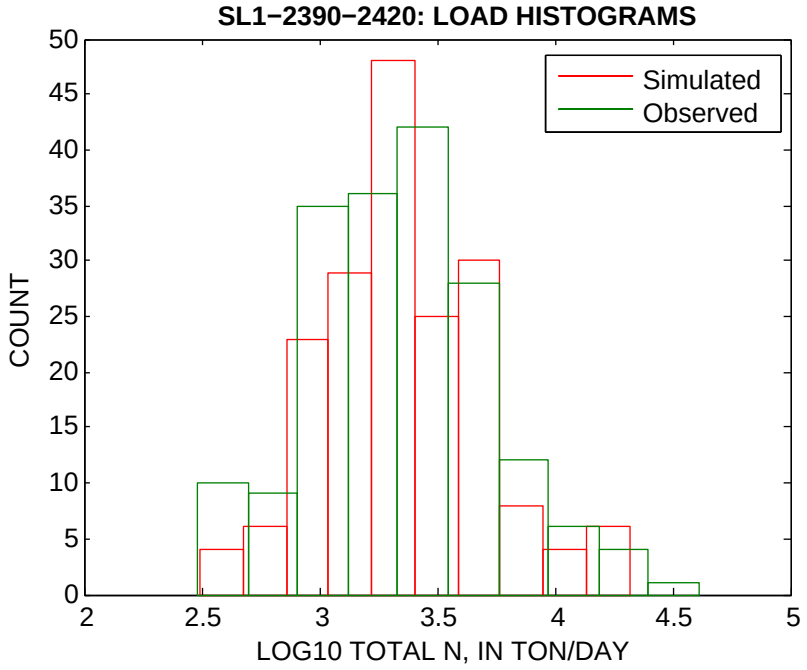


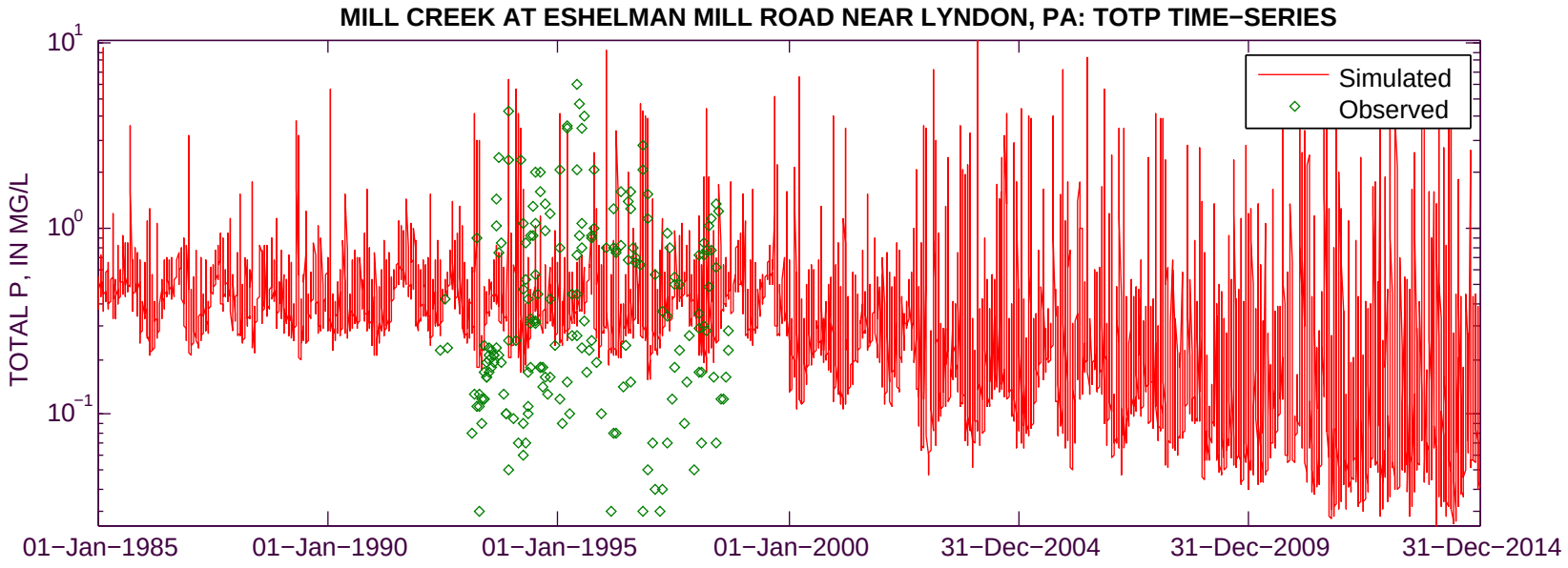
LOAD DATA
LOG10

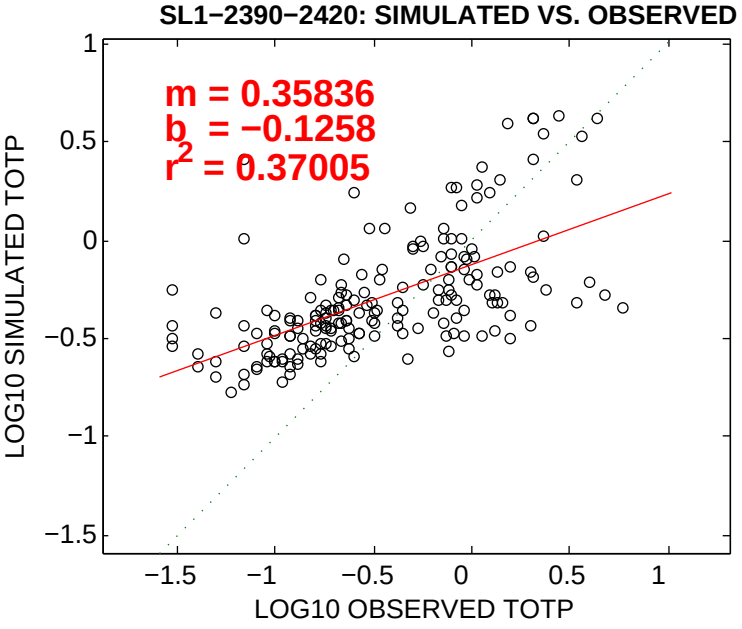


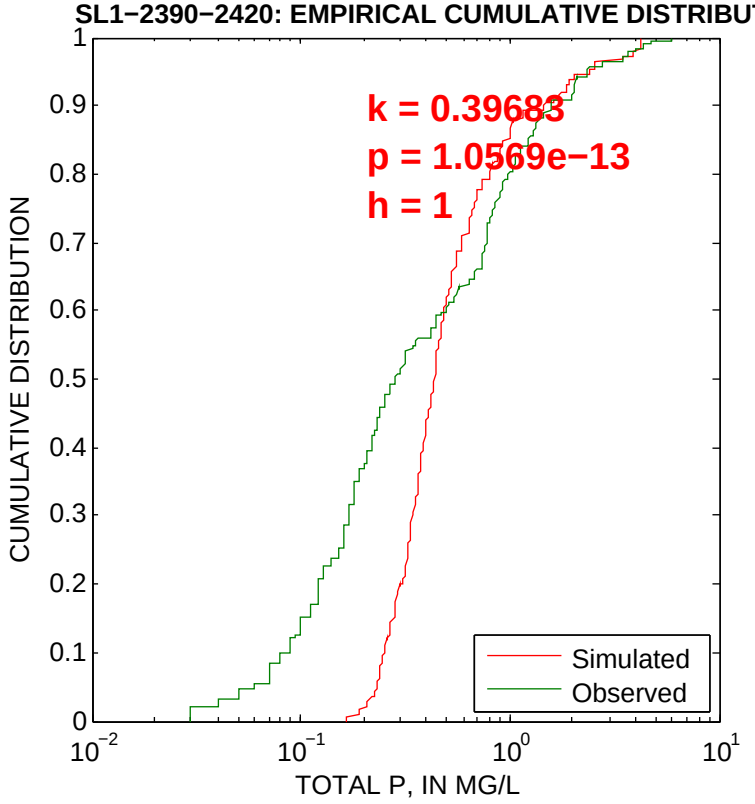












DATA SELECTION

scenario: P620171001WQ | file: TOTP.calib

plot: TOTP - total phosphorus

Dates: 1/1/1985 – 12/31/201

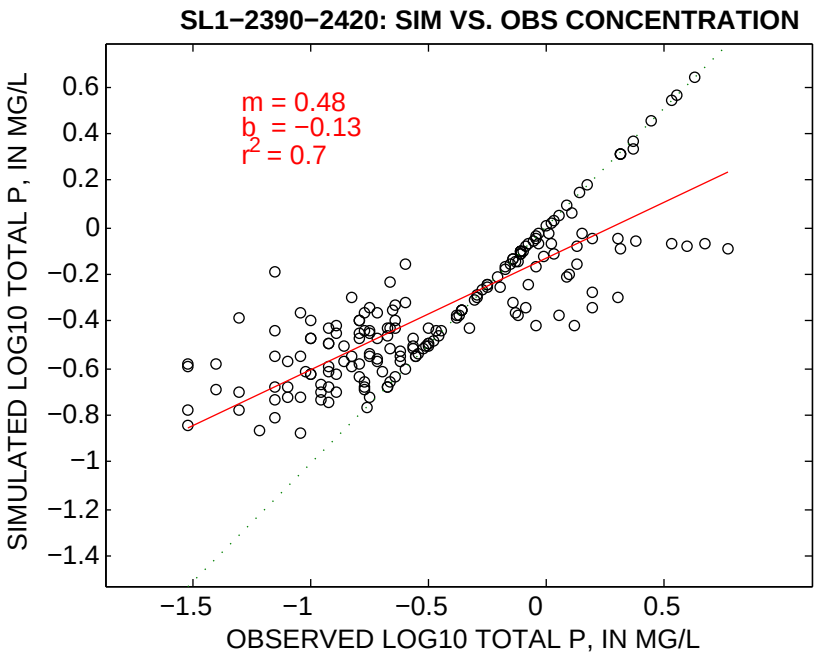
Drive: N/A | Directory: model | Observed: OBS20161101

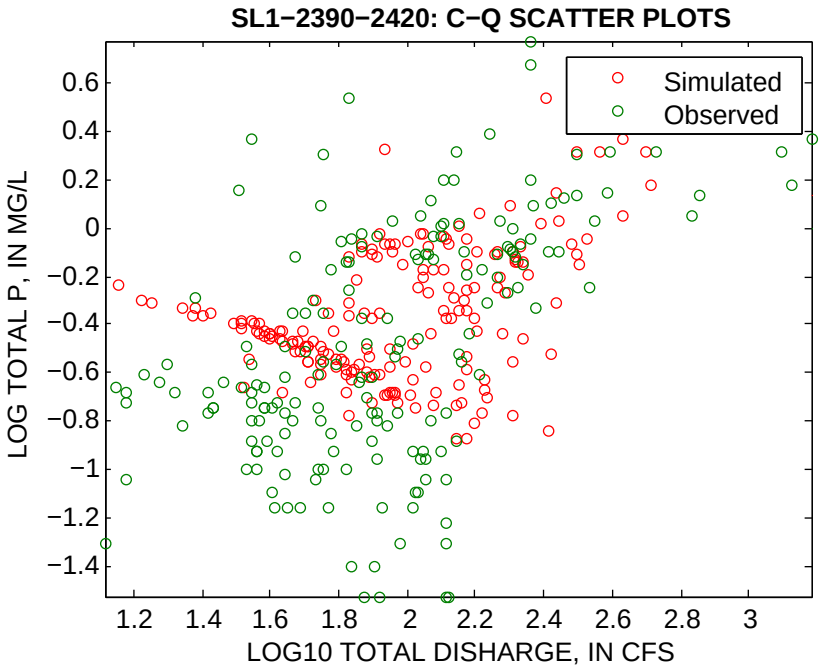
STATISTICS

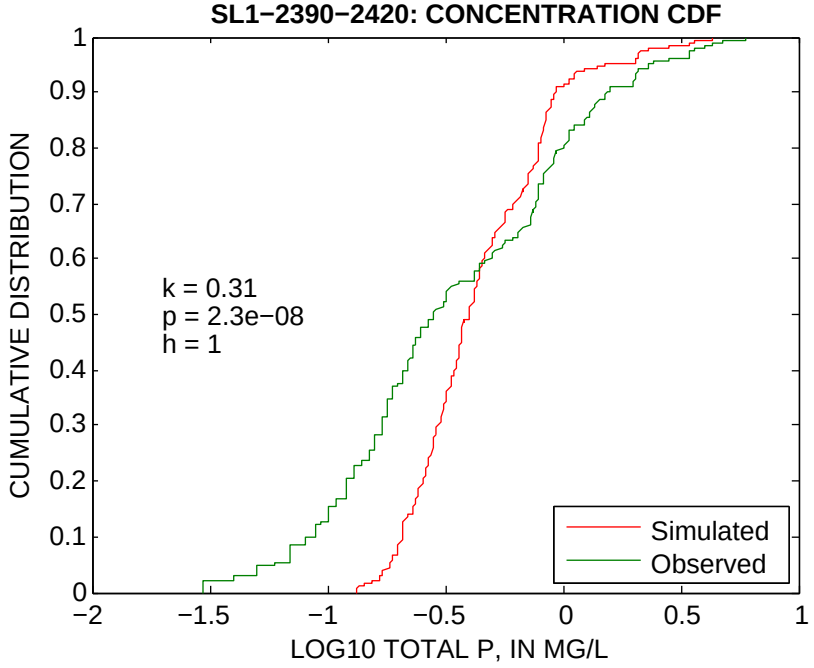
	observe	simulate
n	189	189
min	0.03	0.16751
	-1.52288	-0.775959
mean	0.675696	0.698224
	-0.460547	-0.290837
media	0.2825	0.43951
	-0.548982	-0.357031
max	5.95	4.2531
	0.774517	0.628706
varian	0.823414	0.604063
	0.257478	0.0893548
JB	0.001	0.001
	0.093717	0.001
	ra	log
%	3.33404	-36.8496
err.va	0.721678	0.191249
rel.std.err	0.876446	0.742778
mod.eff	0.123554	0.257222

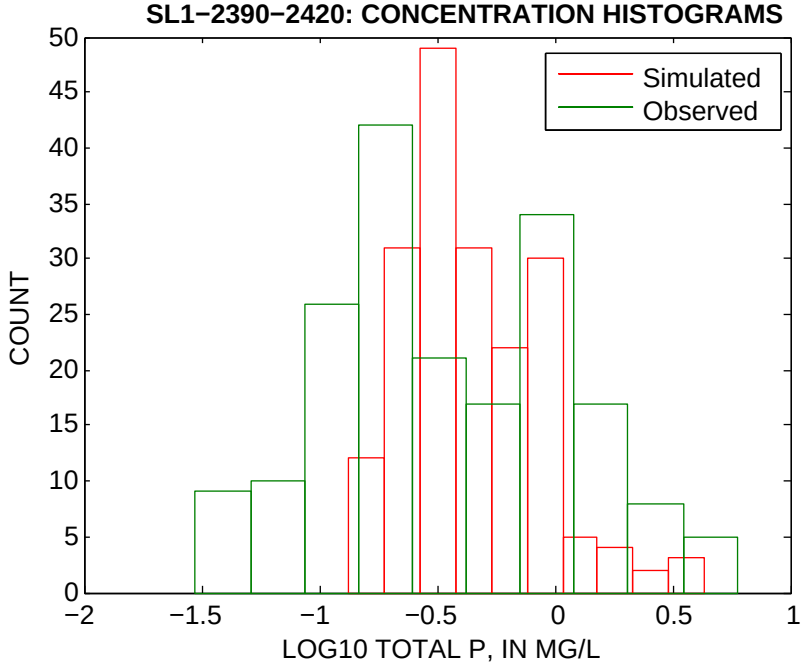
VERSION 2.1

ALL DATA
LOG10

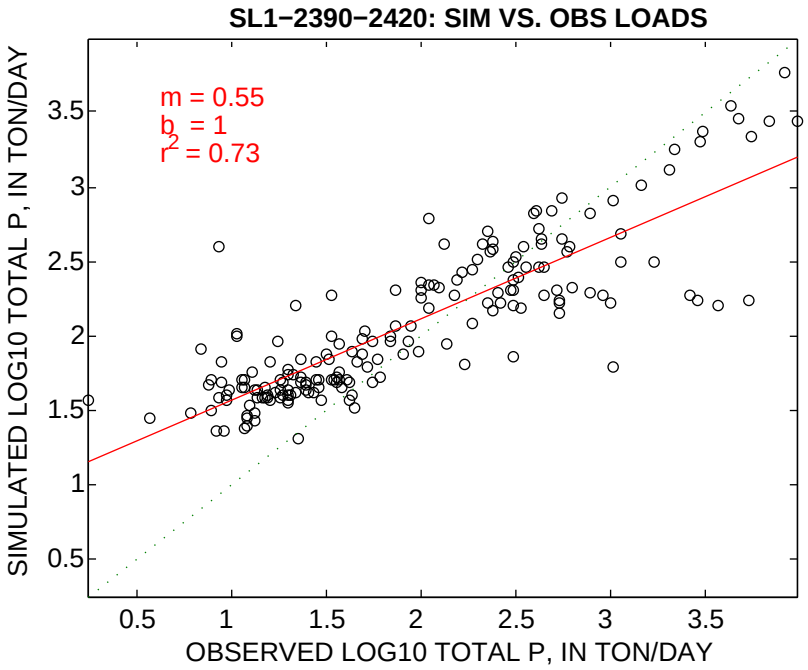


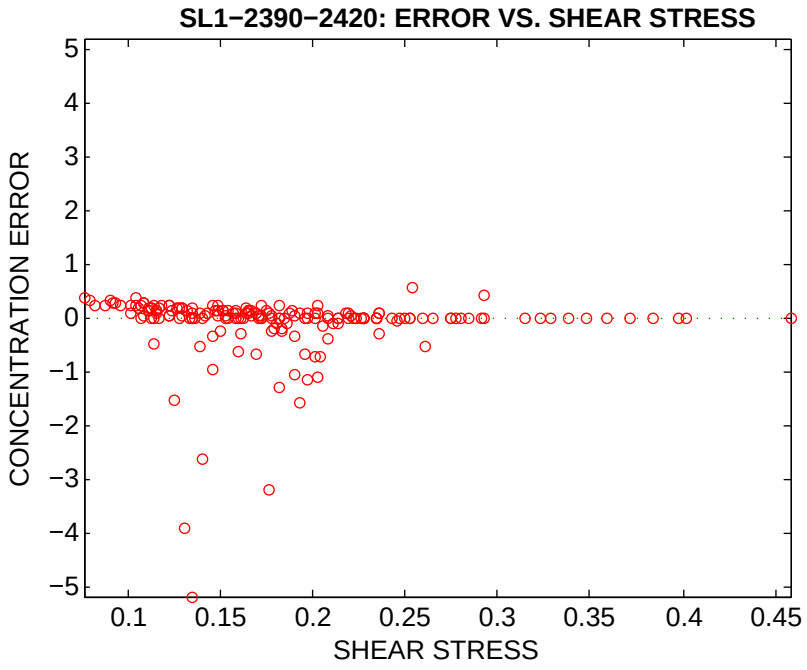


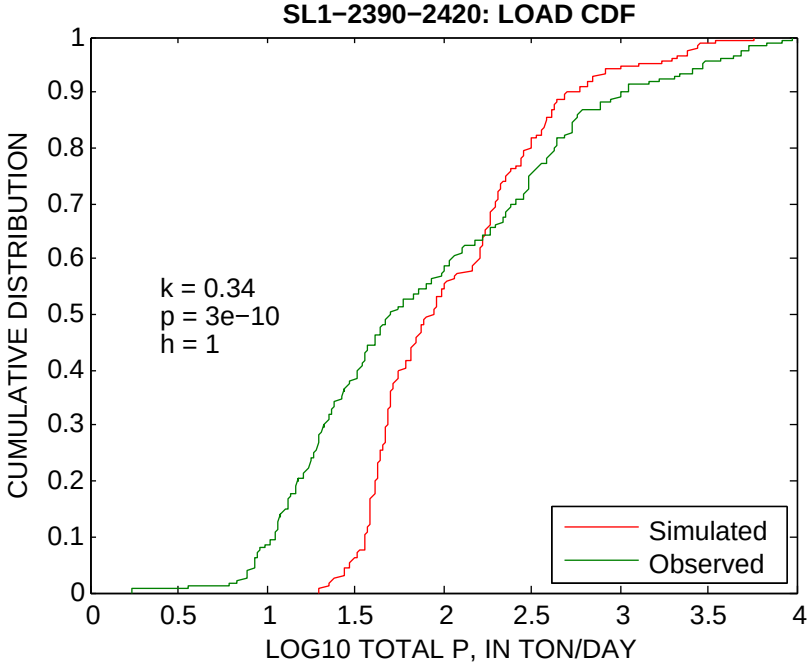


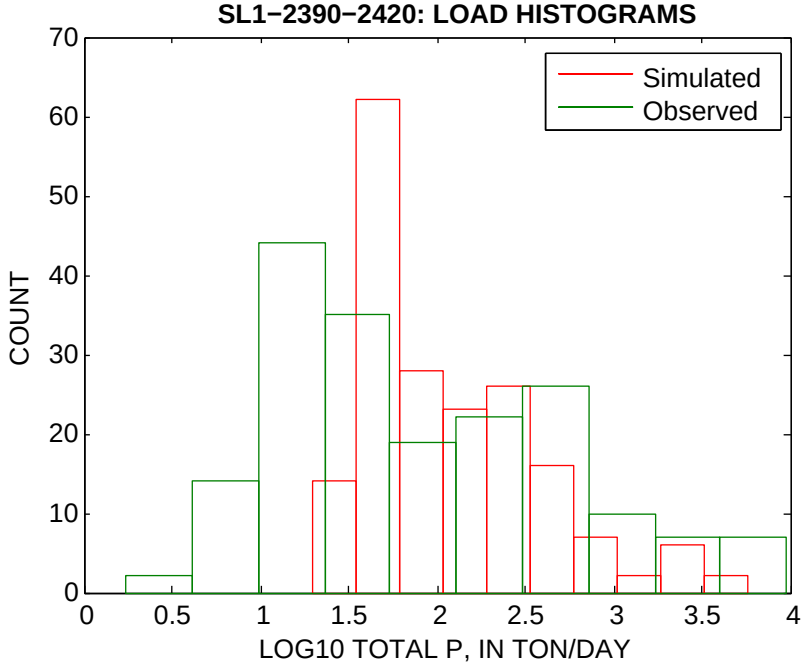


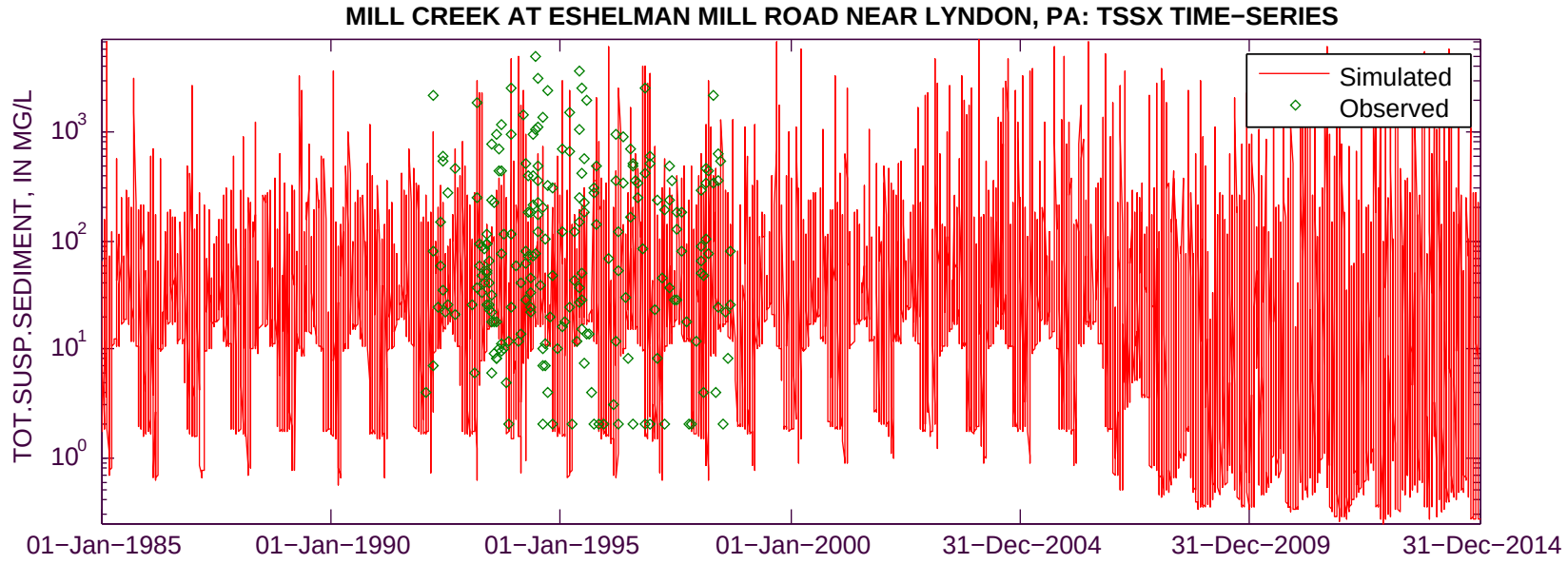
LOAD DATA
LOG10

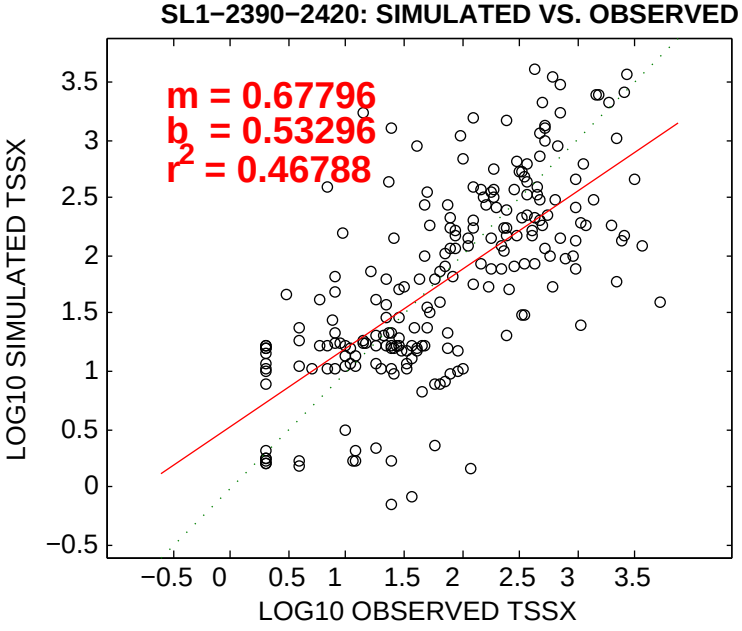


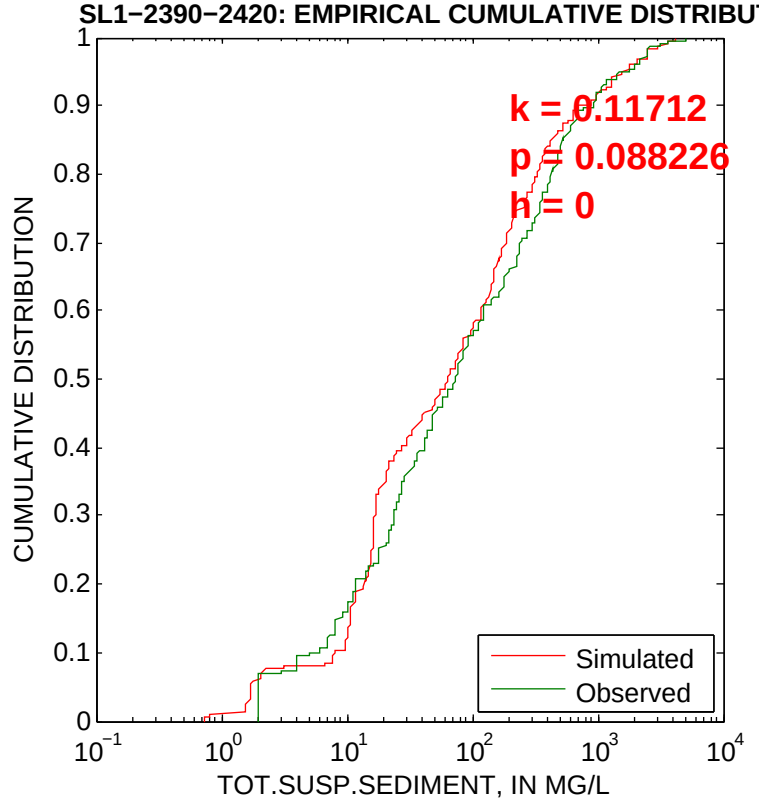












DATA SELECTION

scenario	file
P620171001WQ	TSSX.calib

plot: TSSX - total suspended ...

Dates 1/1/1985 12/31/201

Drive Directory Observed

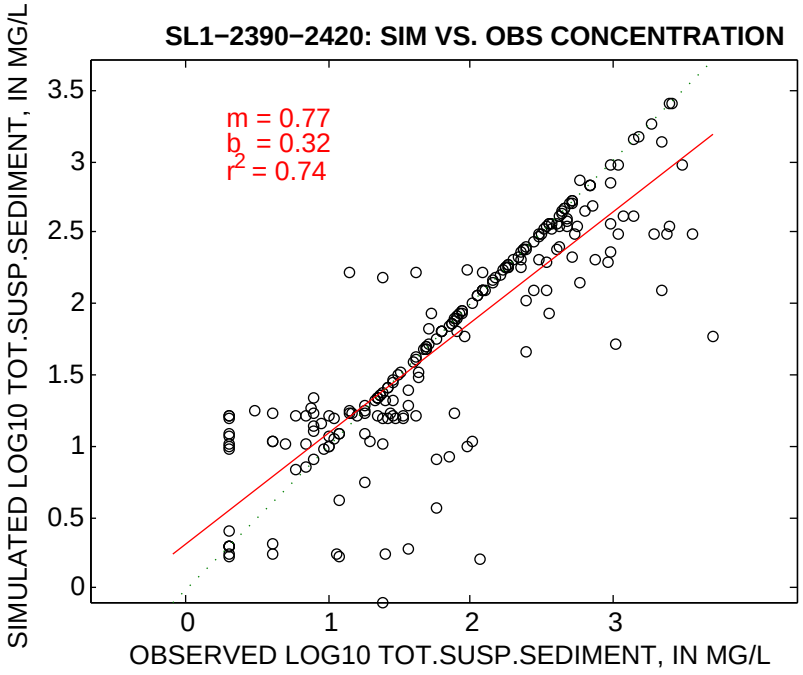
N/A model OBS20161101

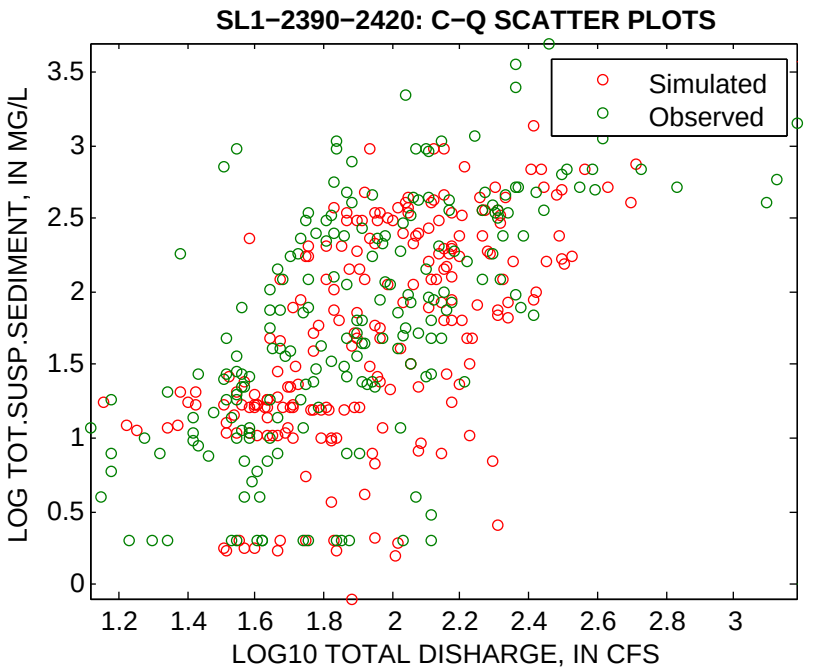
STATISTICS

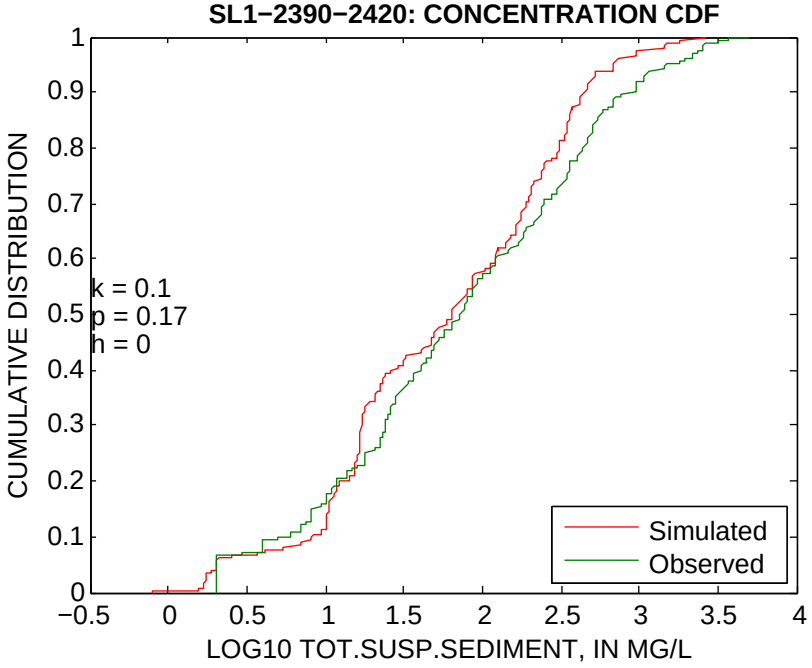
	n	222	222
		observe	simulate
min		2	0.72247
		0.30103	-0.14118
mean		325.313	297.27
		1.8573	1.79213
media		73.5	63.7305
		1.86628	1.80435
max		5076	4114.1
		3.70552	3.61427
varian		424342	402392
		0.696039	0.683766
JB		0.001	0.001
		0.052369	0.235597
		ra	log
%		-8.62027	-3.50884
err.va		553369	0.440299
rel.std.err		1.30406	0.632579
mod.eff		-0.304063	0.367421

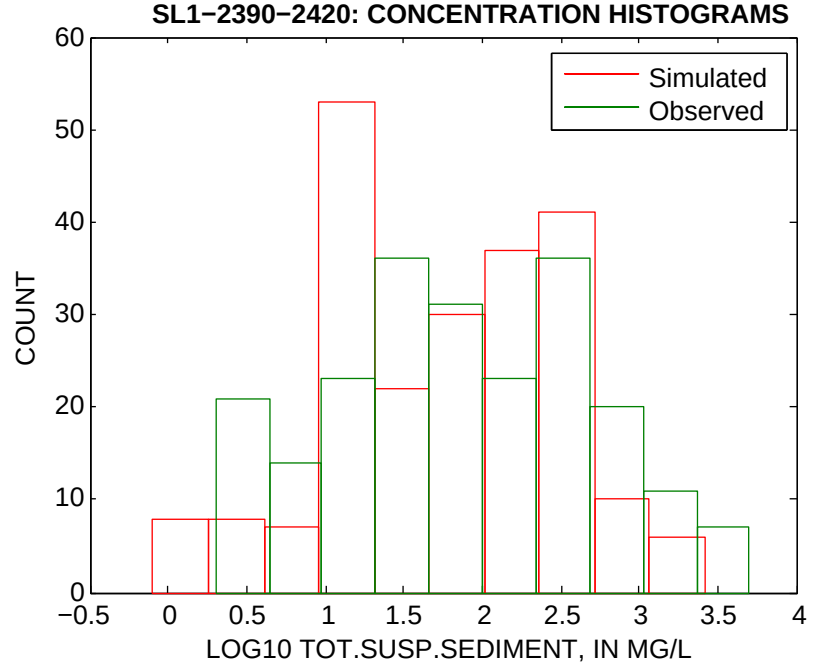
VERSION

ALL DATA
LOG10

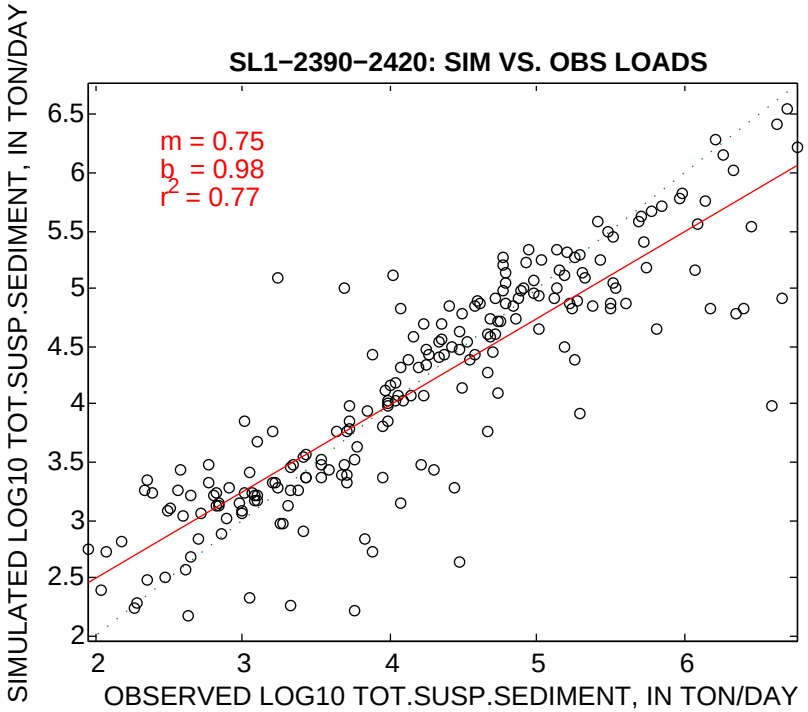




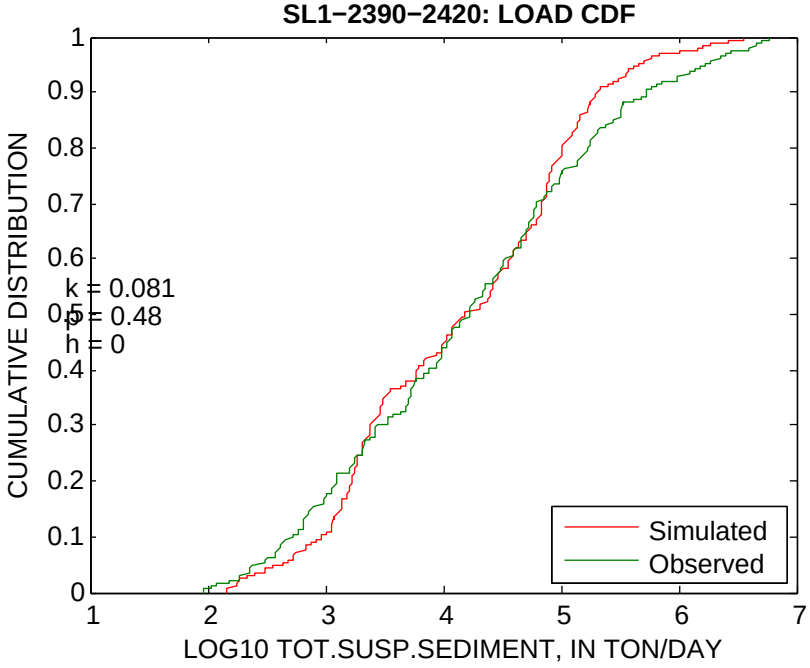


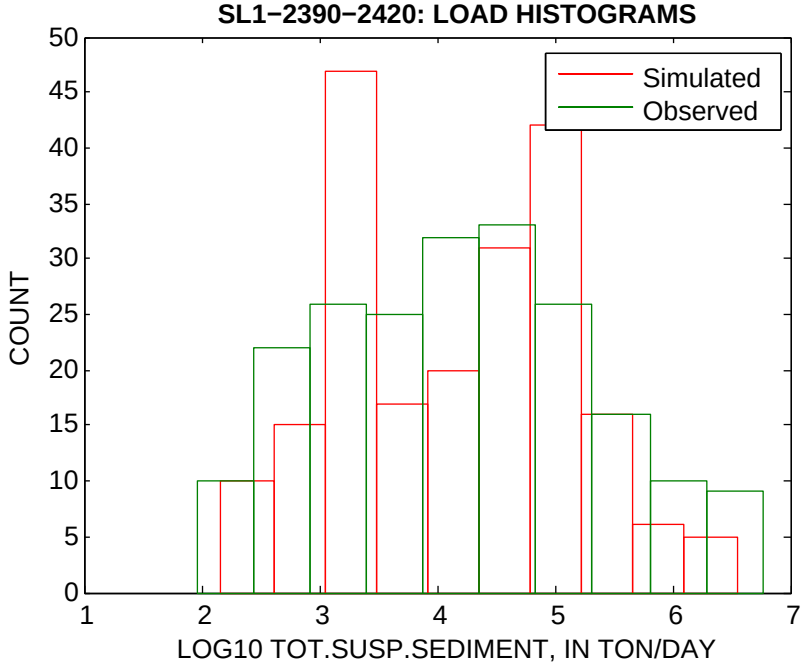


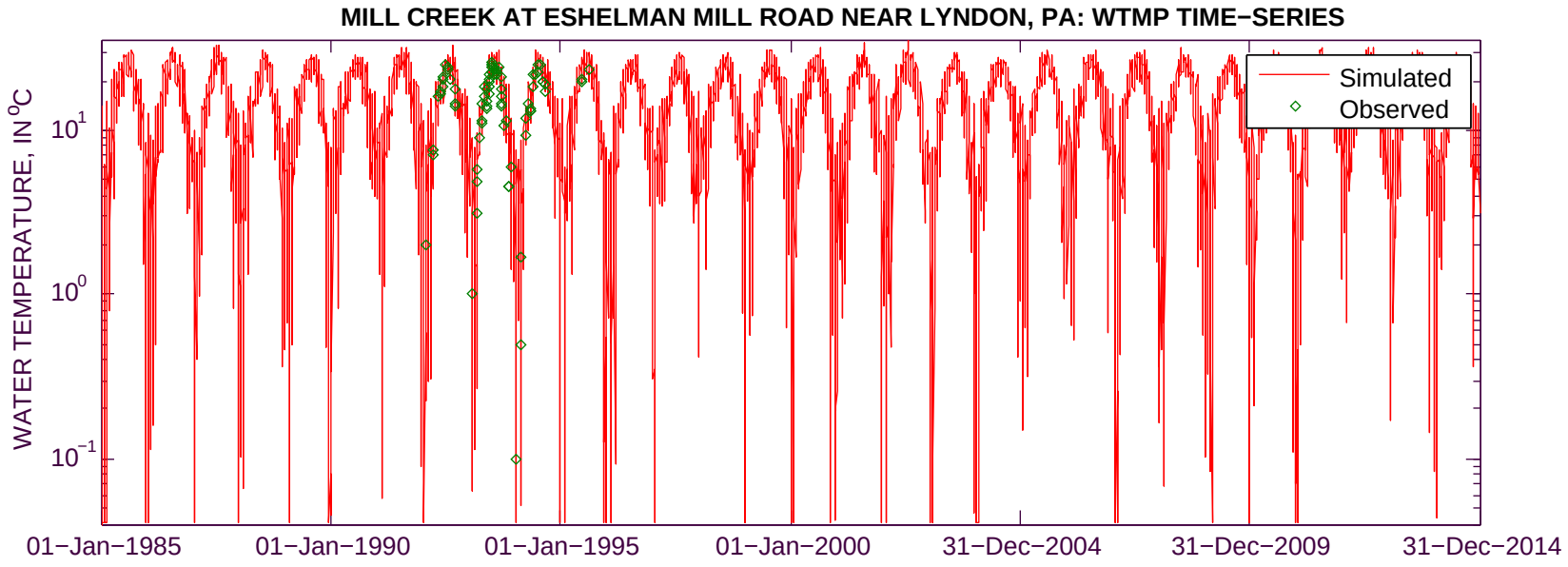
LOAD DATA
LOG10

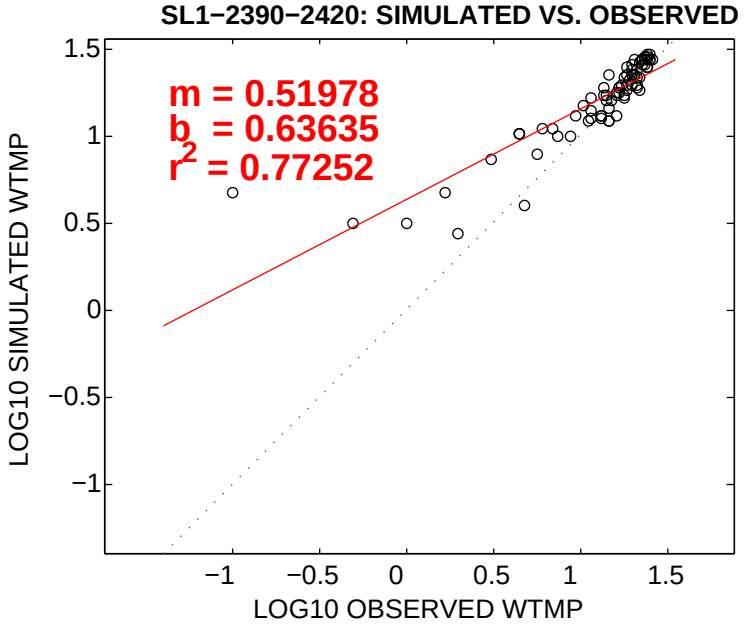


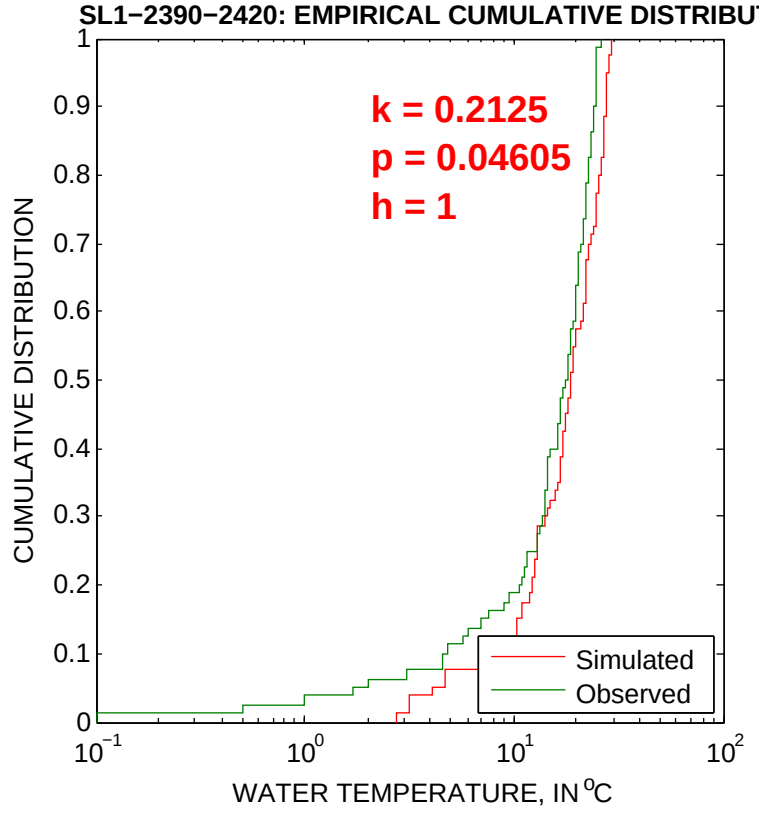












DATA SELECTION

scenario	file
P620171001WQ	WTMP.calib

plot: WTMP - water tempera...

Dates 1/1/1985 12/31/201

Drive Directory Observed

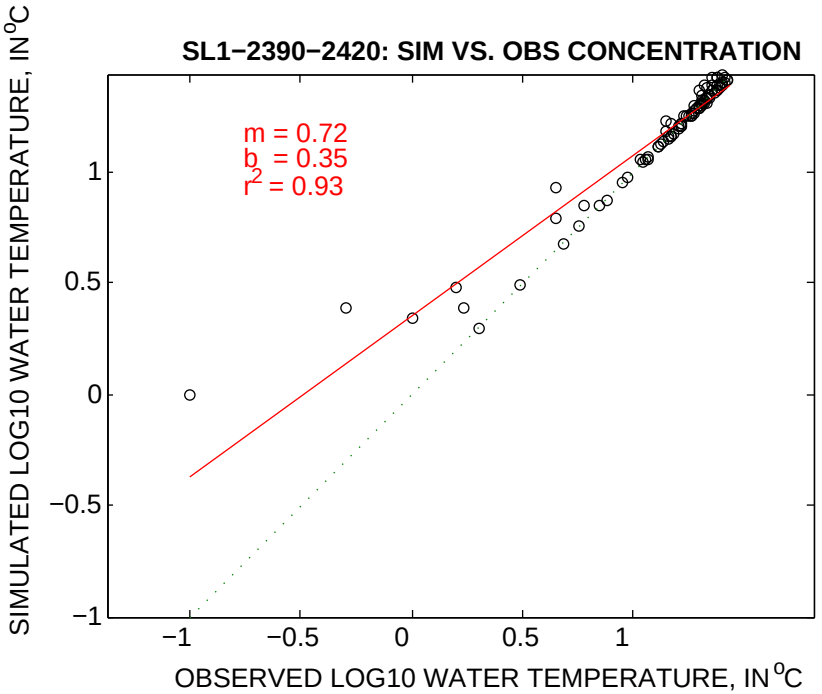
N/A model OBS20161101

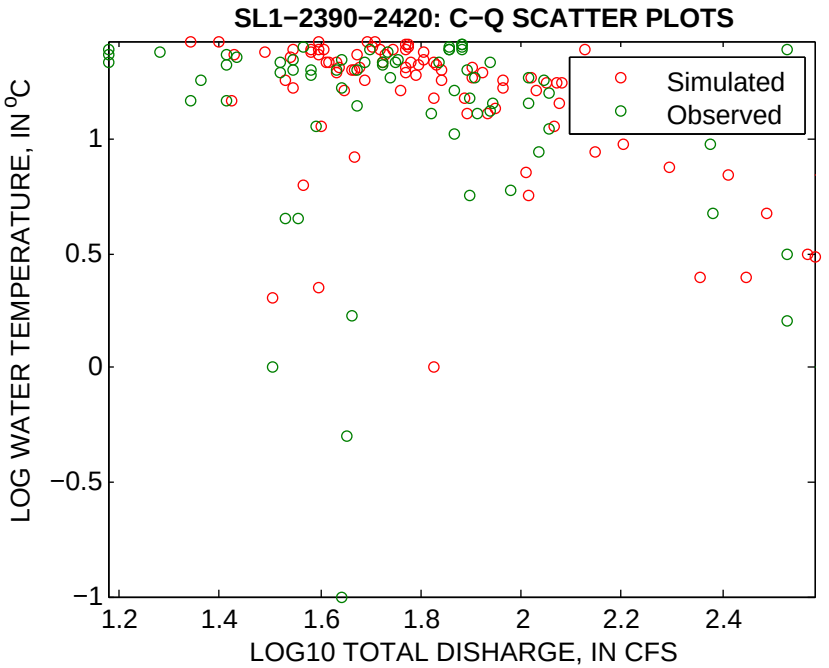
STATISTICS

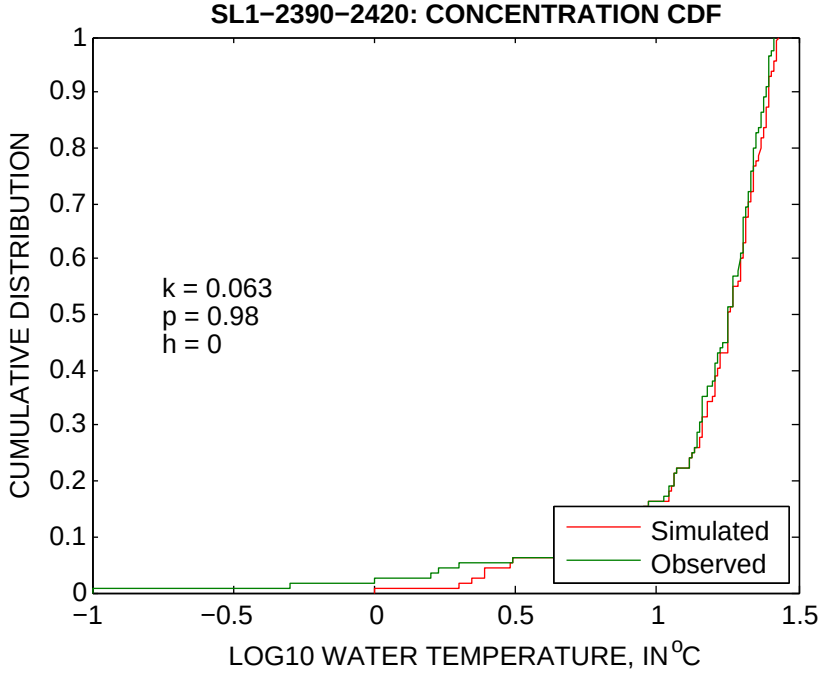
	n	80	80
		observe	simulate
min		0.1	2.713
		-1	0.43345
mean		16.2425	18.4192
		1.11459	1.21569
media		17.9	18.7605
		1.25285	1.27324
max		26.1	29.398
		1.41664	1.46832
varian		49.1772	52.271
		0.16185	0.0566037
JB		0.028407	0.088187
		0.001	0.001
		ra	log
%		13.4014	9.07046
err.va		10.897	0.0605509
rel.std.err		0.221586	0.374117
mod.eff		0.778414	0.625883

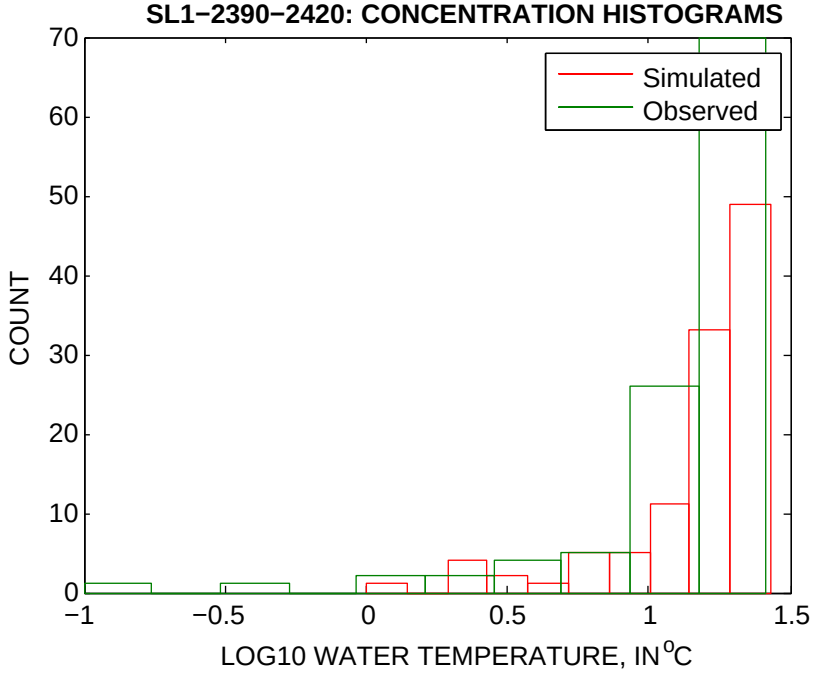
VERSION 2.1

ALL DATA
LOG10

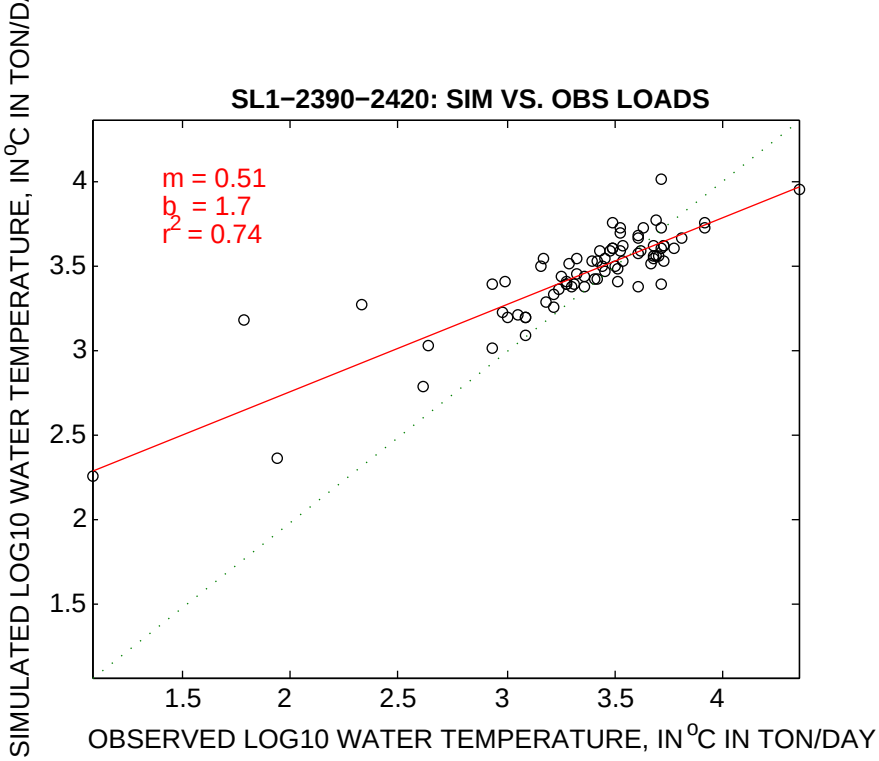


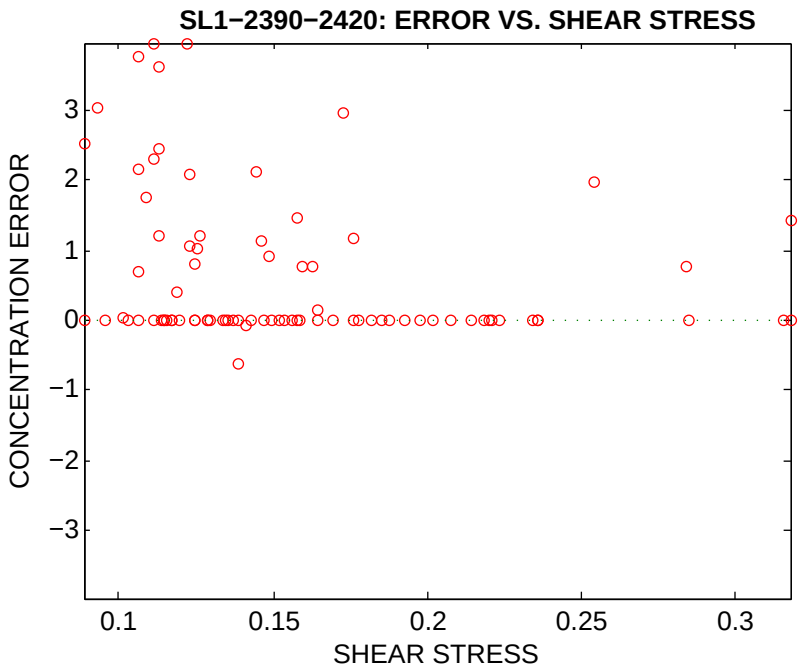


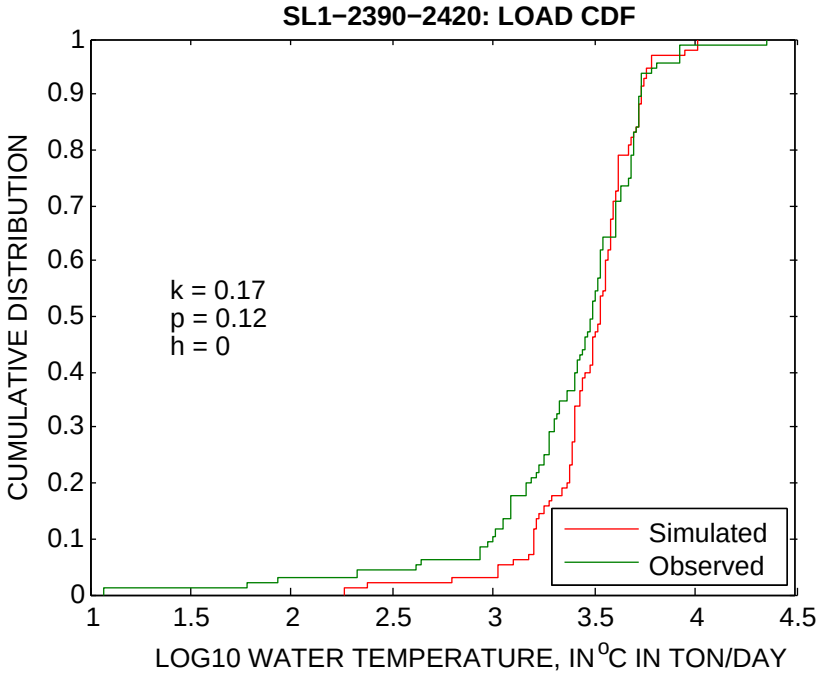


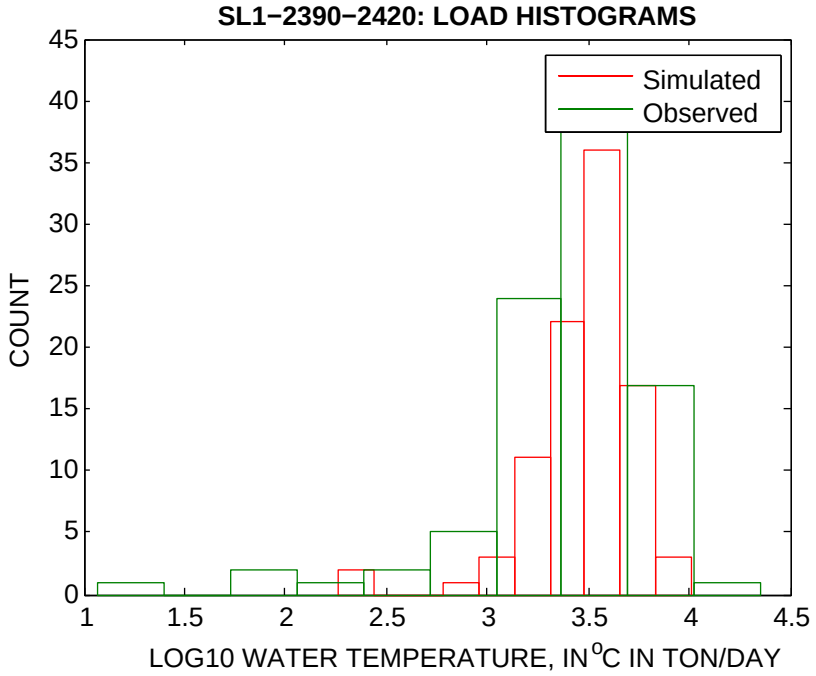


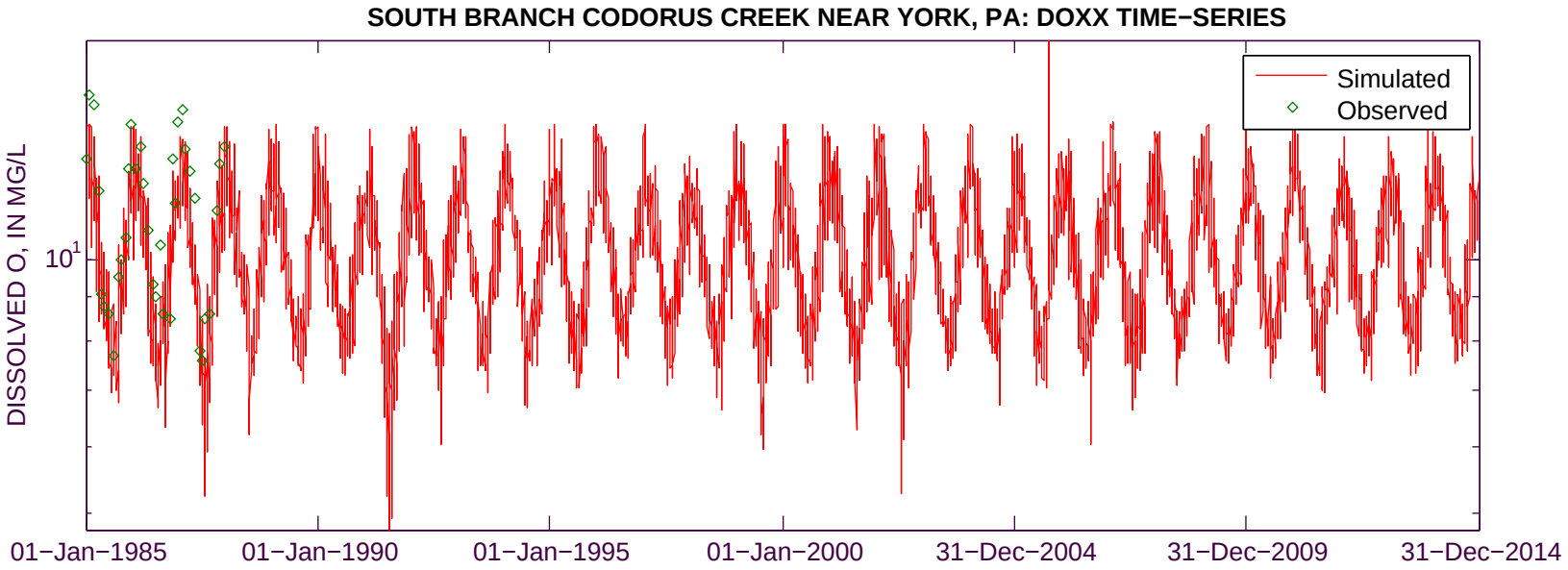
LOAD DATA
LOG10

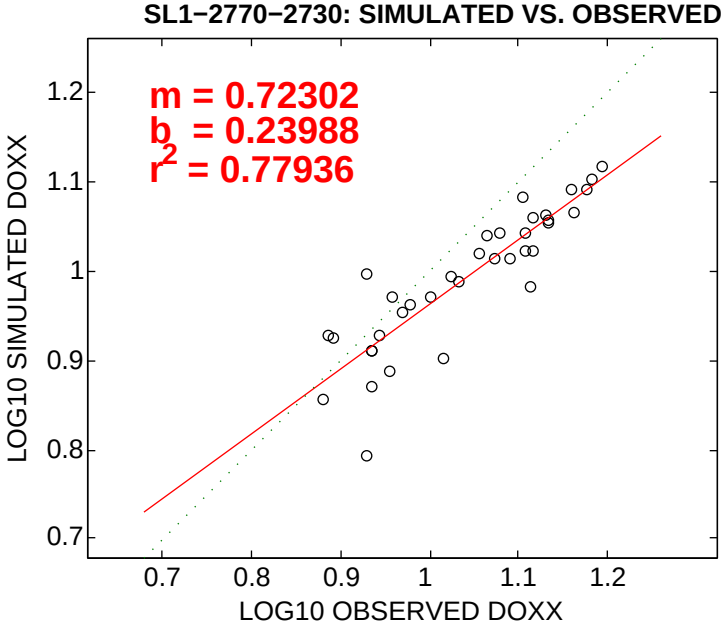


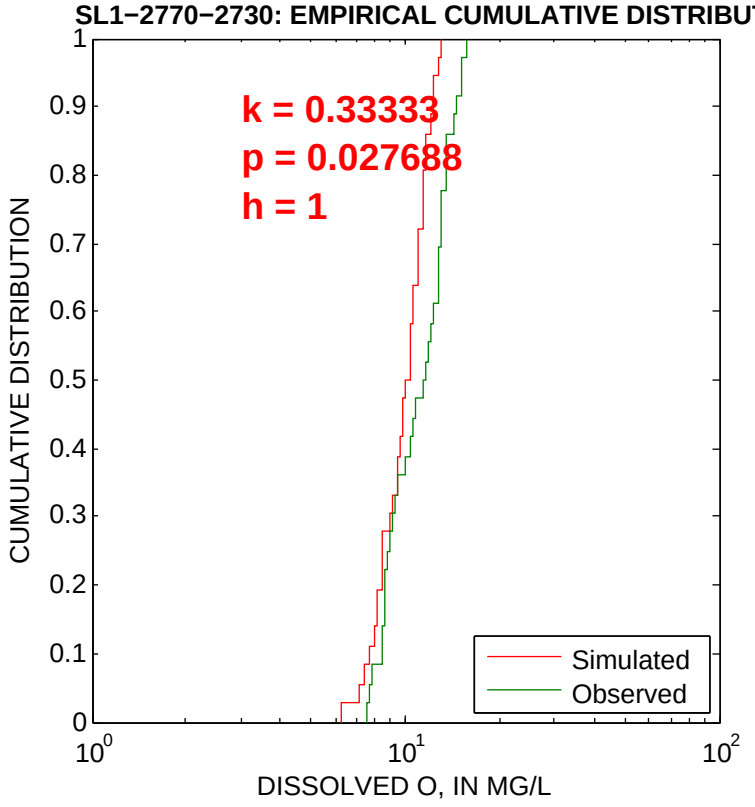












DATA SELECTION

scenario	file
P620171001WQ	DOXX.calib

plot: DOXX - dissolved oxygen

Dates: 1/1/1985 – 12/31/201

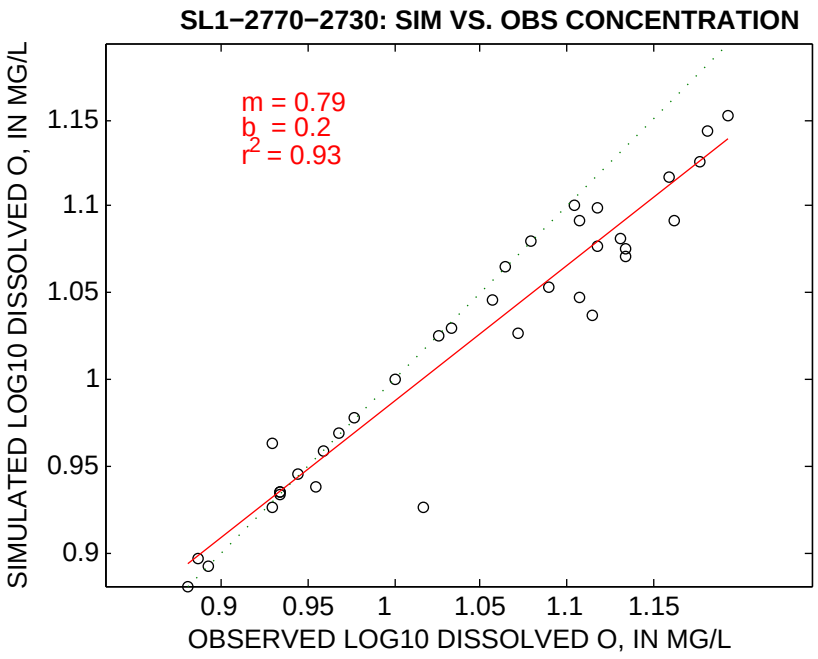
Drive	Directory	Observed
N/A	model	OBS20161101

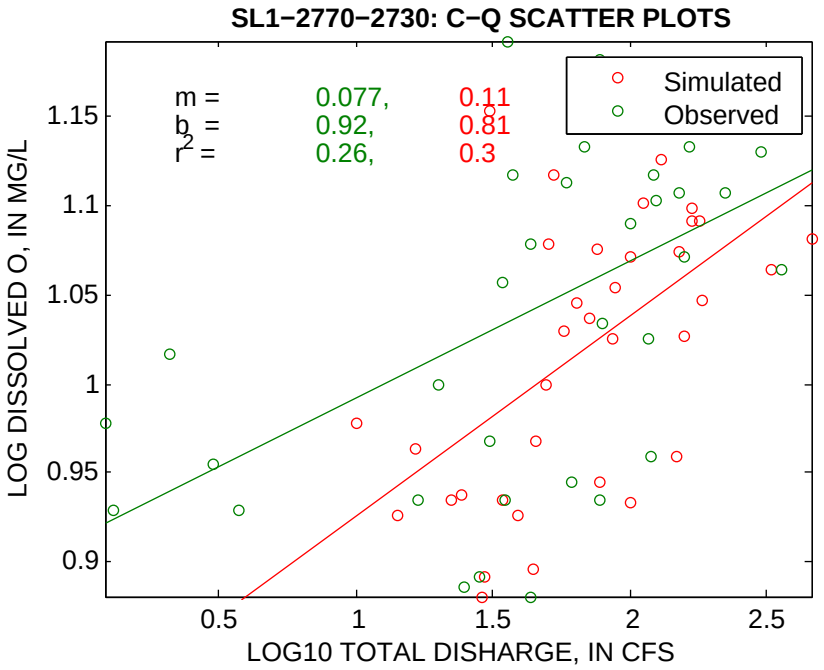
STATISTICS

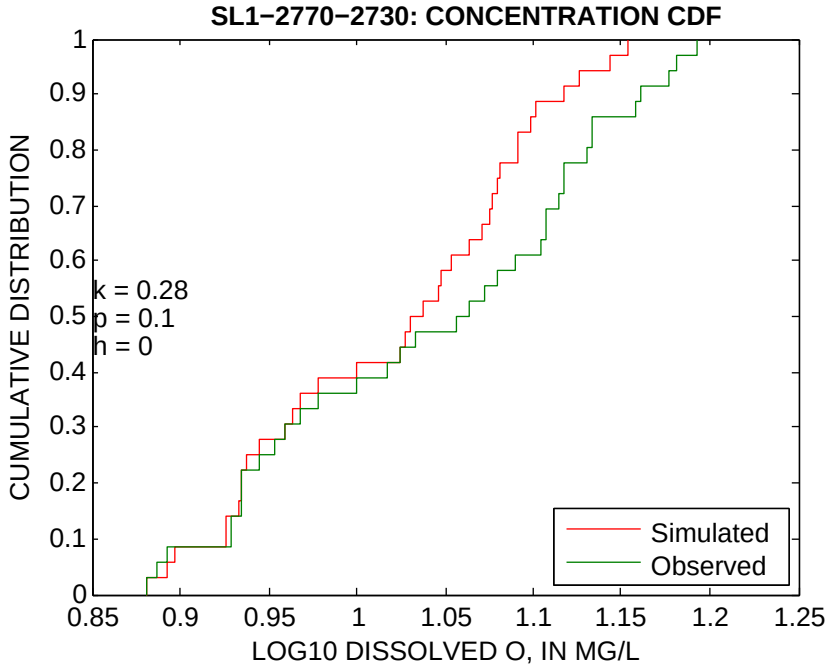
	n	36	36
		observe	simulate
min		7.6	6.1934
		0.880814	0.791929
mean		11.2611	9.98991
		1.04163	0.993003
media		11.5	10.136
		1.06068	1.00576
max		15.6	13.071
		1.19312	1.11631
varian		5.81673	2.92963
		0.00902494	0.00605356
JB		✓ 0.131991	0.449316 ✓
		✓ 0.113613	0.211187 ✓
		ra	log
%		-11.2884	-4.6684
err.va		2.93847	0.00446022
rel.std.err		0.505176	0.49421
mod.eff		0.494824	0.50579

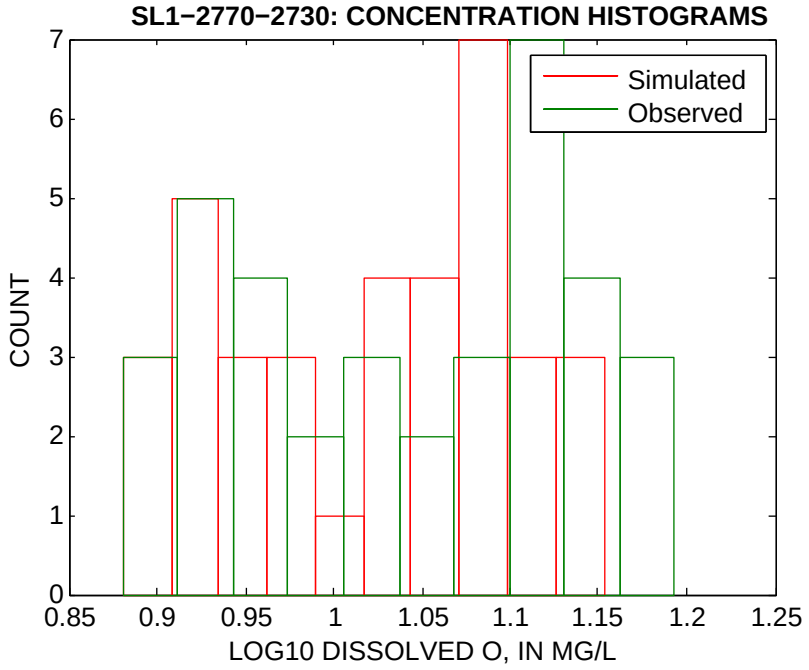
VERSION 2.1

ALL DATA
LOG10

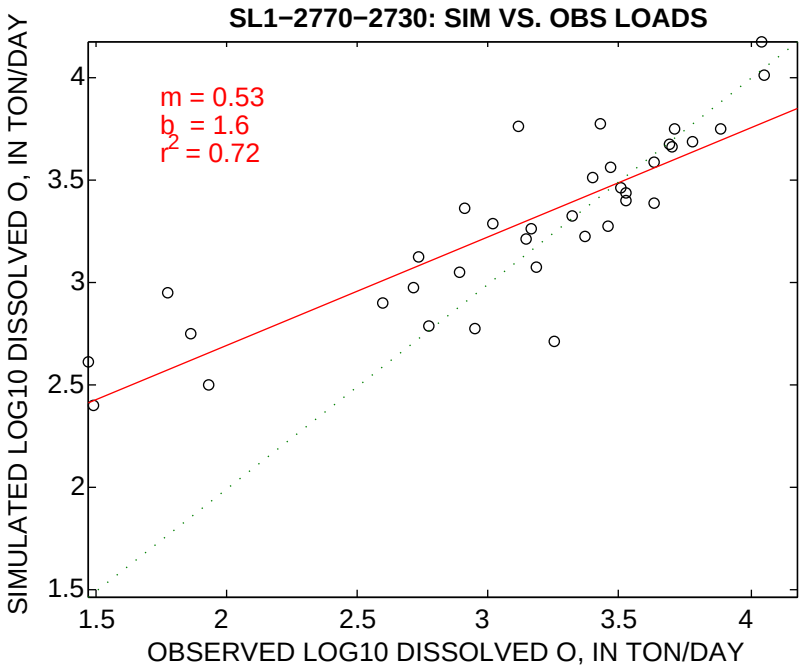


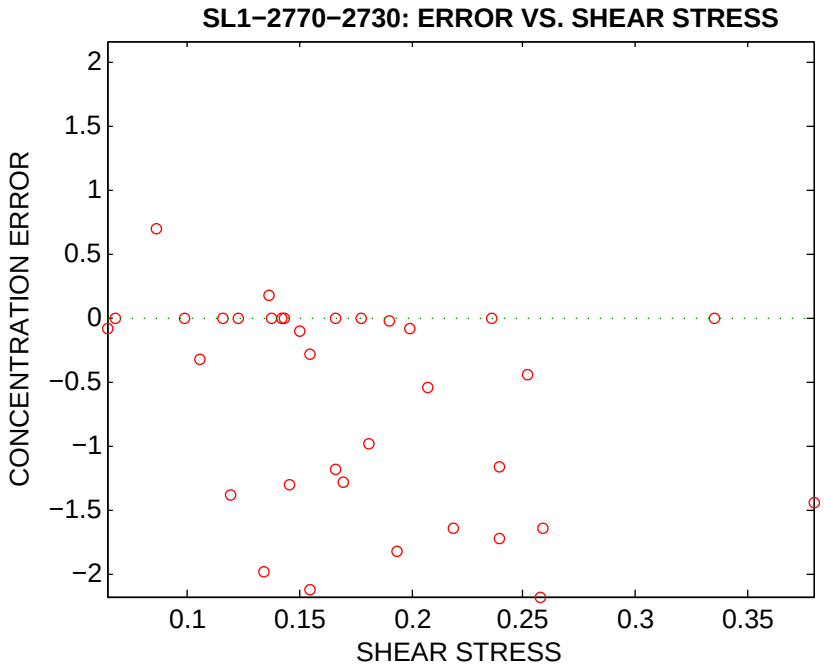


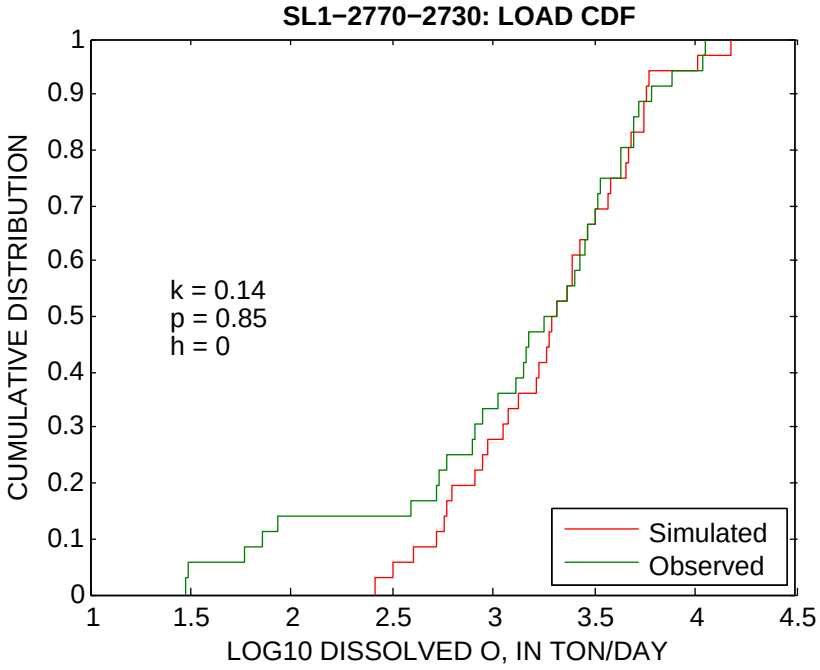


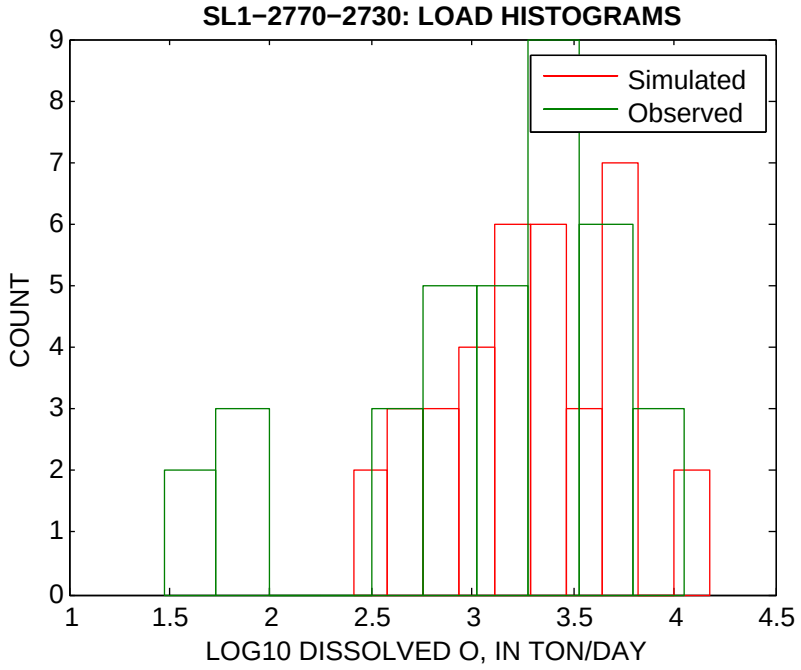


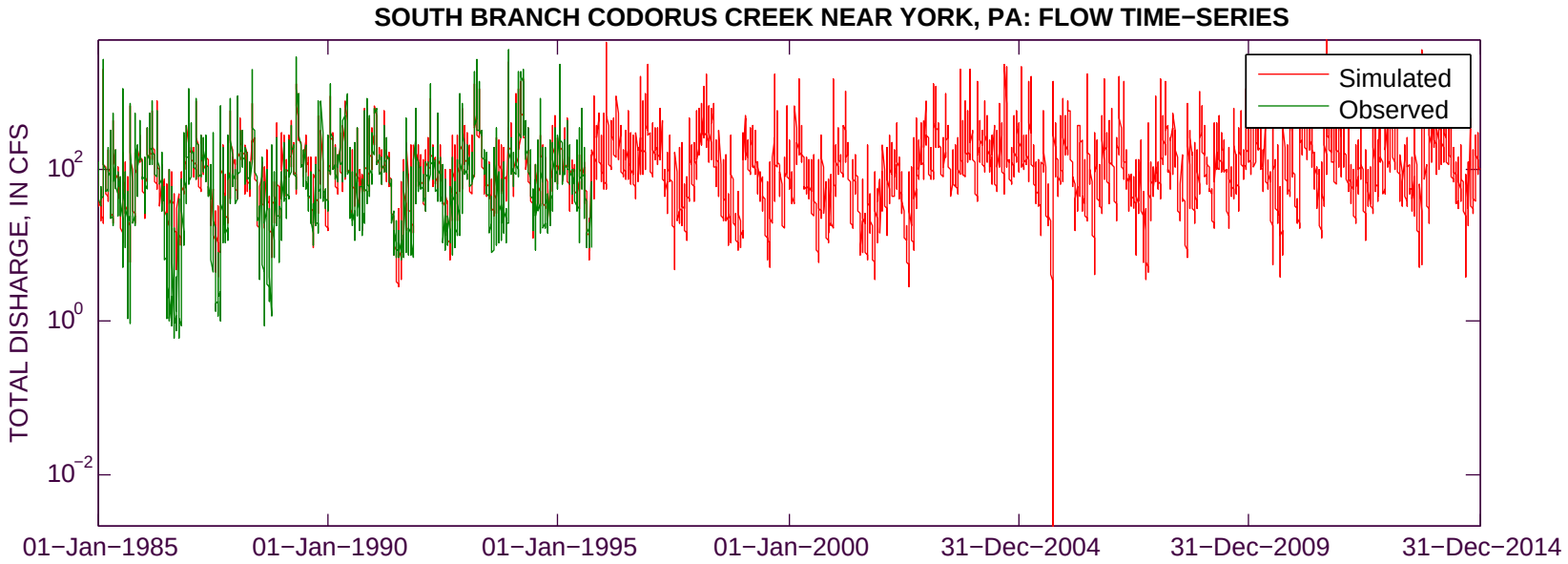
LOAD DATA
LOG10

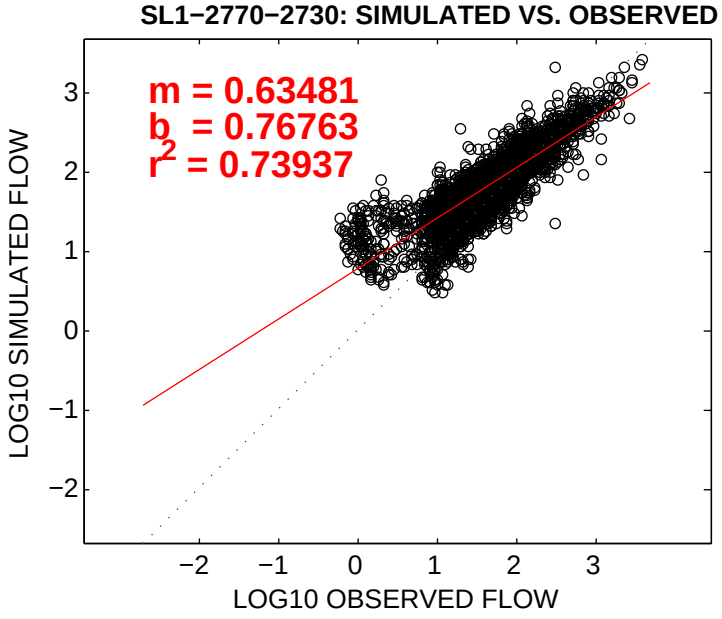


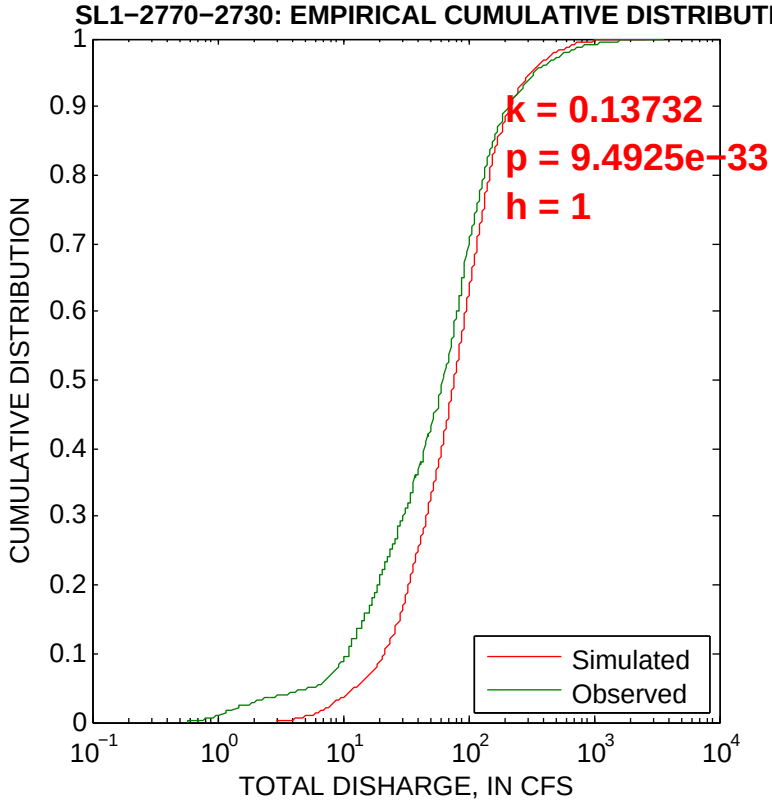












DATA SELECTION

scenario: P620171001WQ | file: FLOW.calib

plot: FLOW - total discharge

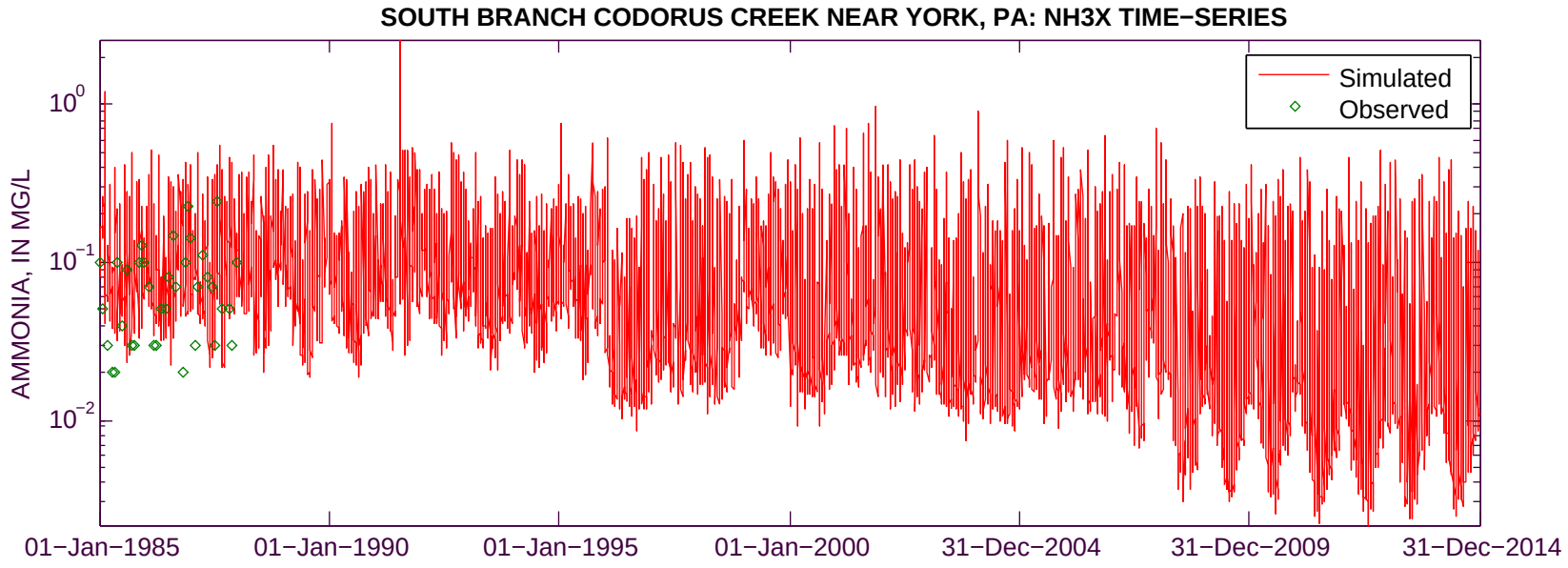
Dates: 1/1/1985 – 12/31/201

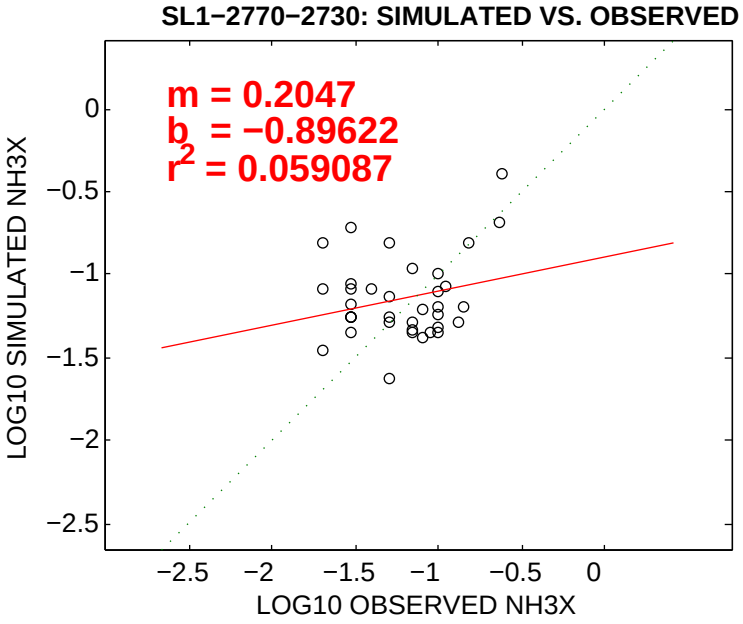
Drive: N/A | Directory: model | Observed: OBS20161101

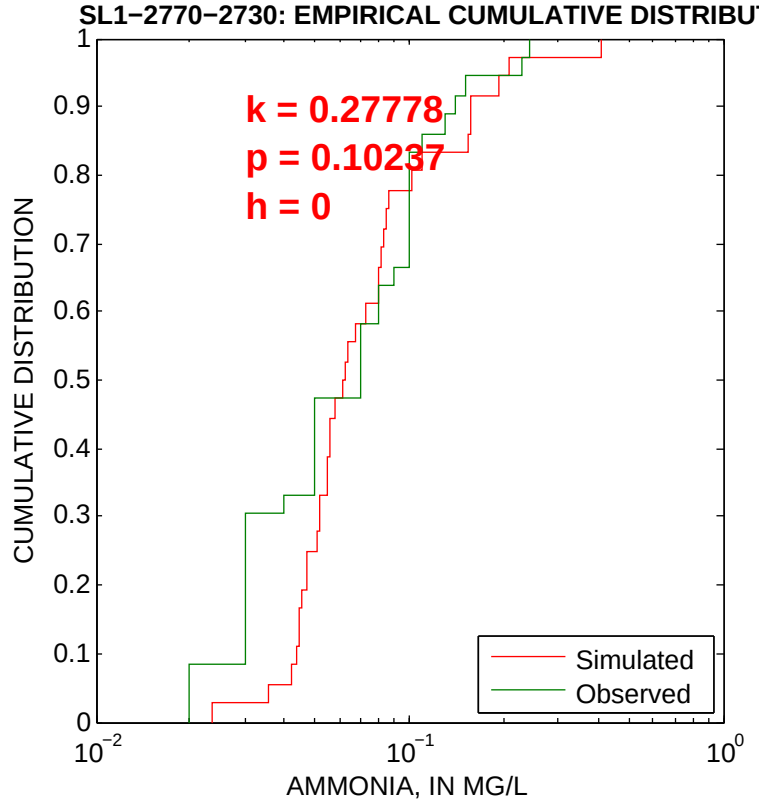
STATISTICS

		observe	simulate
n		3925	3925
min		0.59	2.9553
		-0.229148	0.470602
mean		110.035	112.736
		1.71839	1.85847
media		64	77.672
		1.80618	1.89026
max		3690	2576.8
		3.56703	3.41108
varian		42024.7	20724.7
		0.317936	0.173284
JB		0.001	0.001
		0.001	0.001
		ra	log
%		2.4541	8.15203
err.va		11780	0.107193
rel.std.err		0.280311	0.337152
mod.eff		0.719689	0.662848

VERSION 2.1







DATA SELECTION

scenario: P620171001WQ | file: NH3X.calib

plot: NH3X - ammonia

Dates: 1/1/1985 – 12/31/201

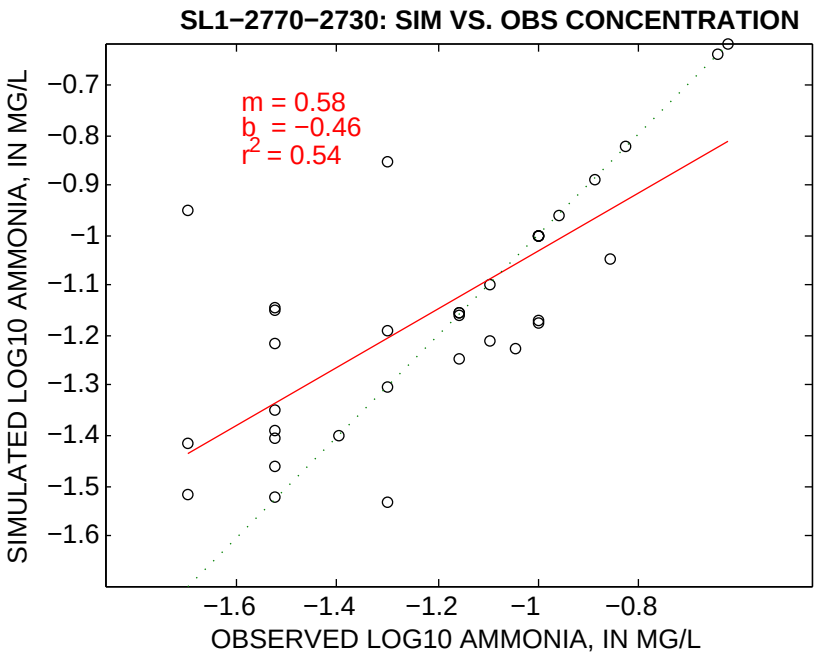
Drive | Directory | Observed: N/A | model | OBS20161101

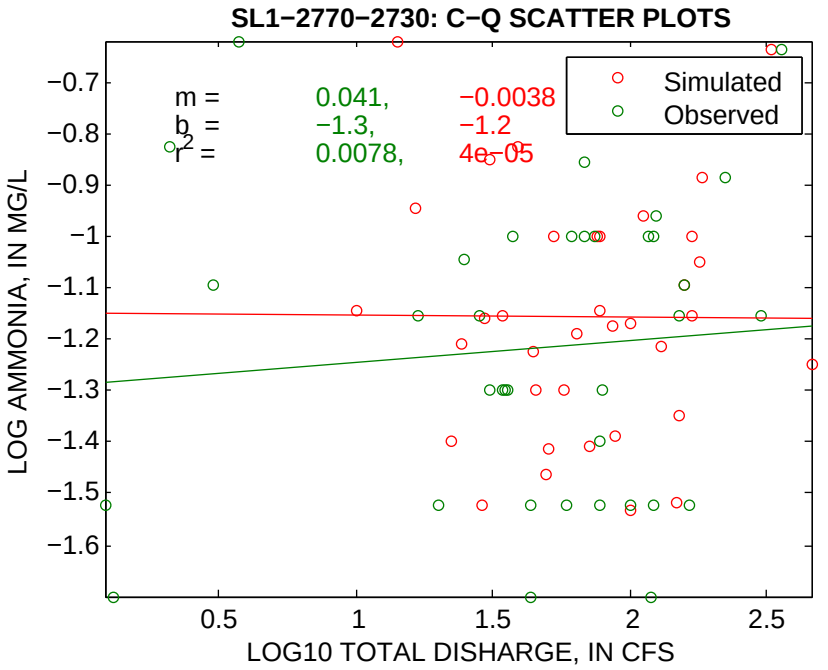
STATISTICS

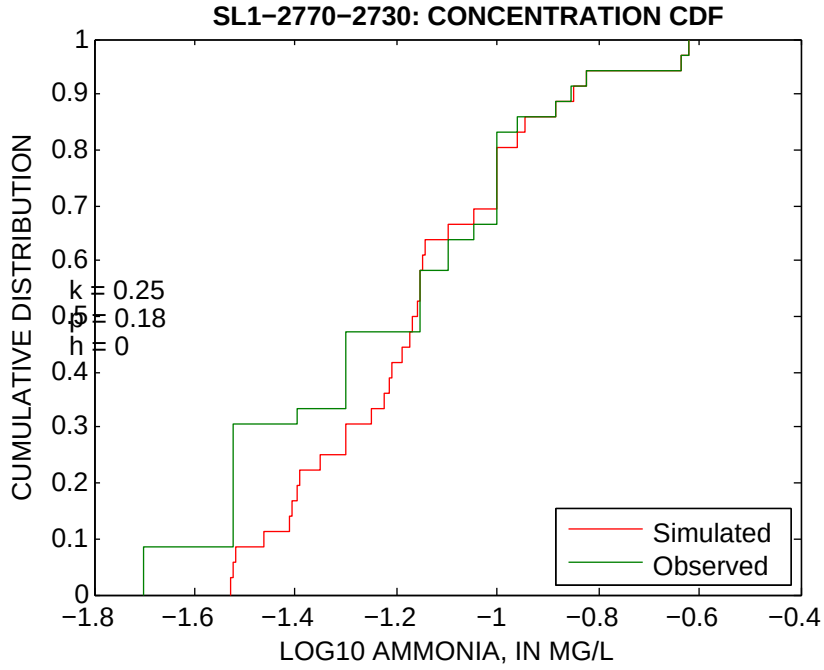
	n	36	36
		observe	simulate
min		0.02	0.023471
		-1.69897	-1.62947
mean		0.0755556	0.0865774
		-1.2173	-1.1454
media		0.07	0.062124
		-1.1549	-1.20678
max		0.24	0.407
		-0.619789	-0.390406
varian		0.00283111	0.00496709
		0.0863945	0.0612687
JB		0.003031	0.001
		0.43451	0.021368
		ra	log
%		14.5878	-5.90639
err.va		0.00371432	0.11761
rel.std.err		1.31196	1.36131
mod.eff		-0.311964	-0.361313

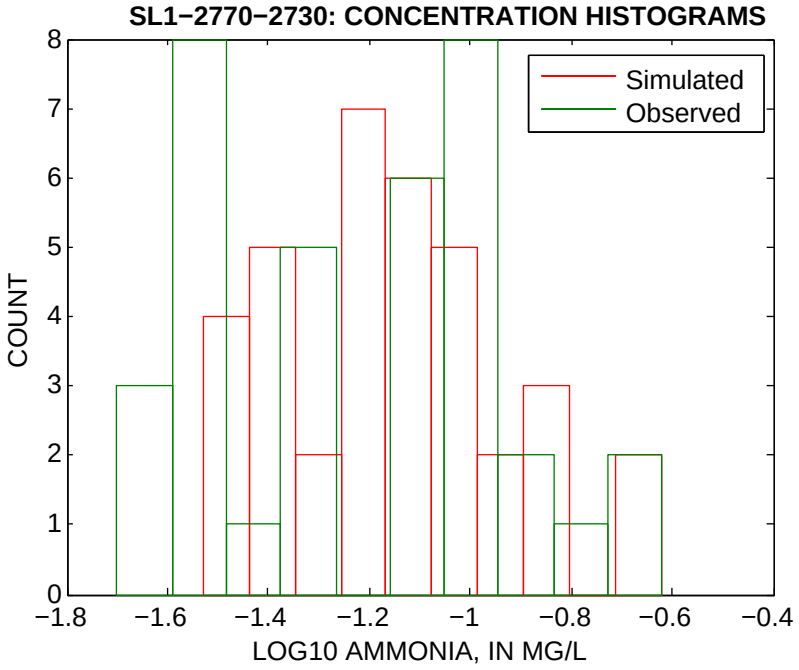
VERSION

ALL DATA
LOG10

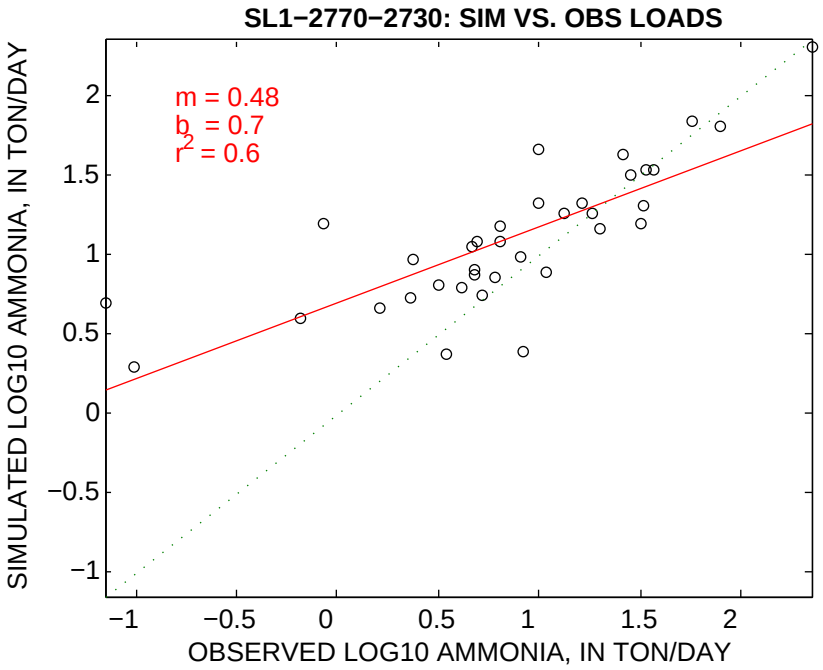


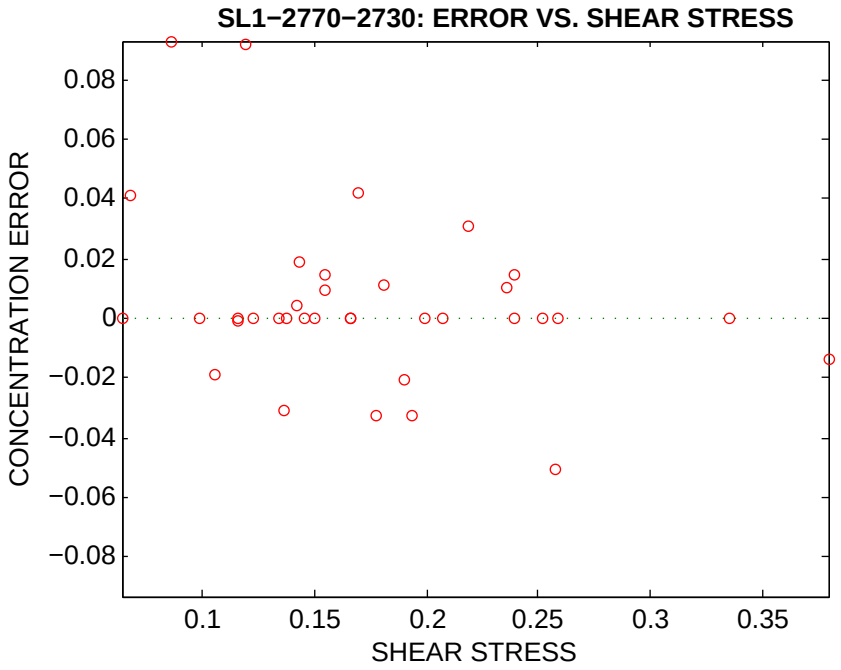


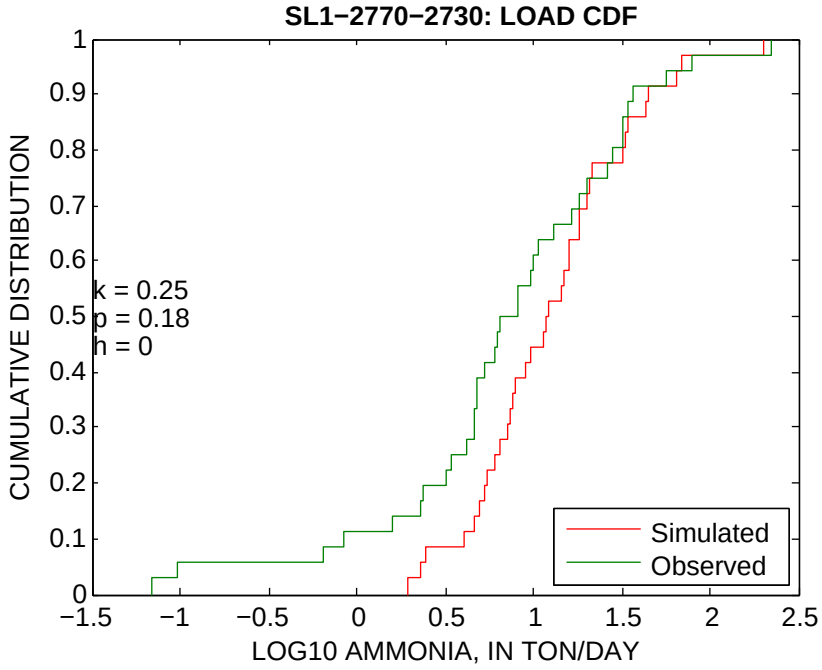


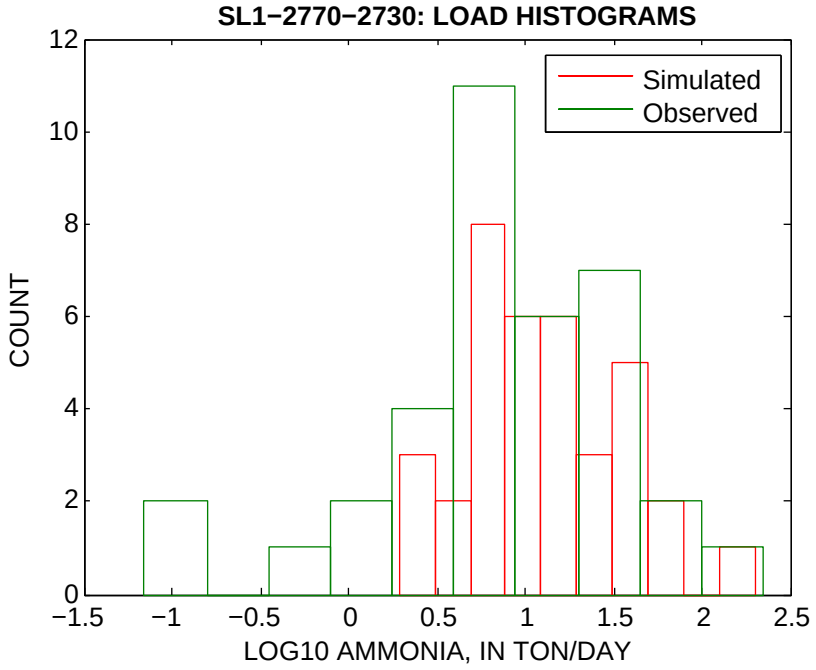


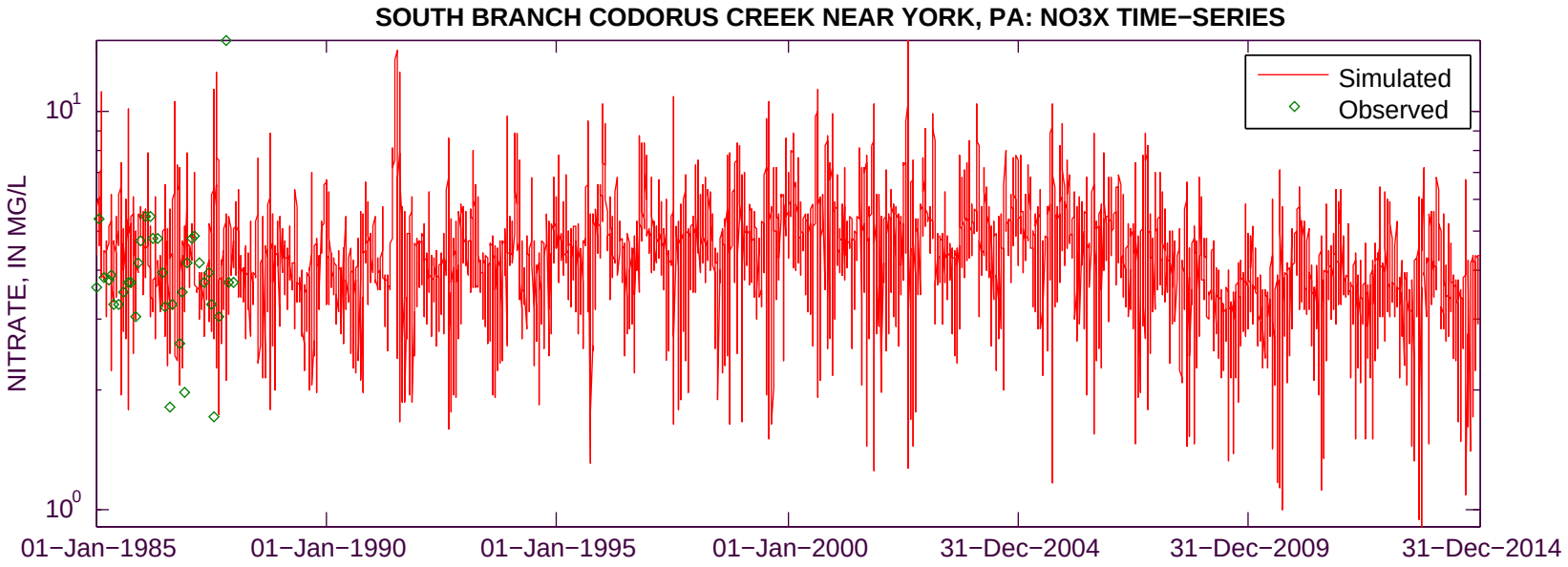
LOAD DATA
LOG10

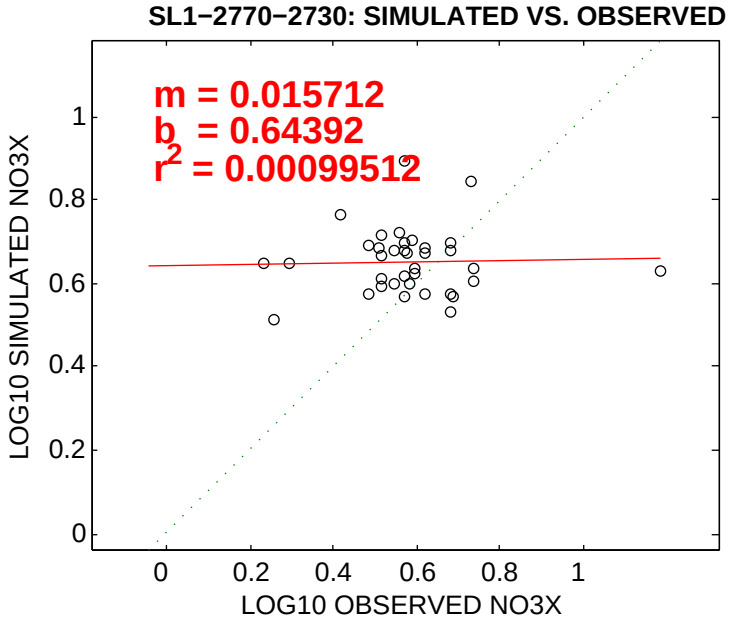


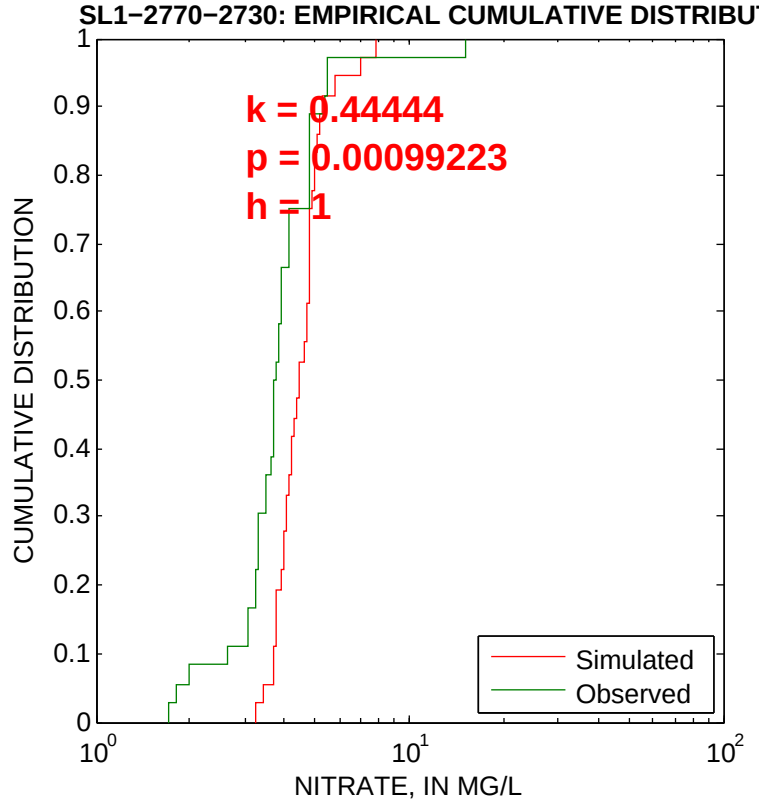












DATA SELECTION

scenario	file
P620171001WQ	NO3X.calib

plot: NO3X - nitrate

Dates: 1/1/1985 – 12/31/201

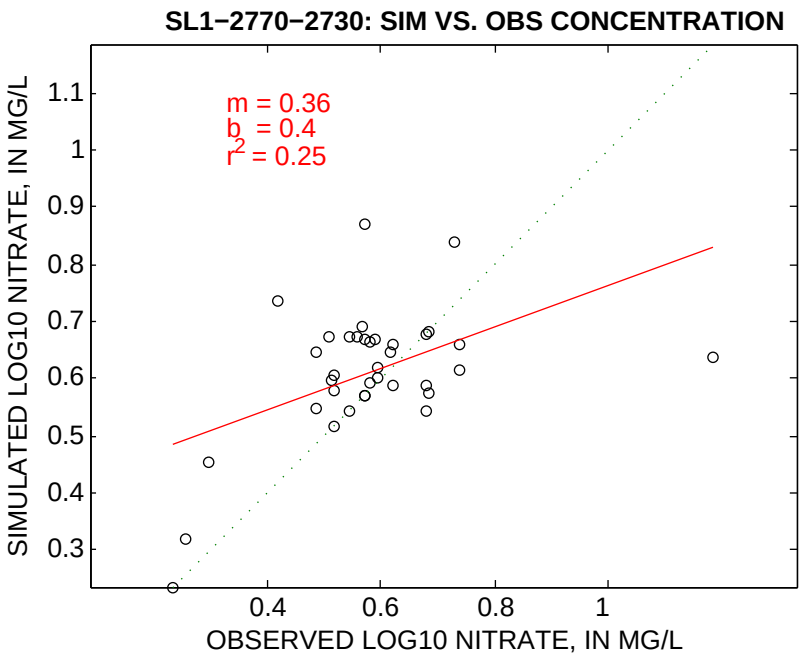
Drive	Directory	Observed
N/A	model	OBS20161101

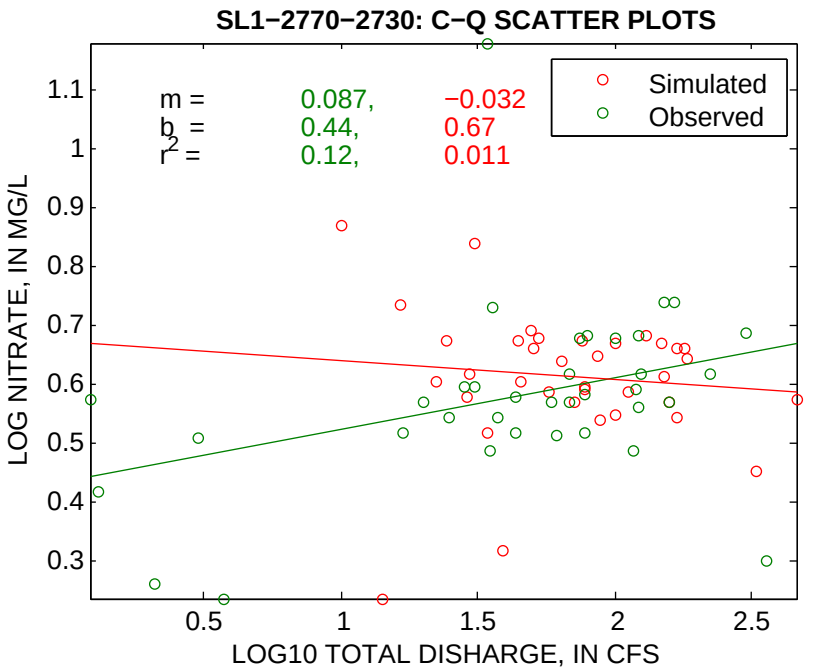
STATISTICS

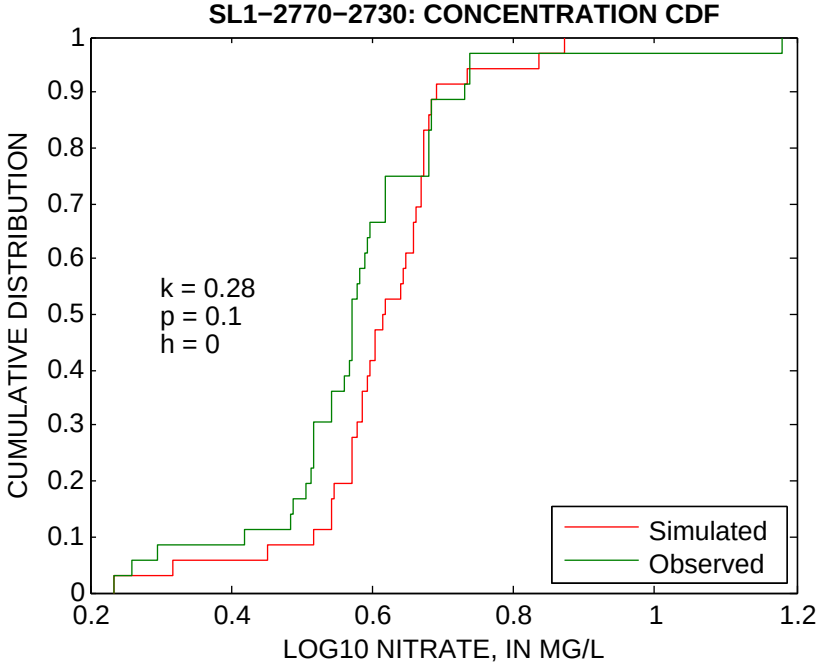
	n	36	36
		observe	simulate
min		1.72	3.265
		0.235528	0.513883
mean		4.08944	4.57377
		0.579121	0.653016
media		3.725	4.42935
		0.571126	0.64634
max		15.2	7.843
		1.18184	0.894482
varian		4.46337	0.829291
		0.0246292	0.00610985
JB		0.001	0.001
		0.001	0.015065
		ra	log
%		11.8434	12.7597
err.va		5.62584	0.0355815
rel.std.err		1.26045	1.44469
mod.eff		-0.260447	-0.444686

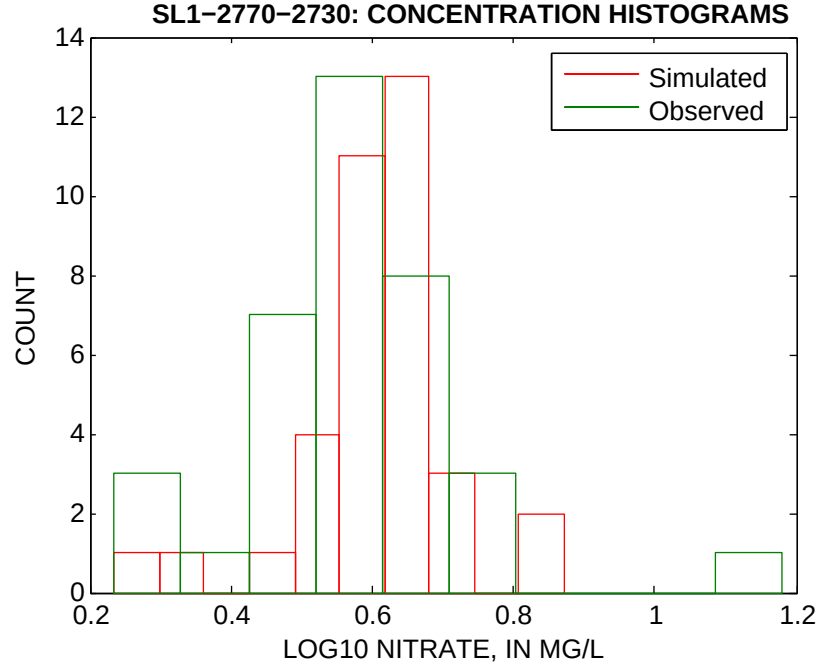
VERSION 2.1

ALL DATA
LOG10

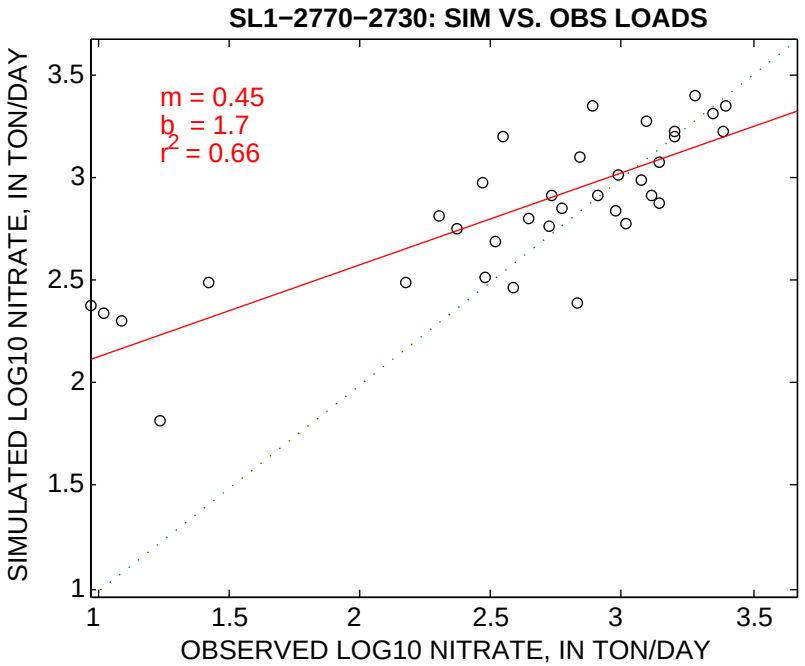


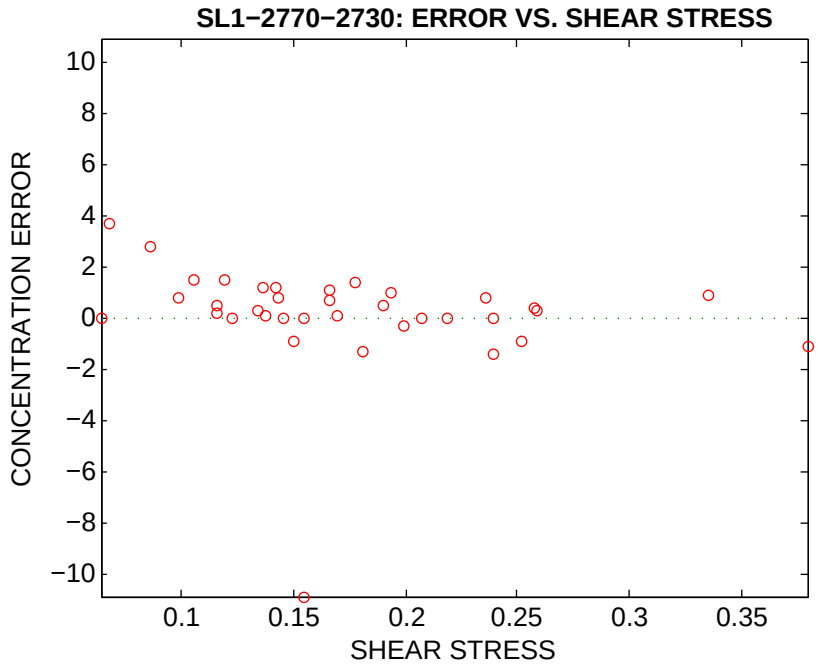


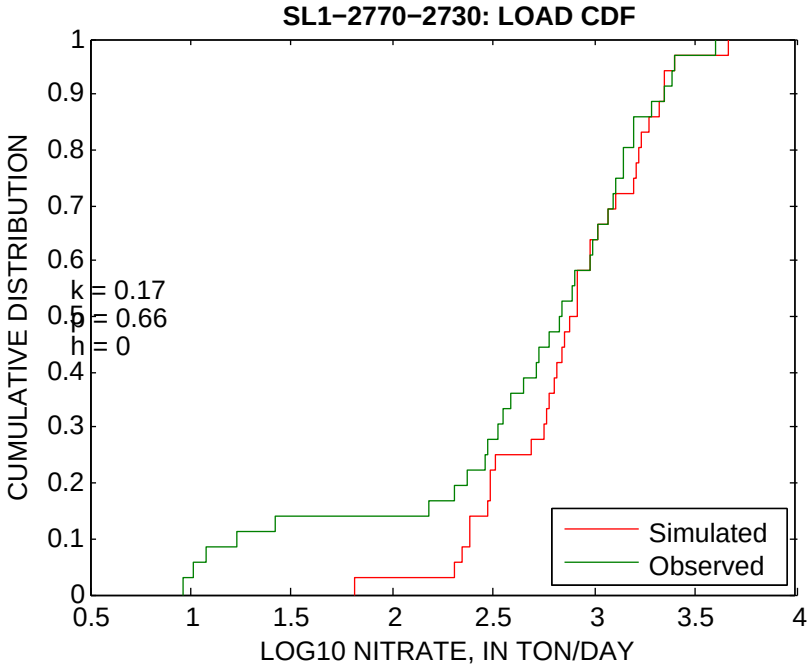


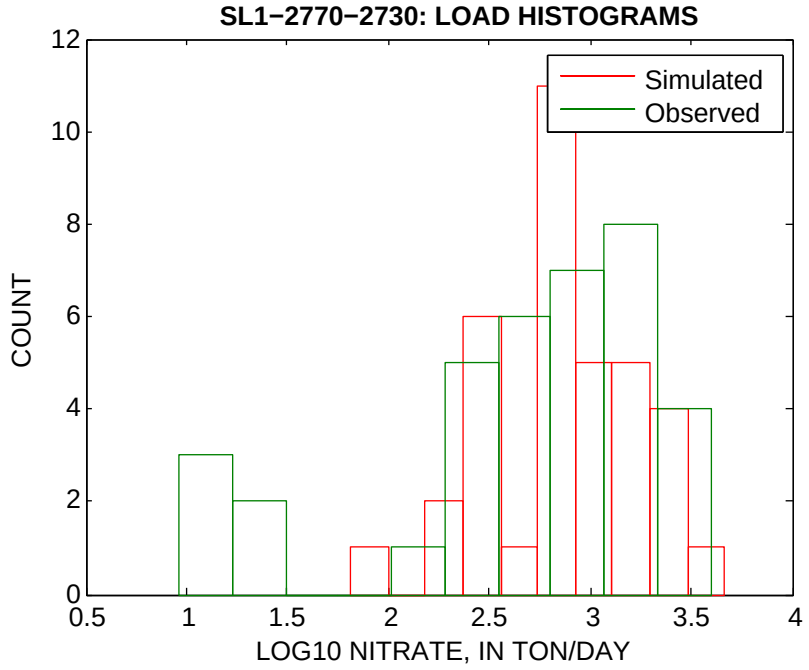


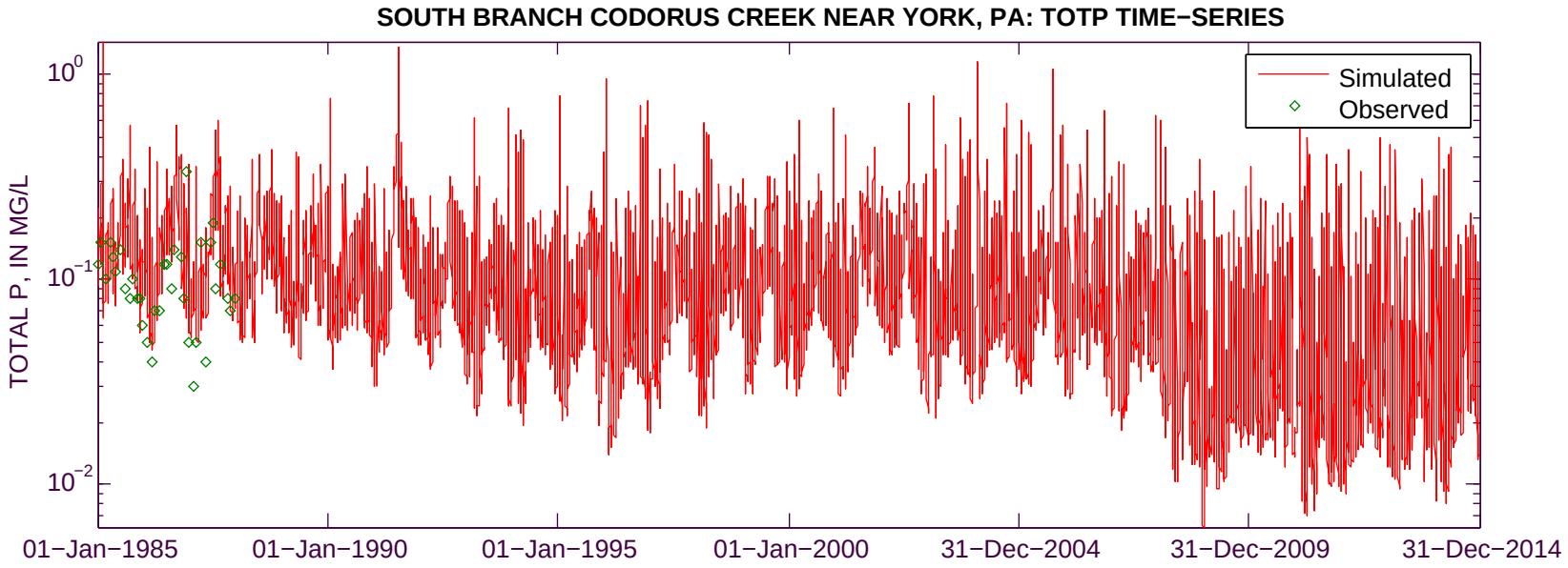
LOAD DATA
LOG10

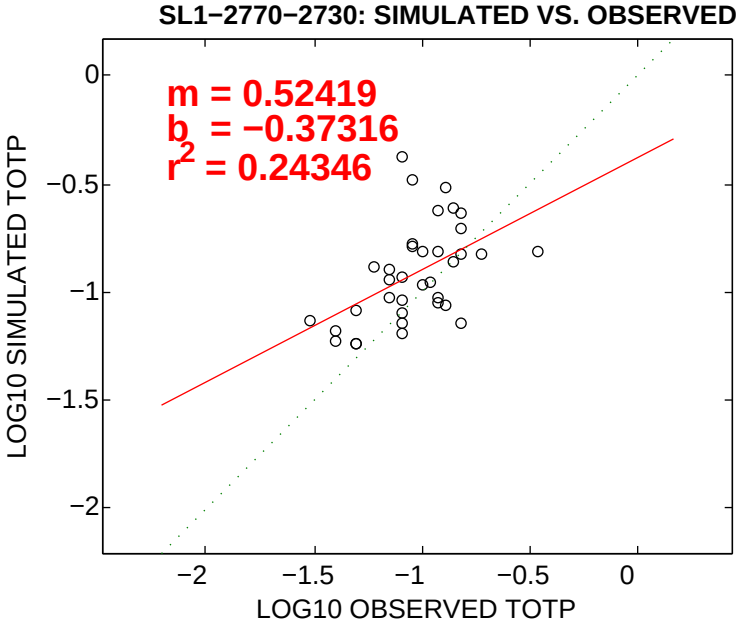


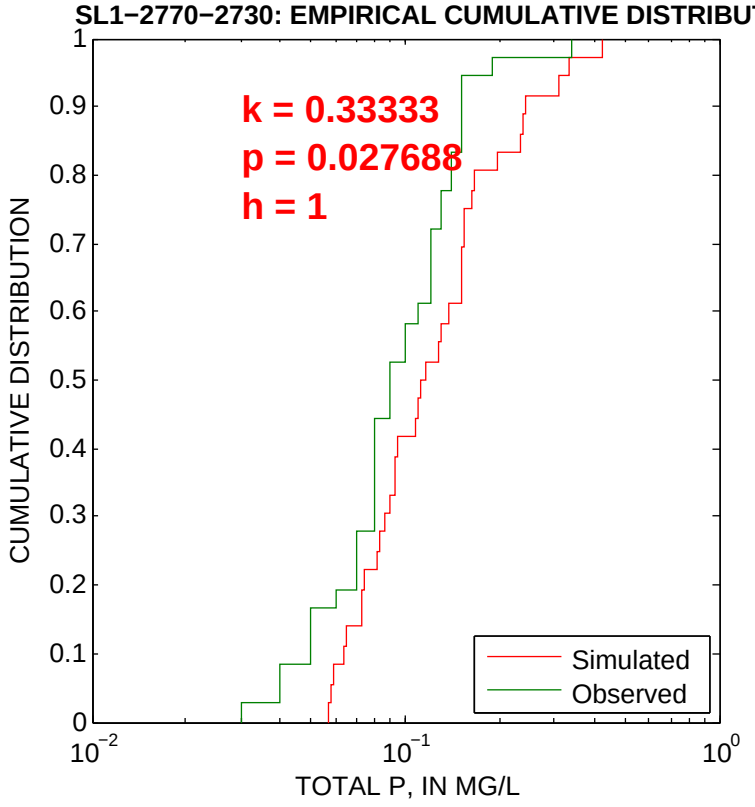












DATA SELECTION

scenario: P620171001WQ | file: TOTP.calib

plot: TOTP - total phosphorus

Dates: 1/1/1985 – 12/31/201

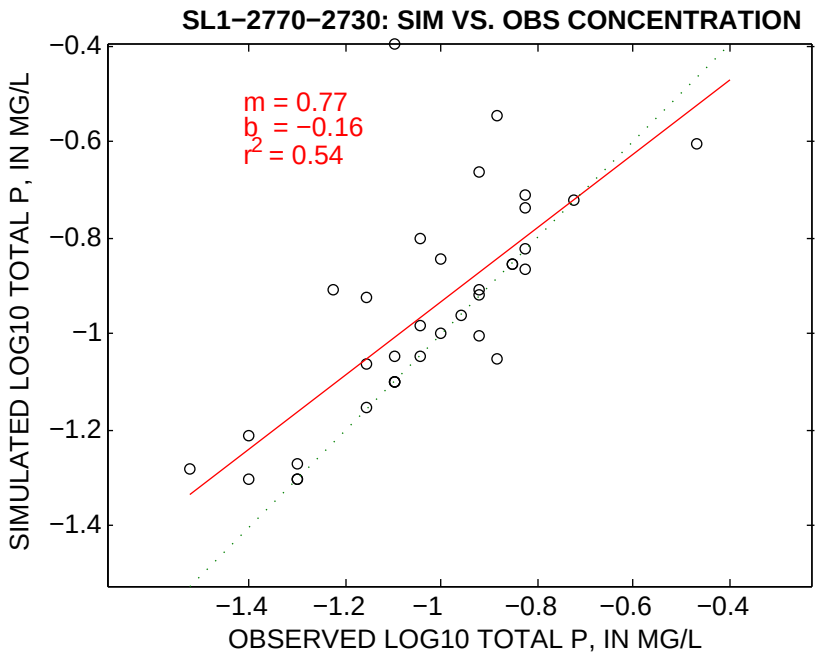
Drive: N/A | Directory: model | Observed: OBS20161101

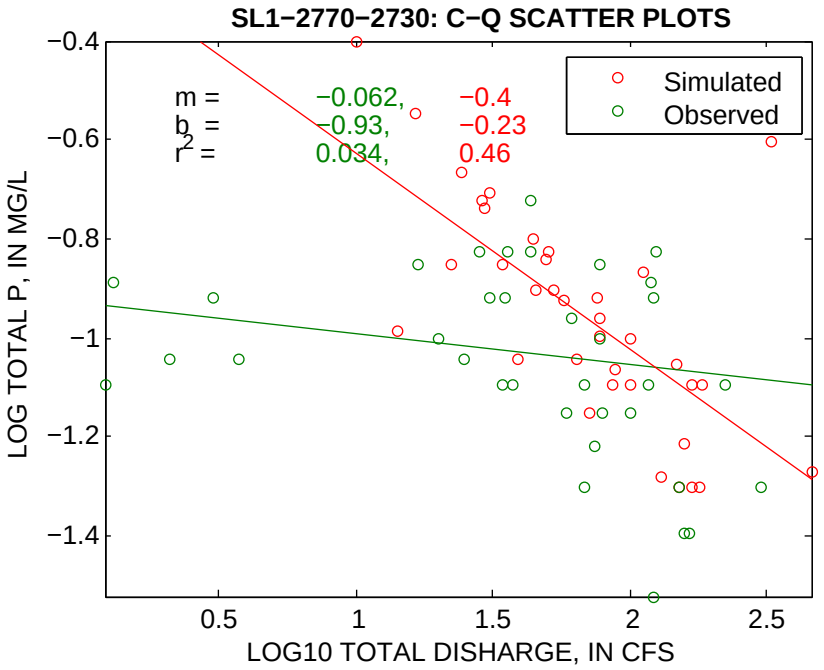
STATISTICS

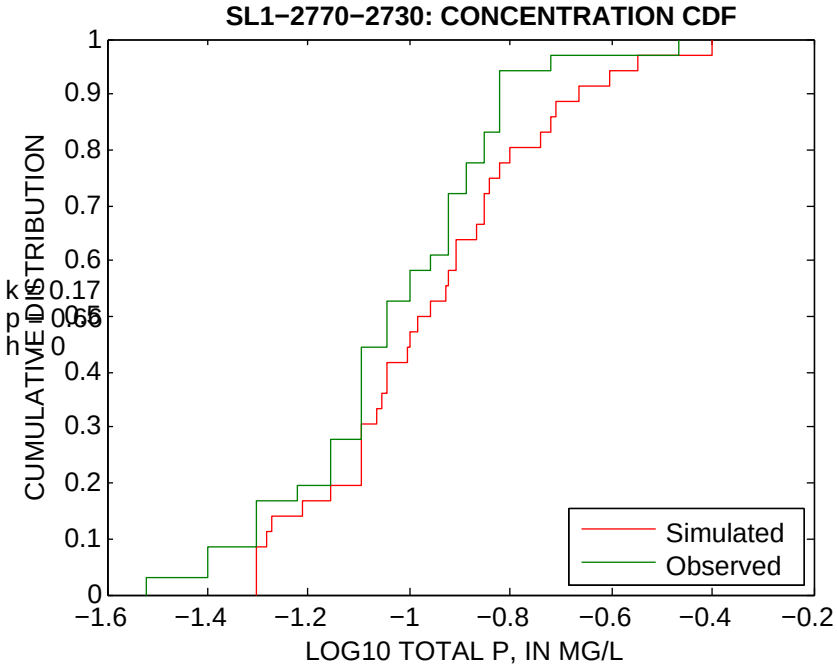
n	36	36
	observe	simulate
min	0.03	0.05689
	-1.52288	-1.24496
mean	0.103889	0.139961
	-1.03429	-0.915327
media	0.09	0.114965
	-1.04576	-0.939507
max	0.34	0.42515
	-0.468521	-0.371458
varian	0.00309873	0.00703776
	0.045233	0.051052
JB	0.001	0.001811
	0.5	0.222321
	ra	log
%	34.7218	-11.5015
err.va	0.00911968	0.0634186
rel.std.err	2.94304	1.40204
mod.eff	-1.94304	-0.402043

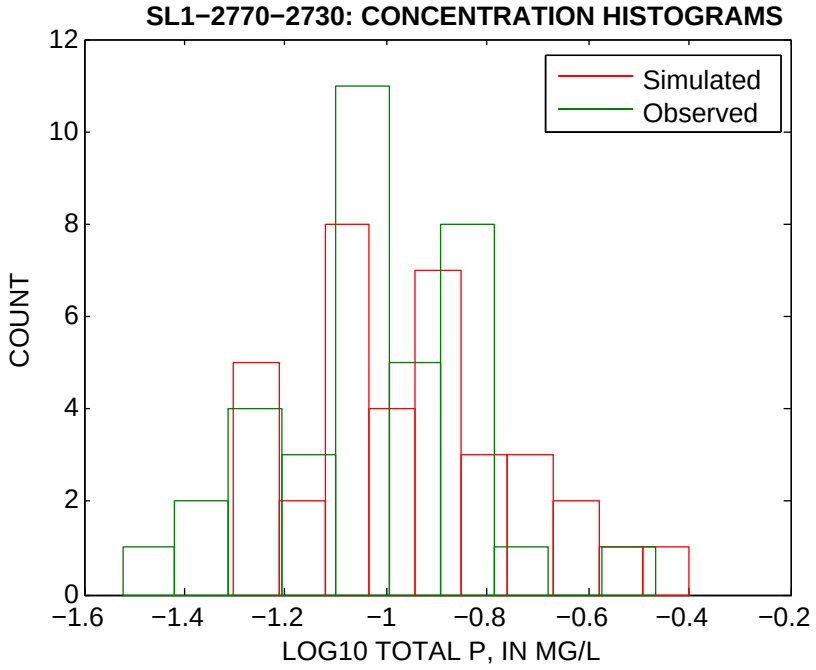
VERSION 2.1

ALL DATA
LOG10

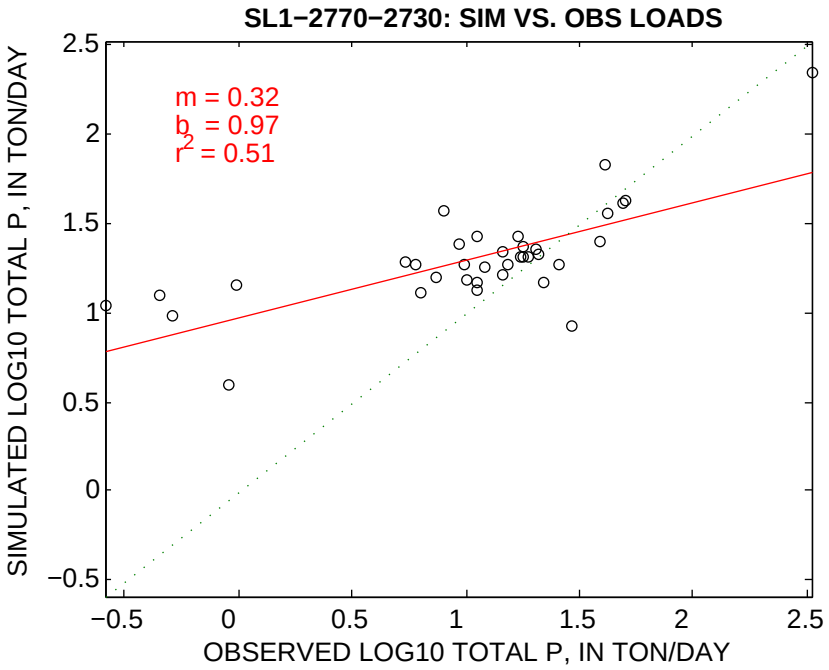


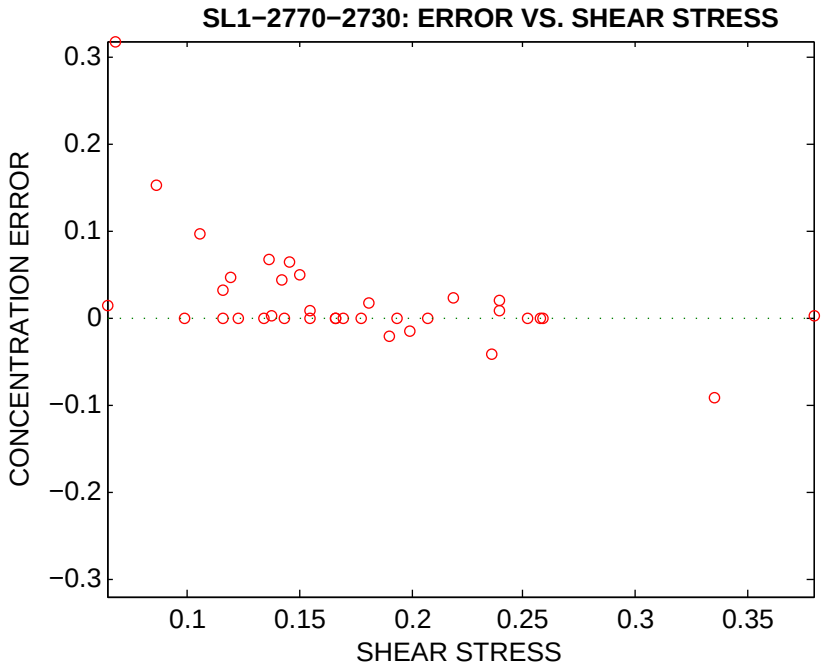


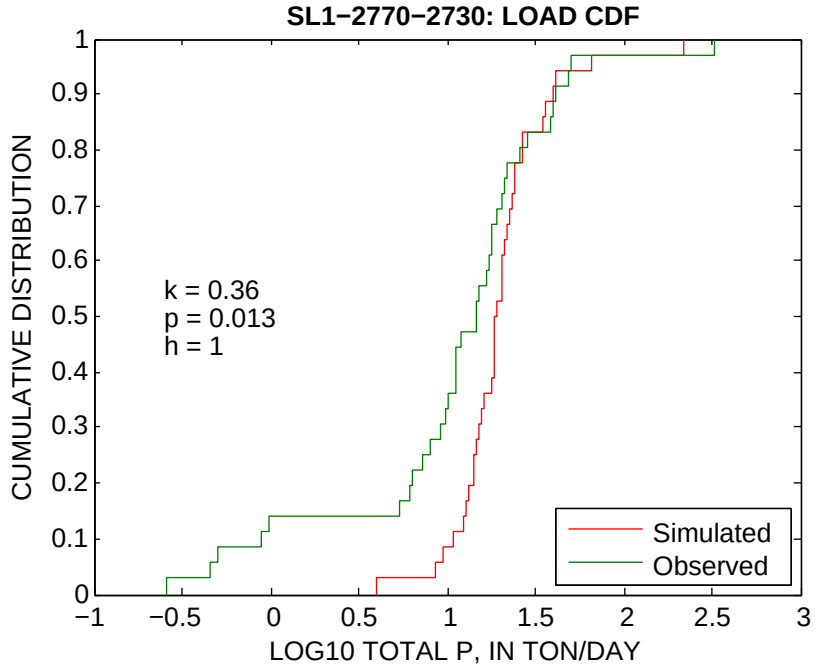


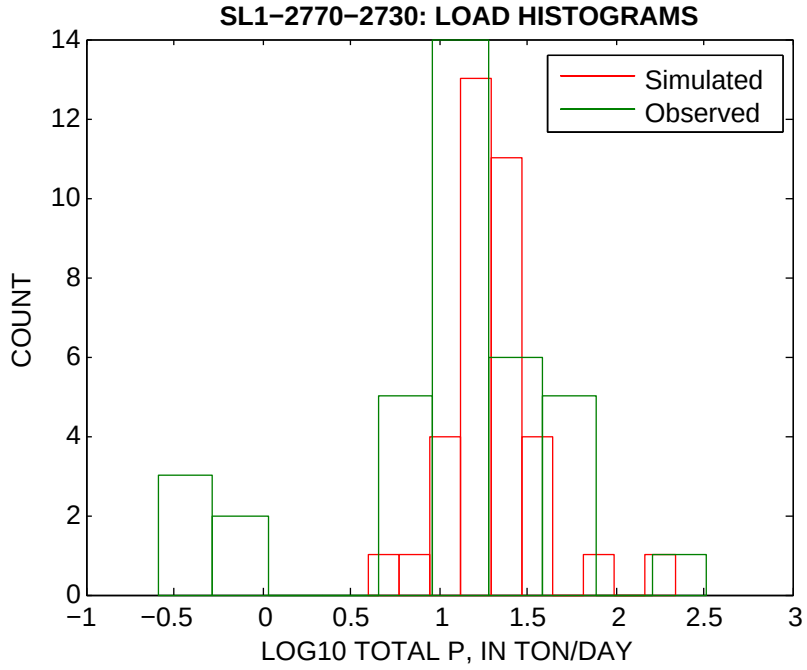


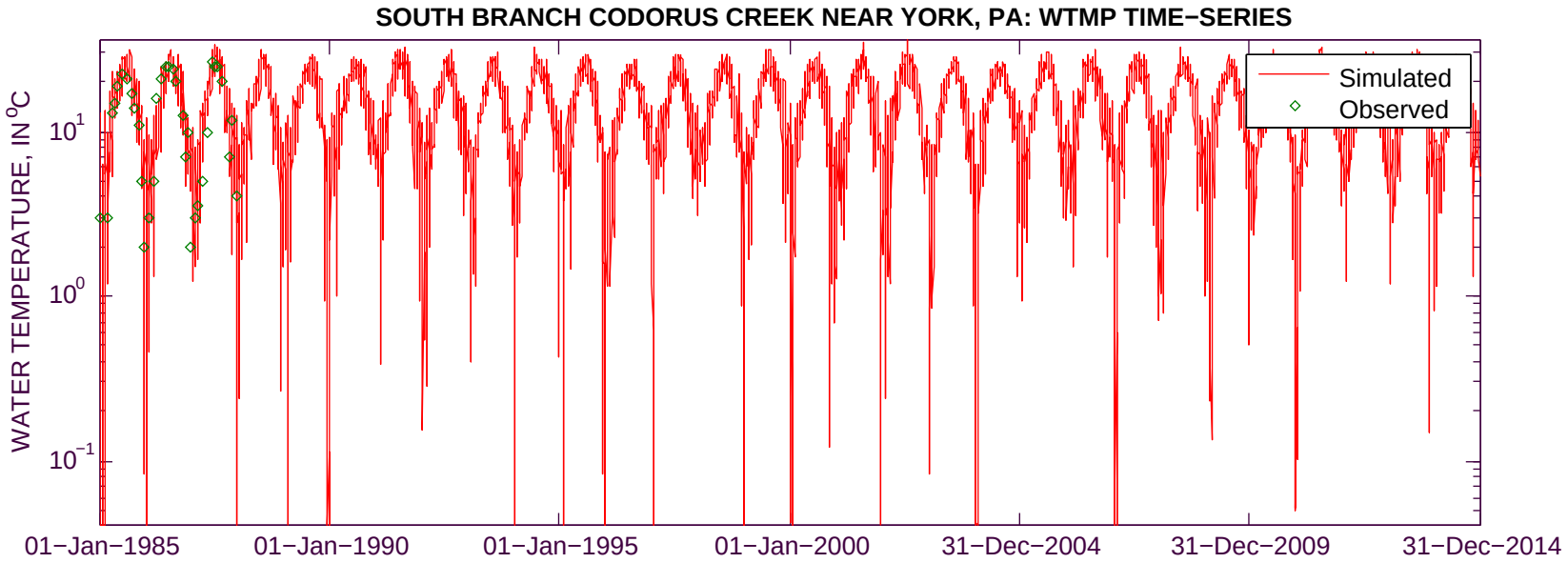
LOAD DATA
LOG10

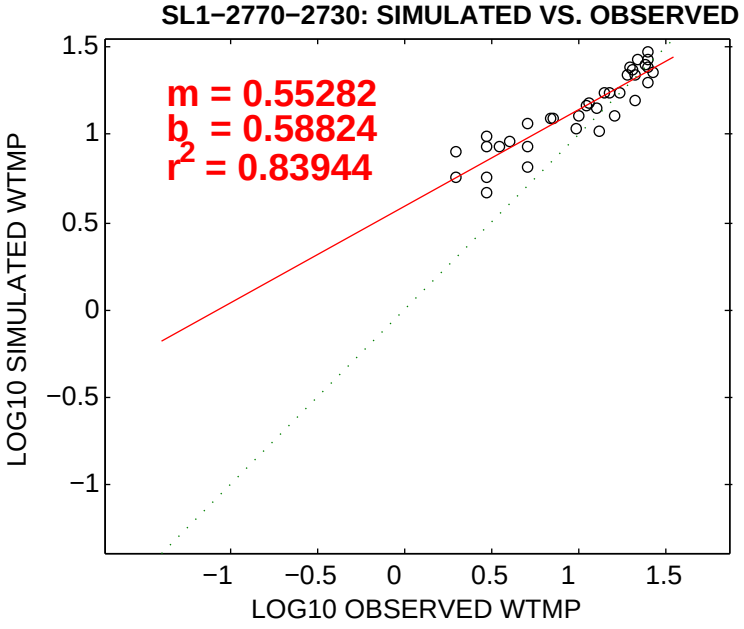


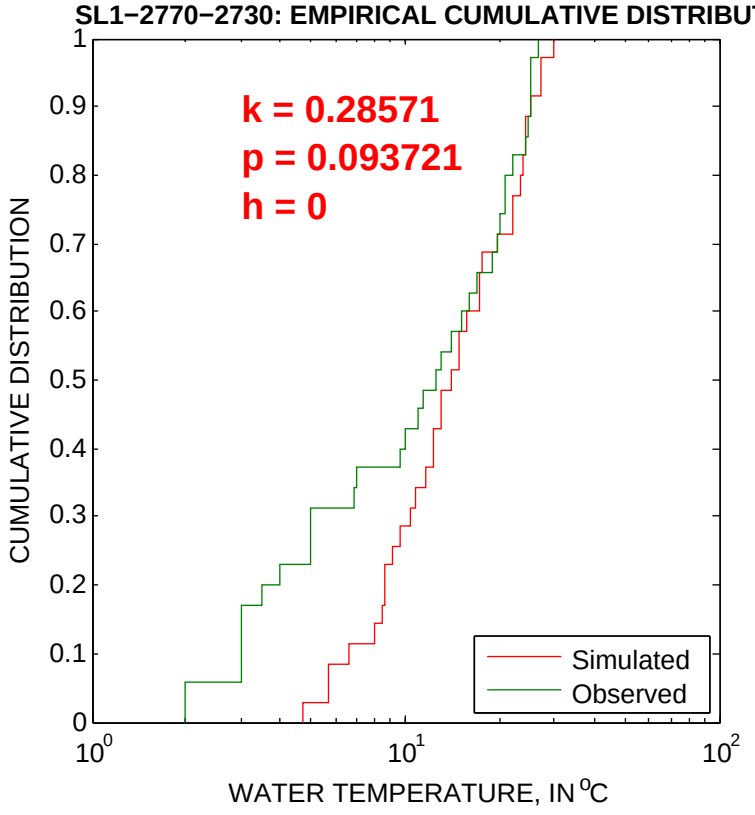












DATA SELECTION

scenario	file
P620171001WQ	WTMP.calib

plot: WTMP - water tempera...

Dates: 1/1/1985 – 12/31/201

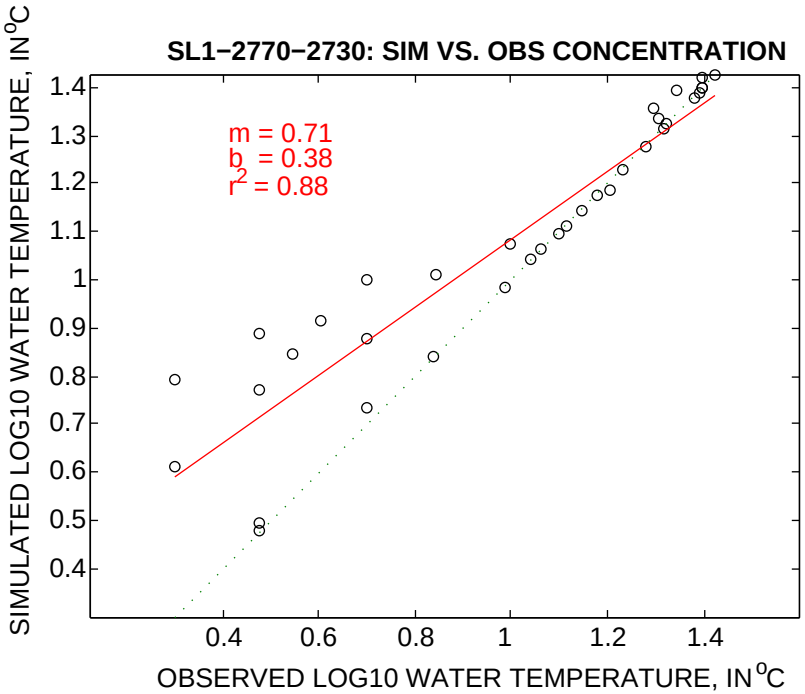
Drive	Directory	Observed
N/A	model	OBS20161101

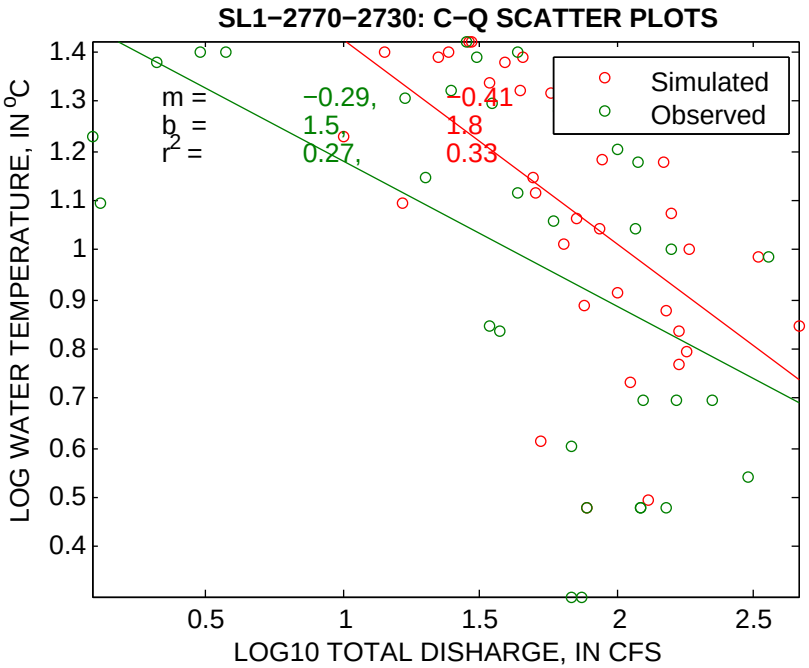
STATISTICS

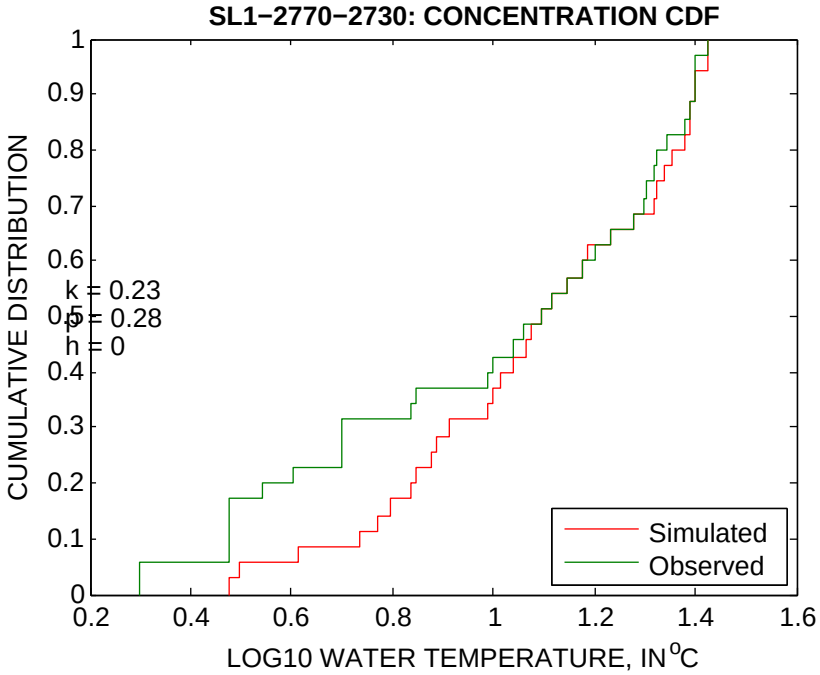
	n	35	35
		observe	simulate
min		2	4.6806
		0.30103	0.670302
mean		12.9943	15.3785
		0.992625	1.13698
media		12.5	14.042
		1.09691	1.14743
max		26.5	29.767
		1.42325	1.47374
varian		68.8447	50.8179
		0.131236	0.0477786
JB		0.090505	0.135269
		0.077709	0.266981
		ra	log
%		18.3478	14.5431
err.va		15.6548	0.0553671
rel.std.err		0.227392	0.421888
mod.eff		0.772608	0.578112

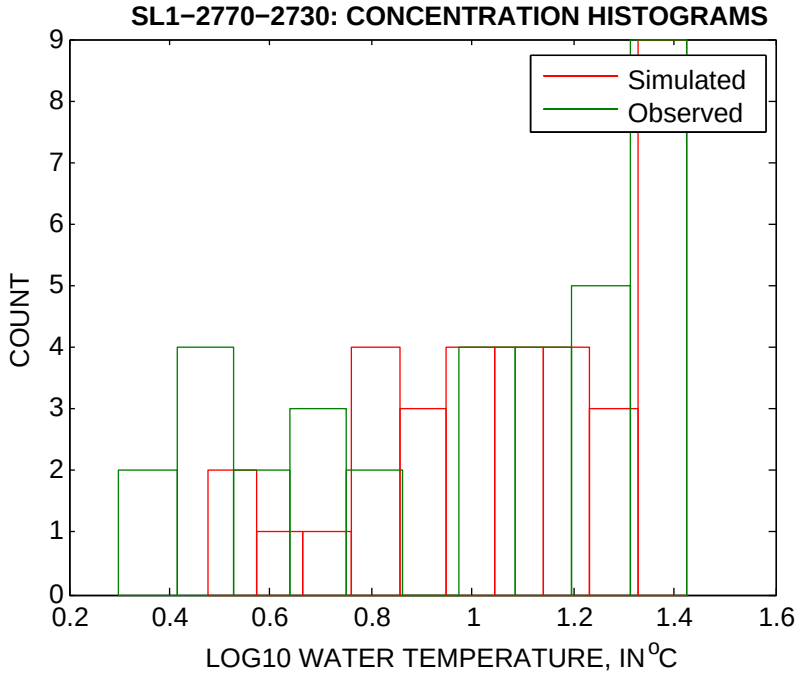
VERSION 2.1

ALL DATA
LOG10

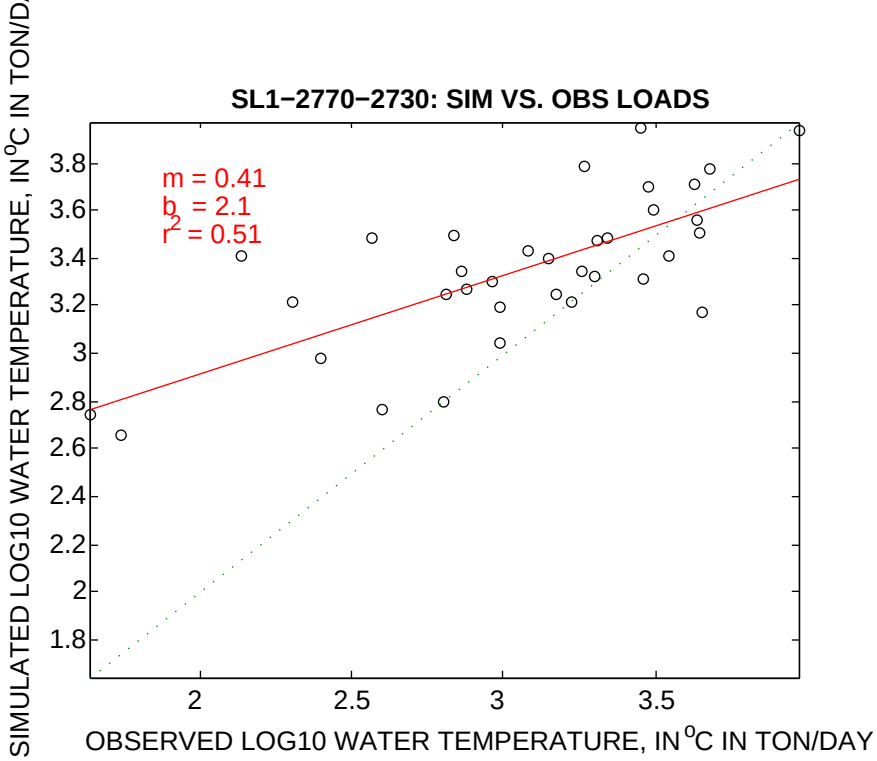


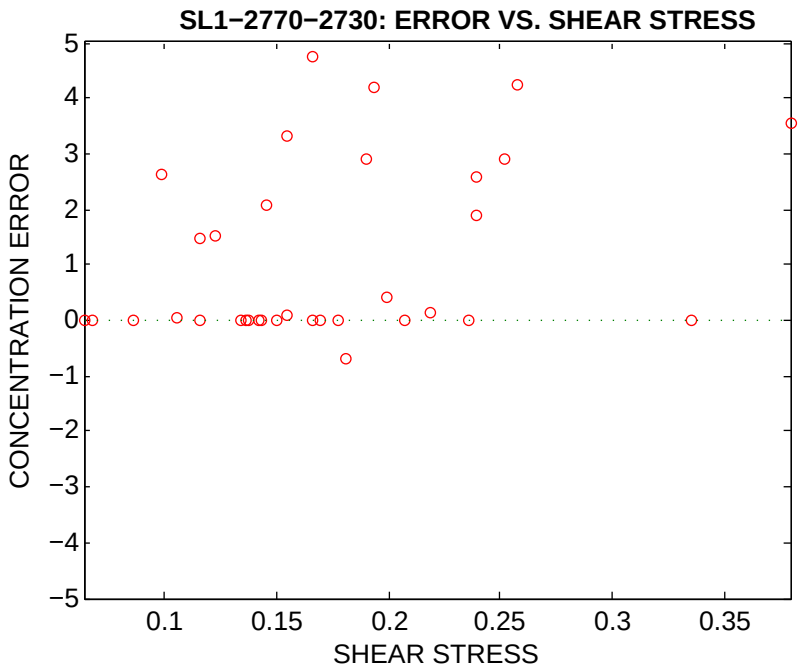


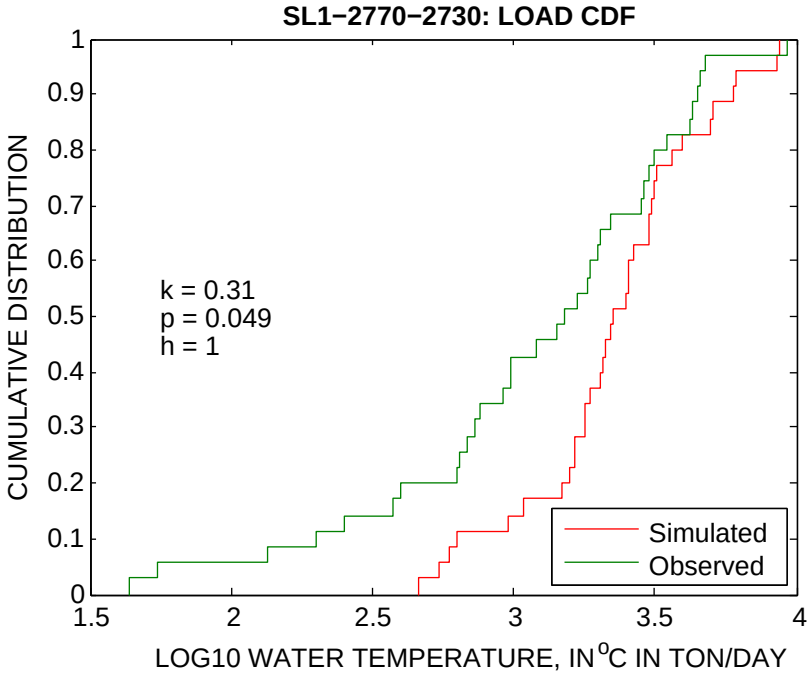


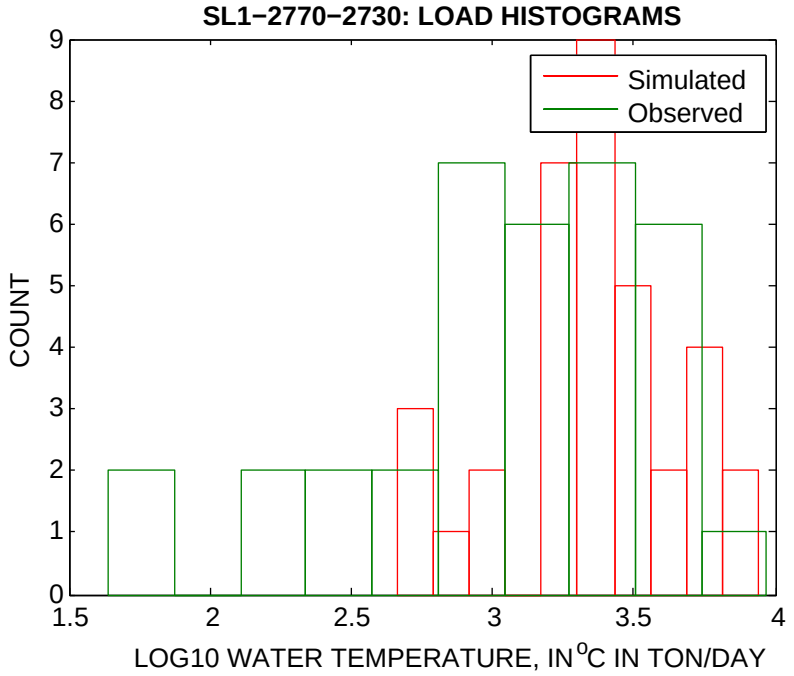


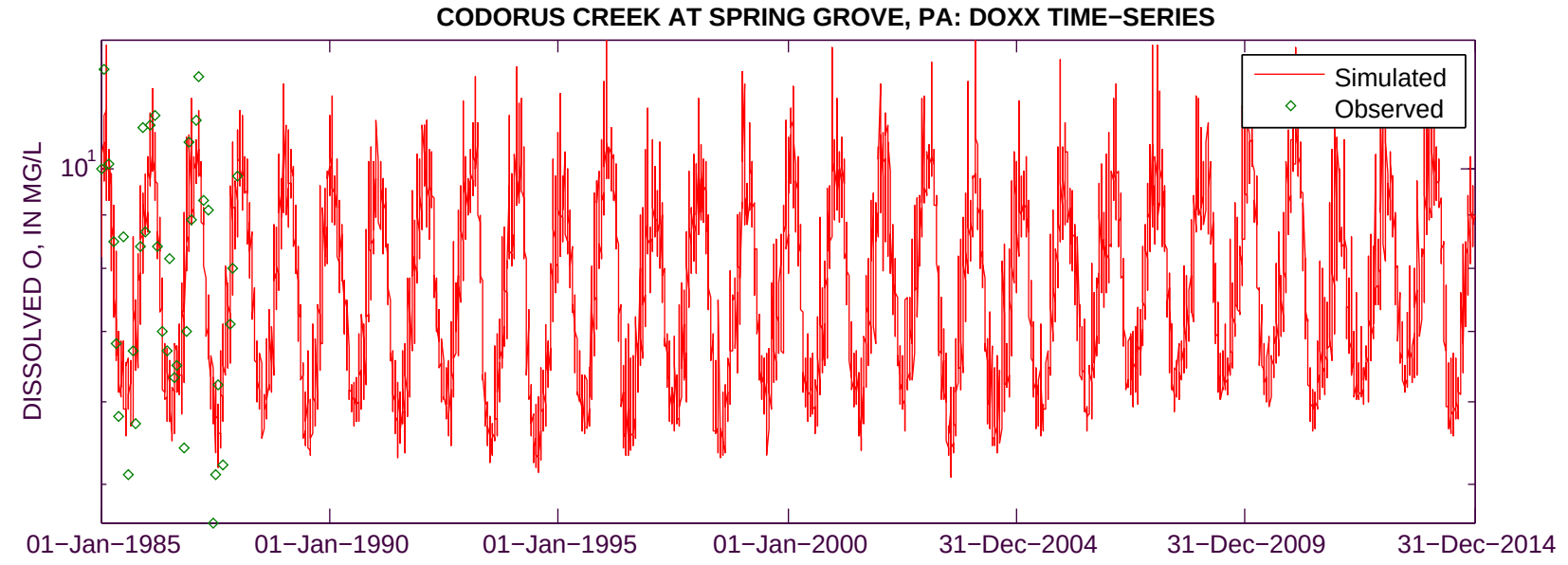
LOAD DATA
LOG10

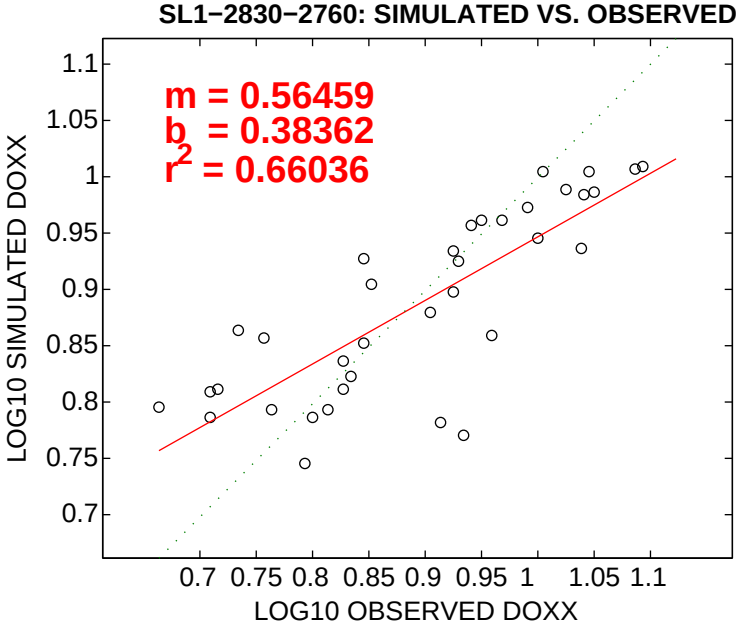


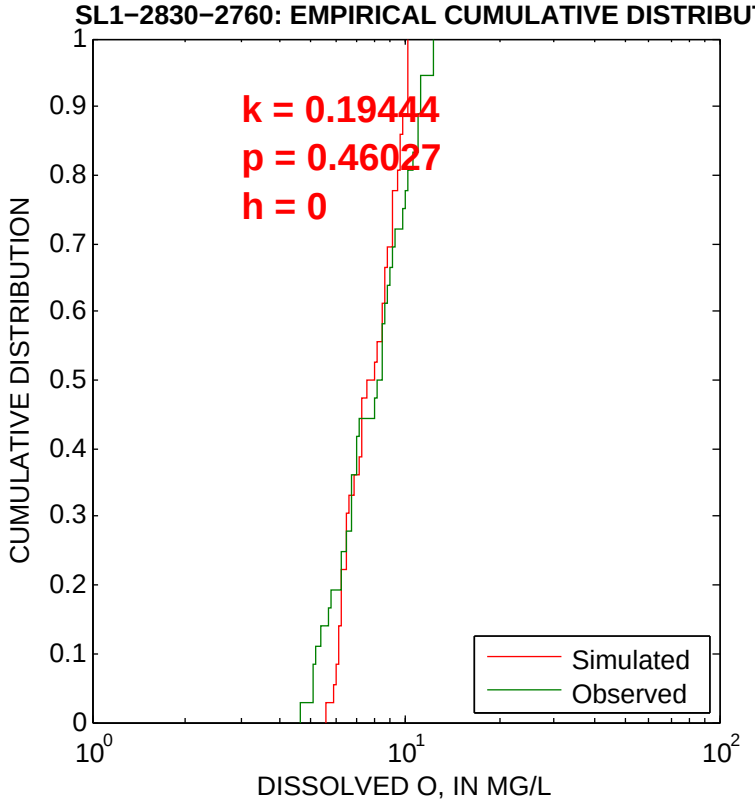












DATA SELECTION

scenario	file
P620171001WQ	DOXX.calib

plot: DOXX - dissolved oxygen

Dates: 1/1/1985 – 12/31/201

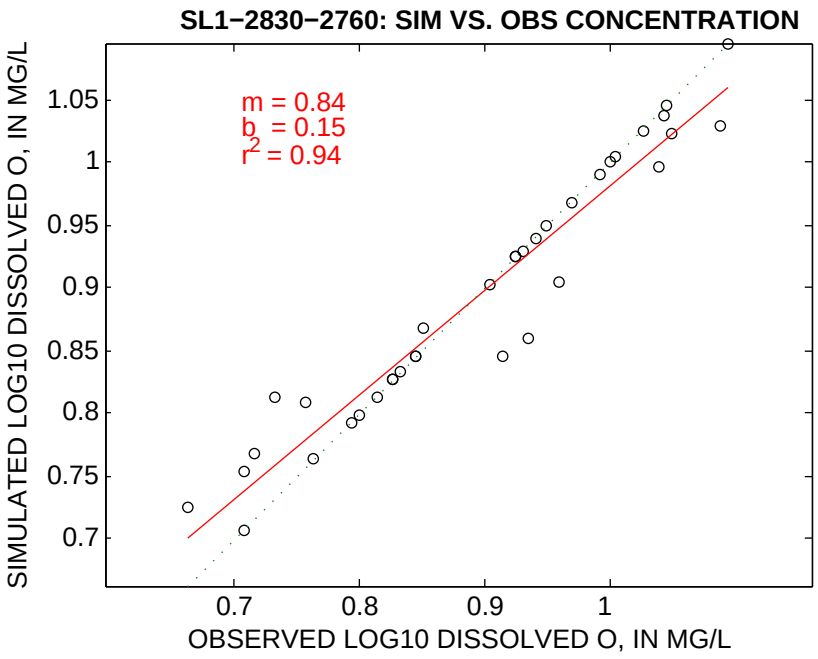
Drive	Directory	Observed
N/A	model	OBS20161101

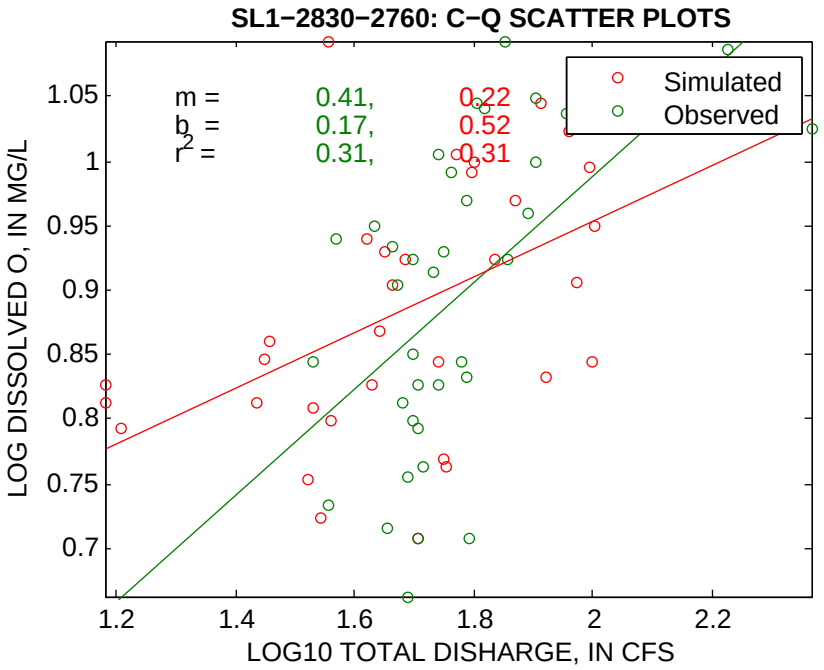
STATISTICS

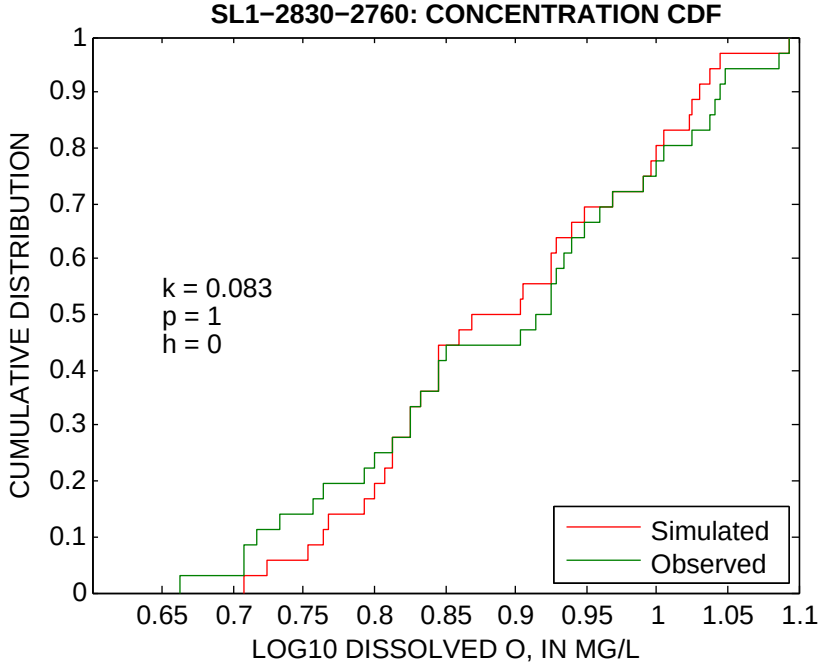
	n	36	36
		observe	simulate
min		4.6	5.5816
		0.662758	0.746759
mean		8.12778	7.87427
		0.894338	0.888553
media		8.3	7.74905
		0.919047	0.889144
max		12.4	10.24
		1.09342	1.0103
varian		4.75349	2.22695
		0.0142476	0.00687759
JB		0.227344	0.093261
		0.242682	0.095523
		ra	log
%		-3.11907	-0.646799
err.va		1.54359	0.00507139
rel.std.err		1.324728	0.355946
mod.eff		0.675272	0.644054

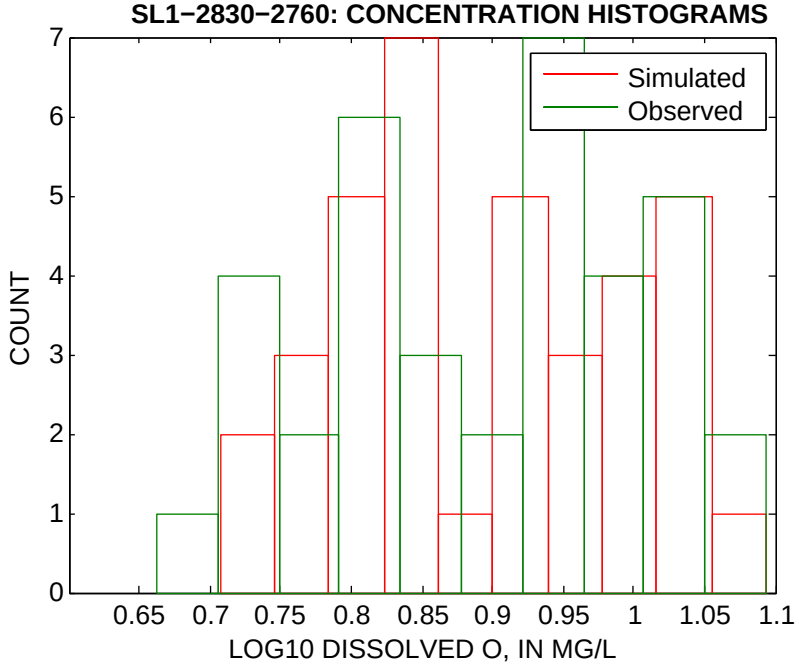
VERSION 2.1

ALL DATA
LOG10

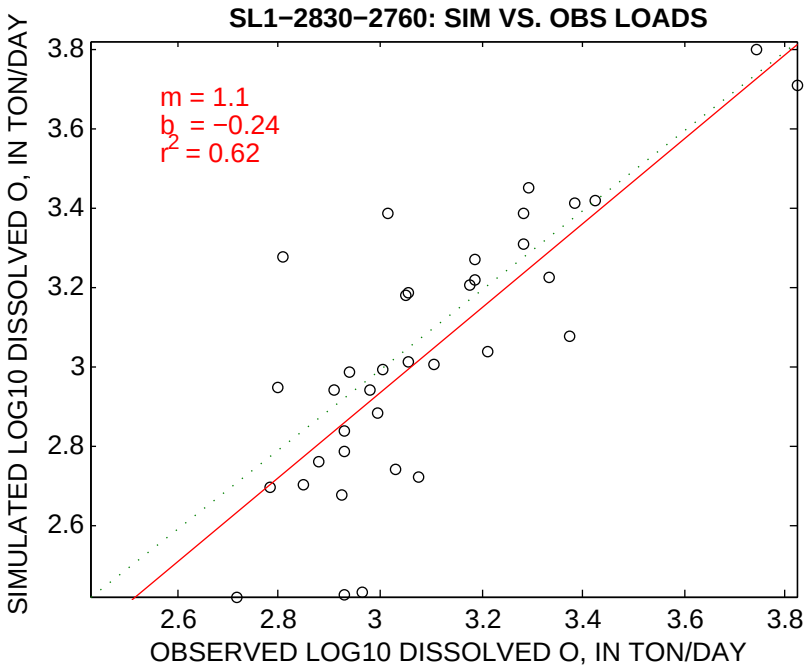


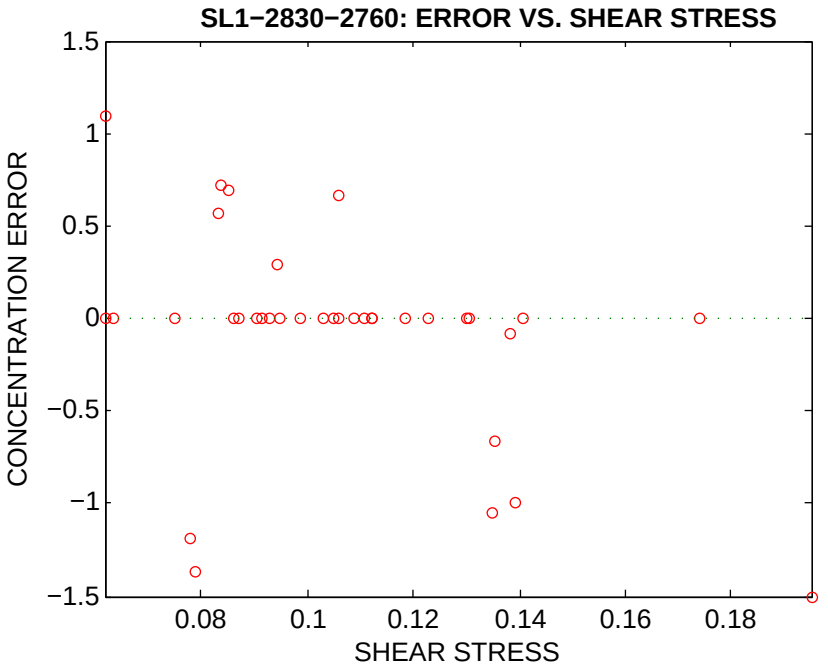


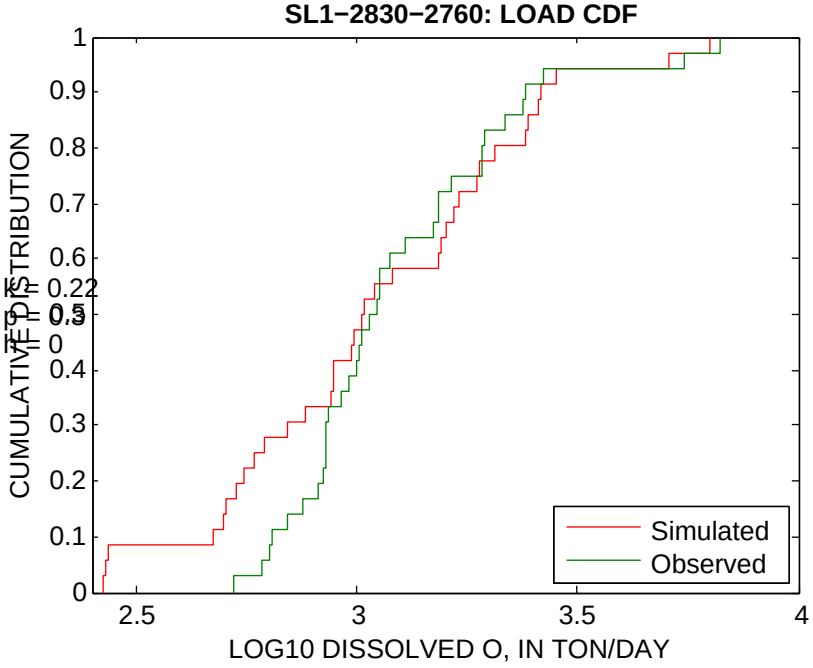


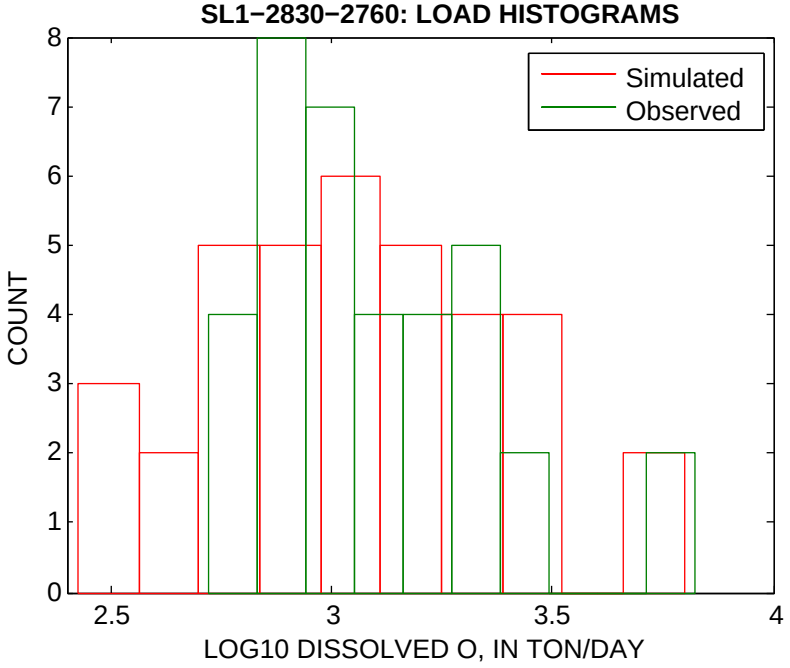


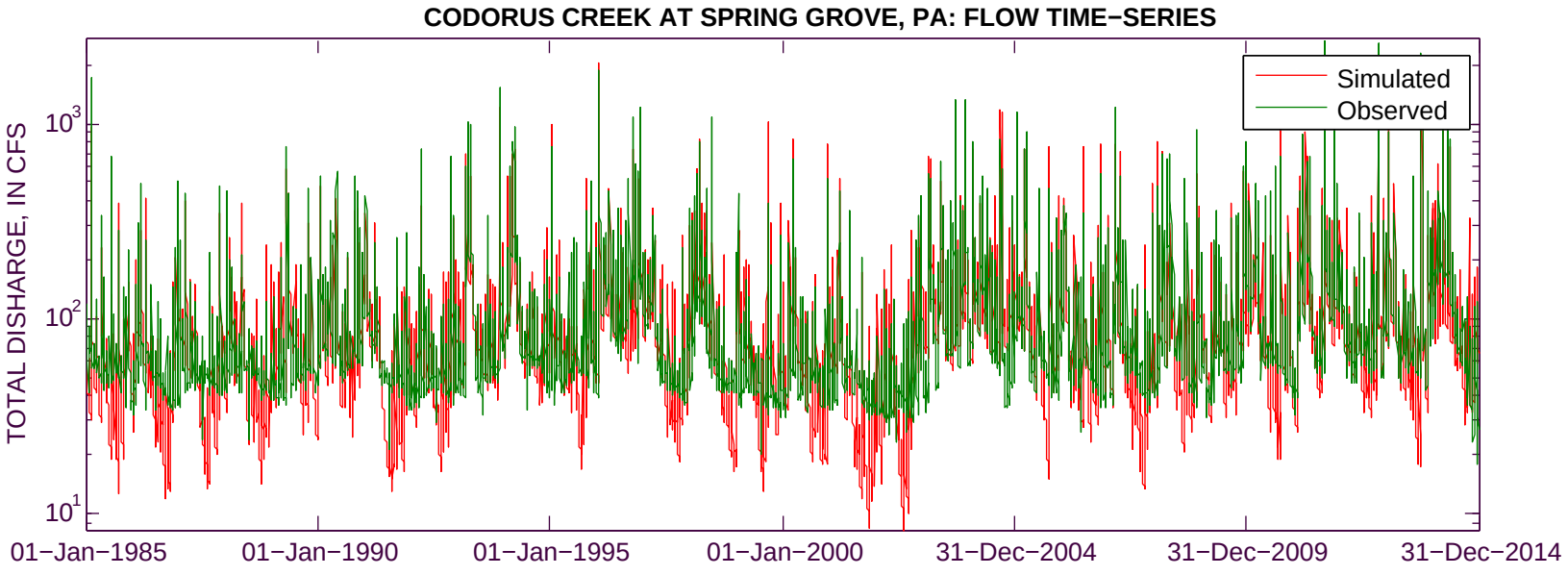
LOAD DATA
LOG10

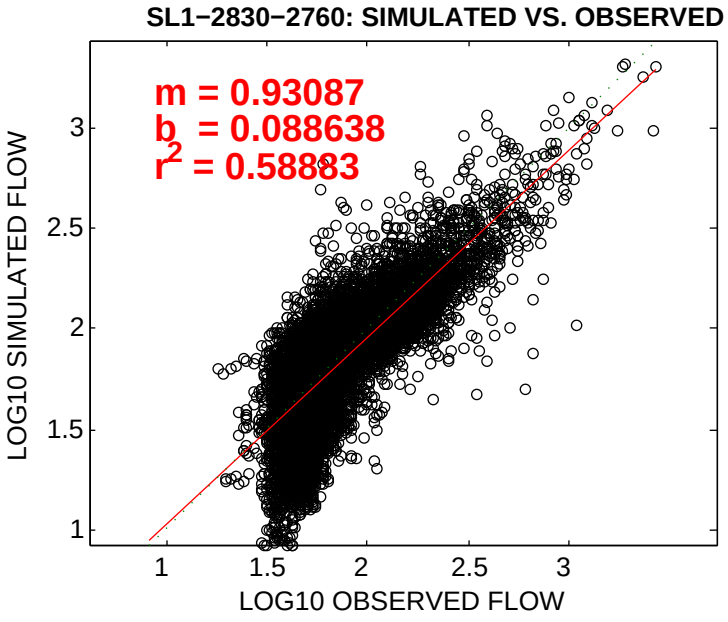


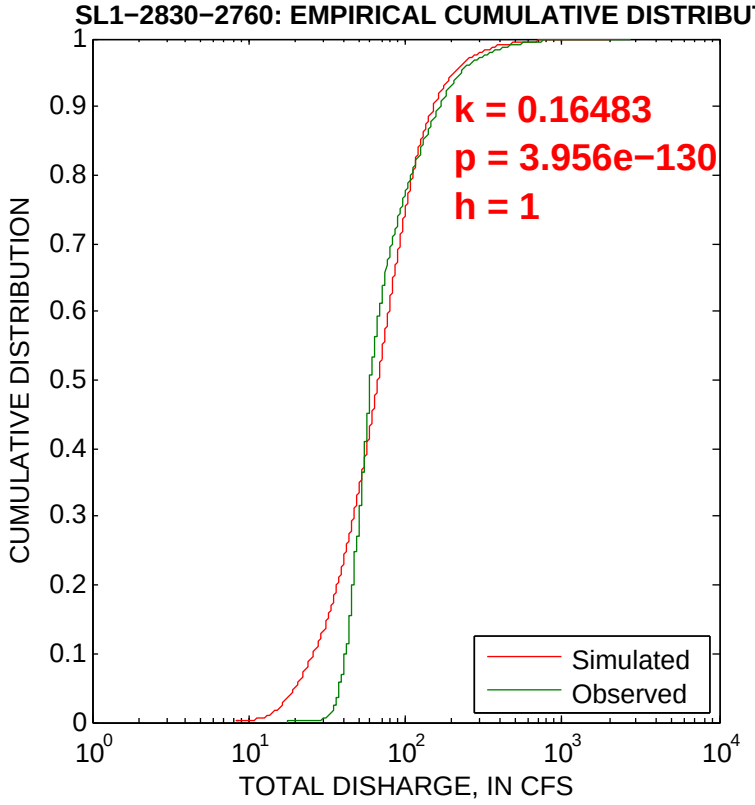












DATA SELECTION

scenario	file
P620171001WQ	FLOW.calib

plot: FLOW - total discharge

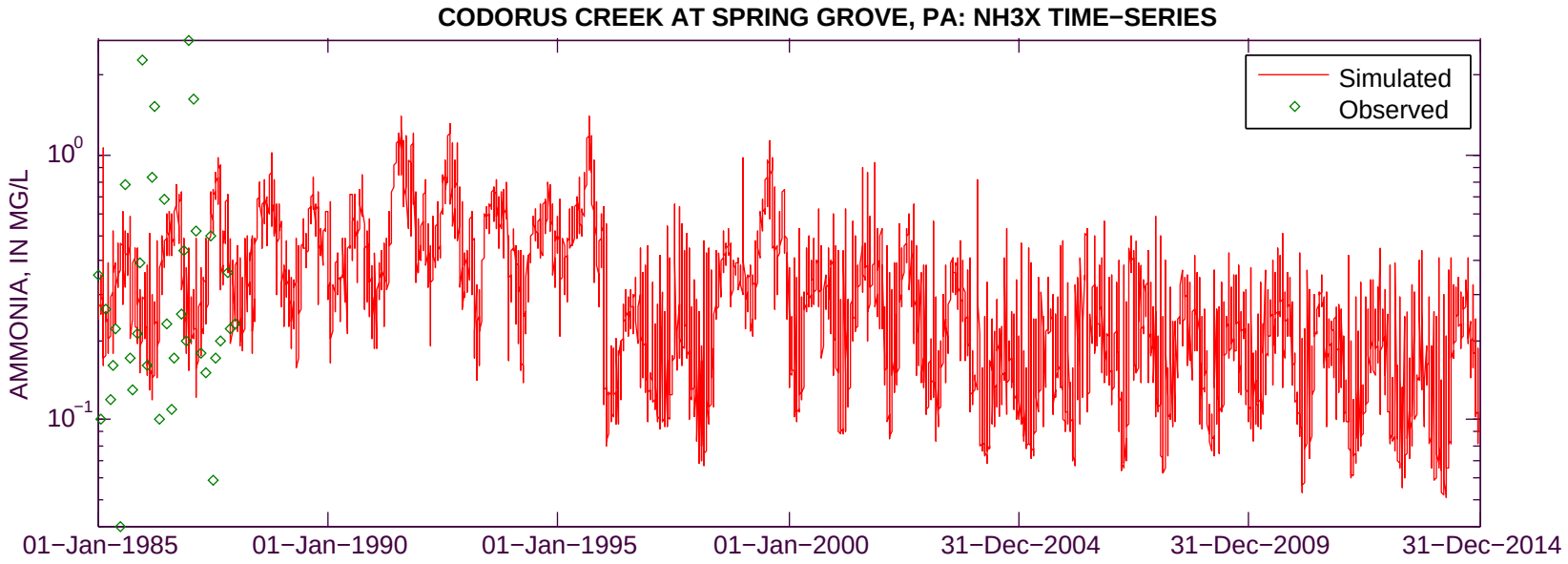
Dates: 1/1/1985 – 12/31/201

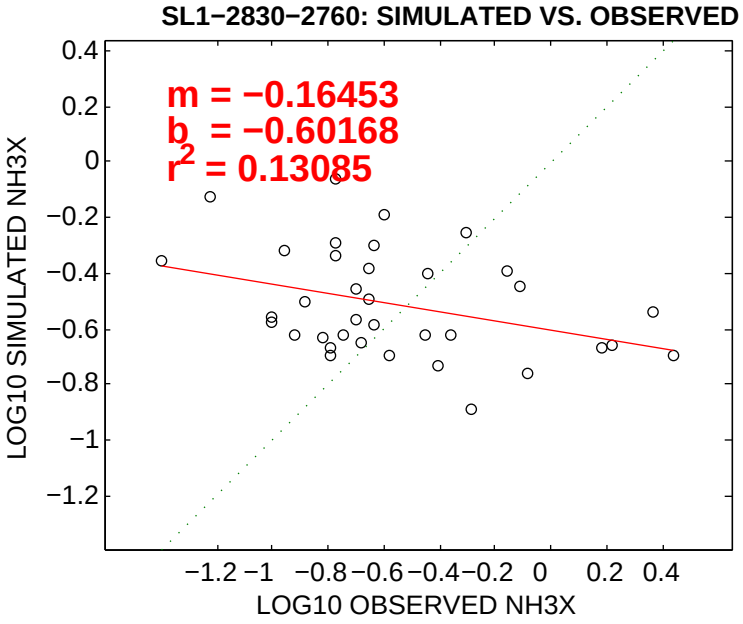
Drive	Directory	Observed
N/A	model	OBS20161101

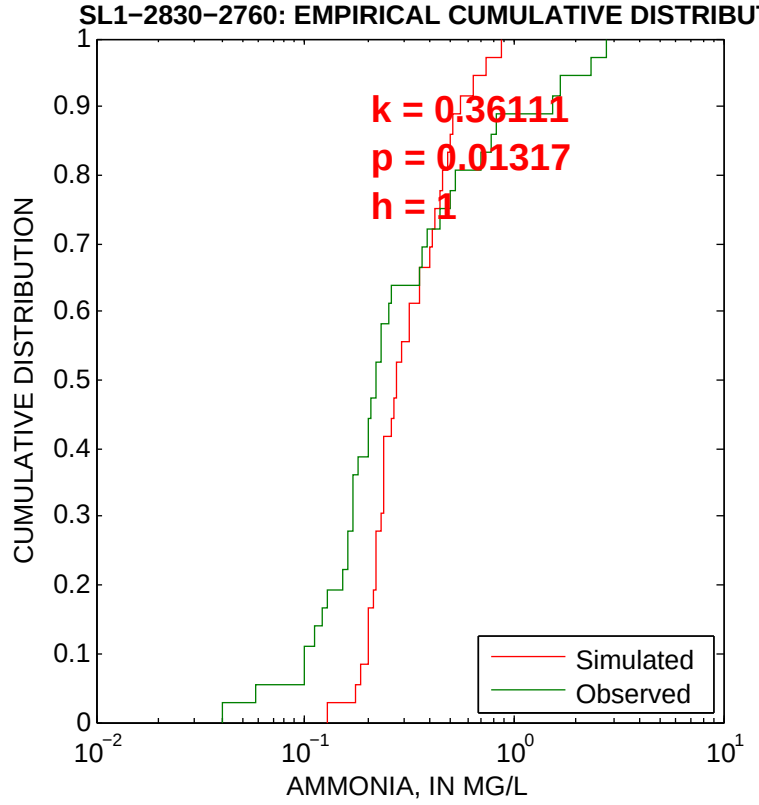
STATISTICS

	n	observe	simulate
		10957	10957
min		18	8.2603
		1.25527	0.916996
mean		90.9762	86.2858
		1.85793	1.81813
media		60	67.241
		1.77815	1.82763
max		2700	2047.7
		3.43136	3.31127
varian		10898.4	8297.94
		0.0638054	0.0938965
JB		0.001	0.001
		0.001	0.001
		ra	log
%		-5.15558	-2.14211
err.va		3165.67	0.0404968
rel.std.err		0.290471	0.634692
mod.eff		0.709529	0.365308

VERSION 2.1







DATA SELECTION

scenario	file
P620171001WQ	NH3X.calib

plot: NH3X - ammonia

Dates: 1/1/1985 – 12/31/201

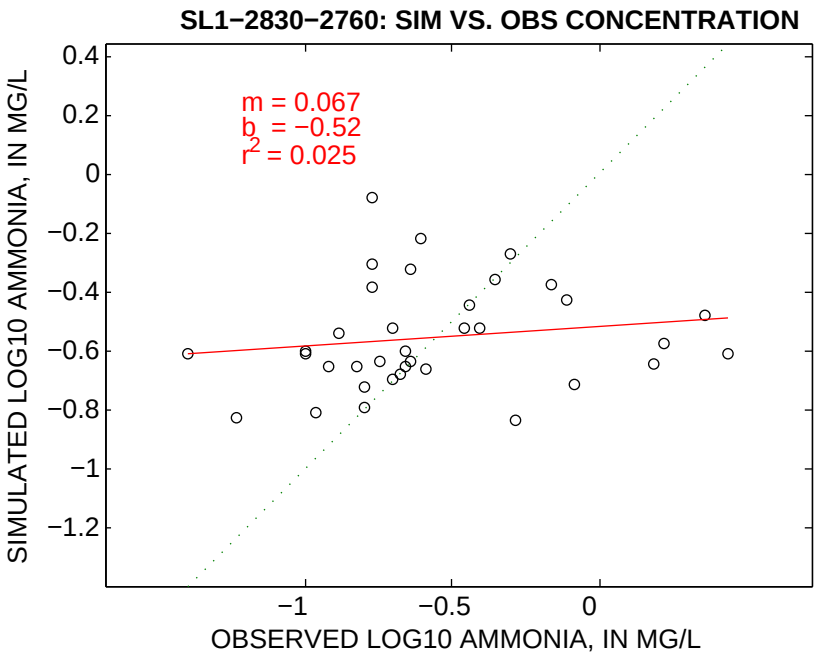
Drive	Directory	Observed
N/A	model	OBS20161101

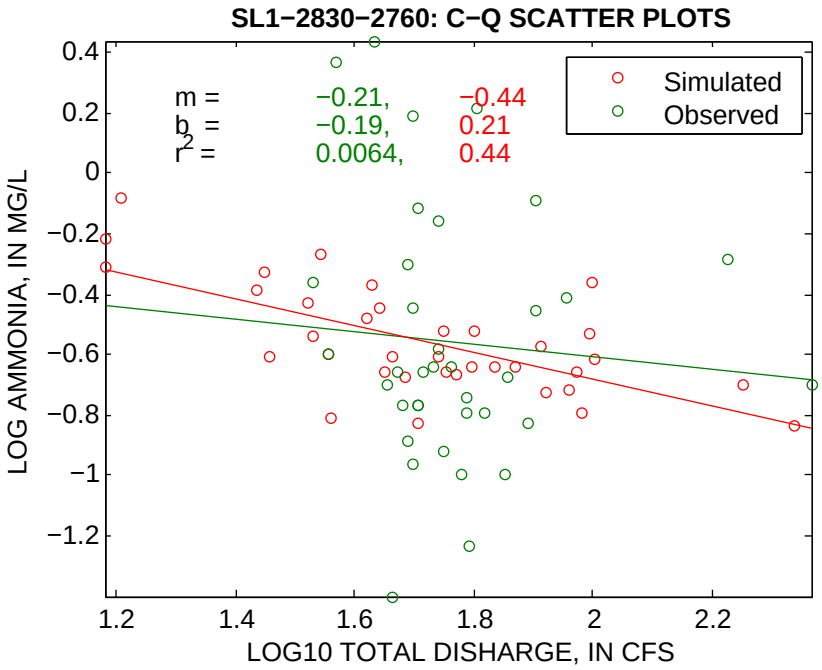
STATISTICS

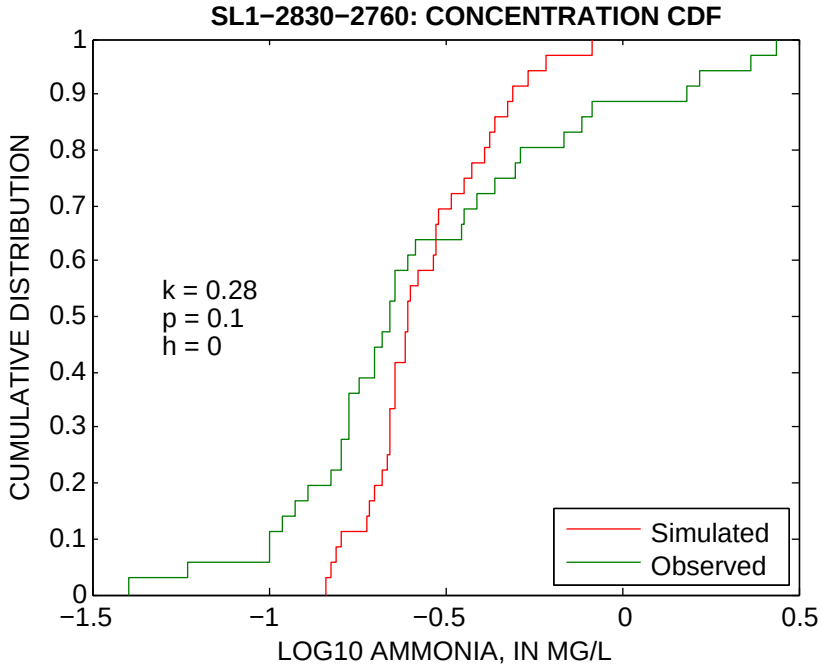
	n	36	36
		observe	simulate
min		0.04	0.12956
		-1.39794	-0.887529
mean		0.47025	0.341742
		-0.558866	-0.509728
media		0.22	0.27492
		-0.657577	-0.56083
max		2.75	0.86883
		0.439333	-0.0610652
varian		0.388843	0.0282969
		0.177005	0.0366186
JB		0.001	0.006383
		0.121139	0.26994
		ra	log
%		-27.3275	-8.79233
err.va		0.491201	0.274352
rel.std.err		1.26323	1.54997
mod.eff		-0.263235	-0.549971

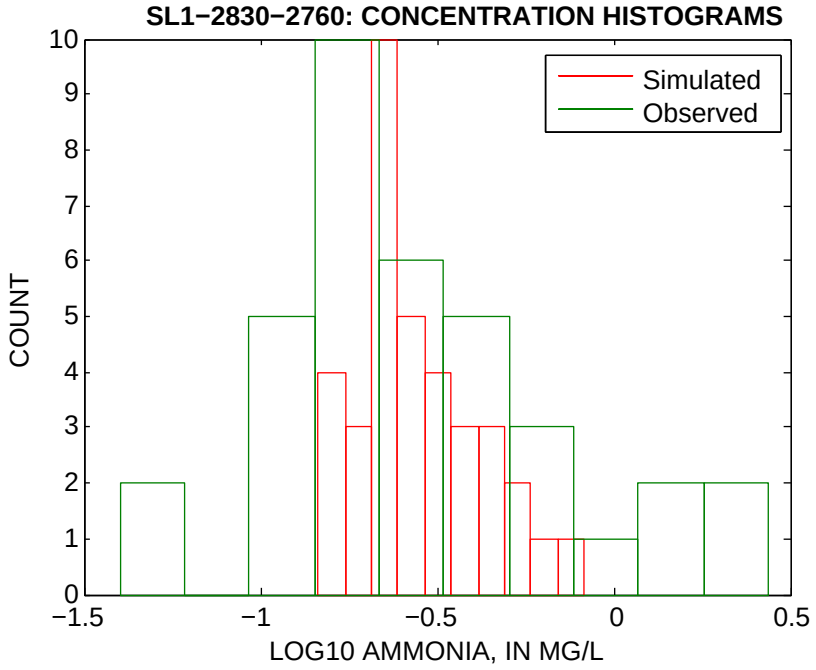
VERSION

ALL DATA
LOG10

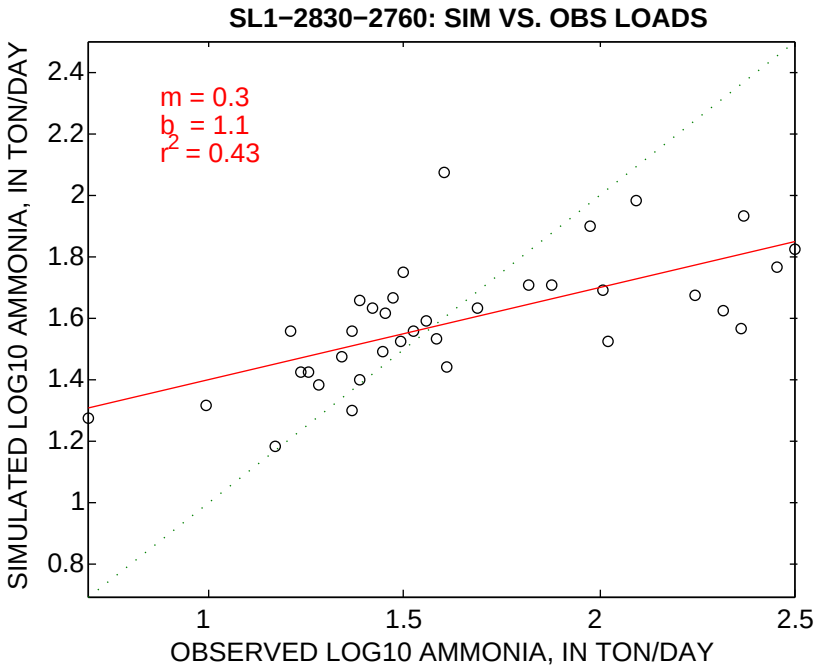


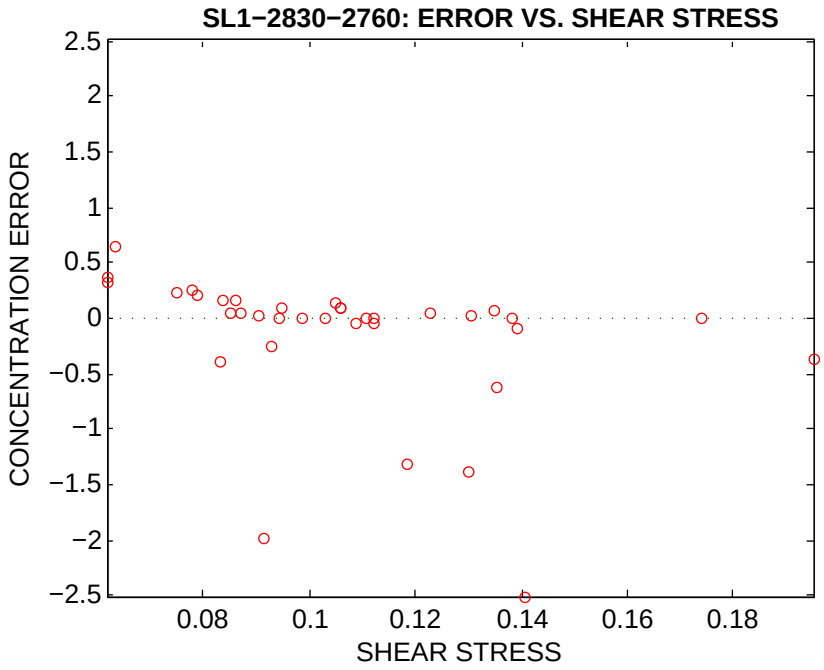


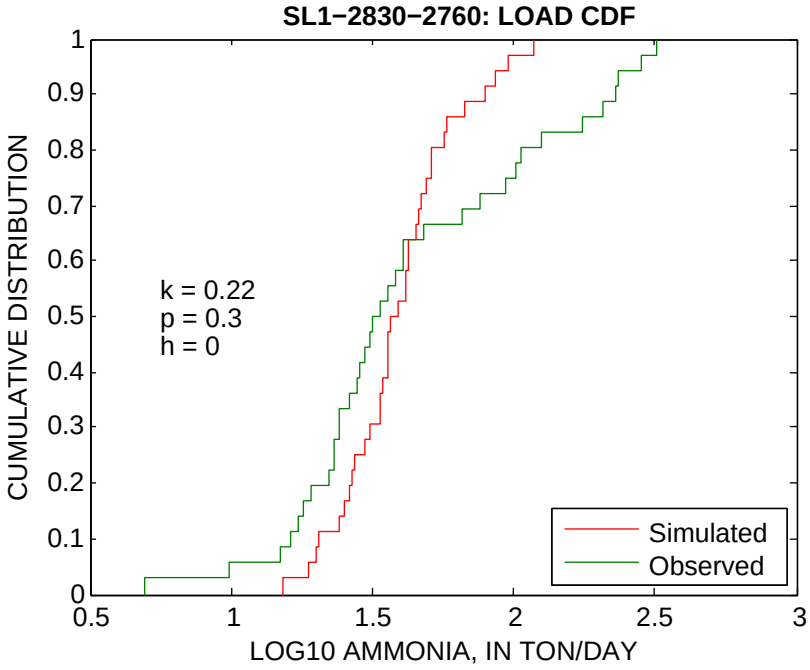


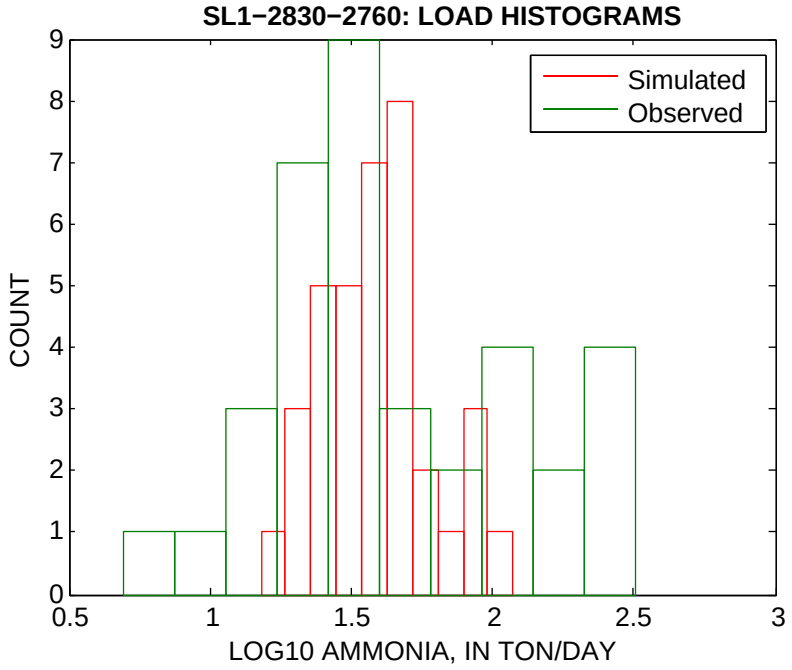


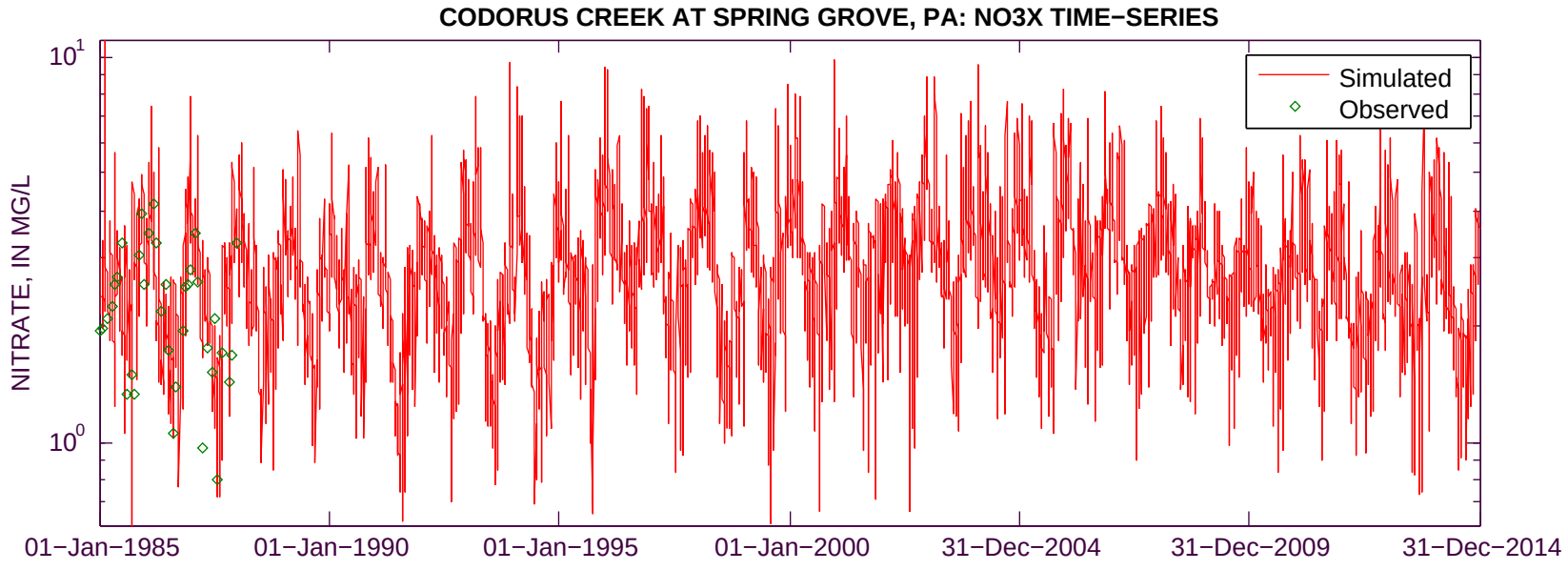
LOAD DATA
LOG10

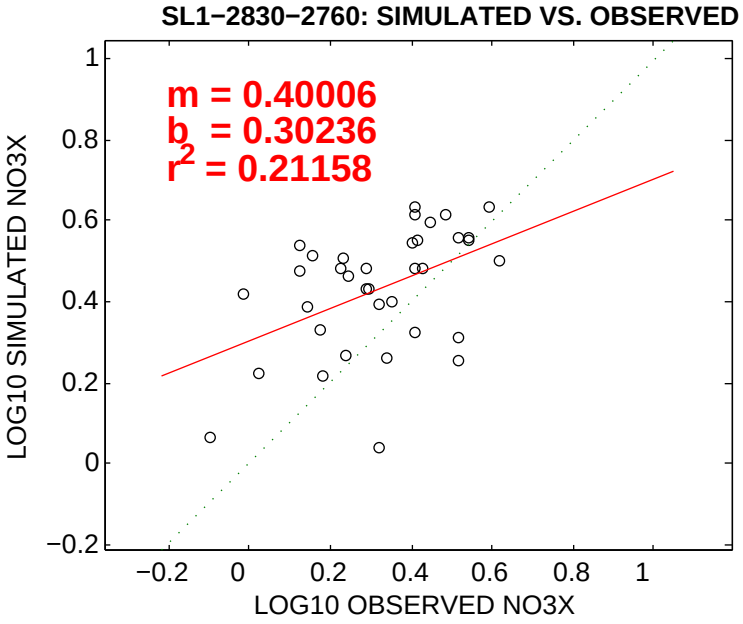


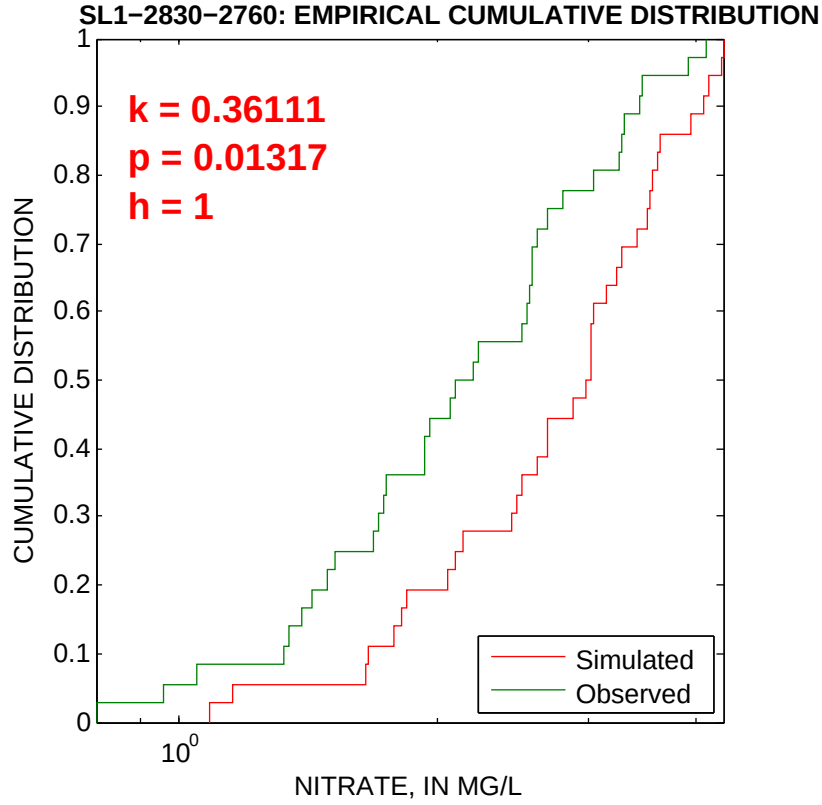












DATA SELECTION

scenario	file
P620171001WQ	NO3X.calib

plot: NO3X - nitrate

Dates: 1/1/1985 – 12/31/201

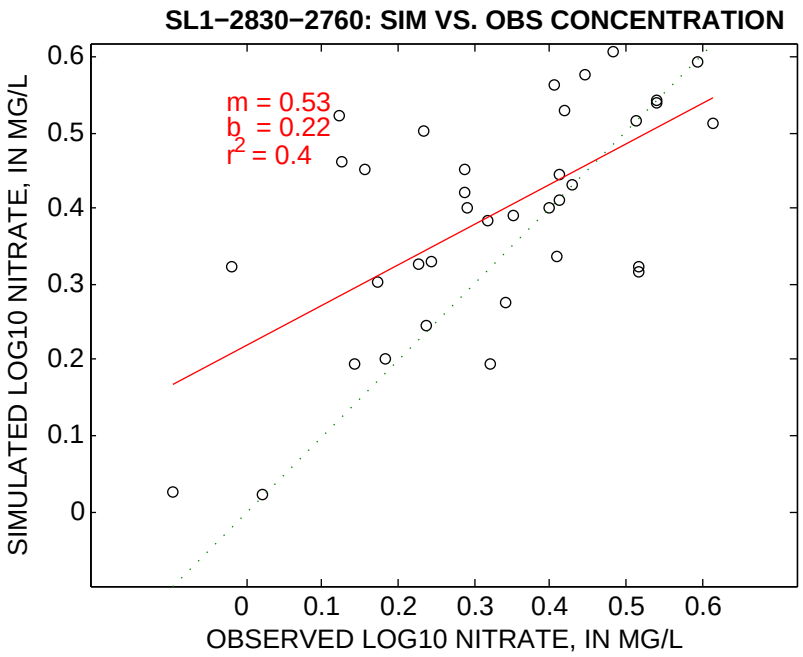
Drive	Directory	Observed
N/A	model	OBS20161101

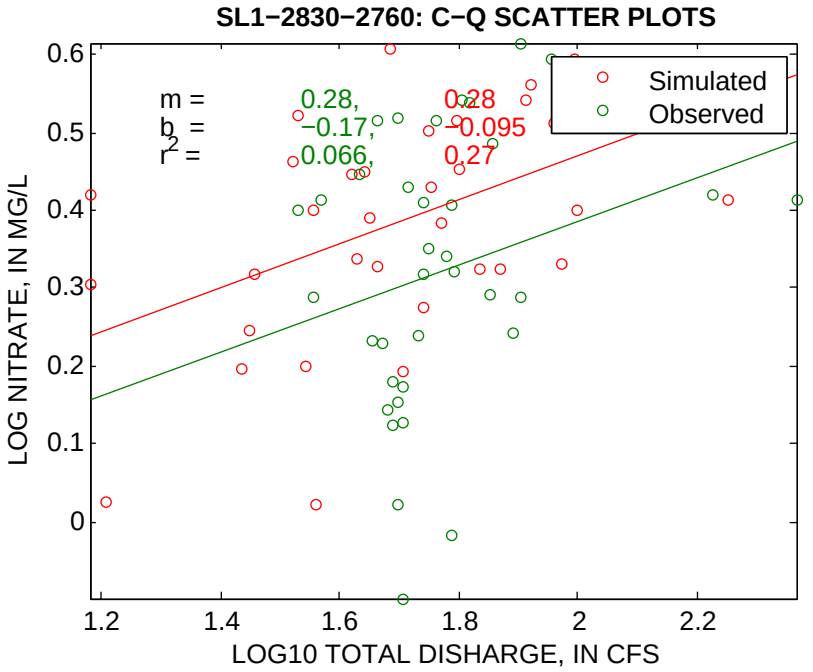
STATISTICS

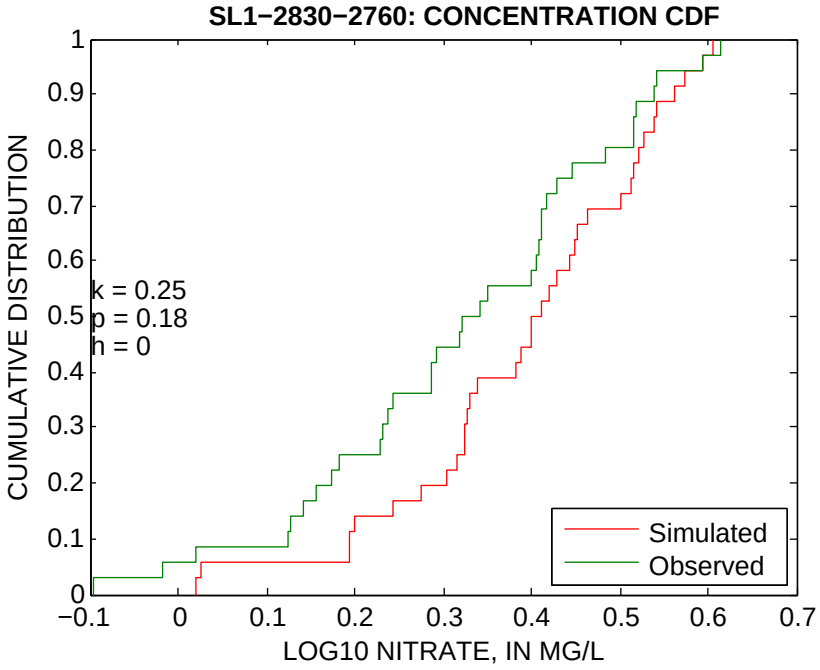
	n	36	36
		observe	simulate
min		0.8	1.0877
		-0.09691	0.0365091
mean		2.26194	2.84857
		0.322509	0.431388
media		2.15	3.00365
		0.332321	0.477636
max		4.12	4.3126
		0.614897	0.634739
varian		0.716336	0.756519
		0.0303603	0.0229666
JB		0.352288	0.449474
		0.370356	0.050923
		ra	log
%		25.9347	33.7597
err.va		1.14072	0.0412279
rel.std.err		1.59243	1.35795
mod.eff		-0.59243	-0.357954

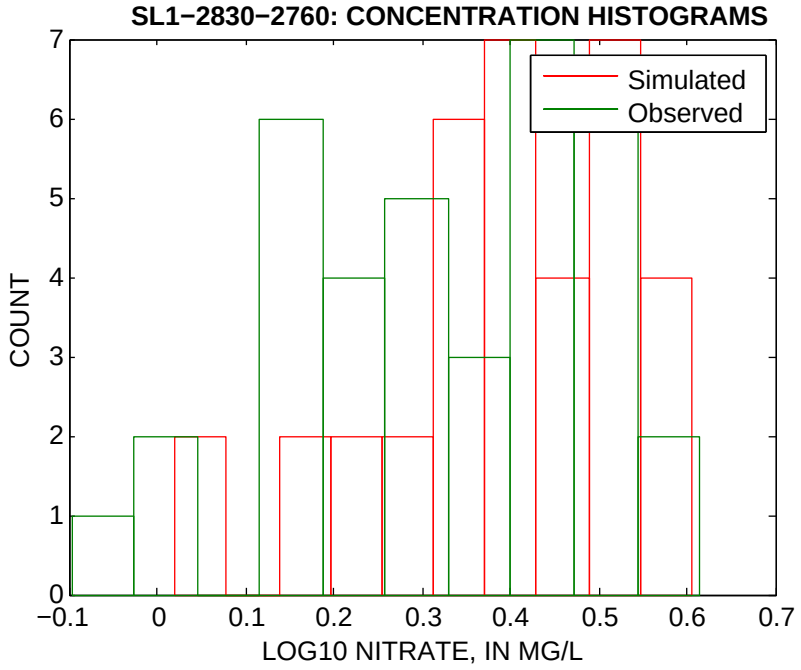
VERSION 2.1

ALL DATA
LOG10

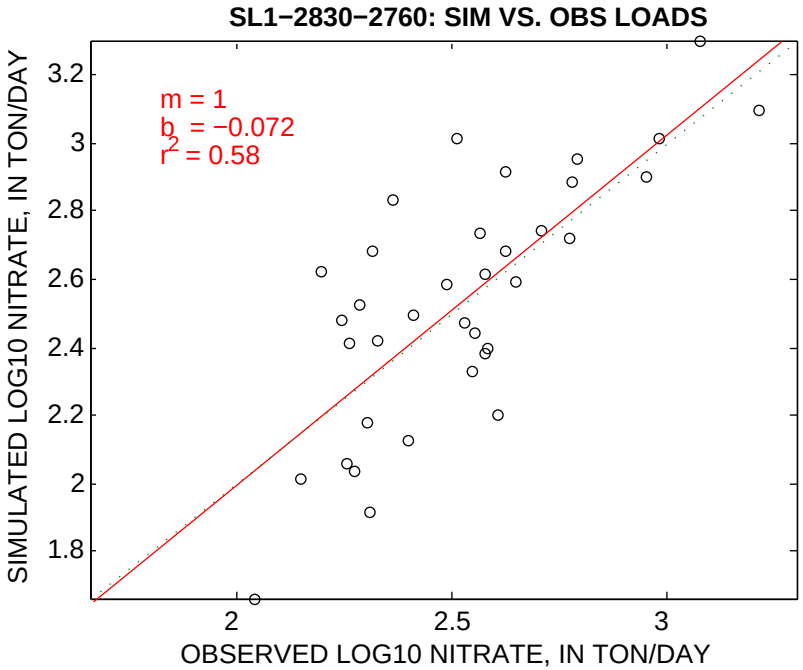


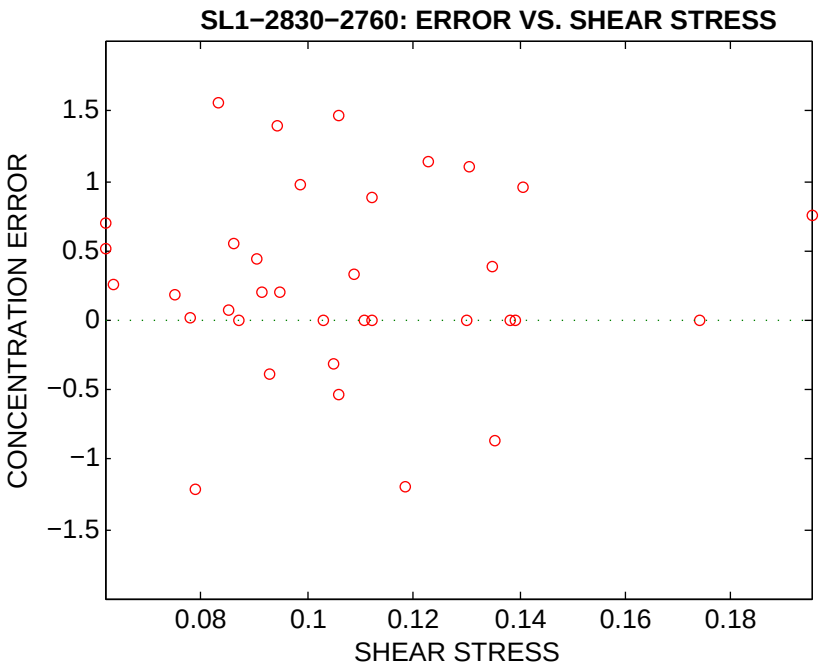


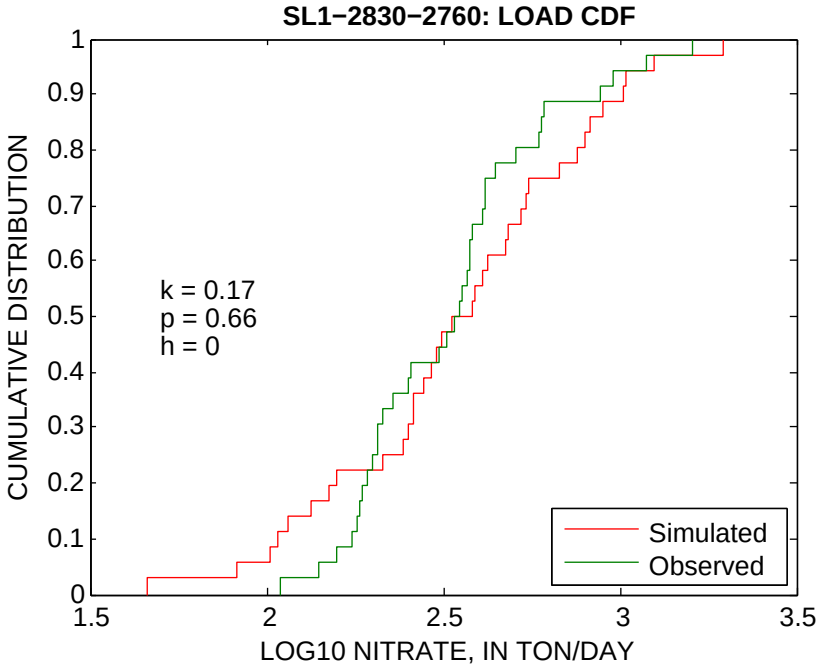


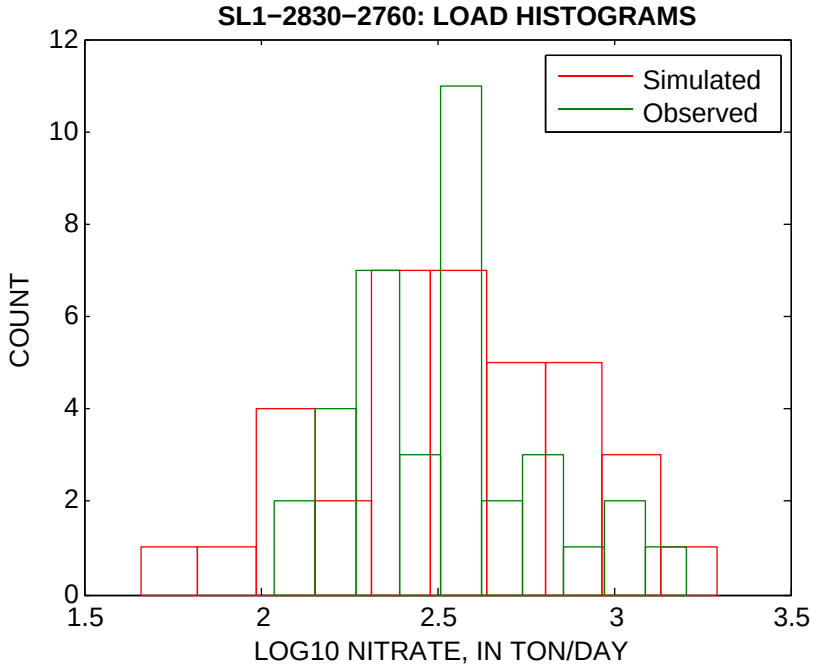


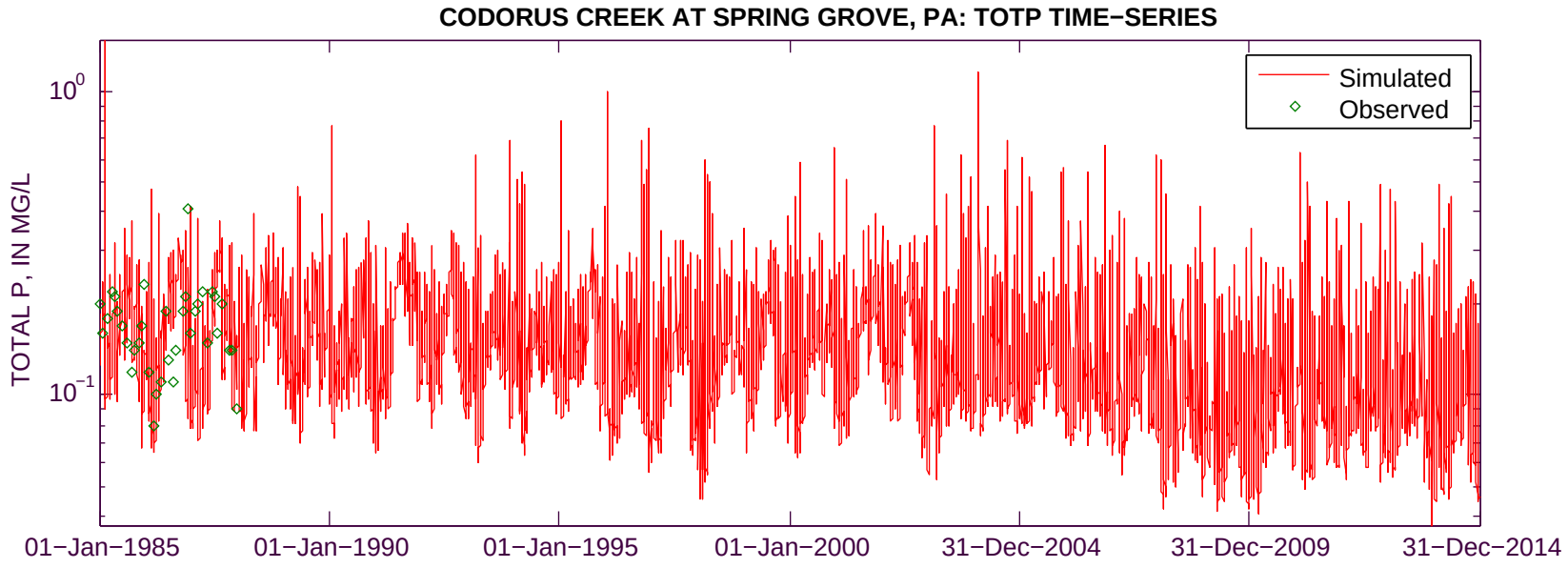
LOAD DATA
LOG10

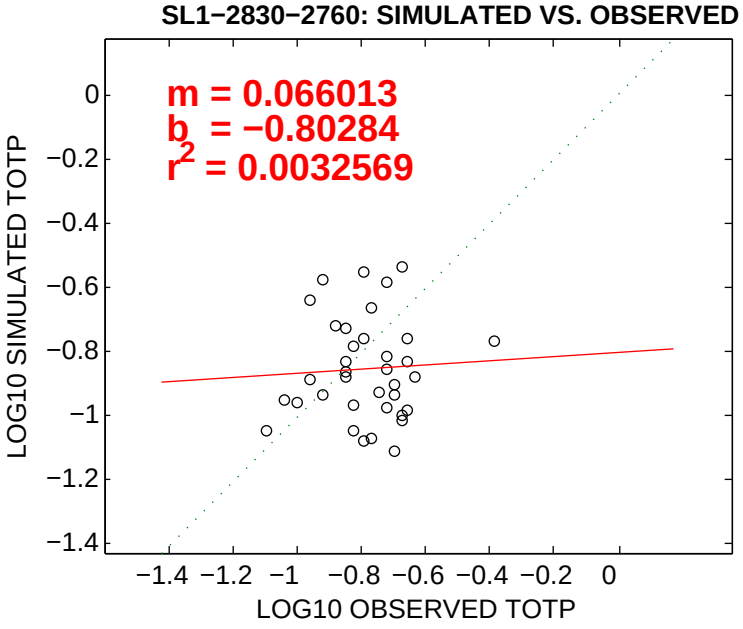


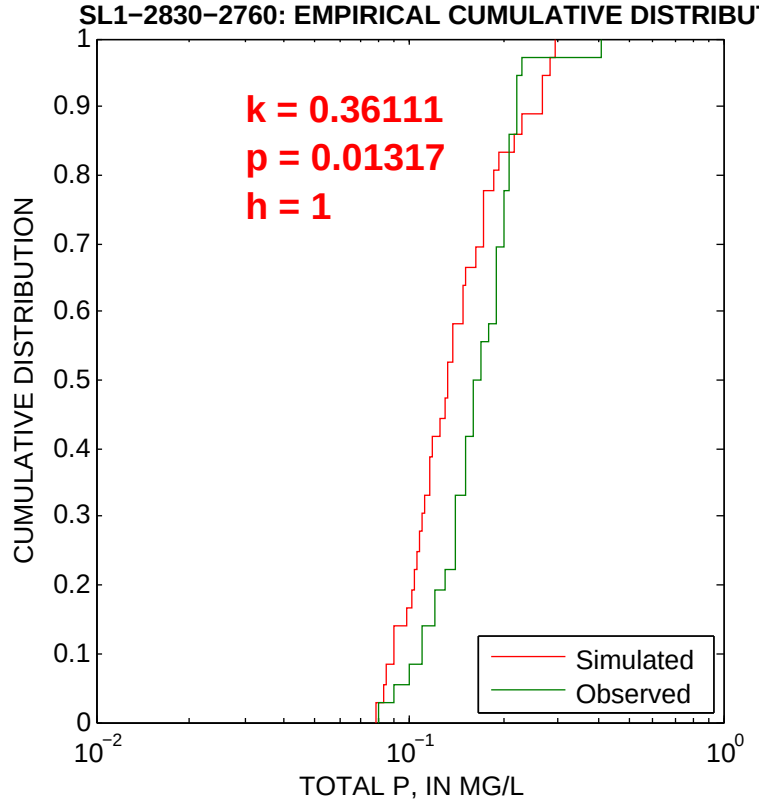












DATA SELECTION

scenario	file
P620171001WQ	TOTP.calib

plot: TOTP - total phosphorus

Dates	1/1/1985	12/31/201

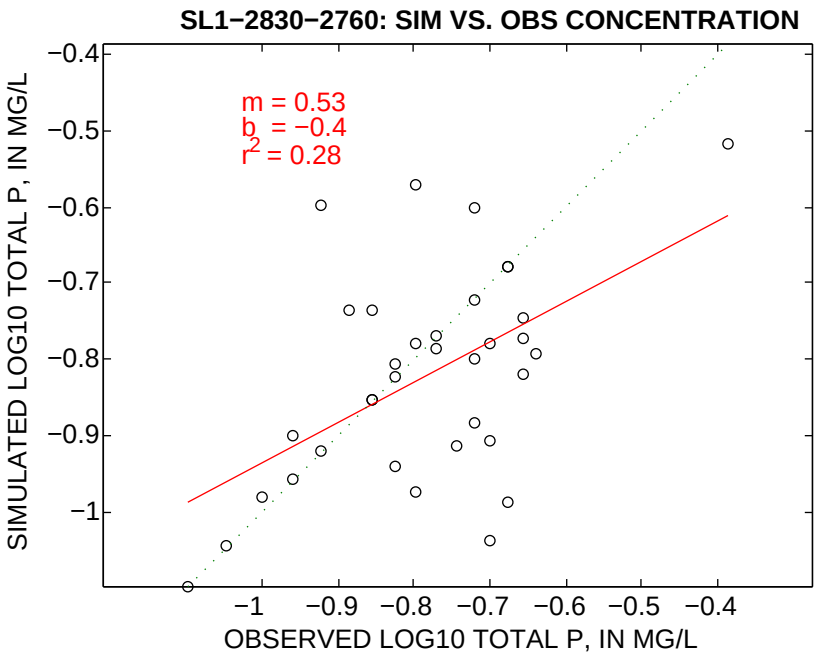
Drive	Directory	Observed
N/A	model	OBS20161101

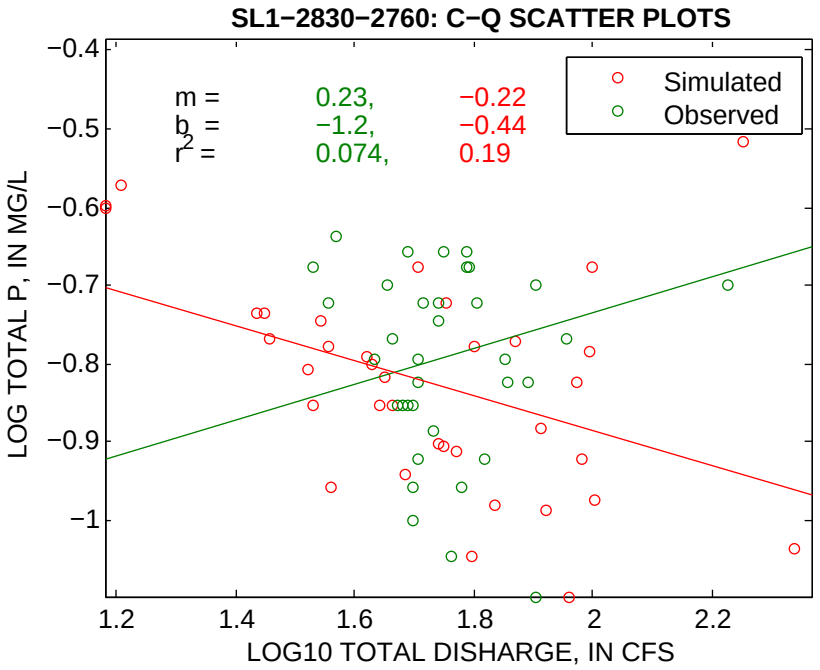
STATISTICS

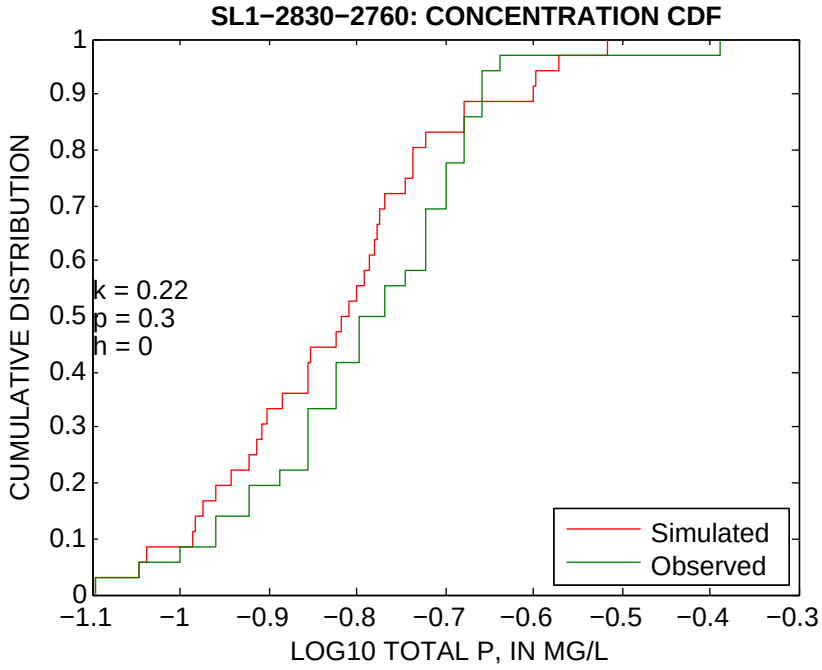
	n	36	36
		observe	simulate
min		0.08	0.077696
		-1.09691	-1.1096
mean		0.171111	0.149293
		-0.78777	-0.854848
media		0.165	0.13284
		-0.782716	-0.876673
max		0.41	0.29379
		-0.387216	-0.531963
varian		0.00331873	0.00341156
		0.0184573	0.0246959
JB		0.001	0.028777
		0.321897	0.216545
		ra	log
%		-12.7507	8.51492
err.va		0.00697682	0.0453443
rel.std.err		2.10226	2.45672
mod.eff		-1.10226	-1.45672

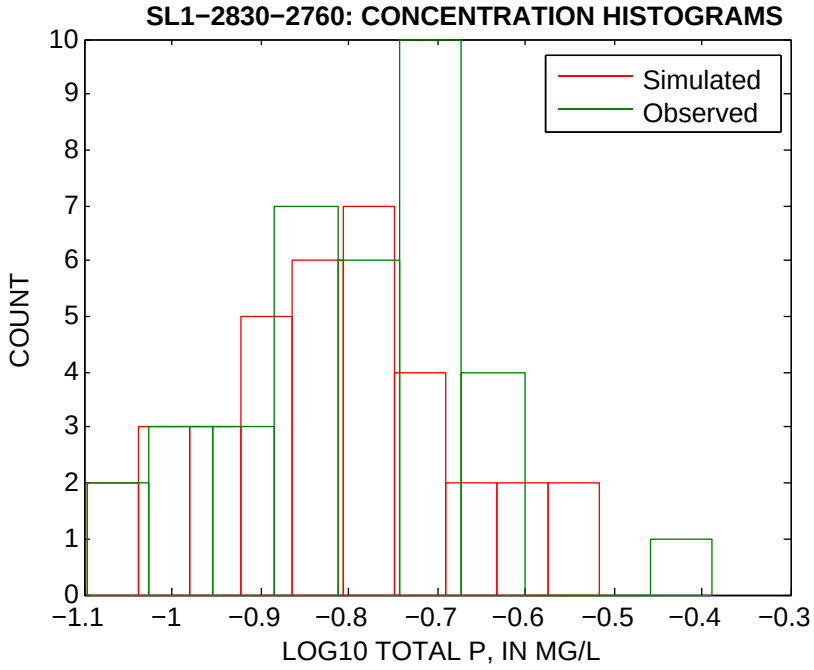
VERSION

ALL DATA
LOG10

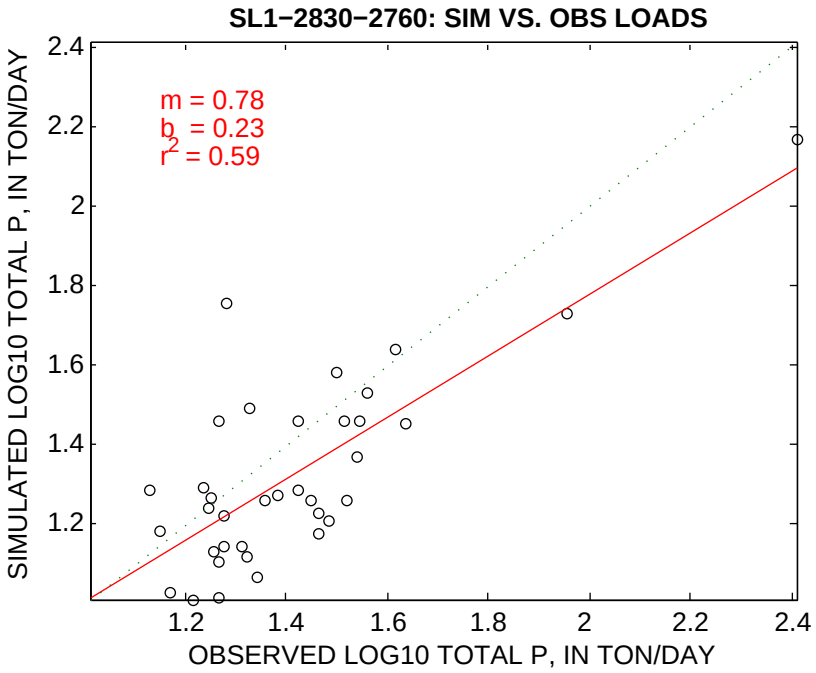


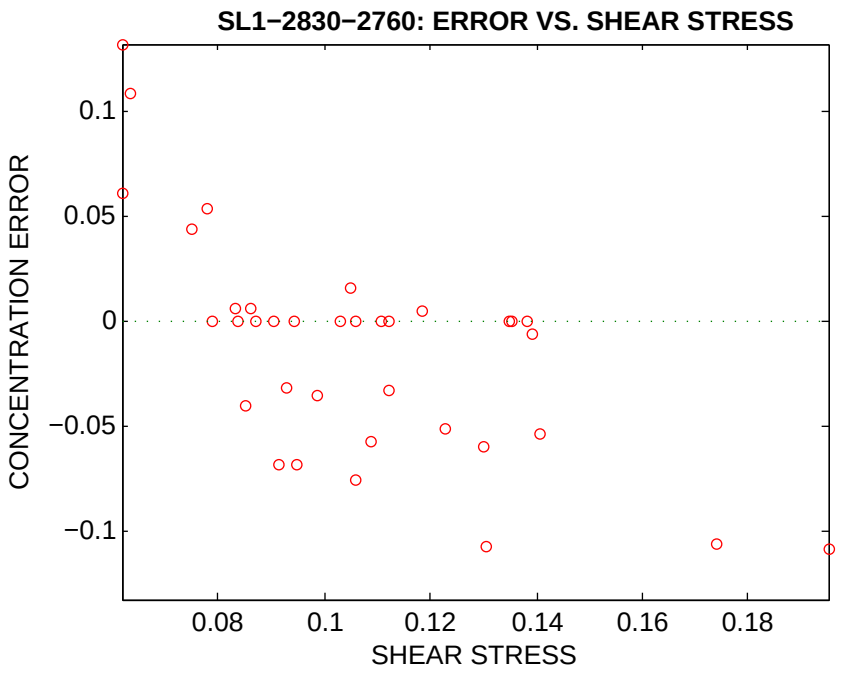


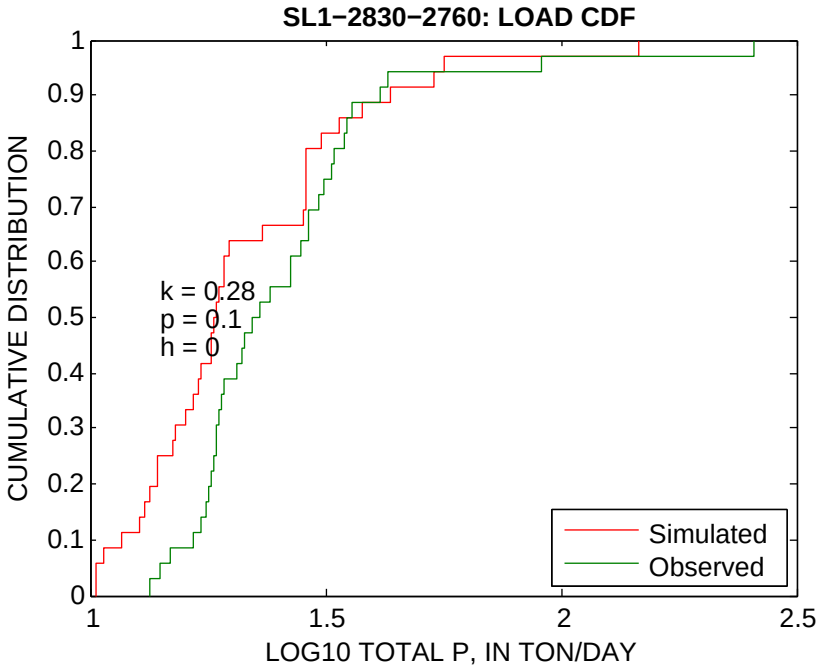


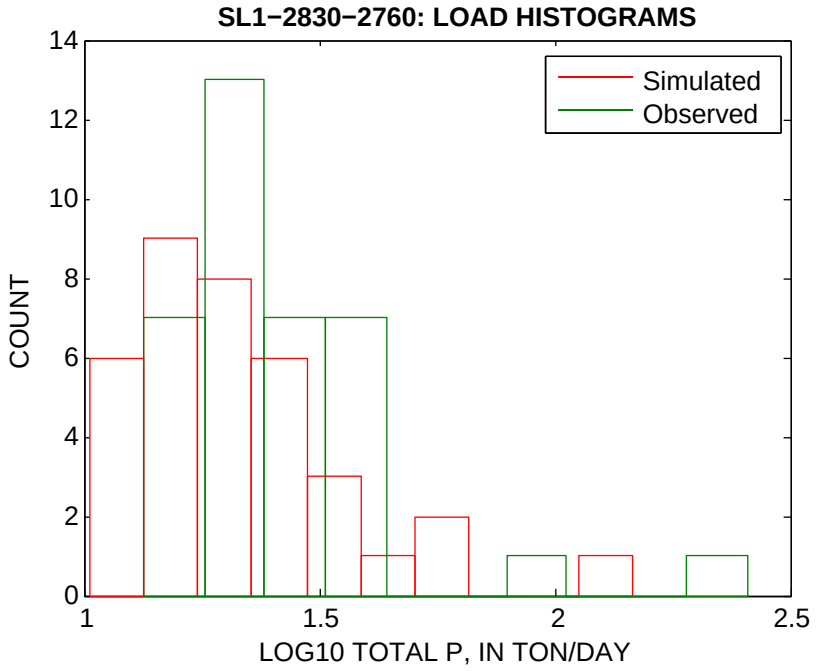


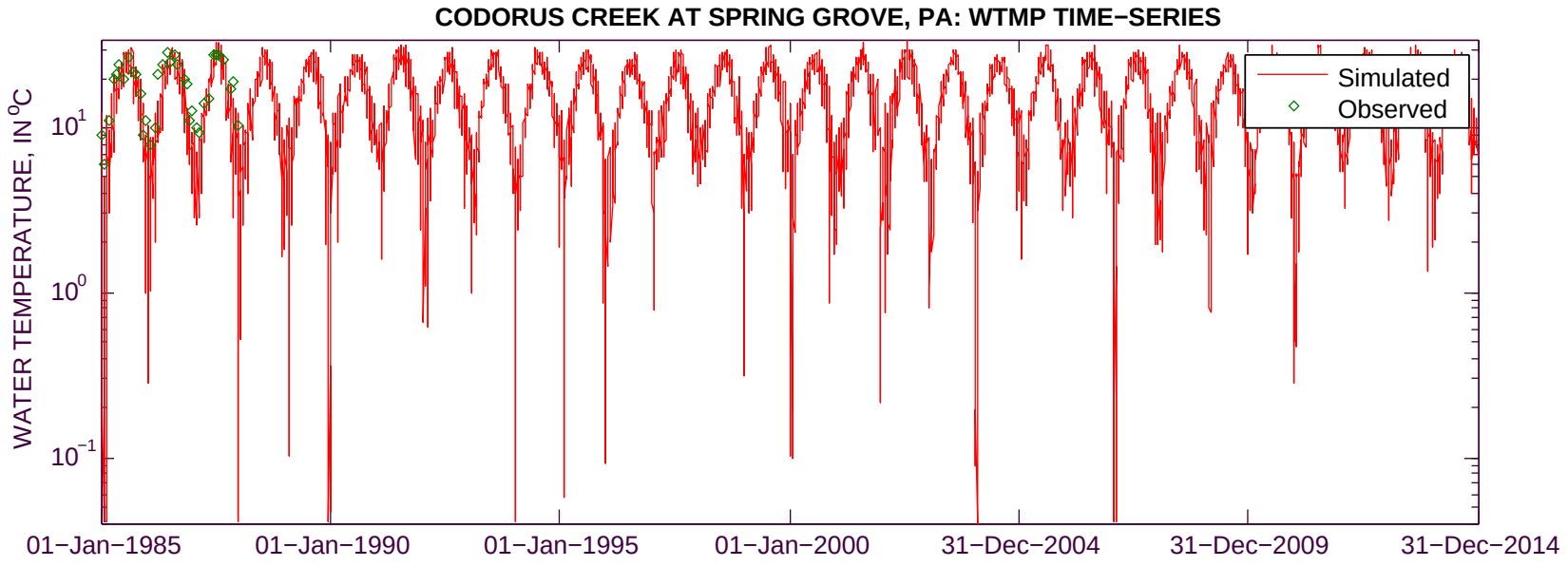
LOAD DATA
LOG10

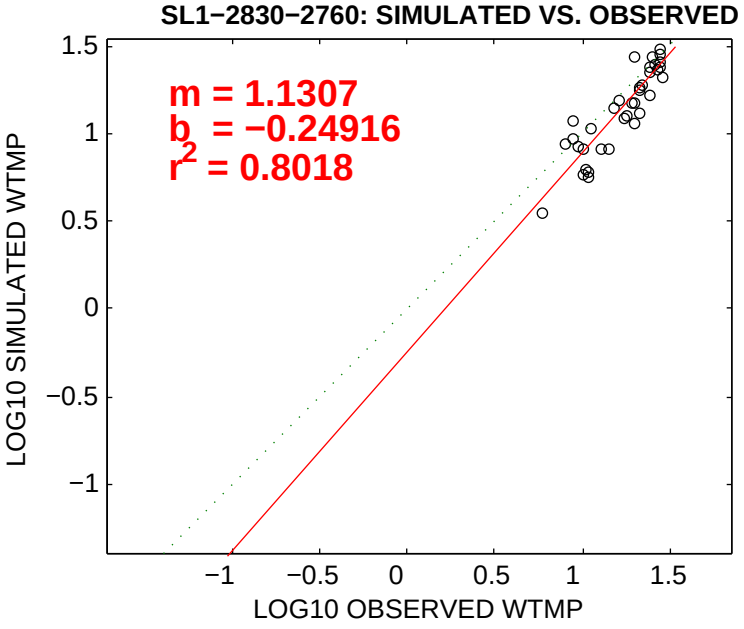


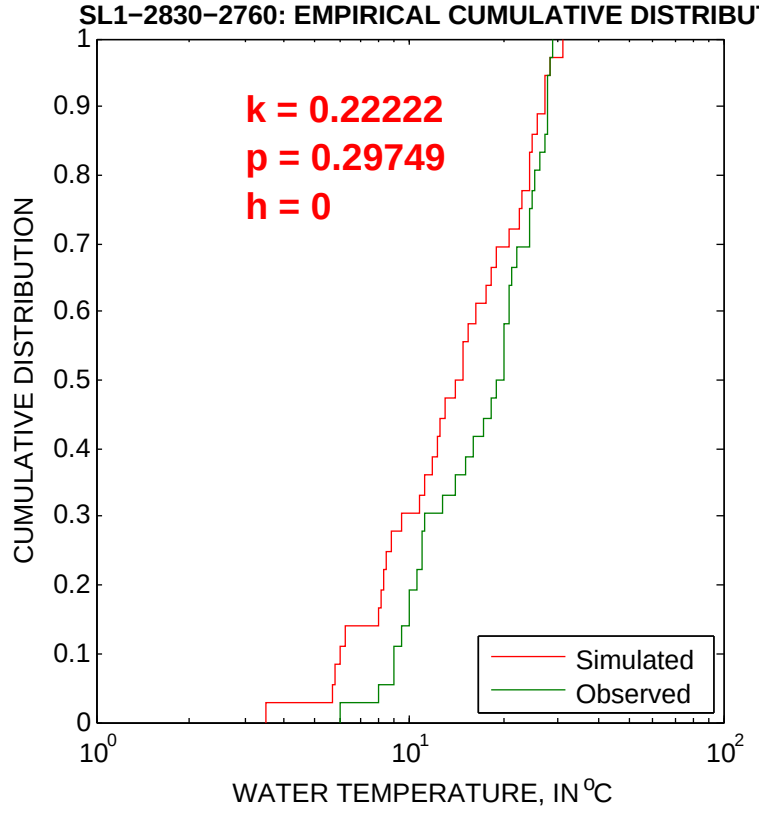












DATA SELECTION

scenario	file
P620171001WQ	WTMP.calib

plot: WTMP - water tempera...

Dates: 1/1/1985 – 12/31/201

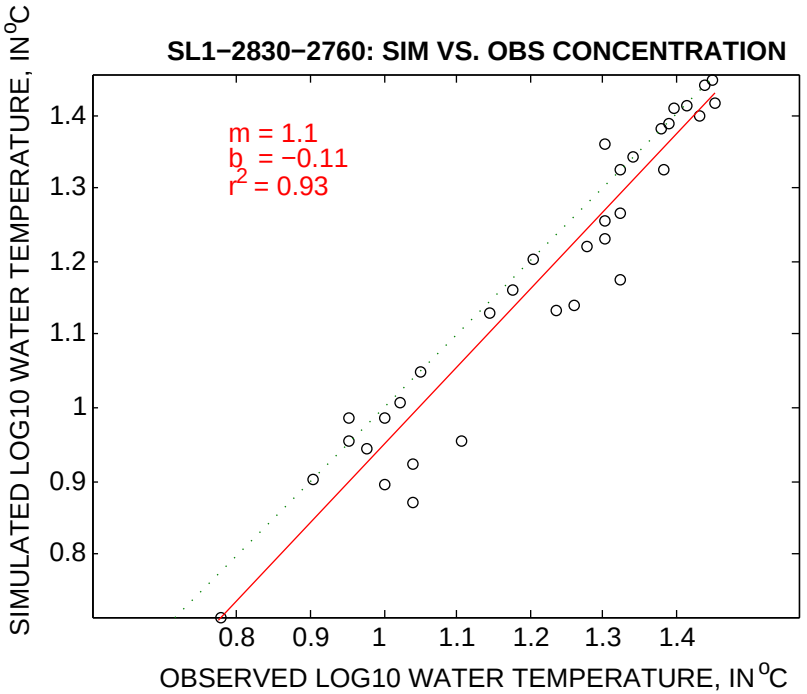
Drive	Directory	Observed
N/A	model	OBS20161101

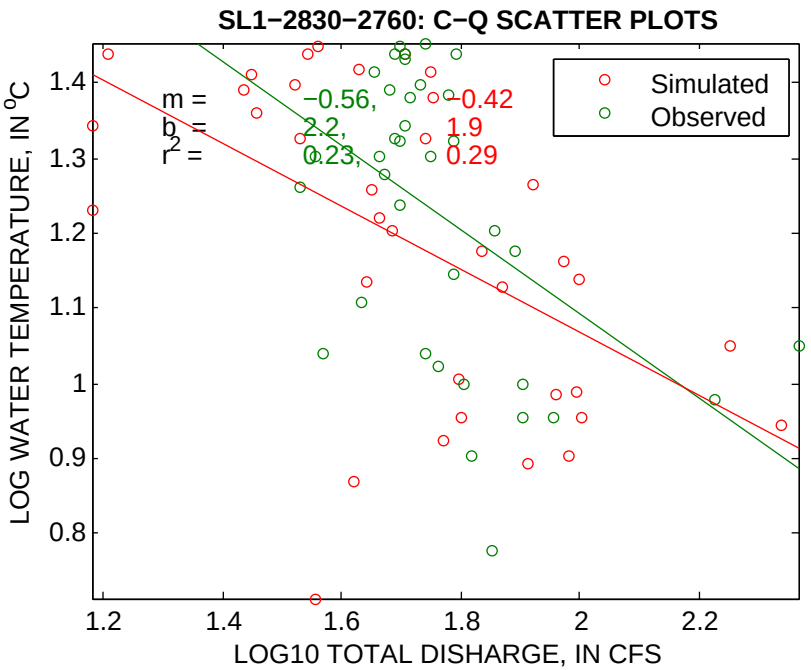
STATISTICS

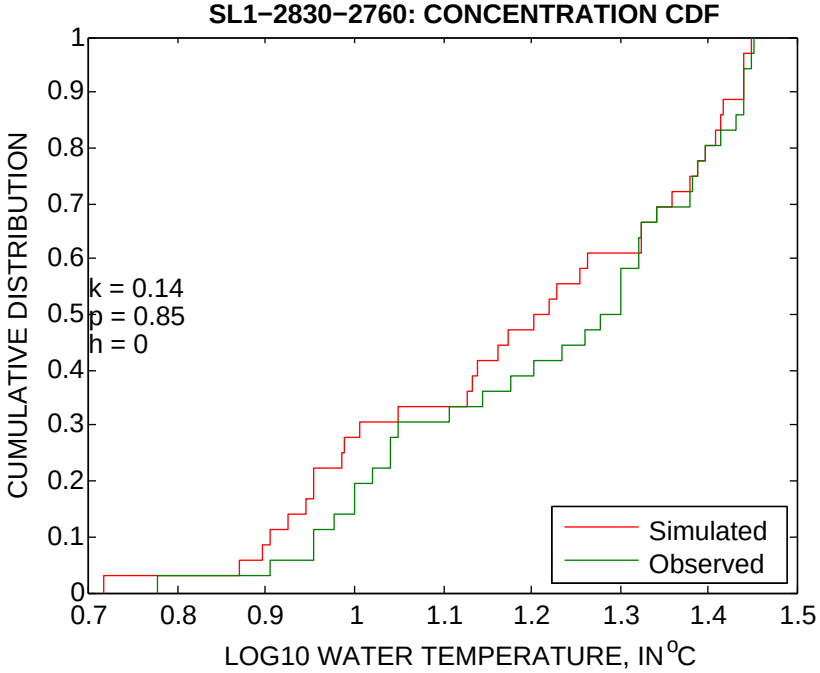
	n	36	36
		observe	simulate
min		6	3.479
		0.778151	0.541454
mean		18.1139	15.4954
		1.22107	1.13153
media		19.5	14.387
		1.28989	1.15776
max		28.4	30.674
		1.45332	1.48677
varian		48.8567	58.3753
		0.0360838	0.057538
JB		✓0.106045	0.130454 ✓
		✓0.099269	0.252285 ✓
		ra	log
%		-14.4558	-7.33292
err.va		18.8688	0.0202668
rel.std.err		0.386208	0.561661
mod.eff		0.613792	0.438339

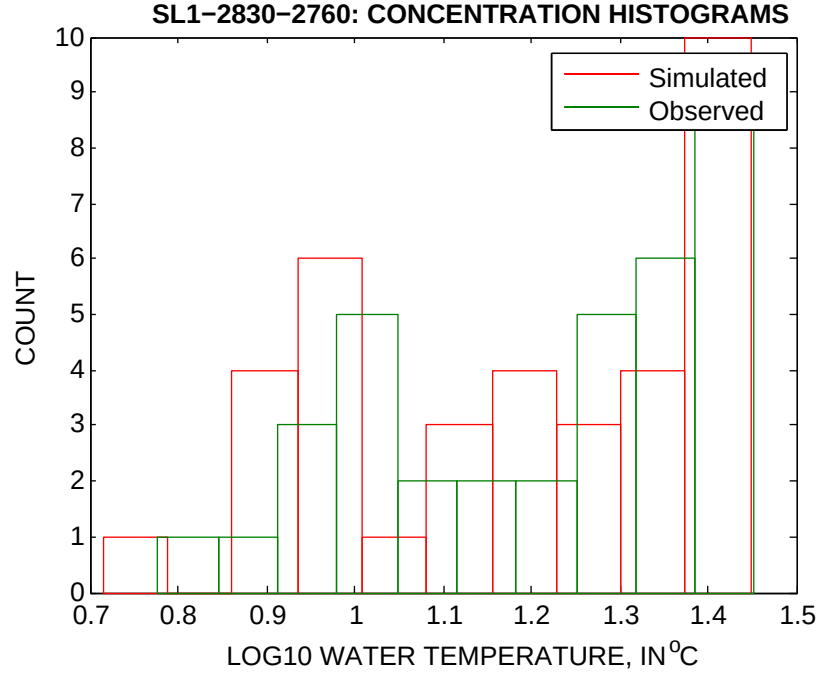
VERSION

ALL DATA
LOG10

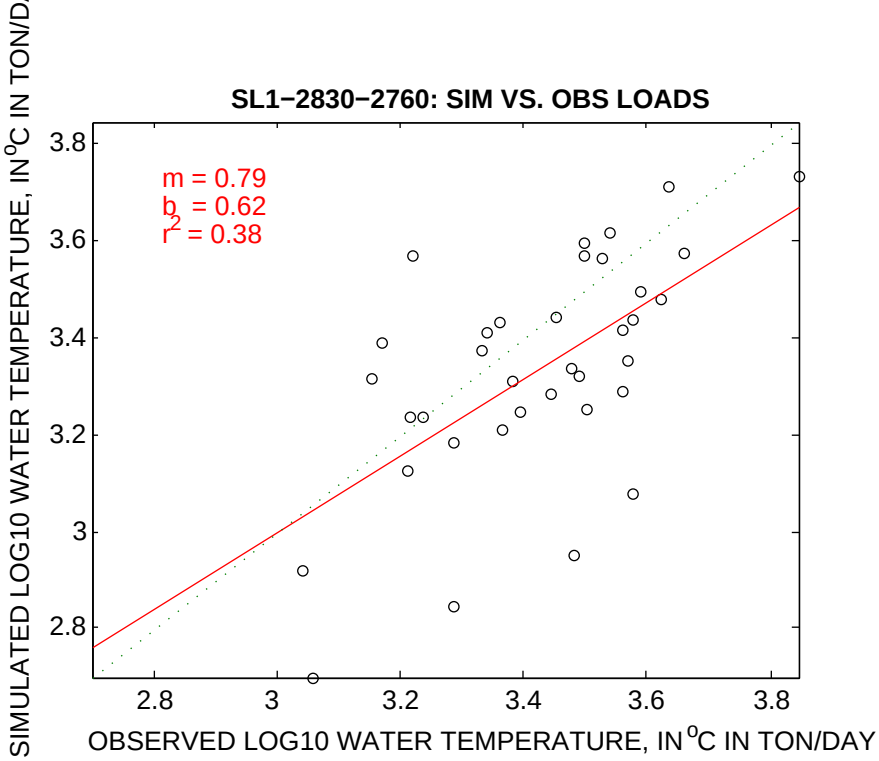


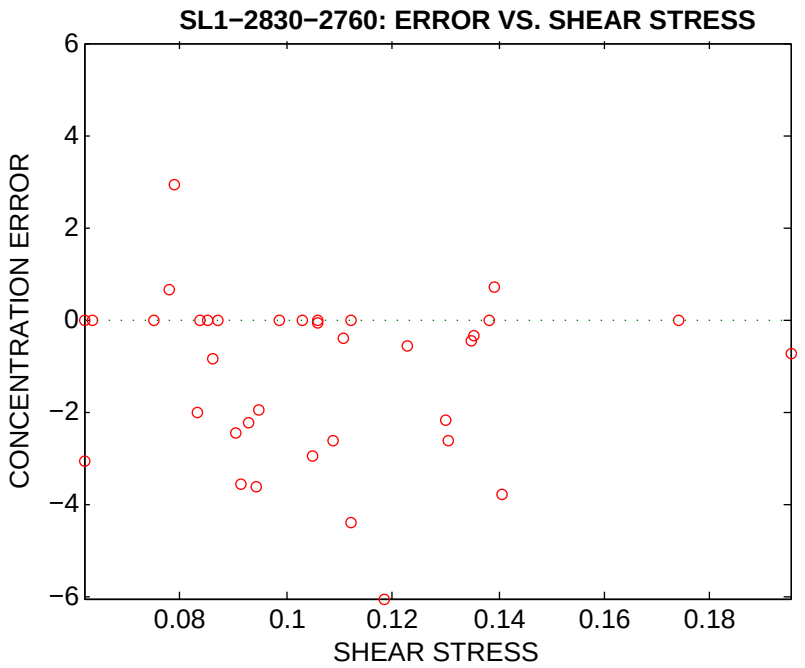


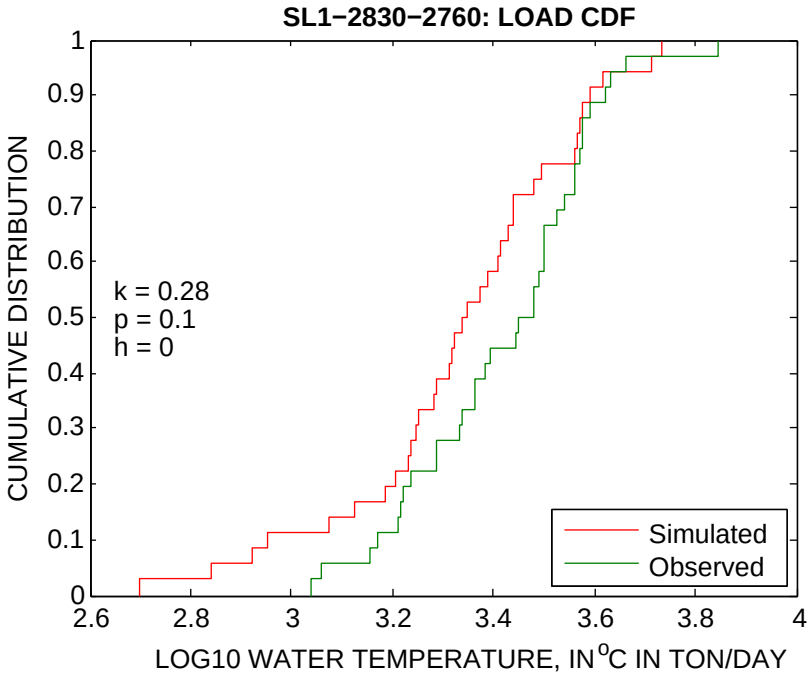


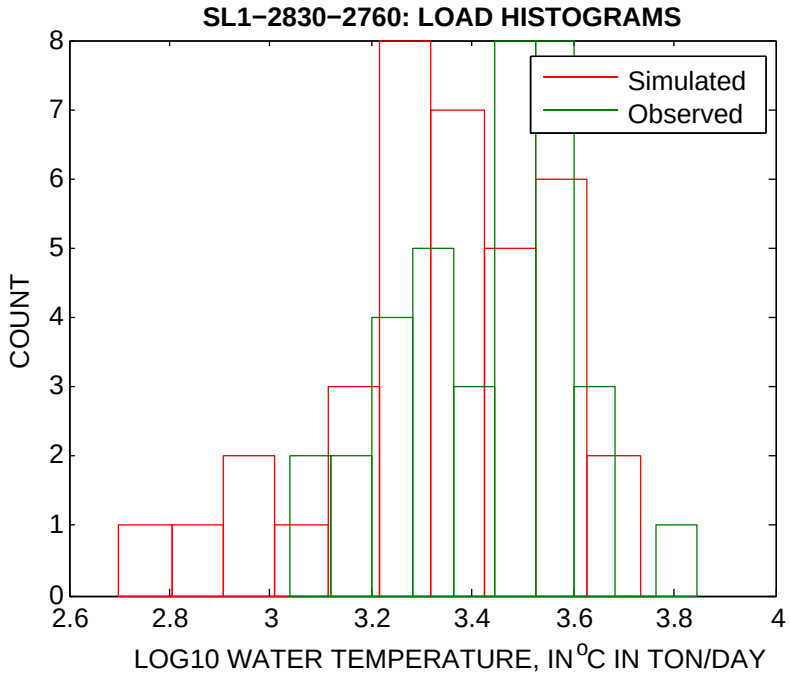


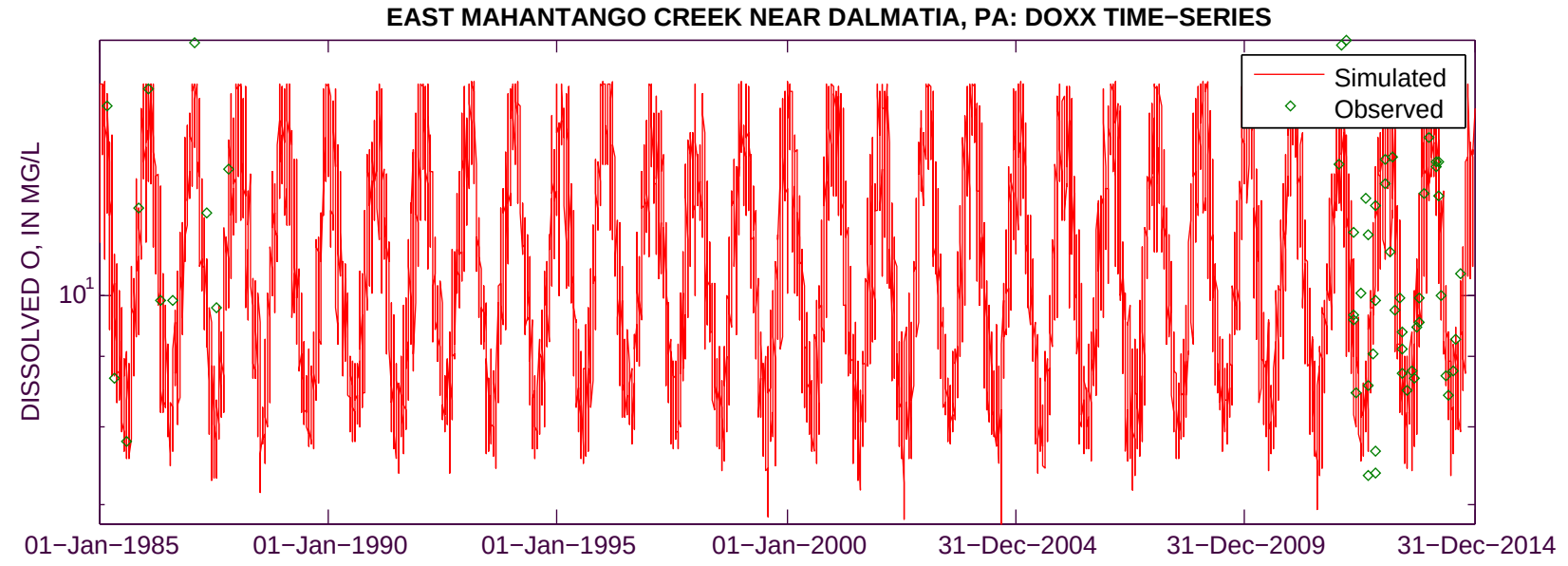
LOAD DATA
LOG10

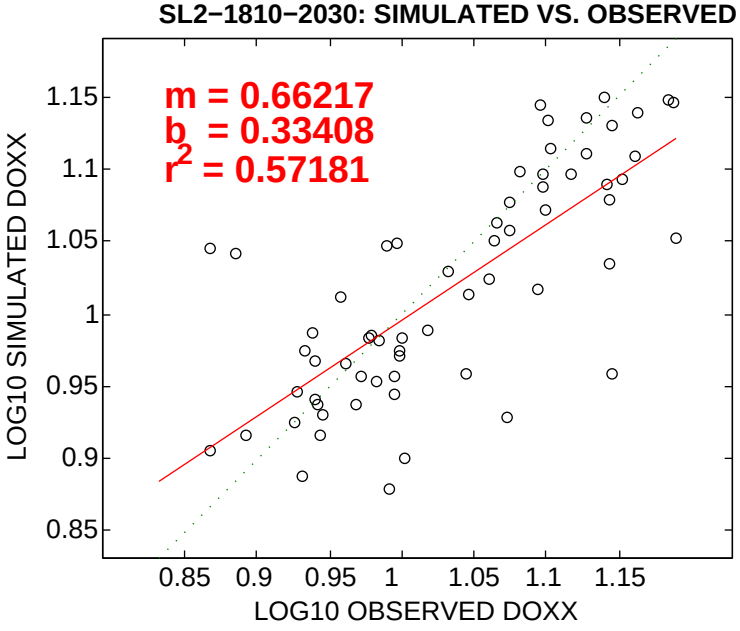


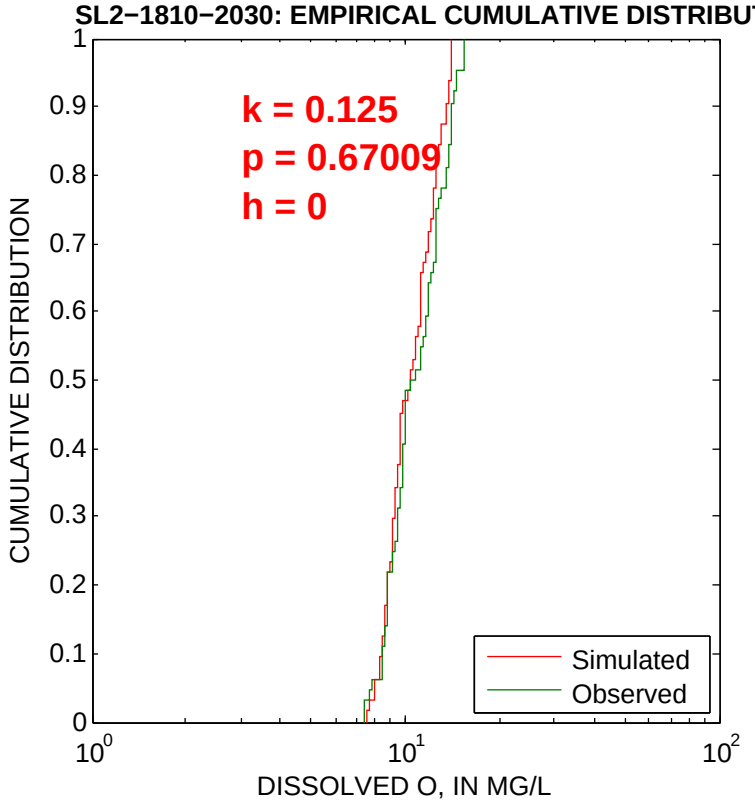












DATA SELECTION

scenario	file
P620171001WQ	DOXX.calib

plot: DOXX - dissolved oxygen

Dates: 1/1/1985 – 12/31/201

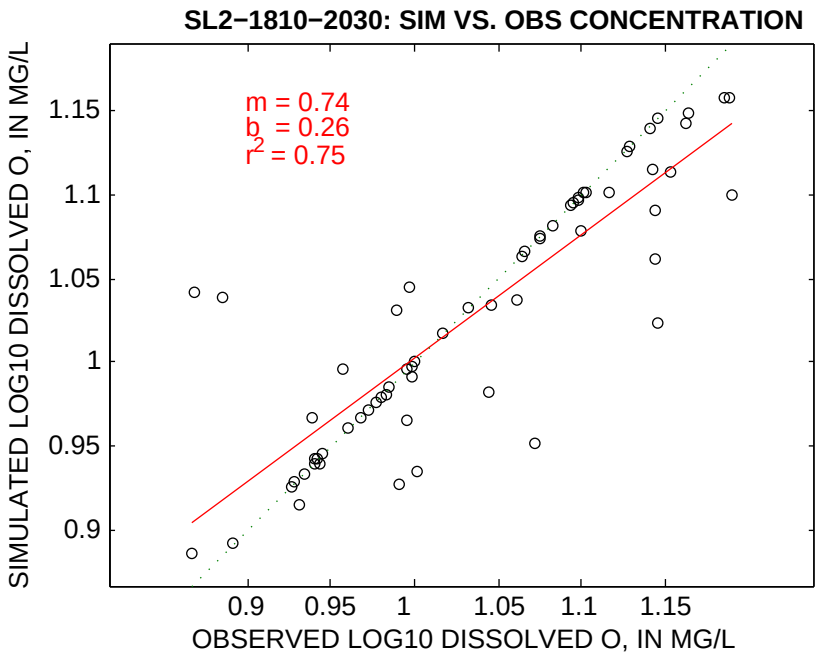
Drive	Directory	Observed
N/A	model	OBS20161101

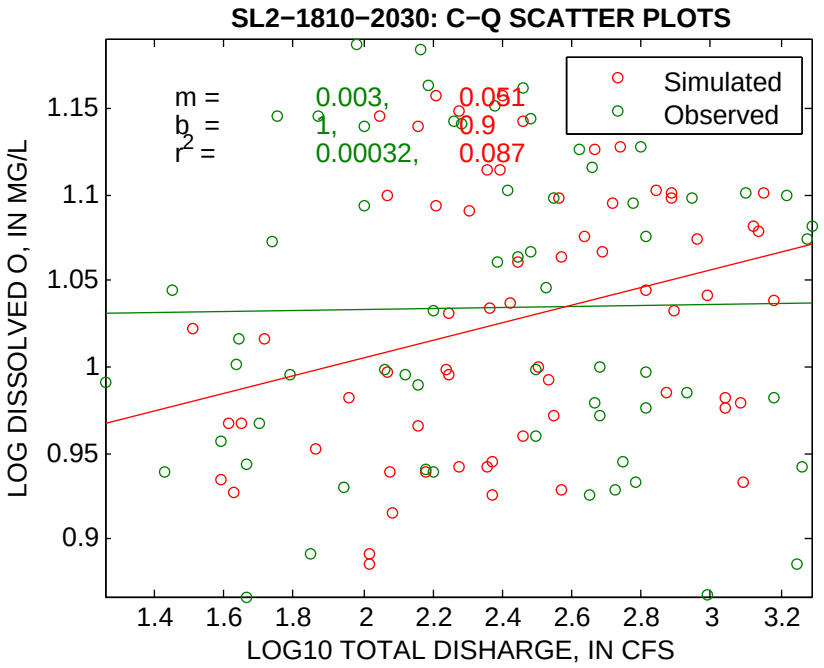
STATISTICS

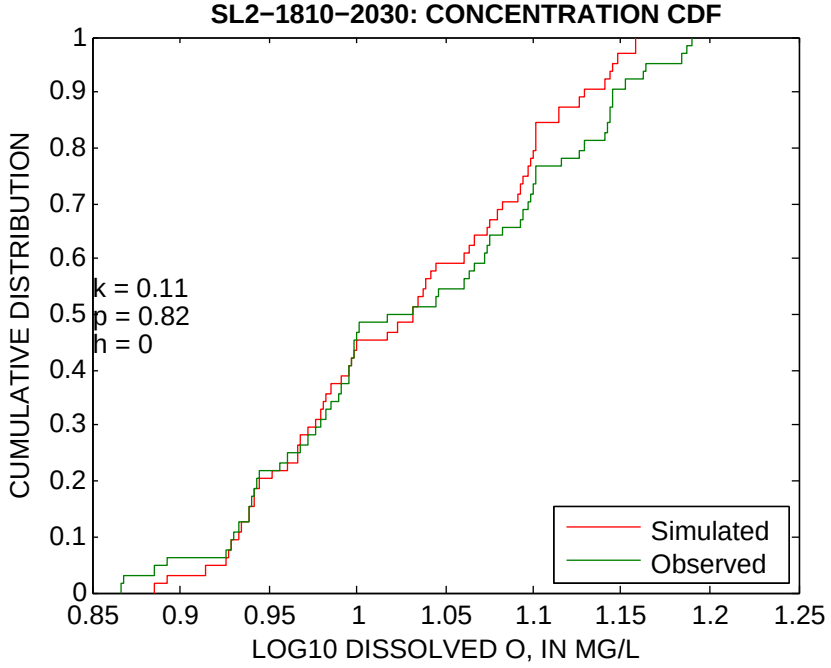
	n	64	64
		observe	simulate
min		7.36	7.5699
		0.866878	0.87909
mean		11.0528	10.6168
		1.0347	1.01923
media		10.585	10.347
		1.02462	1.01481
max		15.47	14.101
		1.18949	1.14925
varian		5.01166	3.60353
		0.00775984	0.00595036
JB		✓ 0.078282	0.065025 ✓
		✓ 0.106541	0.080968 ✓
		ra	log
%		-3.94461	-1.49547
err.va		2.23455	0.00367671
rel.std.err		0.445871	0.473812
mod.eff		0.554129	0.526188

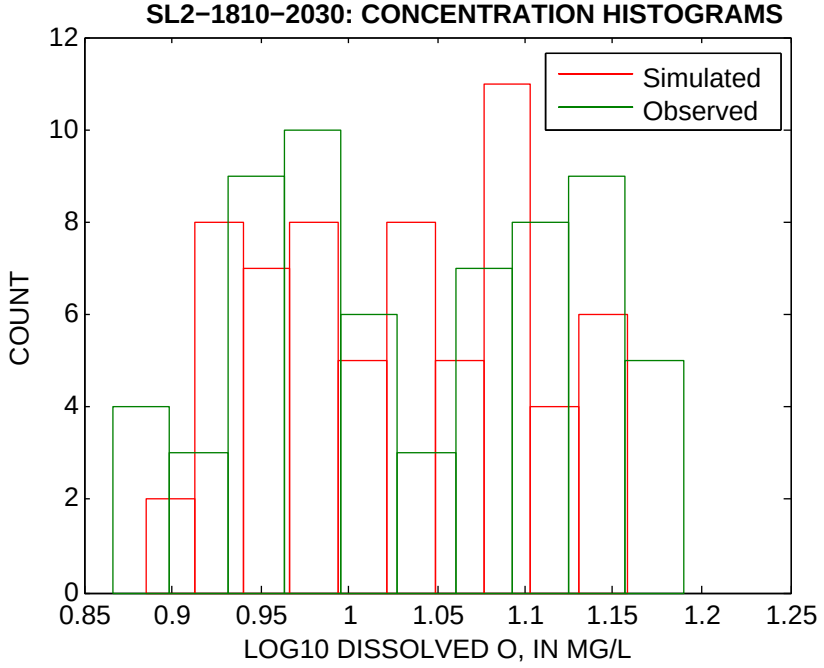
VERSION 2.1

ALL DATA
LOG10

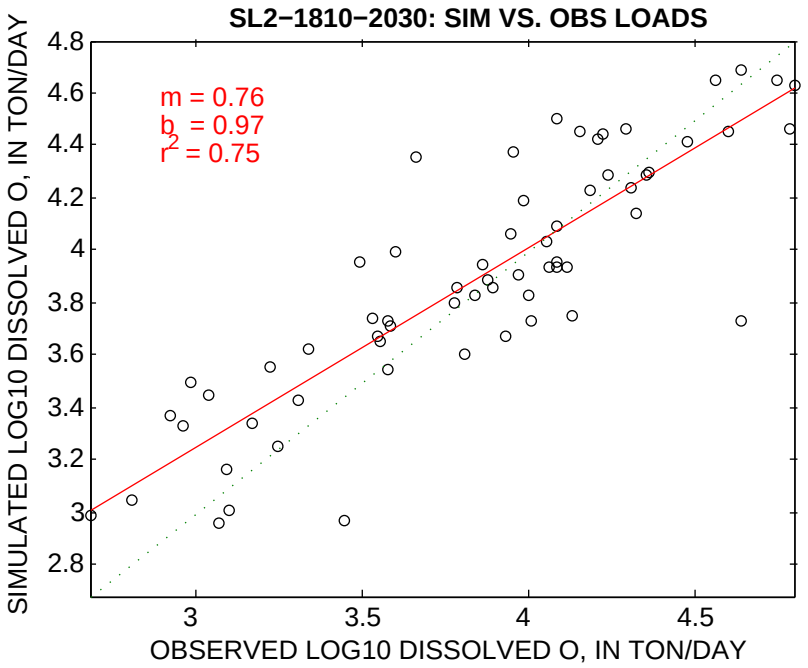


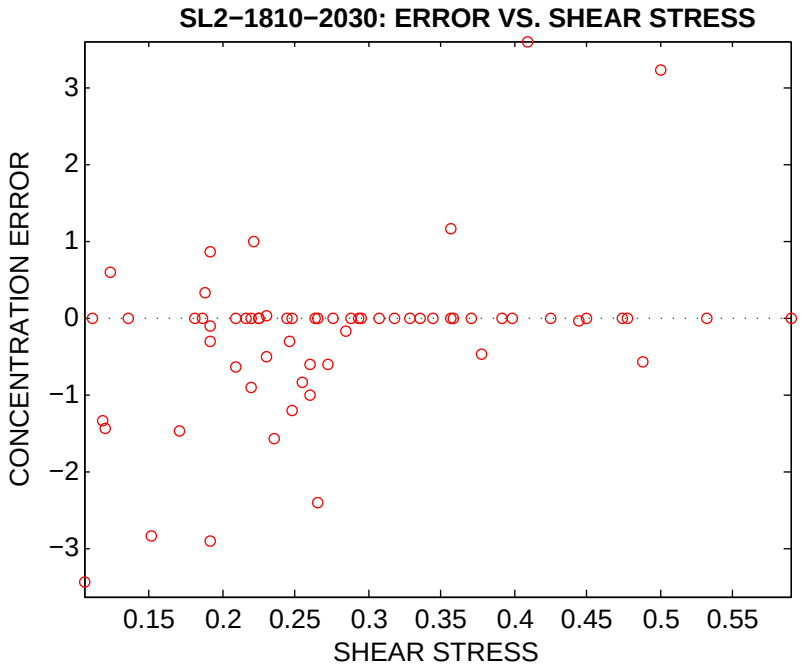


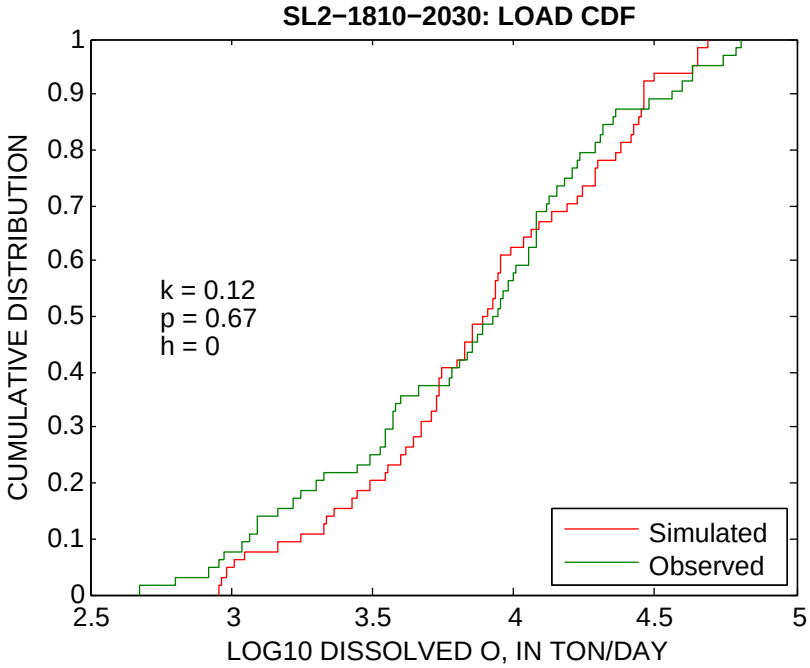


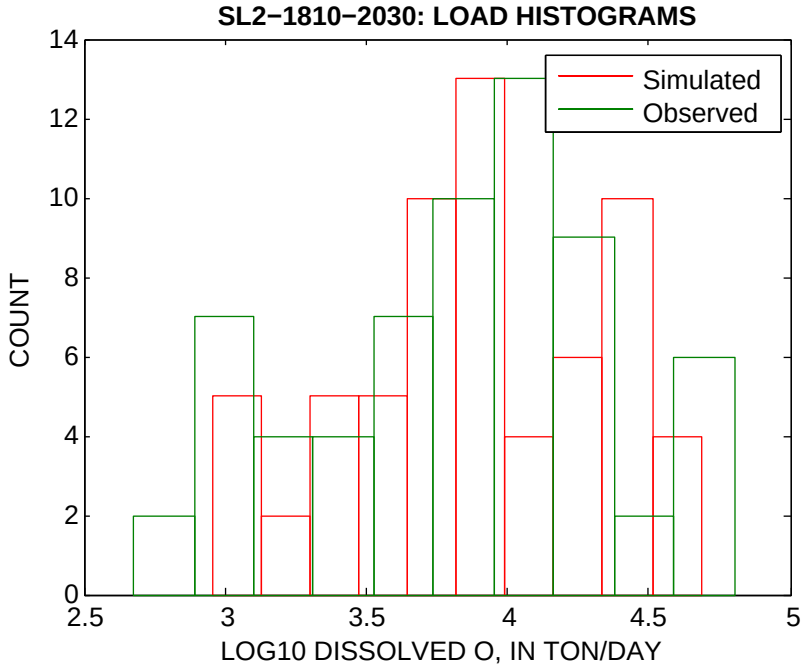


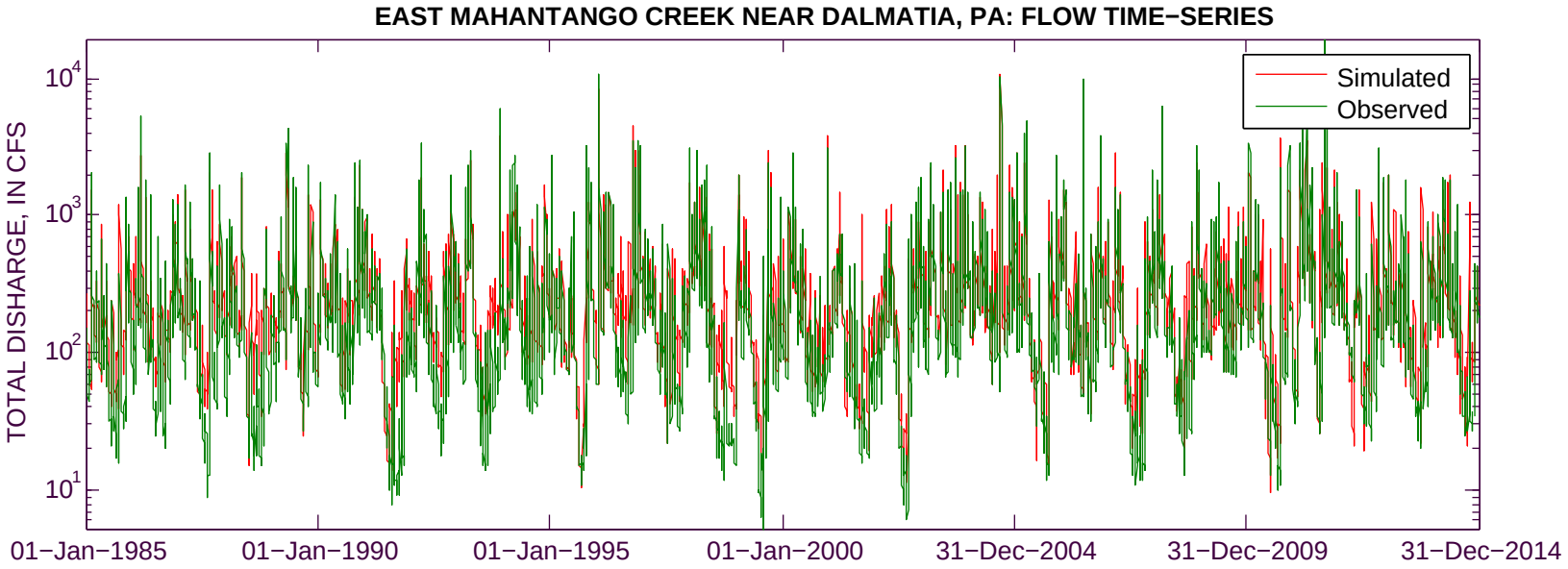
LOAD DATA
LOG10

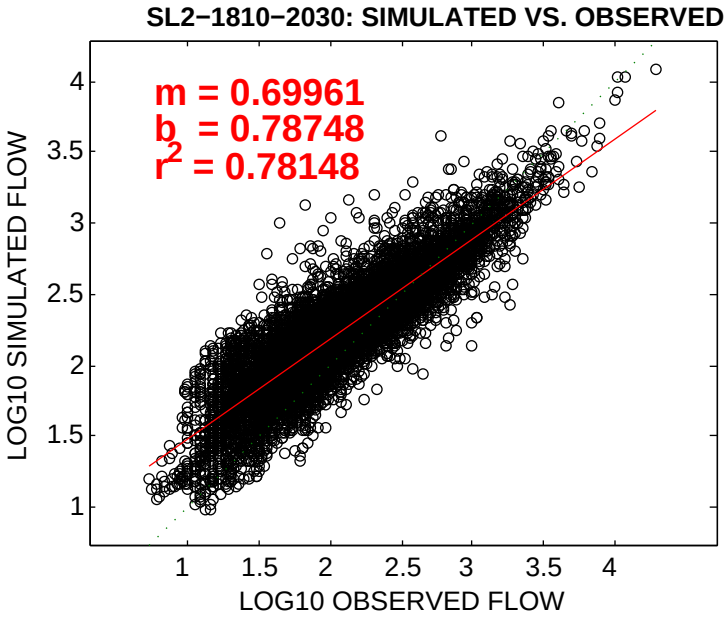


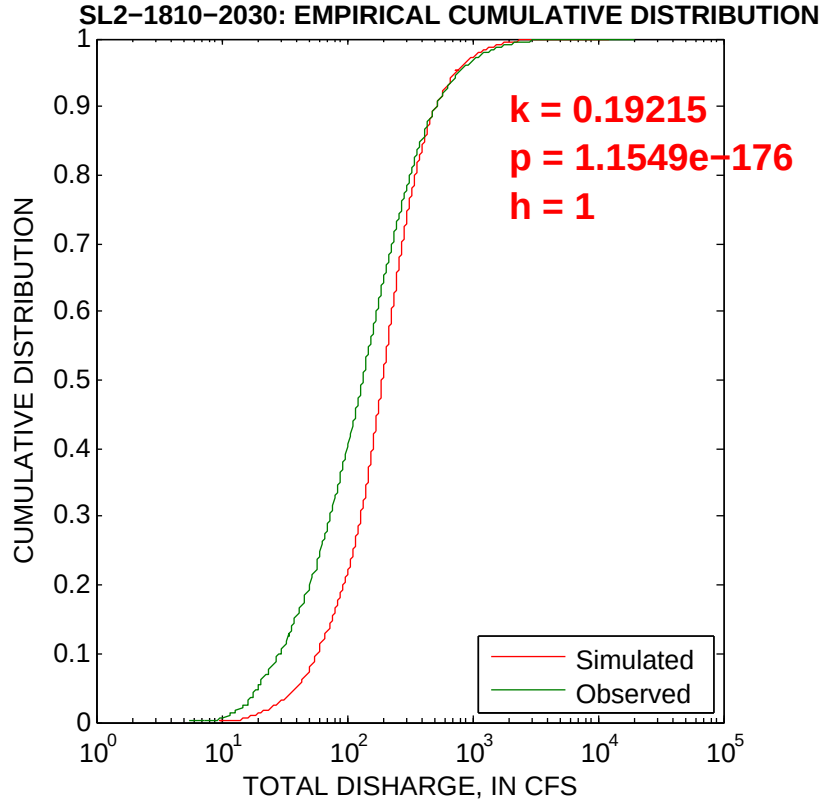












DATA SELECTION

scenario	file
P620171001WQ	FLOW.calib

plot: FLOW - total discharge

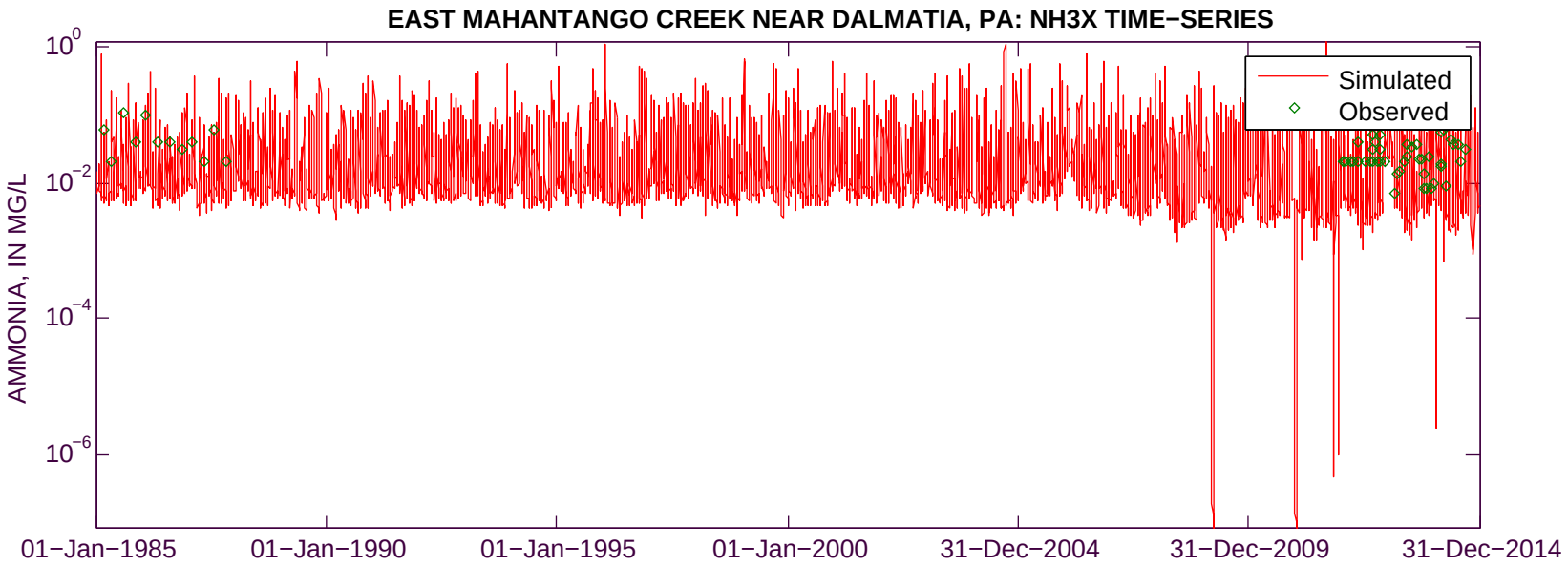
Dates: 1/1/1985 – 12/31/201

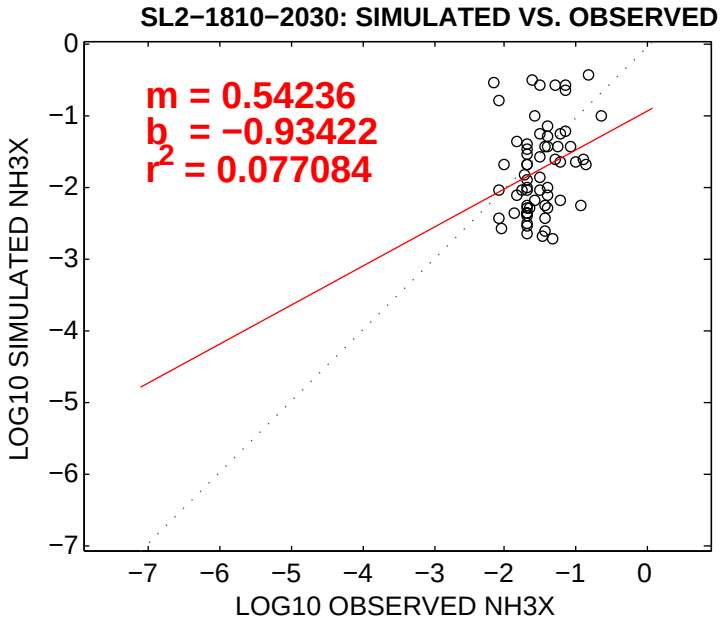
Drive	Directory	Observed
N/A	model	OBS20161101

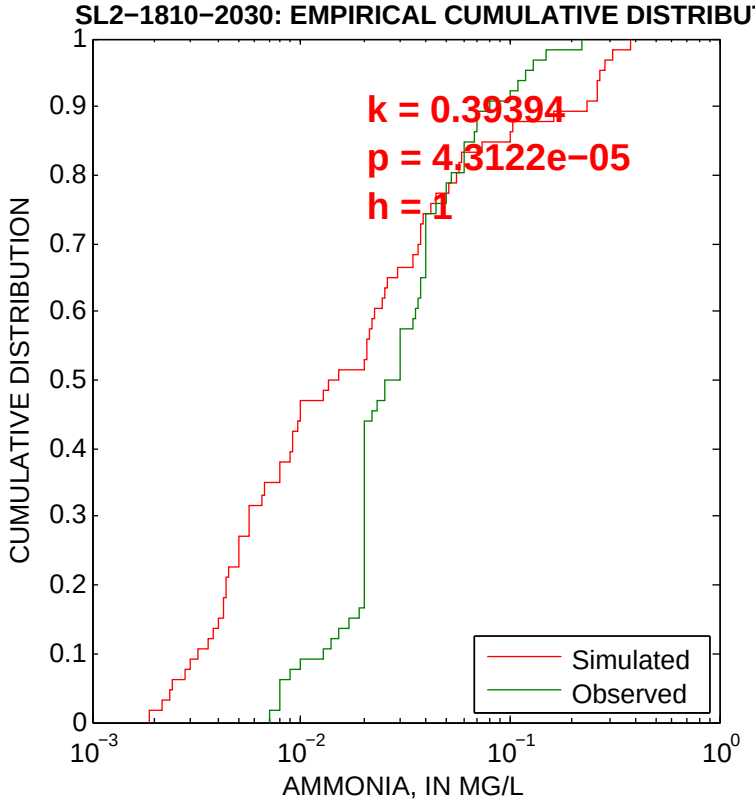
STATISTICS

n	10955	10955
	observe	**simulate**
min	5.3	9.7952
	0.724276	0.991013
mean	248.449	275.701
	2.11691	2.26849
media	134	193.28
	2.1271	2.28619
max	19400	12331
	4.2878	4.091
varian	227405	145949
	0.231052	0.144712
JB	0.001	0.001
	0.005094	0.001
	ra	log
%	10.969	7.16066
err.va	47001.1	0.0754505
rel.std.err	0.206685	0.326552
mod.eff	0.793315	0.673448

VERSION 2.1







DATA SELECTION

scenario: P620171001WQ | file: NH3X.calib

plot: NH3X - ammonia

Dates: 1/1/1985 | 12/31/201

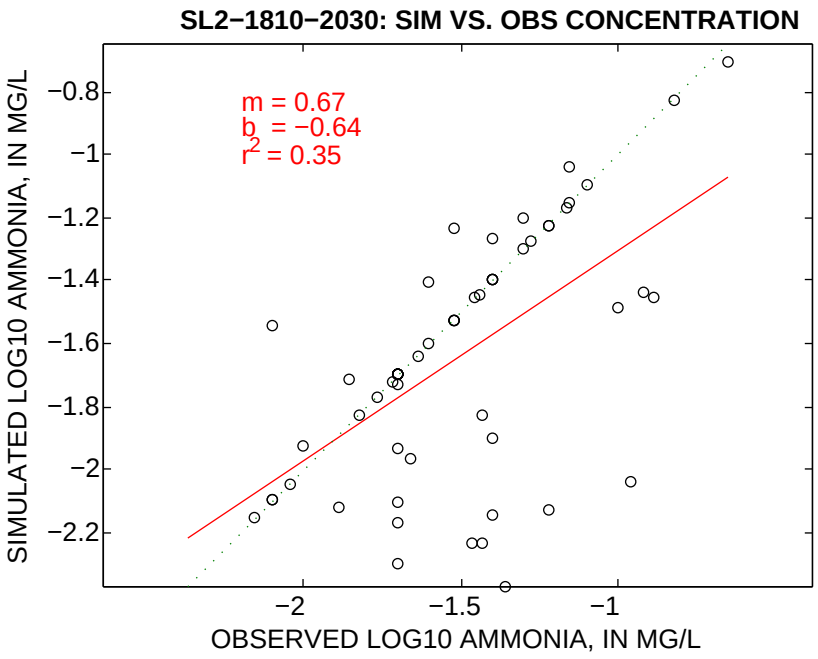
Drive: N/A | Directory: model | Observed: OBS20161101

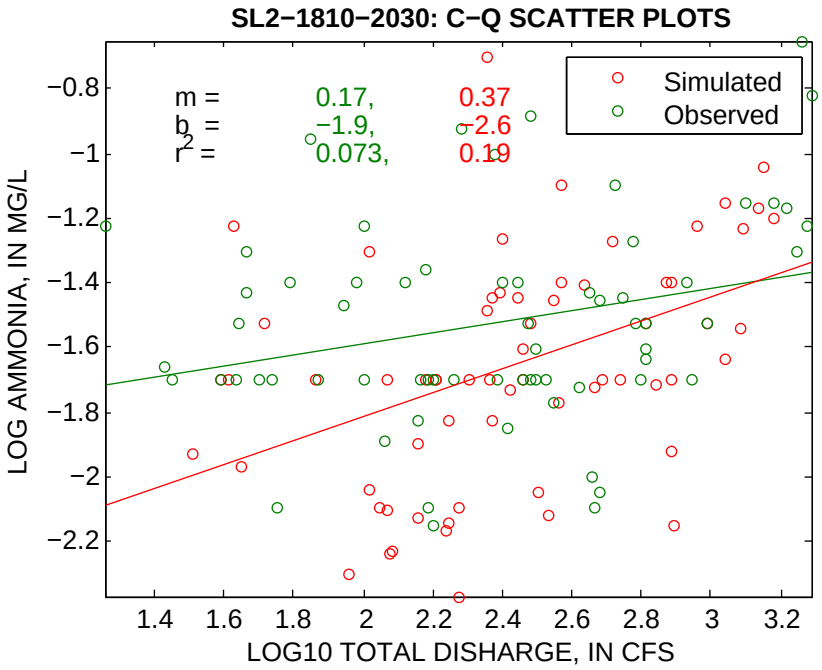
STATISTICS

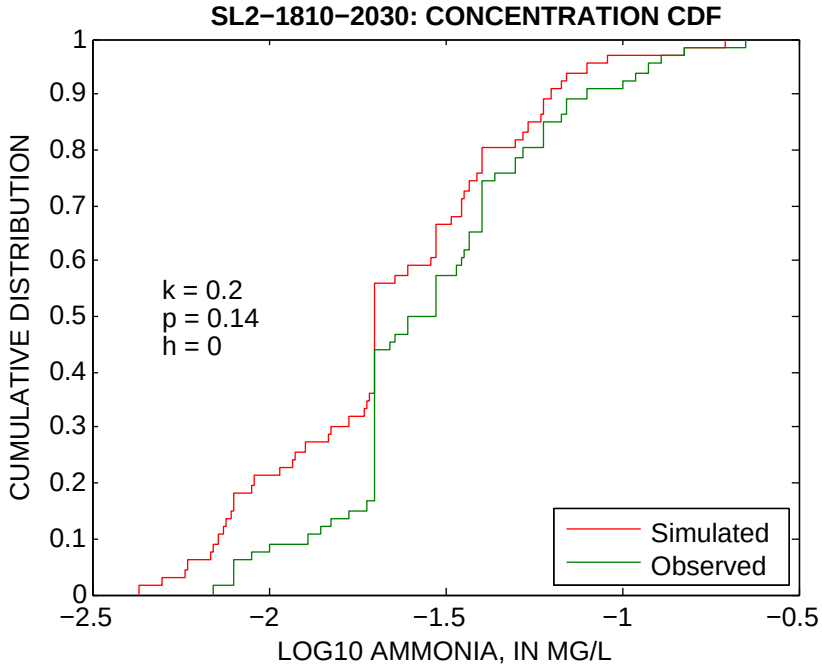
n	66	66
	observe	simulate
min	0.007	0.0018905
	-2.1549	-2.72342
mean	0.0401515	0.0510259
	-1.52388	-1.76071
media	0.0275	0.0142845
	-1.56247	-1.84591
max	0.223	0.37693
	-0.651695	-0.423739
varian	0.00141902	0.00753497
	0.102958	0.392891
JB	0.001	0.001
	0.276248	0.070666
	ra	log
%	27.0835	15.5409
err.va	0.00739109	0.441118
rel.std.err	5.20858	4.28443
mod.eff	-4.20858	-3.28443

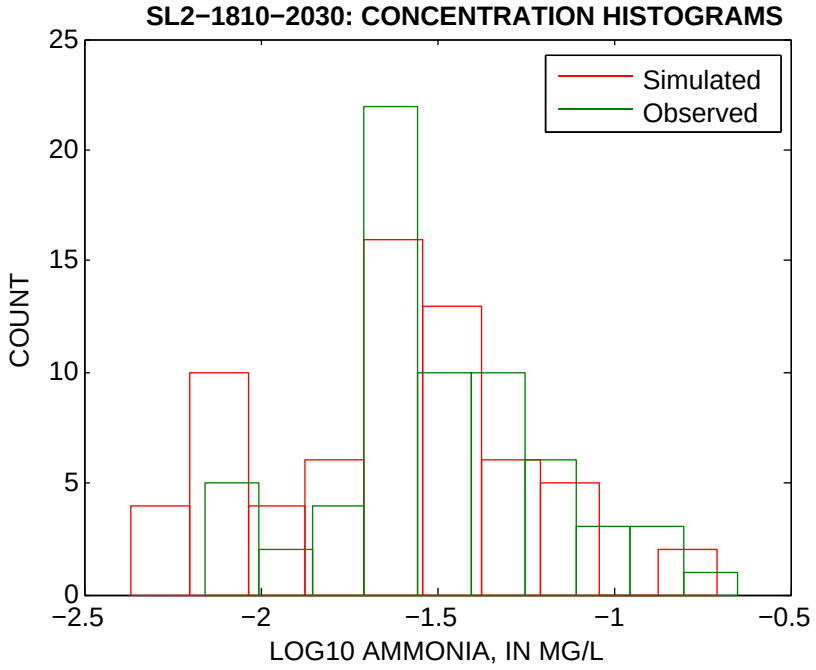
VERSION 2.1

ALL DATA
LOG10

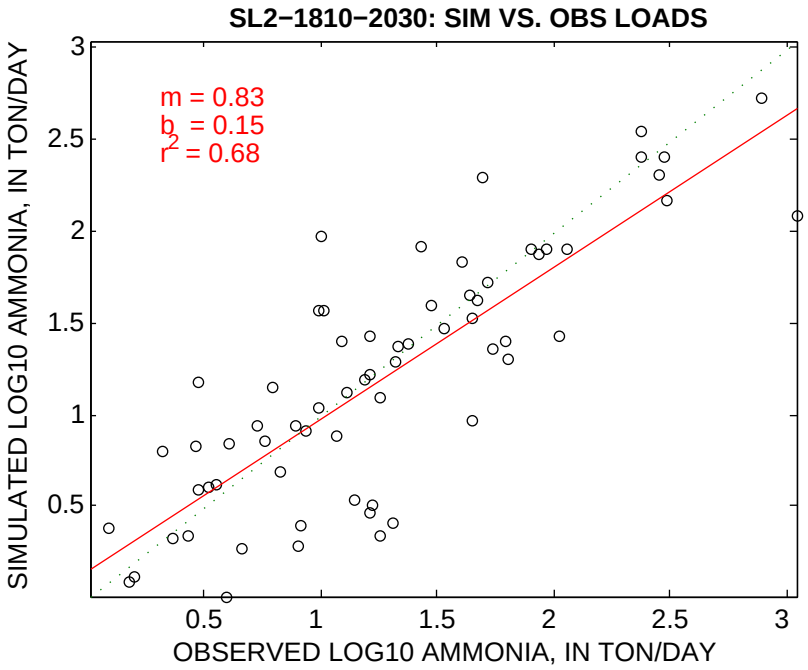


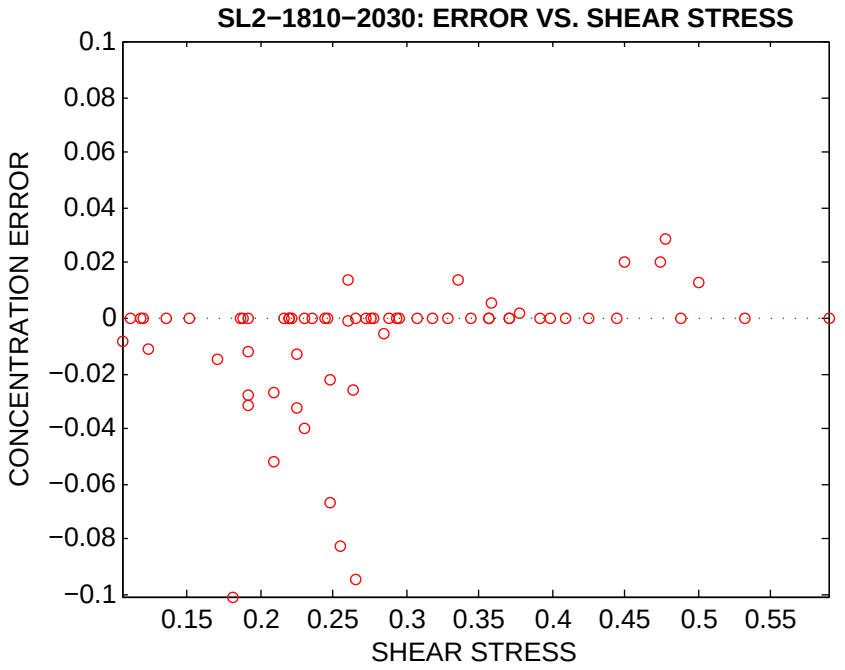


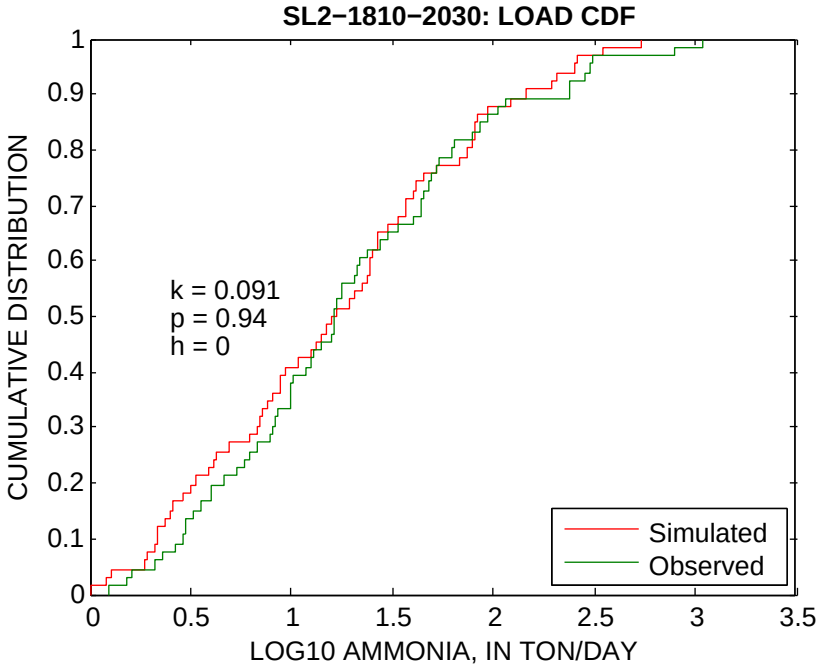


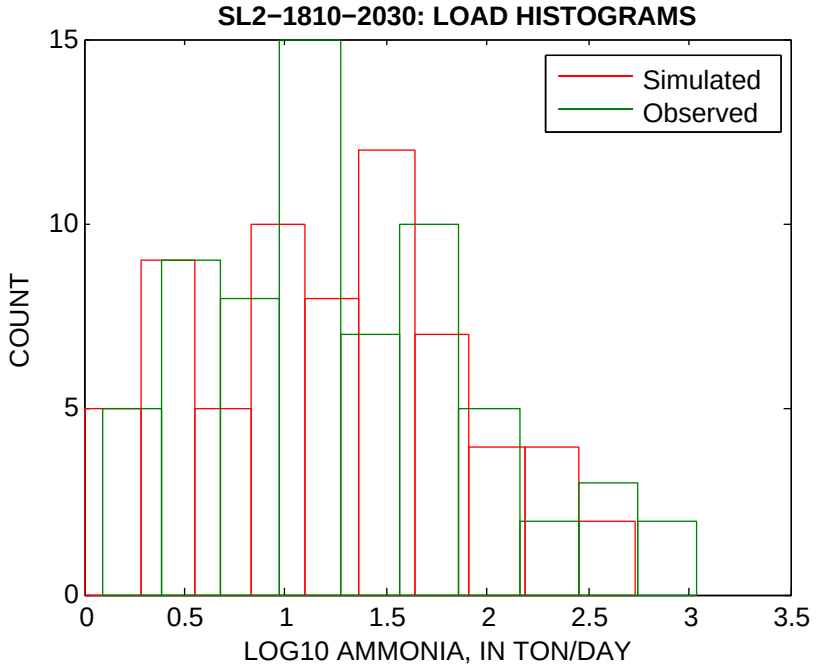


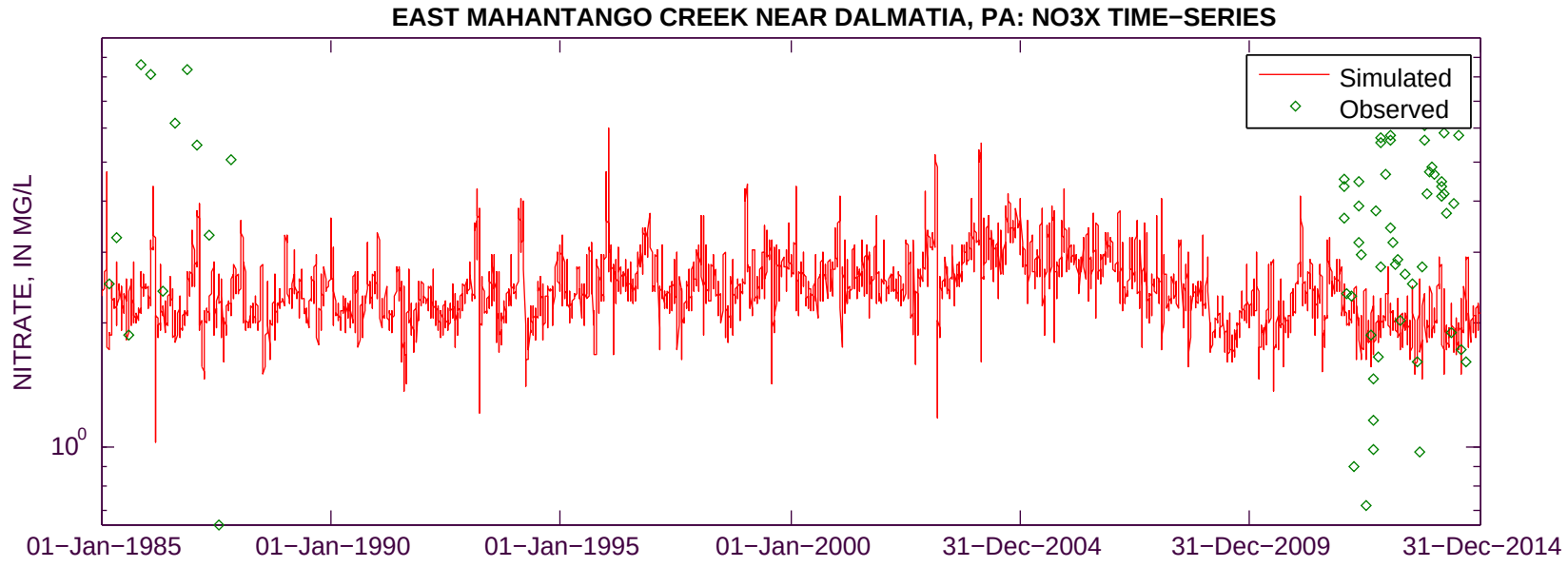
LOAD DATA
LOG10

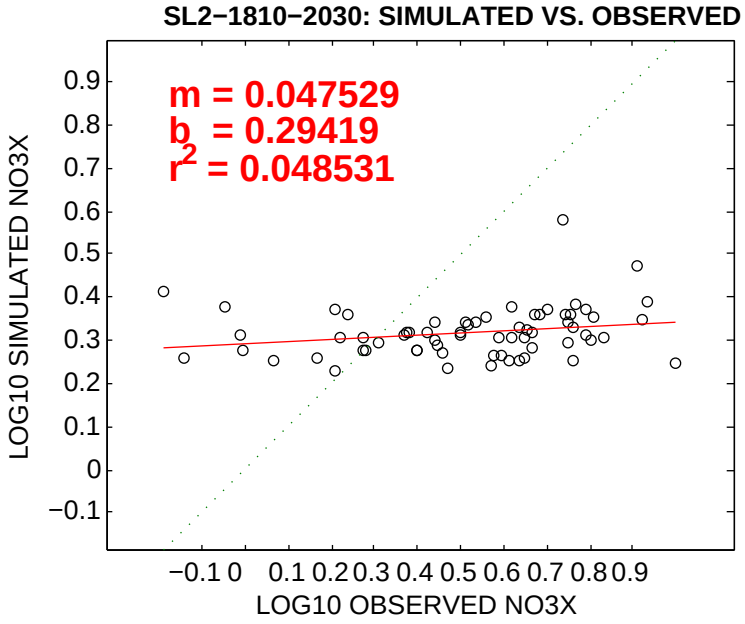


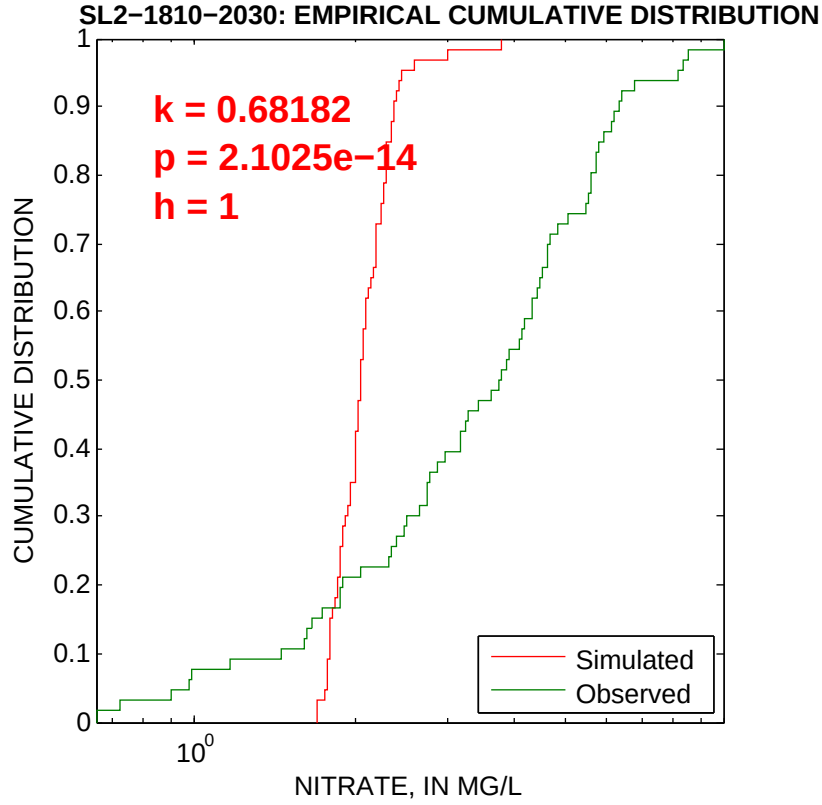












DATA SELECTION

scenario	file
P620171001WQ	NO3X.calib

plot: NO3X - nitrate

Dates: 1/1/1985 – 12/31/201

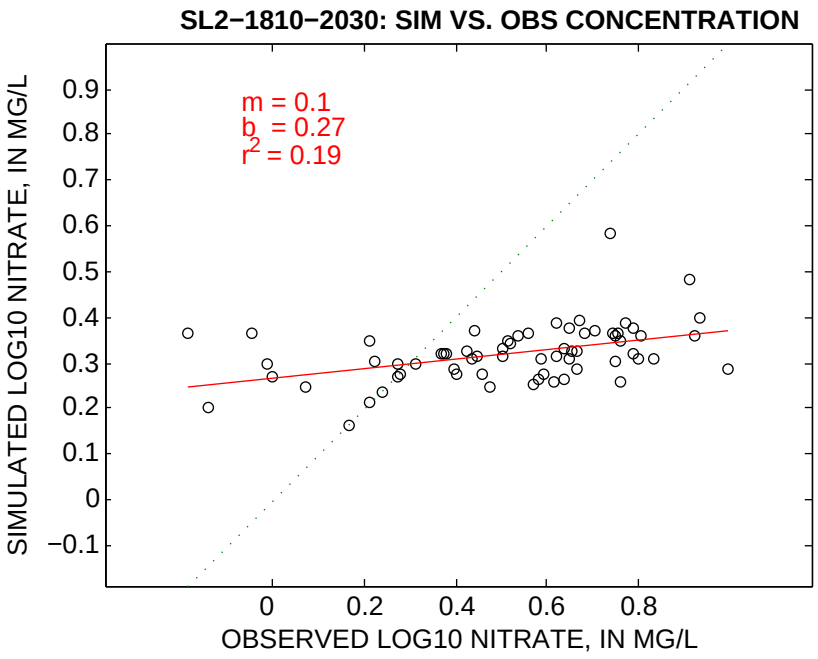
Drive	Directory	Observed
N/A	model	OBS20161101

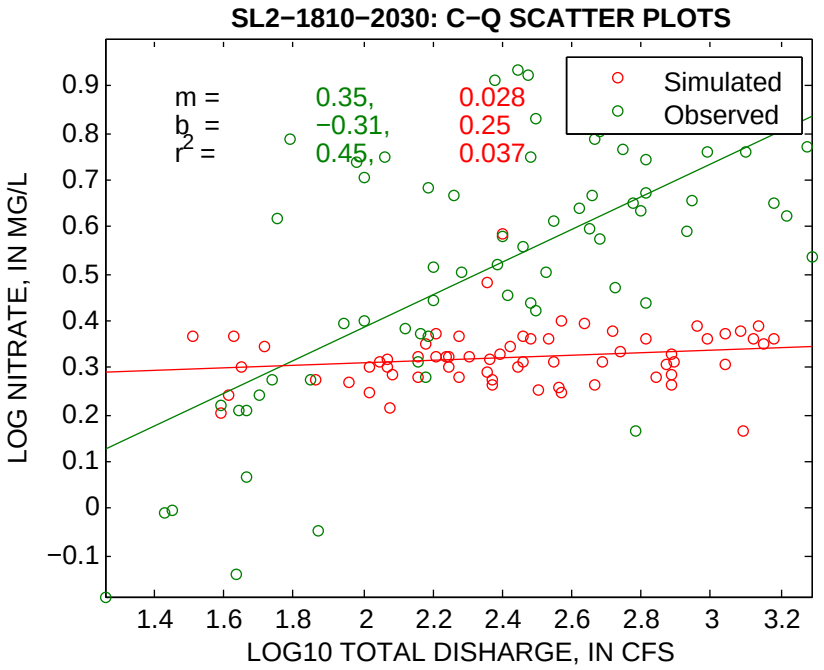
STATISTICS

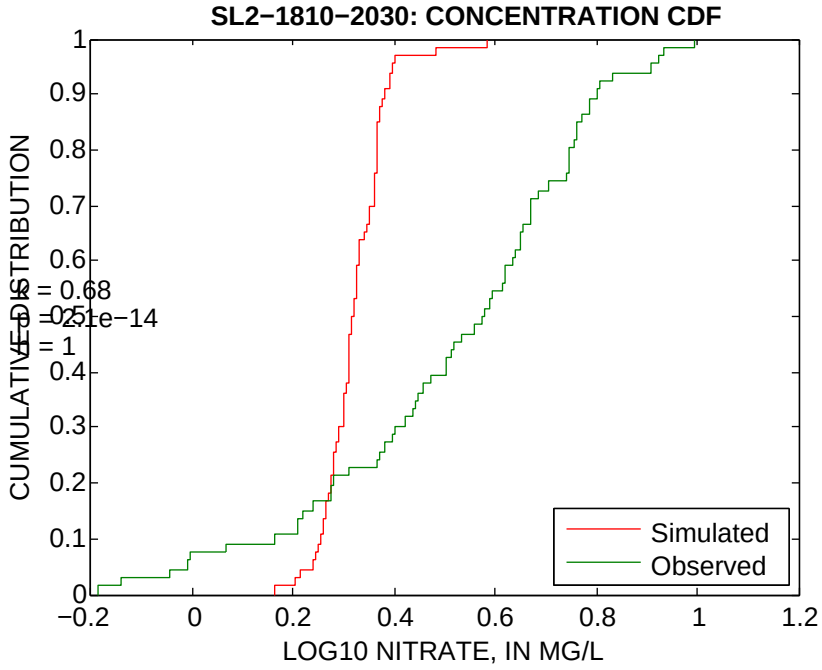
	n	66	66
		observe	simulate
min		0.65	1.7016
		-0.187087	0.230857
mean		3.87615	2.1032
		0.517878	0.318805
media		3.7655	2.0518
		0.575804	0.312135
max		9.916	3.779
		0.996337	0.577377
varian		4.20672	0.099944
		0.071785	0.00334139
JB		0.066020	0.001
		0.049965	0.001
		ra	log
%		-45.7401	-38.44
err.va		7.14284	0.108542
rel.std.err		1.69796	1.51204
mod.eff		-0.69796	-0.512045

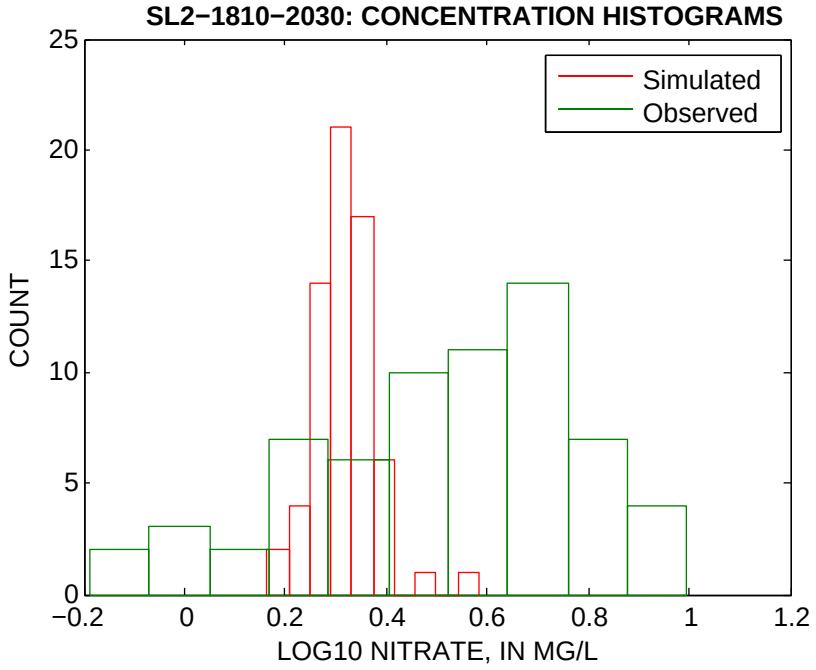
VERSION 2.1

ALL DATA
LOG10

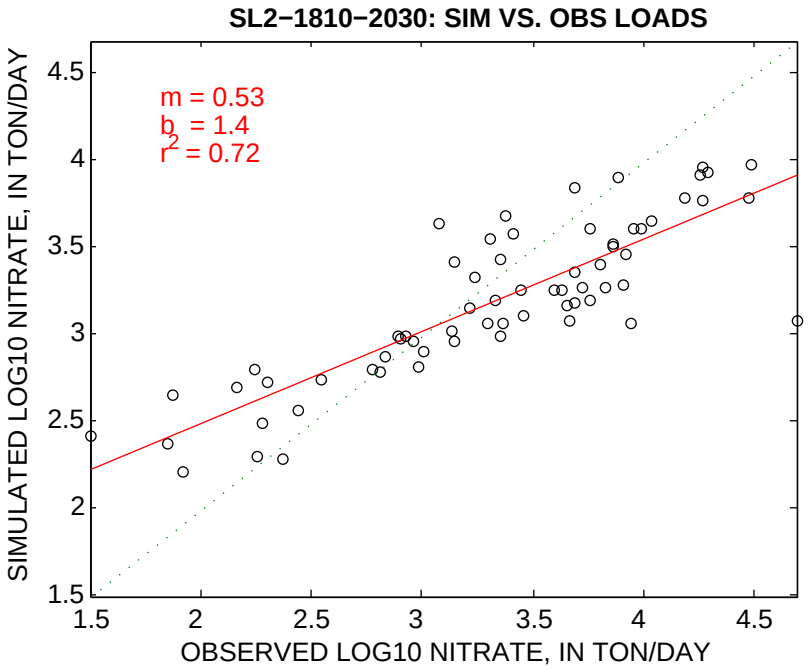


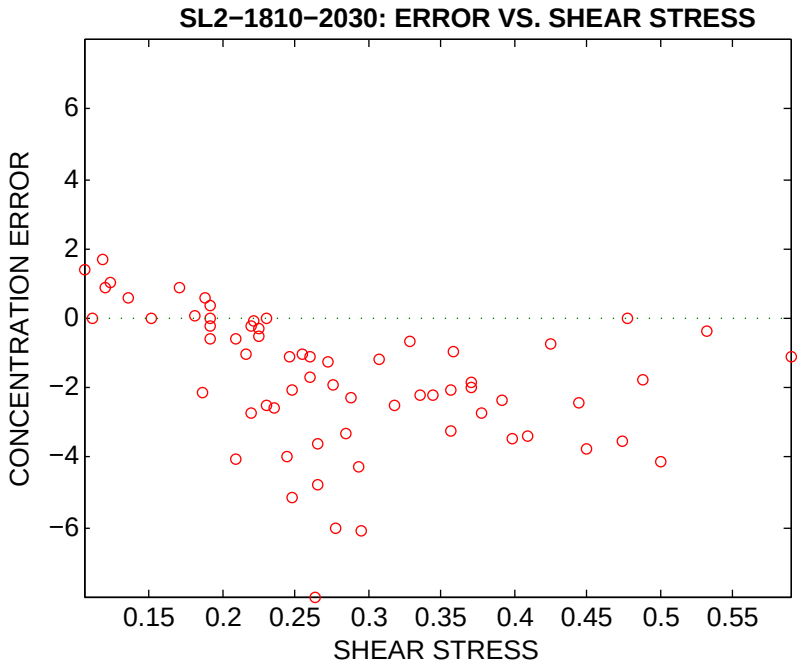


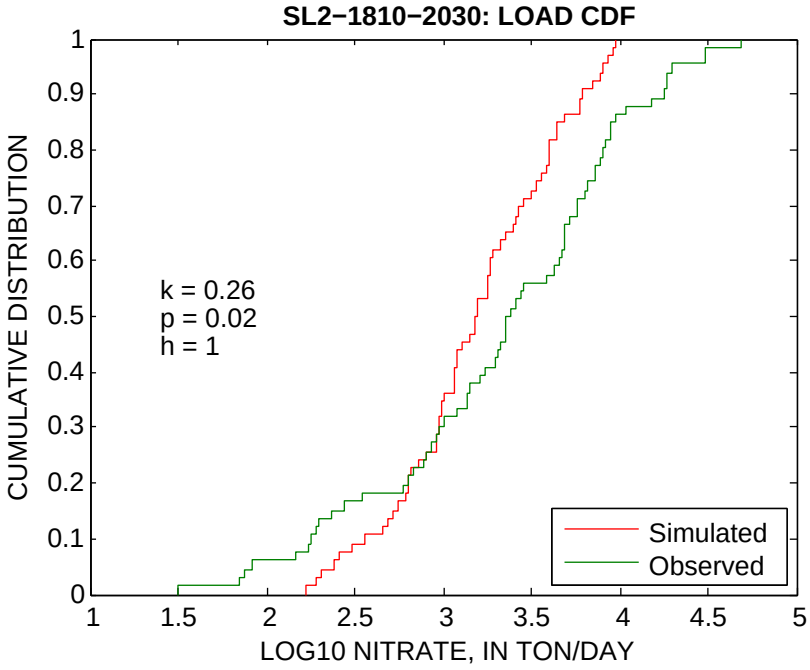


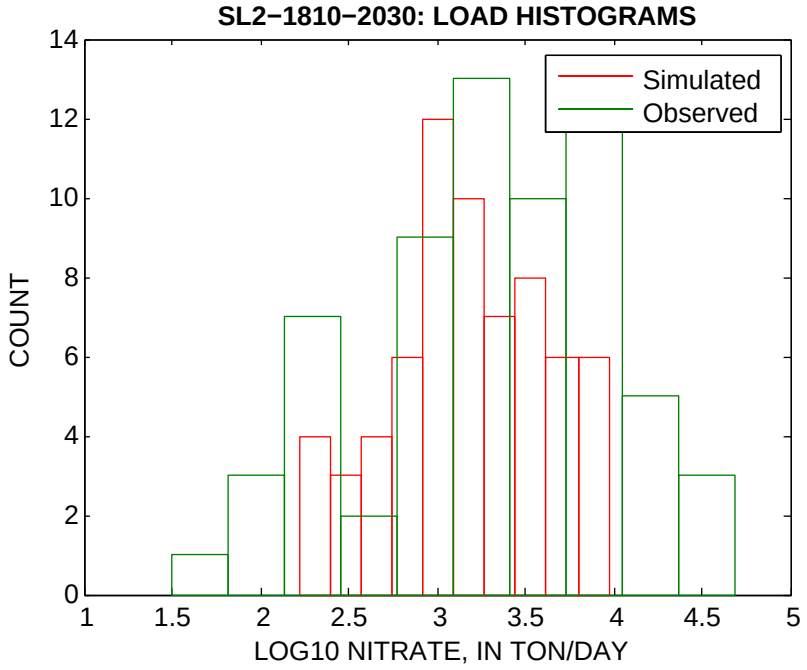


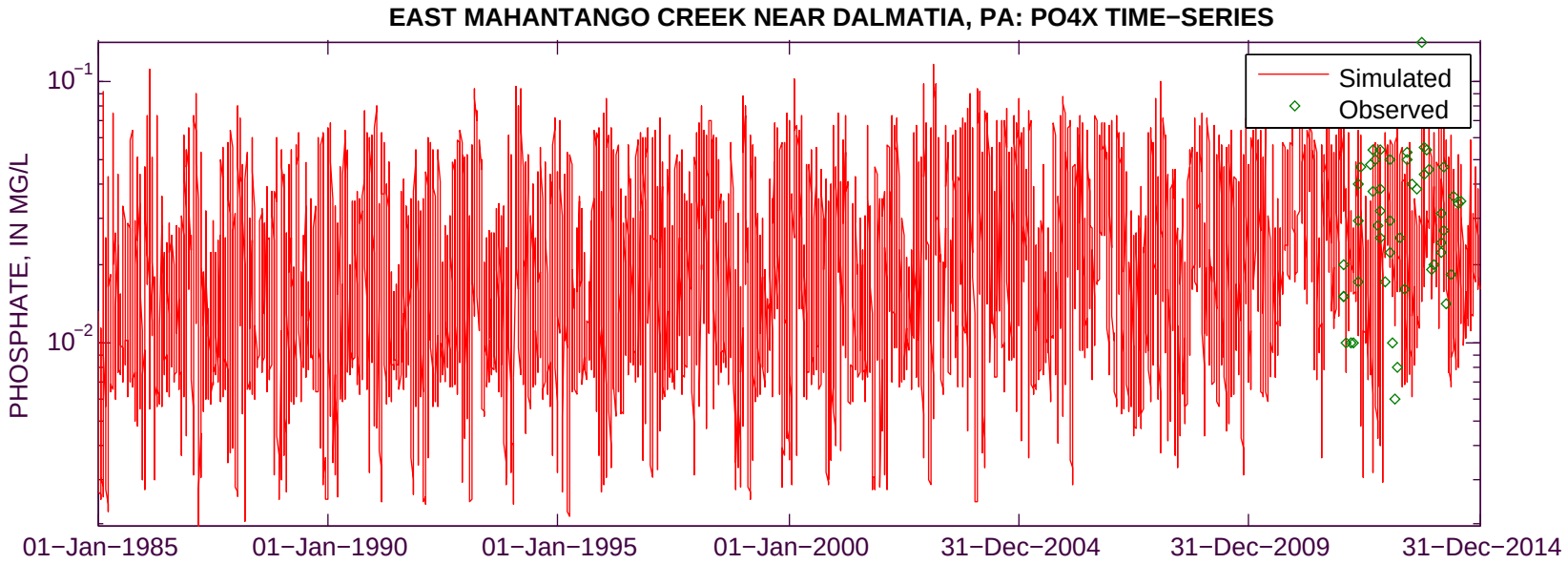
LOAD DATA
LOG10

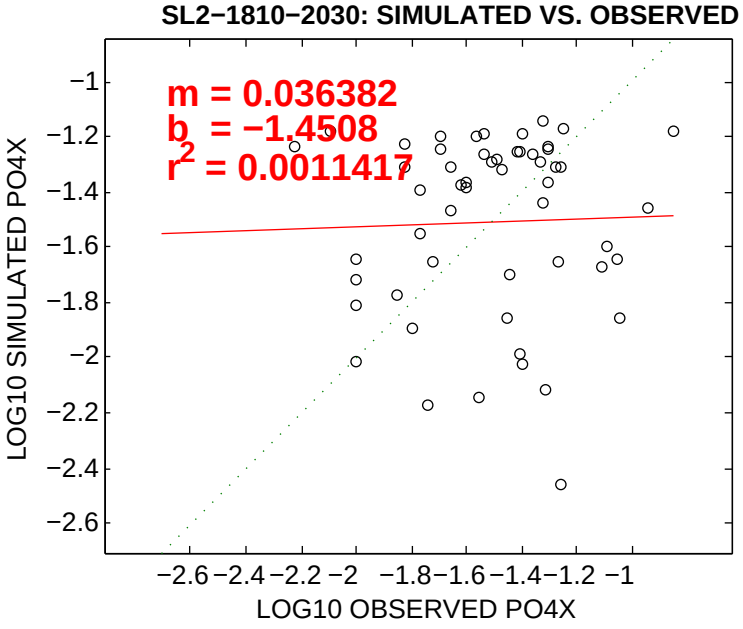


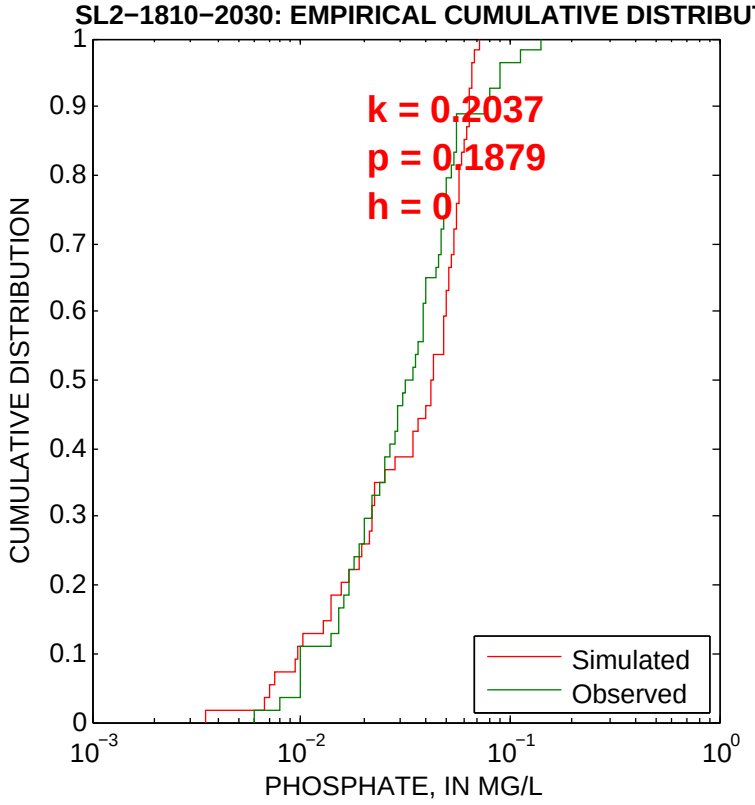












DATA SELECTION

scenario: P620171001WQ | file: PO4X.calib

plot: PO4X - phosphate

Dates: 1/1/1985 – 12/31/201

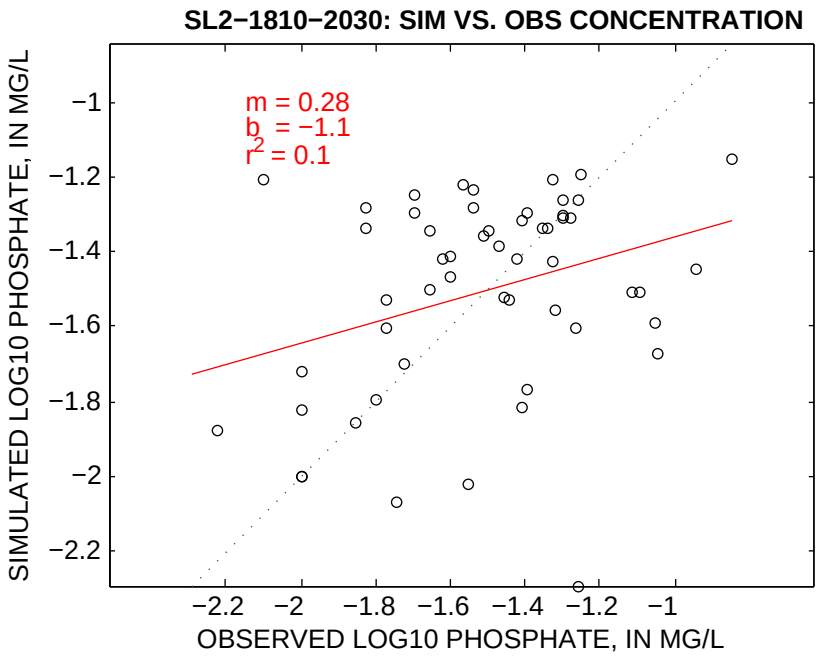
Drive: N/A | Directory: model | Observed: OBS20161101

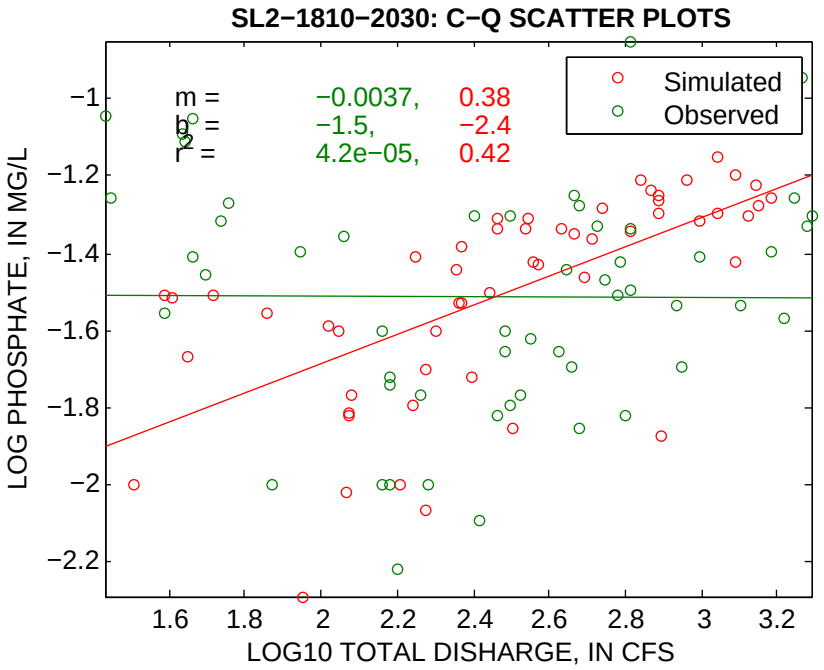
STATISTICS

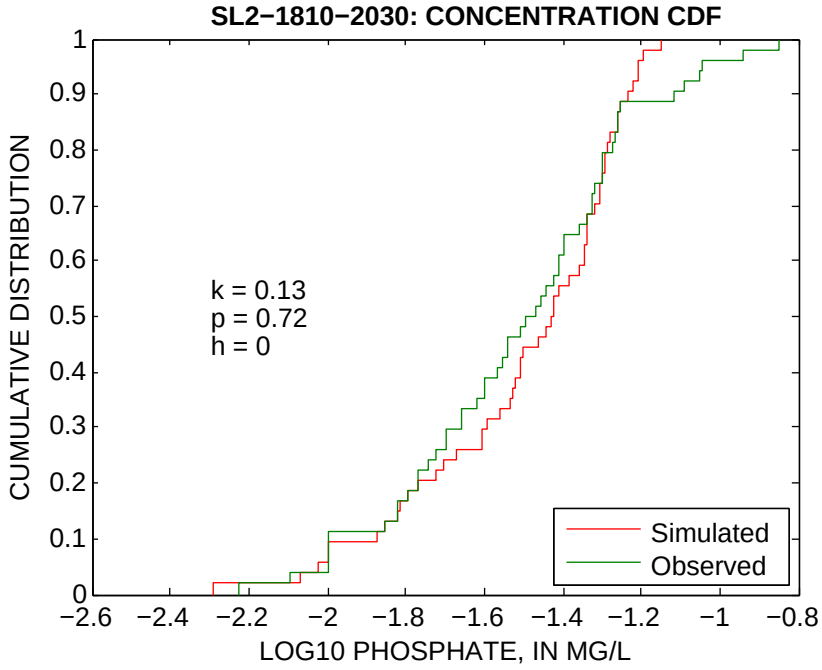
	n	54	54
		observe	simulate
min		0.006	0.0034835
		-2.22185	-2.45798
mean		0.0382963	0.0385043
		-1.51368	-1.50591
media		0.033	0.042432
		-1.48169	-1.37234
max		0.142	0.071194
		-0.847712	-1.14756
varian		0.00072568	0.00041471
		0.08996	0.104299
JB		0.001	0.058849
		0.5	0.019285
		ra	log
%		0.543133	-0.513295
err.va		0.00110644	0.187775
rel.std.err		1.52468	2.08731
mod.eff		-0.52468	-1.08731

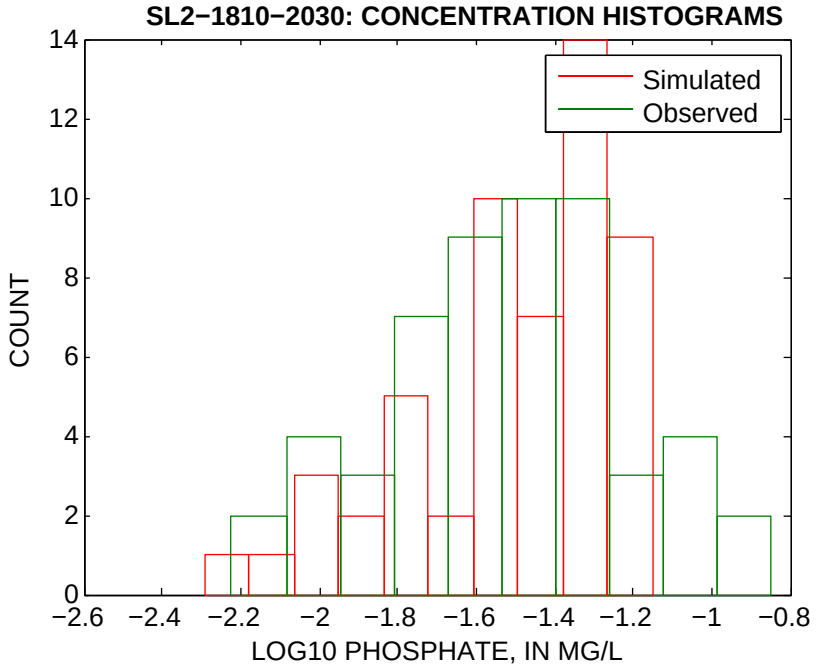
VERSION 2.1

ALL DATA
LOG10

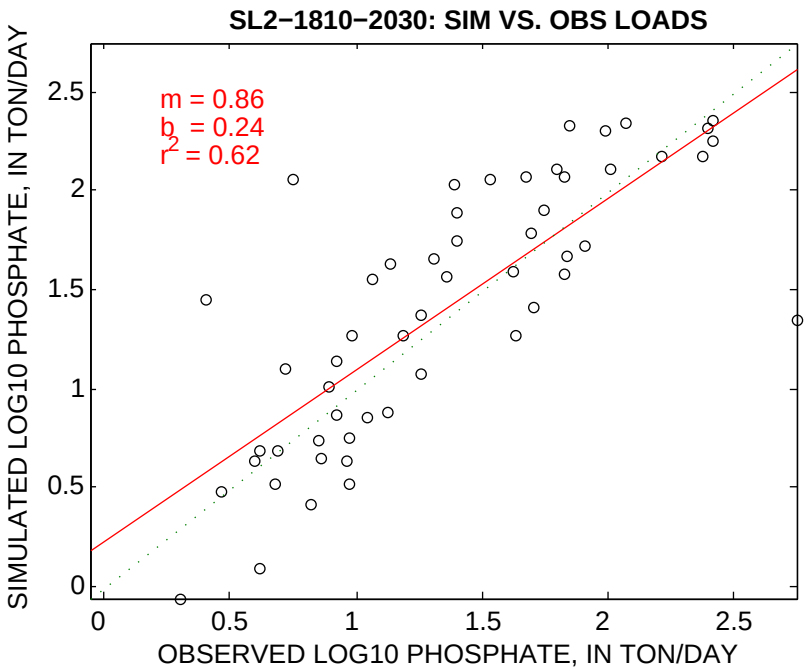


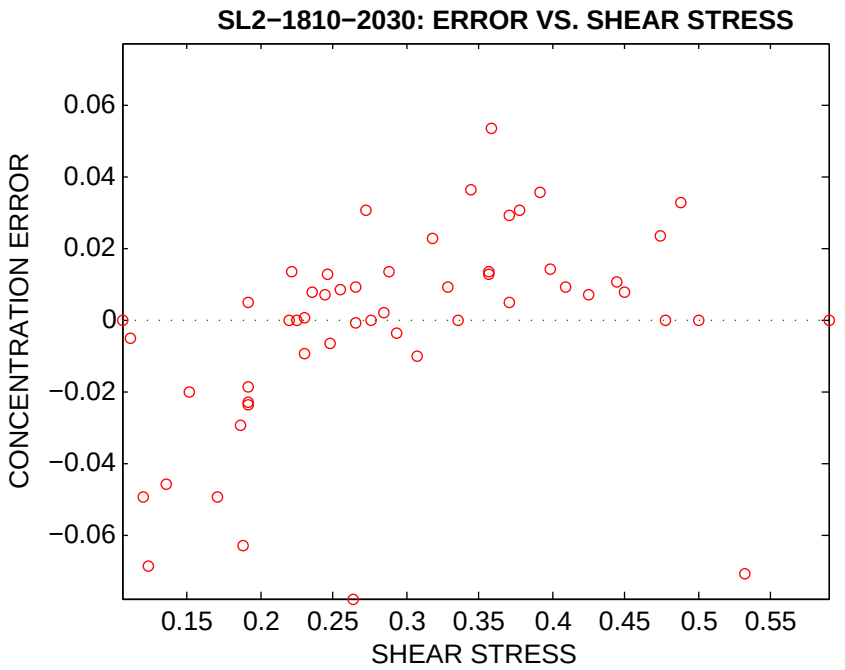


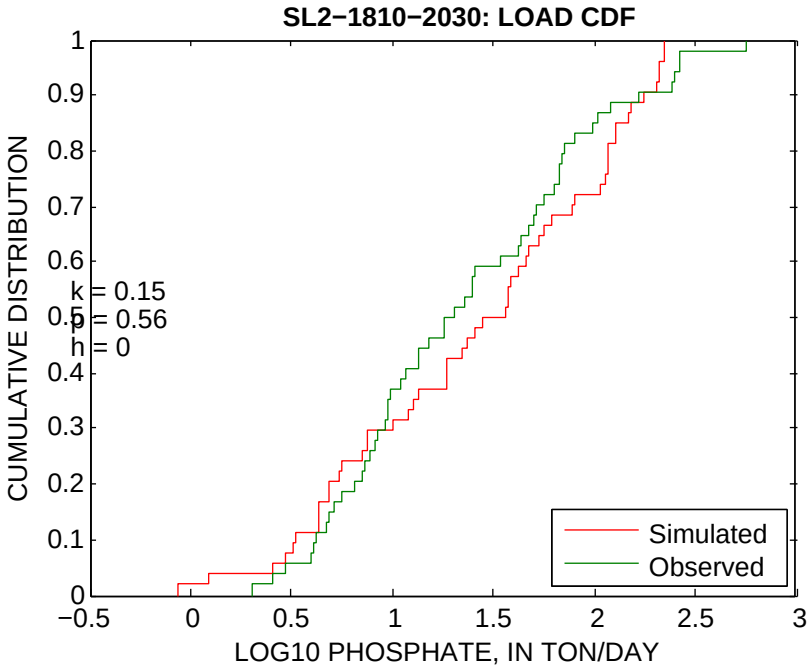


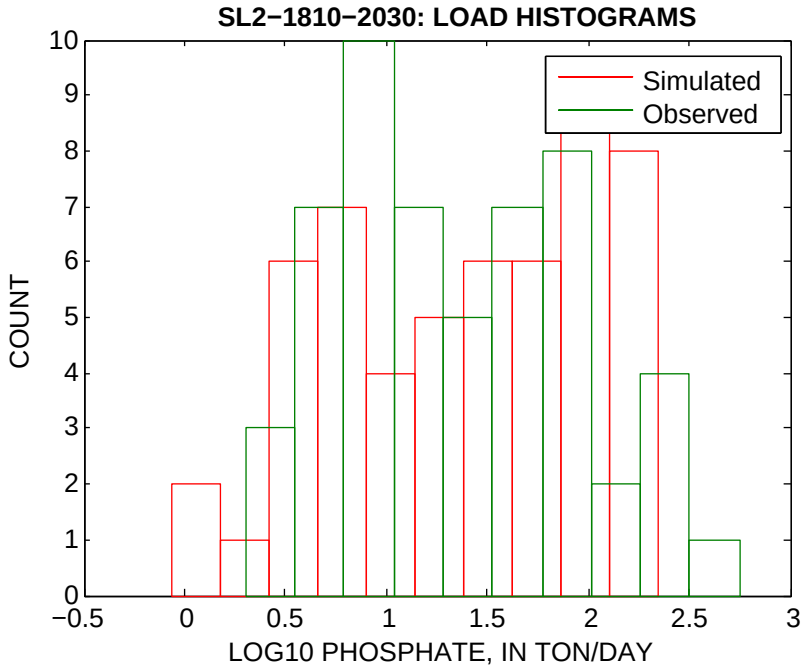


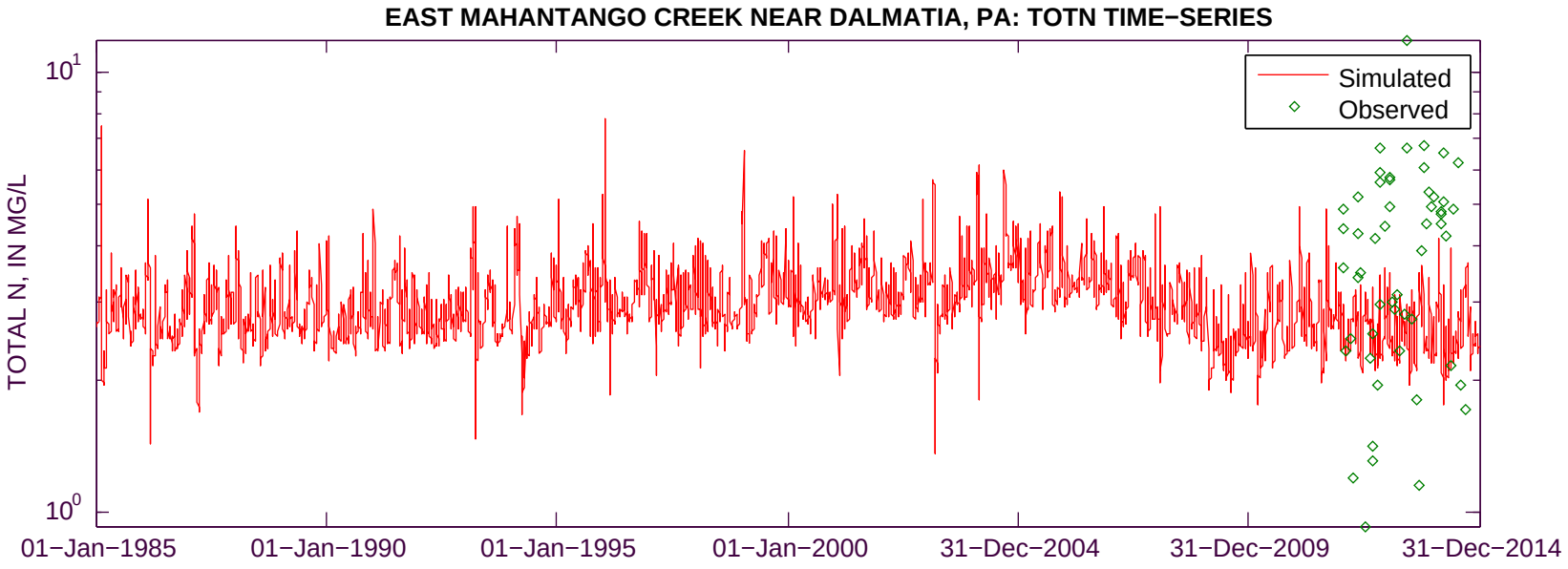
LOAD DATA
LOG10

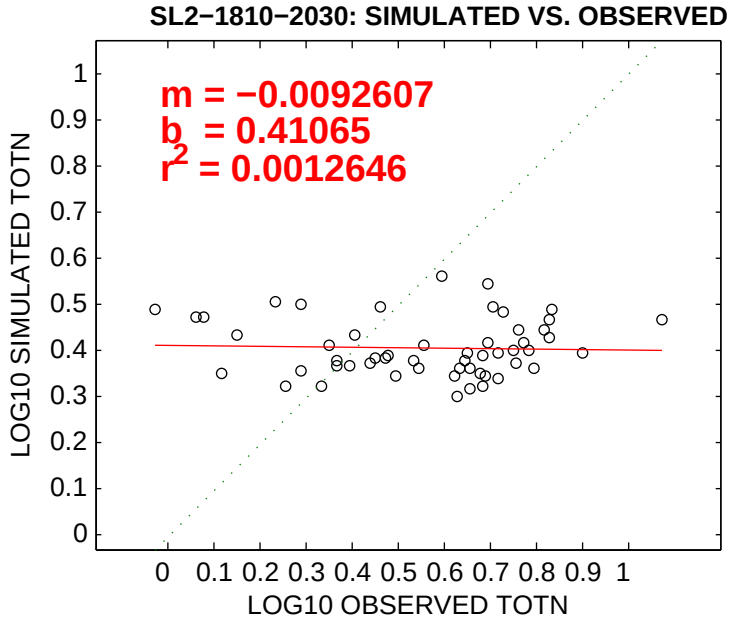


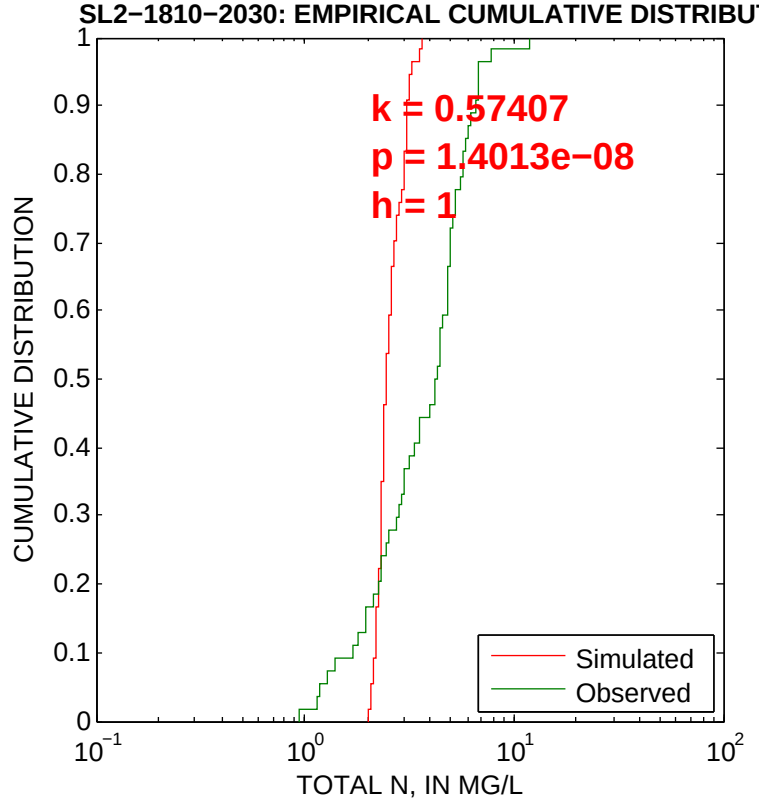












DATA SELECTION

scenario: P620171001WQ | file: TOTN.calib

plot: TOTN - total nitrogen

Dates: 1/1/1985 – 12/31/201

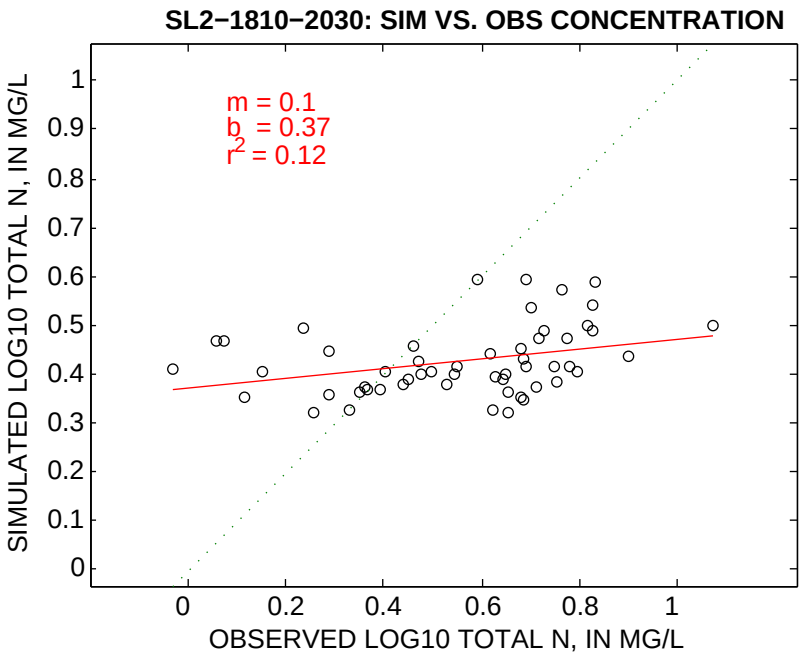
Drive: N/A | Directory: model | Observed: OBS20161101

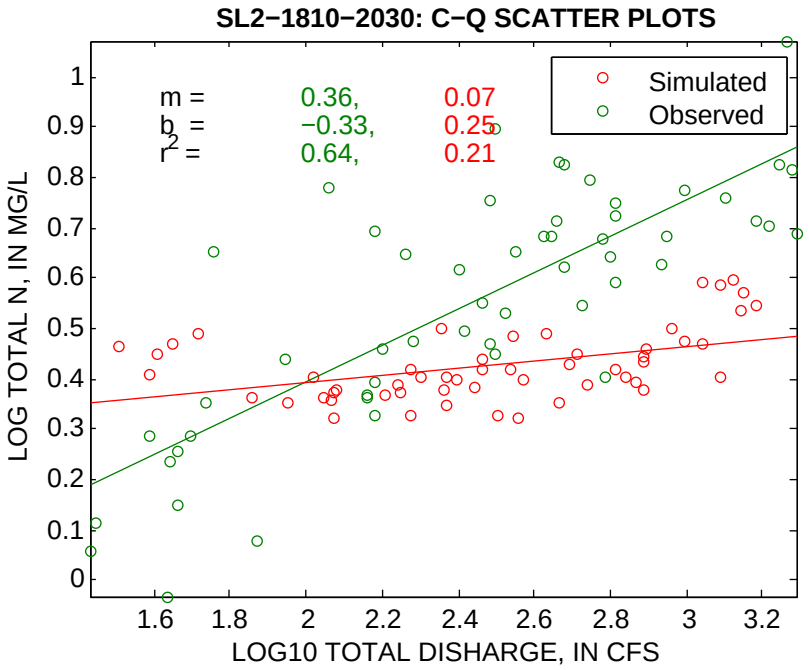
STATISTICS

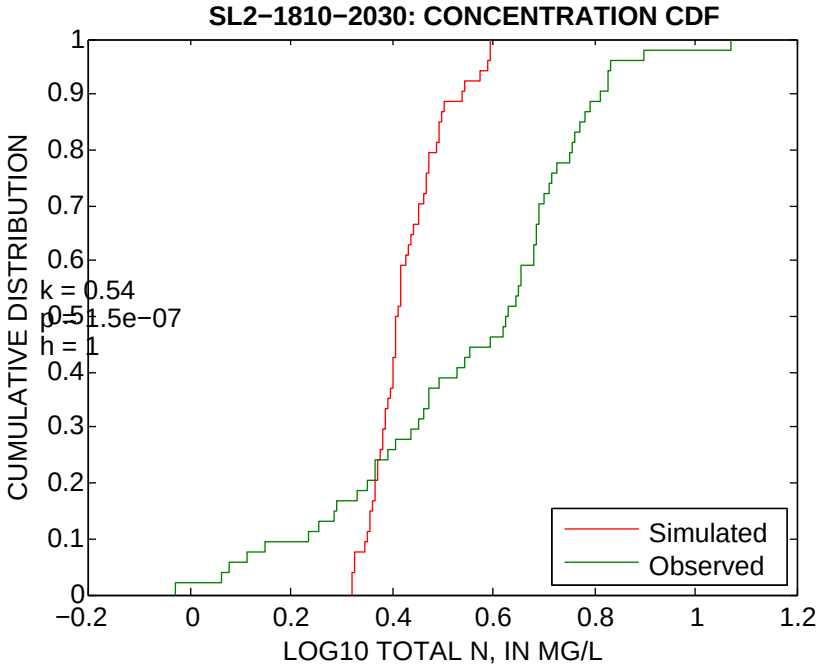
		observe	simulate
n		54	54
min		0.93	1.9906
		-0.0315171	0.298984
mean		4.09406	2.57006
		0.554639	0.405511
media		4.23	2.4638
		0.626329	0.391602
max		11.807	3.6356
		1.07214	0.560576
varian		4.13698	0.145258
		0.0563753	0.00382328
JB		0.004732	0.035375
		0.13378	0.091876
		ra	log
%		-37.2246	-26.8874
err.va		6.54505	0.0839015
rel.std.err		1.58208	1.48827
mod.eff		-0.582084	-0.488267

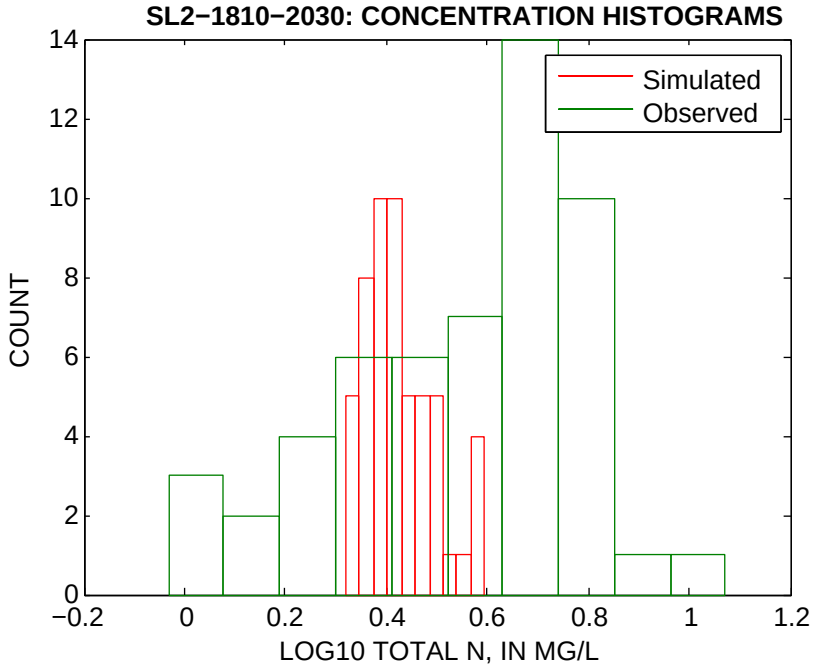
VERSION 2.1

ALL DATA
LOG10

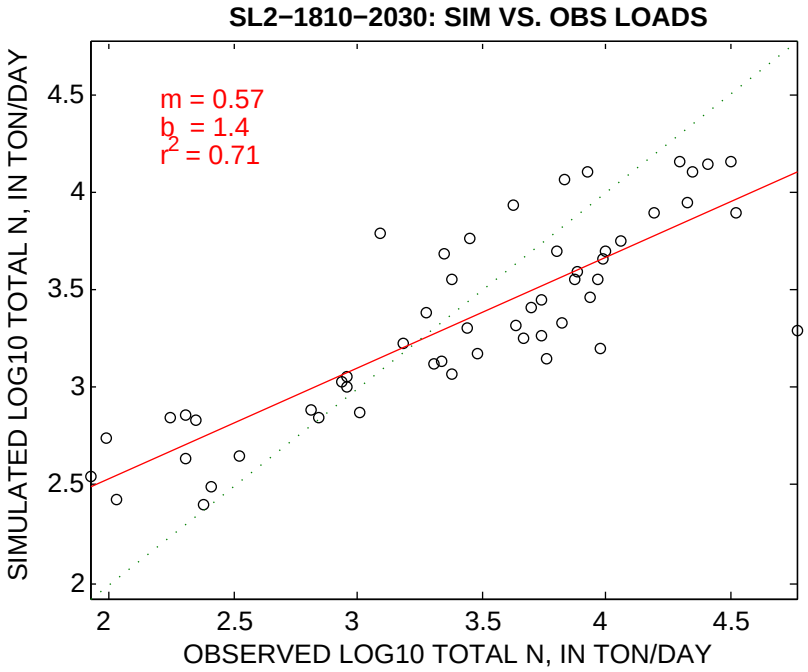


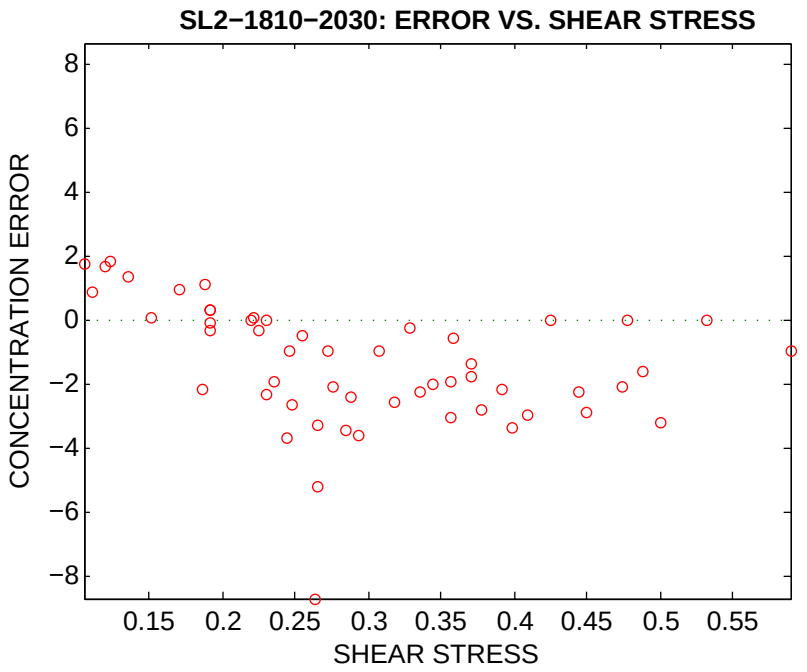


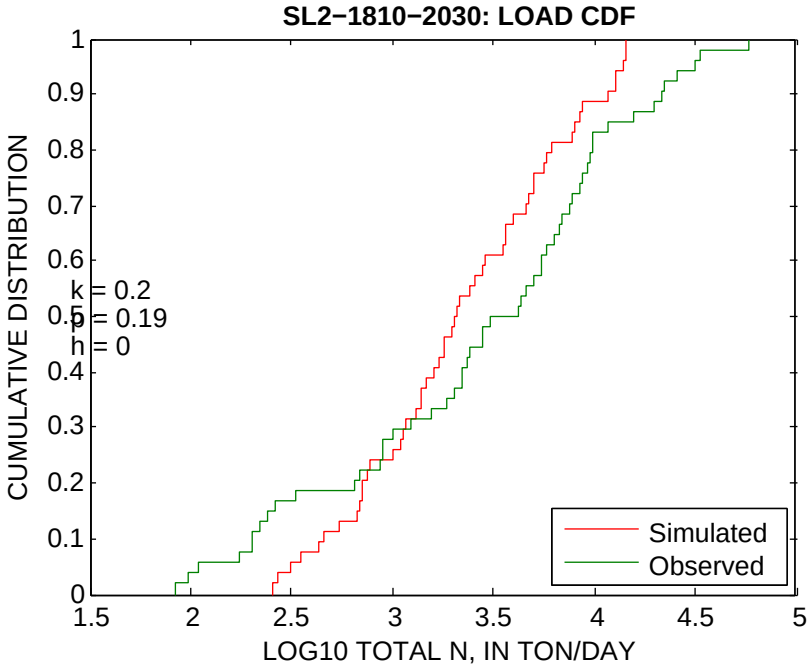


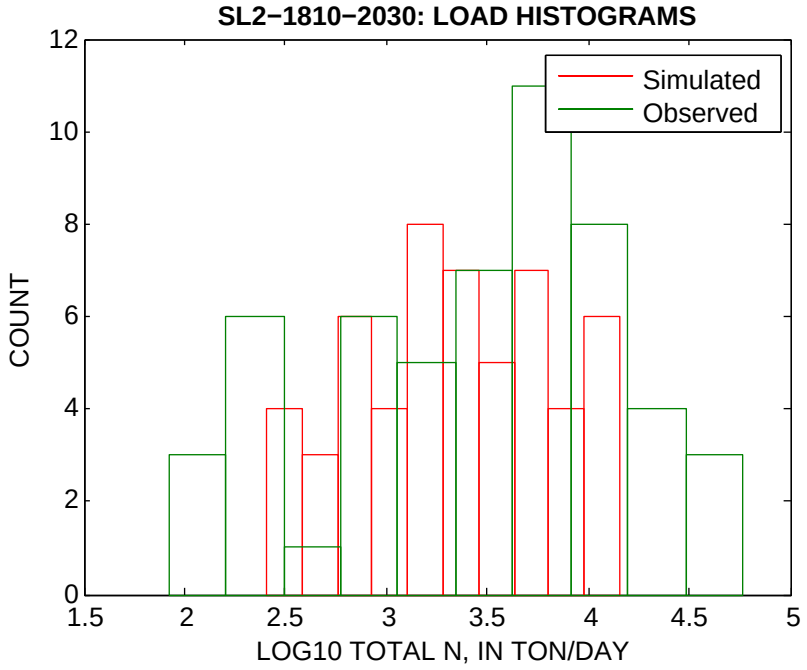


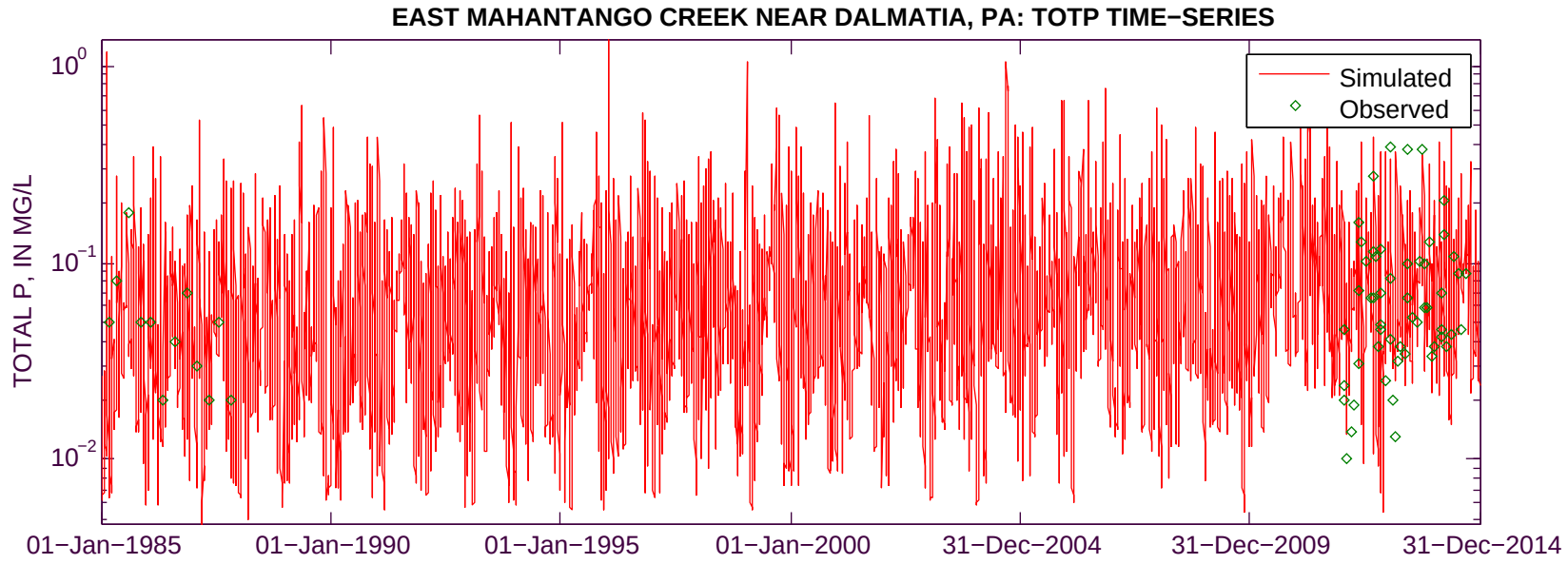
LOAD DATA
LOG10

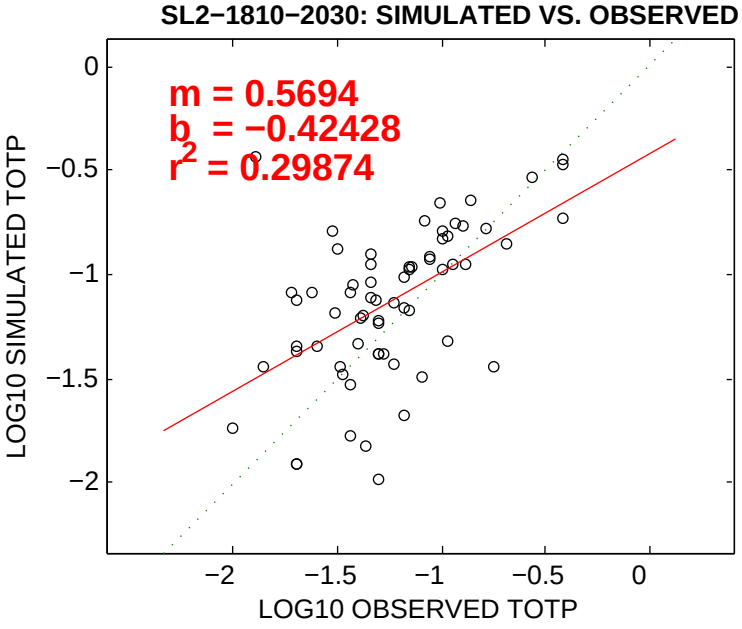


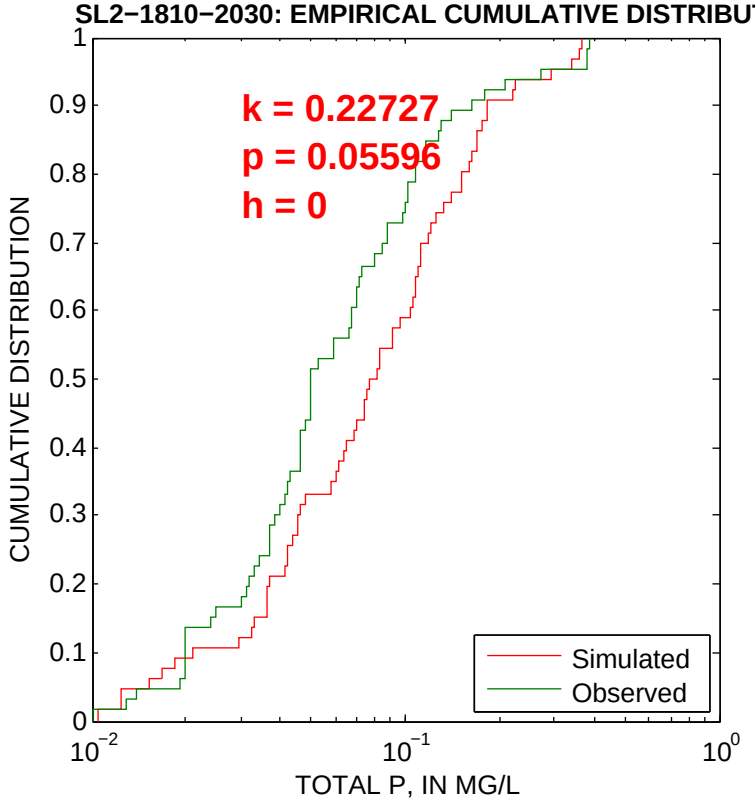












DATA SELECTION

scenario	file
P620171001WQ	TOTP.calib

plot: TOTP - total phosphorus

Dates: 1/1/1985 – 12/31/201

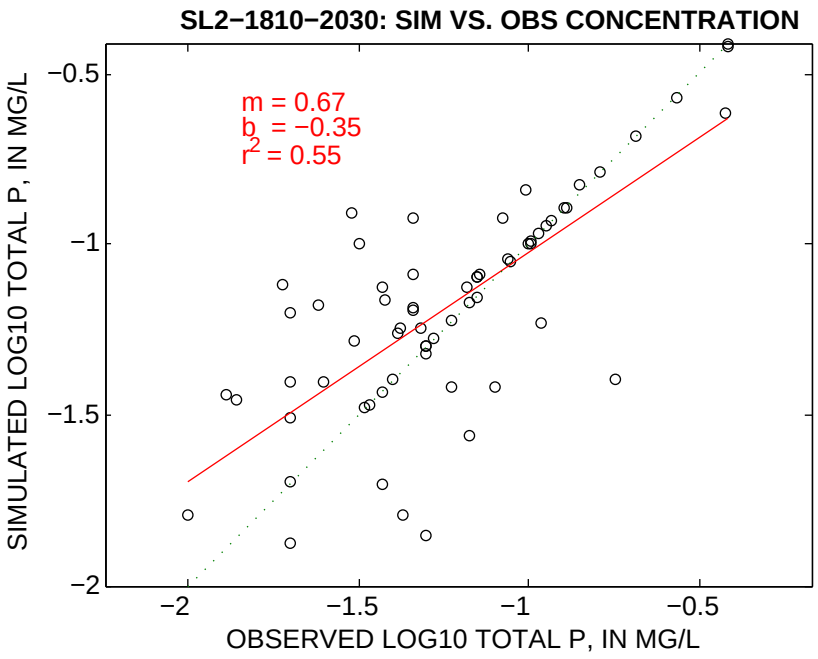
Drive	Directory	Observed
N/A	model	OBS20161101

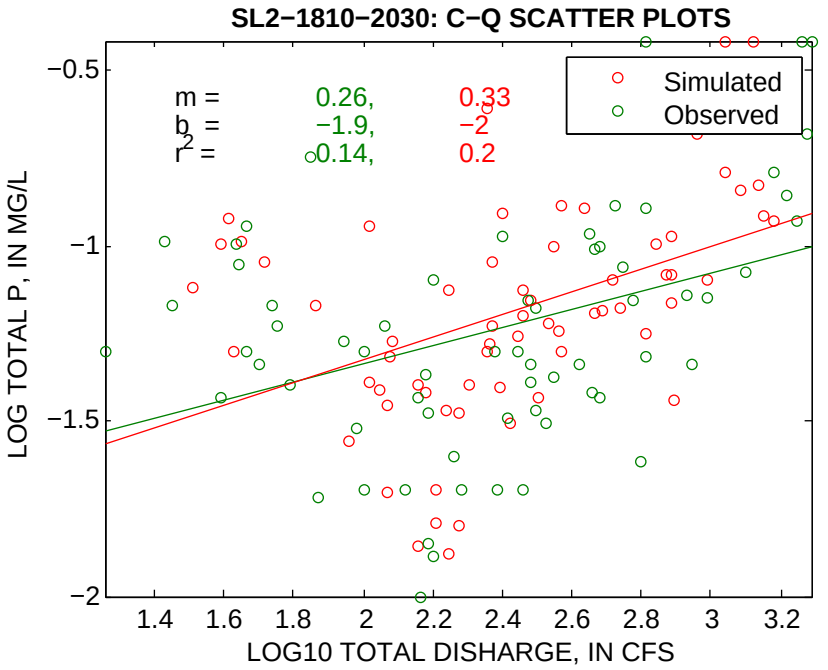
STATISTICS

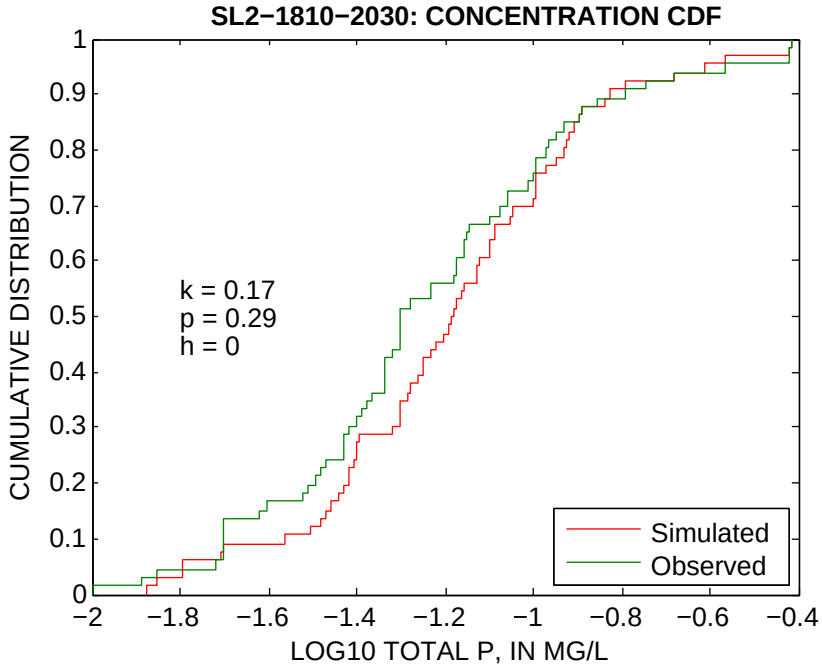
	n	66	66
		observe	simulate
min		0.01	0.010522
		-2	-1.9779
mean		0.0812273	0.1012
		-1.23814	-1.12928
media		0.05	0.0791285
		-1.30103	-1.10181
max		0.384	0.36829
		-0.415669	-0.43381
varian		0.00668695	0.00656977
		0.121385	0.131737
JB		0.001	0.001
		0.5	0.374682
		ra	log
%		24.5881	-8.79224
err.va		0.00490091	0.126921
rel.std.err		0.732907	1.04561
mod.eff		0.267093	-0.0456128

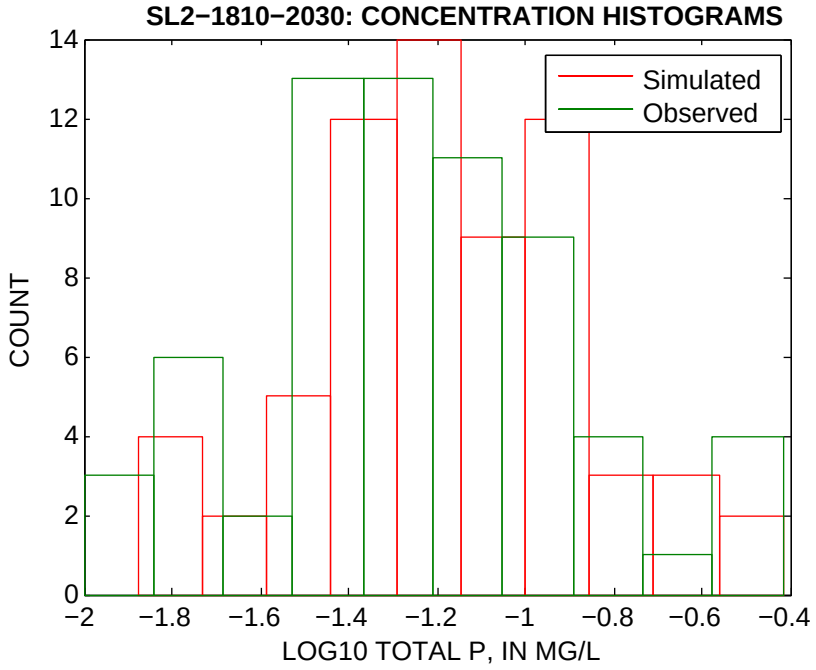
VERSION 2.1

ALL DATA
LOG10

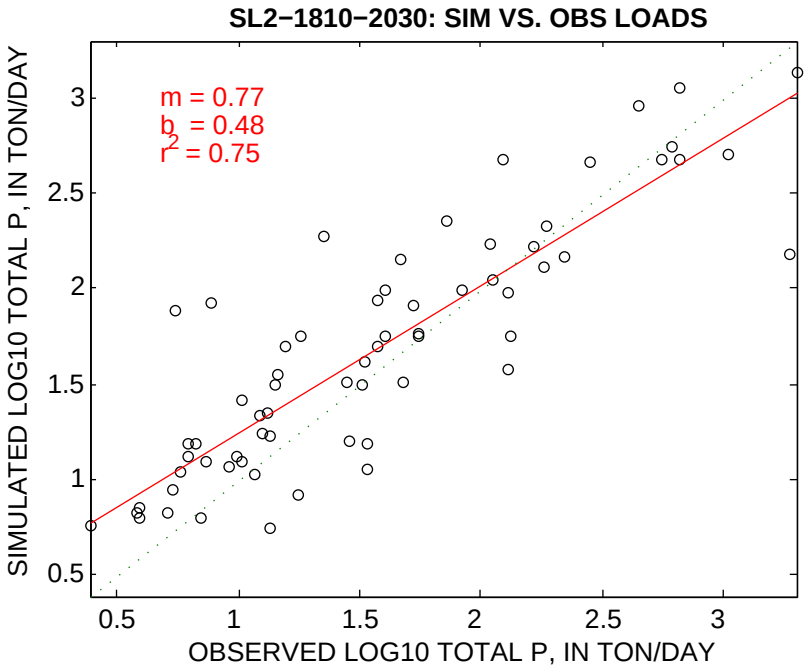


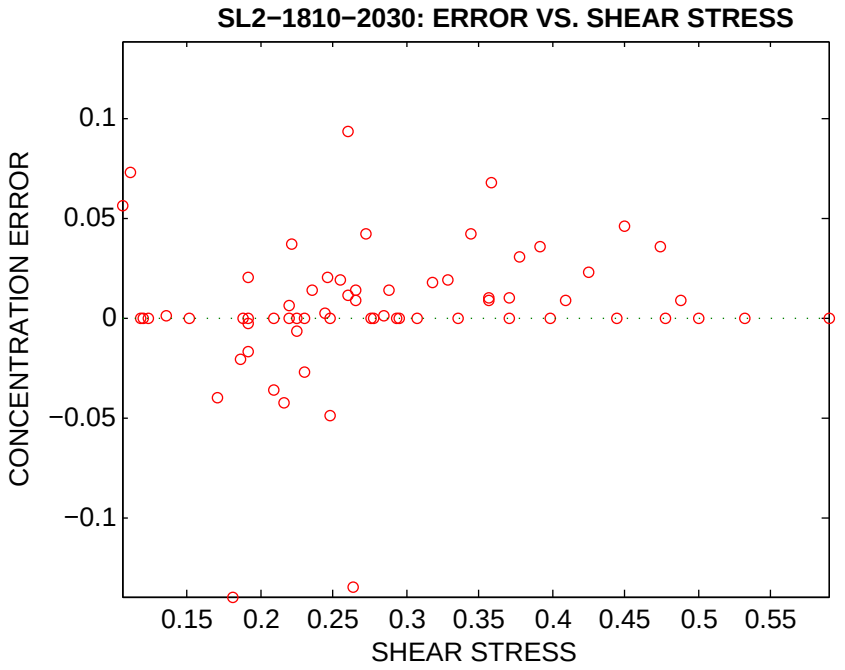


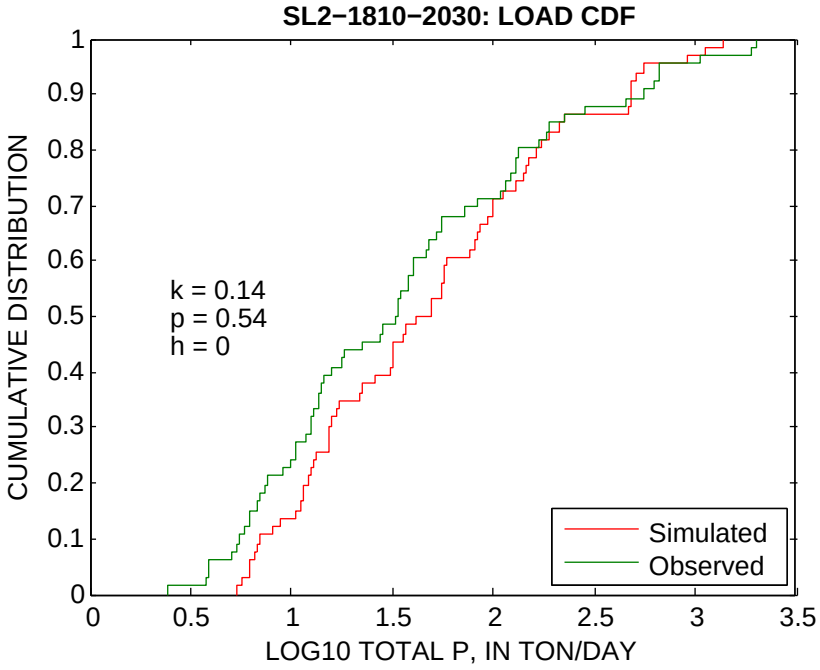


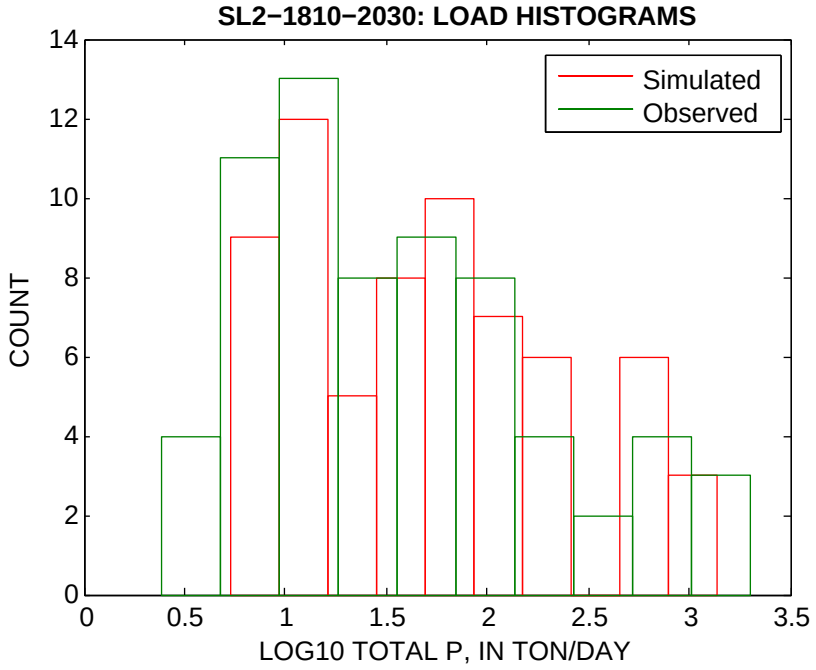


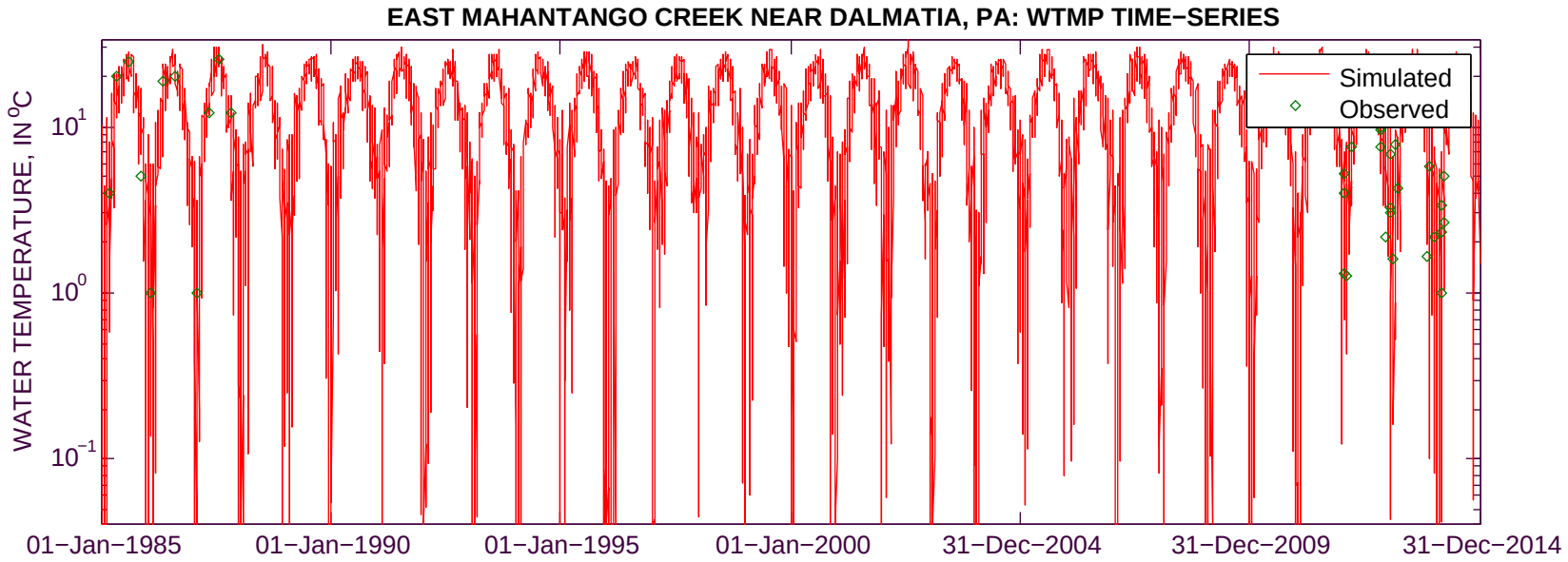
LOAD DATA
LOG10

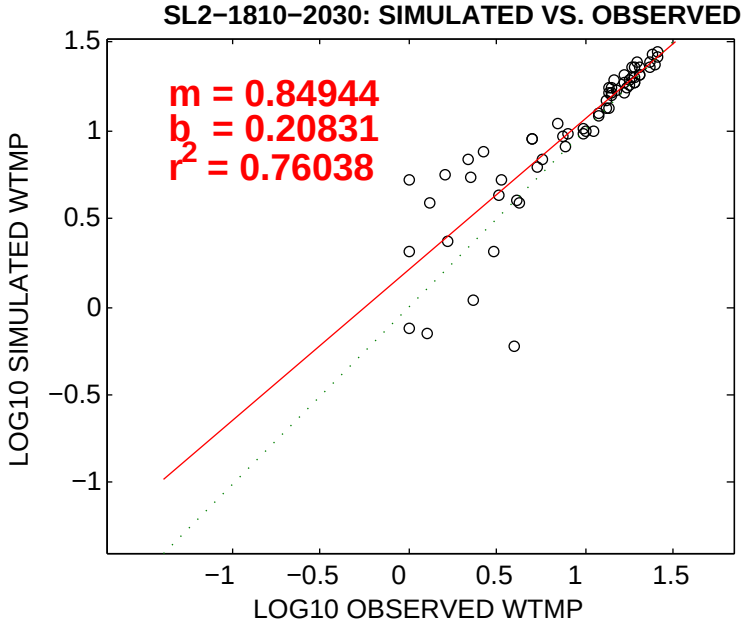


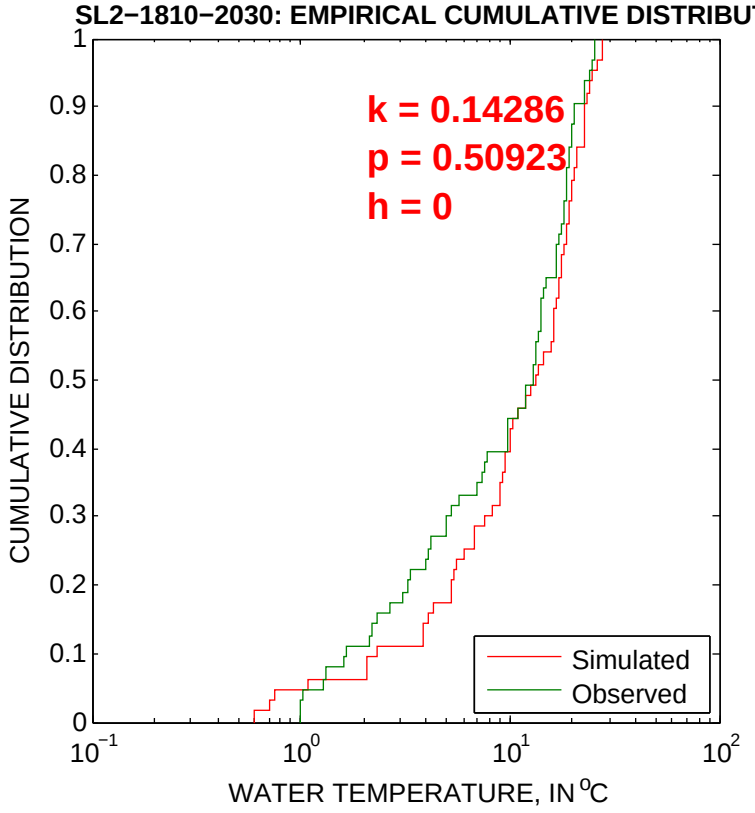












DATA SELECTION

scenario	file
P620171001WQ	WTMP.calib

plot: WTMP - water tempera...

Dates 1/1/1985 12/31/201

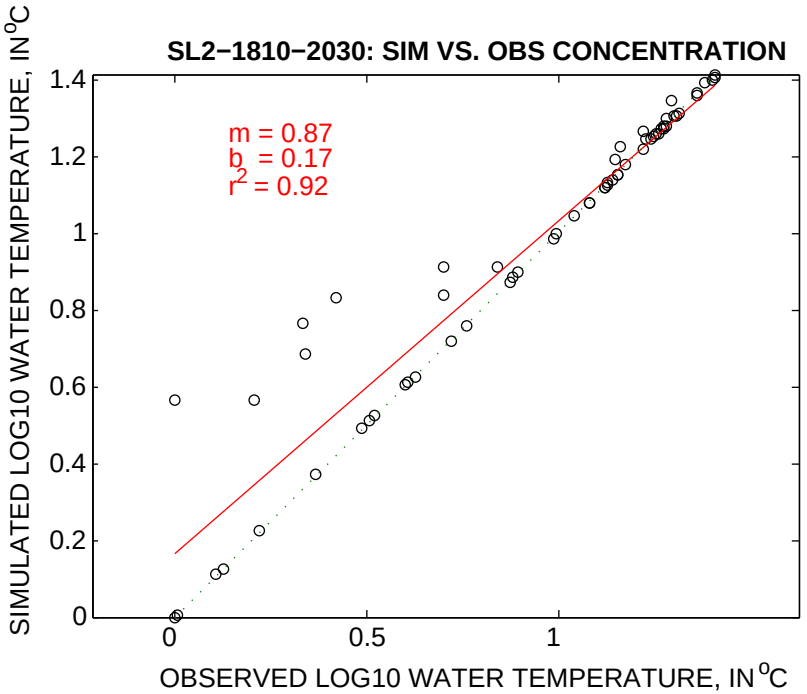
Drive	Directory	Observed
N/A	model	OBS20161101

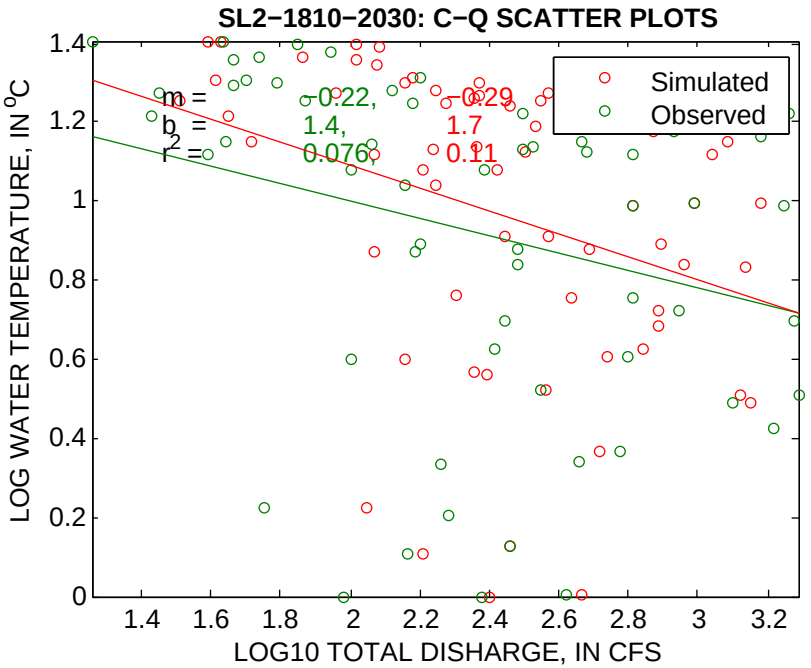
STATISTICS

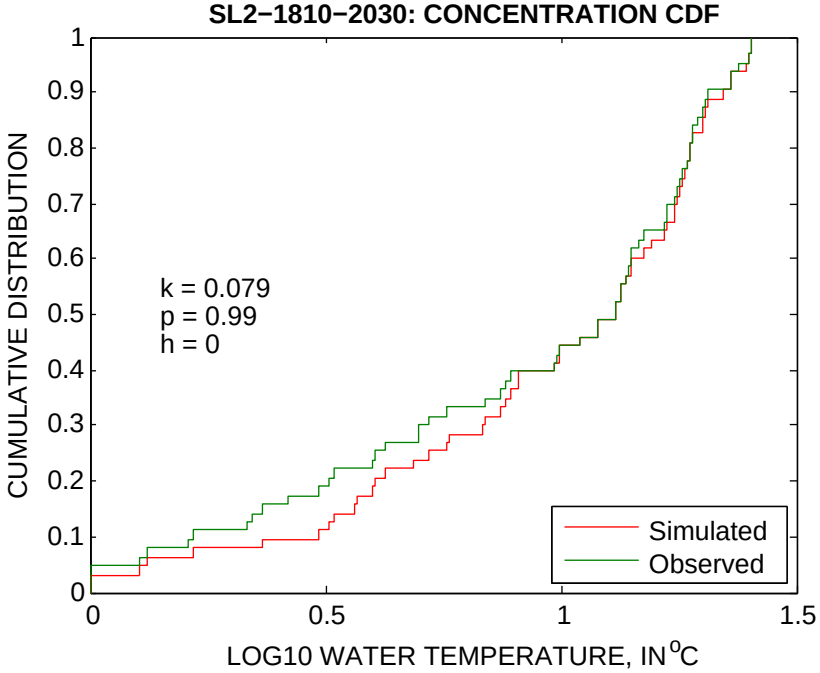
		observe	simulate
n		63	63
min		1	0.5912
		0	-0.228266
mean		11.6808	13.1313
		0.920789	0.990465
media		13.1	13.182
		1.11727	1.11998
max		25.54	27.745
		1.40722	1.44318
varian		56.936	59.7209
		0.174751	0.165825
JB		0.071716	0.090203
		0.023733	0.002272
		ra	log
%		12.4175	7.56689
err.va		5.61718	0.0486293
rel.std.err		0.0986578	0.278278
mod.eff		0.901342	0.721722

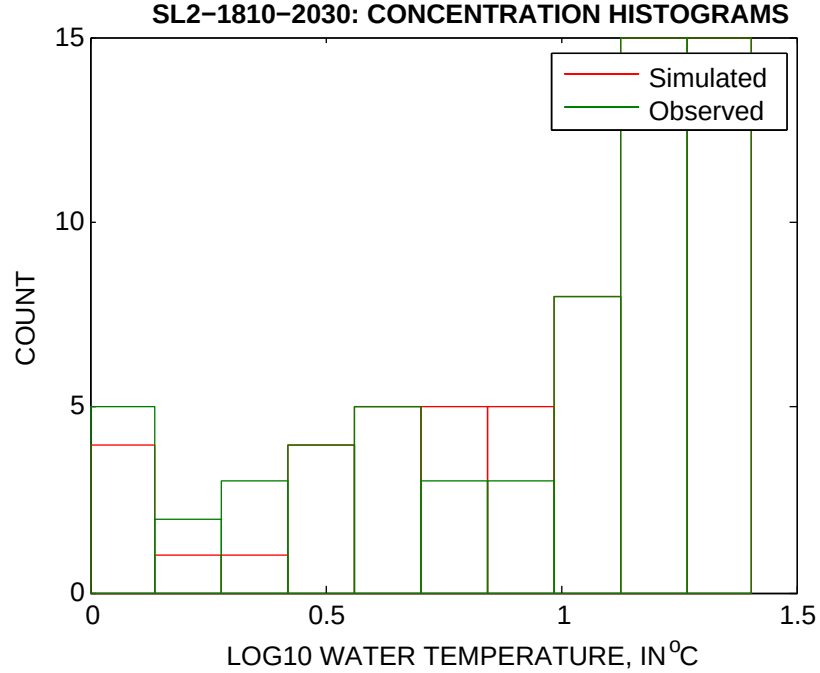
VERSION 2.1

ALL DATA
LOG10

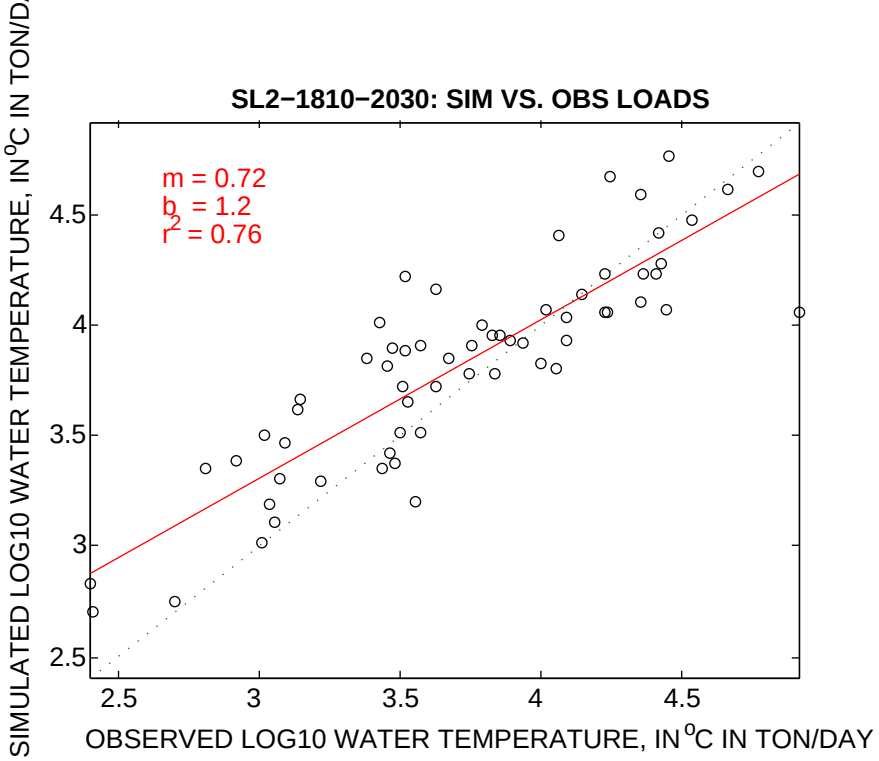


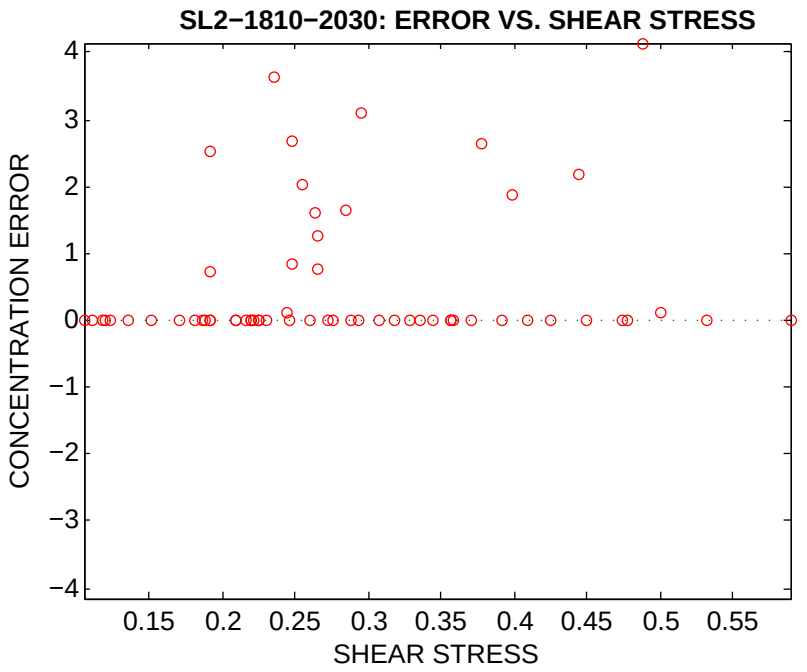


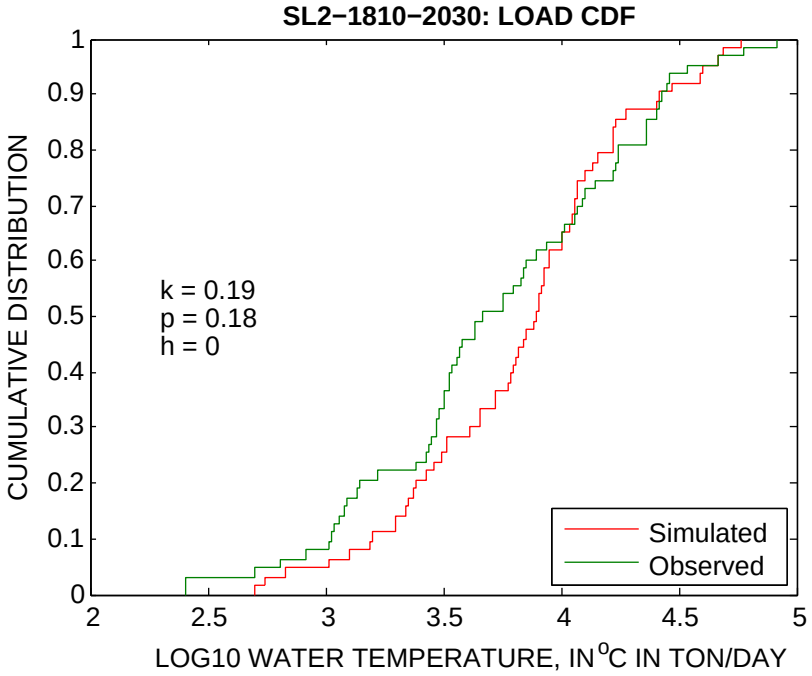


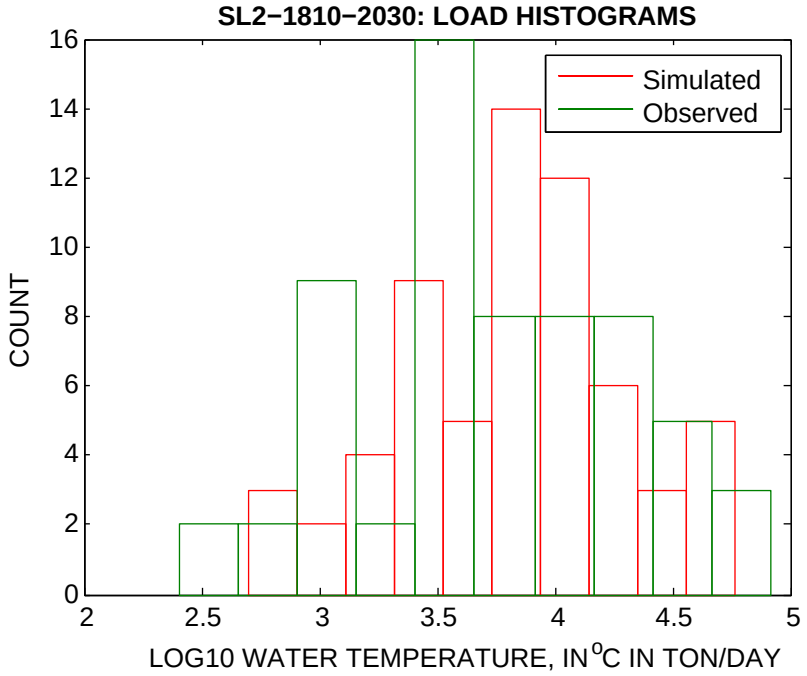


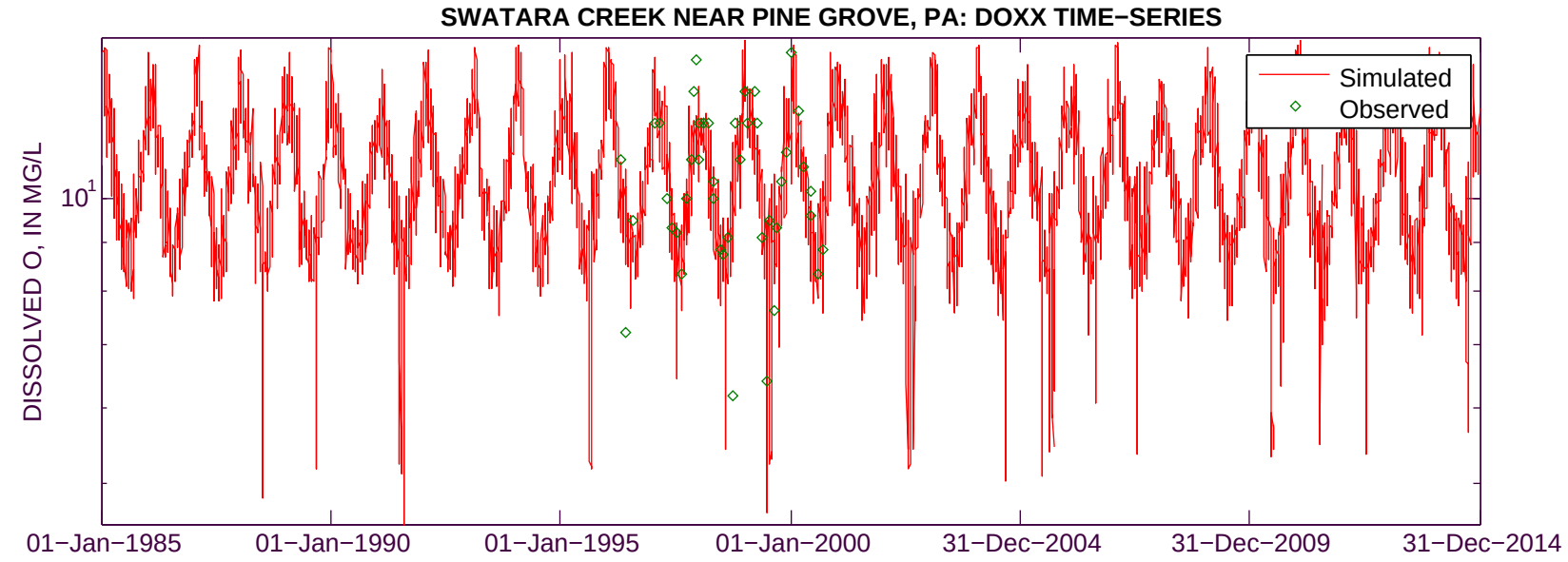
LOAD DATA
LOG10











DATA SELECTION

scenario	file
P620171001WQ	DOXX.calib

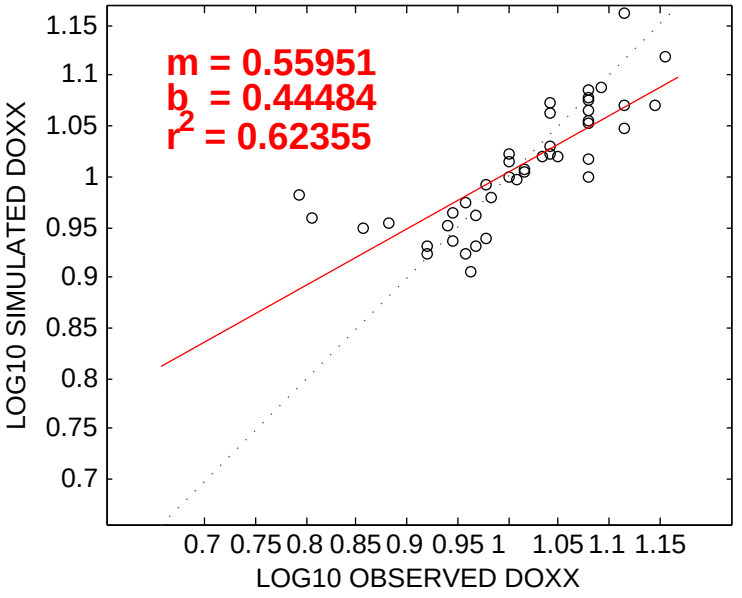
plot: DOXX - dissolved oxygen

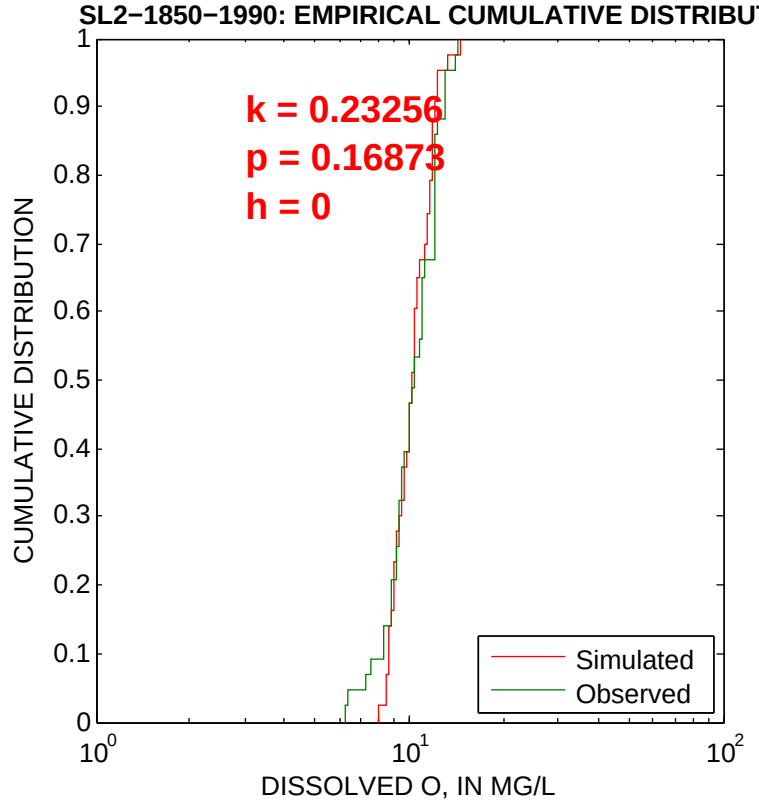
Dates: 1/1/1985 – 12/31/201

Drive	Directory	Observed
N/A	model	OBS20161101

STATISTICS

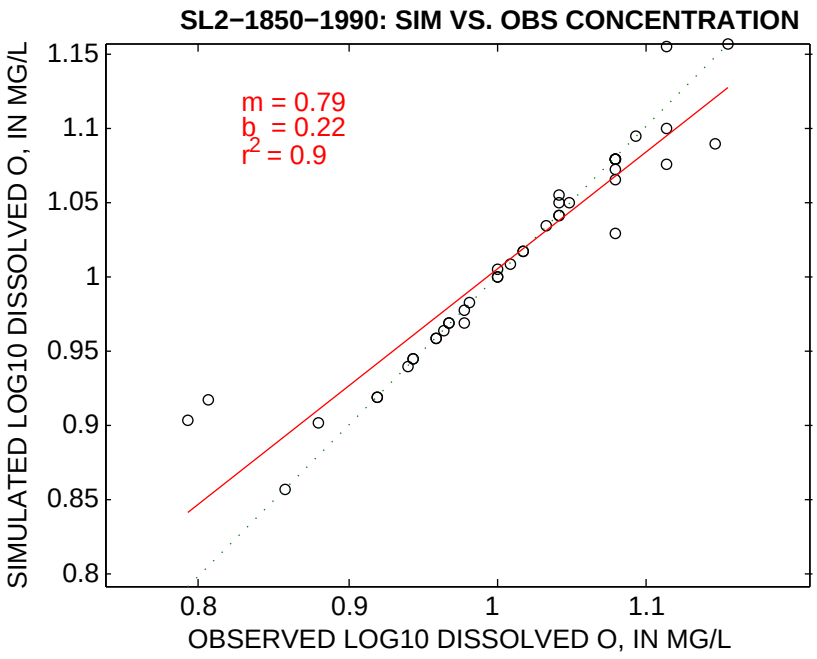
		observe	simulate
n		43	43
min		6.2	8.0292
		0.792392	0.904672
mean		10.4093	10.3244
		1.00979	1.00983
media		10.4	10.191
		1.01703	1.00822
max		14.3	14.494
		1.15534	1.16119
varian		3.66039	2.08488
		0.00705592	0.00354245
JB		0.5	0.150412
		0.125442	0.469442
		ra	log
%		-0.815929	0.00432962
err.va		1.21692	0.00270263
rel.std.err		0.332456	0.38303
mod.eff		0.667544	0.61697

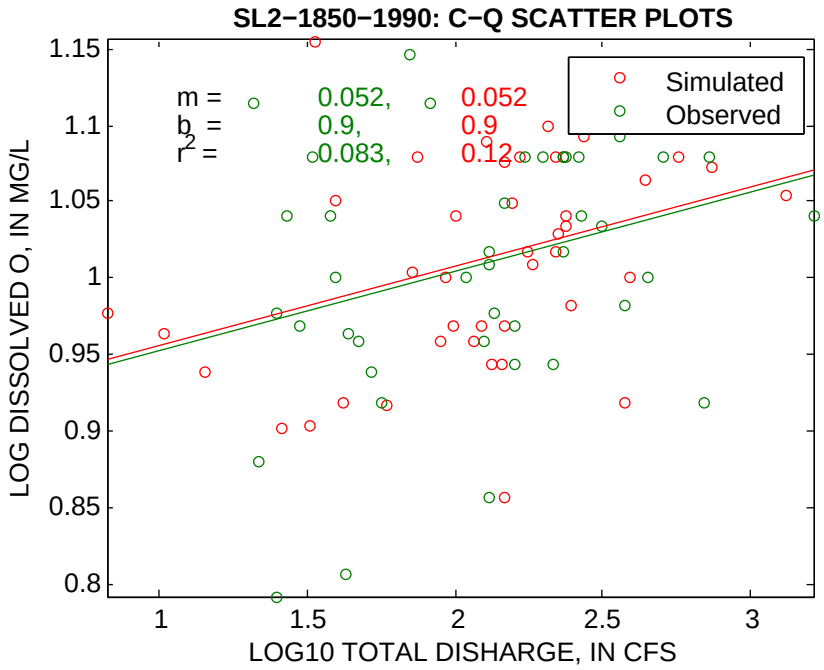


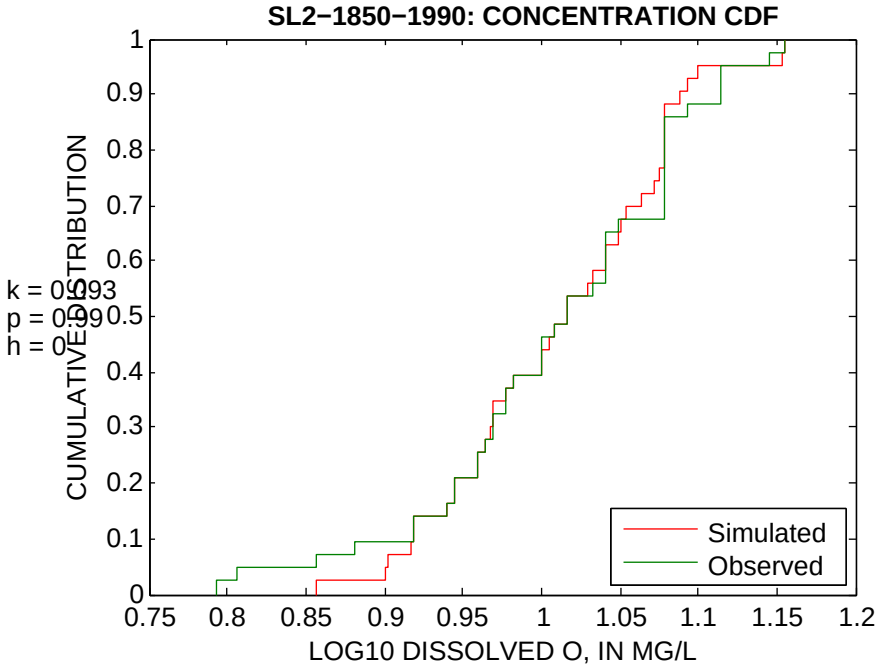


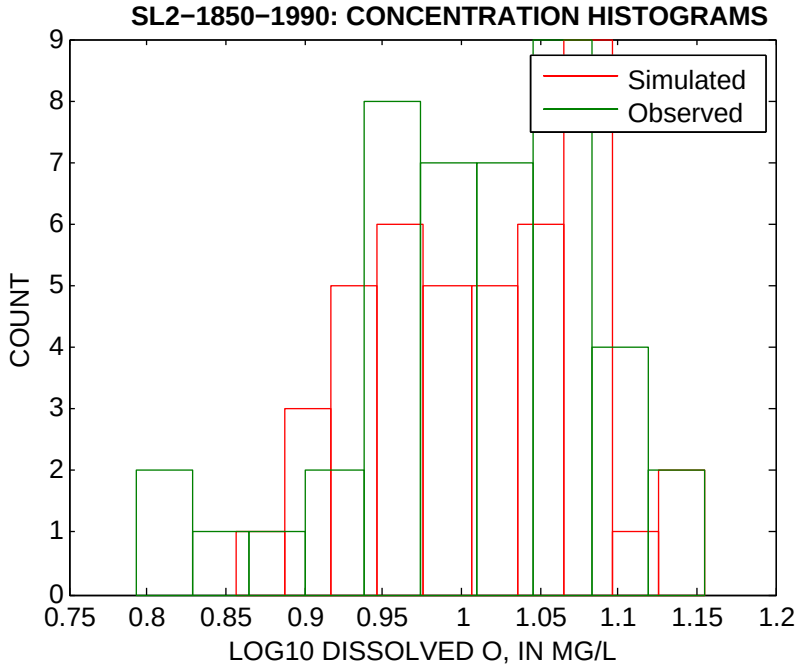
VERSION

ALL DATA
LOG10

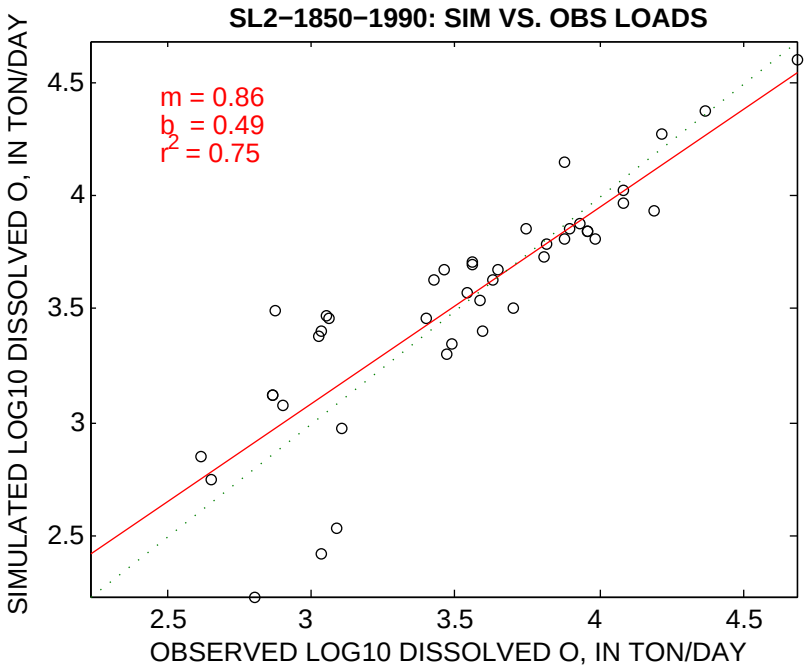


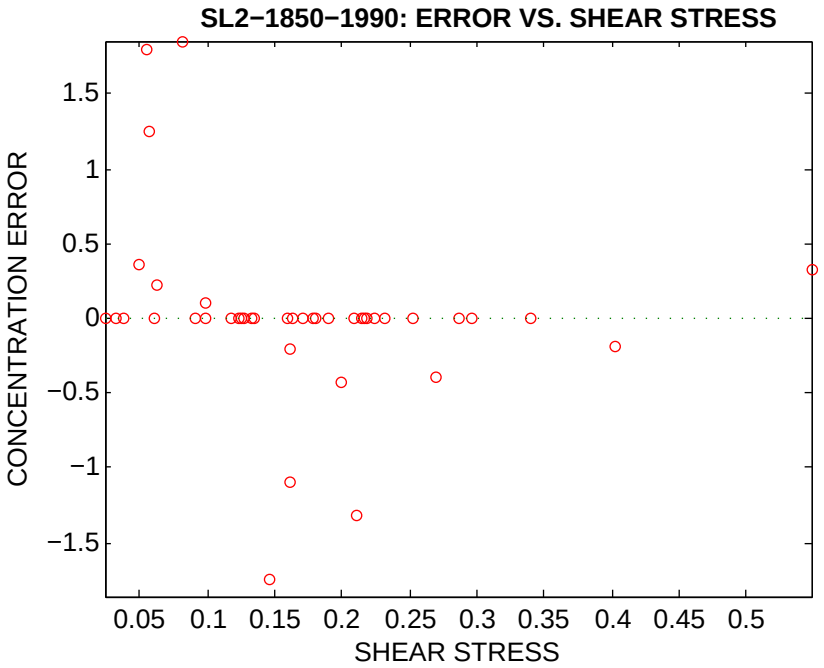


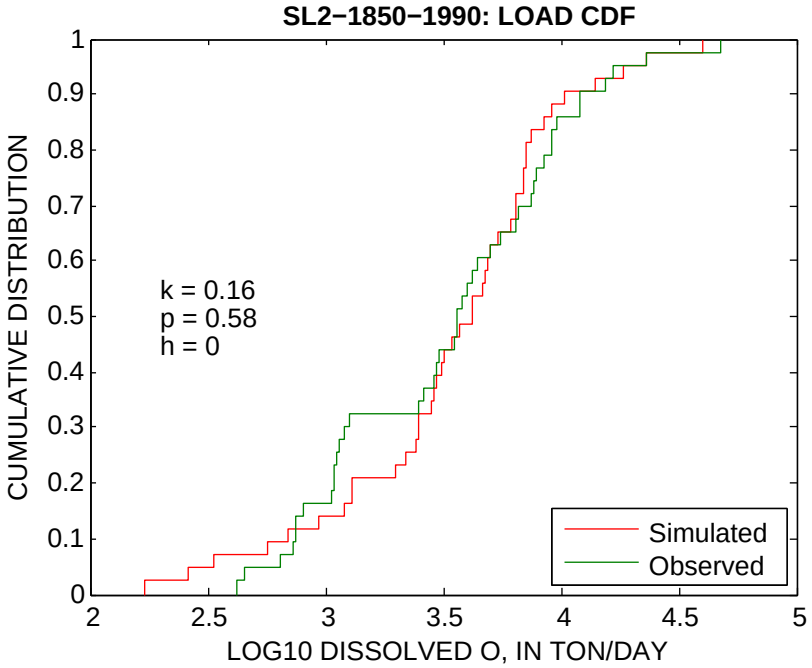


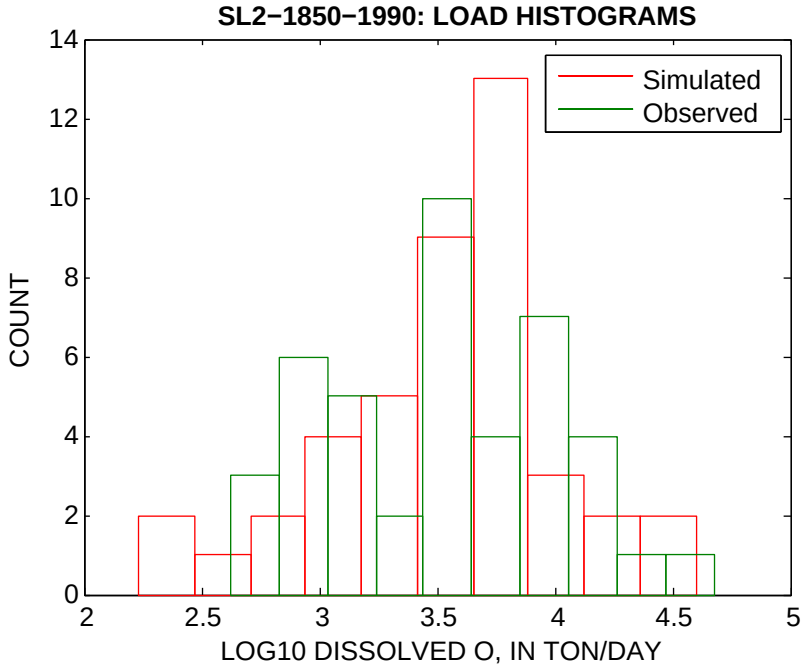


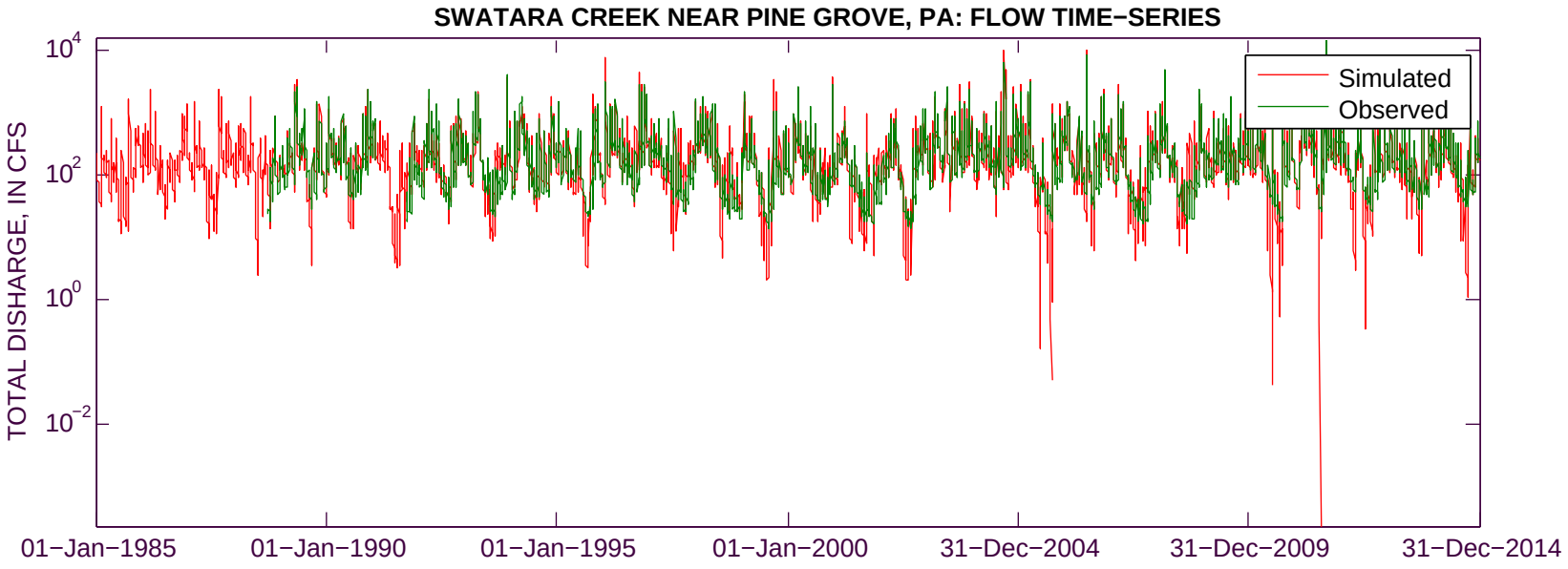
LOAD DATA
LOG10

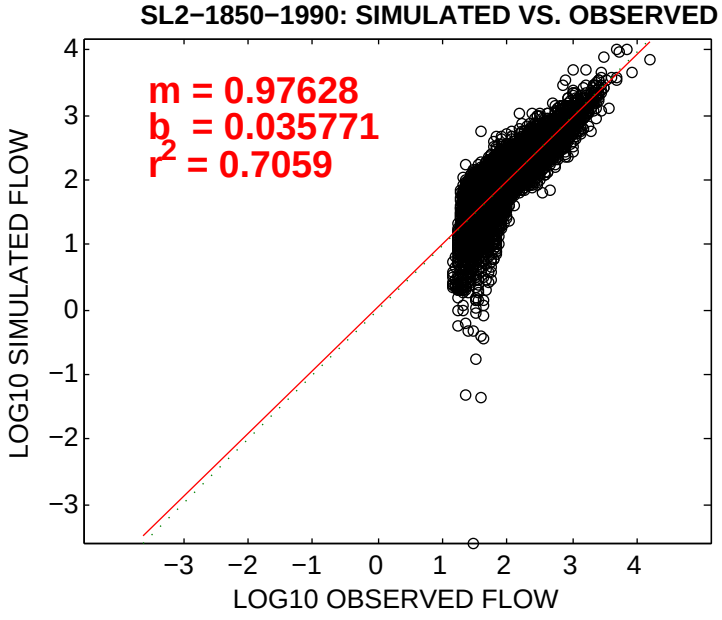


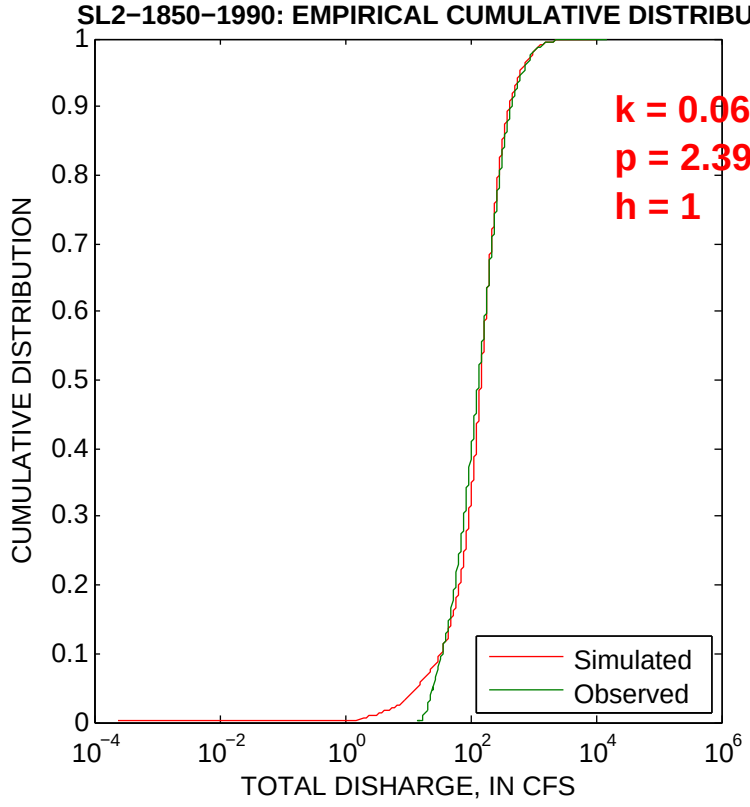












DATA SELECTION

scenario: P620171001WQ | file: FLOW.calib

plot: FLOW - total discharge

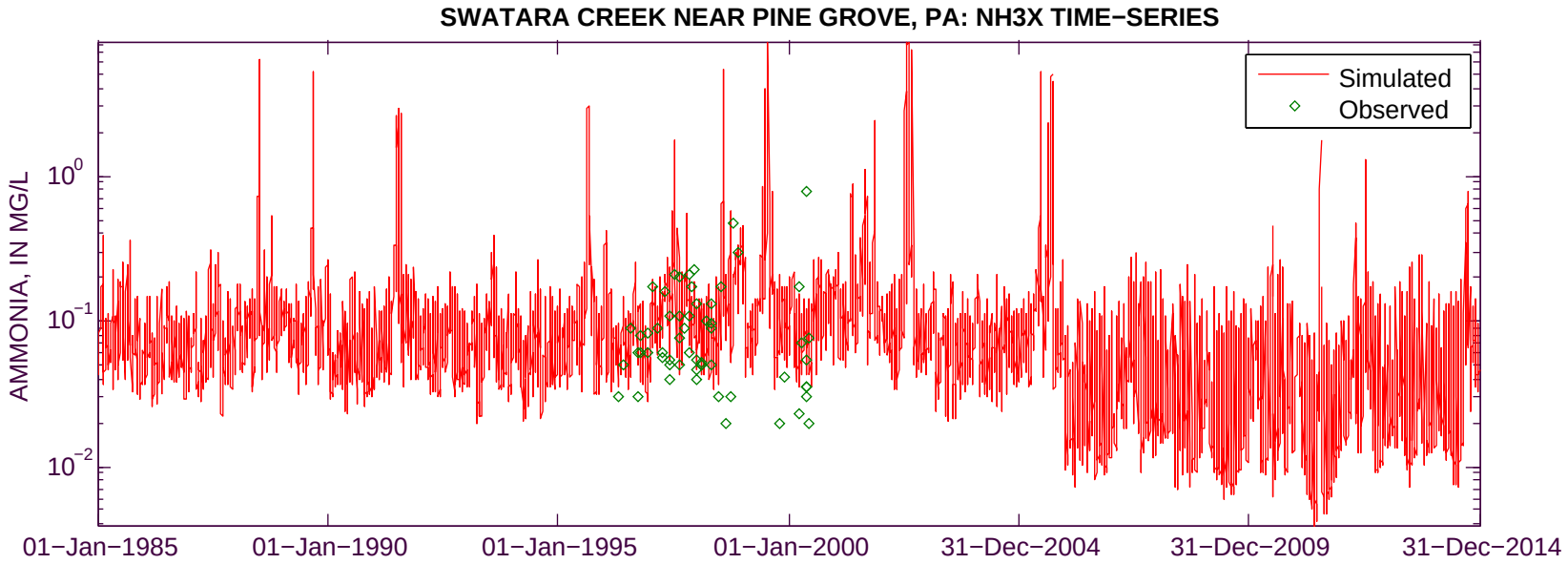
Dates: 1/1/1985 – 12/31/201

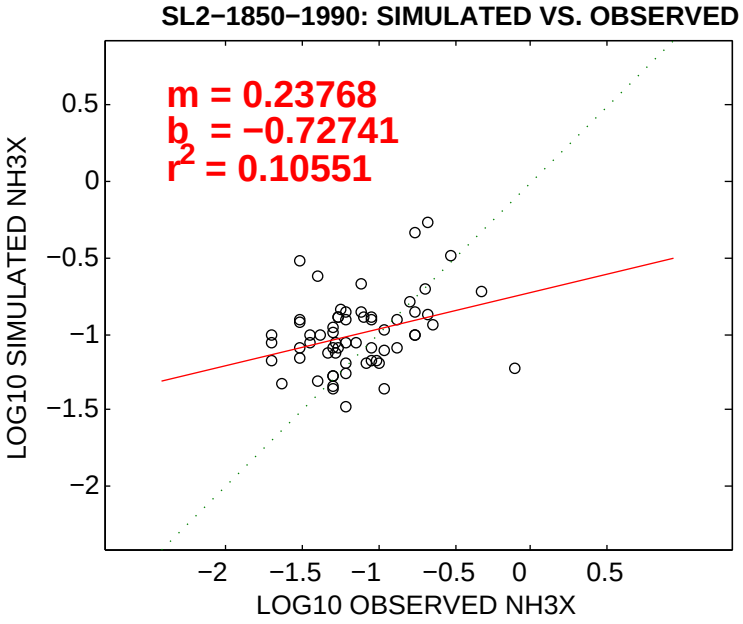
Drive: N/A | Directory: model | Observed: OBS20161101

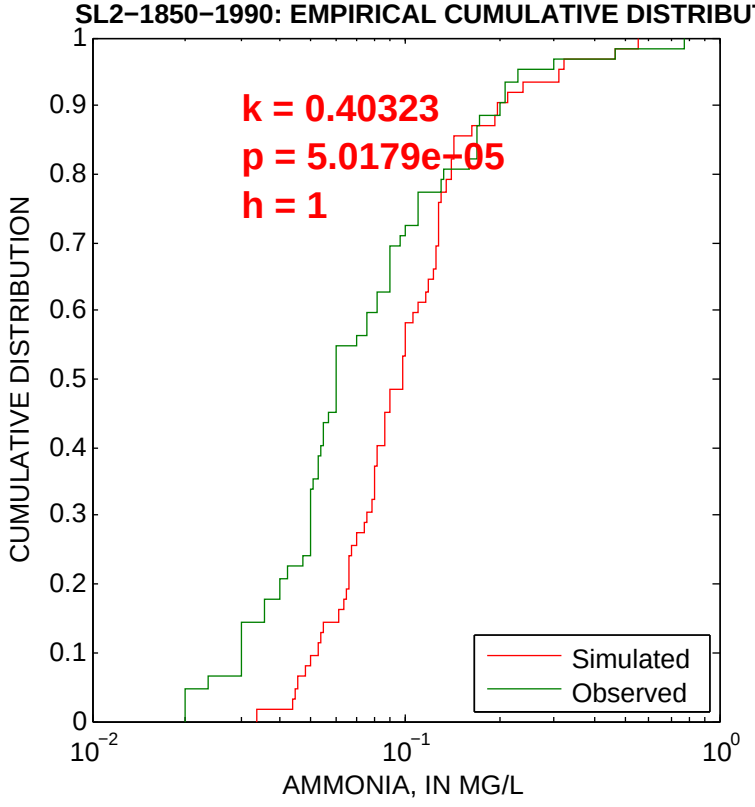
STATISTICS

	n	observe	simulate
		9346	9336
min		14	0
		1.14613	-3.61529
mean		224.555	224.547
		2.13482	2.11996
media		138	149.375
		2.13988	2.17448
max		15600	10312
		4.19312	4.01334
varian		124501	127790
		0.177872	0.240169
JB		0.001	0.001
		0.001	0.001
		ra	log
%		0.0037692	-0.696063
err.va		38742.4	0.0709555
rel.std.err		0.311182	0.398914
mod.eff		0.688818	0.601086

VERSION 2.1







DATA SELECTION

scenario	file
P620171001WQ	NH3X.calib

plot: NH3X - ammonia

Dates	1/1/1985	12/31/201

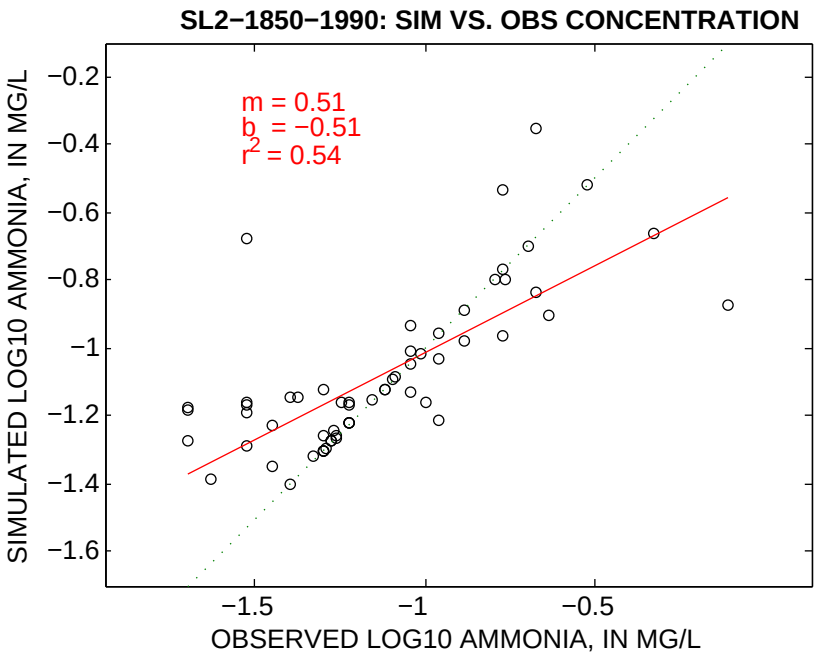
Drive	Directory	Observed
N/A	model	OBS20161101

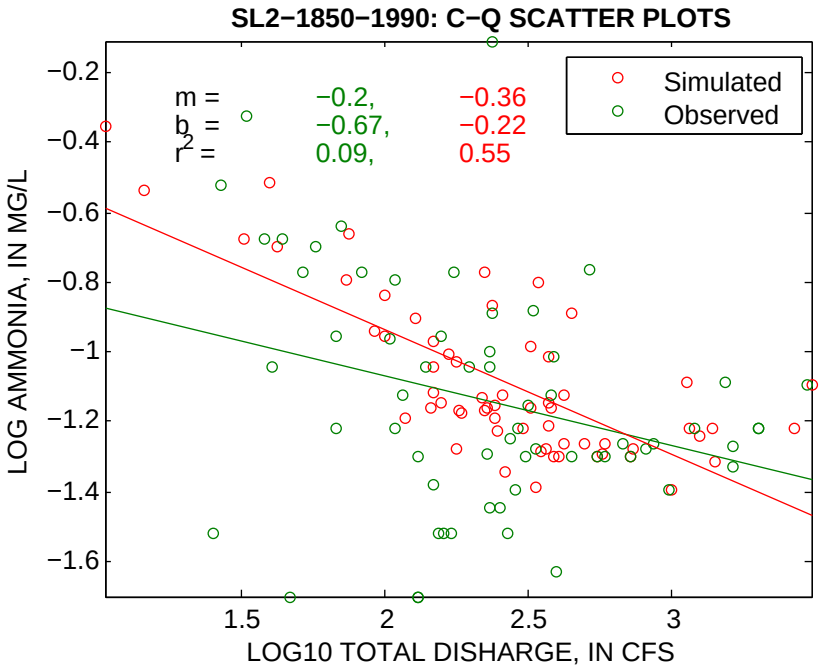
STATISTICS

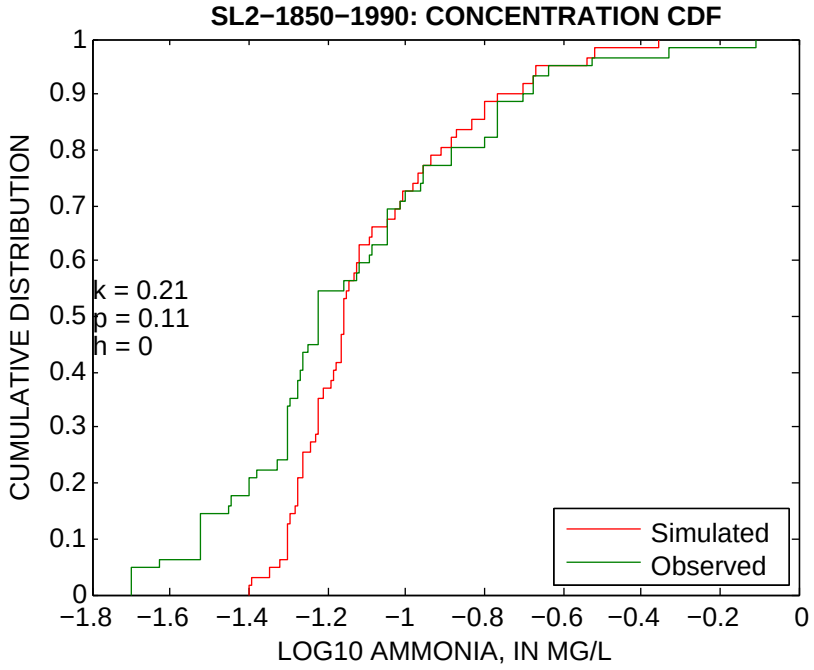
n	62	62
	observe	simulate
min	0.02	0.03368
	-1.69897	-1.47263
mean	0.101305	0.119775
	-1.14045	-0.998467
media	0.06	0.098001
	-1.22185	-1.00877
max	0.777957	0.54916
	-0.109044	-0.260301
varian	0.0135605	0.00839258
	0.108076	0.0578661
JB	0.001	0.001
	0.039320	0.016378
	ra	log
%	18.2321	-12.4497
err.va	0.0174448	0.135057
rel.std.err	1.28645	1.24965
mod.eff	-0.286446	-0.249651

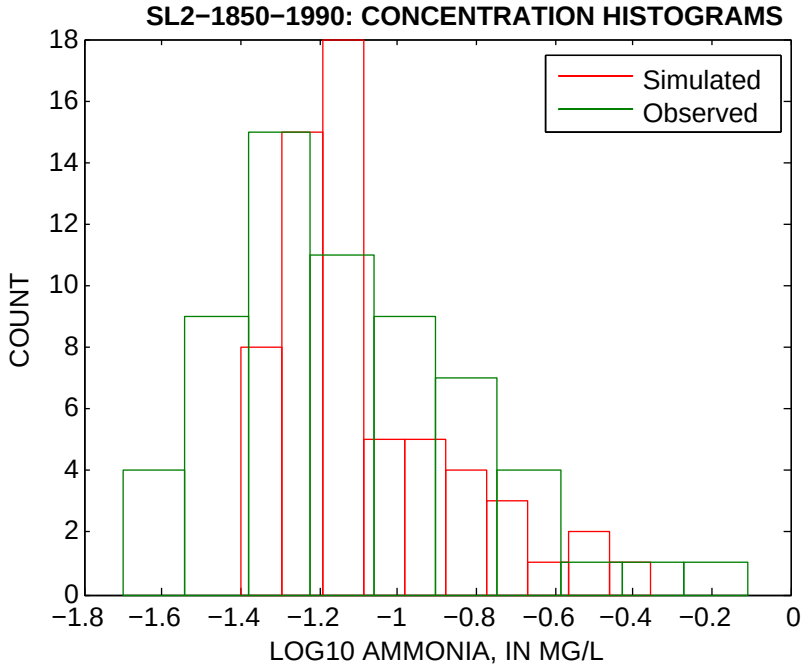
VERSION

ALL DATA
LOG10

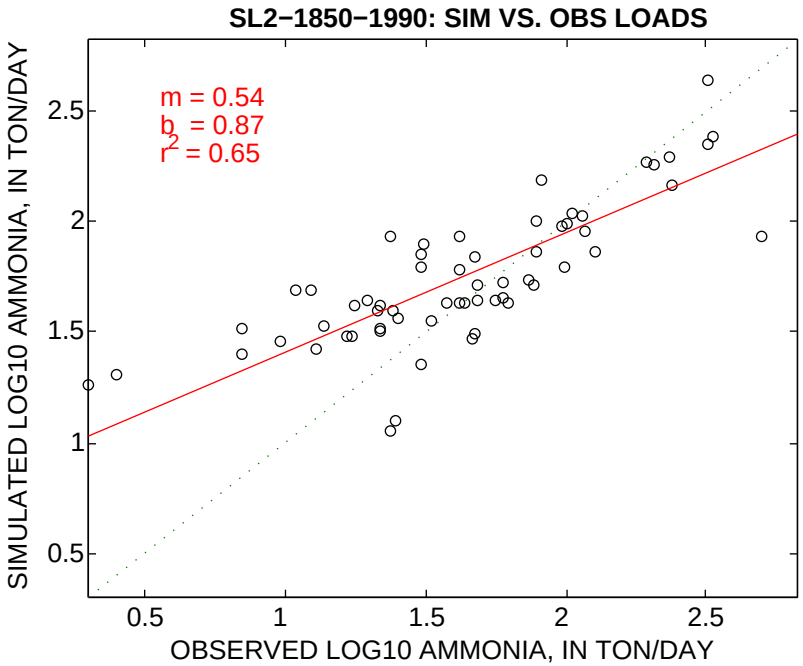


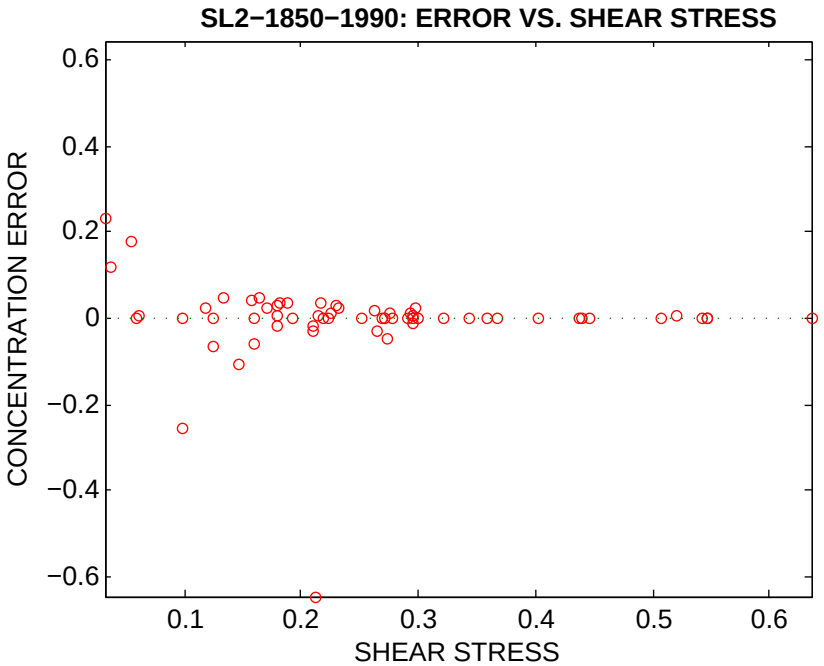


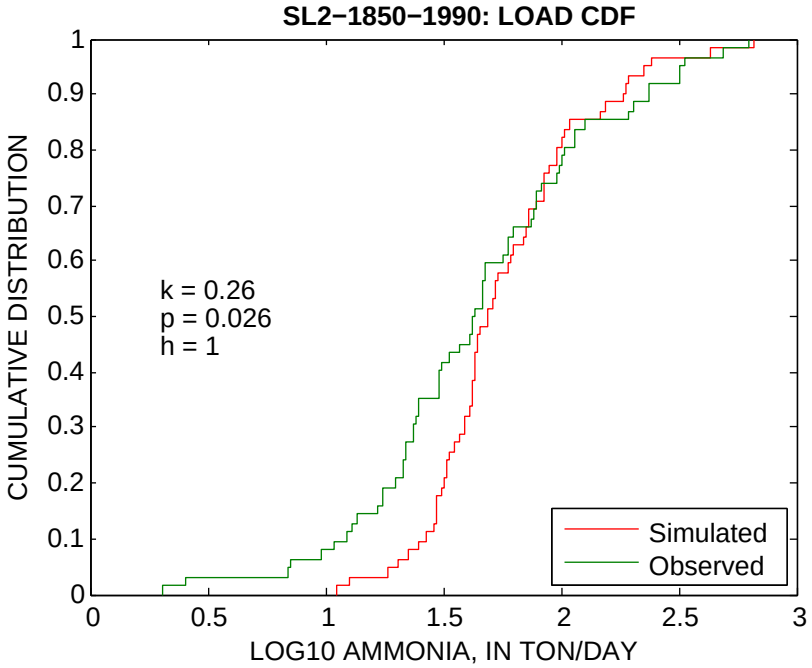


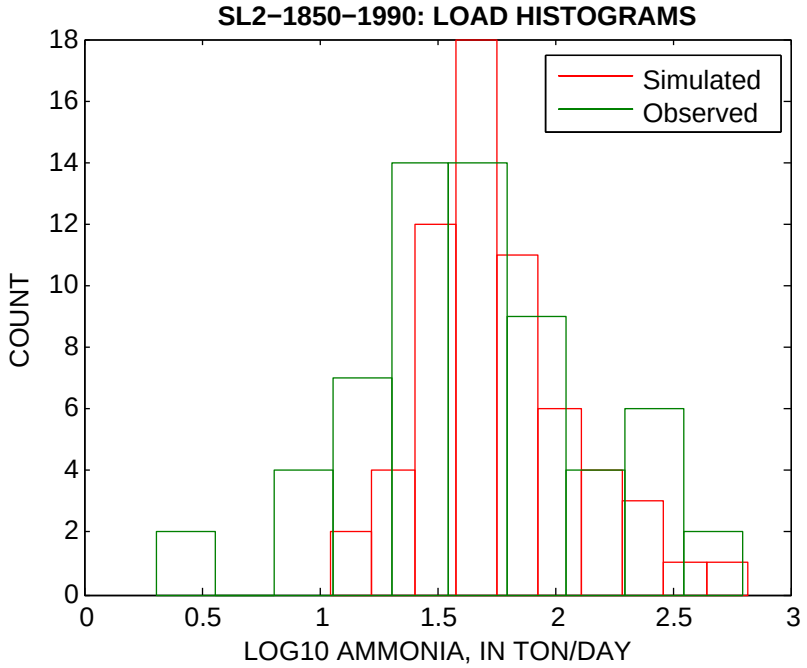


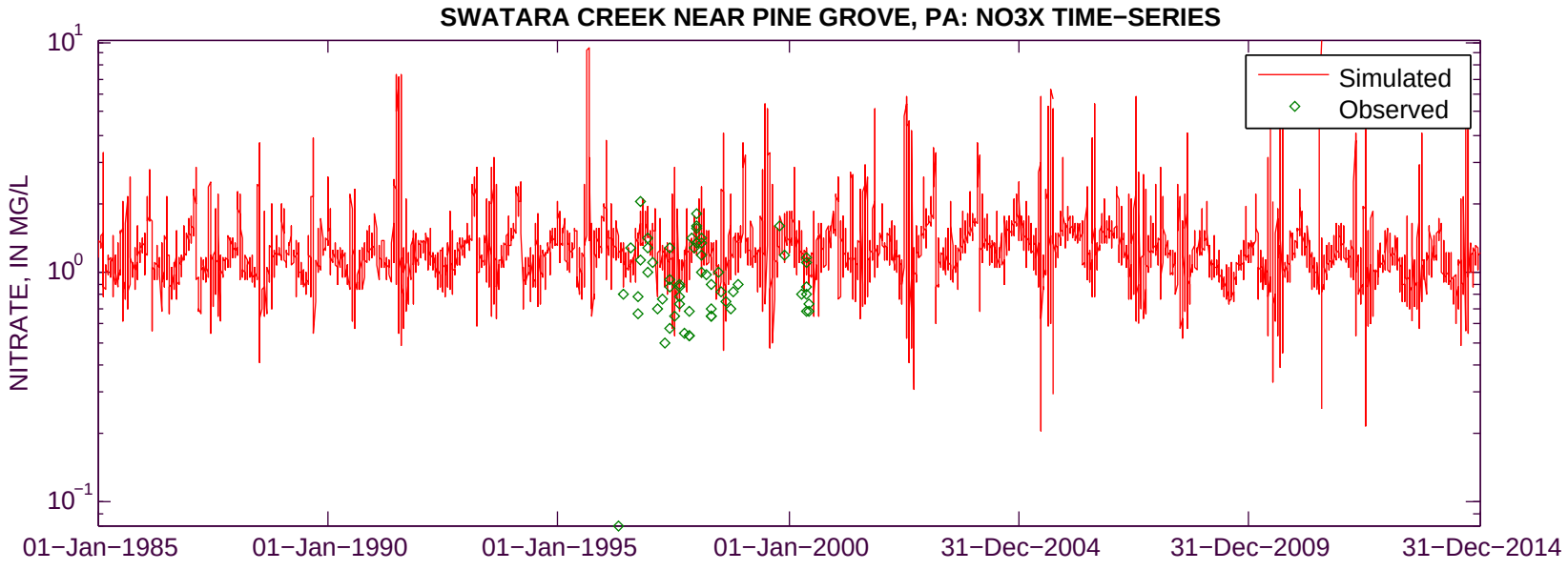
LOAD DATA
LOG10

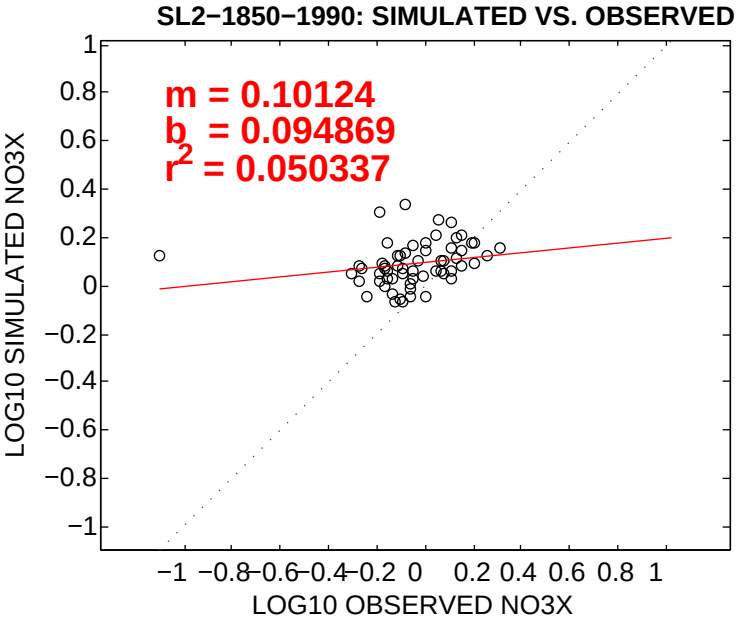


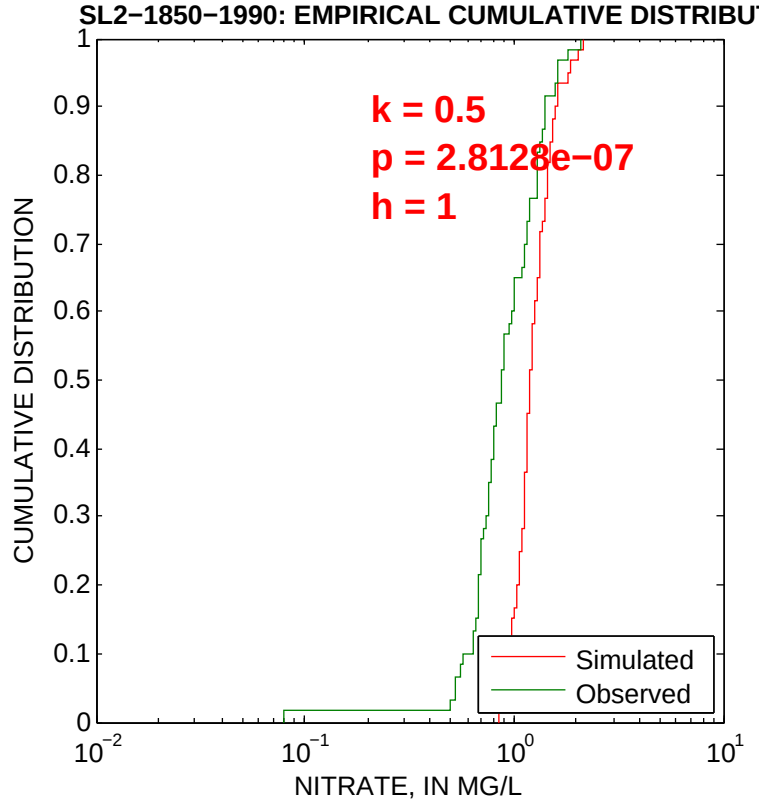












DATA SELECTION

scenario: P620171001WQ | file: NO3X.calib

plot: NO3X - nitrate

Dates: 1/1/1985 – 12/31/201

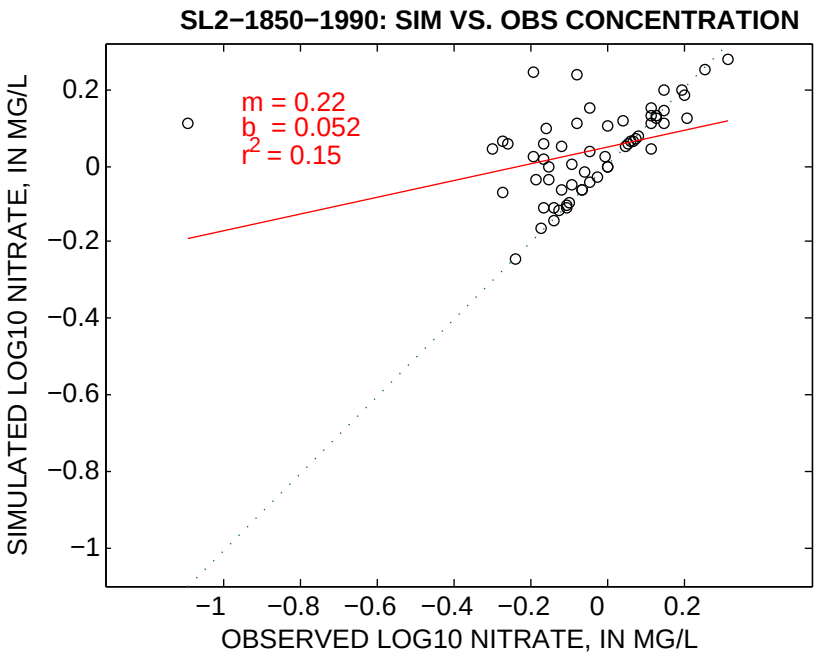
Drive | Directory | Observed: N/A | model | OBS20161101

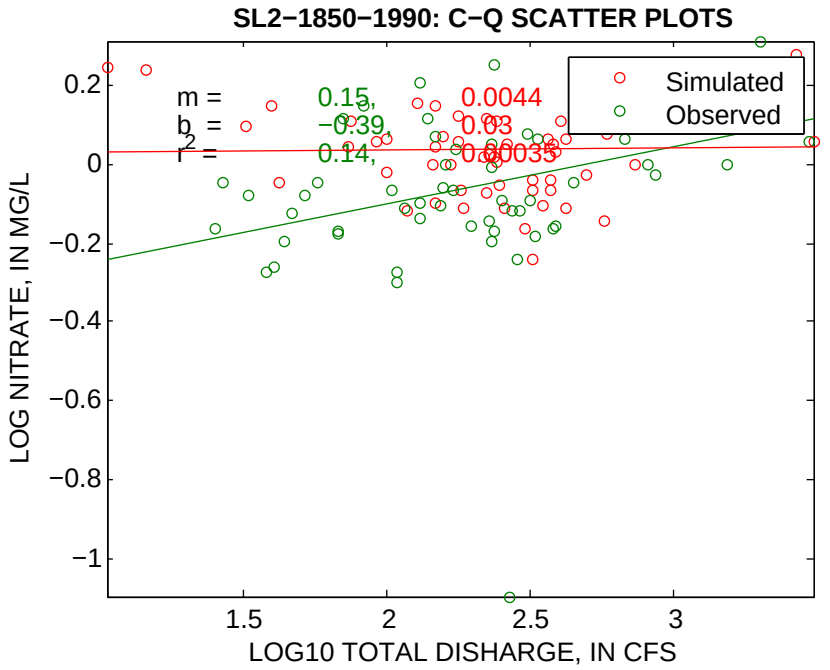
STATISTICS

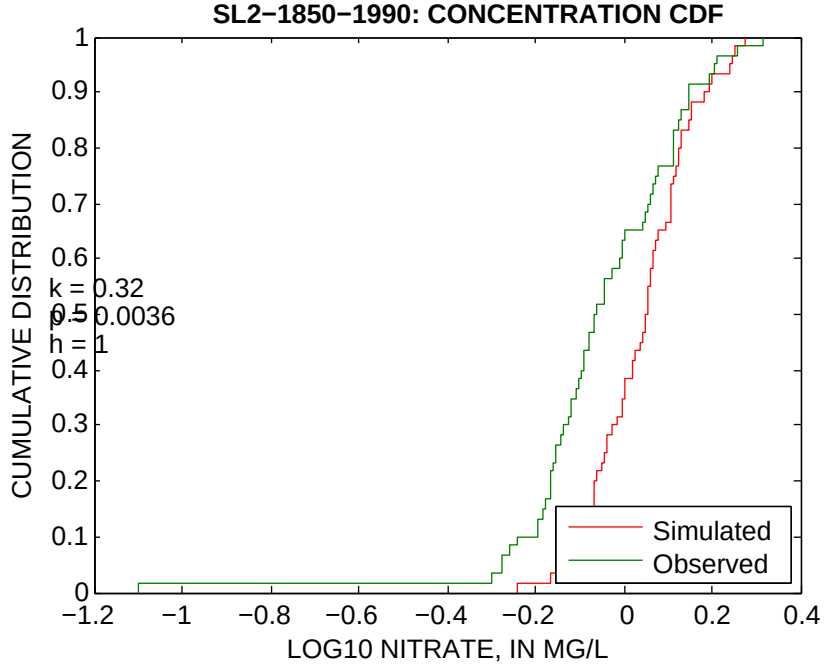
	n	60	60
		observe	simulate
min		0.08	0.85661
		-1.09691	-0.0672169
mean		0.96453	1.25636
		-0.0512316	0.0896822
media		0.865822	1.2006
		-0.0625762	0.0793927
max		2.06603	2.1504
		0.315137	0.332519
varian		0.130254	0.0757557
		0.0396454	0.00807255
JB		0.049010	0.006138
		0.001	0.203903
		ra	log
%		30.2564	-275.052
err.va		0.234703	0.0598837
rel.std.err		1.80189	1.51049
mod.eff		-0.80189	-0.510485

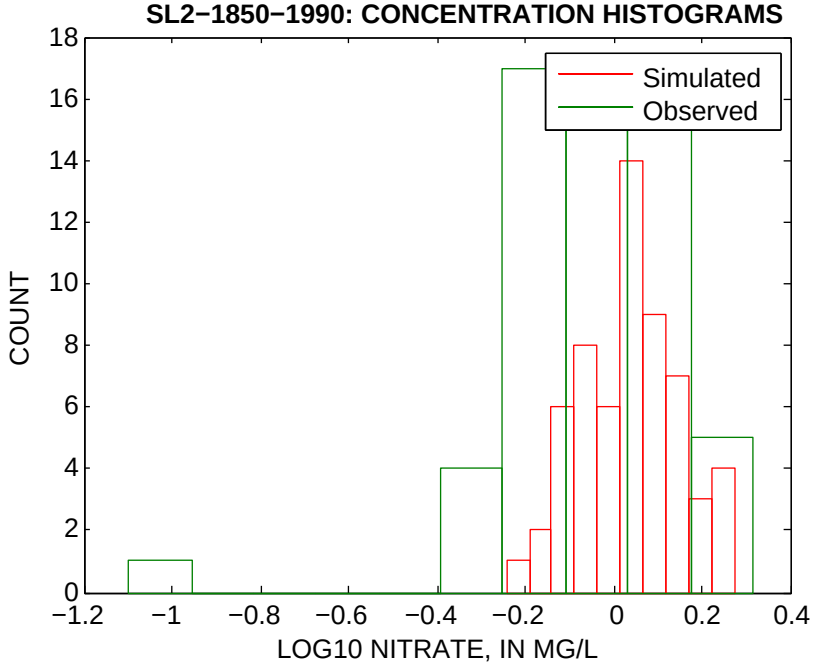
VERSION 2.1

ALL DATA
LOG10

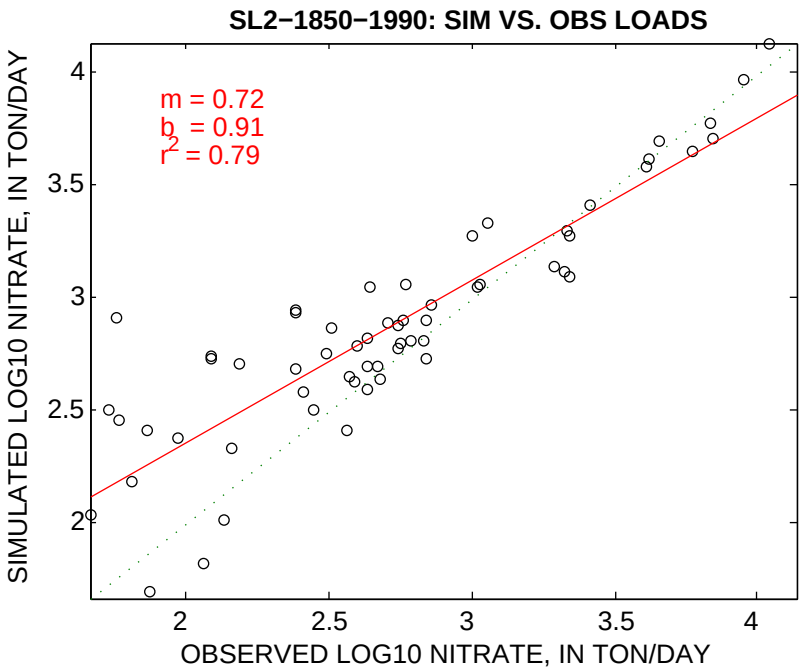


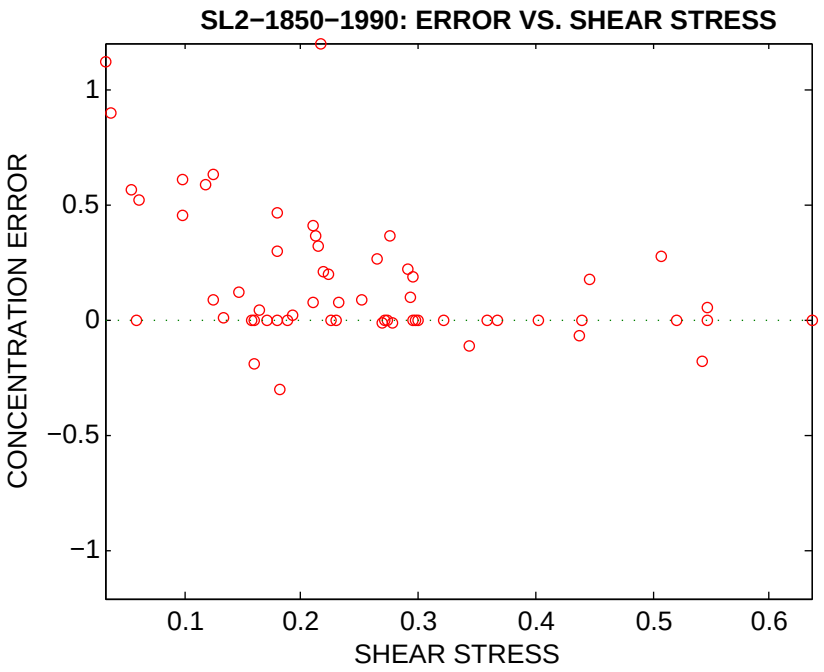


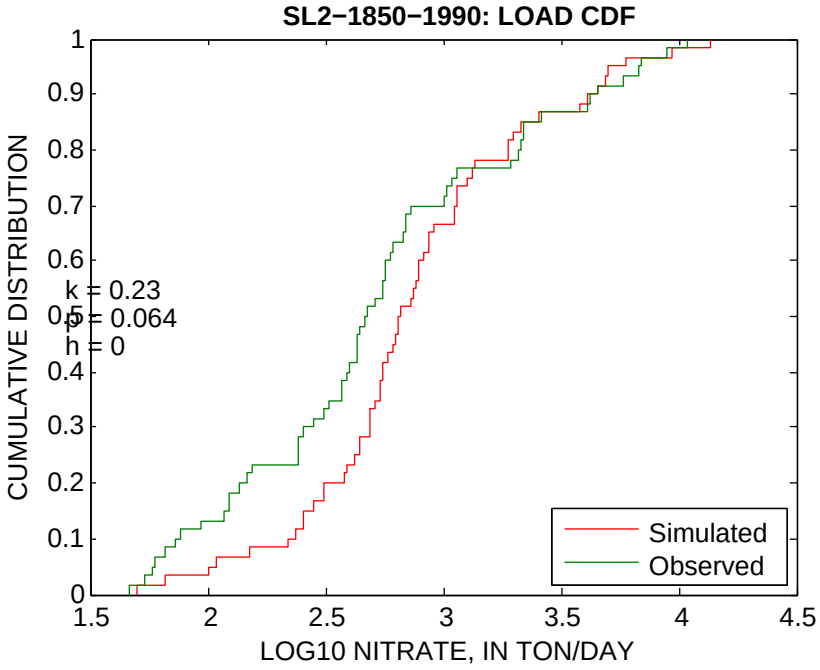


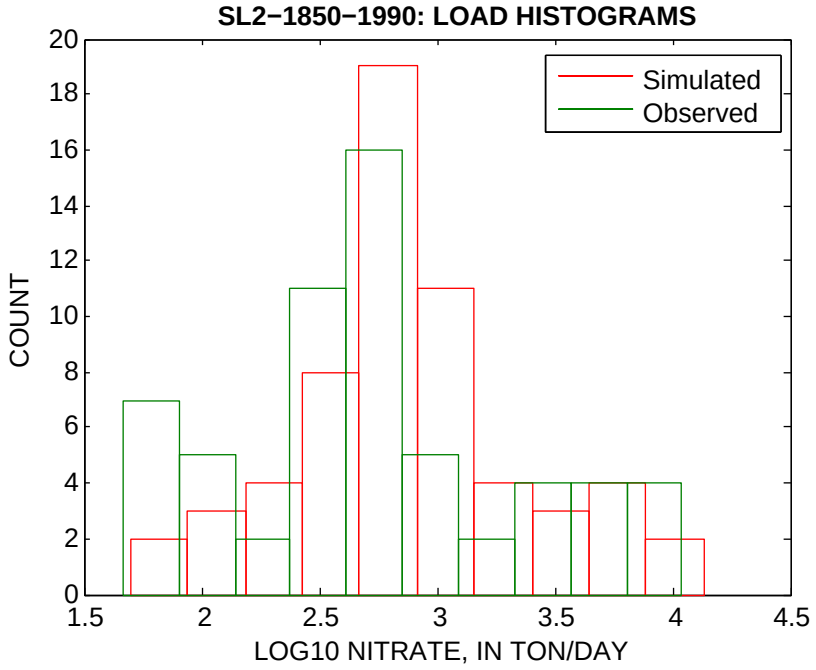


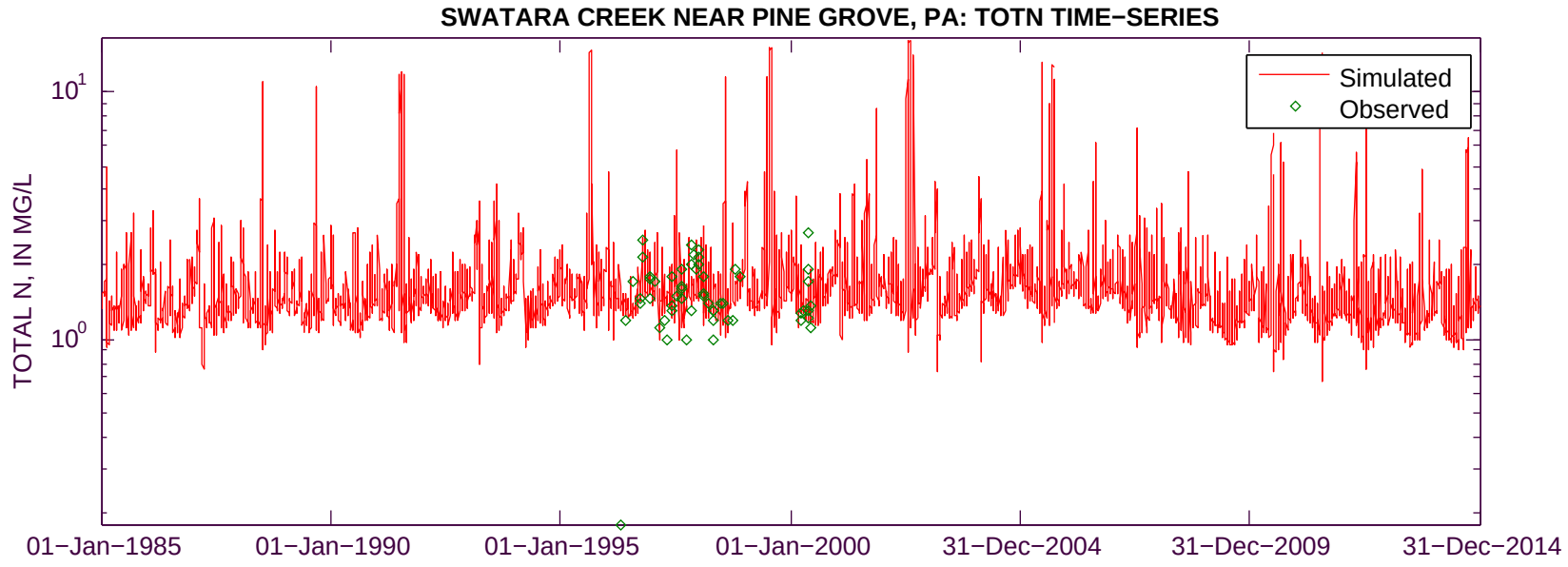
LOAD DATA
LOG10

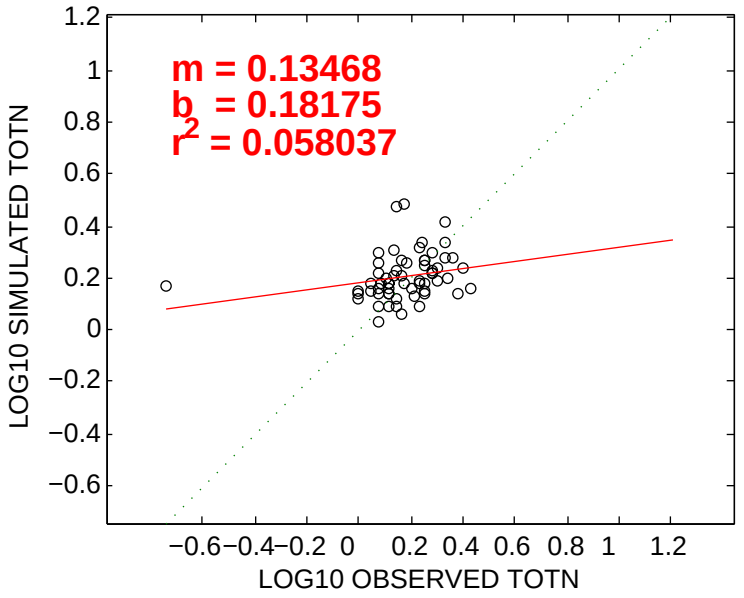


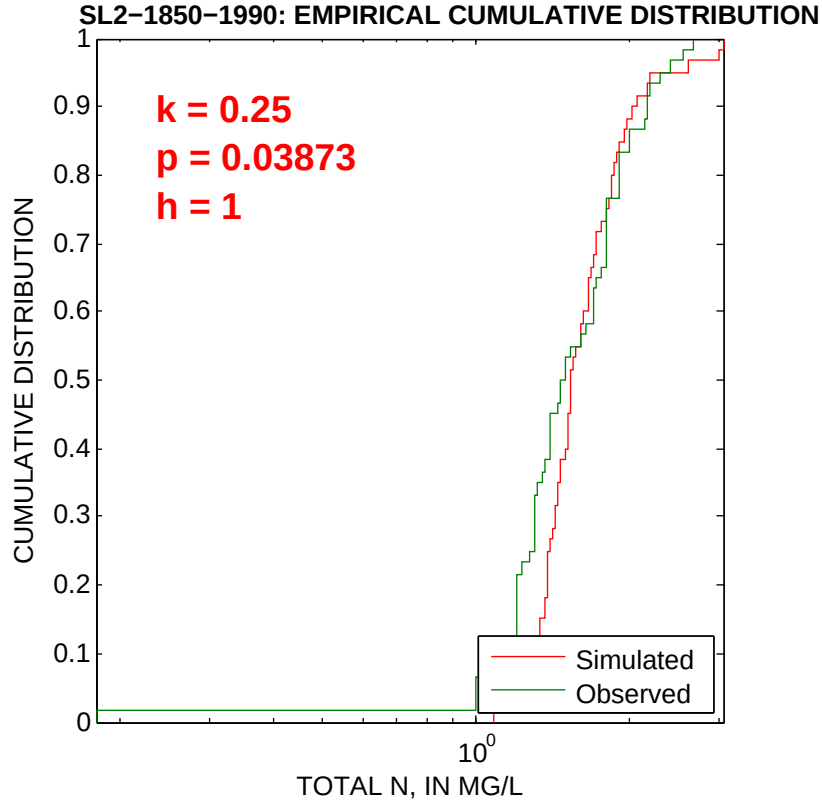












DATA SELECTION

scenario: P620171001WQ | file: TOTN.calib

plot: TOTN - total nitrogen

Dates: 1/1/1985 – 12/31/201

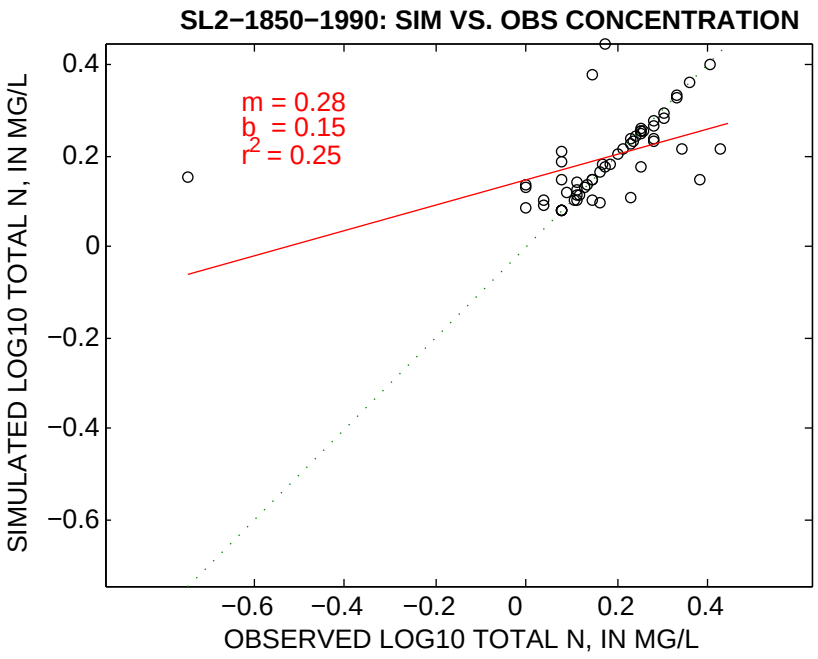
Drive: N/A | Directory: model | Observed: OBS20161101

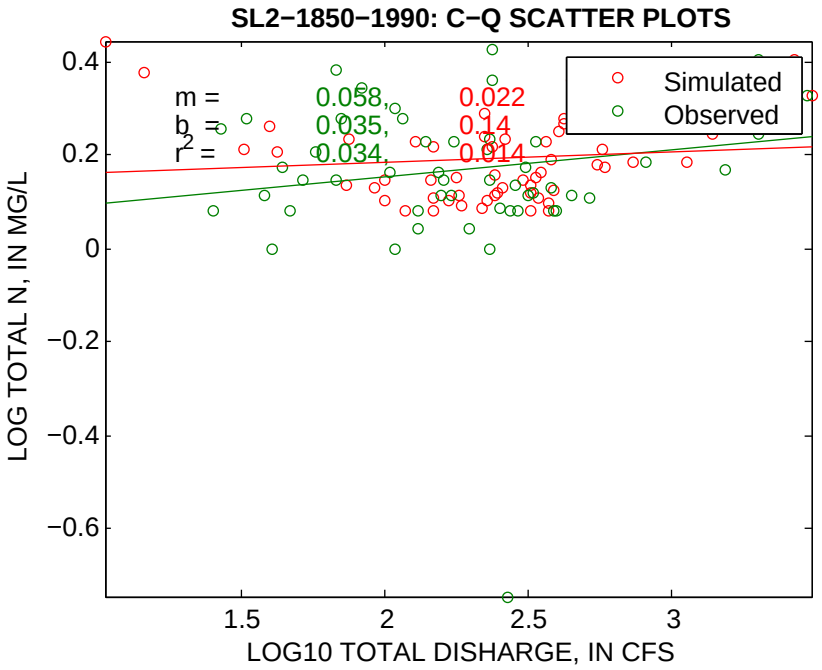
STATISTICS

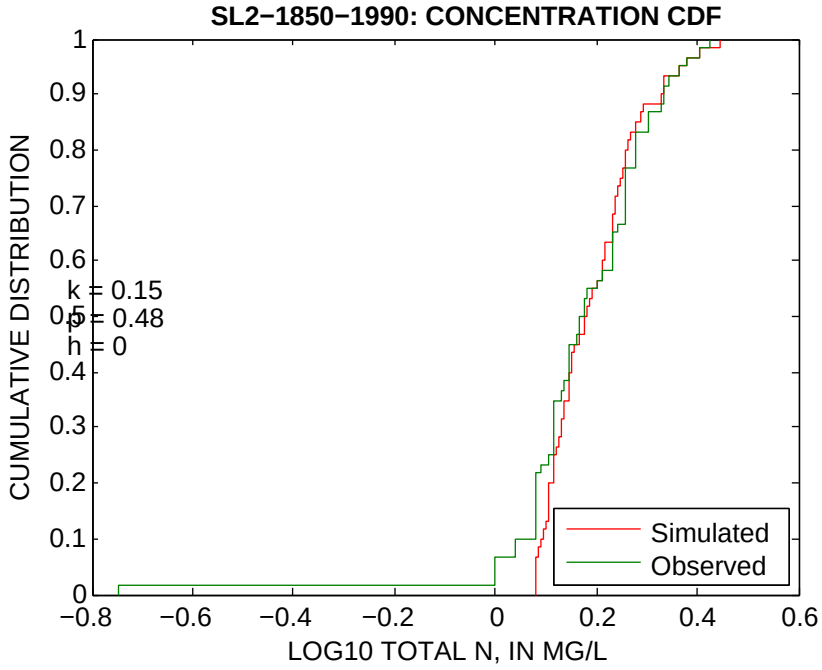
n	60	60
	observe	simulate
min	0.18	1.0832
	-0.744727	0.0347087
mean	1.56783	1.63982
	0.173338	0.205093
media	1.48348	1.52635
	0.171255	0.183654
max	2.66979	3.0394
	0.426477	0.482788
varian	0.189754	0.144697
	0.0255475	0.00798455
JB	0.254703	0.001
	0.001	0.006359
	ra	log
%	4.59165	18.3195
err.va	0.260228	0.027676
rel.std.err	1.37139	1.08332
mod.eff	-0.371392	-0.0833167

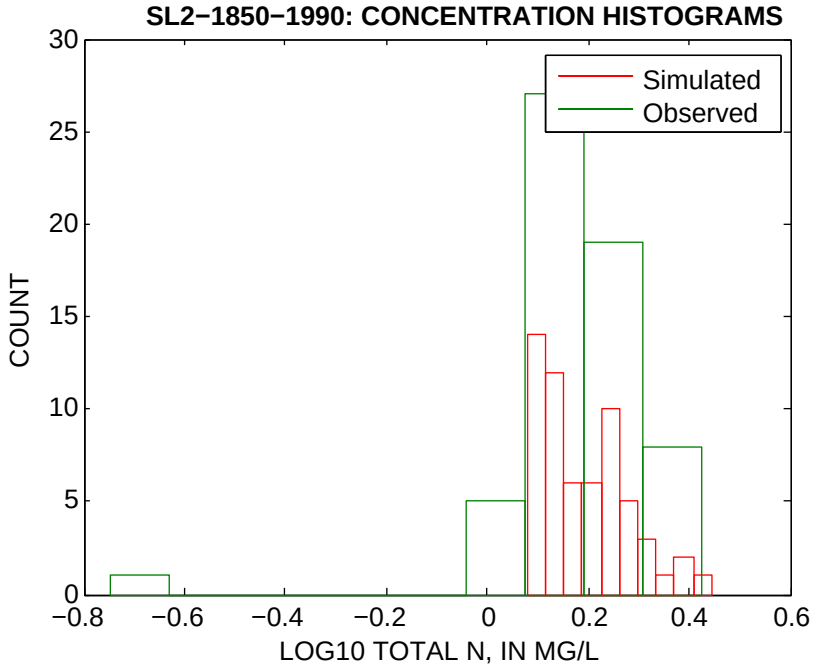
VERSION 2.1

ALL DATA
LOG10

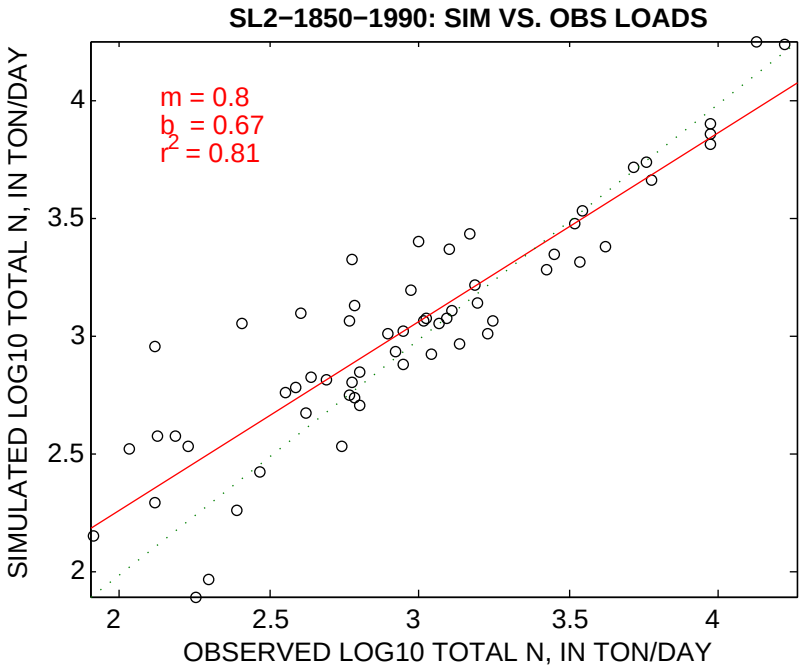


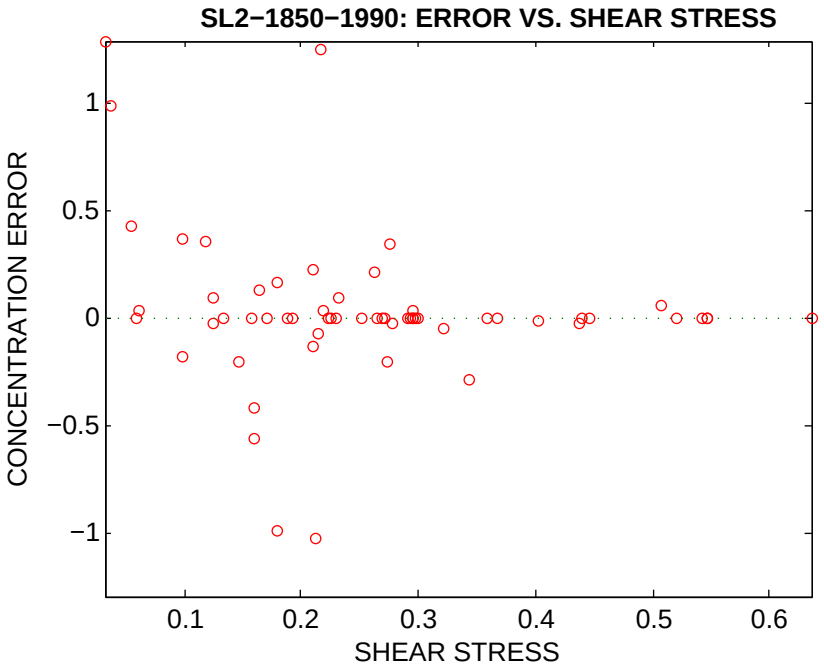


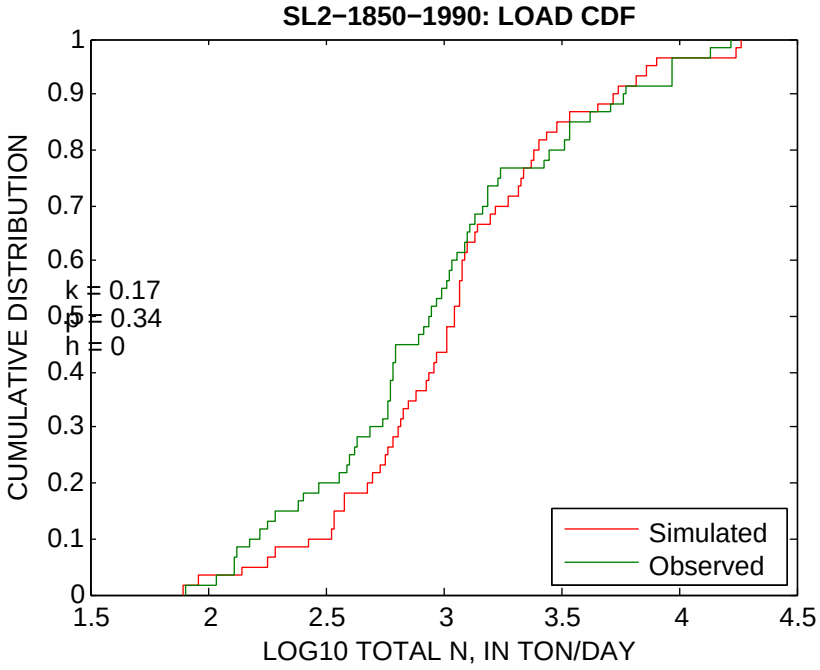


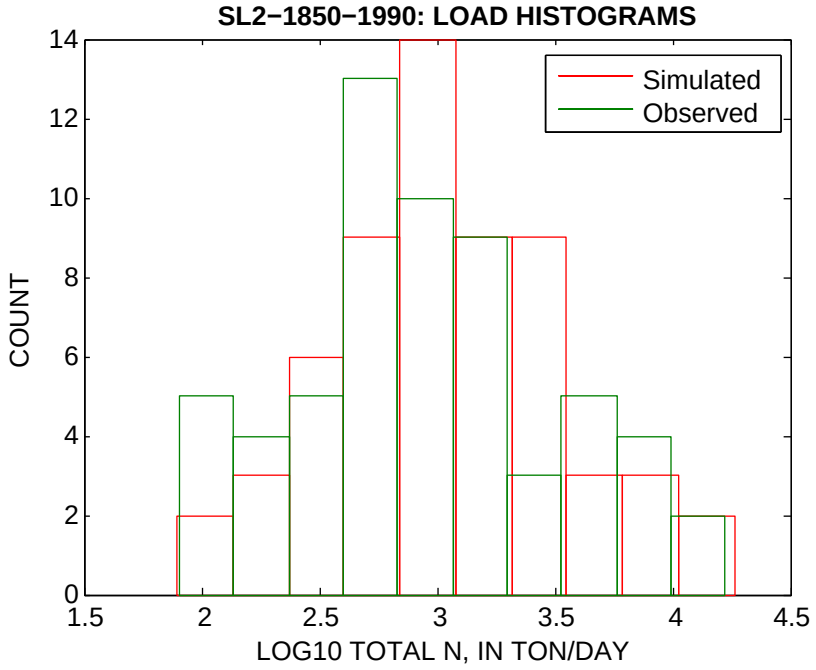


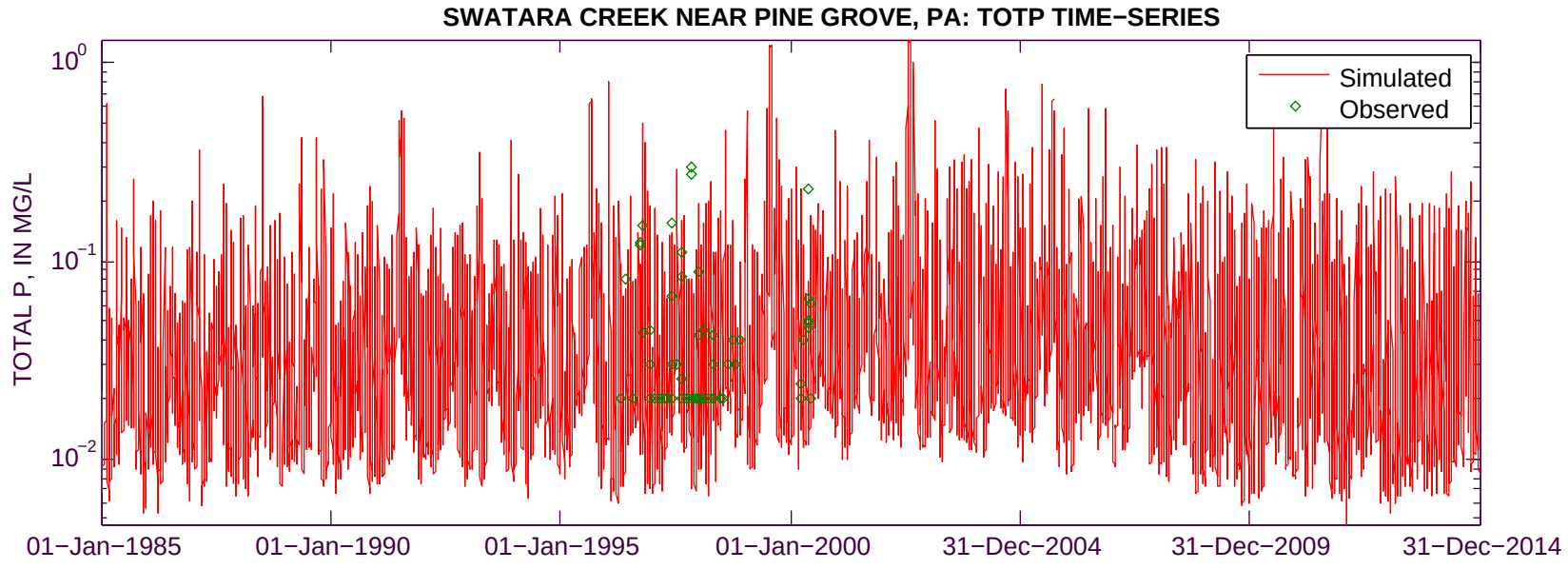
LOAD DATA
LOG10

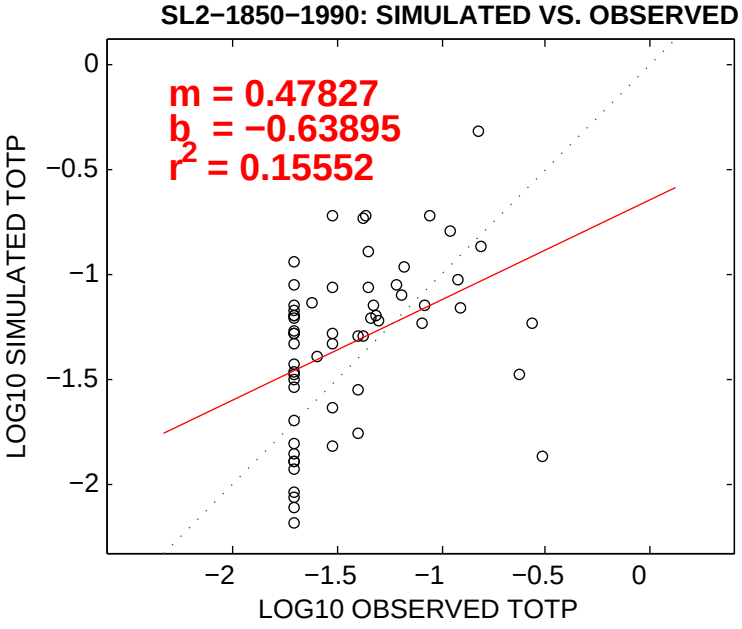


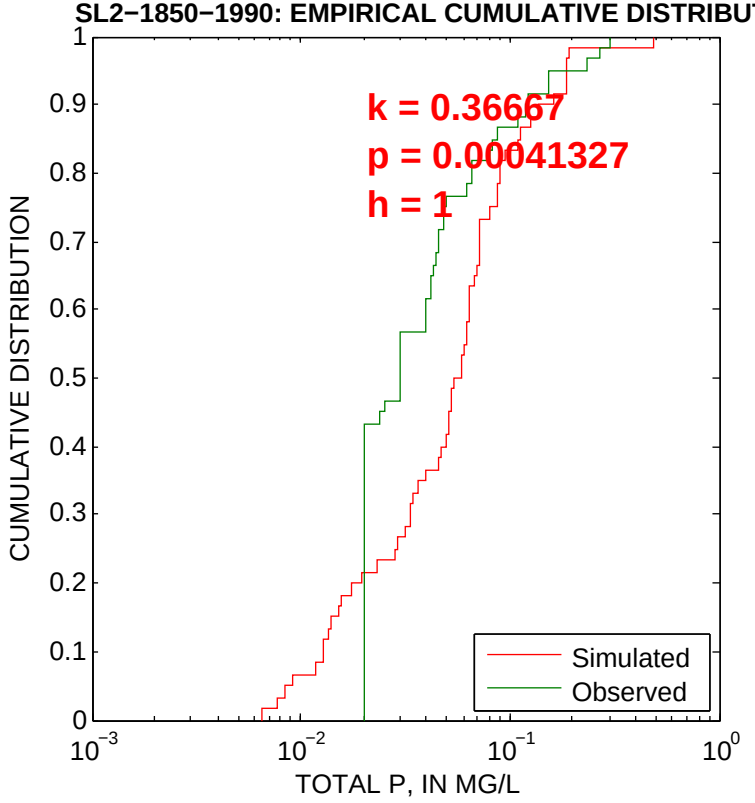












DATA SELECTION

scenario: P620171001WQ | file: TOTP.calib

plot: TOTP - total phosphorus

Dates: 1/1/1985 – 12/31/201

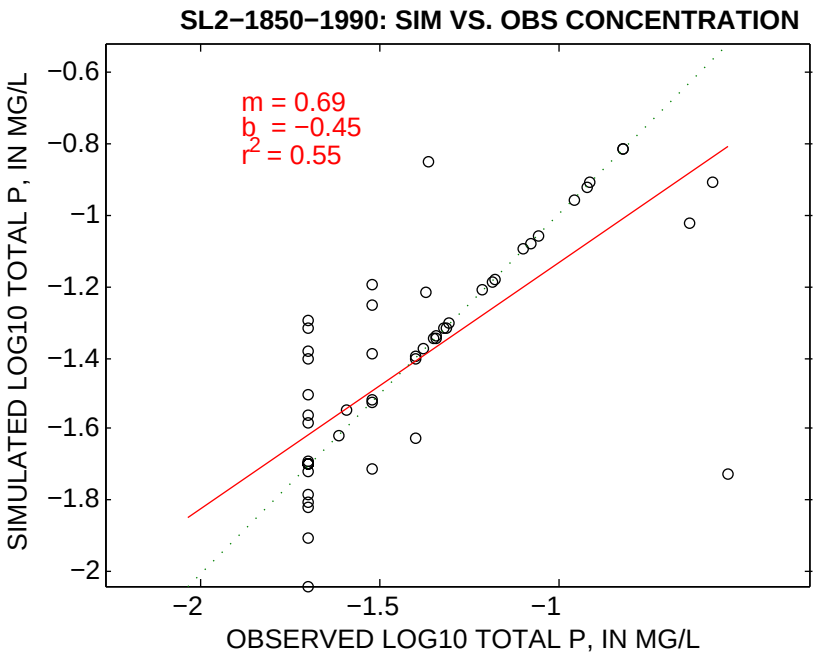
Drive: N/A | Directory: model | Observed: OBS20161101

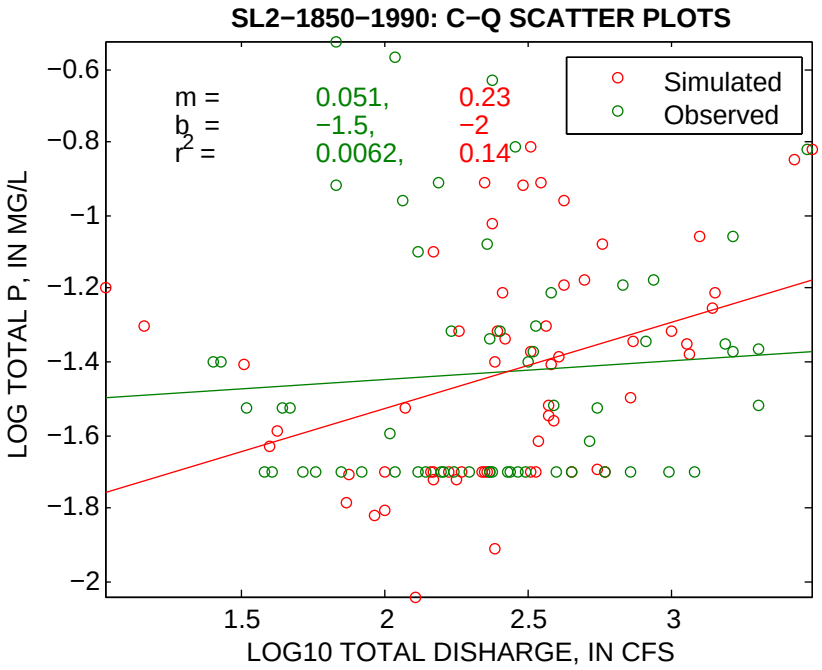
STATISTICS

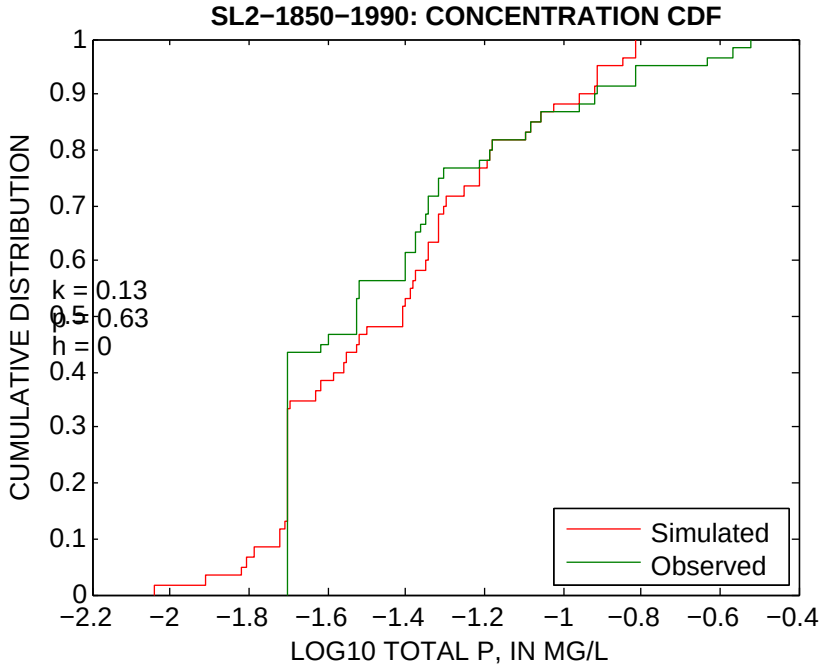
	n	60	60
		observe	simulate
min		0.02	0.0064515
		-1.69897	-2.19034
mean		0.0530951	0.0700013
		-1.42911	-1.32246
media		0.03	0.056694
		-1.52288	-1.24678
max		0.3	0.48978
		-0.522879	-0.309999
varian		0.00356866	0.0053168
		0.107185	0.157656
JB		0.001	0.001
		0.008080	0.5
		ra	log
%		31.8414	-7.46298
err.va		0.00702402	0.173881
rel.std.err		1.96825	1.62225
mod.eff		-0.968253	-0.622252

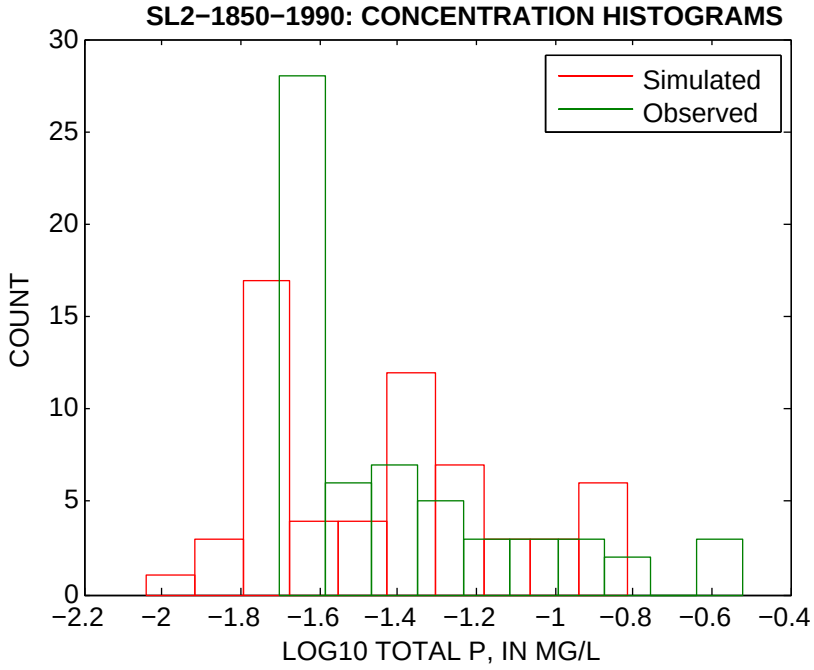
VERSION 2.1

ALL DATA
LOG10

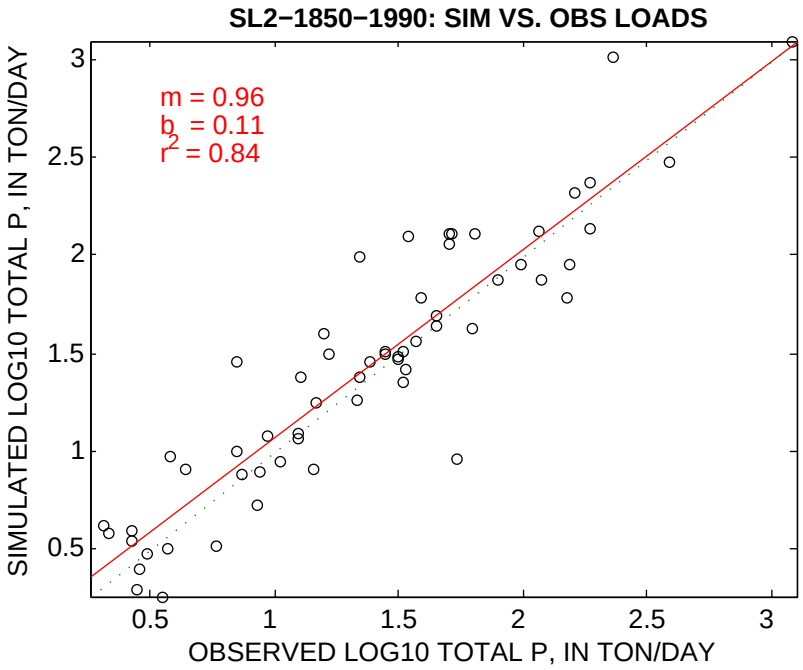


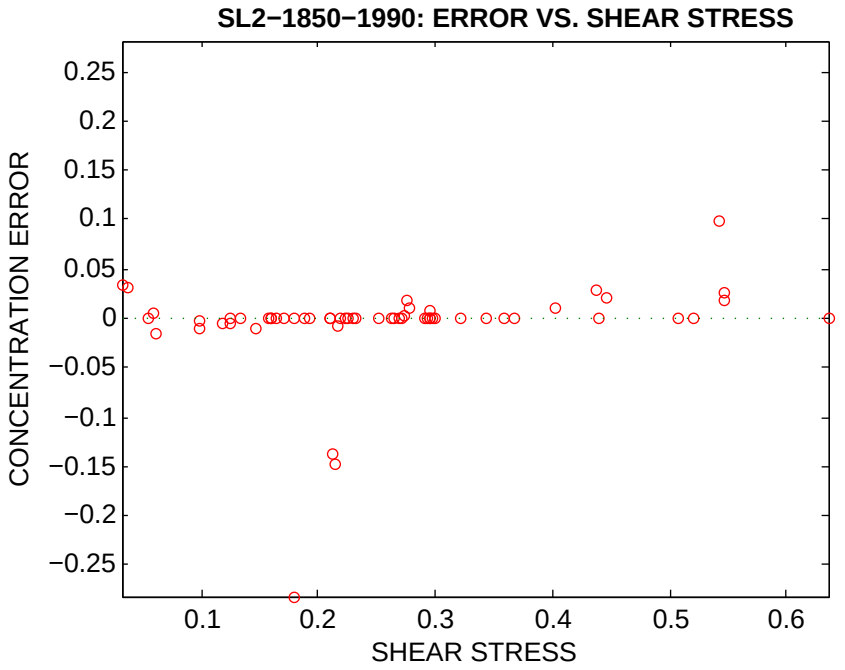


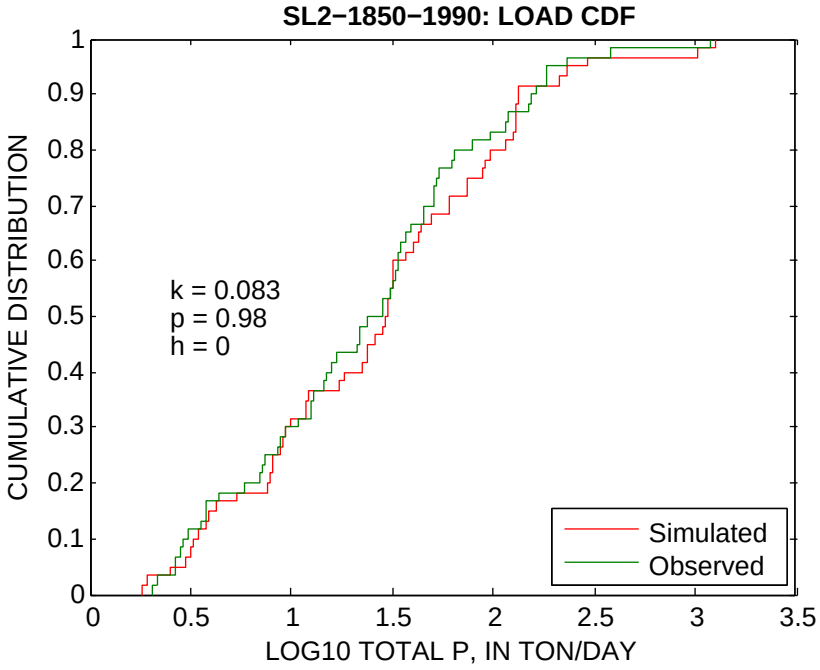


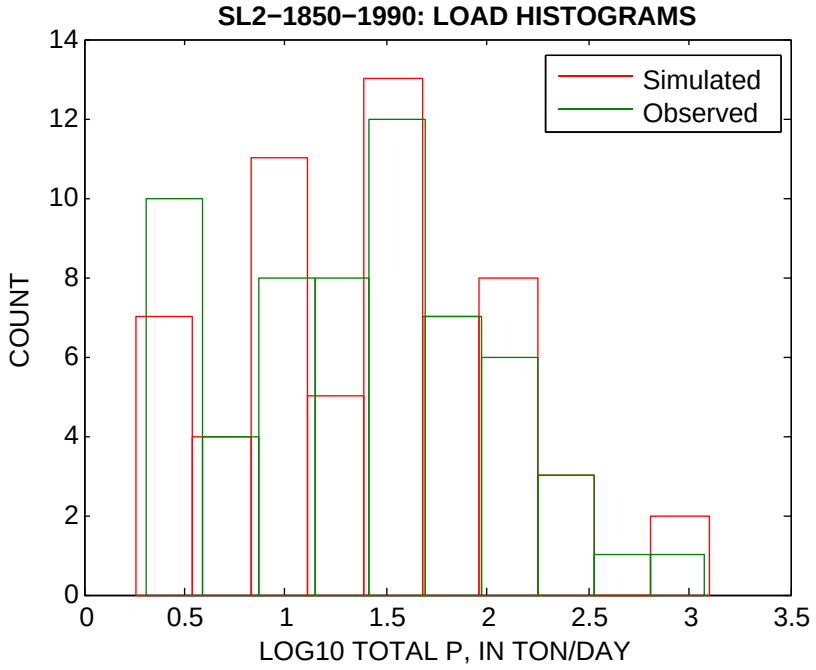


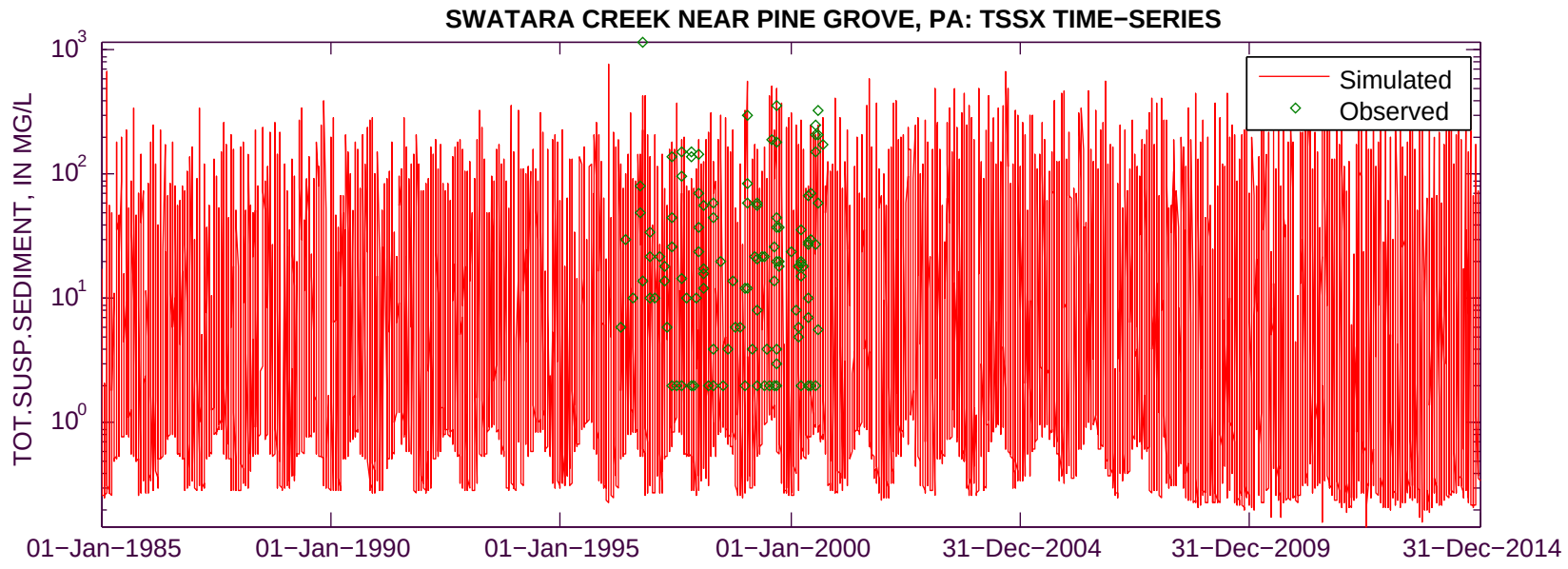
LOAD DATA
LOG10

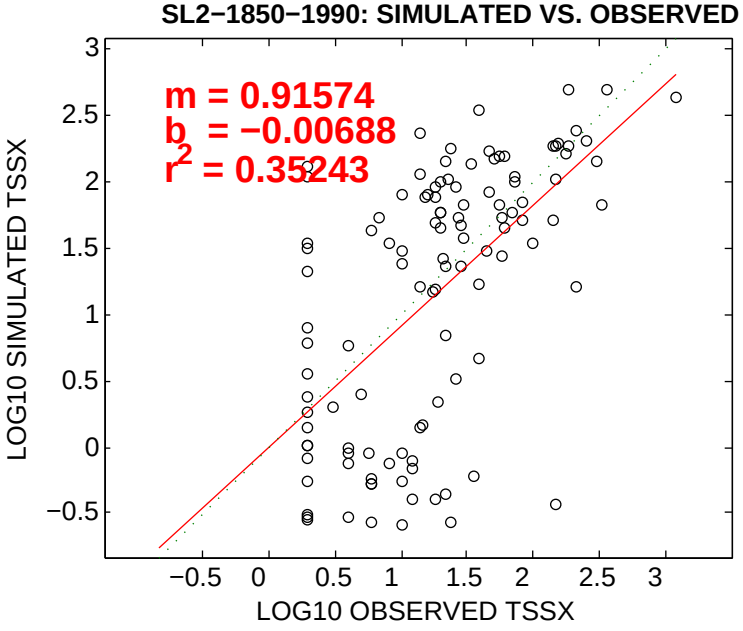


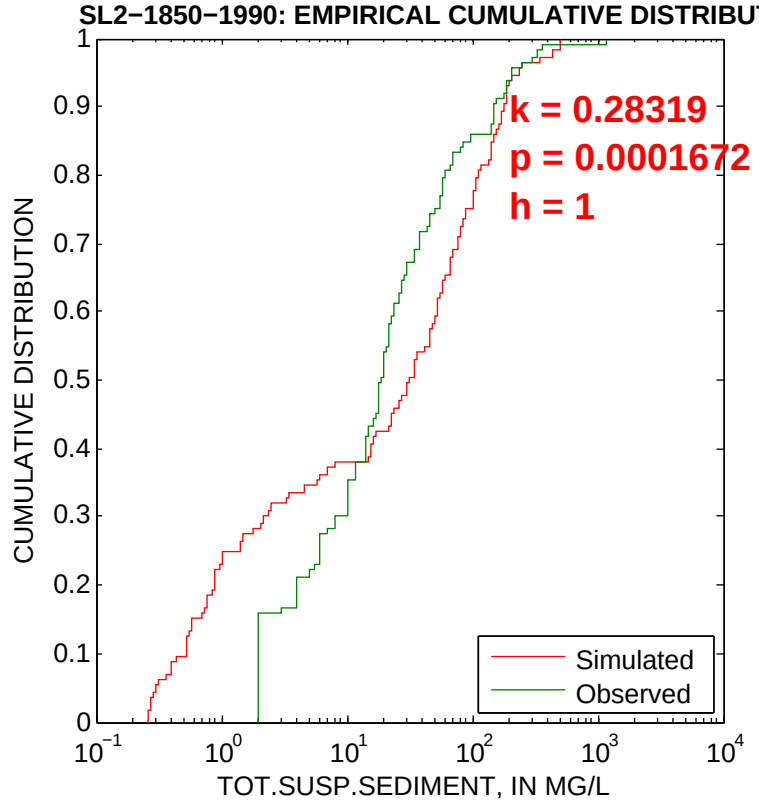












DATA SELECTION

scenario: P620171001WQ | file: TSSX.calib

plot: TSSX - total suspended ...

Dates: 1/1/1985 – 12/31/201

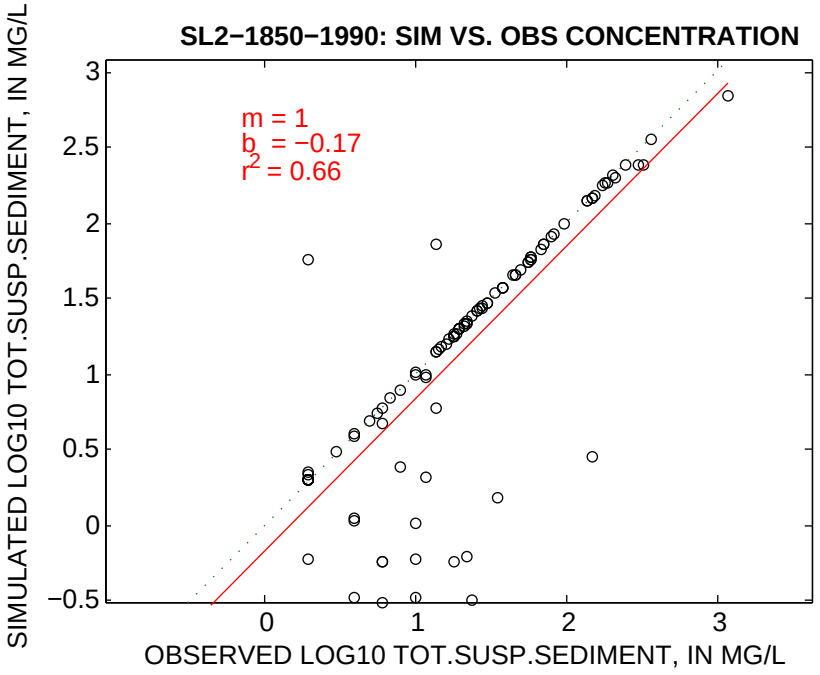
Drive | Directory: N/A | model | Observed: OBS20161101

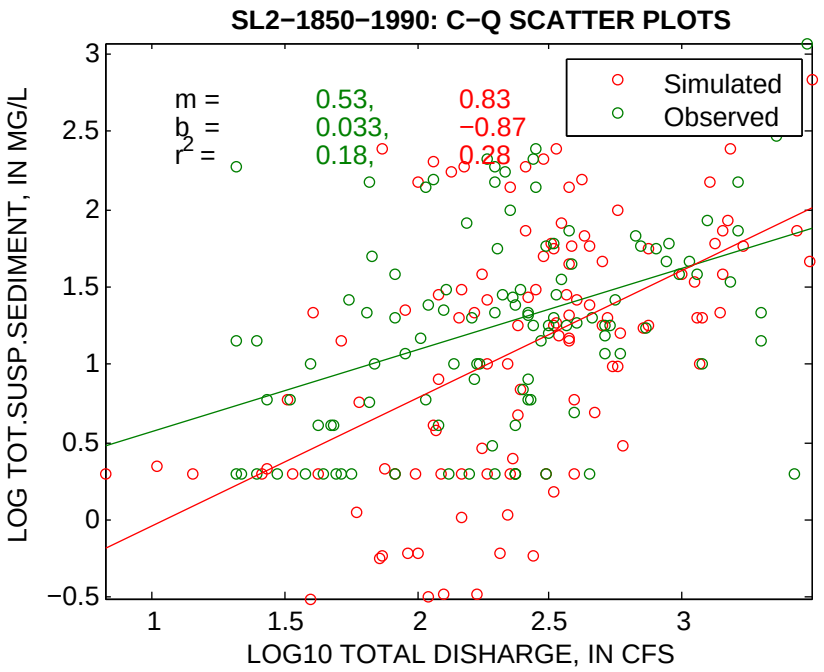
STATISTICS

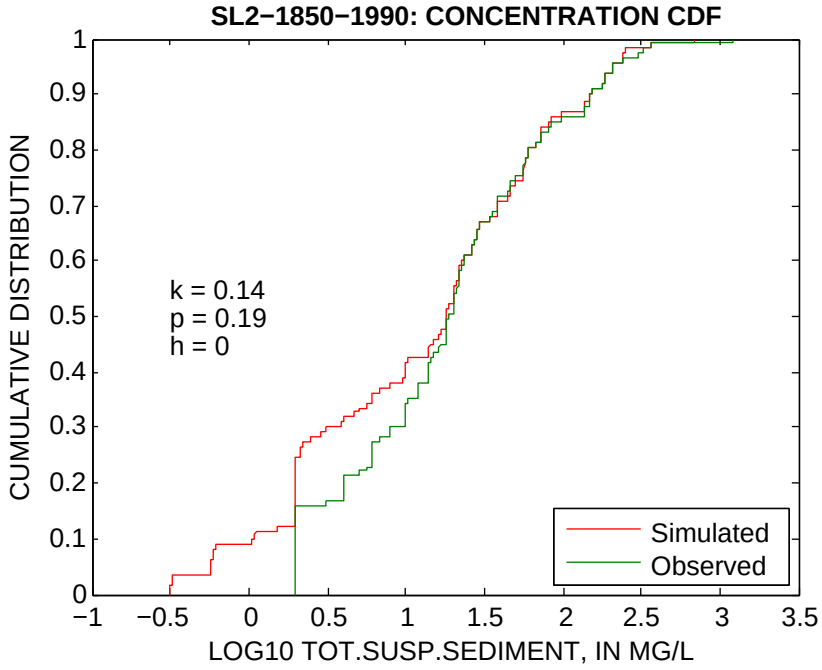
	n	observe	simulate
		113	113
min		2	0.26125
		0.30103	-0.582944
mean		56.4222	67.1235
		1.2664	1.15281
media		18.9186	31.905
		1.27689	1.50386
max		1192.3	509.01
		3.07639	2.70673
varian		16605.3	9331.59
		0.419709	0.998647
JB		0.001	0.001
		0.254385	0.013122
		ra	log
%		18.9665	-8.96961
err.va		10891.4	0.662688
rel.std.err		0.6559	1.57892
mod.eff		0.3441	-0.578923

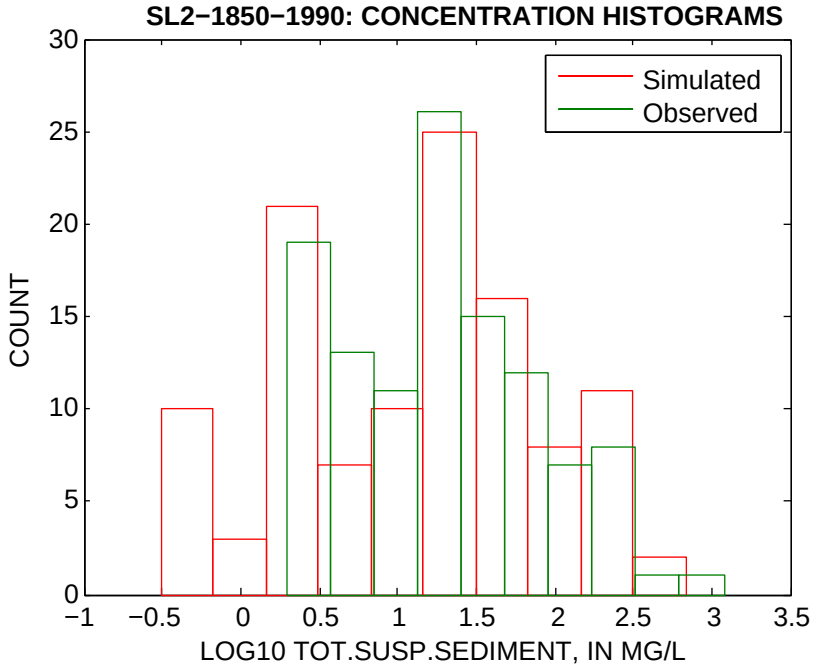
VERSION 2.1

ALL DATA
LOG10

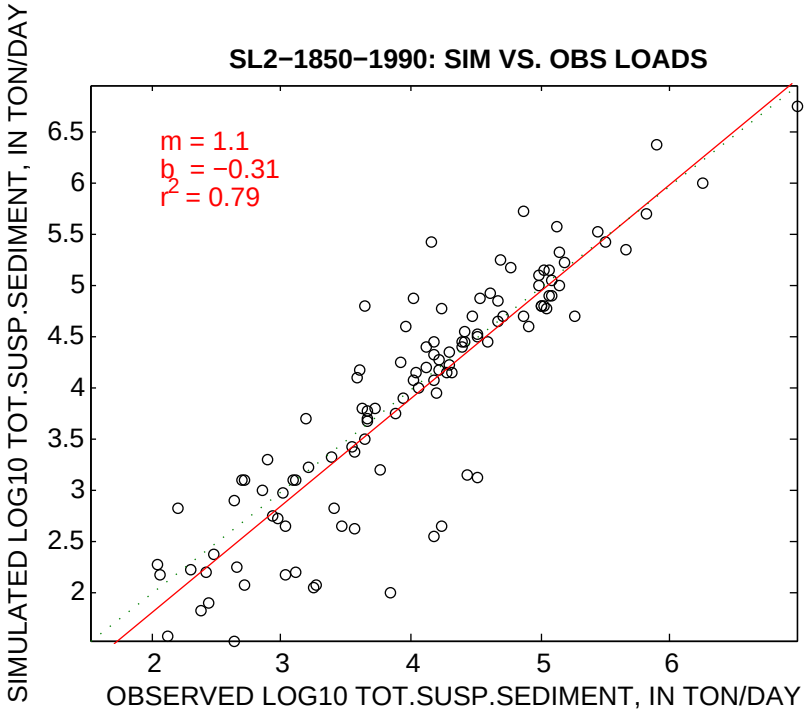


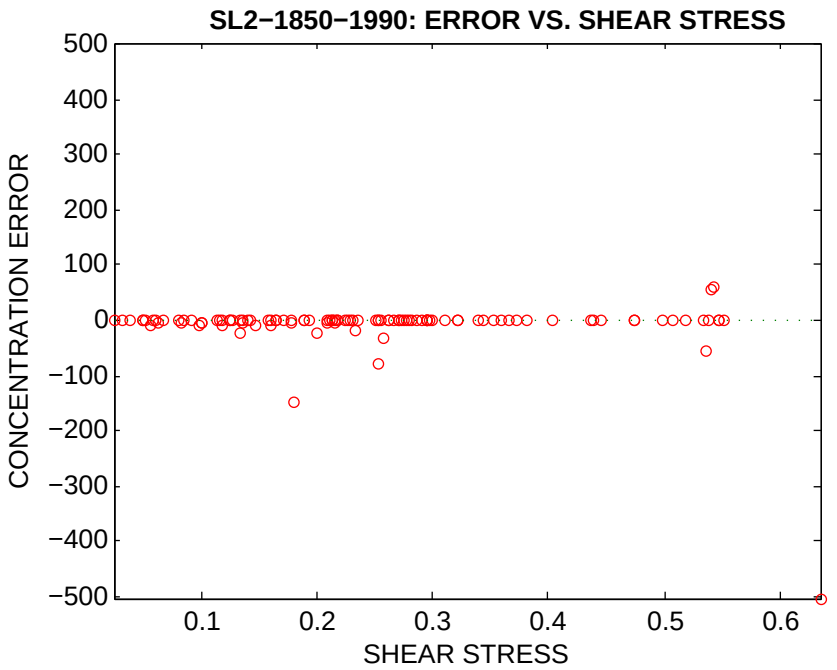


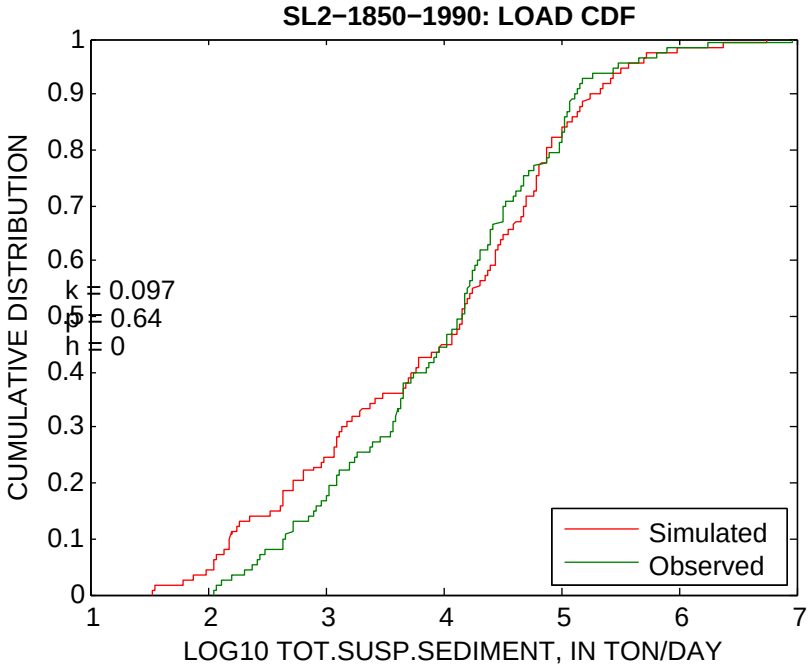


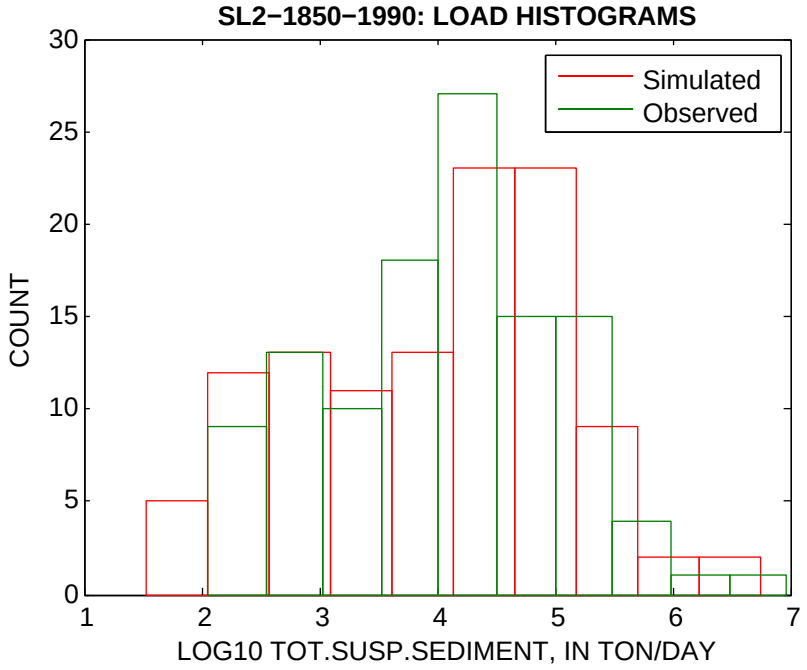


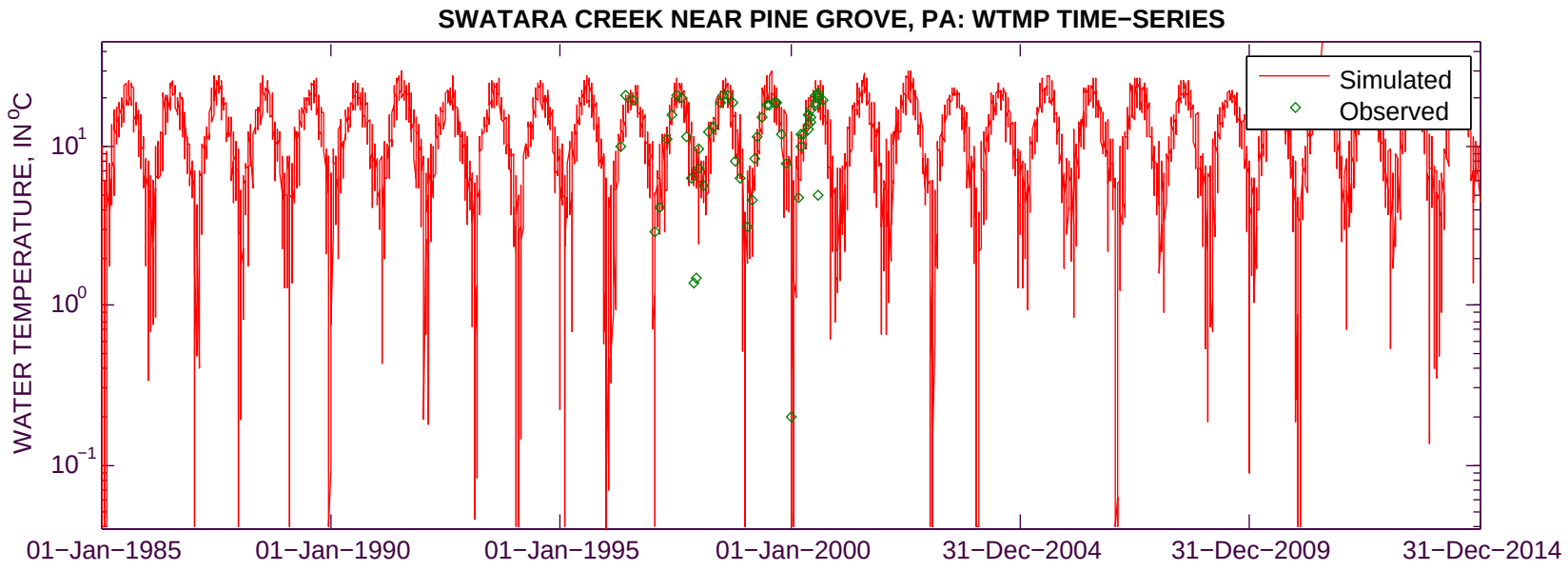
LOAD DATA
LOG10

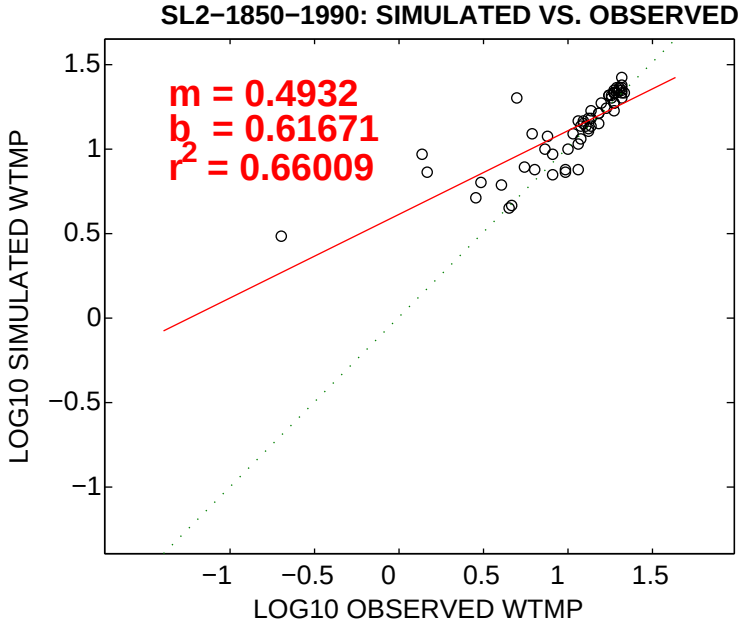


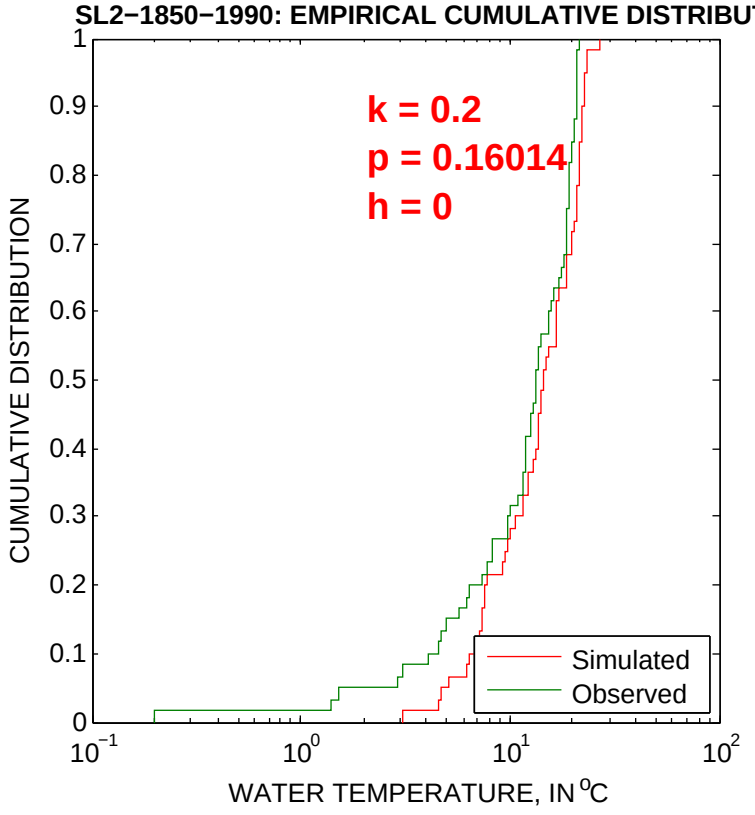












DATA SELECTION

scenario	file
P620171001WQ	WTMP.calib

plot: WTMP - water tempera...

Dates 1/1/1985 12/31/201

Drive Directory Observed

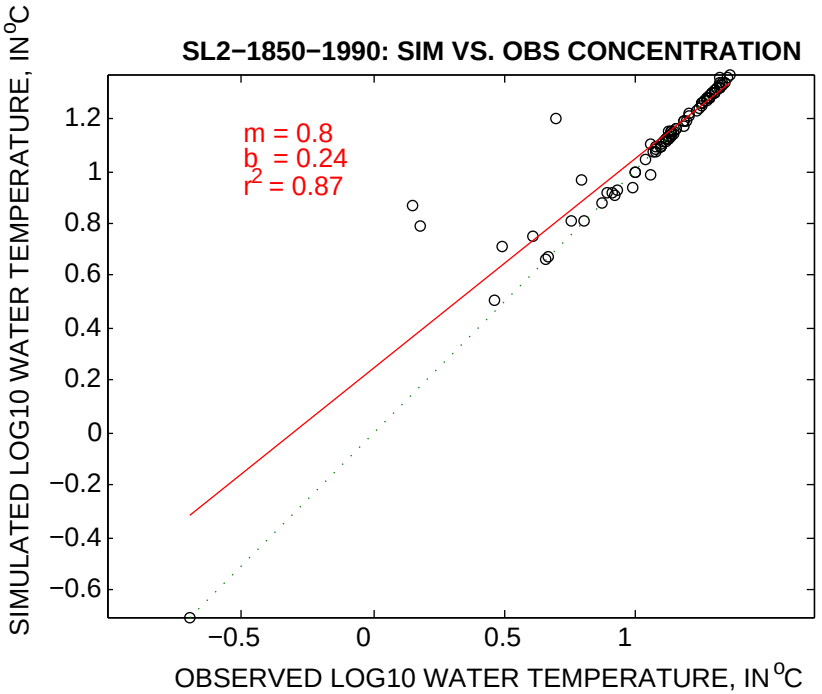
N/A model OBS20161101

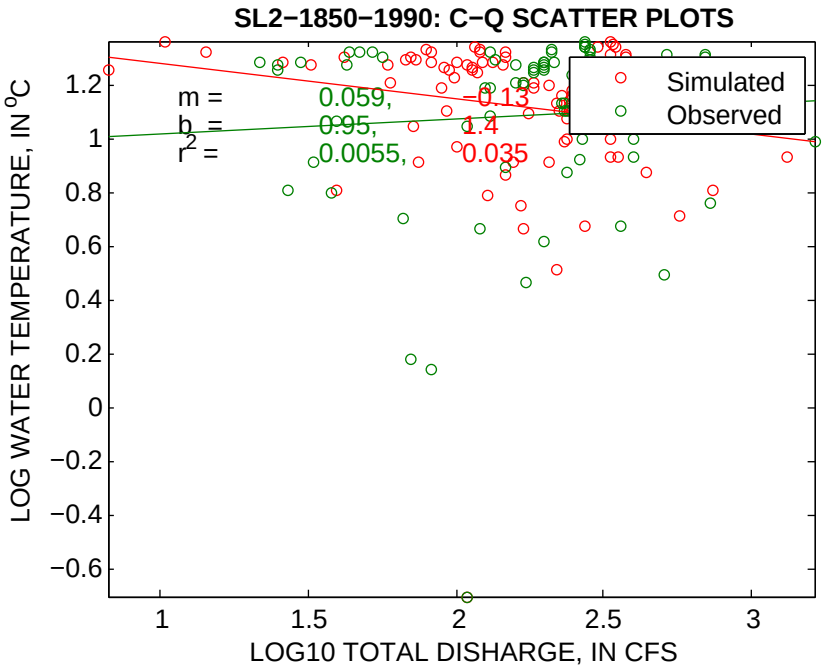
STATISTICS

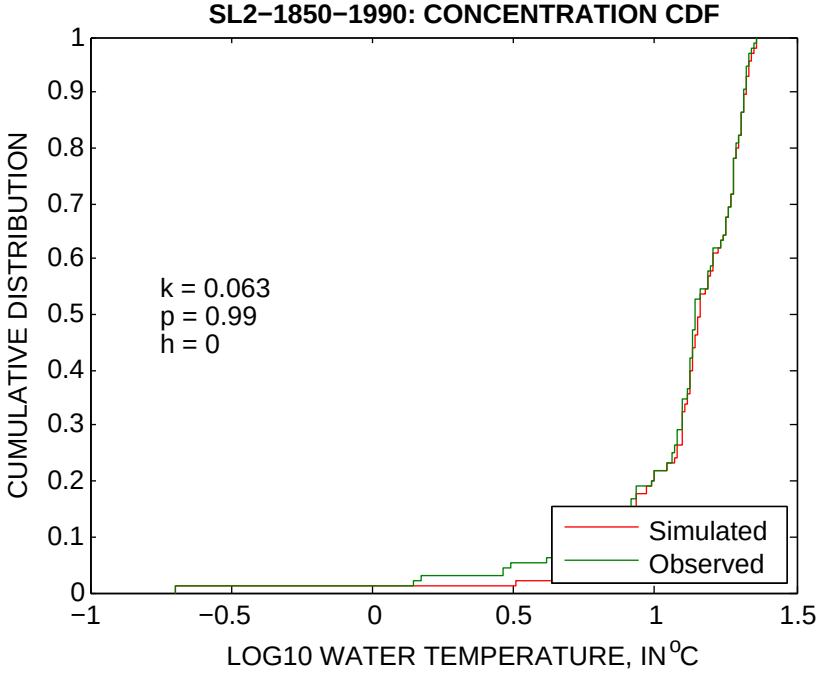
		observe	simulate
n		60	60
min		0.2	3.0842
		-0.69897	0.489143
mean		13.1717	14.8462
		1.03085	1.12512
media		13.45	14.6065
		1.12872	1.16454
max		21.6	26.899
		1.33445	1.42974
varian		37.5997	37.5839
		0.12927	0.0476371
JB	✓	0.075385	0.099439 ✓
		0.001	0.027561
		ra	log
%		12.7134	9.14533
err.va		10.6432	0.0584329
rel.std.err		0.283067	0.452023
mod.eff		0.716933	0.547977

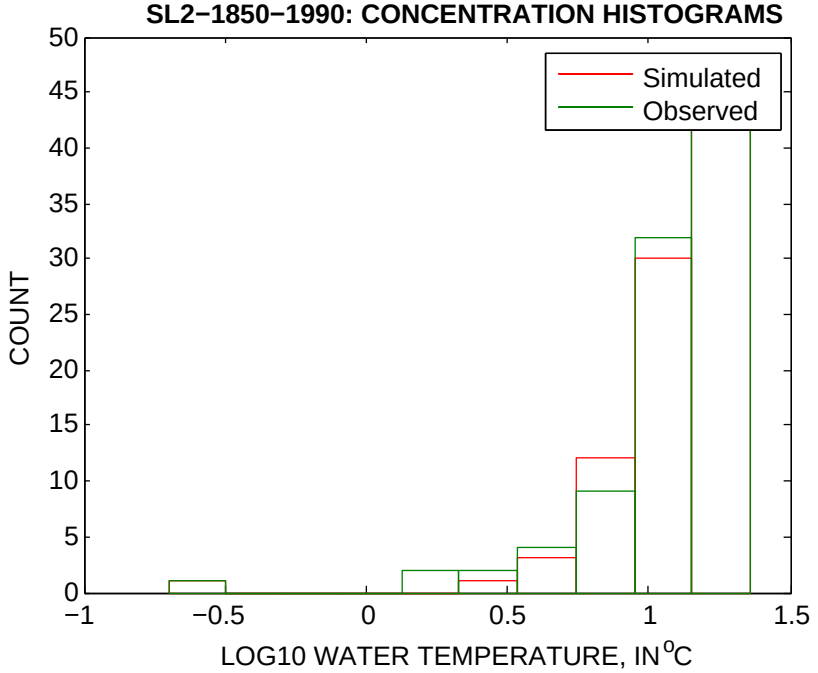
VERSION 2.1

ALL DATA
LOG10

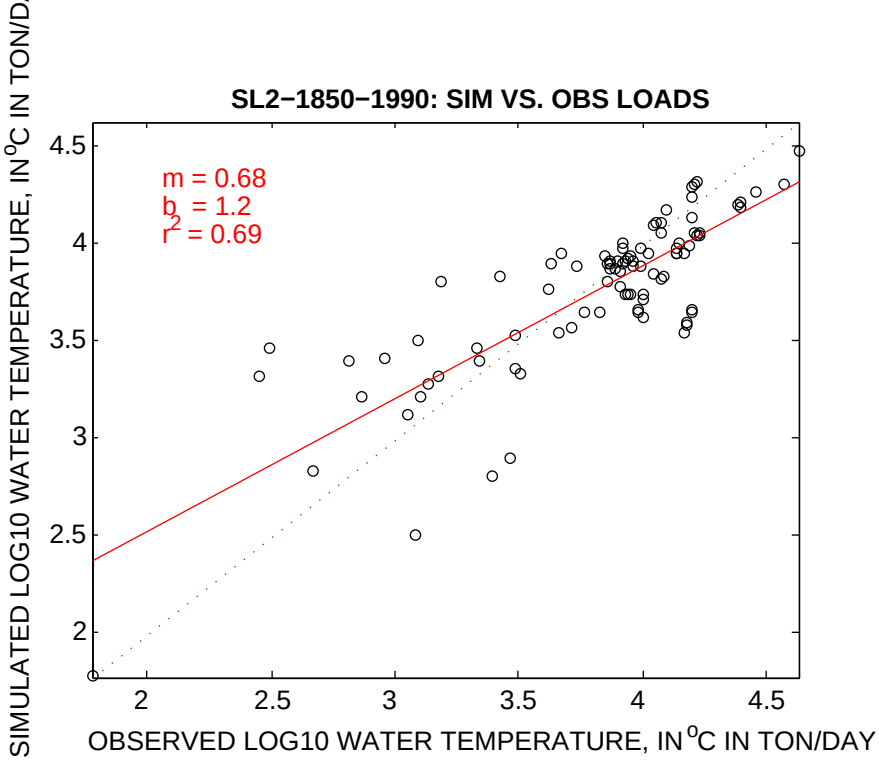


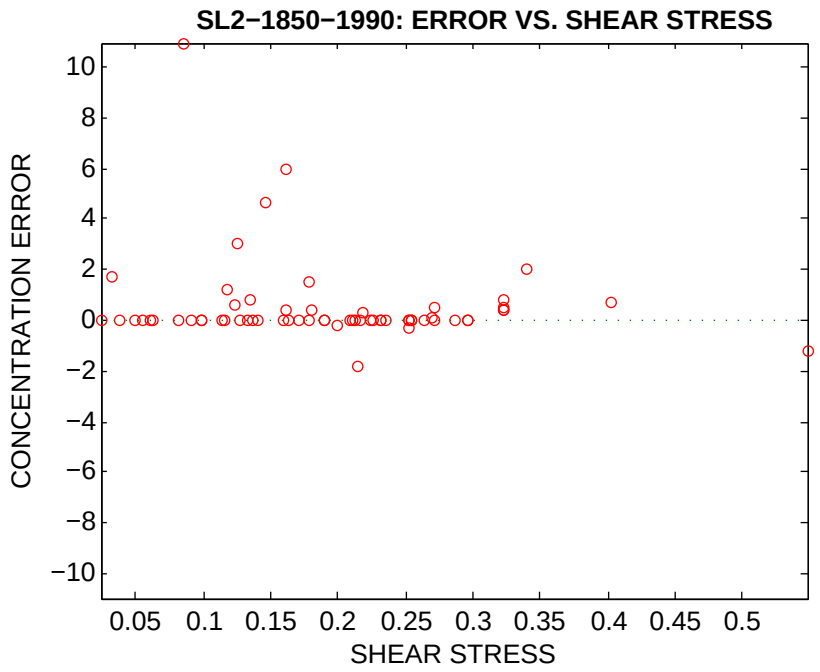


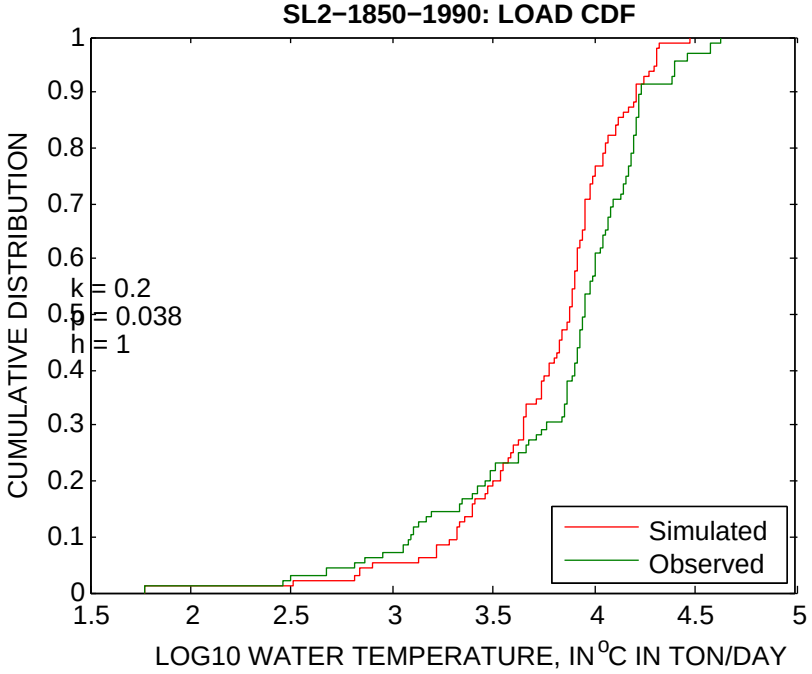


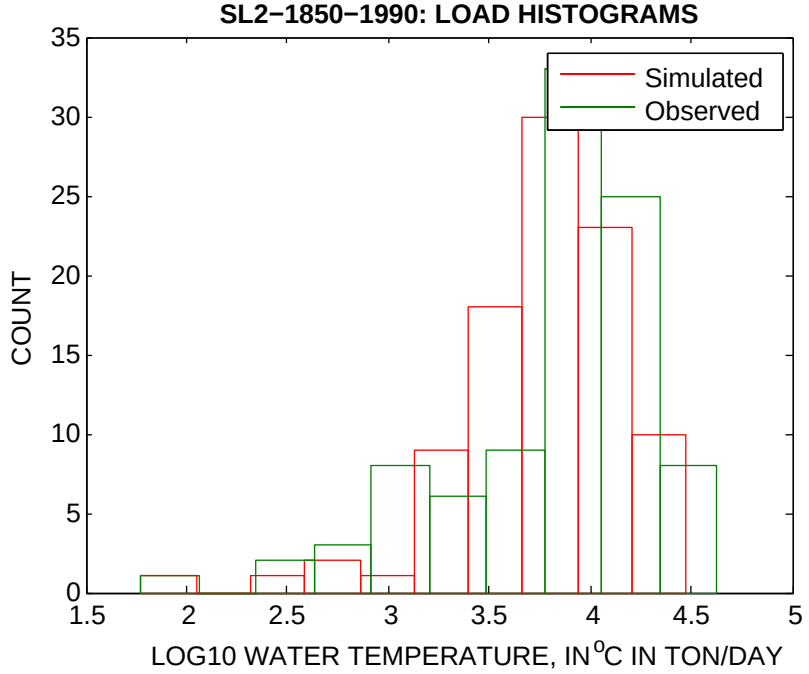


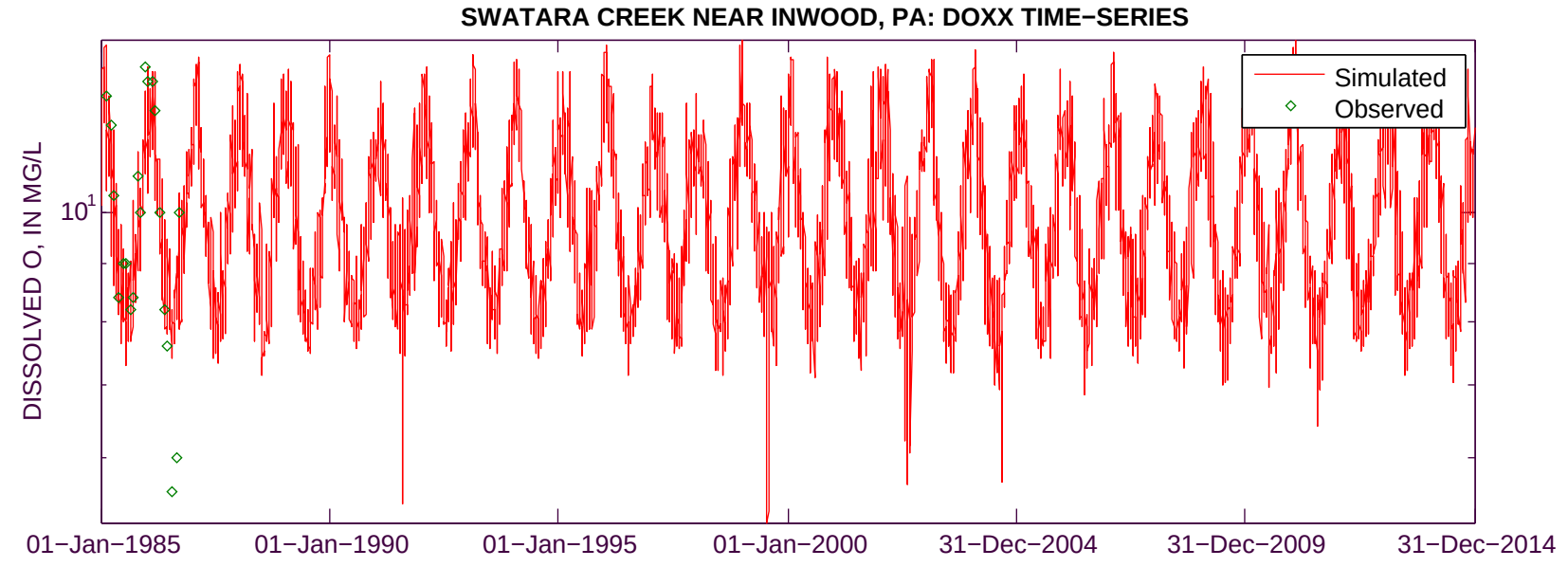
LOAD DATA
LOG10

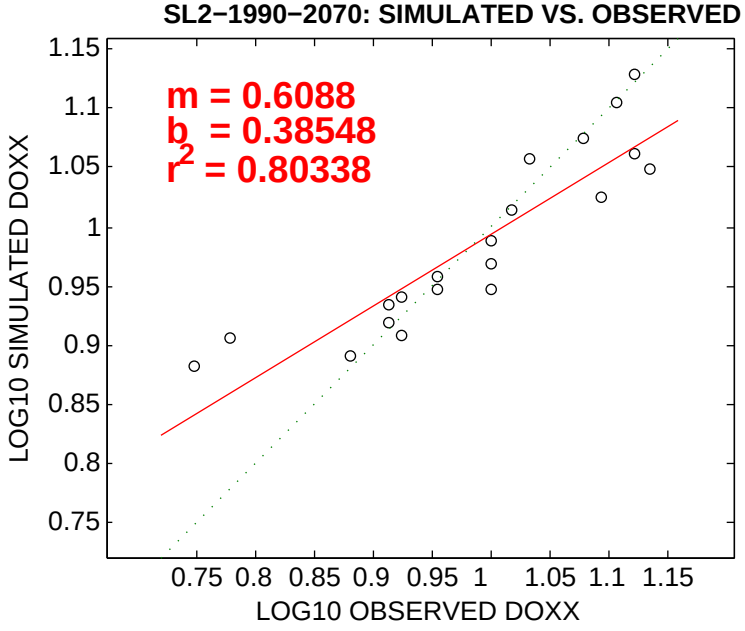


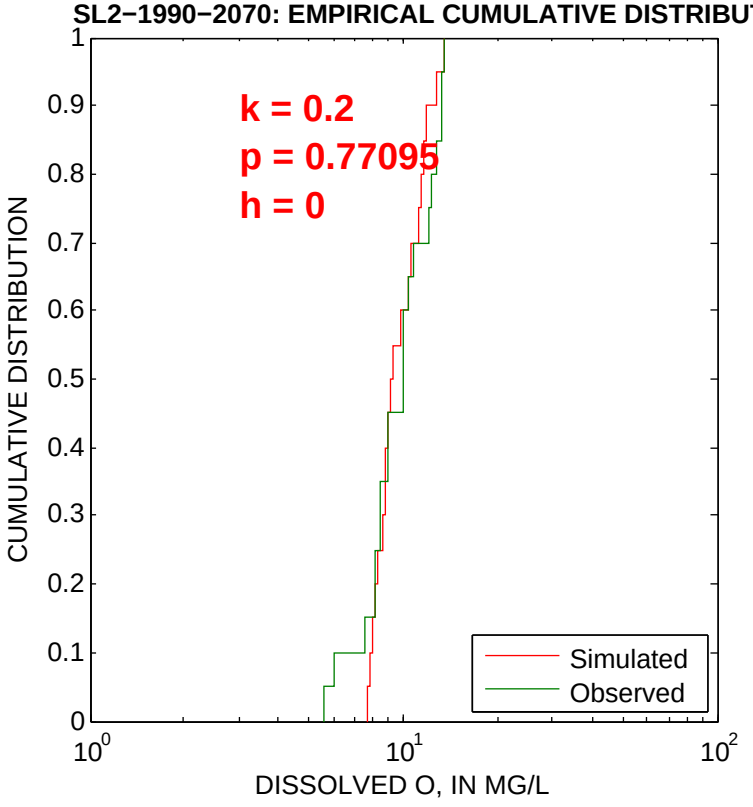












DATA SELECTION

scenario	file
P620171001WQ	DOXX.calib

plot: DOXX - dissolved oxygen

Dates 1/1/1985 12/31/201

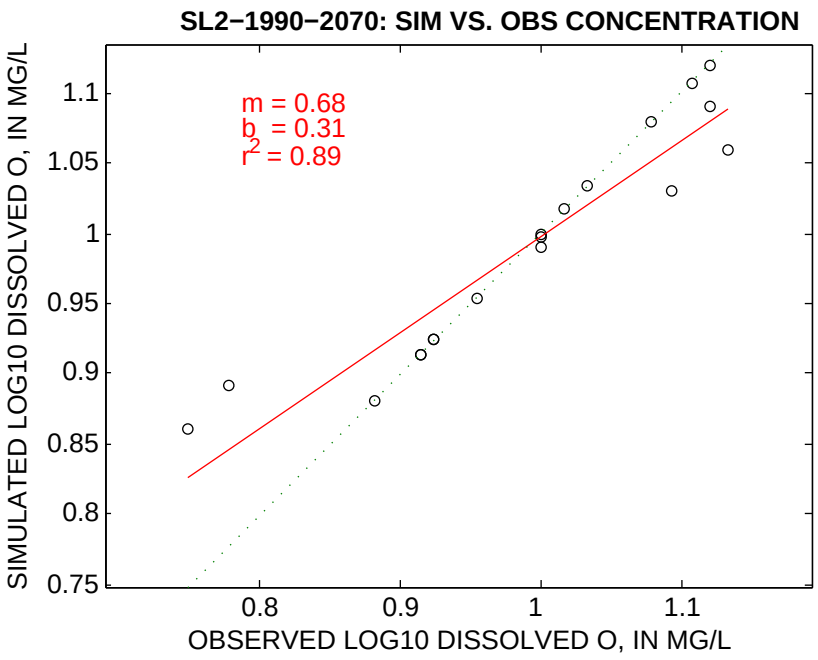
Drive	Directory	Observed
N/A	model	OBS20161101

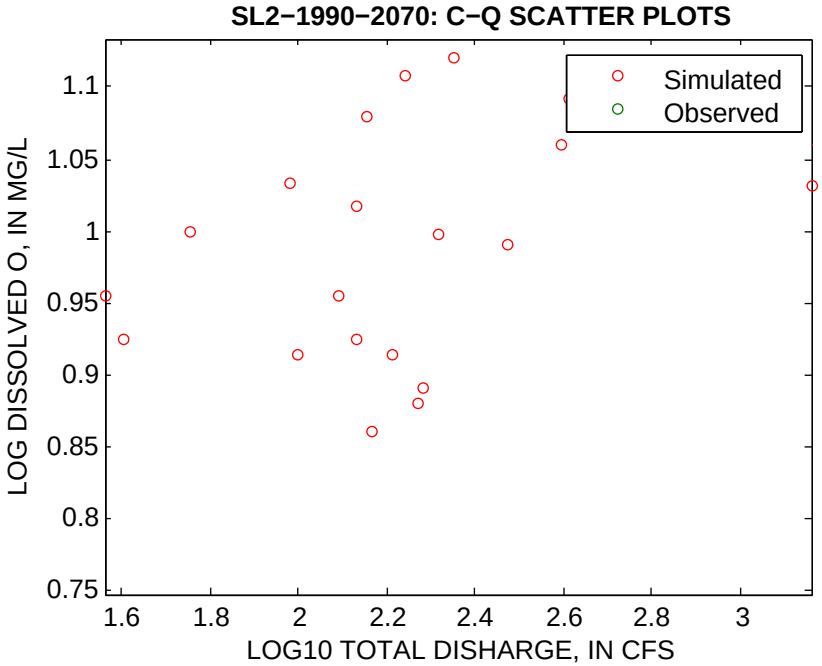
STATISTICS

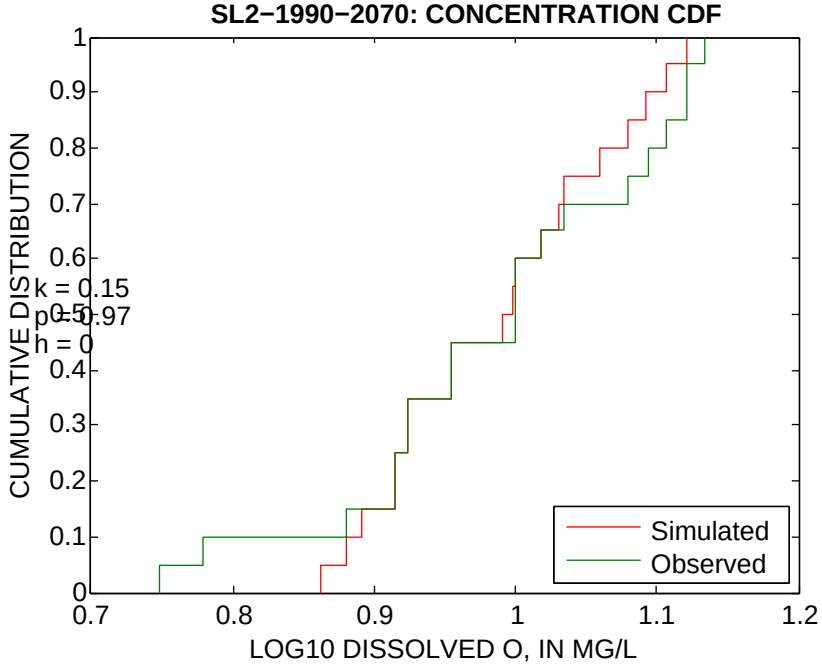
	observe	simulate
n	20	20
min	5.6	7.6343
	0.748188	0.882769
mean	9.94	9.79964
	0.984839	0.98505
media	10	9.1838
	1	0.962991
max	13.6	13.441
	1.13354	1.12843
varian	5.60463	2.98817
	0.0119765	0.00552535
JB	0.5	0.16631
	0.450507	0.23072
	ra	log
%	-1.41202	0.0213937
err.va	1.21231	0.00291922
rel.std.err	1.216306	0.243747
mod.eff	0.783694	0.756253

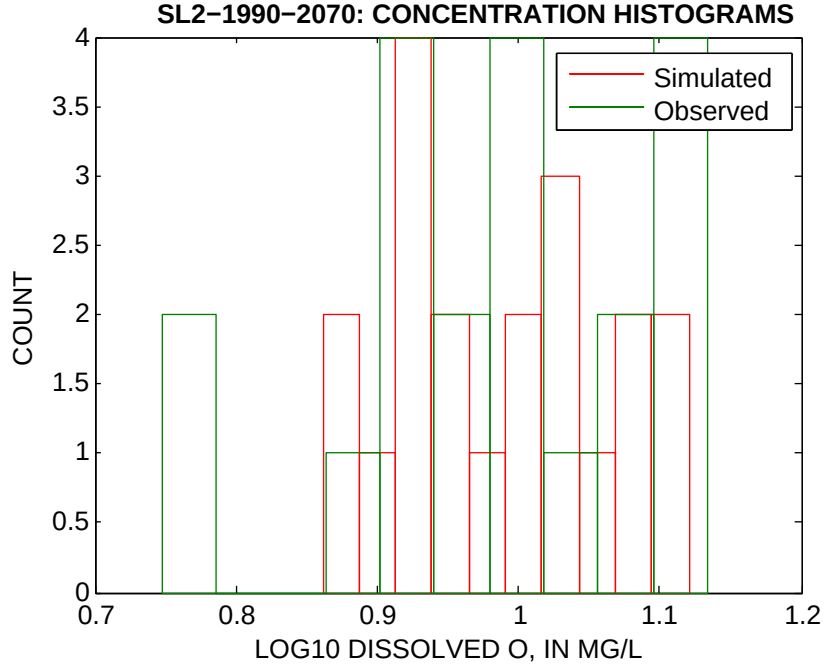
VERSION 2.1

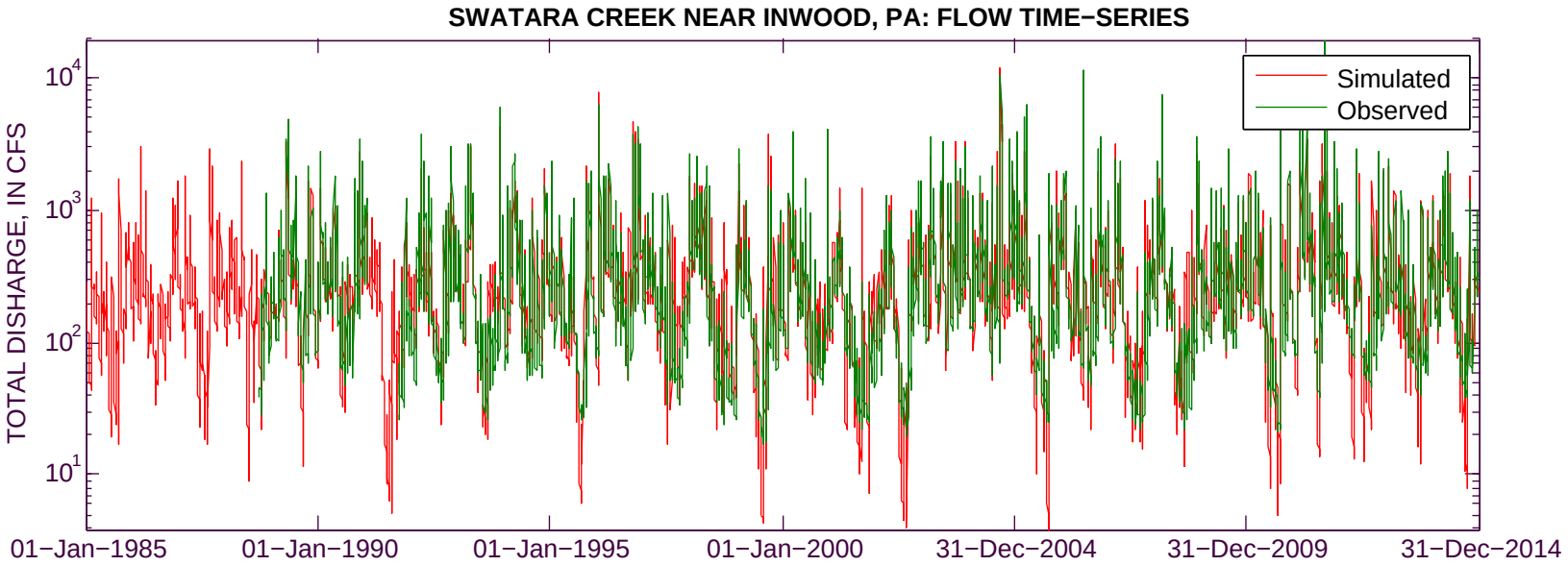
ALL DATA
LOG10

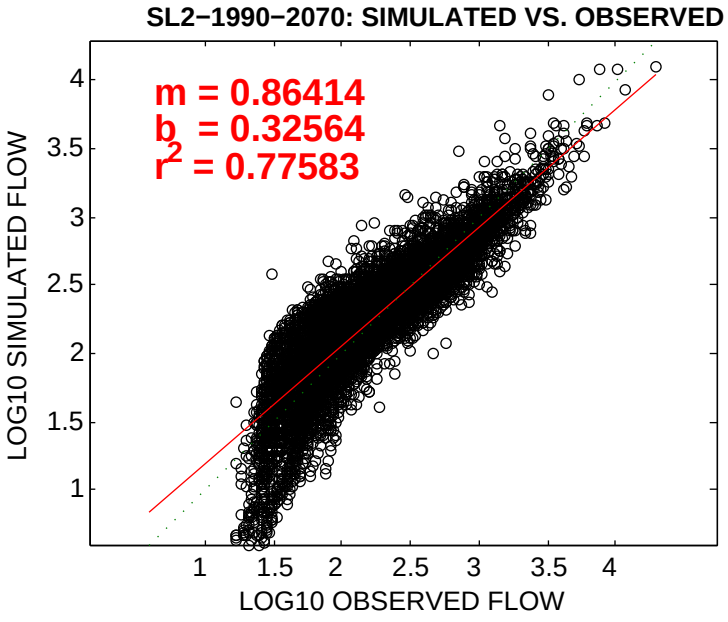


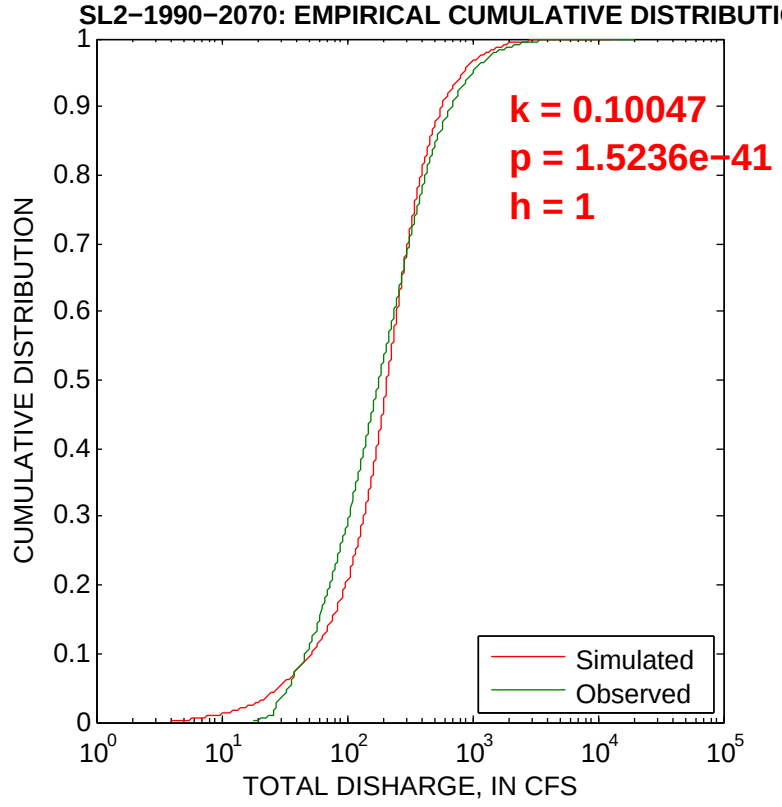












DATA SELECTION

scenario: P620171001WQ | file: FLOW.calib

plot: FLOW - total discharge

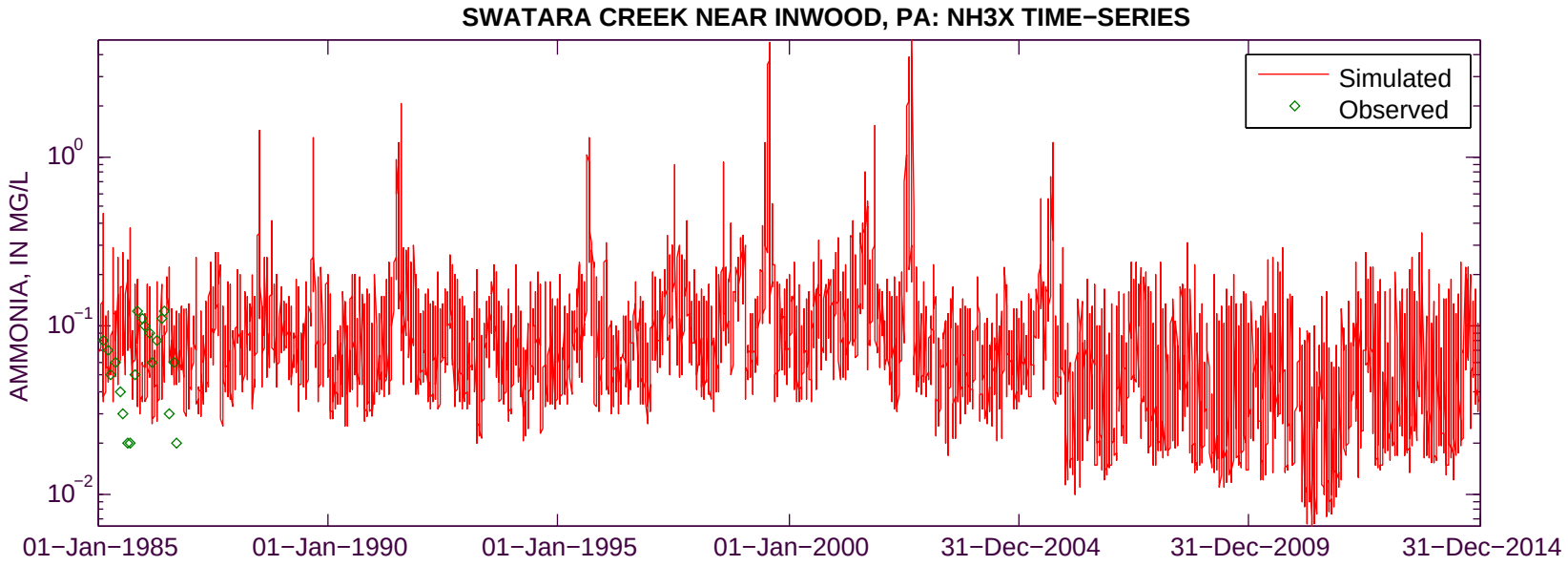
Dates: 1/1/1985 – 12/31/201

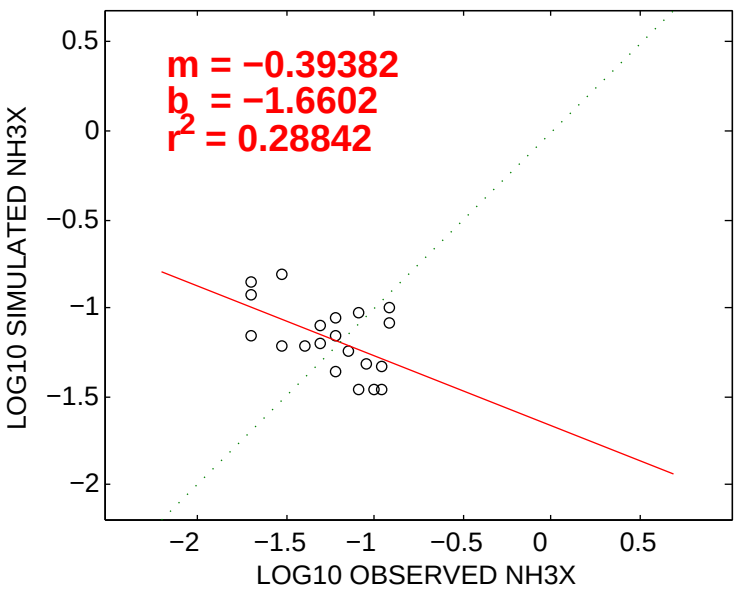
Drive: N/A | Directory: model | Observed: OBS20161101

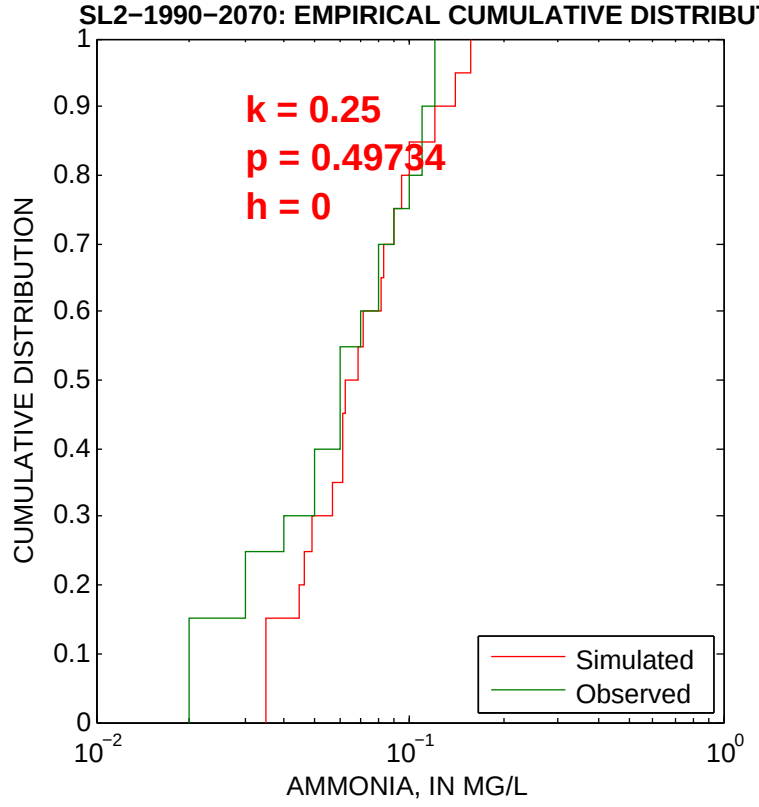
STATISTICS

	observe	simulate
n	9346	9346
min	17	3.8874
	1.23045	0.589659
mean	320.936	304.909
	2.26535	2.28322
media	182	211.38
	2.26007	2.32506
max	19600	12775
	4.29226	4.10636
varian	272614	198564
	0.19648	0.189113
JB	0.001	0.001
	0.001	0.001
	ra	log
%	-4.99379	0.789047
err.va	54301.6	0.0463399
rel.std.err	0.199188	0.235851
mod.eff	0.800812	0.764149

VERSION 2.1







DATA SELECTION

scenario	file
P620171001WQ	NH3X.calib

plot: NH3X - ammonia

Dates: 1/1/1985 – 12/31/201

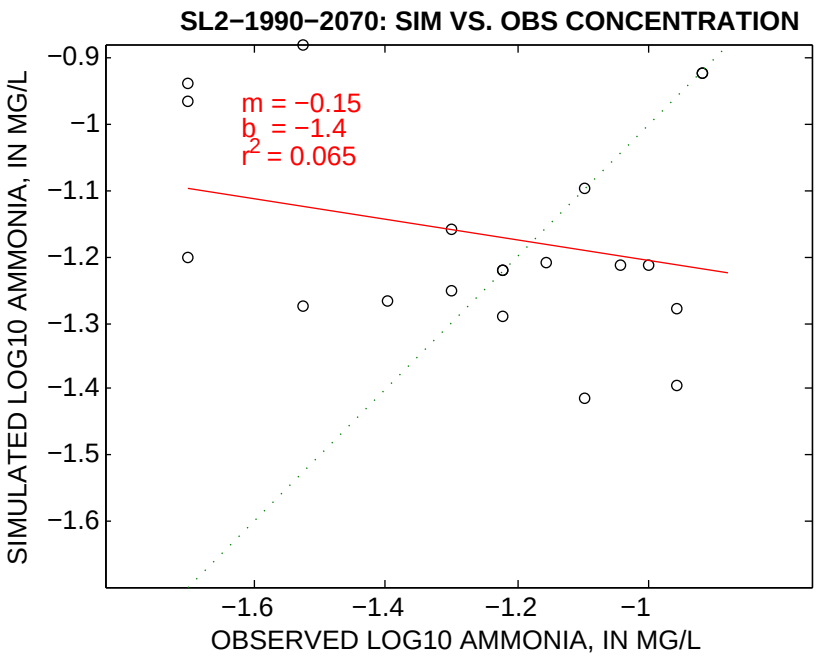
Drive	Directory	Observed
N/A	model	OBS20161101

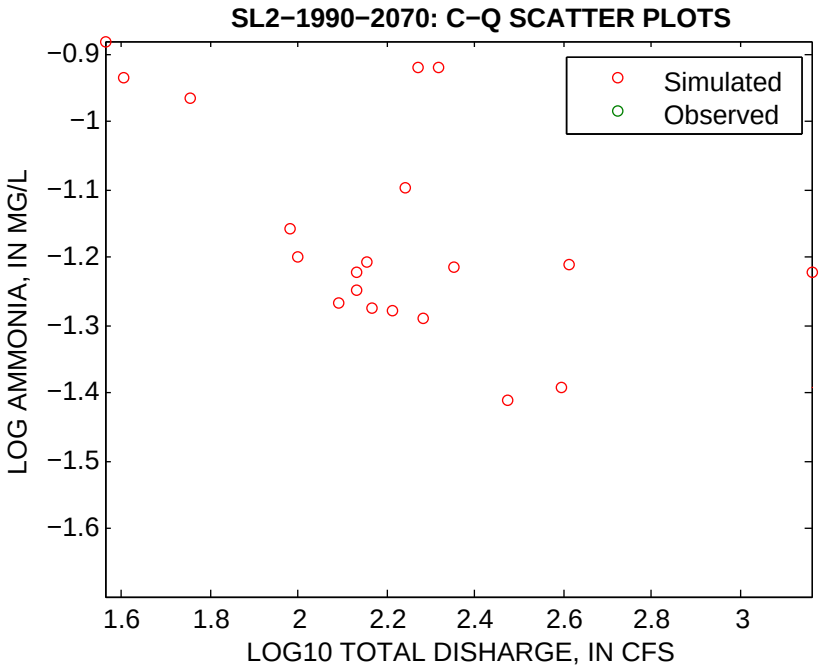
STATISTICS

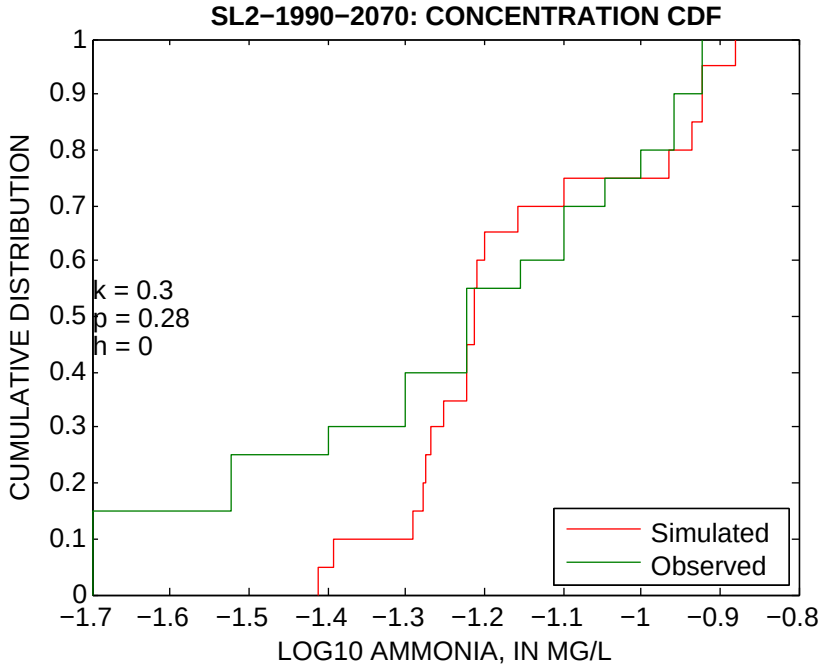
	n	20	20
		observe	simulate
min		0.02	0.034859
		-1.69897	-1.45769
mean		0.066	0.0746079
		-1.24808	-1.16869
media		0.06	0.065645
		-1.22185	-1.18334
max		0.12	0.15658
		-0.920819	-0.805264
varian		0.00116211	0.00118342
		0.0699851	0.037634
JB		0.27063	0.078490
		0.190058	0.5
		ra	log
%		13.0423	-6.36093
err.va		0.00350688	0.169377
rel.std.err		3.01769	2.42019
mod.eff		-2.01769	-1.42019

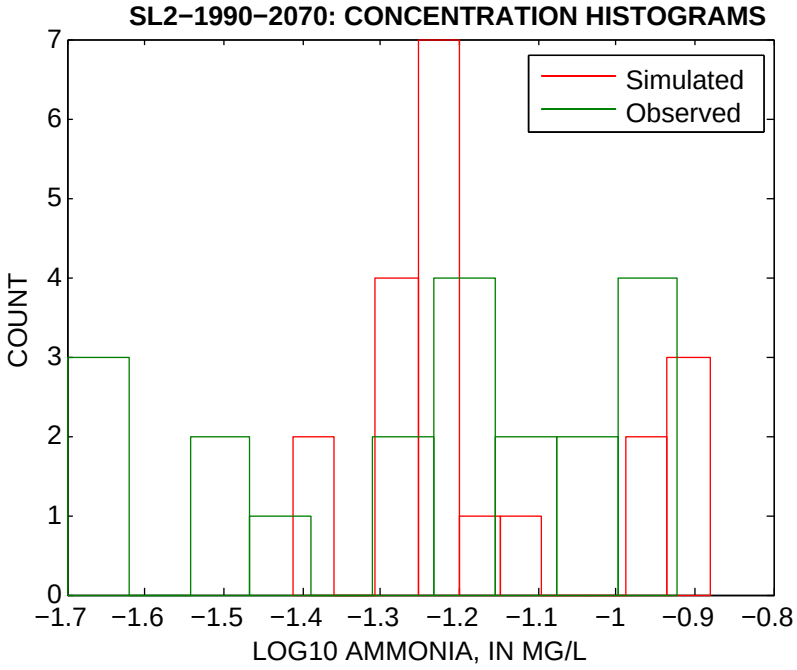
VERSION 2.1

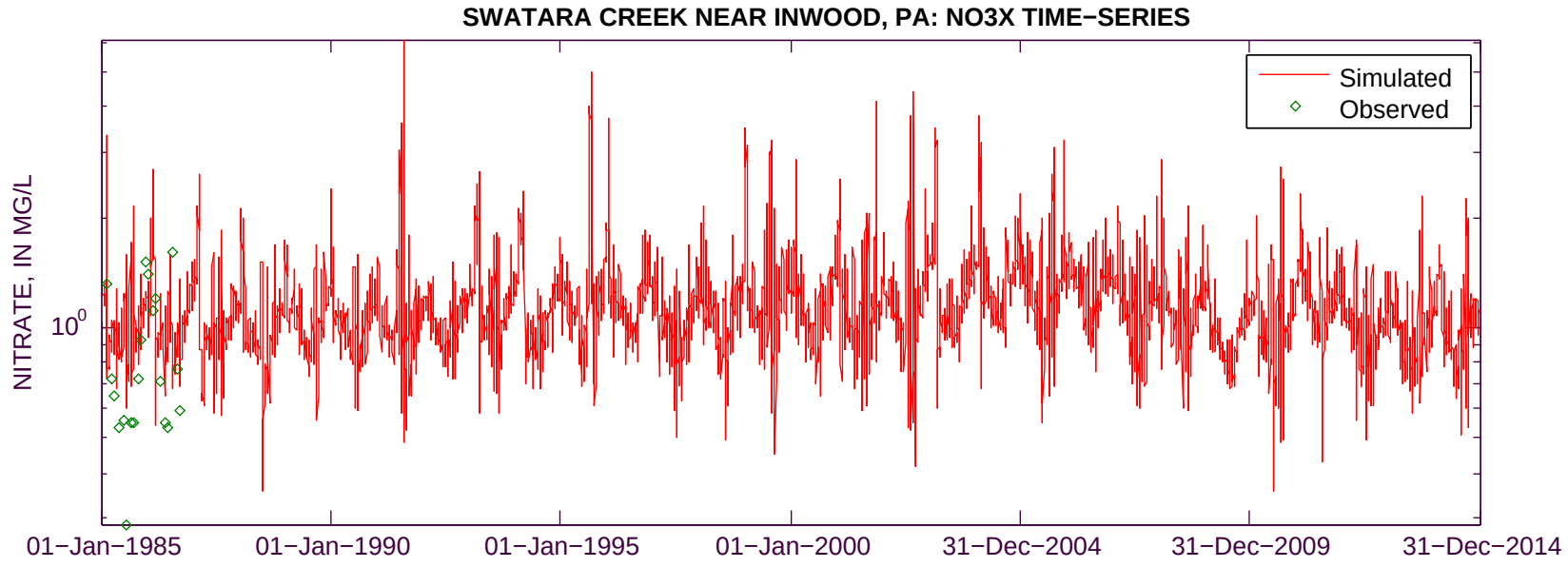
ALL DATA
LOG10

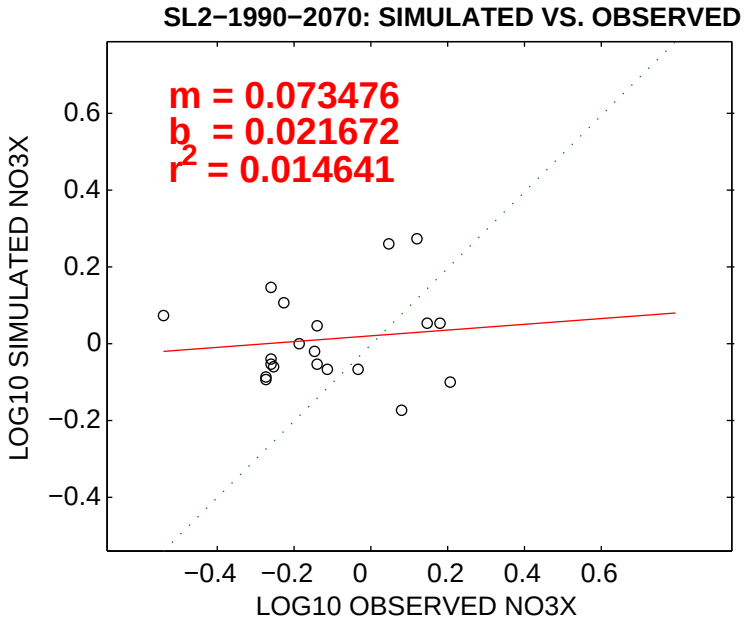


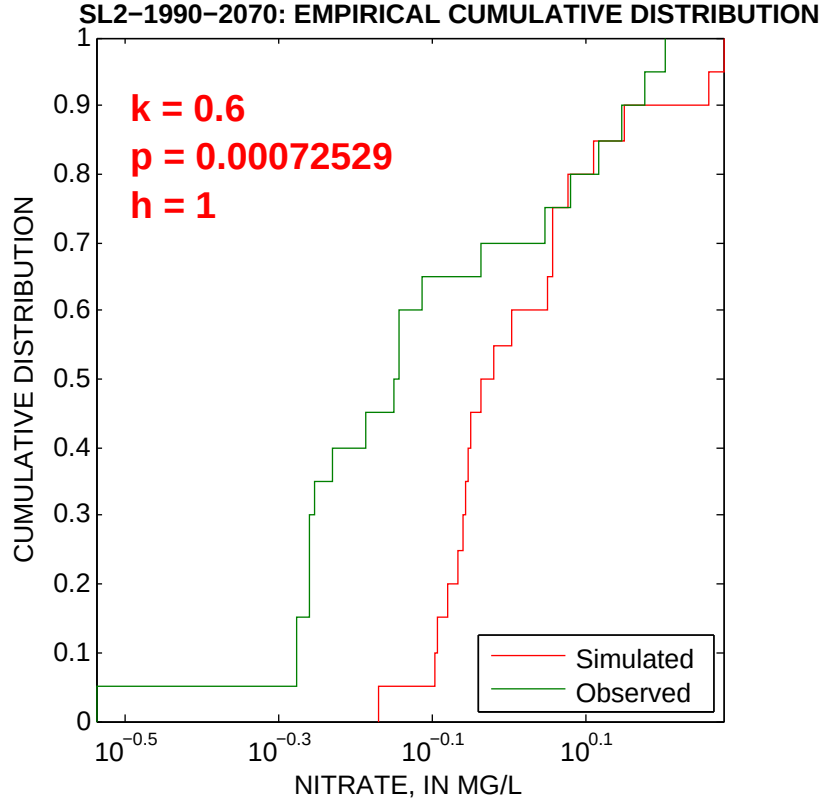












DATA SELECTION

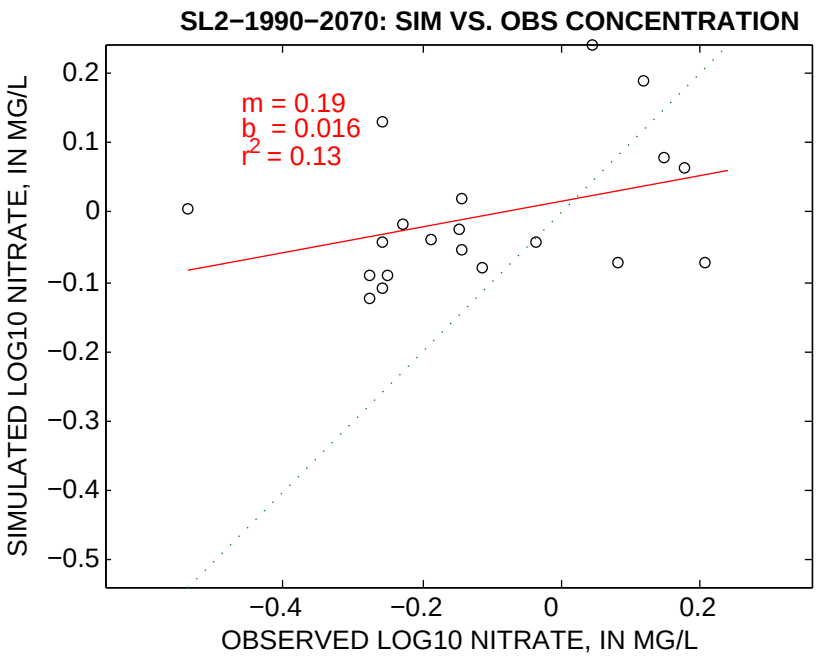
scenario: P620171001WQ
file: NO3X.calib
plot: NO3X - nitrate
Dates: 1/1/1985 – 12/31/201
Drive Directory: N/A
Observed: model
OBS20161101

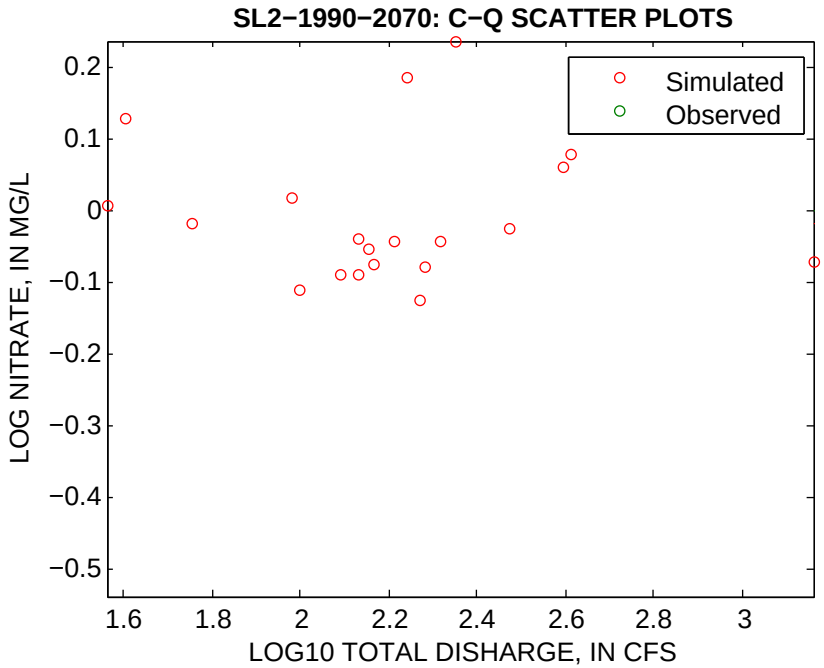
STATISTICS

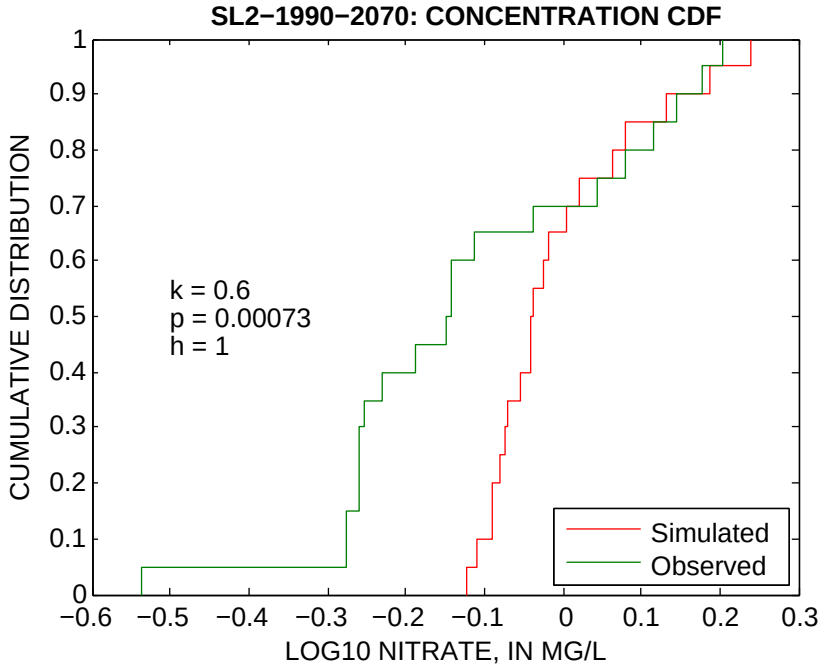
	n	20	20
		observe	simulate
min		0.29	0.67855
		-0.537602	-0.168418
mean		0.838	1.06975
		-0.117585	0.0130322
media		0.715	0.938385
		-0.145705	-0.0276788
max		1.6	1.897
		0.20412	0.278067
varian		0.143743	0.1063
		0.0374119	0.013795
JB		0.1065	0.016263
		0.5	0.086000
		ra	log
%		27.655	-111.083
err.va		0.258466	0.0636679
rel.std.err		1.79811	1.70181
mod.eff		-0.798113	-0.701809

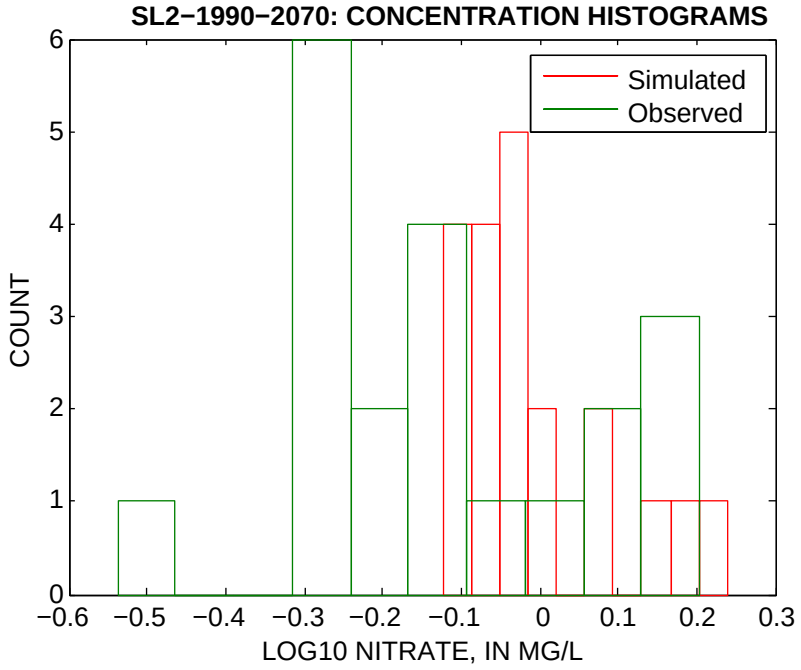
VERSION 2.1

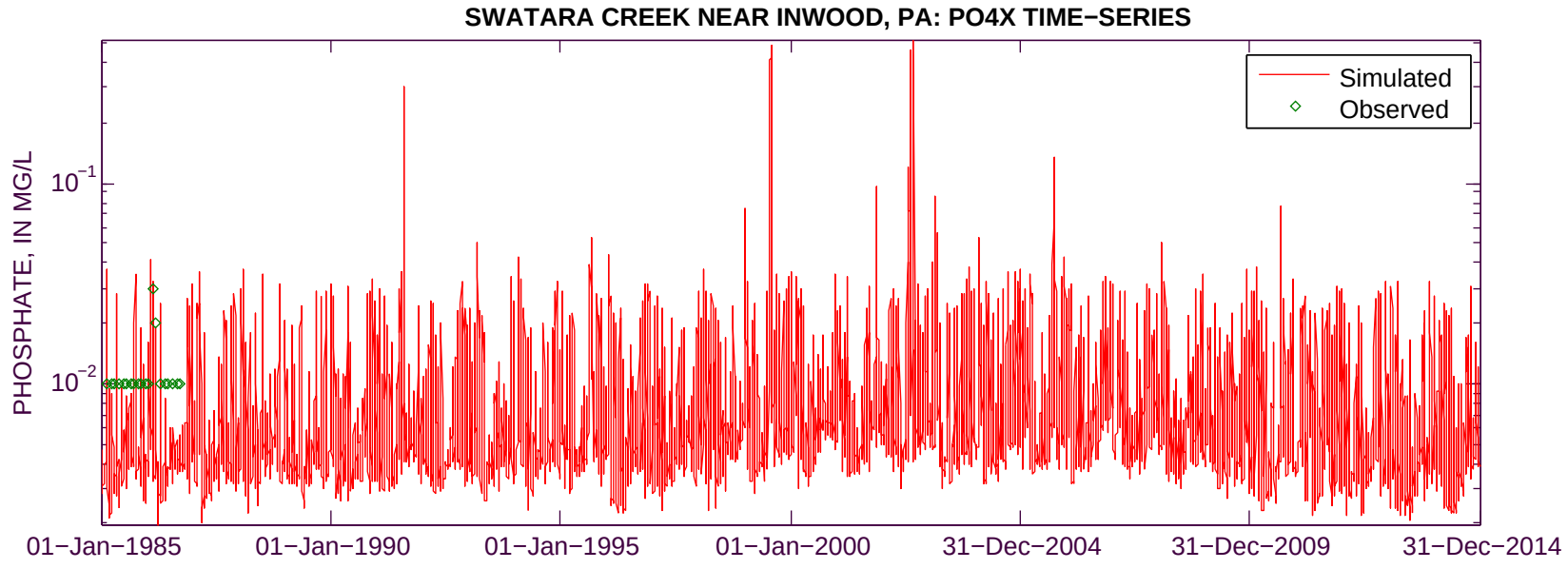
ALL DATA
LOG10

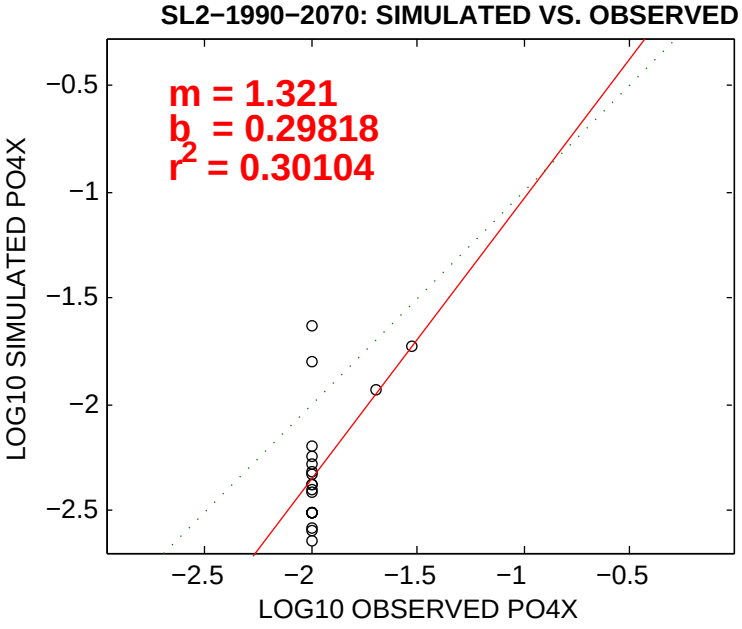


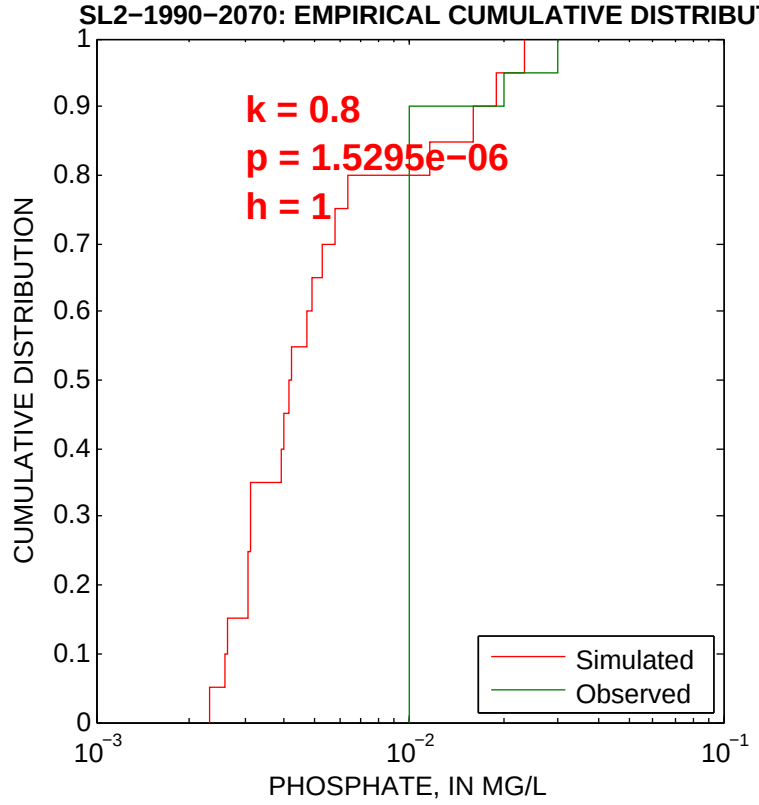












DATA SELECTION

scenario: P620171001WQ | file: PO4X.calib

plot: PO4X - phosphate

Dates: 1/1/1985 – 12/31/201

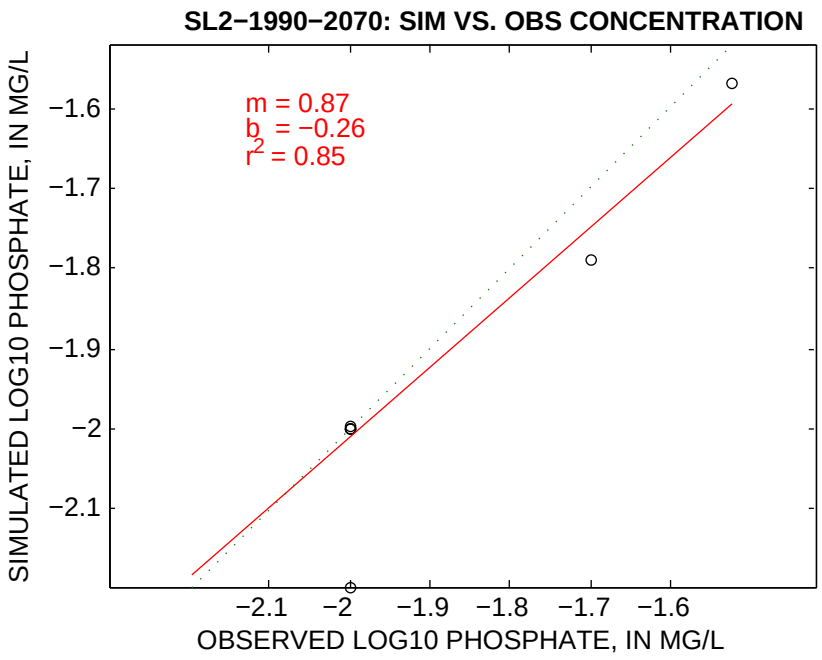
Drive: N/A | Directory: model | Observed: OBS20161101

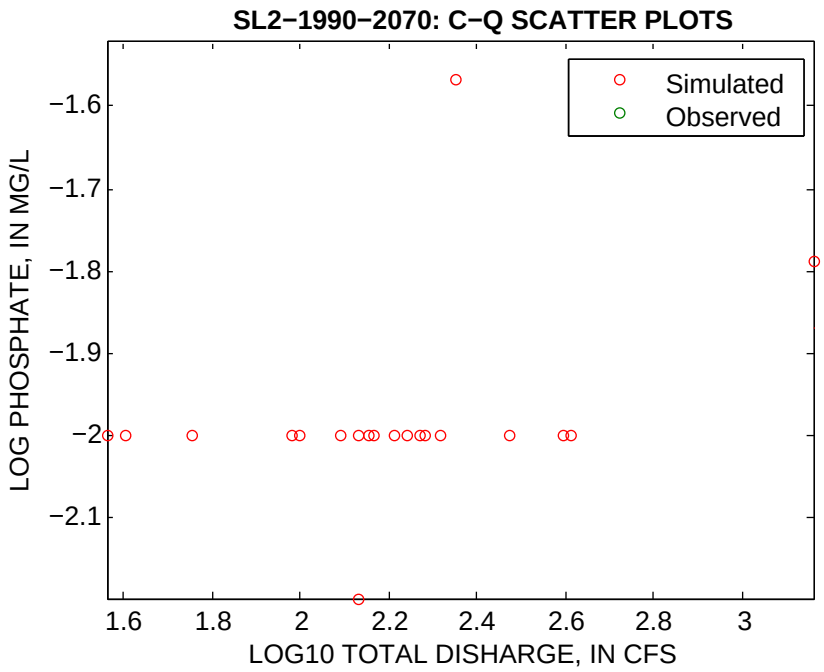
STATISTICS

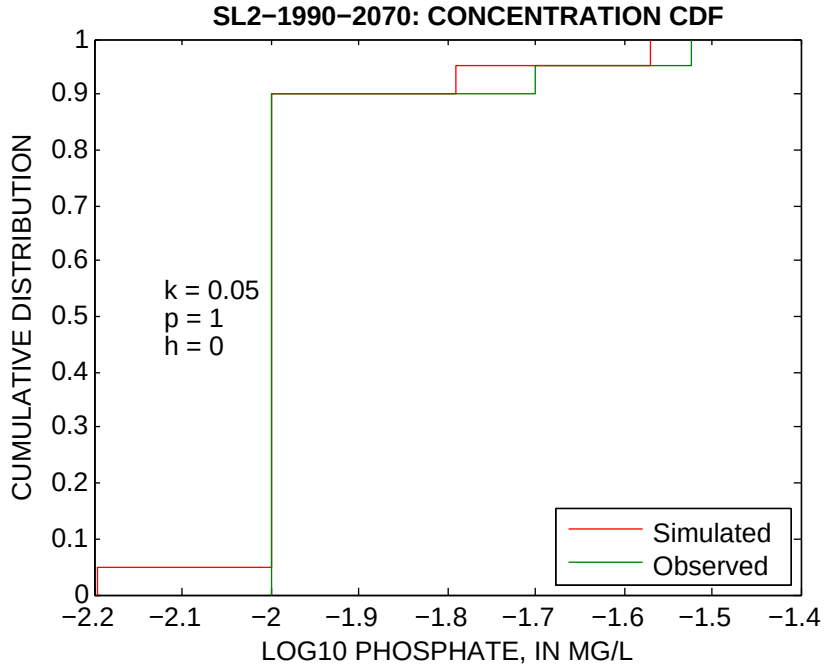
	n	20	20
		observe	simulate
min		0.01	0.0023023
		-2	-2.63784
mean		0.0115	0.0066496
		-1.96109	-2.29242
media		0.01	0.0042034
		-2	-2.37642
max		0.03	0.023202
		-1.52288	-1.63447
varian		2.39474e-0	3.56469e-0
		0.0151573	0.0878629
JB		0.001	0.005880
		0.001	0.053556
		ra	log
%		-42.1774	16.895
err.va		5.31366e-0	0.17853
rel.std.err		2.21889	11.7785
mod.eff		-1.21889	-10.7785

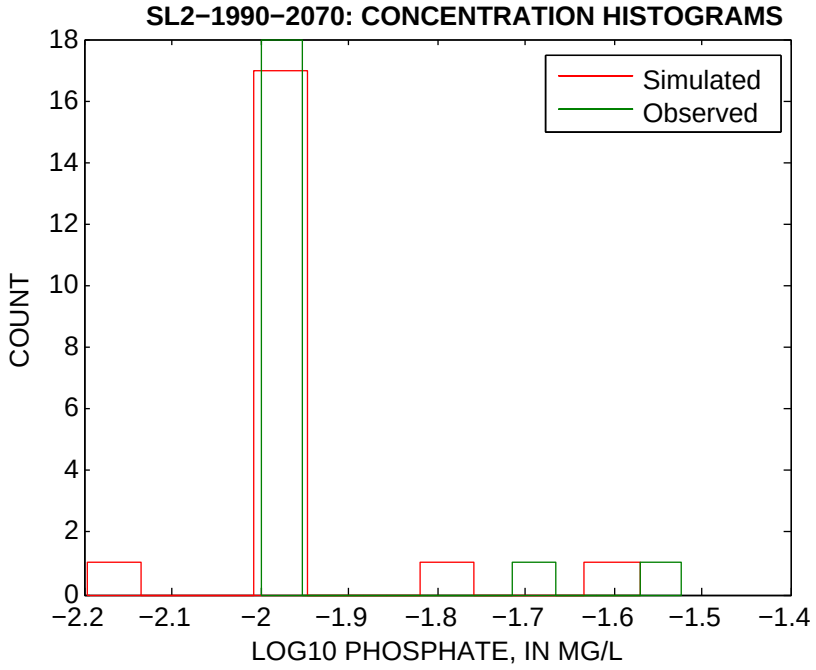
VERSION 2.1

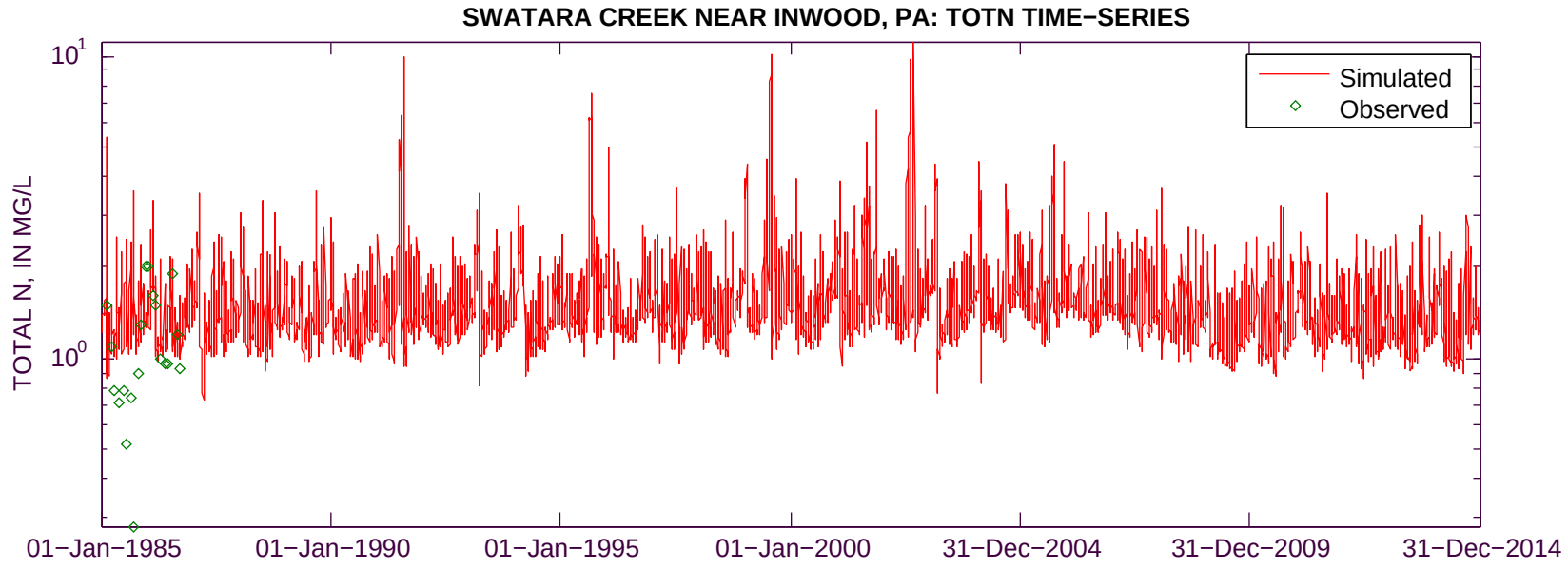
ALL DATA
LOG10

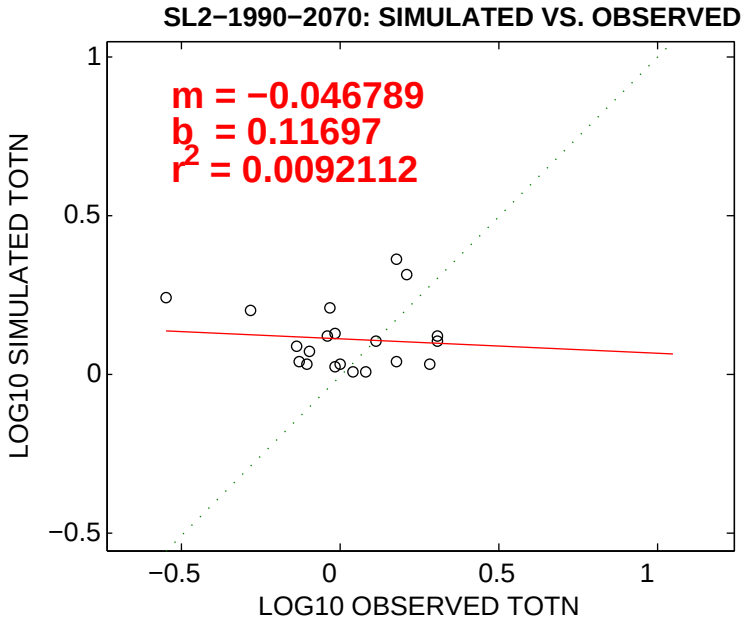


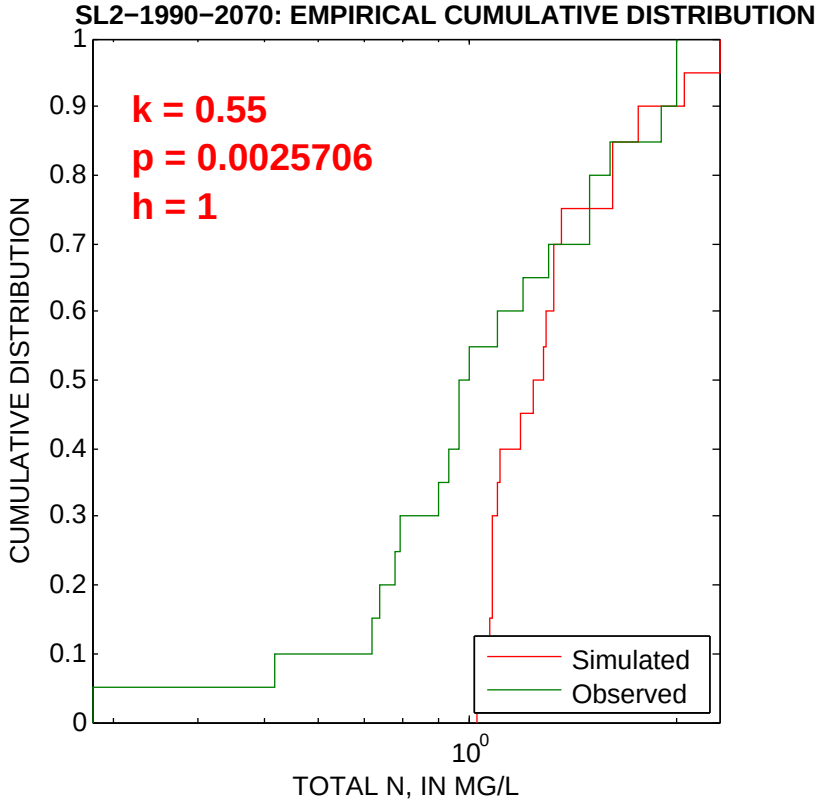












DATA SELECTION

scenario	file
P620171001WQ	TOTN.calib

plot: TOTN - total nitrogen

Dates: 1/1/1985 – 12/31/201

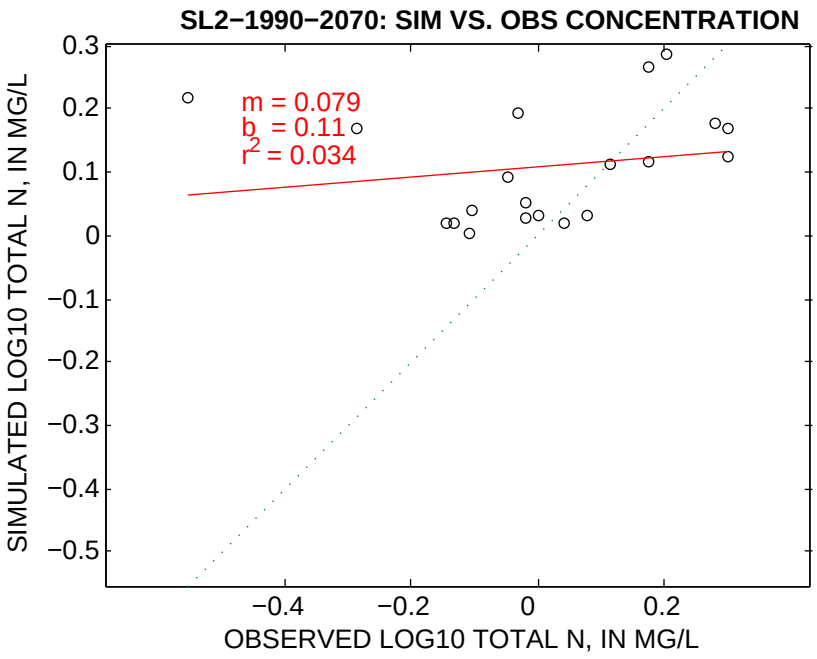
Drive	Directory	Observed
N/A	model	OBS20161101

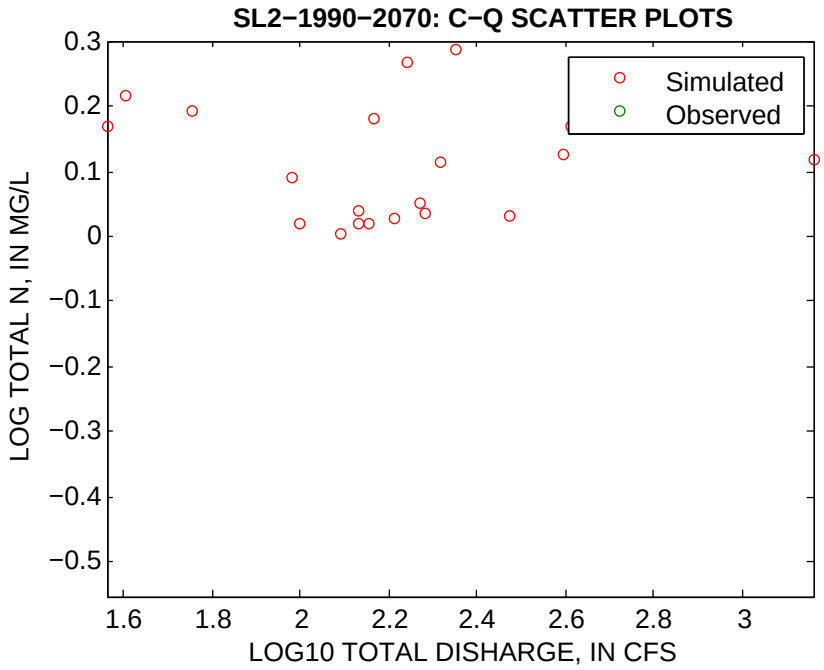
STATISTICS

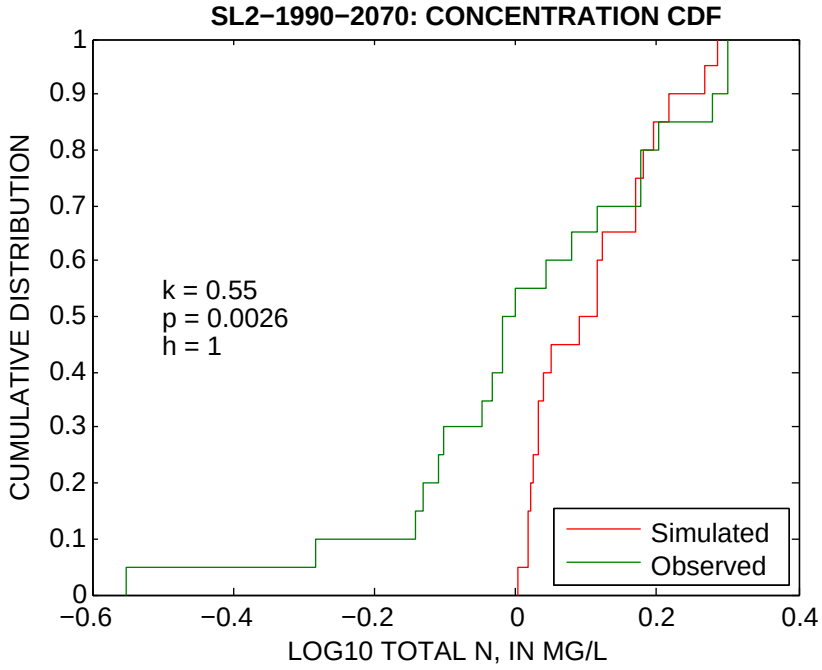
	n	20	20
		observe	simulate
min		0.28	1.0235
		-0.552842	0.0100878
mean		1.134	1.34487
		0.0119174	0.116409
media		0.98	1.256
		-0.0088643	0.0989323
max		2	2.3097
		0.30103	0.363556
varian		0.234541	0.126674
		0.0437016	0.0103867
JB		☑ 0.468226	0.014693
		☑ 0.085536	0.051071 ☑
		ra	log
%		18.5957	876.794
err.va		0.396476	0.069671
rel.std.err		1.69043	1.59424
mod.eff		-0.690435	-0.594242

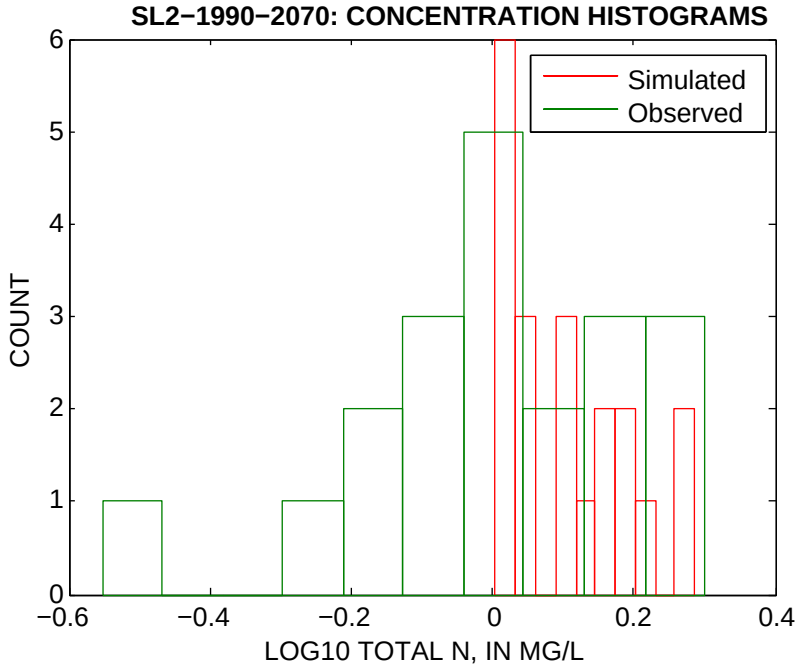
VERSION 2.1

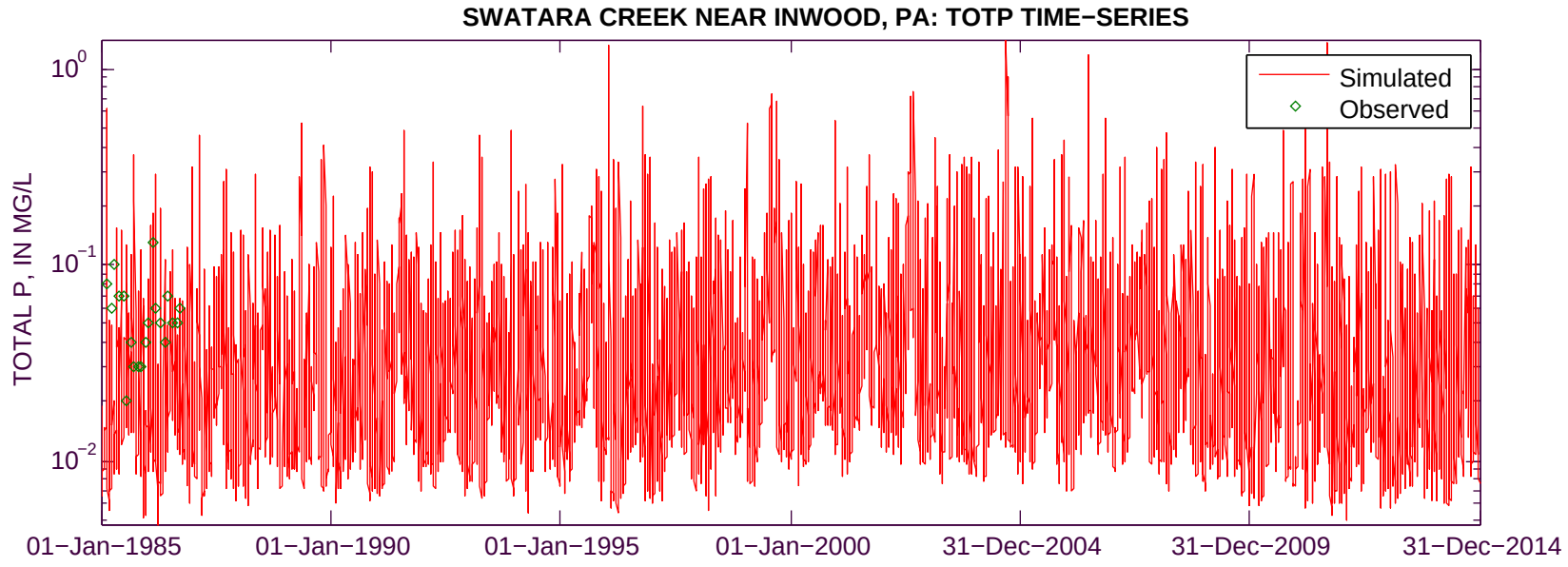
ALL DATA
LOG10

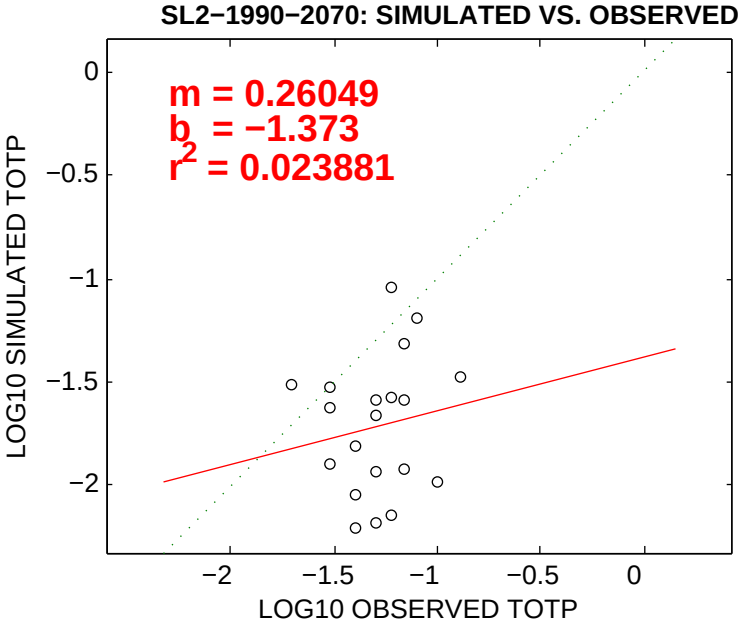


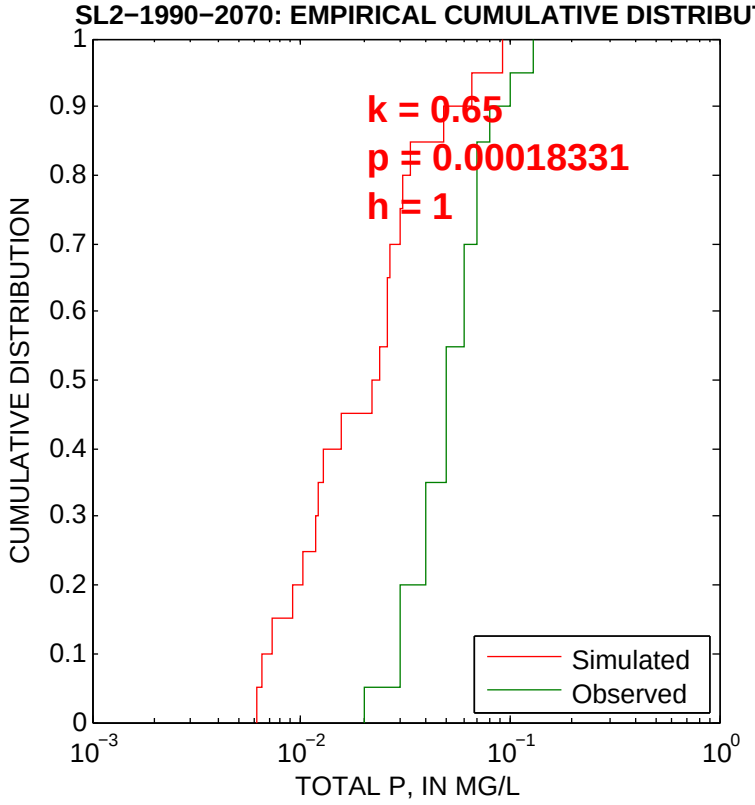












DATA SELECTION

scenario	file
P620171001WQ	TOTP.calib

plot: TOTP - total phosphorus

Dates: 1/1/1985 – 12/31/201

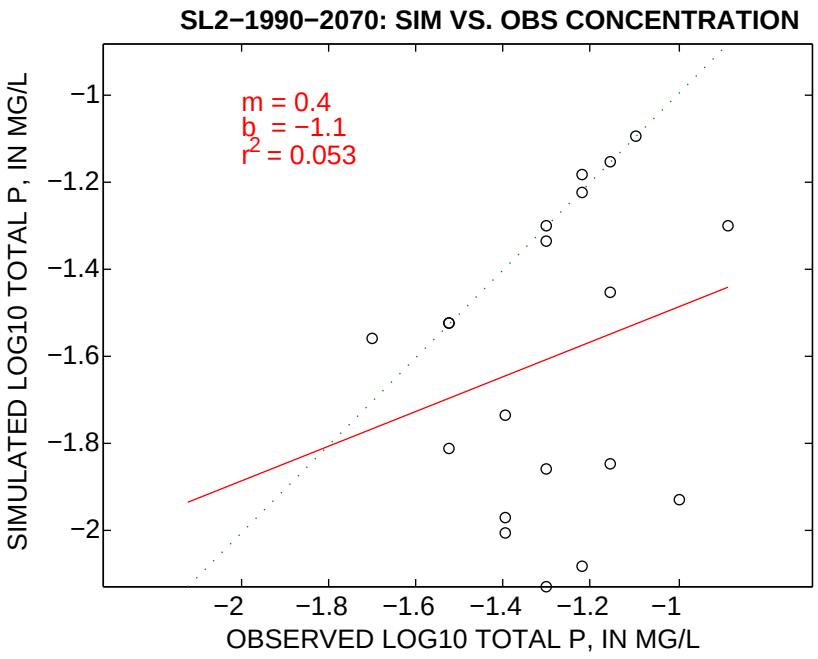
Drive	Directory	Observed
N/A	model	OBS20161101

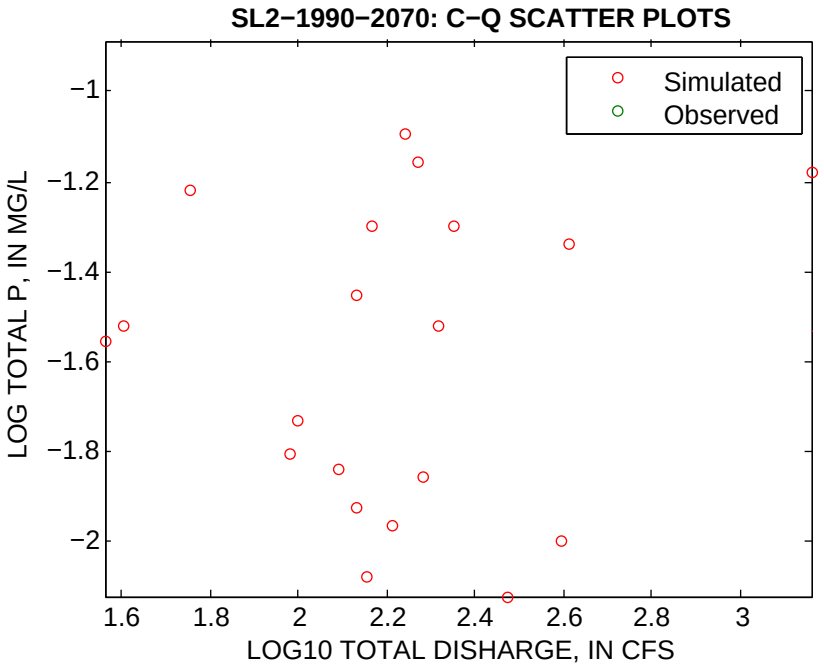
STATISTICS

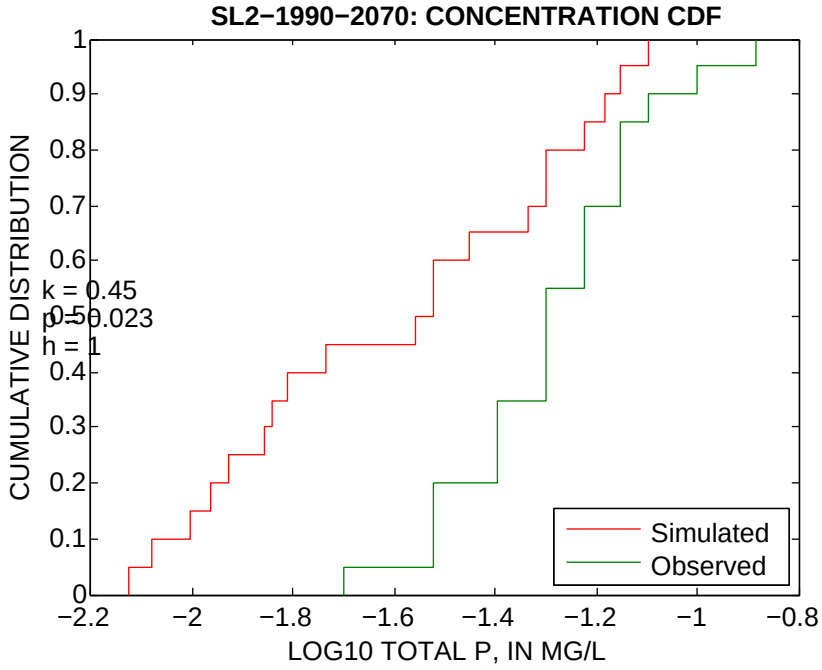
	n	20	20
		observe	simulate
min		0.02	0.0062147
		-1.69897	-2.20658
mean		0.0565	0.0257831
		-1.28894	-1.70876
media		0.05	0.022921
		-1.30103	-1.64004
max		0.13	0.091821
		-0.886057	-1.03706
varian		0.00067657	0.00046371
		0.0378218	0.107471
JB		0.022555	0.003135
		0.5	0.5
		ra	log
%		-54.3662	32.5711
err.va		0.0018981	0.311115
rel.std.err		2.80544	8.22582
mod.eff		-1.80544	-7.22582

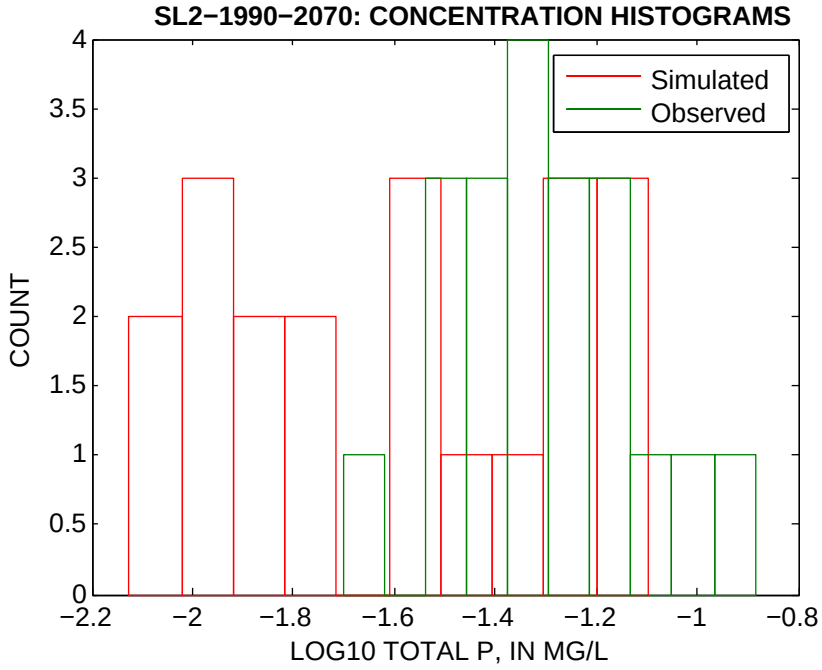
VERSION 2.1

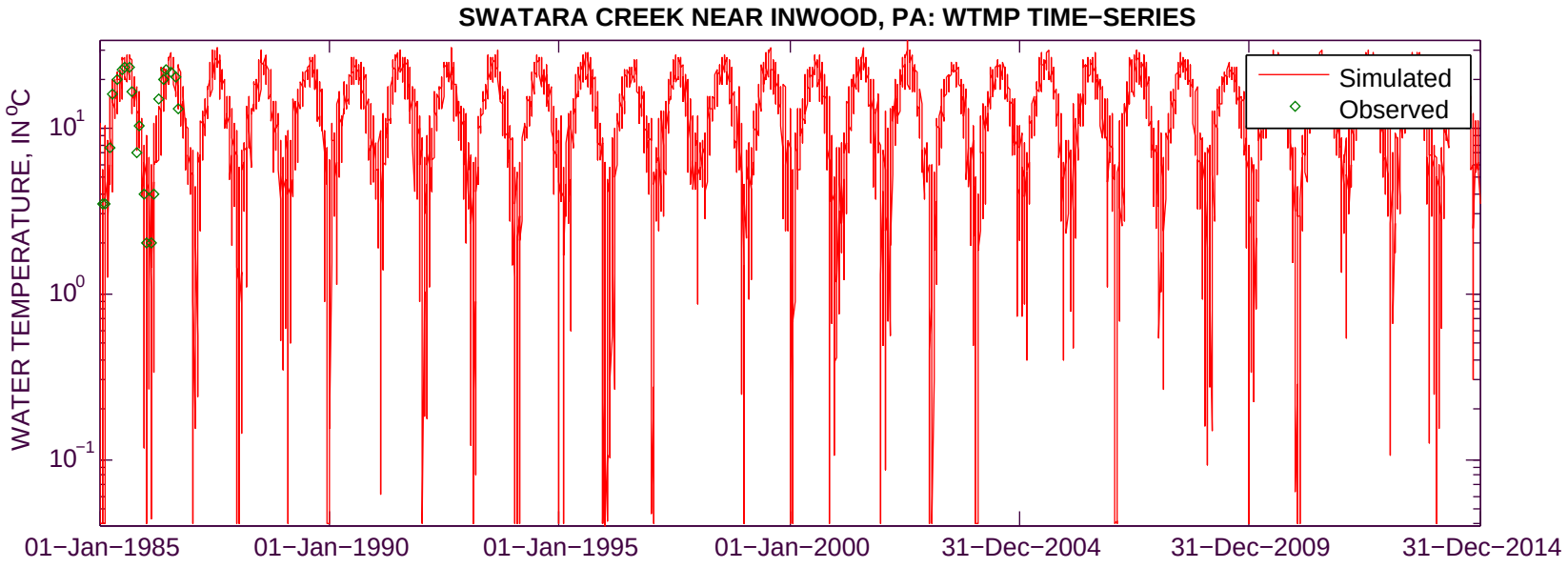
ALL DATA
LOG10

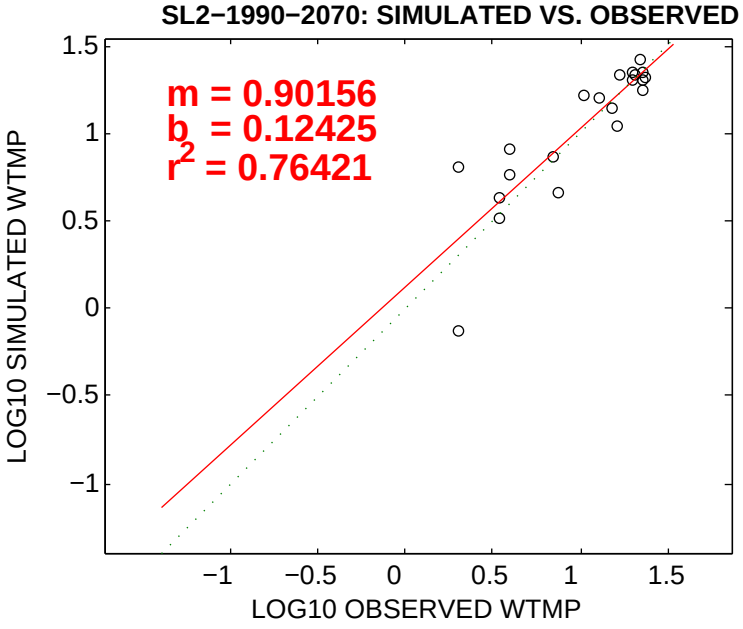


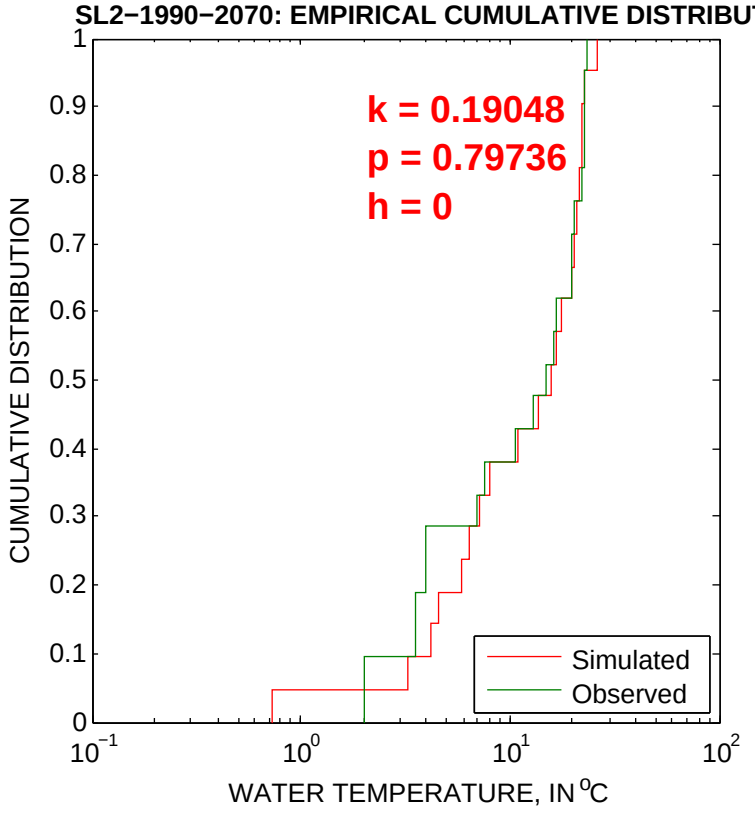












DATA SELECTION

scenario	file
P620171001WQ	WTMP.calib

plot: WTMP - water tempera...

Dates 1/1/1985 12/31/201

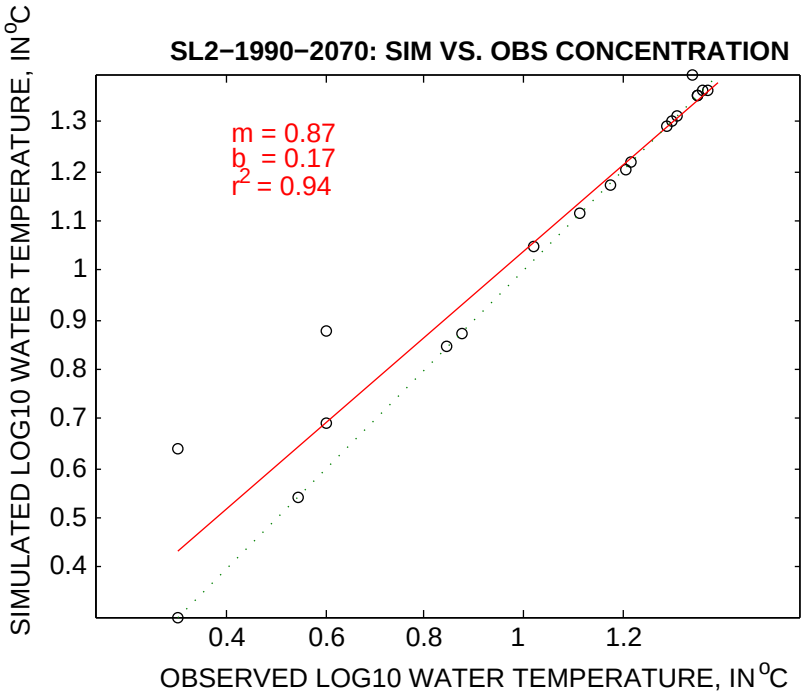
Drive	Directory	Observed
N/A	model	OBS20161101

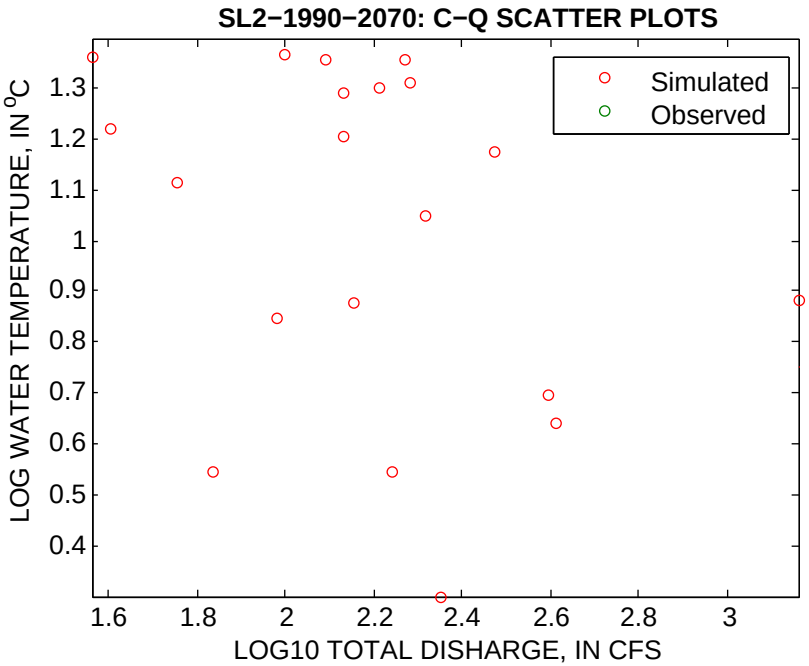
STATISTICS

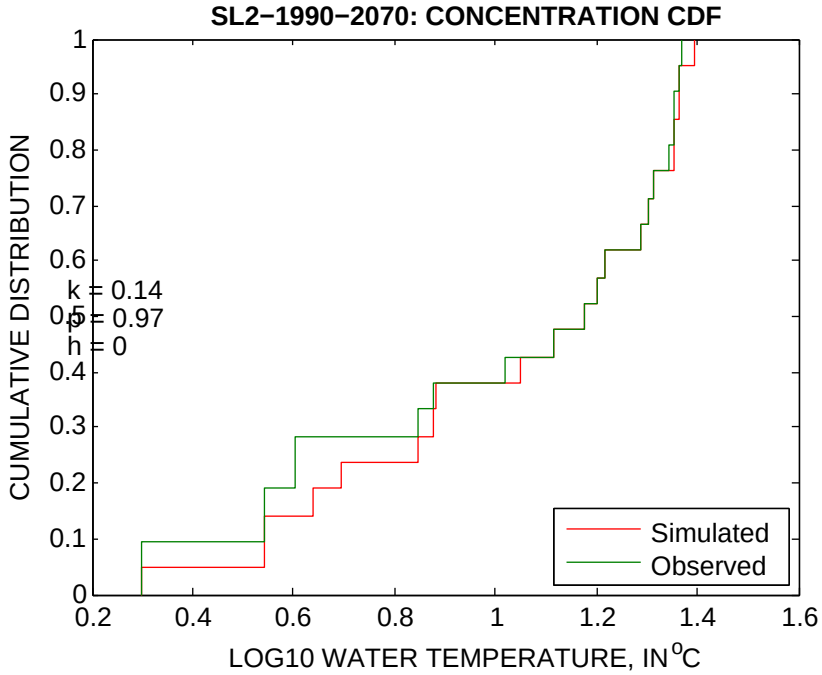
	n	21	21
		observe	simulate
min		2	0.73926
		0.30103	-0.131203
mean		13.2381	13.8201
		1.00141	1.02708
media		15	15.799
		1.17609	1.19863
max		23.5	26.31
		1.37107	1.42012
varian		65.0155	61.8185
		0.139417	0.148282
JB		0.109897	0.153576
		0.093756	0.010701
		ra	log
%		4.39664	2.56327
err.va		11.0899	0.037006
rel.std.err		0.170572	0.265435
mod.eff		0.829428	0.734565

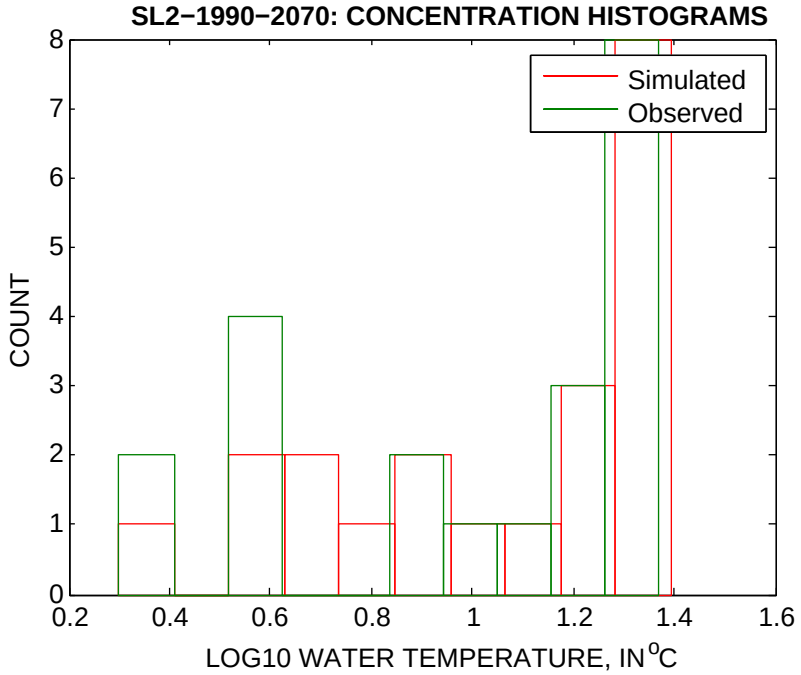
VERSION 2.1

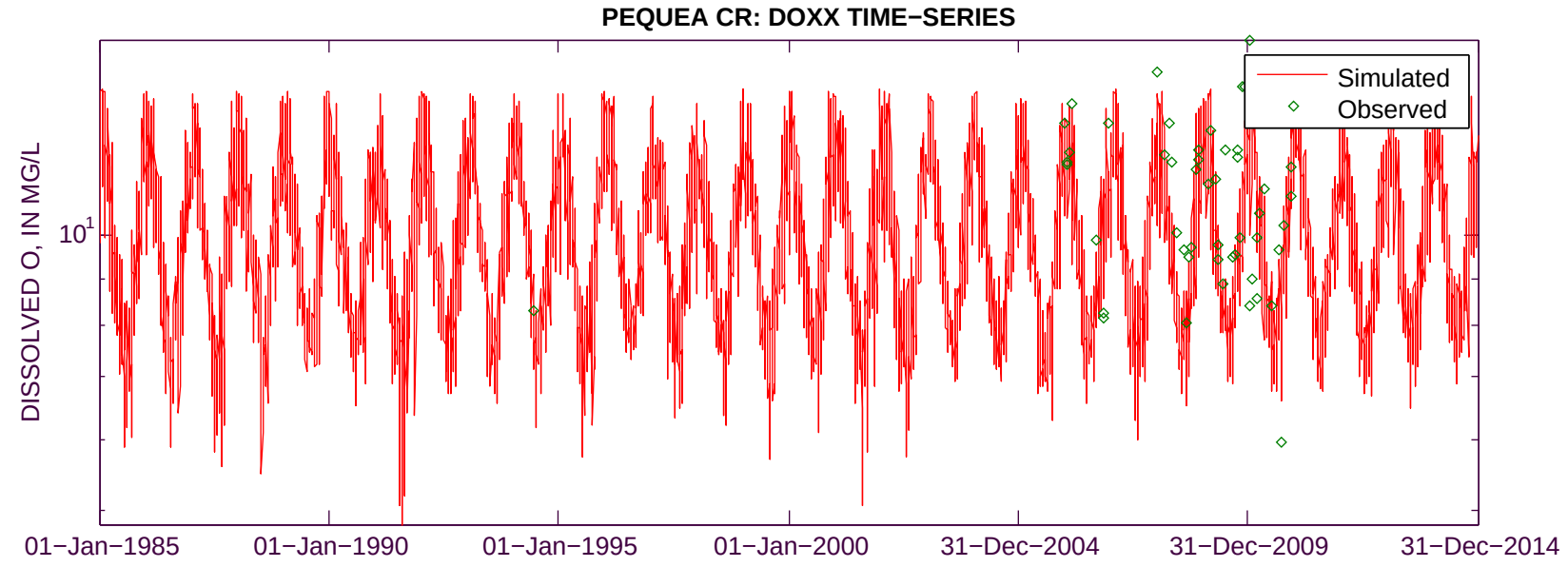
ALL DATA
LOG10

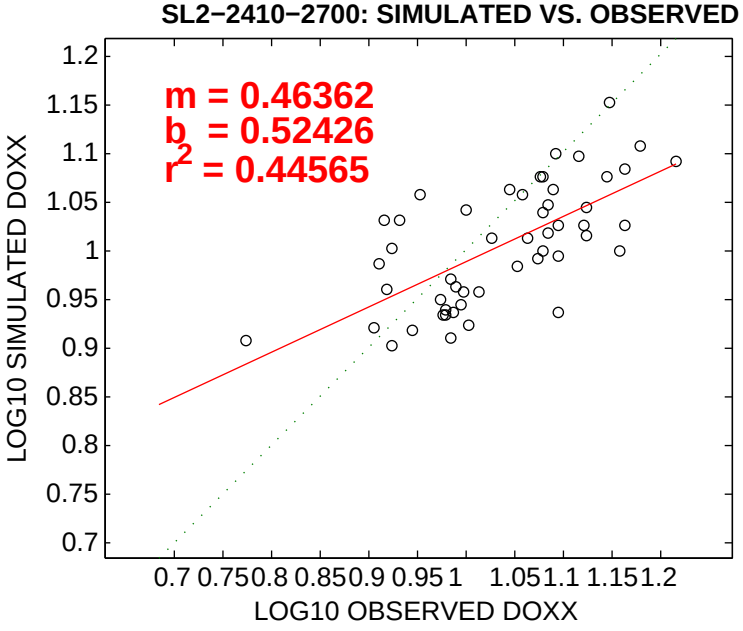


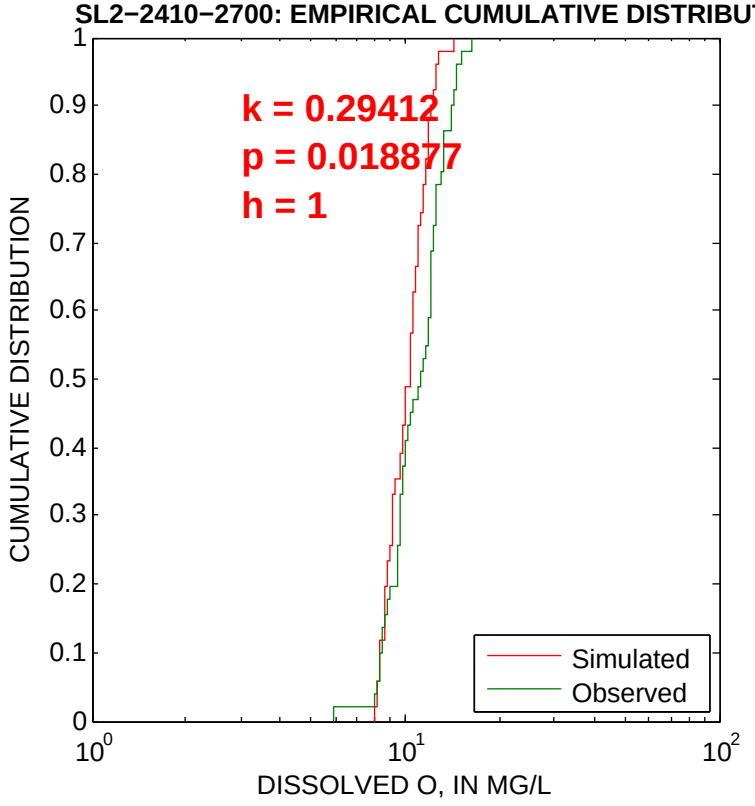












DATA SELECTION

scenario	file
P620171001WQ	DOXX.calib

plot: DOXX - dissolved oxygen

Dates: 1/1/1985 – 12/31/201

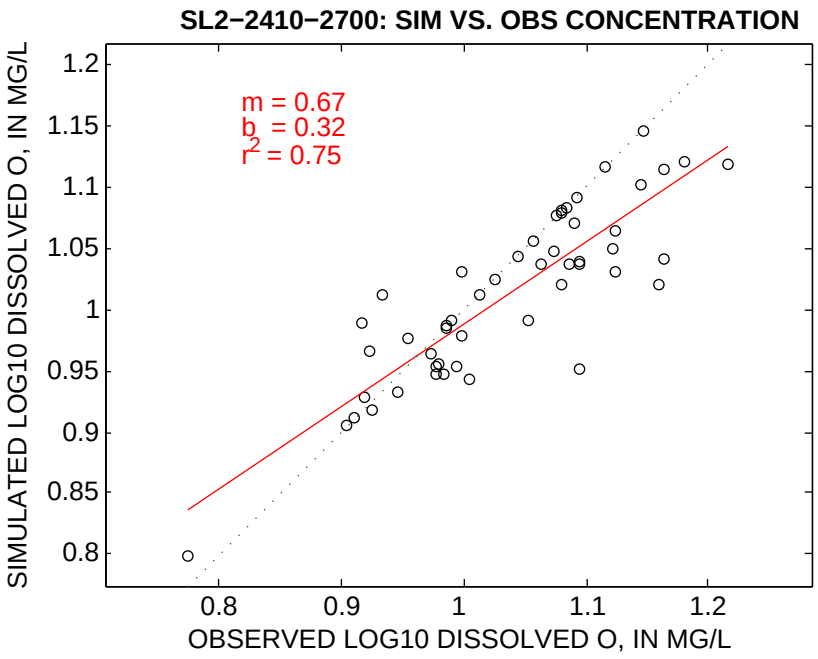
Drive	Directory	Observed
N/A	model	OBS20161101

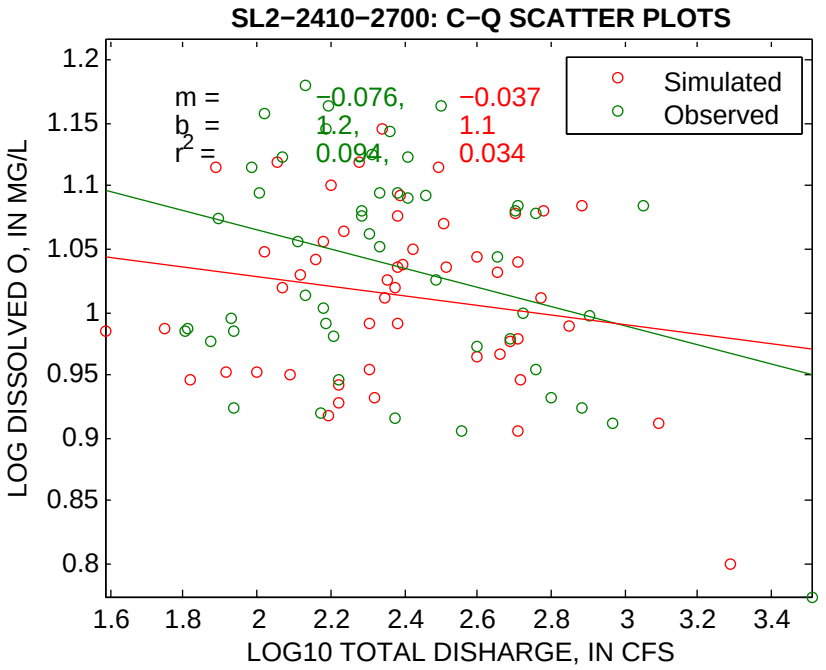
STATISTICS

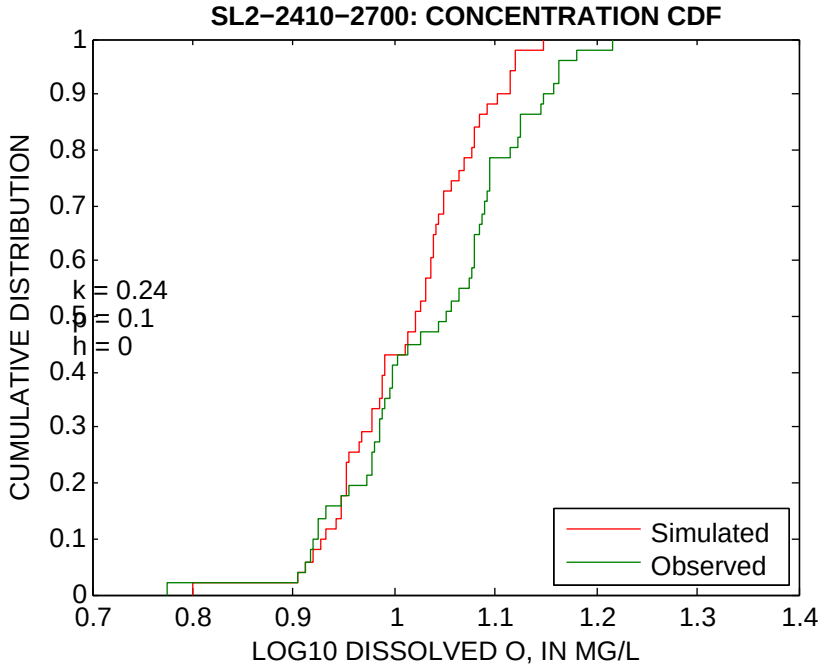
	n	51	51
		observe	simulate
min		5.95	8.0007
		0.774517	0.903128
mean		11.1159	10.2203
		1.03724	1.00514
media		11.28	10.304
		1.05231	1.01301
max		16.44	14.175
		1.2159	1.15152
varian		4.89878	2.14886
		0.00789833	0.00380938
JB		0.5	0.264733
		0.5	0.291895
		ra	log
%		-8.05657	-3.09409
err.va		3.49018	0.00543469
rel.std.err		0.712459	0.688082
mod.eff		0.287541	0.311918

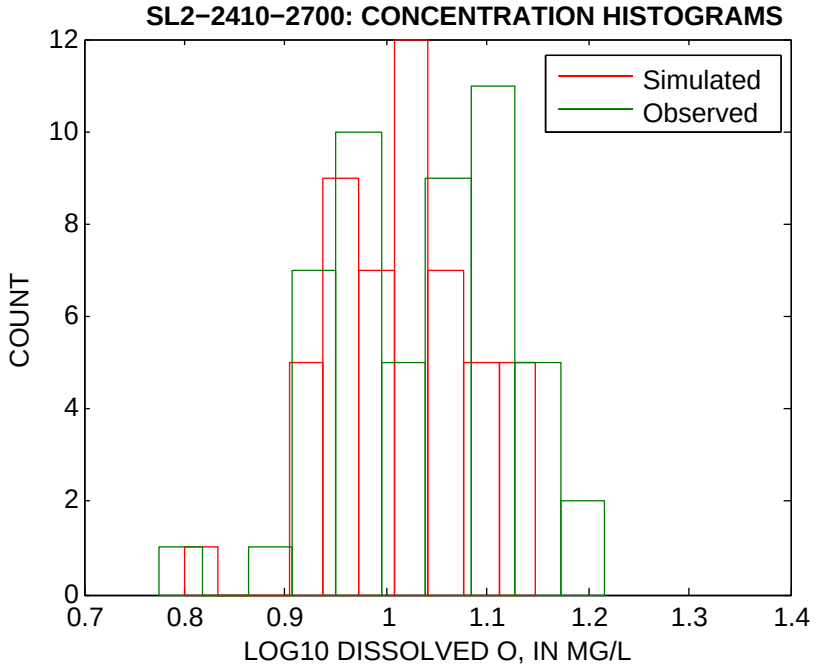
VERSION 2.1

ALL DATA
LOG10

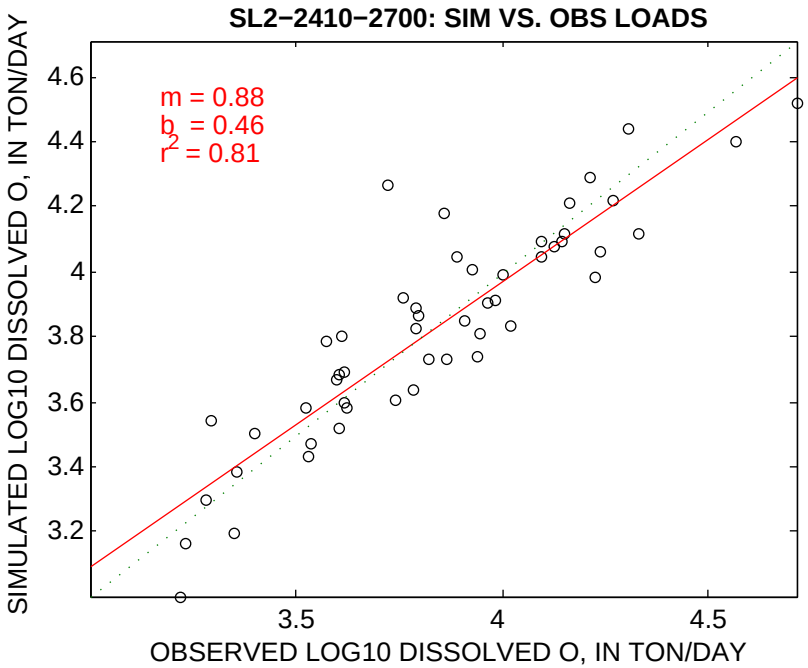


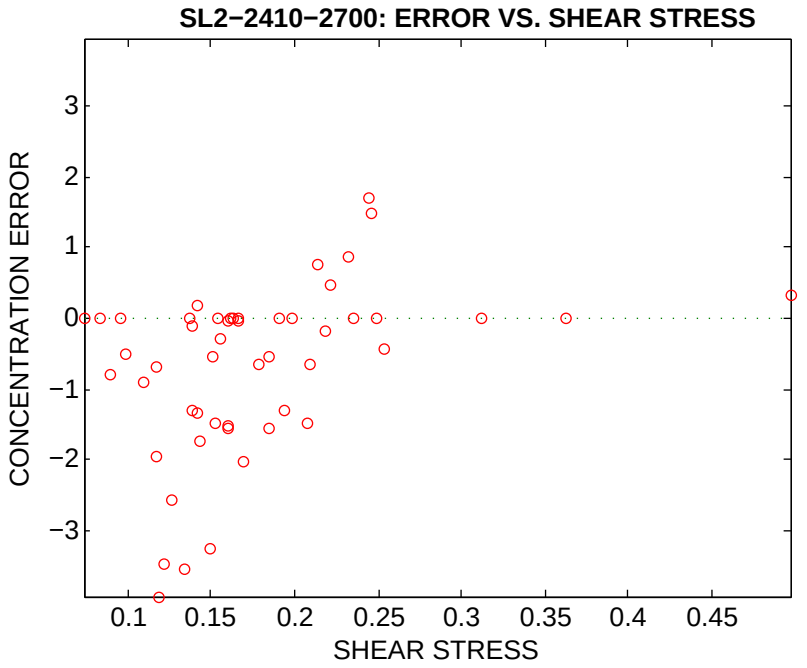


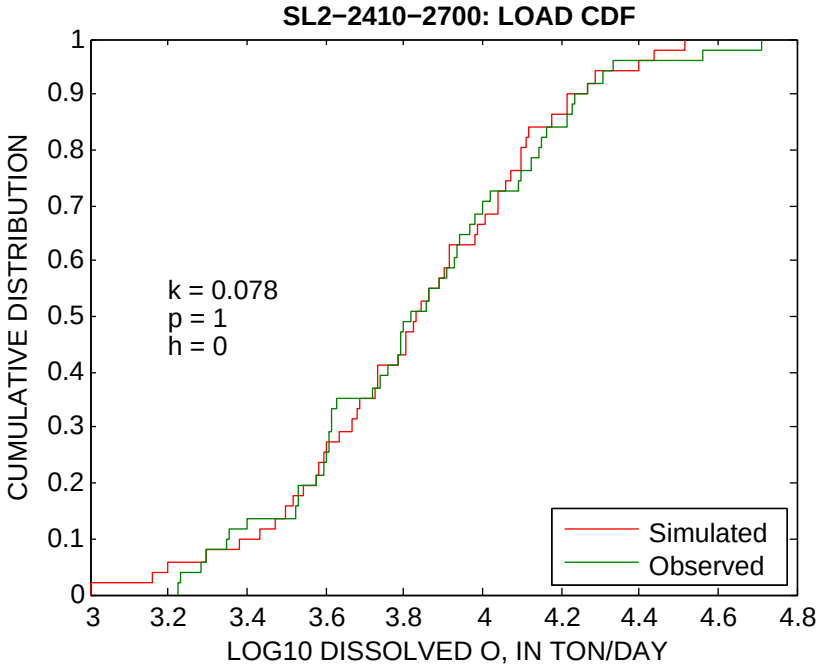


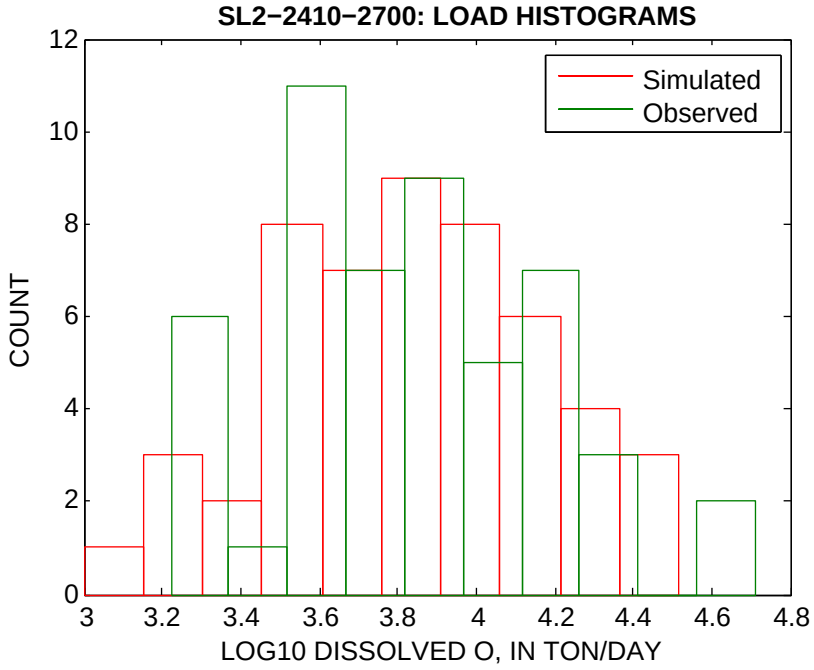


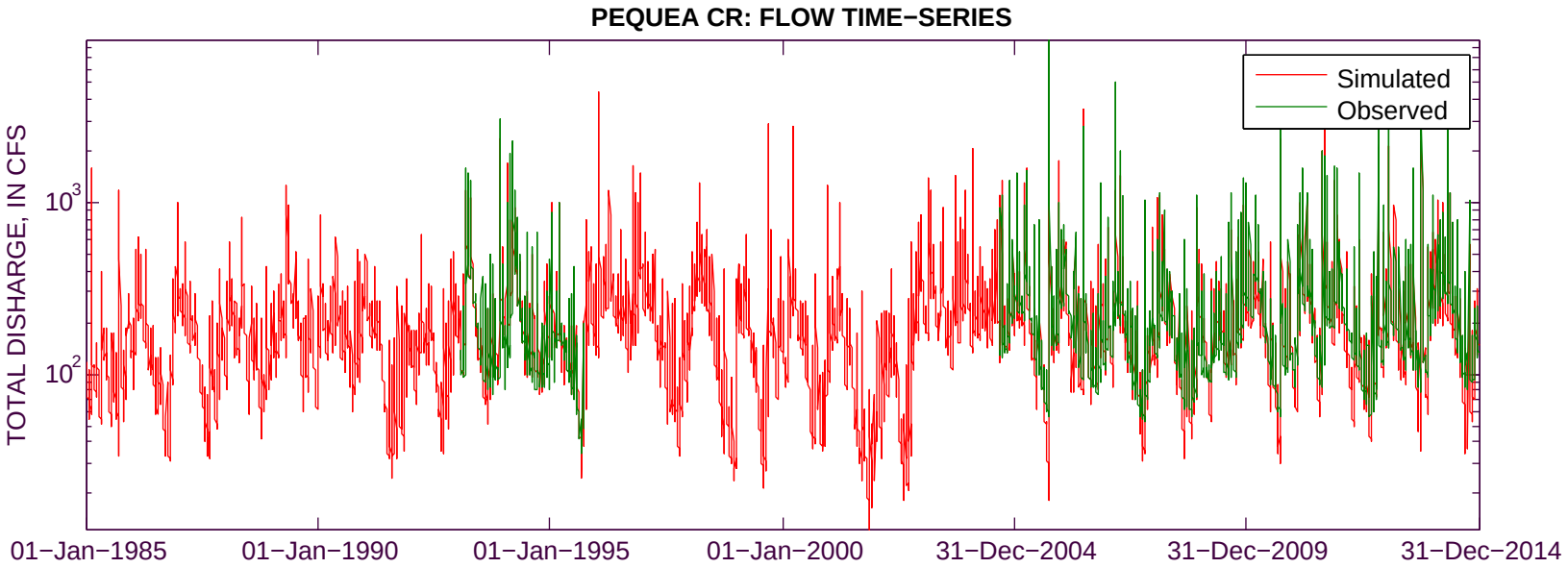
LOAD DATA
LOG10

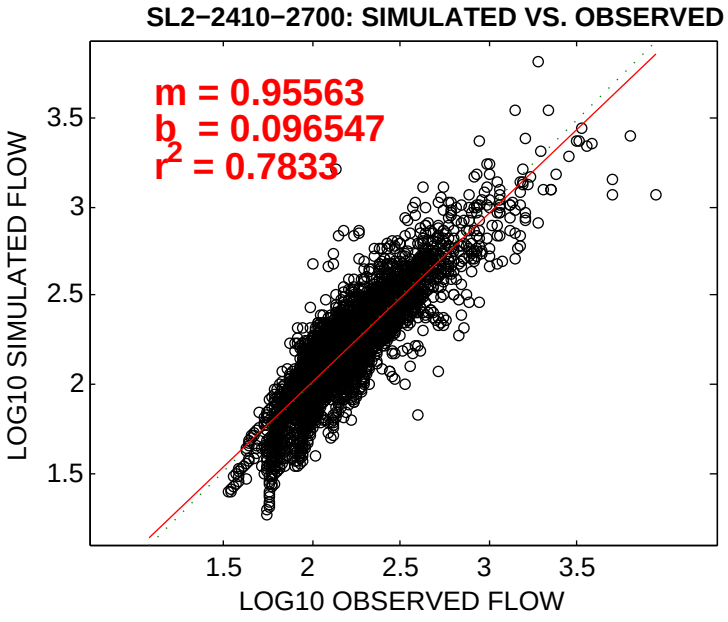


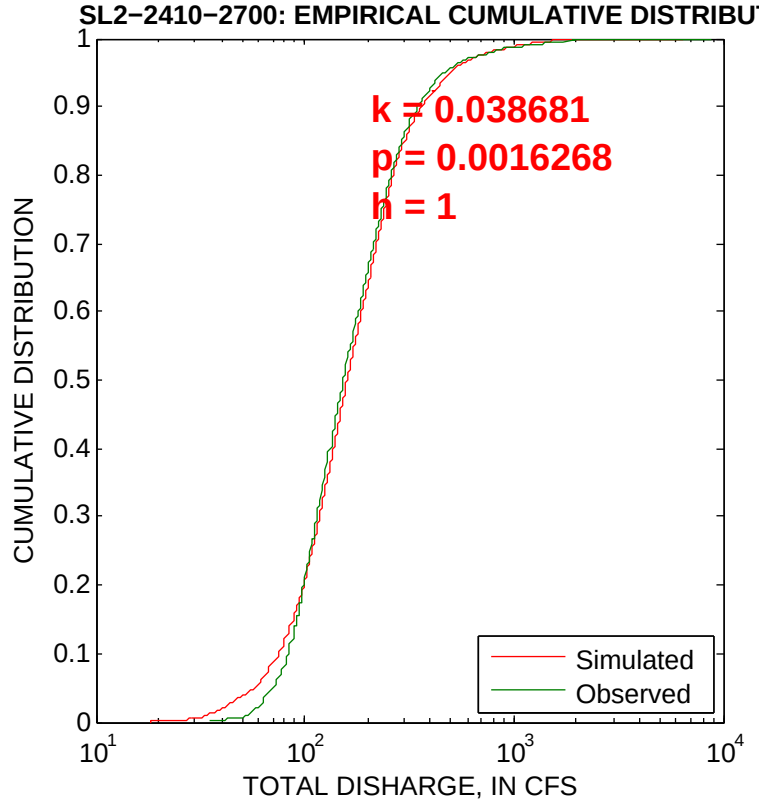












DATA SELECTION

scenario	file
P620171001WQ	FLOW.calib

plot: FLOW - total discharge

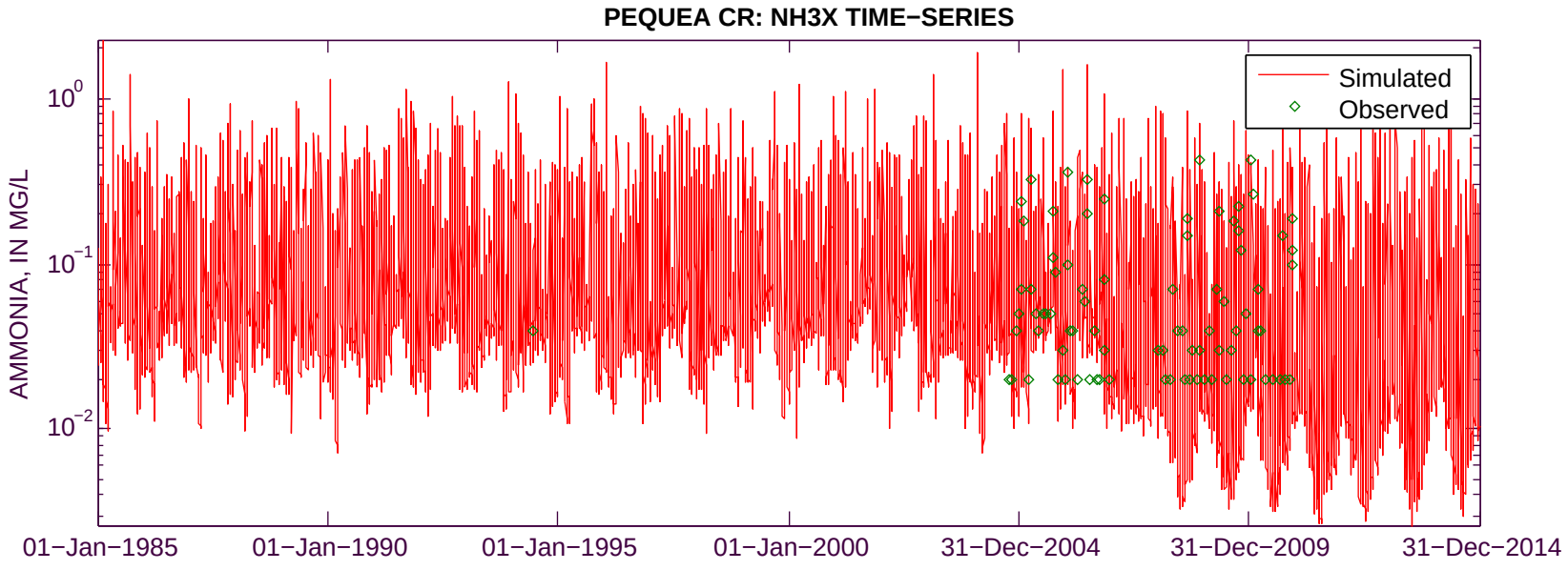
Dates: 1/1/1985 – 12/31/201

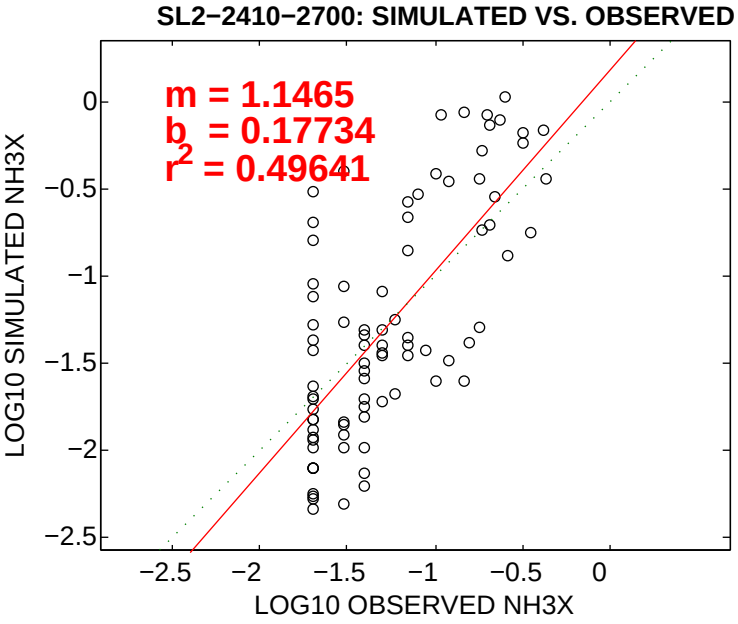
Drive	Directory	Observed
N/A	model	OBS20161101

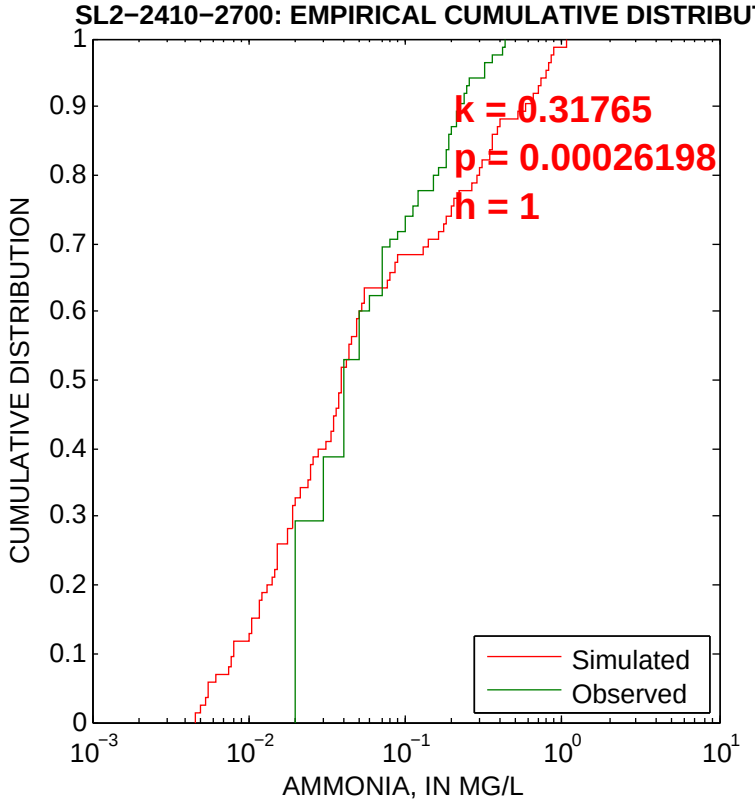
STATISTICS

		observe	simulate
n		4731	4731
min		34	18.535
		1.53148	1.26799
mean		211.703	211.422
		2.21755	2.21571
media		154	160.07
		2.18752	2.20431
max		8700	6493.6
		3.93952	3.81249
varian		78612.7	51416.8
		0.0715211	0.0833846
JB		0.001	0.001
		0.001	0.001
		ra	log
%		-0.132628	-0.0831789
err.va		37931.9	0.0182136
rel.std.err		0.482517	0.25466
mod.eff		0.517483	0.74534

VERSION 2.1







DATA SELECTION

scenario	file
P620171001WQ	NH3X.calib

plot: NH3X - ammonia

Dates: 1/1/1985 – 12/31/201

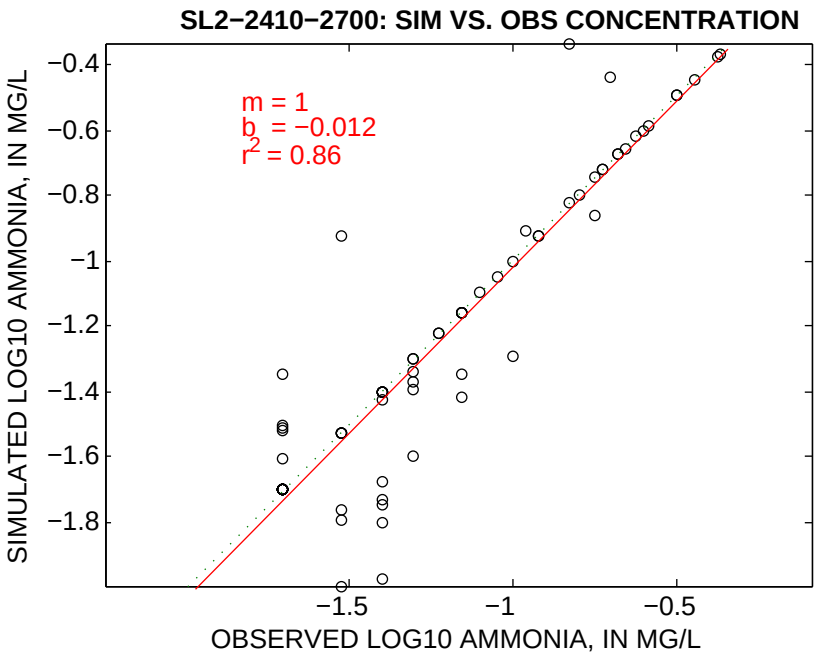
Drive	Directory	Observed
N/A	model	OBS20161101

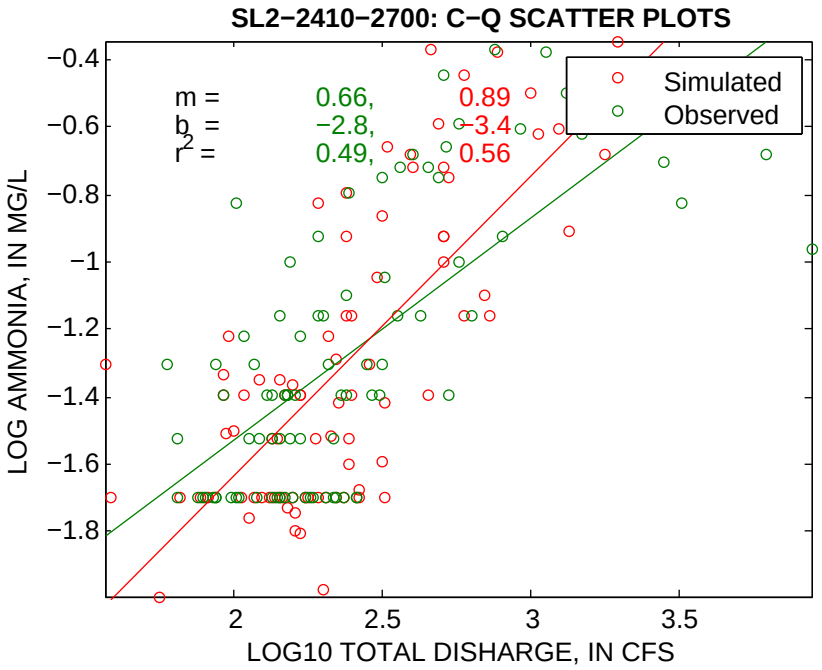
STATISTICS

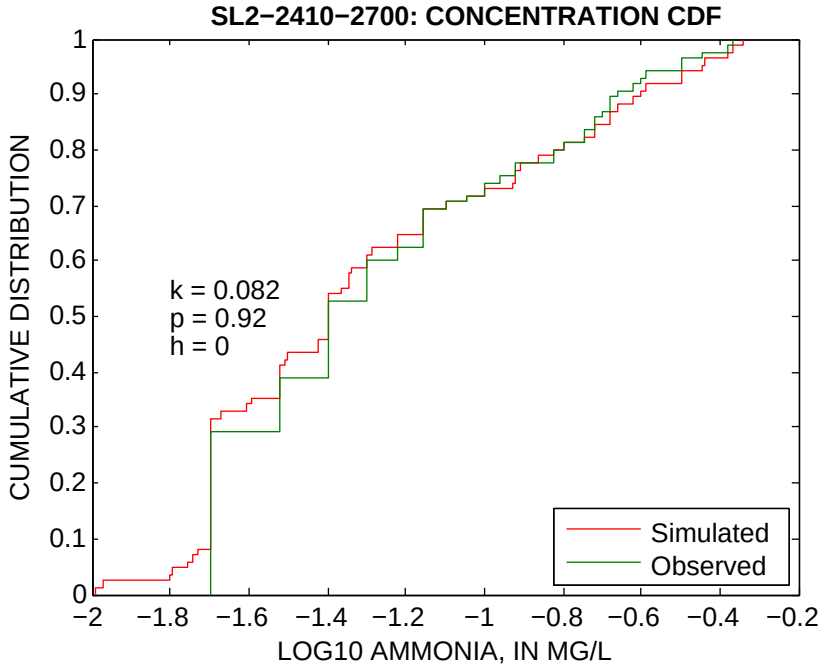
	n	85	85
		observe	simulate
min		0.02	0.0046397
		-1.69897	-2.33351
mean		0.0872941	0.161612
		-1.26619	-1.27436
media		0.04	0.039574
		-1.39794	-1.40259
max		0.43	1.0702
		-0.366532	0.0294649
varian		0.00932473	0.0619766
		0.16643	0.440706
JB		0.001	0.001
		0.025094	0.050372
		ra	log
%		85.1351	0.645632
err.va		0.0455666	0.225576
rel.std.err		4.88664	1.35538
mod.eff		-3.88664	-0.35538

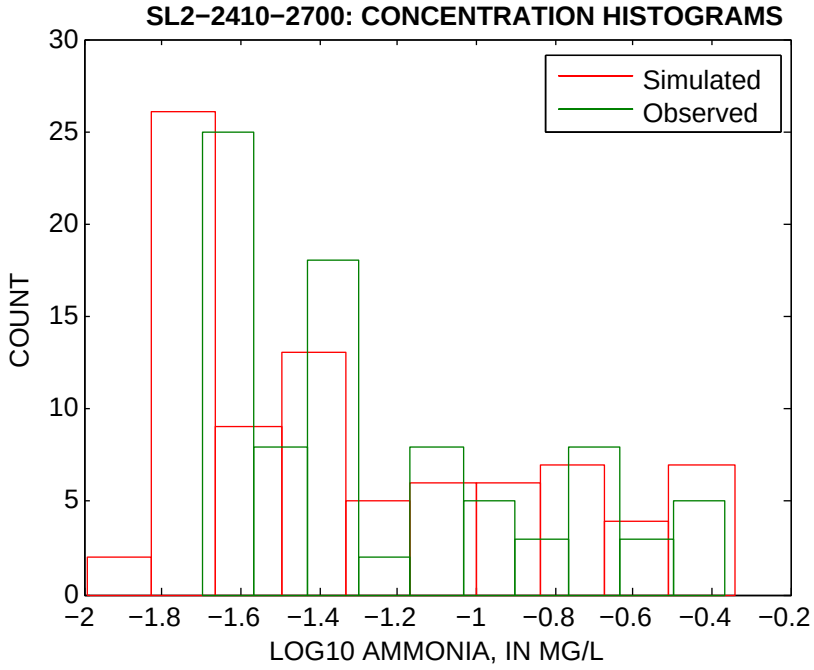
VERSION 2.1

ALL DATA
LOG10

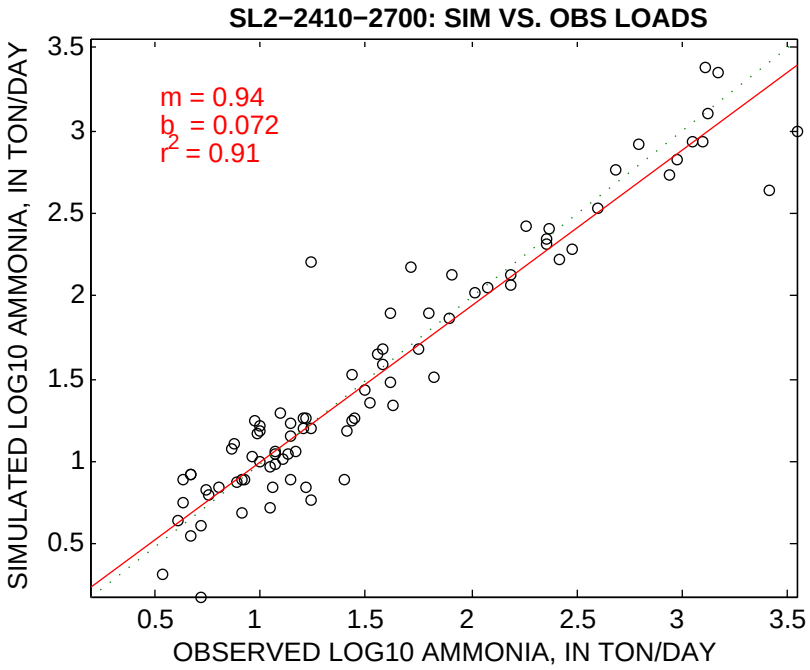


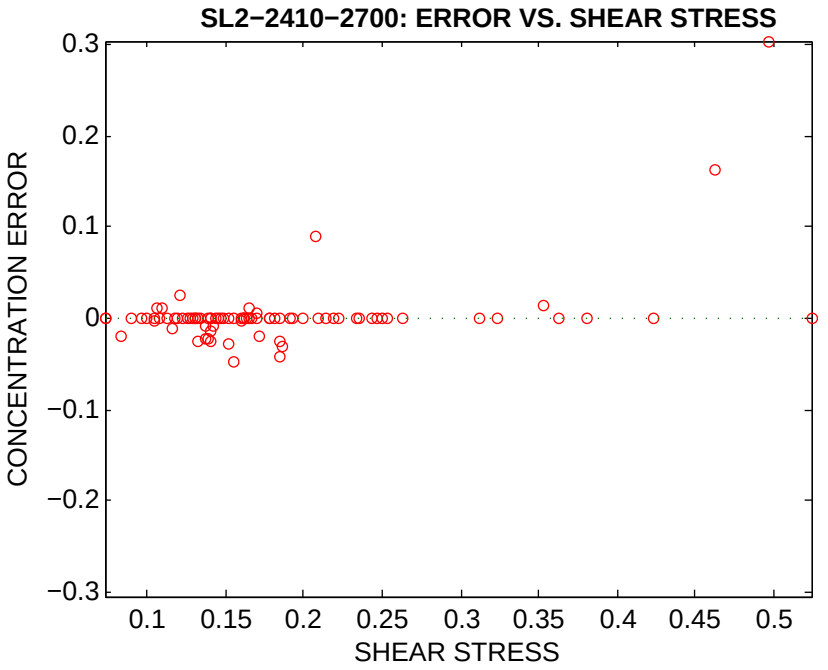


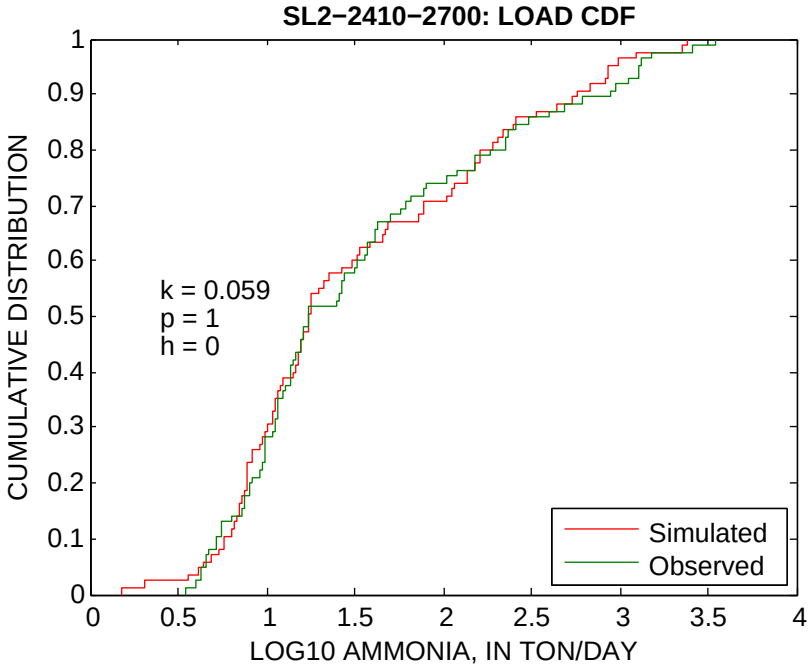


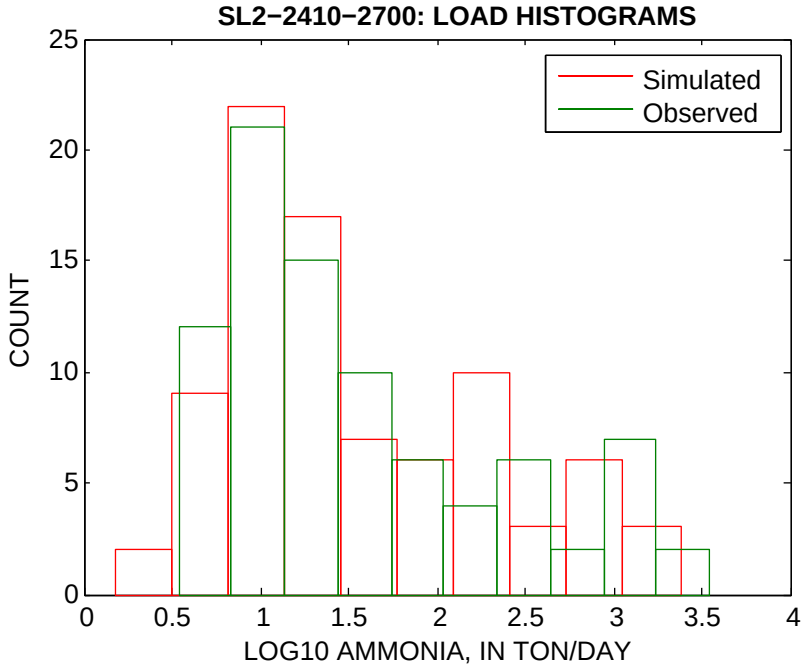


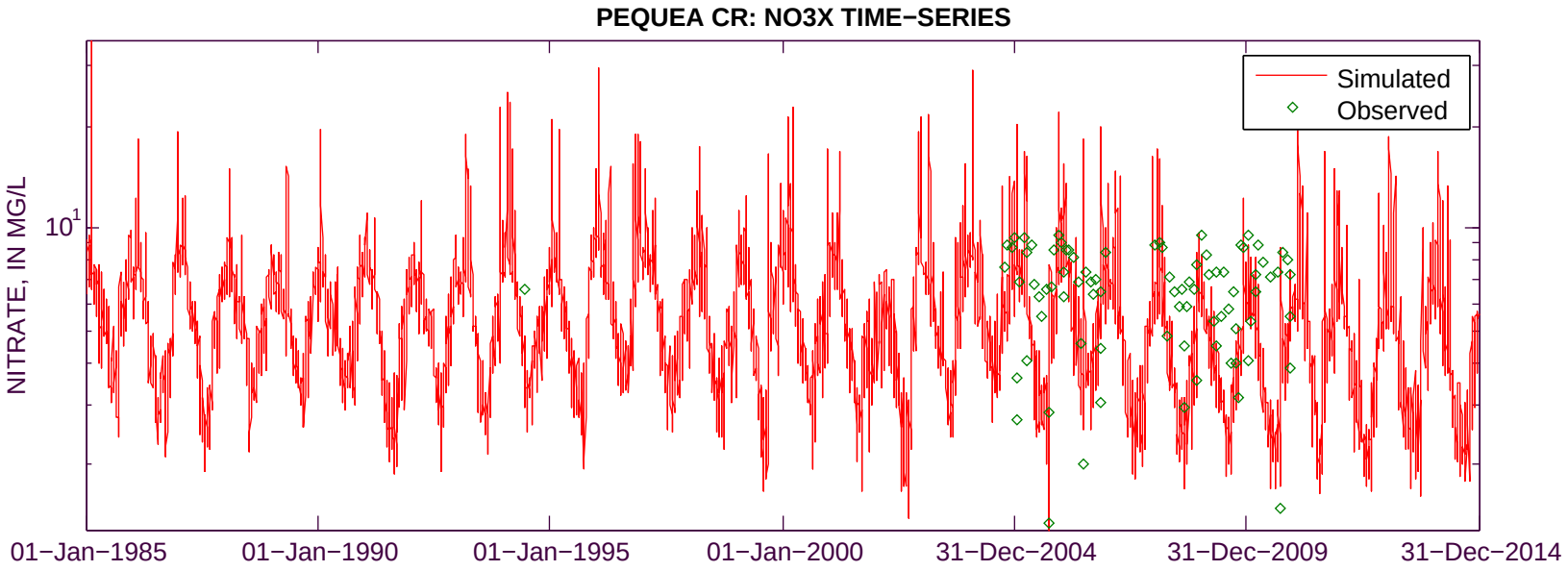
LOAD DATA
LOG10

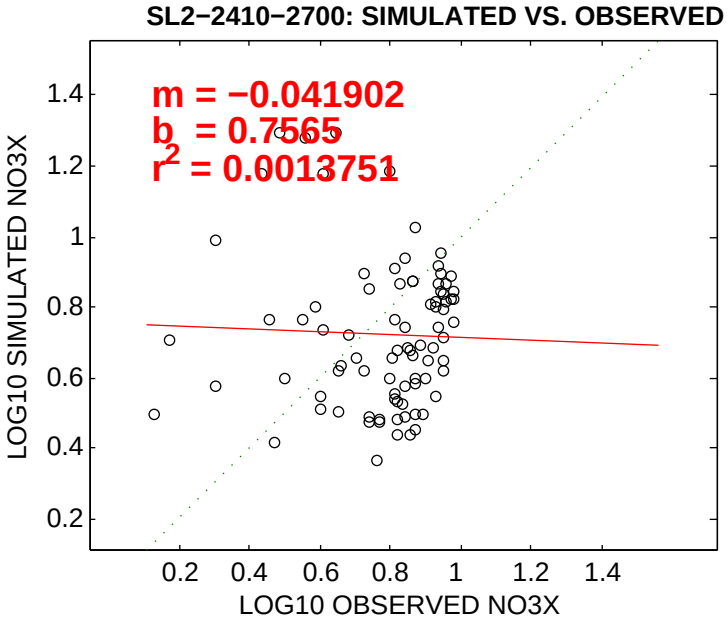


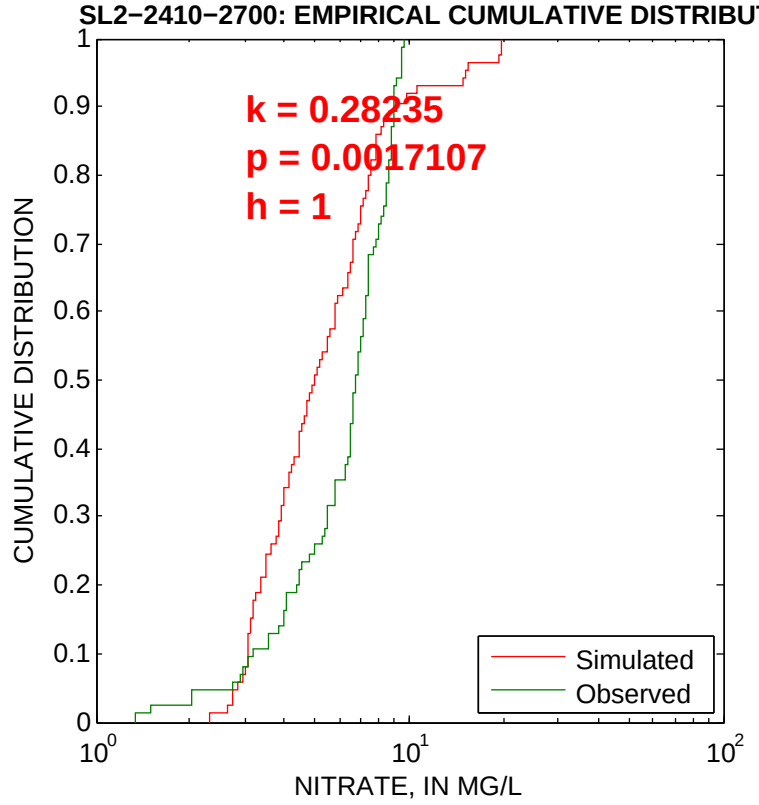












DATA SELECTION

scenario	file
P620171001WQ	NO3X.calib

plot: NO3X - nitrate

Dates: 1/1/1985 – 12/31/201

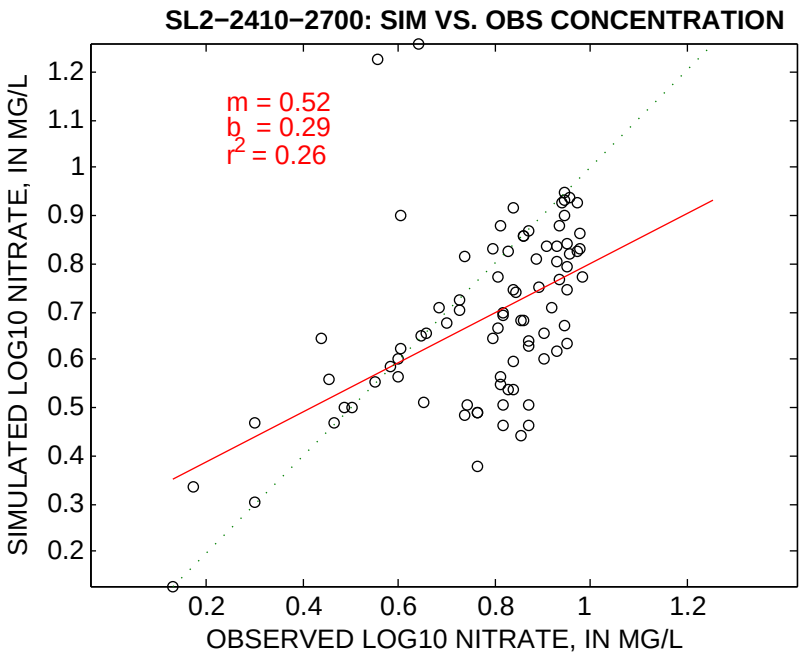
Drive	Directory	Observed
N/A	model	OBS20161101

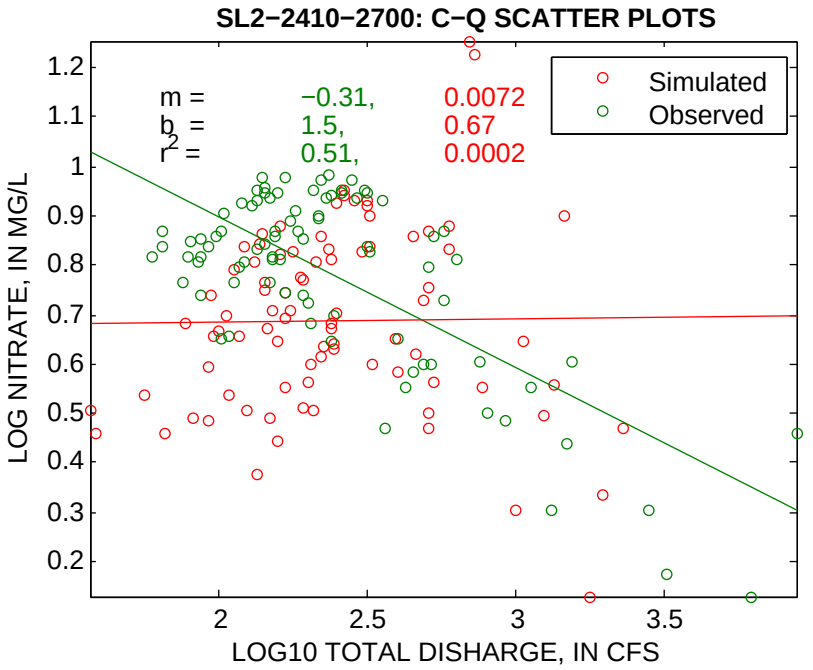
STATISTICS

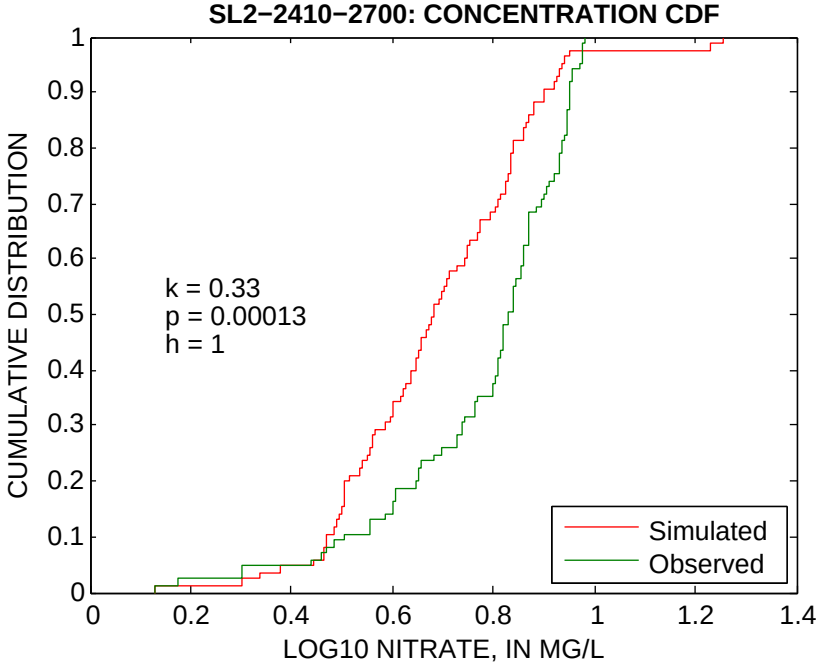
	n	85	85
		observe	simulate
min		1.35	2.3204
		0.130334	0.365563
mean		6.46435	6.03641
		0.778181	0.723892
media		6.78	4.9442
		0.83123	0.694096
max		9.58	19.817
		0.981366	1.29704
varian		4.55157	13.6259
		0.0345973	0.0441724
JB		0.047785	0.001
		0.001	0.017117
		ra	log
%		-6.61998	-6.97642
err.va		20.6282	0.0846515
rel.std.err		4.5321	2.44677
mod.eff		-3.5321	-1.44677

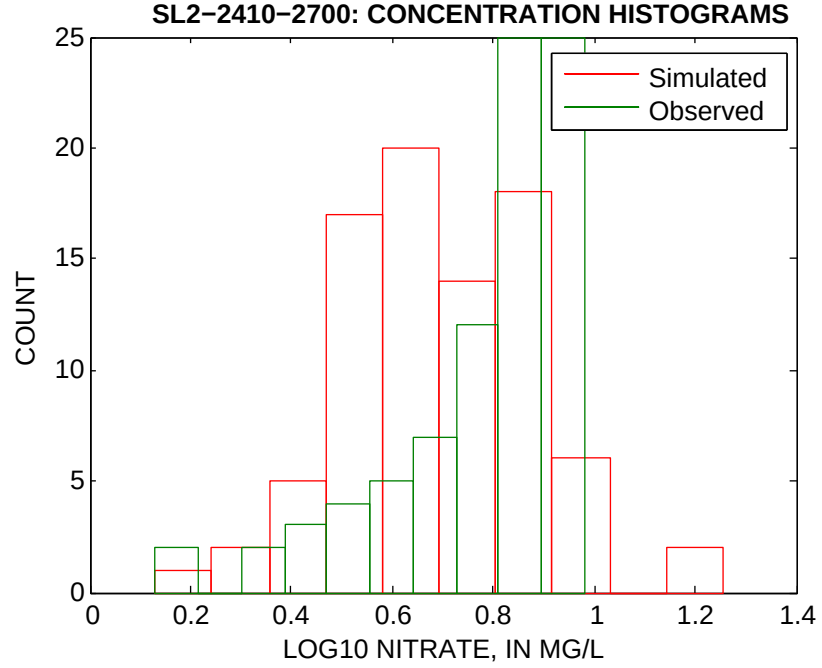
VERSION 2.1

ALL DATA
LOG10

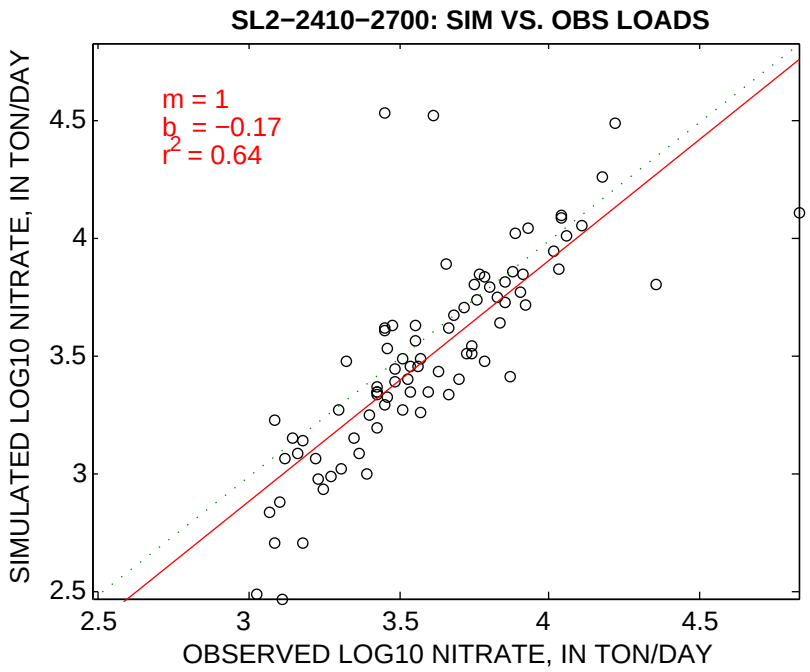


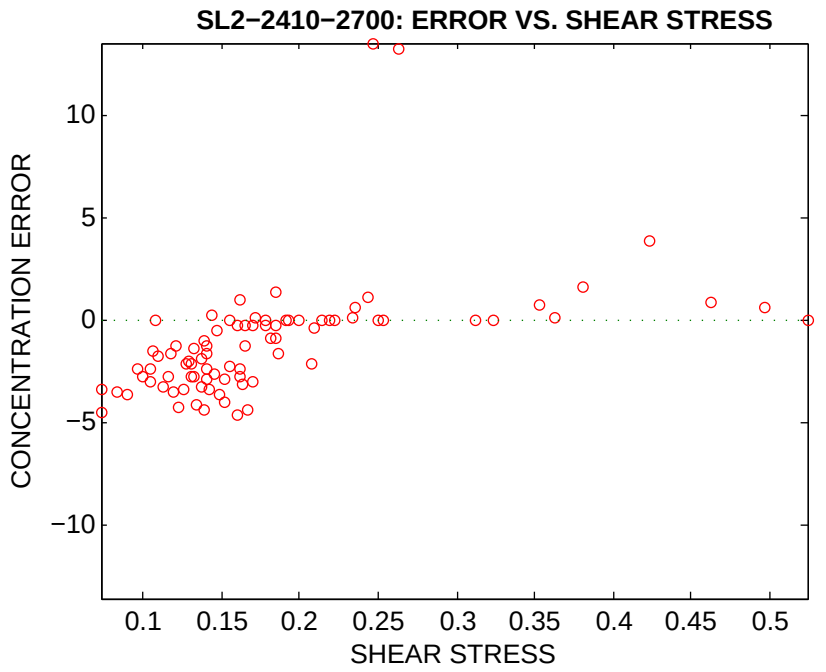


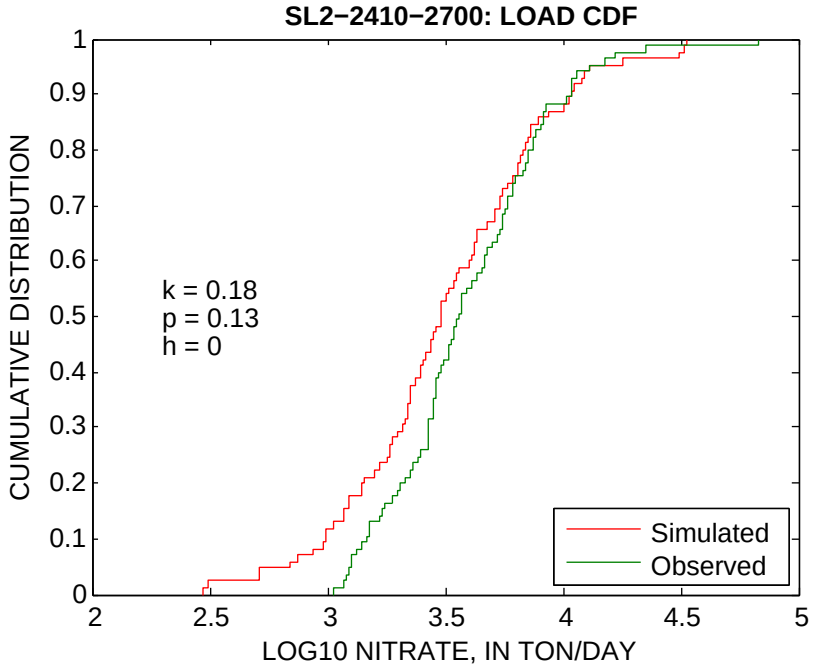


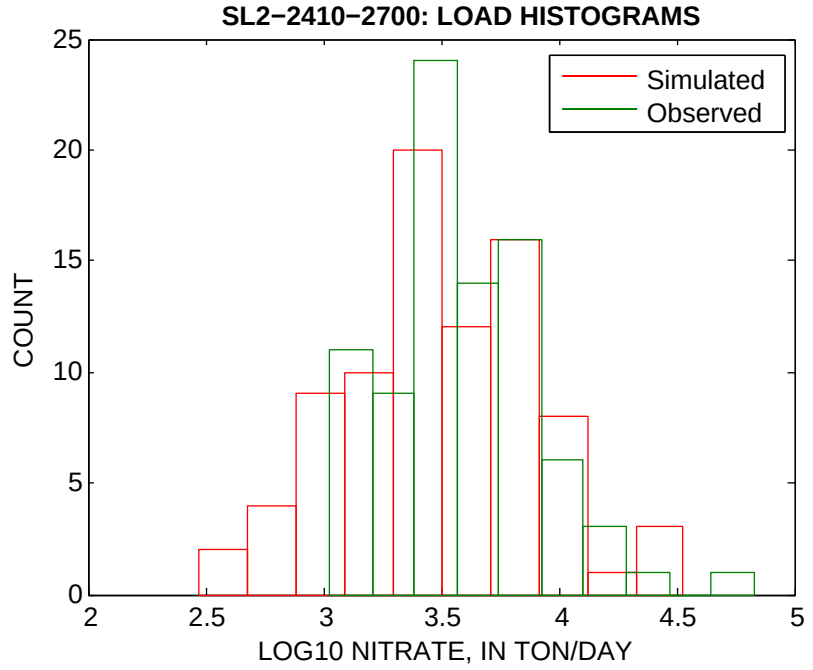


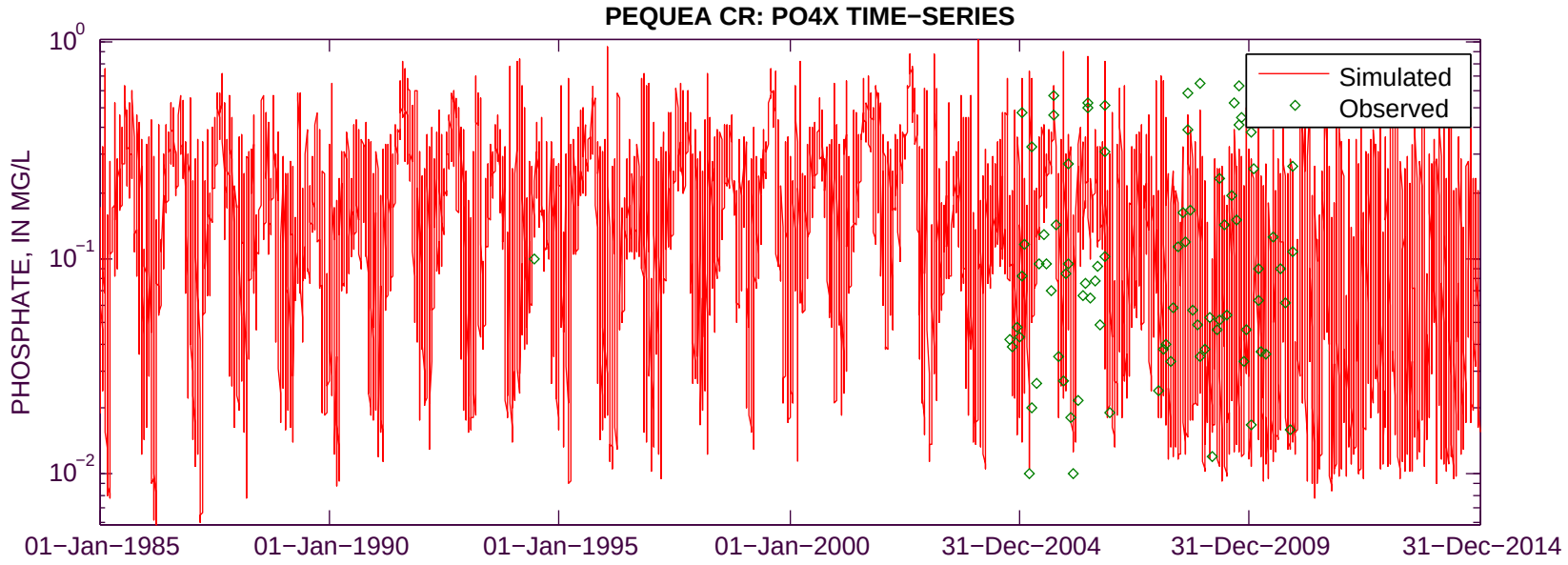
LOAD DATA
LOG10

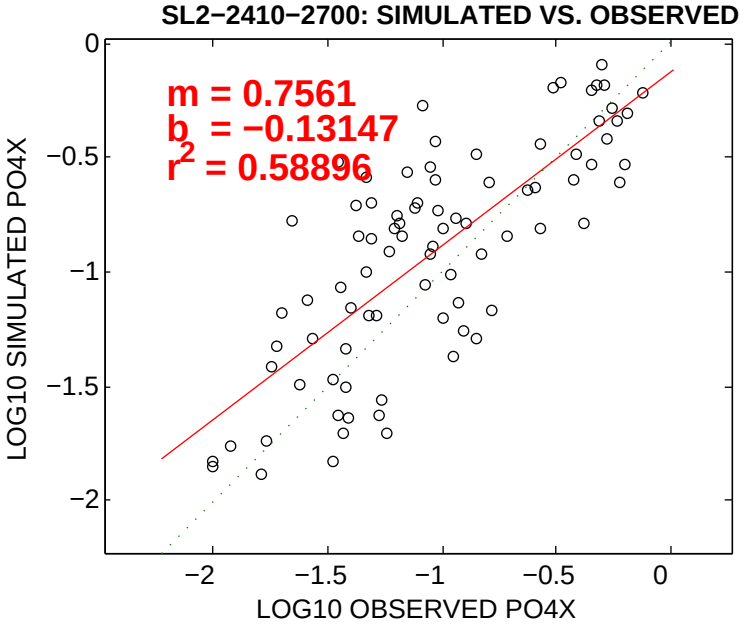


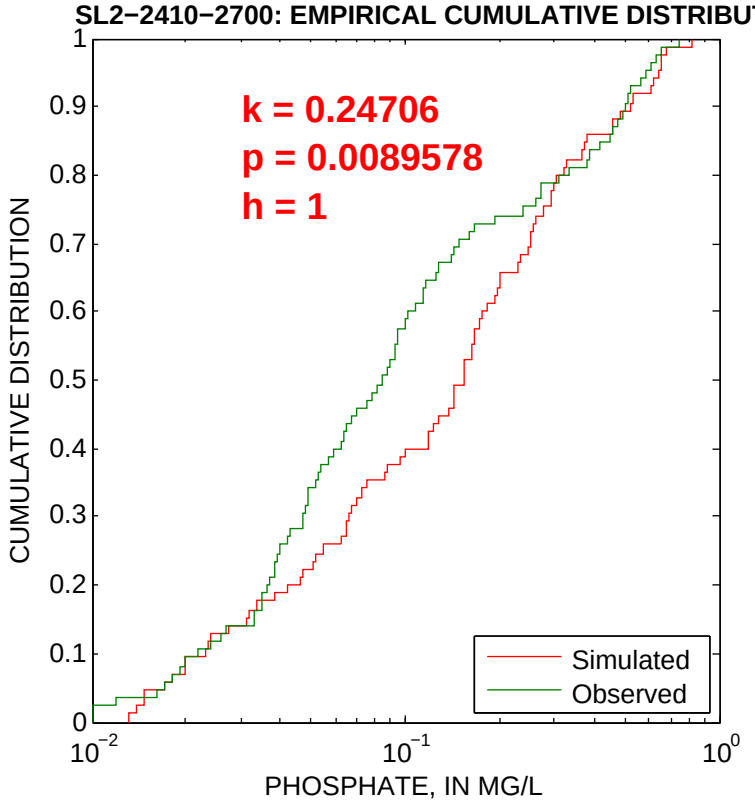












DATA SELECTION

scenario	file
P620171001WQ	PO4X.calib

plot: PO4X - phosphate

Dates: 1/1/1985 – 12/31/201

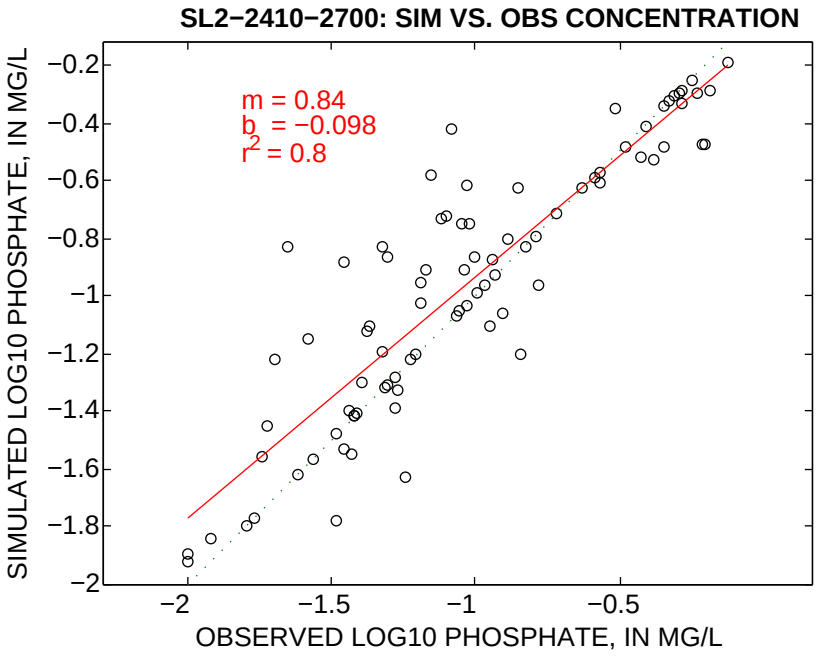
Drive | Directory | Observed: N/A | model | OBS20161101

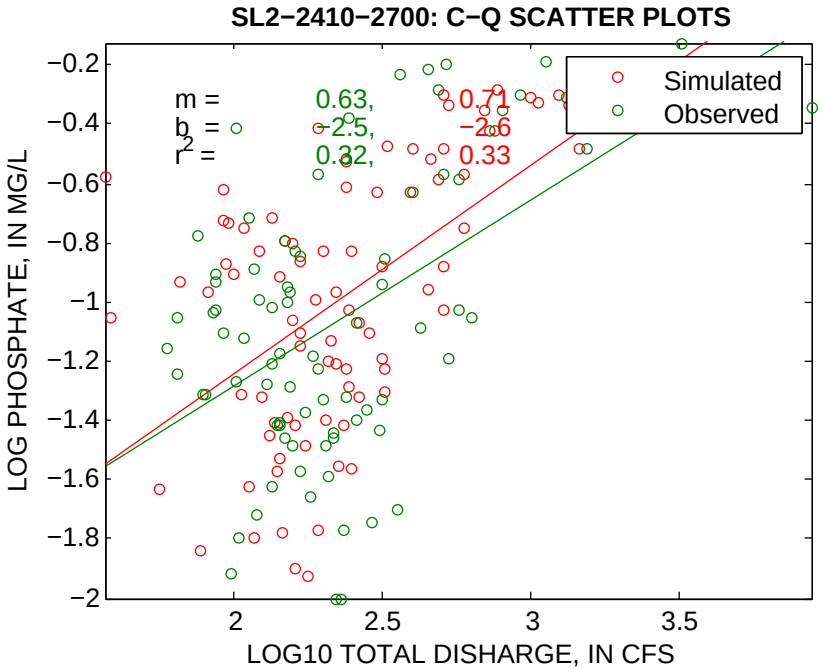
STATISTICS

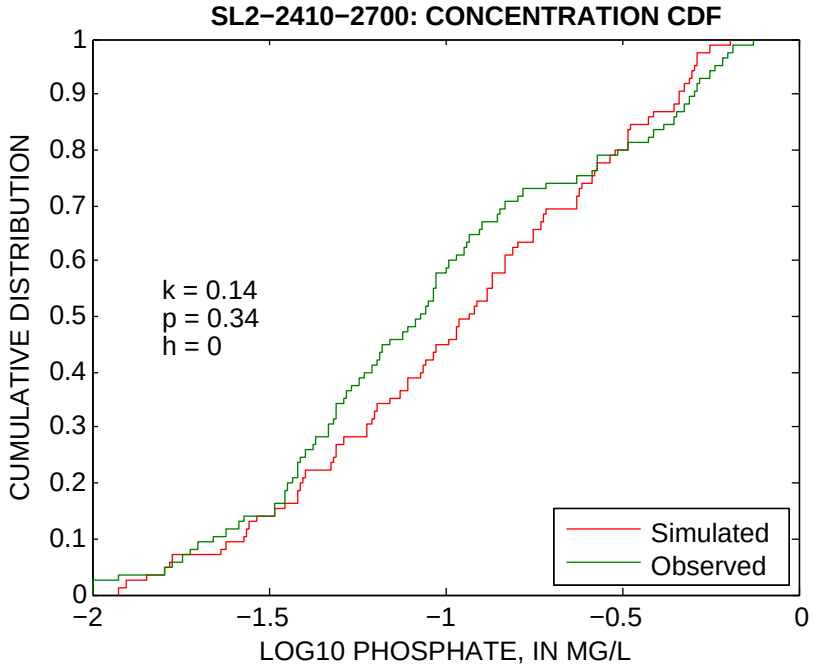
	n	observe	simulate
		85	85
min		0.01	0.013139
		-2	-1.88144
mean		0.168118	0.201774
		-1.03518	-0.914174
media		0.085	0.15327
		-1.07058	-0.814543
max		0.752	0.8175
		-0.123782	-0.0875122
varian		0.0358433	0.0362679
		0.237642	0.230673
JB		0.001165	0.001502
		0.141654	0.081549
		ra	log
%		20.0195	-11.6896
err.va		0.0194548	0.12377
rel.std.err		0.542775	0.520827
mod.eff		0.457225	0.479173

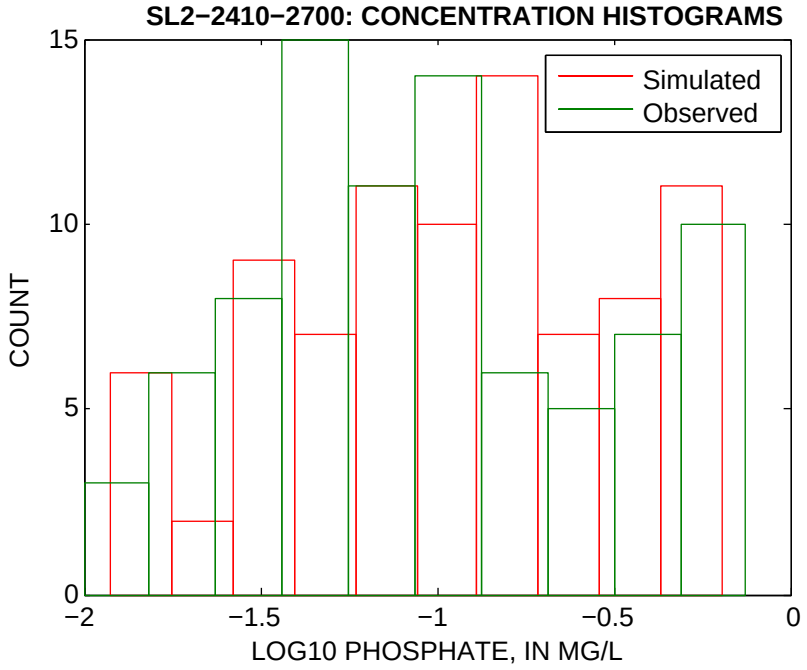
VERSION 2.1

ALL DATA
LOG10

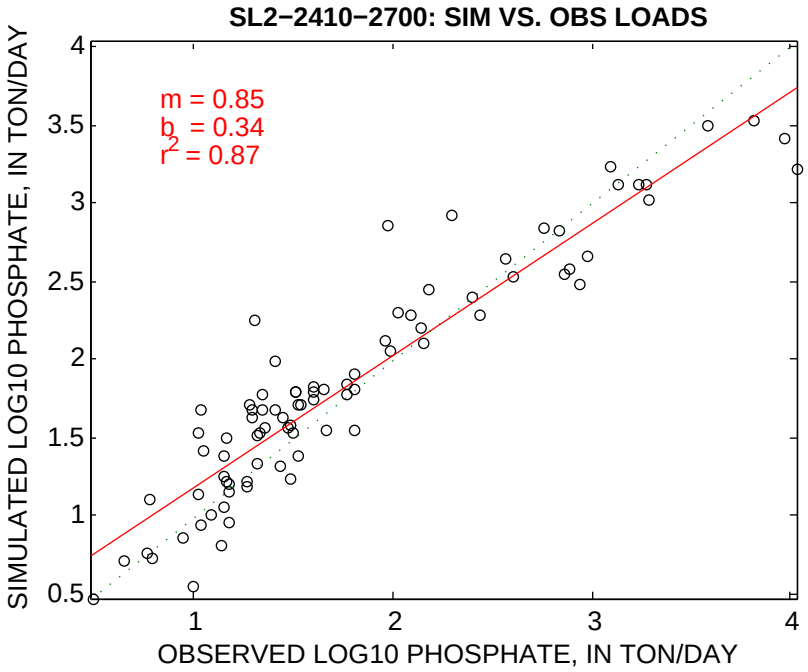


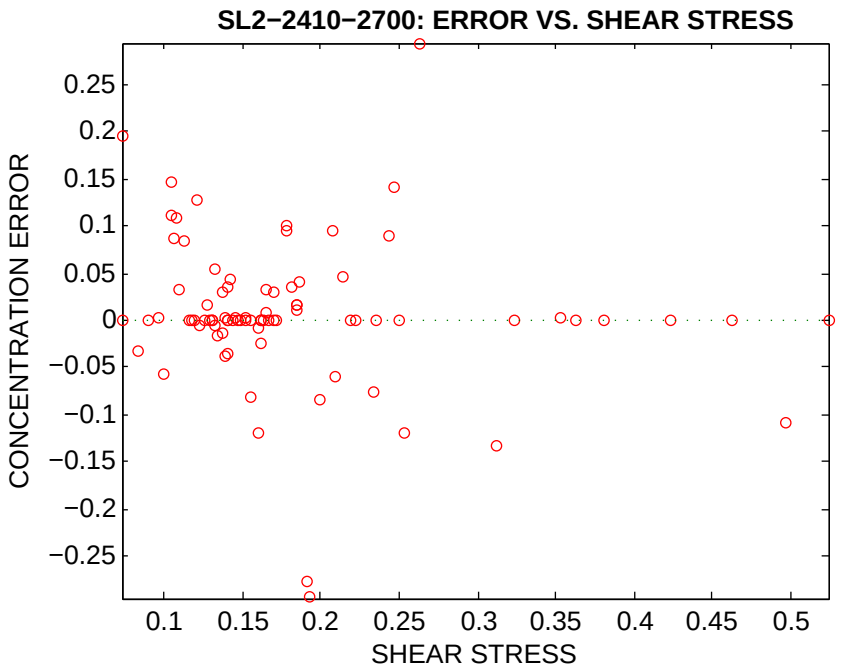


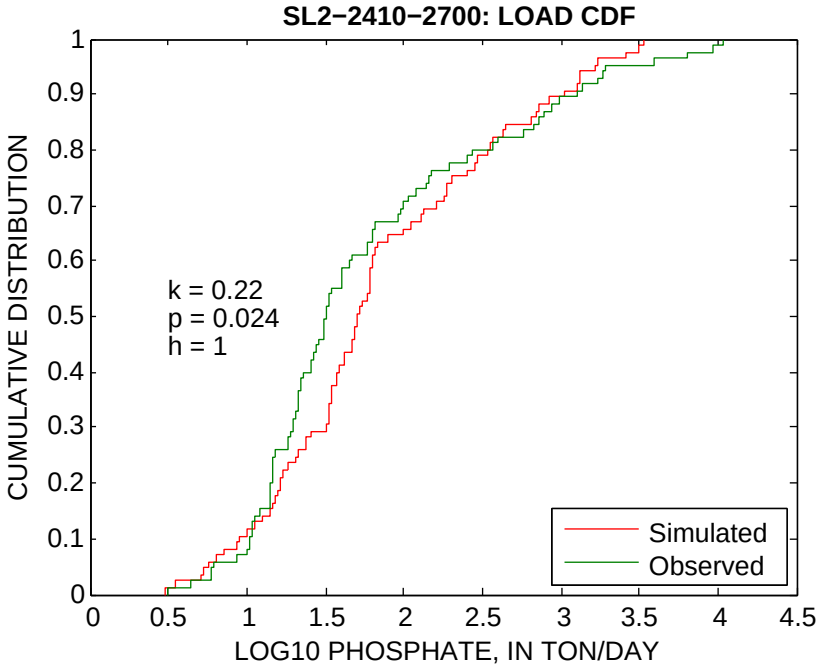


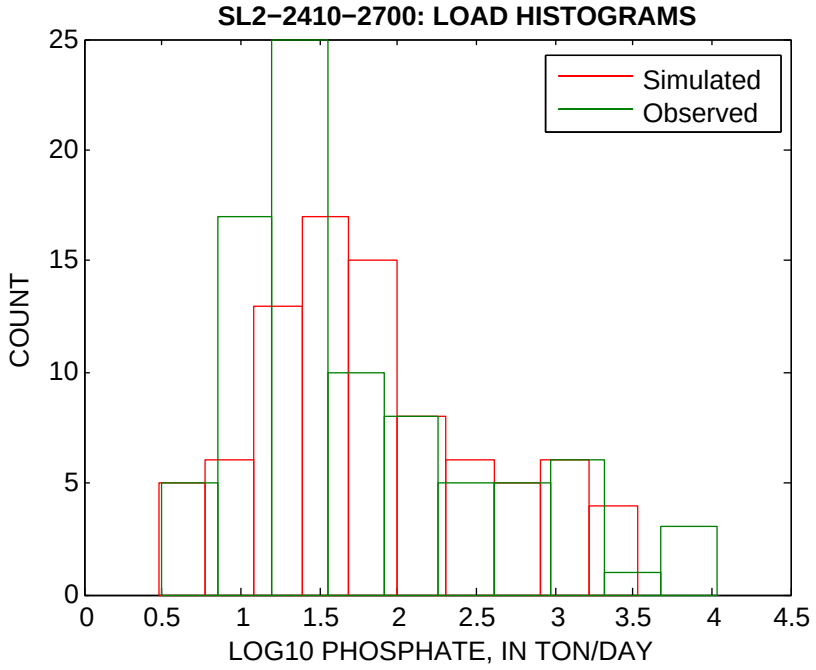


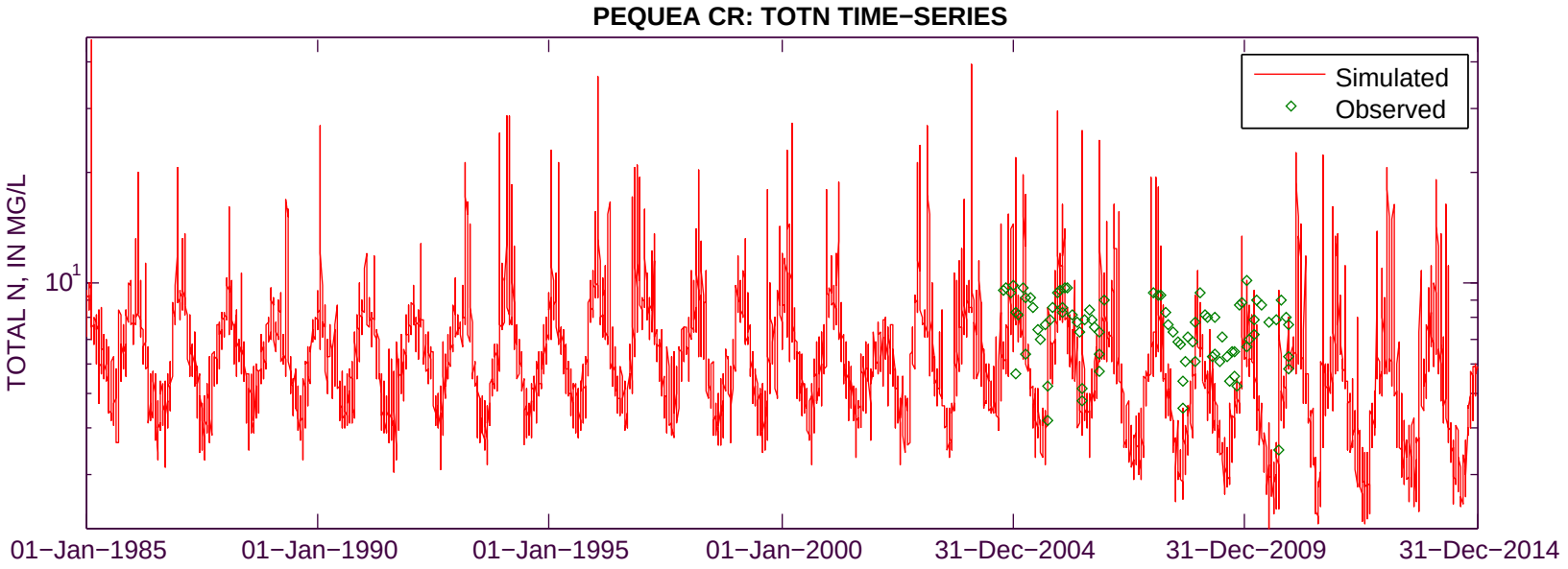
LOAD DATA
LOG10

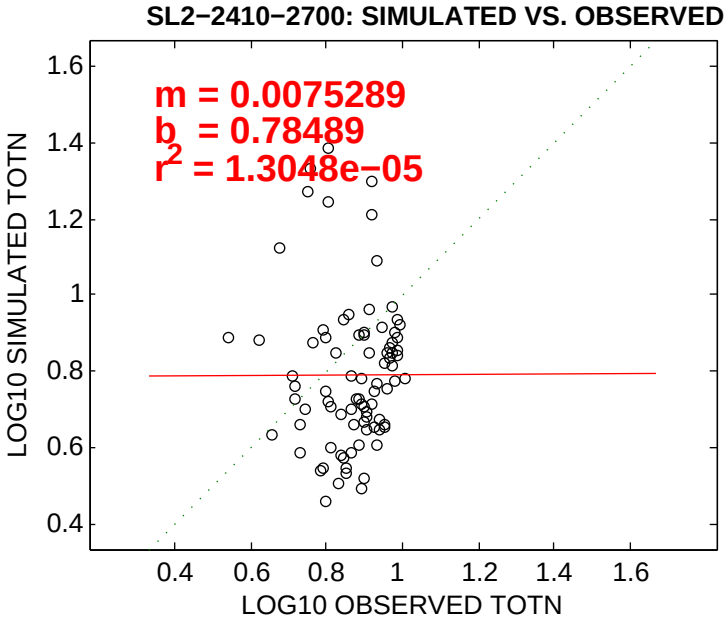


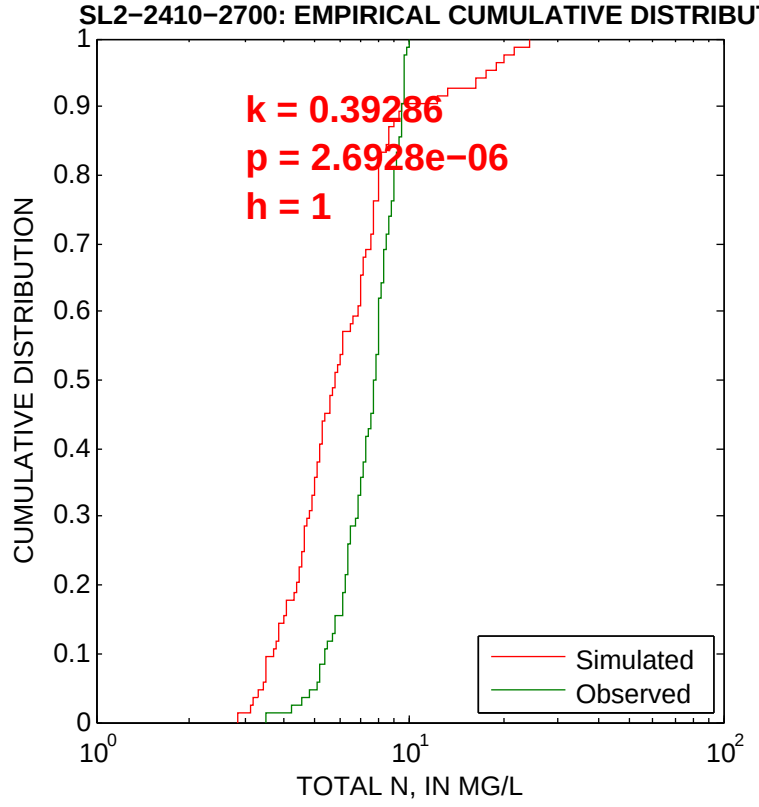












DATA SELECTION

scenario	file
P620171001WQ	TOTN.calib

plot: TOTN - total nitrogen

Dates: 1/1/1985 – 12/31/201

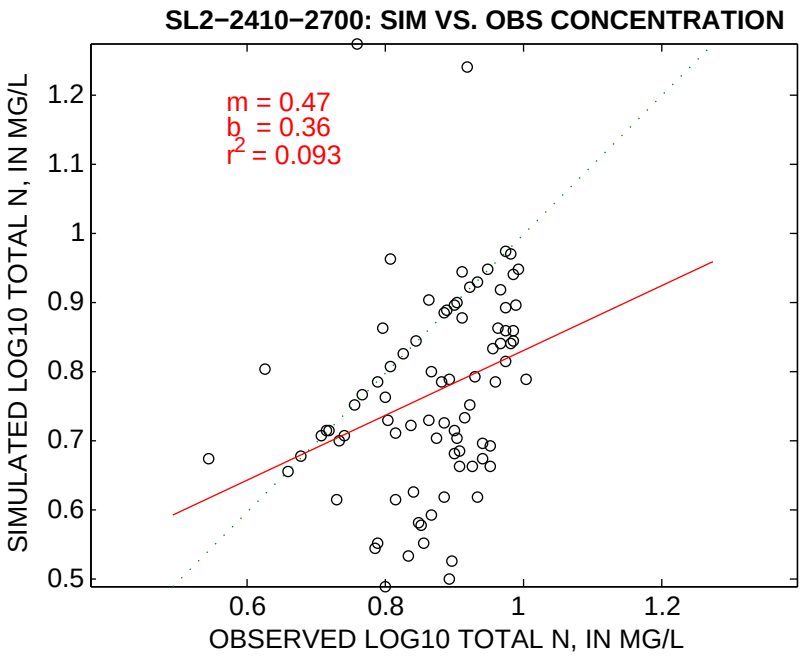
Drive	Directory	Observed
N/A	model	OBS20161101

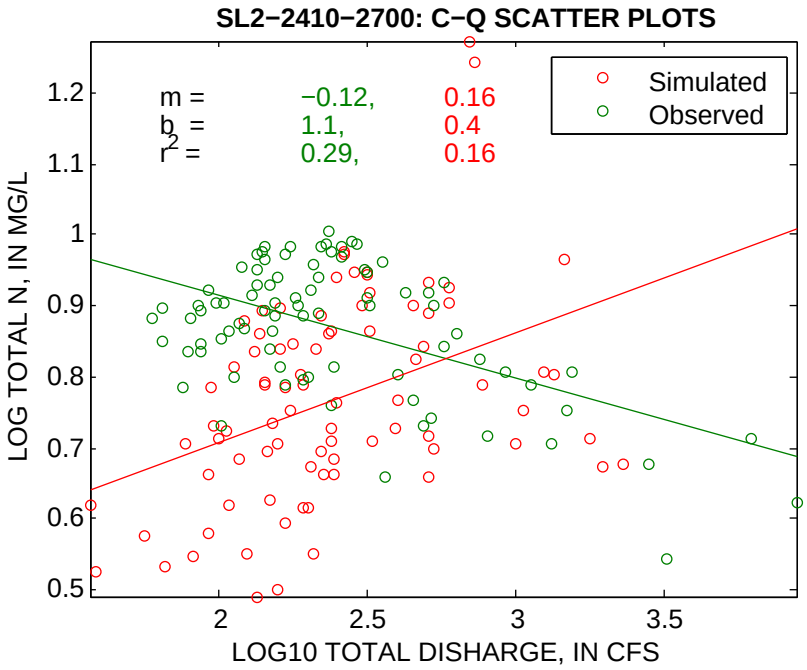
STATISTICS

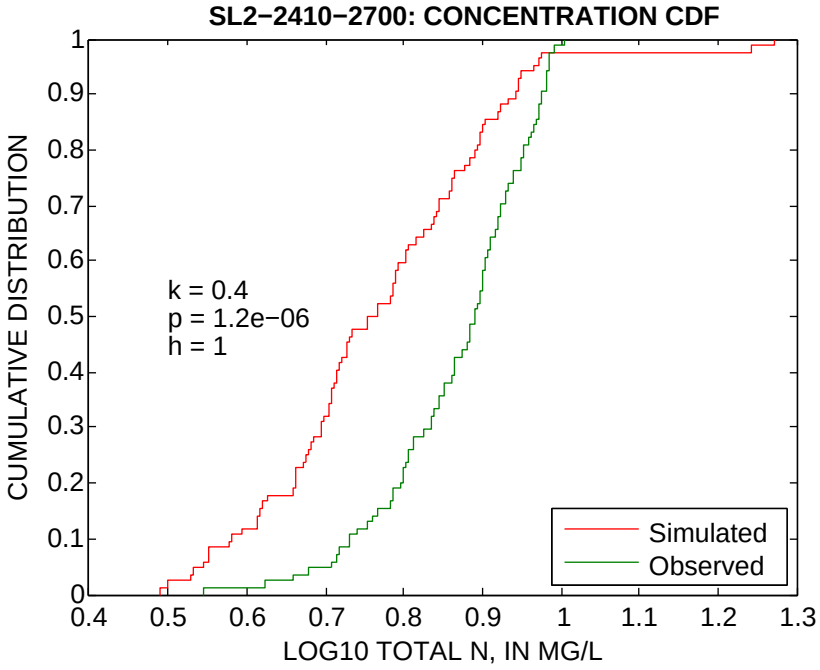
	n	84	84
		observe	simulate
min		3.5	2.8468
		0.544068	0.454357
mean		7.54845	6.95909
		0.868383	0.791423
media		7.77	5.8171
		0.89042	0.764699
max		10.09	24.362
		1.00389	1.38671
varian		2.24422	17.0906
		0.00890108	0.0386698
JB		0.115314	0.001
		0.007972	0.004723
		ra	log
%		-7.80772	-8.86242
err.va		20.4639	0.053431
rel.std.err		9.1185	6.00276
mod.eff		-8.1185	-5.00276

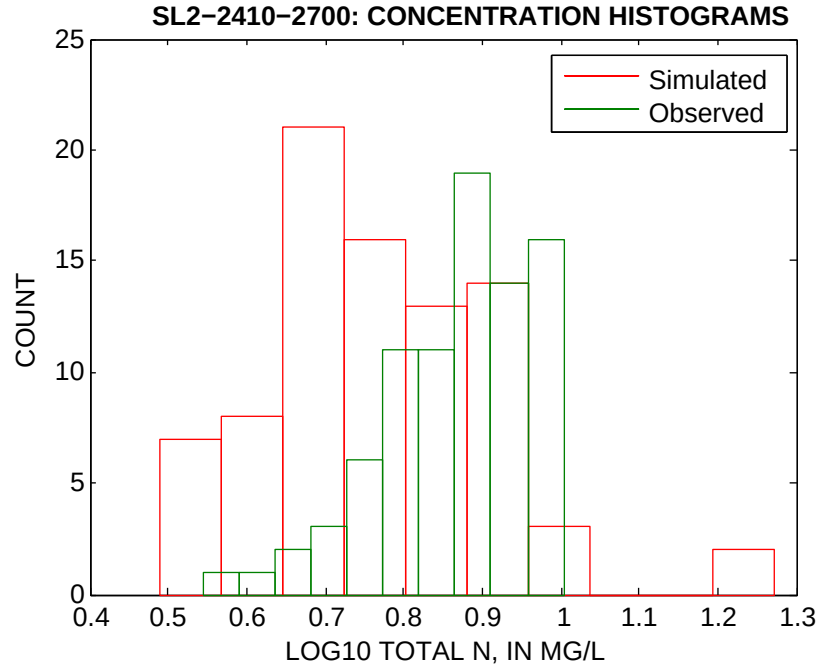
VERSION 2.1

ALL DATA
LOG10

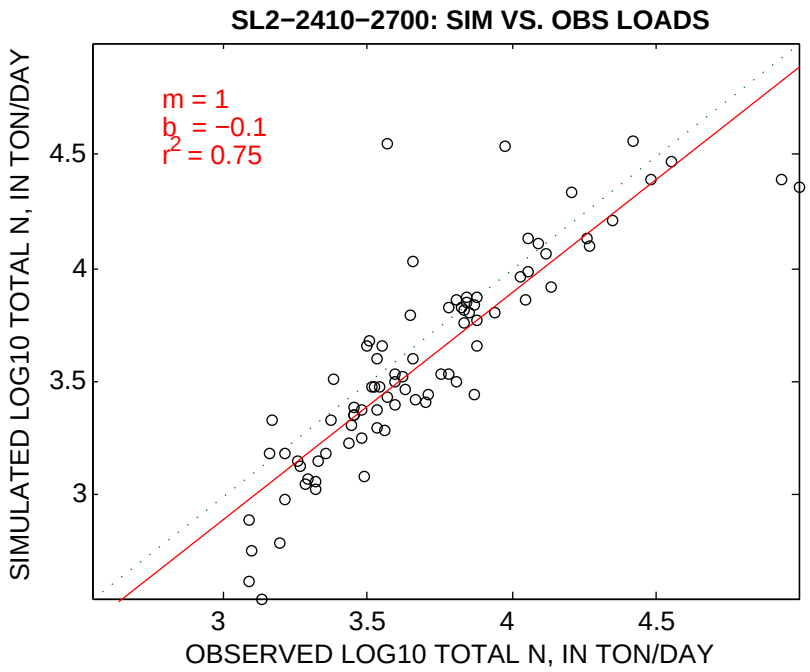


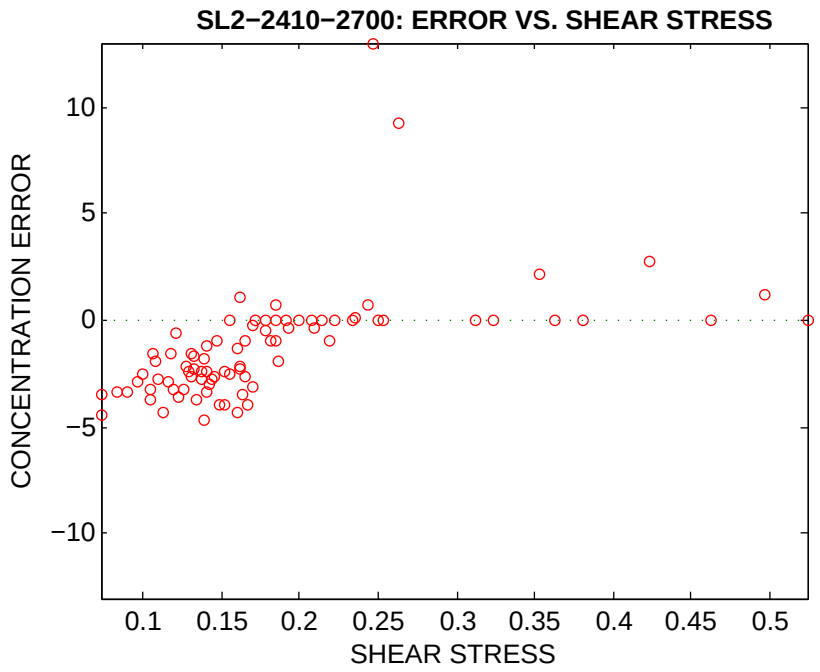


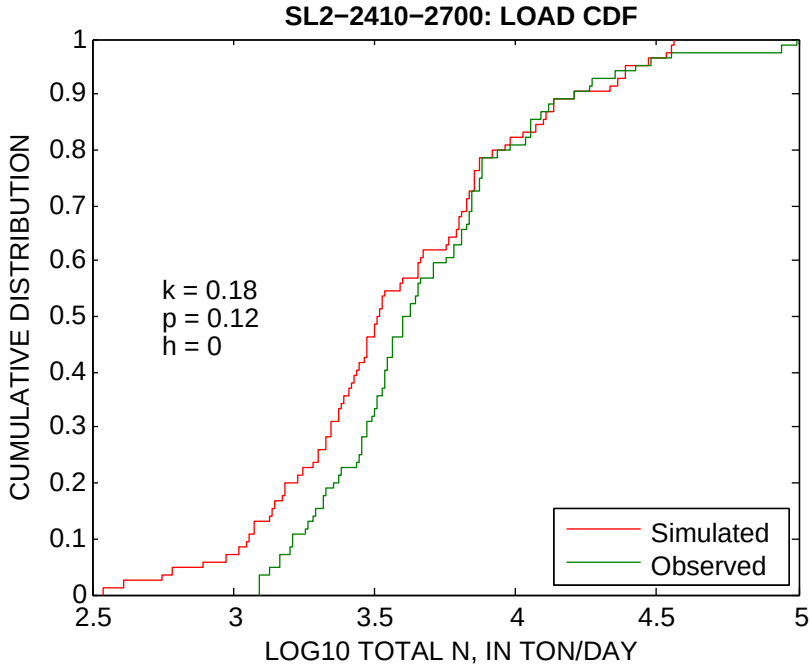


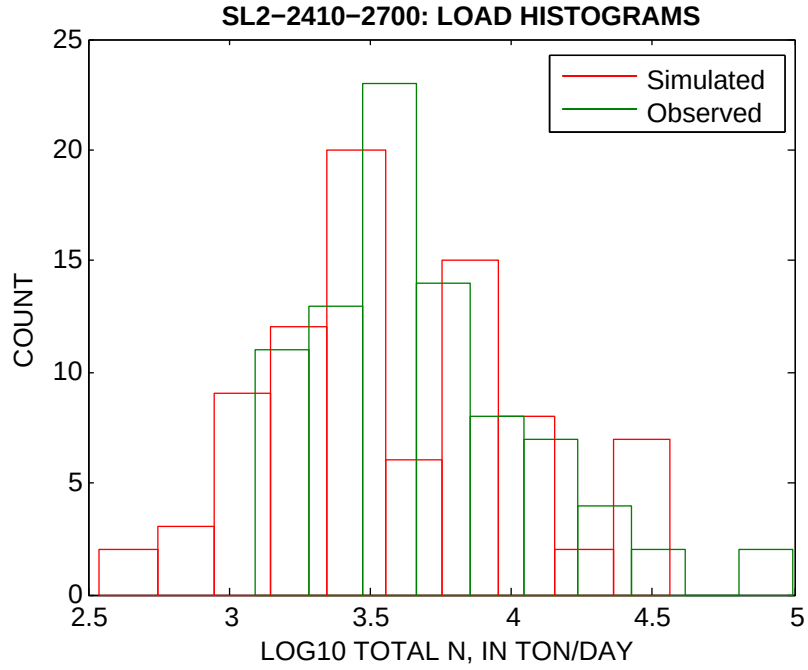


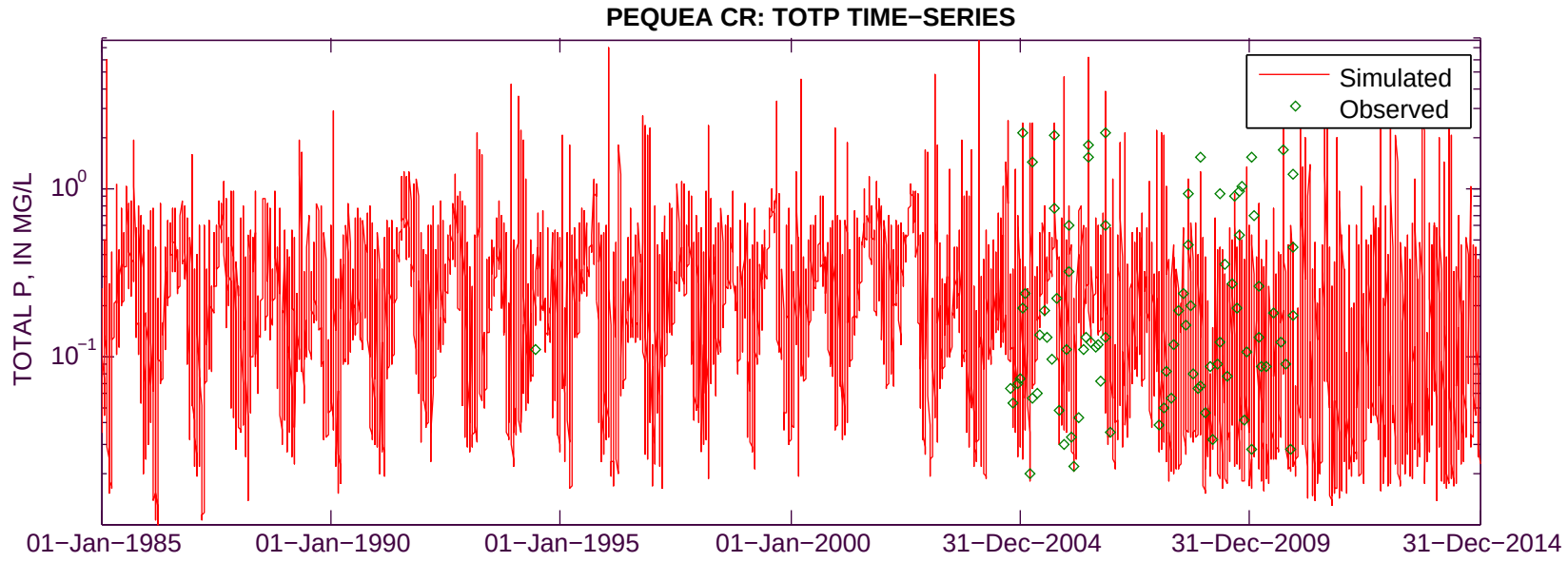
LOAD DATA
LOG10

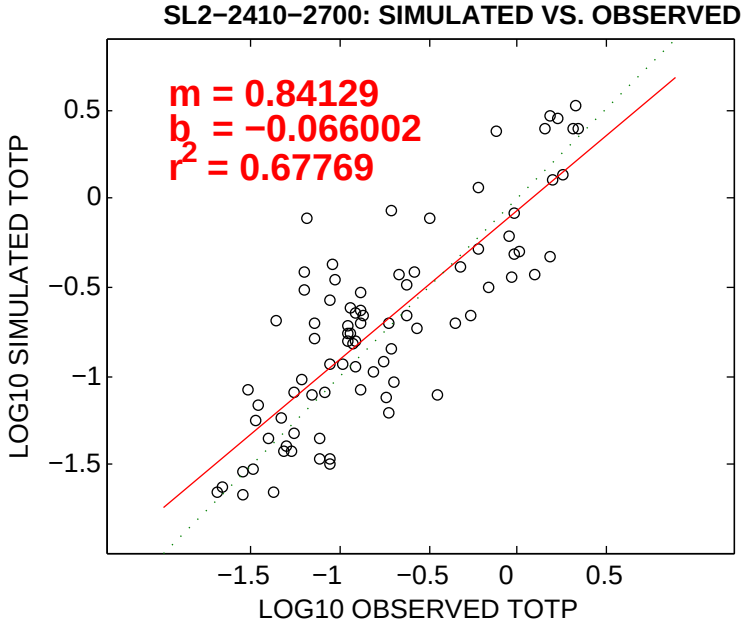


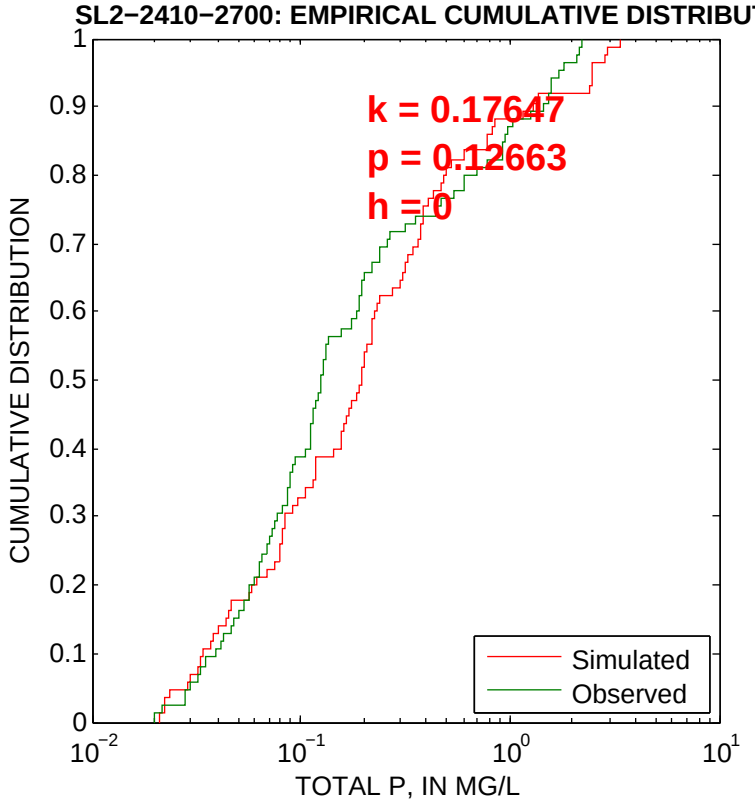












DATA SELECTION

scenario	file
P620171001WQ	TOTP.calib

plot: TOTP - total phosphorus

Dates: 1/1/1985 – 12/31/201

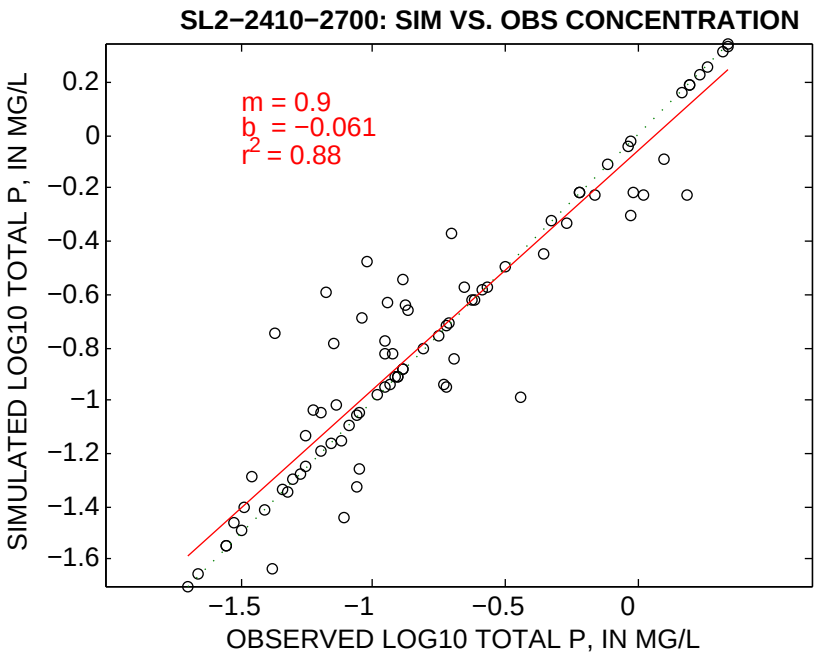
Drive	Directory	Observed
N/A	model	OBS20161101

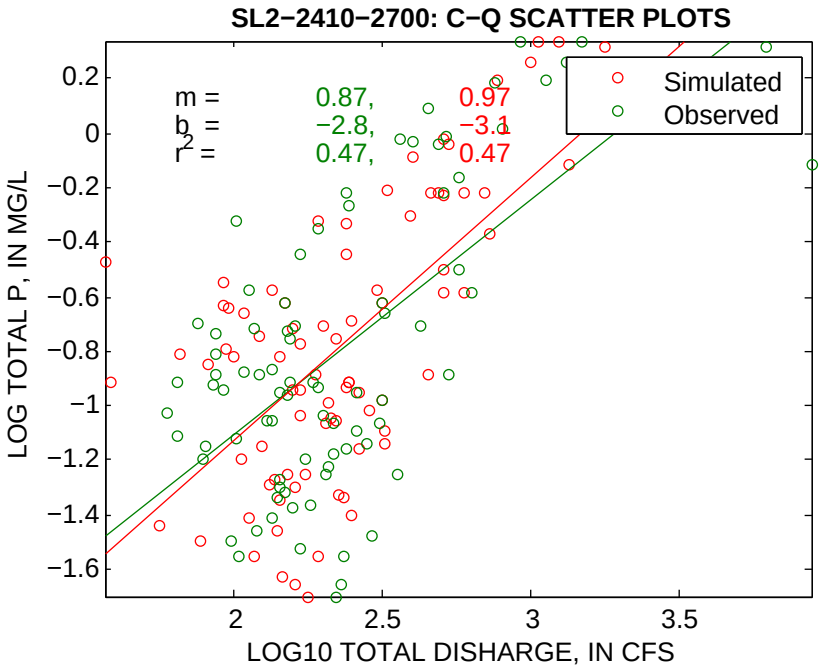
STATISTICS

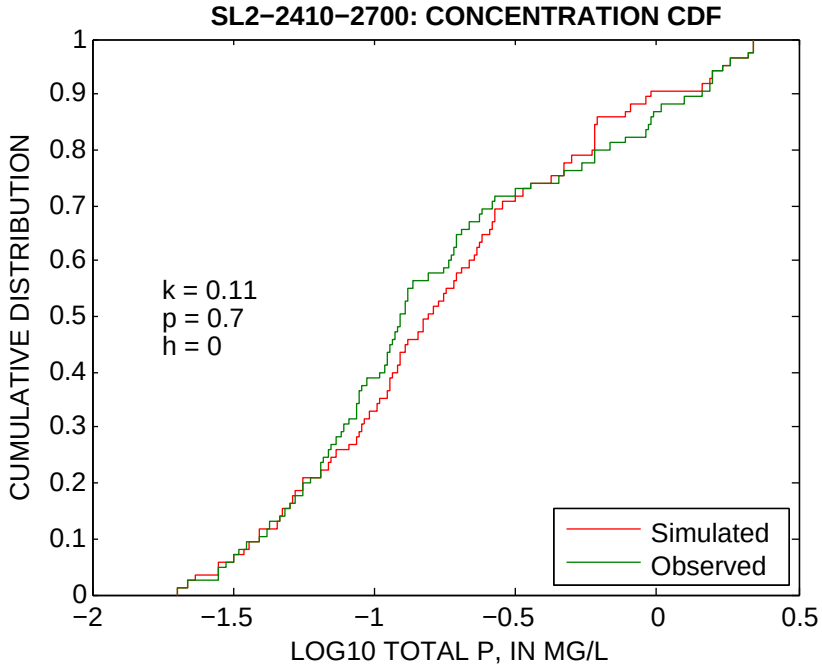
	n	85	85
		observe	simulate
min		0.02	0.021036
		-1.69897	-1.67704
mean		0.393071	0.461422
		-0.767085	-0.711339
media		0.123	0.19626
		-0.910095	-0.707168
max		2.192	3.3985
		0.340841	0.531287
varian		0.313066	0.547792
		0.301646	0.315029
JB		0.001	0.001
		0.044498	0.206932
		ra	log
%		17.389	-7.26727
err.va		0.17208	0.112279
rel.std.err		0.54966	0.372223
mod.eff		0.45034	0.627777

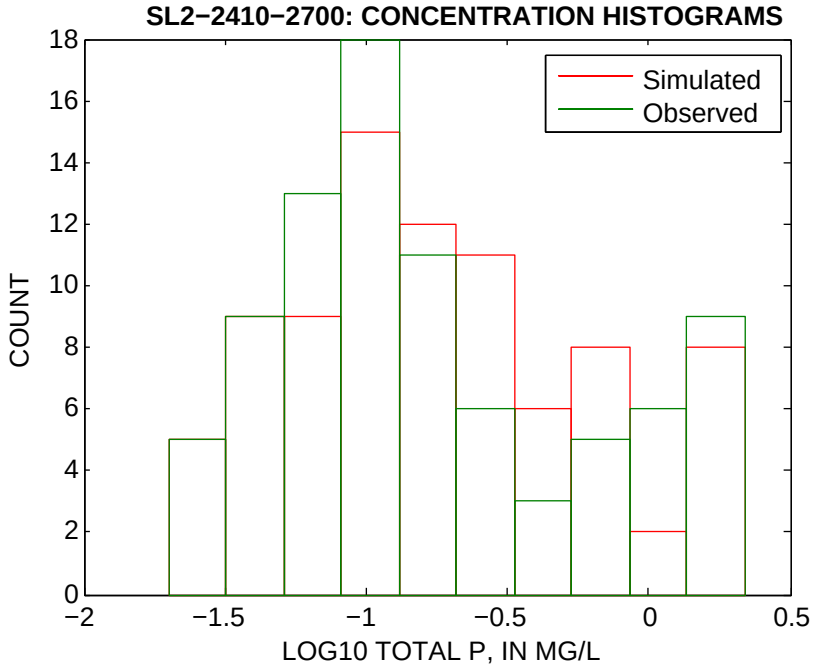
VERSION

ALL DATA
LOG10

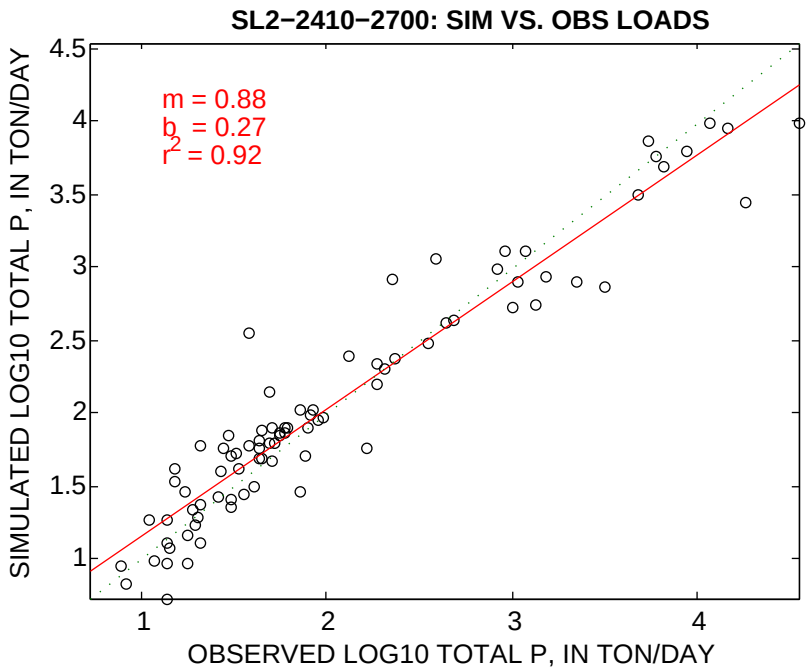


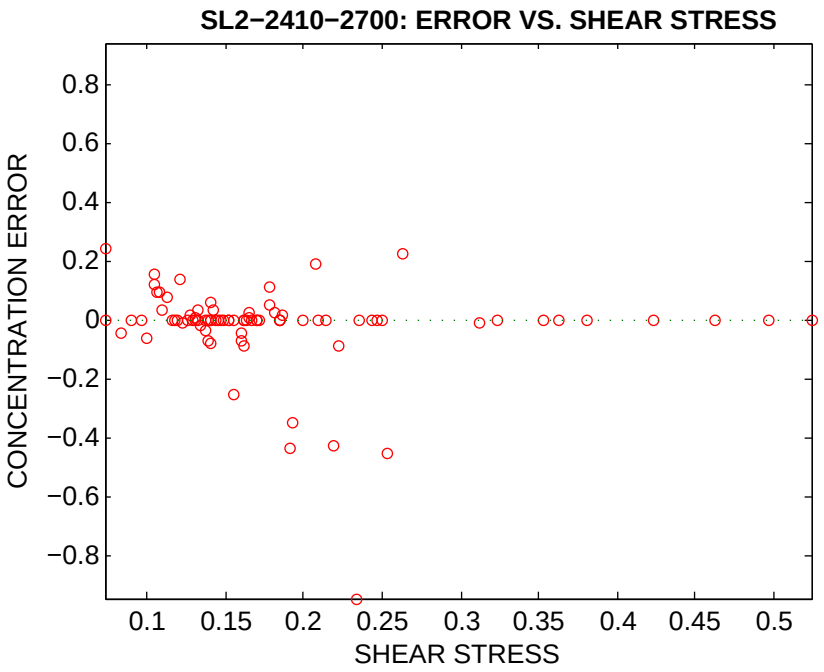


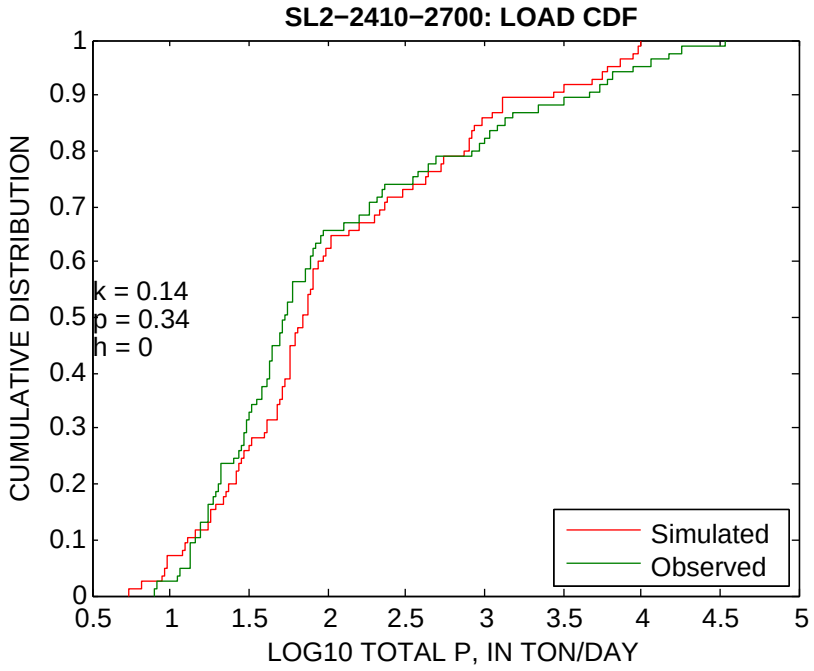


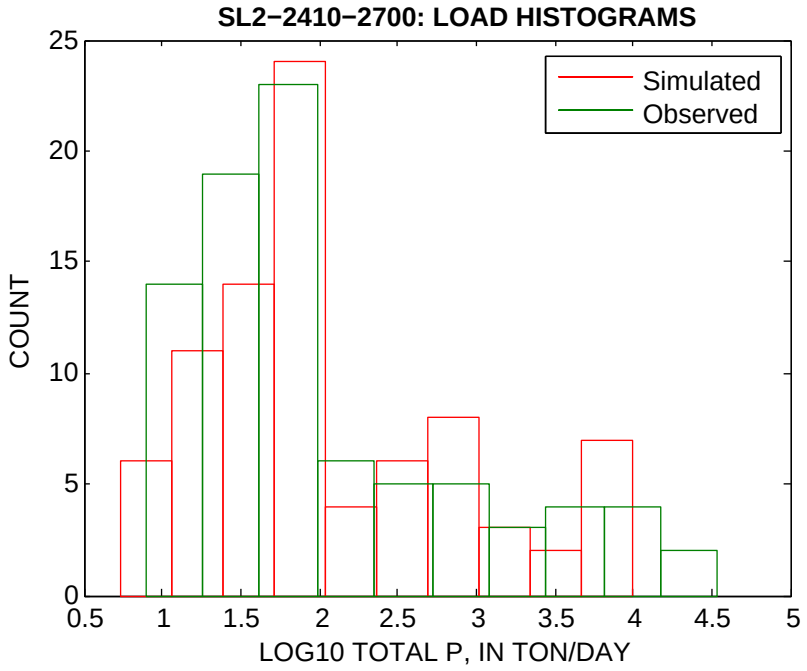


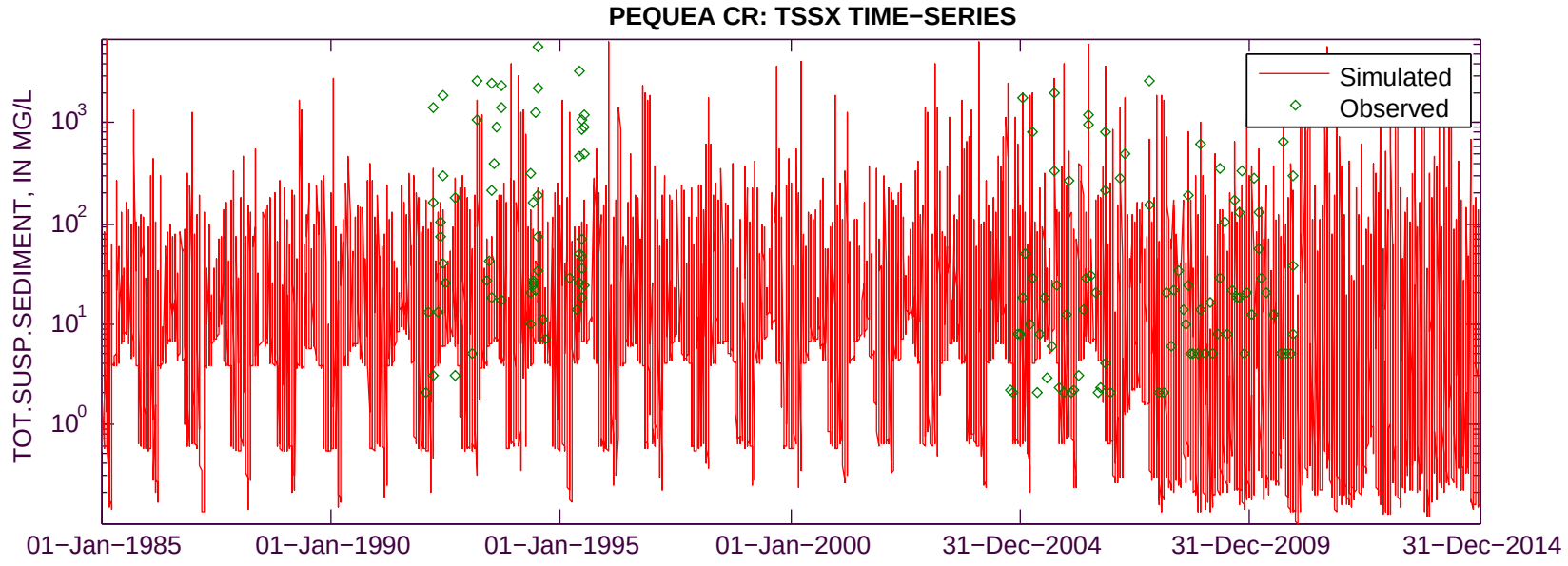
LOAD DATA
LOG10

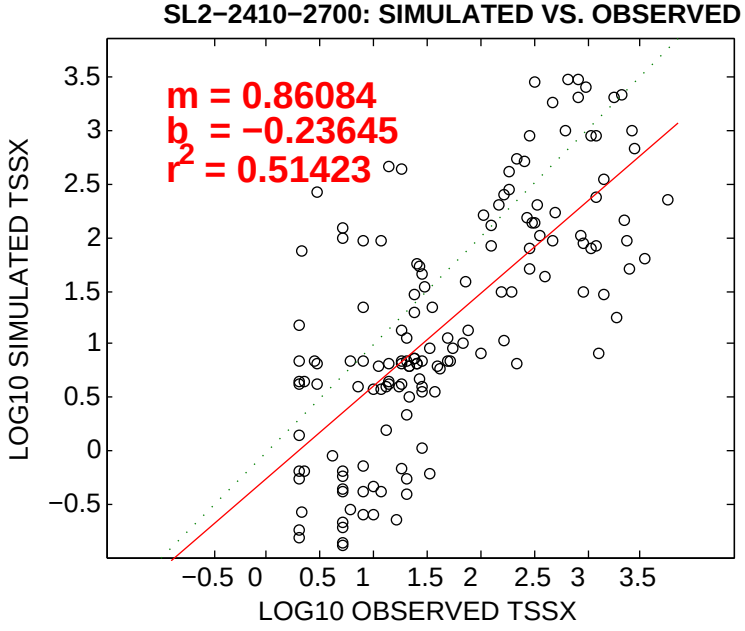


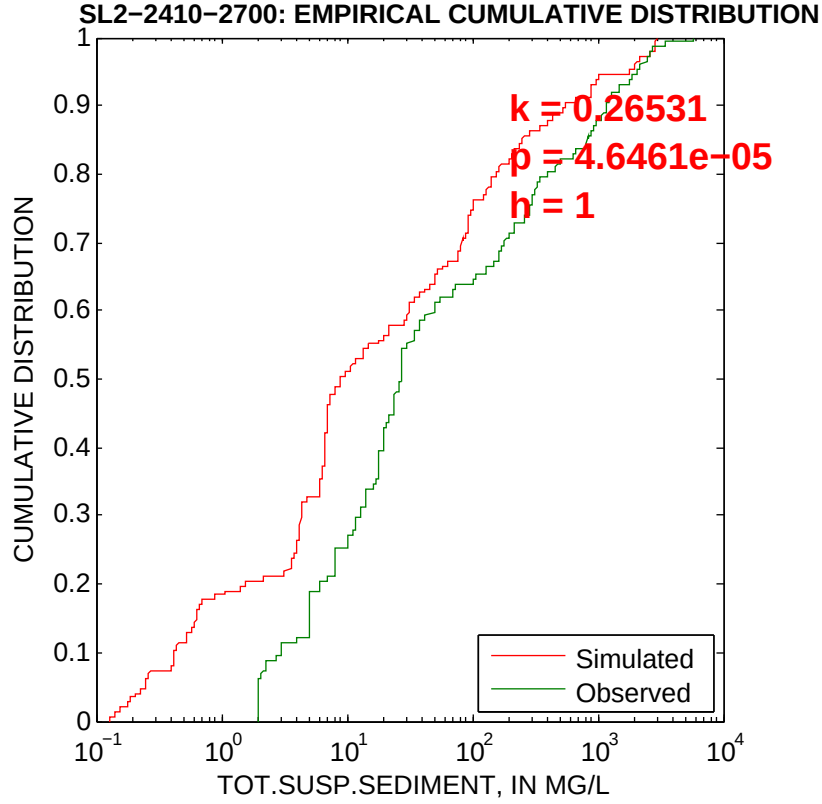












DATA SELECTION

scenario	file
P620171001WQ	TSSX.calib

plot: TSSX - total suspended ...

Dates 1/1/1985 12/31/201

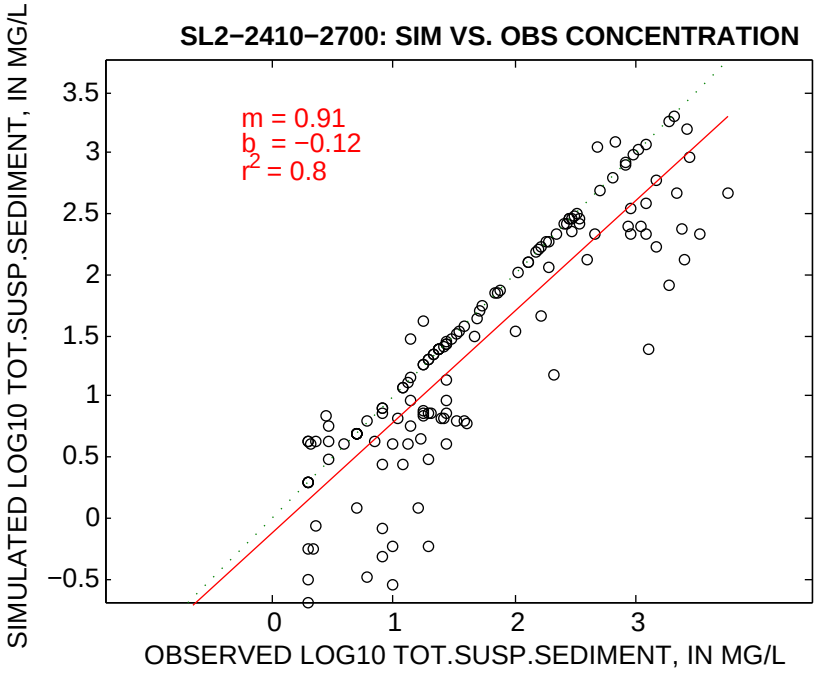
Drive	Directory	Observed
N/A	model	OBS20161101

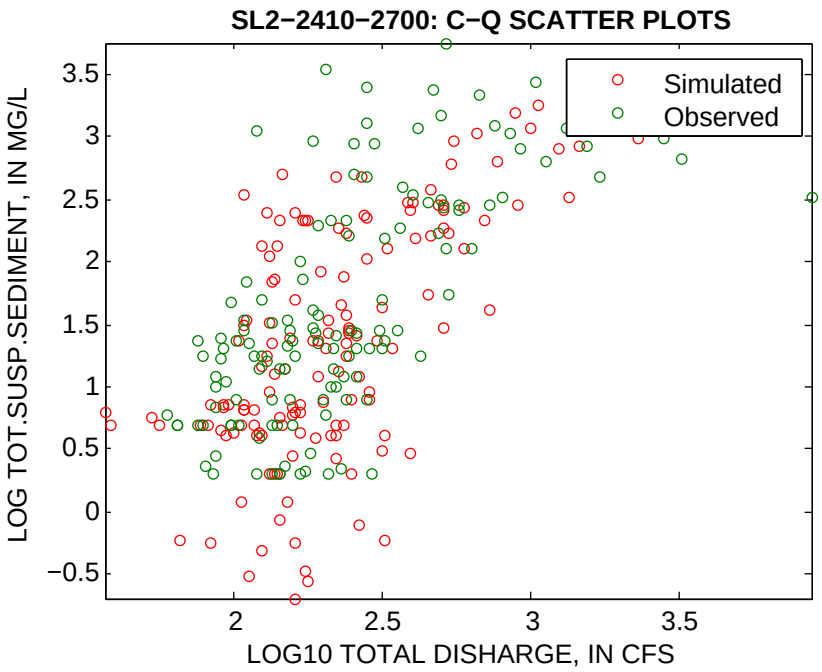
STATISTICS

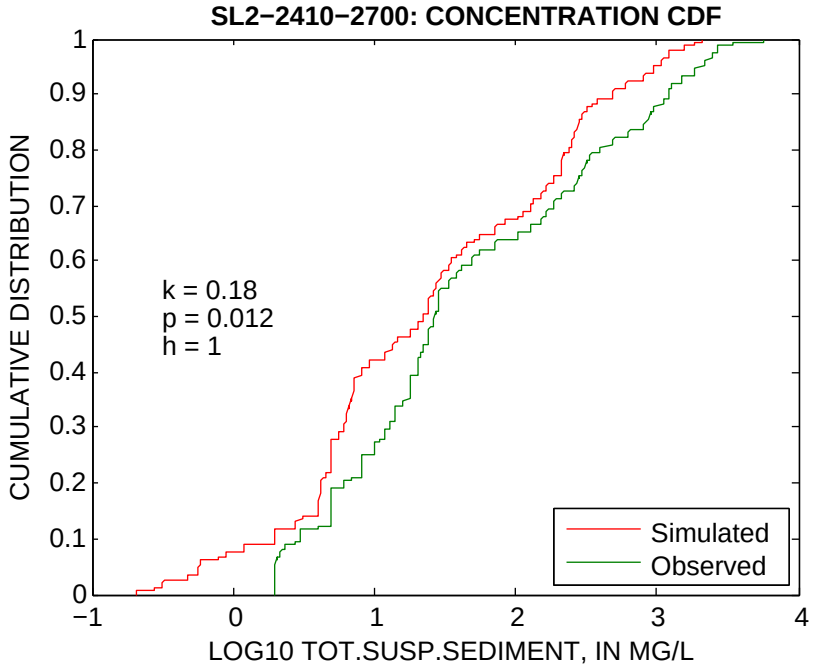
	n	147	147
		observe	simulate
min		2	0.13257
		0.30103	-0.877555
mean		357.976	221.184
		1.66827	1.19967
media		27	9.0465
		1.43136	0.956481
max		5720.18	3005.4
		3.75741	3.4779
varian		605373	330566
		0.873562	1.25887
JB		0.001	0.001
		0.018201	0.106924
		ra	log
%		-38.2127	-28.0894
err.va		697734	0.849531
rel.std.err		1.15257	0.97249
mod.eff		-0.15257	0.0275096

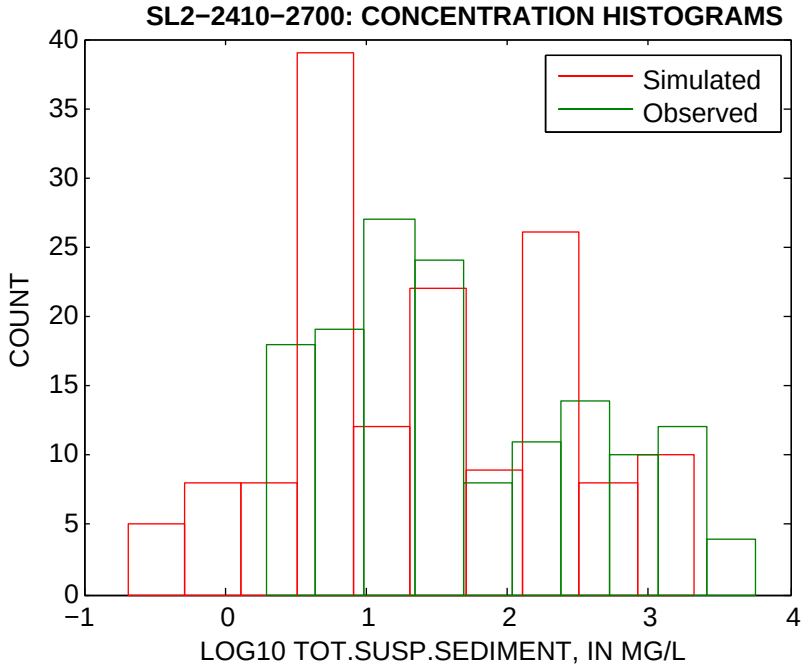
VERSION 2.1

ALL DATA
LOG10

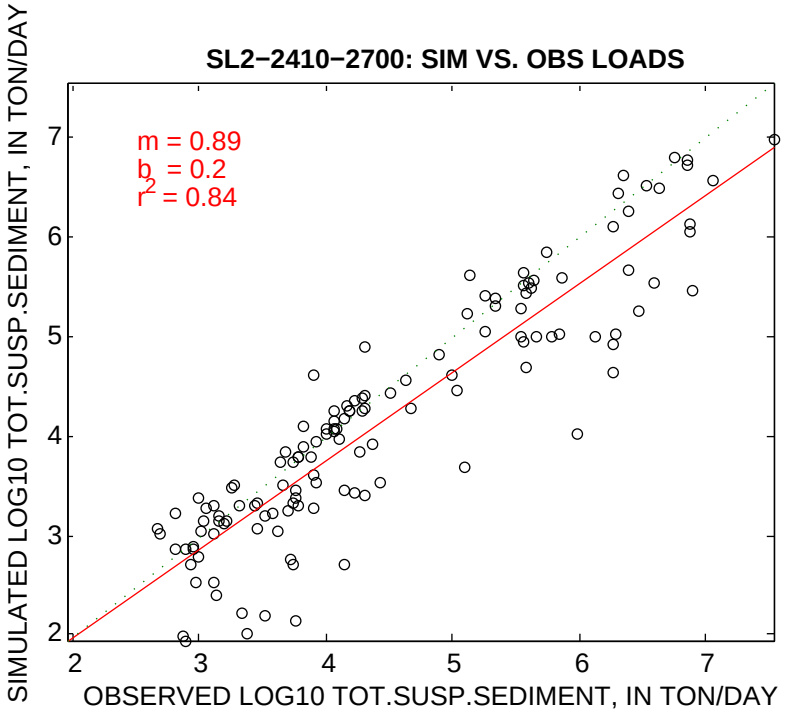


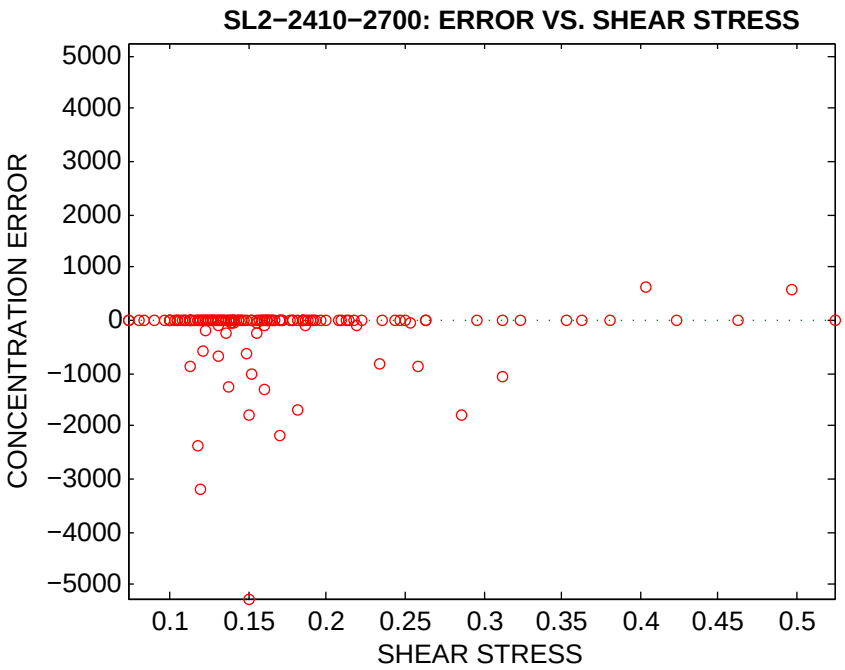


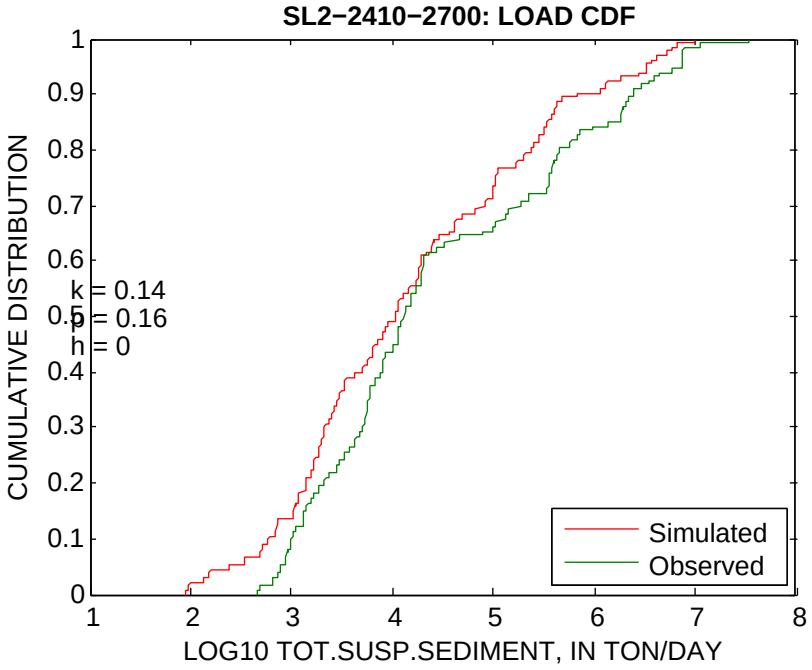


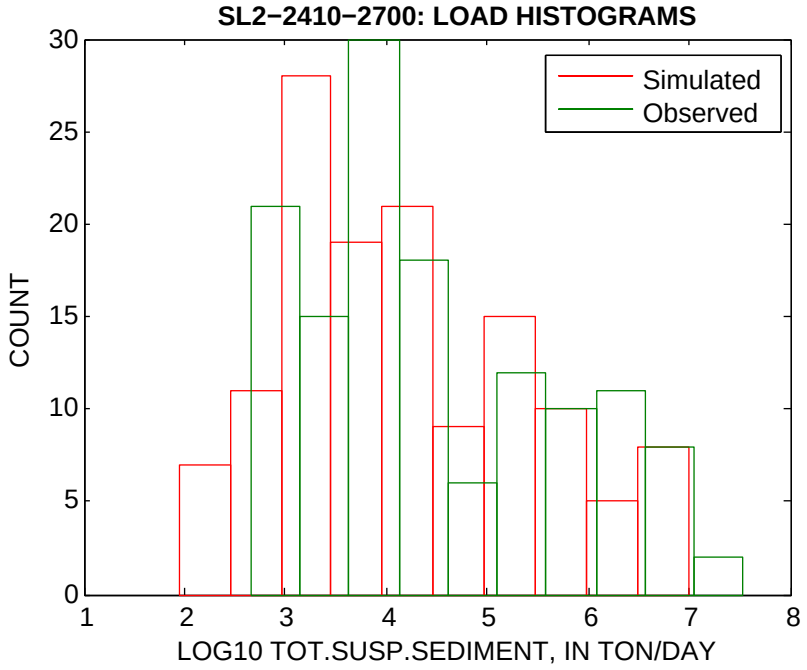


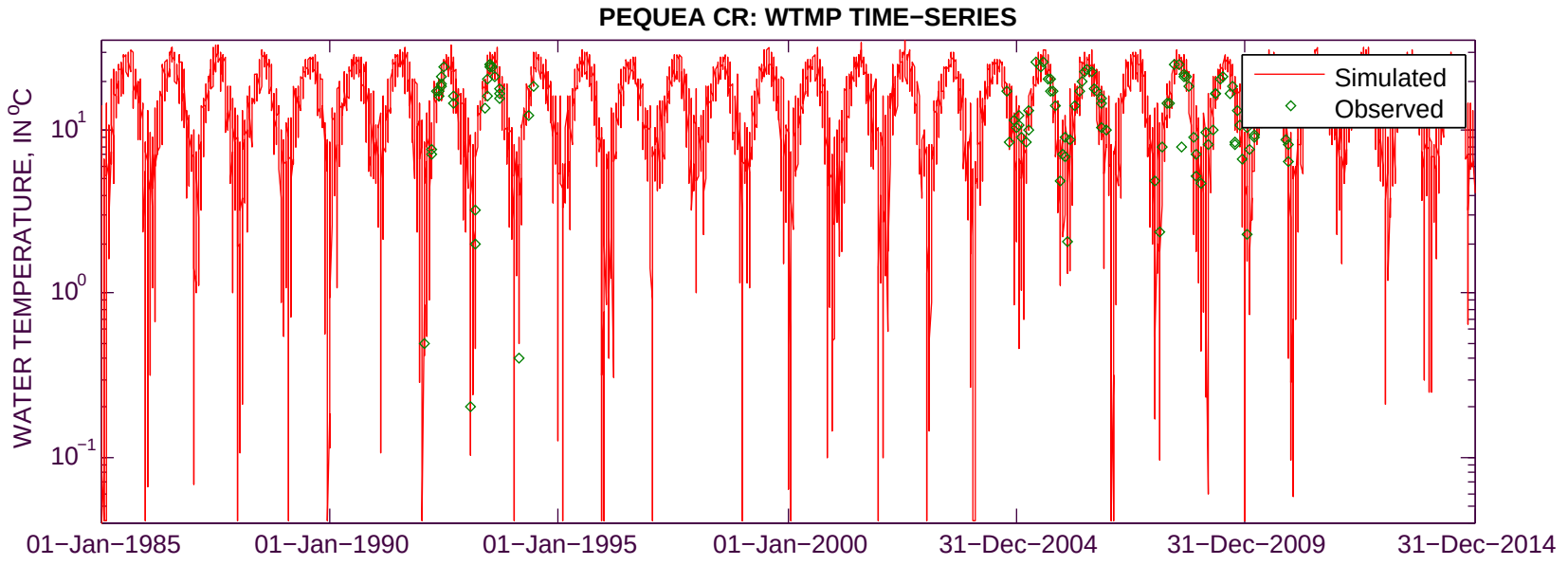
LOAD DATA
LOG10

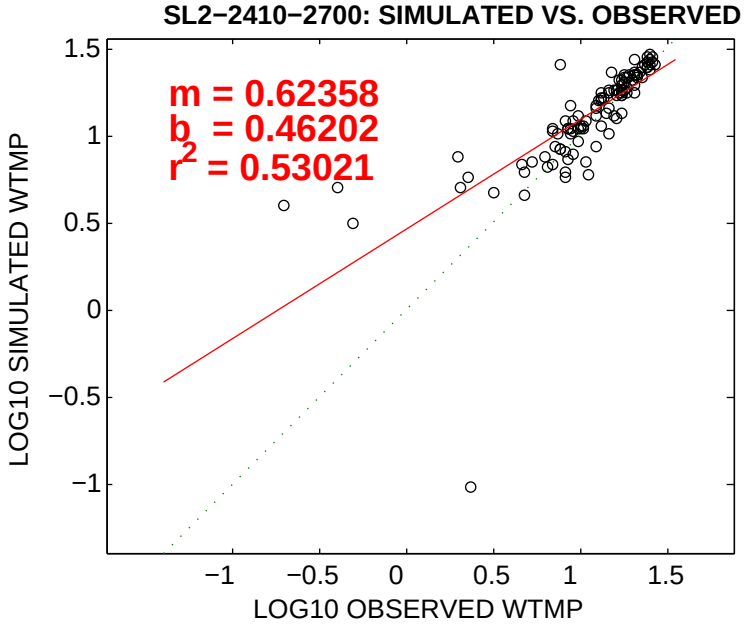


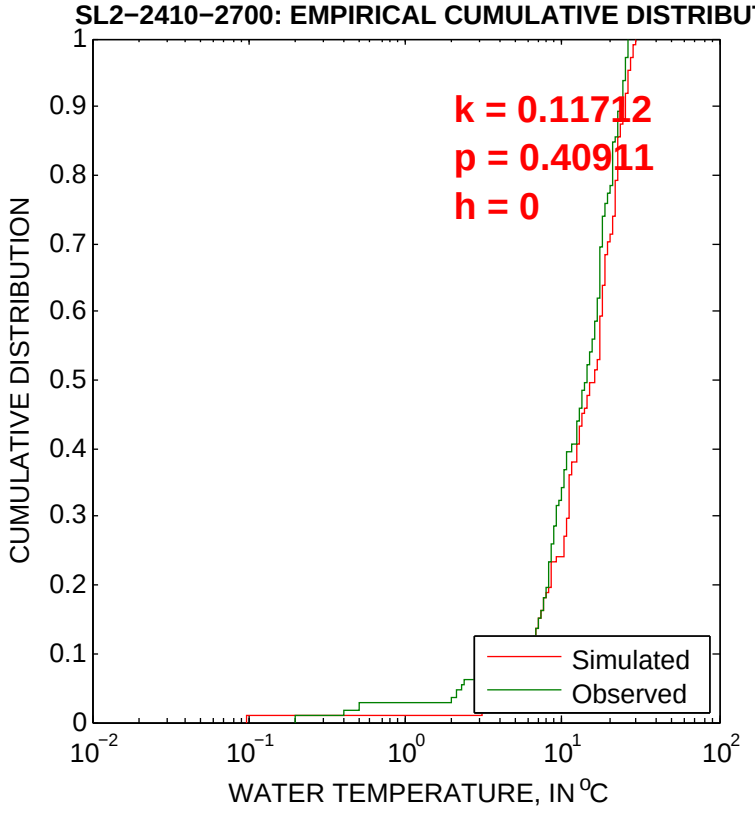












DATA SELECTION

scenario	file
P620171001WQ	WTMP.calib

plot: WTMP - water tempera...

Dates 1/1/1985 12/31/201

Drive Directory: N/A | model

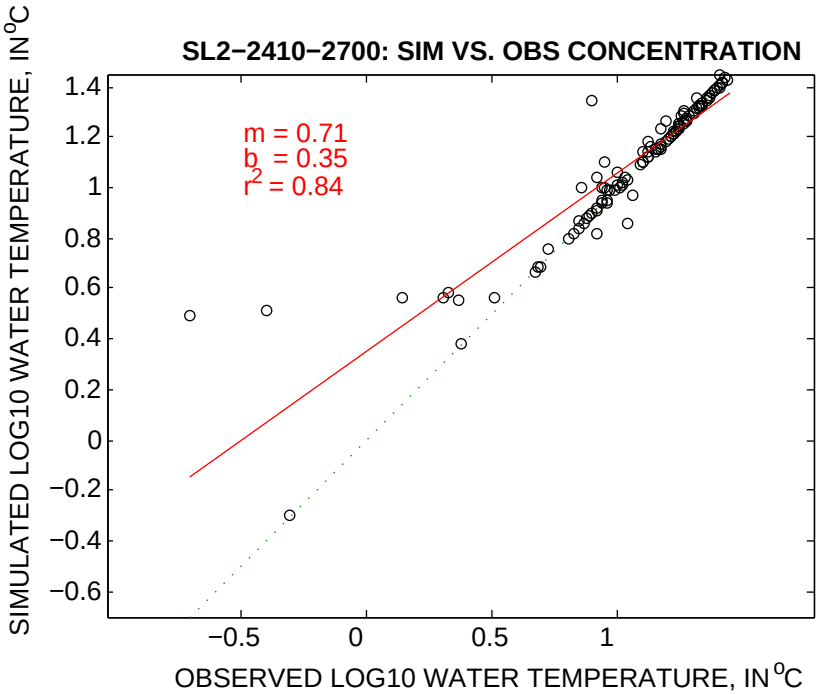
Observed: OBS20161101

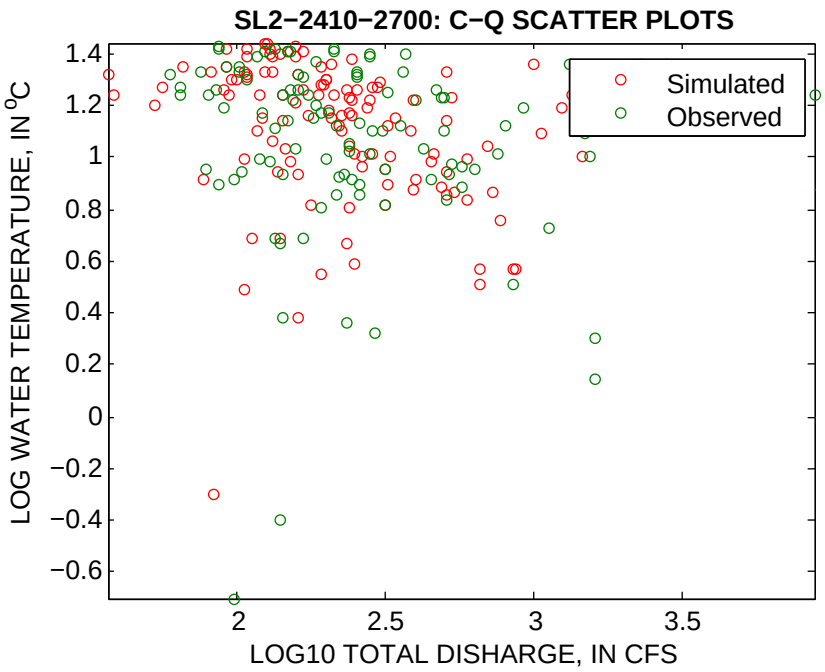
STATISTICS

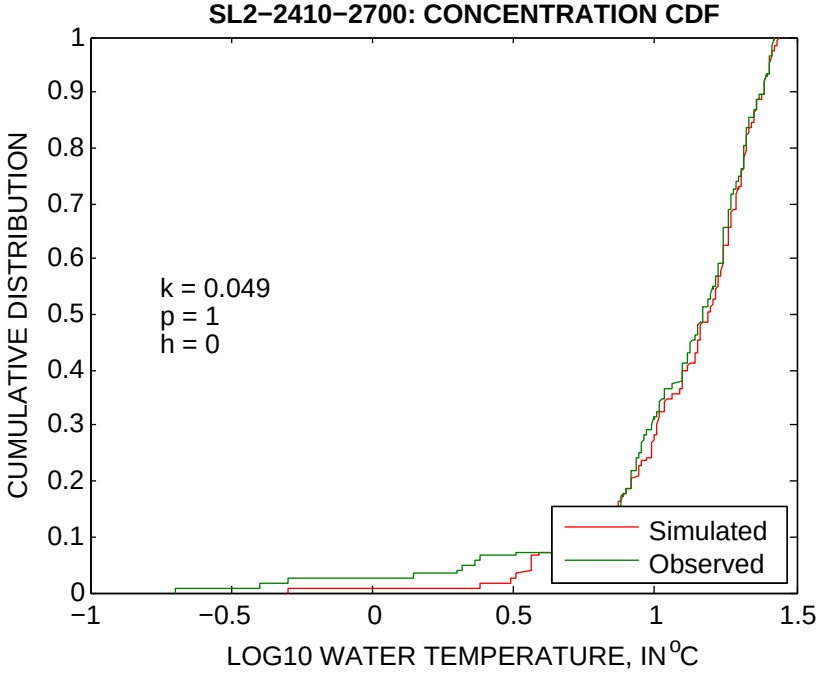
		observe	simulate
n		111	111
min		0.2	0.095502
		-0.69897	-1.01999
mean		14.0316	15.4588
		1.05811	1.12184
media		14.23	16.016
		1.1532	1.20455
max		26.71	29.631
		1.42667	1.47175
varian		46.3894	49.8761
		0.12673	0.0929414
JB	✓	0.103589	0.059942 ✓
		0.001	0.001
		ra	log
%		10.1711	6.02237
err.va		9.984	0.0657169
rel.std.err		0.215222	0.518559
mod.eff		0.784778	0.481441

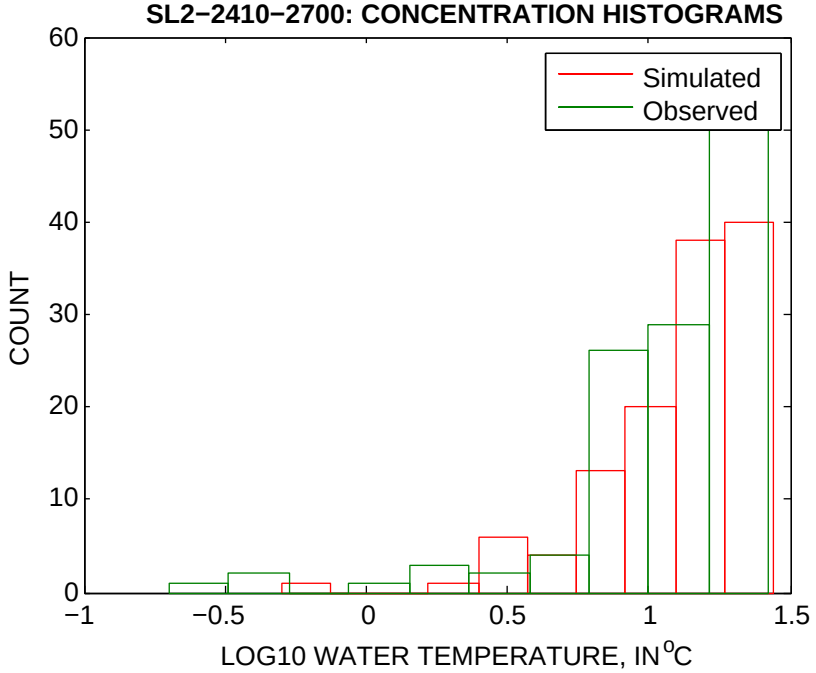
VERSION 2.1

ALL DATA
LOG10

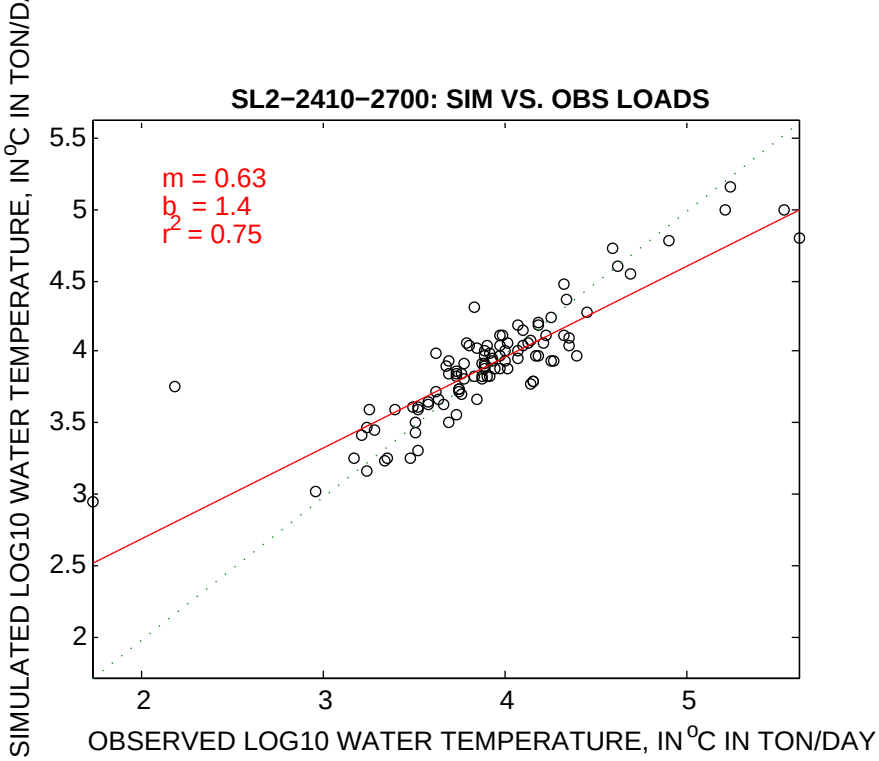


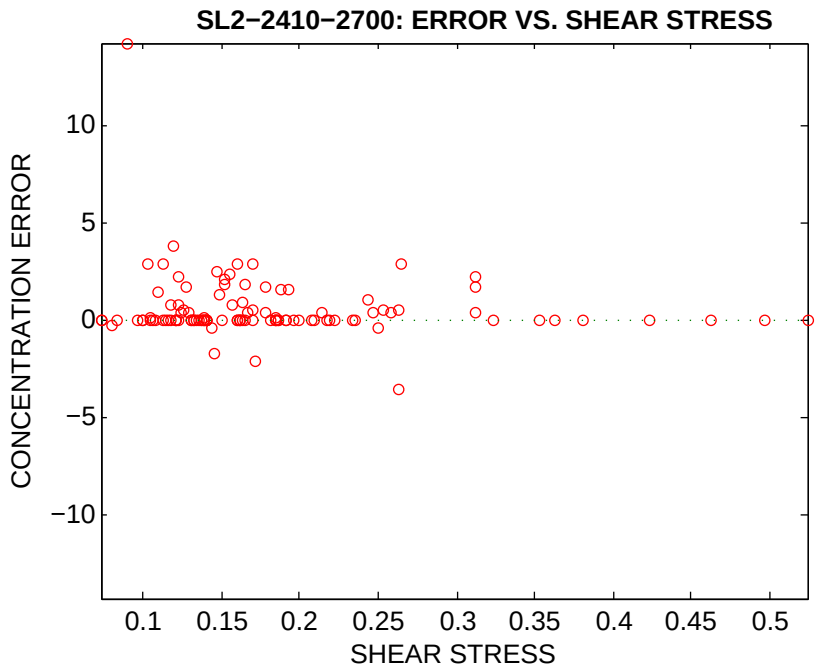


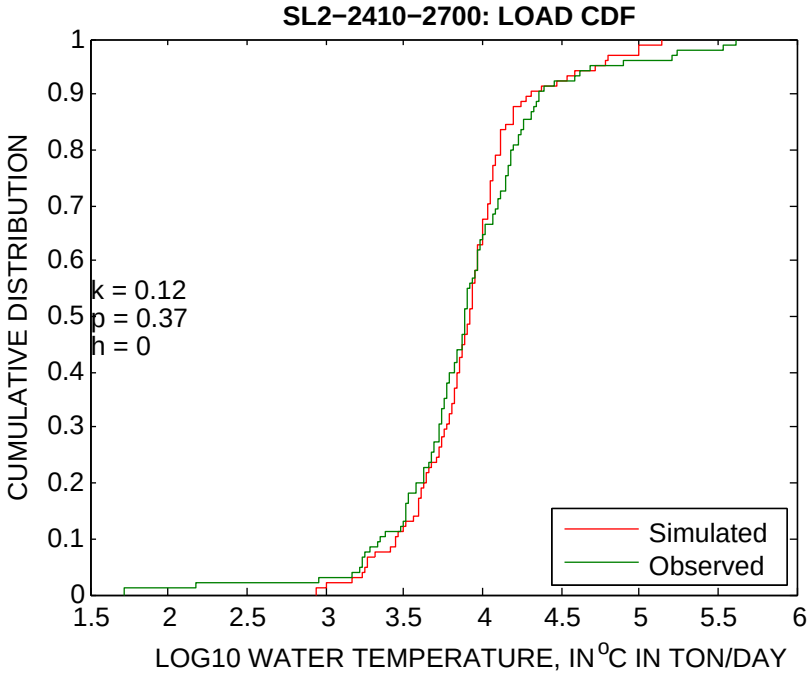


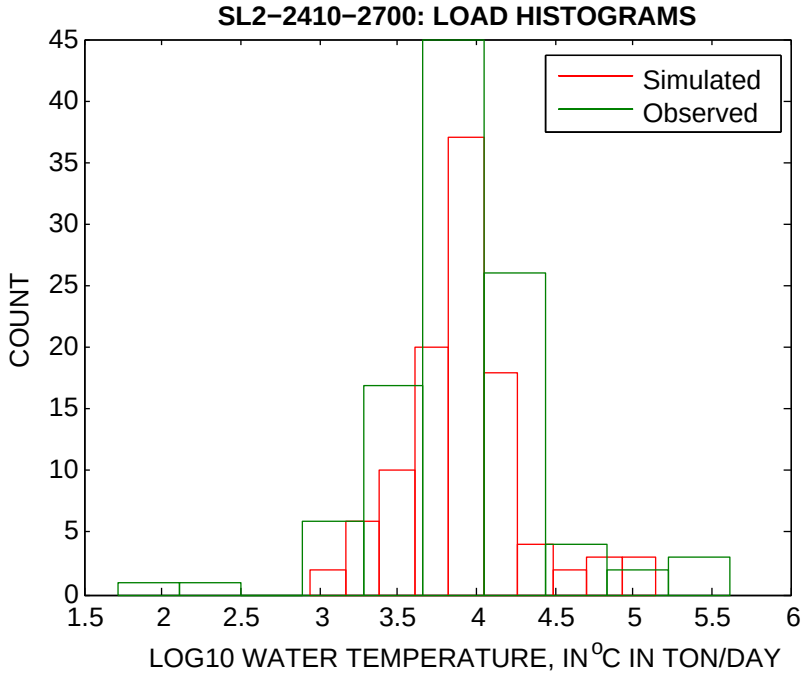


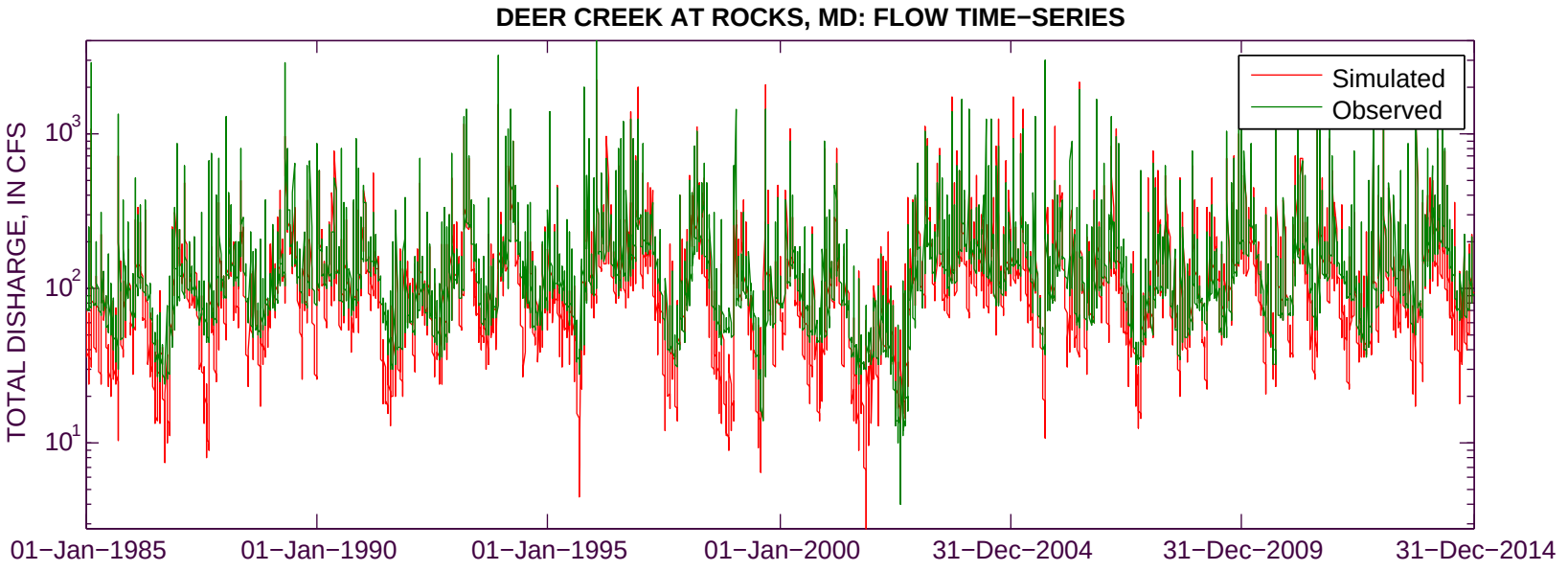
LOAD DATA
LOG10

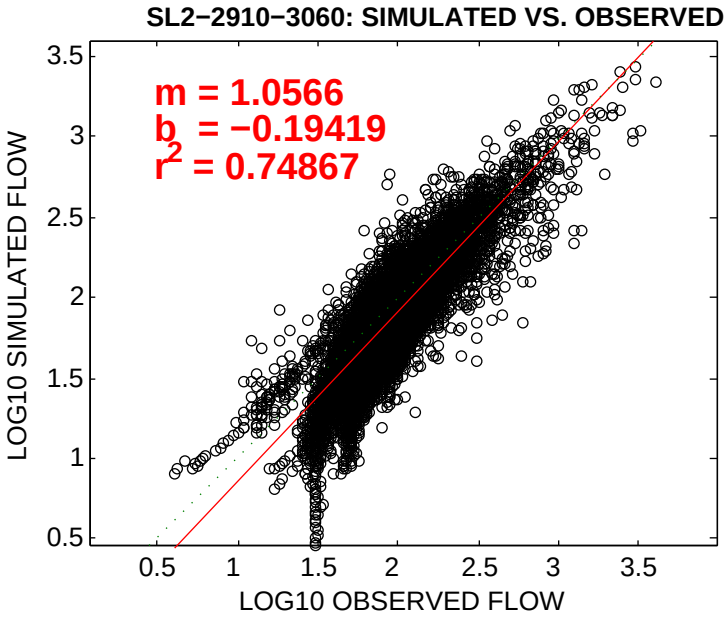


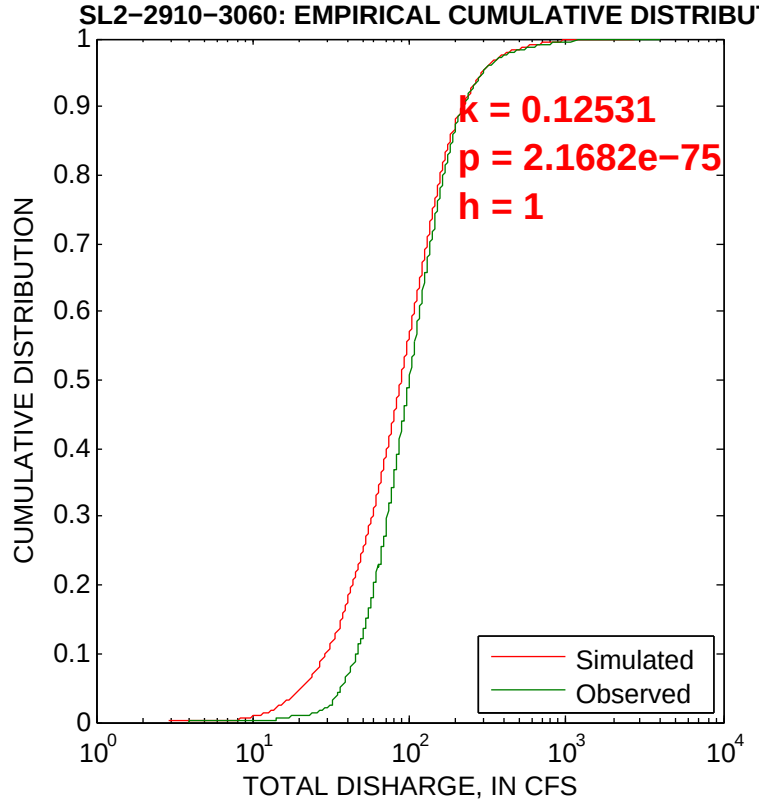












DATA SELECTION

scenario	file
P620171001WQ	FLOW.calib

plot: FLOW - total discharge

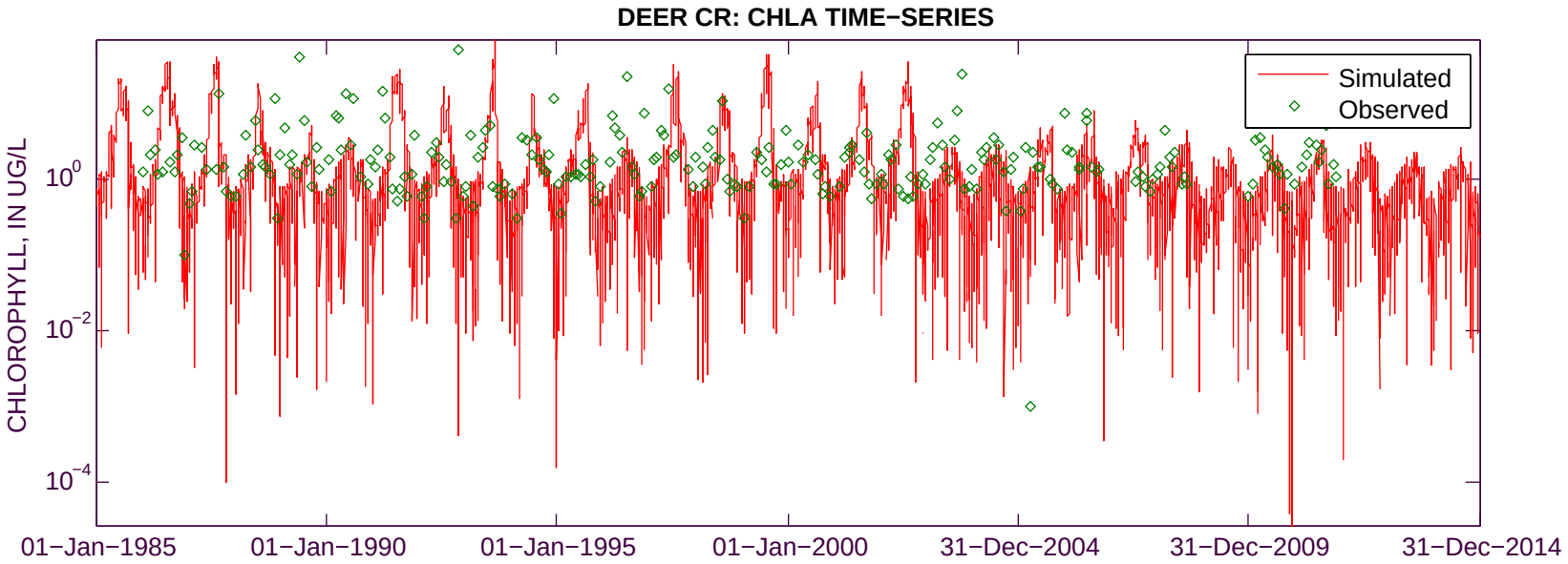
Dates: 1/1/1985 – 12/31/201

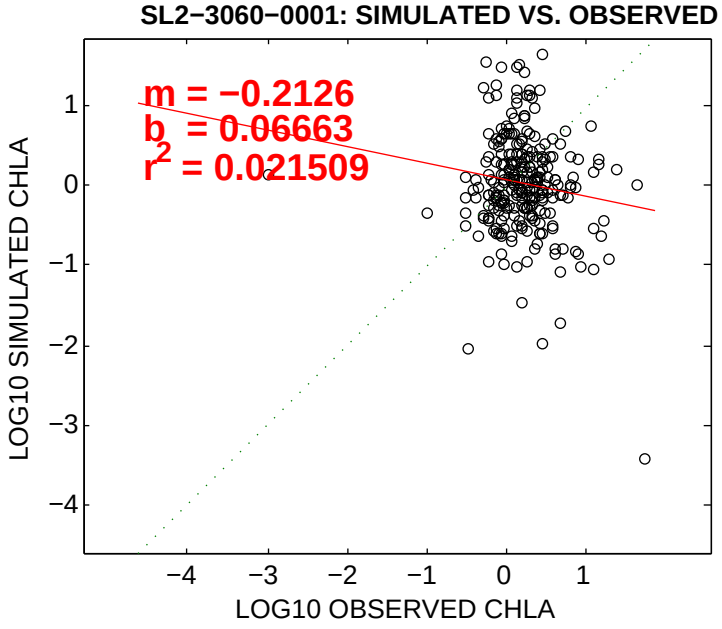
Drive	Directory	Observed
N/A	model	OBS20161101

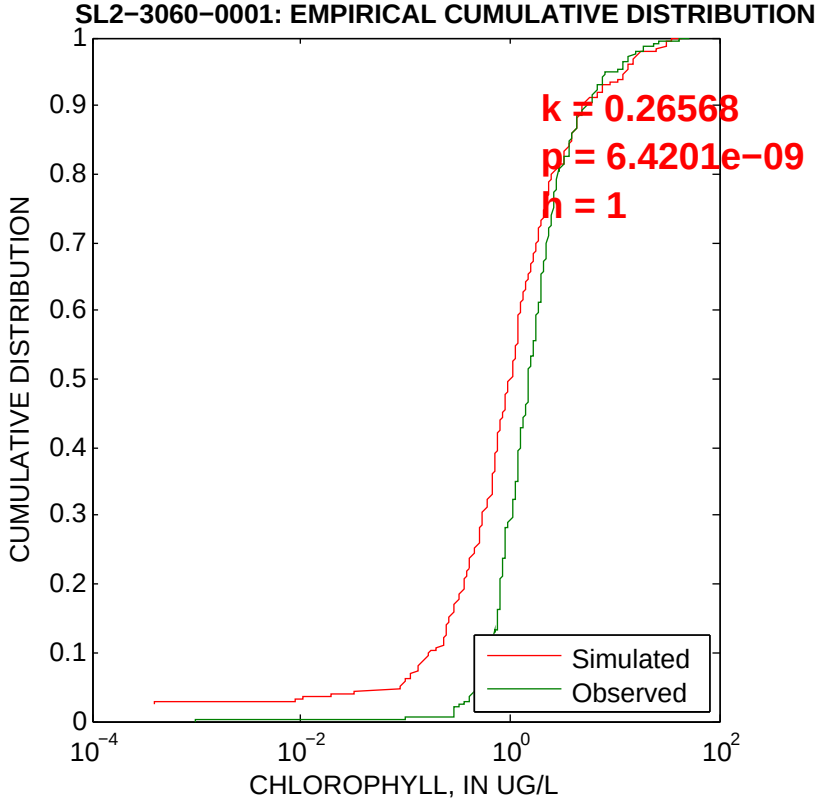
STATISTICS

	n	observe	simulate
		10957	10957
min		4	2.8166
		0.60206	0.449725
mean		131.7	118.078
		2.00776	1.92729
media		100	88.752
		2	1.94818
max		4020	2781.4
		3.60423	3.44426
varian		23014.9	17290.6
		0.0836019	0.124675
JB		0.001	0.001
		0.001	0.001
		ra	log
%		-10.343	-4.00789
err.va		6339.69	0.0380788
rel.std.err		0.275461	0.455477
mod.eff		0.724539	0.544523

VERSION 2.1







DATA SELECTION

scenario	file
P620171001WQ	CHLA.calib

plot: CHLA - chlorophyll A

Dates: 1/1/1985 – 12/31/201

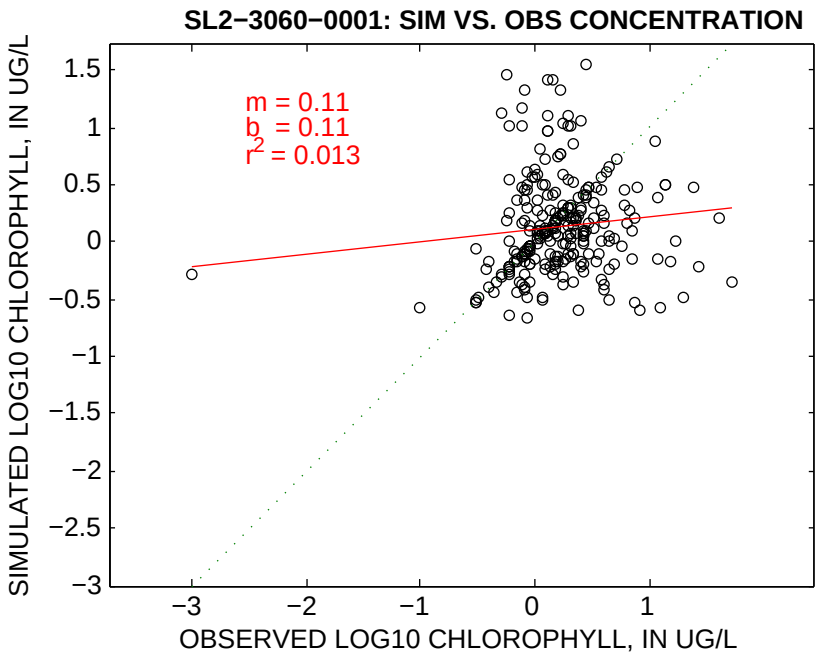
Drive	Directory	Observed
N/A	model	OBS20161101

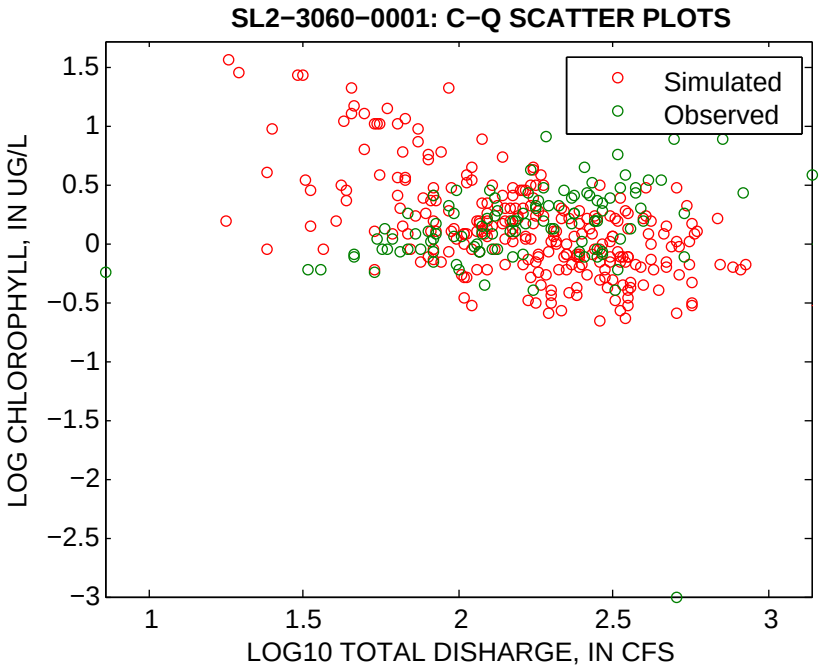
STATISTICS

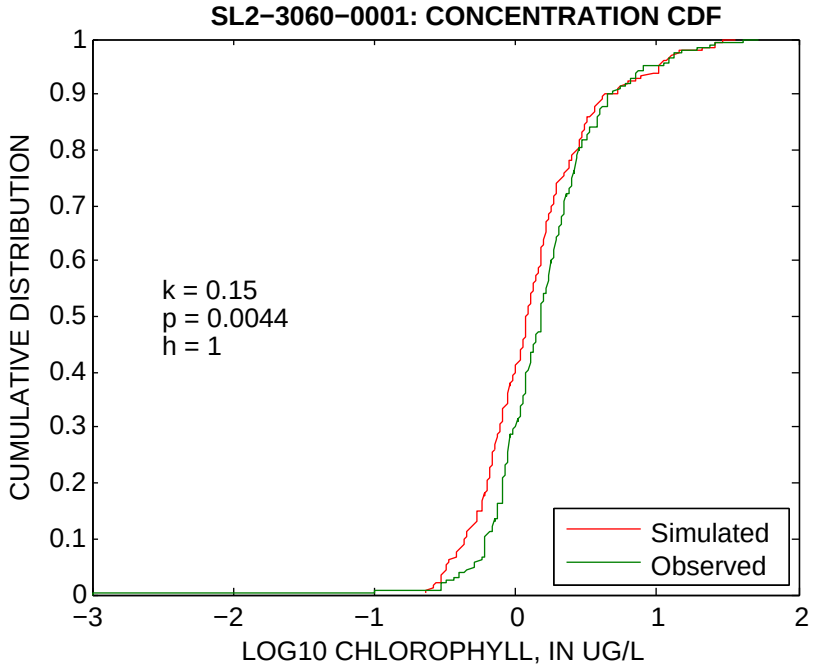
	n	observe	simulate
		271	264
min		0.001	0
		-3	-3.41005
mean		2.89215	2.69119
		0.198981	0.0243271
media		1.5	1.0175
		0.176091	0.0218846
max		52.33	43.118
		1.71875	1.63466
varian		26.5911	30.749
		0.18029	0.378848
JB		0.001	0.001
		0.001	0.001
		ra	log
%		-6.94855	-87.7741
err.va		62.8541	0.666417
rel.std.err		2.36372	3.69635
mod.eff		-1.36372	-2.69635

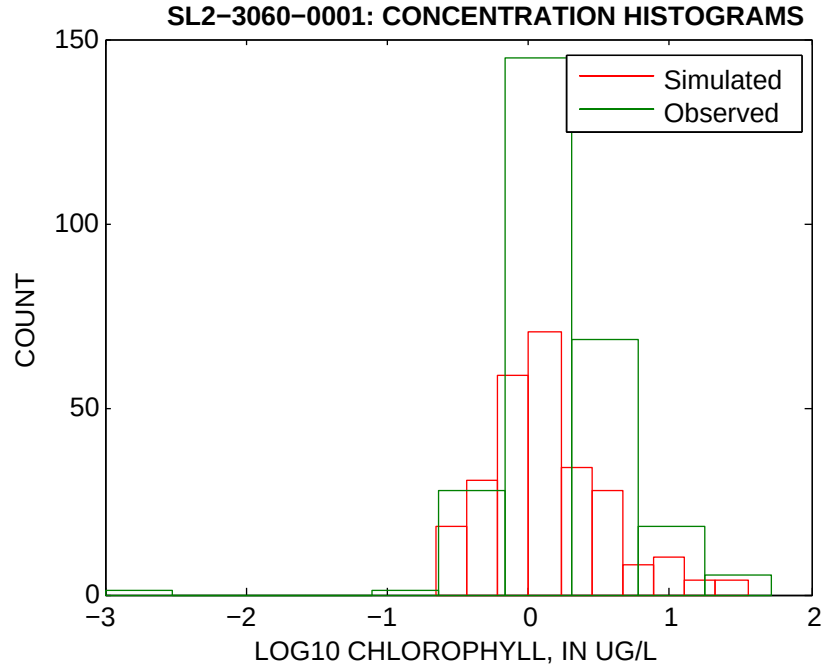
VERSION 2.1

ALL DATA
LOG10

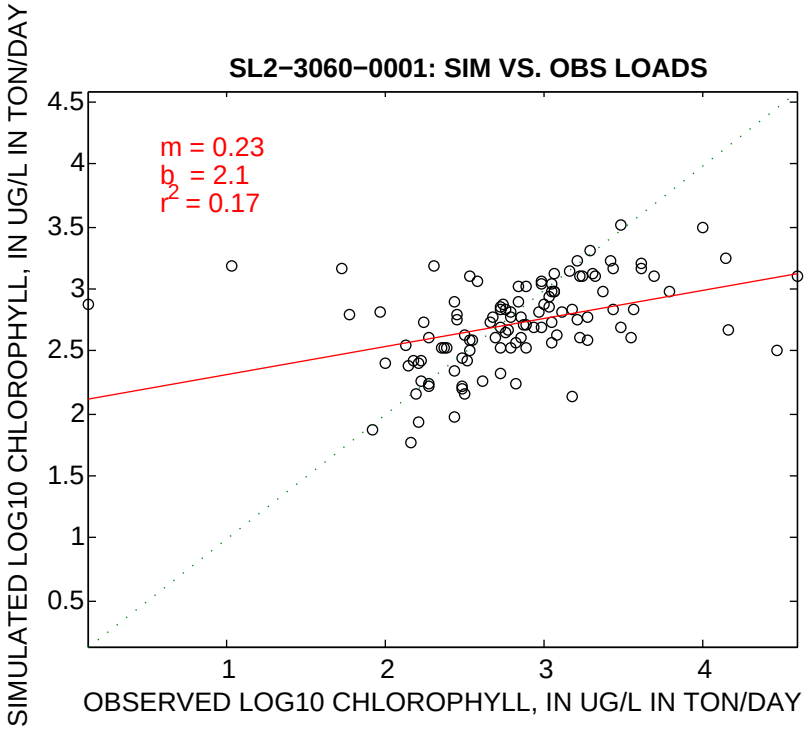


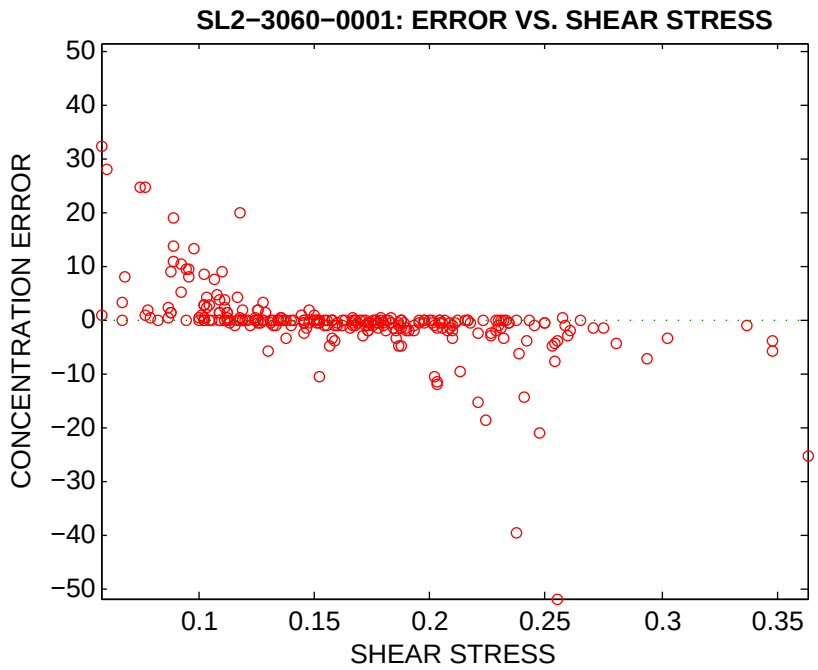


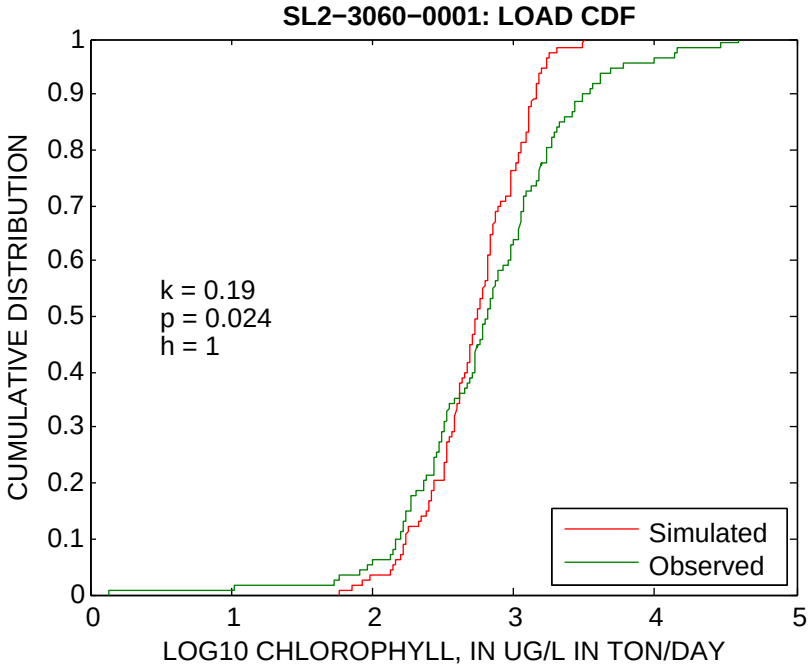


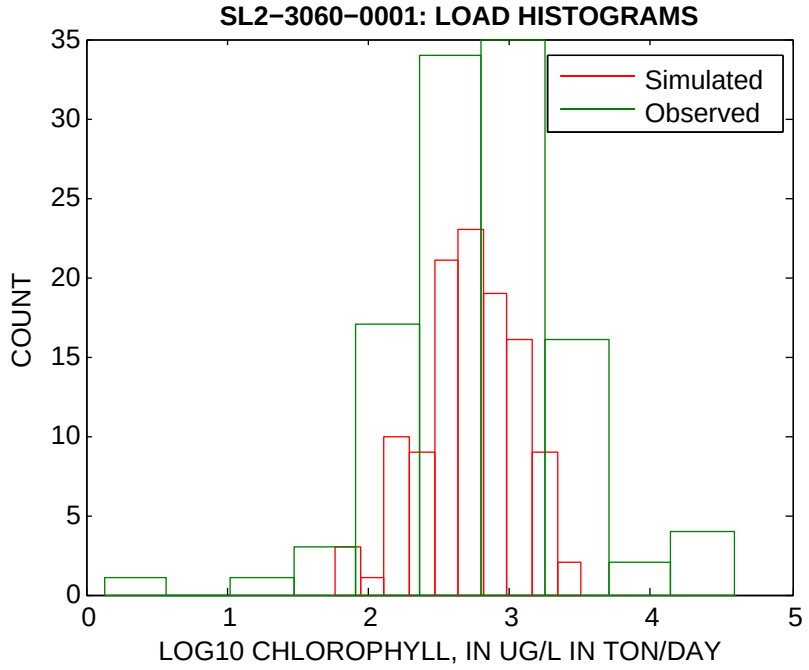


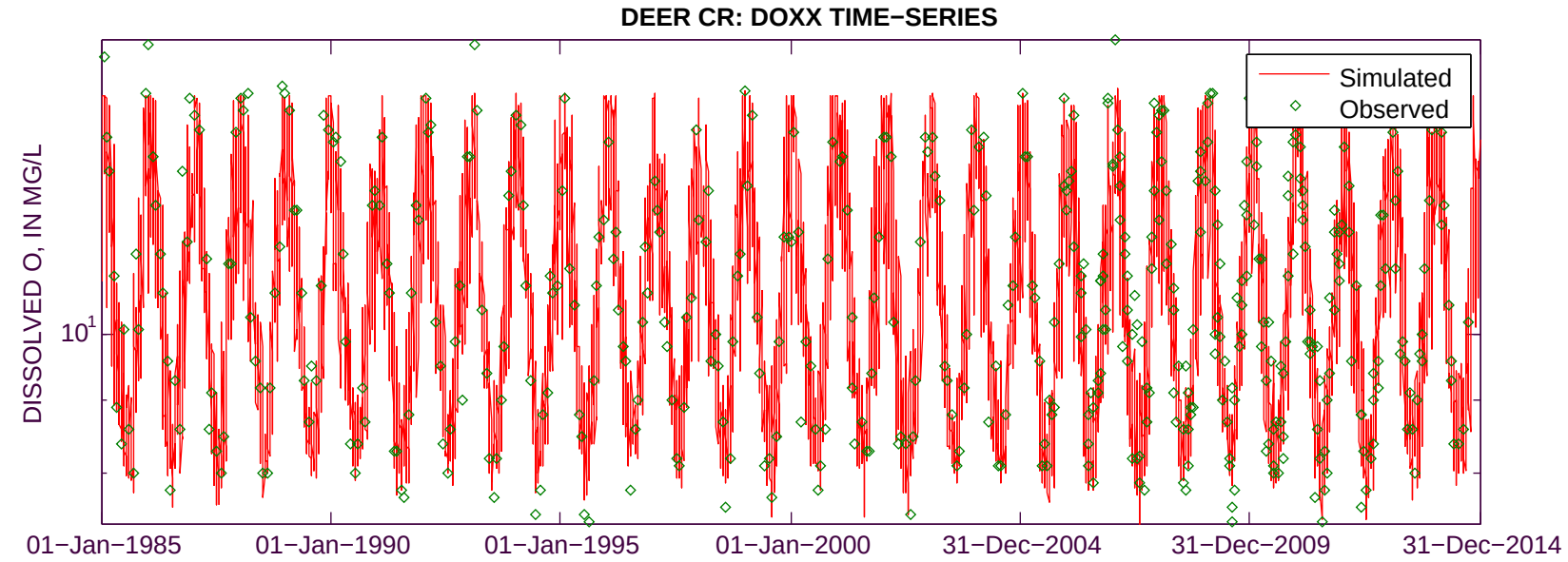
LOAD DATA
LOG10

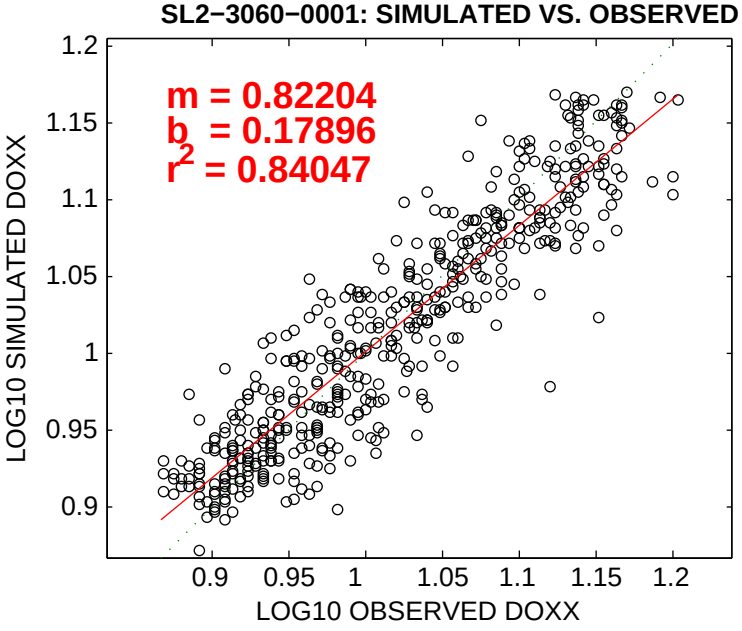


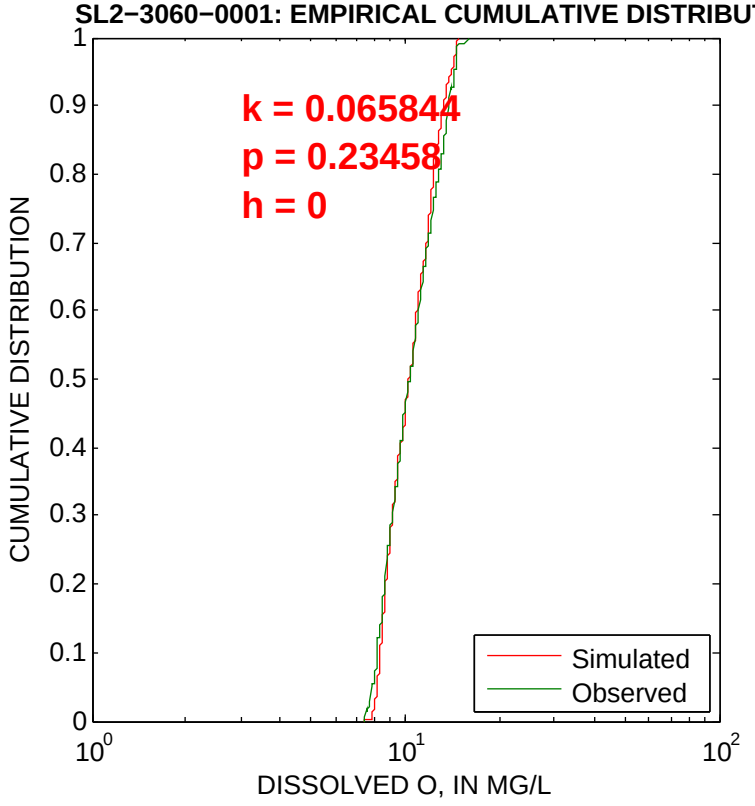












DATA SELECTION

scenario	file
P620171001WQ	DOXX.calib

plot: DOXX - dissolved oxygen

Dates: 1/1/1985 – 12/31/201

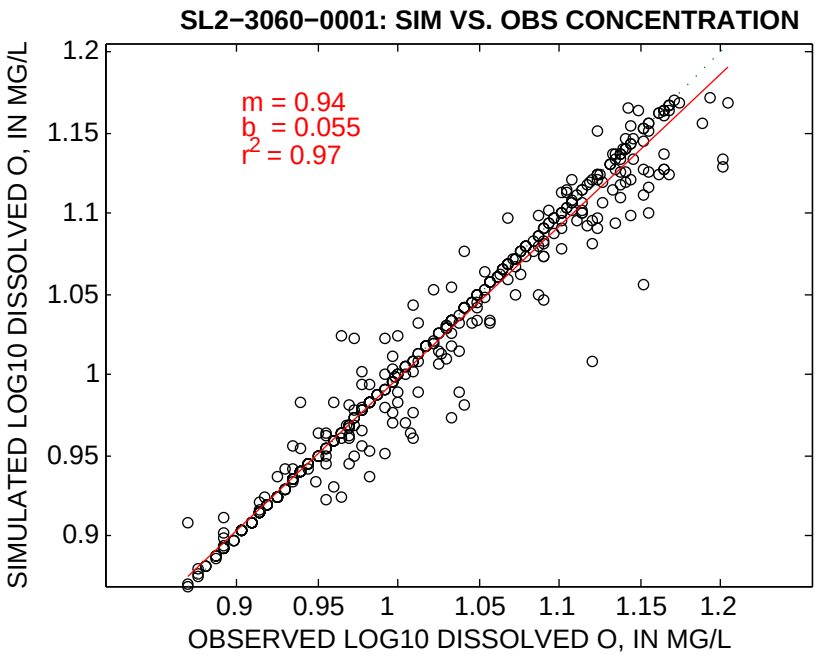
Drive	Directory	Observed
N/A	model	OBS20161101

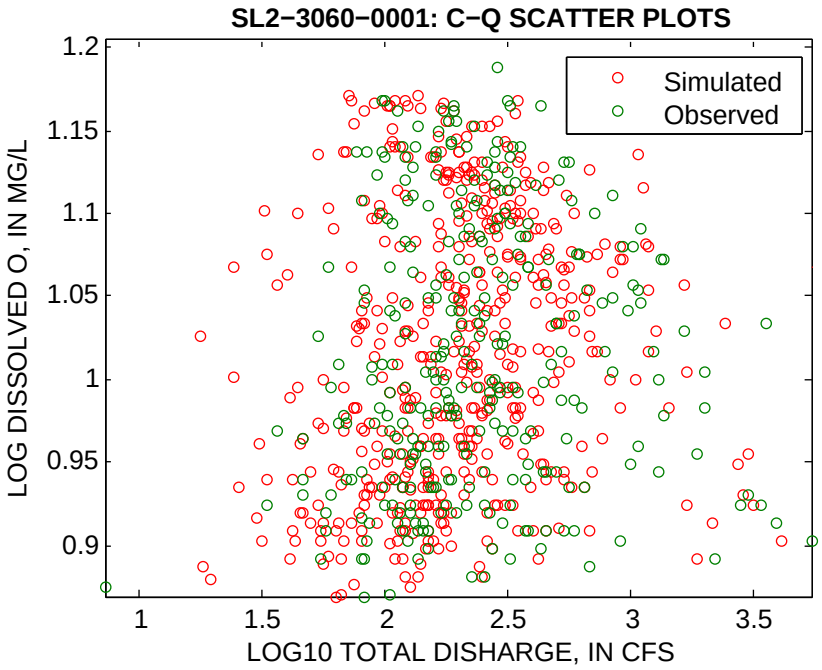
STATISTICS

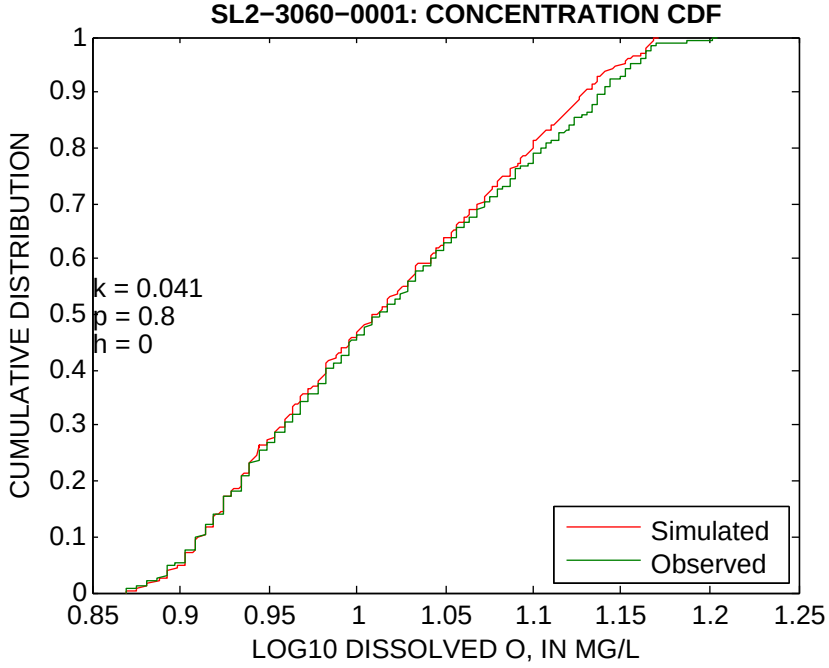
n	486	486
	observe	**simulate**
min	7.399	7.4319
	0.869173	0.8711
mean	10.6631	10.5628
	1.01968	1.01717
media	10.3	10.3105
	1.01284	1.01328
max	16	14.776
	1.20412	1.16956
varian	4.39509	3.47925
	0.00708784	0.00569869
JB	0.001	0.001
	0.001	0.001
	ra	log
%	-0.940824	-0.245798
err.va	0.72526	0.00113985
rel.std.err	0.165016	0.160818
mod.eff	0.834984	0.839182

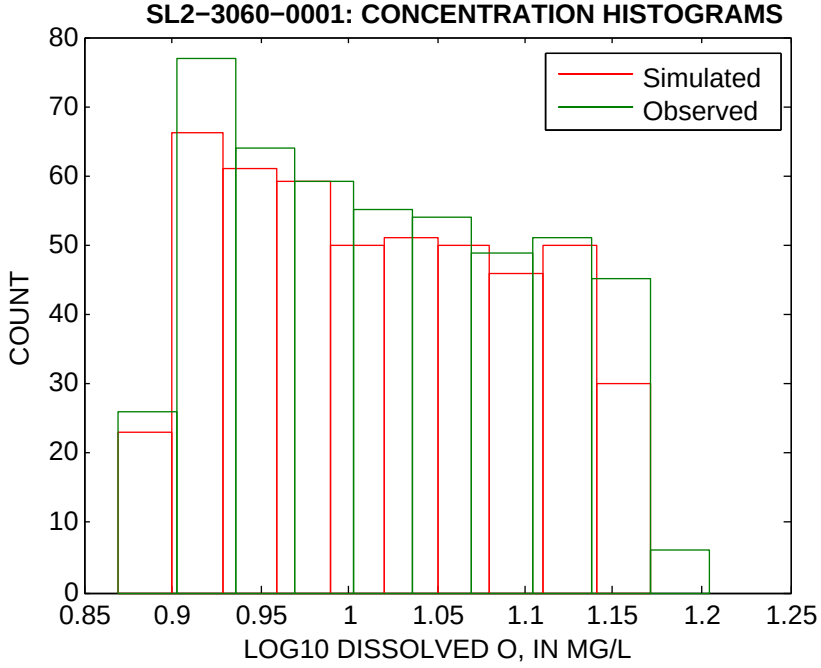
VERSION 2.1

ALL DATA
LOG10

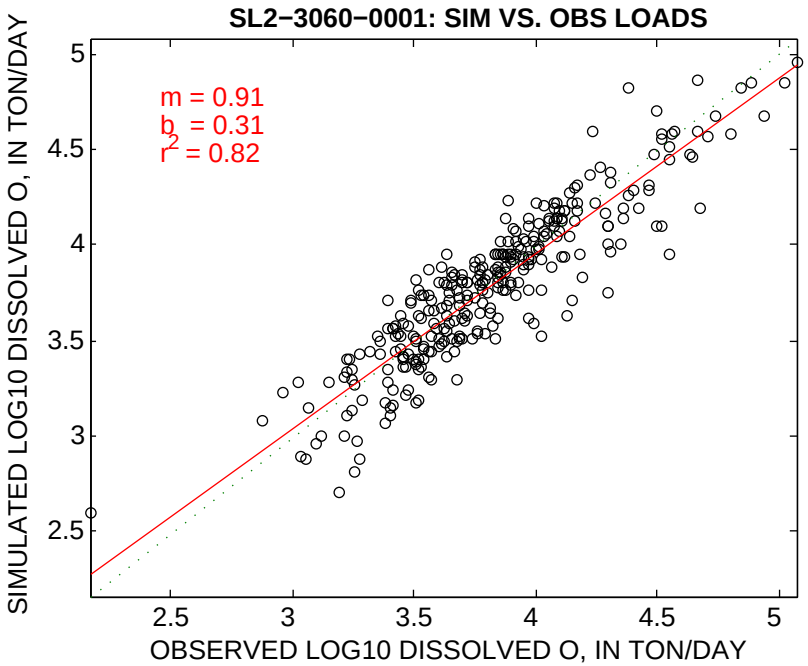


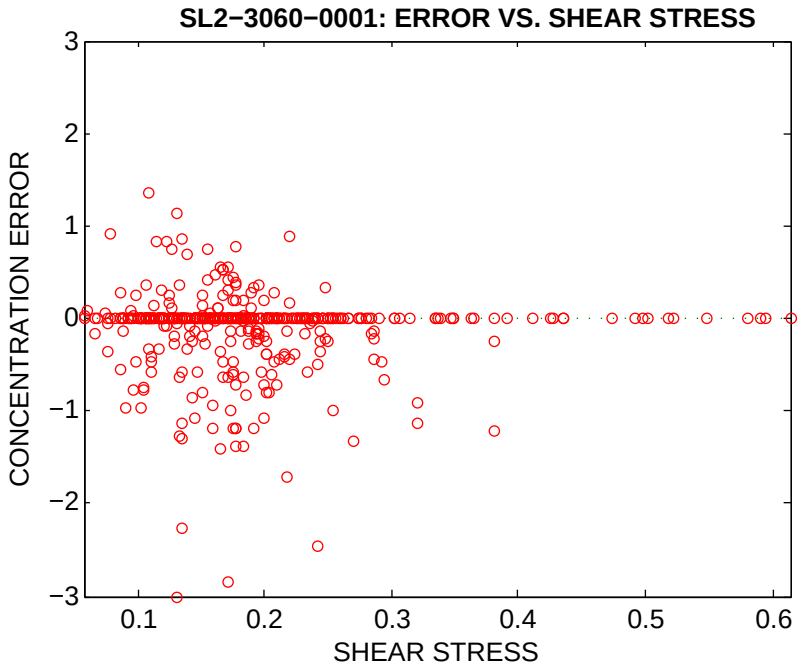


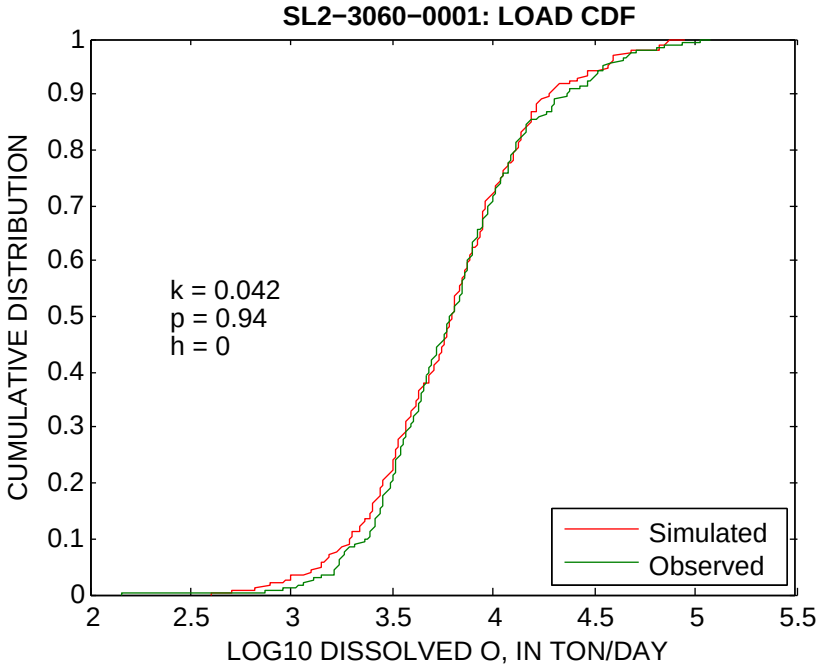


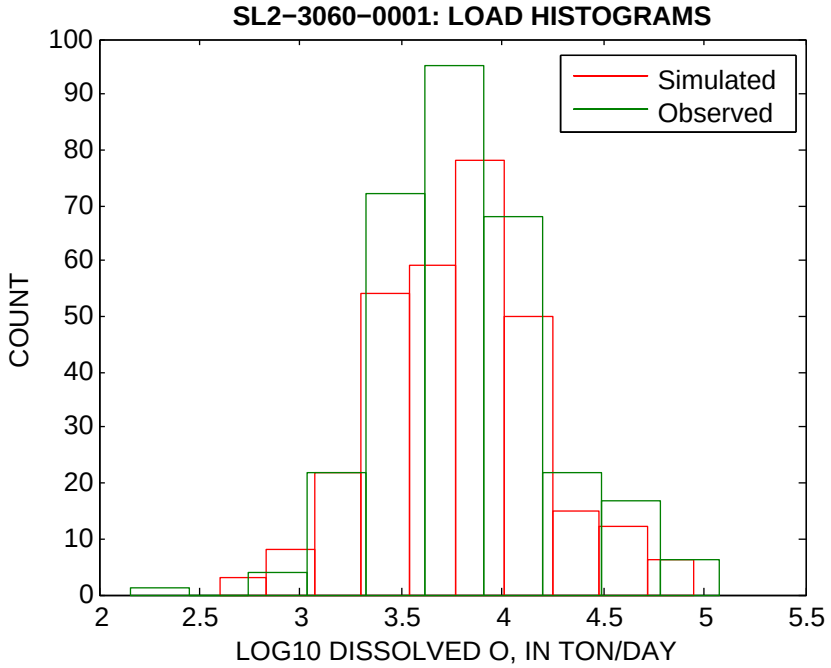


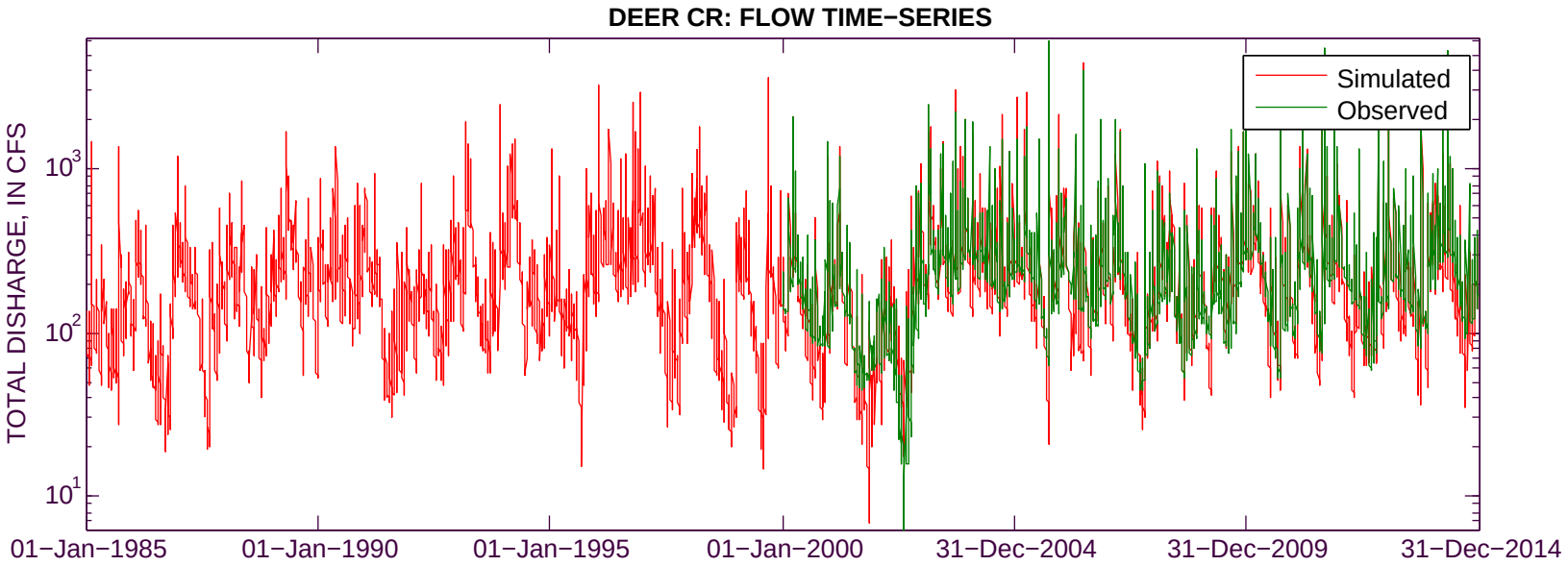
LOAD DATA
LOG10

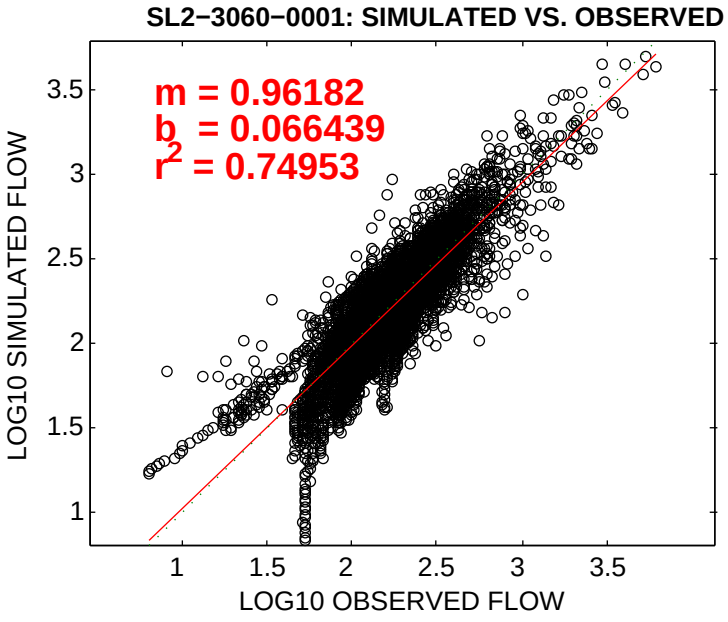


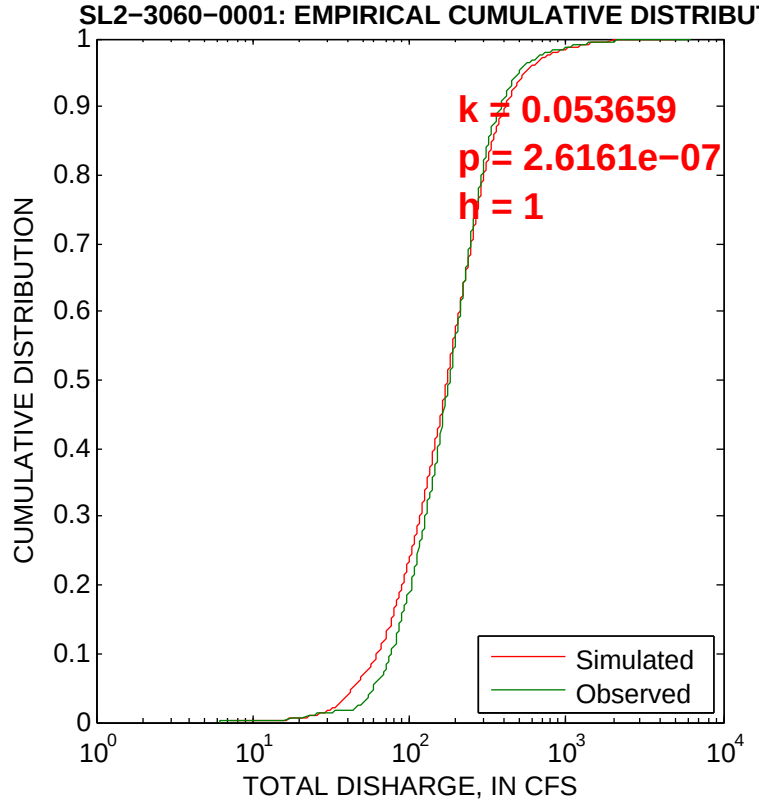












DATA SELECTION

scenario: P620171001WQ | file: FLOW.calib

plot: FLOW - total discharge

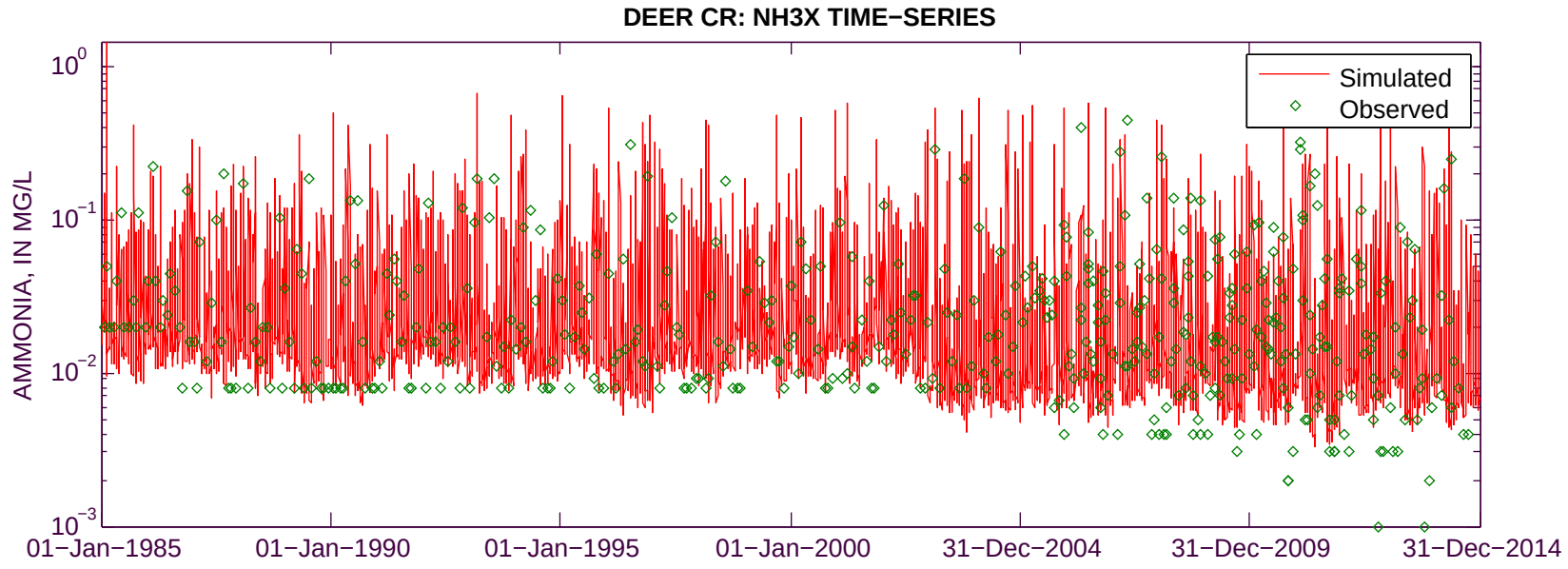
Dates: 1/1/1985 – 12/31/201

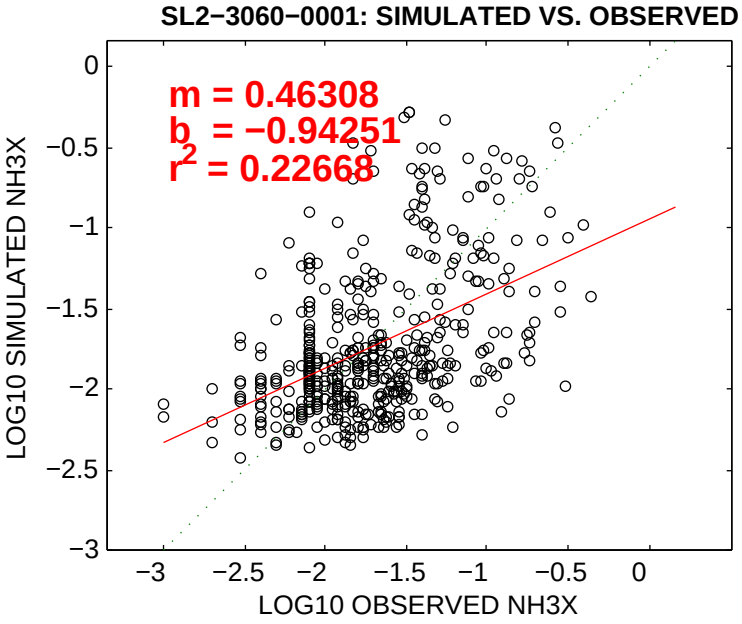
Drive: N/A | Directory: model | Observed: OBS20161101

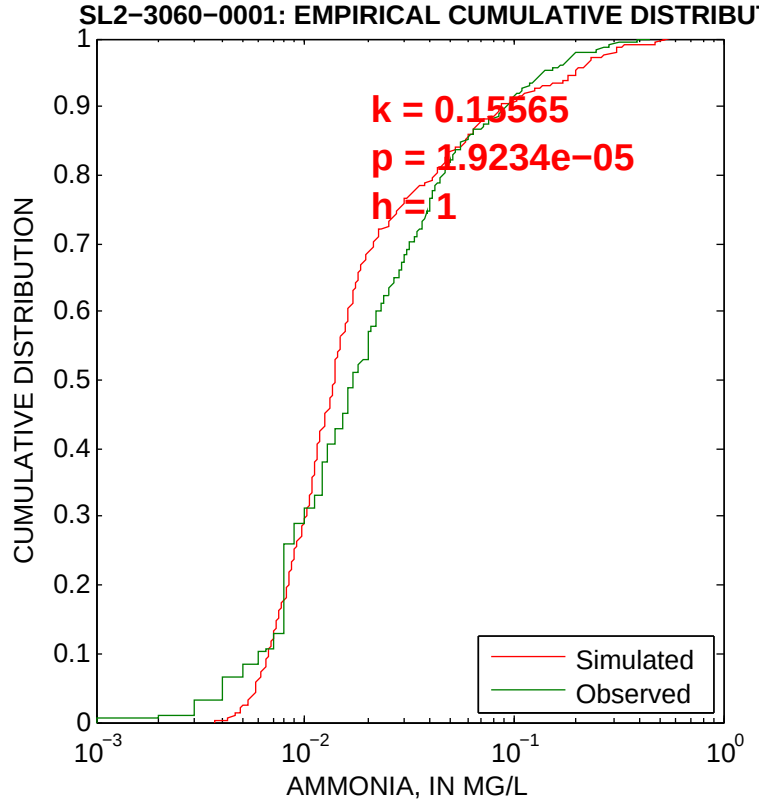
STATISTICS

		observe	simulate
n		5479	5479
min		6.3	6.842
		0.799341	0.835183
mean		229.862	230.911
		2.24554	2.22625
media		182	174.4
		2.26007	2.24155
max		6200	5021
		3.79239	3.70079
varian		70687	70019.5
		0.0918135	0.11332
JB		0.001	0.001
		0.001	0.001
		ra	log
%		0.456423	-0.859136
err.va		15216.4	0.0288892
rel.std.err		0.215264	0.314651
mod.eff		0.784736	0.685349

VERSION 2.1







DATA SELECTION

scenario: P620171001WQ | file: NH3X.calib

plot: NH3X - ammonia

Dates: 1/1/1985 – 12/31/201

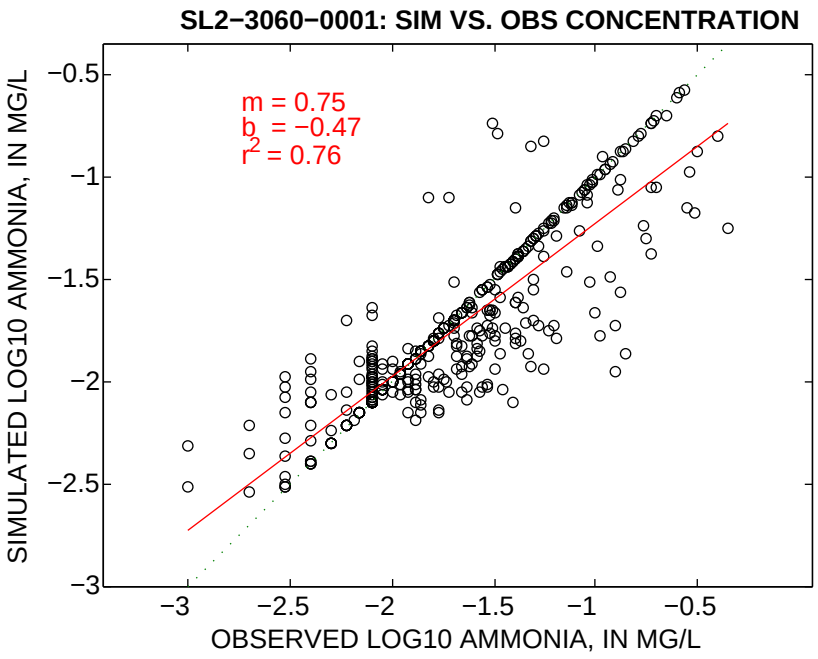
Drive | Directory | Observed: N/A | model | OBS20161101

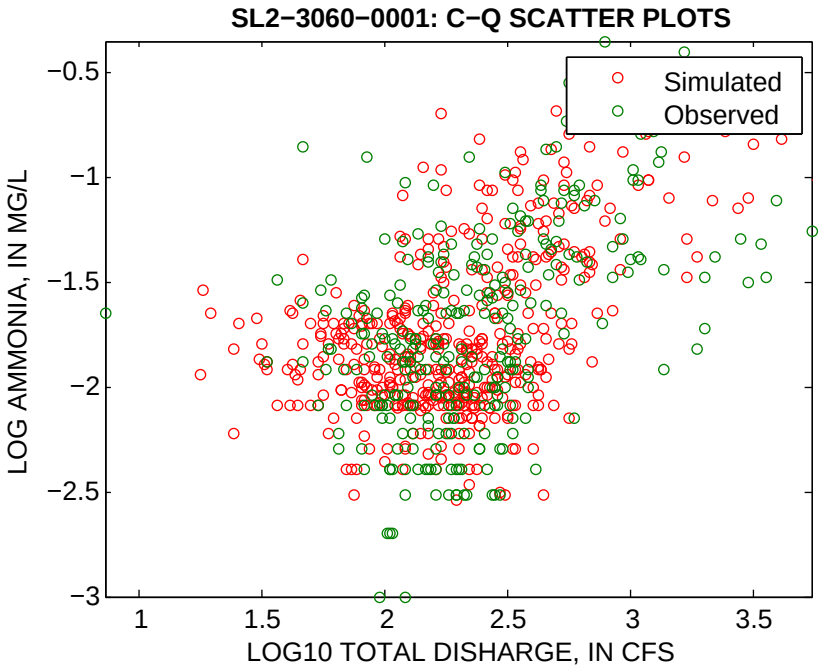
STATISTICS

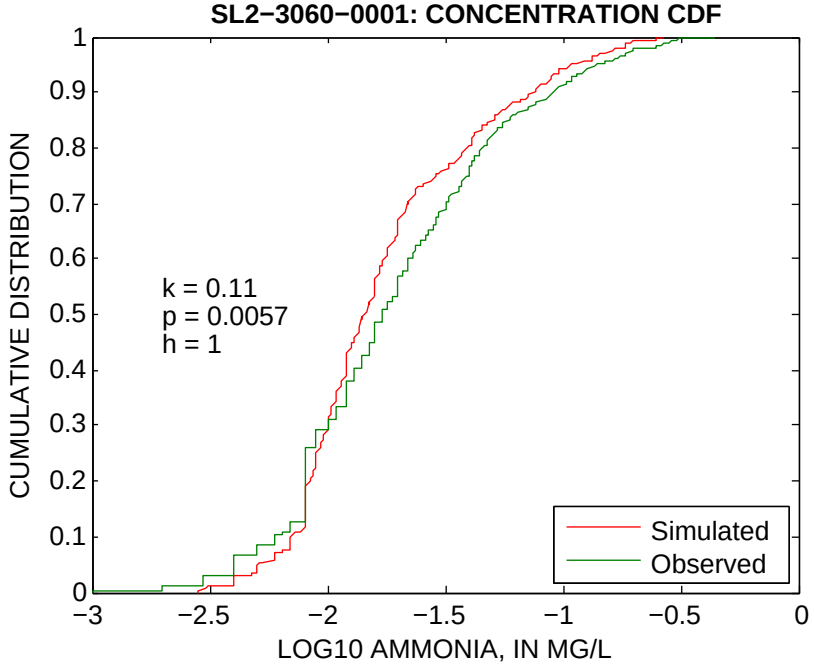
		observe	simulate
n		469	469
min		0.001	0.003746
		-3	-2.42643
mean		0.0367328	0.0388949
		-1.70617	-1.73261
media		0.017	0.013819
		-1.76955	-1.85952
max		0.444	0.52474
		-0.352617	-0.280056
varian		0.00297064	0.0052115
		0.212812	0.201331
JB		0.001	0.001
		0.005464	0.001
		ra	log
%		5.88612	1.54967
err.va		0.00582761	0.217743
rel.std.err		1.96173	1.02317
mod.eff		-0.961734	-0.0231741

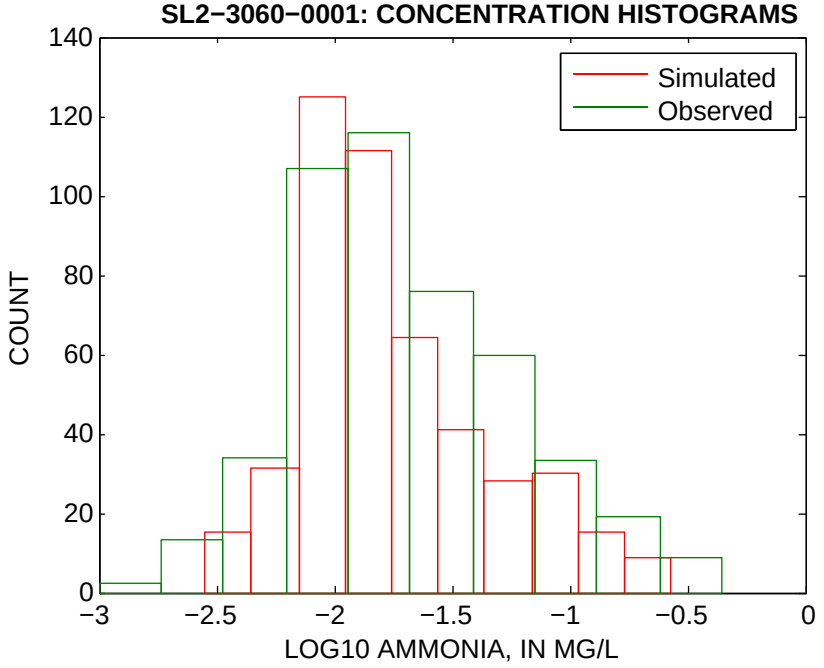
VERSION

ALL DATA
LOG10

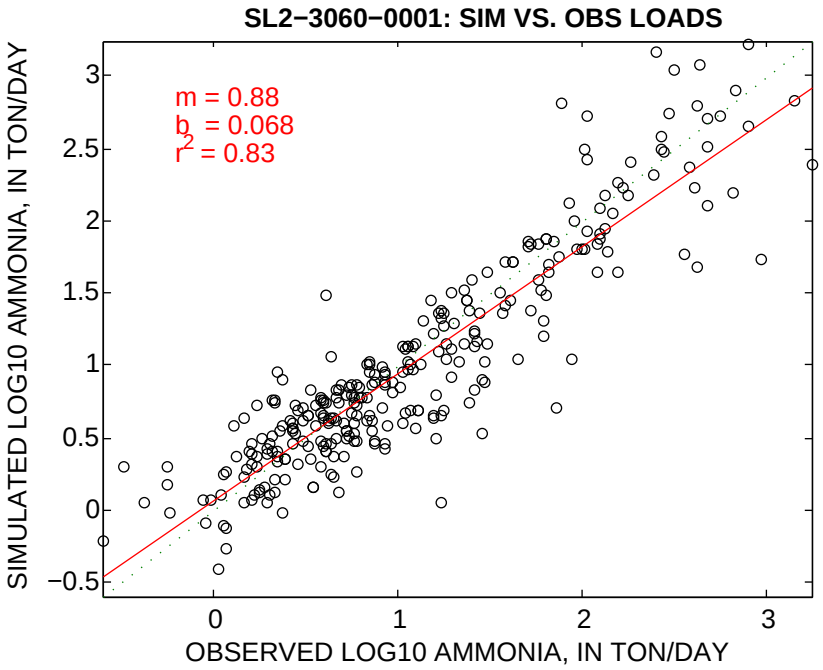


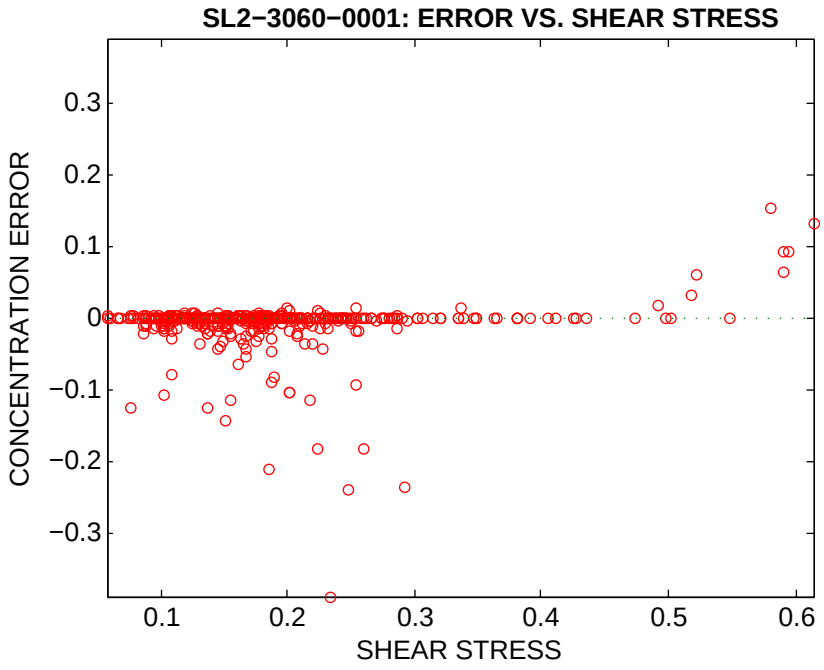


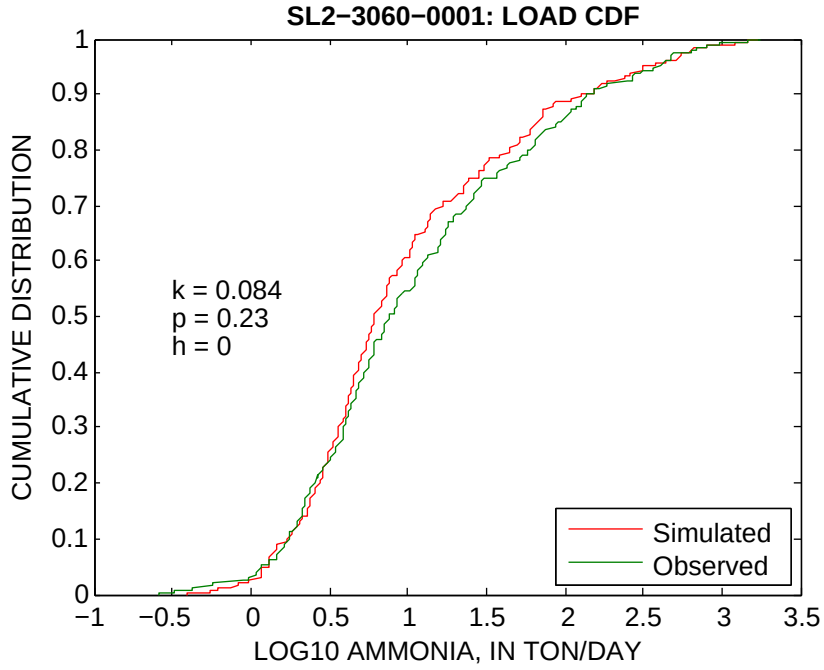


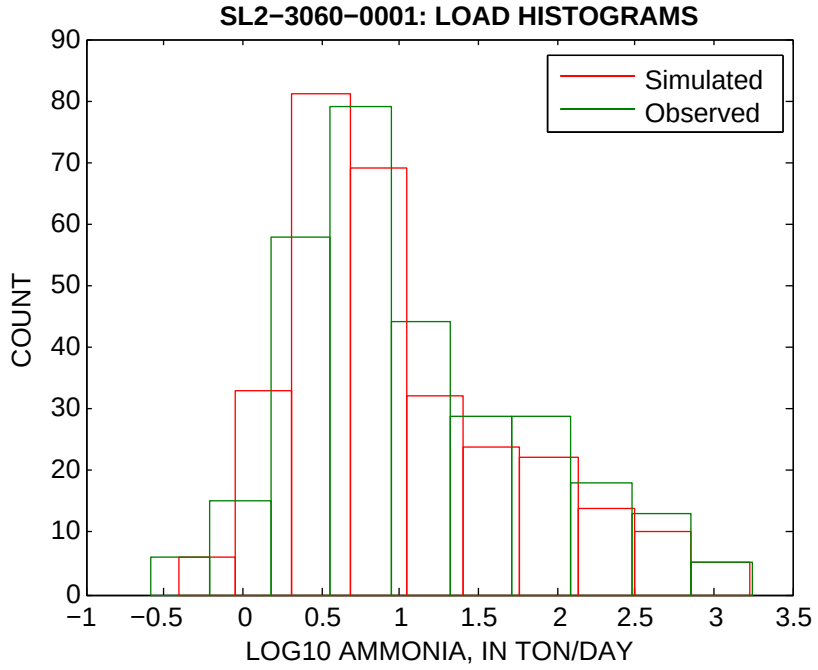


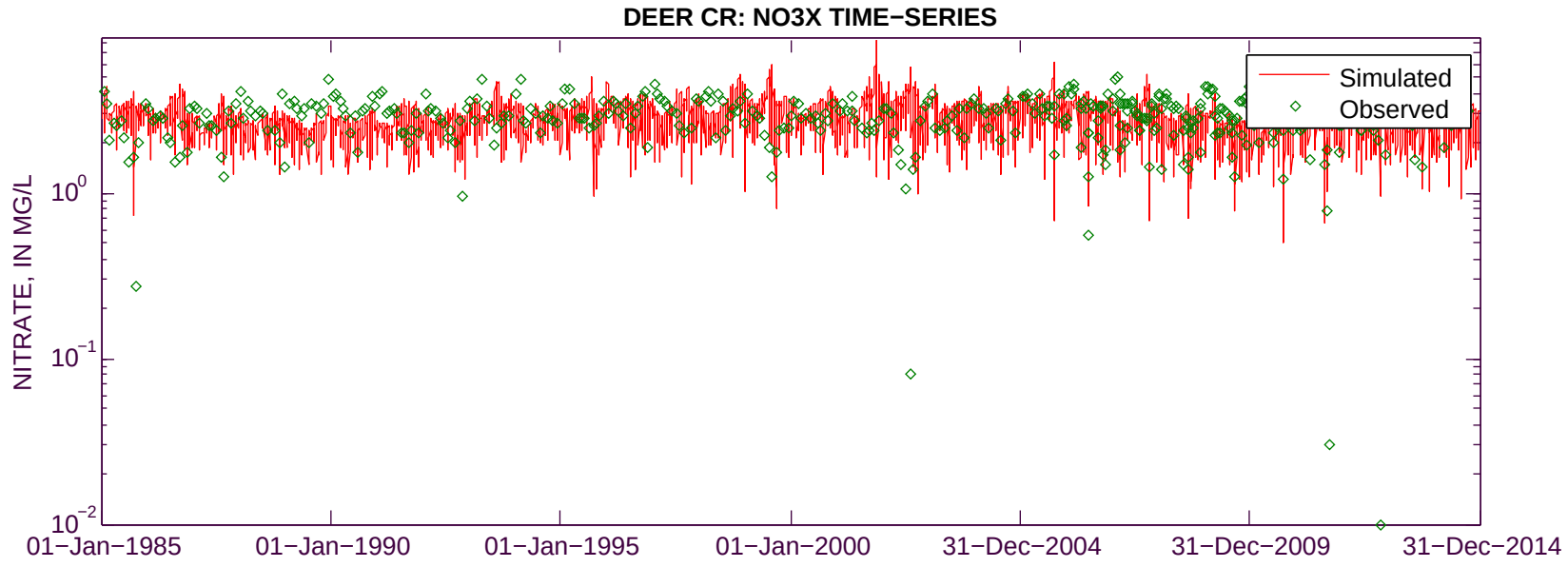
LOAD DATA
LOG10

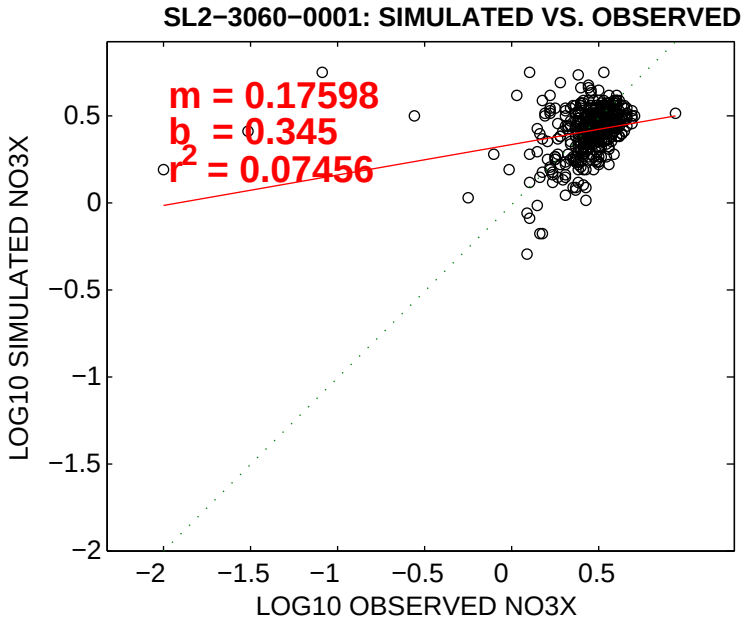


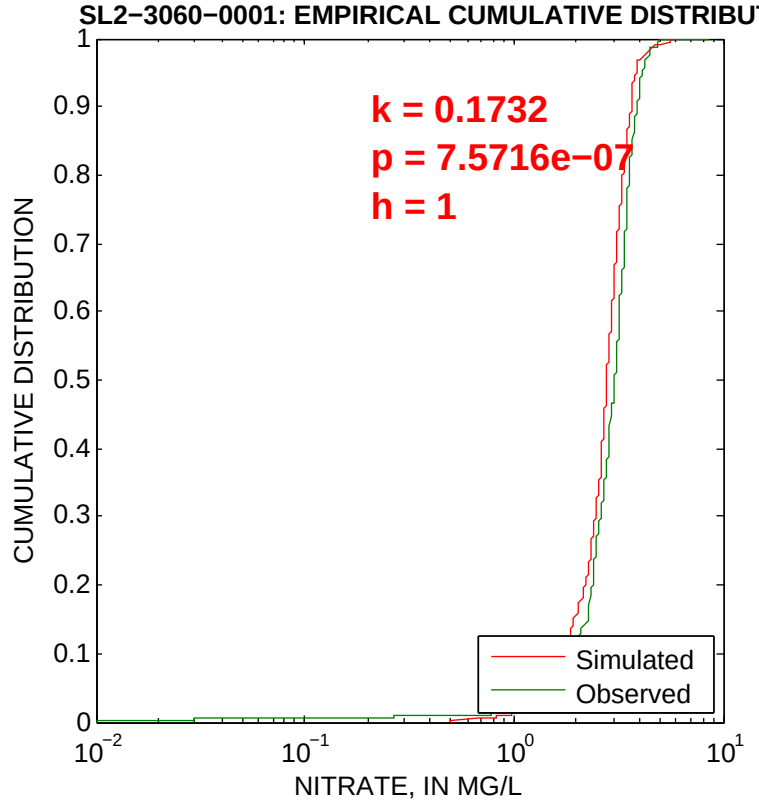












DATA SELECTION

scenario	file
P620171001WQ	NO3X.calib

plot: NO3X - nitrate

Dates: 1/1/1985 – 12/31/201

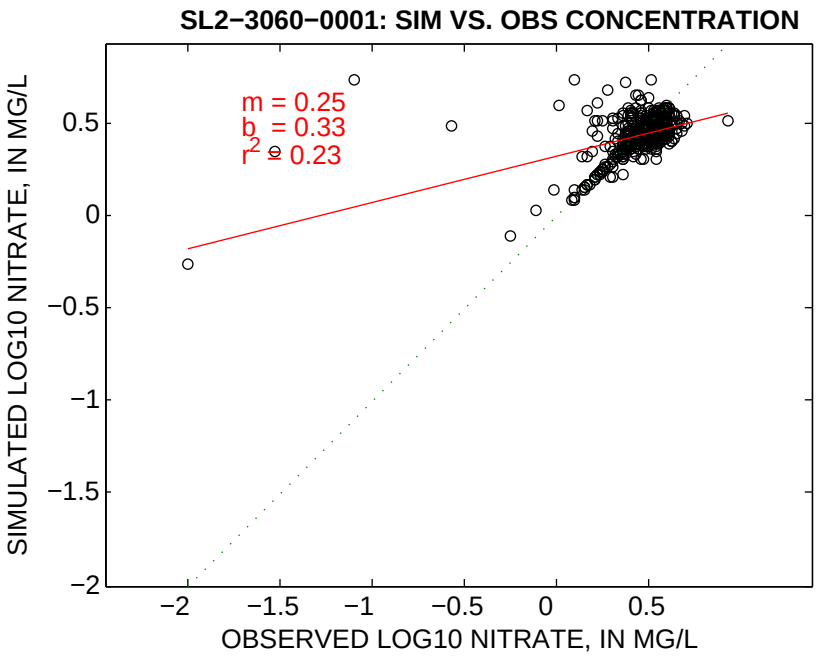
Drive	Directory	Observed
N/A	model	OBS20161101

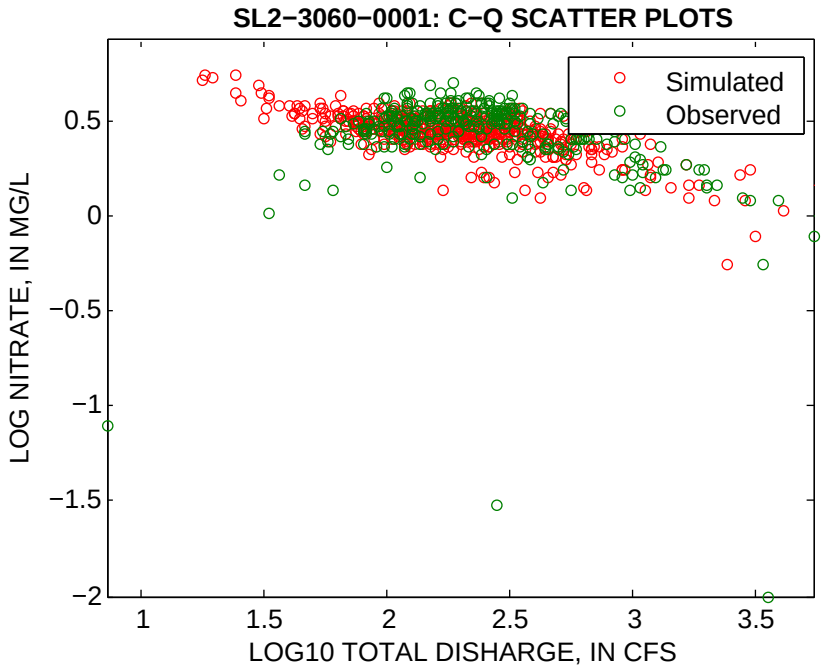
STATISTICS

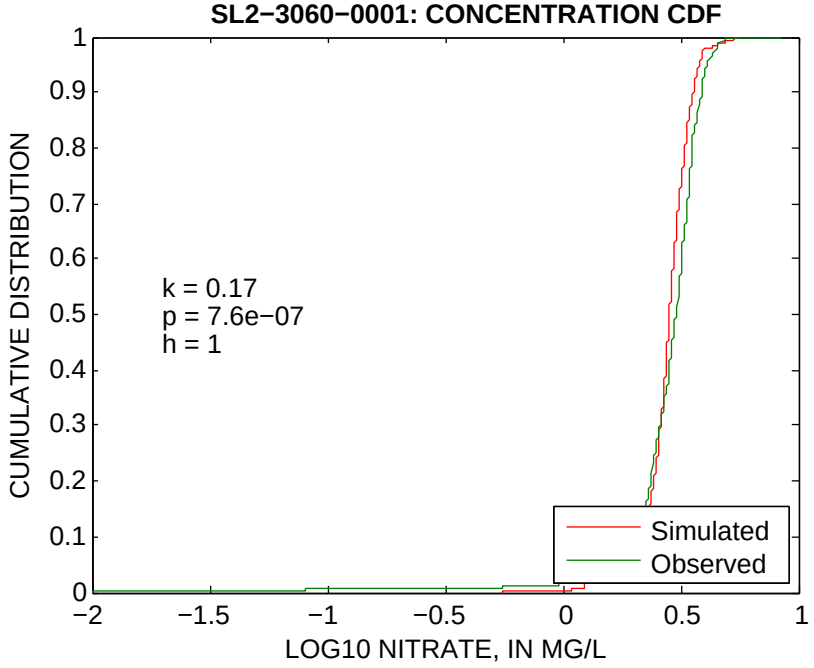
	n	observe	simulate
		485	485
min		0.01	0.50223
		-2	-0.299097
mean		2.96437	2.7654
		0.443809	0.423106
media		3.037	2.7822
		0.482445	0.444388
max		8.5	5.7238
		0.929419	0.757684
varian		0.688923	0.567666
		0.0439686	0.0182622
JB		0.001	0.001
		0.001	0.001
		ra	log
%		-6.71194	-4.6649
err.va		0.908335	0.0471853
rel.std.err		1.31849	1.07316
mod.eff		-0.318485	-0.0731597

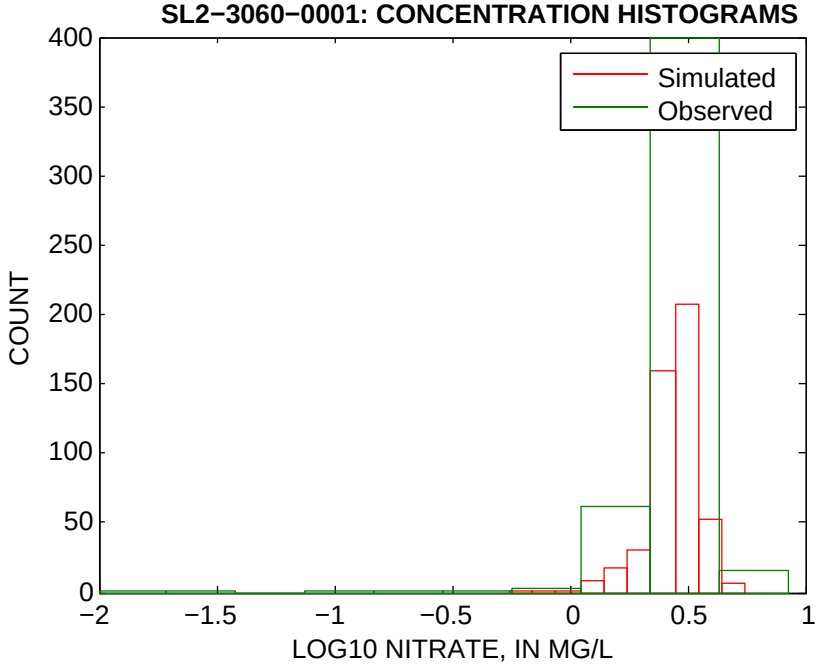
VERSION 2.1

ALL DATA
LOG10

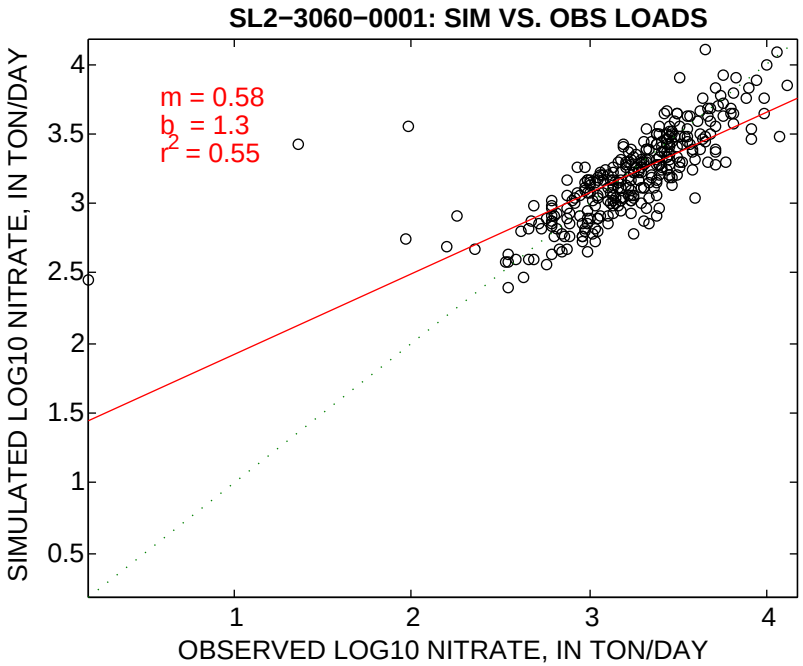


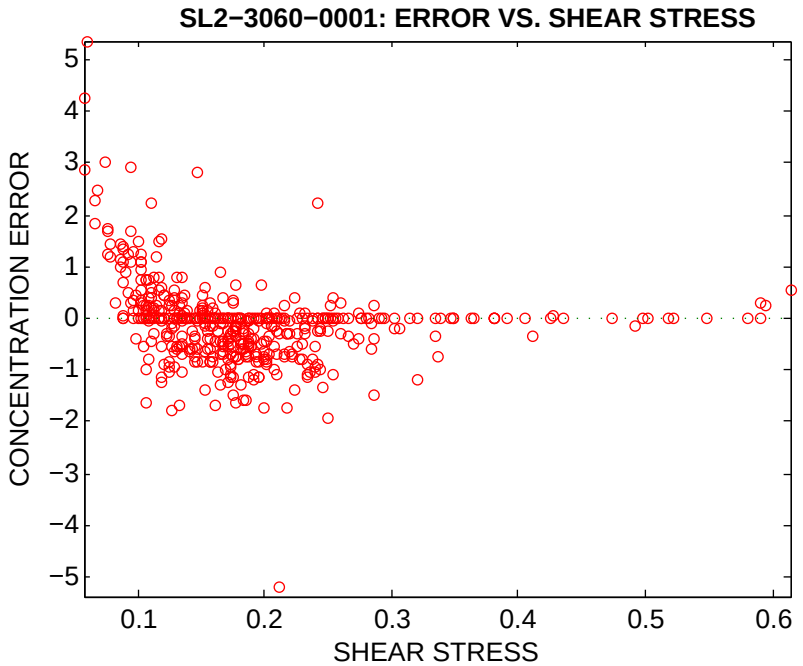


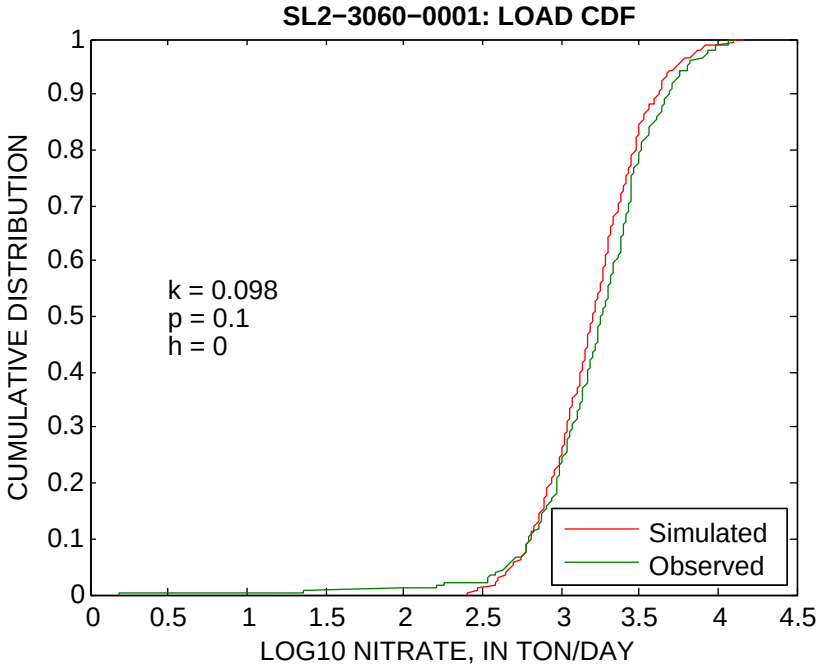


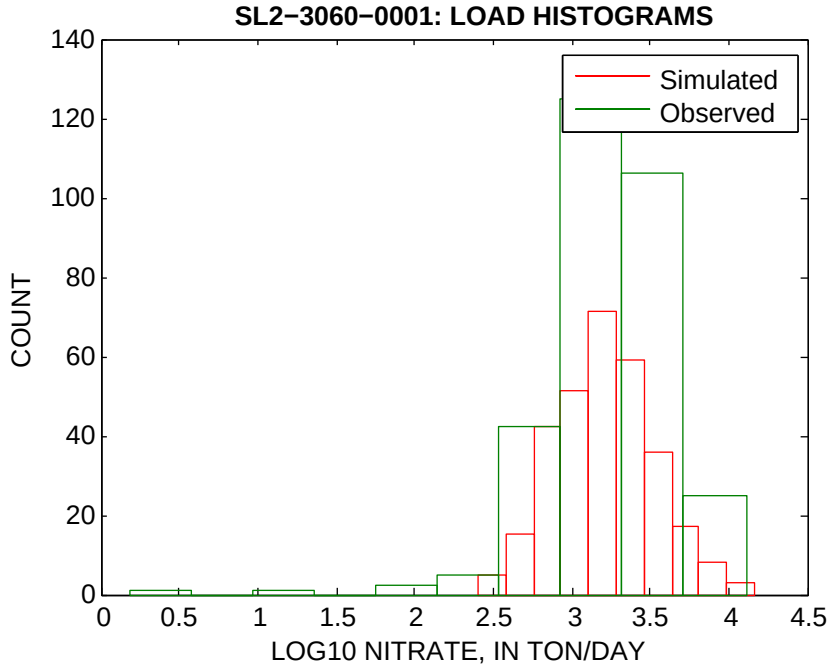


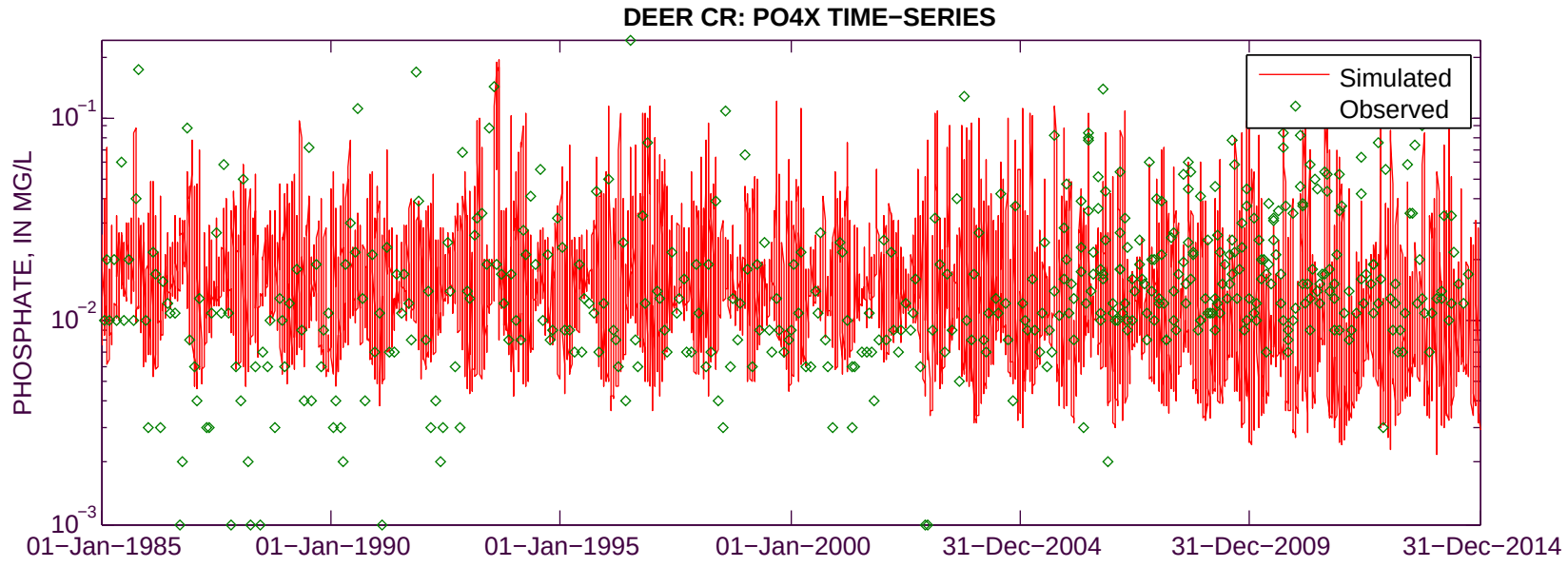
LOAD DATA
LOG10

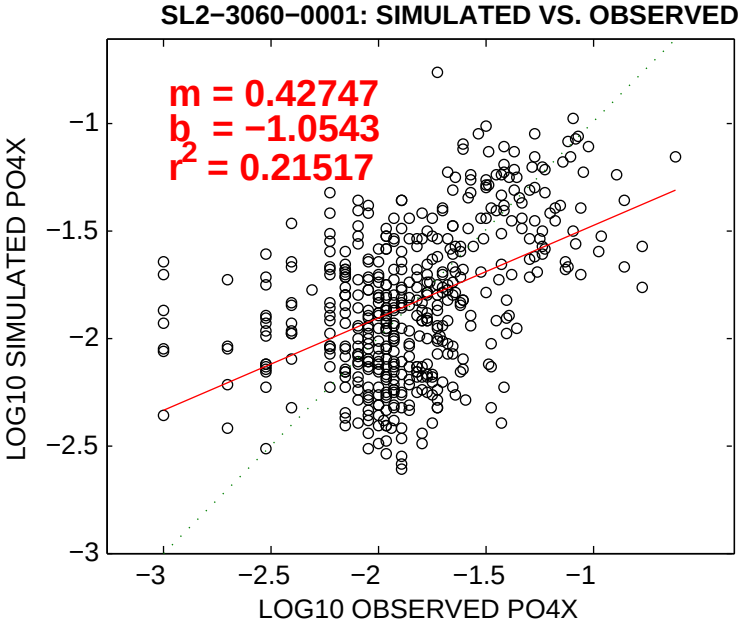


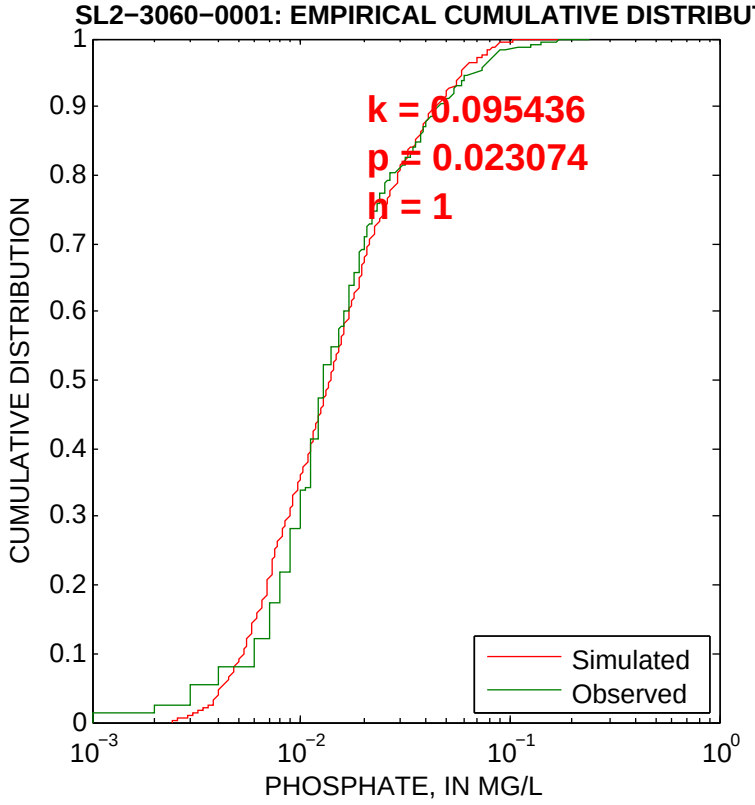












DATA SELECTION

scenario: P620171001WQ | file: PO4X.calib

plot: PO4X - phosphate

Dates: 1/1/1985 – 12/31/201

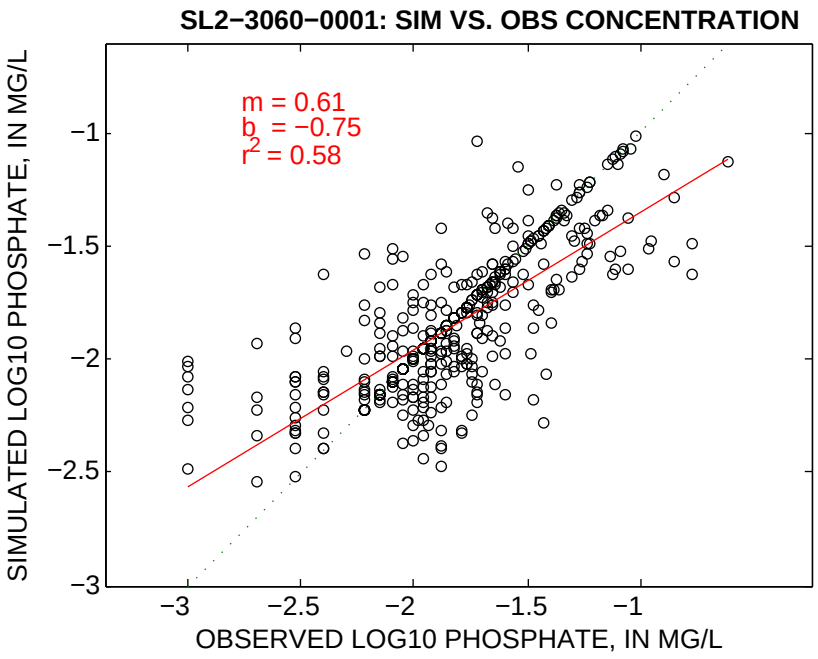
Drive: N/A | Directory: model | Observed: OBS20161101

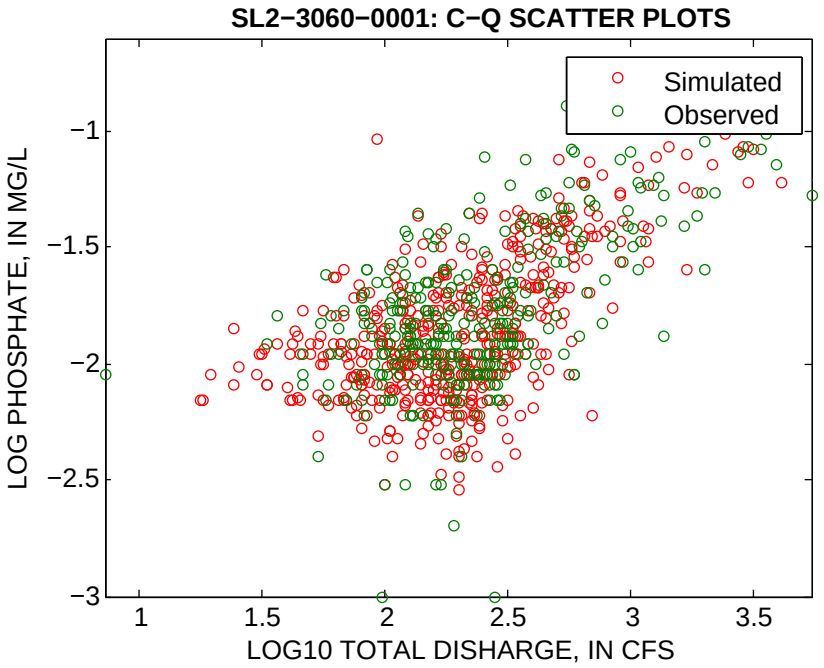
STATISTICS

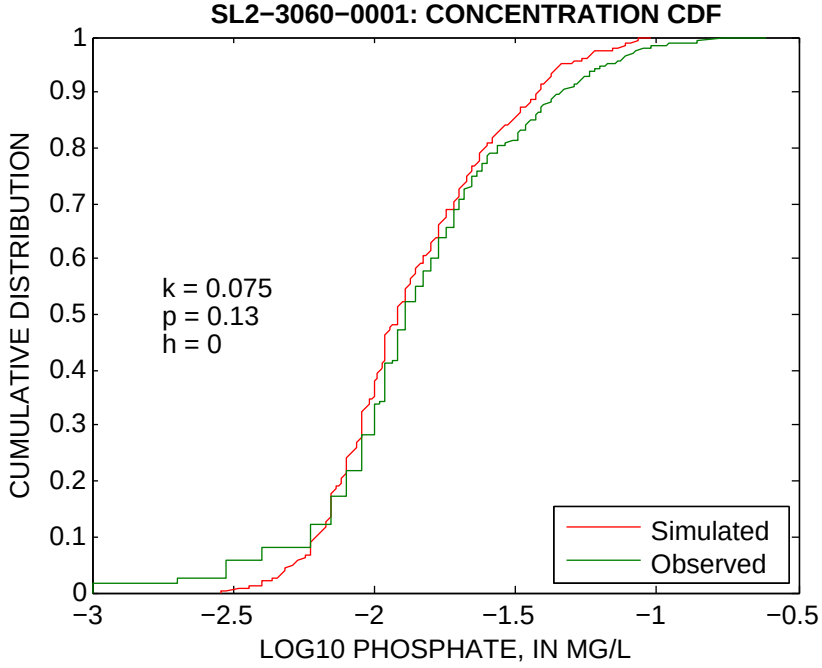
	observe	simulate
n	482	482
min	0.001 -3	0.0024575 -2.60951
mean	0.0213994 -1.84109	0.0201331 -1.84129
media	0.013 -1.88606	0.013889 -1.85733
max	0.243 -0.614394	0.1722 -0.763967
varian	0.00060512 0.143289	0.00036015 0.121682
JB	0.001 0.002382	0.001 0.009953
	ra	log
%	-5.91752	0.0106723
err.va	0.00052616	0.142469
rel.std.err	0.869514	0.994275
mod.eff	0.130486	0.00572514

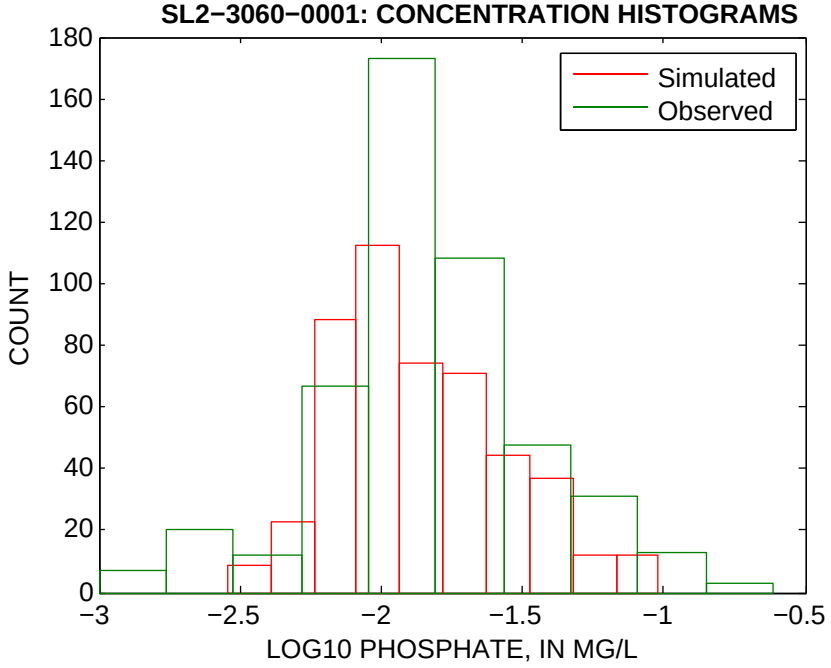
VERSION 2.1

ALL DATA
LOG10

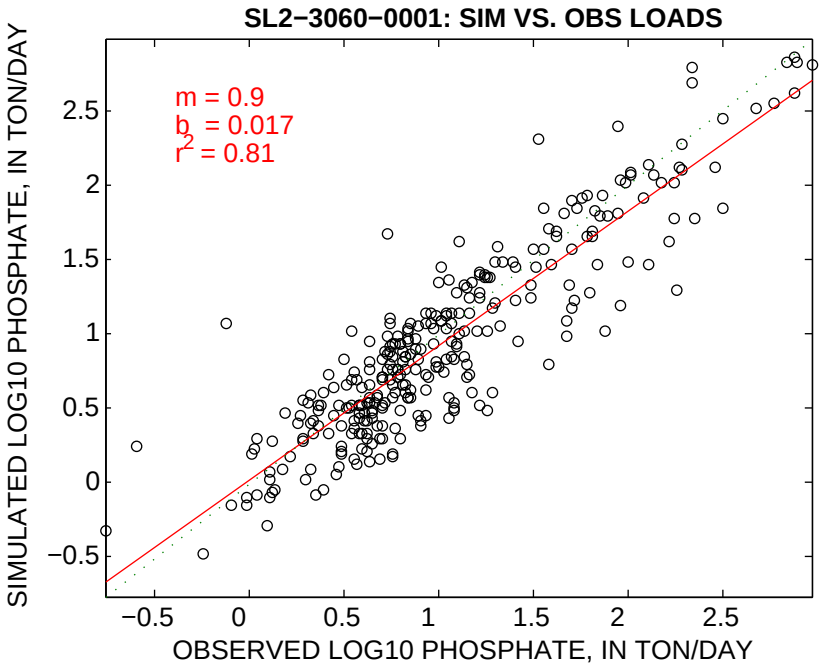


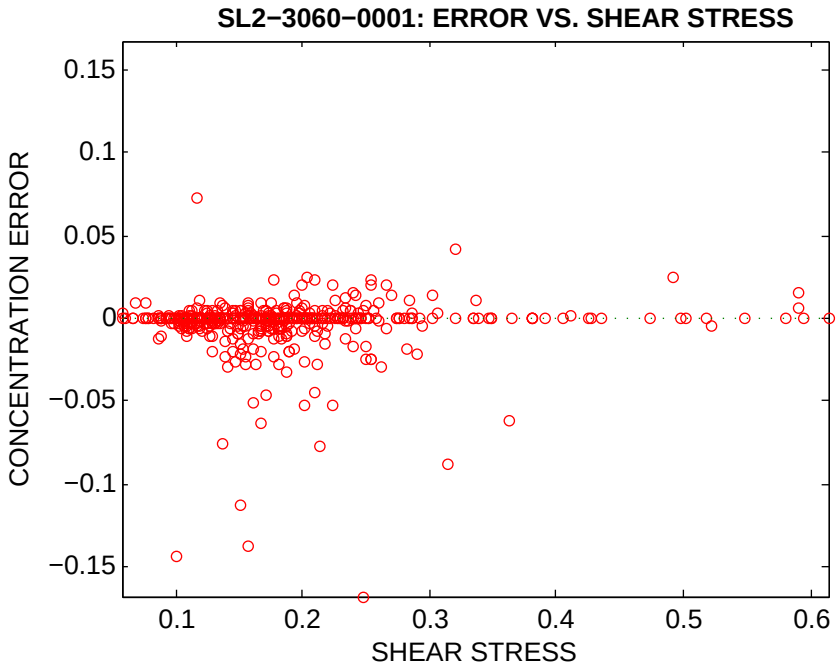


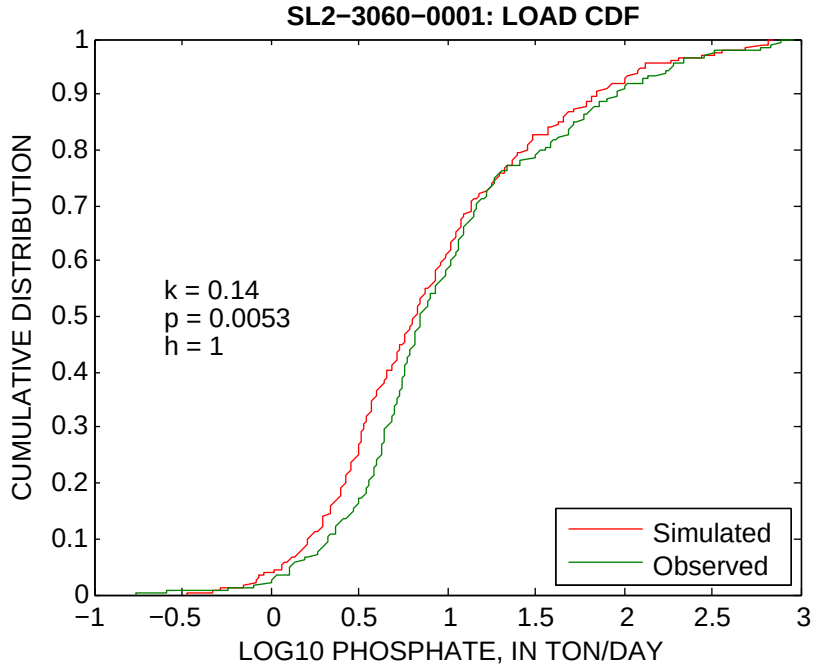


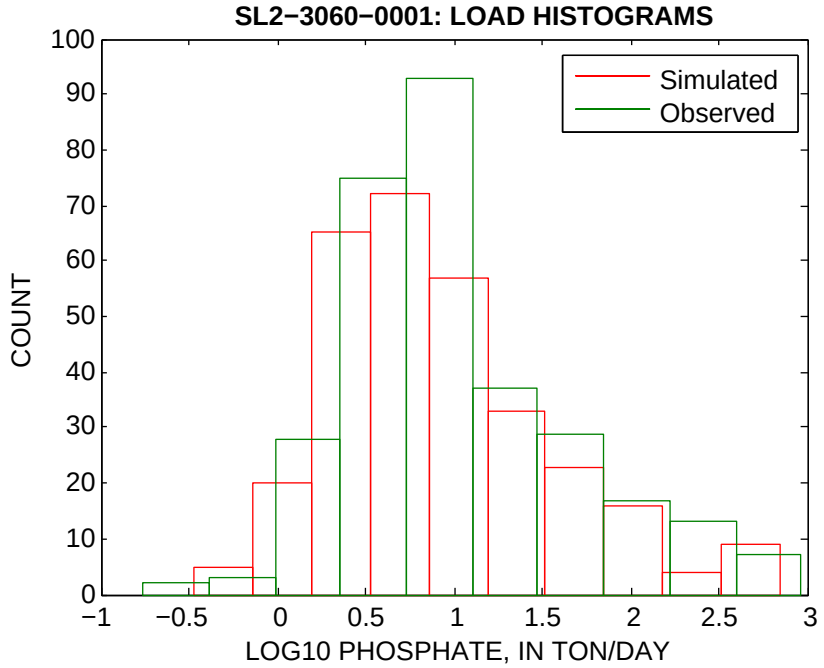


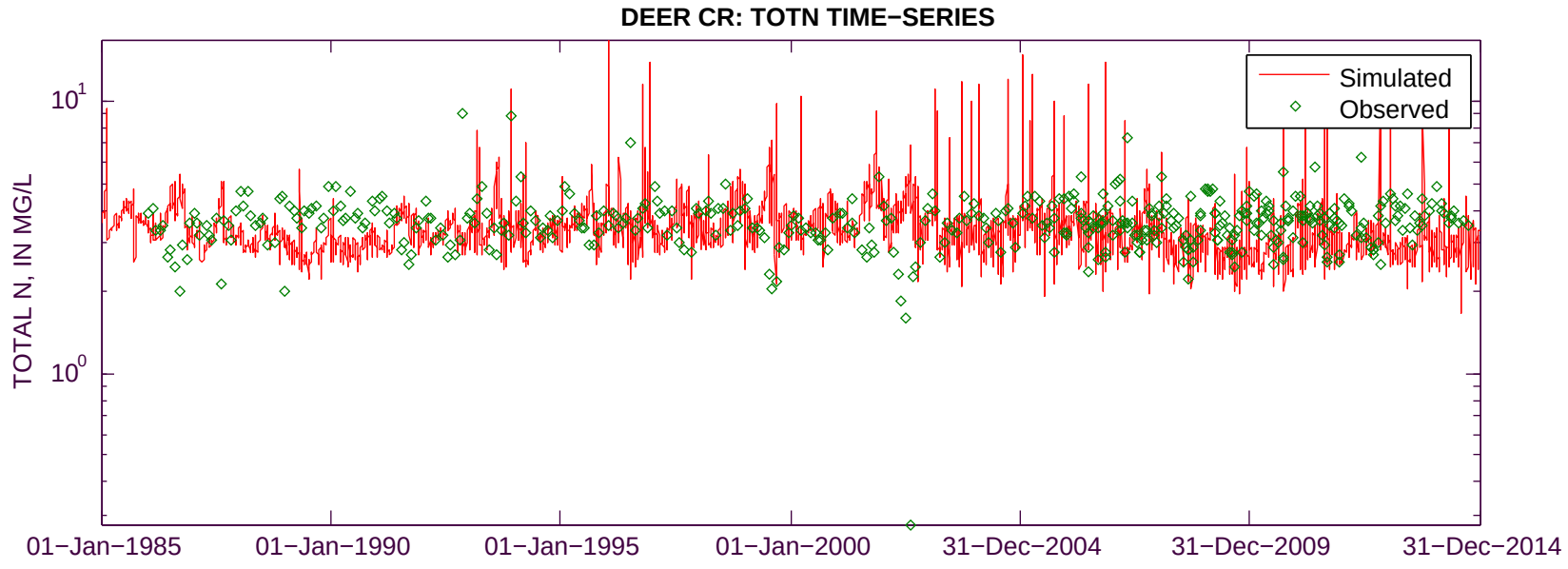
LOAD DATA
LOG10

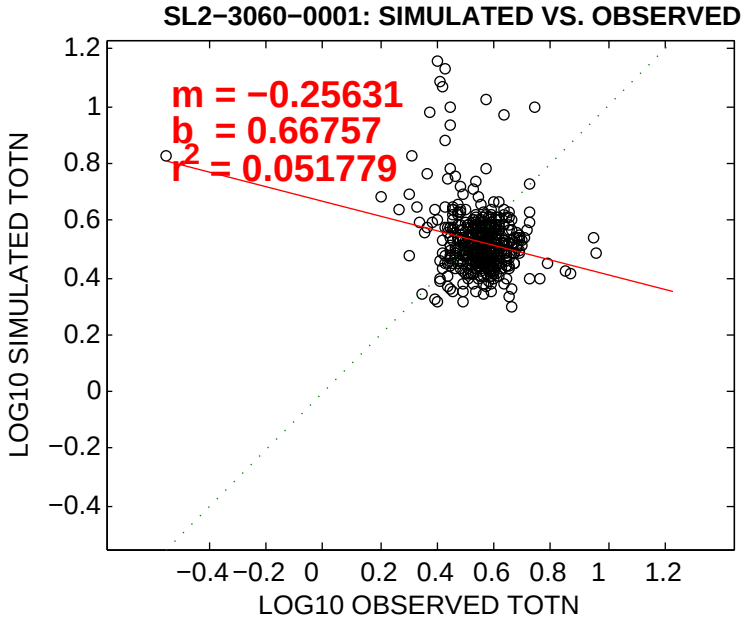


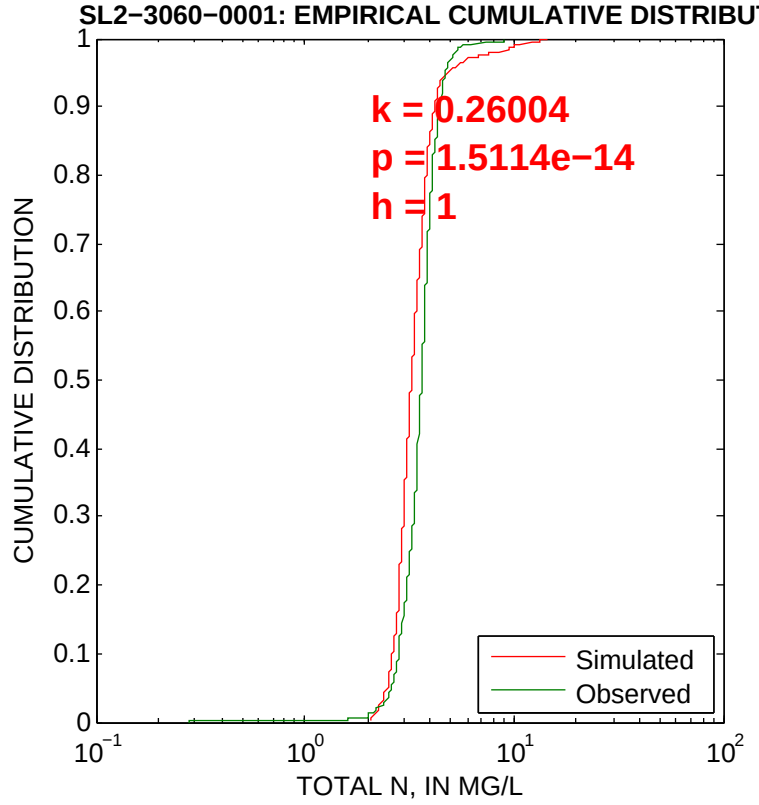












DATA SELECTION

scenario	file
P620171001WQ	TOTN.calib

plot: TOTN - total nitrogen

Dates: 1/1/1985 – 12/31/201

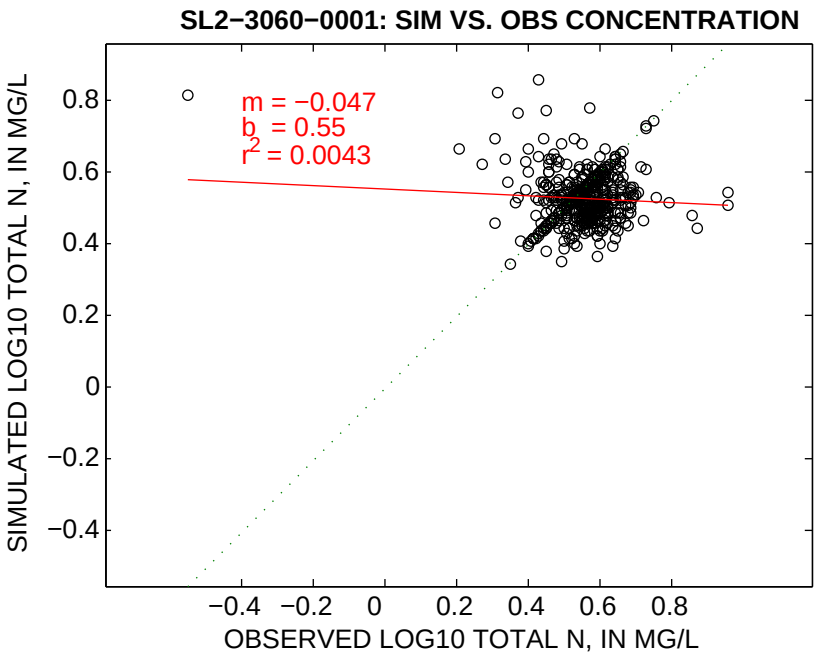
Drive	Directory	Observed
N/A	model	OBS20161101

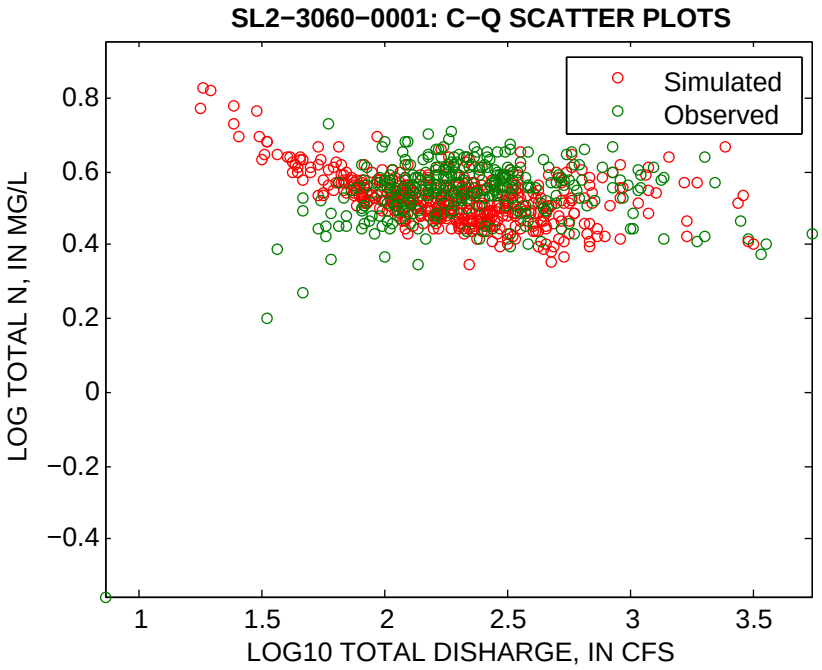
STATISTICS

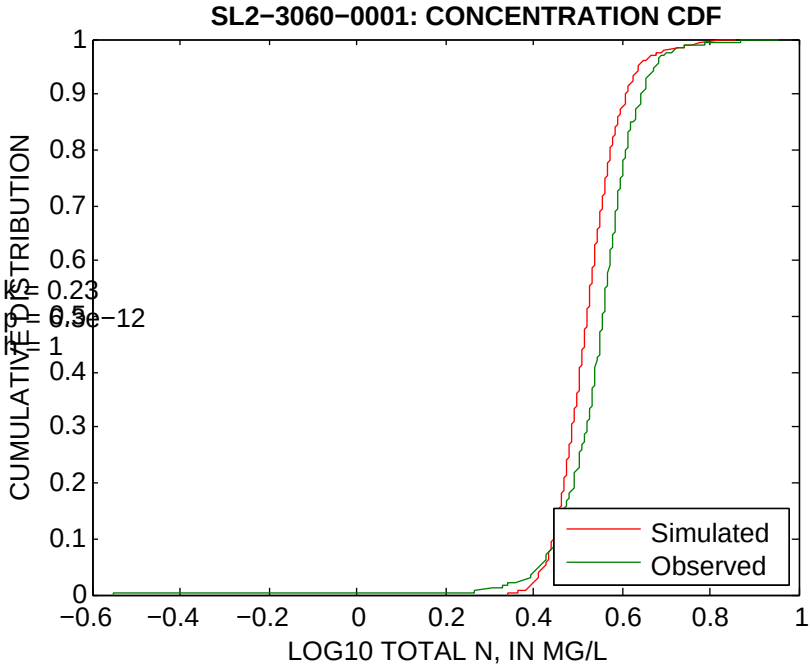
	n	473	473
		observe	simulate
min		0.28	2.0019
		-0.552842	0.301442
mean		3.63967	3.5
		0.55115	0.526311
media		3.61293	3.2444
		0.55786	0.511134
max		9	14.316
		0.954243	1.15582
varian		0.595948	1.75017
		0.00976591	0.0123901
JB		0.001	0.001
		0.001	0.001
		ra	log
%		-3.8376	-4.50667
err.va		2.7352	0.0277804
rel.std.err		4.58965	2.84463
mod.eff		-3.58965	-1.84463

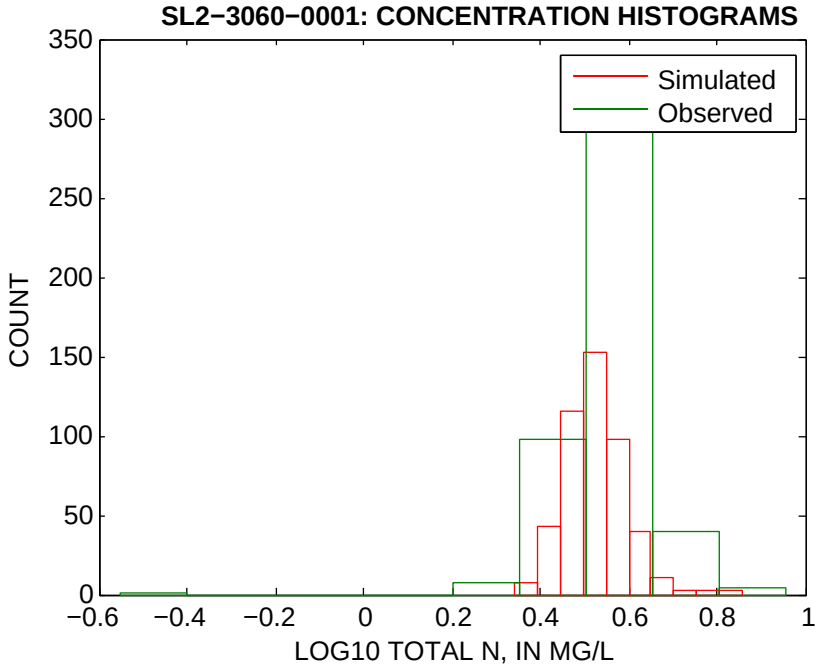
VERSION 2.1

ALL DATA
LOG10

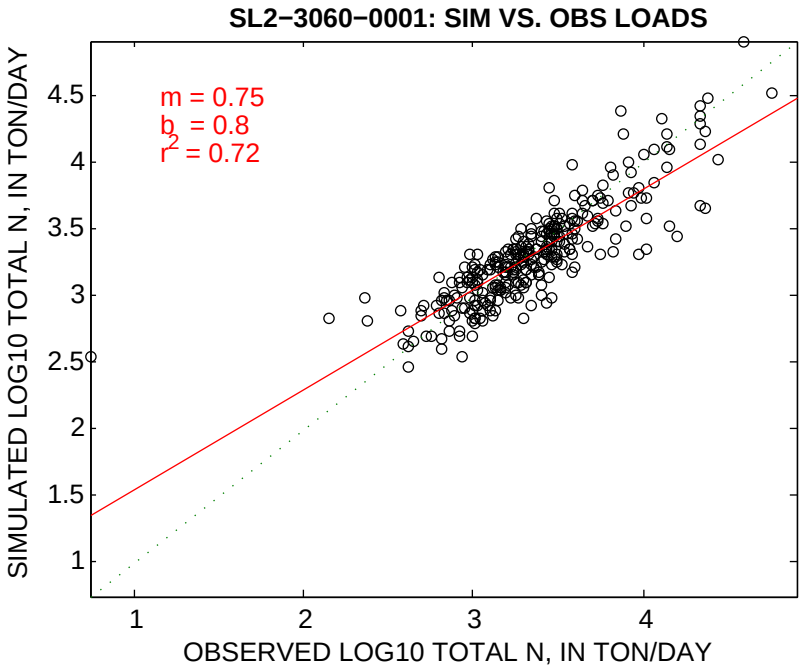


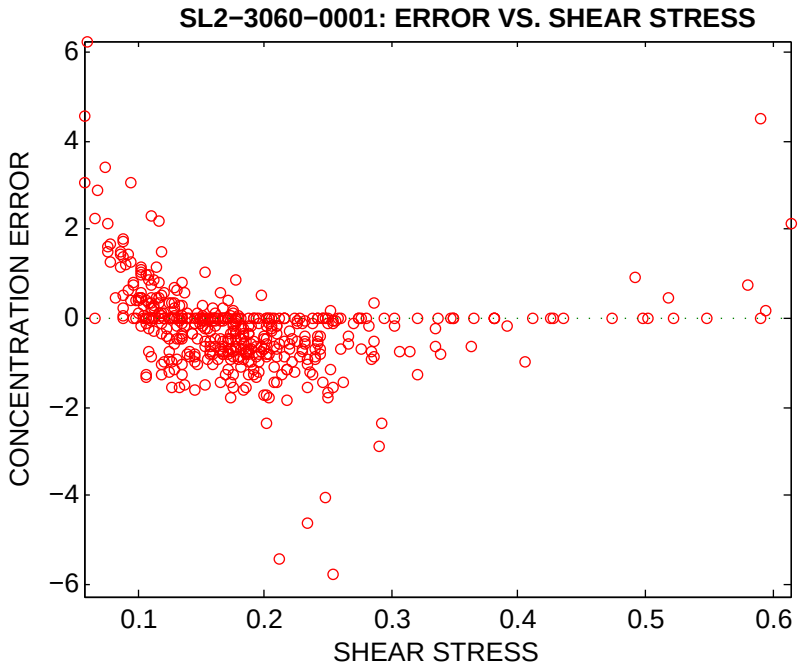


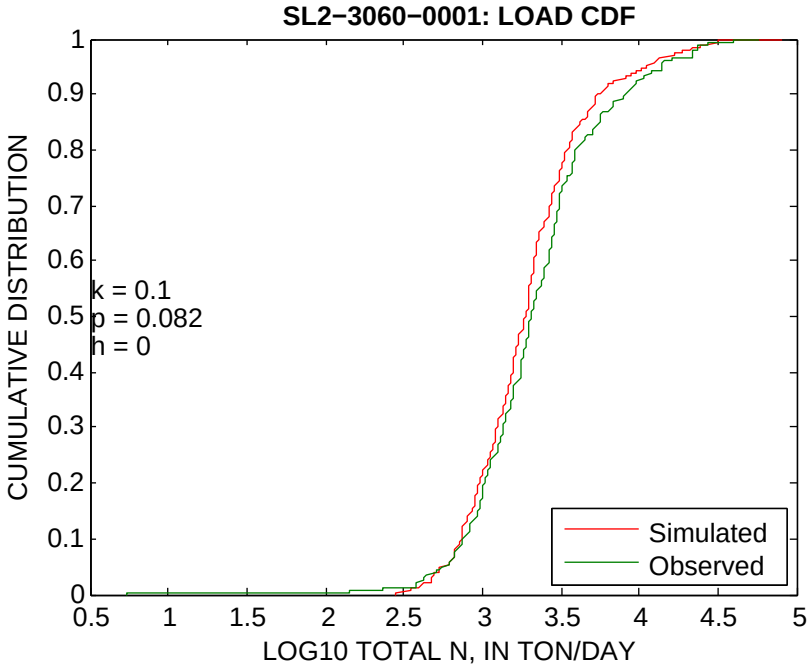


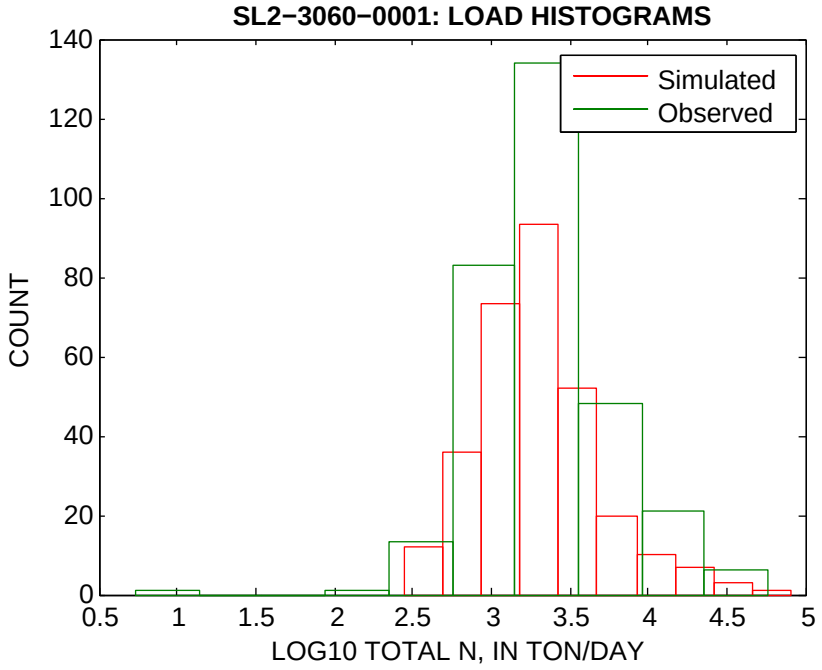


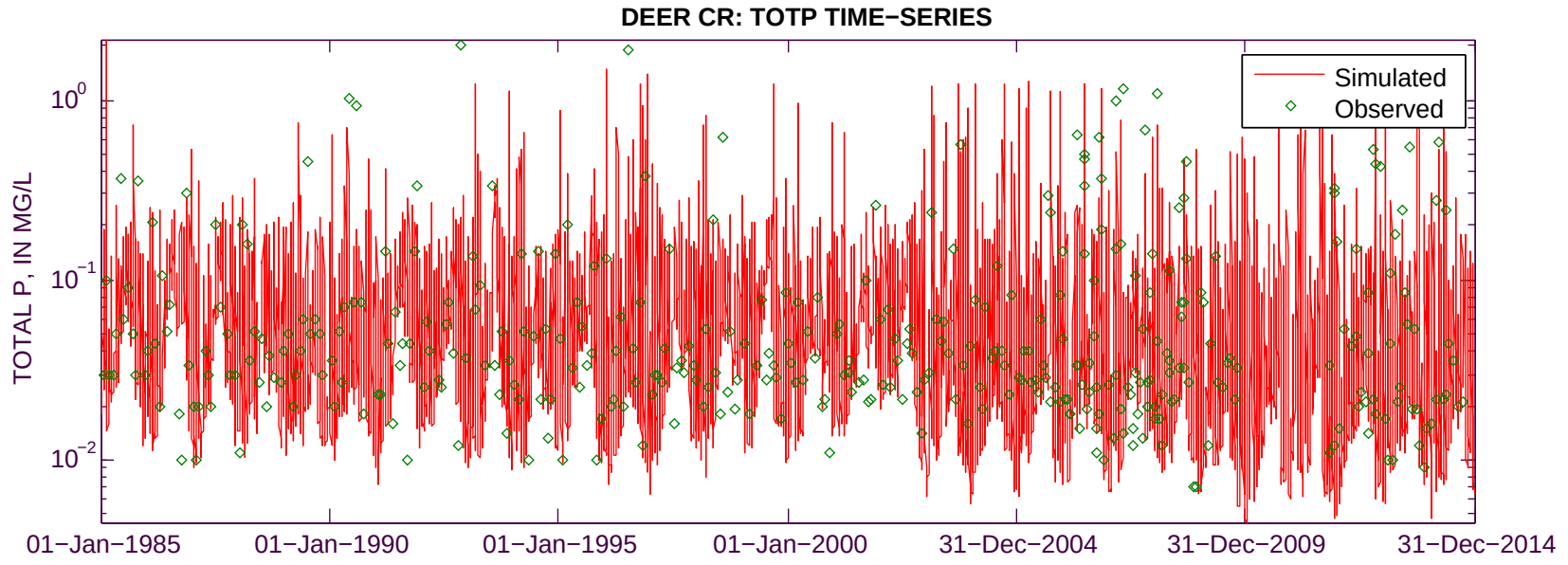
LOAD DATA
LOG10

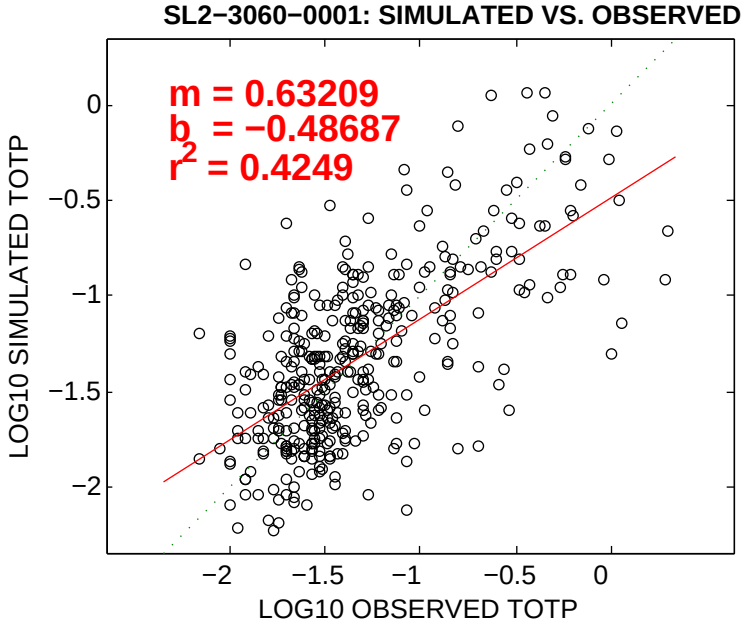


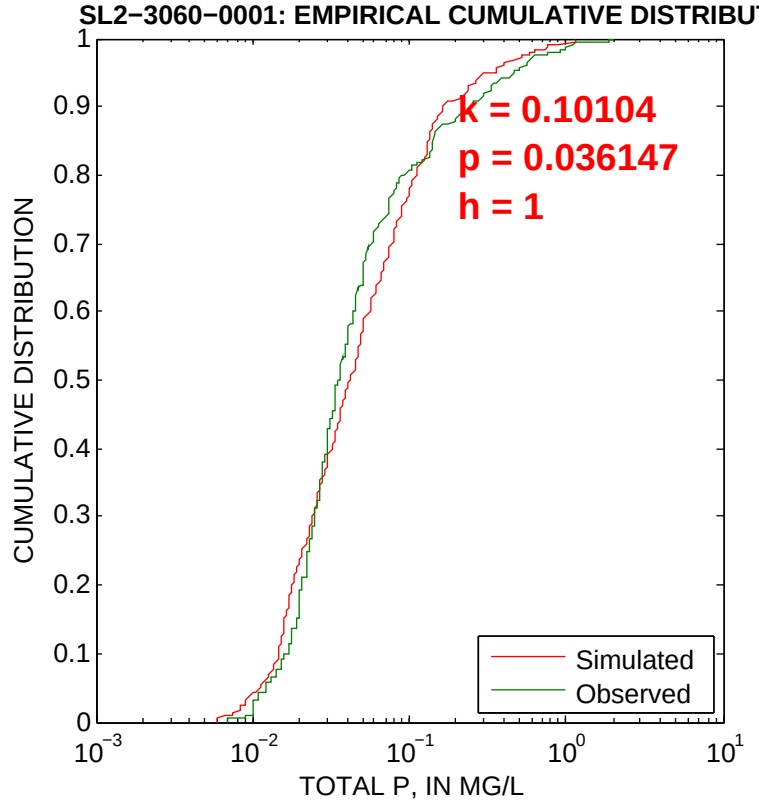












DATA SELECTION

scenario	file
P620171001WQ	TOTP.calib

plot: TOTP - total phosphorus

Dates: 1/1/1985 – 12/31/201

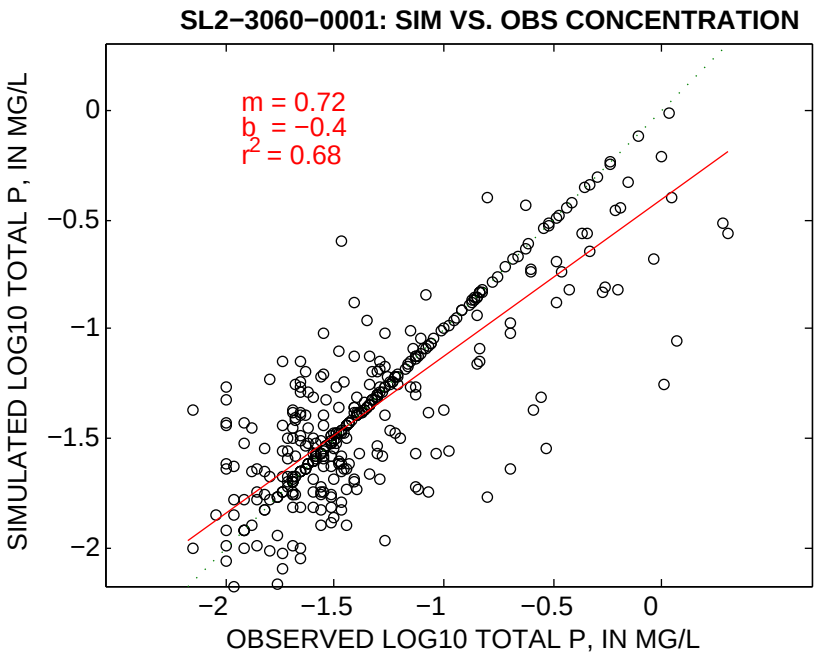
Drive	Directory	Observed
N/A	model	OBS20161101

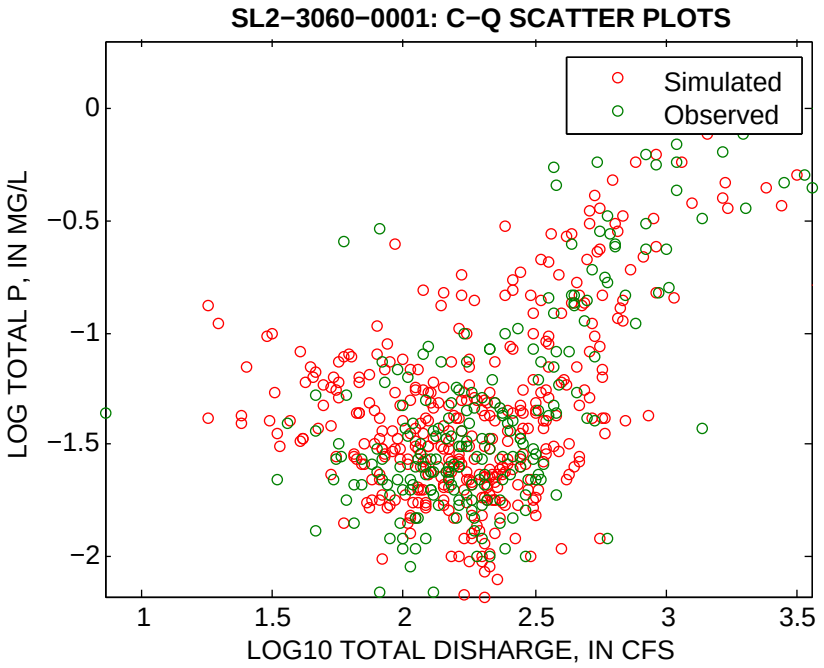
STATISTICS

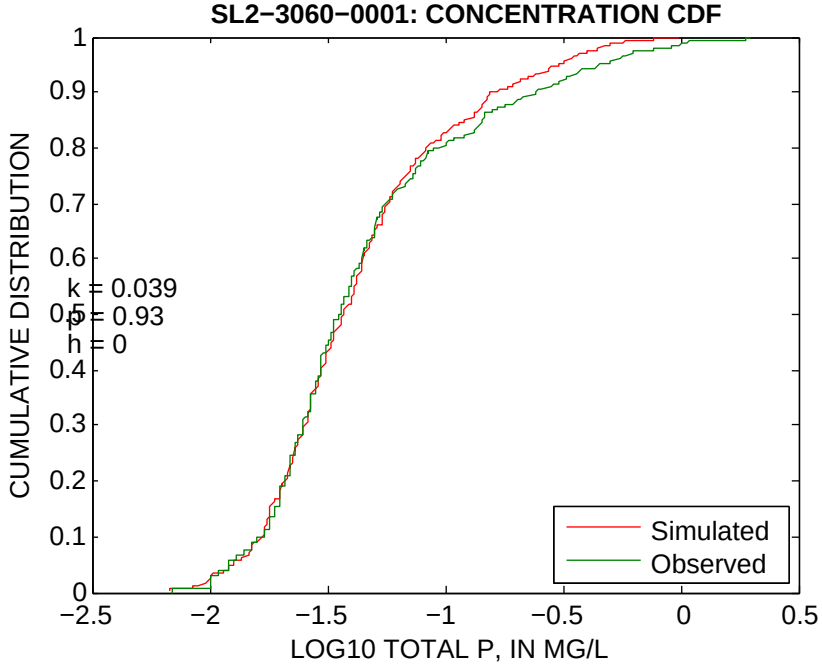
	n	386	386
		observe	simulate
min		0.007	0.0059612
		-2.1549	-2.22467
mean		0.103416	0.0889758
		-1.3313	-1.32837
media		0.0355	0.041873
		-1.44981	-1.37809
max		2	1.1697
		0.30103	0.0680745
varian		0.0460967	0.0224293
		0.215102	0.20226
JB		0.001	0.001
		0.001	0.001
		ra	log
%		-13.9634	-0.220037
err.va		0.0396485	0.145444
rel.std.err		0.860115	0.676164
mod.eff		0.139885	0.323836

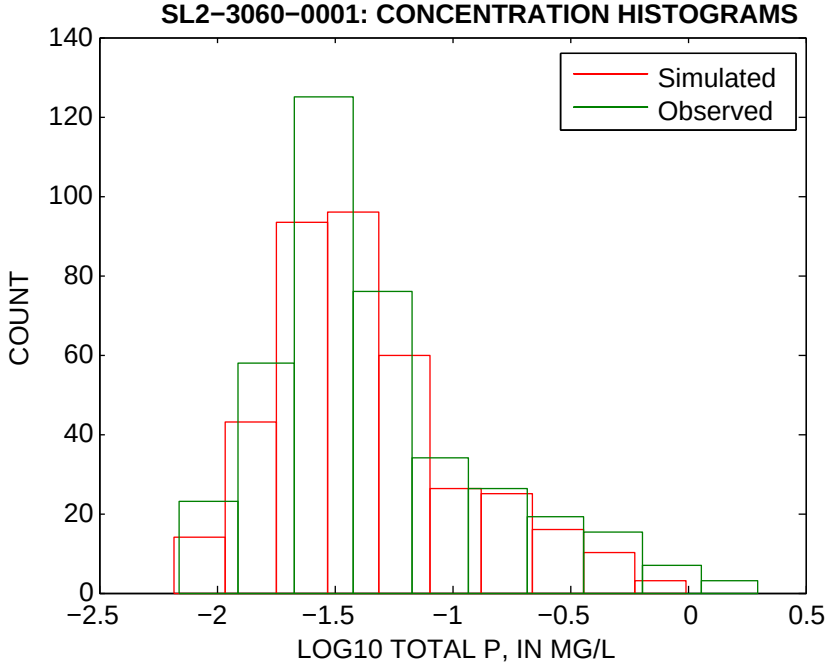
VERSION 2.1

ALL DATA
LOG10

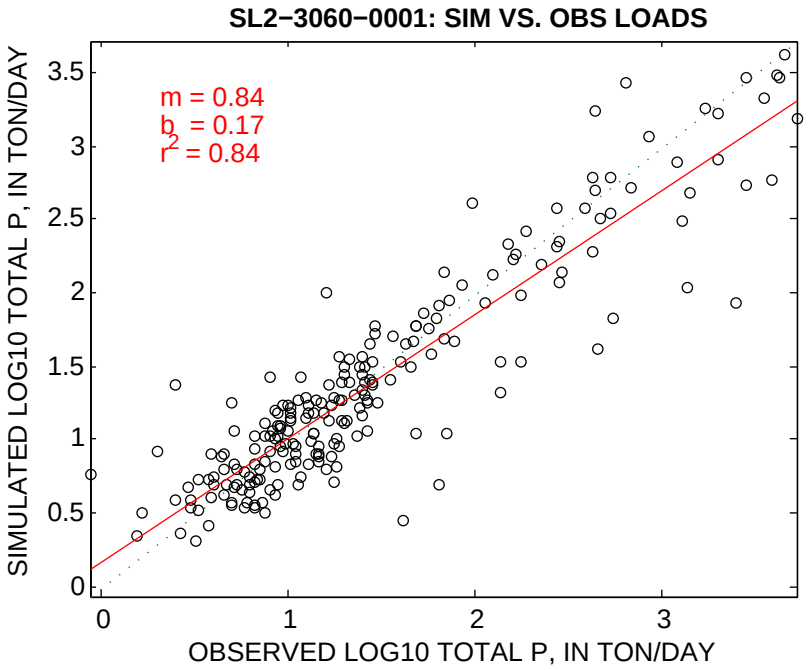


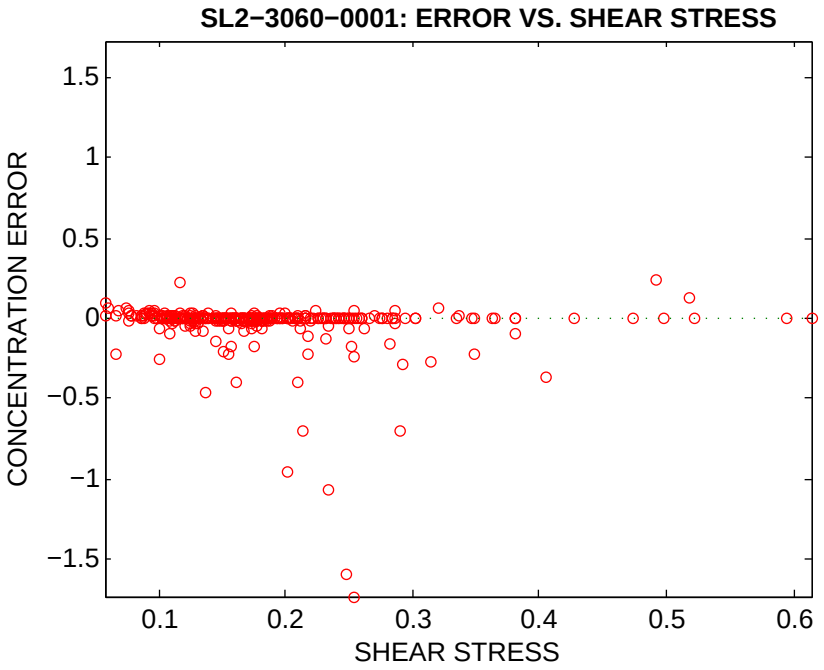


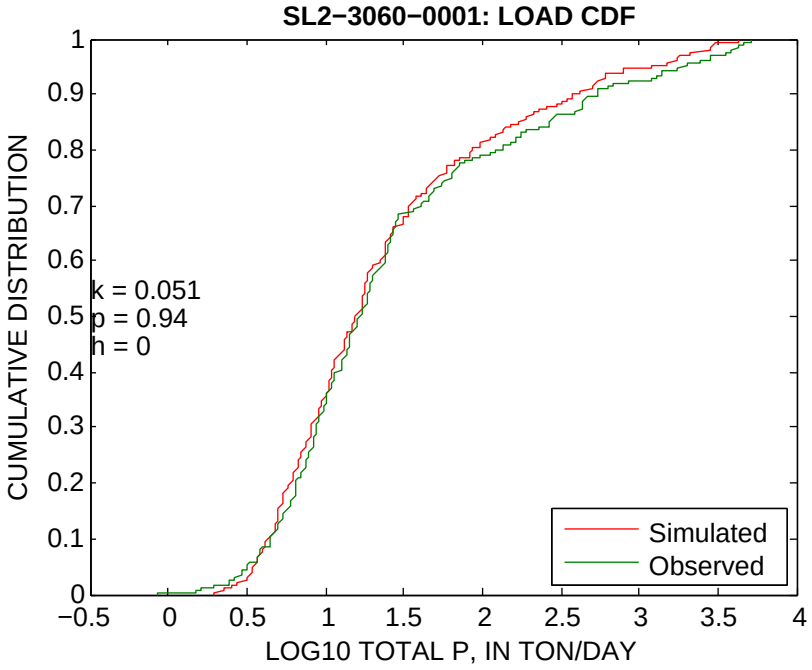


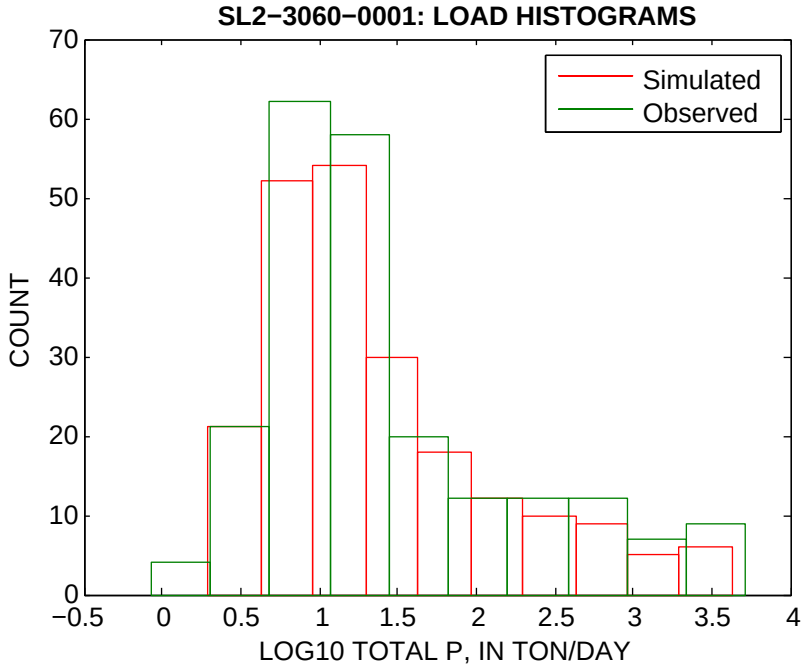


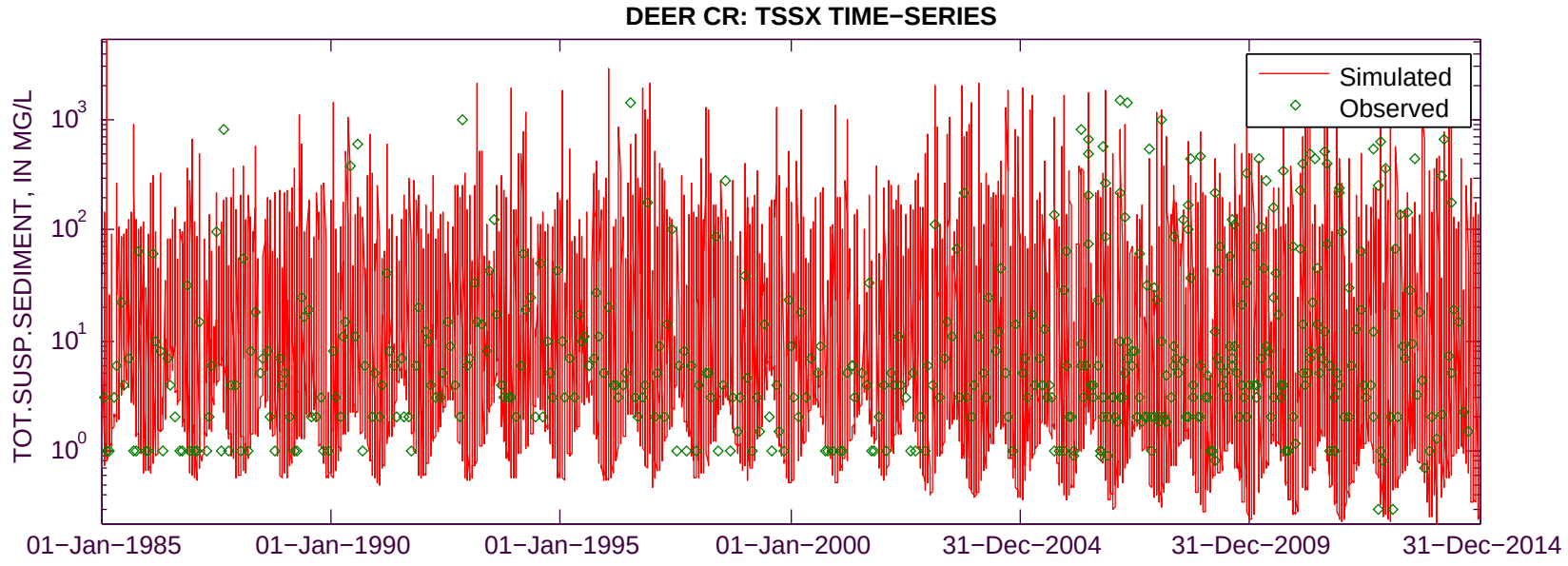
LOAD DATA
LOG10

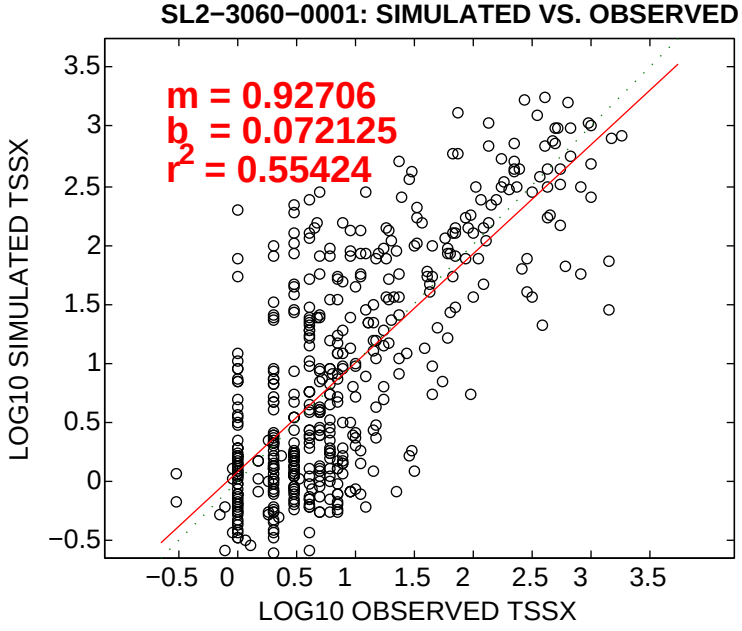


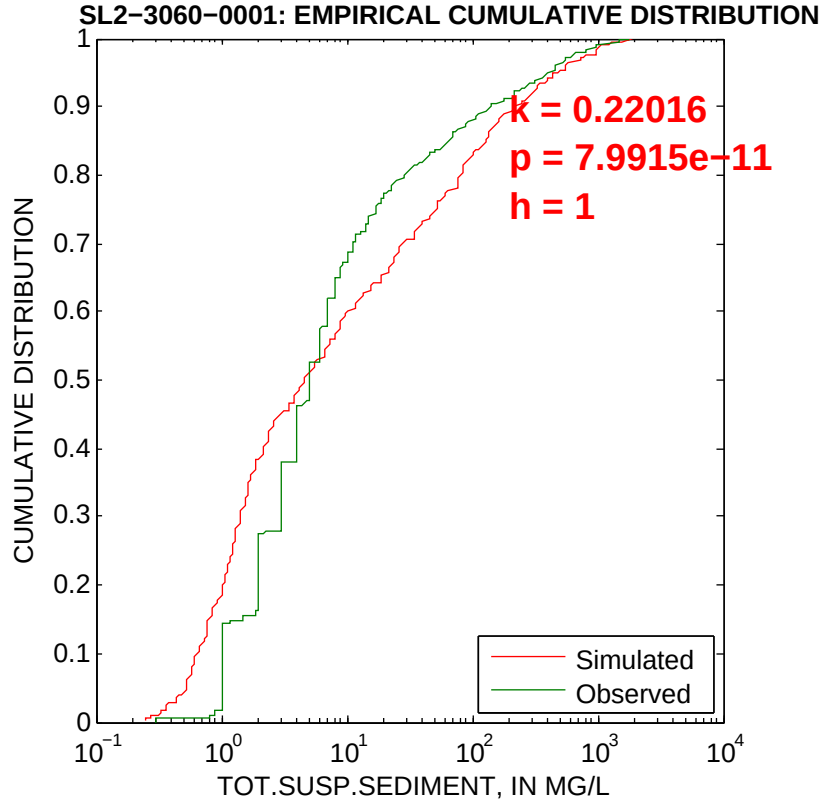












DATA SELECTION

scenario	file
P620171001WQ	TSSX.calib

plot: TSSX - total suspended ...

Dates: 1/1/1985 – 12/31/201

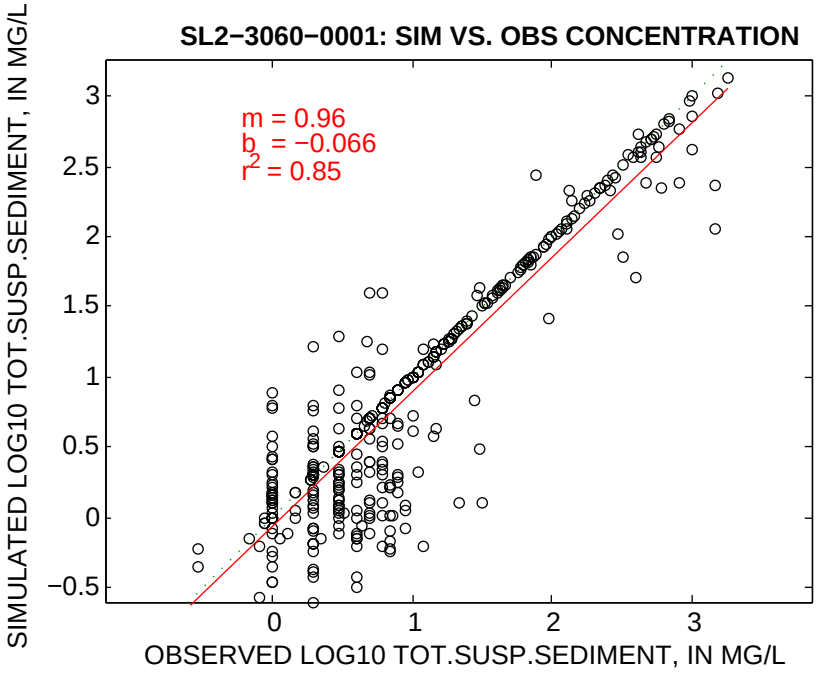
Drive	Directory	Observed
N/A	model	OBS20161101

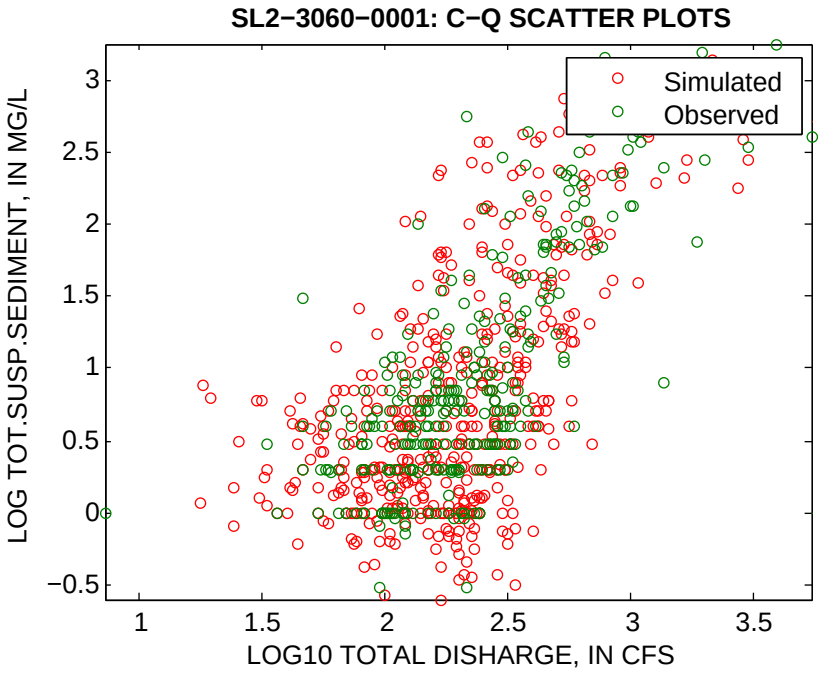
STATISTICS

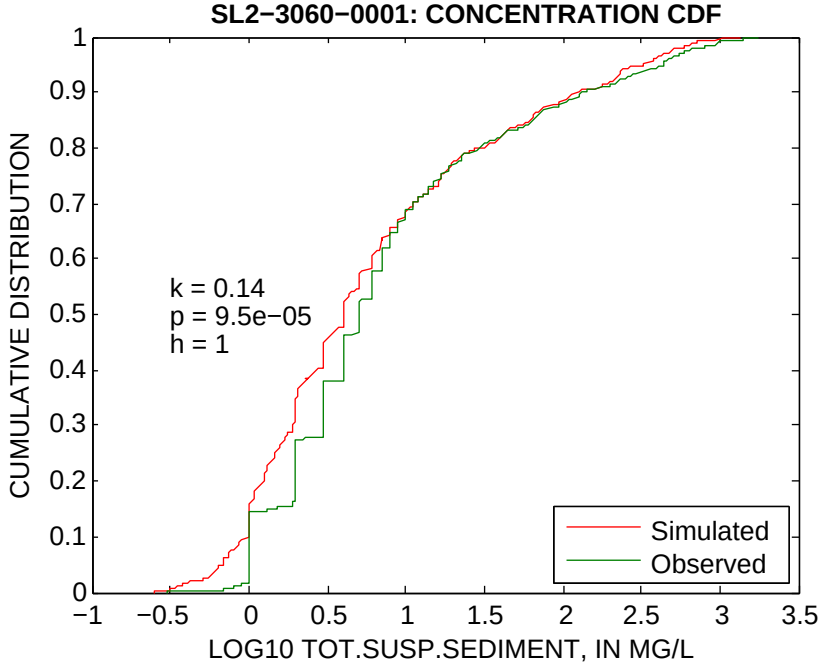
		observe	simulate
n		486	486
min		0.3	0.24026
		-0.522879	-0.619319
mean		64.5819	84.8143
		0.898462	0.905055
media		5	4.6543
		0.69897	0.667854
max		1778	1795.5
		3.24993	3.25419
varian		39191.5	50442.4
		0.610855	0.947238
JB		0.001	0.001
		0.001	0.001
		ra	log
%		31.3283	0.733824
err.va		40460.2	0.425535
rel.std.err		1.03237	0.696623
mod.eff		-0.0323734	0.303377

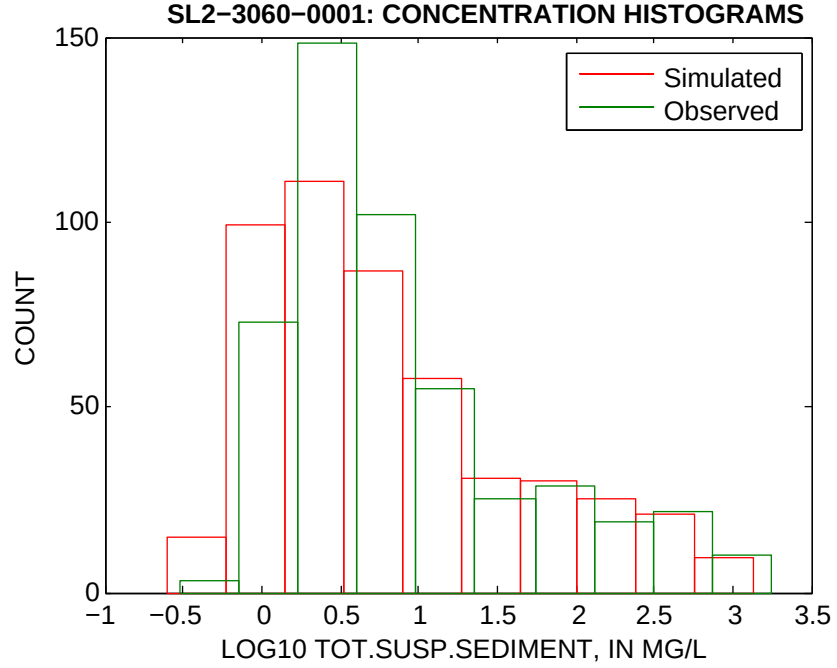
VERSION 2.1

ALL DATA
LOG10

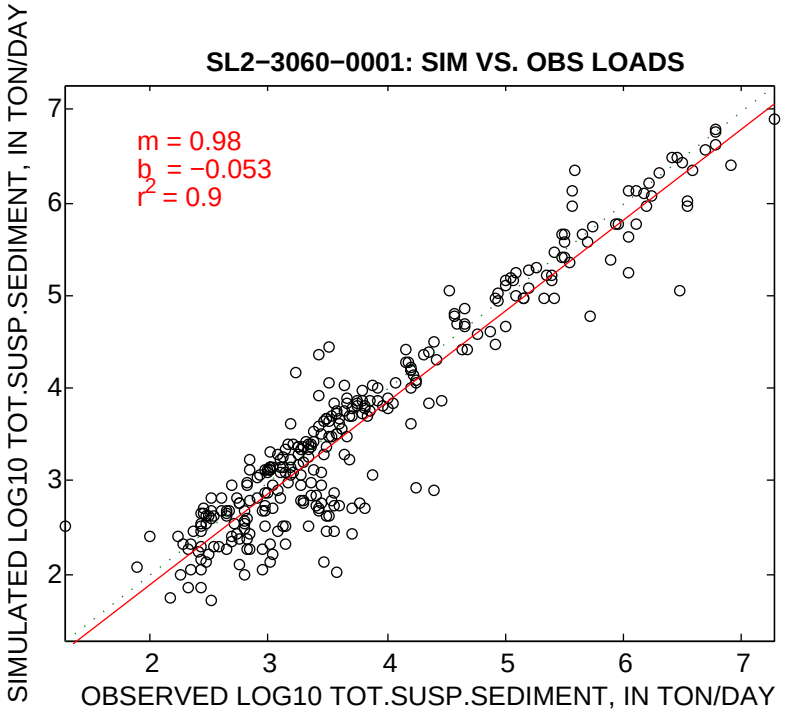


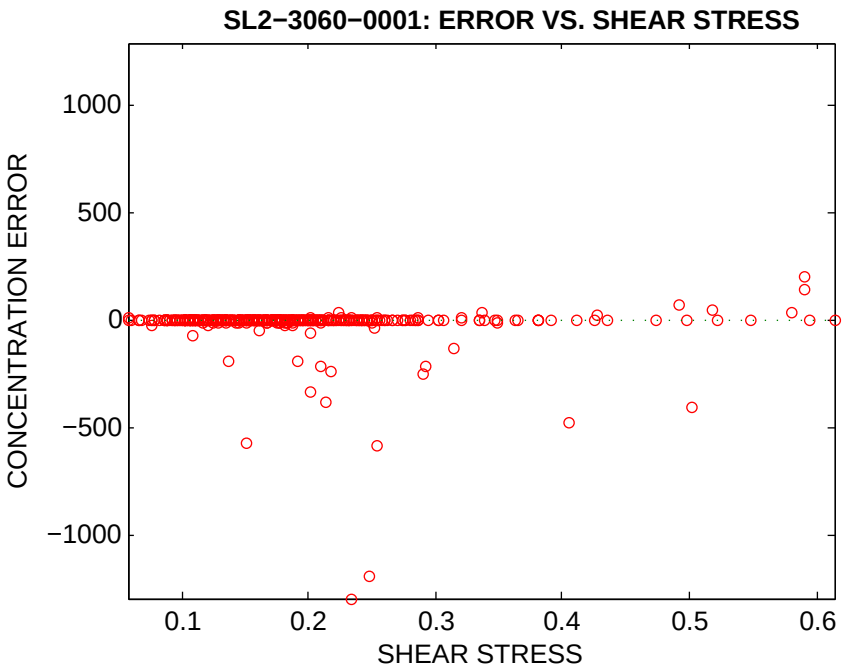


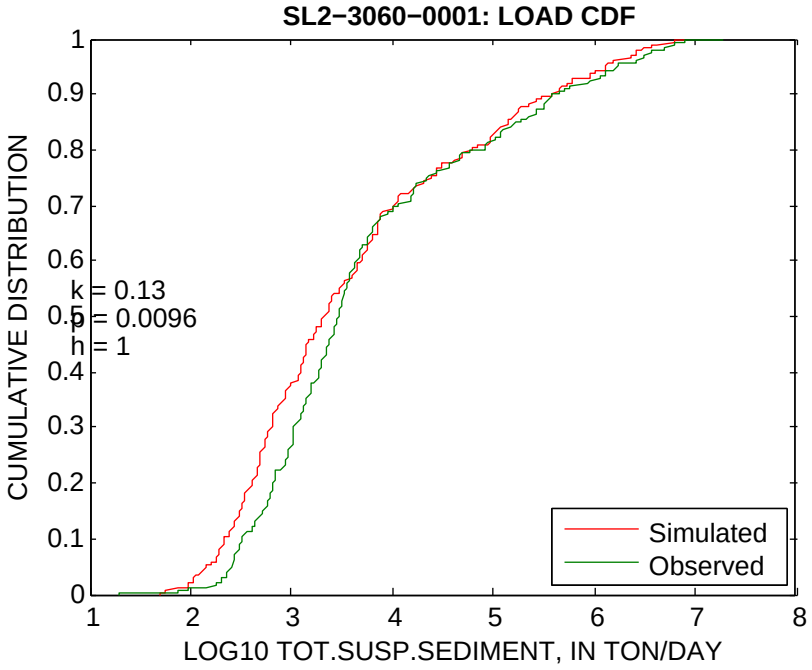


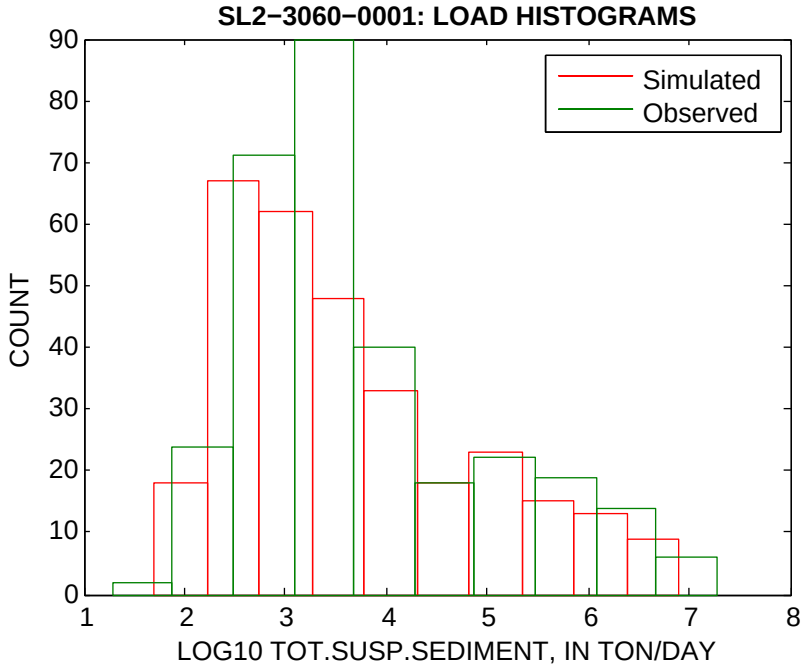


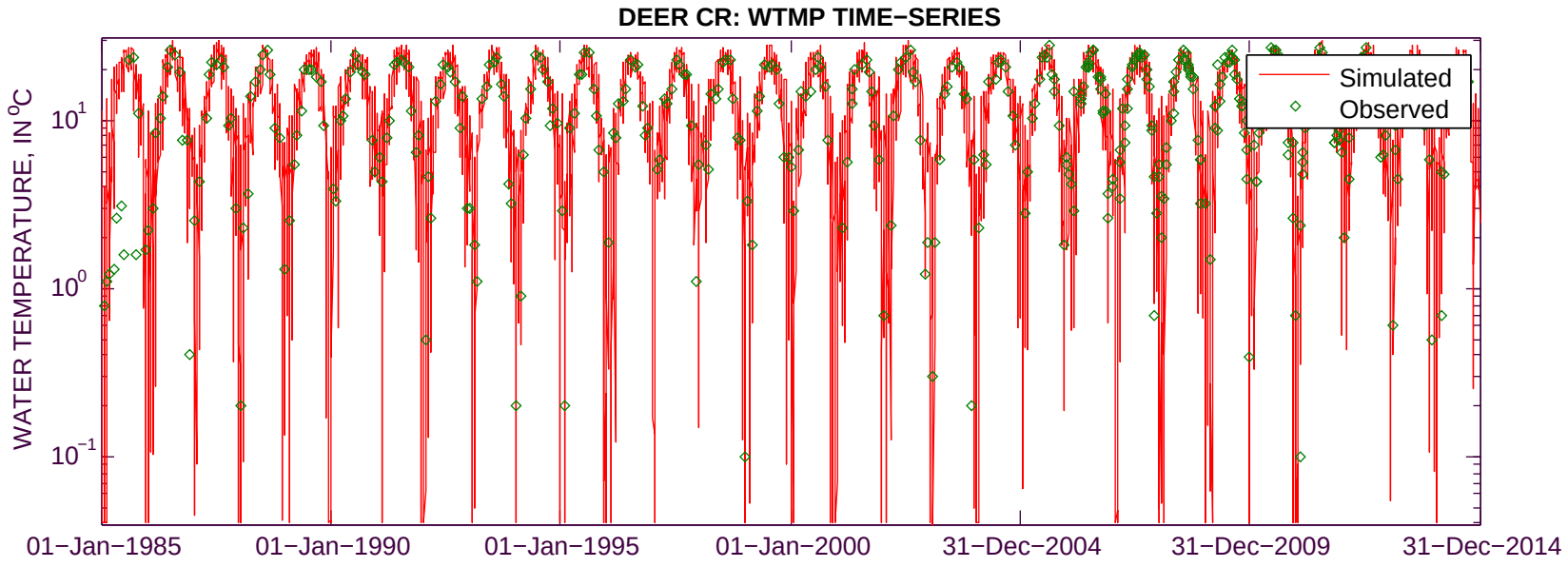
LOAD DATA
LOG10

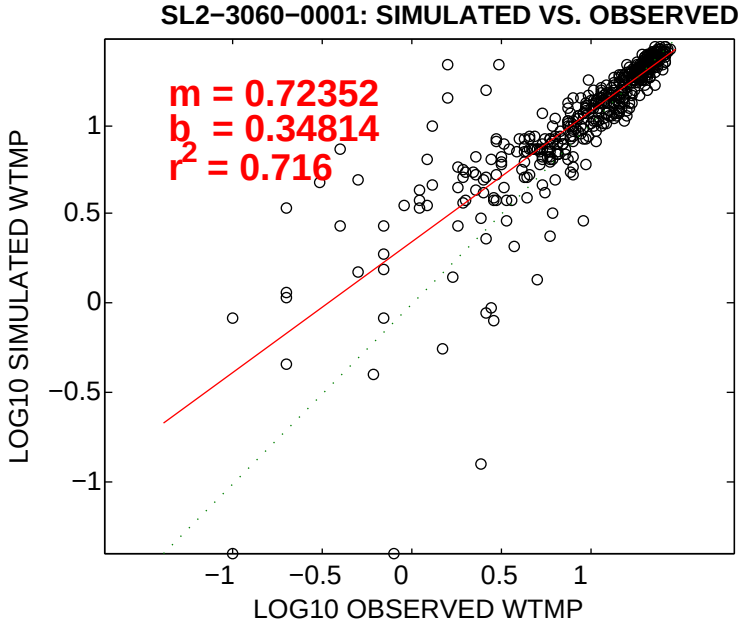


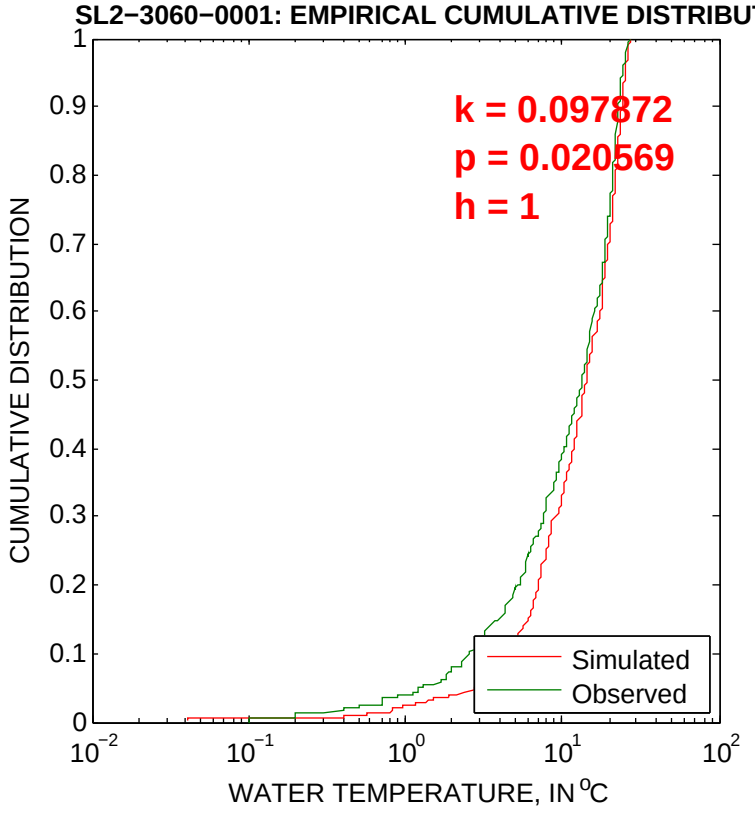












DATA SELECTION

scenario	file
P620171001WQ	WTMP.calib

plot: WTMP - water tempera...

Dates: 1/1/1985 – 12/31/201

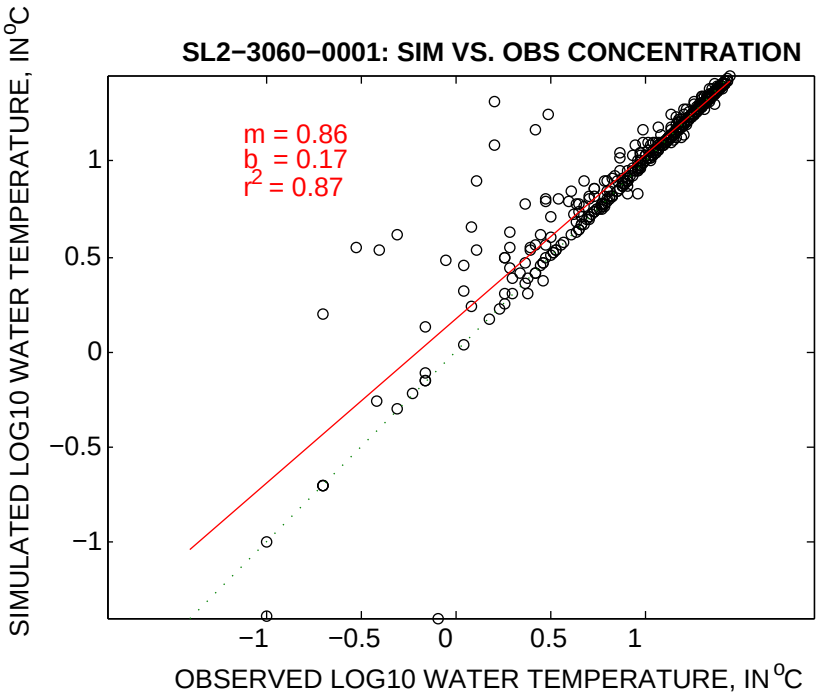
Drive	Directory	Observed
N/A	model	OBS20161101

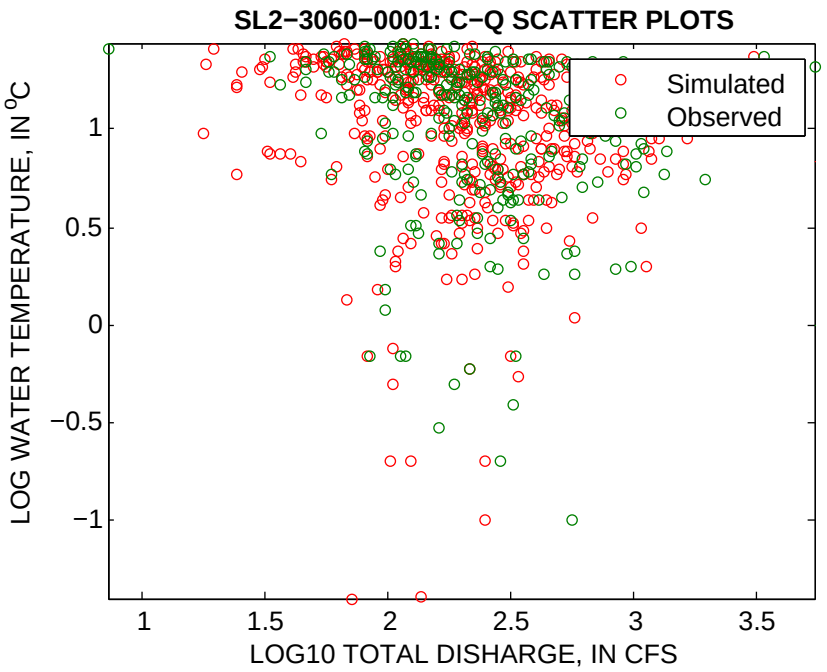
STATISTICS

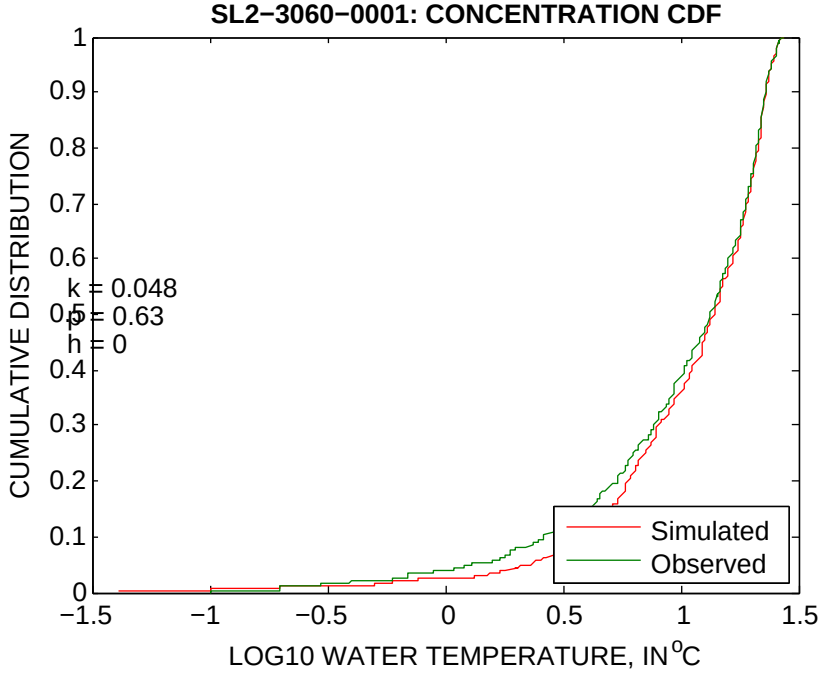
	n	observe	simulate
		470	470
min		0.1	0.040051
		-1	-1.39739
mean		13.1753	14.3888
		0.985361	1.06107
media		13.45	14.2445
		1.12872	1.15365
max		27.699	27.498
		1.44246	1.4393
varian		58.1936	53.9192
		0.18618	0.136119
JB		0.001	0.001
		0.001	0.001
		ra	log
%		9.2098	7.68322
err.va		8.30234	0.0586342
rel.std.err		0.142668	0.314934
mod.eff		0.857332	0.685066

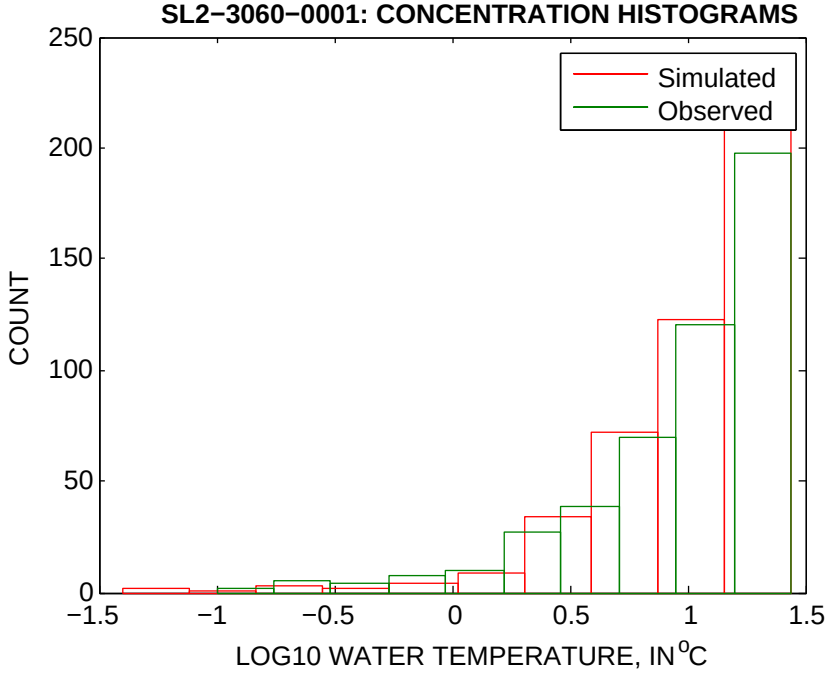
VERSION 2.1

ALL DATA
LOG10

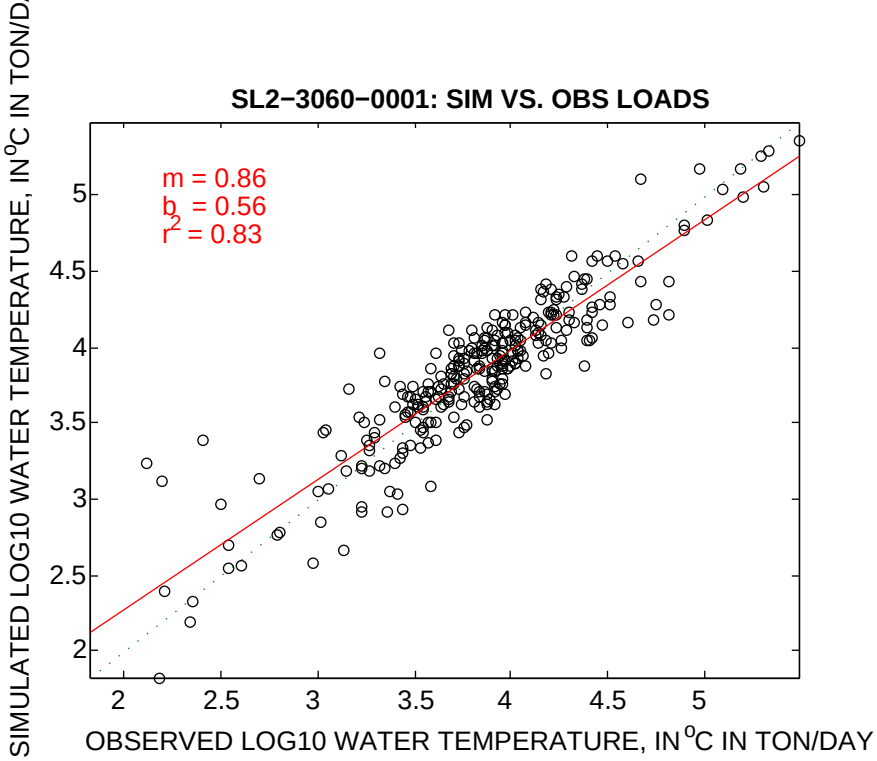


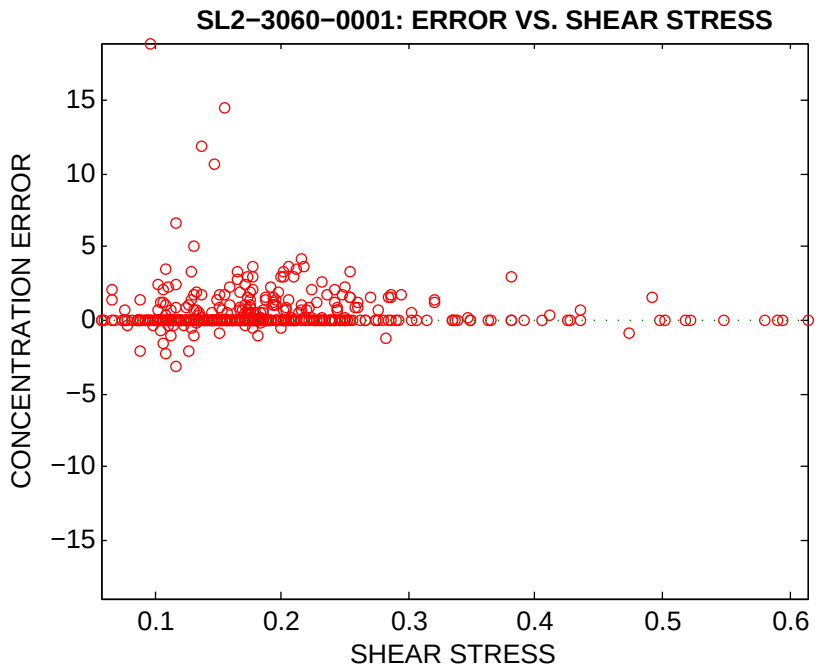


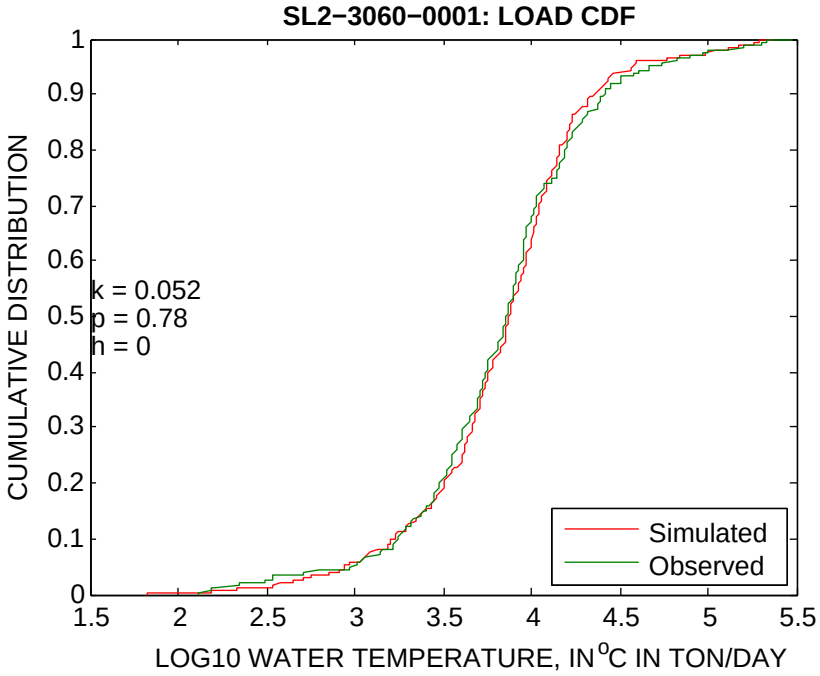


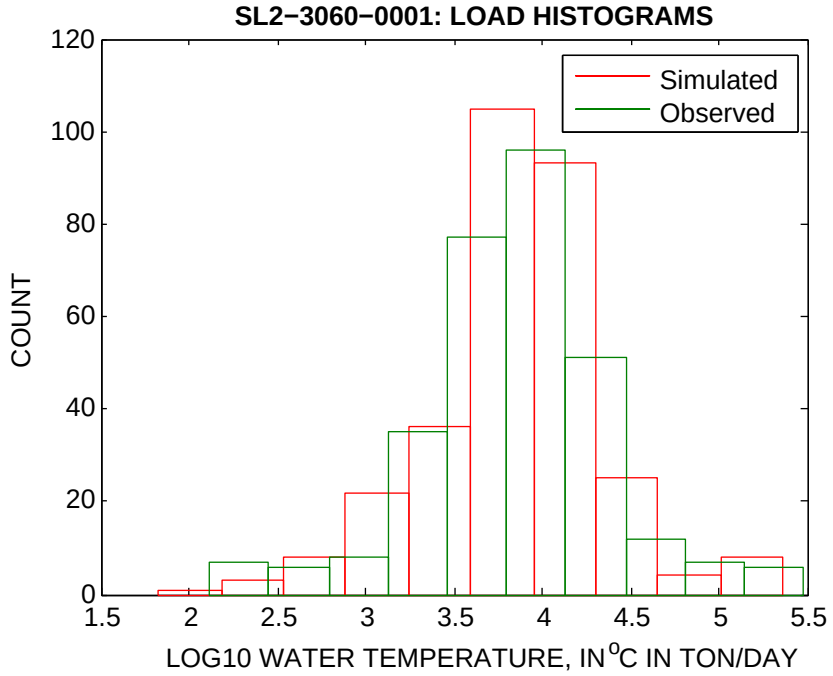


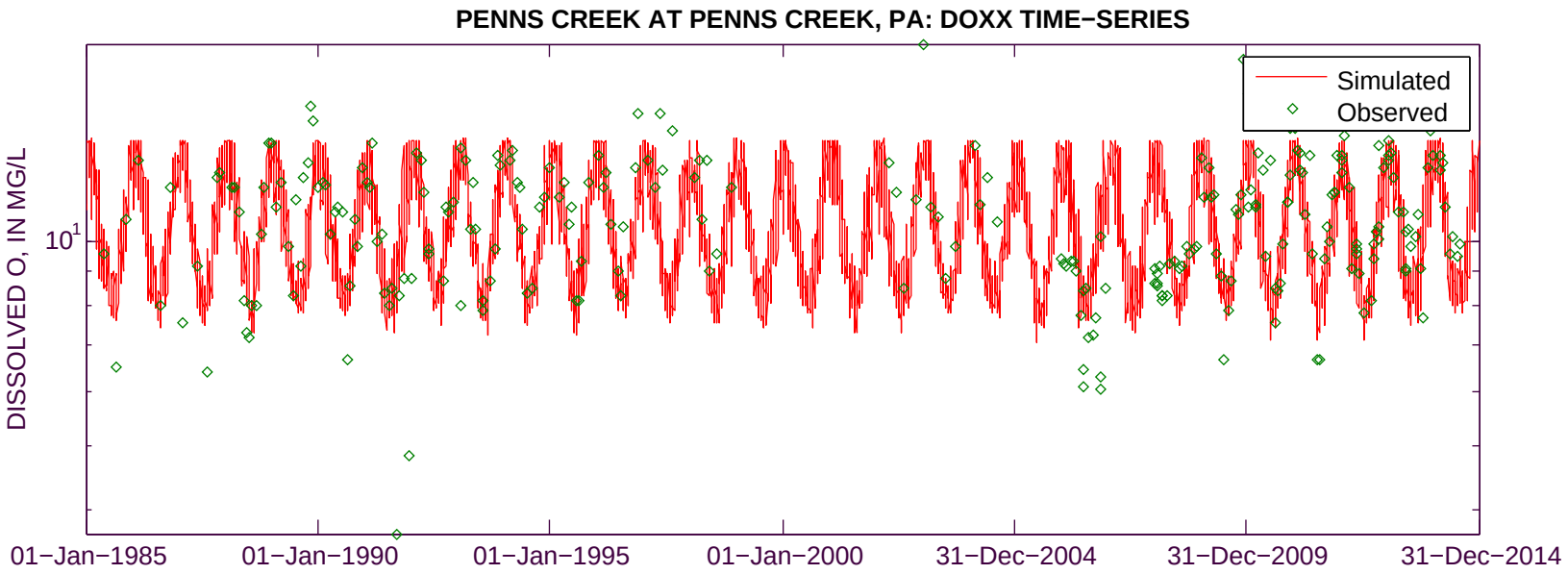
LOAD DATA
LOG10

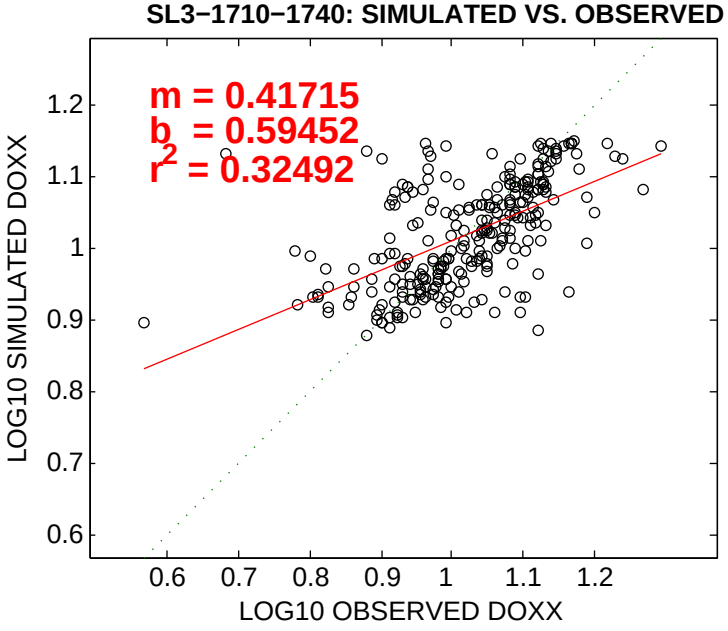


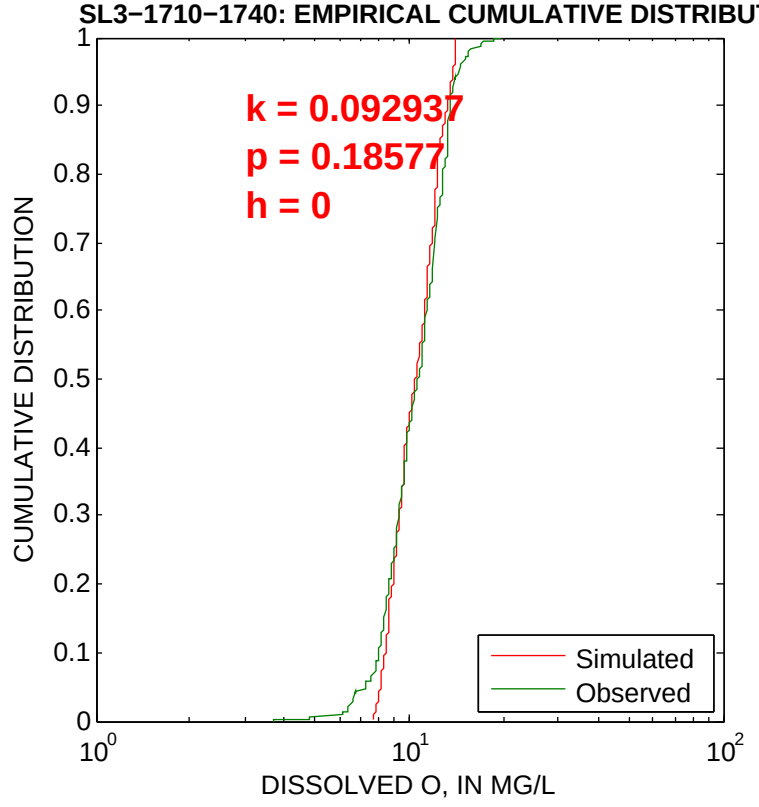












DATA SELECTION

scenario	file
P620171001WQ	DOXX.calib

plot: DOXX - dissolved oxygen

Dates 1/1/1985 12/31/201

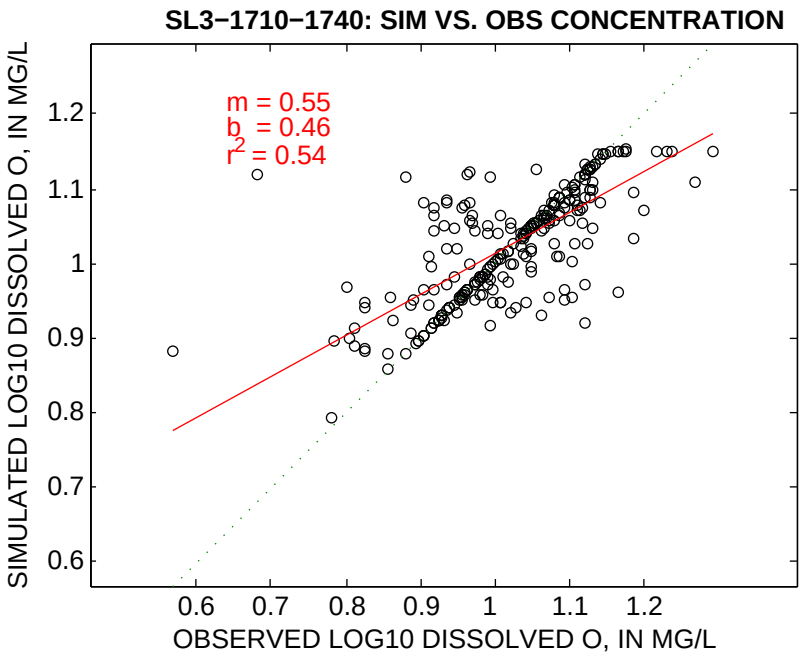
Drive	Directory	Observed
N/A	model	OBS20161101

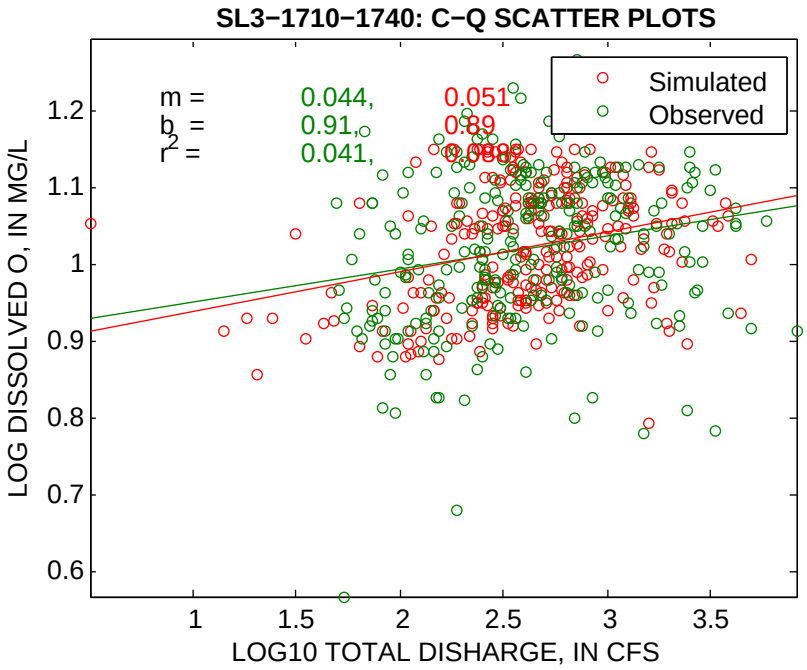
STATISTICS

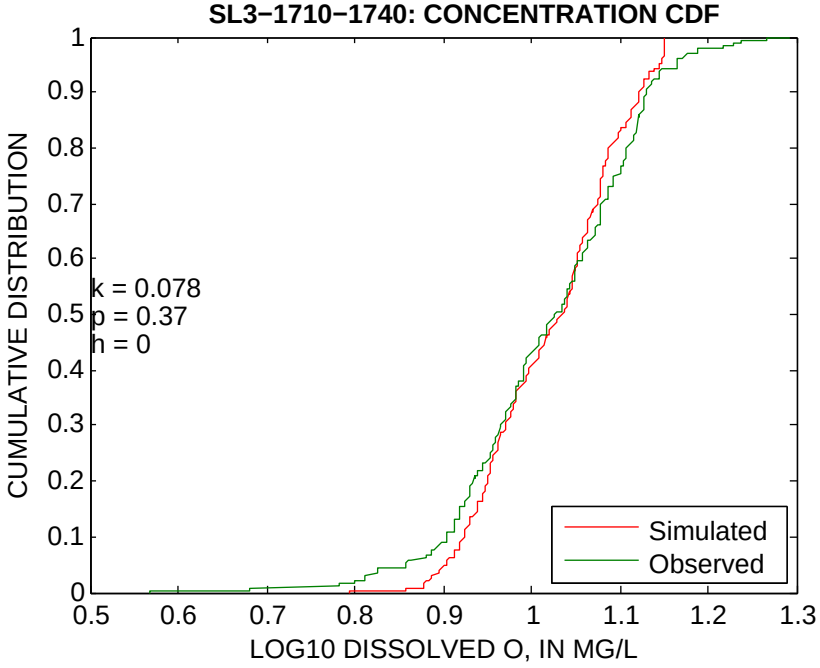
	n	269	269
		observe	simulate
min		3.7	7.5653
		0.568202	0.878826
mean		10.7563	10.6269
		1.02056	1.02025
media		10.6	10.475
		1.02531	1.02015
max		19.6	14.098
		1.29226	1.14916
varian		5.72472	3.21989
		0.0100369	0.00537534
JB		0.038432	0.004514
		0.001	0.005060
		ra	log
%		-1.2029	-0.0303976
err.va		3.89513	0.00703855
rel.std.err		0.680405	0.701271
mod.eff		0.319595	0.298729

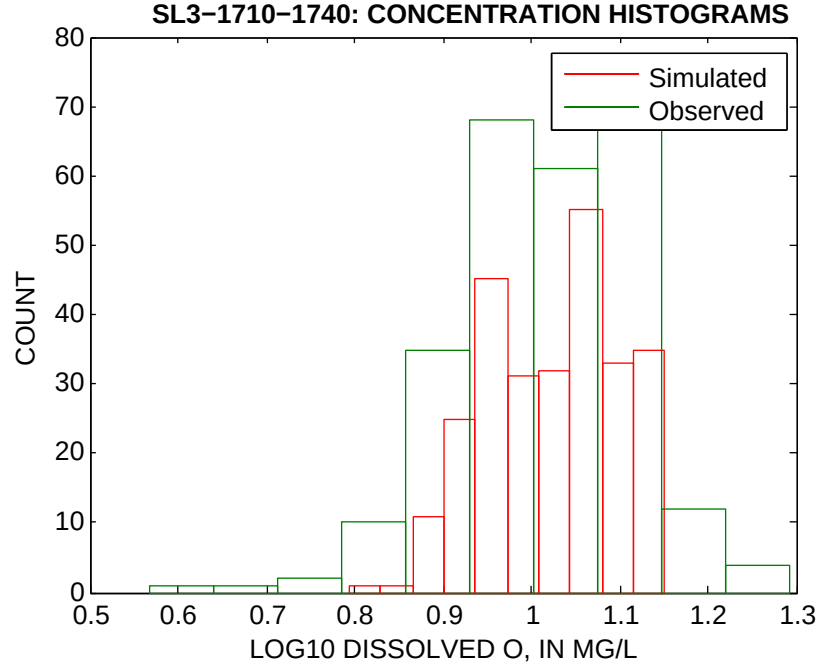
VERSION

ALL DATA
LOG10

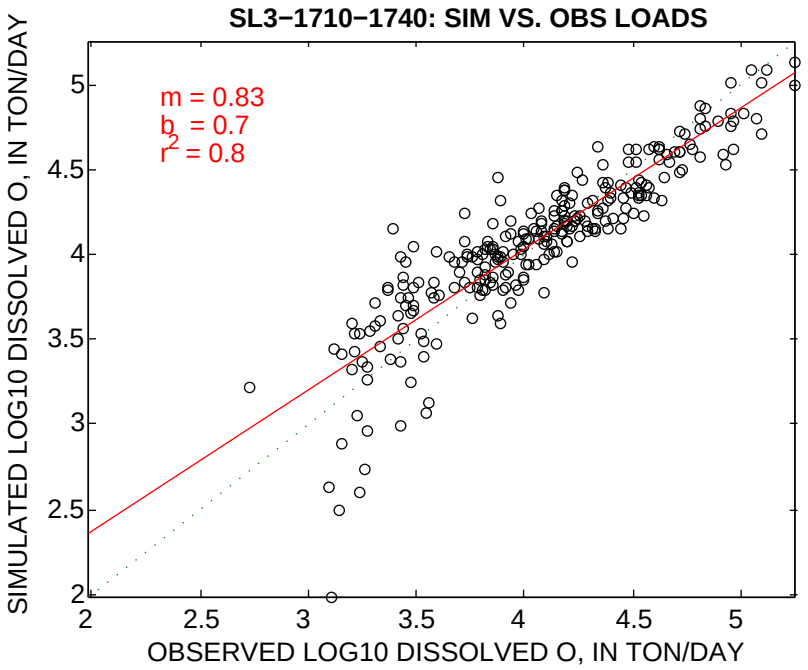


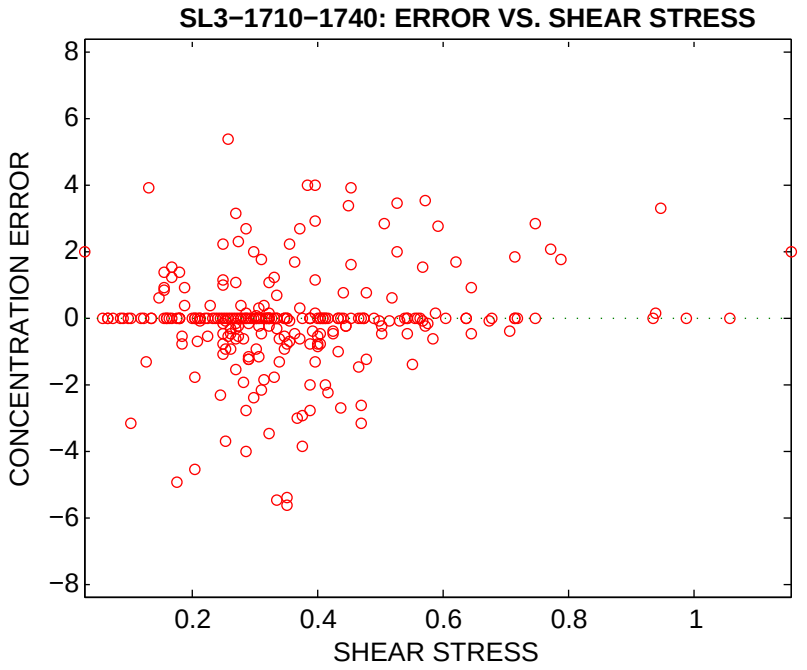


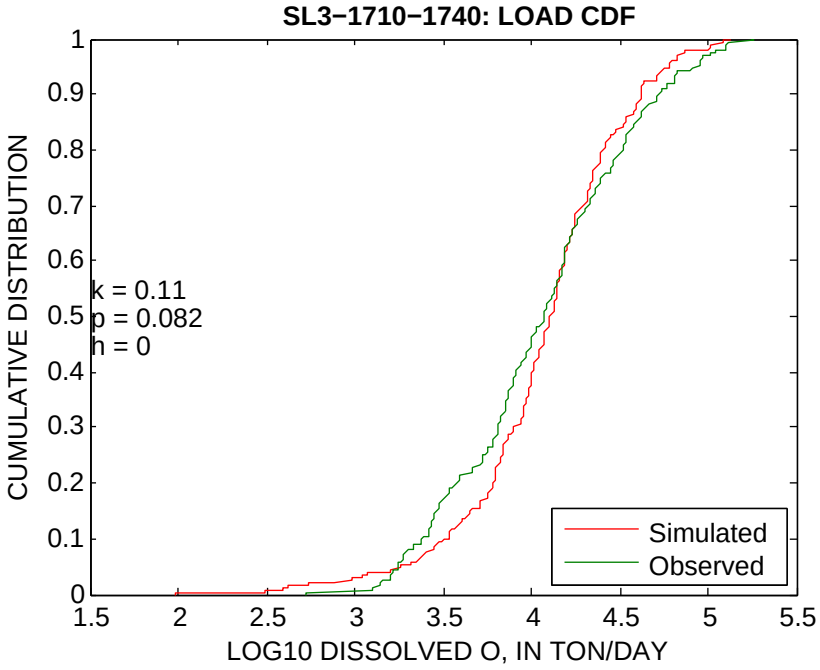


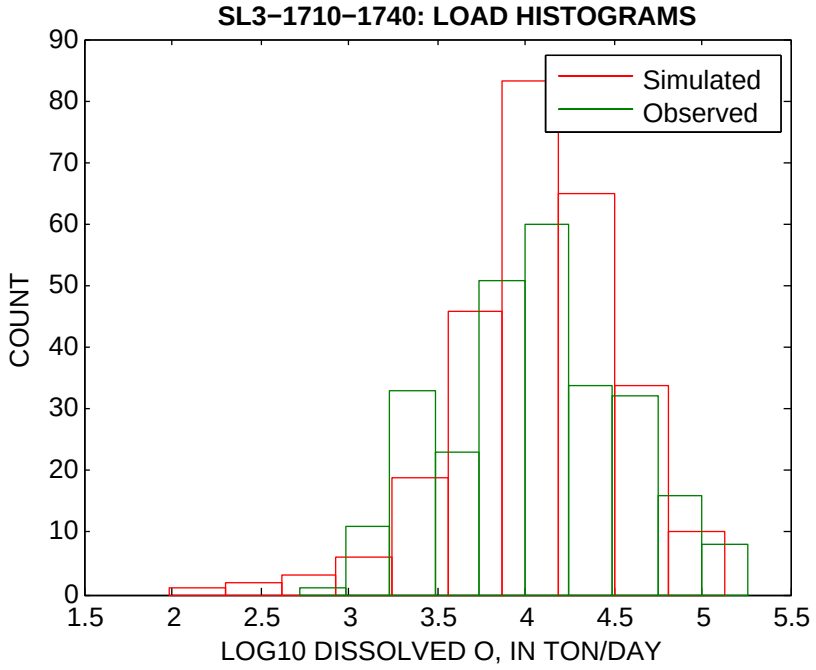


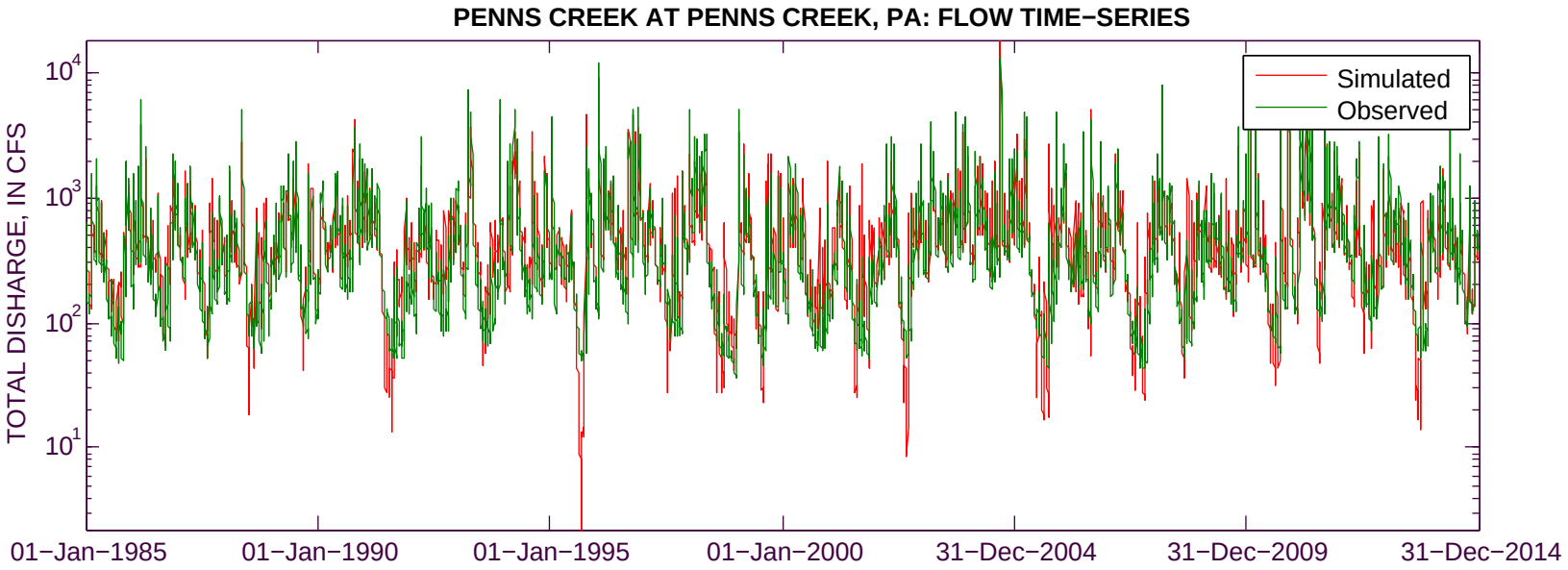
LOAD DATA
LOG10

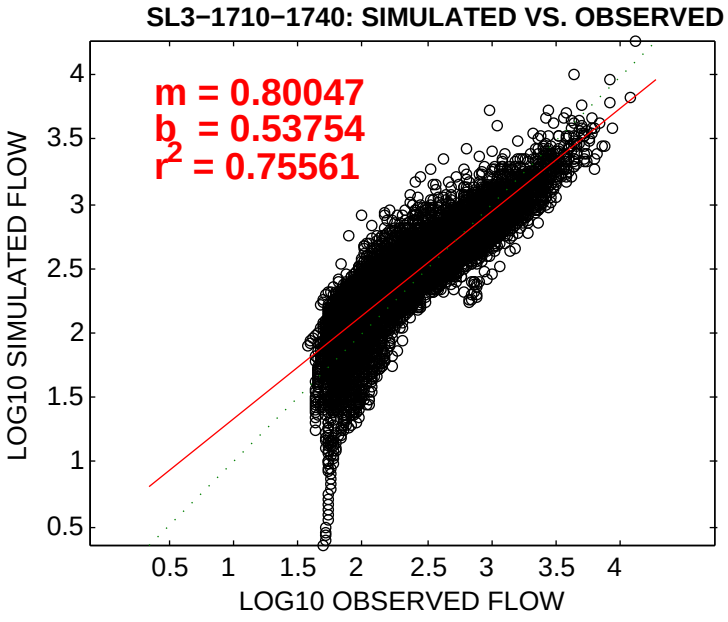


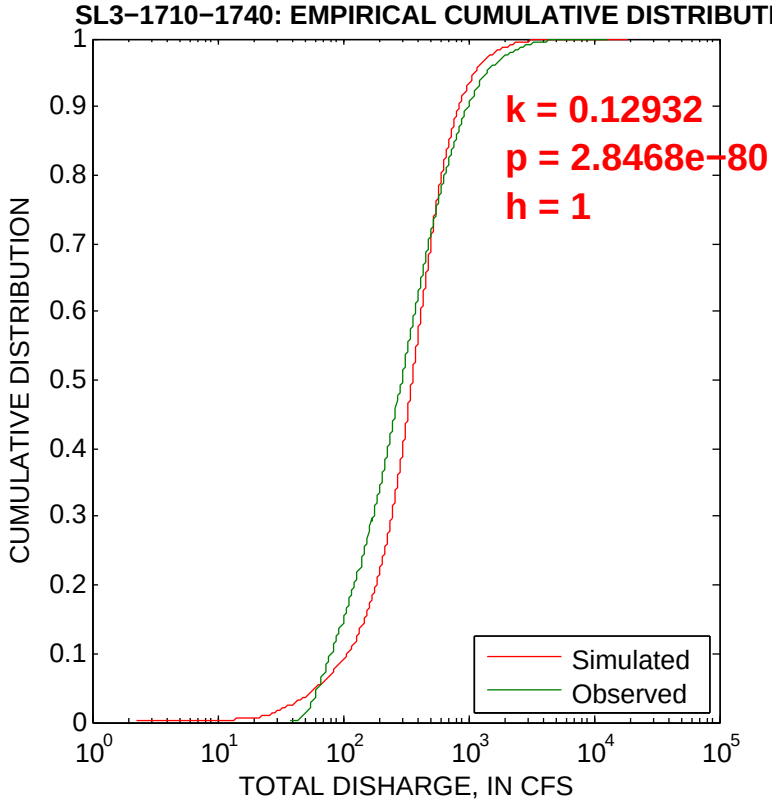












DATA SELECTION

scenario	file
P620171001WQ	FLOW.calib

plot: FLOW - total discharge

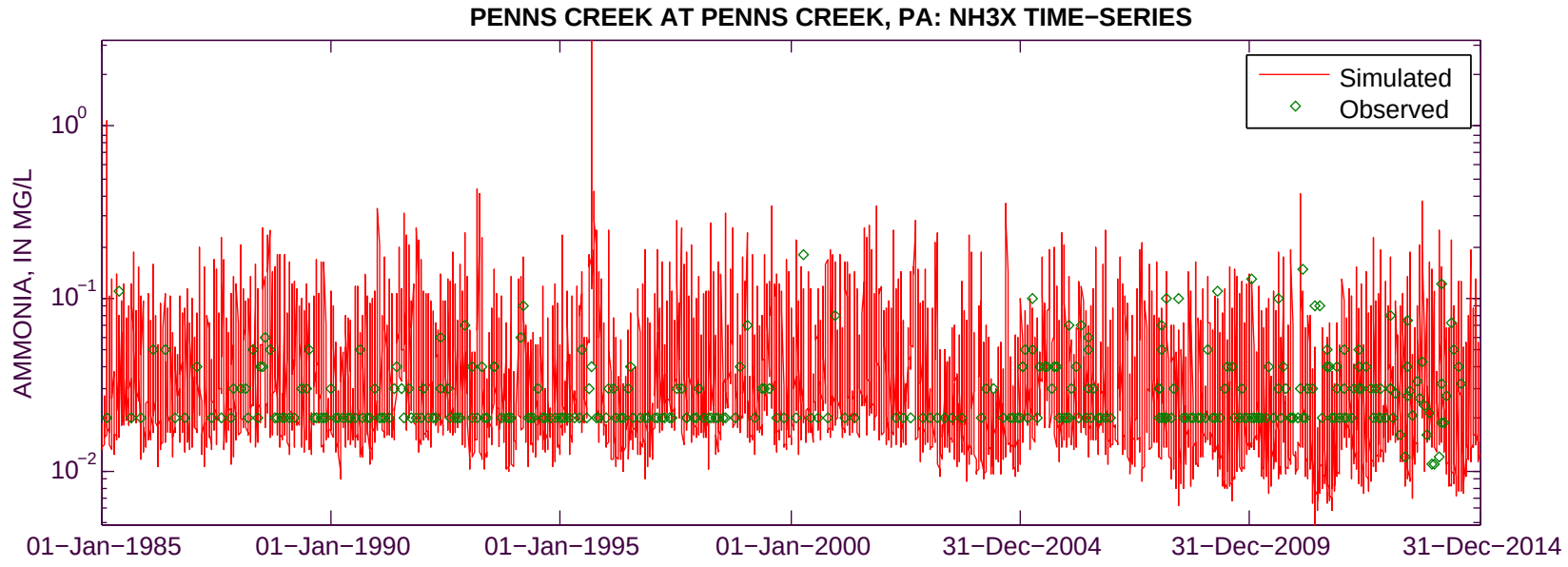
Dates: 1/1/1985 – 12/31/201

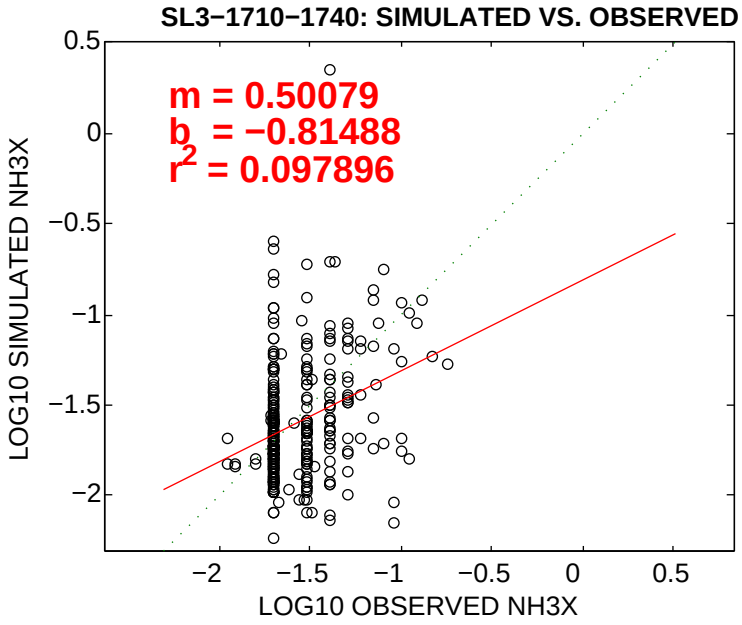
Drive	Directory	Observed
N/A	model	OBS20161101

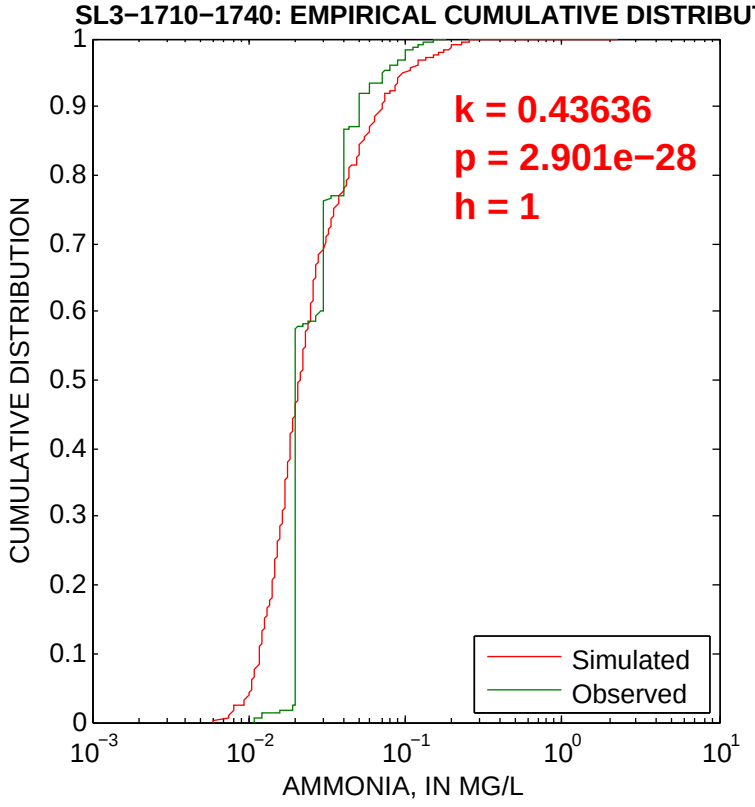
STATISTICS

		observe	simulate
n		10957	10957
min		37	2.2182
		1.5682	0.346001
mean		474.126	458.937
		2.47262	2.51681
media		298	358.62
		2.47422	2.55463
max		13000	18646
		4.11394	4.27059
varian		378192	226280
		0.167986	0.142453
JB		0.001	0.001
		0.001	0.001
		ra	log
%		-3.20346	1.78712
err.va		100795	0.0434551
rel.std.err		0.266519	0.258682
mod.eff		0.733481	0.741318

VERSION







DATA SELECTION

scenario	file
P620171001WQ	NH3X.calib

plot: NH3X - ammonia

Dates: 1/1/1985 – 12/31/201

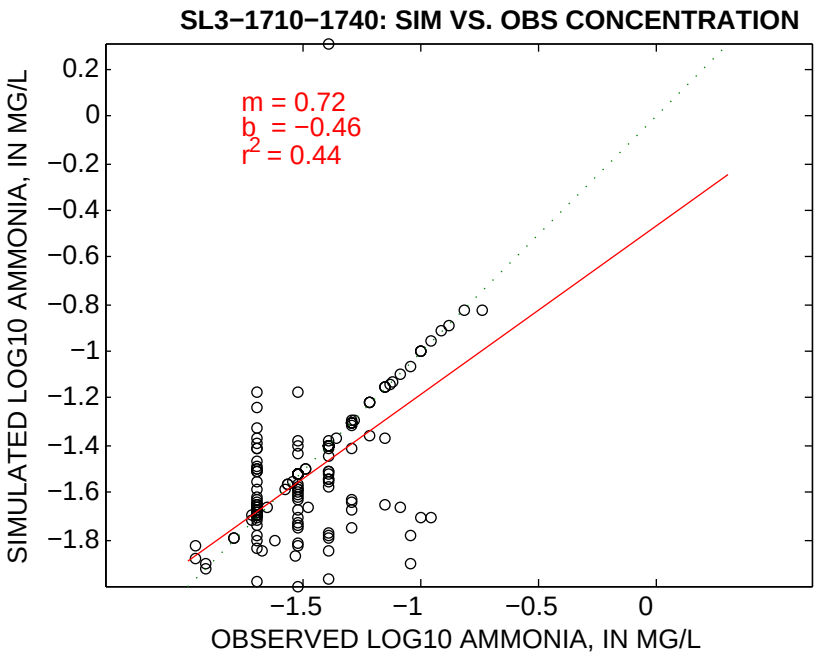
Drive	Directory	Observed
N/A	model	OBS20161101

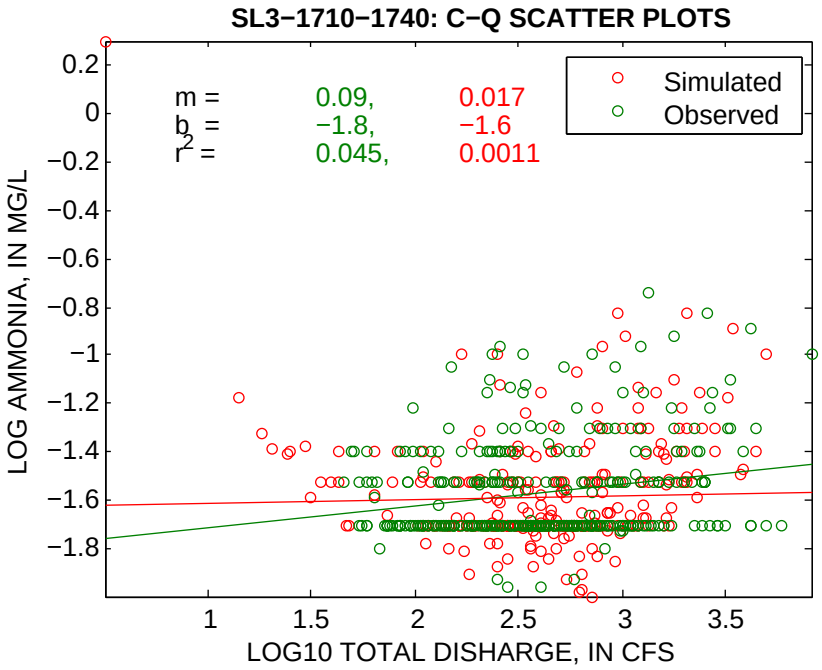
STATISTICS

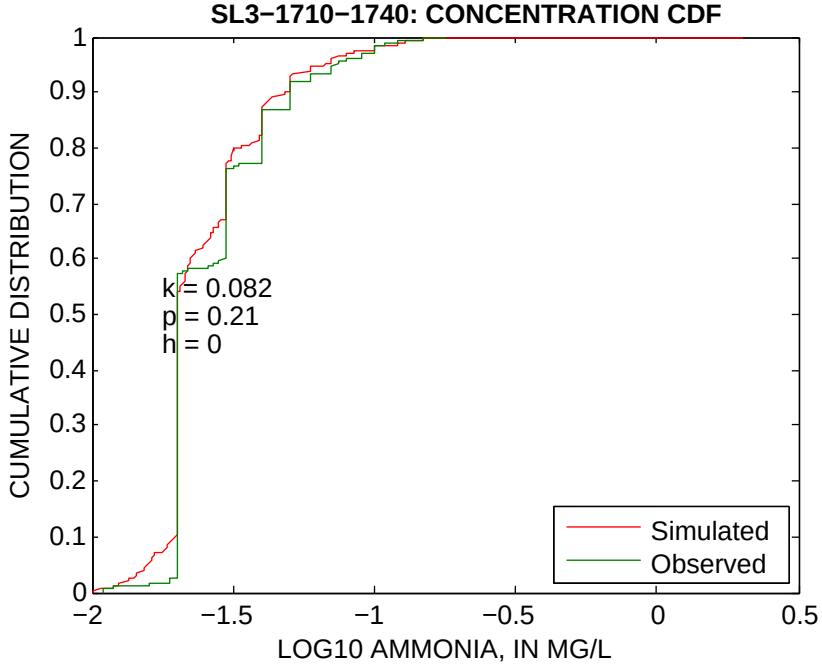
	n	observe	simulate
		330	330
min		0.011	0.0059364
		-1.95861	-2.22648
mean		0.0308788	0.0400685
		-1.56882	-1.60053
media		0.02	0.0212975
		-1.69897	-1.67167
max		0.18	2.2586
		-0.744727	0.353839
varian		0.00045365	0.0161946
		0.0403933	0.103481
JB		0.001	0.001
		0.001	0.001
		ra	log
%		29.7605	2.02132
err.va		0.0162145	0.104426
rel.std.err		35.7422	2.58523
mod.eff		-34.7422	-1.58523

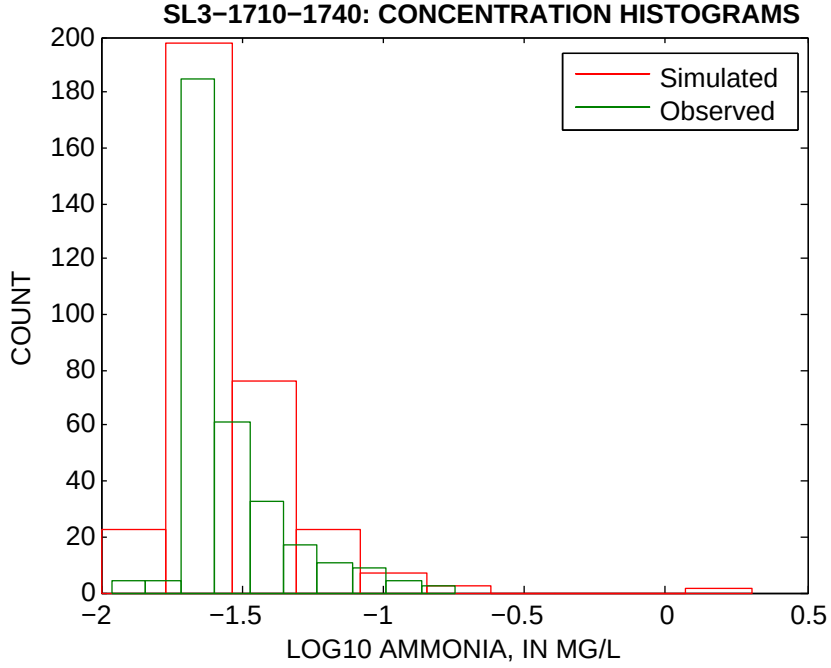
VERSION 2.1

ALL DATA
LOG10

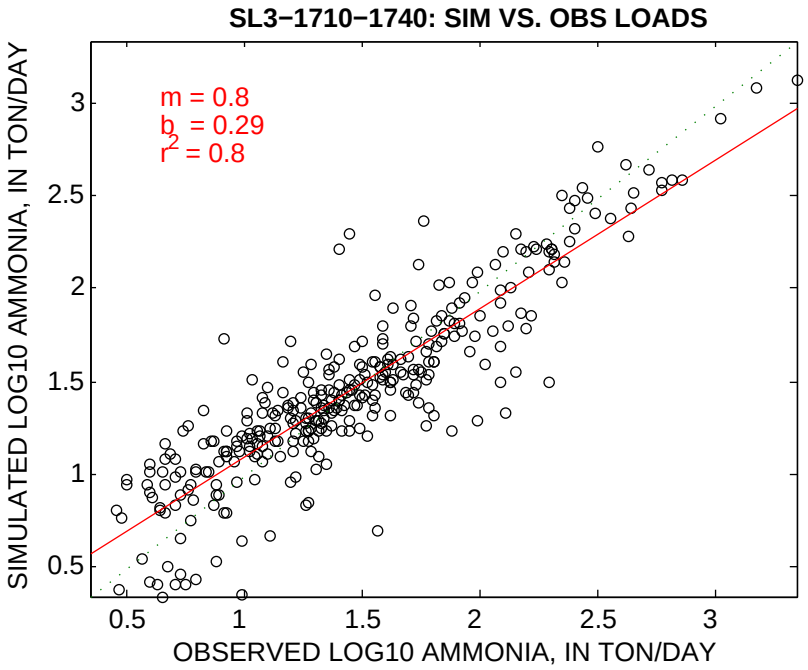


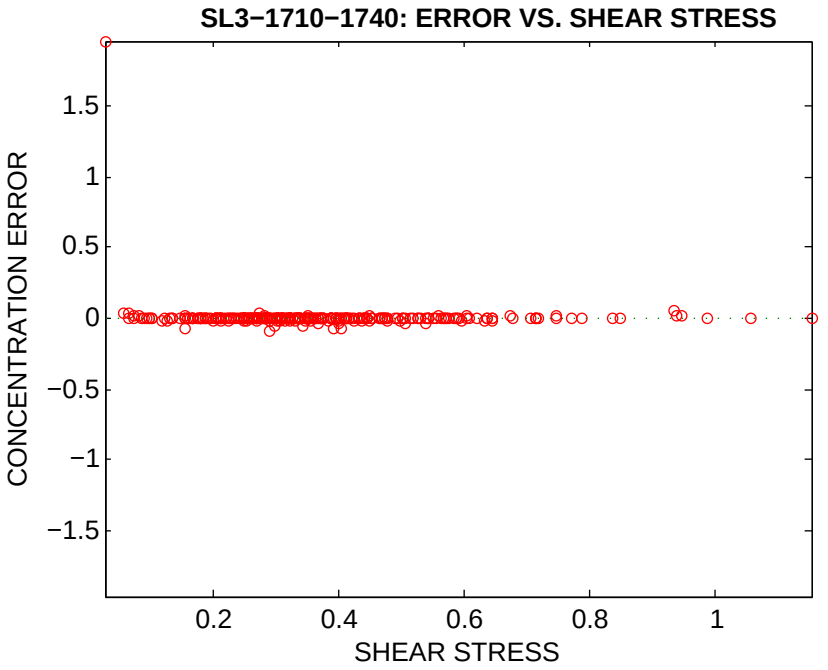


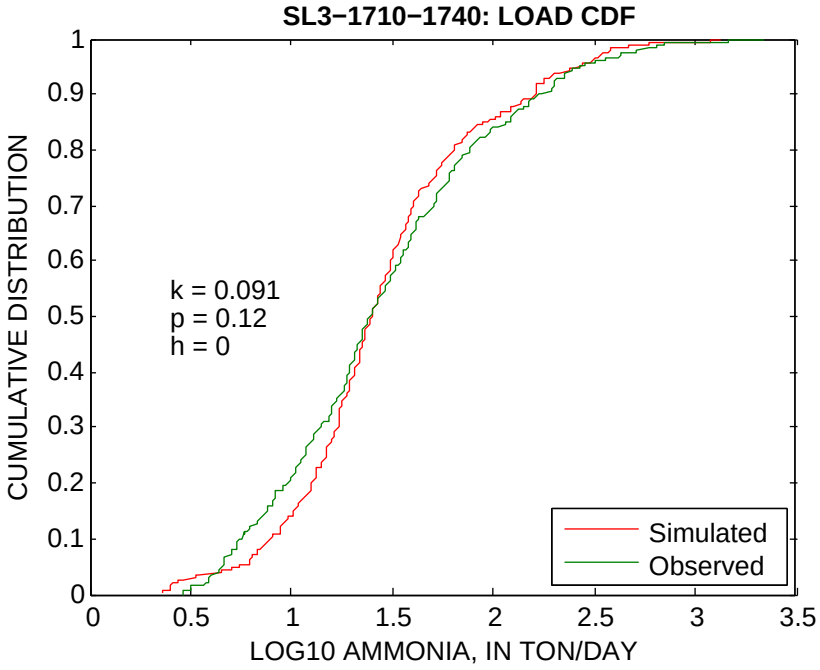


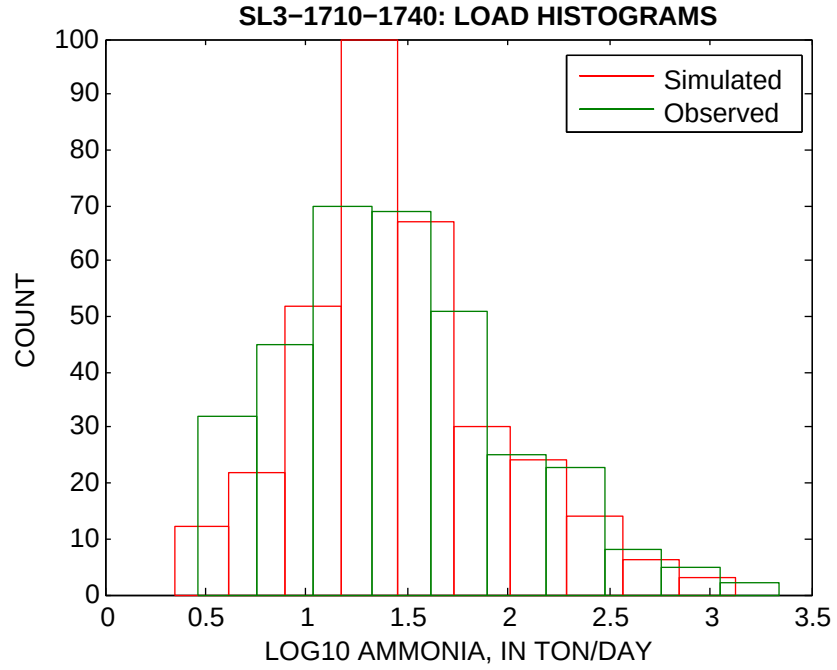


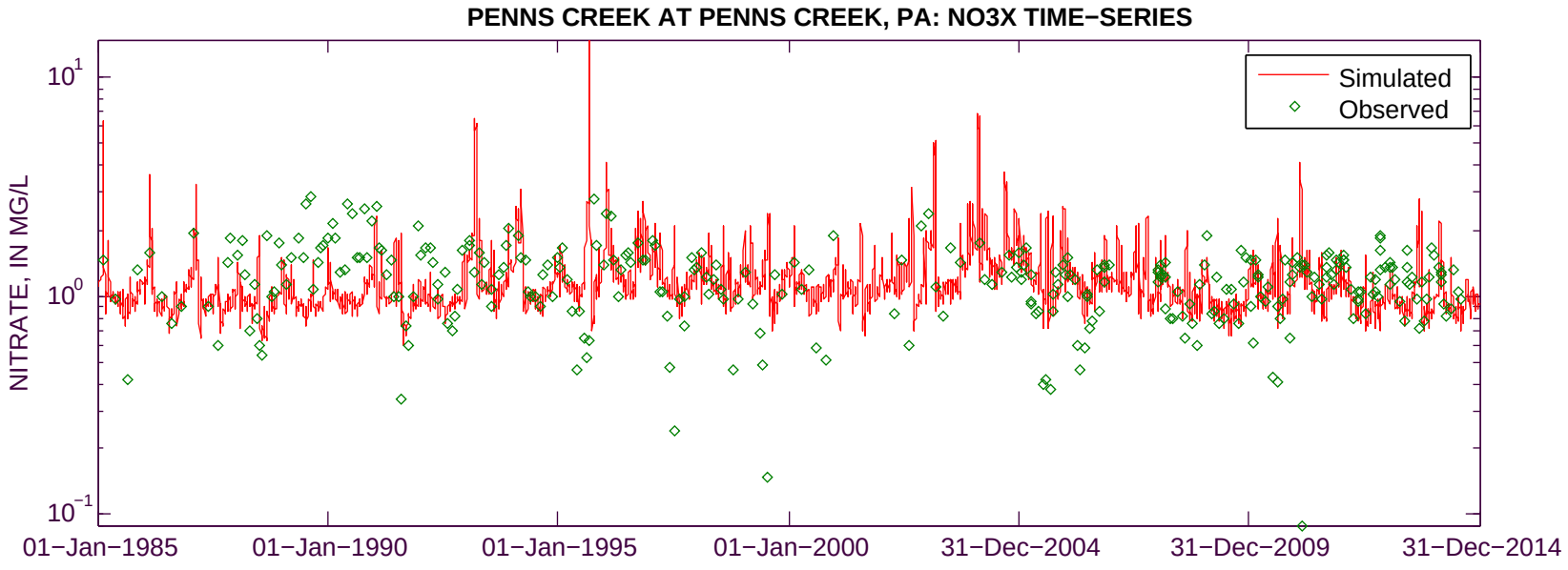
LOAD DATA
LOG10

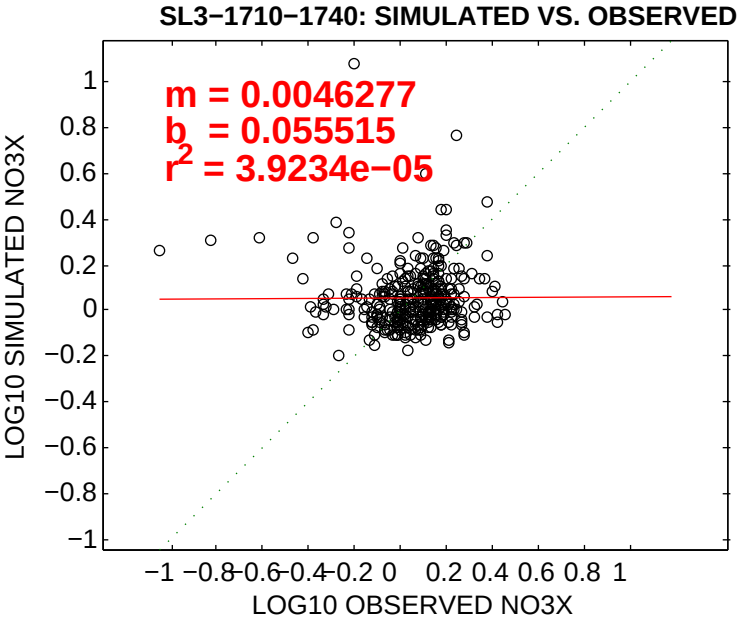


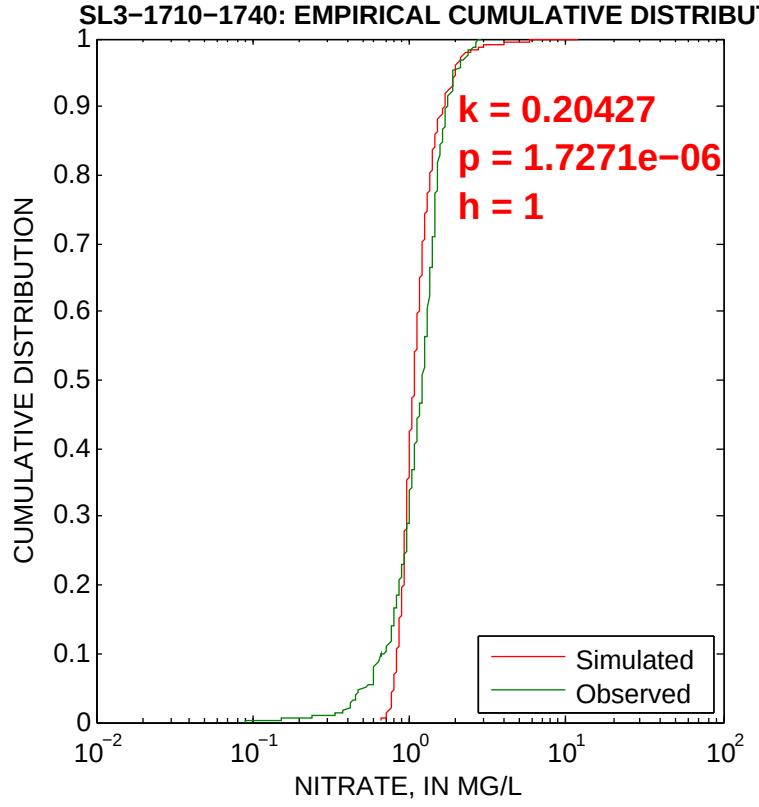












DATA SELECTION

scenario: P620171001WQ | file: NO3X.calib

plot: NO3X - nitrate

Dates: 1/1/1985 – 12/31/201

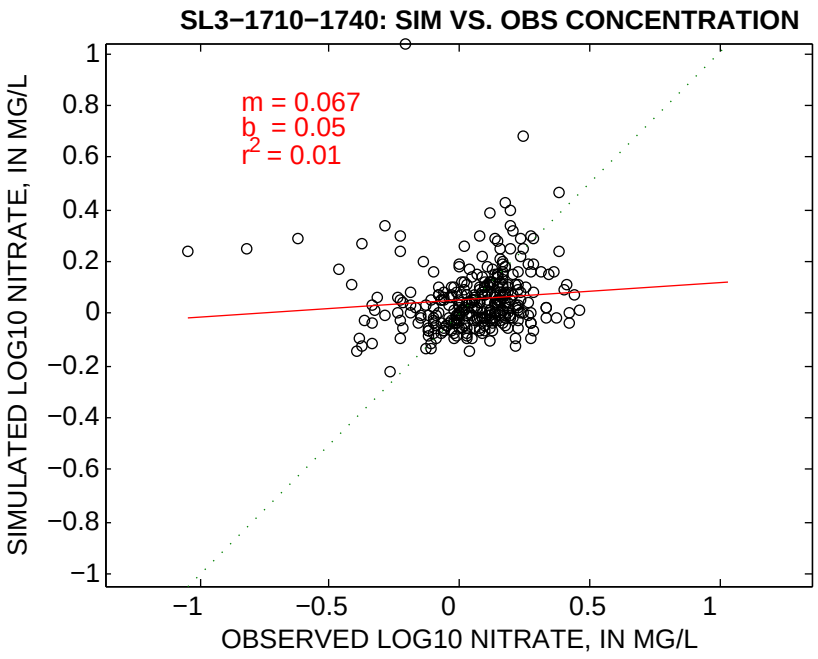
Drive | Directory | Observed: N/A | model | OBS20161101

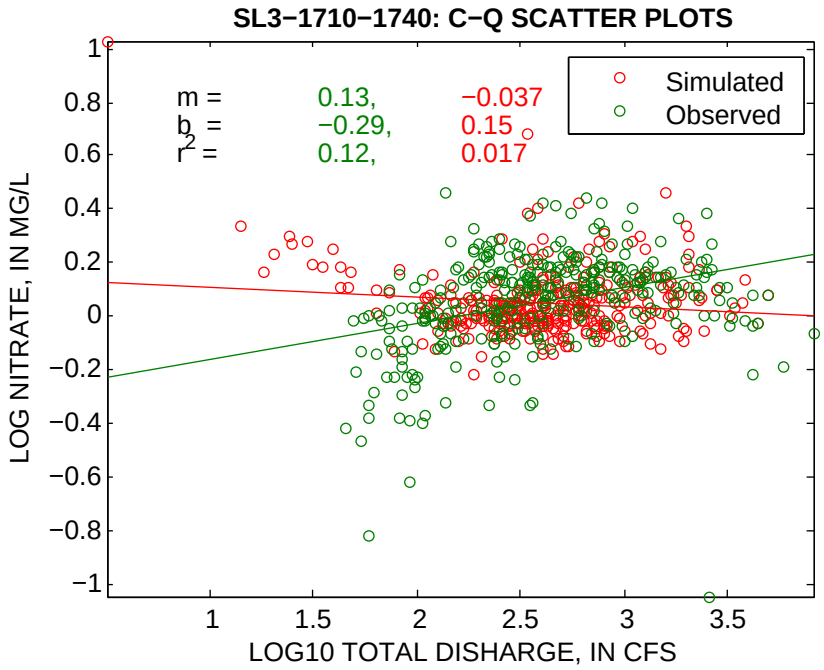
STATISTICS

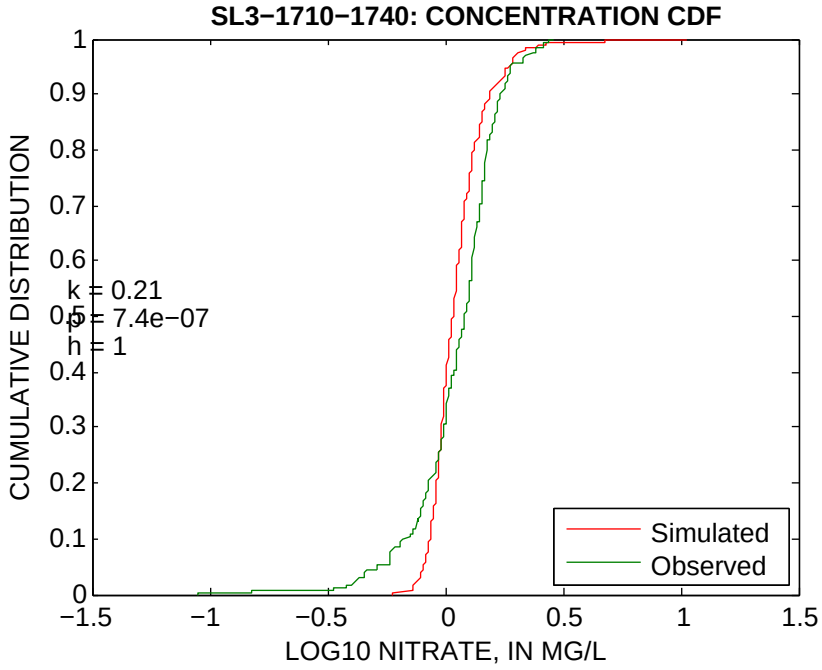
		observe	simulate
n		328	328
min		0.09	0.63186
		-1.04576	-0.199379
mean		1.22293	1.2164
		0.0542213	0.0557663
media		1.22	1.07265
		0.0863598	0.030458
max		2.89	11.818
		0.460898	1.07254
varian		0.199432	0.556704
		0.0337871	0.0184426
JB		0.001	0.001
		0.001	0.001
		ra	log
%		-0.533846	2.84942
err.va		0.748439	0.0519194
rel.std.err		3.75286	1.53666
mod.eff		-2.75286	-0.536663

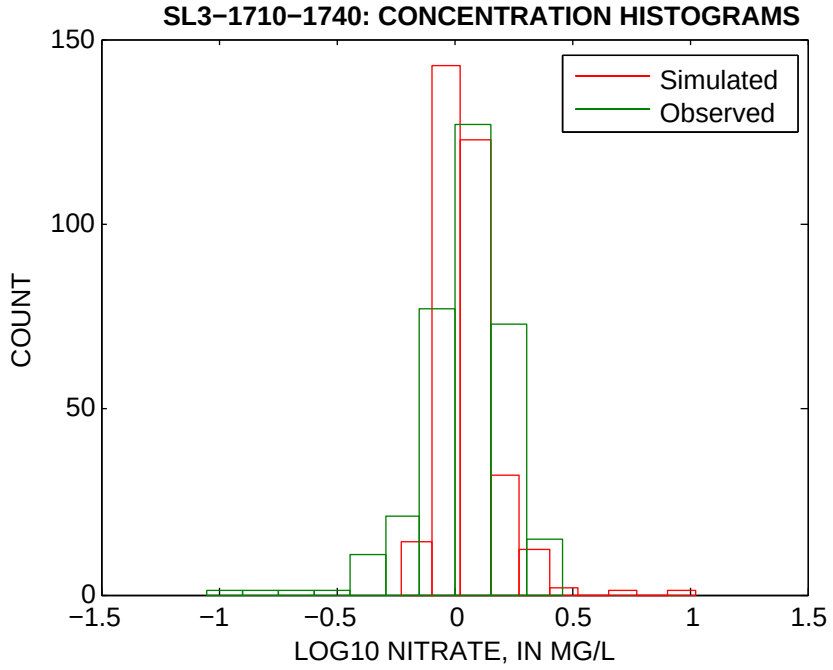
VERSION 2.1

ALL DATA
LOG10

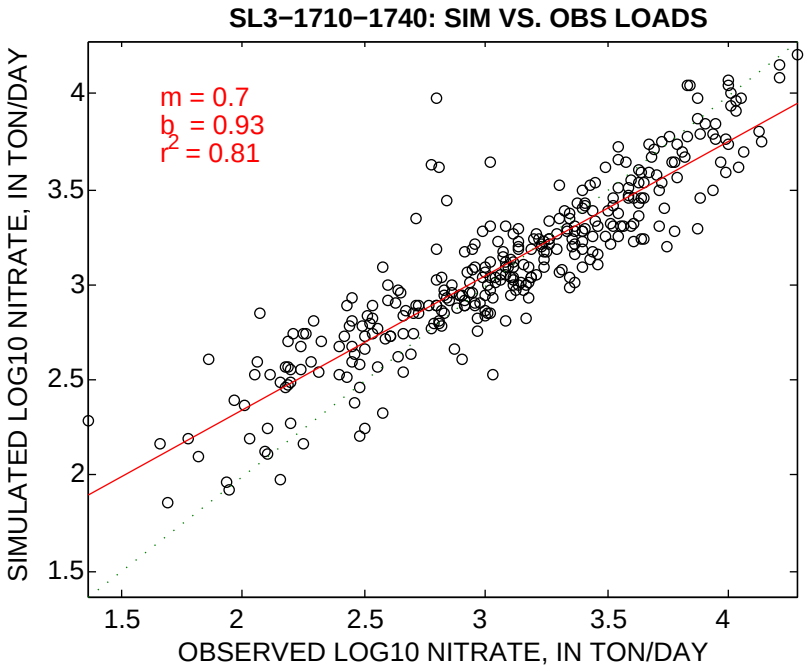


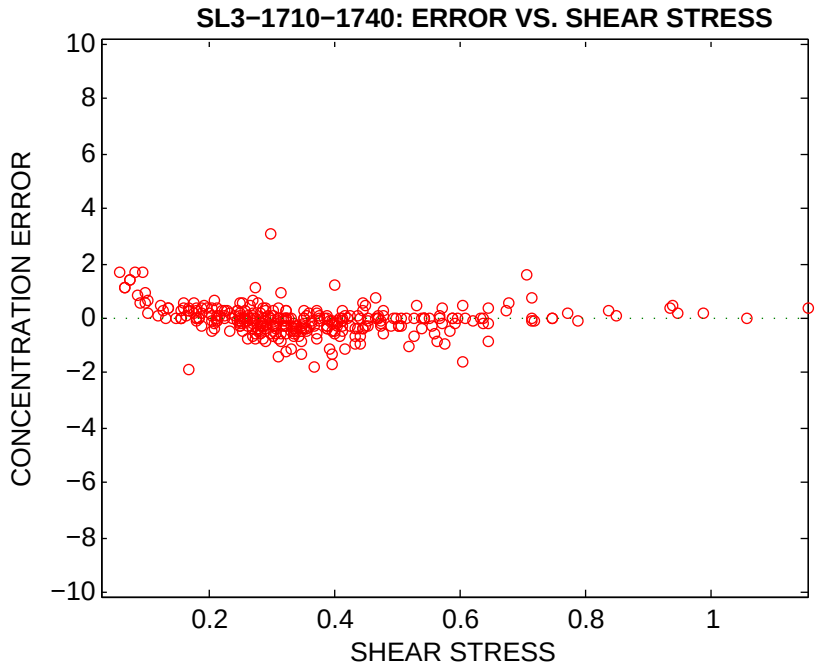


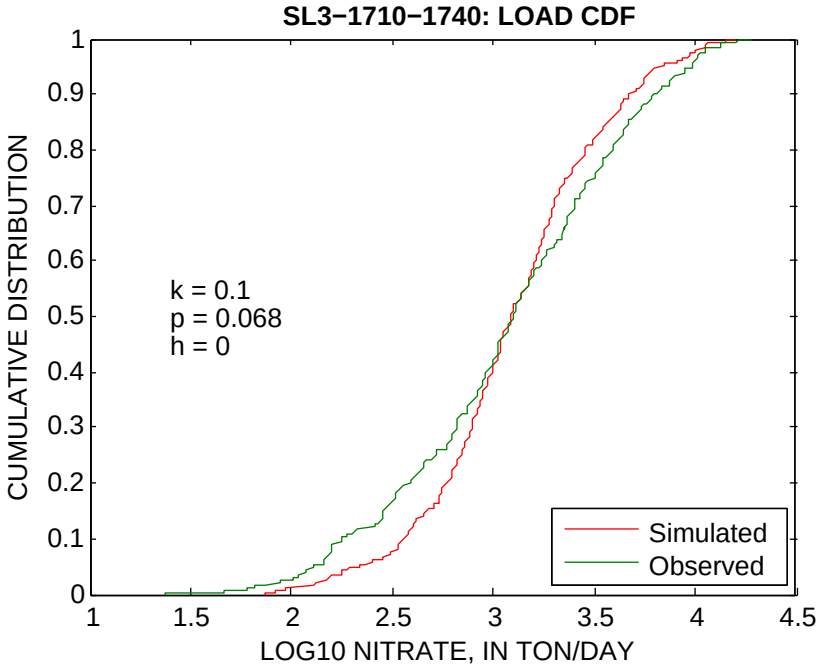


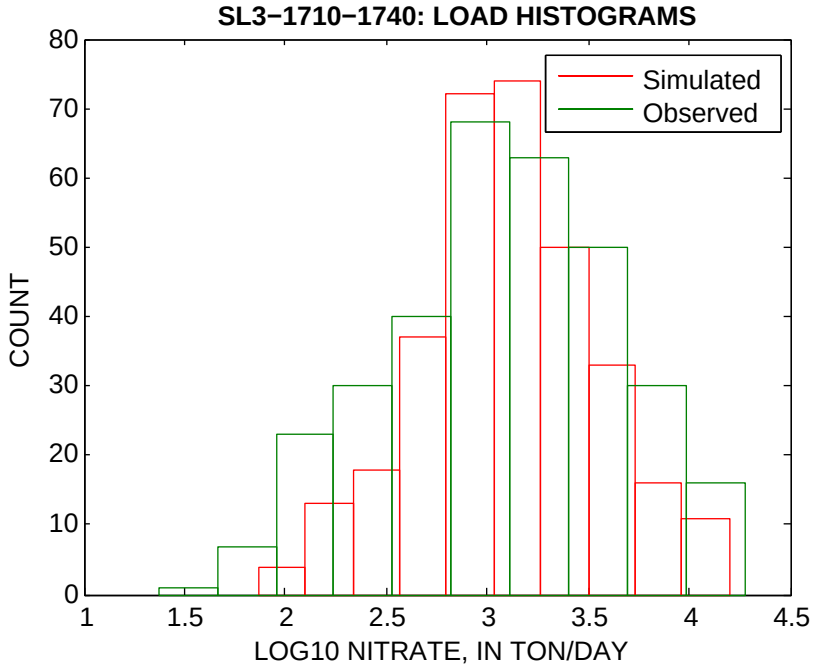


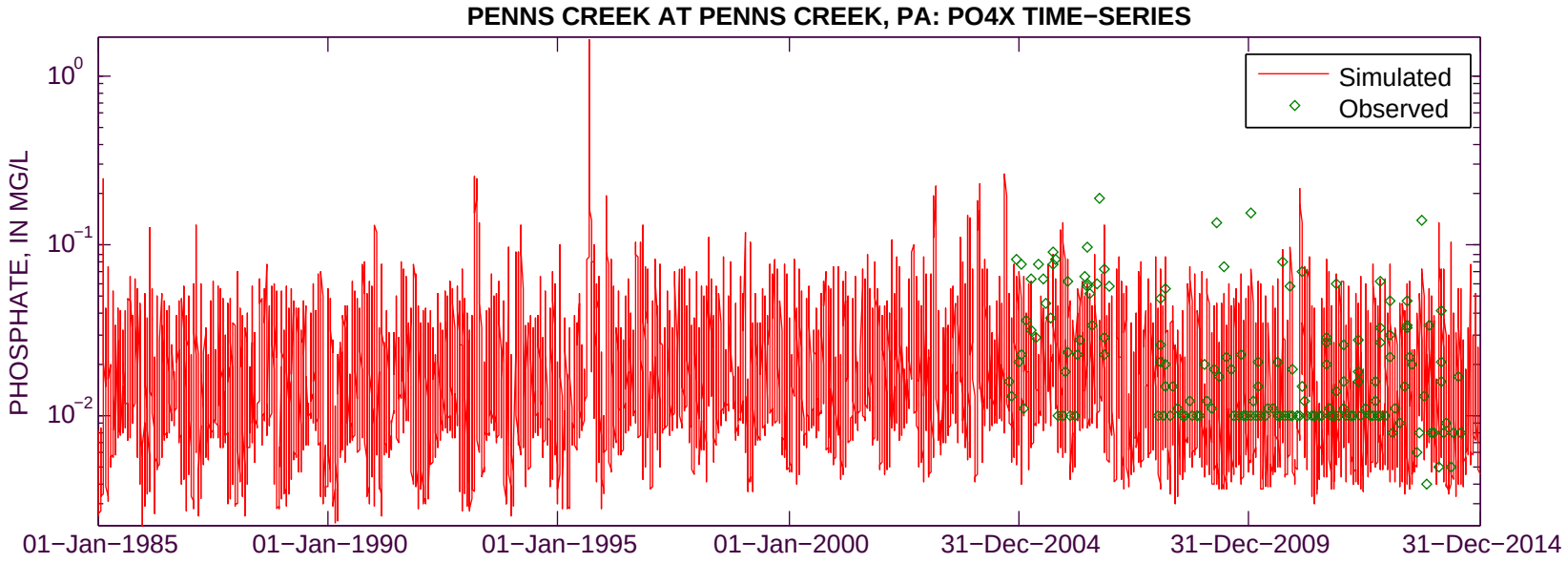
LOAD DATA
LOG10

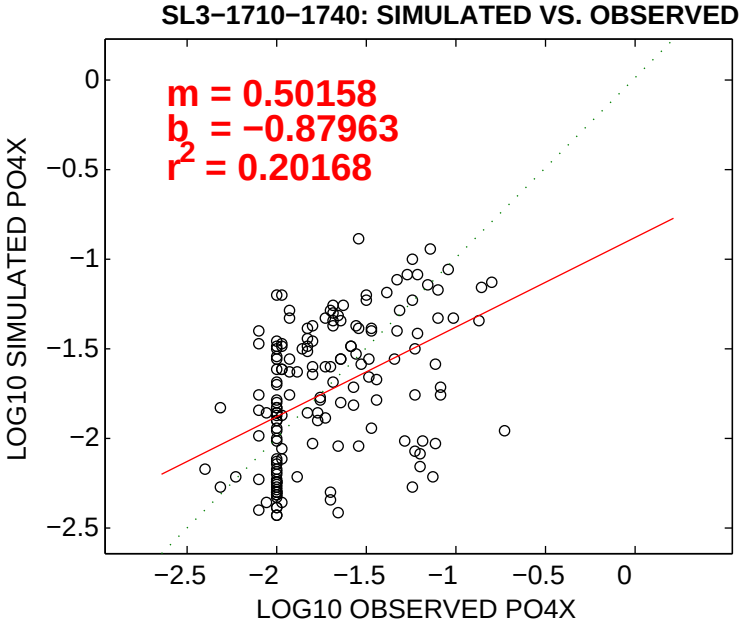


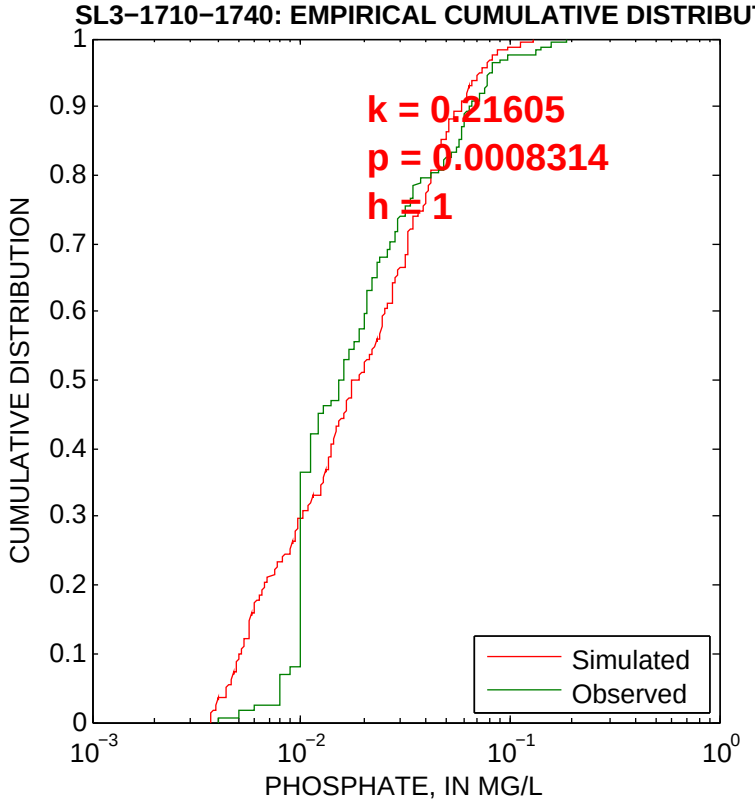












DATA SELECTION

scenario	file
P620171001WQ	PO4X.calib

plot: PO4X - phosphate

Dates: 1/1/1985 – 12/31/201

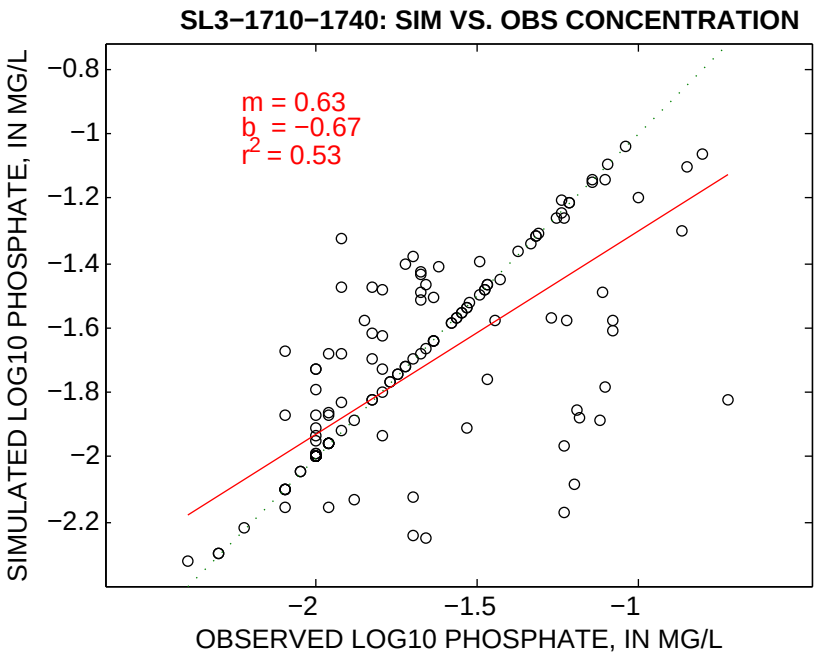
Drive	Directory	Observed
N/A	model	OBS20161101

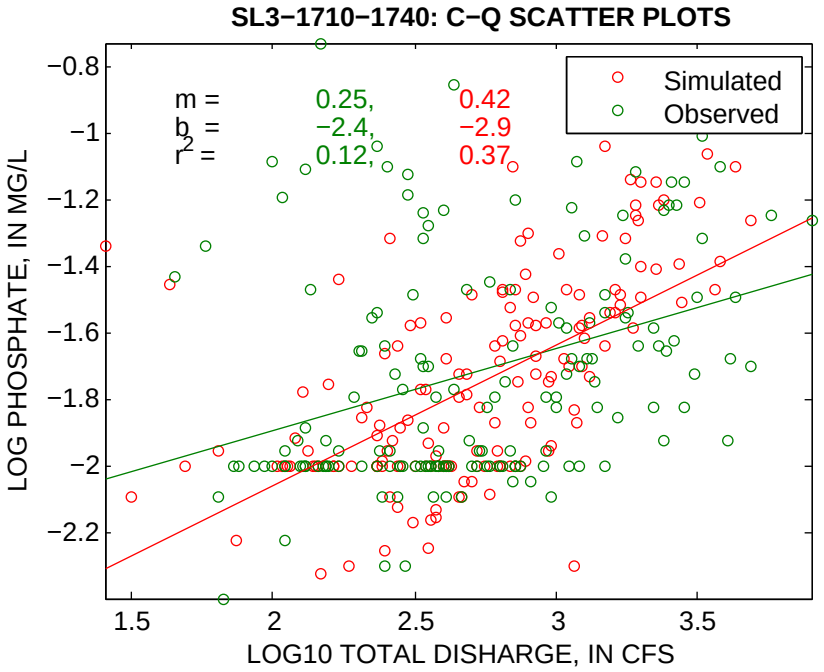
STATISTICS

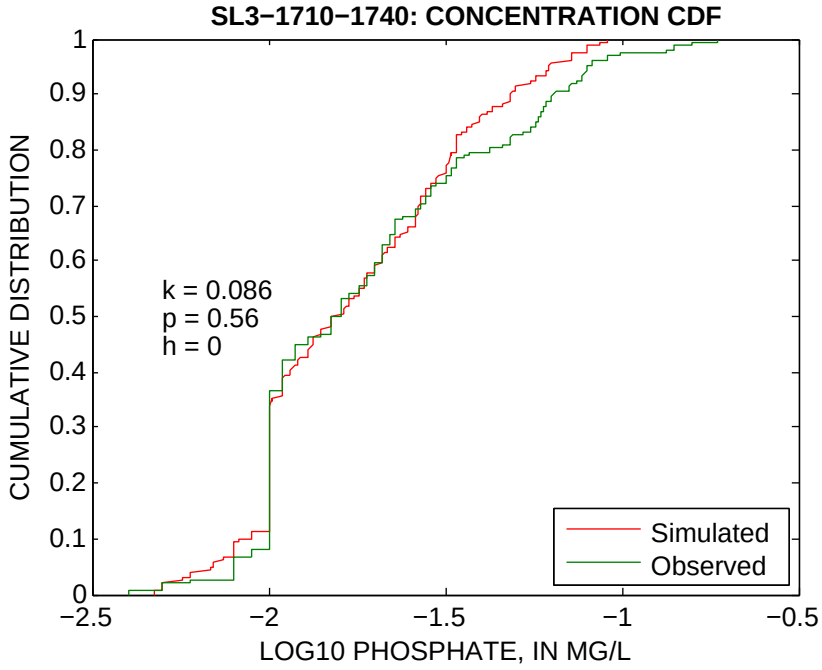
	n	observe	simulate
		162	162
min		0.004	0.0036811
		-2.39794	-2.43402
mean		0.0277778	0.0263626
		-1.71706	-1.74088
media		0.0155	0.018384
		-1.80989	-1.73592
max		0.188	0.13004
		-0.725842	-0.885923
varian		0.00087559	0.00053374
		0.121221	0.151215
JB		0.001	0.001
		0.004864	0.031474
		ra	log
%		-5.09471	1.38724
err.va		0.00088516	0.151402
rel.std.err		1.01093	1.24898
mod.eff		-0.0109347	-0.248978

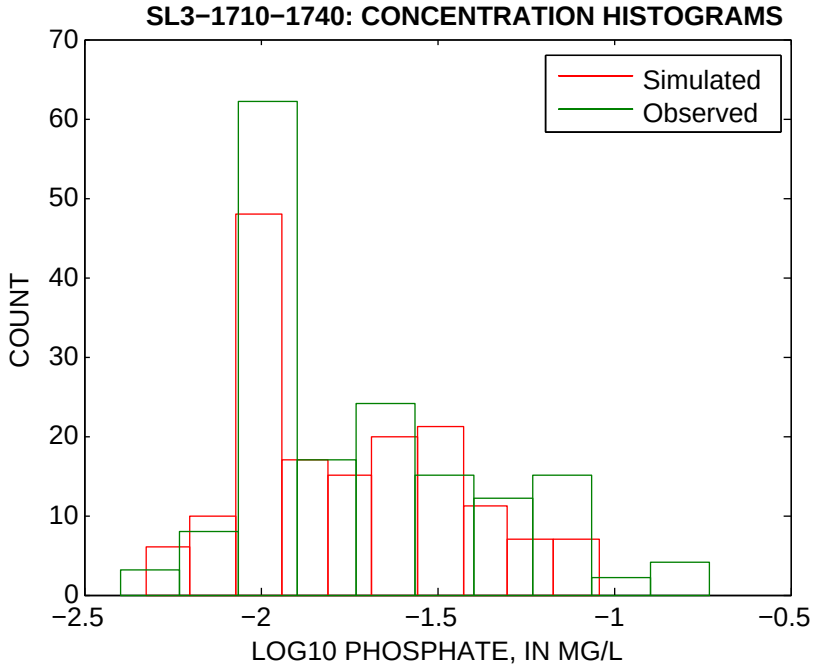
VERSION 2.1

ALL DATA
LOG10

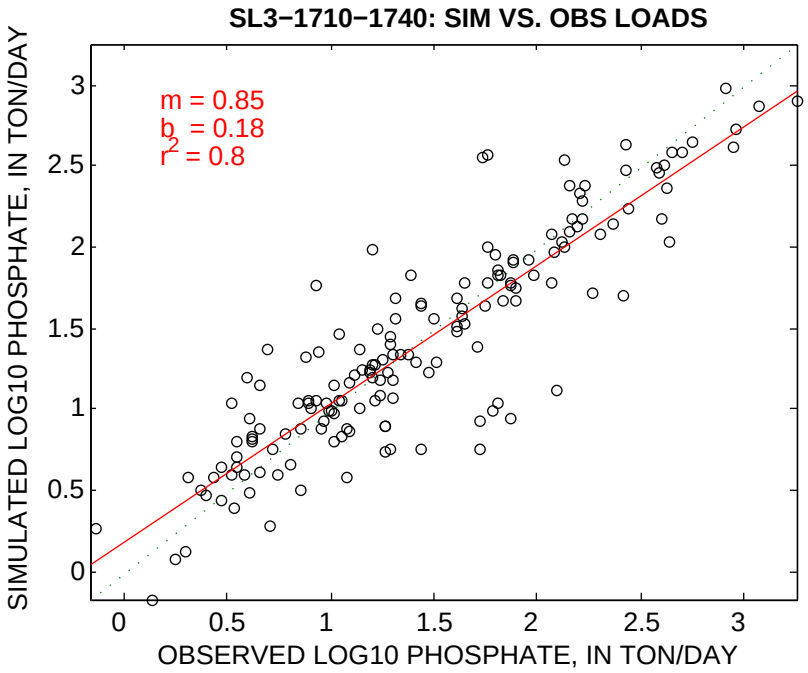


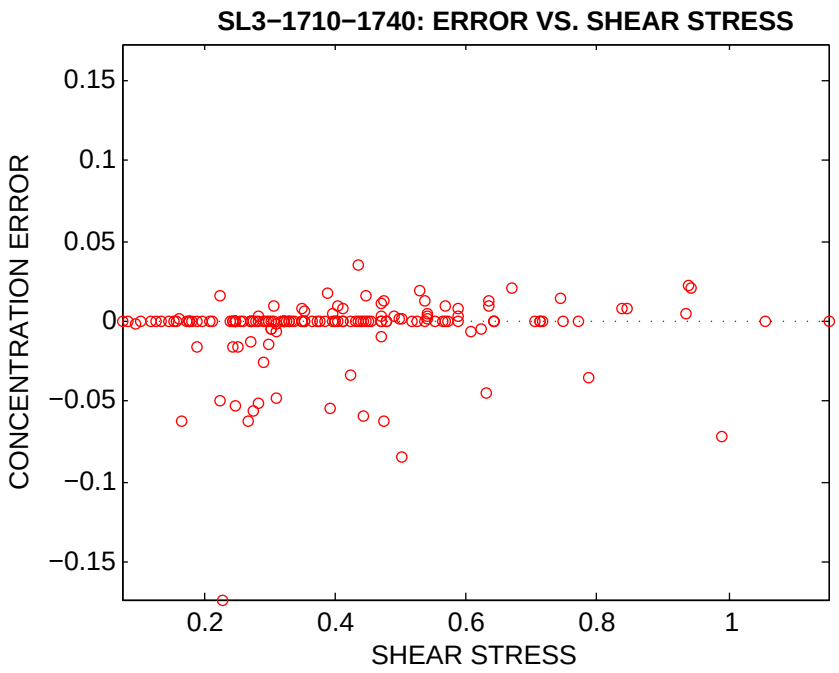


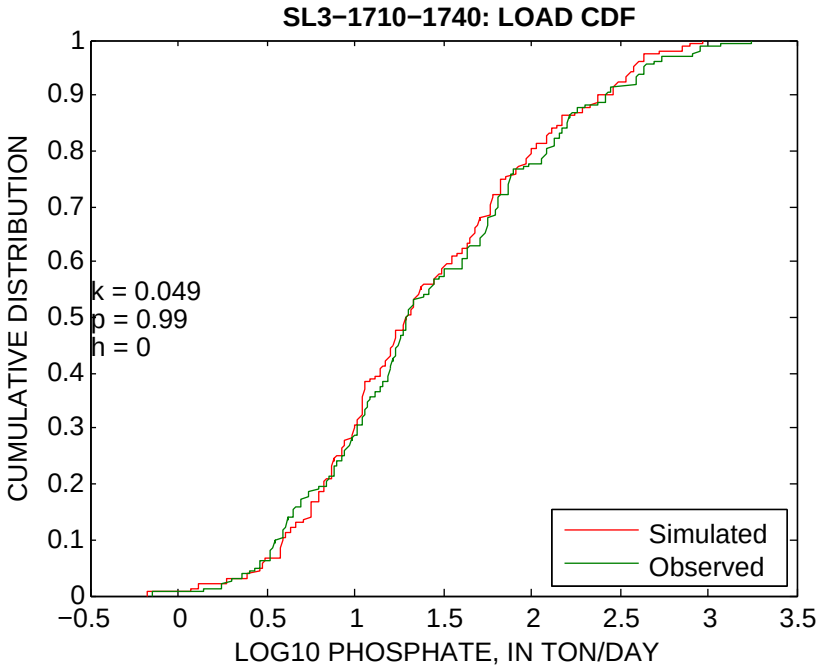


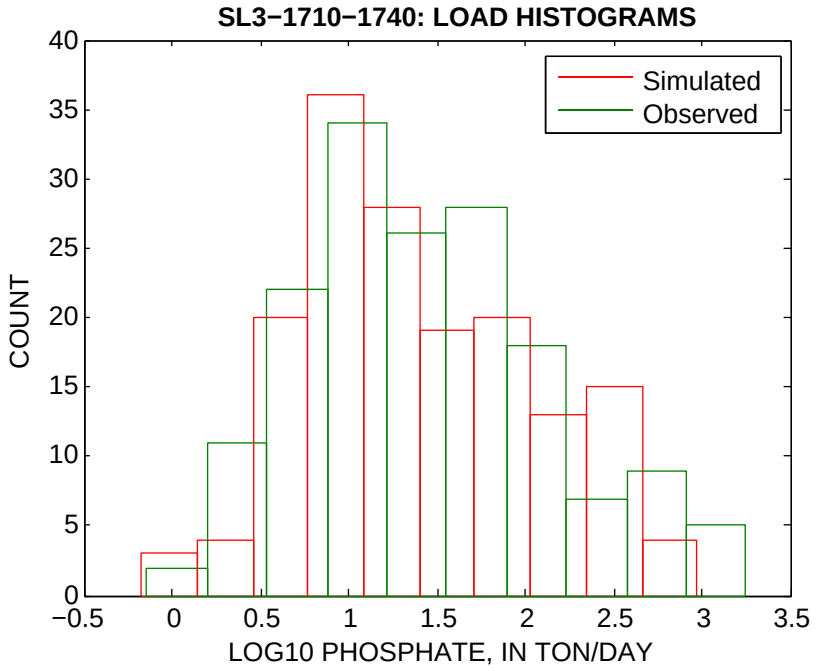


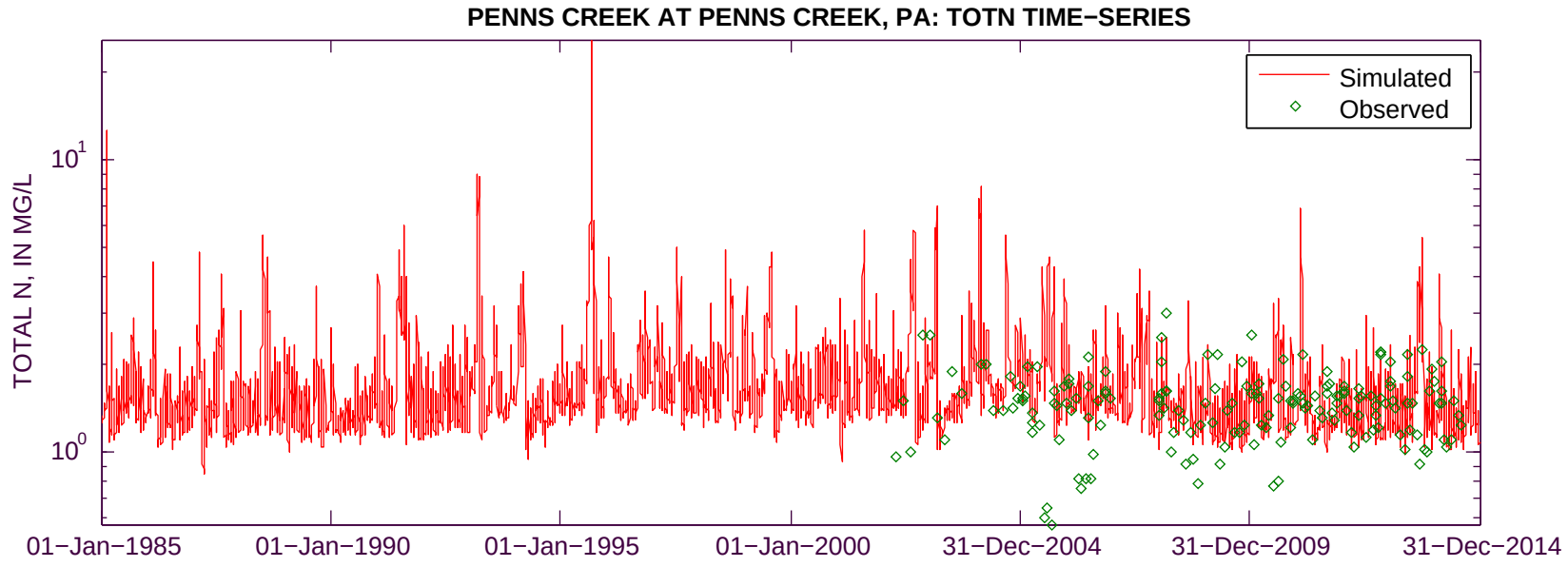
LOAD DATA
LOG10

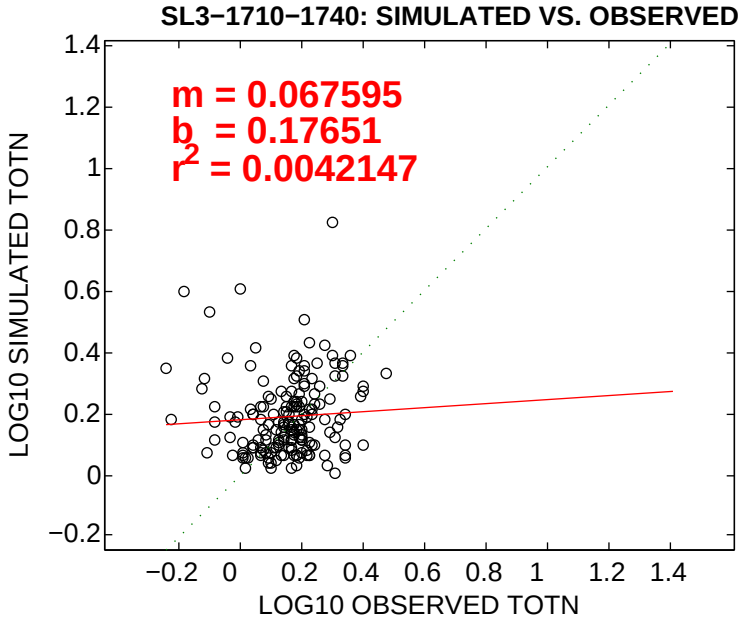


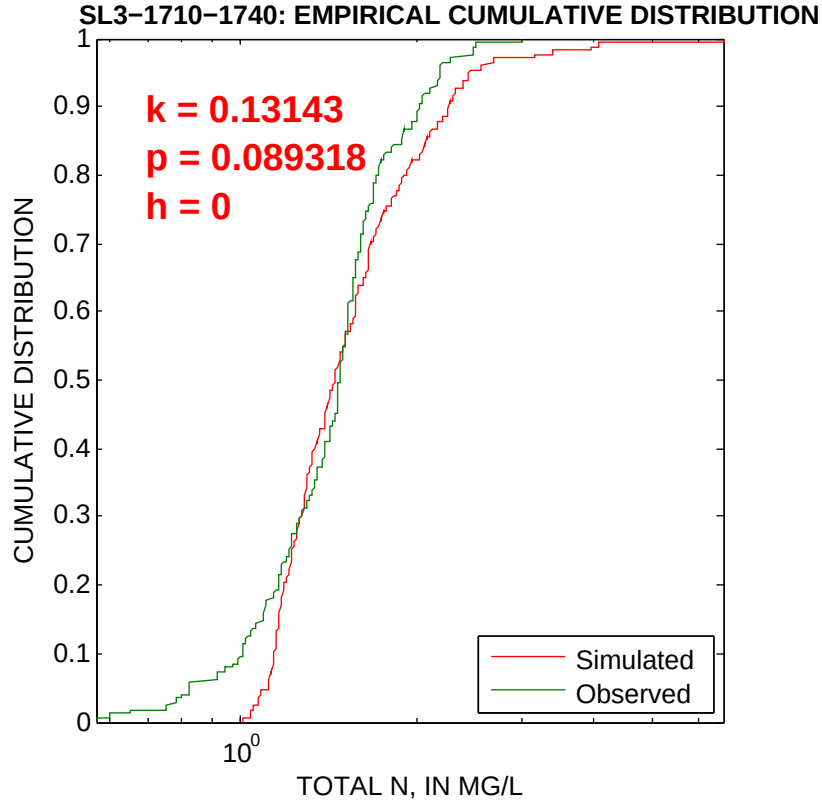












DATA SELECTION

scenario	file
P620171001WQ	TOTN.calib

plot: TOTN - total nitrogen

Dates: 1/1/1985 – 12/31/201

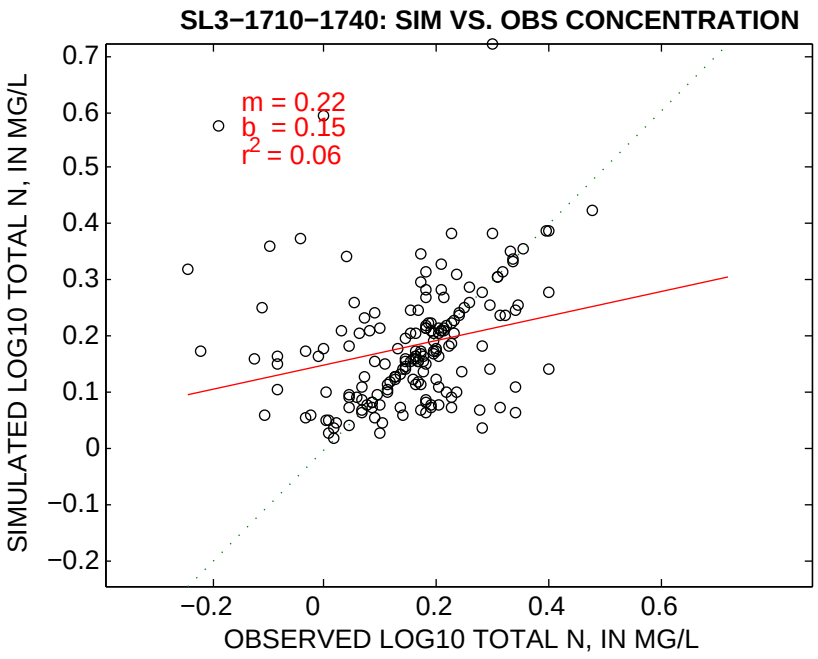
Drive	Directory	Observed
N/A	model	OBS20161101

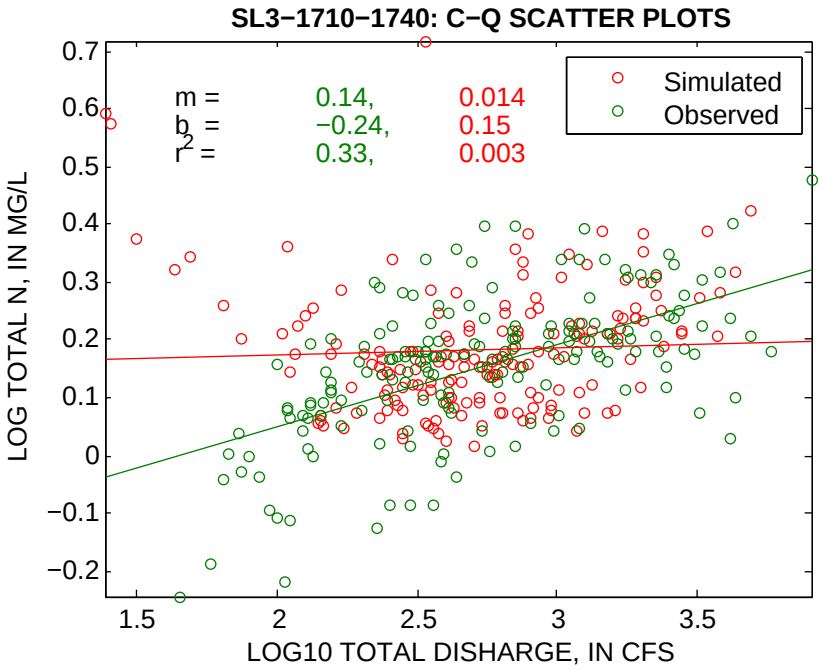
STATISTICS

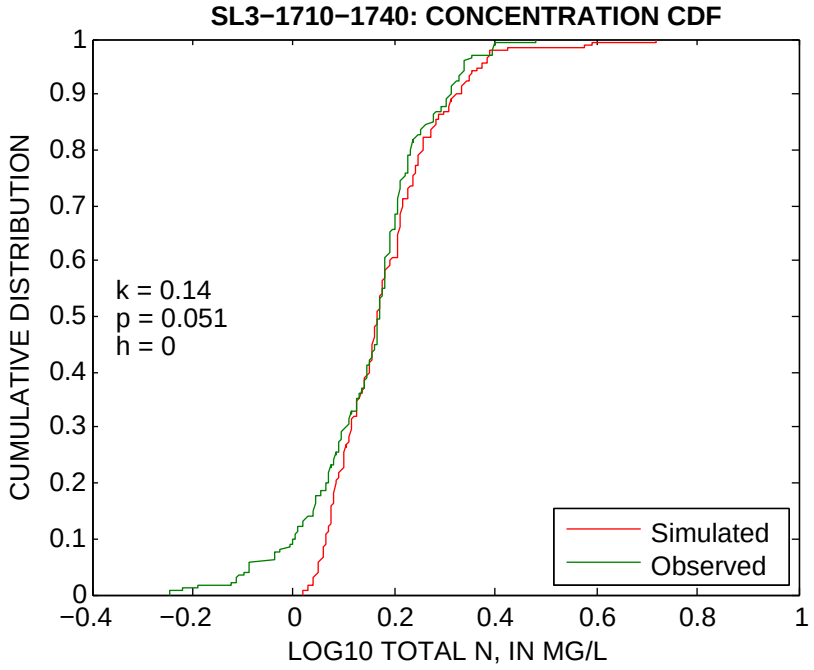
	n	175	175
		observe	simulate
min		0.57	1.0123
		-0.244125	0.00530924
mean		1.47739	1.61524
		0.153314	0.186873
media		1.476	1.445
		0.169086	0.159868
max		3.01	6.6052
		0.478566	0.819886
varian		0.158996	0.394239
		0.0147138	0.015951
JB		0.004531	0.001
		0.011392	0.001
		ra	log
%		9.33048	21.8891
err.va		0.523581	0.0298083
rel.std.err		3.29305	2.02587
mod.eff		-2.29305	-1.02587

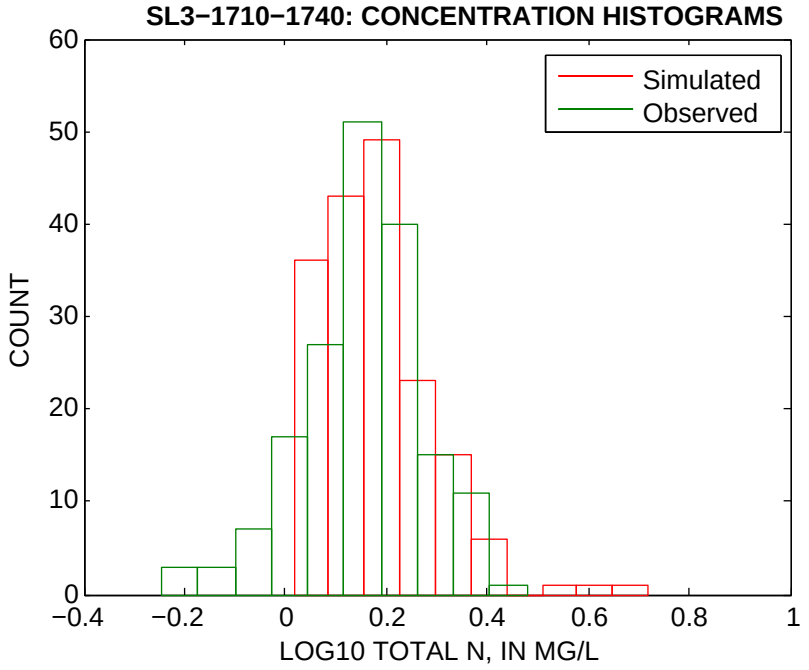
VERSION 2.1

ALL DATA
LOG10

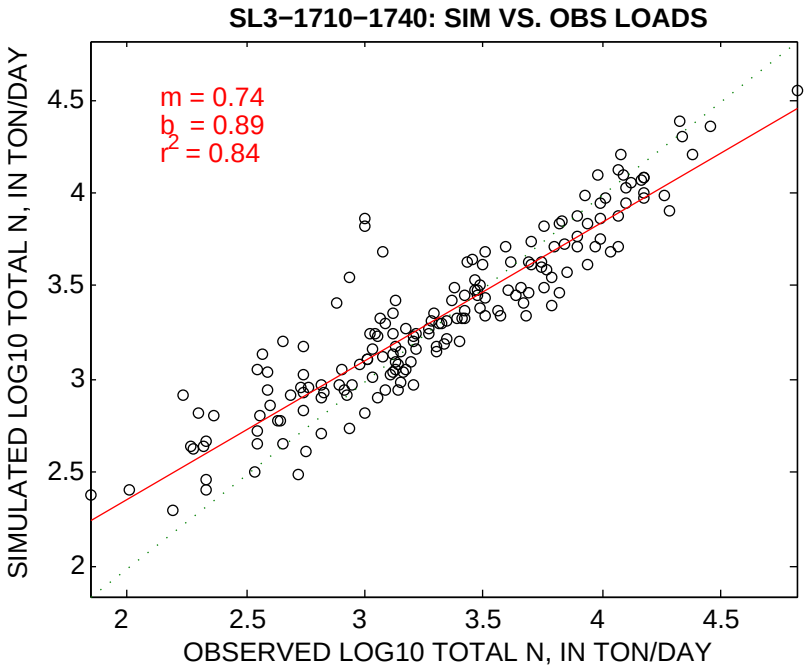


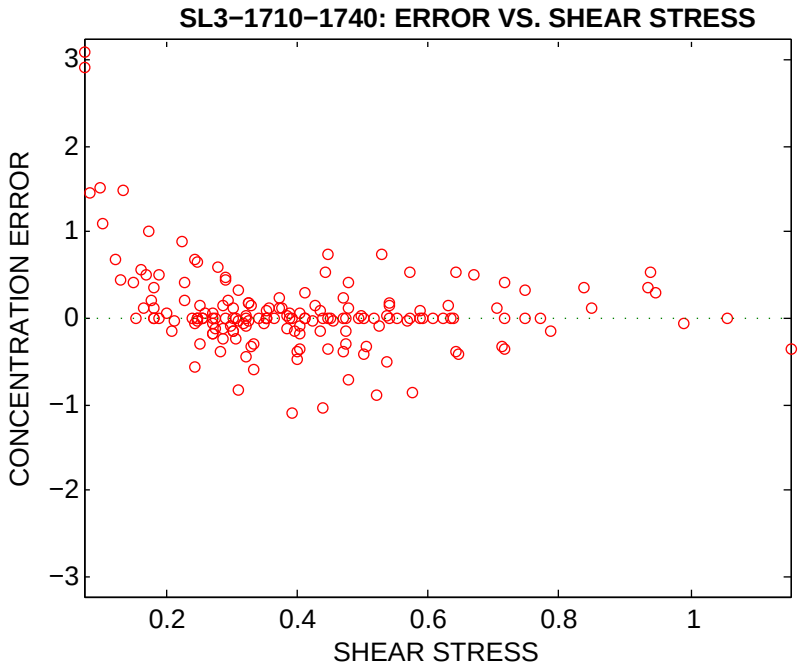


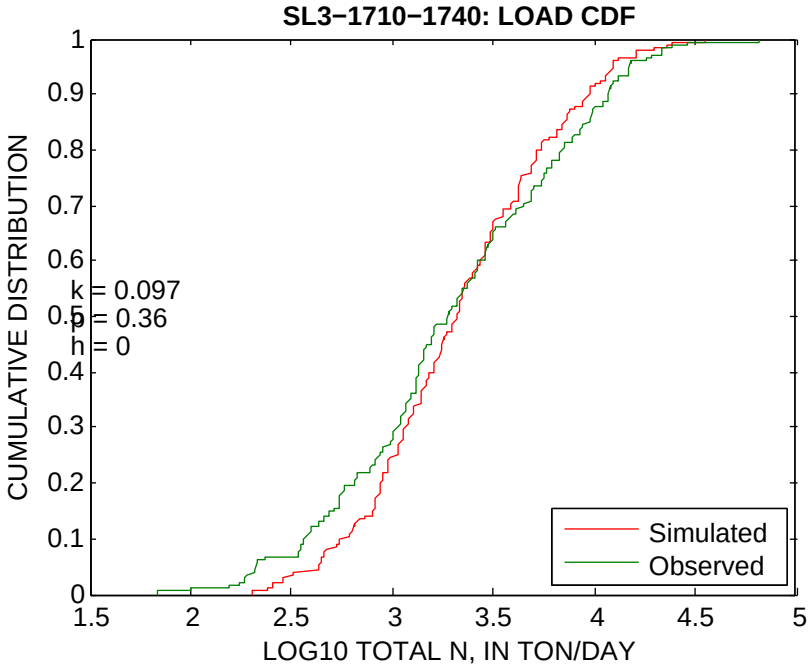


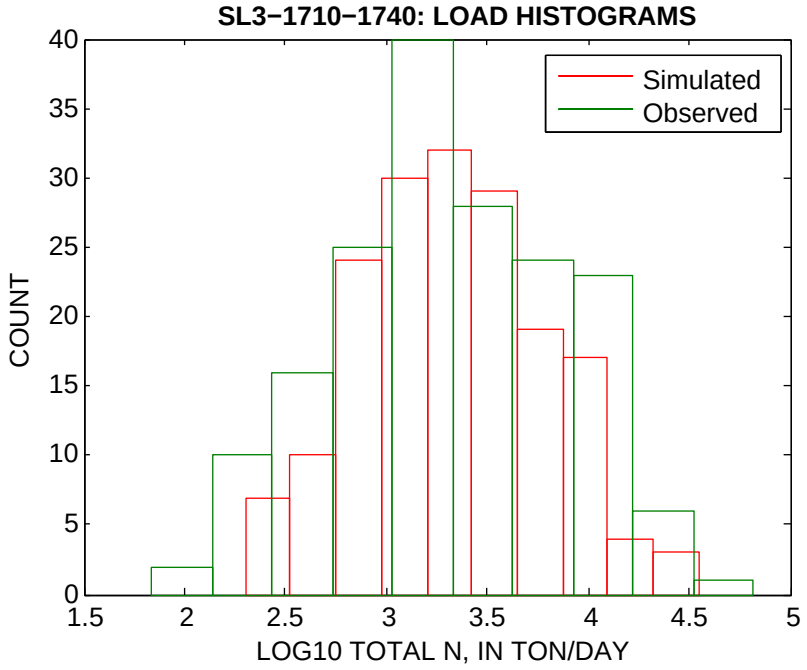


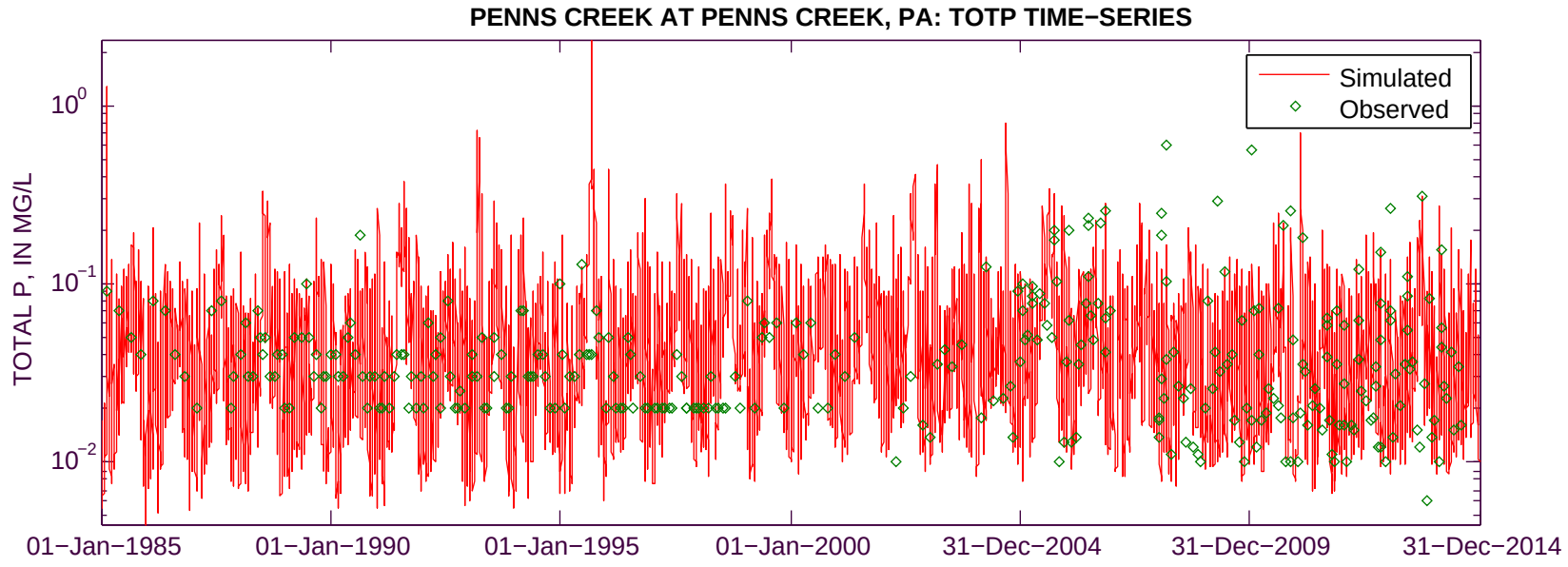
LOAD DATA
LOG10

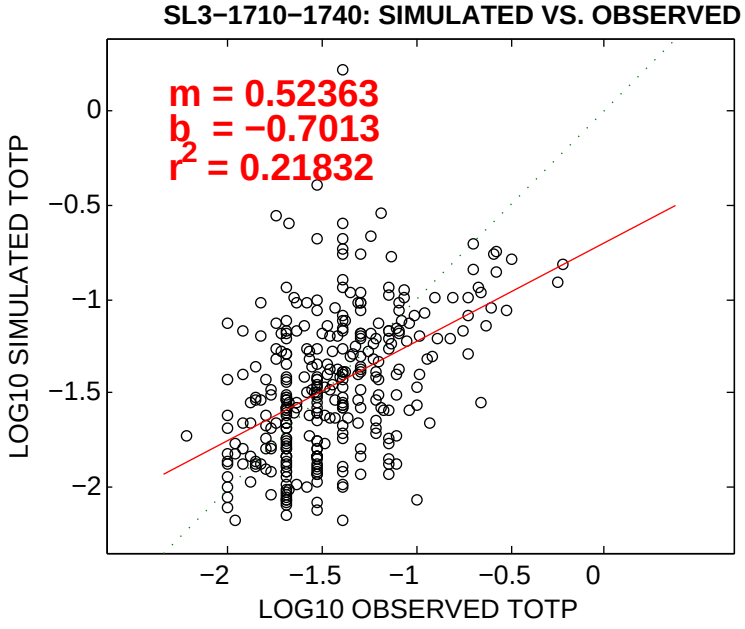


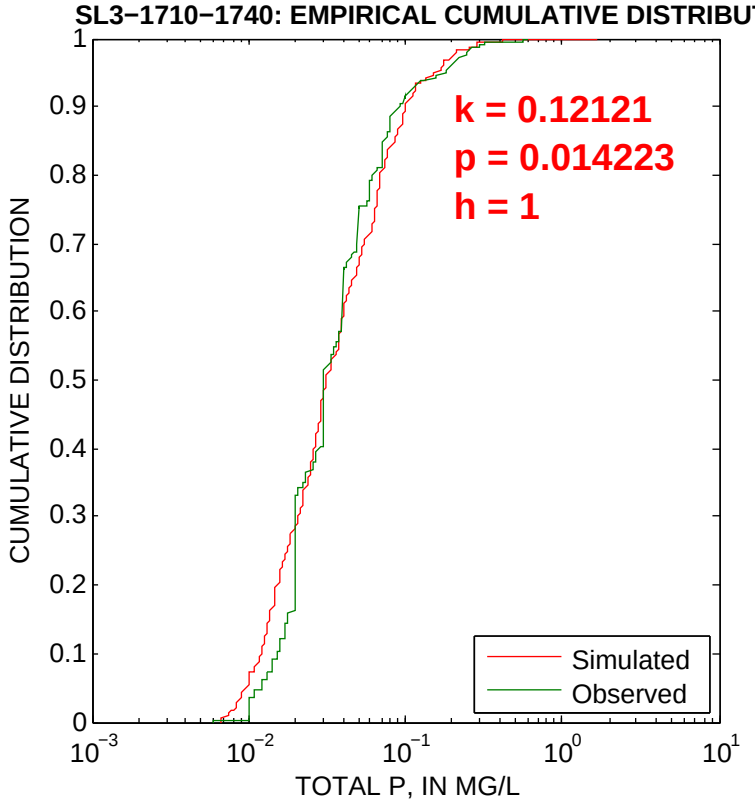












DATA SELECTION

scenario	file
P620171001WQ	TOTP.calib

plot: TOTP - total phosphorus

Dates: 1/1/1985 – 12/31/201

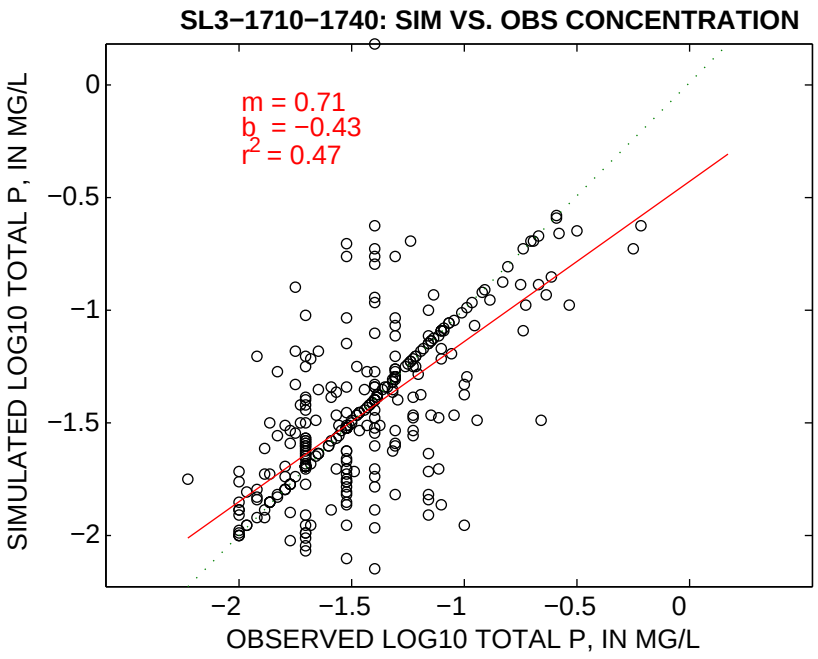
Drive	Directory	Observed
N/A	model	OBS20161101

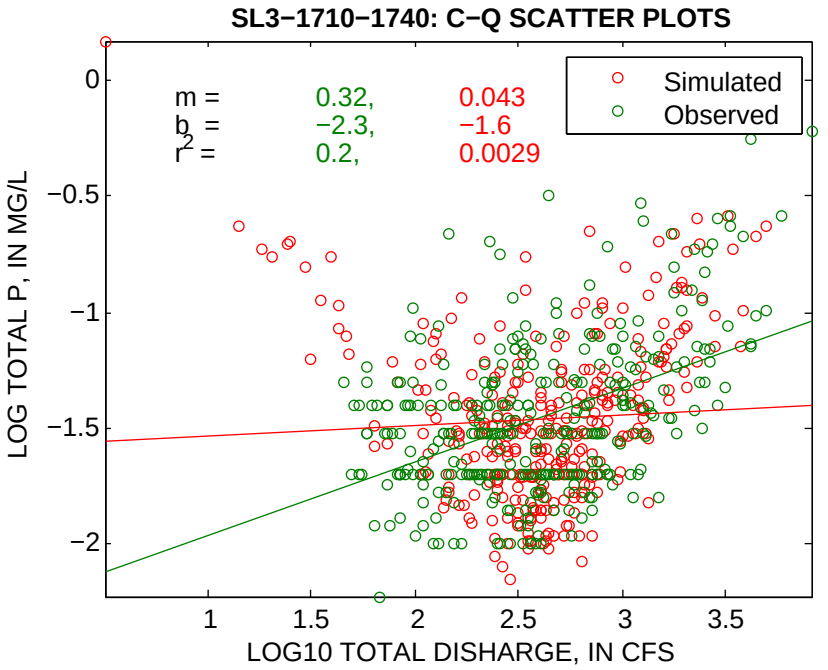
STATISTICS

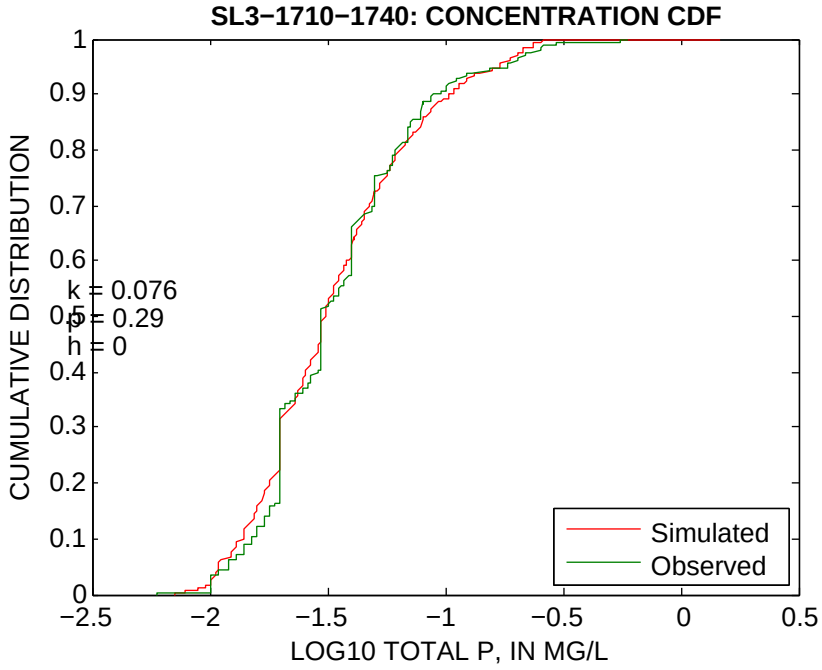
	n	330	330
		observe	simulate
min		0.006	0.006586
		-2.22185	-2.18138
mean		0.0508667	0.0541564
		-1.45183	-1.46153
media		0.03	0.0315915
		-1.52288	-1.50044
max		0.604	1.6691
		-0.218963	0.222482
varian		0.00412573	0.0104916
		0.111188	0.139639
JB		0.001	0.001
		0.001	0.002488
		ra	log
%		6.46731	0.667751
err.va		0.0123984	0.134479
rel.std.err		3.00514	1.20948
mod.eff		-2.00514	-0.209476

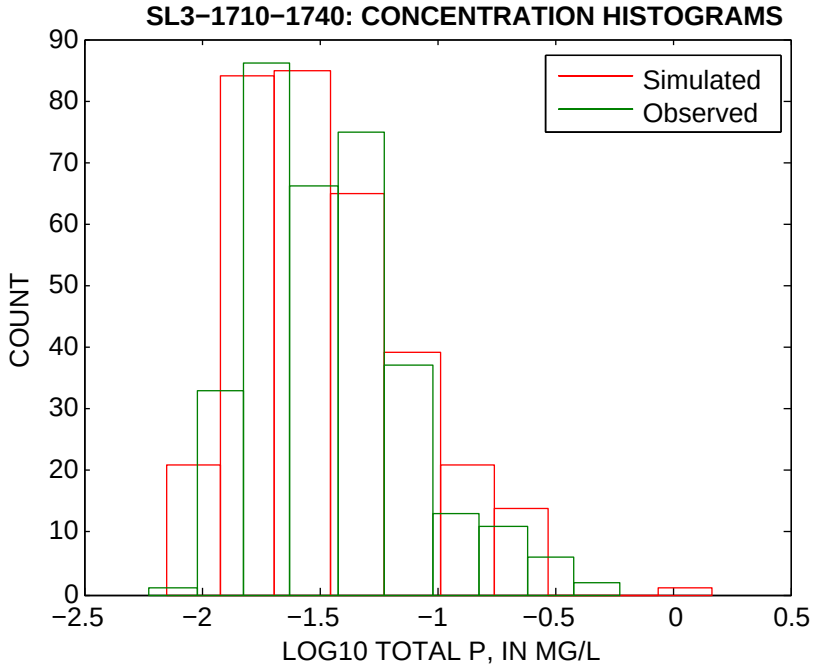
VERSION 2.1

ALL DATA
LOG10

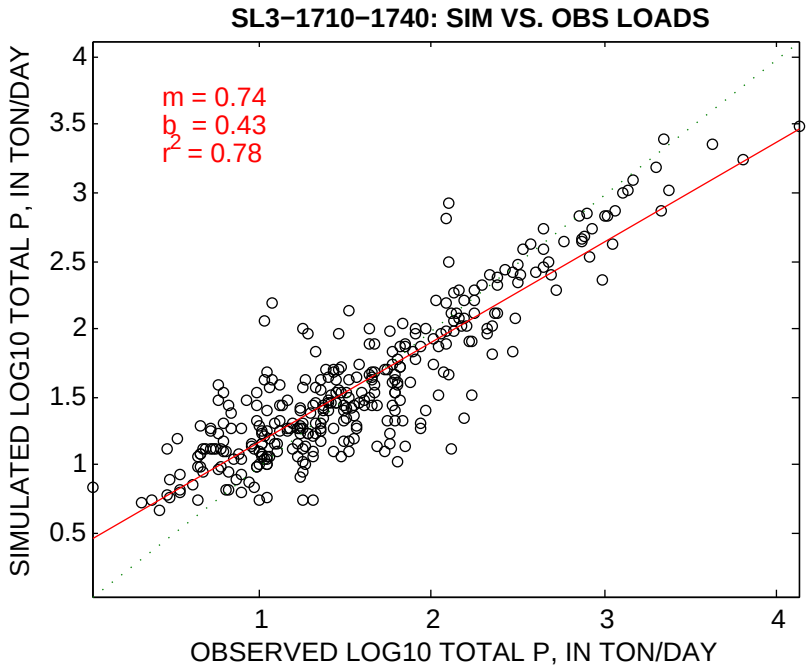


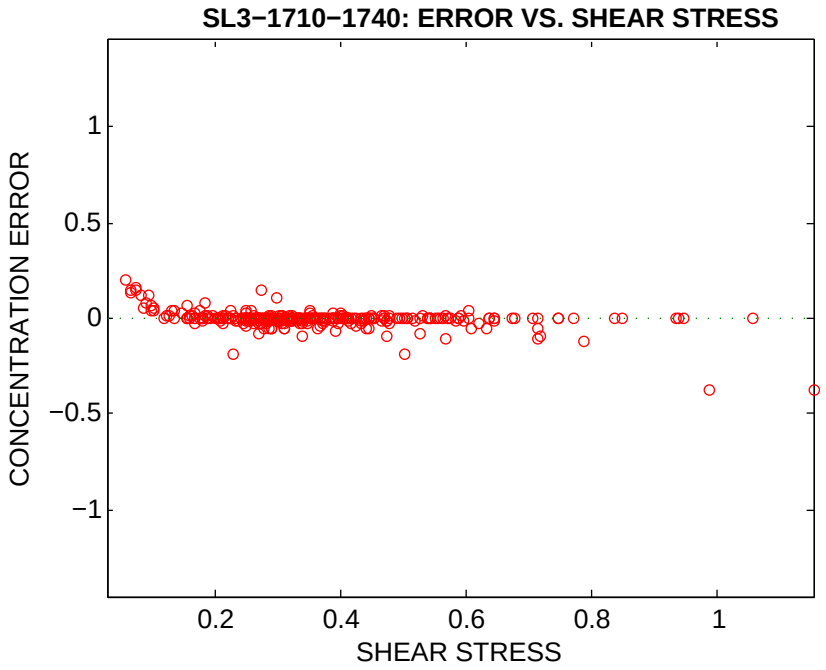


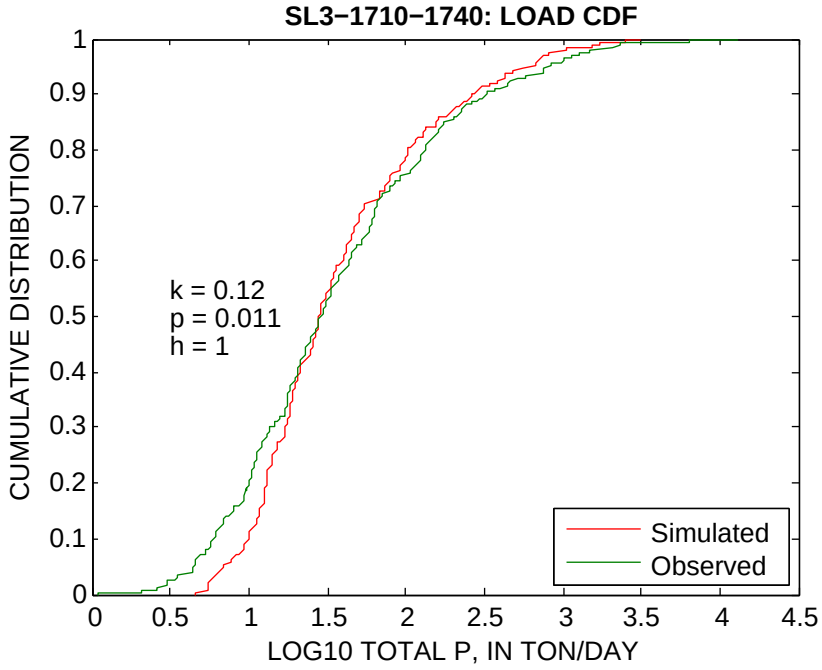


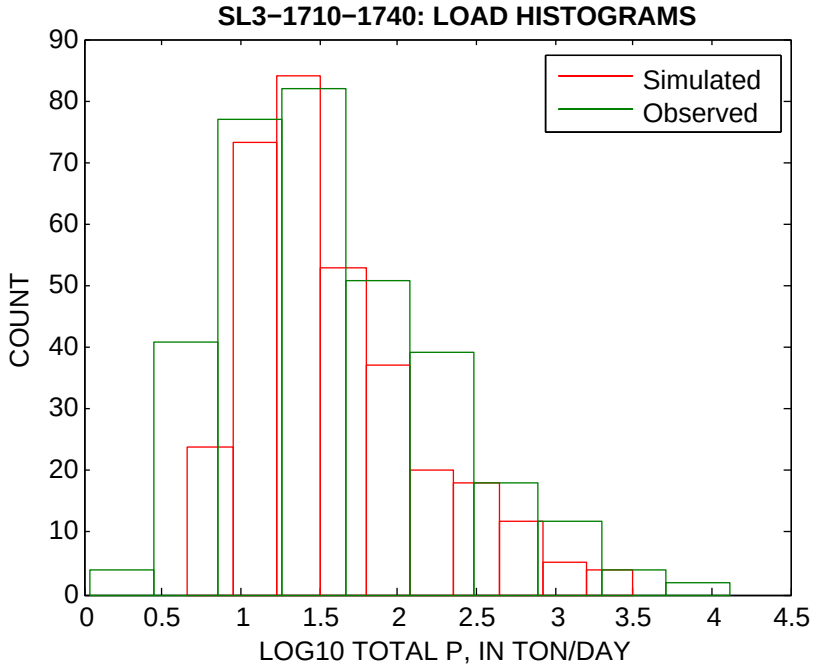


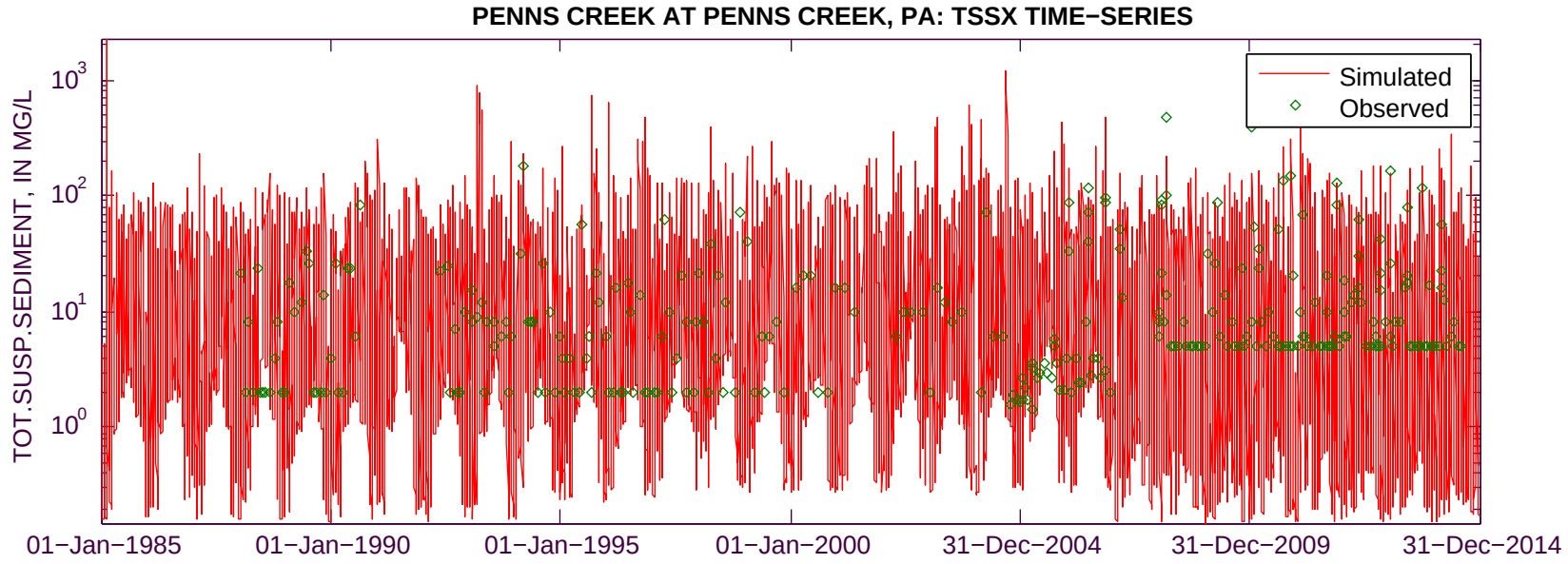
LOAD DATA
LOG10

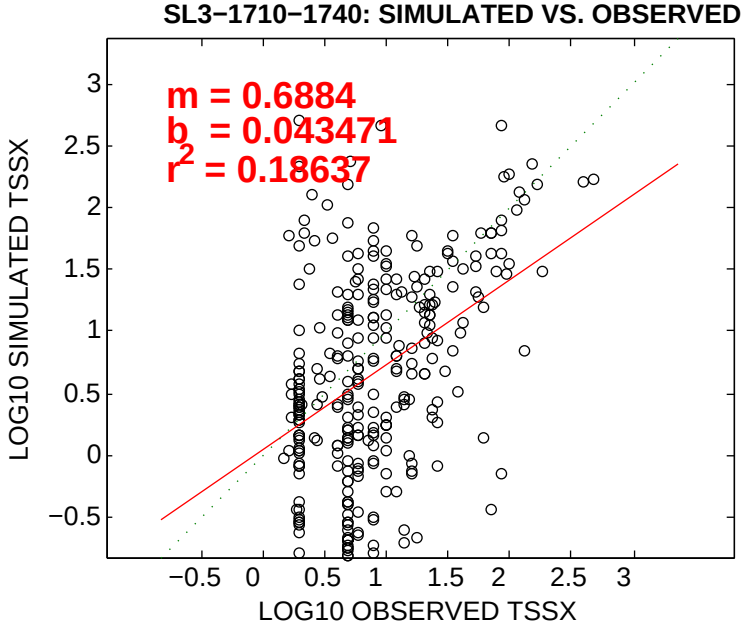


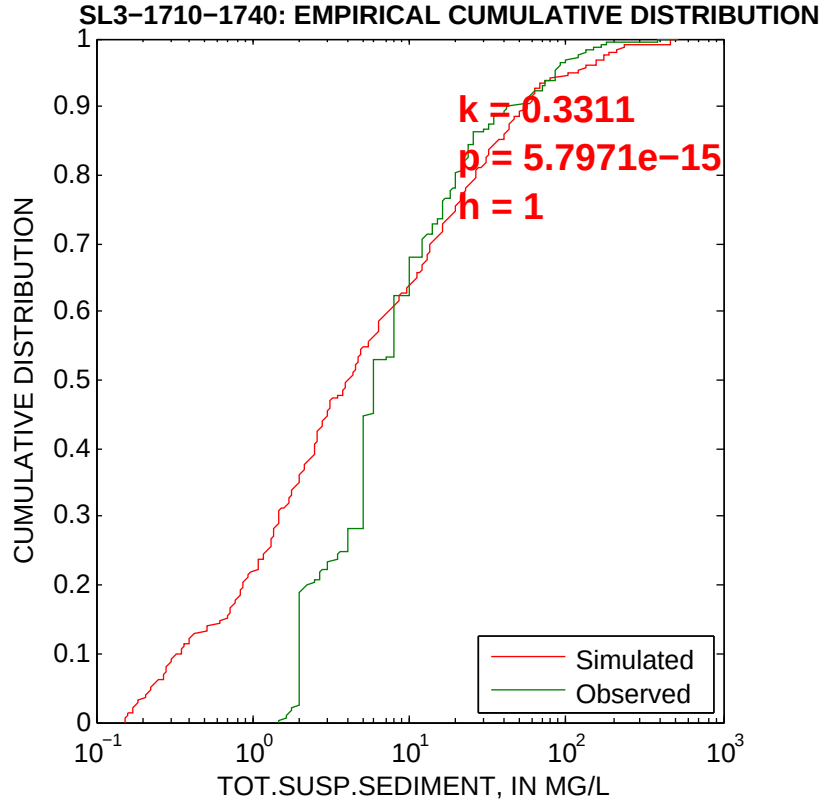












DATA SELECTION

scenario	file
P620171001WQ	TSSX.calib

plot: TSSX - total suspended ...

Dates: 1/1/1985 – 12/31/201

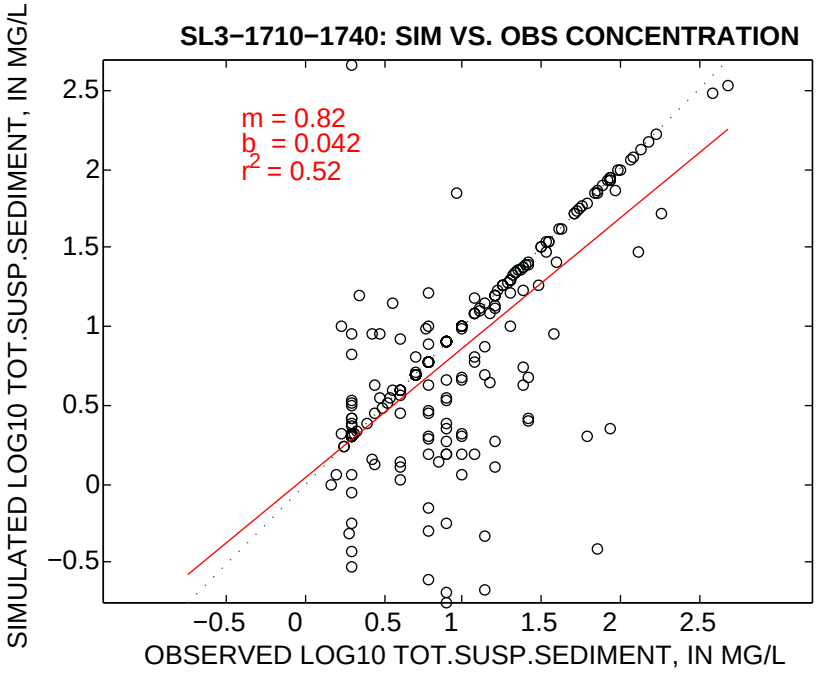
Drive	Directory	Observed
N/A	model	OBS20161101

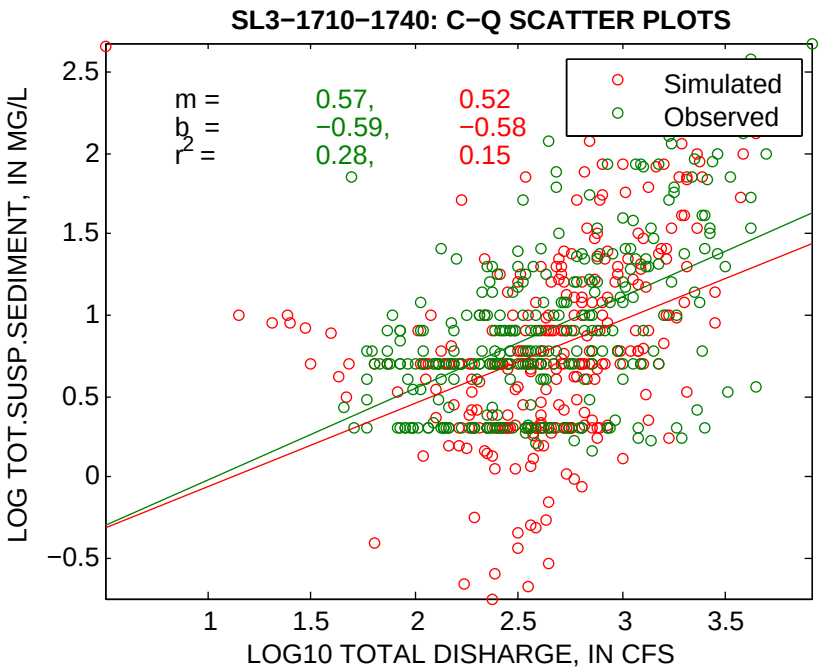
STATISTICS

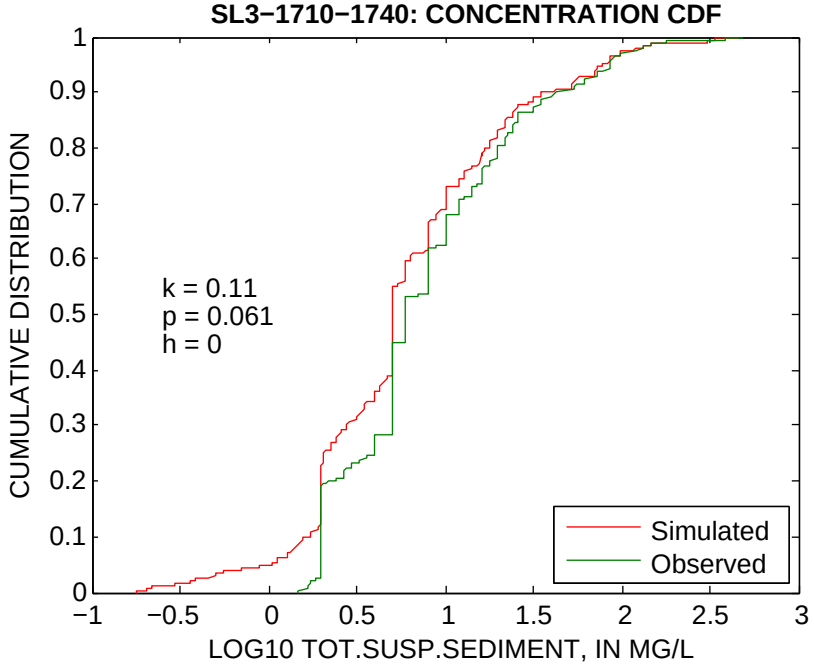
	n	299	299
		observe	simulate
min		1.45	0.15215
		0.161368	-0.817728
mean		19.4493	23.4055
		0.906171	0.667282
media		6	4.0759
		0.778151	0.610224
max		485	518.56
		2.68574	2.7148
varian		1939.2	3527.36
		0.258196	0.656552
JB		0.001	0.001
		0.001	0.030550
		ra	log
%		20.3407	-26.3625
err.va		3598.22	0.616522
rel.std.err		1.85552	2.3878
mod.eff		-0.855521	-1.3878

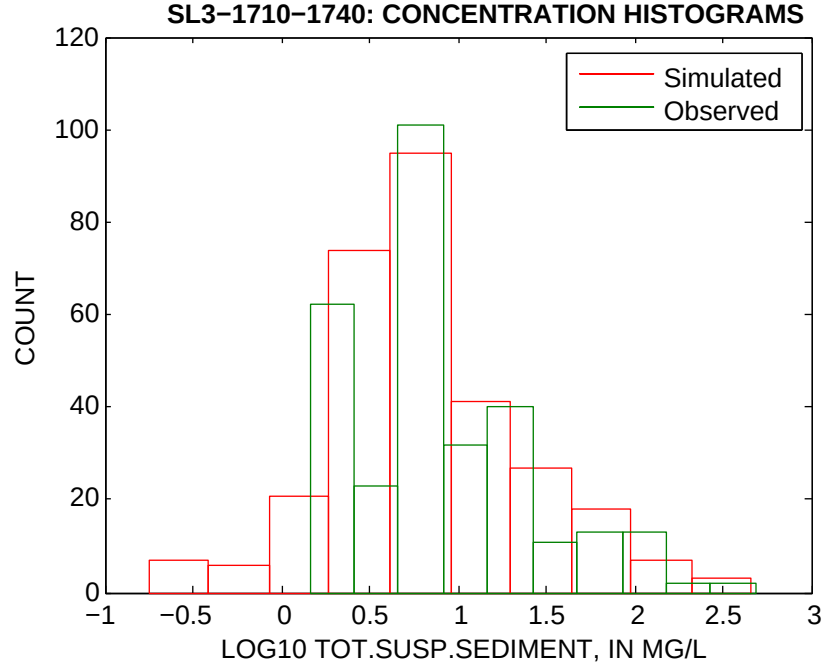
VERSION 2.1

ALL DATA
LOG10

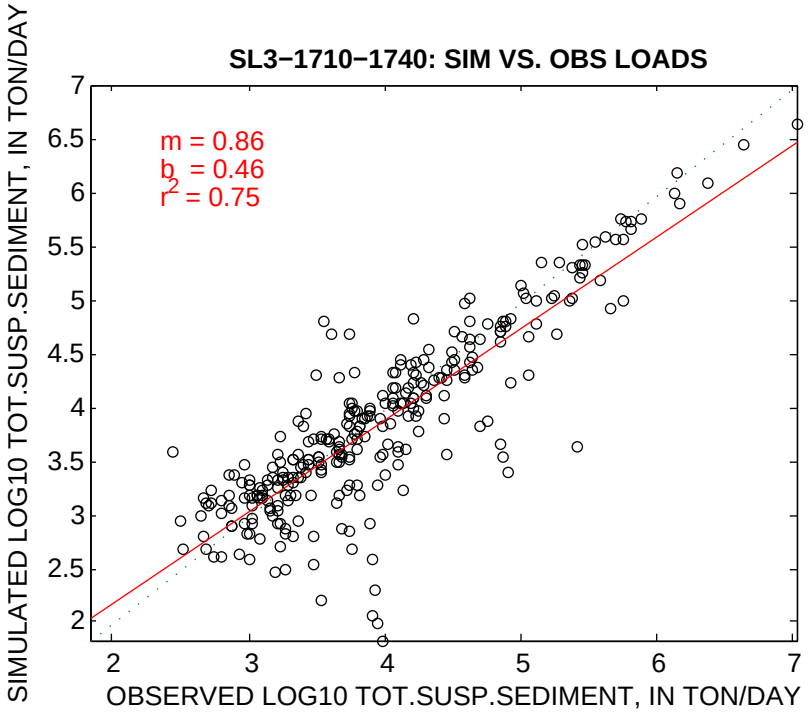


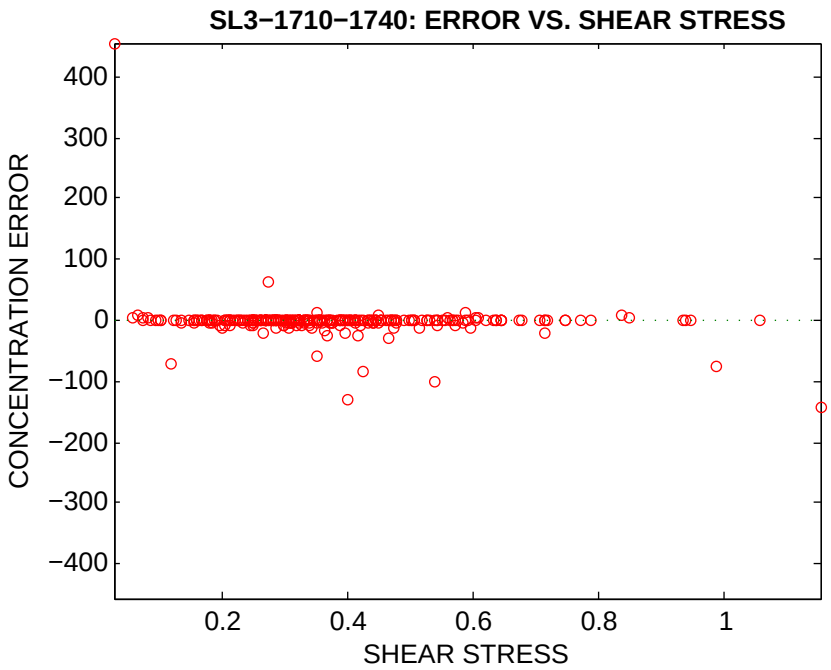


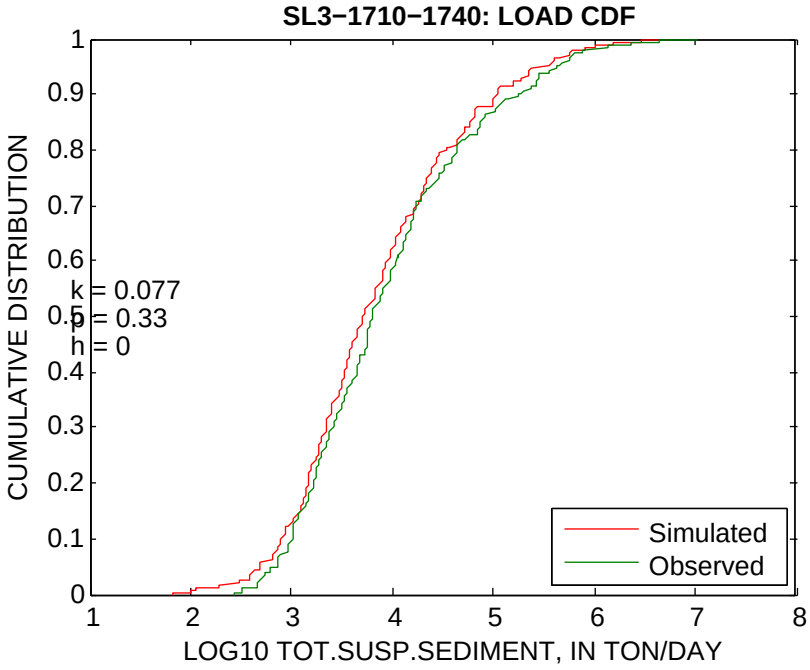


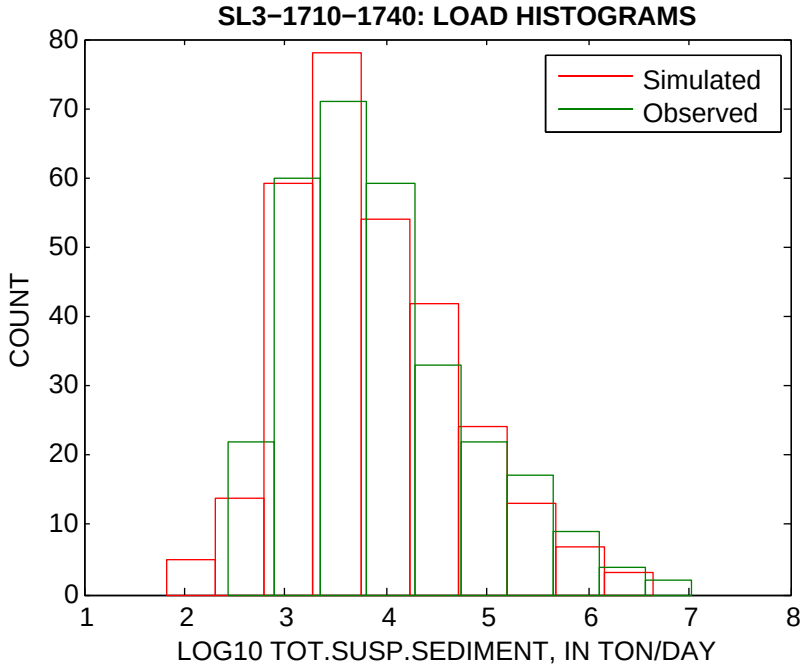


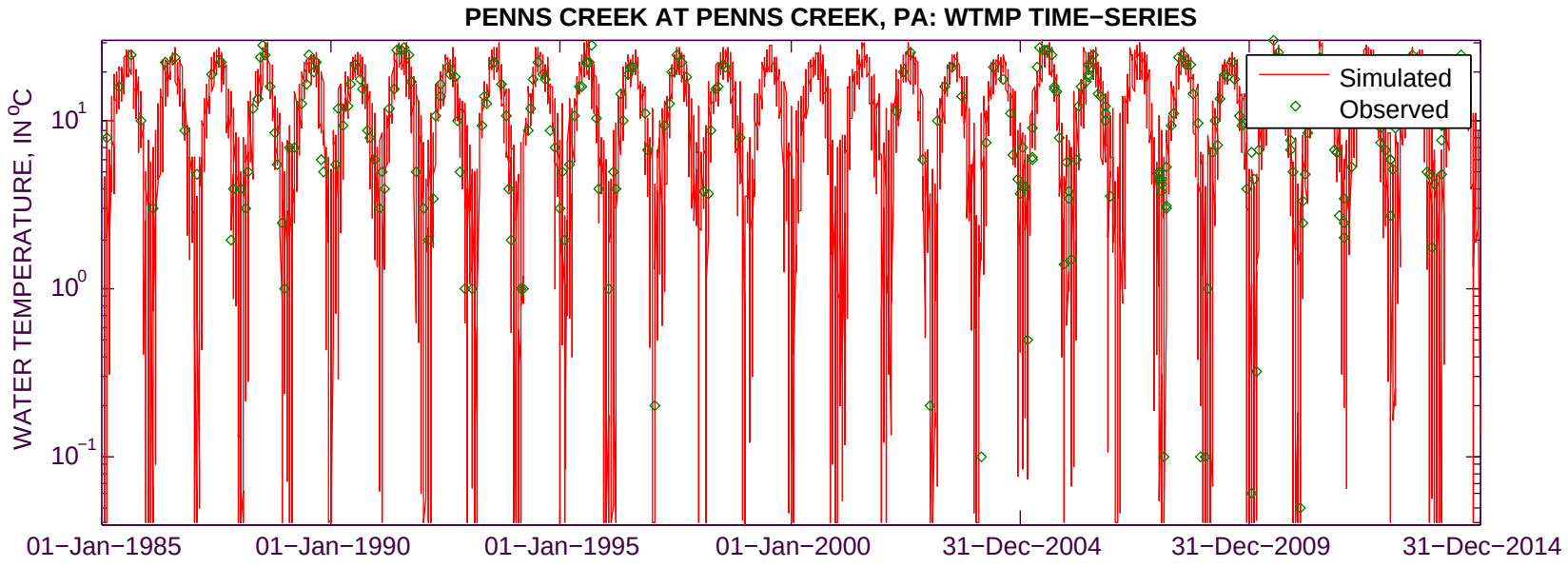
LOAD DATA
LOG10

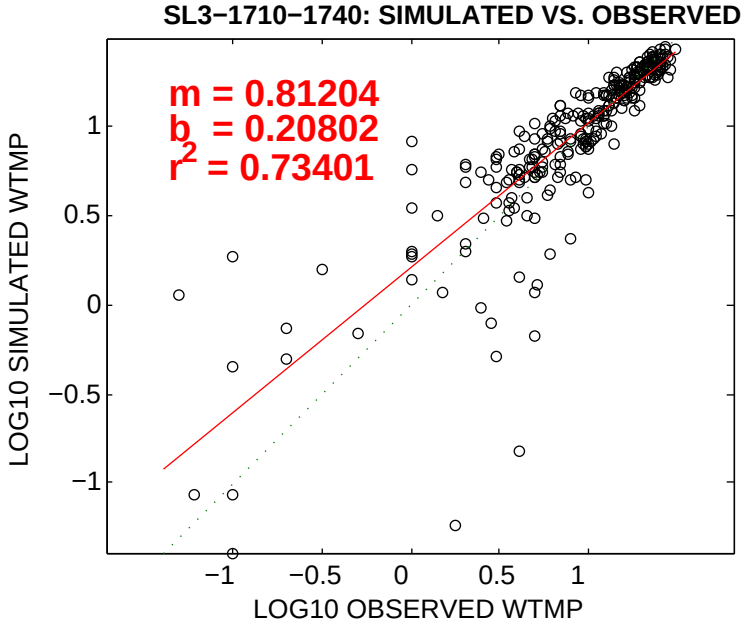


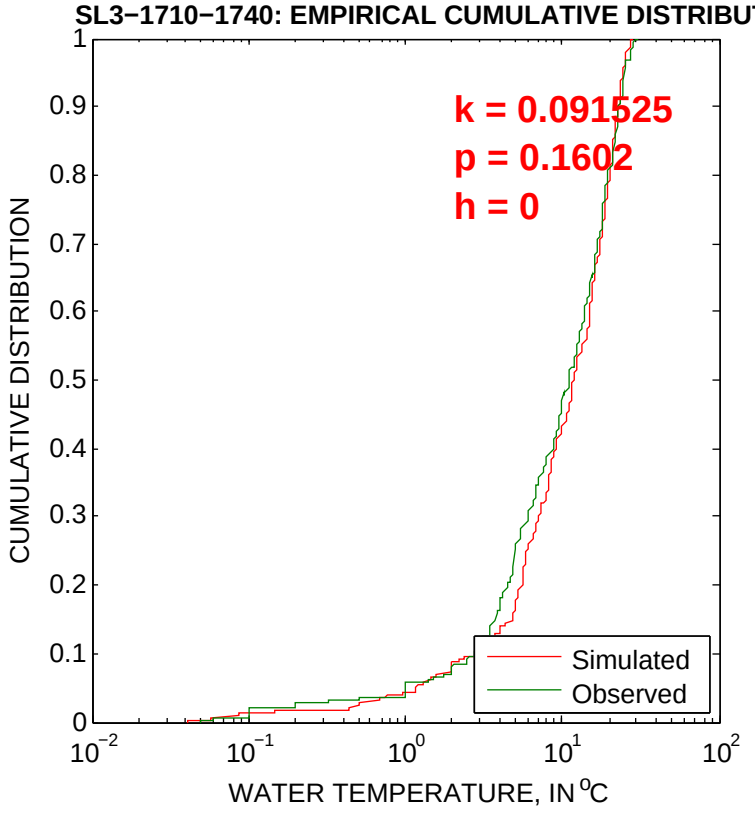












DATA SELECTION

scenario	file
P620171001WQ	WTMP.calib

plot: WTMP - water tempera...

Dates: 1/1/1985 – 12/31/201

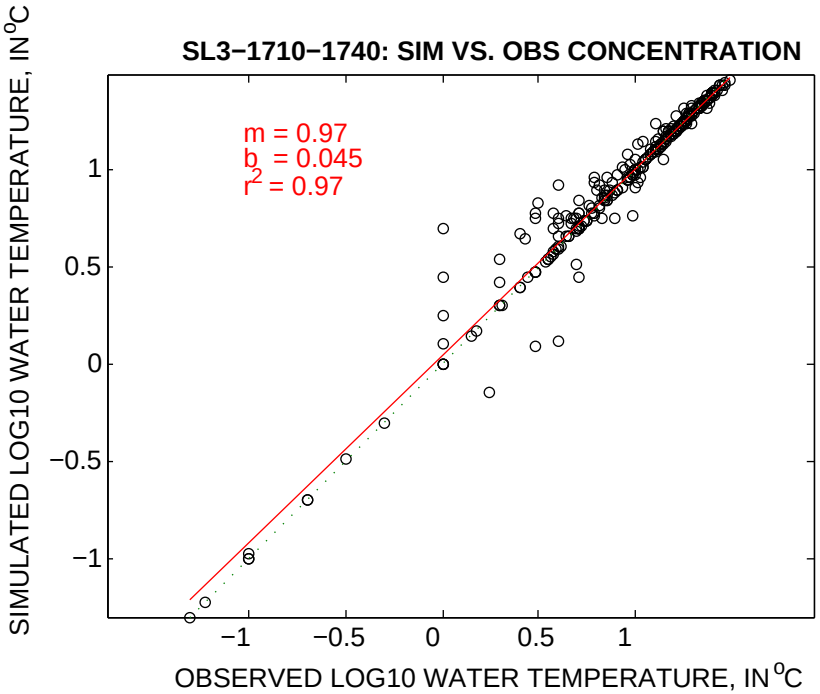
Drive	Directory	Observed
N/A	model	OBS20161101

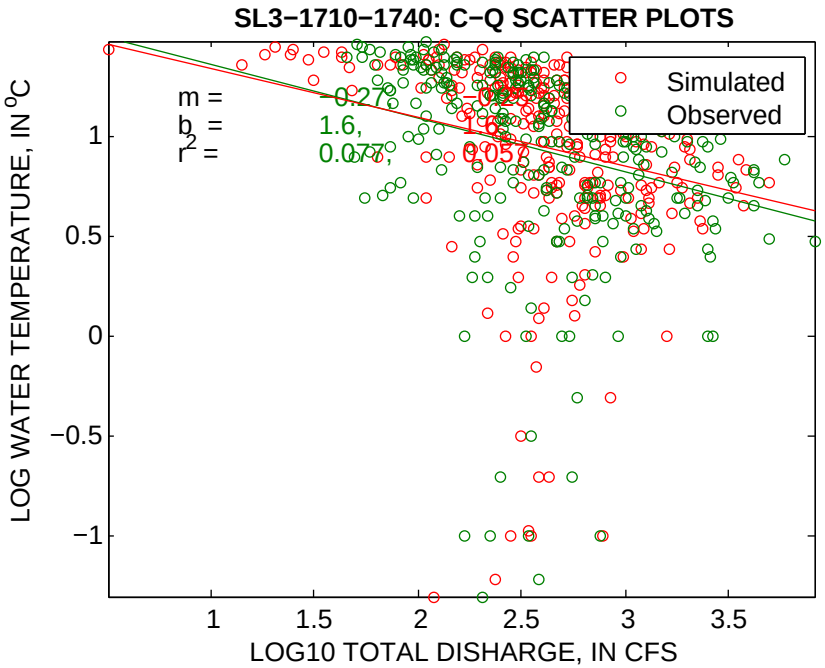
STATISTICS

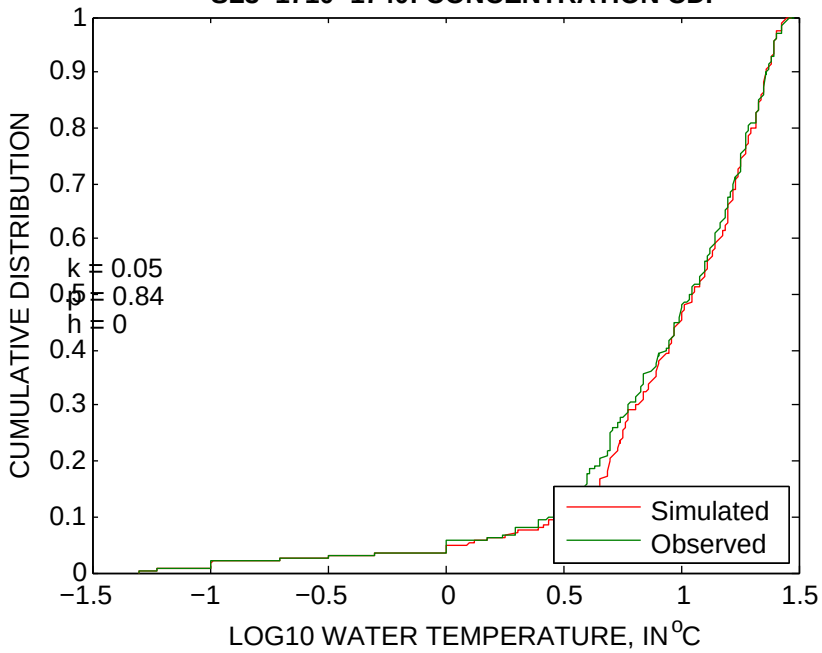
	n	295	295
		observe	simulate
min		0.05	0.040415
		-1.30103	-1.39346
mean		12.1002	12.5505
		0.925744	0.959761
media		11	11.782
		1.04139	1.07122
max		30.5	28.236
		1.4843	1.4508
varian		60.7051	55.028
		0.231323	0.20781
JB		0.002812	0.003736
		0.001	0.001
		ra	log
%		3.72115	3.67456
err.va		7.28917	0.0646094
rel.std.err		0.120075	0.279304
mod.eff		0.879925	0.720696

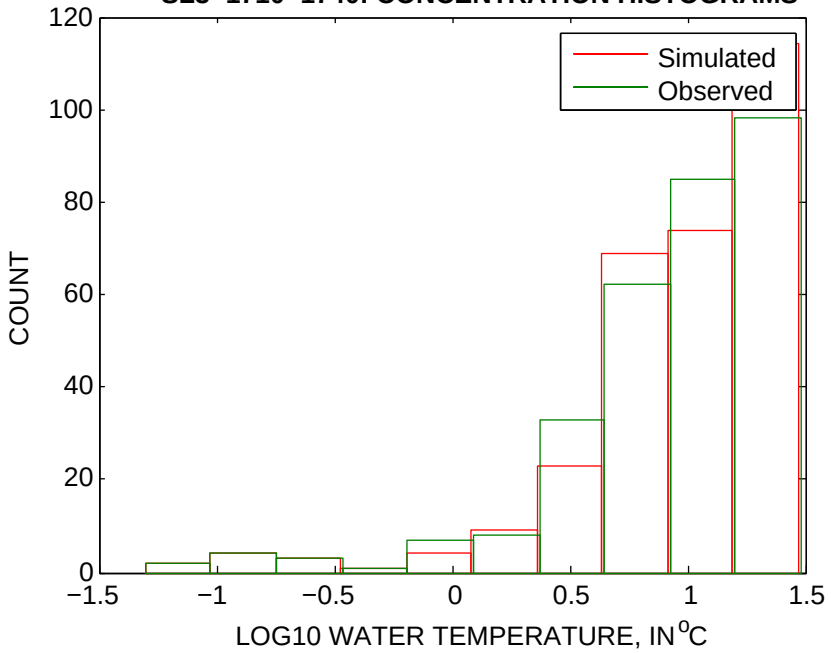
VERSION 2.1

ALL DATA
LOG10

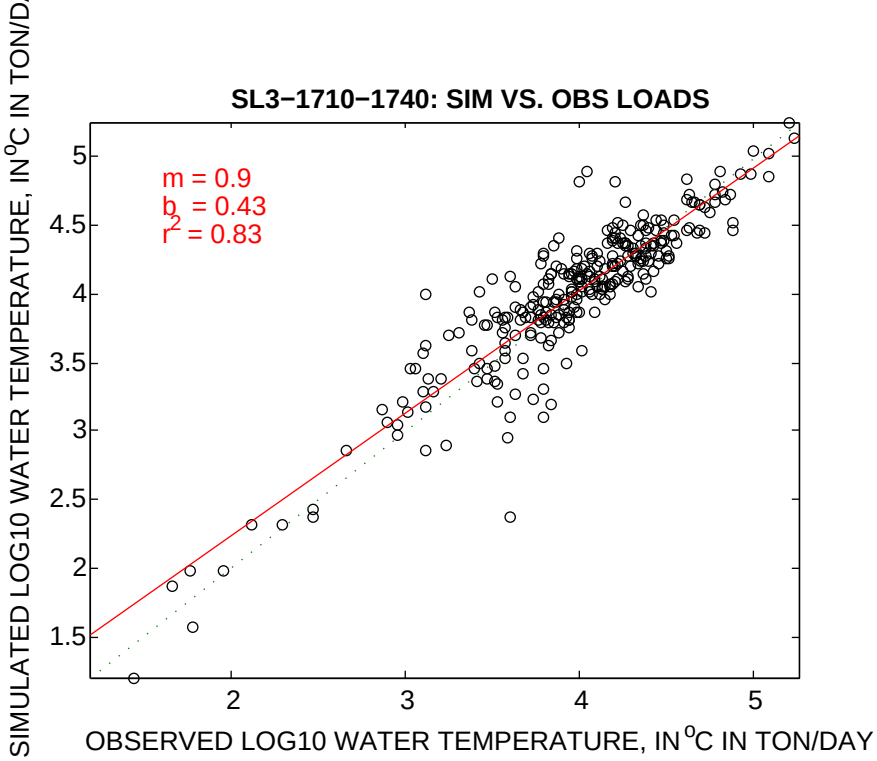


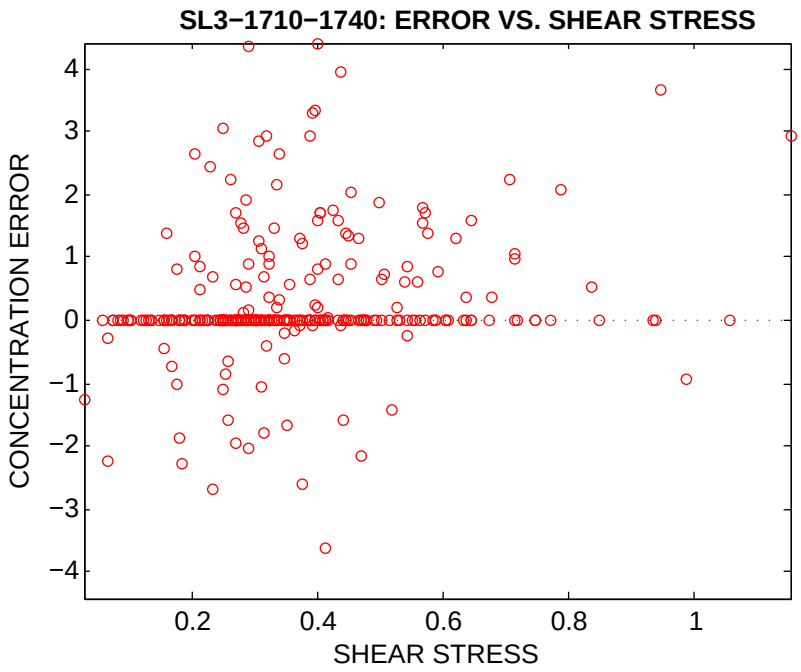


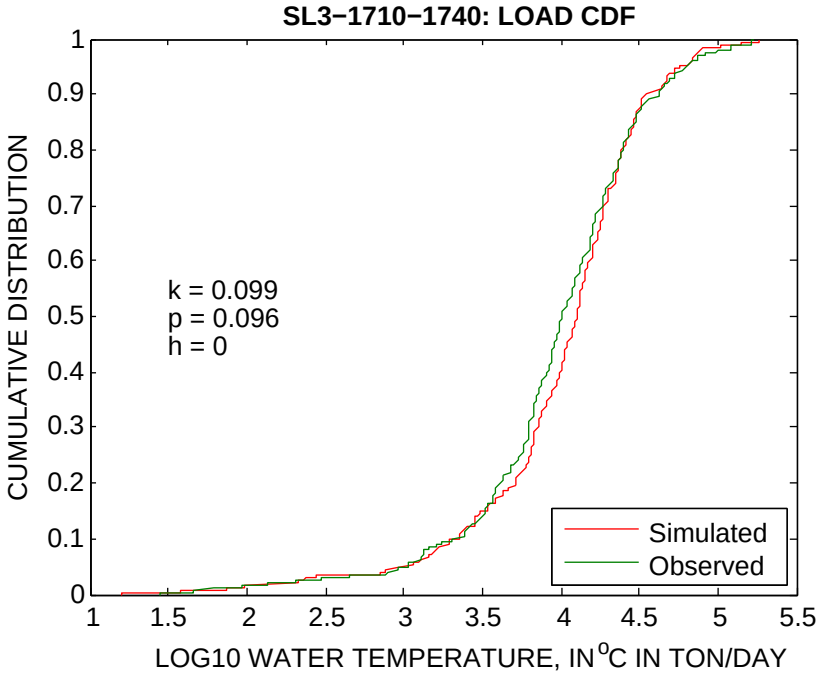


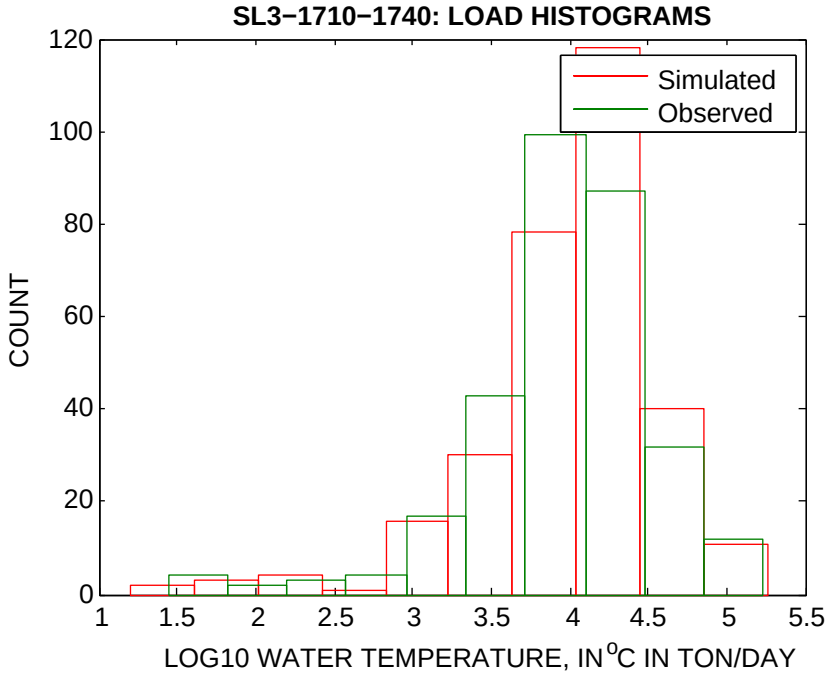


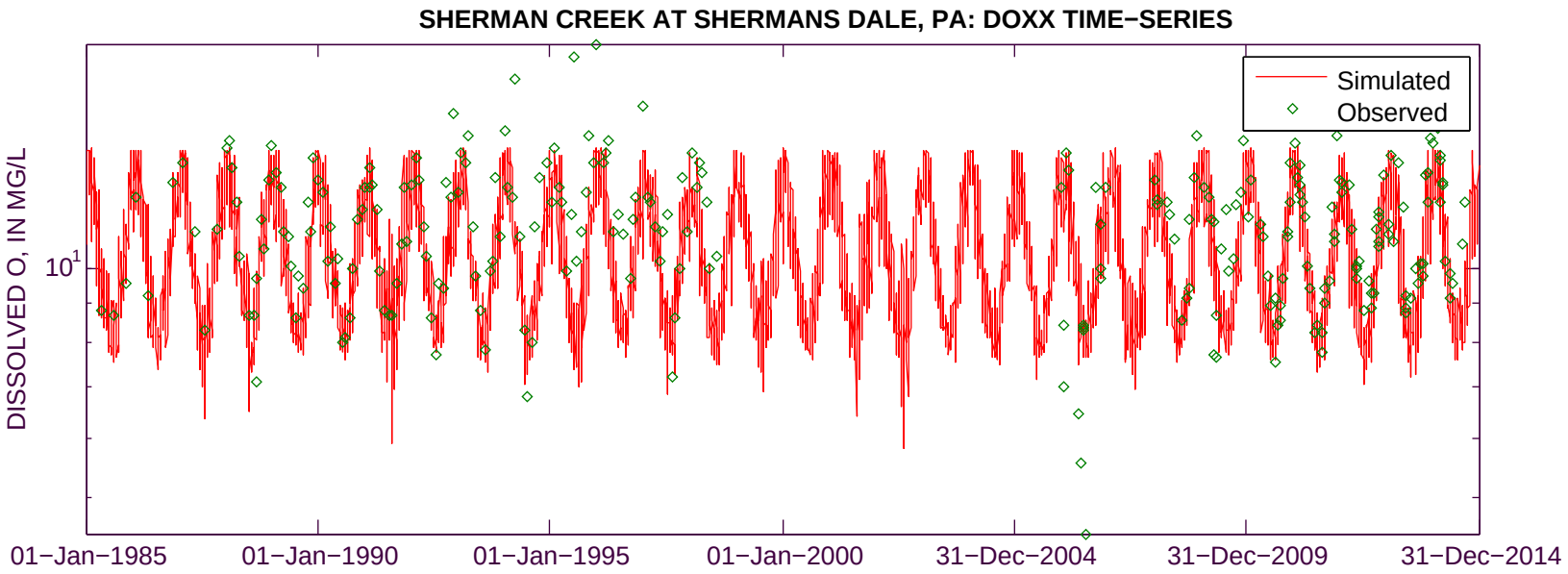
LOAD DATA
LOG10

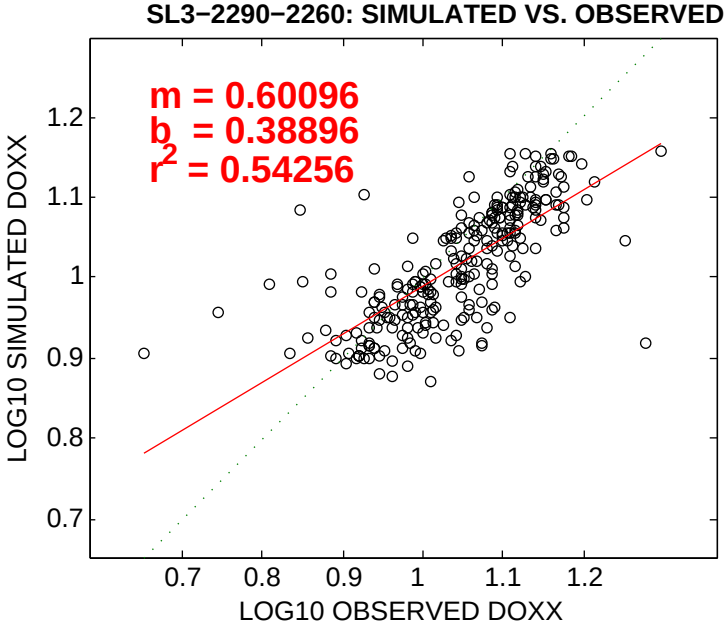


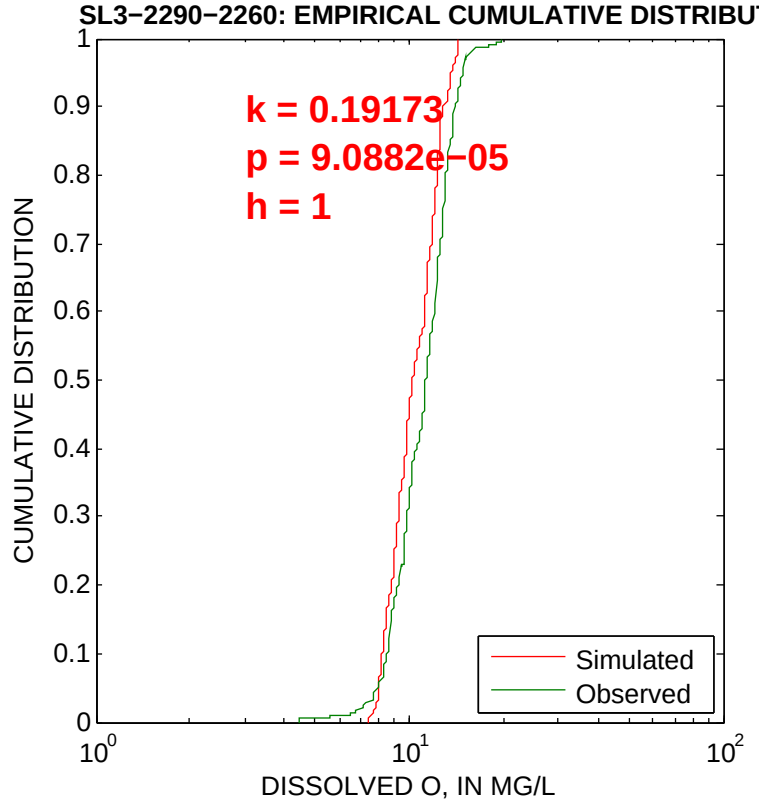












DATA SELECTION

scenario: P620171001WQ | file: DOXX.calib

plot: DOXX - dissolved oxygen

Dates: 1/1/1985 – 12/31/201

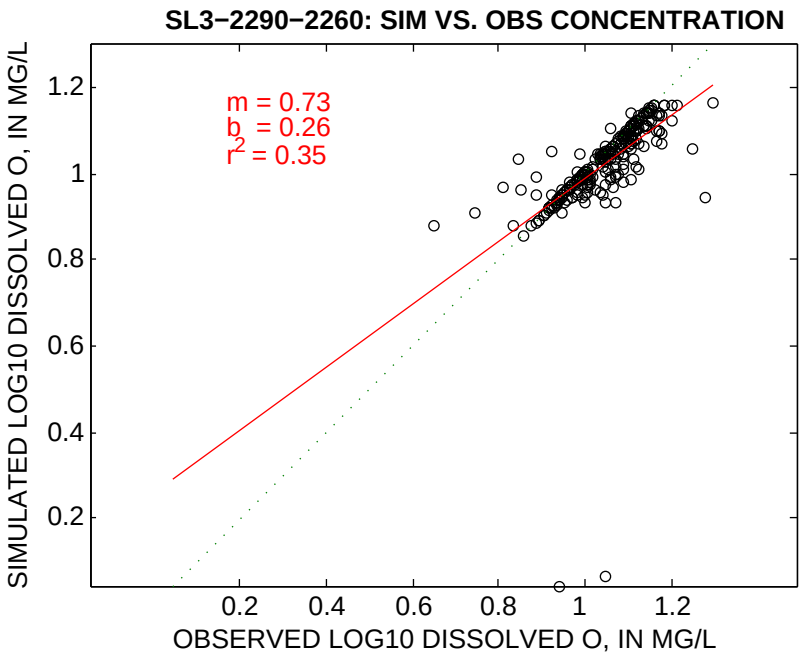
Drive: N/A | Directory: model | Observed: OBS20161101

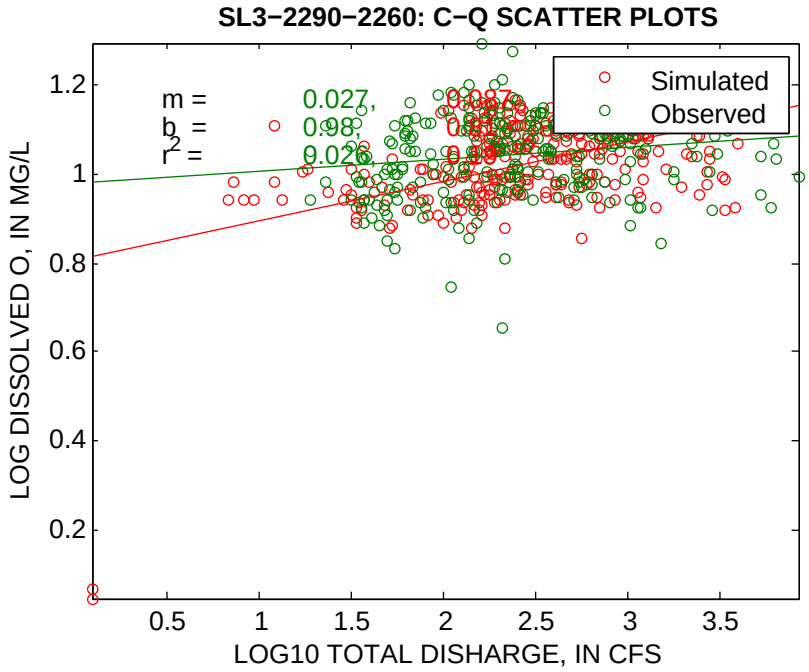
STATISTICS

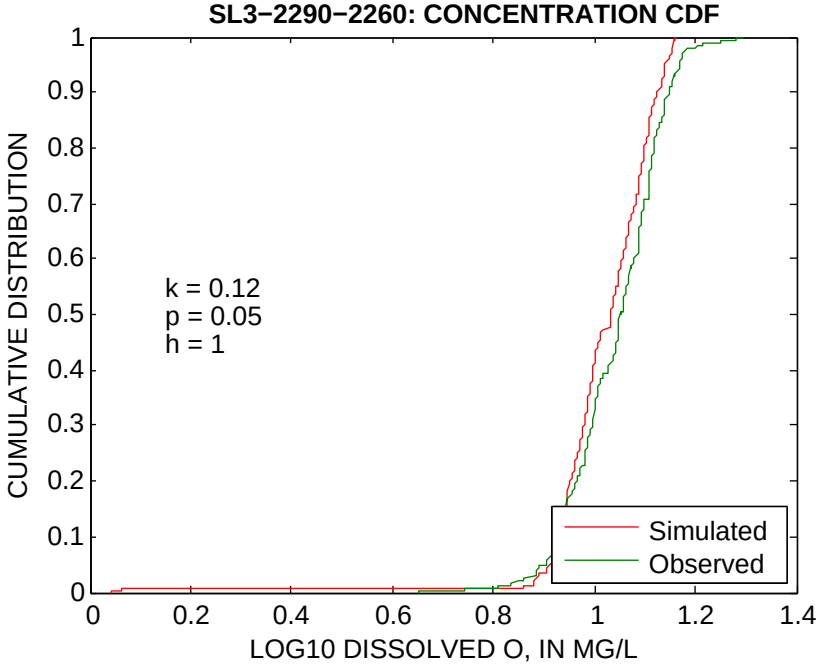
	observe	simulate
n	266	266
min	4.49	7.4016
	0.652246	0.869326
mean	11.2935	10.5302
	1.04375	1.01621
media	11.275	10.2645
	1.05212	1.01134
max	19.8	14.404
	1.29667	1.15848
varian	5.16405	3.19493
	0.00816986	0.0054382
JB	0.062162	0.006220
	0.002070	0.006393
	ra	log
%	-6.75897	-2.63885
err.va	2.86405	0.00455005
rel.std.err	0.554612	0.556932
mod.eff	0.445388	0.443068

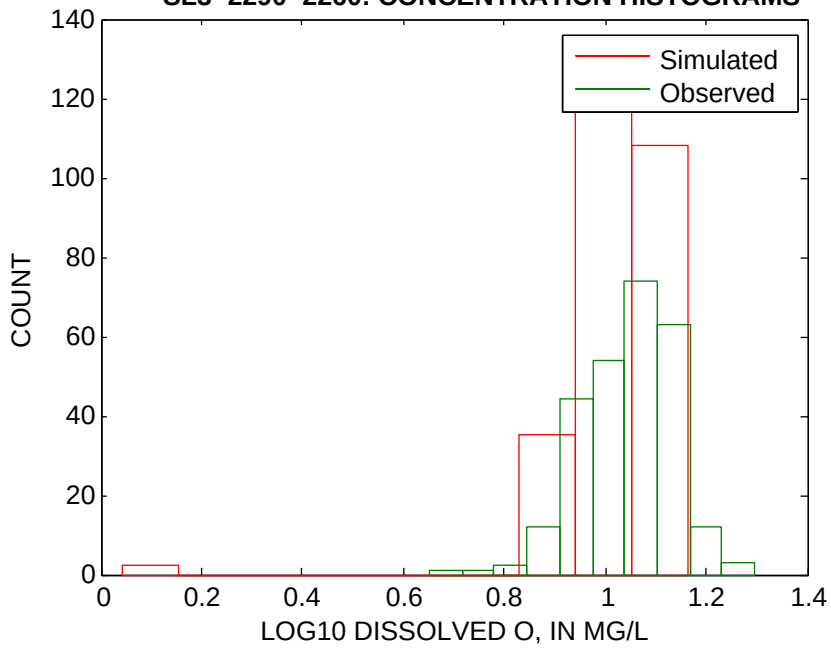
VERSION 2.1

ALL DATA
LOG10

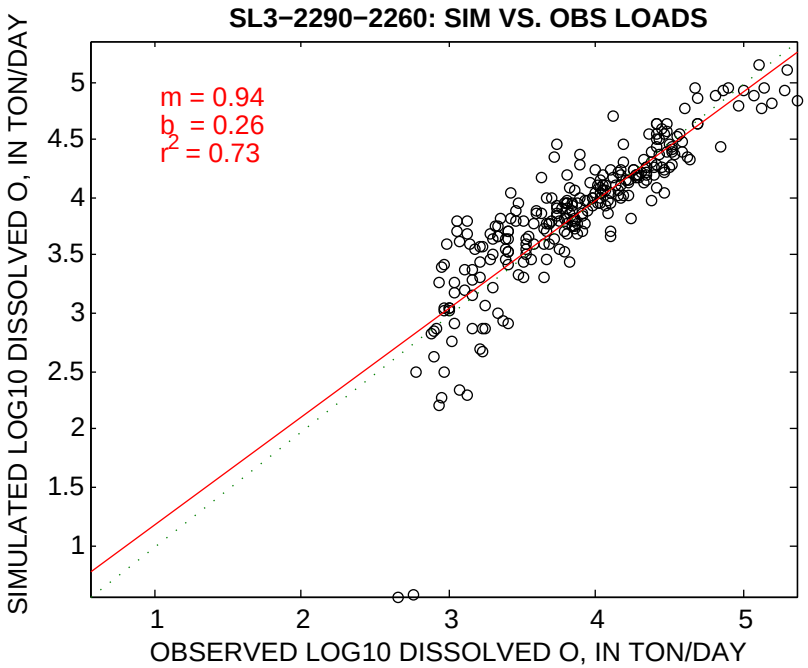


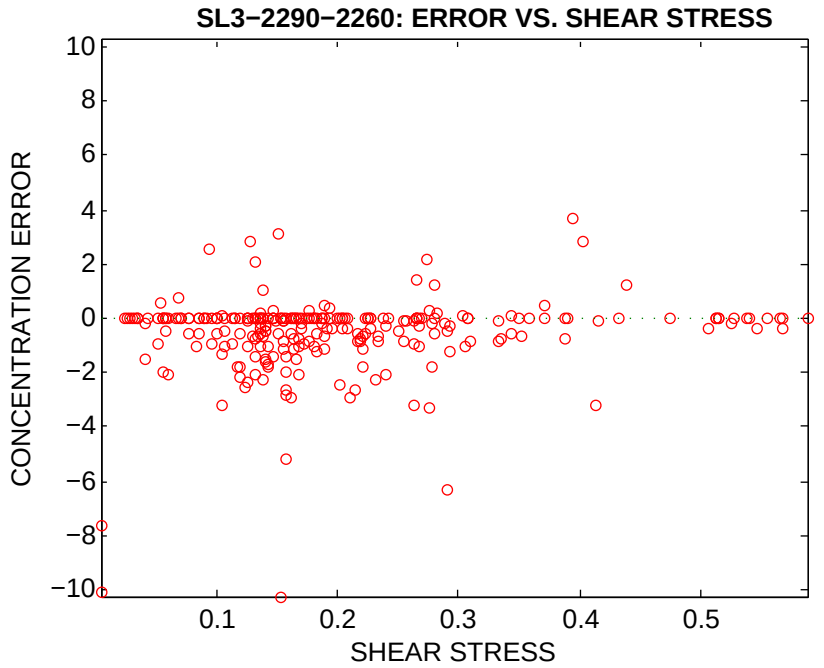


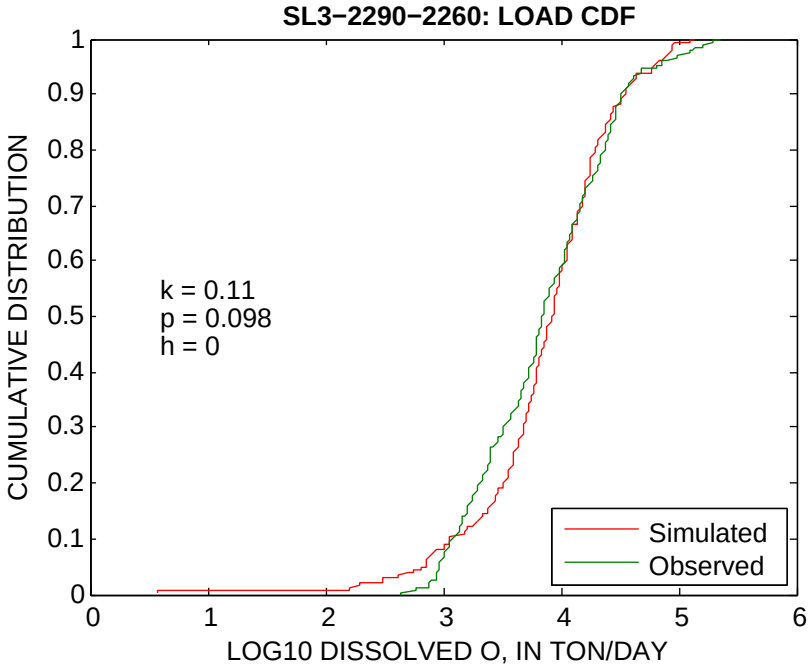


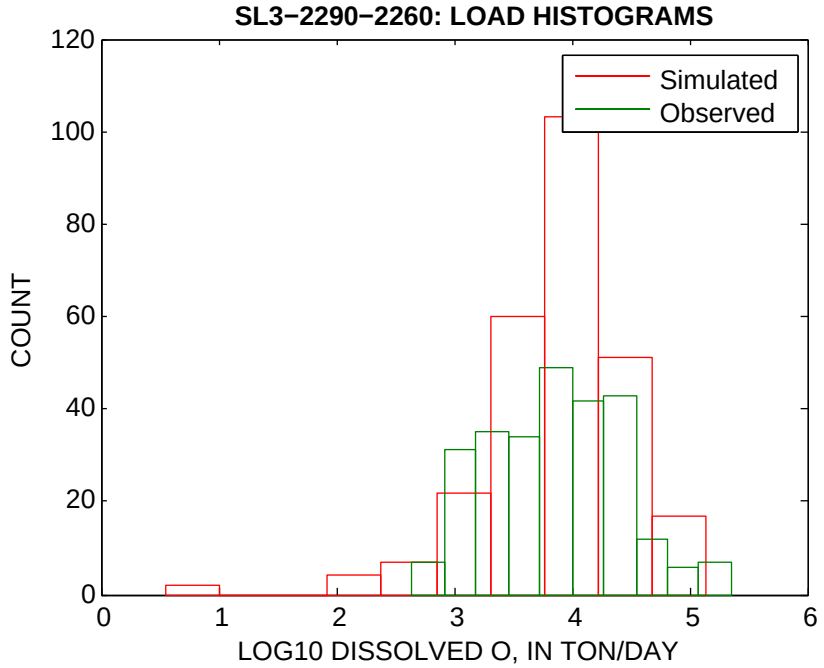


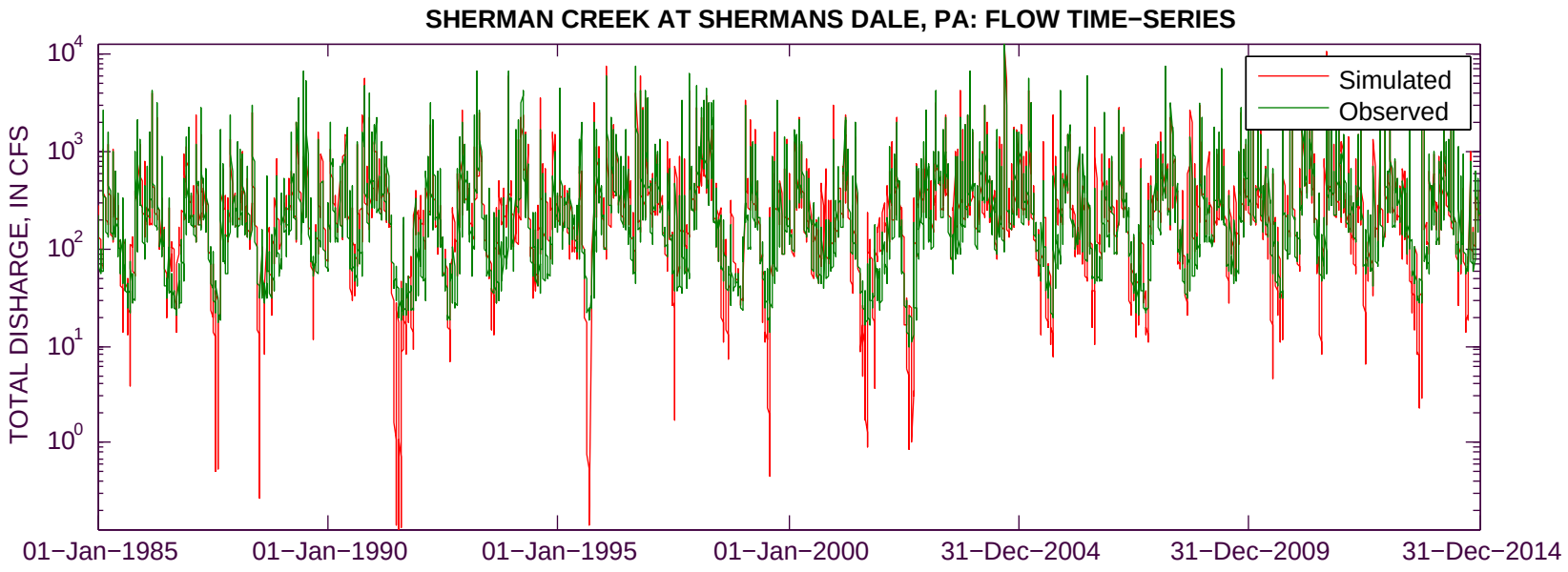
LOAD DATA
LOG10

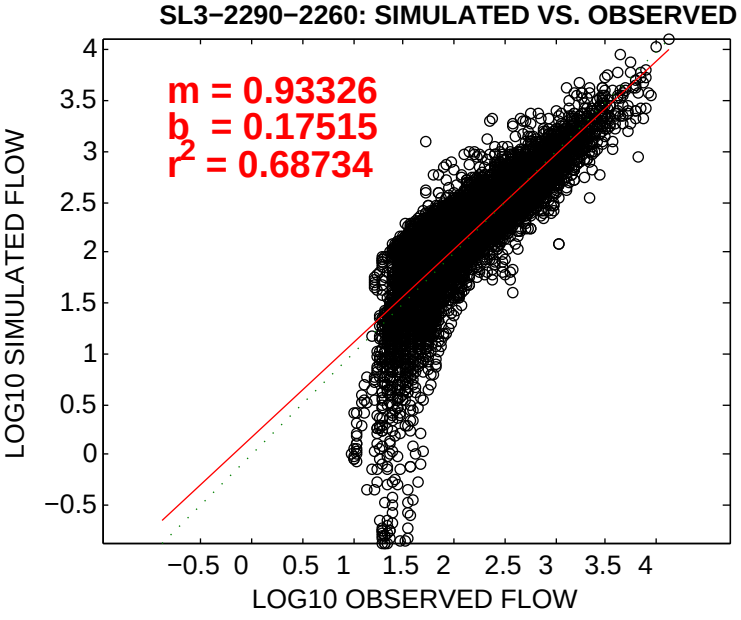


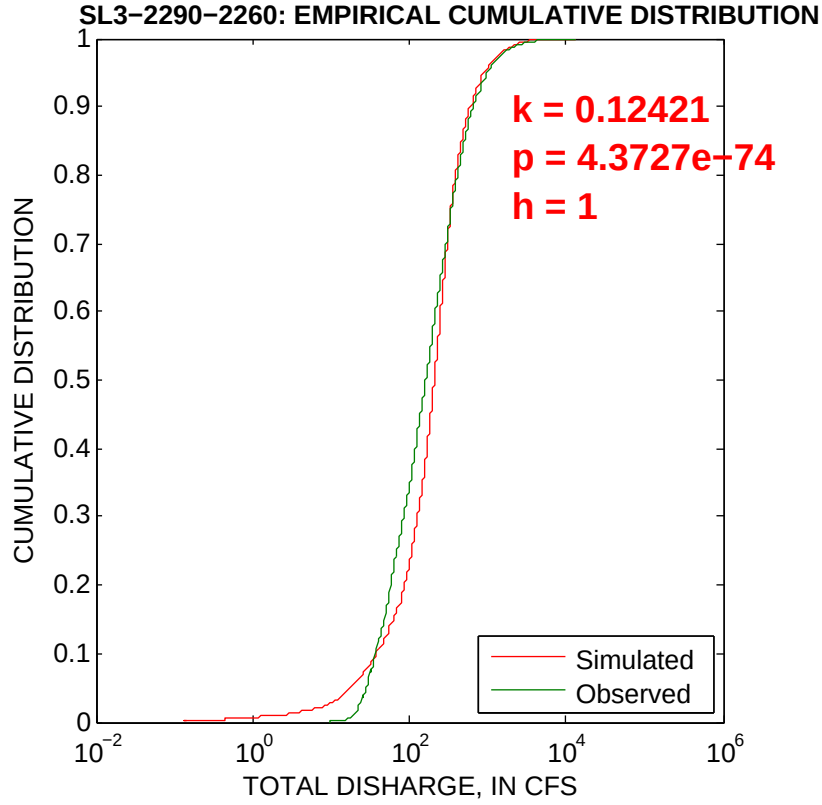












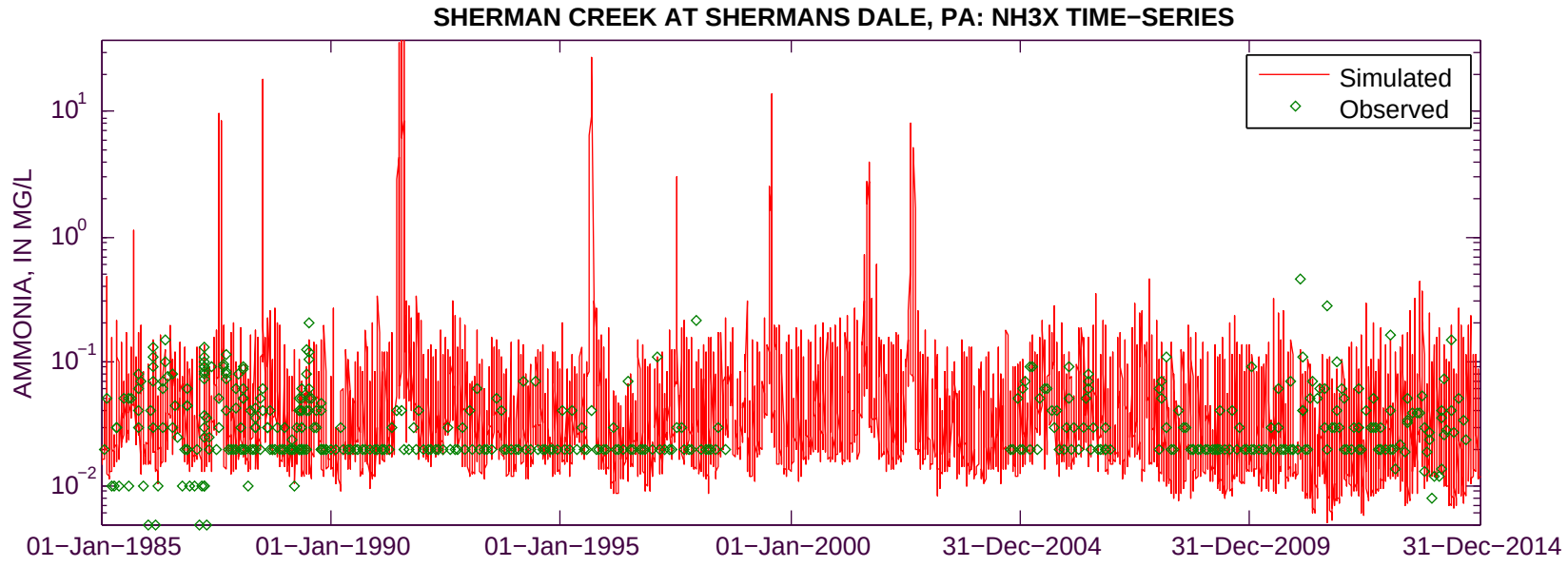
DATA SELECTION

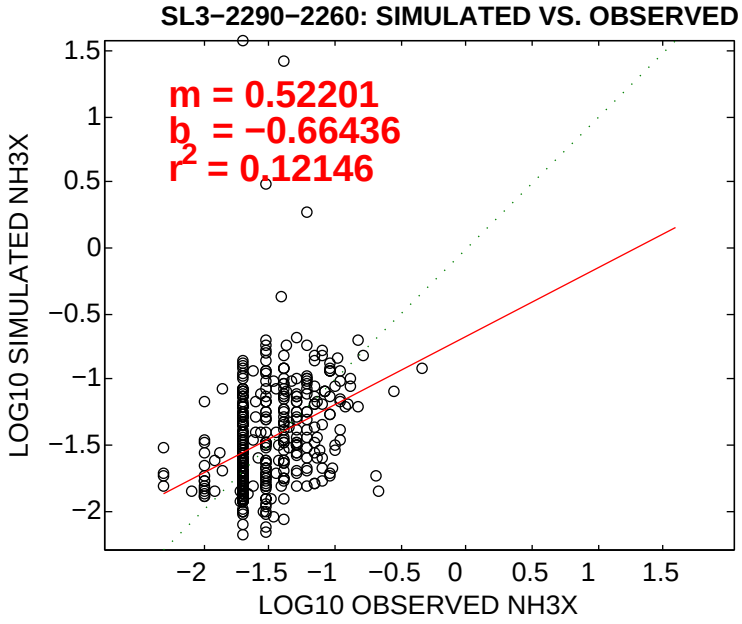
scenario: P620171001WQ
file: FLOW.calib
plot: FLOW - total discharge
Dates: 1/1/1985 12/31/201
Drive: N/A
Directory: model
Observed: OBS20161101

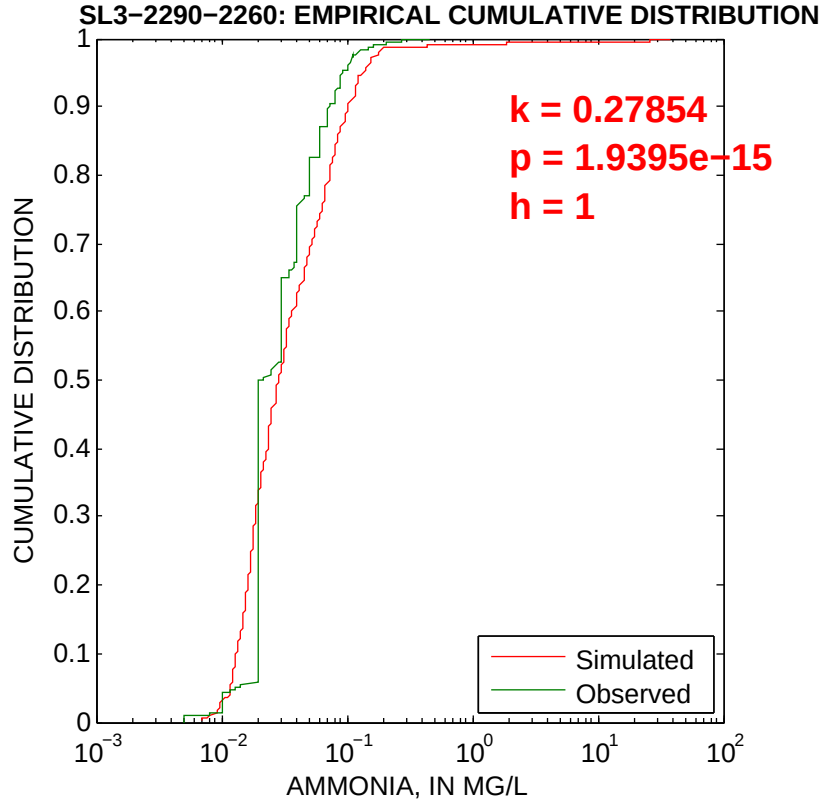
STATISTICS

		observe	simulate
n		10957	10957
min		9.9	0.13079
		0.995635	-0.883425
mean		312.143	311.674
		2.21297	2.24042
media		164	209.53
		2.21484	2.32125
max		12900	13203
		4.11059	4.12067
varian		297539	214707
		0.227991	0.288899
JB		0.001	0.001
		0.001	0.001
		ra	log
%		-0.150171	1.24035
err.va		73957.2	0.0920957
rel.std.err		0.248563	0.403945
mod.eff		0.751437	0.596055

VERSION 2.1







DATA SELECTION

scenario	file
P620171001WQ	NH3X.calib

plot: NH3X - ammonia

Dates 1/1/1985 12/31/201

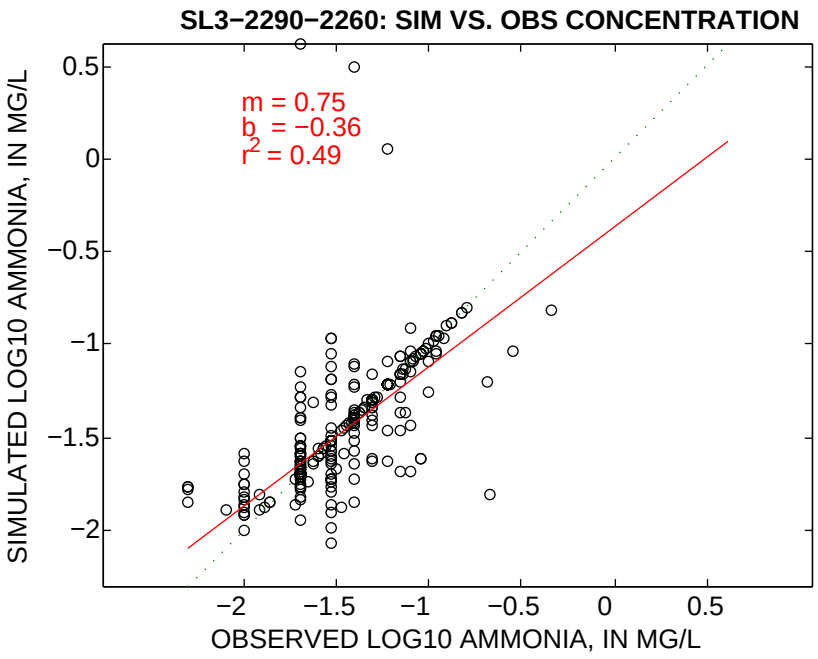
Drive	Directory	Observed
N/A	model	OBS20161101

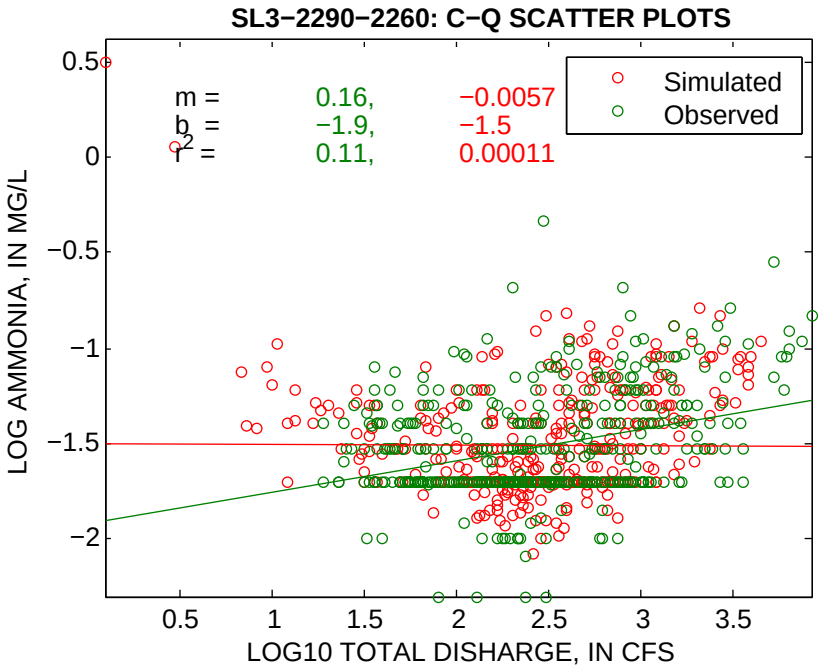
STATISTICS

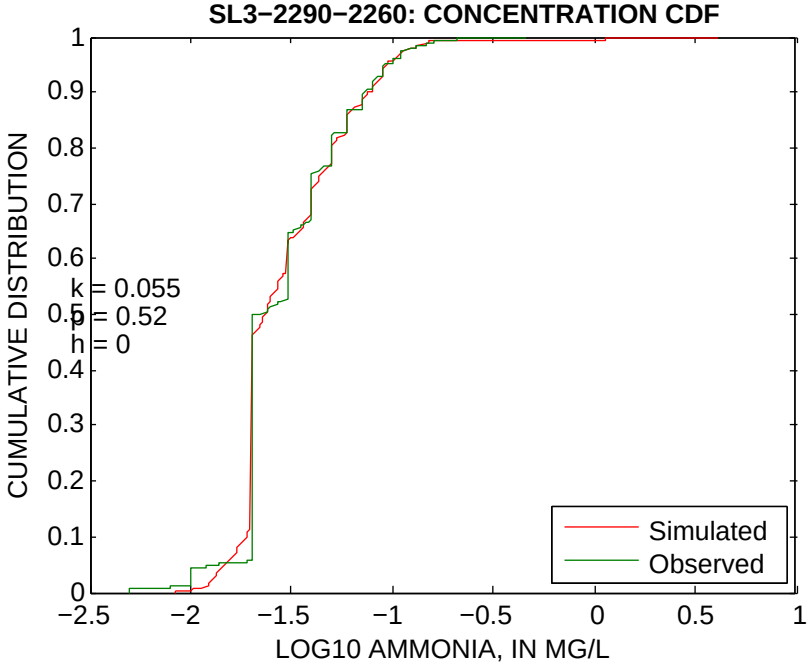
	observe	simulate
n	438	438
min	0.005 -2.30103	0.0065965 -2.18069
mean	0.0378571 -1.52421	0.20289 -1.46001
media	0.021 -1.67827	0.0285955 -1.5437
max	0.46 -0.337242	38.006 1.57985
varian	0.00132545 0.0752192	4.86171 0.168758
JB	0.001 0.001	0.001 0.001
	ra	log
%	435.935	-4.21198
err.va	4.89216	0.169578
rel.std.err	3690.95	2.25445
mod.eff	-3689.95	-1.25445

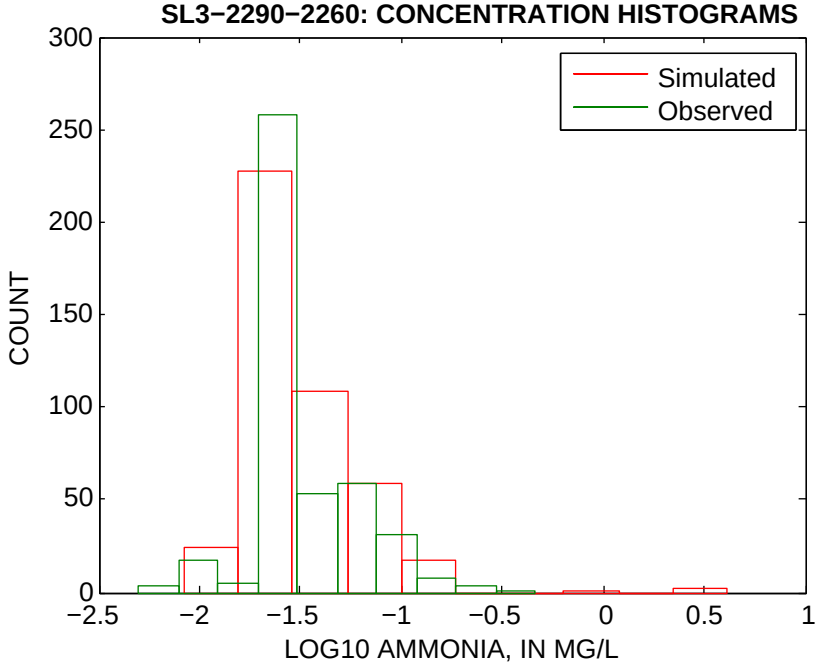
VERSION

ALL DATA
LOG10

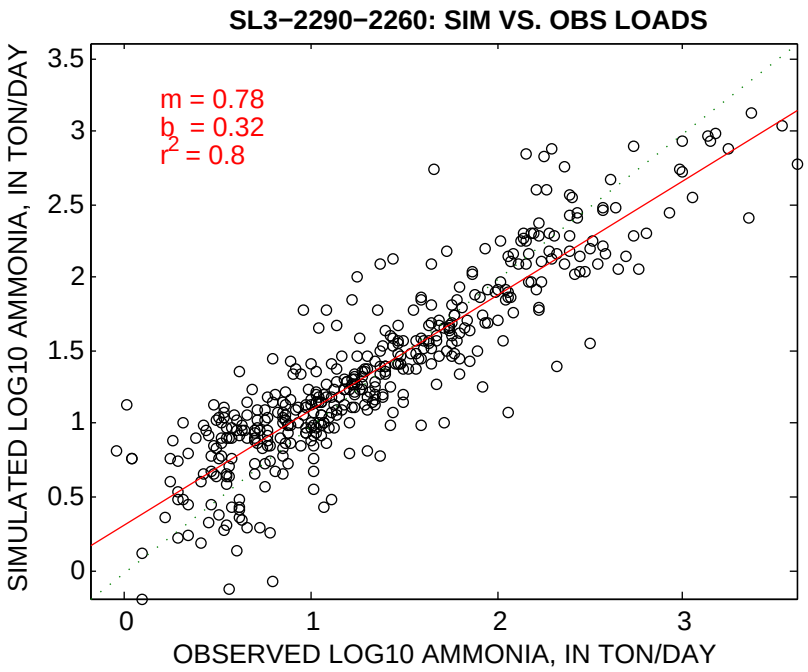


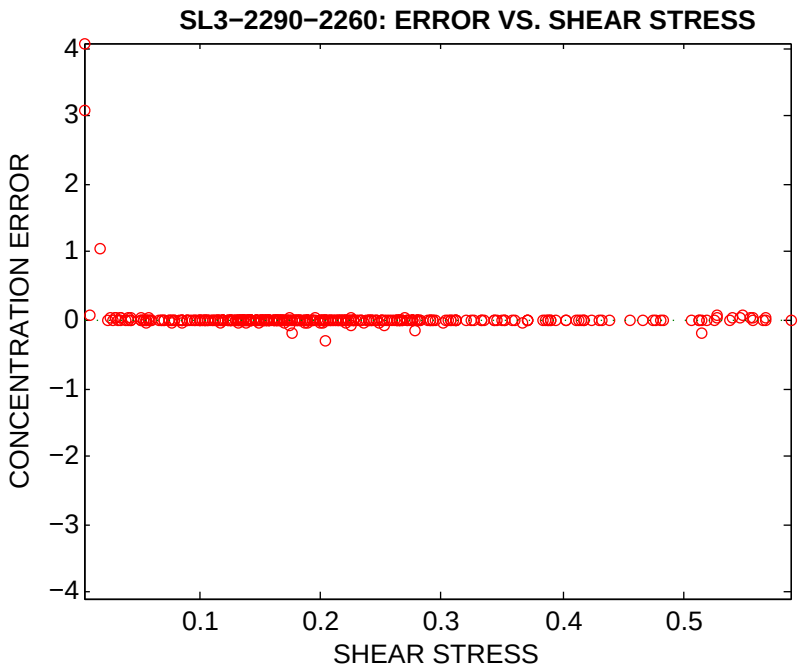


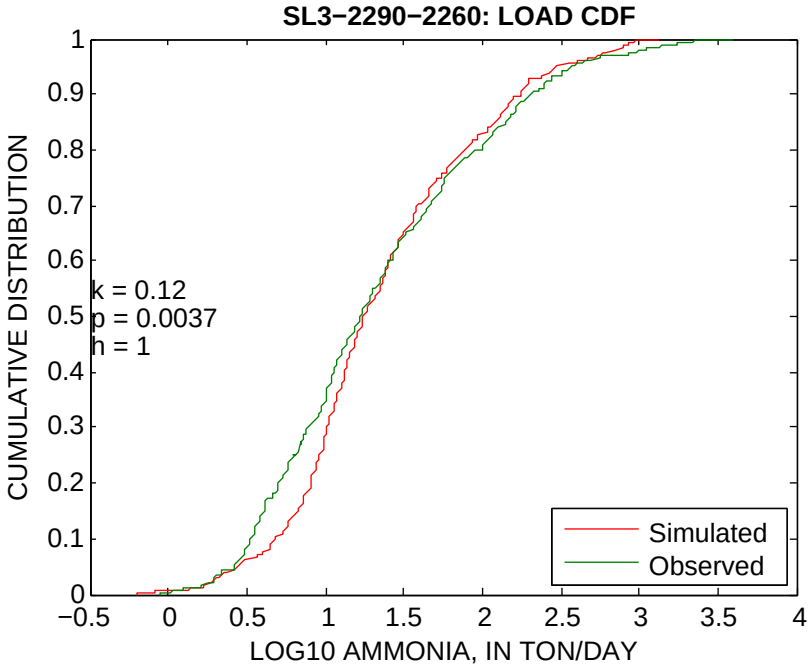


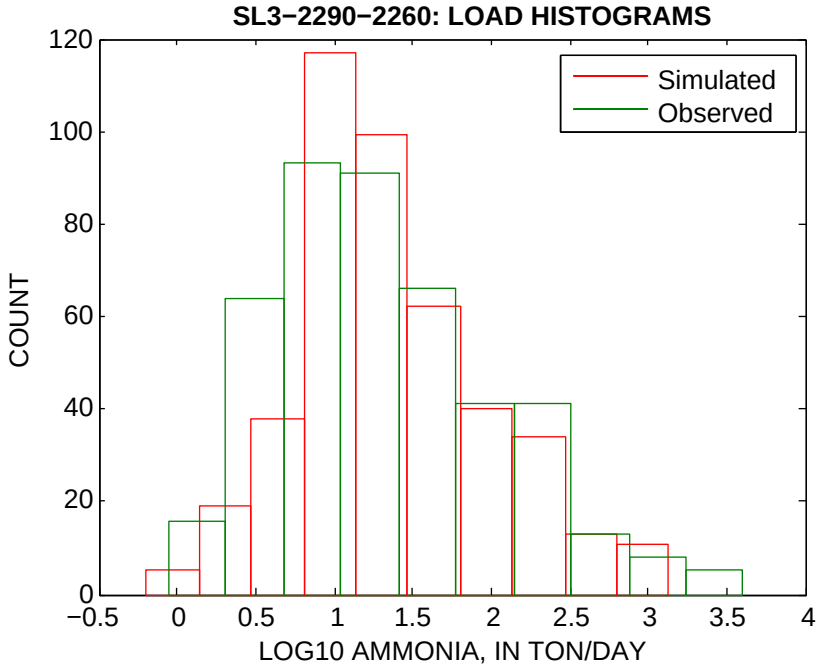


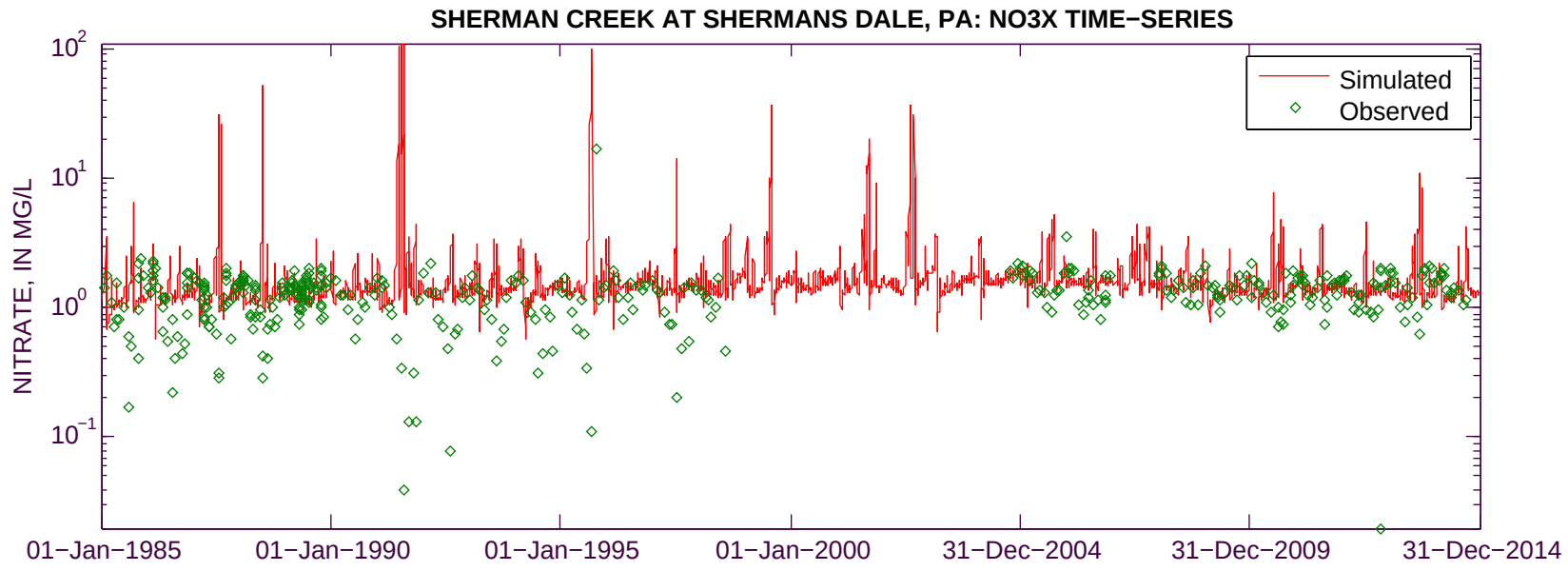
LOAD DATA
LOG10

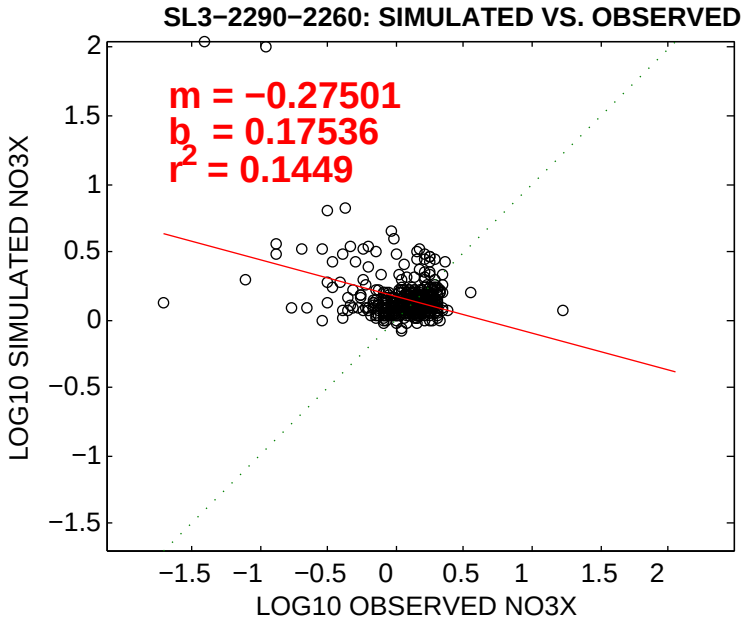


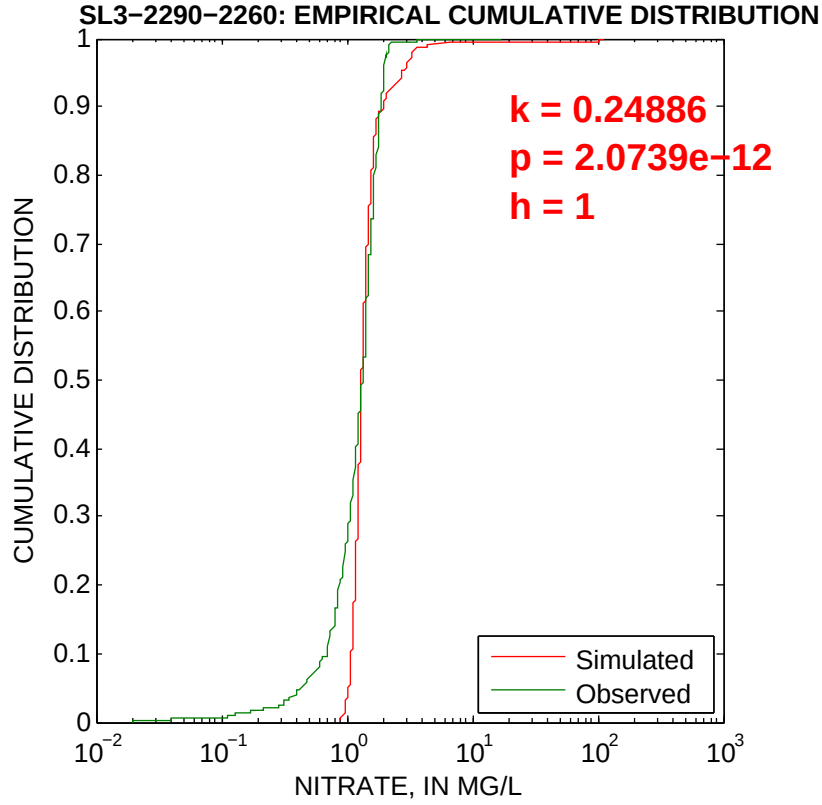












DATA SELECTION

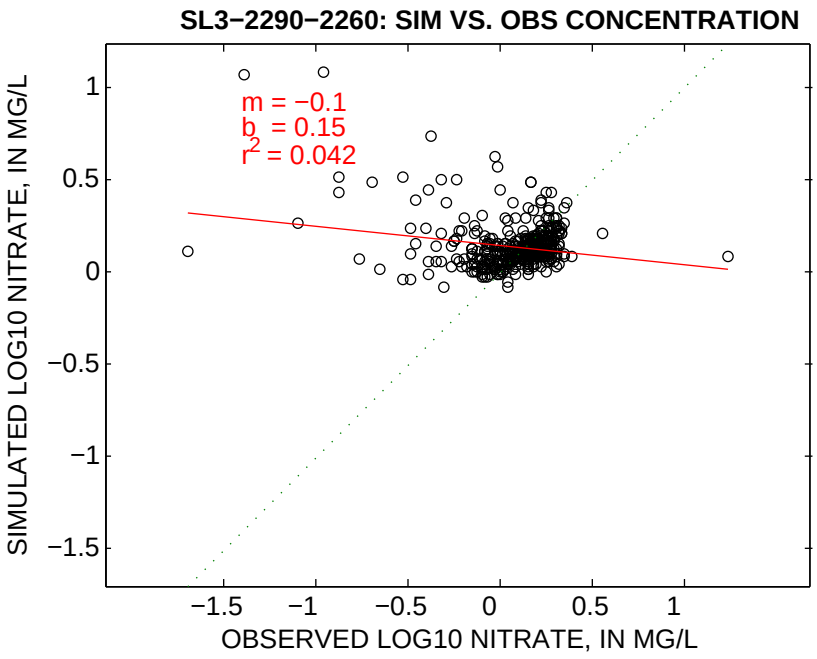
scenario: P620171001WQ
file: NO3X.calib
plot: NO3X - nitrate
Dates: 1/1/1985 – 12/31/201
Drive: N/A
Directory: model
Observed: OBS20161101

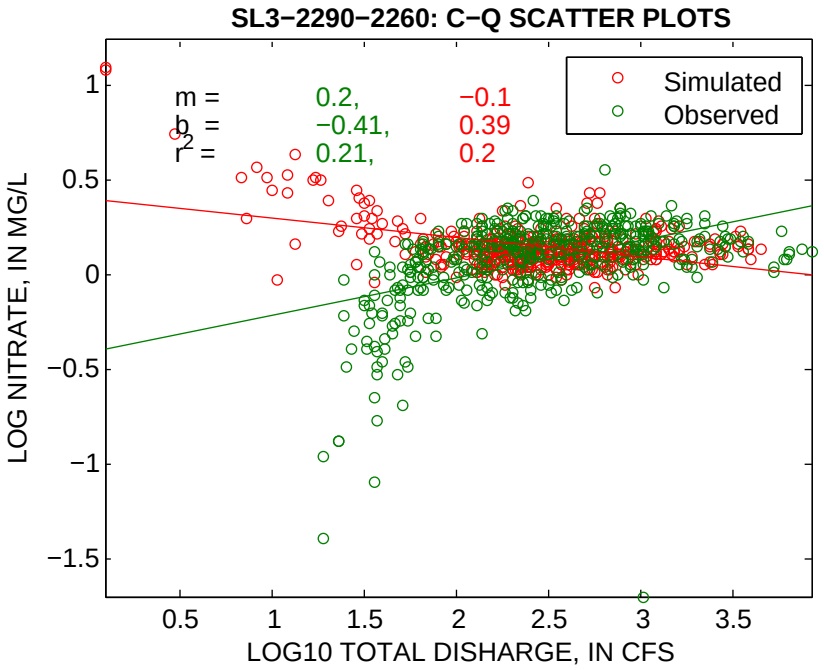
STATISTICS

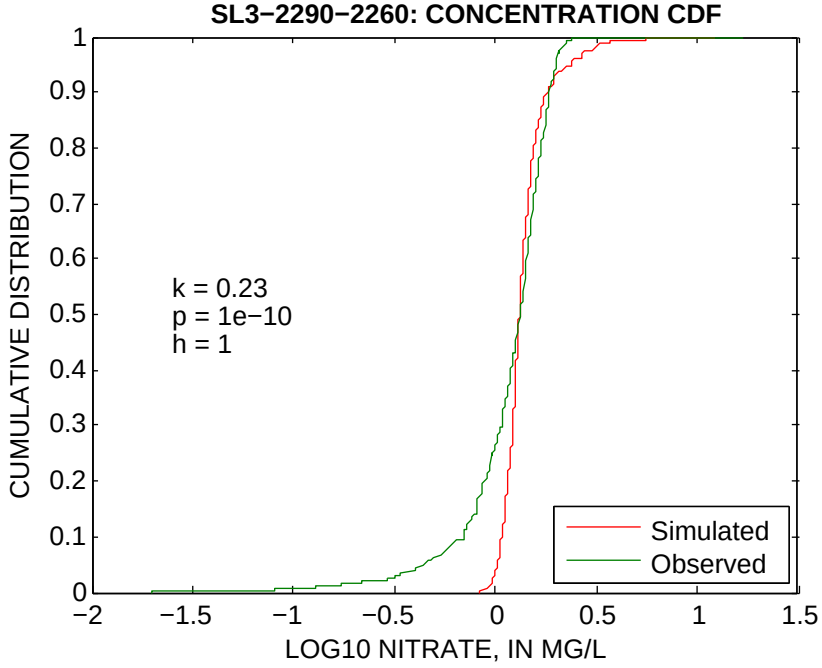
		observe	simulate
n		438	438
min		0.02	0.82942
		-1.69897	-0.0812255
mean		1.32628	1.95139
		0.0688712	0.15642
media		1.34	1.3172
		0.127105	0.119652
max		17	110.04
		1.23045	2.04155
varian		0.785711	49.9131
		0.0589602	0.030776
JB		0.001	0.001
		0.001	0.001
		ra	log
%		47.1325	127.119
err.va		52.3992	0.129848
rel.std.err		66.6901	2.2023
mod.eff		-65.6901	-1.2023

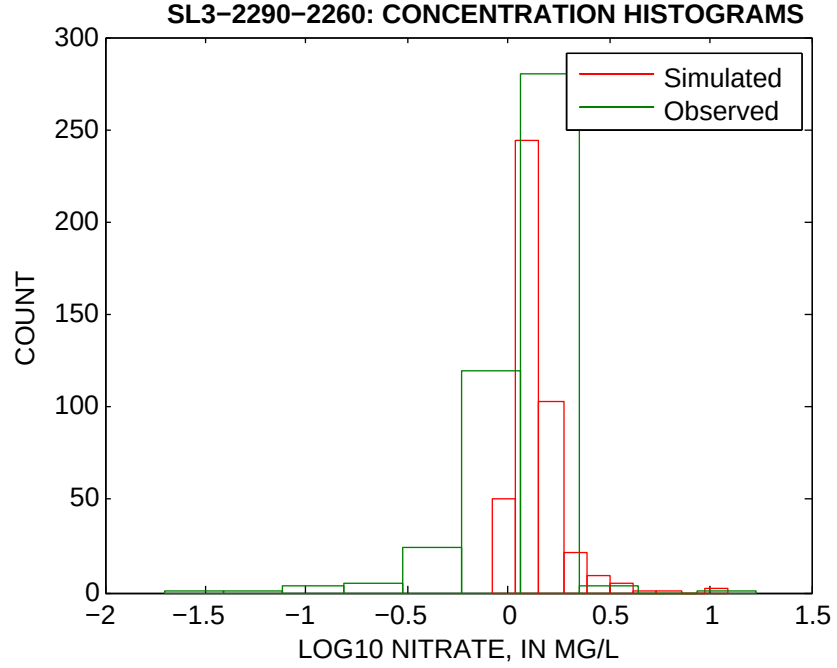
VERSION 2.1

ALL DATA
LOG10

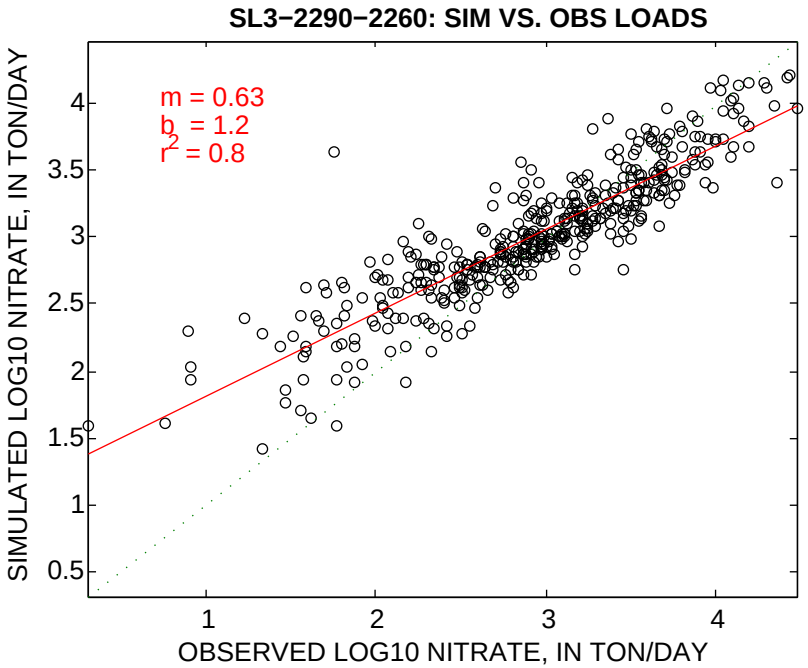


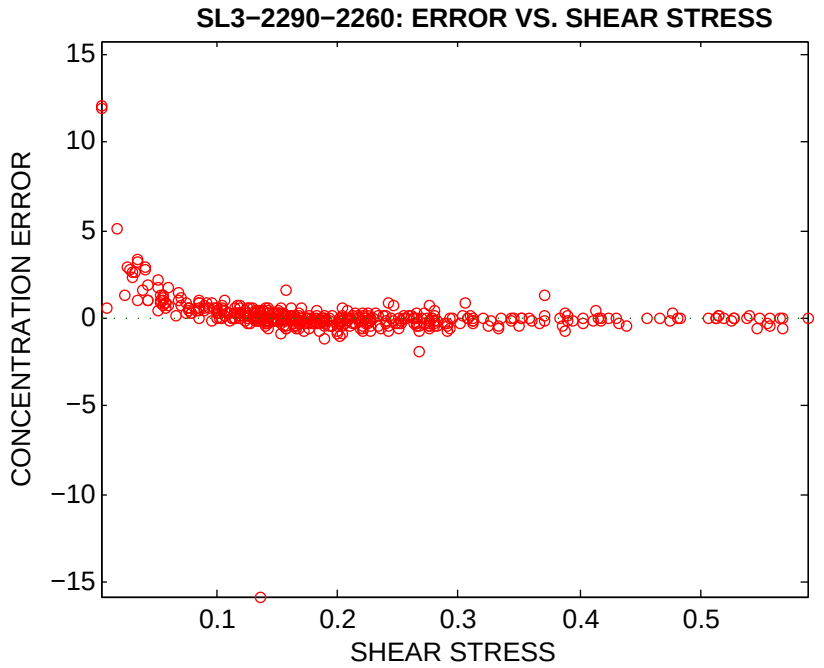


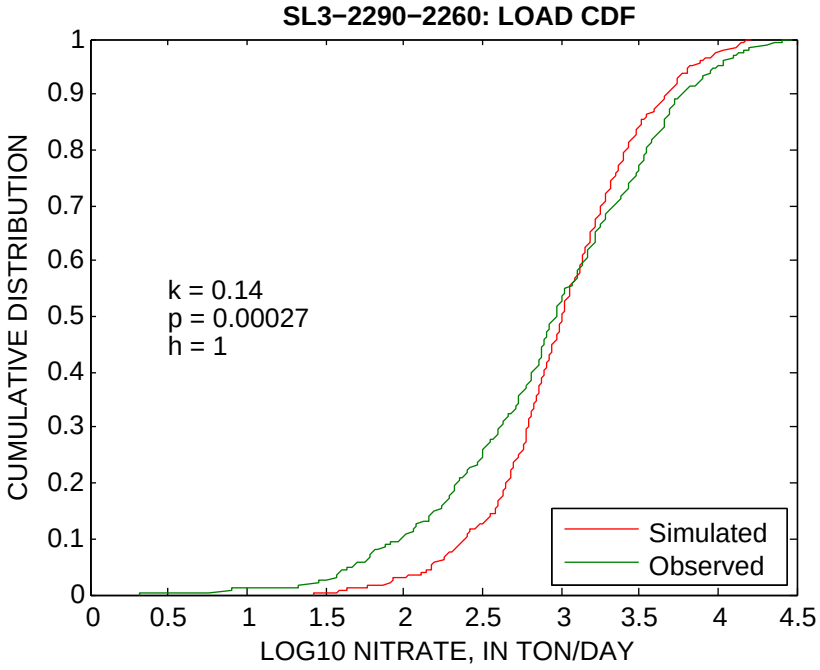


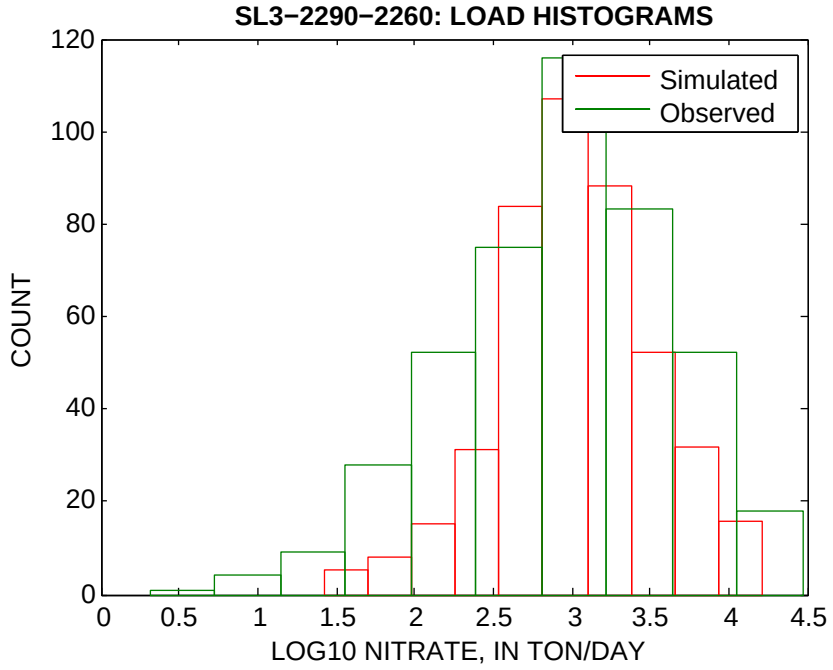


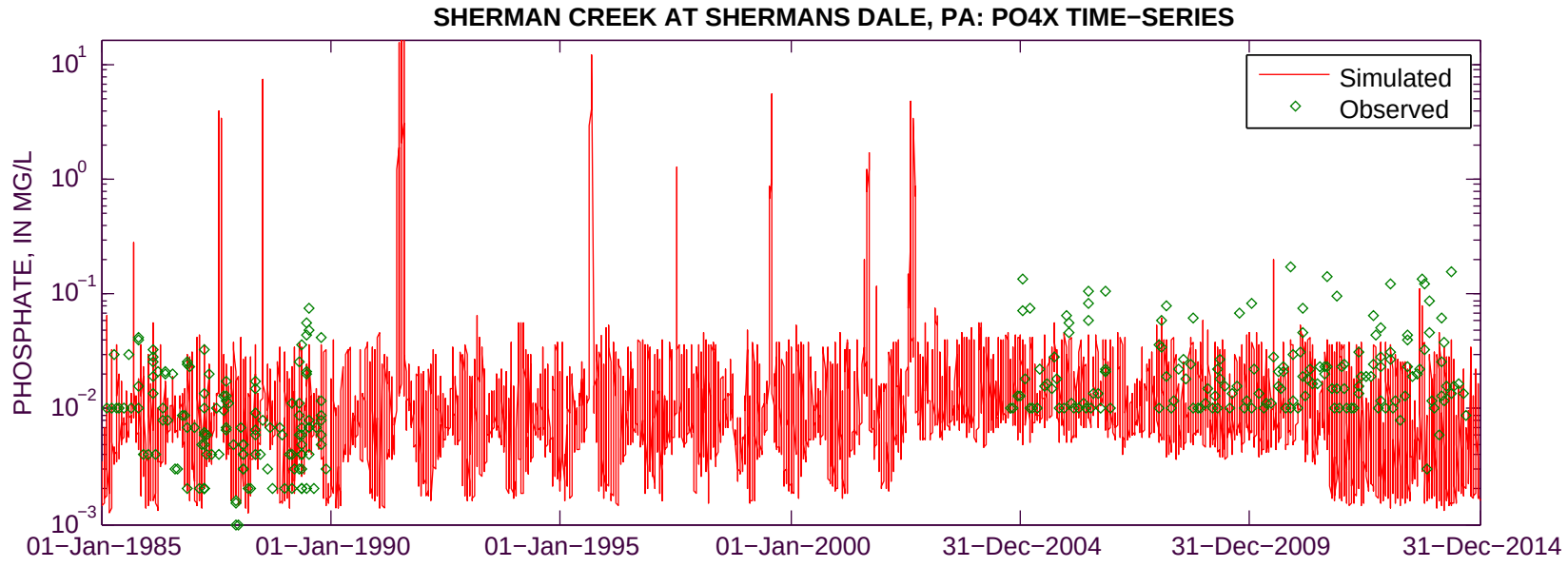
LOAD DATA
LOG10

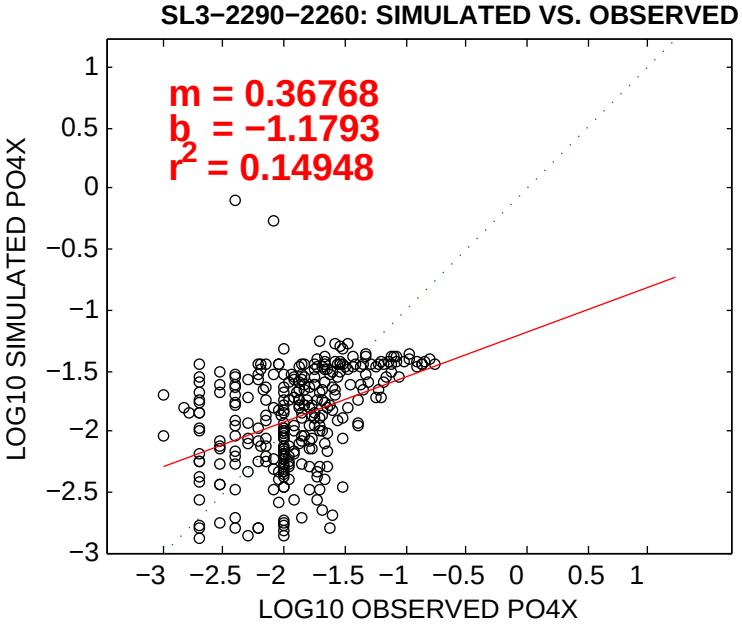


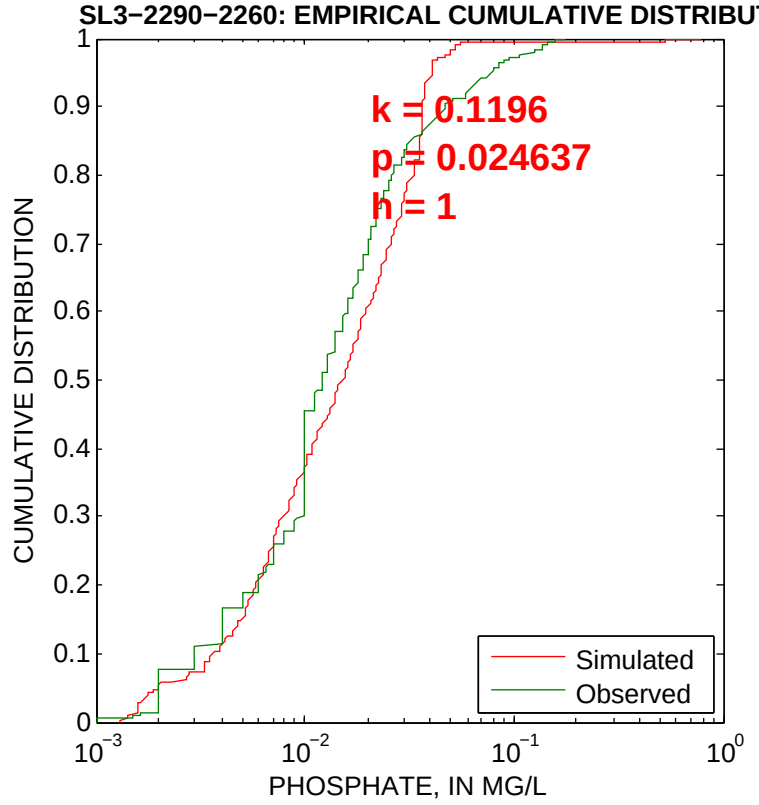












DATA SELECTION

scenario: P620171001WQ | file: PO4X.calib

plot: PO4X - phosphate

Dates: 1/1/1985 | 12/31/201

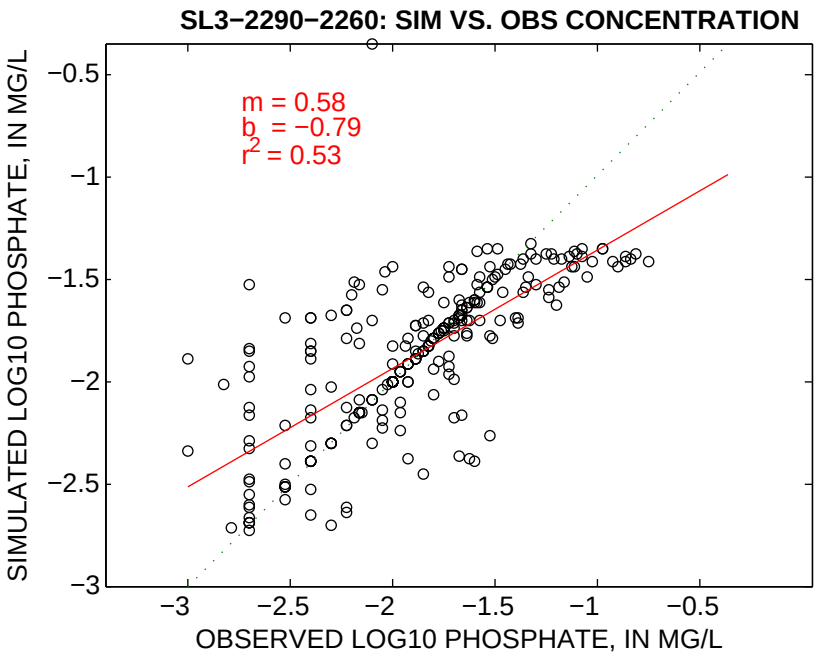
Drive: N/A | Directory: model | Observed: OBS20161101

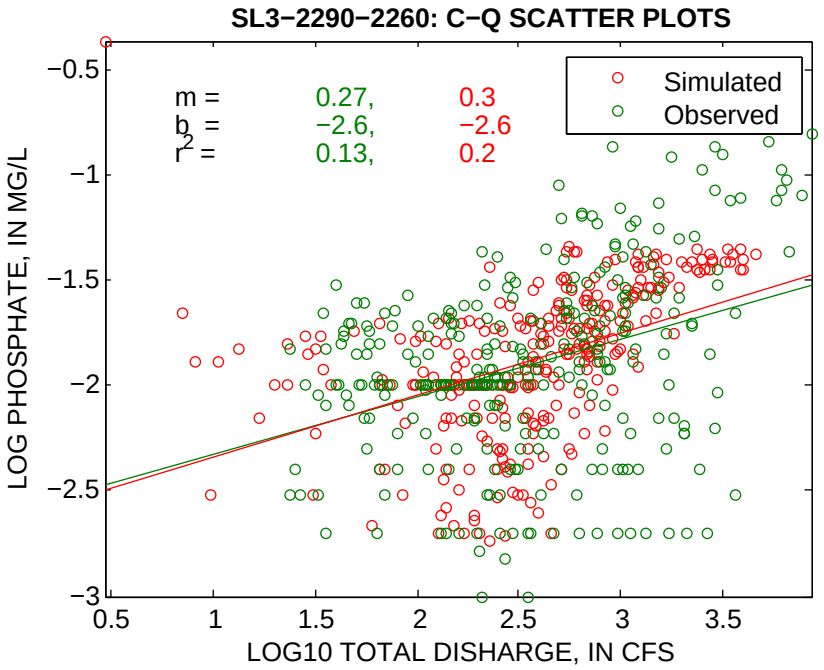
STATISTICS

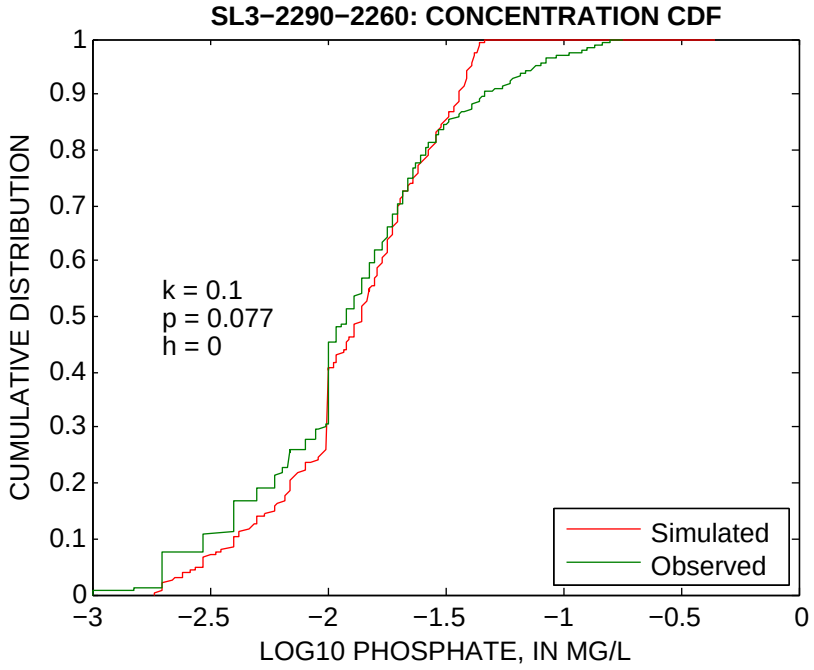
		observe	simulate
n		301	301
min		0.001	0.0013037
		-3	-2.88482
mean		0.0212409	0.0223835
		-1.89637	-1.87651
media		0.012	0.015166
		-1.92082	-1.81913
max		0.178	0.79138
		-0.74958	-0.101615
varian		0.00071382	0.00303996
		0.191877	0.173532
JB		0.001	0.001
		0.5	0.011815
		ra	log
%		5.37917	-1.04732
err.va		0.00354036	0.224707
rel.std.err		4.95968	1.1711
mod.eff		-3.95968	-0.171099

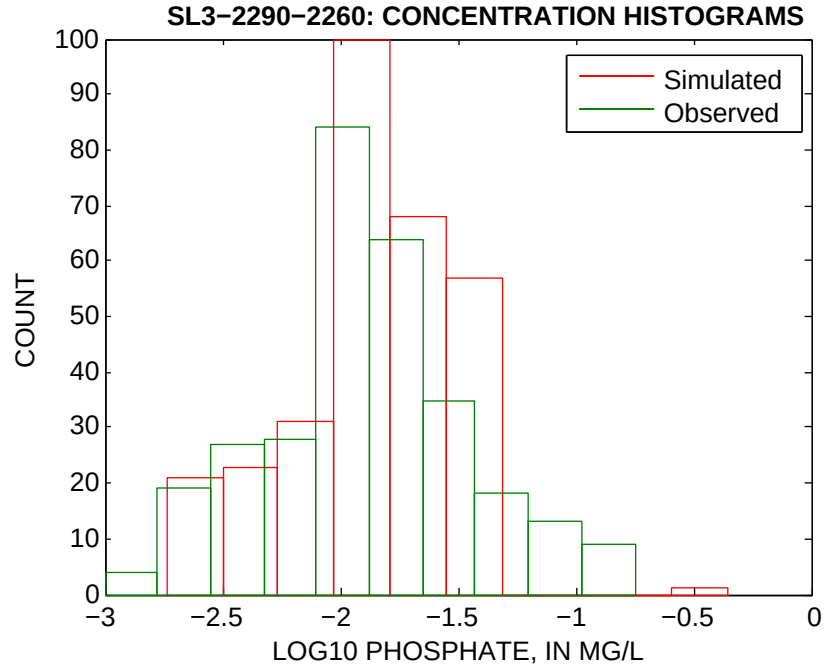
VERSION 2.1

ALL DATA
LOG10

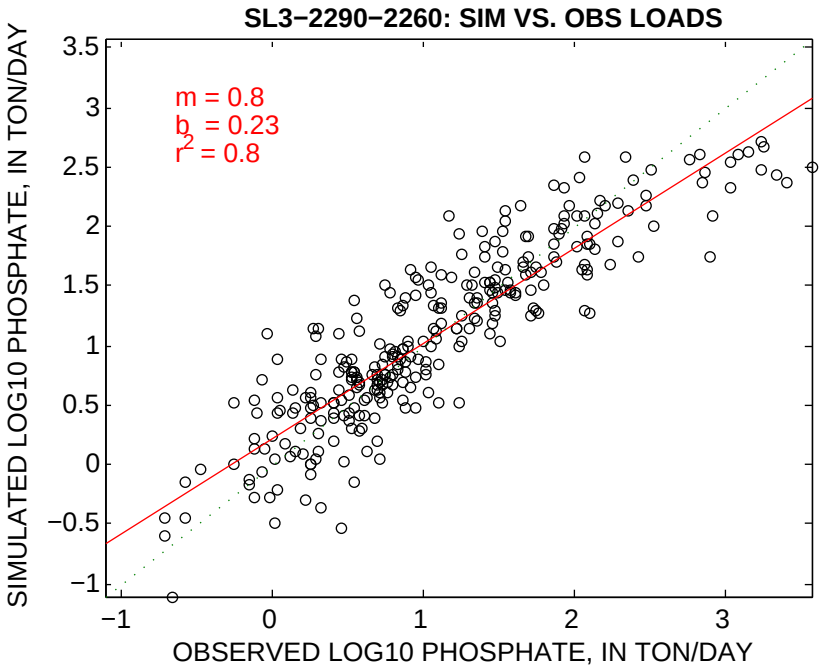


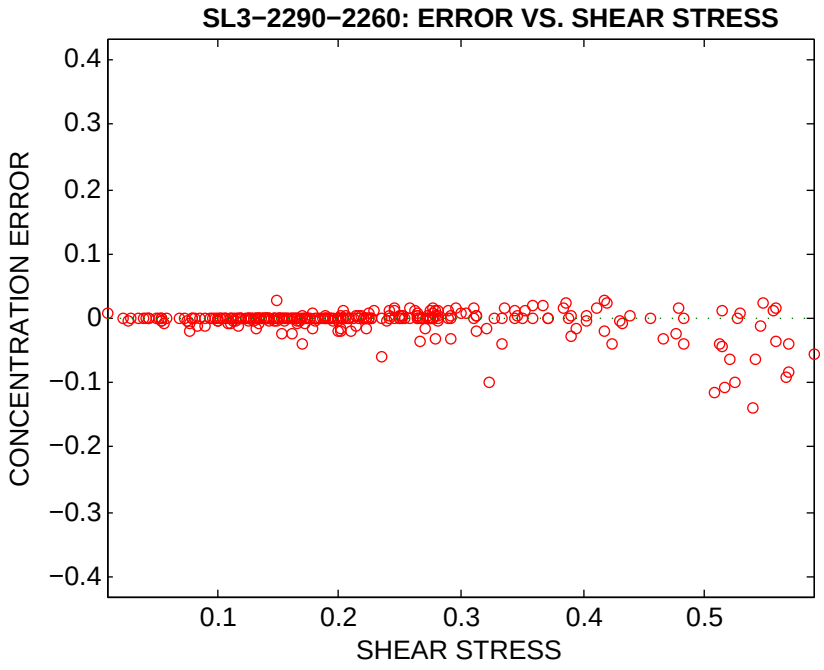


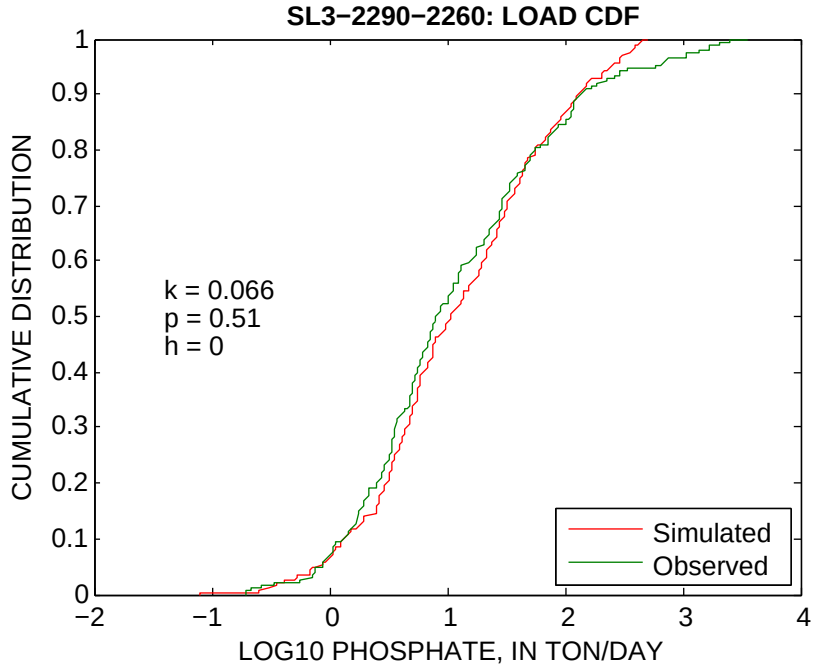


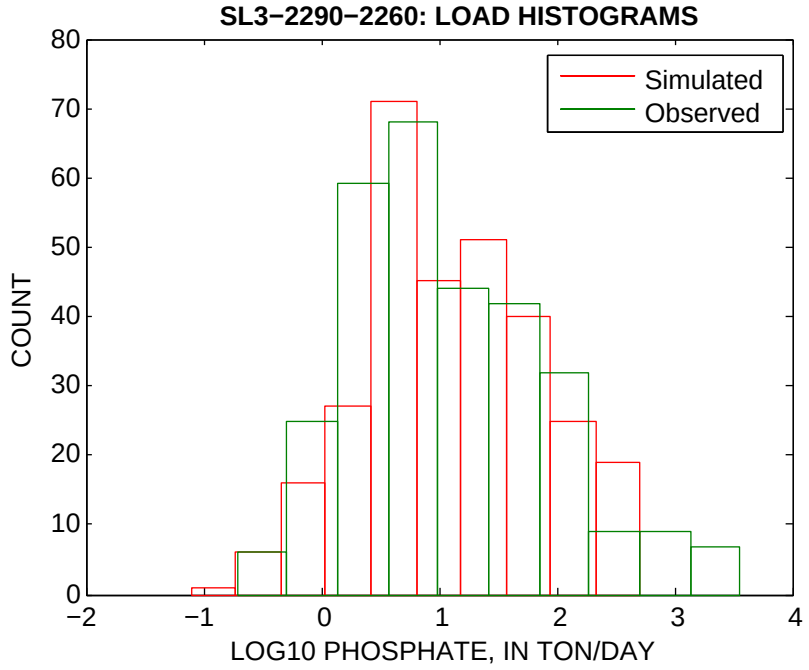


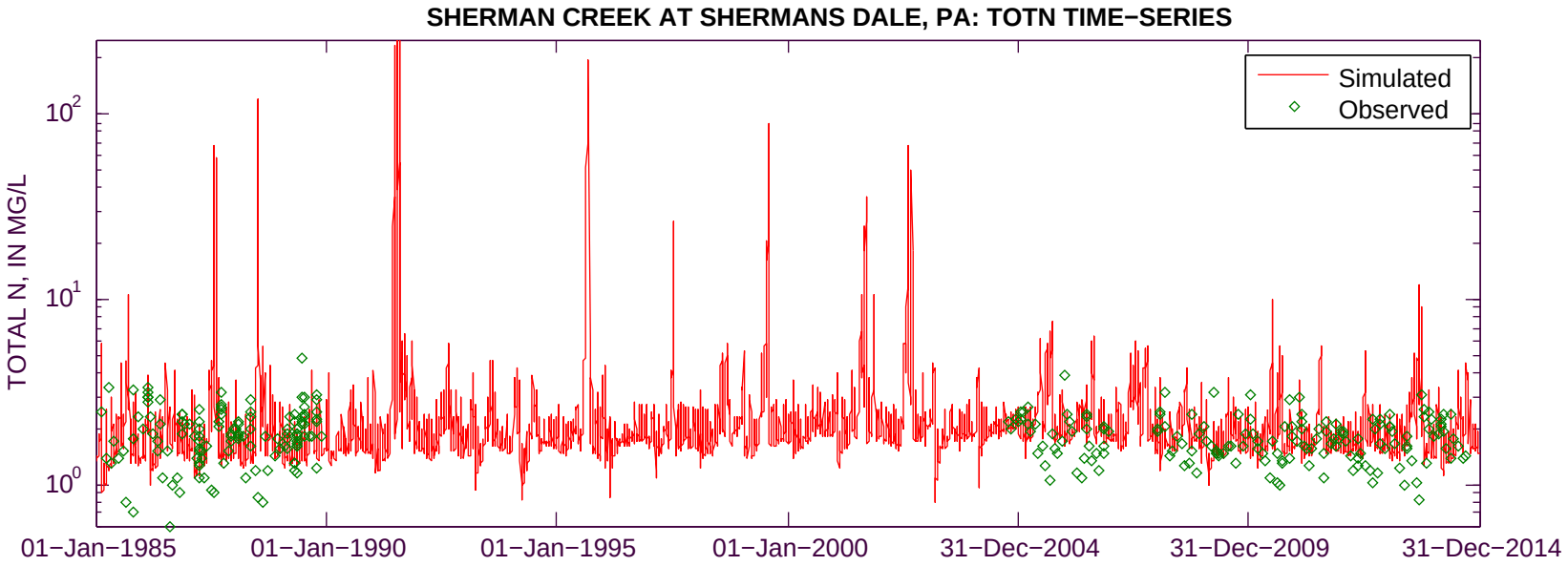
LOAD DATA
LOG10

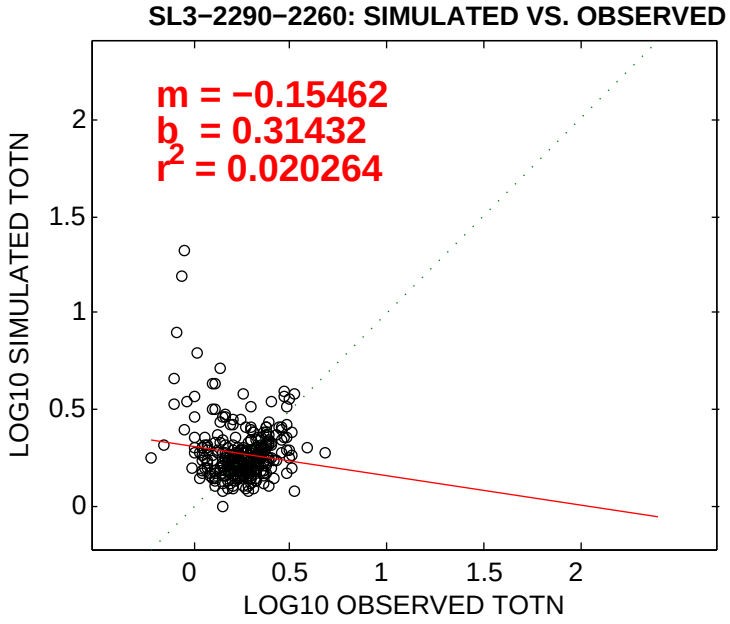


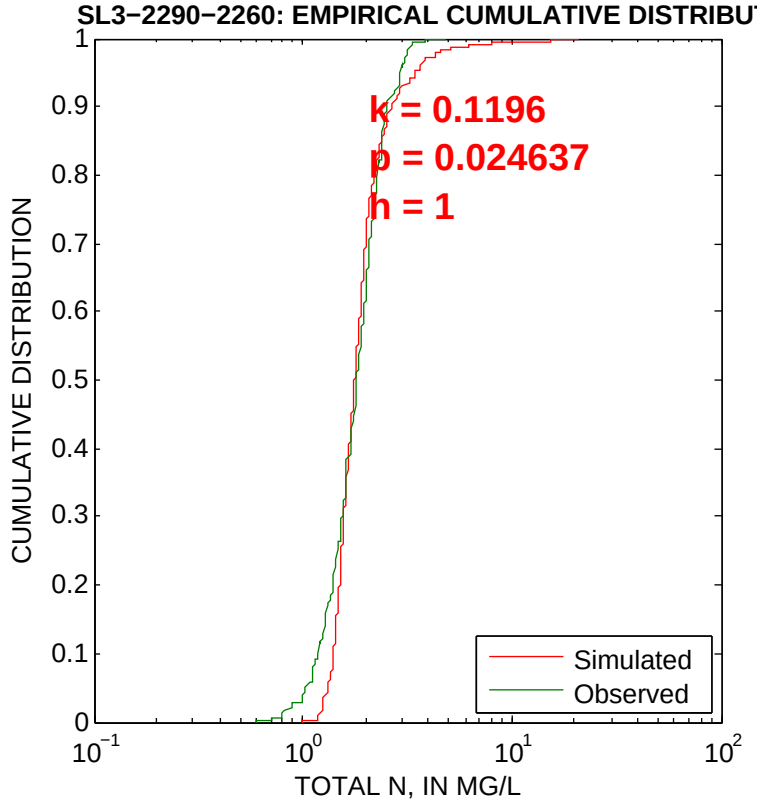












DATA SELECTION

scenario	file
P620171001WQ	TOTN.calib

plot: TOTN - total nitrogen

Dates: 1/1/1985 – 12/31/201

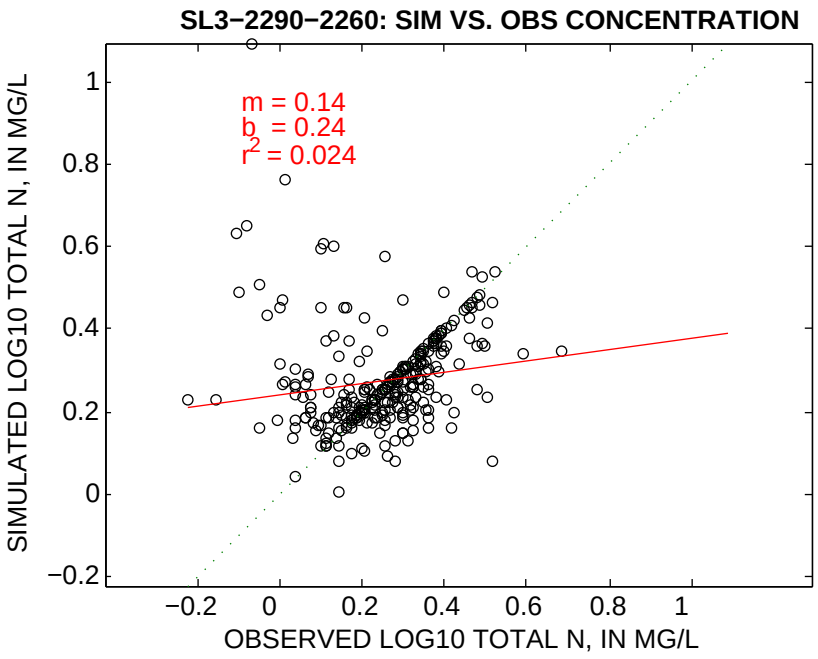
Drive	Directory	Observed
N/A	model	OBS20161101

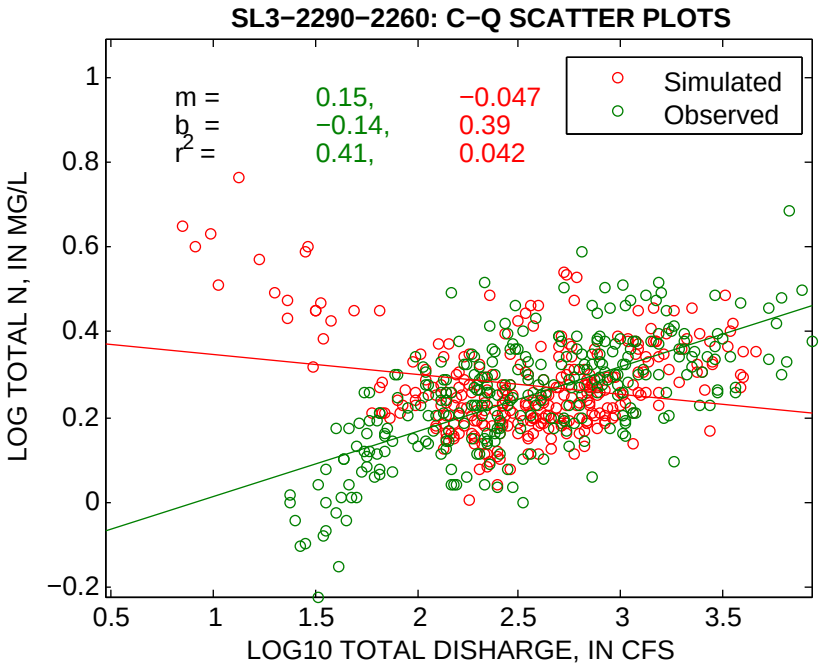
STATISTICS

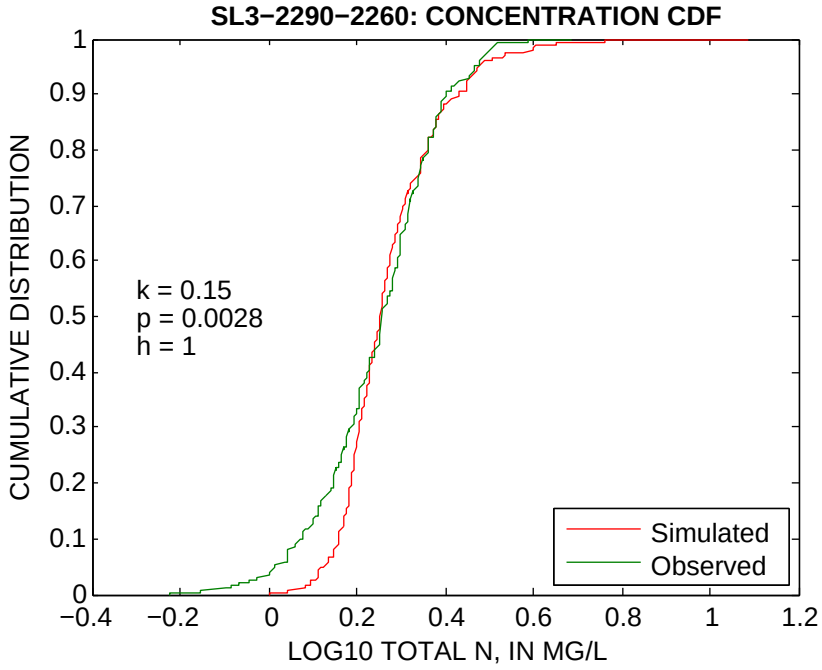
	n	301	301
		observe	simulate
min		0.6	1.0049
		-0.221849	0.00212285
mean		1.86726	2.0546
		0.250818	0.275542
media		1.8	1.7697
		0.255273	0.2479
max		4.85235	21.018
		0.685952	1.32259
varian		0.331304	2.32617
		0.018229	0.0215062
JB		0.001	0.001
		0.037893	0.001
		ra	log
%		10.033	9.85735
err.va		2.93478	0.0459857
rel.std.err		8.85827	2.52266
mod.eff		-7.85827	-1.52266

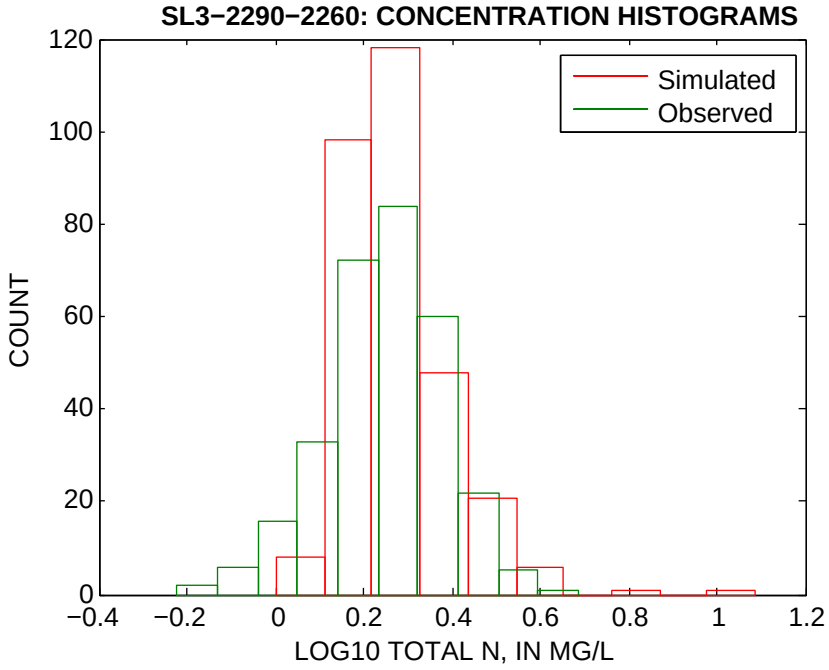
VERSION 2.1

ALL DATA
LOG10

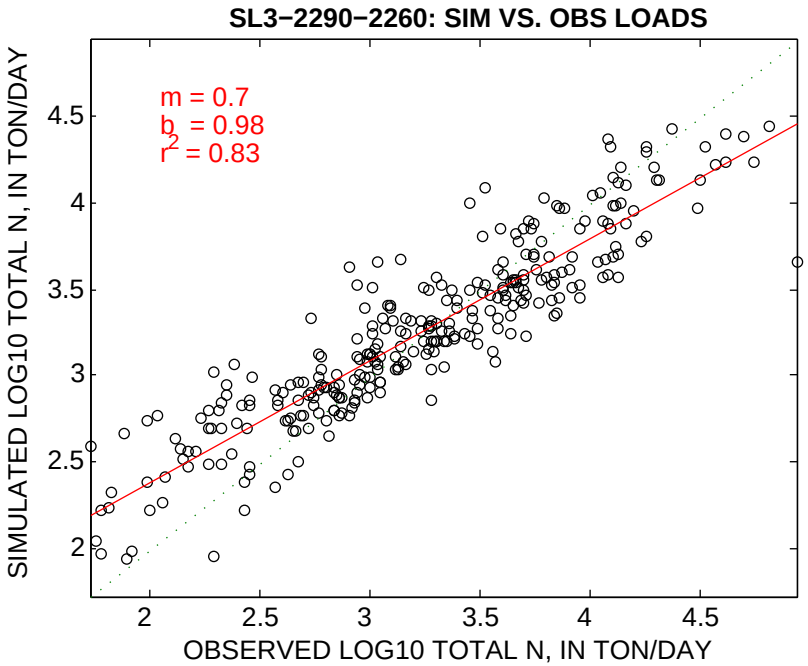


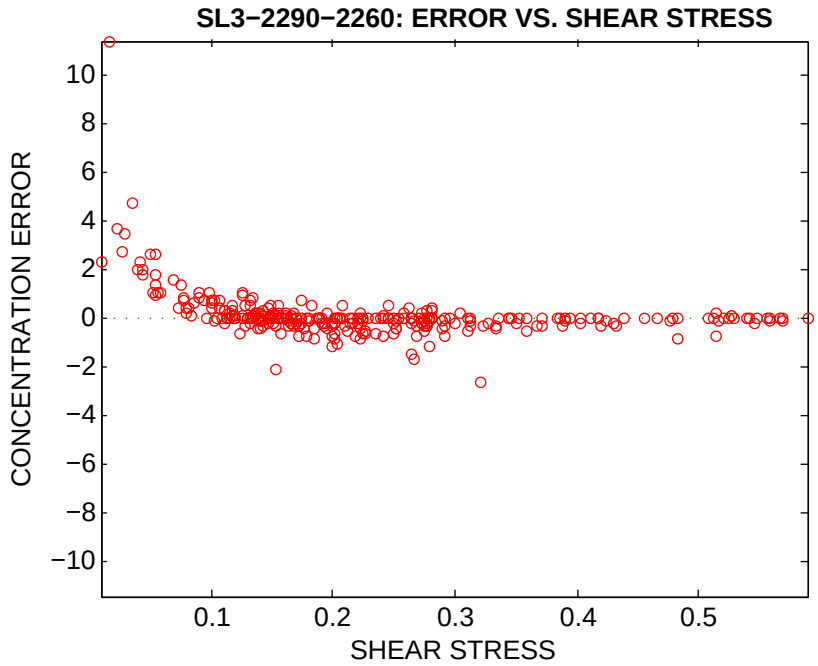


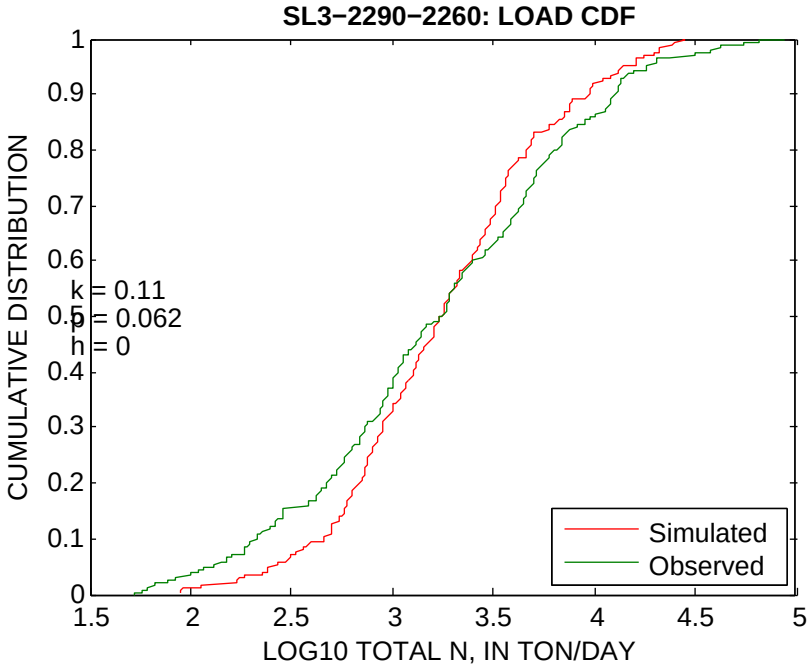


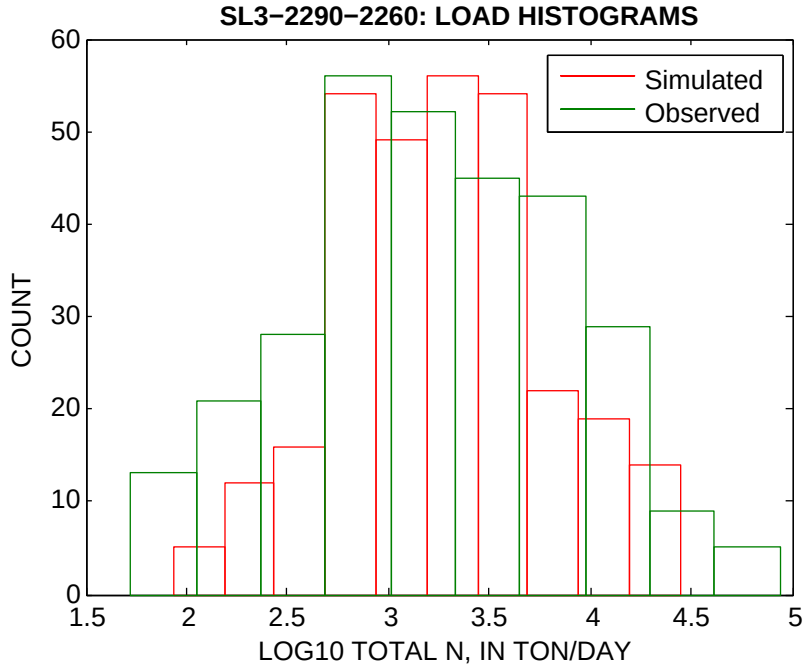


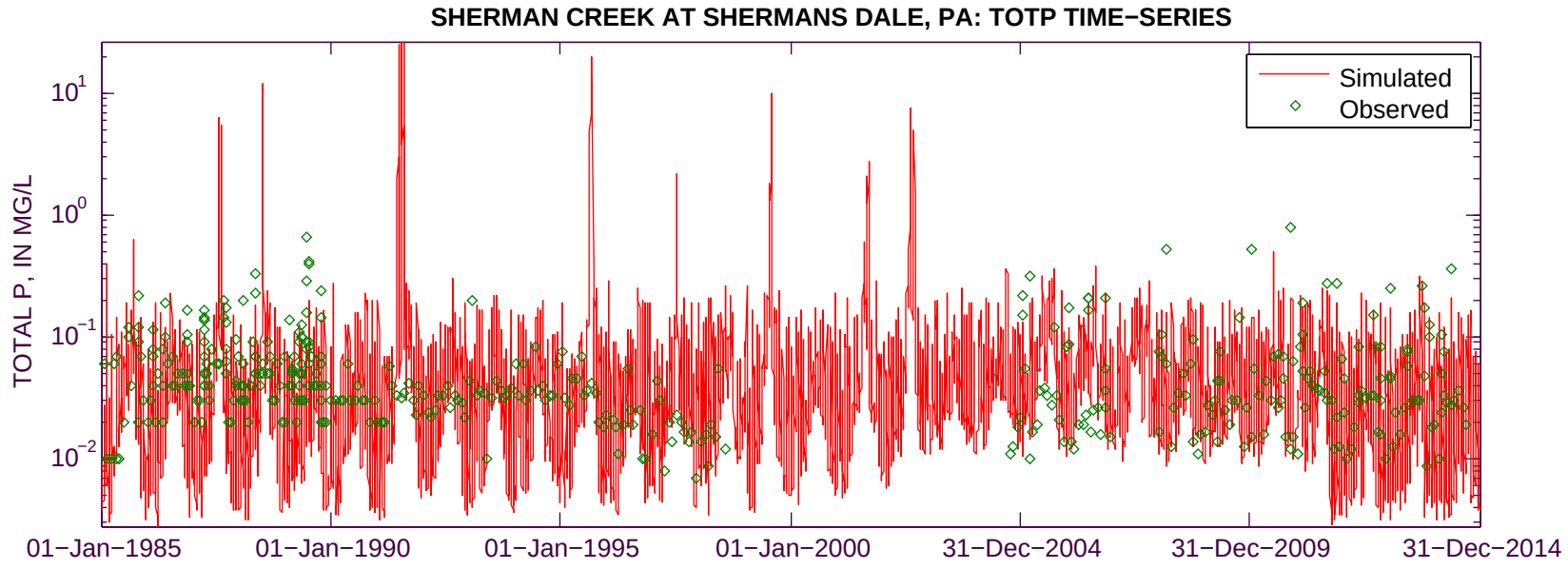
LOAD DATA
LOG10

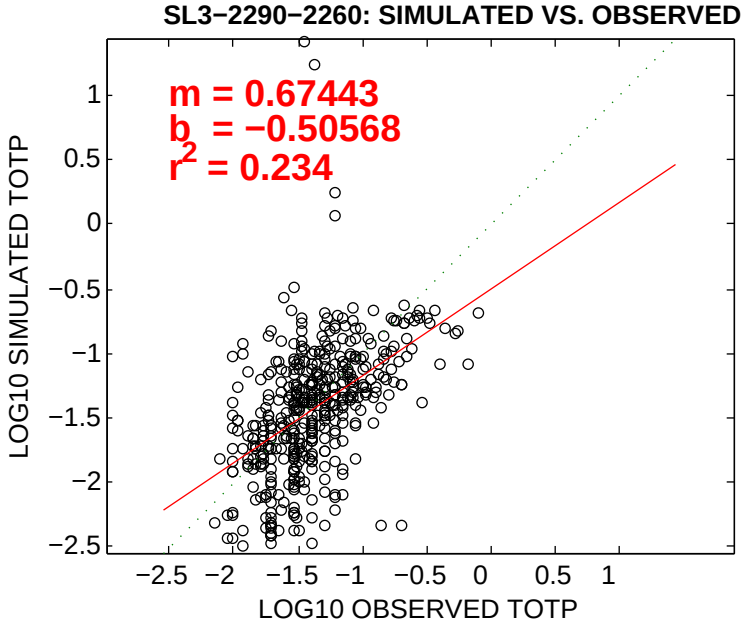


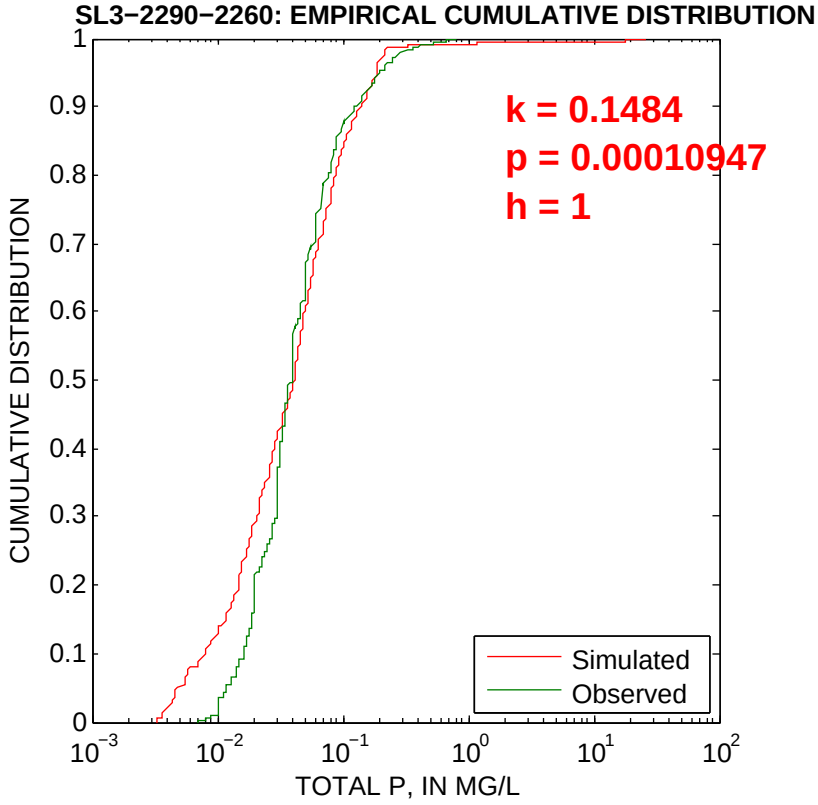












DATA SELECTION

scenario	file
P620171001WQ	TOTP.calib

plot: TOTP - total phosphorus

Dates: 1/1/1985 – 12/31/201

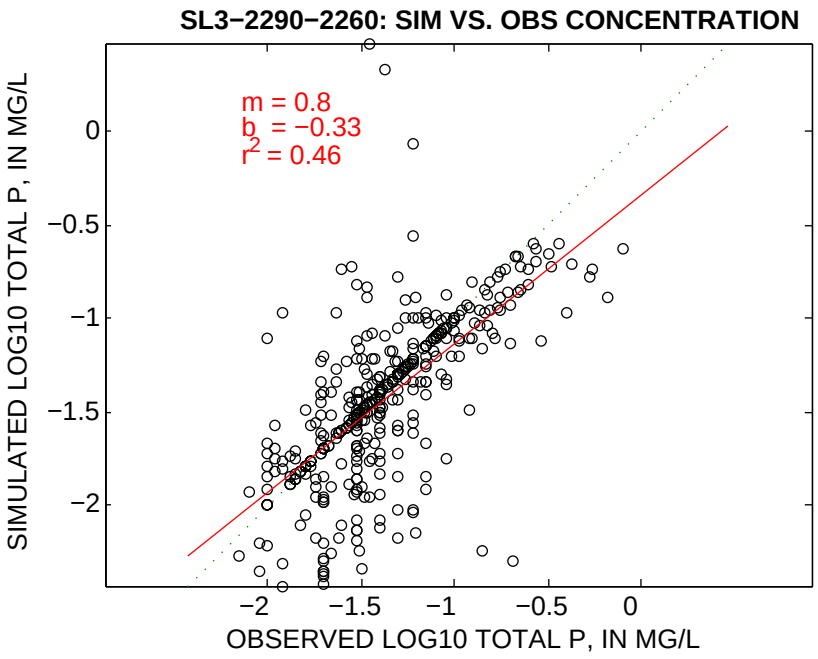
Drive	Directory	Observed
N/A	model	OBS20161101

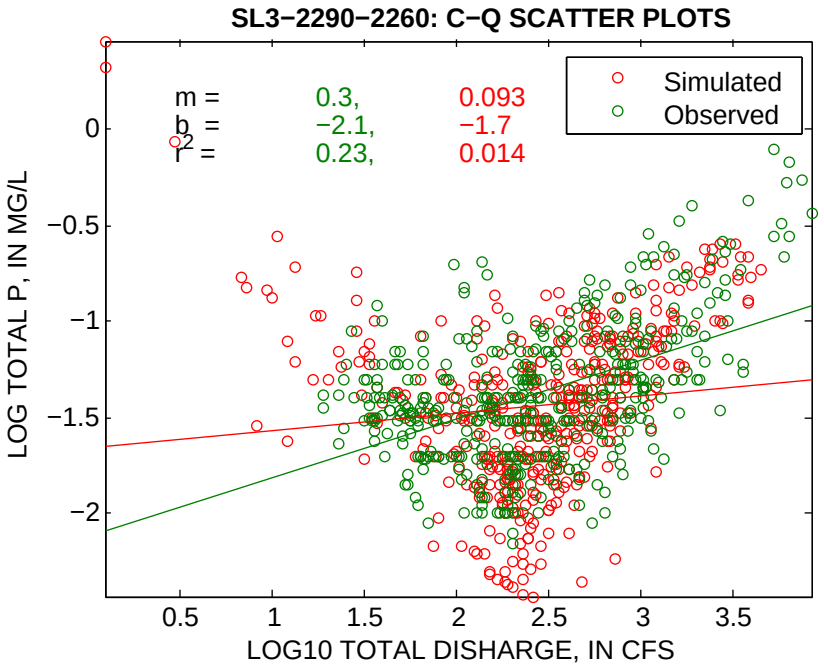
STATISTICS

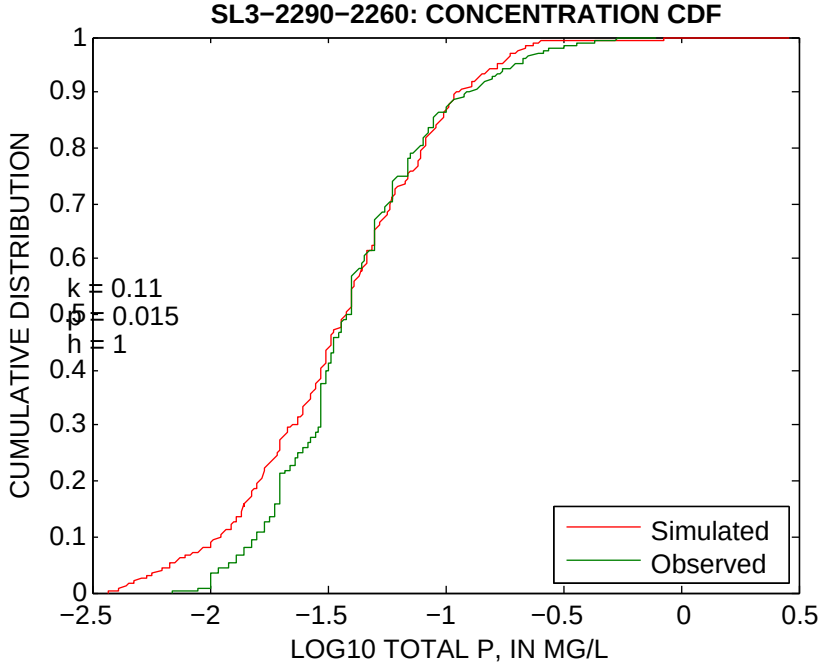
	n	observe	simulate
		438	438
min		0.007	0.0032416
		-2.1549	-2.48924
mean		0.0623805	0.163399
		-1.37906	-1.43576
media		0.04	0.041275
		-1.39794	-1.38432
max		0.793	26.812
		-0.100727	1.42833
varian		0.00659013	2.35583
		0.126108	0.245125
JB		0.001	0.001
		0.001	0.001
		ra	log
%		161.939	4.11141
err.va		2.37364	0.204354
rel.std.err		360.18	1.62047
mod.eff		-359.18	-0.620474

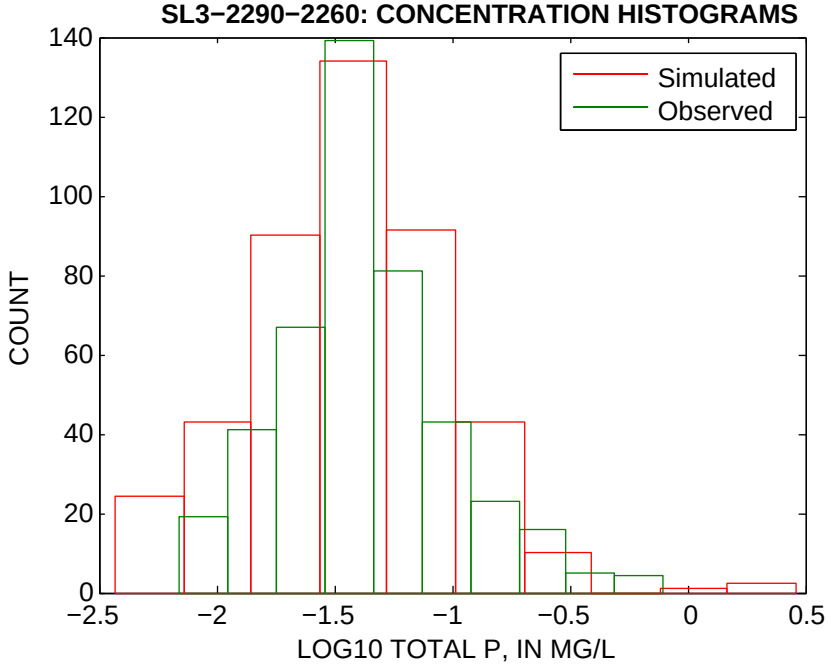
VERSION 2.1

ALL DATA
LOG10

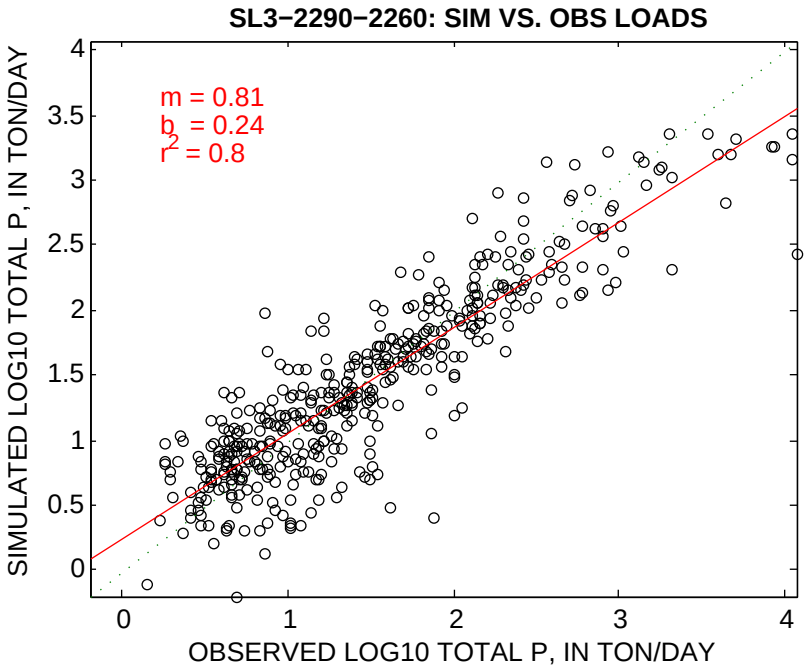


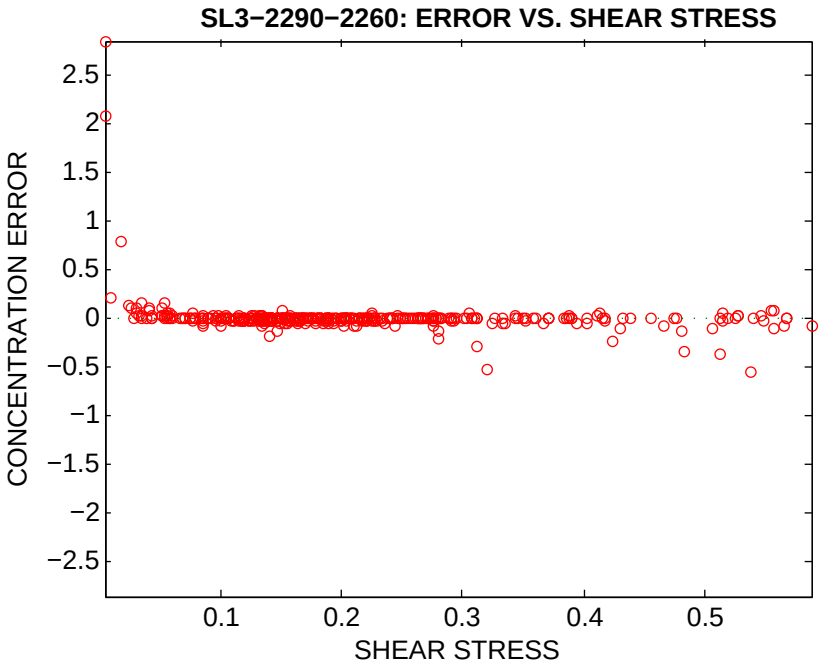


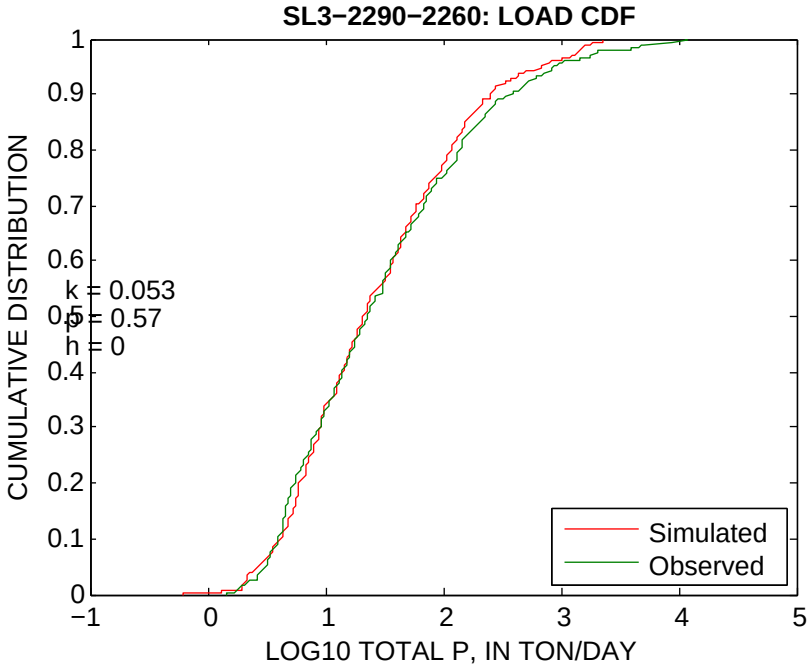


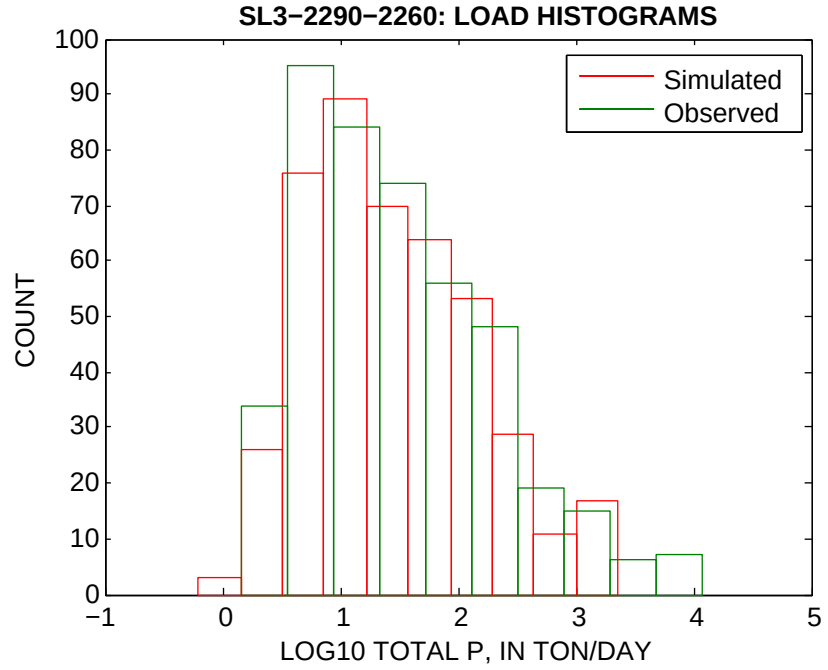


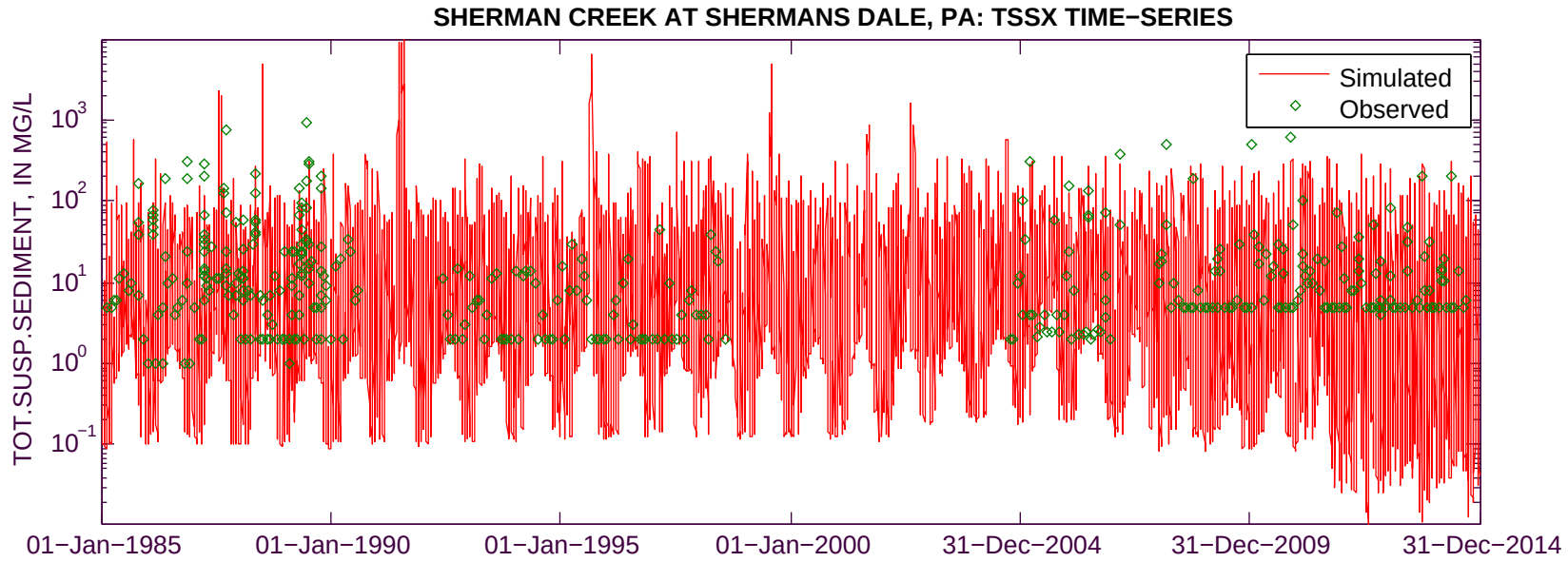
LOAD DATA
LOG10

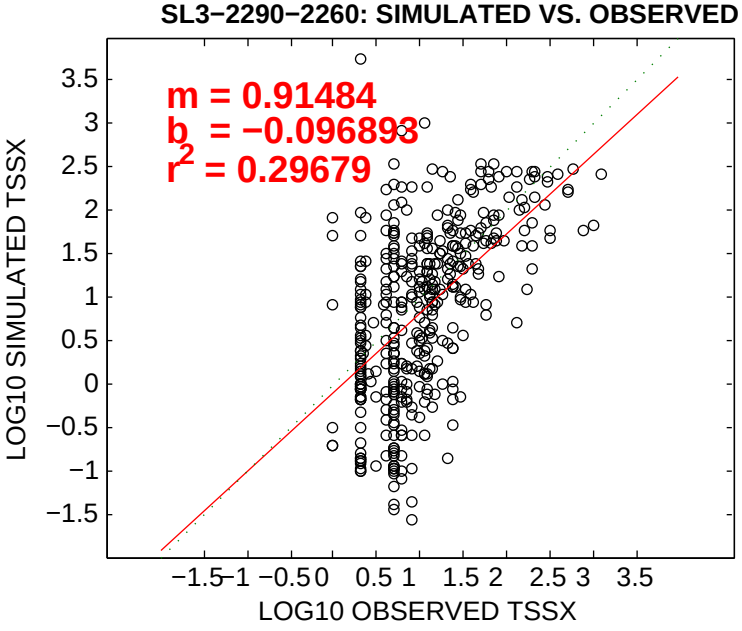


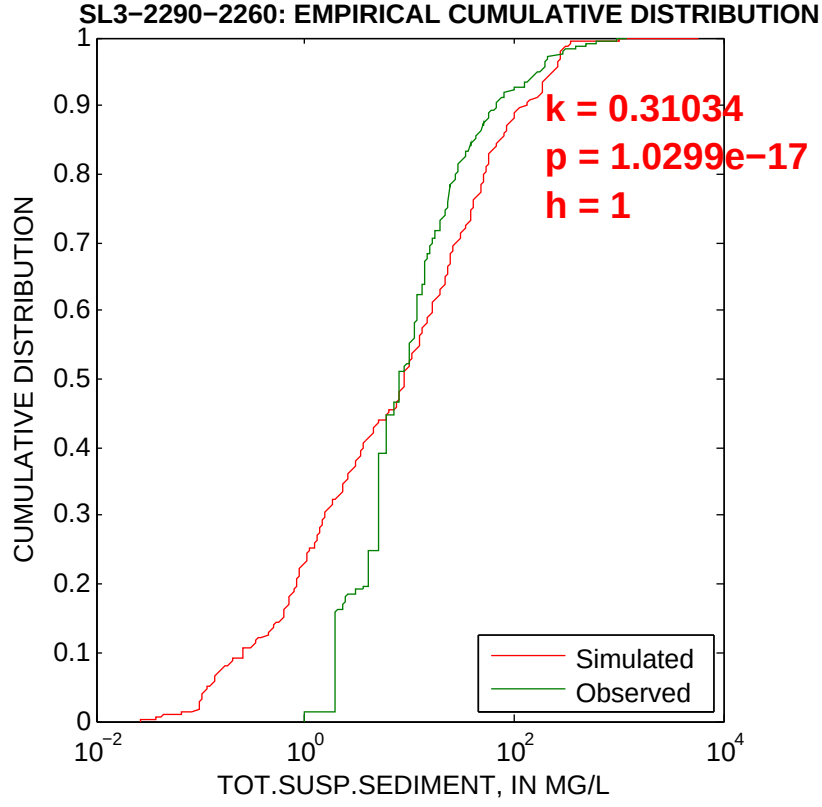












DATA SELECTION

scenario: P620171001WQ | file: TSSX.calib

plot: TSSX - total suspended ...

Dates: 1/1/1985 – 12/31/201

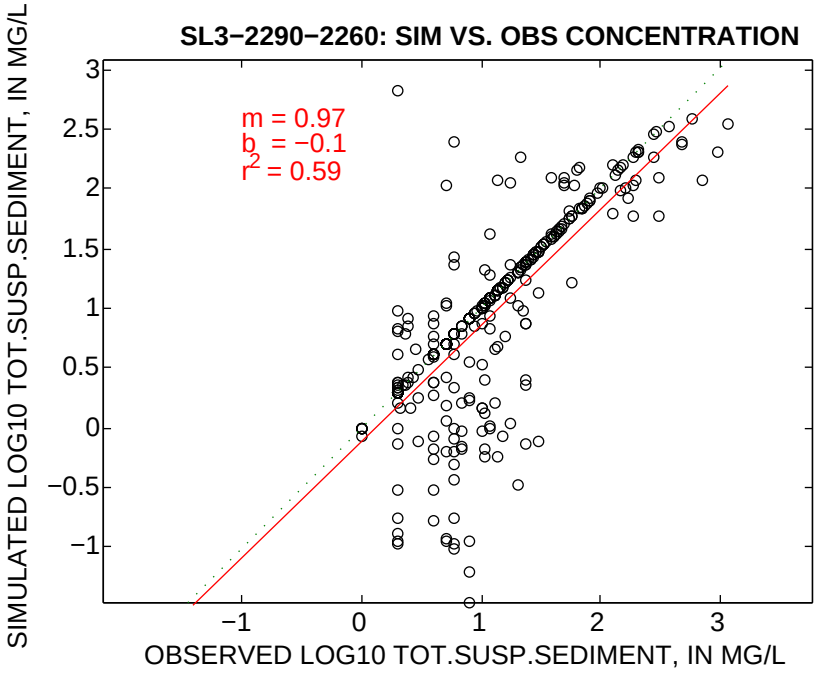
Drive | Directory: N/A | model | Observed: OBS20161101

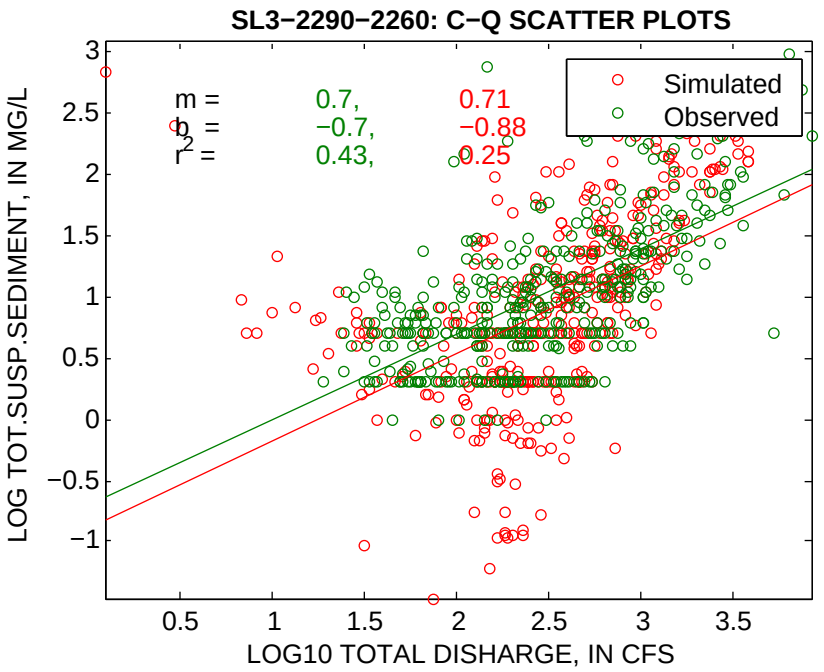
STATISTICS

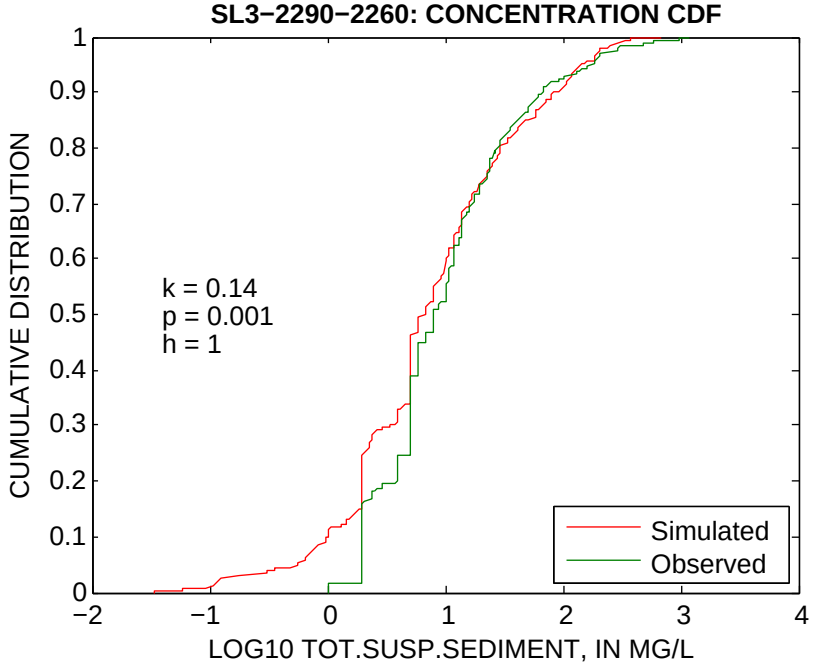
n	406	406
	observe	simulate
min	1	0.027202
	0	-1.5654
mean	36.1776	56.6123
	1.01851	0.834887
media	8	8.92165
	0.90309	0.950444
max	1181	5723
	3.07225	3.75762
varian	11043.1	88303.6
	0.349749	0.986267
JB	0.001	0.001
	0.001	0.013011
	ra	log
%	56.4845	-18.0289
err.va	94781.2	0.729888
rel.std.err	8.58287	2.08689
mod.eff	-7.58287	-1.08689

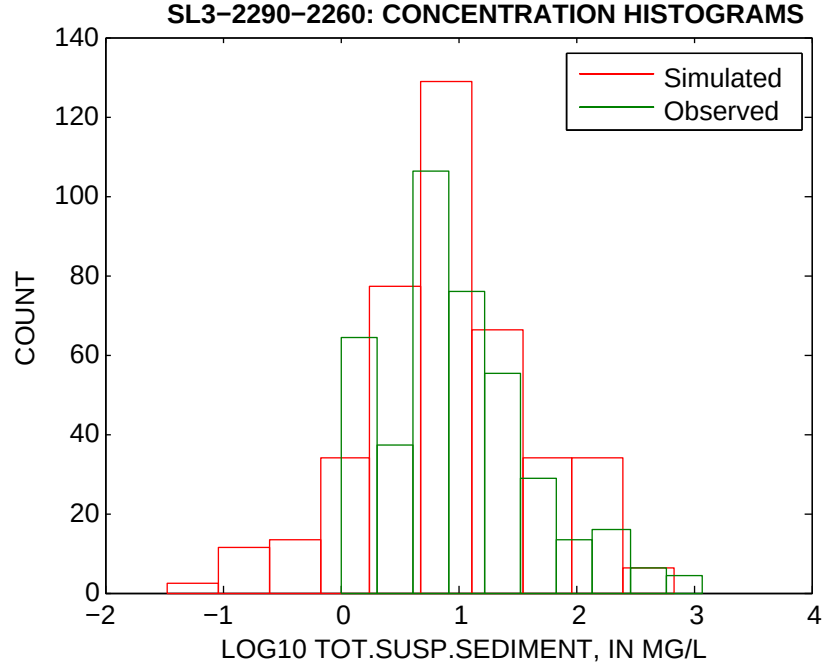
VERSION 2.1

ALL DATA
LOG10

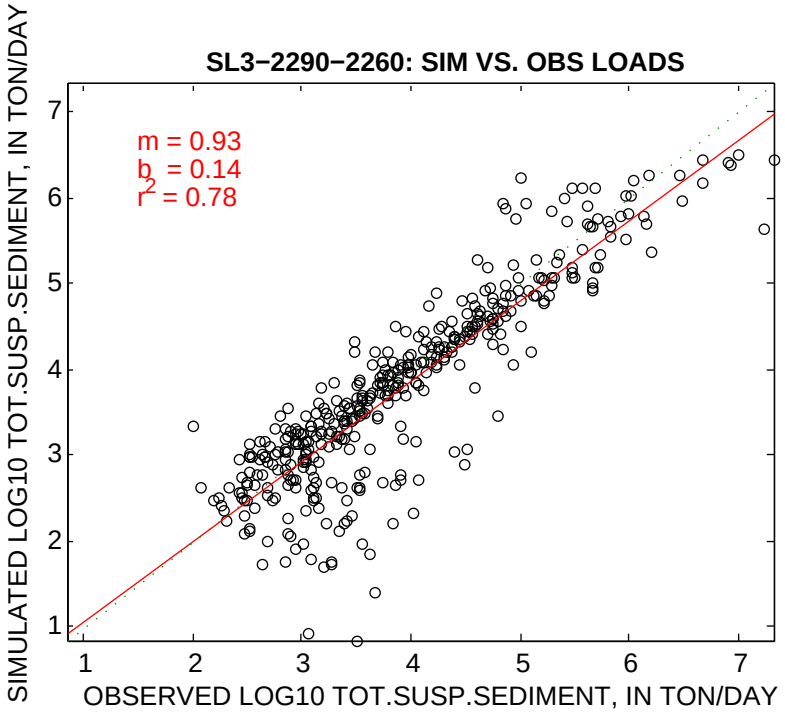


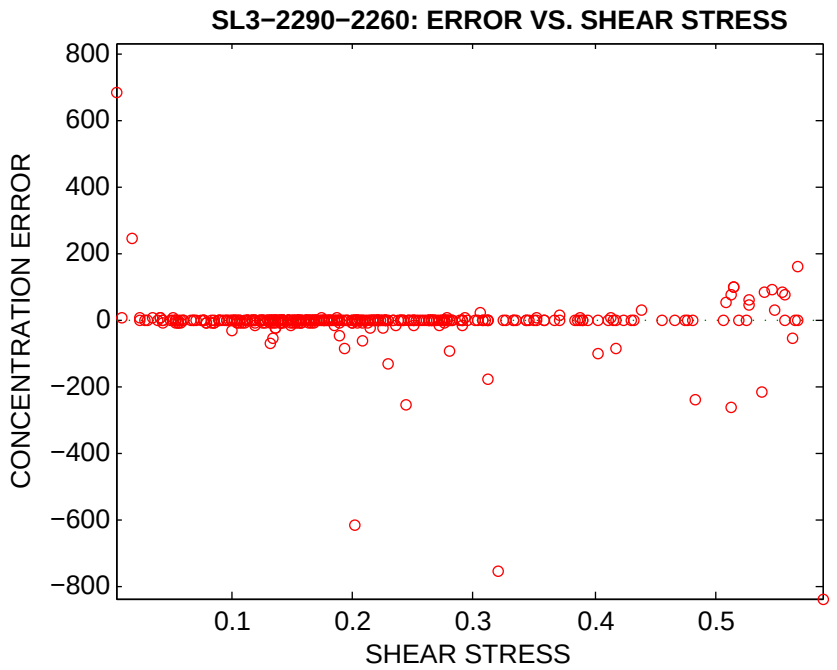


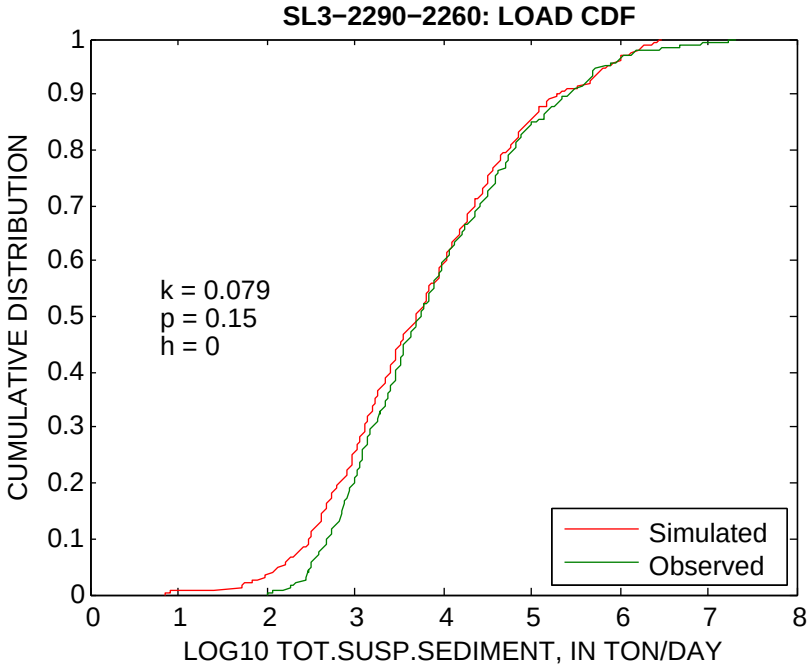


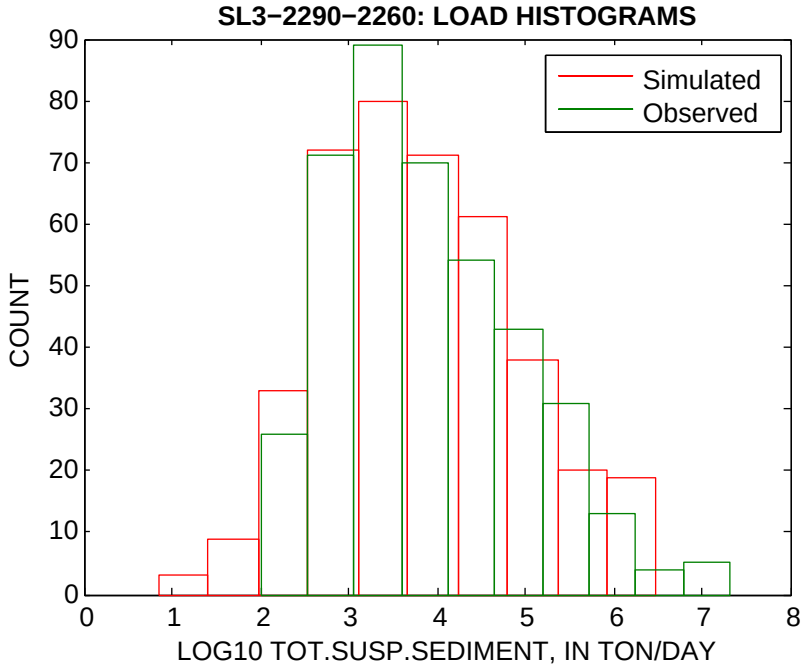


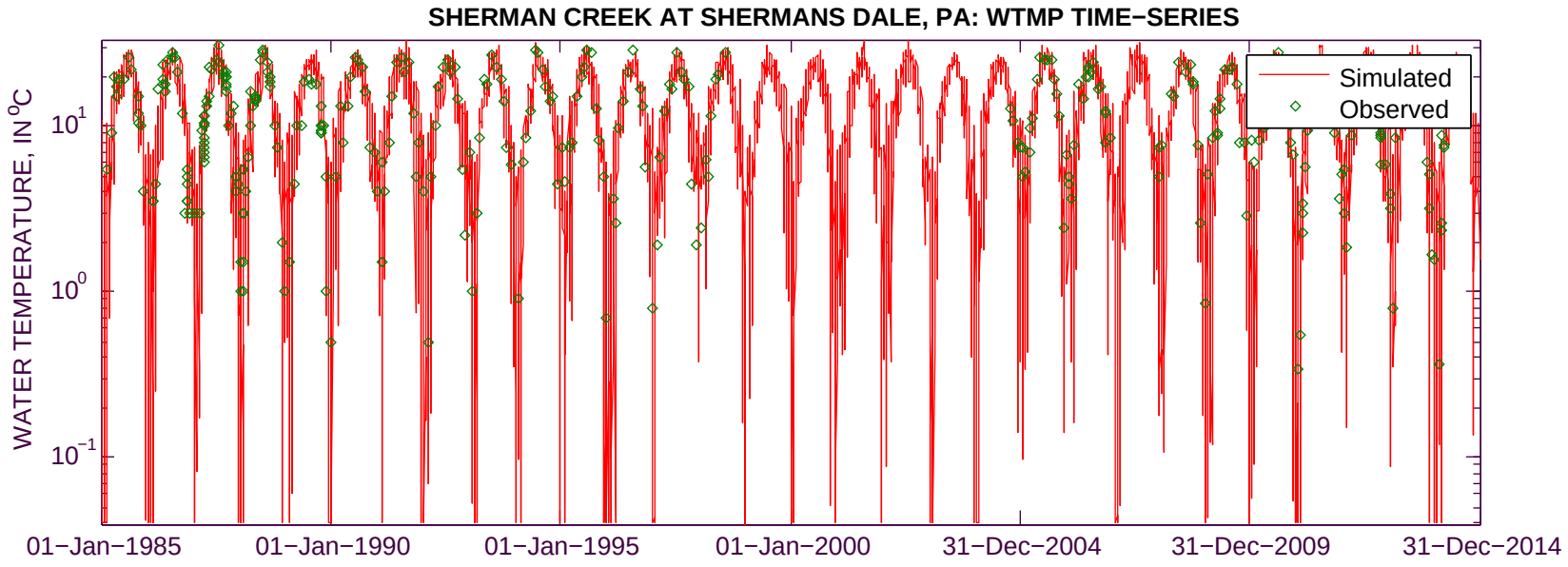
LOAD DATA
LOG10

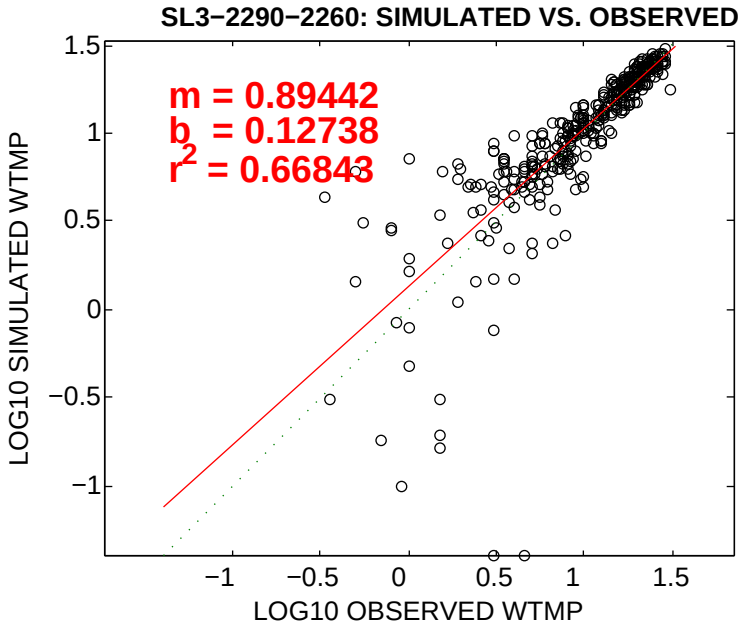


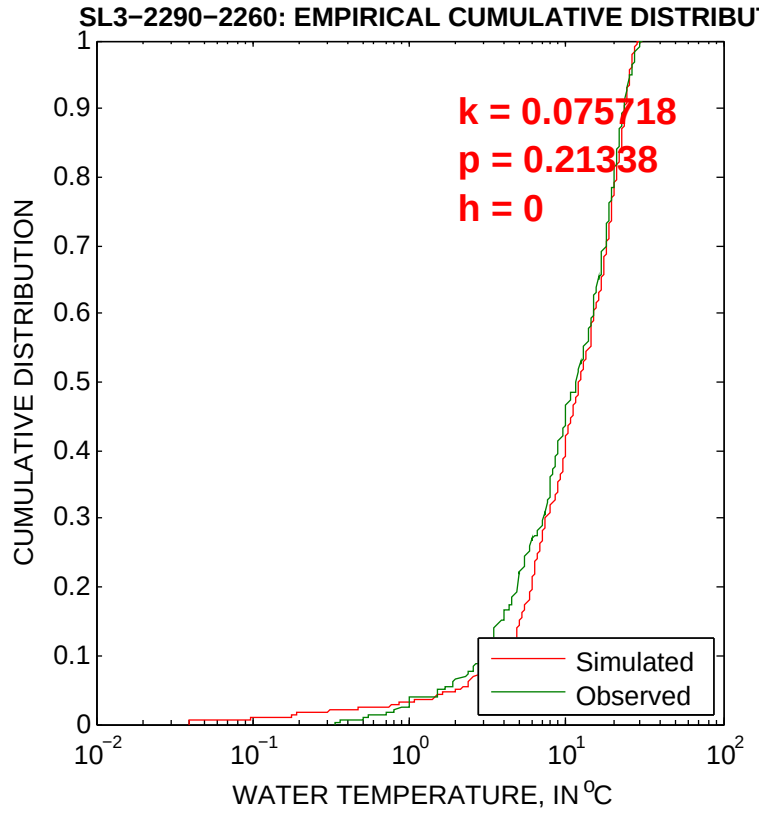












DATA SELECTION

scenario	file
P620171001WQ	WTMP.calib

plot: WTMP - water tempera...

Dates: 1/1/1985 – 12/31/201

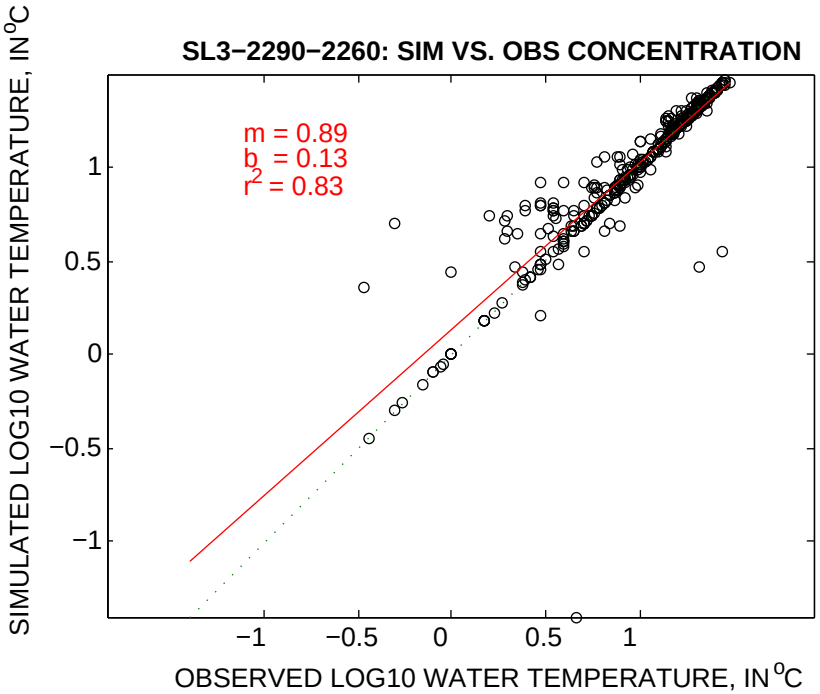
Drive	Directory	Observed
N/A	model	OBS20161101

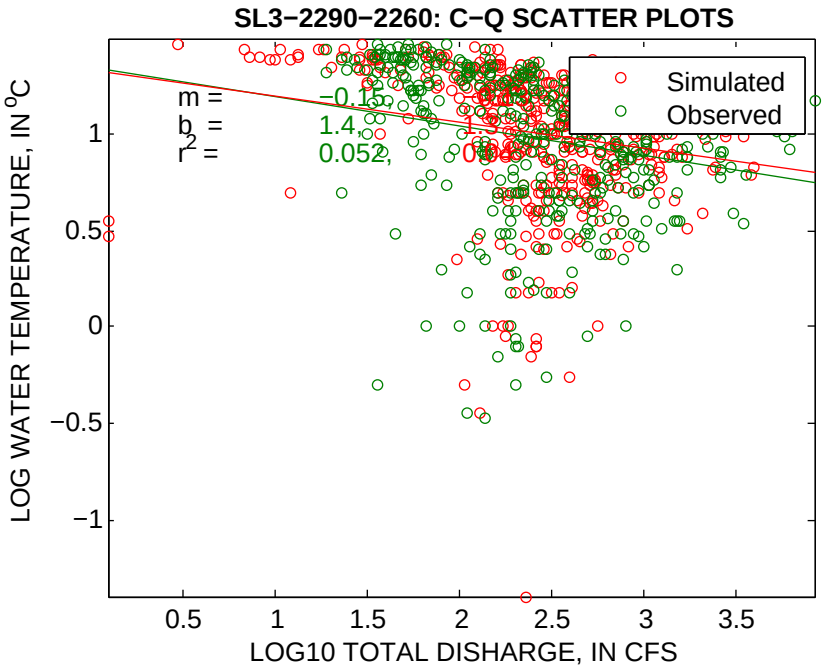
STATISTICS

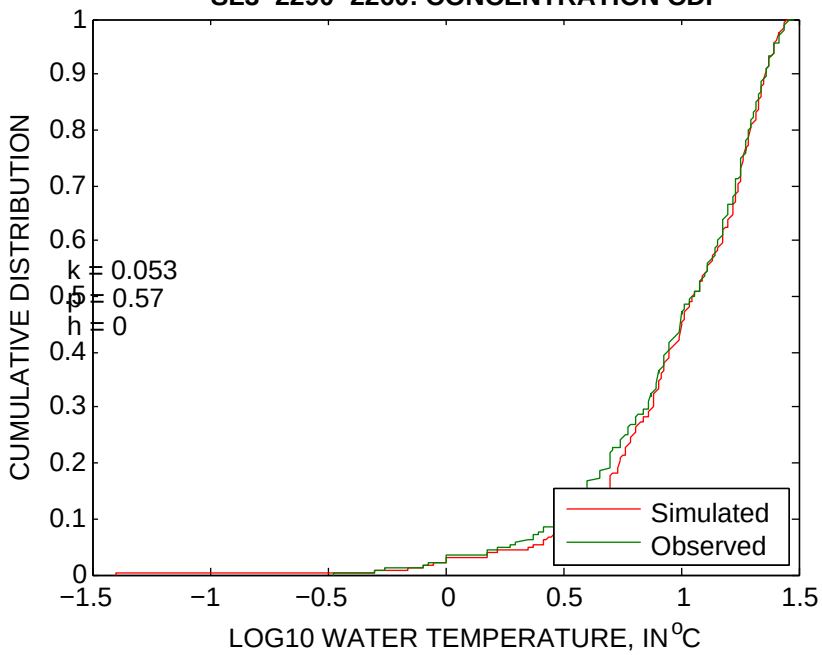
	n	observe	simulate
		383	383
min		0.34	0.040033
		-0.468521	-1.39758
mean		12.5499	13.1886
		0.97537	0.999774
media		11.5	12.284
		1.0607	1.08934
max		30.5	30.325
		1.4843	1.4818
varian		59.518	56.5943
		0.14692	0.175838
JB		0.001189	0.001488
		0.001	0.001
		ra	log
%		5.08878	2.50195
err.va		6.26972	0.060538
rel.std.err		0.105342	0.412048
mod.eff		0.894658	0.587952

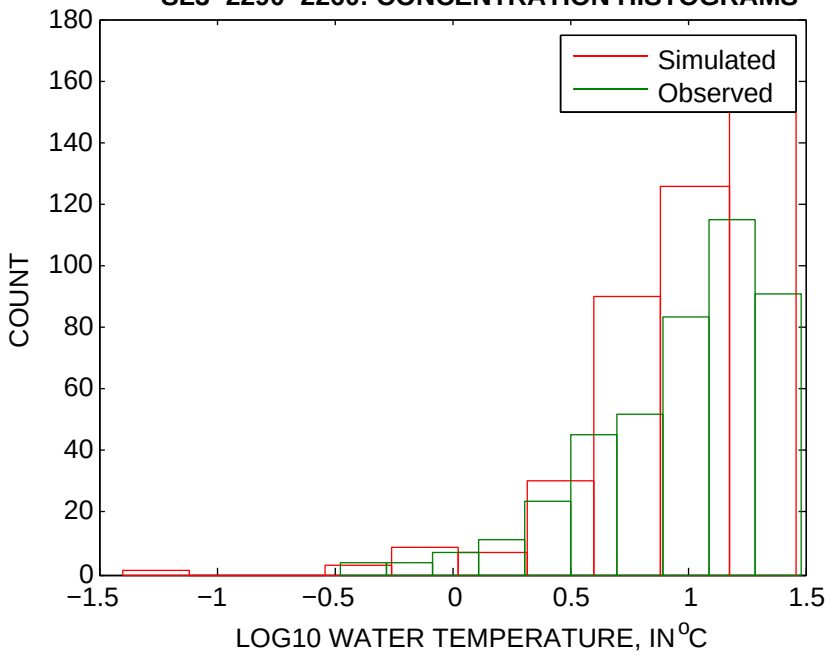
VERSION 2.1

ALL DATA
LOG10

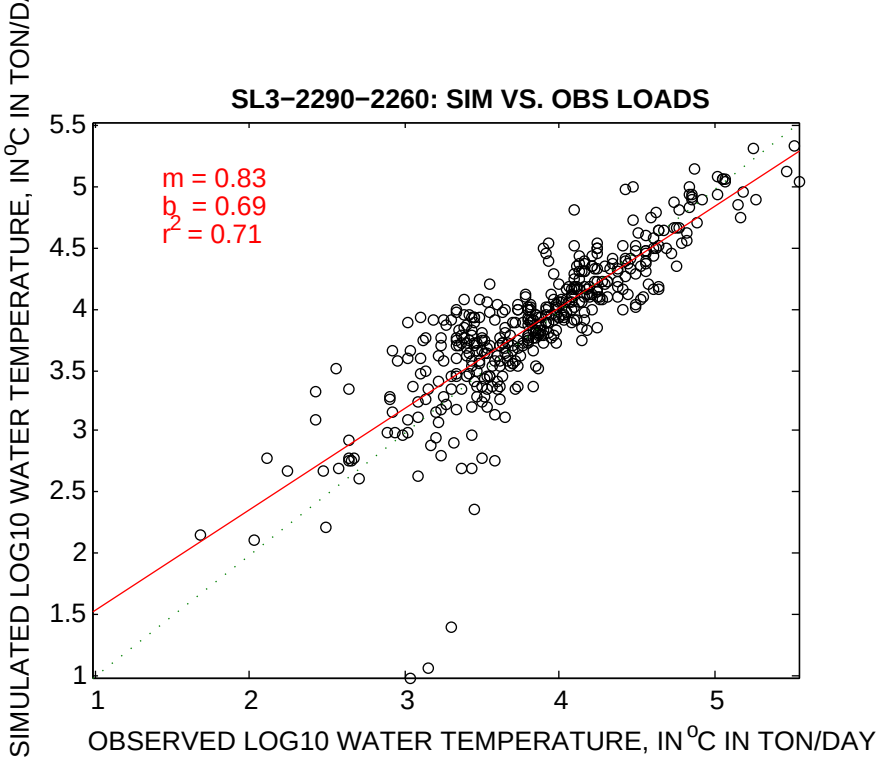


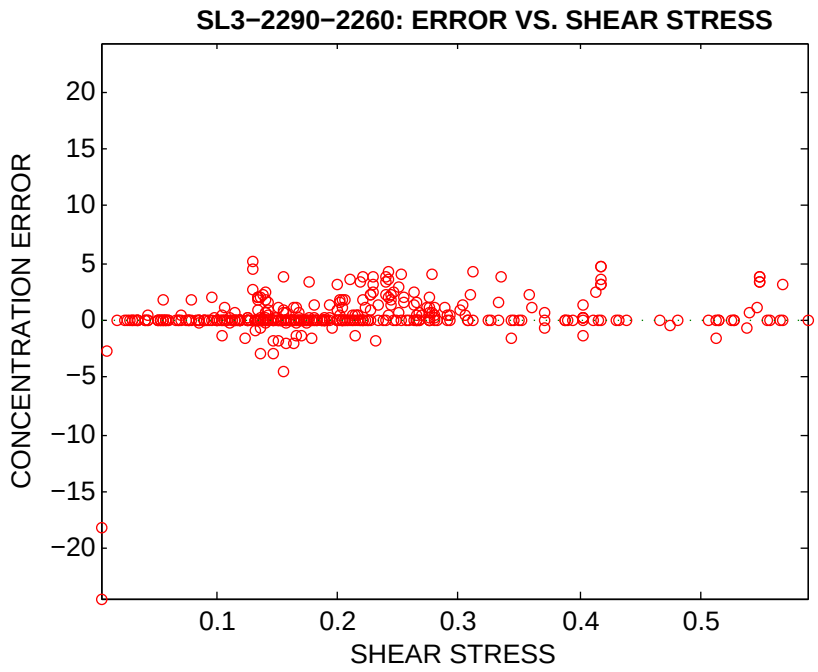


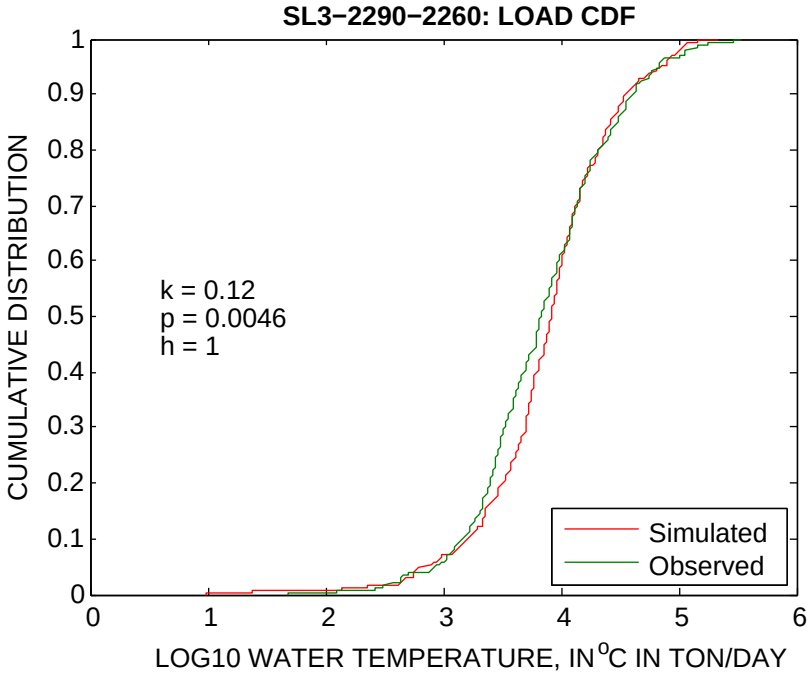


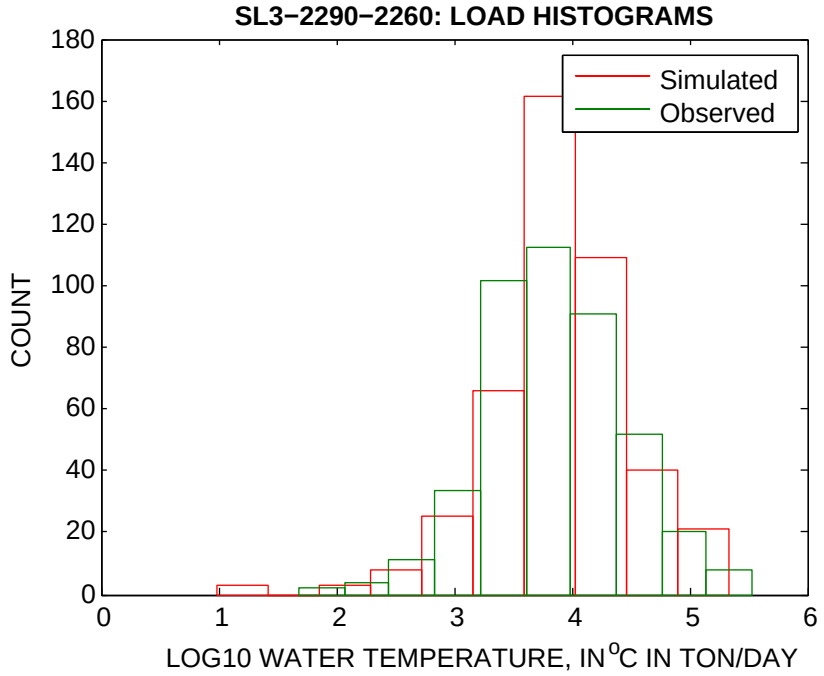


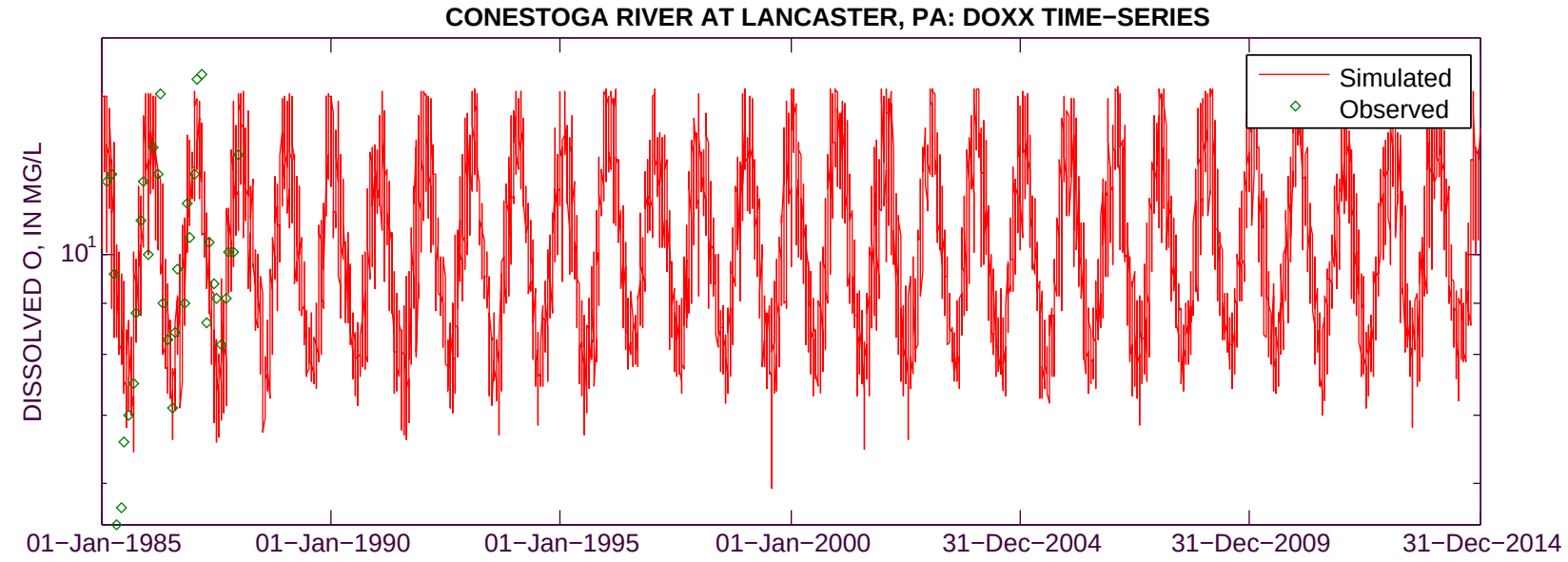
LOAD DATA
LOG10

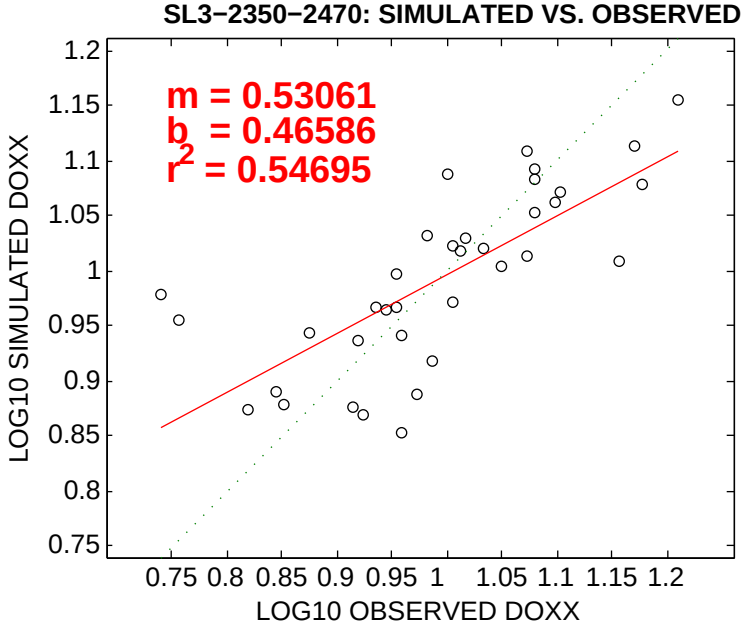


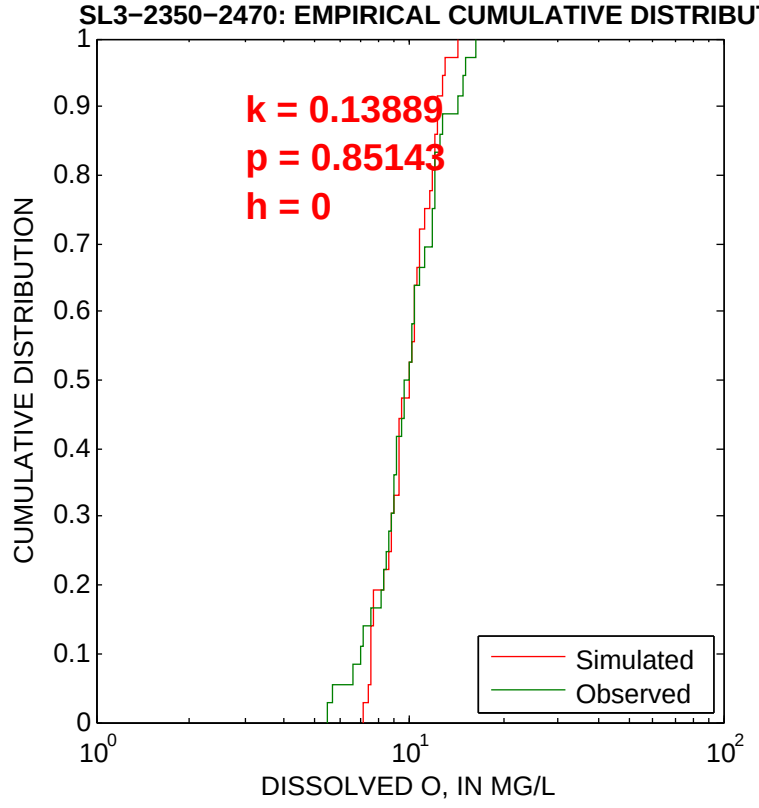












DATA SELECTION

scenario: P620171001WQ; file: DOXX.calib

plot: DOXX - dissolved oxygen

Dates: 1/1/1985 – 12/31/201

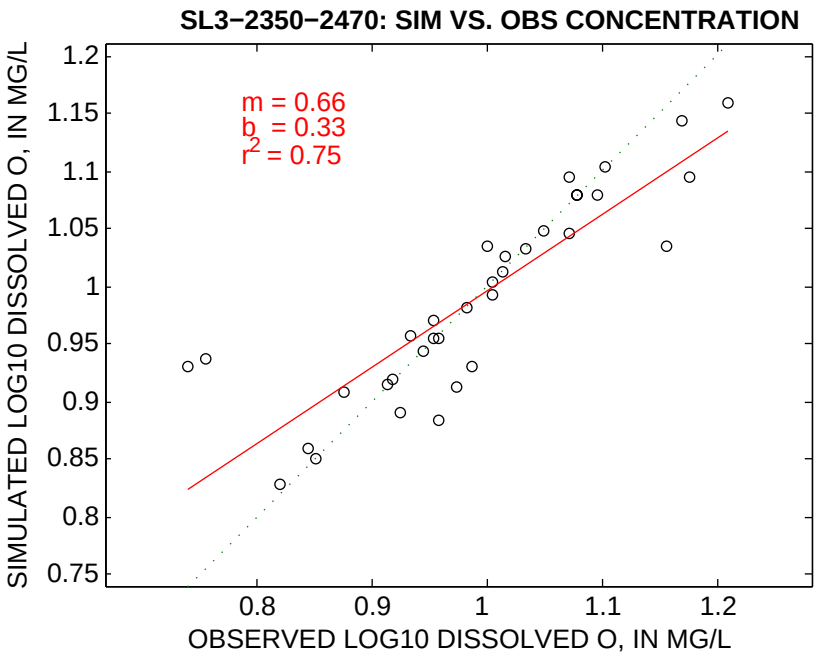
Drive: N/A; Directory: model; Observed: OBS20161101

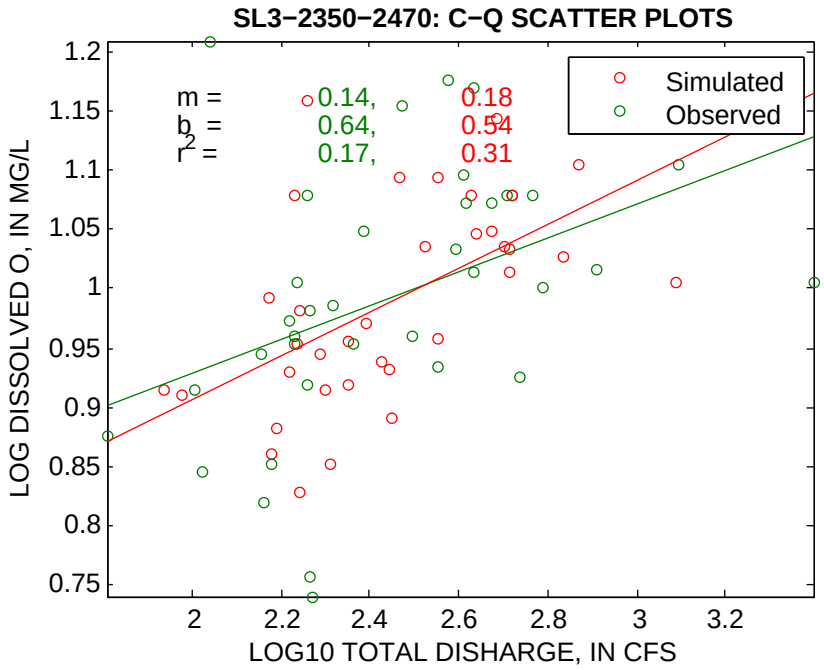
STATISTICS

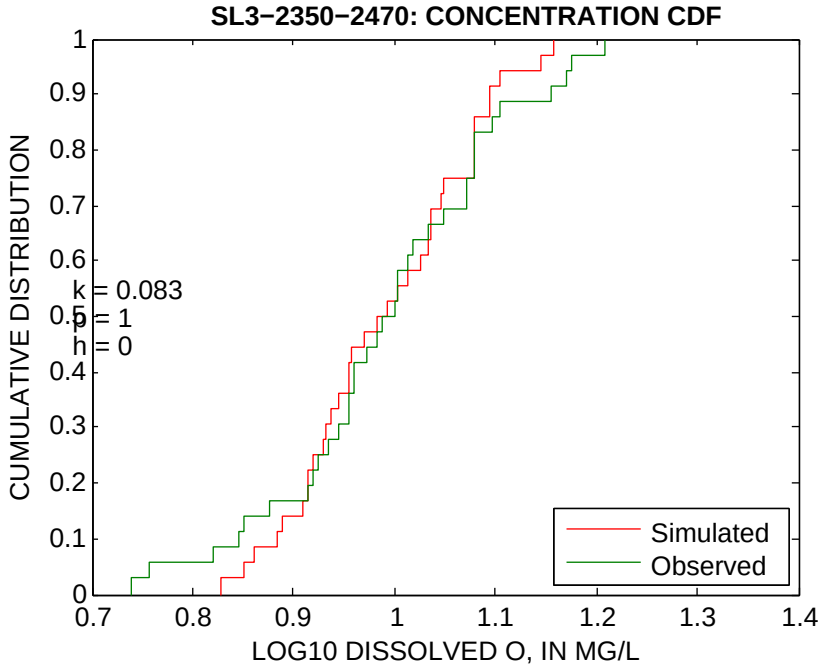
	n	36	36
		observe	simulate
min		5.5	7.1251
		0.740363	0.852791
mean		10.1278	9.98374
		0.991846	0.992138
media		9.85	10.0098
		0.993386	1.00042
max		16.2	14.283
		1.20952	1.15482
varian		6.54378	3.37852
		0.0124603	0.00641398
JB		0.458101	0.384418
		0.5	0.383715
		ra	log
%		-1.42222	0.0293914
err.va		2.55721	0.00565131
rel.std.err		0.390786	0.453546
mod.eff		0.609214	0.546454

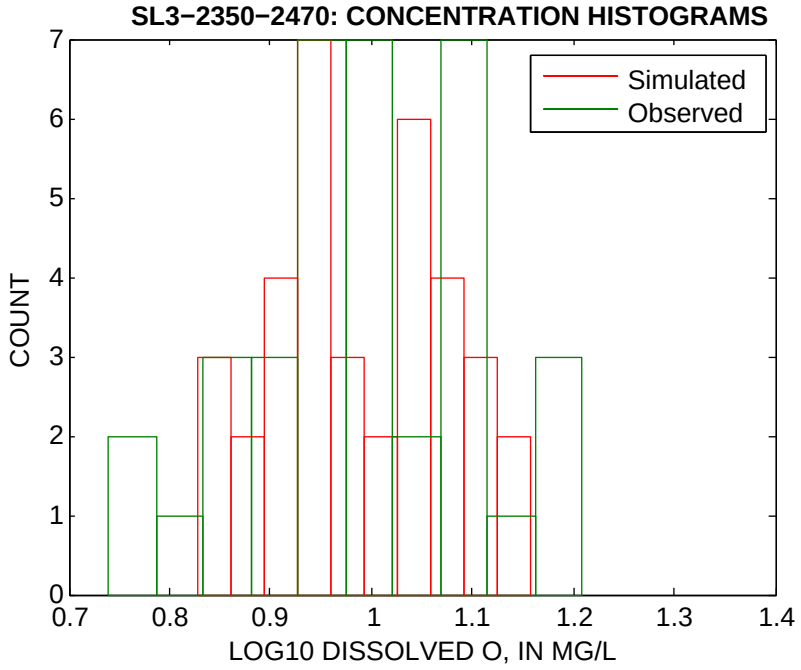
VERSION 2.1

ALL DATA
LOG10

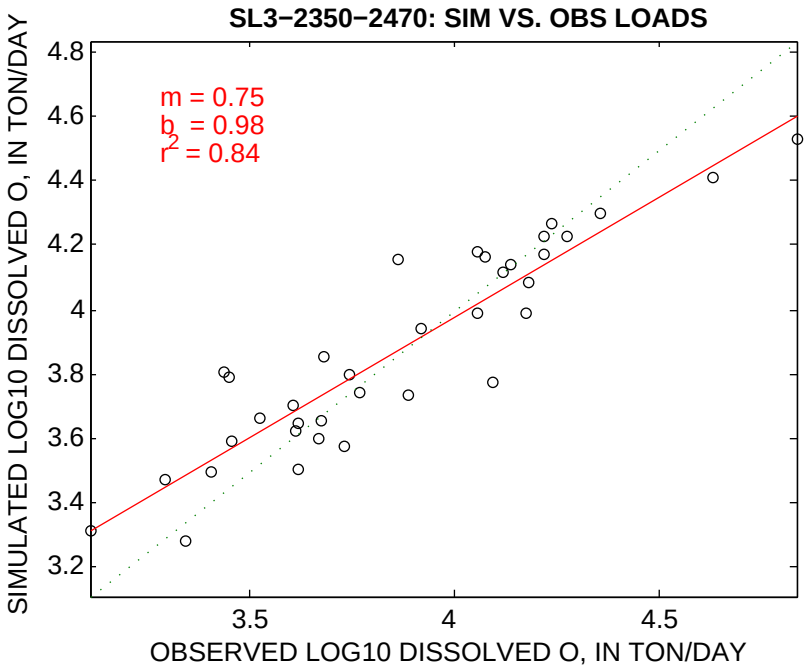


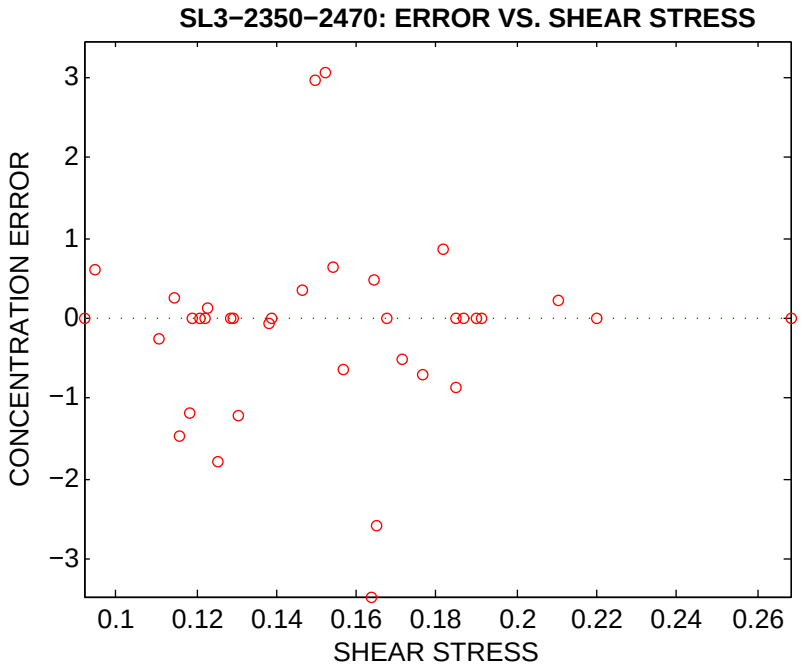


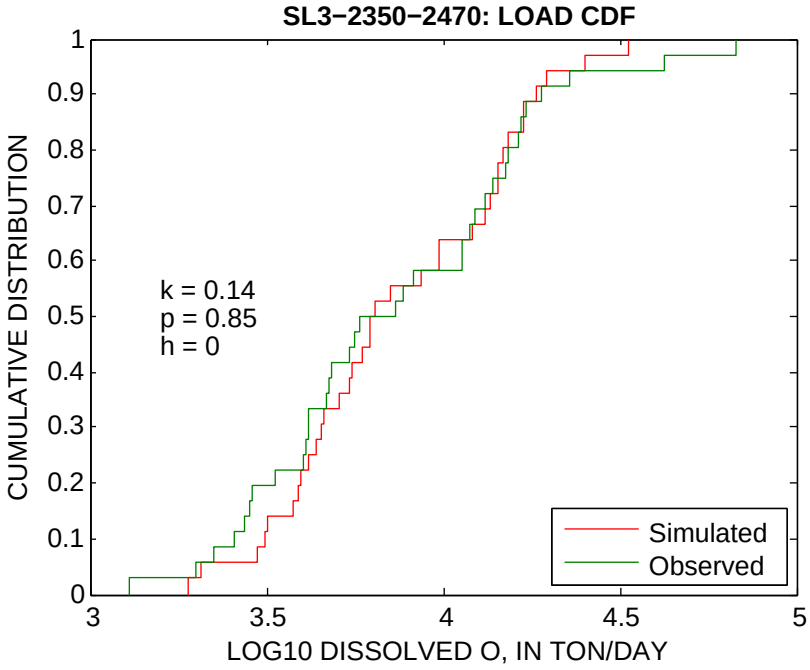


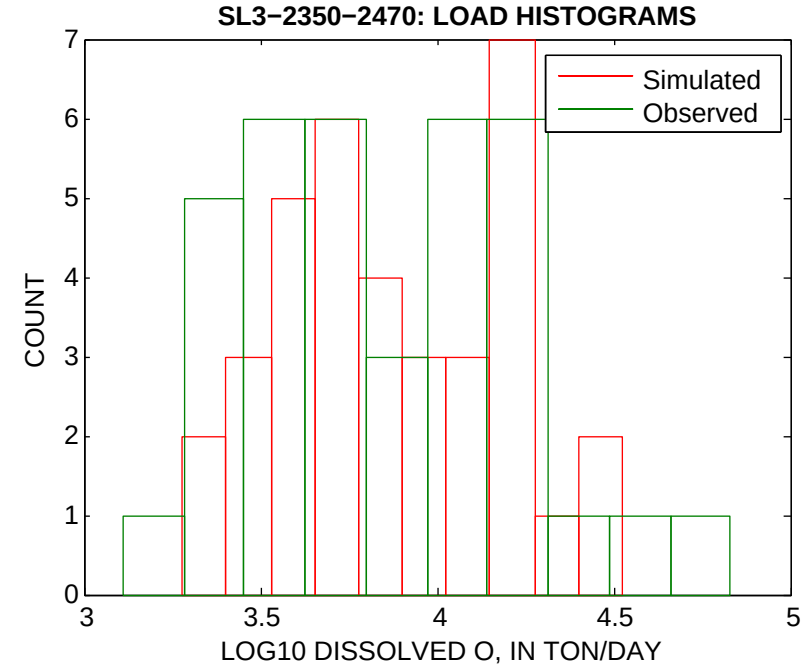


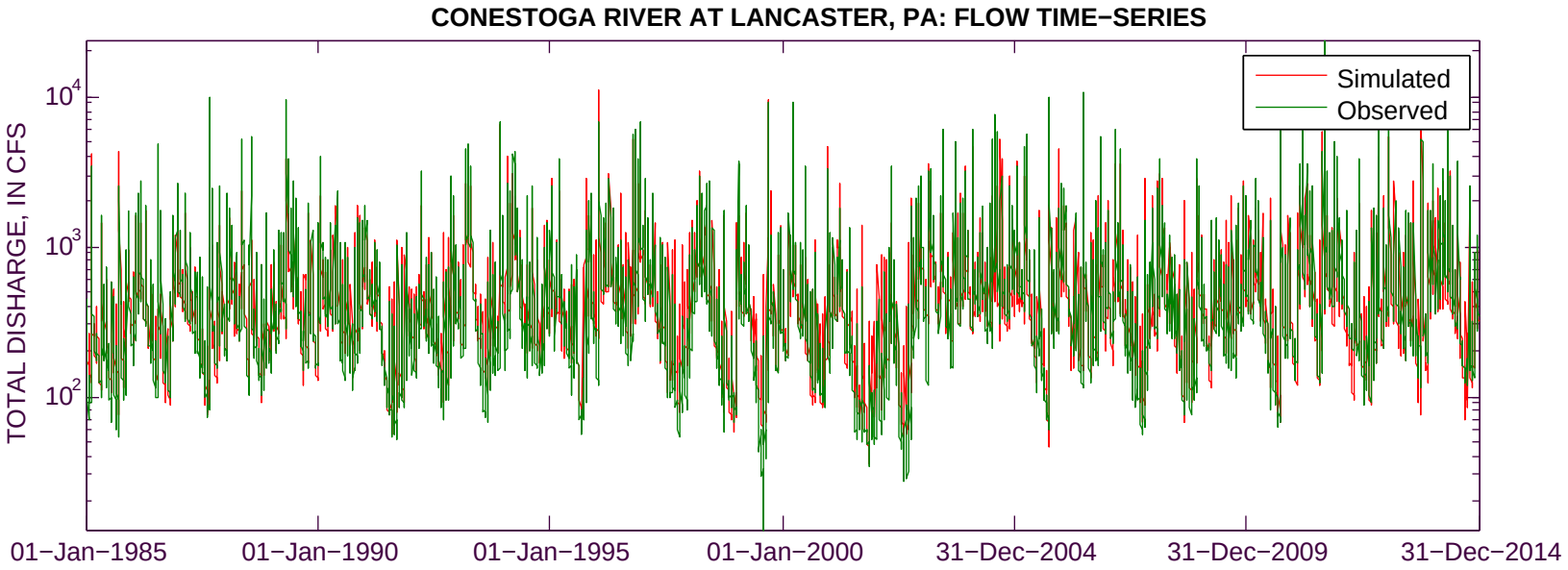
LOAD DATA
LOG10

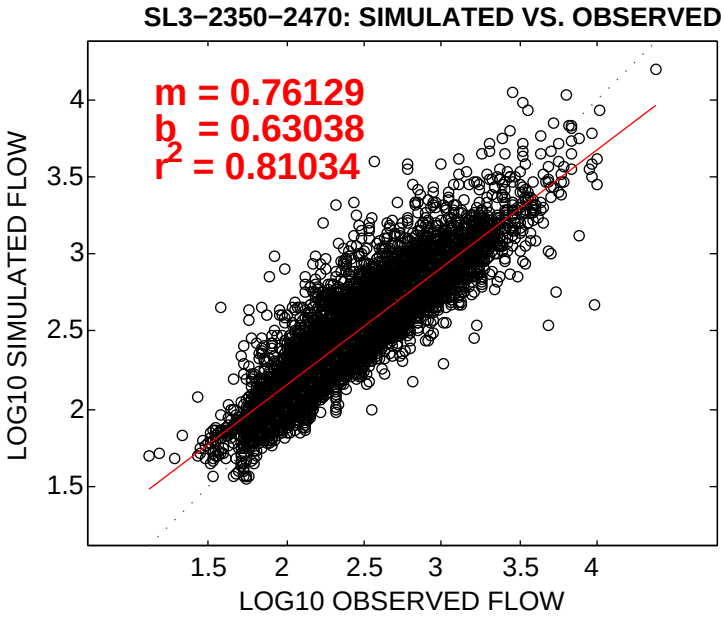


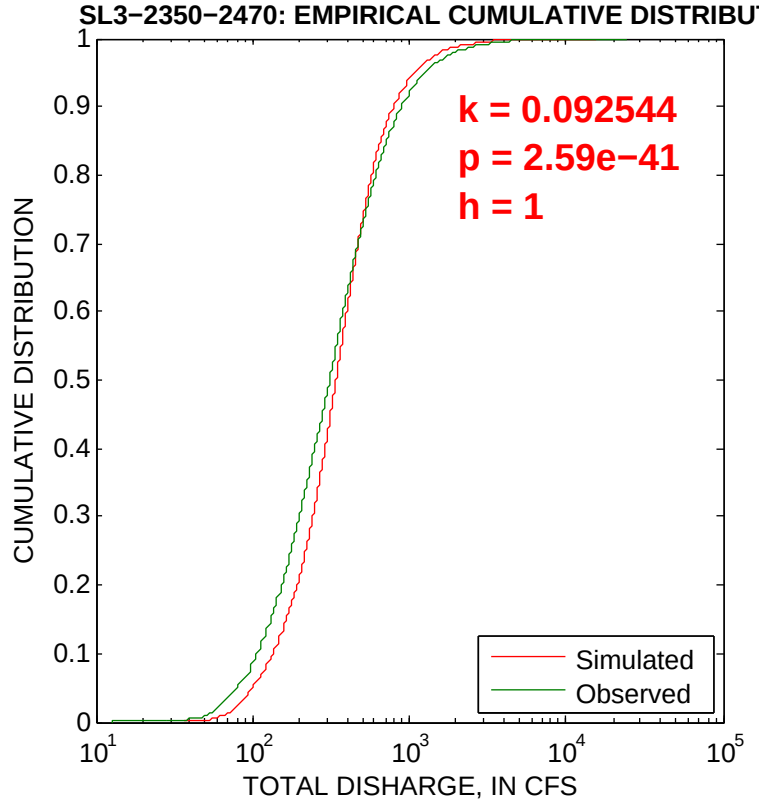












DATA SELECTION

scenario: P620171001WQ; file: FLOW.calib

plot: FLOW - total discharge

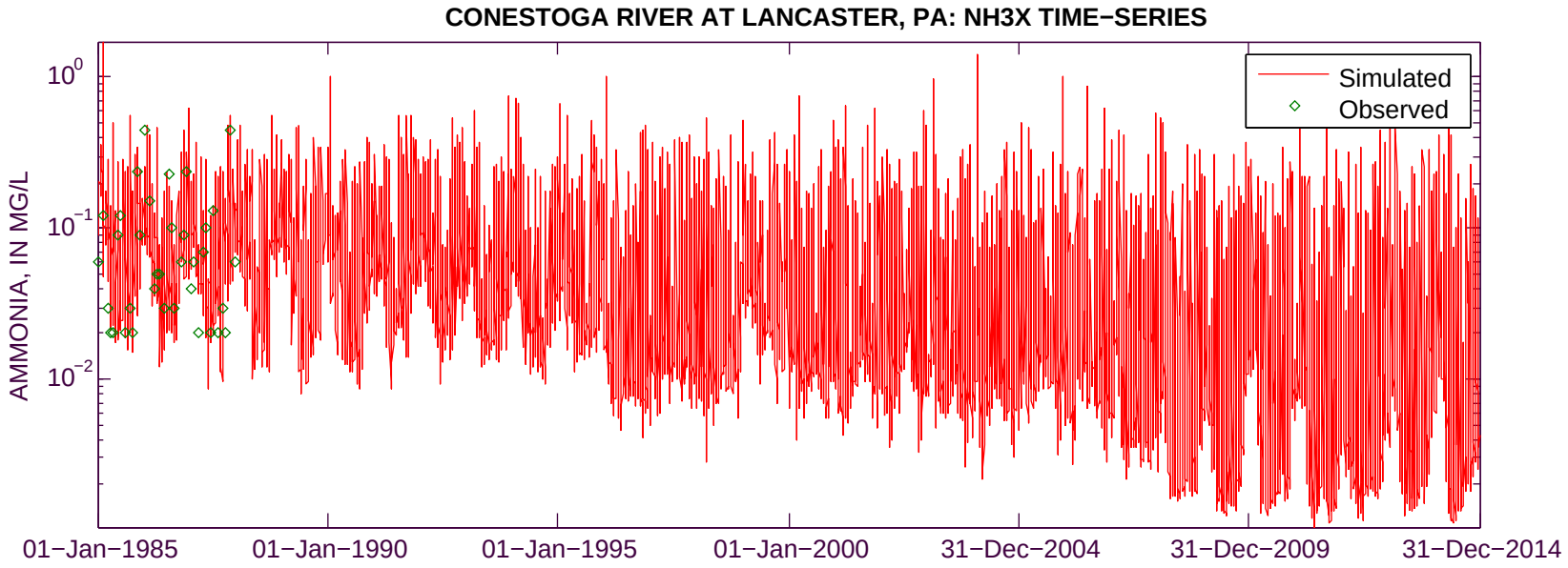
Dates: 1/1/1985 – 12/31/201

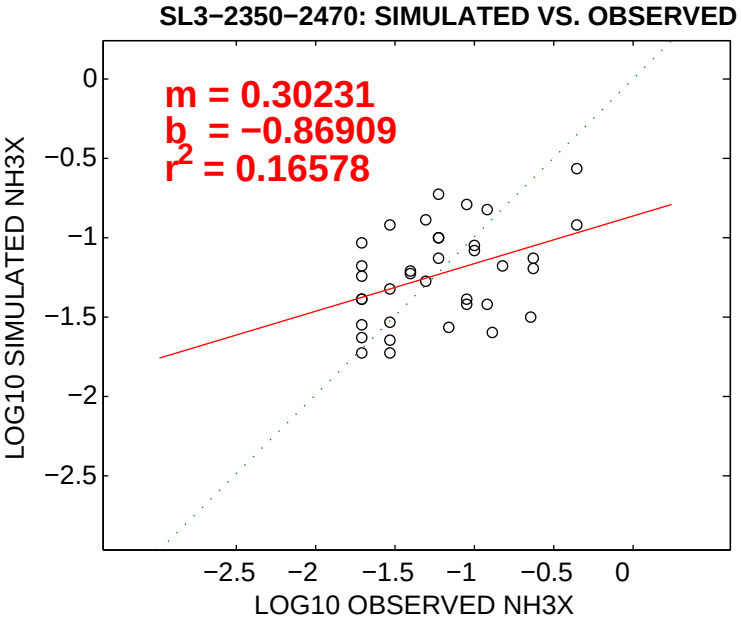
Drive: N/A; Directory: model; Observed: OBS20161101

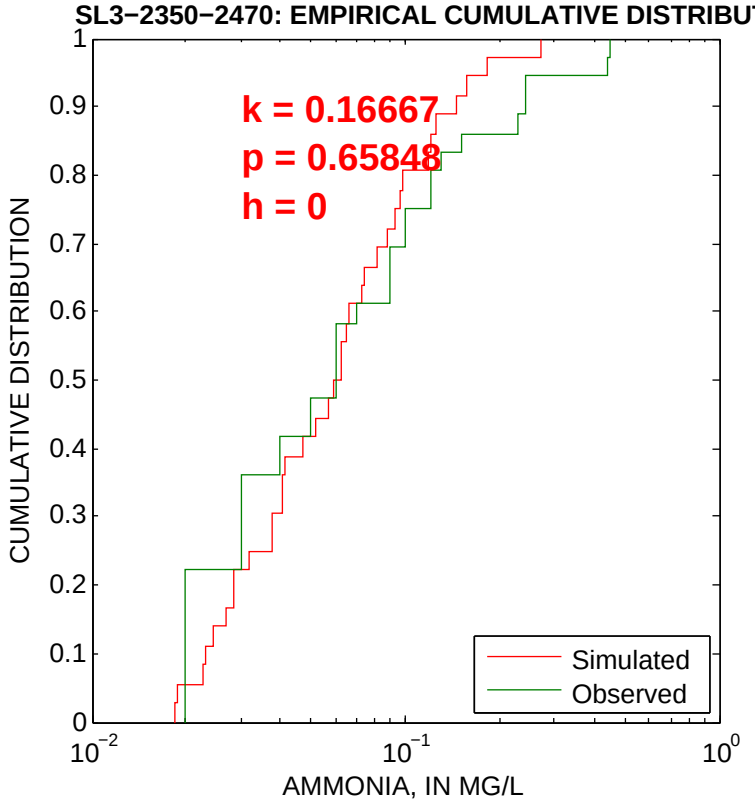
STATISTICS

		observe	simulate
n		10957	10957
min		13	35.826
		1.11394	1.5542
mean		463.955	448.453
		2.49574	2.53038
media		312	341.47
		2.49415	2.53335
max		24000	15748
		4.38021	4.19723
varian		400283	249239
		0.134286	0.0960439
JB		0.001	0.001
		0.001	0.001
		ra	log
%		-3.34126	1.38791
err.va		141681	0.0270674
rel.std.err		0.353953	0.201566
mod.eff		0.646047	0.798434

VERSION 2.1







DATA SELECTION

scenario: P620171001WQ | file: NH3X.calib

plot: NH3X - ammonia

Dates: 1/1/1985 – 12/31/201

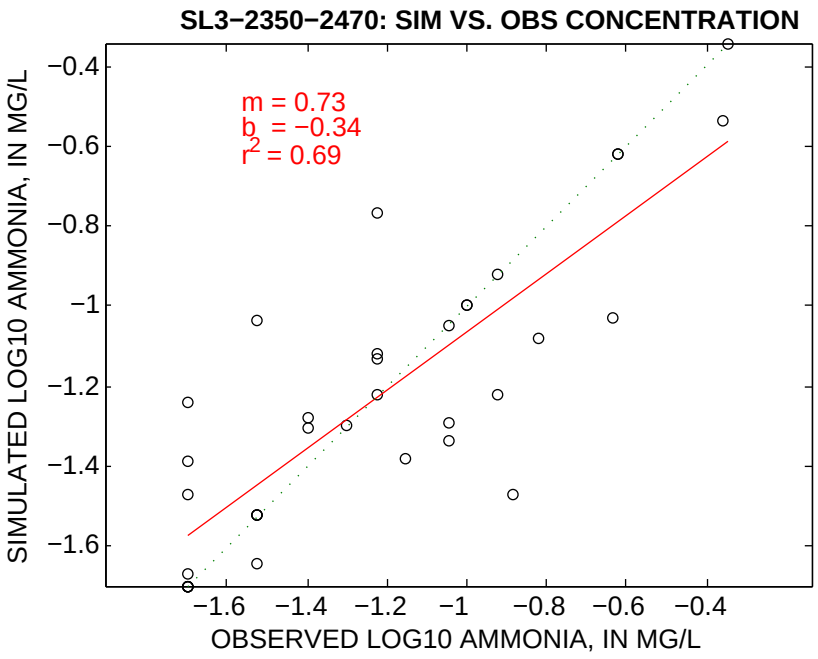
Drive: N/A | Directory: model | Observed: OBS20161101

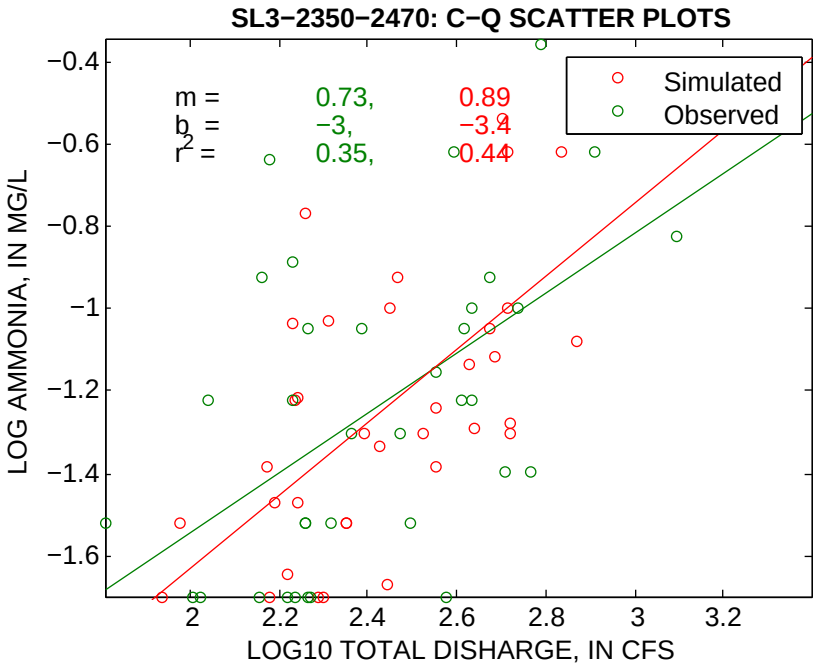
STATISTICS

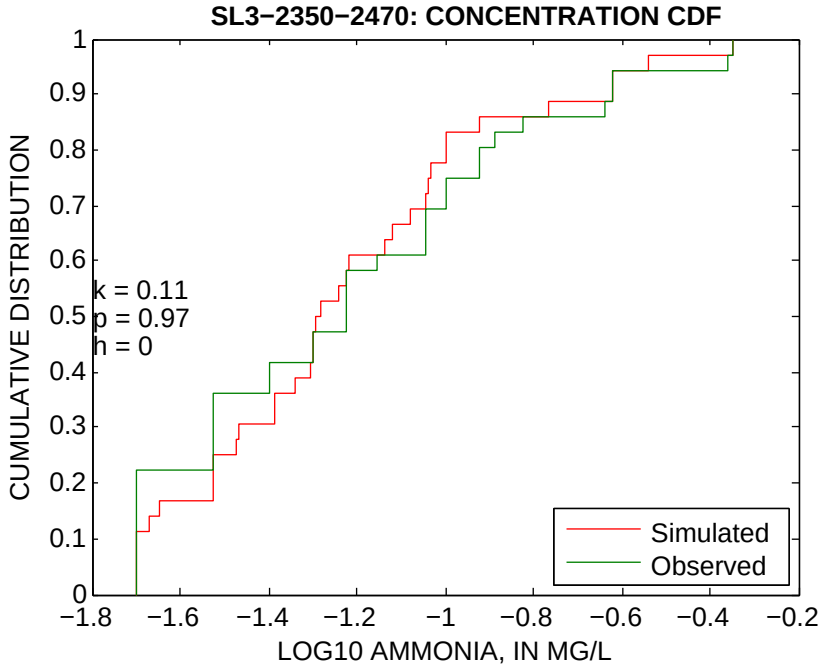
n	36	36
	observe	simulate
min	0.02	0.018288
	-1.69897	-1.73783
mean	0.0941667	0.0727134
	-1.2199	-1.23788
media	0.06	0.0605825
	-1.22185	-1.21777
max	0.45	0.2718
	-0.346787	-0.565751
varian	0.0112193	0.00290632
	0.159342	0.0878377
JB	0.001	0.001
	0.170172	0.5
	ra	log
%	-22.7822	1.47364
err.va	0.00897332	0.151172
rel.std.err	0.799812	0.948728
mod.eff	0.200188	0.0512721

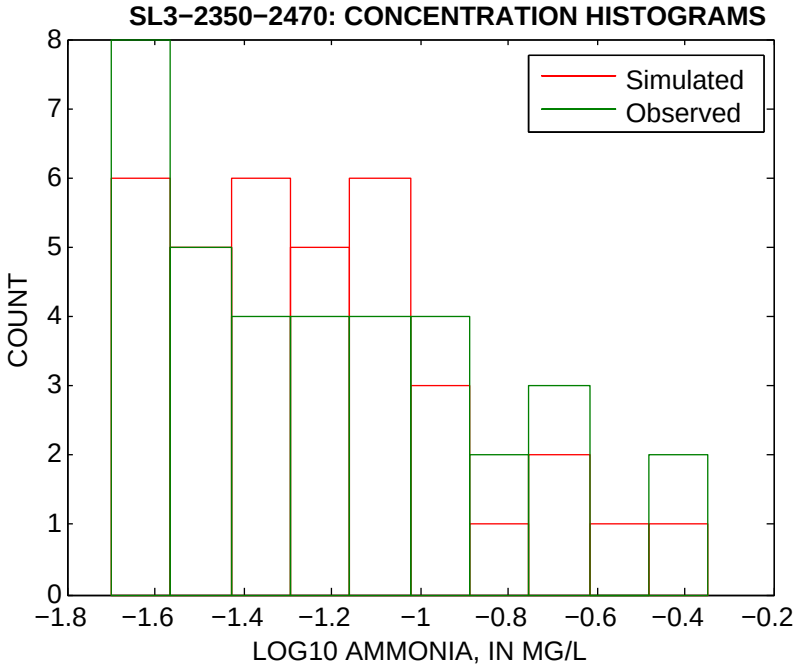
VERSION

ALL DATA
LOG10

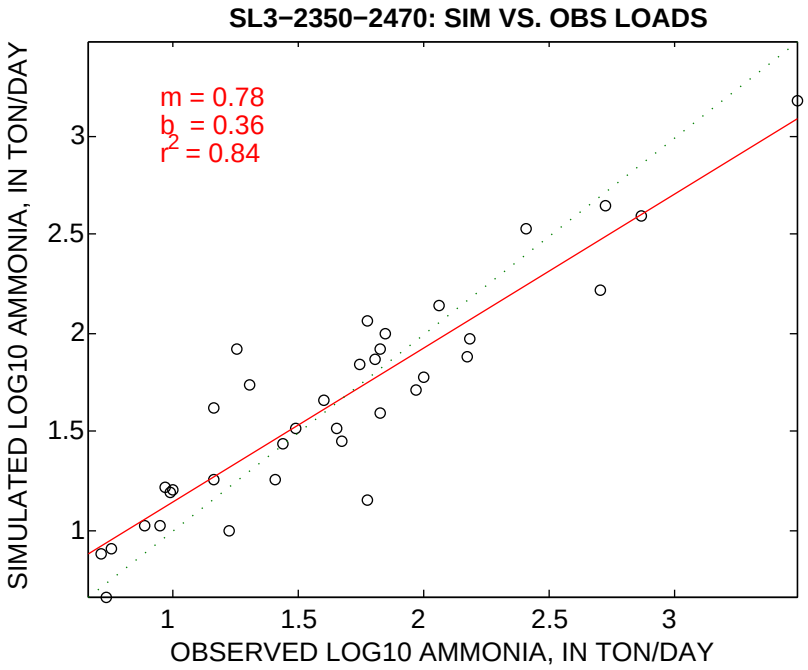


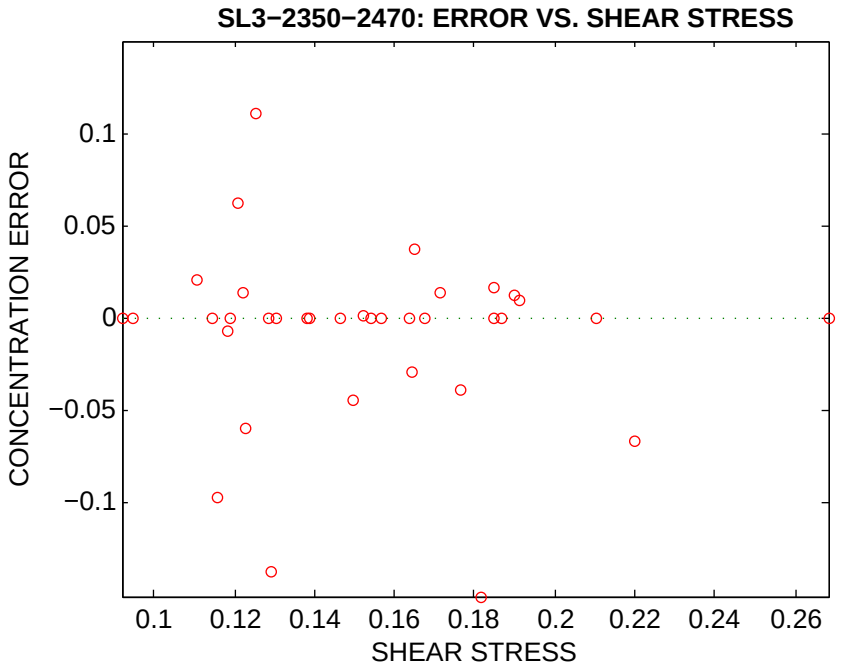


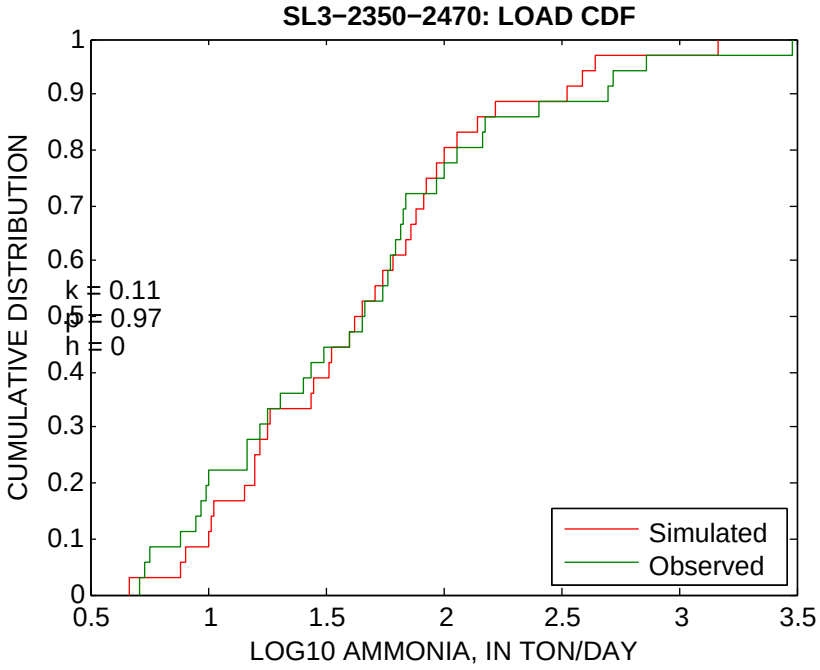


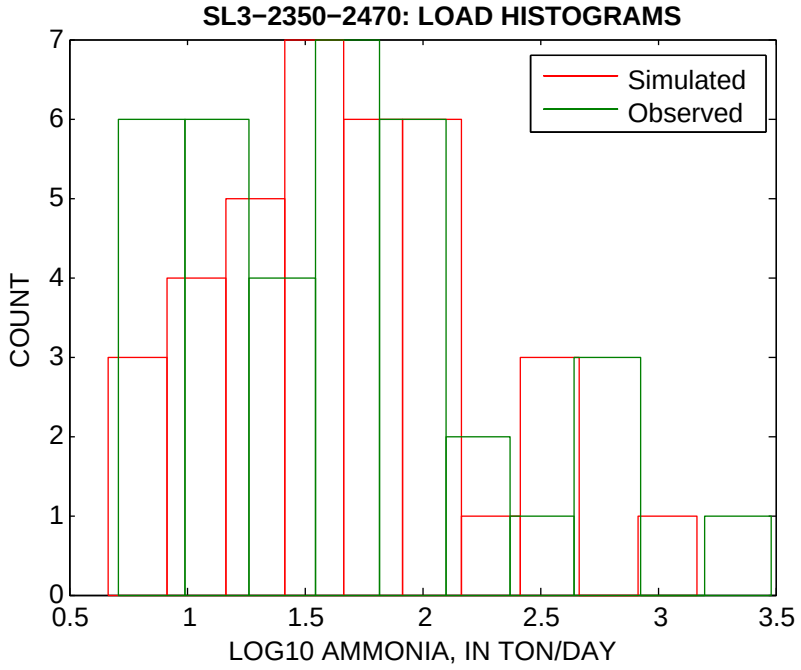


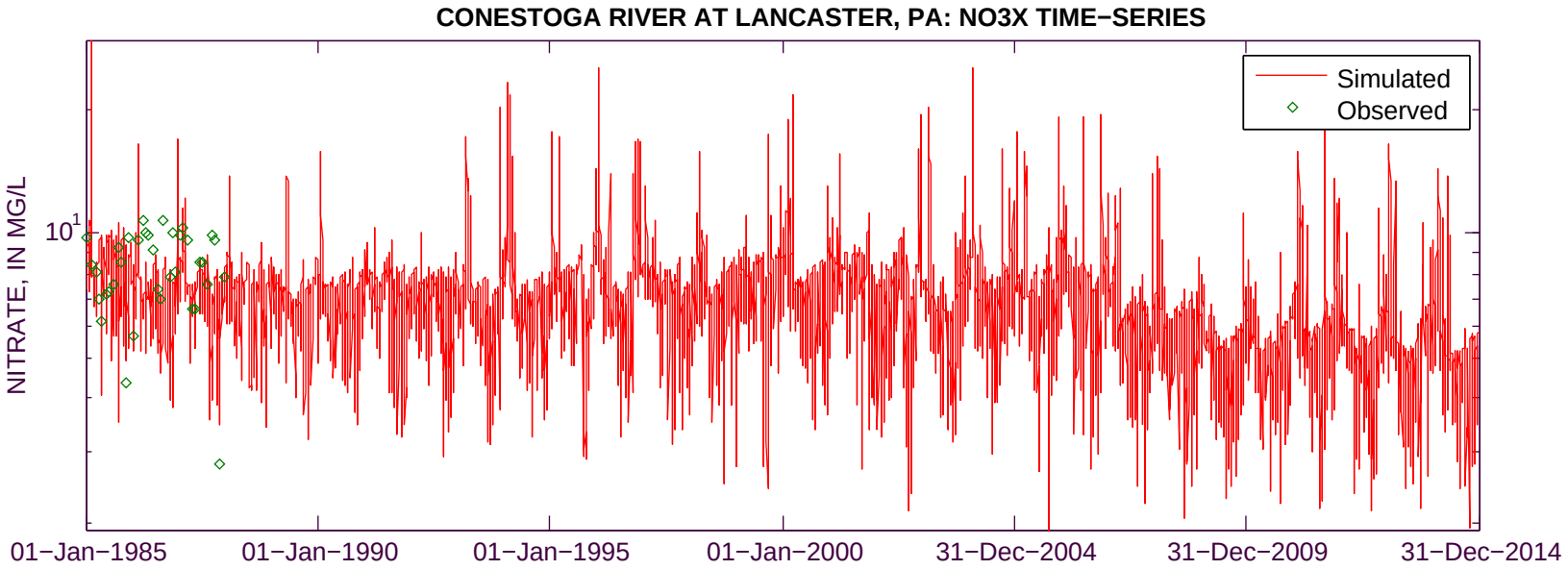
LOAD DATA
LOG10

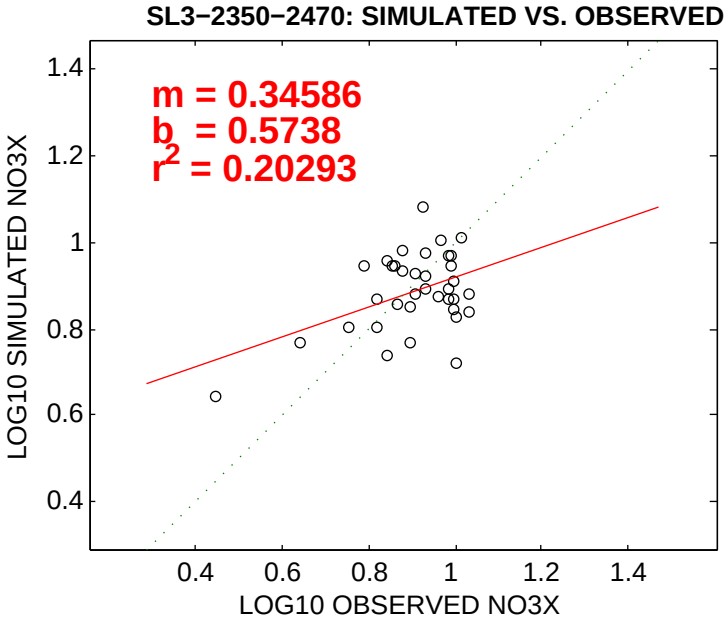


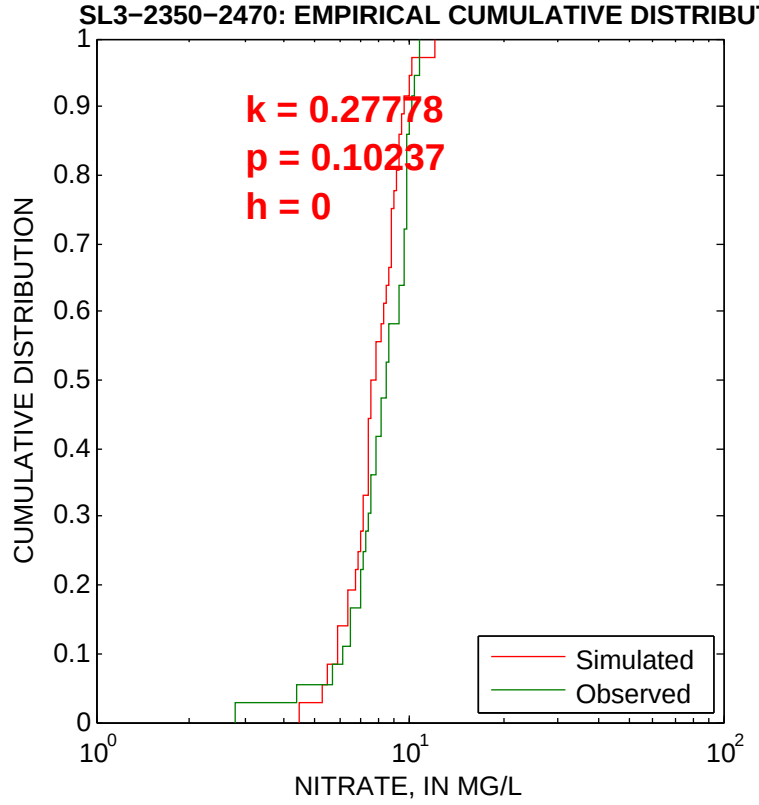












DATA SELECTION

scenario	file
P620171001WQ	NO3X.calib

plot: NO3X - nitrate

Dates: 1/1/1985 – 12/31/201

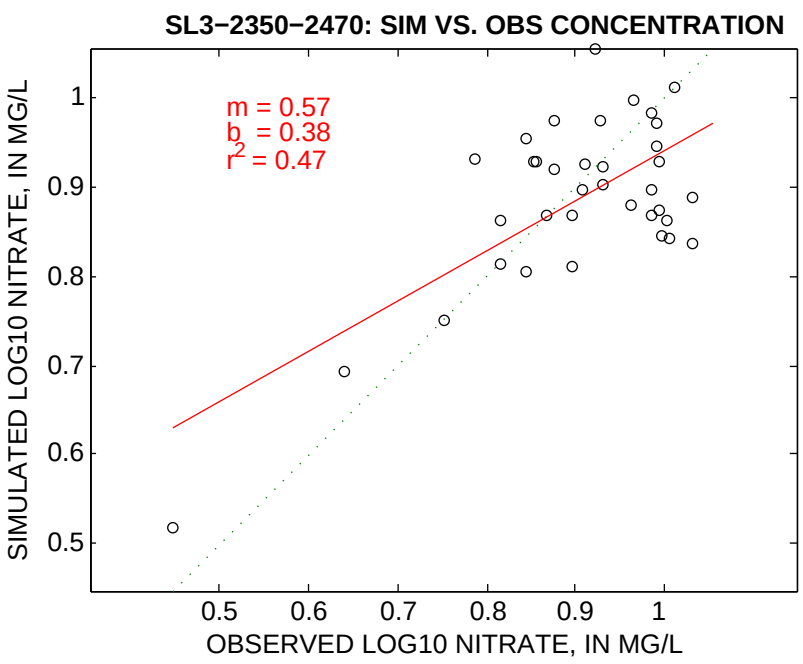
Drive	Directory	Observed
N/A	model	OBS20161101

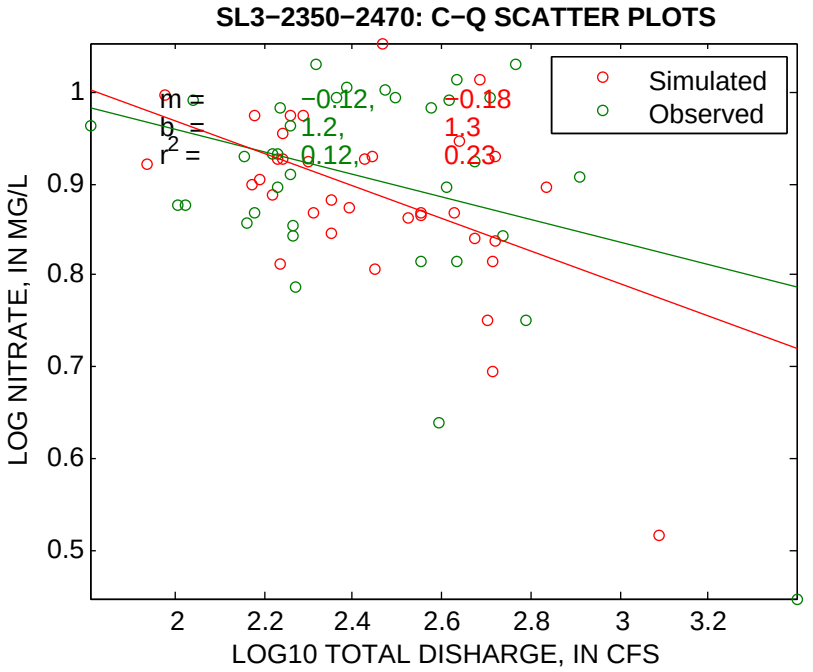
STATISTICS

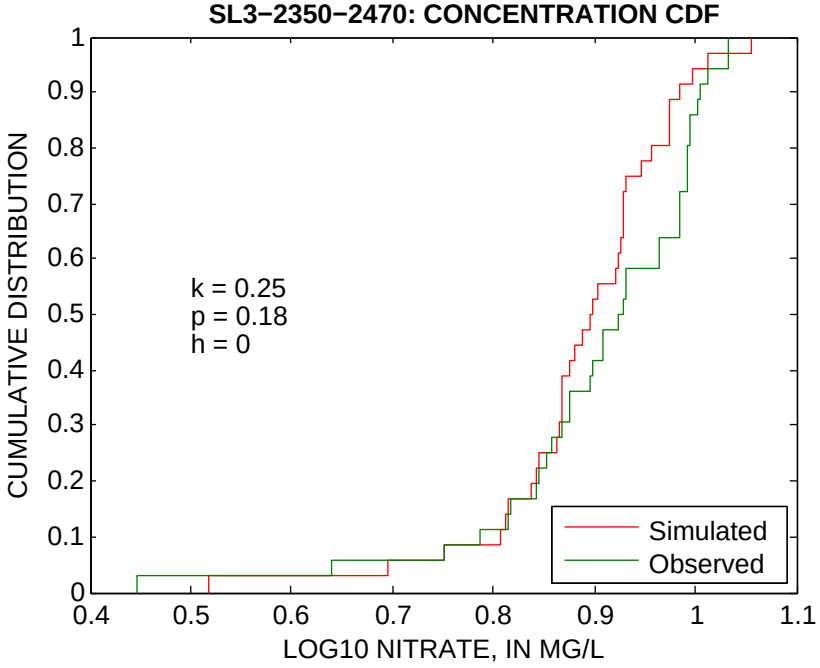
	n	36	36
		observe	simulate
min		2.8	4.4182
		0.447158	0.645245
mean		8.25722	7.85477
		0.903752	0.886375
media		8.435	7.6903
		0.926076	0.88588
max		10.76	12.013
		1.03181	1.07965
varian		3.25197	2.45856
		0.0136918	0.00807074
JB		0.032944	0.5
		0.001	0.333689
		ra	log
%		-4.87392	-1.92281
err.va		4.05008	0.0126022
rel.std.err		1.24542	0.920423
mod.eff		-0.245423	0.0795768

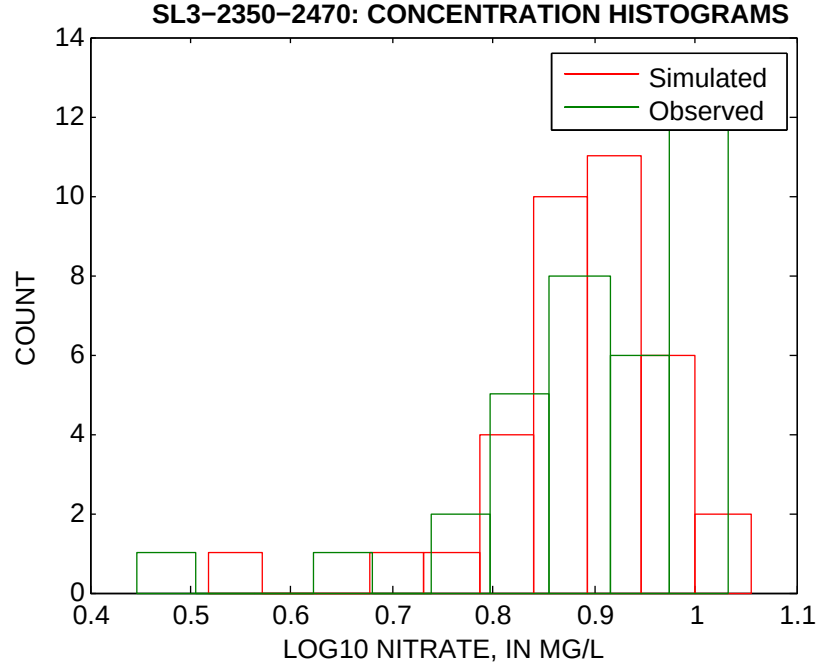
VERSION 2.1

ALL DATA
LOG10

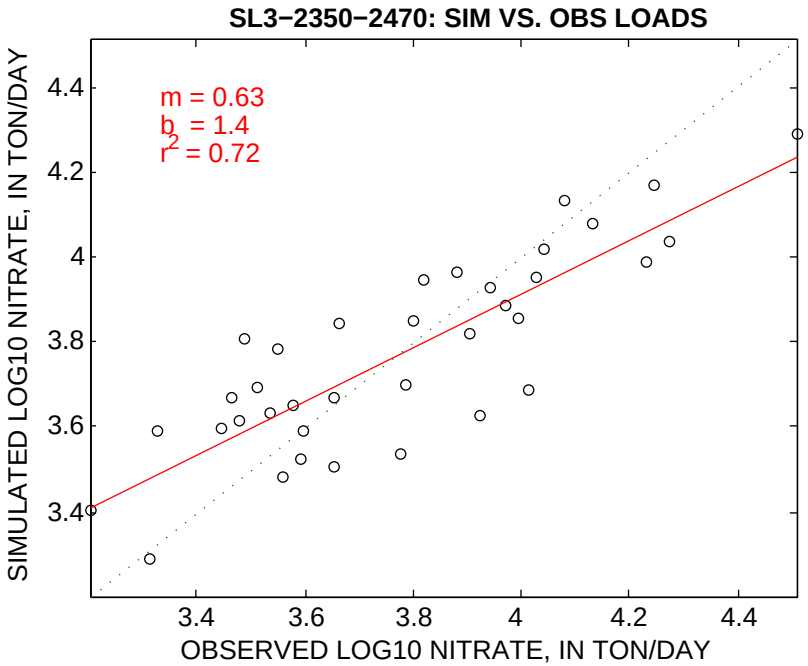


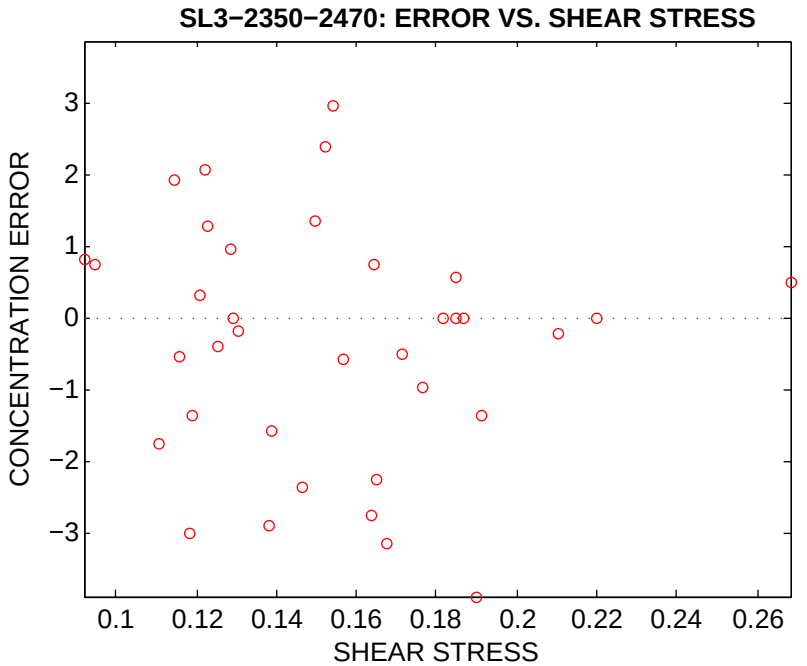


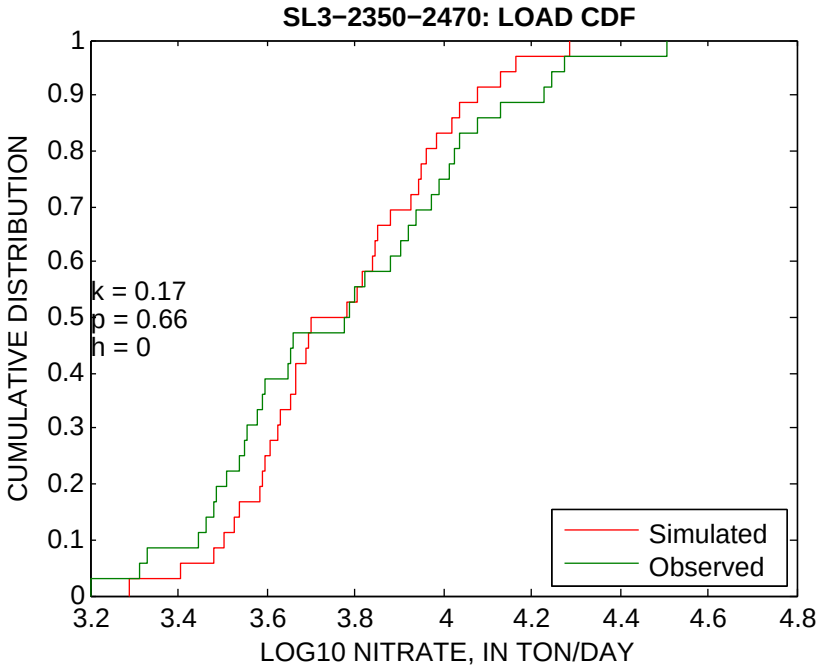


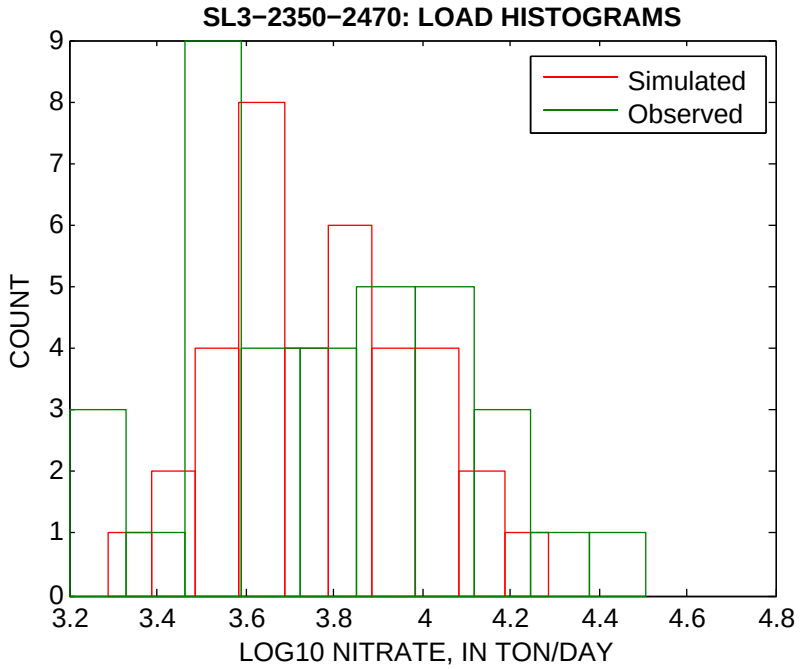


LOAD DATA
LOG10

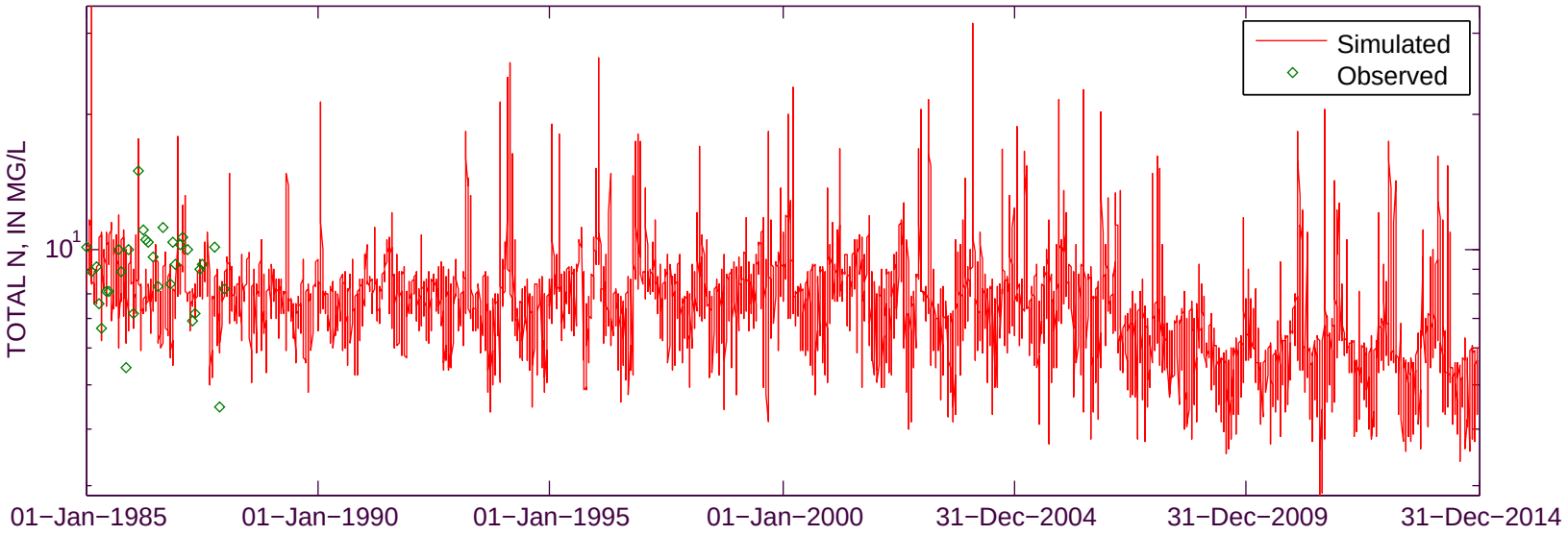




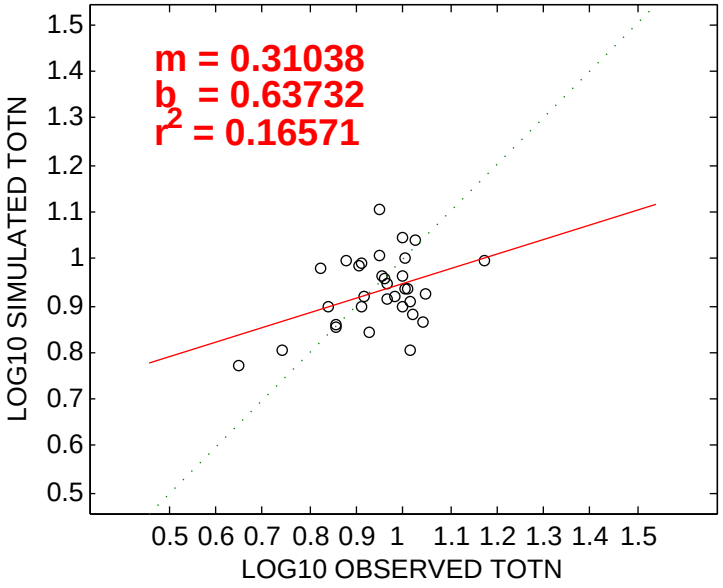




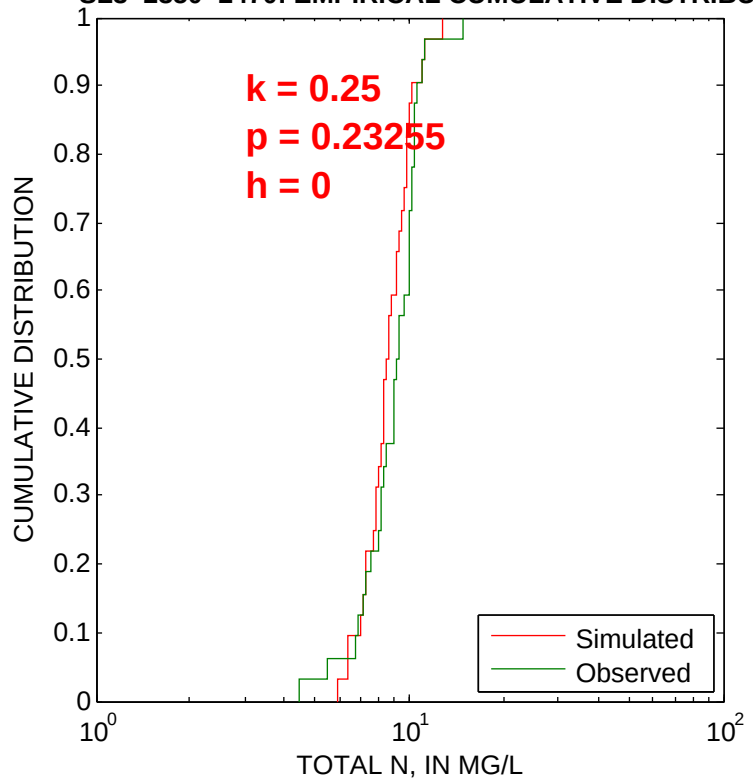
CONESTOGA RIVER AT LANCASTER, PA: TOTN TIME-SERIES



SL3-2350-2470: SIMULATED VS. OBSERVED



SL3-2350-2470: EMPIRICAL CUMULATIVE DISTRIBUTION



DATA SELECTION

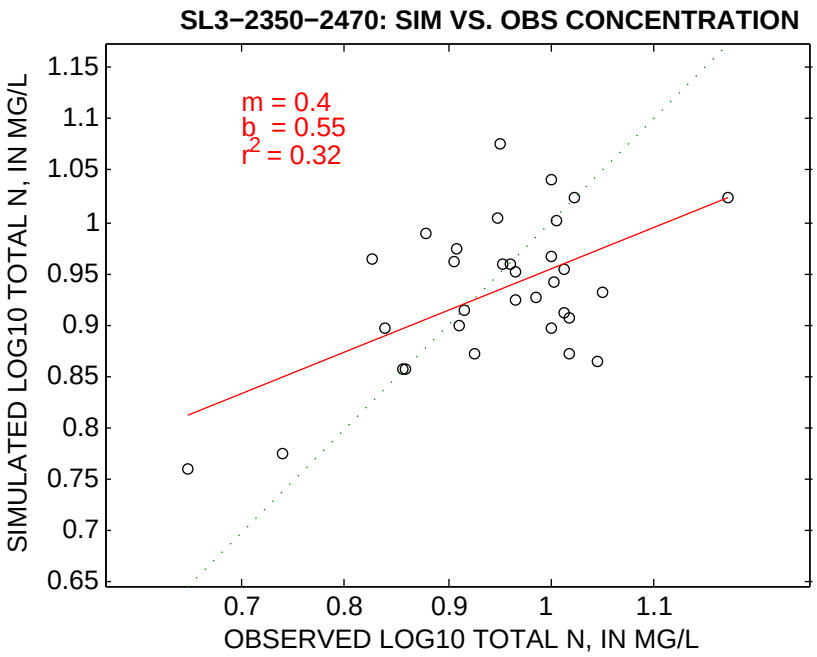
scenario: P620171001WQ
file: TOTN.calib
plot: TOTN - total nitrogen
Dates: 1/1/1985 – 12/31/201
Drive: N/A
Directory: model
Observed: OBS20161101

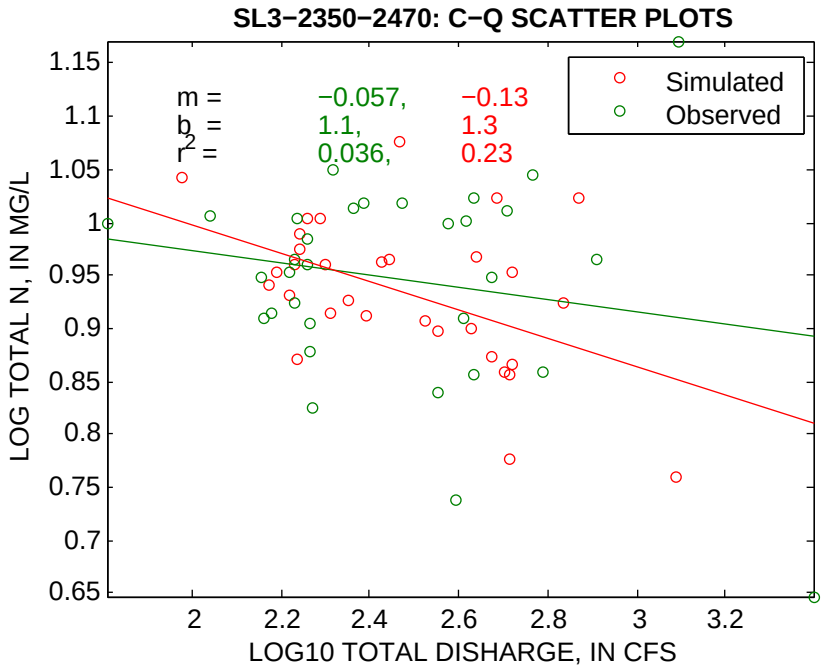
STATISTICS

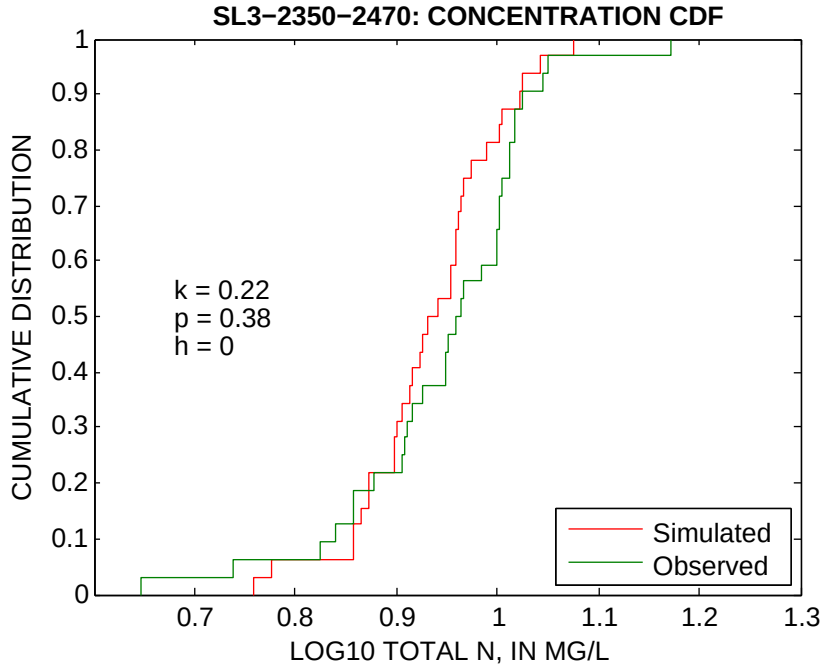
	n	32	32
		observe	simulate
min		4.44	5.9006
		0.647383	0.770896
mean		9.05219	8.65687
		0.946597	0.931118
media		9.175	8.50755
		0.962598	0.929753
max		14.85	12.768
		1.17173	1.10612
varian		3.68299	2.24589
		0.00964567	0.00560735
JB		0.063475	0.359444
		0.019331	0.5
		ra	log
%		-4.36707	-1.63519
err.va		4.25913	0.00951273
rel.std.err		1.15643	0.986218
mod.eff		-0.156432	0.0137825

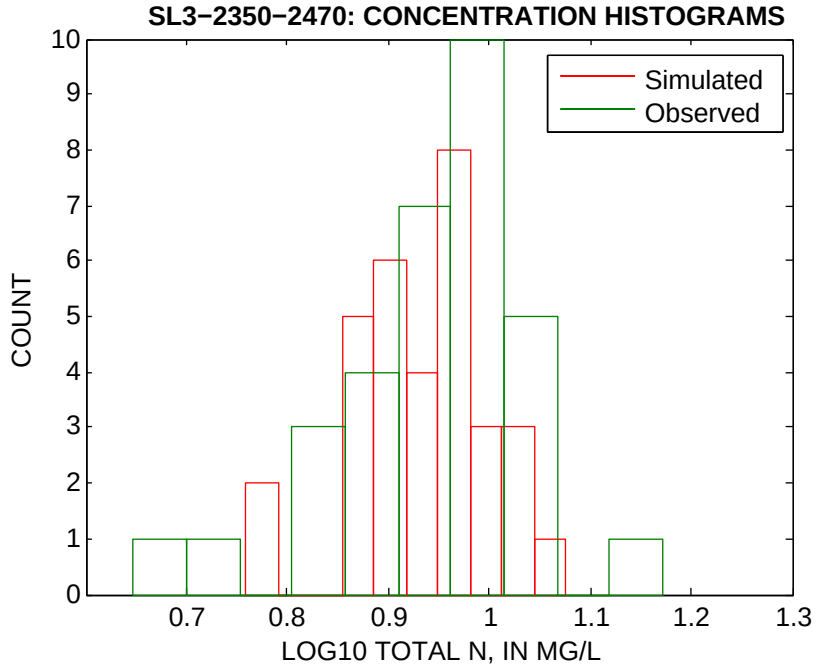
VERSION 2.1

ALL DATA
LOG10

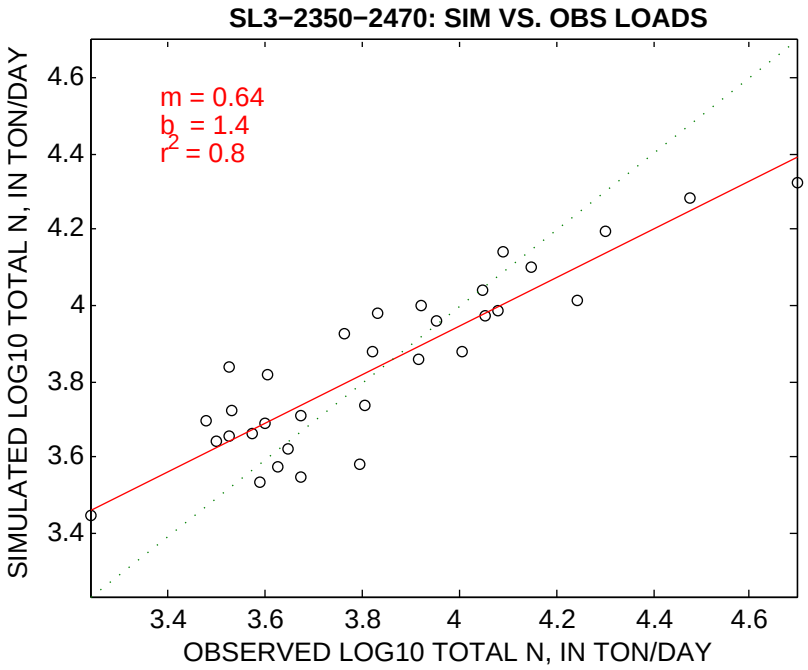


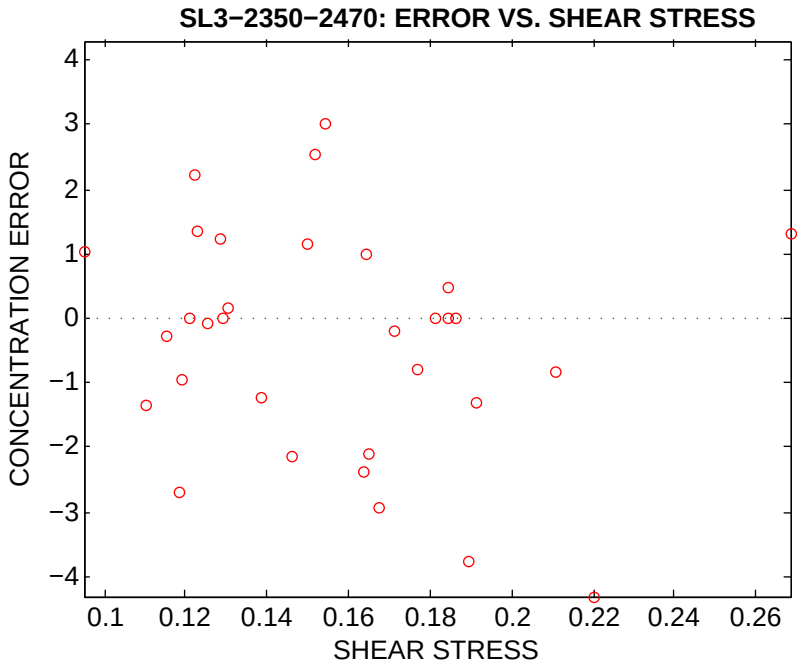


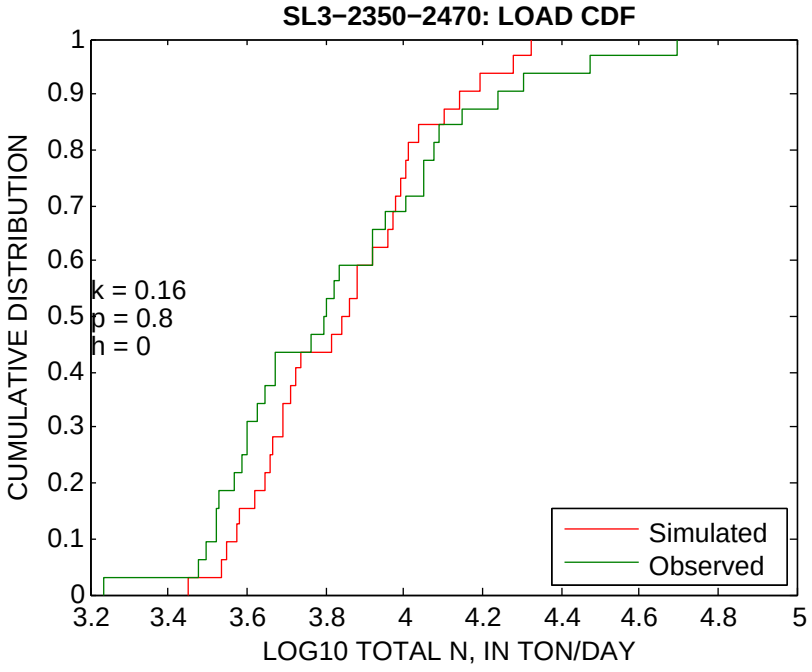


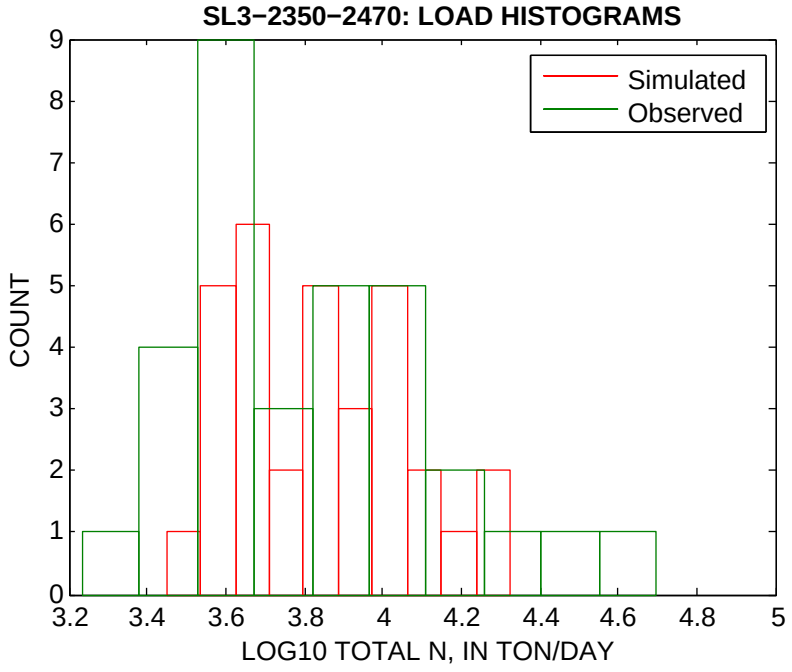


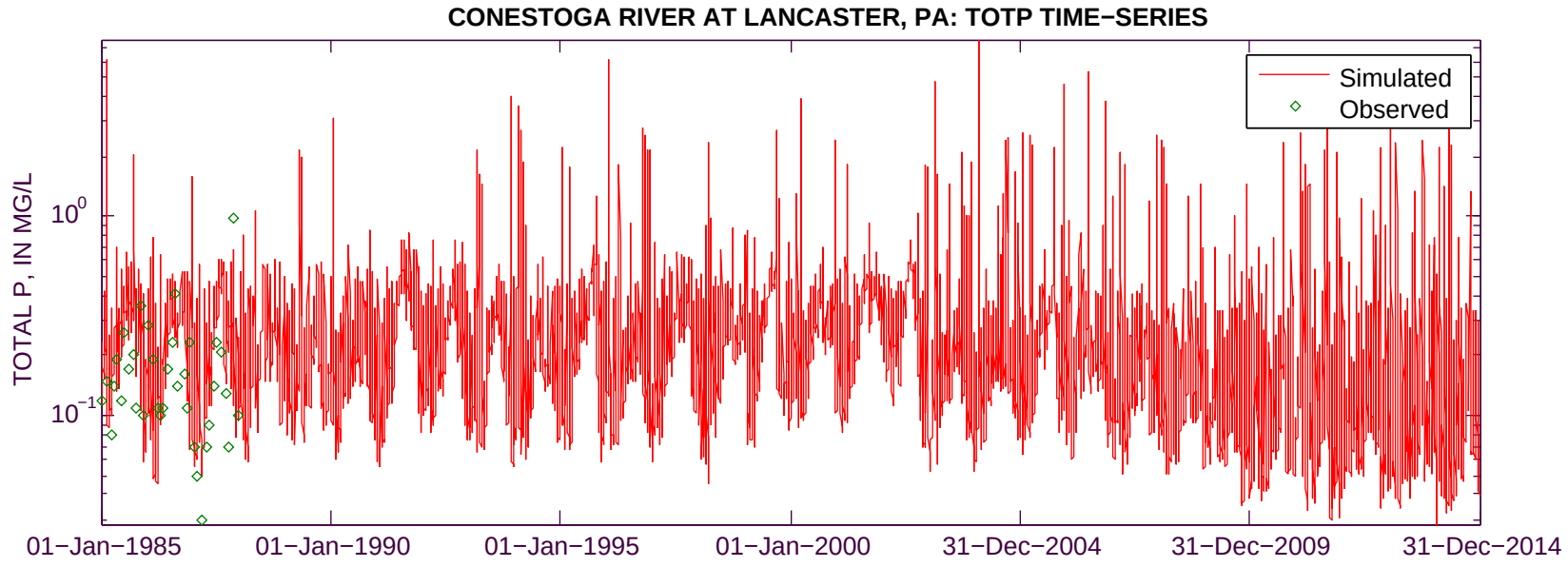
LOAD DATA
LOG10

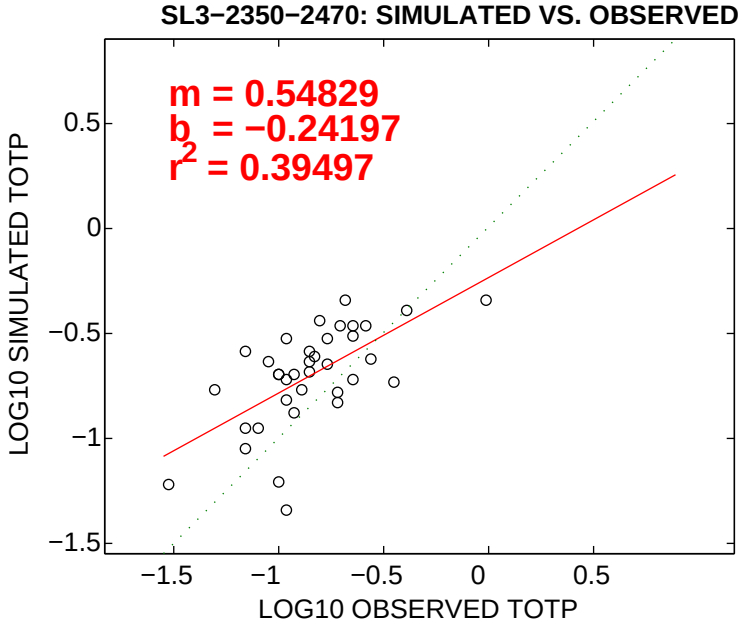


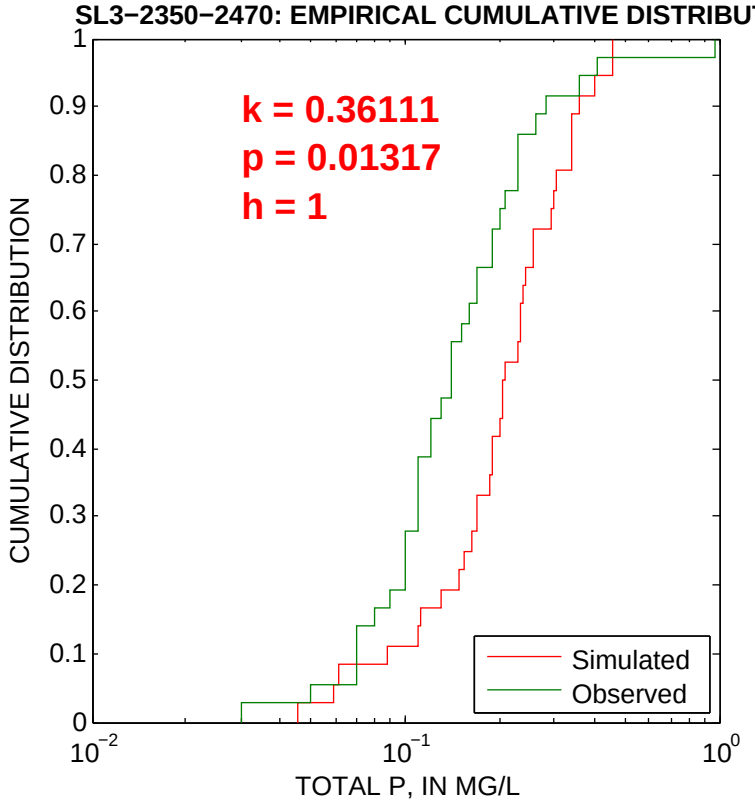












DATA SELECTION

scenario: P620171001WQ | file: TOTP.calib

plot: TOTP - total phosphorus

Dates: 1/1/1985 – 12/31/201

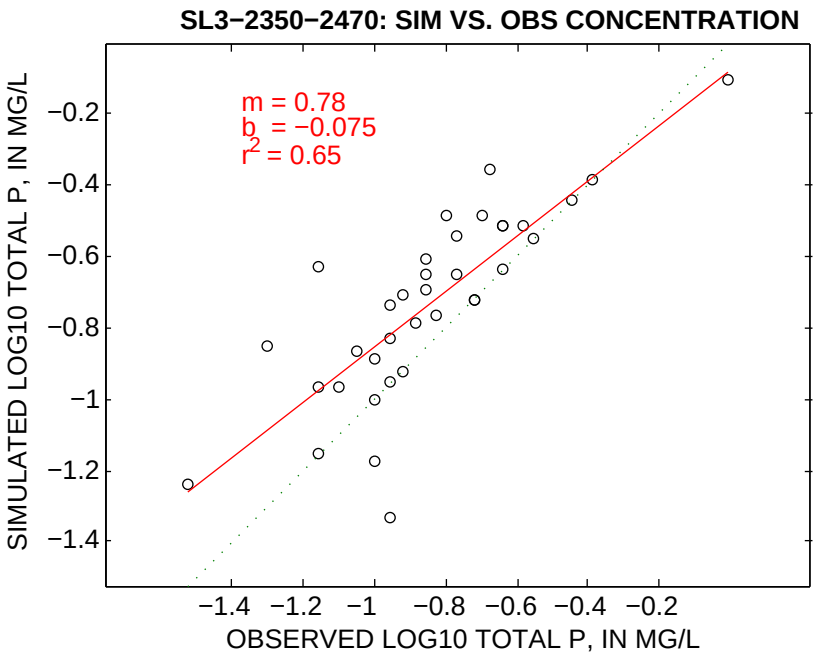
Drive: N/A | Directory: model | Observed: OBS20161101

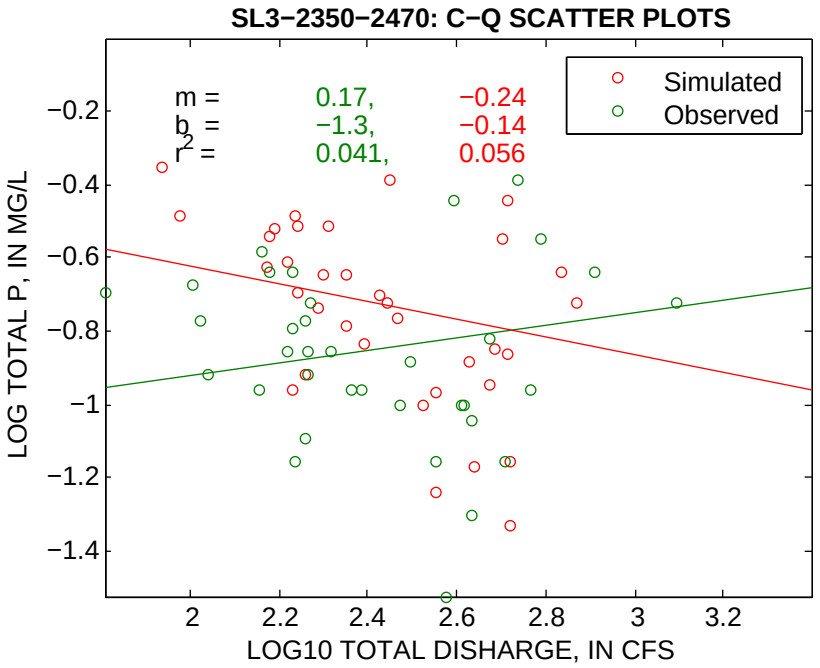
STATISTICS

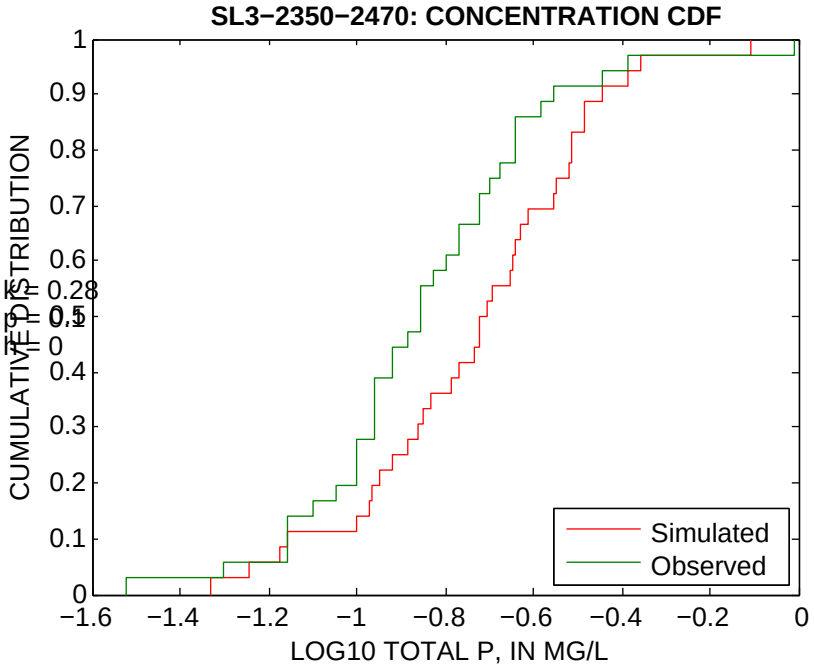
n	36	36
	observe	simulate
min	0.03	0.04526
	-1.52288	-1.34429
mean	0.178056	0.223822
	-0.845154	-0.70536
media	0.14	0.20478
	-0.853872	-0.68873
max	0.98	0.45762
	-0.0087739	-0.339495
varian	0.0256904	0.0109198
	0.0754765	0.0574475
JB	0.001	0.379851
	0.056532	0.045673
	ra	log
%	25.7035	-16.5406
err.va	0.0187486	0.0702587
rel.std.err	0.729788	0.930868
mod.eff	0.270212	0.0691318

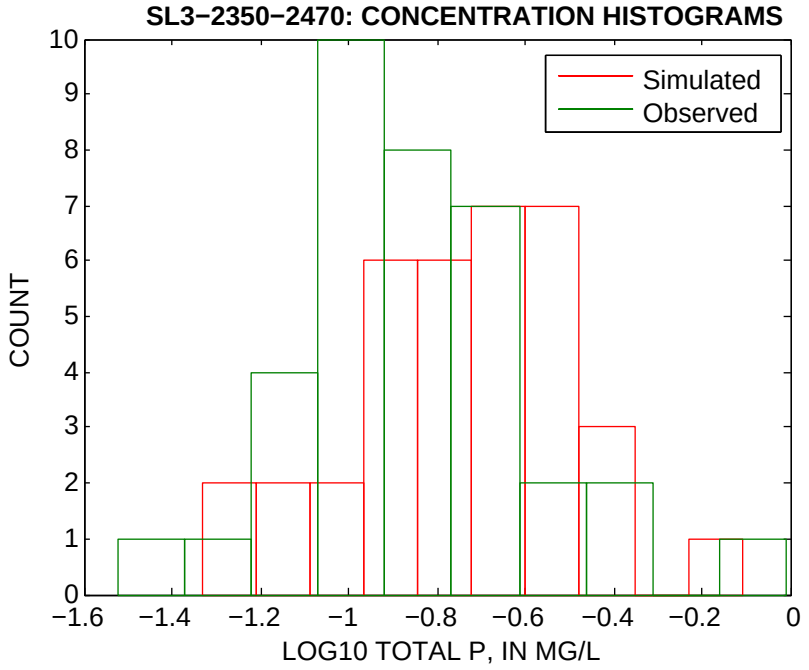
VERSION 2.1

ALL DATA
LOG10

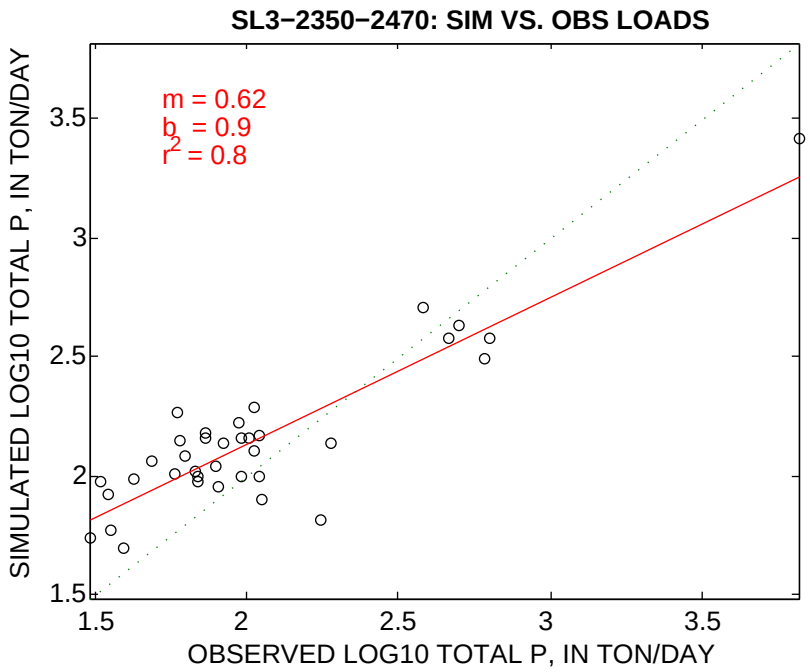


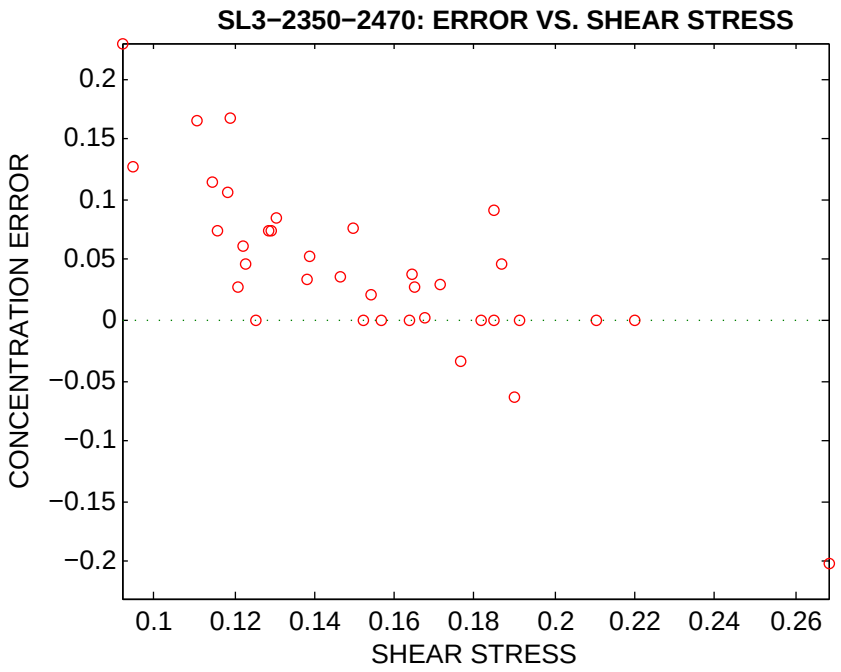


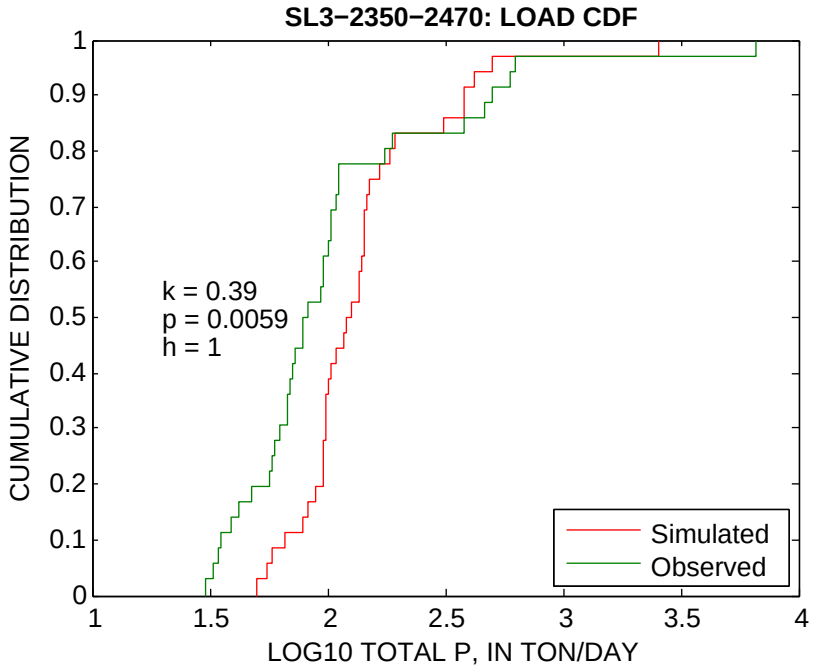


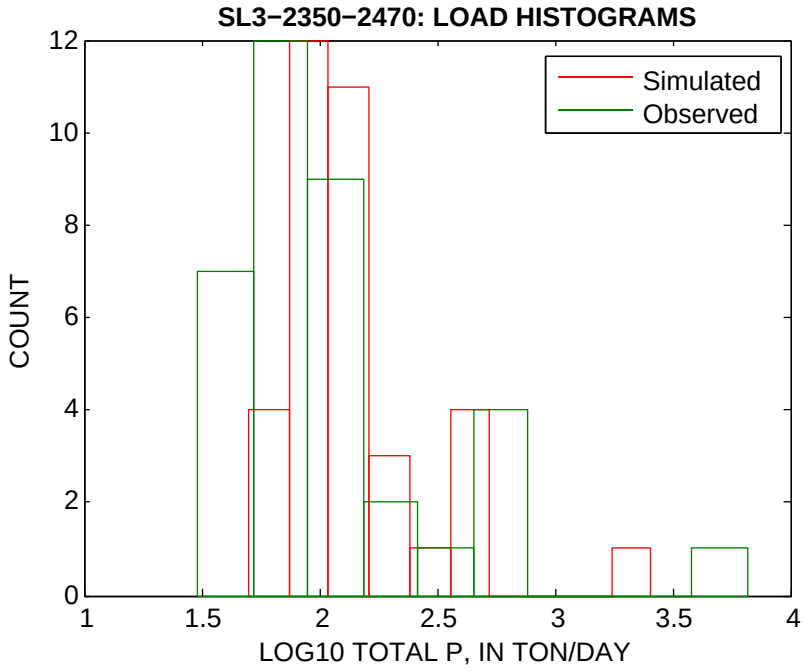


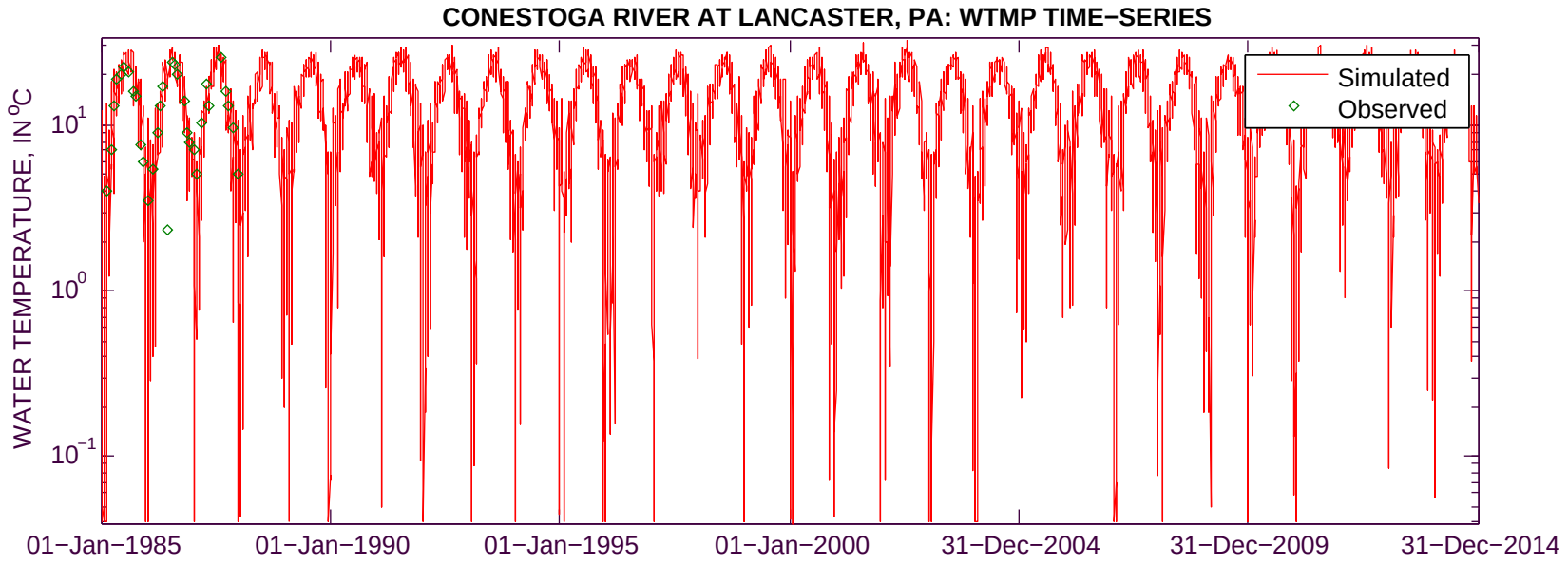
LOAD DATA
LOG10

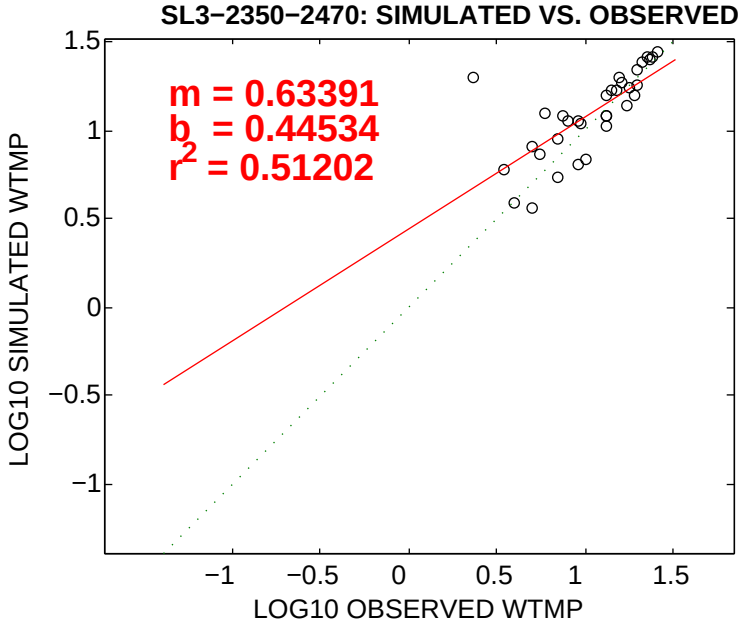


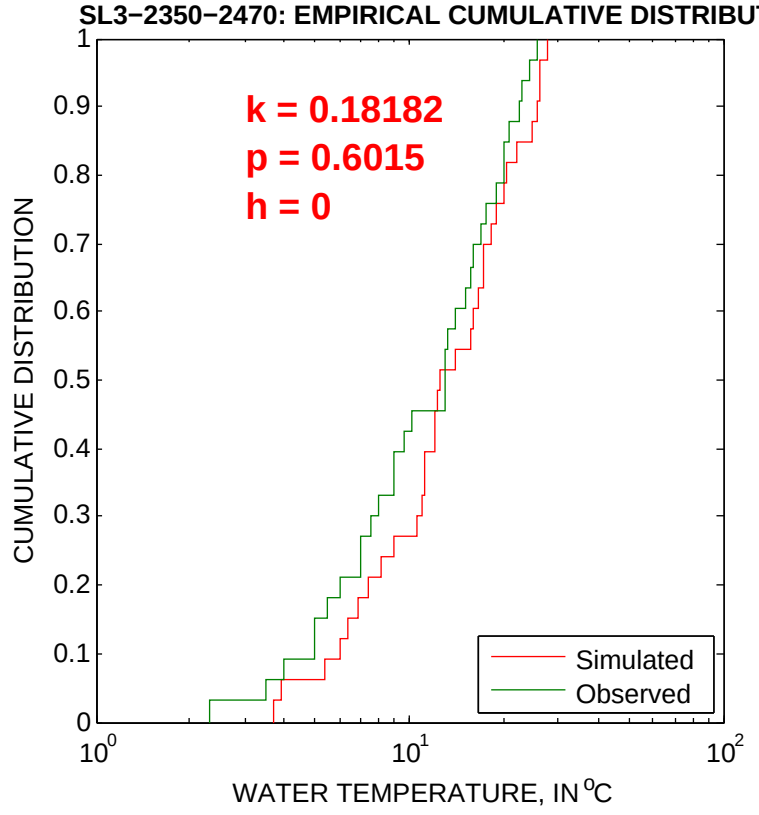












DATA SELECTION

scenario	file
P620171001WQ	WTMP.calib

plot: WTMP - water tempera...

Dates 1/1/1985 12/31/201

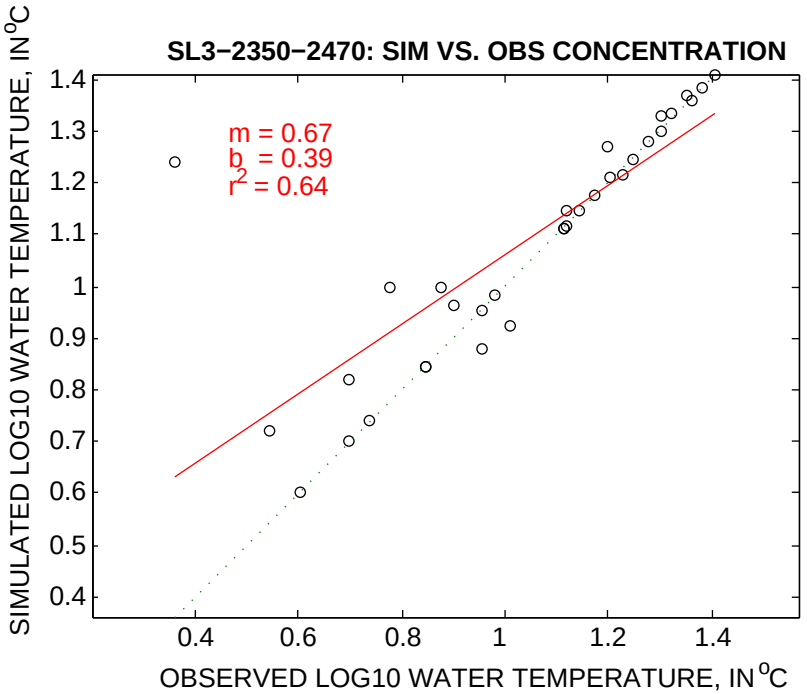
Drive	Directory	Observed
N/A	model	OBS20161101

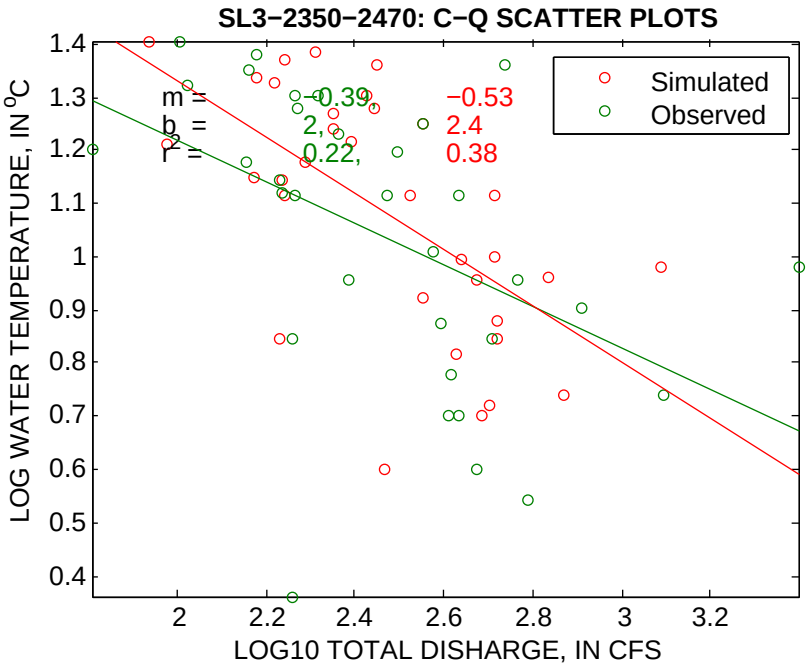
STATISTICS

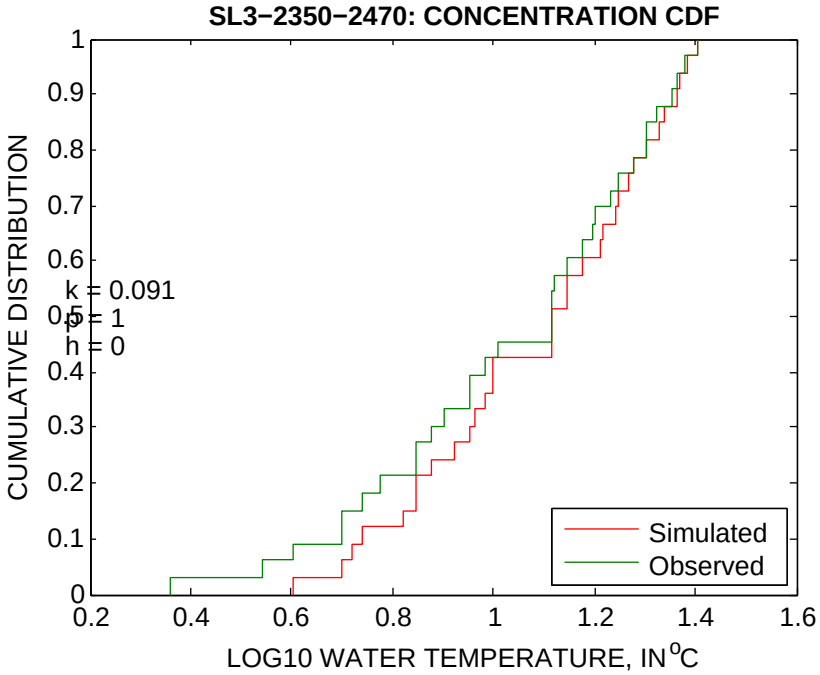
	n	33	33
		observe	simulate
min		2.3	3.6722
		0.361728	0.564926
mean		12.7697	14.4169
		1.0353	1.10163
media		13	12.533
		1.11394	1.09806
max		25.5	27.585
		1.40654	1.44067
varian		44.4178	48.1866
		0.0730551	0.0573347
JB		✓0.181926	0.24028 ✓
		✓0.137376	0.181336 ✓
		ra	log
%		12.8996	6.40658
err.va		17.7128	0.0423063
rel.std.err		0.398777	0.579101
mod.eff		0.601223	0.420899

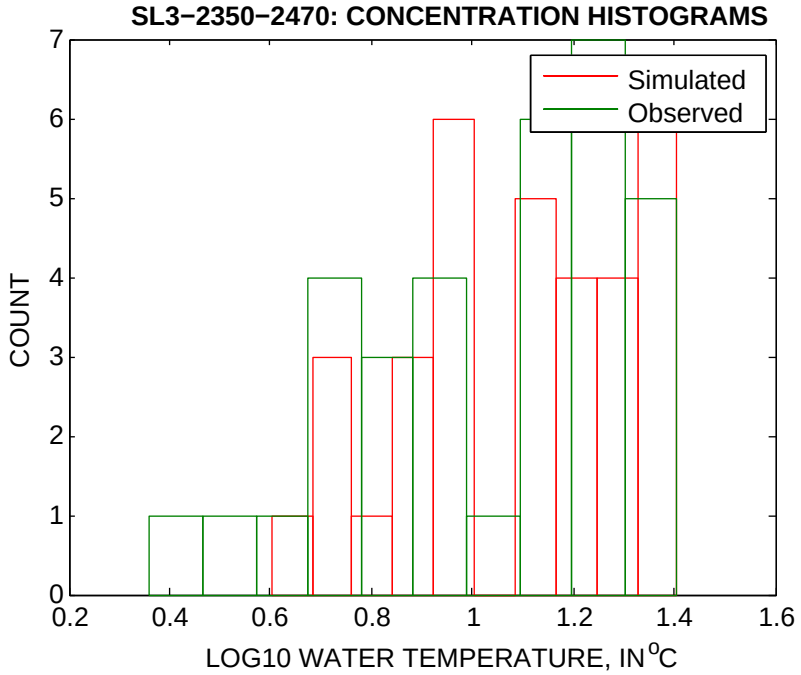
VERSION 2.1

ALL DATA
LOG10

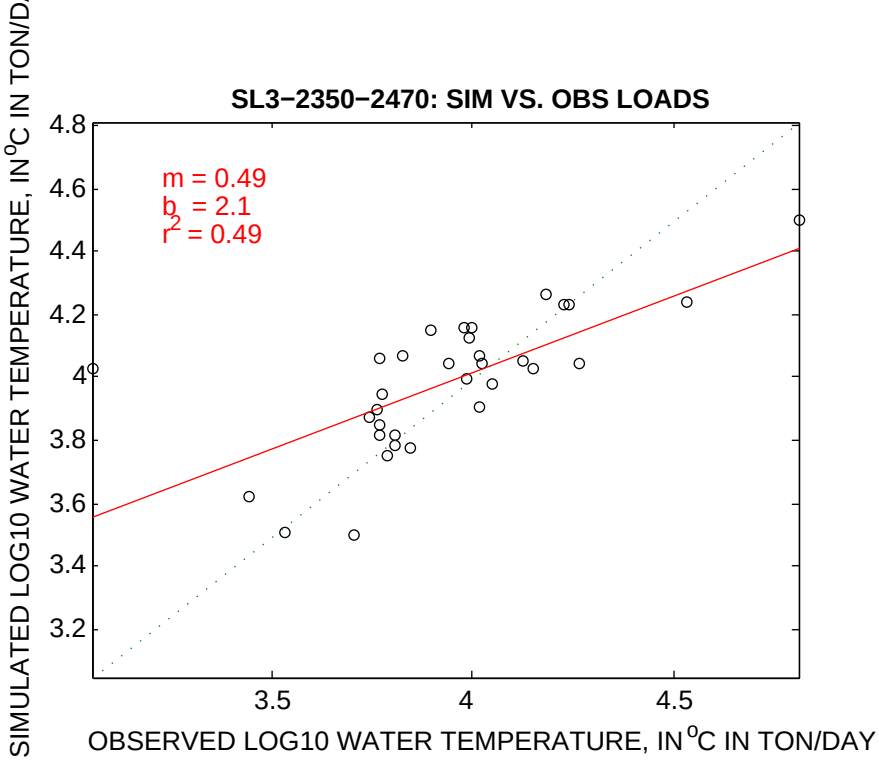


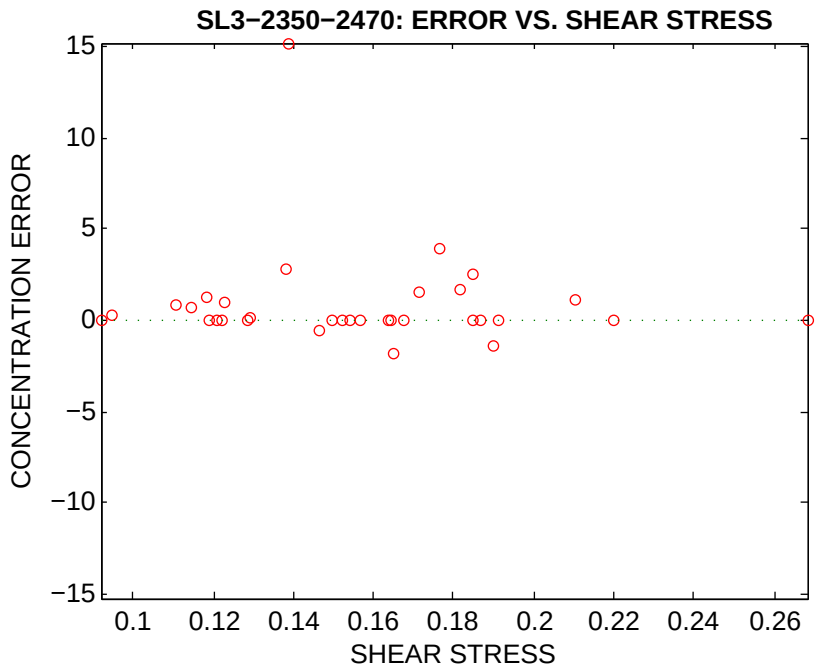


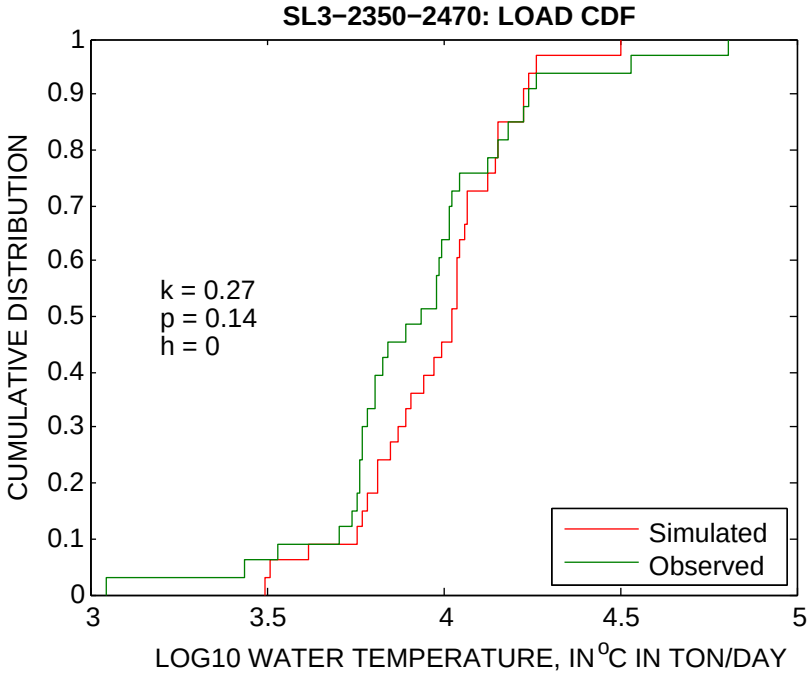


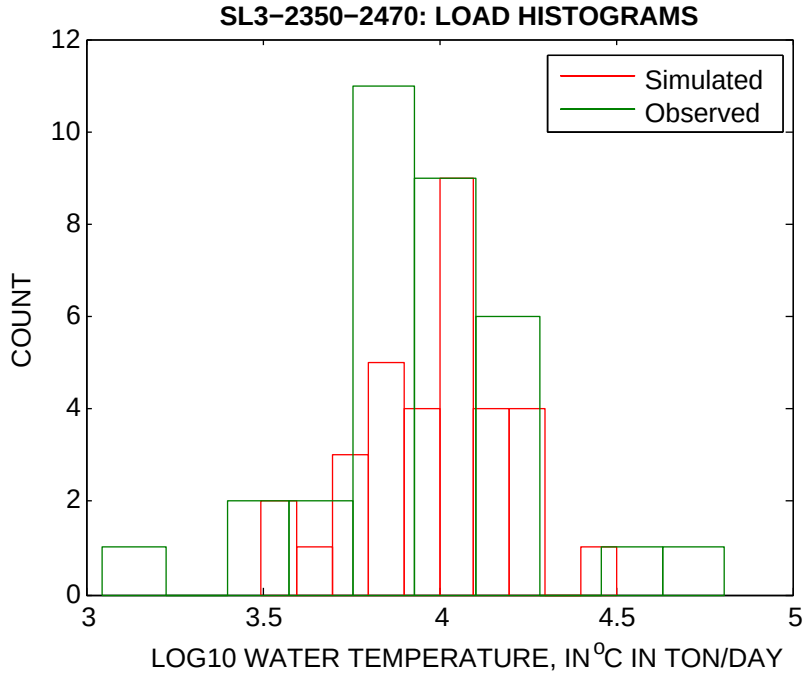


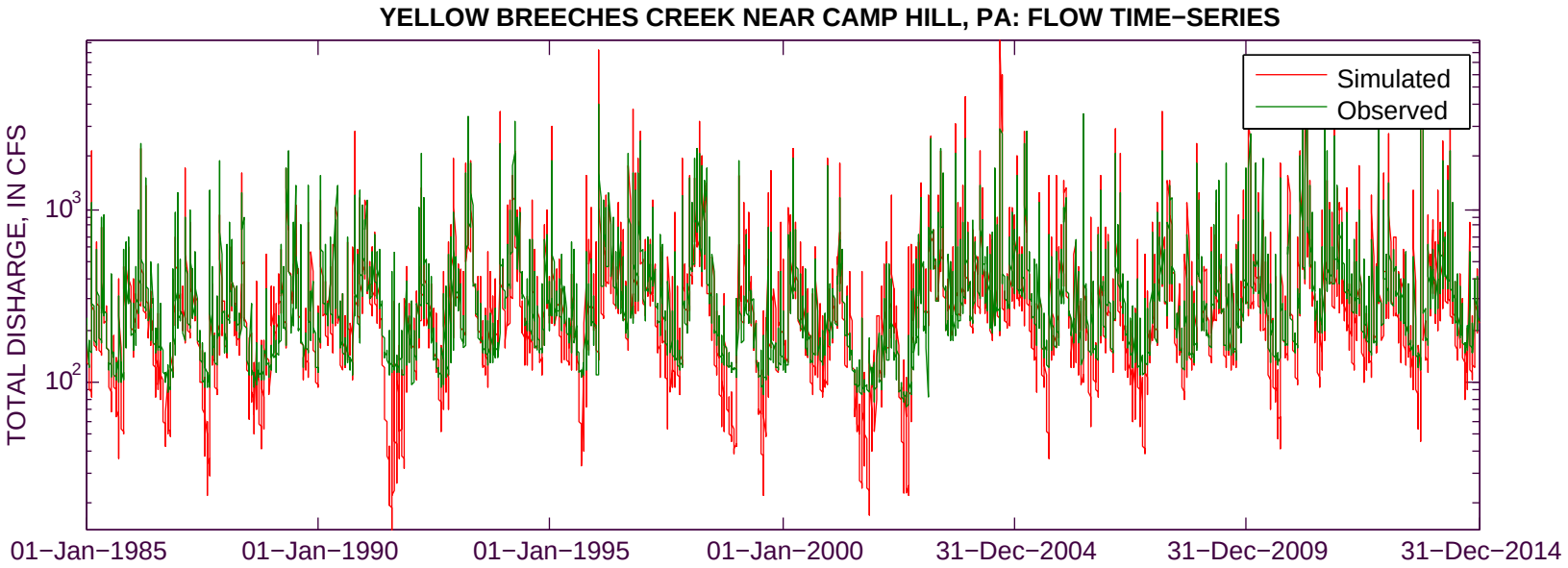
LOAD DATA
LOG10

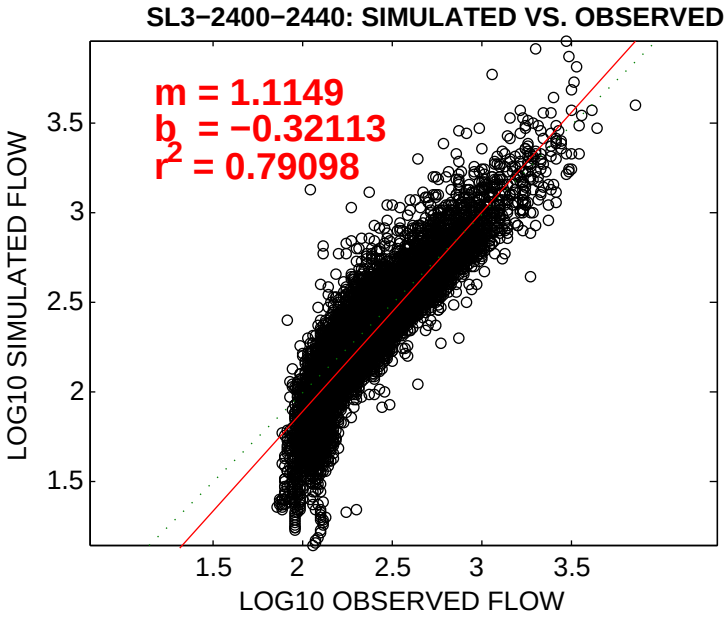


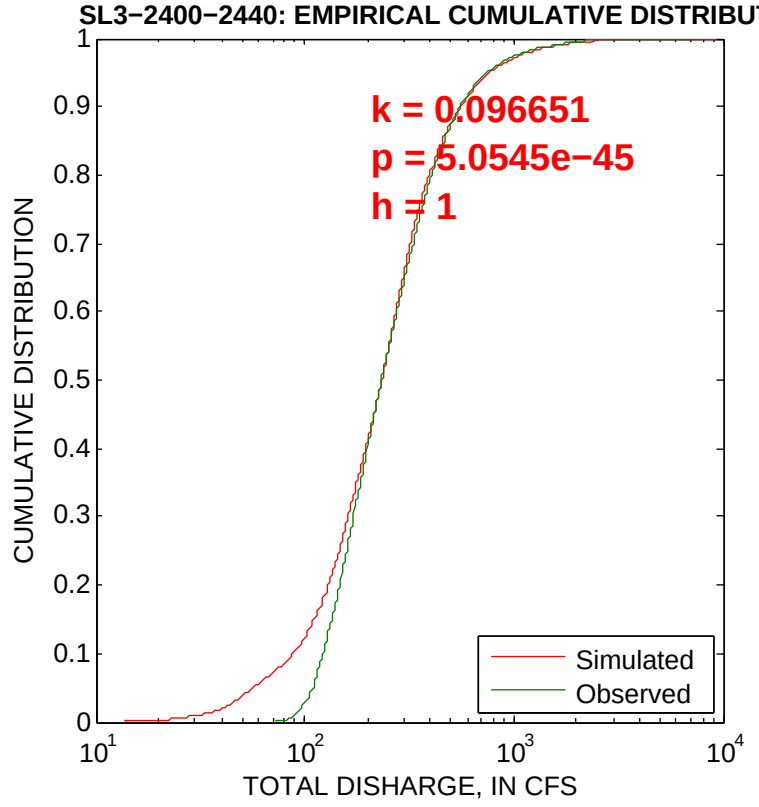












DATA SELECTION

scenario	file
P620171001WQ	FLOW.calib

plot: FLOW - total discharge

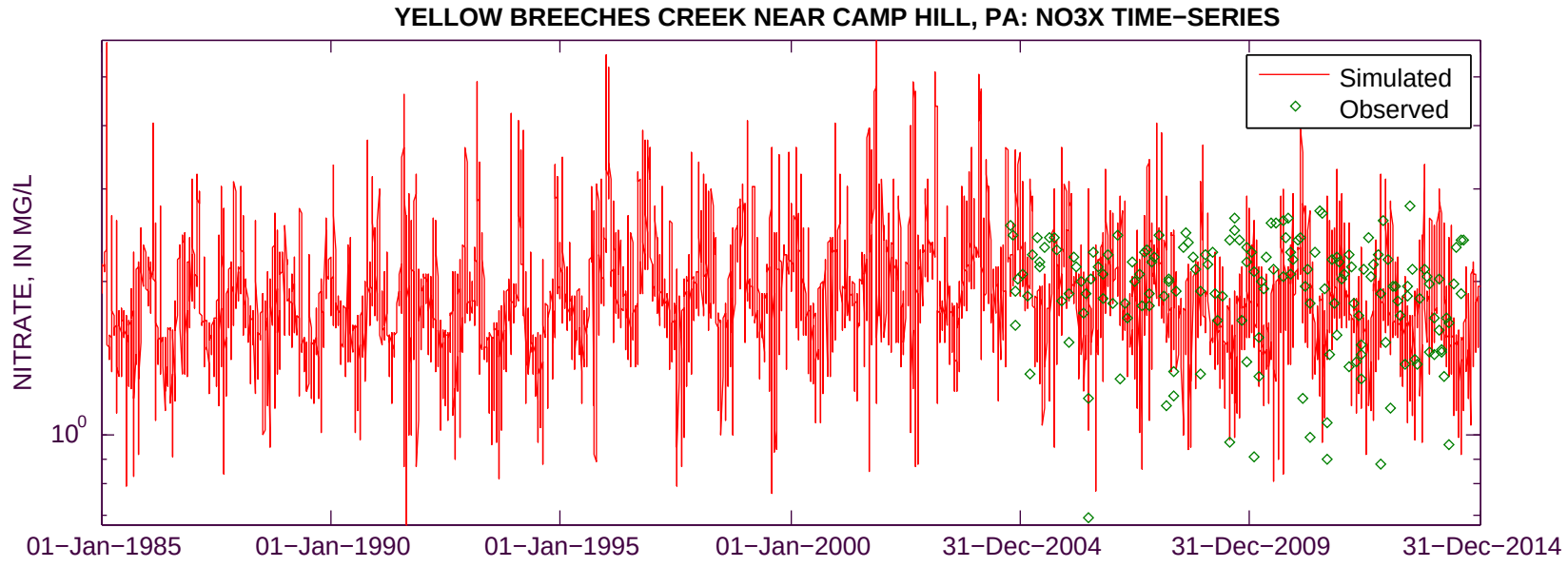
Dates: 1/1/1985 – 12/31/201

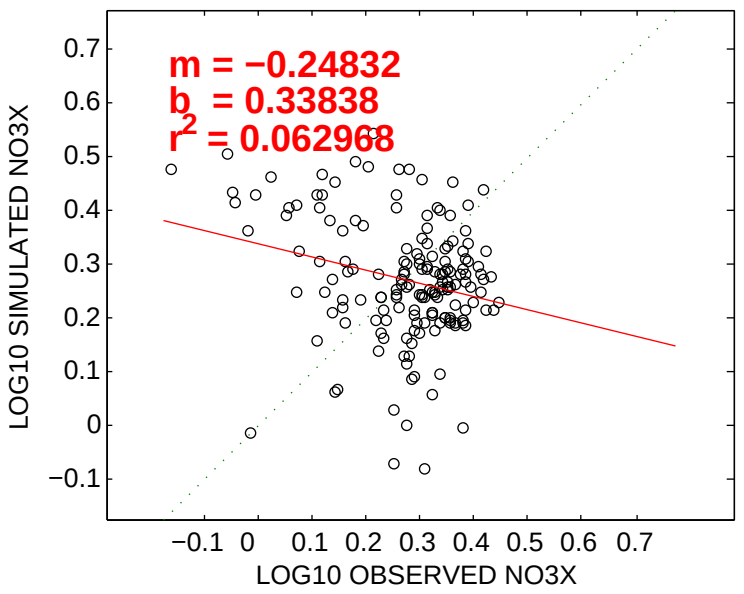
Drive	Directory	Observed
N/A	model	OBS20161101

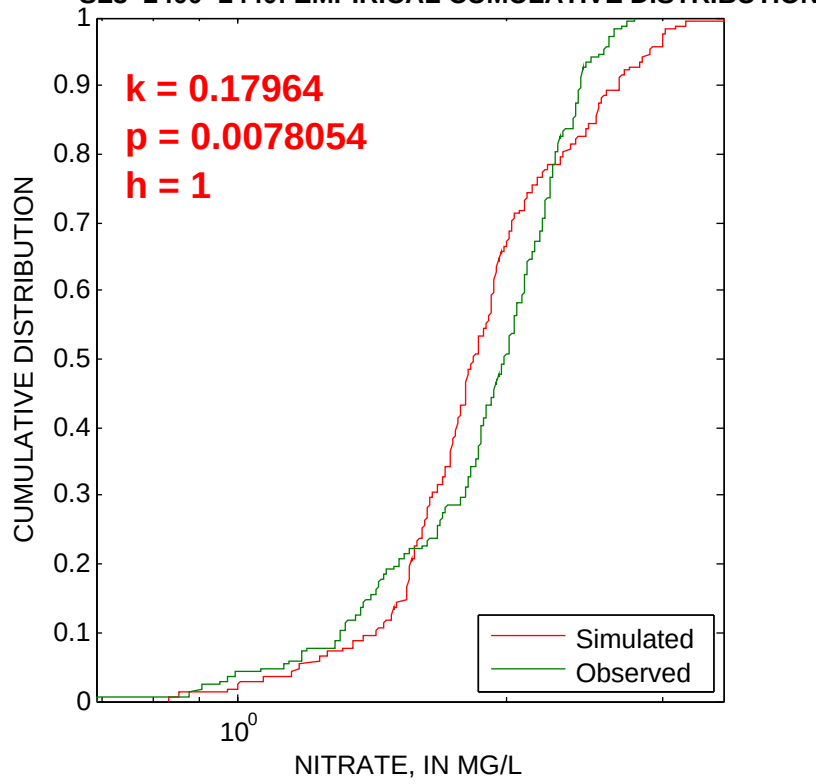
STATISTICS

	n	observe	simulate
		10957	10957
min		72	13.818
		1.85733	1.14045
mean		314.706	308.757
		2.4011	2.35596
media		233	234.38
		2.36736	2.36992
max		7200	9280.9
		3.85733	3.96759
varian		86760	120303
		0.0704607	0.110736
JB		0.001	0.001
		0.001	0.001
		ra	log
%		-1.89049	-1.87995
err.va		35375.8	0.0261149
rel.std.err		0.407744	0.37063
mod.eff		0.592256	0.62937

VERSION 2.1







DATA SELECTION

scenario: P620171001WQ | file: NO3X.calib

plot: NO3X - nitrate

Dates: 1/1/1985 – 12/31/201

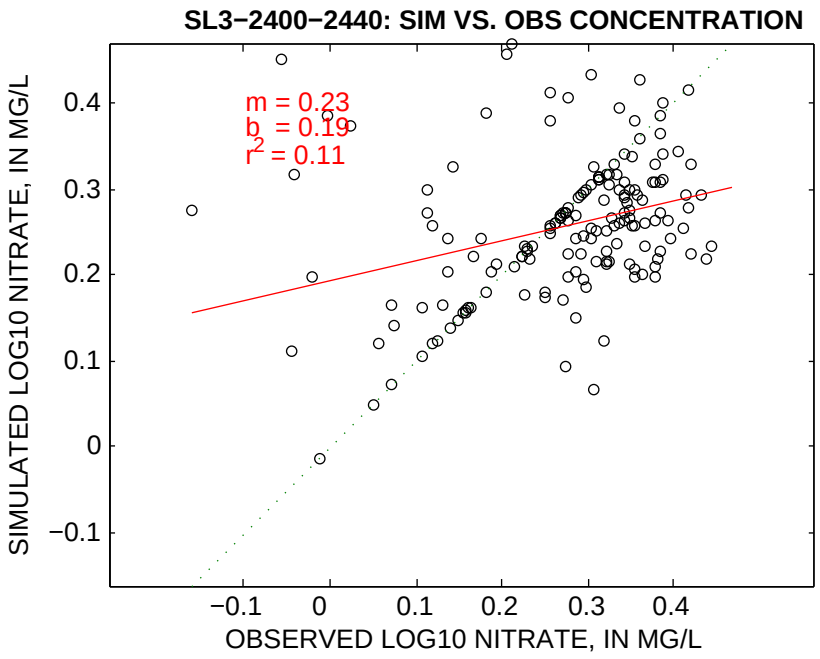
Drive | Directory | Observed: N/A | model | OBS20161101

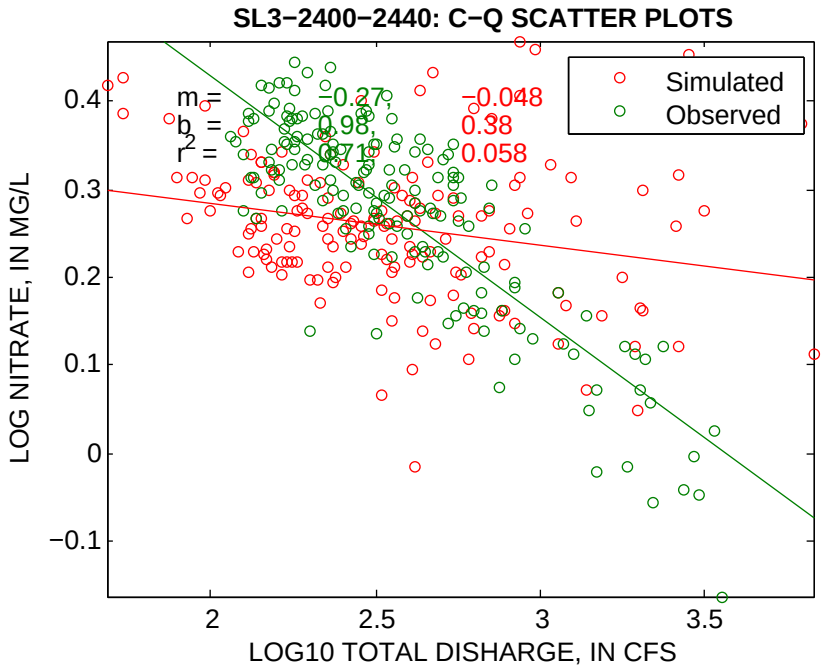
STATISTICS

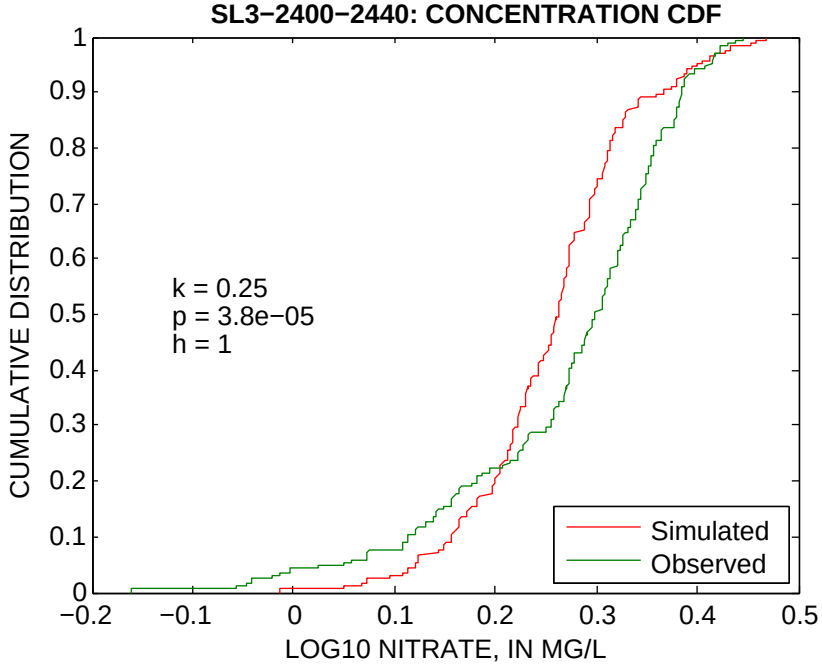
	n	observe	simulate
		167	167
min		0.69	0.83561
		-0.161151	-0.0779964
mean		1.92818	1.92714
		0.271928	0.270858
media		1.99	1.8389
		0.298853	0.264558
max		2.786	3.5125
		0.444981	0.545616
varian		0.191552	0.242555
		0.0127754	0.0125102
JB		0.020289	0.010992
		0.001	0.080331
		ra	log
%		0.0538158	-0.393292
err.va		0.552961	0.0316314
rel.std.err		2.88674	2.47597
mod.eff		-1.88674	-1.47597

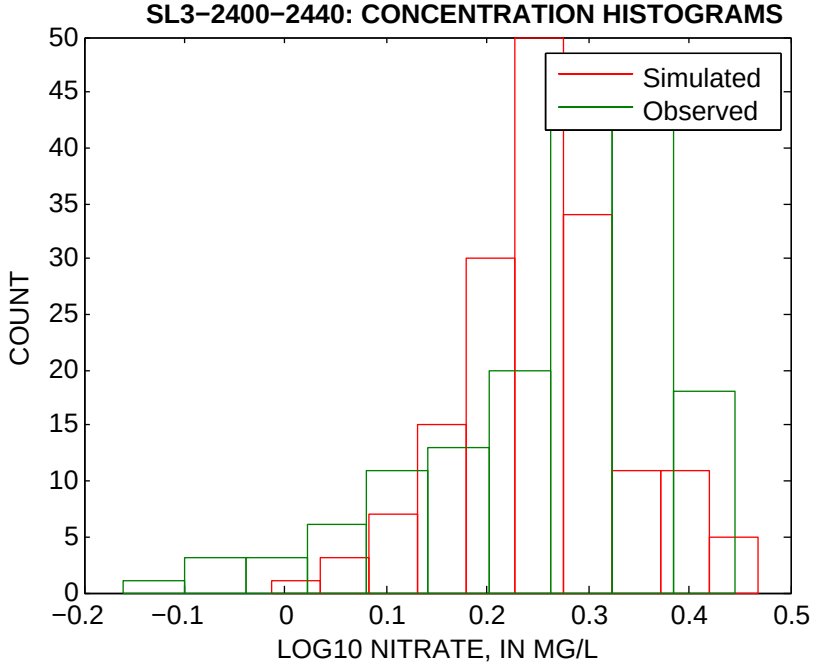
VERSION 2.1

ALL DATA
LOG10

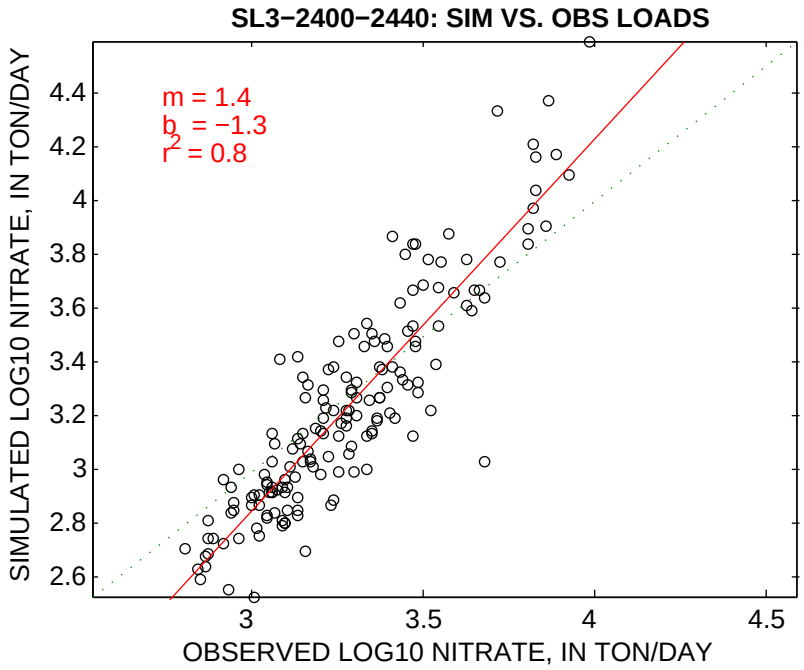


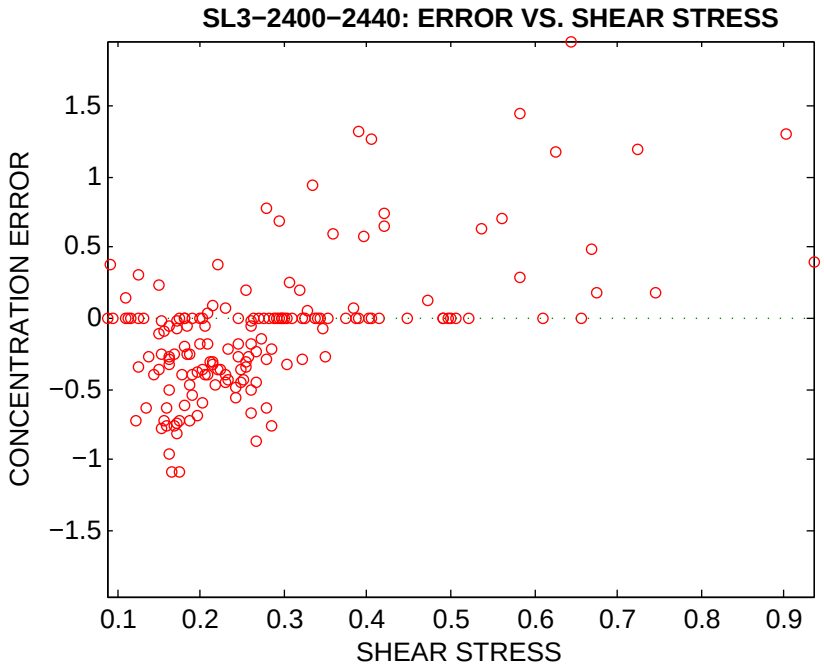


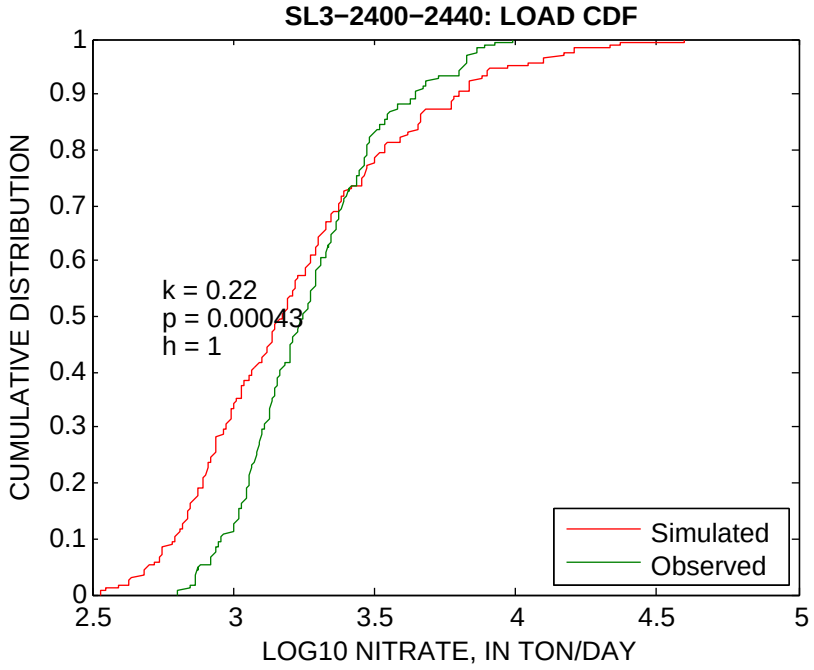


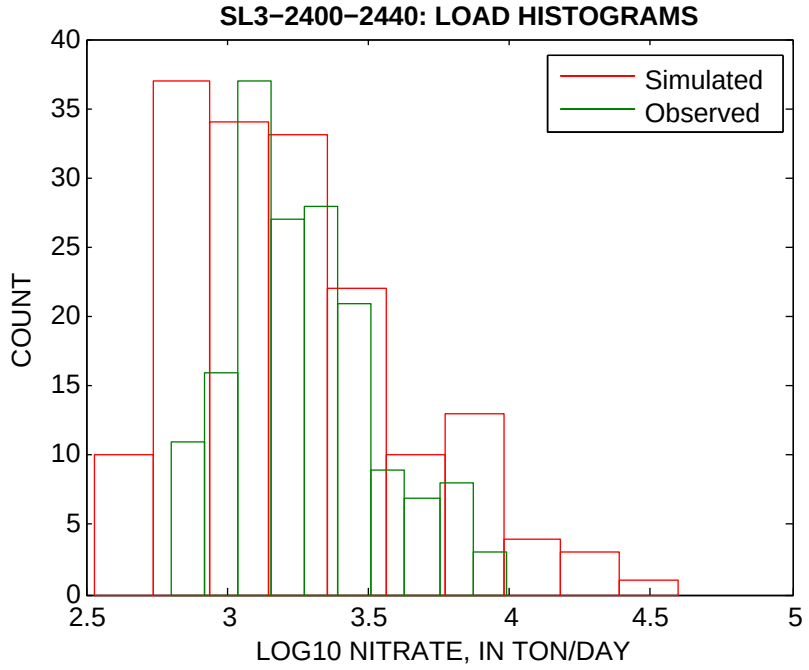


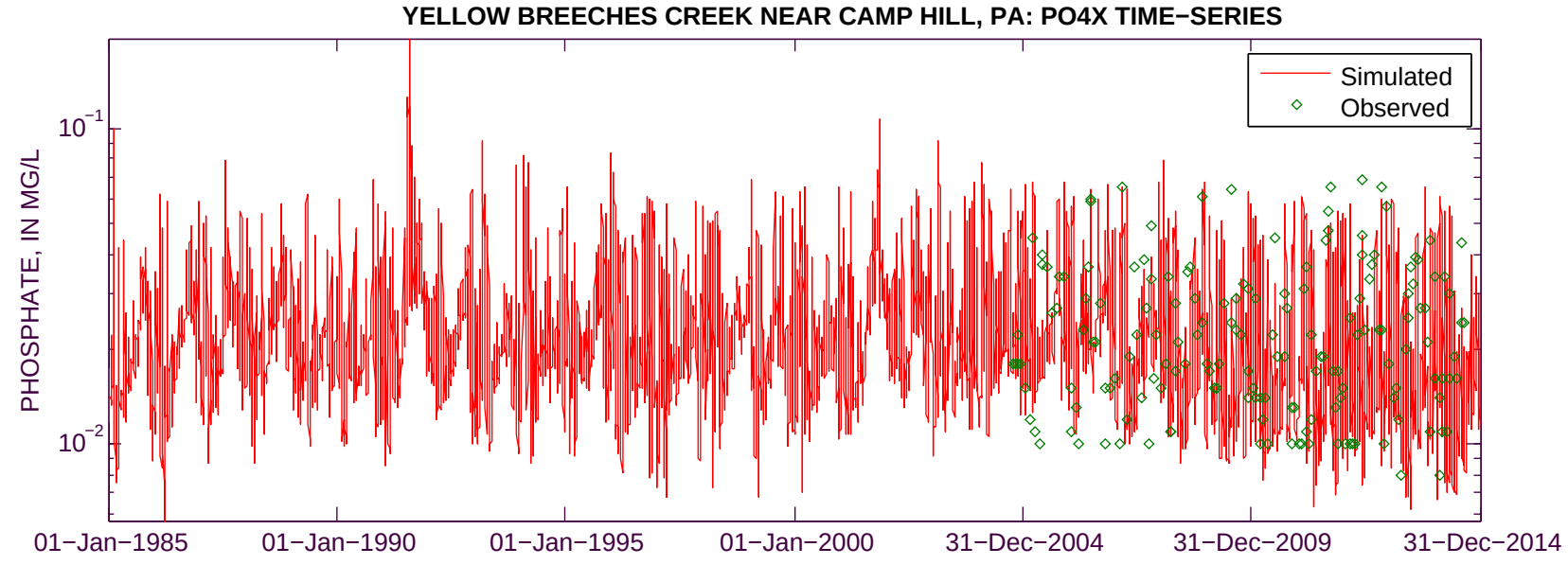
LOAD DATA
LOG10

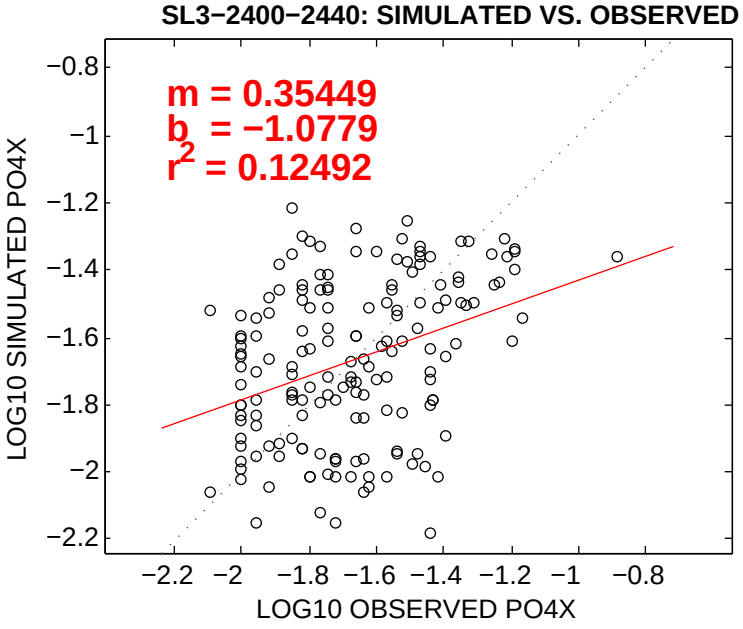


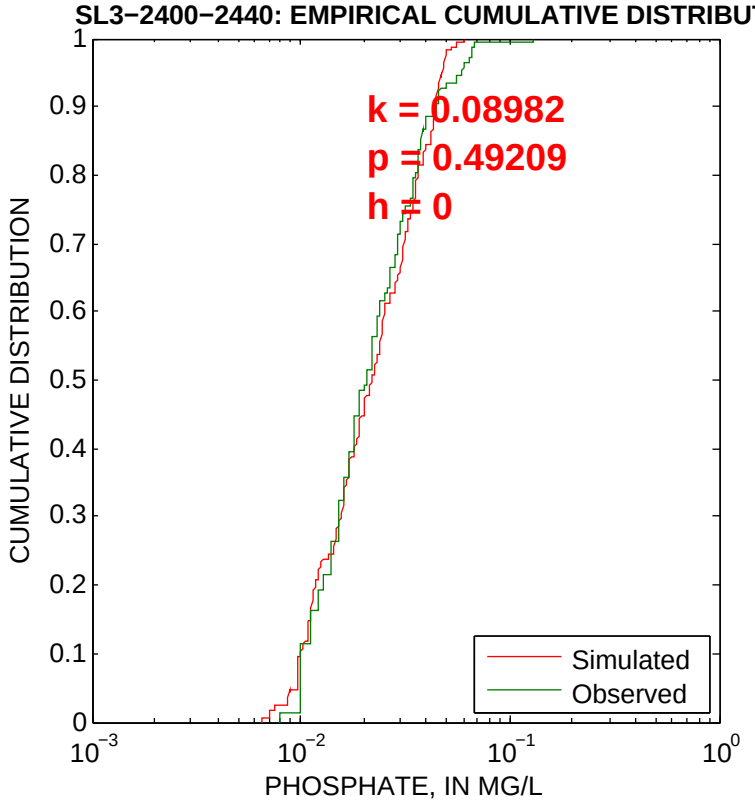












DATA SELECTION

scenario	file
P620171001WQ	PO4X.calib

plot: PO4X - phosphate

Dates: 1/1/1985 – 12/31/201

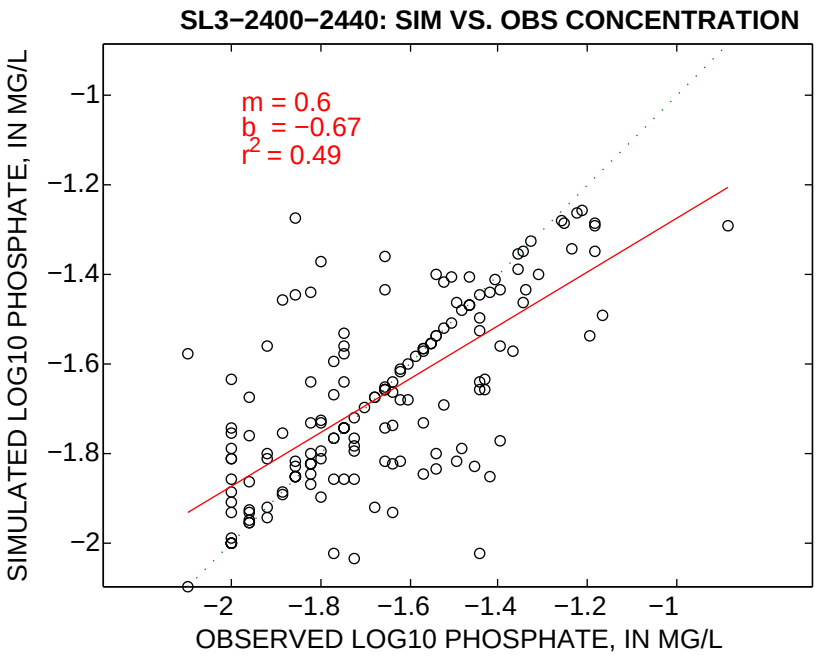
Drive	Directory	Observed
N/A	model	OBS20161101

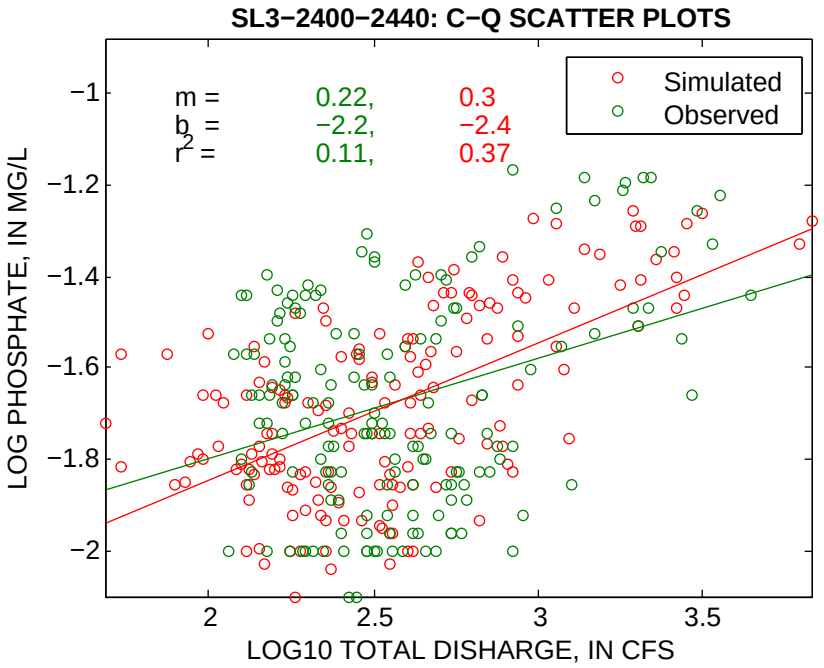
STATISTICS

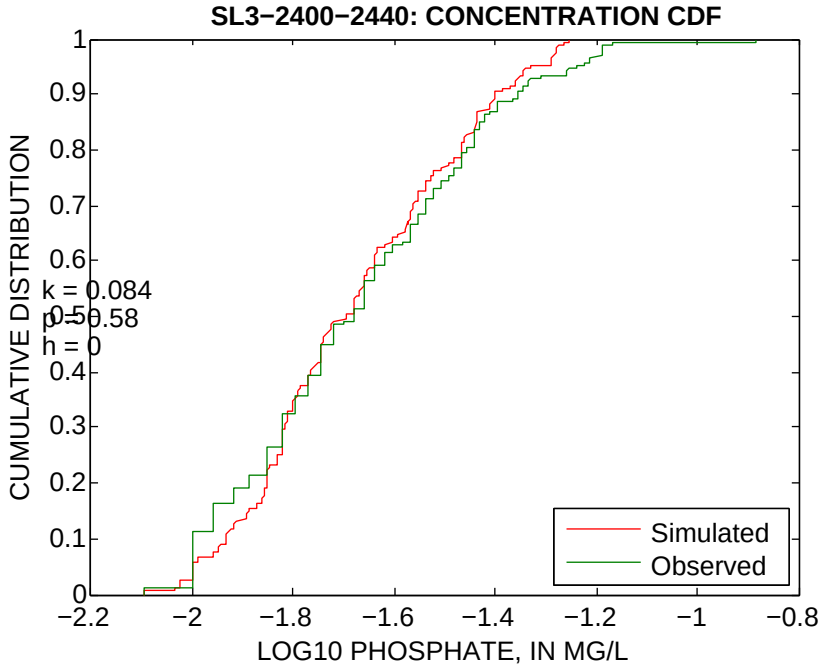
	n	167	167
		observe	simulate
min		0.008	0.0066029
		-2.09691	-2.18027
mean		0.025	0.0246238
		-1.66989	-1.66985
media		0.021	0.021989
		-1.67778	-1.65779
max		0.13	0.061011
		-0.886057	-1.21459
varian		0.00025490	0.00016316
		0.0557059	0.0560373
JB		0.001	0.008342
		0.056767	0.024123
		ra	log
%		-1.50476	-0.002061
err.va		0.00025968	0.0722488
rel.std.err		1.01876	1.29697
mod.eff		-0.0187635	-0.29697

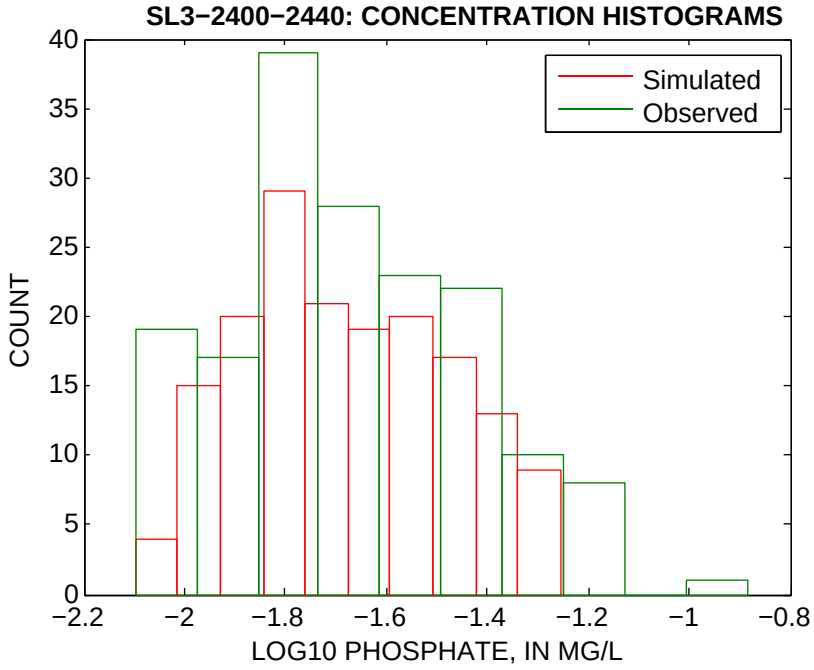
VERSION 2.1

ALL DATA
LOG10

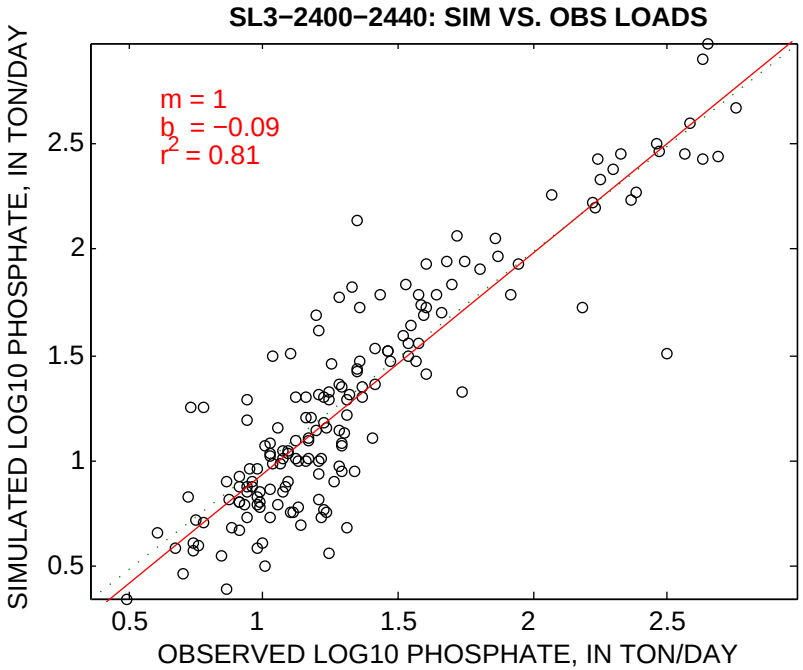


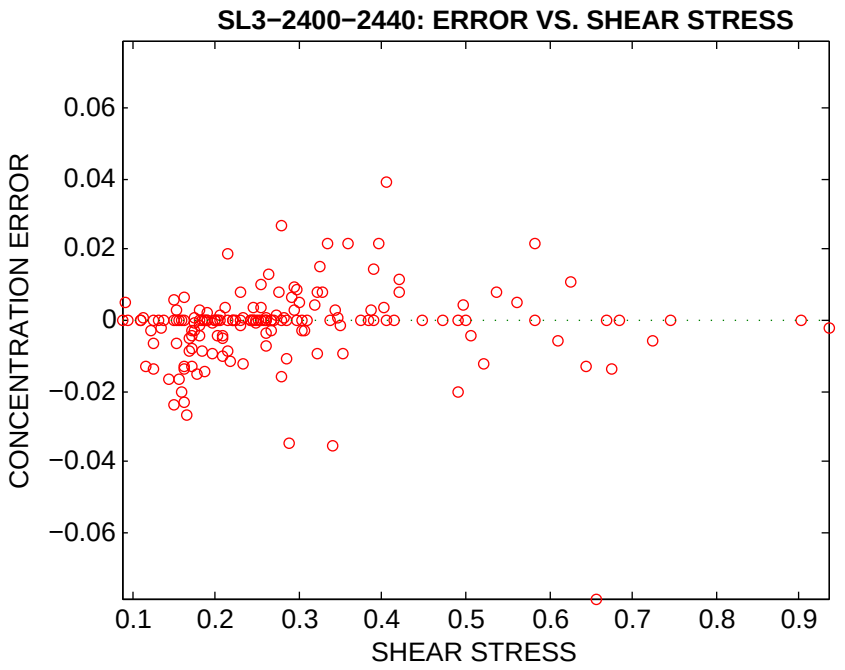


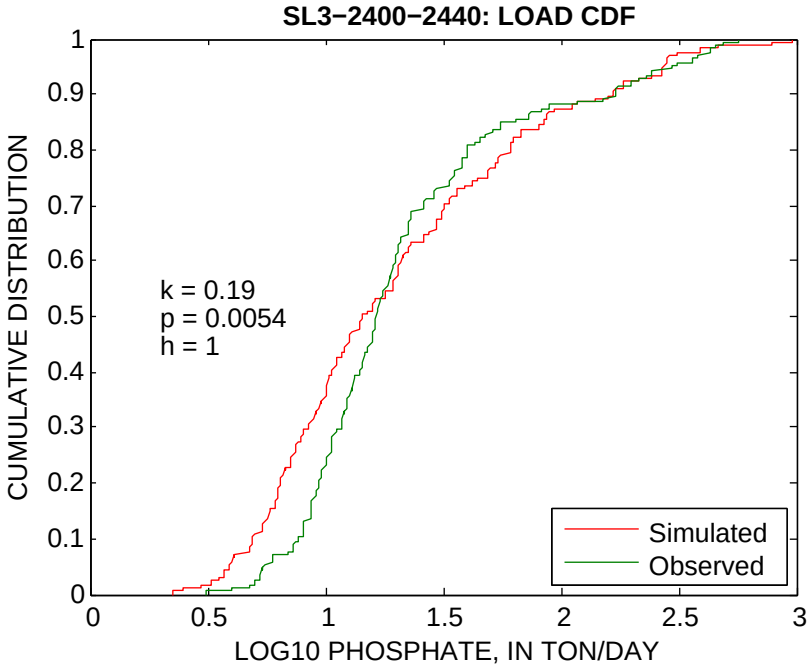


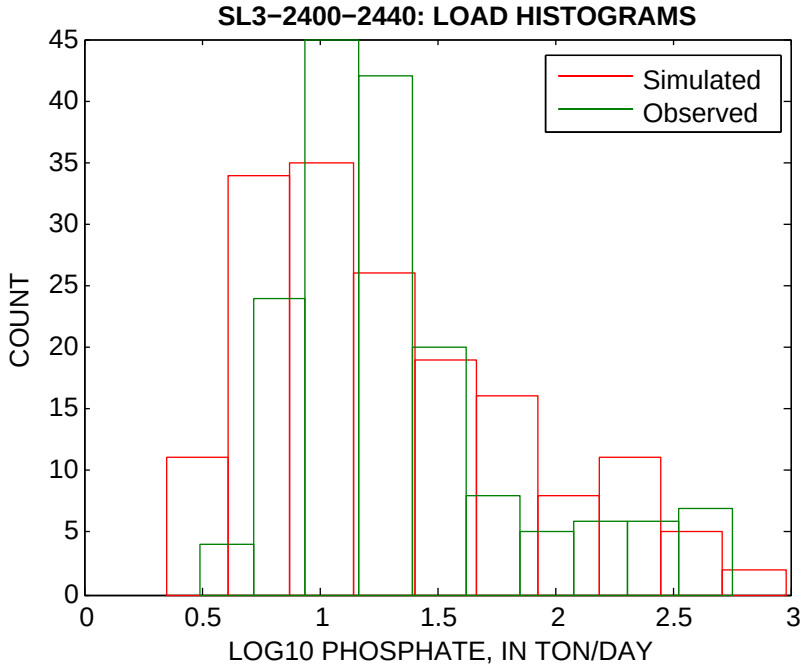


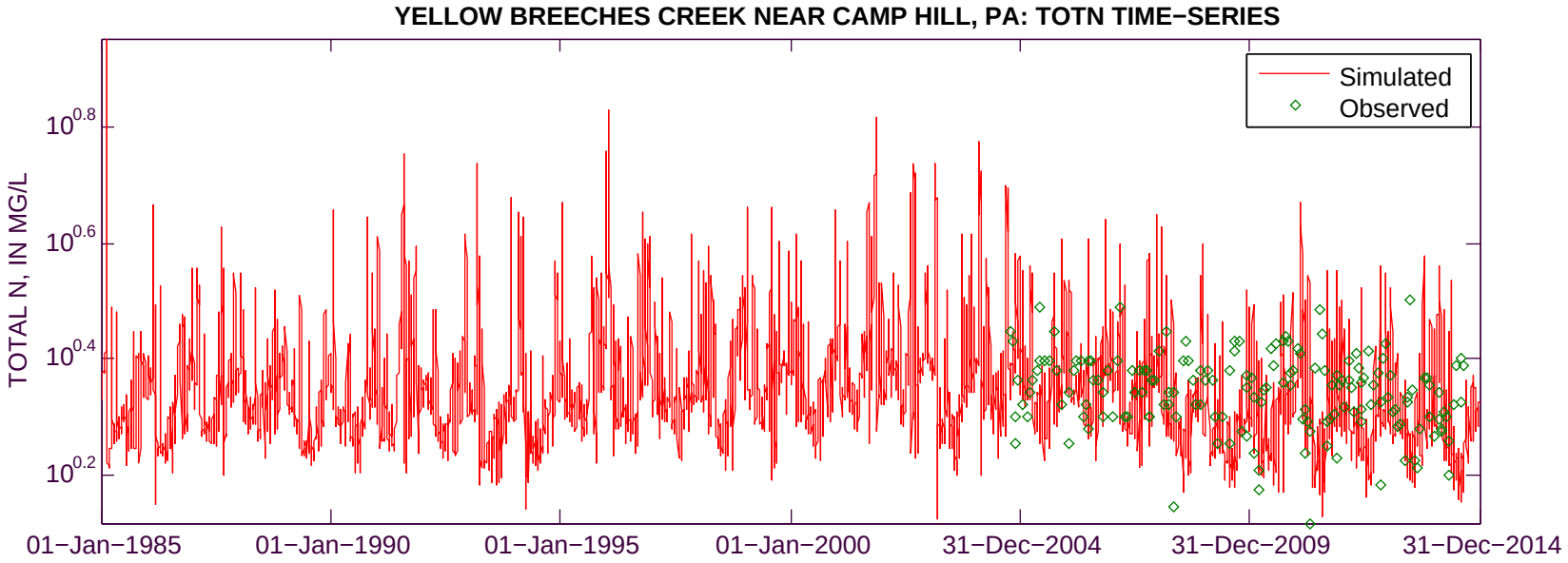
LOAD DATA
LOG10

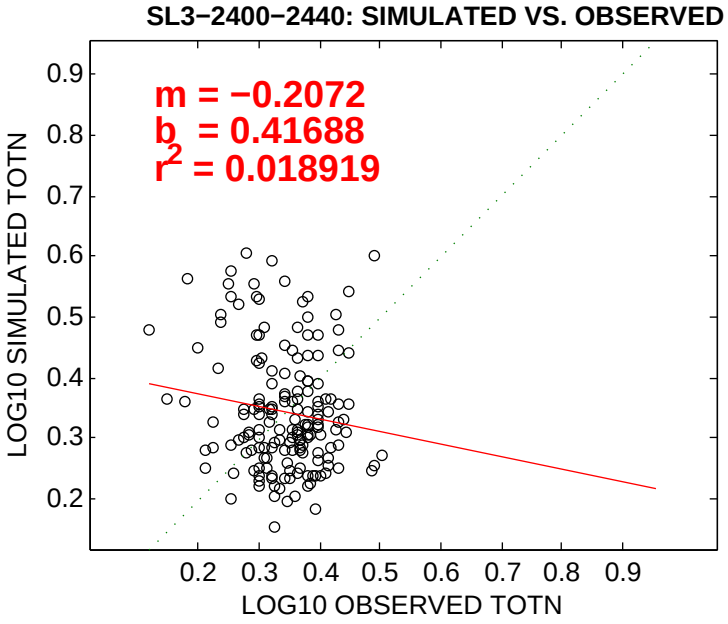


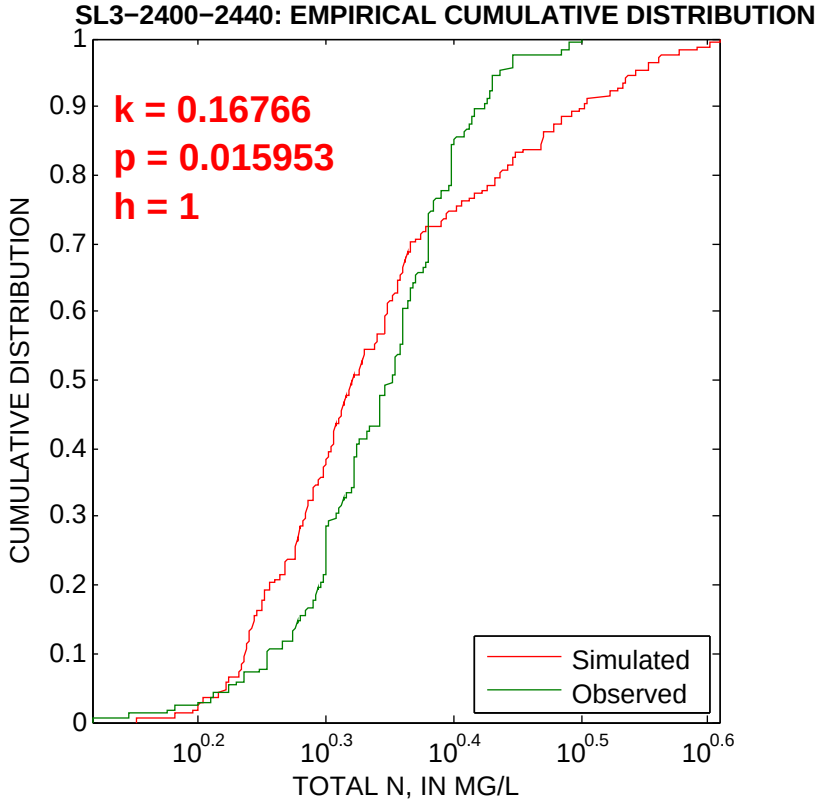












DATA SELECTION

scenario	file
P620171001WQ	TOTN.calib

plot: TOTN - total nitrogen

Dates: 1/1/1985 – 12/31/201

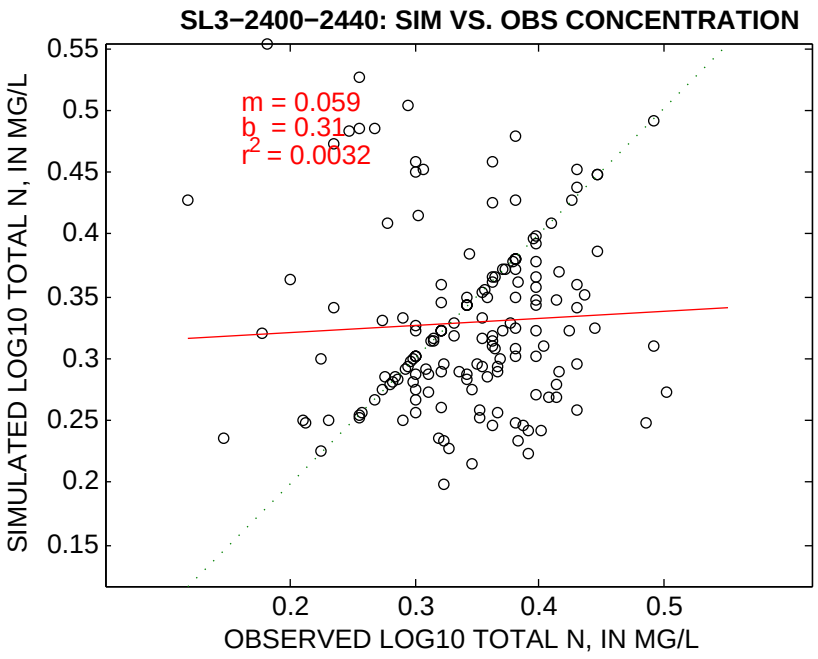
Drive	Directory	Observed
N/A	model	OBS20161101

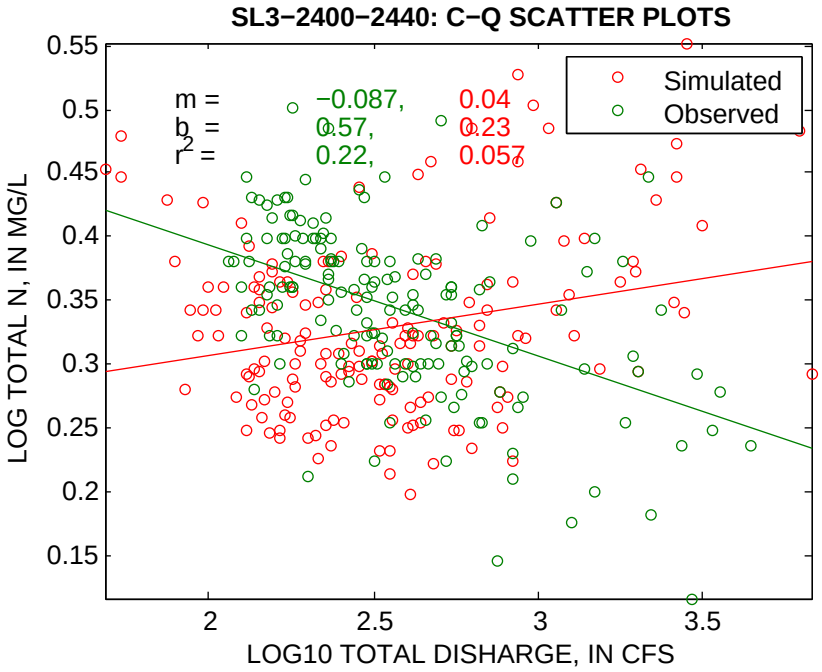
STATISTICS

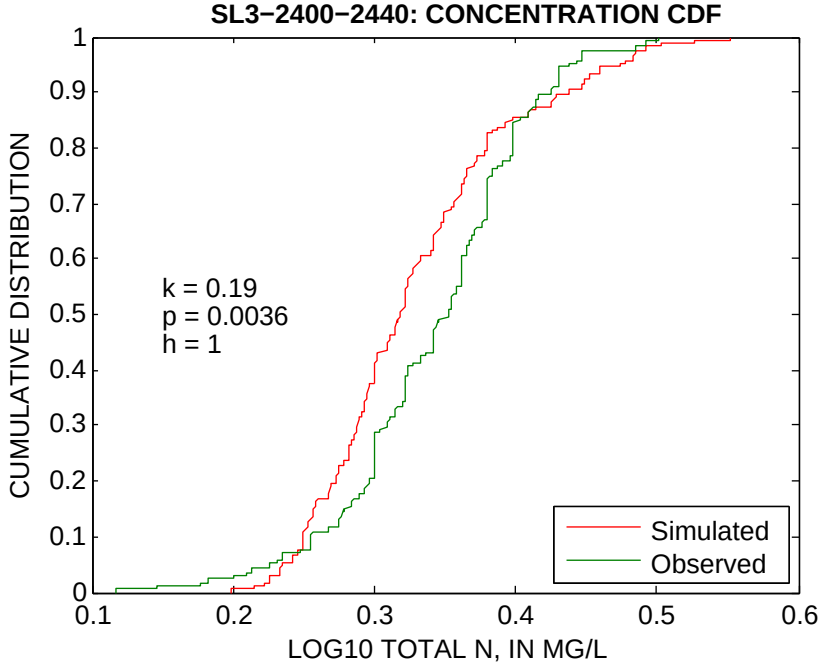
	n	observe	simulate
		167	167
min		1.31	1.4222
		0.117271	0.152961
mean		2.22638	2.27946
		0.342711	0.345871
media		2.25	2.1002
		0.352183	0.322261
max		3.176	4.057
		0.50188	0.608205
varian		0.109024	0.324552
		0.00436472	0.00990469
JB		0.5	0.001
		0.022972	0.005337
		ra	log
%		2.38421	0.922143
err.va		0.483081	0.0160882
rel.std.err		4.43097	3.68596
mod.eff		-3.43097	-2.68596

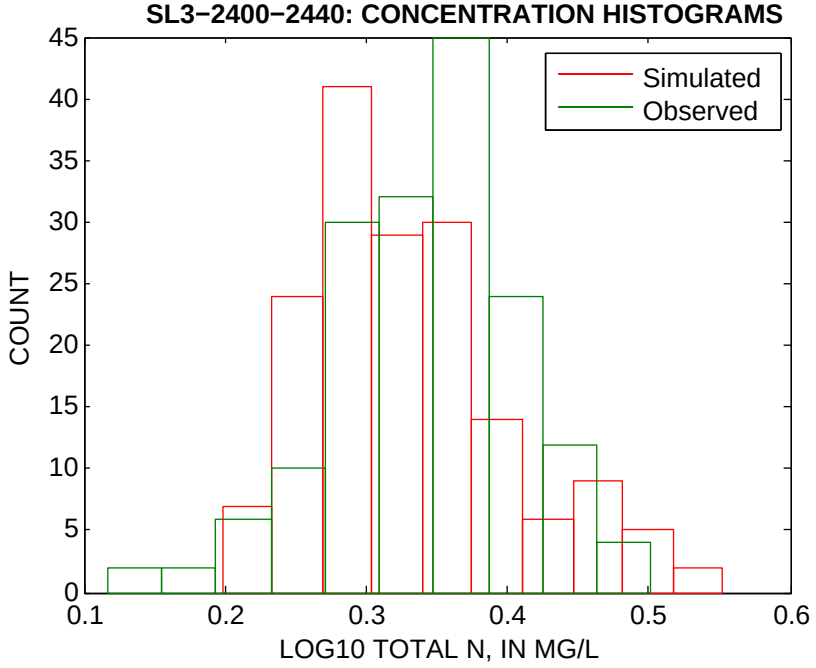
VERSION

ALL DATA
LOG10

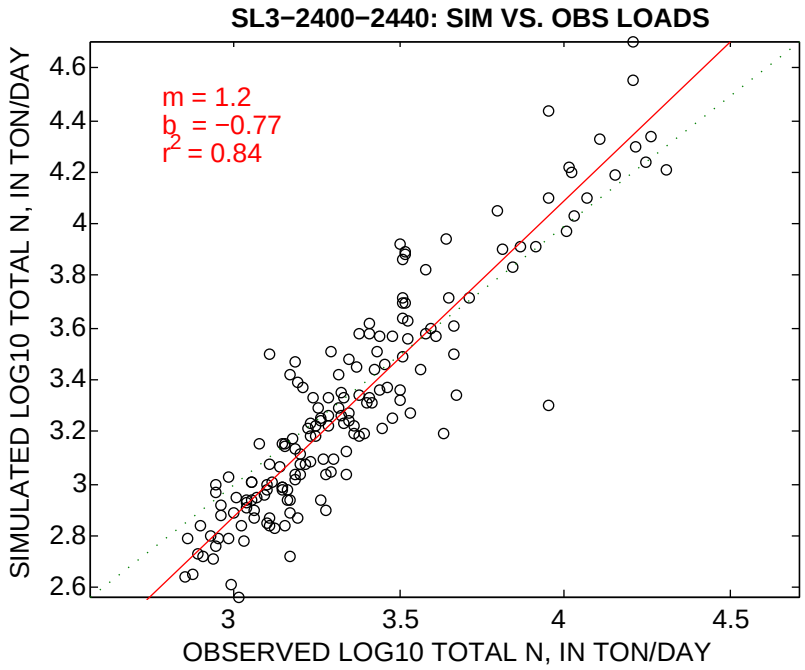


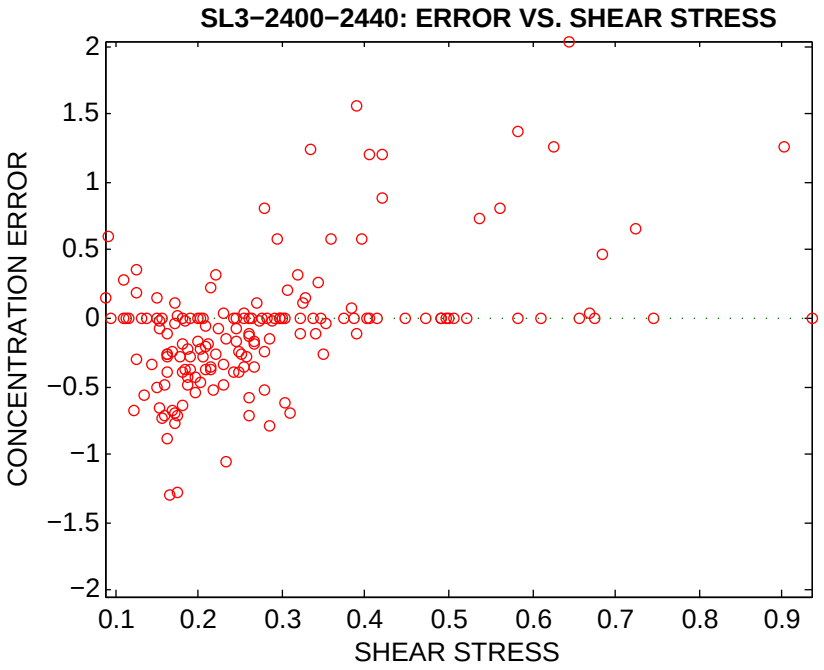


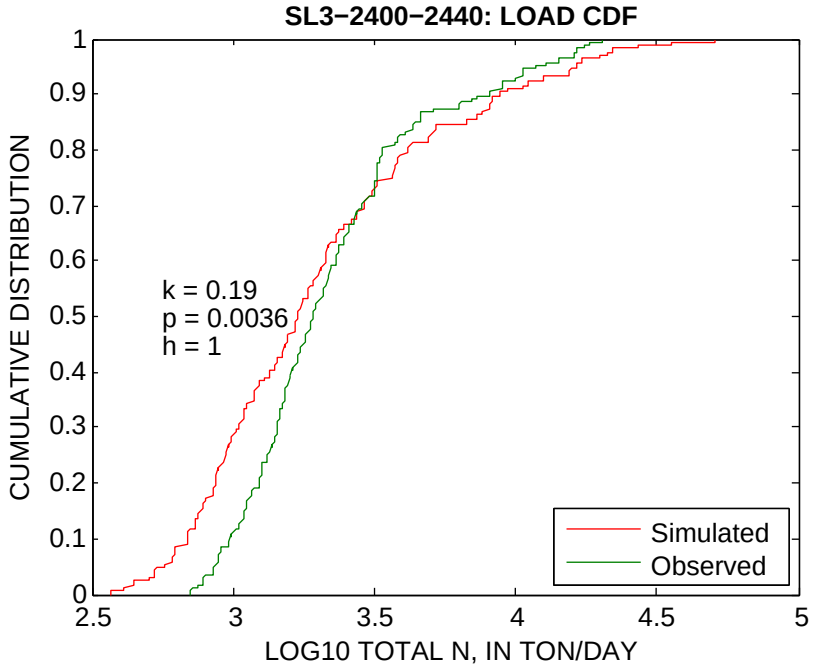


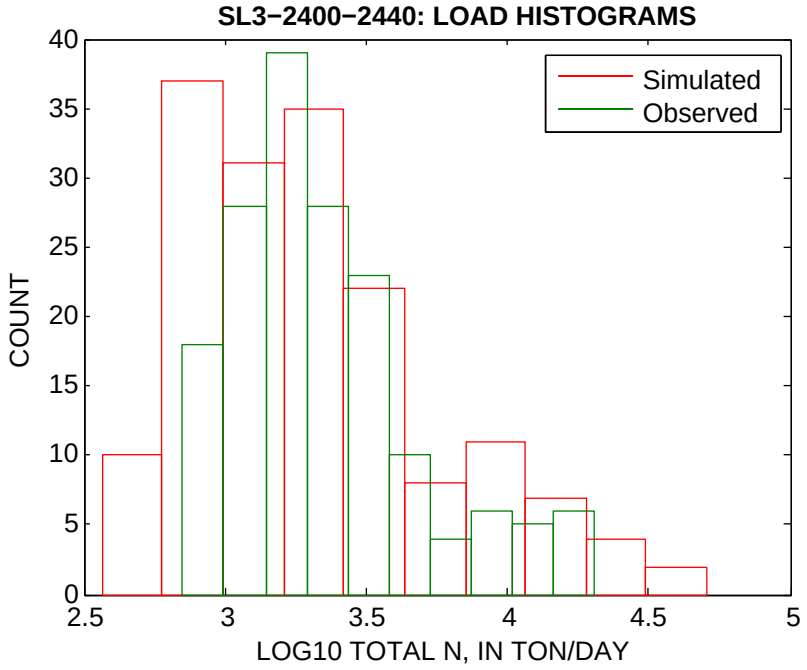


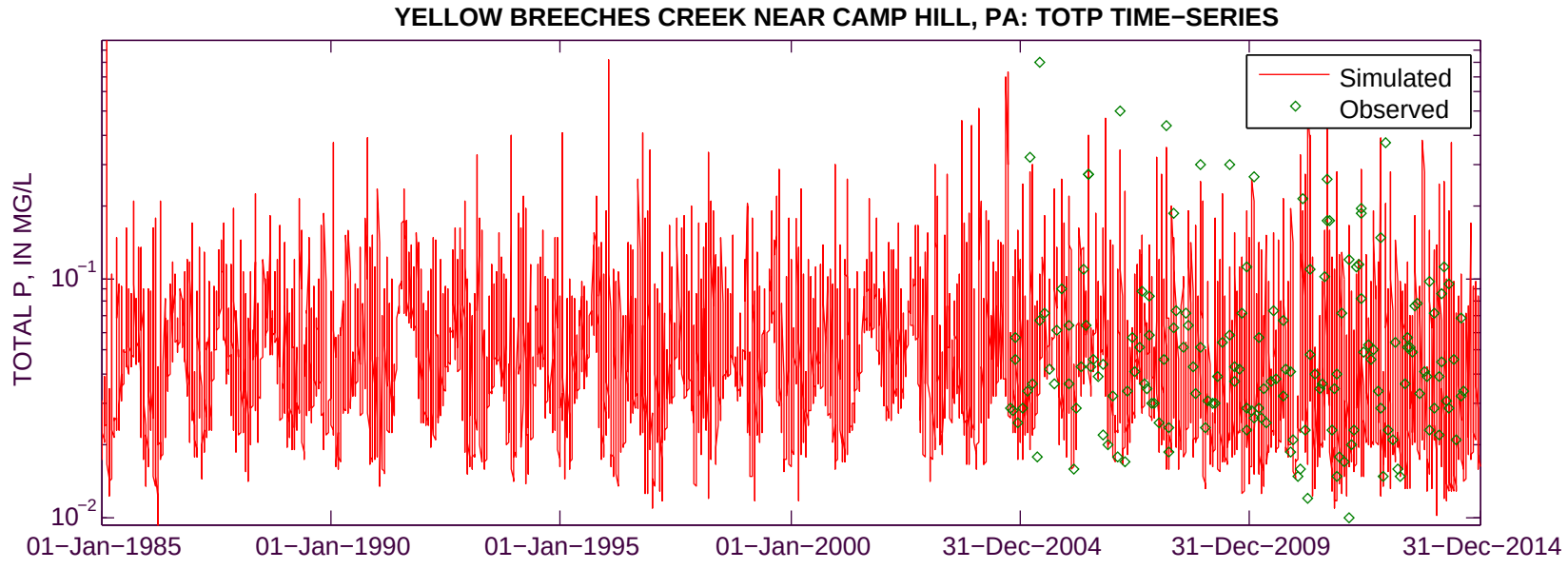
LOAD DATA
LOG10

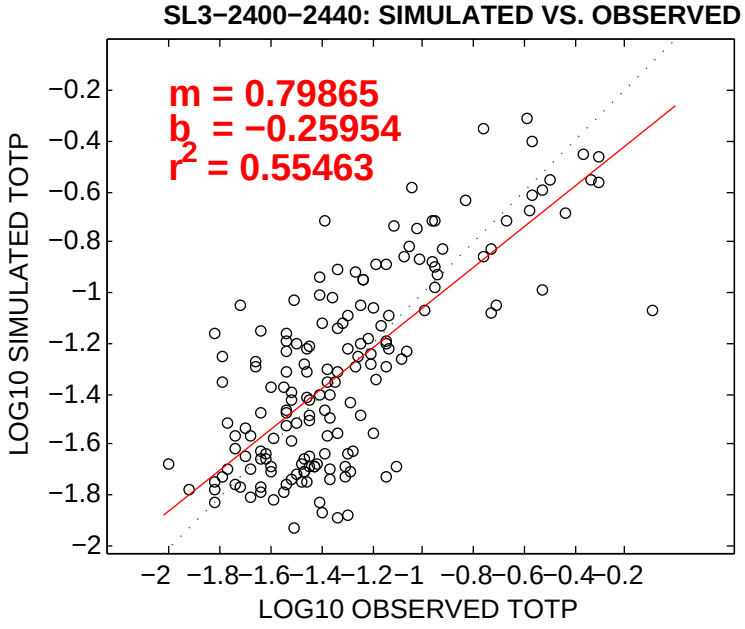


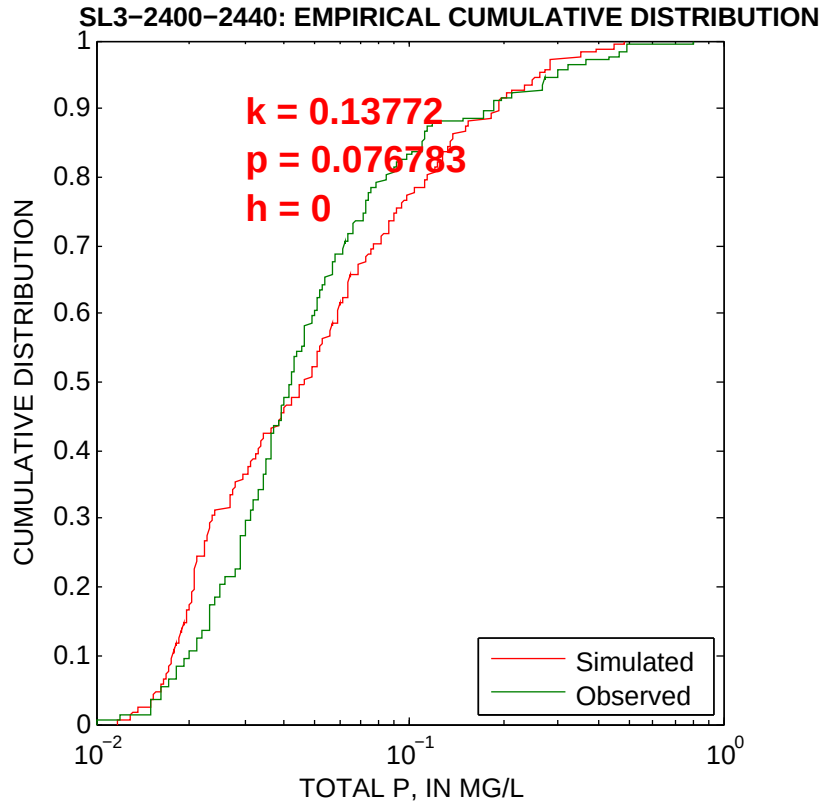












DATA SELECTION

scenario	file
P620171001WQ	TOTP.calib

plot: TOTP - total phosphorus

Dates: 1/1/1985 – 12/31/201

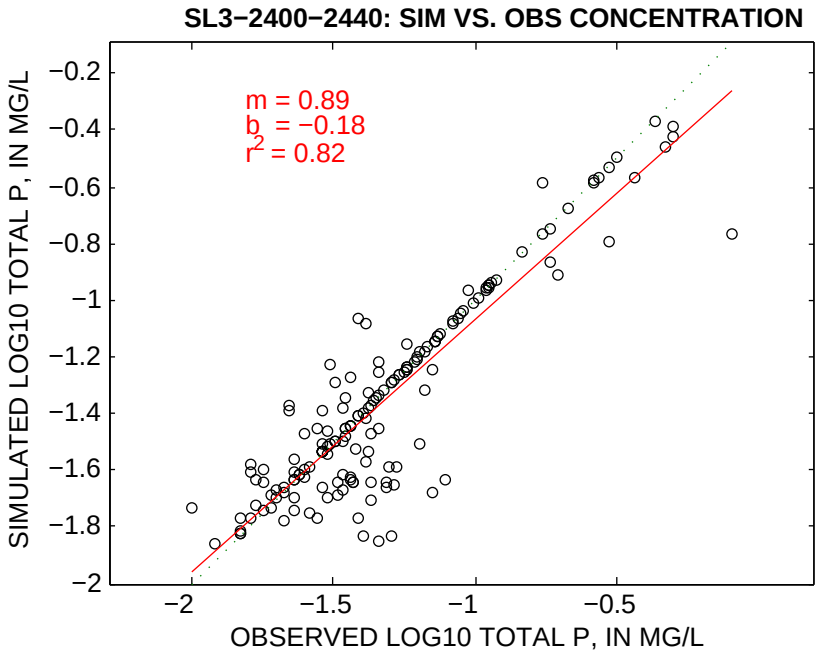
Drive	Directory	Observed
N/A	model	OBS20161101

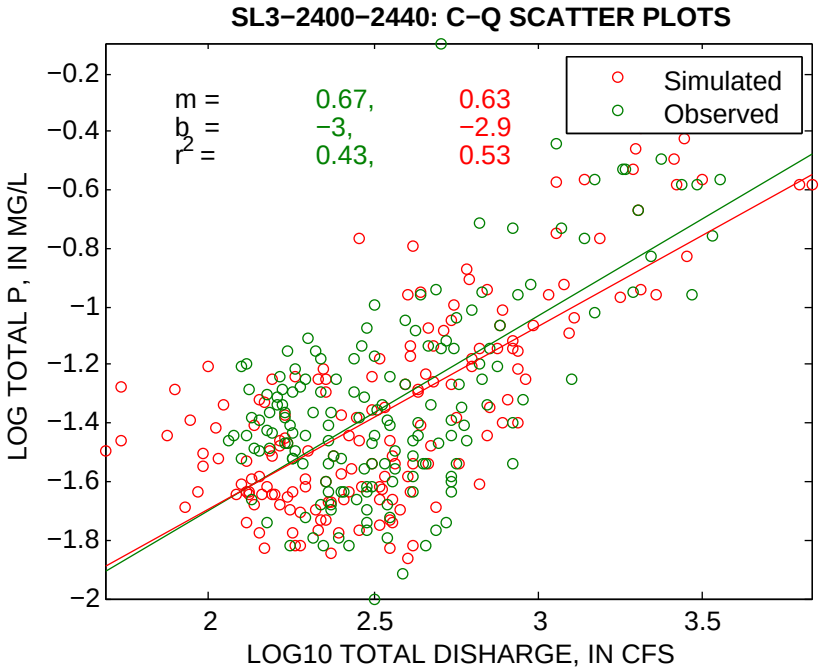
STATISTICS

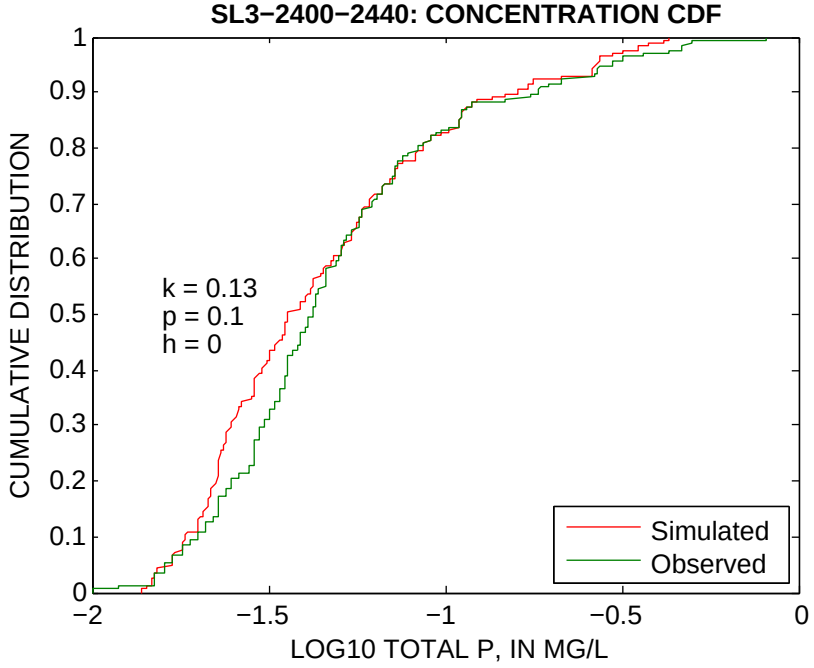
	n	167	167
		observe	simulate
min		0.01	0.011832
		-2	-1.92694
mean		0.0772216	0.0768283
		-1.30749	-1.30376
media		0.042	0.045875
		-1.37675	-1.33842
max		0.808	0.48728
		-0.0925886	-0.312221
varian		0.0112681	0.00721218
		0.131939	0.151732
JB		0.001	0.001
		0.001	0.014378
		ra	log
%		-0.509282	-0.284922
err.va		0.00642368	0.0729395
rel.std.err		0.570075	0.552829
mod.eff		0.429925	0.447171

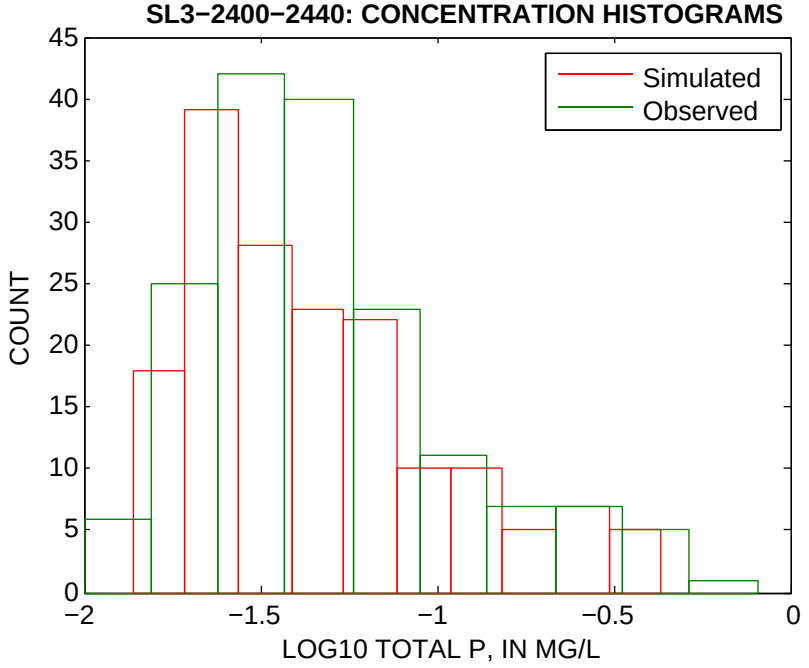
VERSION 2.1

ALL DATA
LOG10

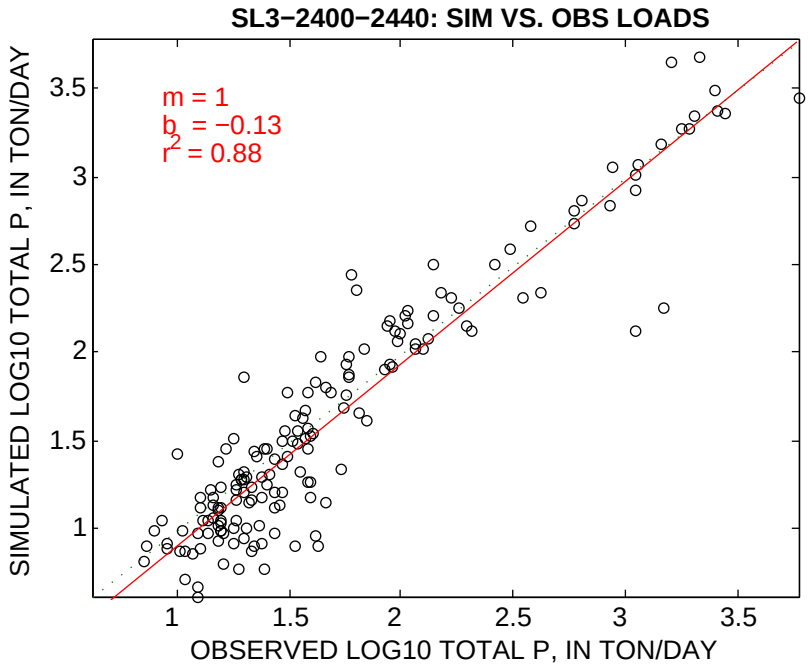


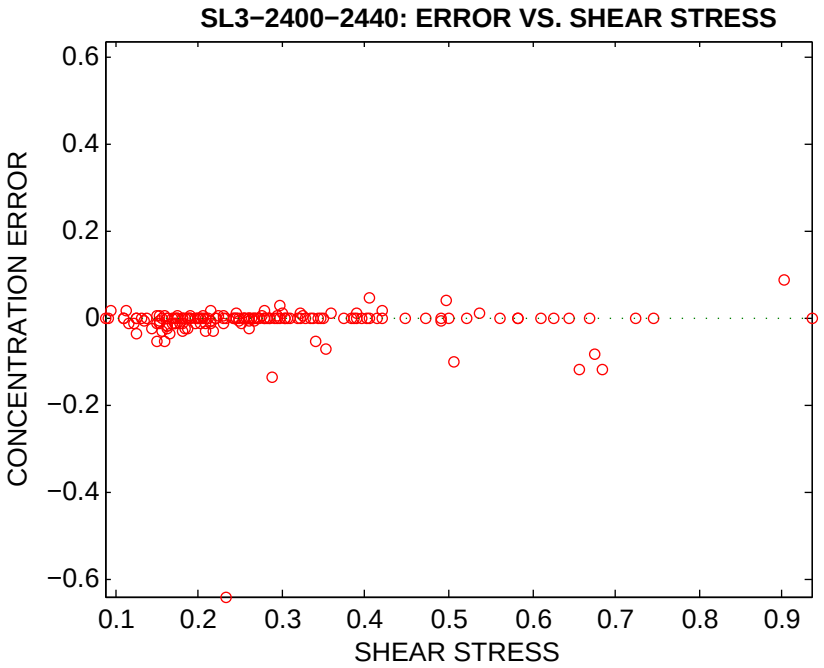


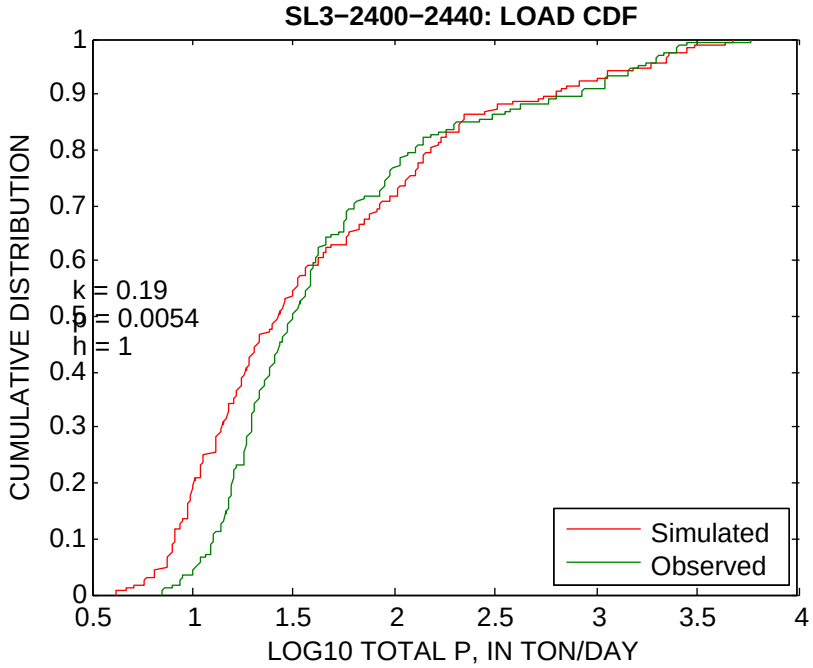


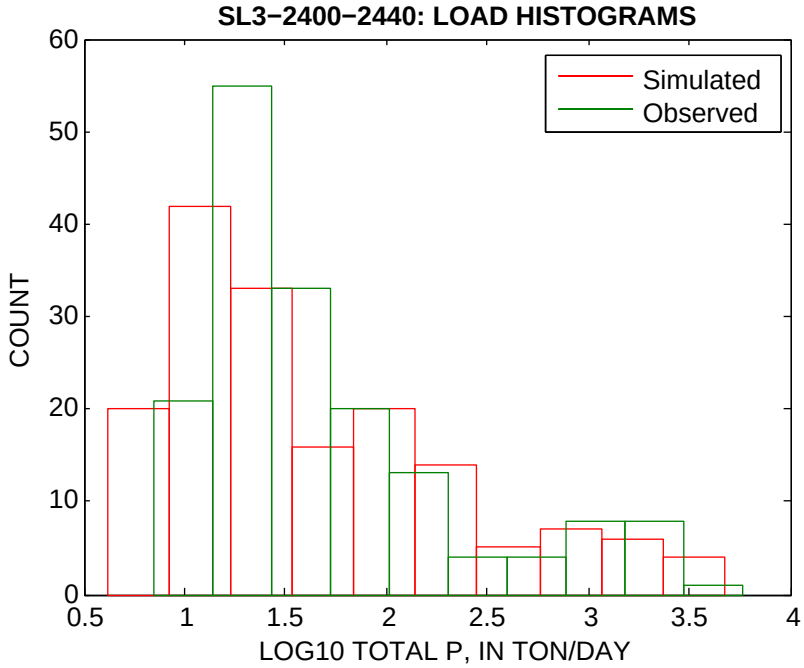


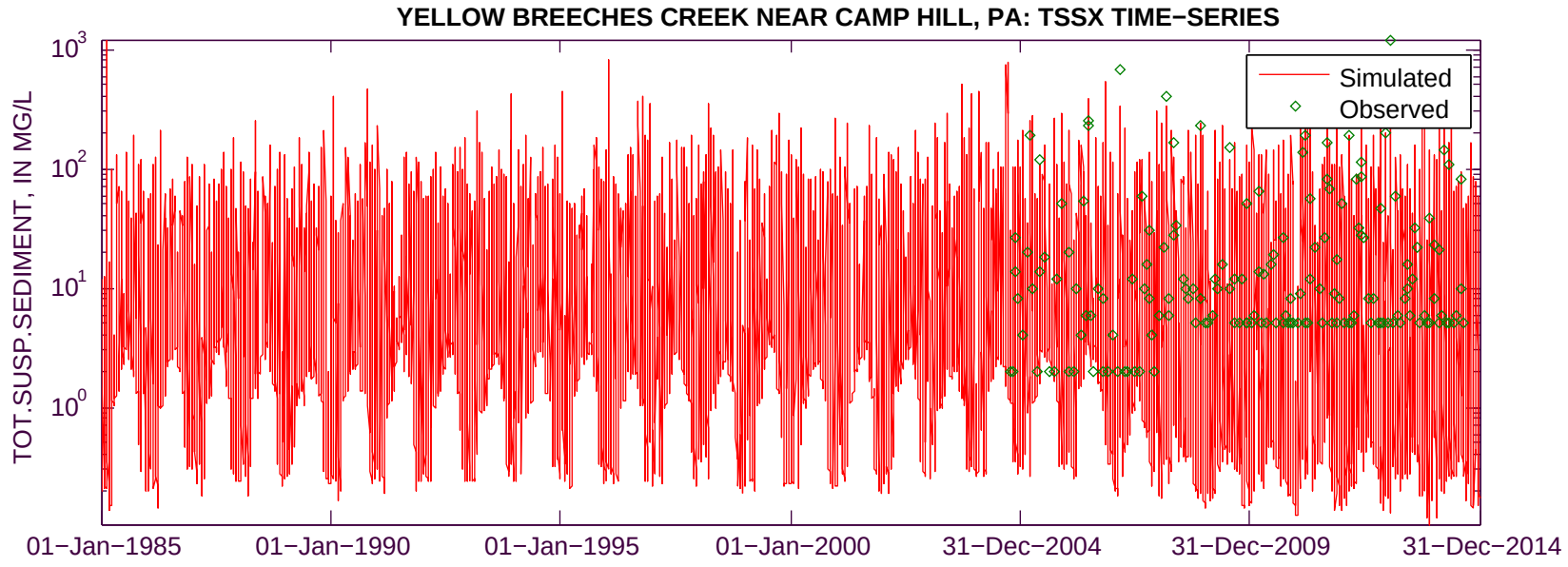
LOAD DATA
LOG10

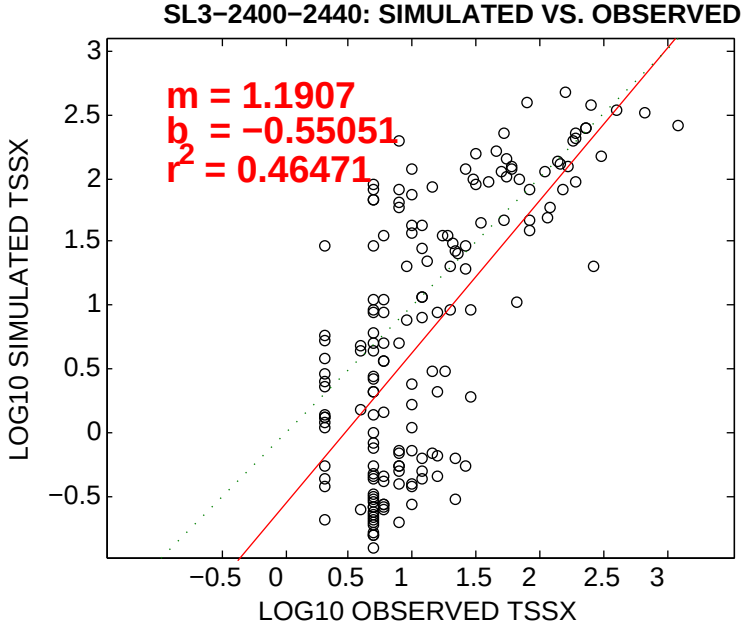


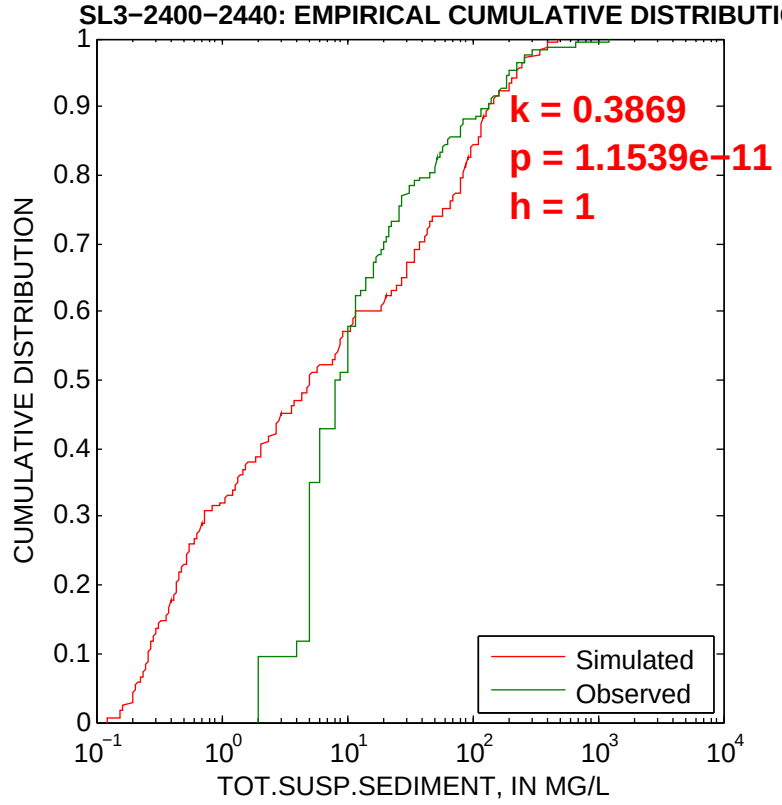












DATA SELECTION

scenario	file
P620171001WQ	TSSX.calib

plot: TSSX - total suspended ...

Dates: 1/1/1985 – 12/31/201

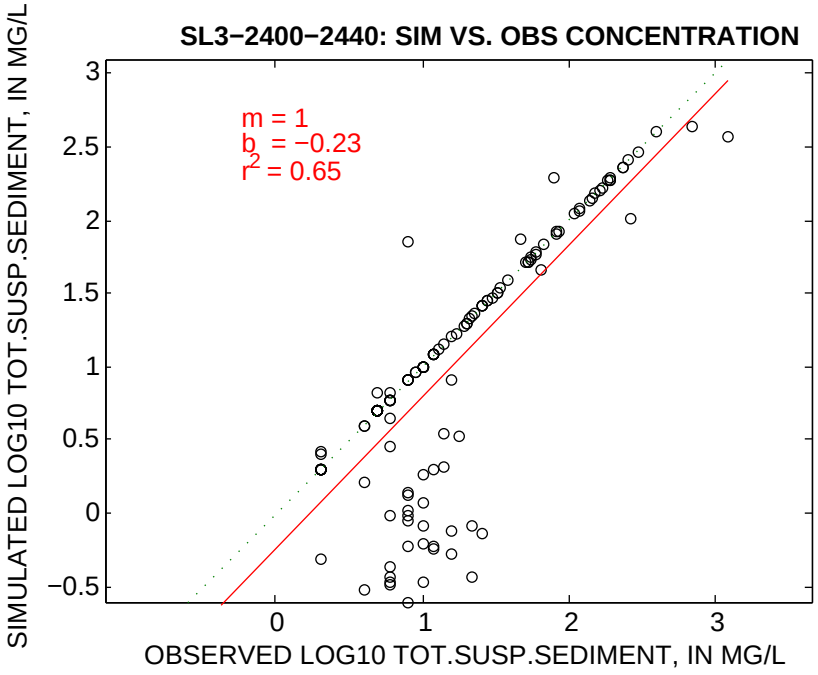
Drive	Directory	Observed
N/A	model	OBS20161101

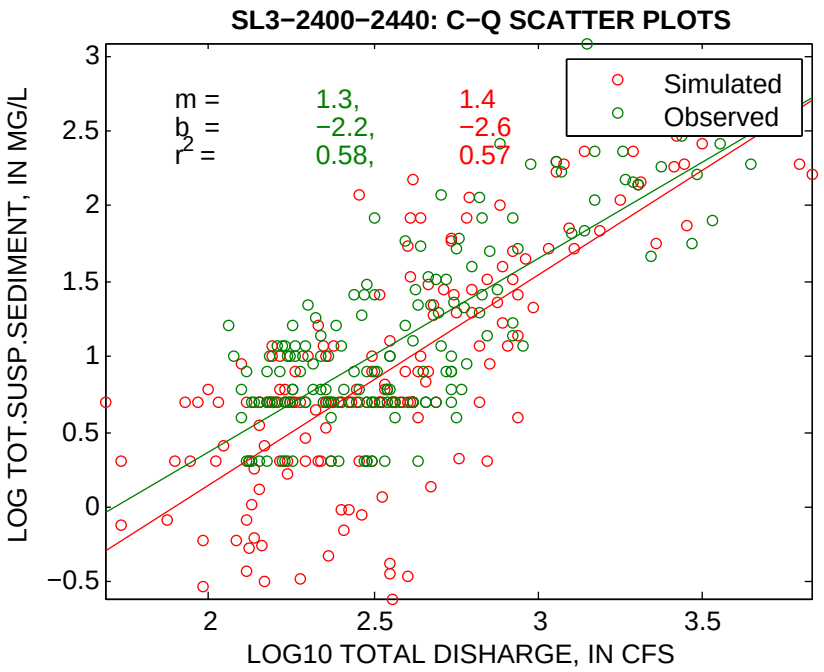
STATISTICS

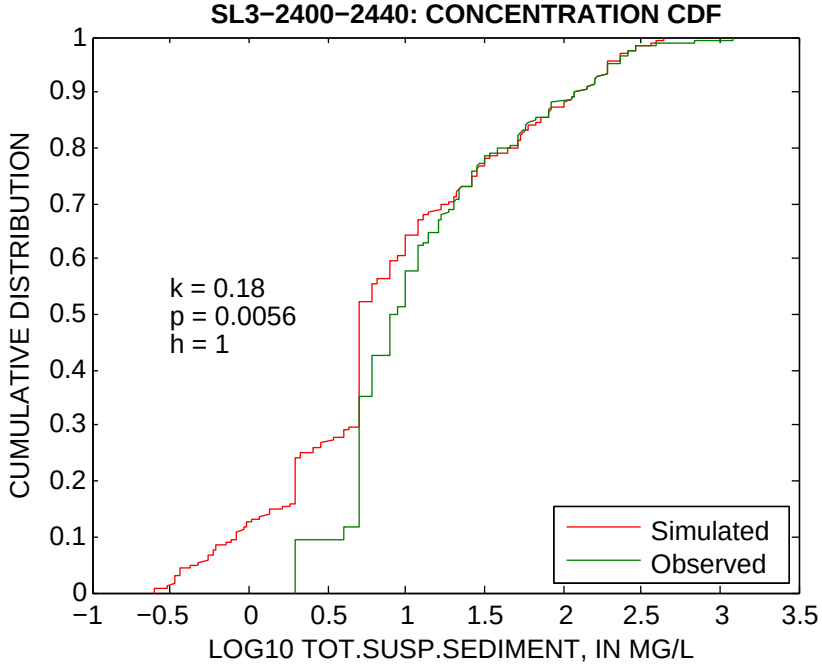
	n	observe	simulate
		168	168
min		2	0.12327
		0.30103	-0.909143
mean		45.4226	46.7723
		1.11604	0.778413
media		8.5	5.09235
		0.928666	0.706904
max		1219	479.31
		3.086	2.68062
varian		14813.6	6945.03
		0.360808	1.10085
JB		0.001	0.001
		0.001387	0.007309
		ra	log
%		2.97138	-30.2523
err.va		9436.35	0.717072
rel.std.err		0.637008	1.98741
mod.eff		0.362992	-0.987408

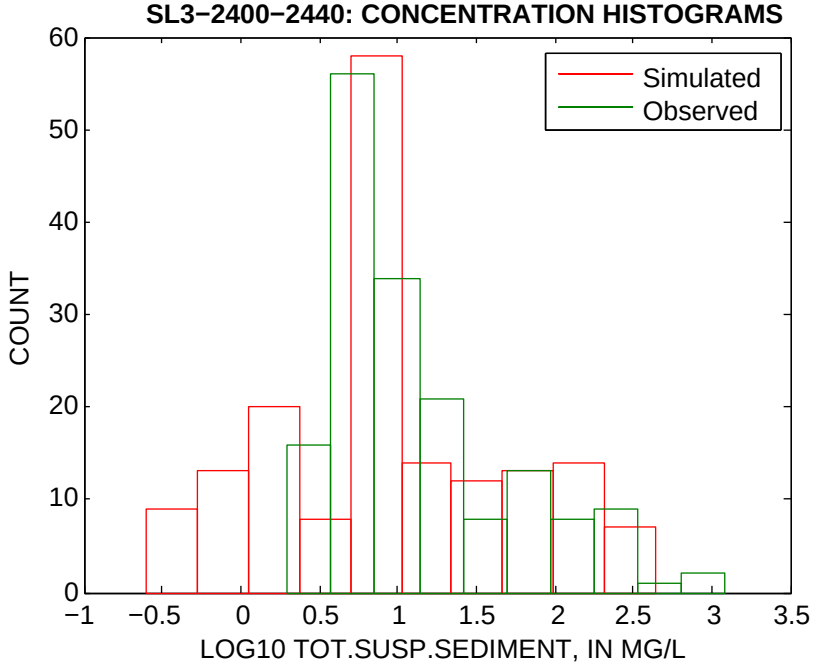
VERSION 2.1

ALL DATA
LOG10

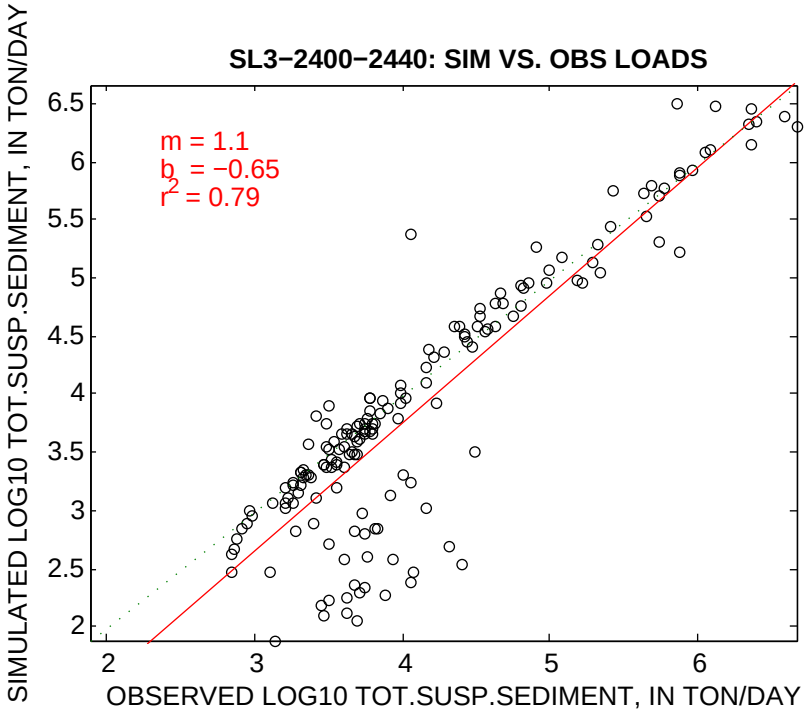


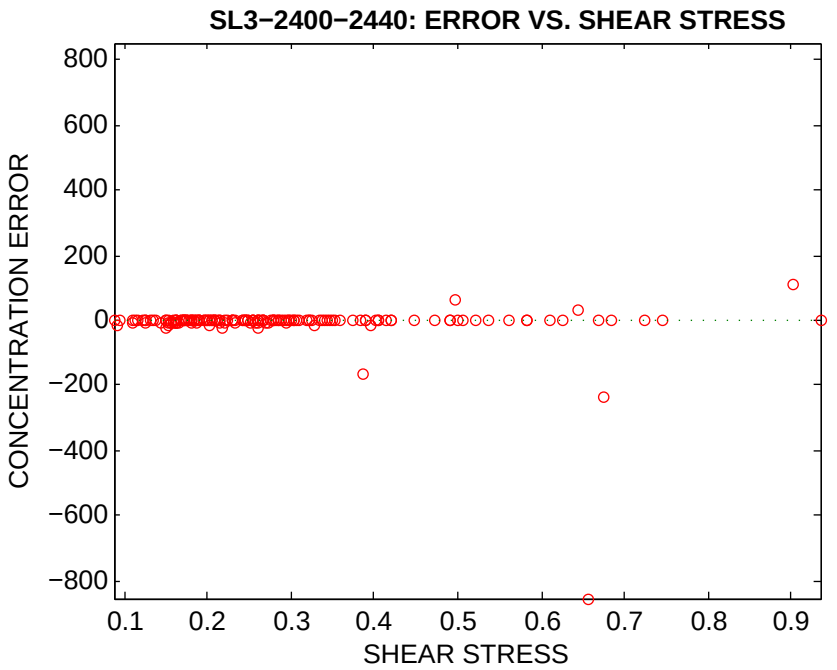


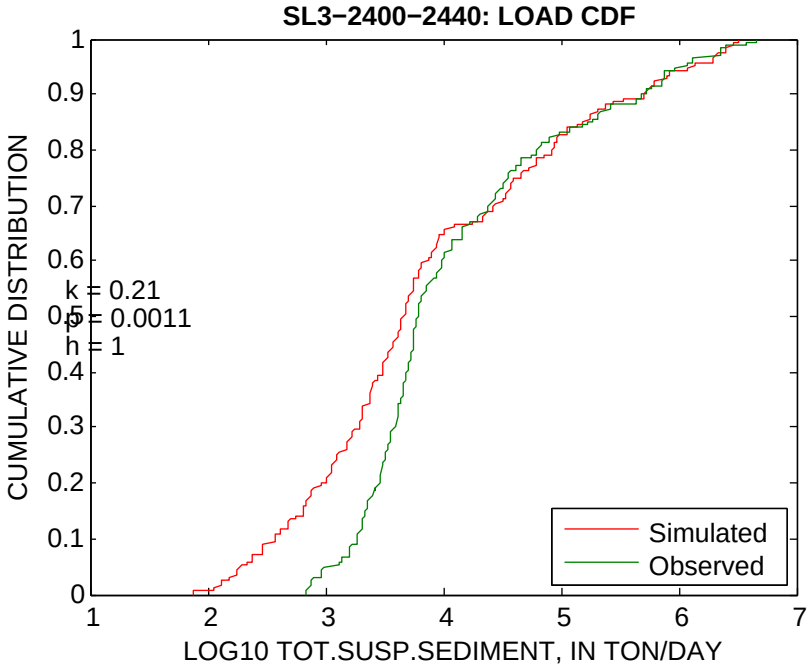


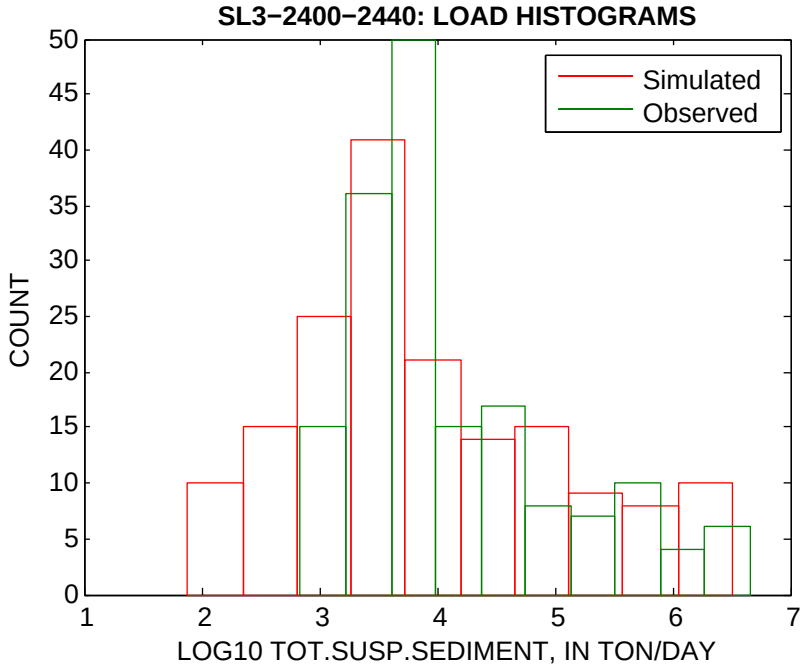


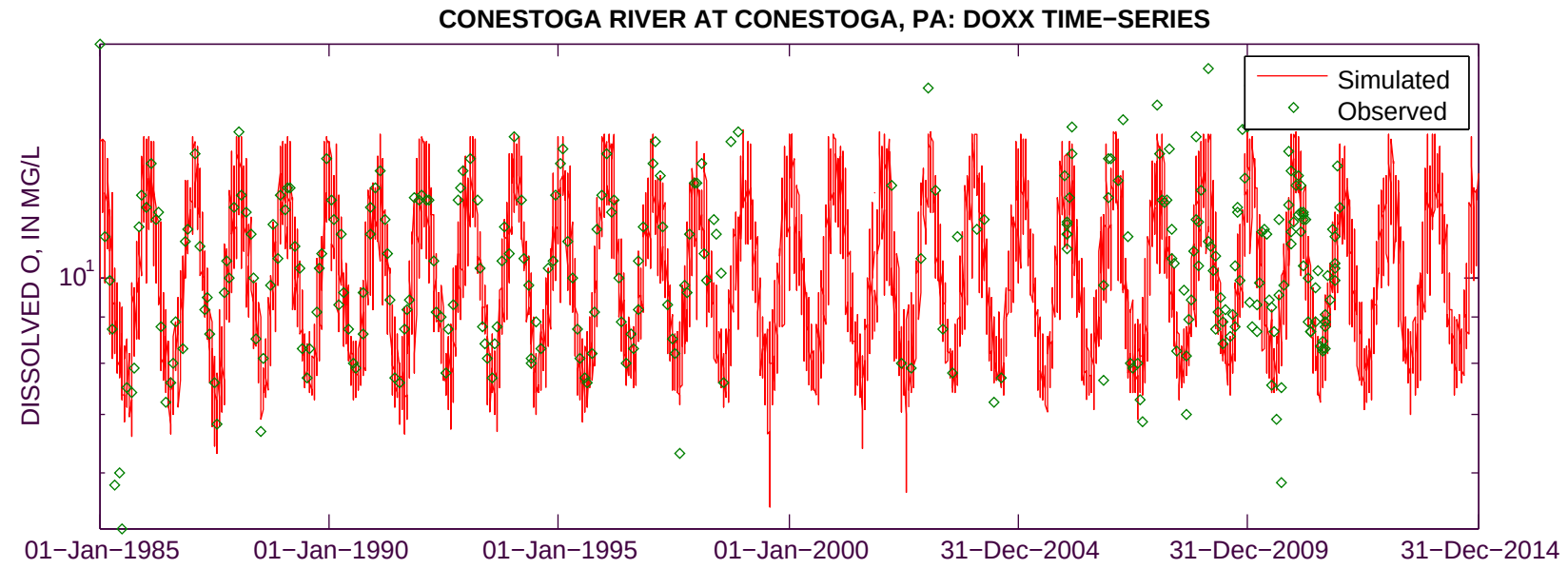
LOAD DATA
LOG10

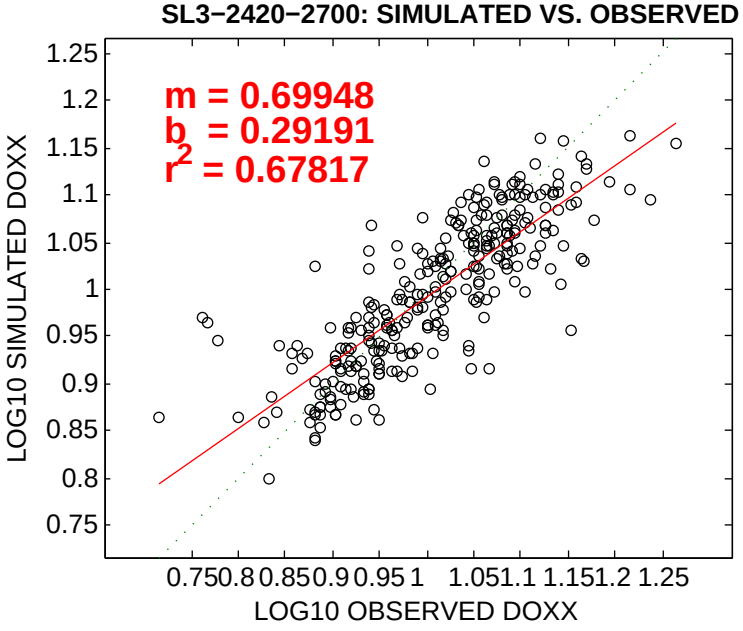


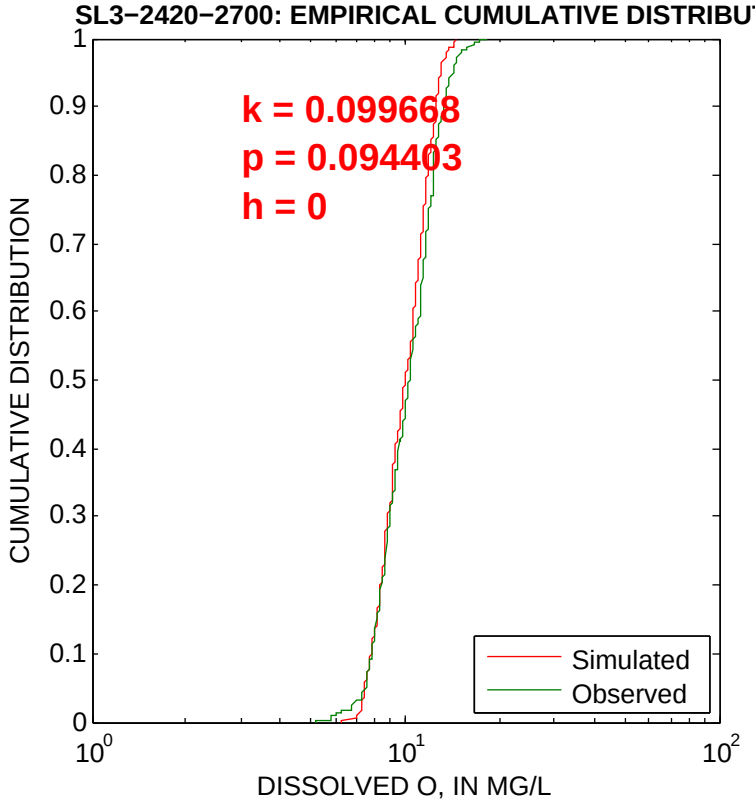












DATA SELECTION

scenario: P620171001WQ | file: DOXX.calib

plot: DOXX - dissolved oxygen

Dates: 1/1/1985 – 12/31/201

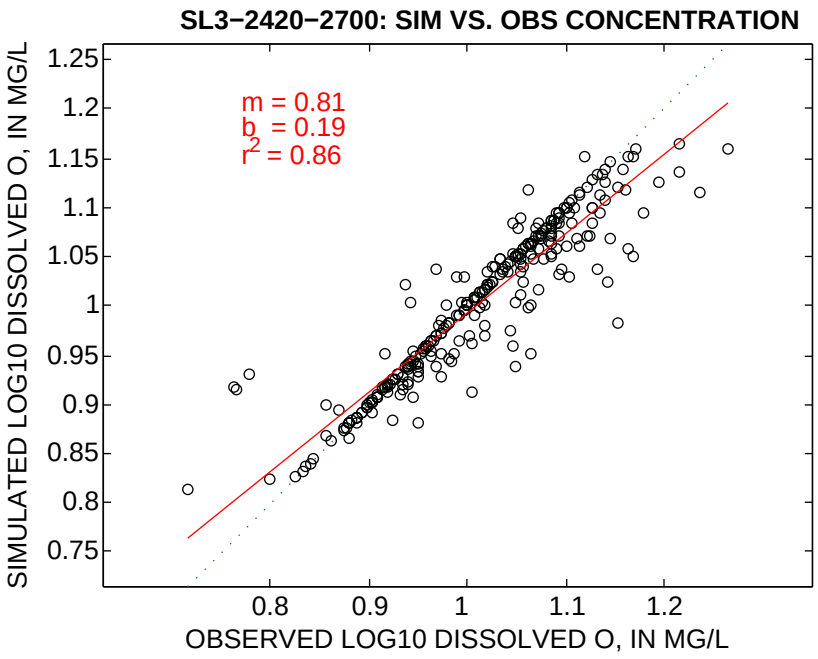
Drive: N/A | Directory: model | Observed: OBS20161101

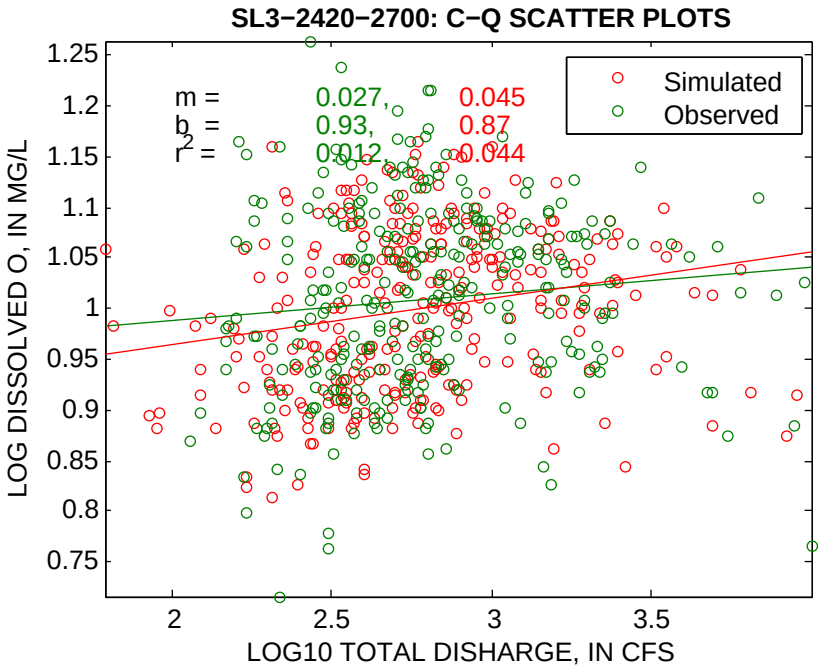
STATISTICS

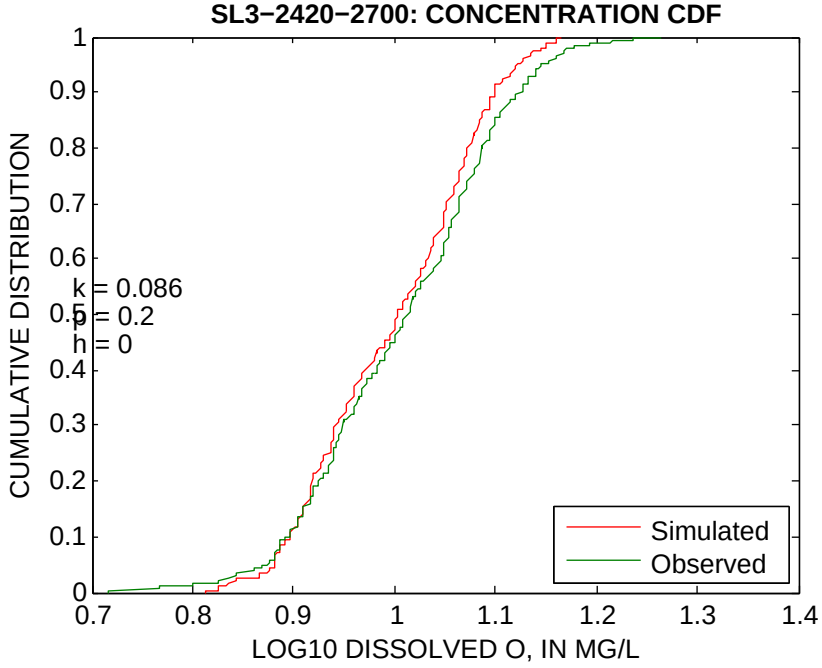
	n	observe	simulate
		301	301
min		5.2	6.3074
		0.716003	0.79985
mean		10.4322	10.1035
		1.00887	0.997601
media		10.32	9.9248
		1.01368	0.996722
max		18.4	14.546
		1.26482	1.16274
varian		4.77491	3.21318
		0.00836051	0.00603178
JB		0.016281	0.009846
		0.496351	0.010050
		ra	log
%		-3.15076	-1.11734
err.va		1.65771	0.00282372
rel.std.err		0.347172	0.337745
mod.eff		0.652828	0.662255

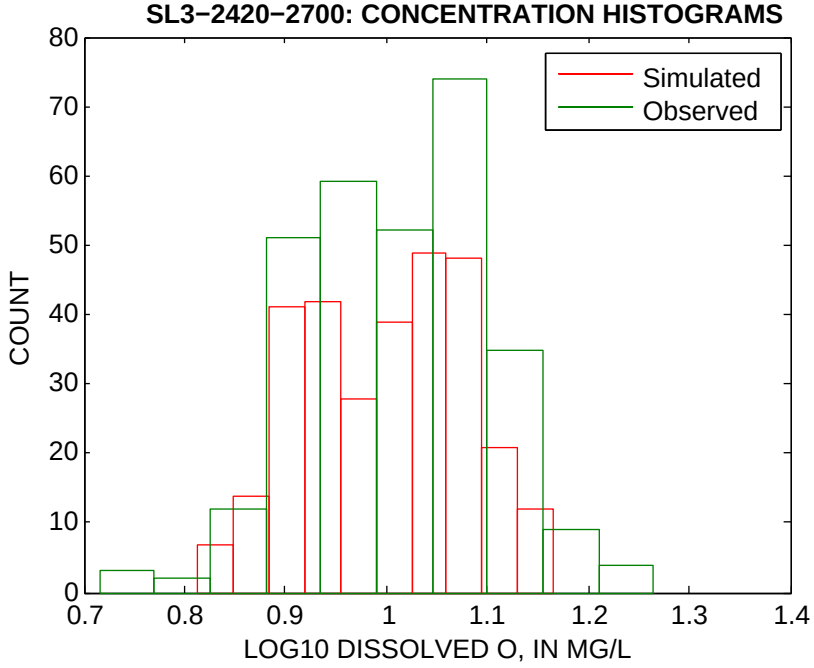
VERSION 2.1

ALL DATA
LOG10

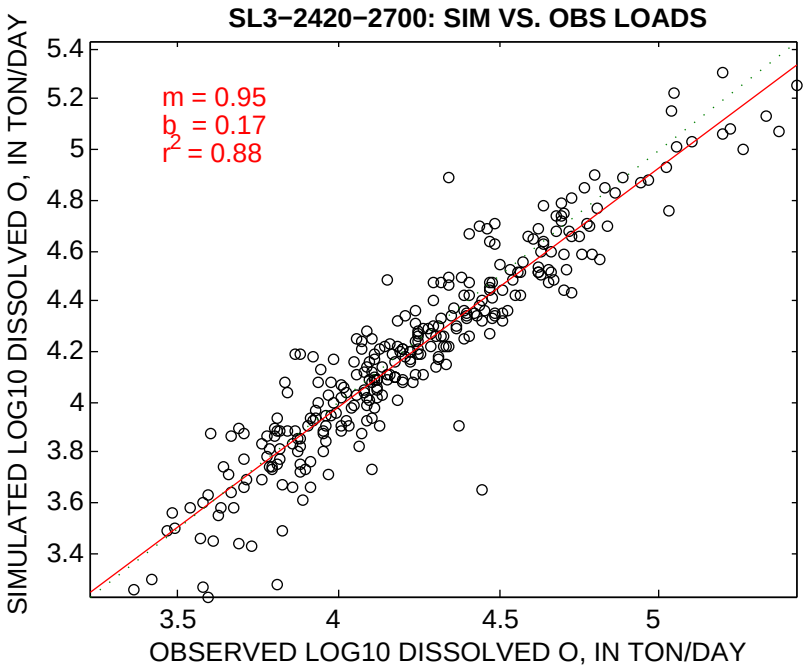


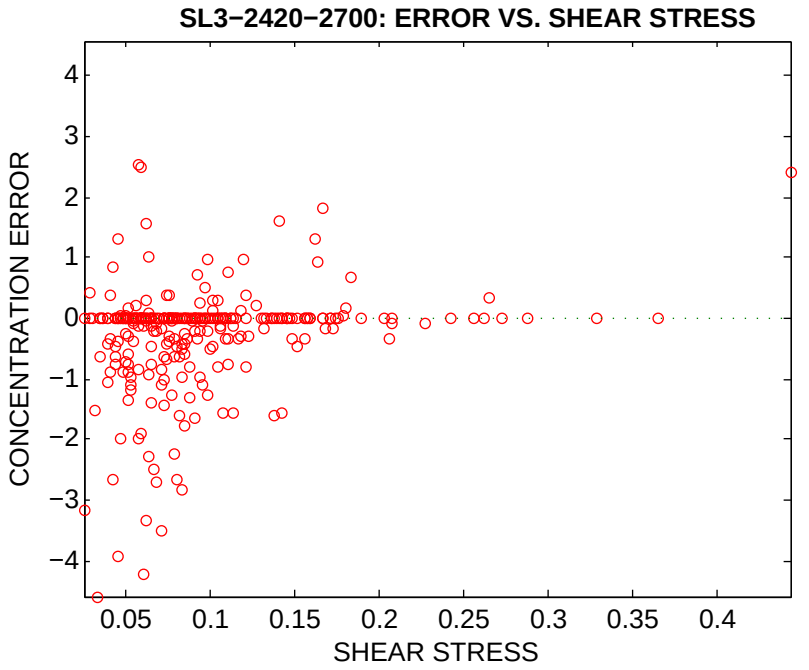


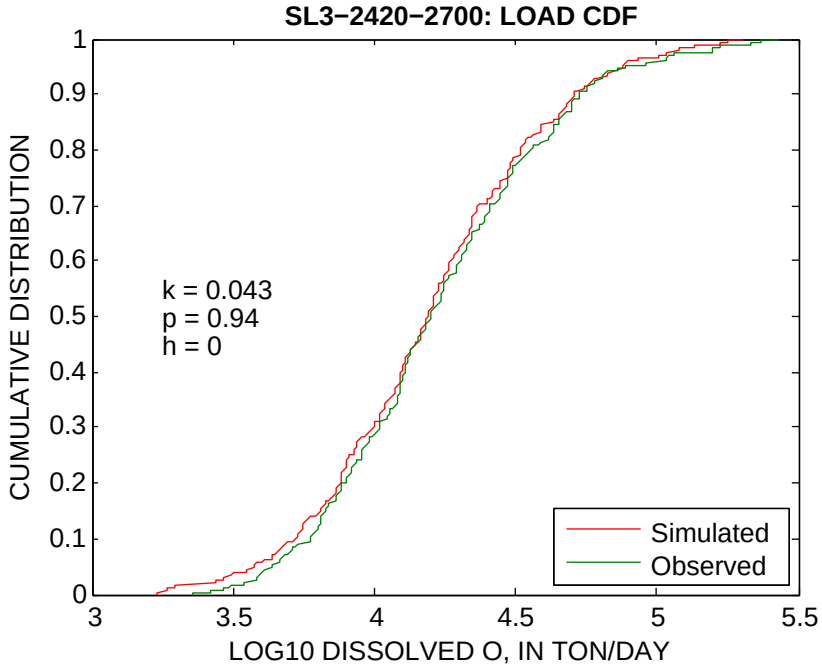


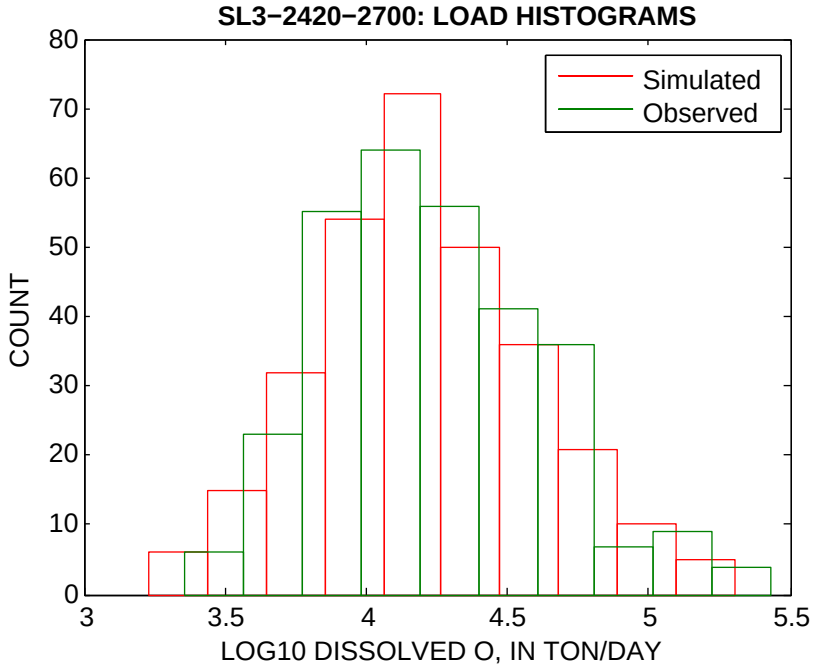


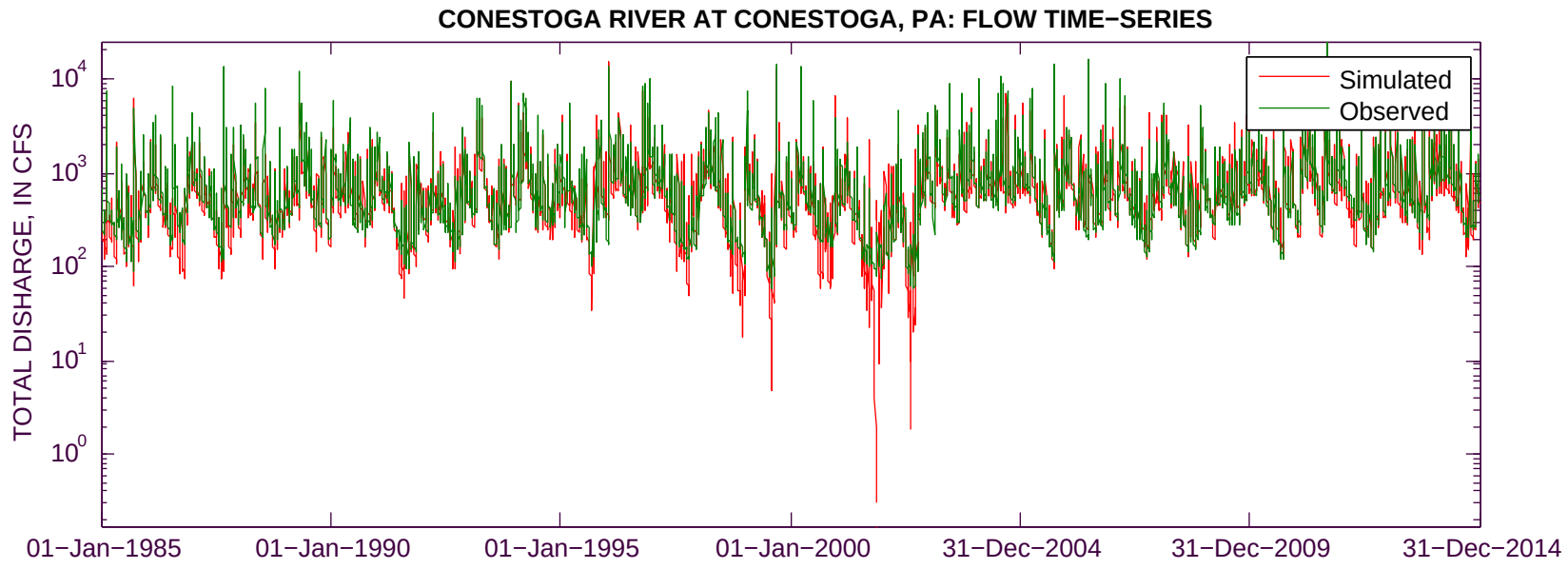
LOAD DATA
LOG10

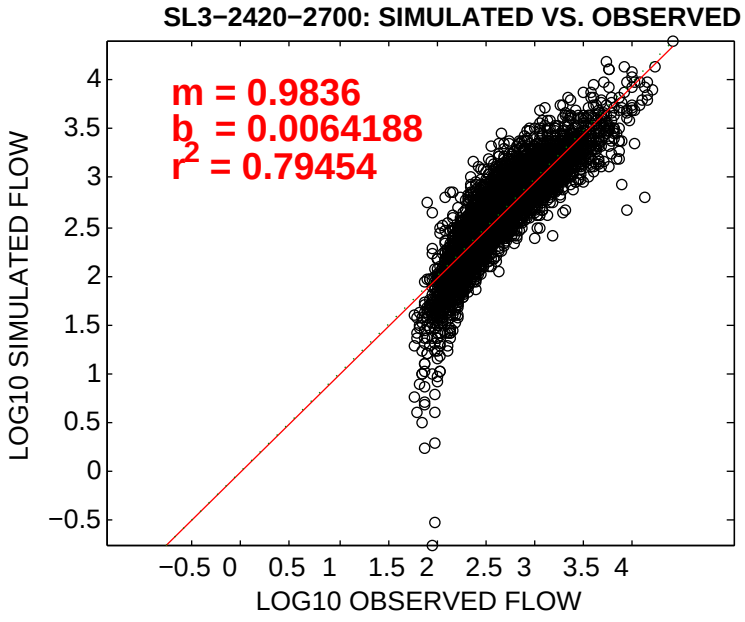


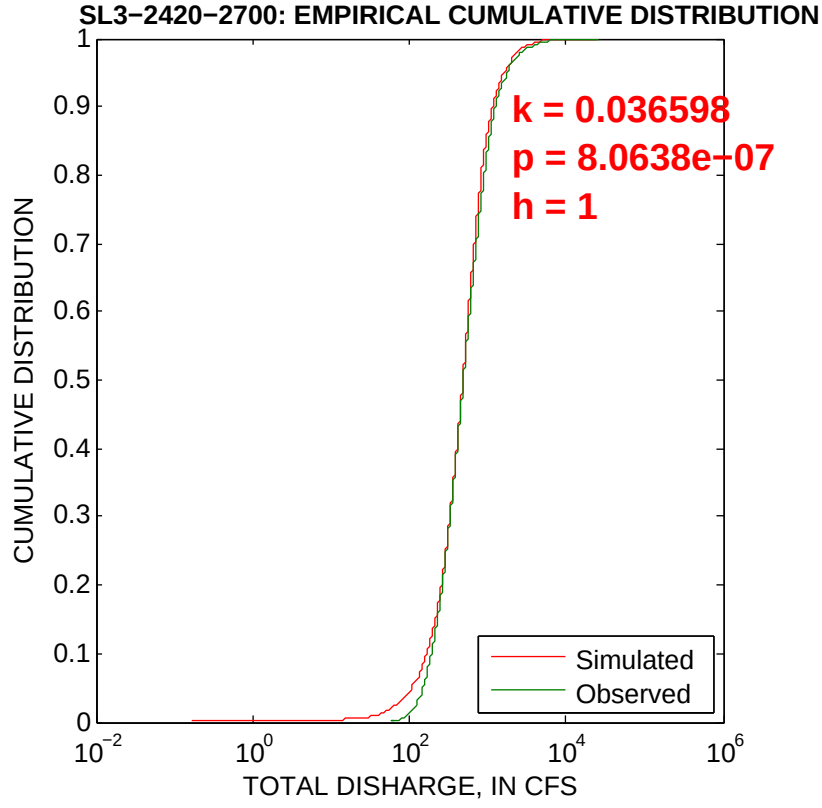












DATA SELECTION

scenario: P620171001WQ | file: FLOW.calib

plot: FLOW - total discharge

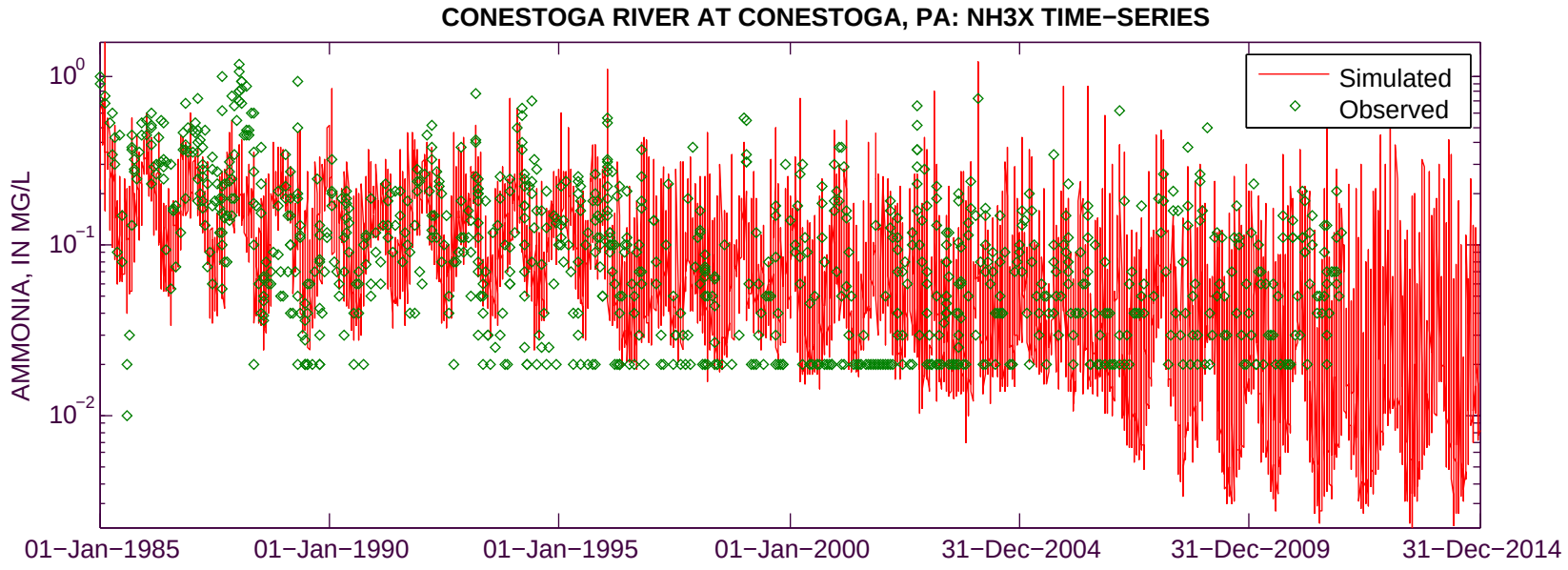
Dates: 1/1/1985 – 12/31/201

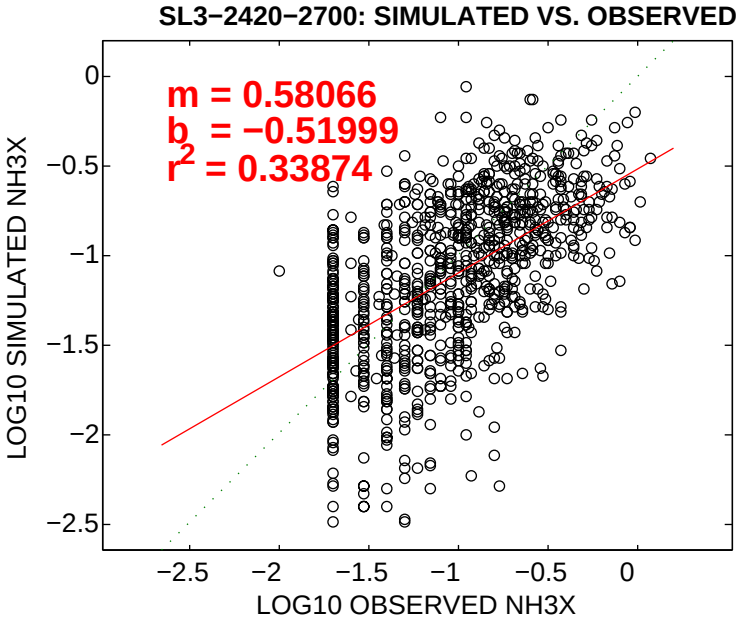
Drive: N/A | Directory: model | Observed: OBS20161101

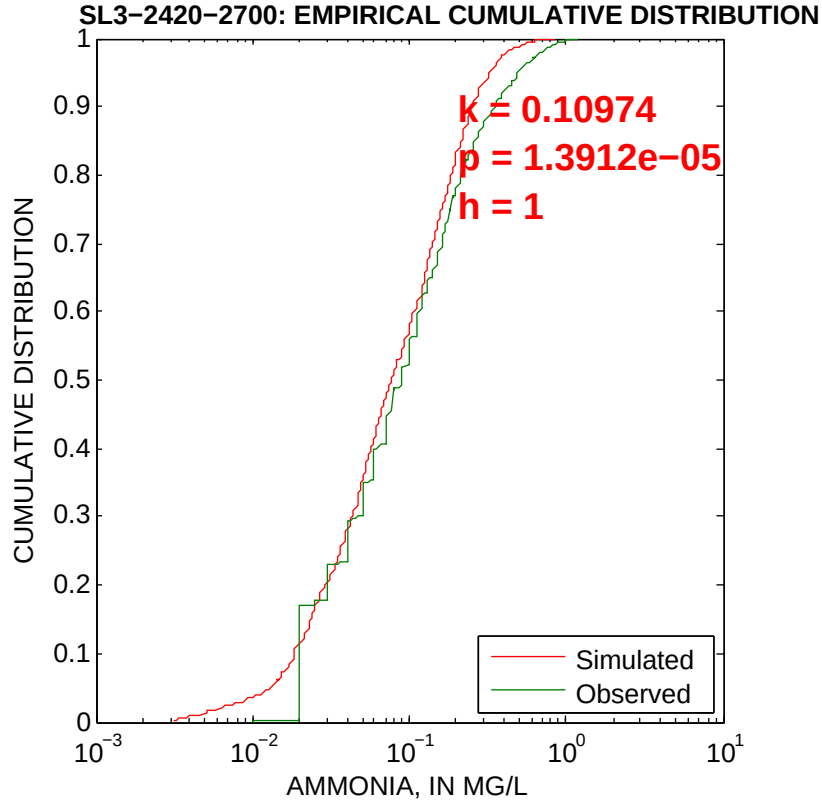
STATISTICS

		observe	simulate
n		10957	10943
min		58	0
		1.76343	-0.762381
mean		697.22	642.982
		2.70039	2.66252
media		491	483.42
		2.69108	2.68479
max		25400	24976
		4.40483	4.39752
varian		779715	570238
		0.108715	0.132376
JB		0.001	0.001
		0.001	0.001
		ra	log
% err.va		-7.77917	-1.4021
		252046	0.0286608
rel.std.err		0.323253	0.263633
mod.eff		0.676747	0.736367

VERSION 2.1







DATA SELECTION

scenario	file
P620171001WQ	NH3X.calib

plot: NH3X - ammonia

Dates: 1/1/1985 – 12/31/201

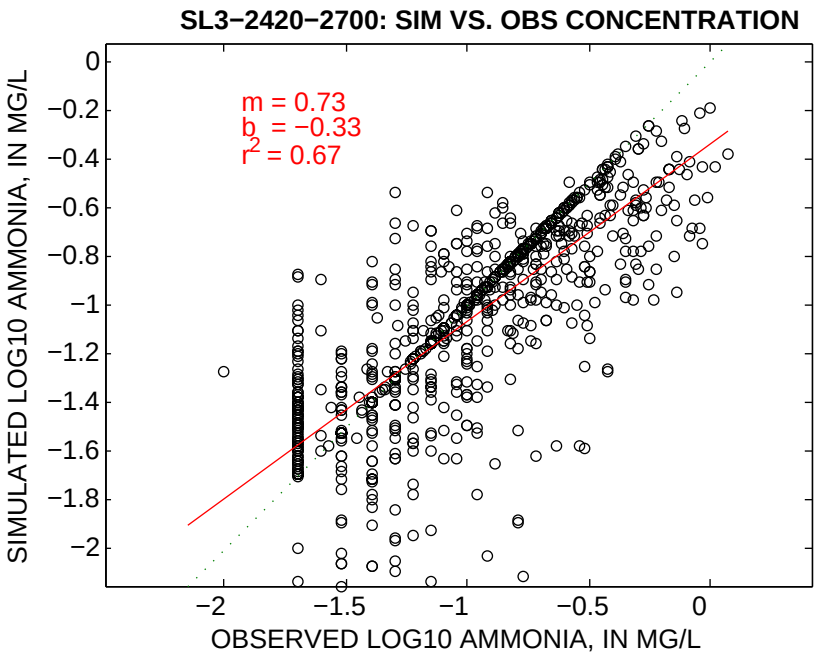
Drive	Directory	Observed
N/A	model	OBS20161101

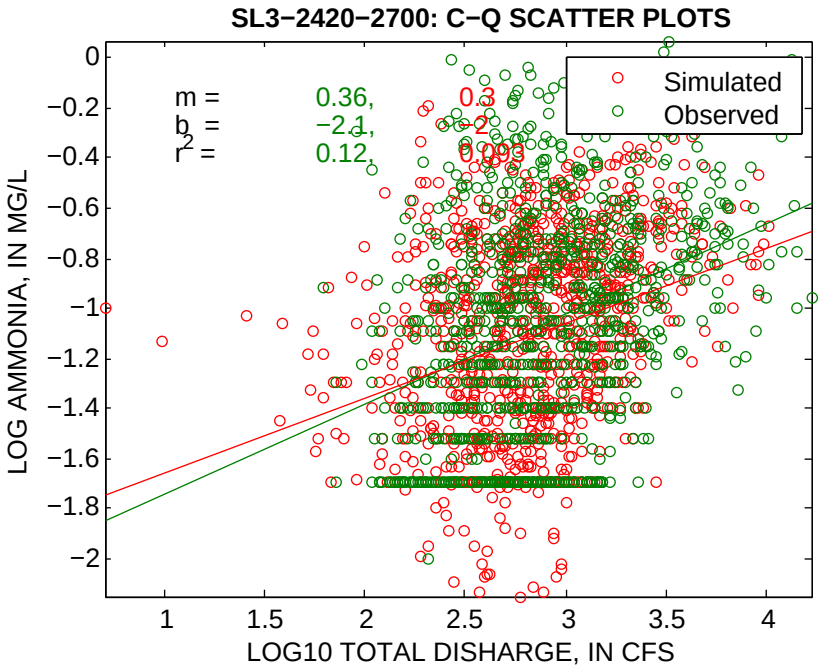
STATISTICS

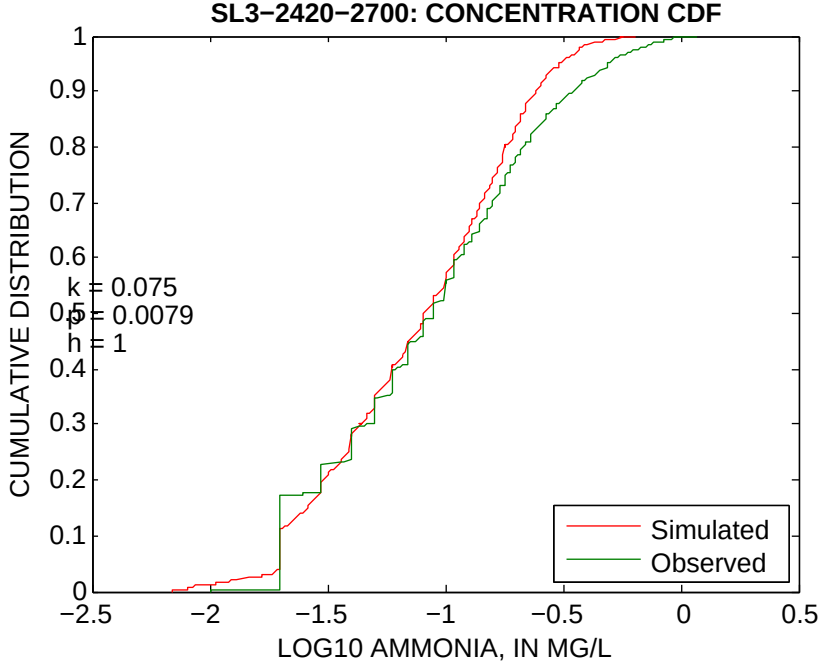
		observe	simulate
n		975	974
min		0.01	0
		-2	-2.49465
mean		0.146423	0.1149
		-1.06096	-1.13605
media		0.09	0.077609
		-1.04576	-1.10875
max		1.1775	0.85953
		0.0709609	-0.065739
varian		0.0280187	0.0121258
		0.199769	0.19884
JB		0.001	0.001
		0.001	0.001
		ra	log
%		-21.5289	7.07701
err.va		0.023415	0.172257
rel.std.err		0.835692	0.86228
mod.eff		0.164308	0.13772

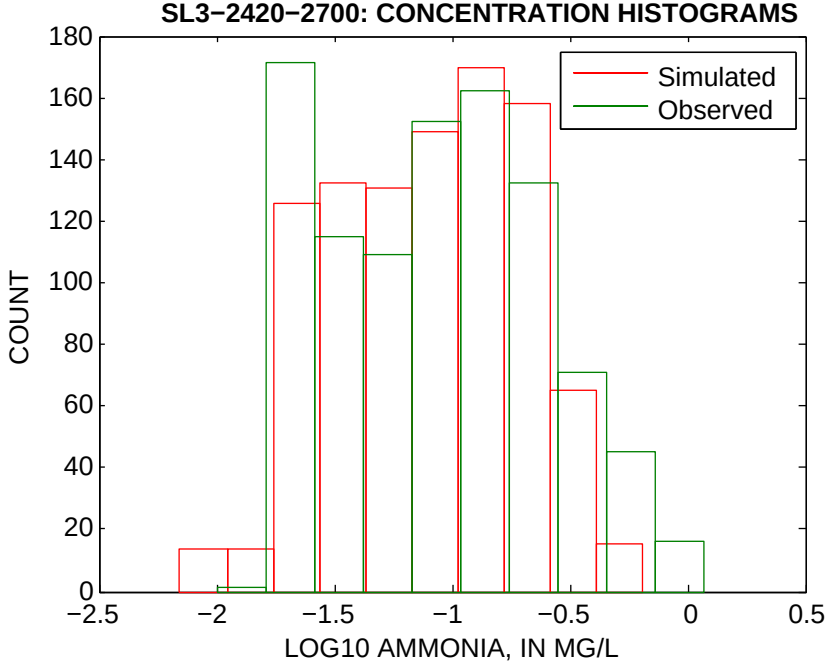
VERSION 2.1

ALL DATA
LOG10

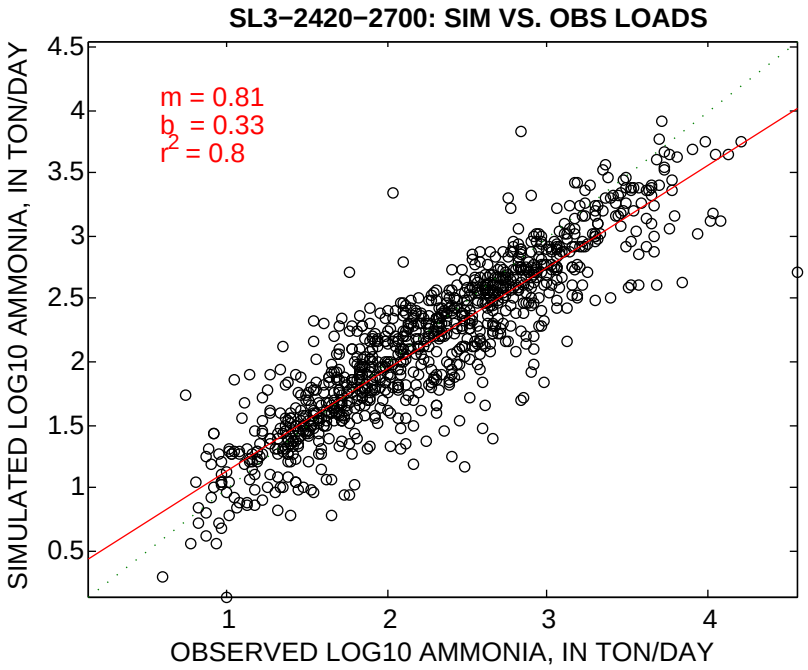


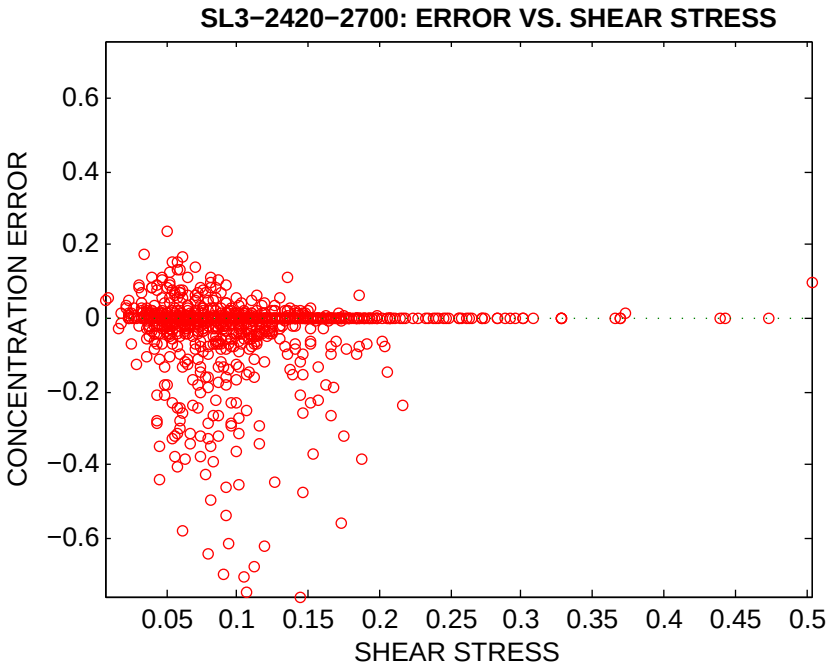


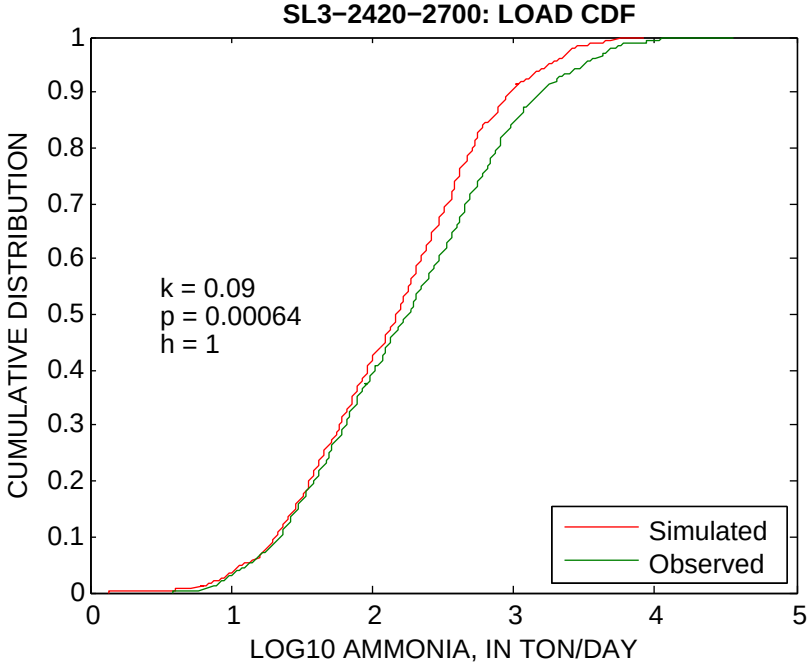


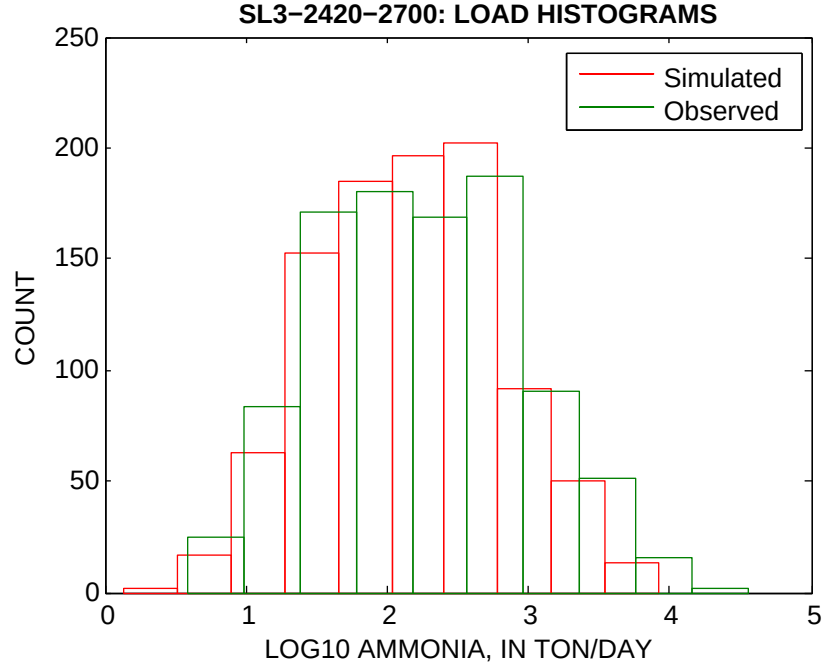


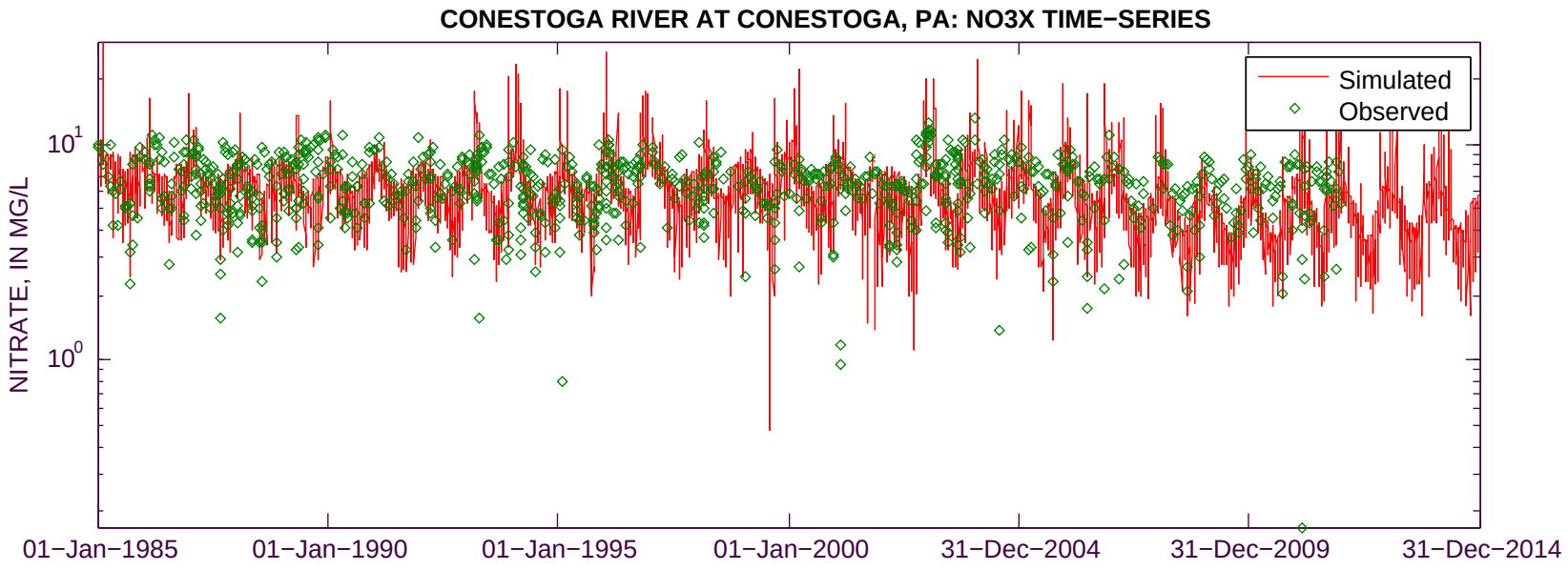
LOAD DATA
LOG10

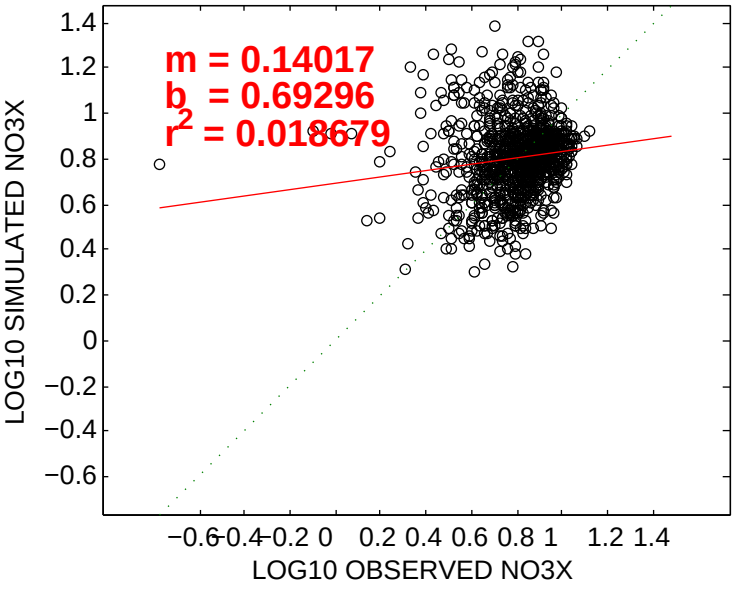


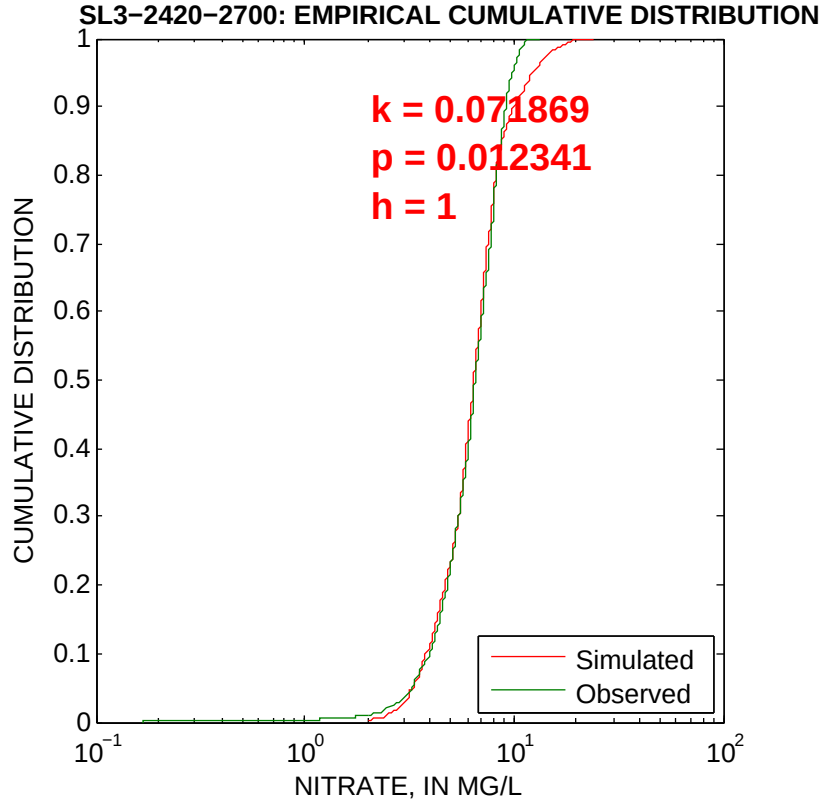












DATA SELECTION

scenario	file
P620171001WQ	NO3X.calib

plot: NO3X - nitrate

Dates: 1/1/1985 – 12/31/201

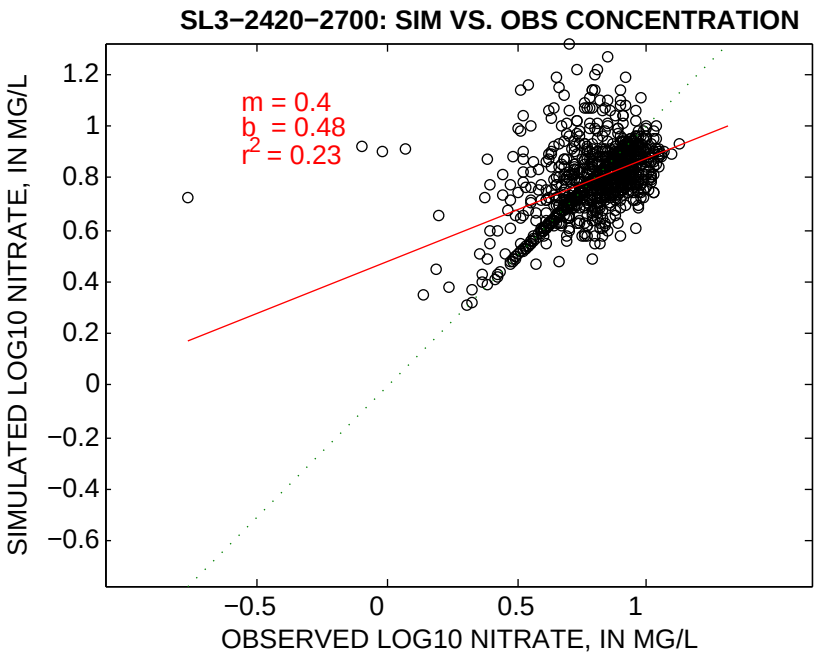
Drive	Directory	Observed
N/A	model	OBS20161101

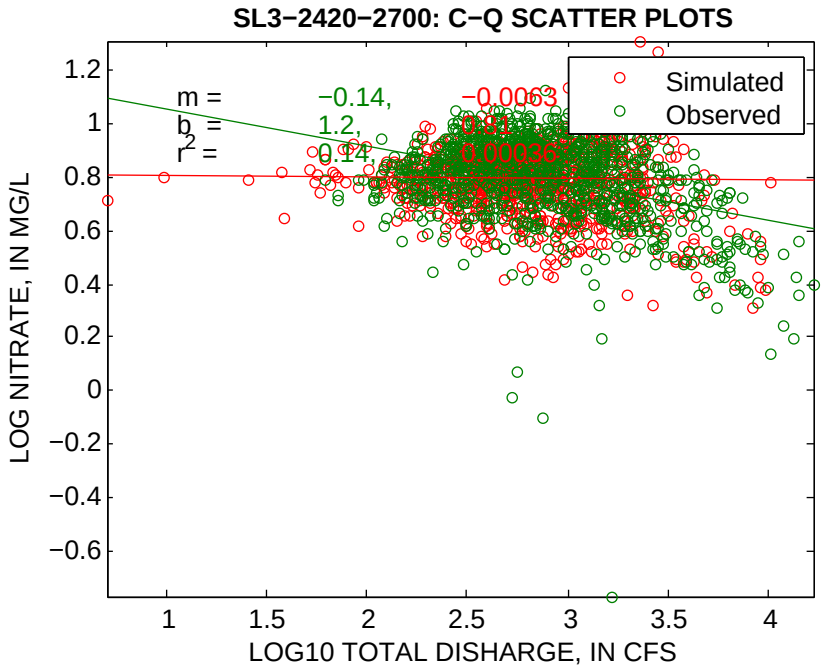
STATISTICS

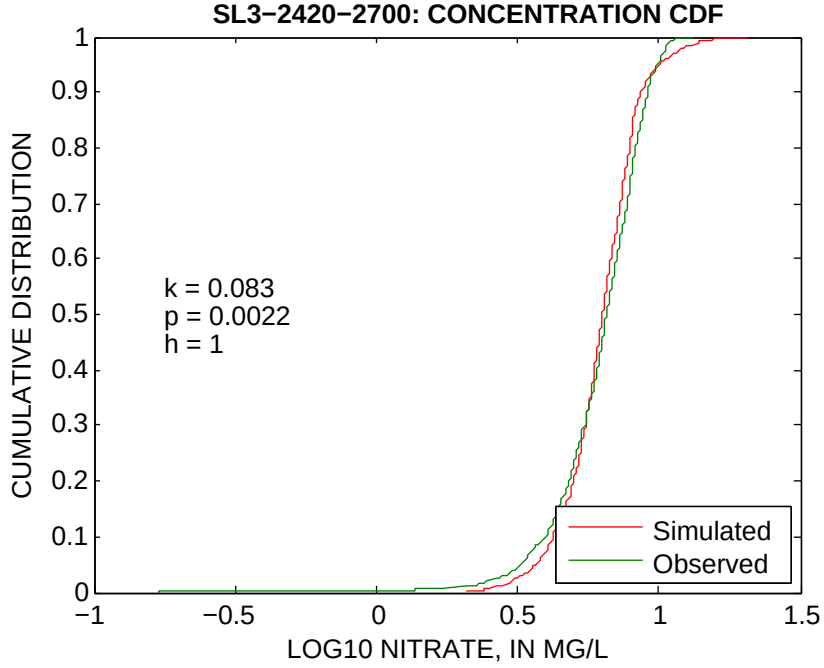
	n	974	973
		observe	simulate
min		0.17	0
		-0.769551	0.299986
mean		6.56692	6.84727
		0.792277	0.804007
media		6.53	6.42735
		0.814913	0.808096
max		13.3	24.096
		1.12385	1.38194
varian		4.06147	7.95569
		0.0259853	0.0273314
JB		0.357477	0.001
		0.001	0.004814
		ra	log
% err.va		4.26918	1.48051
		11.3562	0.04617
rel.std.err		2.79607	1.77677
mod.eff		-1.79607	-0.776769

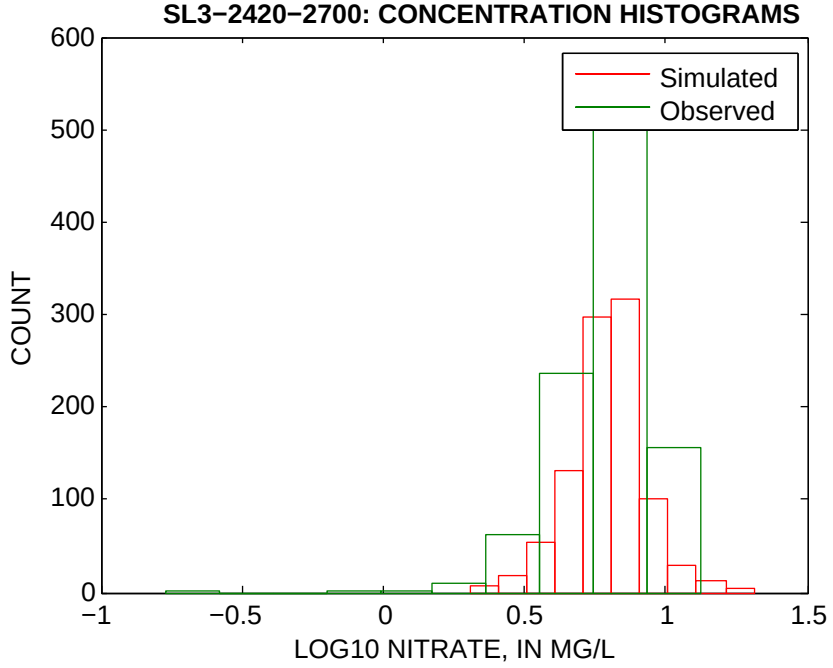
VERSION 2.1

ALL DATA
LOG10

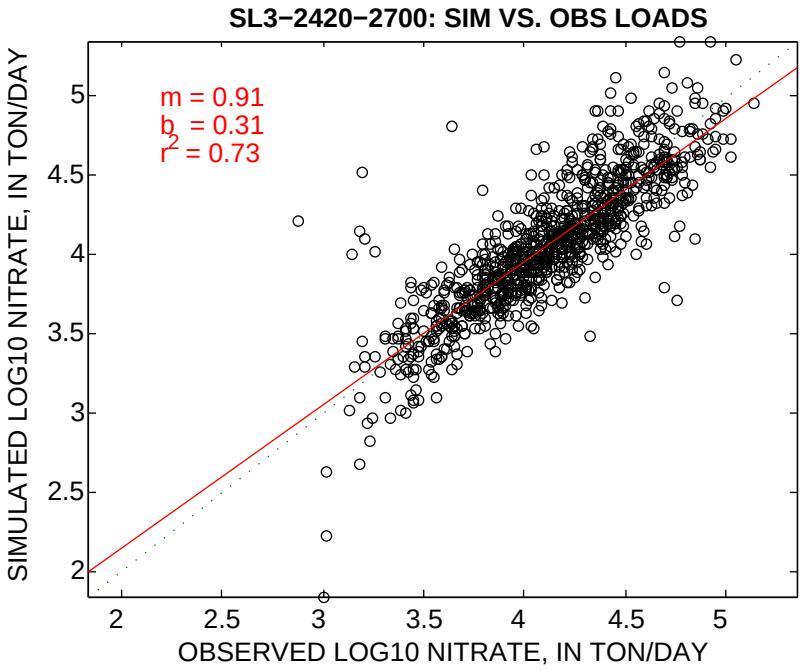


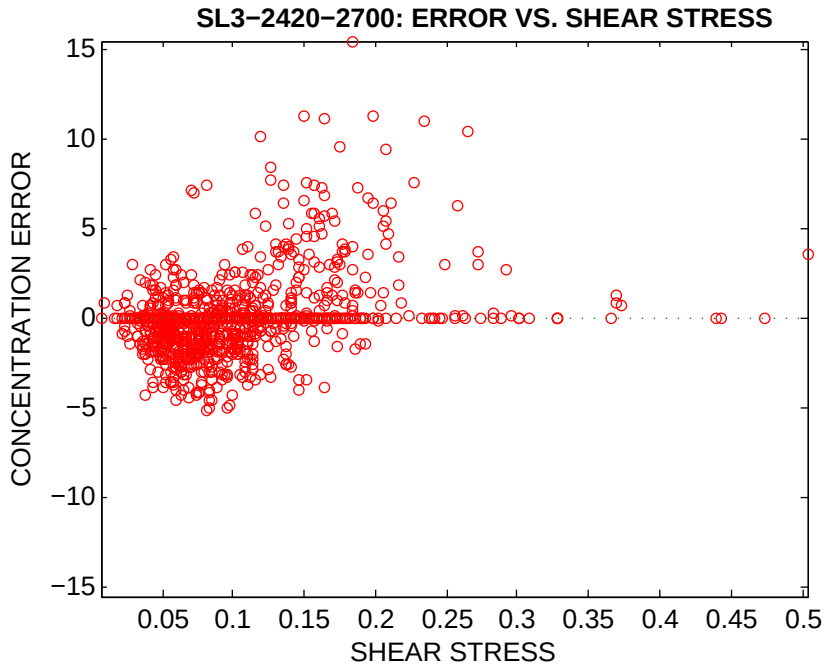


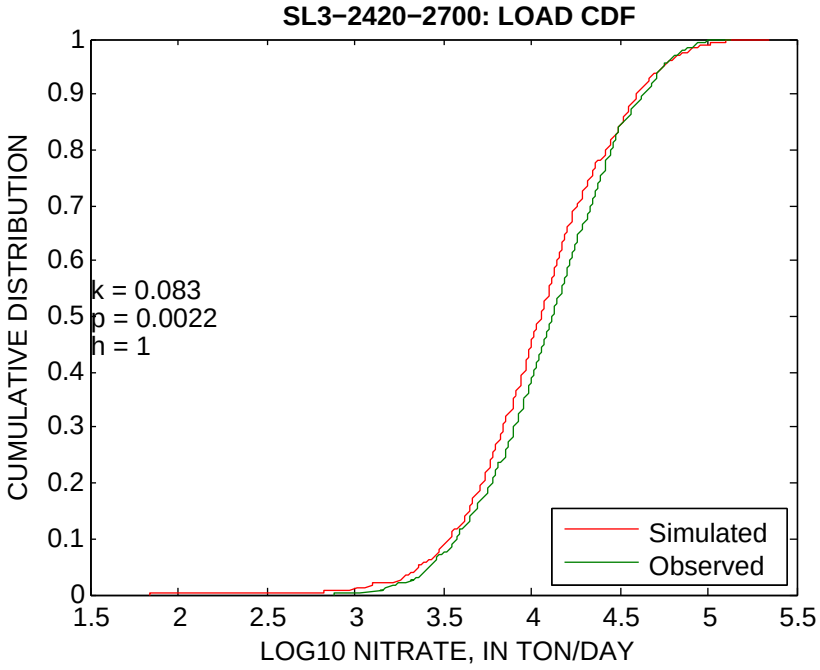


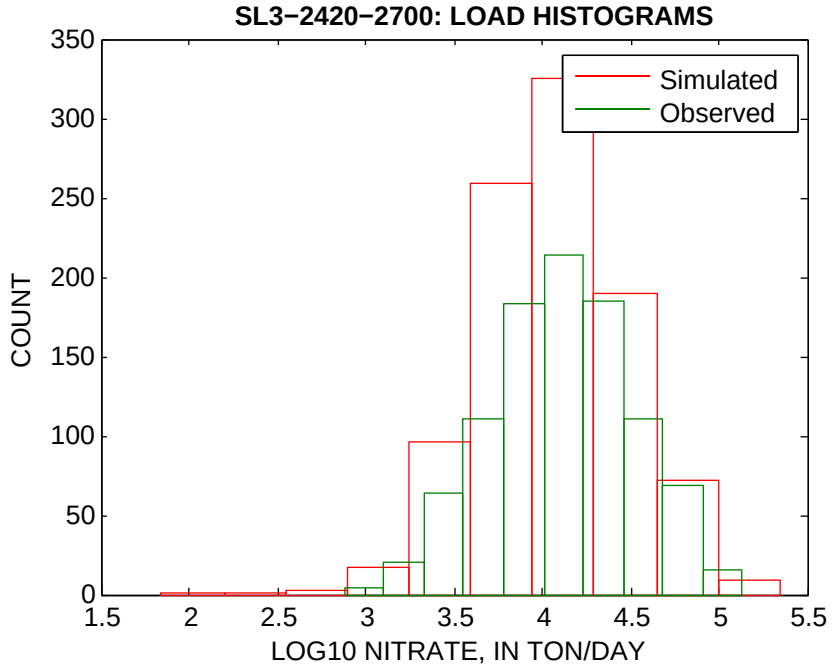


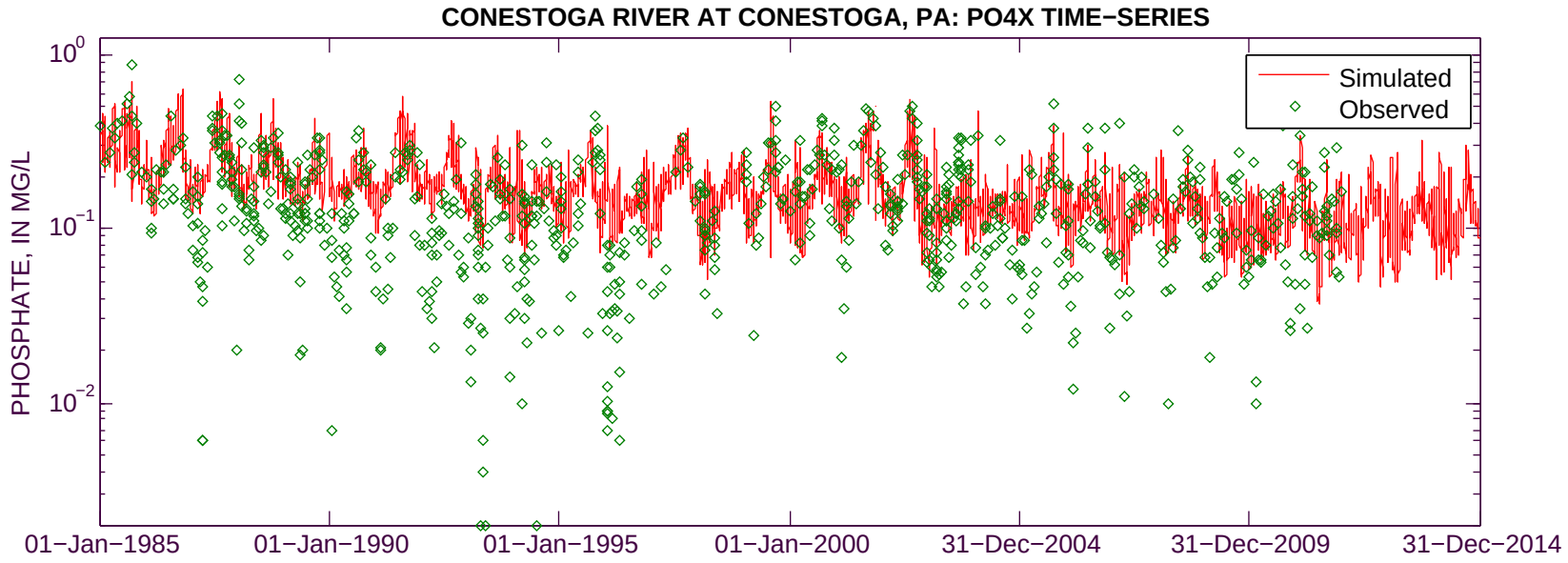
LOAD DATA
LOG10

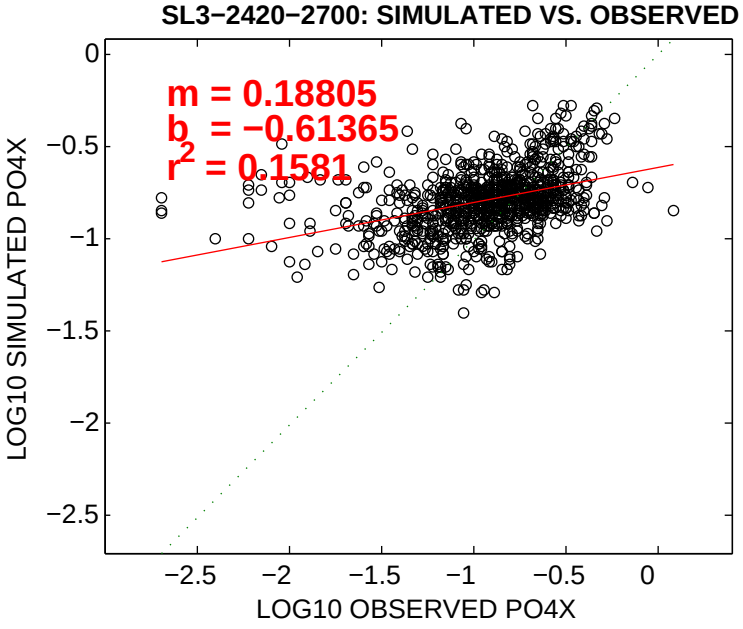


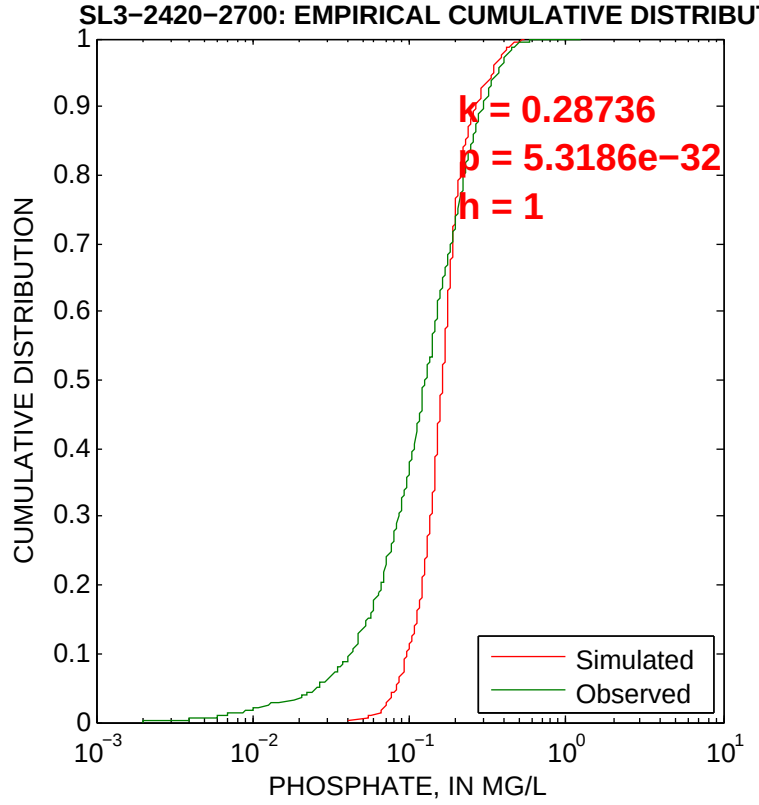












DATA SELECTION

scenario: P620171001WQ | file: PO4X.calib

plot: PO4X - phosphate

Dates: 1/1/1985 – 12/31/201

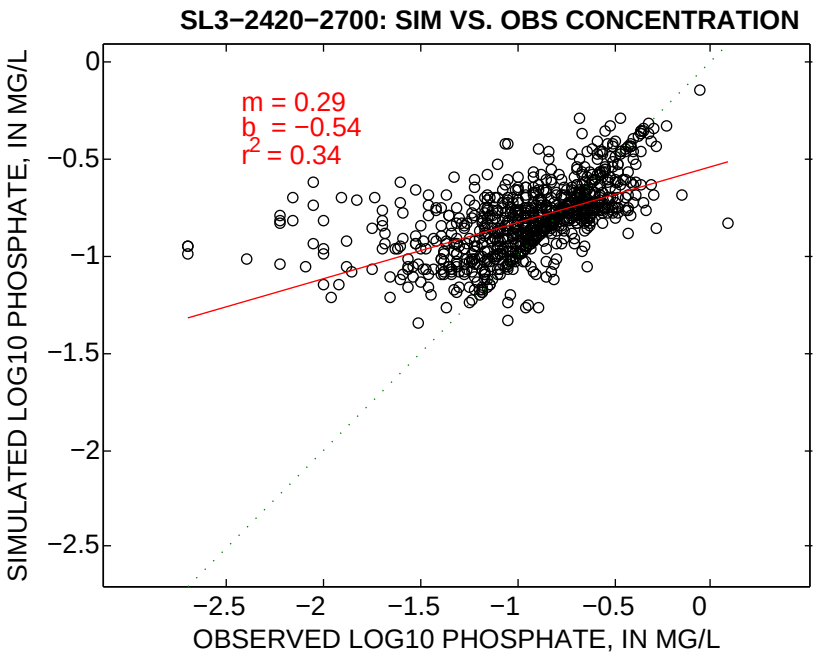
Drive: N/A | Directory: model | Observed: OBS20161101

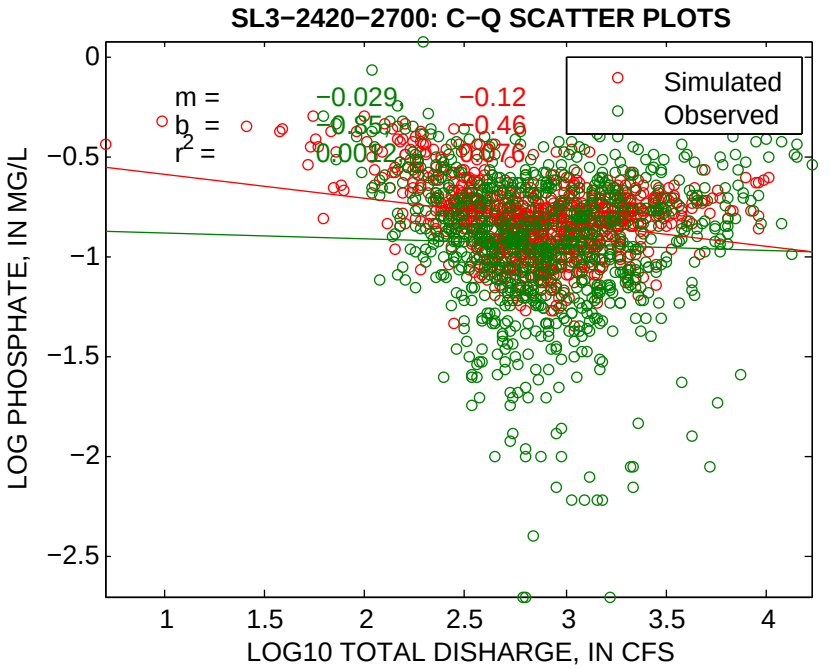
STATISTICS

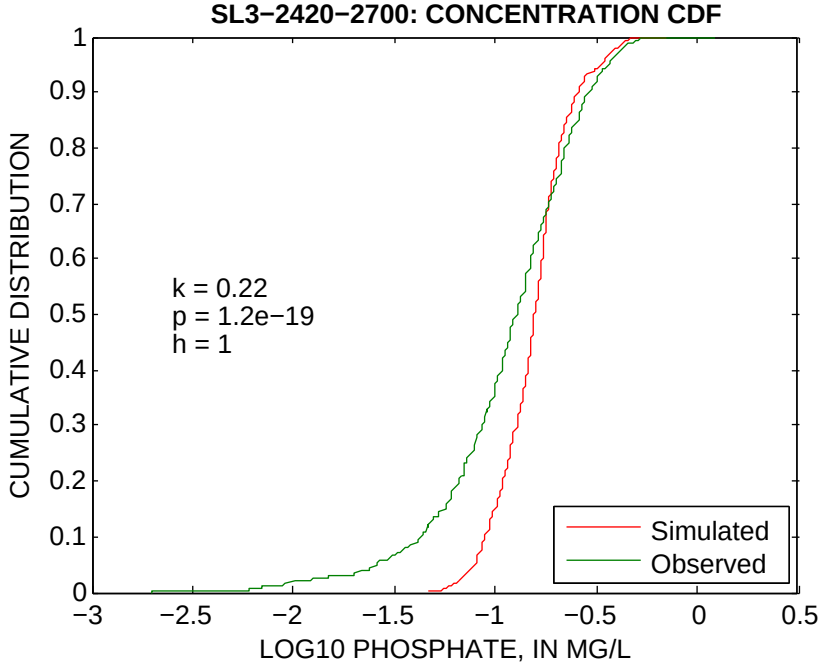
	observe	simulate
n	870	869
min	0.002	0
	-2.69897	-1.39643
mean	0.152953	0.175529
	-0.937583	-0.789955
media	0.128	0.16297
	-0.89279	-0.787839
max	1.22	0.53838
	0.0863598	-0.268911
varian	0.0125773	0.00577161
	0.132571	0.0296512
JB	0.001	0.001
	0.001	0.001284
	ra	log
%	14.7604	-15.7456
err.va	0.0115531	0.134182
rel.std.err	0.918572	1.01215
mod.eff	0.0814276	-0.0121549

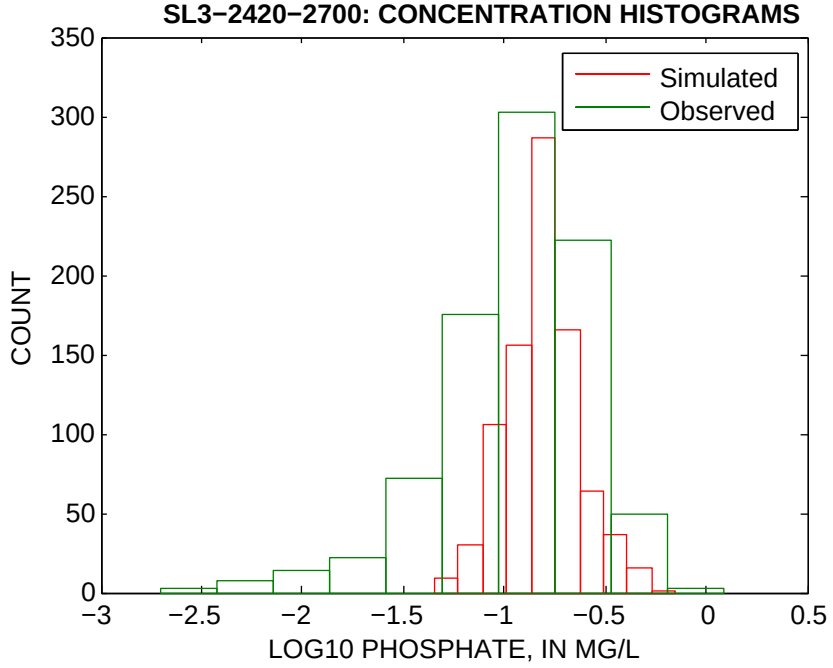
VERSION 2.1

ALL DATA
LOG10

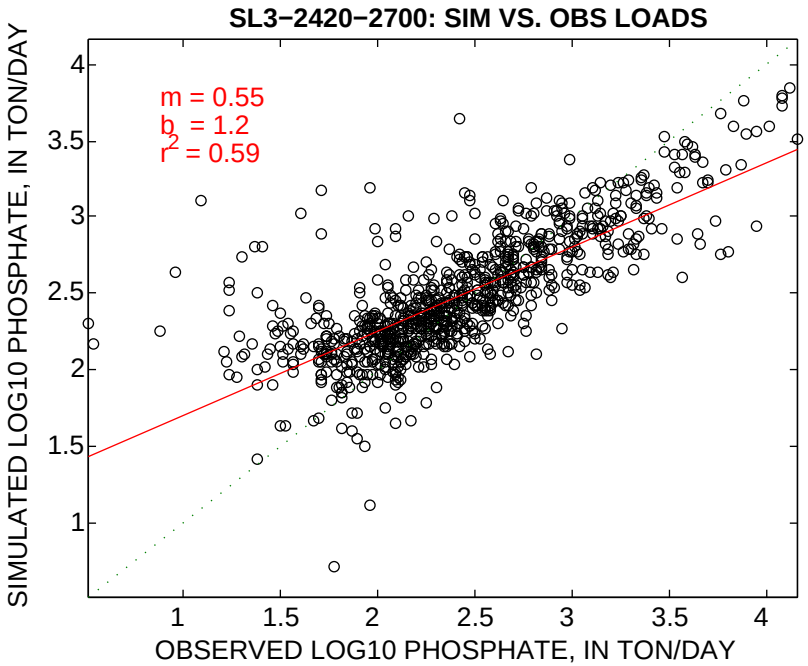


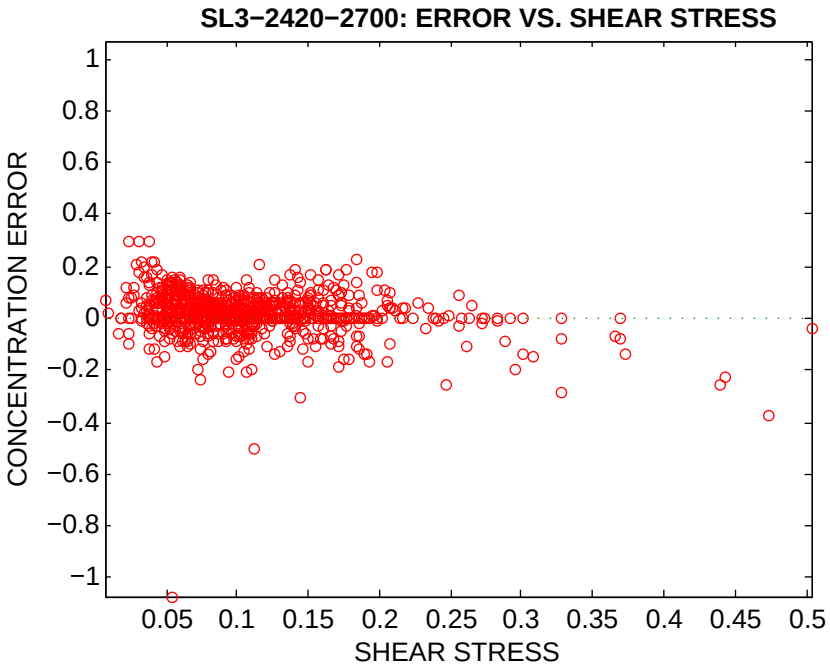


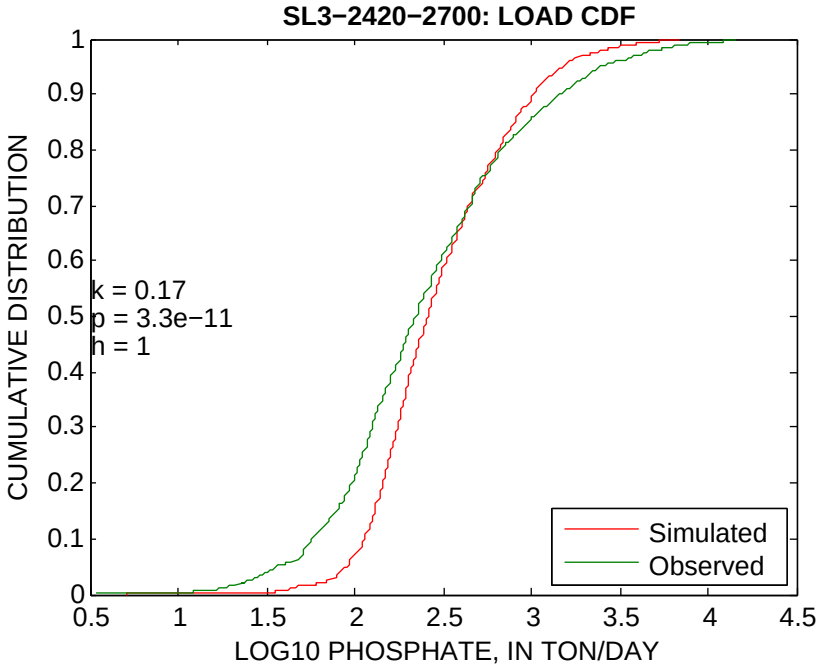


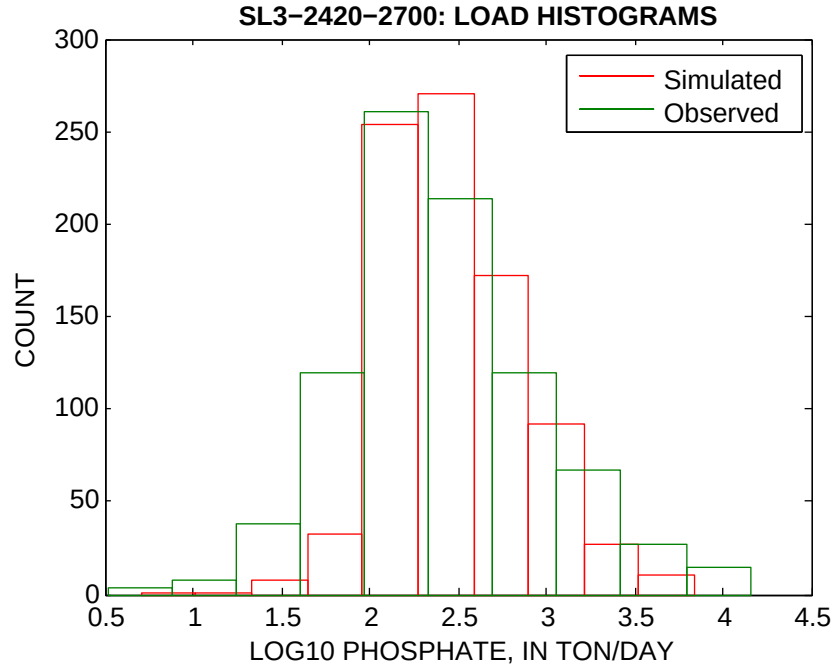


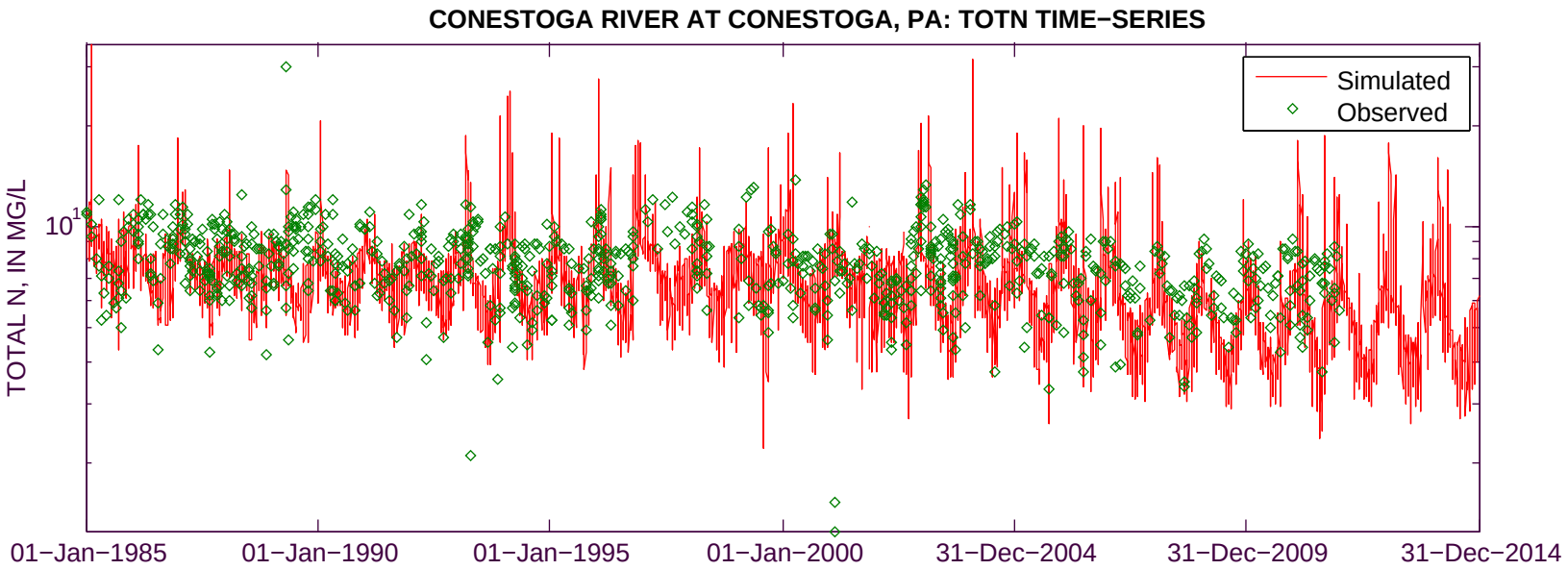
LOAD DATA
LOG10

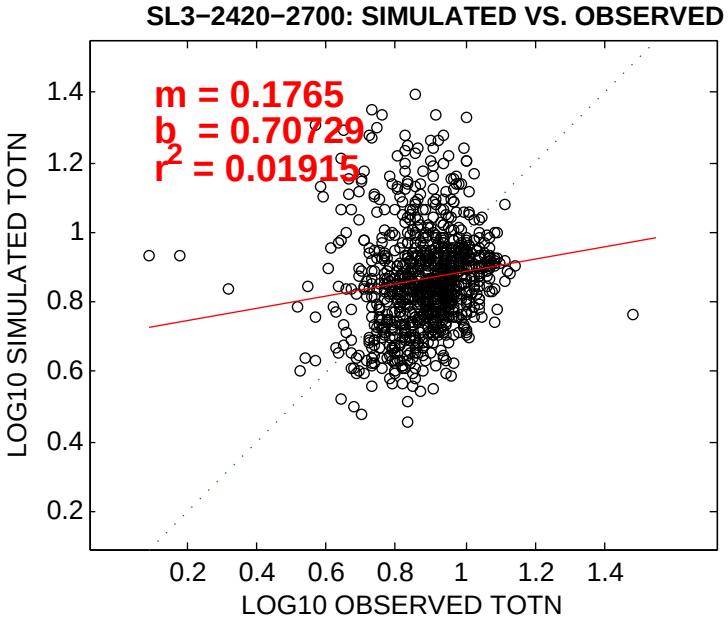


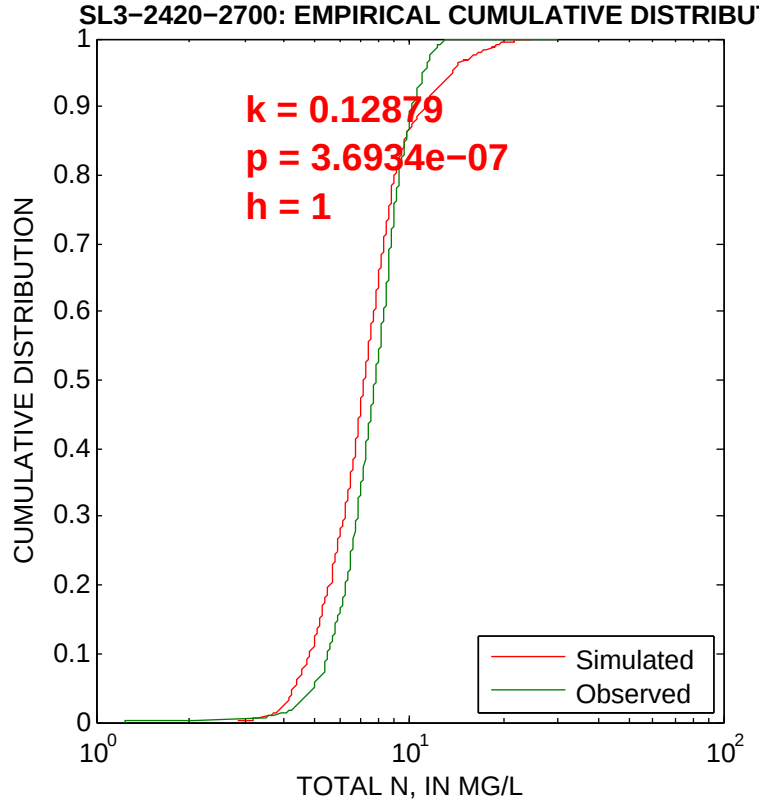












DATA SELECTION

scenario	file
P620171001WQ	TOTN.calib

plot: TOTN - total nitrogen

Dates: 1/1/1985 – 12/31/201

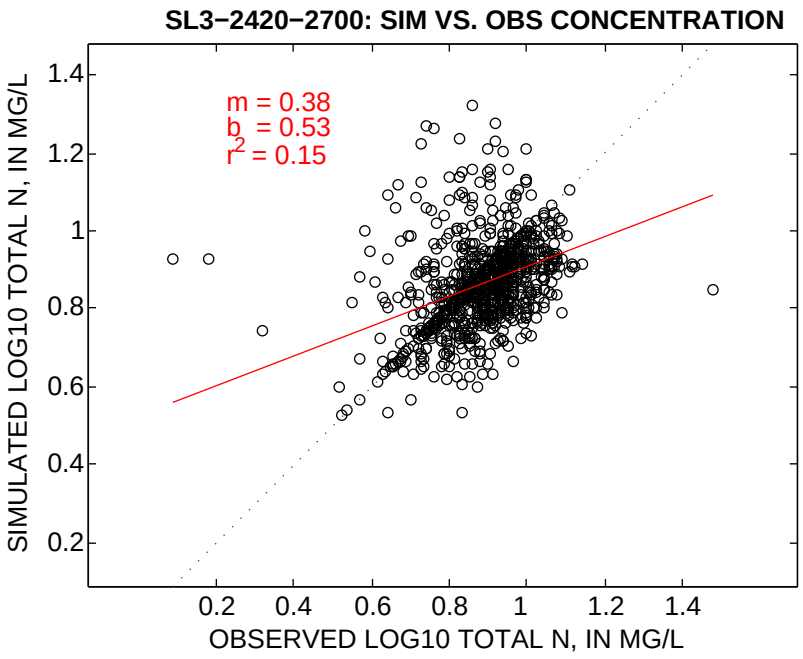
Drive	Directory	Observed
N/A	model	OBS20161101

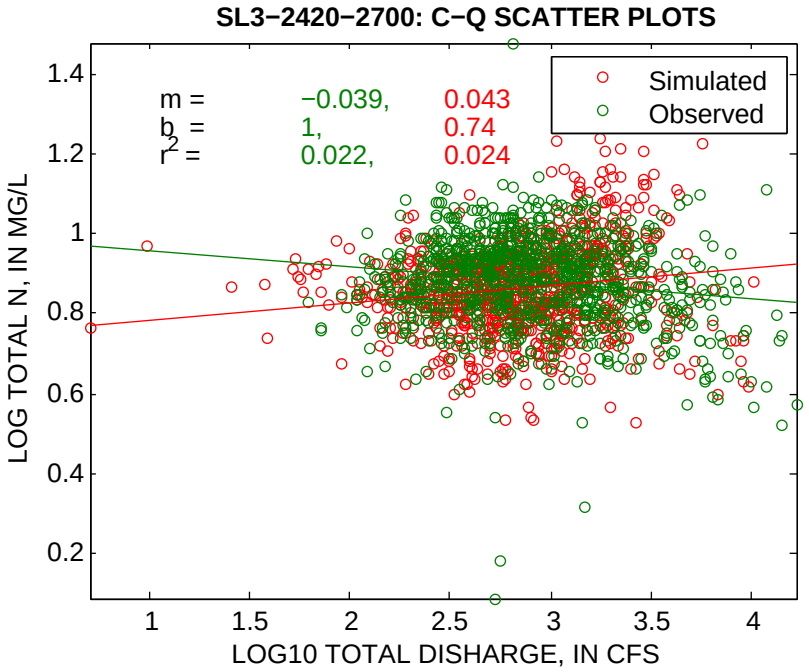
STATISTICS

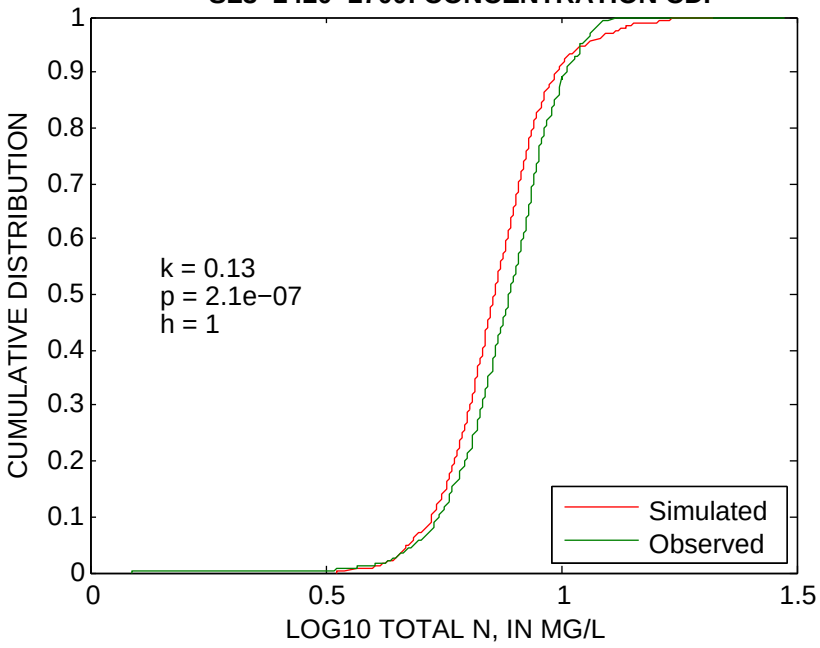
	n	observe	simulate
		924	923
min		1.23	0
		0.0899051	0.455789
mean		7.86623	7.72735
		0.881728	0.862906
media		7.79	7.2005
		0.891537	0.857851
max		30	24.81
		1.47712	1.39463
varian		3.97733	8.65675
		0.012876	0.020945
JB		0.001	0.001
		0.001	0.001
		ra	log
%		-1.76549	-2.13469
err.va		11.8774	0.0296306
rel.std.err		2.98627	2.30122
mod.eff		-1.98627	-1.30122

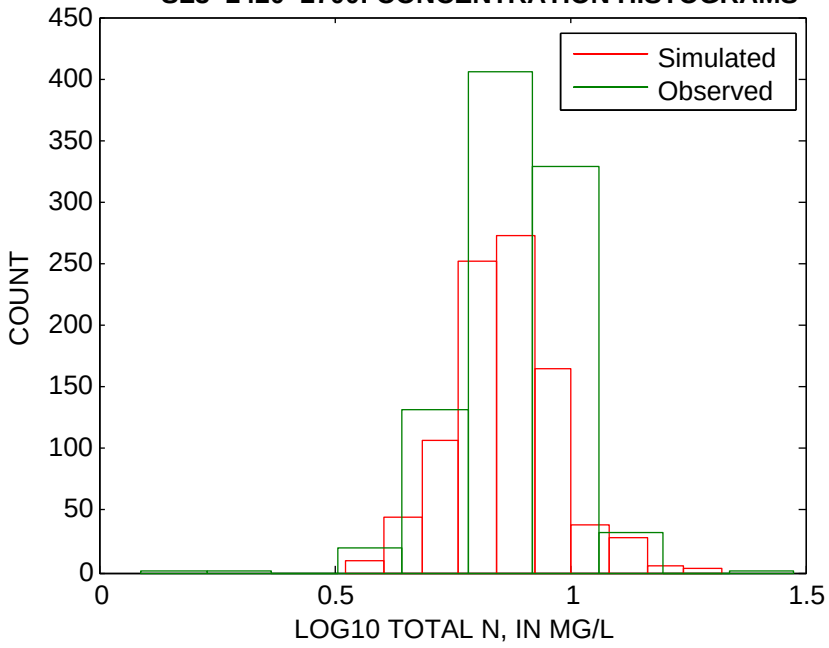
VERSION 2.1

ALL DATA
LOG10

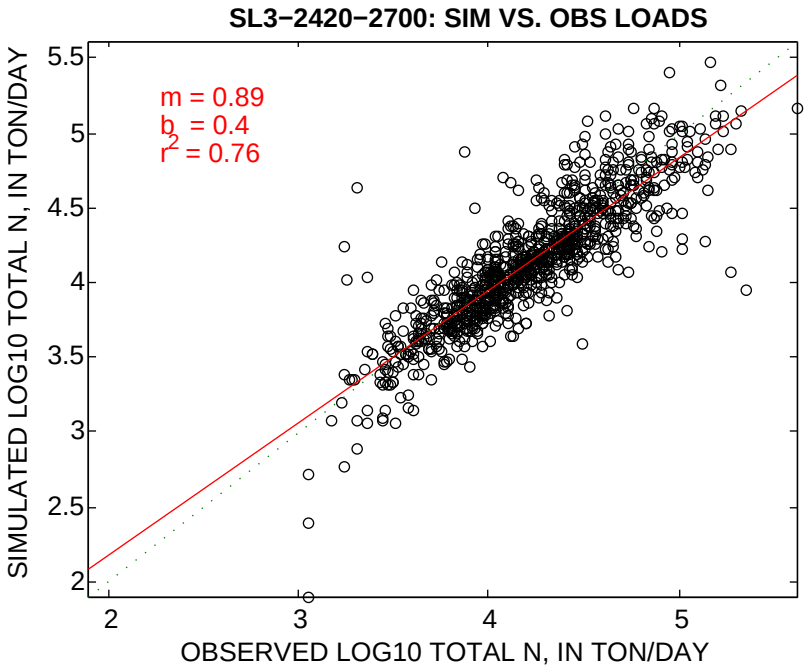


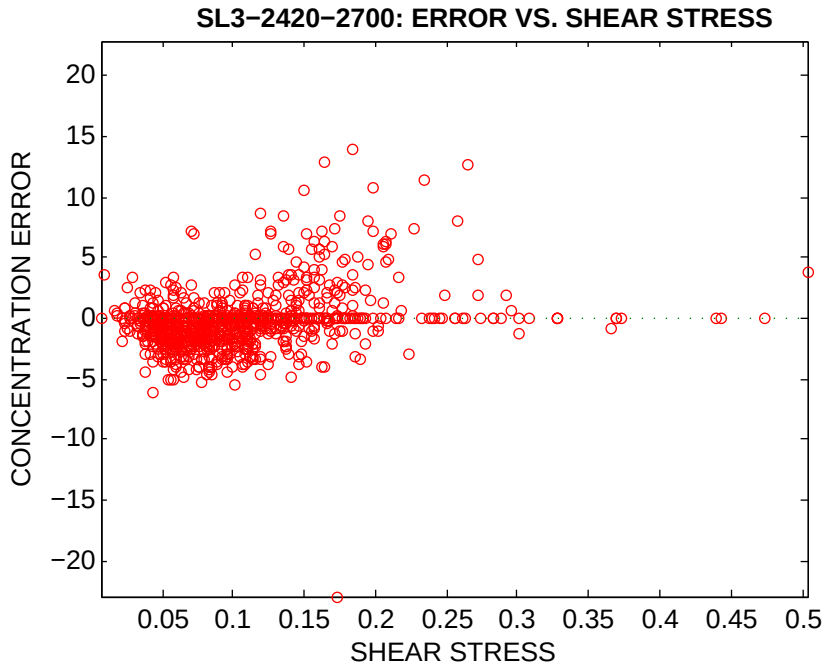


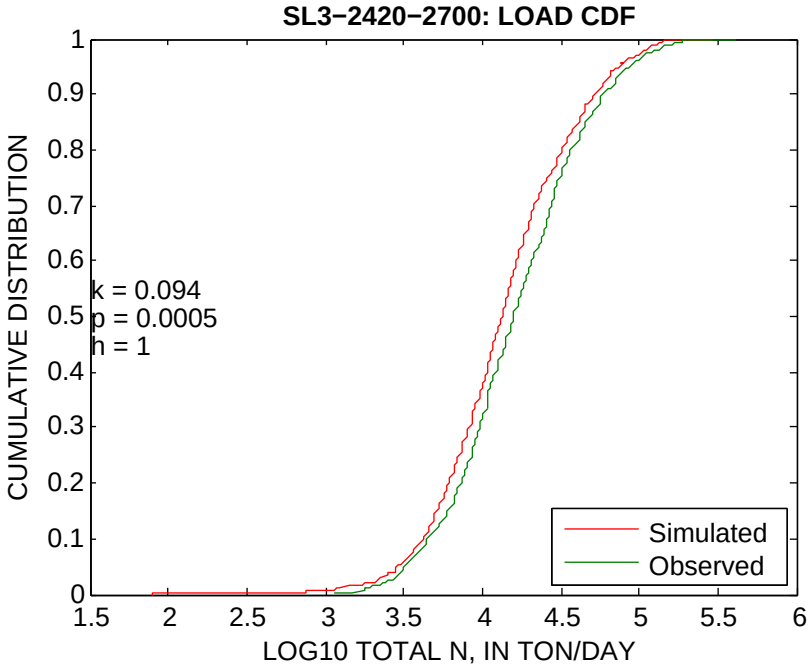


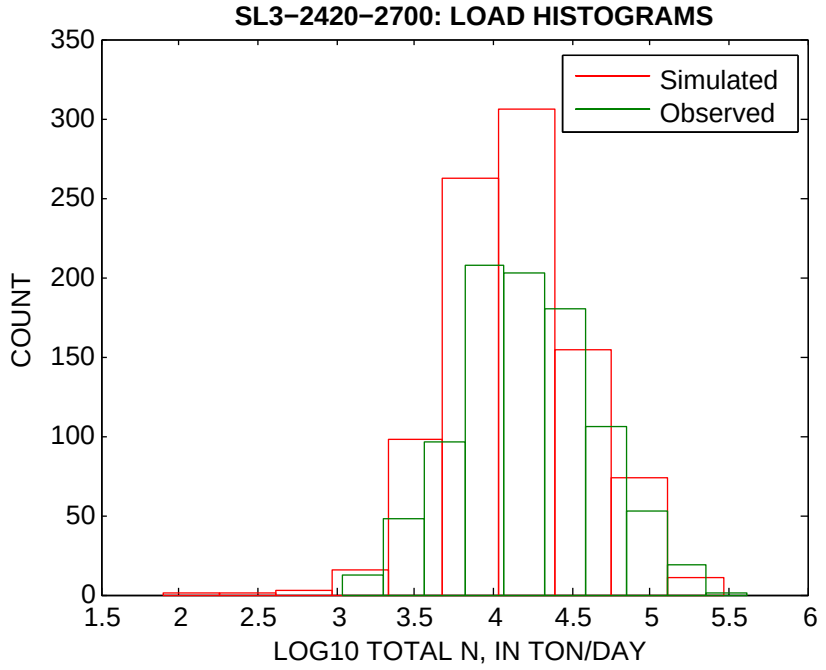


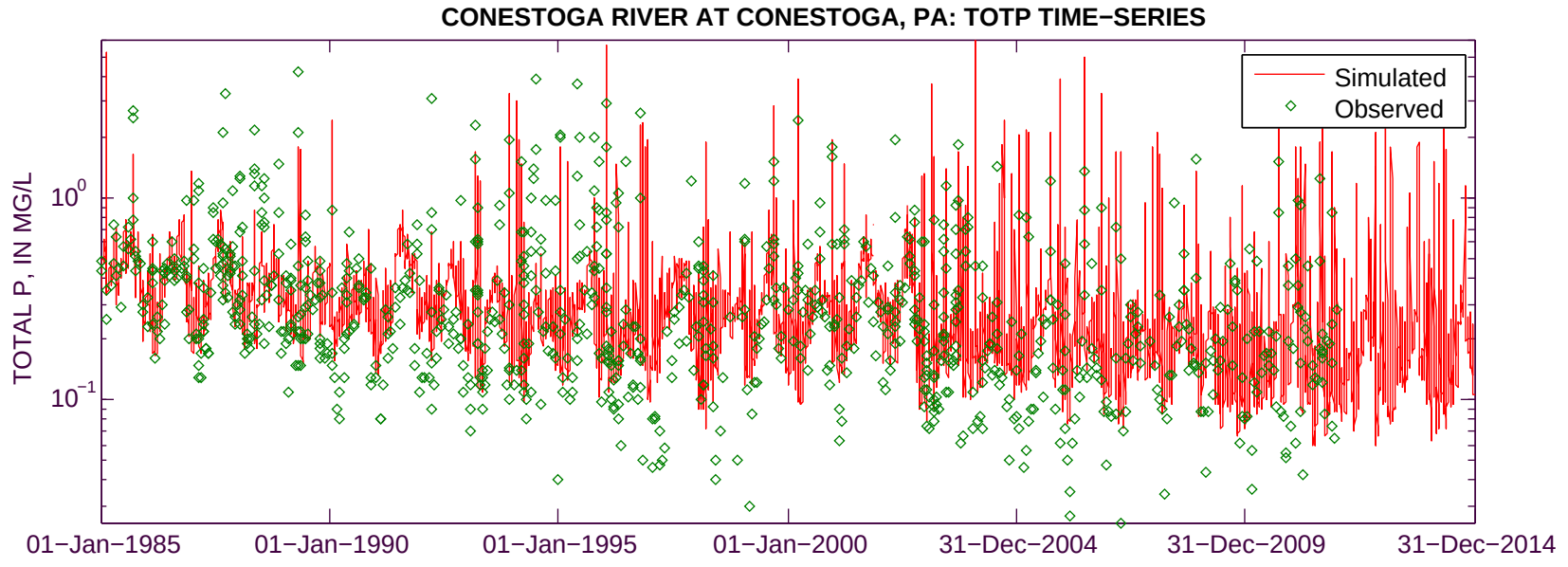
LOAD DATA
LOG10

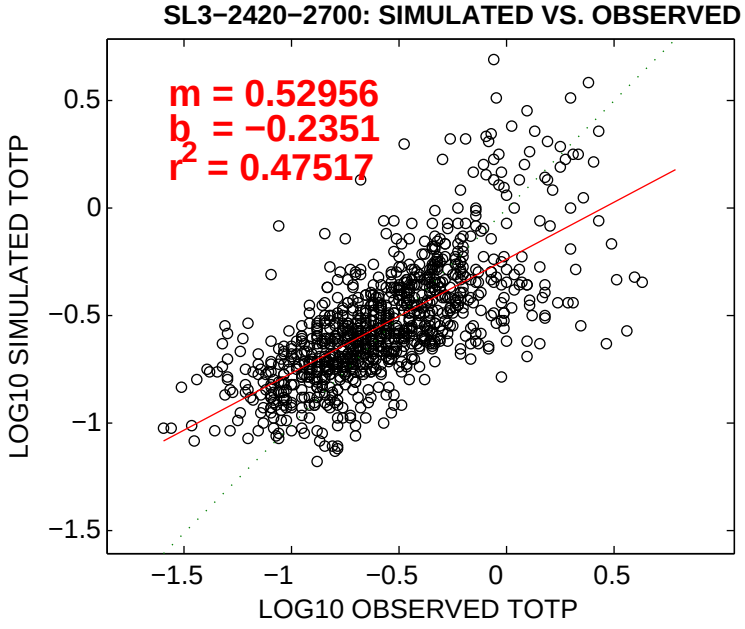


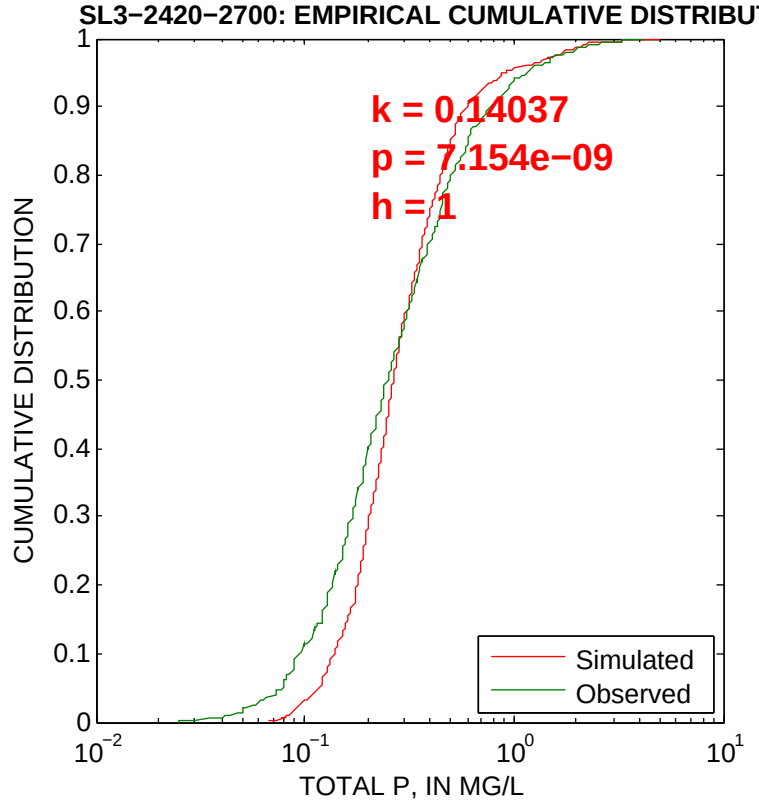












DATA SELECTION

scenario	file
P620171001WQ	TOTP.calib

plot: TOTP - total phosphorus

Dates	1/1/1985	12/31/201

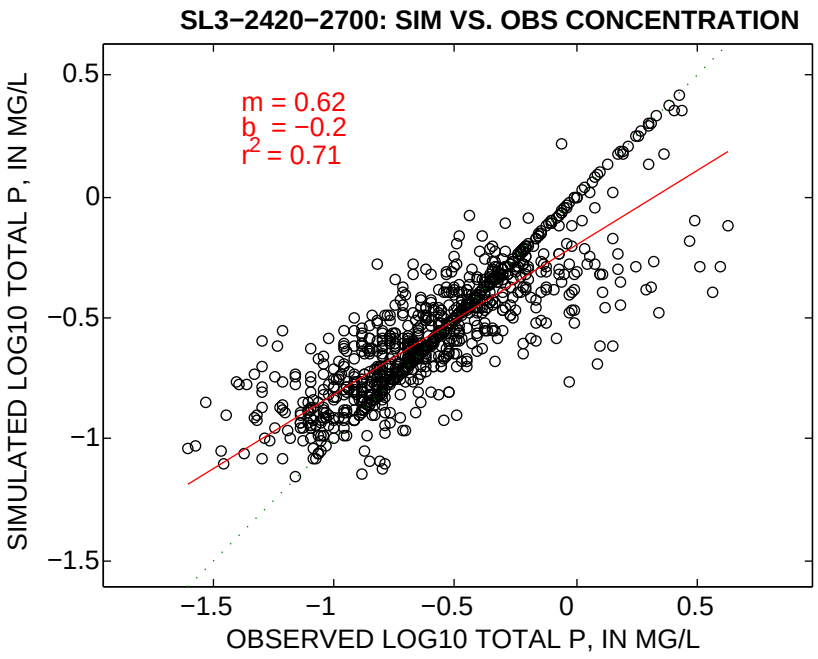
Drive	Directory	Observed
N/A	model	OBS20161101

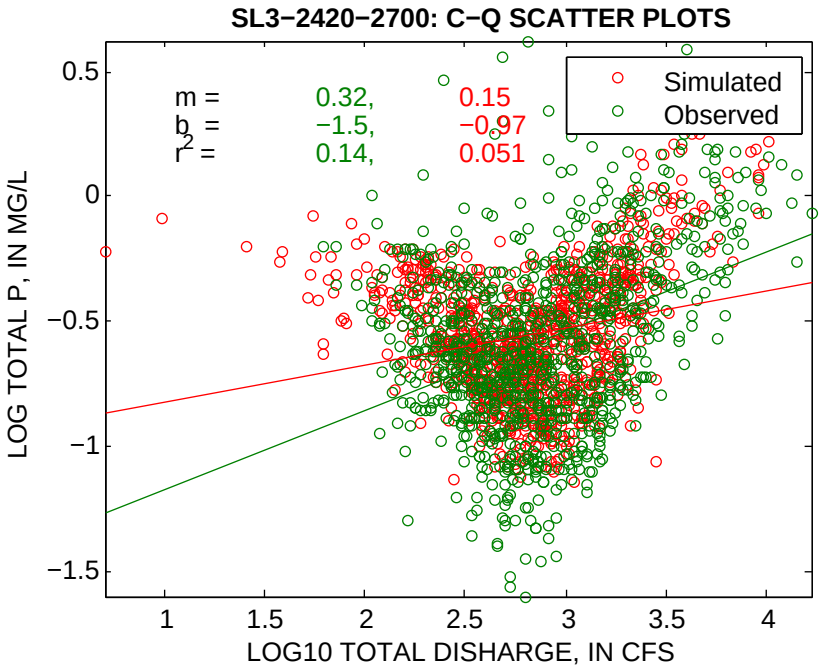
STATISTICS

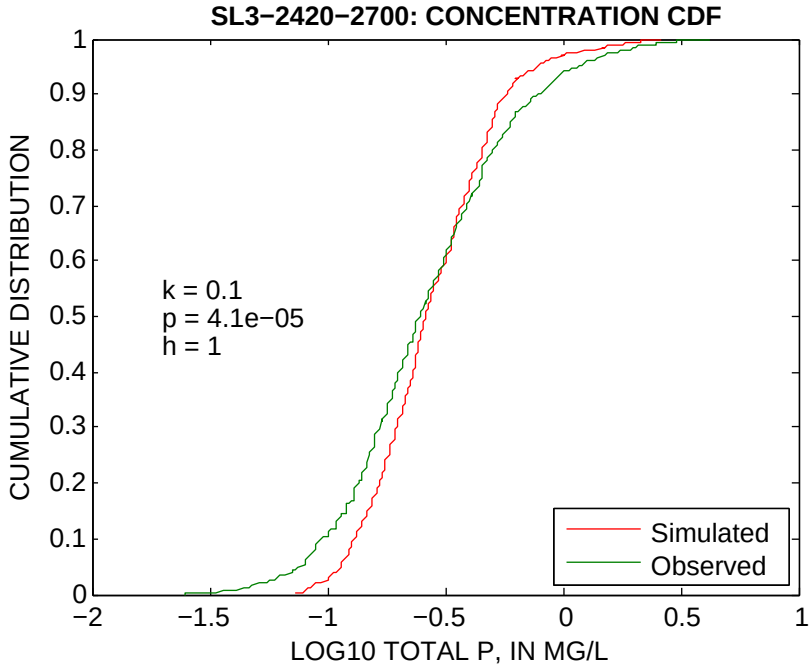
	n	observe	simulate
		976	975
min		0.025	0
		-1.60206	-1.17629
mean		0.387534	0.371879
		-0.575166	-0.539688
media		0.25	0.267105
		-0.60206	-0.572563
max		4.2	4.9658
		0.623249	0.695989
varian		0.195396	0.157964
		0.129223	0.0762634
JB		0.001	0.001
		0.001	0.001
		ra	log
%		-4.03959	-6.16816
err.va		0.179873	0.0698842
rel.std.err		0.920557	0.540802
mod.eff		0.079443	0.459198

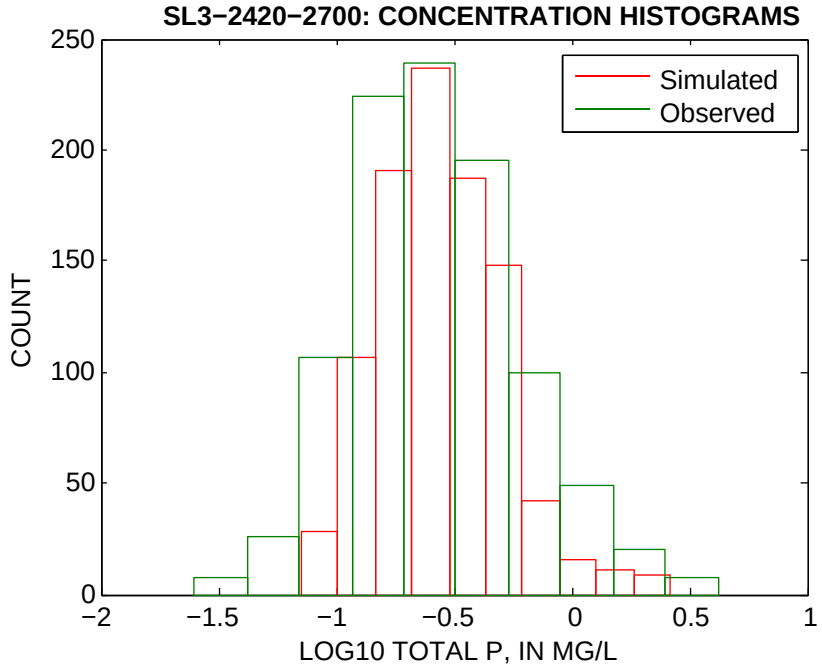
VERSION 2.1

ALL DATA
LOG10

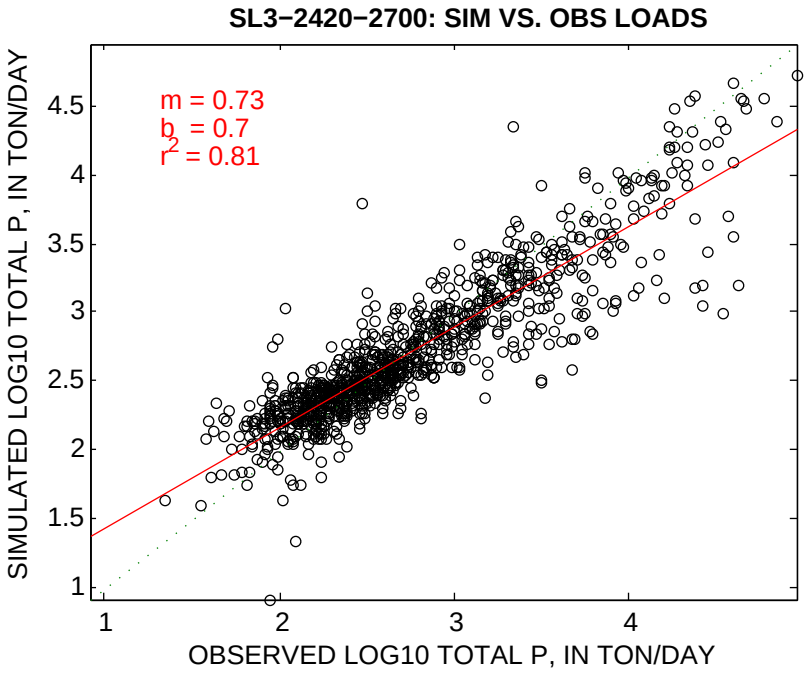


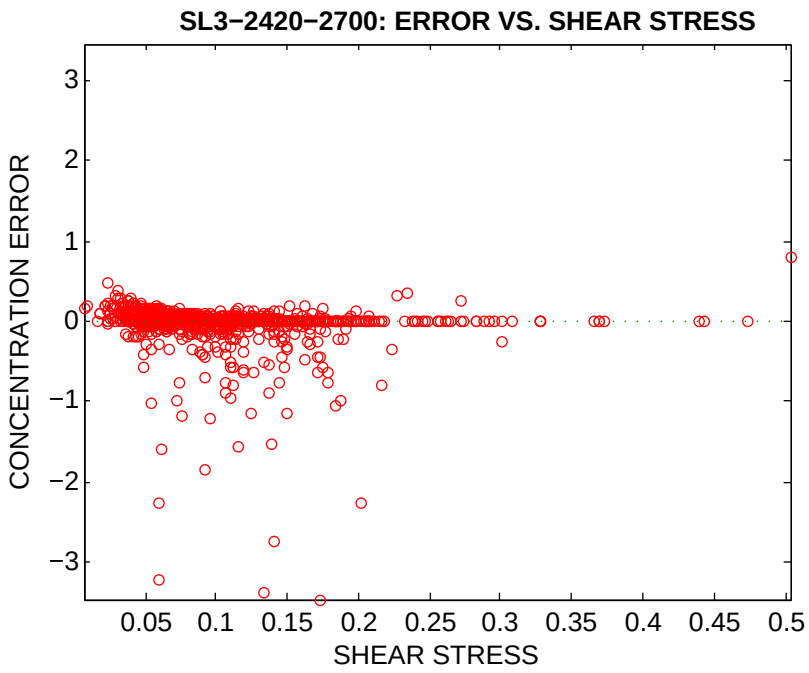


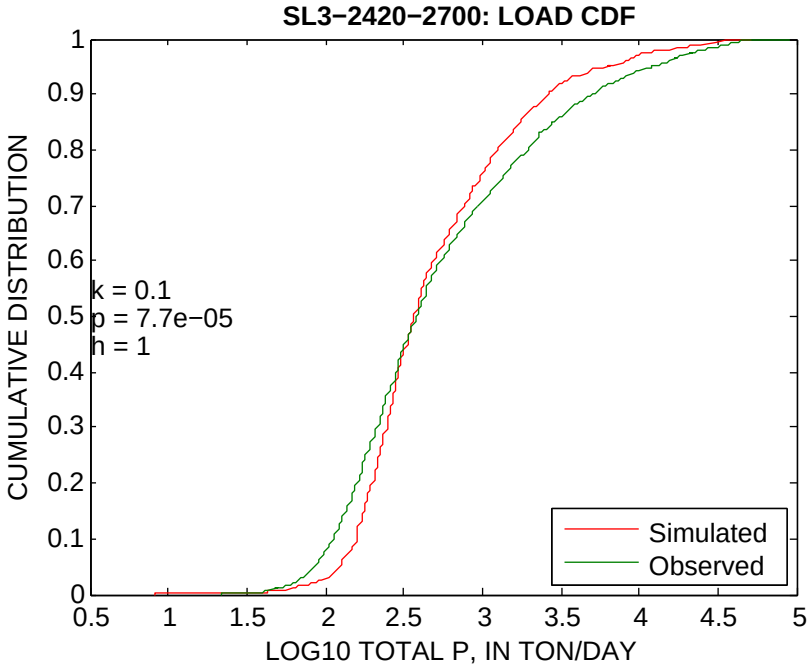


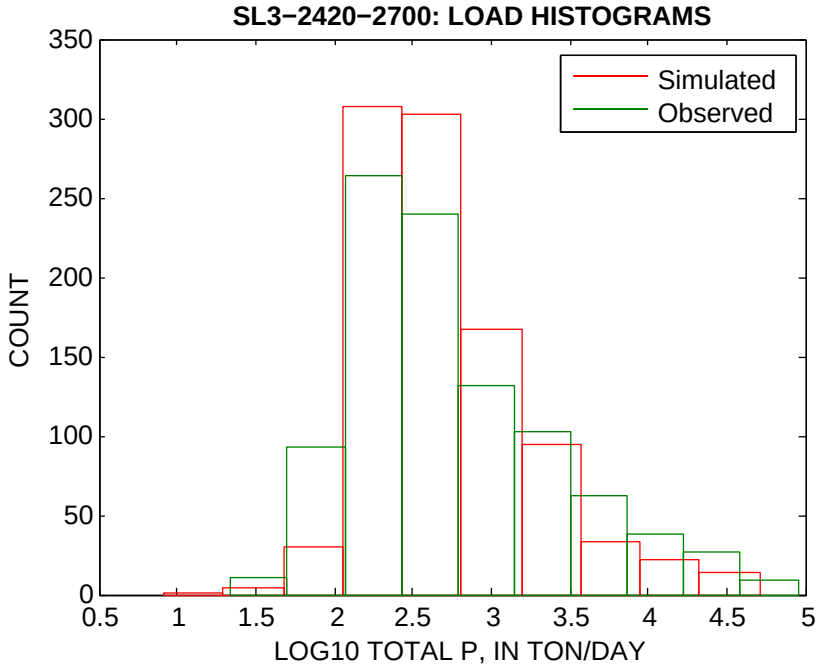


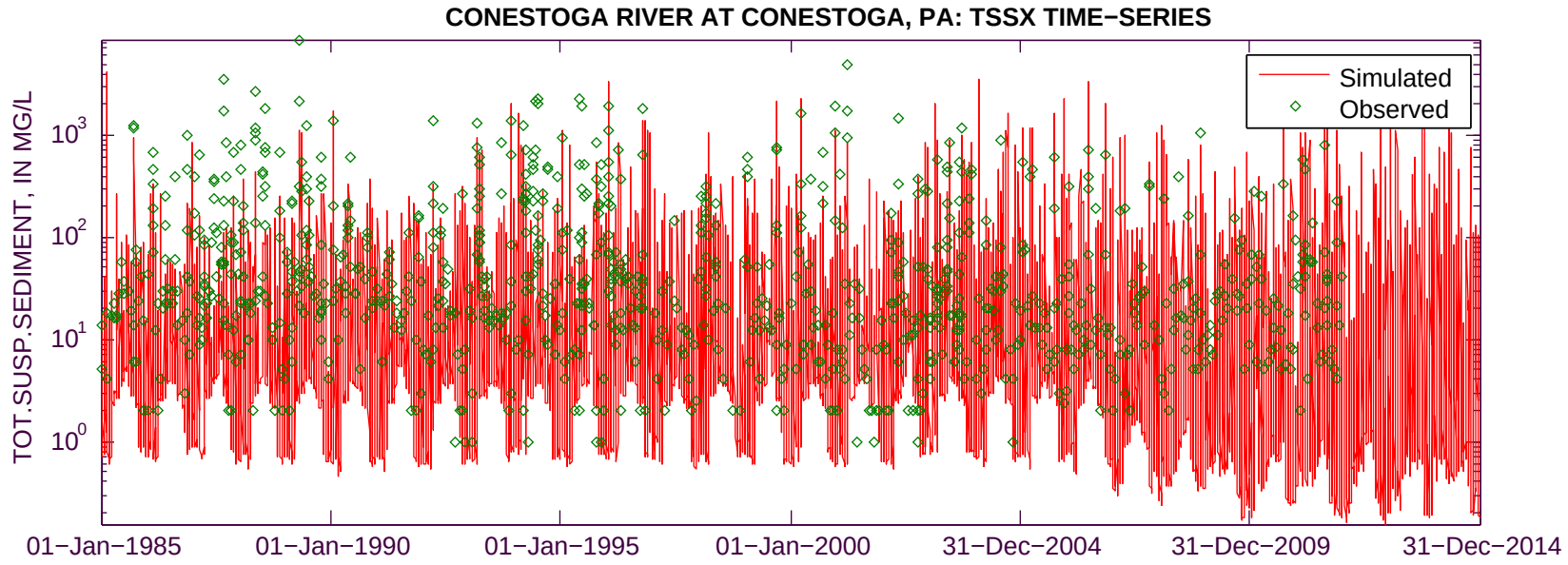
LOAD DATA
LOG10

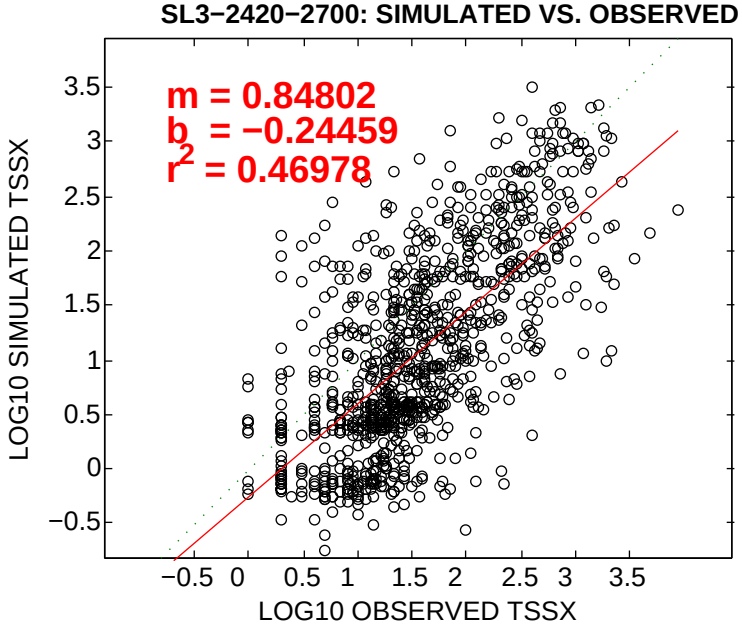


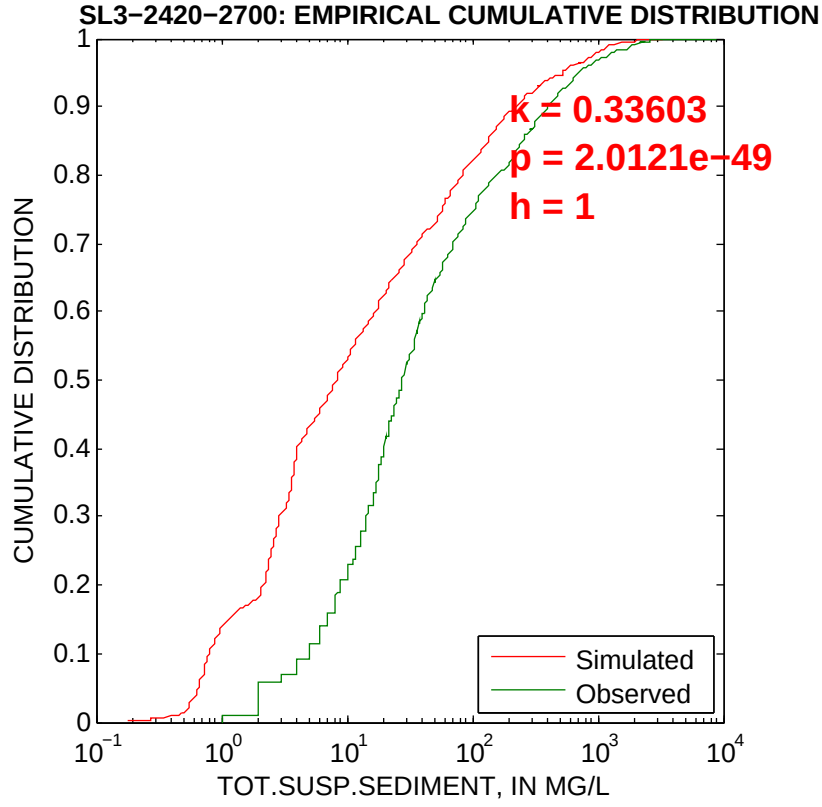












DATA SELECTION

scenario	file
P620171001WQ	TSSX.calib

plot: TSSX - total suspended ...

Dates: 1/1/1985 – 12/31/201

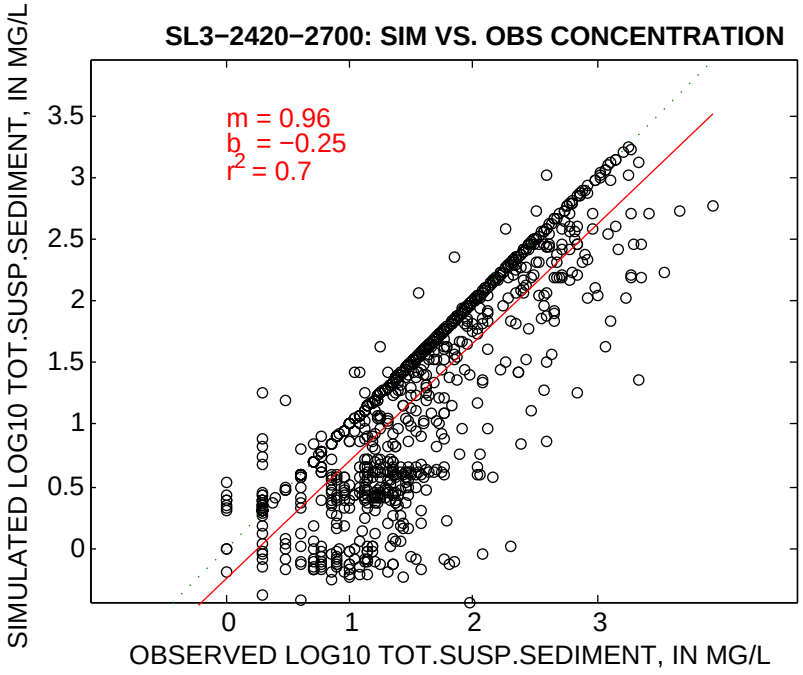
Drive	Directory	Observed
N/A	model	OBS20161101

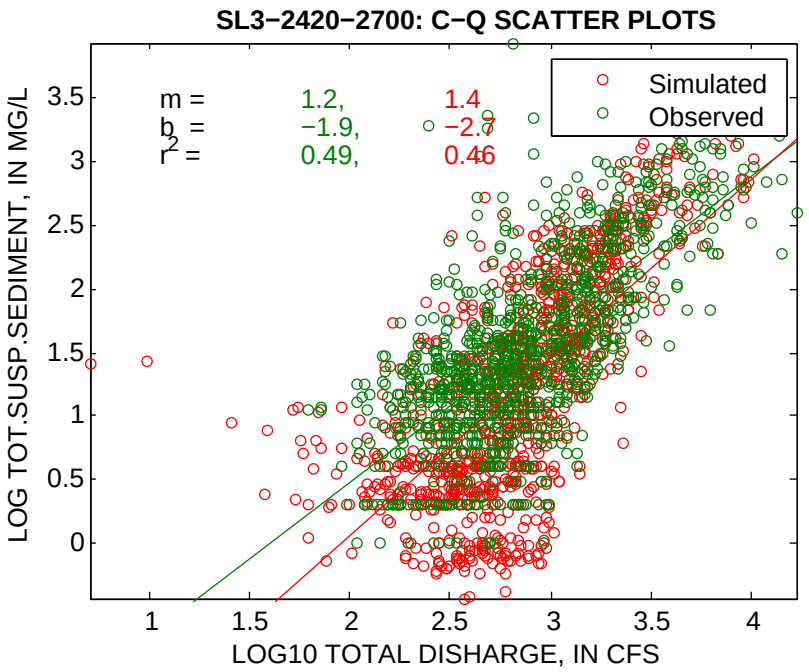
STATISTICS

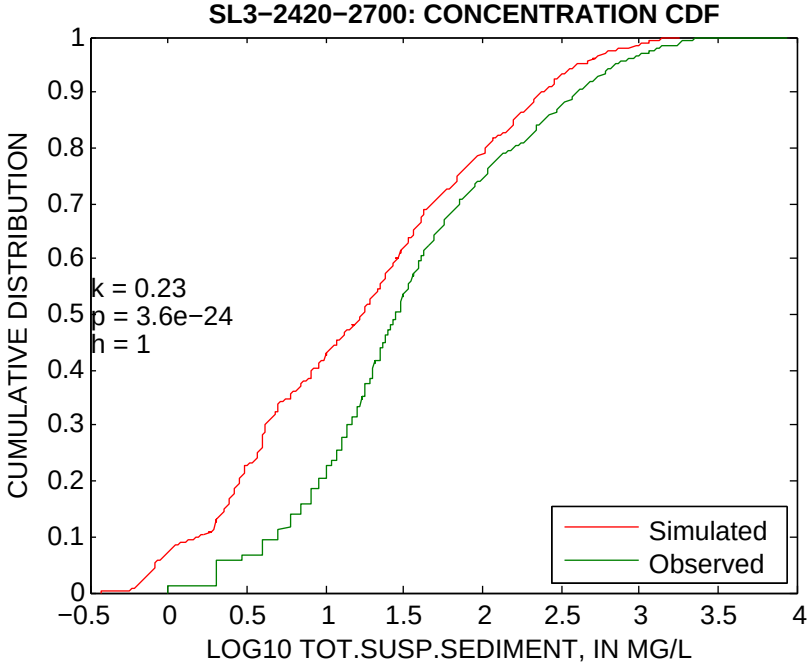
	n	observe	simulate
		988	987
min		1	0
		0	-0.747511
mean		159.377	95.6984
		1.5533	1.07265
media		28	8.2717
		1.44716	0.918093
max		8710	3263
		3.94002	3.51362
varian		206513	71355.7
		0.526691	0.806261
JB		0.001	0.001
		0.001	0.001
		ra	log
%		-39.9545	-30.9439
err.va		196984	0.67092
rel.std.err		0.953858	1.27384
mod.eff		0.0461418	-0.27384

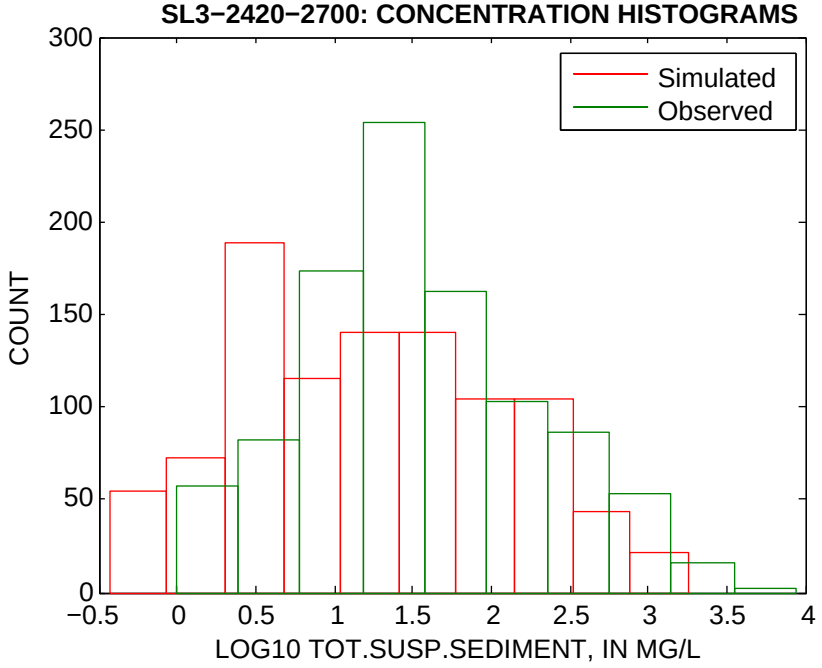
VERSION 2.1

ALL DATA
LOG10

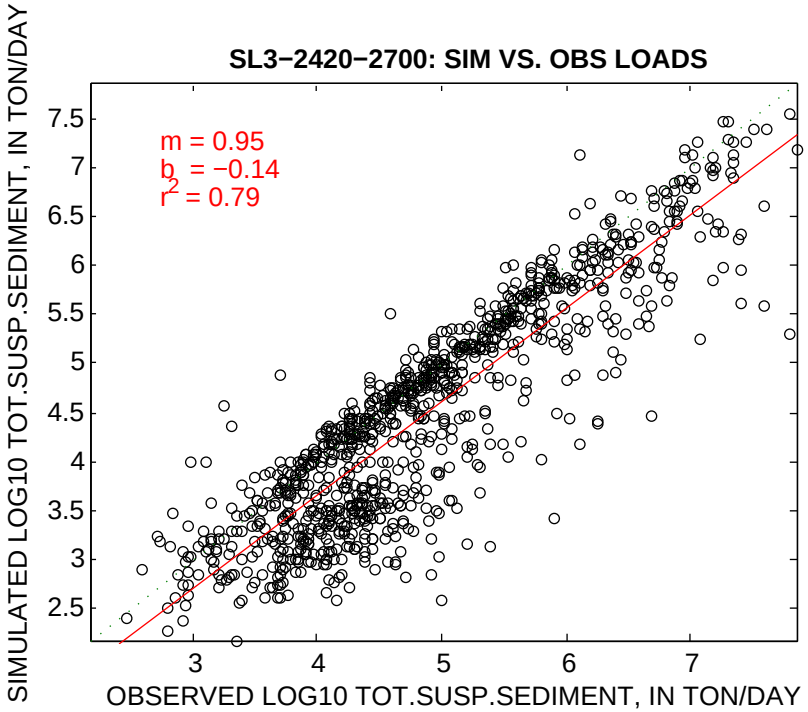


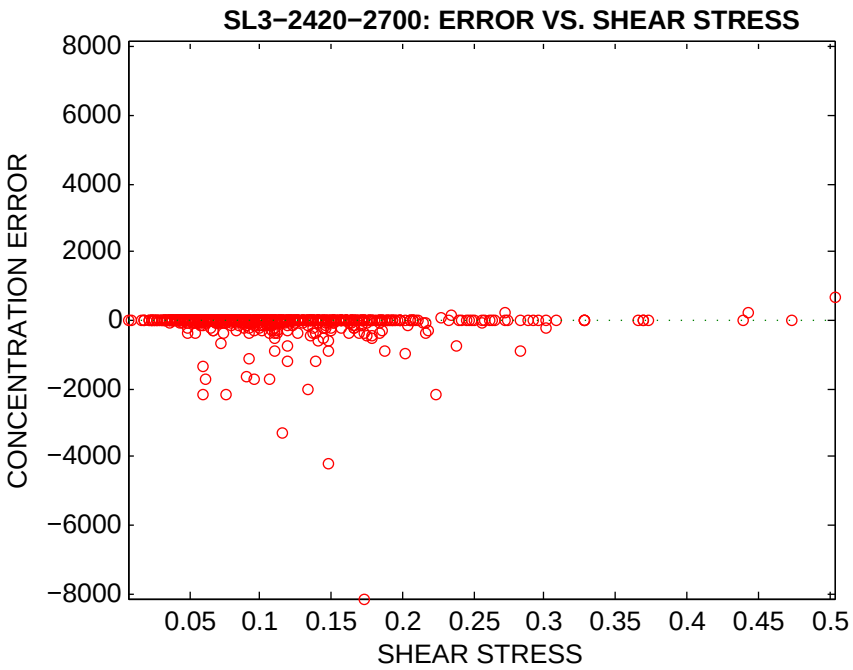


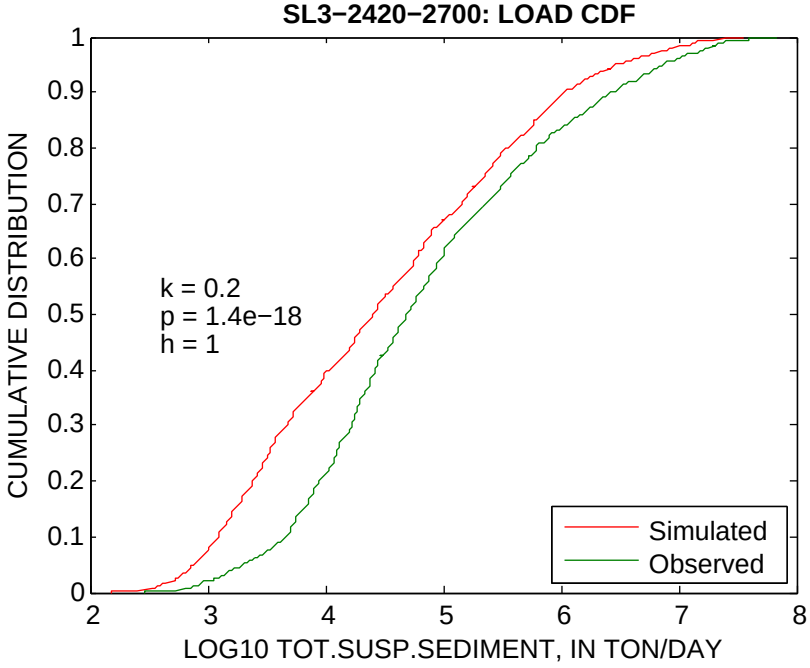


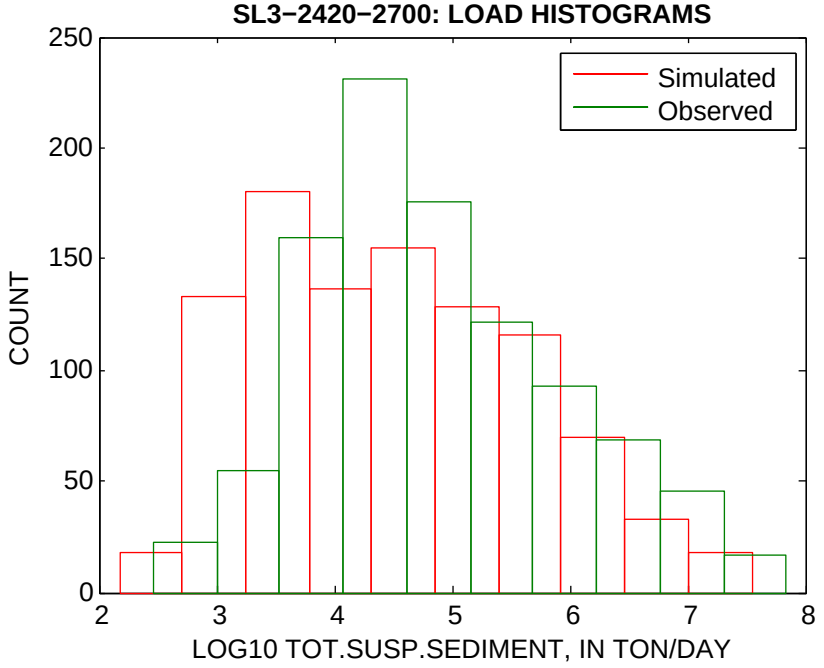


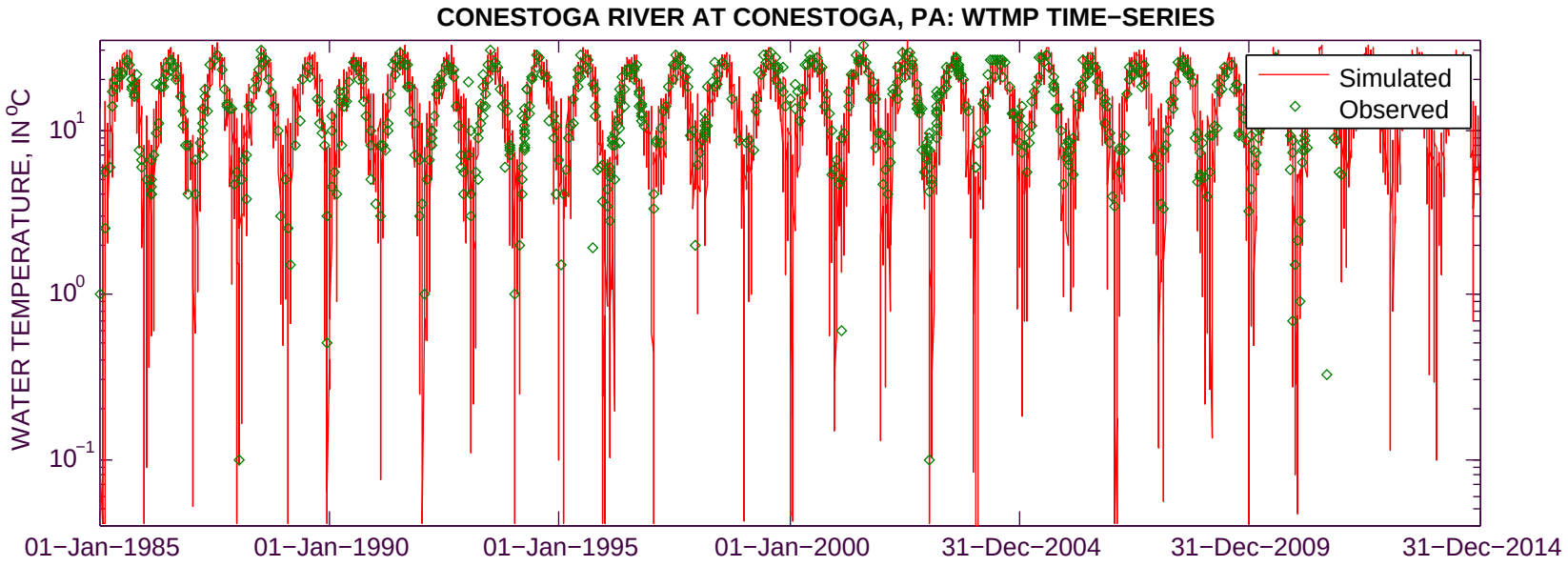
LOAD DATA
LOG10

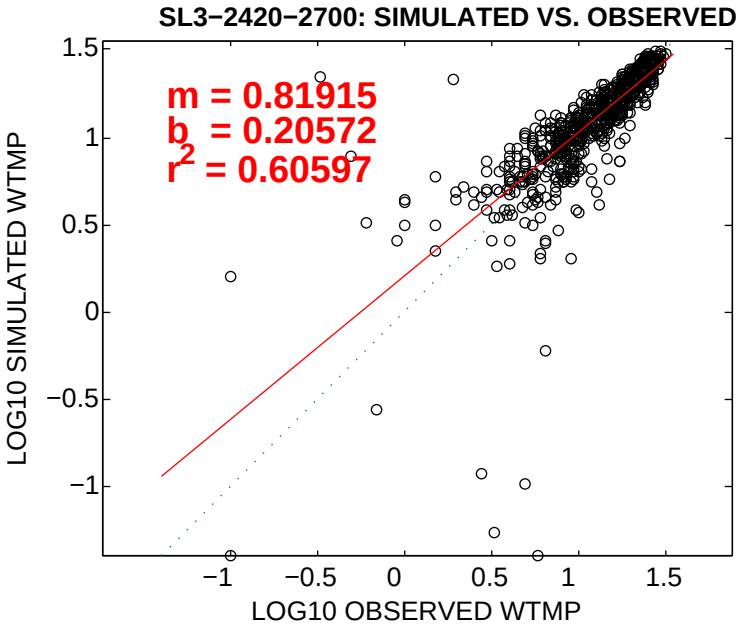


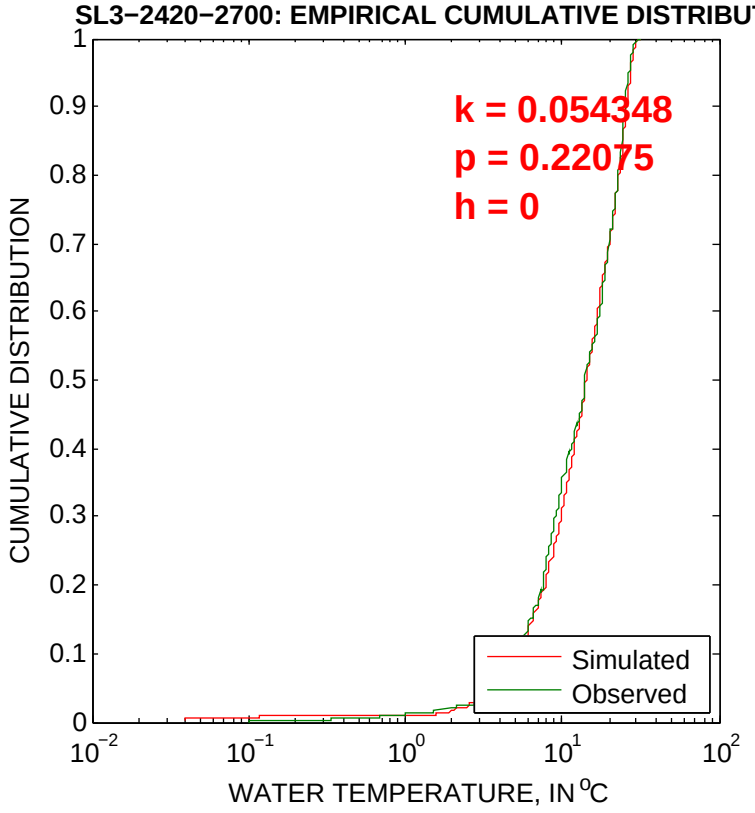












DATA SELECTION

scenario	file
P620171001WQ	WTMP.calib

plot: WTMP - water tempera...

Dates: 1/1/1985 – 12/31/201

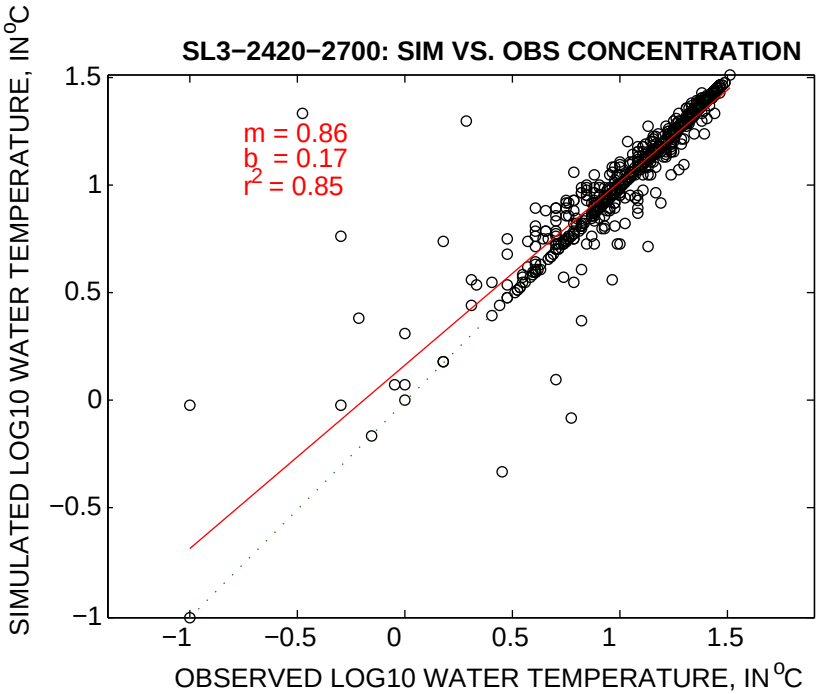
Drive	Directory	Observed
N/A	model	OBS20161101

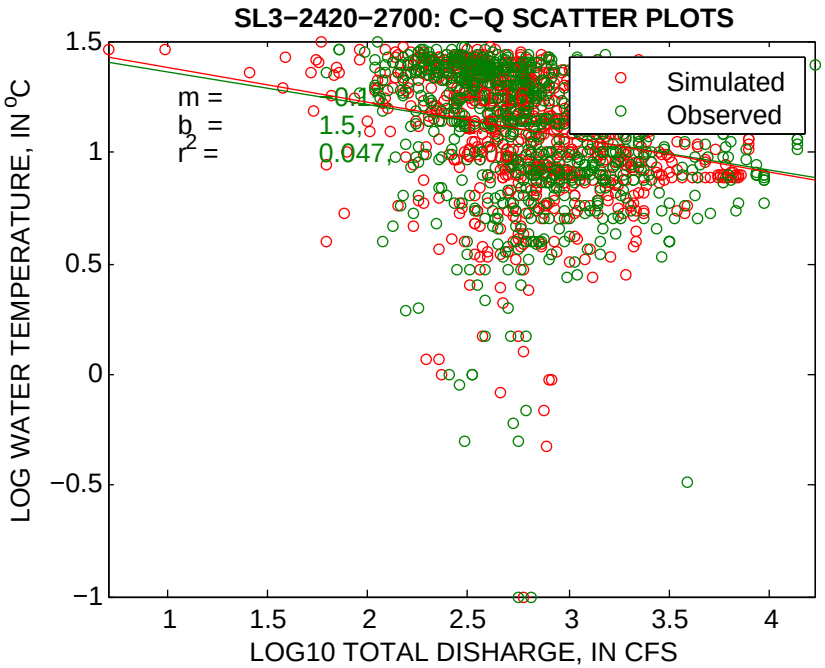
STATISTICS

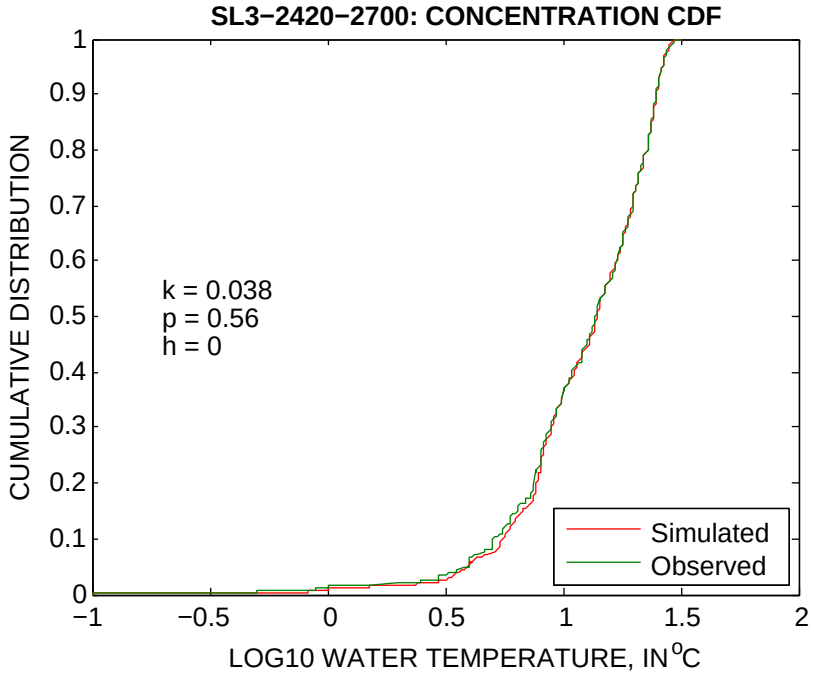
	n	observe	simulate
		736	735
min		0.1	0
		-1	-1.39766
mean		14.8194	15.0856
		1.08885	1.09766
media		14	14.292
		1.14613	1.15567
max		32.1	31.393
		1.50651	1.49683
varian		57.8106	57.6846
		0.0985332	0.109108
JB		0.001	0.001
		0.001	0.001
		ra	log
%		1.7961	0.808735
err.va		9.00074	0.046292
rel.std.err		0.155693	0.469811
mod.eff		0.844307	0.530189

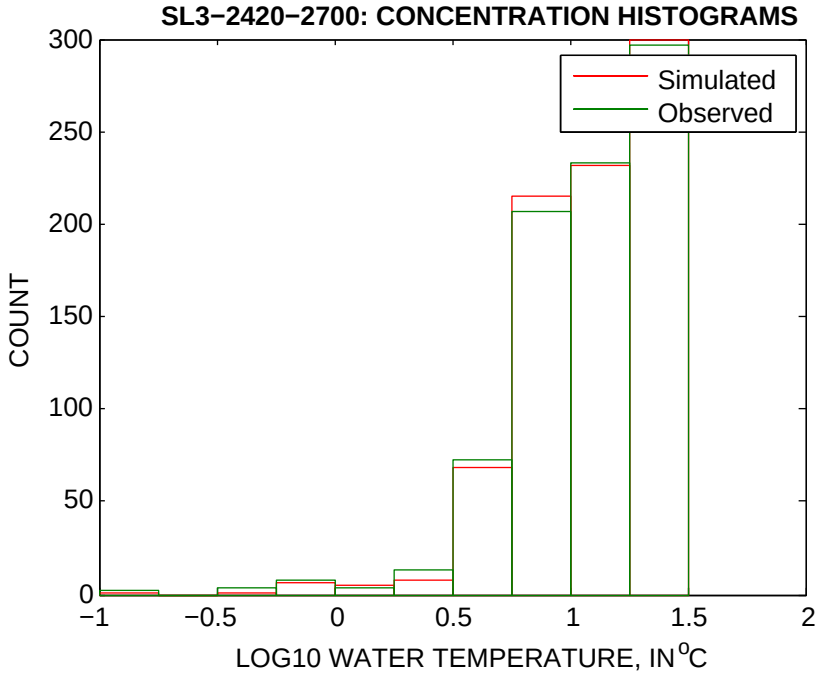
VERSION 2.1

ALL DATA
LOG10

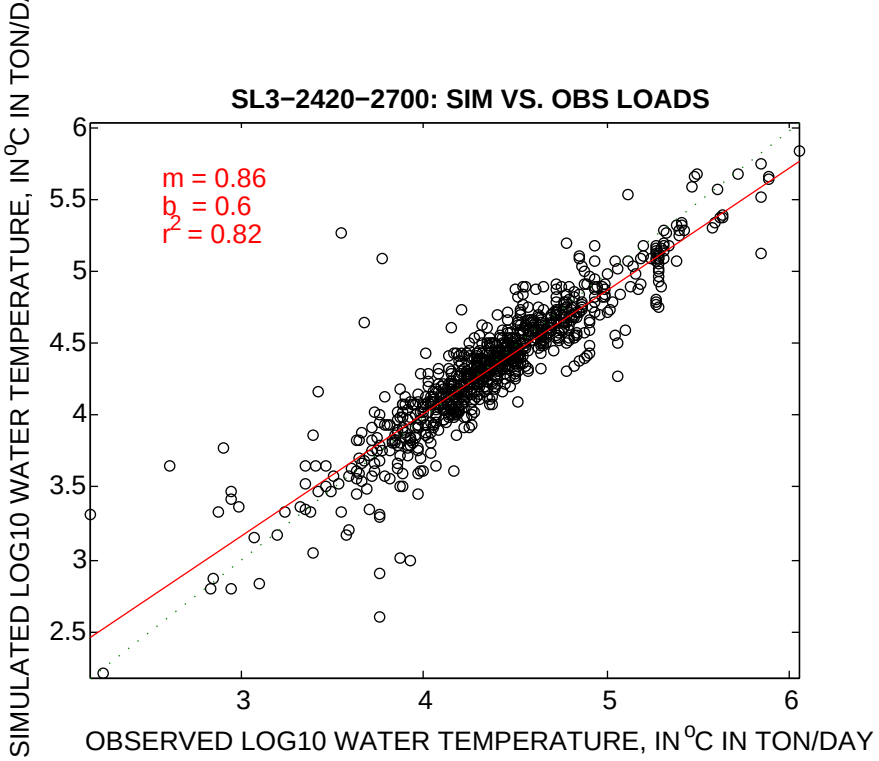


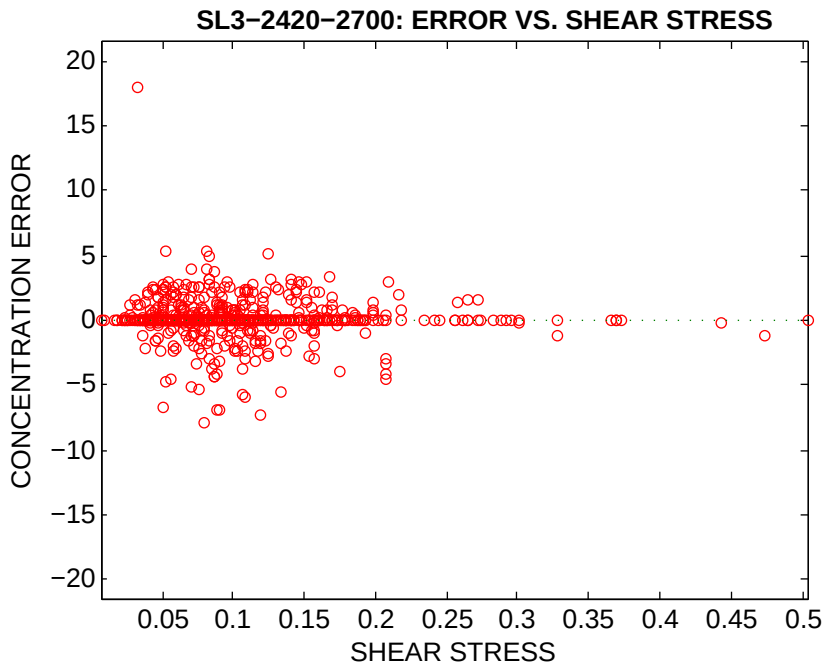


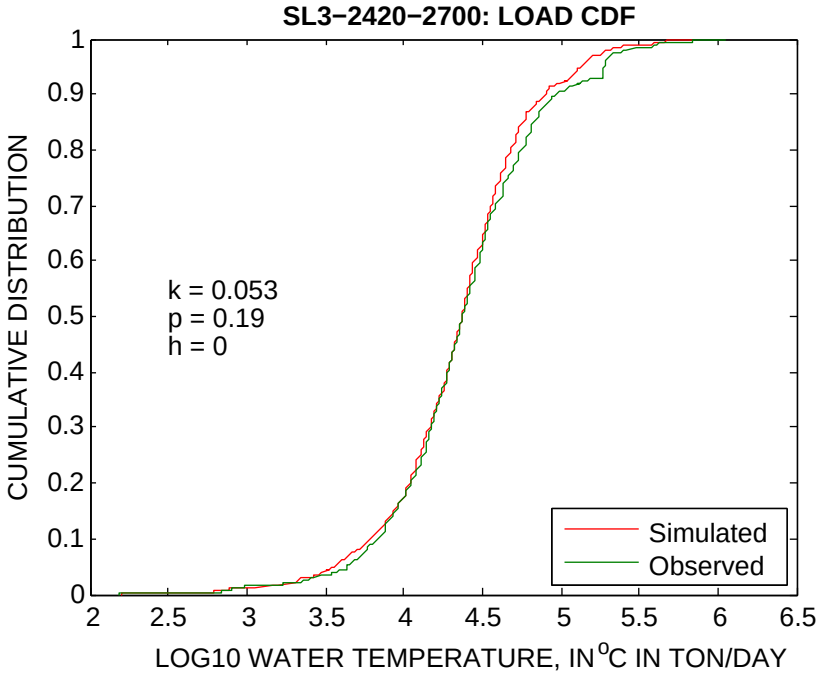


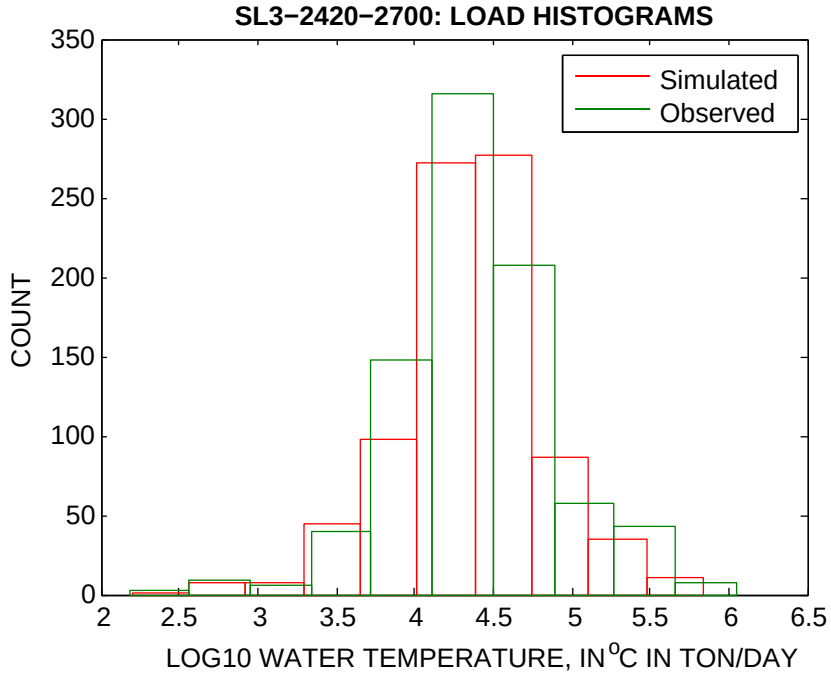


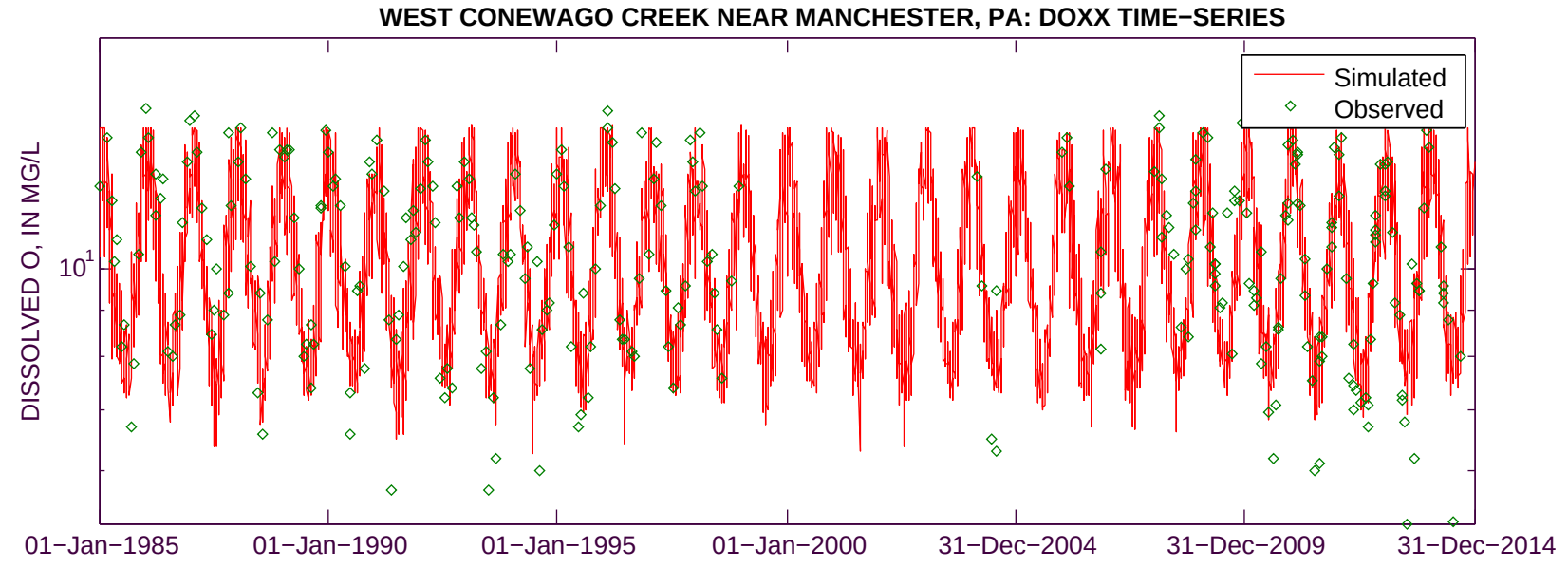
LOAD DATA
LOG10

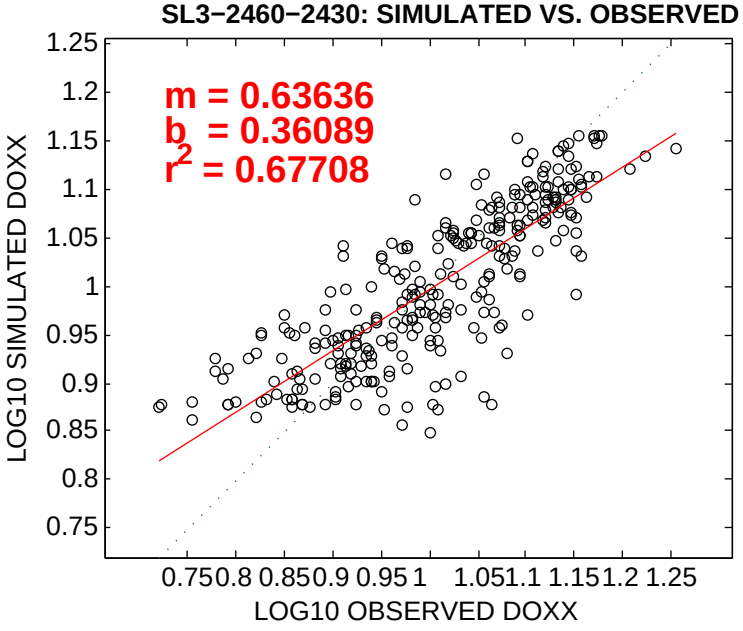


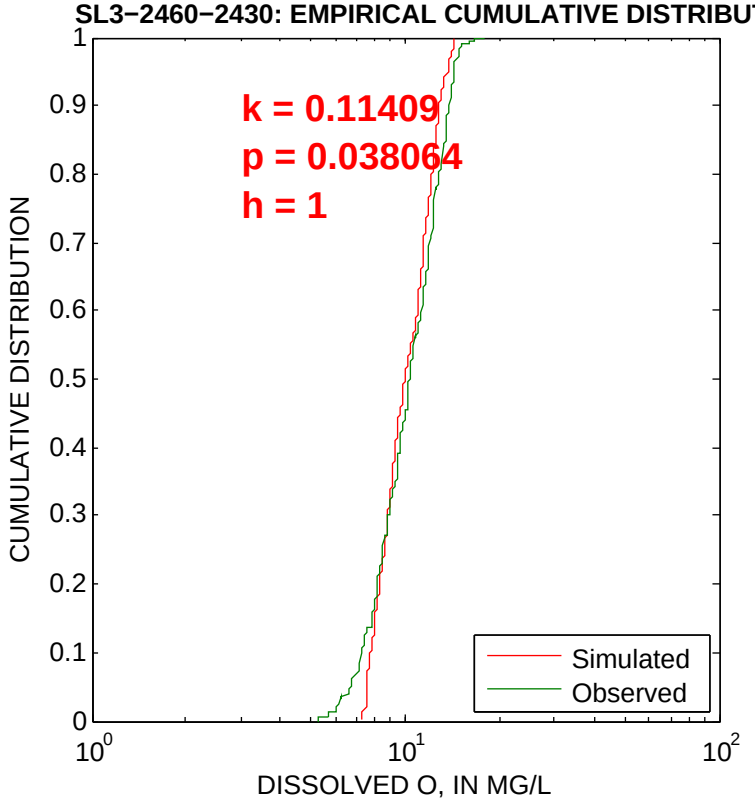












DATA SELECTION

scenario	file
P620171001WQ	DOXX.calib

plot: DOXX - dissolved oxygen

Dates 1/1/1985 12/31/201

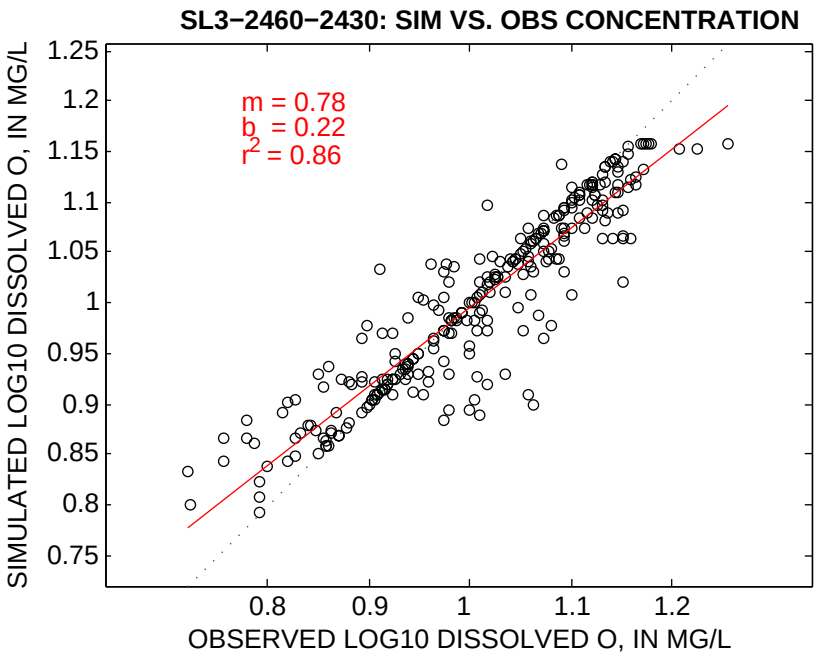
Drive	Directory	Observed
N/A	model	OBS20161101

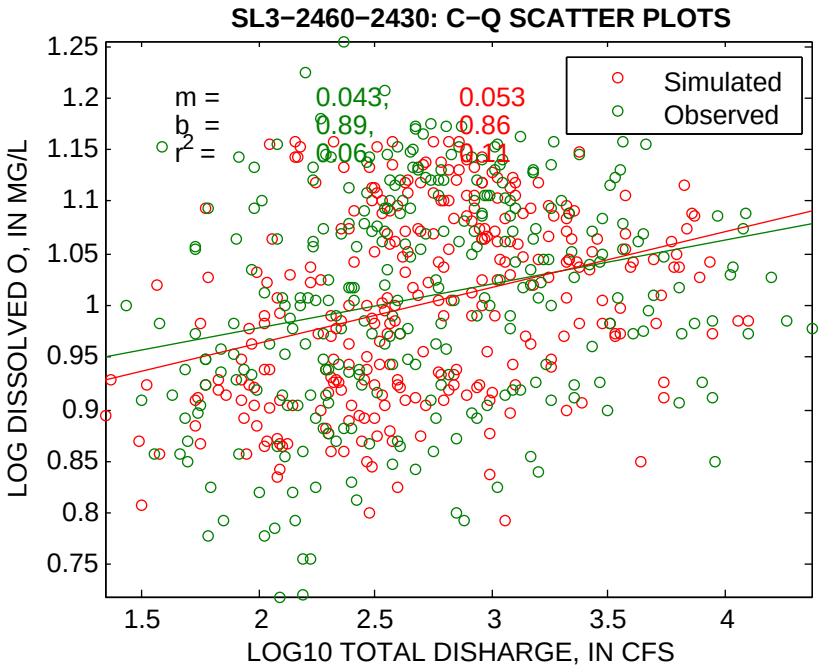
STATISTICS

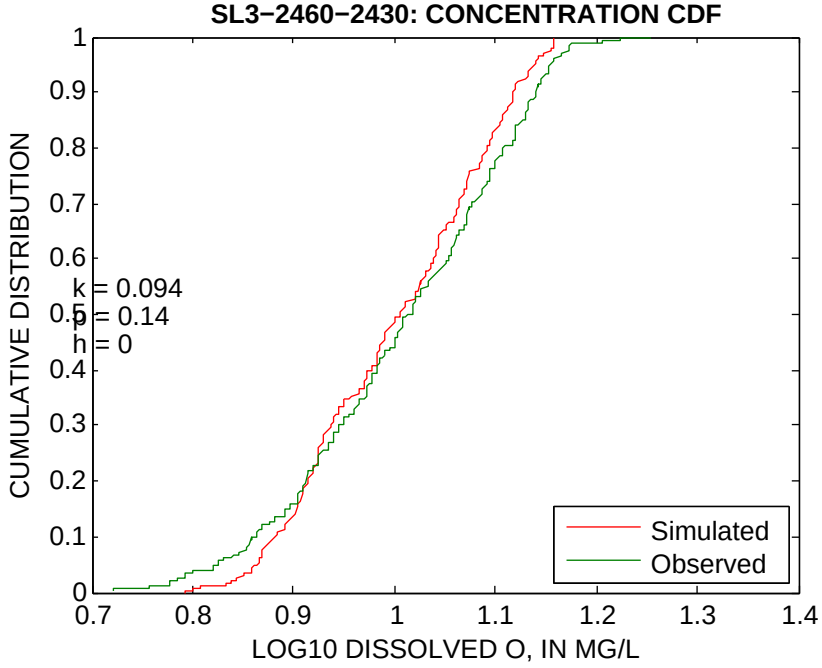
	n	observe	simulate
		298	298
min		5.25	7.0656
		0.720159	0.849149
mean		10.4904	10.2381
		1.00829	1.00253
media		10.345	9.9302
		1.01472	0.996958
max		18	14.356
		1.25527	1.15703
varian		6.08436	3.73189
		0.0112243	0.00671313
JB		0.030751	0.002885
		0.015718	0.002917
		ra	log
%		-2.40447	-0.571426
err.va		1.89595	0.00368539
rel.std.err		0.311611	0.32834
mod.eff		0.688389	0.67166

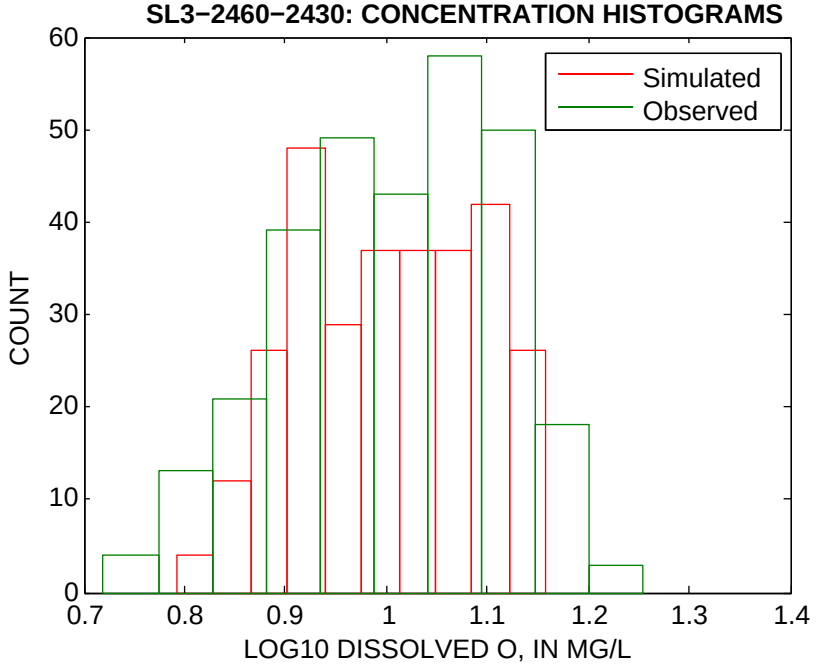
VERSION 2.1

ALL DATA
LOG10

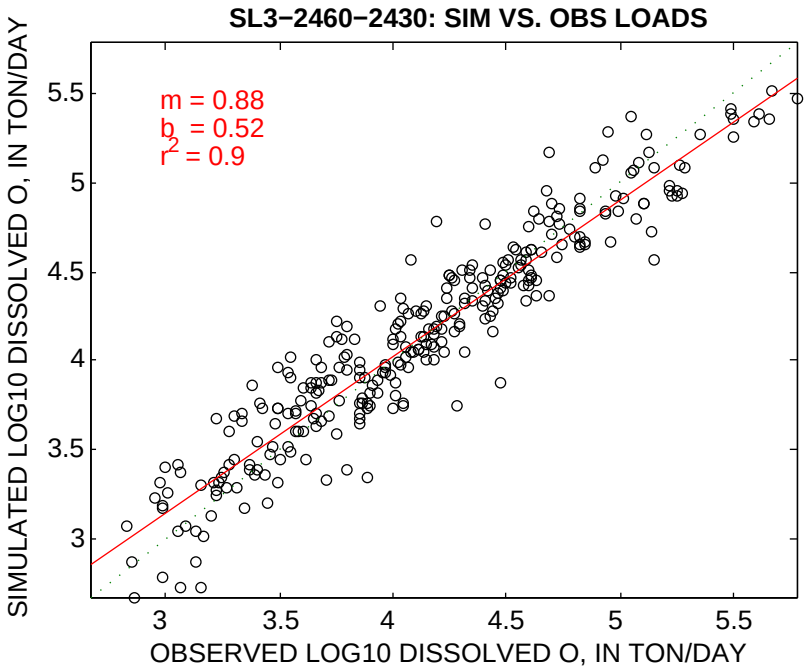


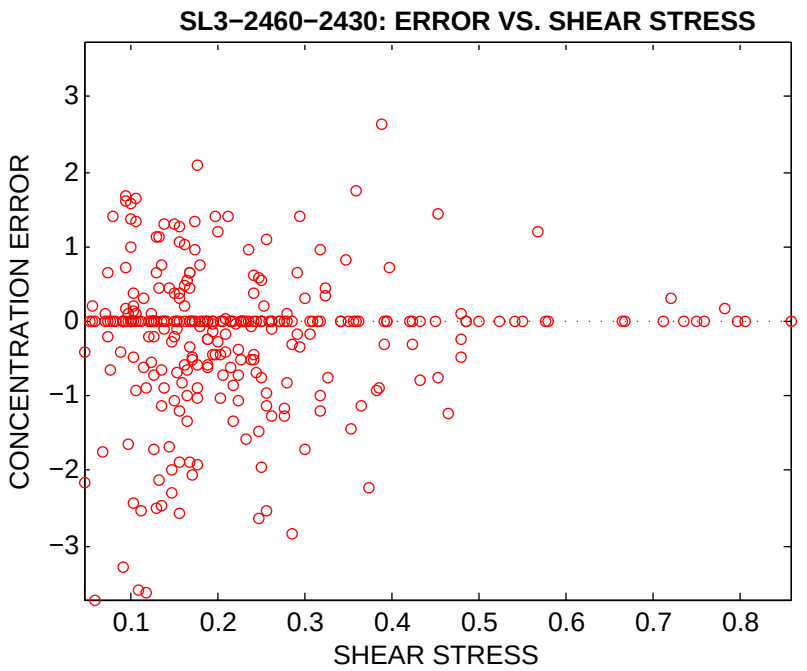


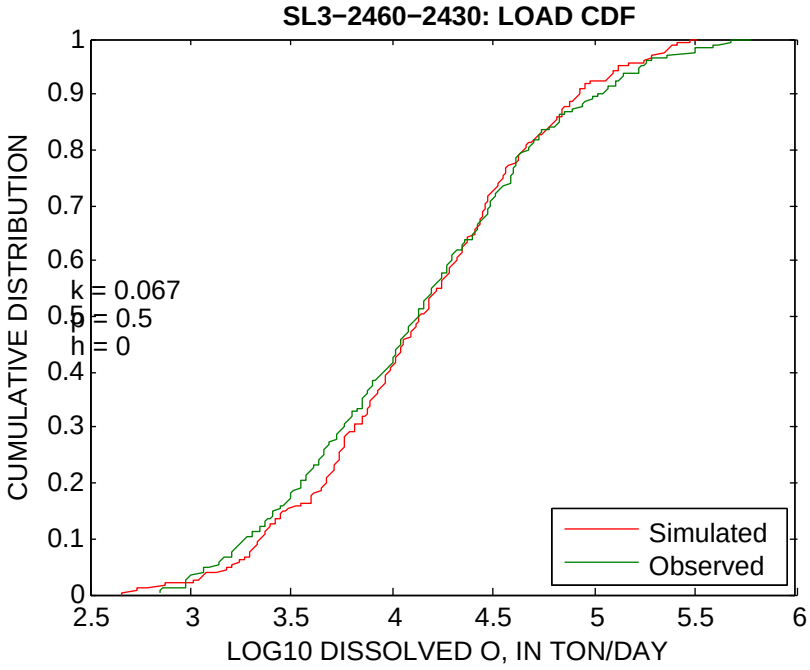


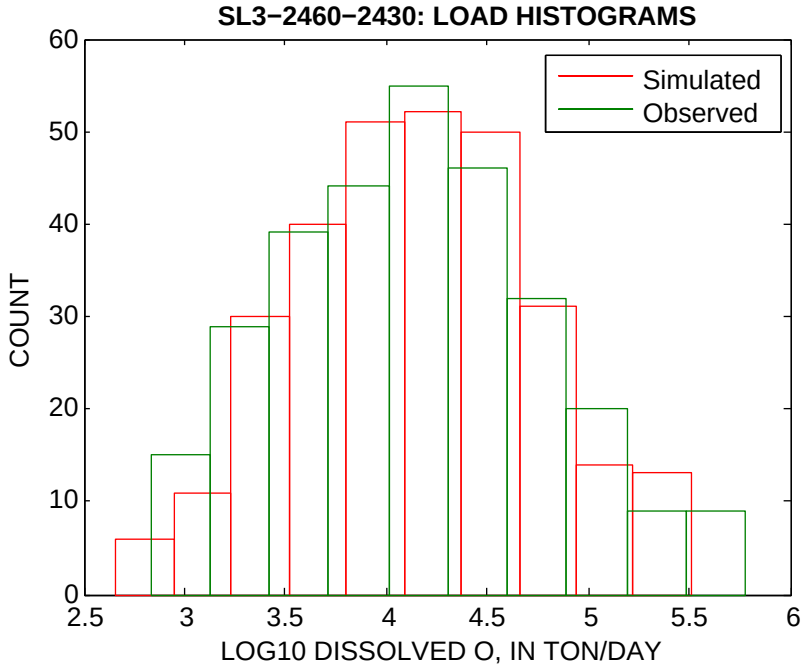


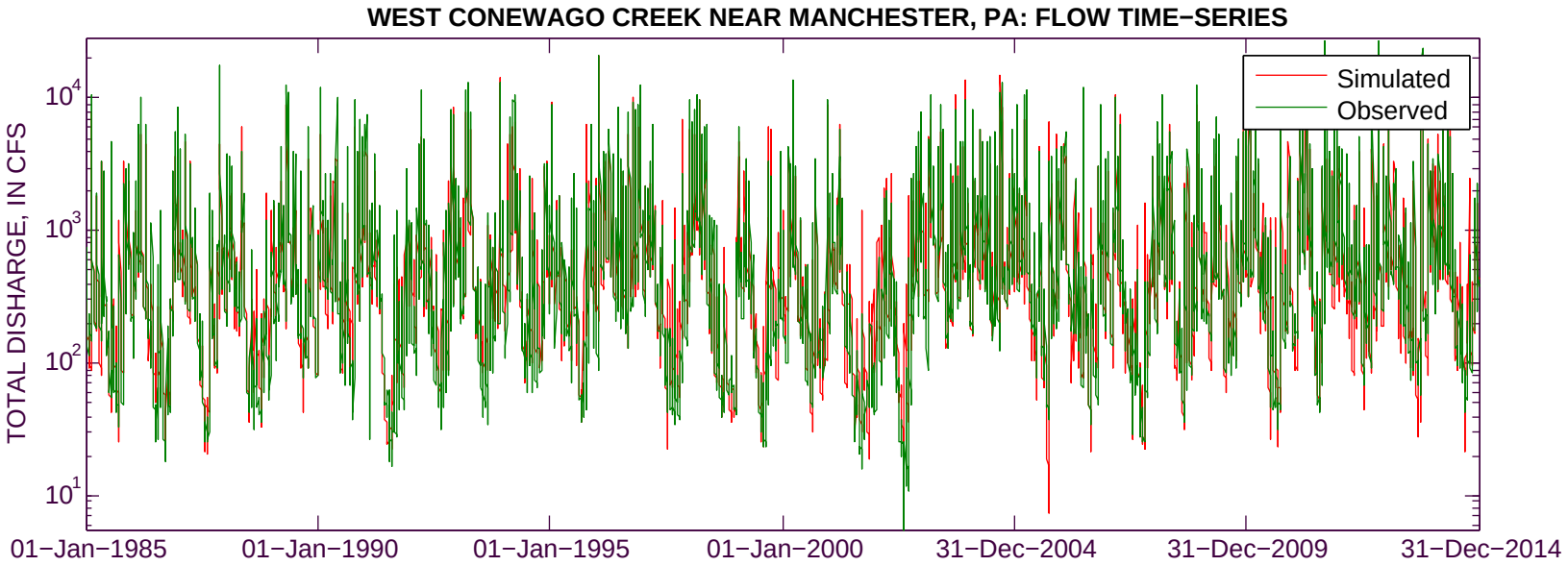
LOAD DATA
LOG10

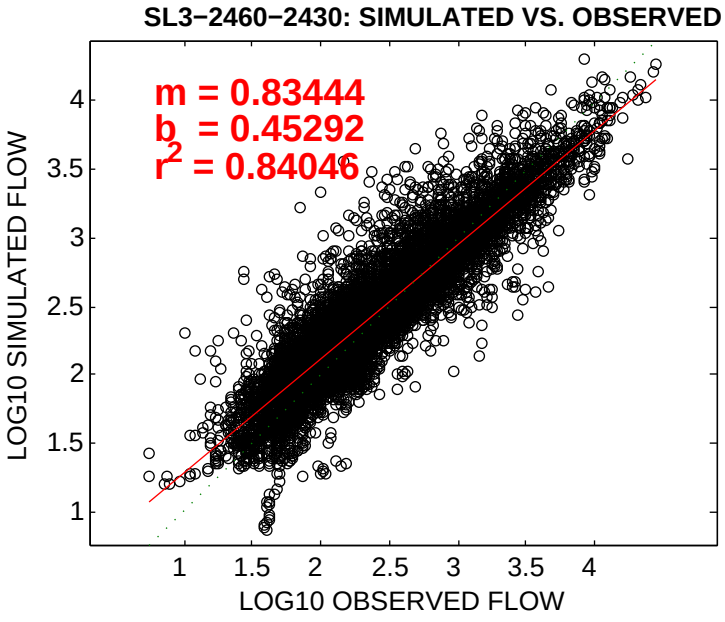


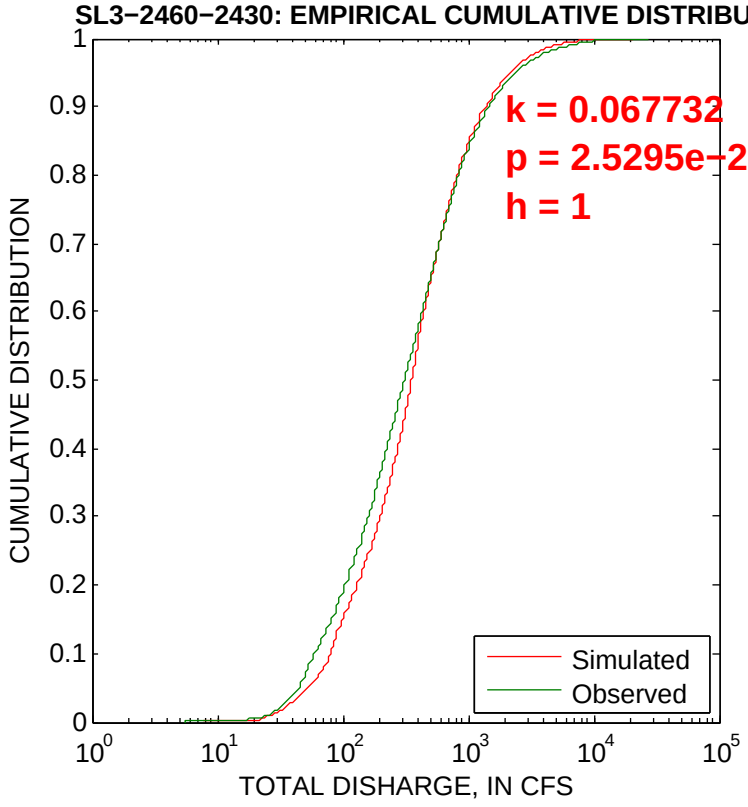












DATA SELECTION

scenario	file
P620171001WQ	FLOW.calib

plot: FLOW - total discharge

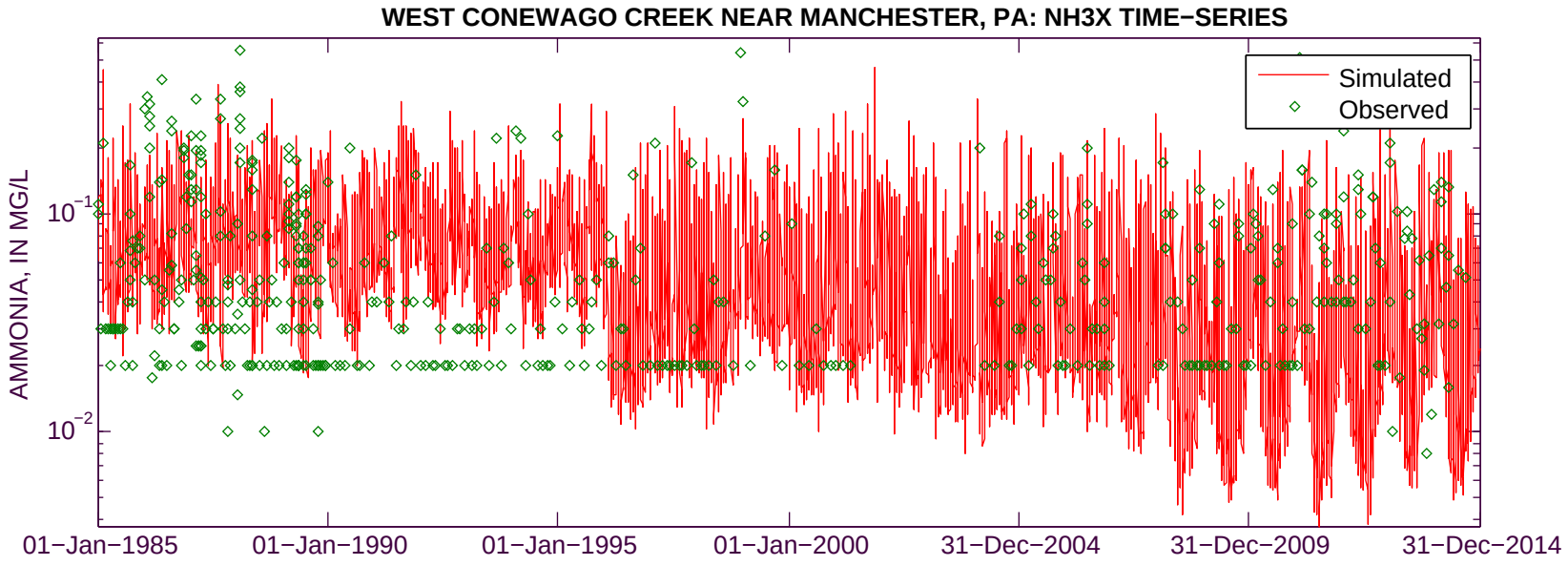
Dates: 1/1/1985 – 12/31/201

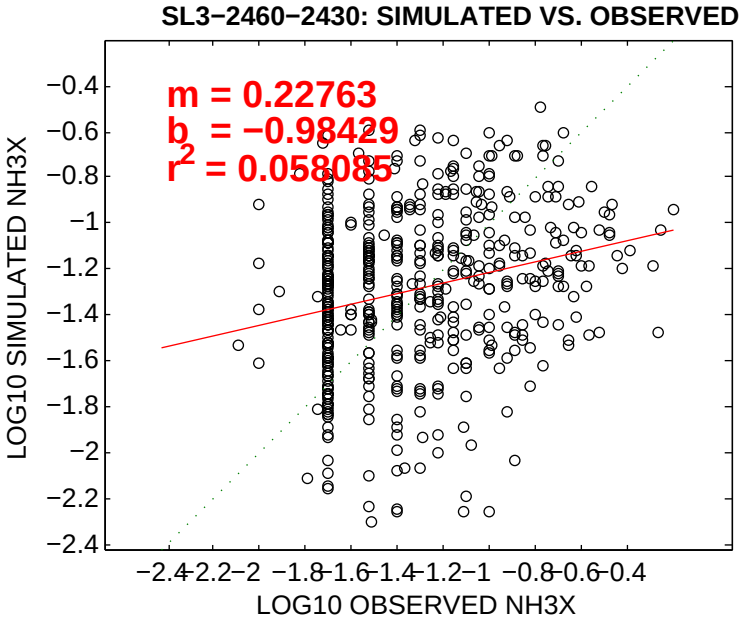
Drive	Directory	Observed
N/A	model	OBS20161101

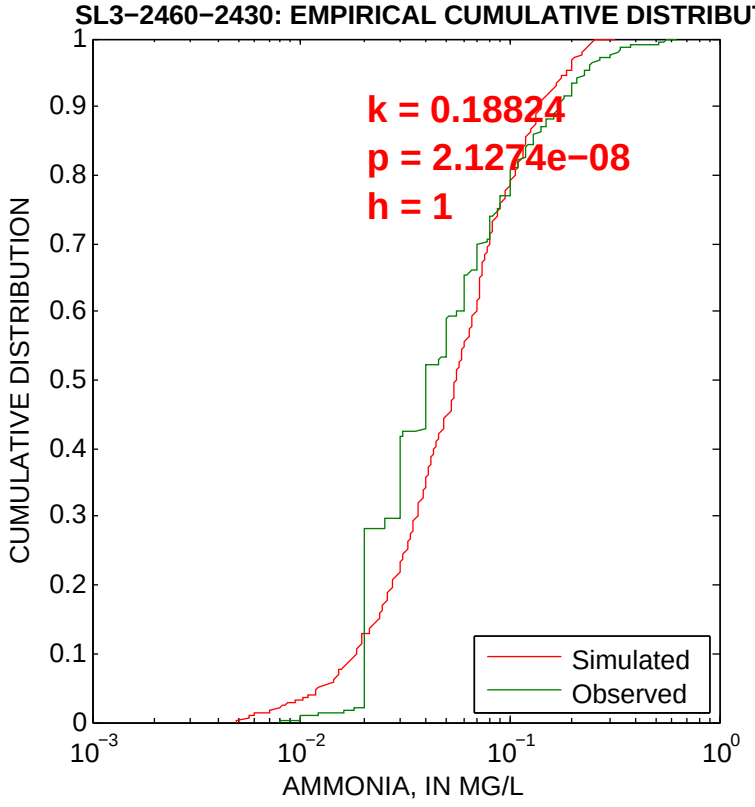
STATISTICS

	n	observe	simulate
		10955	10955
min		5.6	7.3824
		0.748188	0.868198
mean		687.851	646.039
		2.49509	2.53493
media		312	356.53
		2.49415	2.5521
max		27700	20570
		4.44248	4.31323
varian		1.79677e+0	1.09738e+
		0.28149	0.233206
JB		0.001	0.001
		0.001	0.062968
		ra	log
%		-6.07863	1.5967
err.va		457838	0.0465089
rel.std.err		0.254812	0.165224
mod.eff		0.745188	0.834776

VERSION 2.1







DATA SELECTION

scenario: P620171001WQ | file: NH3X.calib

plot: NH3X - ammonia

Dates: 1/1/1985 – 12/31/201

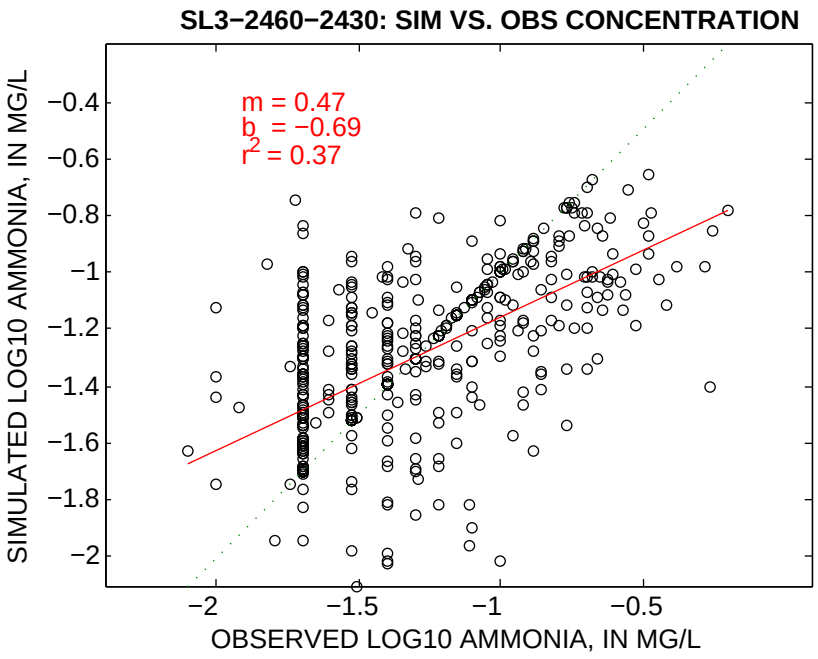
Drive: N/A | Directory: model | Observed: OBS20161101

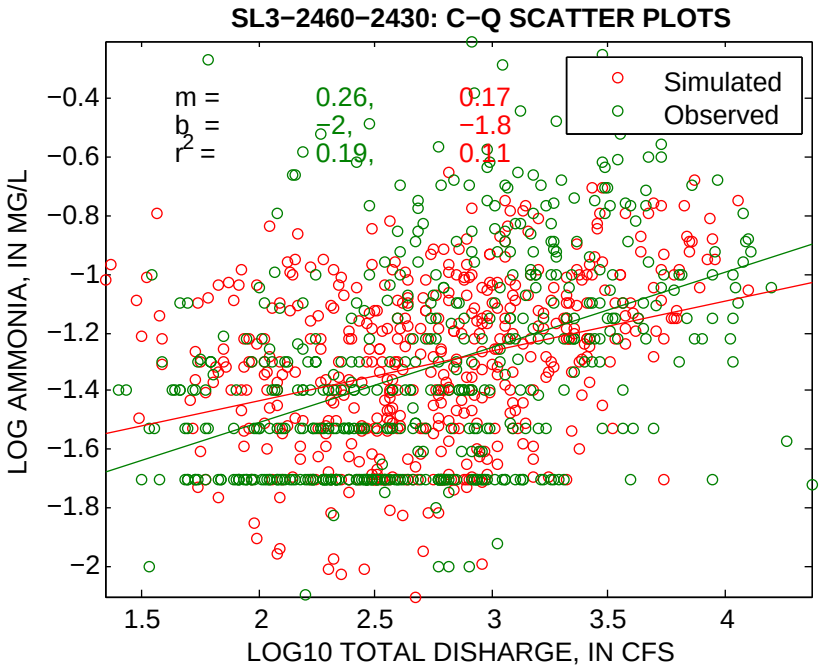
STATISTICS

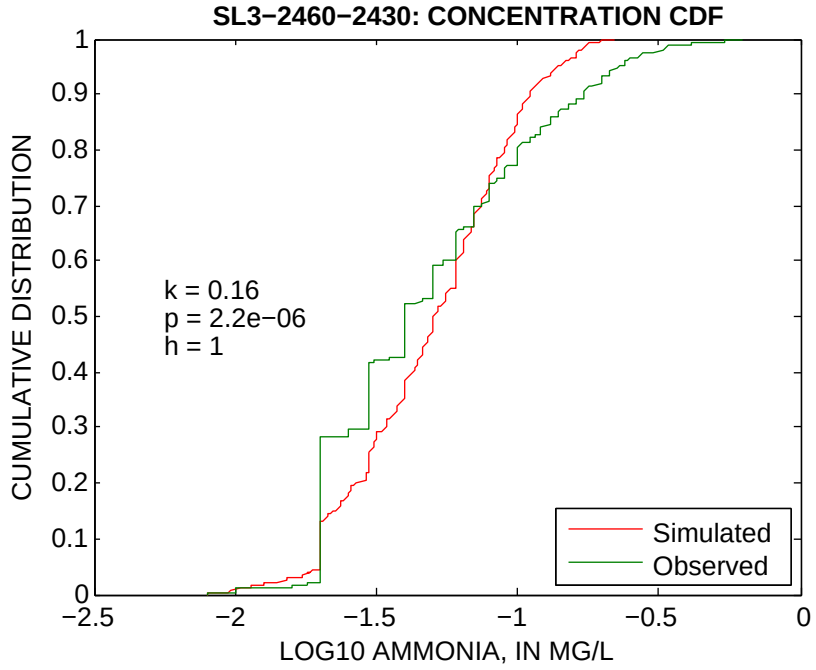
		observe	simulate
n		510	510
min		0.008	0.0049689
		-2.09691	-2.30374
mean		0.0725352	0.0693055
		-1.31317	-1.28321
media		0.04	0.0558045
		-1.39794	-1.25333
max		0.63	0.32165
		-0.200659	-0.492616
varian		0.00650722	0.00278269
		0.1342	0.119717
JB		0.001	0.001
		0.001	0.006616
		ra	log
%		-4.45266	-2.28107
err.va		0.00786791	0.193719
rel.std.err		1.20911	1.44351
mod.eff		-0.209105	-0.443514

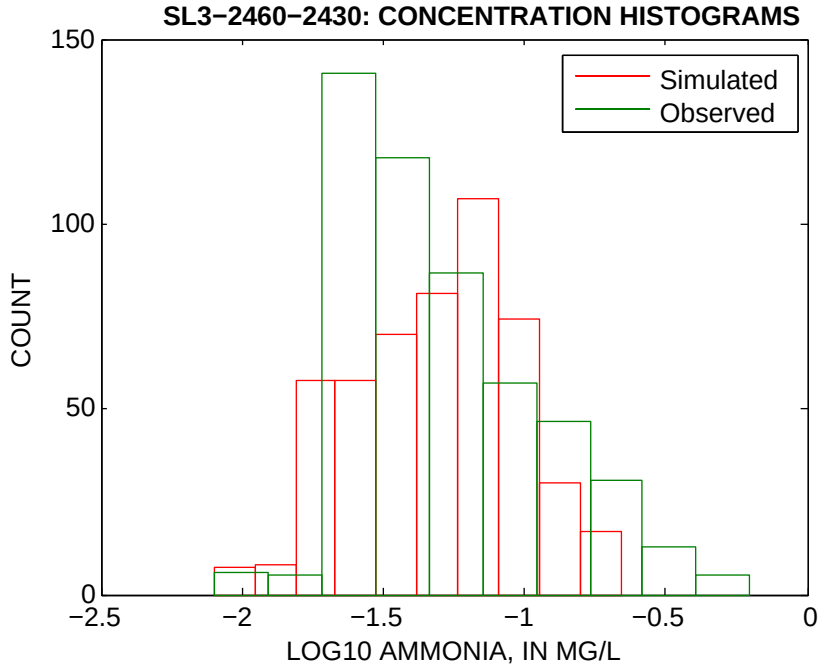
VERSION

ALL DATA
LOG10

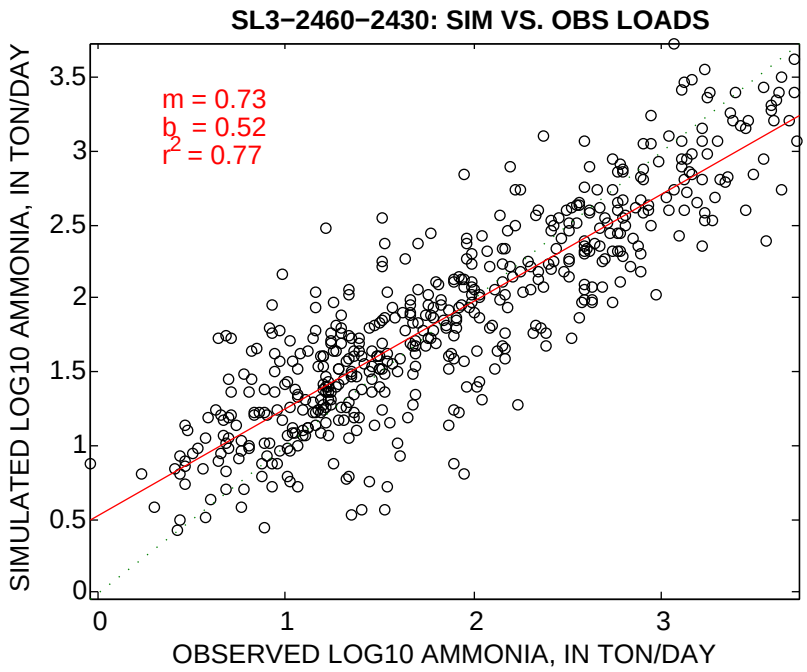


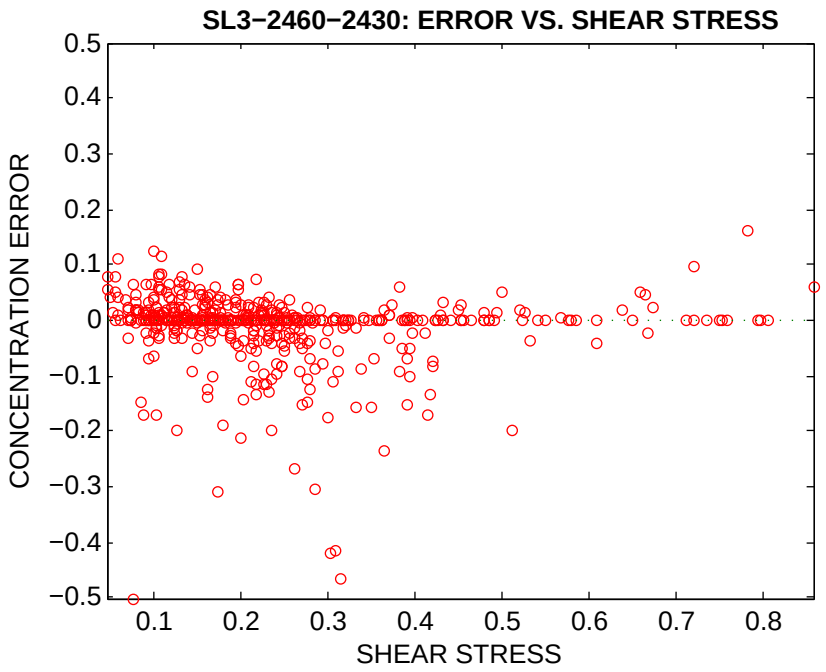


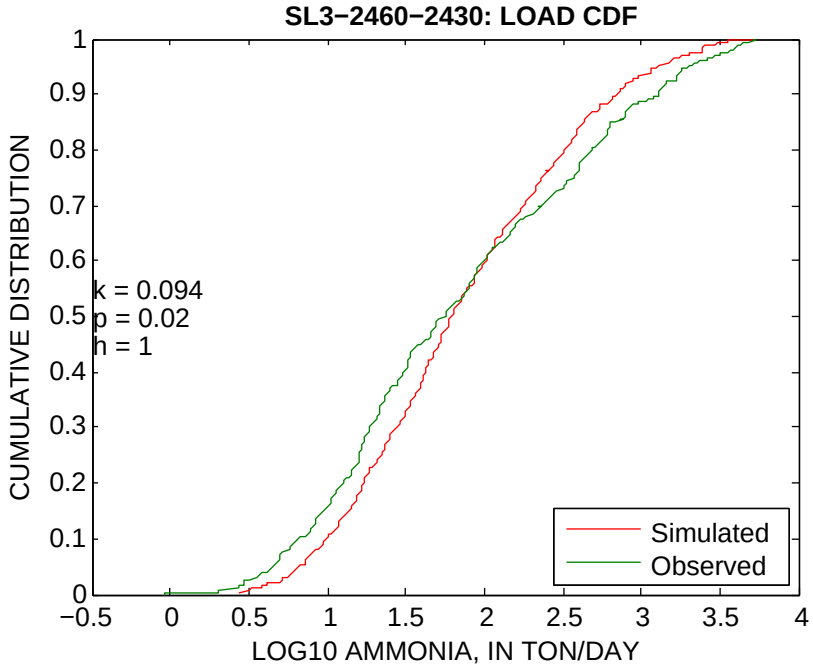


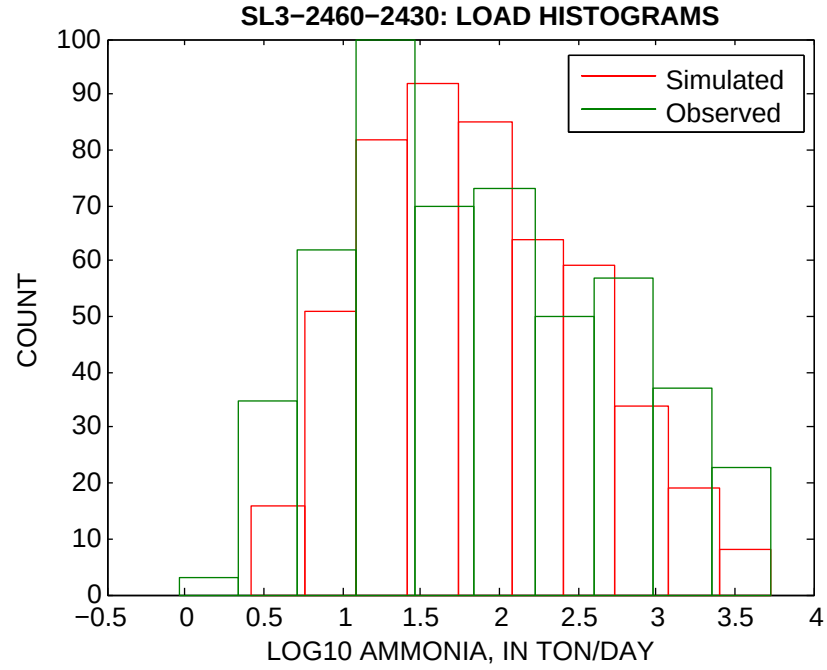


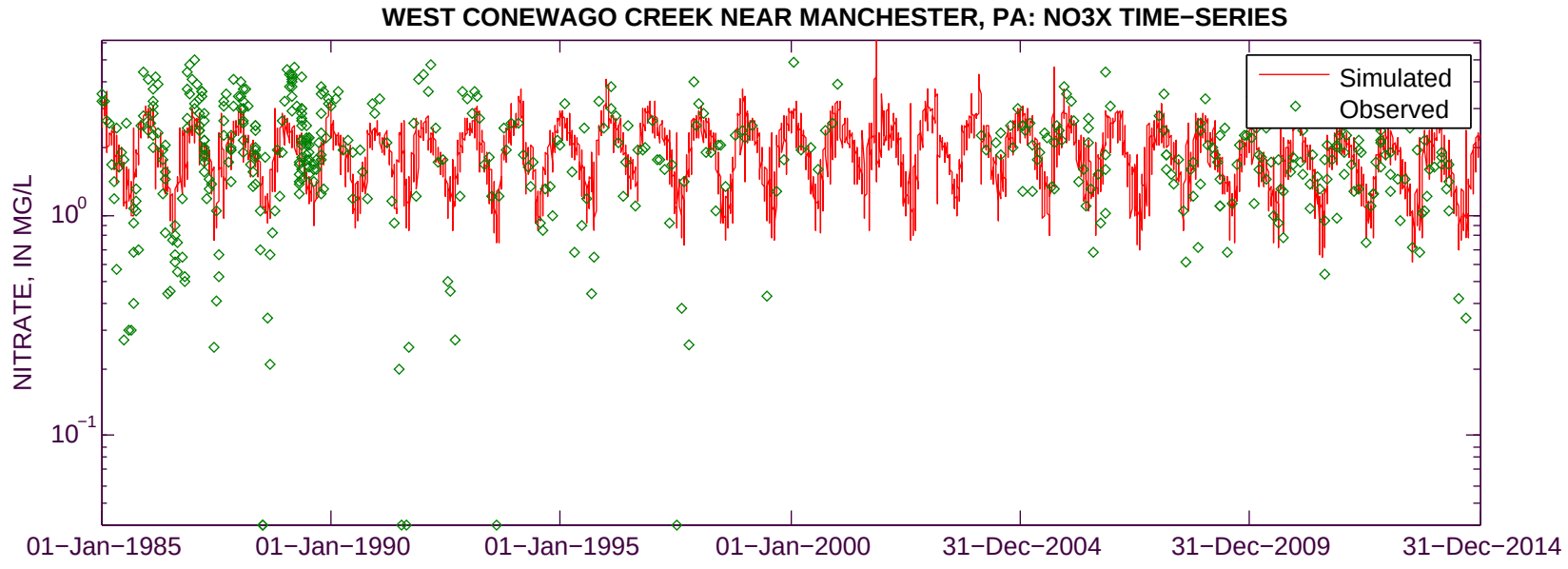
LOAD DATA
LOG10

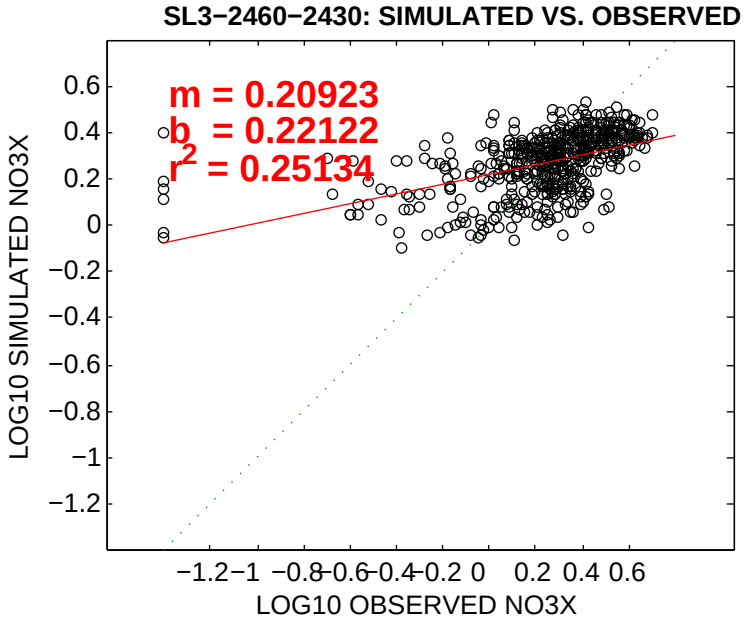


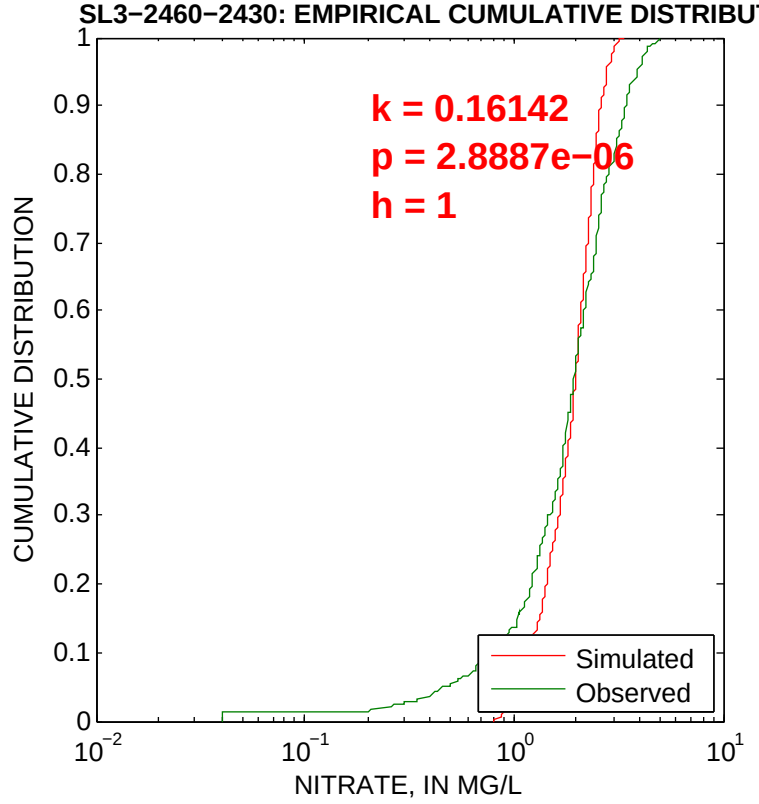












DATA SELECTION

scenario	file
P620171001WQ	NO3X.calib

plot: NO3X - nitrate

Dates: 1/1/1985 – 12/31/201

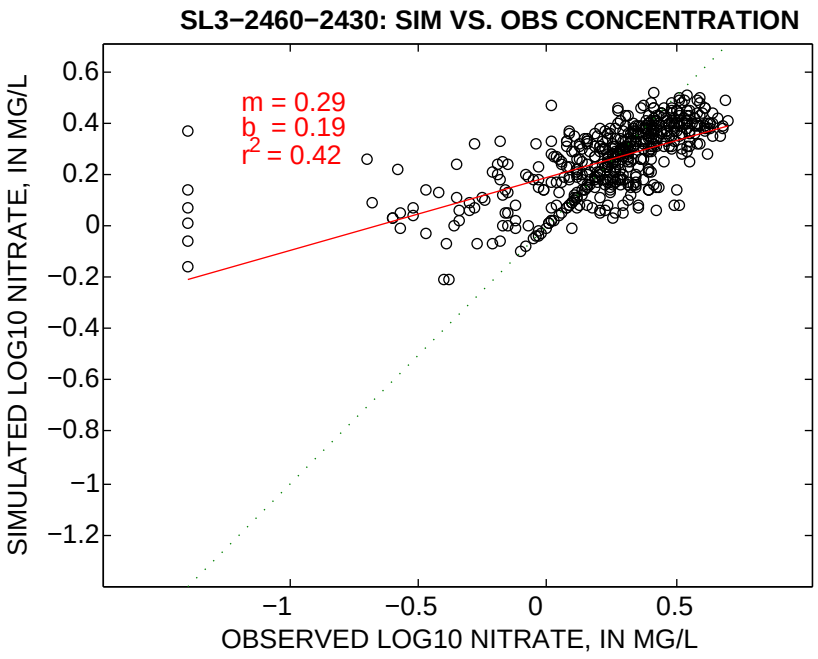
Drive	Directory	Observed
N/A	model	OBS20161101

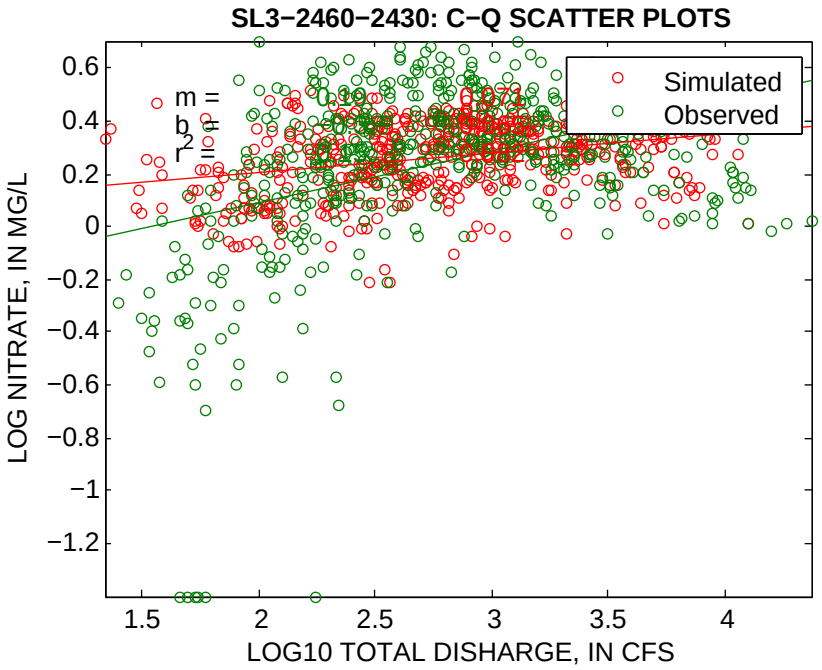
STATISTICS

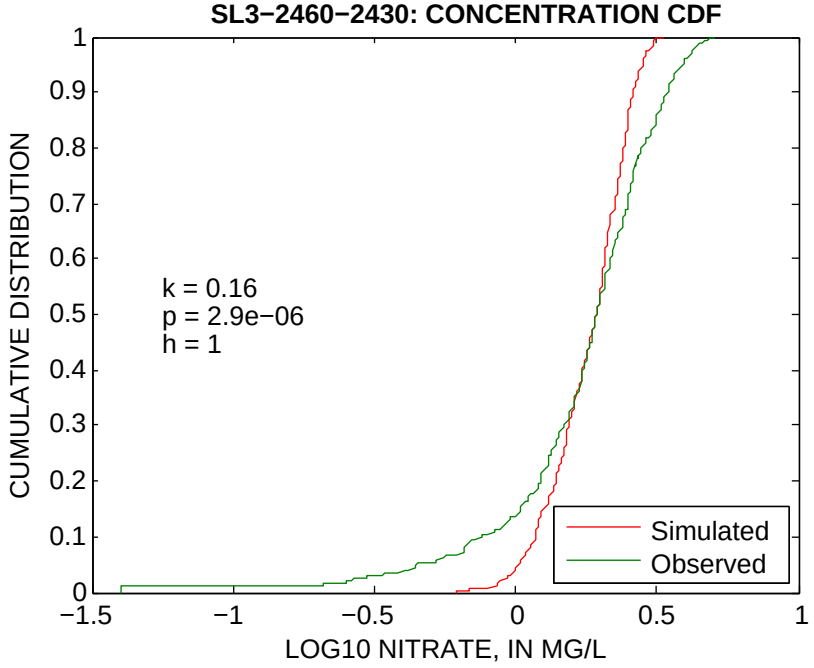
	n	508	508
		observe	simulate
min		0.04	0.79511
		-1.39794	-0.0995728
mean		2.04465	1.94264
		0.235726	0.270543
media		1.945	1.97095
		0.288918	0.294676
max		5.06	3.3961
		0.704151	0.53098
varian		1.00025	0.282405
		0.0947441	0.016502
JB		0.003368	0.018128
		0.001	0.001
		ra	log
%		-4.98891	14.7698
err.va		0.697642	0.0728143
rel.std.err		0.69747	0.768536
mod.eff		0.30253	0.231464

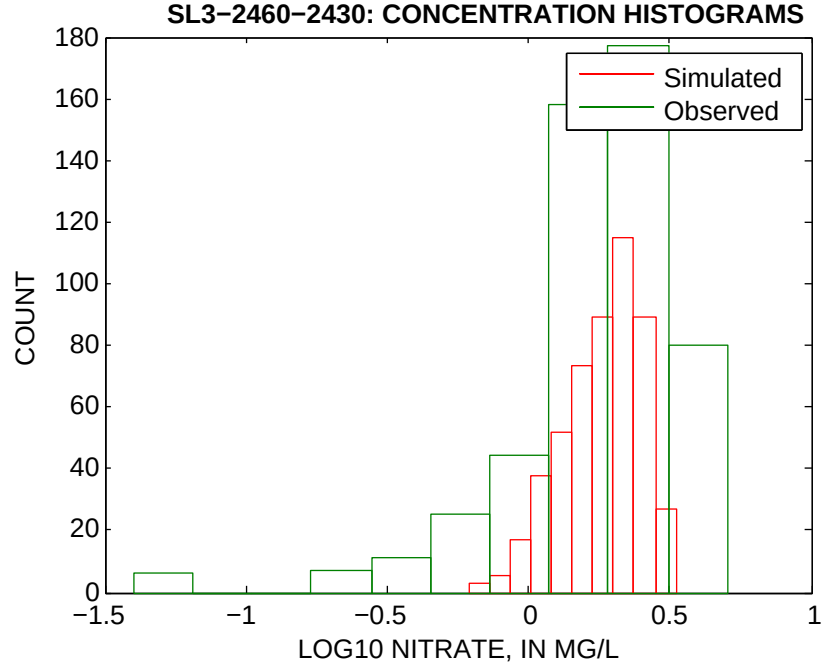
VERSION 2.1

ALL DATA
LOG10

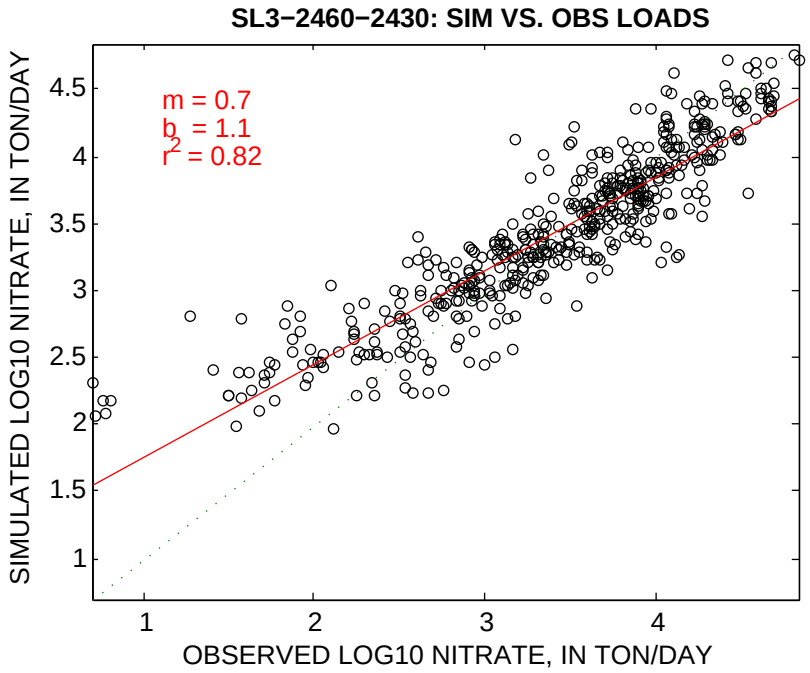


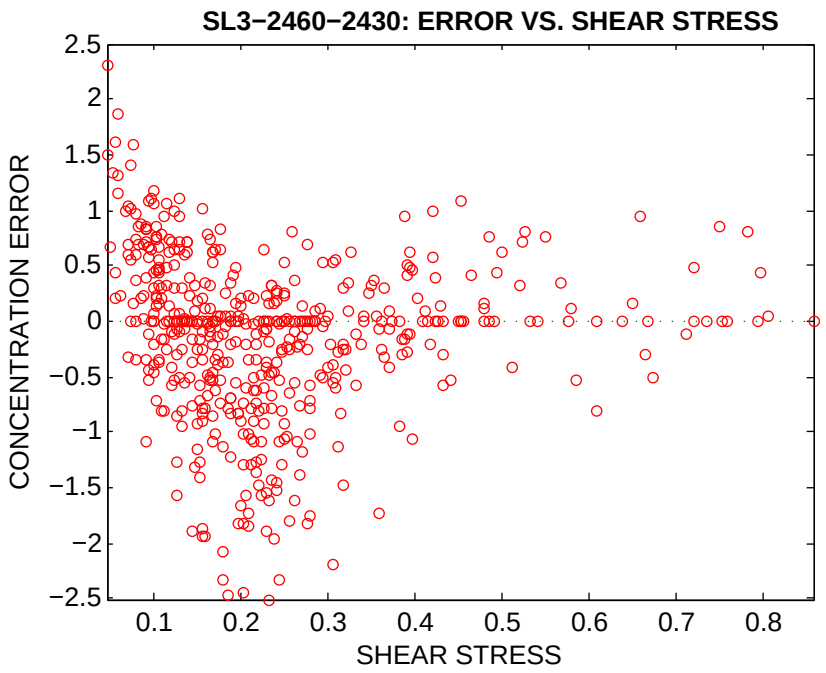


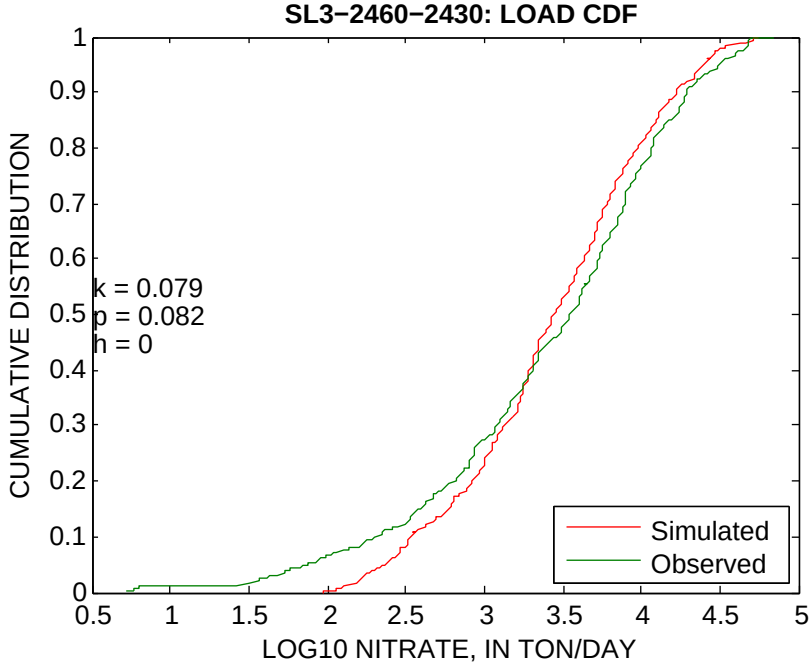


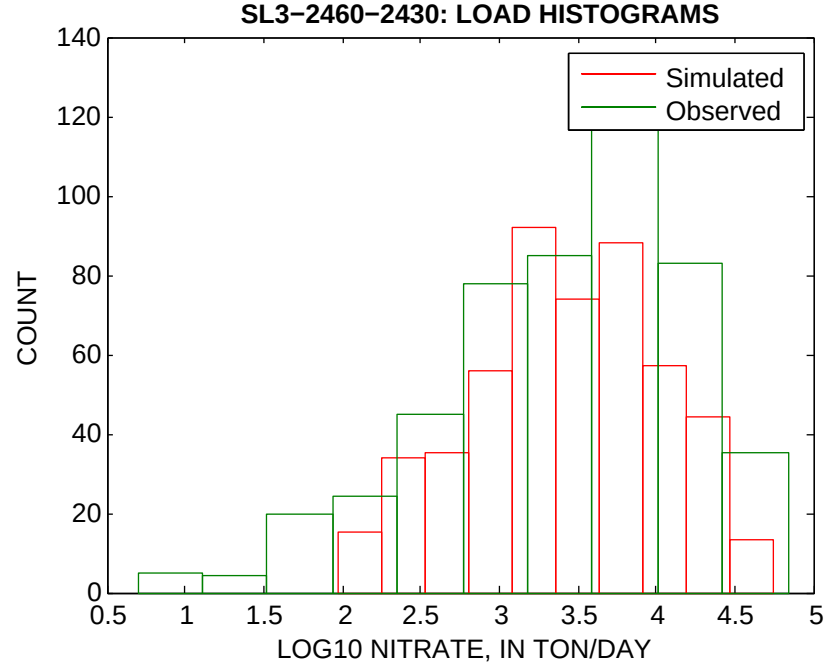


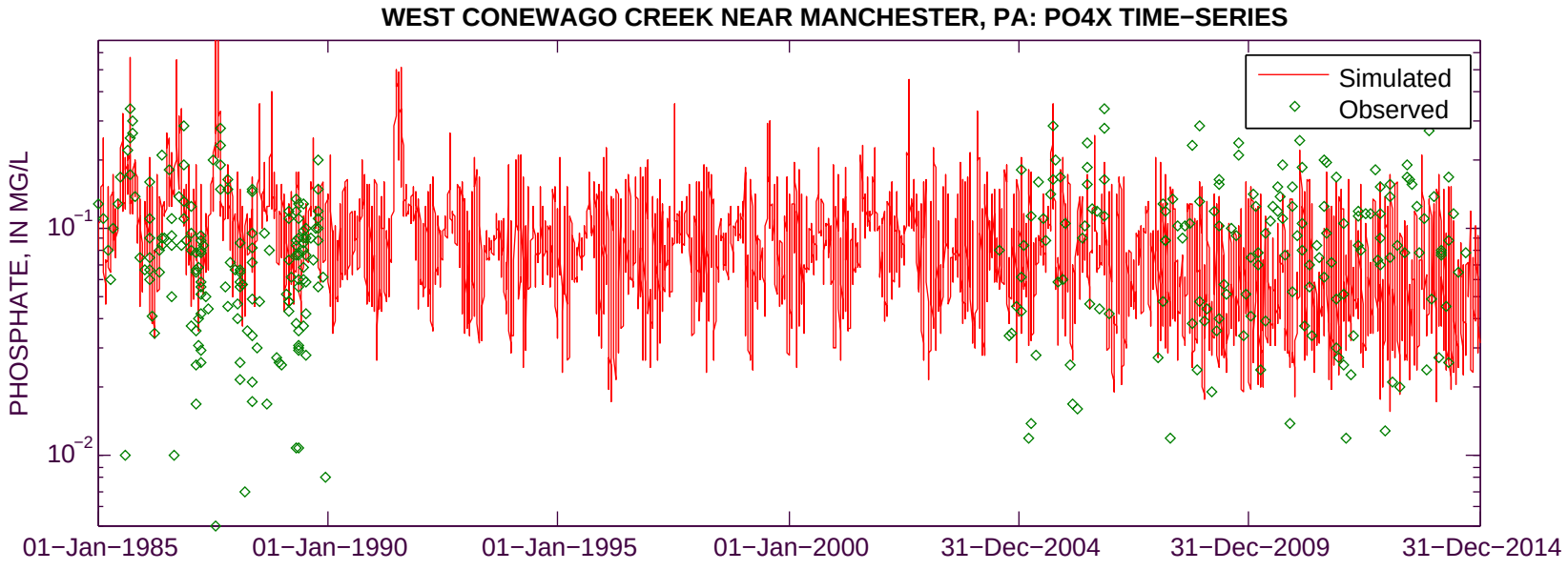
LOAD DATA
LOG10

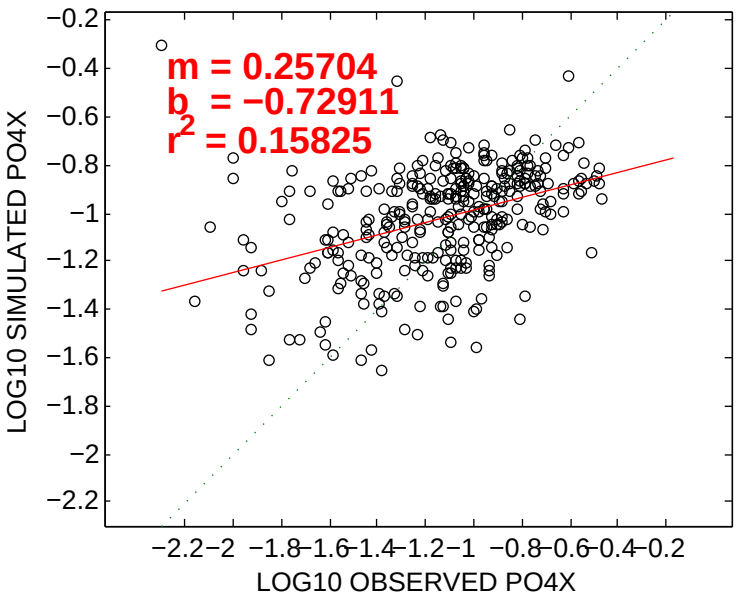


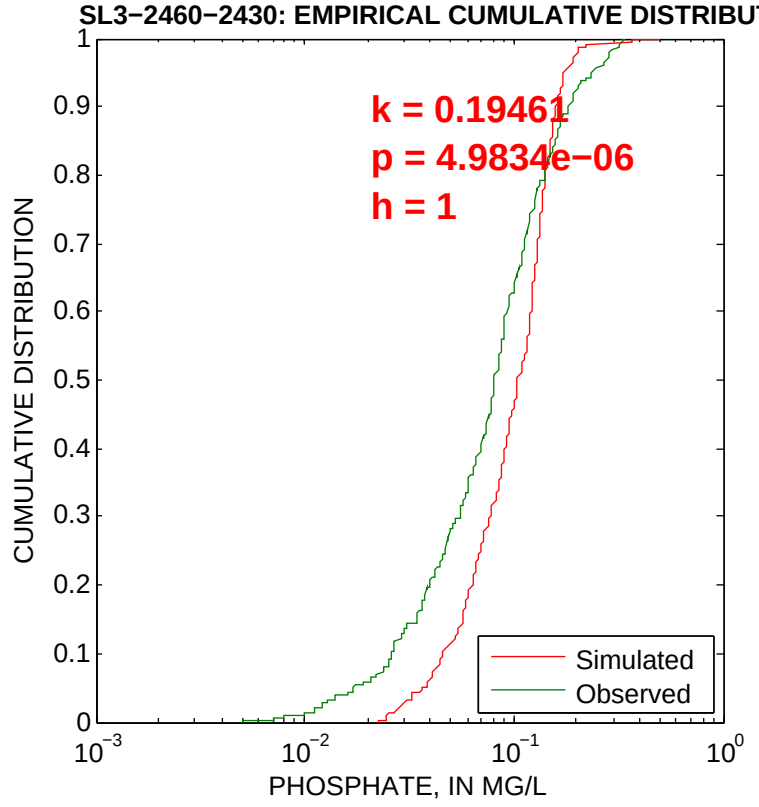












DATA SELECTION

scenario	file
P620171001WQ	PO4X.calib

plot: PO4X - phosphate

Dates: 1/1/1985 – 12/31/201

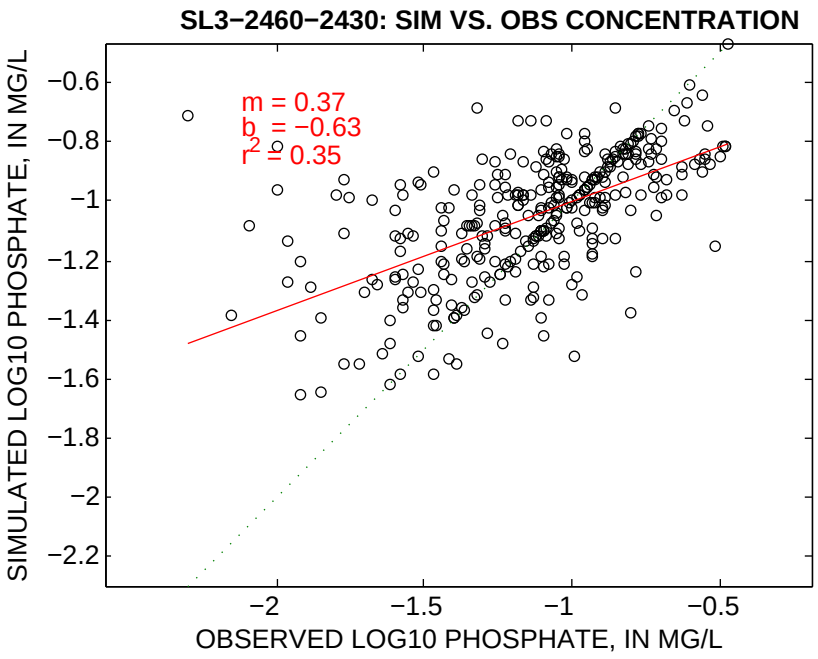
Drive	Directory	Observed
N/A	model	OBS20161101

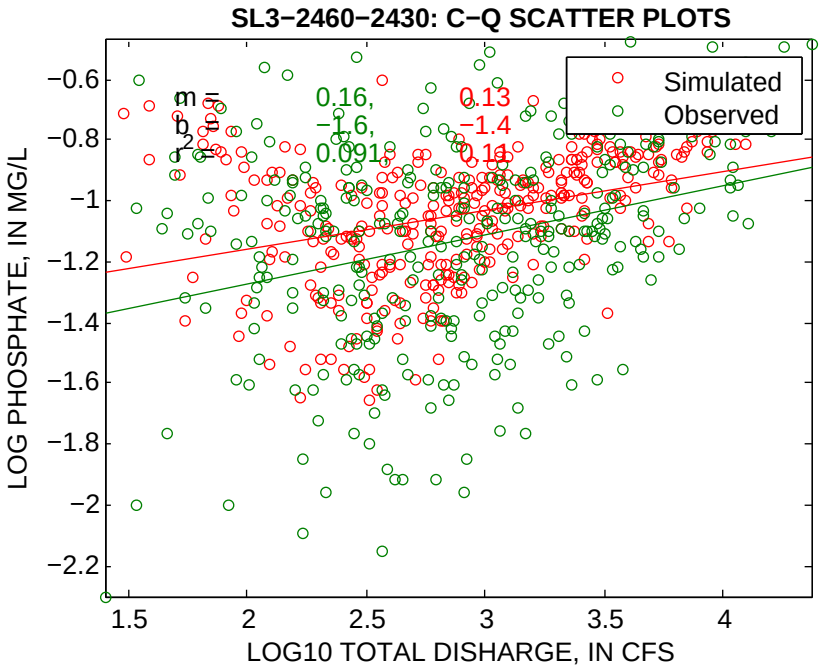
STATISTICS

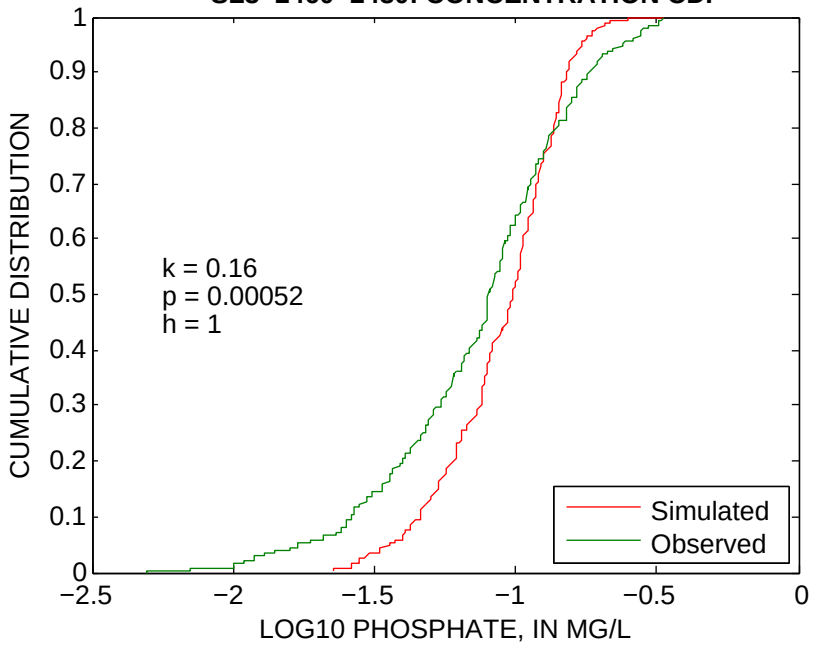
	n	observe	simulate
		334	334
min		0.005	0.022408
		-2.30103	-1.6496
mean		0.0957152	0.107079
		-1.13062	-1.01972
media		0.081	0.10363
		-1.09151	-0.984515
max		0.3375	0.50054
		-0.471726	-0.300561
varian		0.00449865	0.00267033
		0.111806	0.04668
JB		0.001	0.001
		0.001737	0.002445
		ra	log
%		11.8727	-9.8082
err.va		0.0049731	0.113343
rel.std.err		1.10546	1.01375
mod.eff		-0.105464	-0.0137484

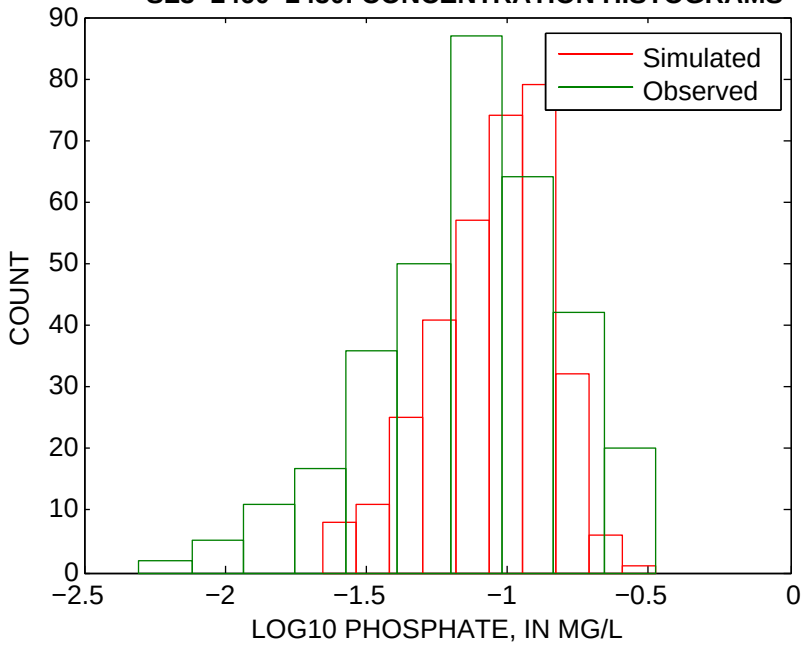
VERSION 2.1

ALL DATA
LOG10

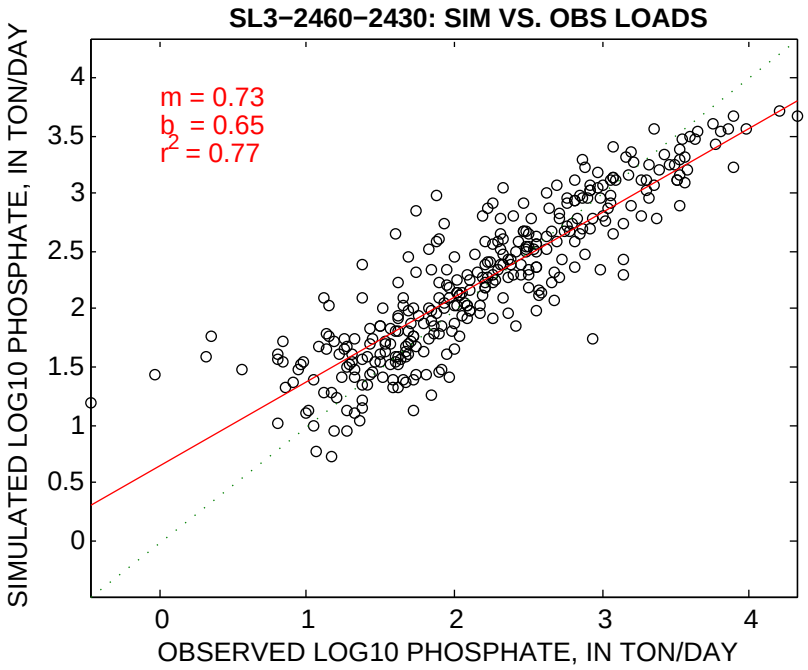


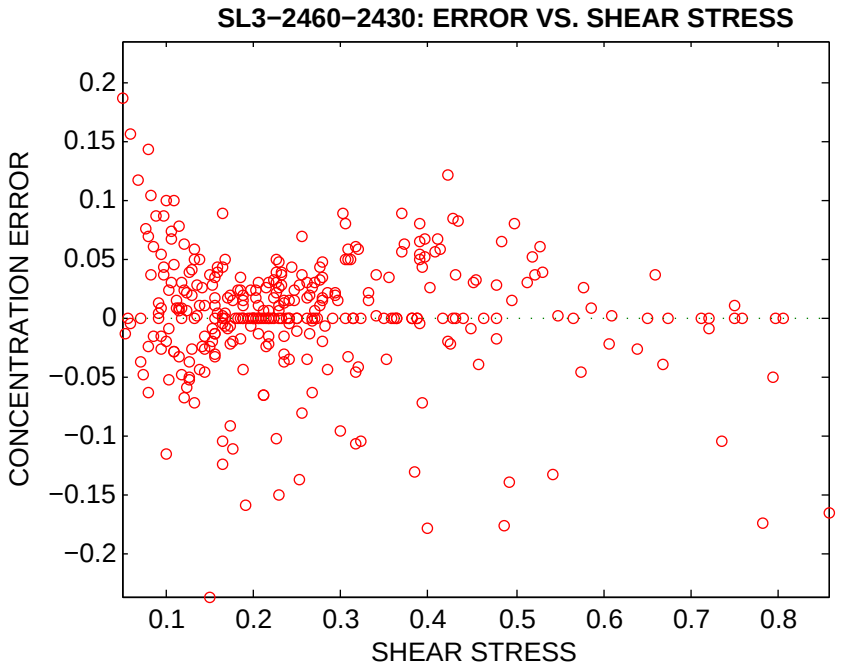


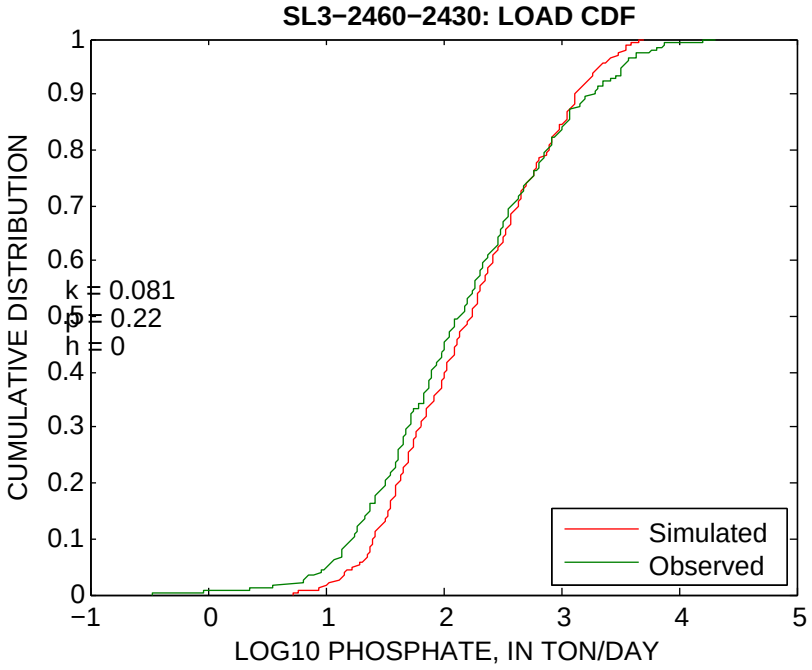


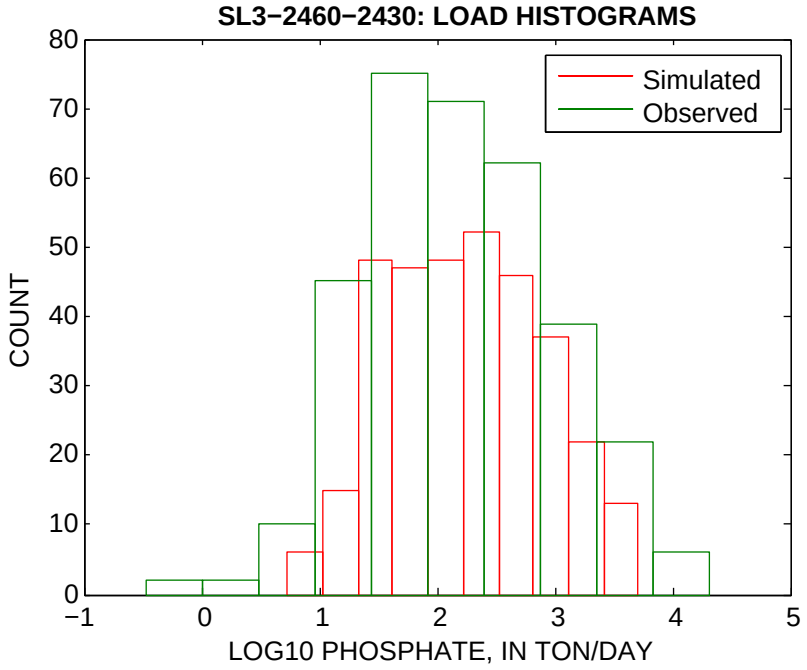


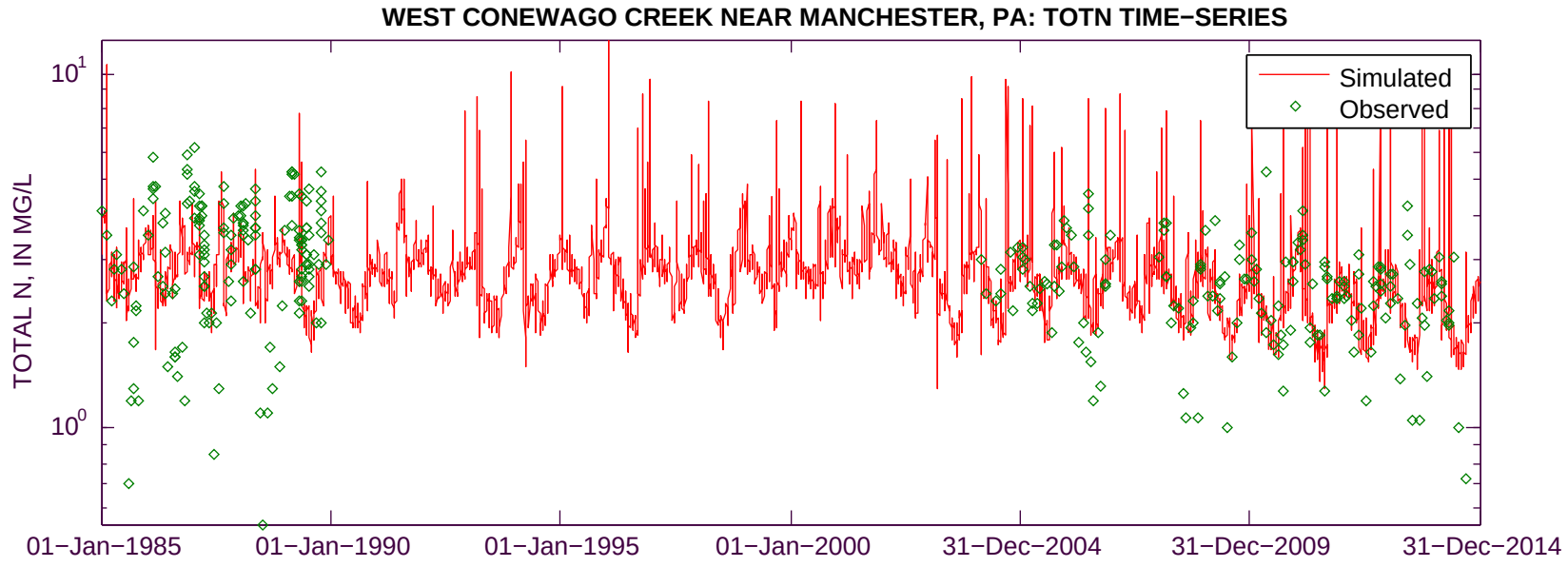
LOAD DATA
LOG10

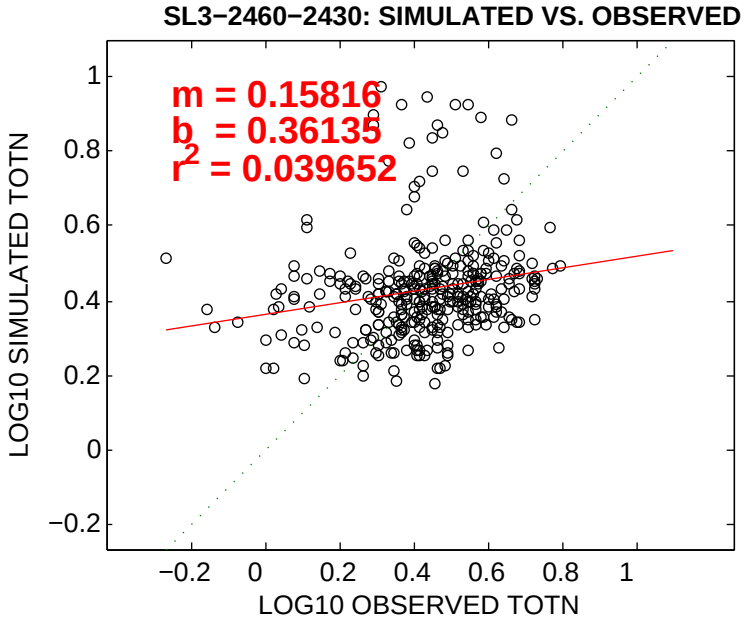


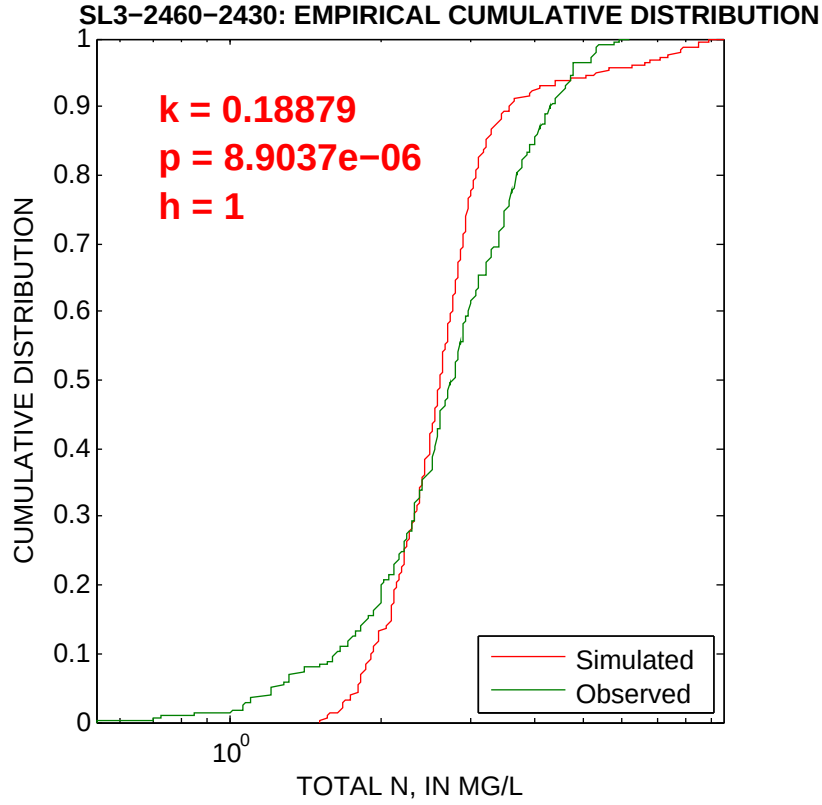












DATA SELECTION

scenario	file
P620171001WQ	TOTN.calib

plot: TOTN - total nitrogen

Dates: 1/1/1985 – 12/31/201

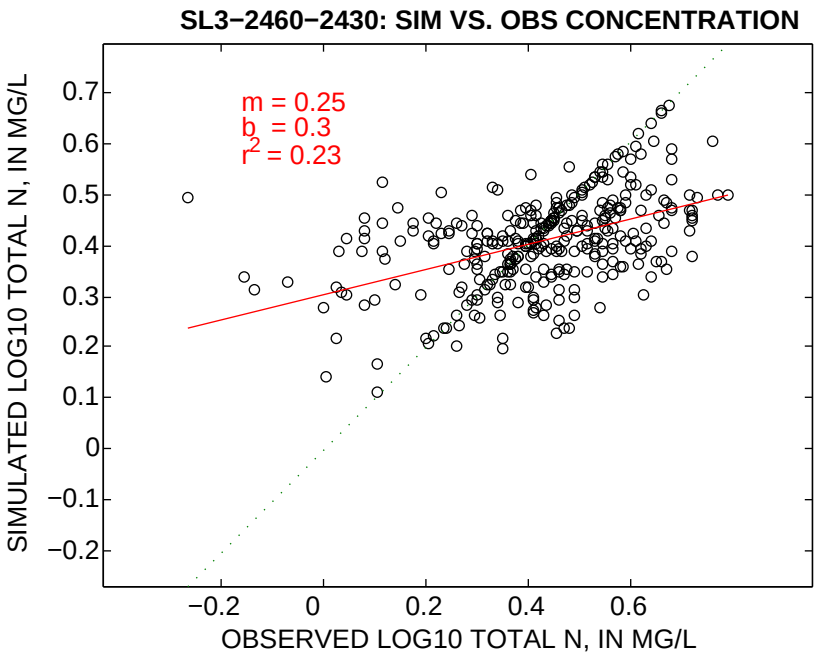
Drive	Directory	Observed
N/A	model	OBS20161101

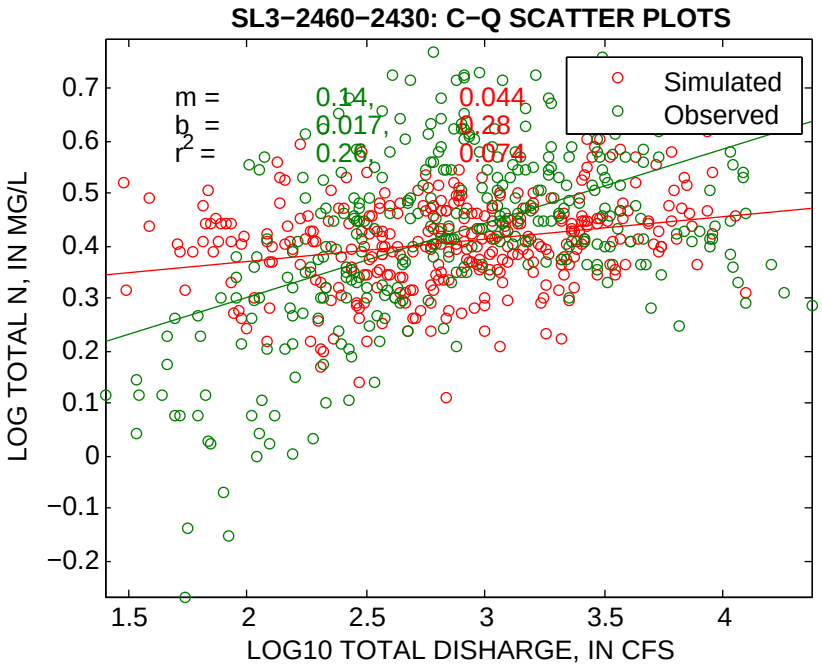
STATISTICS

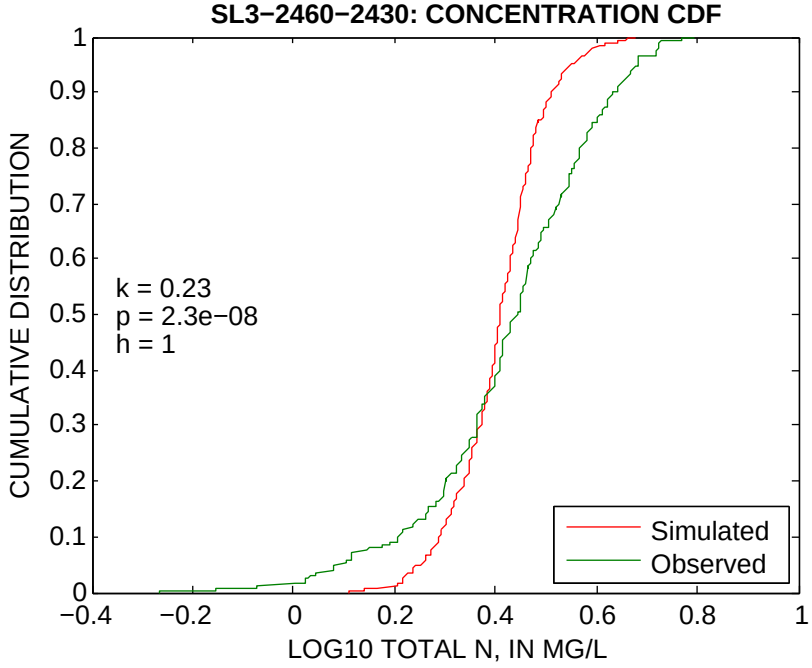
	n	observe	simulate
		339	339
min		0.54	1.51
		-0.267606	0.178977
mean		2.8779	2.84953
		0.427849	0.42902
media		2.762	2.5974
		0.441224	0.414539
max		6.2	9.4755
		0.792392	0.976602
varian		1.08877	1.49962
		0.0296849	0.0187258
JB		0.009311	0.001
		0.001	0.001
		ra	log
%		-0.985851	0.273668
err.va		2.24713	0.0390224
rel.std.err		2.06391	1.31455
mod.eff		-1.06391	-0.314552

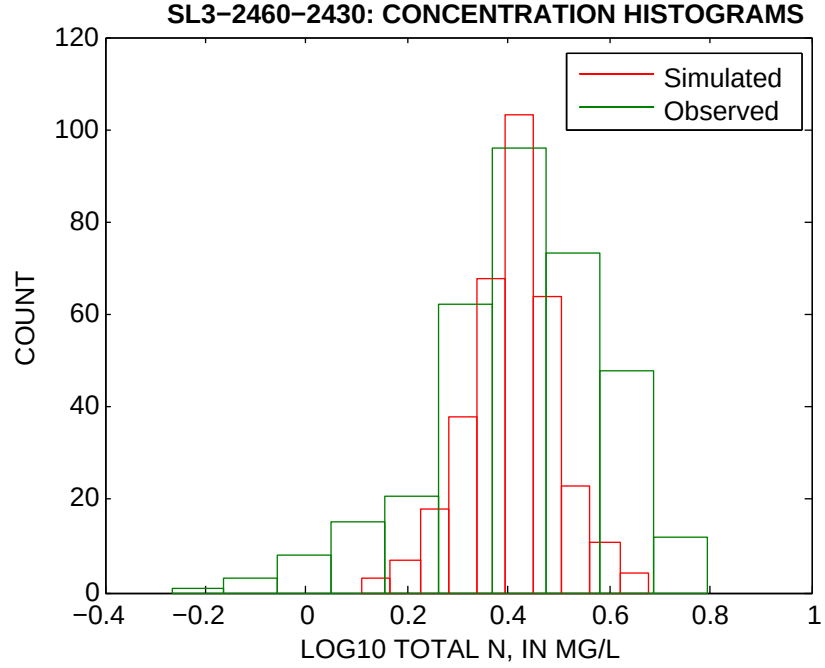
VERSION 2.1

ALL DATA
LOG10

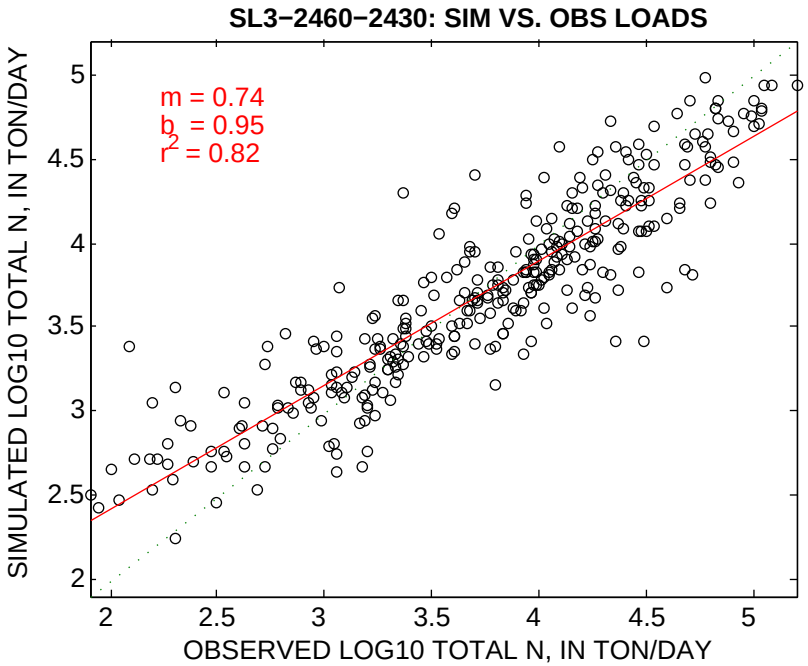


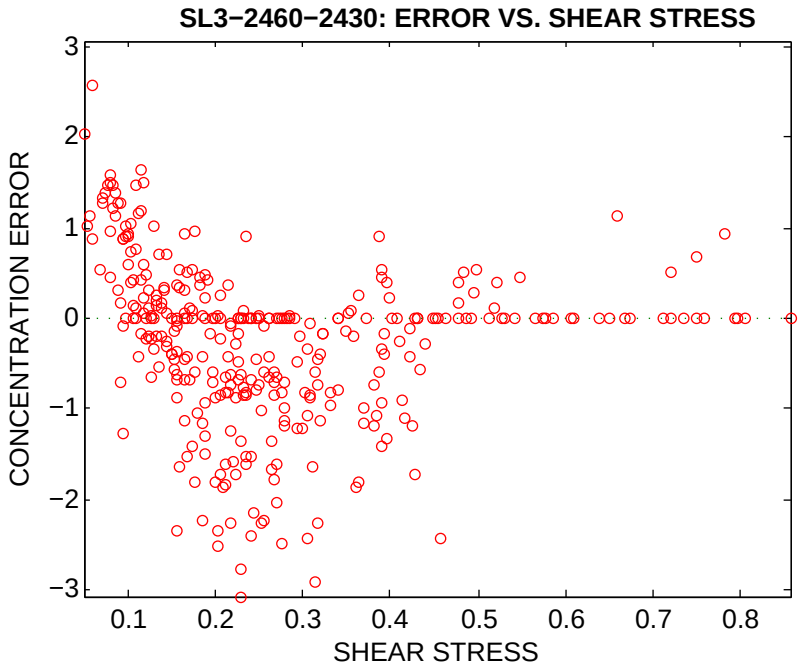


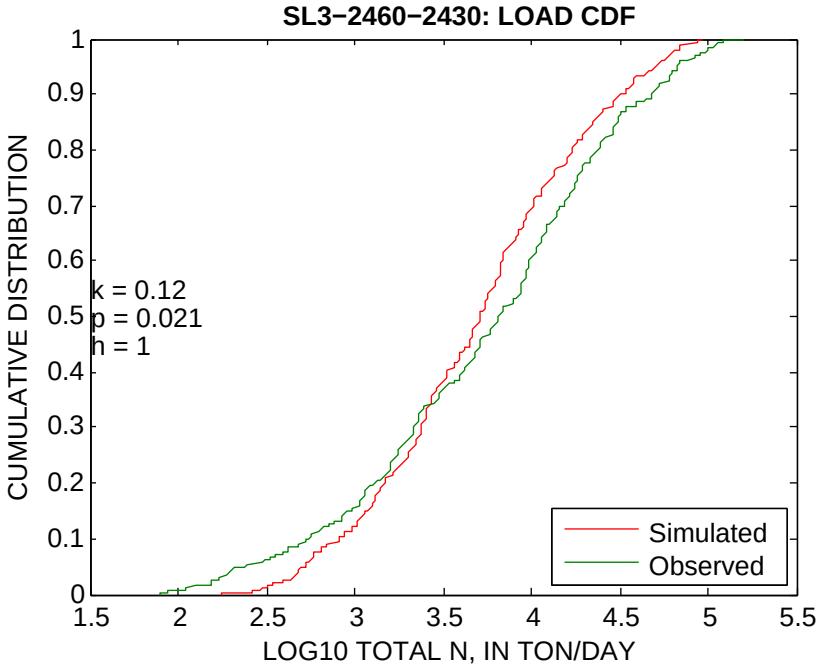


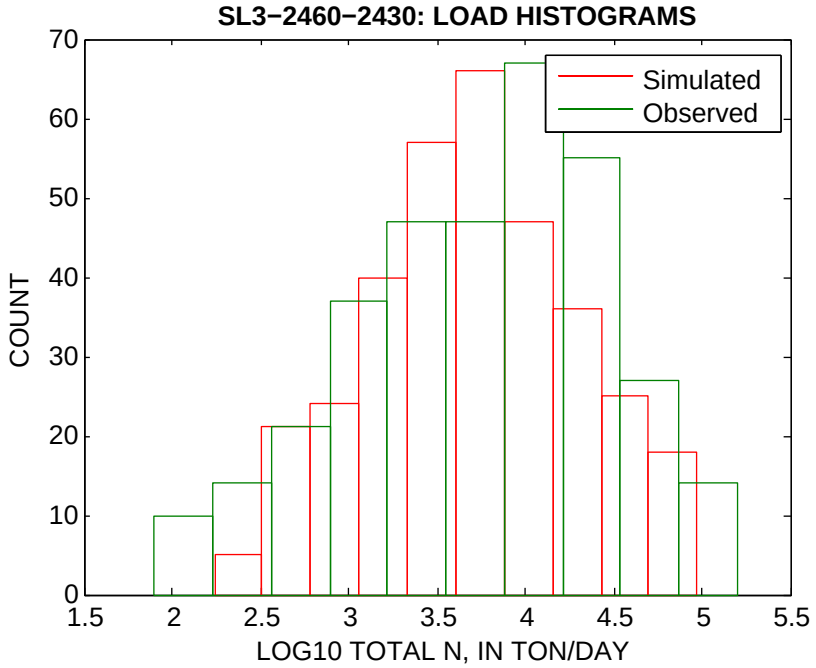


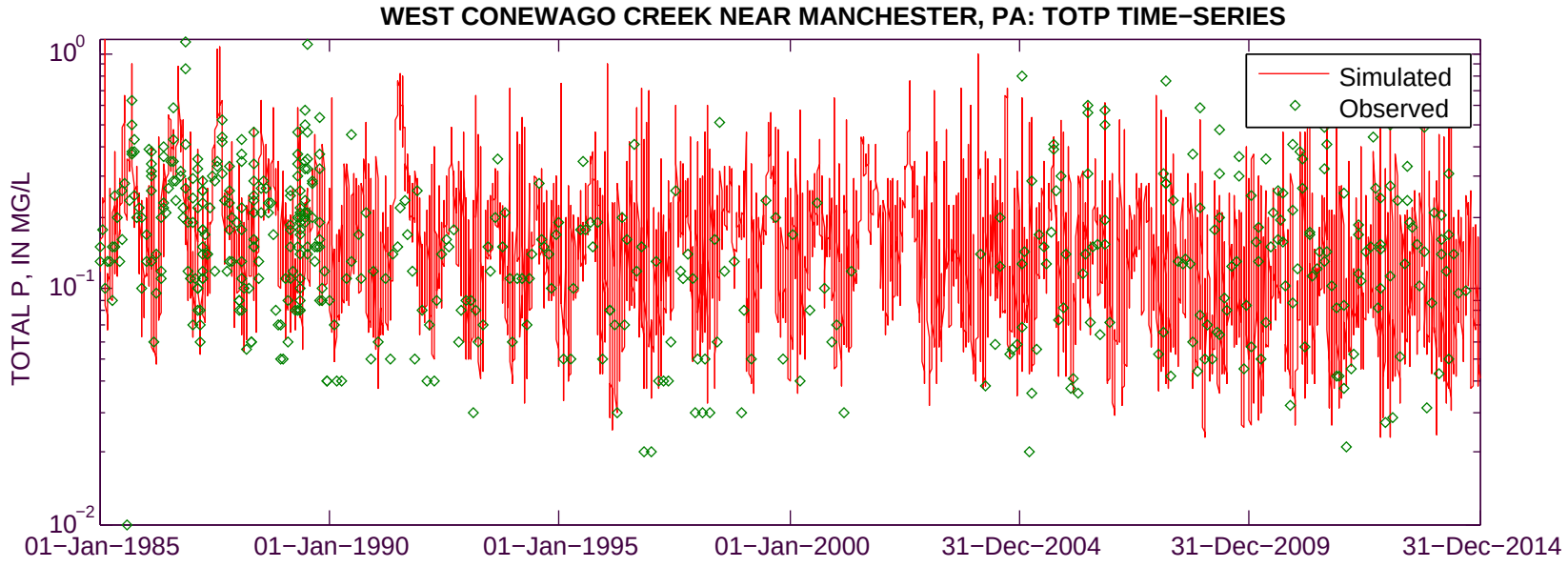
LOAD DATA
LOG10

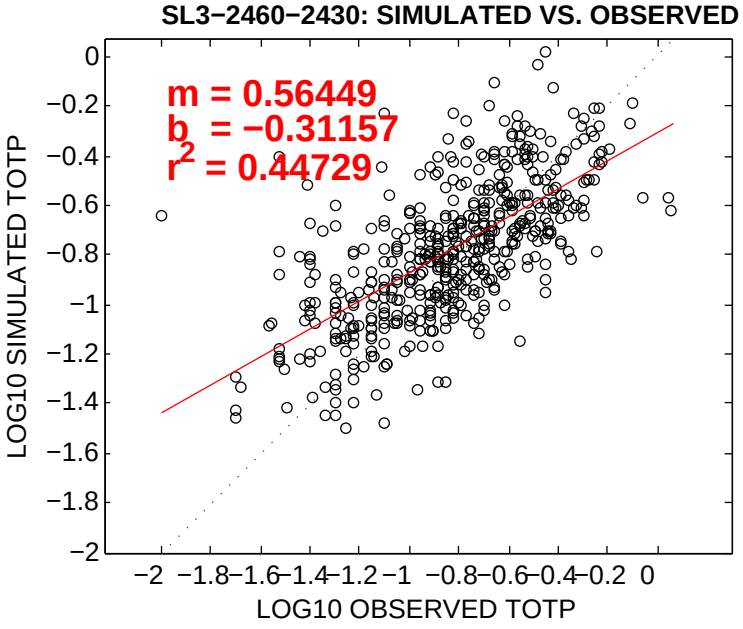


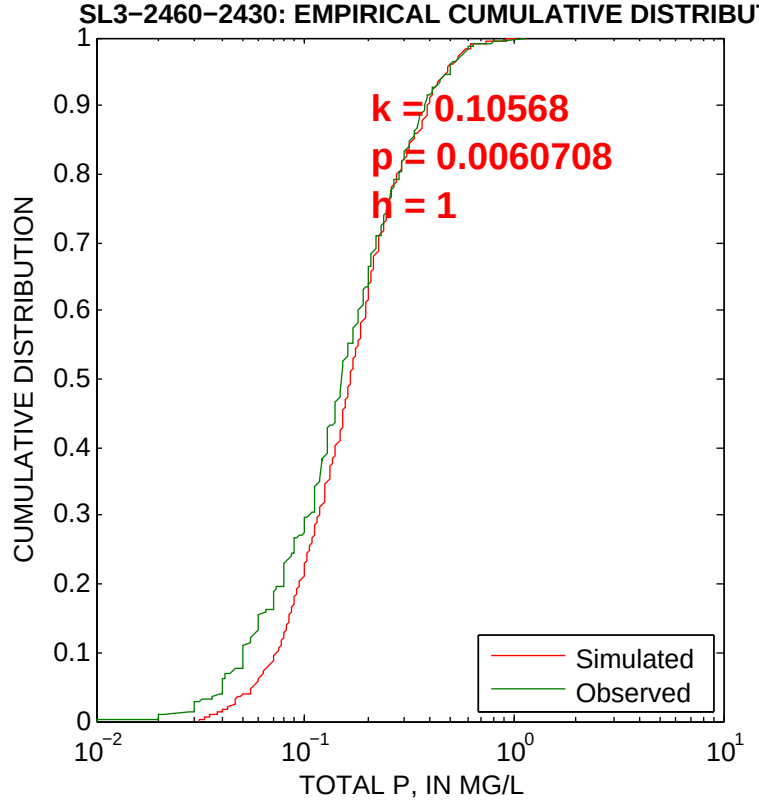












DATA SELECTION

scenario: P620171001WQ | file: TOTP.calib

plot: TOTP - total phosphorus

Dates: 1/1/1985 – 12/31/201

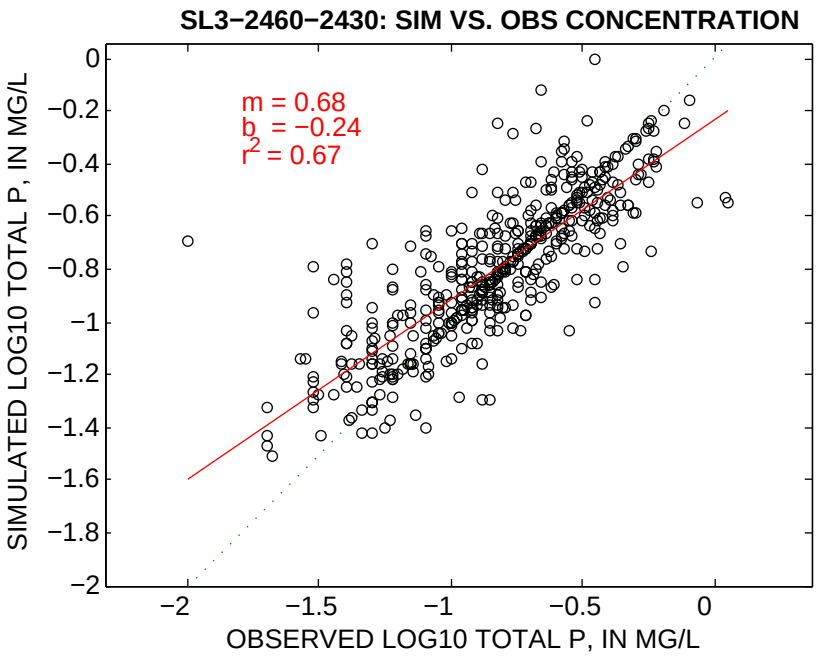
Drive: N/A | Directory: model | Observed: OBS20161101

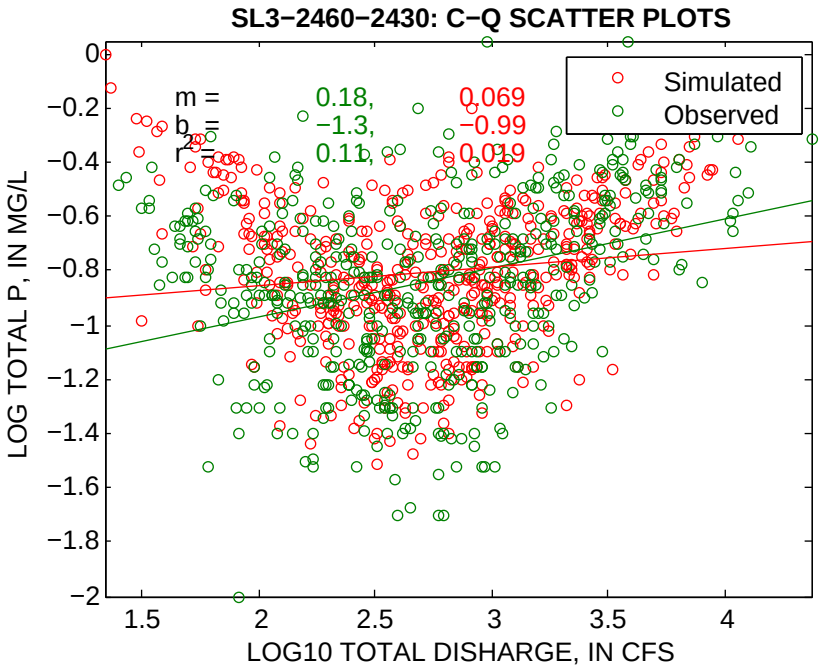
STATISTICS

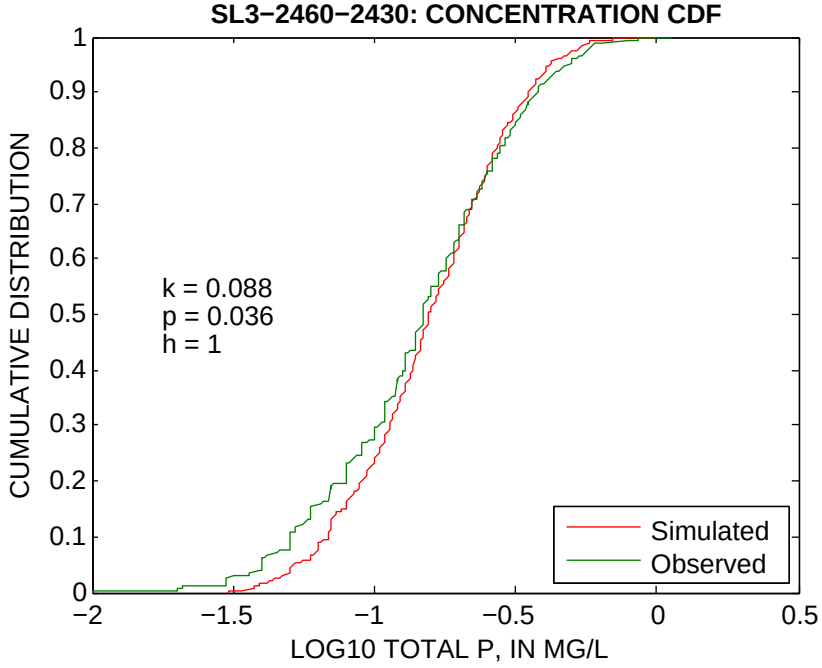
	n	observe	simulate
		511	511
min		0.01	0.03144
		-2	-1.50252
mean		0.191043	0.20155
		-0.835541	-0.783224
media		0.15	0.1641
		-0.823909	-0.784891
max		1.12264	1.0334
		0.0502405	0.0142685
varian		0.0219045	0.0189002
		0.108192	0.0770756
JB		0.001	0.001
		0.076439	0.476126
		ra	log
%		5.49963	-6.2614
err.va		0.0181314	0.0658629
rel.std.err		0.827749	0.608761
mod.eff		0.172251	0.391239

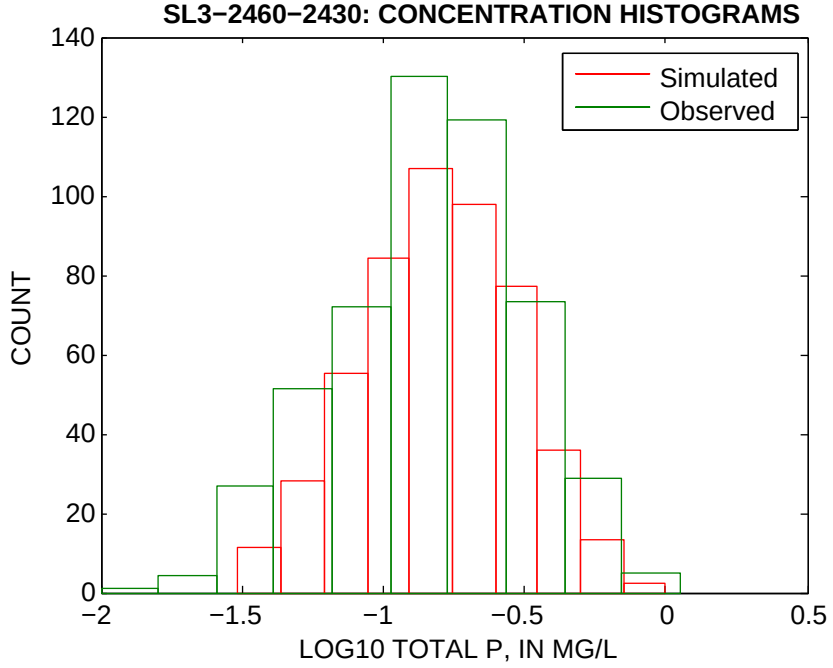
VERSION 2.1

ALL DATA
LOG10

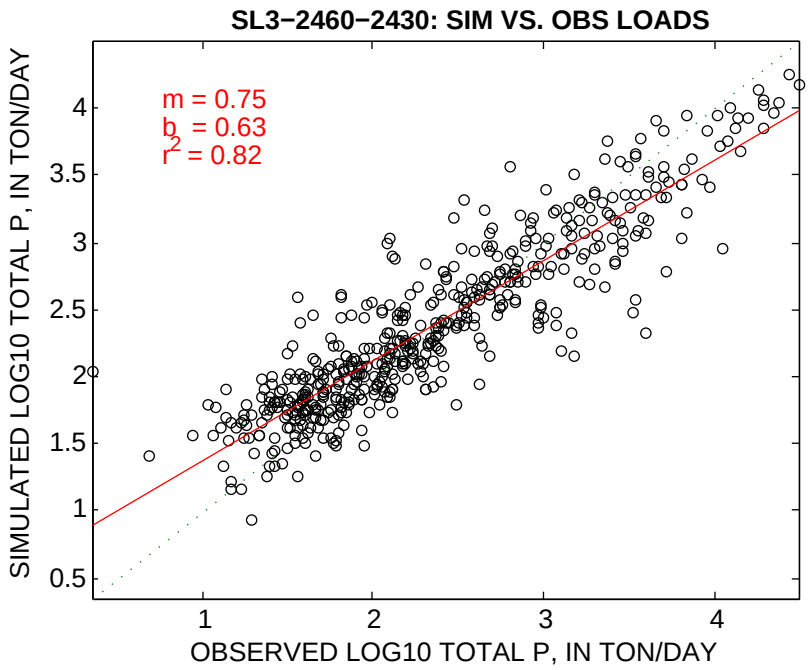


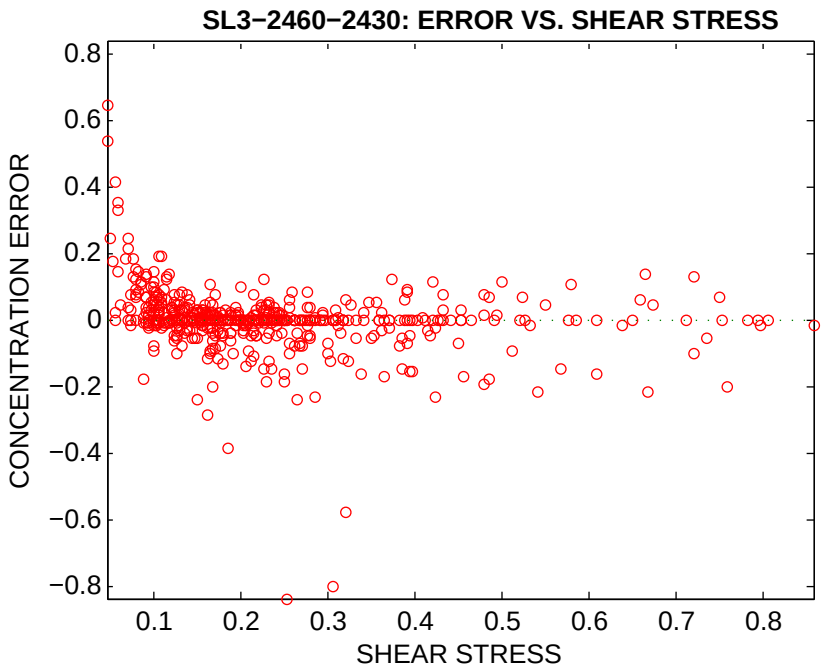


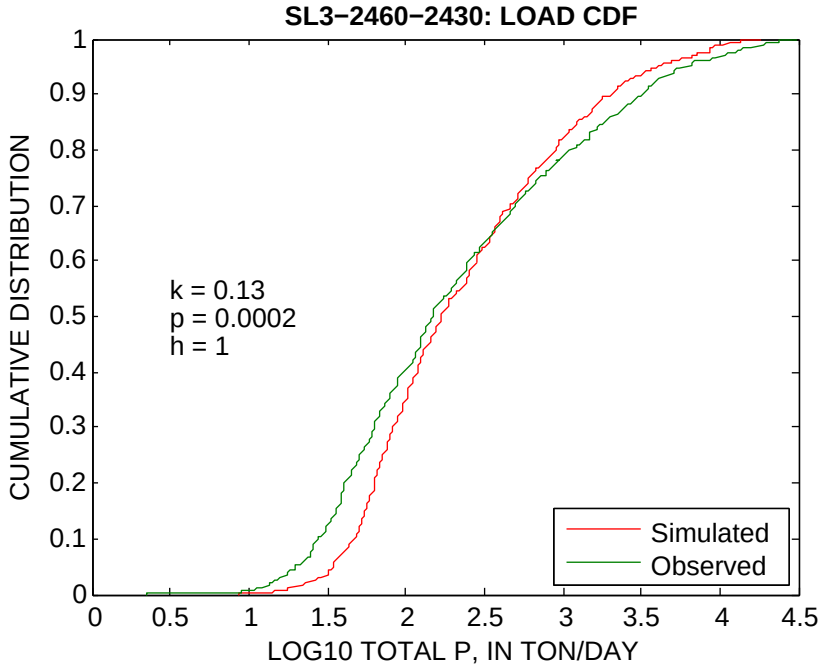


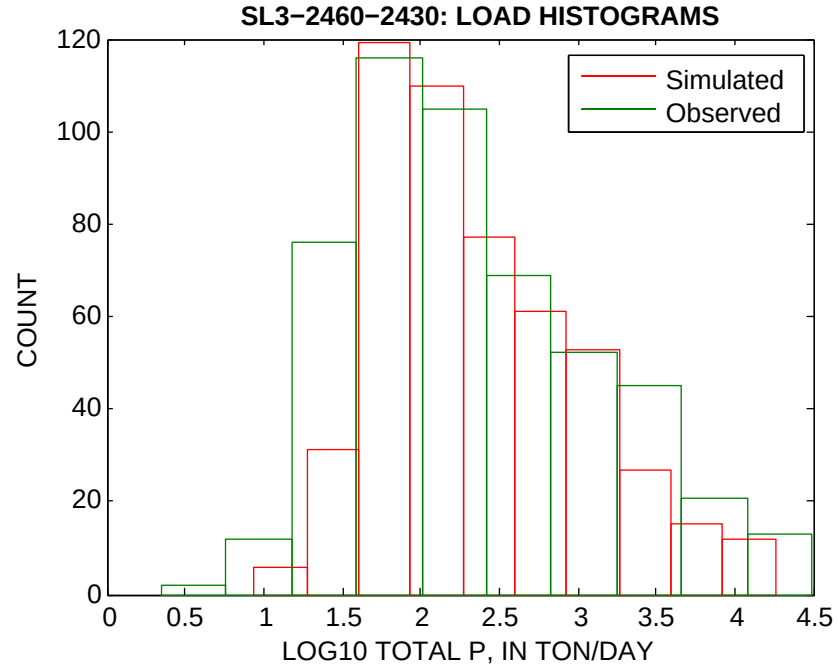


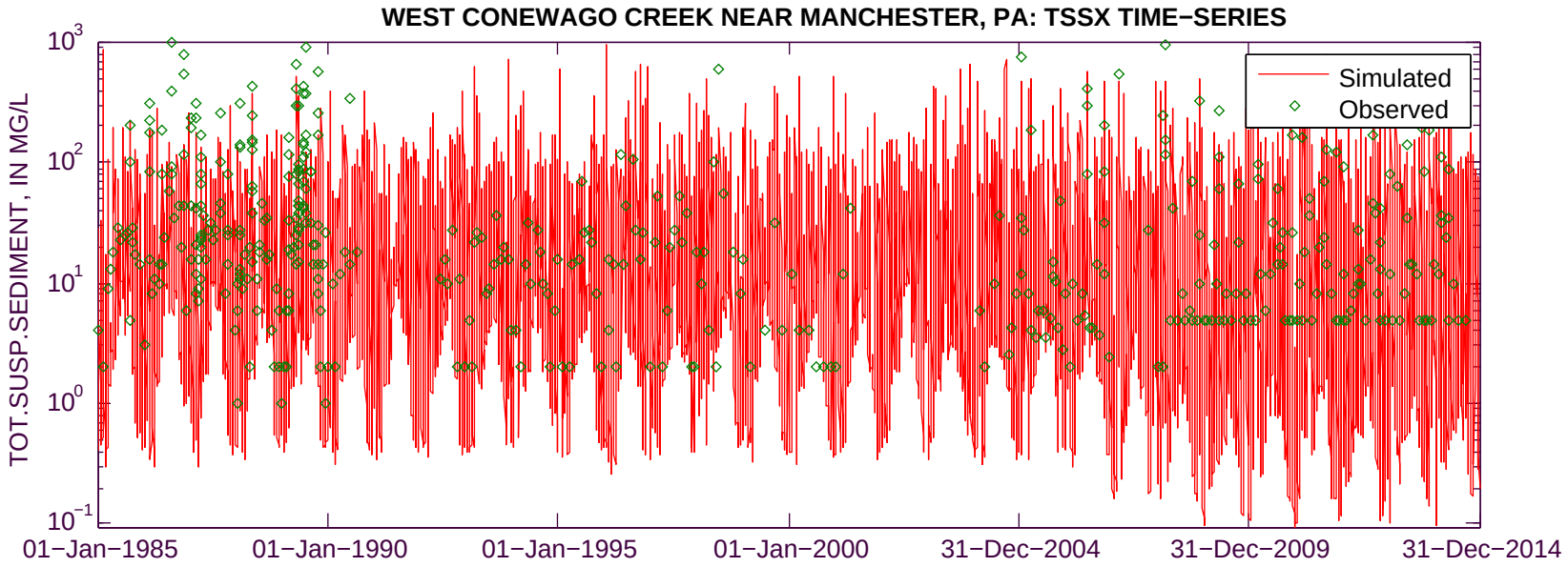
LOAD DATA
LOG10

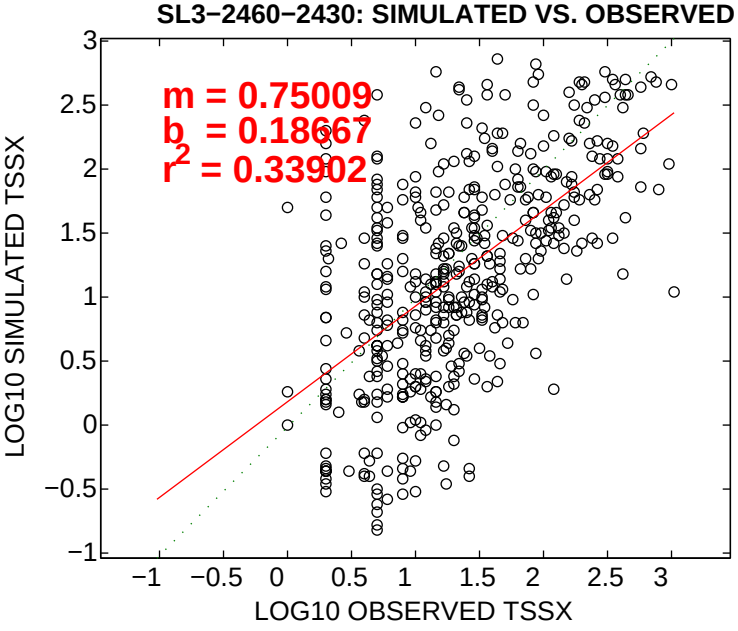


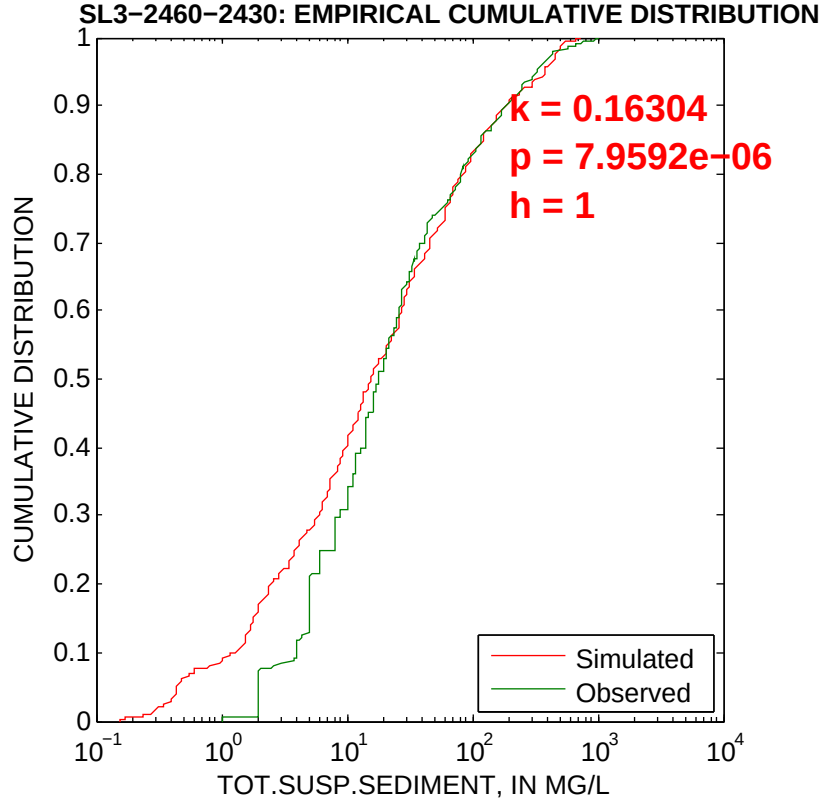












DATA SELECTION

scenario	file
P620171001WQ	TSSX.calib

plot: TSSX - total suspended ...

Dates: 1/1/1985 – 12/31/201

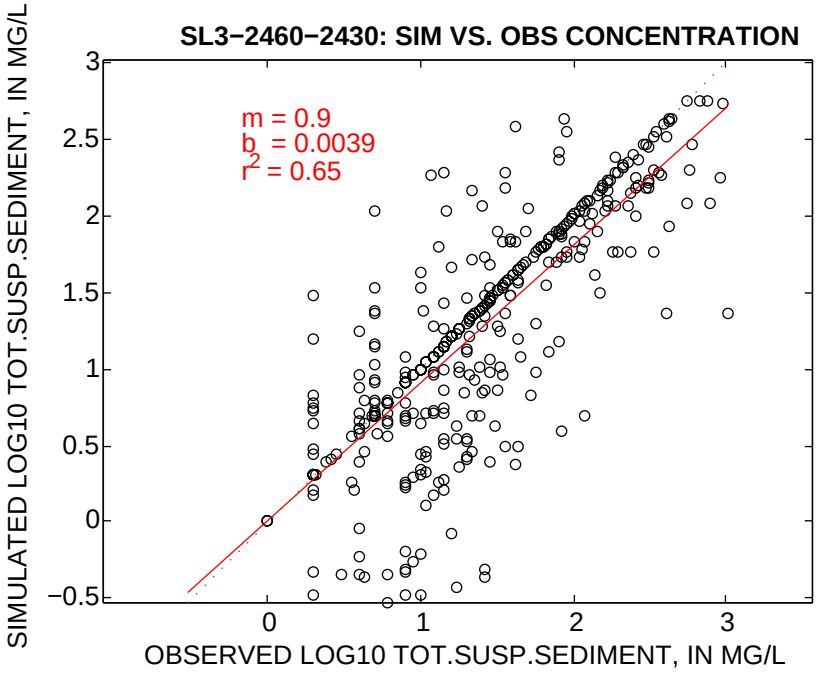
Drive	Directory	Observed
N/A	model	OBS20161101

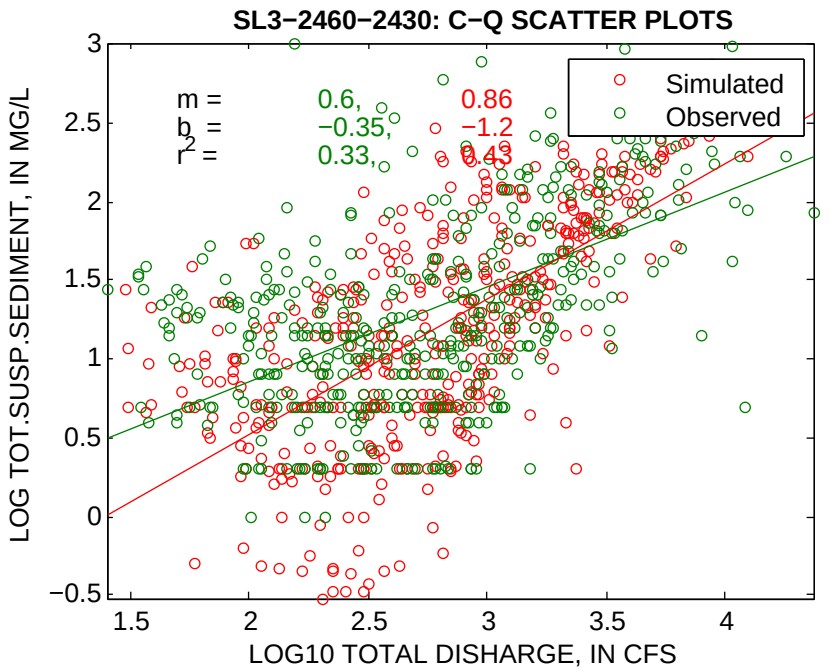
STATISTICS

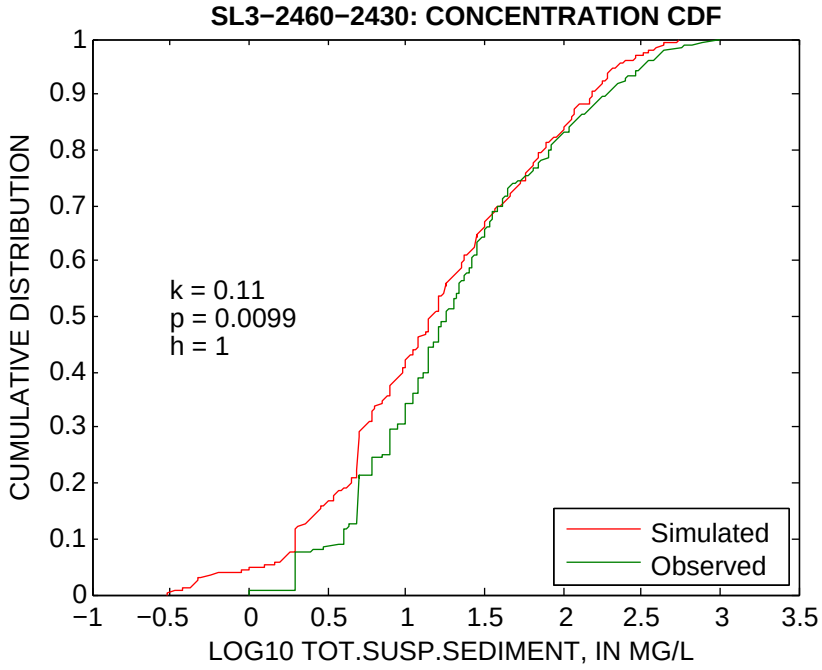
	n	observe	simulate
		460	460
min		1	0.15352
		0	-0.813835
mean		67.4964	65.5316
		1.33021	1.18445
media		18	15.8785
		1.25527	1.20081
max		1023.51	724.4
		3.01009	2.85998
varian		17710	14324.1
		0.414844	0.68848
JB		0.001	0.001
		0.003355	0.016965
		ra	log
%		-2.91102	-10.9577
err.va		17892.8	0.502272
rel.std.err		1.01032	1.21075
mod.eff		-0.0103195	-0.210748

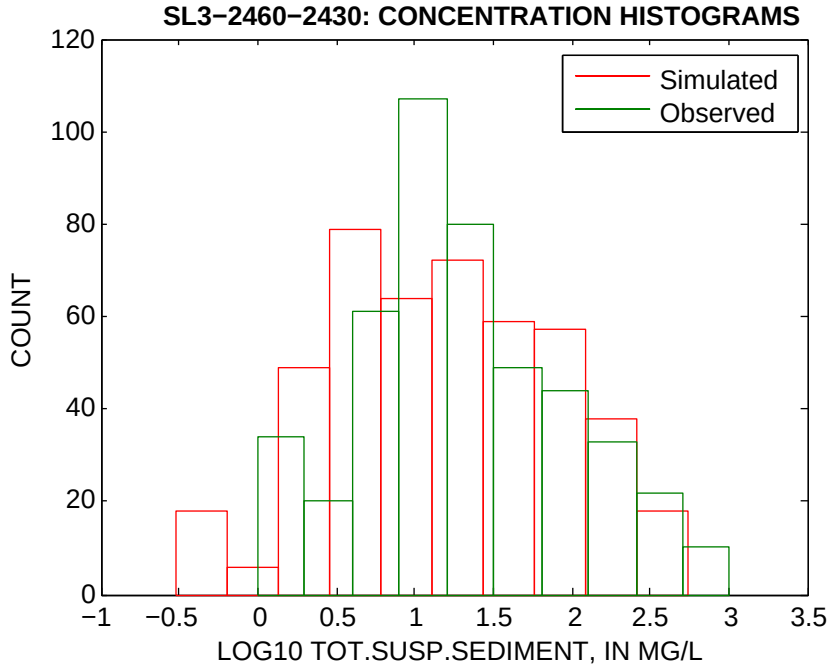
VERSION 2.1

ALL DATA
LOG10

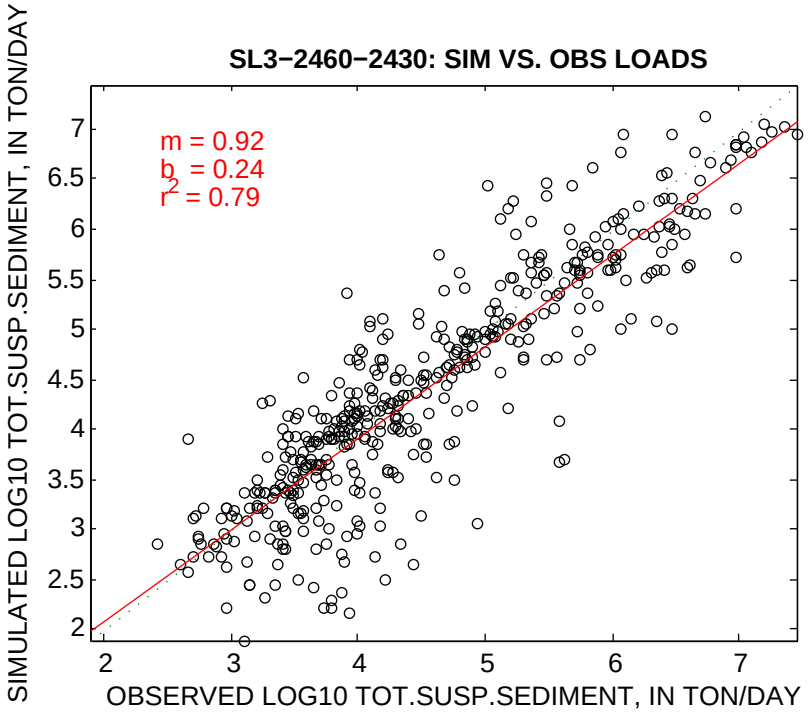


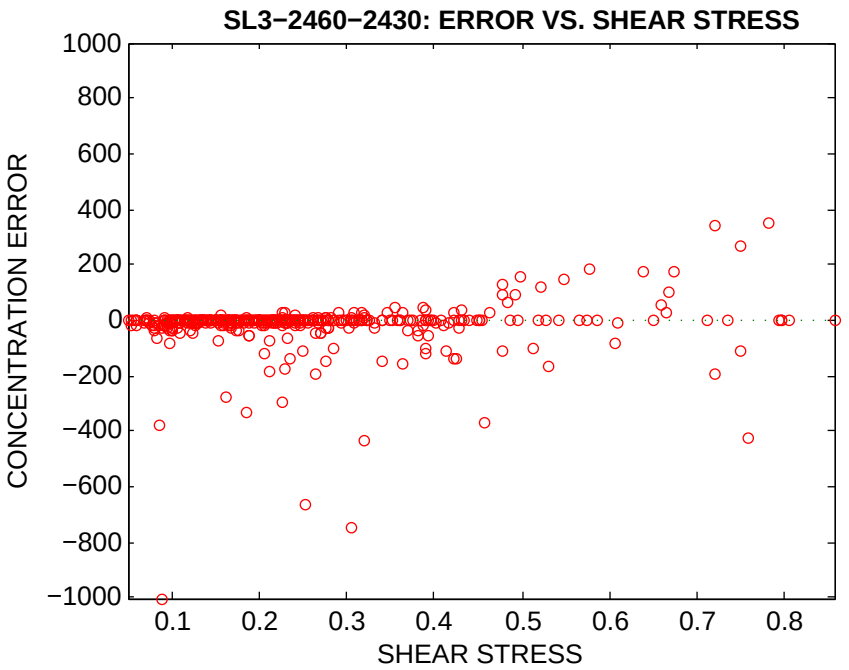


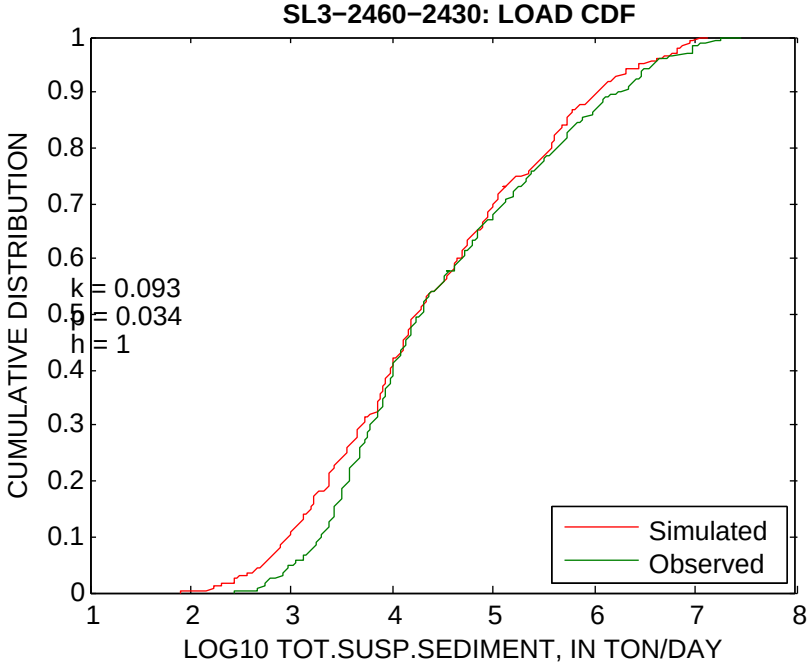


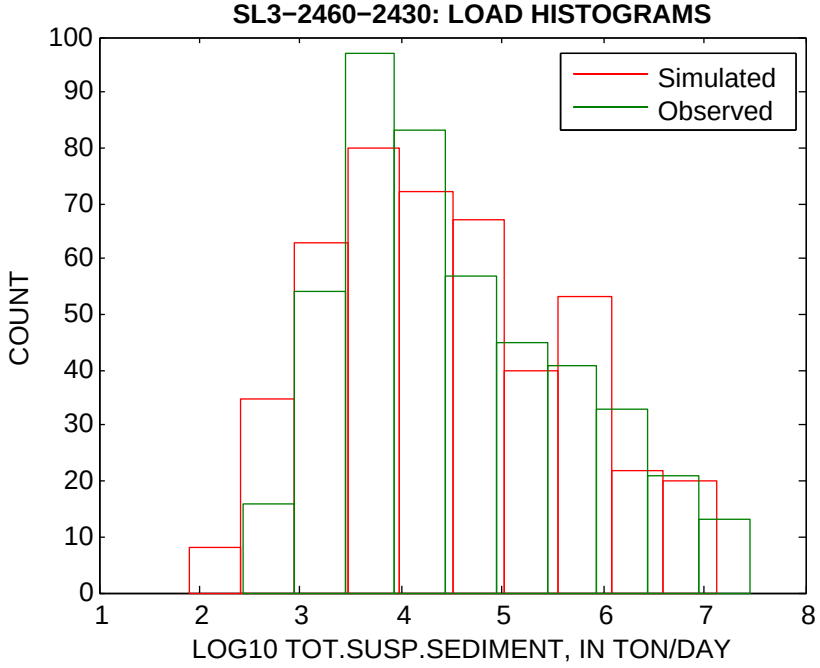


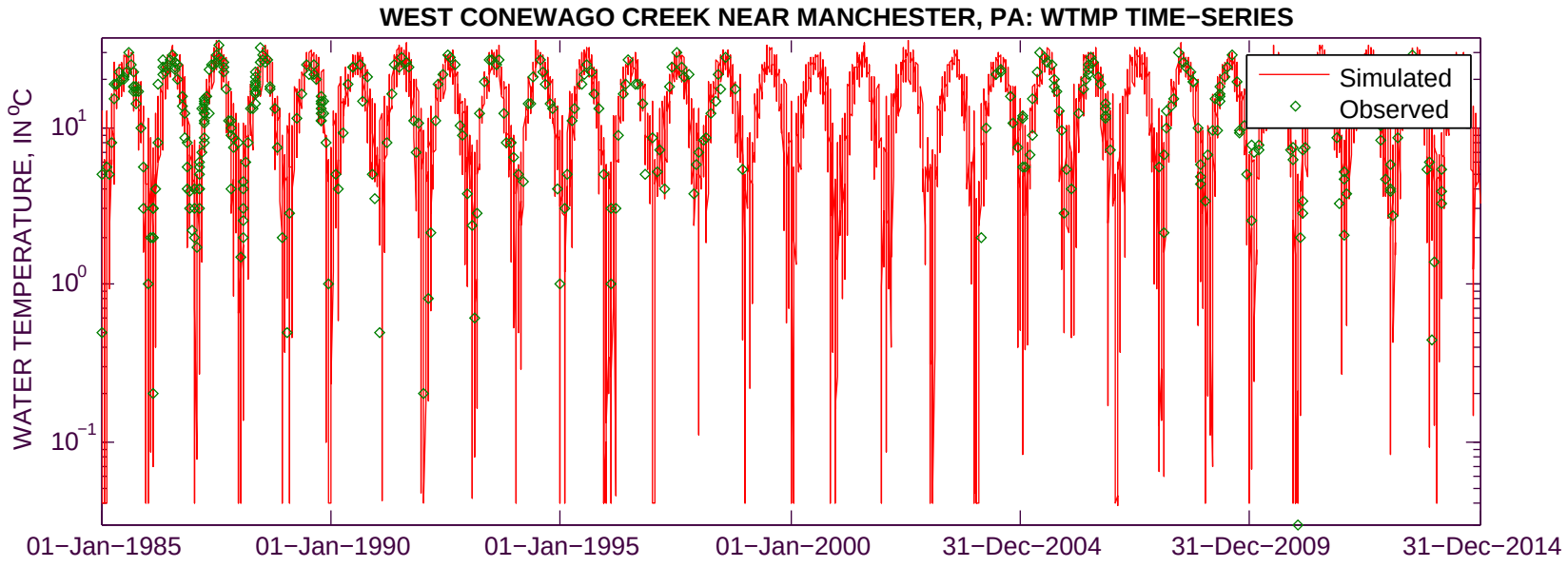
LOAD DATA
LOG10

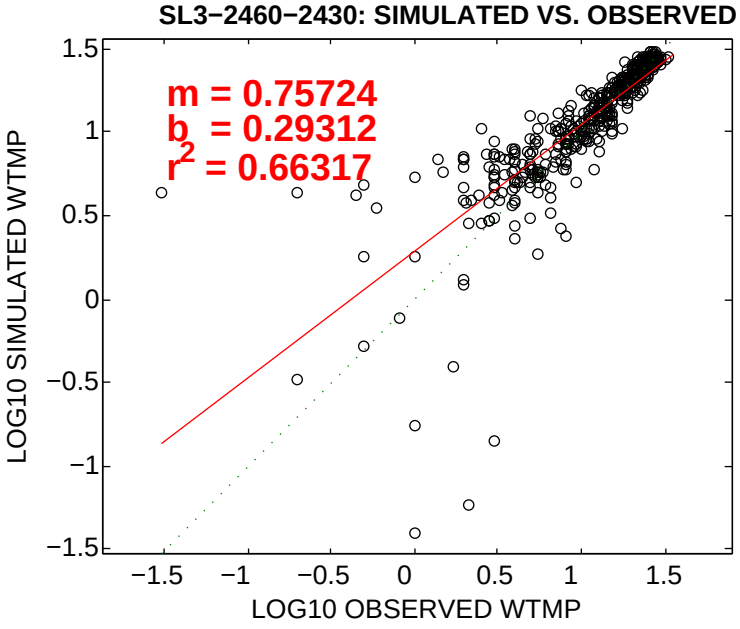


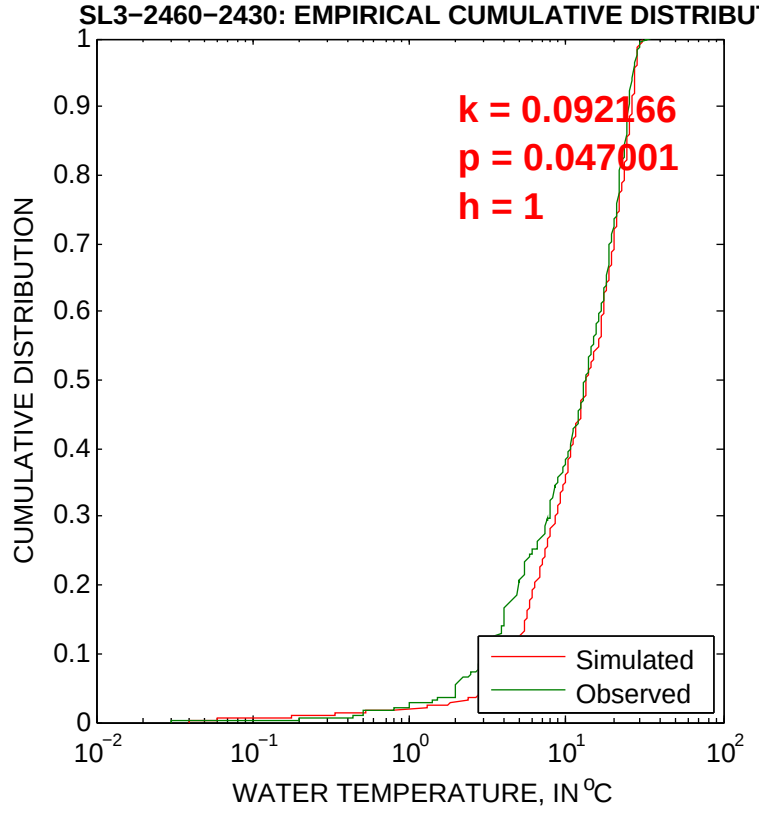












DATA SELECTION

scenario	file
P620171001WQ	WTMP.calib

plot: WTMP - water tempera...

Dates 1/1/1985 12/31/201

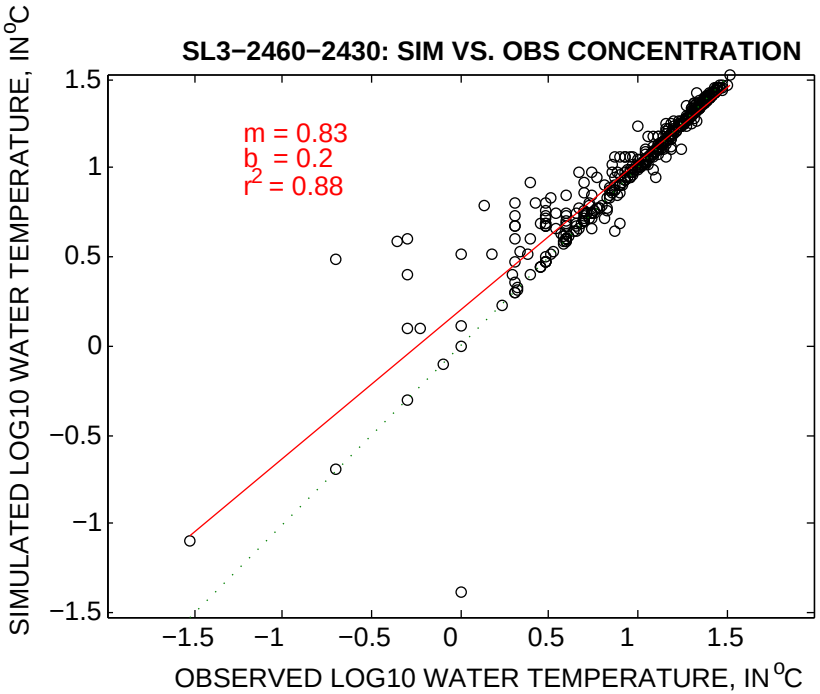
Drive	Directory	Observed
N/A	model	OBS20161101

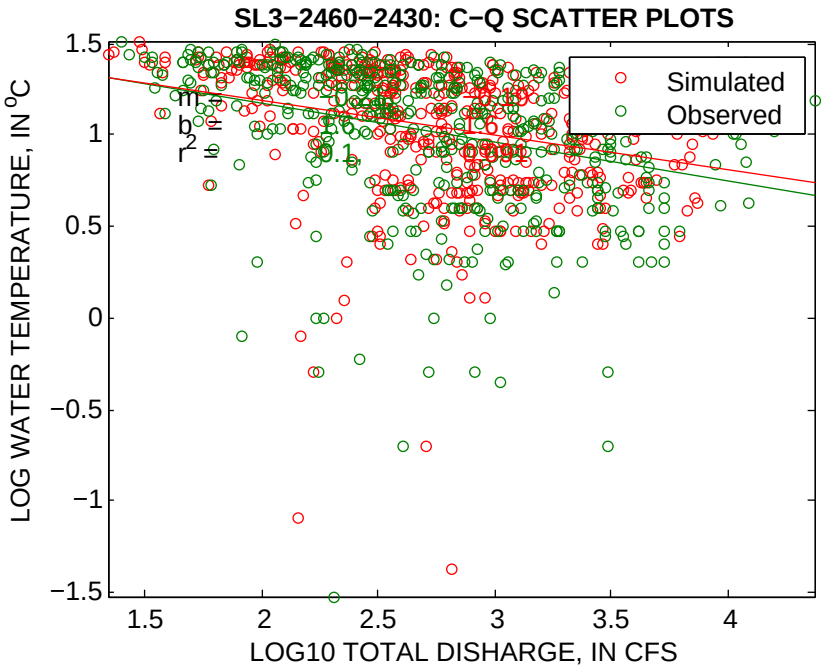
STATISTICS

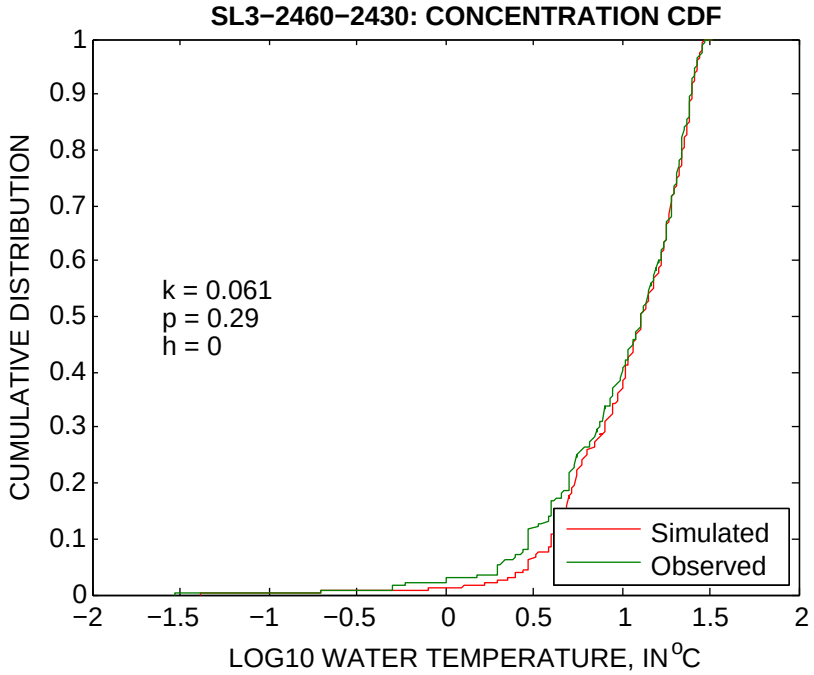
	n	434	434
		observe	simulate
min		0.03	0.040072
		-1.52288	-1.39716
mean		13.818	14.632
		1.01341	1.06052
media		13.25	13.565
		1.12221	1.13242
max		33	30.049
		1.51851	1.47783
varian		68.7046	65.895
		0.164156	0.141939
JB		0.001	0.001
		0.001	0.001
		ra	log
%		5.89084	4.64807
err.va		7.00344	0.0597075
rel.std.err		0.101936	0.363724
mod.eff		0.898064	0.636276

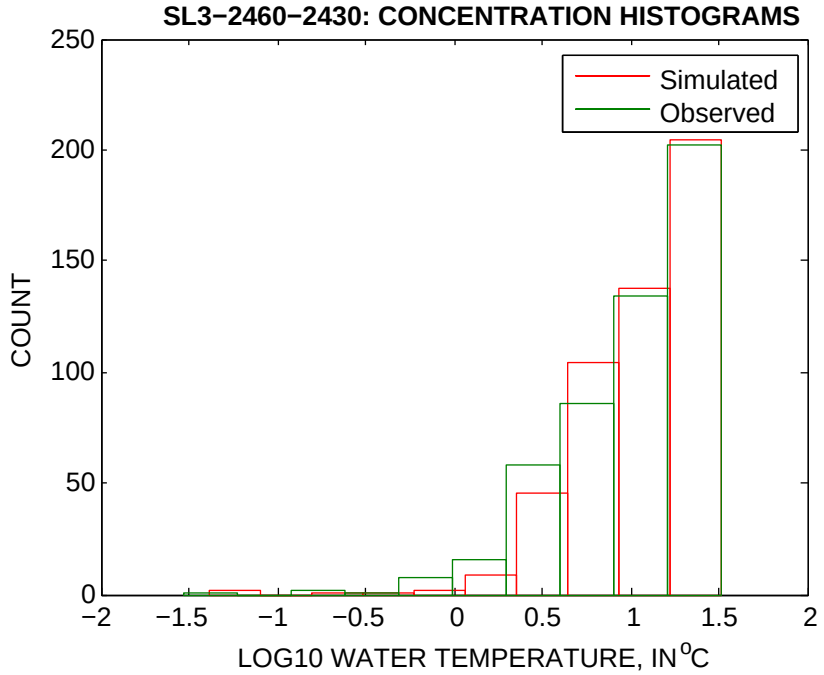
VERSION 2.1

ALL DATA
LOG10

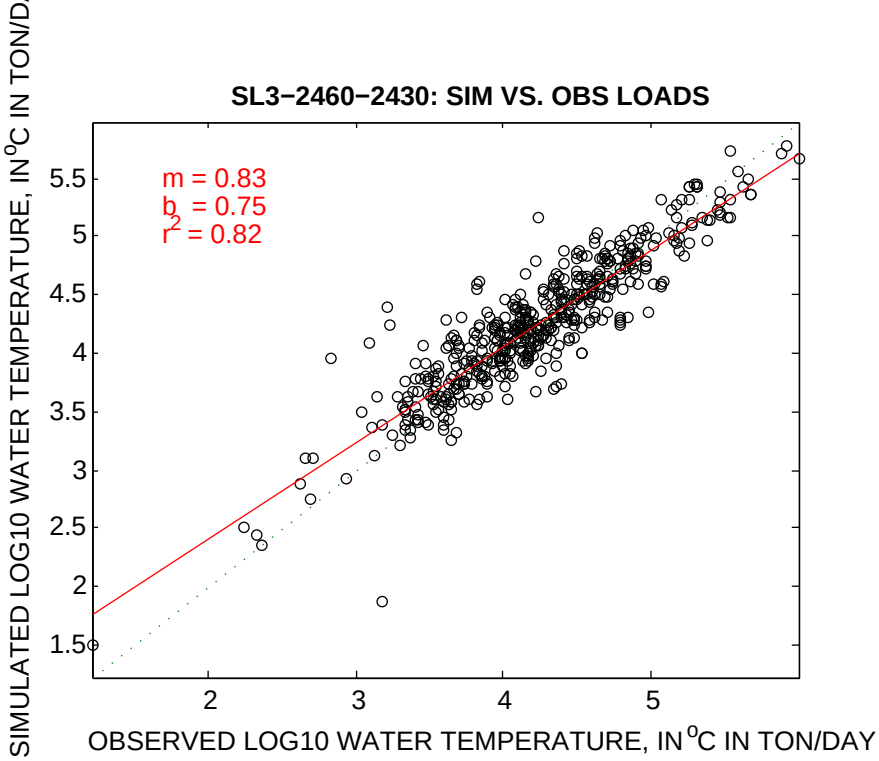


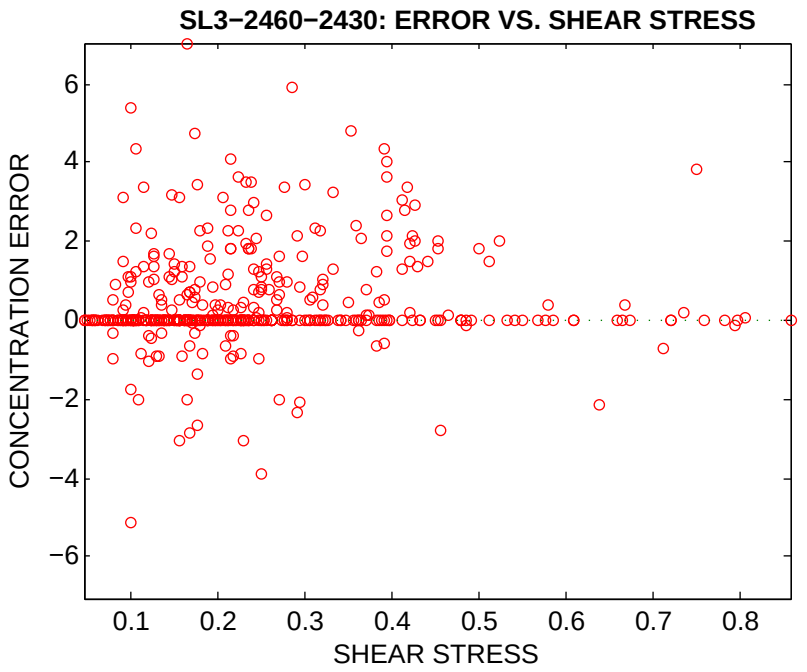


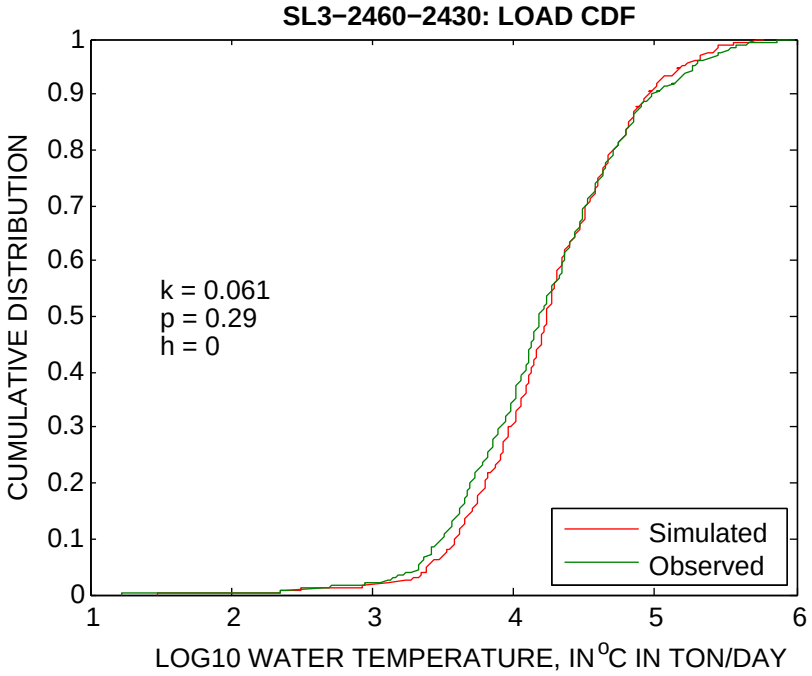


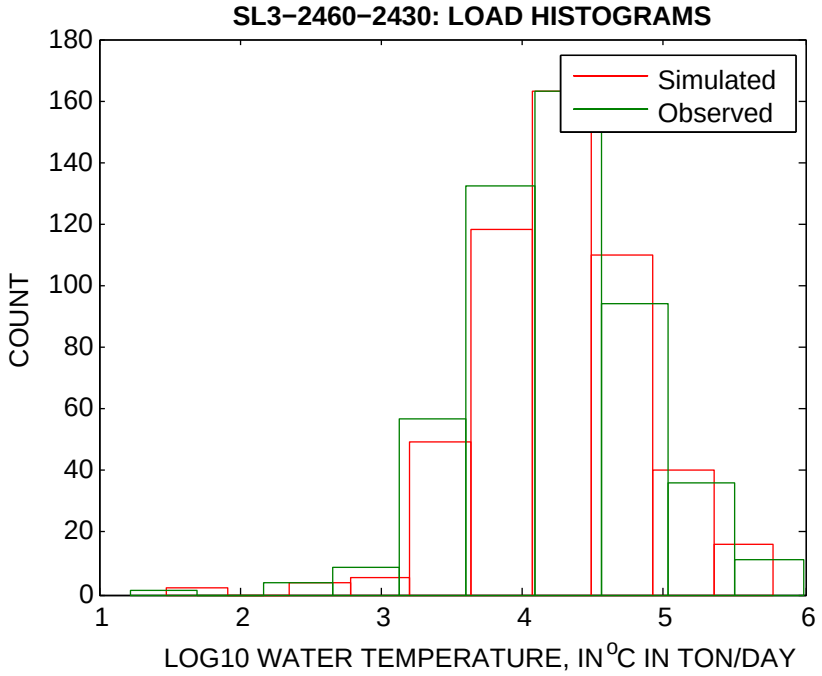


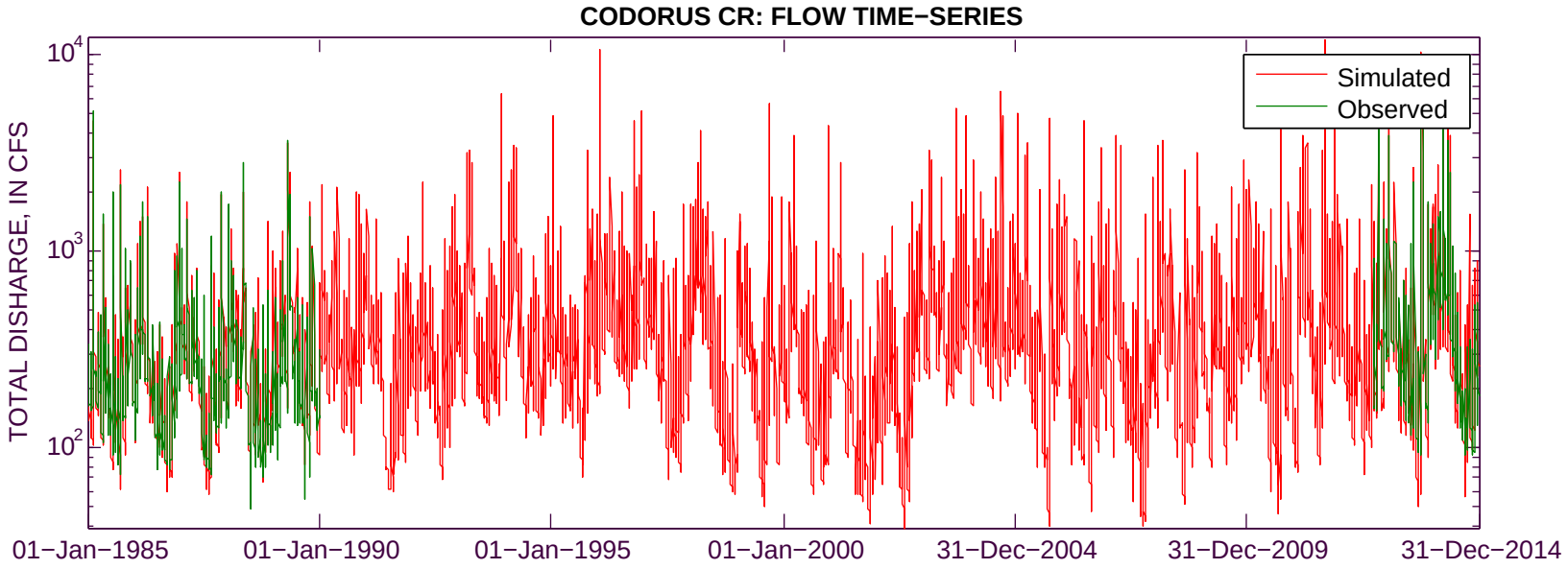
LOAD DATA
LOG10

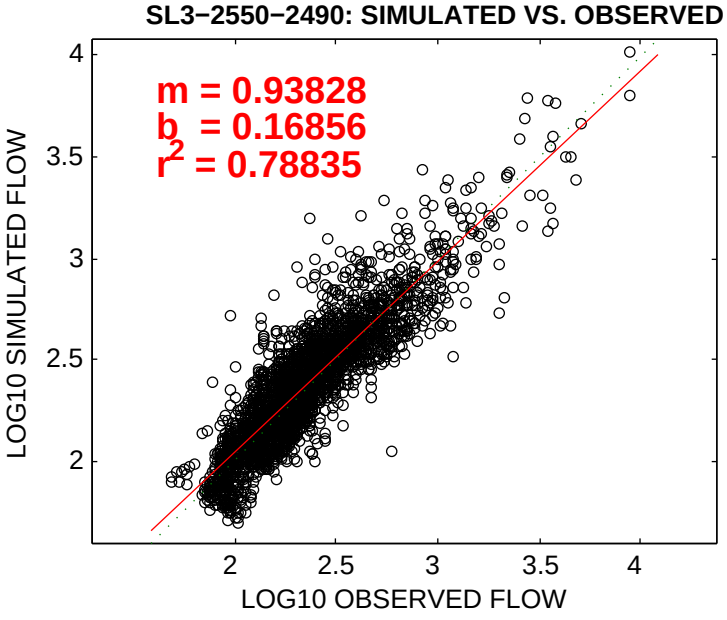


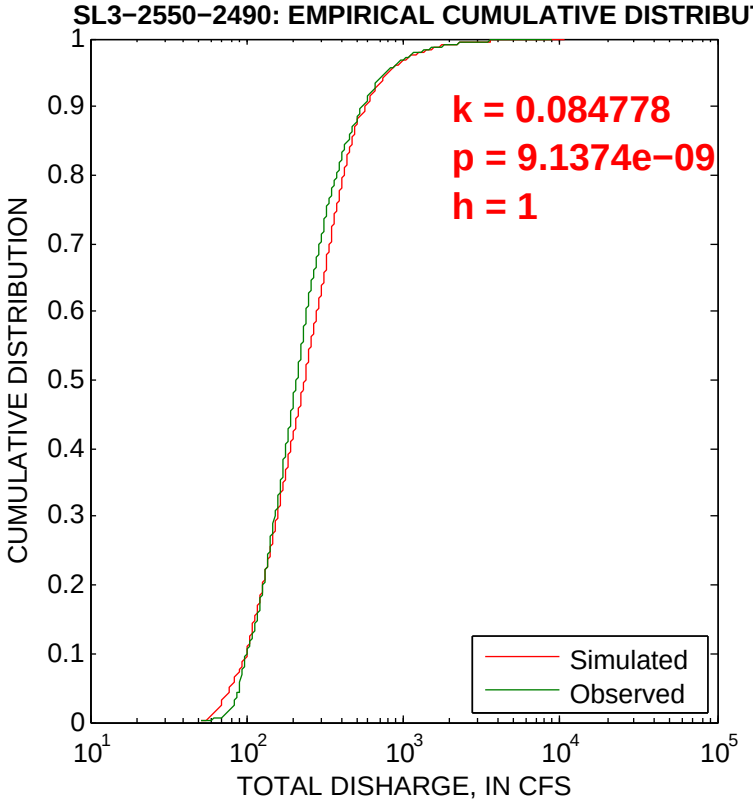












DATA SELECTION

scenario	file
P620171001WQ	FLOW.calib

plot: FLOW - total discharge

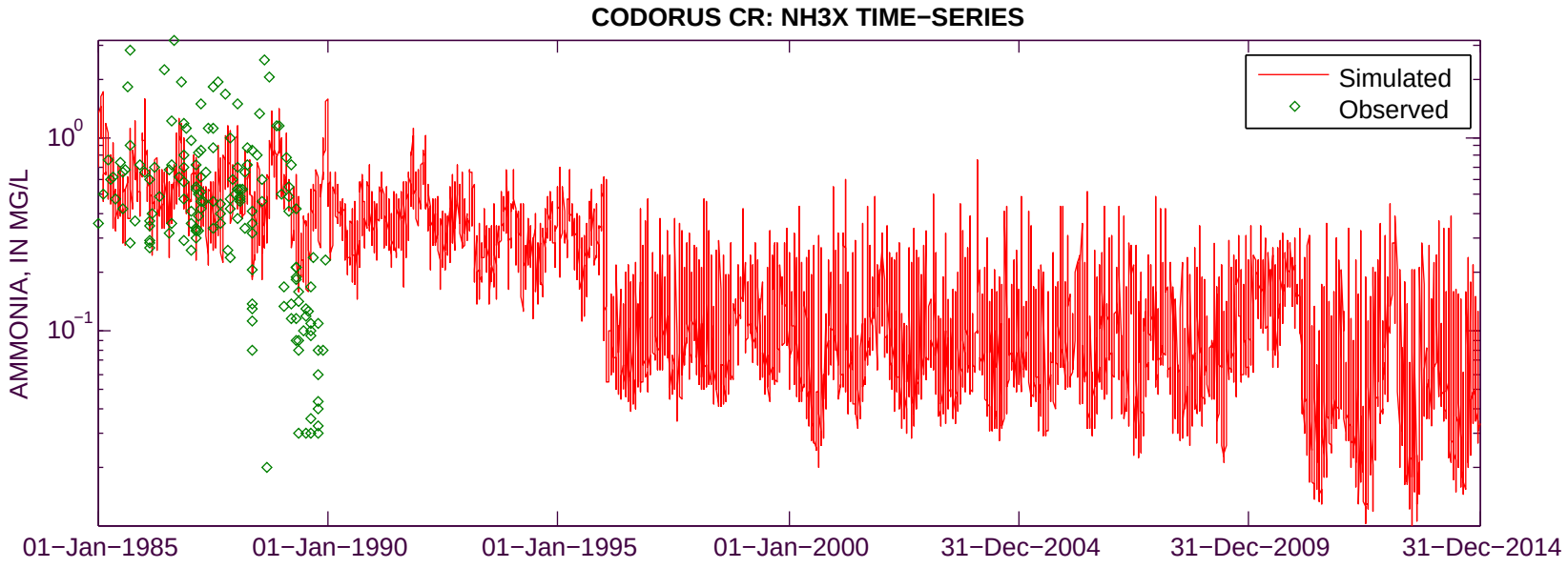
Dates: 1/1/1985 – 12/31/201

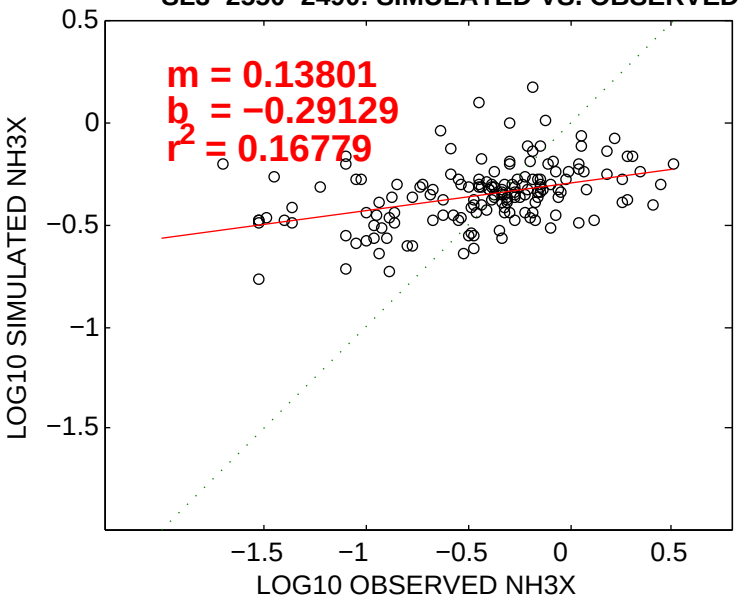
Drive	Directory	Observed
N/A	model	OBS20161101

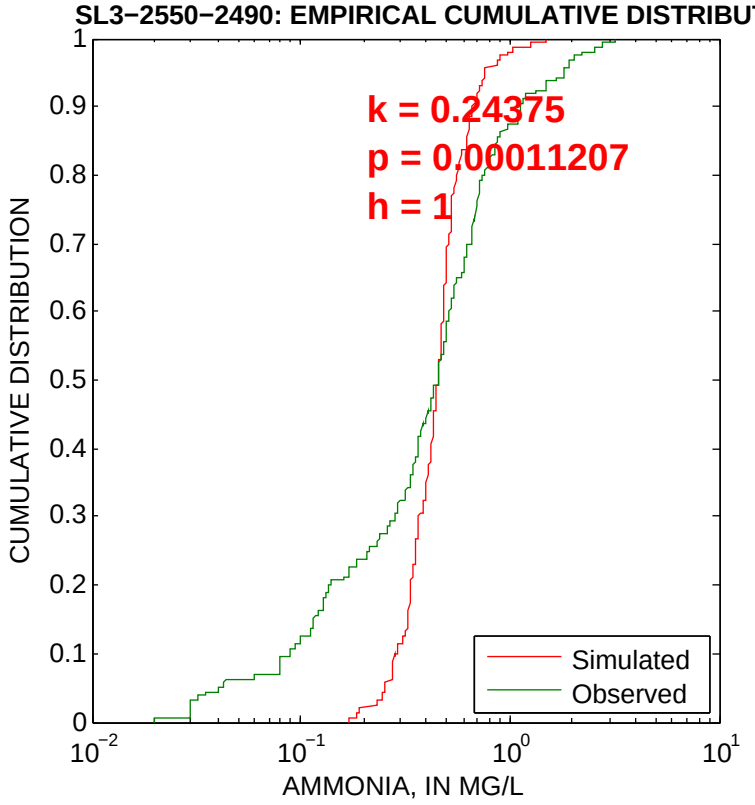
STATISTICS

	n	observe	simulate
		2654	2654
min		49	49.349
		1.6902	1.69328
mean		310.723	330.594
		2.3576	2.38066
media		210	235.965
		2.32222	2.37285
max		8970	10514
		3.95279	4.02177
varian		191215	203674
		0.0885051	0.0988365
JB		0.001	0.001
		0.001	0.001
		ra	log
%		6.39527	0.978313
err.va		49624.9	0.0217878
rel.std.err		0.259525	0.246175
mod.eff		0.740475	0.753825

VERSION 2.1







DATA SELECTION

scenario	file
P620171001WQ	NH3X.calib

plot: NH3X - ammonia

Dates: 1/1/1985 – 12/31/201

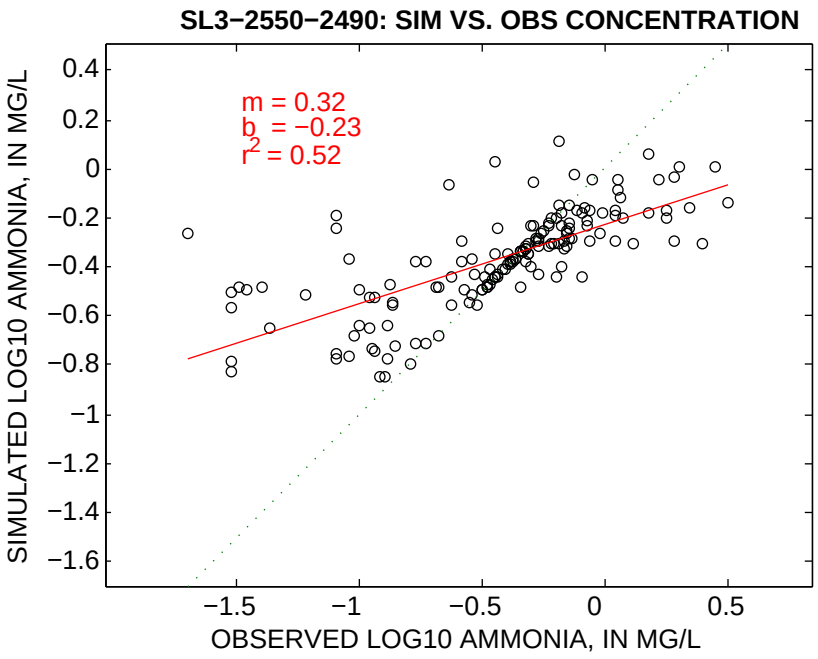
Drive	Directory	Observed
N/A	model	OBS20161101

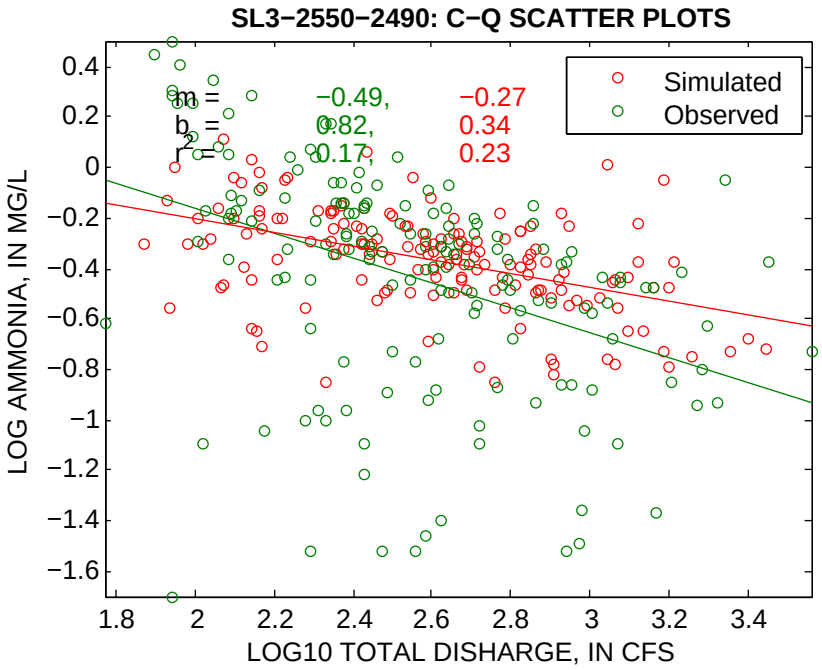
STATISTICS

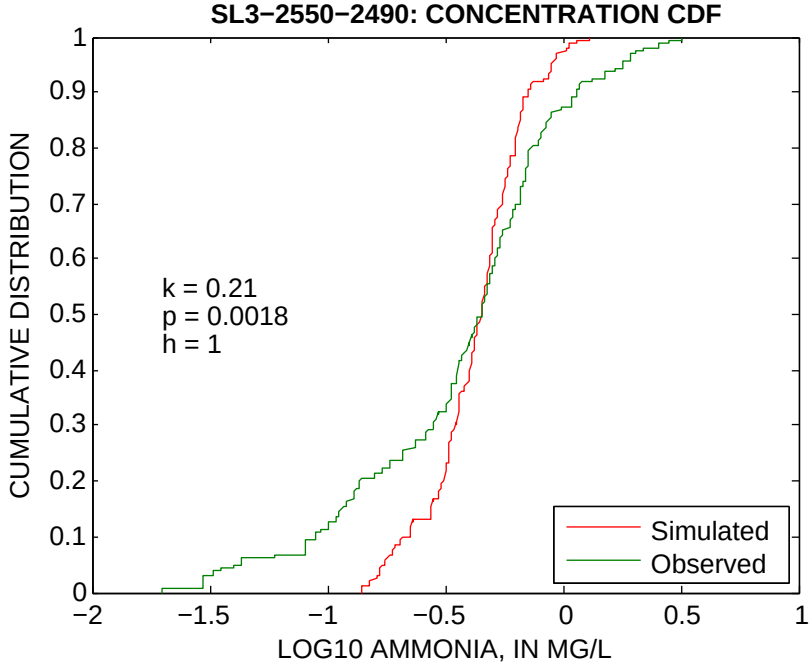
	n	160	160
		observe	simulate
min		0.02	0.17067
		-1.69897	-0.767843
mean		0.563873	0.473521
		-0.435061	-0.351329
media		0.4575	0.452225
		-0.33961	-0.344646
max		3.19	1.4868
		0.503791	0.172253
varian		0.286174	0.033093
		0.198089	0.0224863
JB		0.001	0.001
		0.011447	0.022821
		ra	log
%		-16.0235	-19.246
err.va		0.272274	0.172953
rel.std.err		0.951429	0.873108
mod.eff		0.0485713	0.126892

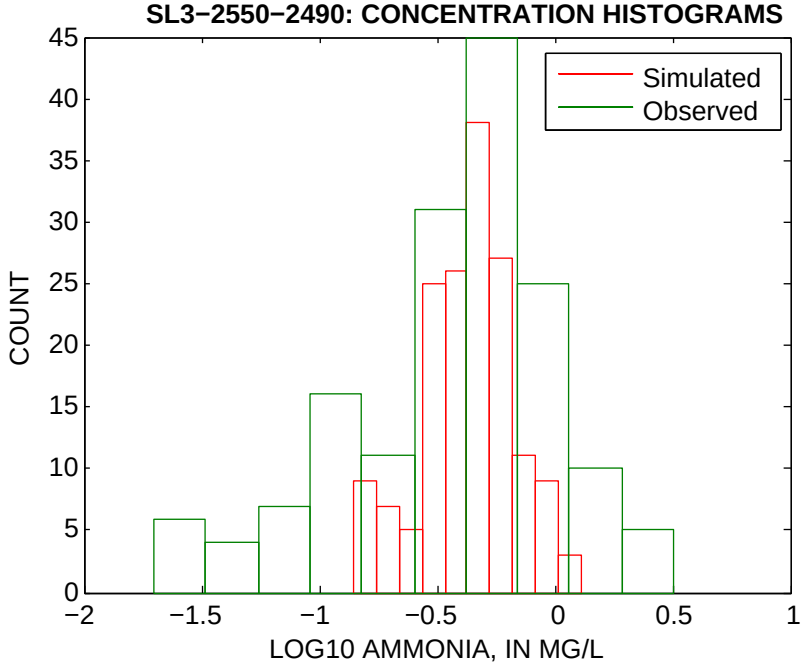
VERSION

ALL DATA
LOG10

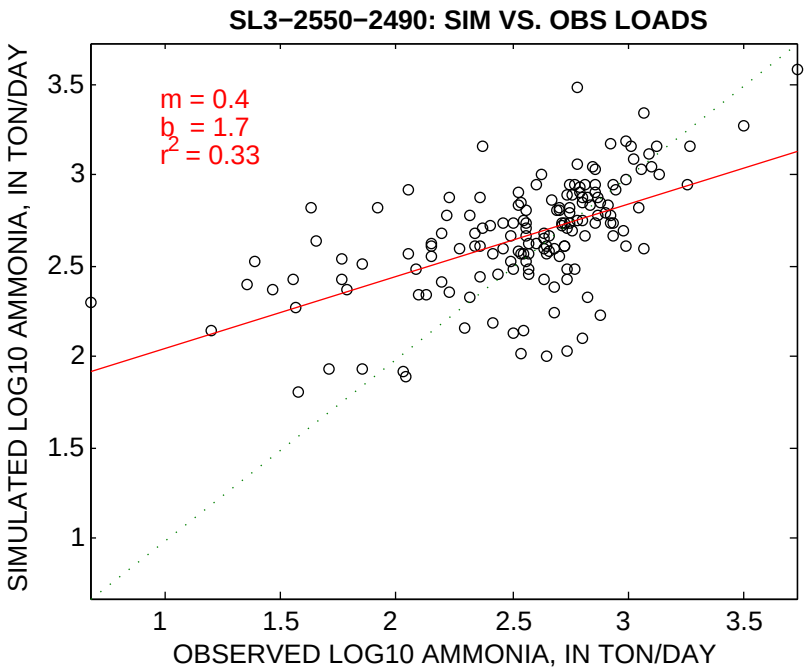


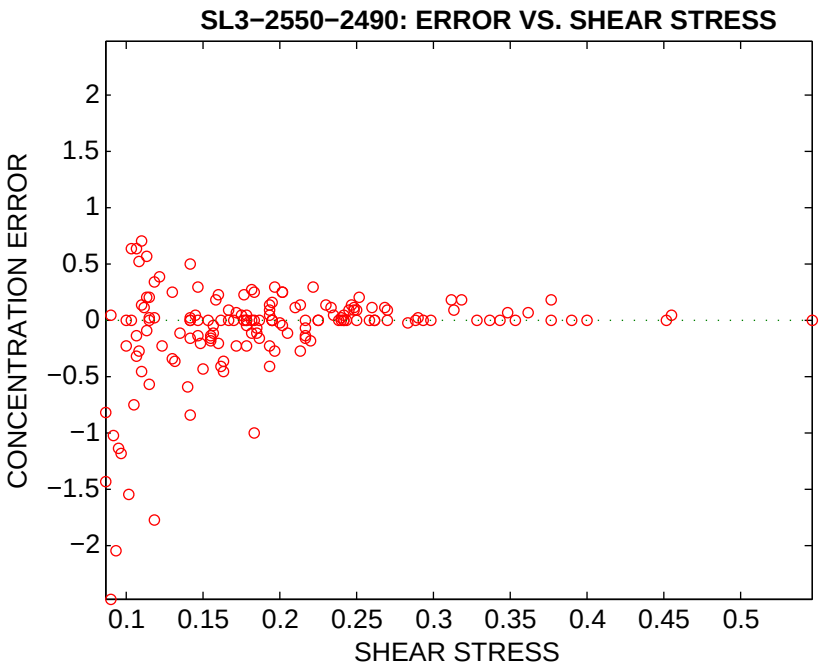


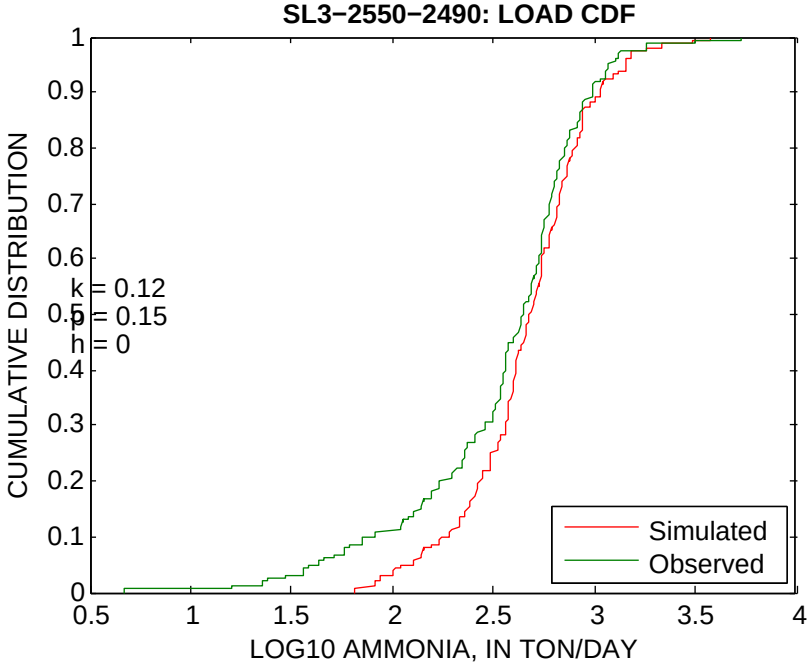


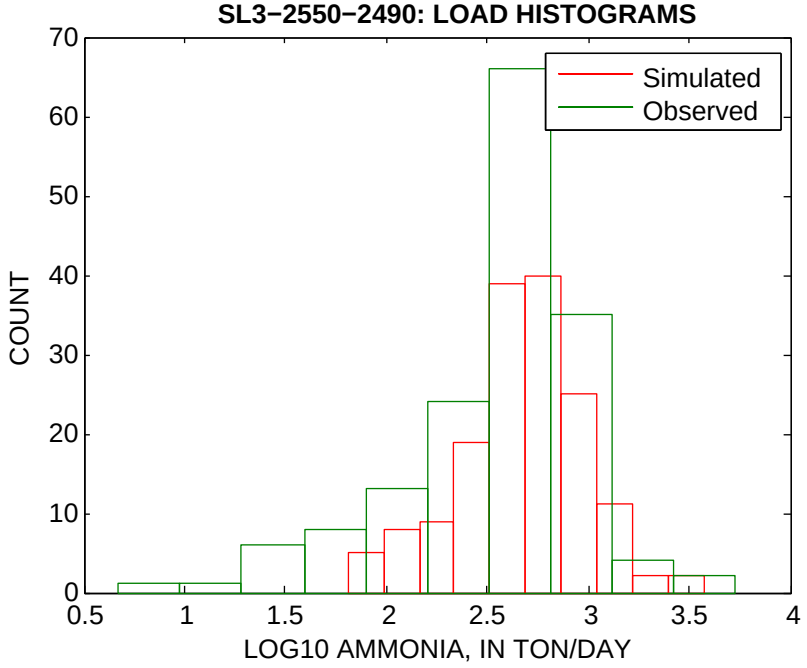


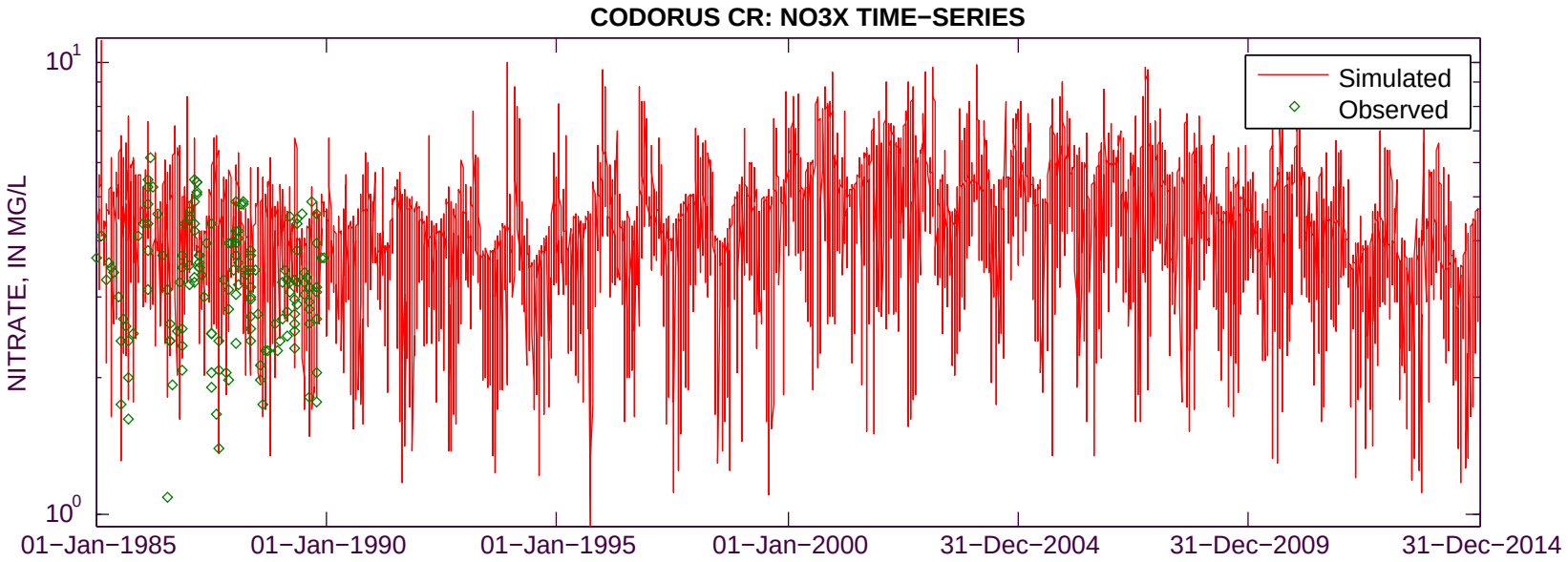
LOAD DATA
LOG10

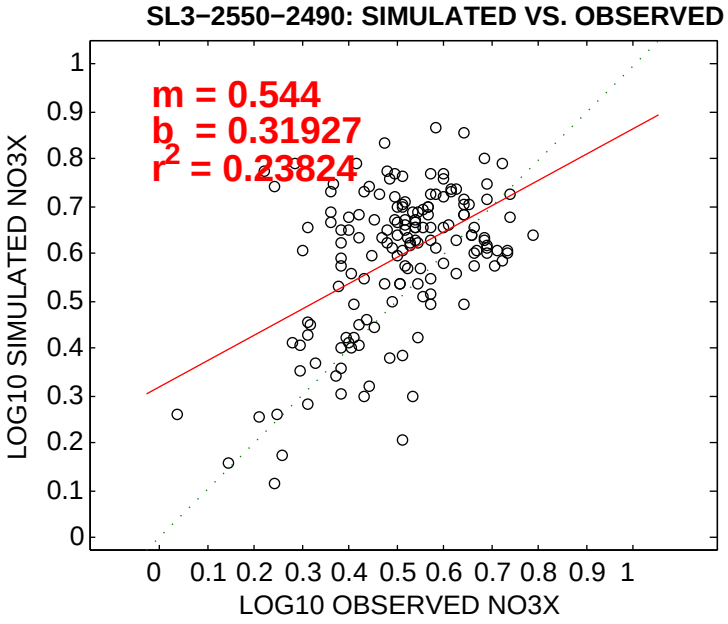


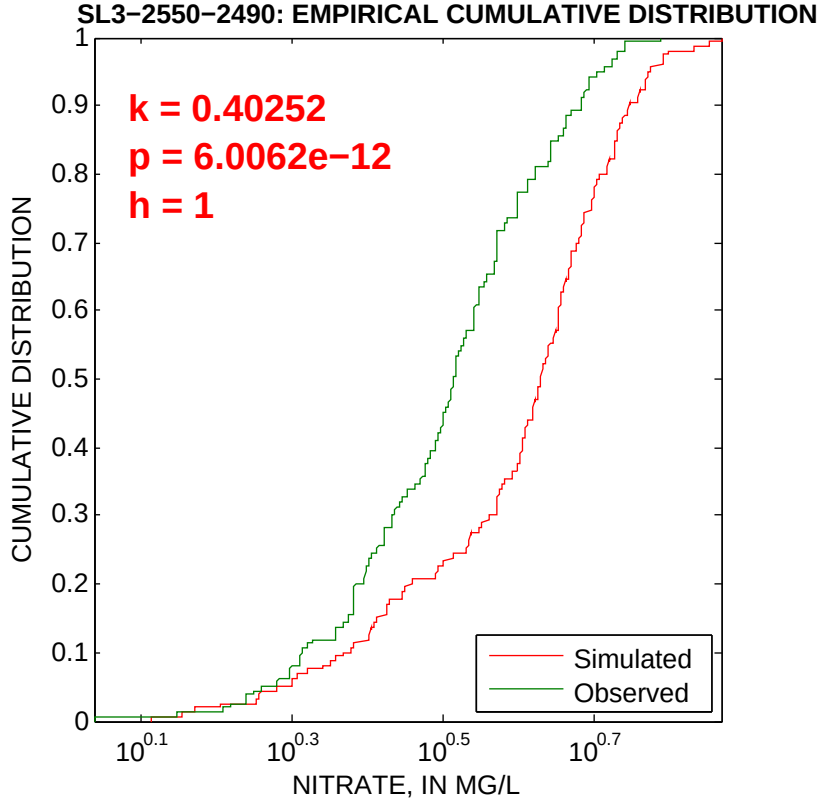












DATA SELECTION

scenario	file
P620171001WQ	NO3X.calib

plot: NO3X - nitrate

Dates: 1/1/1985 – 12/31/201

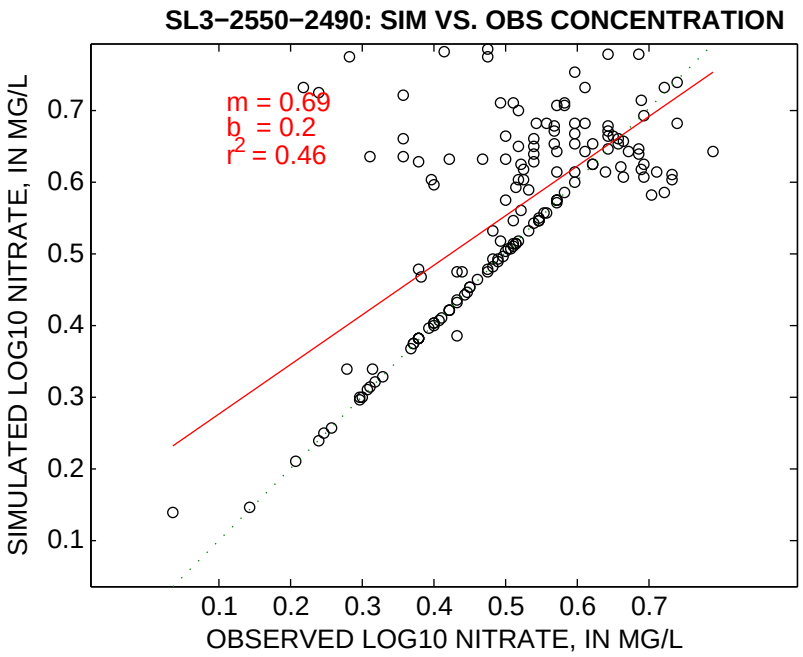
Drive	Directory	Observed
N/A	model	OBS20161101

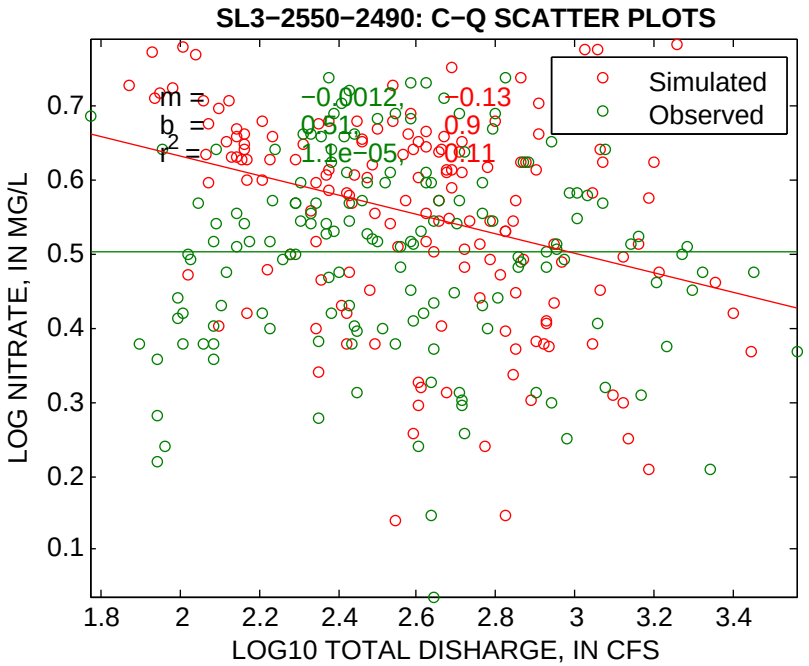
STATISTICS

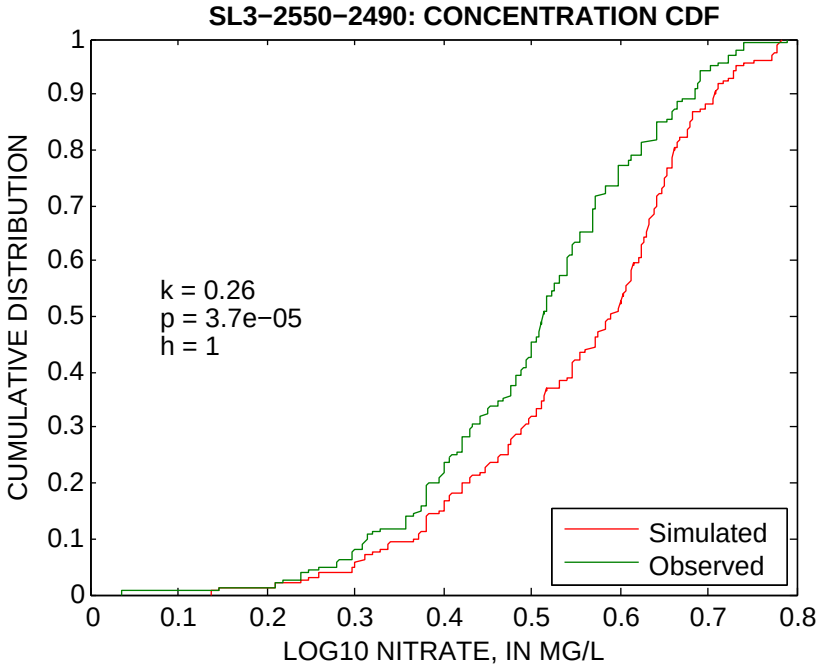
	n	159	159
		observe	simulate
min		1.09	1.304
		0.0374265	0.115278
mean		3.34005	4.13473
		0.503934	0.593413
media		3.265	4.2593
		0.513883	0.629338
max		6.16	7.3821
		0.789581	0.86818
varian		0.973488	1.52487
		0.0181297	0.0225205
JB		0.110262	0.428009
		0.055198	0.001130
		ra	log
%		23.7926	17.7562
err.va		2.18349	0.0289823
rel.std.err		2.24296	1.59861
mod.eff		-1.24296	-0.598612

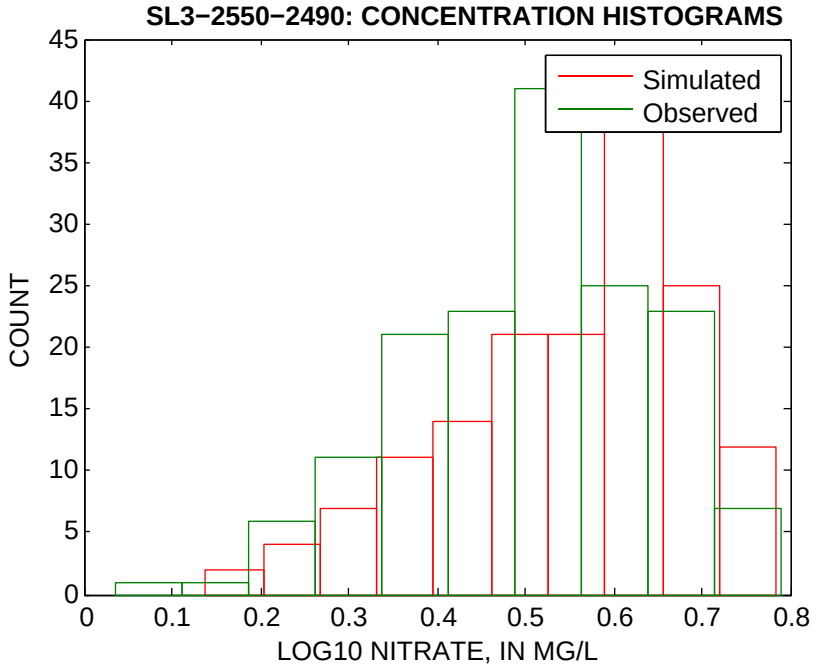
VERSION 2.1

ALL DATA
LOG10

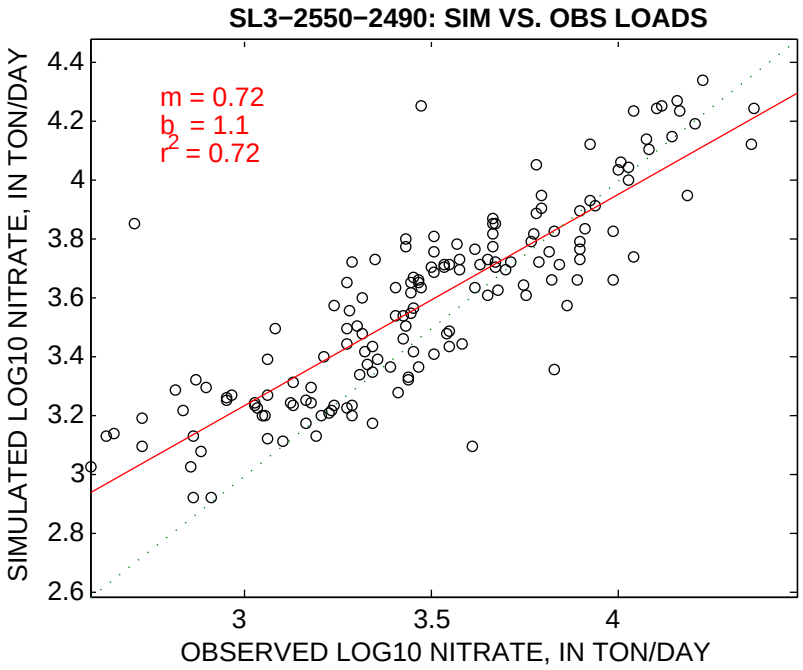


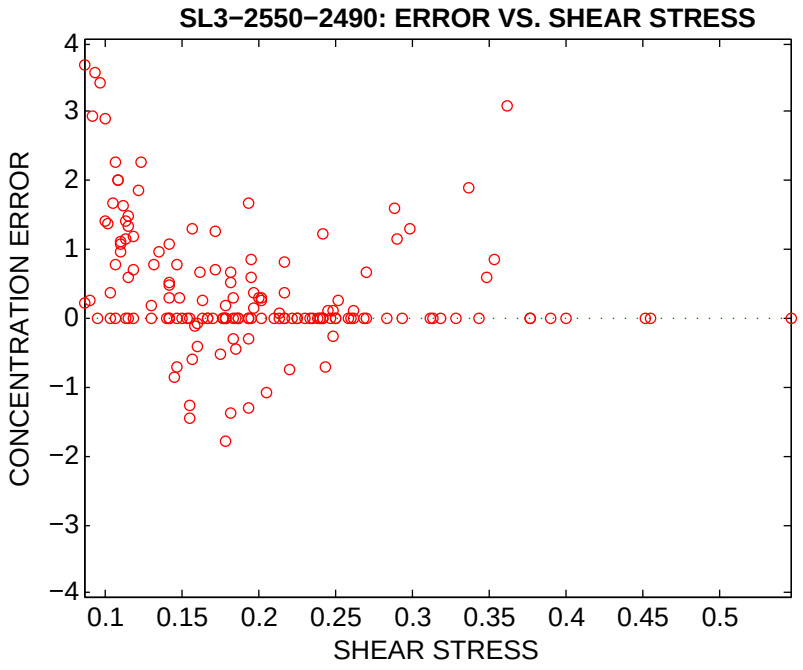


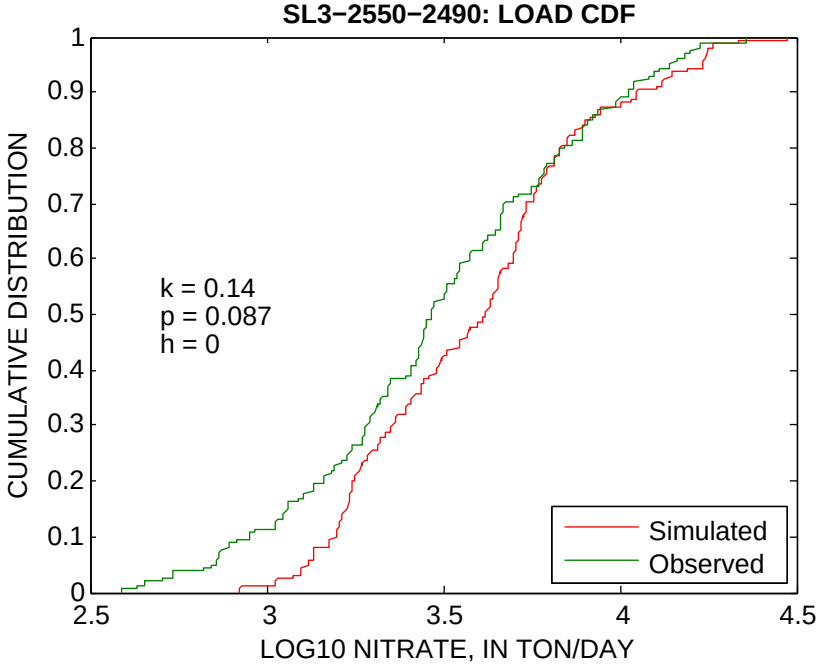


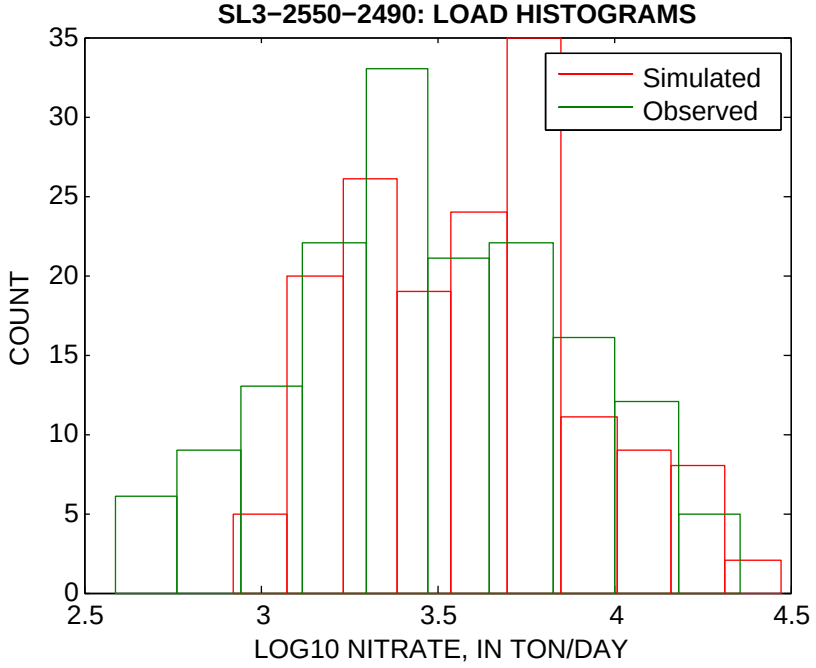


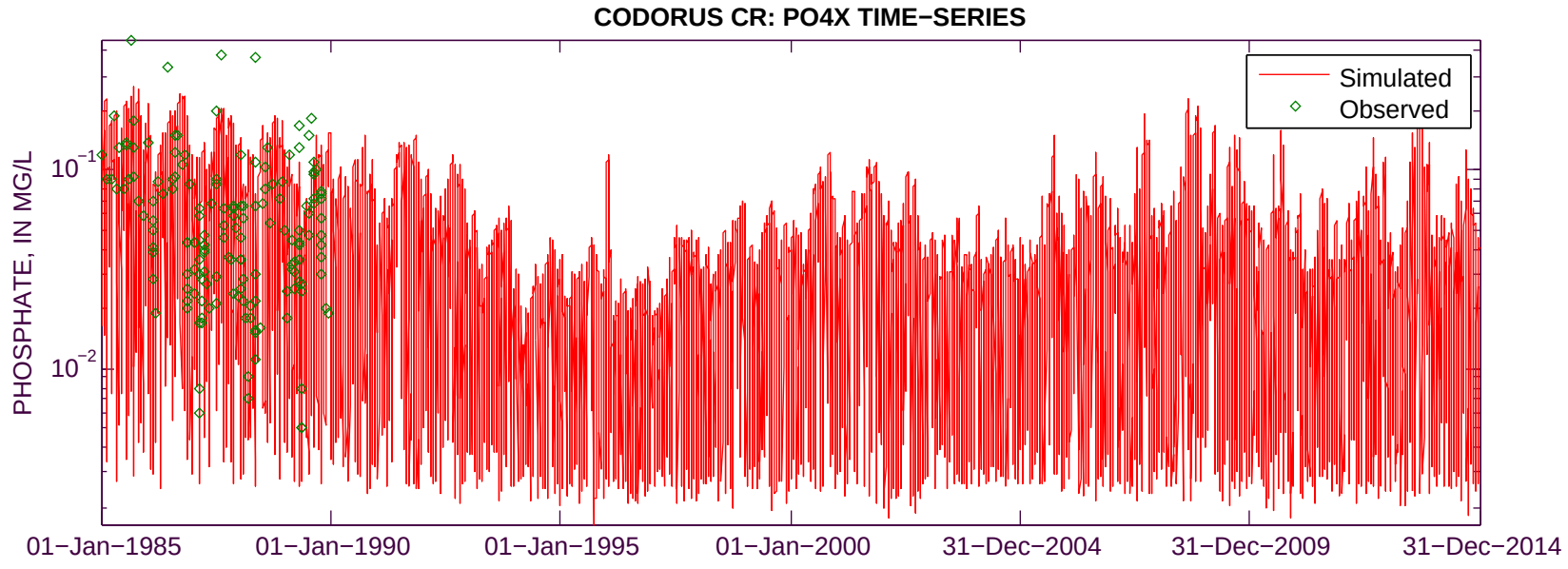
LOAD DATA
LOG10

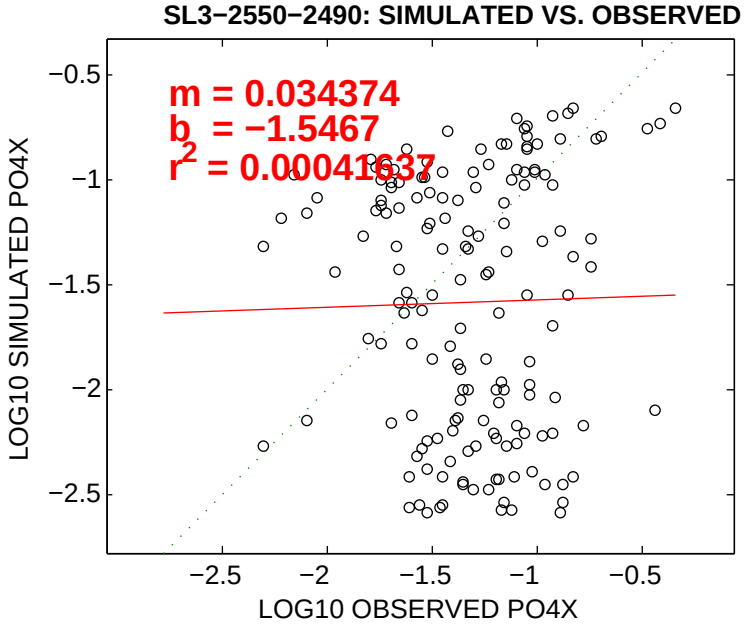


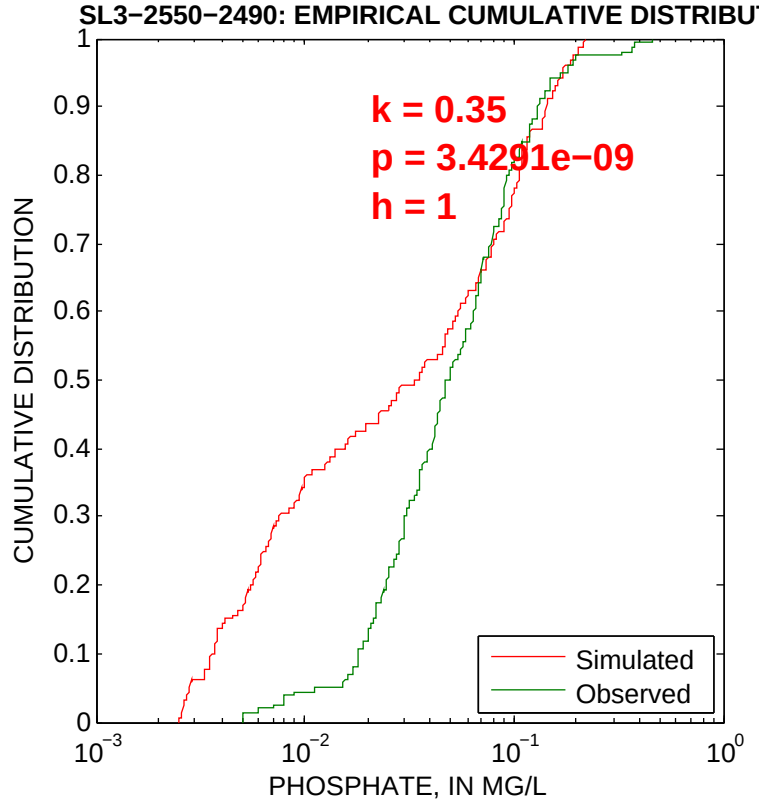












DATA SELECTION

scenario: P620171001WQ | file: PO4X.calib

plot: PO4X - phosphate

Dates: 1/1/1985 – 12/31/201

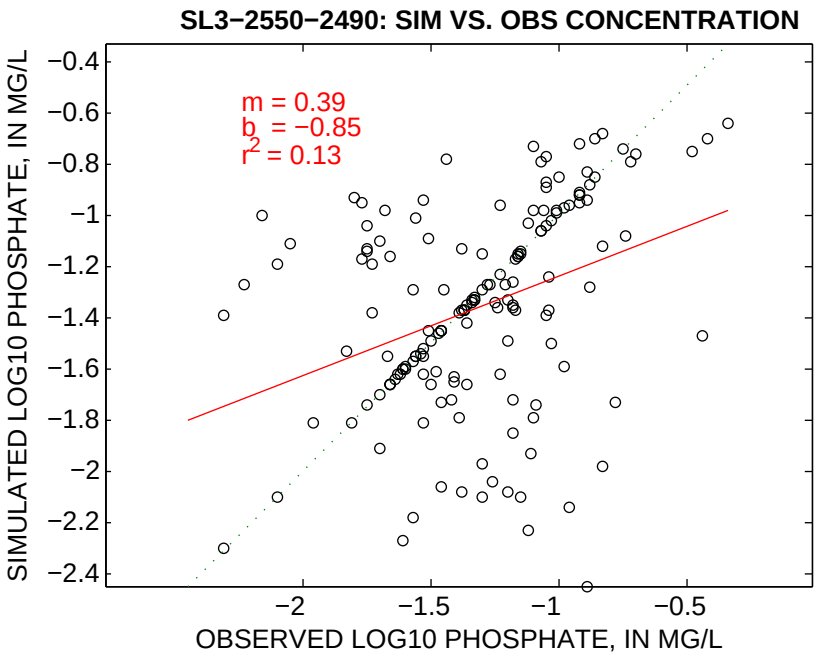
Drive: N/A | Directory: model | Observed: OBS20161101

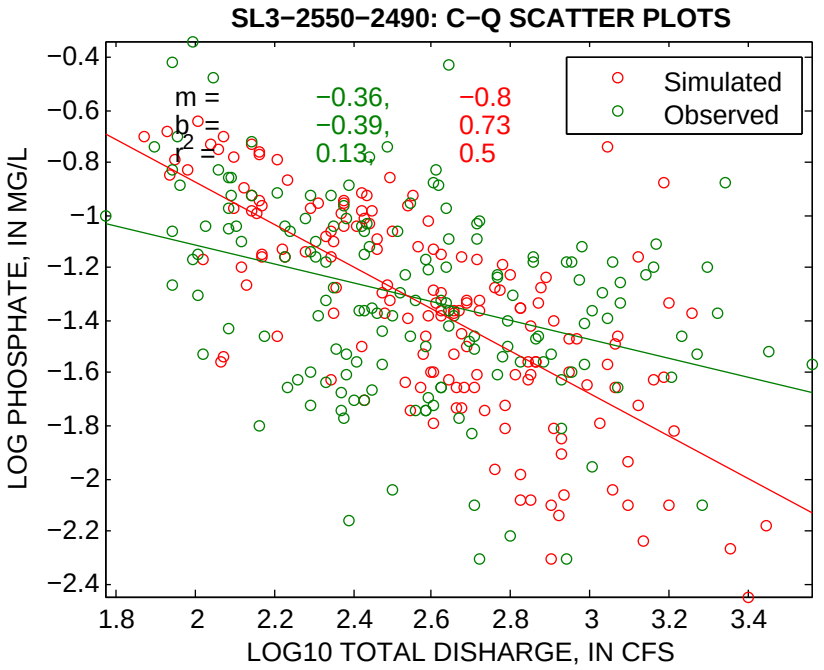
STATISTICS

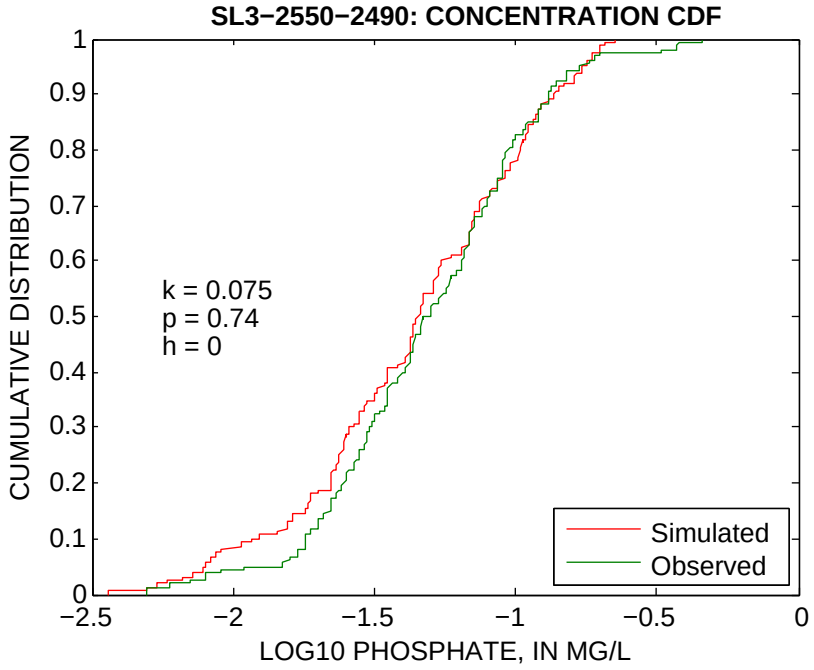
	n	160	160
		observe	simulate
min		0.005	0.0025316
		-2.30103	-2.5966
mean		0.0683288	0.0553512
		-1.31217	-1.59176
media		0.04875	0.0340005
		-1.31217	-1.46868
max		0.46	0.21914
		-0.337242	-0.659278
varian		0.00439282	0.00327472
		0.131558	0.373347
JB		0.001	0.001292
		0.5	0.006434
		ra	log
%		-18.9928	21.3073
err.va		0.00548804	0.574521
rel.std.err		1.24932	4.36706
mod.eff		-0.24932	-3.36706

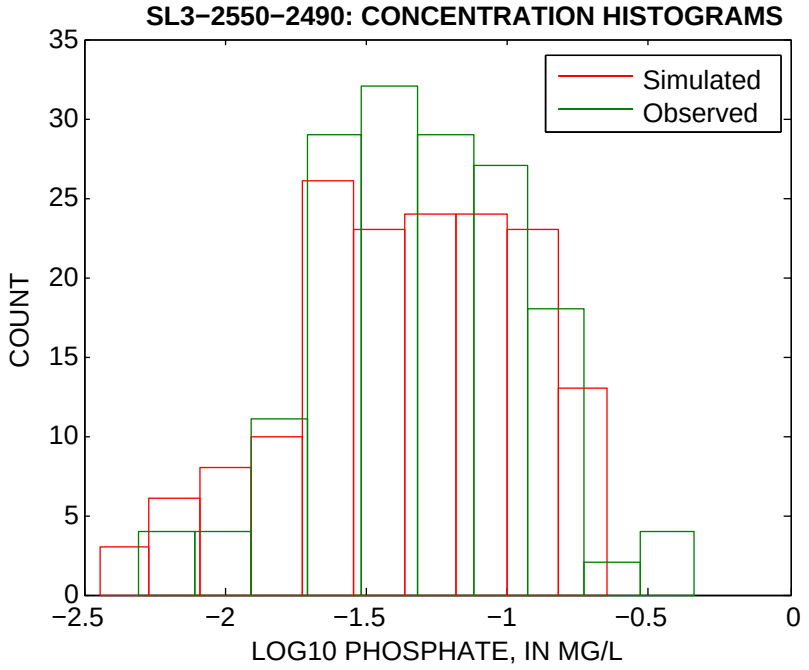
VERSION 2.1

ALL DATA
LOG10

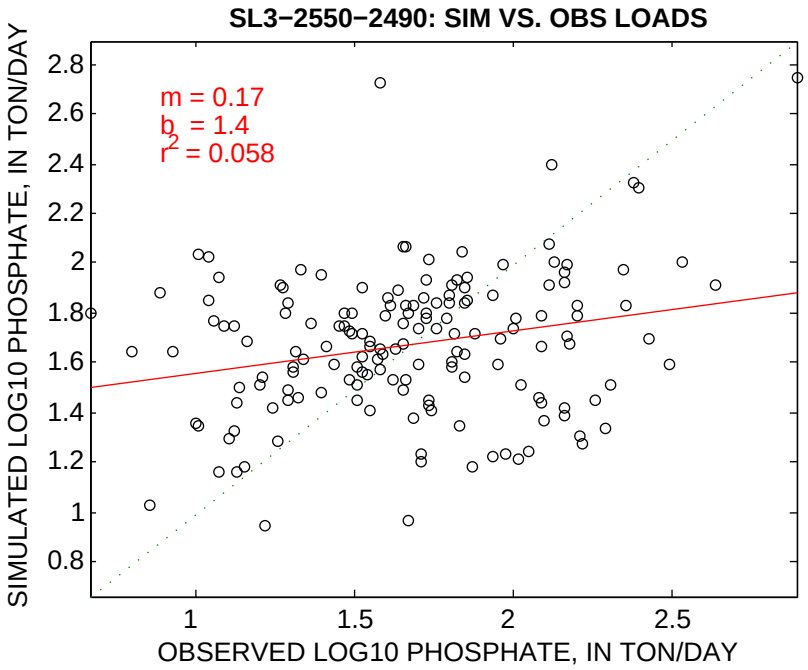


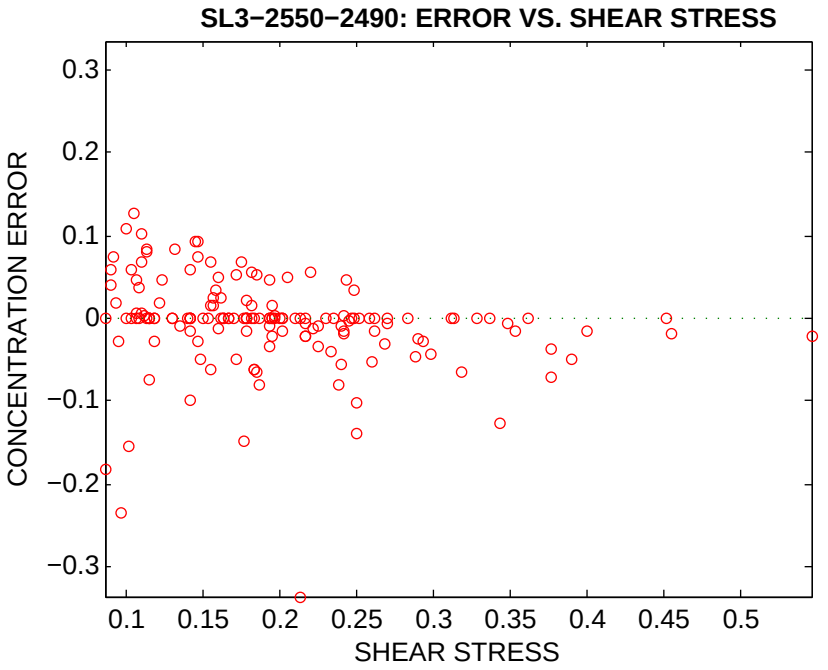


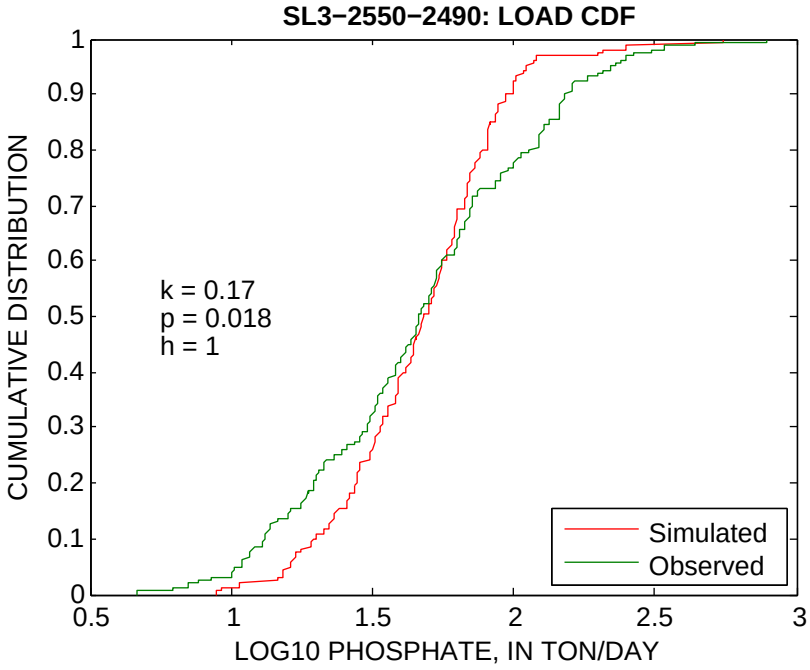


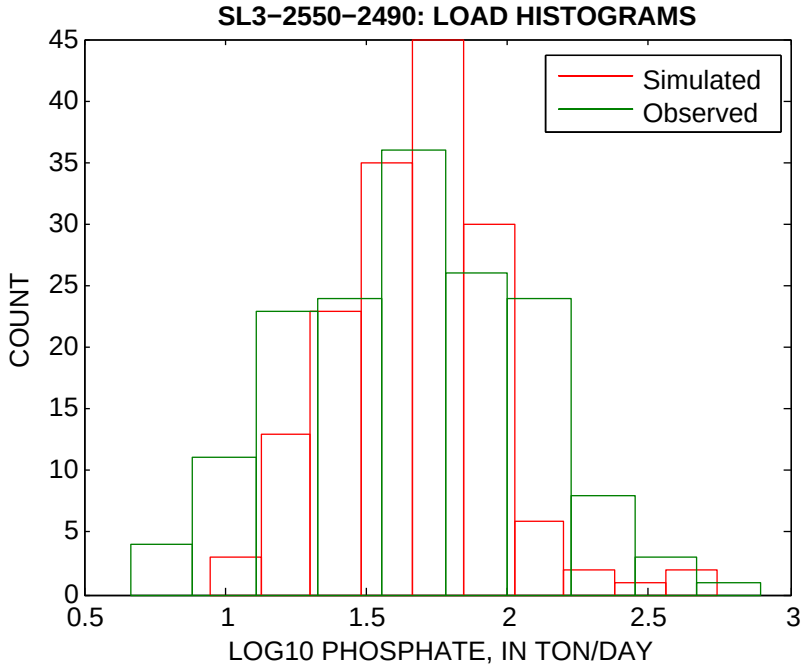


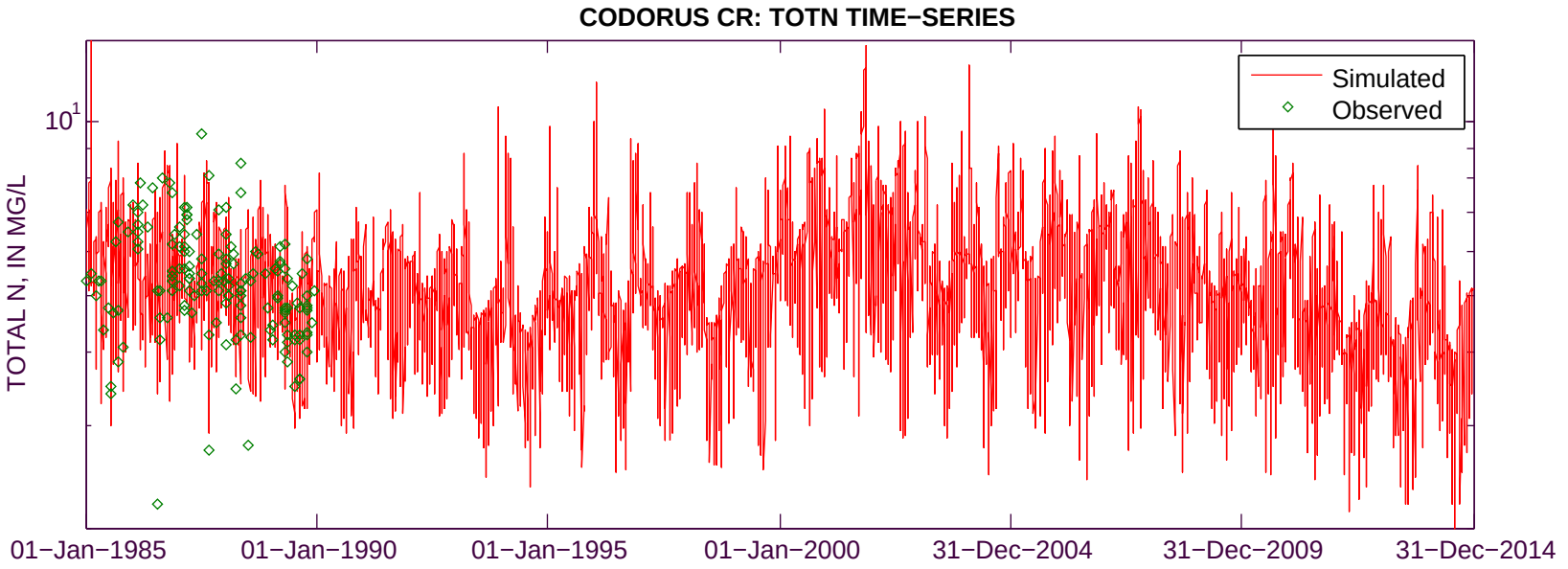
LOAD DATA
LOG10

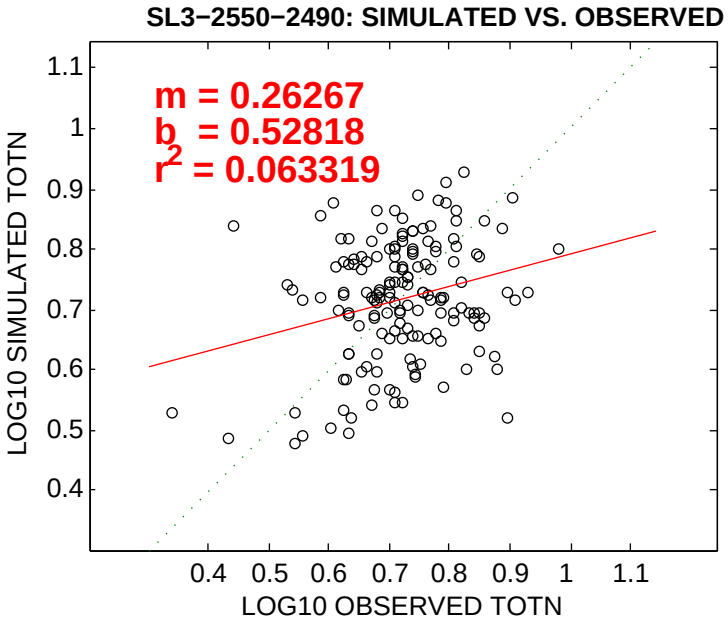


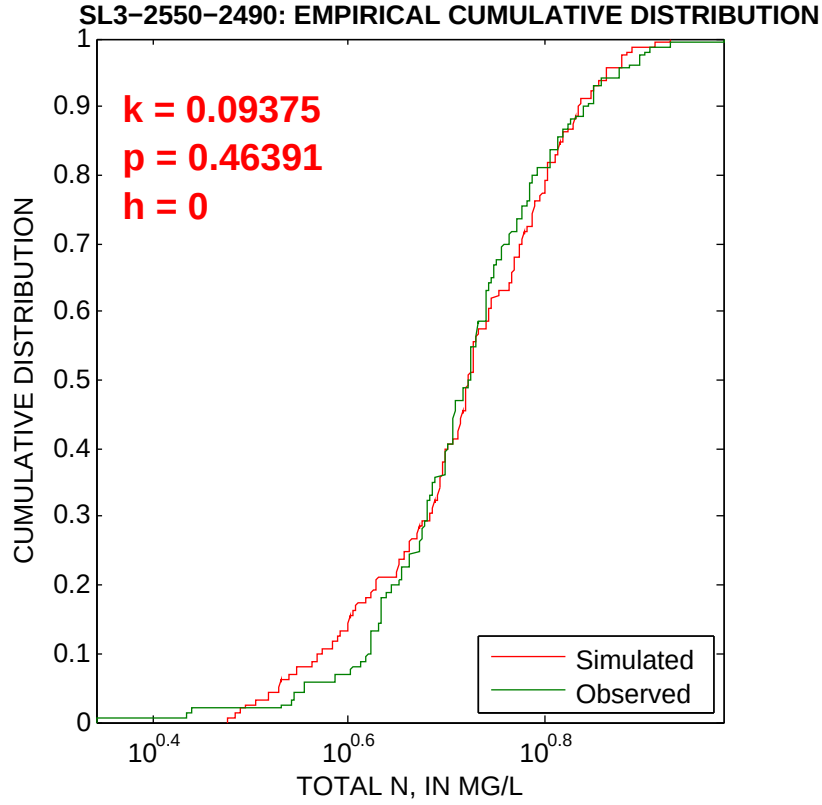












DATA SELECTION

scenario	file
P620171001WQ	TOTN.calib

plot: TOTN - total nitrogen

Dates: 1/1/1985 – 12/31/201

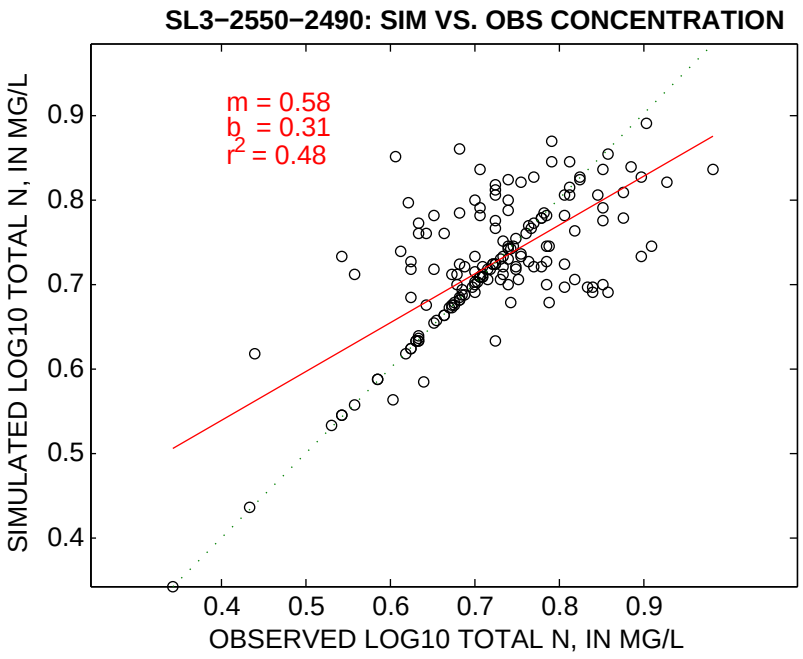
Drive	Directory	Observed
N/A	model	OBS20161101

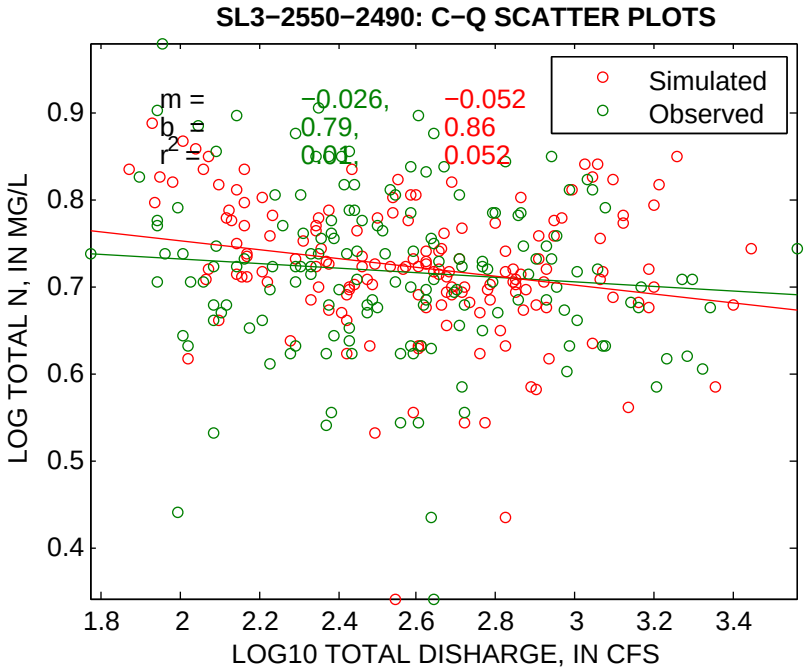
STATISTICS

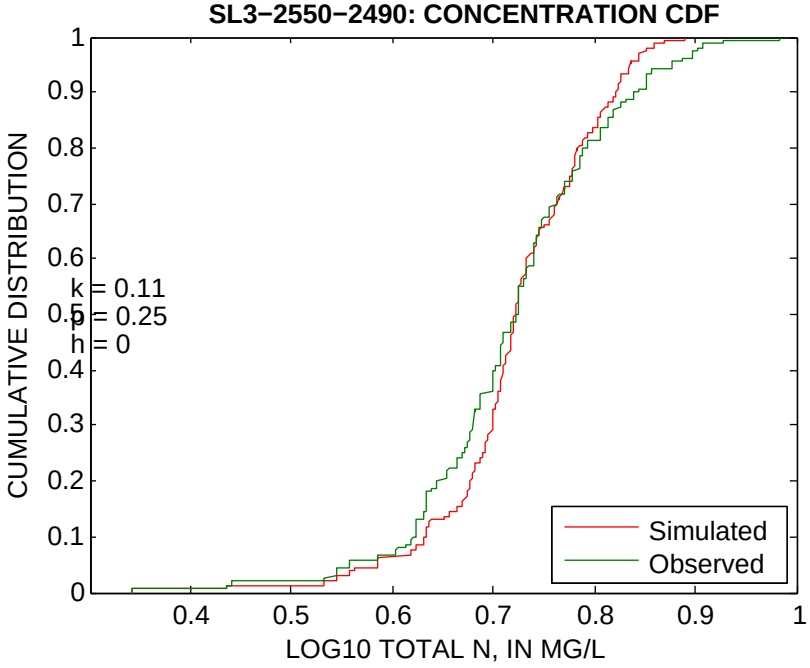
	n	160	160
		observe	simulate
min		2.2	3.0008
		0.342423	0.477237
mean		5.36765	5.34687
		0.719764	0.717241
media		5.28636	5.289
		0.723156	0.723374
max		9.6	8.5068
		0.982271	0.929766
varian		1.32189	1.37508
		0.00898648	0.00979208
JB		0.007378	0.400815
		0.002608	0.065209
		ra	log
%		-0.387276	-0.350485
err.va		2.1343	0.014064
rel.std.err		1.61458	1.56502
mod.eff		-0.614581	-0.56502

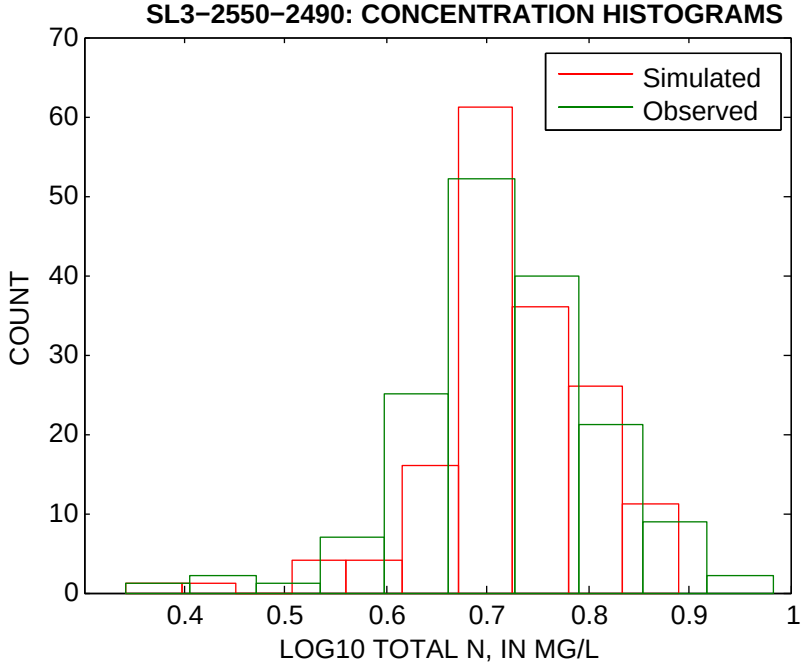
VERSION 2.1

ALL DATA
LOG10

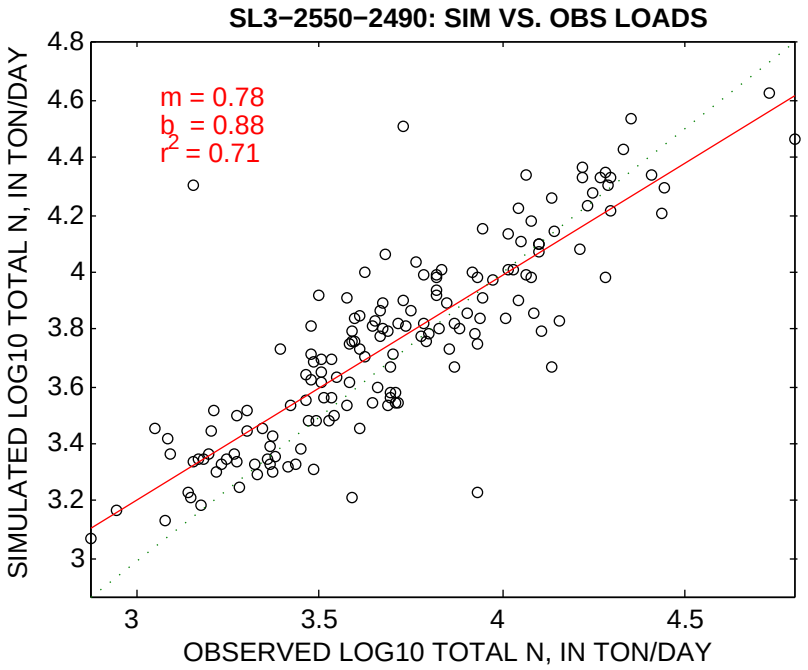


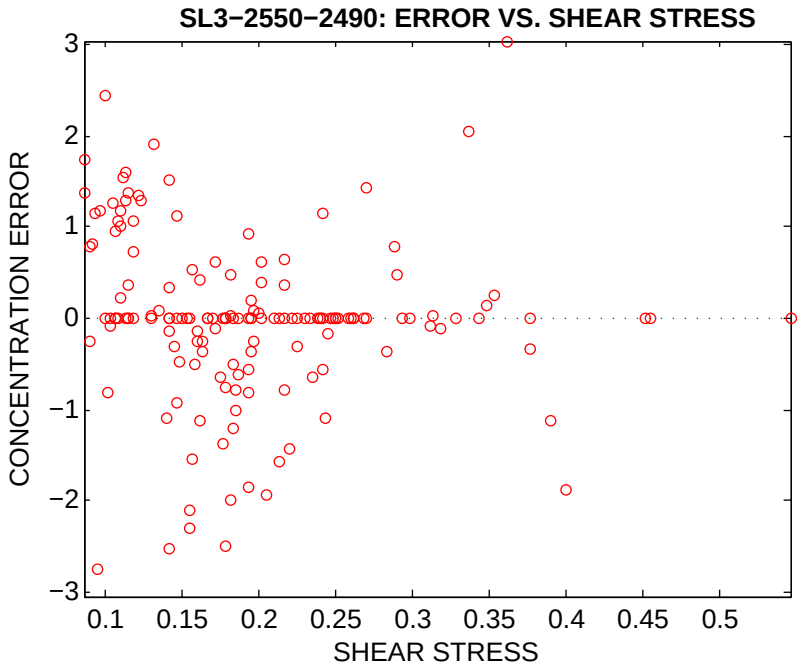


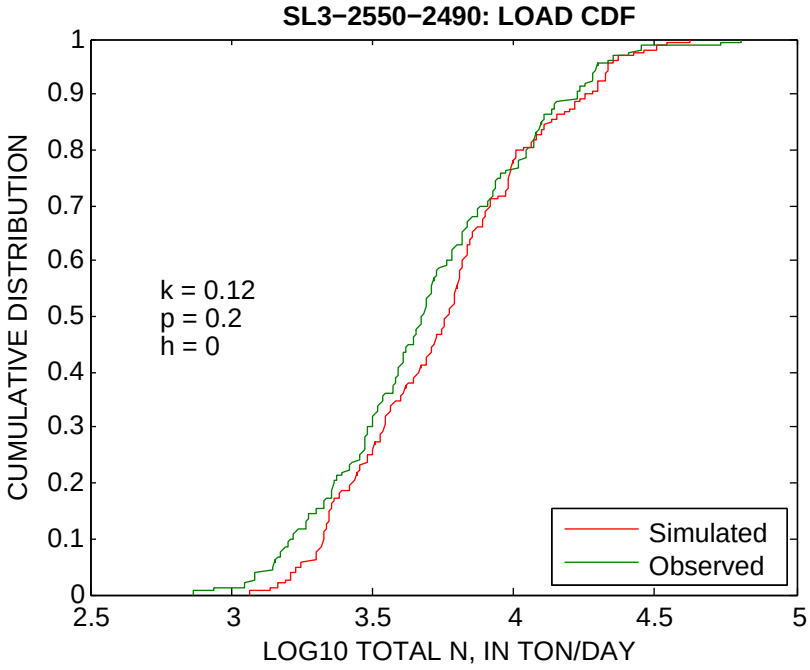


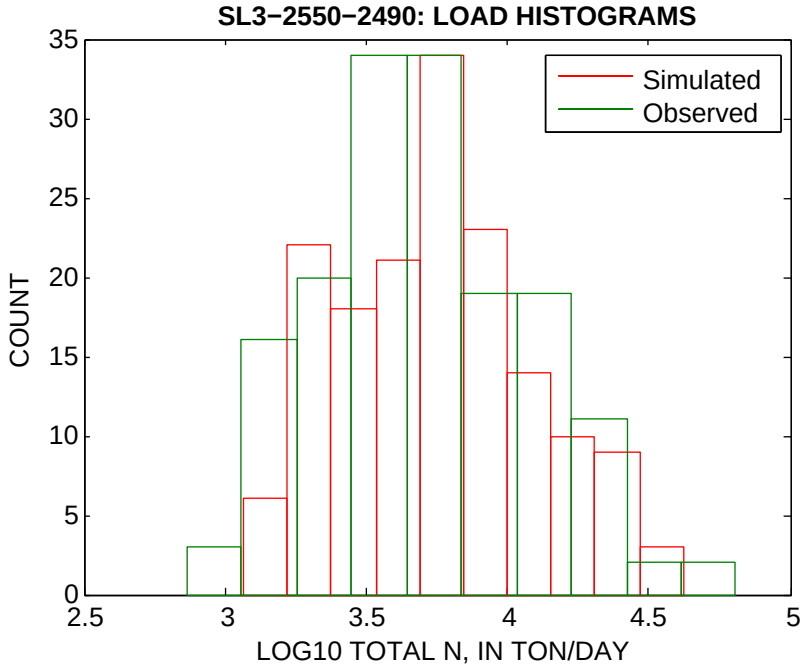


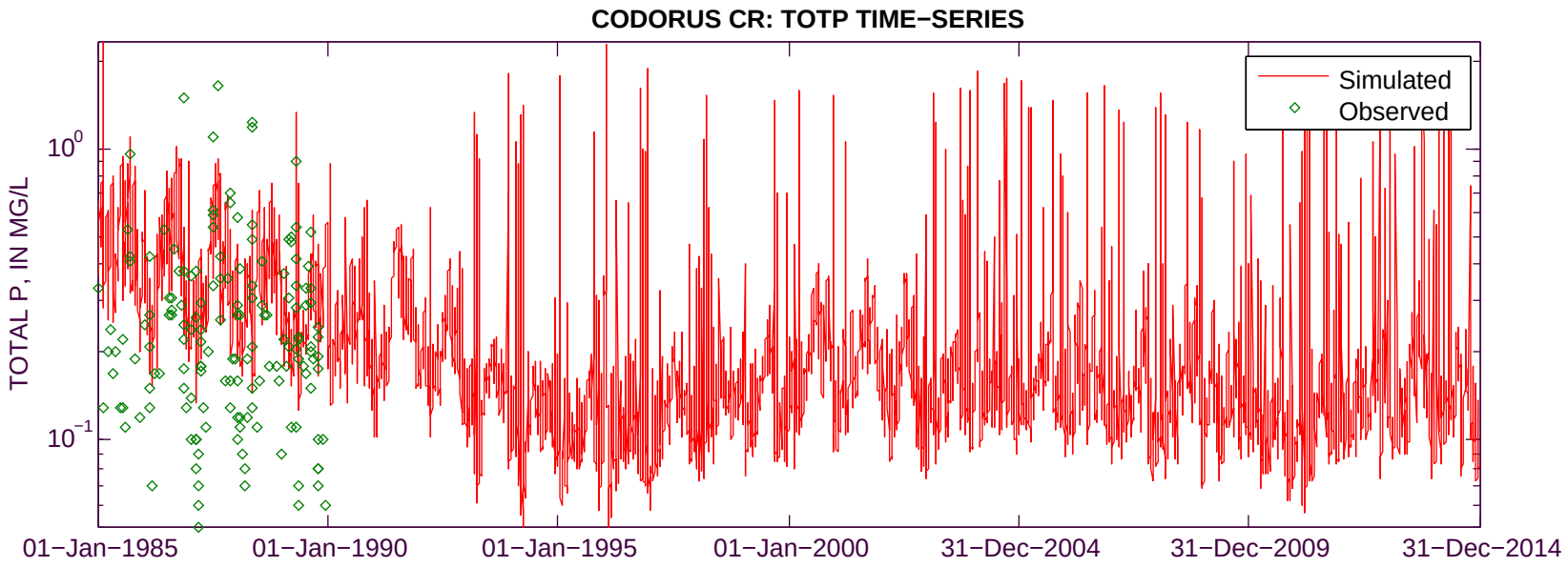
LOAD DATA
LOG10

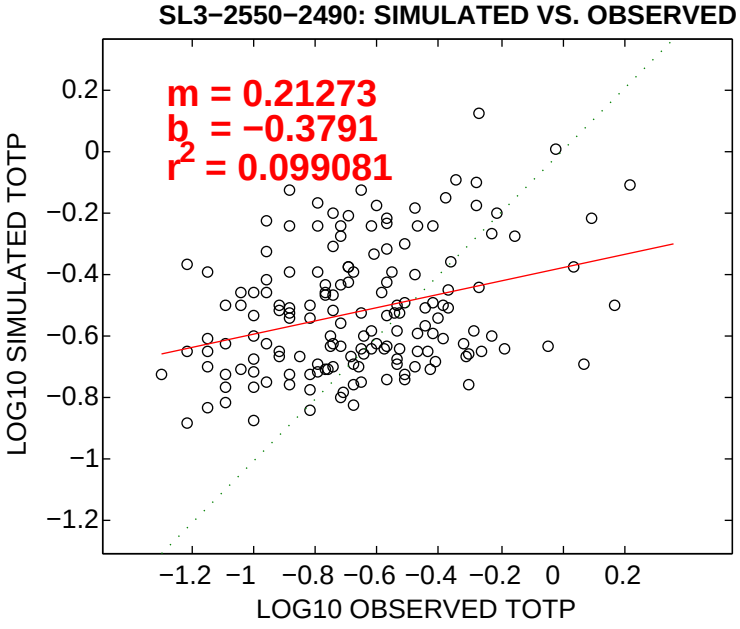


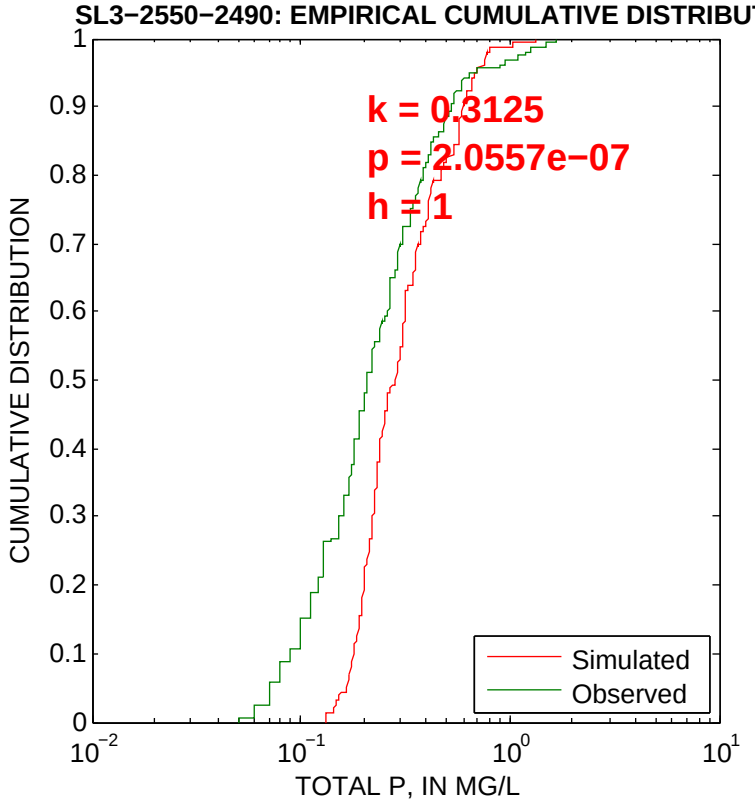












DATA SELECTION

scenario	file
P620171001WQ	TOTP.calib

plot: TOTP - total phosphorus

Dates: 1/1/1985 – 12/31/201

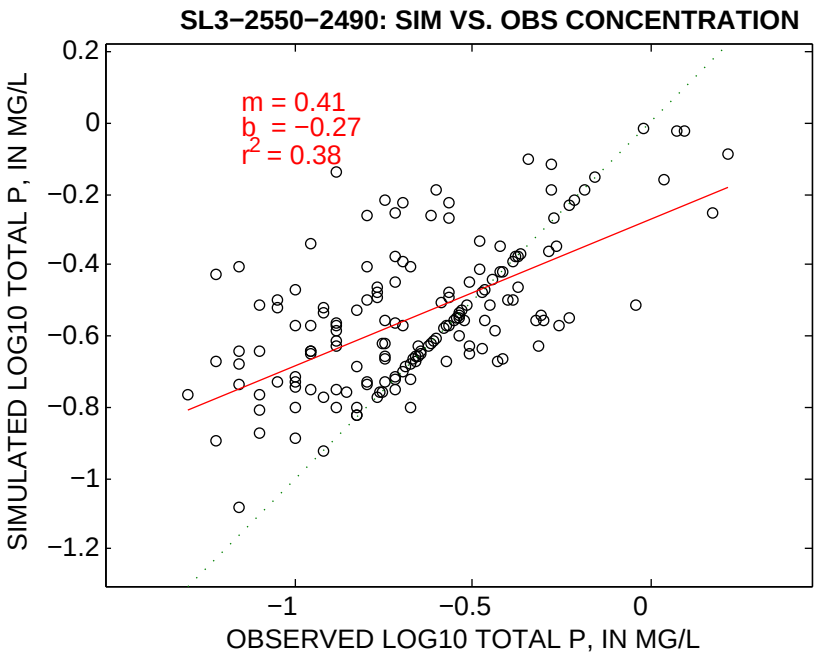
Drive	Directory	Observed
N/A	model	OBS20161101

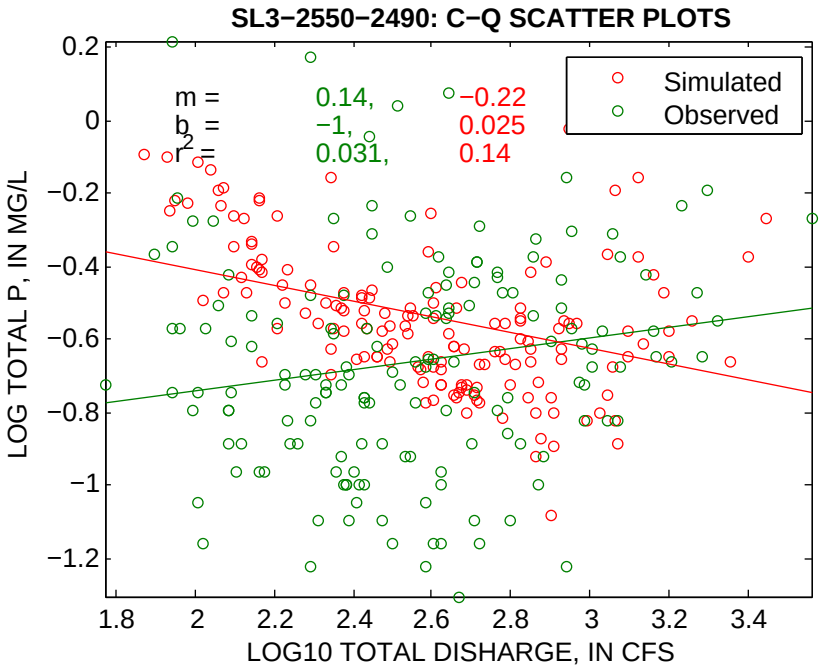
STATISTICS

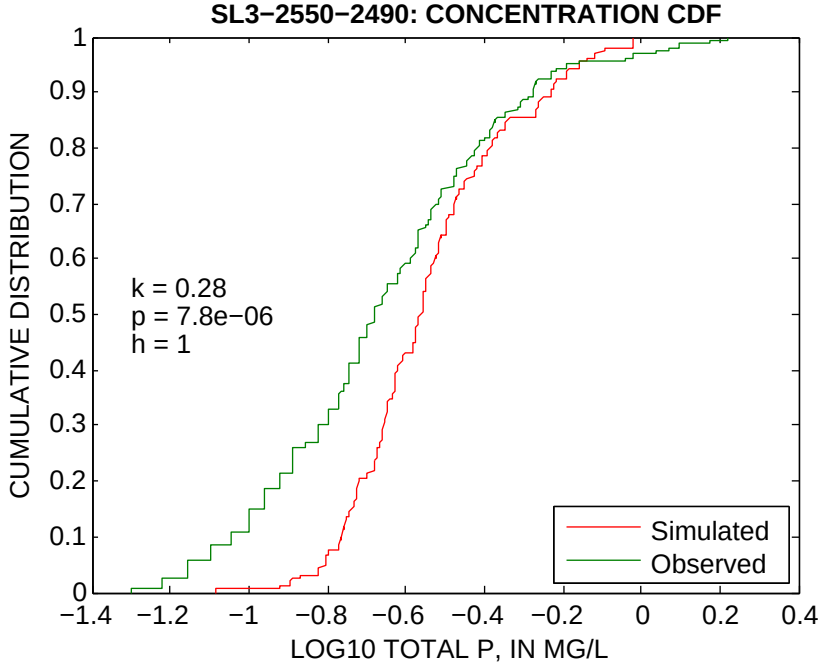
	n	160	160
		observe	simulate
min		0.05	0.13062
		-1.30103	-0.88399
mean		0.283779	0.340357
		-0.65834	-0.519152
media		0.21	0.285985
		-0.677781	-0.543658
max		1.65	1.3313
		0.217484	0.124276
varian		0.0620819	0.0348961
		0.089746	0.0409911
JB		0.001	0.001
		0.119211	0.012807
		ra	log
%		19.9371	-21.1423
err.va		0.0716221	0.112049
rel.std.err		1.15367	1.24851
mod.eff		-0.153672	-0.248509

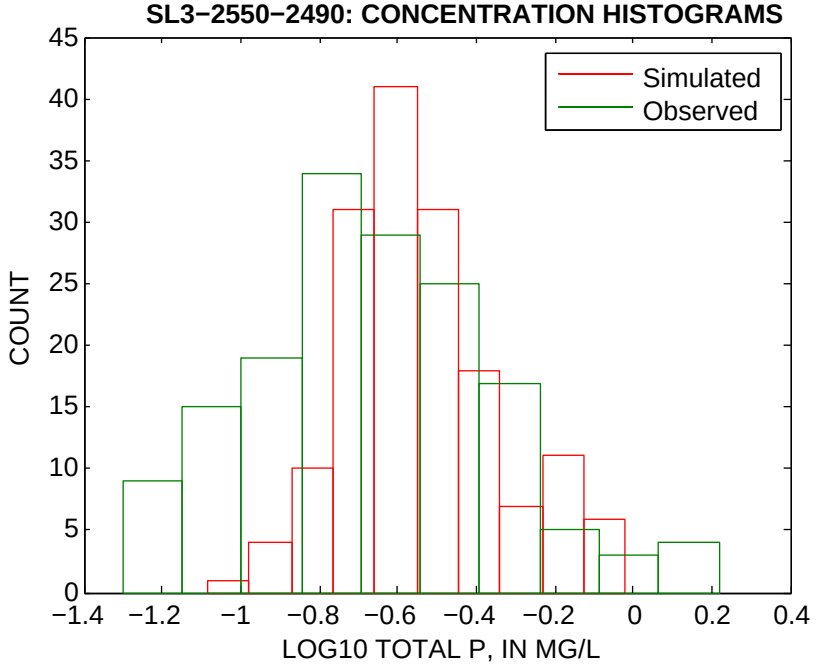
VERSION 2.1

ALL DATA
LOG10

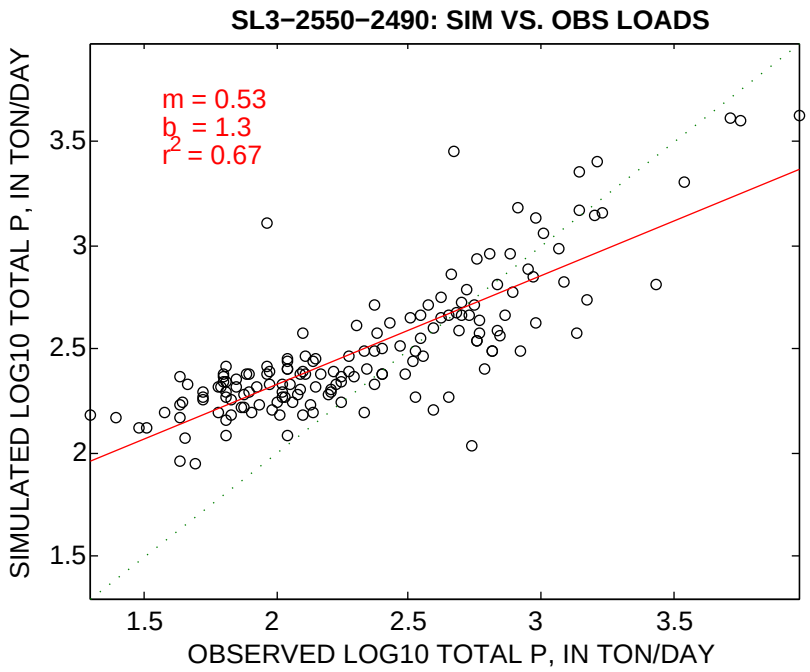


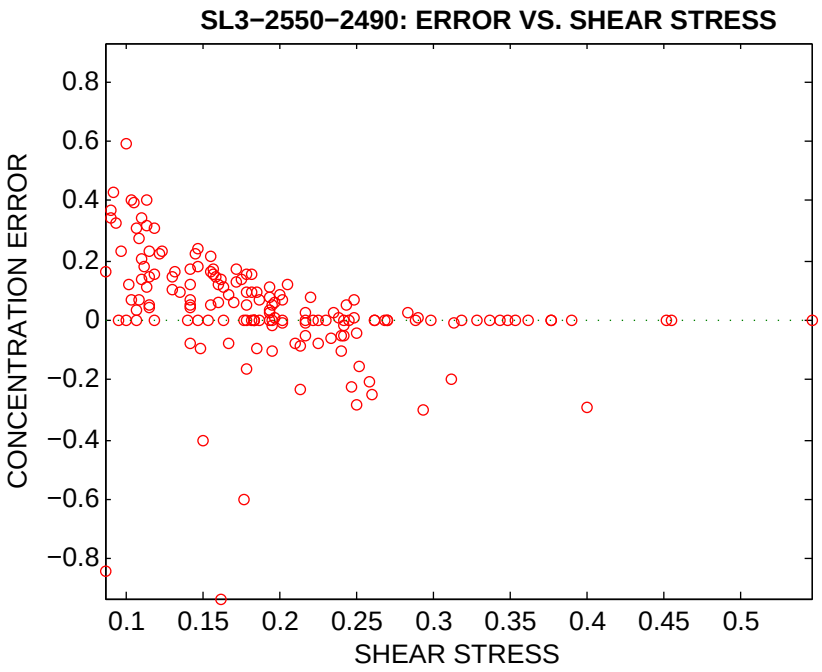


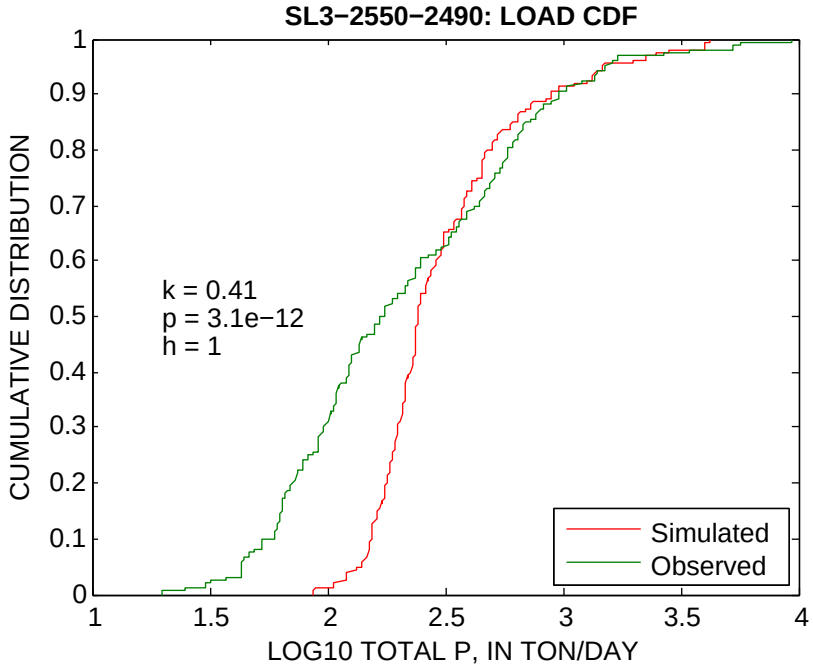


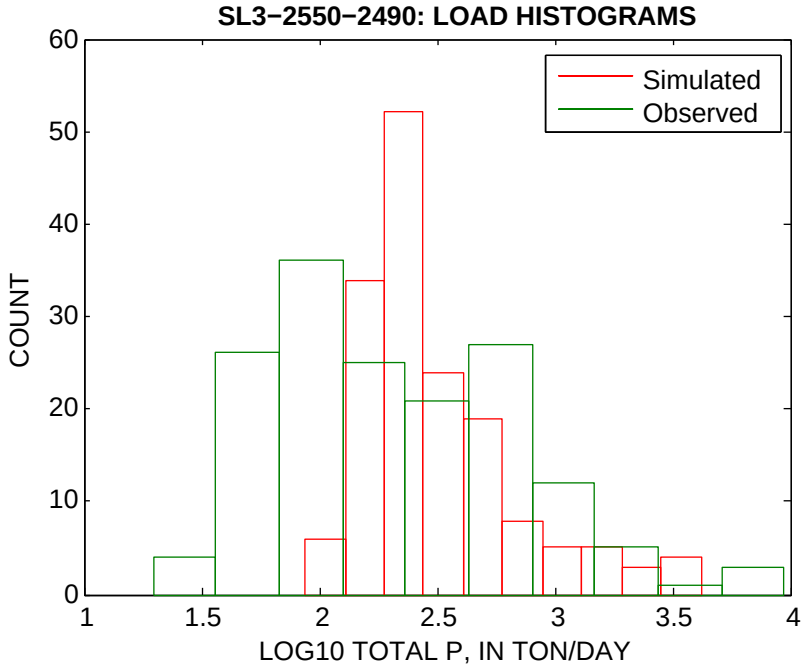


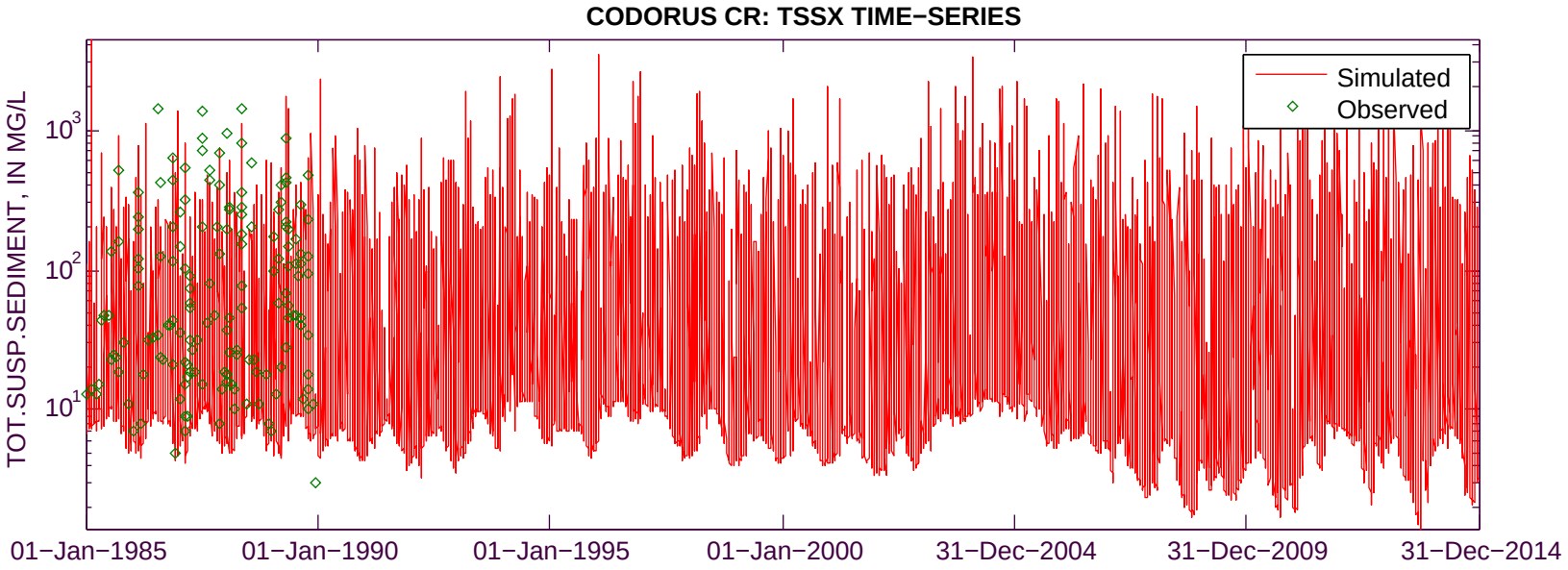
LOAD DATA
LOG10

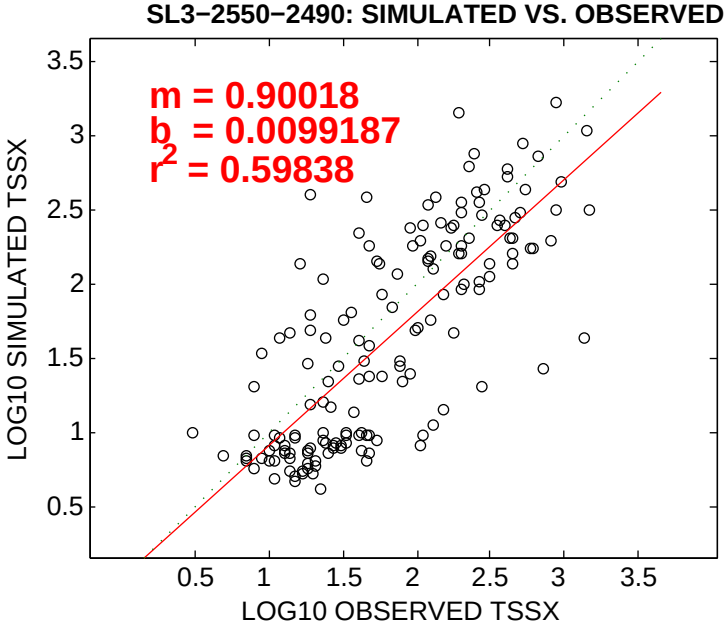


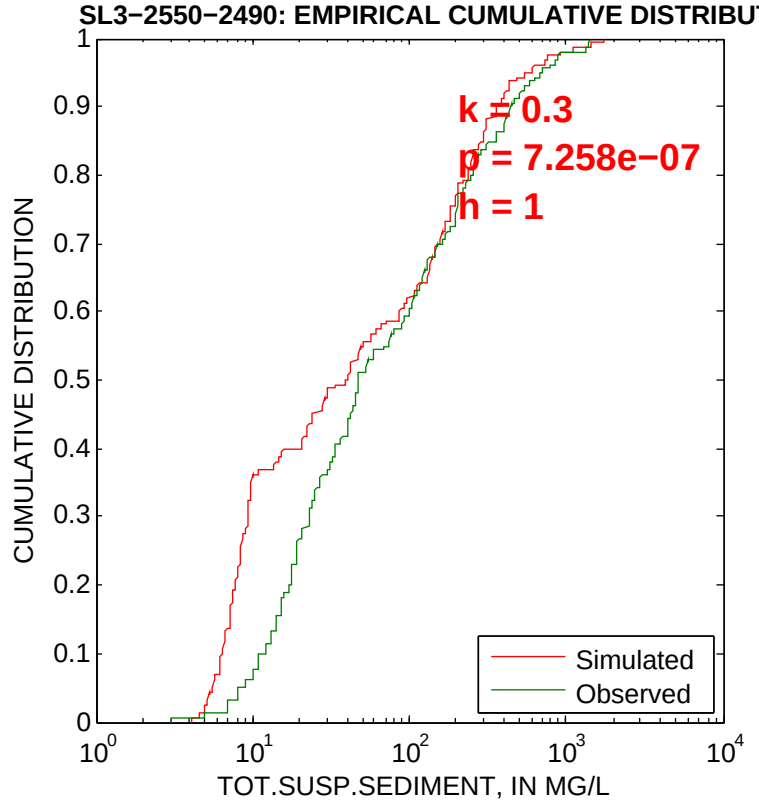












DATA SELECTION

scenario: P620171001WQ | file: TSSX.calib

plot: TSSX - total suspended ...

Dates: 1/1/1985 – 12/31/201

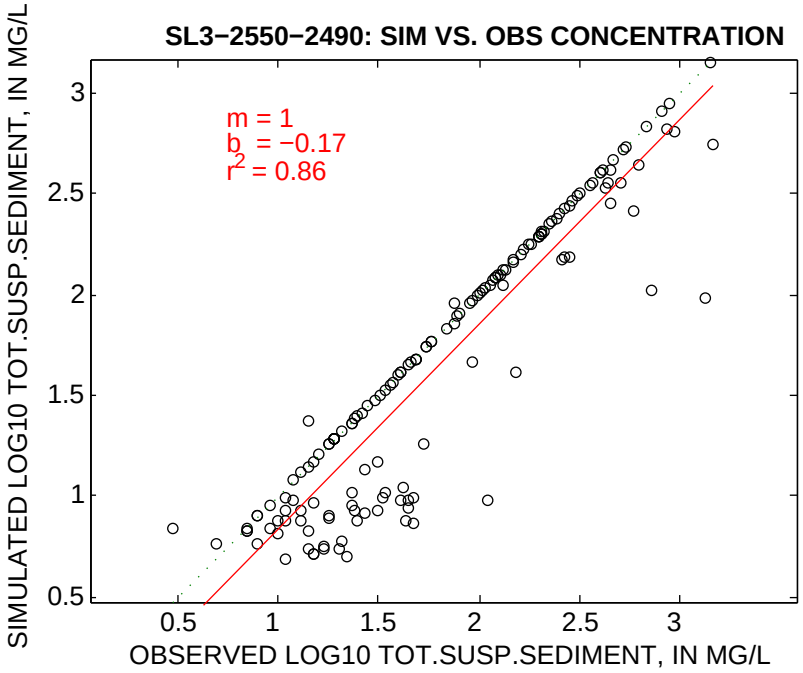
Drive | Directory: N/A | model | Observed: OBS20161101

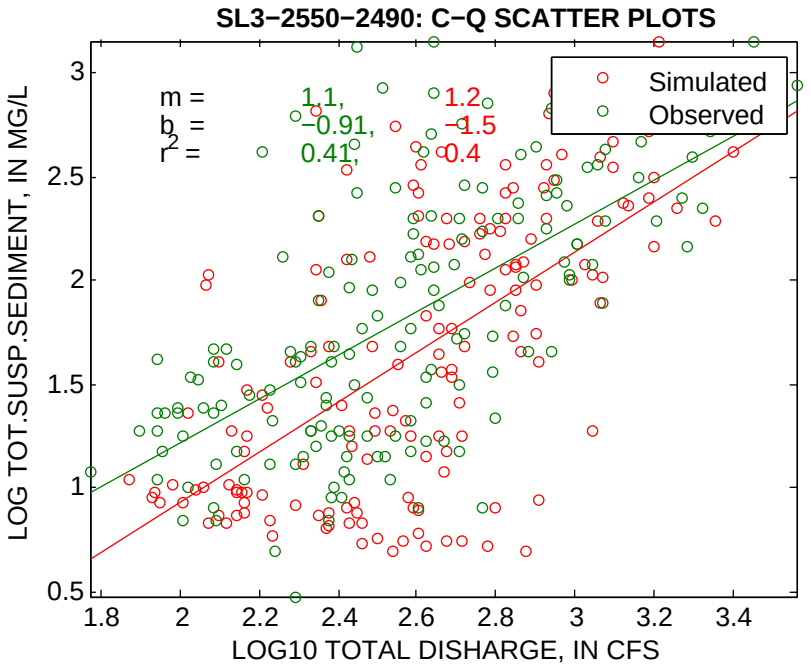
STATISTICS

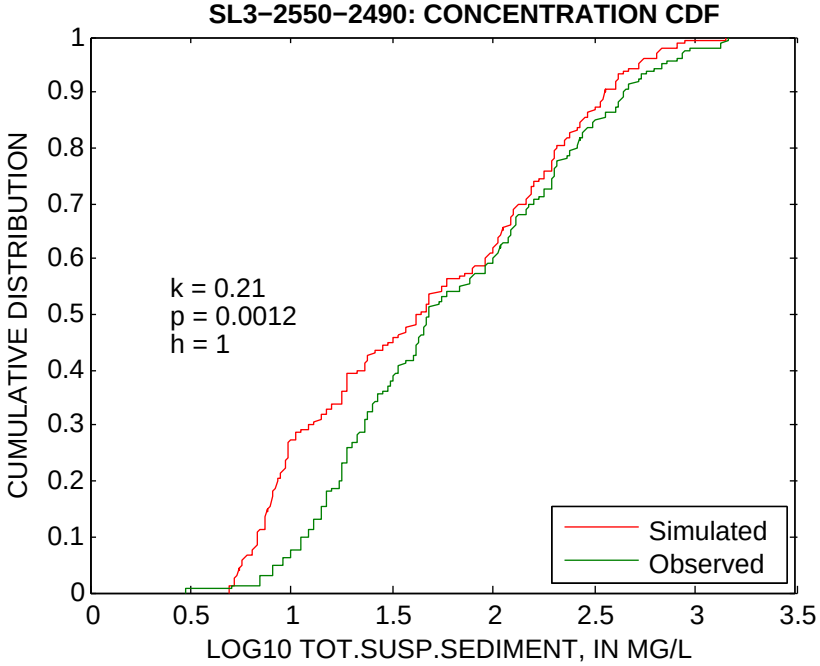
	observe	simulate
n	160	160
min	3	4.1584
	0.477121	0.618926
mean	164.927	142.921
	1.80395	1.63381
media	48	39.8405
	1.68124	1.60016
max	1445	1720
	3.15987	3.23553
varian	65939.9	59681.3
	0.374954	0.507763
JB	0.001	0.001
	0.029608	0.008574
	ra	log
%	-13.3426	-9.43187
err.va	56804	0.236794
rel.std.err	0.86145	0.631528
mod.eff	0.13855	0.368472

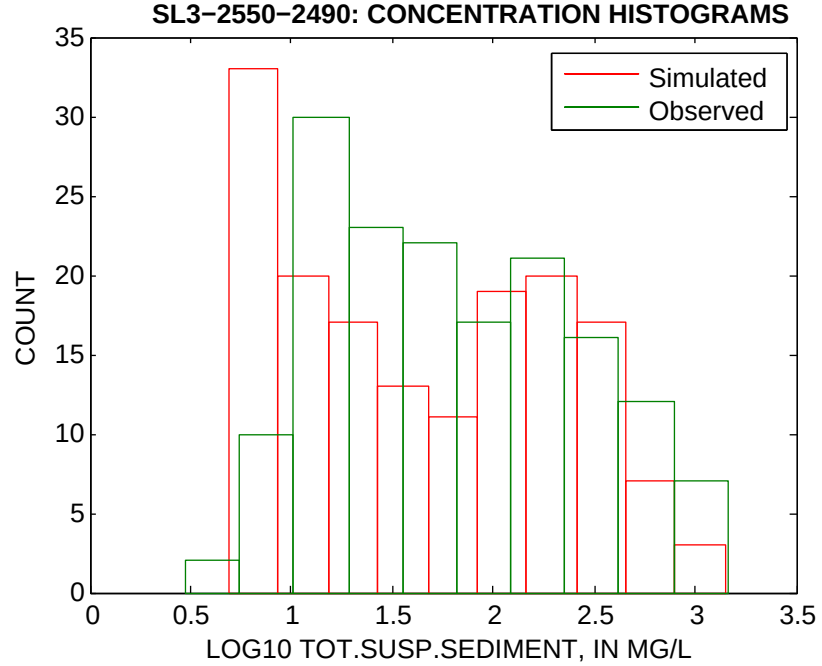
VERSION 2.1

ALL DATA
LOG10

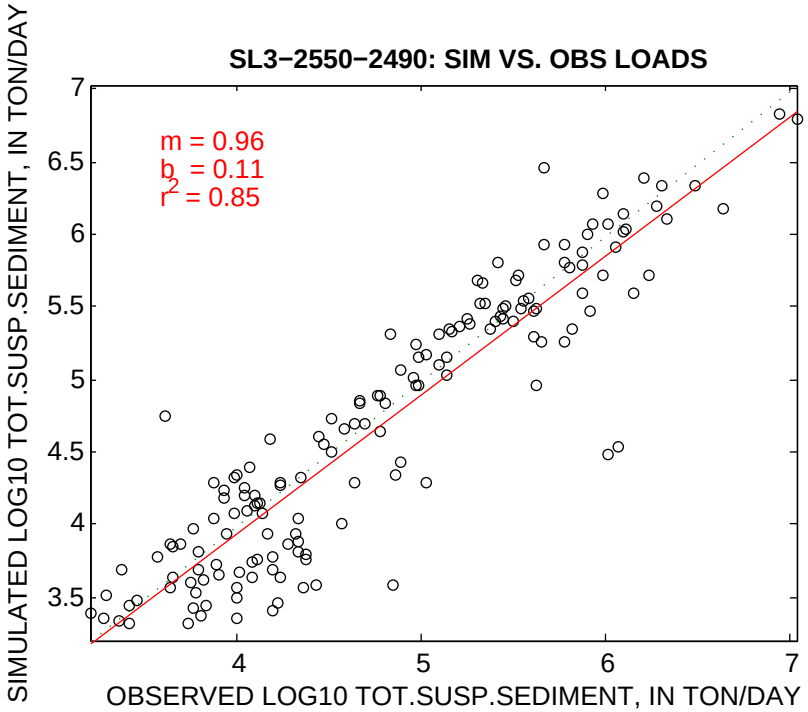


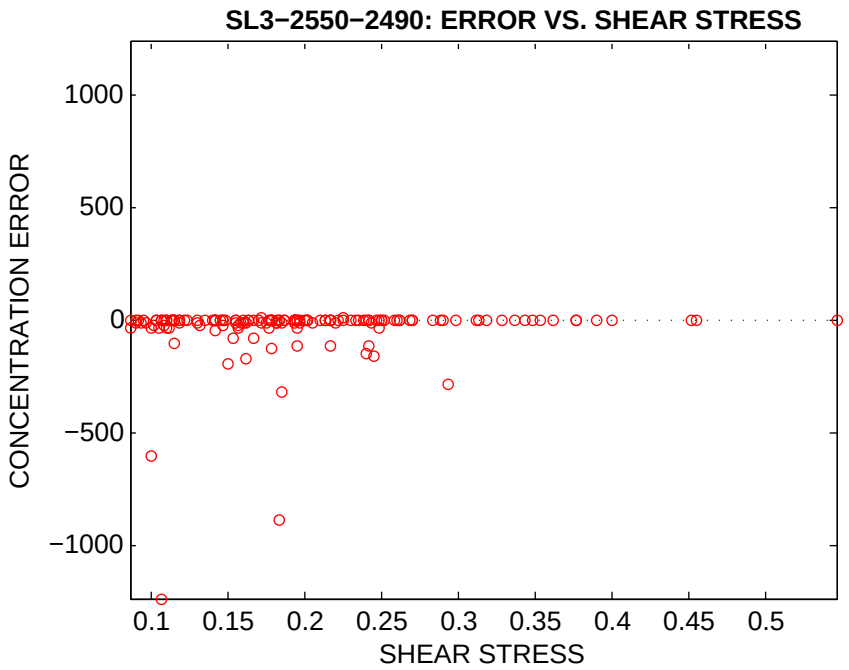


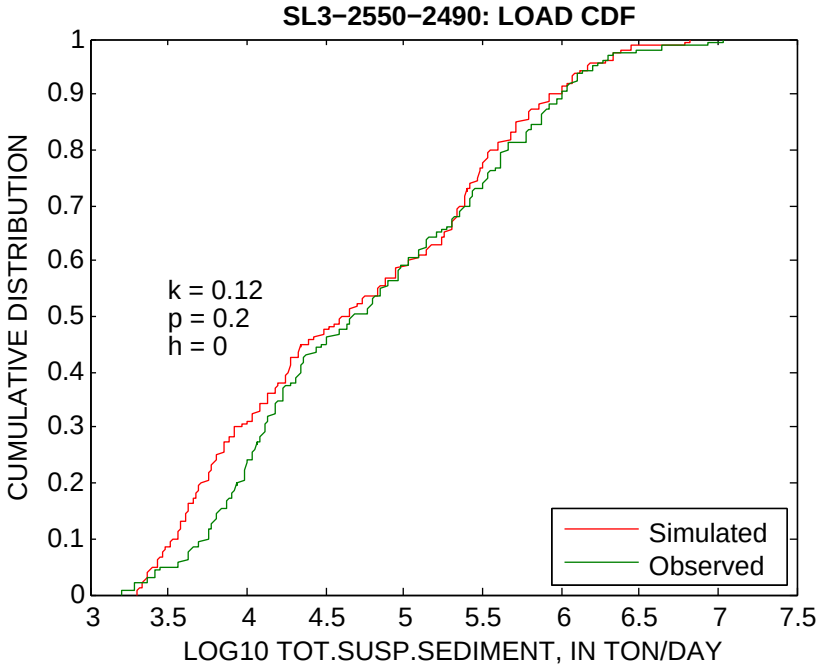


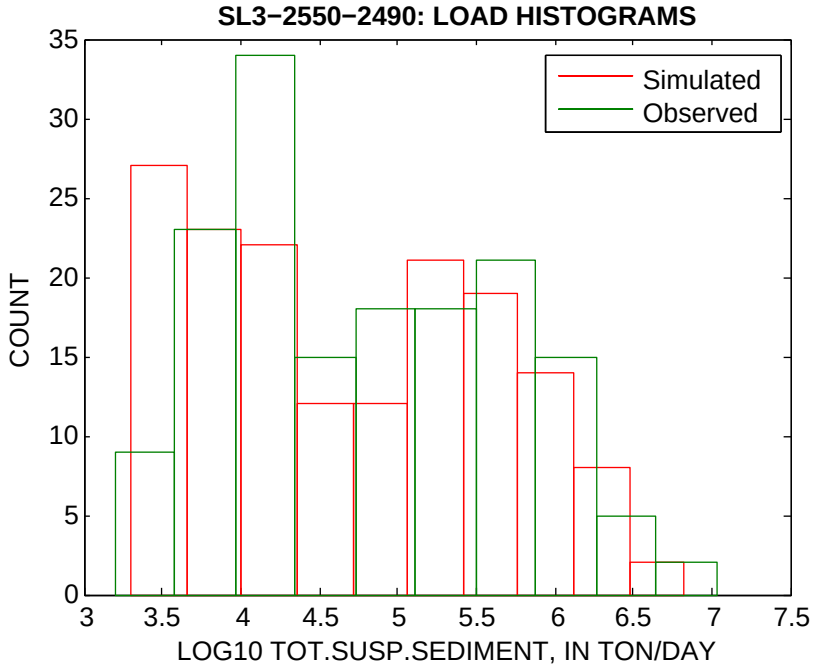


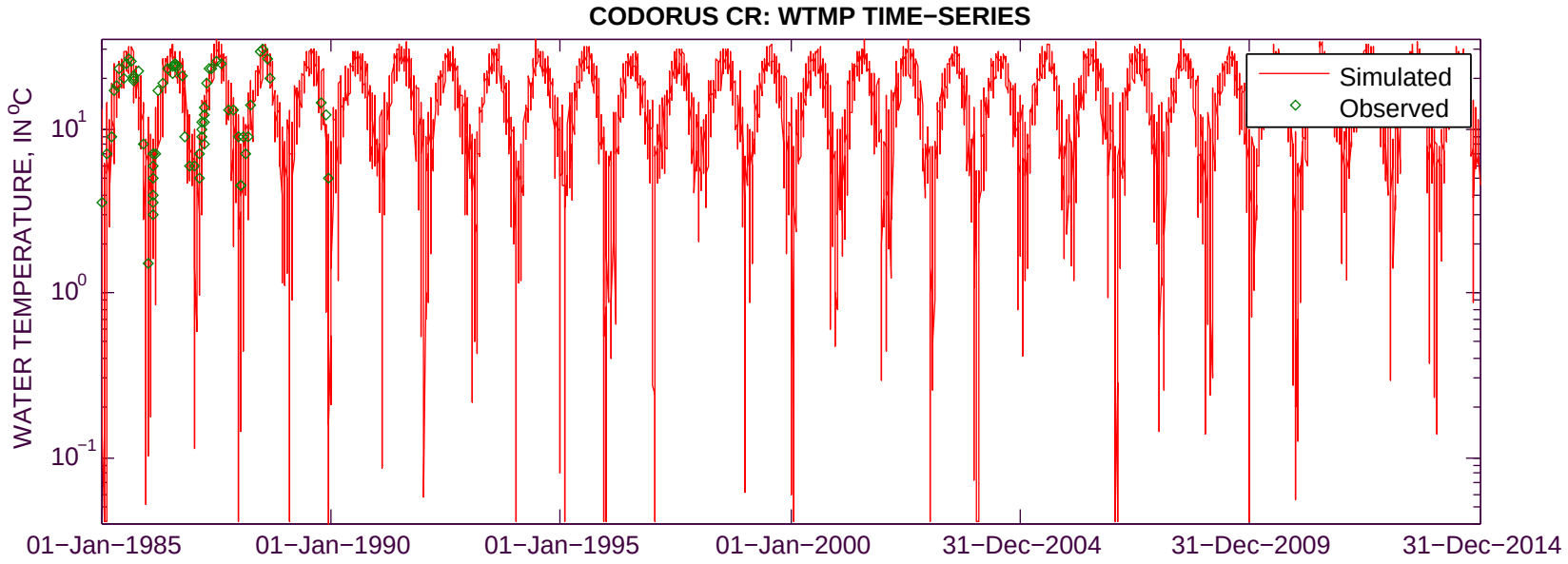
LOAD DATA
LOG10

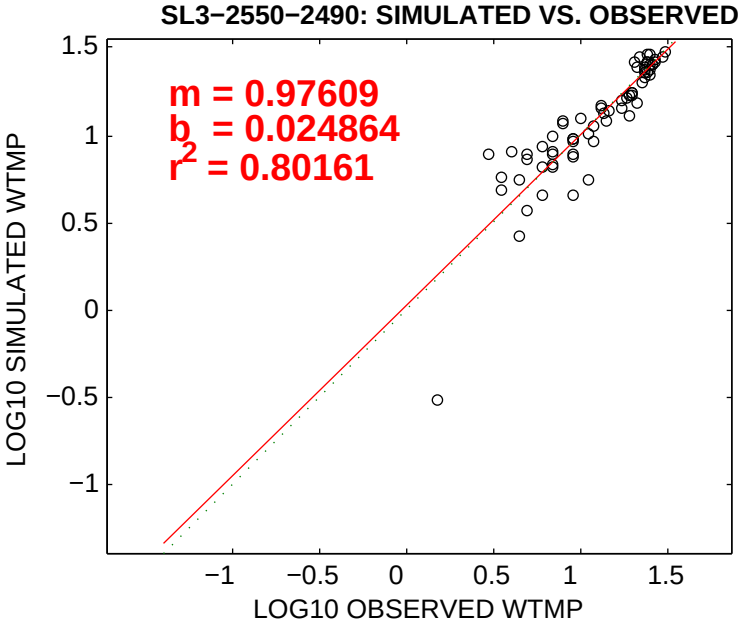


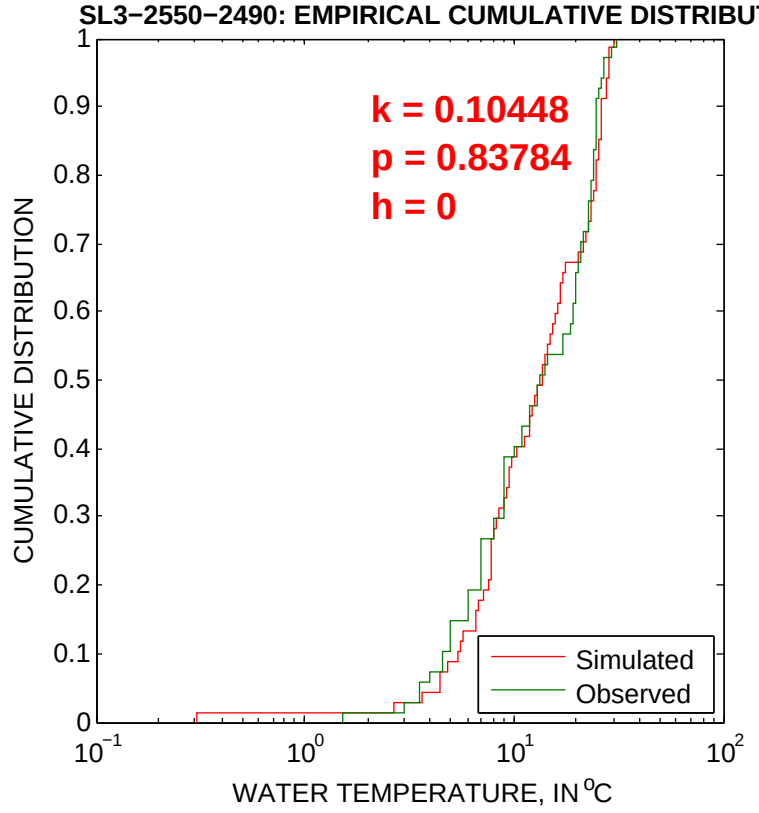












DATA SELECTION

scenario	file
P620171001WQ	WTMP.calib

plot: WTMP - water tempera...

Dates: 1/1/1985 – 12/31/201

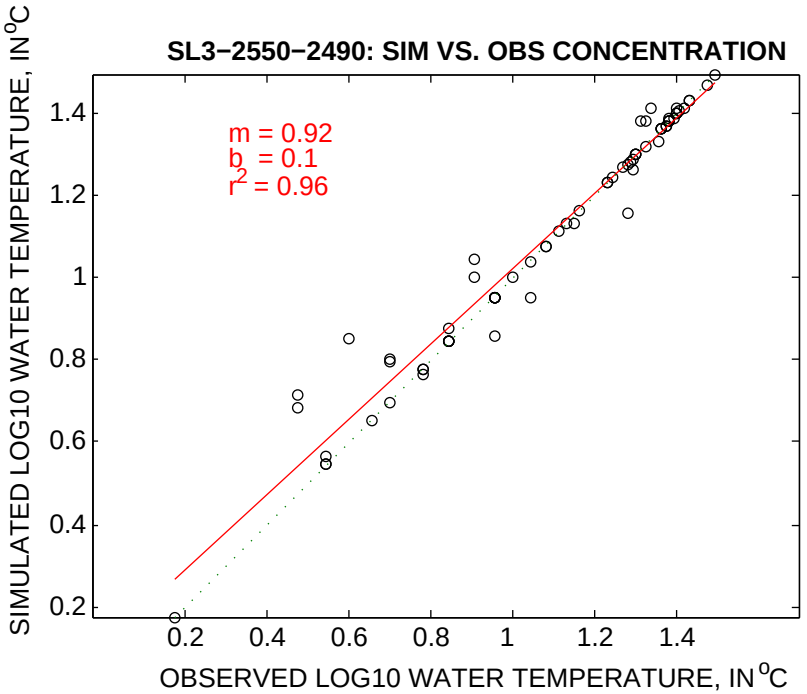
Drive	Directory	Observed
N/A	model	OBS20161101

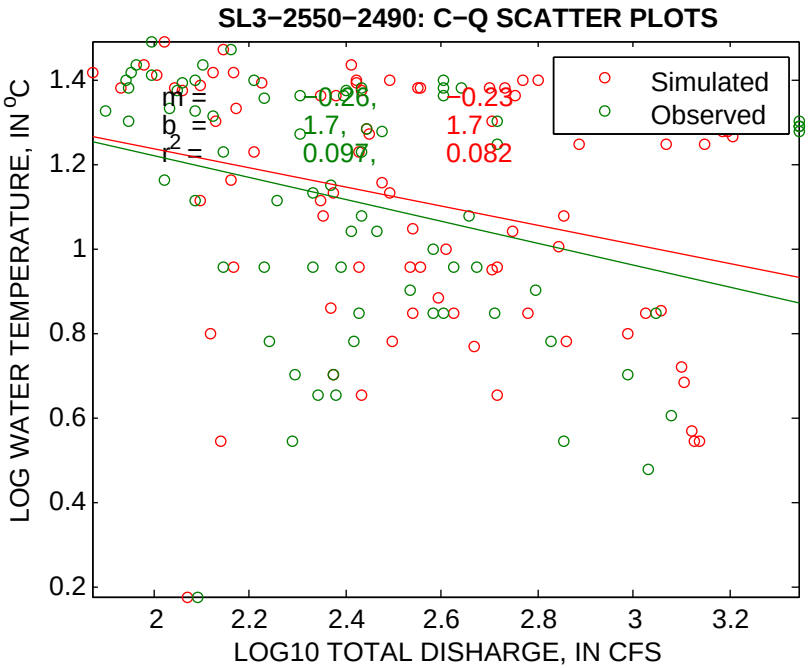
STATISTICS

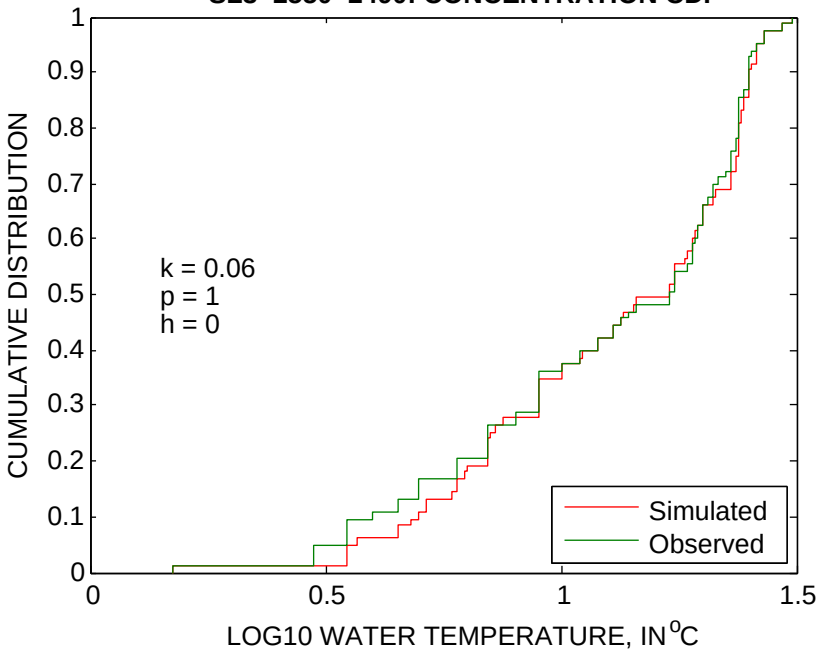
	n	observe	simulate
		67	67
min		1.5	0.30731
		0.176091	-0.512423
mean		14.906	14.961
		1.08658	1.08546
media		13.5	13.534
		1.13033	1.13143
max		31	30.103
		1.49136	1.47861
varian		68.353	68.4906
		0.091053	0.10822
JB		0.044625	0.048810
		0.046744	0.001
		ra	log
%		0.369191	-0.102811
err.va		7.02725	0.0215228
rel.std.err		0.102808	0.236376
mod.eff		0.897192	0.763624

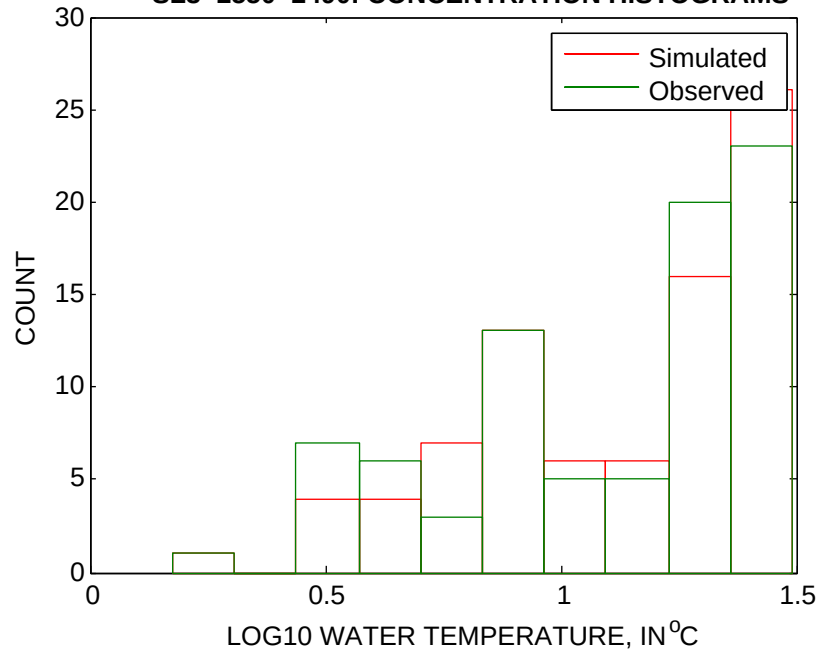
VERSION 2.1

ALL DATA
LOG10

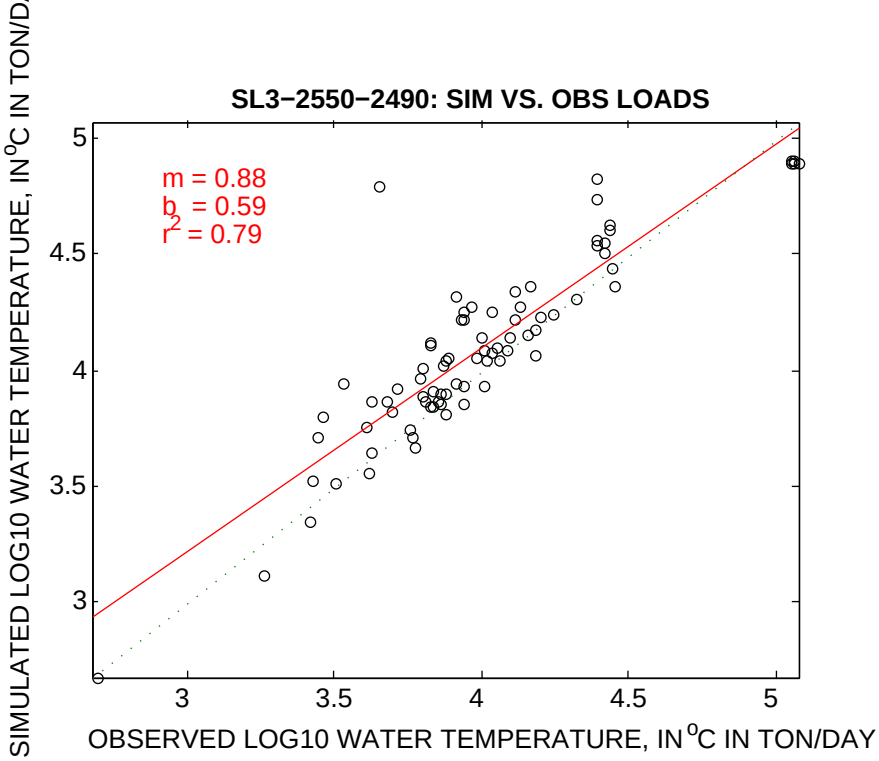


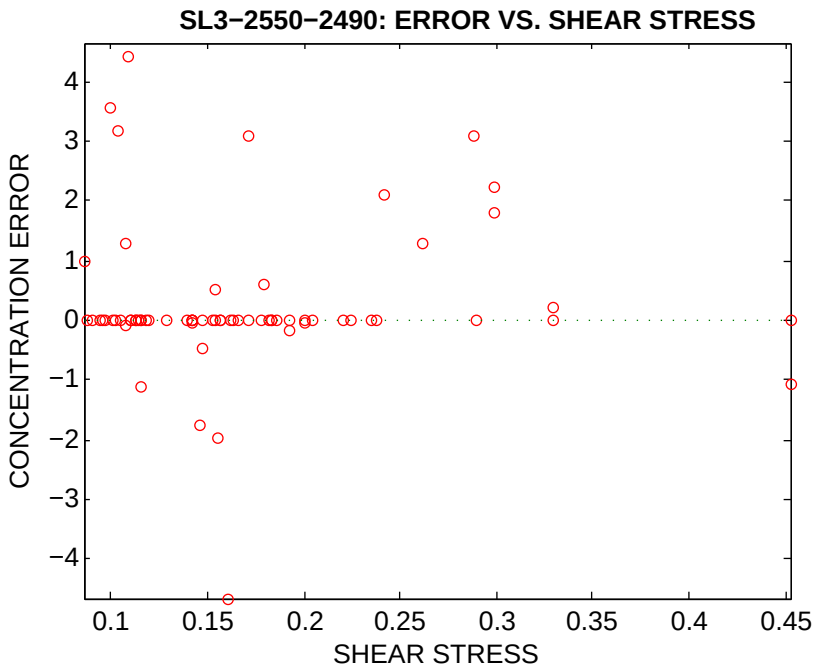


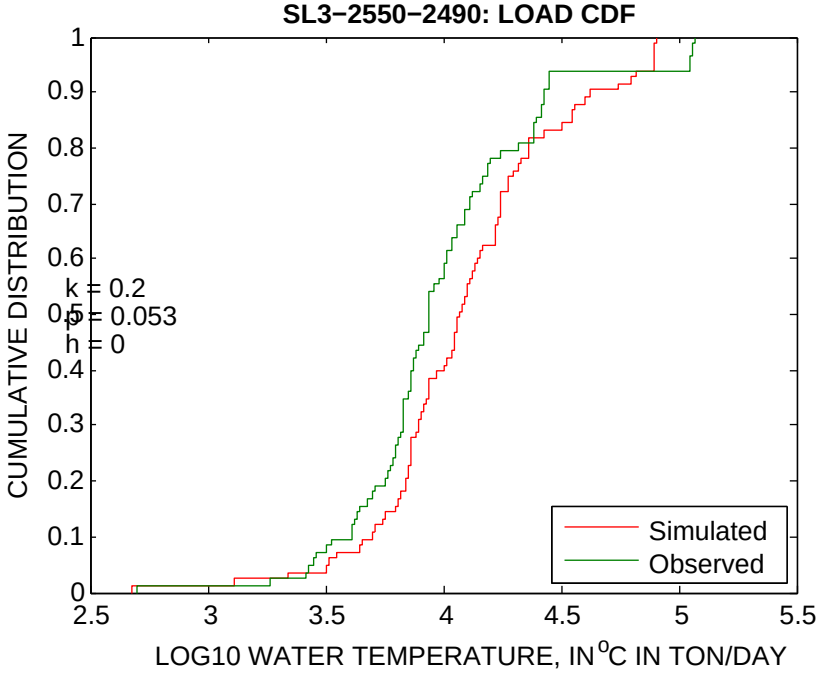


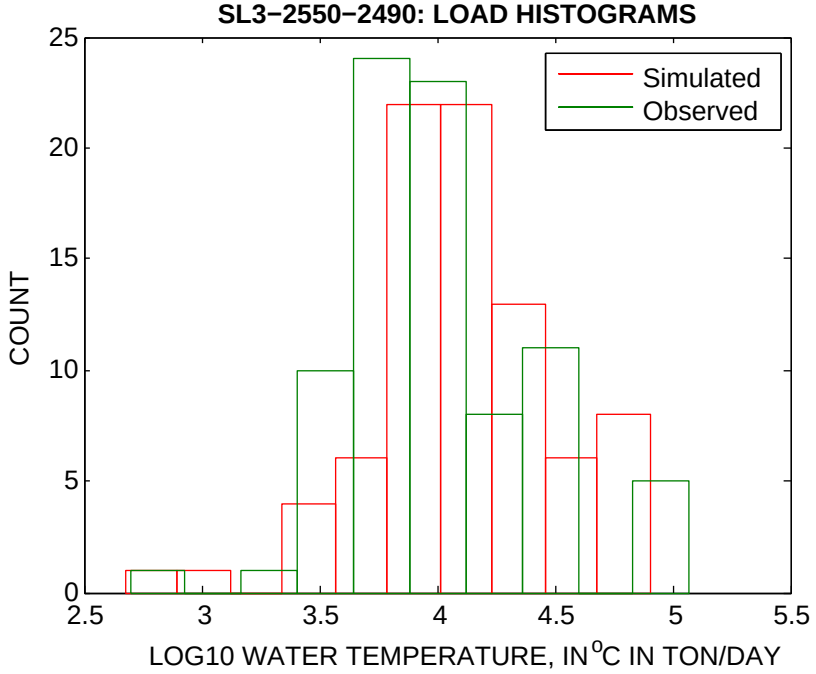


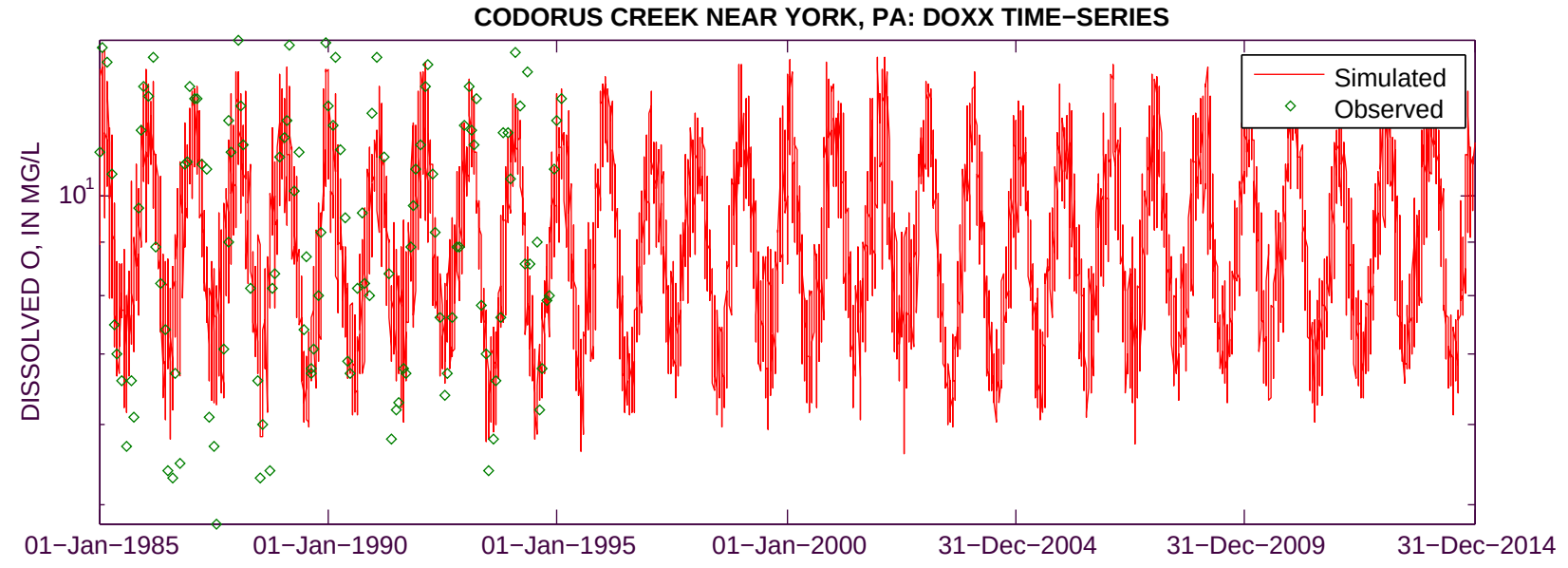
LOAD DATA
LOG10

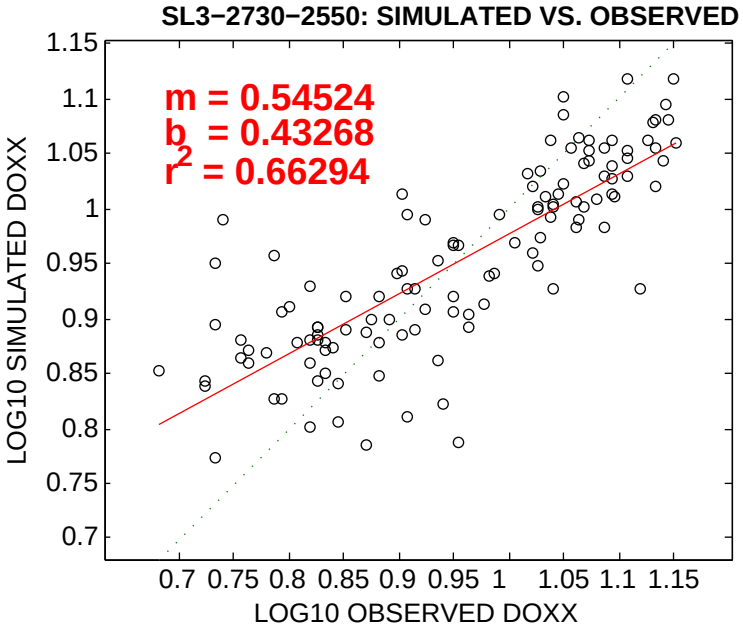


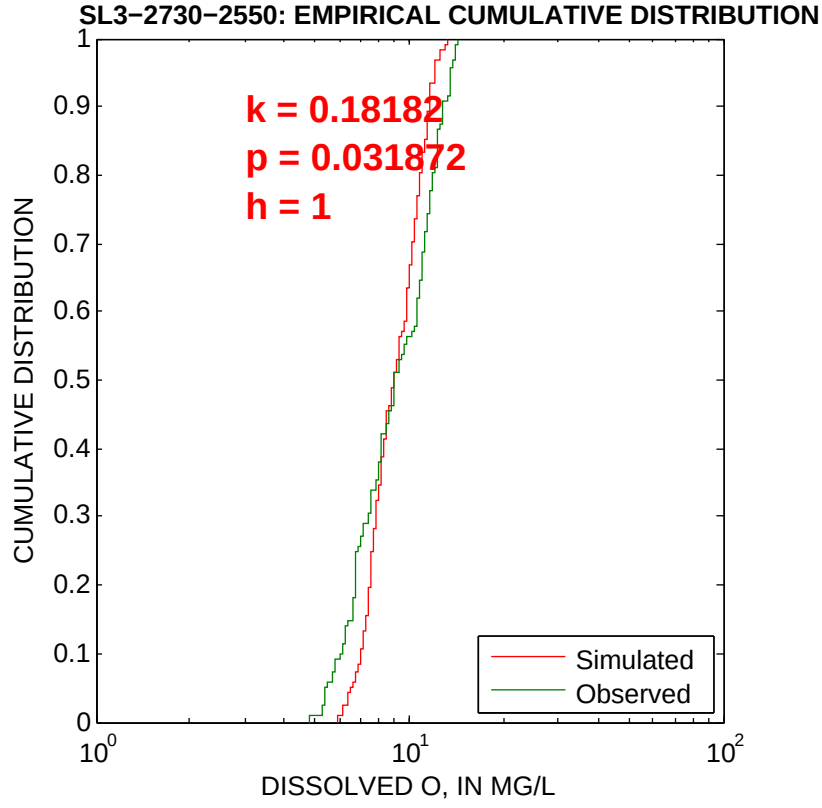












DATA SELECTION

scenario	file
P620171001WQ	DOXX.calib

plot: DOXX - dissolved oxygen

Dates: 1/1/1985 – 12/31/201

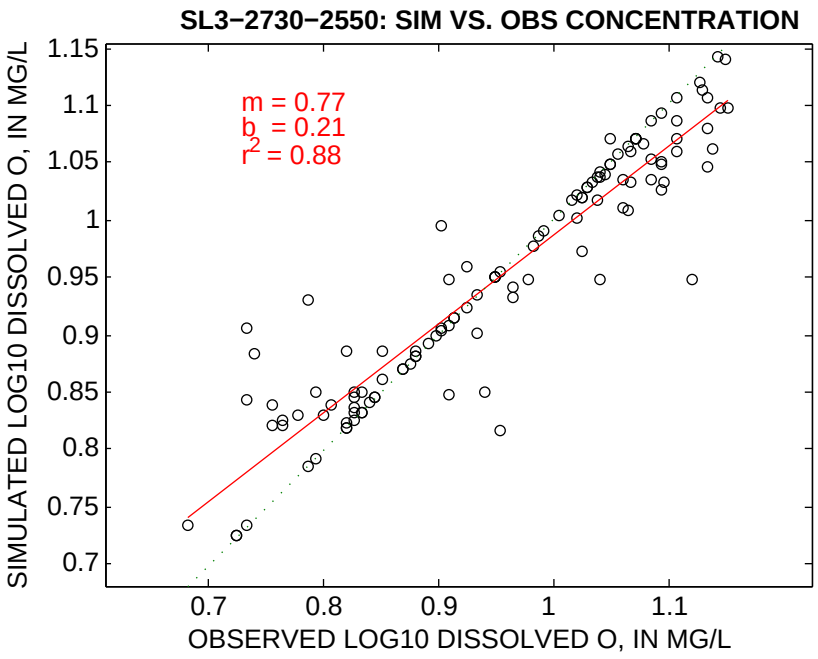
Drive	Directory	Observed
N/A	model	OBS20161101

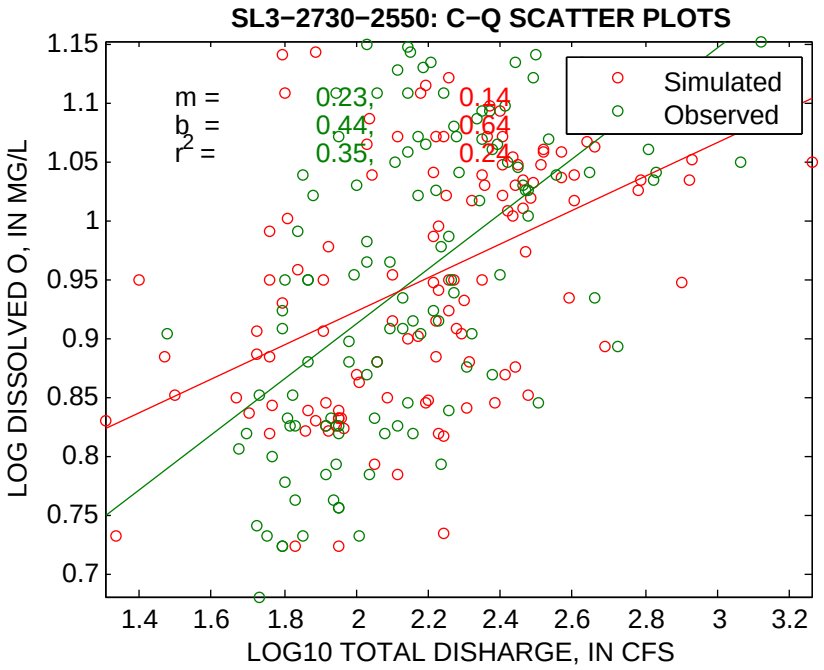
STATISTICS

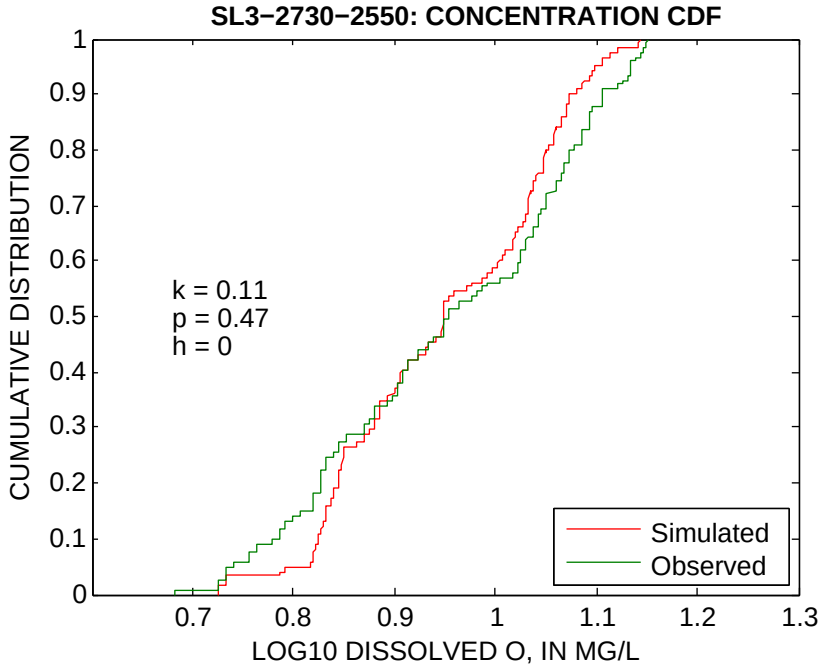
	n	observe	simulate
		121	121
min		4.8	5.9469
		0.681241	0.774291
mean		9.35372	9.13184
		0.953301	0.952453
media		9	8.9074
		0.954243	0.949751
max		14.2	13.145
		1.15229	1.11876
varian		6.85217	3.12129
		0.0159238	0.00714072
JB		0.025354	0.047766
		0.027351	0.059464
		ra	log
%		-2.37209	-0.0889224
err.va		2.25851	0.00570081
rel.std.err		0.329604	0.358006
mod.eff		0.670396	0.641994

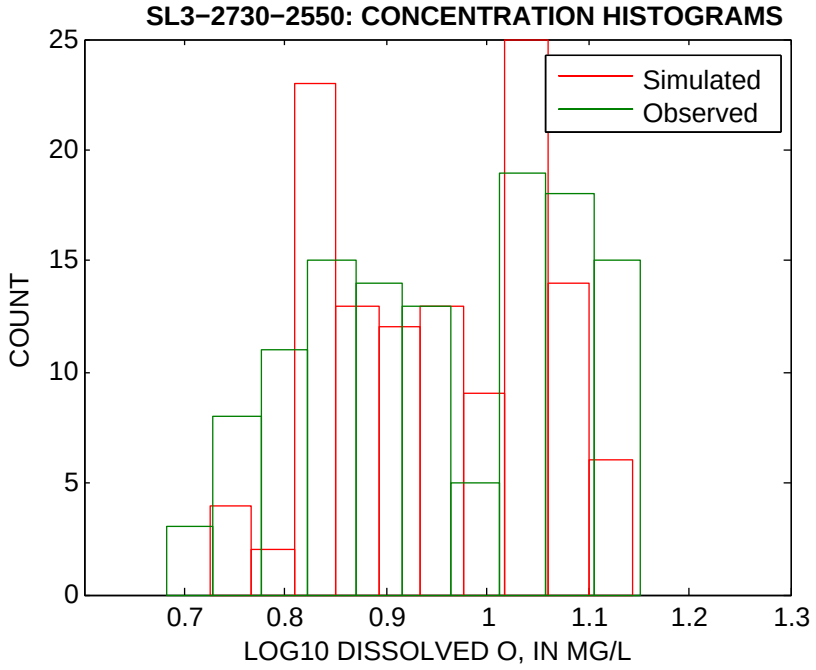
VERSION 2.1

ALL DATA
LOG10

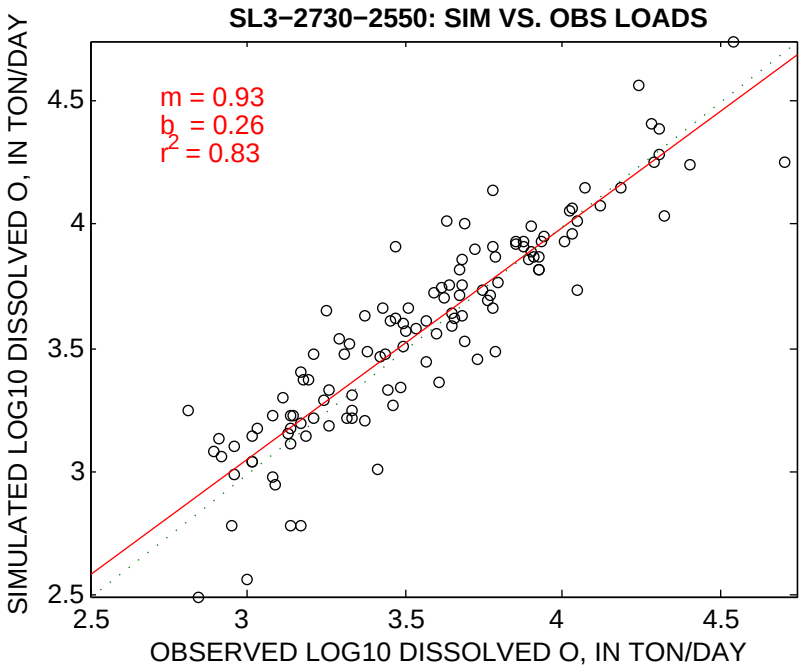


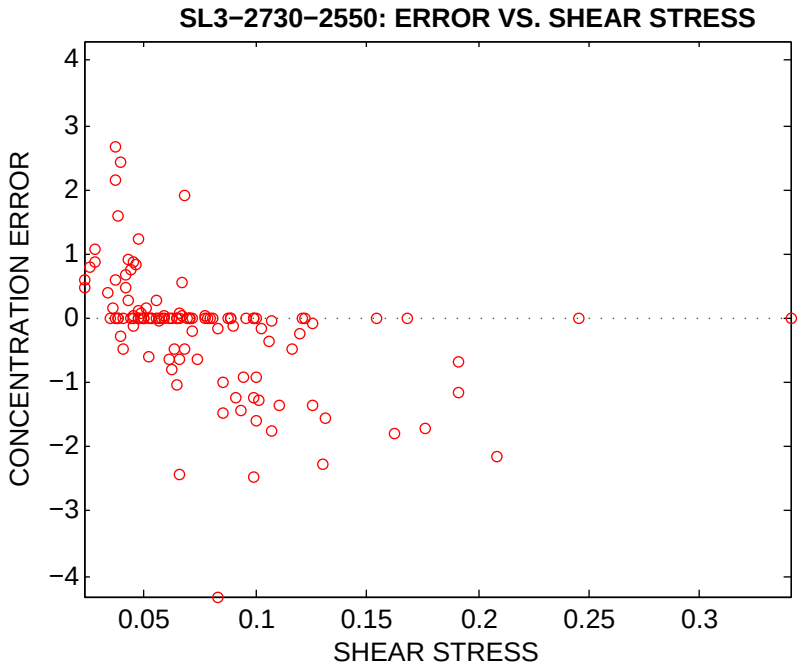


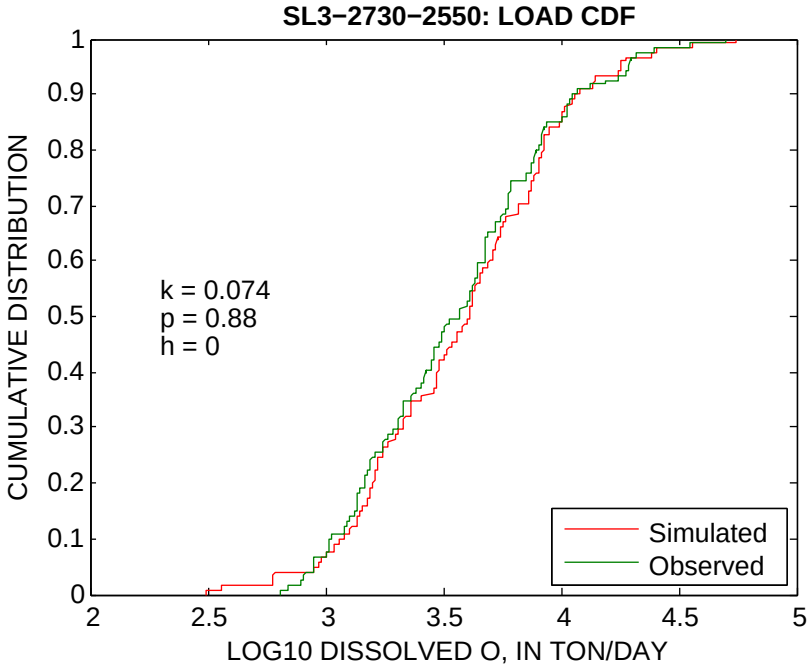


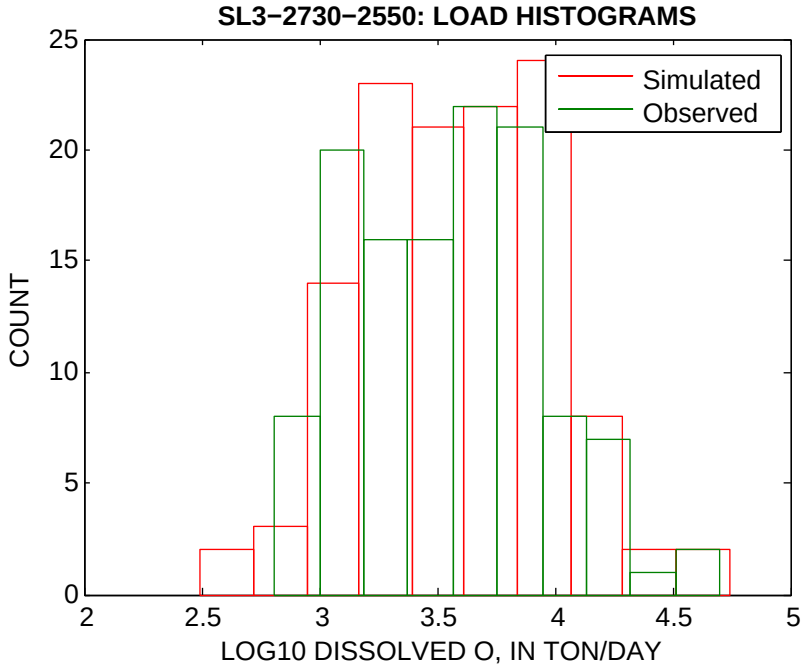


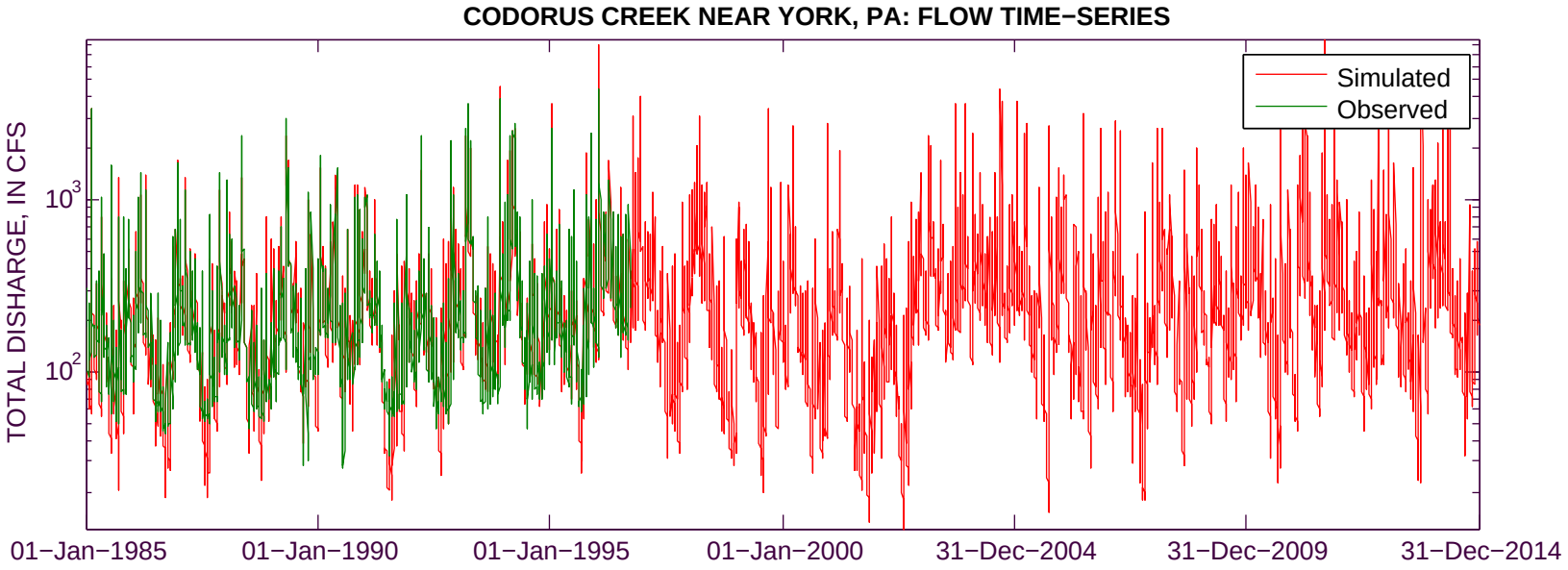
LOAD DATA
LOG10

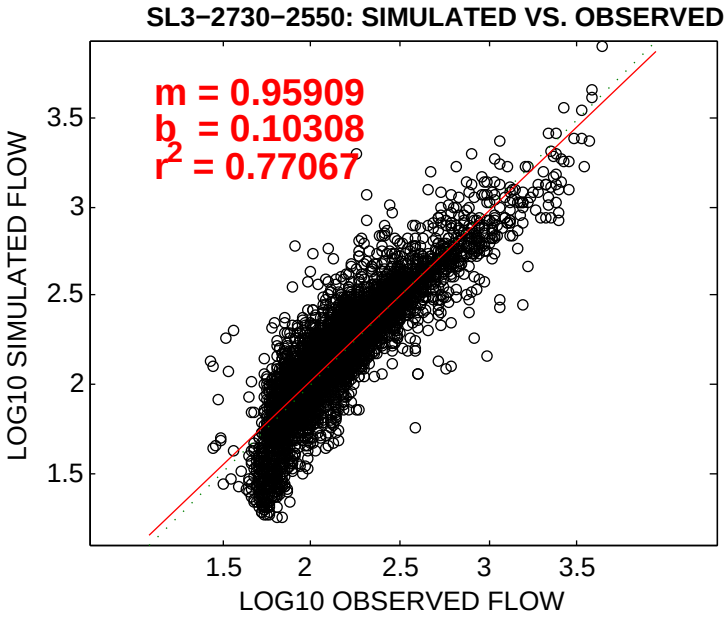


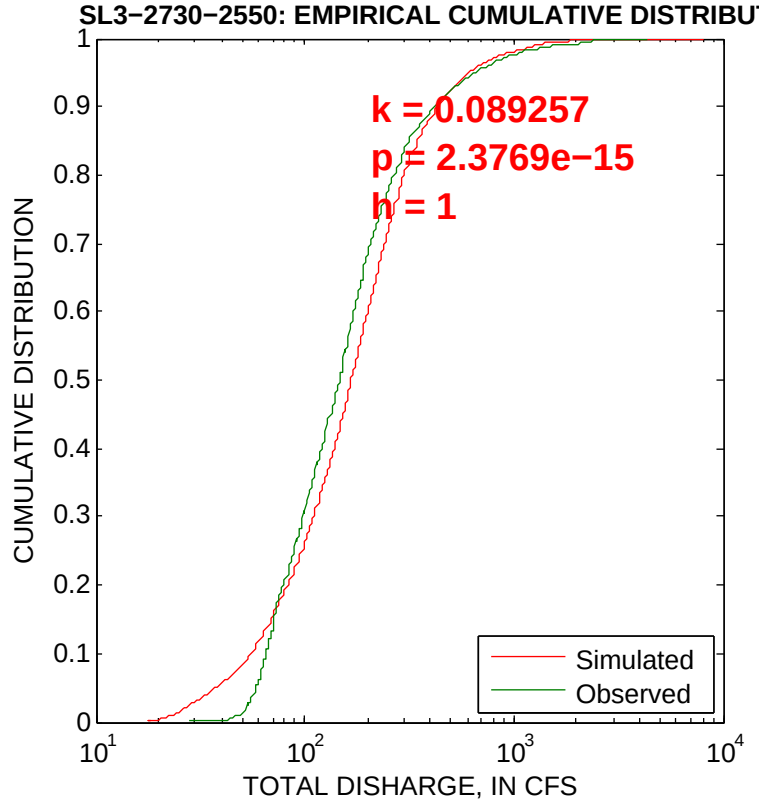












DATA SELECTION

scenario	file
P620171001WQ	FLOW.calib

plot: FLOW - total discharge

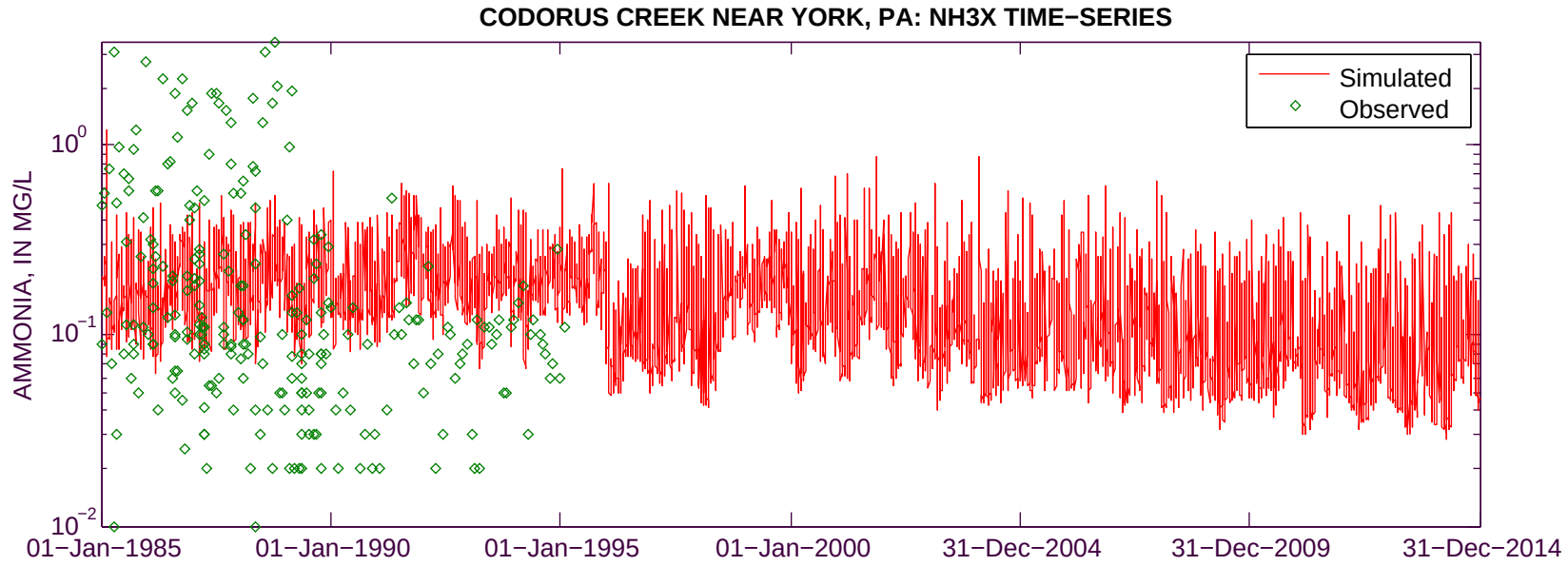
Dates: 1/1/1985 – 12/31/201

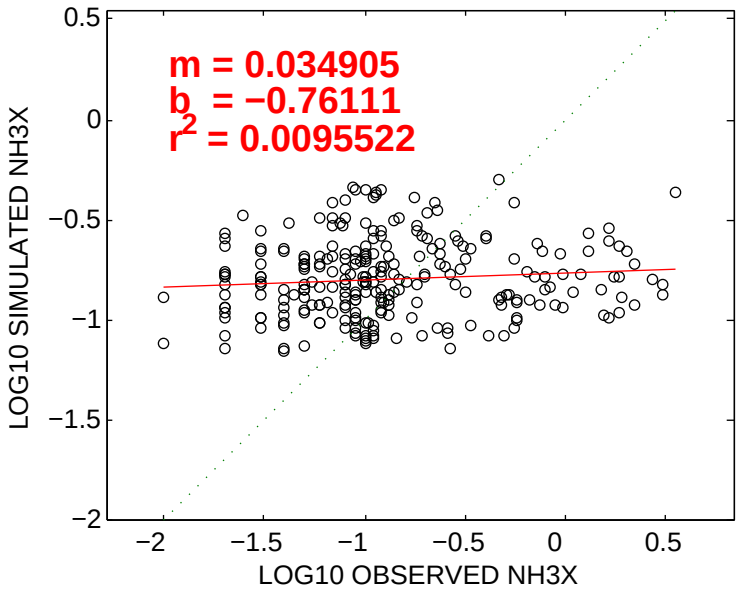
Drive	Directory	Observed
N/A	model	OBS20161101

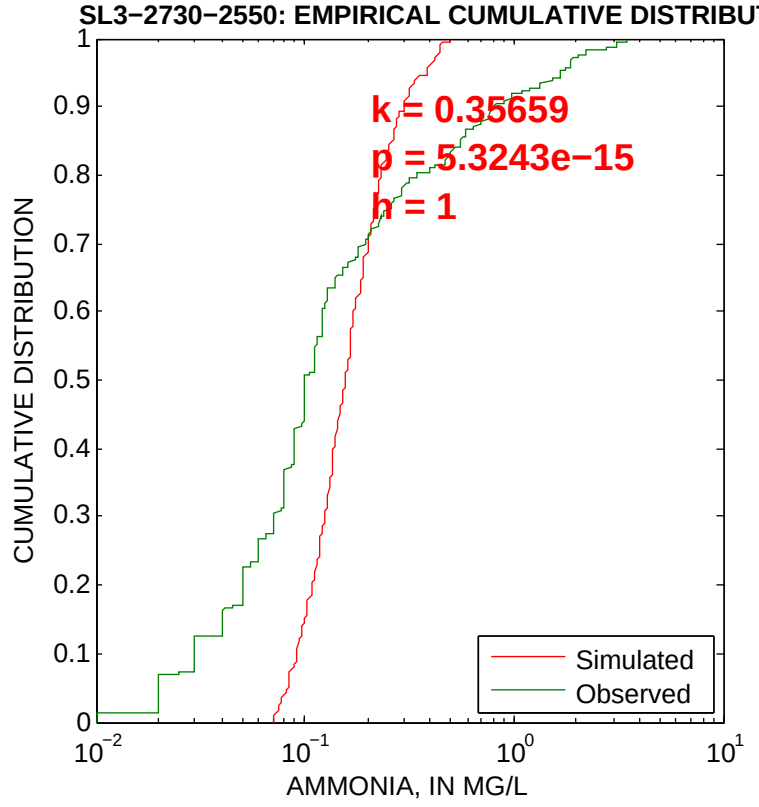
STATISTICS

	n	observe	simulate
		4291	4291
min		27	17.627
		1.43136	1.24618
mean		226.6	231.538
		2.19602	2.20926
media		147	167.36
		2.16732	2.22365
max		4390	8035.8
		3.64246	3.90503
varian		95429.9	81778.3
		0.107235	0.127992
JB		0.001	0.001
		0.001	0.001
		ra	log
%		2.17929	0.6027
err.va		25393.7	0.0297075
rel.std.err		0.266098	0.277031
mod.eff		0.733902	0.722969

VERSION 2.1







DATA SELECTION

scenario	file
P620171001WQ	NH3X.calib

plot: NH3X - ammonia

Dates: 1/1/1985 – 12/31/201

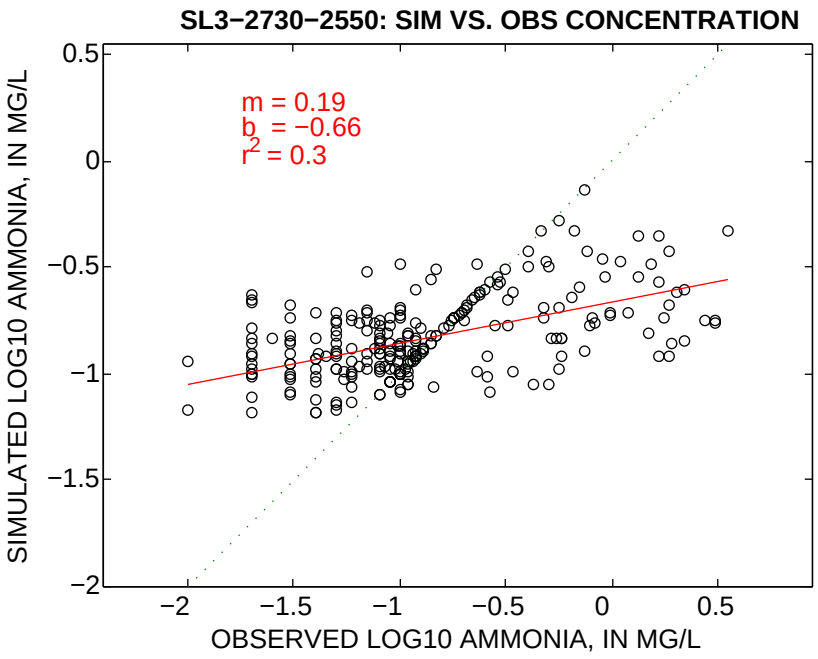
Drive	Directory	Observed
N/A	model	OBS20161101

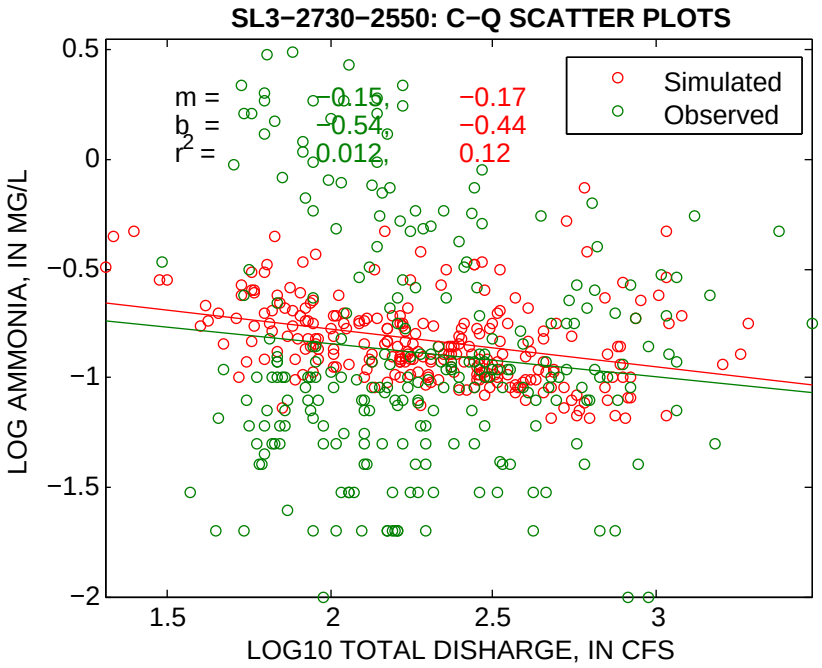
STATISTICS

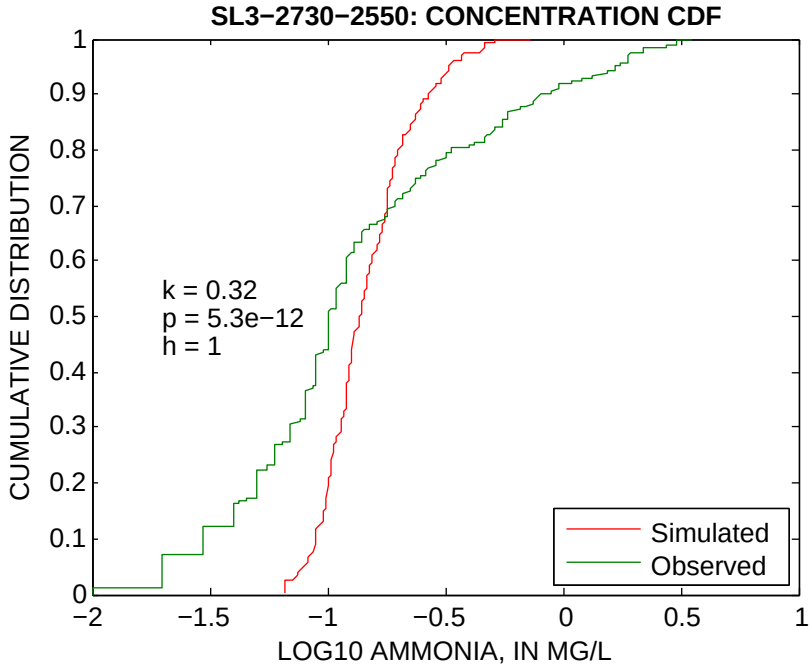
	n	observe	simulate
		258	258
min		0.01	0.071003
		-2	-1.14872
mean		0.315923	0.17858
		-0.881953	-0.791898
media		0.1	0.156215
		-1	-0.806278
max		3.52	0.50266
		0.546543	-0.298726
varian		0.308916	0.00748826
		0.286052	0.0364862
JB		0.001	0.001
		0.003888	0.029432
		ra	log
%		-43.4737	-10.2109
err.va		0.331552	0.31071
rel.std.err		1.07328	1.0862
mod.eff		-0.073276	-0.0862017

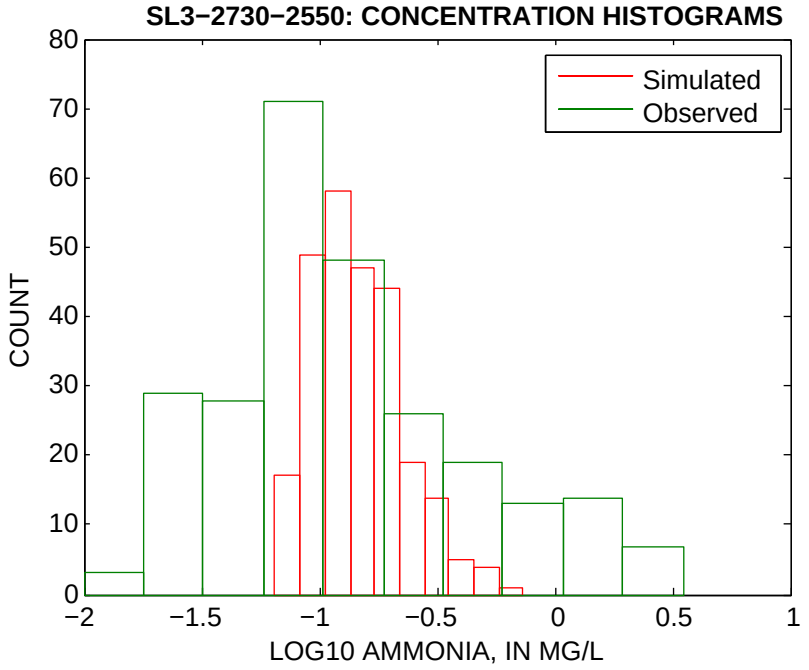
VERSION 2.1

ALL DATA
LOG10

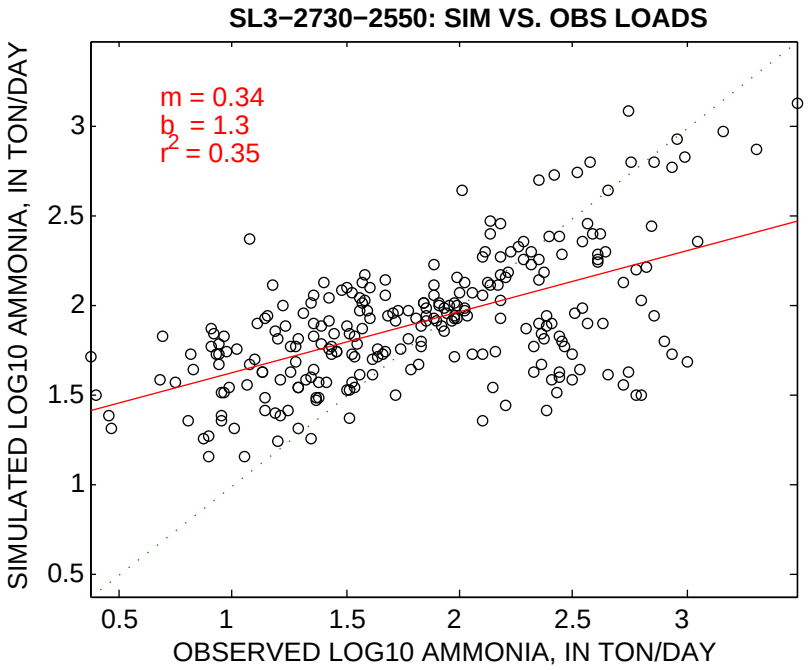


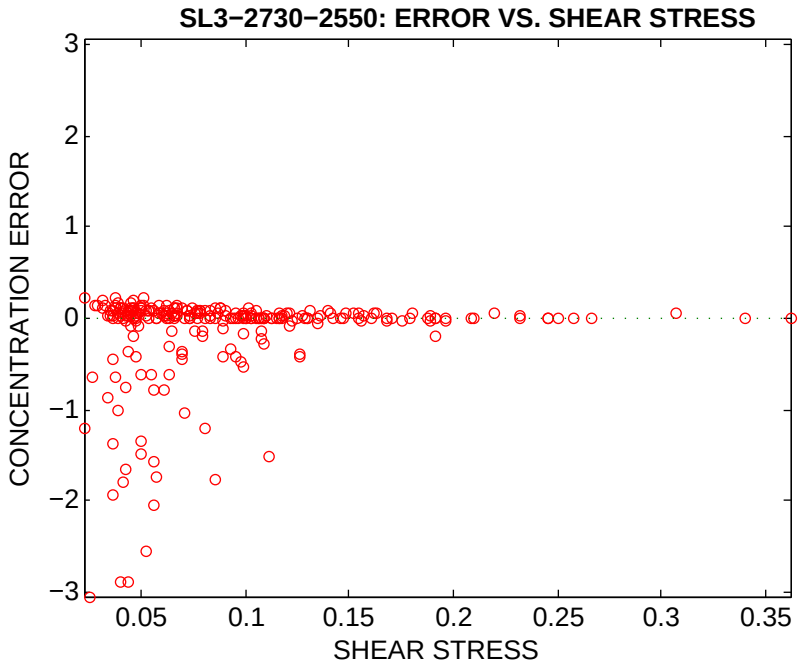


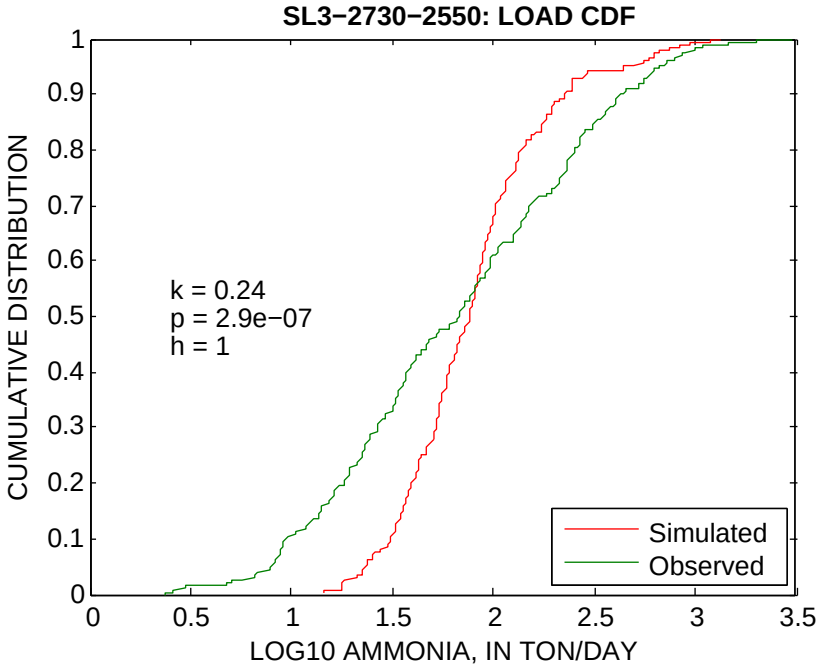


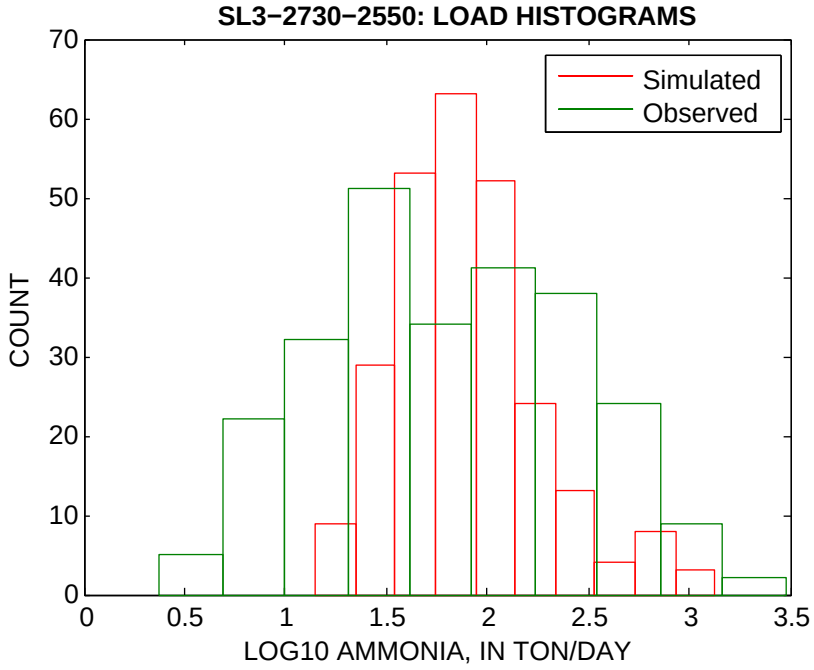


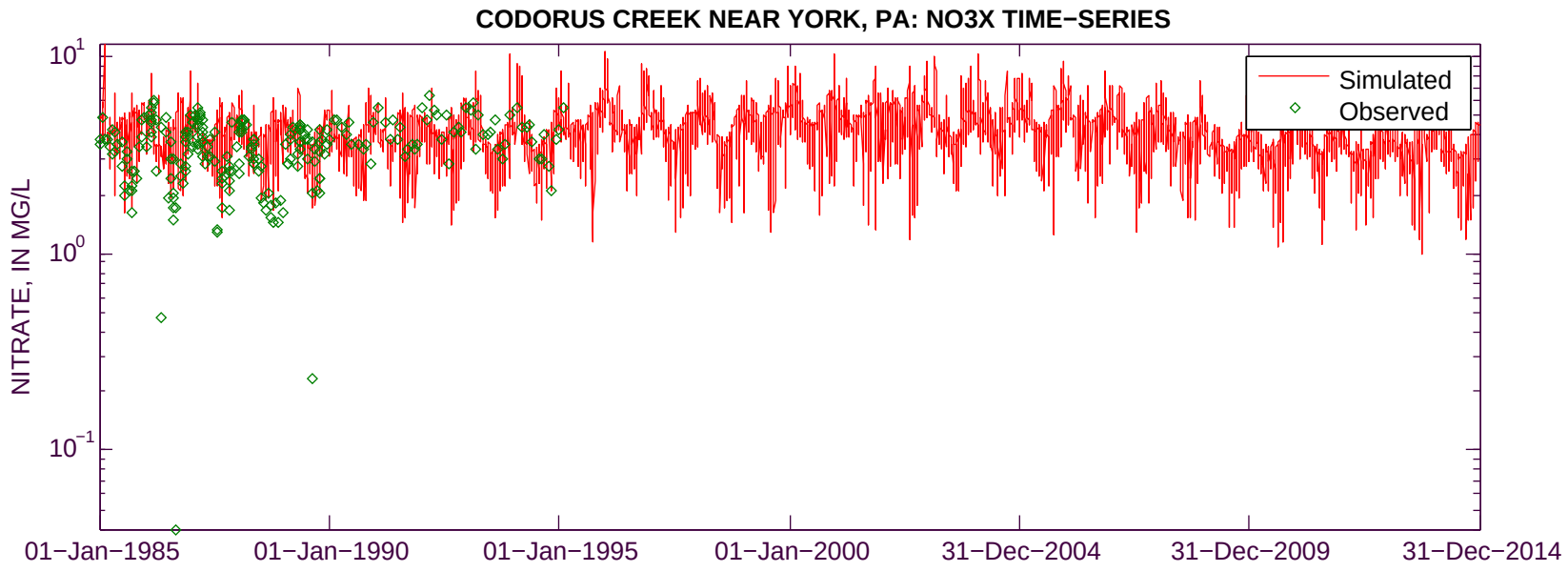
LOAD DATA
LOG10

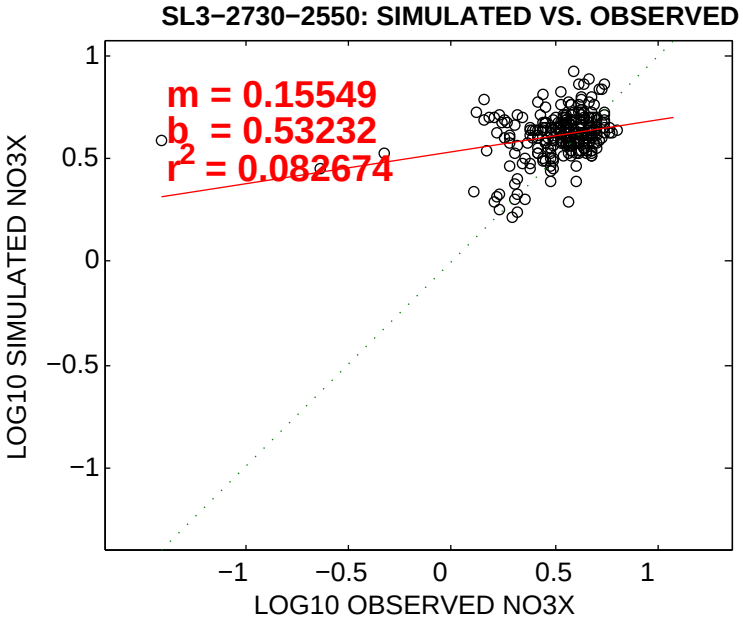


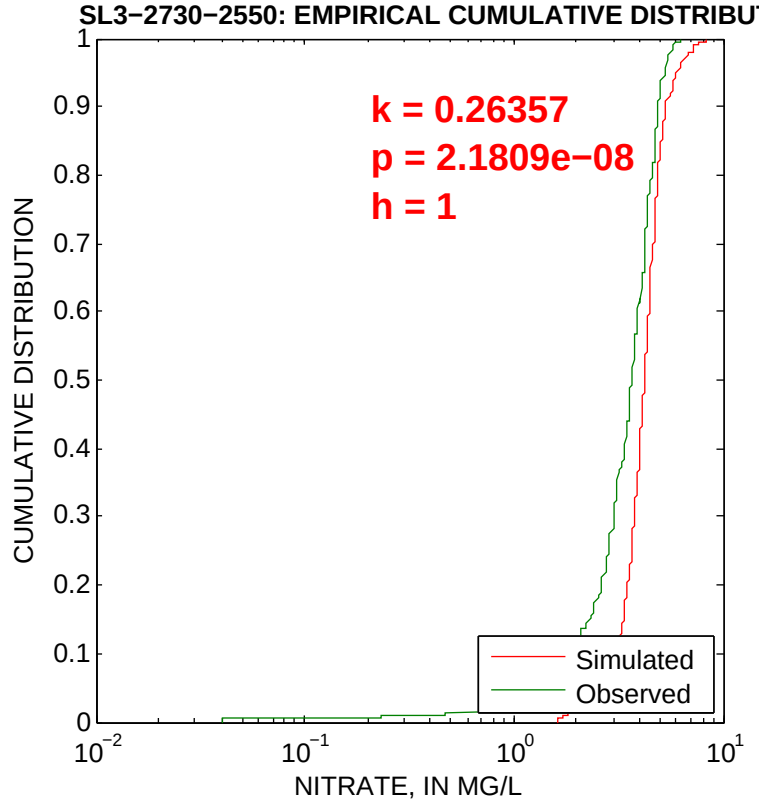












DATA SELECTION

scenario	file
P620171001WQ	NO3X.calib

plot: NO3X - nitrate

Dates: 1/1/1985 – 12/31/201

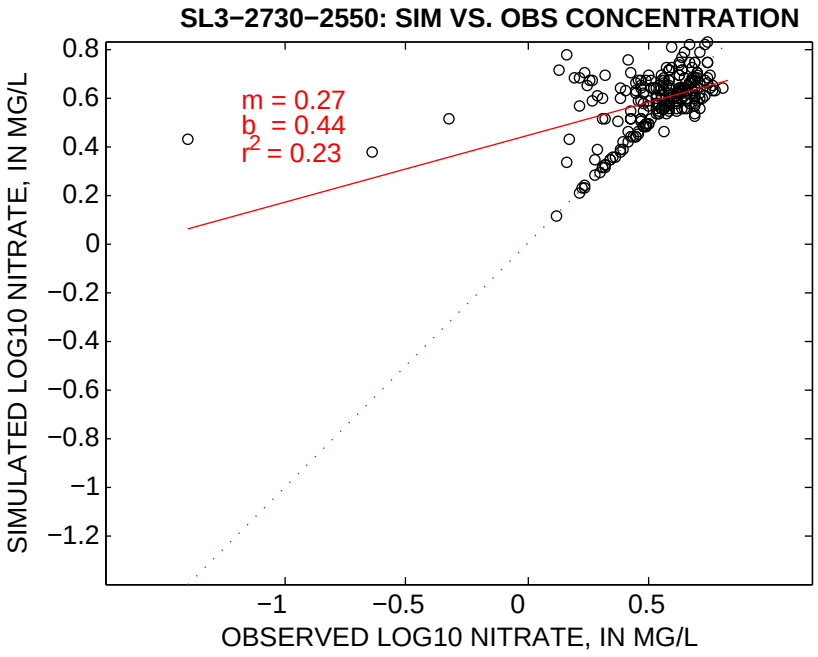
Drive	Directory	Observed
N/A	model	OBS20161101

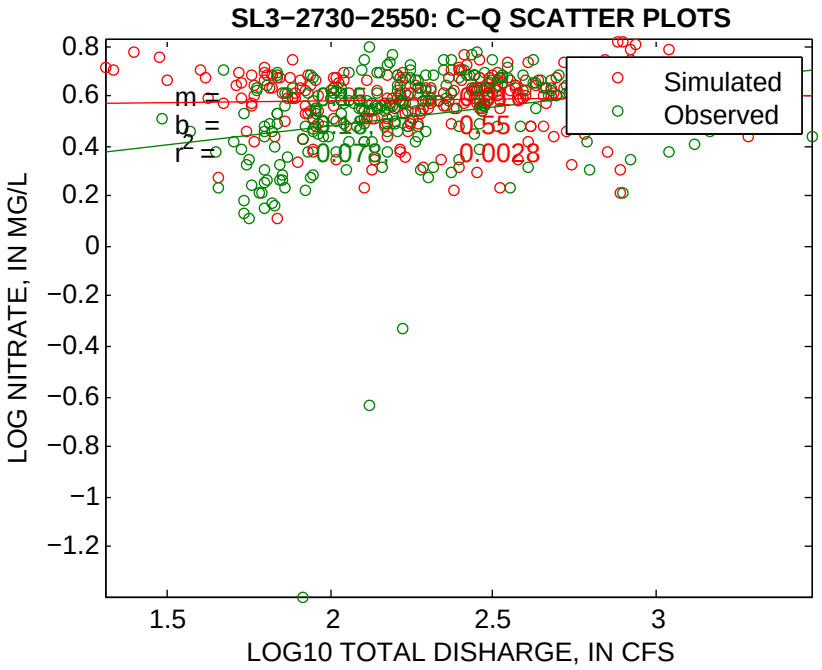
STATISTICS

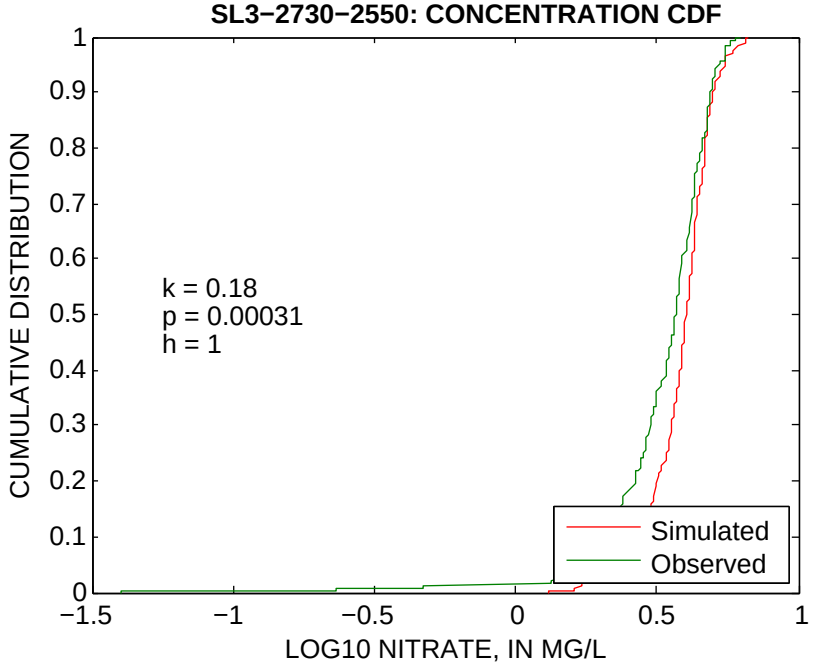
	n	observe	simulate
		258	258
min		0.04	1.6242
		-1.39794	0.21064
mean		3.5747	4.23595
		0.520696	0.613283
media		3.6875	4.2011
		0.566731	0.623363
max		6.27	8.2436
		0.797268	0.916117
varian		1.25602	1.06855
		0.0432435	0.0126454
JB		0.066646	0.001
		0.001	0.001
		ra	log
%		18.4982	17.7814
err.va		2.03771	0.0510472
rel.std.err		1.62236	1.18046
mod.eff		-0.622358	-0.180459

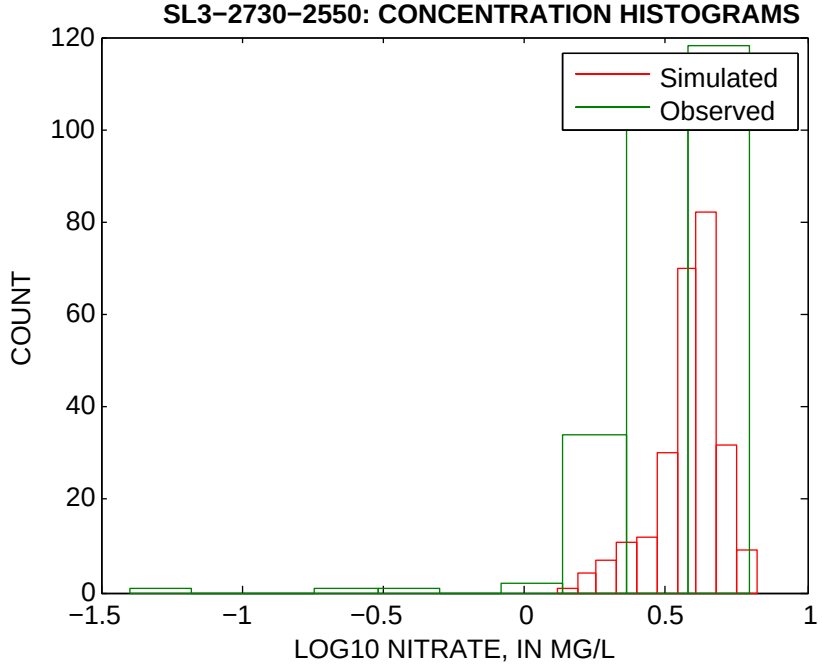
VERSION 2.1

ALL DATA
LOG10

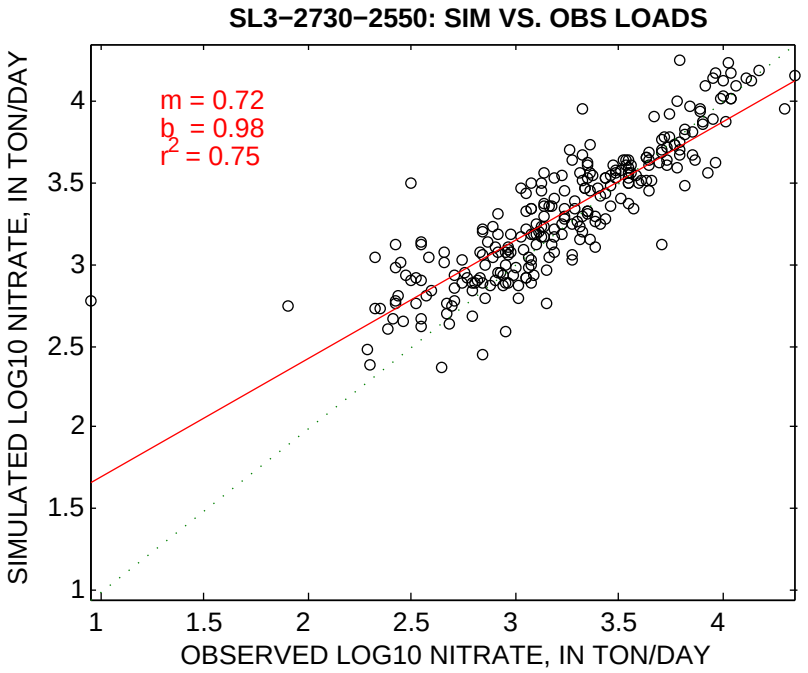


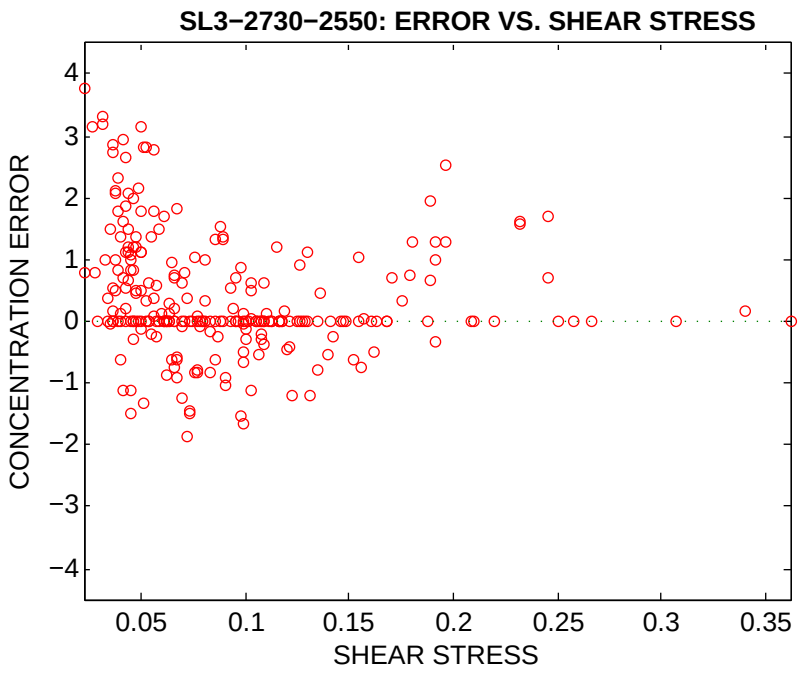


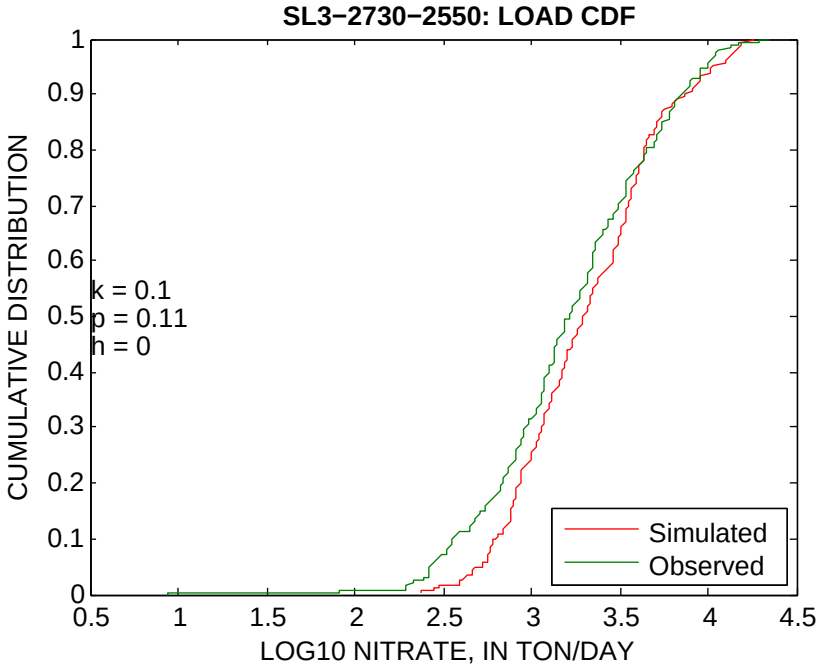


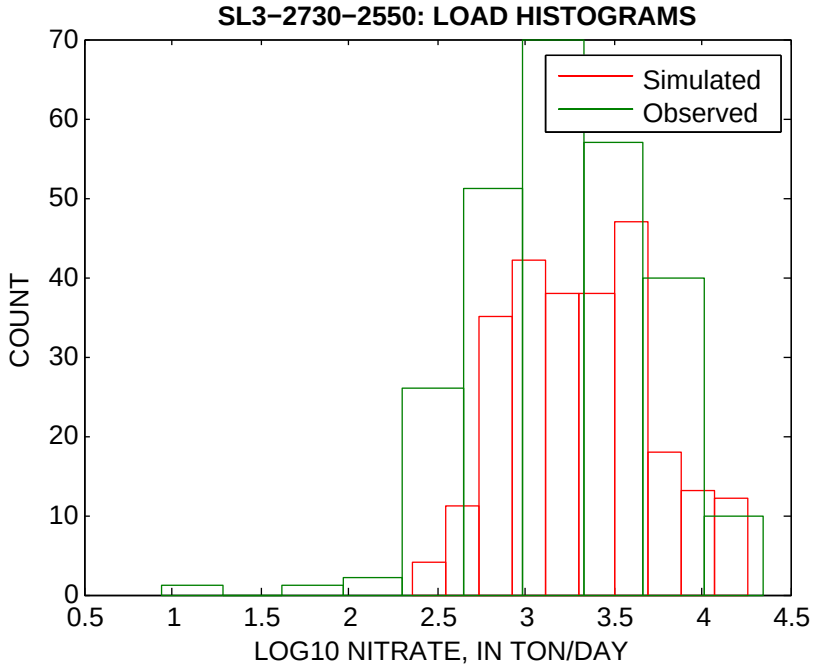


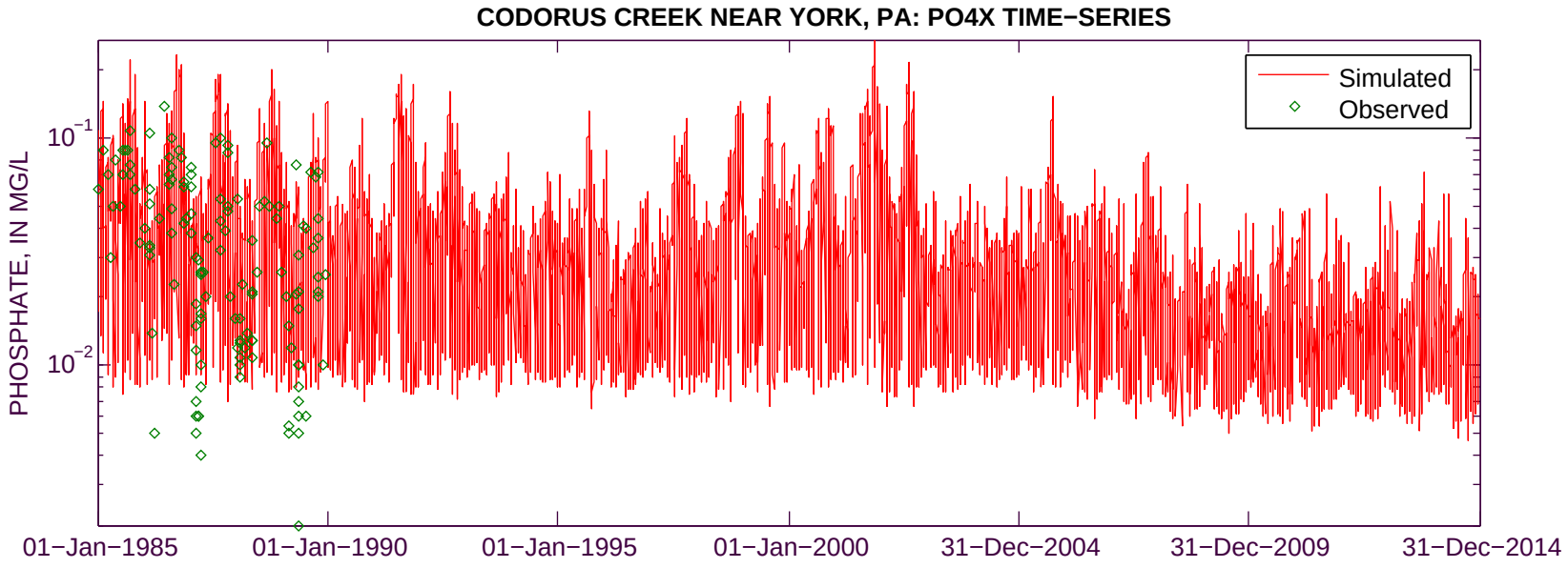
LOAD DATA
LOG10

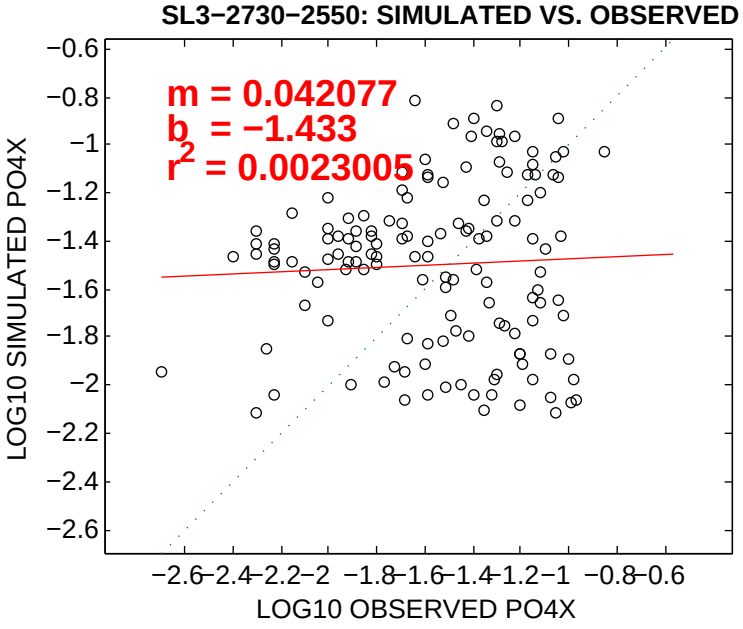


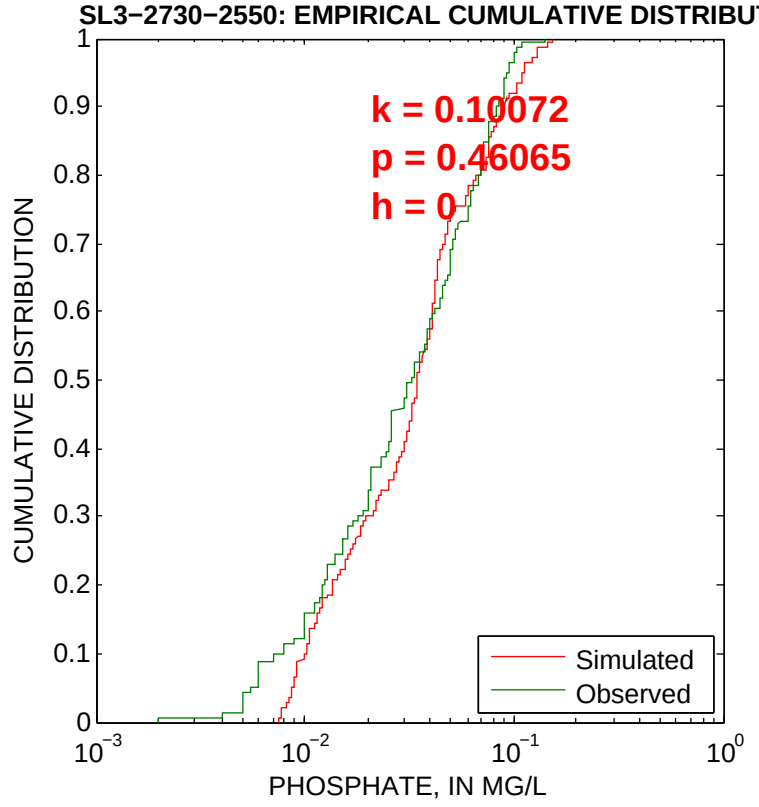












DATA SELECTION

scenario	file
P620171001WQ	PO4X.calib

plot: PO4X - phosphate

Dates: 1/1/1985 – 12/31/201

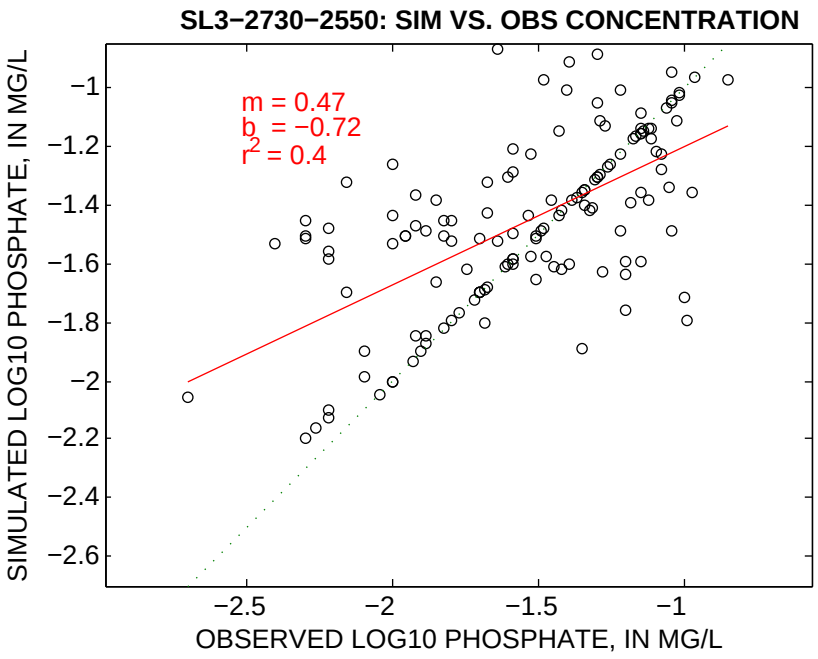
Drive	Directory	Observed
N/A	model	OBS20161101

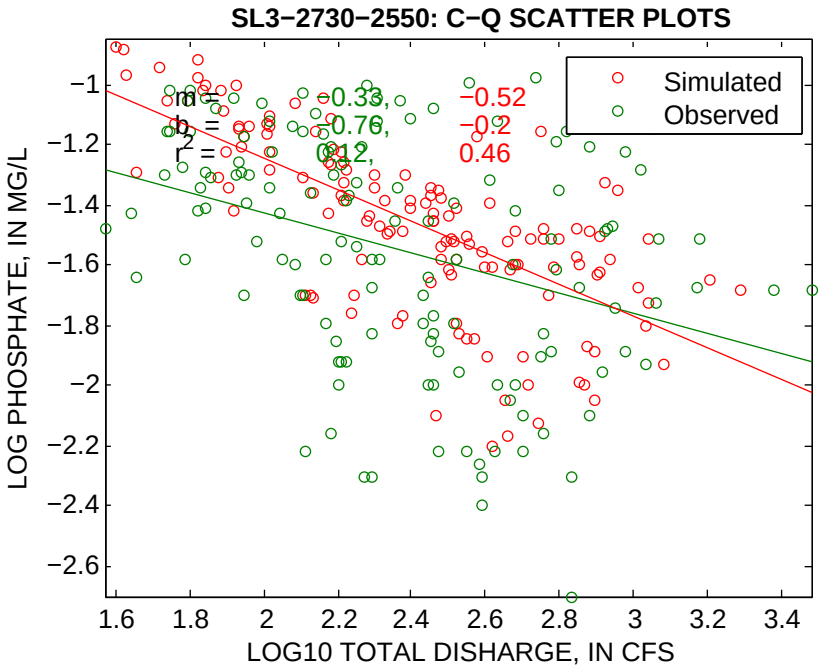
STATISTICS

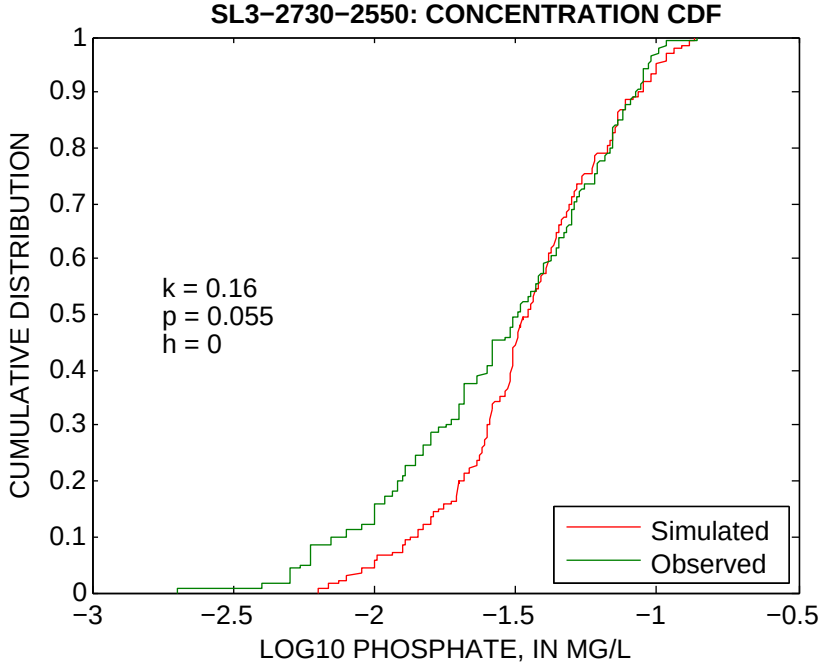
	n	139	139
		observe	simulate
min		0.002	0.0075831
		-2.69897	-2.12015
mean		0.0396264	0.0423254
		-1.54661	-1.49805
media		0.03225	0.034209
		-1.49147	-1.46586
max		0.14	0.15227
		-0.853872	-0.817386
varian		0.00085560	0.0010384
		0.151211	0.116376
JB		0.005914	0.001
		0.029500	0.065175
		ra	log
%		6.81107	-3.13944
err.va		0.00166333	0.257236
rel.std.err		1.94405	1.70118
mod.eff		-0.944046	-0.701175

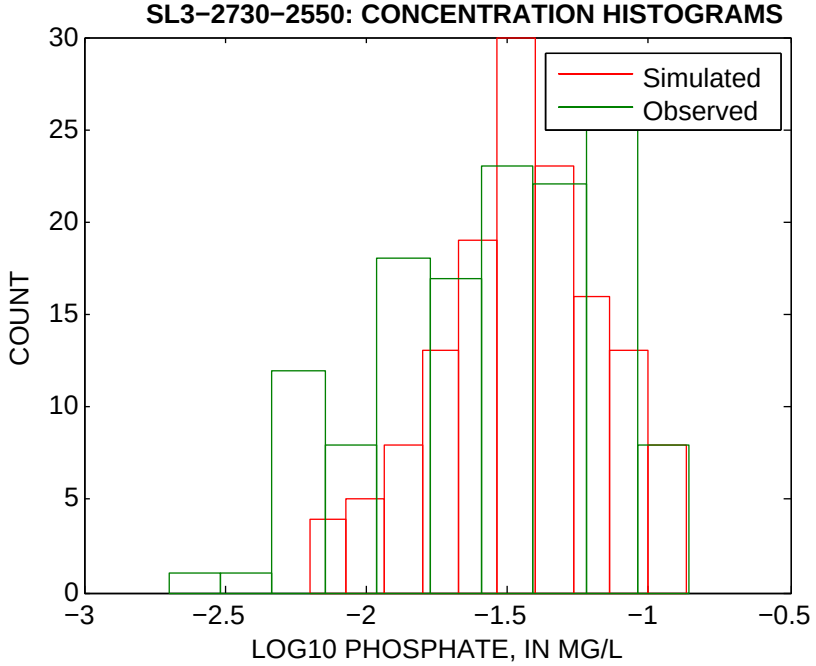
VERSION 2.1

ALL DATA
LOG10

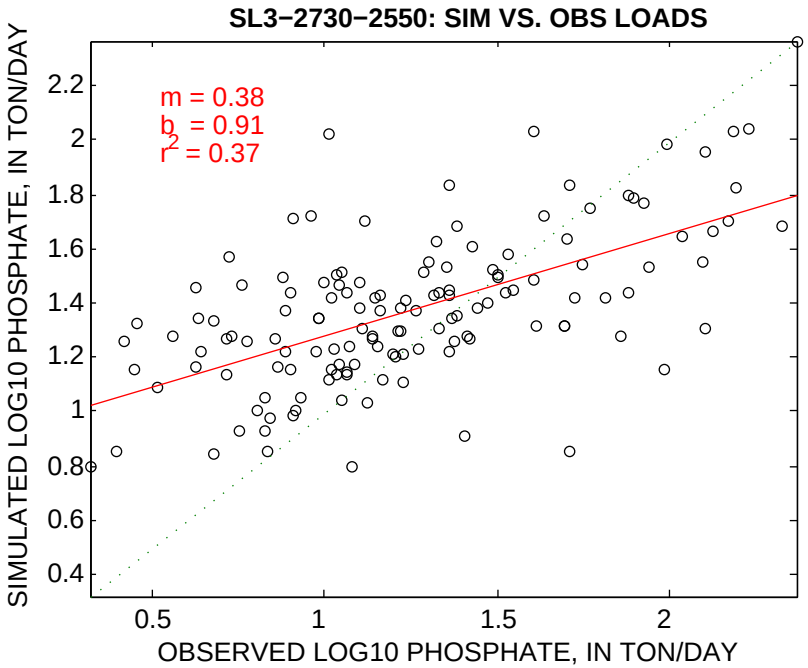


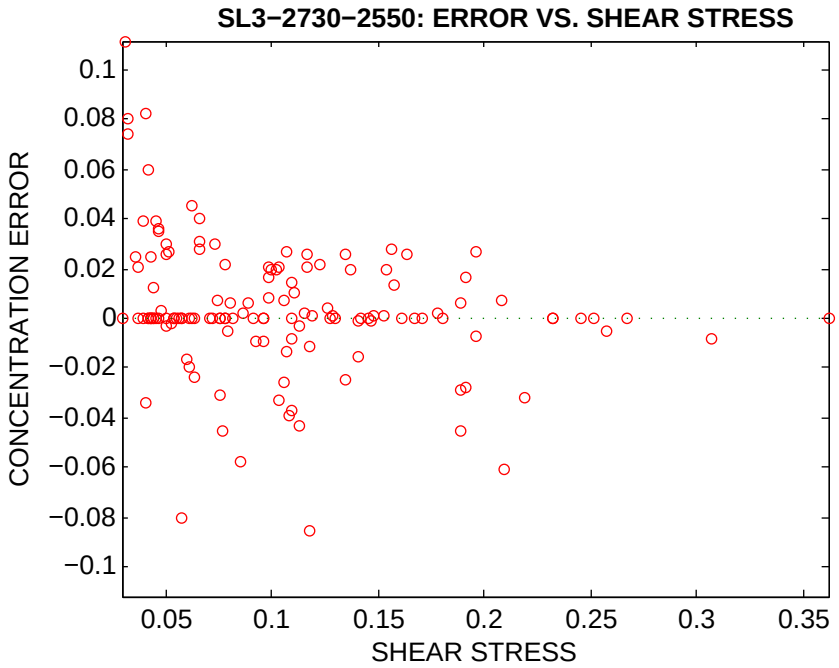


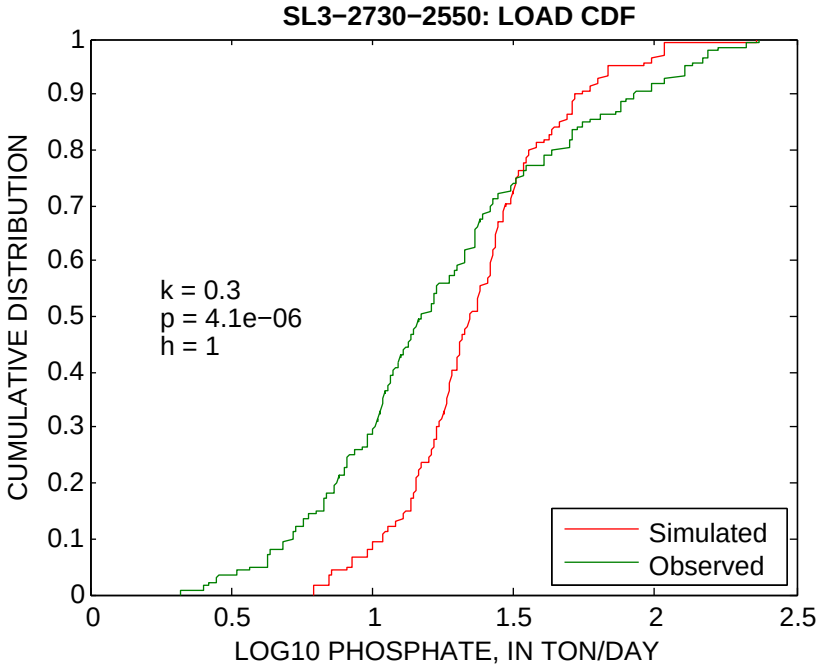


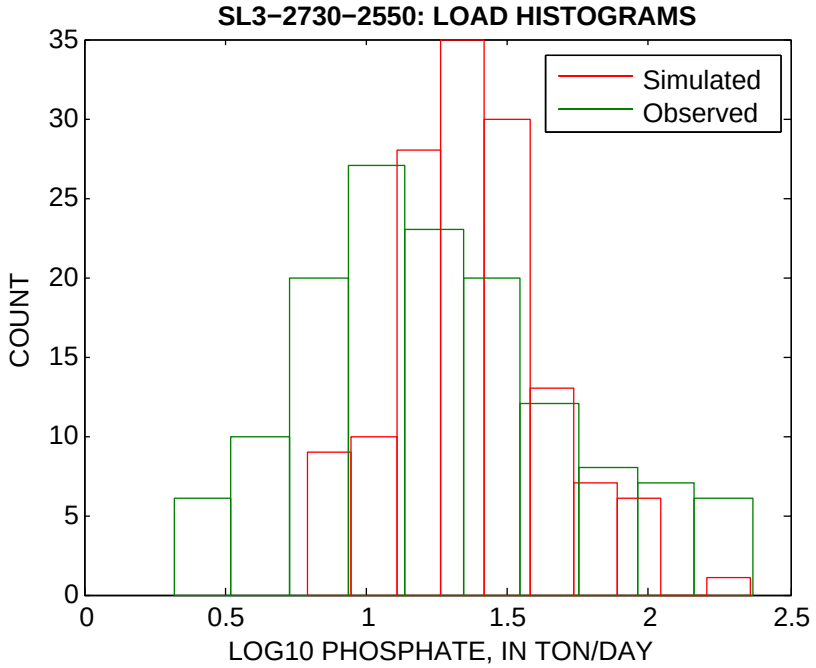


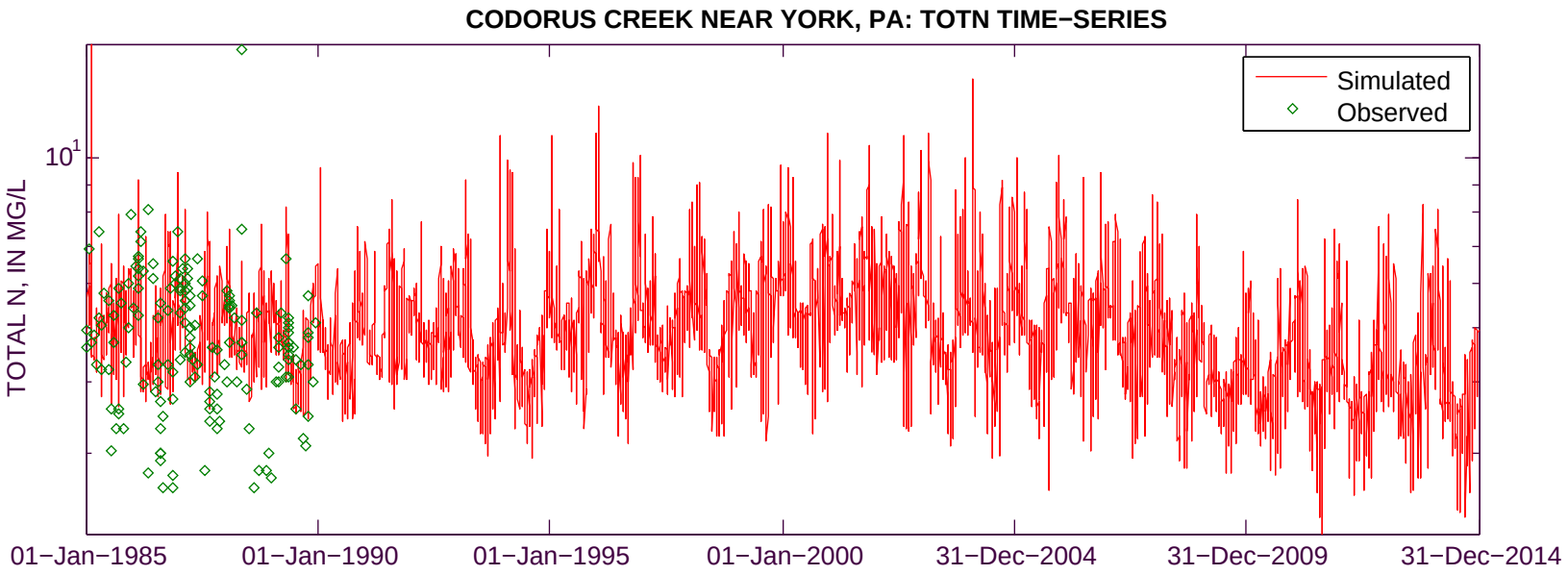
LOAD DATA
LOG10

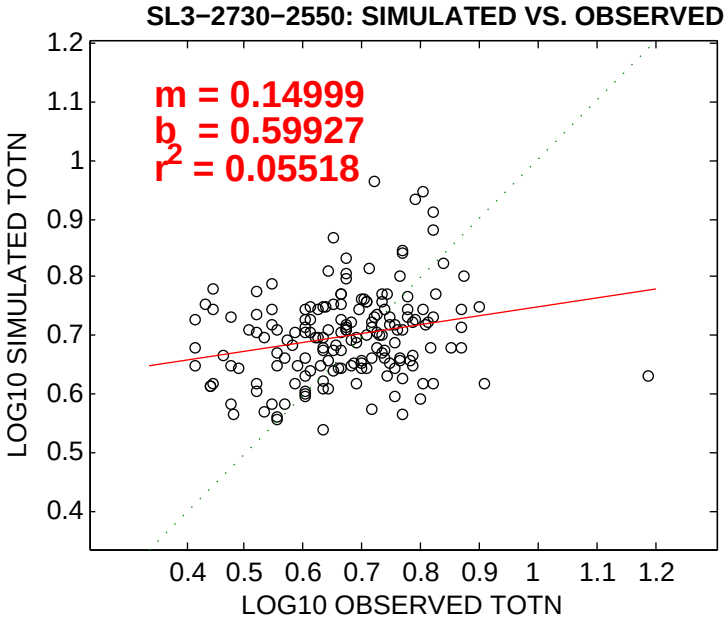


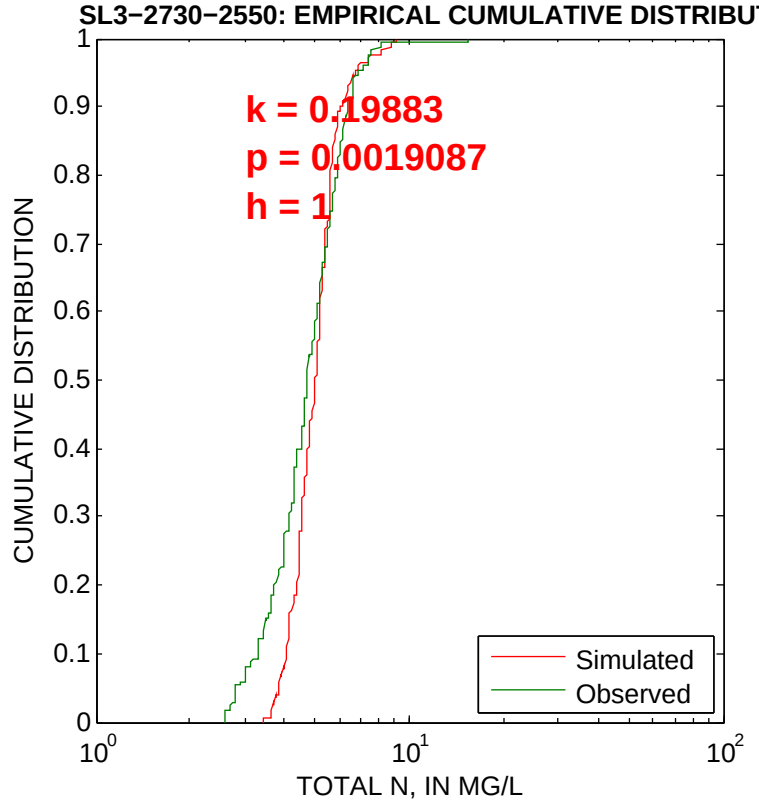












DATA SELECTION

scenario	file
P620171001WQ	TOTN.calib

plot: TOTN - total nitrogen

Dates: 1/1/1985 – 12/31/201

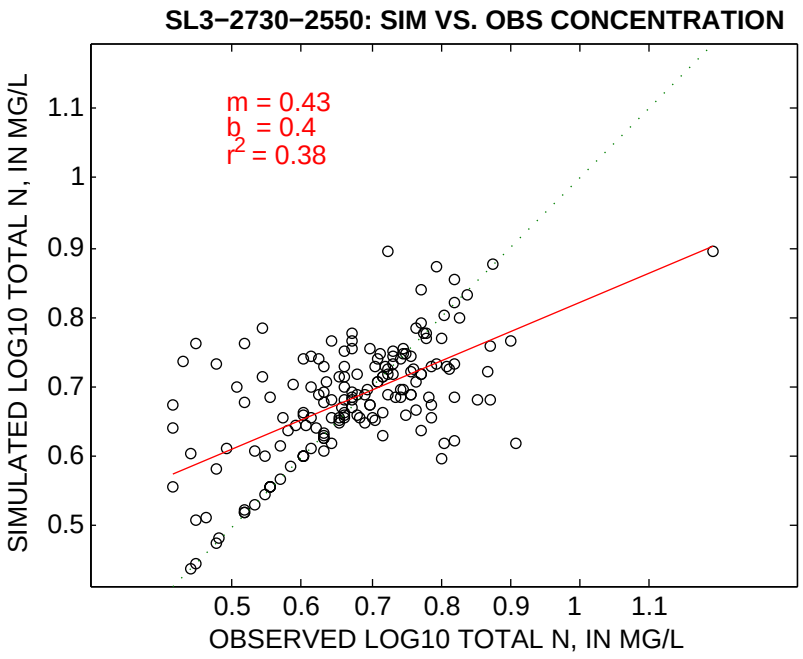
Drive	Directory	Observed
N/A	model	OBS20161101

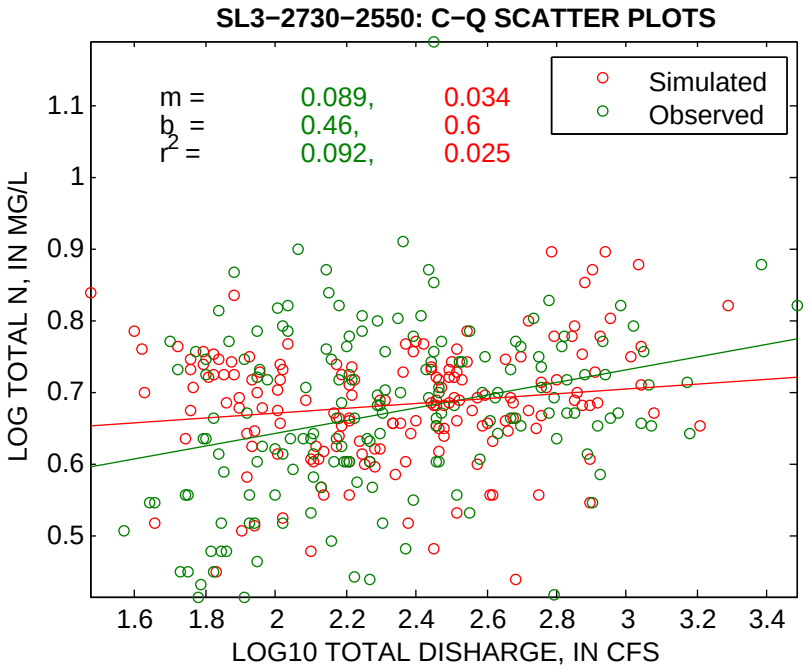
STATISTICS

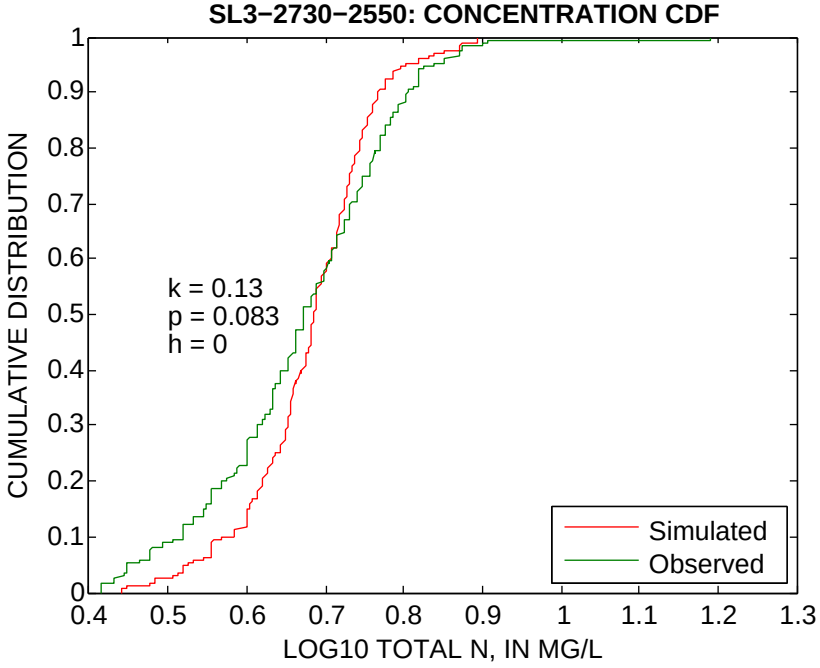
	n	171	171
		observe	simulate
min		2.6	3.4489
		0.414973	0.537681
mean		4.86969	5.08944
		0.671218	0.69994
media		4.7	5.009
		0.672098	0.699751
max		15.5	9.1637
		1.19033	0.962071
varian		2.08081	0.89614
		0.0138508	0.00564683
JB		0.001	0.001
		0.008244	0.002151
		ra	log
%		4.5127	4.27915
err.va		2.51047	0.0161725
rel.std.err		1.20649	1.16762
mod.eff		-0.206487	-0.167625

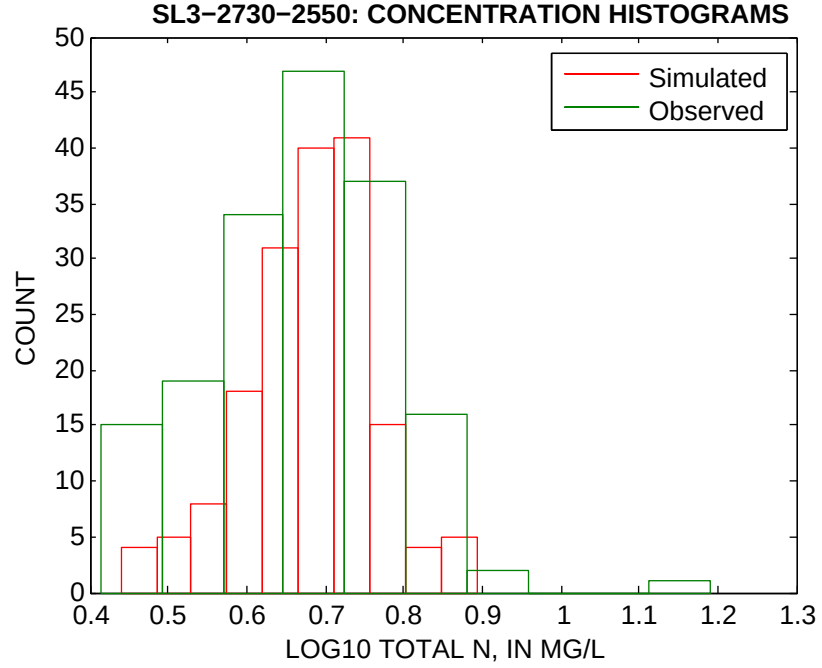
VERSION 2.1

ALL DATA
LOG10

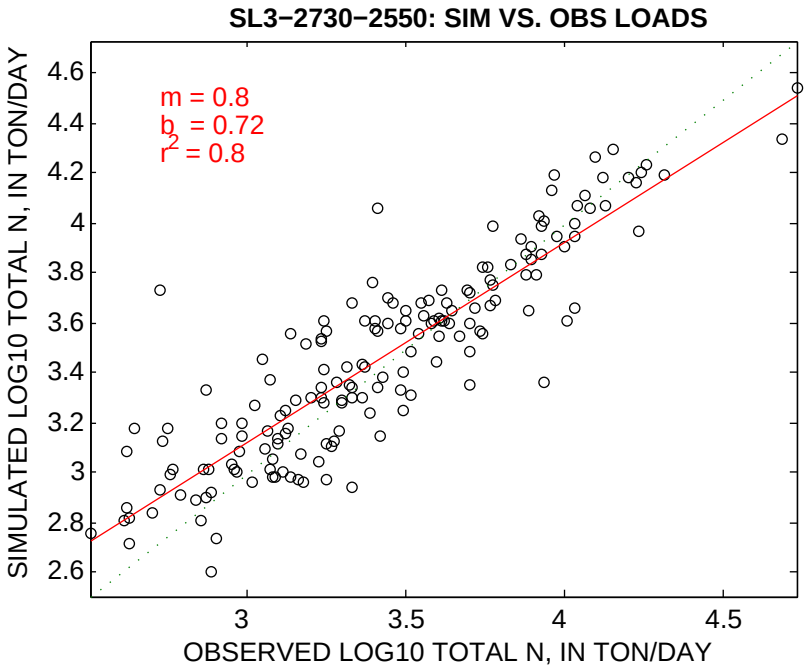


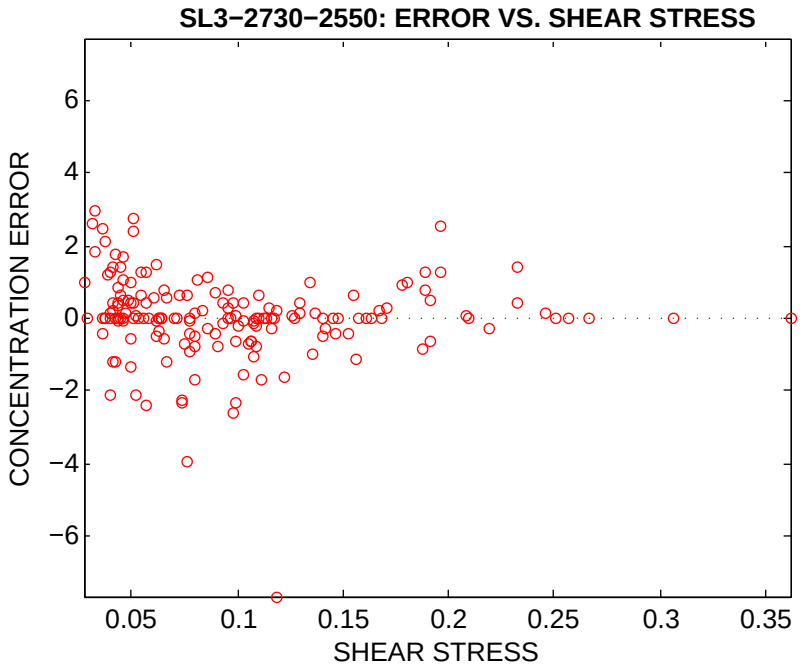


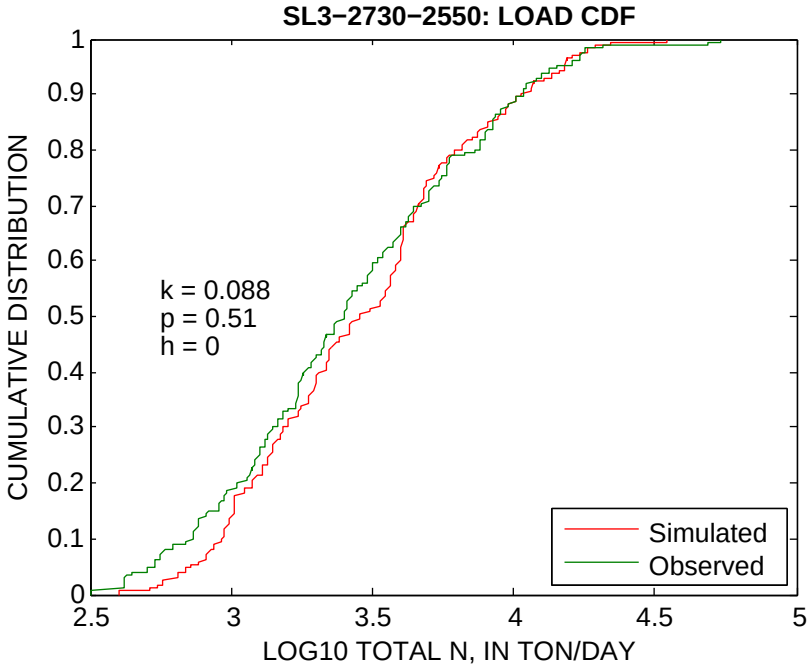


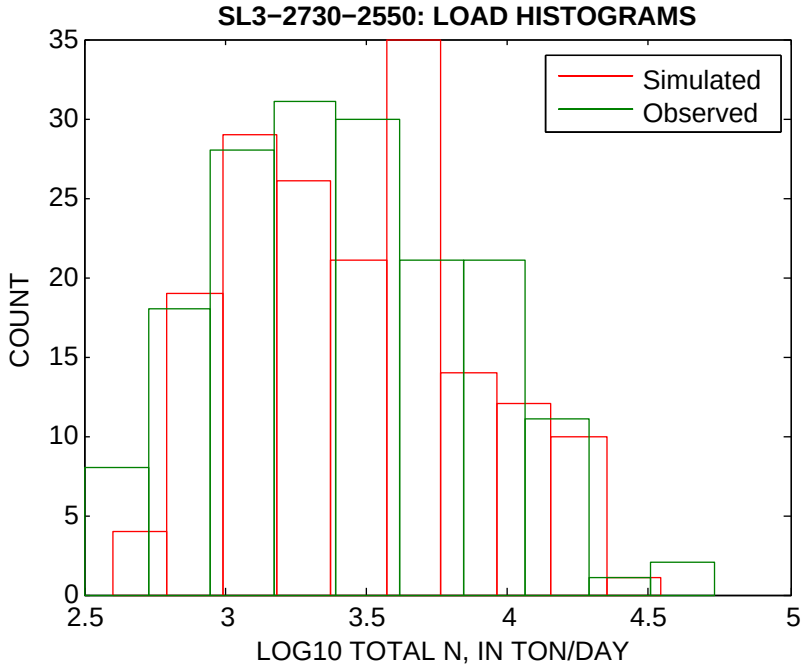


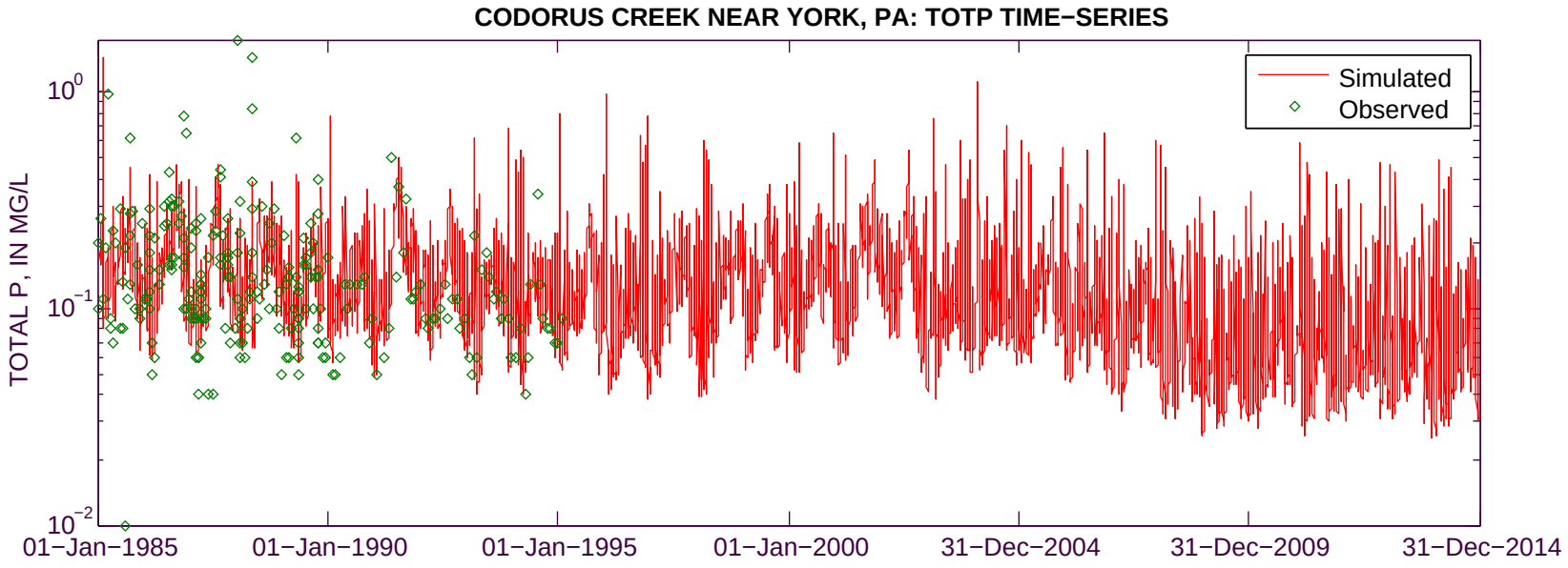
LOAD DATA
LOG10

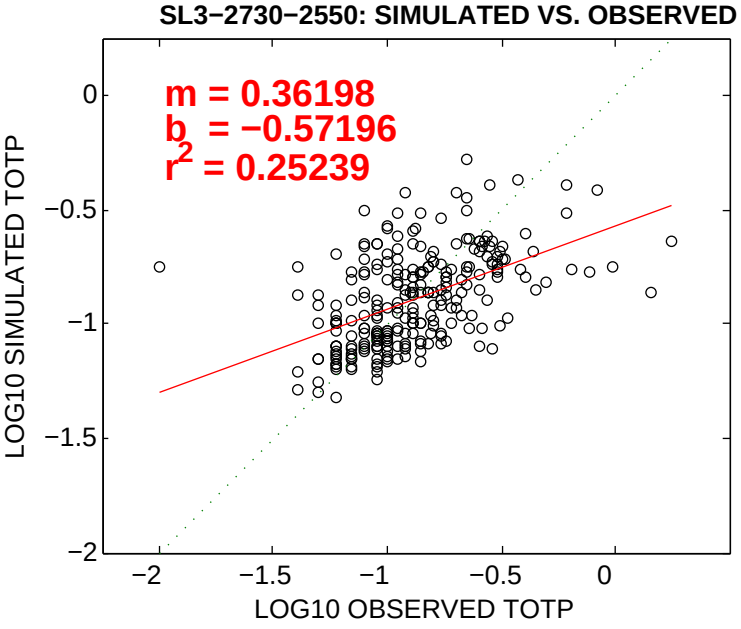


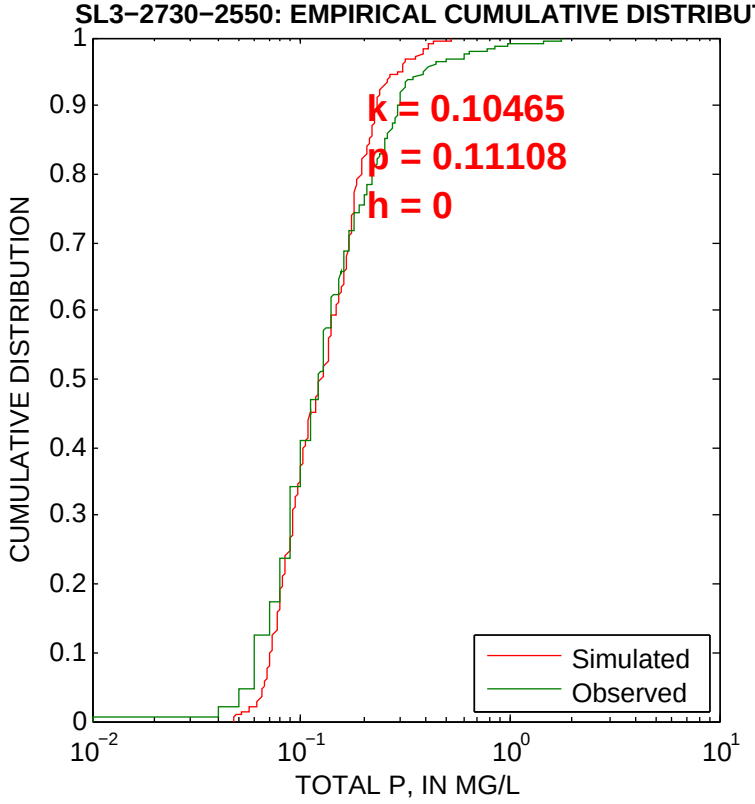












DATA SELECTION

scenario	file
P620171001WQ	TOTP.calib

plot: TOTP - total phosphorus

Dates: 1/1/1985 – 12/31/201

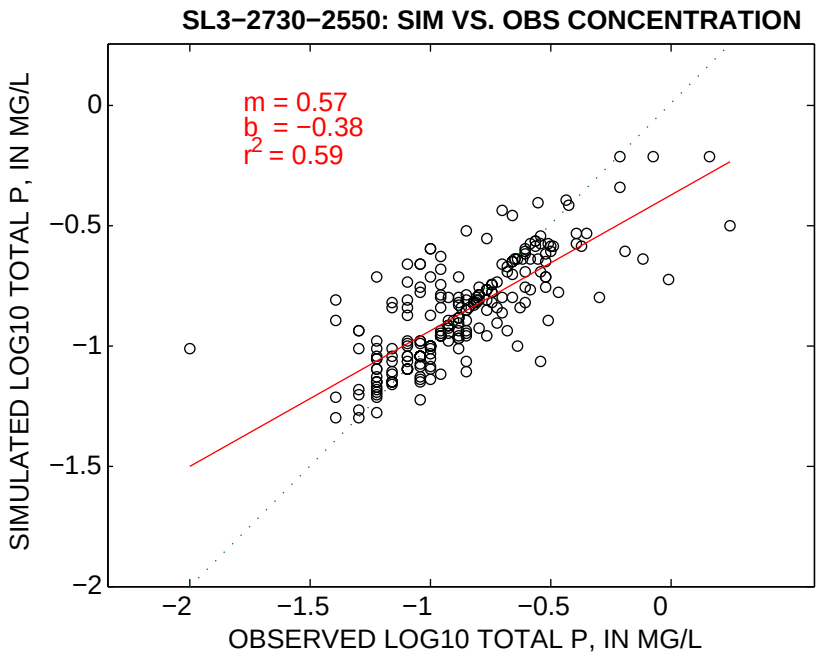
Drive	Directory	Observed
N/A	model	OBS20161101

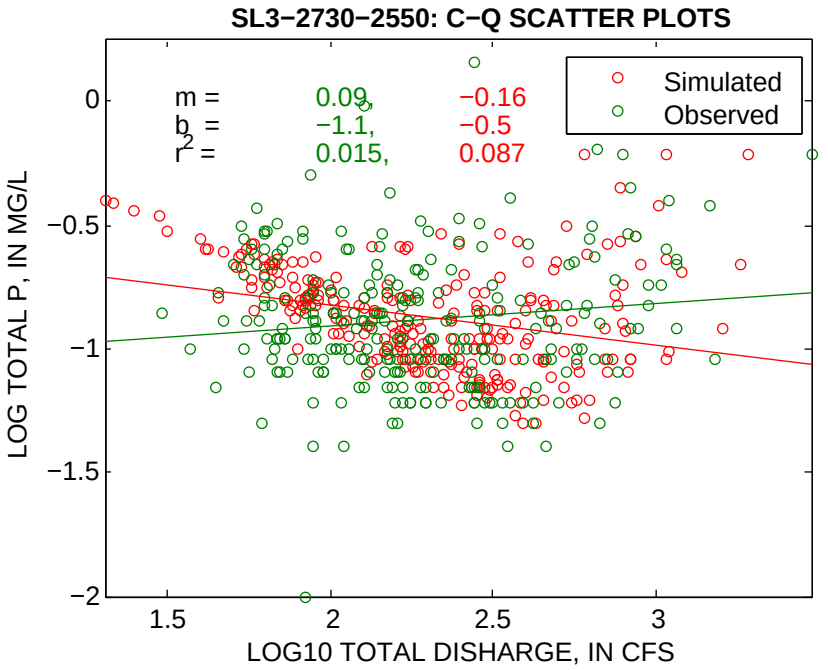
STATISTICS

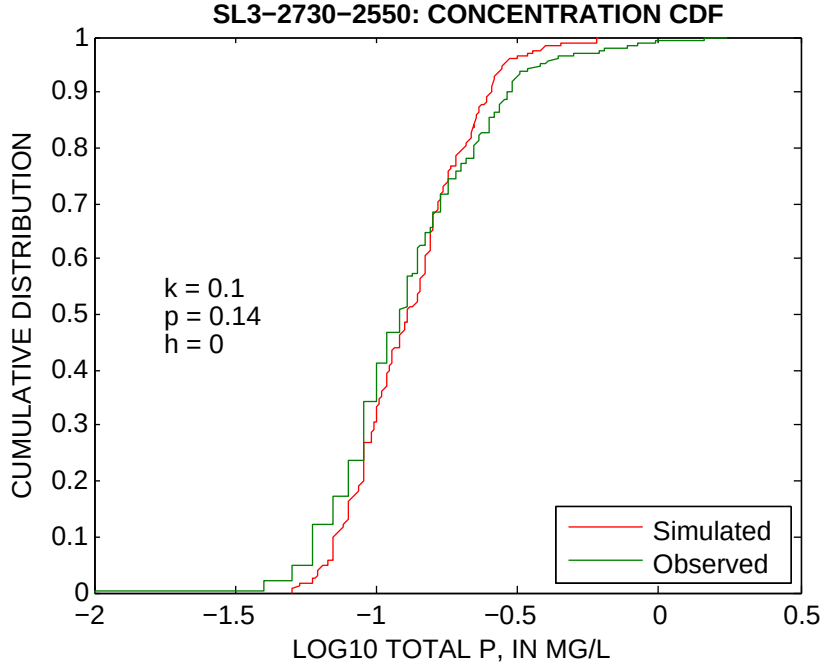
	n	258	258
		observe	simulate
min		0.01	0.048363
		-2	-1.31549
mean		0.169209	0.144195
		-0.882637	-0.891459
media		0.12	0.12646
		-0.920819	-0.898049
max		1.76	0.53236
		0.245513	-0.273795
varian		0.0318336	0.00578412
		0.0807194	0.0419061
JB		0.001	0.001
		0.001	0.026021
		ra	log
%		-14.7829	0.999471
err.va		0.0288068	0.0642659
rel.std.err		0.904917	0.796164
mod.eff		0.0950826	0.203836

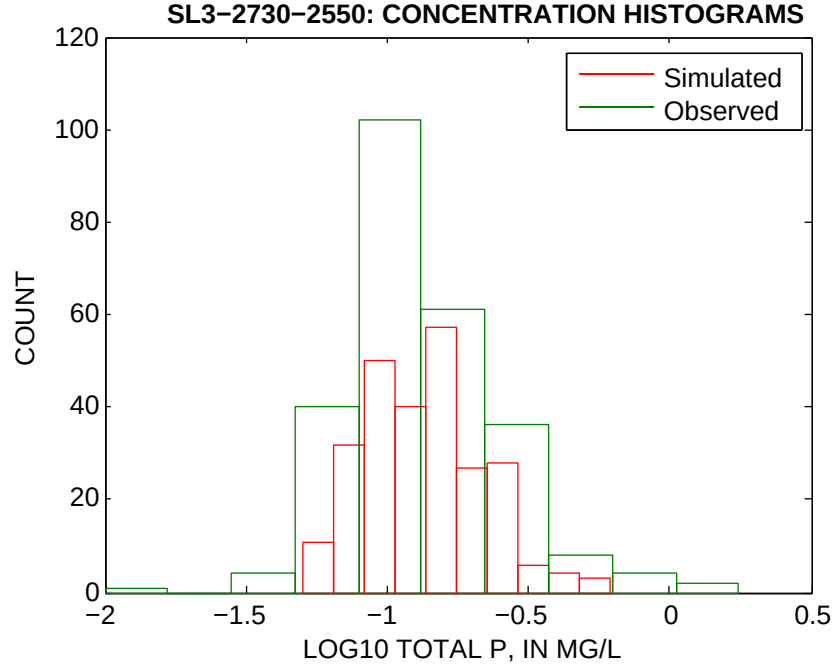
VERSION

ALL DATA
LOG10

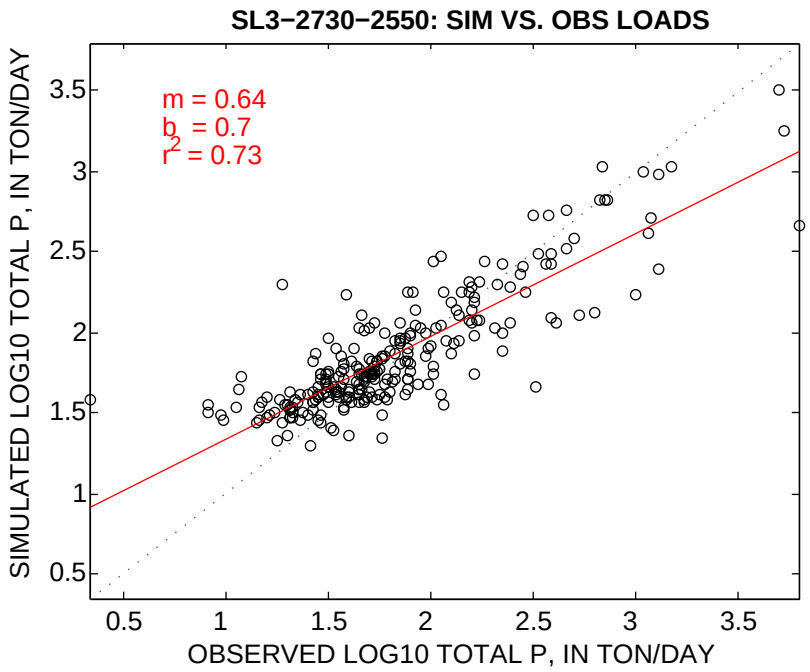


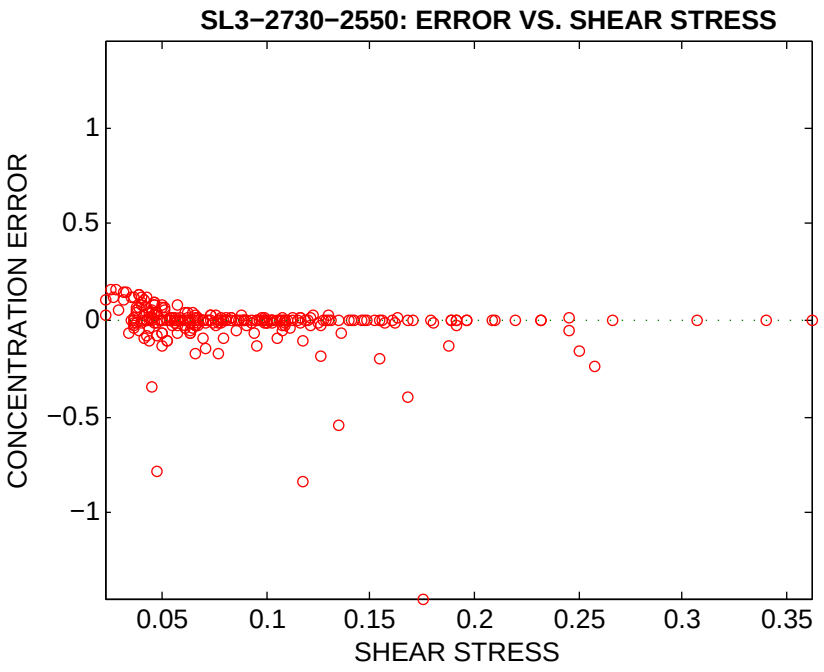


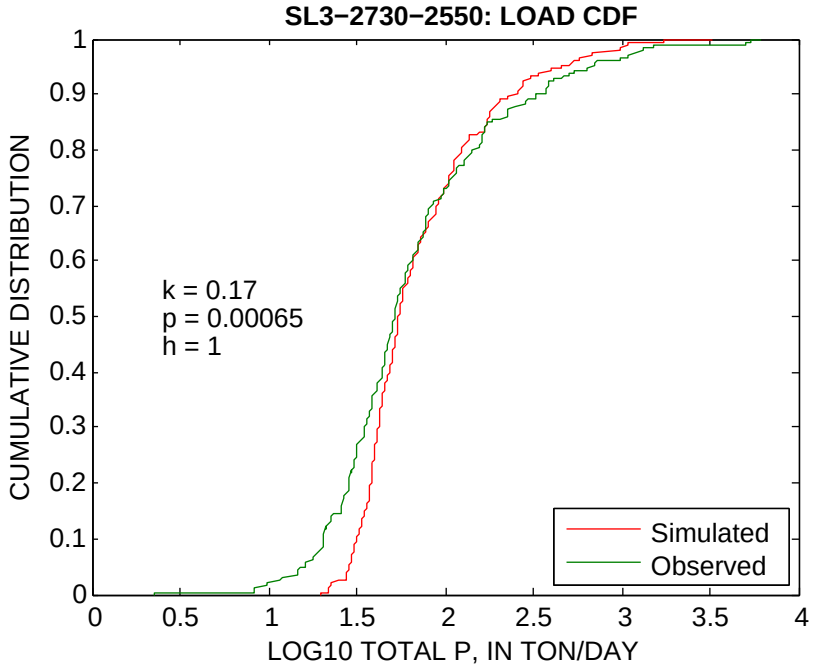


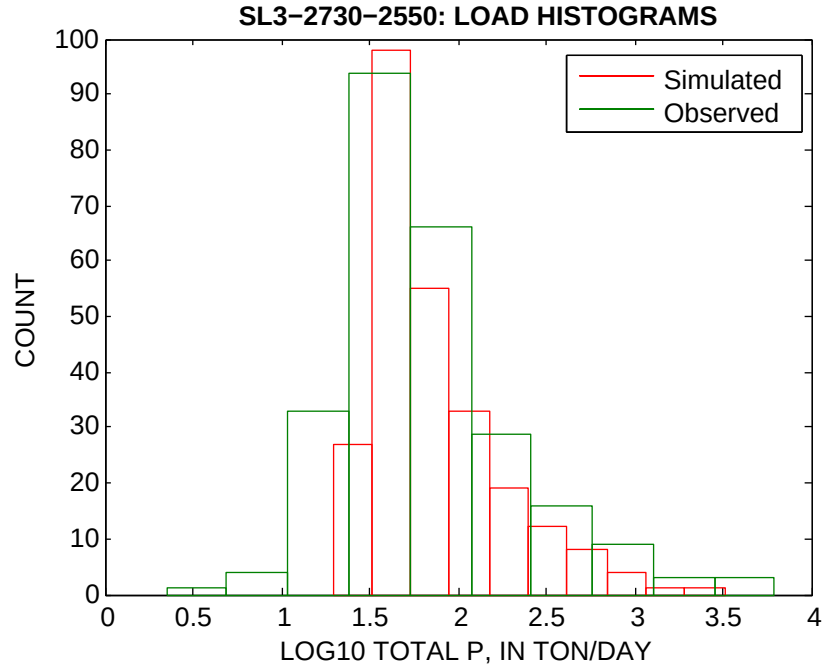


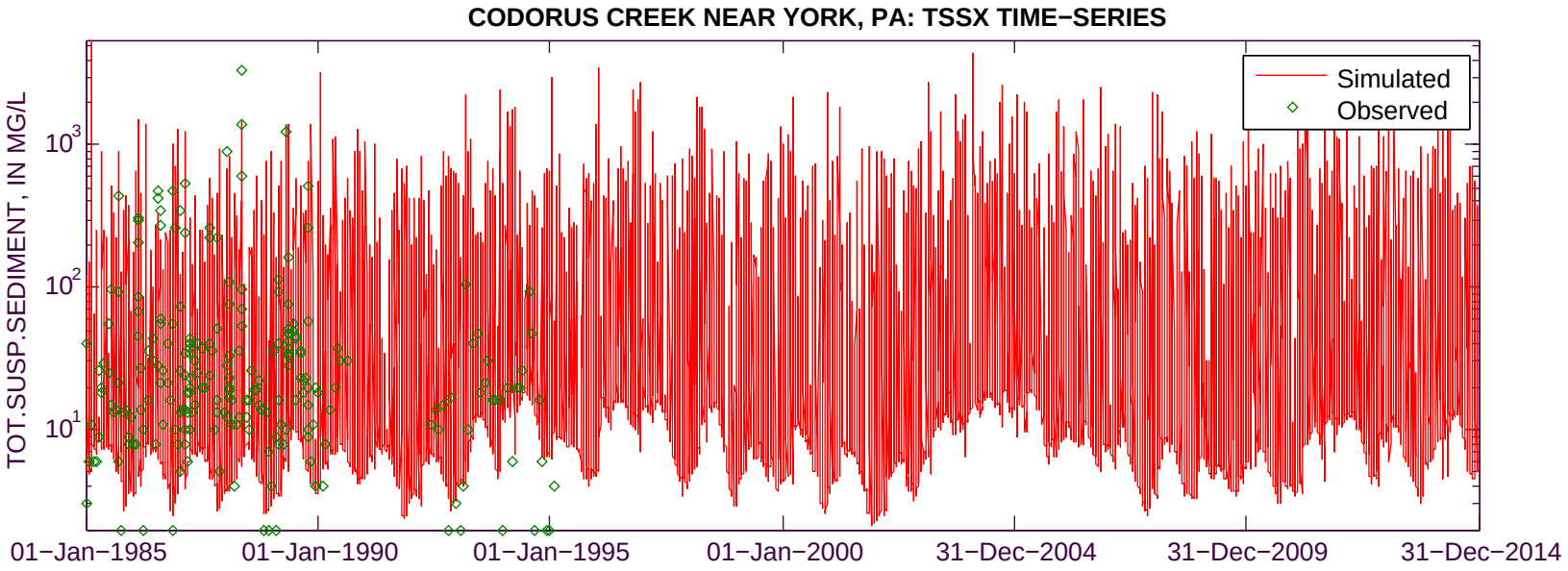
LOAD DATA
LOG10

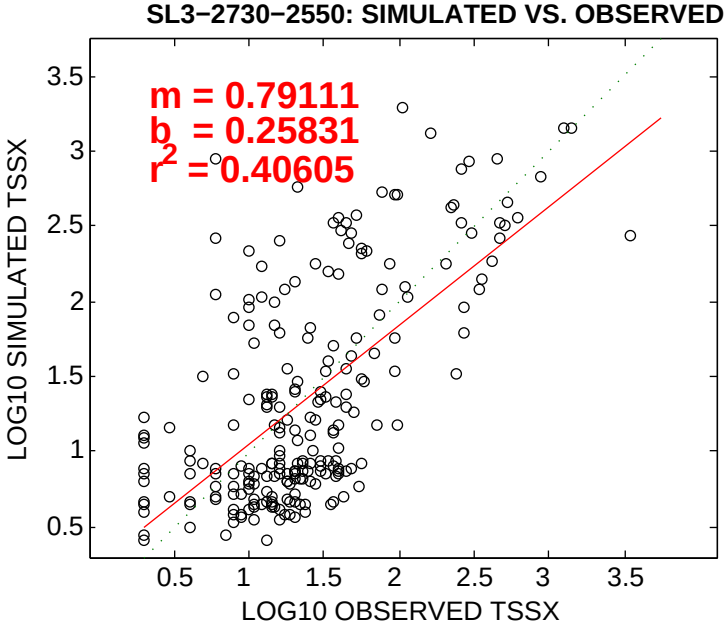


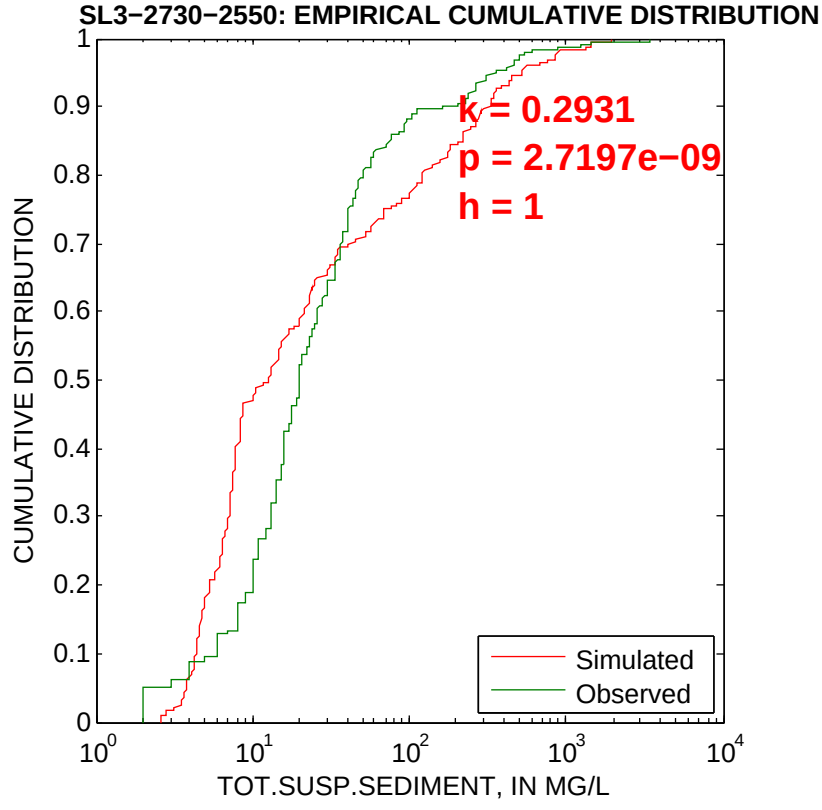












DATA SELECTION

scenario	file
P620171001WQ	TSSX.calib

plot: TSSX - total suspended ...

Dates: 1/1/1985 — 12/31/201

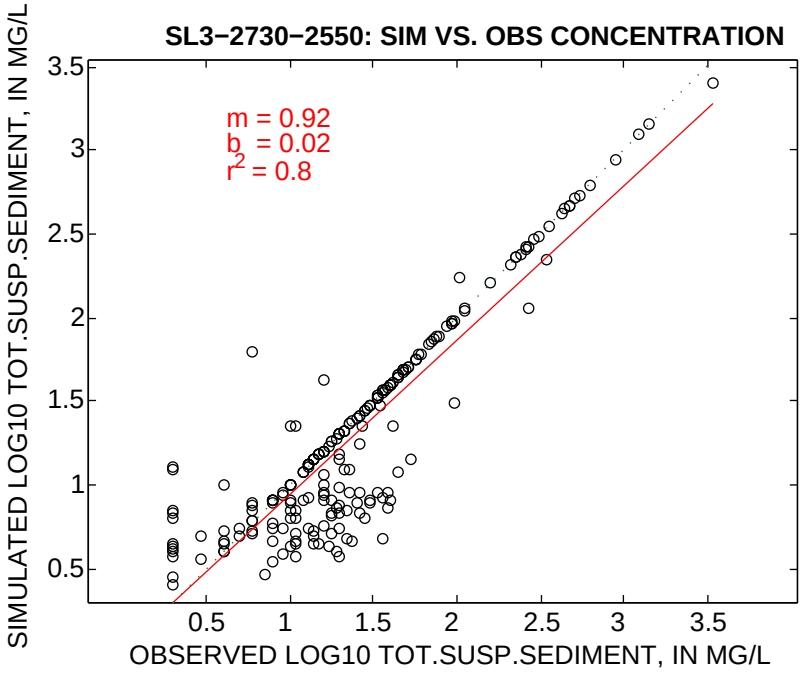
Drive	Directory	Observed
N/A	model	OBS20161101

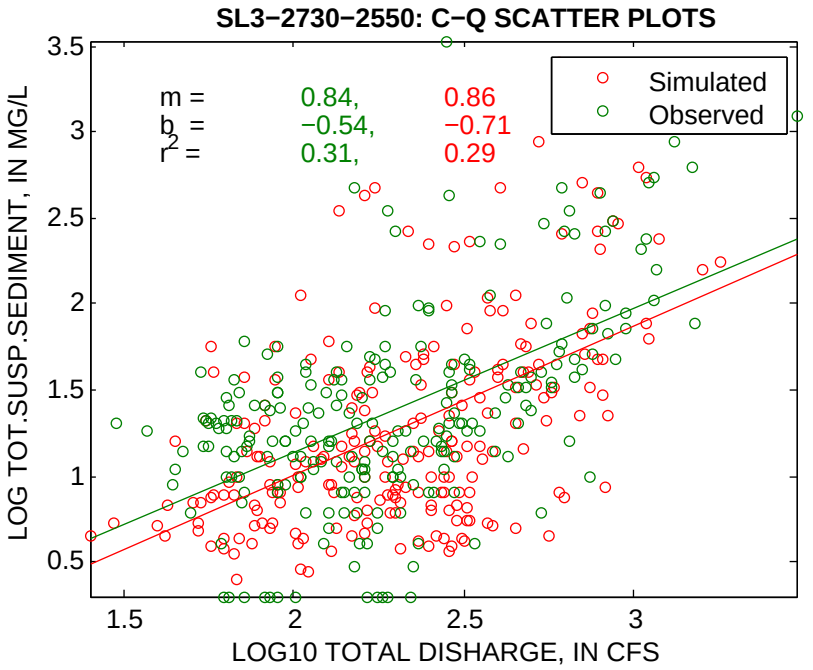
STATISTICS

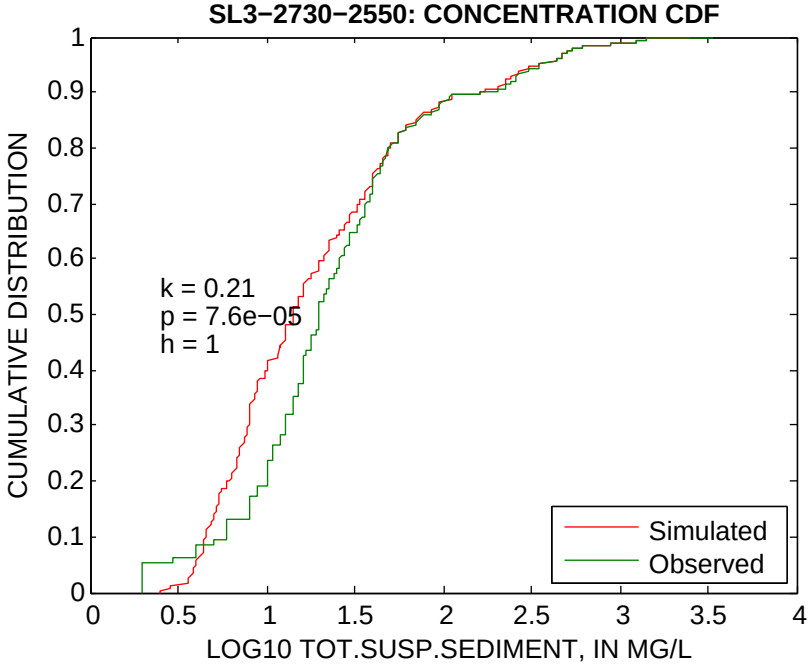
	n	observe	simulate
		232	232
min		2	2.5639
		0.30103	0.408901
mean		82.1275	106.736
		1.37985	1.34992
media		20	12.725
		1.30103	1.10465
max		3395	1945.7
		3.53084	3.28908
varian		74395.5	61801.7
		0.334932	0.516236
JB		0.001	0.001
		0.001	0.001
		ra	log
%		29.9636	-2.16915
err.va		80132.9	0.322131
rel.std.err		1.07712	0.961779
mod.eff		-0.07712	0.0382208

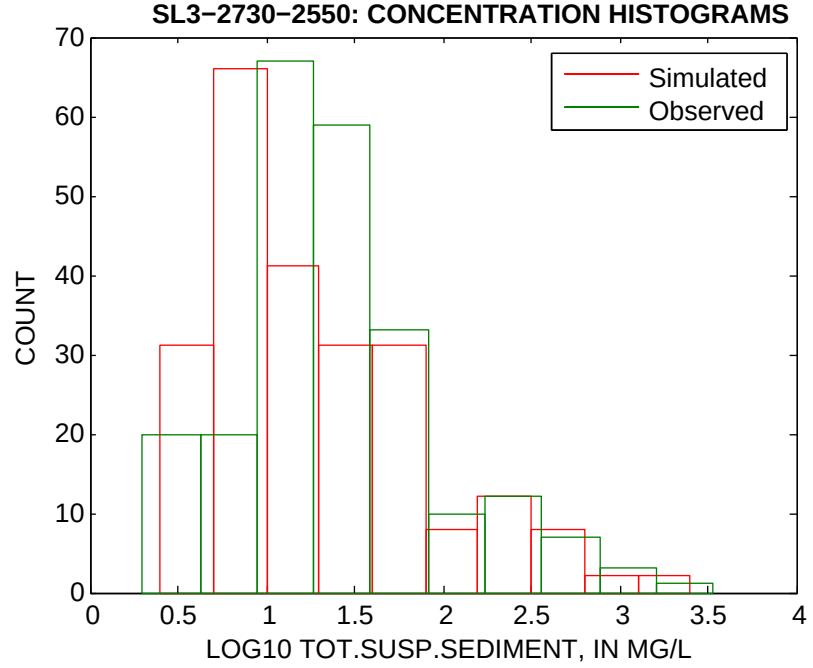
VERSION 2.1

ALL DATA
LOG10

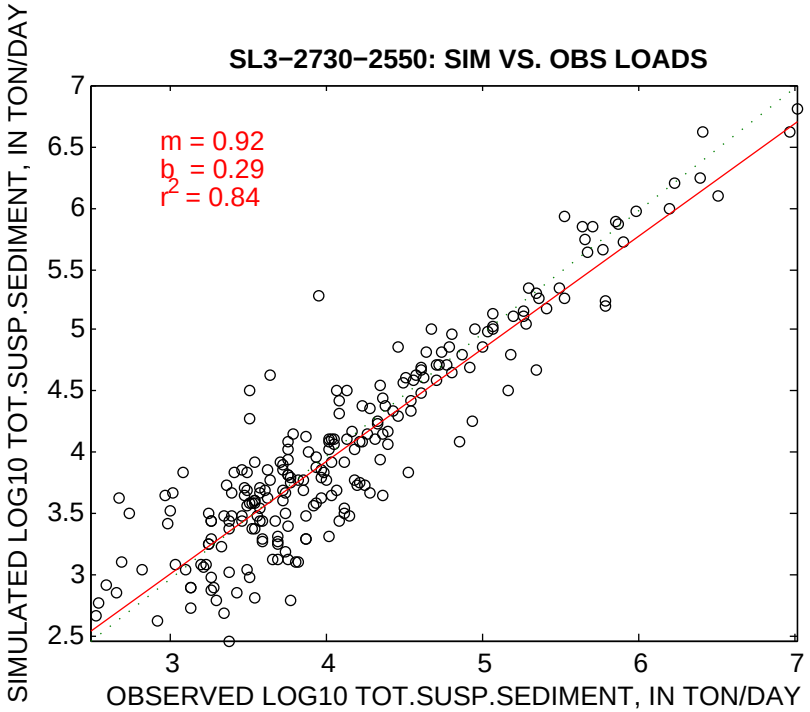


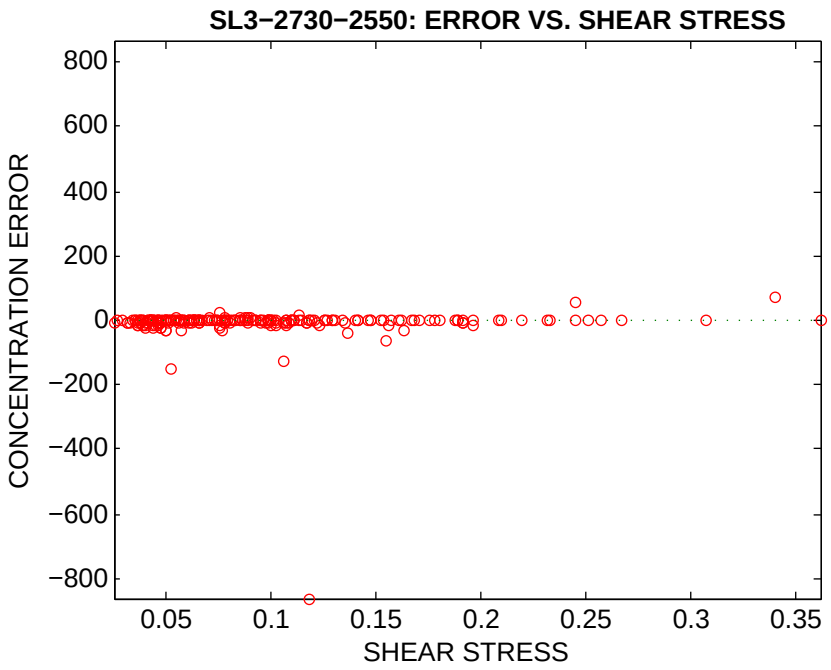


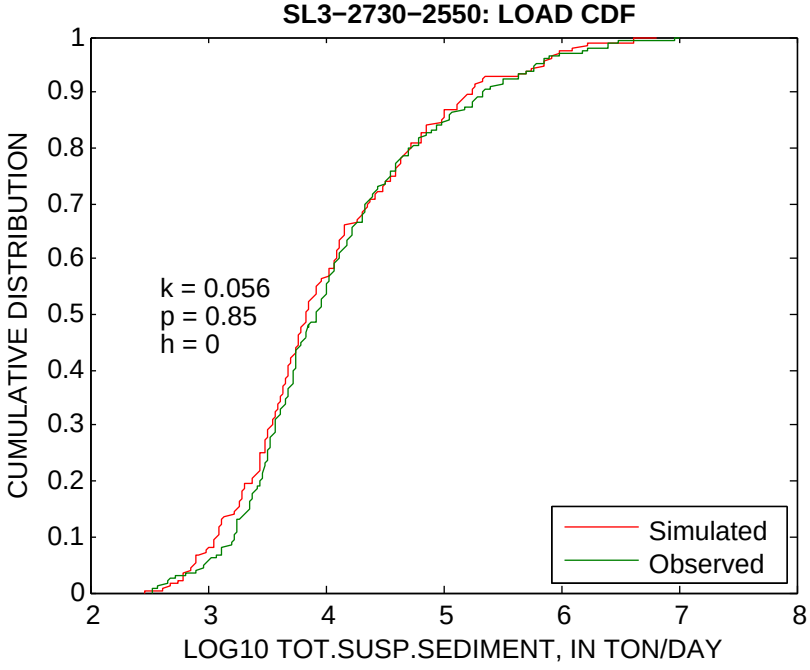


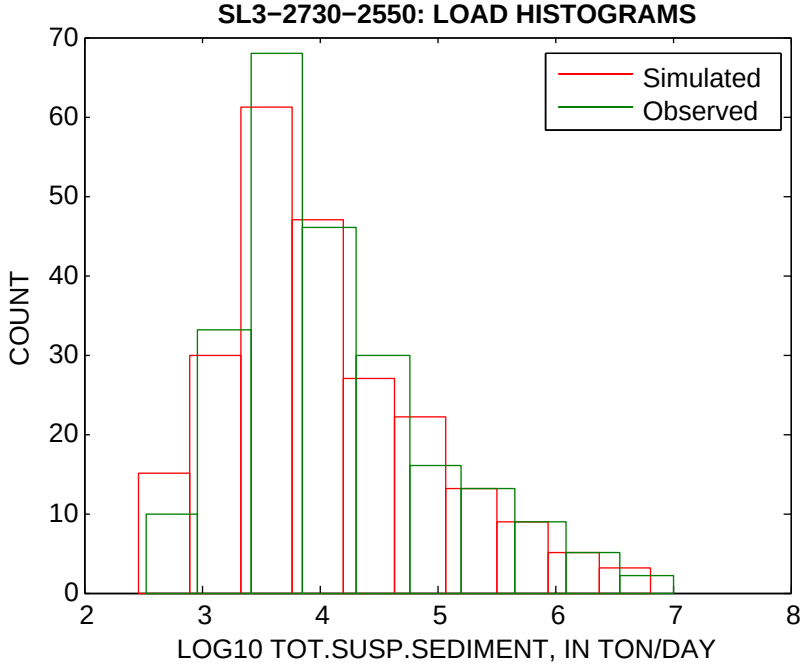


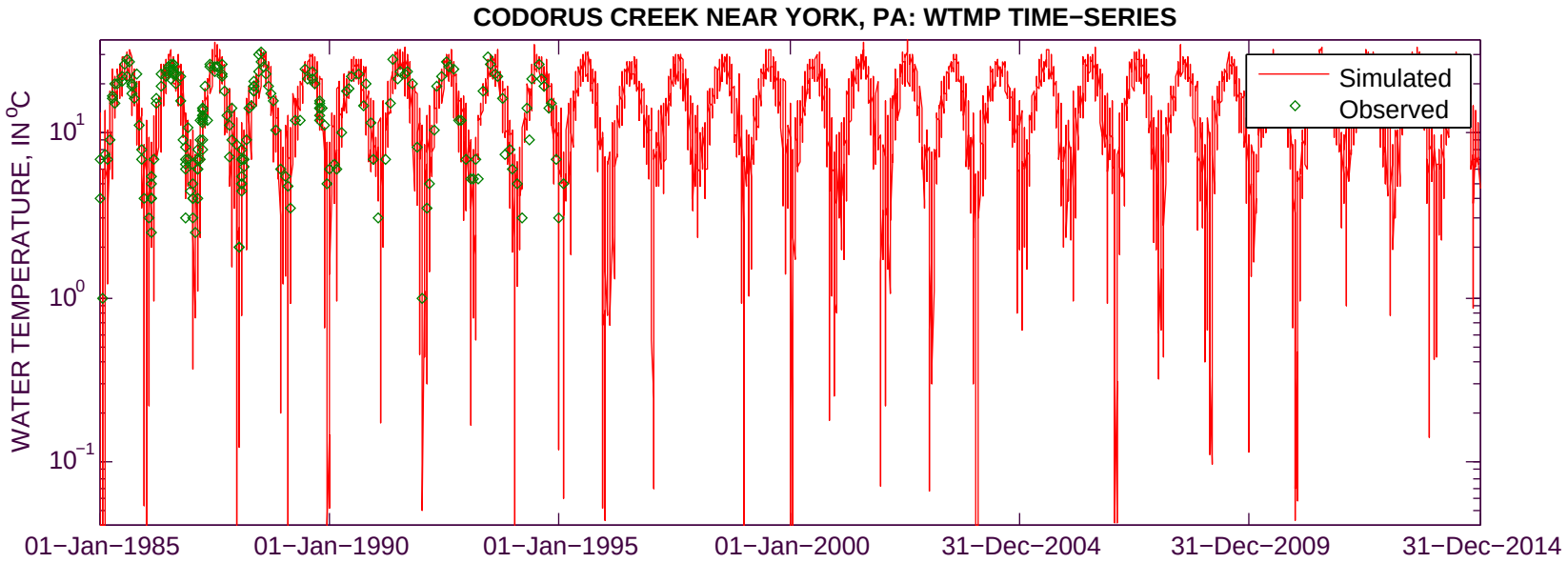
LOAD DATA
LOG10

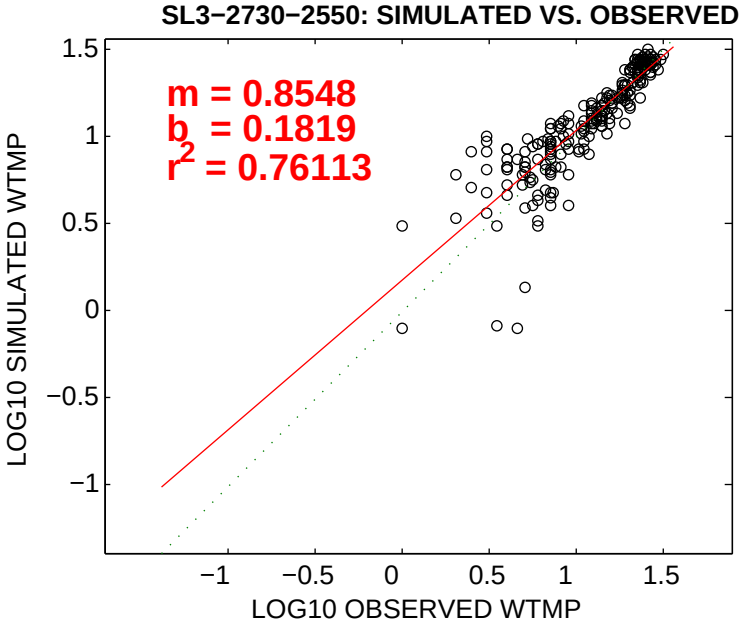


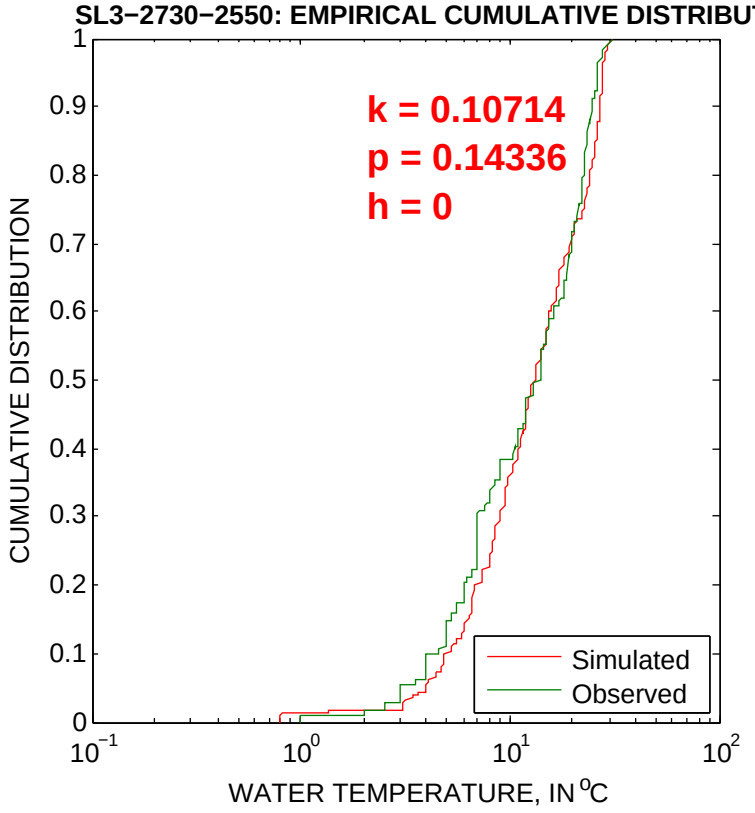












DATA SELECTION

scenario	file
P620171001WQ	WTMP.calib

plot: WTMP - water tempera...

Dates: 1/1/1985 – 12/31/201

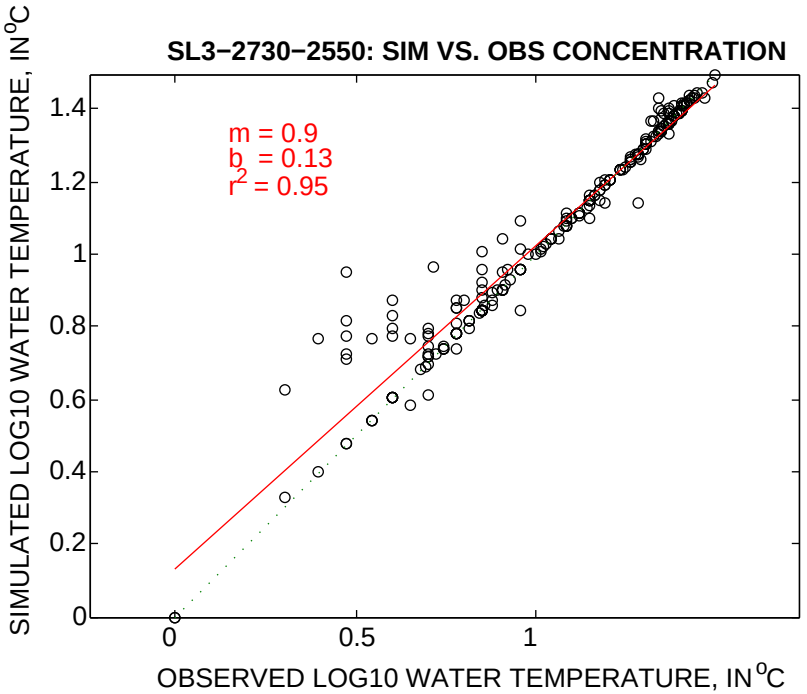
Drive	Directory	Observed
N/A	model	OBS20161101

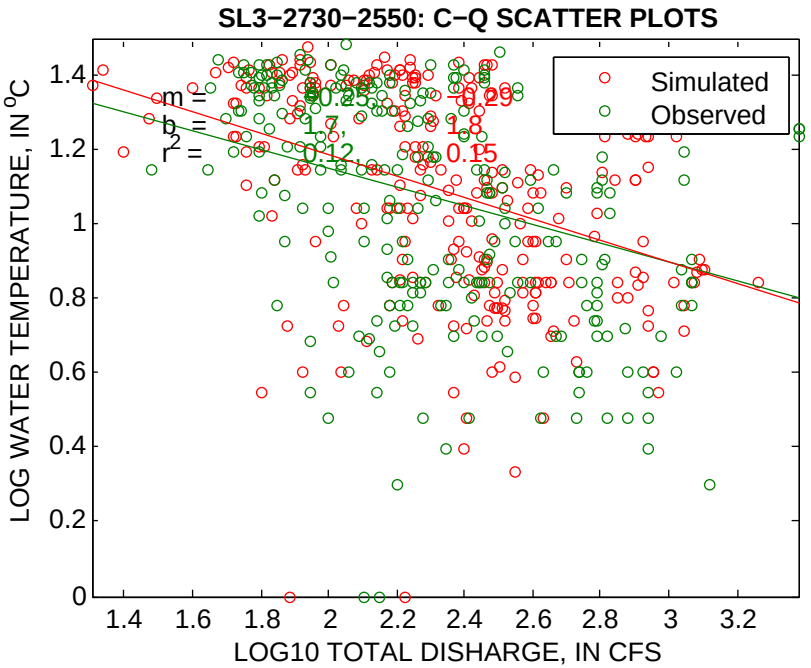
STATISTICS

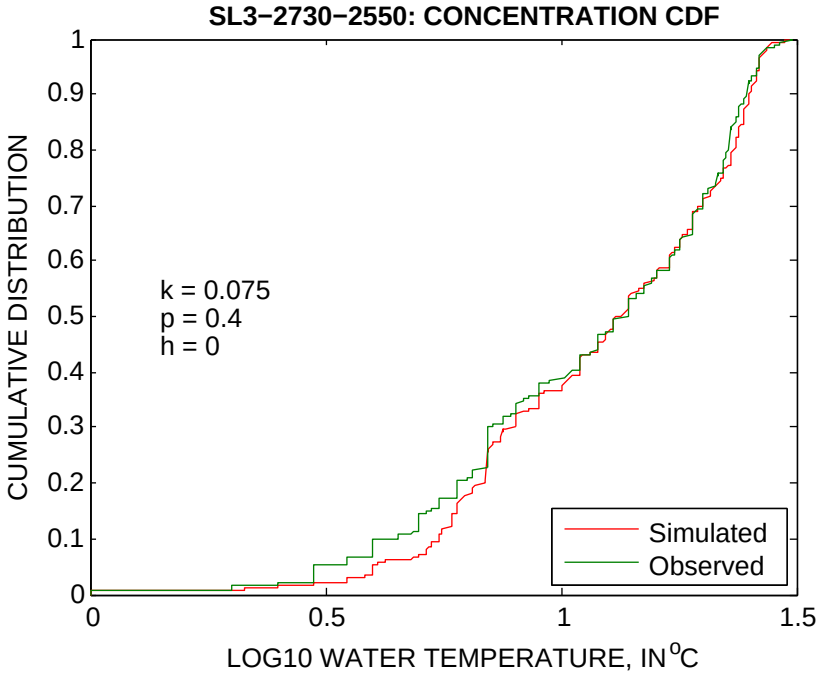
	n	observe	simulate
		224	224
min		1	0.79023
		0	-0.102246
mean		14.0728	14.8097
		1.05934	1.08743
media		13.85	13.137
		1.14142	1.11849
max		31	31.165
		1.49136	1.49367
varian		62.0336	65.7249
		0.0934115	0.0896748
JB		0.004201	0.004415
		0.002042	0.001
		ra	log
%		5.23632	2.65169
err.va		7.75586	0.0241823
rel.std.err		0.125027	0.25888
mod.eff		0.874973	0.74112

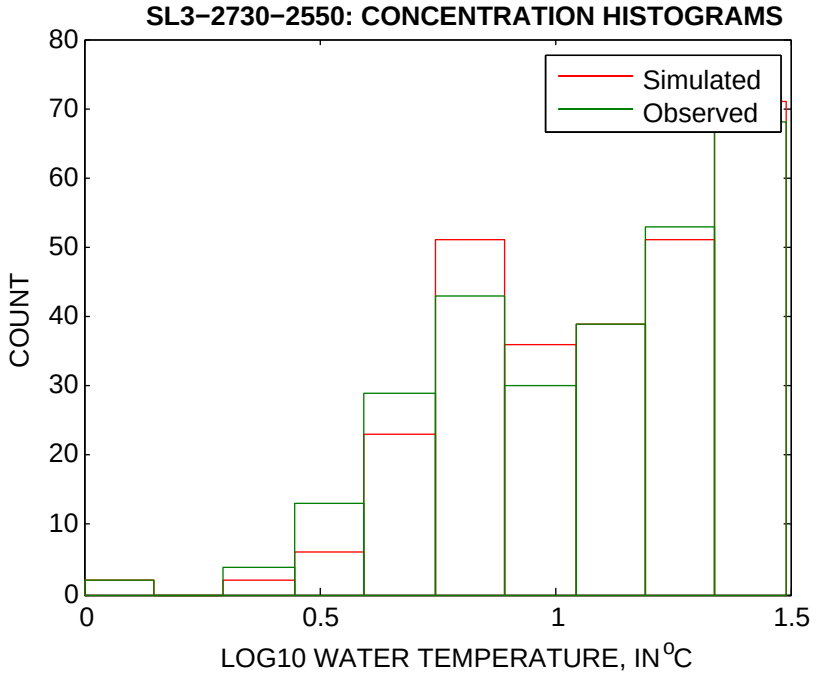
VERSION 2.1

ALL DATA
LOG10

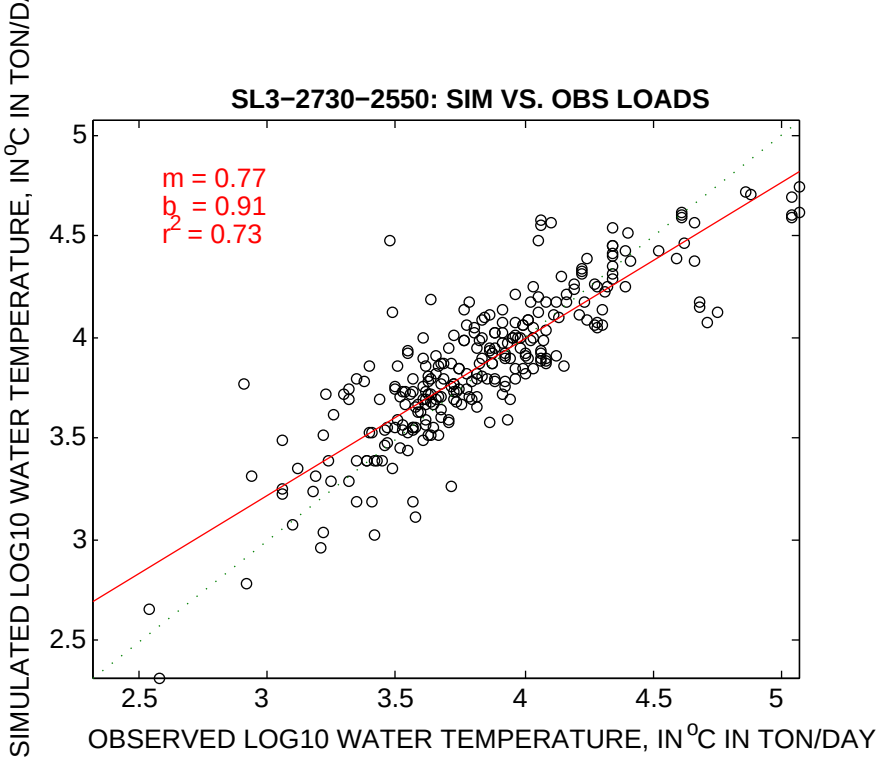


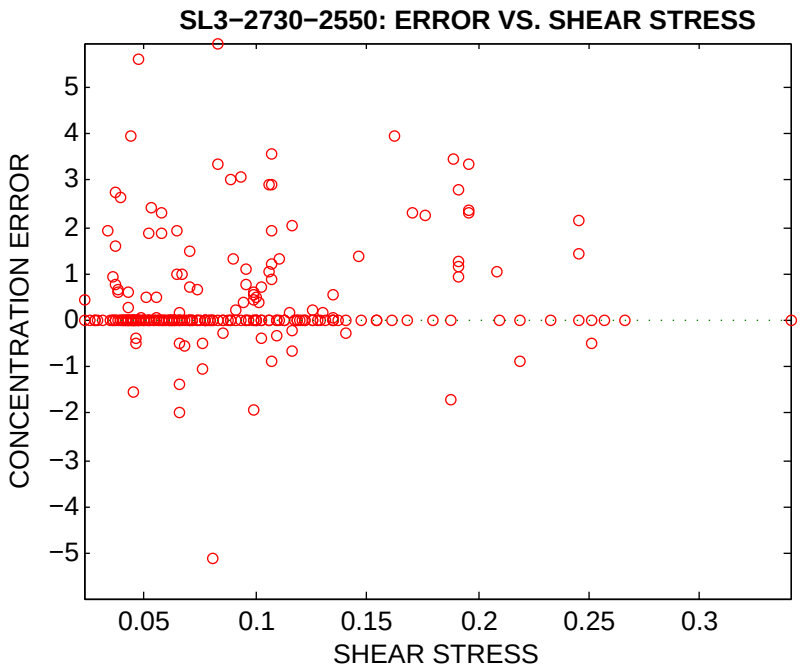


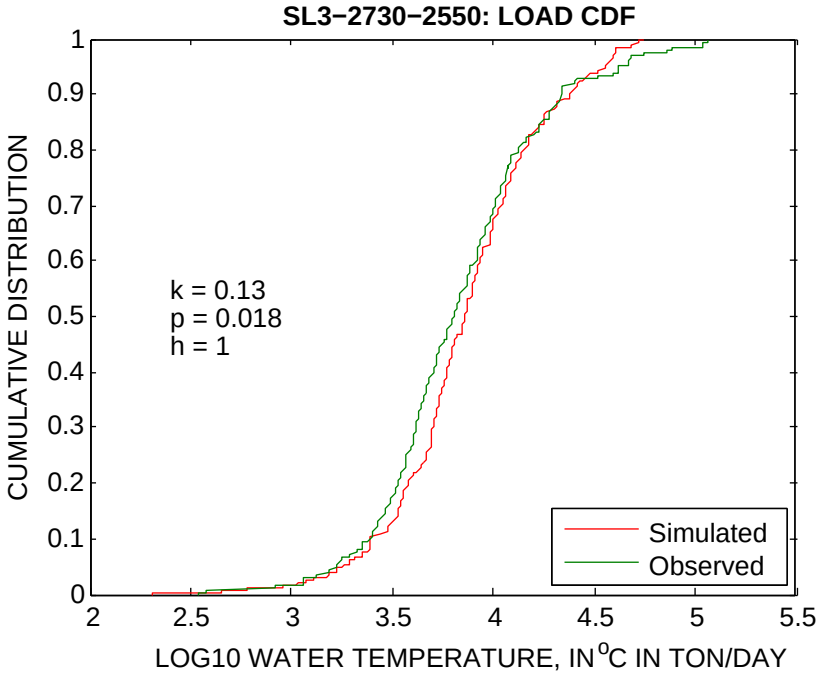


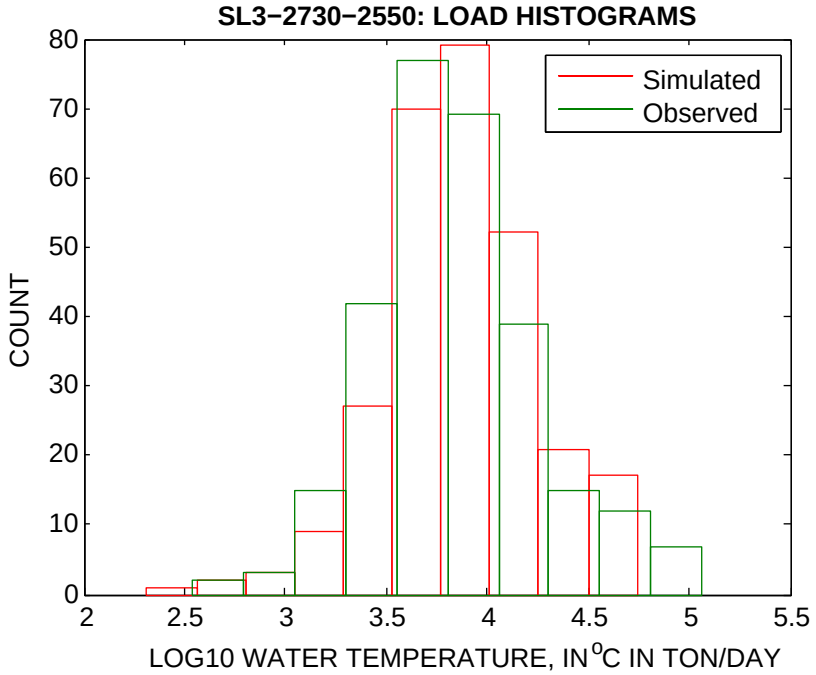


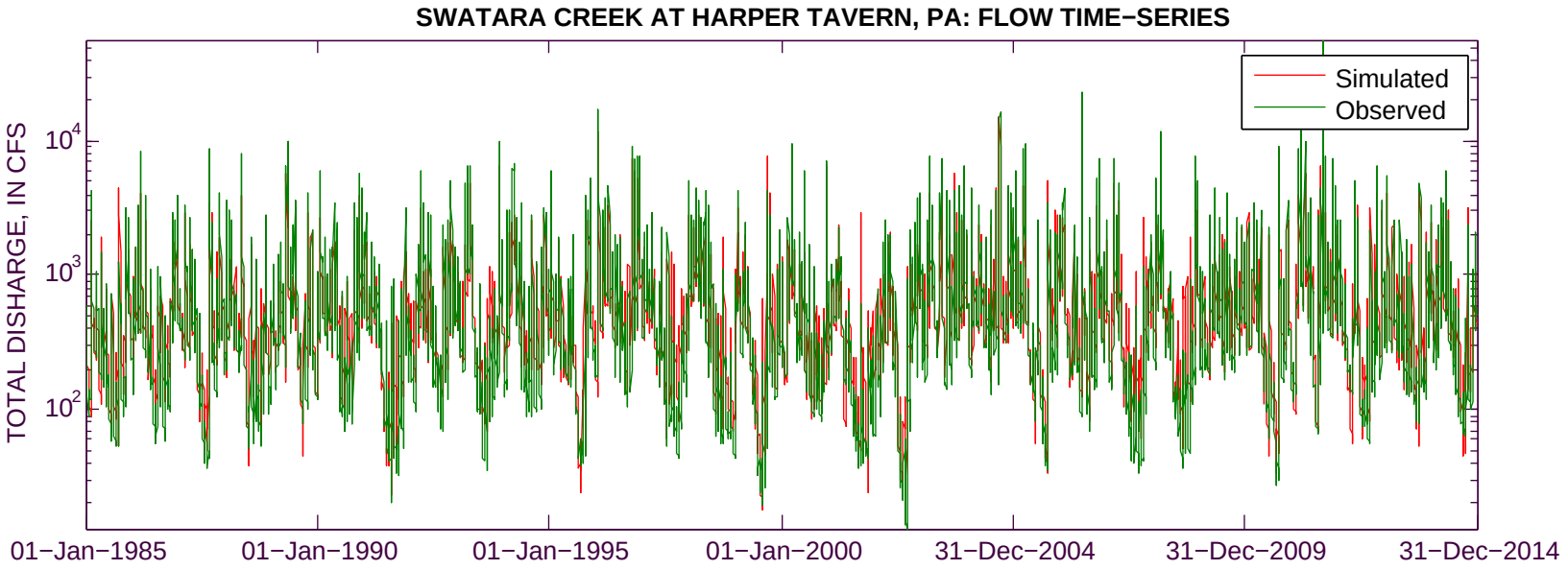
LOAD DATA
LOG10

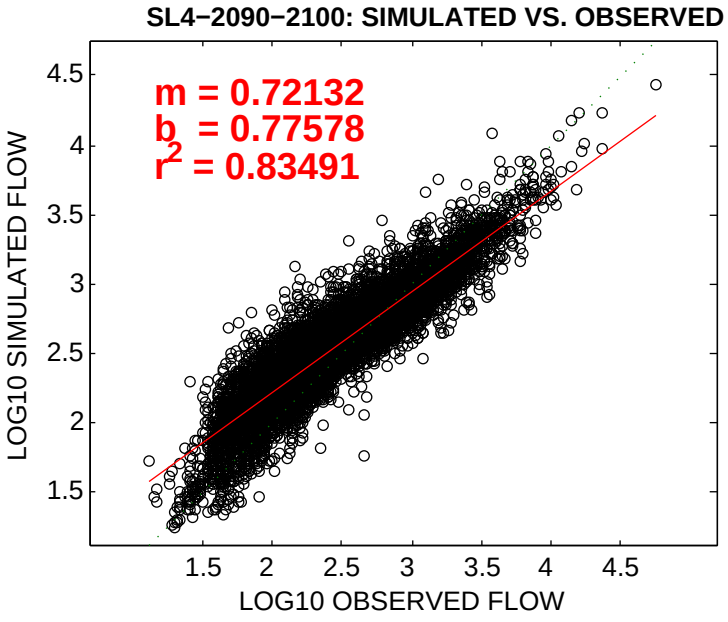


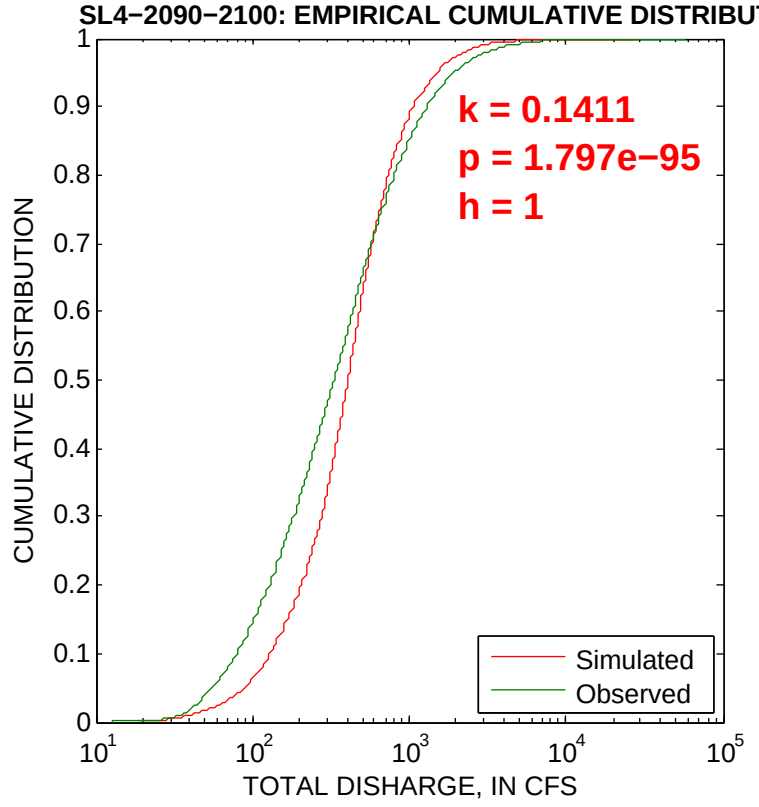












DATA SELECTION

scenario: P620171001WQ | file: FLOW.calib

plot: FLOW - total discharge

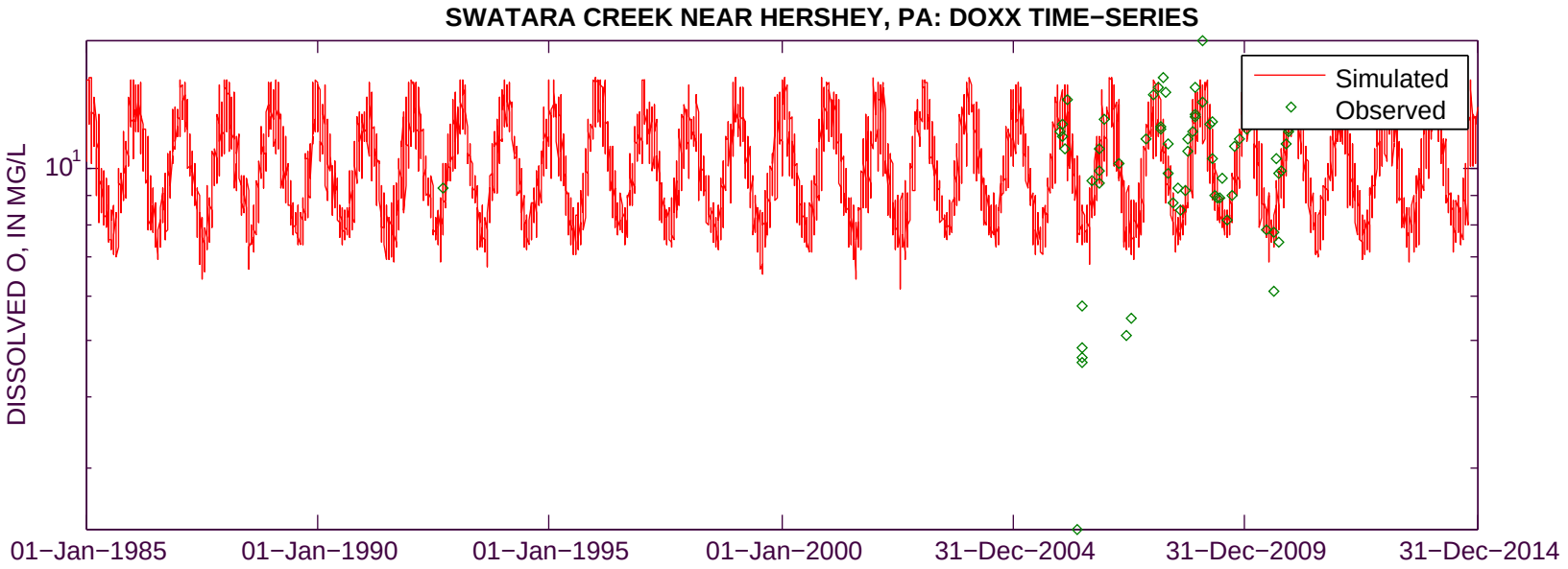
Dates: 1/1/1985 – 12/31/201

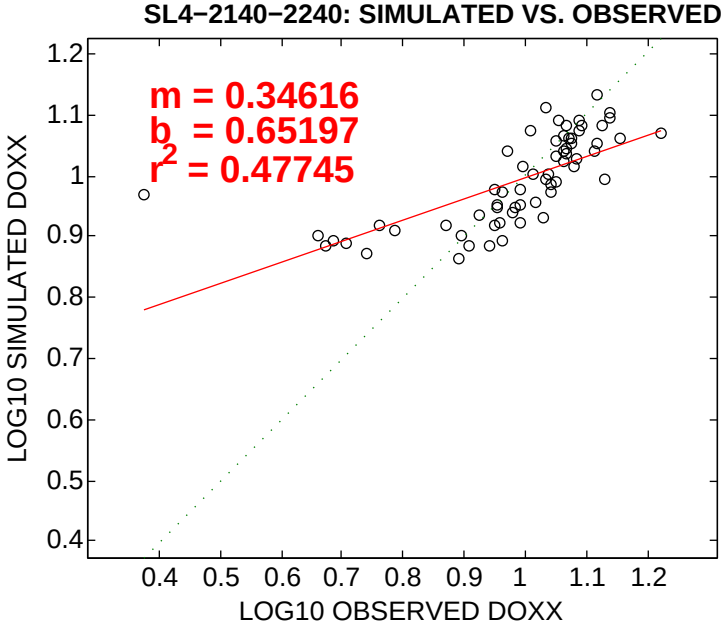
Drive: N/A | Directory: model | Observed: OBS20161101

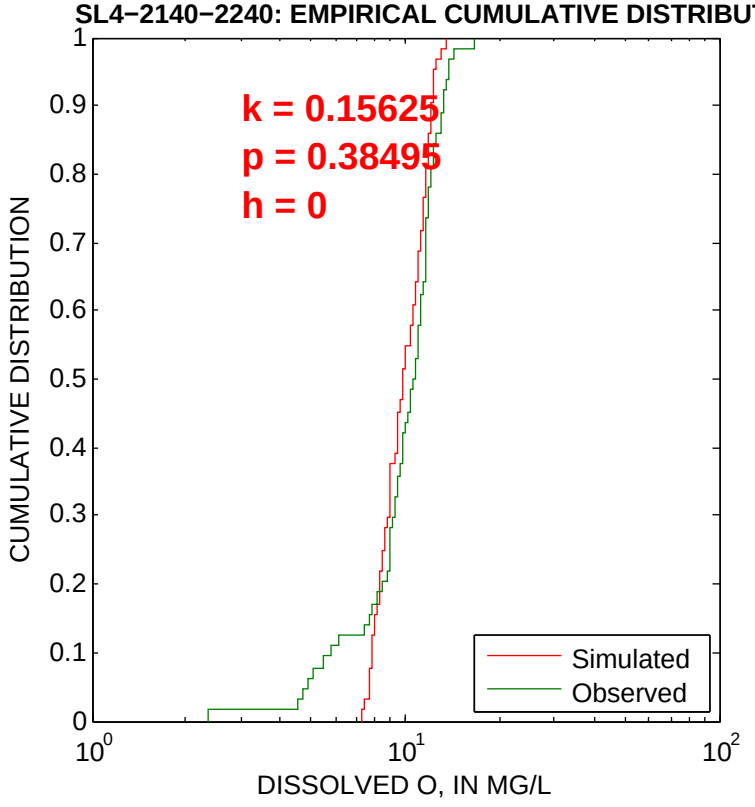
STATISTICS

		observe	simulate
n		10957	10957
min		13	18.134
		1.11394	1.25849
mean		606.26	563.923
		2.5173	2.59155
media		331	406.98
		2.51983	2.60957
max		57000	26983
		4.75587	4.43109
varian		1.23914e+0	521294
		0.218541	0.13619
JB		0.001	0.001
		0.001	0.001
		ra	log
%		-6.9833	2.94951
err.va		314664	0.0449691
rel.std.err		0.253937	0.205769
mod.eff		0.746063	0.794231

VERSION 2.1







DATA SELECTION

scenario	file
P620171001WQ	DOXX.calib

plot: DOXX - dissolved oxygen

Dates: 1/1/1985 – 12/31/201

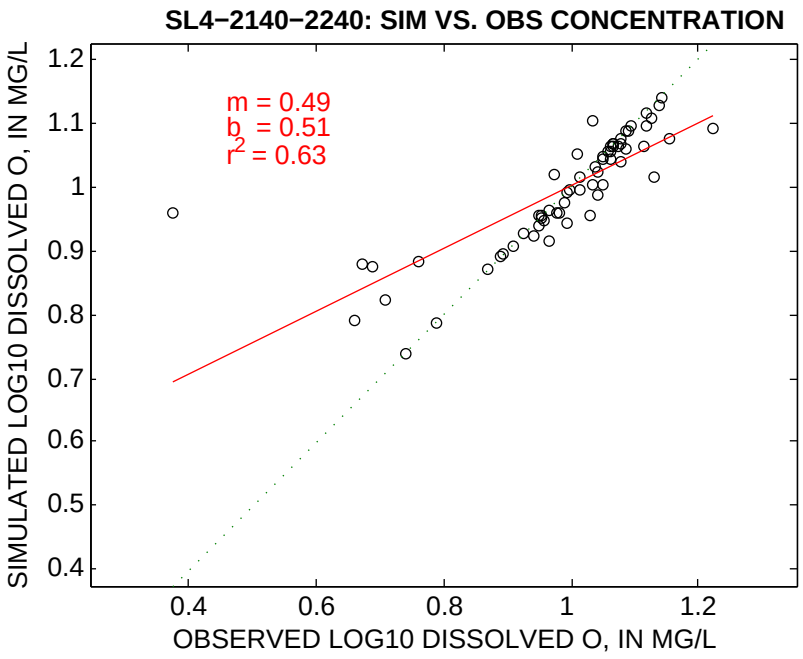
Drive	Directory	Observed
N/A	model	OBS20161101

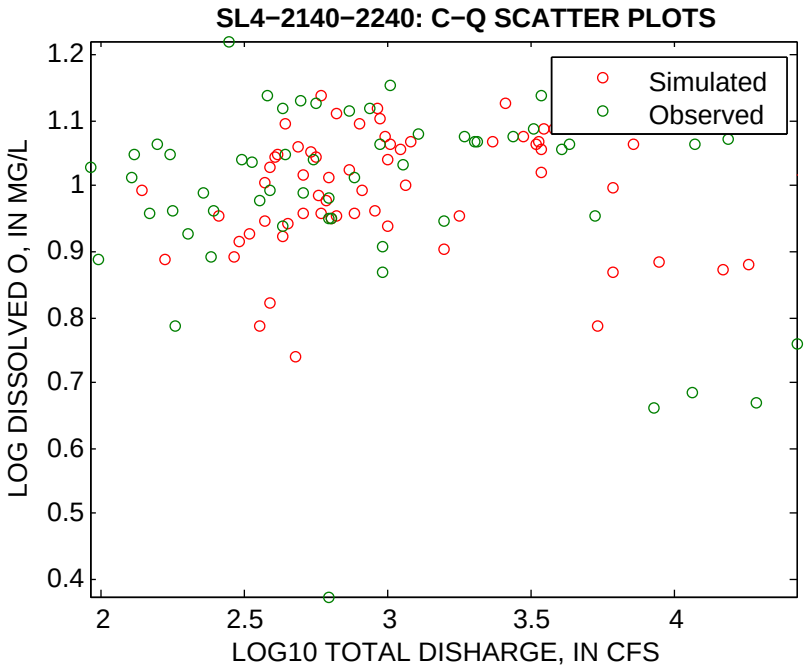
STATISTICS

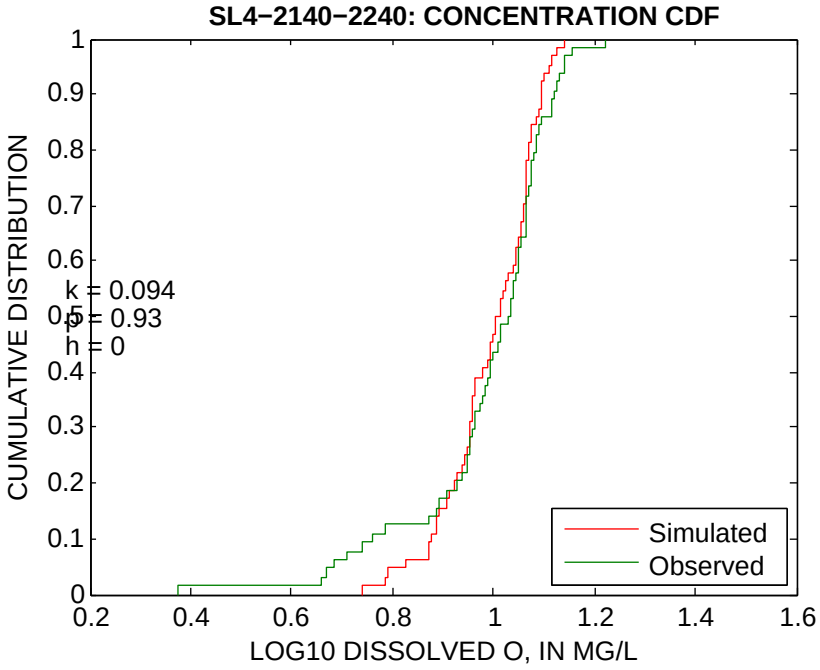
	n	64	64
		observe	simulate
min		2.37	7.3107
		0.374748	0.863959
mean		10.1656	9.99174
		0.98729	0.993731
media		10.735	9.8821
		1.0308	0.994848
max		16.7	13.547
		1.22272	1.13184
varian		7.24493	2.73206
		0.0209142	0.00524904
JB		0.059761	0.082217
		0.001	0.074605
		ra	log
%		-1.71053	0.652386
err.va		3.18022	0.0117259
rel.std.err		0.438959	0.560668
mod.eff		0.561041	0.439332

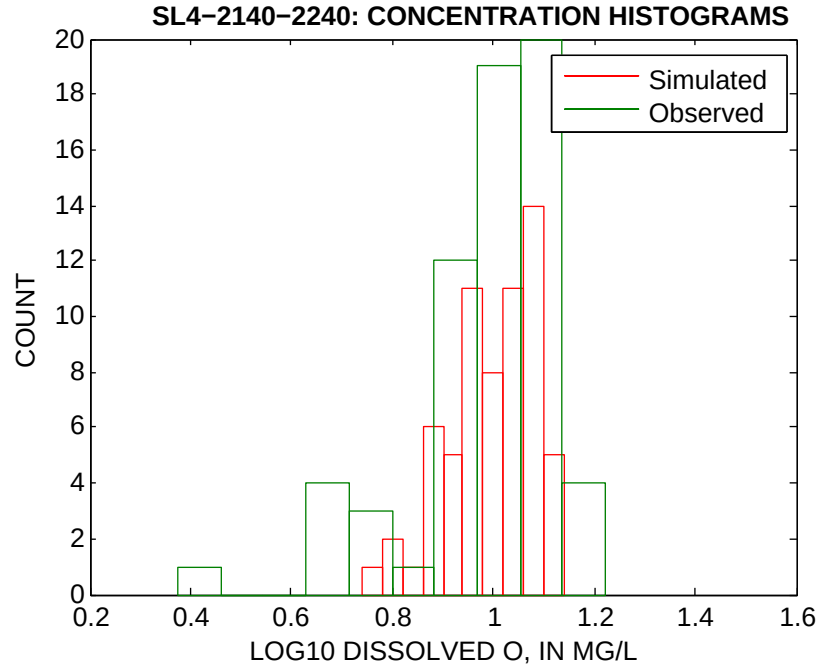
VERSION

ALL DATA
LOG10

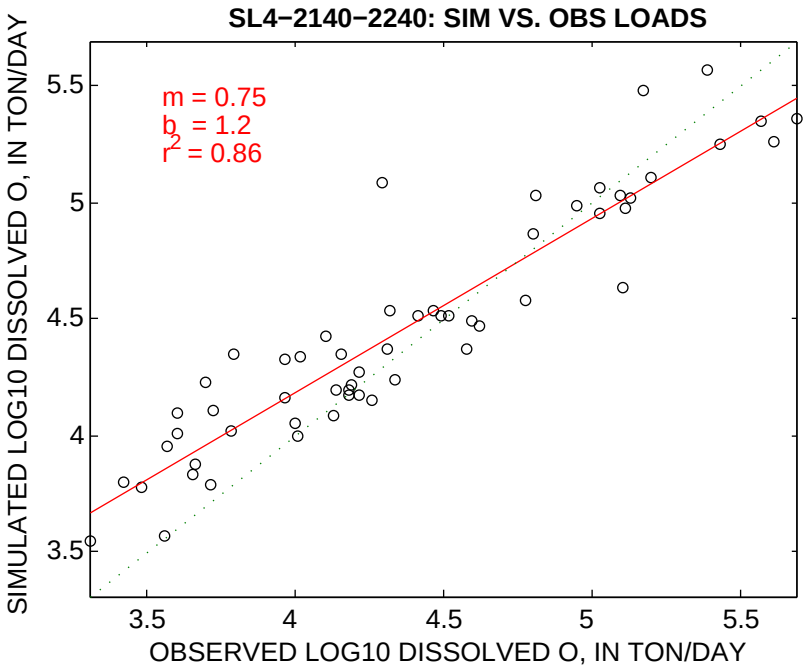


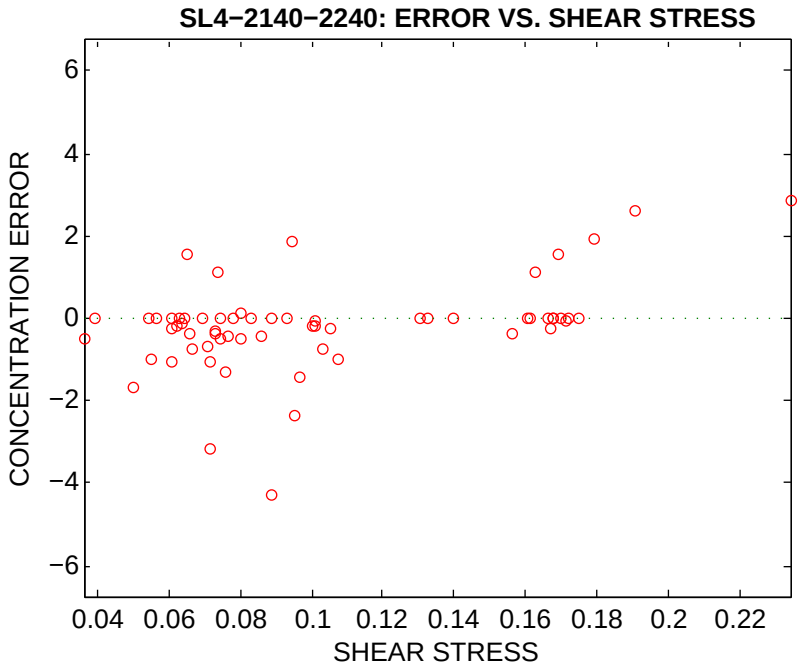


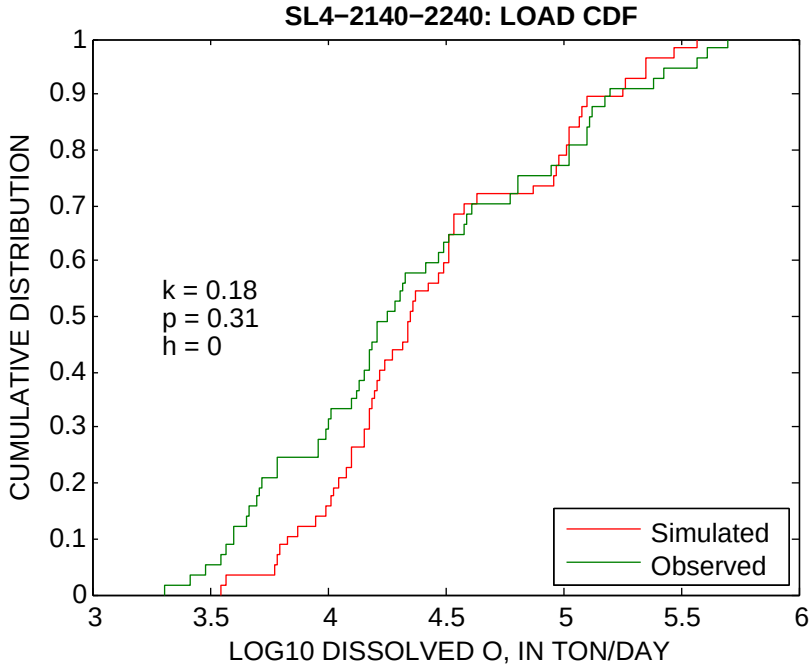


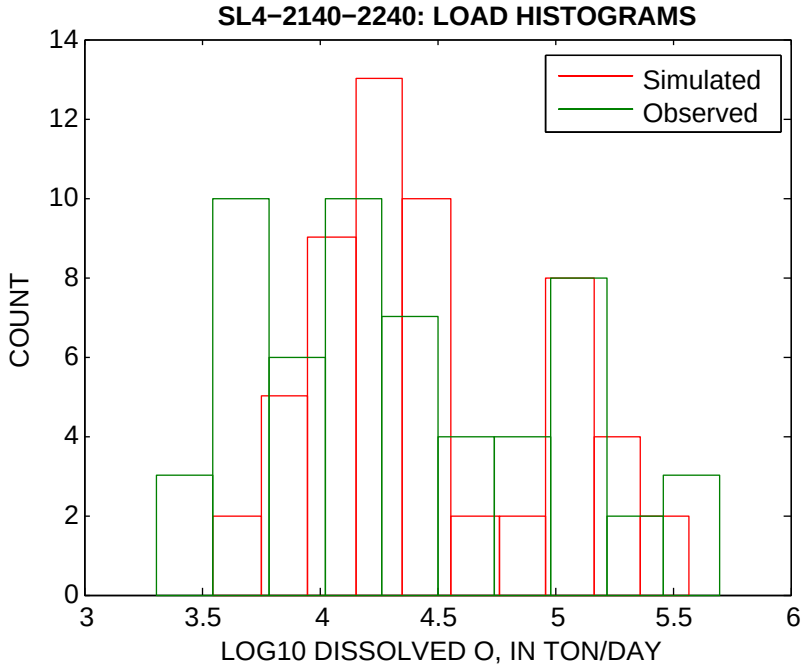


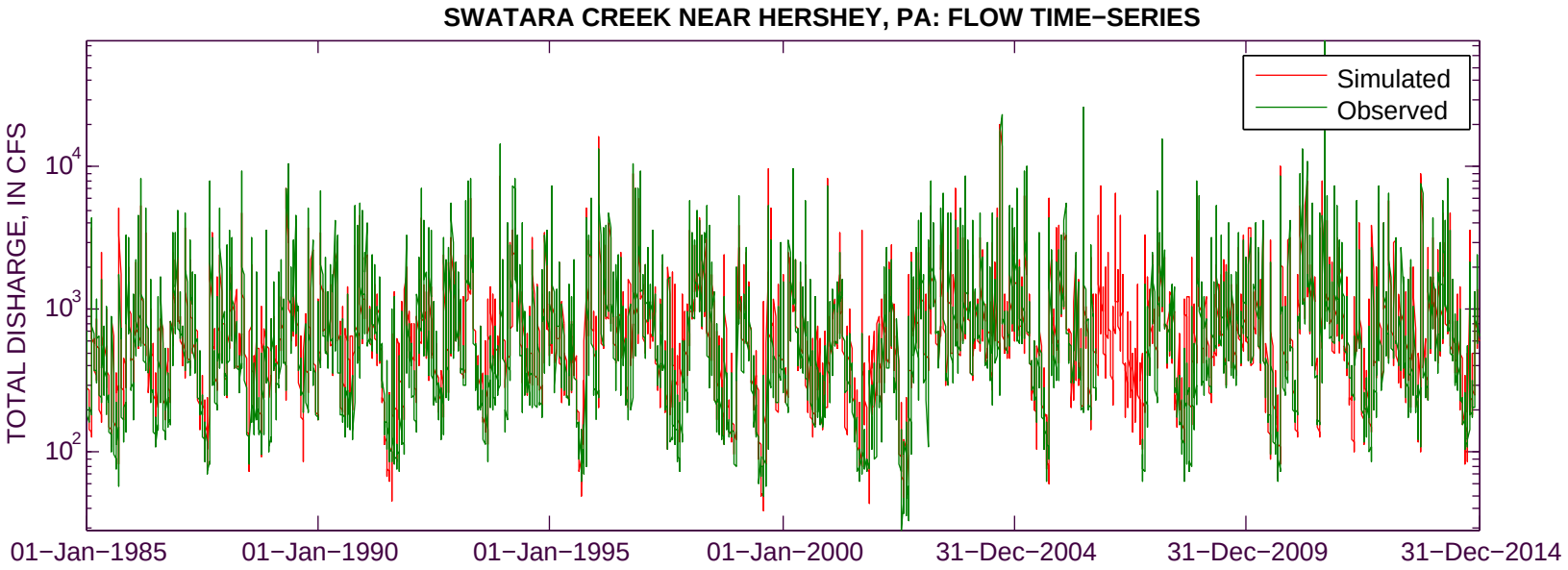
LOAD DATA
LOG10

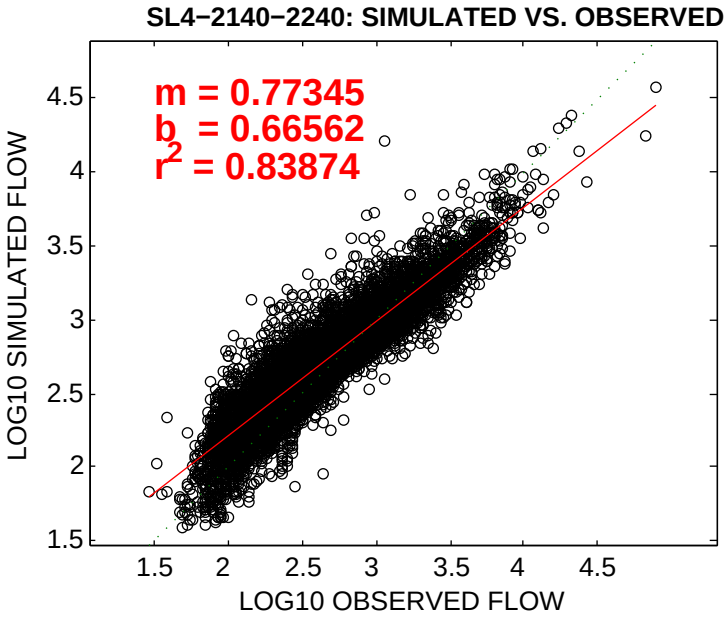


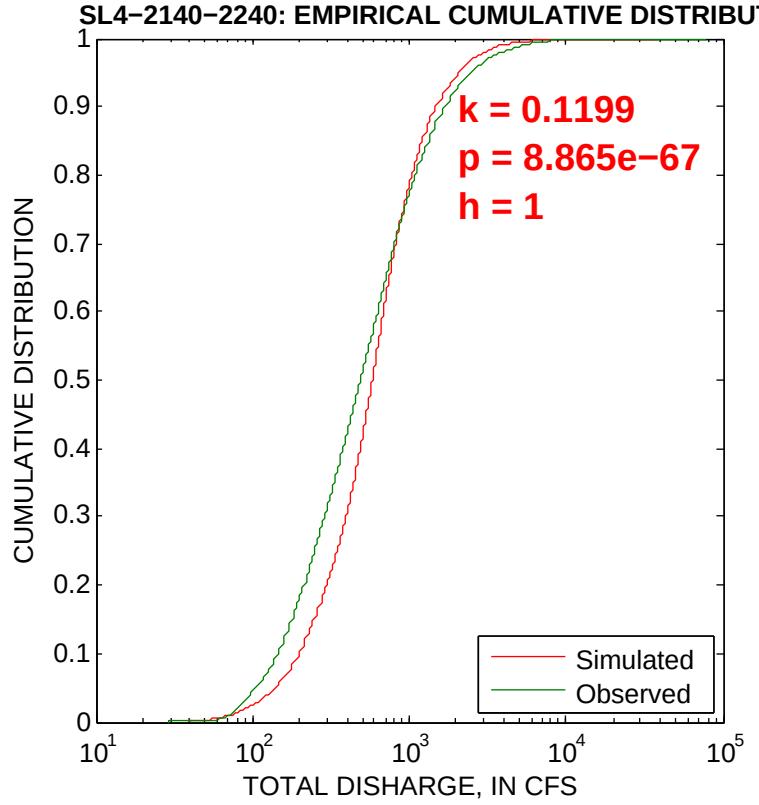












DATA SELECTION

scenario: P620171001WQ | file: FLOW.calib

plot: FLOW - total discharge

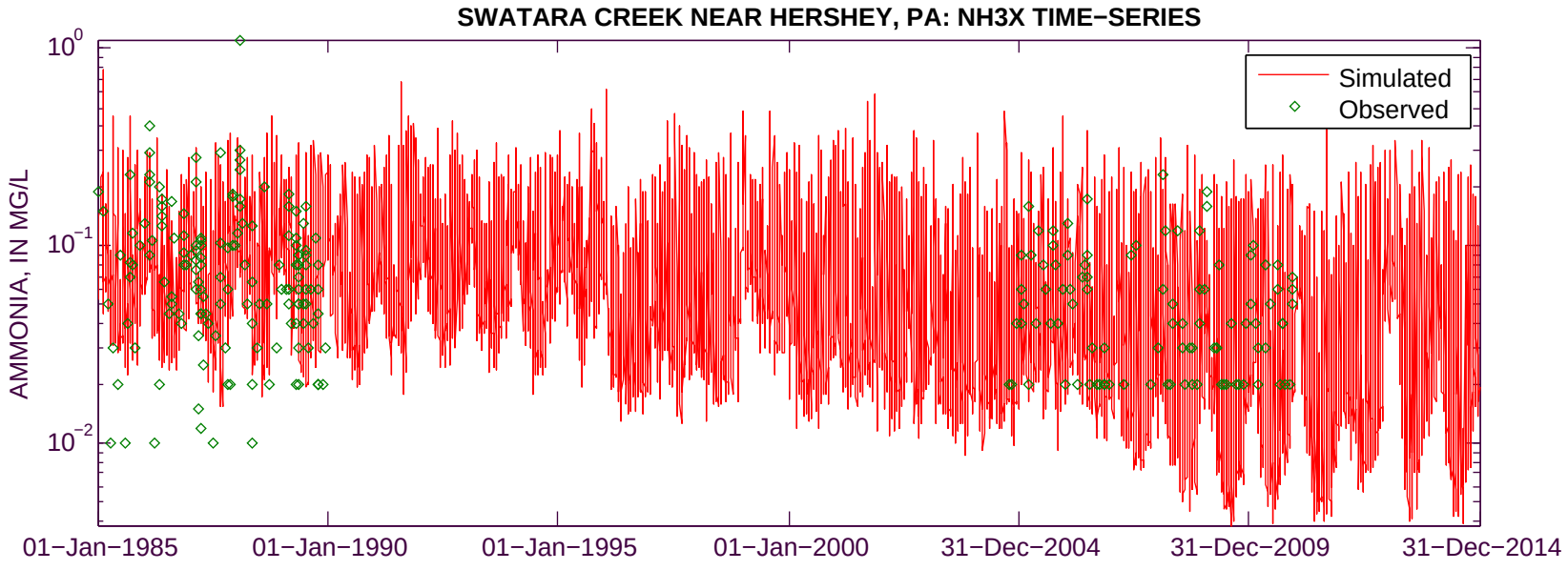
Dates: 1/1/1985 – 12/31/201

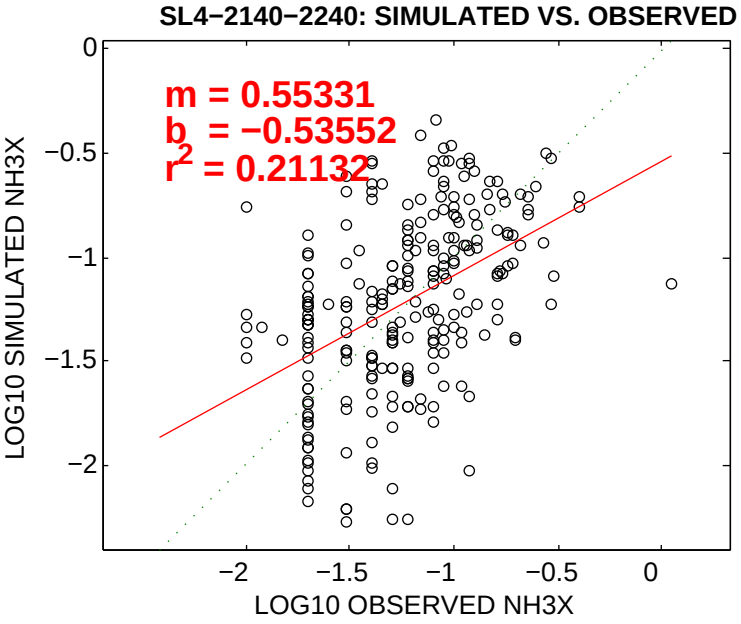
Drive | Directory: N/A | model | Observed: OBS20161101

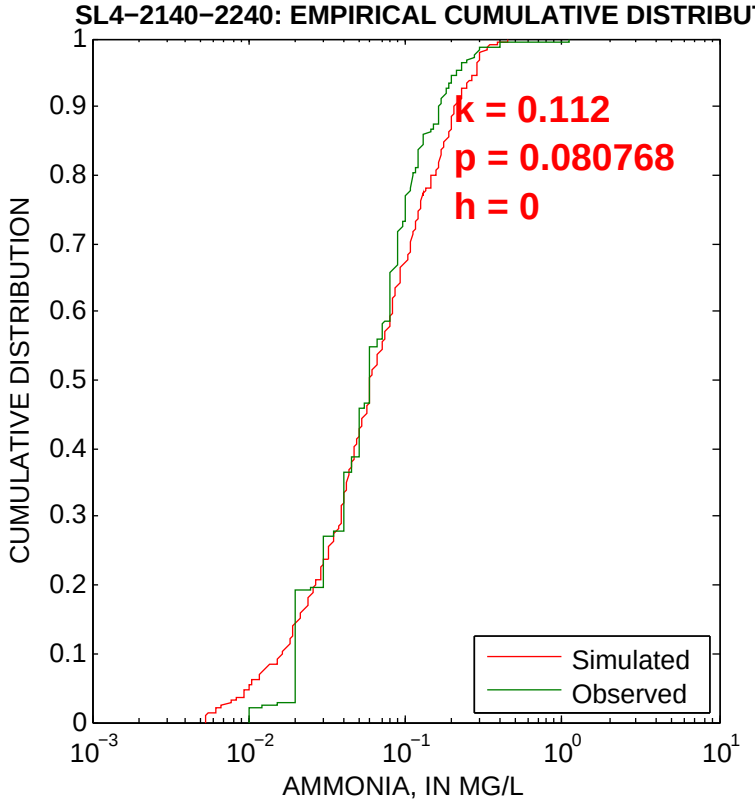
STATISTICS

		observe	simulate
n		10592	10592
min		29	39.049
		1.4624	1.59161
mean		821.384	791.681
		2.69631	2.75109
media		490	582.985
		2.6902	2.76566
max		78000	37825
		4.89209	4.57778
varian		2.25364e+0	959009
		0.172598	0.123105
JB		0.001	0.001
		0.001	0.001
		ra	log
%		-3.61621	2.03166
err.va		688726	0.0317115
rel.std.err		0.305605	0.183731
mod.eff		0.694395	0.816269

VERSION 2.1







DATA SELECTION

scenario: P620171001WQ | file: NH3X.calib

plot: NH3X - ammonia

Dates: 1/1/1985 – 12/31/201

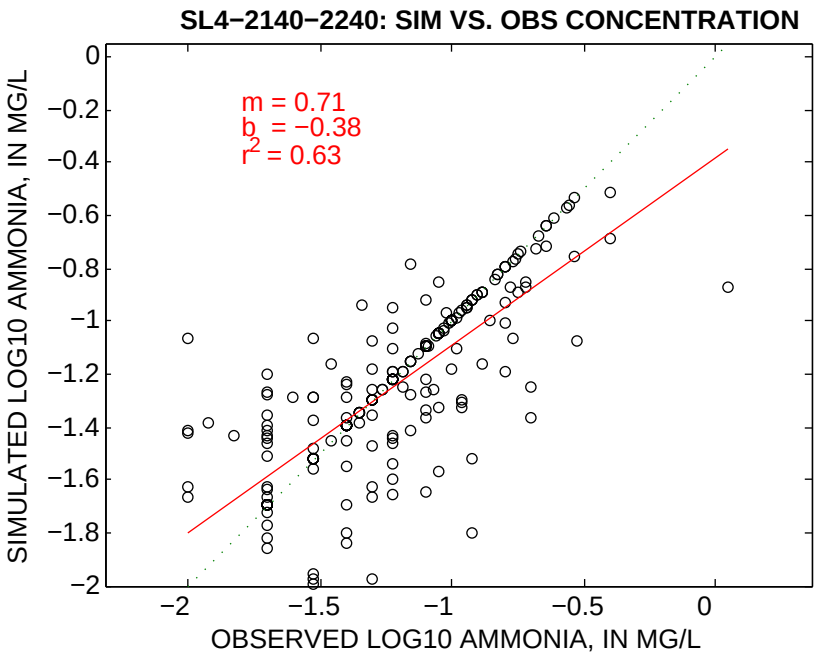
Drive: N/A | Directory: model | Observed: OBS20161101

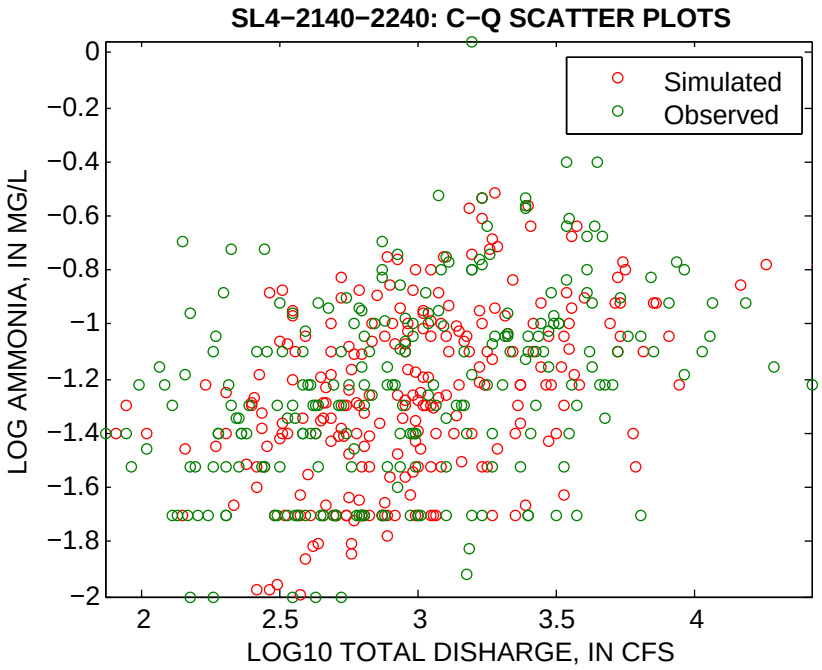
STATISTICS

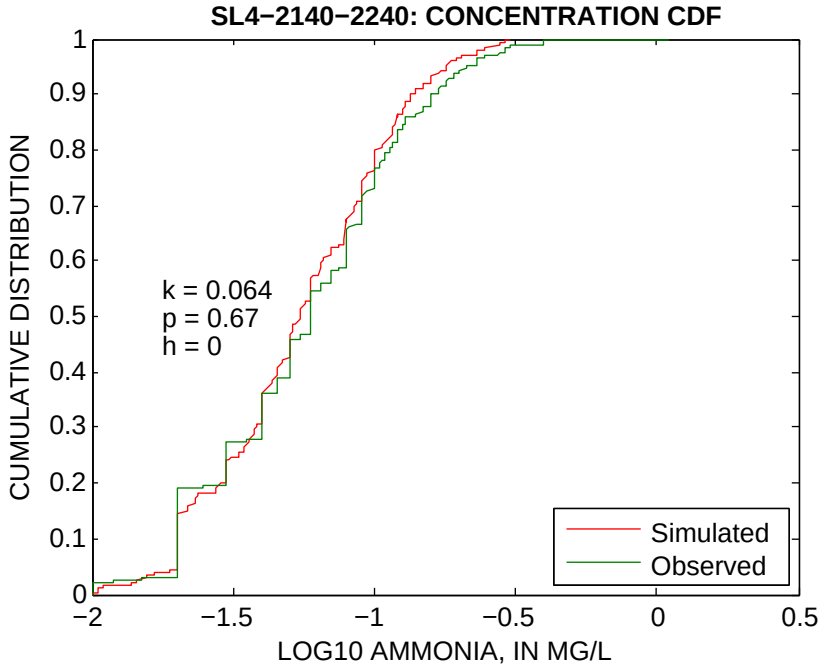
		observe	simulate
n		250	250
min		0.01	0.0052562
		-2	-2.27933
mean		0.0819764	0.0915818
		-1.23521	-1.21898
media		0.06	0.0600155
		-1.22185	-1.22174
max		1.11	0.45618
		0.045323	-0.340864
varian		0.00852124	0.00682843
		0.123755	0.179292
JB		0.001	0.001
		0.5	0.049021
		ra	log
%		11.7173	-1.31433
err.va		0.0113319	0.166361
rel.std.err		1.32984	1.34428
mod.eff		-0.329844	-0.344279

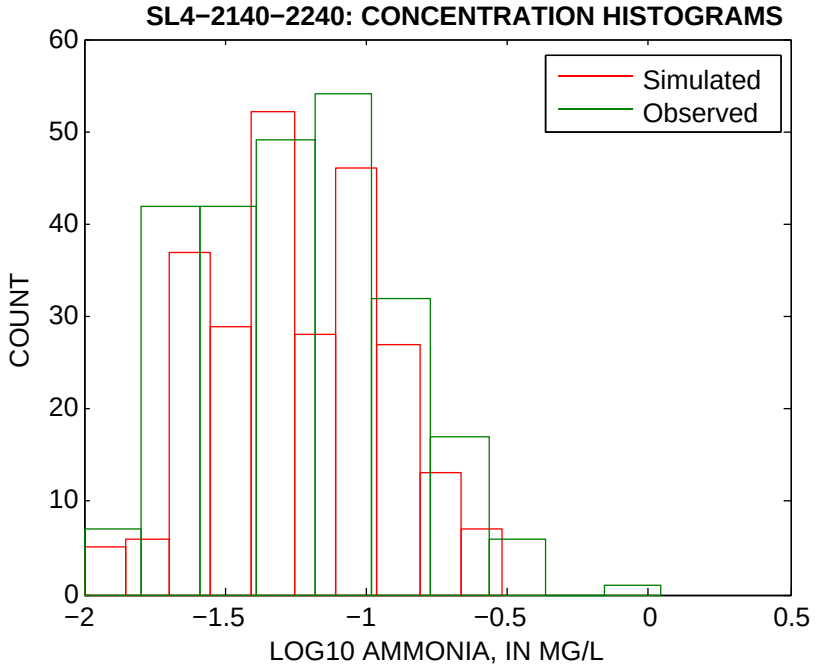
VERSION 2.1

ALL DATA
LOG10

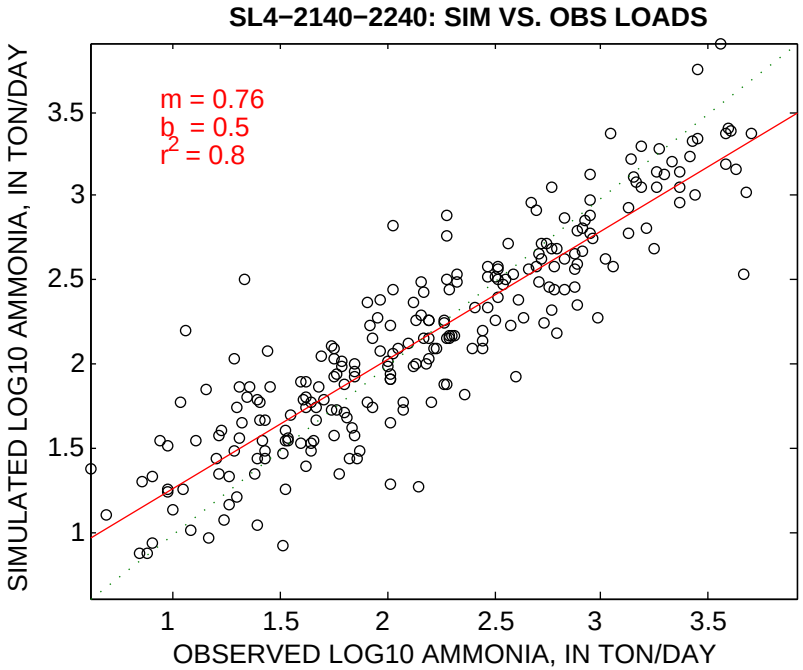


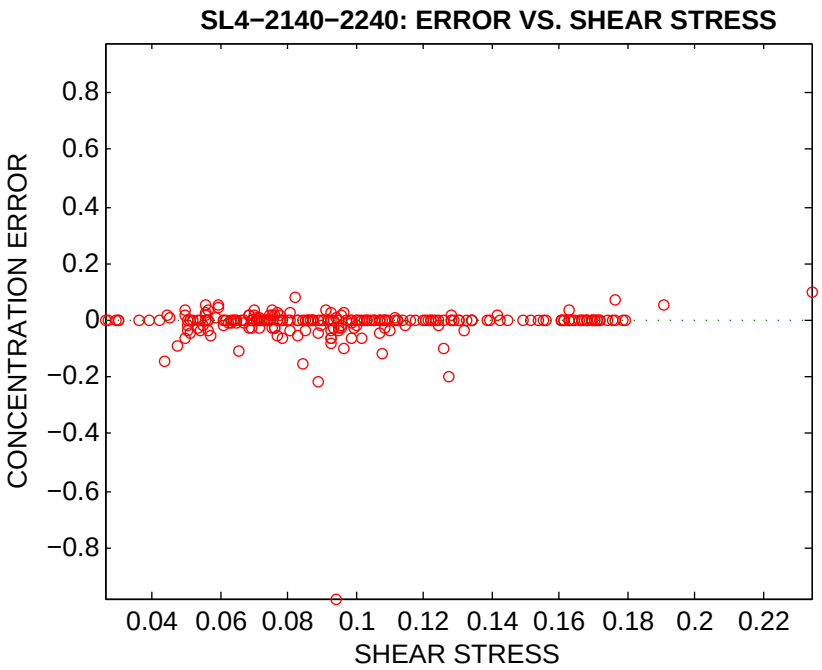


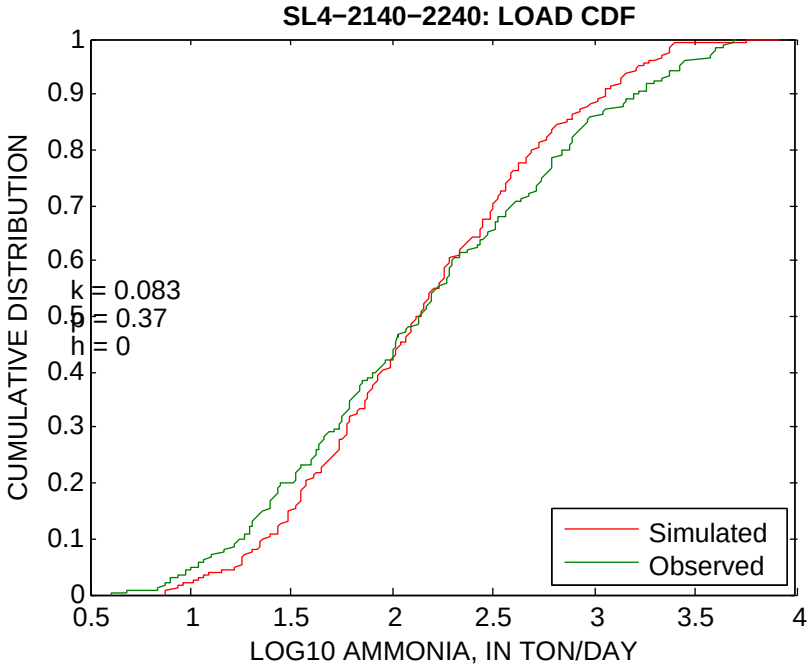


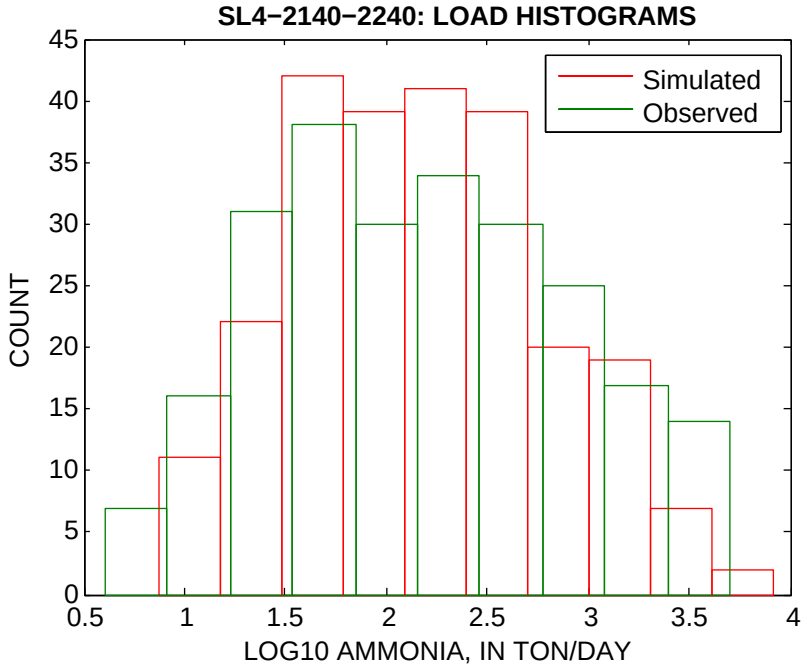


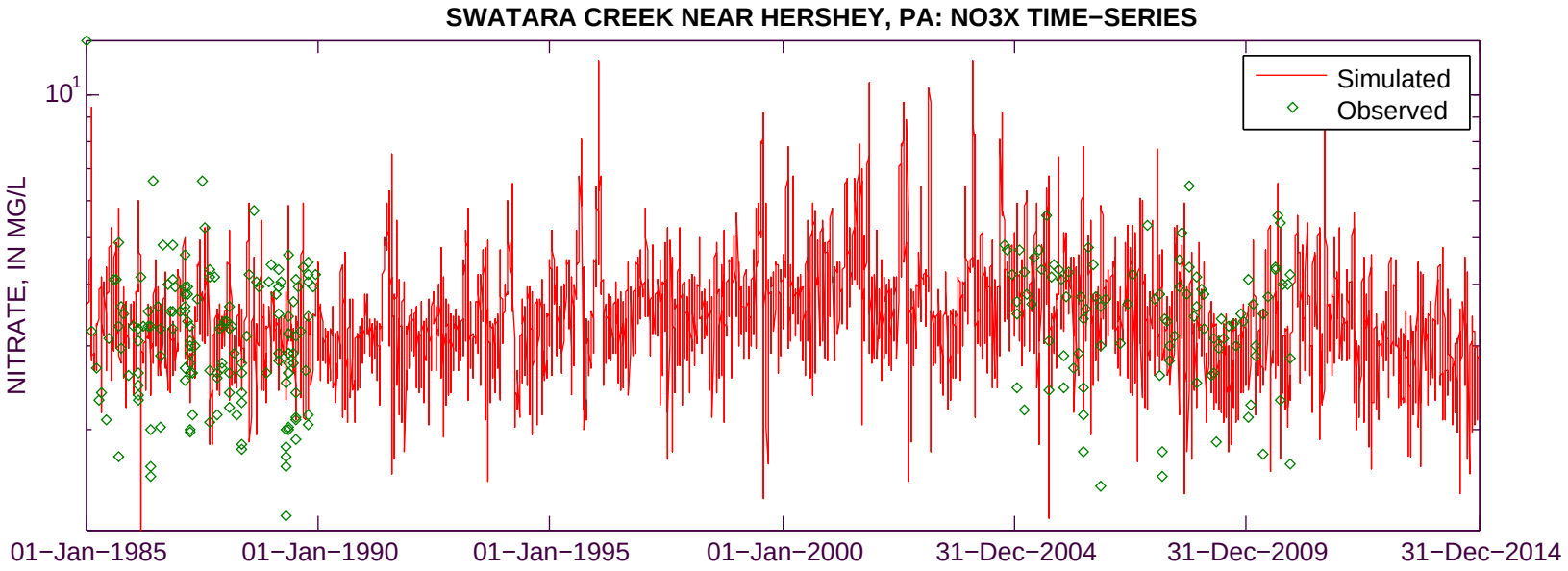
LOAD DATA
LOG10

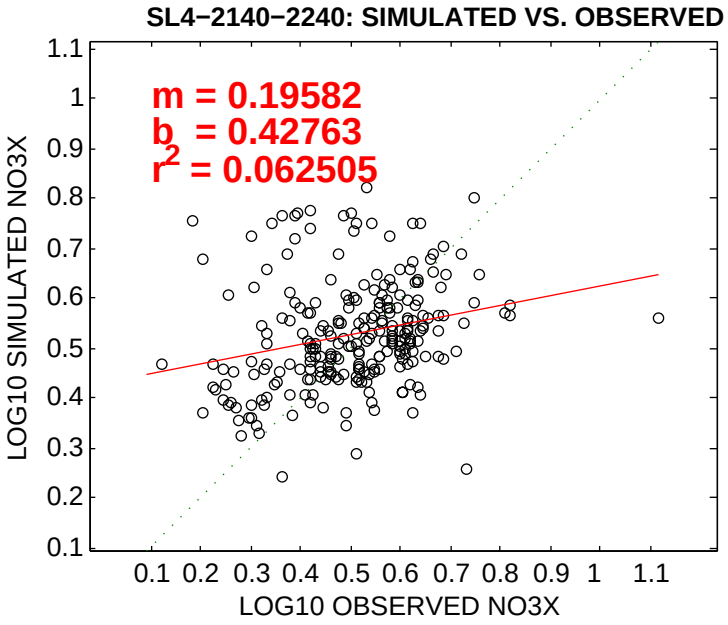


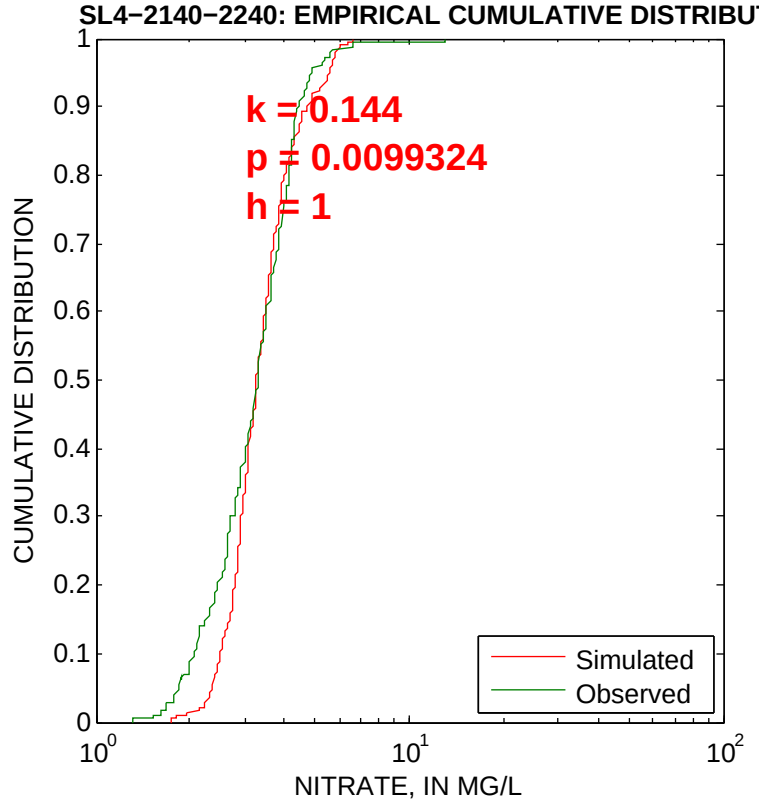












DATA SELECTION

scenario	file
P620171001WQ	NO3X.calib

plot: NO3X - nitrate

Dates: 1/1/1985 – 12/31/201

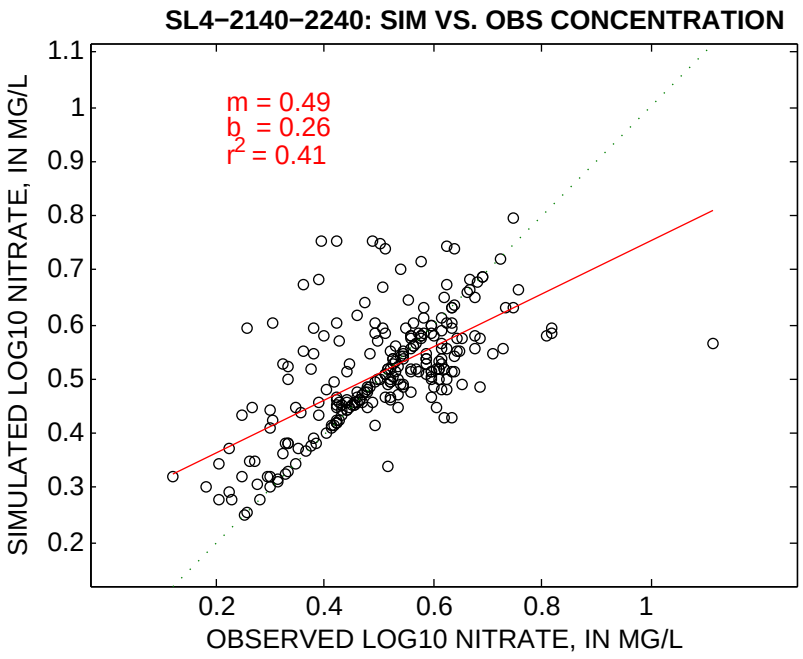
Drive	Directory	Observed
N/A	model	OBS20161101

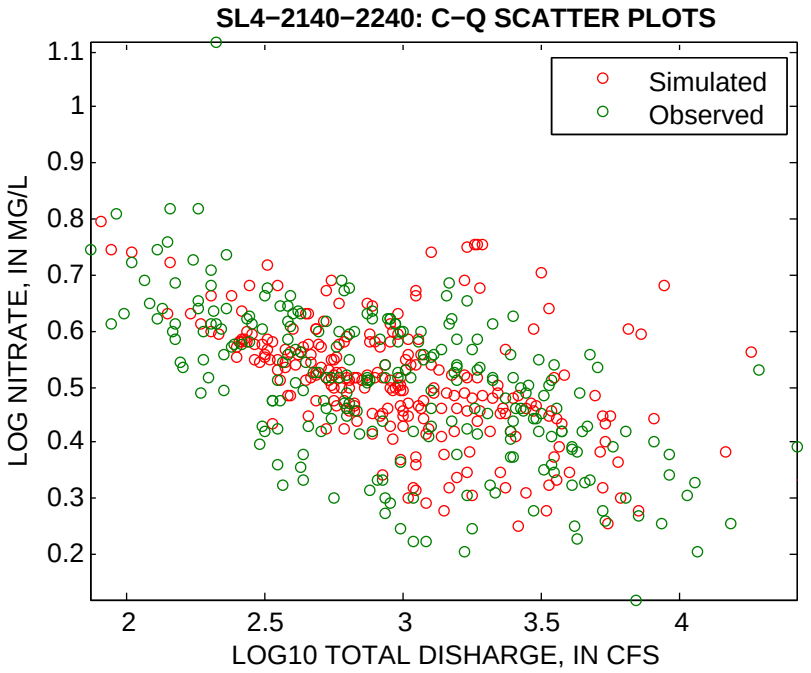
STATISTICS

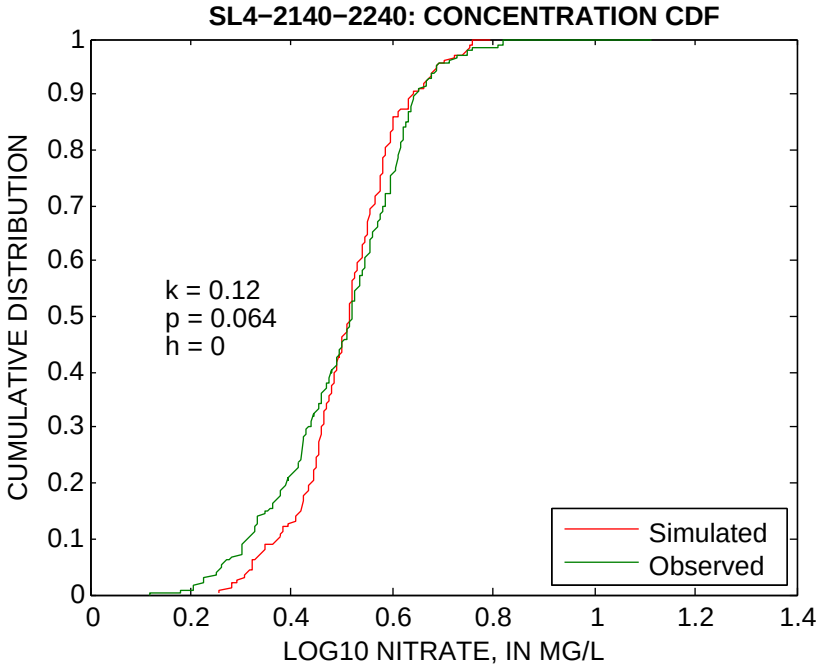
	n	250	250
		observe	simulate
min		1.32	1.7441
		0.120574	0.241571
mean		3.34993	3.46466
		0.503572	0.526237
media		3.3	3.26265
		0.518514	0.51357
max		13	6.6509
		1.11394	0.82288
varian		1.30215	0.820684
		0.0184245	0.0113036
JB		0.001	0.001
		0.010970	0.023635
		ra	log
%		3.42483	4.50083
err.va		1.75197	0.0230279
rel.std.err		1.34544	1.24985
mod.eff		-0.34544	-0.249854

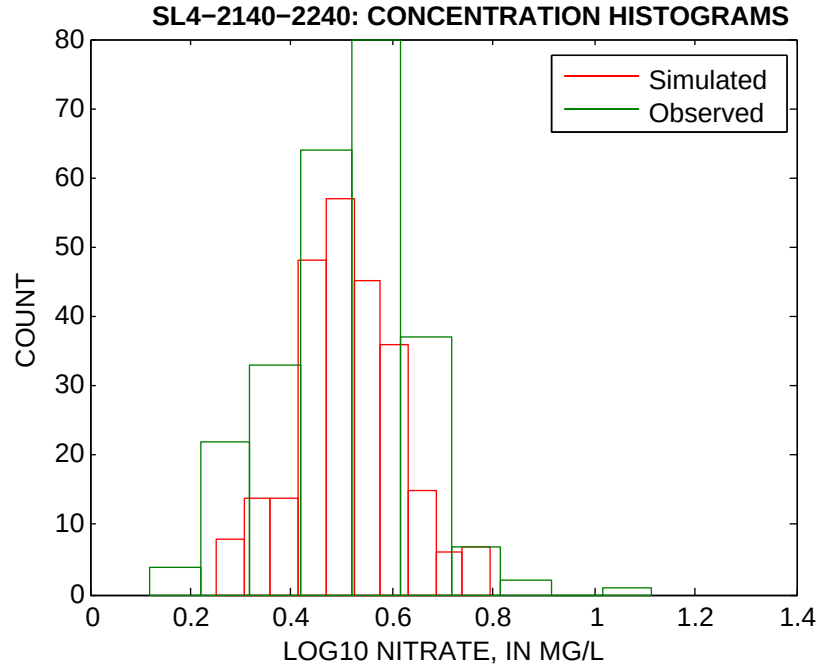
VERSION

ALL DATA
LOG10

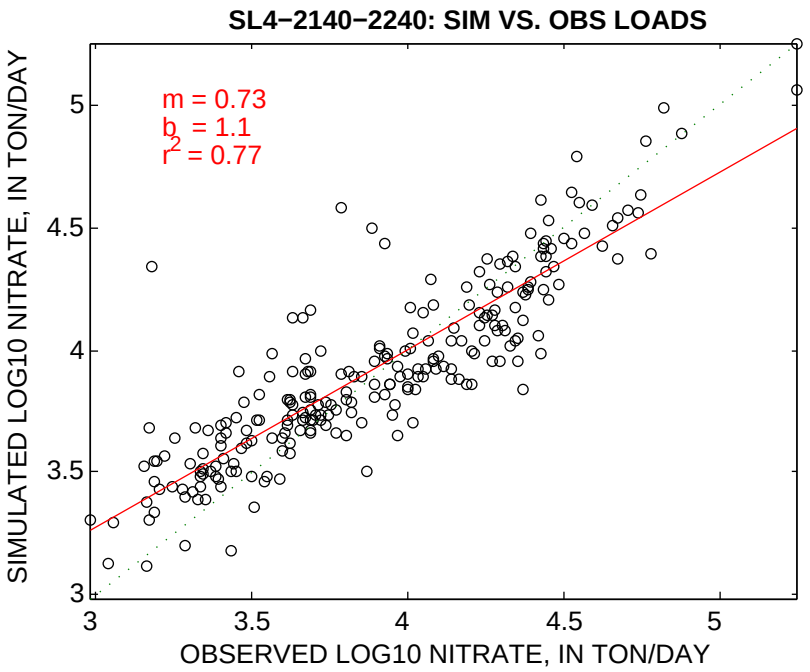


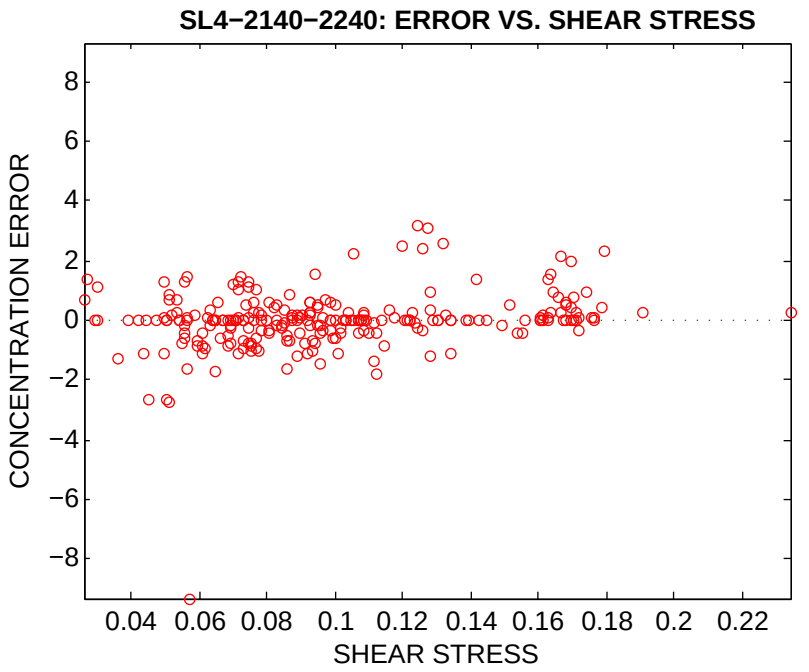


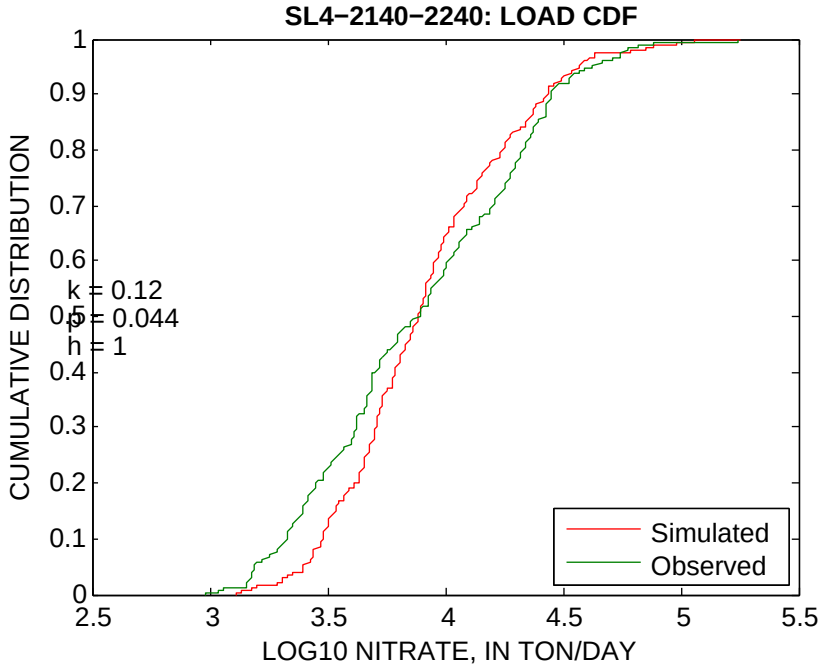


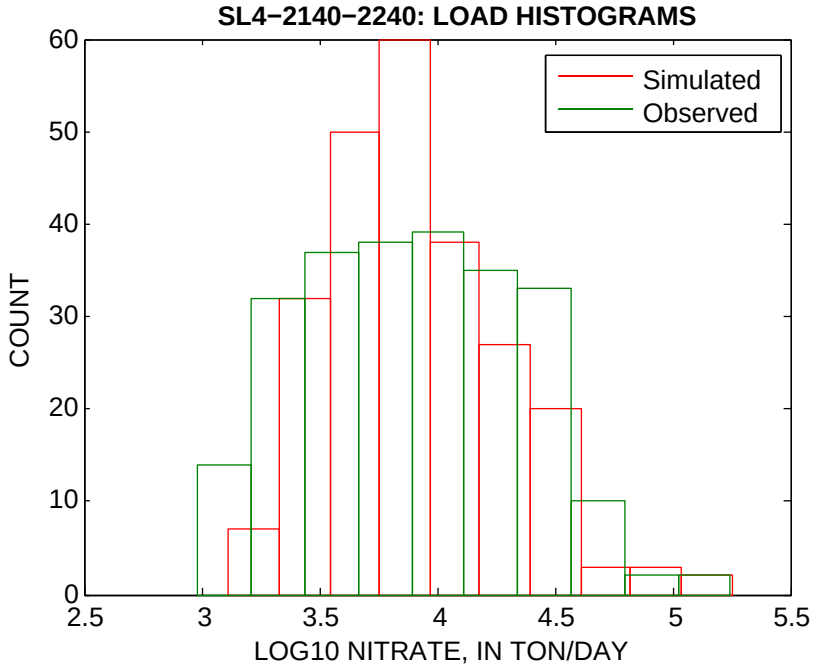


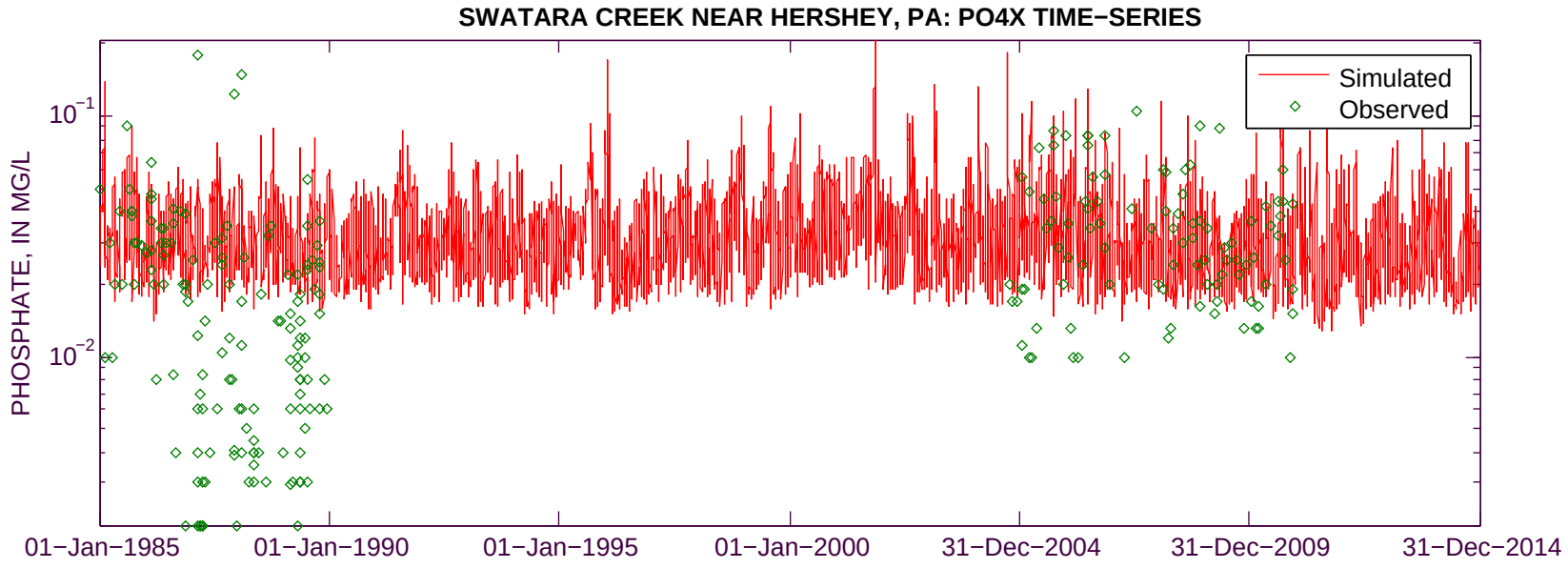
LOAD DATA
LOG10

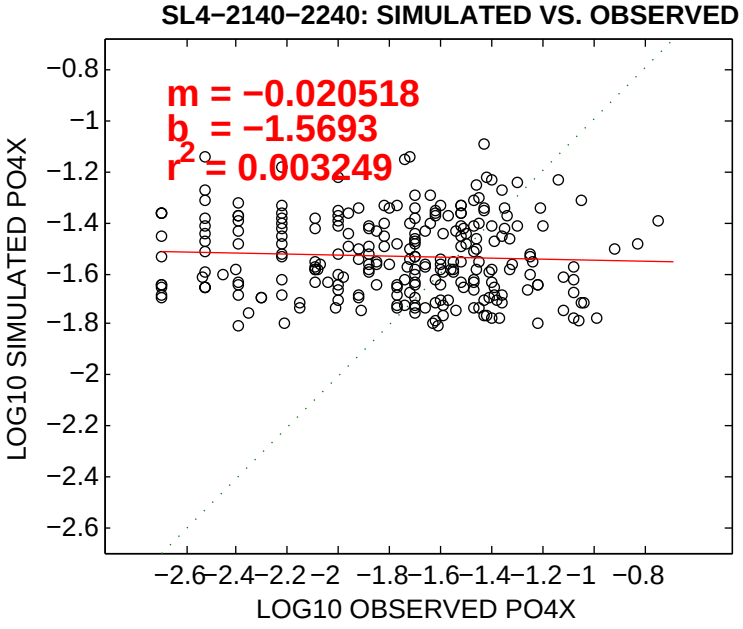


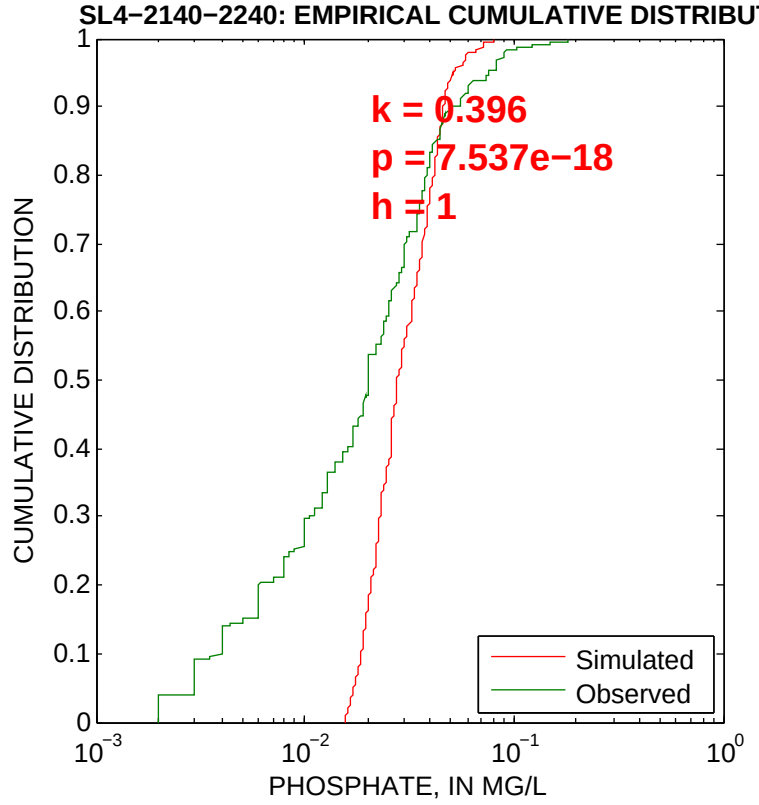












DATA SELECTION

scenario: P620171001WQ | file: PO4X.calib

plot: PO4X - phosphate

Dates: 1/1/1985 – 12/31/201

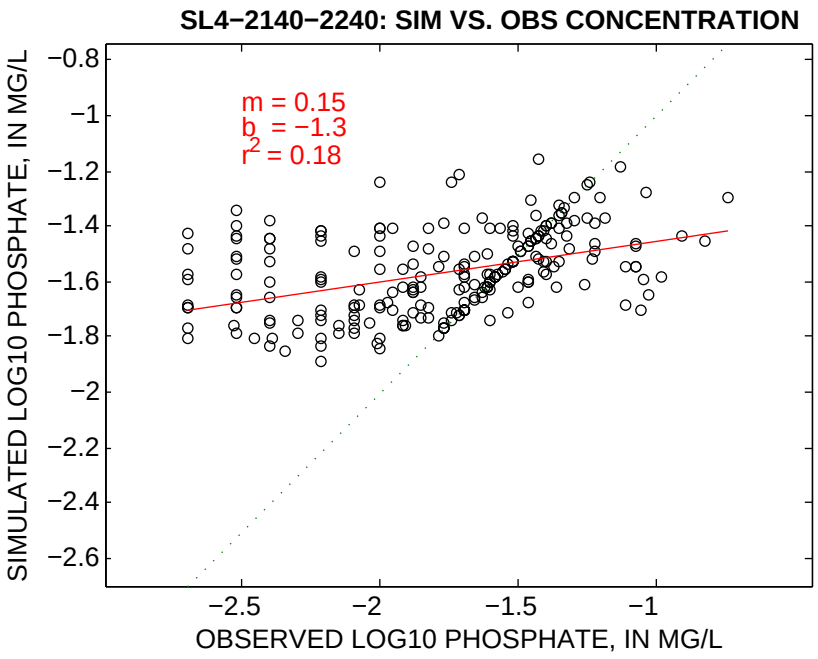
Drive: N/A | Directory: model | Observed: OBS20161101

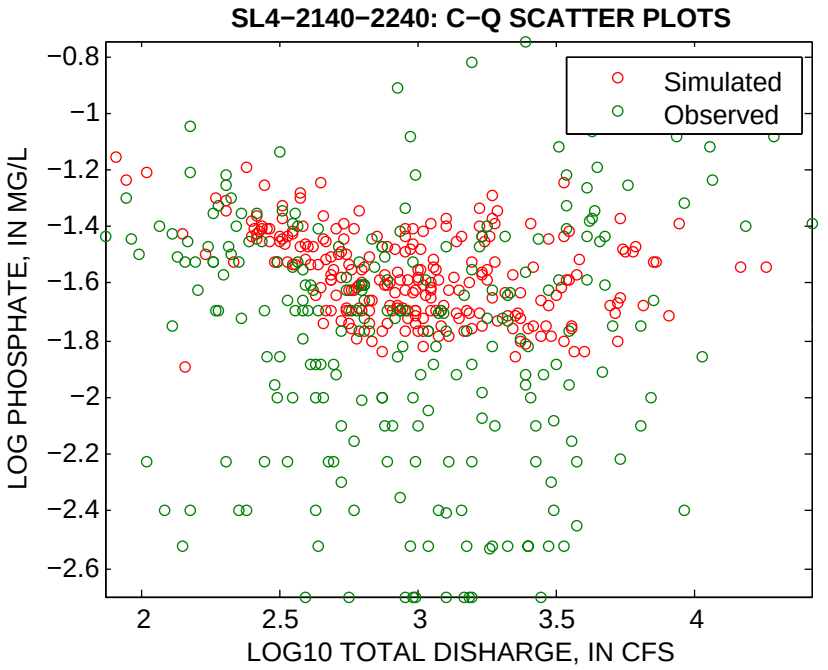
STATISTICS

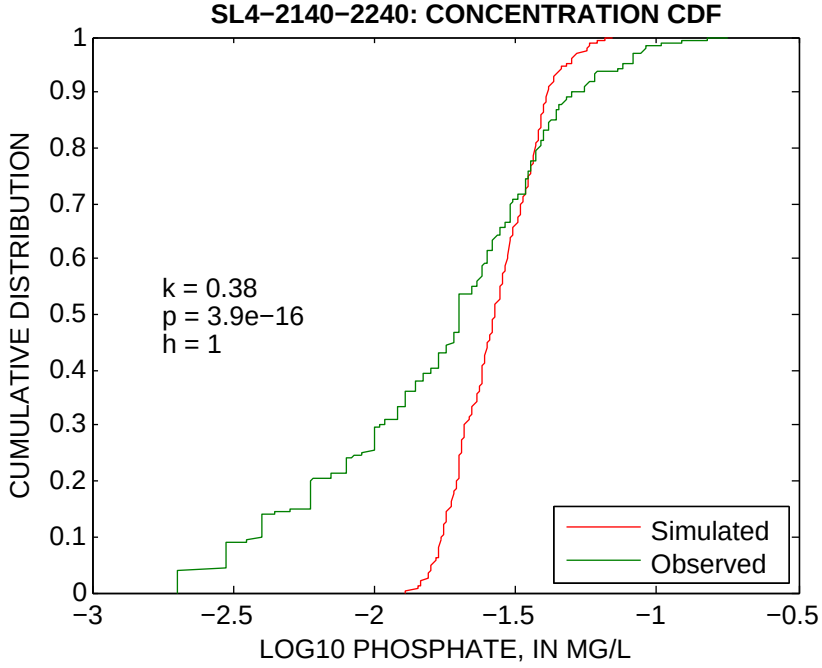
	n	250	250
		observe	simulate
min		0.002	0.015596
		-2.69897	-1.80699
mean		0.0258688	0.0312888
		-1.77054	-1.53301
media		0.02	0.027692
		-1.69897	-1.55765
max		0.18	0.080275
		-0.744727	-1.09542
varian		0.00060030	0.00014121
		0.185771	0.0240712
JB		0.001	0.001
		0.019669	0.022146
		ra	log
%		20.9519	-13.4154
err.va		0.00079480	0.27411
rel.std.err		1.324	1.47553
mod.eff		-0.323997	-0.475525

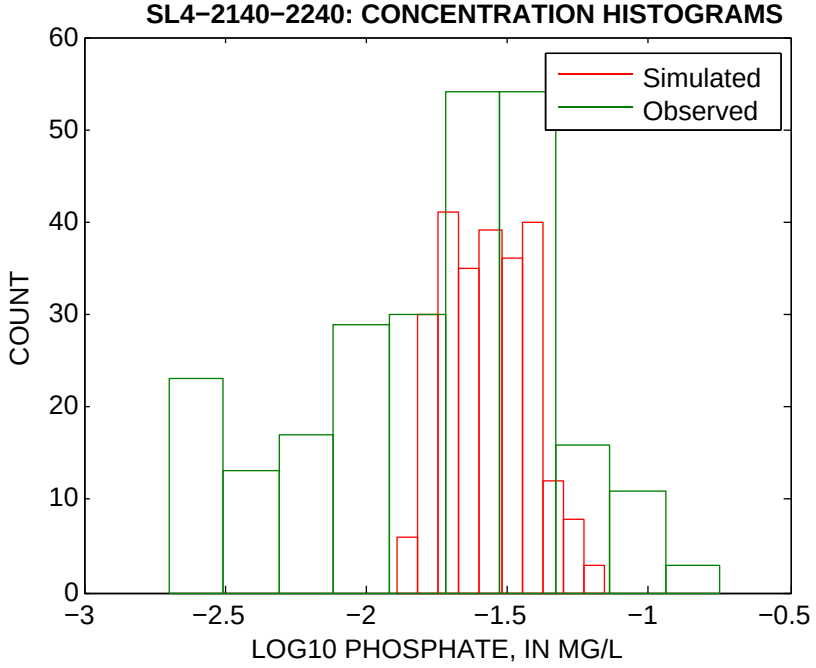
VERSION 2.1

ALL DATA
LOG10

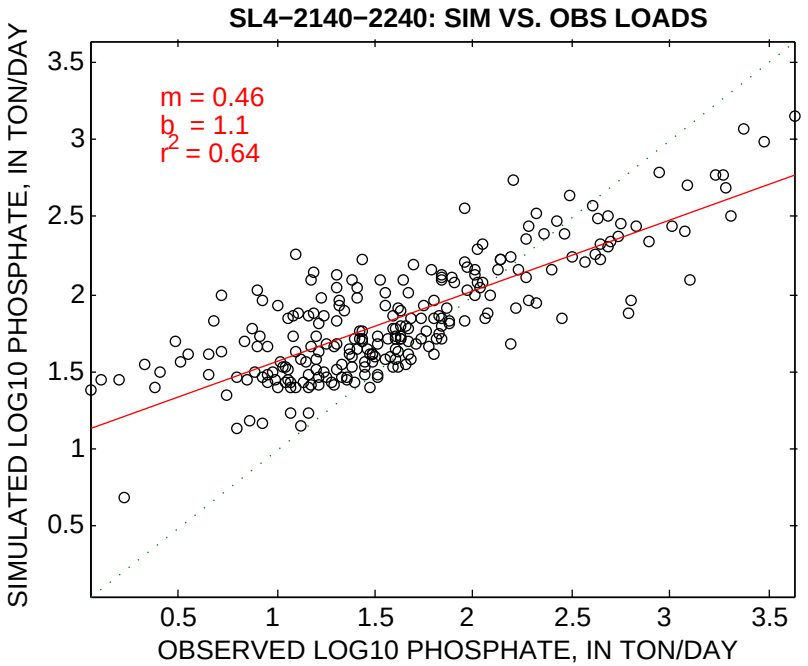


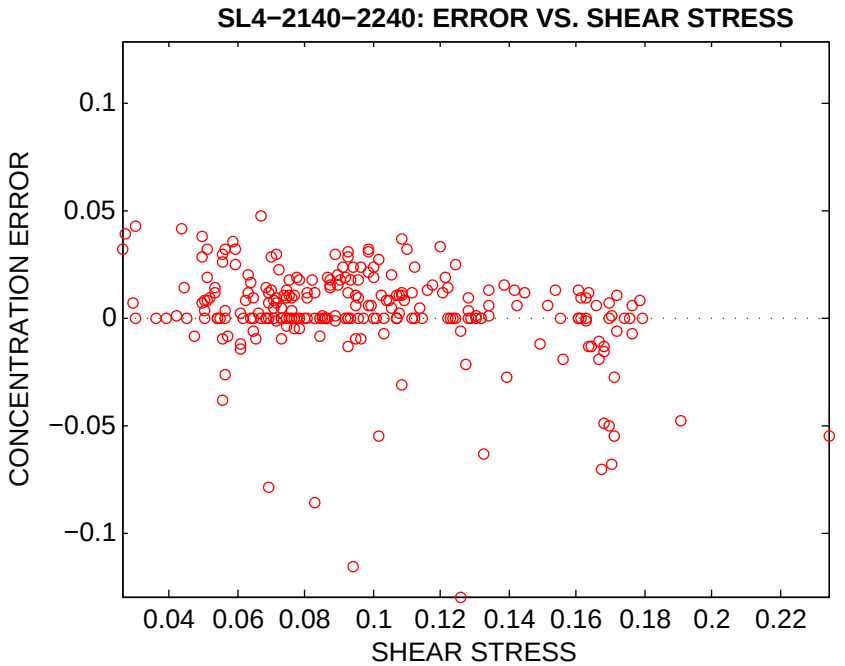


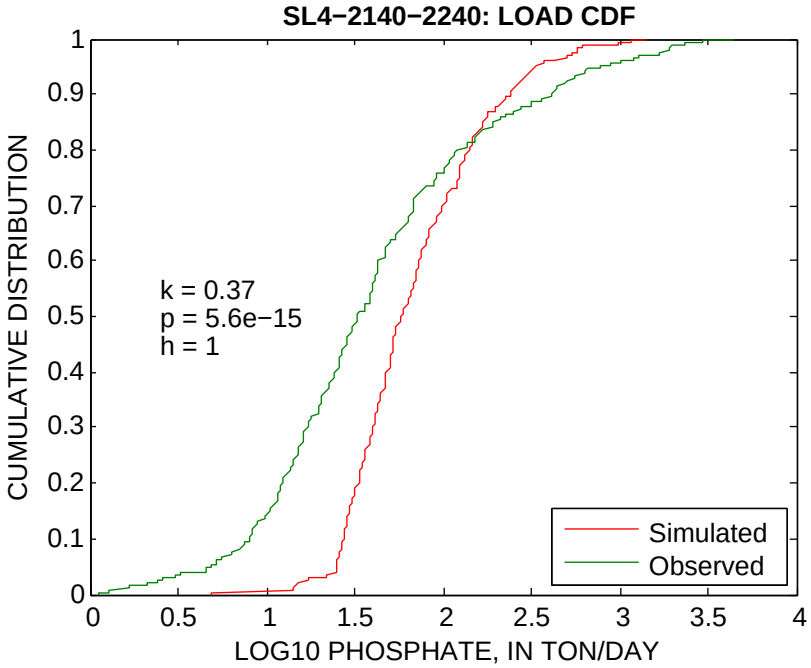


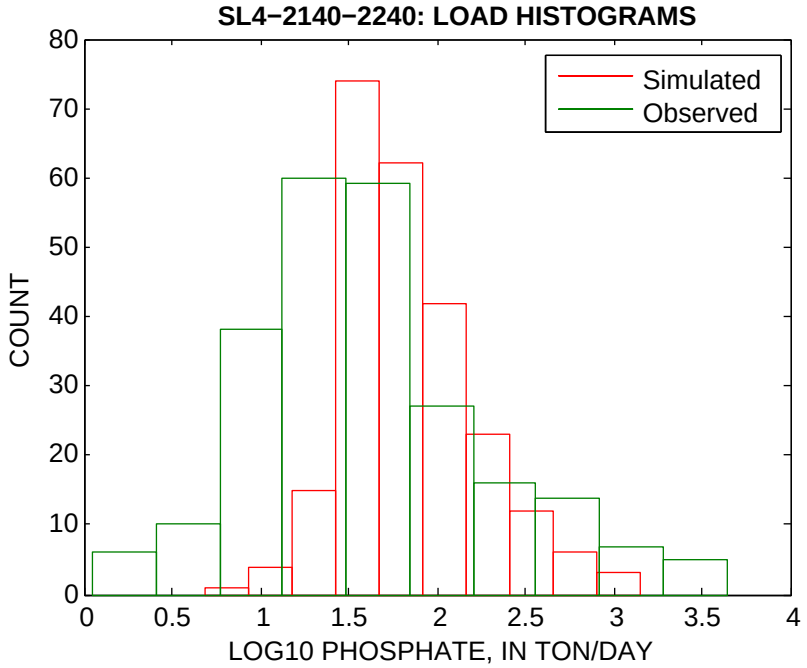


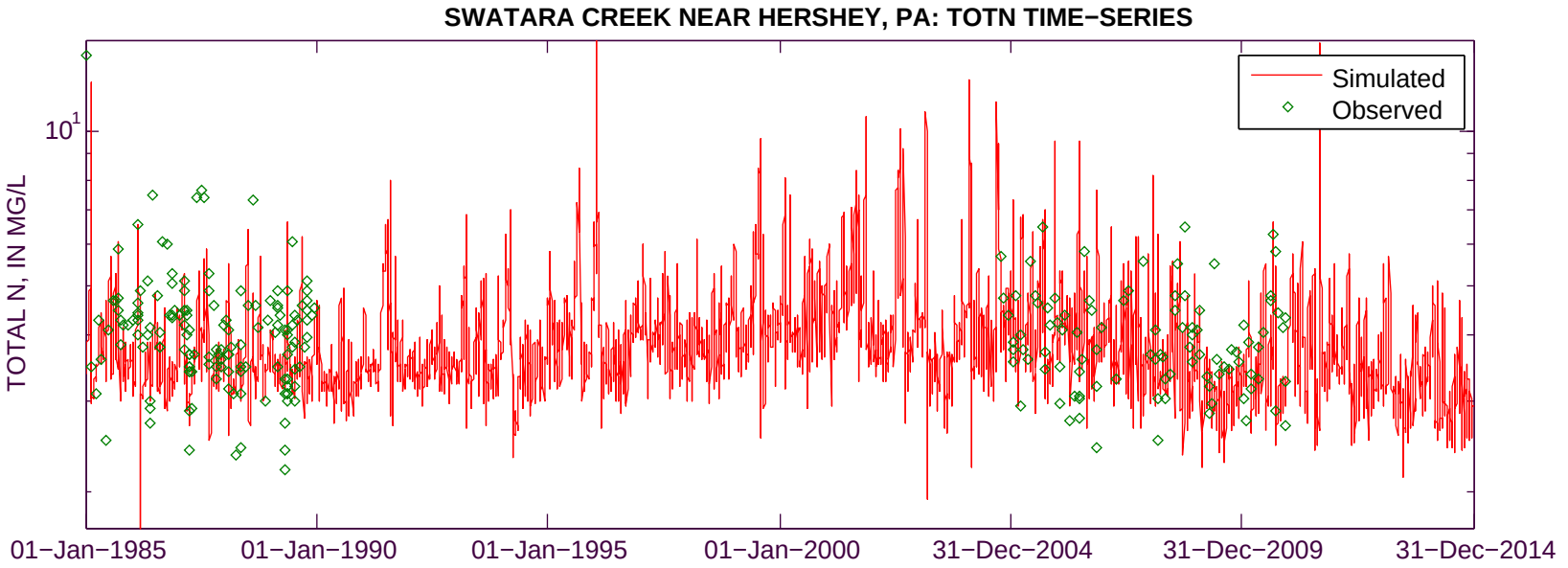
LOAD DATA
LOG10

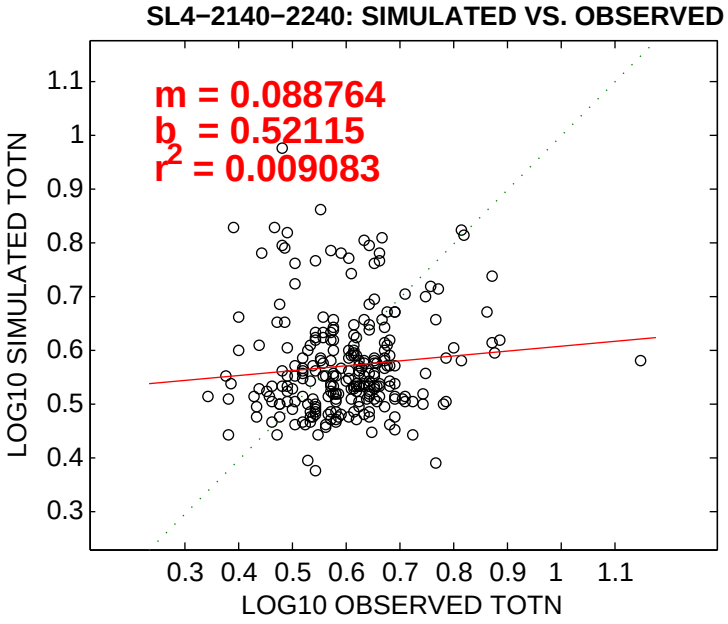


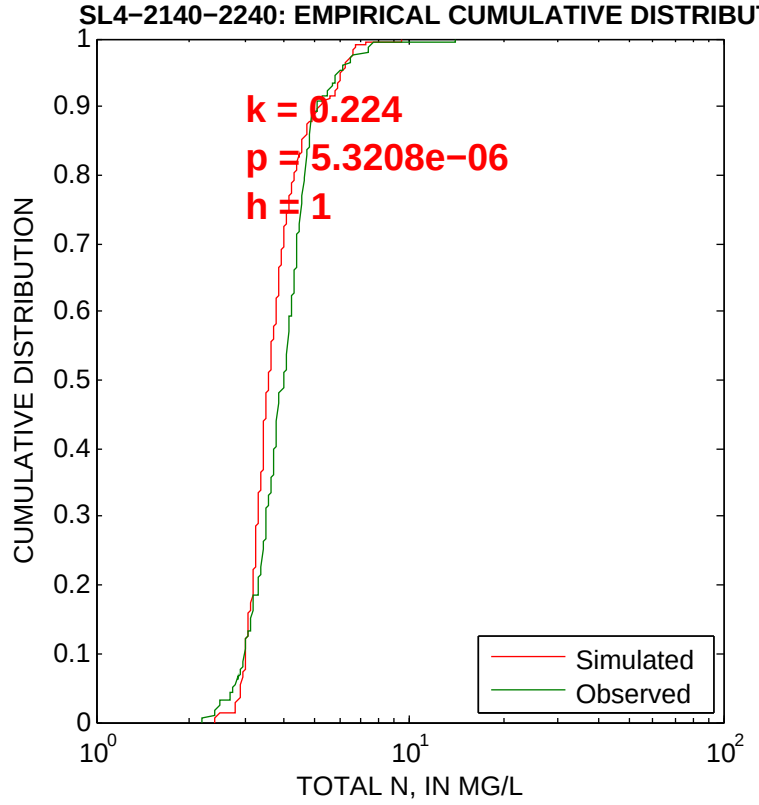












DATA SELECTION

scenario	file
P620171001WQ	TOTN.calib

plot: TOTN - total nitrogen

Dates: 1/1/1985 – 12/31/201

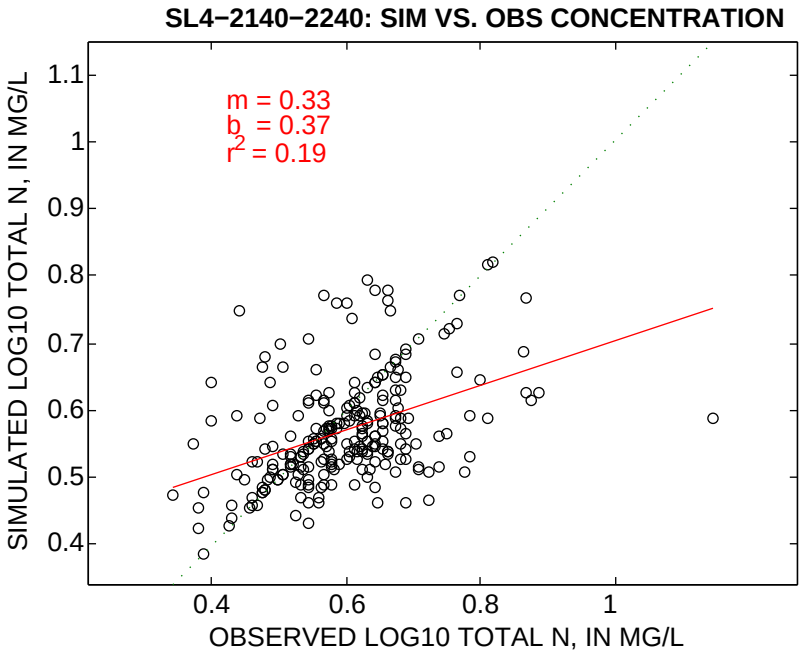
Drive	Directory	Observed
N/A	model	OBS20161101

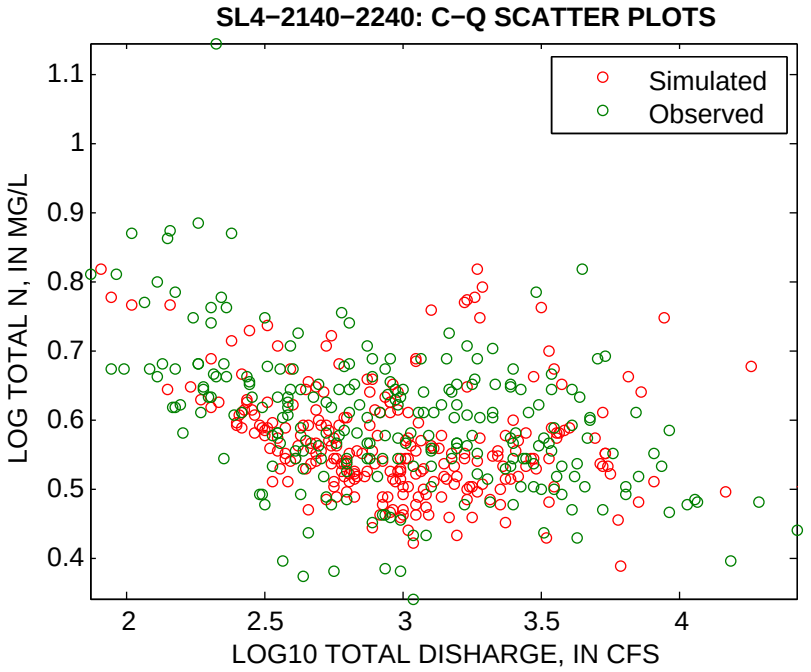
STATISTICS

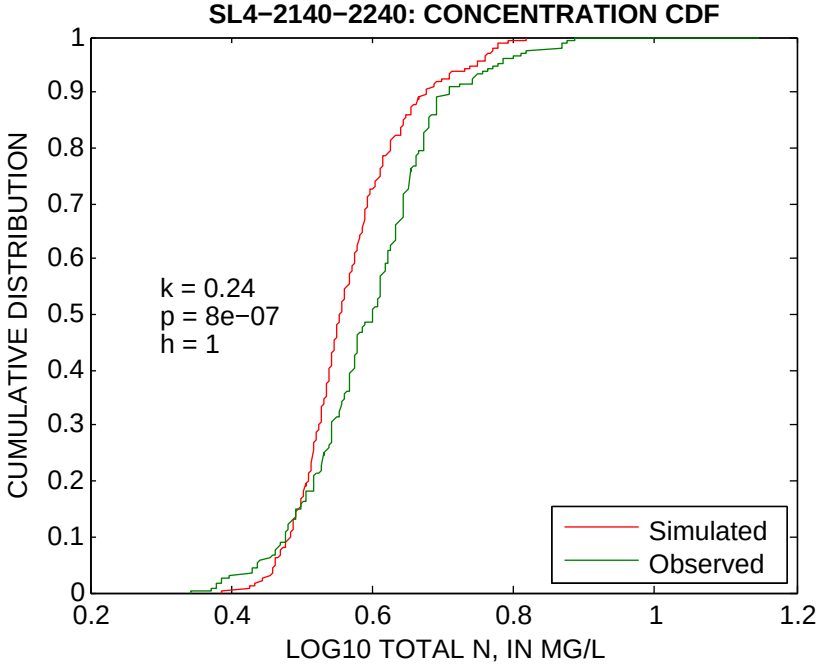
	n	observe	simulate
		250	250
min		2.2	2.3774
		0.342423	0.376102
mean		4.09372	3.85424
		0.598917	0.57431
media		4	3.57055
		0.60206	0.552735
max		14	9.4992
		1.14613	0.977687
varian		1.30561	0.979927
		0.0106974	0.00927938
JB		0.001	0.001
		0.001	0.001
		ra	log
%		-5.84985	-4.10861
err.va		2.16823	0.0186856
rel.std.err		1.66071	1.74675
mod.eff		-0.660707	-0.746749

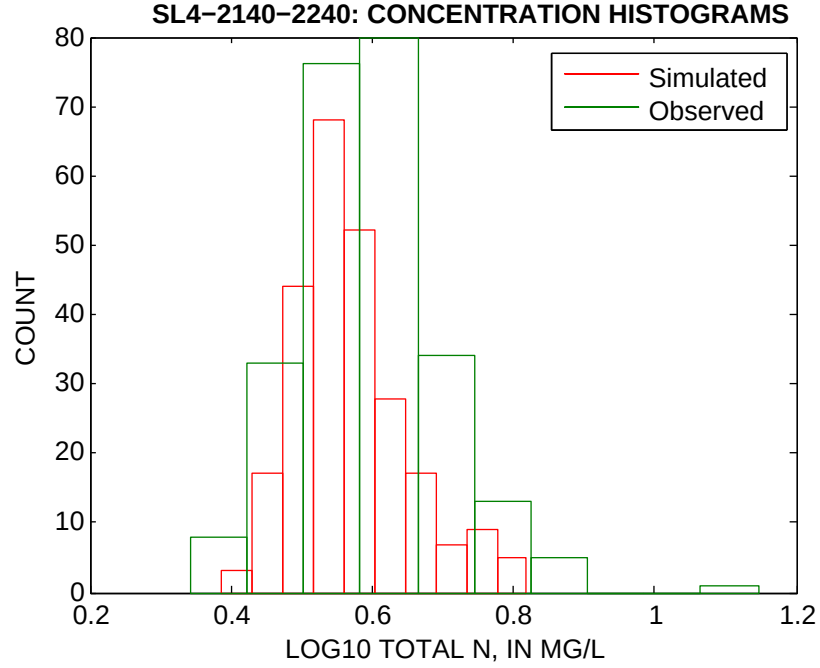
VERSION 2.1

ALL DATA
LOG10

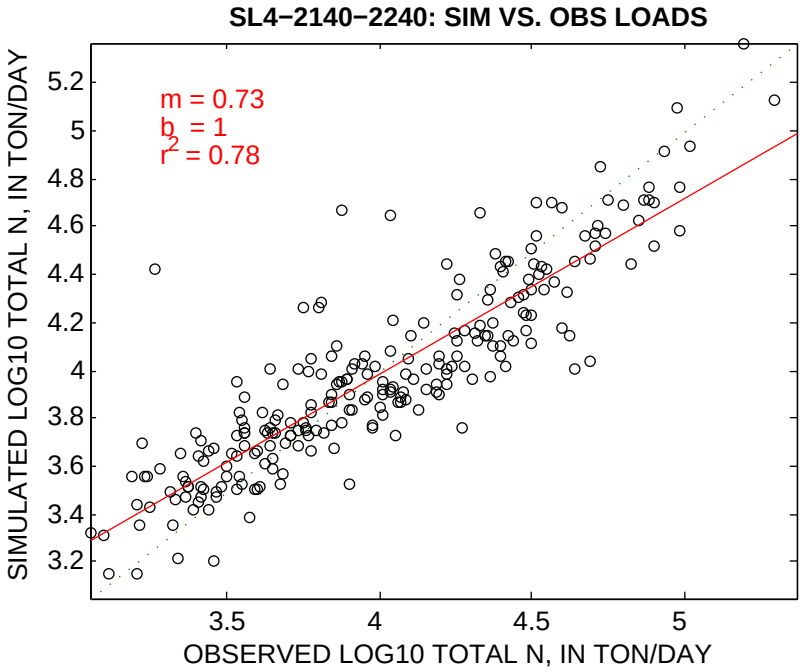


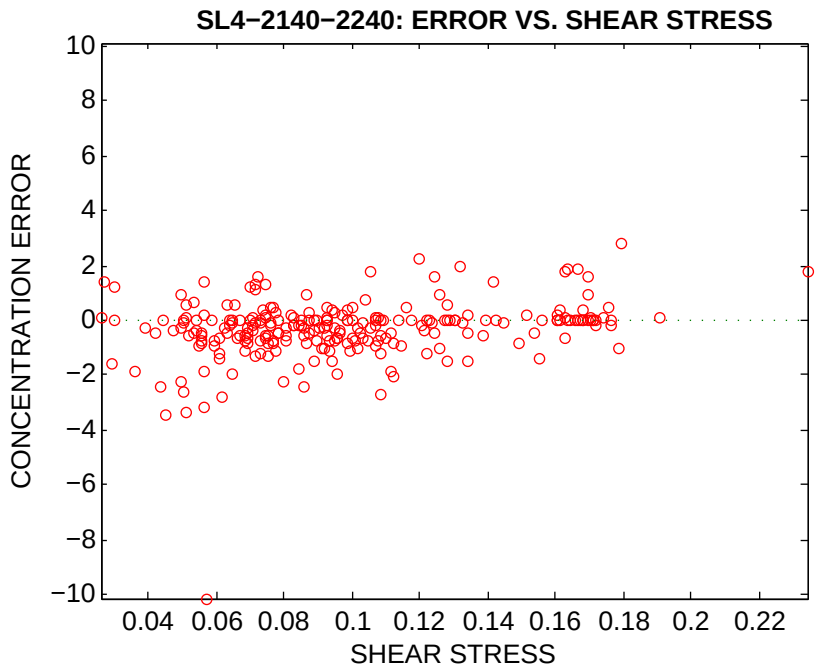


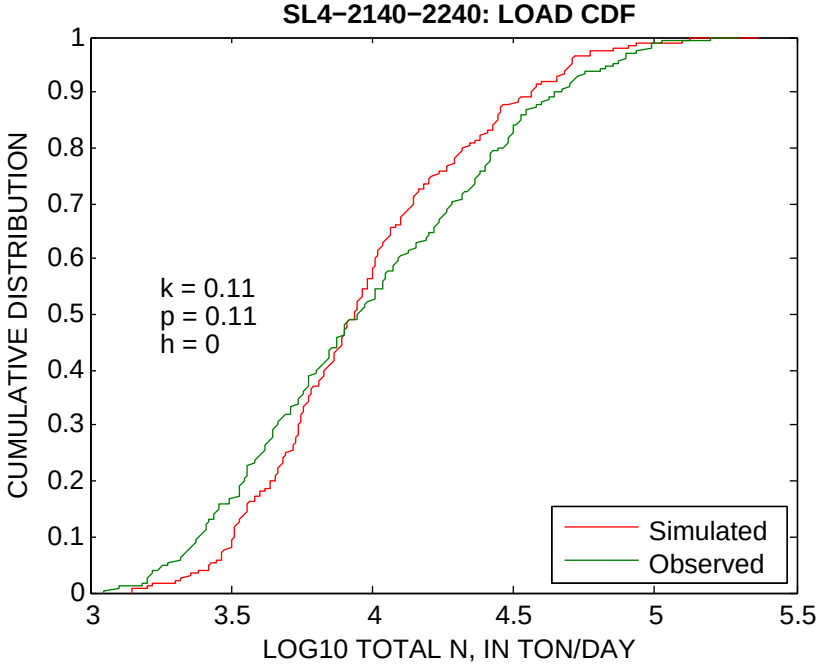


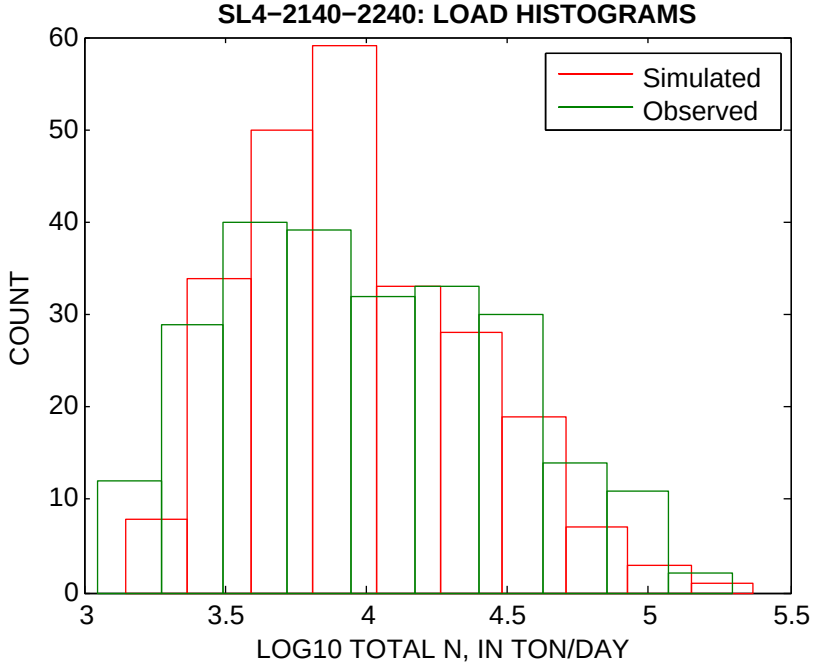


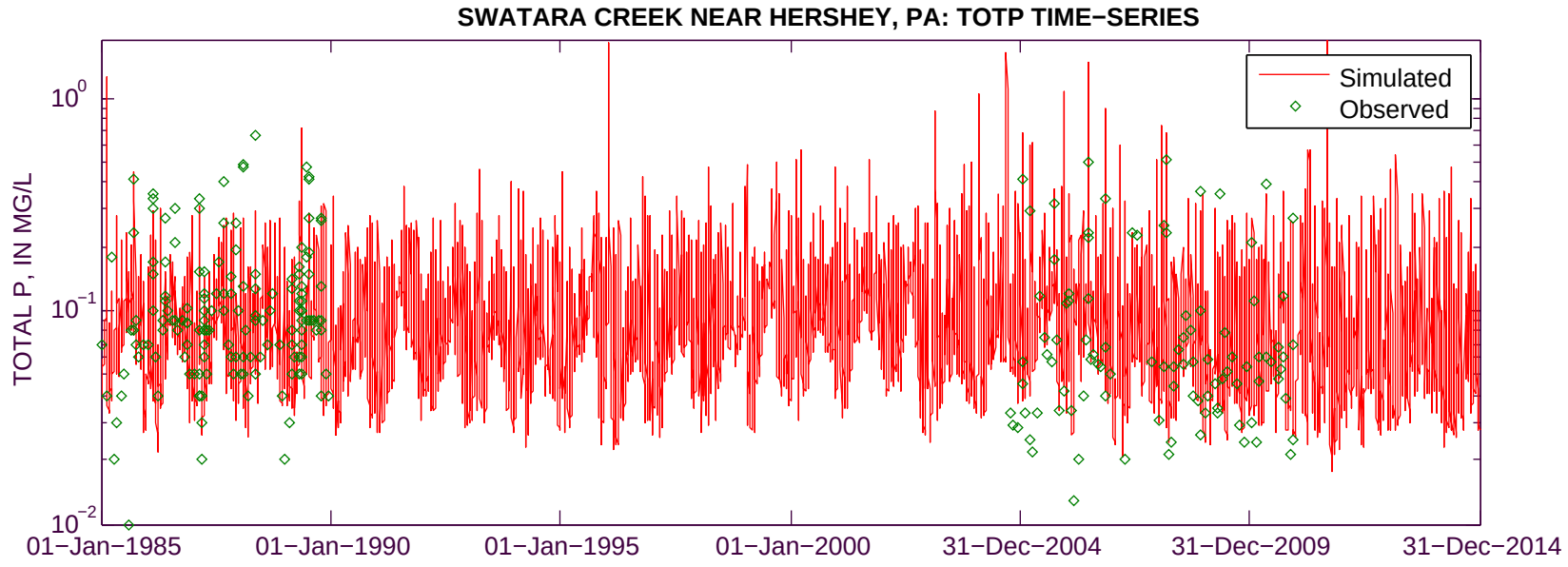
LOAD DATA
LOG10

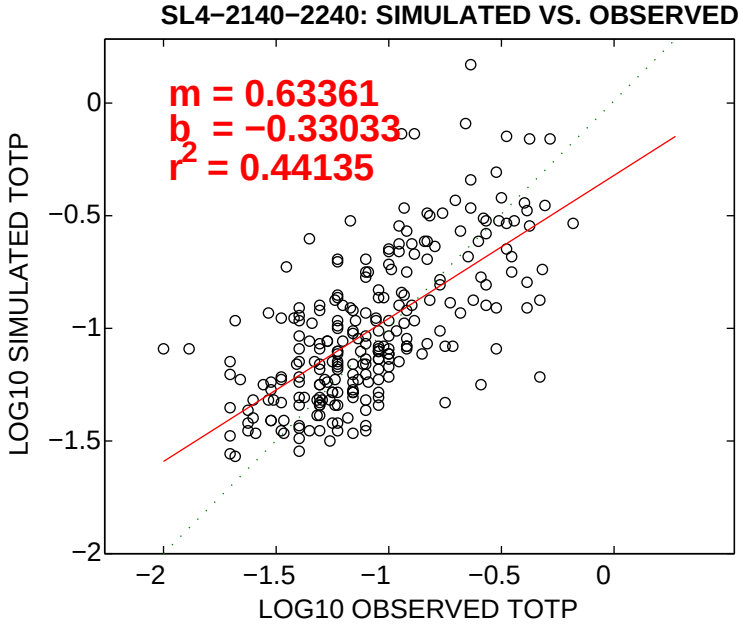


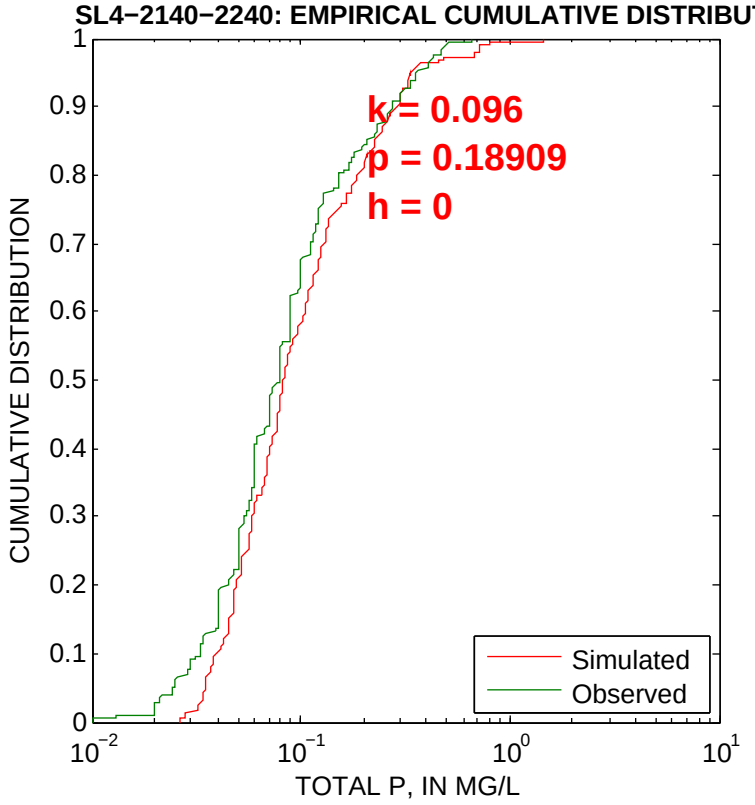












DATA SELECTION

scenario	file
P620171001WQ	TOTP.calib

plot: TOTP - total phosphorus

Dates: 1/1/1985 – 12/31/201

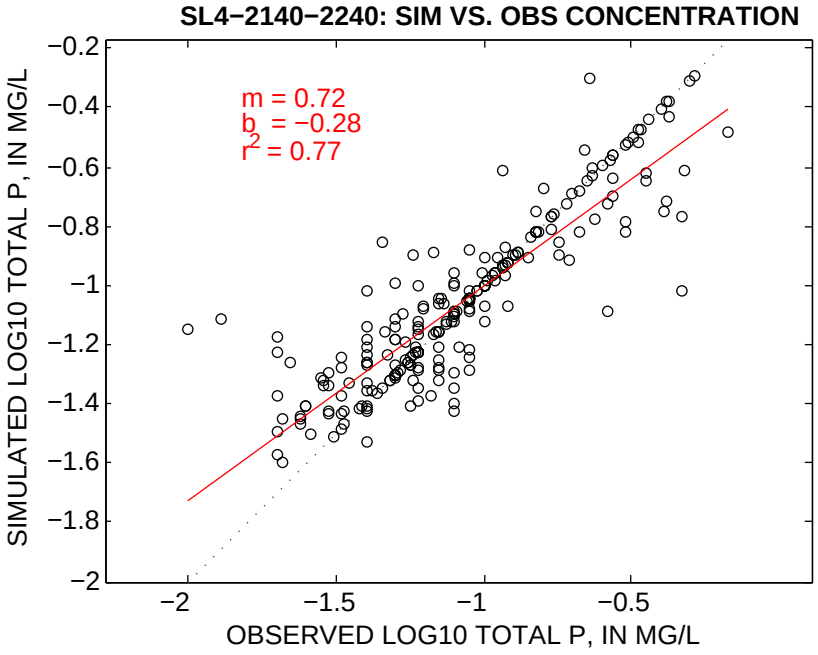
Drive	Directory	Observed
N/A	model	OBS20161101

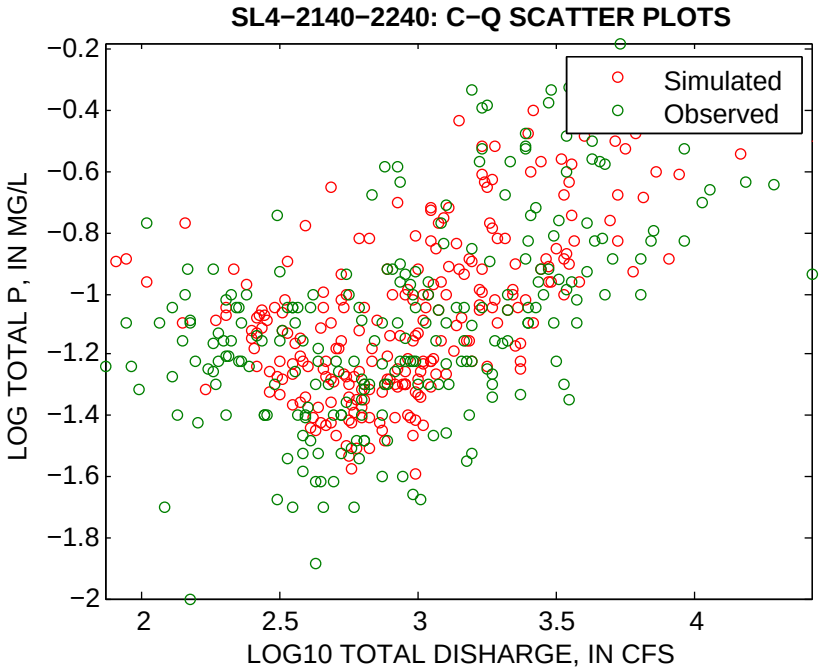
STATISTICS

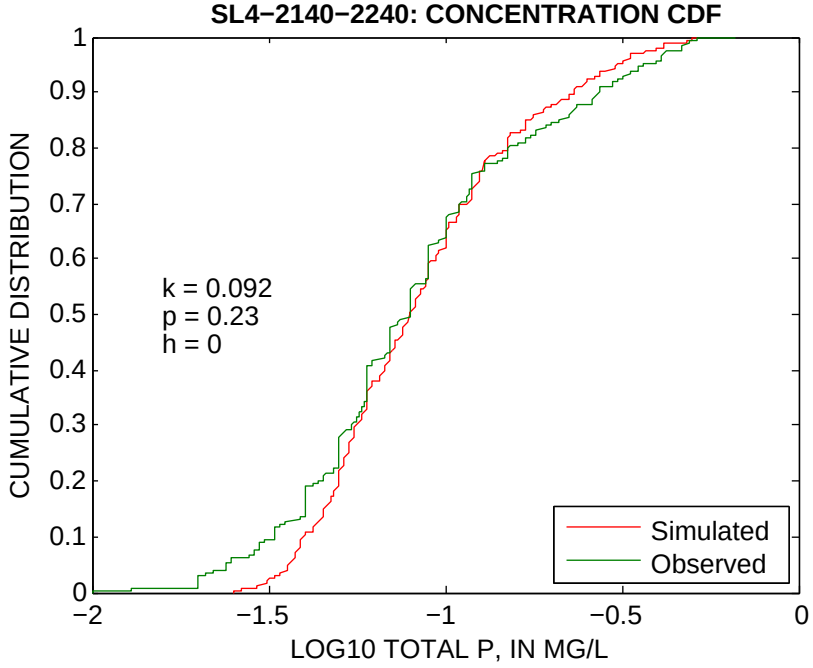
	n	250	250
		observe	simulate
min		0.01	0.026573
		-2	-1.57556
mean		0.115341	0.13486
		-1.08155	-1.01561
media		0.08	0.0826175
		-1.09691	-1.08293
max		0.667356	1.46
		-0.175642	0.164353
varian		0.011955	0.0231494
		0.117029	0.10645
JB		0.001	0.001
		0.054042	0.001151
		ra	log
%		16.9224	-6.09724
err.va		0.0185205	0.0795446
rel.std.err		1.54919	0.679699
mod.eff		-0.549187	0.320301

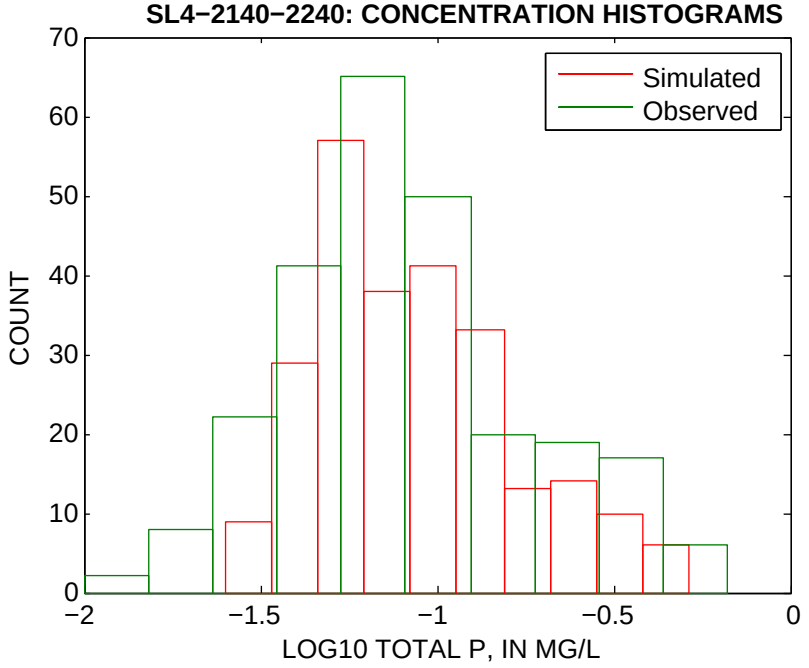
VERSION

ALL DATA
LOG10

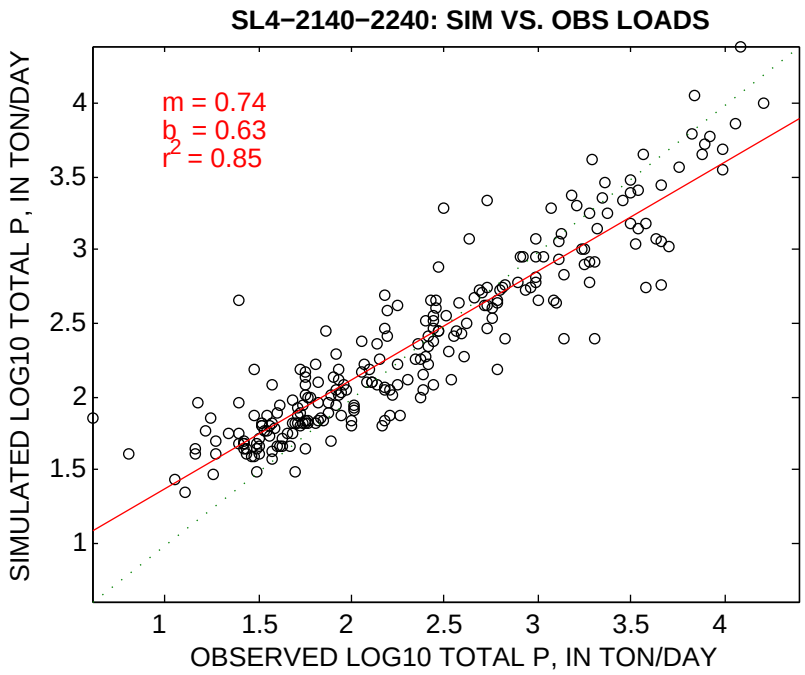


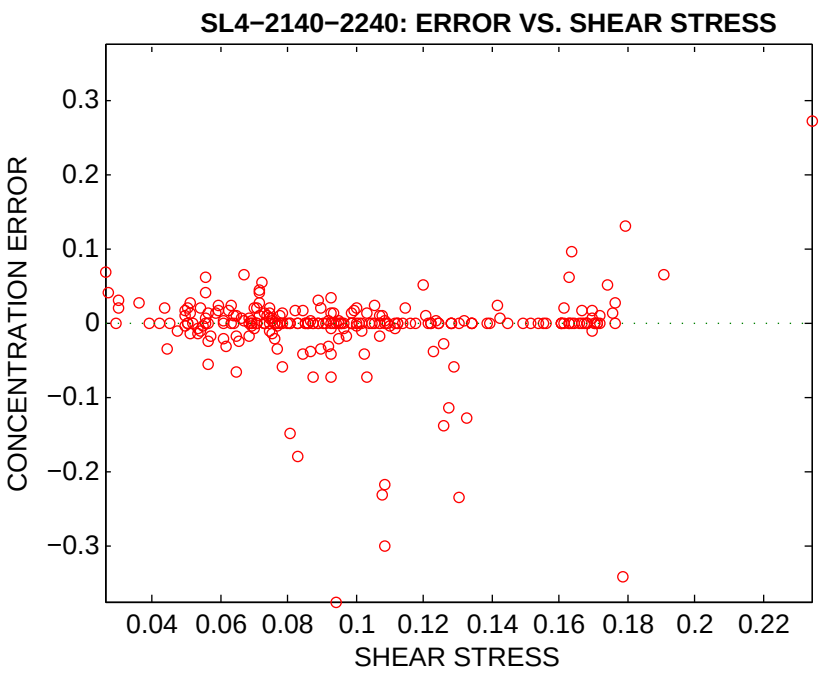


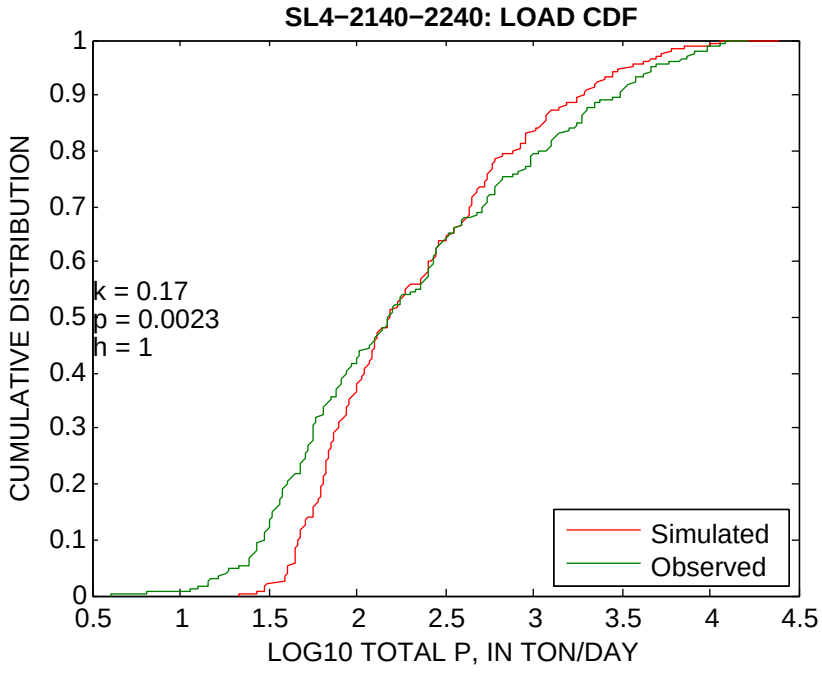


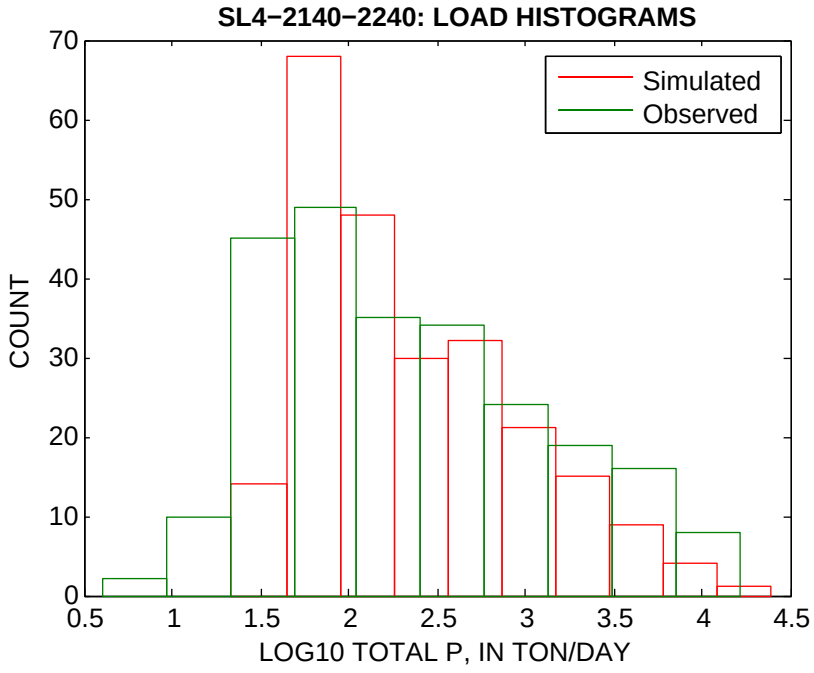


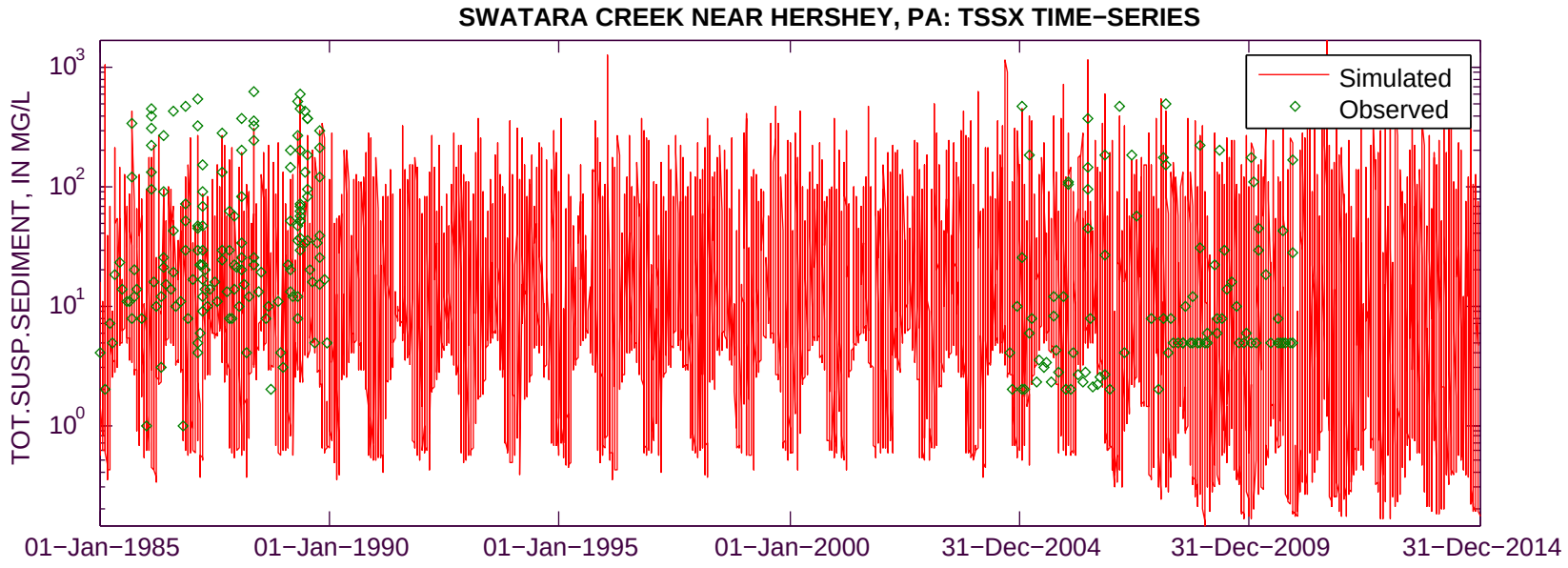
LOAD DATA
LOG10

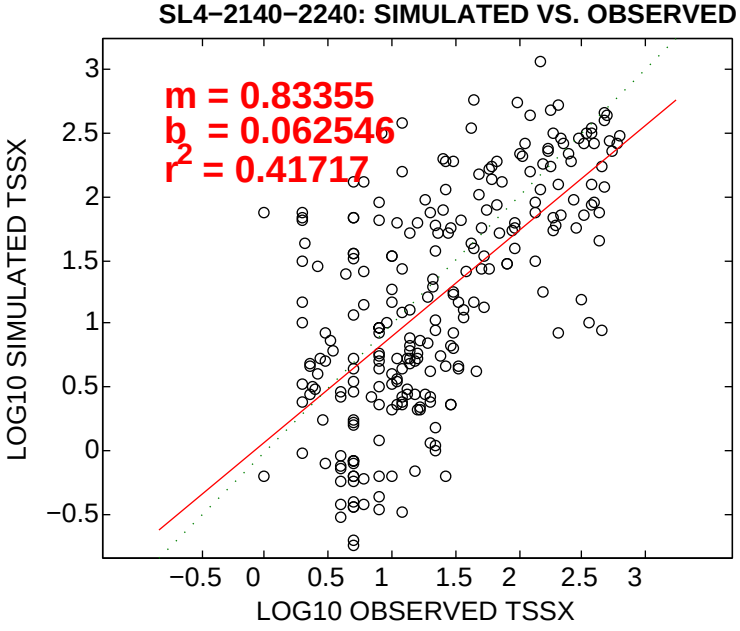


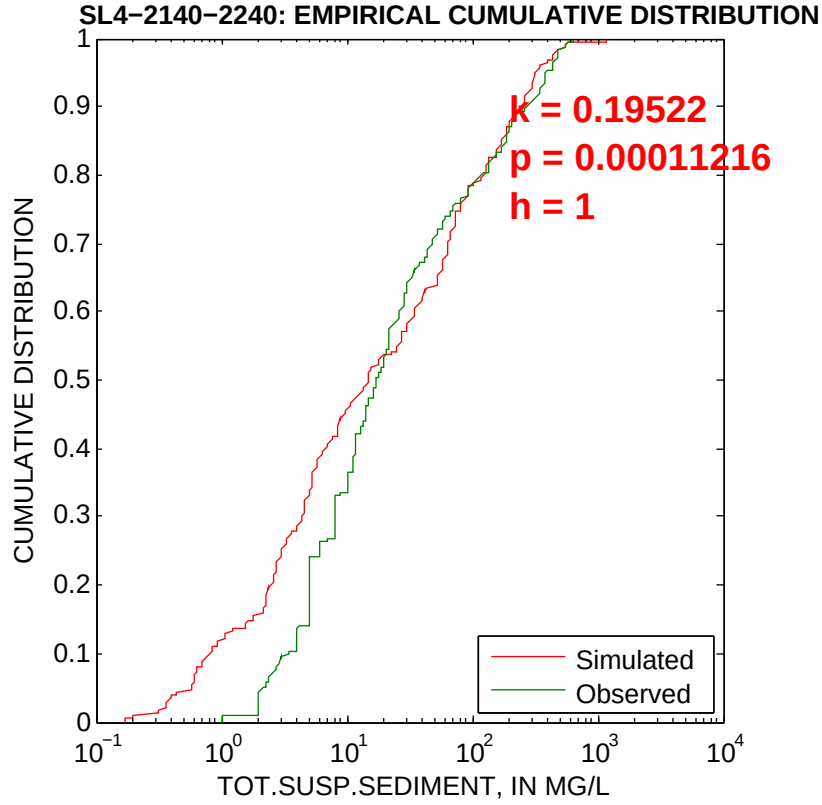












DATA SELECTION

scenario	file
P620171001WQ	TSSX.calib

plot: TSSX - total suspended ...

Dates: 1/1/1985 – 12/31/201

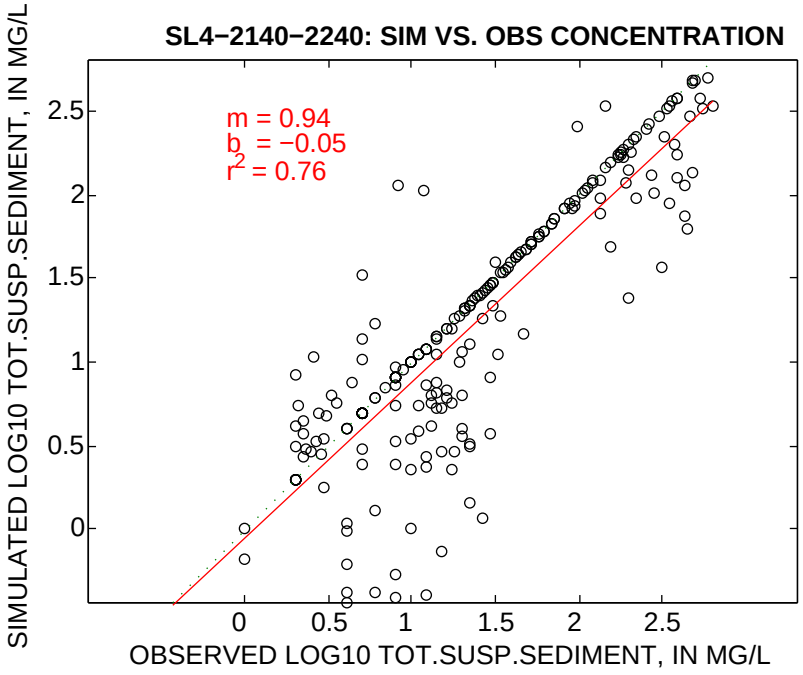
Drive	Directory	Observed
N/A	model	OBS20161101

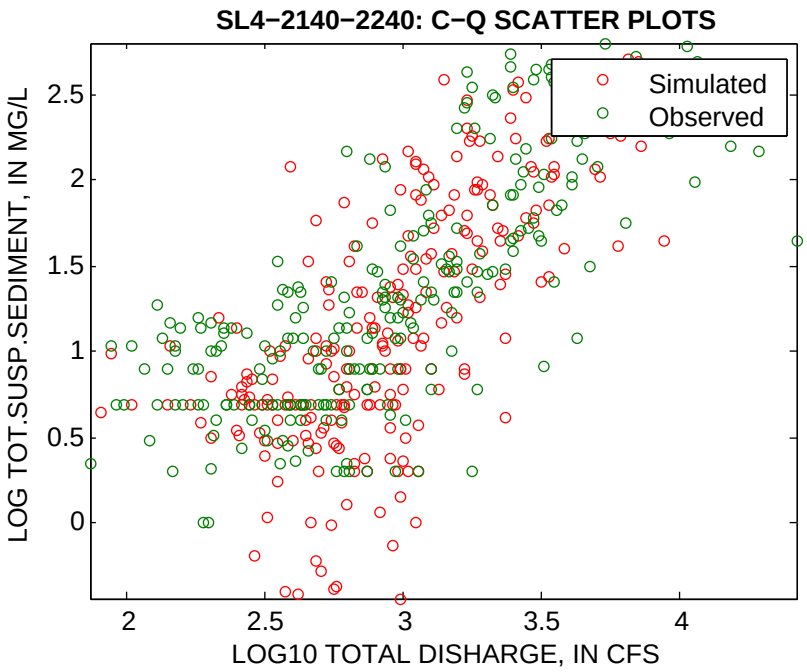
STATISTICS

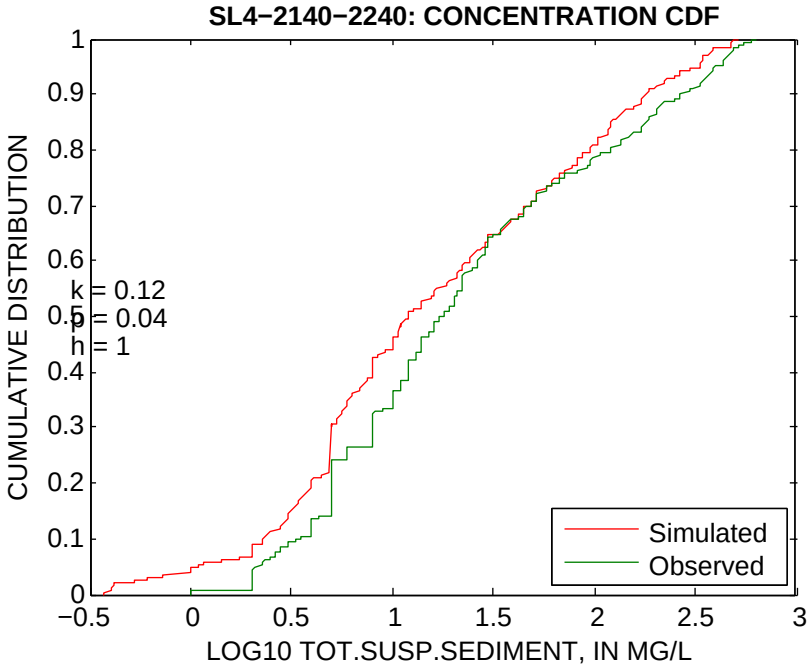
	n	observe	simulate
		251	251
min		1	0.1756
		0	-0.755475
mean		77.4292	75.2778
		1.35255	1.18997
media		17	14.68
		1.23045	1.16673
max		635.001	1171.7
		2.80277	3.06882
varian		16986.4	17789.2
		0.47851	0.796977
JB		0.001	0.001
		0.006678	0.011580
		ra	log
%		-2.77844	-12.0203
err.va		17619	0.504297
rel.std.err		1.03724	1.05389
mod.eff		-0.0372391	-0.0538902

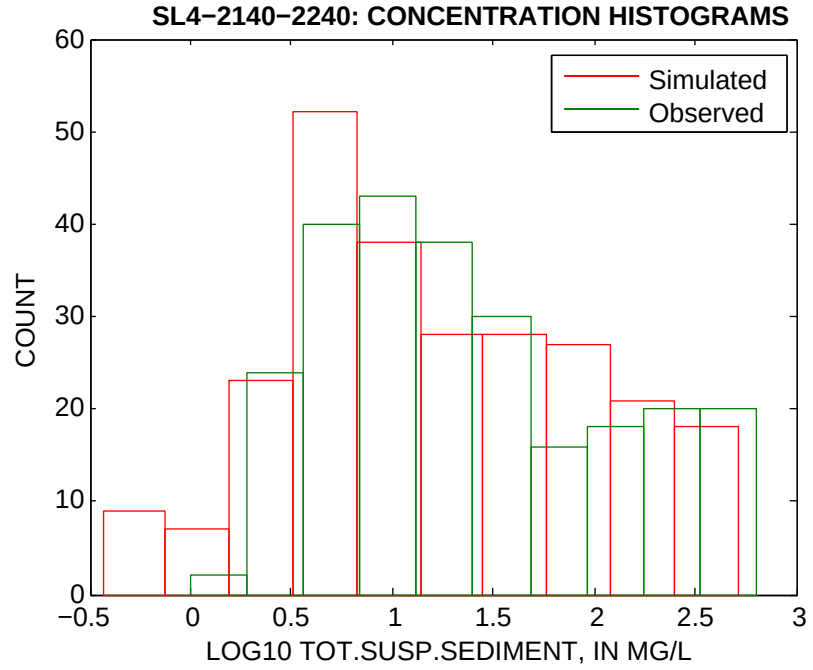
VERSION 2.1

ALL DATA
LOG10

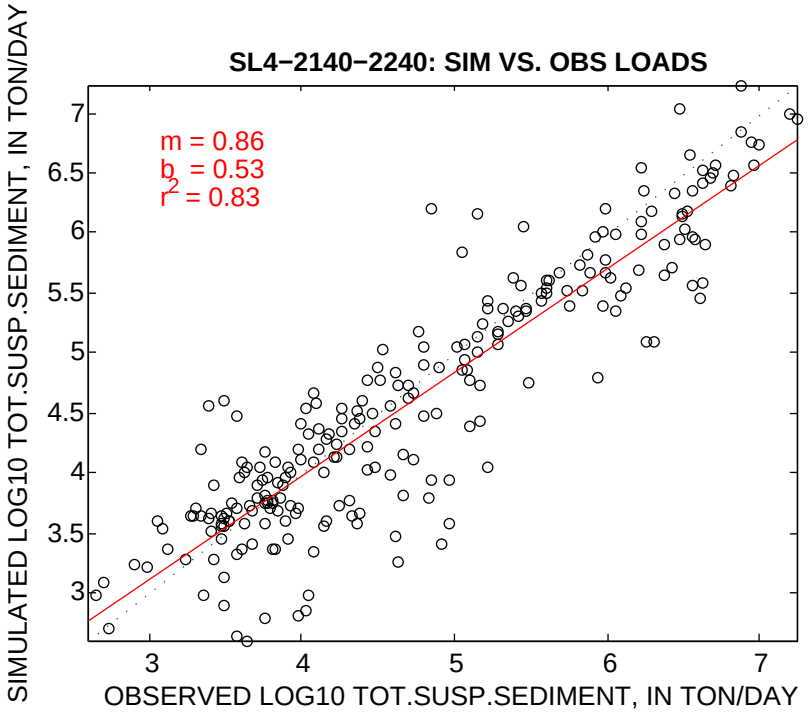


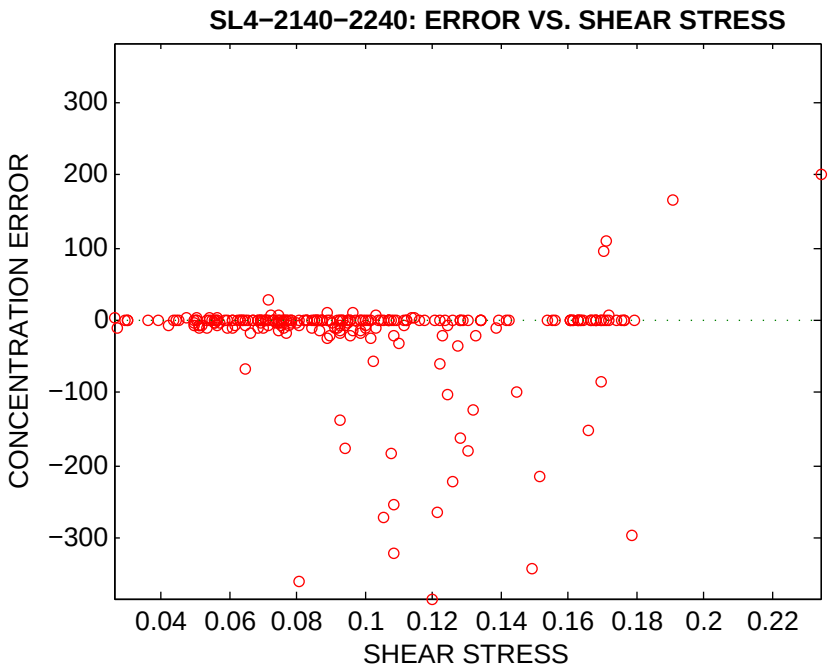


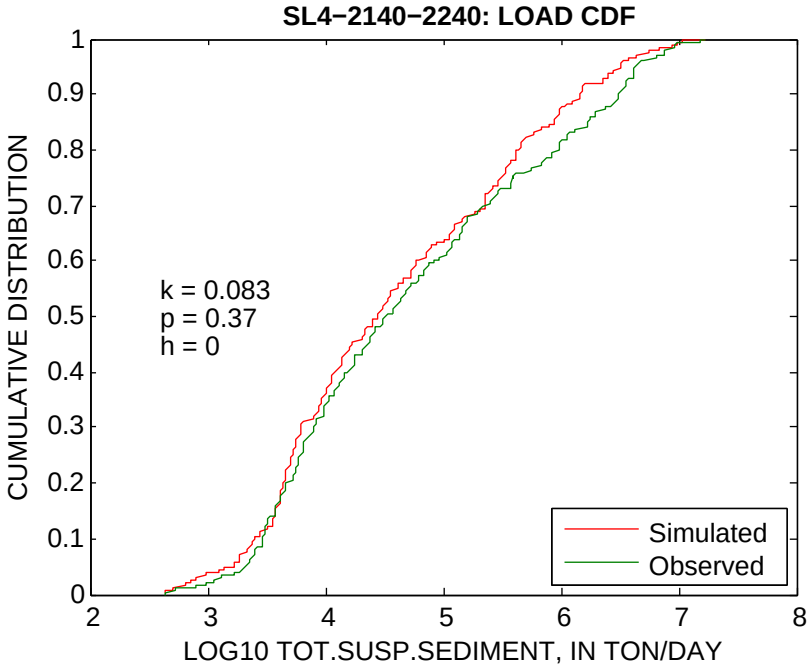


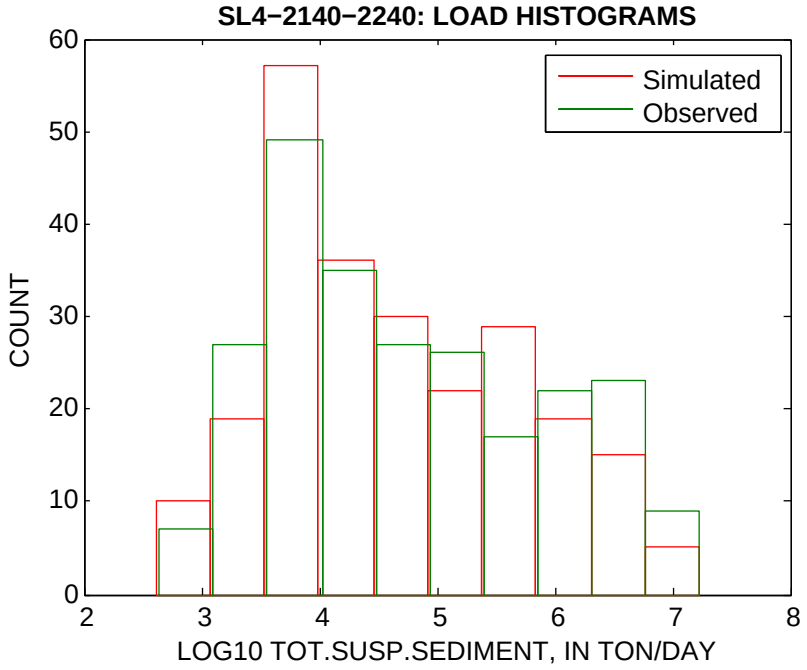


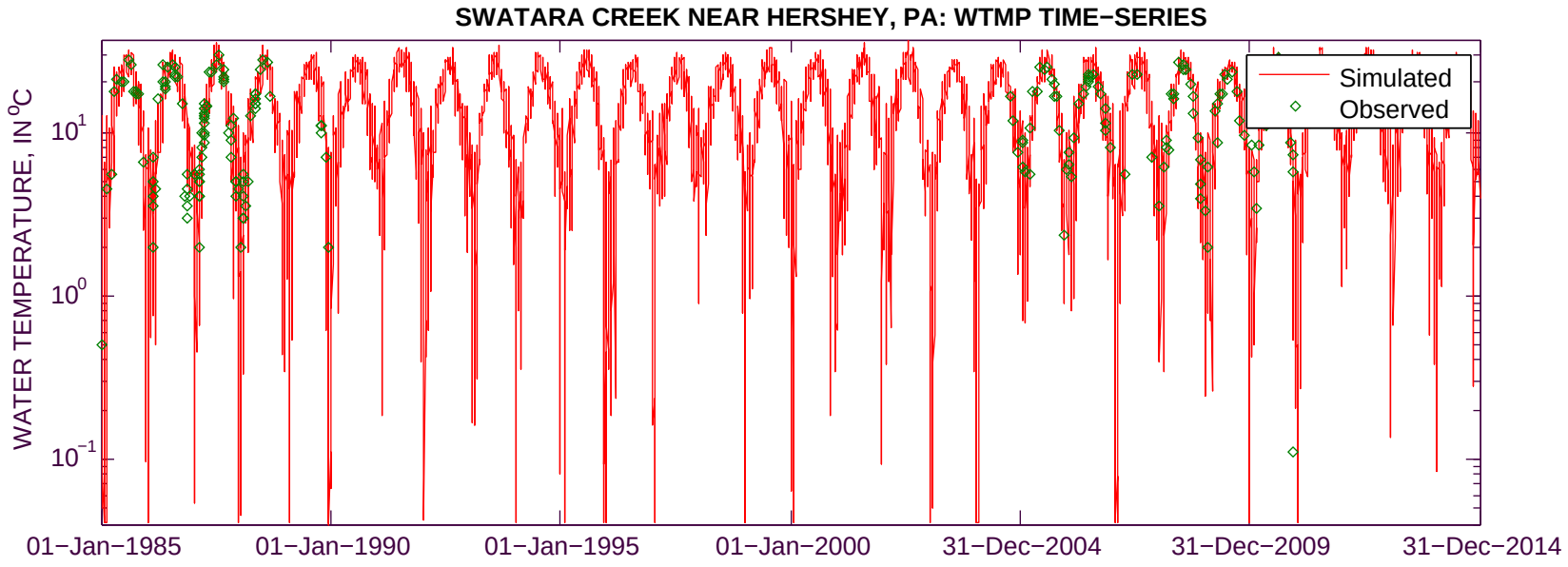
LOAD DATA
LOG10

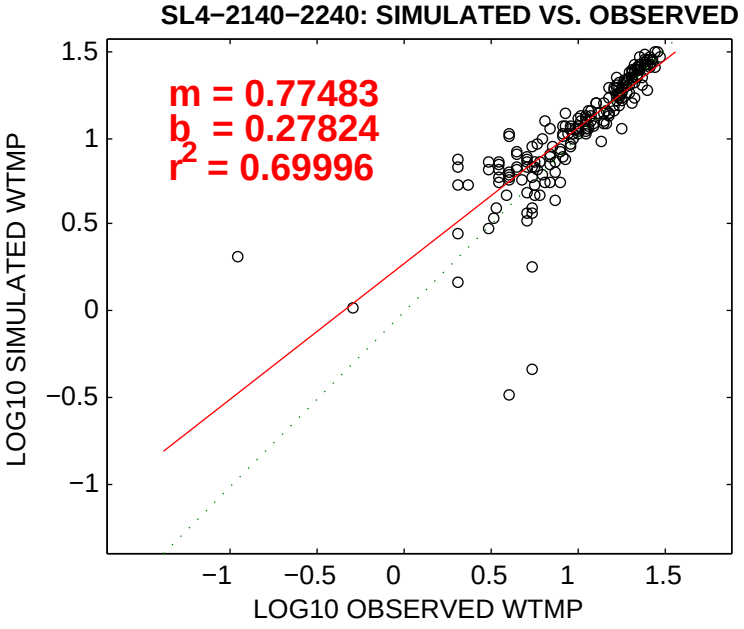


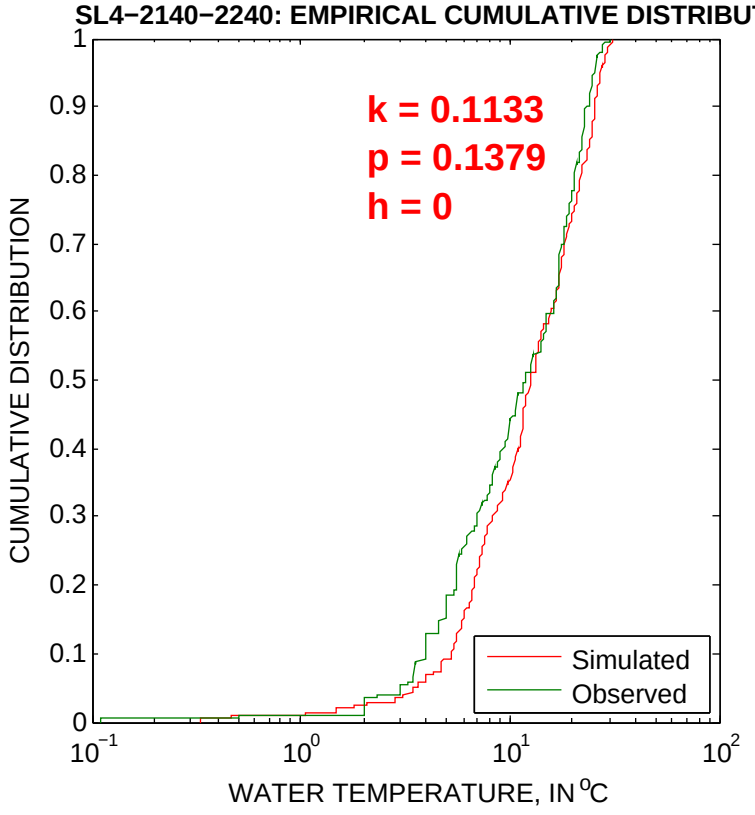












DATA SELECTION

scenario	file
P620171001WQ	WTMP.calib

plot: WTMP - water tempera...

Dates: 1/1/1985 – 12/31/201

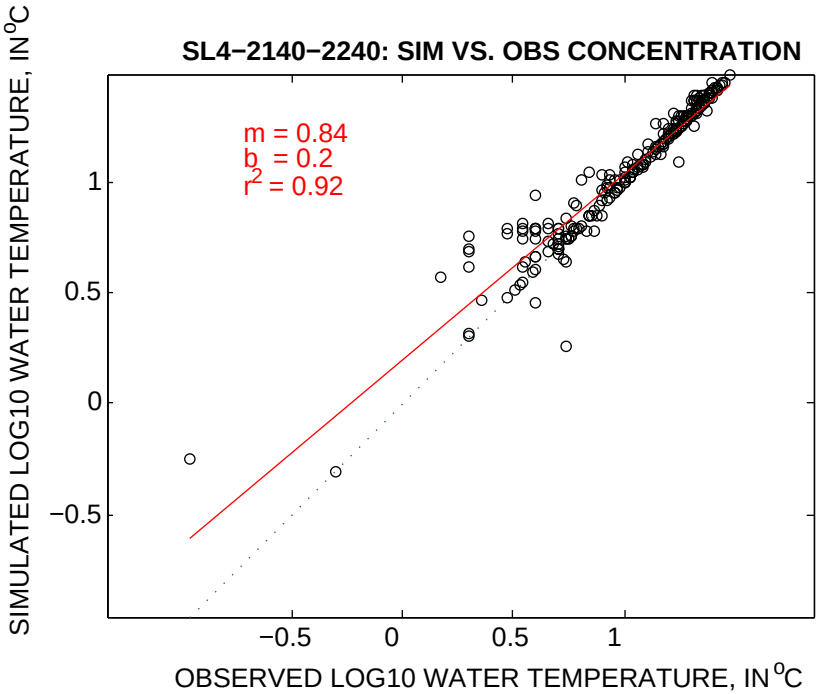
Drive	Directory	Observed
N/A	model	OBS20161101

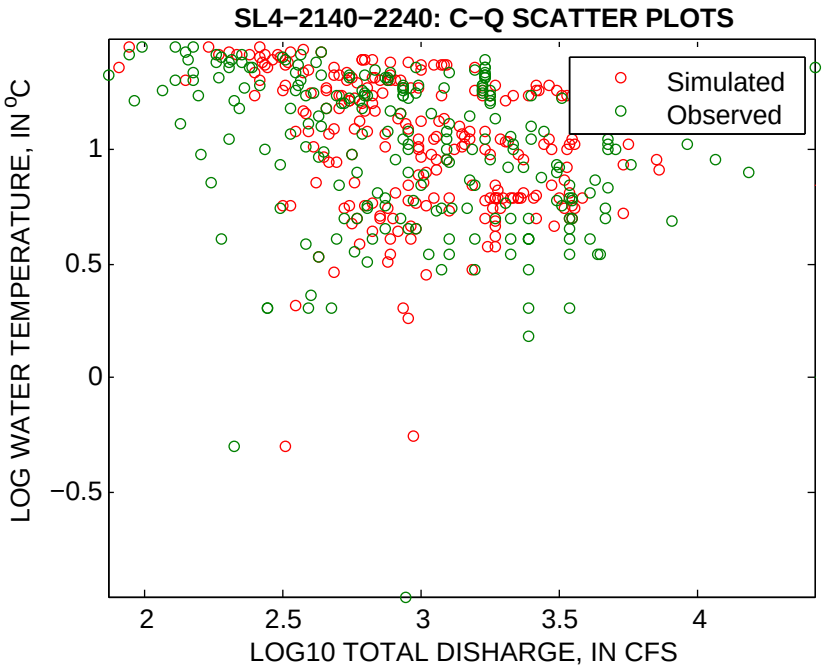
STATISTICS

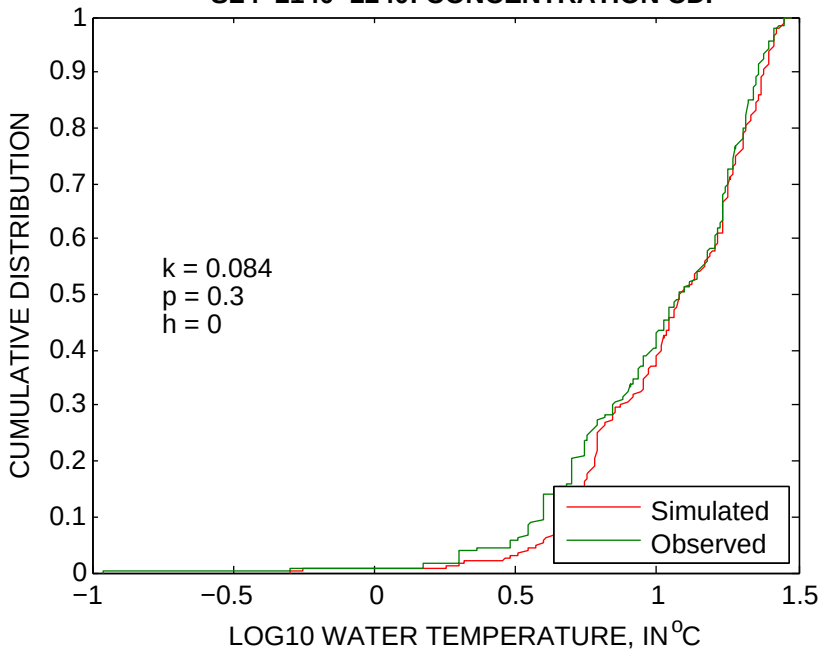
	n	203	203
		observe	simulate
min		0.11	0.33284
		-0.958607	-0.477764
mean		13.0064	14.1625
		1.01406	1.06397
media		11.83	12.632
		1.07298	1.10147
max		30	30.987
		1.47712	1.49118
varian		56.5798	60.246
		0.116403	0.0998401
JB		0.007484	0.010035
		0.001	0.001
		ra	log
%		8.88928	4.92157
err.va		6.57018	0.0383603
rel.std.err		0.116122	0.329547
mod.eff		0.883878	0.670453

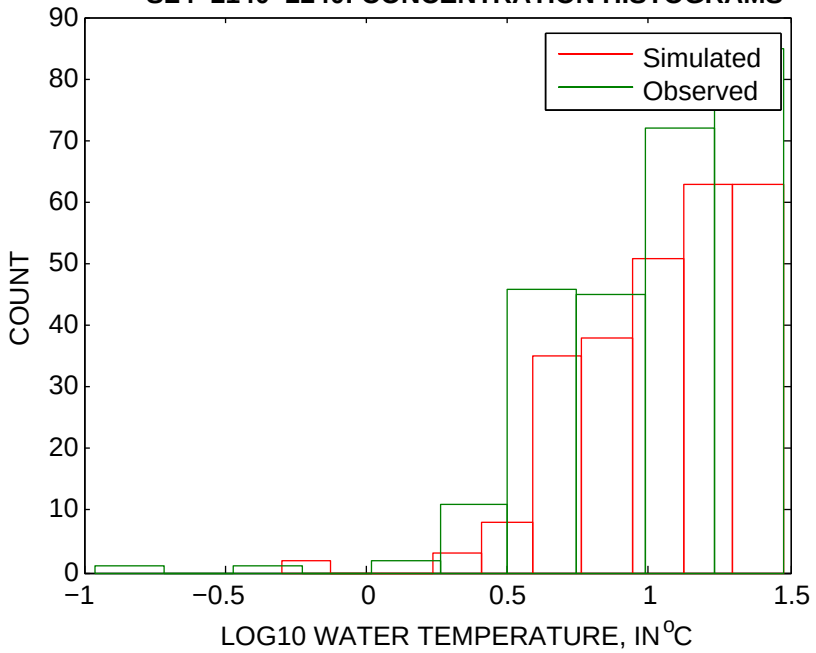
VERSION 2.1

ALL DATA
LOG10

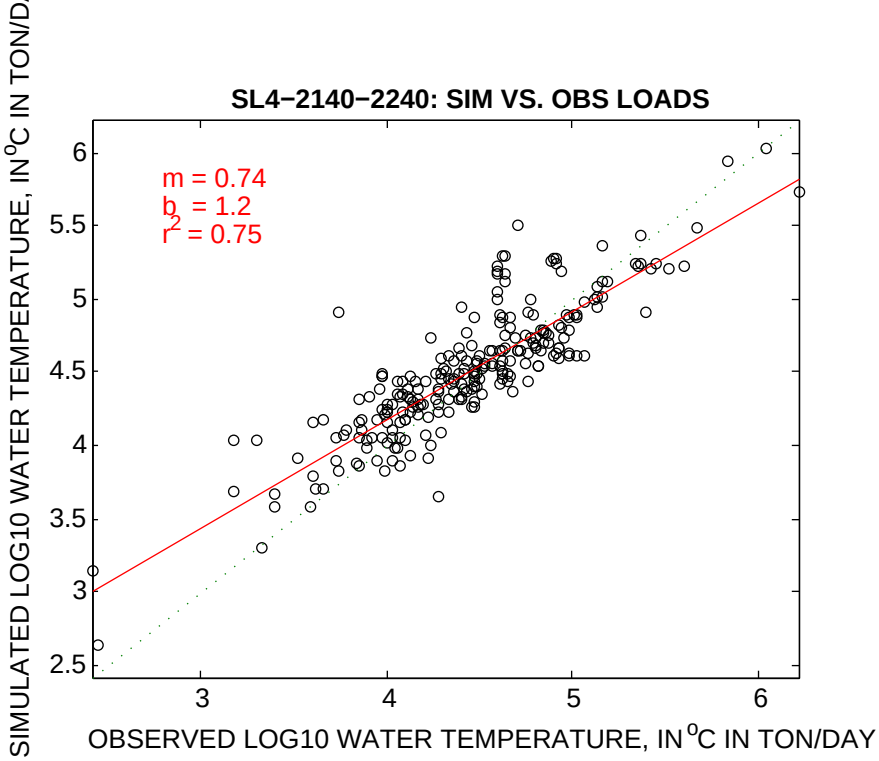


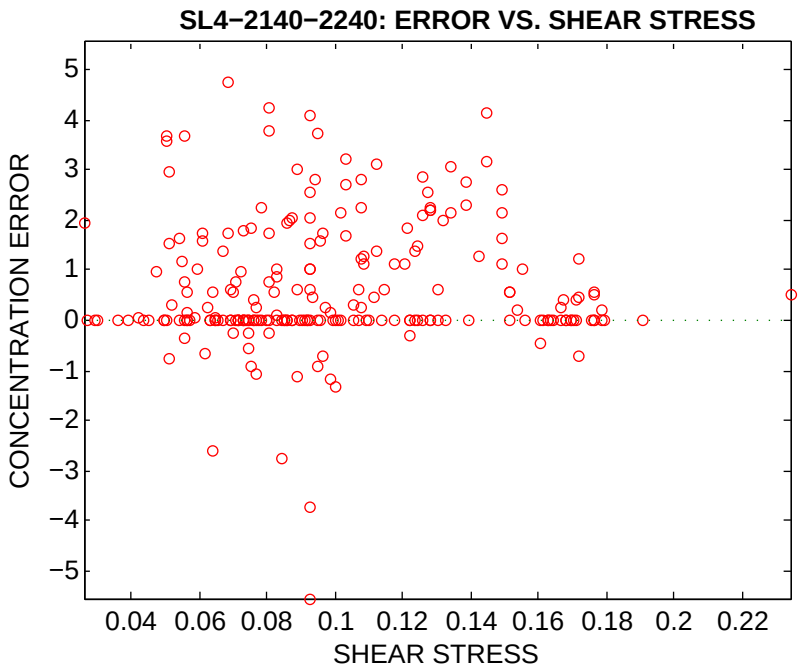


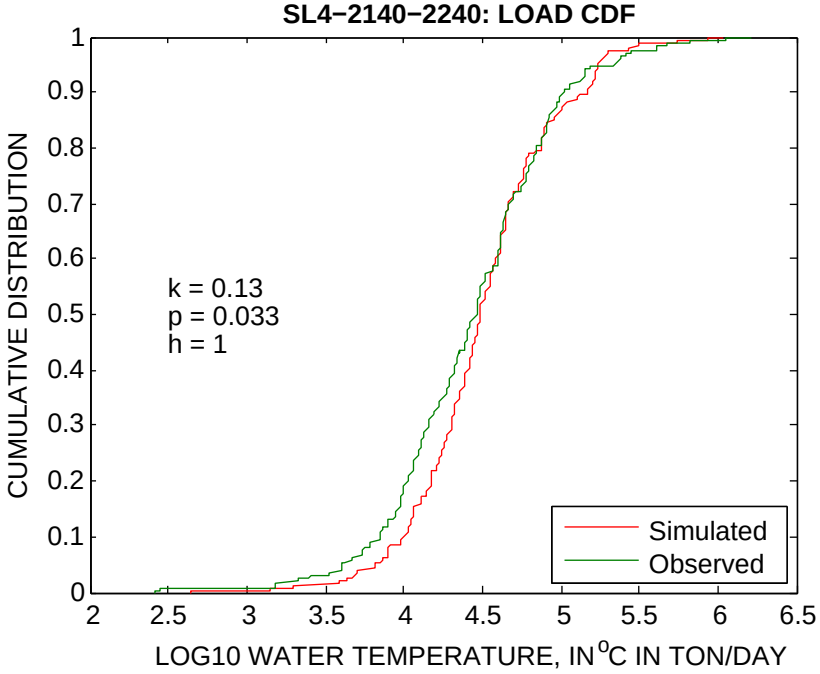


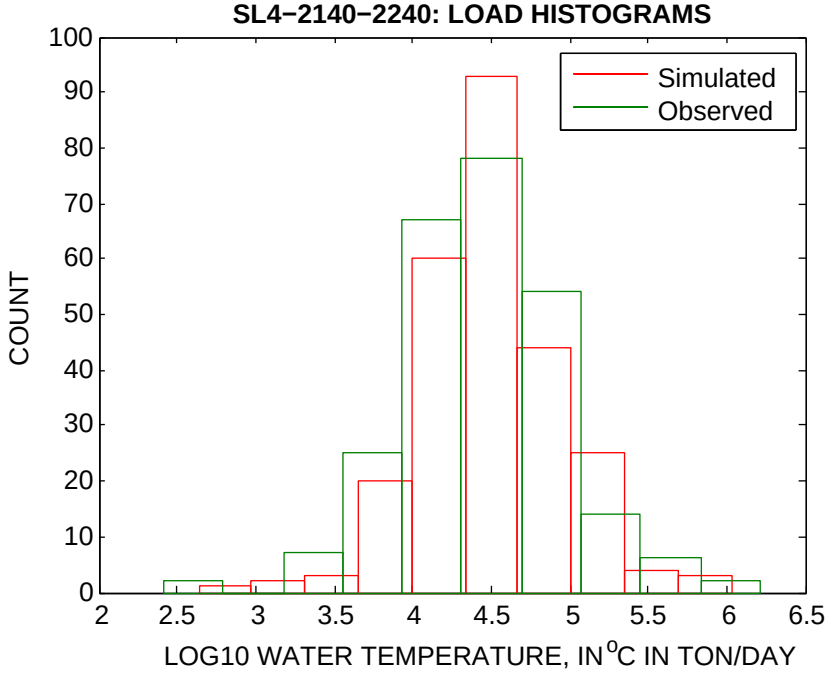


LOAD DATA
LOG10

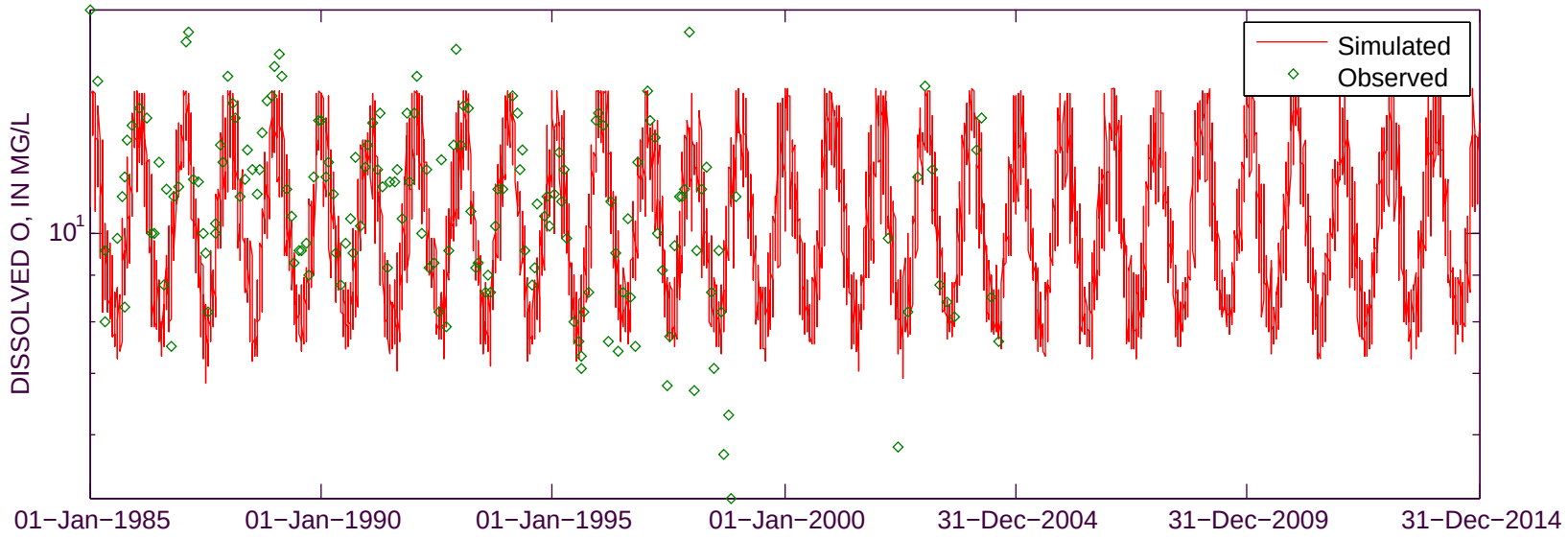




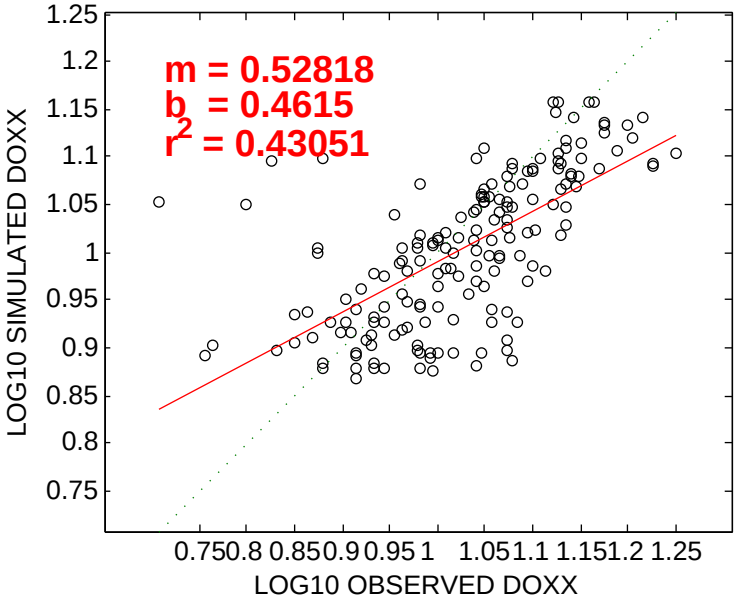




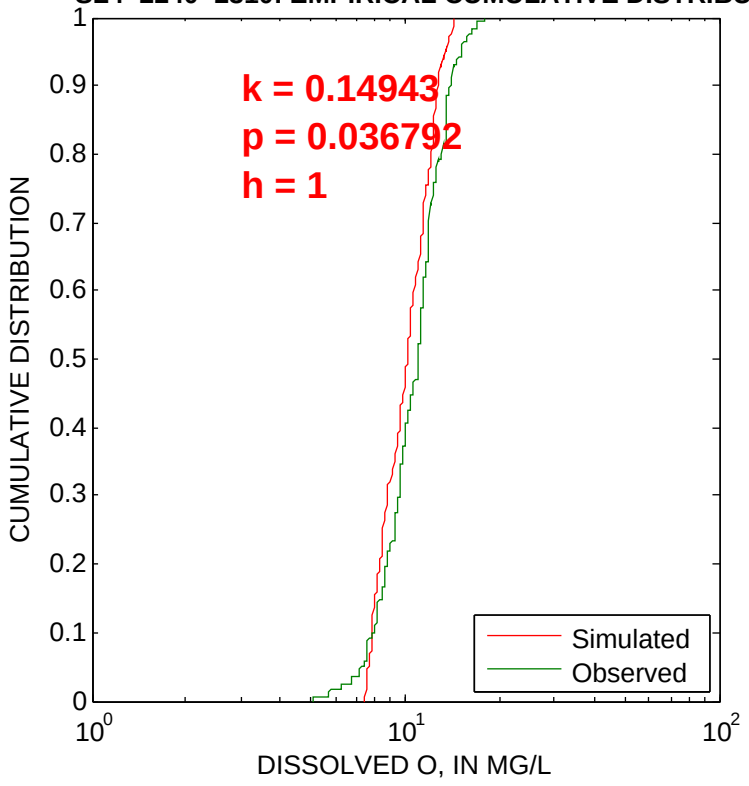
SWATARA CR: DOXX TIME-SERIES



SL4-2240-2310: SIMULATED VS. OBSERVED



SL4-2240-2310: EMPIRICAL CUMULATIVE DISTRIBUTION



DATA SELECTION

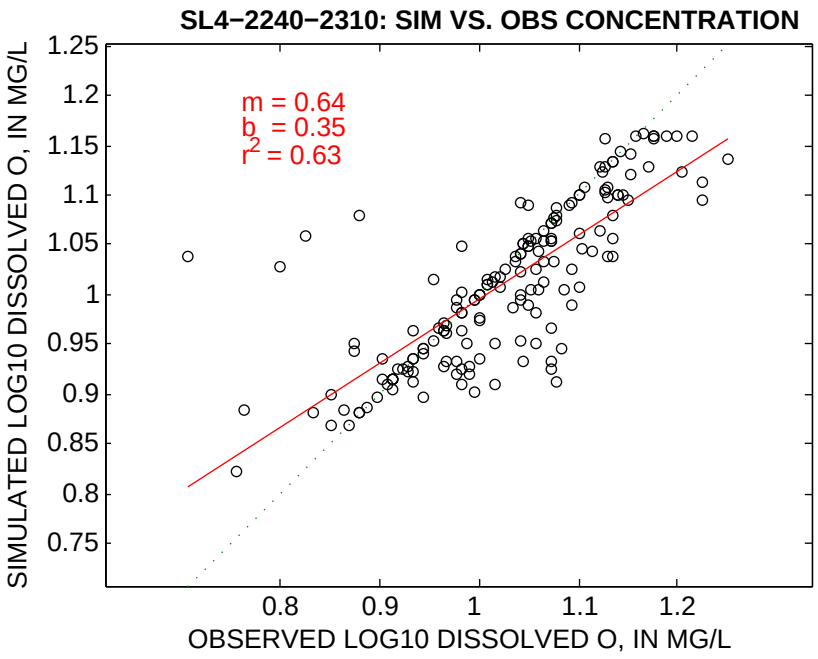
scenario: P620171001WQ
file: DOXX.calib
plot: DOXX - dissolved oxygen
Dates: 1/1/1985 12/31/201
Drive: N/A
Directory: model
Observed: OBS20161101

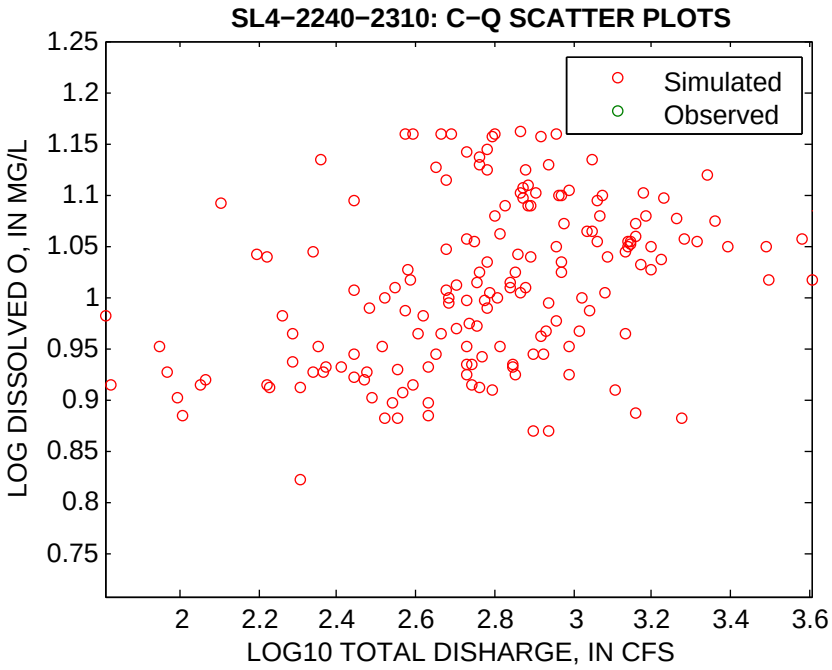
STATISTICS

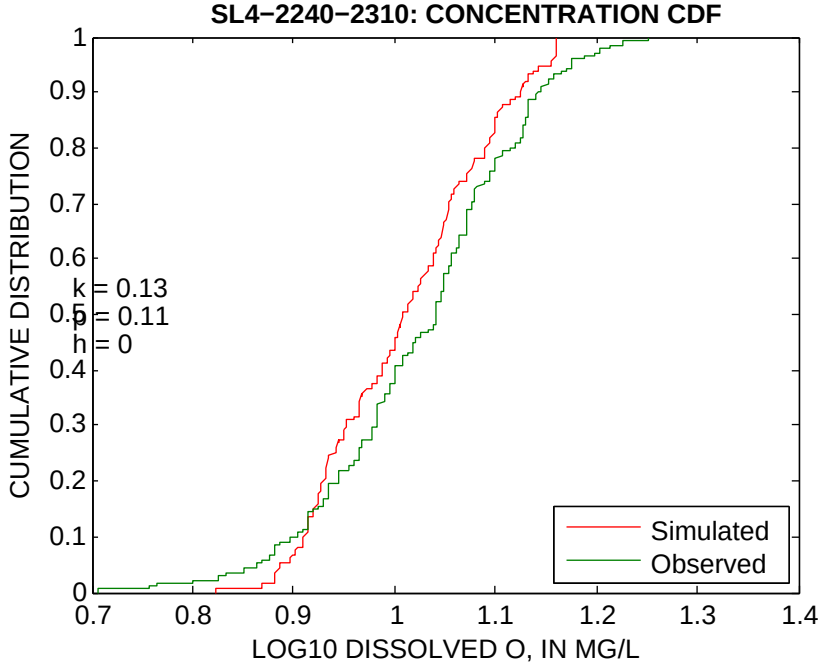
	n	observe	simulate
		174	174
min		5.1	7.3572
		0.70757	0.866713
mean		10.8943	10.2521
		1.02641	1.00362
media		11	10.127
		1.04139	1.00548
max		17.8	14.406
		1.25042	1.15854
varian		5.7387	3.51299
		0.00969954	0.00628526
JB		☑ 0.326992	0.020972
		☑ 0.085655	0.019636
		ra	log
%		-5.89418	-2.21961
err.va		3.37598	0.00626071
rel.std.err		0.588283	0.645465
mod.eff		0.411717	0.354535

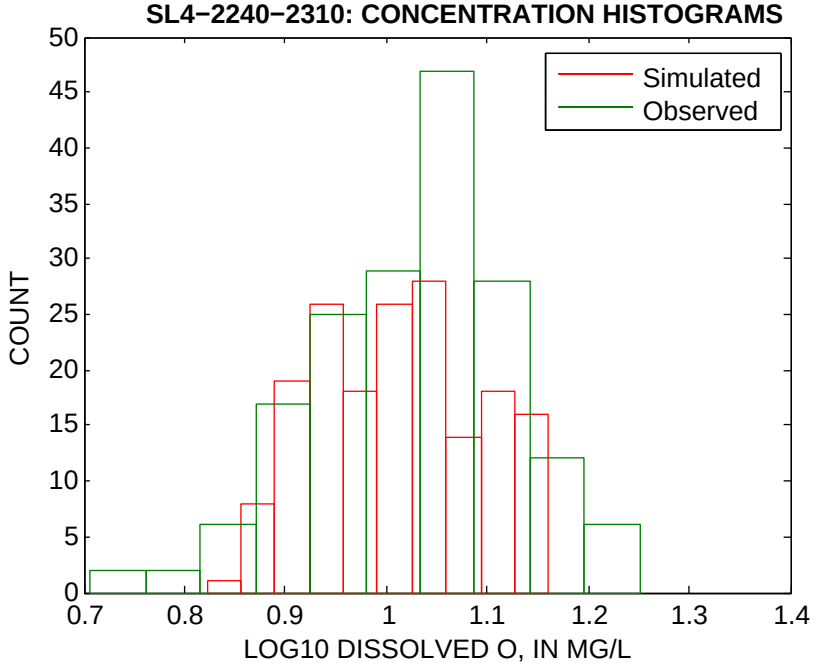
VERSION

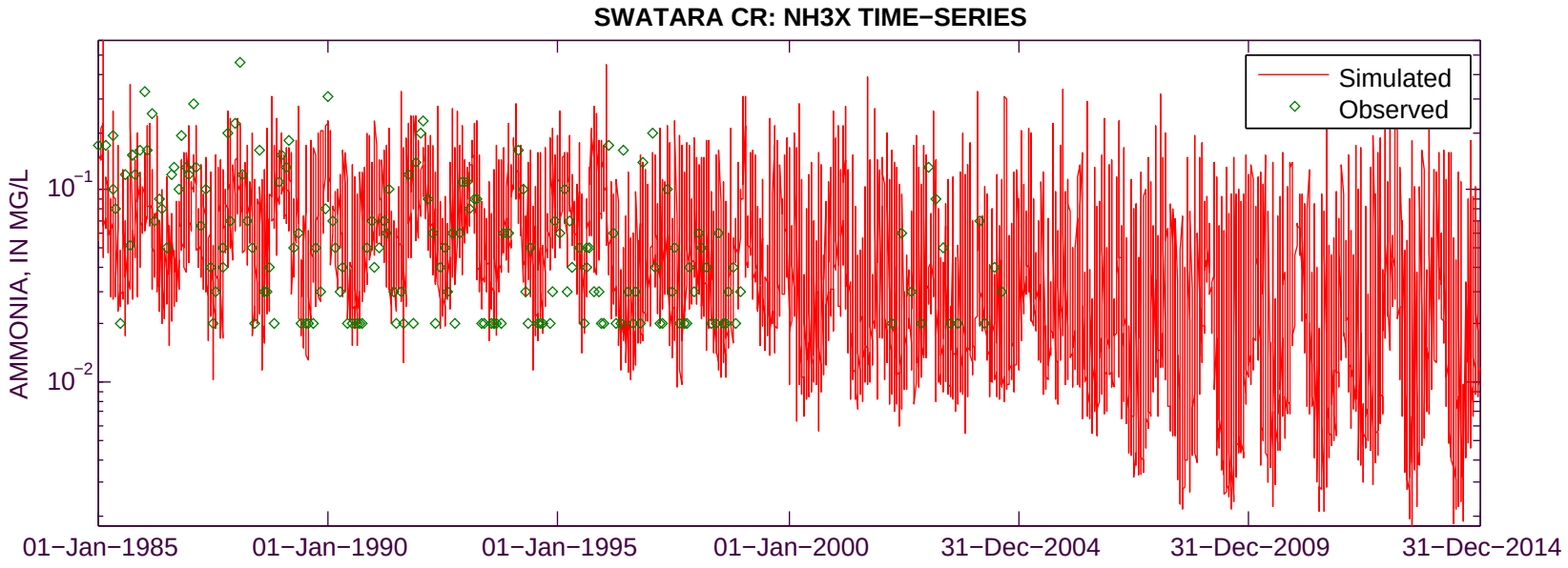
ALL DATA
LOG10

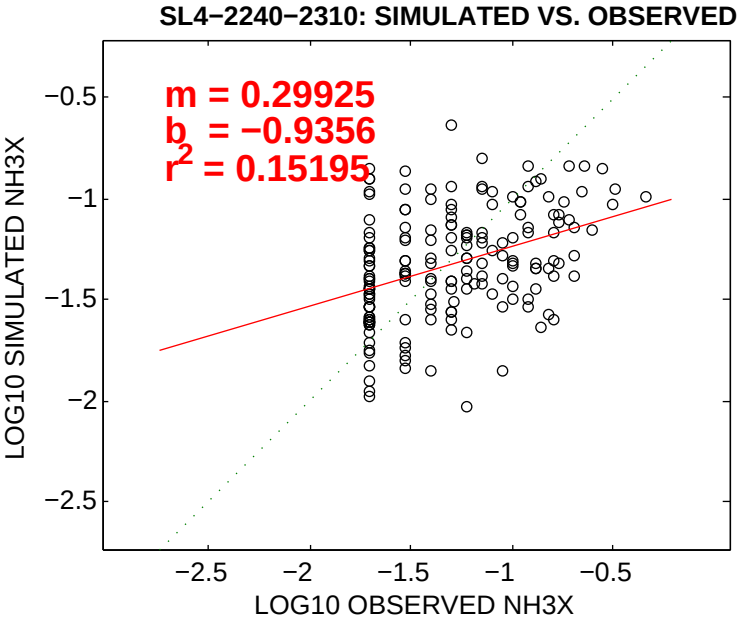


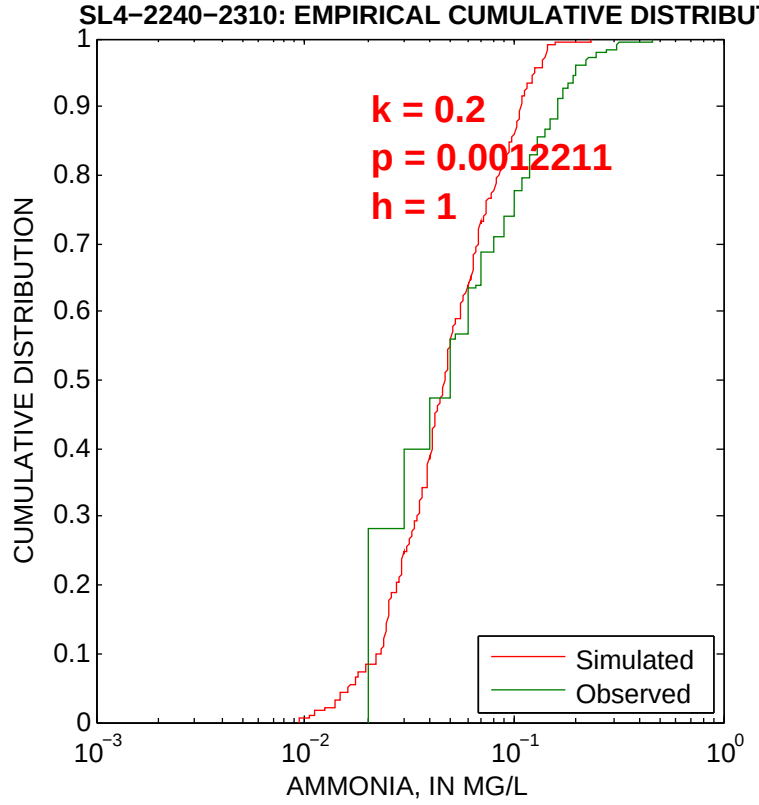












DATA SELECTION

scenario	file
P620171001WQ	NH3X.calib

plot: NH3X - ammonia

Dates: 1/1/1985 – 12/31/201

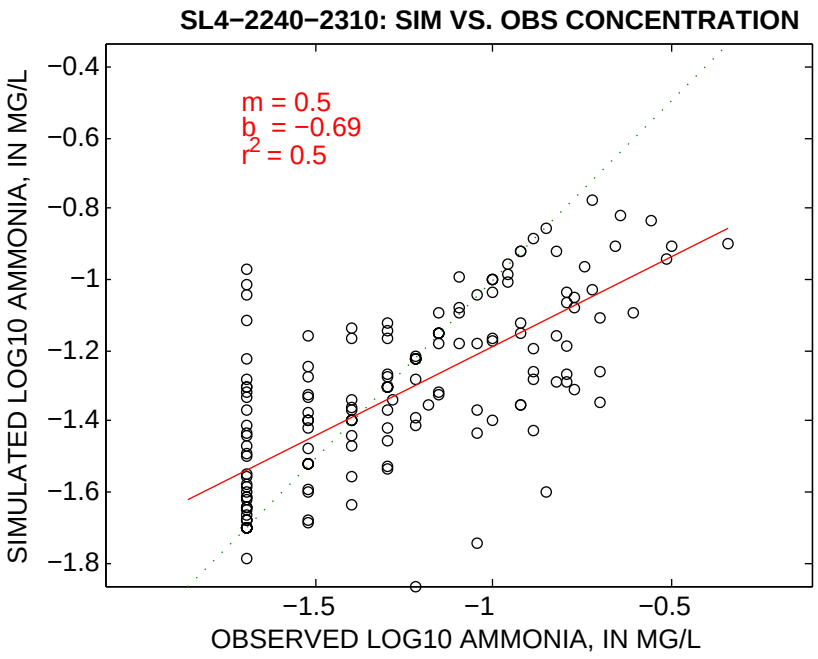
Drive	Directory	Observed
N/A	model	OBS20161101

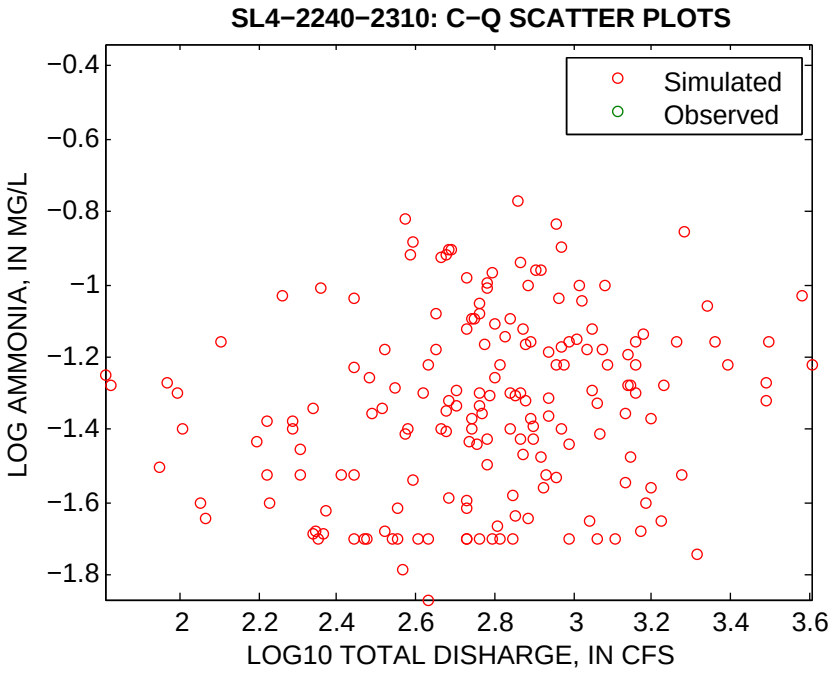
STATISTICS

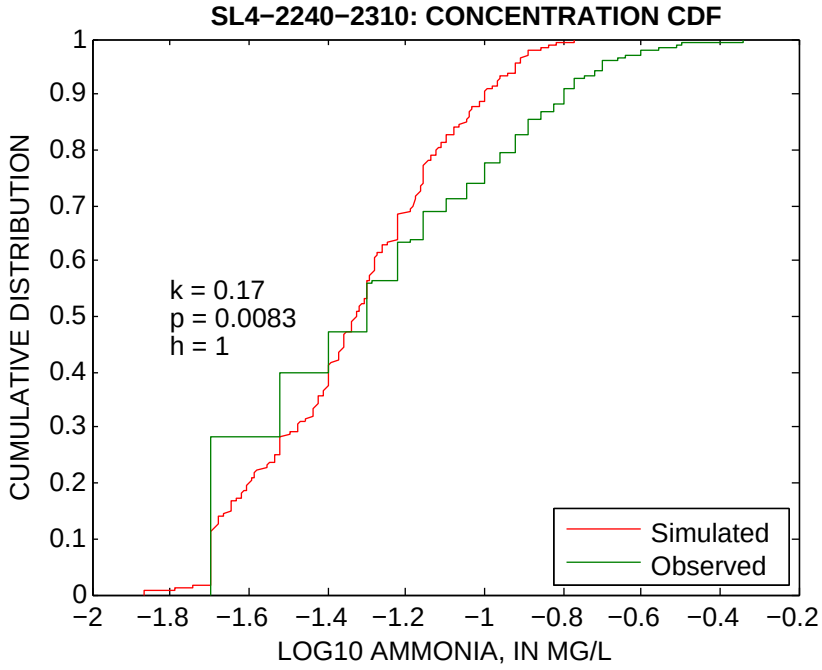
	observe	simulate
n	180	180
min	0.02 -1.69897	0.009371 -2.02821
mean	0.0715389 -1.2952	0.0571851 -1.32319
media	0.05 -1.30103	0.0471365 -1.32665
max	0.46 -0.337242	0.23111 -0.636181
varian	0.00455152 0.123447	0.00128833 0.0727518
JB	0.001 0.011271	0.001 0.436988
	ra	log
%	-20.0644	2.1612
err.va	0.00434302	0.123104
rel.std.err	0.95419	0.997223
mod.eff	0.0458105	0.00277719

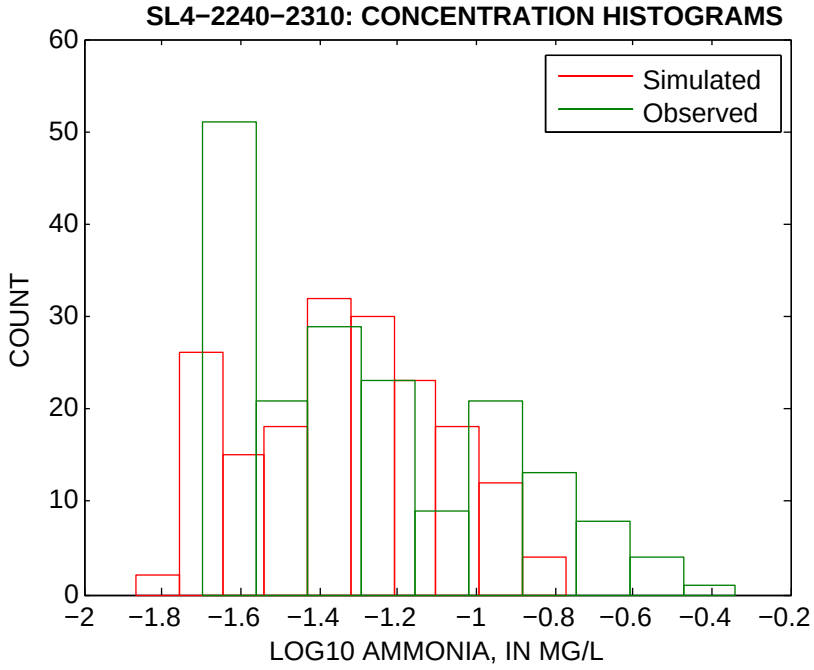
VERSION 2.1

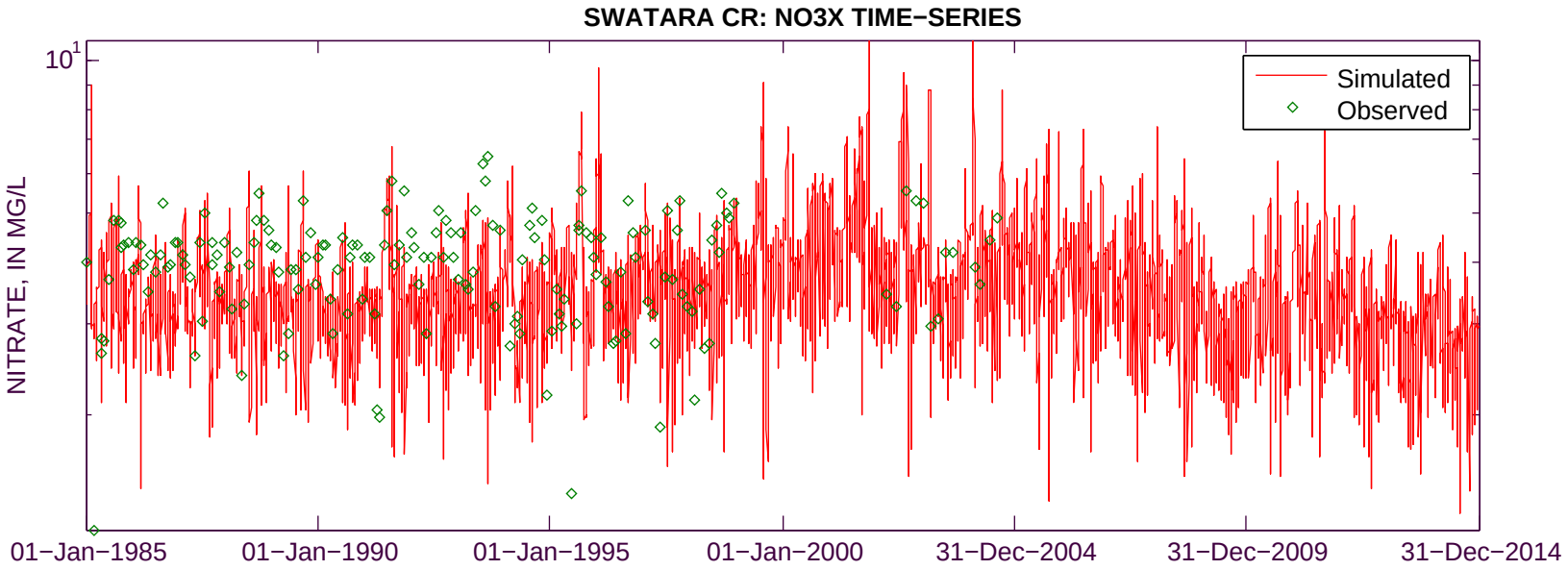
ALL DATA
LOG10

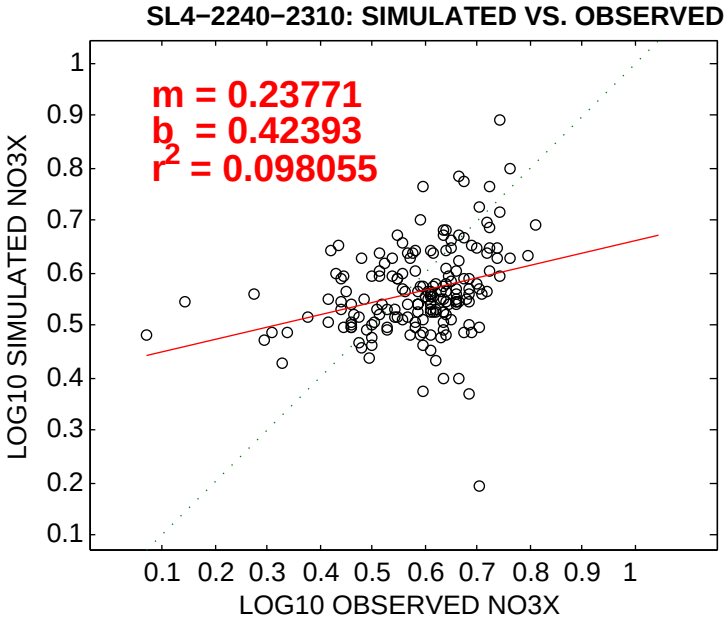


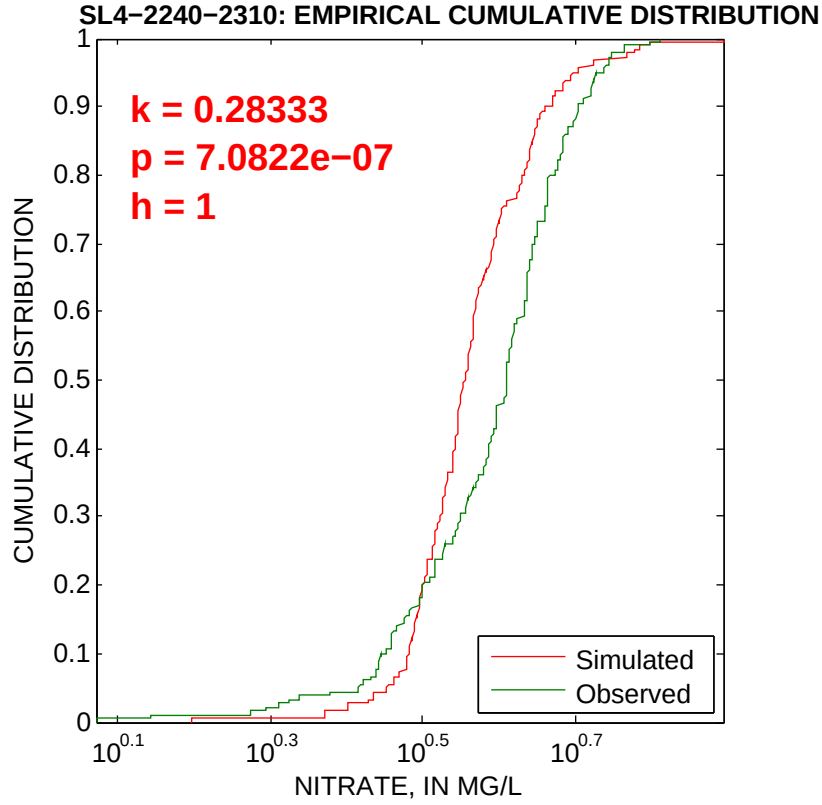












DATA SELECTION

scenario: P620171001WQ | file: NO3X.calib

plot: NO3X - nitrate

Dates: 1/1/1985 – 12/31/201

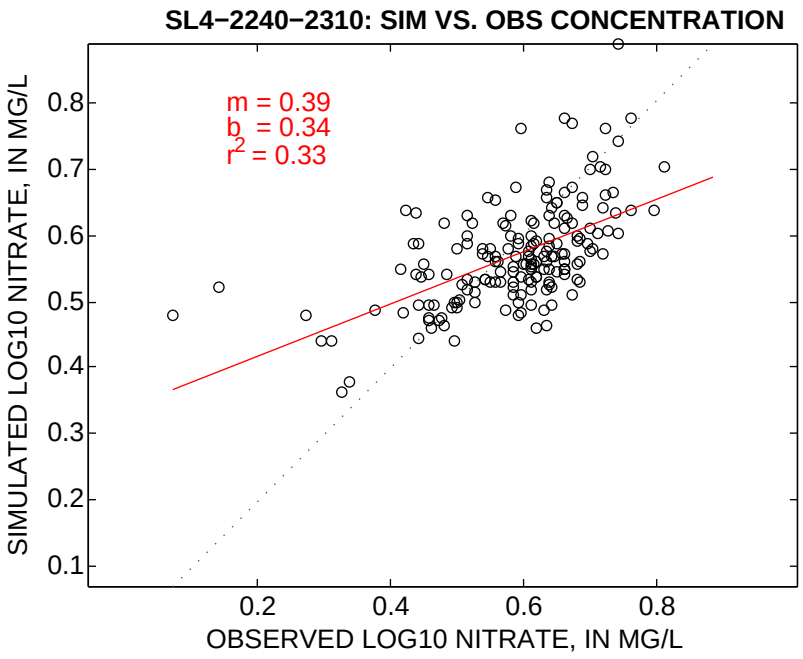
Drive: N/A | Directory: model | Observed: OBS20161101

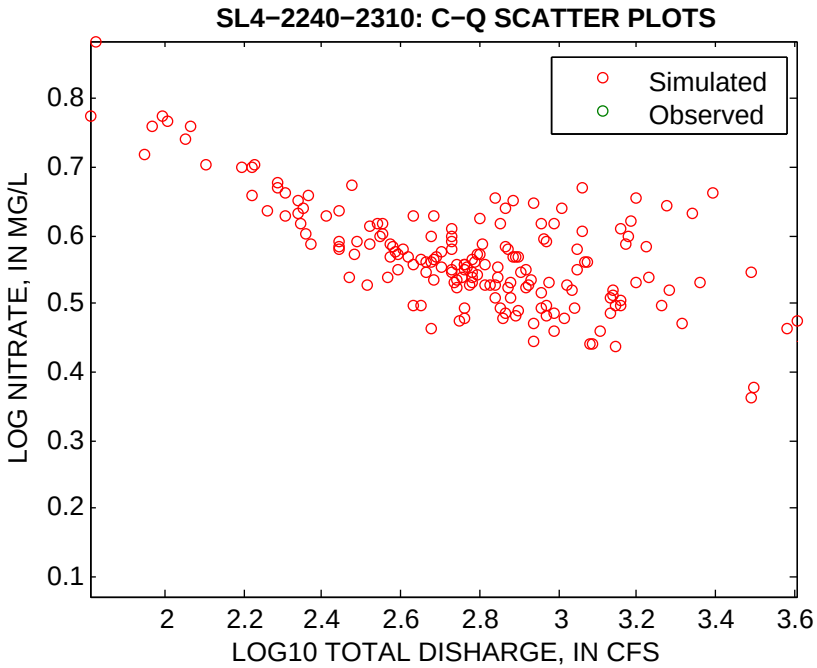
STATISTICS

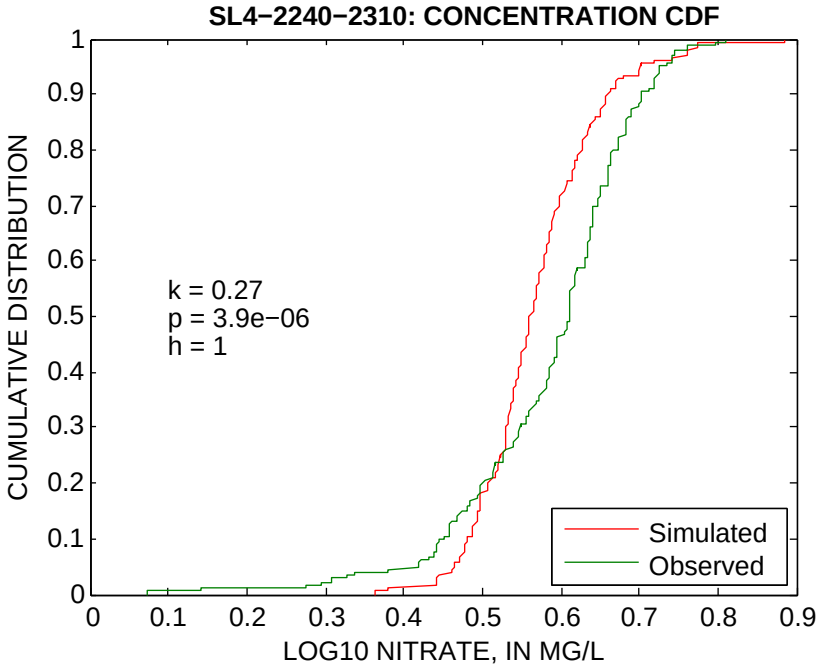
	observe	simulate
n	180	180
min	1.18	1.572
	0.071882	0.196453
mean	3.98089	3.73088
	0.587237	0.563516
media	4.08	3.58715
	0.61066	0.554749
max	6.48	7.8025
	0.811575	0.892234
varian	0.809006	0.586682
	0.0122869	0.0070804
JB	0.247226	0.001
	0.001	0.001
	ra	log
%	-6.28027	-4.03944
err.va	0.944016	0.0140918
rel.std.err	1.16688	1.14689
mod.eff	-0.166884	-0.146891

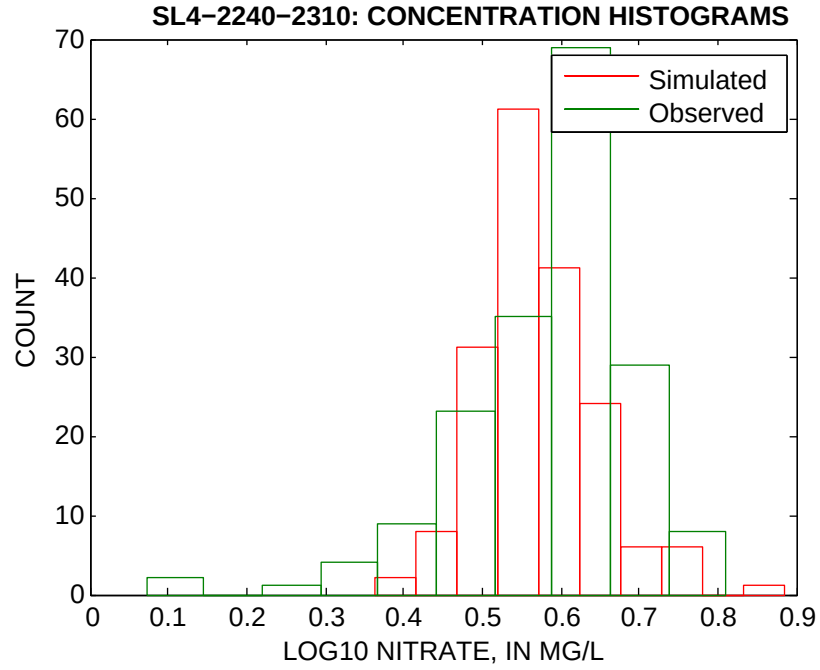
VERSION 2.1

ALL DATA
LOG10

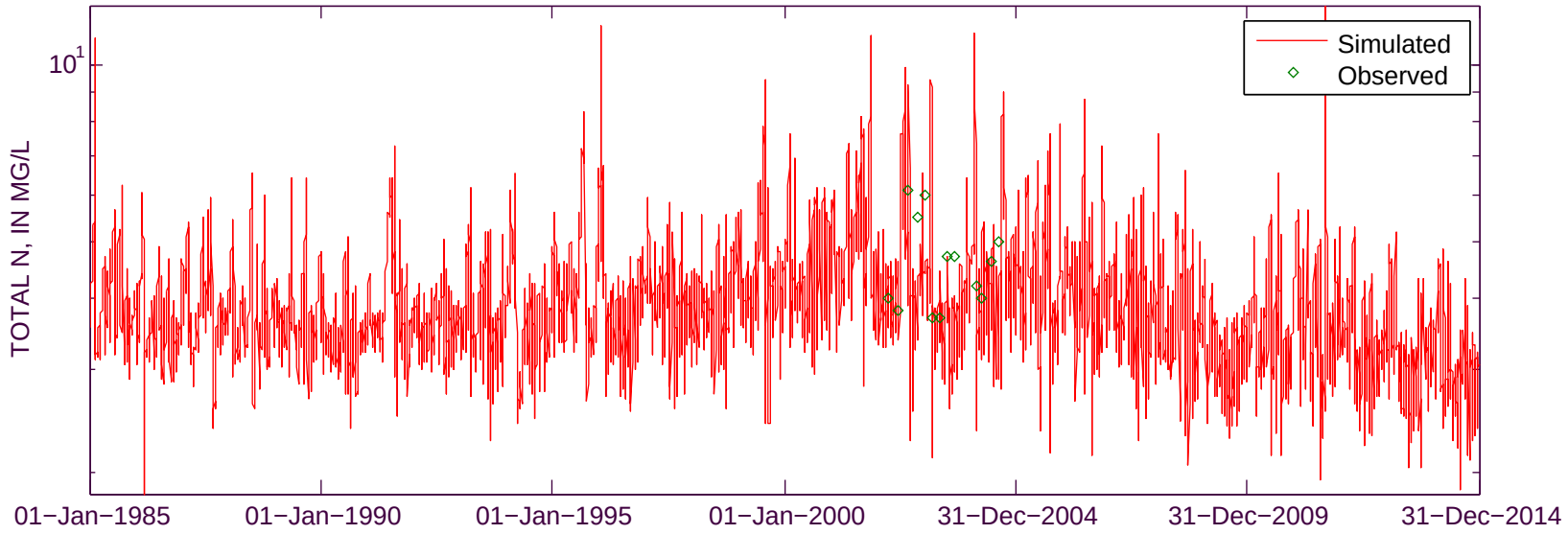




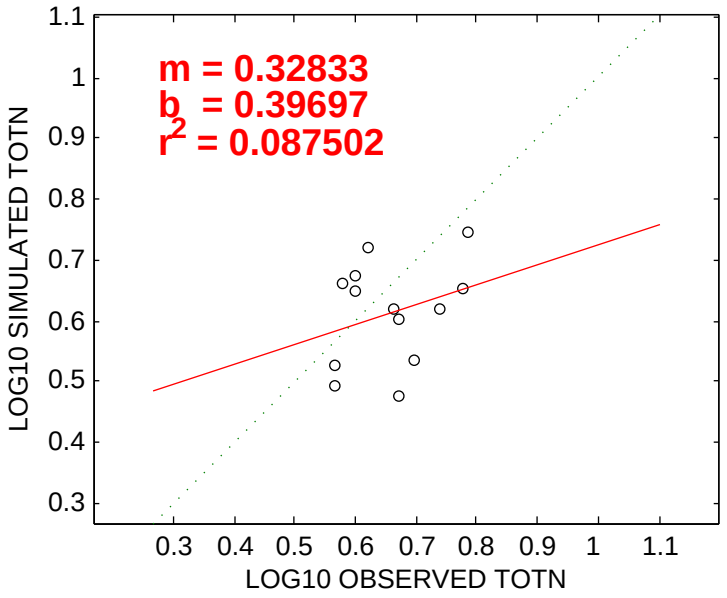




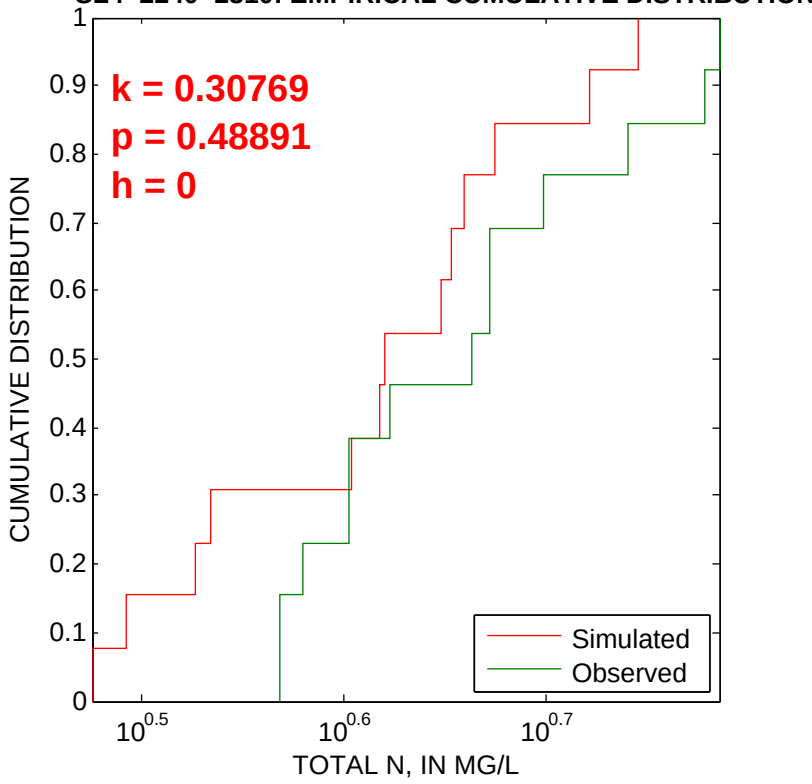
SWATARA CR: TOTN TIME-SERIES



SL4-2240-2310: SIMULATED VS. OBSERVED



SL4-2240-2310: EMPIRICAL CUMULATIVE DISTRIBUTION



DATA SELECTION

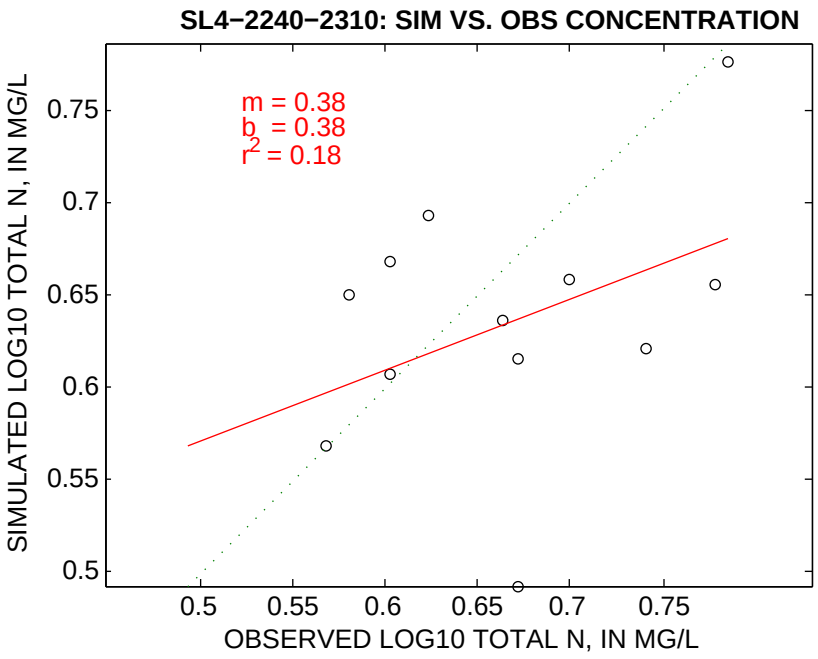
scenario: P620171001WQ
file: TOTN.calib
plot: TOTN - total nitrogen
Dates: 1/1/1985 – 12/31/201
Drive: N/A
Directory: model
Observed: OBS20161101

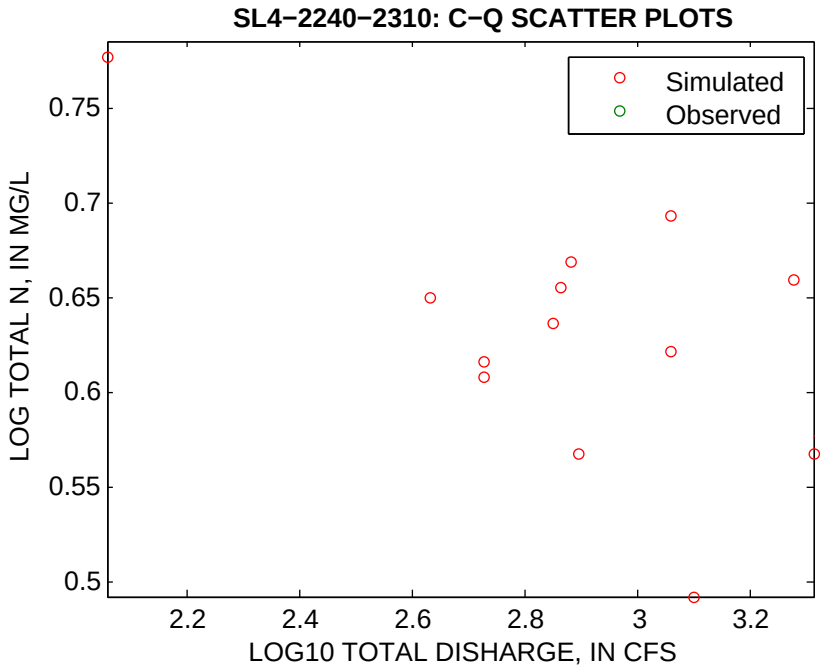
STATISTICS

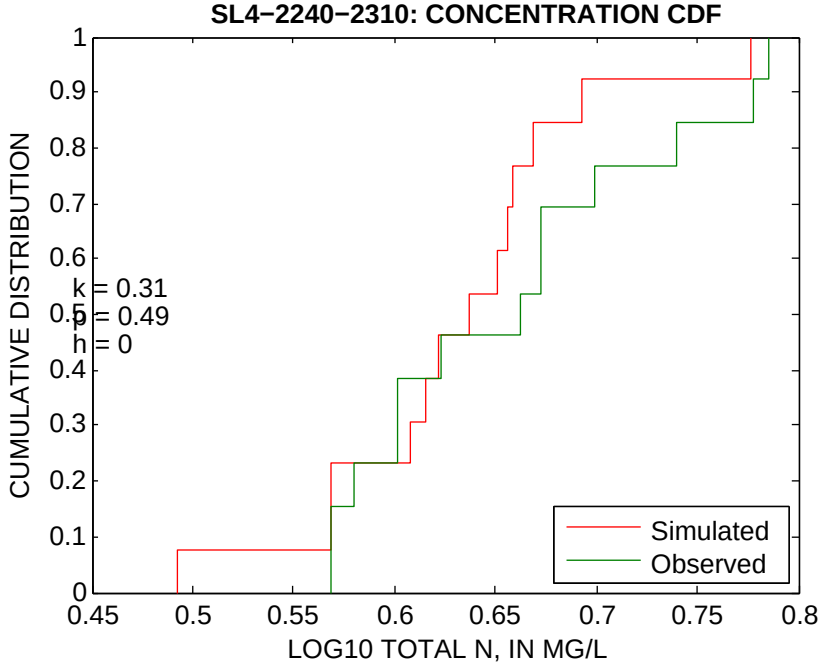
	n	13	13
		observe	simulate
min		3.7	2.9869
		0.568202	0.475221
mean		4.61538	4.17274
		0.657948	0.612991
media		4.6	4.167
		0.662758	0.619824
max		6.1	5.5574
		0.78533	0.744872
varian		0.694744	0.628262
		0.00577024	0.00710872
JB		0.222824	0.5
		0.324254	0.5
		ra	log
%		-9.59067	-6.83298
err.va		1.11209	0.0112795
rel.std.err		1.60072	1.95477
mod.eff		-0.600723	-0.954772

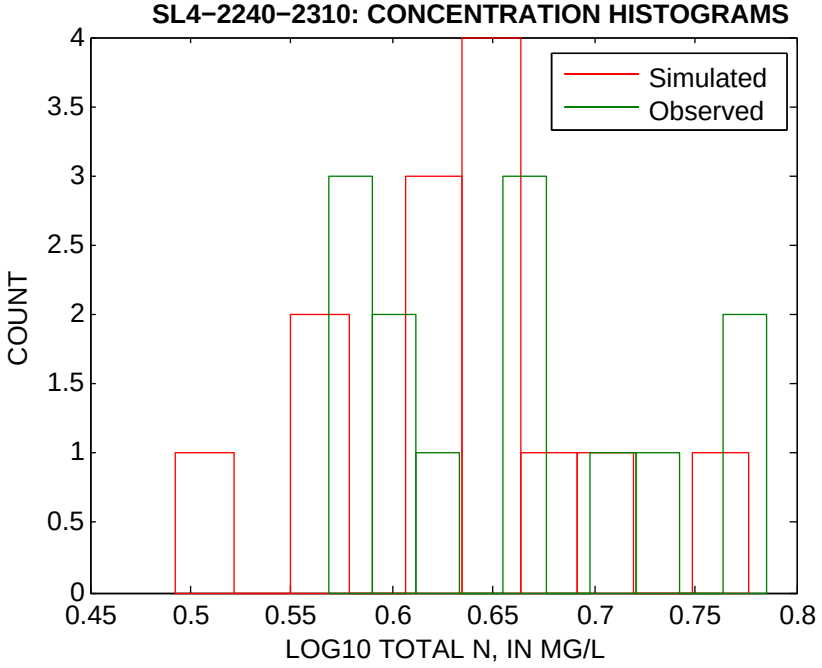
VERSION 2.1

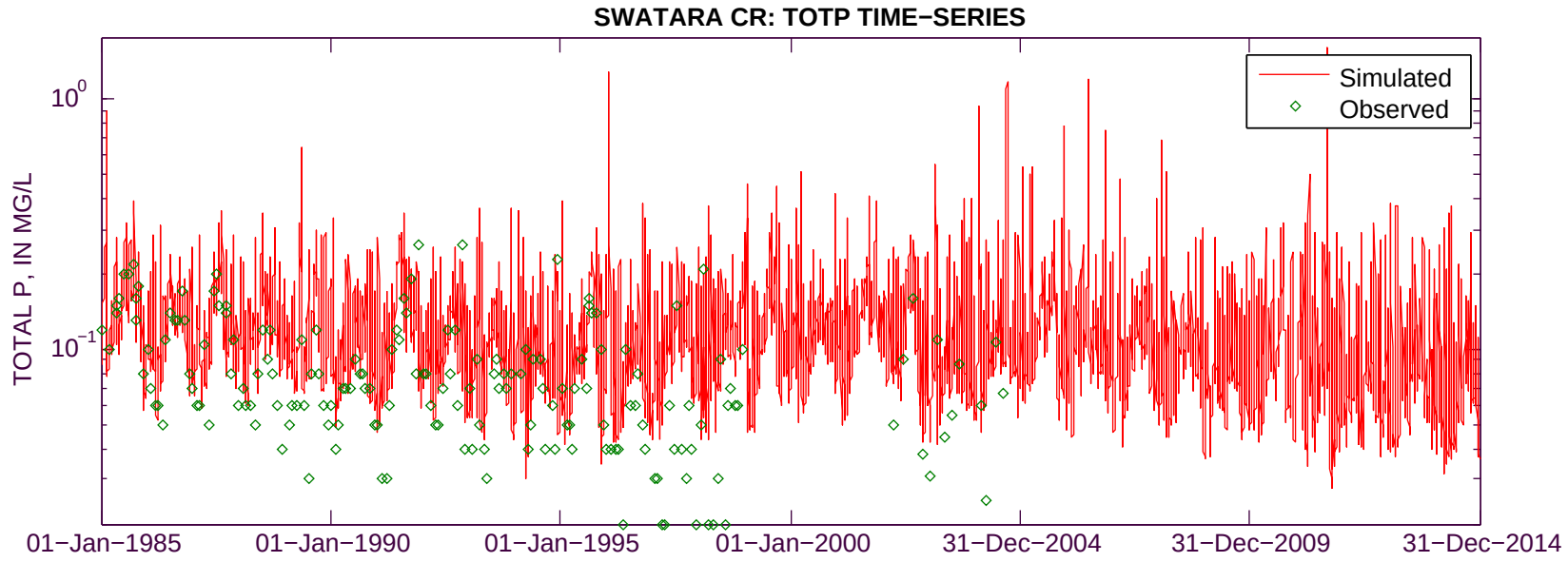
ALL DATA
LOG10

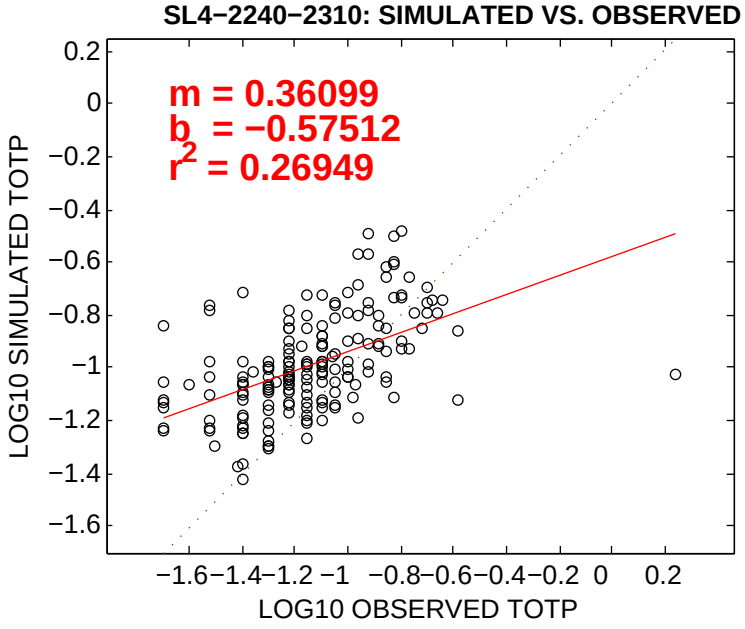


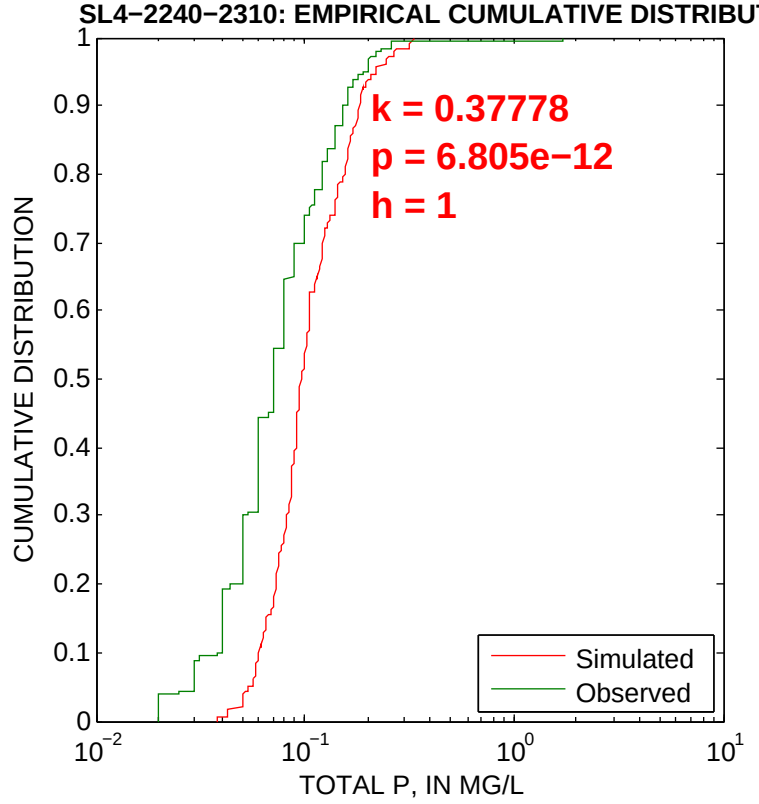












DATA SELECTION

scenario	file
P620171001WQ	TOTP.calib

plot: TOTP - total phosphorus

Dates: 1/1/1985 – 12/31/201

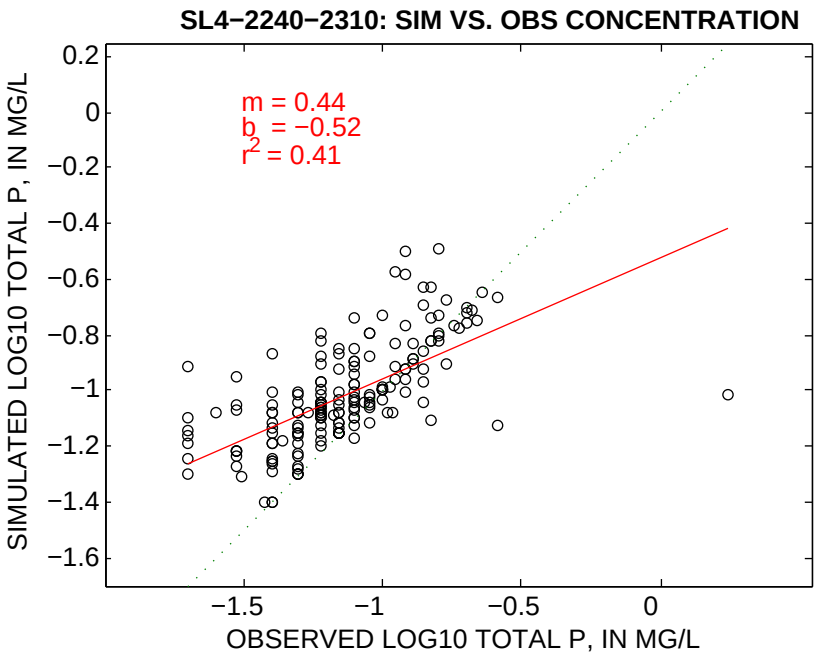
Drive	Directory	Observed
N/A	model	OBS20161101

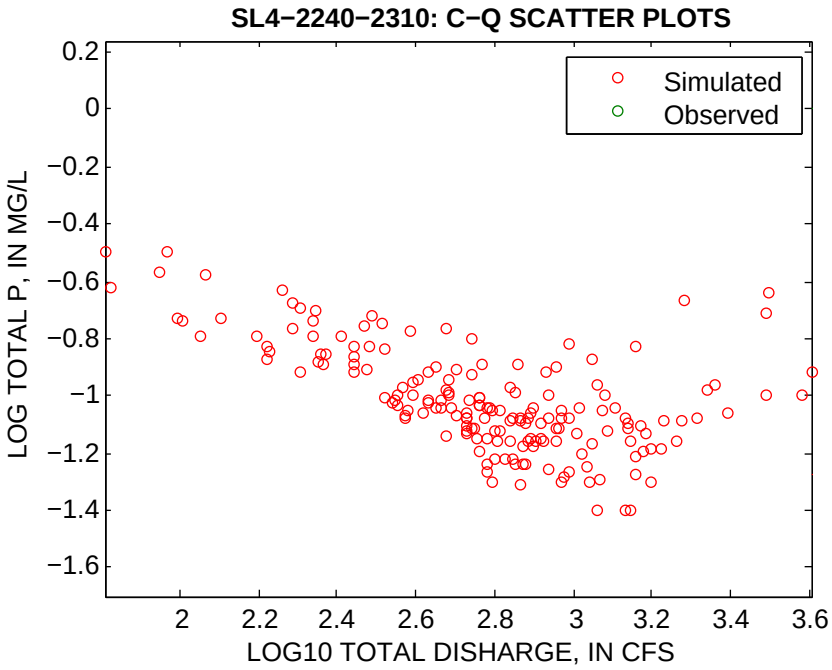
STATISTICS

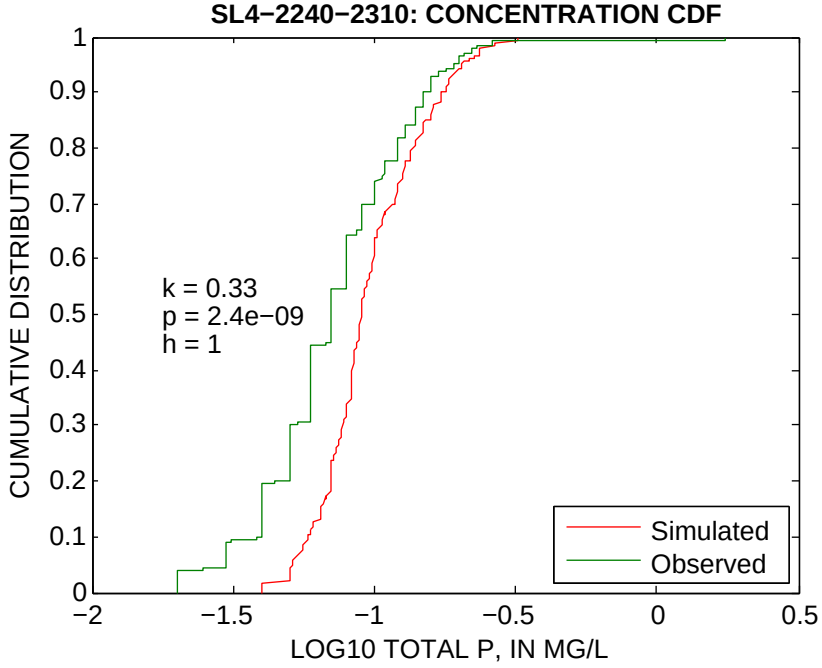
	n	observe	simulate
		180	180
min		0.02	0.038004
		-1.69897	-1.42017
mean		0.0926944	0.113557
		-1.13865	-0.986162
media		0.07	0.096413
		-1.1549	-1.01586
max		1.74	0.33324
		0.240549	-0.477243
varian		0.0175992	0.00295742
		0.070835	0.0342536
JB		0.001	0.001
		0.001	0.062282
		ra	log
%		22.5064	-13.3917
err.va		0.0185024	0.0773283
rel.std.err		1.05132	1.09167
mod.eff		-0.0513221	-0.0916672

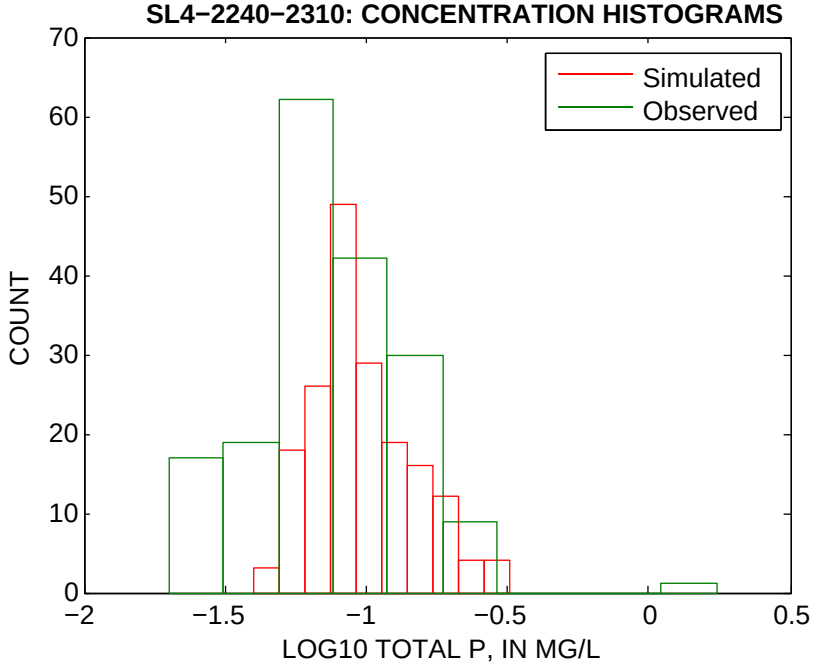
VERSION 2.1

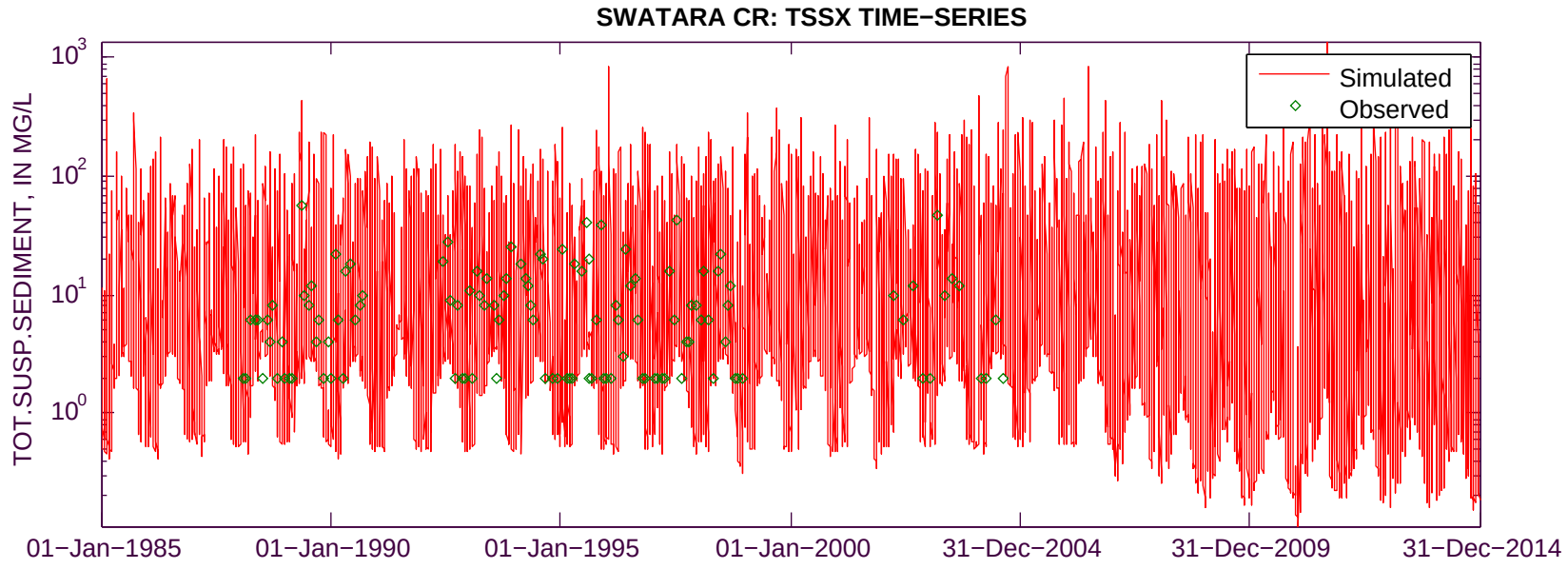
ALL DATA
LOG10

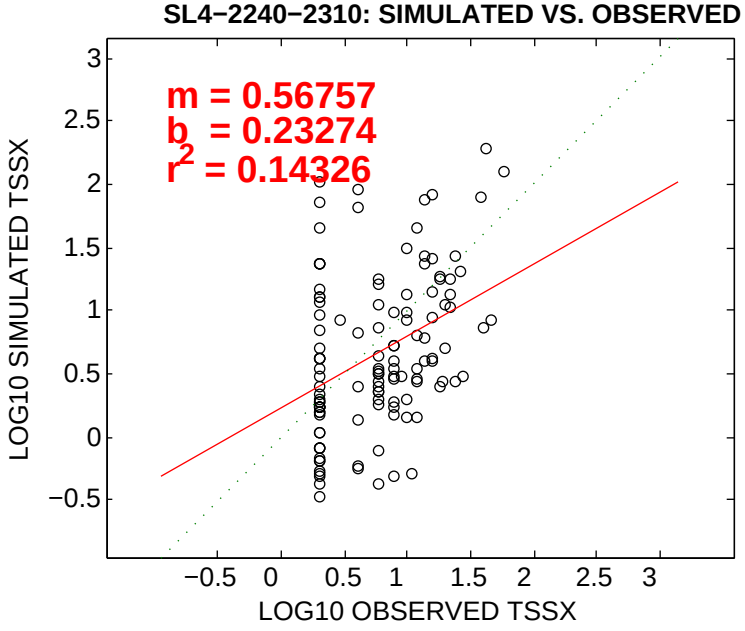


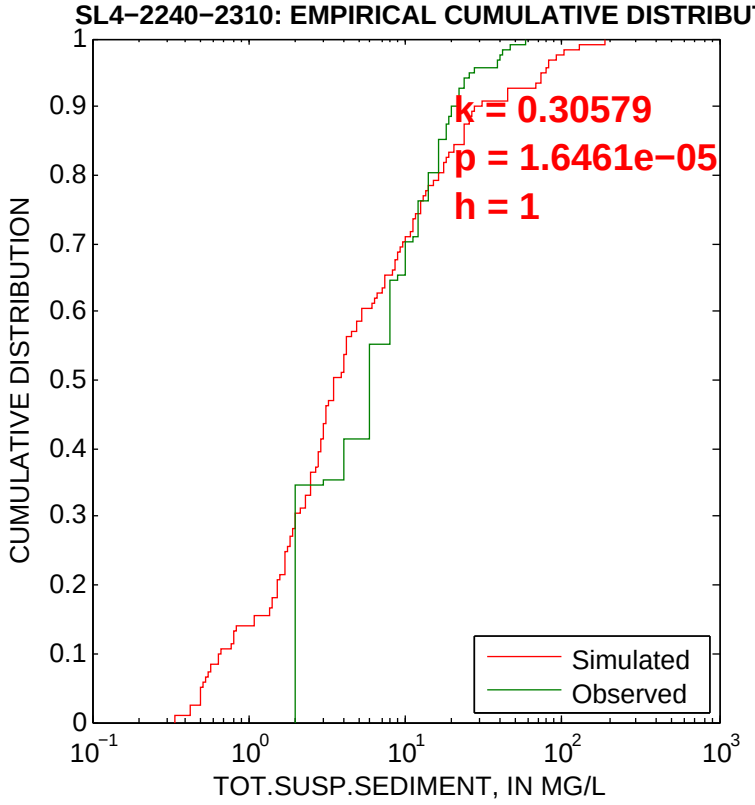












DATA SELECTION

scenario	file
P620171001WQ	TSSX.calib

plot: TSSX - total suspended ...

Dates: 1/1/1985 – 12/31/201

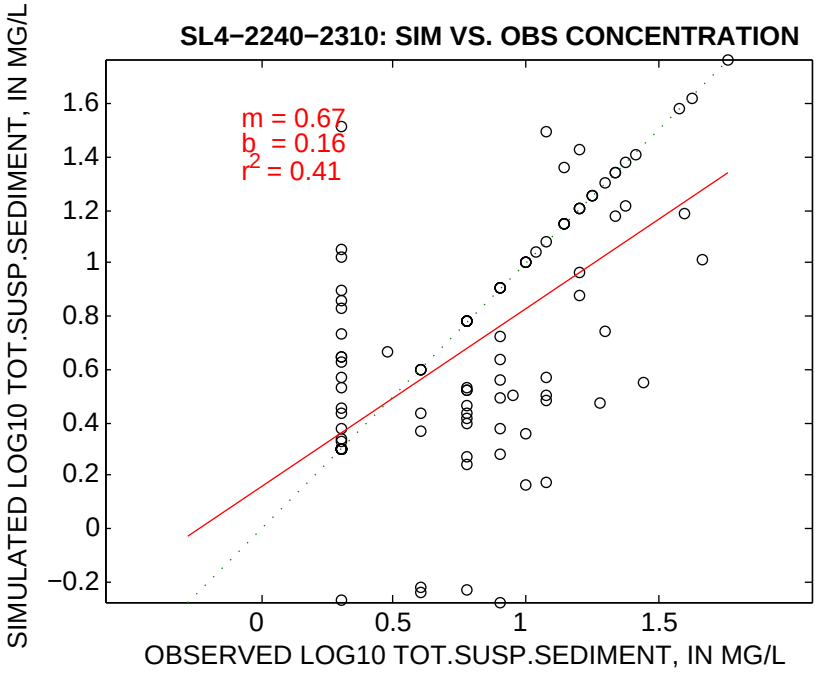
Drive	Directory	Observed
N/A	model	OBS20161101

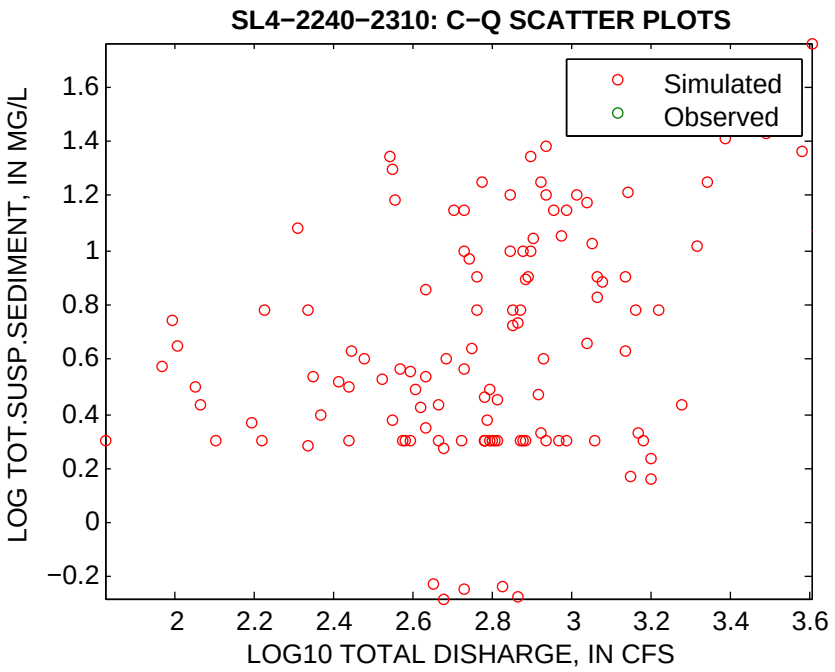
STATISTICS

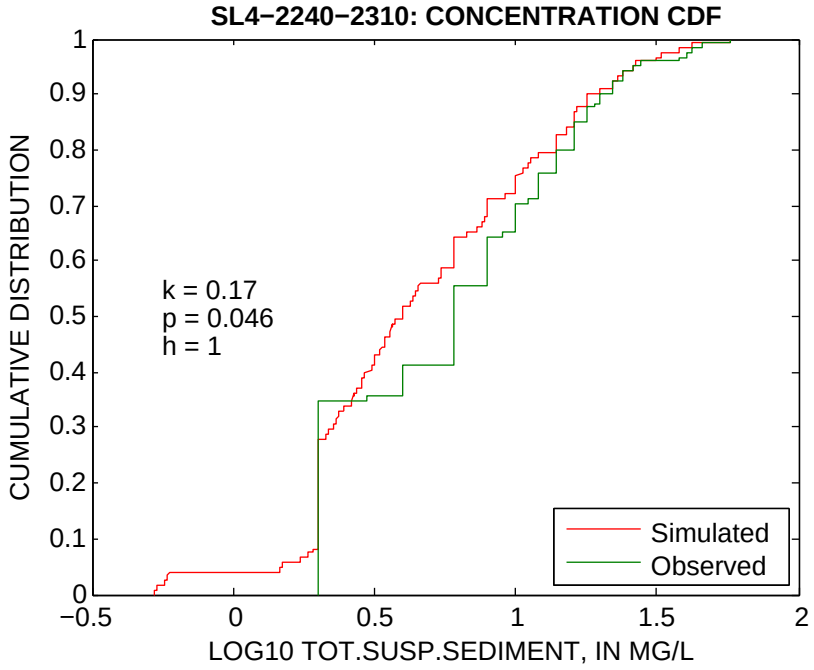
	n	observe	simulate
		121	121
min		2	0.34362
		0.30103	-0.463922
mean		9.32231	13.9111
		0.772324	0.671084
media		6	3.5433
		0.778151	0.549408
max		58	187.61
		1.76343	2.27326
varian		97.9702	747.362
		0.1712	0.384954
JB		0.001	0.001
		0.032612	0.087146
		ra	log
%		49.224	-13.1085
err.va		624.396	0.372153
rel.std.err		6.37332	2.1738
mod.eff		-5.37332	-1.1738

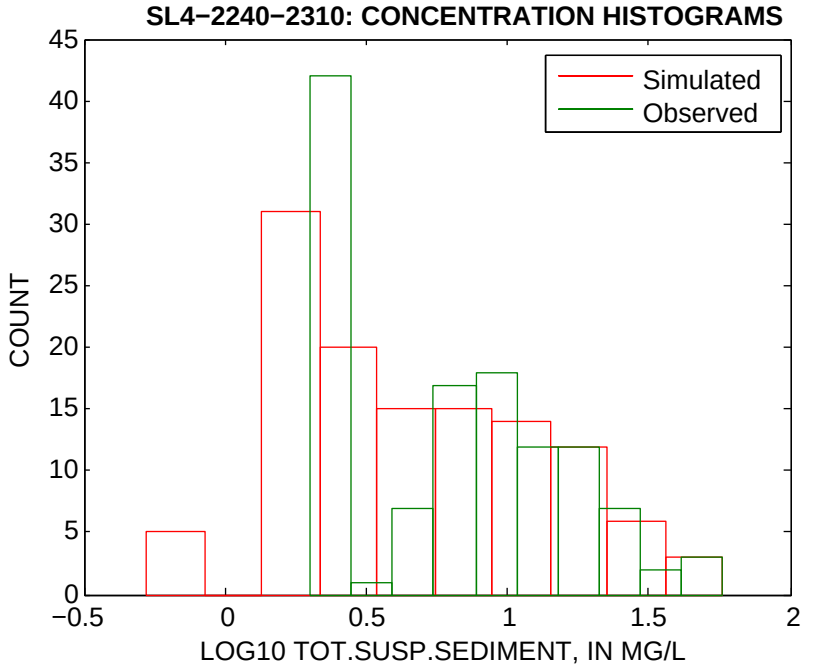
VERSION 2.1

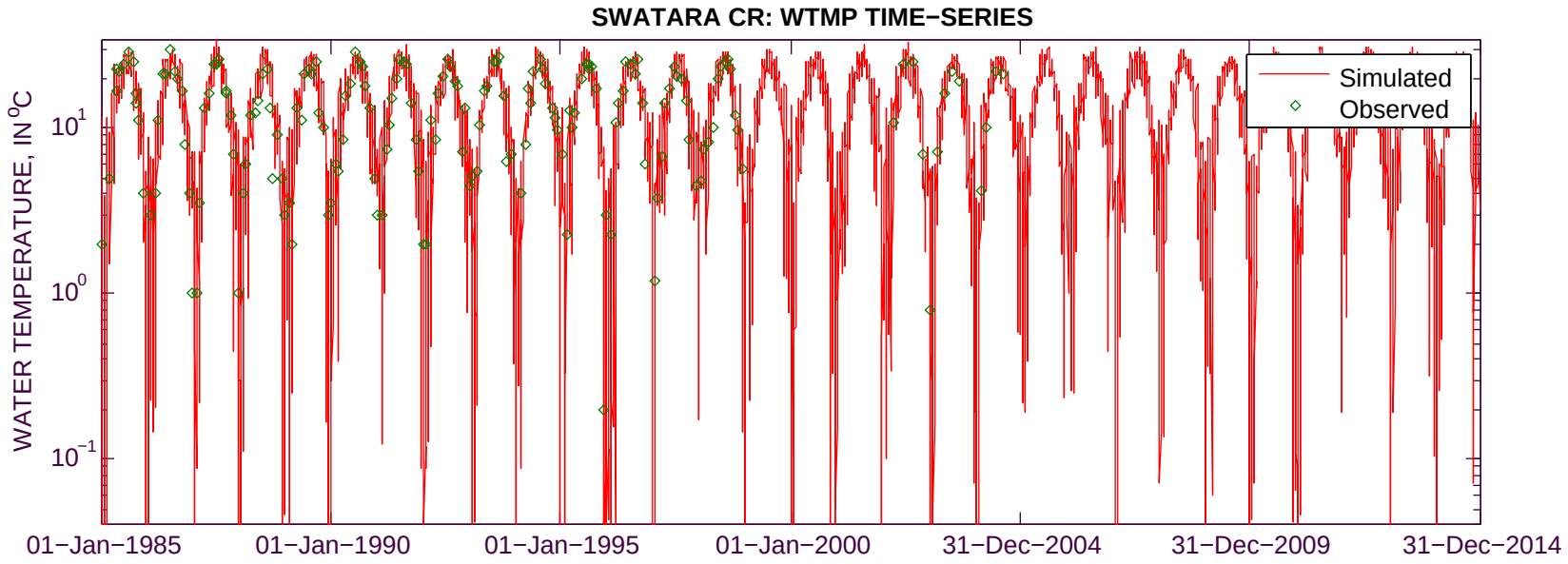
ALL DATA
LOG10

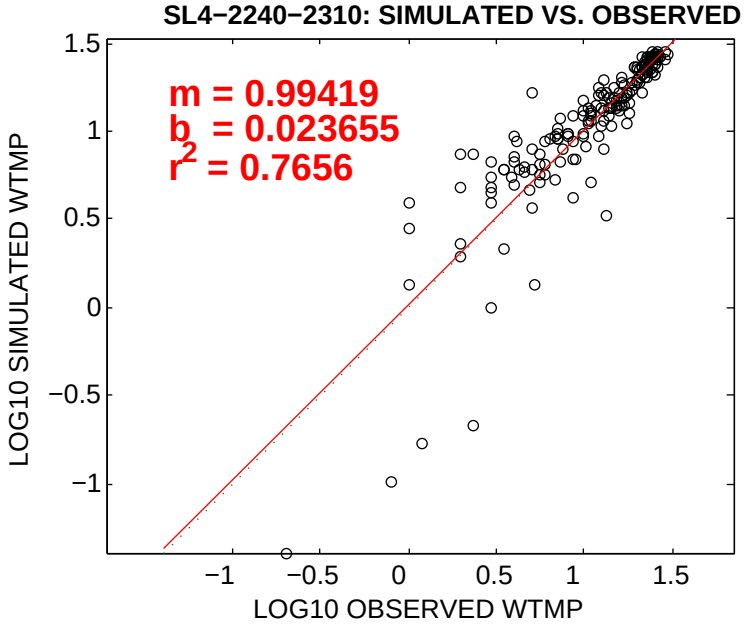


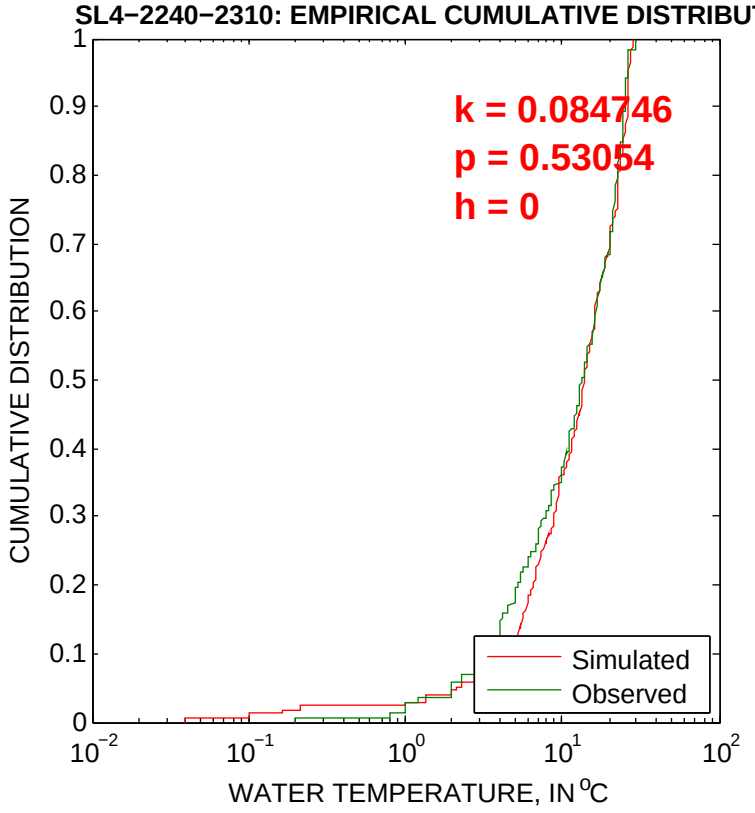












DATA SELECTION

scenario	file
P620171001WQ	WTMP.calib

plot: WTMP - water tempera...

Dates: 1/1/1985 – 12/31/201

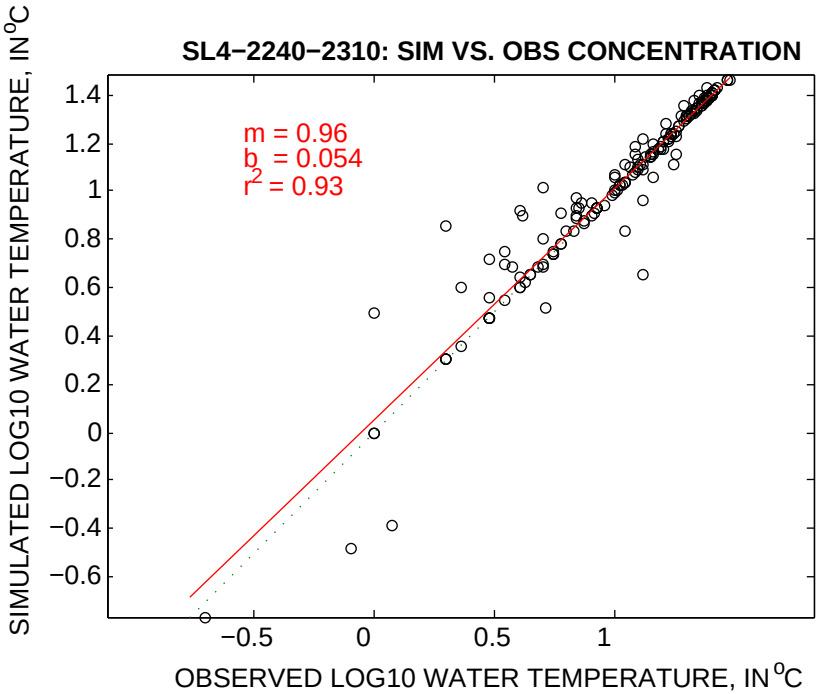
Drive	Directory	Observed
N/A	model	OBS20161101

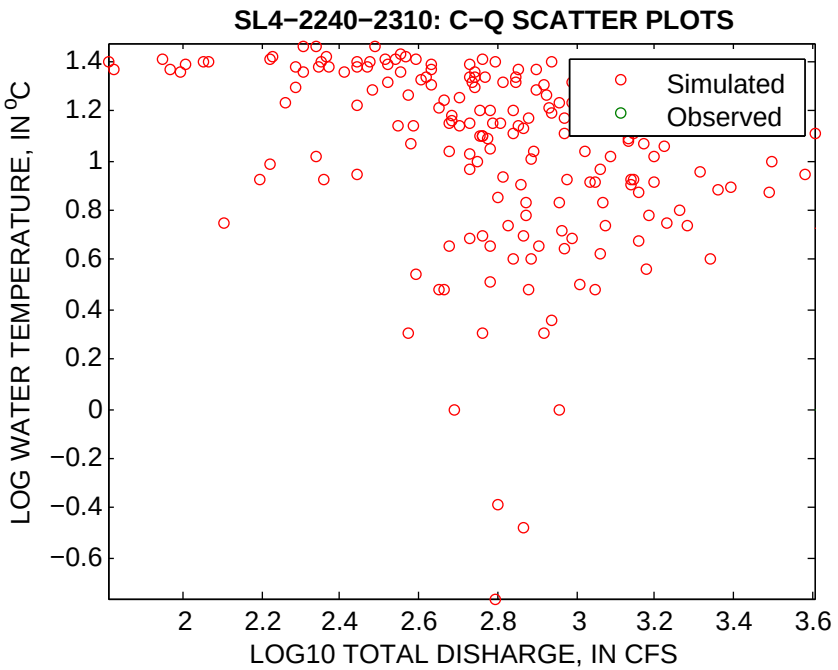
STATISTICS

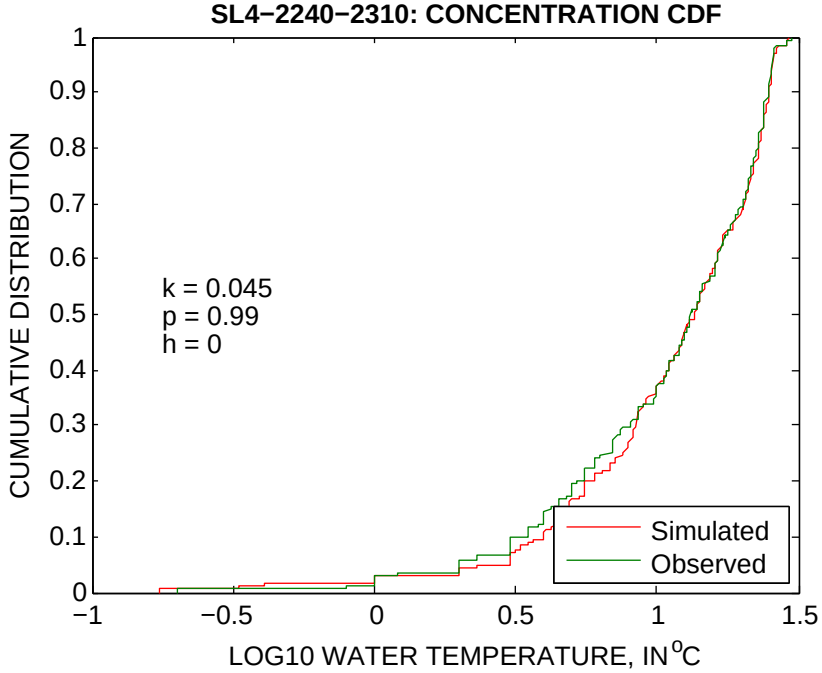
	n	177	177
		observe	simulate
min		0.2	0.040046
		-0.69897	-1.39744
mean		13.9107	14.5599
		1.02745	1.04514
media		13.3	13.956
		1.12385	1.14476
max		30	28.404
		1.47712	1.45338
varian		65.4177	64.208
		0.14159	0.182798
JB		0.009818	0.013676
		0.001	0.001
		ra	log
%		4.66695	1.72125
err.va		7.50723	0.0431672
rel.std.err		0.114758	0.304874
mod.eff		0.885242	0.695126

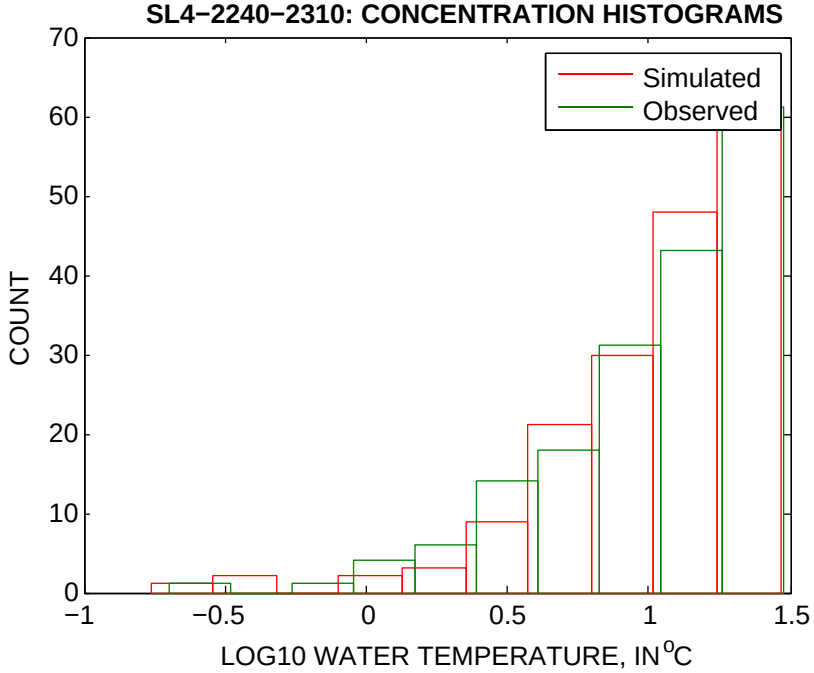
VERSION 2.1

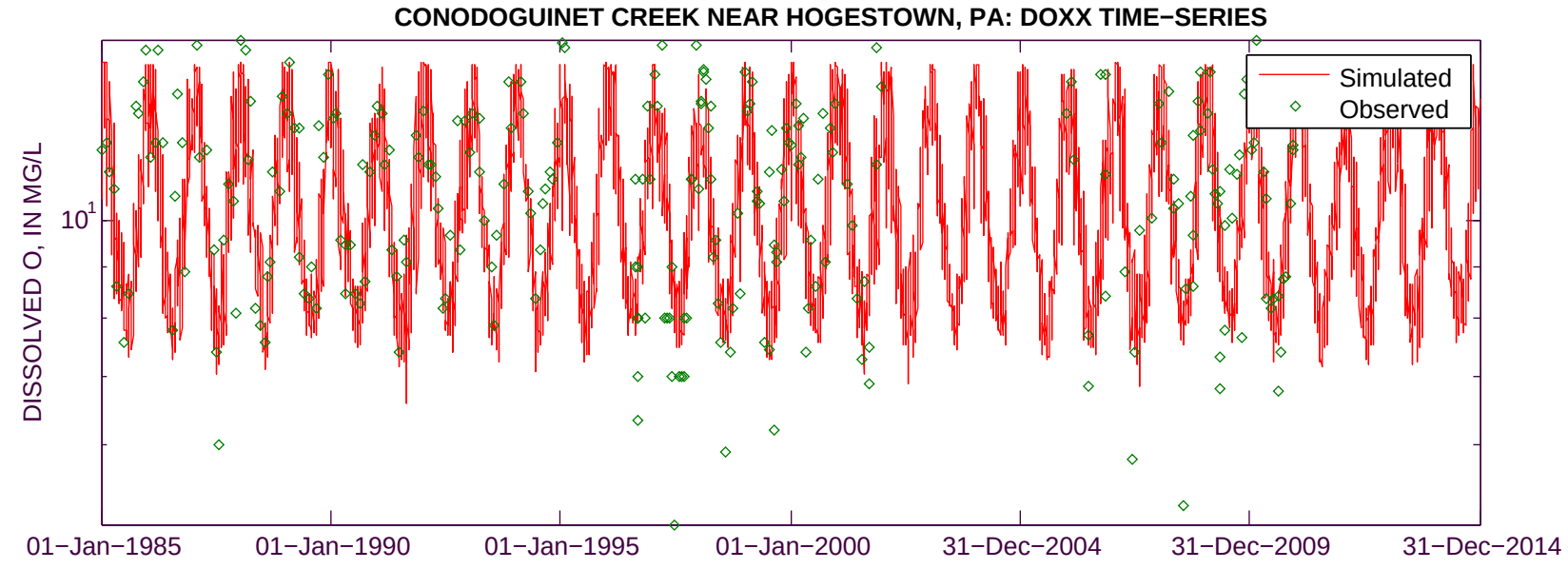
ALL DATA
LOG10

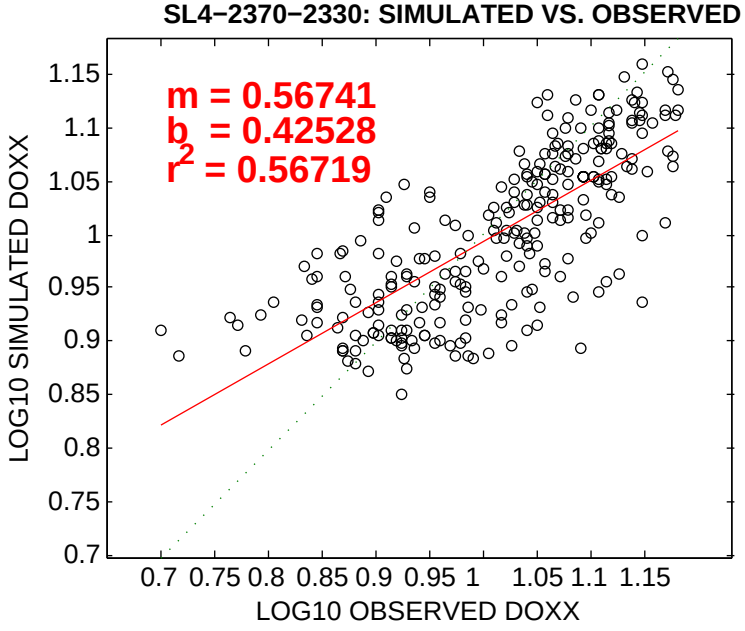


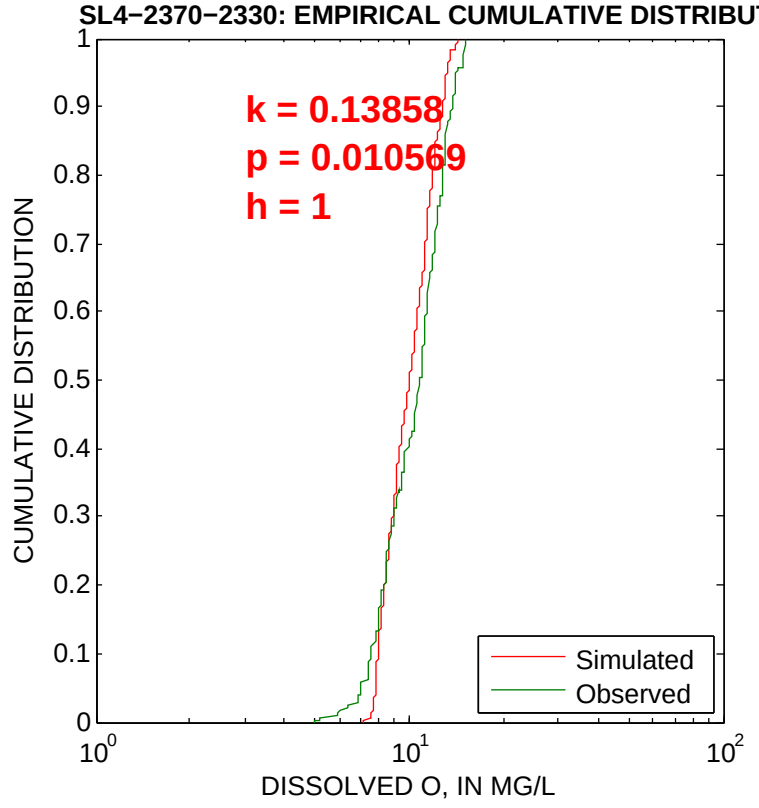












DATA SELECTION

scenario	file
P620171001WQ	DOXX.calib

plot: DOXX - dissolved oxygen

Dates: 1/1/1985 – 12/31/201

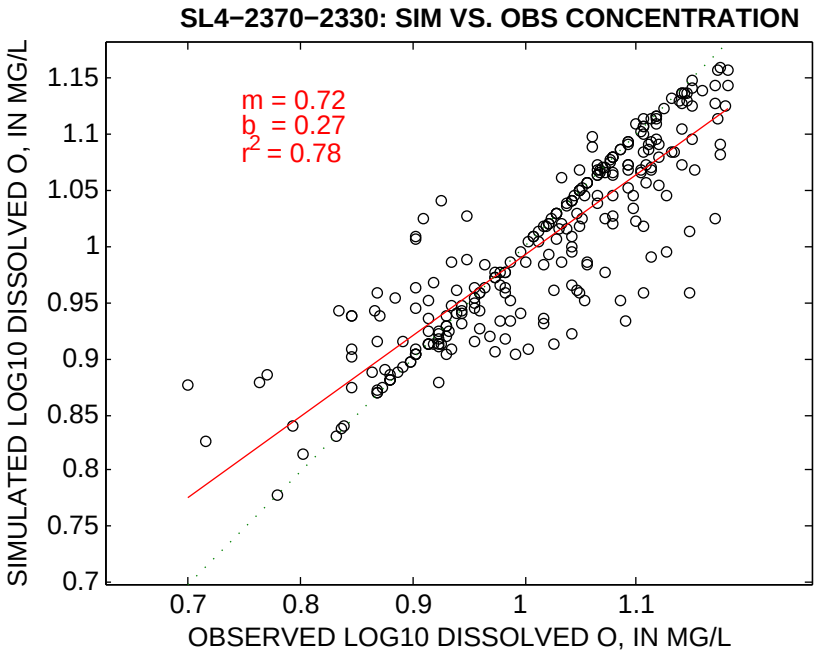
Drive	Directory	Observed
N/A	model	OBS20161101

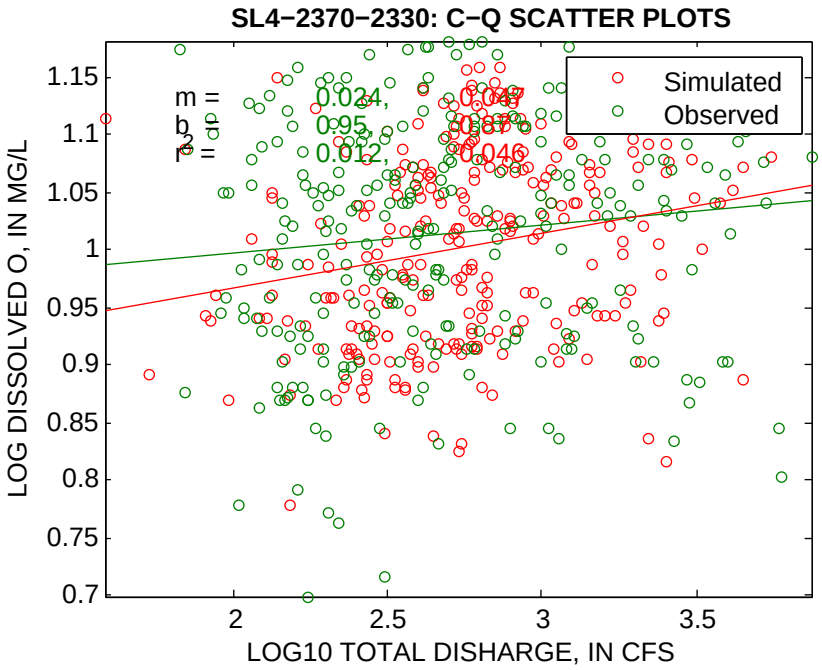
STATISTICS

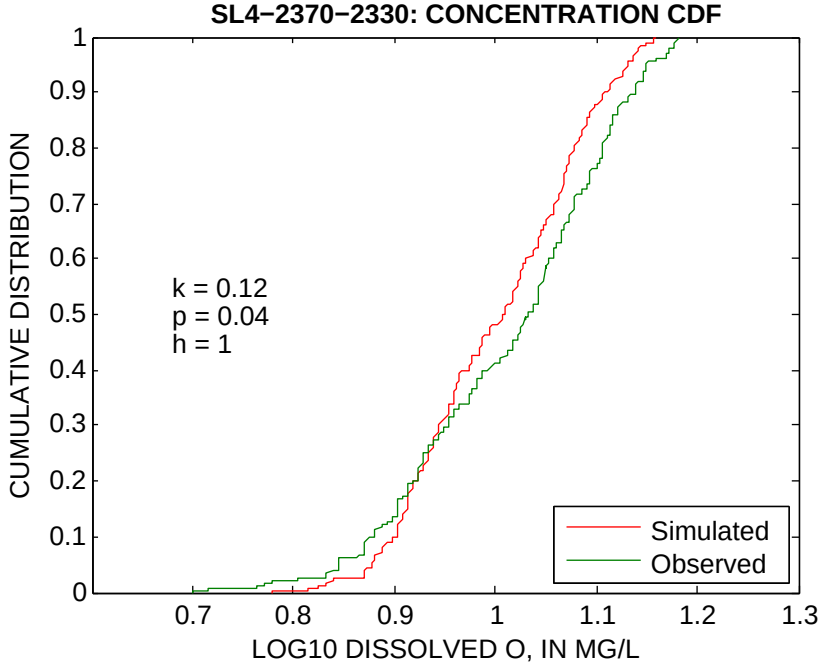
	n	observe	simulate
		267	267
min		5	7.0864
		0.69897	0.850426
mean		10.5906	10.1646
		1.01389	1.00057
media		10.8	10.008
		1.03342	1.00035
max		15.2	14.404
		1.18184	1.15848
varian		5.38095	3.1401
		0.00998727	0.00566909
JB		0.021273	0.004671
		0.010451	0.005046
		ra	log
%		-4.02256	-1.31337
err.va		2.34774	0.00450055
rel.std.err		0.436306	0.450628
mod.eff		0.563694	0.549372

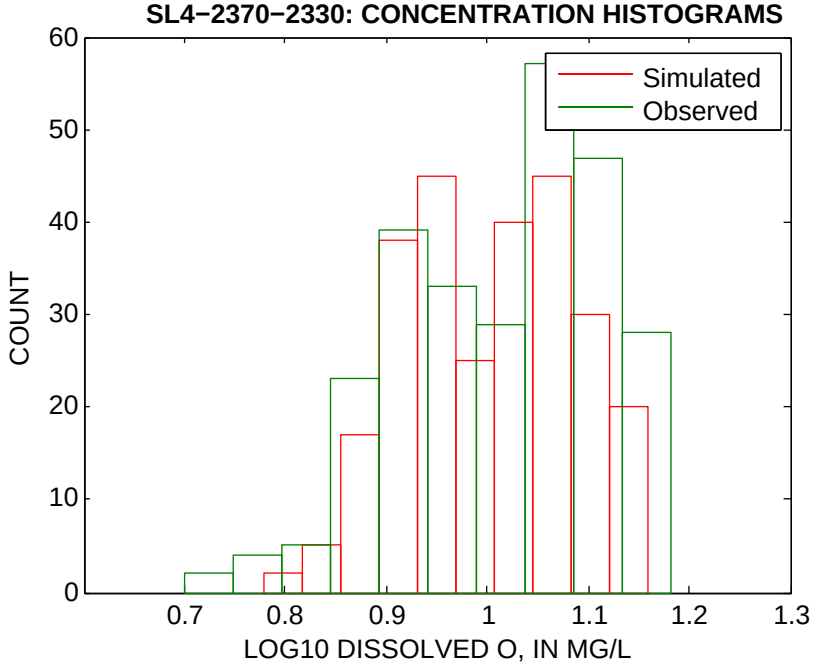
VERSION 2.1

ALL DATA
LOG10

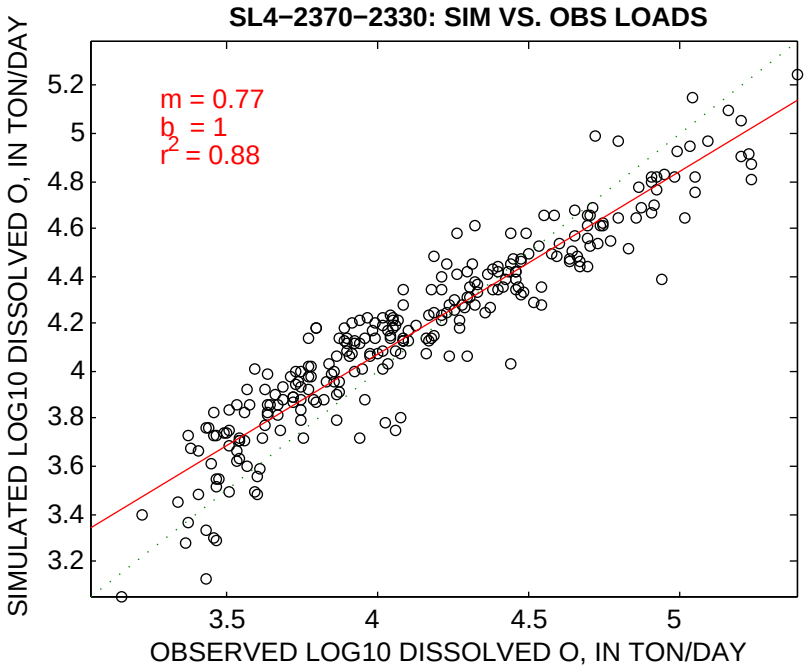


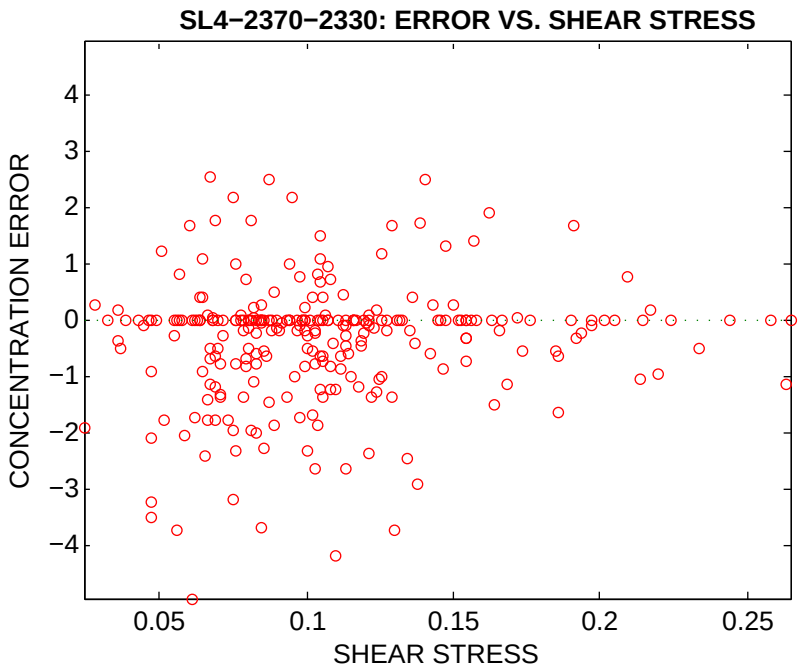


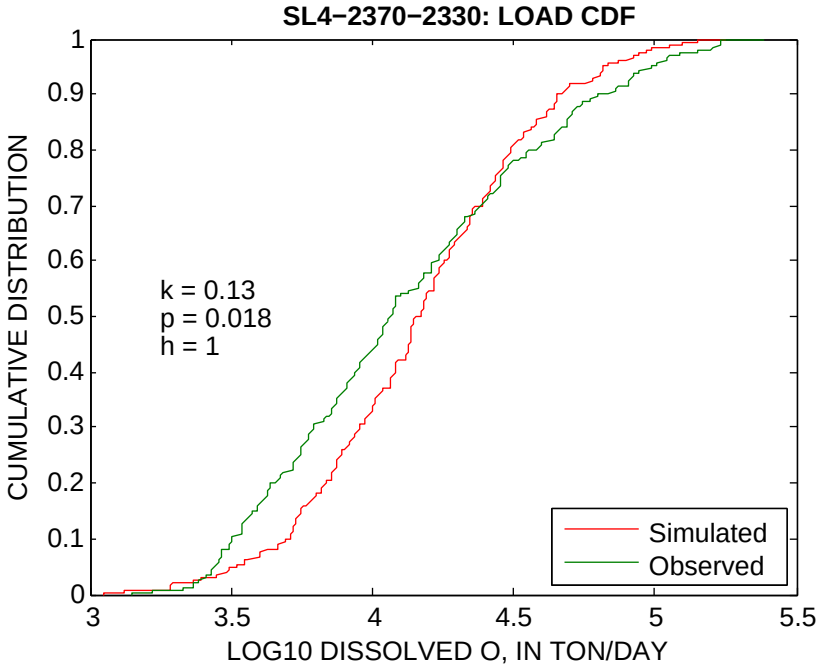


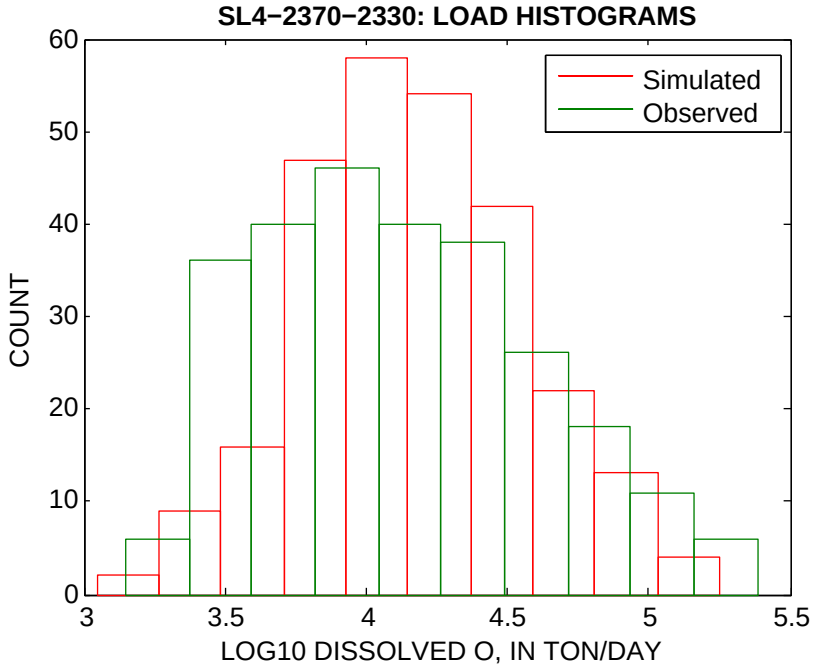


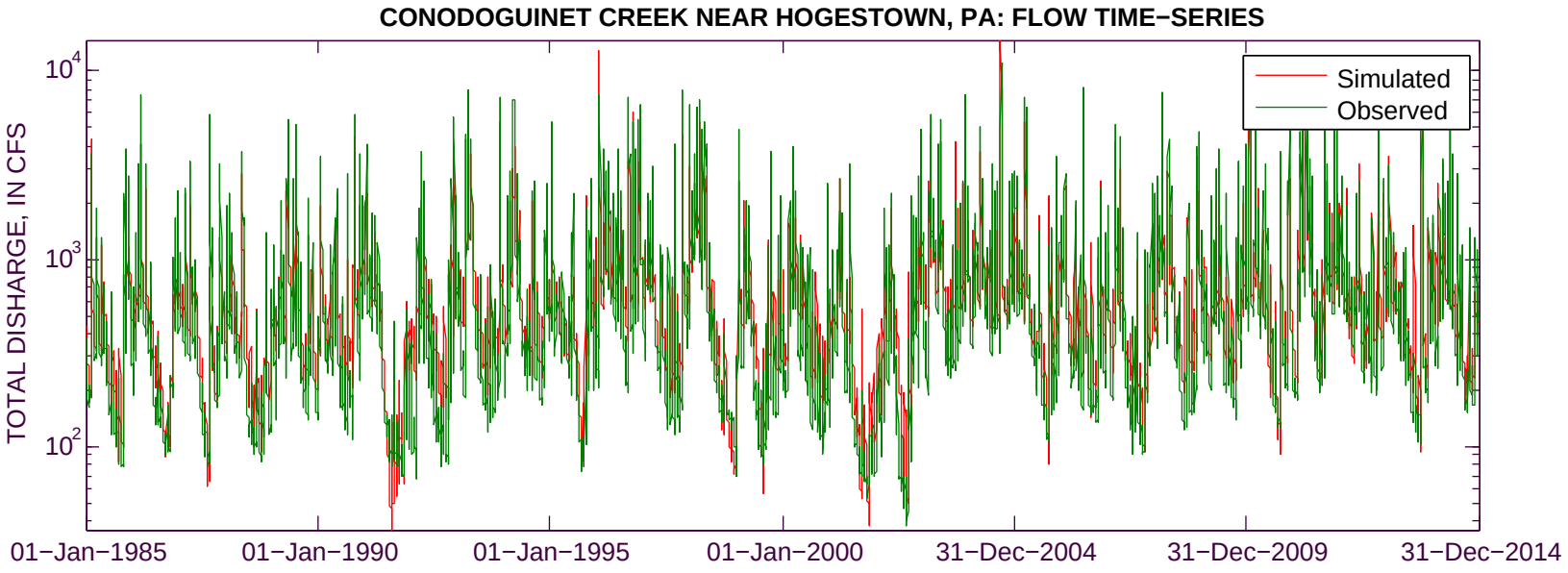
LOAD DATA
LOG10

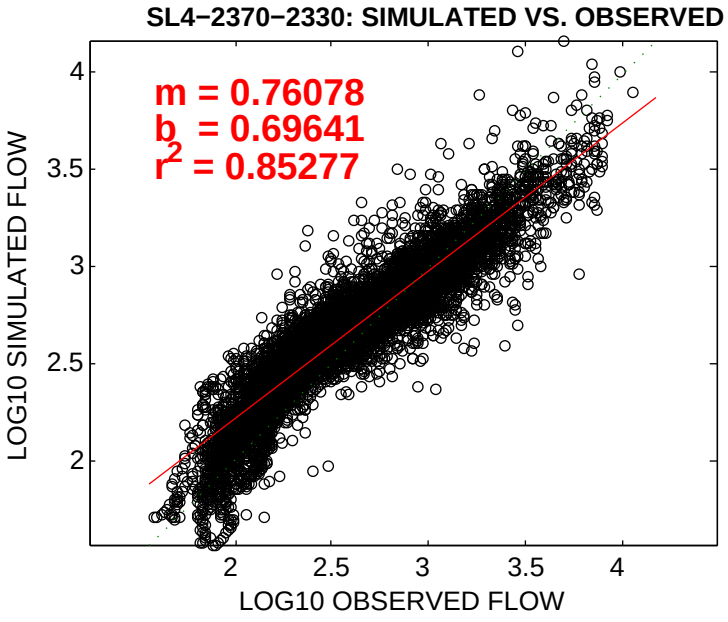


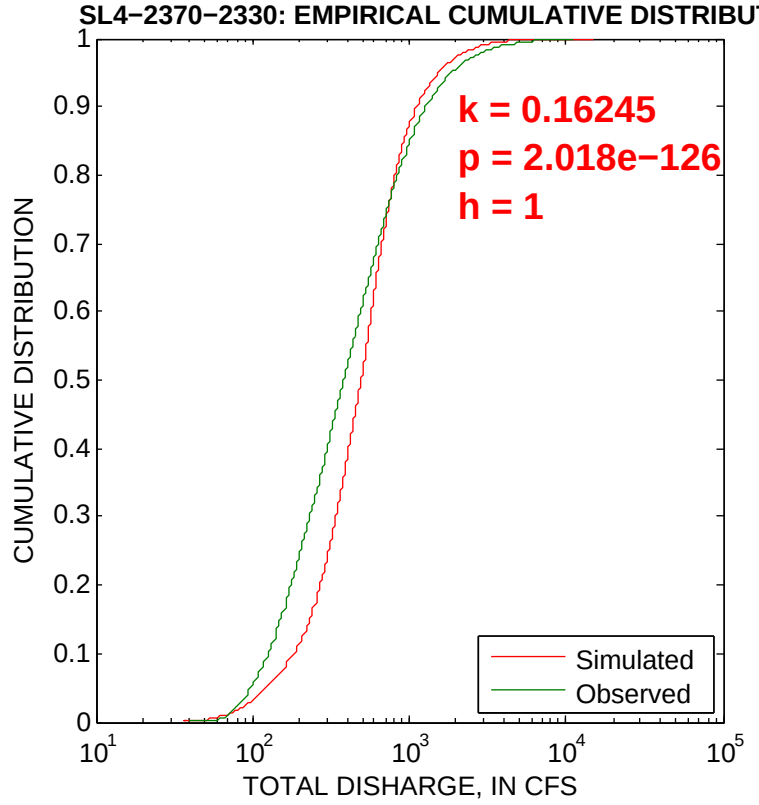












DATA SELECTION

scenario	file
P620171001WQ	FLOW.calib

plot: FLOW - total discharge

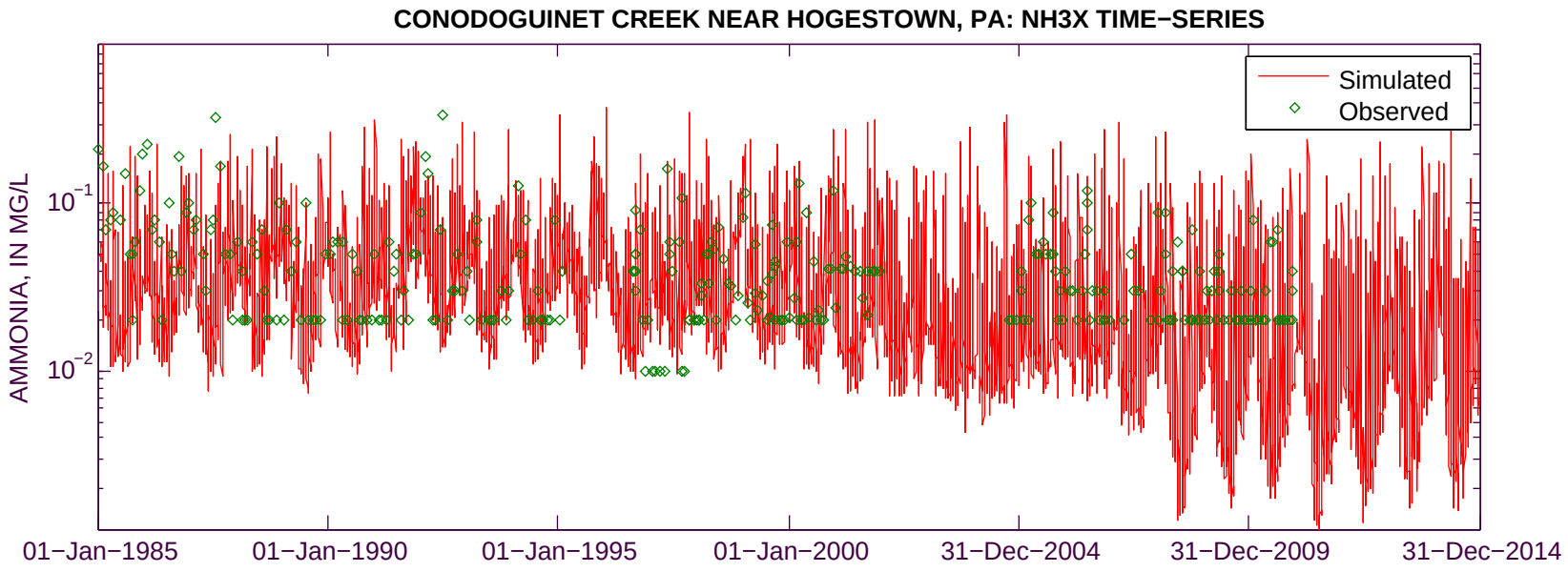
Dates: 1/1/1985 – 12/31/201

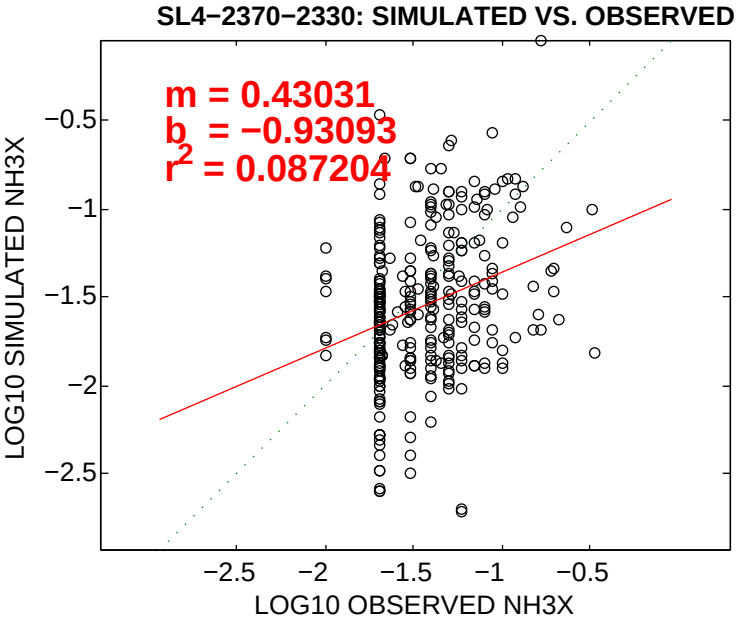
Drive	Directory	Observed
N/A	model	OBS20161101

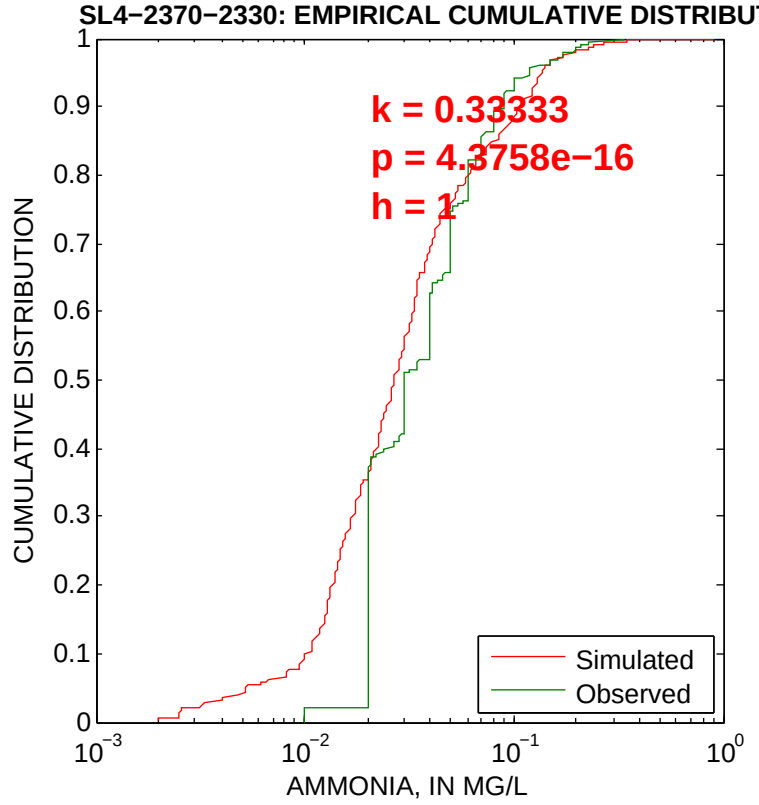
STATISTICS

	n	observe	simulate
		10957	10957
min		38	36.134
		1.57978	1.55792
mean		622.002	626.608
		2.60018	2.67458
media		382	495.02
		2.58206	2.69462
max		11200	14785
		4.04922	4.16982
varian		626071	386890
		0.154113	0.104599
JB		0.001	0.001
		0.001	0.001
		ra	log
%		0.74045	2.86134
err.va		175855	0.0297547
rel.std.err		0.280886	0.19307
mod.eff		0.719114	0.80693

VERSION 2.1







DATA SELECTION

scenario: P620171001WQ | file: NH3X.calib

plot: NH3X - ammonia

Dates: 1/1/1985 – 12/31/201

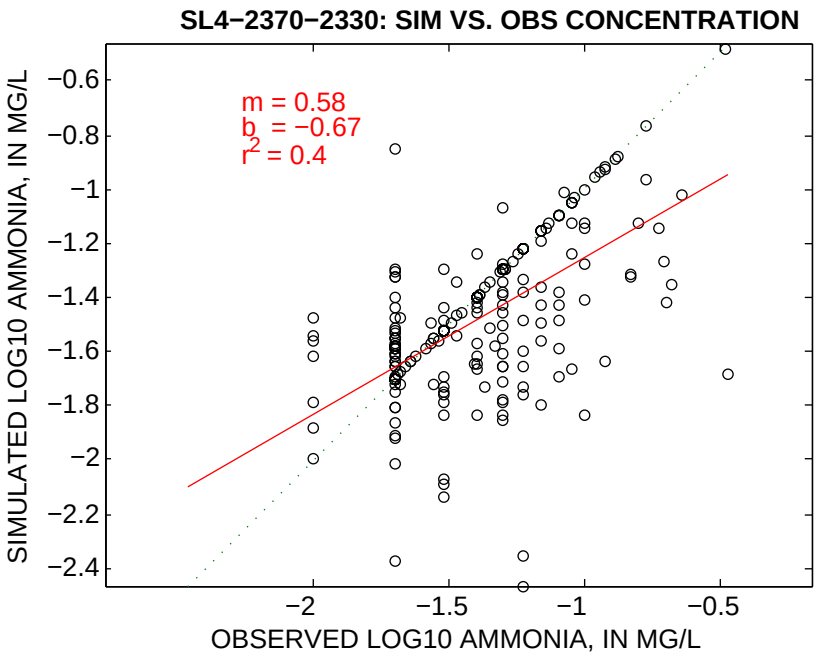
Drive | Directory: N/A | model | Observed: OBS20161101

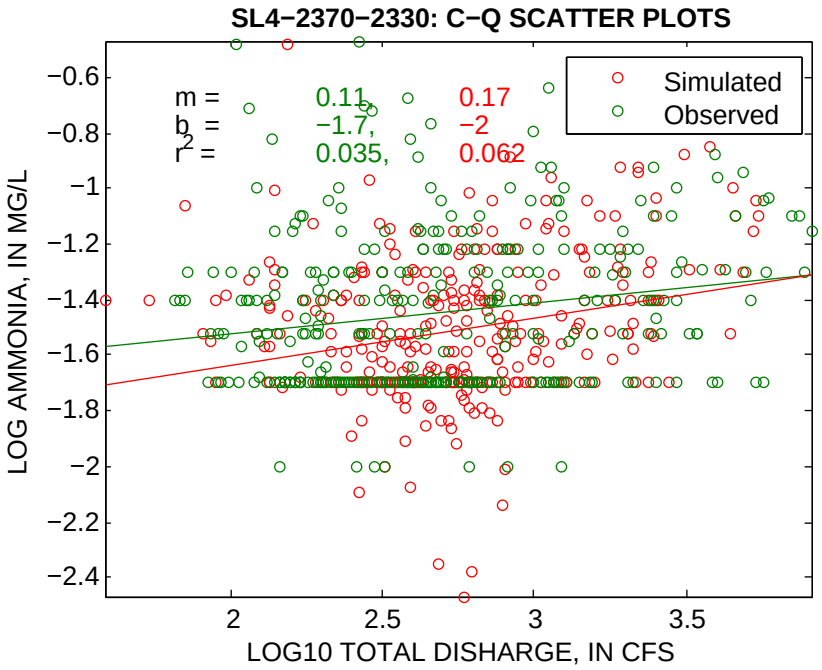
STATISTICS

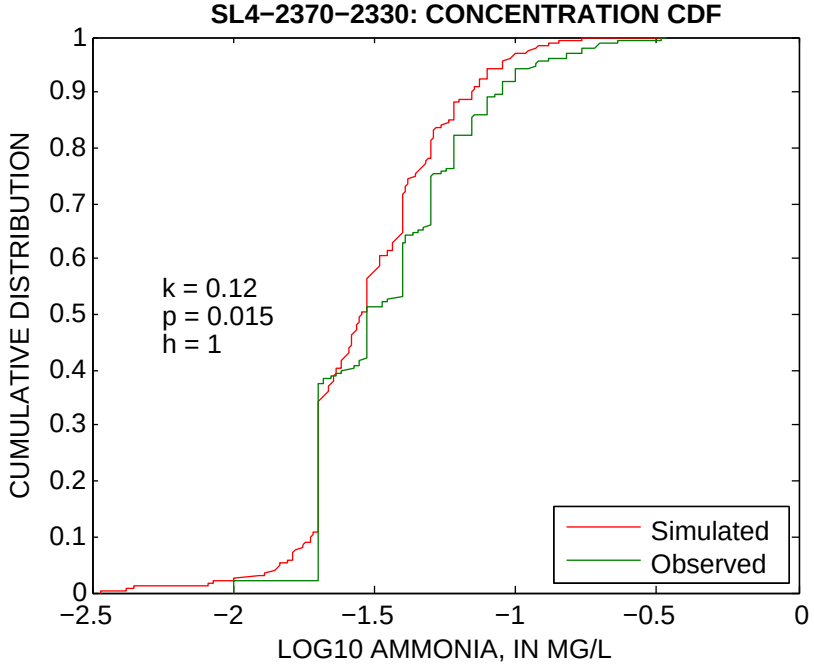
	n	observe	simulate
		318	318
min		0.01	0.0019462
		-2	-2.71081
mean		0.0460683	0.0453615
		-1.44427	-1.55241
media		0.03	0.0269465
		-1.52288	-1.5695
max		0.34	0.91682
		-0.468521	-0.0377159
varian		0.00176421	0.00452723
		0.0805985	0.171137
JB		0.001	0.001
		0.001	0.096794
		ra	log
%		-1.53429	7.48736
err.va		0.0049413	0.194103
rel.std.err		2.80086	2.40827
mod.eff		-1.80086	-1.40827

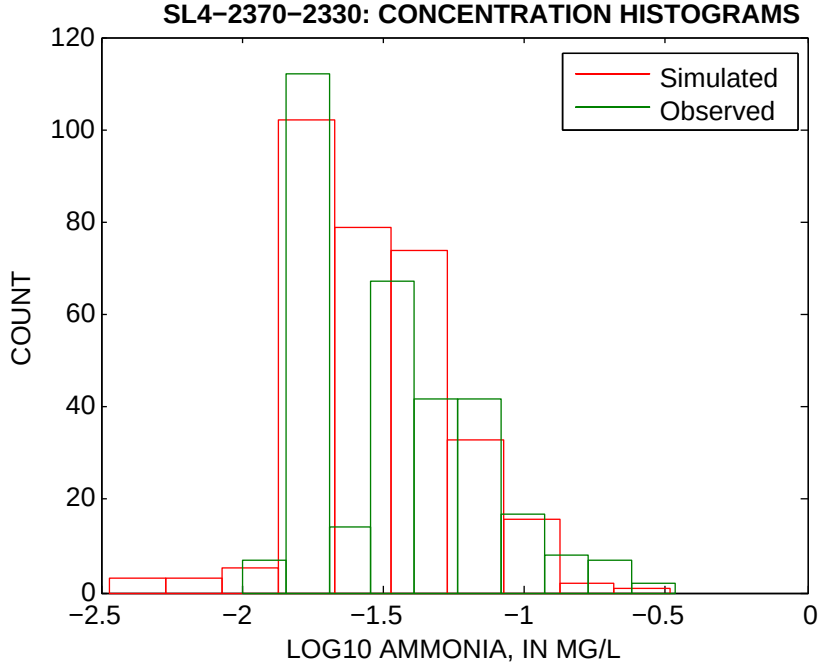
VERSION 2.1

ALL DATA
LOG10

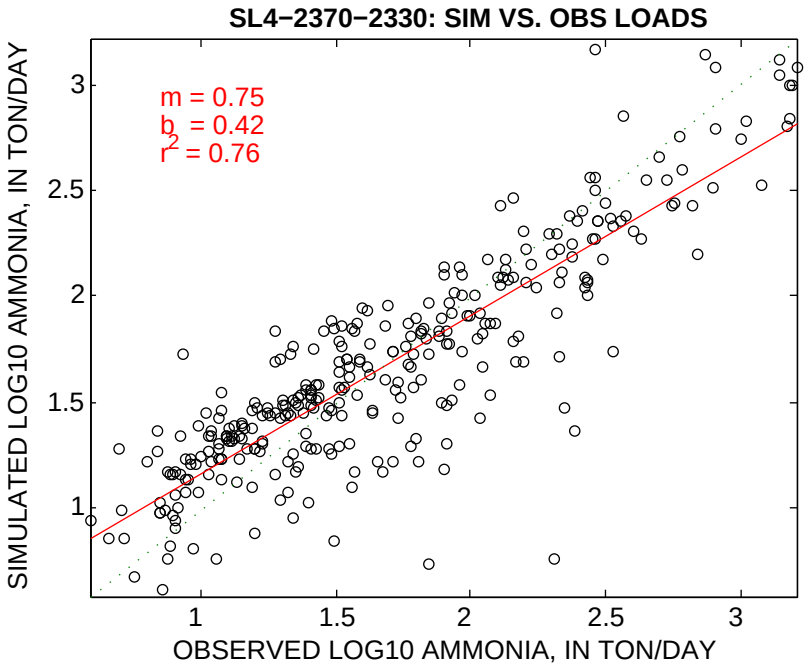


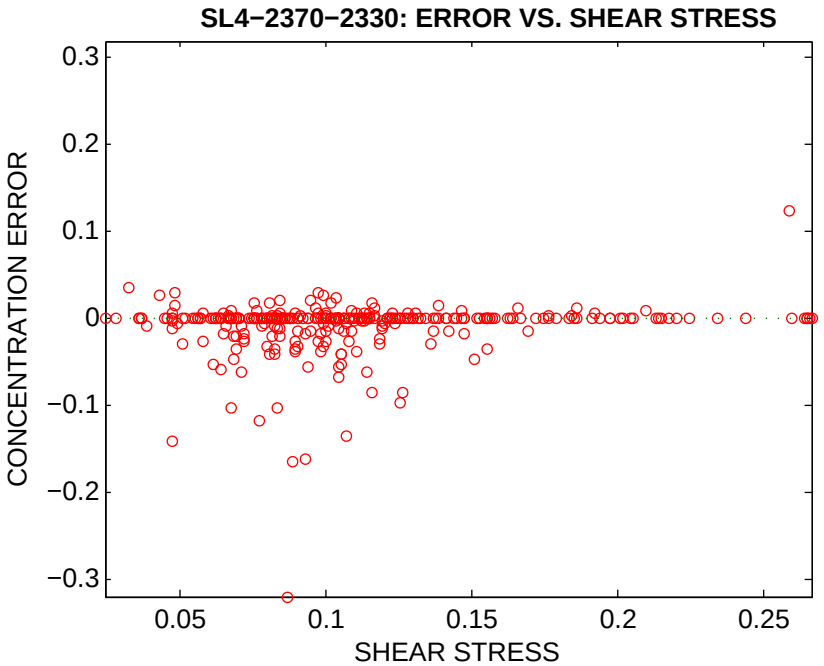


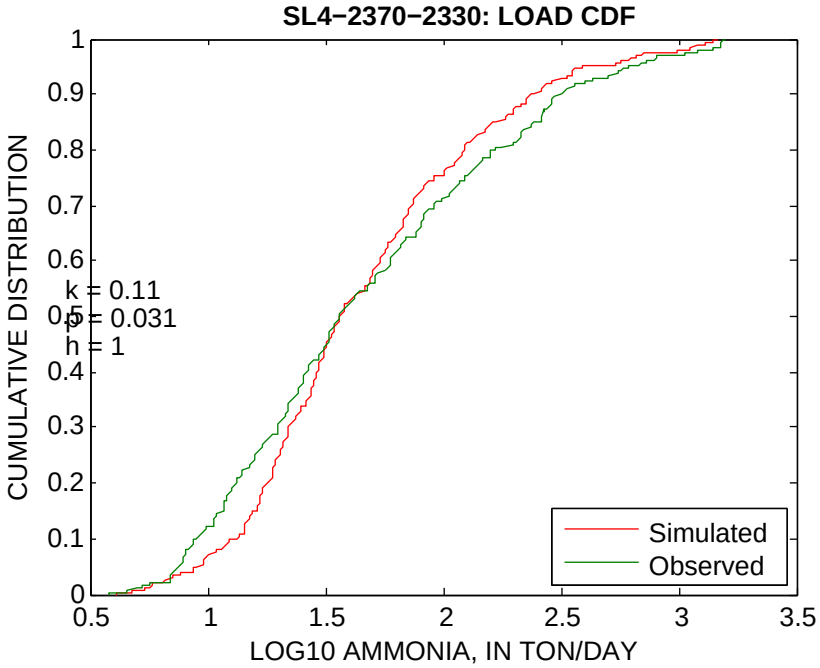


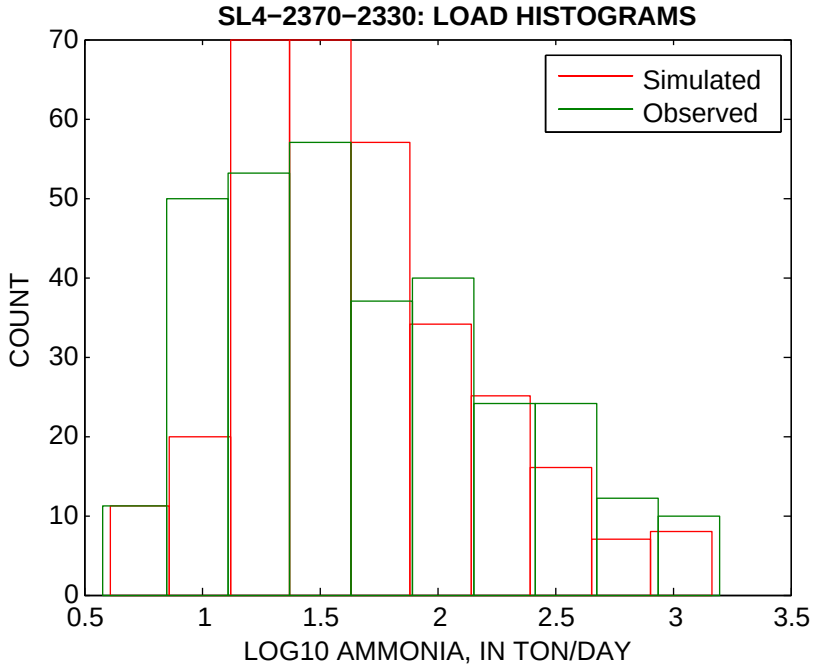


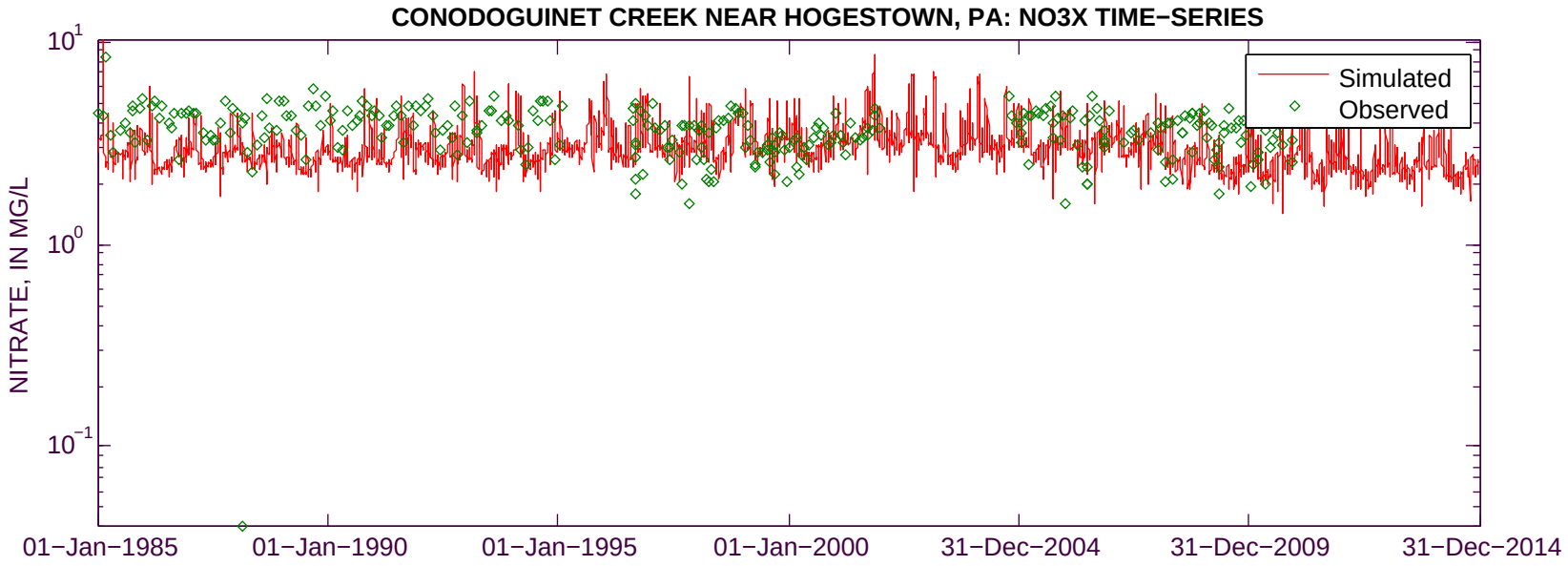
LOAD DATA
LOG10

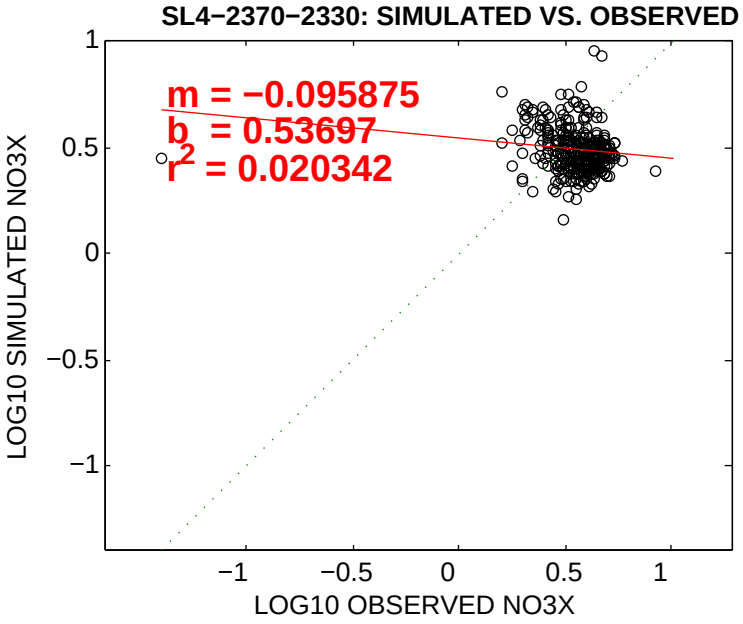


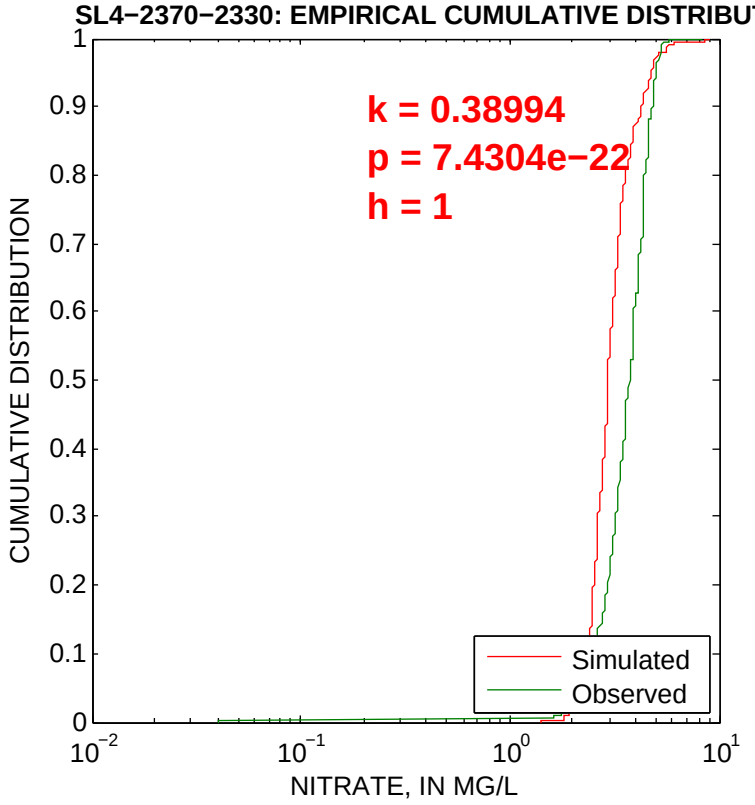












DATA SELECTION

scenario: P620171001WQ | file: NO3X.calib

plot: NO3X - nitrate

Dates: 1/1/1985 – 12/31/201

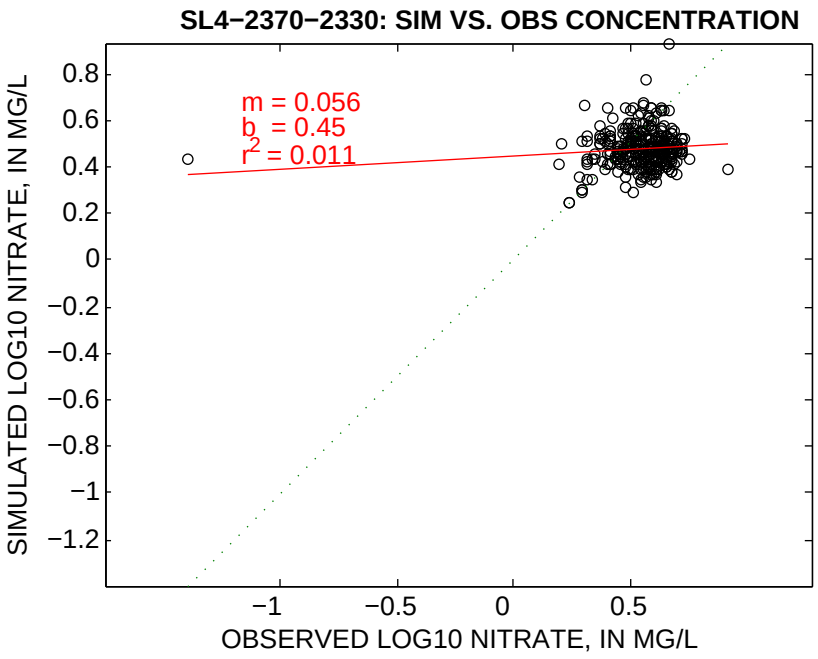
Drive: N/A | Directory: model | Observed: OBS20161101

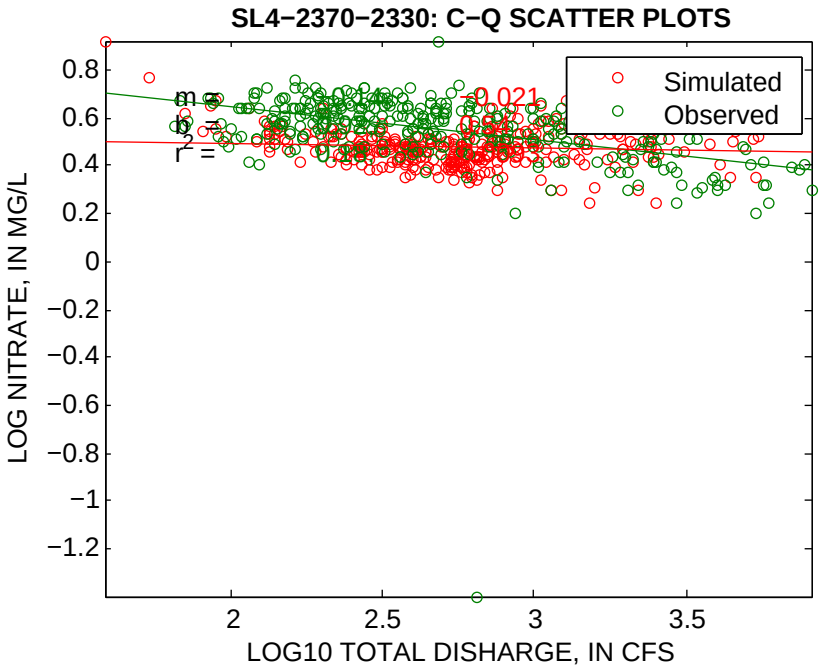
STATISTICS

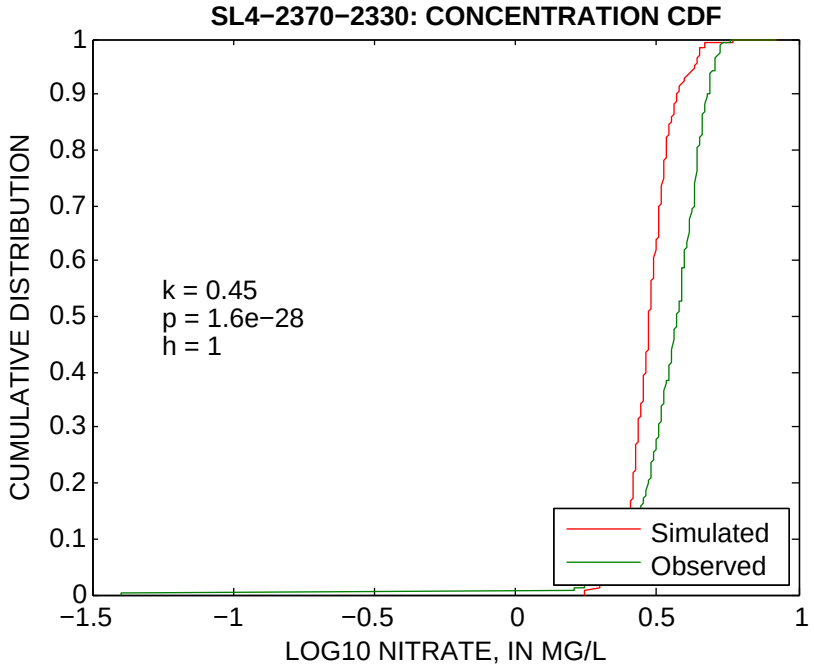
	n	observe	simulate
		318	318
min		0.04	1.4172
		-1.39794	0.151431
mean		3.69619	3.14616
		0.54965	0.484268
media		3.745	2.95425
		0.573451	0.470447
max		8.38	9.0489
		0.923244	0.956596
varian		0.829085	0.762069
		0.0241966	0.0109339
JB		0.001	0.001
		0.001	0.001
		ra	log
%		-14.881	-11.8951
err.va		2.19483	0.0440584
rel.std.err		2.64729	1.82085
mod.eff		-1.64729	-0.82085

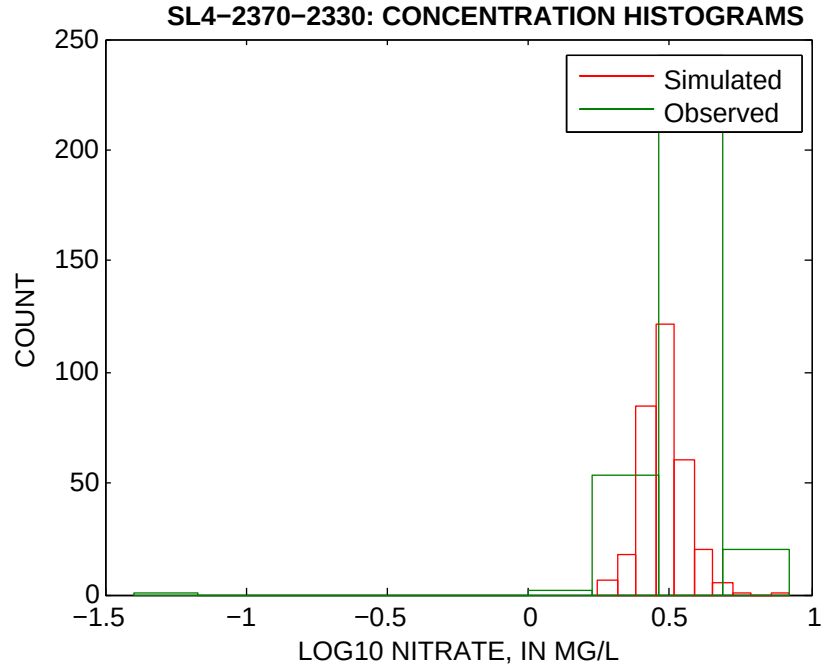
VERSION 2.1

ALL DATA
LOG10

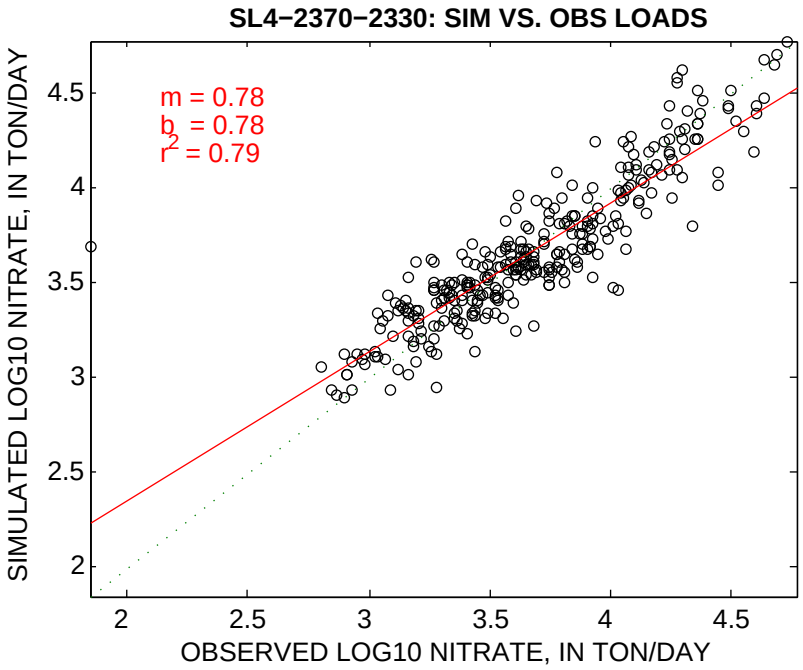


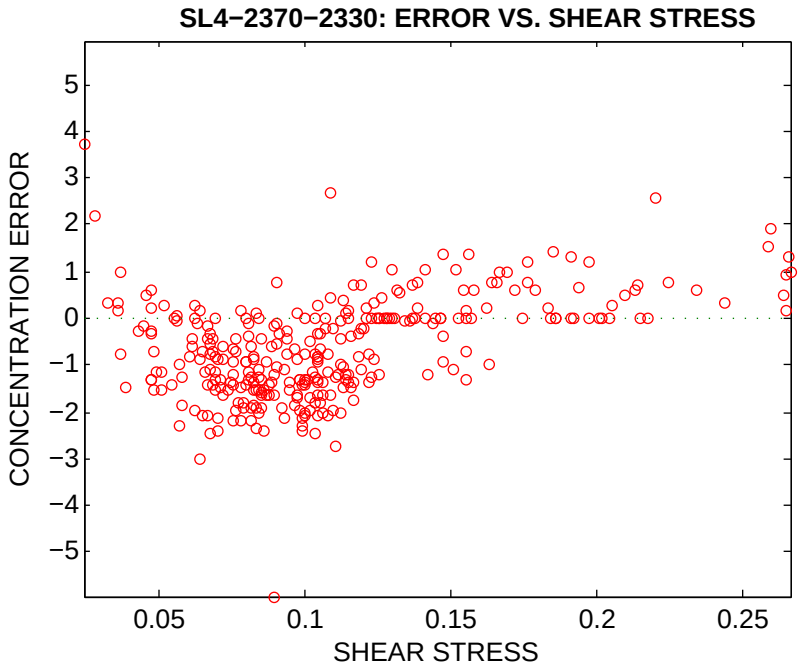


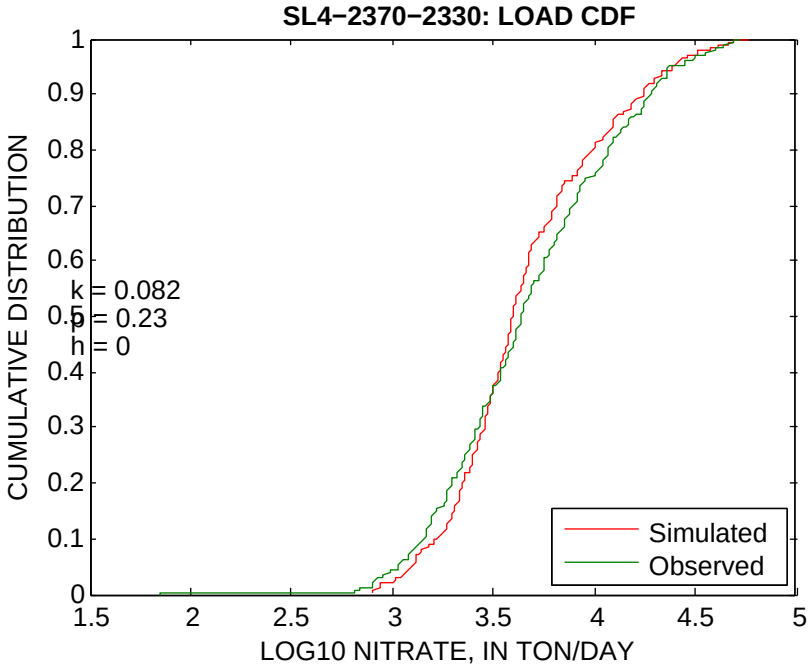


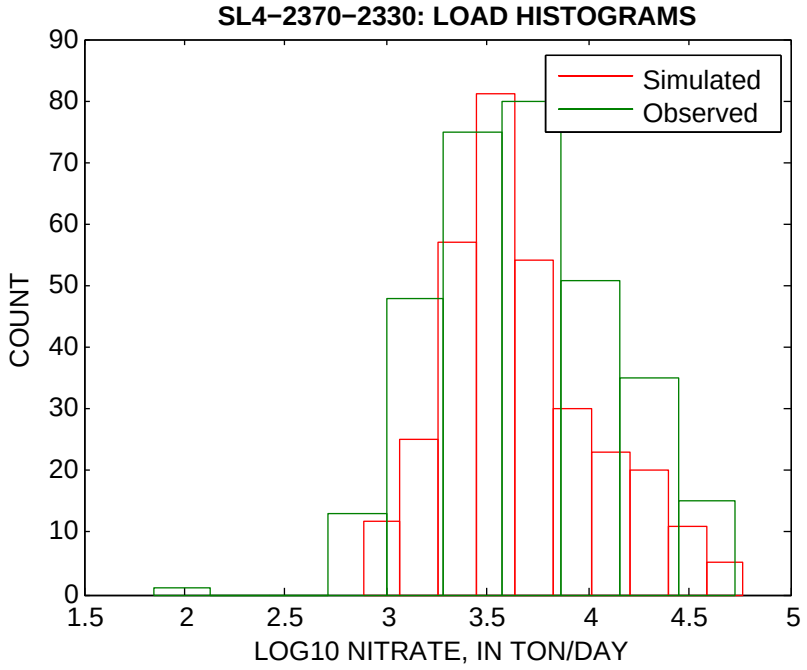


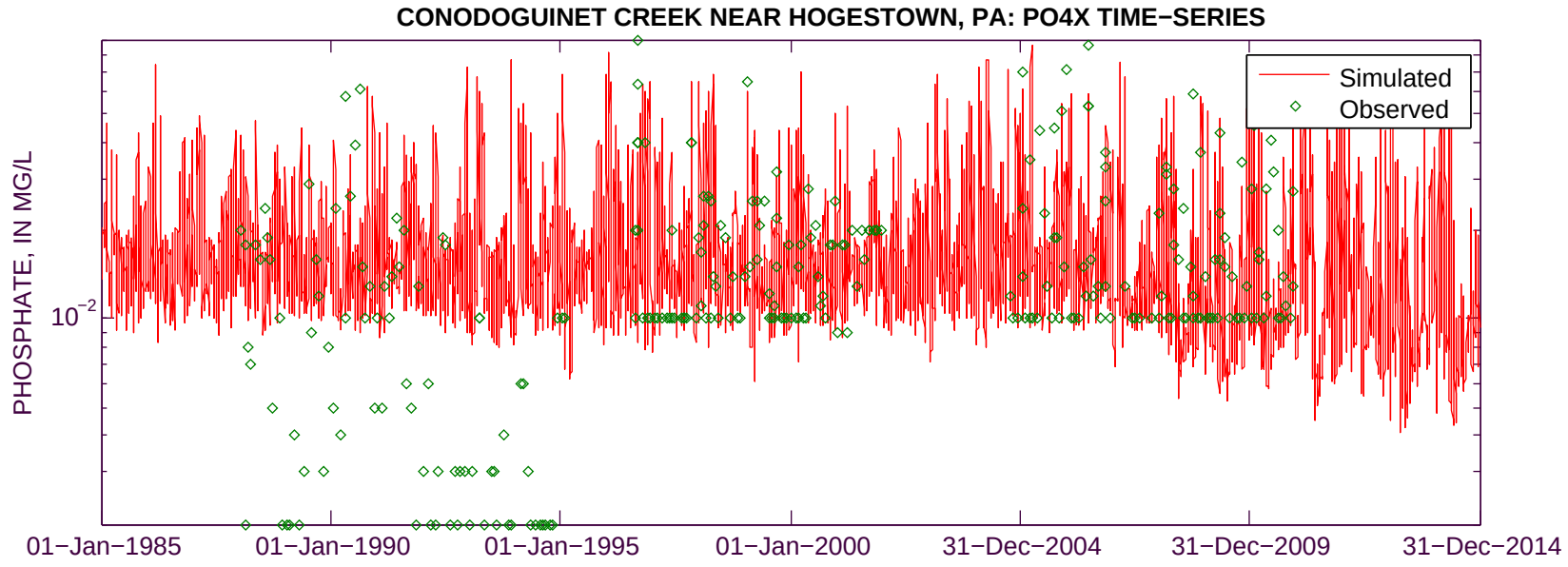
LOAD DATA
LOG10

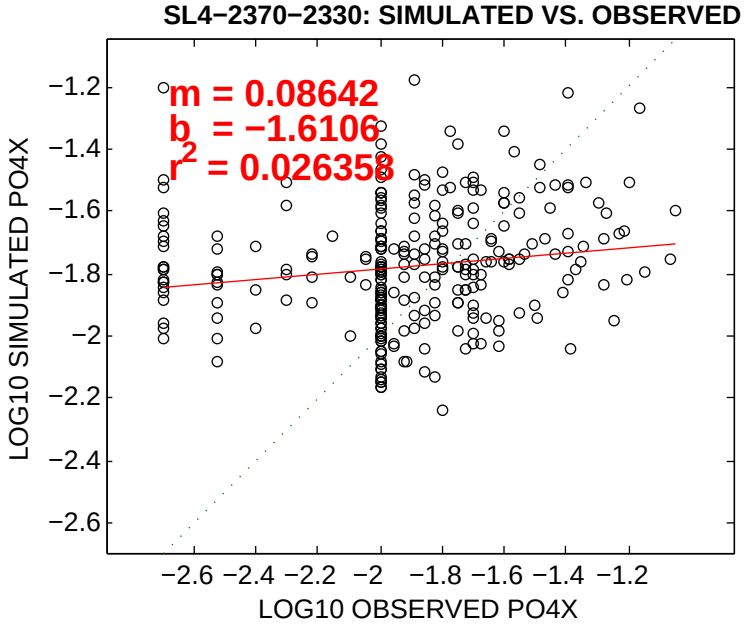


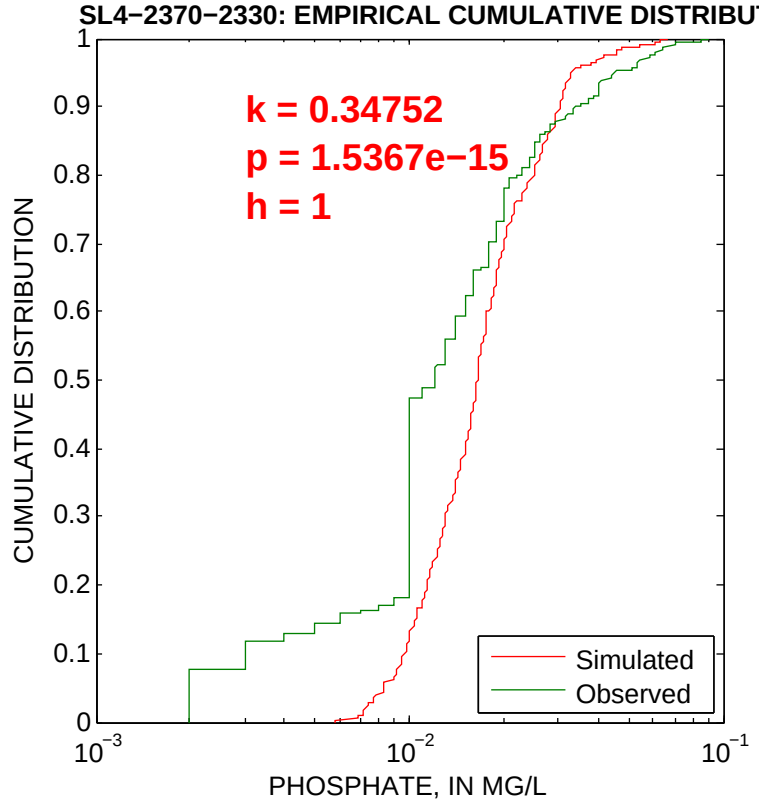












DATA SELECTION

scenario	file
P620171001WQ	PO4X.calib

plot: PO4X - phosphate

Dates: 1/1/1985 – 12/31/201

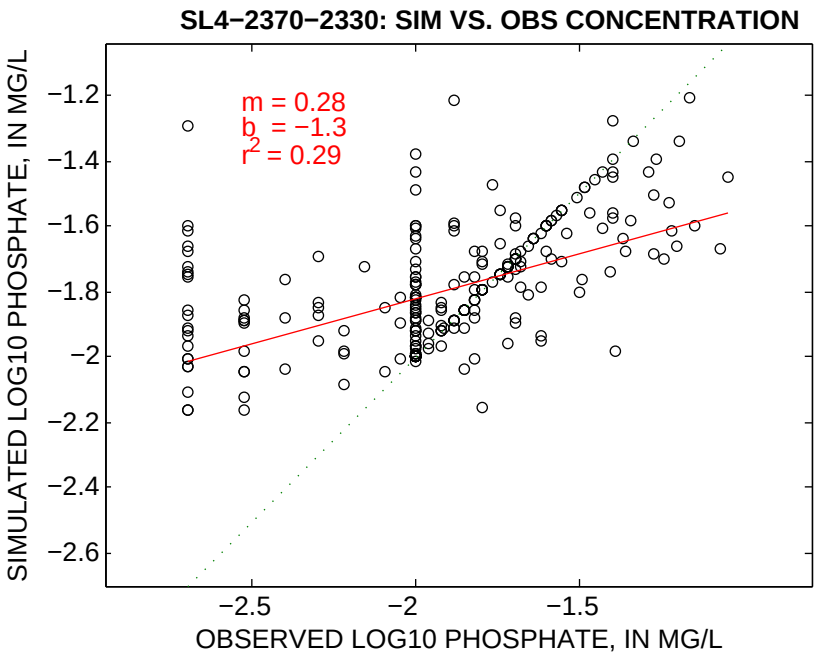
Drive	Directory	Observed
N/A	model	OBS20161101

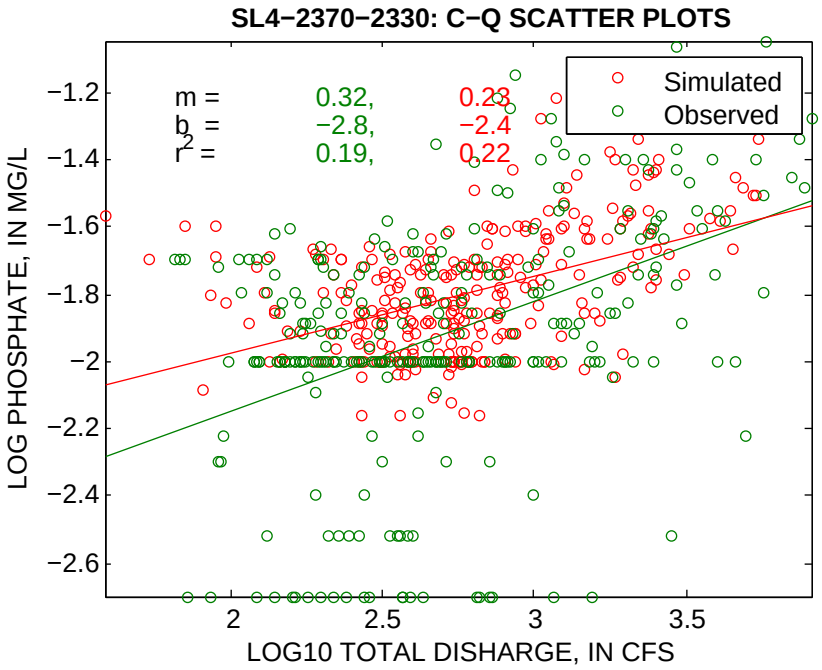
STATISTICS

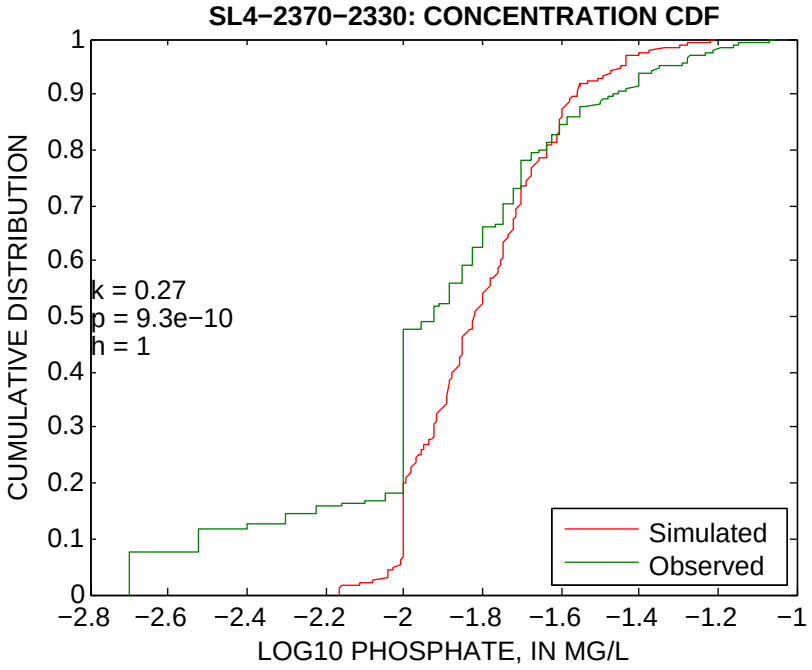
	n	282	282
		observe	simulate
min		0.002	0.0058089
		-2.69897	-2.23591
mean		0.0166734	0.0185429
		-1.91215	-1.77587
media		0.012	0.0165015
		-1.92082	-1.78248
max		0.09	0.067259
		-1.04576	-1.17225
varian		0.00019996	8.59103e-0
		0.128981	0.0365465
JB		0.001	0.001
		0.014364	0.056865
		ra	log
%		11.2127	-7.12706
err.va		0.00023552	0.161873
rel.std.err		1.17783	1.25501
mod.eff		-0.177828	-0.255012

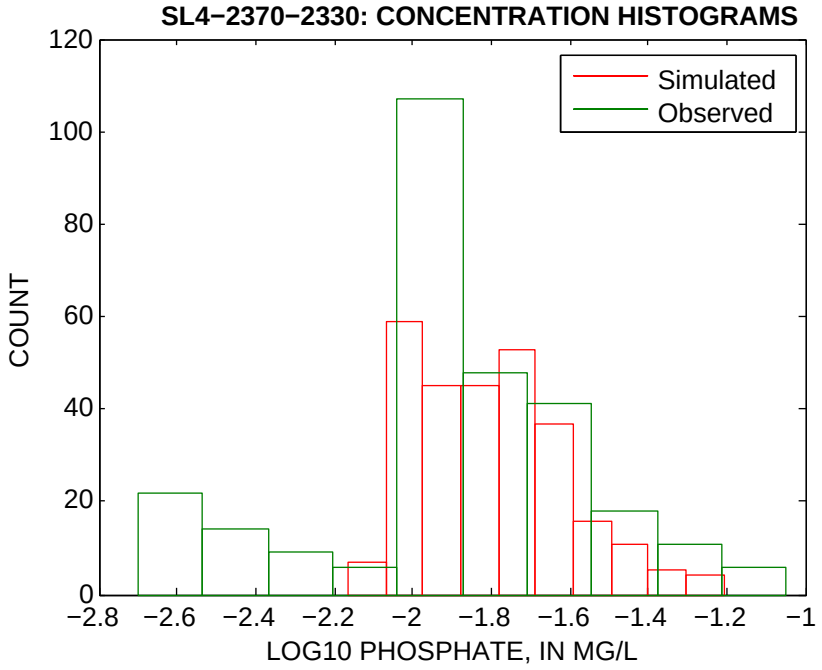
VERSION 2.1

ALL DATA
LOG10

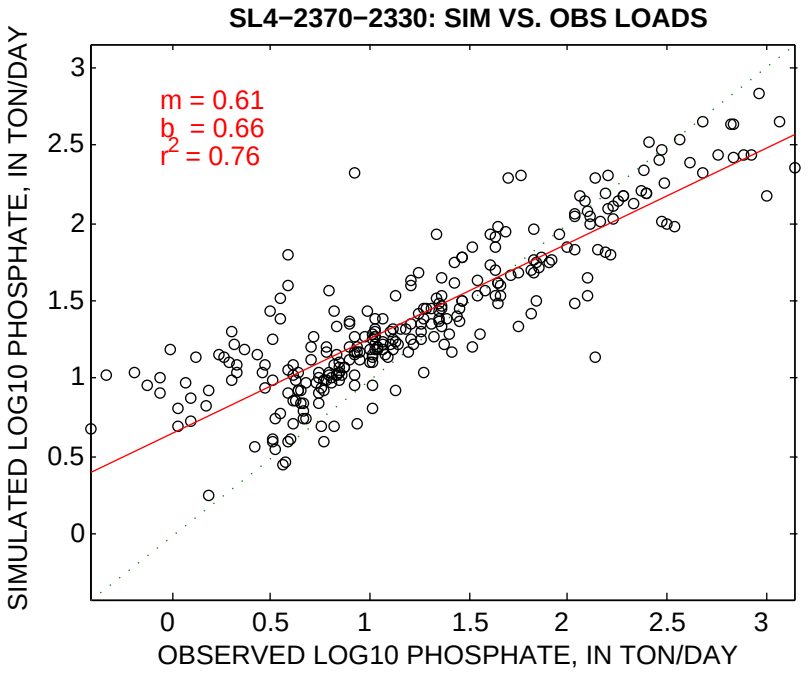


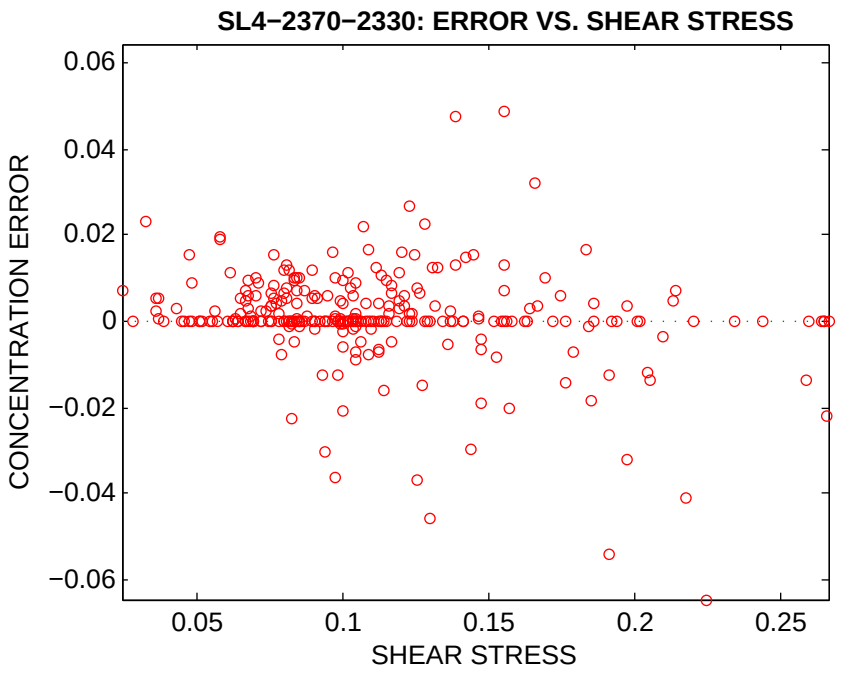


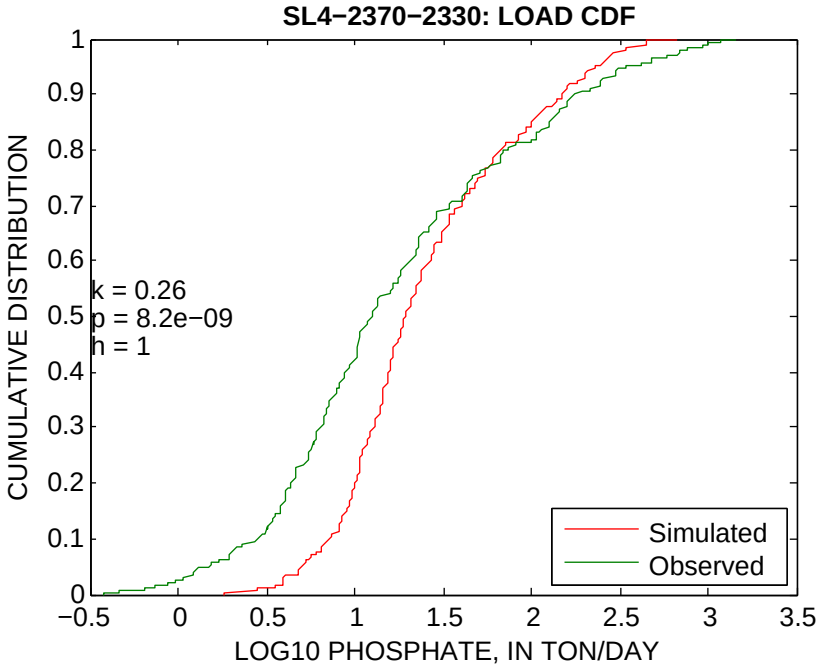


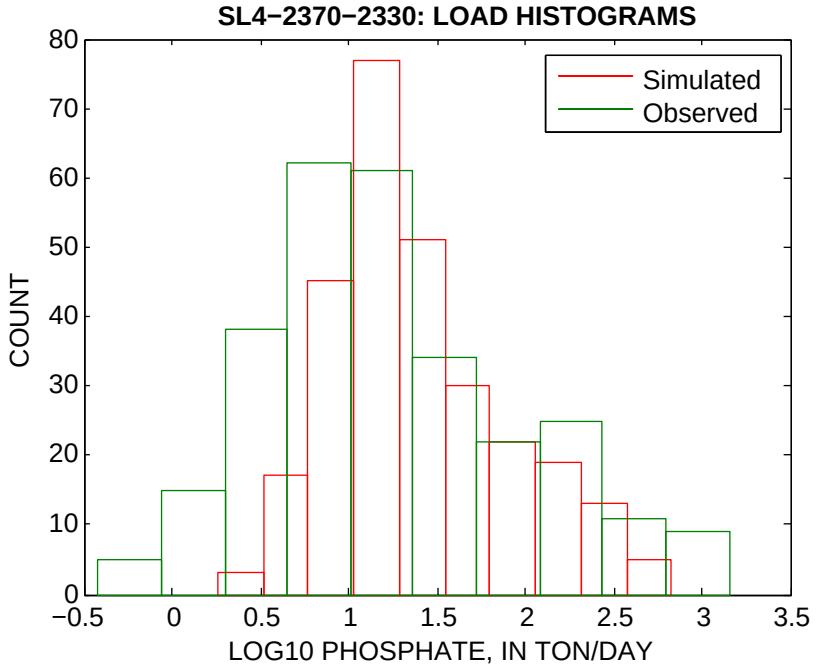


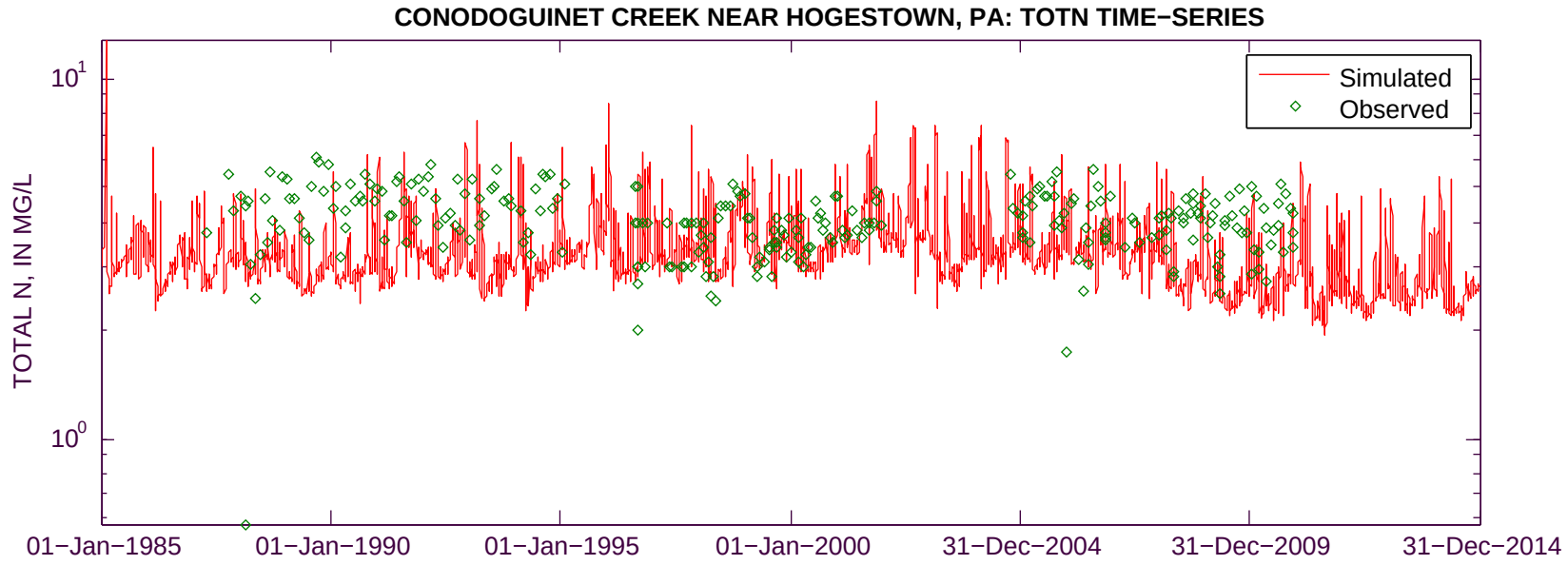
LOAD DATA
LOG10

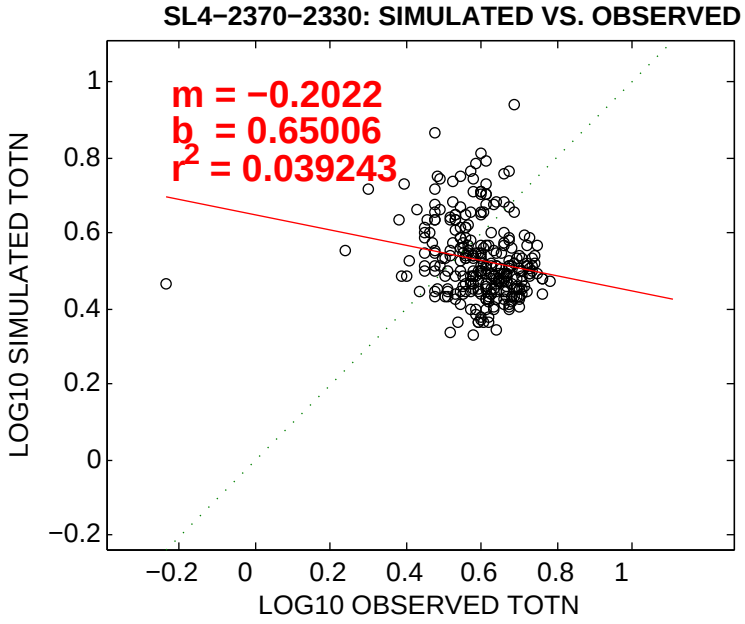


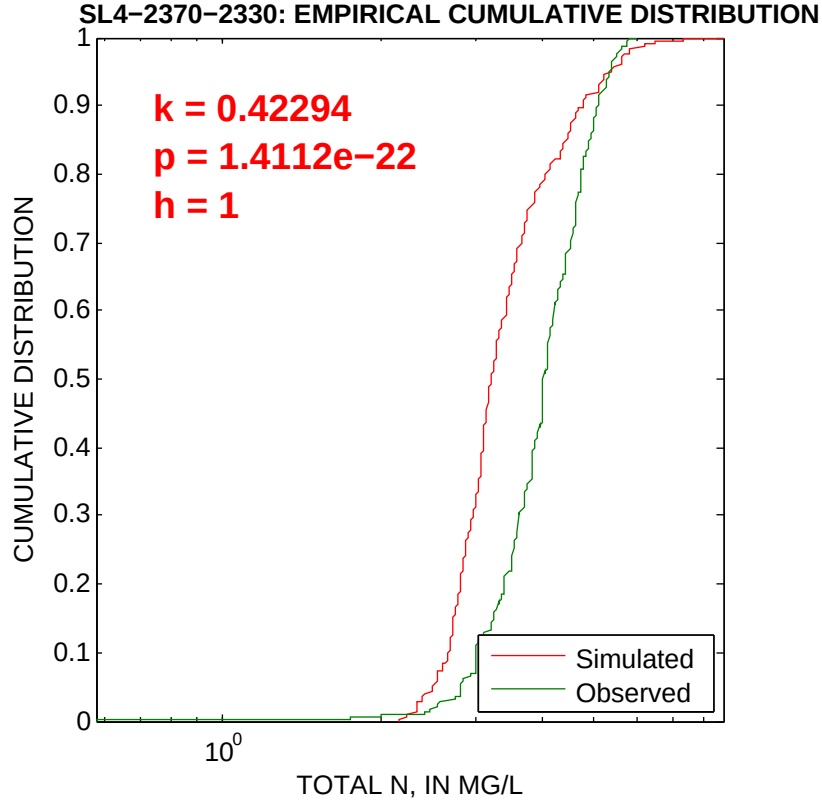












DATA SELECTION

scenario: P620171001WQ | file: TOTN.calib

plot: TOTN - total nitrogen

Dates: 1/1/1985 – 12/31/201

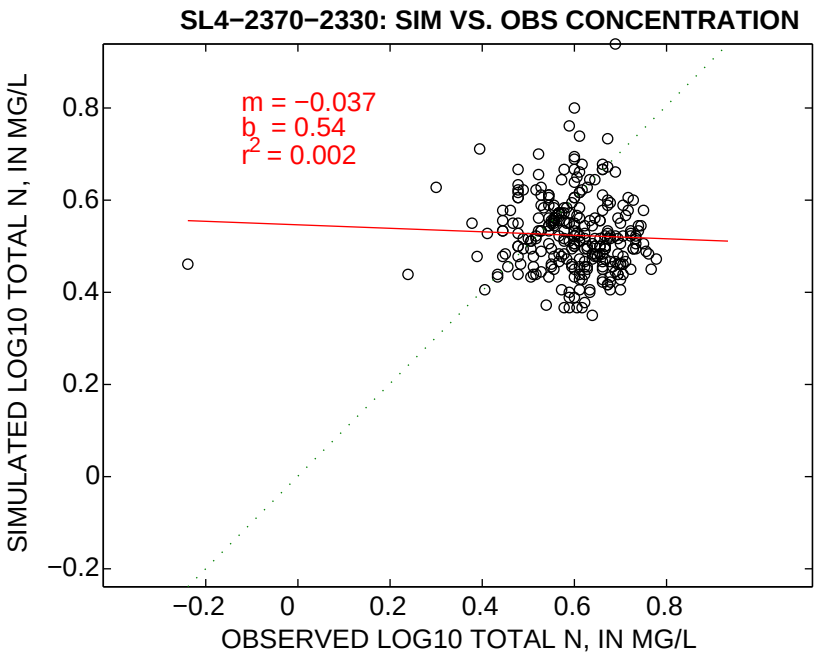
Drive | Directory: N/A | model | Observed: OBS20161101

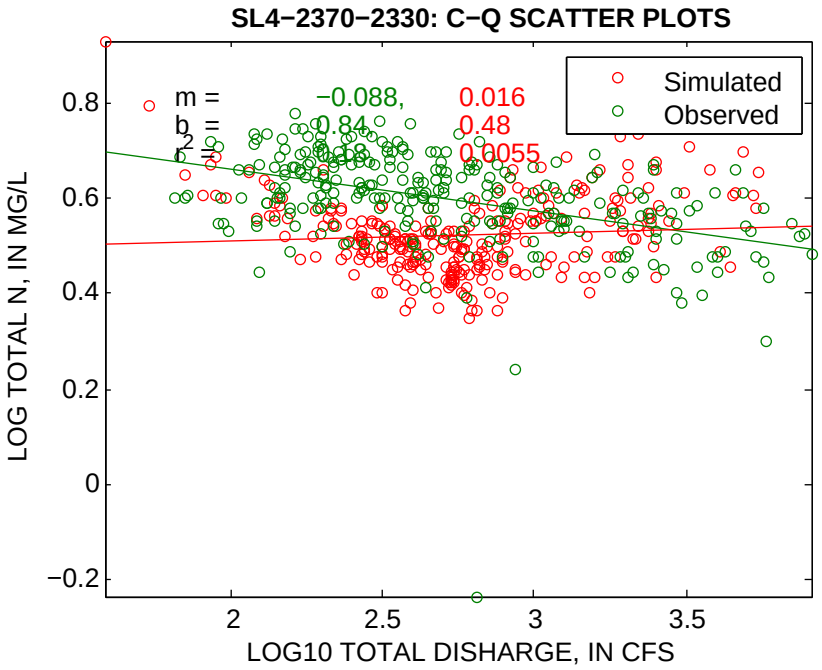
STATISTICS

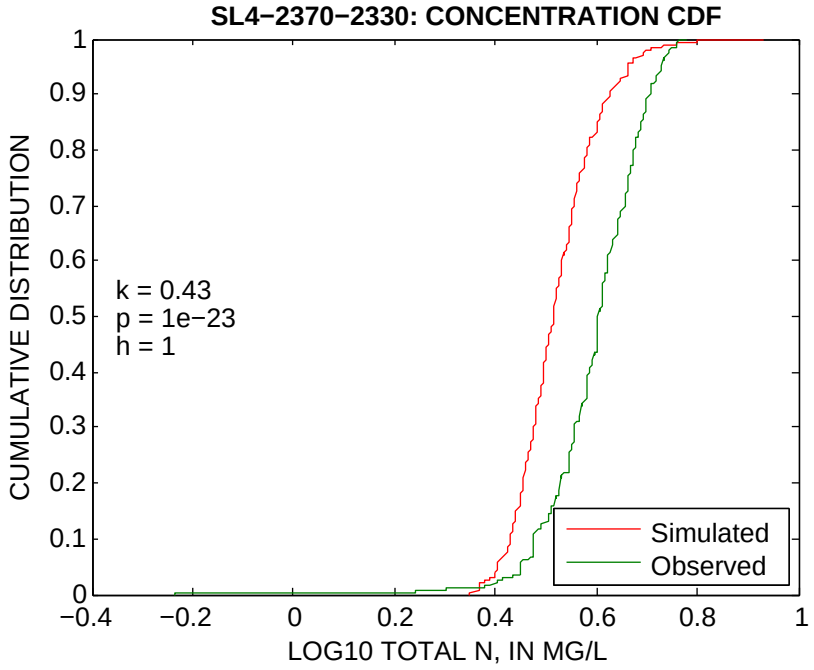
n	279	279
	observe	**simulate**
min	0.58	2.154
	-0.236572	0.333246
mean	4.05369	3.48202
	0.598026	0.529139
media	4.02	3.2077
	0.604226	0.506194
max	6.04	8.7077
	0.781037	0.939903
varian	0.630654	0.847148
	0.00987928	0.0102928
JB	0.019630	0.001
	0.001	0.001
	ra	log
%	-14.1024	-11.519
err.va	2.11902	0.0289297
rel.std.err	3.36003	2.92832
mod.eff	-2.36003	-1.92832

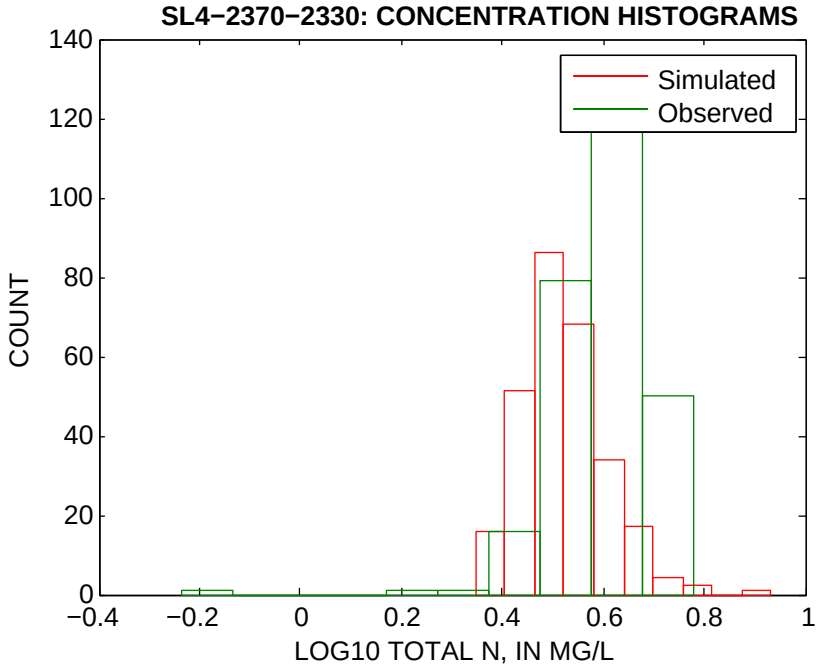
VERSION 2.1

ALL DATA
LOG10

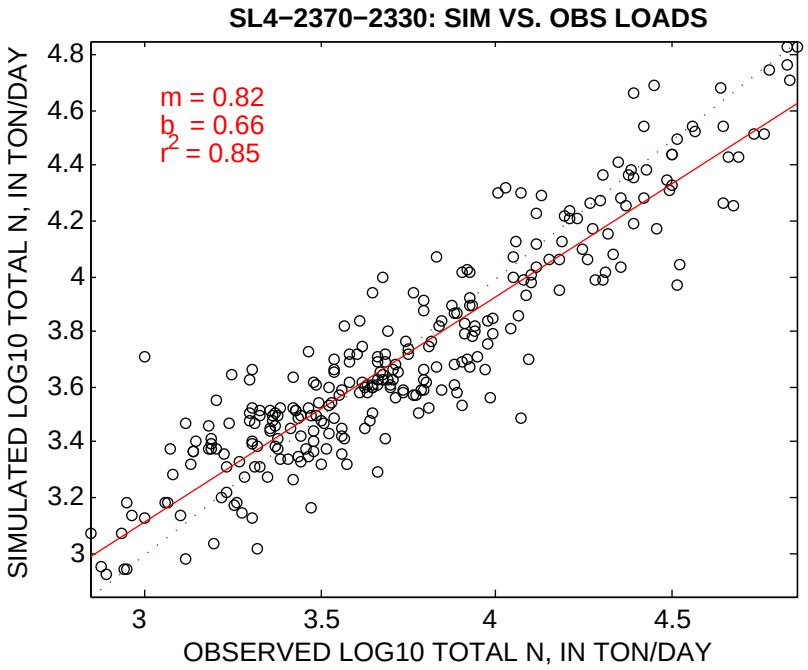


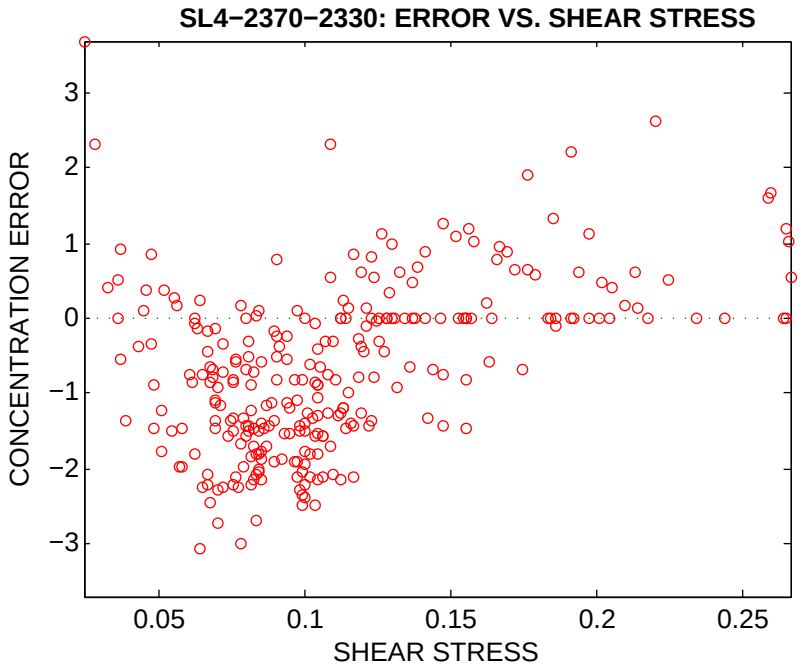


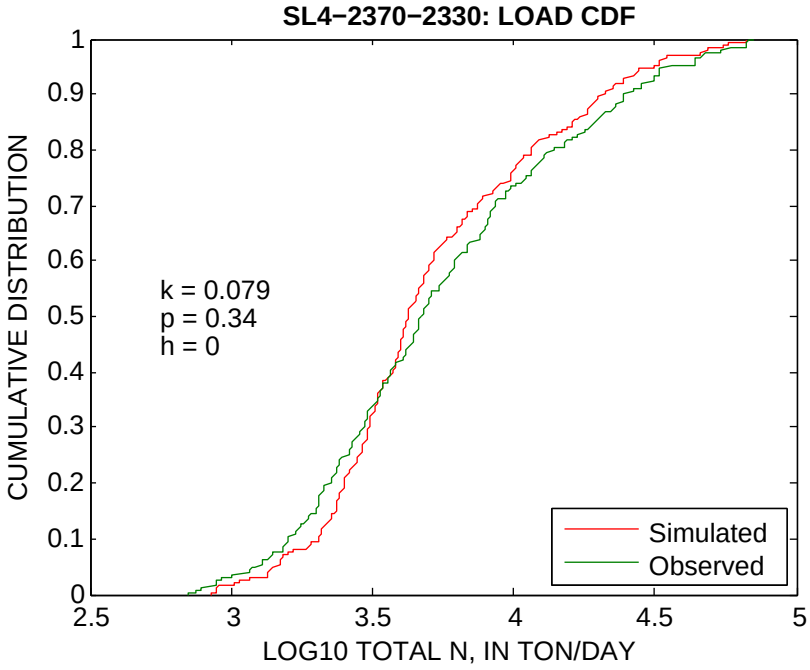


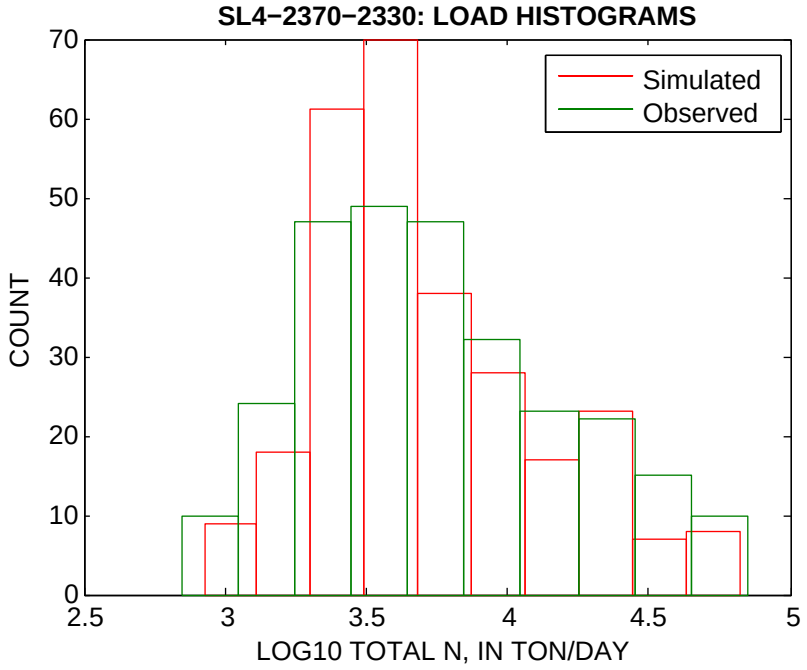


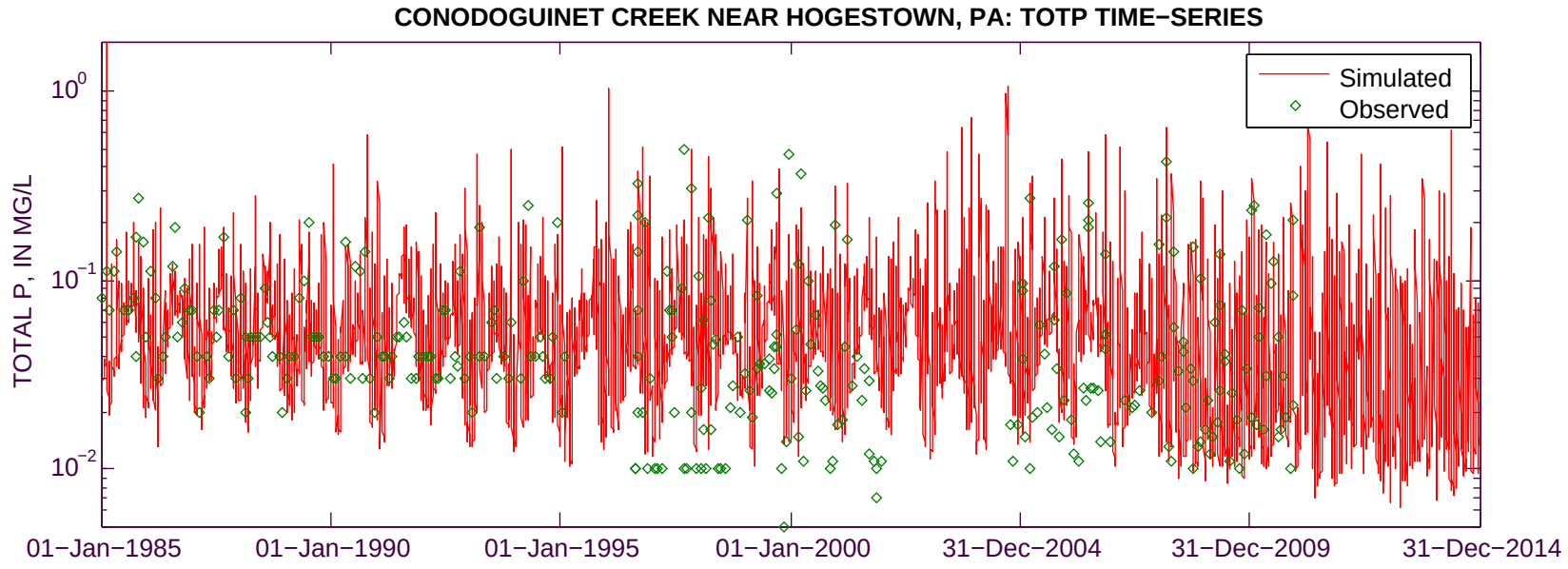
LOAD DATA
LOG10

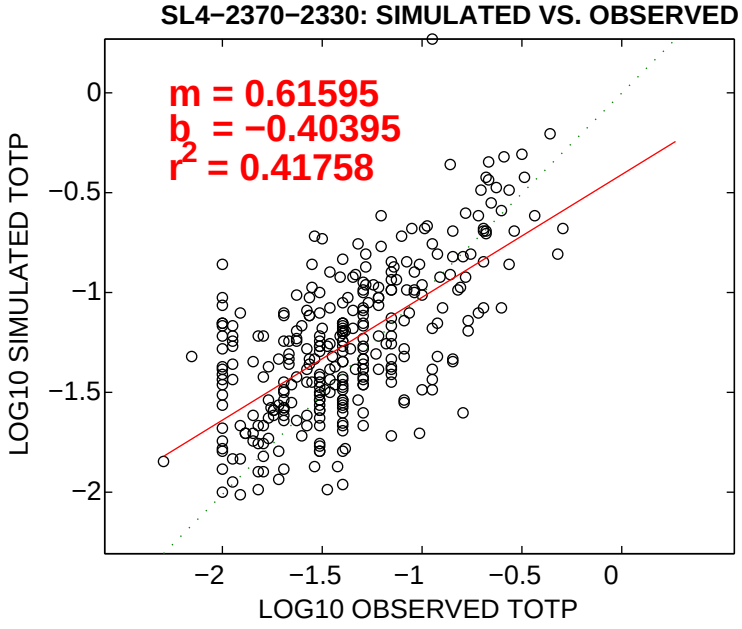


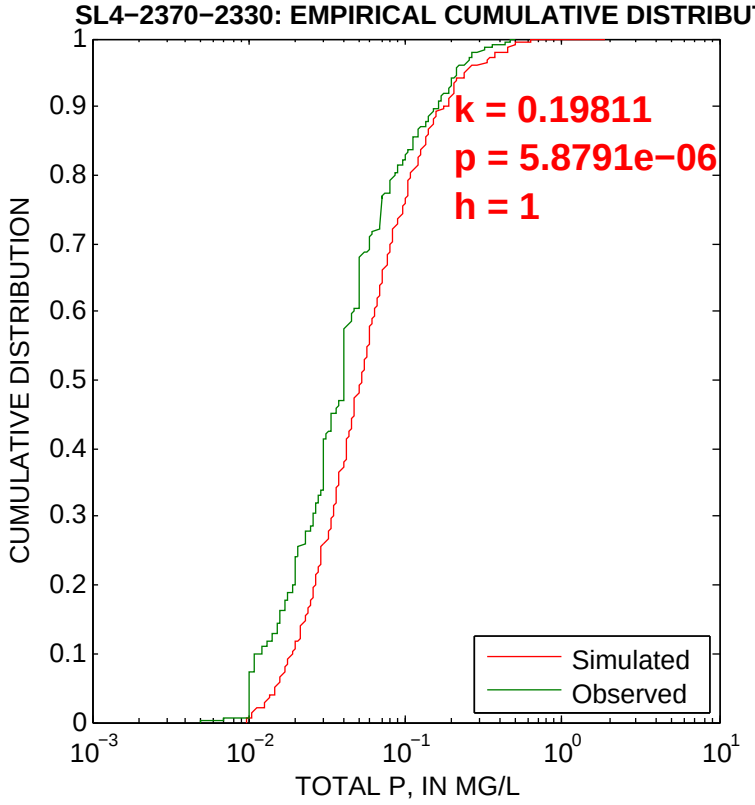












DATA SELECTION

scenario	file
P620171001WQ	TOTP.calib

plot: TOTP - total phosphorus

Dates: 1/1/1985 – 12/31/201

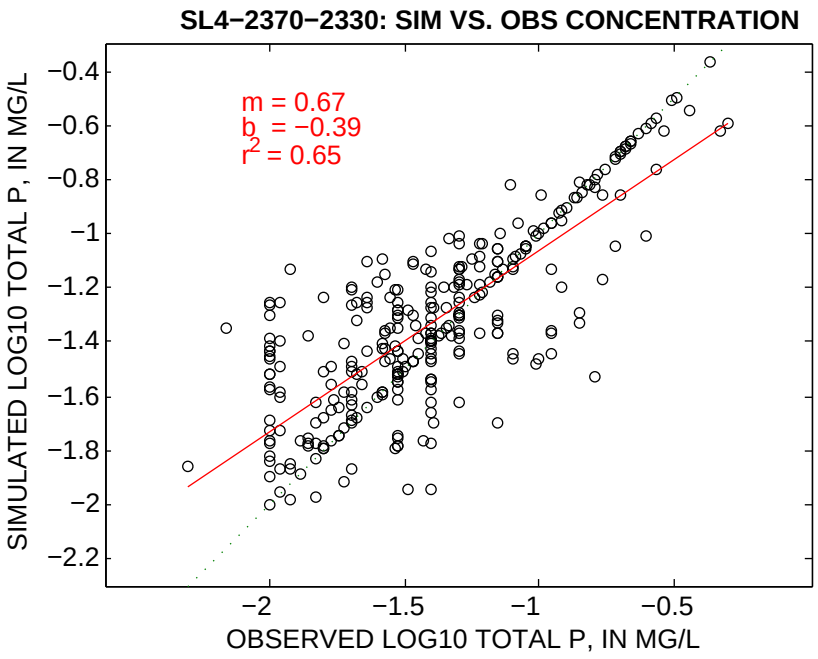
Drive	Directory	Observed
N/A	model	OBS20161101

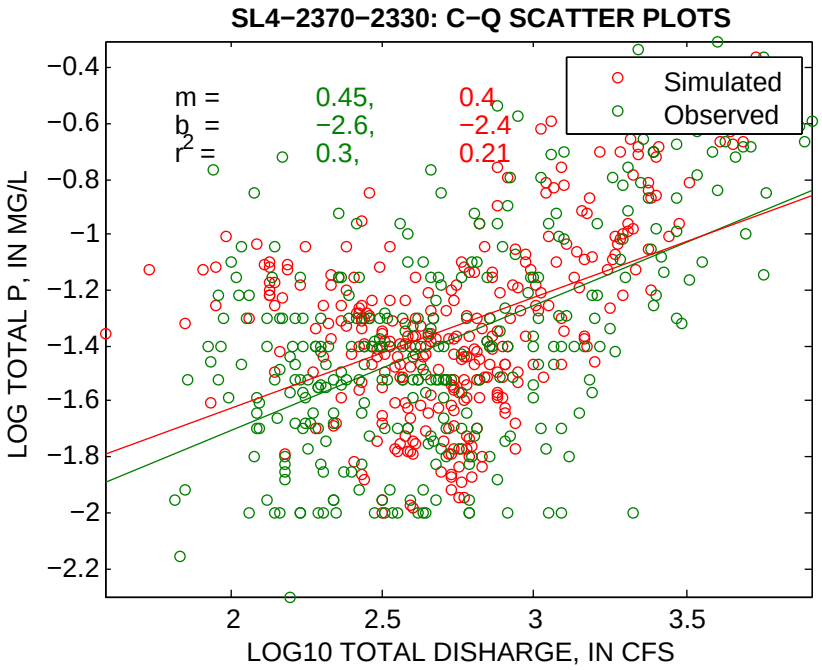
STATISTICS

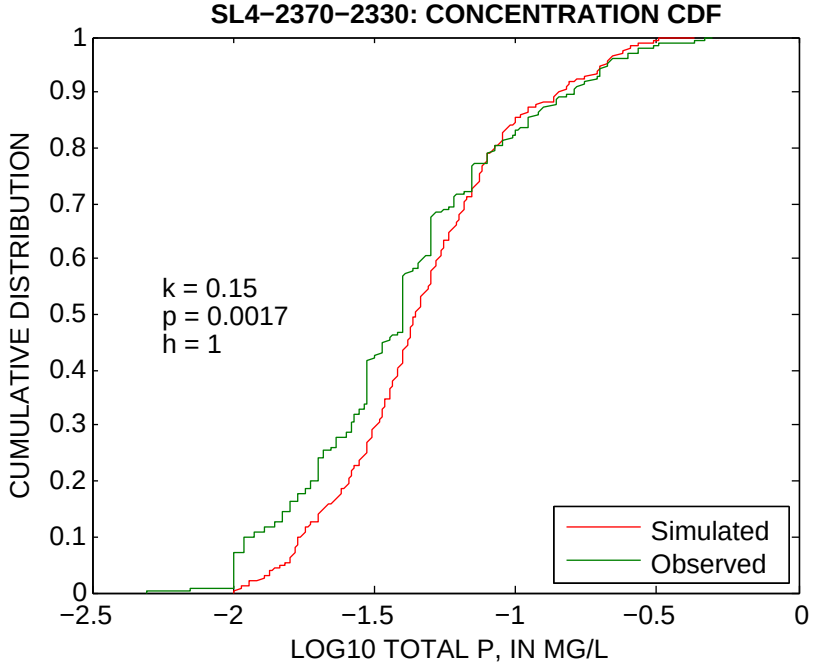
	n	318	318
		observe	simulate
min		0.005	0.0098123
		-2.30103	-2.00823
mean		0.0638782	0.0853619
		-1.38554	-1.25737
media		0.04	0.0525025
		-1.39794	-1.27983
max		0.5	1.8504
		-0.30103	0.267266
varian		0.00537827	0.0171411
		0.15379	0.139726
JB		0.001	0.001
		0.017636	0.004323
		ra	log
%		33.6323	-9.25093
err.va		0.0134302	0.120544
rel.std.err		2.49713	0.783825
mod.eff		-1.49713	0.216175

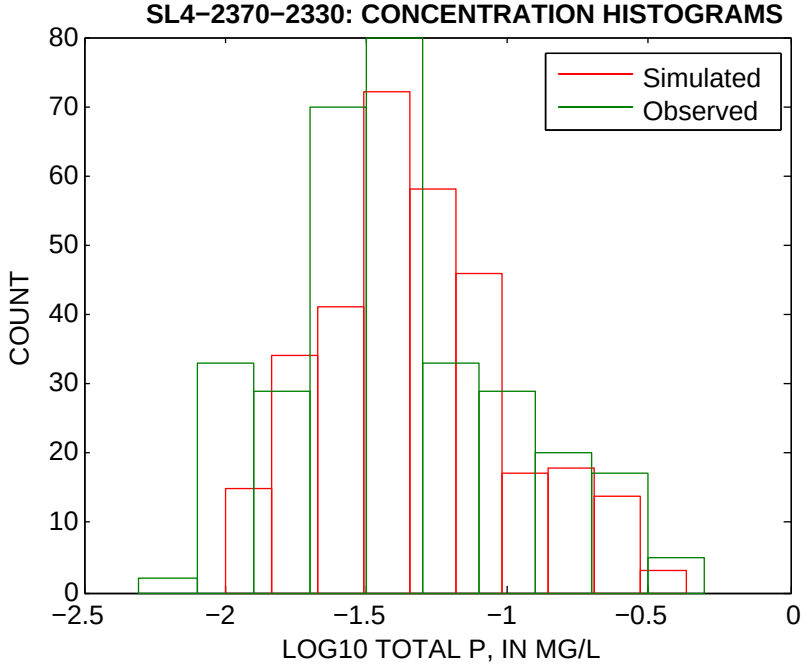
VERSION

ALL DATA
LOG10

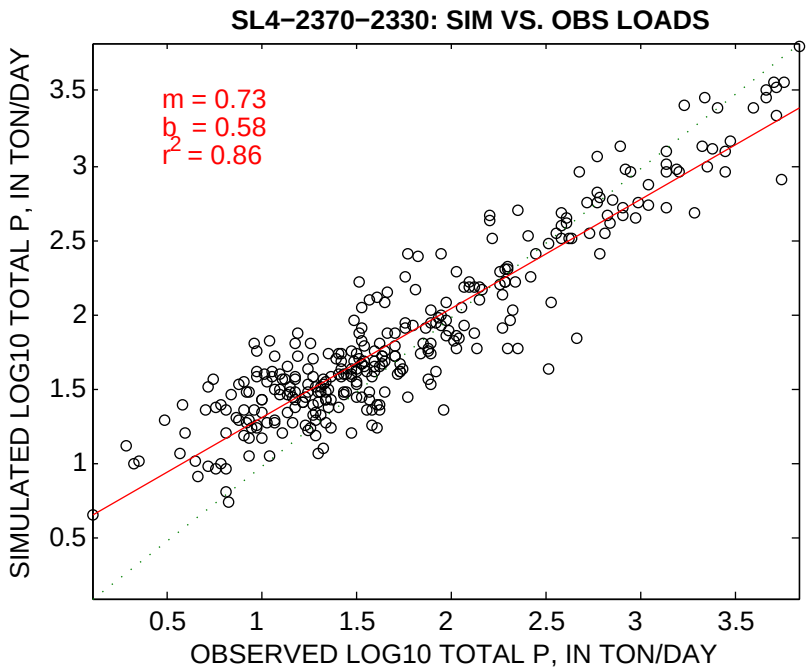


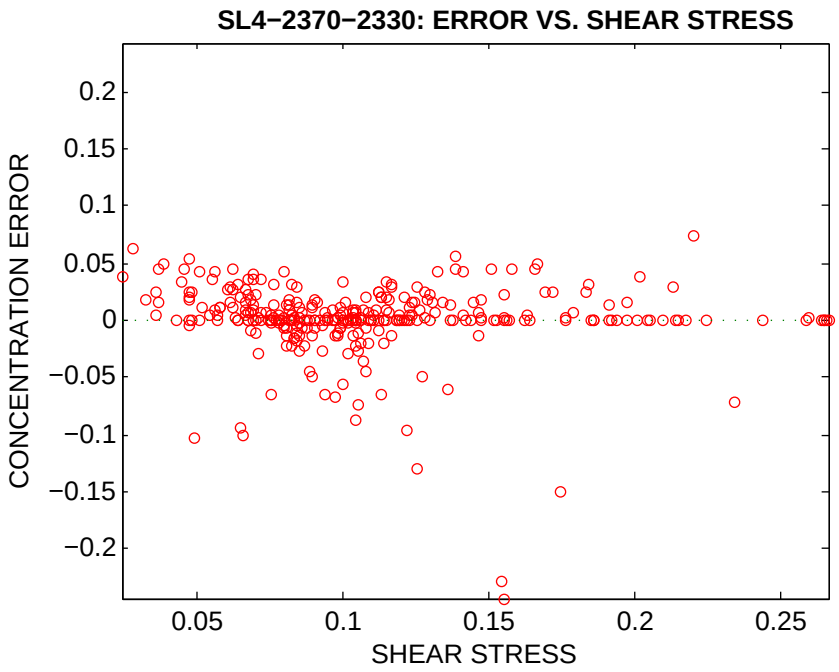


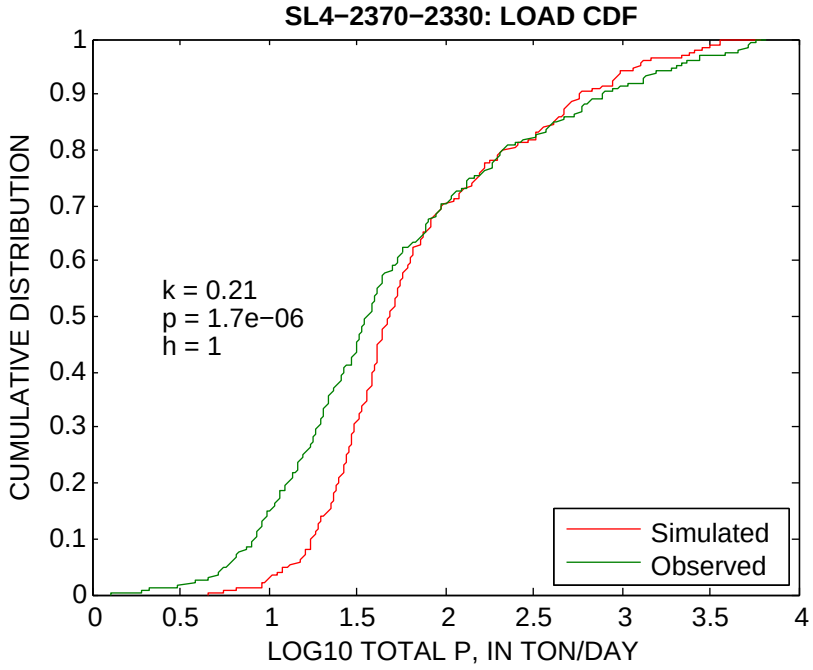


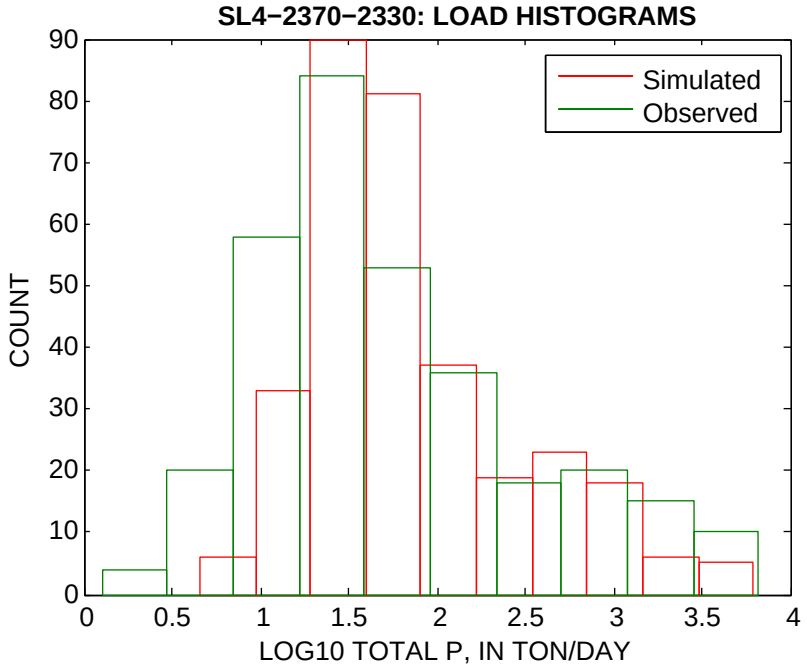


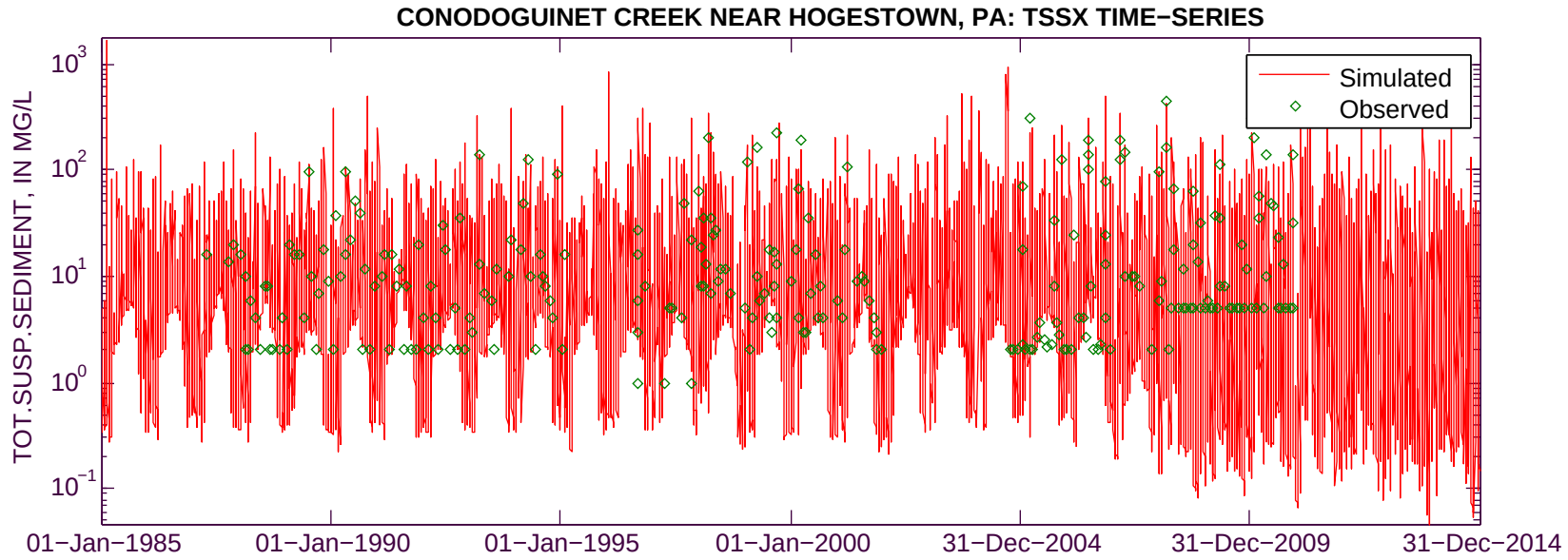
LOAD DATA
LOG10

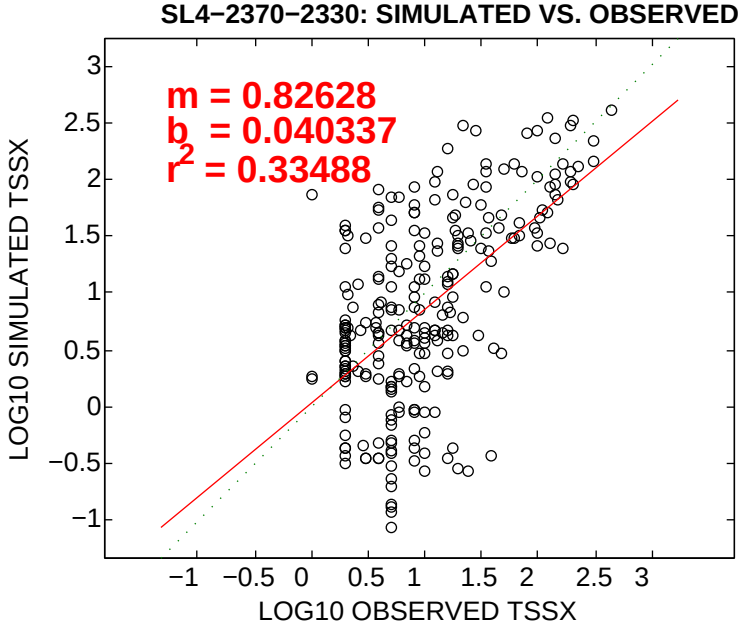


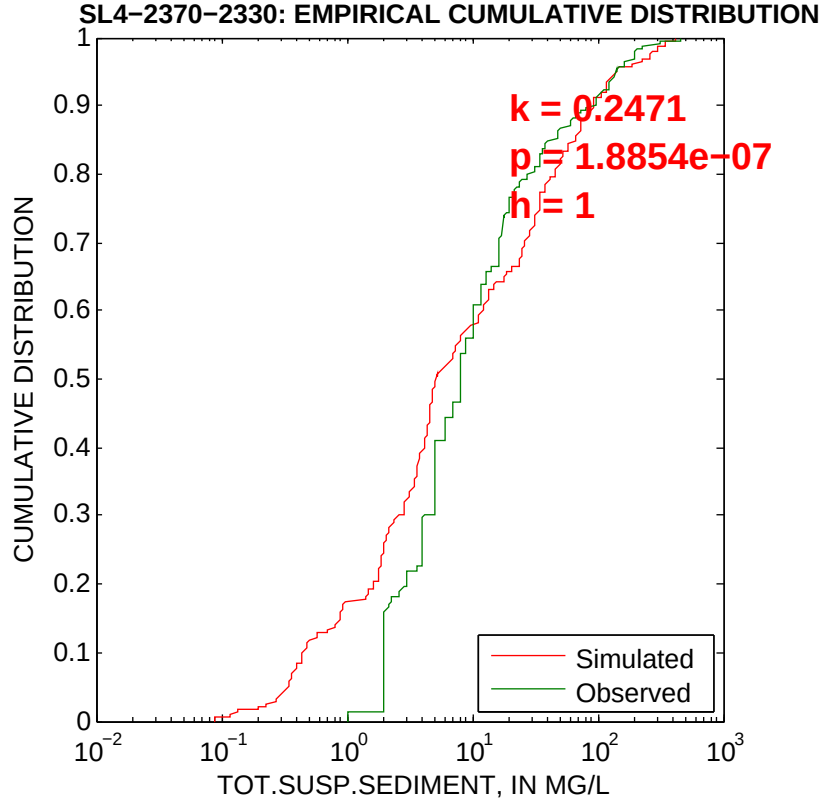












DATA SELECTION

scenario	file
P620171001WQ	TSSX.calib

plot: TSSX - total suspended ...

Dates: 1/1/1985 – 12/31/201

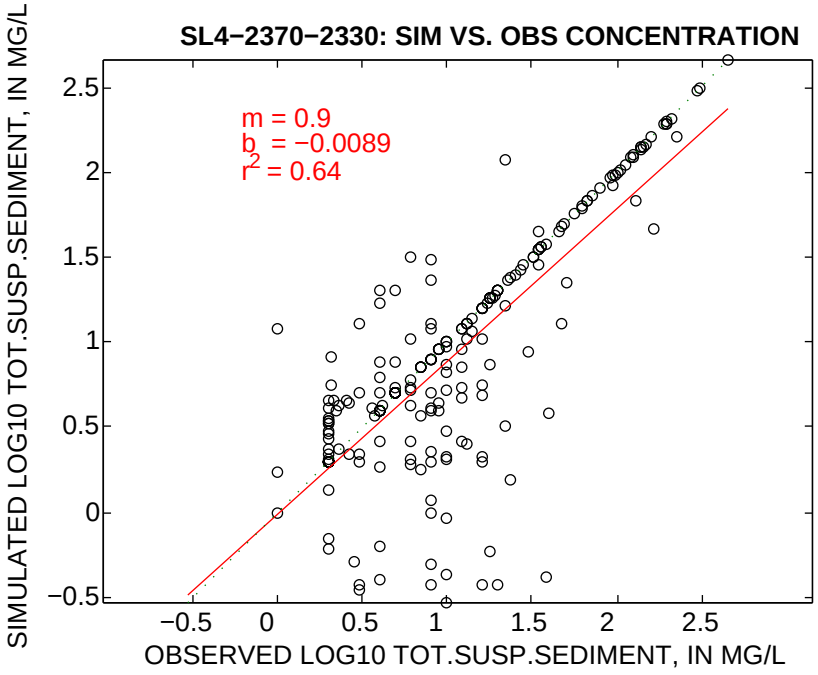
Drive	Directory	Observed
N/A	model	OBS20161101

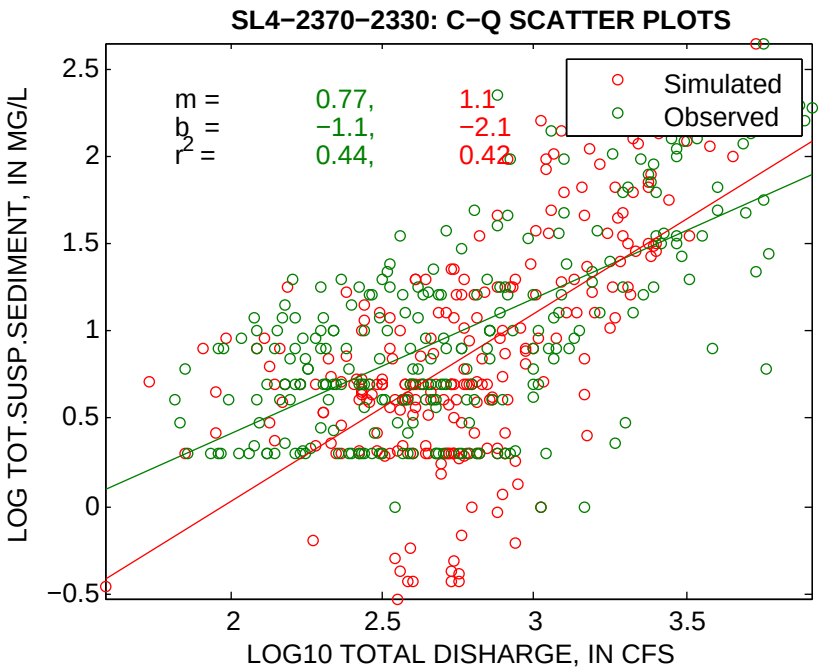
STATISTICS

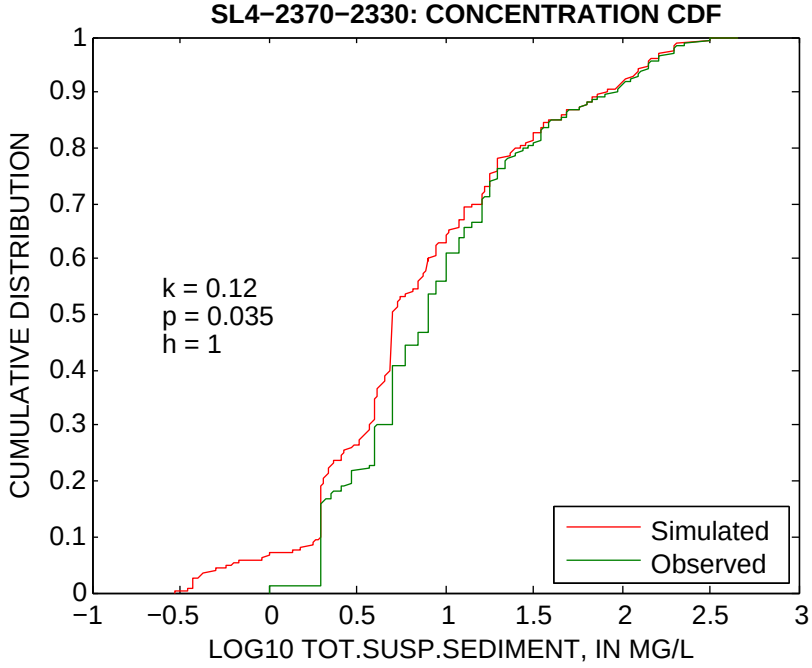
	n	observe	simulate
		259	259
min		1	0.087944
		0	-1.05579
mean		28.1579	32.8331
		0.994861	0.862369
media		8	5.2456
		0.90309	0.719795
max		452	415.45
		2.65514	2.61852
varian		3094.53	4026.76
		0.335313	0.683613
JB		0.001	0.001
		0.001454	0.045627
		ra	log
%		16.6034	-13.3176
err.va		2299.78	0.482425
rel.std.err		0.743177	1.43873
mod.eff		0.256823	-0.43873

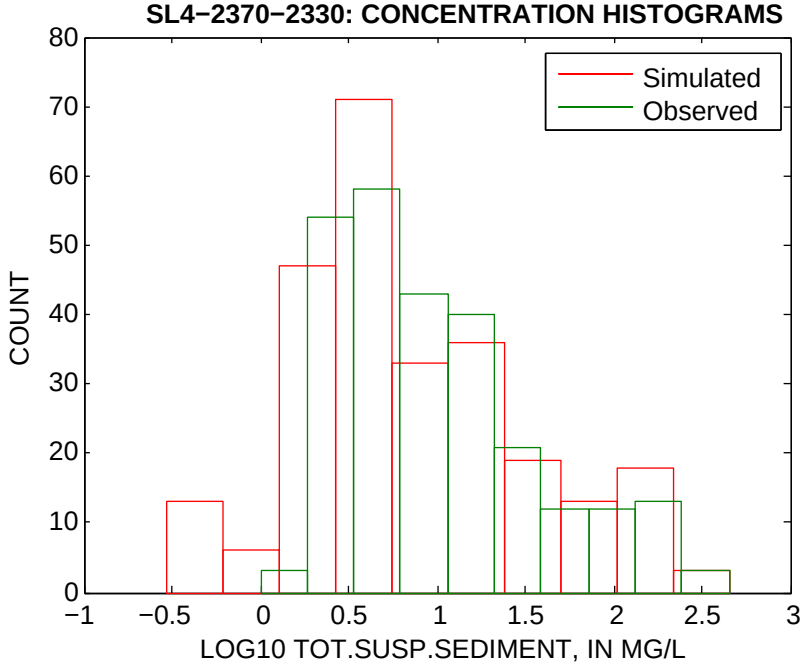
VERSION 2.1

ALL DATA
LOG10

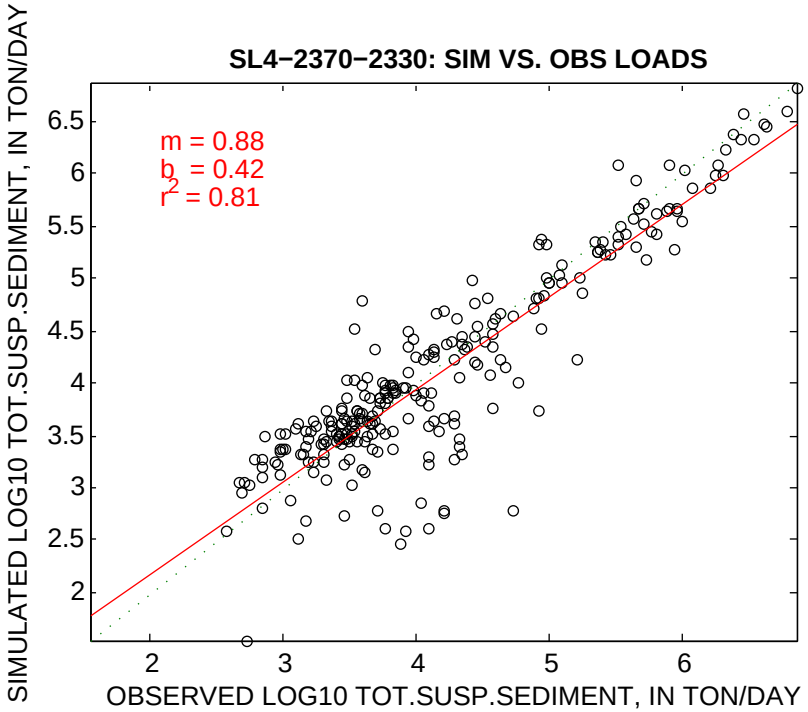


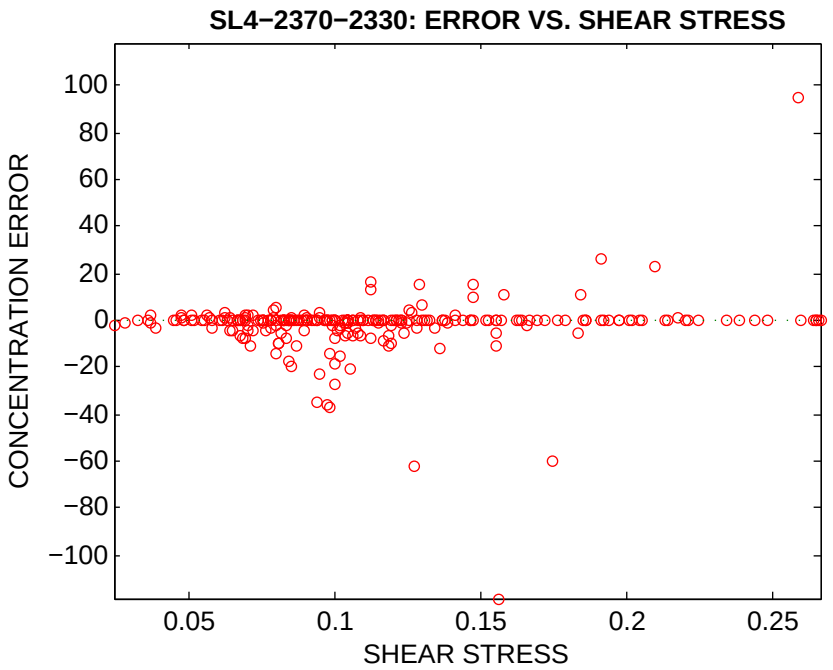


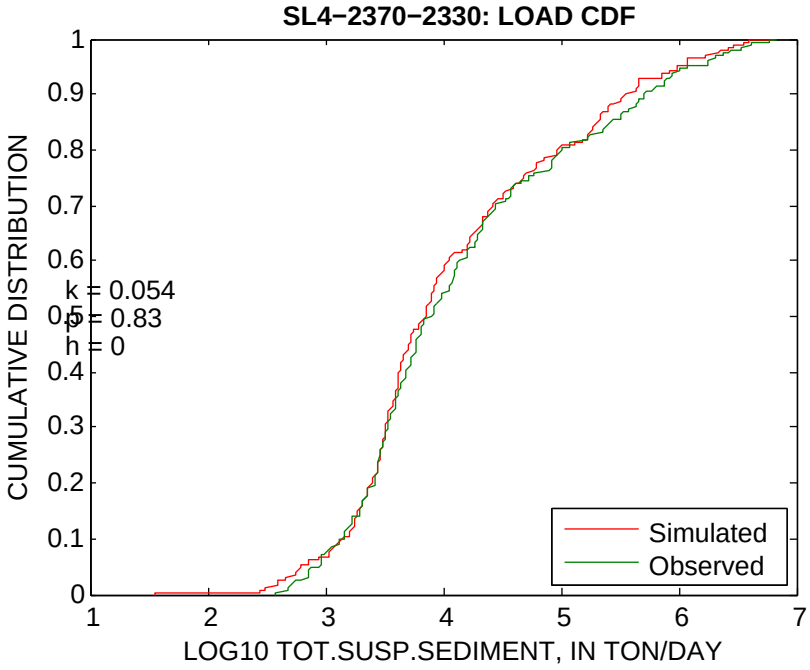


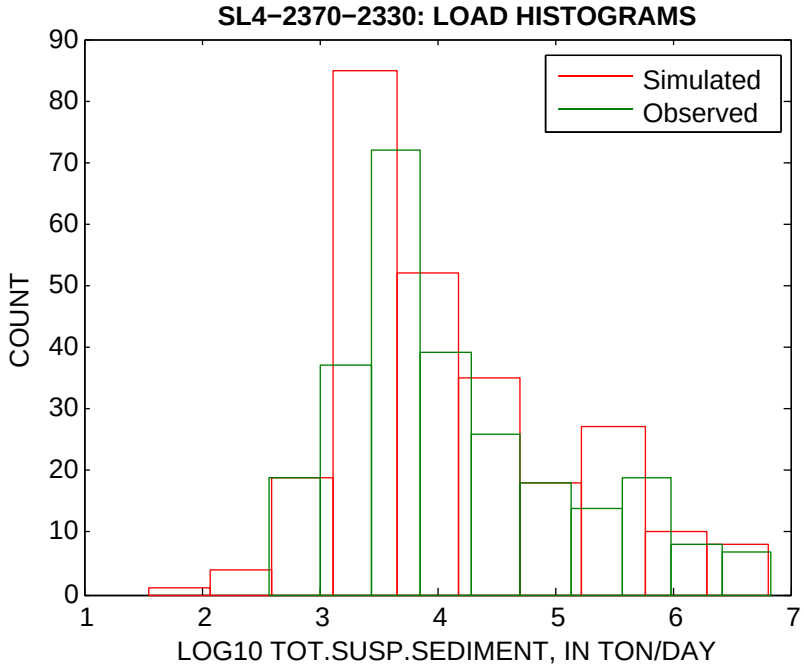


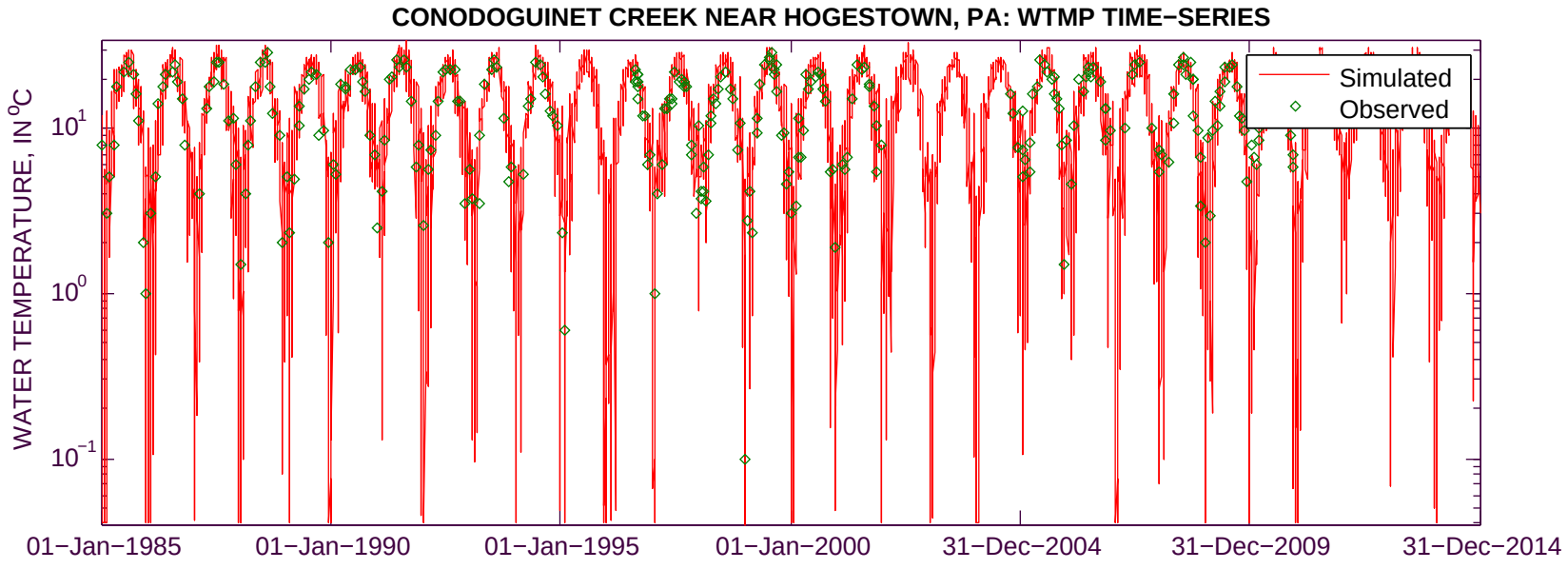
LOAD DATA
LOG10

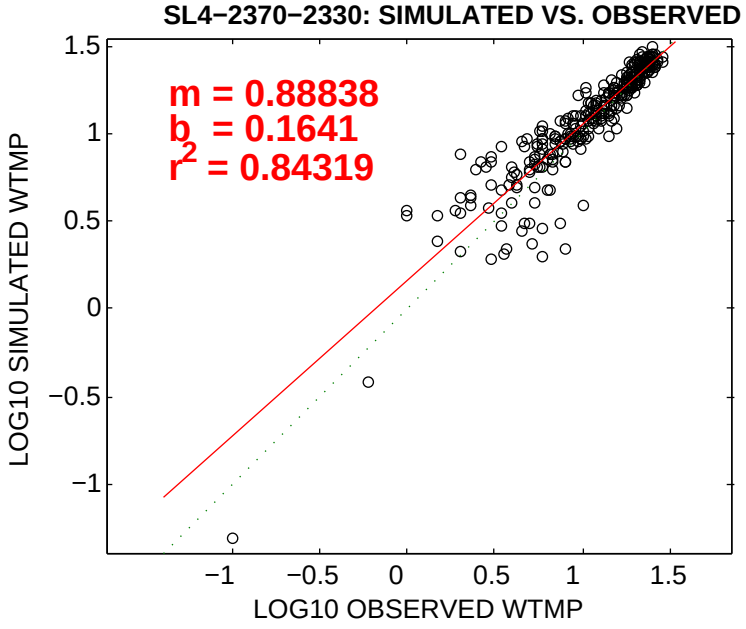


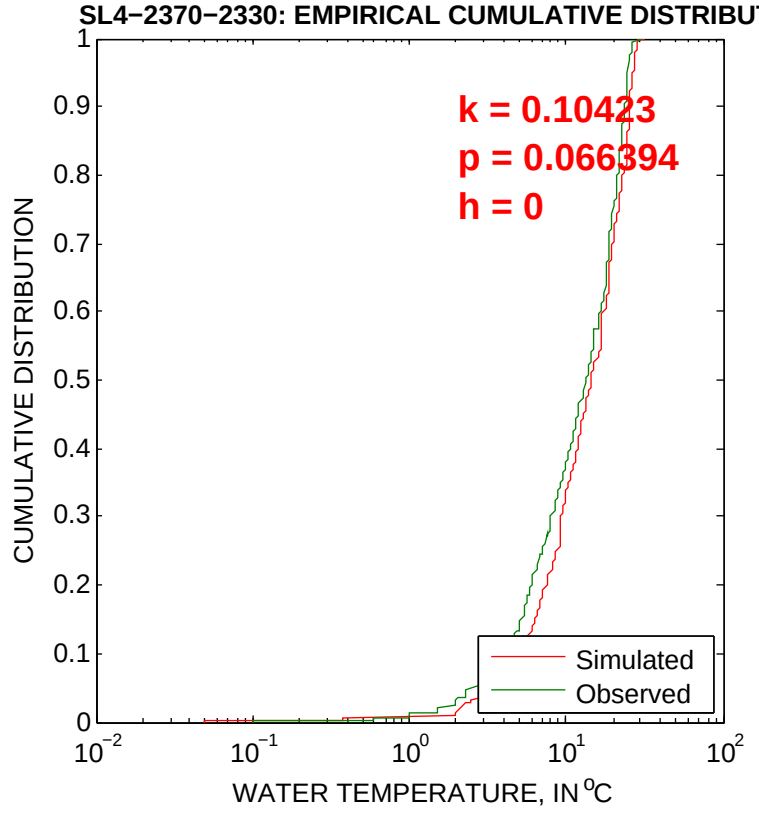












DATA SELECTION

scenario	file
P620171001WQ	WTMP.calib

plot: WTMP - water tempera...

Dates: 1/1/1985 – 12/31/201

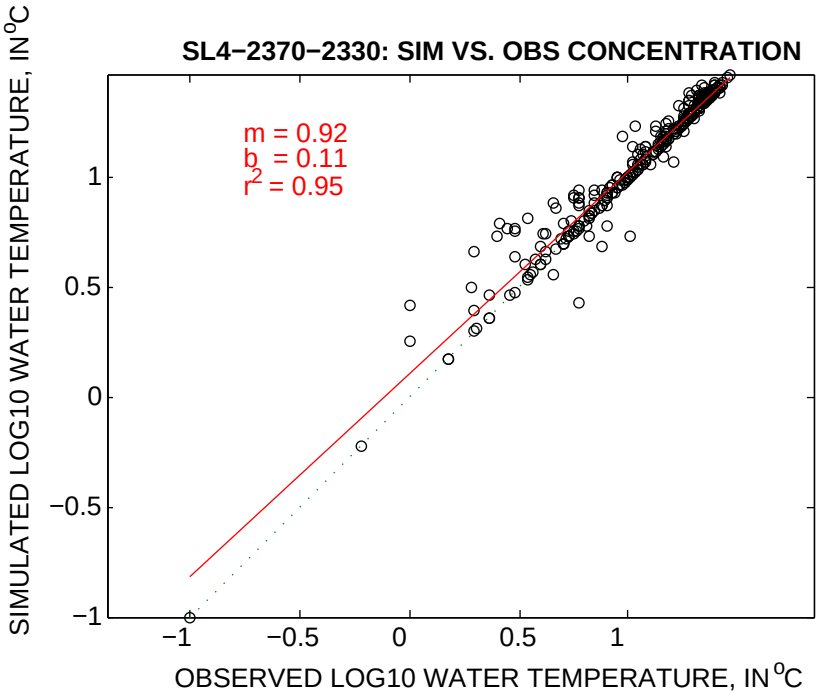
Drive	Directory	Observed
N/A	model	OBS20161101

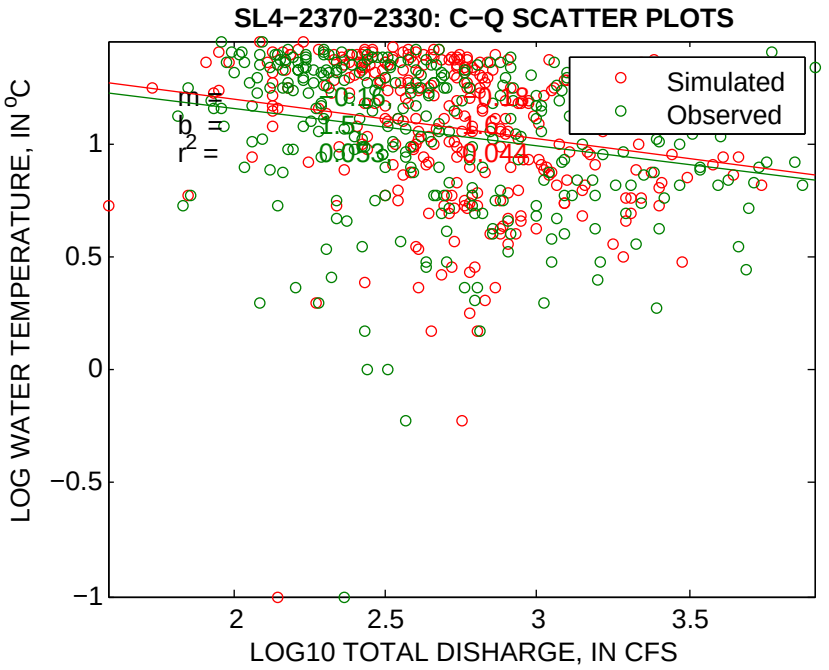
STATISTICS

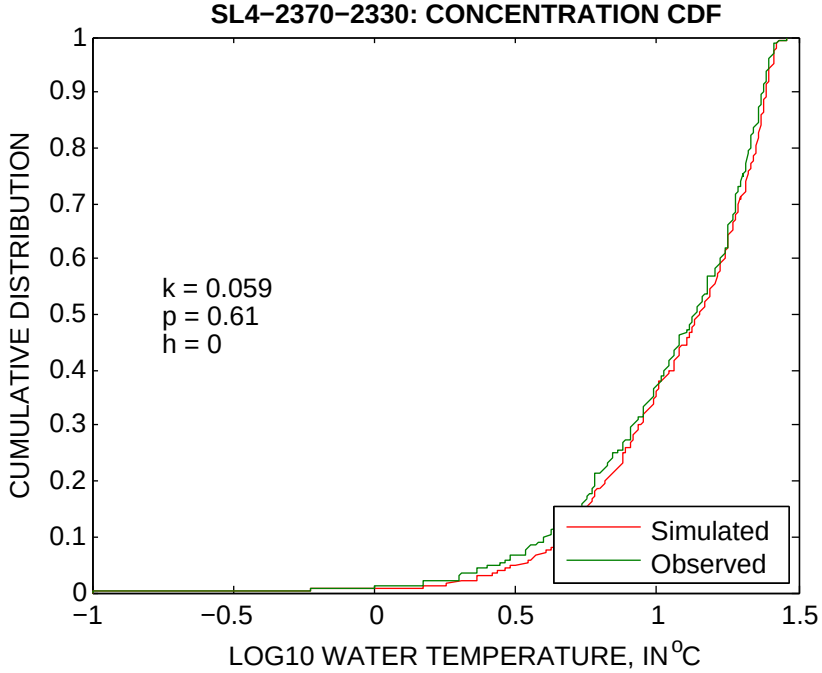
	n	observe	simulate
		307	307
min		0.1	0.049561
		-1	-1.30486
mean		13.6912	14.9515
		1.04217	1.08996
media		13.4	14.385
		1.1271	1.15791
max		29	31.372
		1.4624	1.49654
varian		54.5095	58.9336
		0.112442	0.105246
JB		0.002049	0.003047
		0.001	0.001
		ra	log
%		9.20563	4.58484
err.va		6.92925	0.0201945
rel.std.err		0.12712	0.179599
mod.eff		0.87288	0.820401

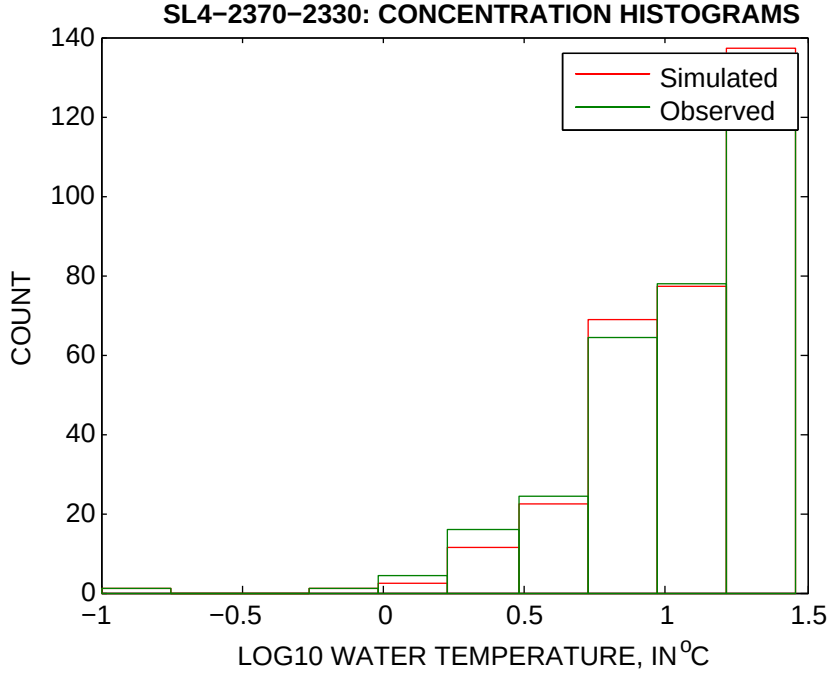
VERSION 2.1

ALL DATA
LOG10

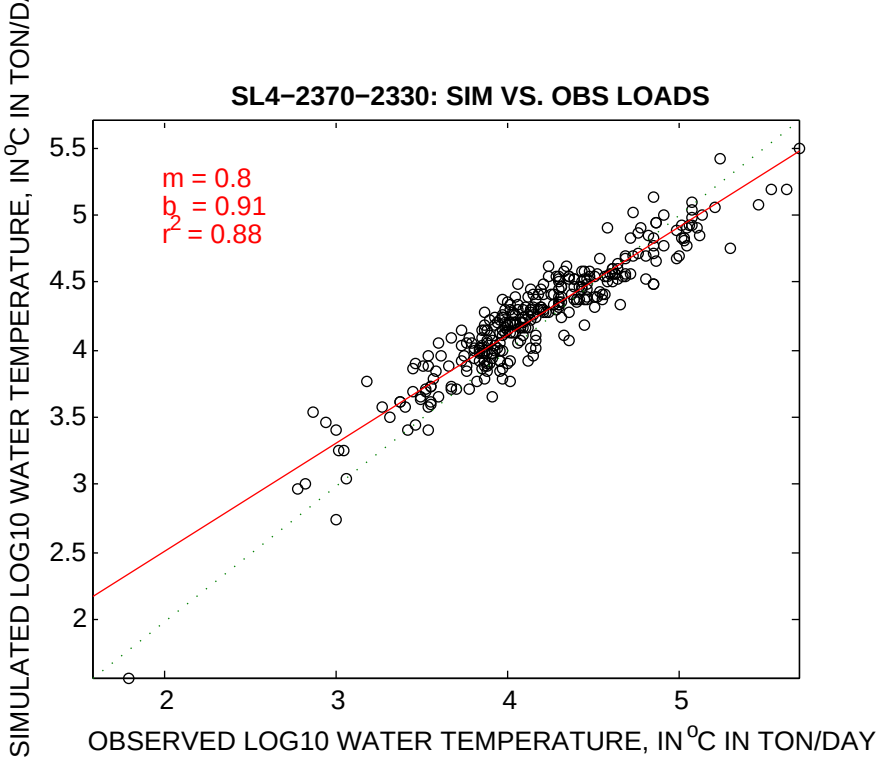


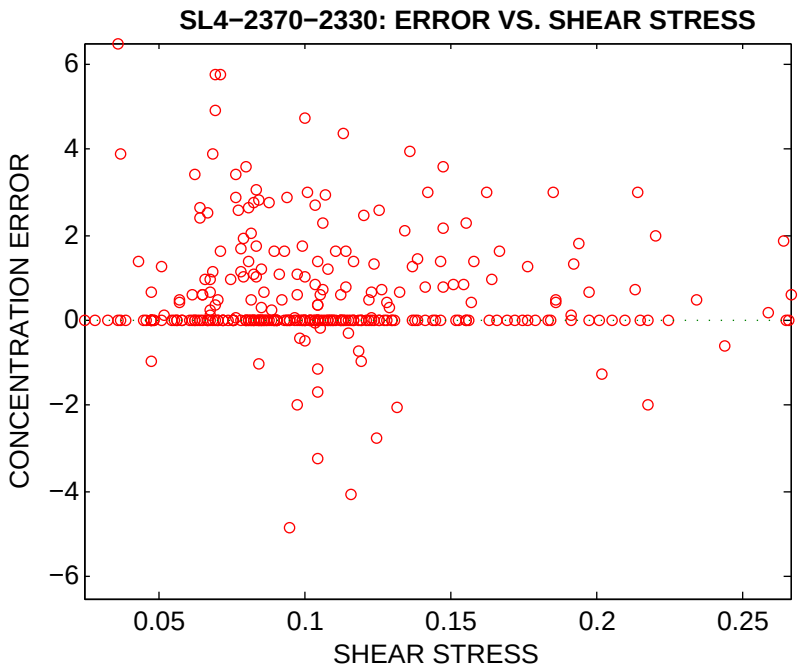


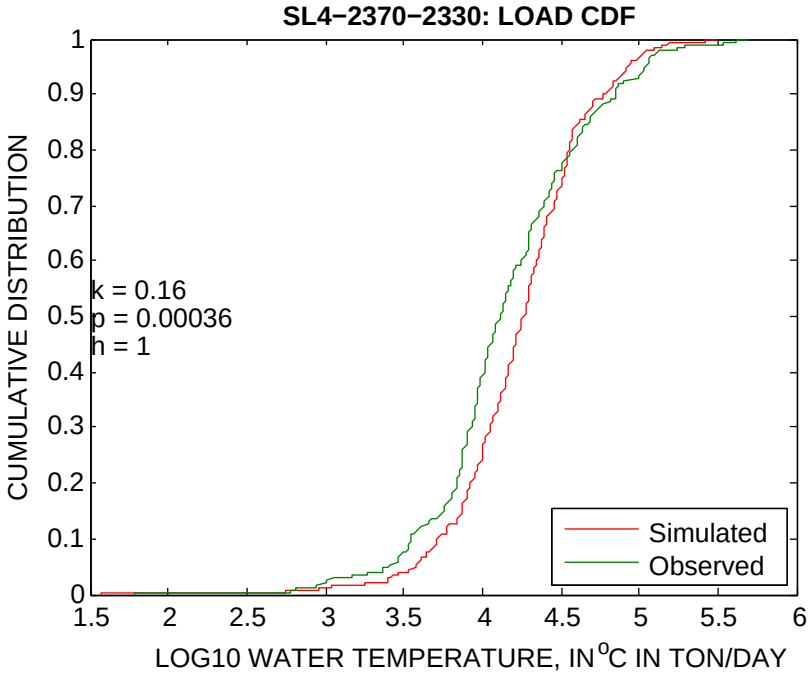


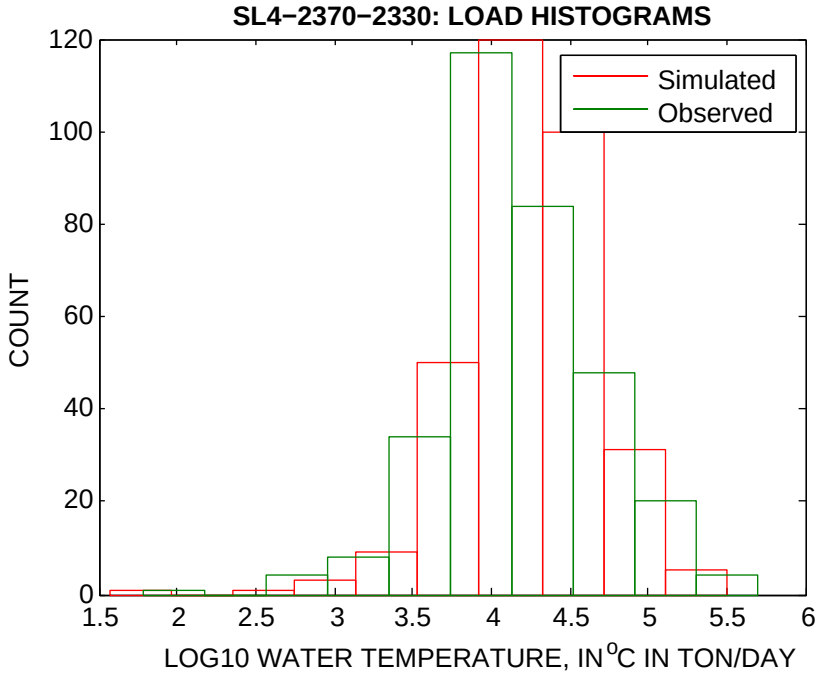


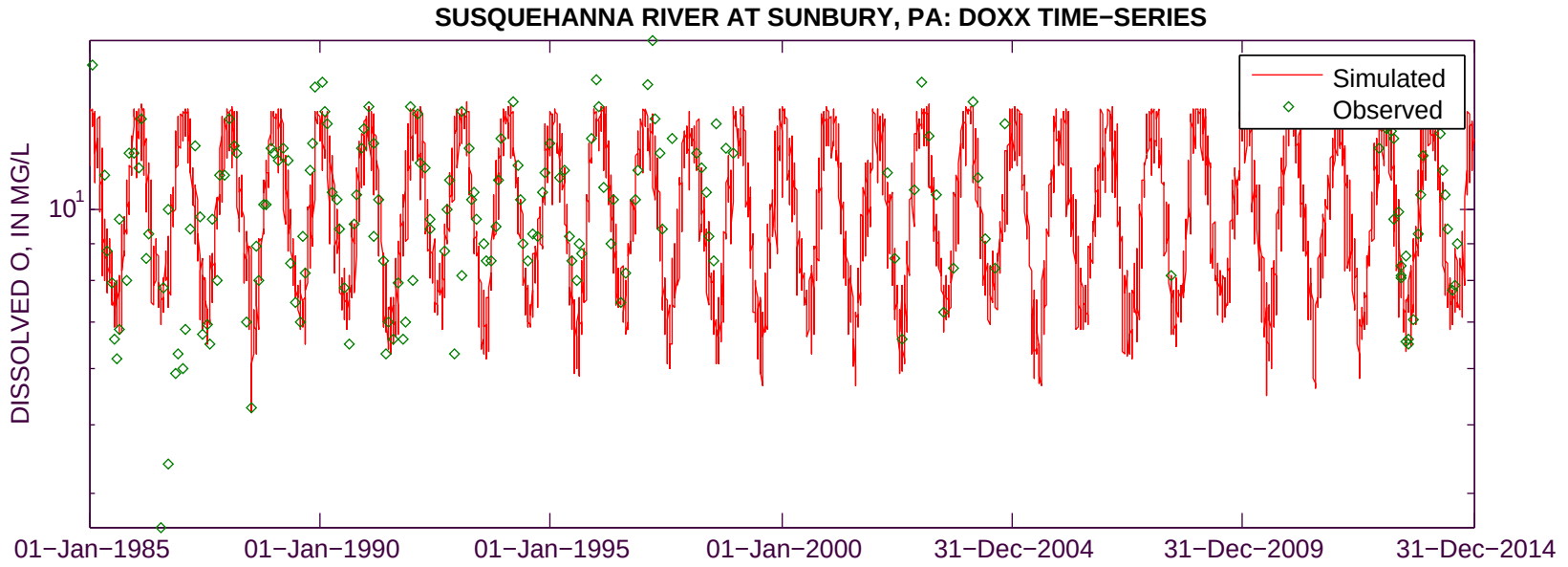
LOAD DATA
LOG10

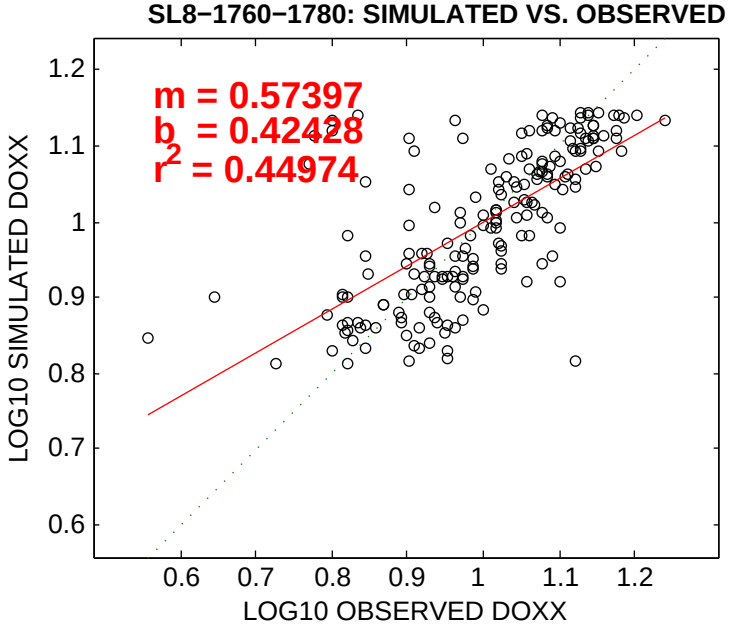


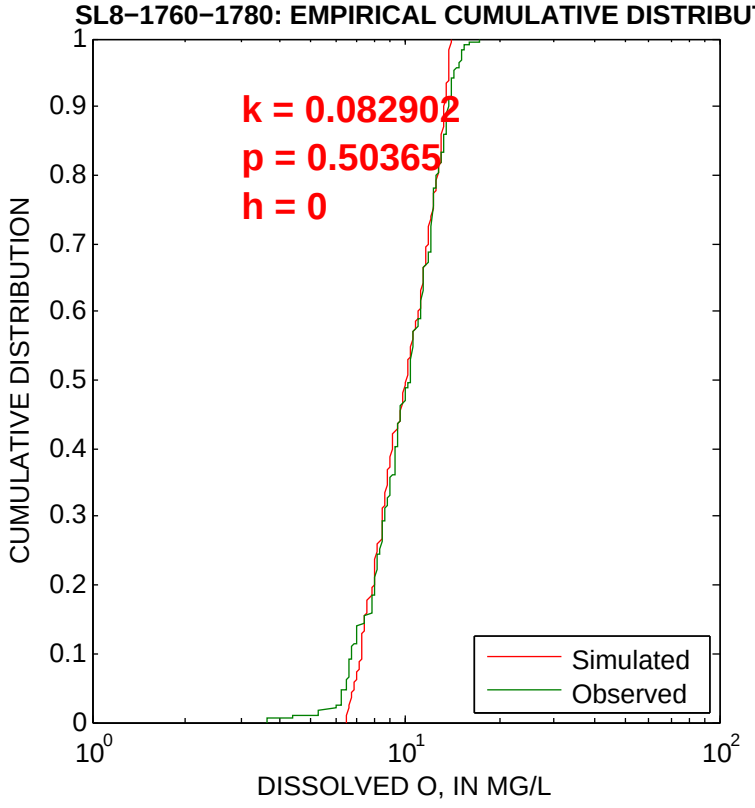












DATA SELECTION

scenario	file
P620171001WQ	DOXX.calib

plot: DOXX - dissolved oxygen

Dates: 1/1/1985 – 12/31/201

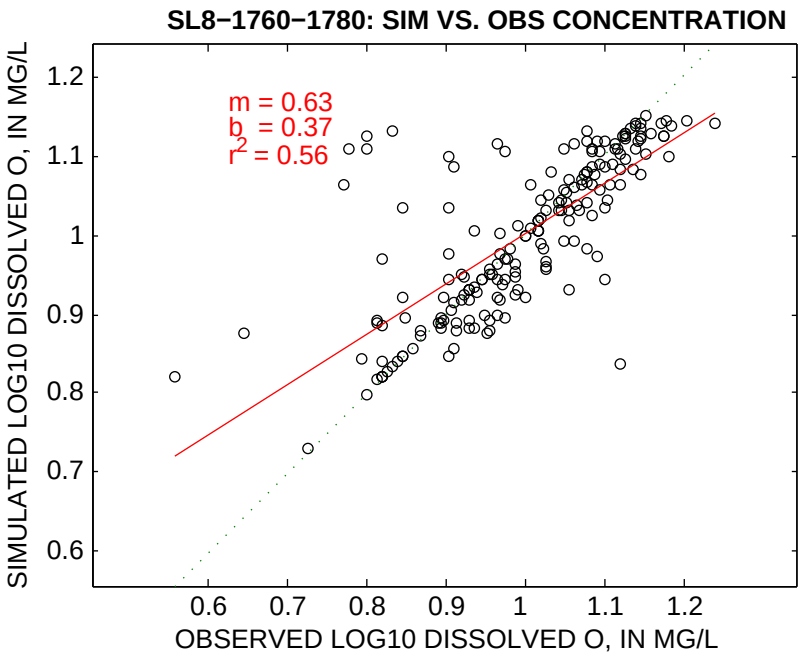
Drive	Directory	Observed
N/A	model	OBS20161101

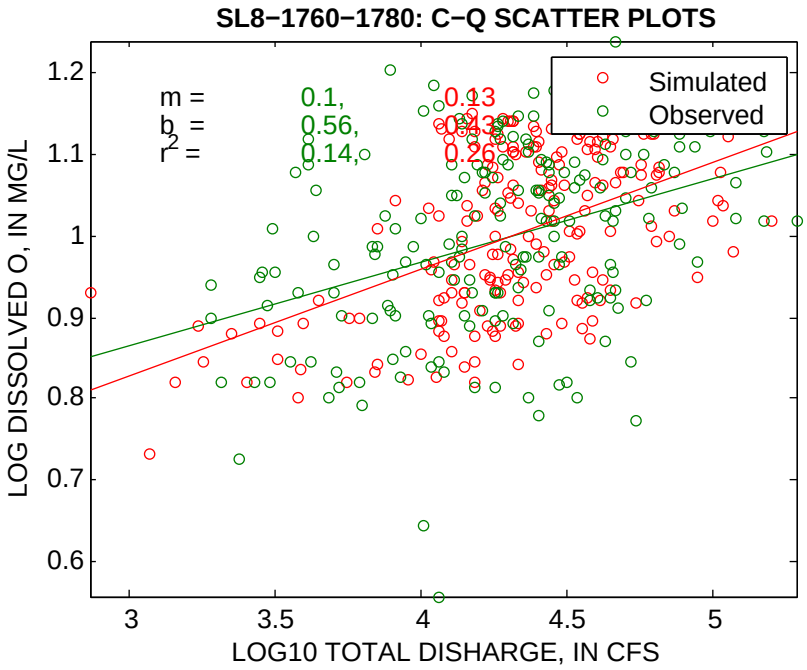
STATISTICS

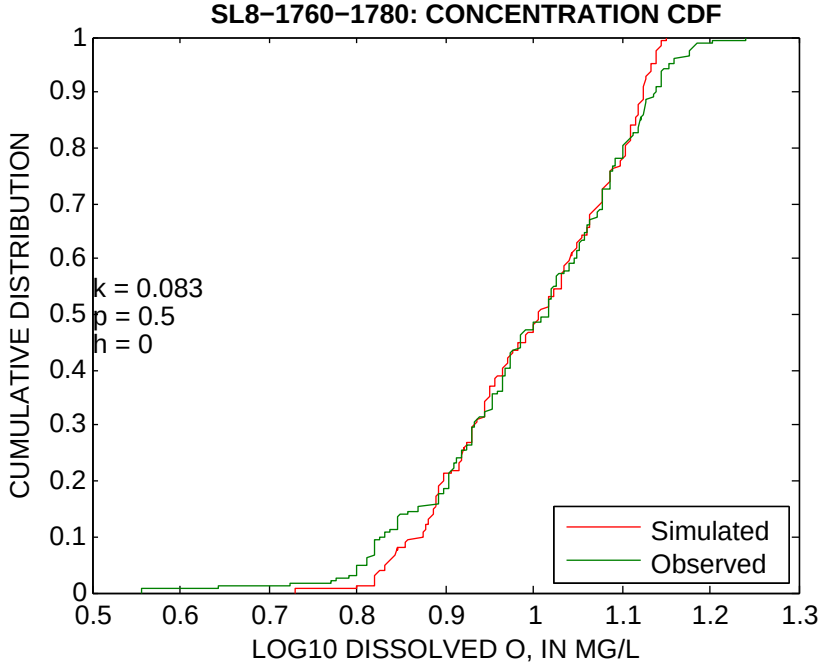
	n	193	193
		observe	simulate
min		3.6	6.4957
		0.556303	0.812626
mean		10.2842	10.1842
		0.997481	0.996809
media		10.4	10.096
		1.01703	1.00415
max		17.4	13.959
		1.24055	1.14485
varian		6.70274	5.18384
		0.0134725	0.00986893
JB		0.141111	0.006553
		0.013938	0.007343
		ra	log
%		-0.972711	-0.067403
err.va		3.65398	0.00787624
rel.std.err		0.545148	0.584616
mod.eff		0.454852	0.415384

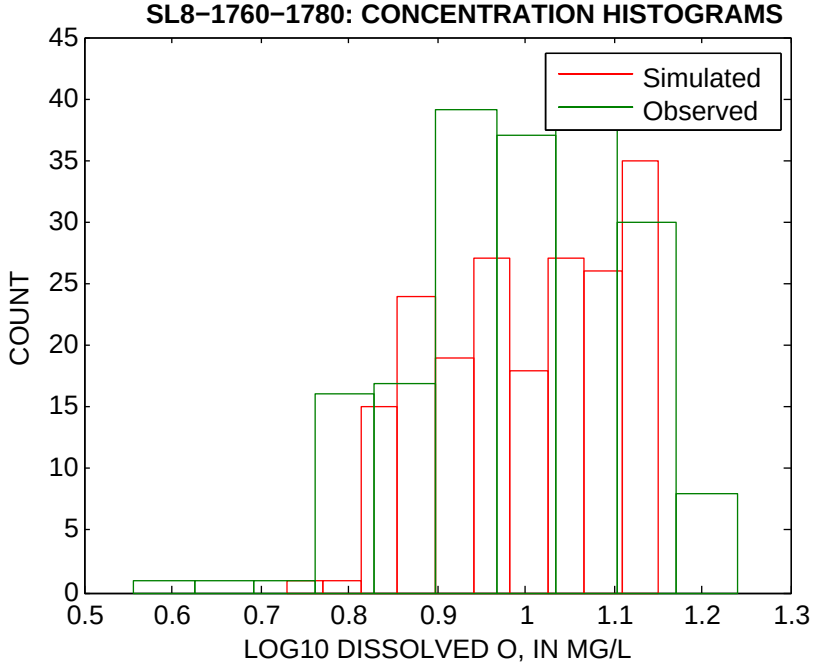
VERSION 2.1

ALL DATA
LOG10

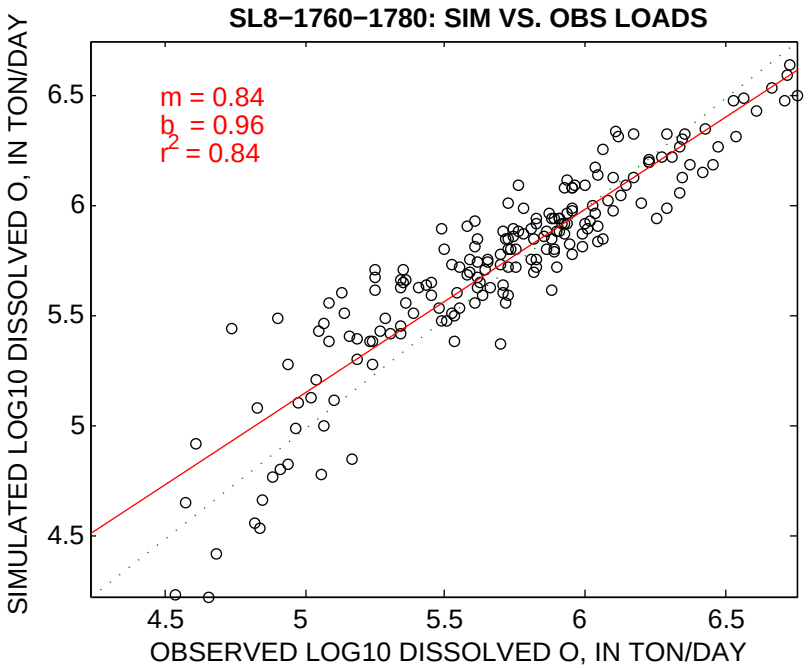


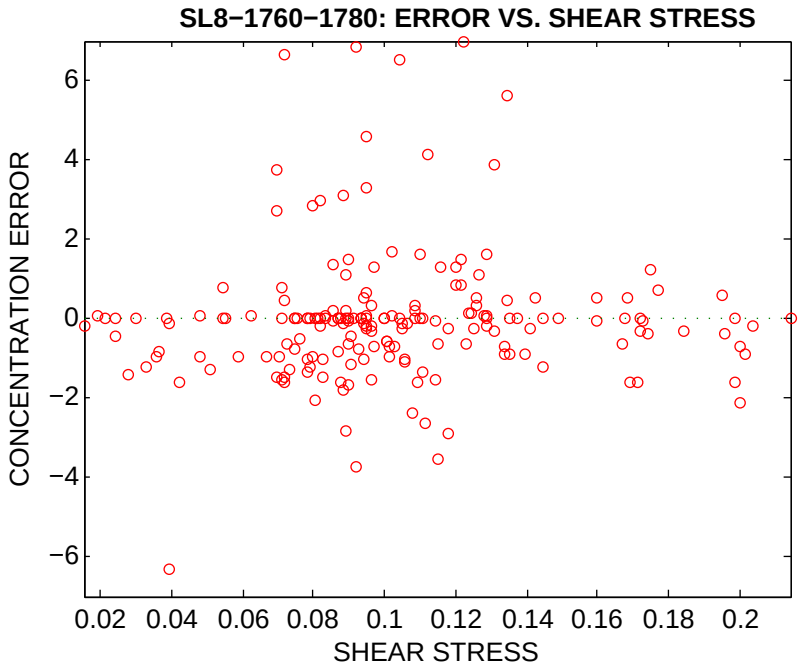


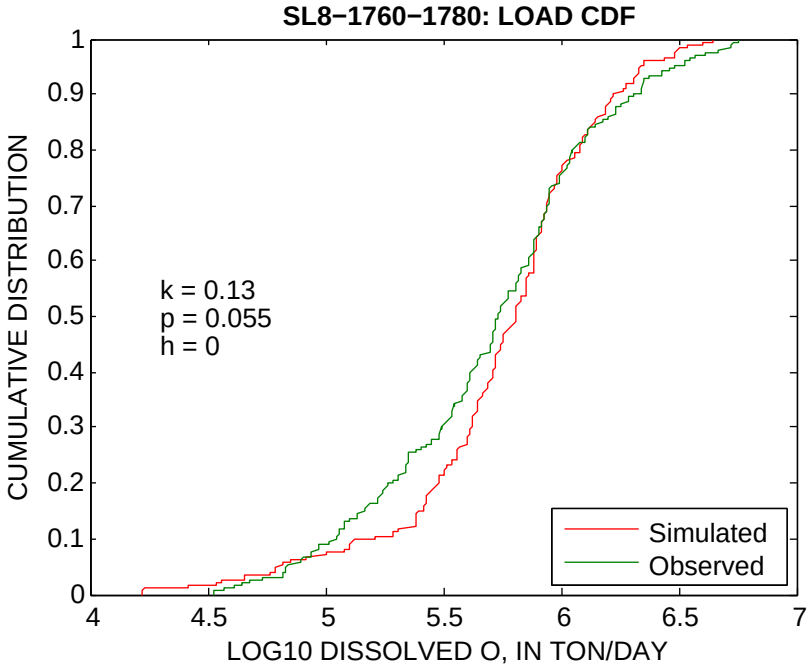


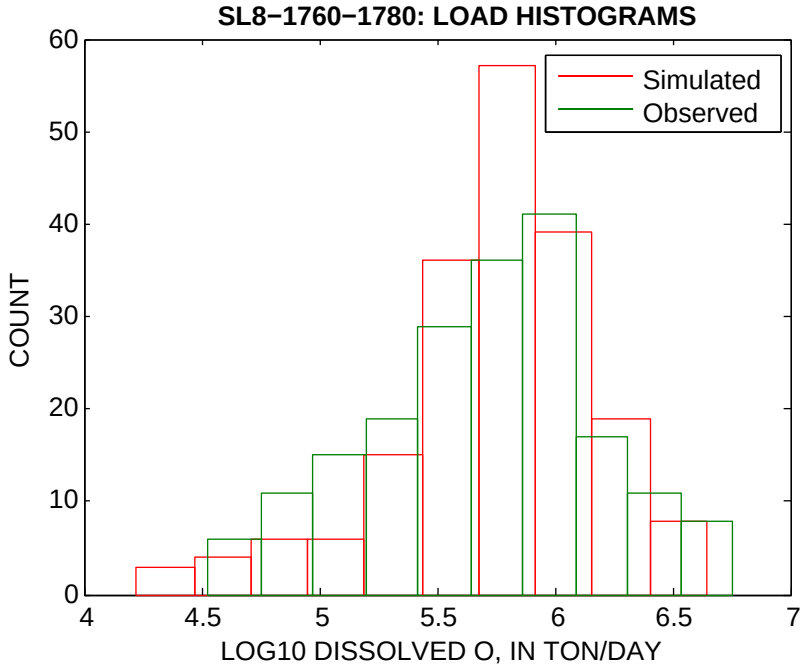


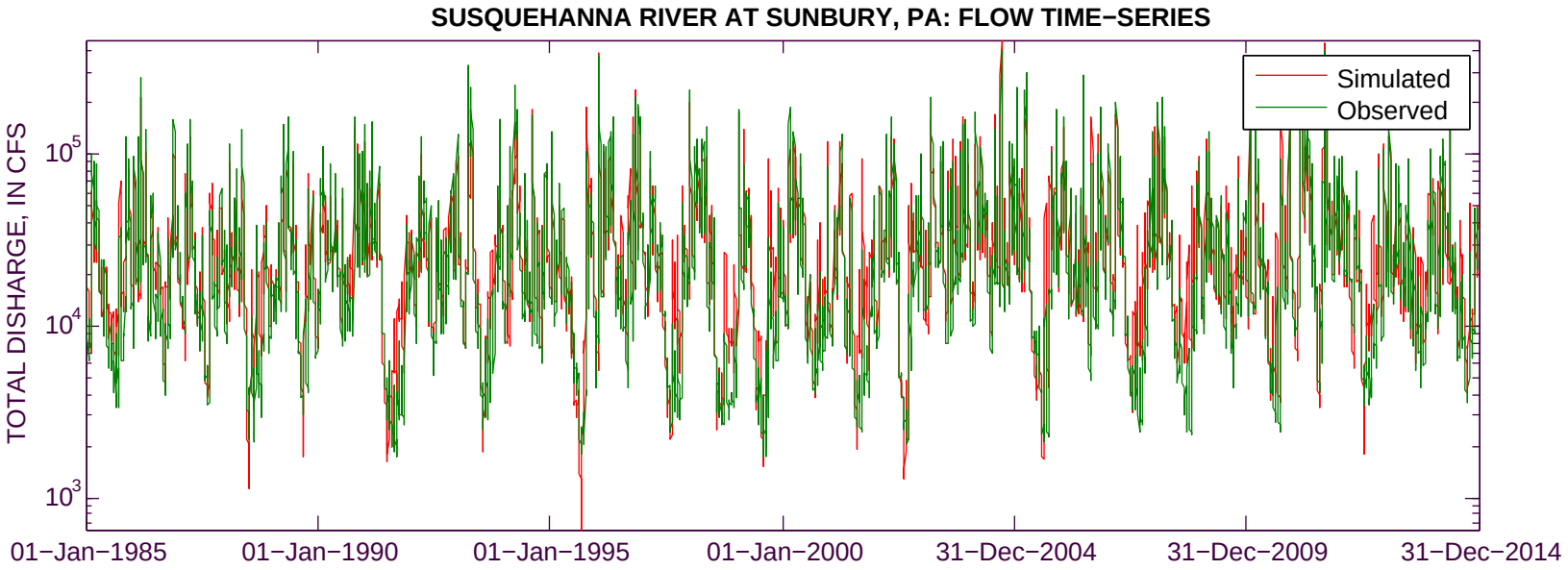
LOAD DATA
LOG10

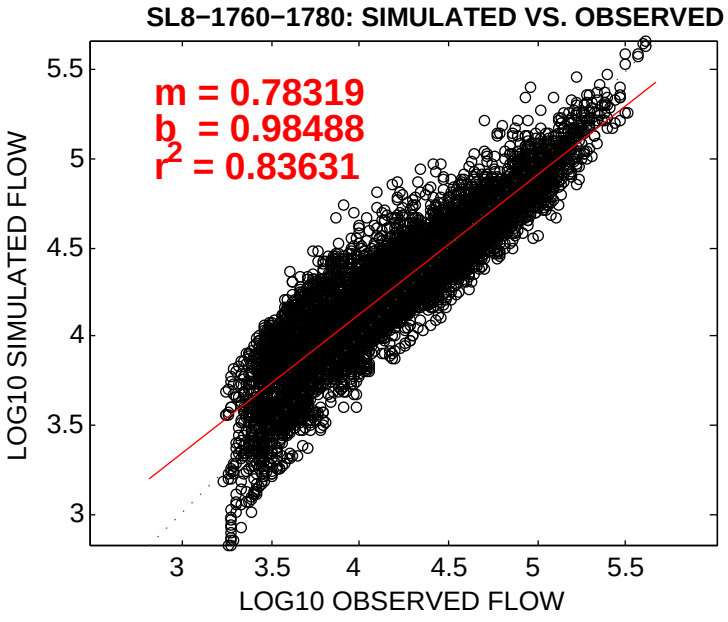


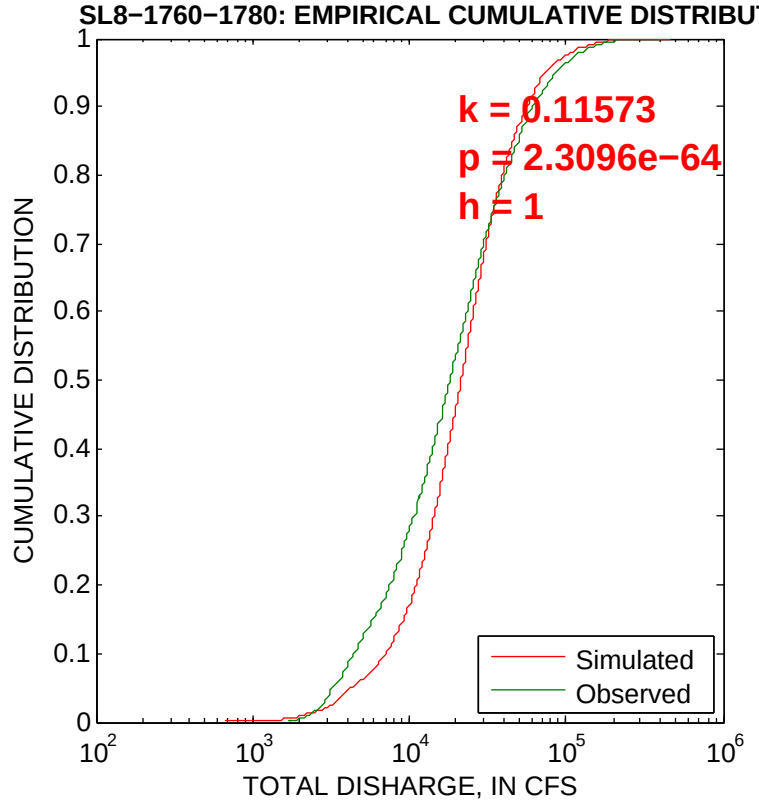












DATA SELECTION

scenario: P620171001WQ | file: FLOW.calib

plot: FLOW - total discharge

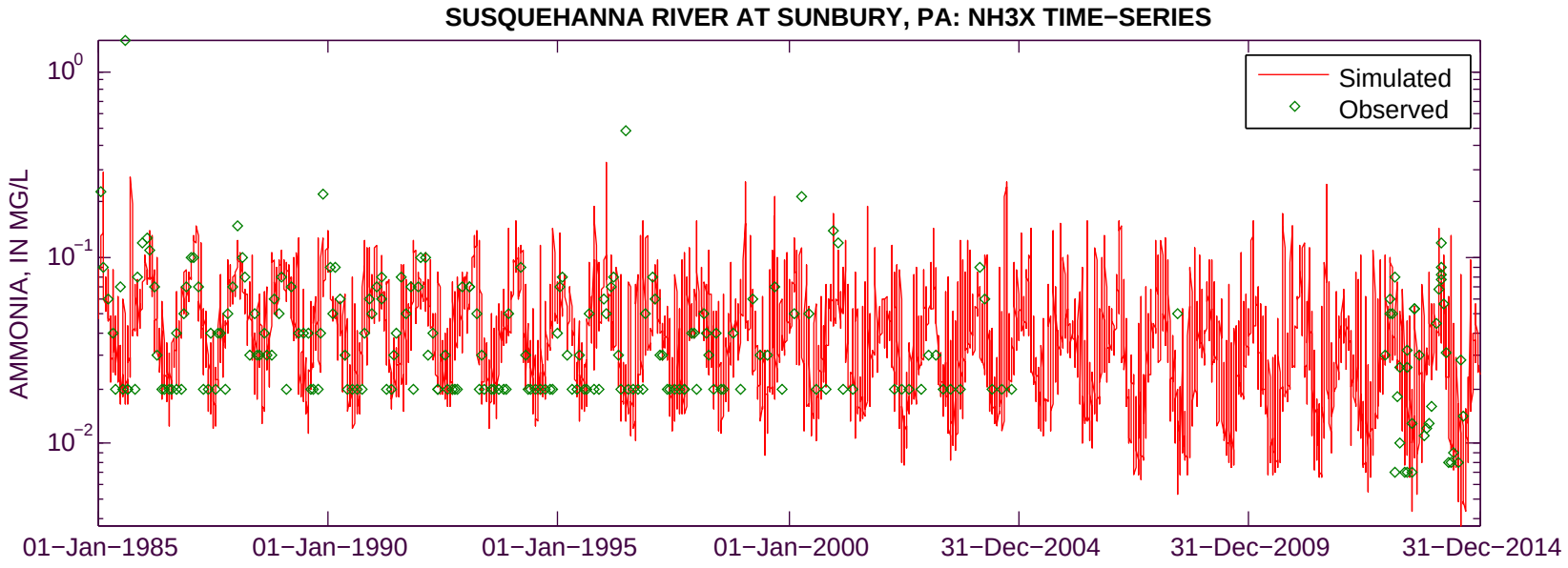
Dates: 1/1/1985 – 12/31/201

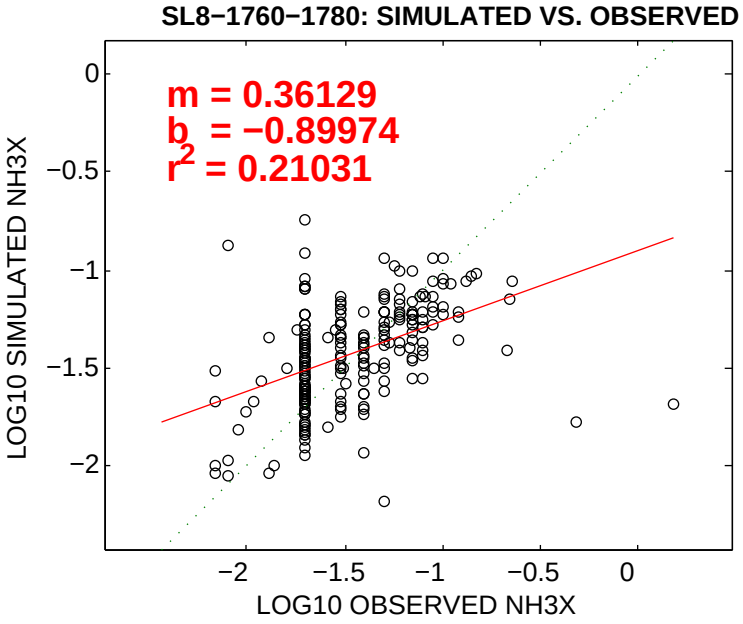
Drive: N/A | Directory: model | Observed: OBS20161101

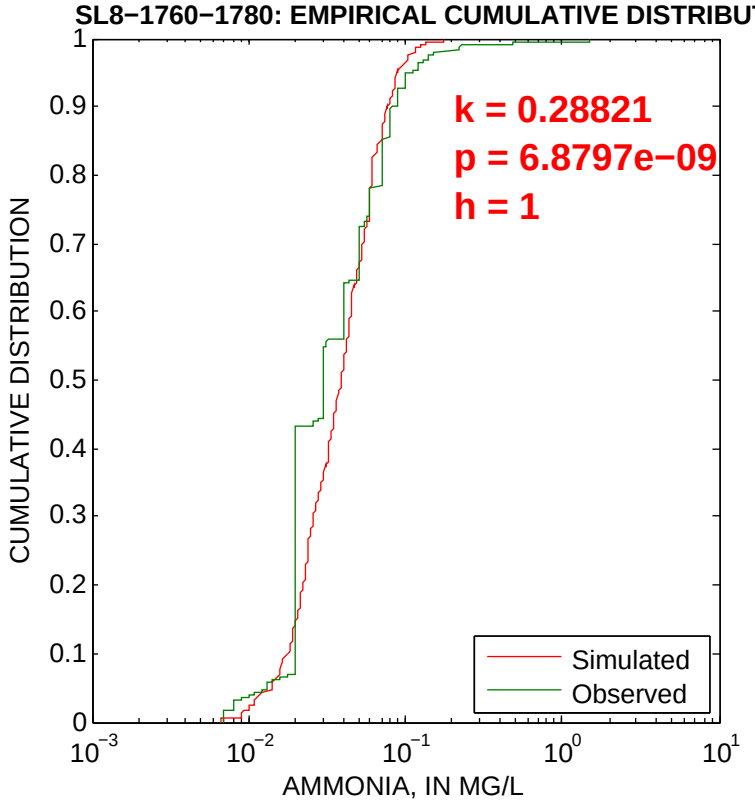
STATISTICS

		observe	simulate
n		10957	10957
min		1720	654.02
		3.23553	2.81559
mean		28232.1	28590
		4.24858	4.31233
media		18300	21483
		4.26245	4.33209
max		406000	465090
		5.60853	5.66754
varian		1.04074e+0	7.71396e+
		0.179896	0.131944
JB		0.001	0.001
		0.001	0.001
		ra	log
%		1.26767	1.50062
err.va		1.63918e+0	0.0341193
rel.std.err		0.157501	0.189662
mod.eff		0.842499	0.810338

VERSION 2.1







DATA SELECTION

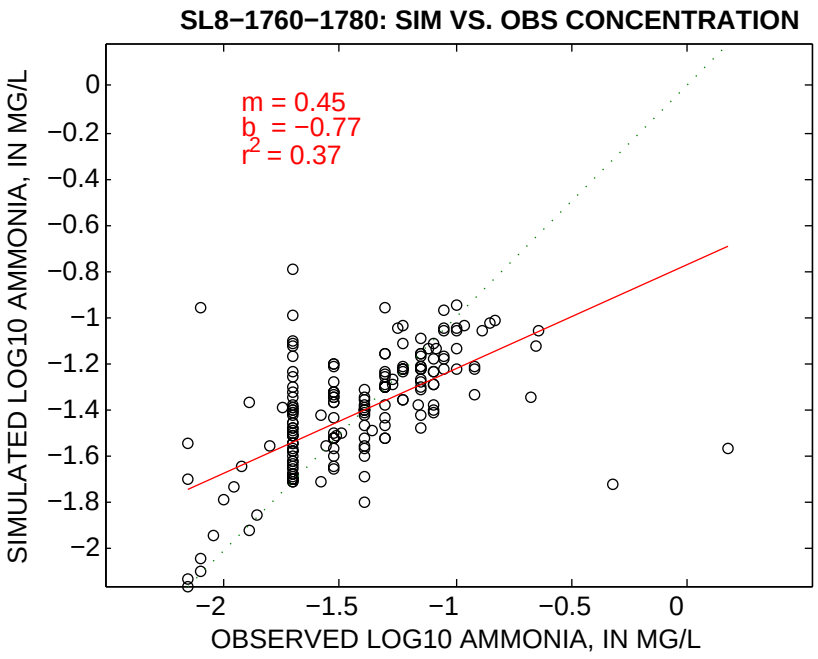
scenario: P620171001WQ
file: NH3X.calib
plot: NH3X - ammonia
Dates: 1/1/1985 12/31/201
Drive: N/A
Directory: model
Observed: OBS20161101

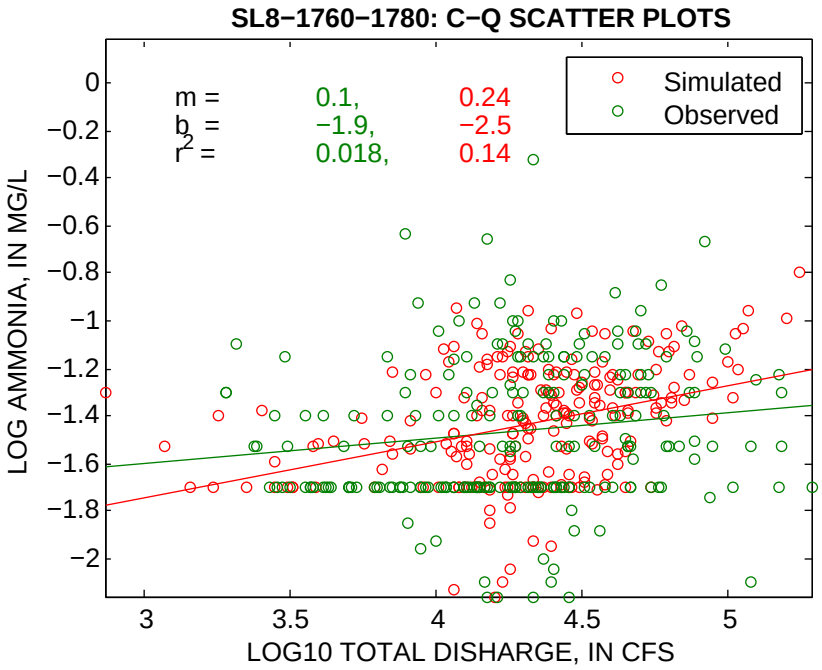
STATISTICS

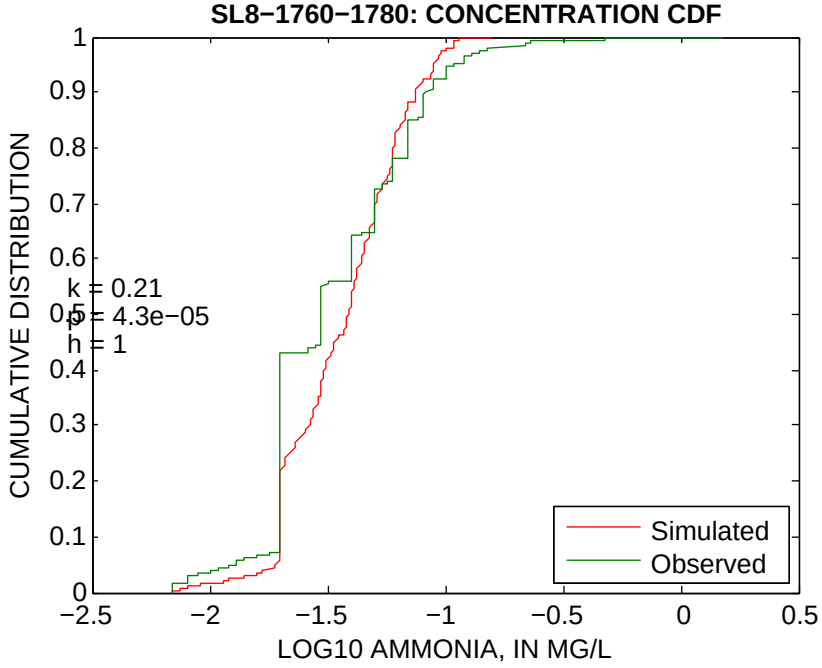
	n	observe	simulate
		229	229
min		0.007	0.0066941
		-2.1549	-2.17431
mean		0.0512183	0.0440478
		-1.46229	-1.42804
media		0.03	0.039295
		-1.52288	-1.40566
max		1.5	0.1786
		0.176091	-0.748119
varian		0.0112761	0.00067100
		0.106208	0.0659171
JB		0.001	0.001
		0.001	0.259425
		ra	log
%		-14	-2.34235
err.va		0.0115969	0.0965605
rel.std.err		1.02845	0.909163
mod.eff		-0.0284502	0.0908371

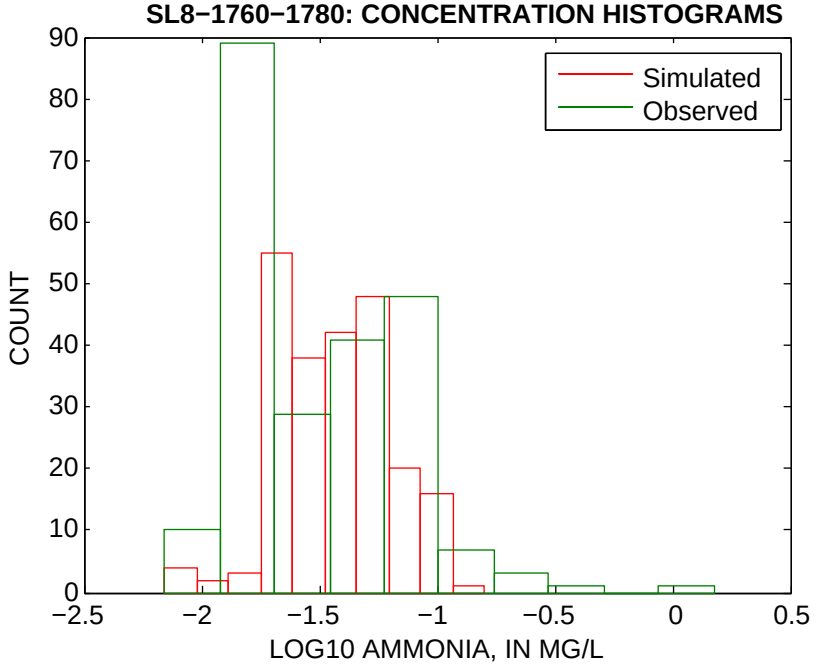
VERSION 2.1

ALL DATA
LOG10

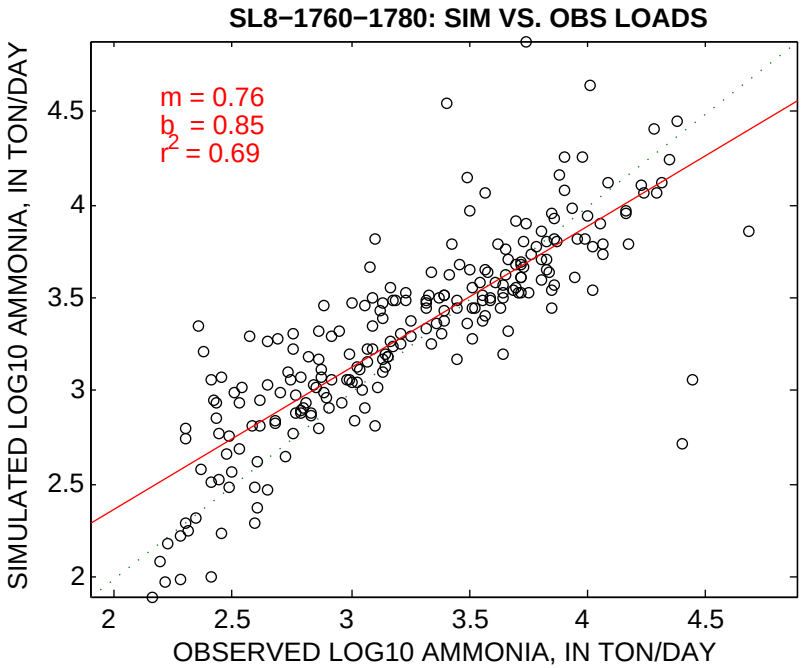


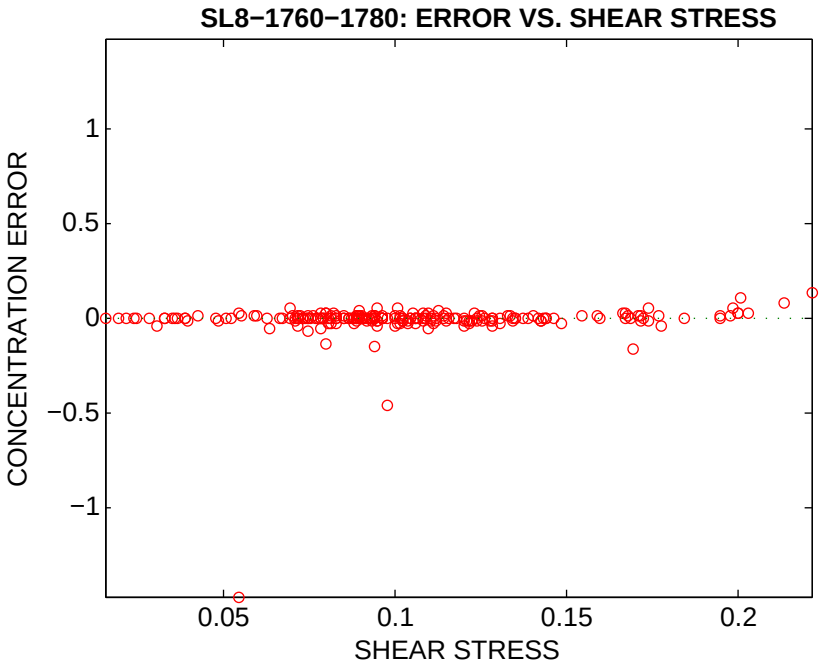


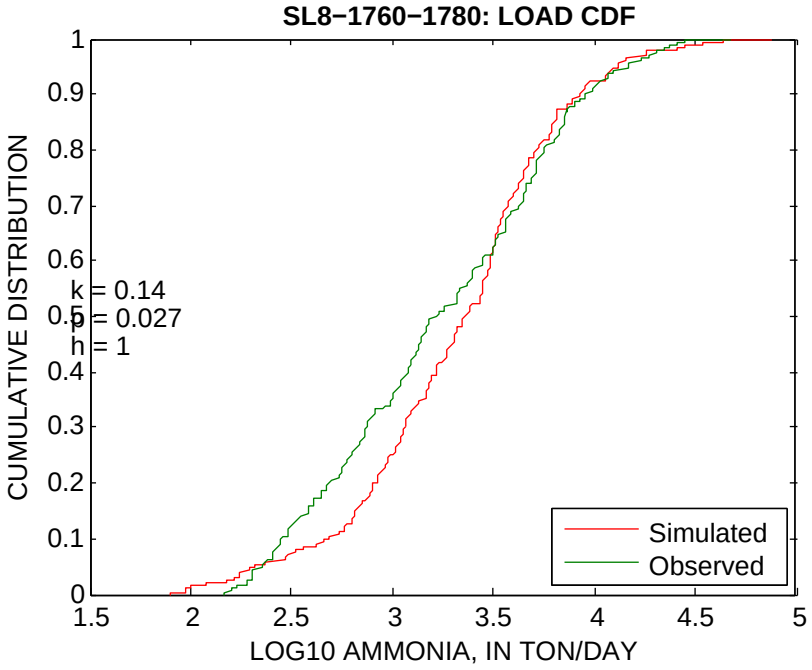


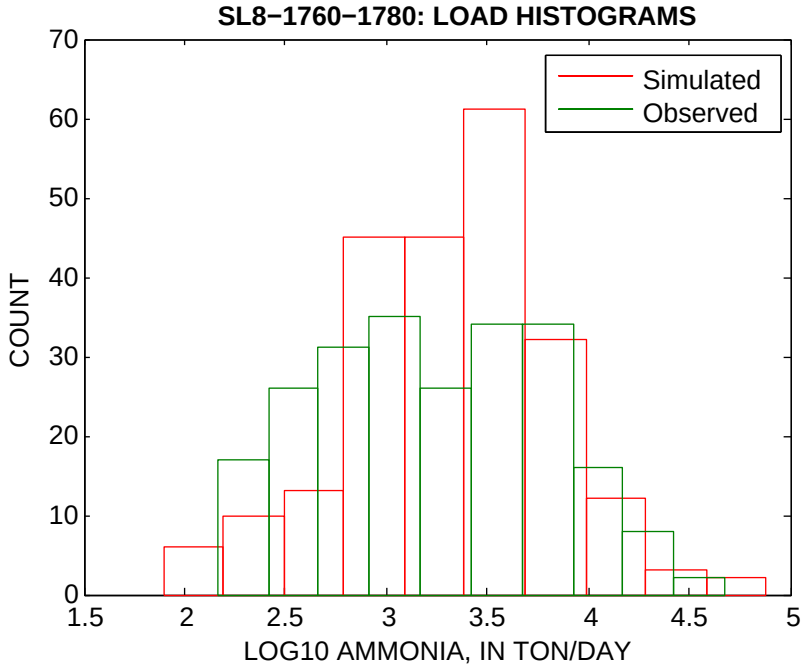


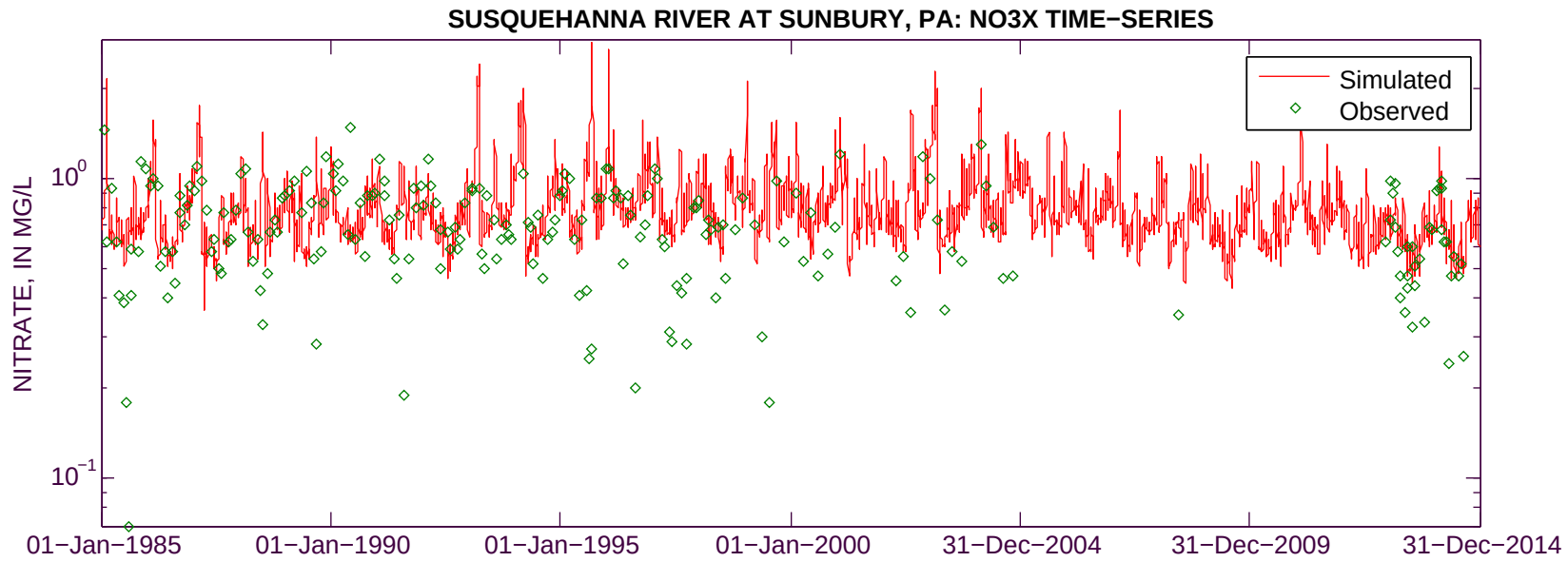
LOAD DATA
LOG10

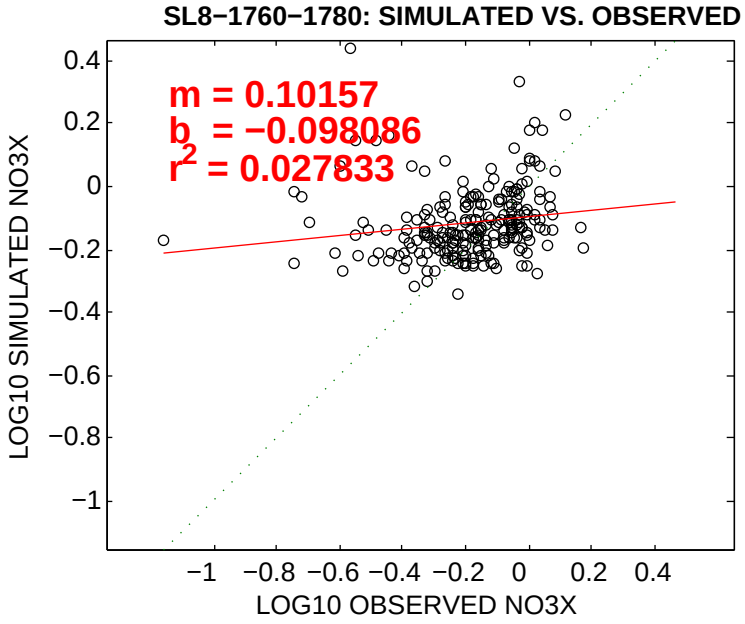


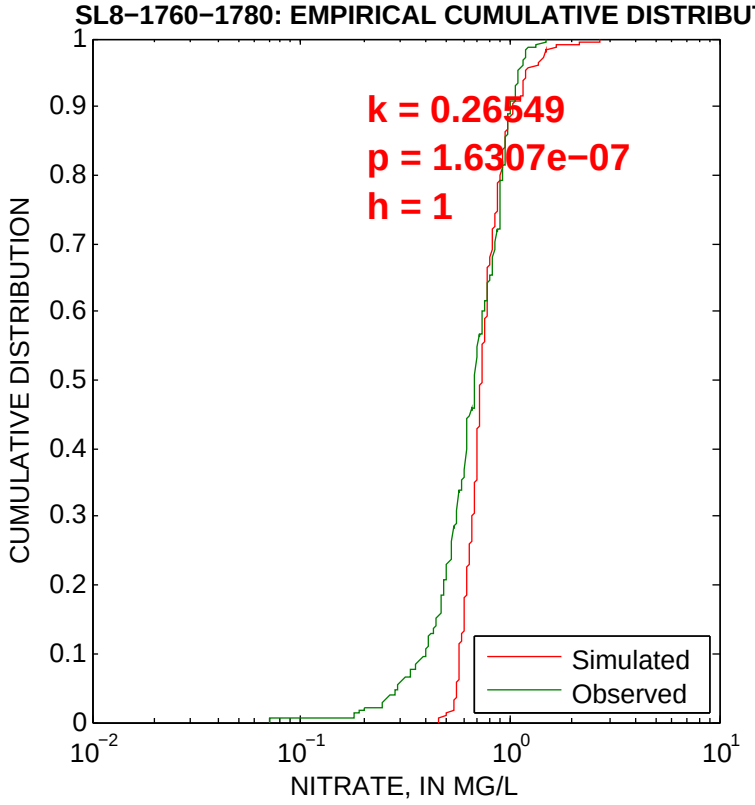












DATA SELECTION

scenario: P620171001WQ | file: NO3X.calib

plot: NO3X - nitrate

Dates: 1/1/1985 – 12/31/201

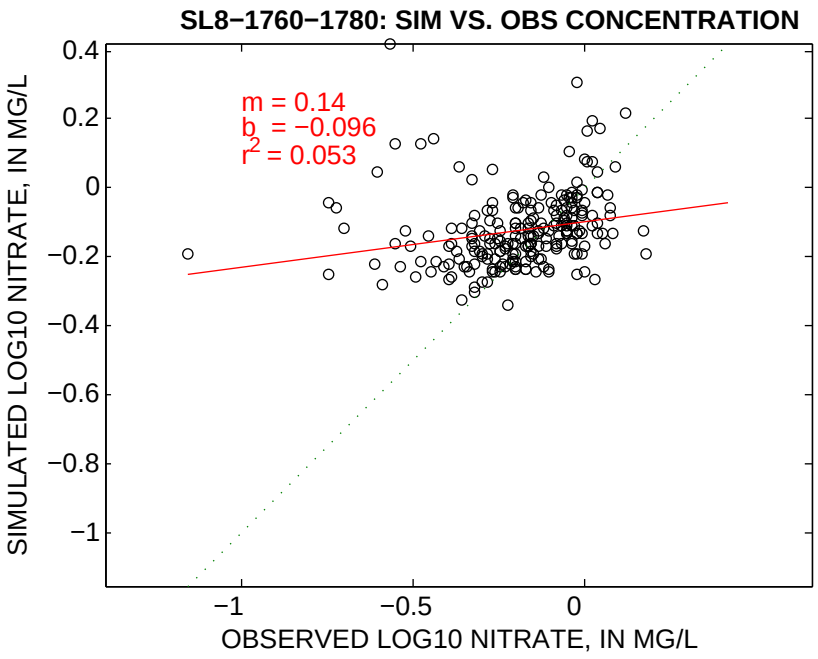
Drive: N/A | Directory: model | Observed: OBS20161101

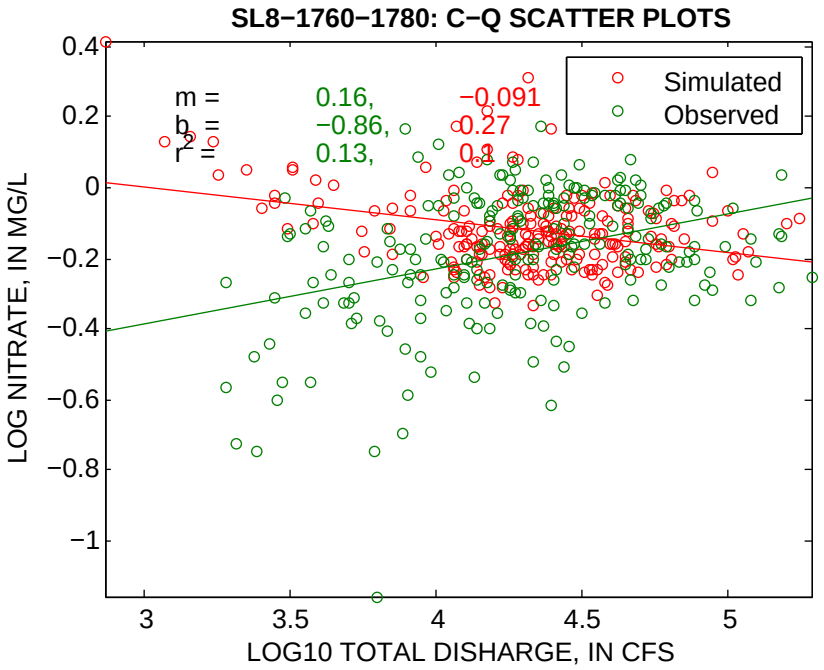
STATISTICS

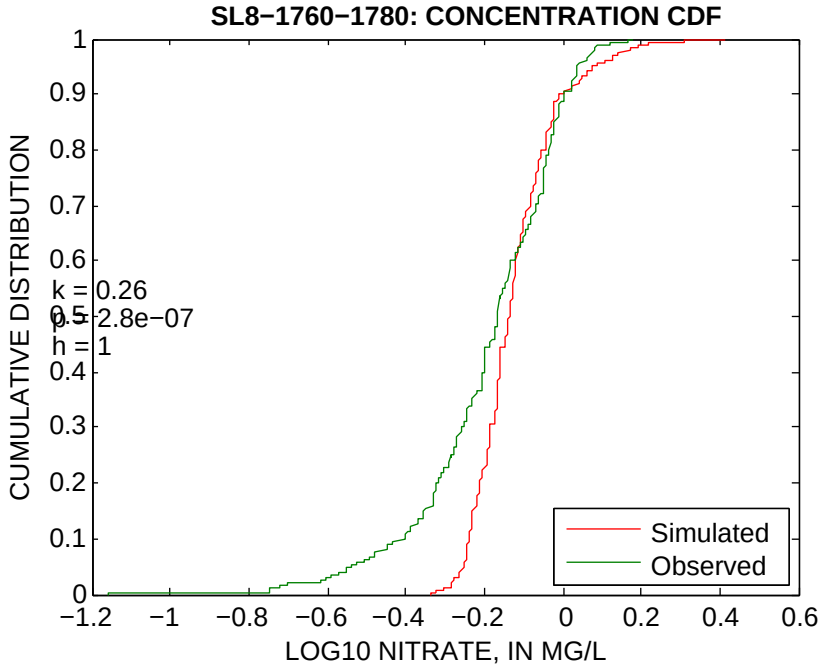
	n	observe	simulate
		226	226
min		0.07	0.45221
		-1.1549	-0.34466
mean		0.701209	0.793024
		-0.1876	-0.11714
media		0.681	0.73053
		-0.166853	-0.136362
max		1.5	2.7221
		0.176091	0.434904
varian		0.063616	0.0673548
		0.0338735	0.0125555
JB		0.357804	0.001
		0.001	0.001
		ra	log
%		13.0938	-37.5585
err.va		0.116951	0.0445346
rel.std.err		1.83839	1.31473
mod.eff		-0.838385	-0.314734

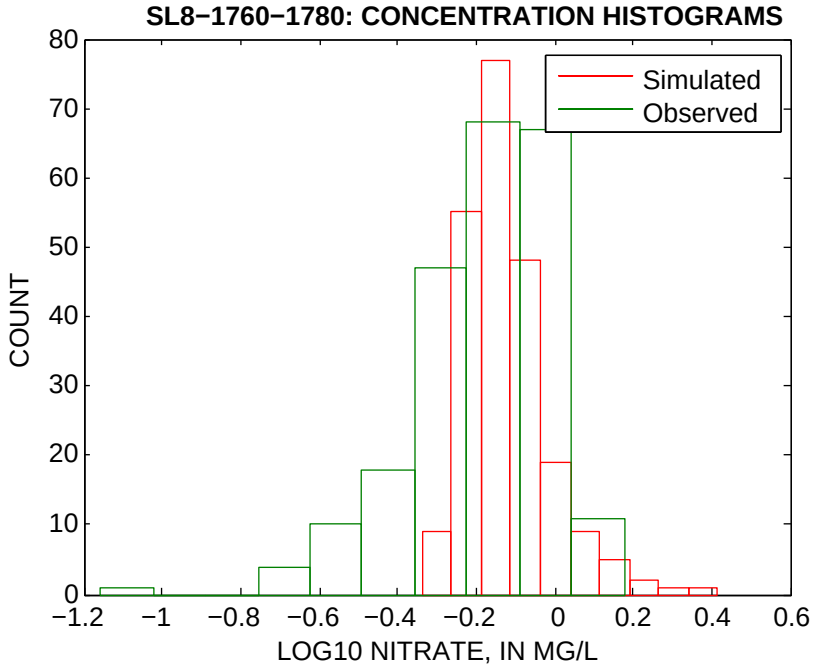
VERSION 2.1

ALL DATA
LOG10

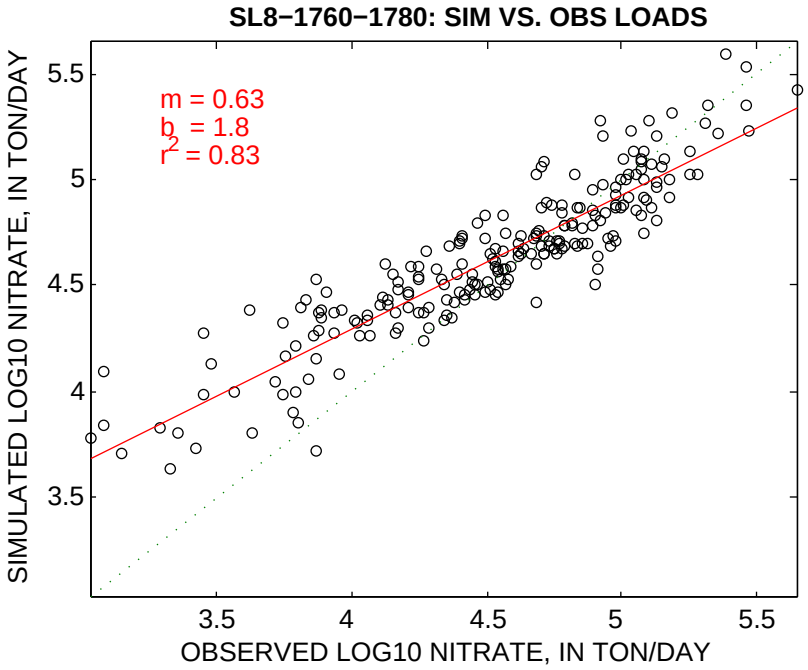


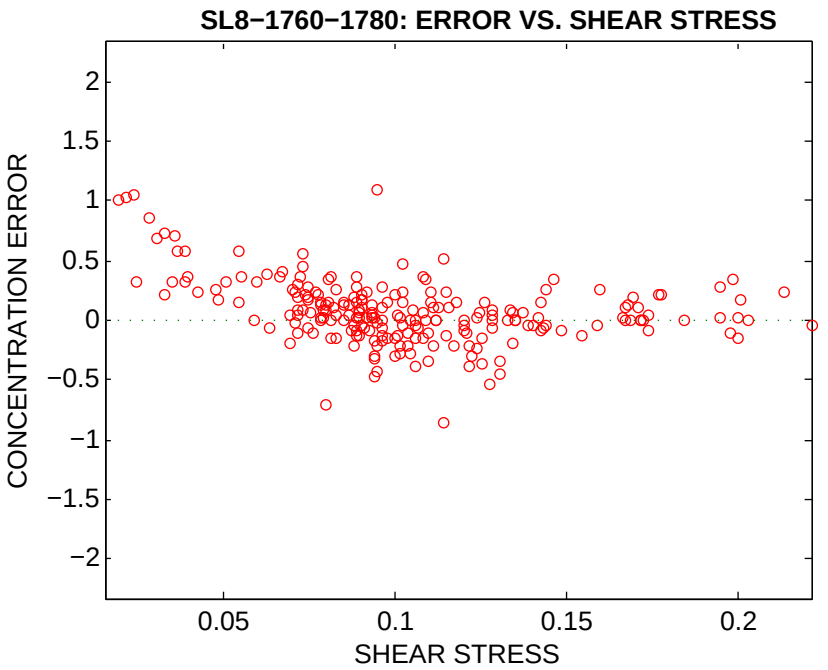


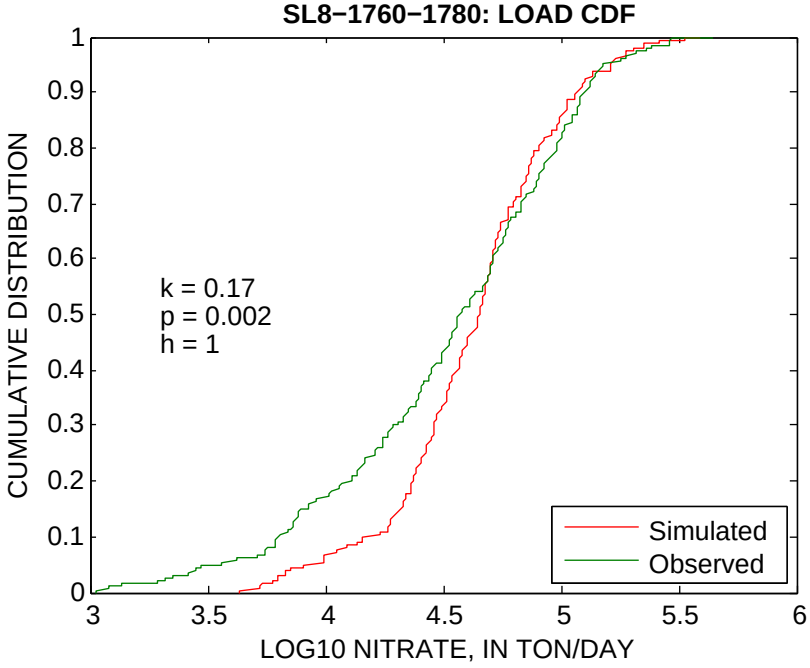


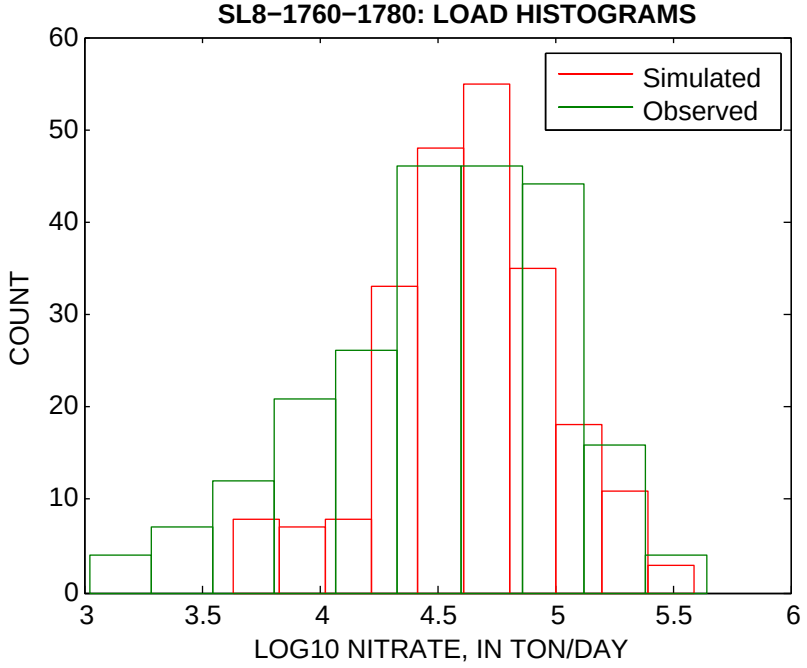


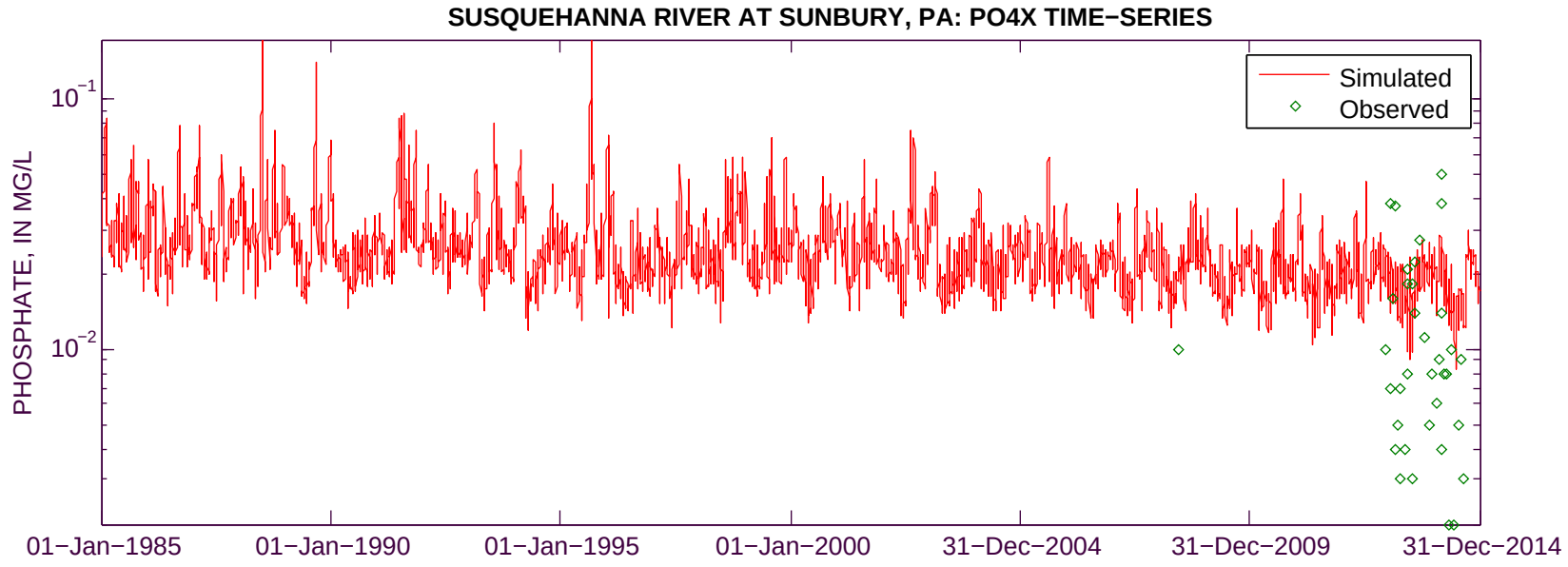
LOAD DATA
LOG10

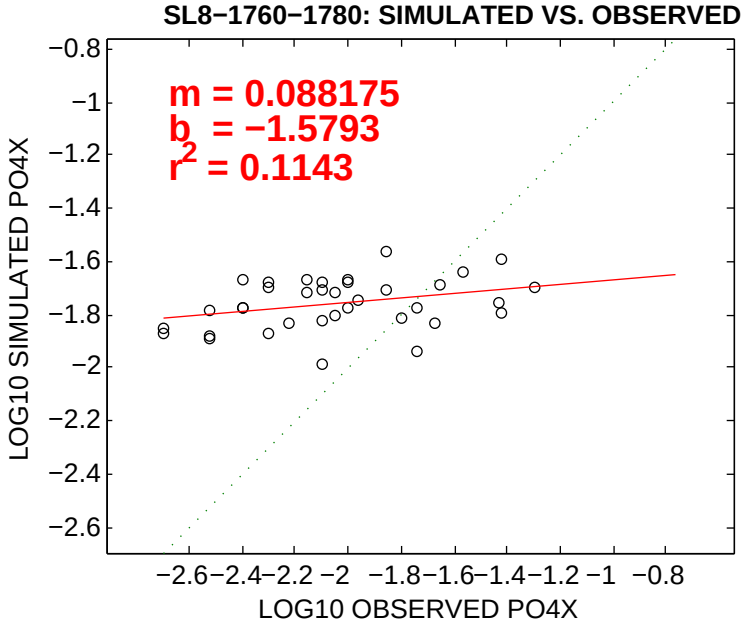


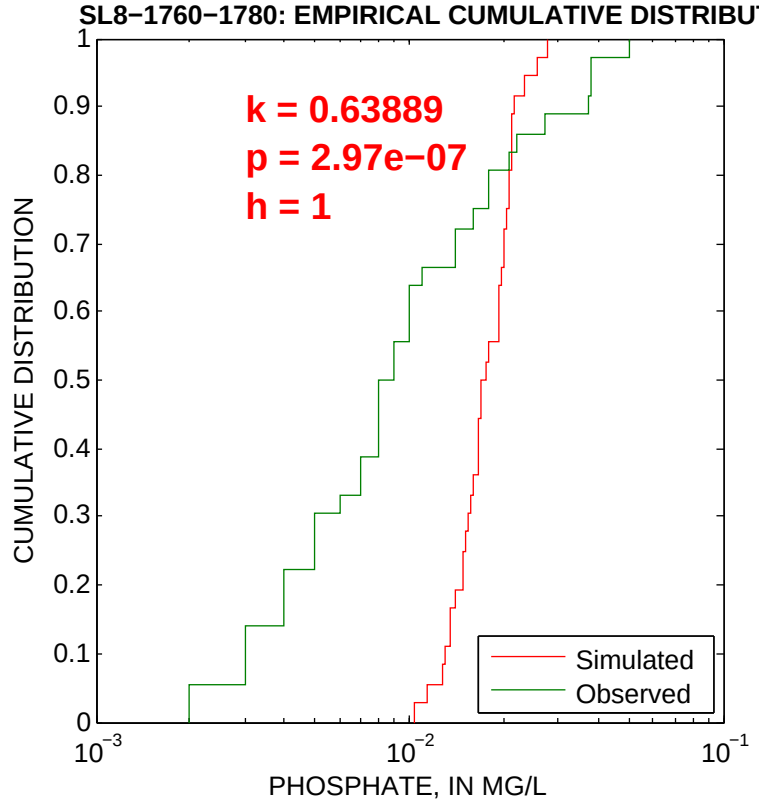












DATA SELECTION

scenario	file
P620171001WQ	PO4X.calib

plot: PO4X - phosphate

Dates: 1/1/1985 – 12/31/201

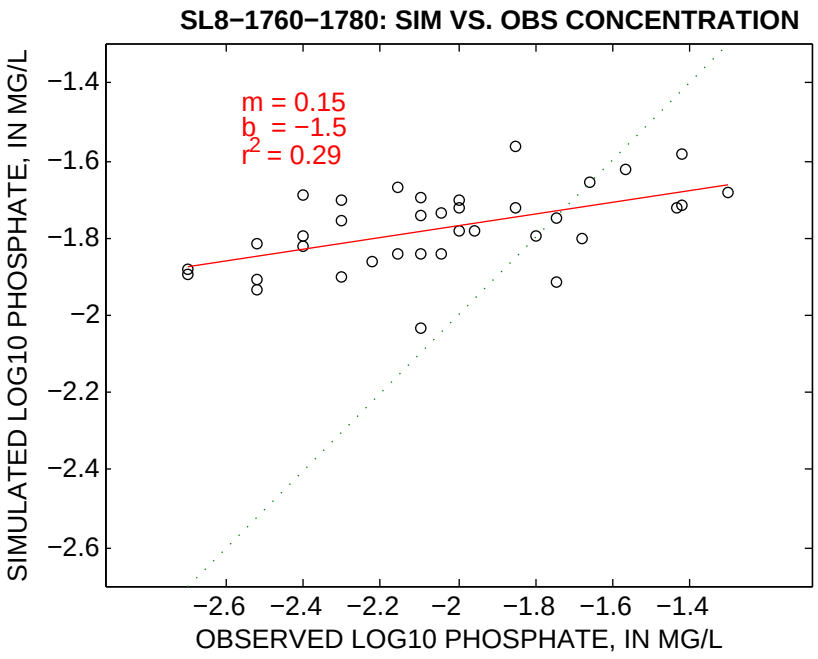
Drive	Directory	Observed
N/A	model	OBS20161101

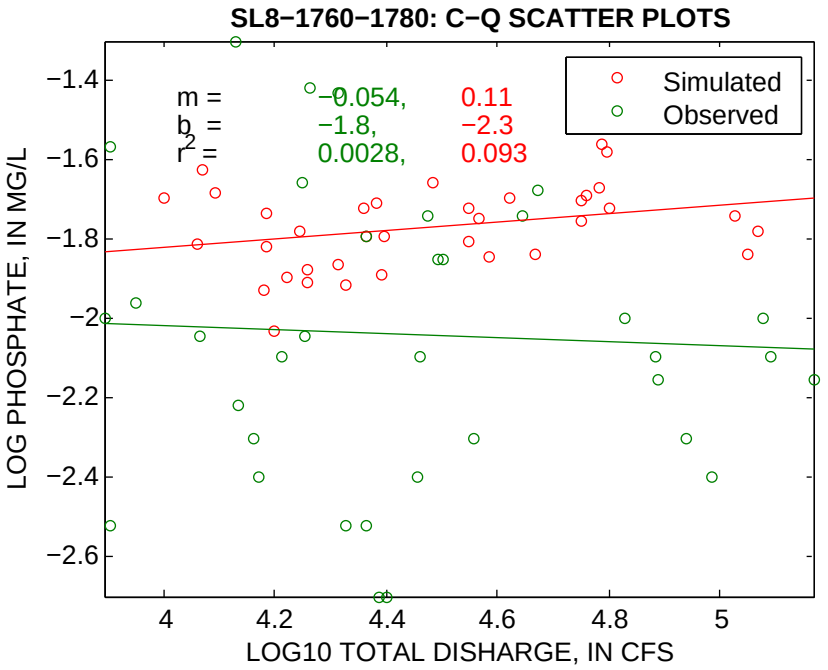
STATISTICS

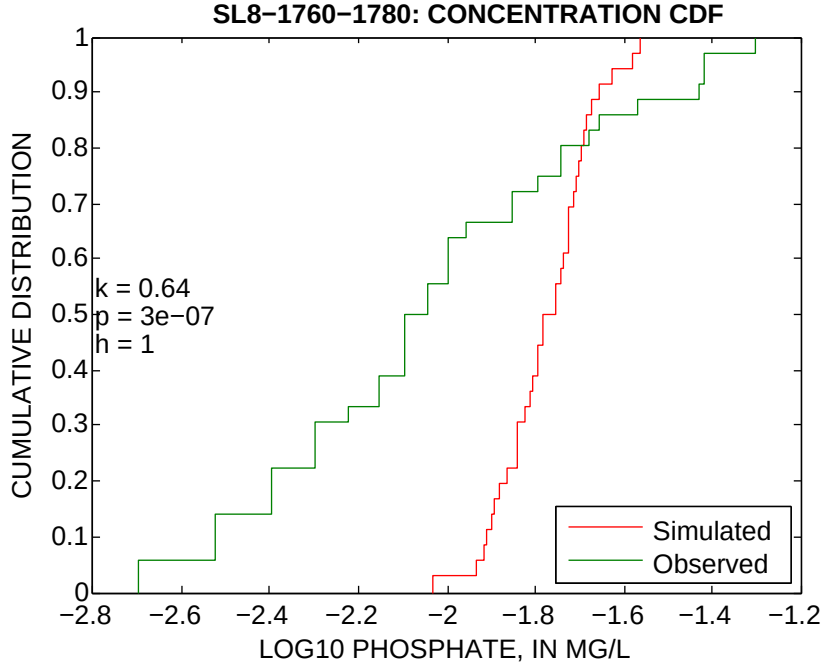
	n	36	36
		observe	simulate
min		0.002	0.010299
		-2.69897	-1.9872
mean		0.0128889	0.0178128
		-2.04176	-1.75936
media		0.0085	0.017283
		-2.07133	-1.76244
max		0.05	0.027702
		-1.30103	-1.55749
varian		0.00013878	1.48948e-0
		0.135078	0.00918787
JB		0.003040	0.5
		0.5	0.5
		ra	log
%		38.2024	-13.8308
err.va		0.00015356	0.202468
rel.std.err		1.10647	1.4989
mod.eff		-0.106469	-0.498901

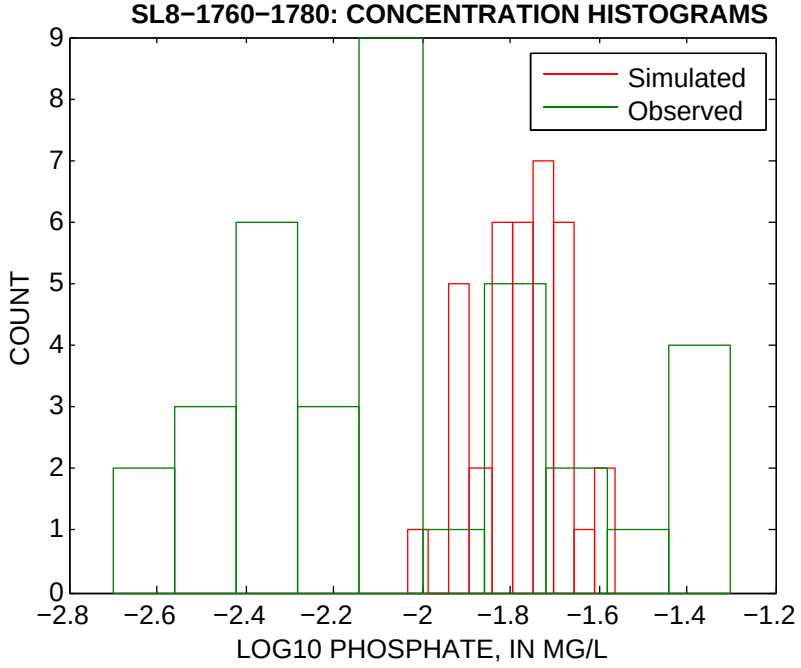
VERSION 2.1

ALL DATA
LOG10

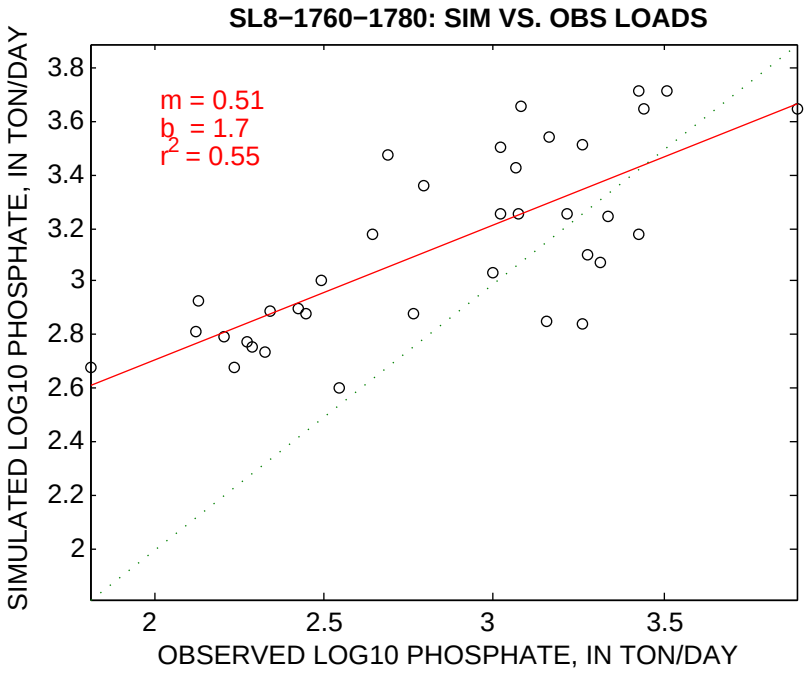


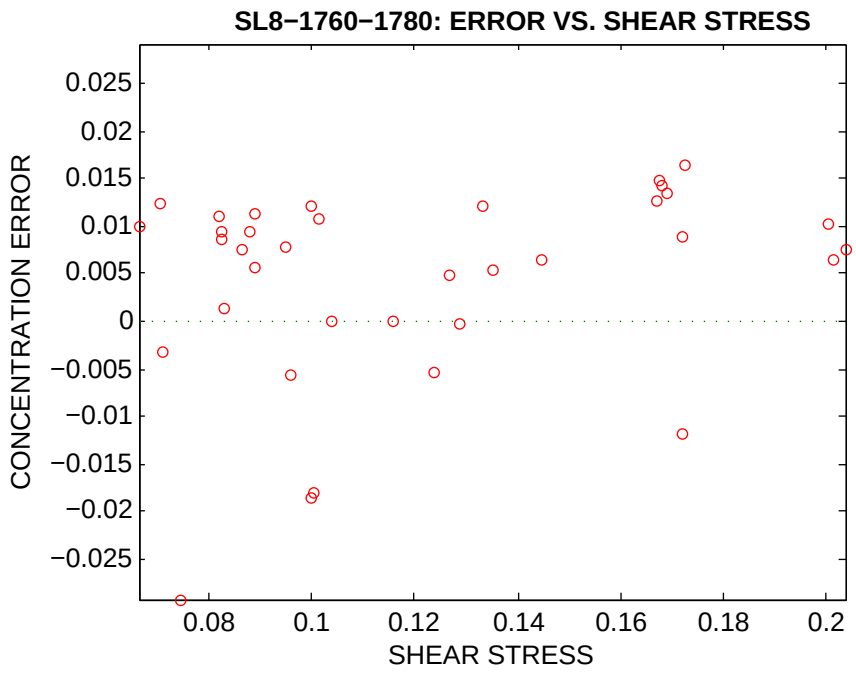


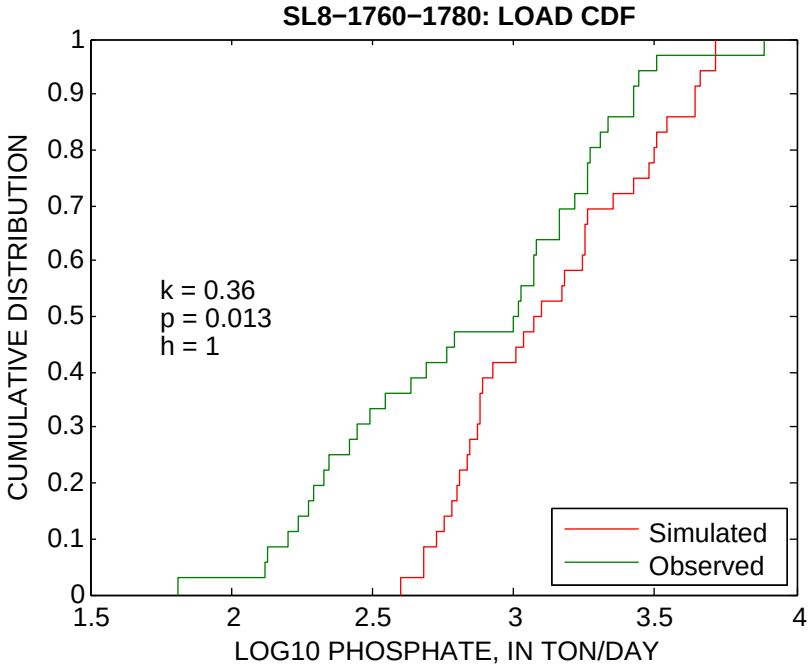


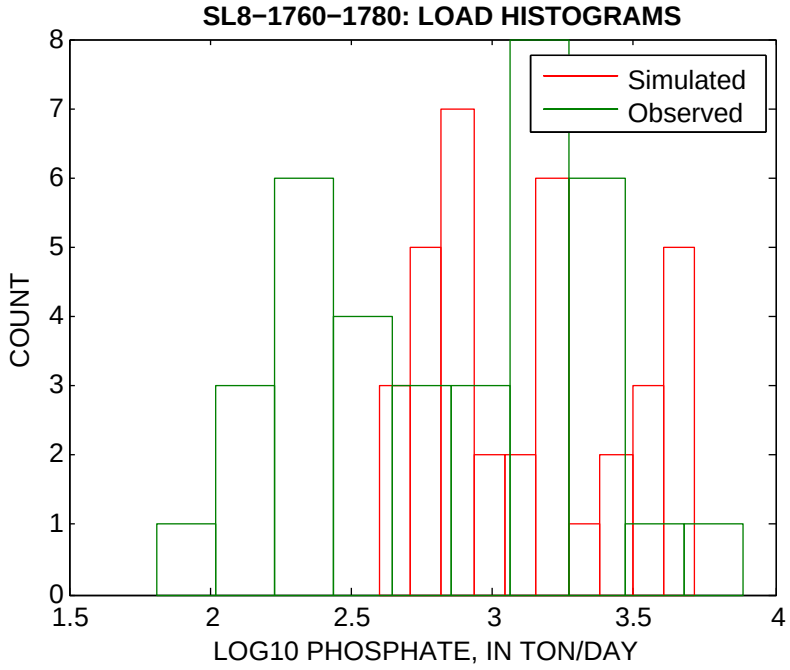


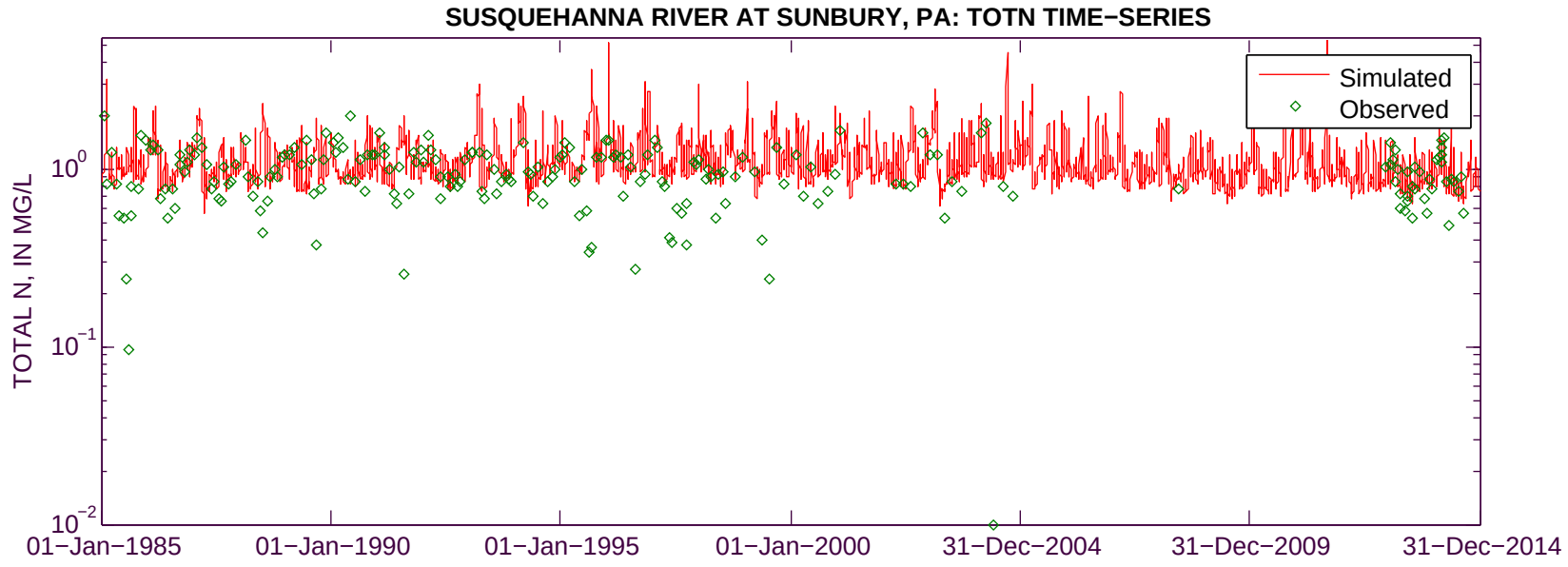
LOAD DATA
LOG10

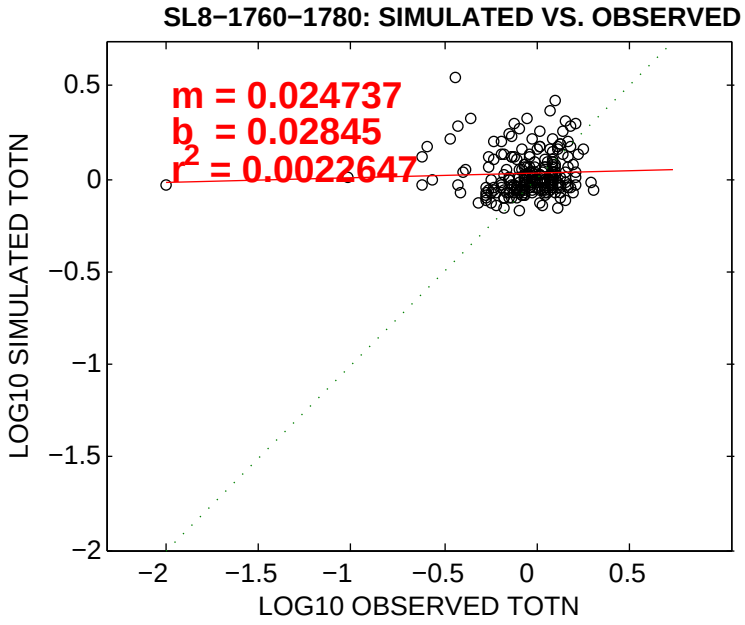


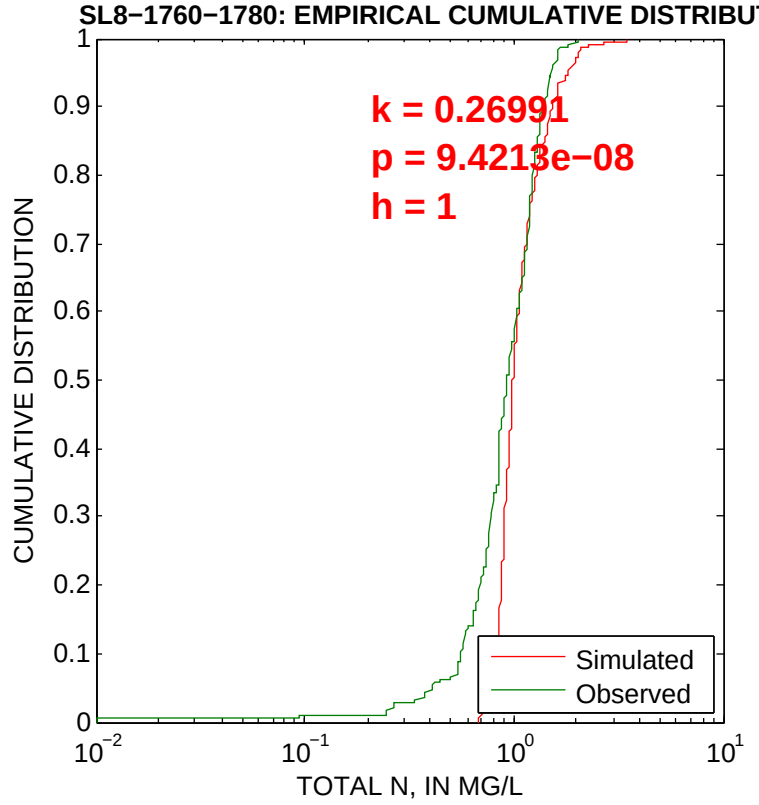












DATA SELECTION

scenario: P620171001WQ | file: TOTN.calib

plot: TOTN - total nitrogen

Dates: 1/1/1985 – 12/31/201

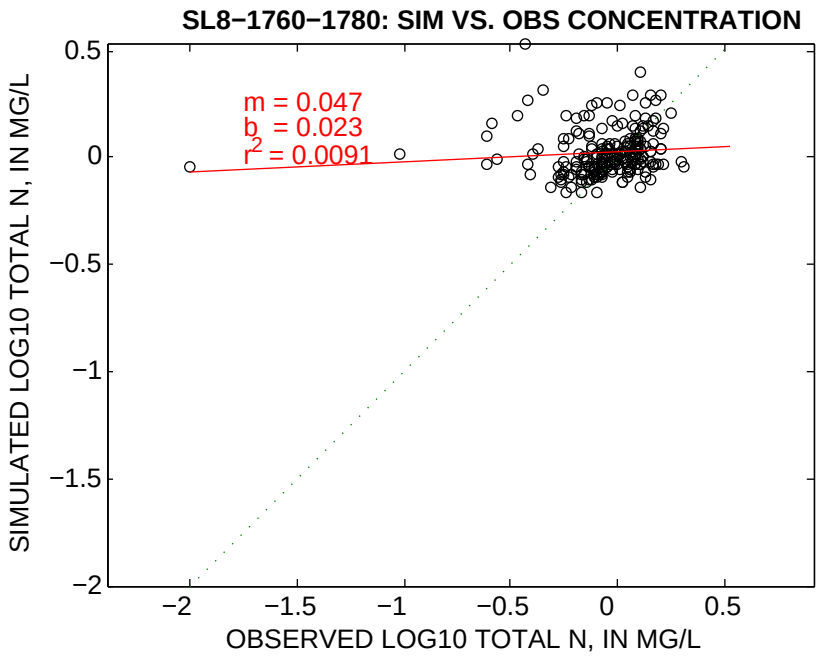
Drive: N/A | Directory: model | Observed: OBS20161101

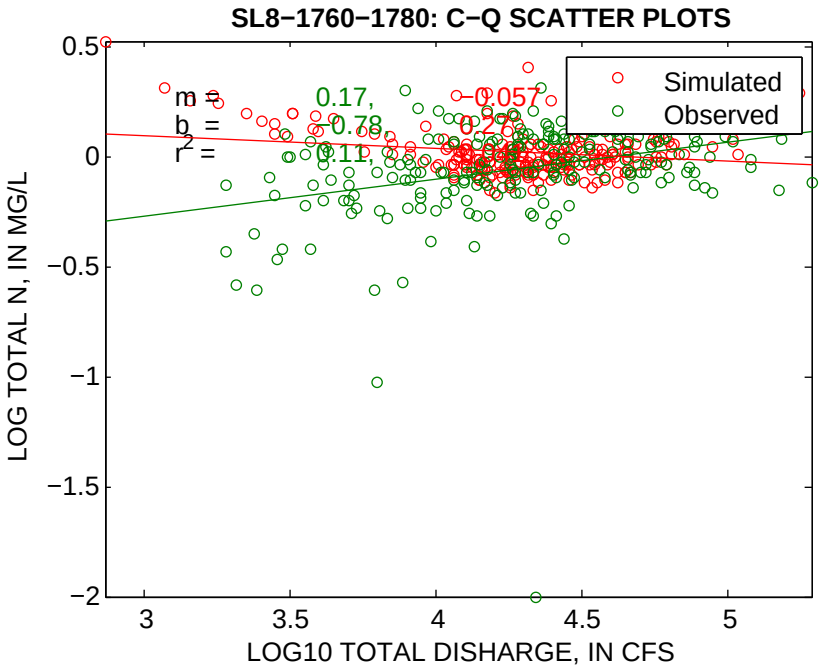
STATISTICS

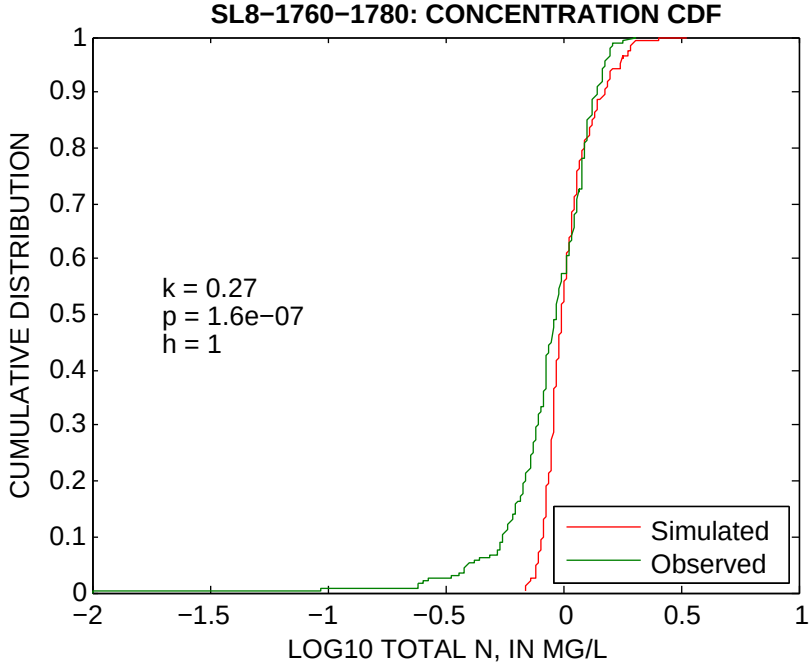
		observe	simulate
n		226	226
min		0.01	0.67302
		-2	-0.171972
mean		0.964248	1.10612
		-0.0529329	0.0271411
media		0.932	0.99205
		-0.0305841	-0.0034686
max		2.025	3.4829
		0.306425	0.541941
varian		0.113279	0.125648
		0.0478281	0.0129233
JB	☑	0.5	0.001
	☐	0.001	0.001
		ra	log
%		14.7129	-151.275
err.va		0.24715	0.0648255
rel.std.err		2.18179	1.35539
mod.eff		-1.18179	-0.355385

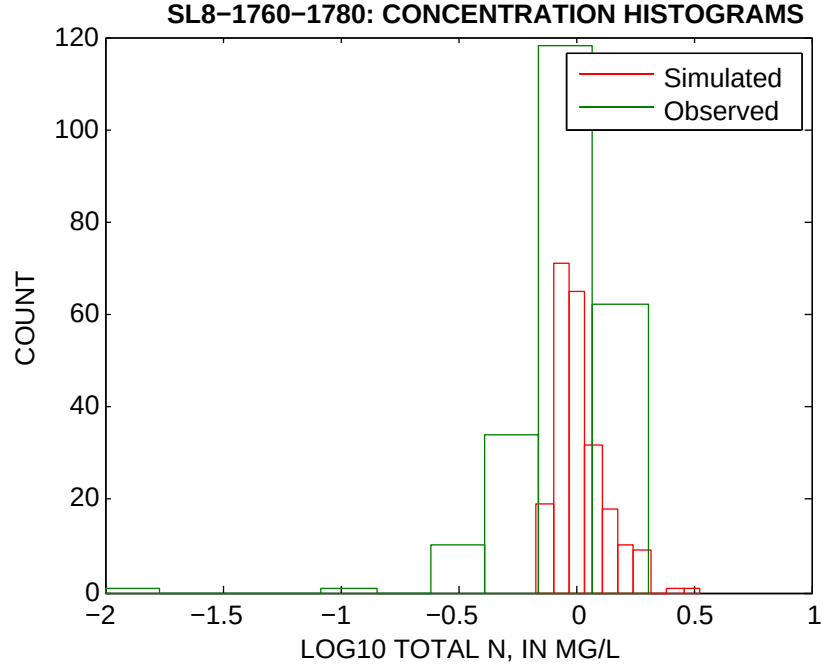
VERSION 2.1

ALL DATA
LOG10

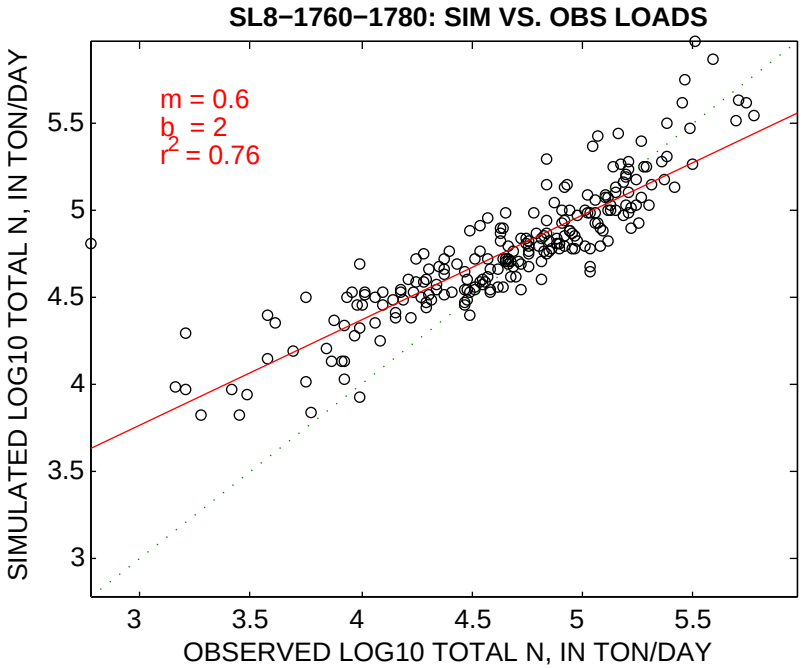


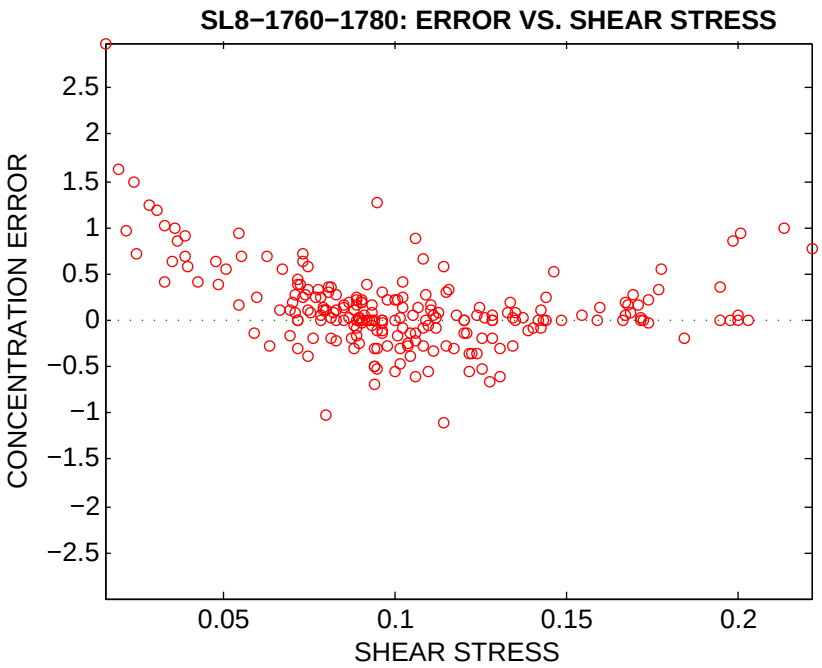


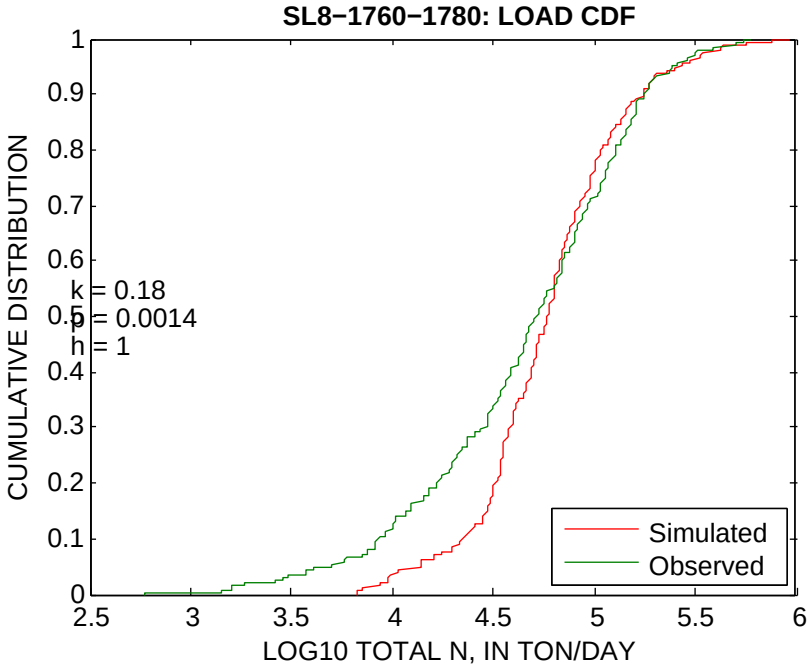


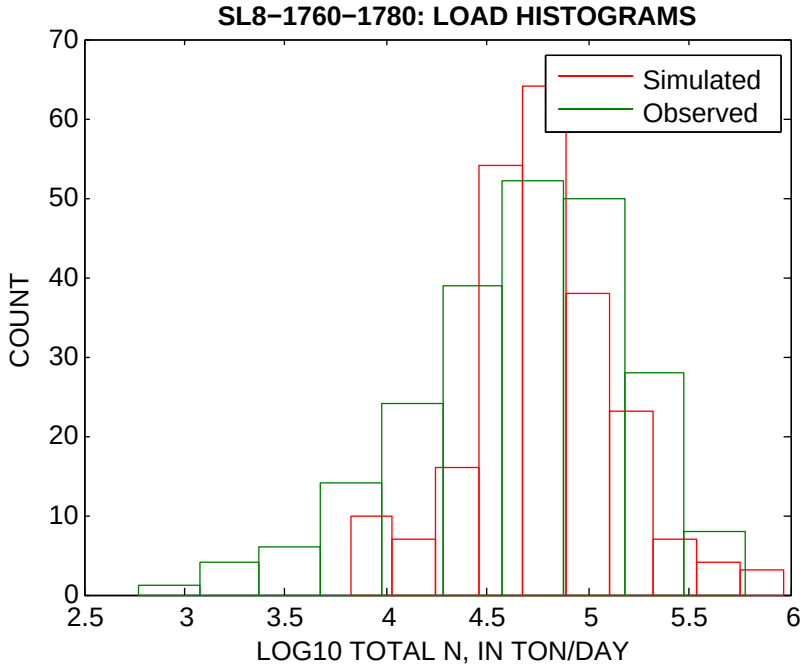


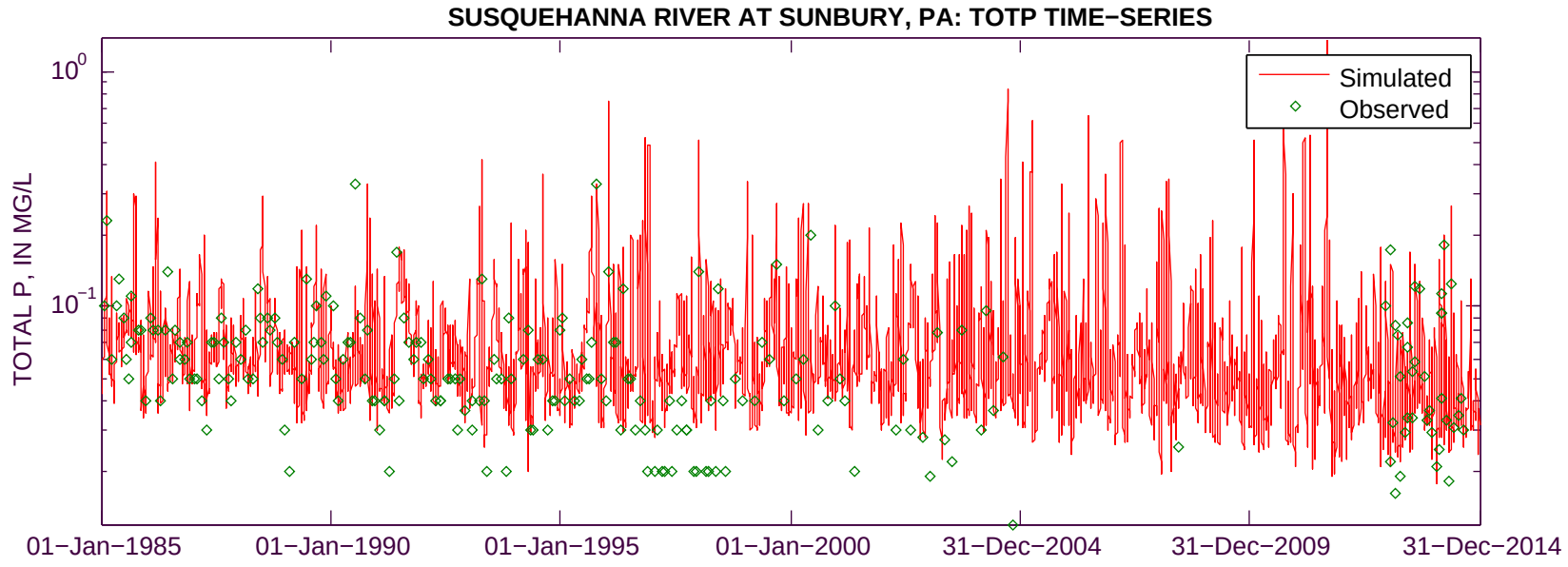
LOAD DATA
LOG10

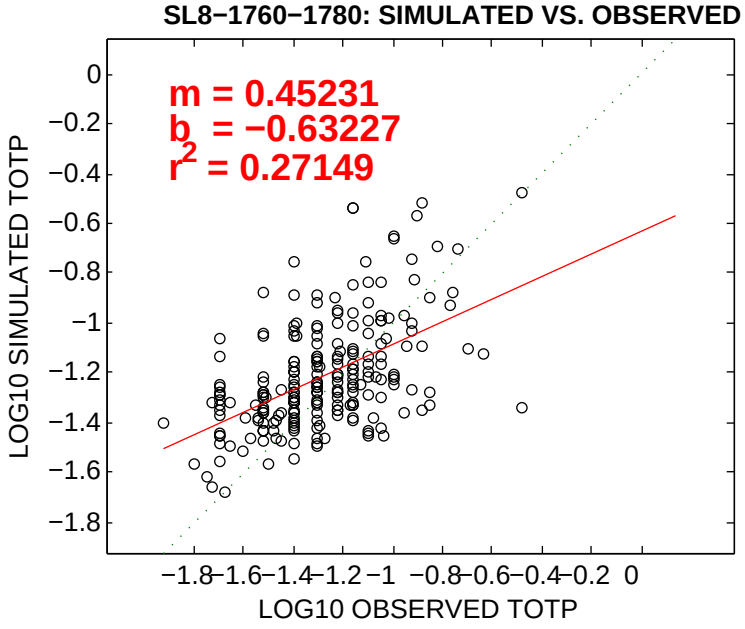


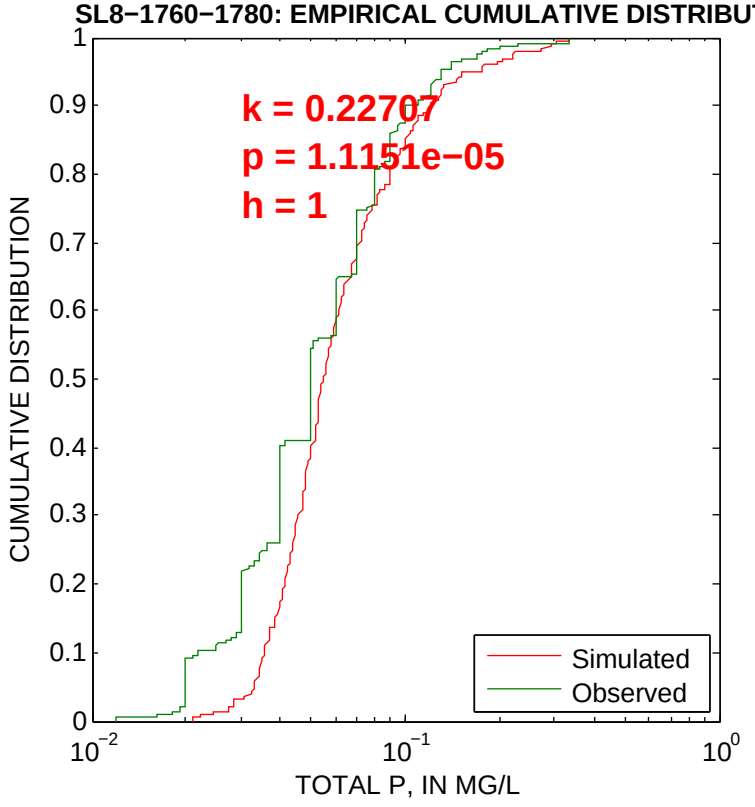












DATA SELECTION

scenario	file
P620171001WQ	TOTP.calib

plot: TOTP - total phosphorus

Dates: 1/1/1985 – 12/31/201

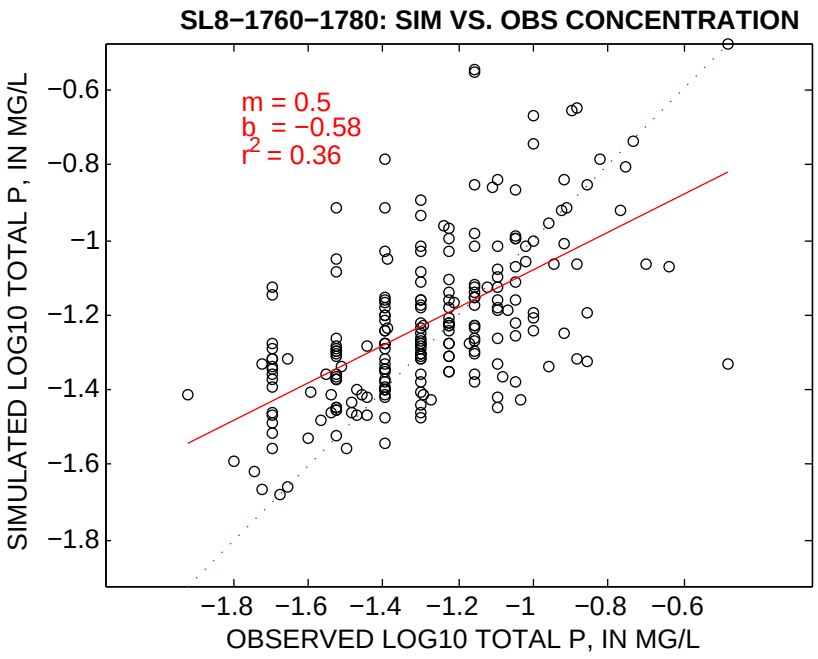
Drive	Directory	Observed
N/A	model	OBS20161101

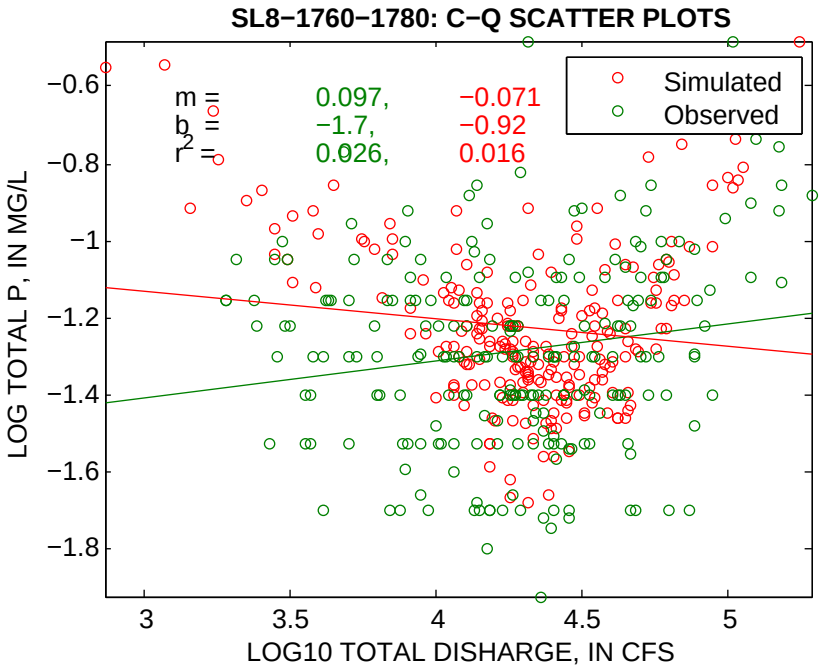
STATISTICS

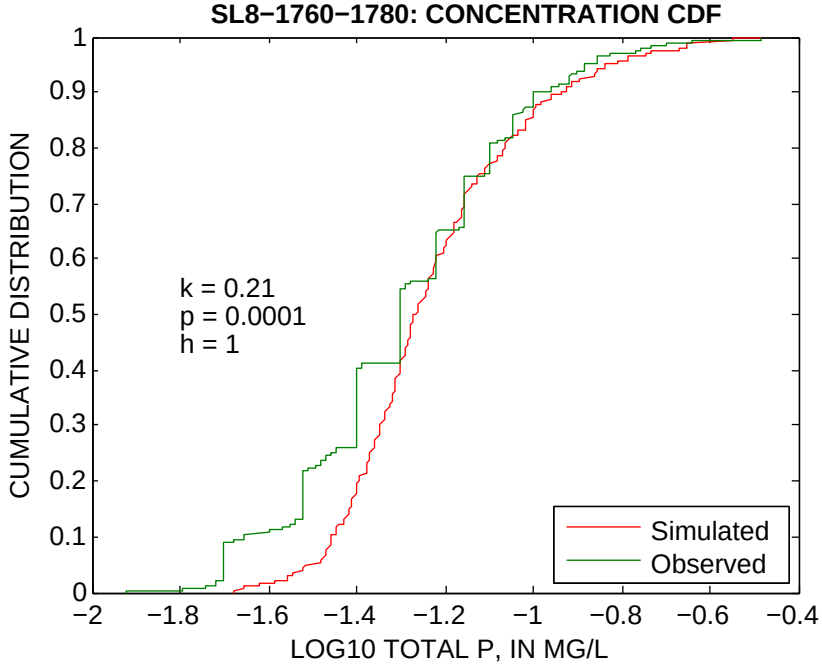
	n	229	229
		observe	simulate
min		0.012	0.021055
		-1.92082	-1.67664
mean		0.0617618	0.0709079
		-1.28578	-1.21384
media		0.05	0.055202
		-1.30103	-1.25805
max		0.33	0.33369
		-0.481486	-0.476657
varian		0.00186535	0.00239339
		0.0631654	0.0475994
JB		0.001	0.001
		0.189177	0.001
		ra	log
%		14.8086	-5.59511
err.va		0.00233466	0.0588223
rel.std.err		1.25159	0.931241
mod.eff		-0.251589	0.0687585

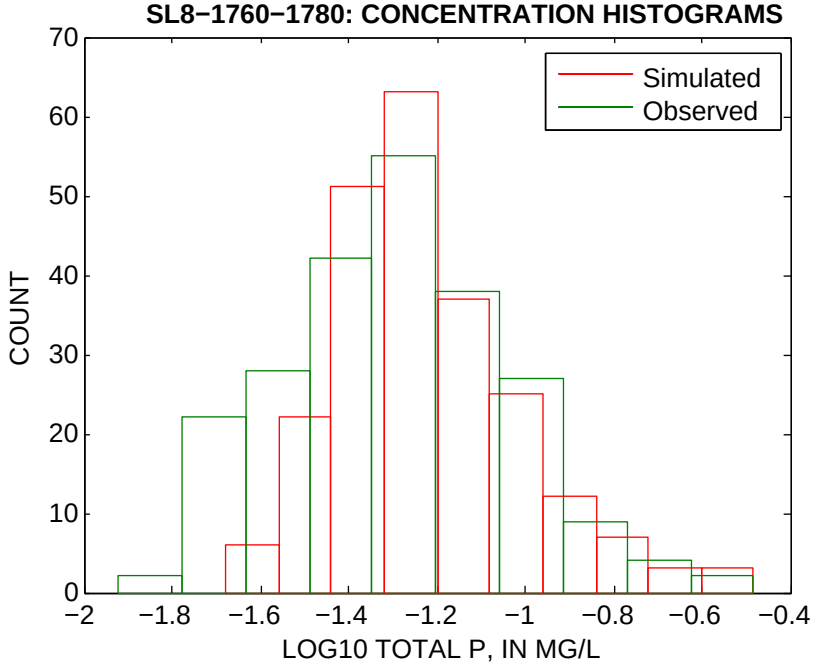
VERSION 2.1

ALL DATA
LOG10

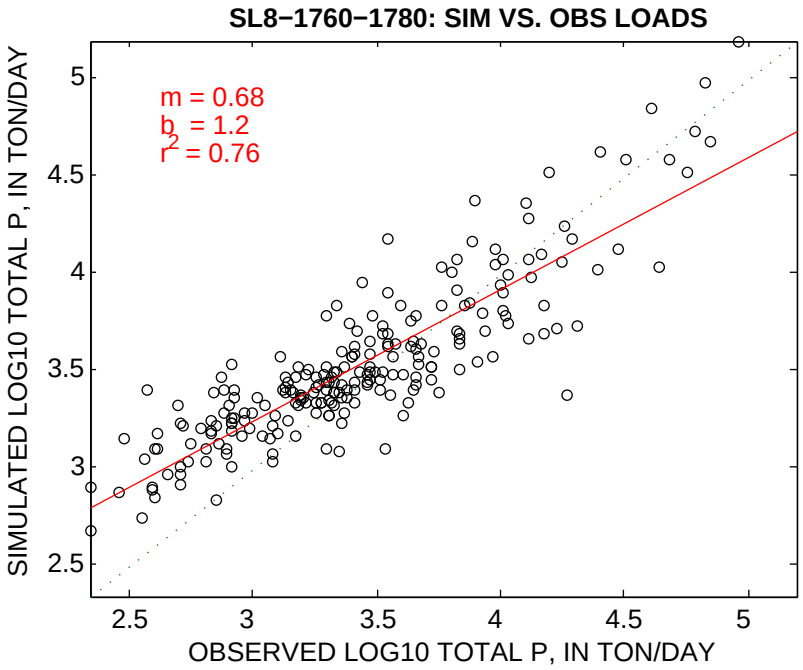


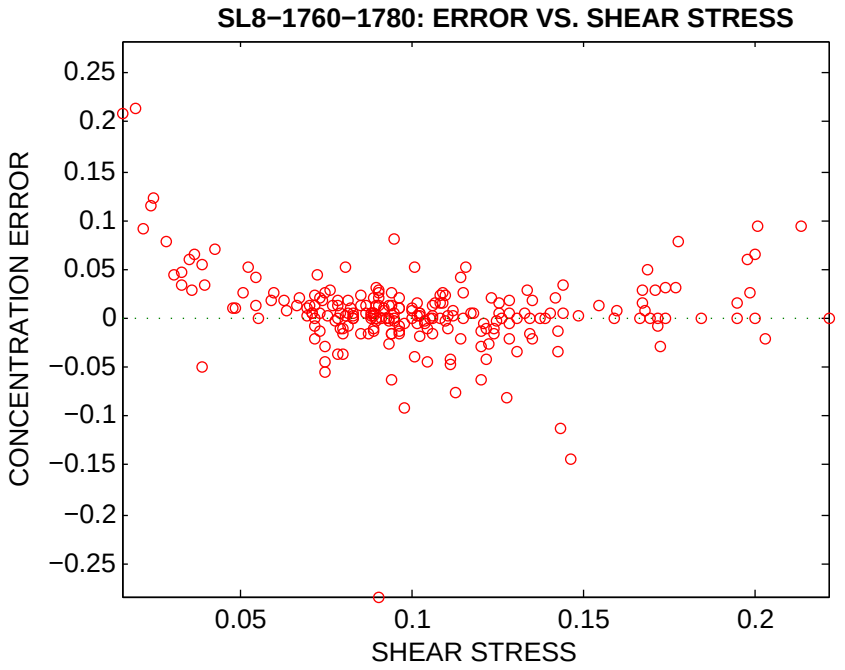


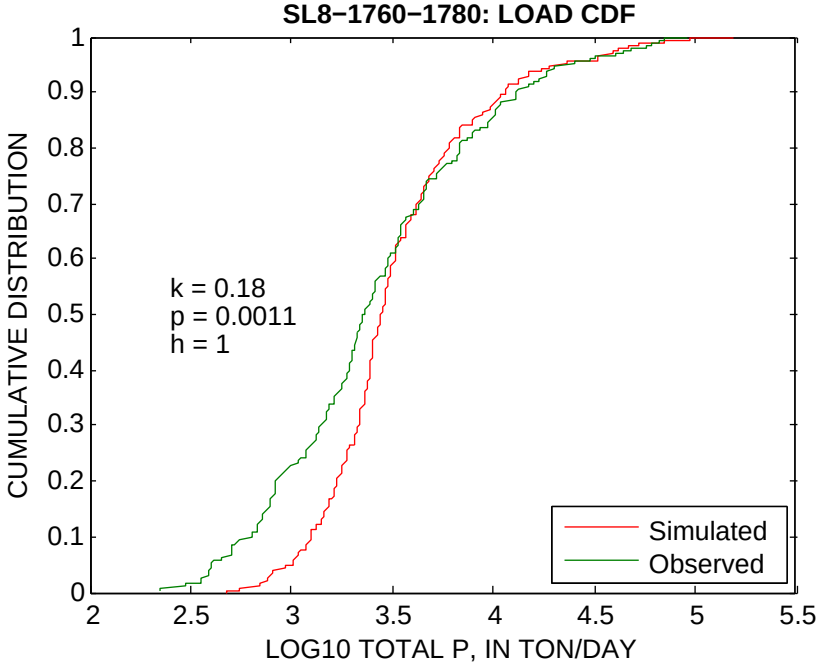


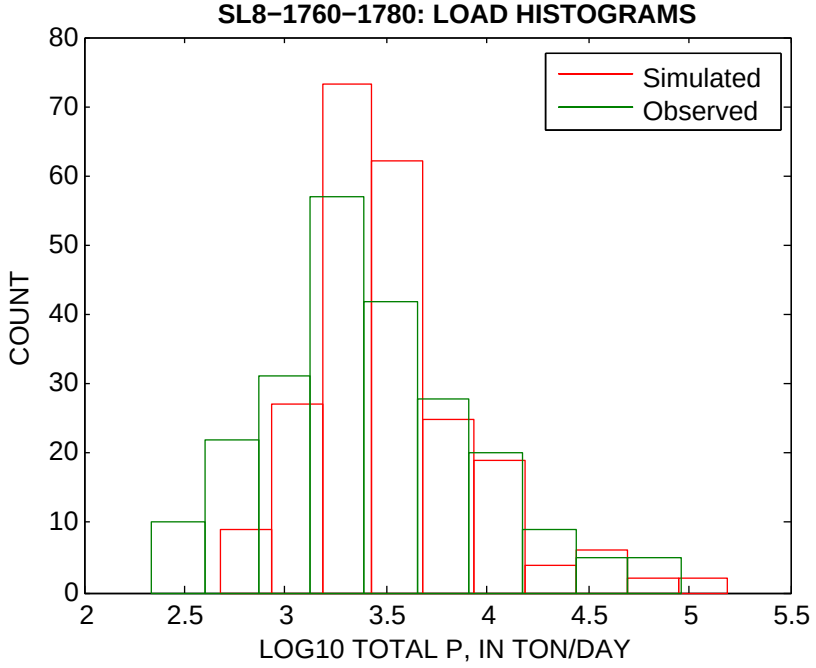


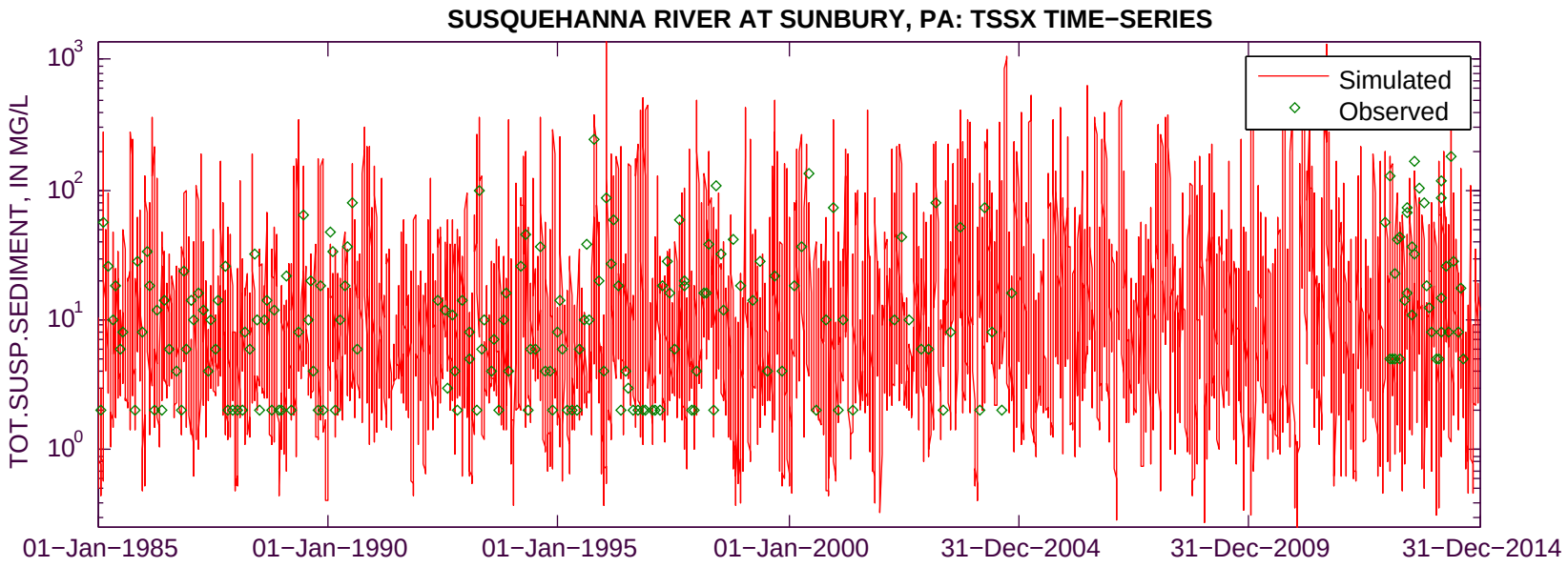
LOAD DATA
LOG10

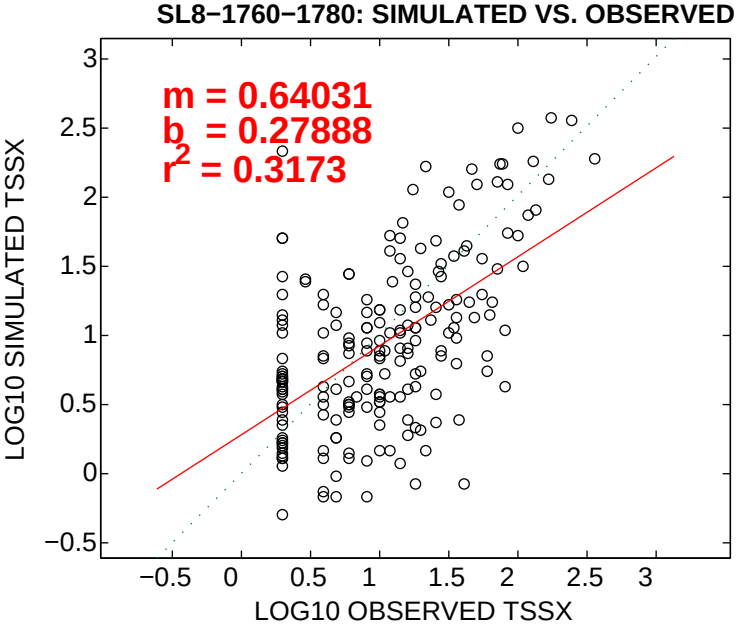


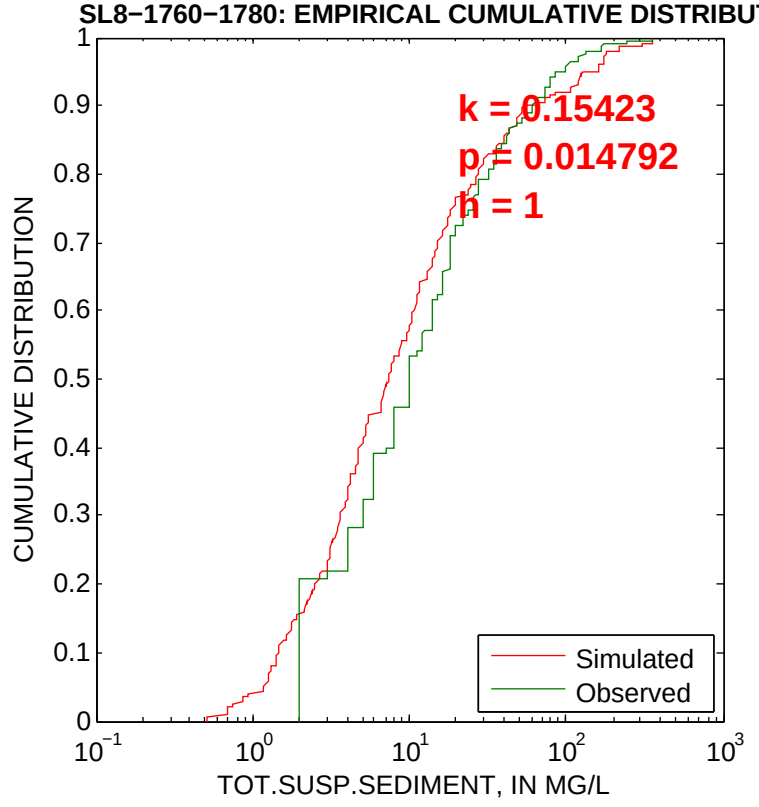












DATA SELECTION

scenario	file
P620171001WQ	TSSX.calib

plot: TSSX - total suspended ...

Dates: 1/1/1985 – 12/31/201

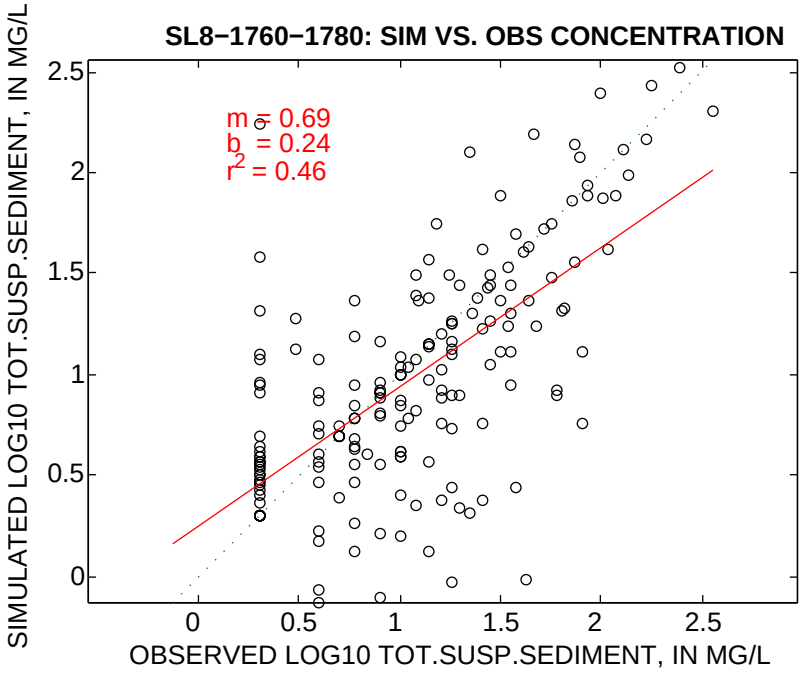
Drive	Directory	Observed
N/A	model	OBS20161101

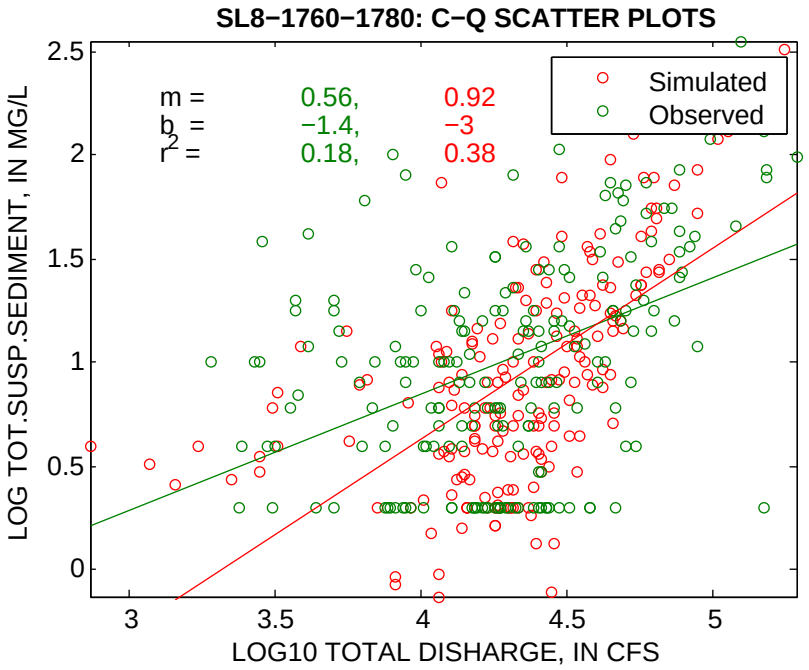
STATISTICS

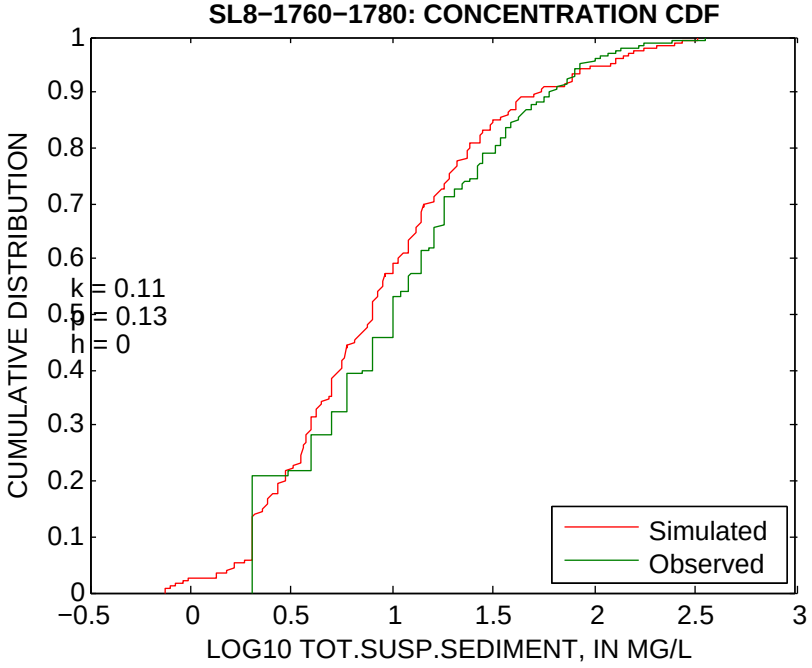
	n	observe	simulate
		201	201
min		2	0.51228
		0.30103	-0.290493
mean		23.8144	26.3286
		1.02104	0.932666
media		10	7.4066
		1	0.869619
max		358	361.76
		2.55388	2.55842
varian		1674.86	2986.8
		0.293712	0.379524
JB		0.001	0.001
		0.030563	0.019360
		ra	log
%		10.5571	-8.65536
err.va		1596.84	0.30495
rel.std.err		0.953414	1.03826
mod.eff		0.0465858	-0.0382614

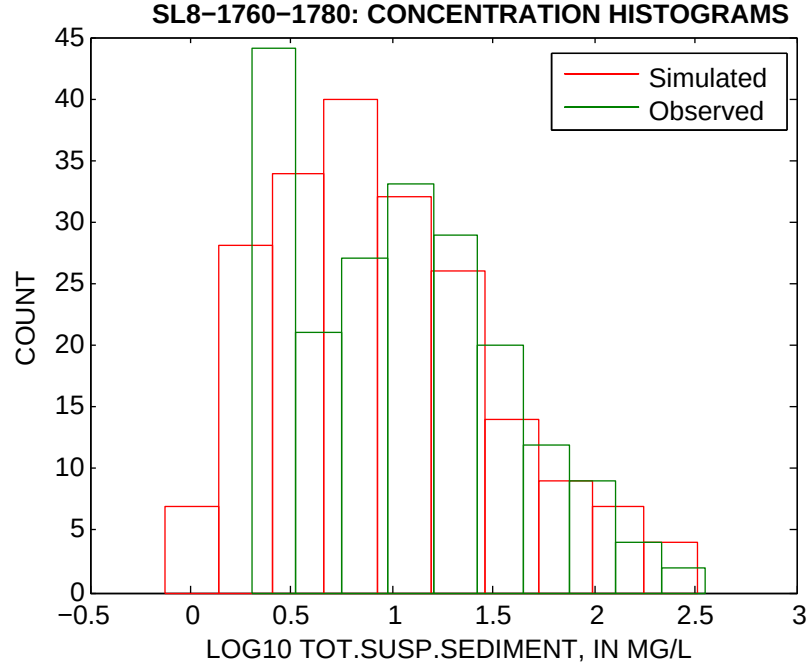
VERSION 2.1

ALL DATA
LOG10

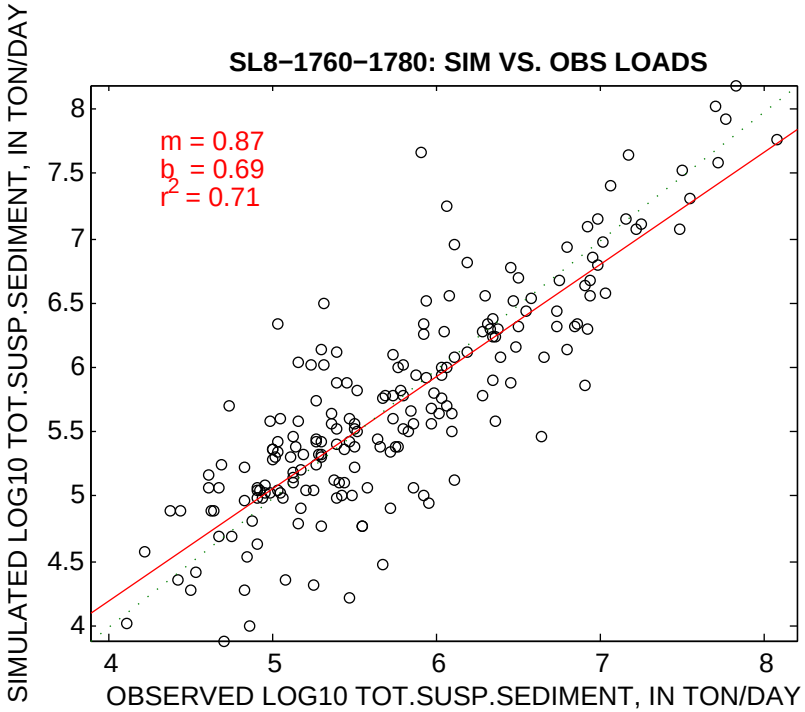


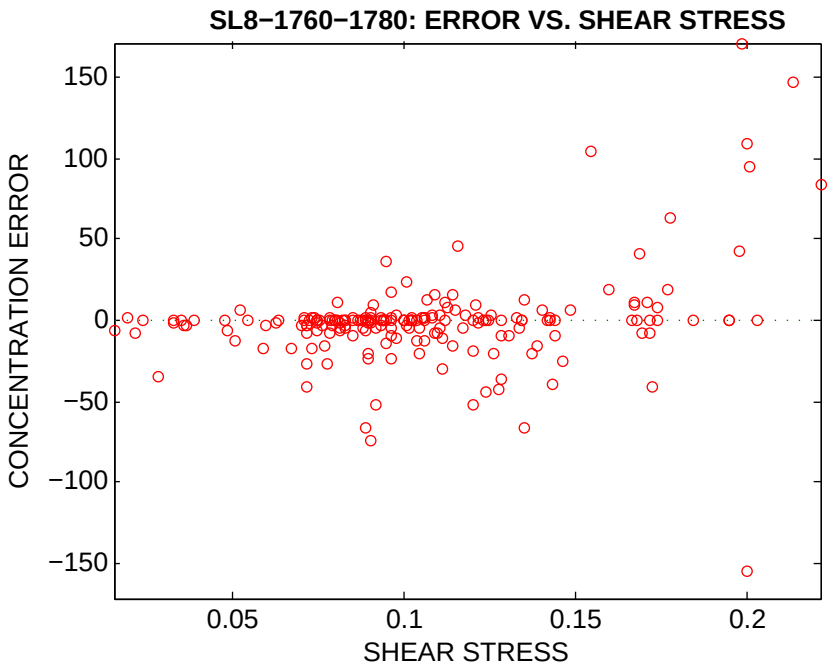


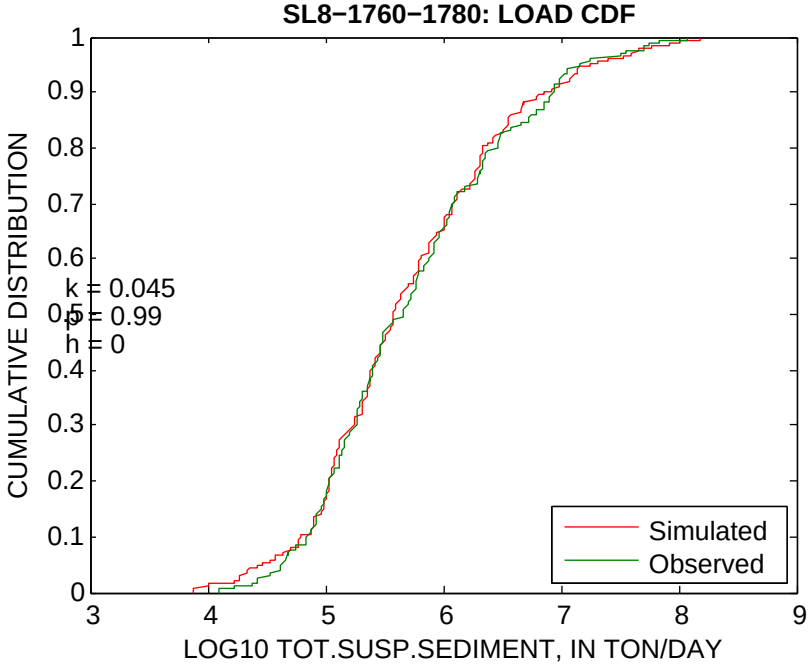


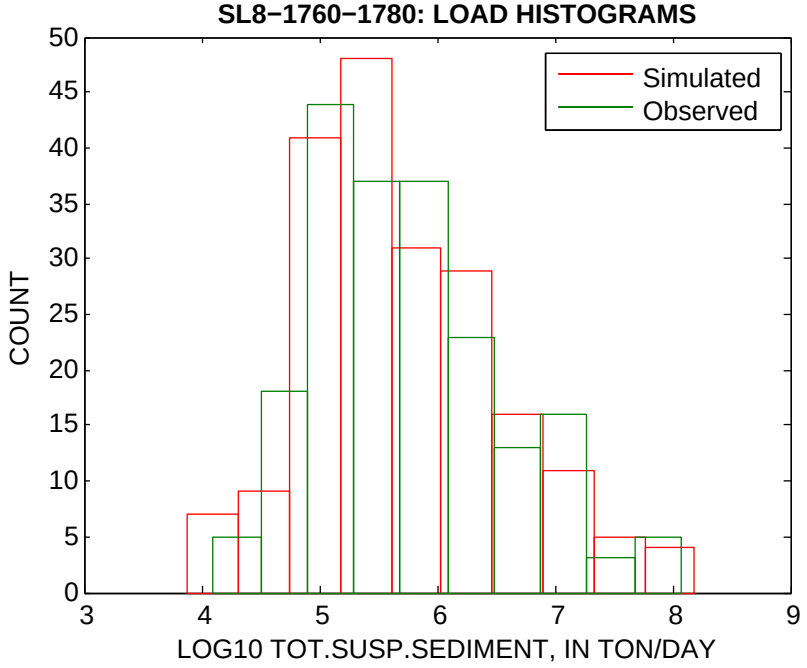


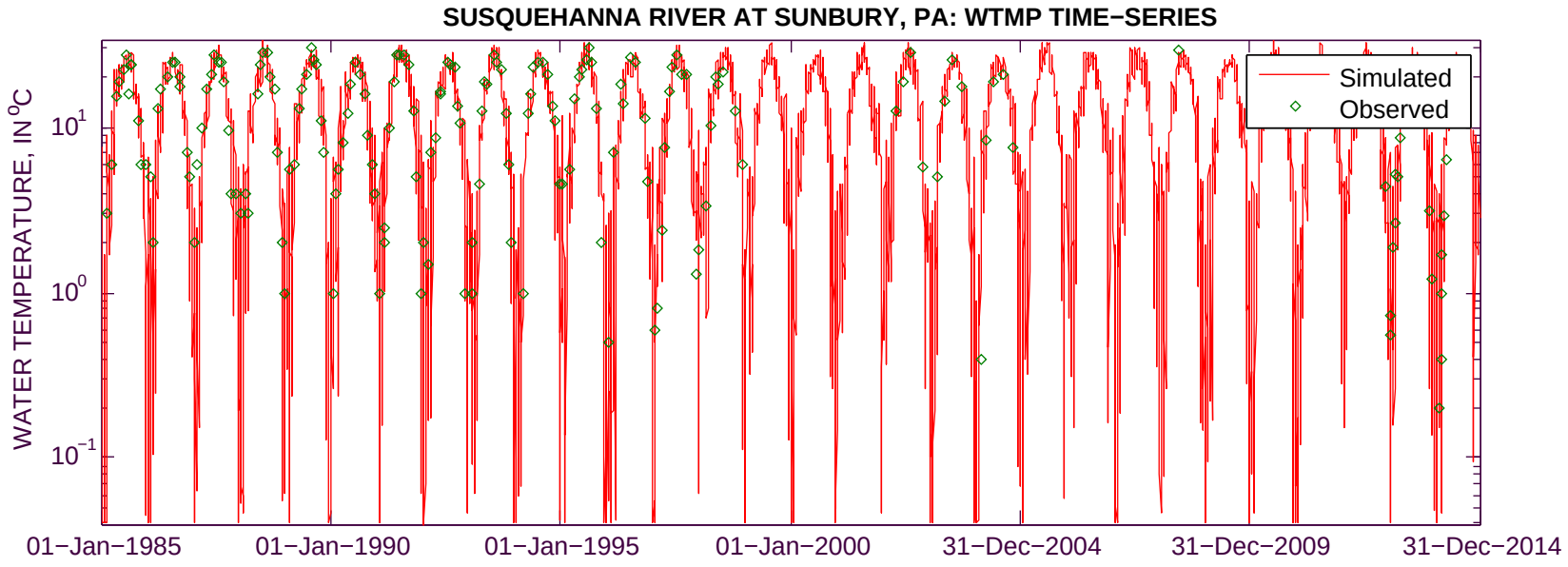
LOAD DATA
LOG10

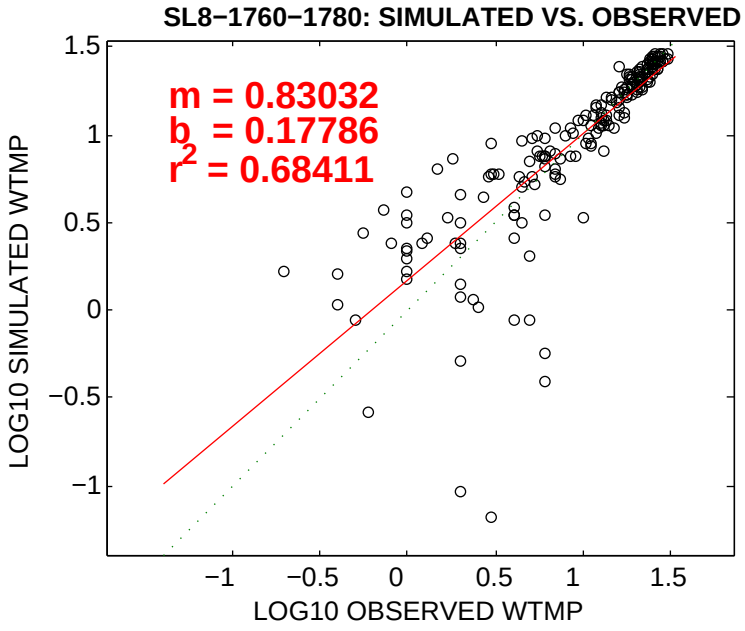


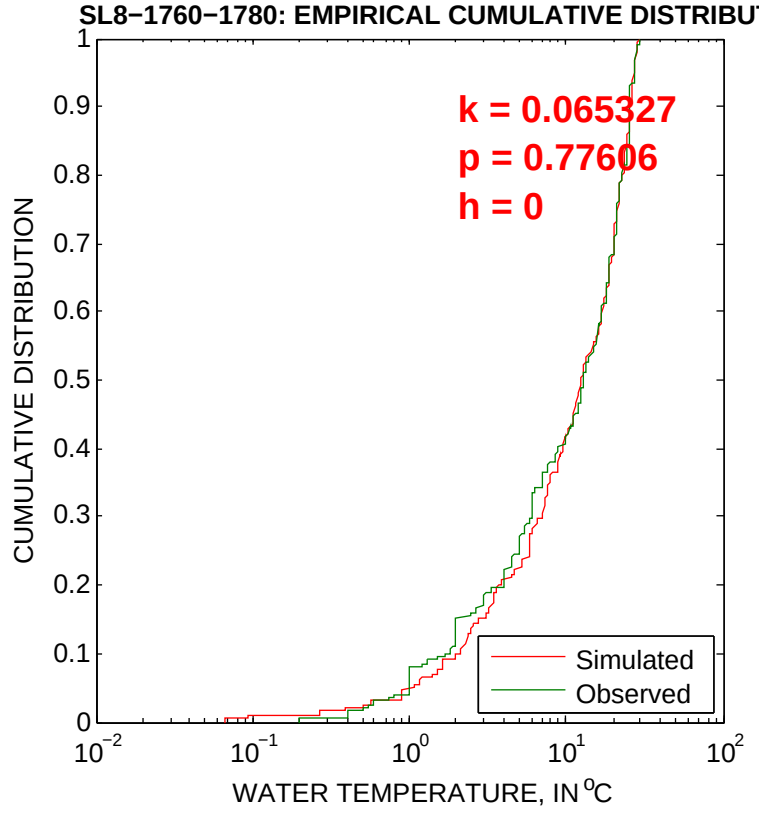












DATA SELECTION

scenario	file
P620171001WQ	WTMP.calib

plot: WTMP - water tempera...

Dates: 1/1/1985 – 12/31/201

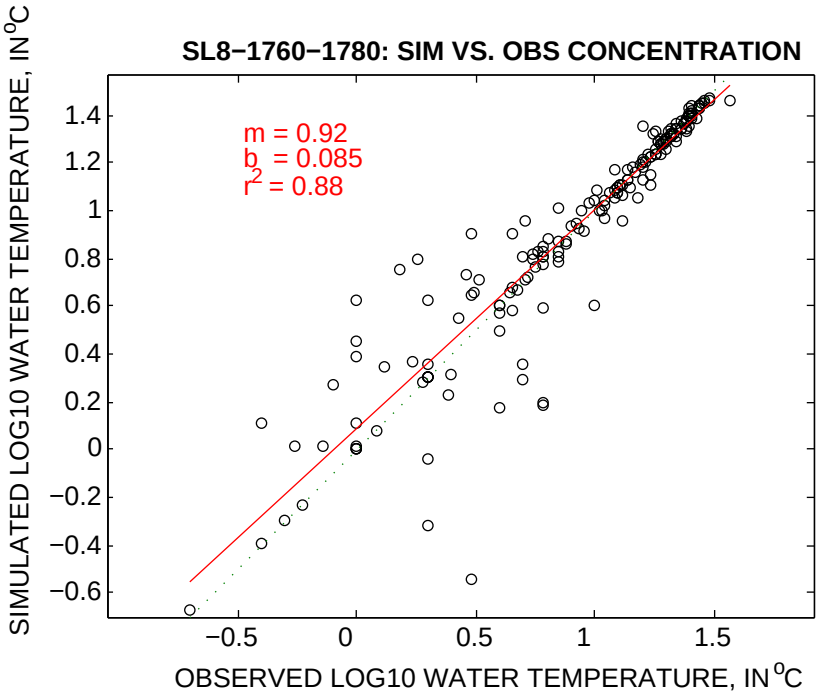
Drive	Directory	Observed
N/A	model	OBS20161101

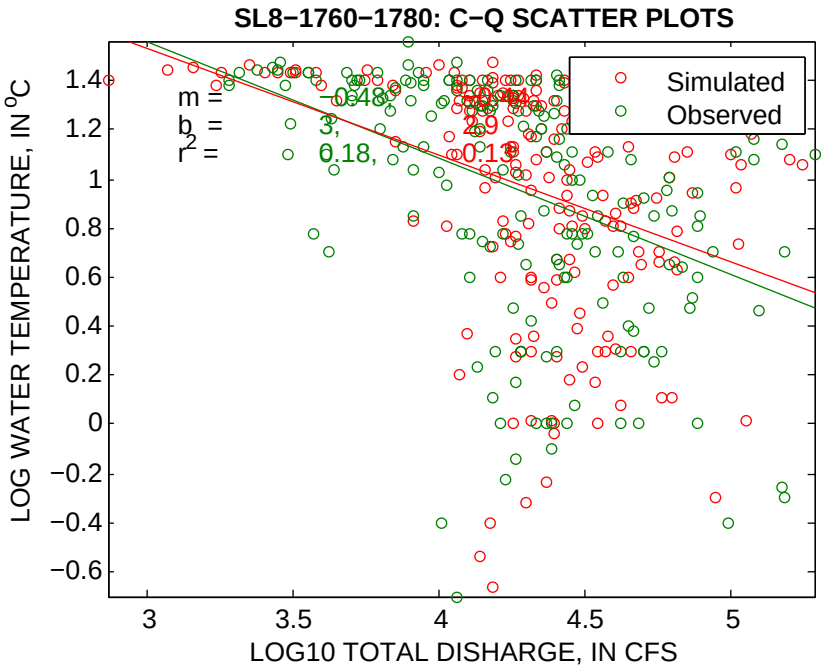
STATISTICS

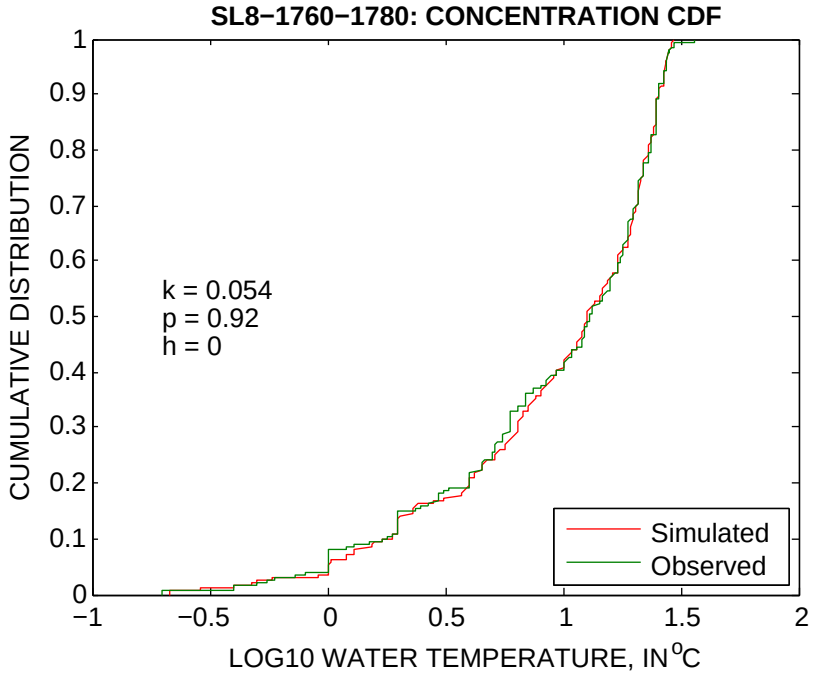
	n	observe	simulate
		199	199
min		0.2	0.066961
		-0.69897	-1.17418
mean		13.3433	13.5613
		0.946029	0.963368
media		13	12.469
		1.11394	1.09583
max		30	29.103
		1.47712	1.46394
varian		81.522	78.3667
		0.232196	0.234003
JB		0.004499	0.005122
		0.001	0.001
		ra	log
%		1.63409	1.83288
err.va		5.31201	0.0809056
rel.std.err		.0651604	0.348436
mod.eff		0.93484	0.651564

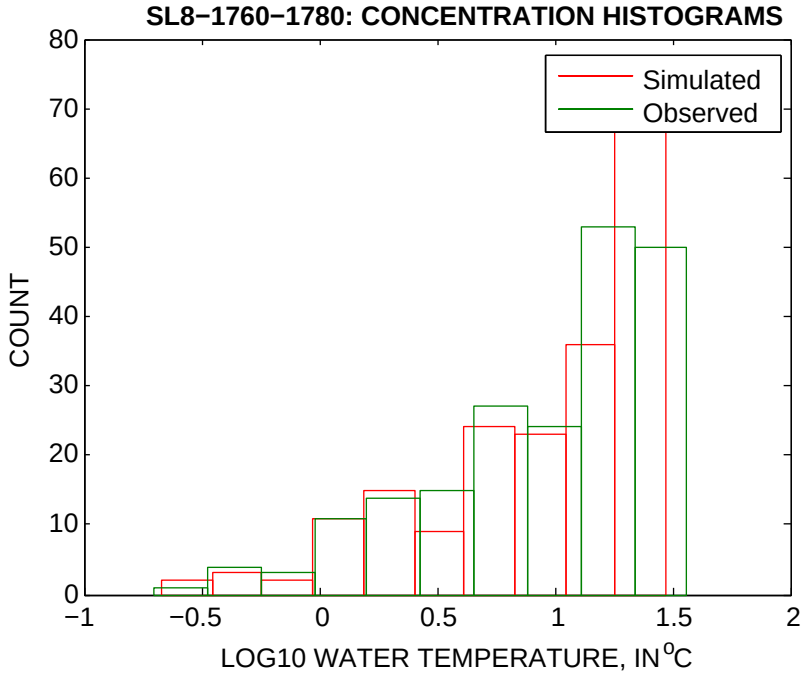
VERSION 2.1

ALL DATA
LOG10

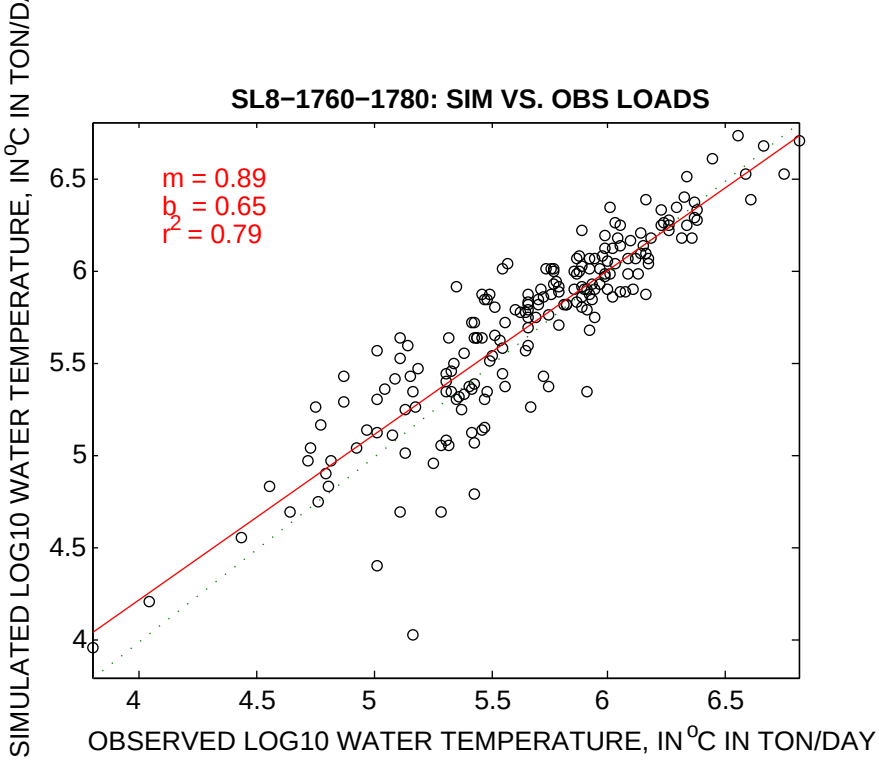


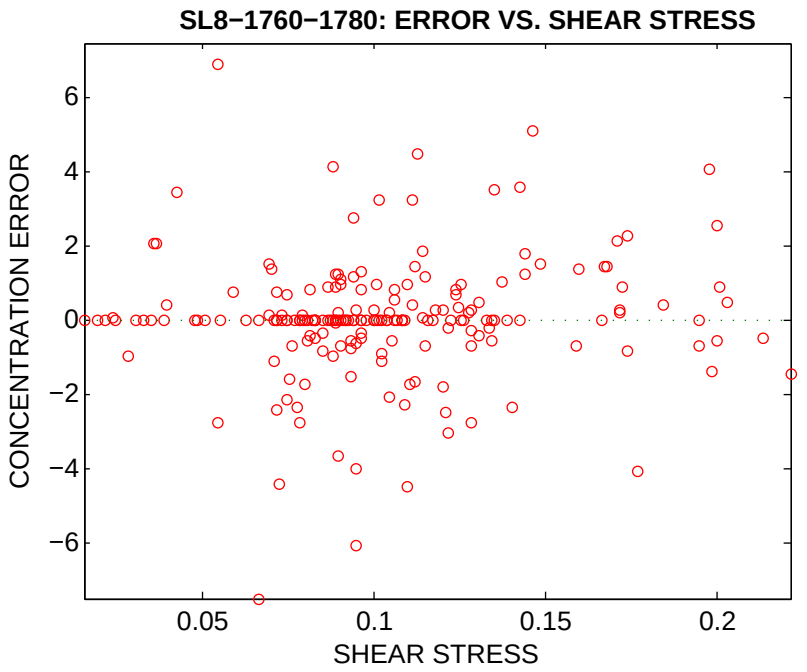


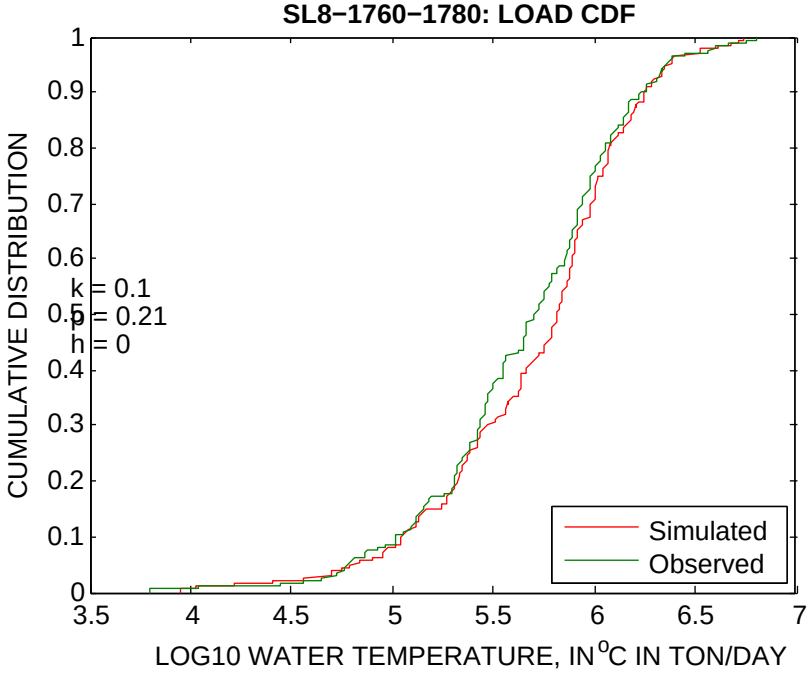


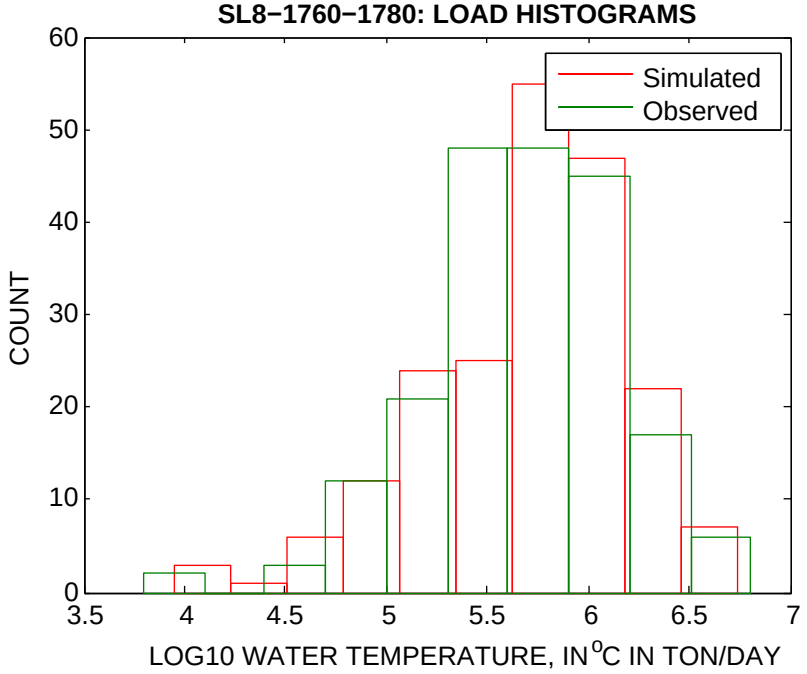


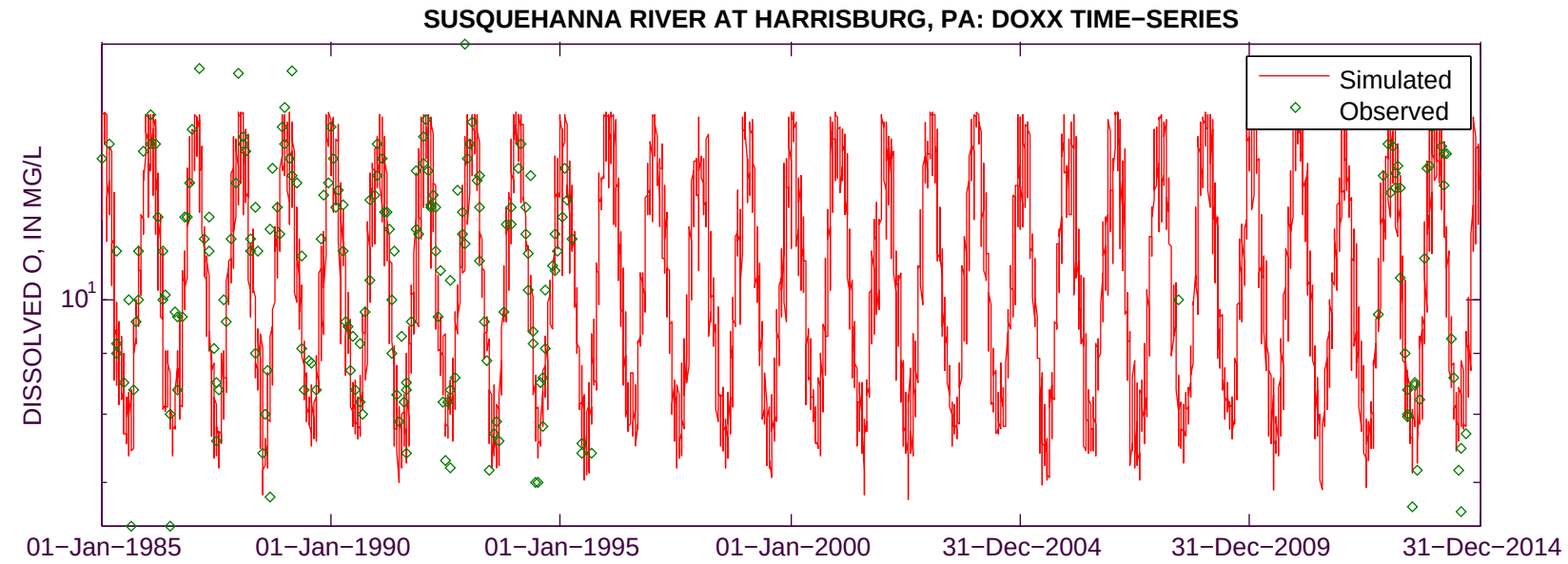
LOAD DATA
LOG10

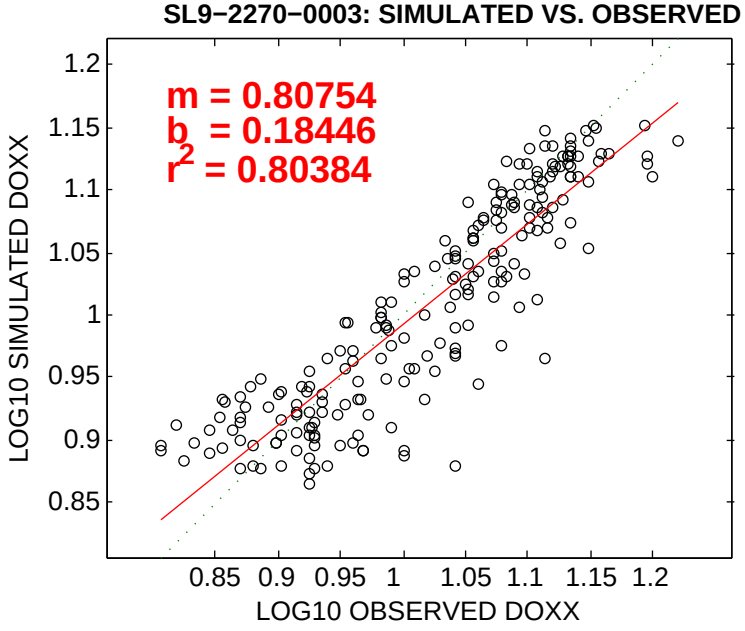


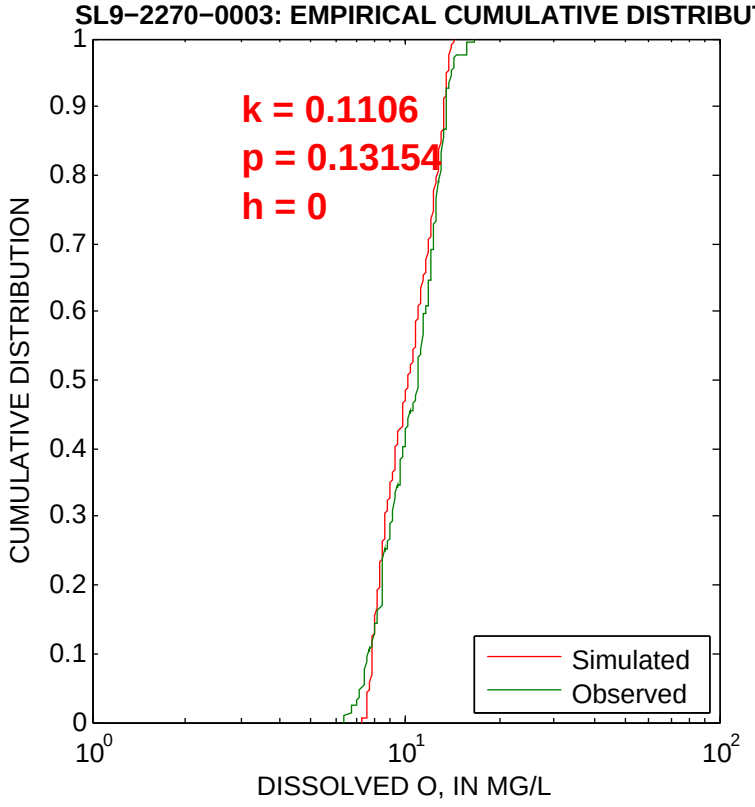












DATA SELECTION

scenario	file
P620171001WQ	DOXX.calib

plot: DOXX - dissolved oxygen

Dates: 1/1/1985 – 12/31/201

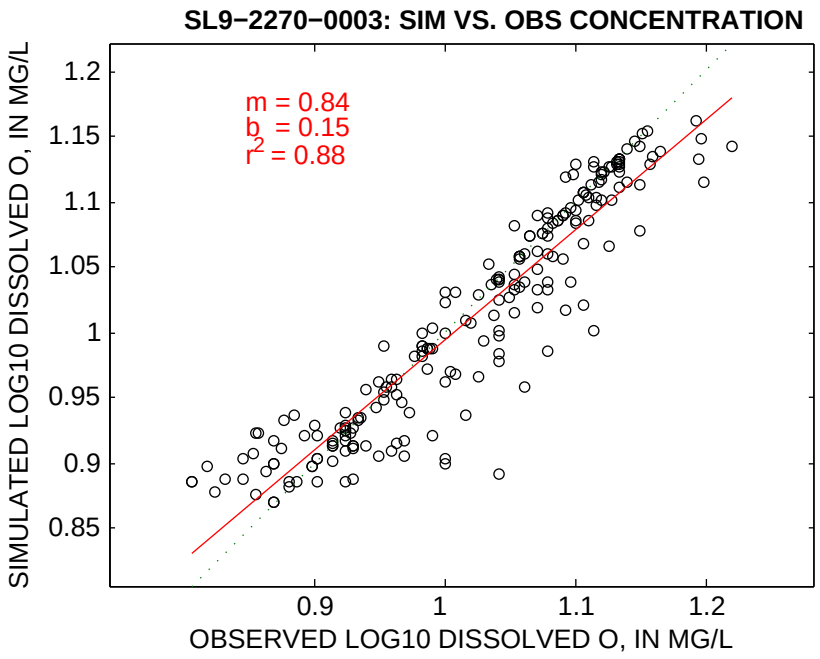
Drive	Directory	Observed
N/A	model	OBS20161101

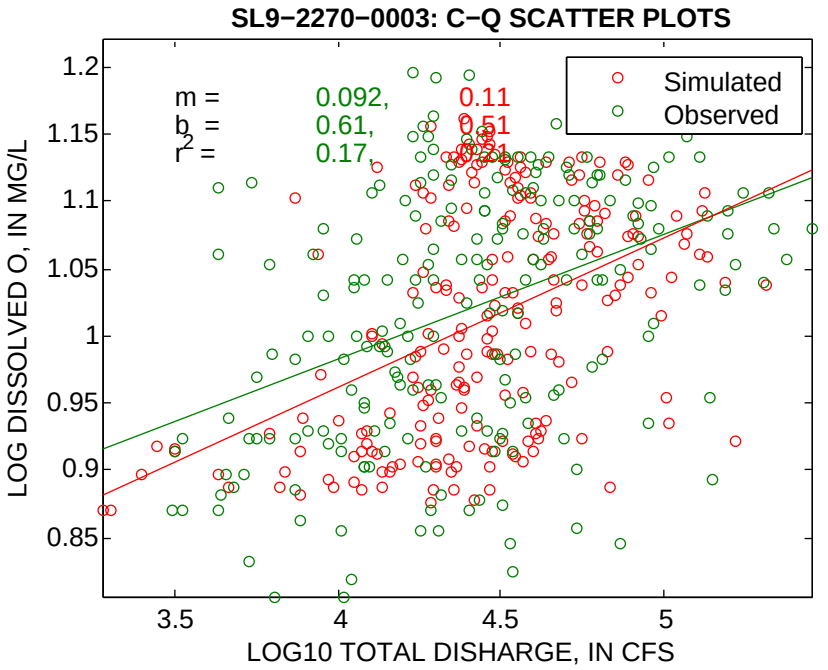
STATISTICS

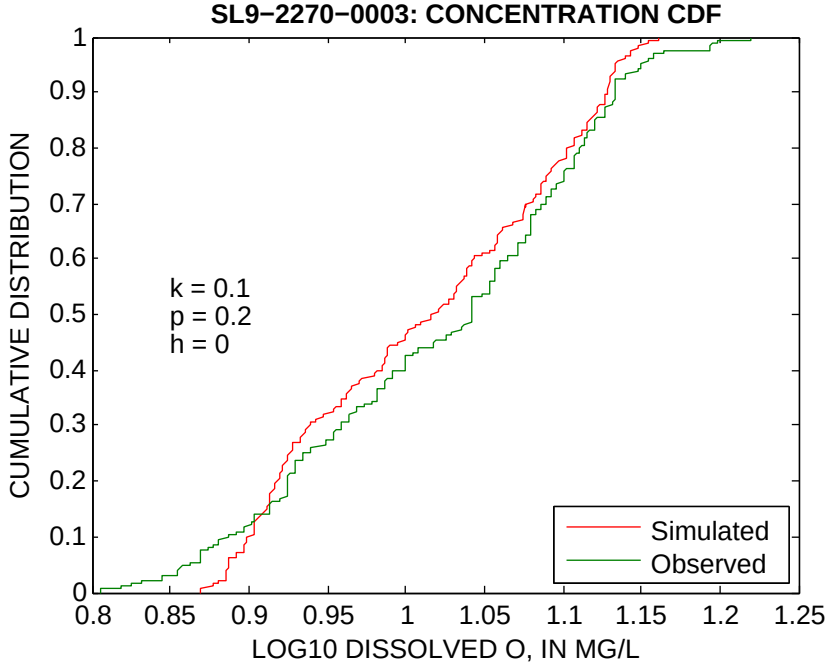
	n	217	217
		observe	simulate
min		6.4	7.3261
		0.80618	0.864873
mean		10.7376	10.4031
		1.02079	1.00879
media		11	10.228
		1.04139	1.00979
max		16.6	14.202
		1.22011	1.15235
varian		5.19289	4.1706
		0.0090345	0.00732921
JB		0.026038	0.003552
		0.013357	0.003583
		ra	log
%		-3.11538	-1.17572
err.va		1.05788	0.00191706
rel.std.err		0.203716	0.212193
mod.eff		0.796284	0.787807

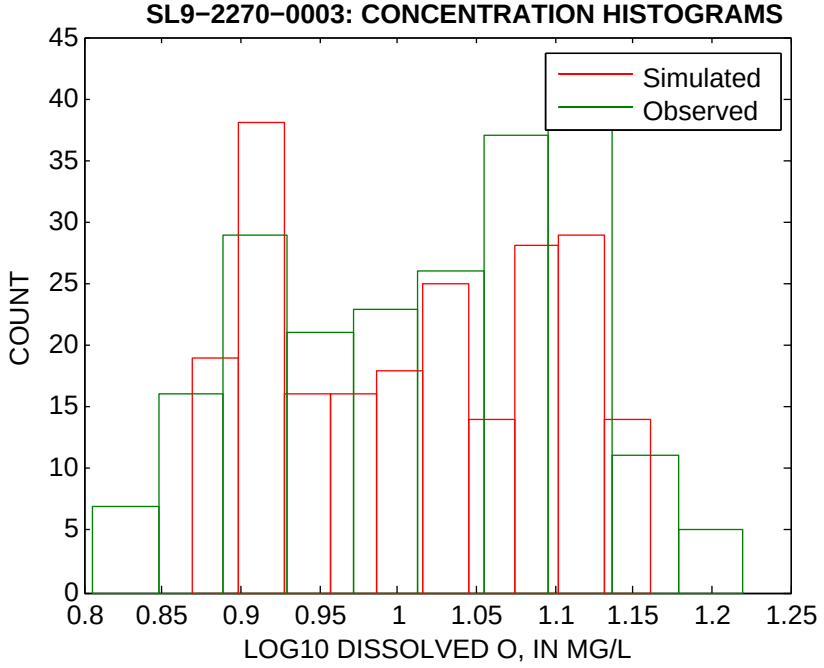
VERSION 2.1

ALL DATA
LOG10

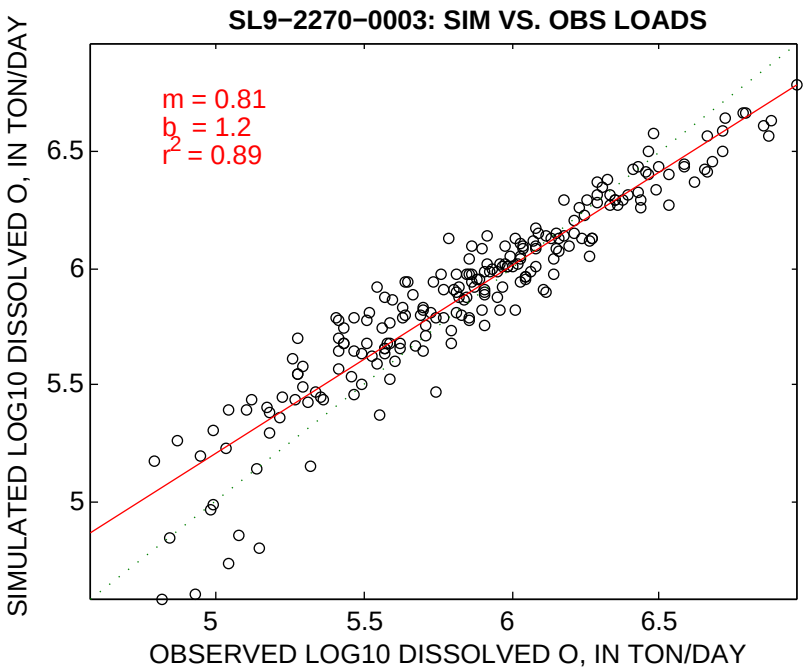


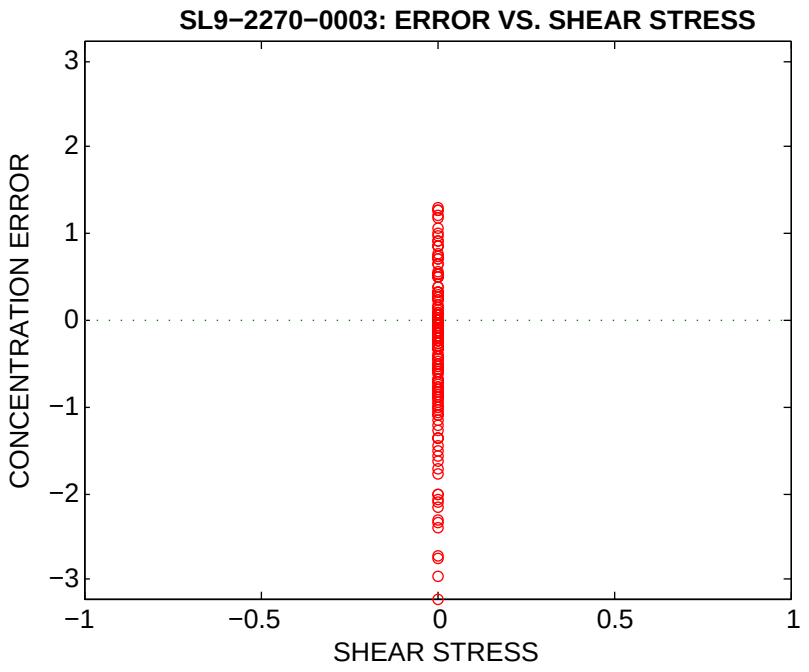


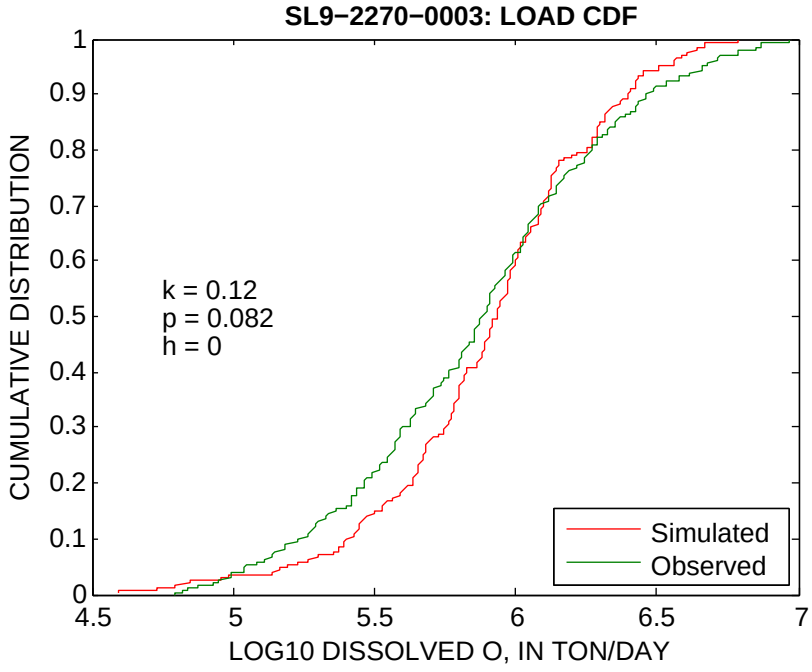


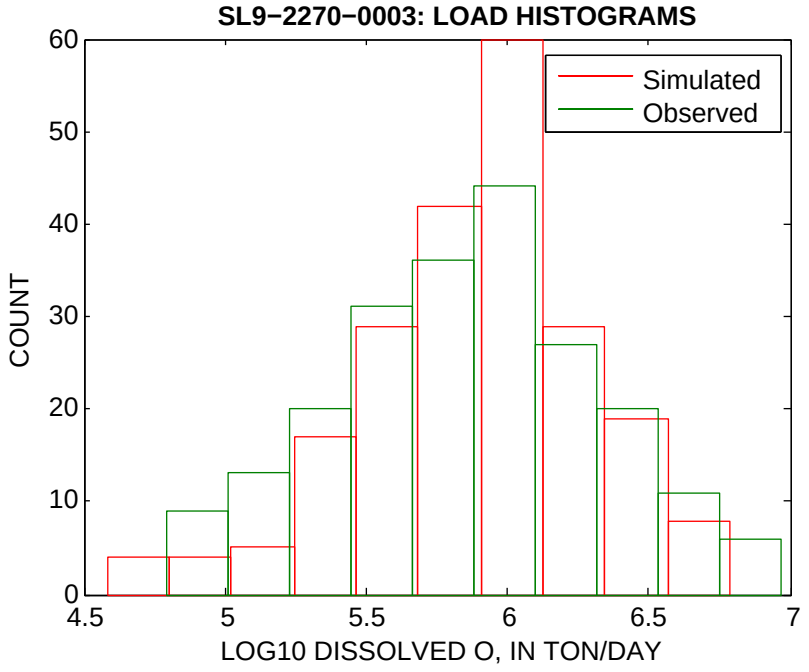


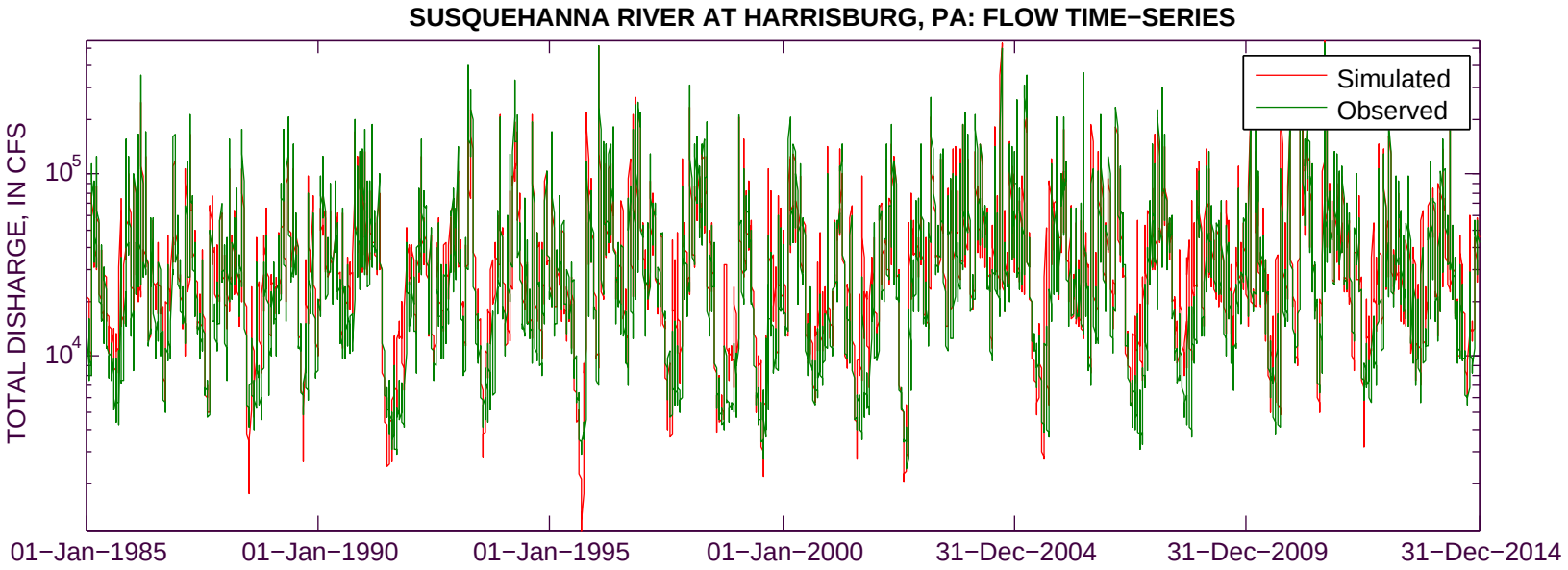
LOAD DATA
LOG10

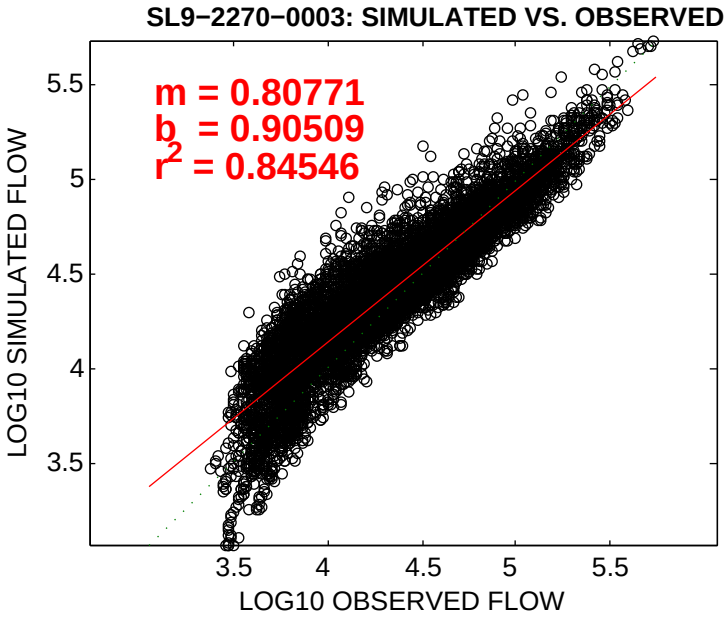


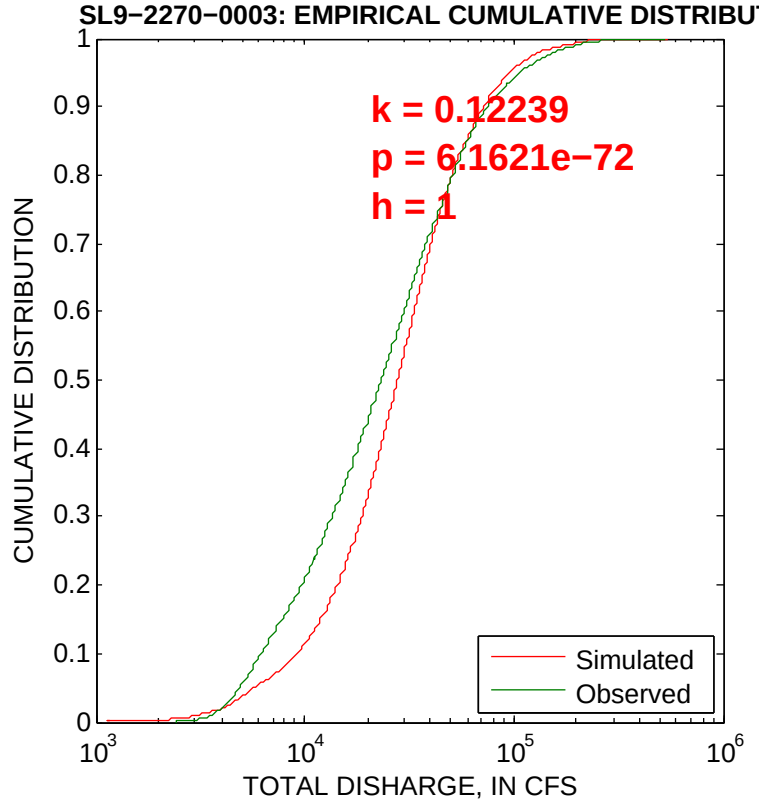












DATA SELECTION

scenario: P620171001WQ | file: FLOW.calib

plot: FLOW - total discharge

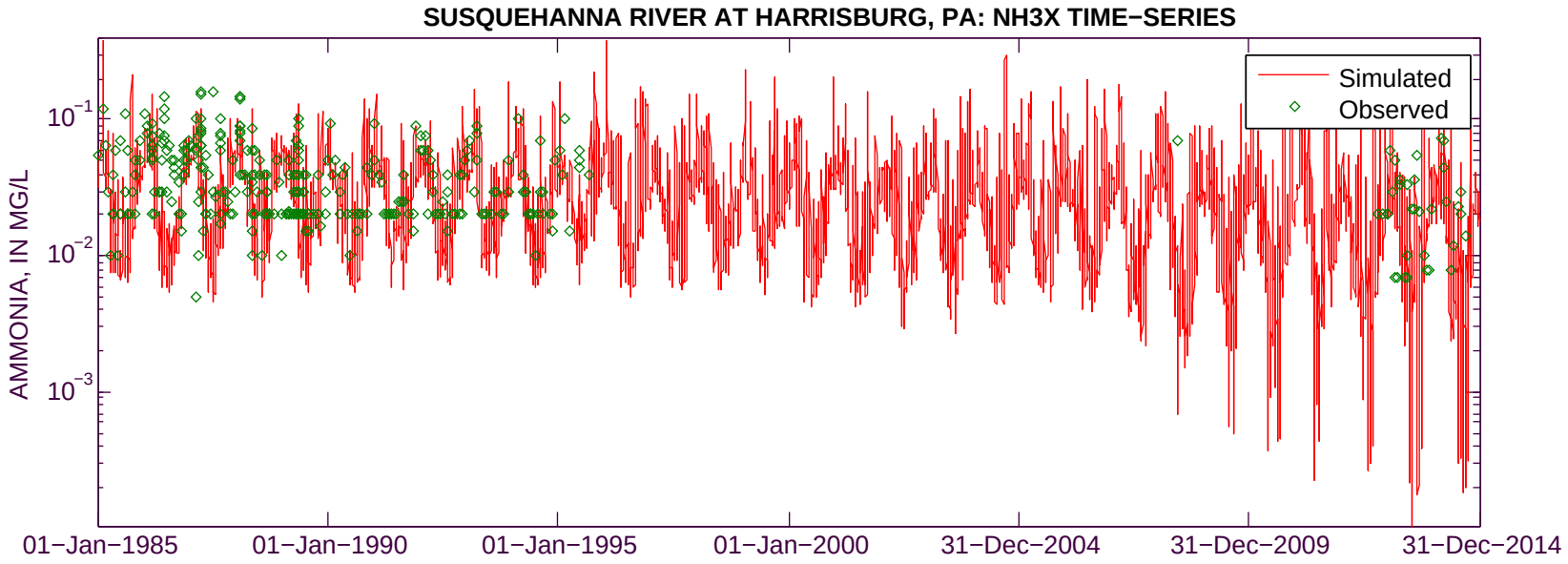
Dates: 1/1/1985 – 12/31/201

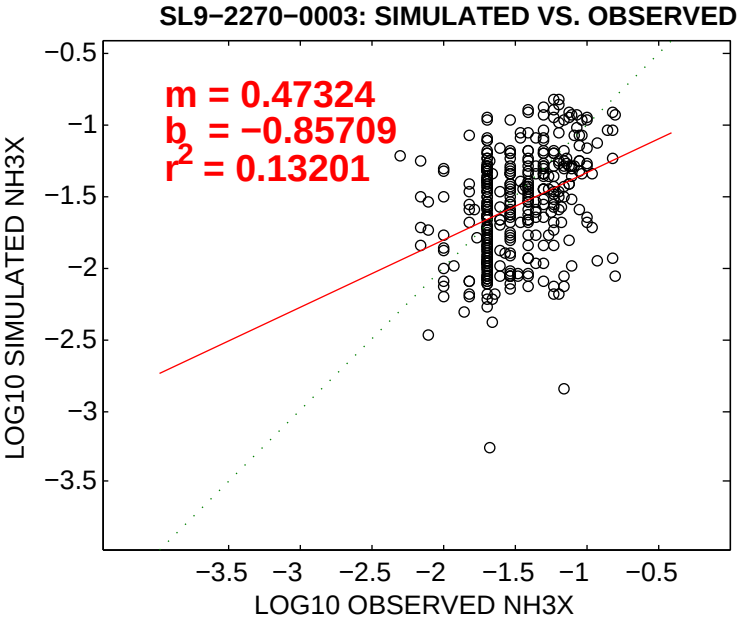
Drive: N/A | Directory: model | Observed: OBS20161101

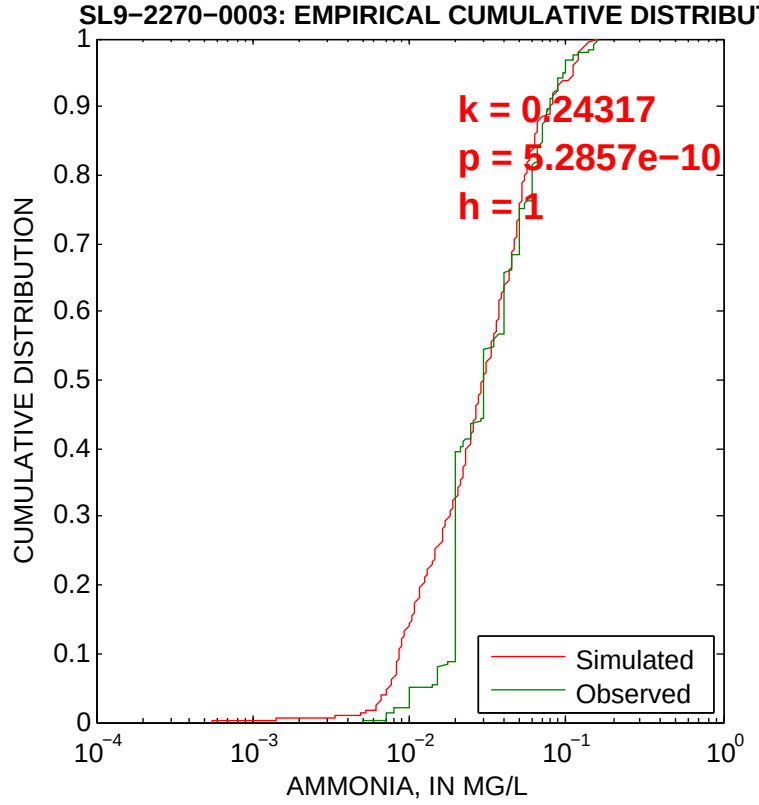
STATISTICS

	observe	simulate
n	10957	10957
min	2420 3.38382	1129.1 3.05273
mean	35417.4 4.35833	36741.4 4.42536
media	23200 4.36549	27893 4.4455
max	530000 5.72428	551580 5.74161
varian	1.59847e+0 0.165317	1.21741e+ 0.127566
JB	0.001 0.001	0.001 0.001
	ra	log
%	3.73831	1.53793
err.va	2.40798e+0	0.0303197
rel.std.err	0.150643	0.183403
mod.eff	0.849357	0.816597

VERSION 2.1







DATA SELECTION

scenario	file
P620171001WQ	NH3X.calib

plot: NH3X - ammonia

Dates: 1/1/1985 – 12/31/201

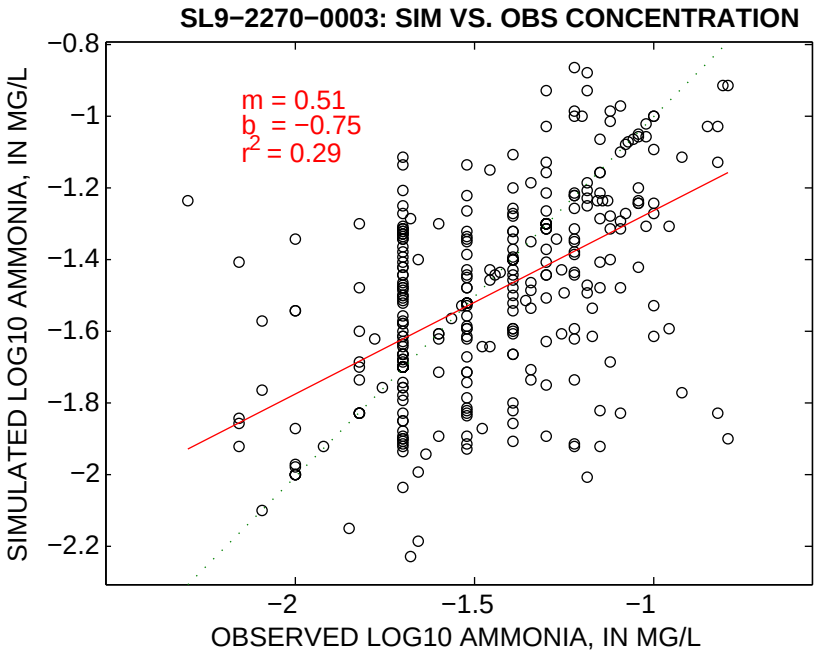
Drive	Directory	Observed
N/A	model	OBS20161101

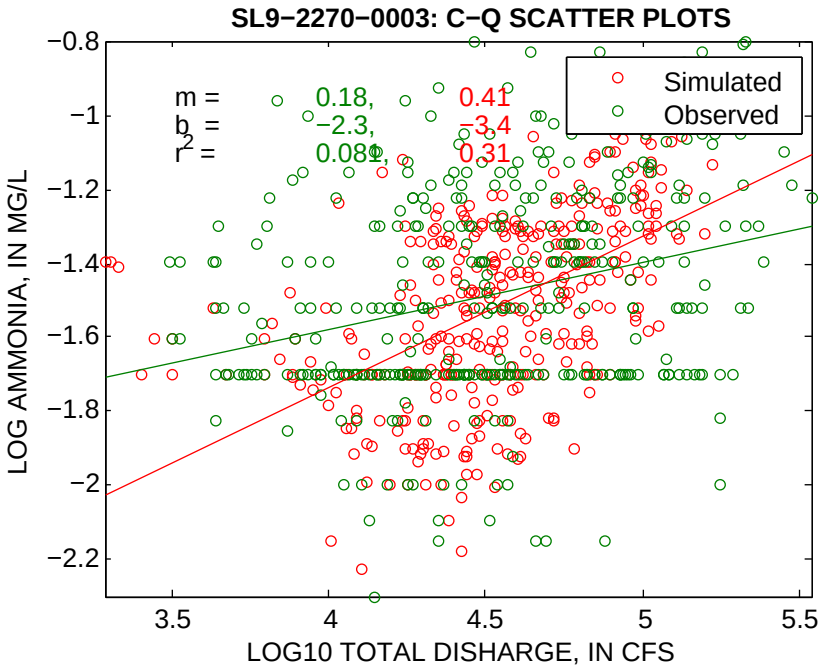
STATISTICS

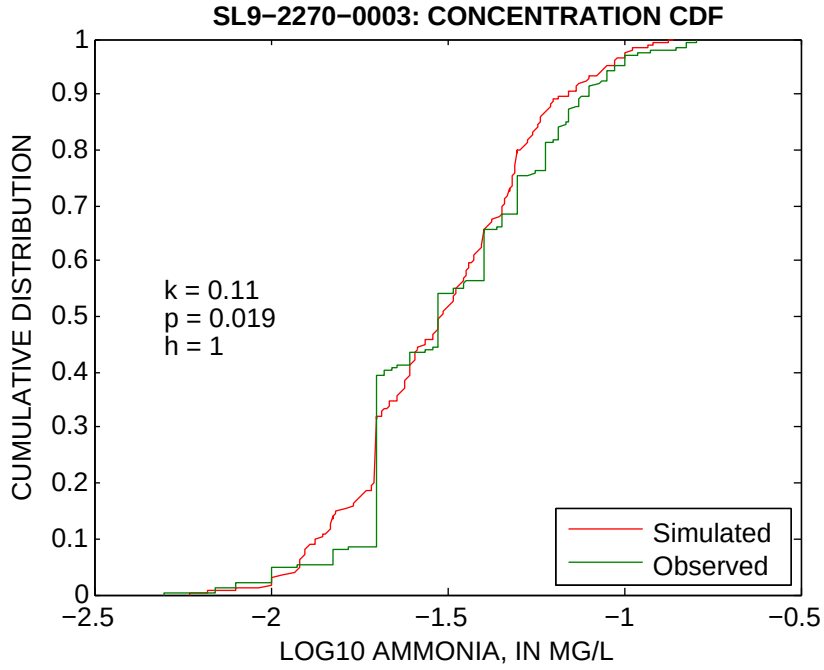
	n	observe	simulate
		366	366
min		0.005	0.0005463
		-2.30103	-3.26257
mean		0.0405407	0.0377702
		-1.48424	-1.55949
media		0.03	0.0297225
		-1.52288	-1.52694
max		0.16	0.15265
		-0.79588	-0.816303
varian		0.00081443	0.00088647
		0.0792431	0.134434
JB		0.001	0.001
		0.203256	0.002462
		ra	log
%		-6.83375	5.06993
err.va		0.00103407	0.144353
rel.std.err		1.26968	1.82165
mod.eff		-0.269683	-0.821648

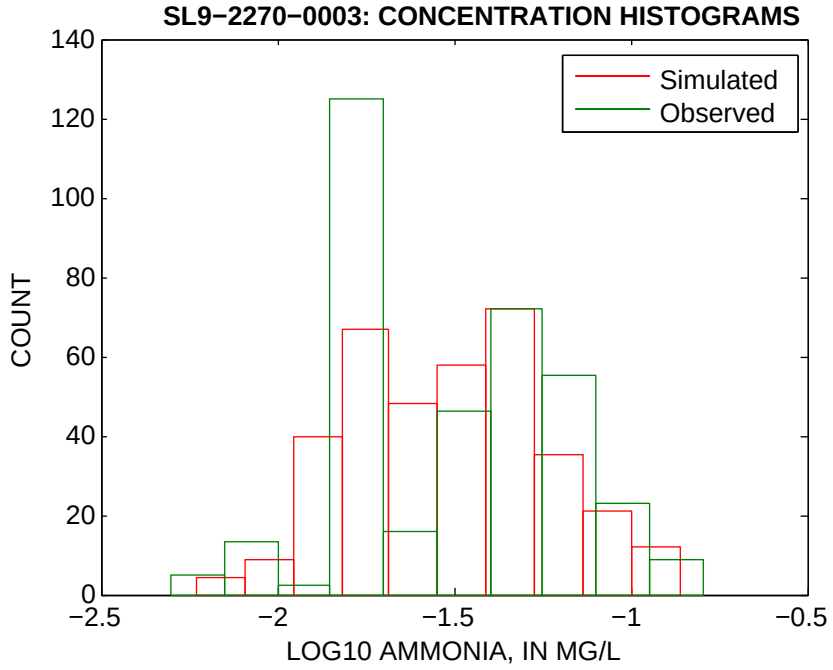
VERSION 2.1

ALL DATA
LOG10

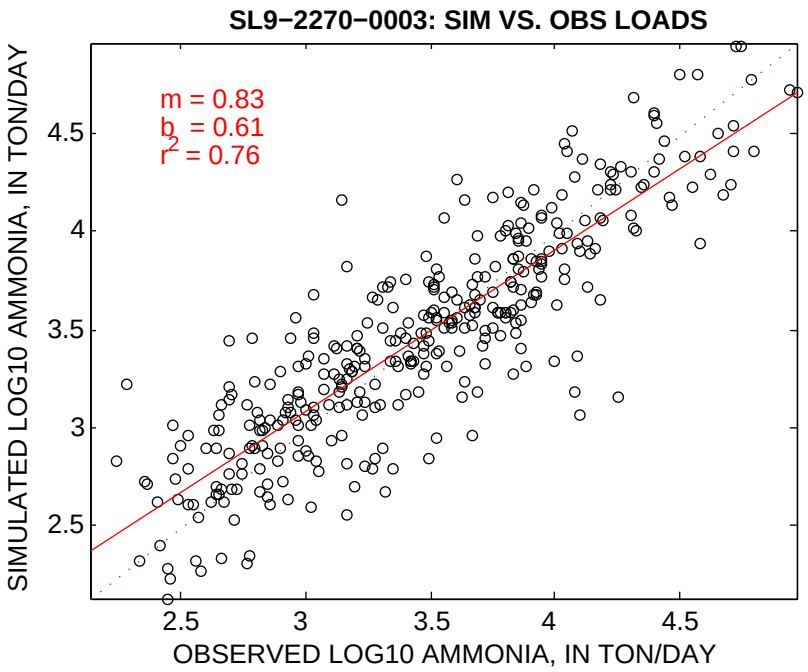


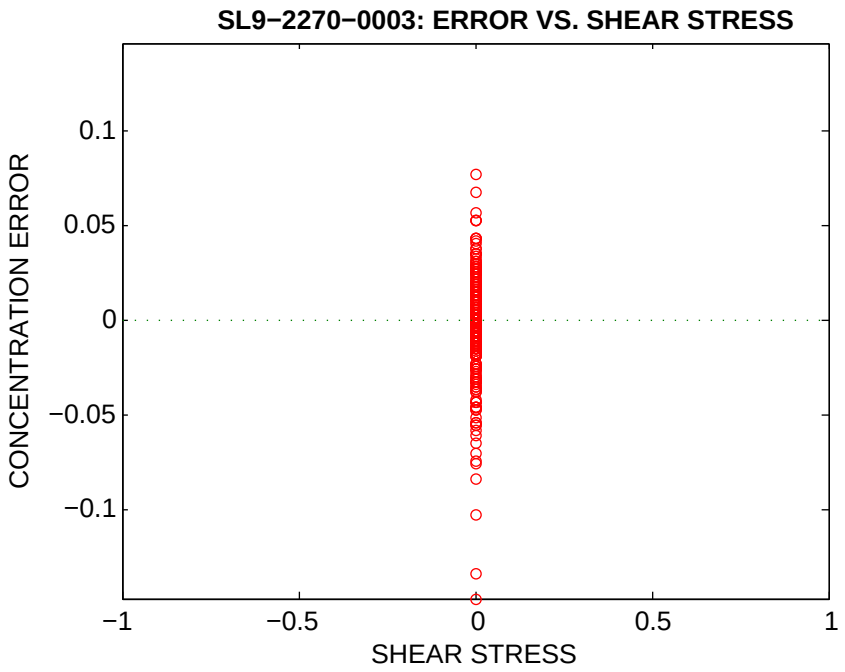


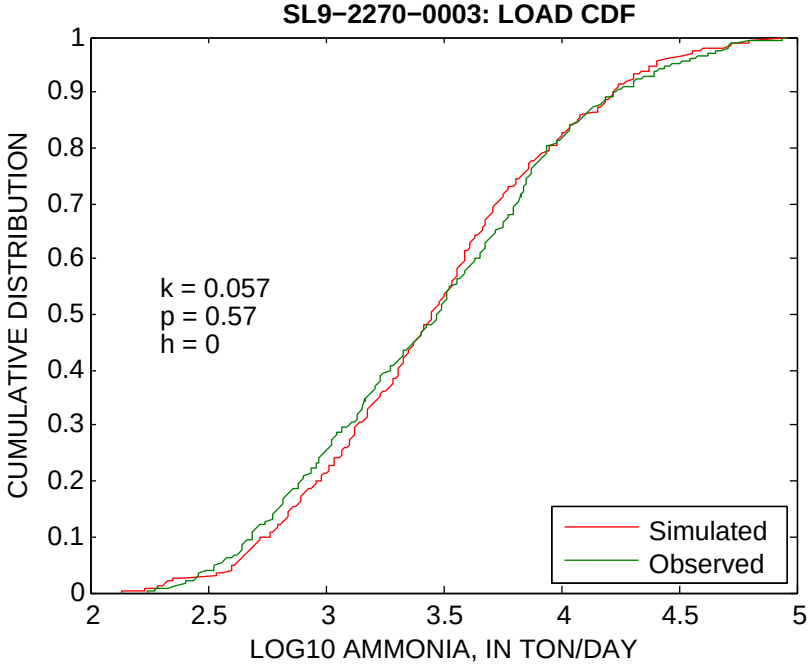


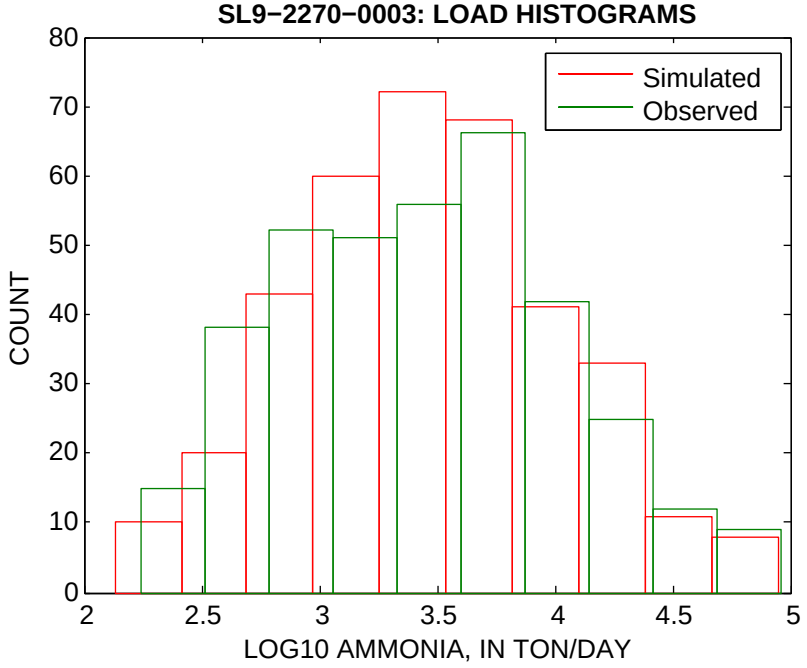


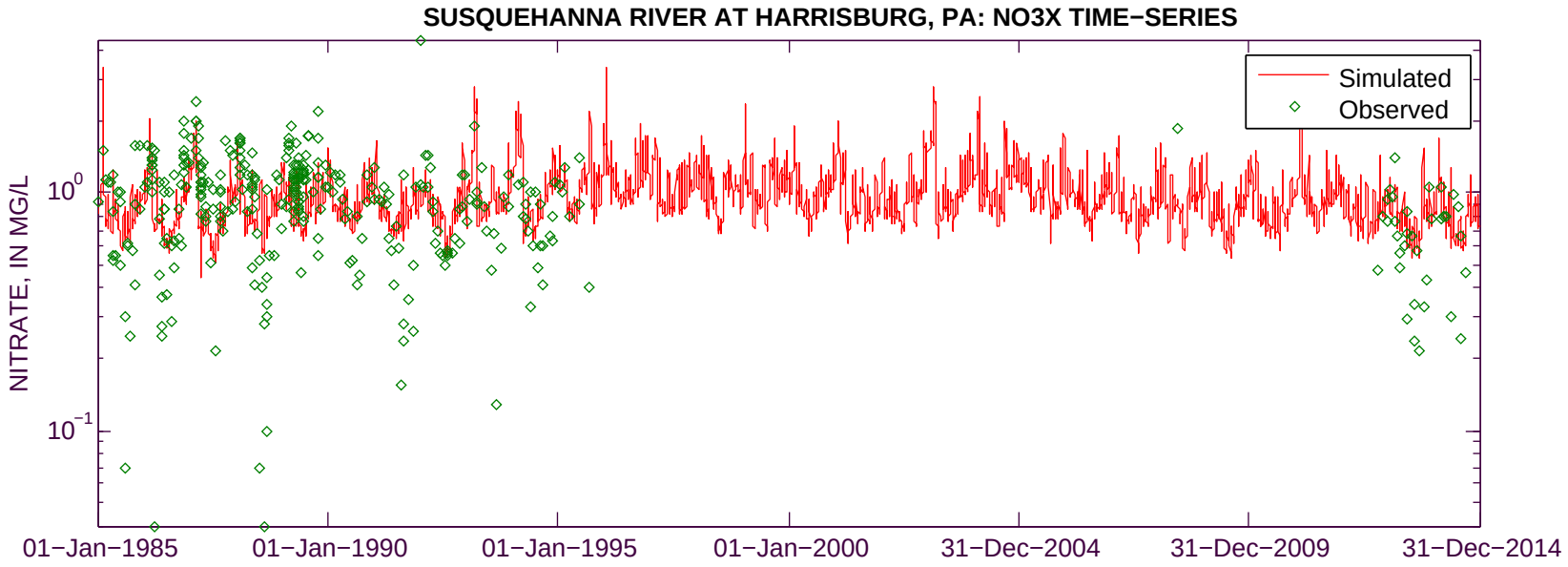
LOAD DATA
LOG10

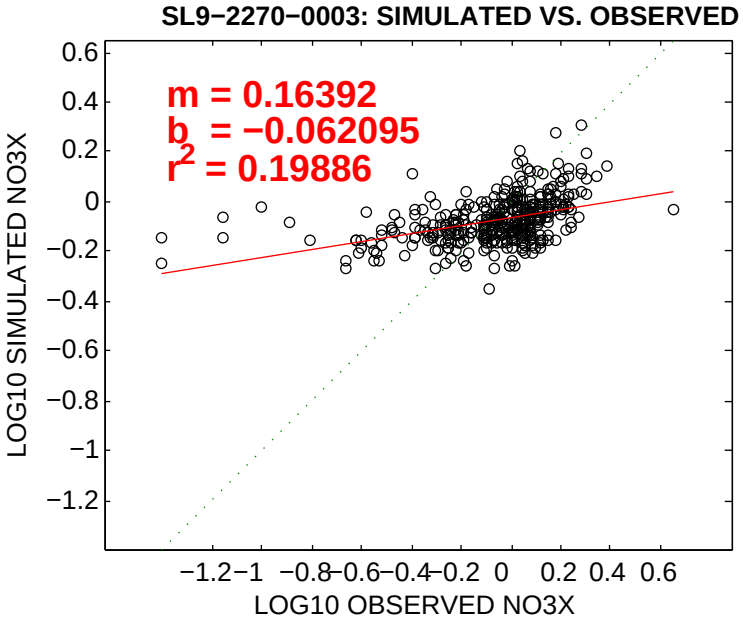


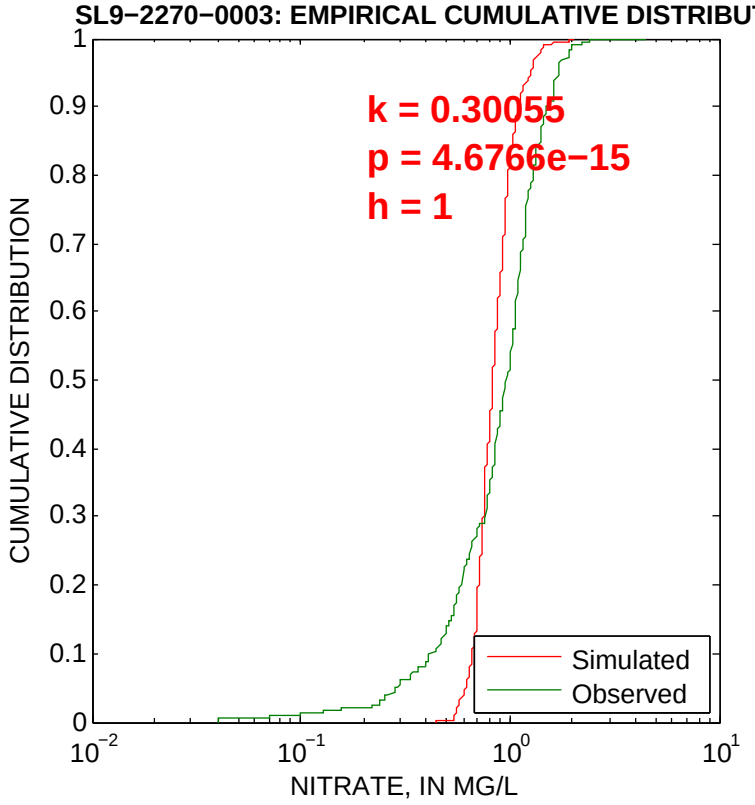












DATA SELECTION

scenario	file
P620171001WQ	NO3X.calib

plot: NO3X - nitrate

Dates: 1/1/1985 – 12/31/201

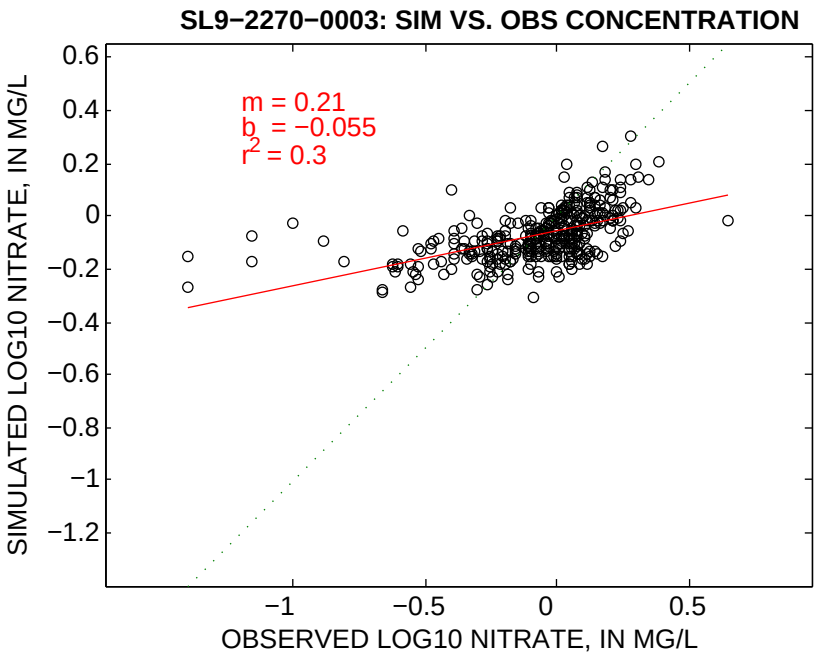
Drive	Directory	Observed
N/A	model	OBS20161101

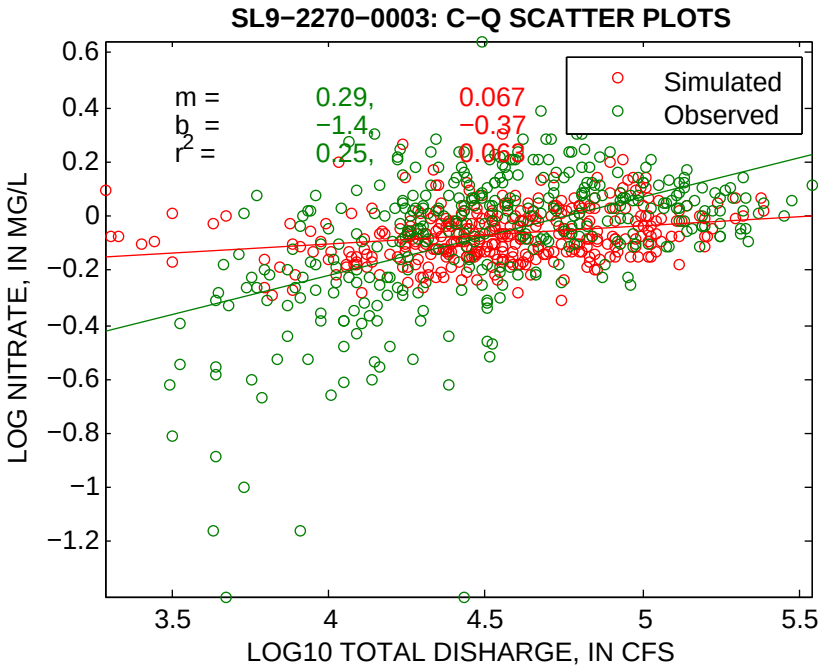
STATISTICS

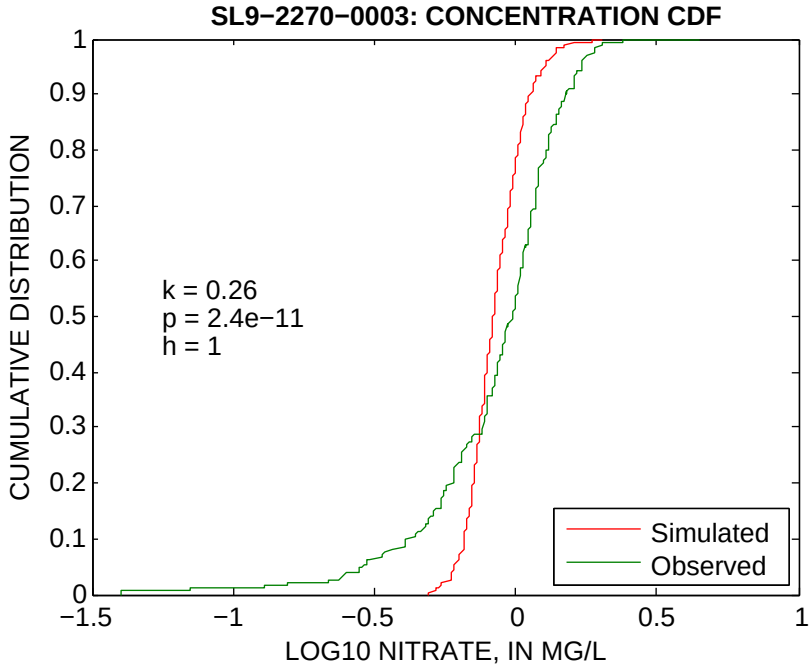
	n	366	366
		observe	simulate
min		0.04	0.4431
		-1.39794	-0.353498
mean		0.973314	0.864978
		-0.0694525	-0.0734796
media		0.97	0.830355
		-0.0132283	-0.0807362
max		4.435	2.0444
		0.646894	0.310566
varian		0.207347	0.0411673
		0.0646023	0.00872886
JB		0.001	0.001
		0.001	0.001
		ra	log
%		-11.1306	5.79828
err.va		0.169496	0.0521683
rel.std.err		0.817452	0.807529
mod.eff		0.182548	0.192471

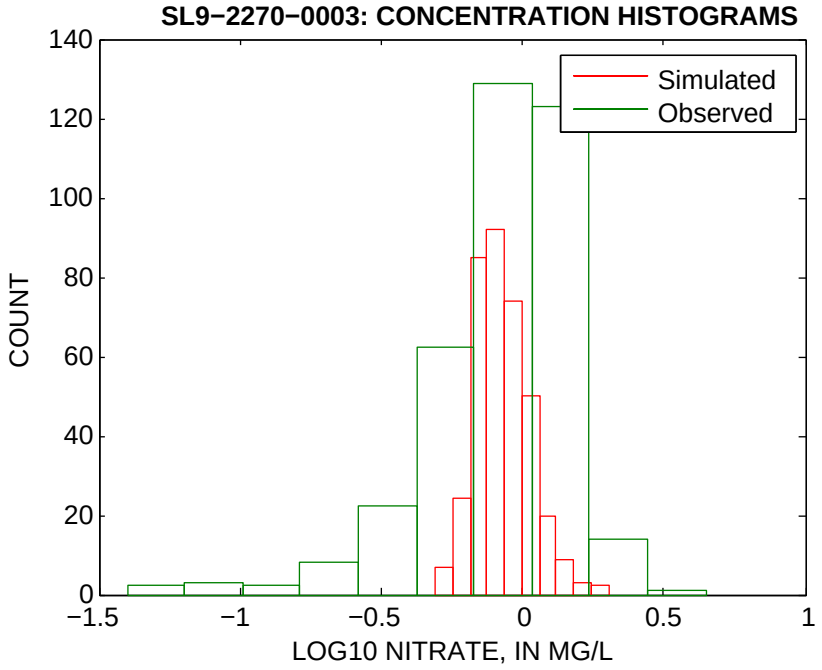
VERSION 2.1

ALL DATA
LOG10

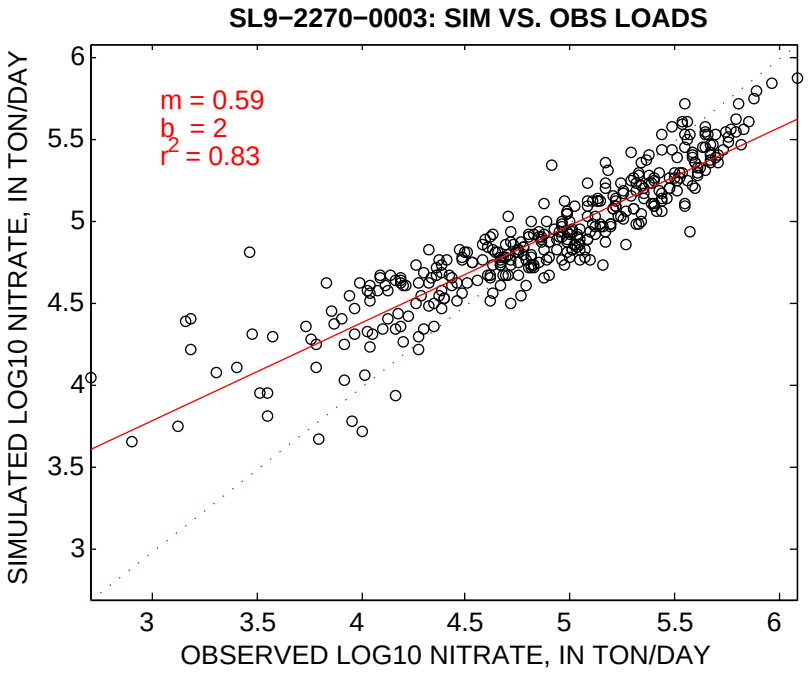


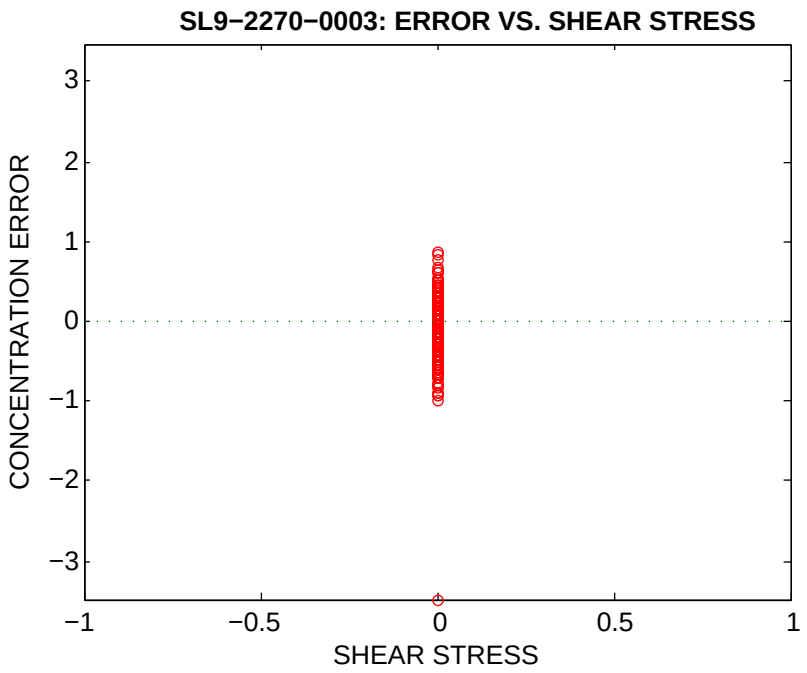


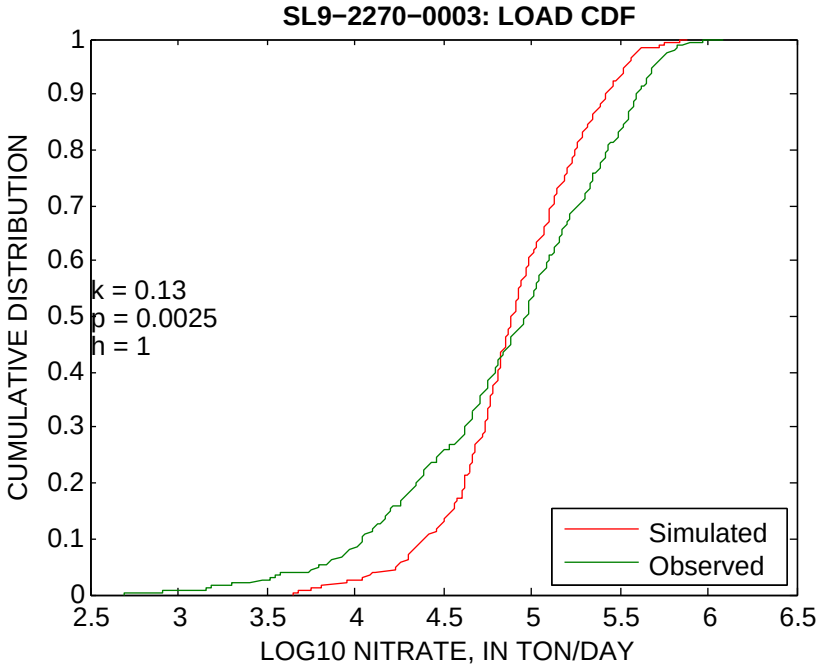


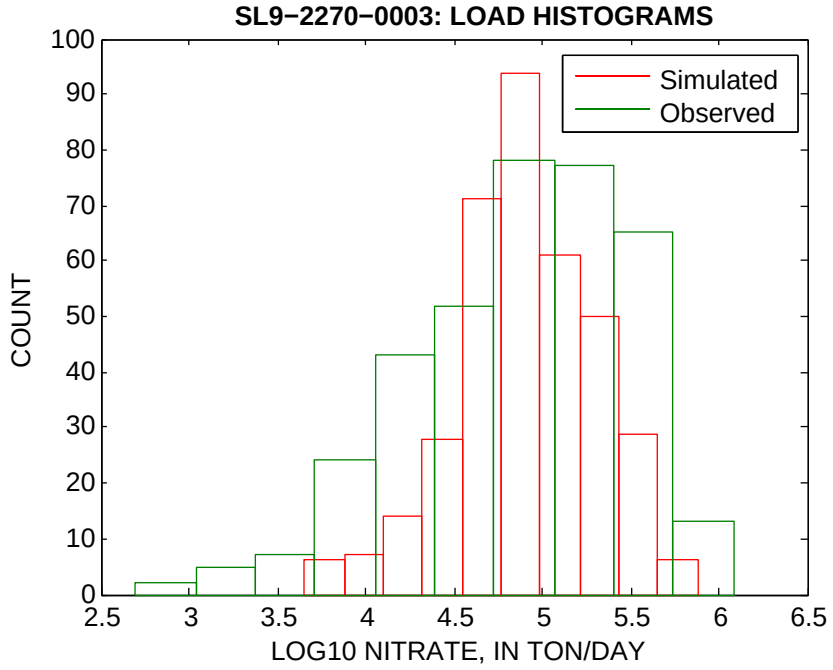


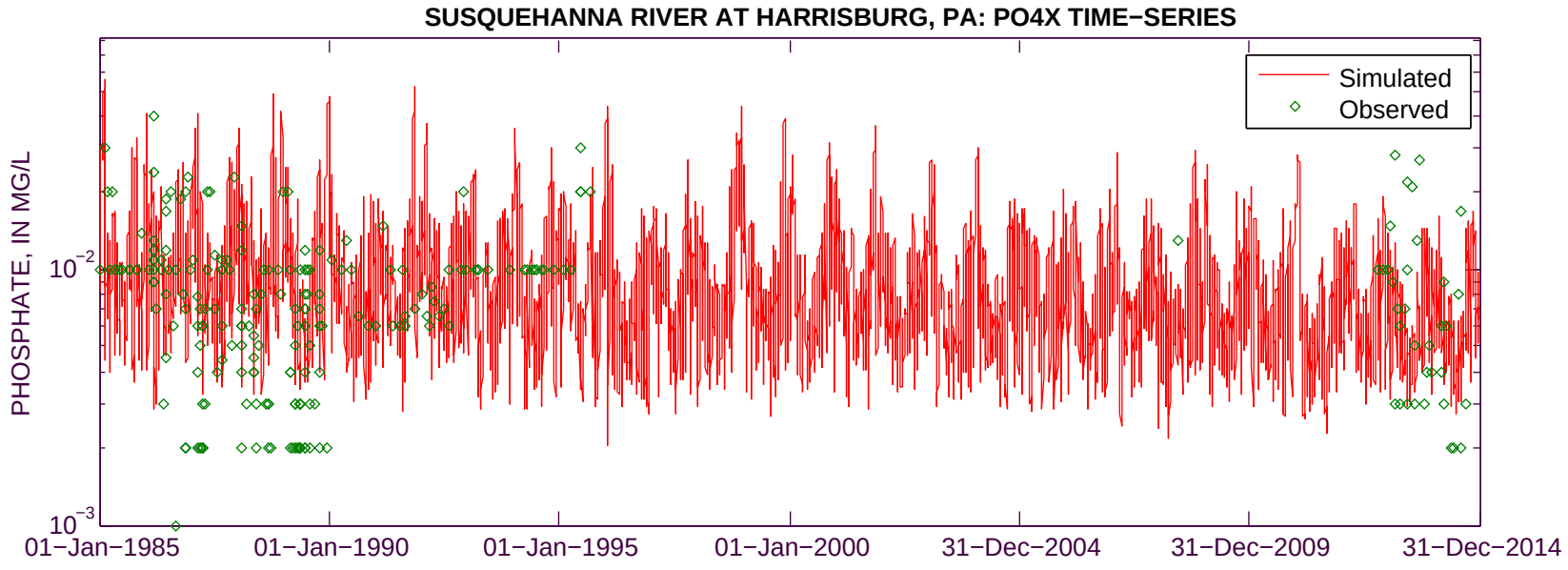
LOAD DATA
LOG10

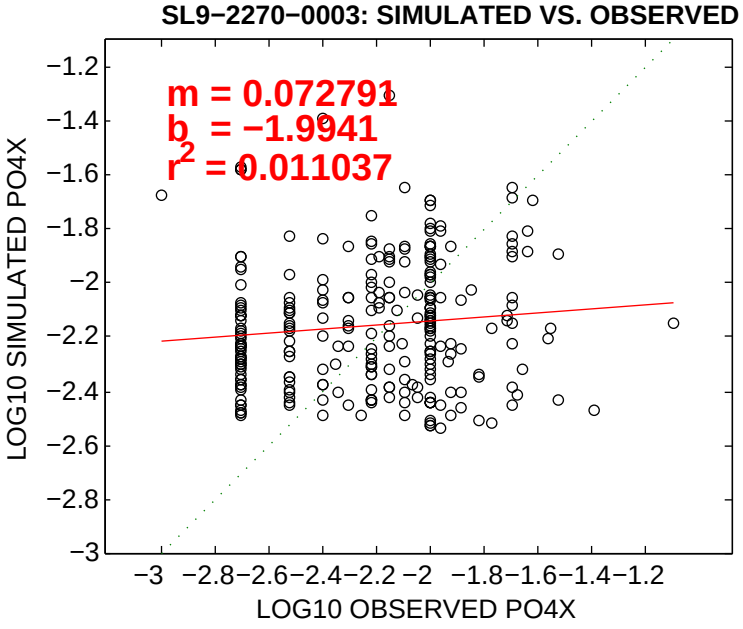


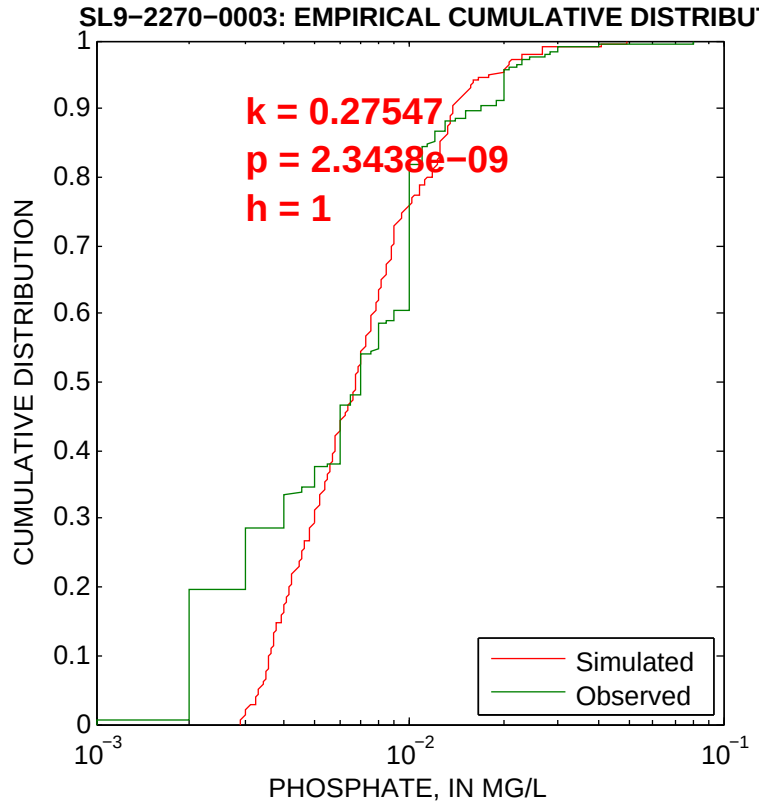












DATA SELECTION

scenario: P620171001WQ; file: PO4X.calib

plot: PO4X - phosphate

Dates: 1/1/1985 – 12/31/201

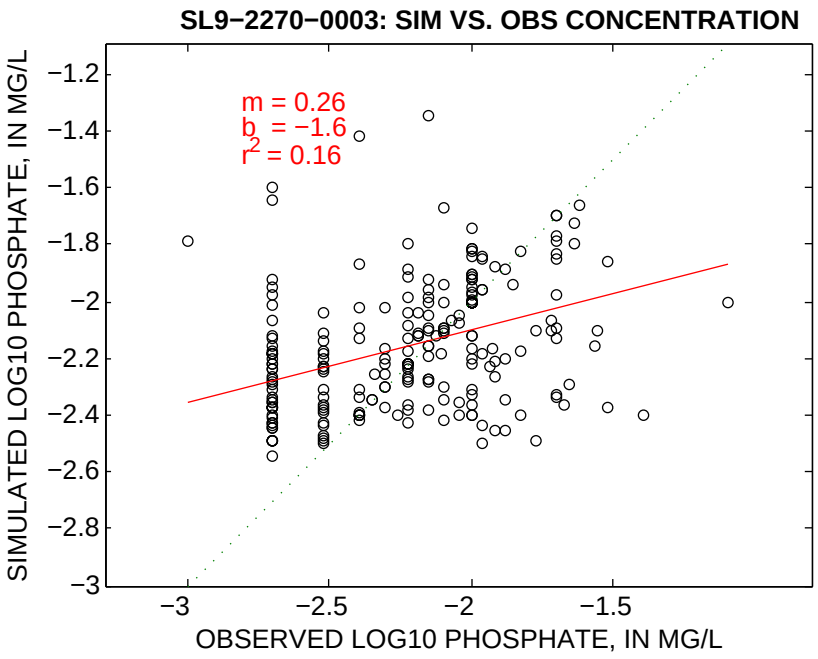
Drive: N/A Directory: model Observed: OBS20161101

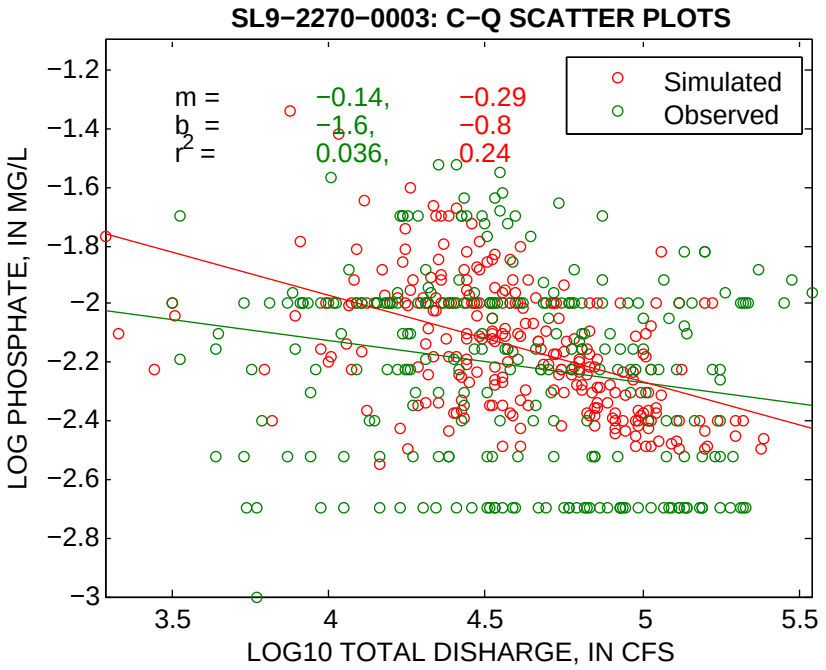
STATISTICS

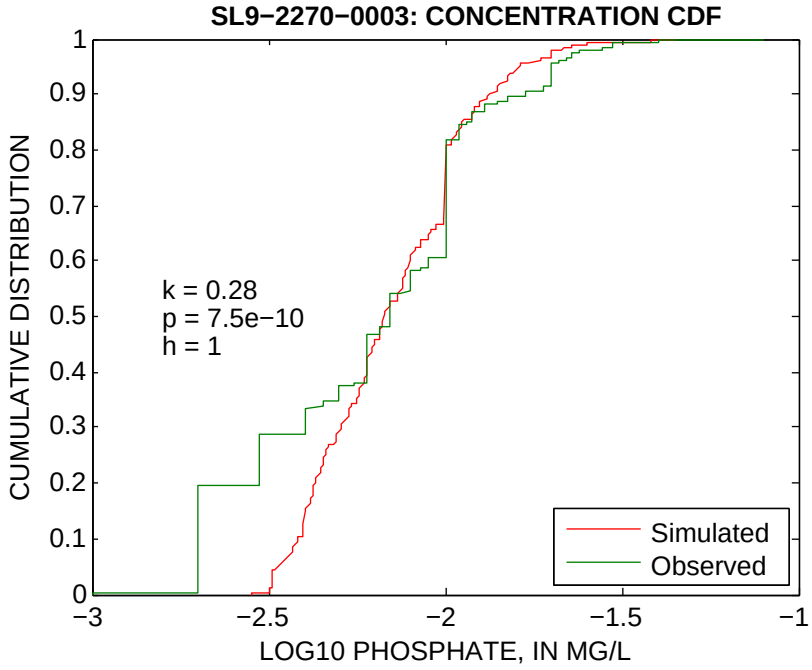
		observe	simulate
n		265	265
min		0.001	0.0028746
		-3	-2.54142
mean		0.00824226	0.00820393
		-2.2117	-2.15506
media		0.007	0.0067822
		-2.1549	-2.16863
max		0.08	0.049433
		-1.09691	-1.30598
varian		5.57559e-0	3.14795e-0
		0.112842	0.054171
JB		0.001	0.001
		0.136347	0.003679
		ra	log
%		-0.464954	-2.56077
err.va		8.27176e-0	0.153805
rel.std.err		1.48357	1.36301
mod.eff		-0.483566	-0.363014

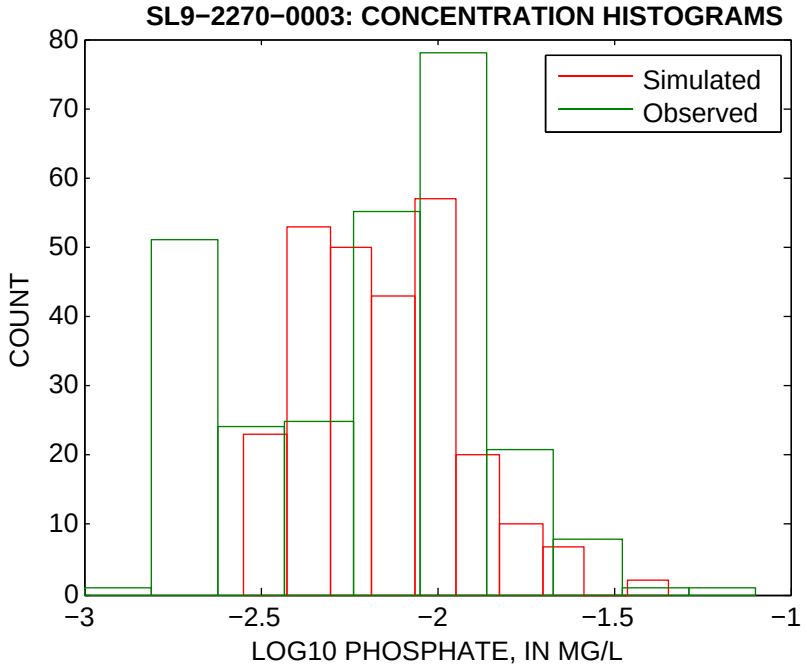
VERSION 2.1

ALL DATA
LOG10

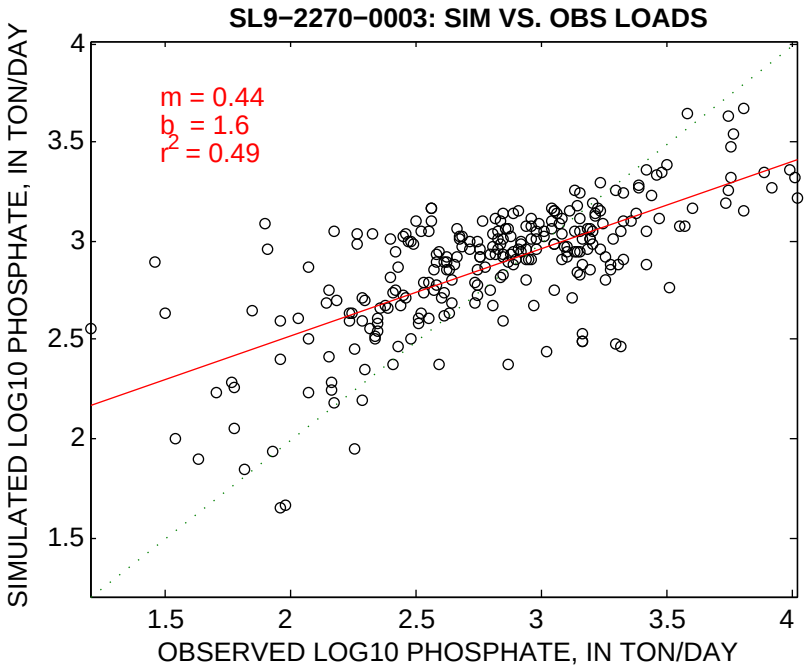


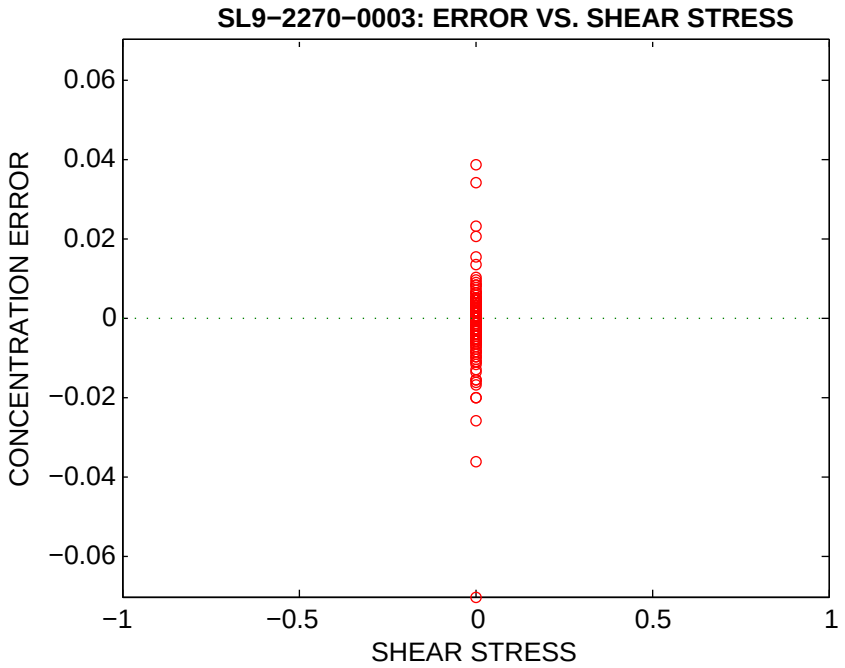


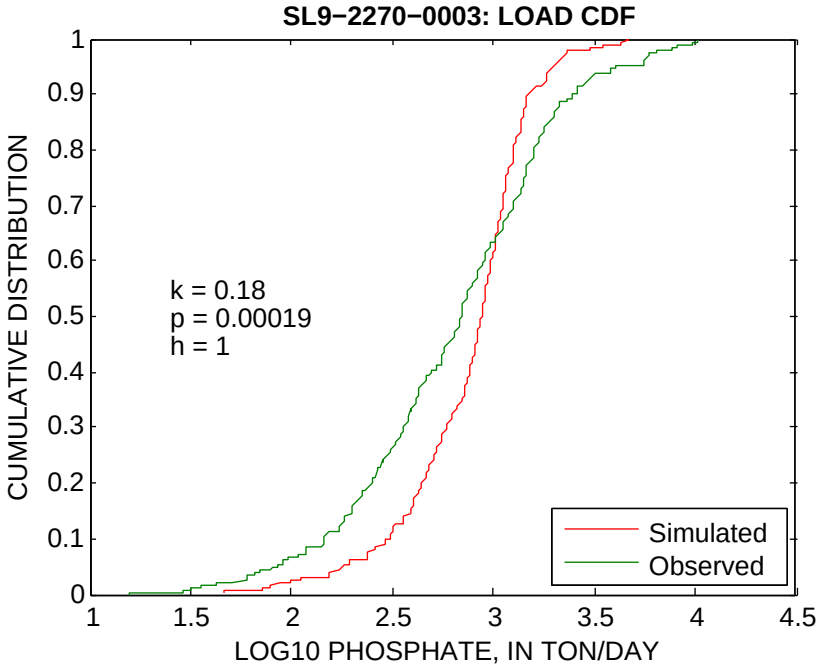


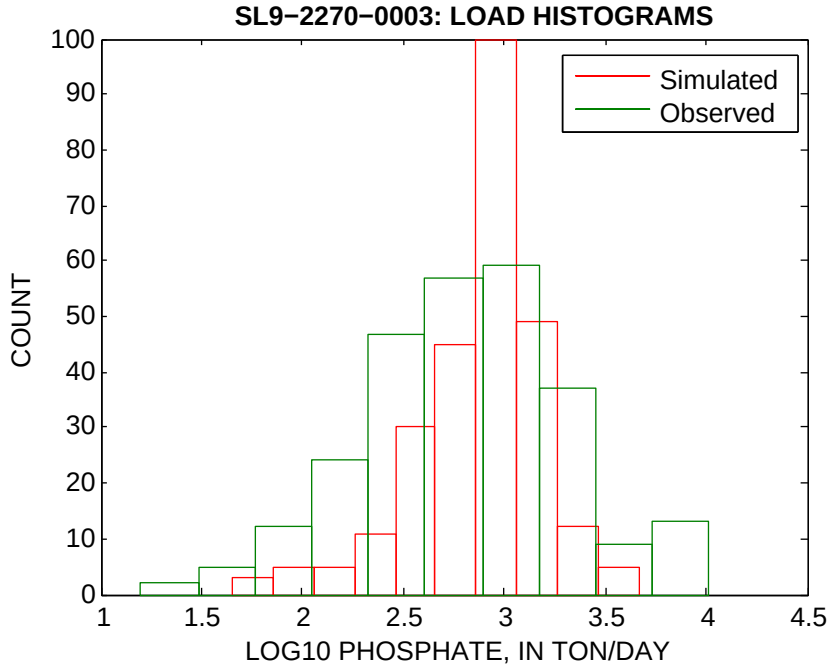


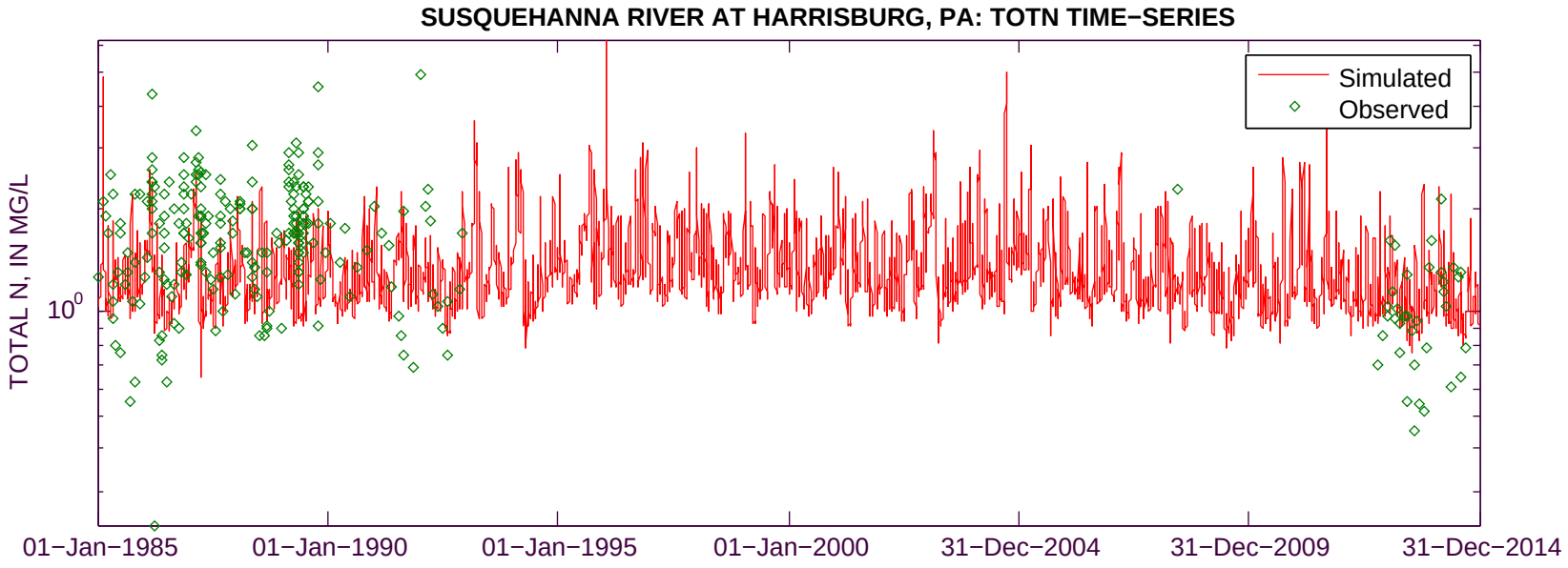
LOAD DATA
LOG10

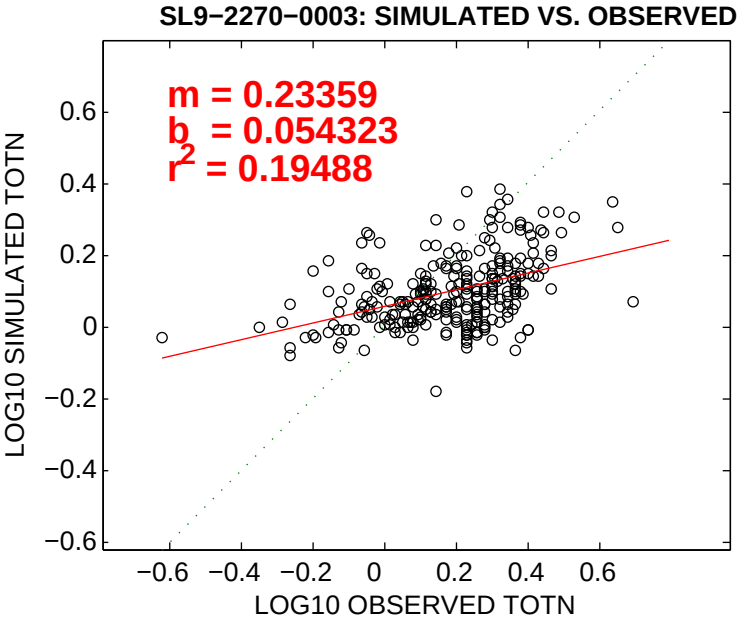


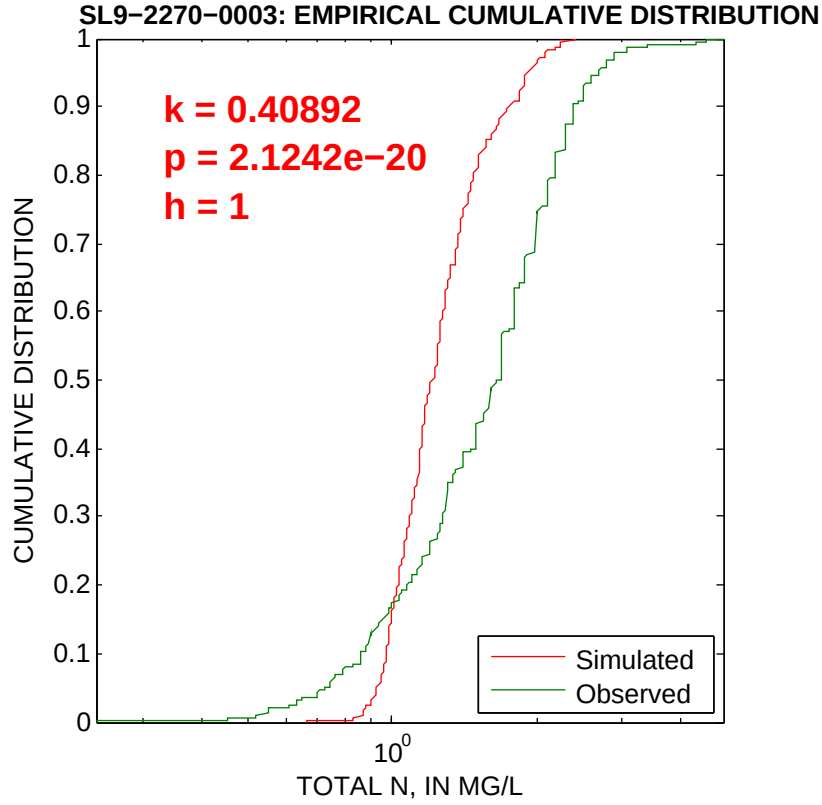












DATA SELECTION

scenario: P620171001WQ; file: TOTN.calib

plot: TOTN - total nitrogen

Dates: 1/1/1985 – 12/31/201

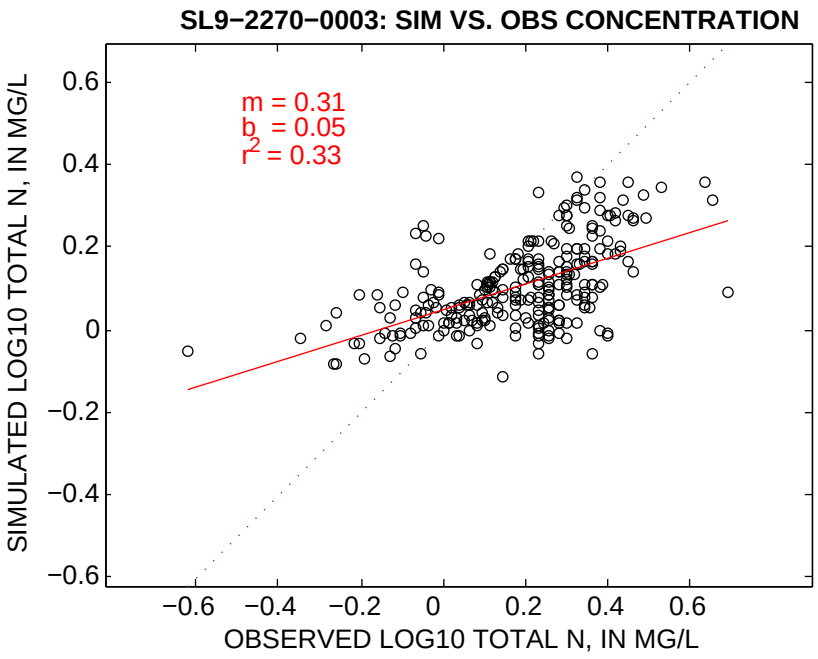
Drive: N/A; Directory: model; Observed: OBS20161101

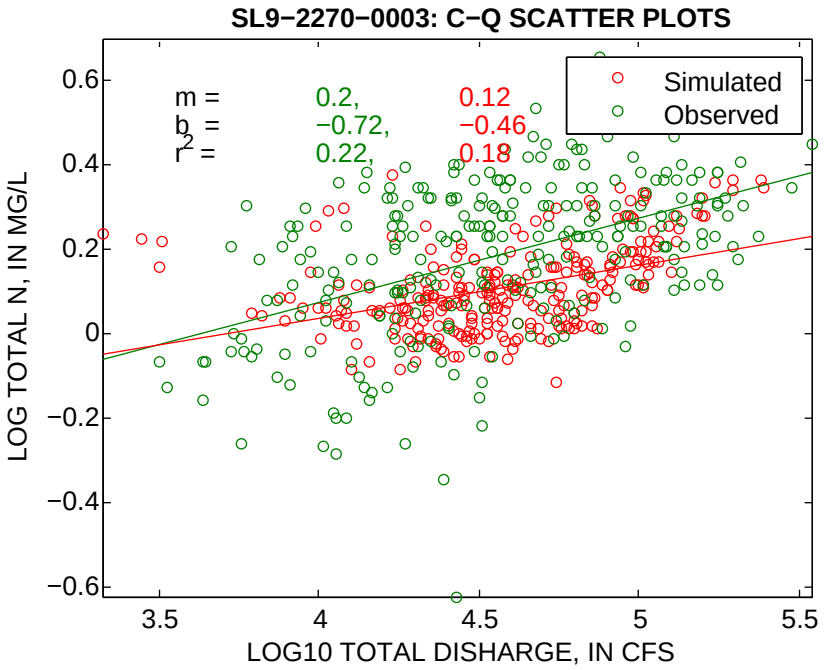
STATISTICS

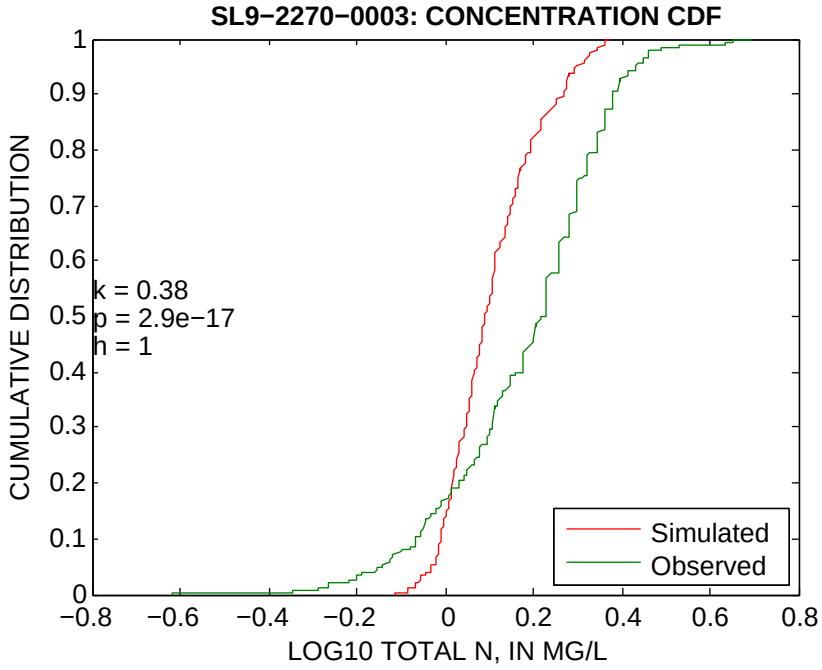
		observe	simulate
n		269	269
min		0.24	0.66638
		-0.619789	-0.176278
mean		1.66056	1.28465
		0.18404	0.0973135
media		1.7	1.2149
		0.230449	0.0845405
max		4.905	2.4019
		0.690639	0.380555
varian		0.442176	0.0976606
		0.034131	0.00955667
JB		0.001	0.001
		0.001	0.003263
		ra	log
%		-22.6378	-47.1238
err.va		0.489995	0.0352918
rel.std.err		1.10814	1.03401
mod.eff		-0.108144	-0.0340108

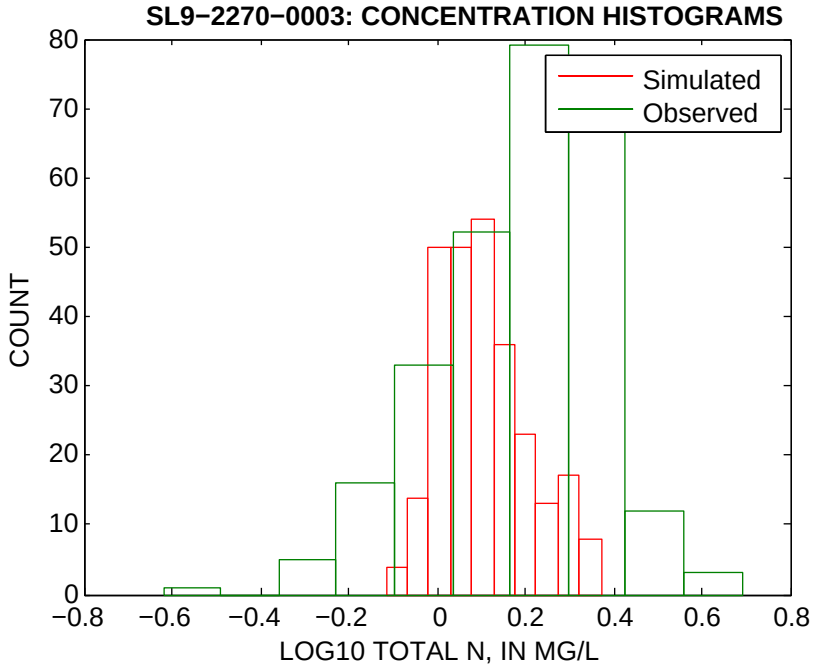
VERSION 2.1

ALL DATA
LOG10

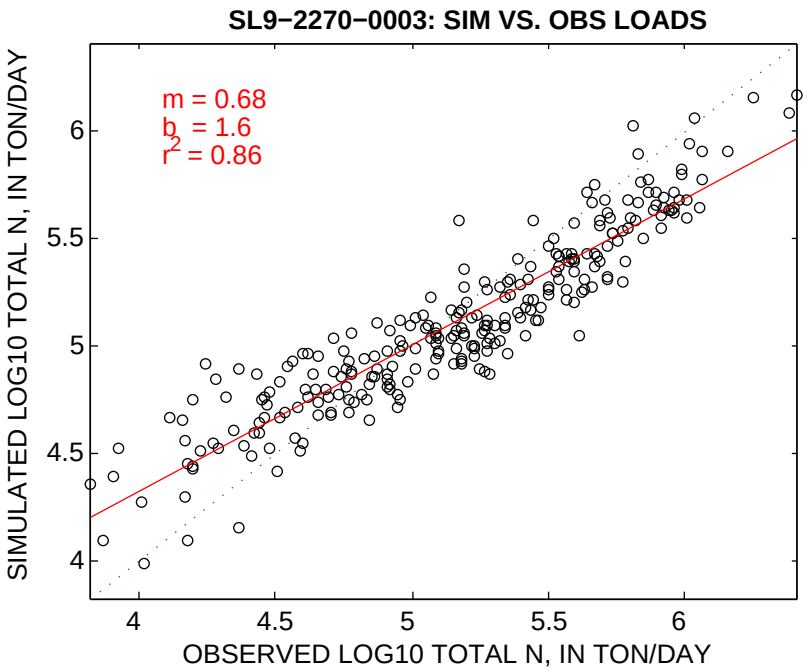


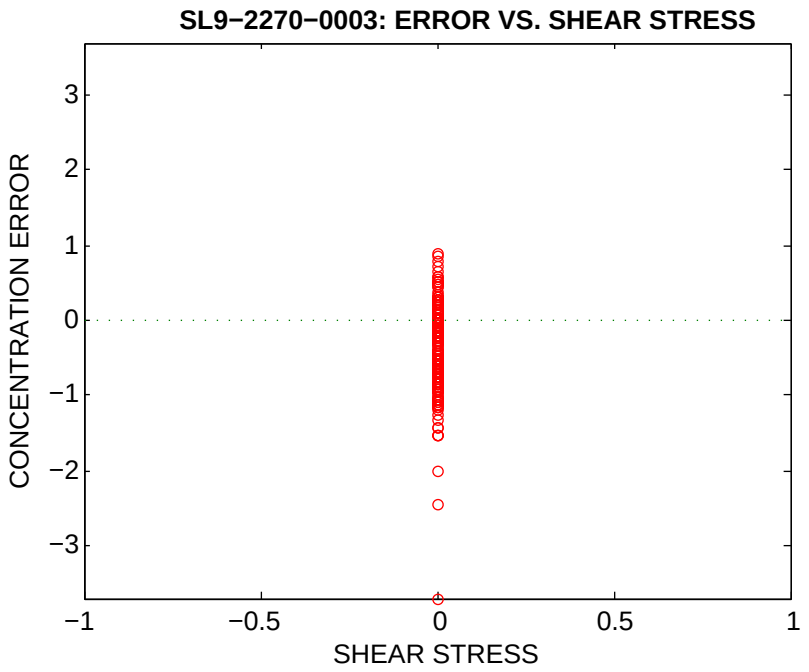


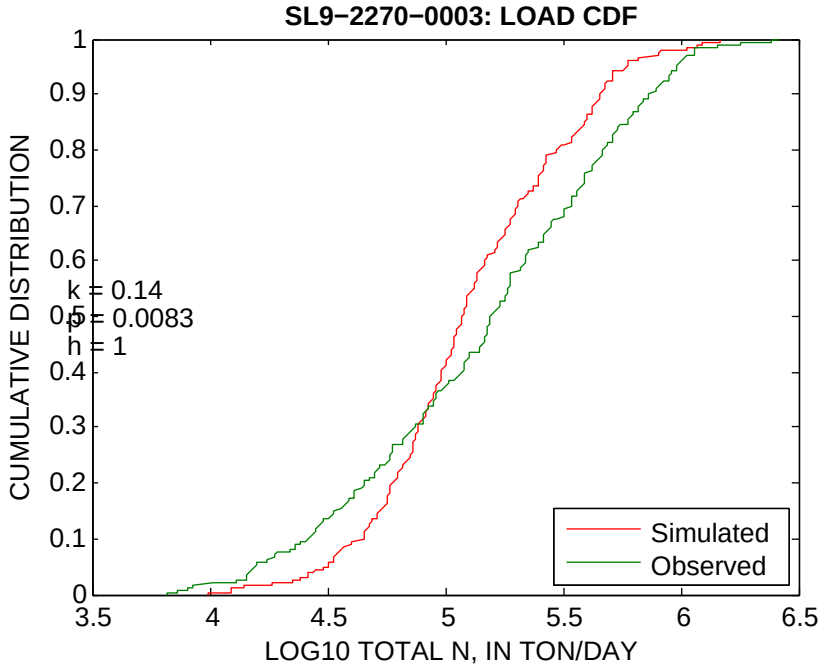


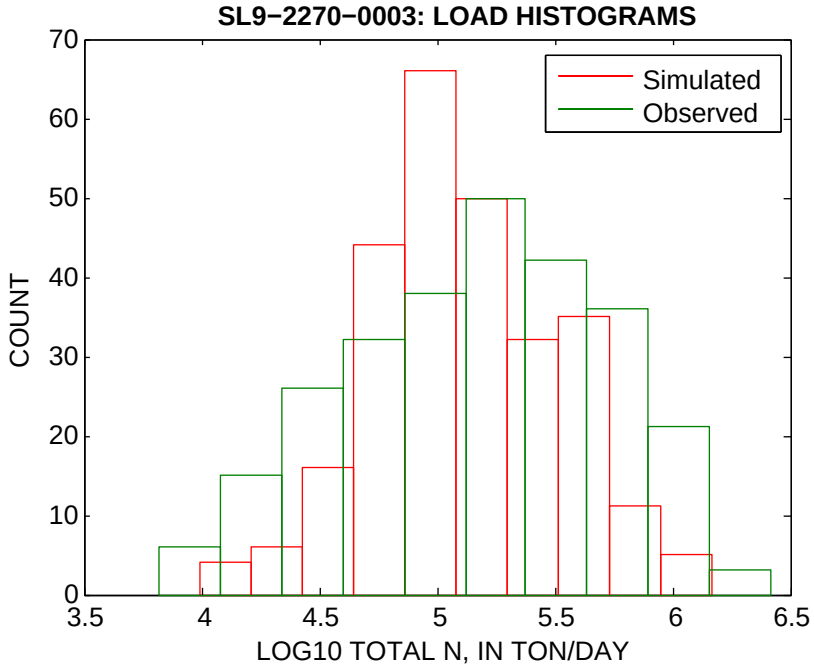


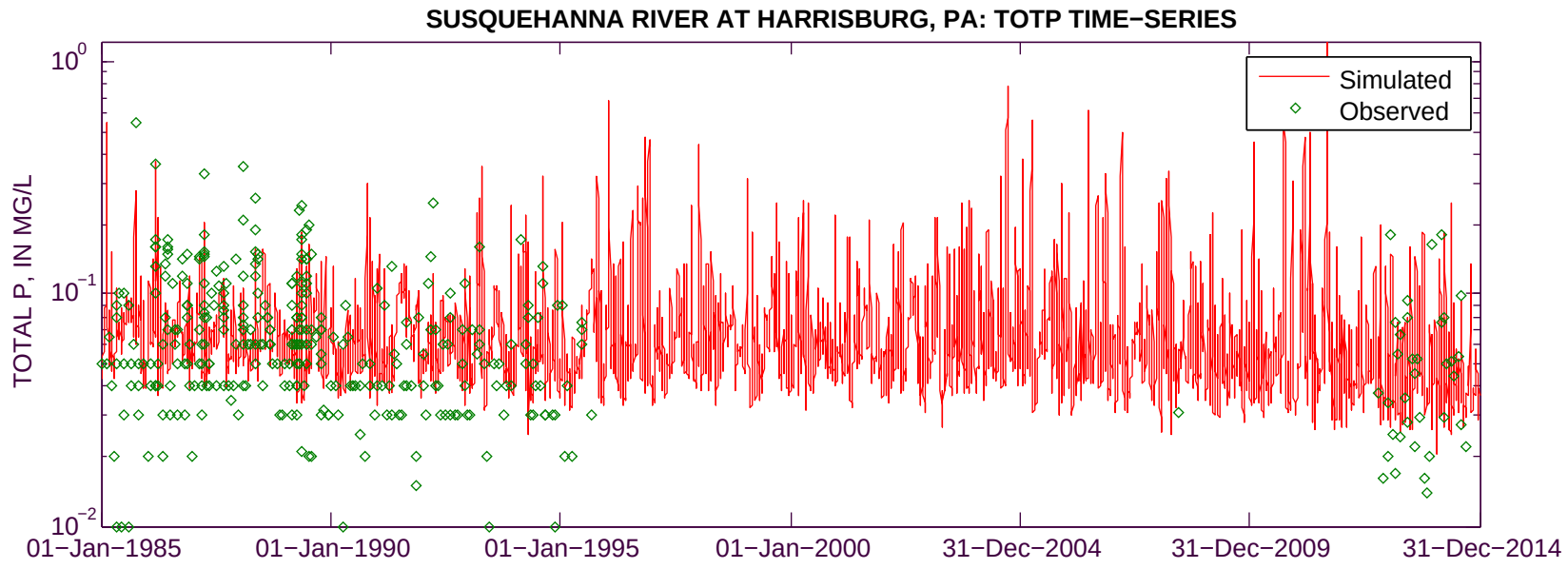
LOAD DATA
LOG10

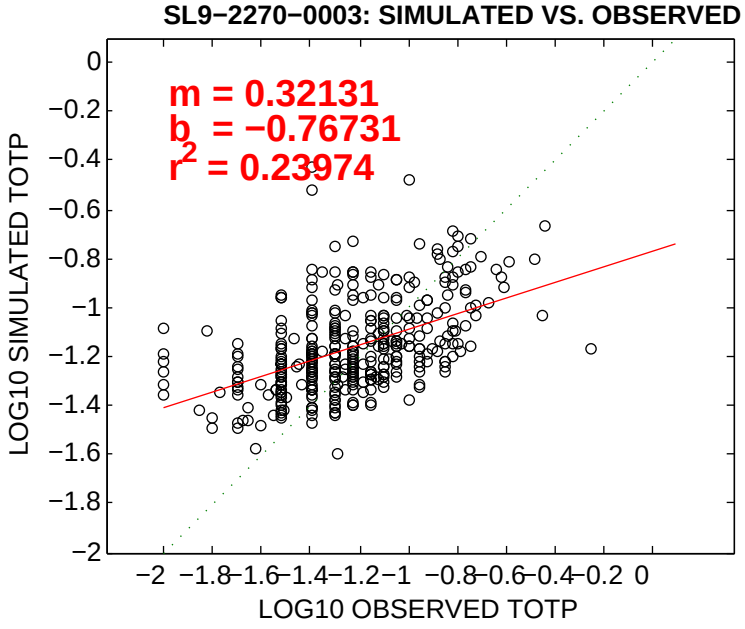


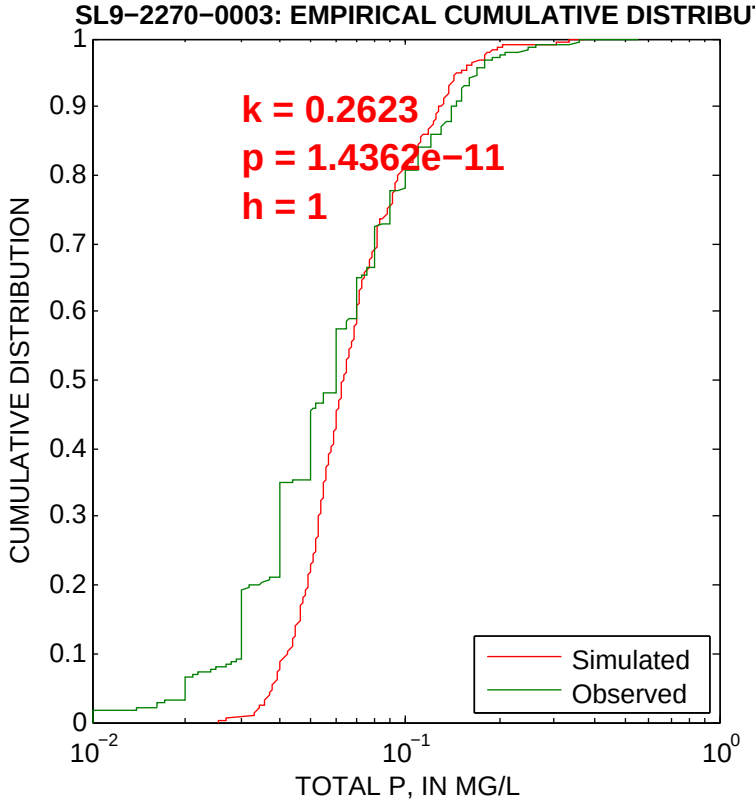












DATA SELECTION

scenario: P620171001WQ | file: TOTP.calib

plot: TOTP - total phosphorus

Dates: 1/1/1985 – 12/31/201

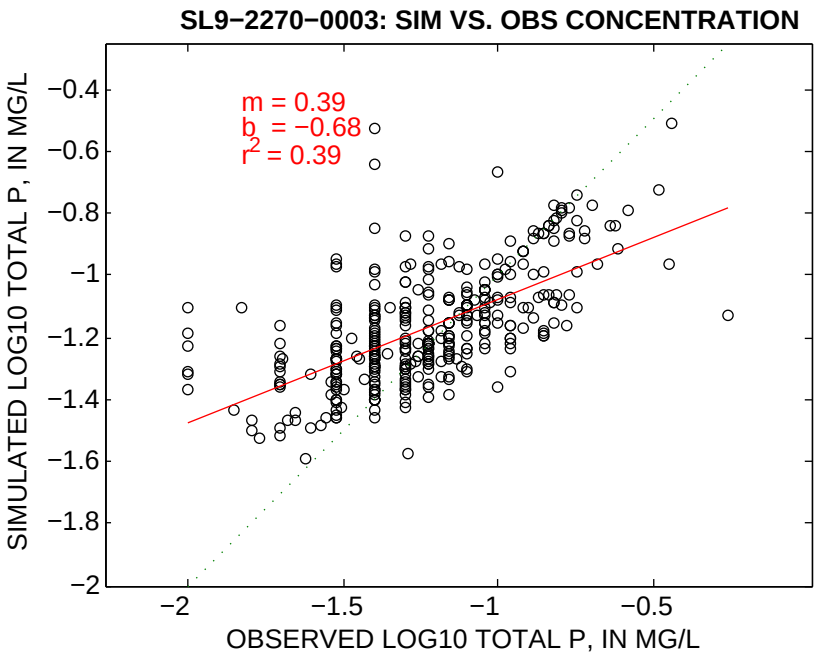
Drive: N/A | Directory: model | Observed: OBS20161101

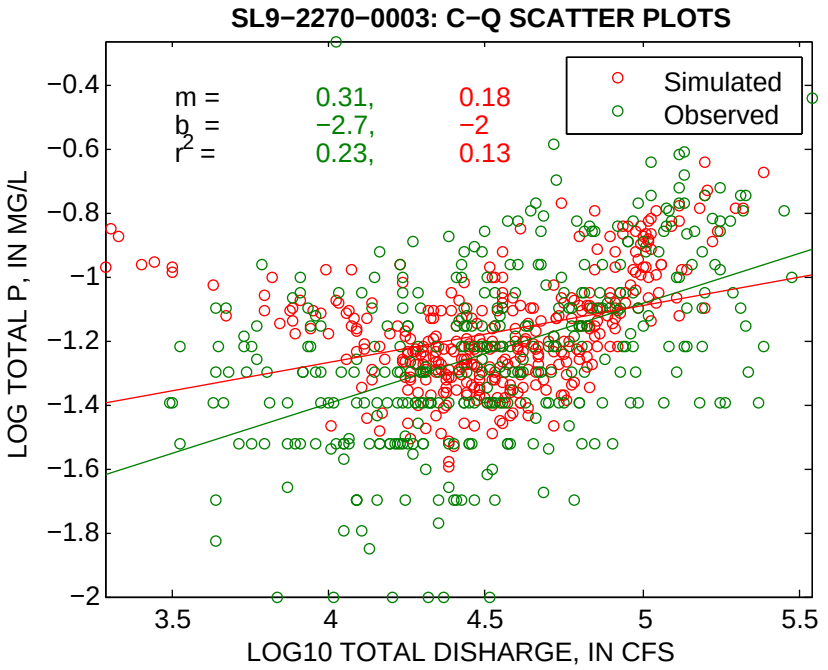
STATISTICS

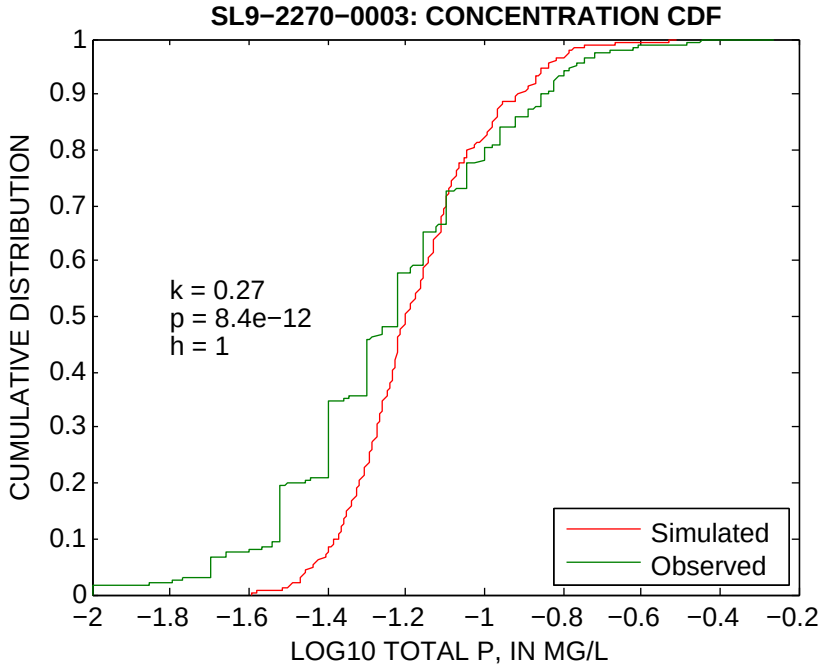
n	366	366
	observe	simulate
min	0.01	0.025525
	-2	-1.59303
mean	0.0733793	0.0763358
	-1.23099	-1.16284
media	0.06	0.0635605
	-1.22185	-1.19682
max	0.55	0.37106
	-0.259637	-0.430556
varian	0.00327383	0.00173717
	0.0822106	0.0354023
JB	0.001	0.001
	0.480248	0.001
	ra	log
%	4.02907	-5.53653
err.va	0.00314943	0.0694404
rel.std.err	0.962001	0.844665
mod.eff	0.0379985	0.155335

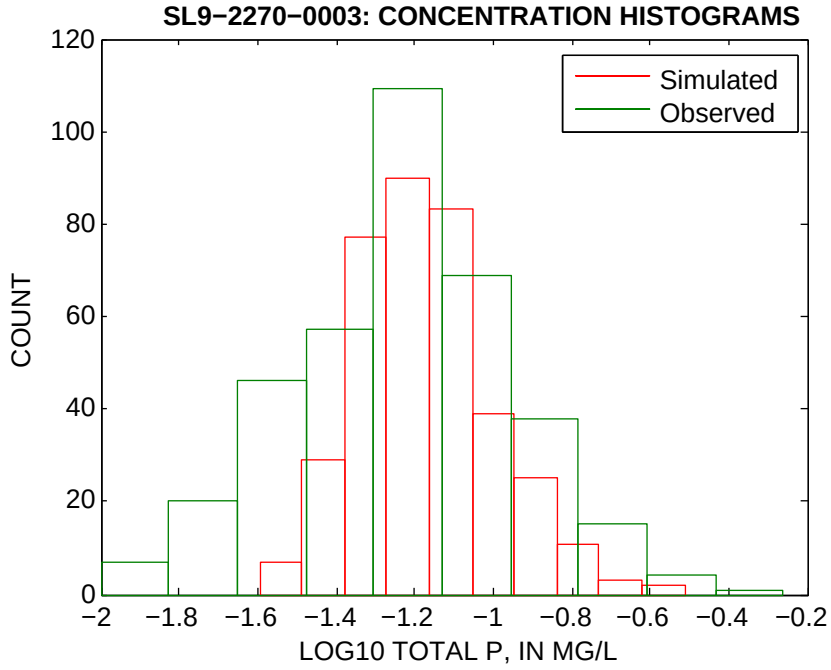
VERSION 2.1

ALL DATA
LOG10

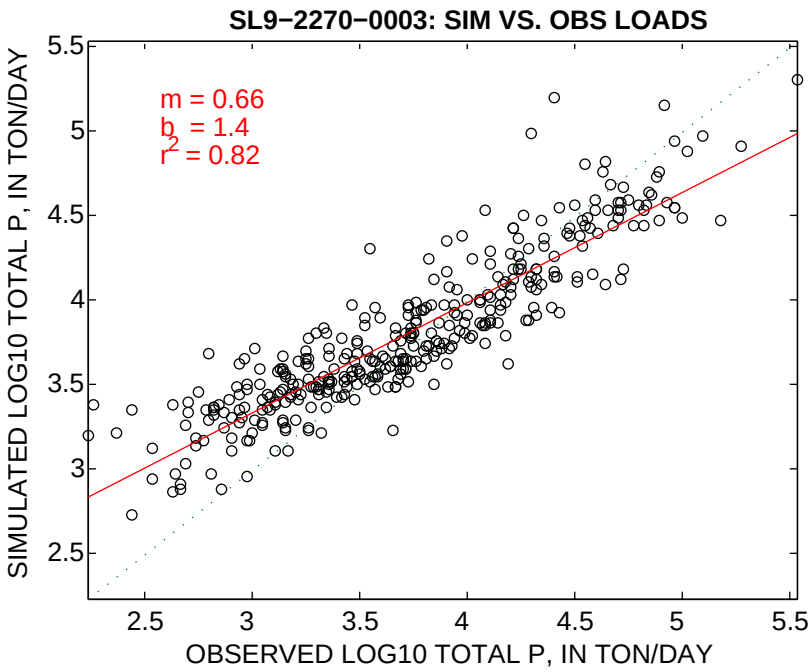


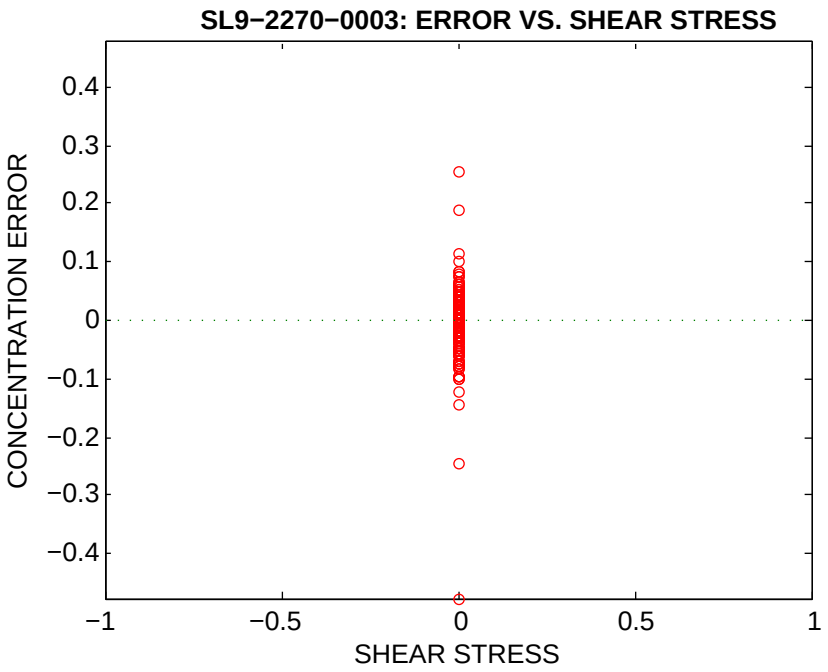


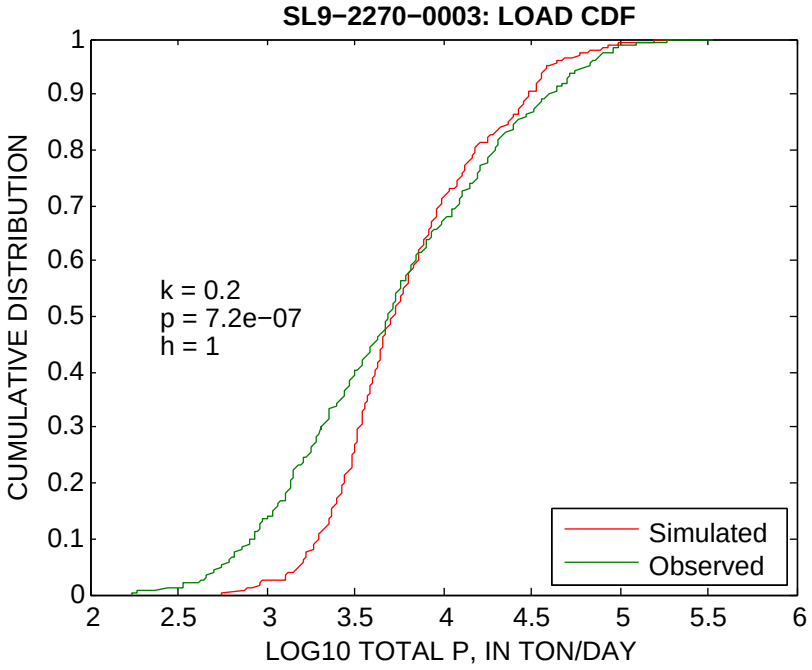


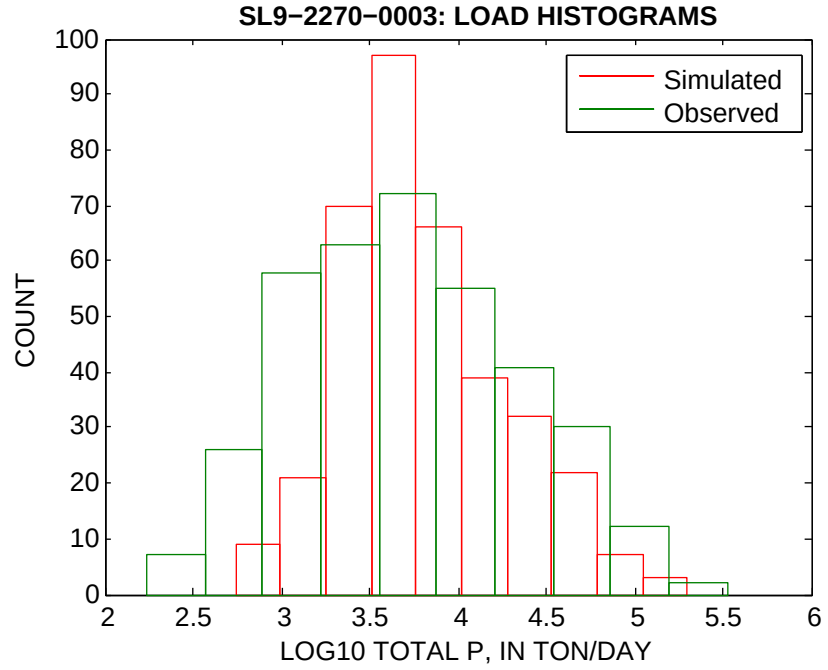


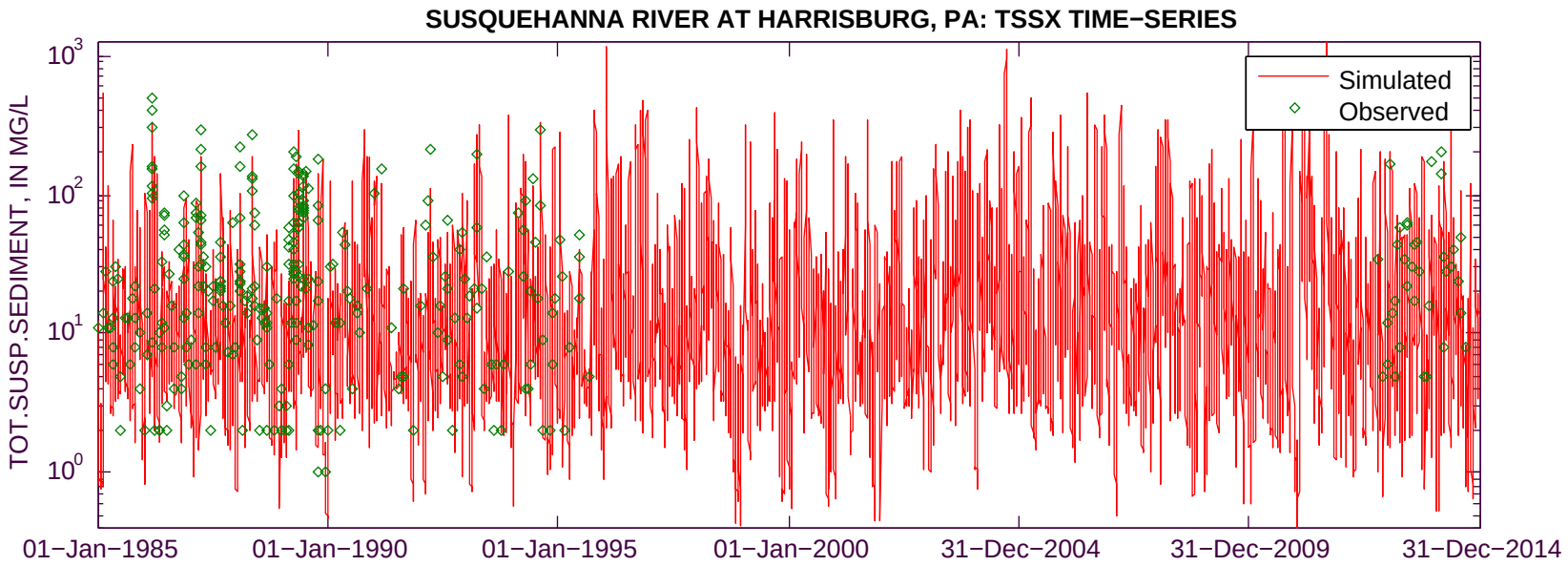
LOAD DATA
LOG10

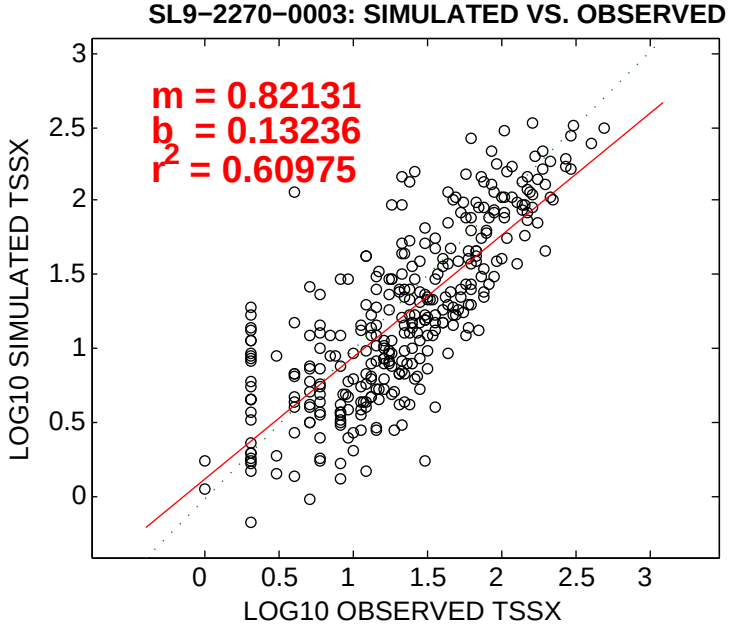


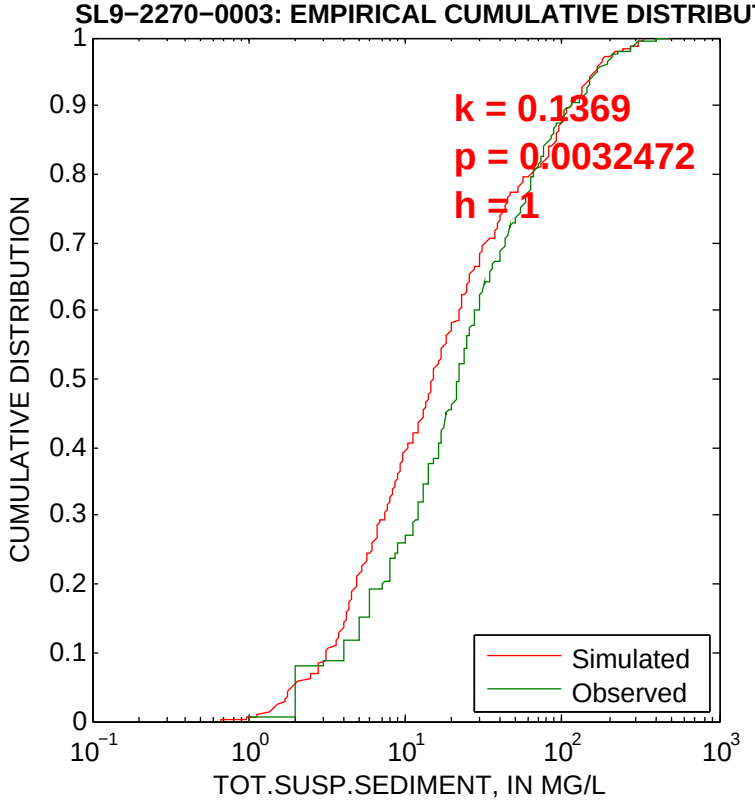












DATA SELECTION

scenario: P620171001WQ | file: TSSX.calib

plot: TSSX - total suspended ...

Dates: 1/1/1985 | 12/31/201

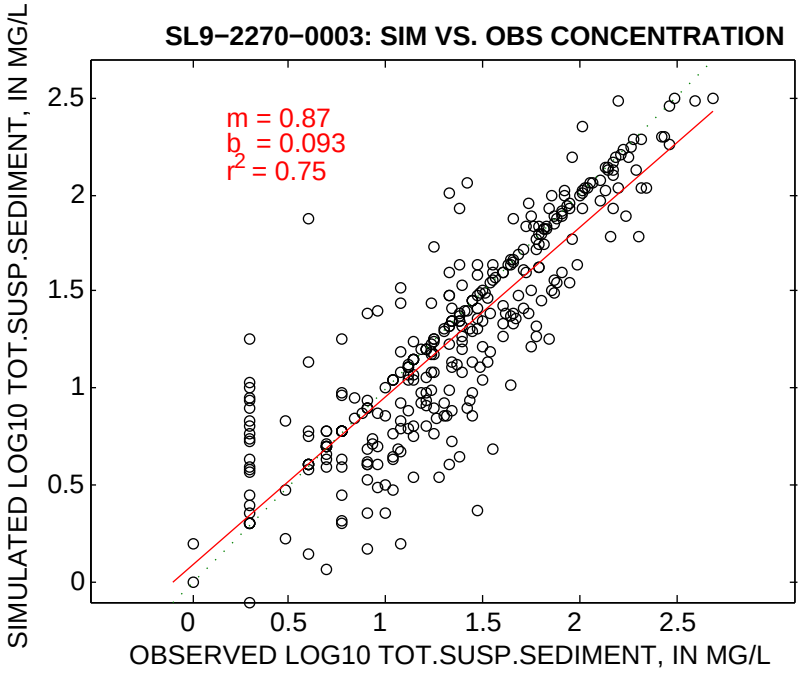
Drive | Directory: N/A | model | Observed: OBS20161101

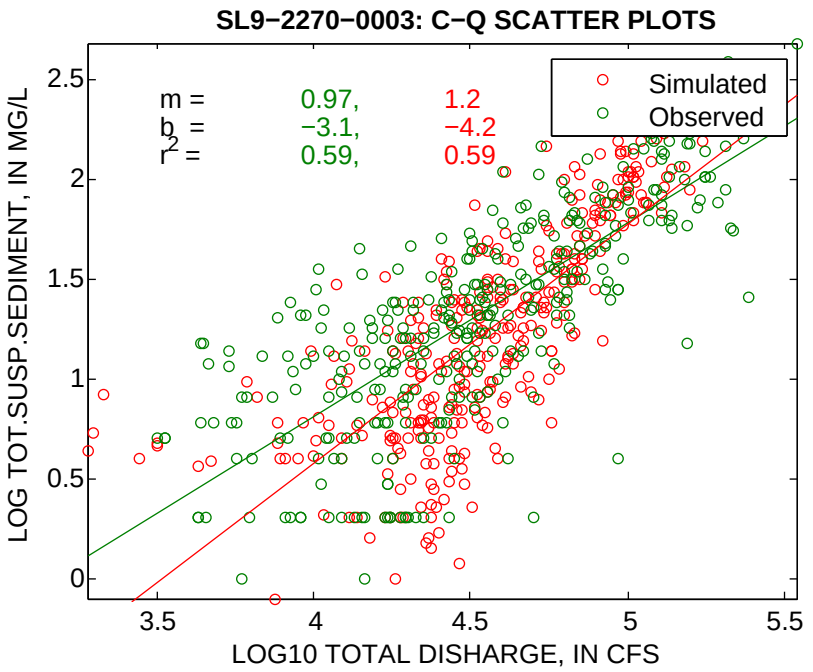
STATISTICS

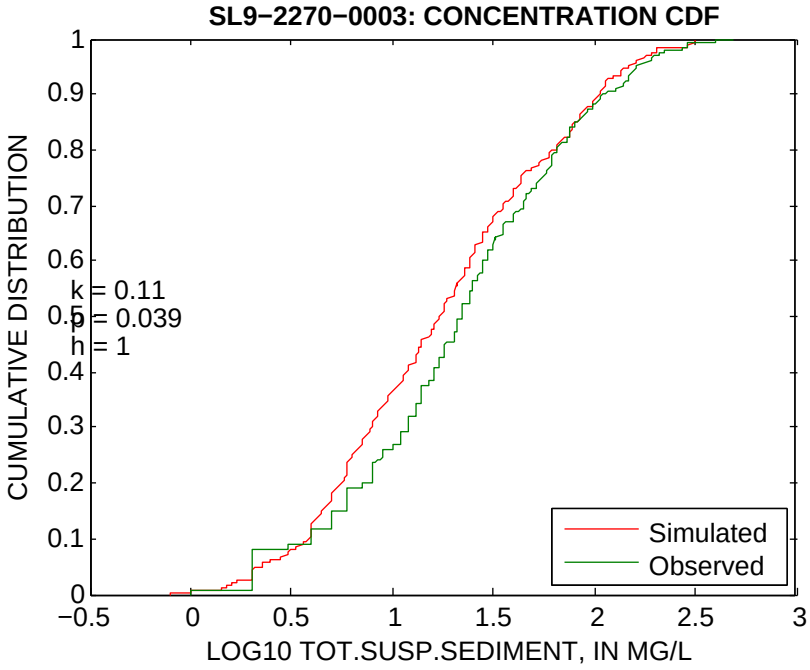
		observe	simulate
n		336	336
min		1	0.6729
		0	-0.172049
mean		44.653	39.595
		1.3295	1.2243
media		22	14.961
		1.34242	1.17496
max		489	335.73
		2.68931	2.52599
varian		3856.41	3362.92
		0.305457	0.33792
JB		0.001	0.001
	☑	0.127316	0.018400
		ra	log
%		-11.3273	-7.91311
err.va		1599.27	0.152726
rel.std.err		0.414704	0.49999
mod.eff		0.585296	0.50001

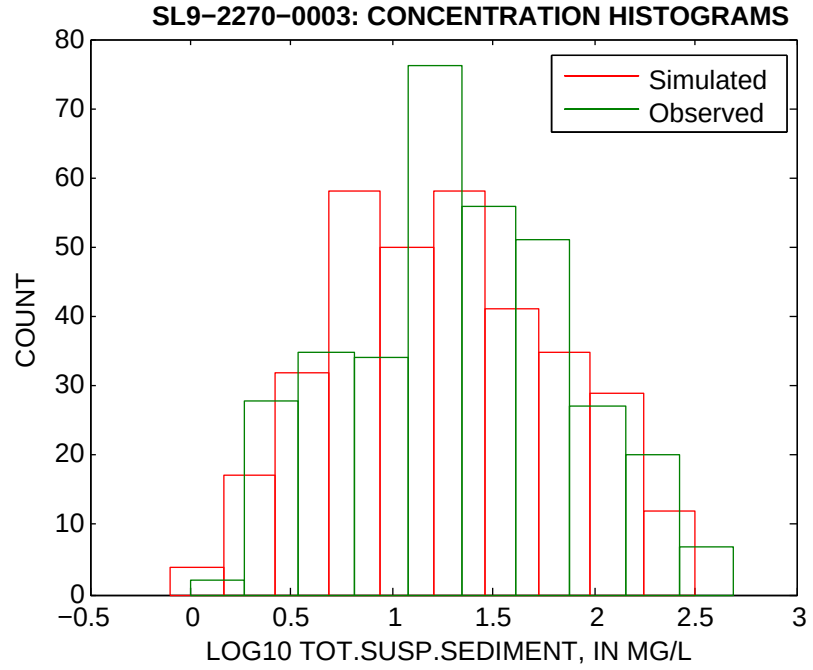
VERSION 2.1

ALL DATA
LOG10

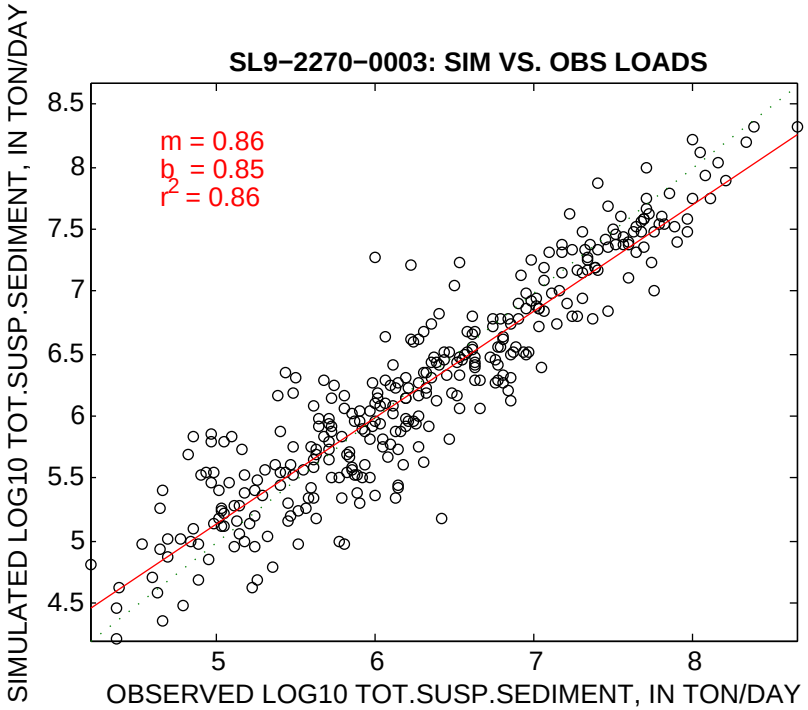




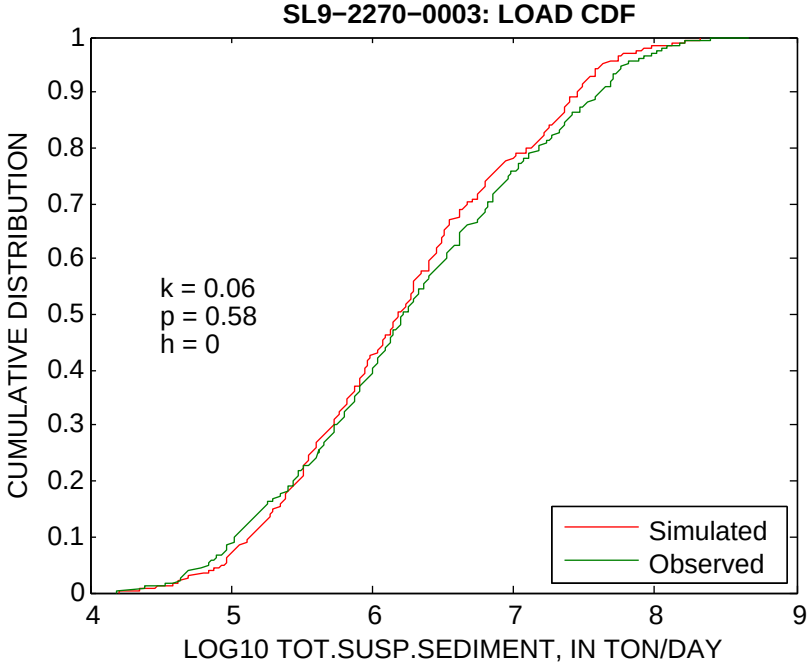


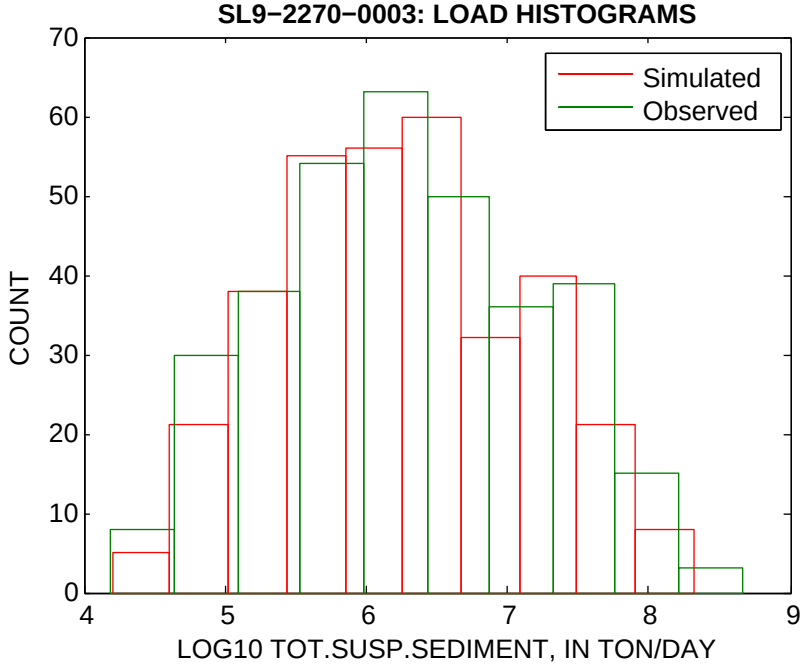


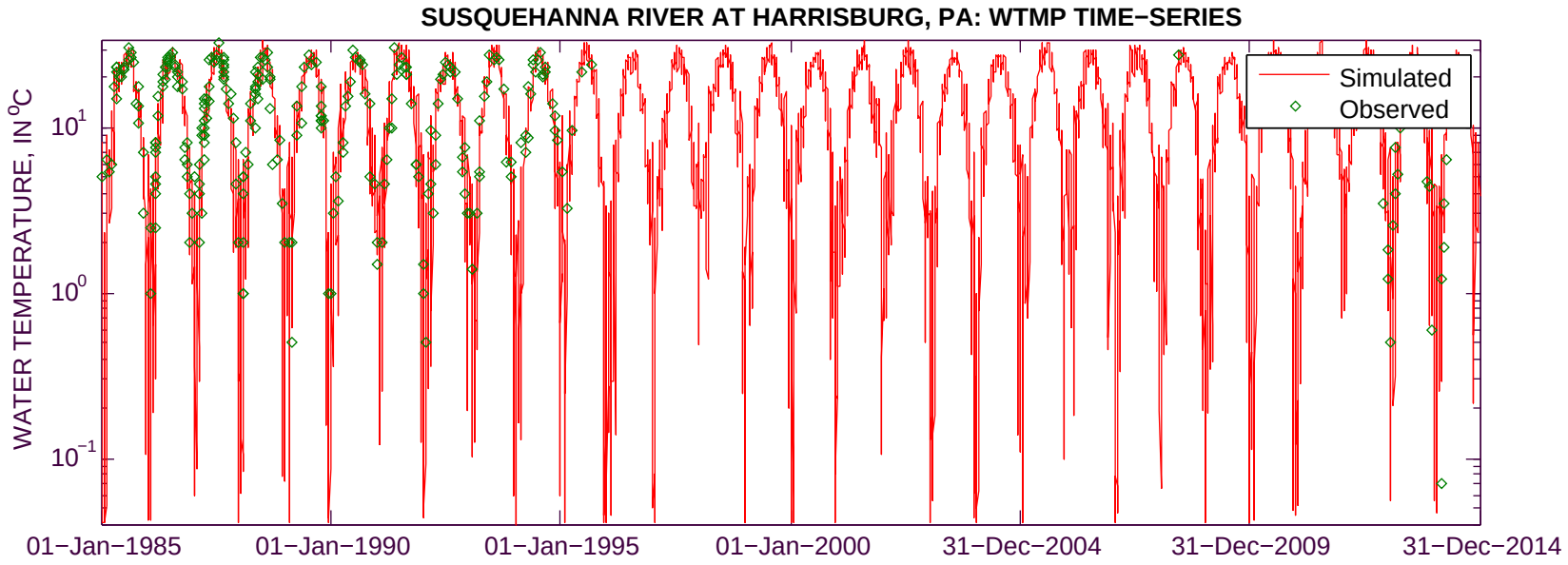
LOAD DATA
LOG10

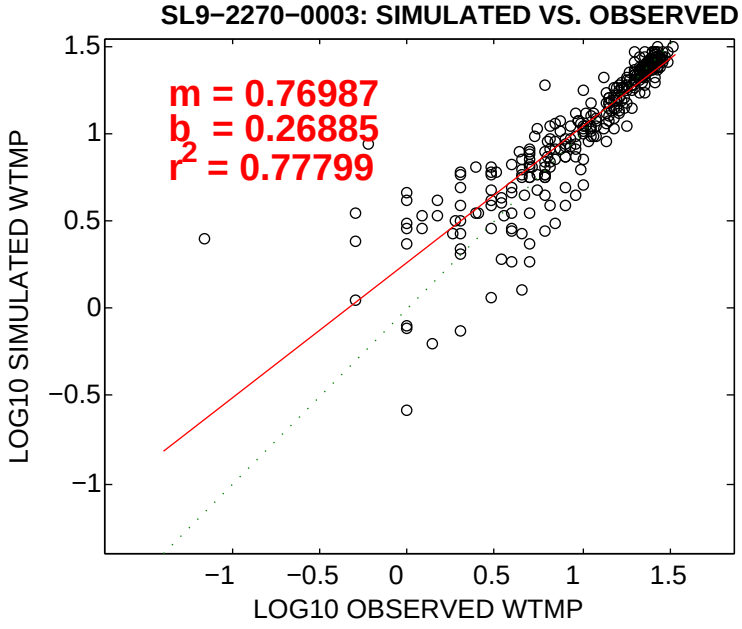


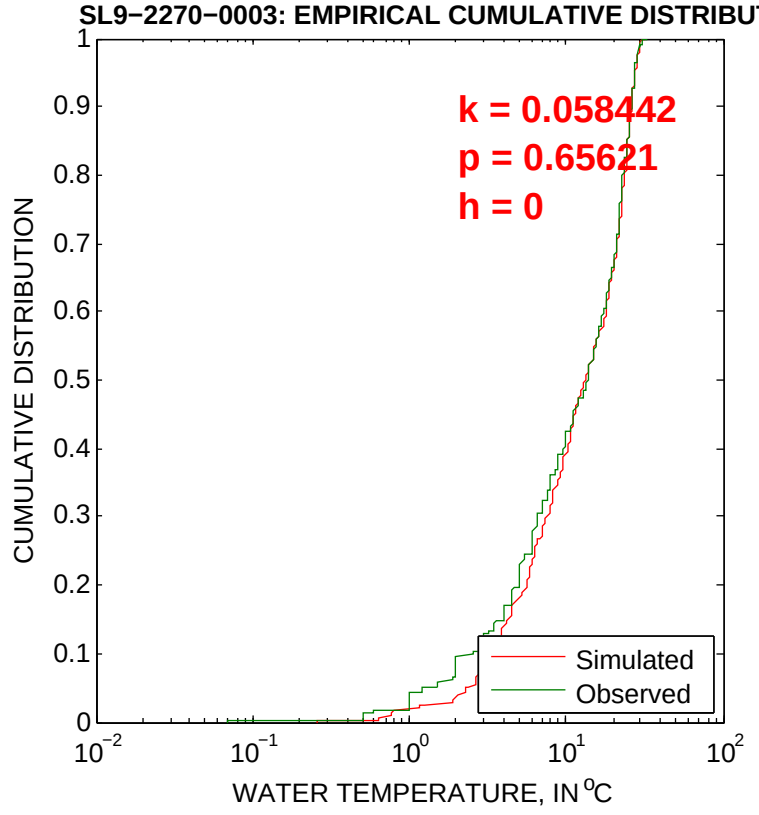












DATA SELECTION

scenario	file
P620171001WQ	WTMP.calib

plot: WTMP - water tempera...

Dates: 1/1/1985 – 12/31/201

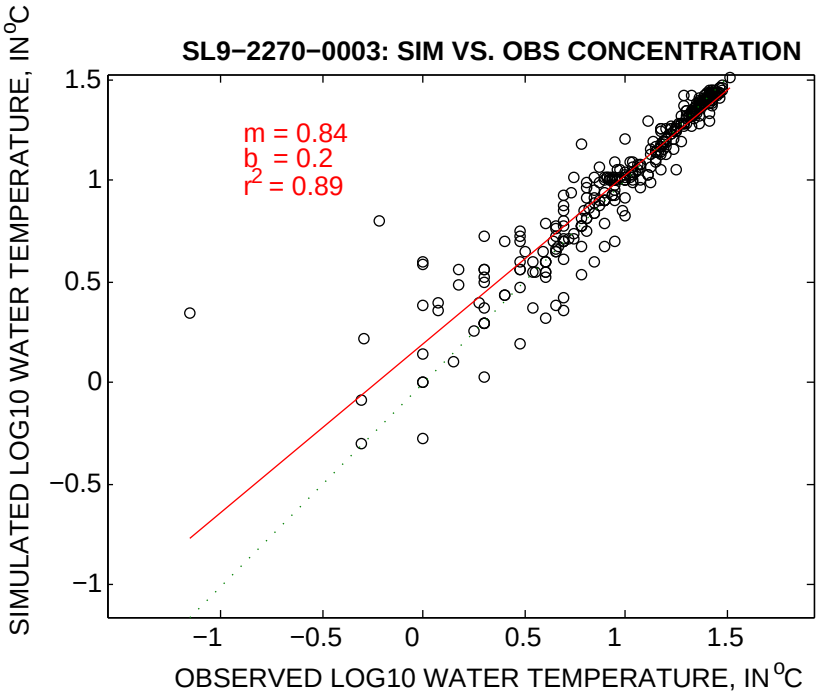
Drive	Directory	Observed
N/A	model	OBS20161101

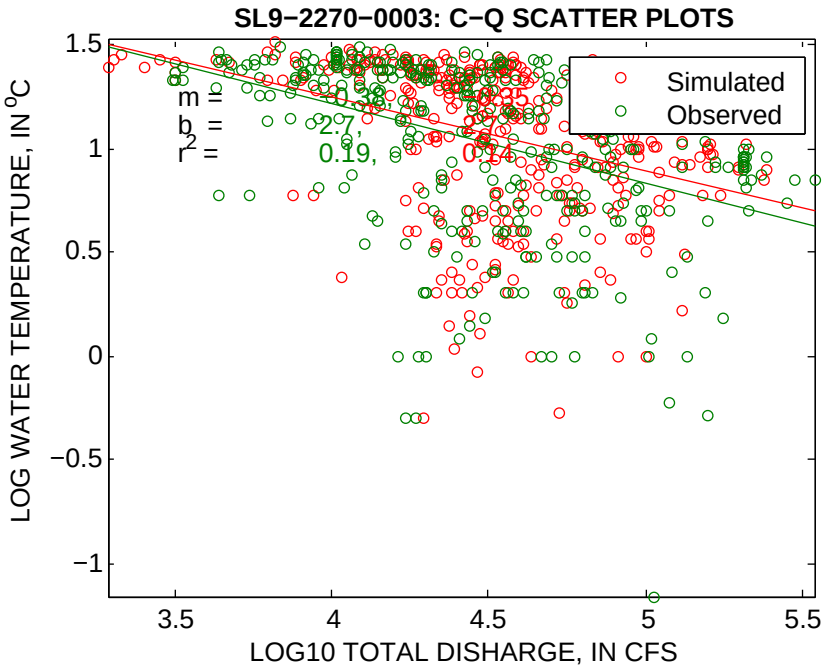
STATISTICS

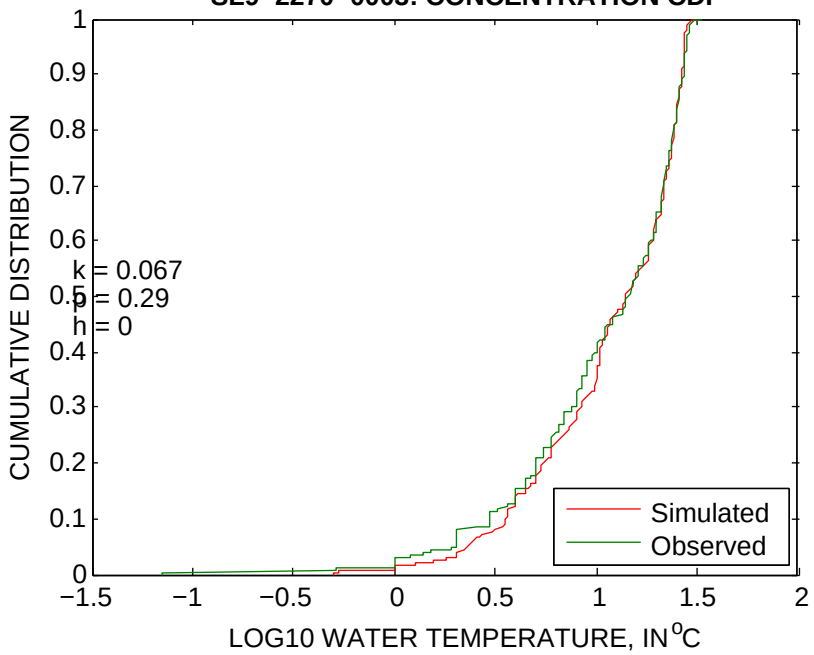
	n	308	308
		observe	**simulate**
min		0.07	0.2606
		-1.1549	-0.584026
mean		13.9427	14.374
		1.00084	1.03937
media		13.9	13.3275
		1.143	1.12473
max		33	31.618
		1.51851	1.49993
varian		77.789	74.9723
		0.180455	0.137477
JB		0.001118	0.001064
		0.001	0.001
		ra	log
%		3.09327	3.84958
err.va		6.4724	0.0415675
rel.std.err		.0832046	0.230348
mod.eff		0.916795	0.769652

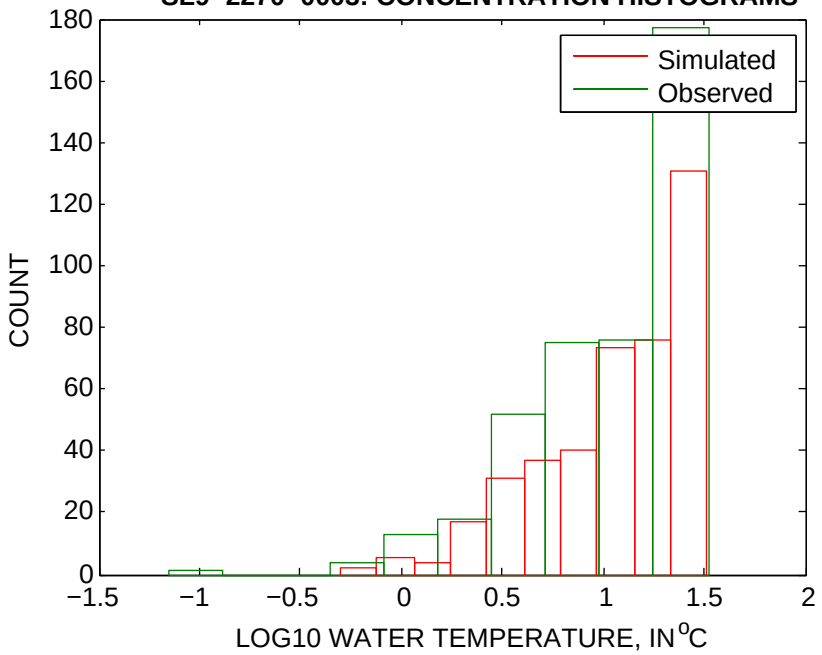
VERSION 2.1

ALL DATA
LOG10

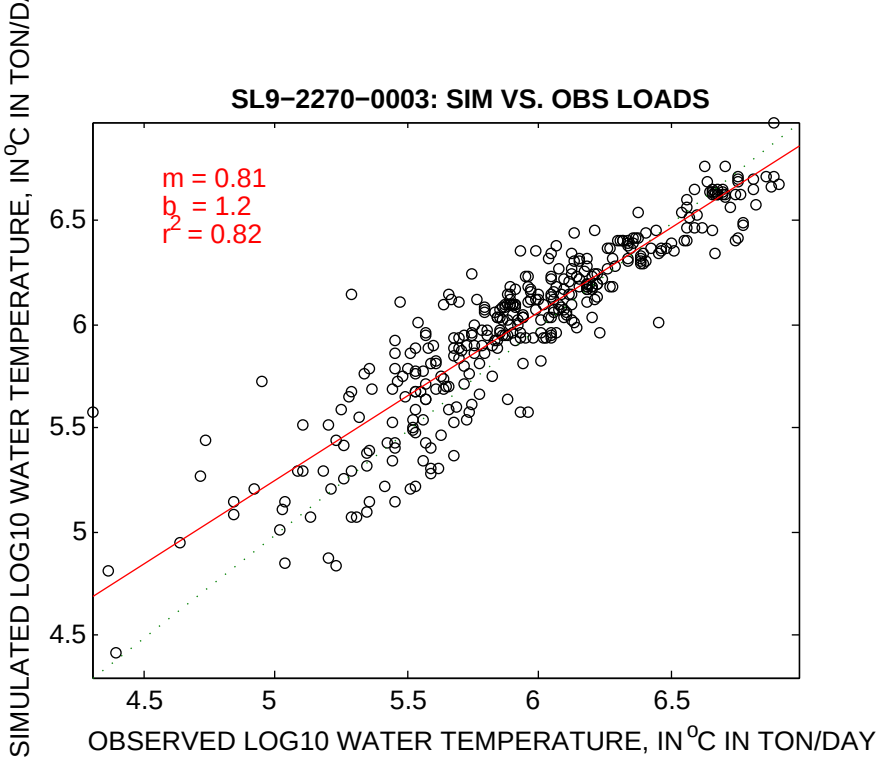


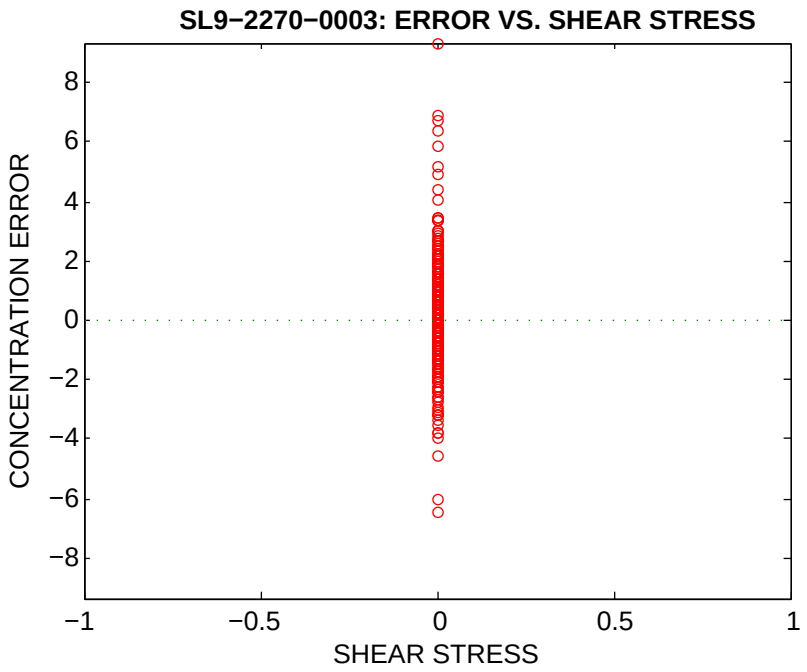


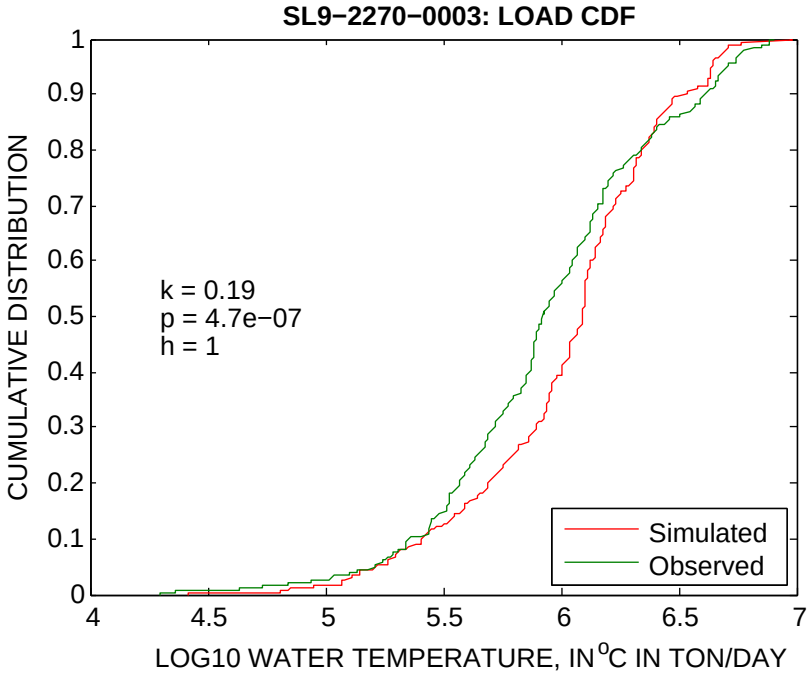


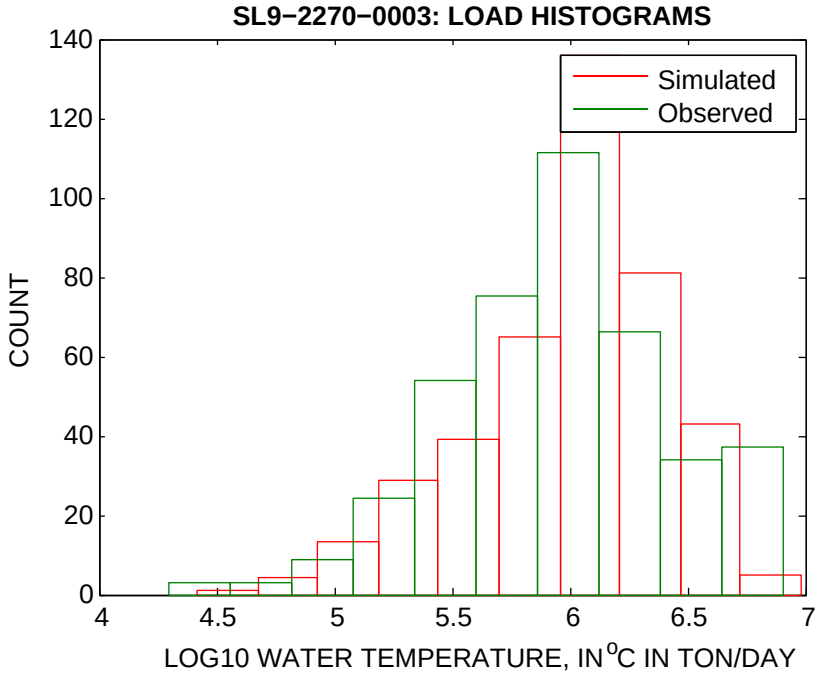


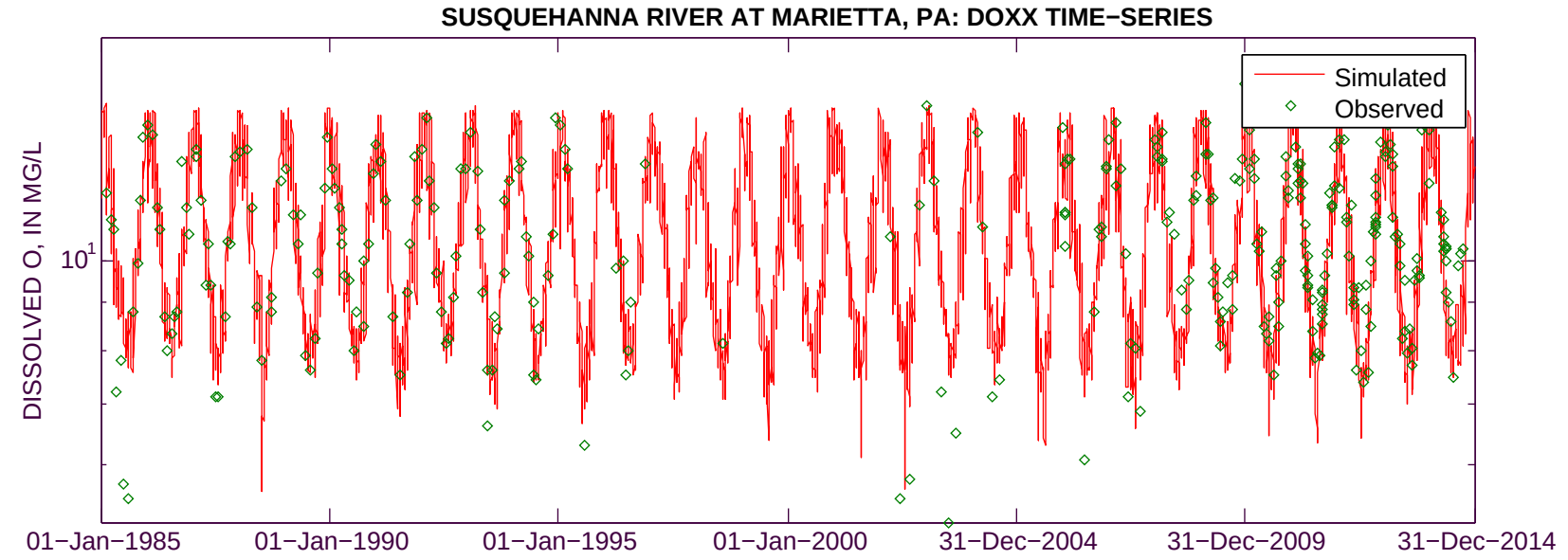
LOAD DATA
LOG10

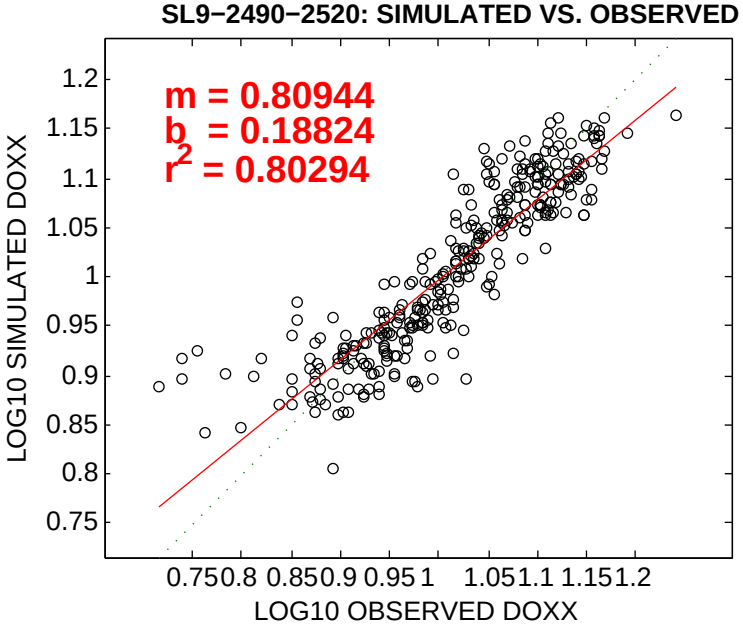


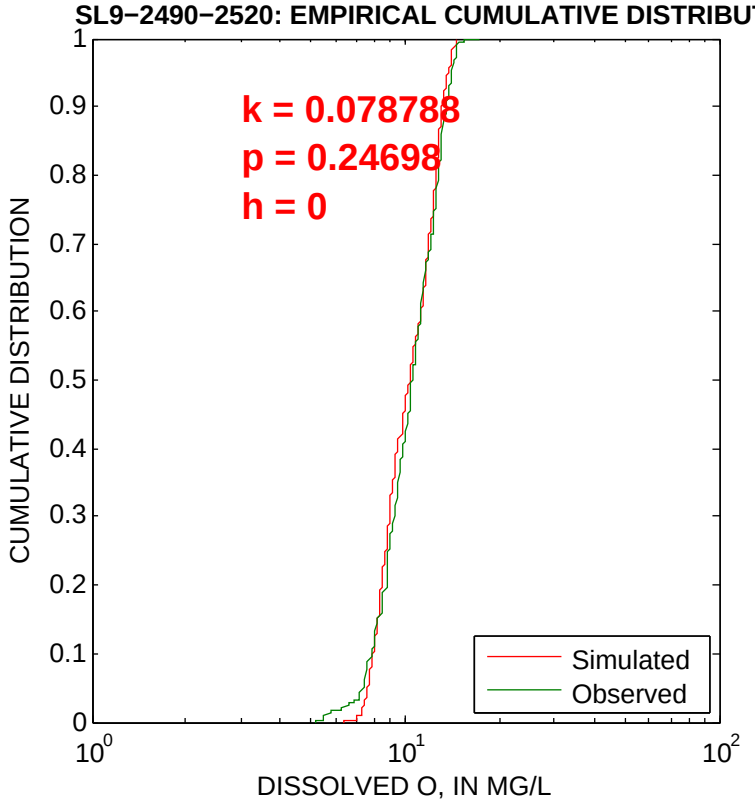












DATA SELECTION

scenario	file
P620171001WQ	DOXX.calib

plot: DOXX - dissolved oxygen

Dates: 1/1/1985 – 12/31/201

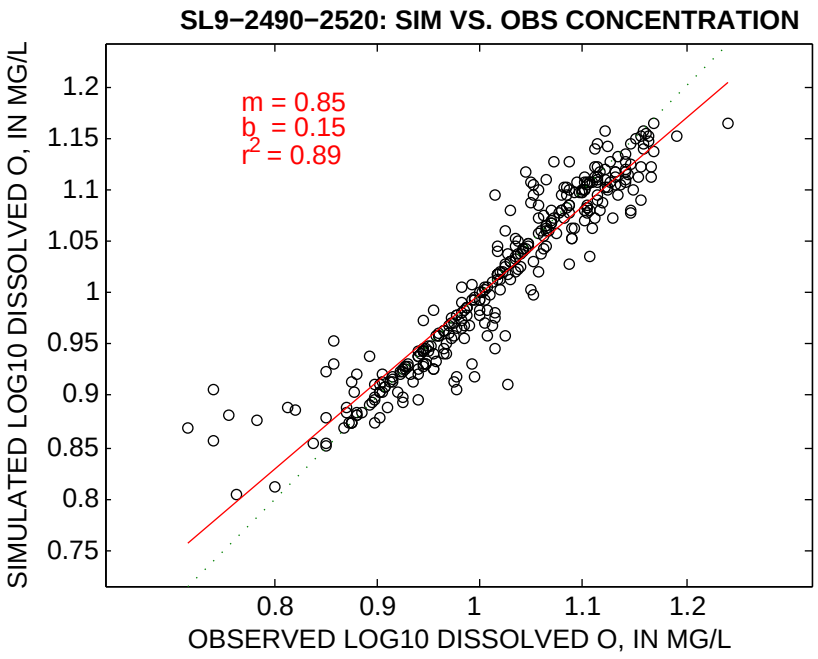
Drive	Directory	Observed
N/A	model	OBS20161101

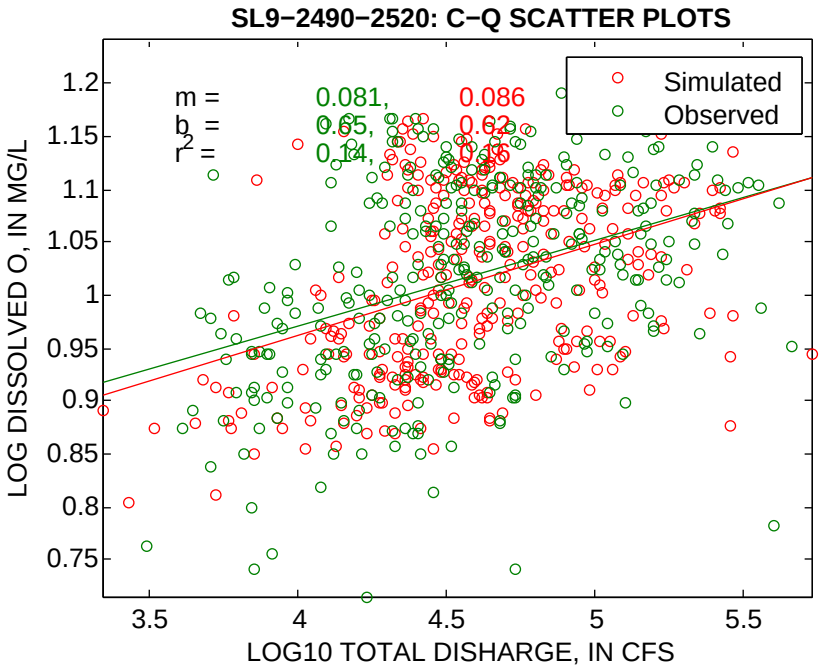
STATISTICS

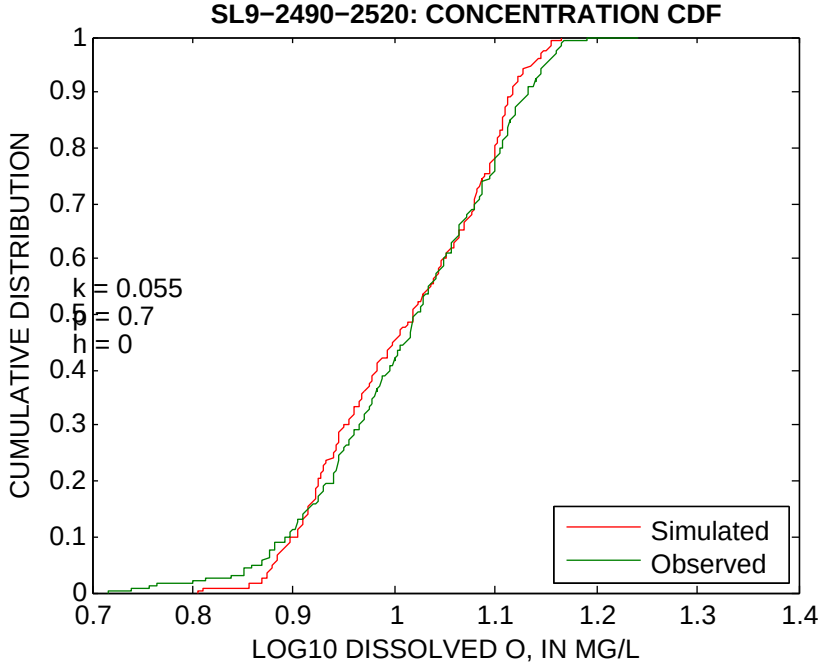
	n	330	330
		observe	simulate
min		5.2	6.3745
		0.716003	0.804446
mean		10.6204	10.4494
		1.01641	1.01096
media		10.54	10.3265
		1.02284	1.01395
max		17.4	14.554
		1.24055	1.16298
varian		4.82689	4.0456
		0.00876189	0.00714961
JB		0.061010	0.001518
		0.010493	0.001757
		ra	log
%		-1.61	-0.536244
err.va		0.892915	0.00175684
rel.std.err		0.184988	0.200509
mod.eff		0.815012	0.799491

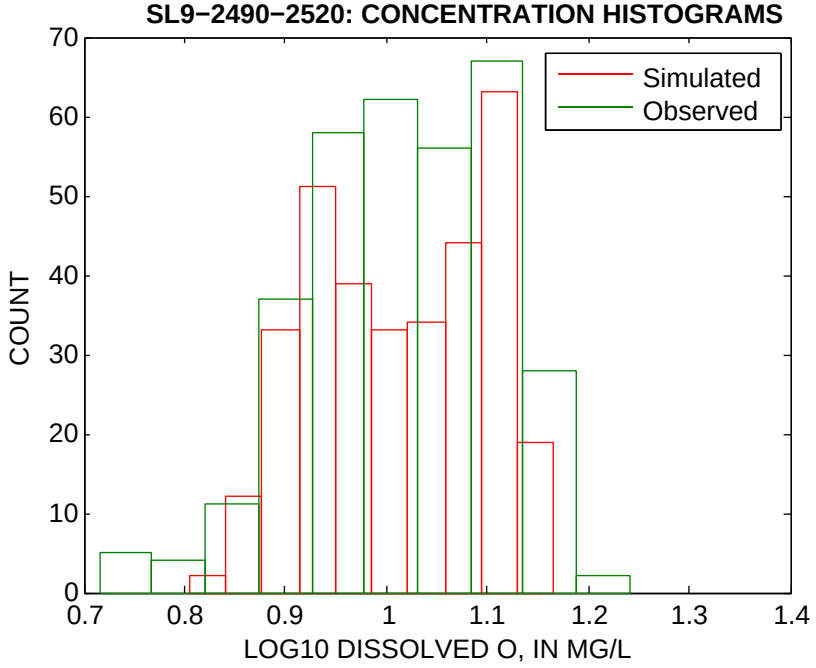
VERSION 2.1

ALL DATA
LOG10

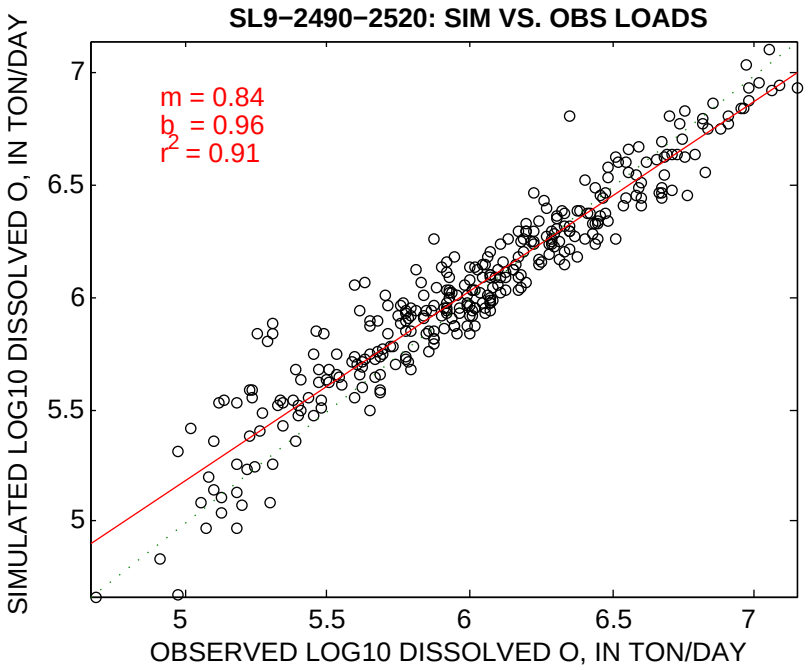


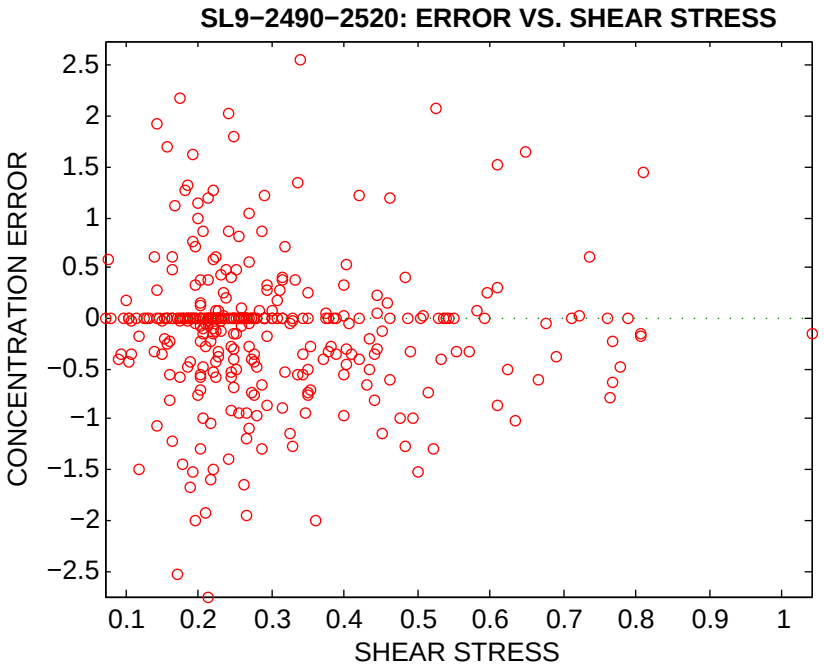


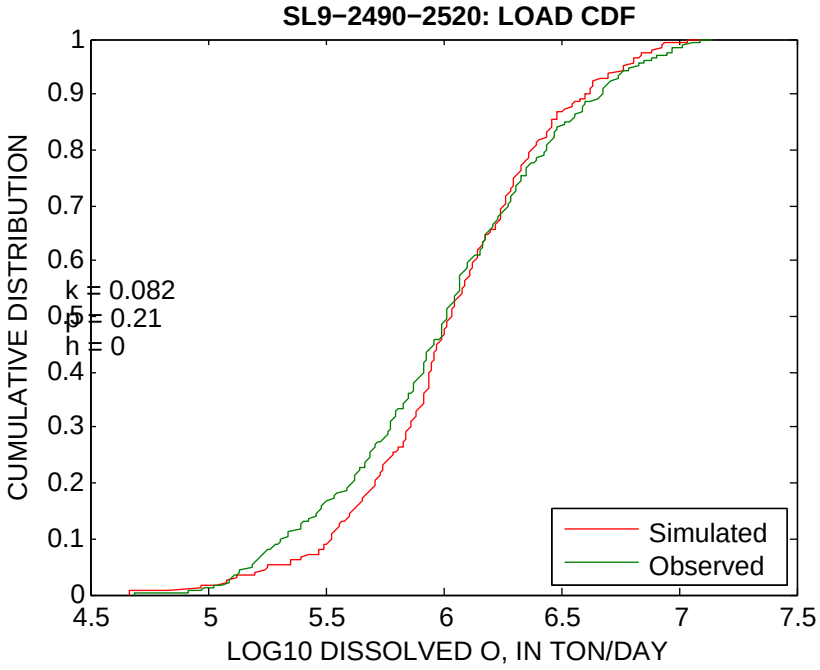


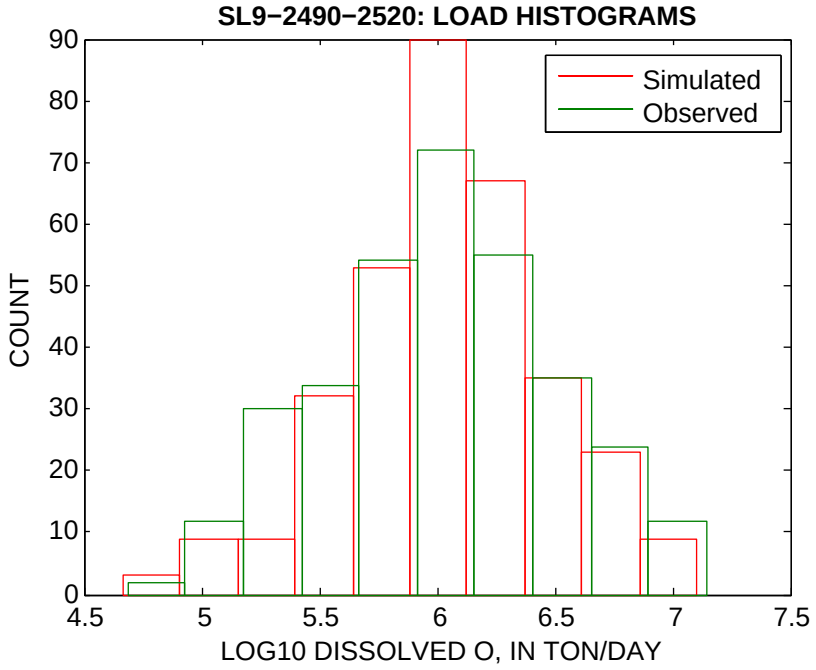


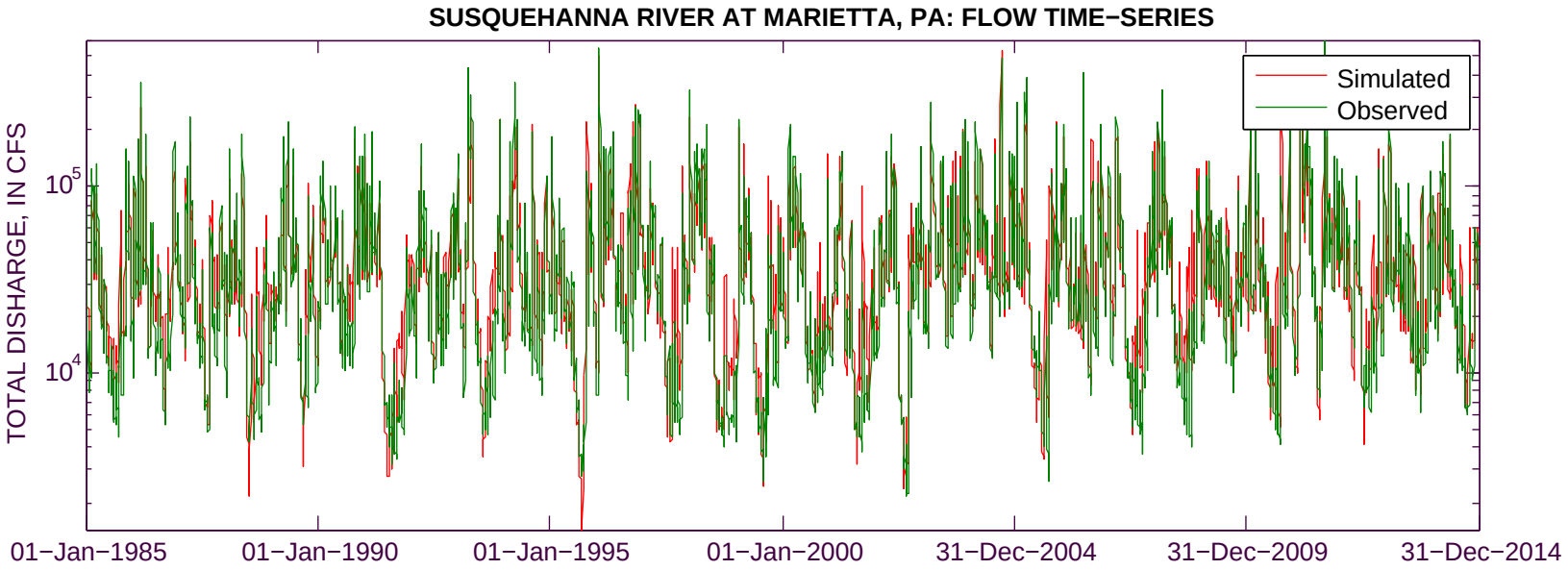
LOAD DATA
LOG10

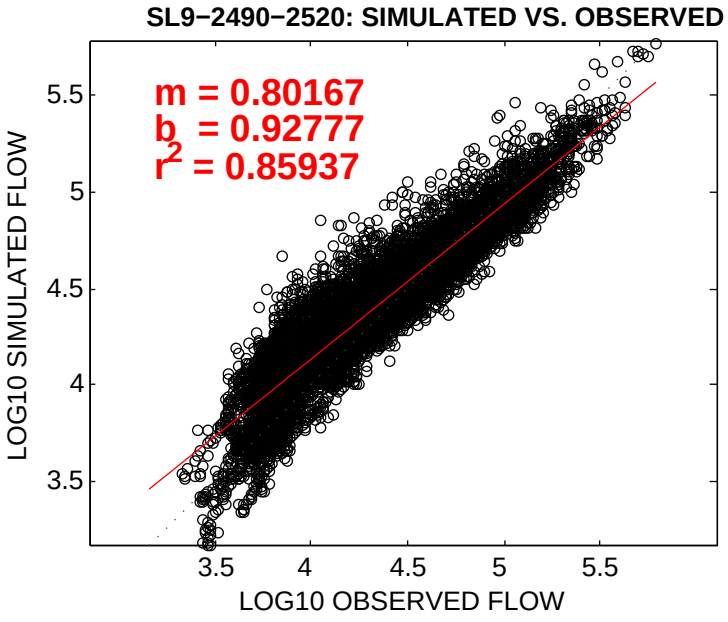


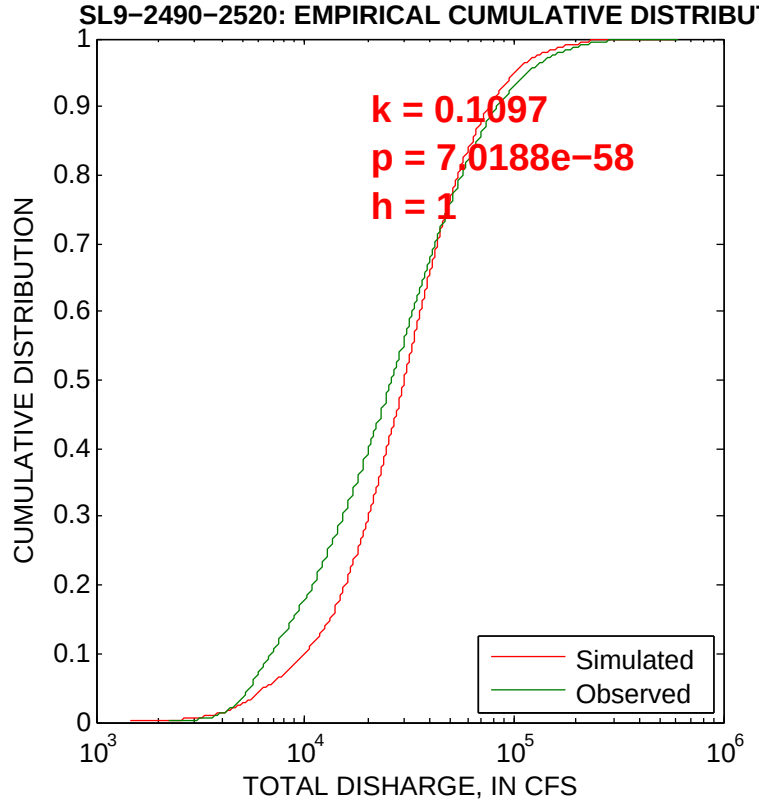












DATA SELECTION

scenario: P620171001WQ | file: FLOW.calib

plot: FLOW - total discharge

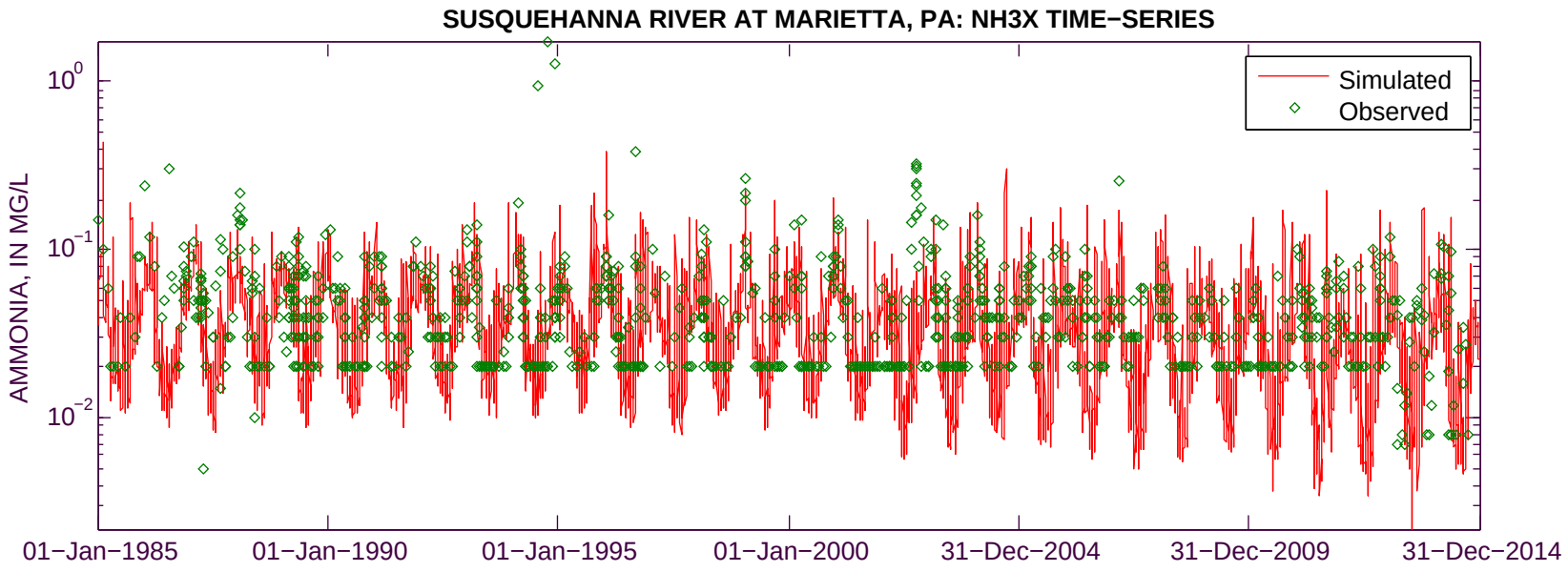
Dates: 1/1/1985 – 12/31/201

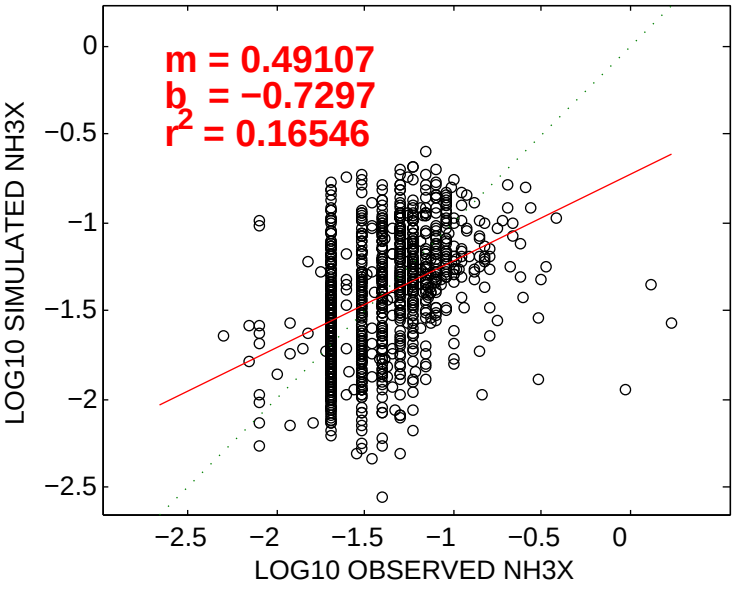
Drive: N/A | Directory: model | Observed: OBS20161101

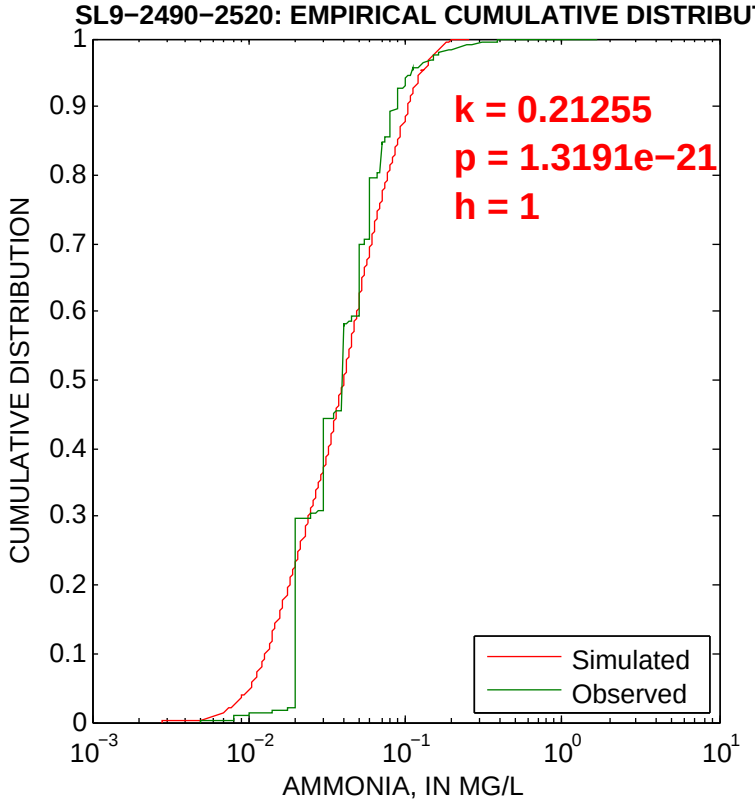
STATISTICS

		observe	simulate
n		10957	10957
min		2150	1440.5
		3.33244	3.15851
mean		39103.4	39296.2
		4.40498	4.45913
media		26000	29955
		4.41497	4.47647
max		616000	596300
		5.78958	5.77546
varian		1.8819e+09	1.3468e+0
		0.1636	0.122349
JB		0.001	0.001
		0.001	0.001
		ra	log
%		0.493257	1.22912
err.va		2.7476e+08	0.0265731
rel.std.err		0.146001	0.162427
mod.eff		0.853999	0.837573

VERSION 2.1







DATA SELECTION

scenario	file
P620171001WQ	NH3X.calib

plot: NH3X - ammonia

Dates: 1/1/1985 – 12/31/201

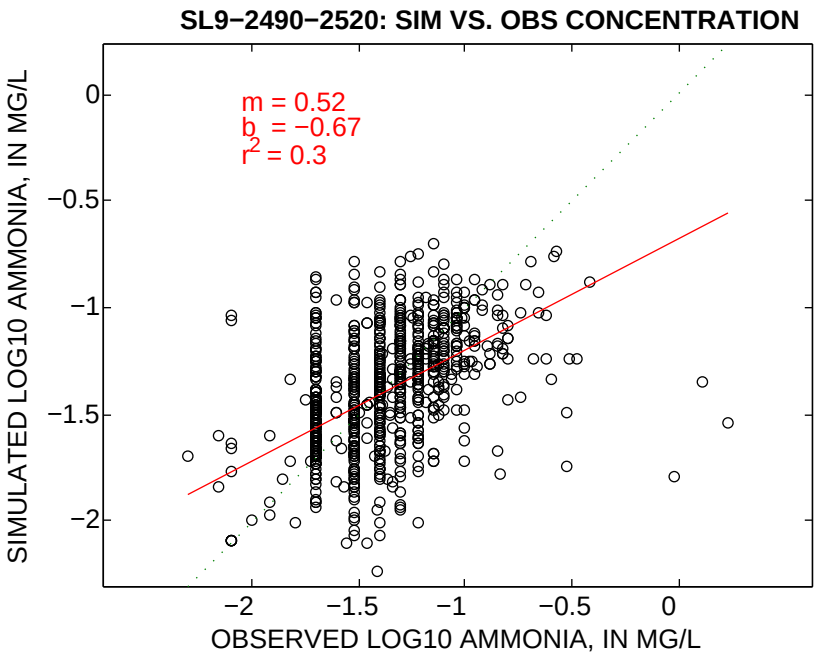
Drive	Directory	Observed
N/A	model	OBS20161101

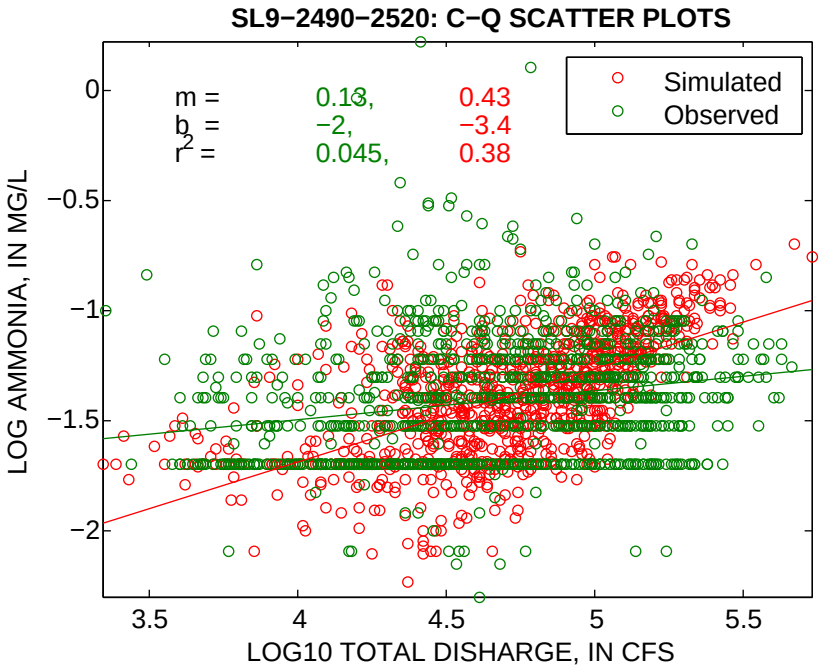
STATISTICS

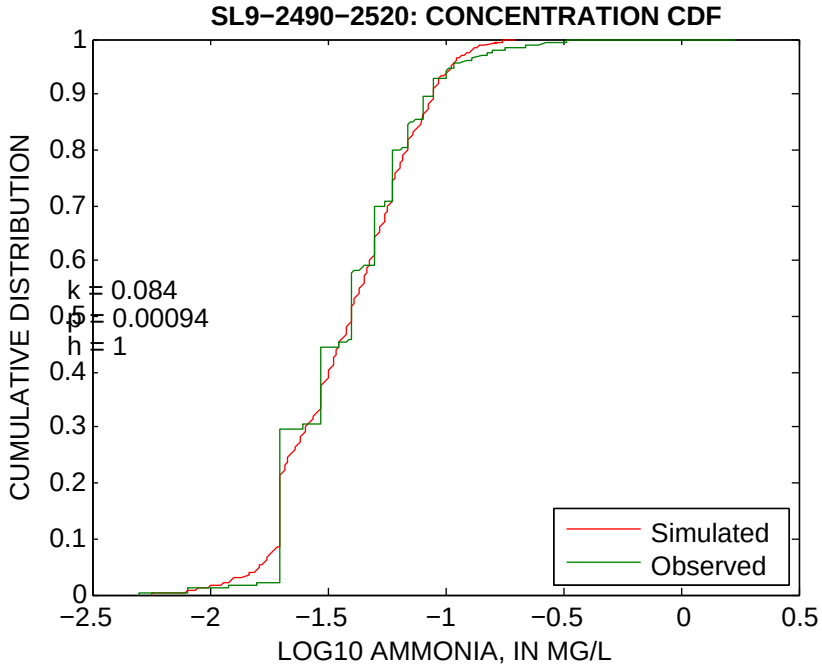
	n	observe	simulate
		1068	1068
min		0.005	0.0027713
		-2.30103	-2.55732
mean		0.0516461	0.0505142
		-1.40568	-1.41999
media		0.04	0.040397
		-1.39794	-1.39365
max		1.7	0.2549
		0.230449	-0.59363
varian		0.00622112	0.00145992
		0.0797302	0.116208
JB		0.001	0.001
		0.001	0.001
		ra	log
%		-2.19151	1.01808
err.va		0.00692874	0.117836
rel.std.err		1.11375	1.47794
mod.eff		-0.113745	-0.477939

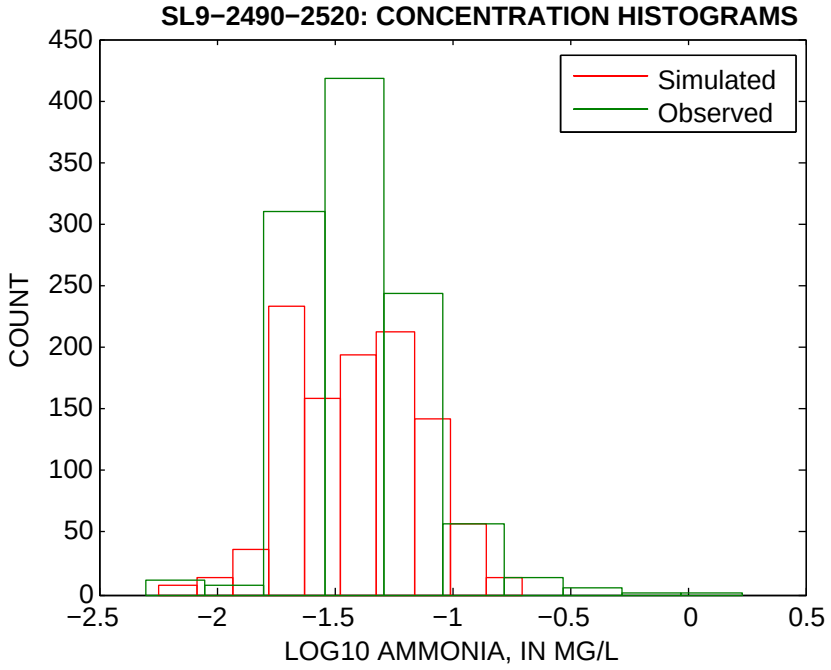
VERSION 2.1

ALL DATA
LOG10

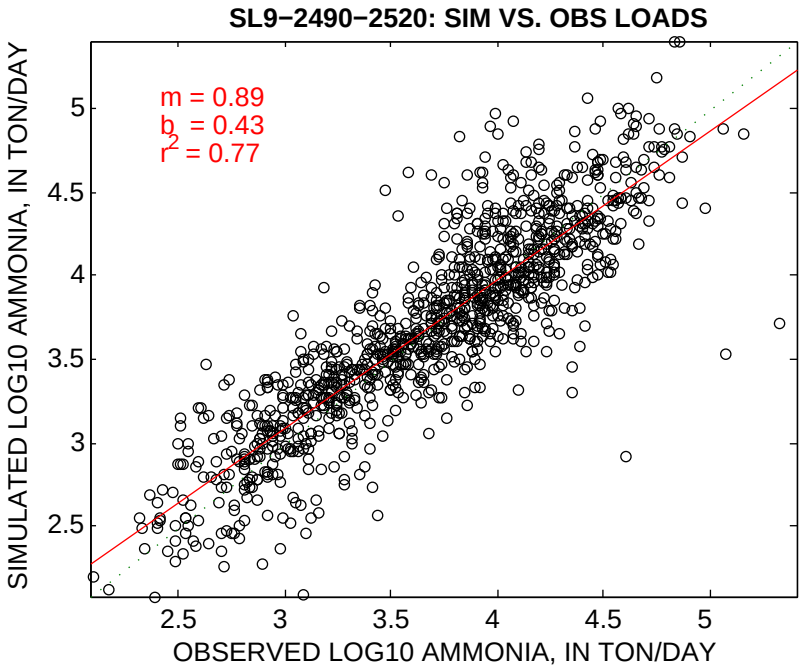


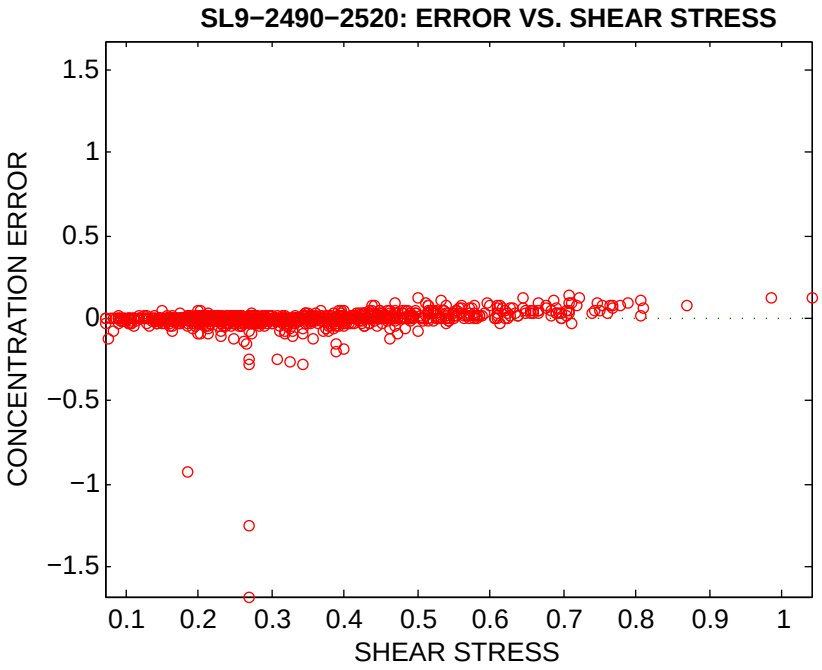


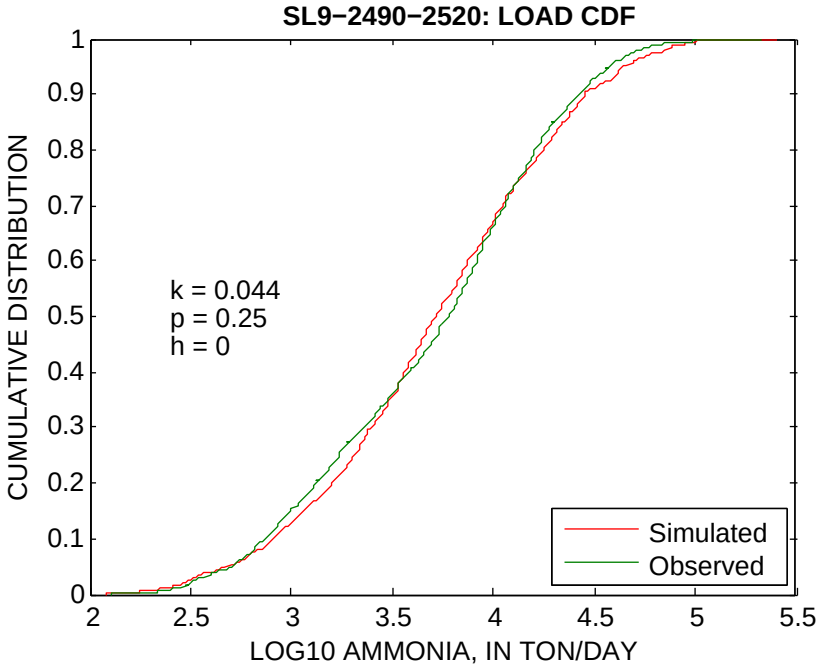


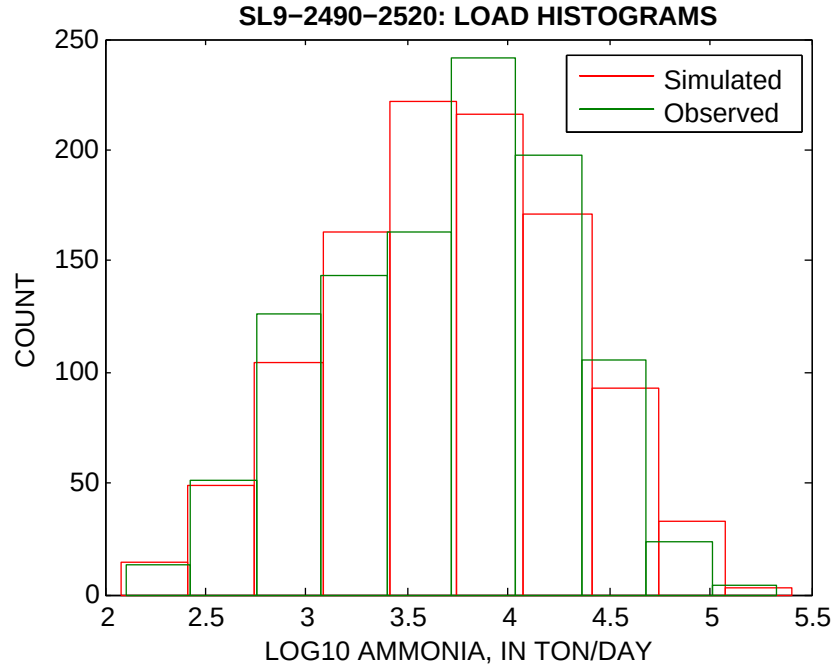


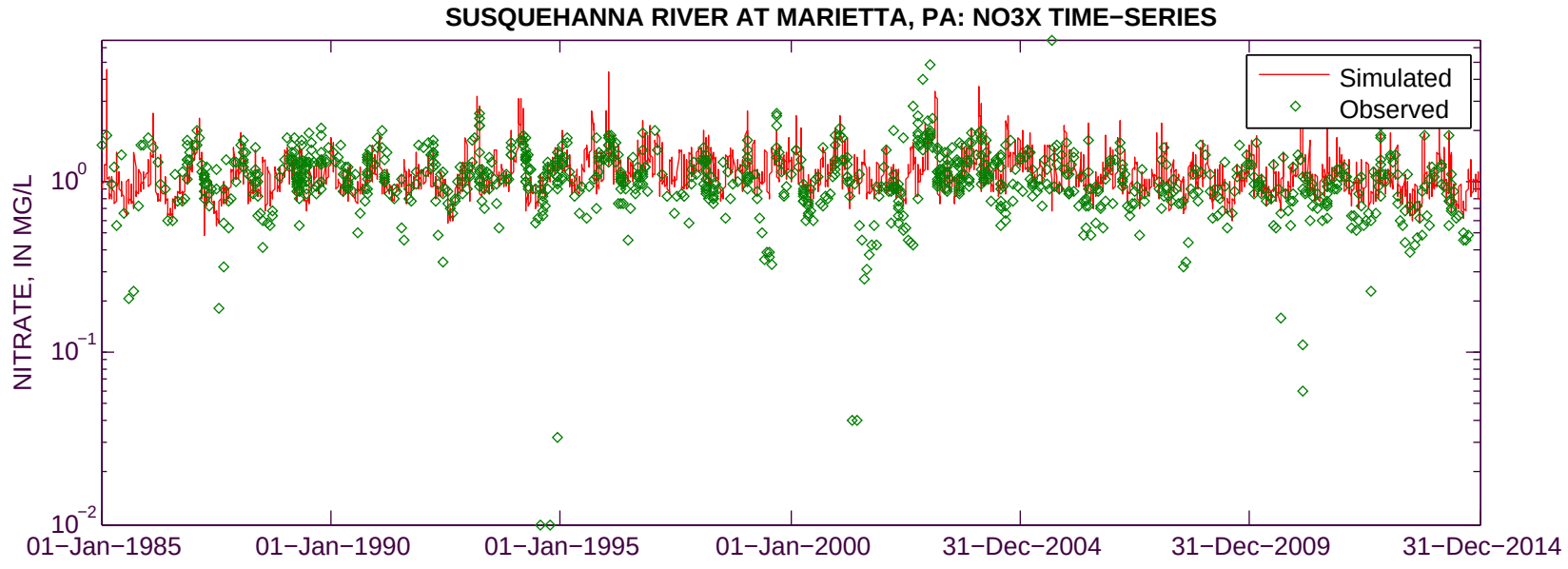
LOAD DATA
LOG10

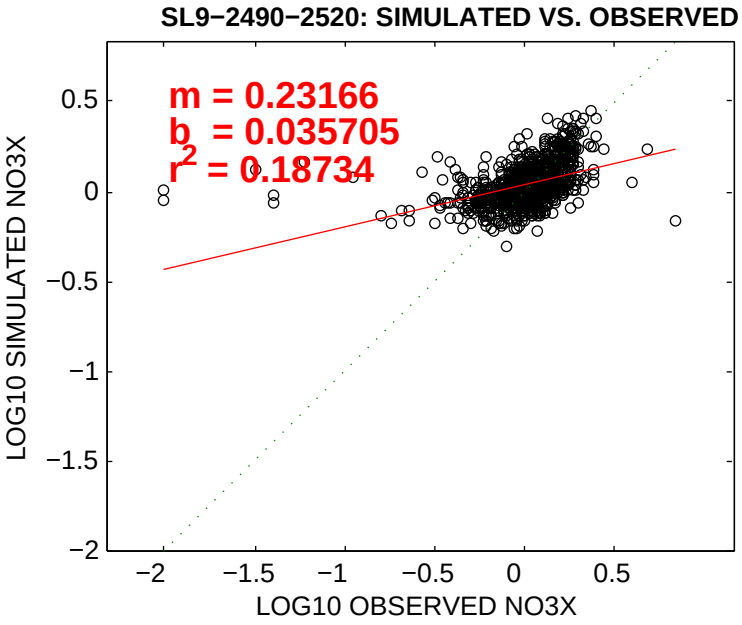


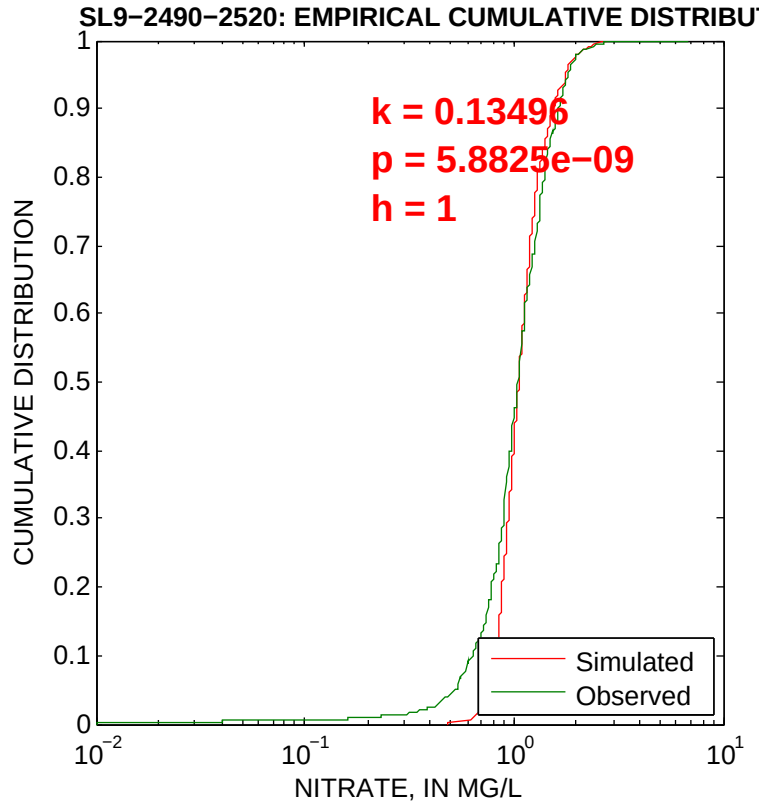












DATA SELECTION

scenario	file
P620171001WQ	NO3X.calib

plot: NO3X - nitrate

Dates: 1/1/1985 – 12/31/201

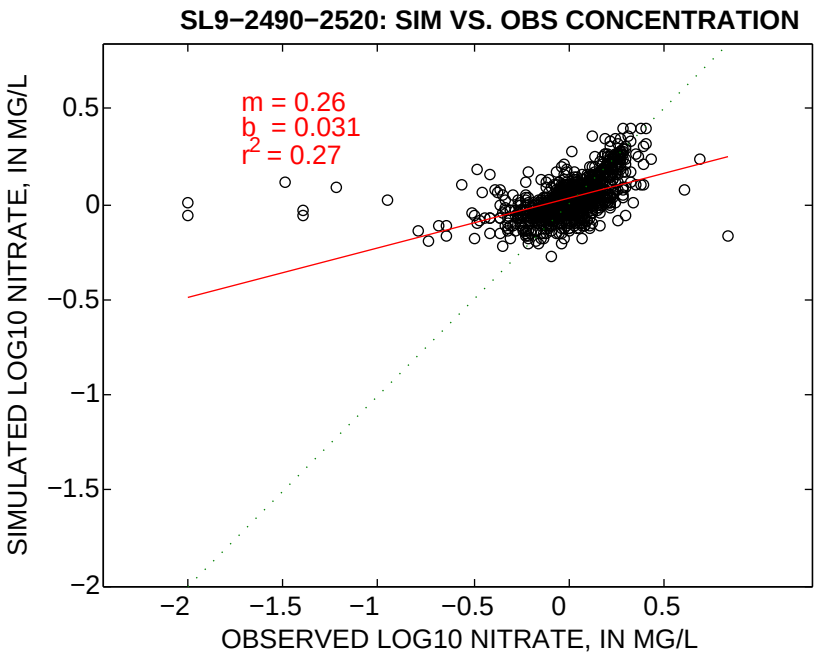
Drive	Directory	Observed
N/A	model	OBS20161101

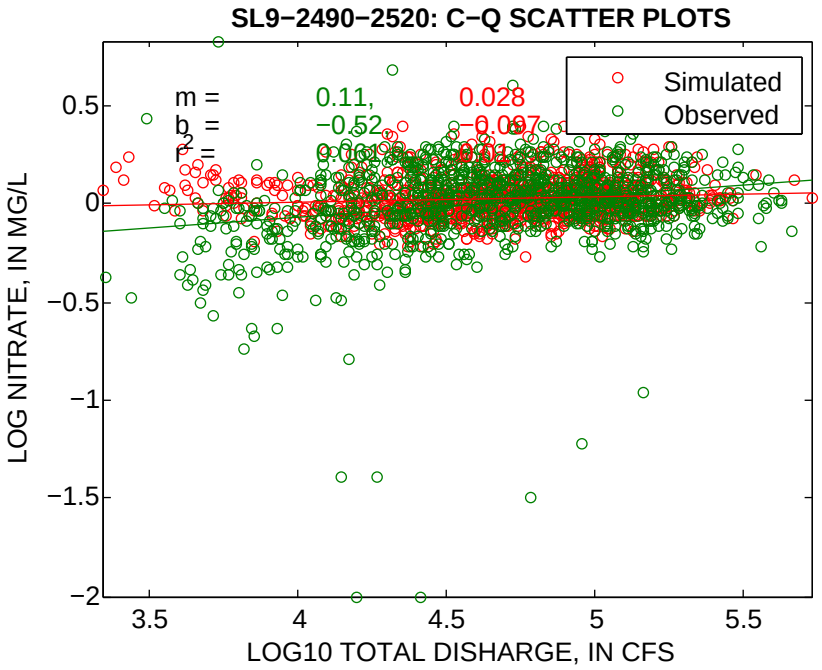
STATISTICS

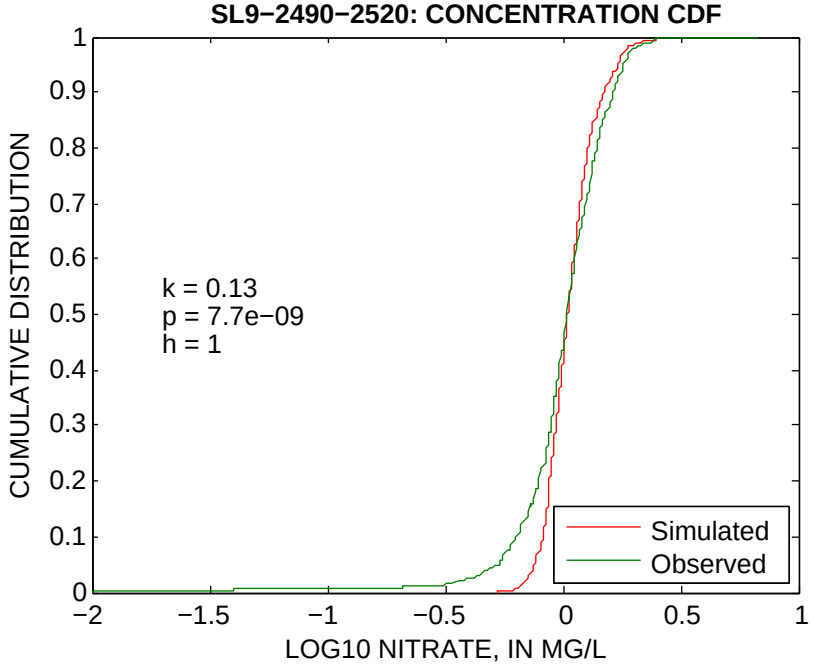
n	1067	1067
	observe	simulate
min	0.01	0.48943
	-2	-0.310309
mean	1.10708	1.12784
	0.00633249	0.0371718
media	1.05	1.0567
	0.0211893	0.0239517
max	6.81	2.8099
	0.833147	0.448691
varian	0.206704	0.103239
	0.0431673	0.0123658
JB	0.001	0.001
	0.001	0.001
	ra	log
%	1.8752	487.002
err.va	0.162752	0.0364848
rel.std.err	0.787365	0.845196
mod.eff	0.212635	0.154804

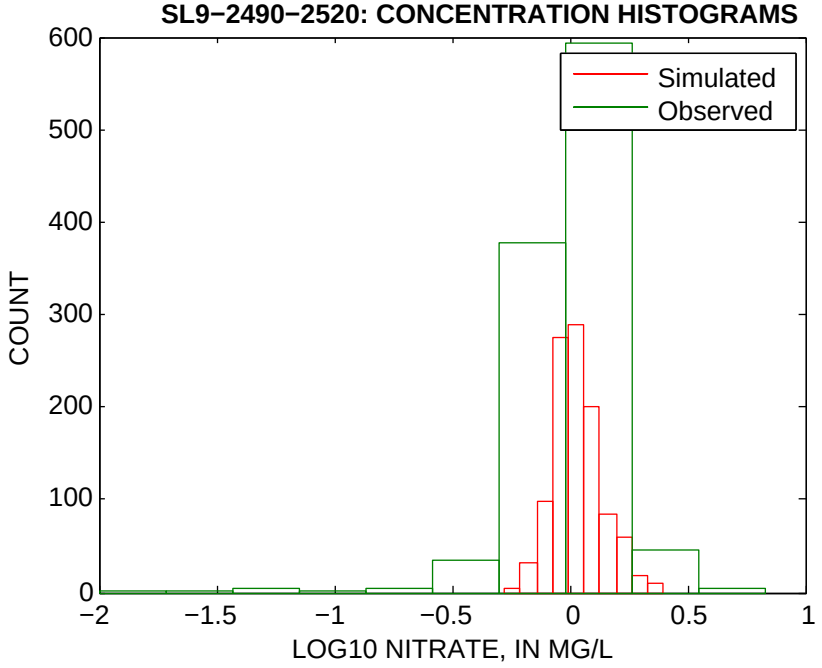
VERSION 2.1

ALL DATA
LOG10

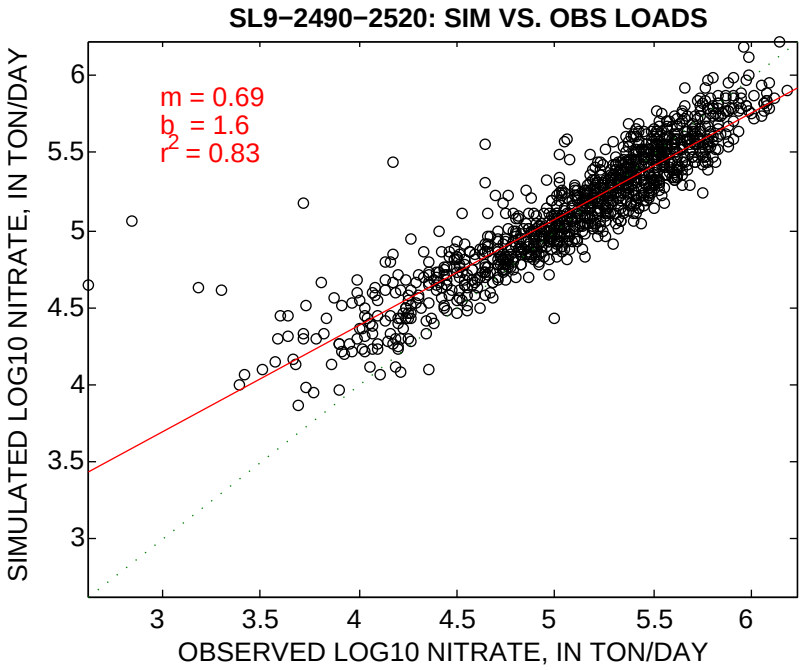


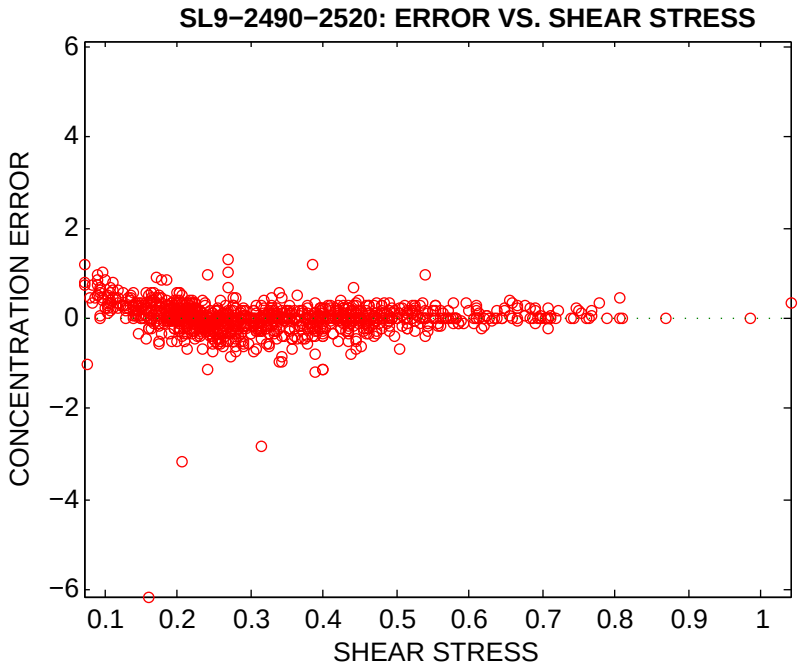


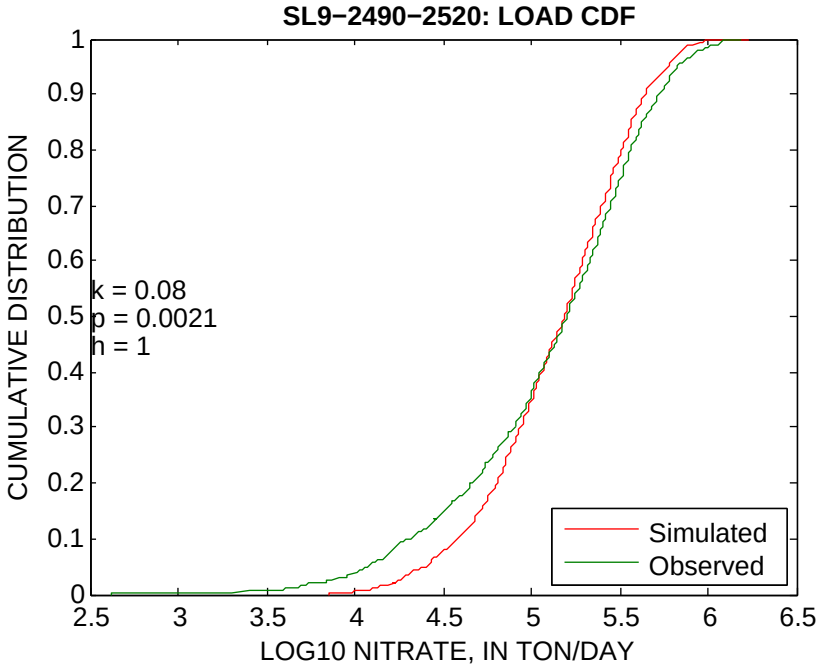


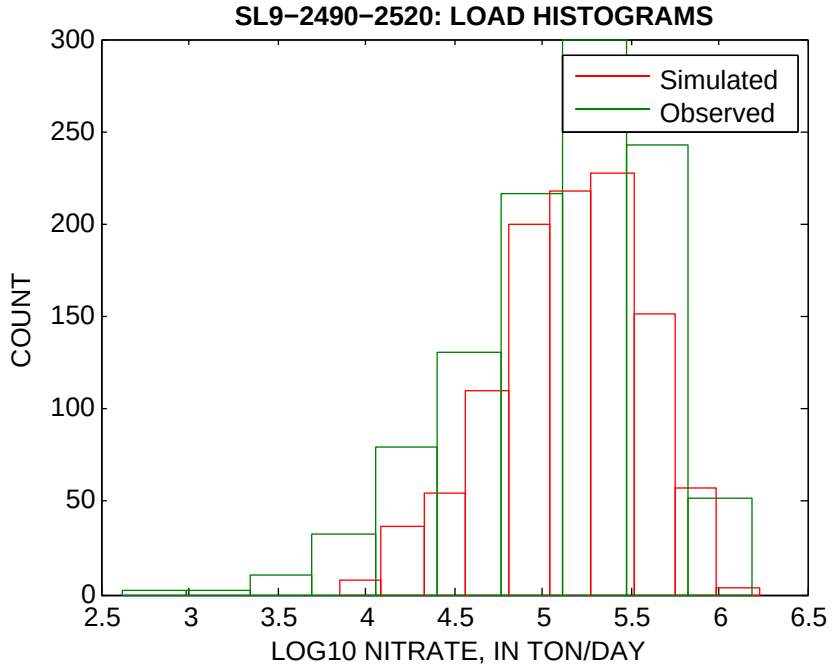


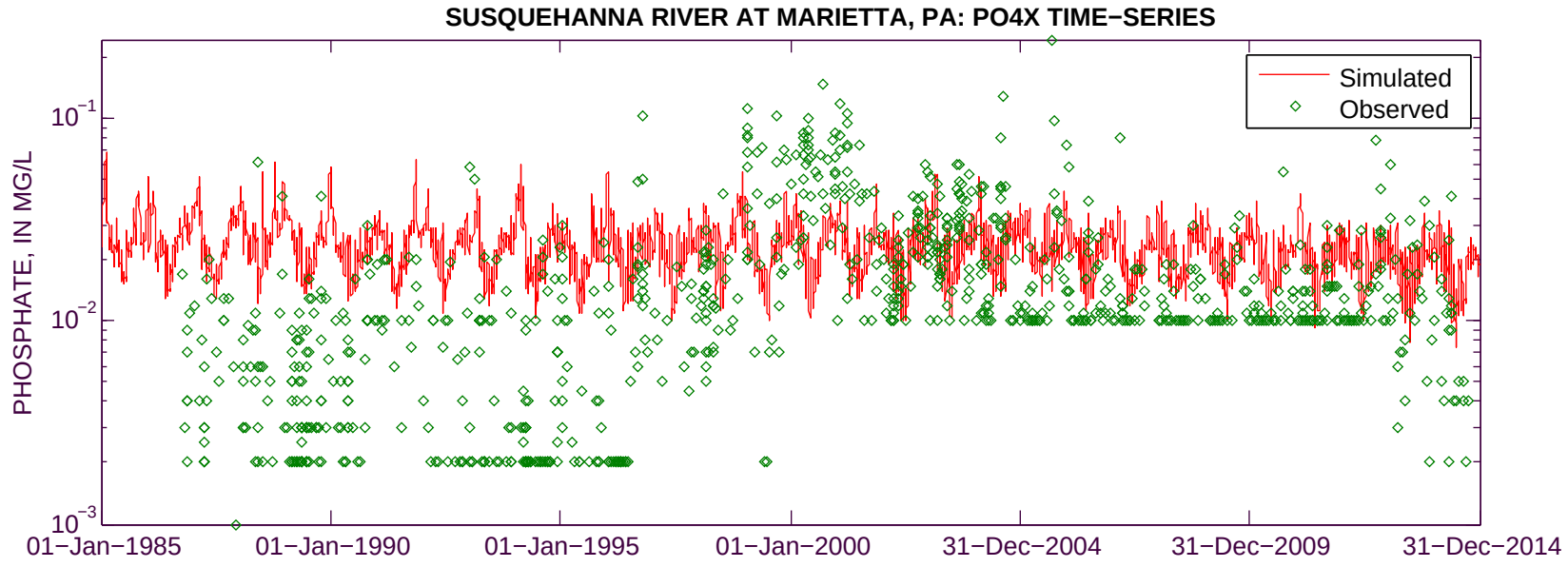
LOAD DATA
LOG10

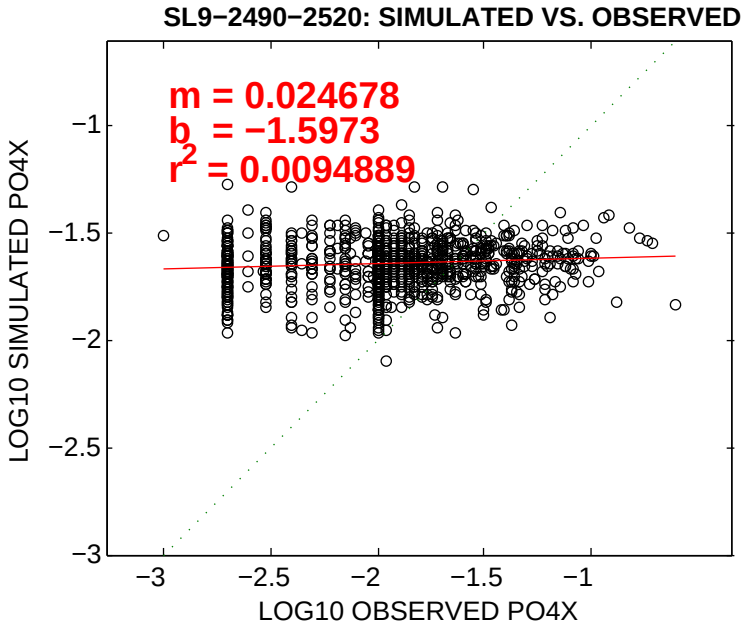


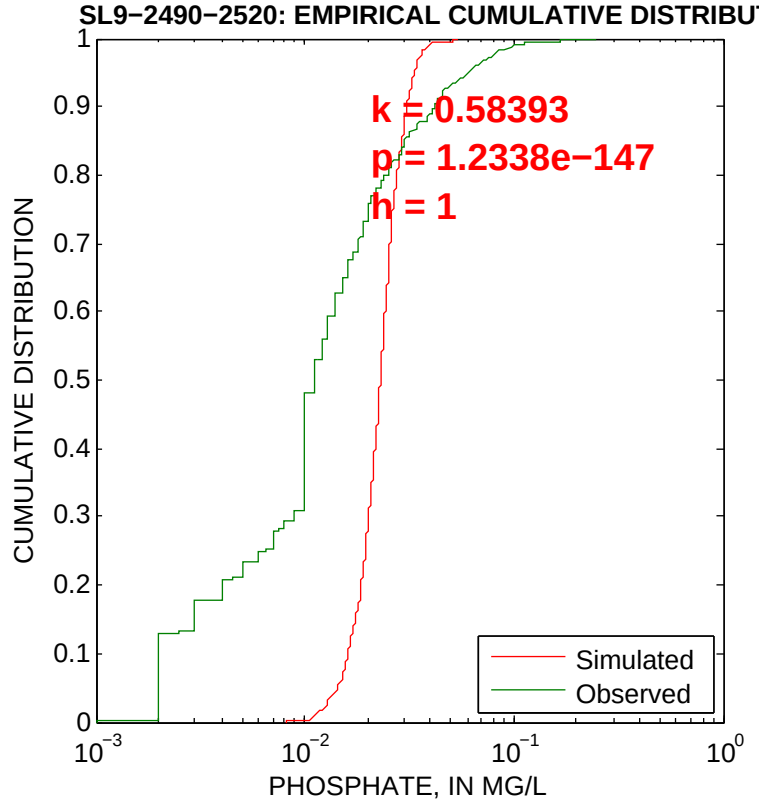












DATA SELECTION

scenario	file
P620171001WQ	PO4X.calib

plot: PO4X - phosphate

Dates: 1/1/1985 – 12/31/201

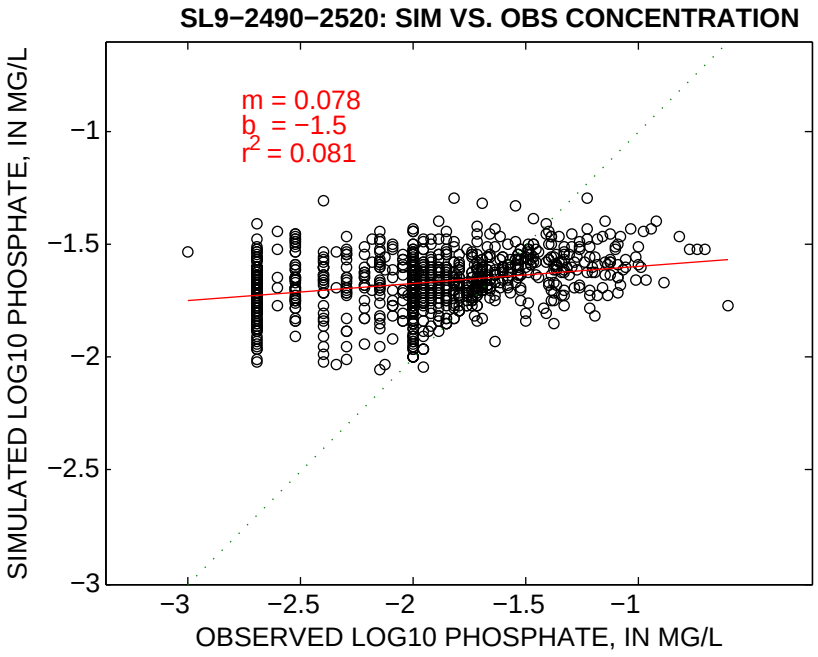
Drive	Directory	Observed
N/A	model	OBS20161101

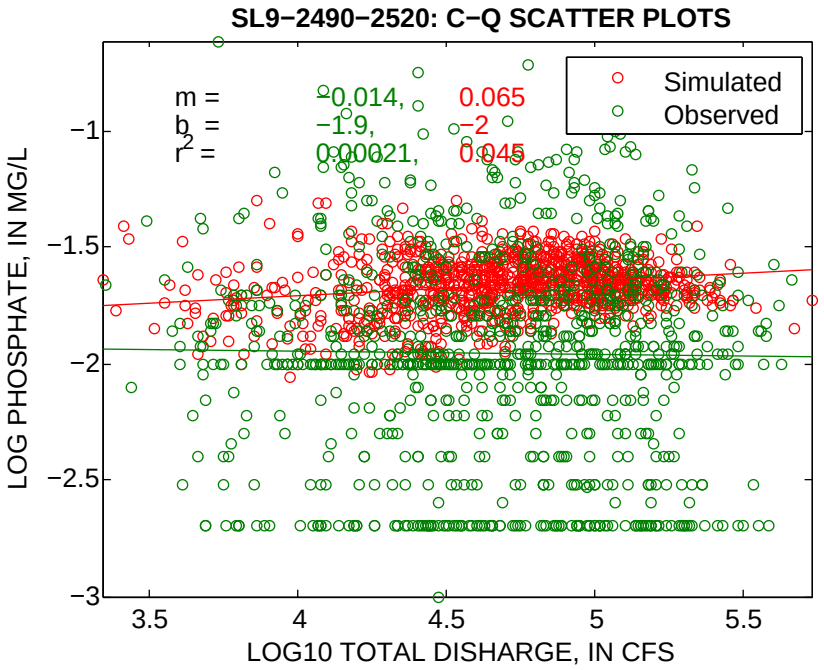
STATISTICS

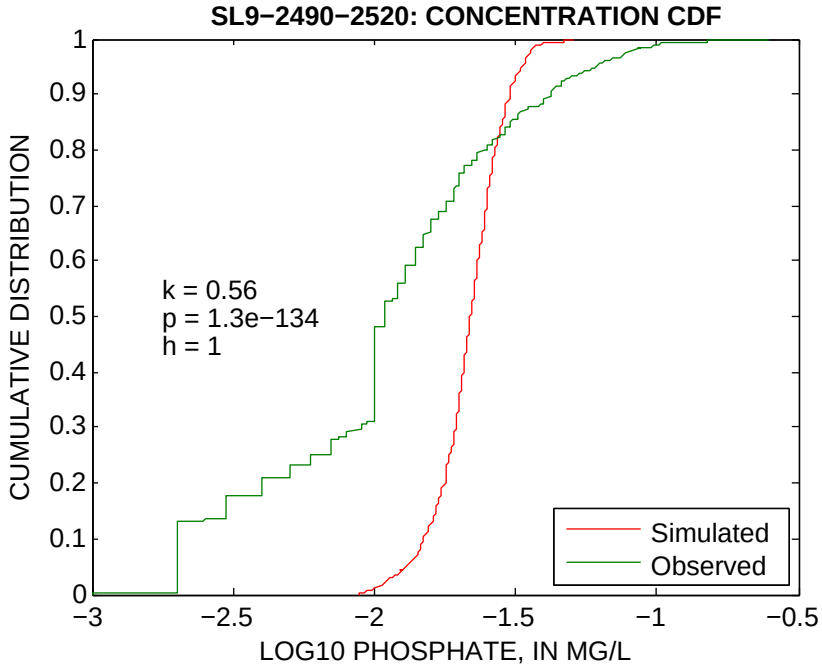
n	983	983
	observe	simulate
min	0.001	0.0080824
	-3	-2.09246
mean	0.018215	0.0233574
	-1.95593	-1.64555
media	0.011	0.022992
	-1.95861	-1.63842
max	0.247	0.053383
	-0.607303	-1.2726
varian	0.00049576	3.53827e-0
	0.193123	0.0123948
JB	0.001	0.001
	0.083625	0.001
	ra	log
%	28.2323	-15.8686
err.va	0.00053423	0.292419
rel.std.err	1.07761	1.51416
mod.eff	-0.0776061	-0.51416

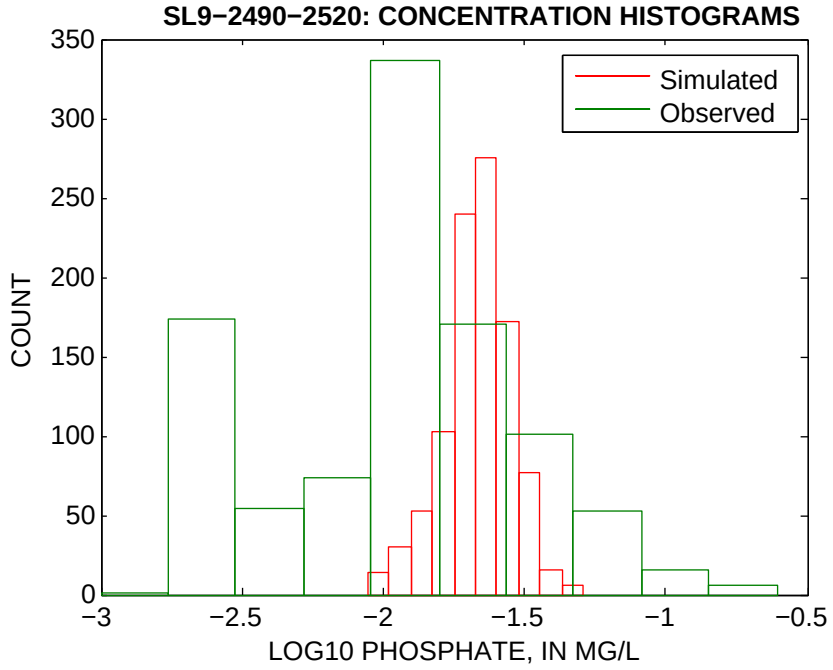
VERSION 2.1

ALL DATA
LOG10

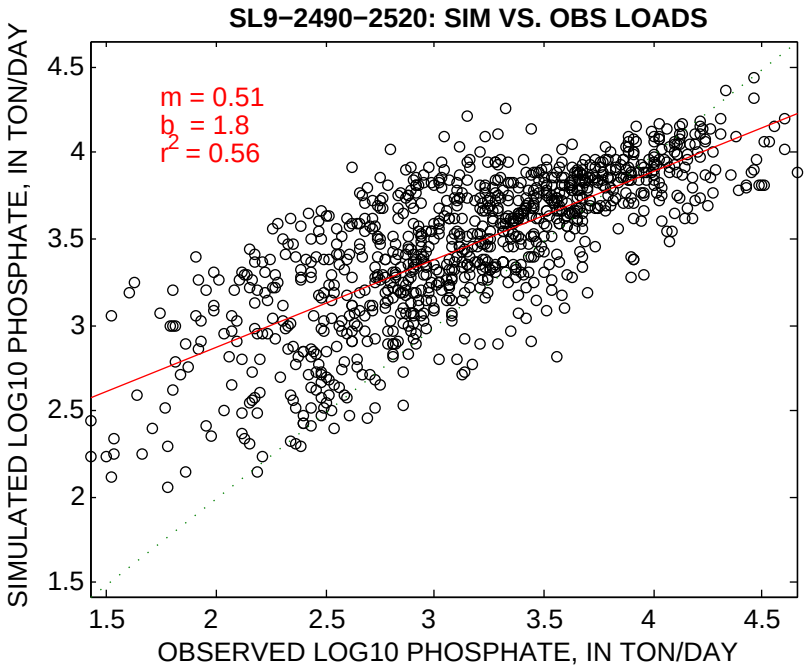


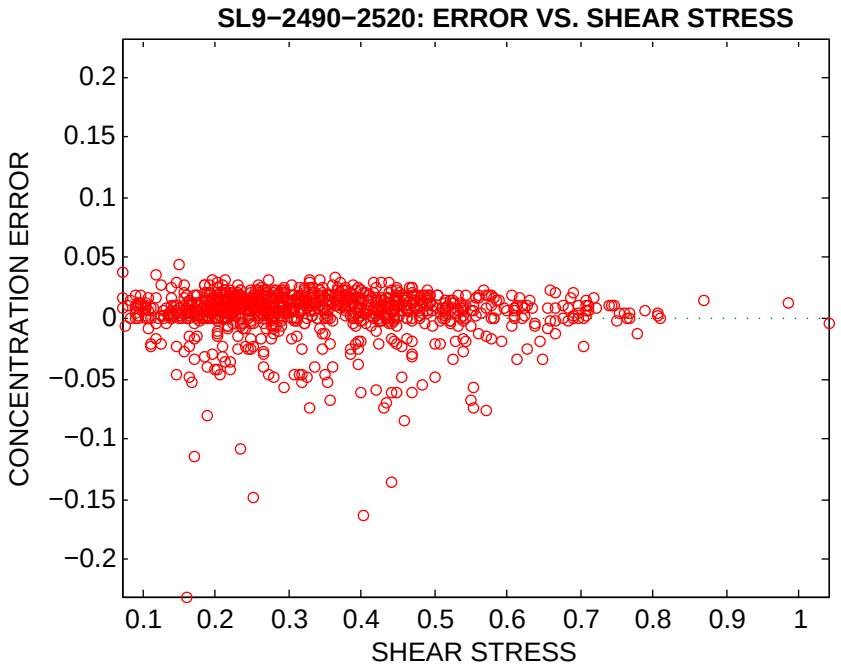


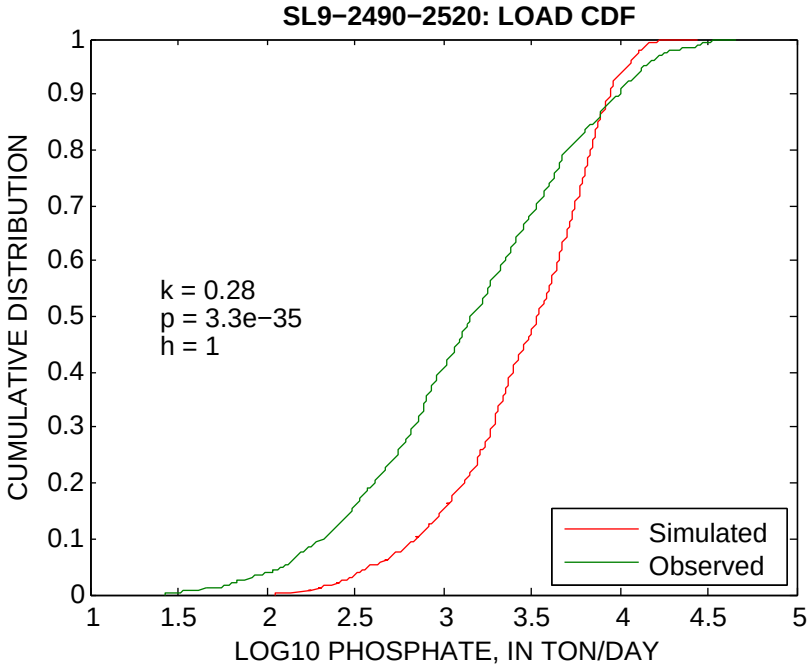


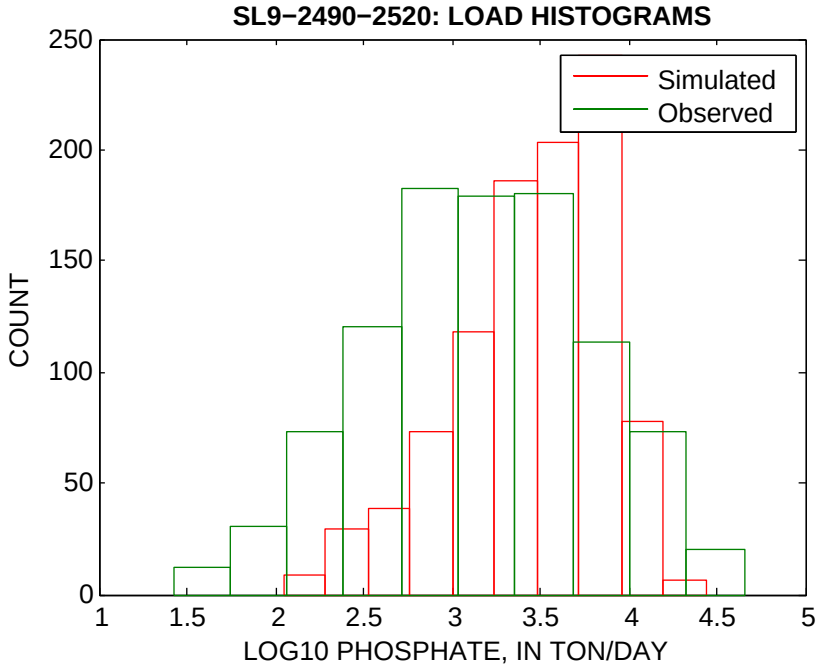


LOAD DATA
LOG10

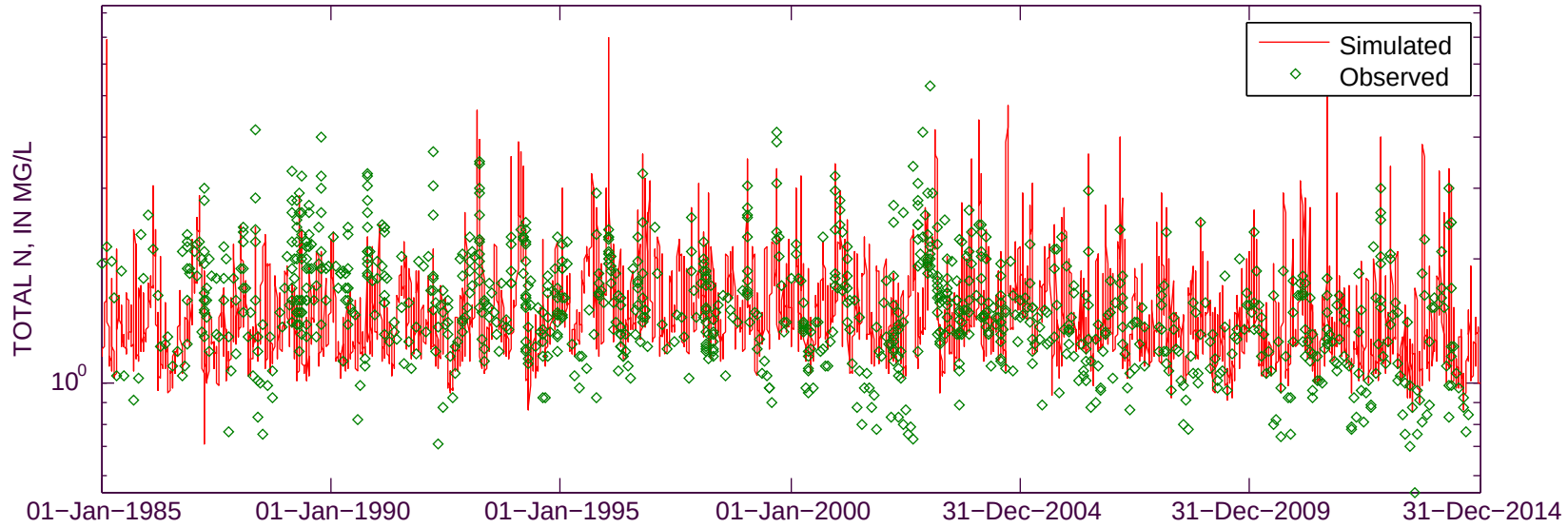




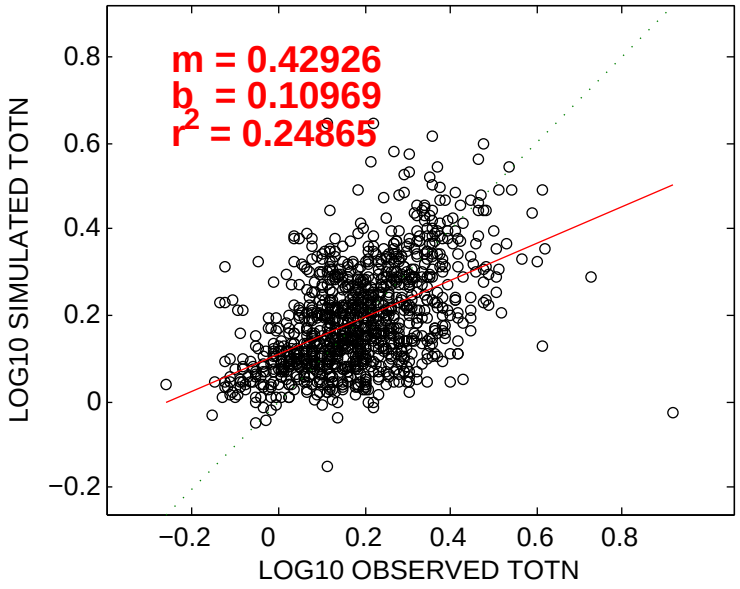




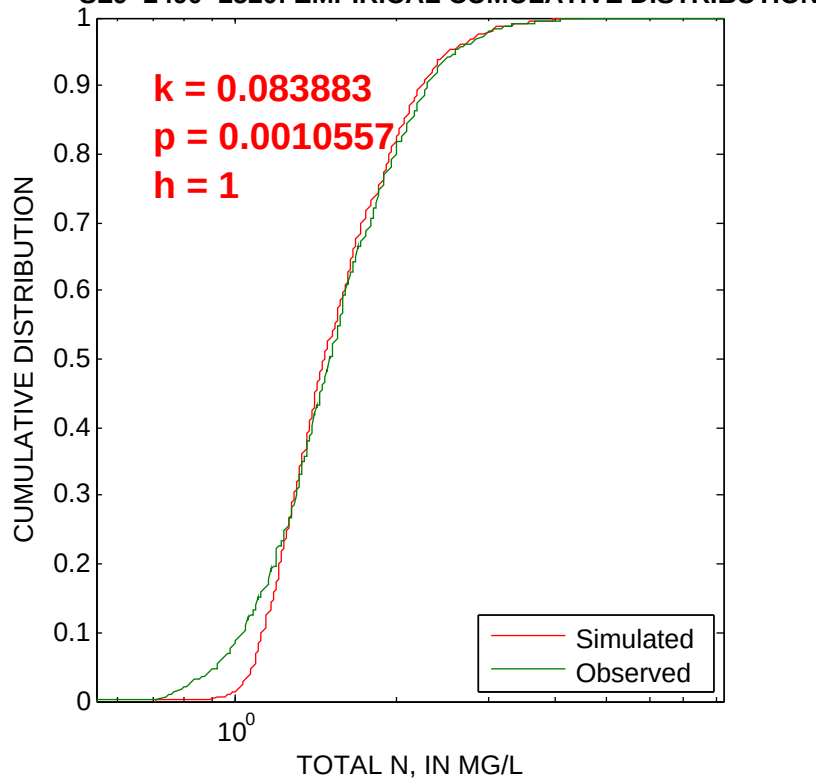
SUSQUEHANNA RIVER AT MARIETTA, PA: TOTN TIME-SERIES



SL9-2490-2520: SIMULATED VS. OBSERVED



SL9-2490-2520: EMPIRICAL CUMULATIVE DISTRIBUTION



DATA SELECTION

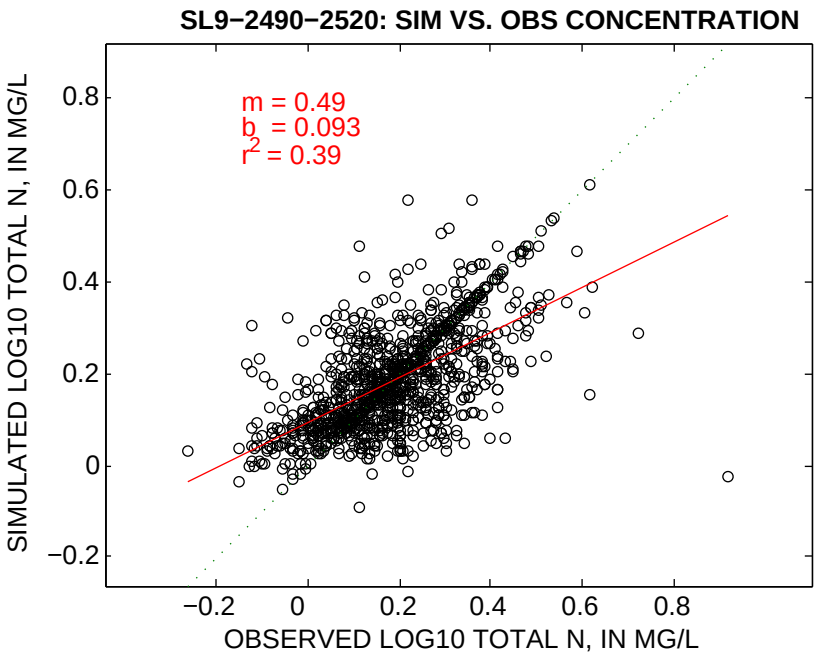
scenario: P620171001WQ
file: TOTN.calib
plot: TOTN - total nitrogen
Dates: 1/1/1985 – 12/31/201
Drive: N/A
Directory: model
Observed: OBS20161101

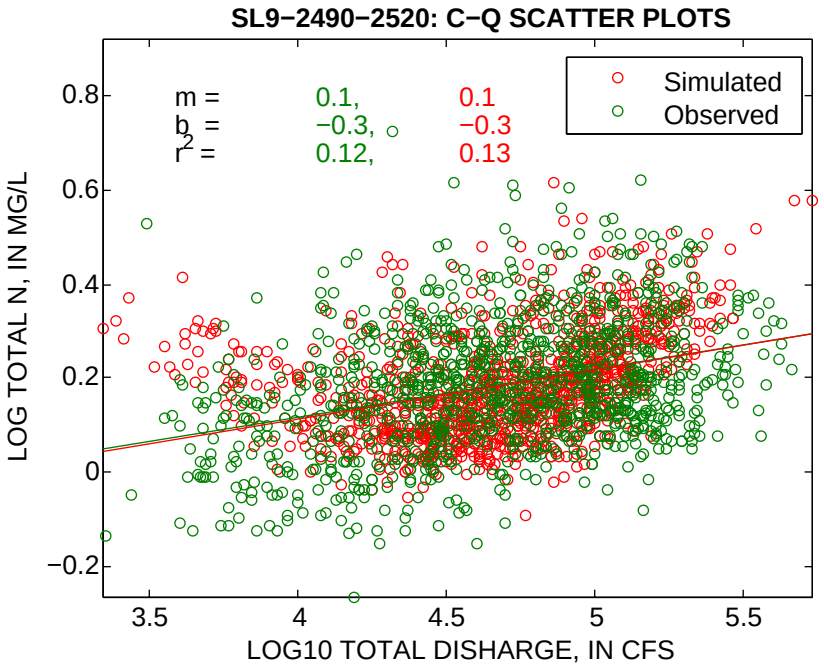
STATISTICS

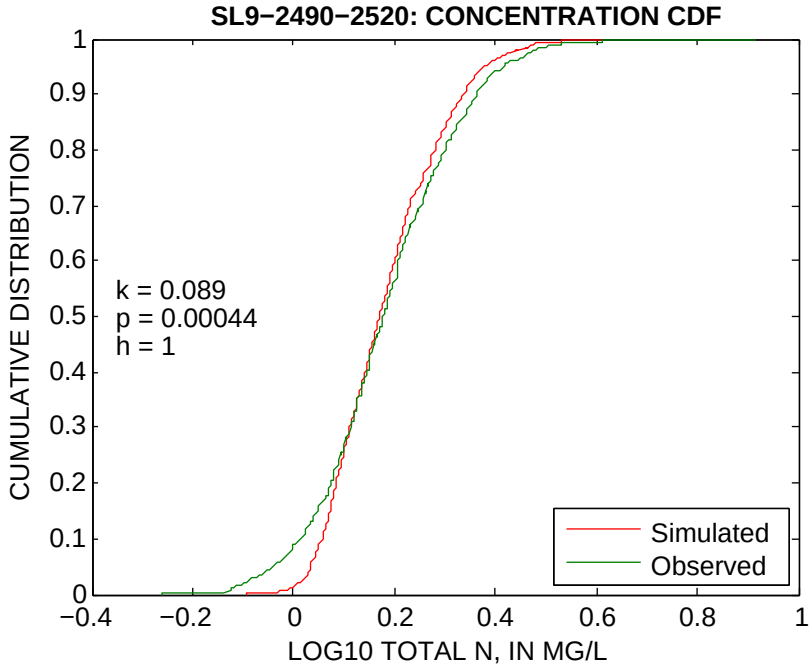
	n	observe	simulate
		1061	1061
min		0.546	0.70854
		-0.262807	-0.149636
mean		1.61589	1.60986
		0.185293	0.189229
media		1.50137	1.4696
		0.176488	0.167199
max		8.27	4.4294
		0.917506	0.646345
varian		0.335325	0.249173
		0.0192698	0.0142798
JB		0.001	0.001
		0.001	0.001
		ra	log
%		-0.37326	2.12424
err.va		0.327074	0.0170217
rel.std.err		0.975394	0.883332
mod.eff		0.0246062	0.116668

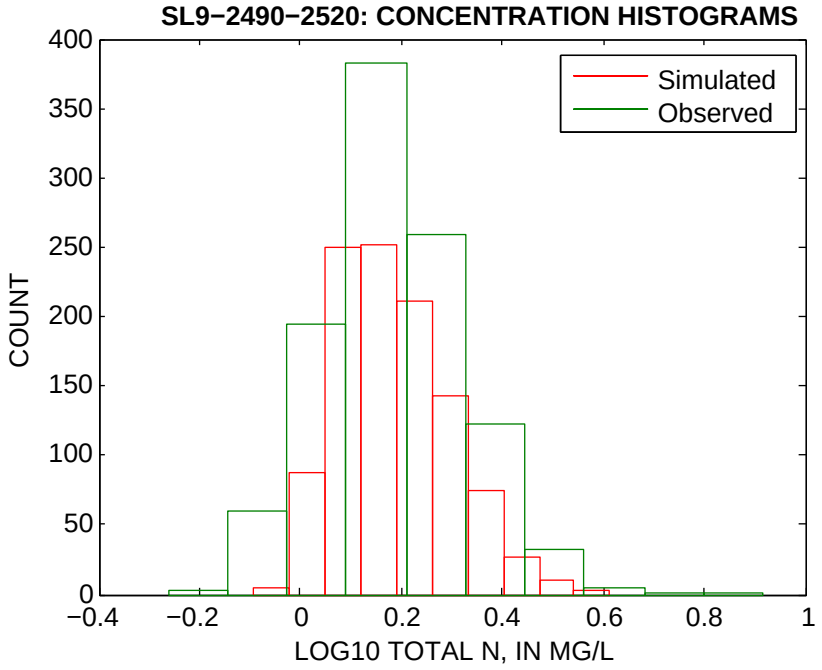
VERSION 2.1

ALL DATA
LOG10

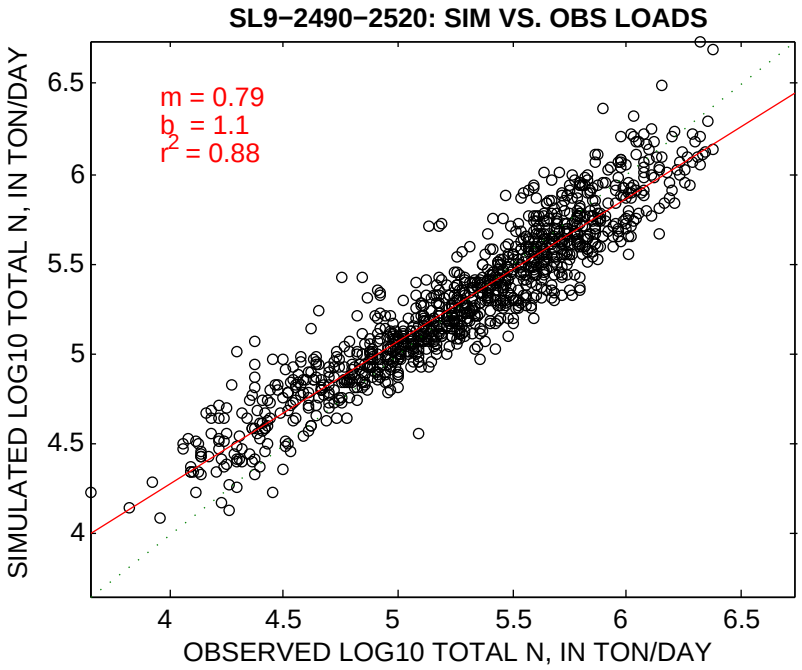


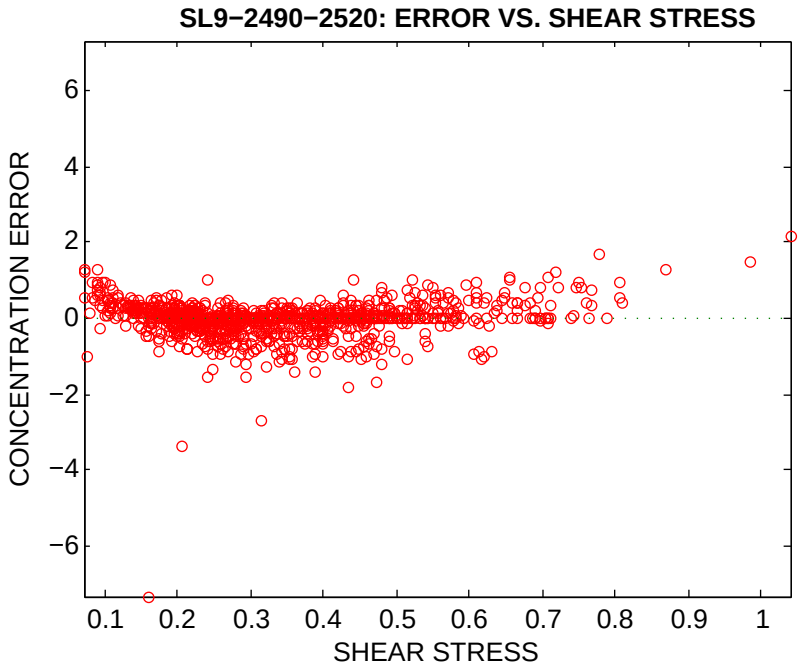


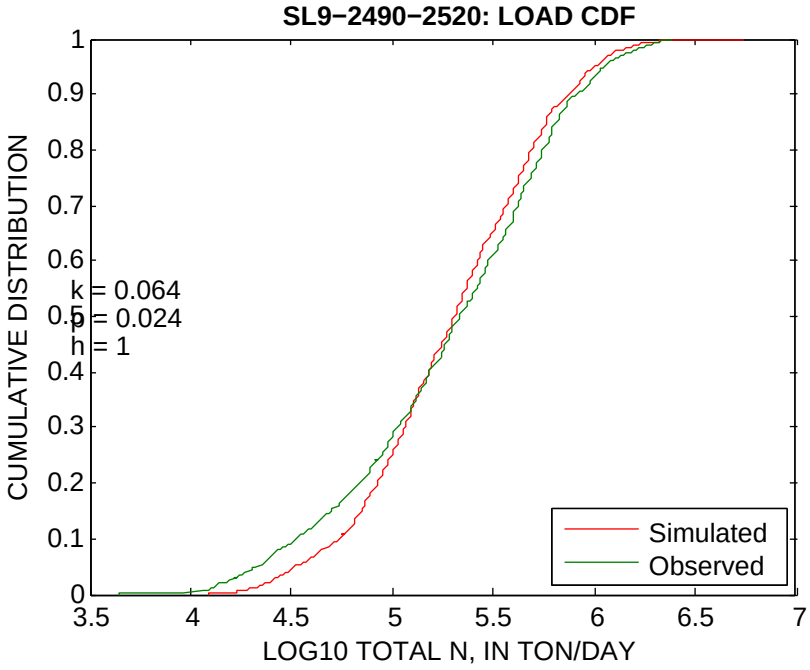


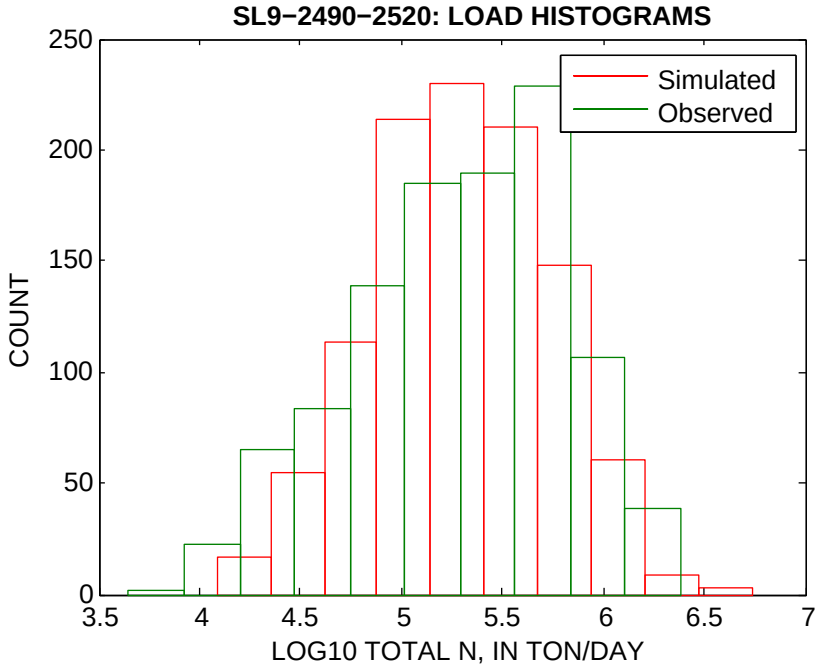


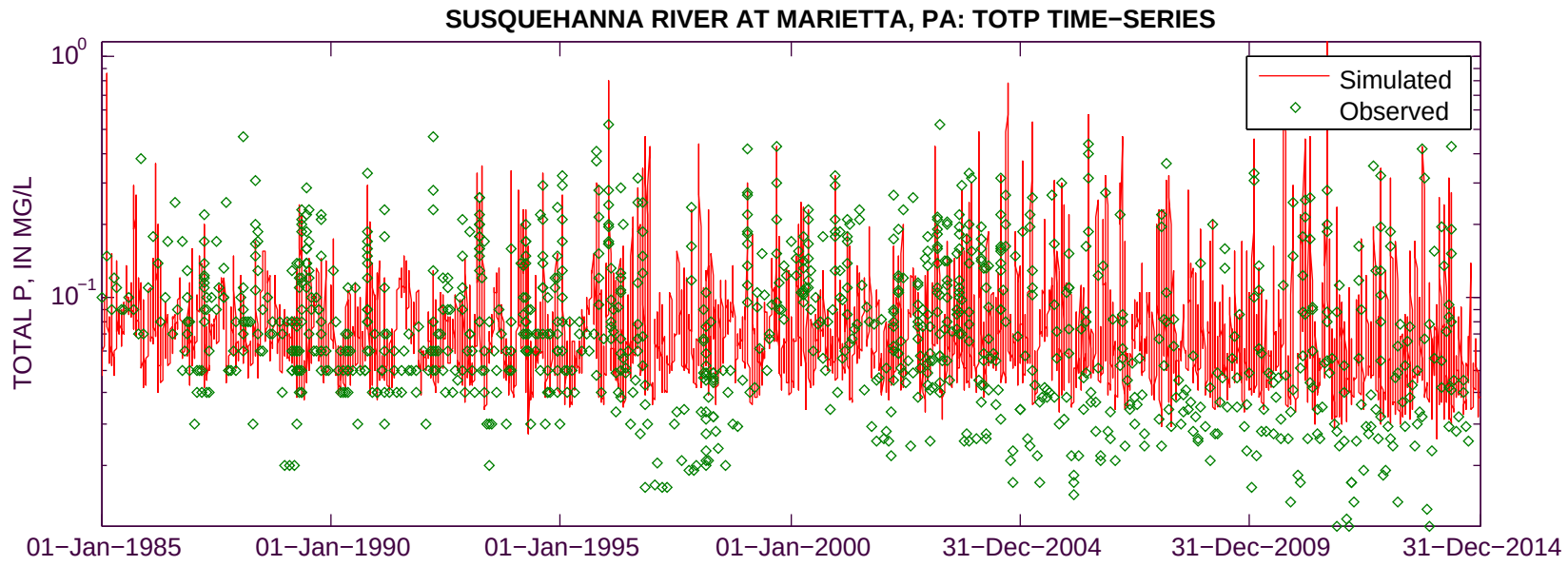
LOAD DATA
LOG10

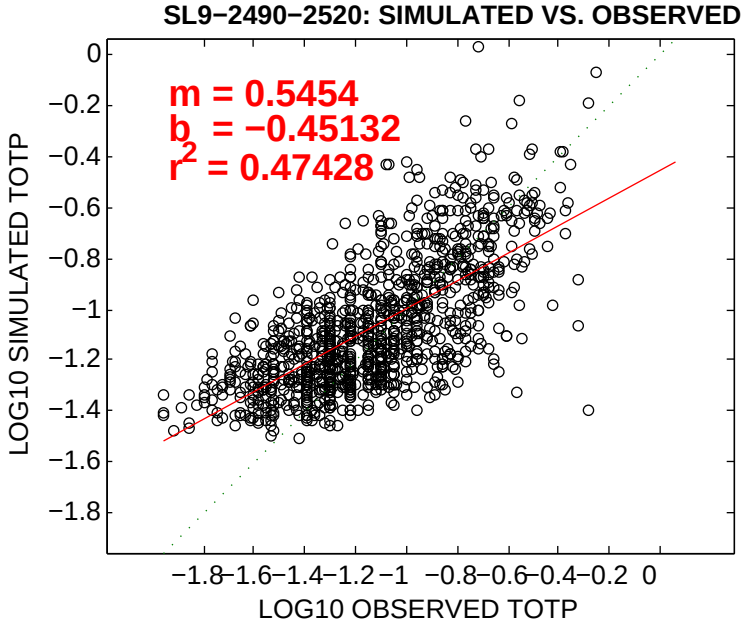


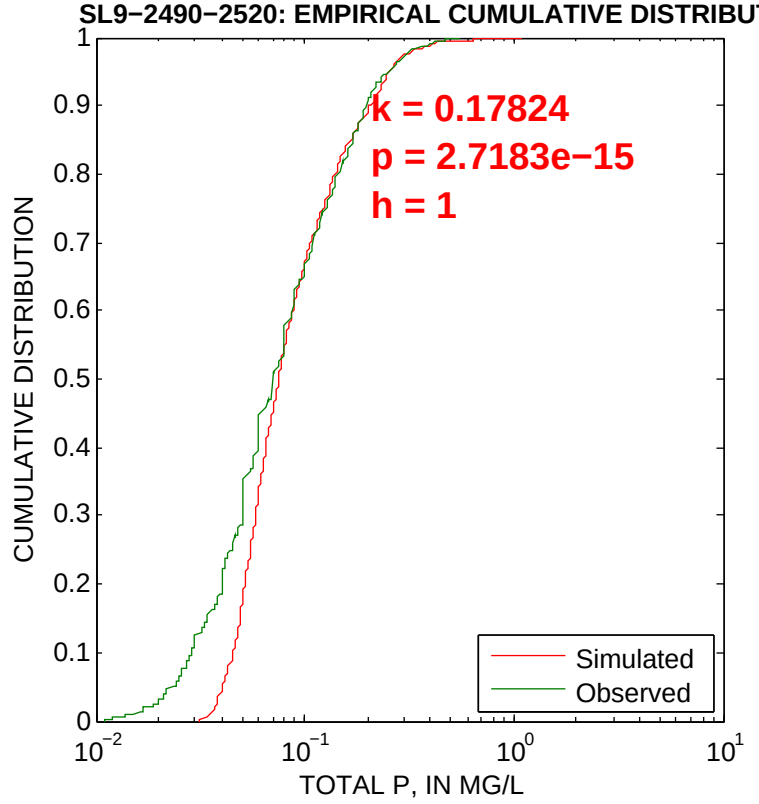












DATA SELECTION

scenario: P620171001WQ | file: TOTP.calib

plot: TOTP - total phosphorus

Dates: 1/1/1985 – 12/31/201

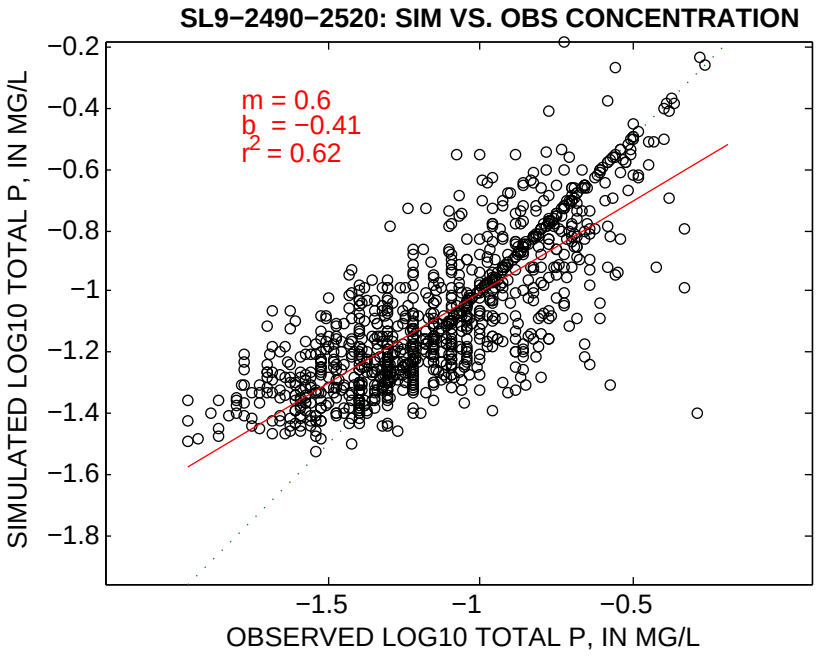
Drive: N/A | Directory: model | Observed: OBS20161101

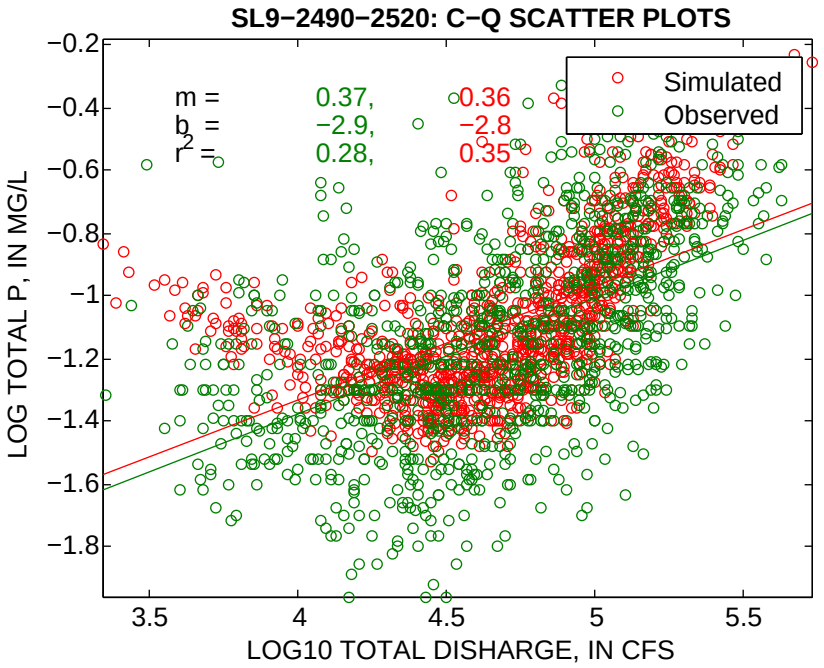
STATISTICS

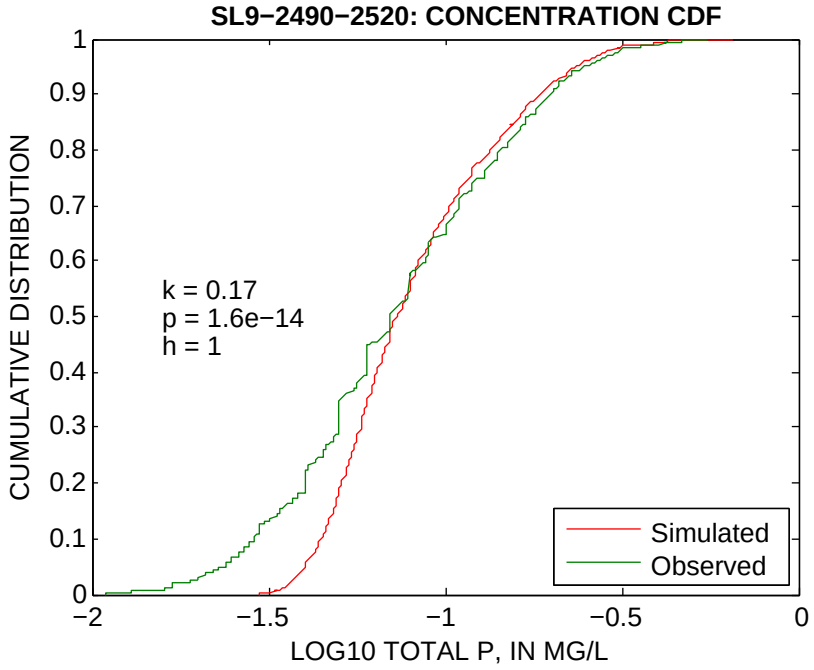
		observe	simulate
n		1066	1066
min		0.011	0.030893
		-1.95861	-1.51014
mean		0.0968328	0.104052
		-1.13074	-1.06803
media		0.07	0.0753595
		-1.1549	-1.12286
max		0.553	1.0935
		-0.257275	0.0388188
varian		0.00607785	0.00710613
		0.100864	0.06326
JB		0.001	0.001
		0.007214	0.001
		ra	log
%		7.45581	-5.54571
err.va		0.00496246	0.0580372
rel.std.err		0.816482	0.575401
mod.eff		0.183518	0.424599

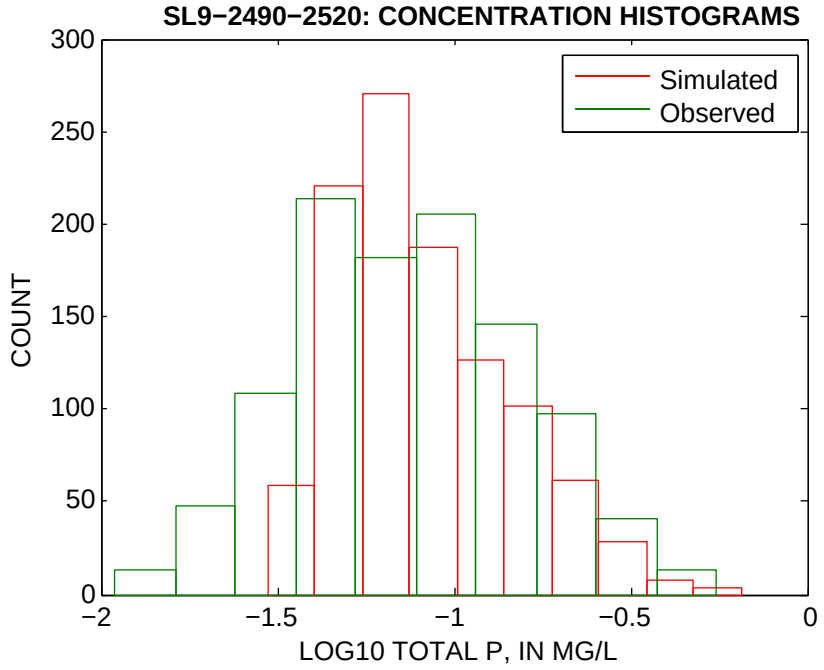
VERSION 2.1

ALL DATA
LOG10

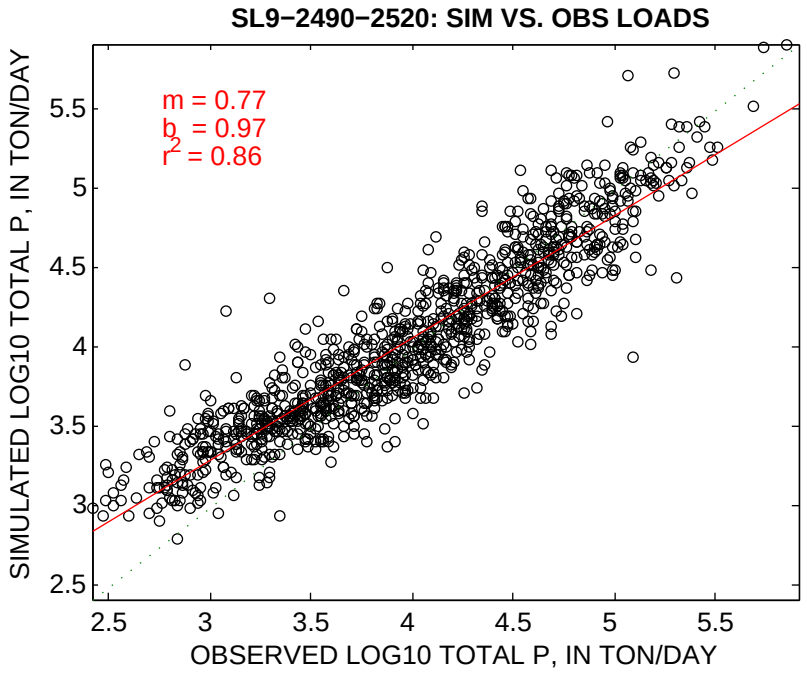


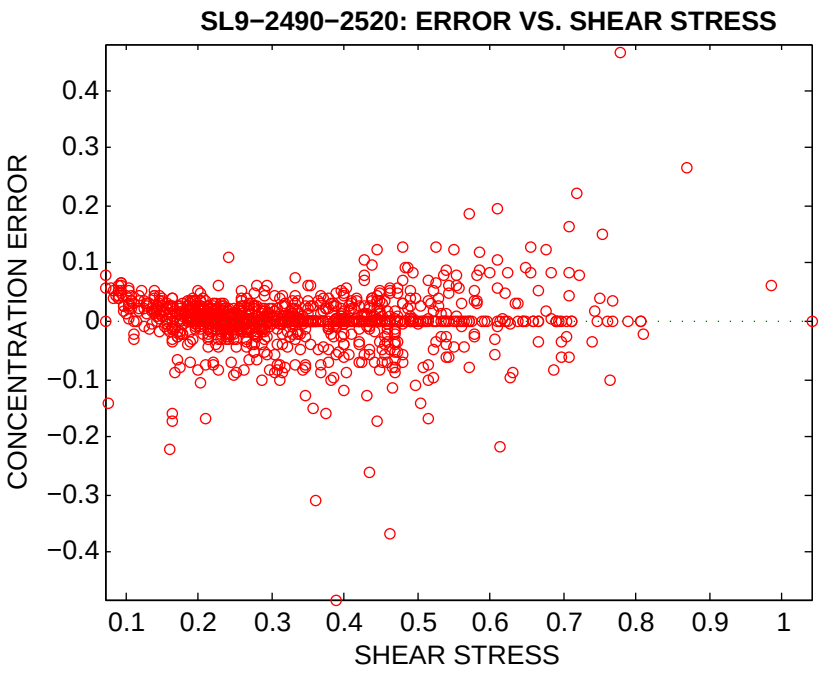


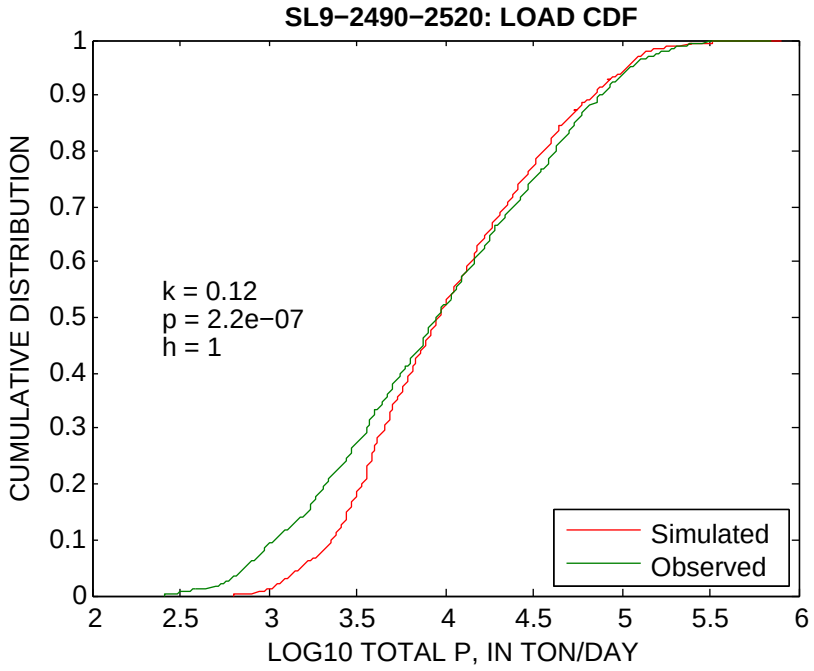


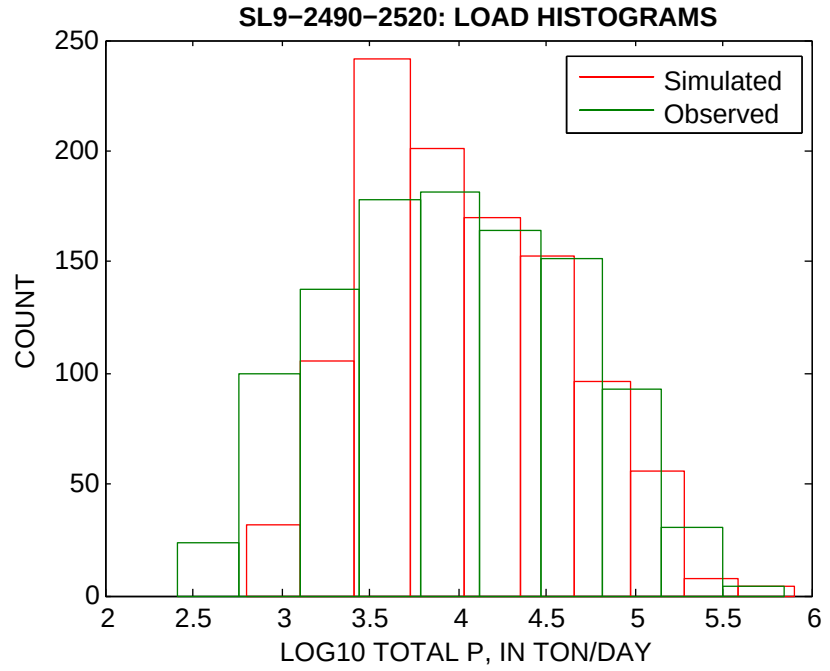


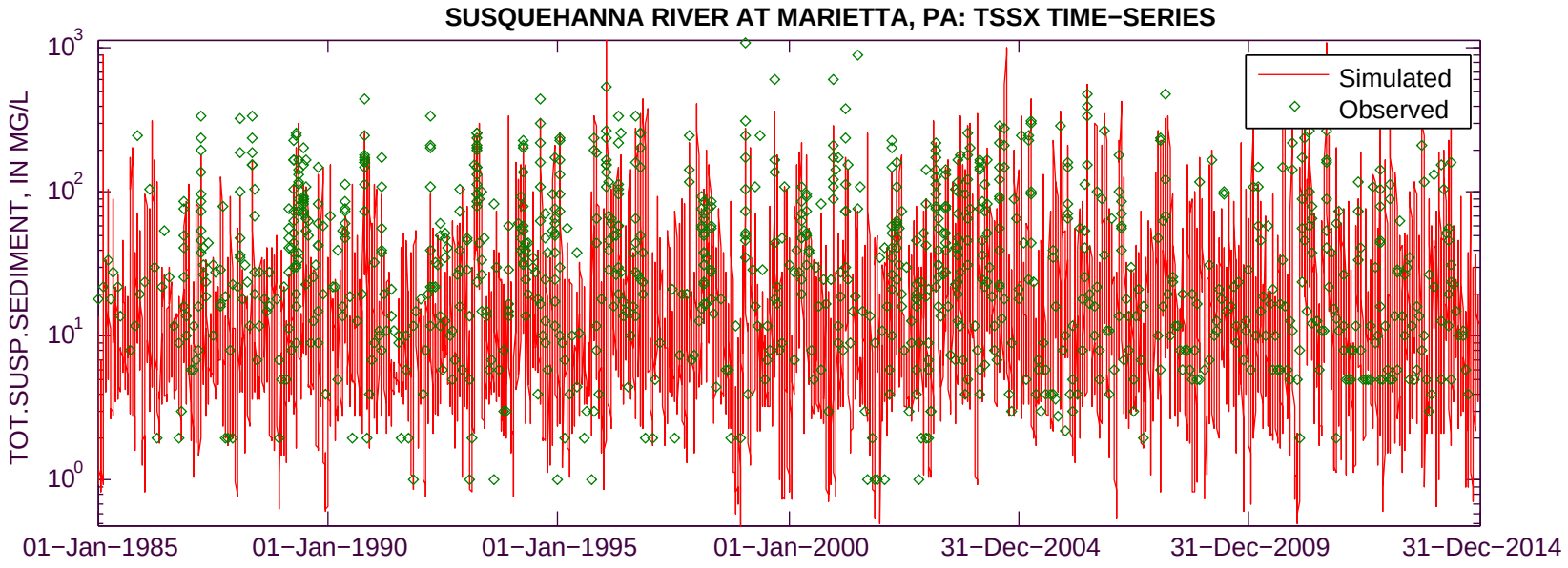
LOAD DATA
LOG10

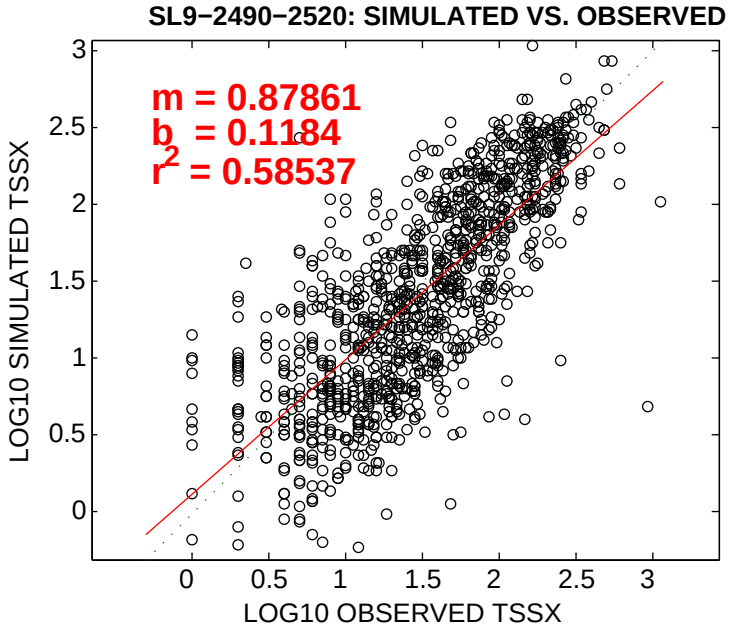


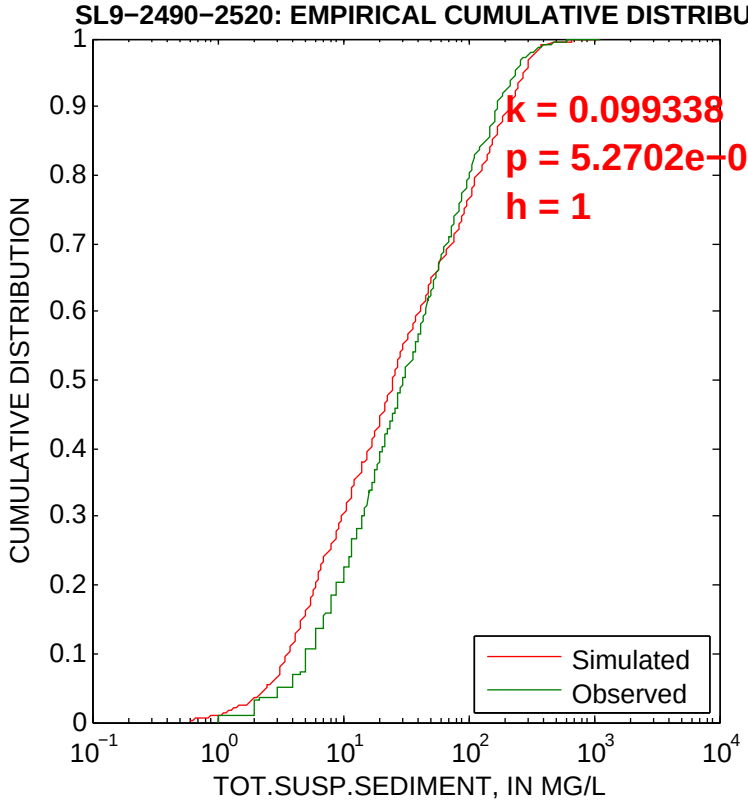












DATA SELECTION

scenario: P620171001WQ | file: TSSX.calib

plot: TSSX - total suspended ...

Dates: 1/1/1985 – 12/31/201

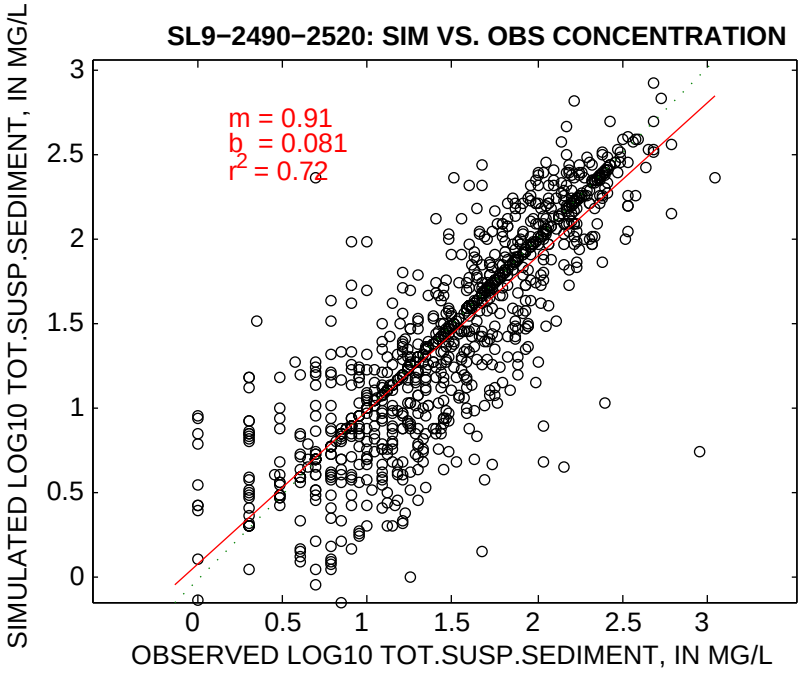
Drive | Directory: N/A | model | Observed: OBS20161101

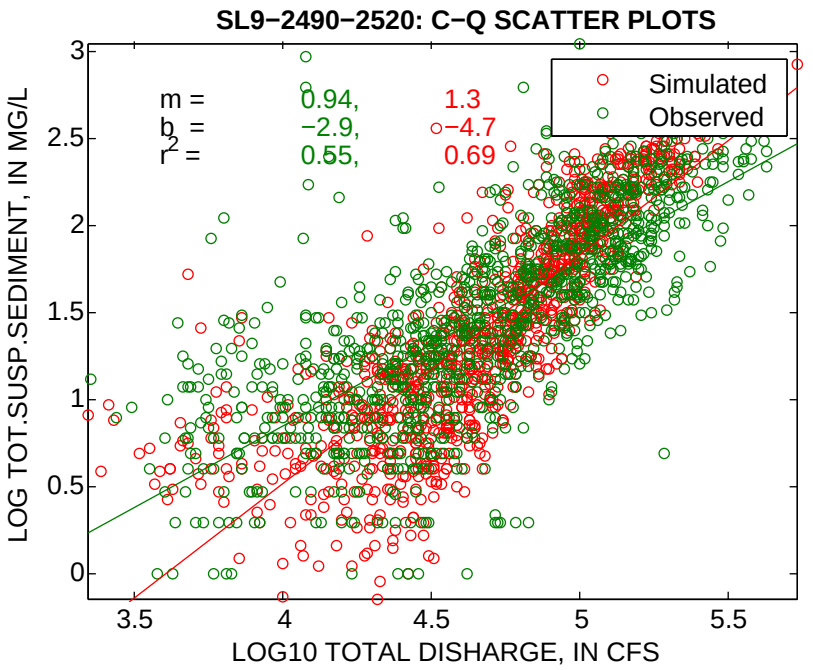
STATISTICS

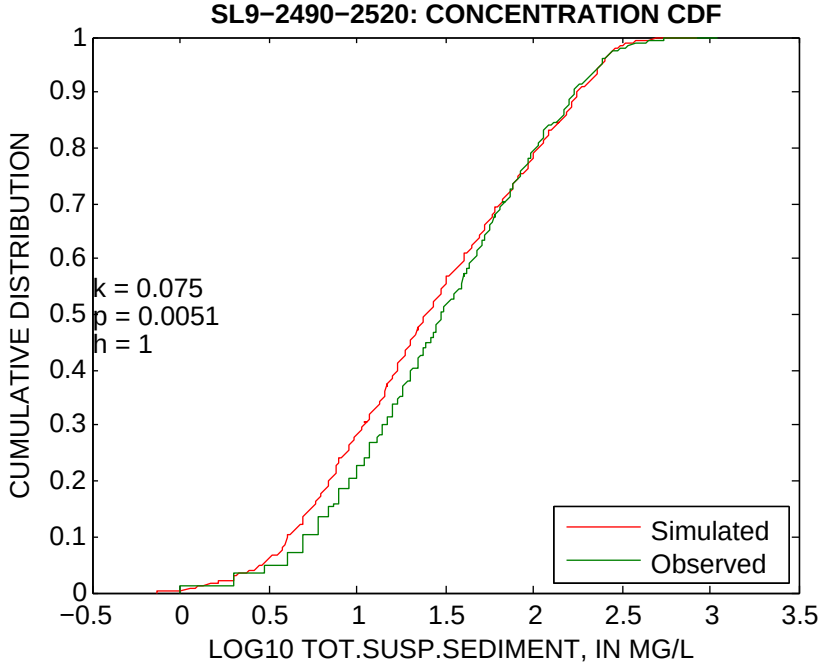
		observe	simulate
n		1057	1057
min		1	0.5978
		0	-0.223444
mean		65.9786	70.8632
		1.48302	1.4214
media		30	25.314
		1.47712	1.40336
max		1117	1086.5
		3.04805	3.03603
varian		8625.94	10802
		0.329798	0.43492
JB		0.001	0.001
		0.001973	0.001
		ra	log
%		7.40332	-4.15526
err.va		6937.78	0.188994
rel.std.err		0.804293	0.573059
mod.eff		0.195707	0.426941

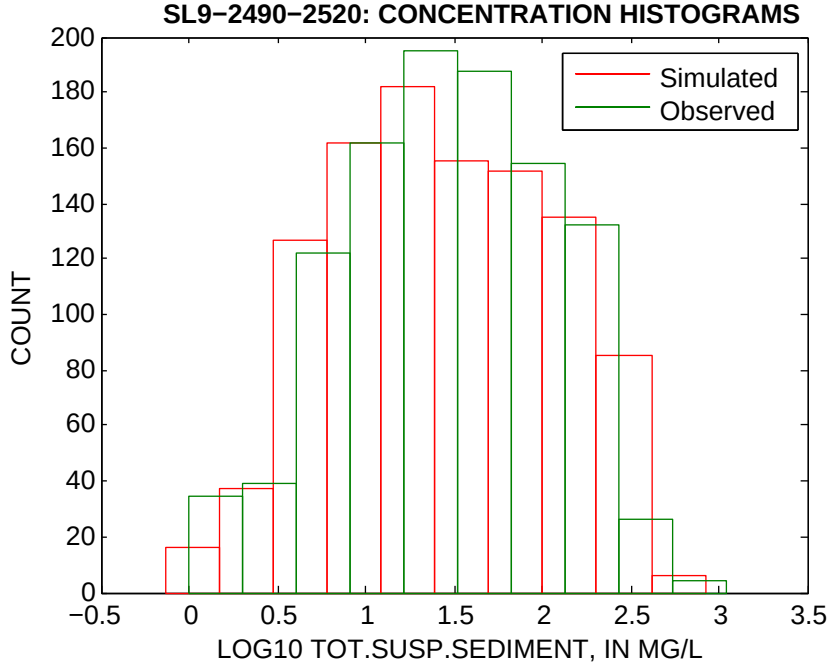
VERSION 2.1

ALL DATA
LOG10

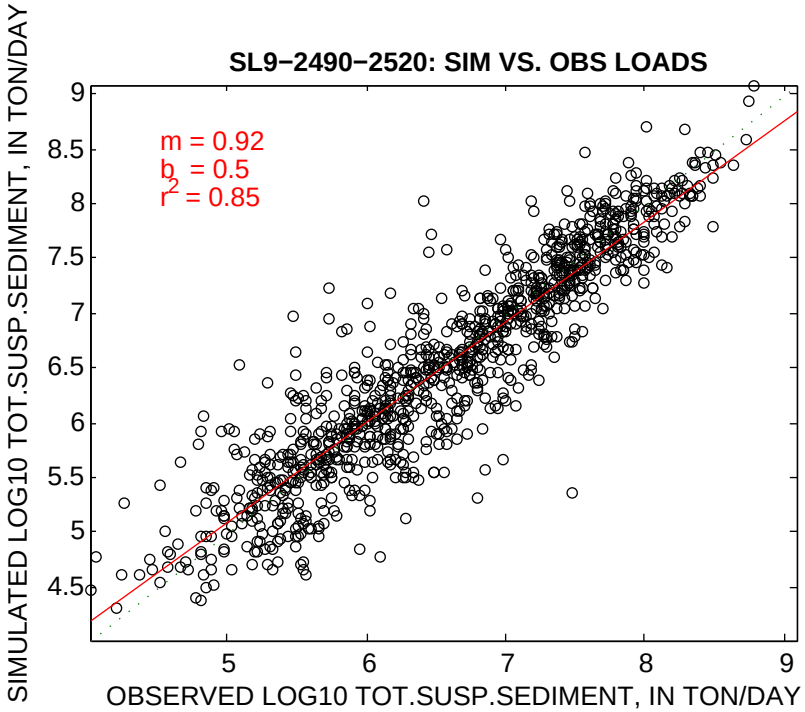


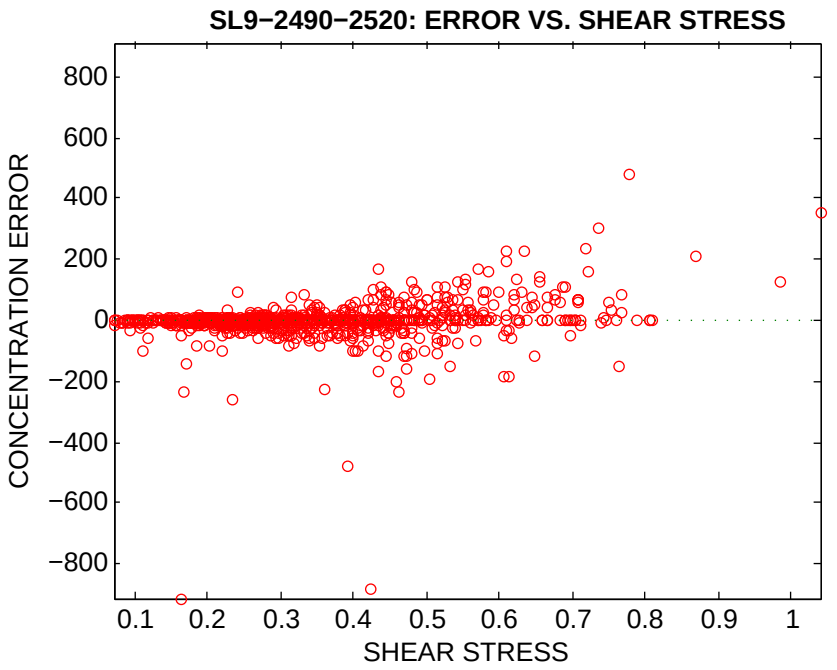


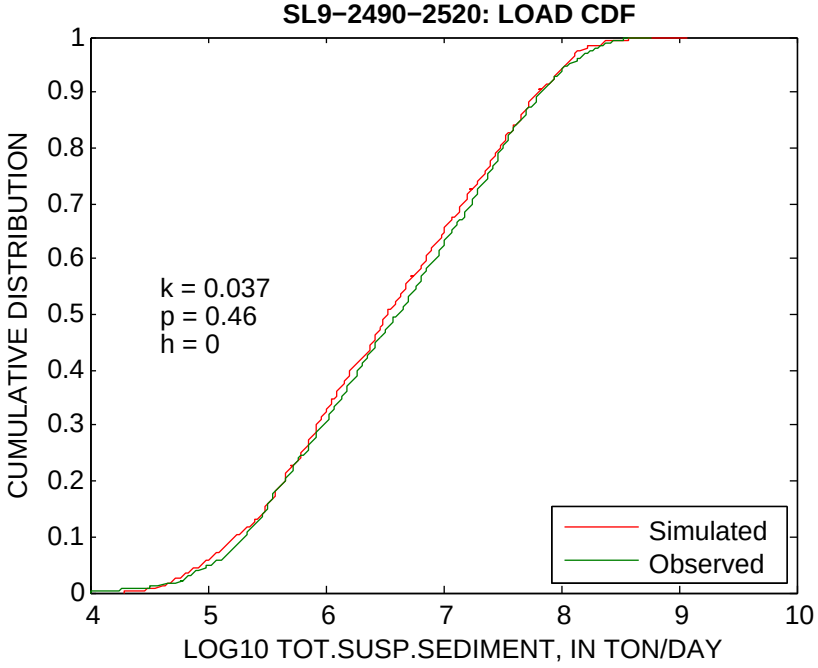


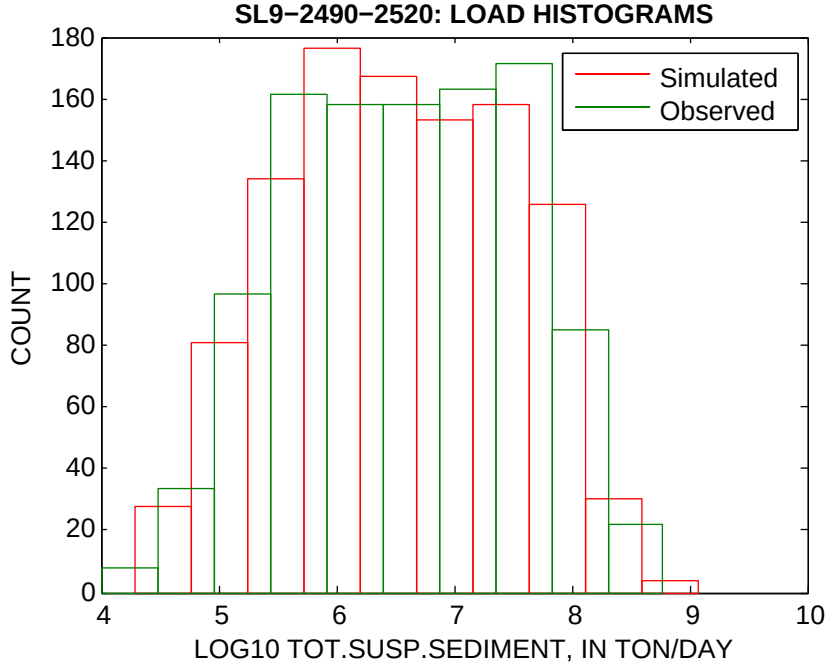


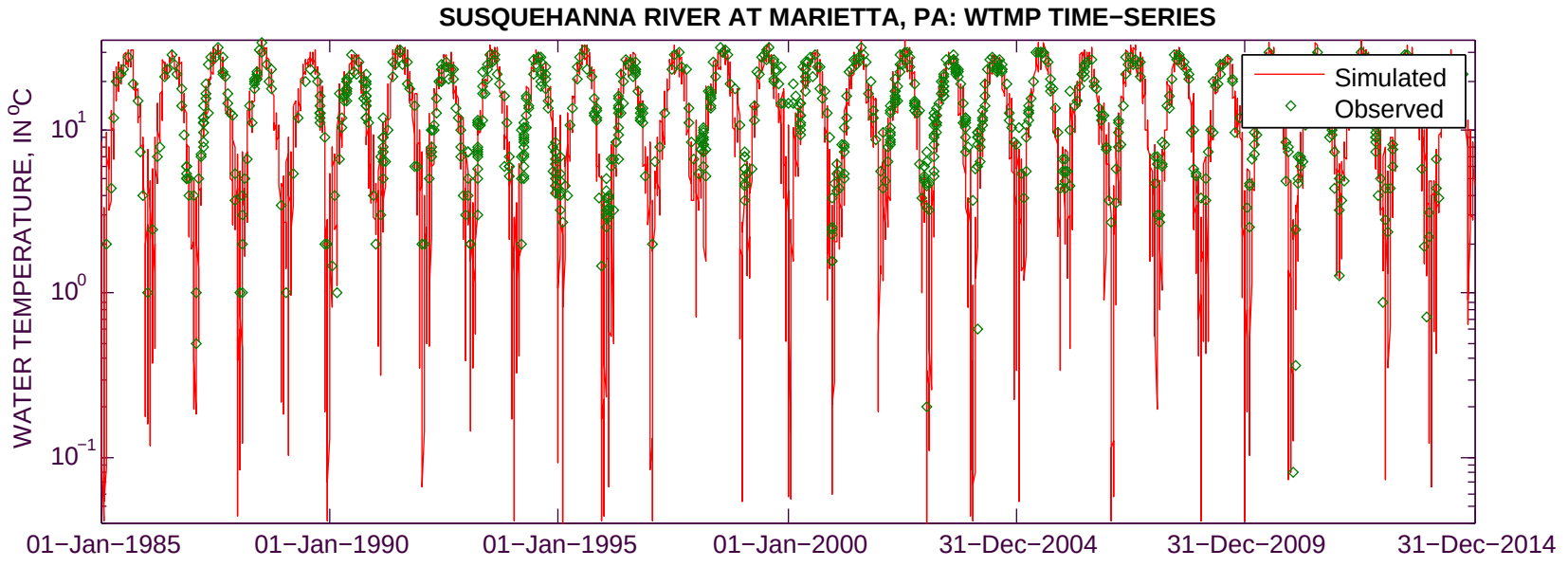
LOAD DATA
LOG10

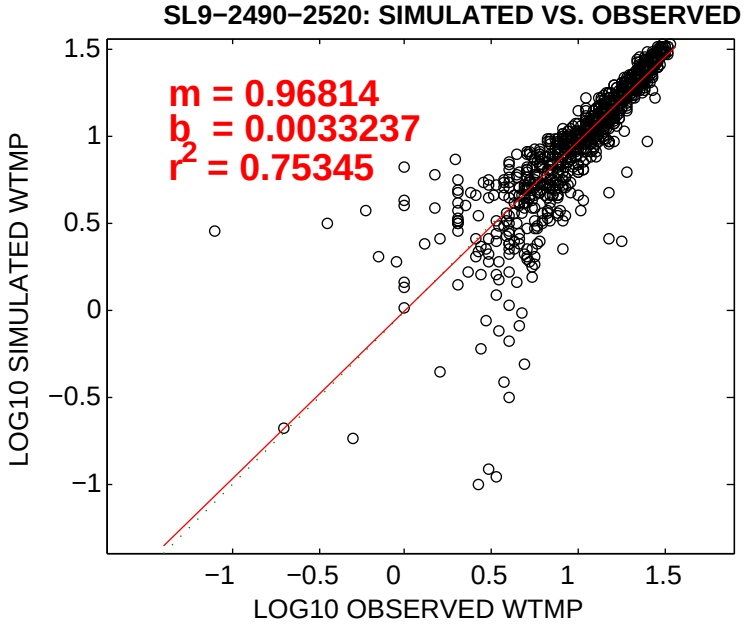


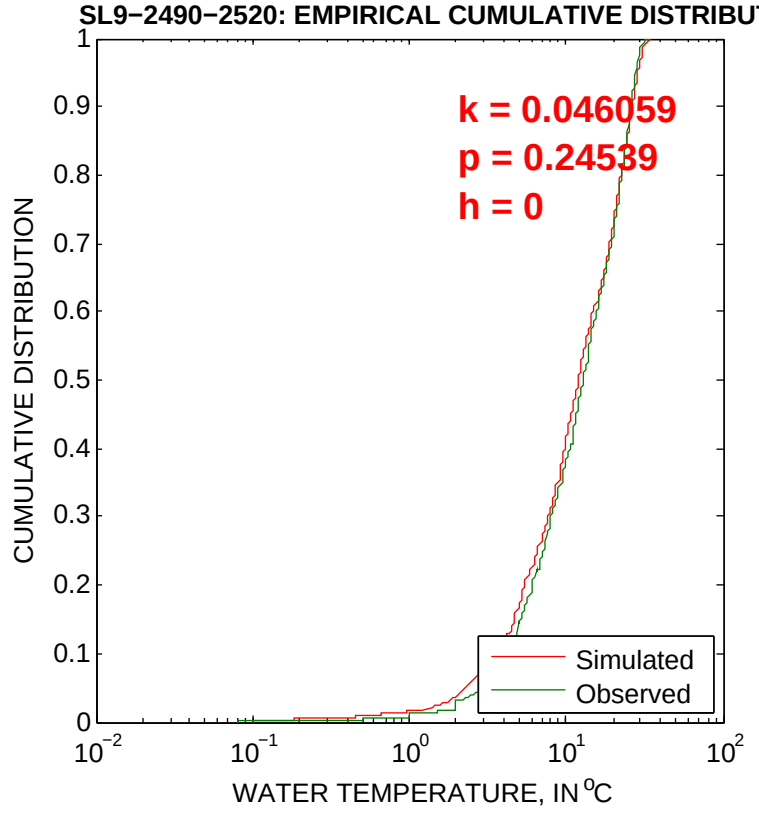












DATA SELECTION

scenario	file
P620171001WQ	WTMP.calib

plot: WTMP - water tempera...

Dates: 1/1/1985 — 12/31/201

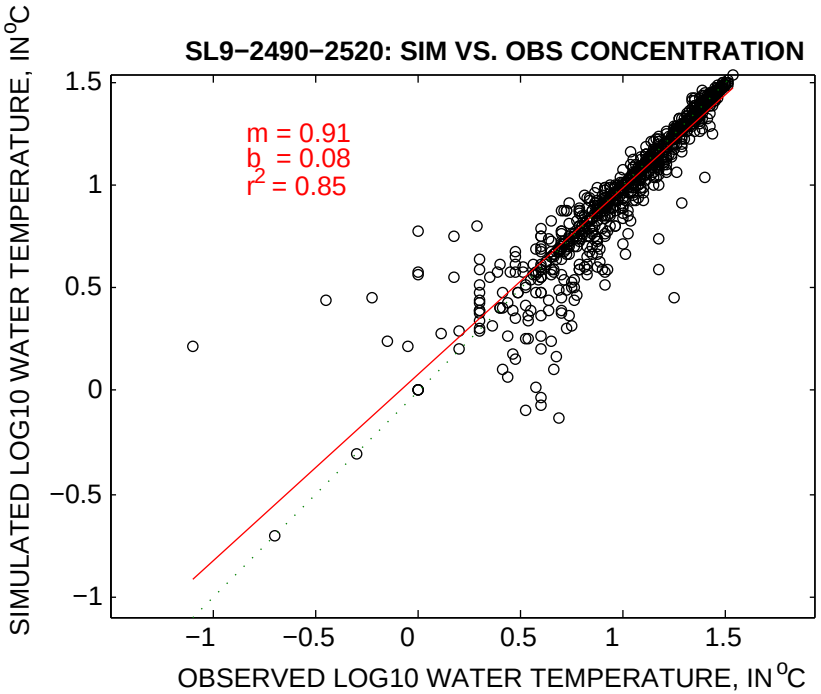
Drive	Directory	Observed
N/A	model	OBS20161101

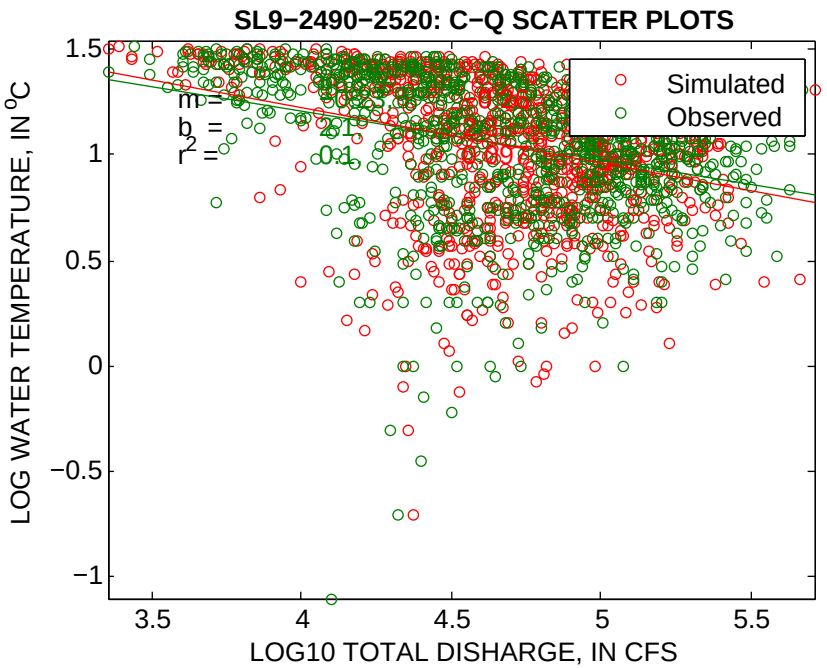
STATISTICS

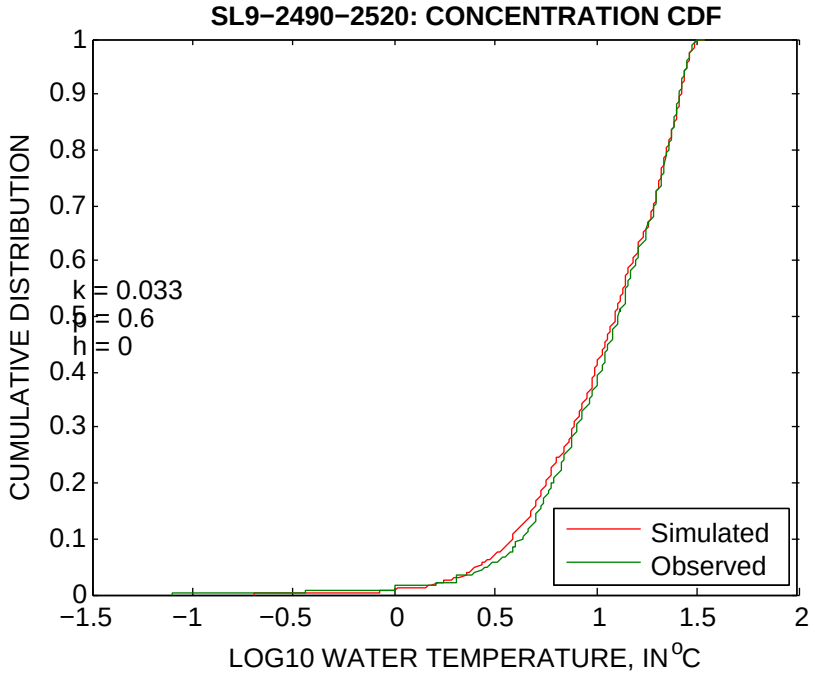
	n	observe	simulate
		977	977
min		0.08	0.10124
		-1.09691	-0.994648
mean		14.1899	13.8092
		1.05447	1.02419
media		13	12.042
		1.11394	1.0807
max		34	34.365
		1.53148	1.53612
varian		66.465	72.6801
		0.109982	0.136817
JB		0.001	0.001
		0.001	0.001
		ra	log
%		-2.68319	-2.87128
err.va		5.32994	0.034762
rel.std.err		0.0801917	0.316071
mod.eff		0.919808	0.683929

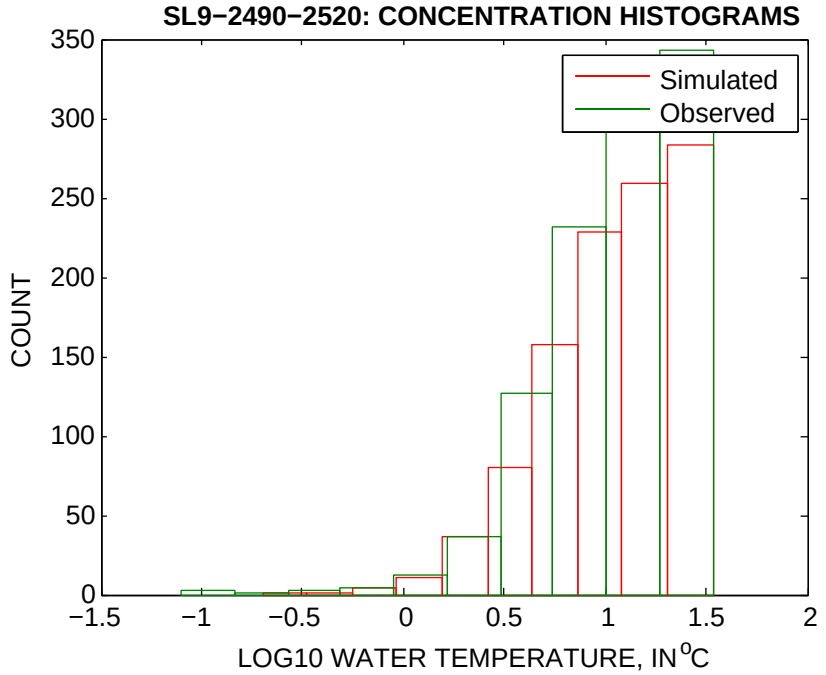
VERSION 3.1

ALL DATA
LOG10

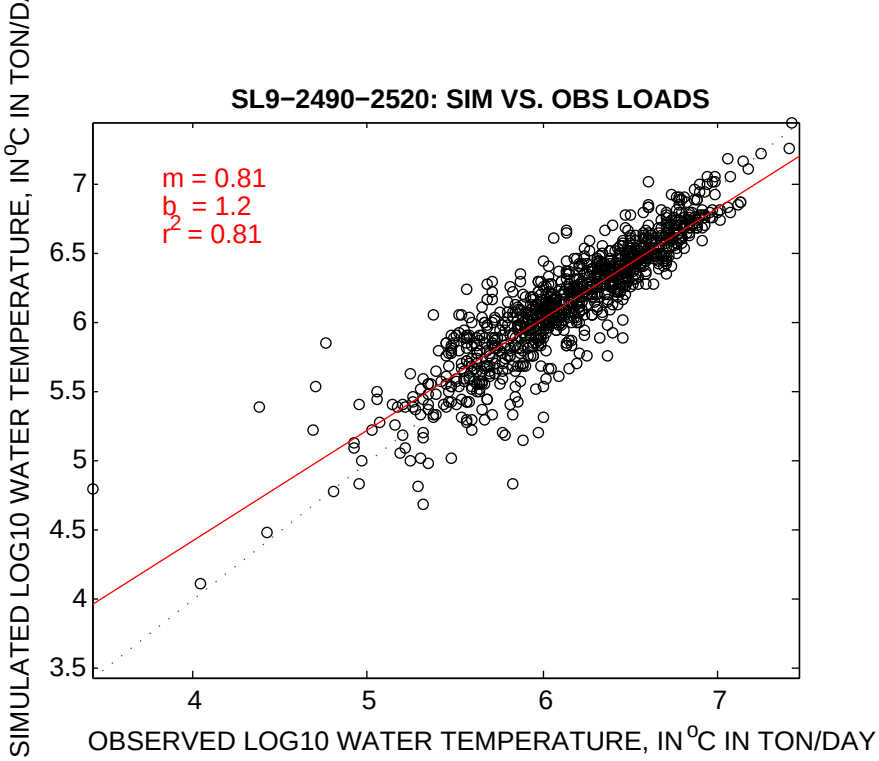


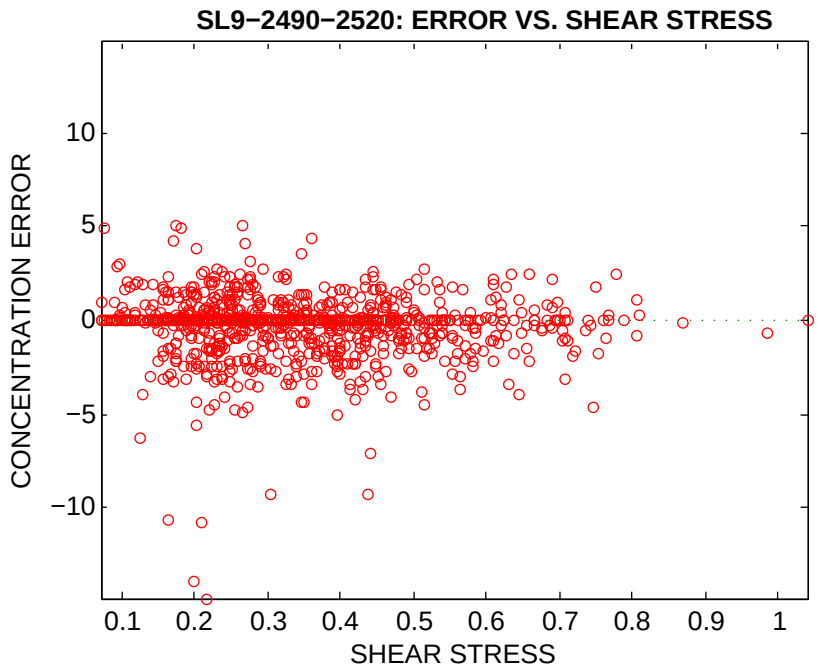


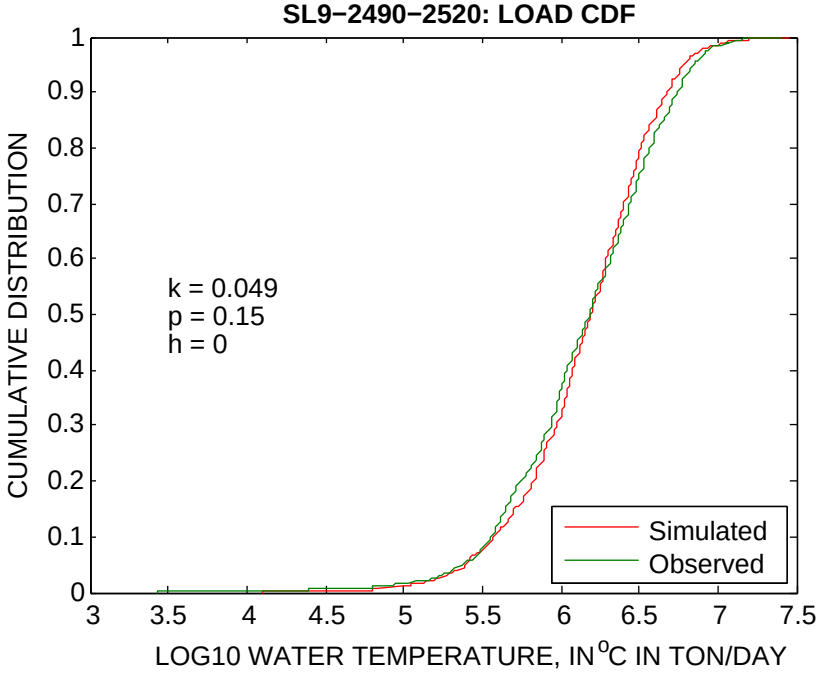


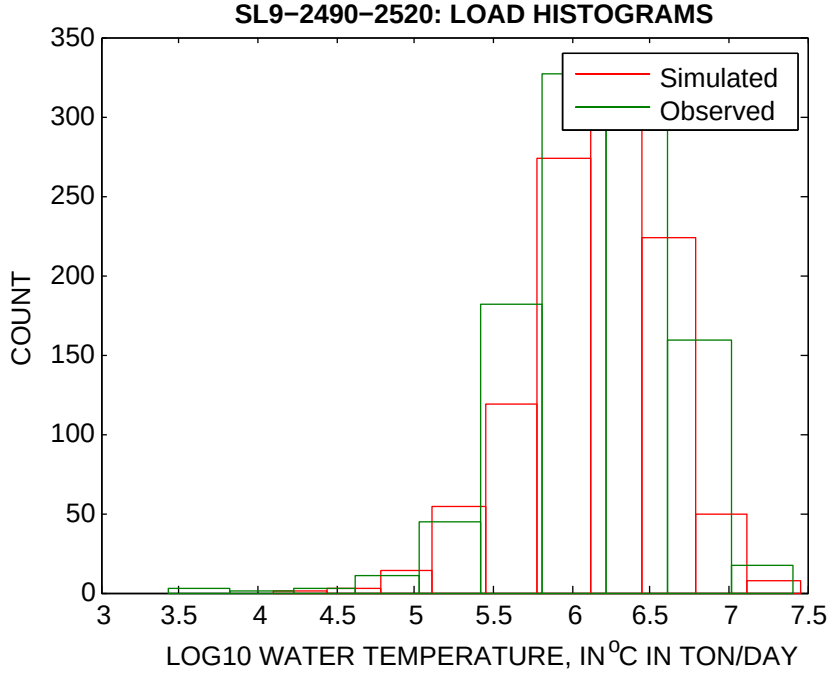


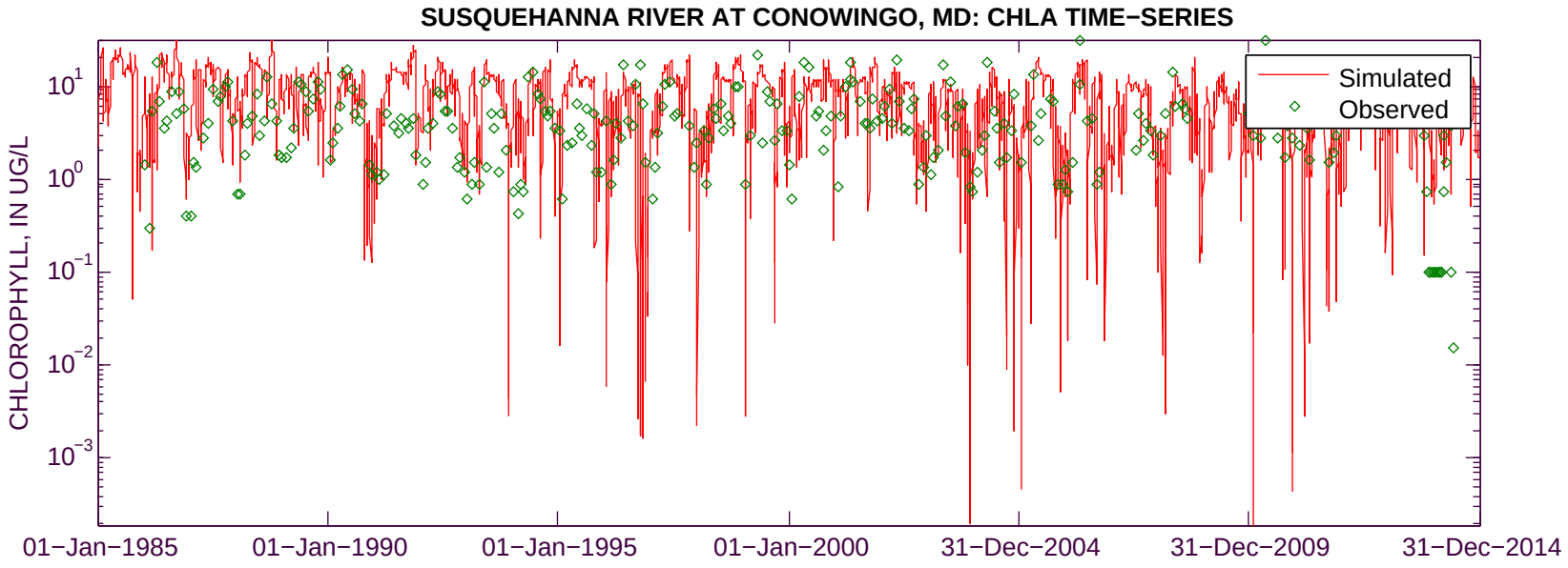
LOAD DATA
LOG10

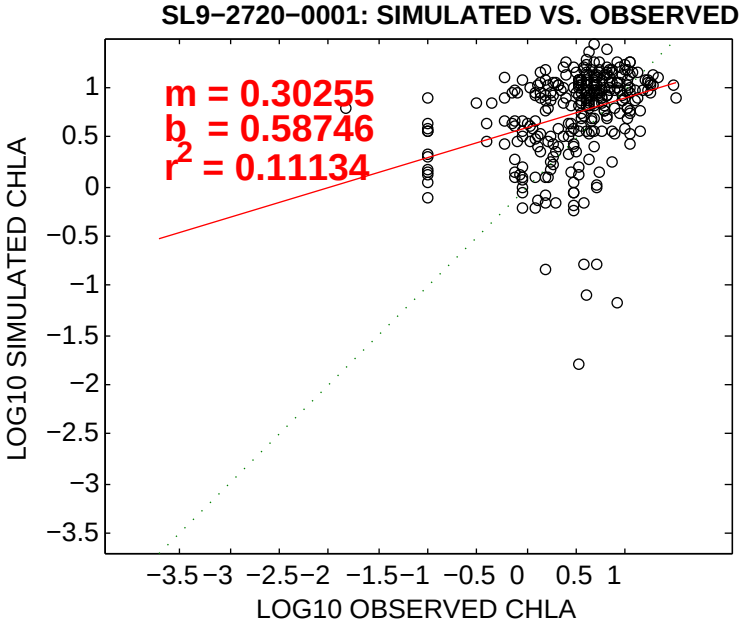


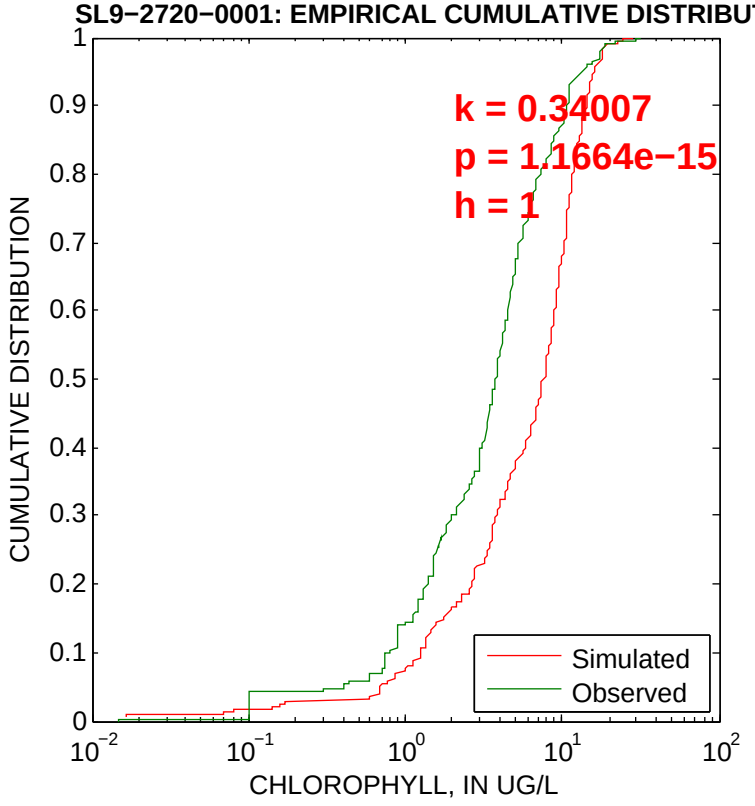












DATA SELECTION

scenario	file
P620171001WQ	CHLA.calib

plot: CHLA - chlorophyll A

Dates: 1/1/1985 – 12/31/201

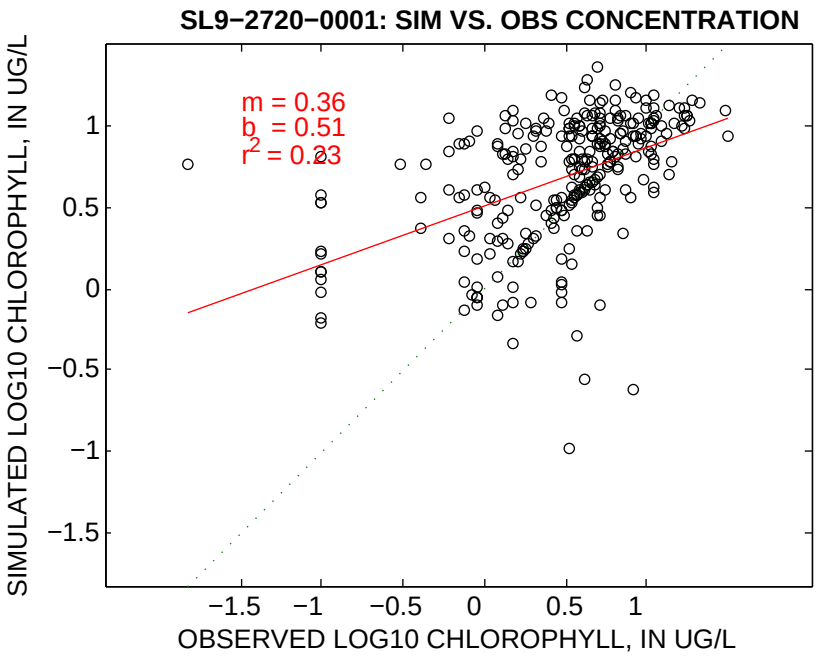
Drive	Directory	Observed
N/A	model	OBS20161101

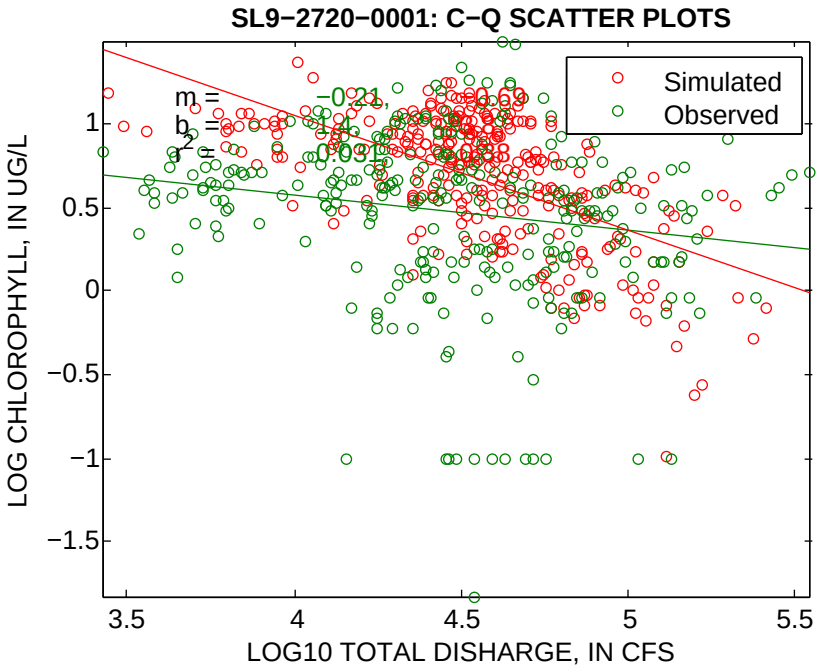
STATISTICS

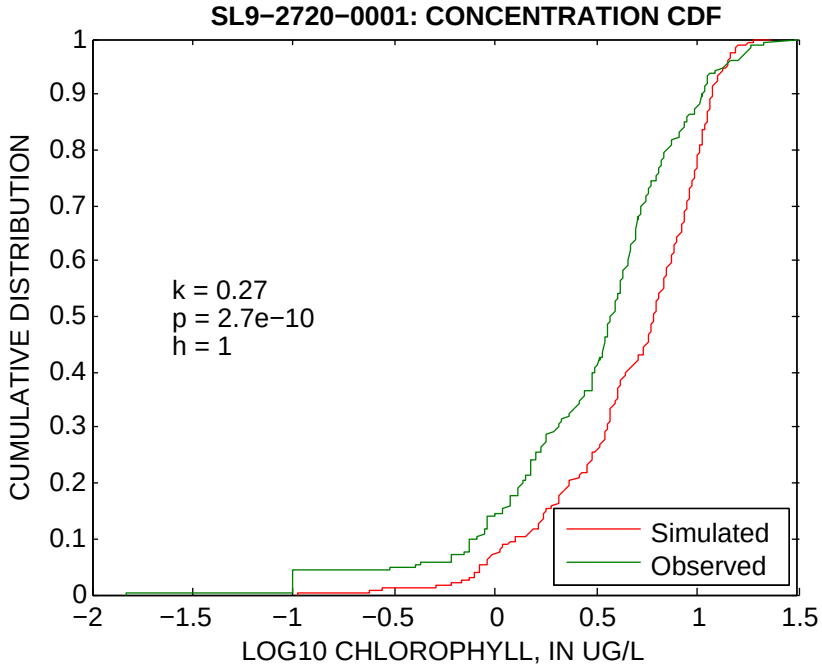
	n	297	295
		observe	simulate
min		0.015	0
		-1.82391	-1.78028
mean		4.87915	7.62928
		0.480639	0.73288
media		3.74	7.5854
		0.572872	0.894216
max		31.58	28.061
		1.49941	1.4481
varian		20.7596	25.7472
		0.253118	0.208109
JB		0.001	0.003031
		0.001	0.001
		ra	log
%		56.3647	52.4805
err.va		39.87	0.371906
rel.std.err		1.92056	1.4693
mod.eff		-0.92056	-0.4693

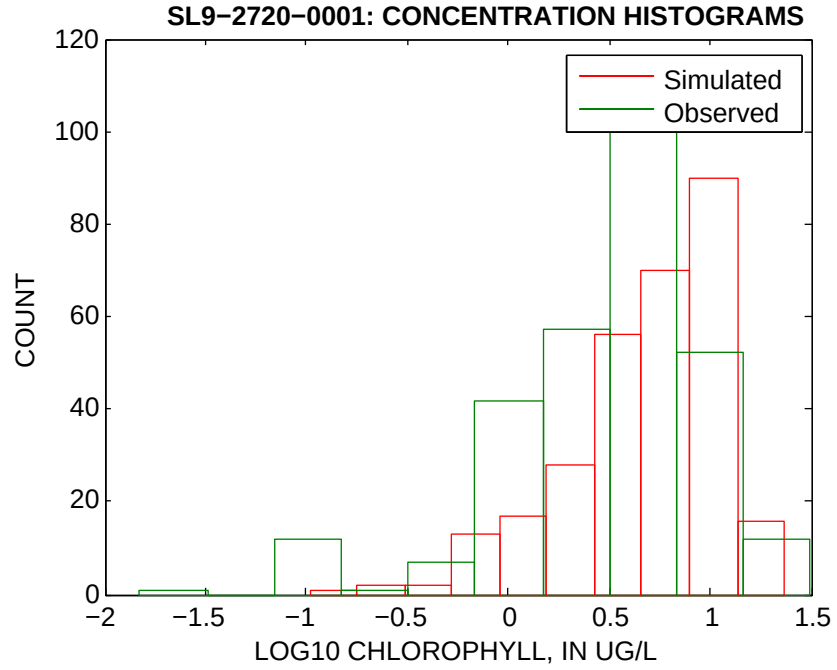
VERSION 2.1

ALL DATA
LOG10

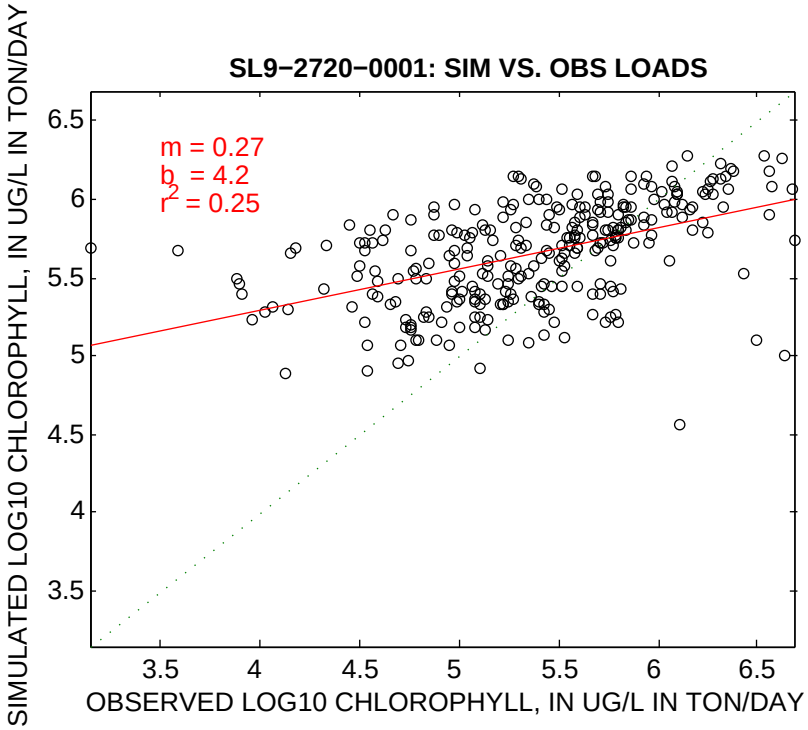


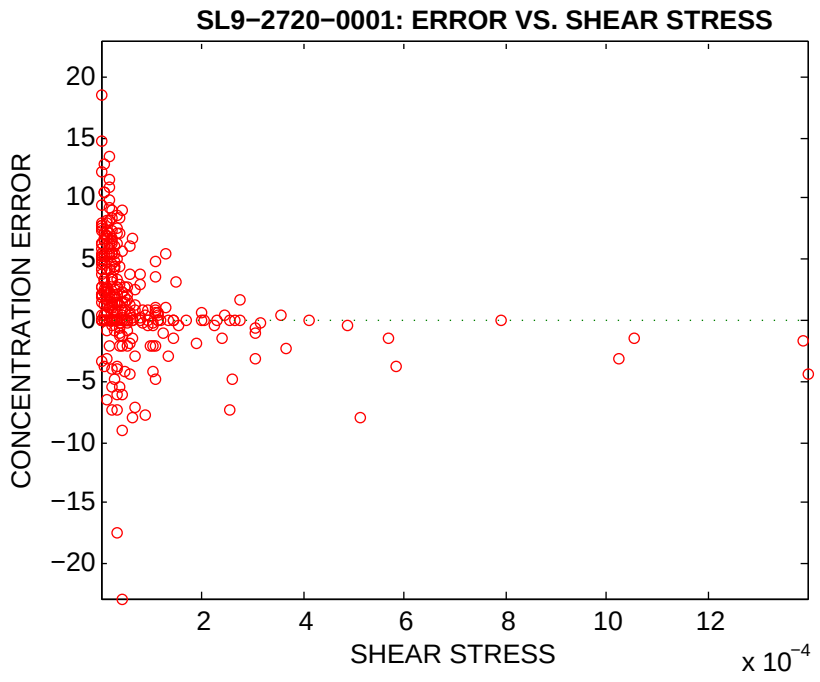


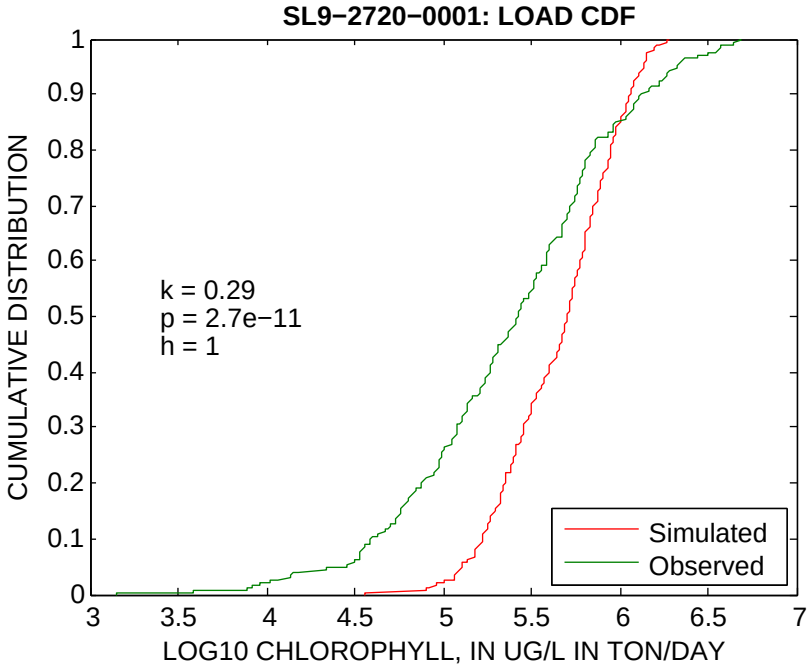


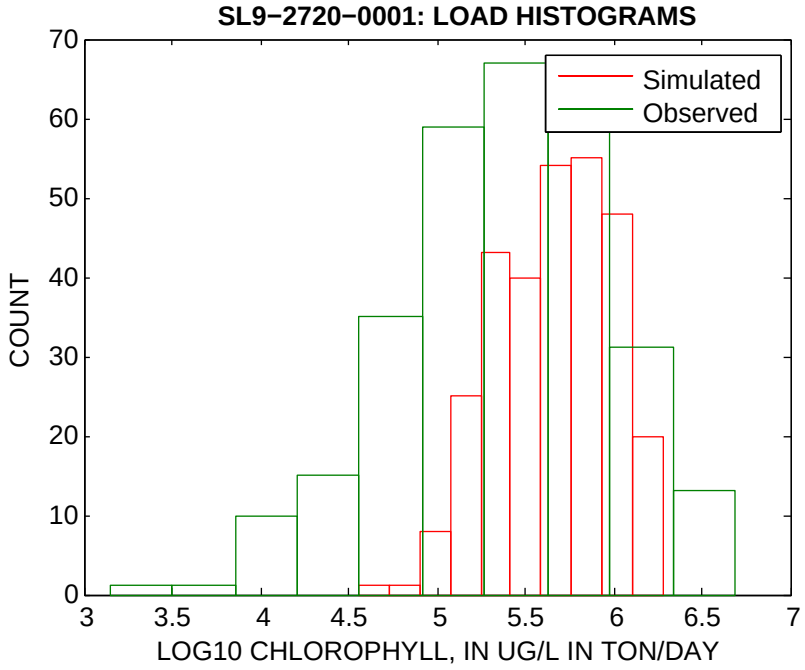


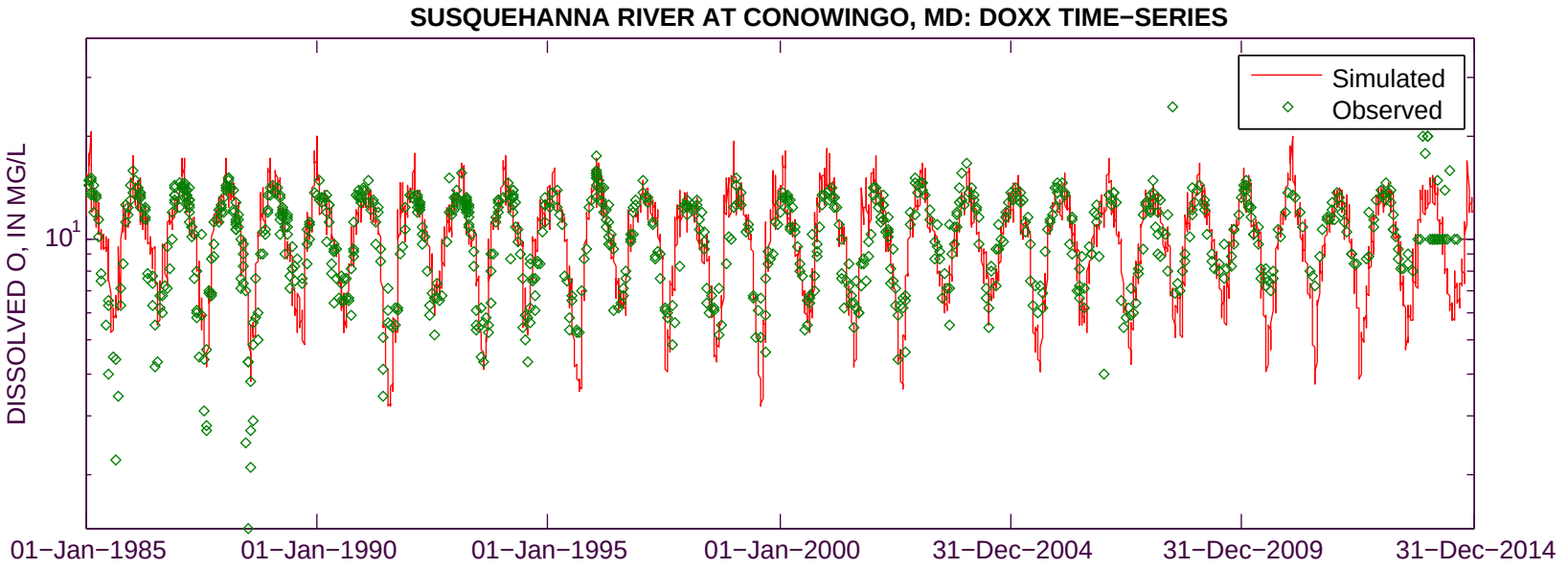
LOAD DATA
LOG10

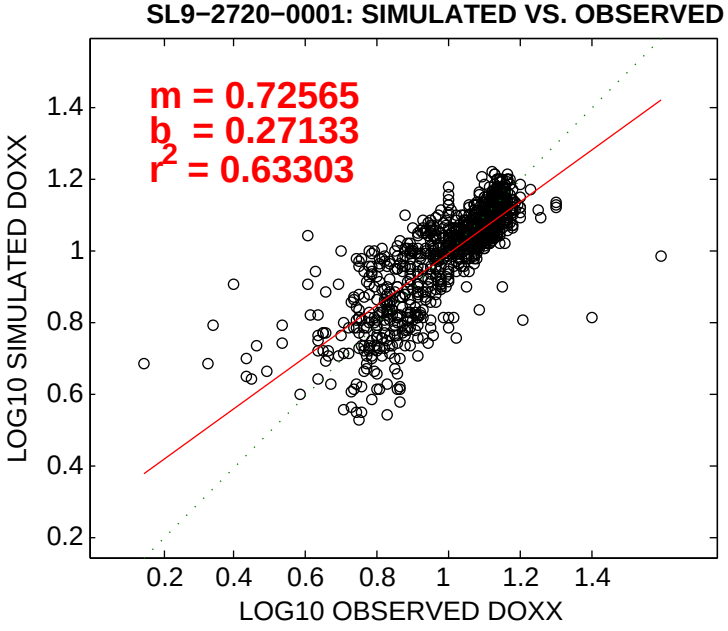


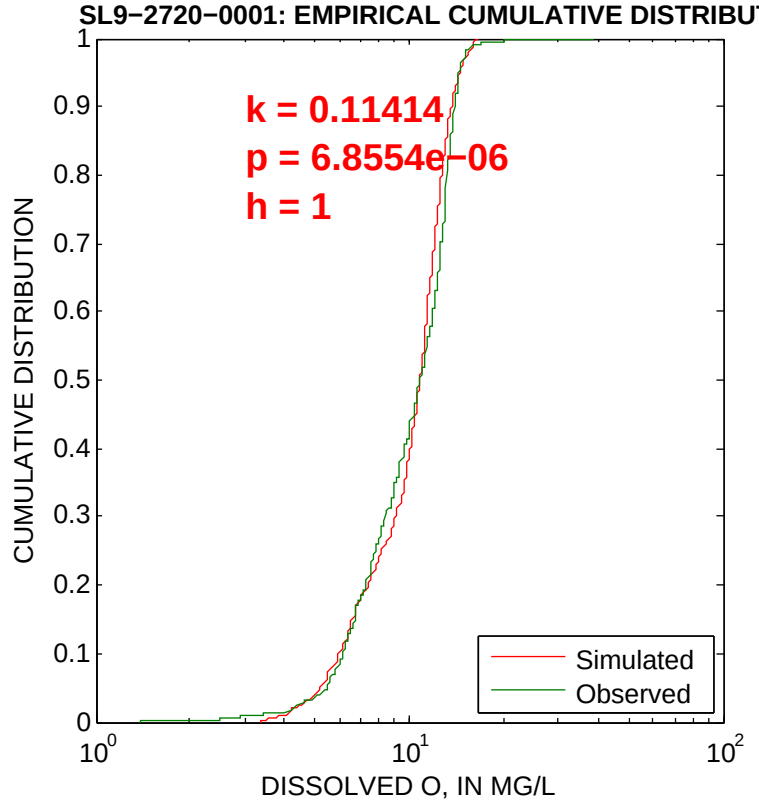












DATA SELECTION

scenario	file
P620171001WQ	DOXX.calib

plot: DOXX - dissolved oxygen

Dates: 1/1/1985 – 12/31/201

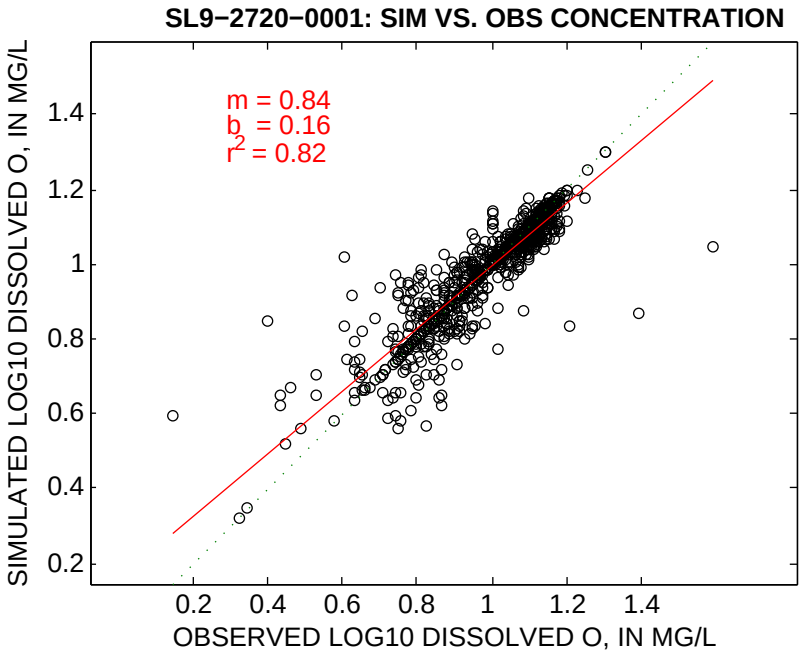
Drive	Directory	Observed
N/A	model	OBS20161101

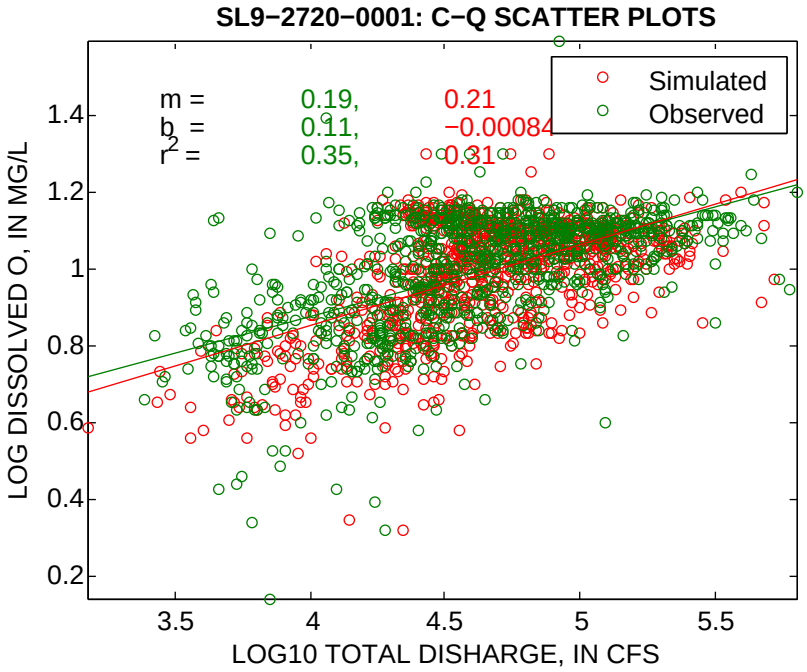
STATISTICS

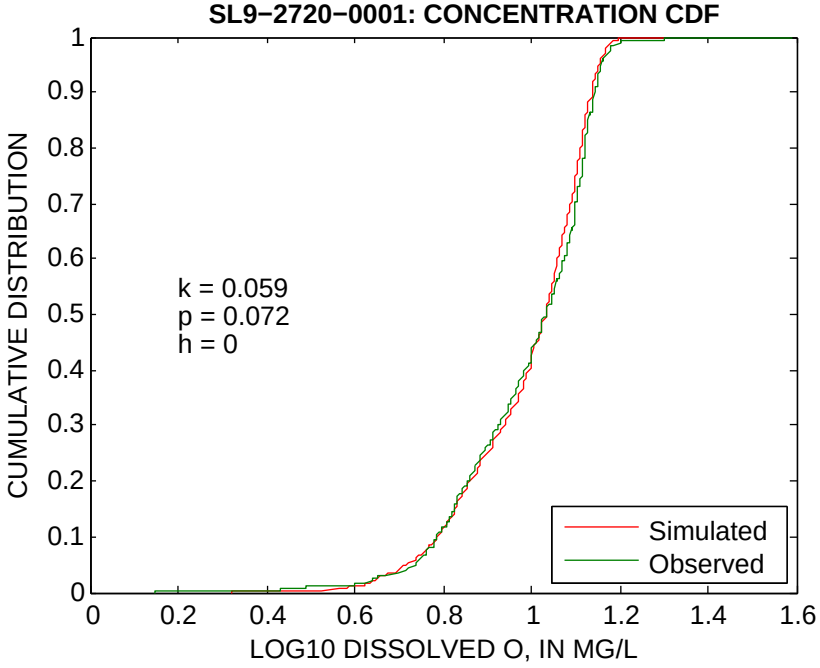
	n	955	955
		observe	simulate
min		1.4	3.3848
		0.146128	0.529533
mean		10.4295	10.3003
		0.994316	0.992859
media		10.8	10.805
		1.03342	1.03362
max		39	16.683
		1.59106	1.22227
varian		10.549	8.15363
		0.0232181	0.0193132
JB		0.001	0.001
		0.001	0.001
		ra	log
%		-1.2388	-0.146598
err.va		4.27108	0.00883706
rel.std.err		0.404879	0.38061
mod.eff		0.595121	0.61939

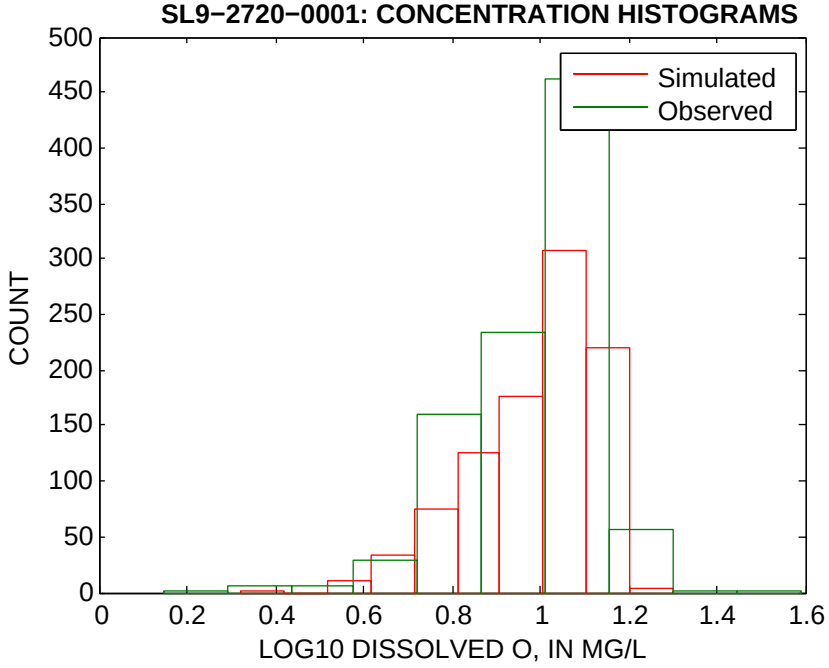
VERSION 2.1

ALL DATA
LOG10

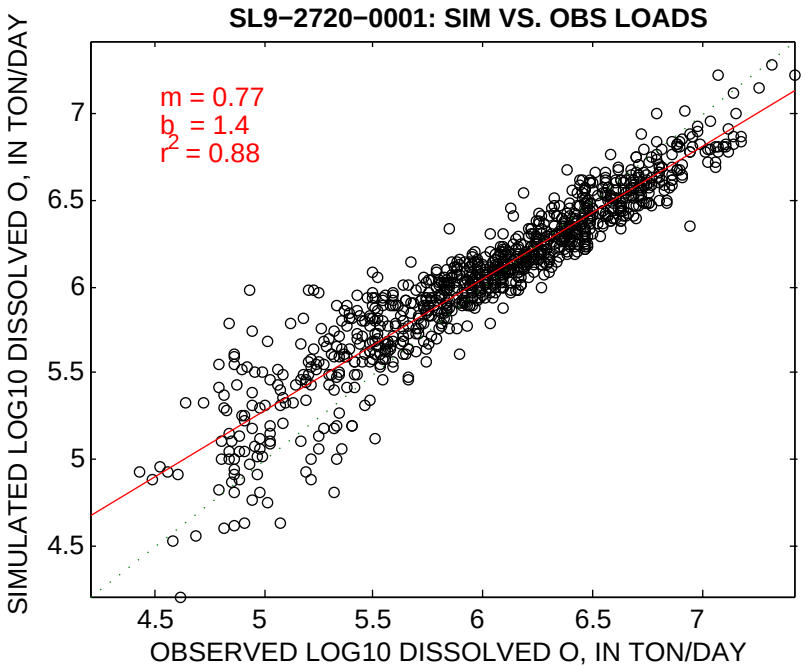


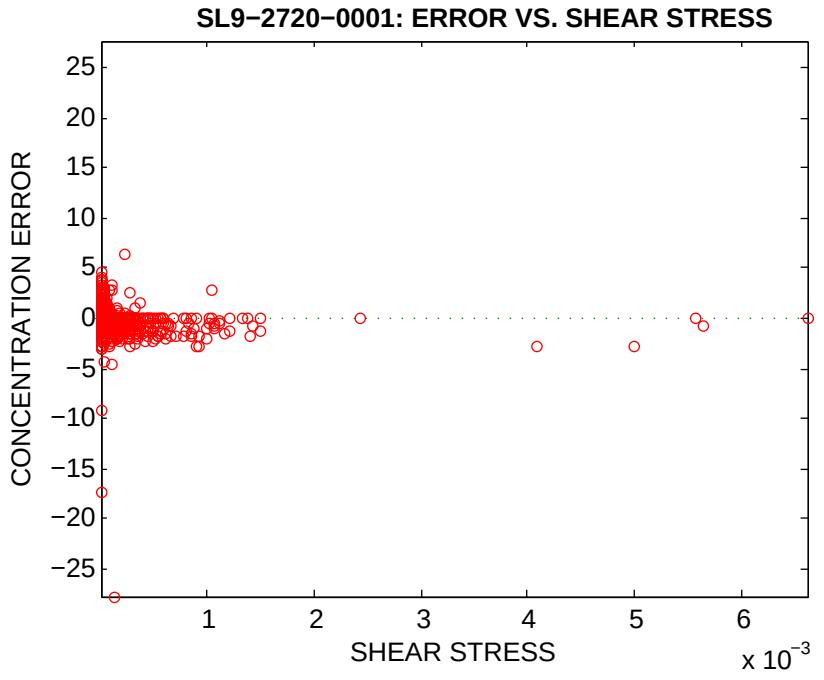


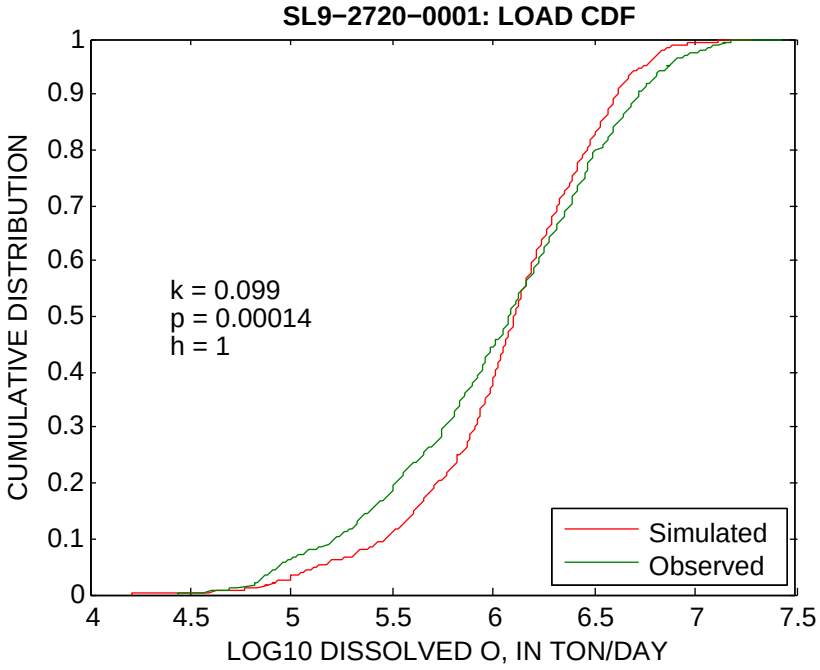


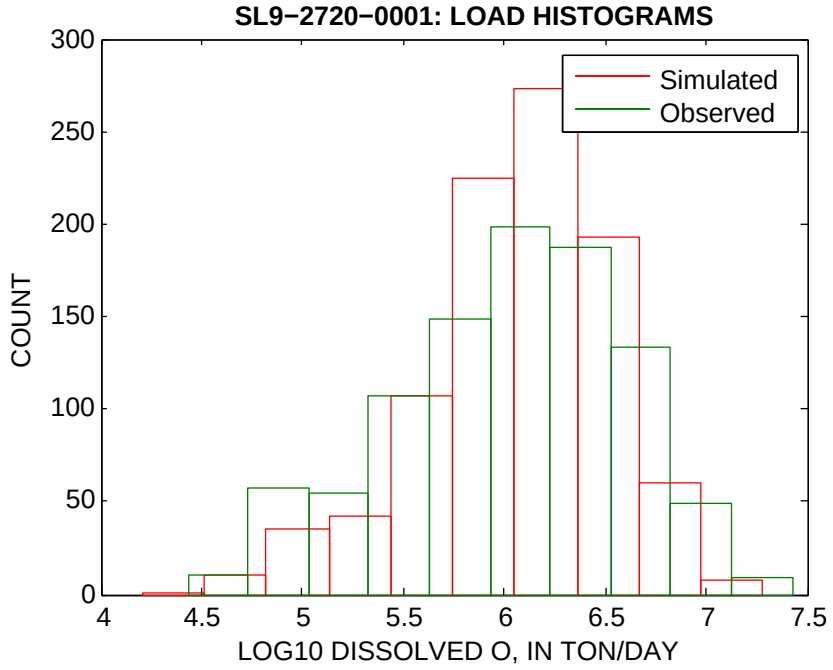


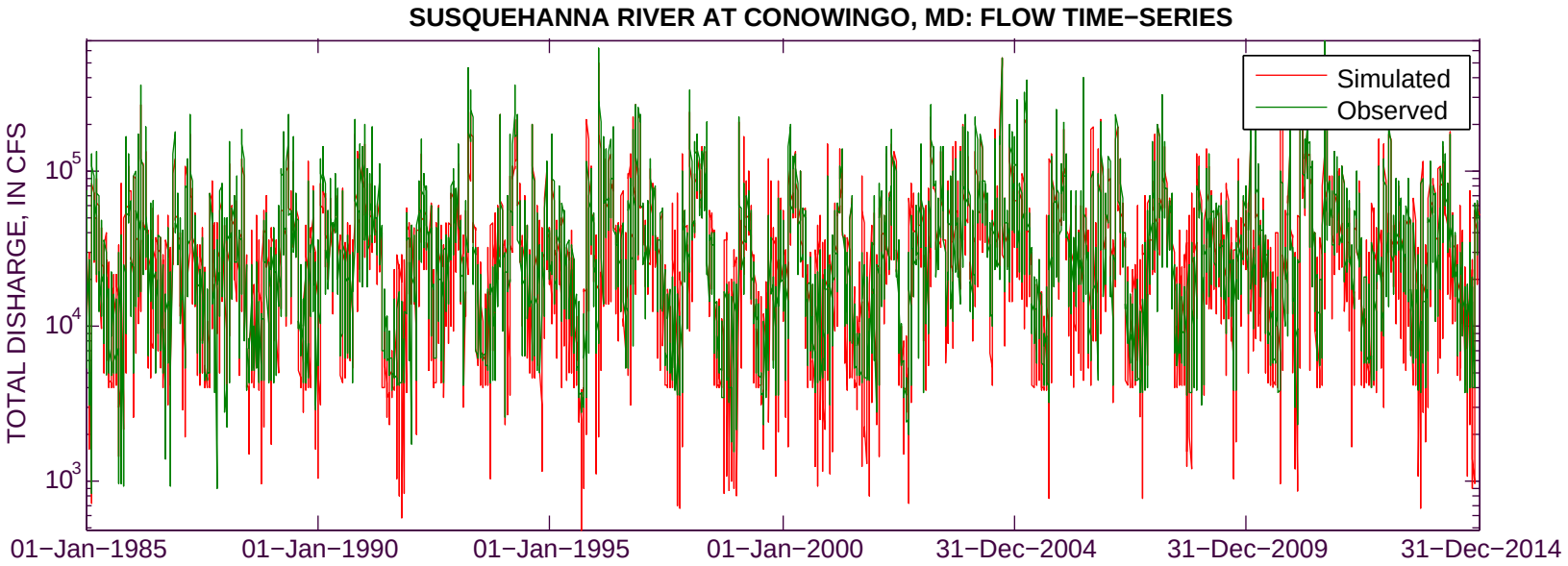
LOAD DATA
LOG10

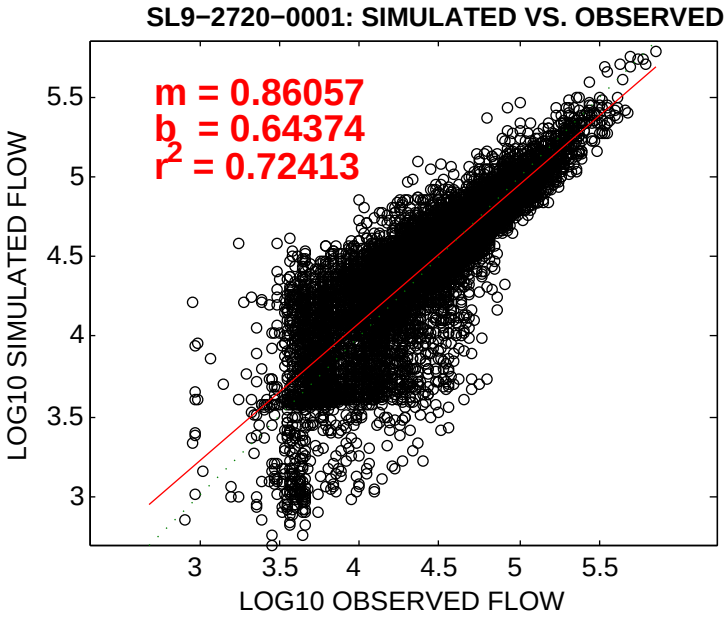


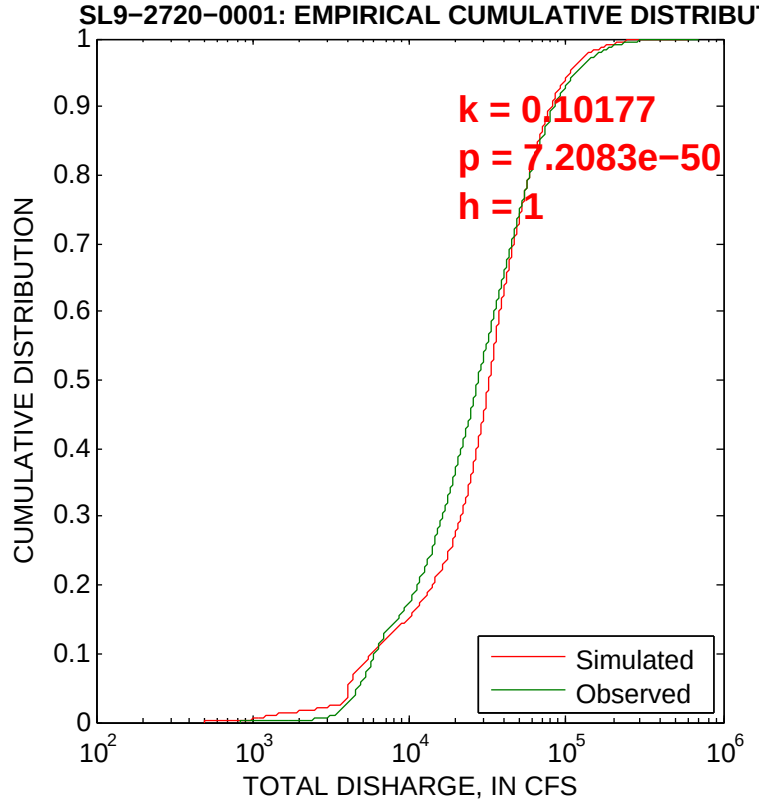












DATA SELECTION

scenario	file
P620171001WQ	FLOW.calib

plot: FLOW - total discharge

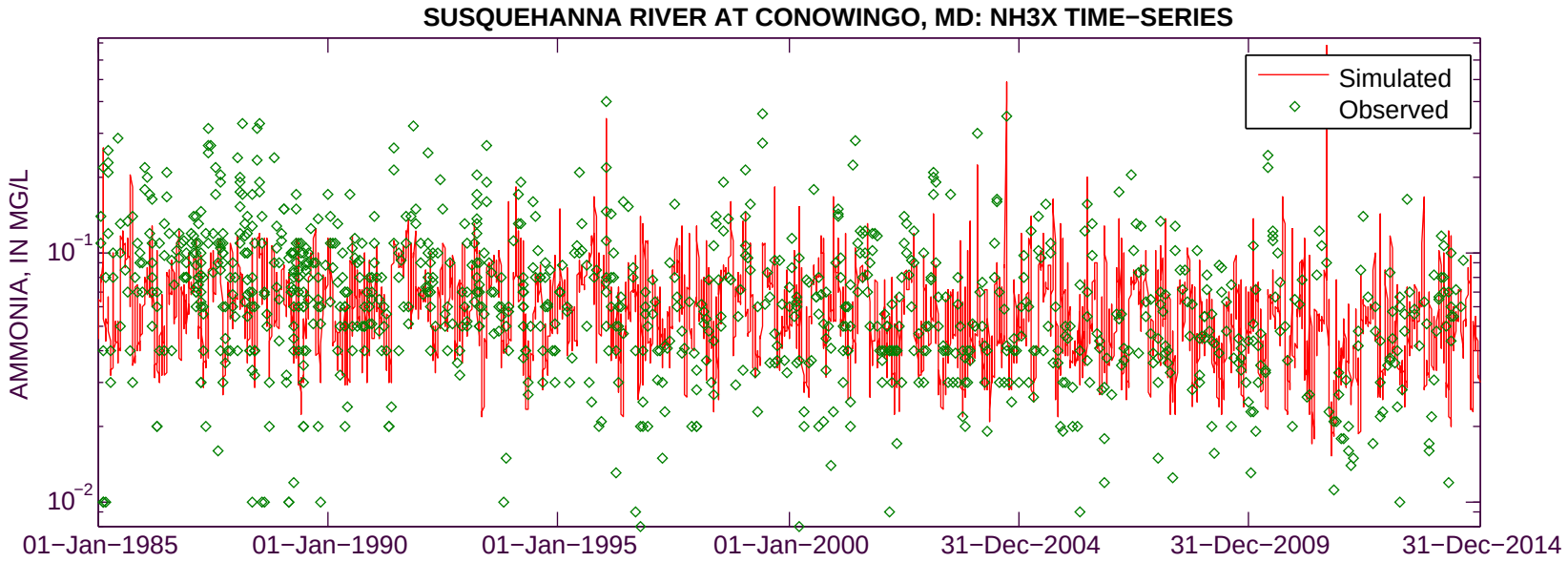
Dates: 1/1/1985 – 12/31/201

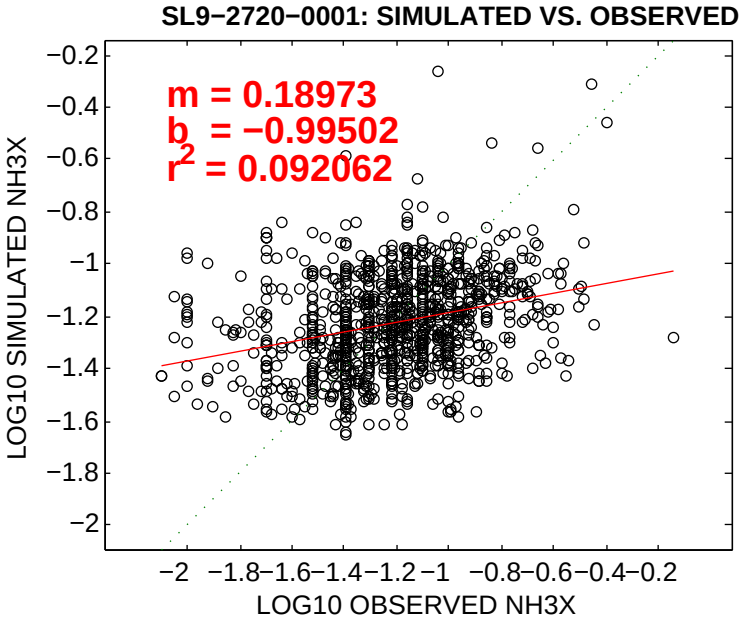
Drive	Directory	Observed
N/A	model	OBS20161101

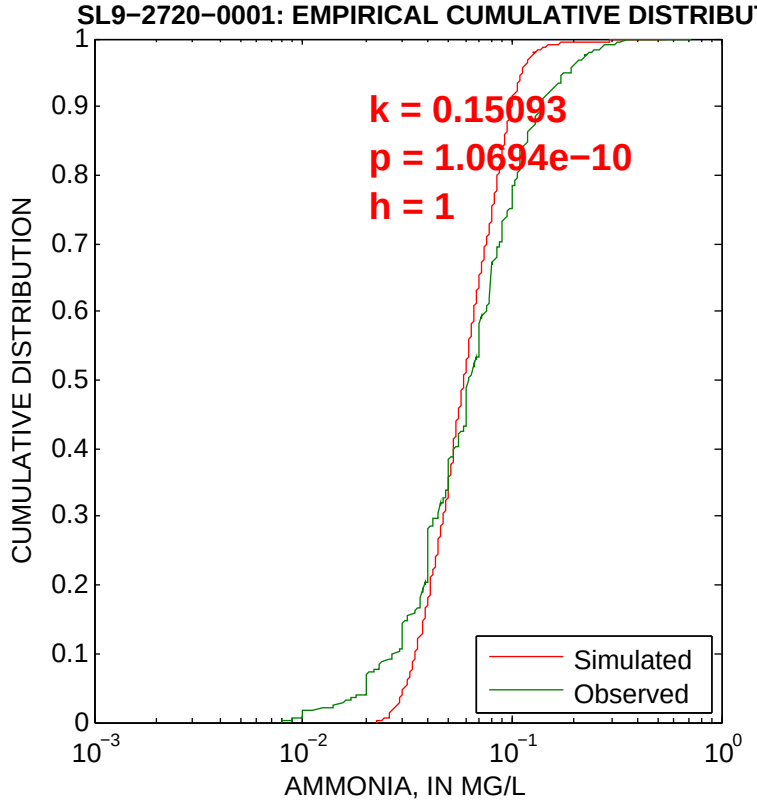
STATISTICS

n	10956	10956
	observe	simulate
min	821	486.86
	2.91434	2.6874
mean	40183.2	40794.8
	4.41301	4.44145
media	27500	32518
	4.43933	4.51212
max	709000	609360
	5.85065	5.78487
varian	1.91343e+0	1.46507e+
	0.177287	0.181317
JB	0.001	0.001
	0.001	0.001
	ra	log
%	1.52195	0.644572
err.va	3.13447e+0	0.0542764
rel.std.err	0.163814	0.306149
mod.eff	0.836186	0.693851

VERSION 2.1







DATA SELECTION

scenario	file
P620171001WQ	NH3X.calib

plot: NH3X - ammonia

Dates: 1/1/1985 – 12/31/201

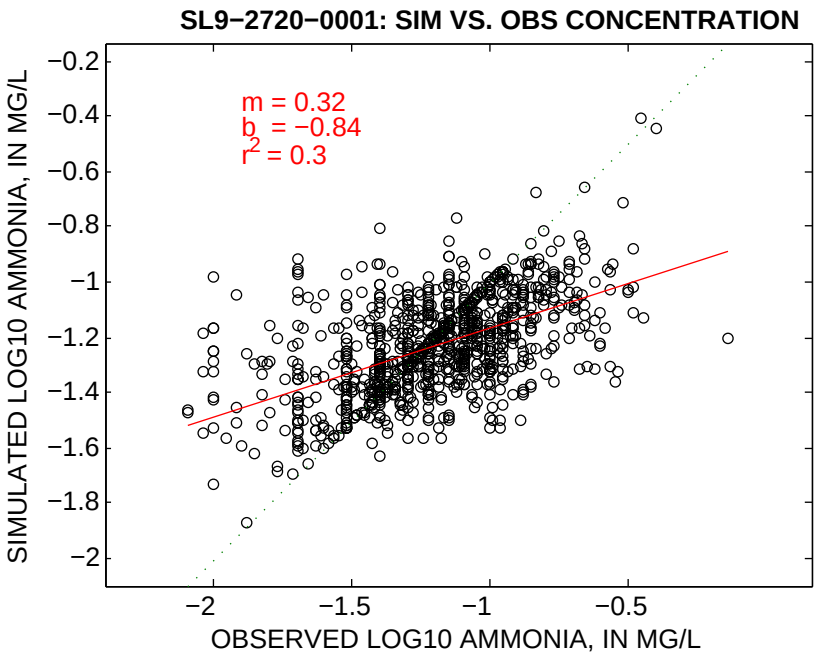
Drive	Directory	Observed
N/A	model	OBS20161101

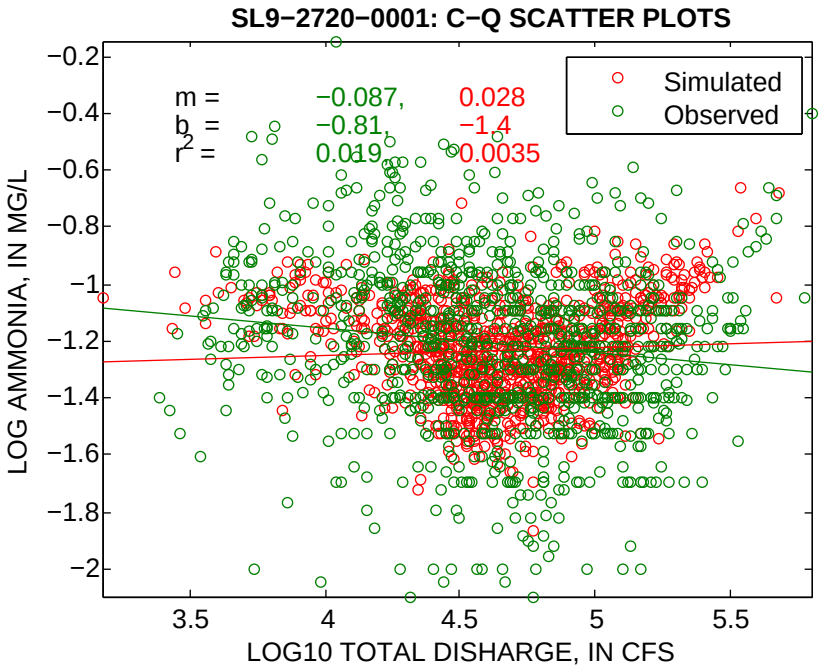
STATISTICS

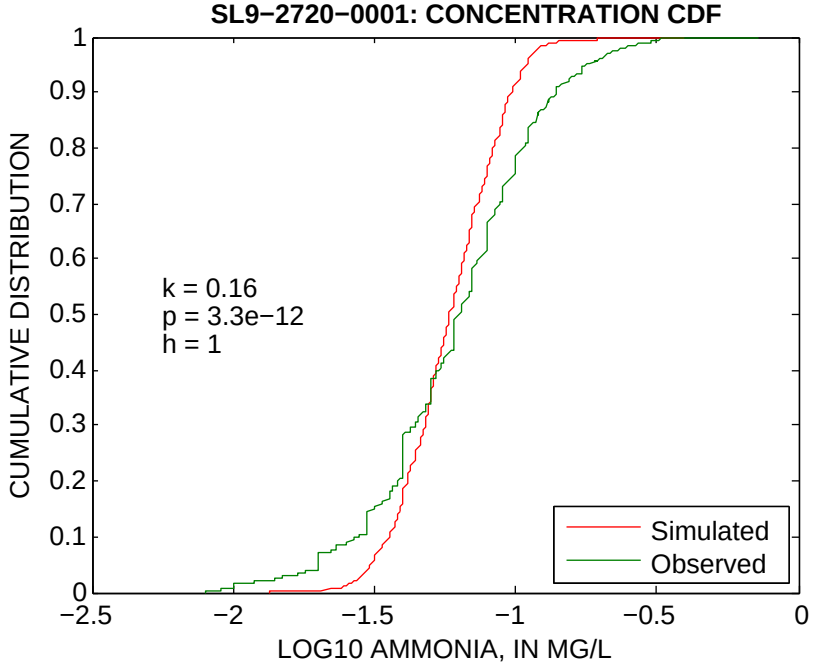
	n	observe	simulate
		1027	1027
min		0.008	0.022417
		-2.09691	-1.64942
mean		0.0770355	0.0656291
		-1.20807	-1.22422
media		0.063	0.059281
		-1.20066	-1.22708
max		0.72	0.54217
		-0.142668	-0.265865
varian		0.00326495	0.00126467
		0.0846521	0.0330995
JB		0.001	0.001
		0.005059	0.001
		ra	log
%		-14.8067	1.33751
err.va		0.00351791	0.0858912
rel.std.err		1.07748	1.01464
mod.eff		-0.0774763	-0.0146371

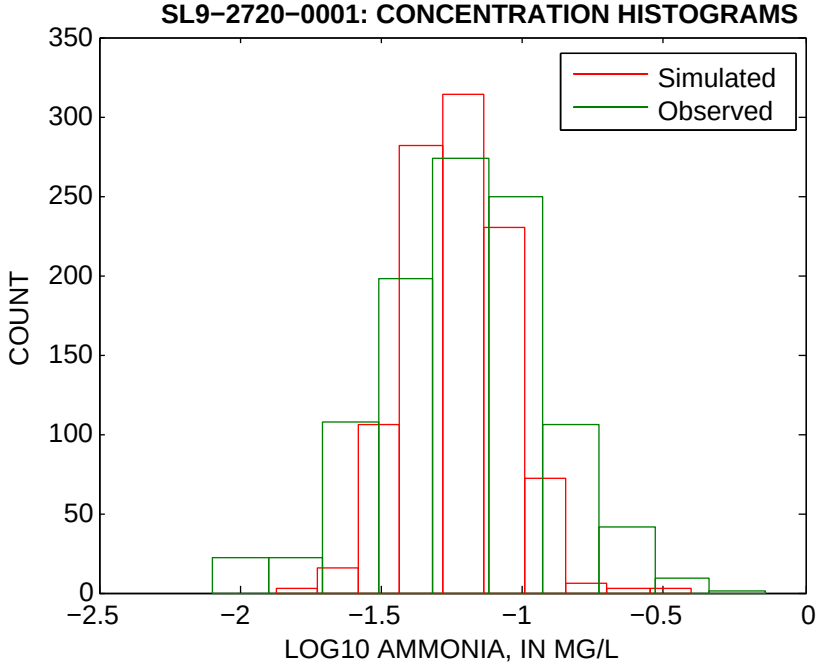
VERSION

ALL DATA
LOG10

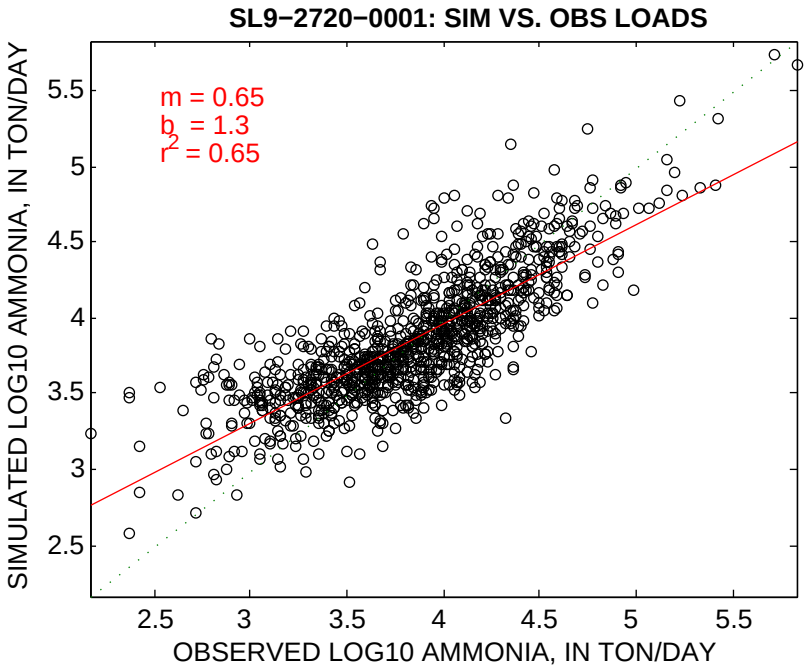


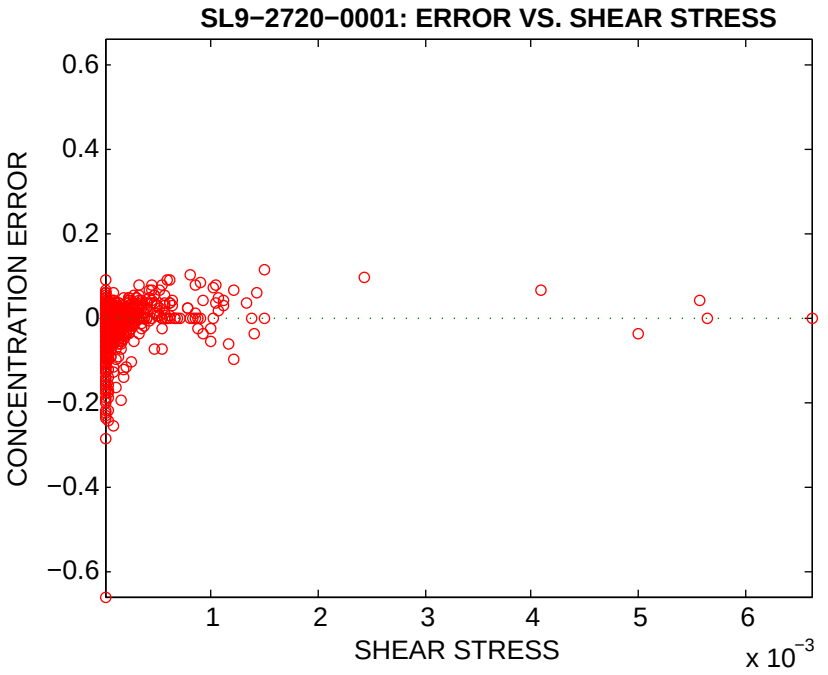


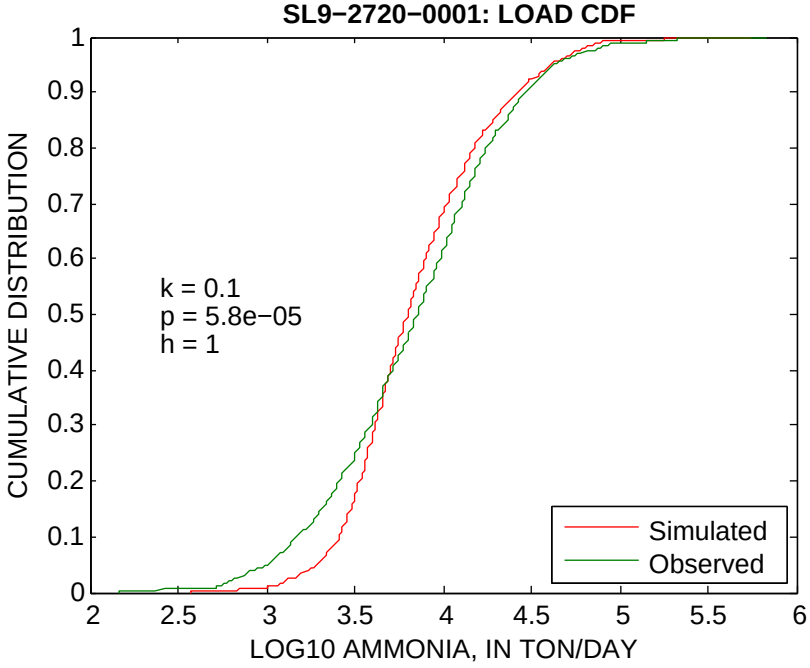


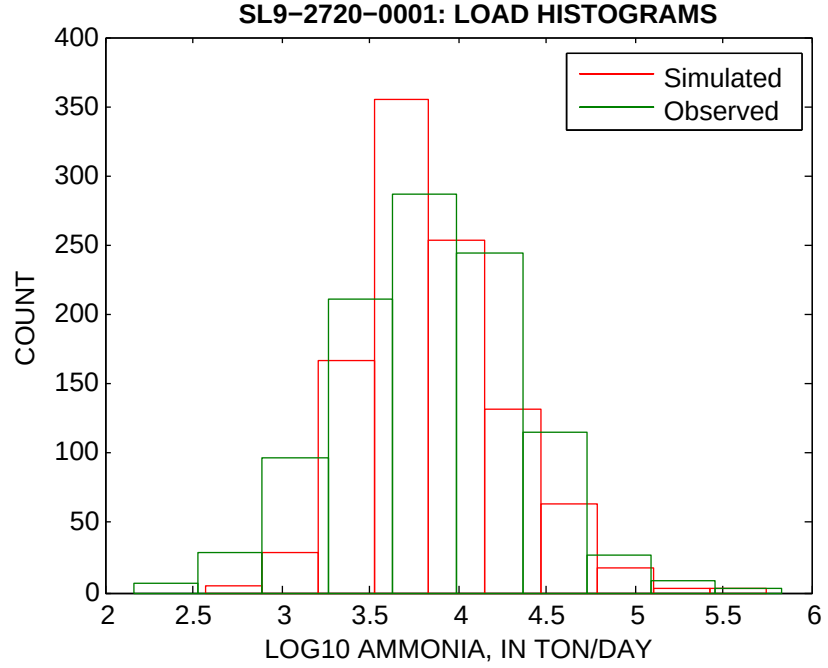


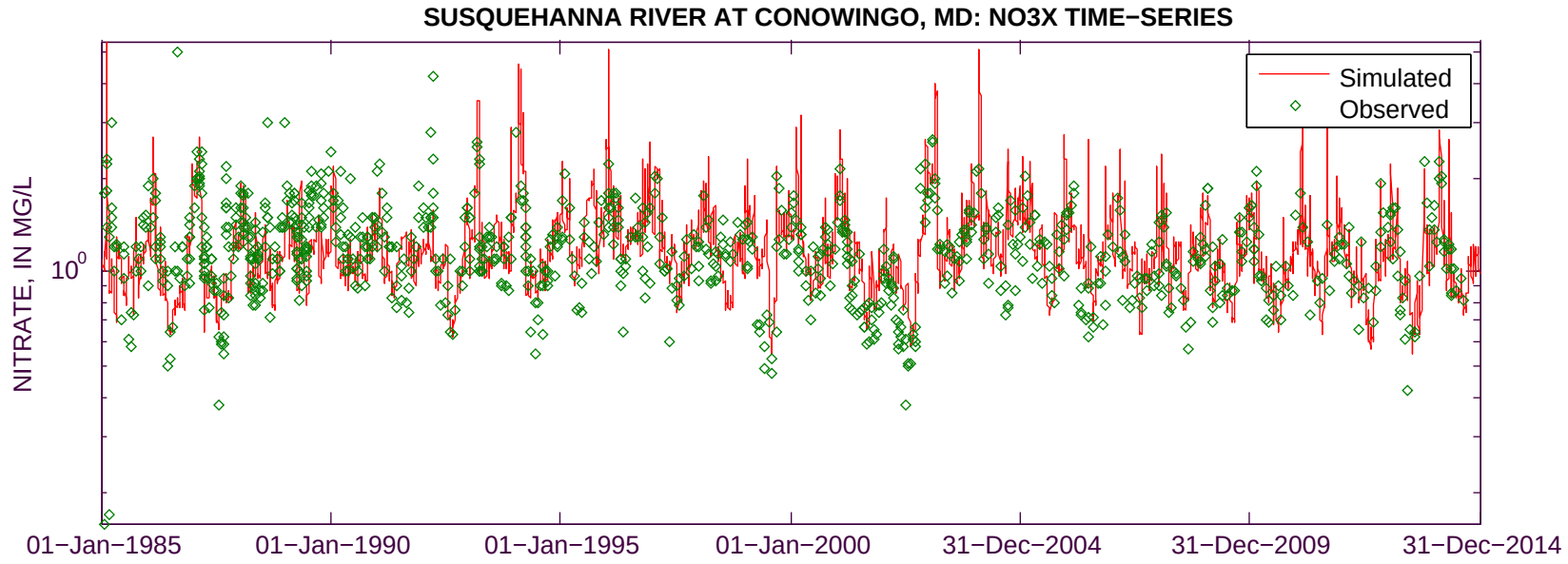
LOAD DATA
LOG10

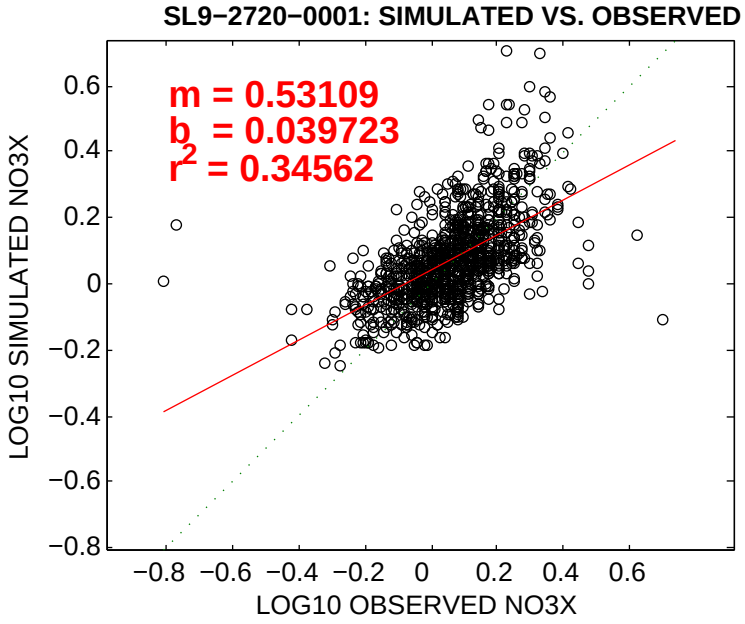


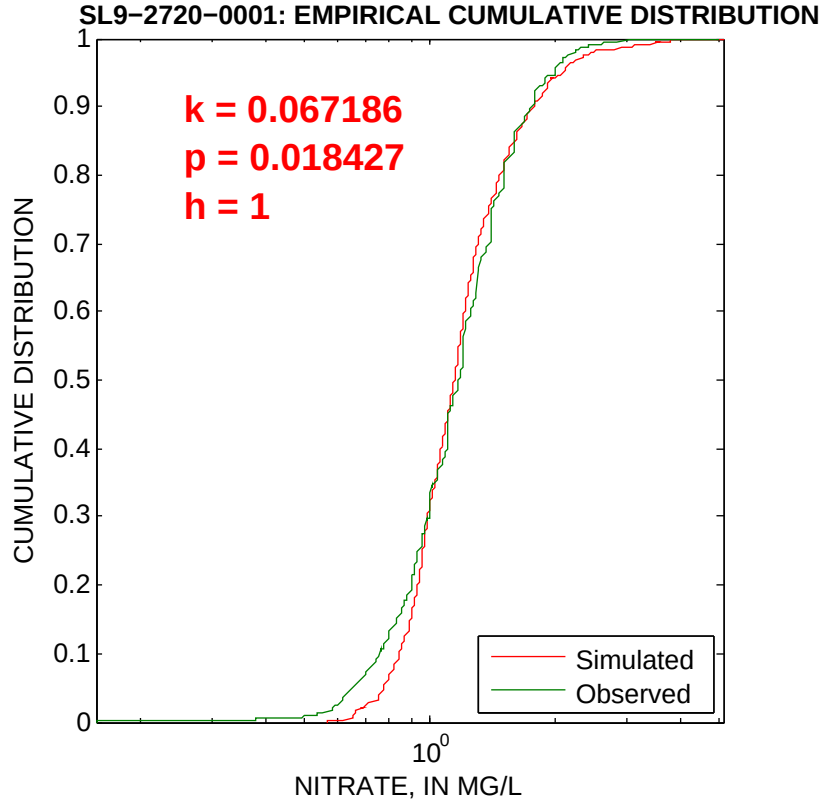












DATA SELECTION

scenario	file
P620171001WQ	NO3X.calib

plot: NO3X - nitrate

Dates: 1/1/1985 – 12/31/201

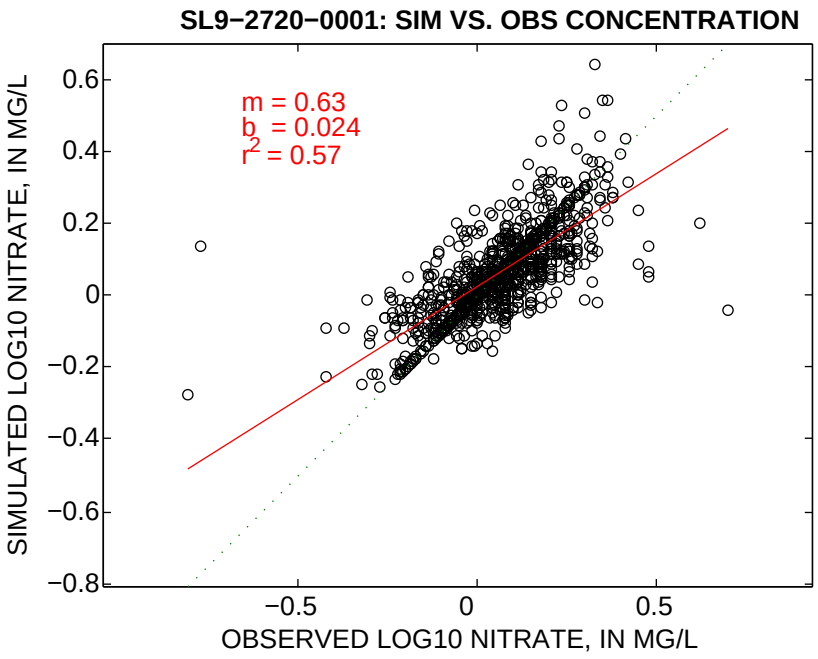
Drive	Directory	Observed
N/A	model	OBS20161101

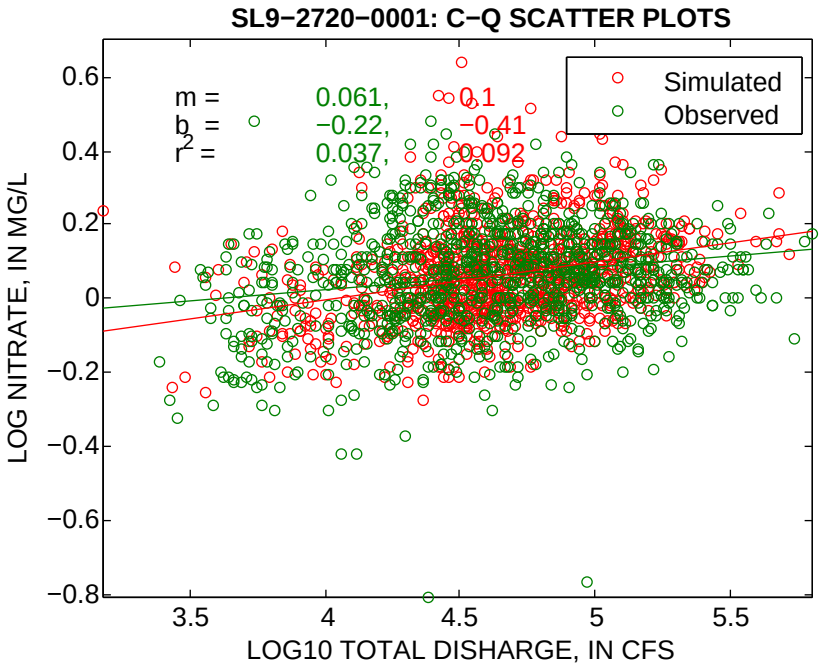
STATISTICS

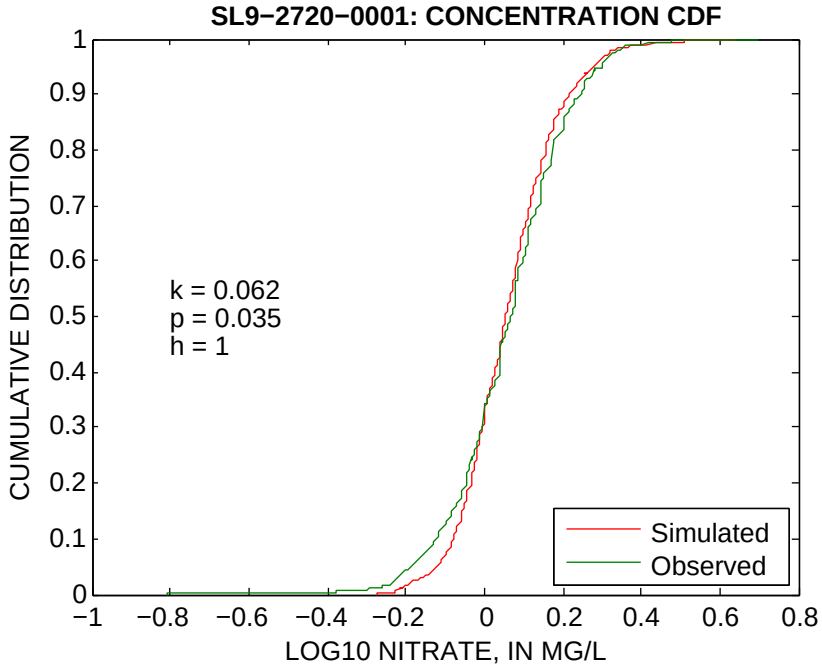
	n	1027	1027
		observe	simulate
min		0.156	0.56257
		-0.806875	-0.249823
mean		1.22203	1.24604
		0.0626557	0.0729989
media		1.18	1.1437
		0.071882	0.0583121
max		5	5.0836
		0.69897	0.706171
varian		0.182034	0.217094
		0.0216481	0.0176667
JB		0.001	0.001
		0.001	0.001
		ra	log
%		1.96489	16.5081
err.va		0.19112	0.0164277
rel.std.err		1.04992	0.758853
mod.eff		-0.0499155	0.241147

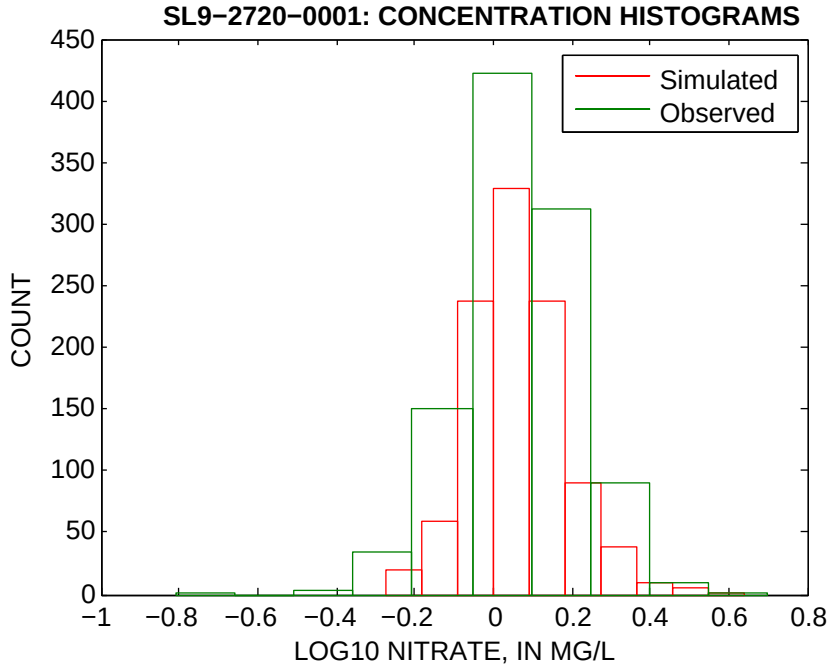
VERSION 2.1

ALL DATA
LOG10

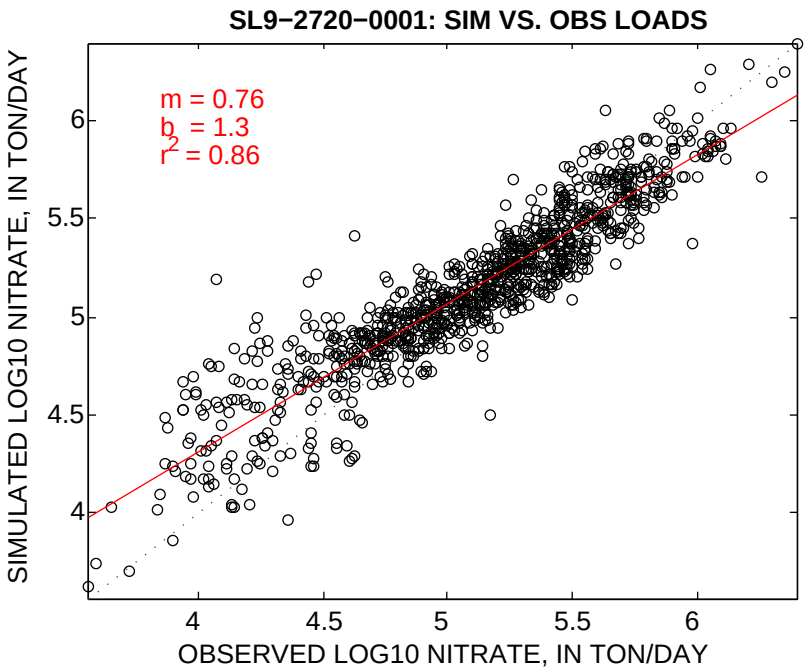


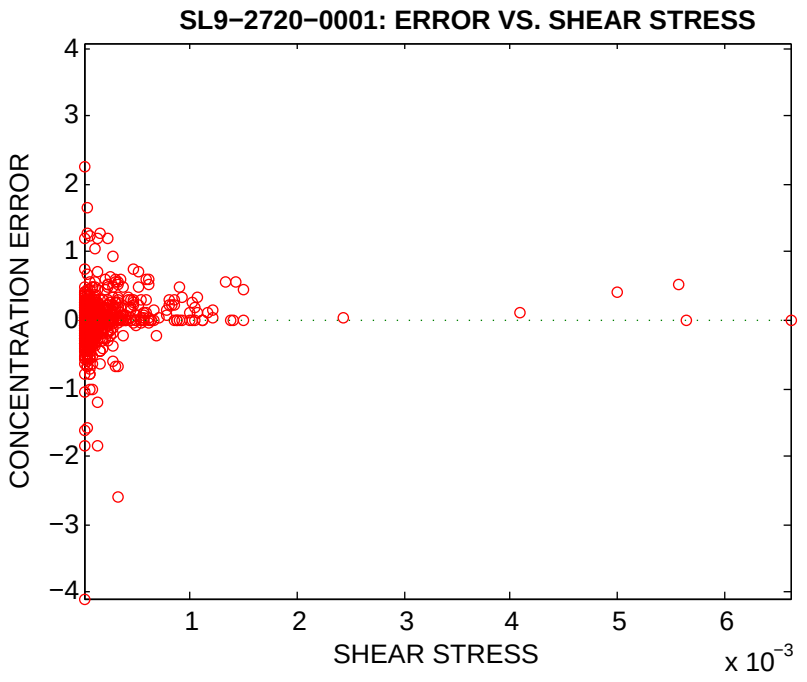


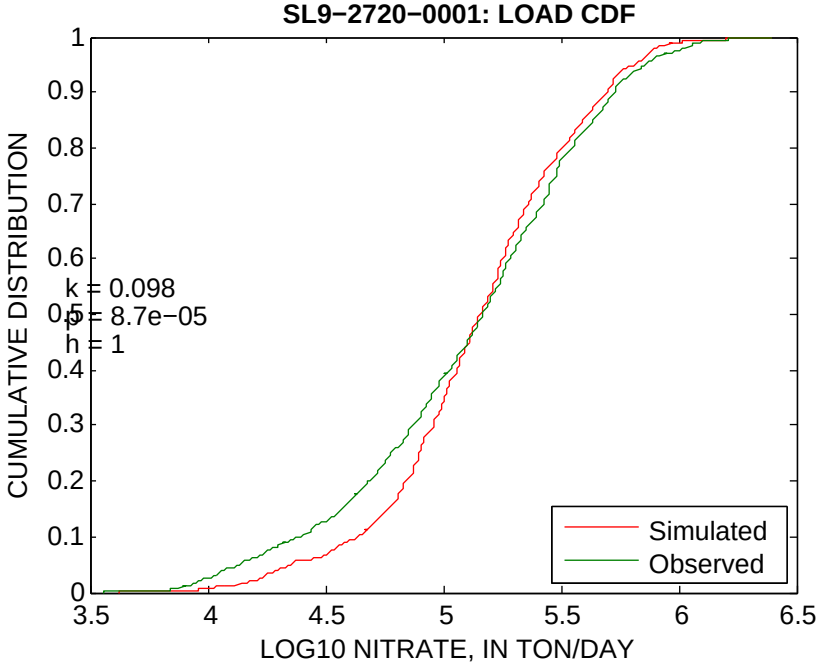


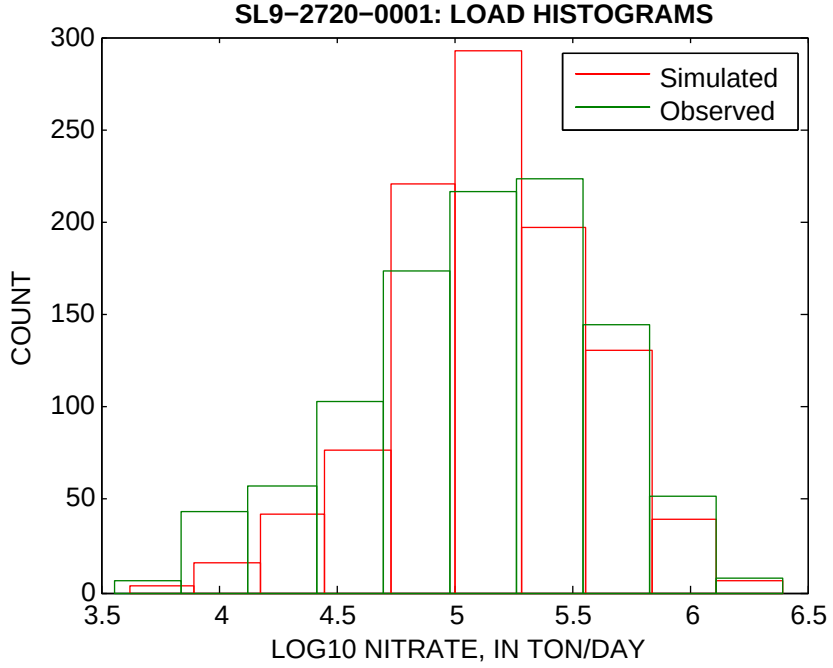


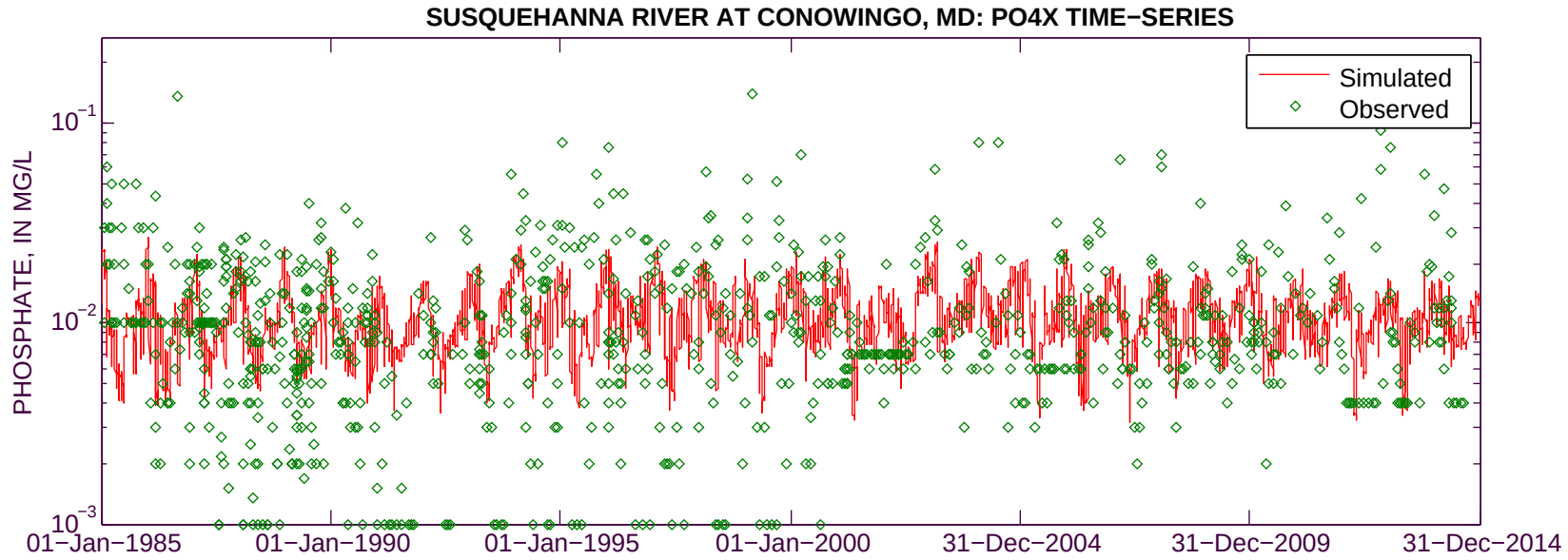
LOAD DATA
LOG10

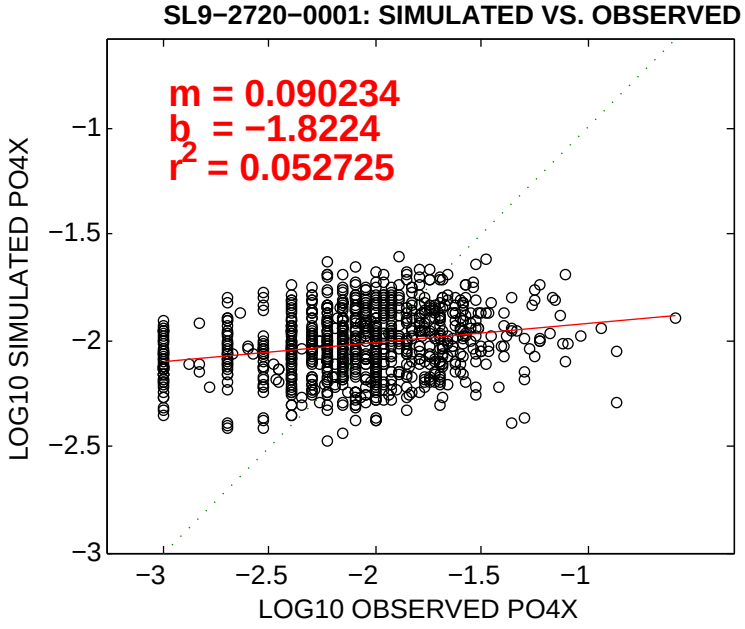


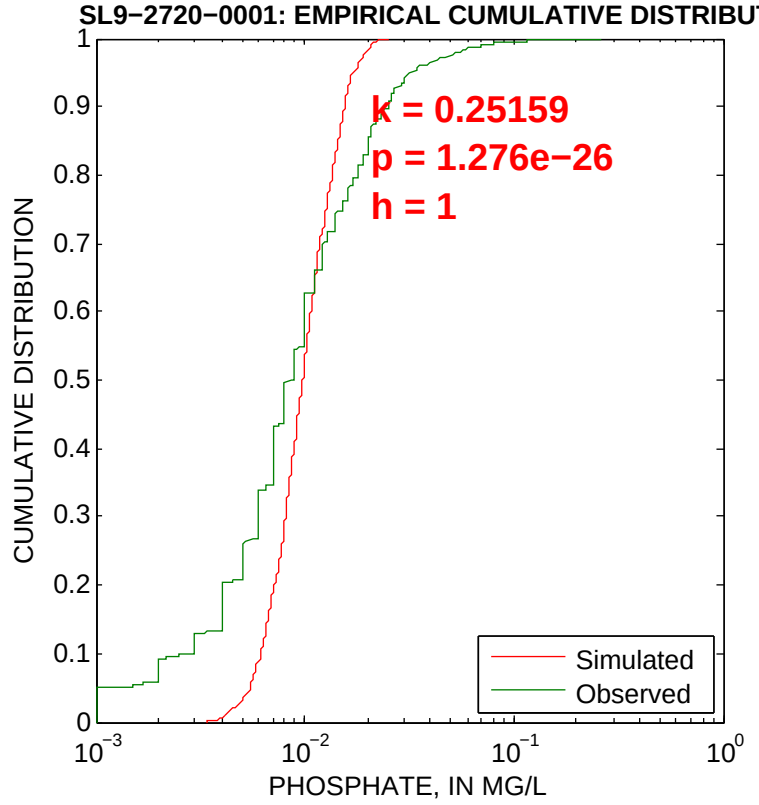












DATA SELECTION

scenario: P620171001WQ | file: PO4X.calib

plot: PO4X - phosphate

Dates: 1/1/1985 – 12/31/201

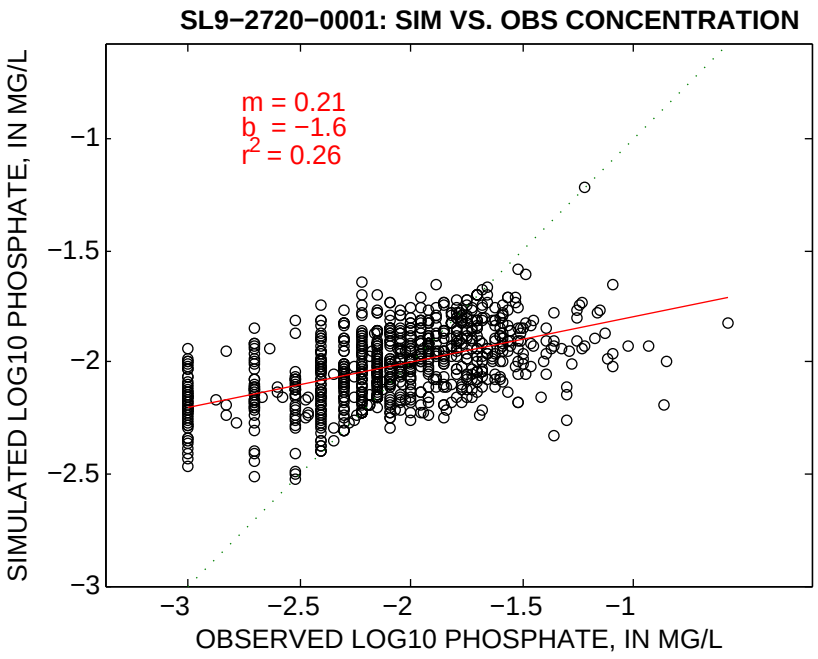
Drive: N/A | Directory: model | Observed: OBS20161101

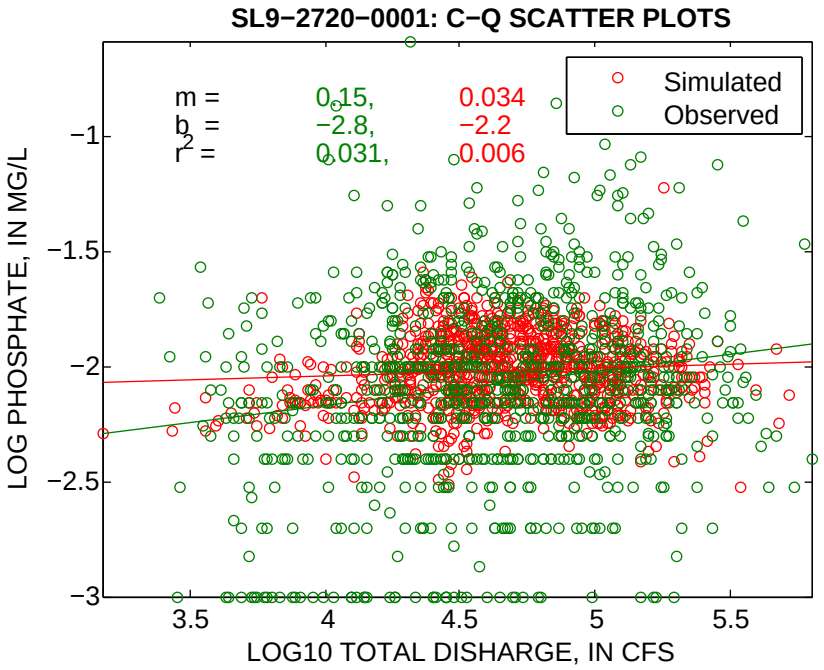
STATISTICS

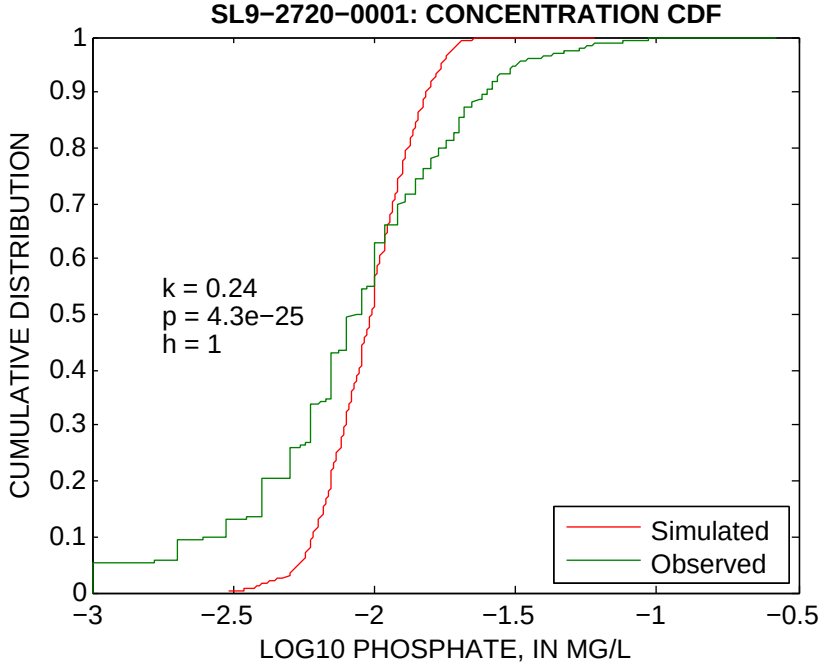
		observe	simulate
n		942	942
min		0.001	0.0034198
		-3	-2.466
mean		0.0125264	0.0104026
		-2.07714	-2.0098
media		0.00883333	0.0098205
		-2.05395	-2.00787
max		0.263	0.02509
		-0.580044	-1.6005
varian		0.00024381	1.37253e-0
		0.153639	0.0237264
JB		0.001	0.001
		0.001043	0.059072
		ra	log
%		-16.9539	-3.24165
err.va		0.00024726	0.154177
rel.std.err		1.01413	1.0035
mod.eff		-0.014131	-0.00350135

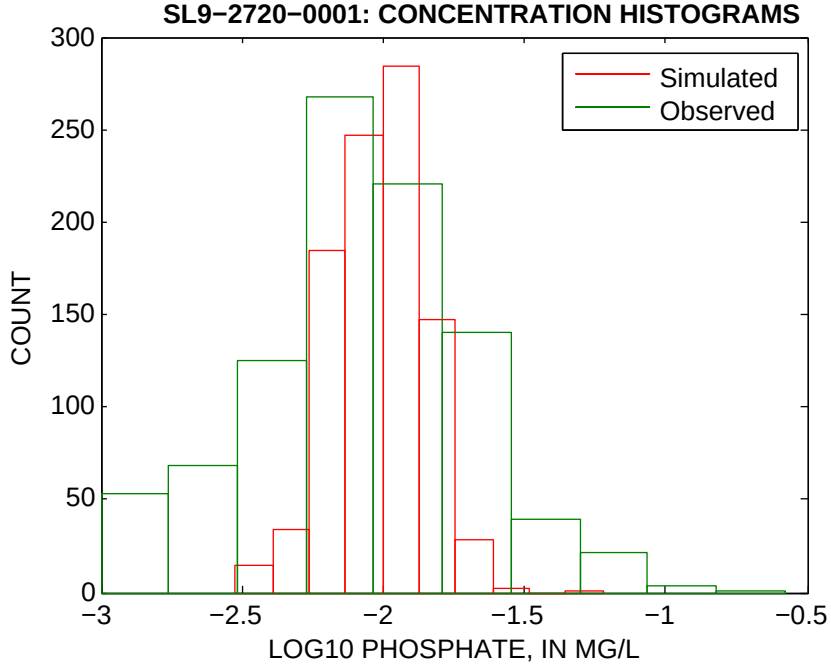
VERSION 2.1

ALL DATA
LOG10

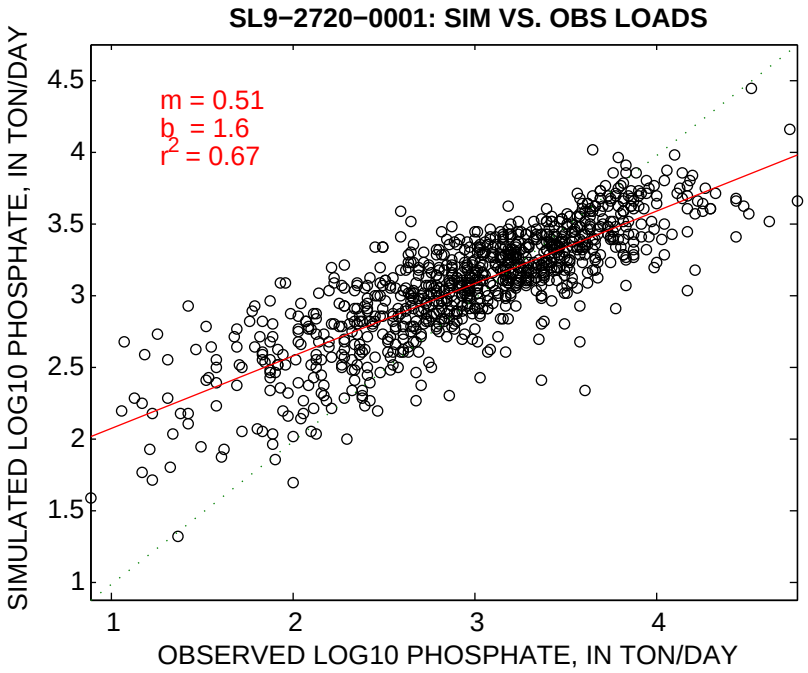


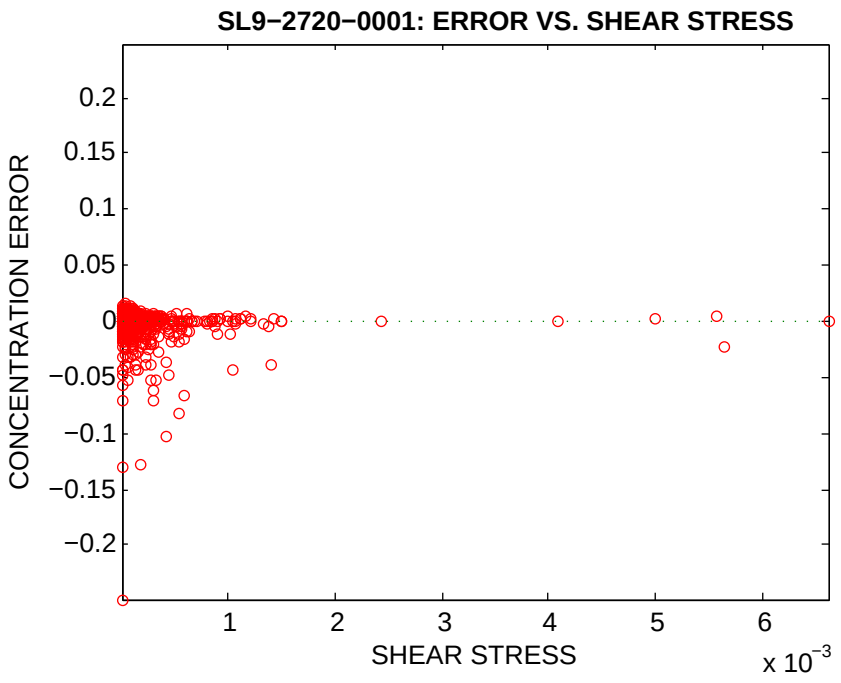


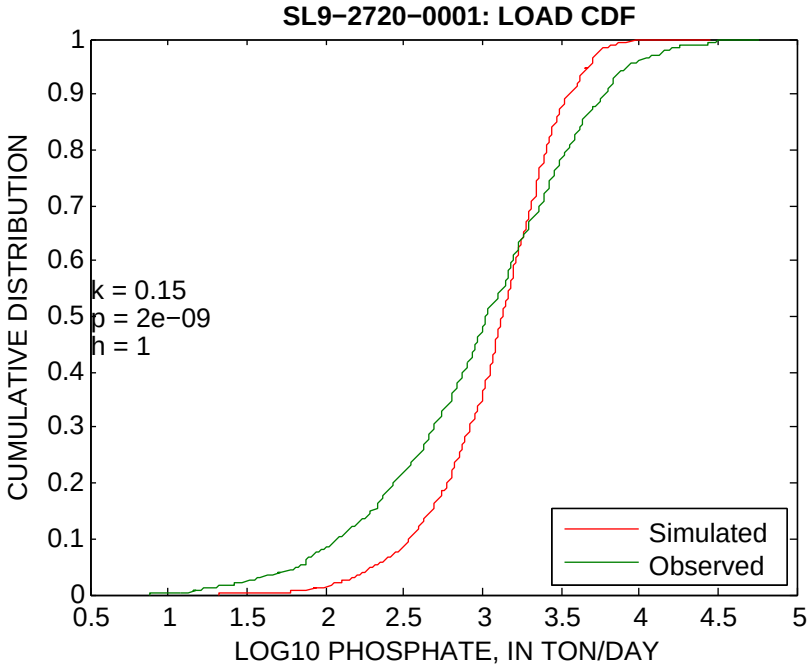


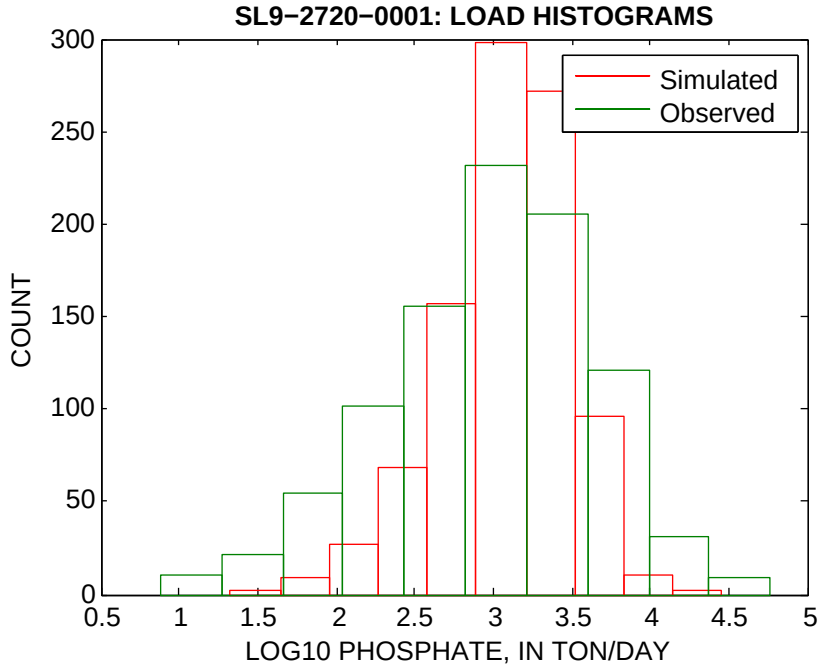


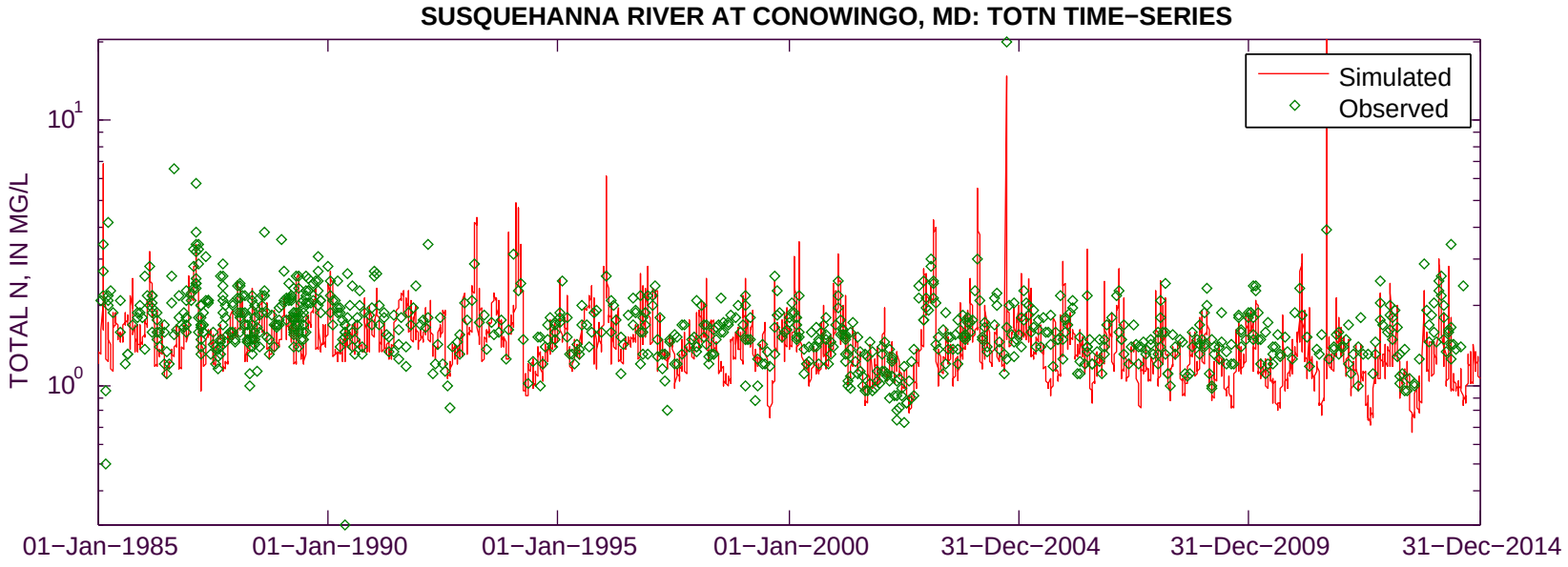
LOAD DATA
LOG10

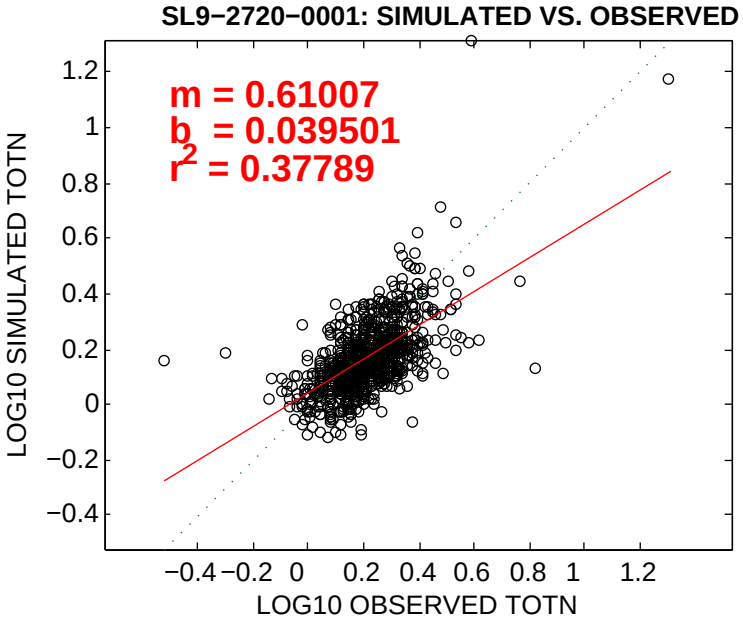


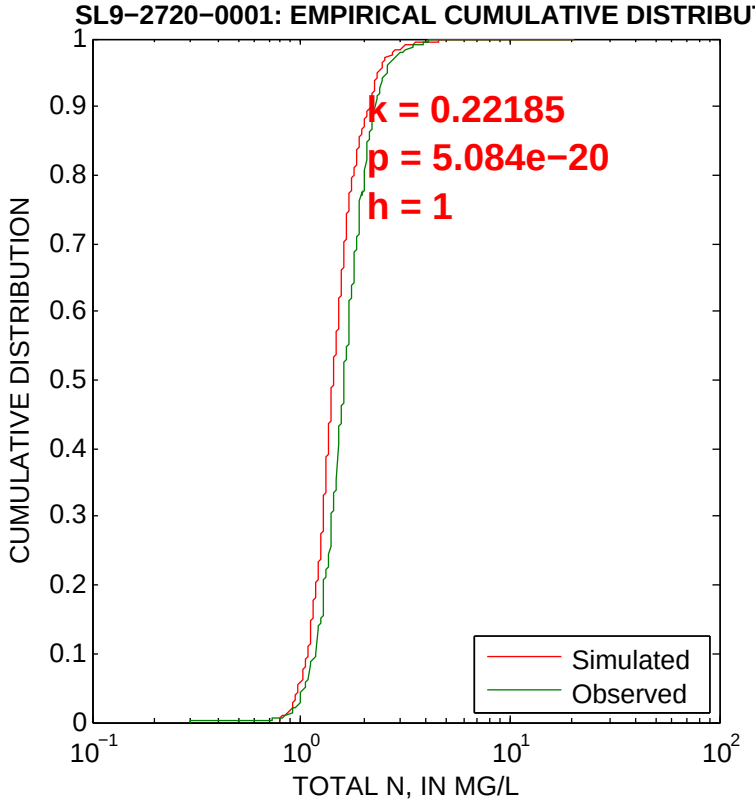












DATA SELECTION

scenario: P620171001WQ | file: TOTN.calib

plot: TOTN - total nitrogen

Dates: 1/1/1985 – 12/31/201

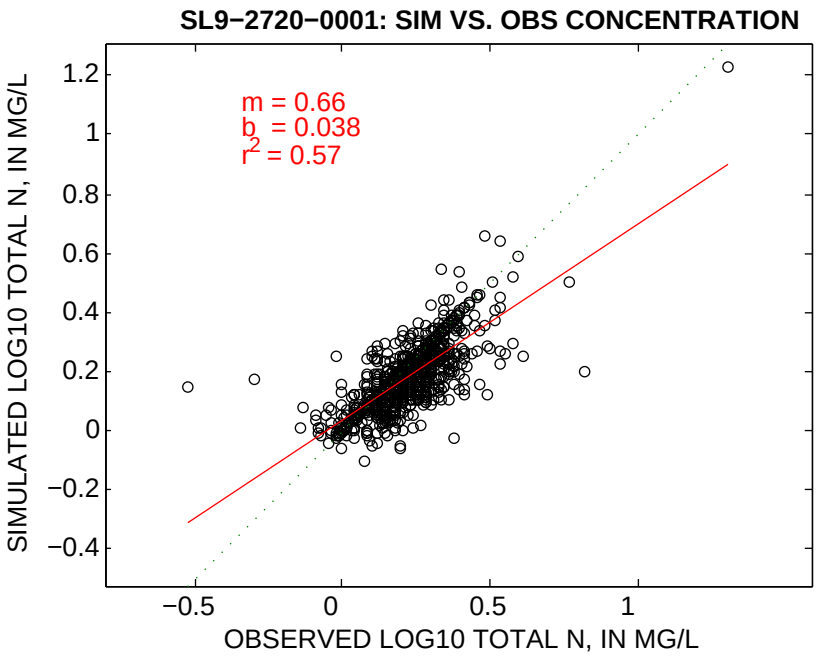
Drive | Directory | Observed: N/A | model | OBS20161101

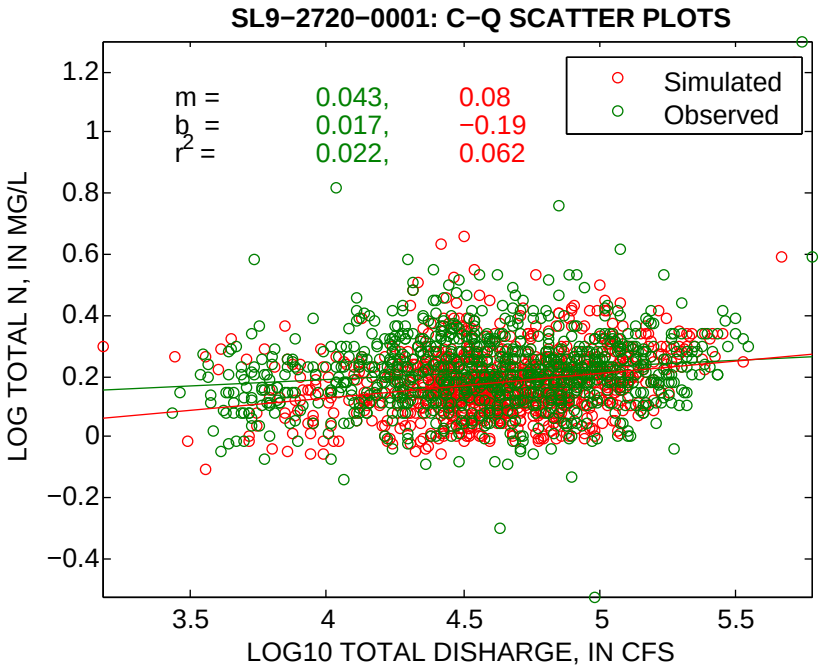
STATISTICS

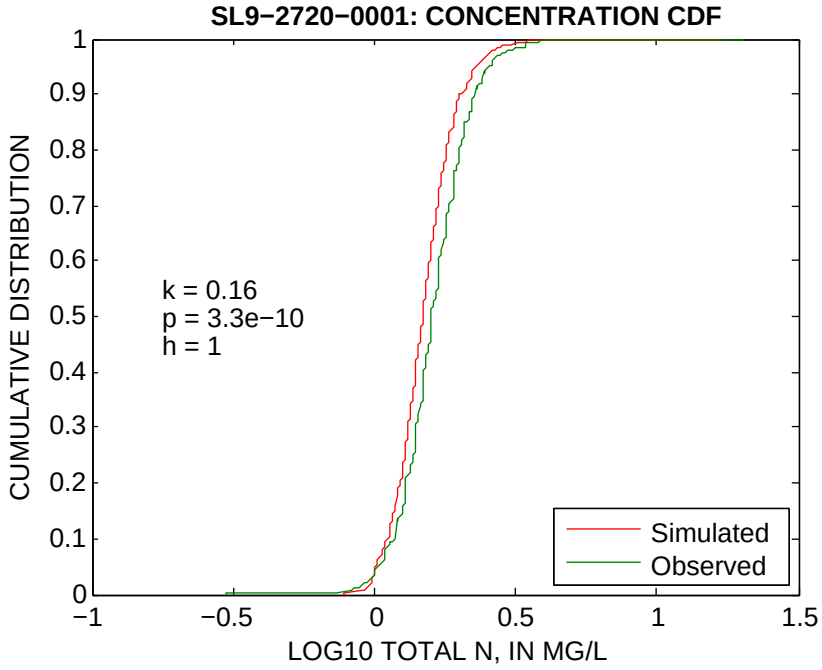
		observe	simulate
n		906	906
min		0.3	0.76644
		-0.522879	-0.115522
mean		1.71407	1.56064
		0.212449	0.169109
media		1.6	1.42995
		0.20412	0.155321
max		20.05	20.566
		1.30211	1.31315
varian		0.643463	0.80989
		0.0162593	0.0160137
JB		0.001	0.001
		0.001	0.001
		ra	log
%		-8.95153	-20.4002
err.va		0.583305	0.0143149
rel.std.err		0.906509	0.880411
mod.eff		0.0934911	0.119589

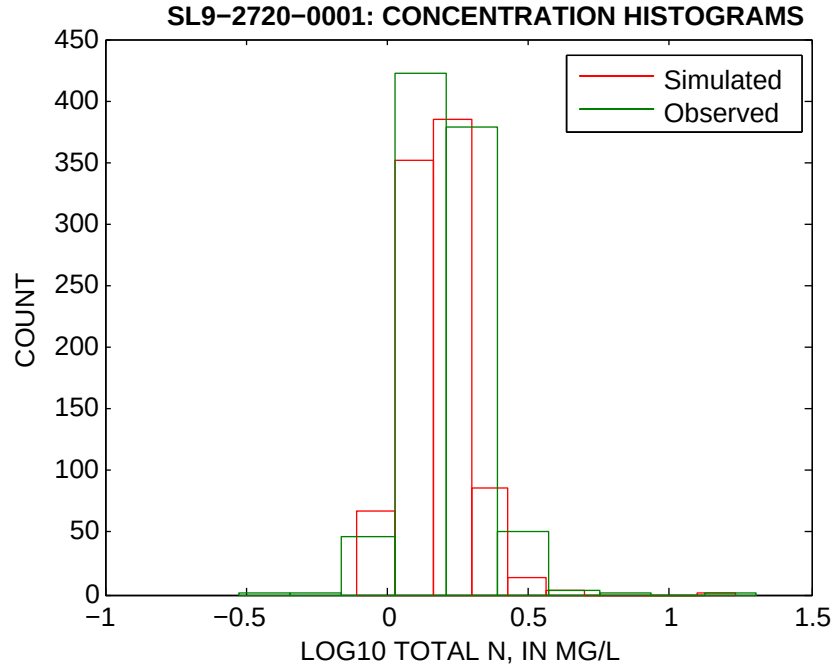
VERSION 2.1

ALL DATA
LOG10

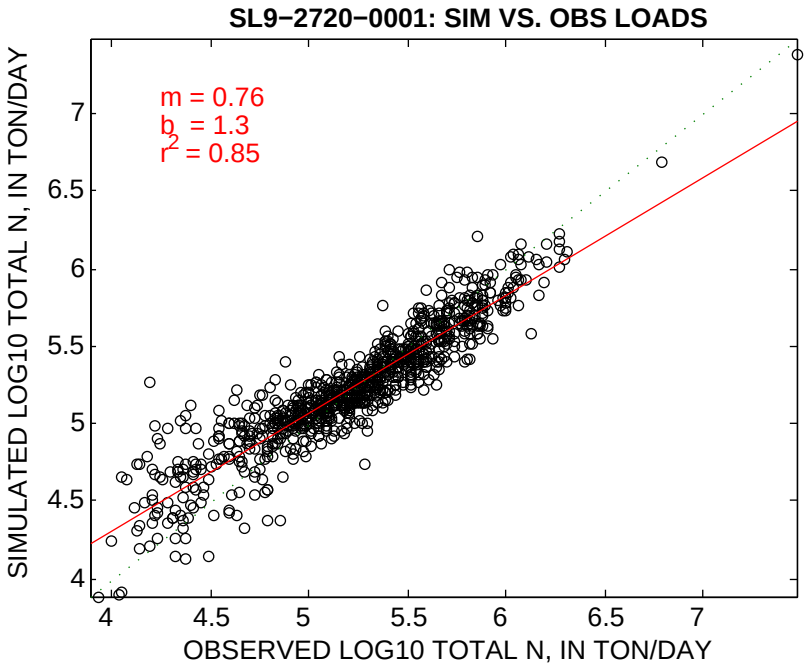


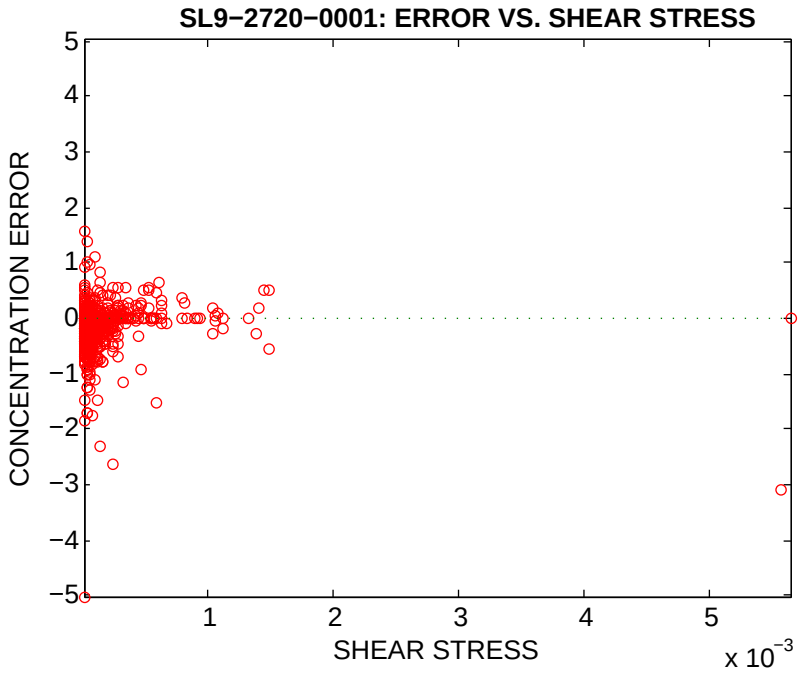


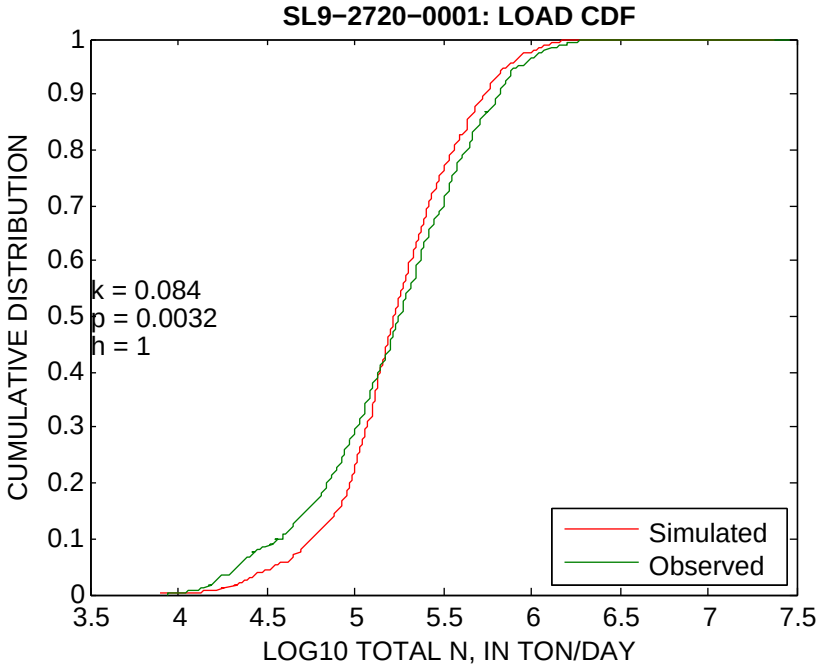


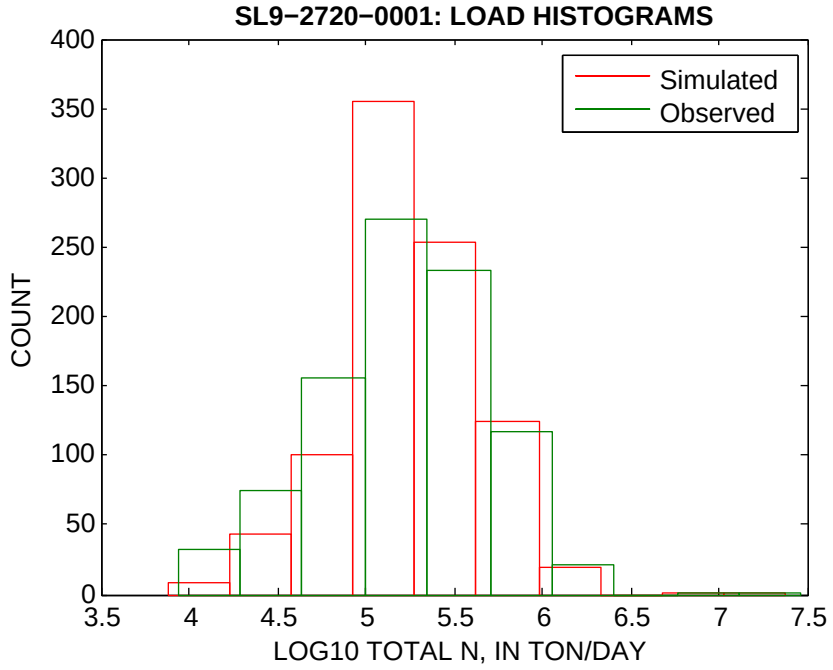


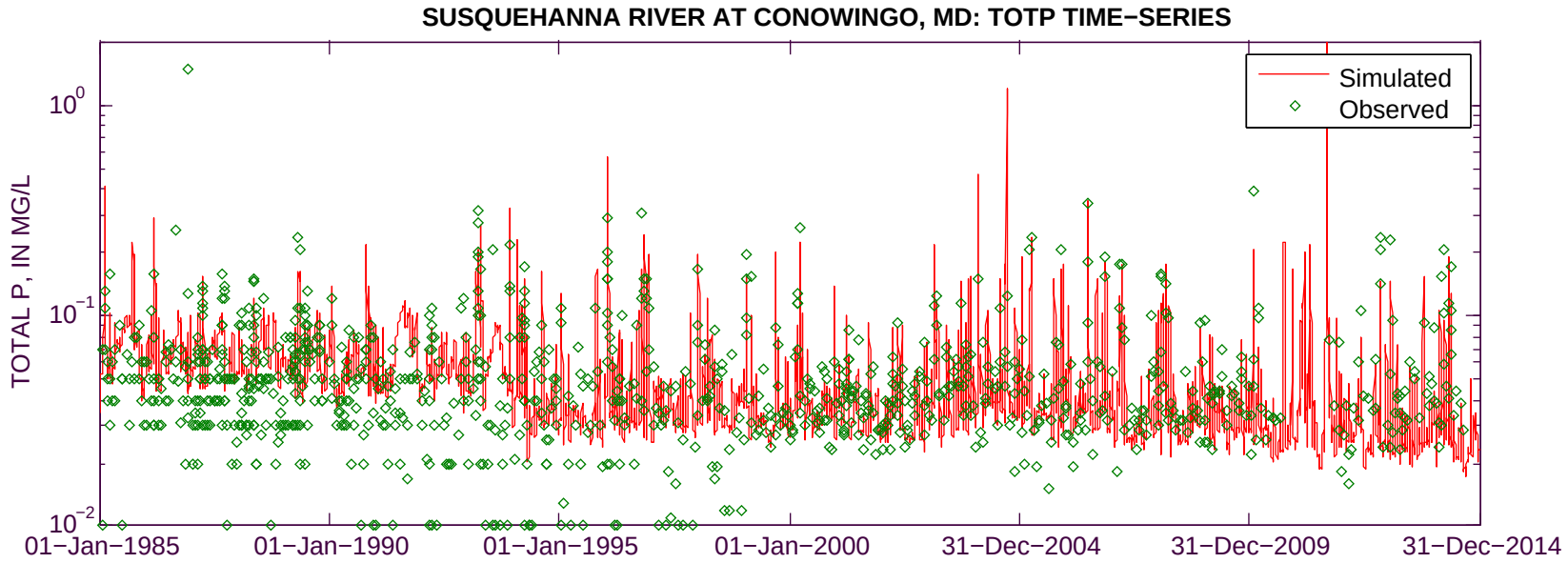
LOAD DATA
LOG10

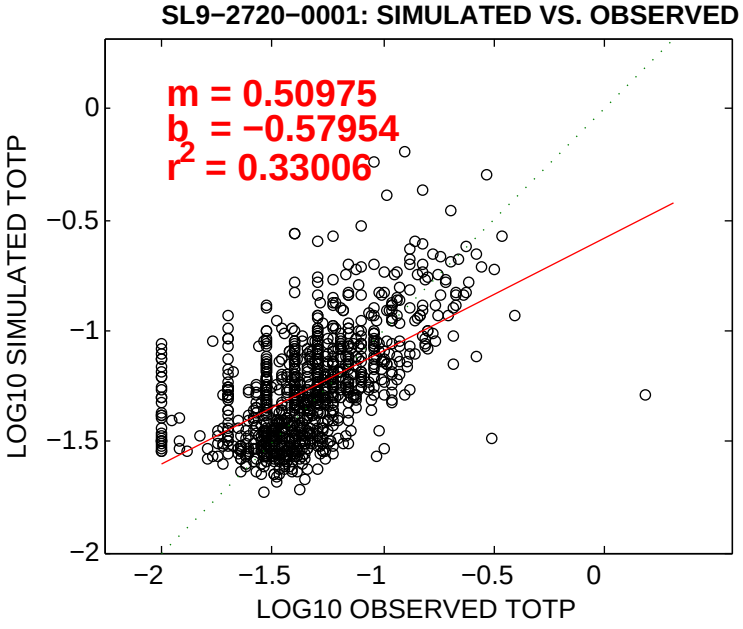


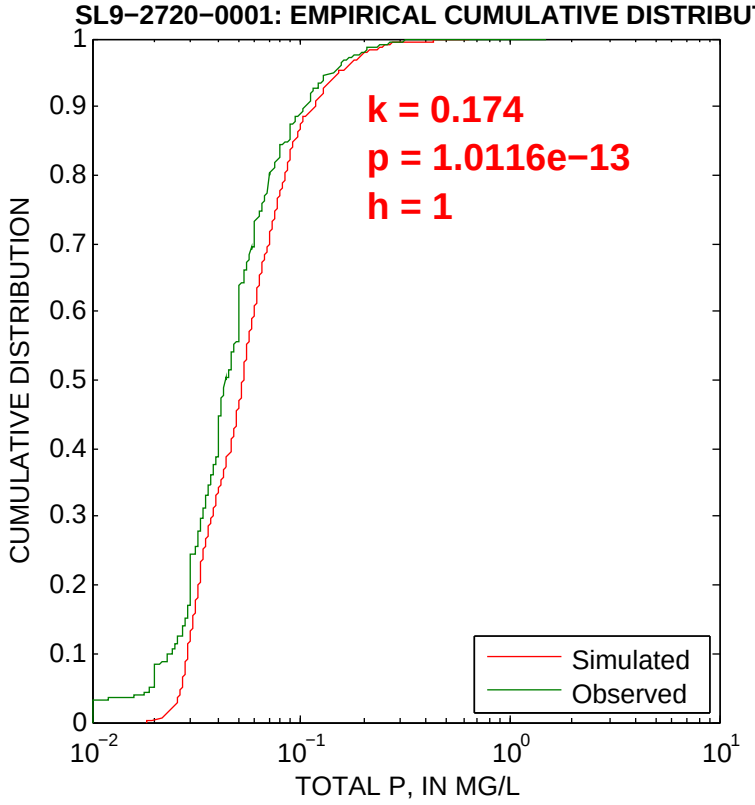












DATA SELECTION

scenario	file
P620171001WQ	TOTP.calib

plot: TOTP - total phosphorus

Dates: 1/1/1985 – 12/31/201

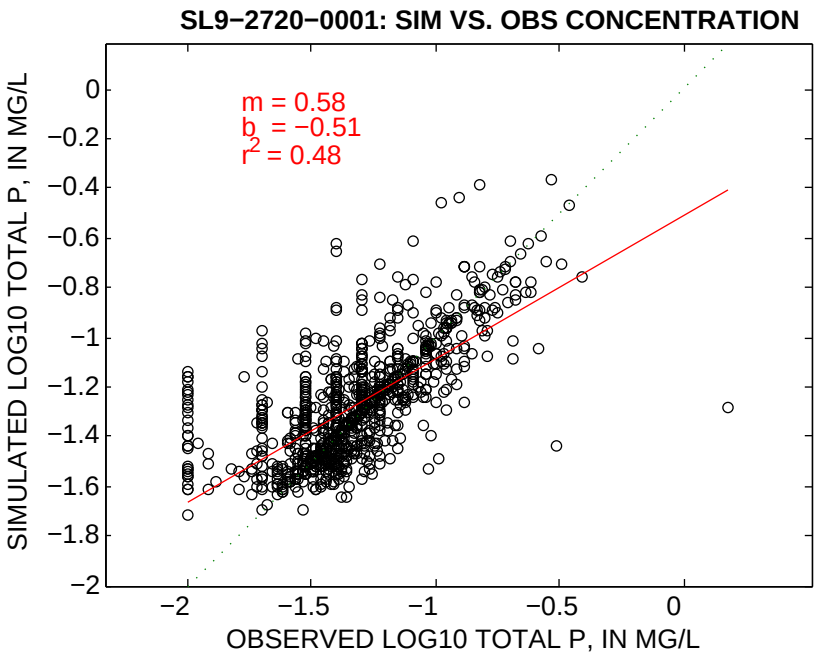
Drive	Directory	Observed
N/A	model	OBS20161101

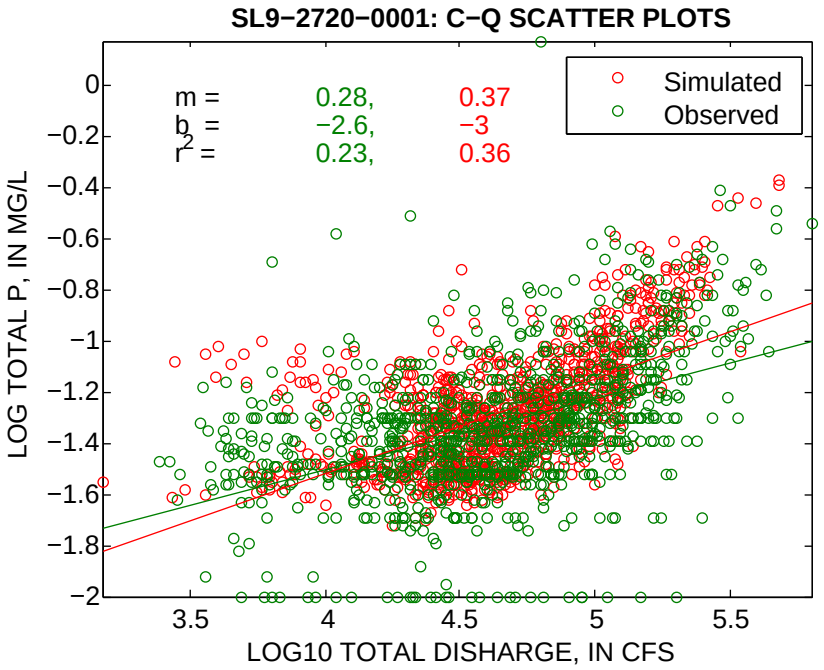
STATISTICS

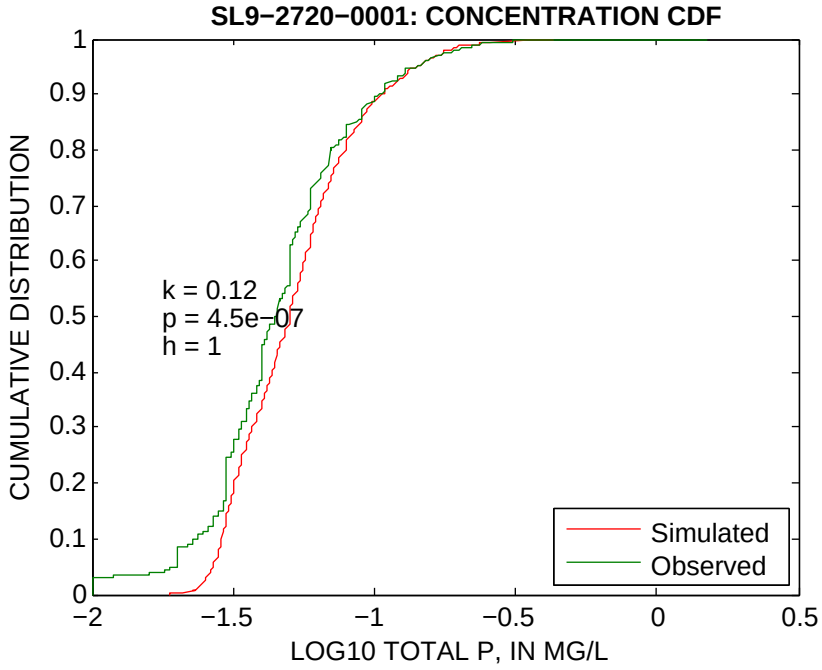
		observe	simulate
n		1000	1000
min		0.01	0.018529
		-2	-1.73215
mean		0.0579397	0.0658646
		-1.33358	-1.25933
media		0.044	0.053003
		-1.35655	-1.2757
max		1.5	0.64147
		0.176091	-0.192824
varian		0.00394179	0.00277693
		0.0732801	0.0576919
JB		0.001	0.001
		0.001	0.001
		ra	log
%		13.678	-5.56766
err.va		0.00426367	0.0617814
rel.std.err		1.08166	0.843086
mod.eff		-0.0816599	0.156914

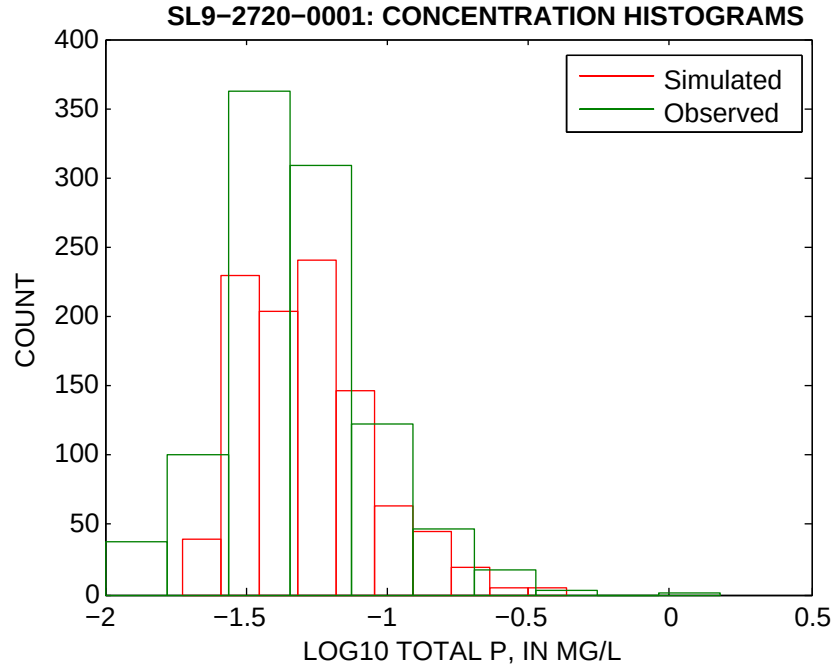
VERSION 2.1

ALL DATA
LOG10

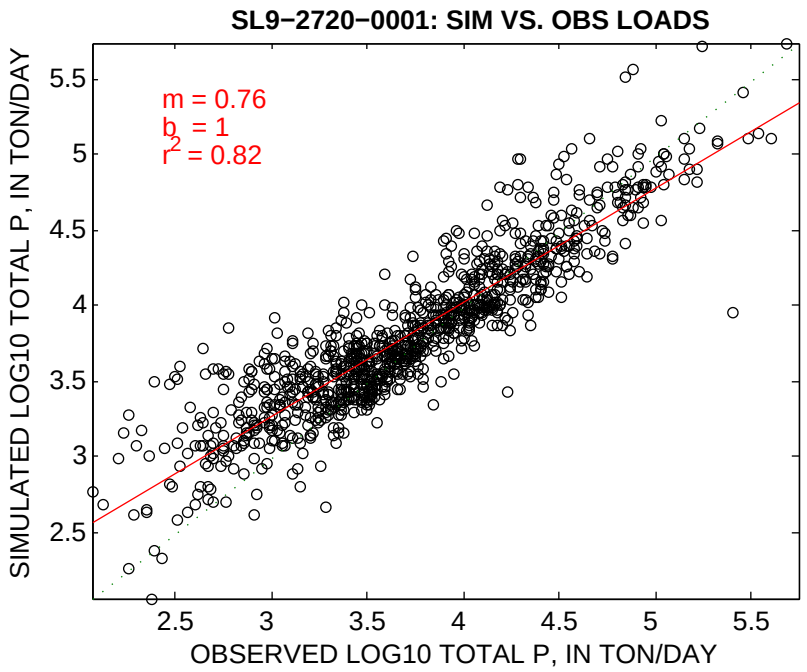


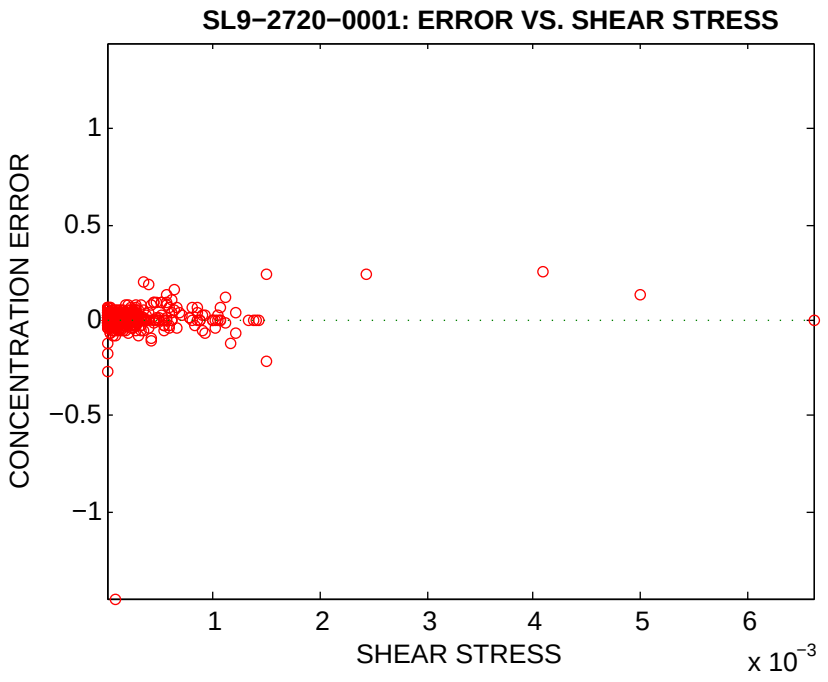


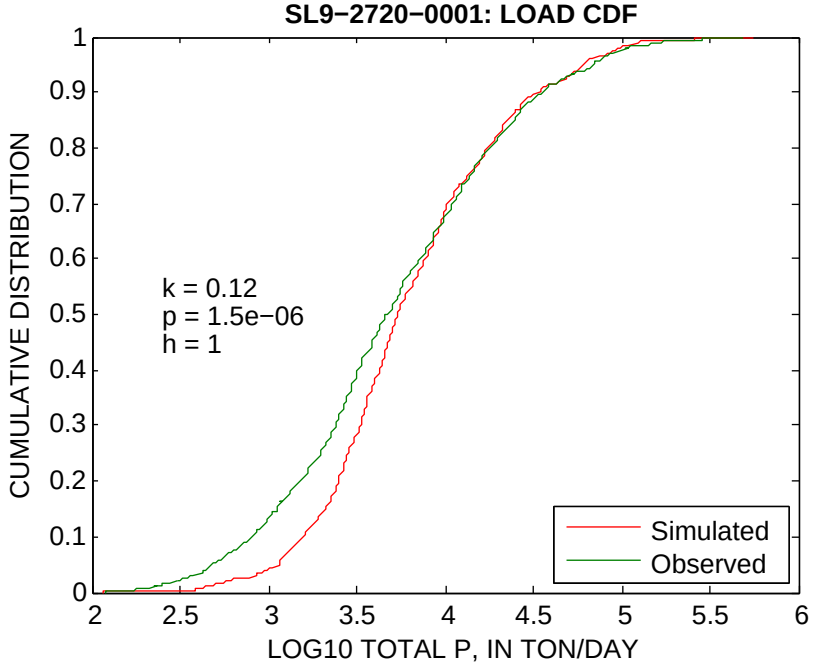


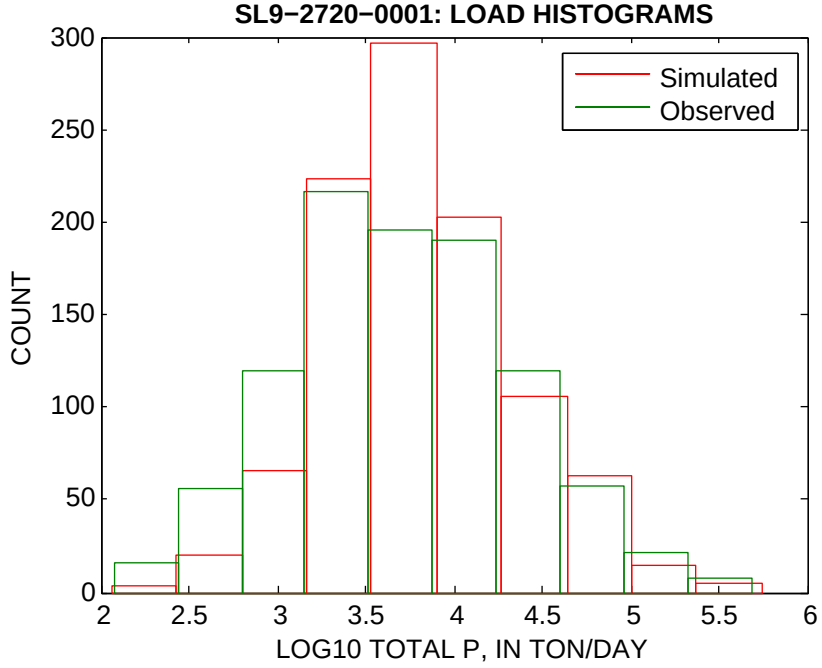


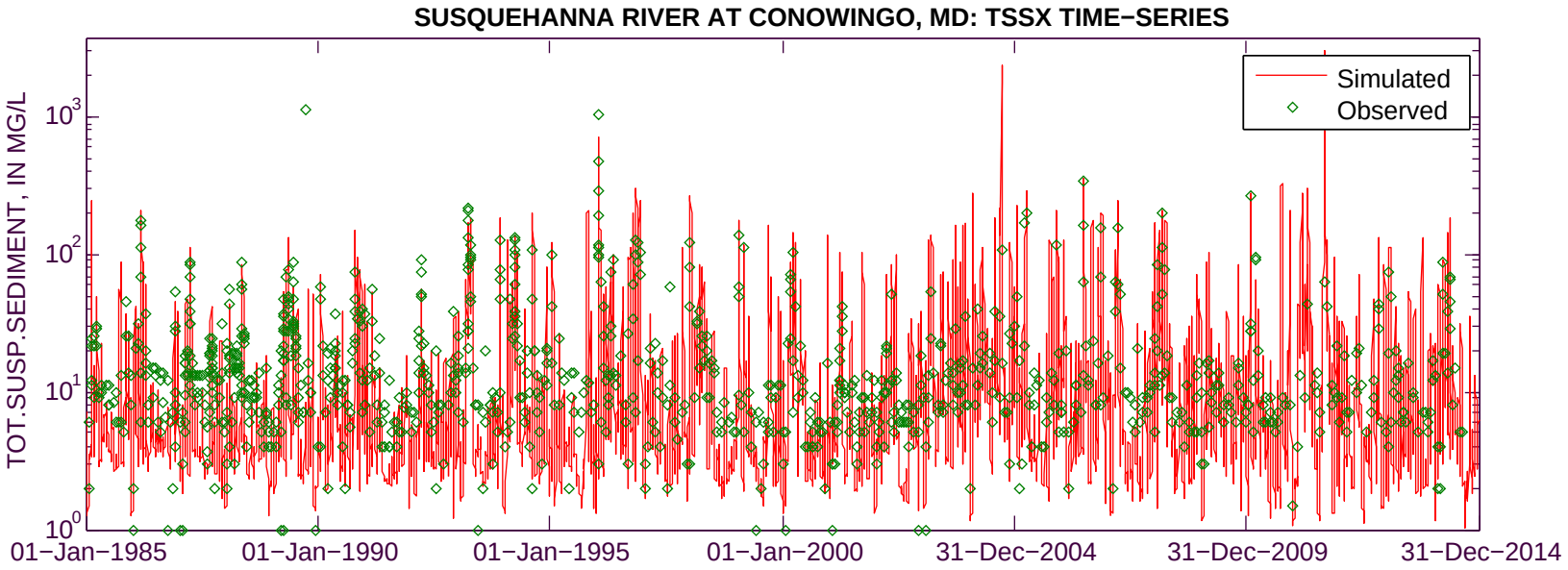
LOAD DATA
LOG10

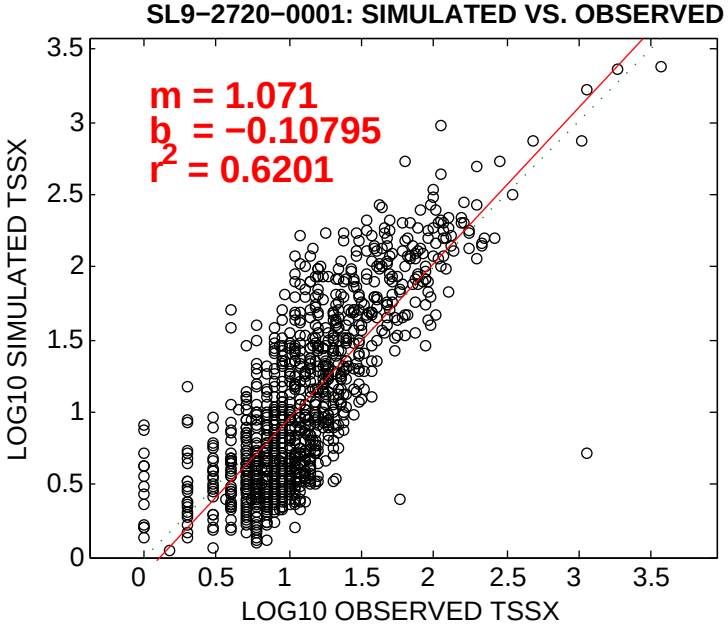


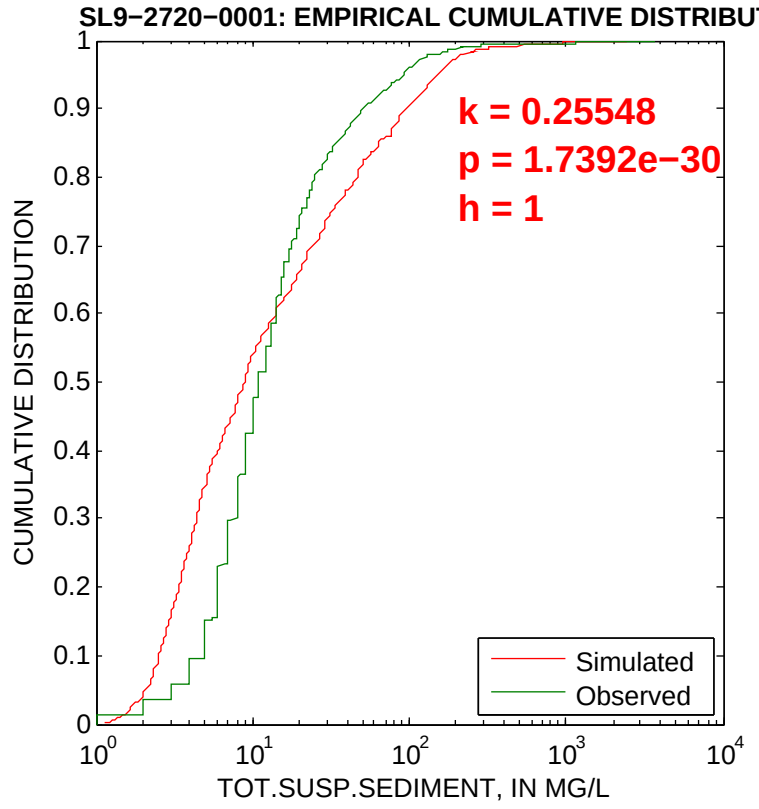












DATA SELECTION

scenario: P620171001WQ | file: TSSX.calib

plot: TSSX - total suspended ...

Dates: 1/1/1985 – 12/31/201

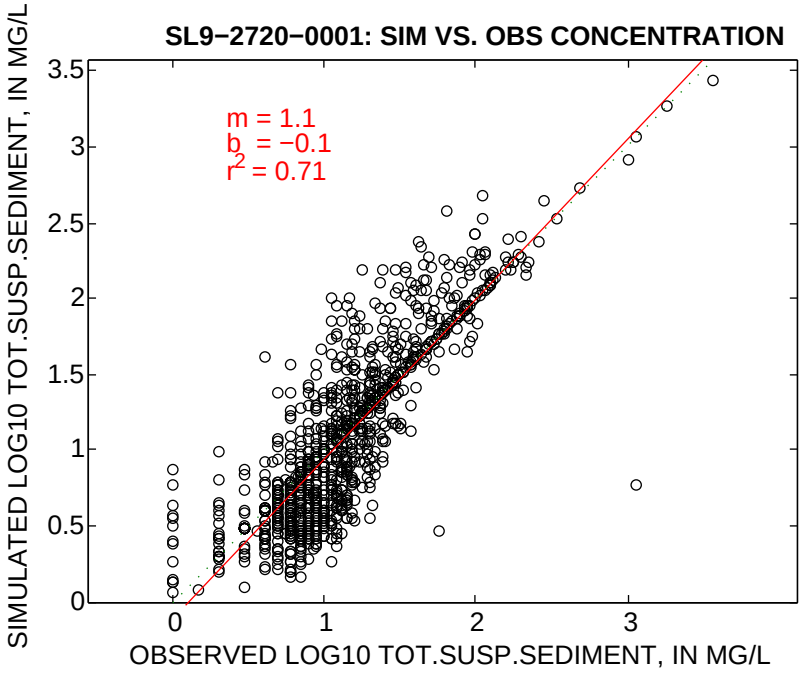
Drive: N/A | Directory: model | Observed: OBS20161101

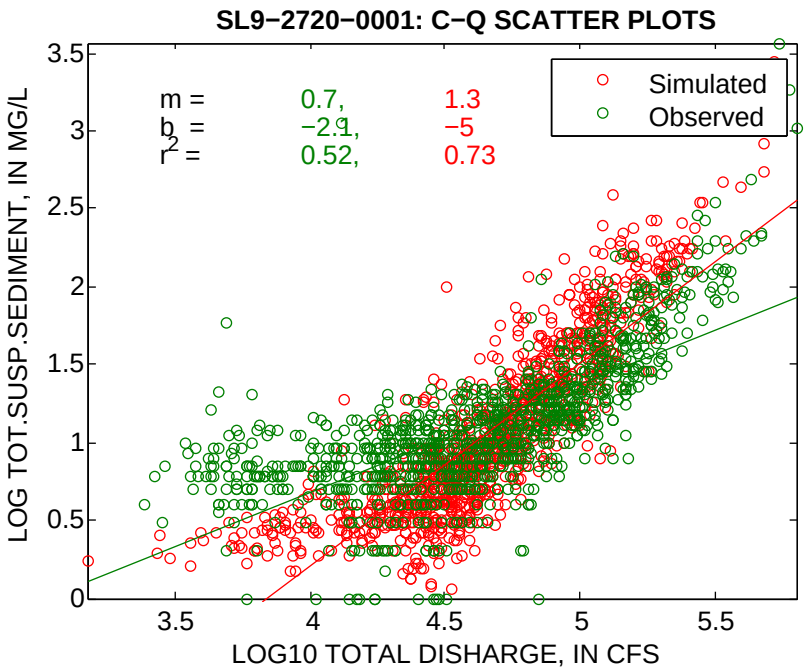
STATISTICS

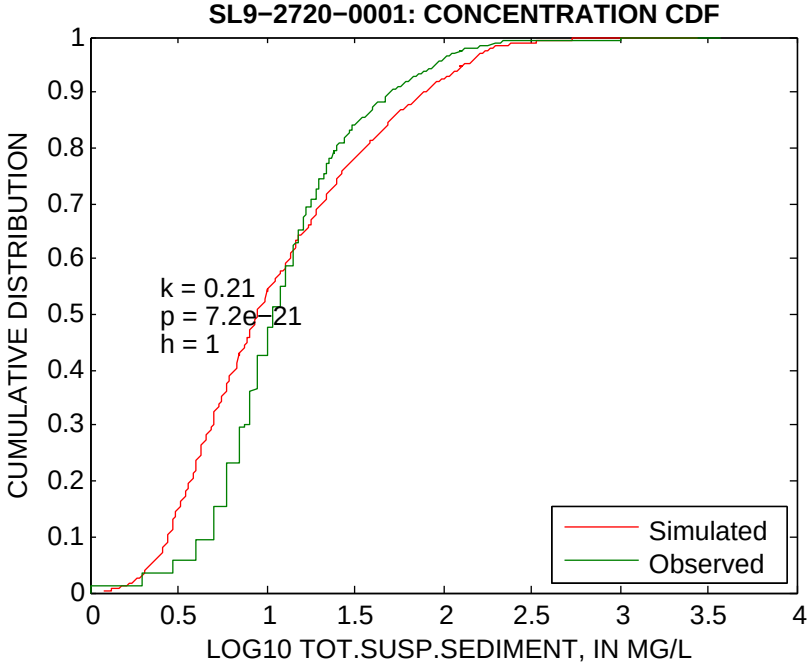
		observe	simulate
n		1049	1049
min		1	1.1051
		0	0.0434016
mean		30.5615	40.0466
		1.111	1.08198
media		11	8.865
		1.04139	0.947679
max		3680	2408.9
		3.56585	3.38182
varian		20451.9	17904.3
		0.199503	0.369064
JB		0.001	0.001
		0.001	0.001
		ra	log
%		31.036	-2.61208
err.va		5662.79	0.142056
rel.std.err		0.276883	0.712051
mod.eff		0.723117	0.287949

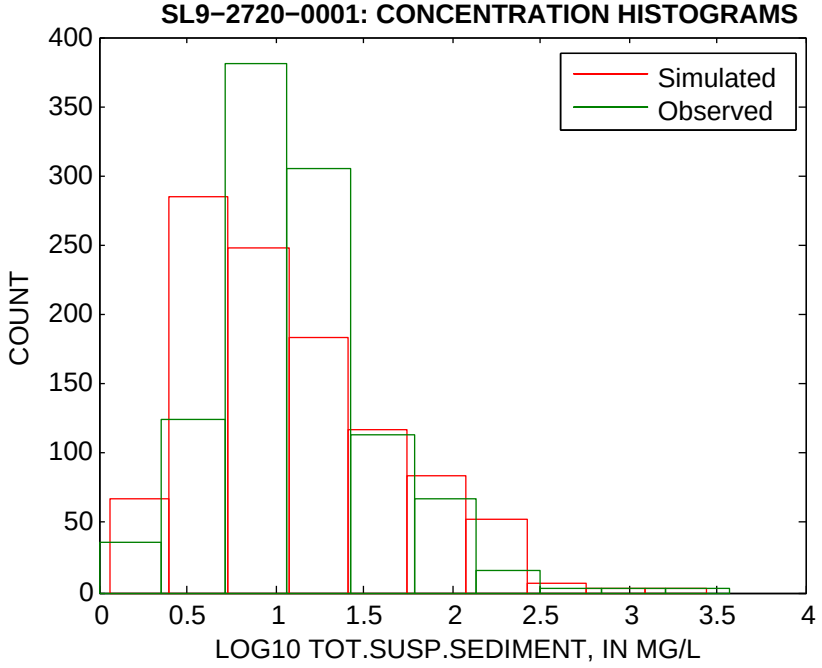
VERSION 2.1

ALL DATA
LOG10

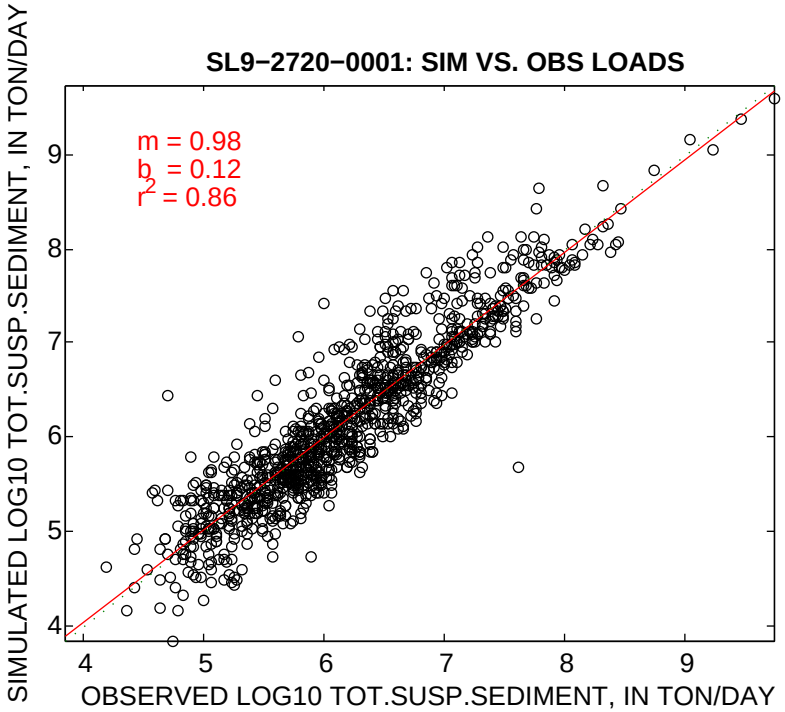


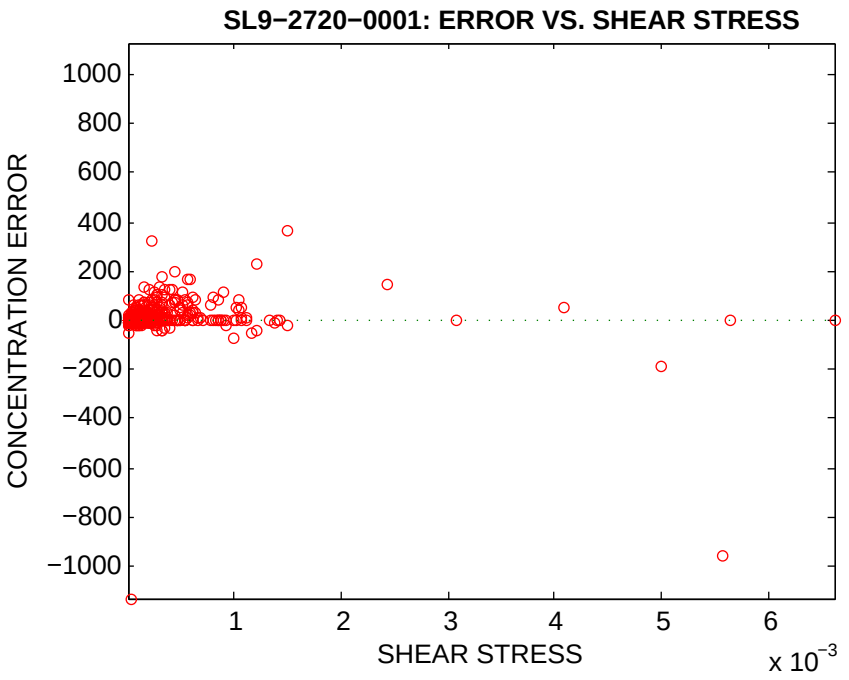


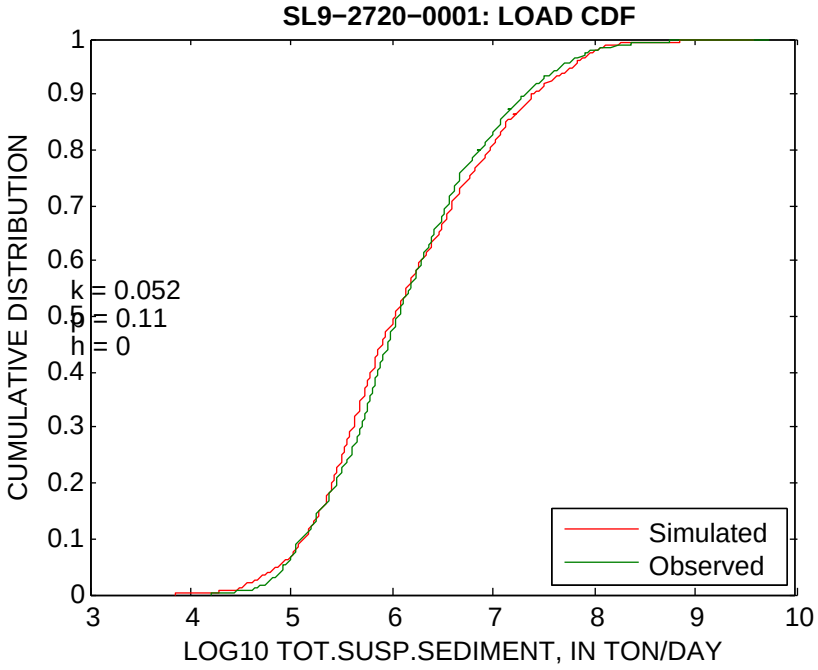


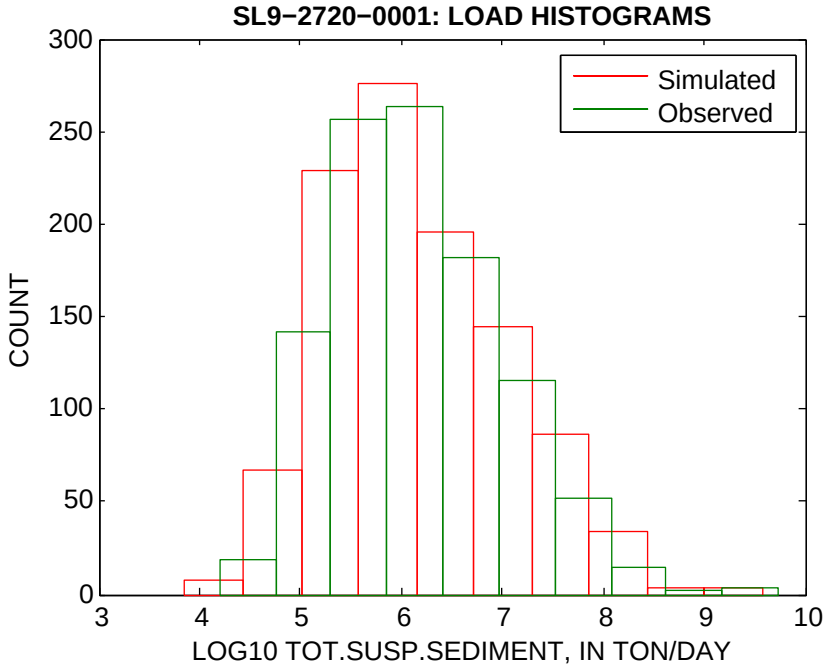


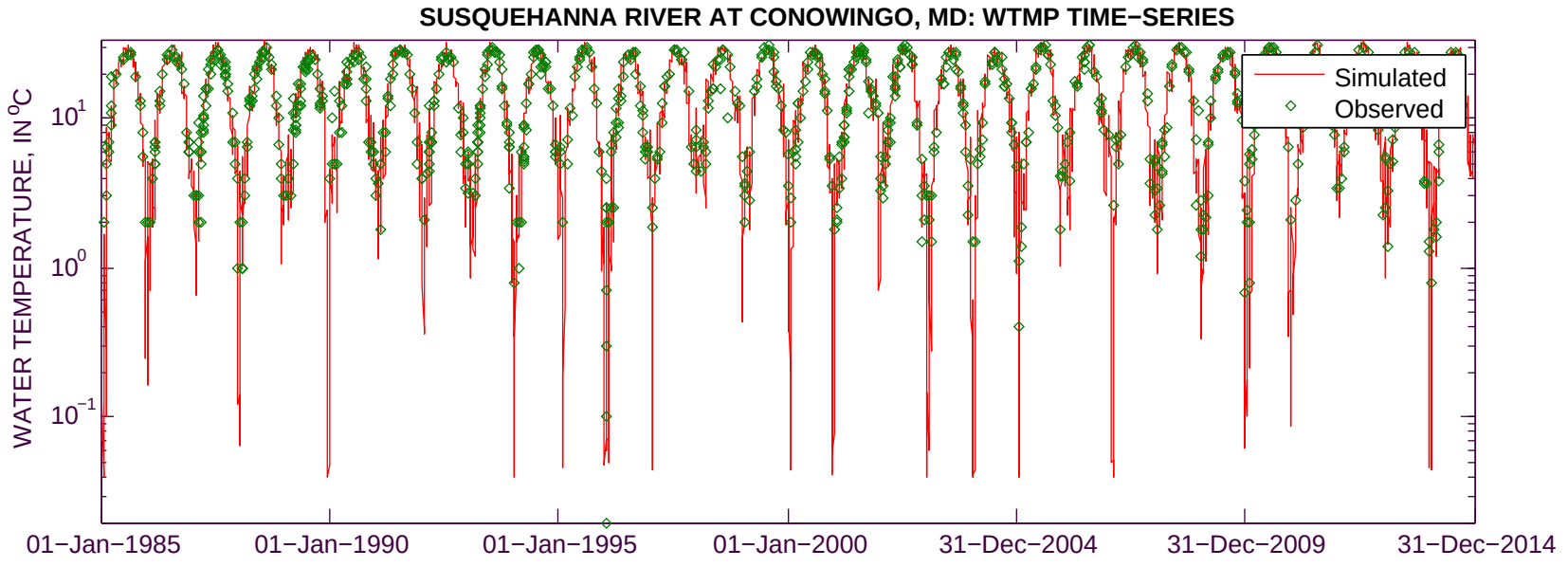
LOAD DATA
LOG10

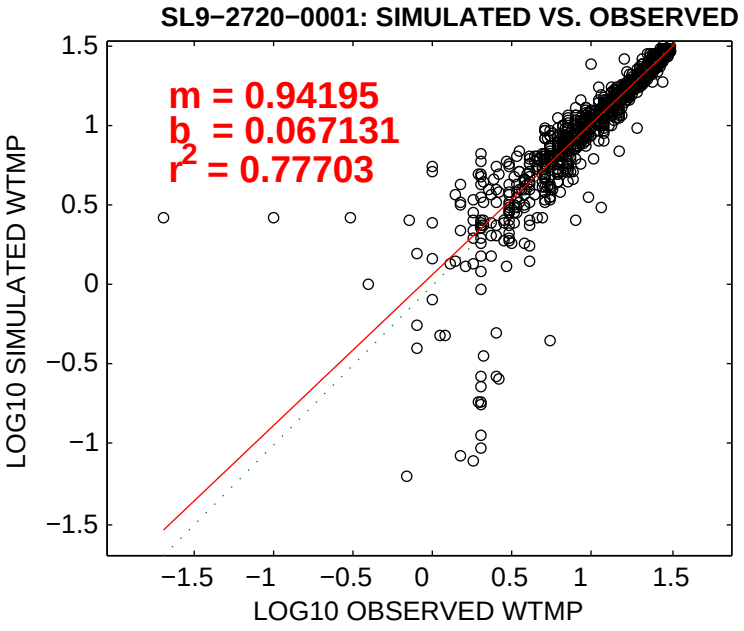


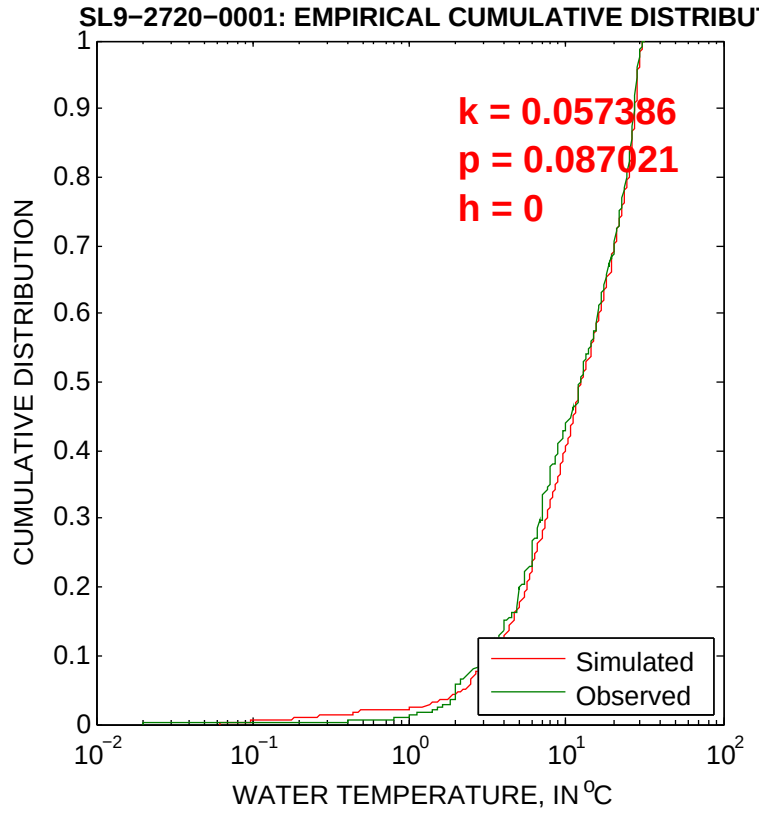












DATA SELECTION

scenario	file
P620171001WQ	WTMP.calib

plot: WTMP - water tempera...

Dates: 1/1/1985 — 12/31/201

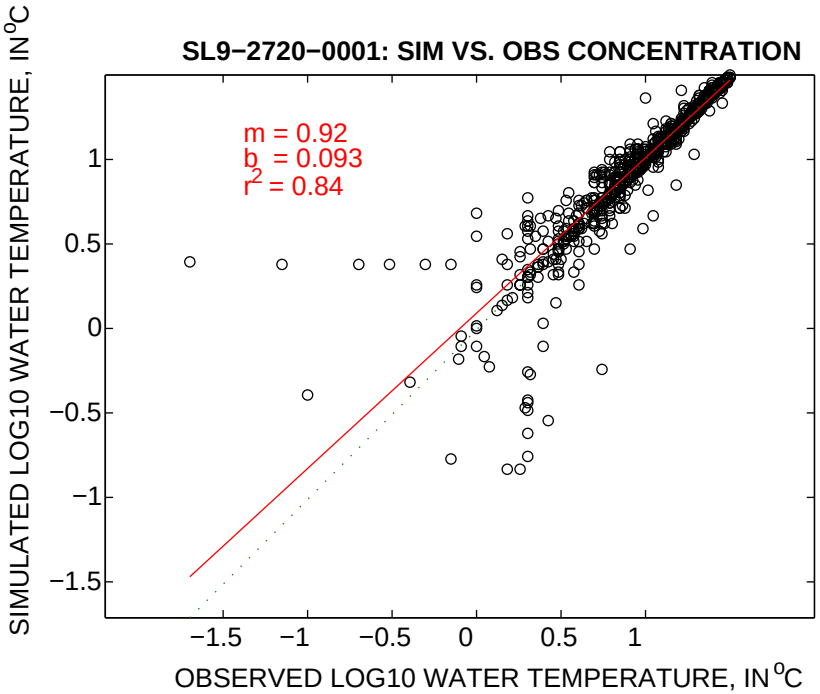
Drive	Directory	Observed
N/A	model	OBS20161101

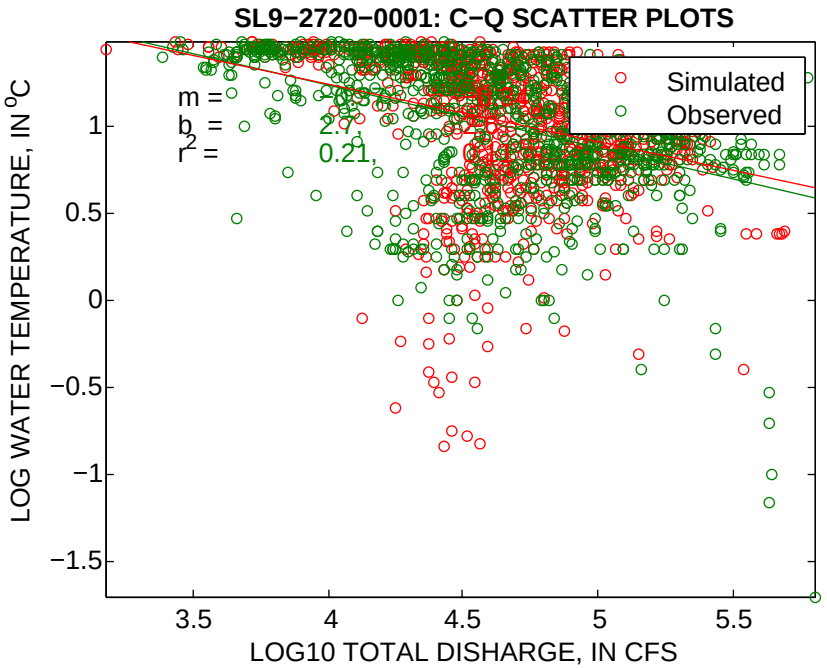
STATISTICS

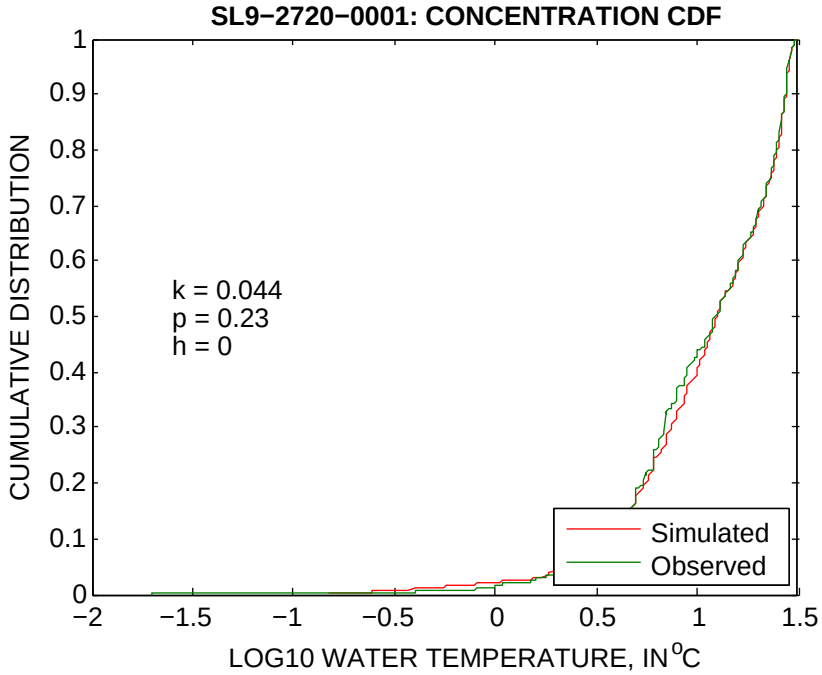
	n	941	941
		observe	simulate
min		0.02	0.062431
		-1.69897	-1.2046
mean		14.0262	14.3903
		1.01826	1.02628
media		12.4	12.534
		1.09342	1.09809
max		31.398	31.719
		1.4969	1.50132
varian		81.458	80.8939
		0.148892	0.170015
JB		0.001	0.001
		0.001	0.001
		ra	log
%		2.59565	0.787588
err.va		3.61006	0.0384742
rel.std.err		0.044318	0.258403
mod.eff		0.955682	0.741597

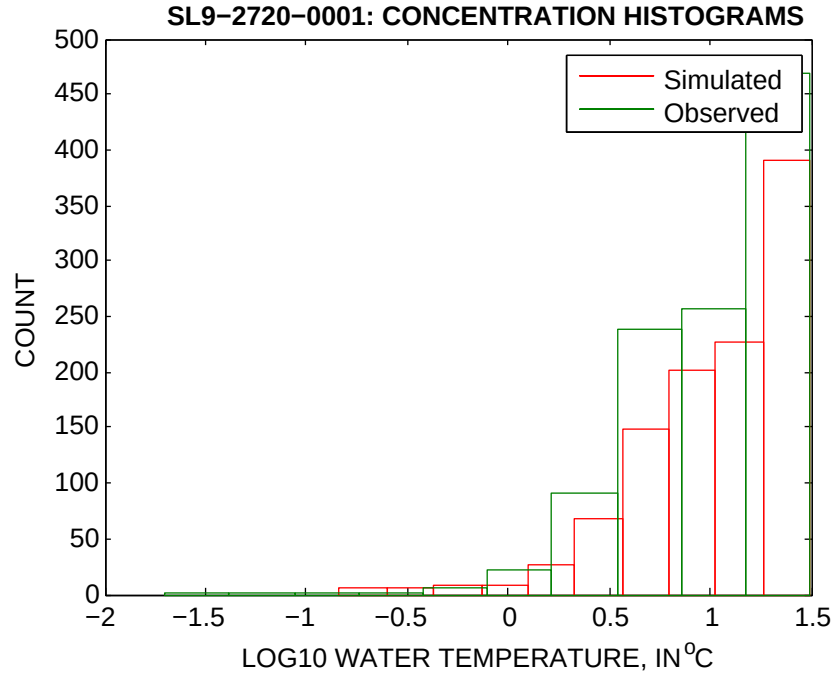
VERSION 2.1

ALL DATA
LOG10

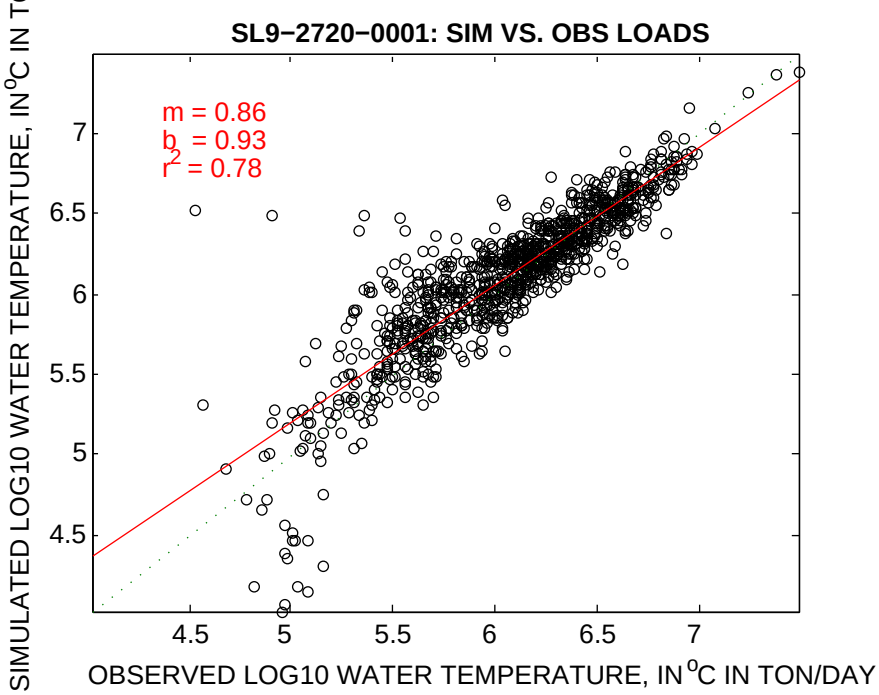


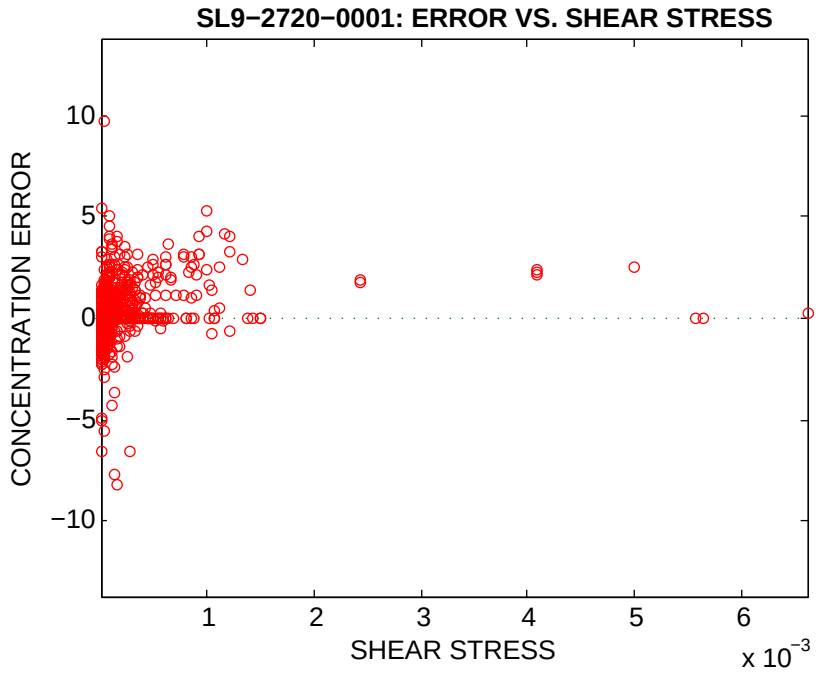


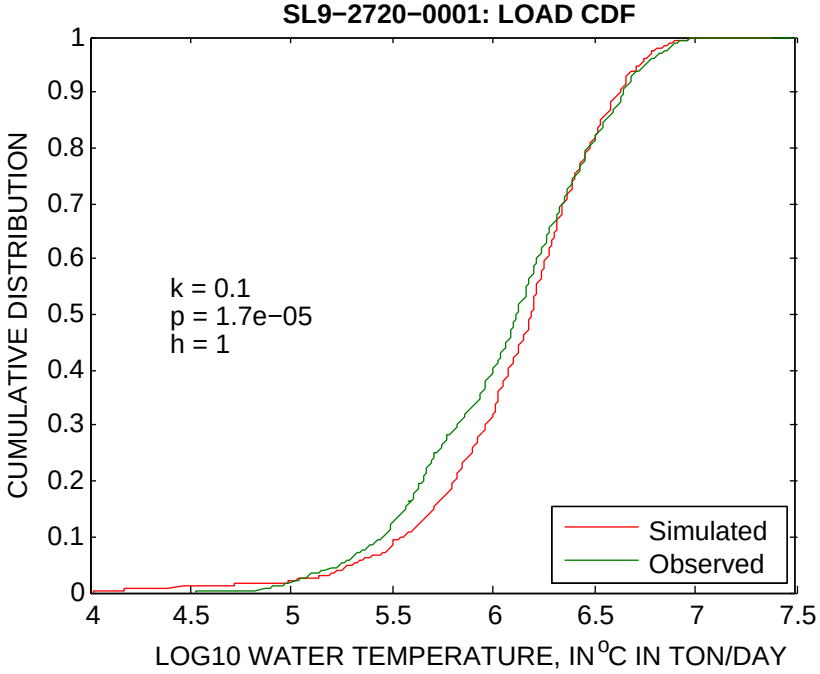


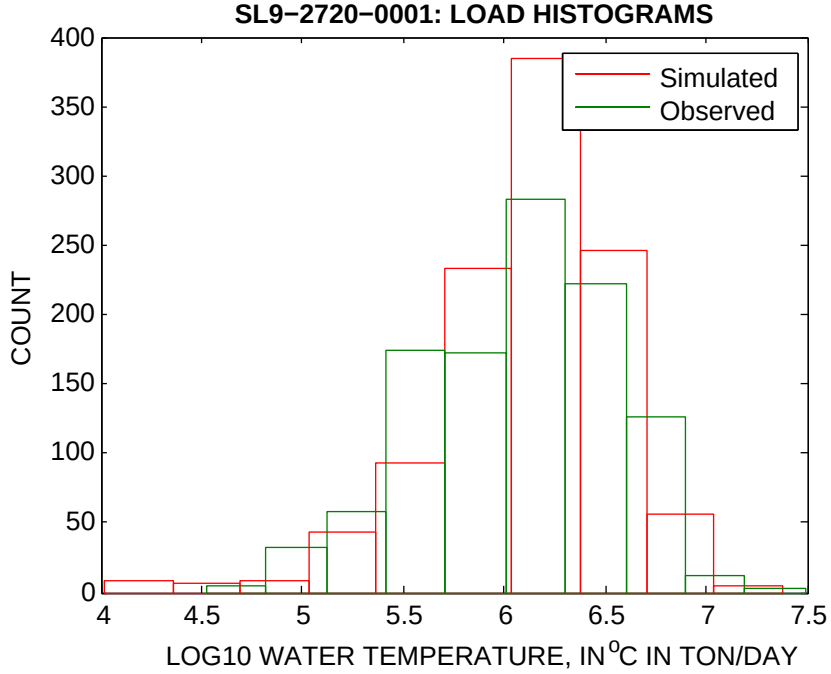


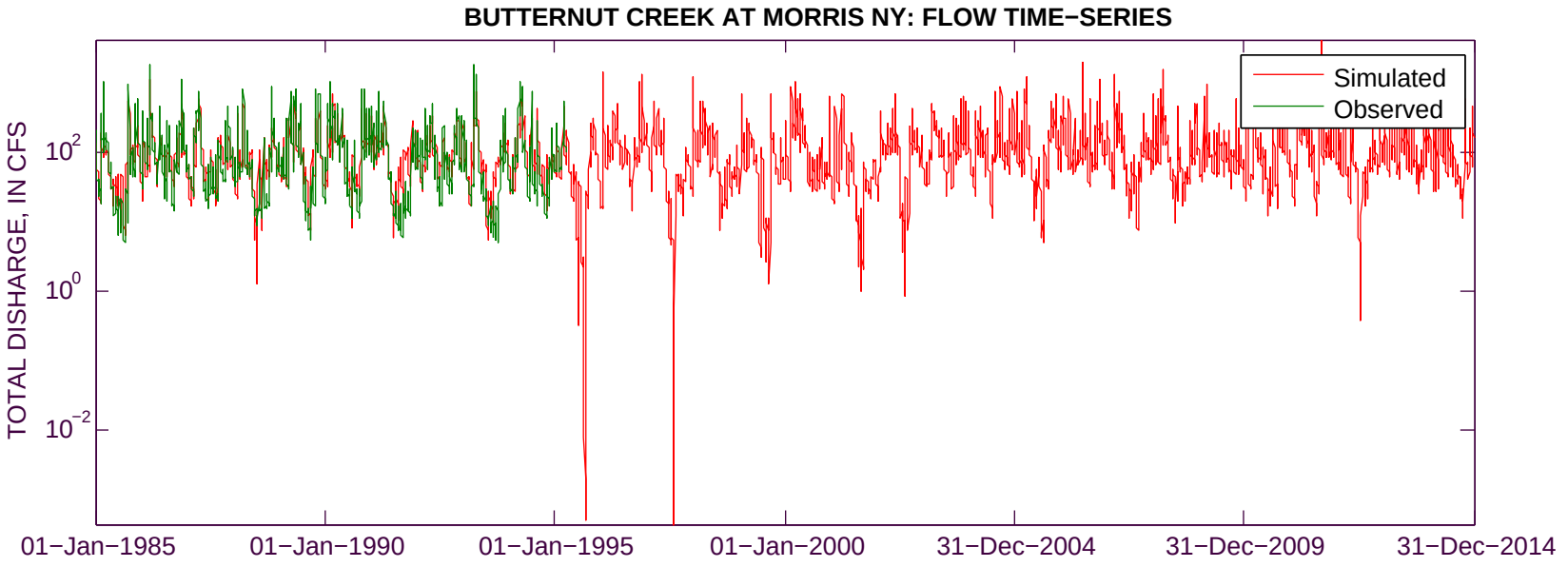
LOAD DATA
LOG10

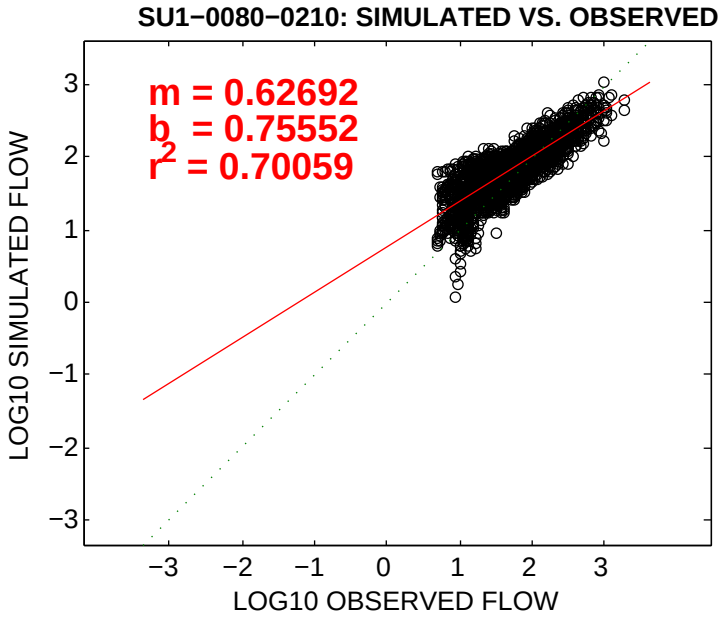


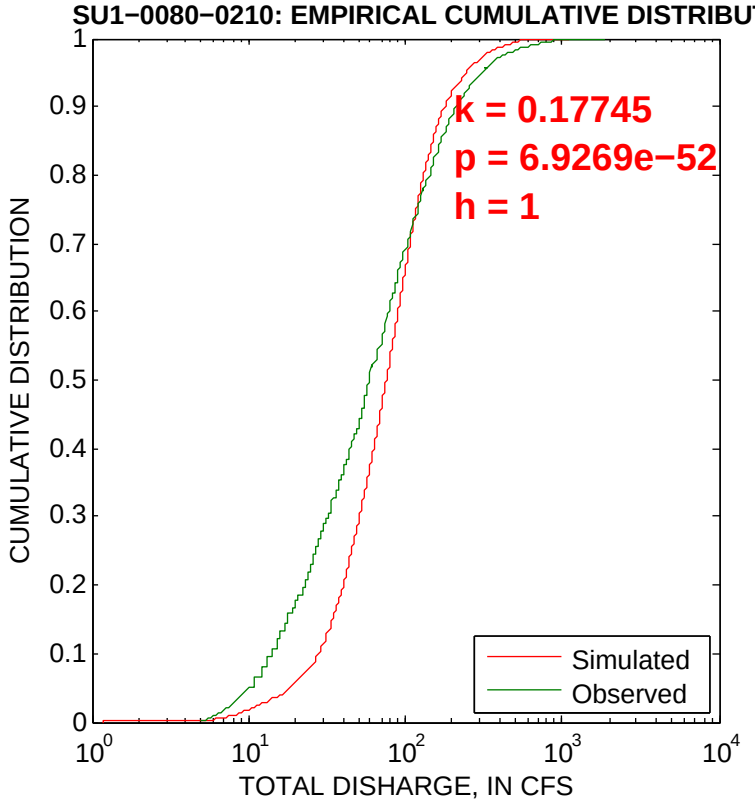












DATA SELECTION

scenario	file
P620171001WQ	FLOW.calib

plot: FLOW - total discharge

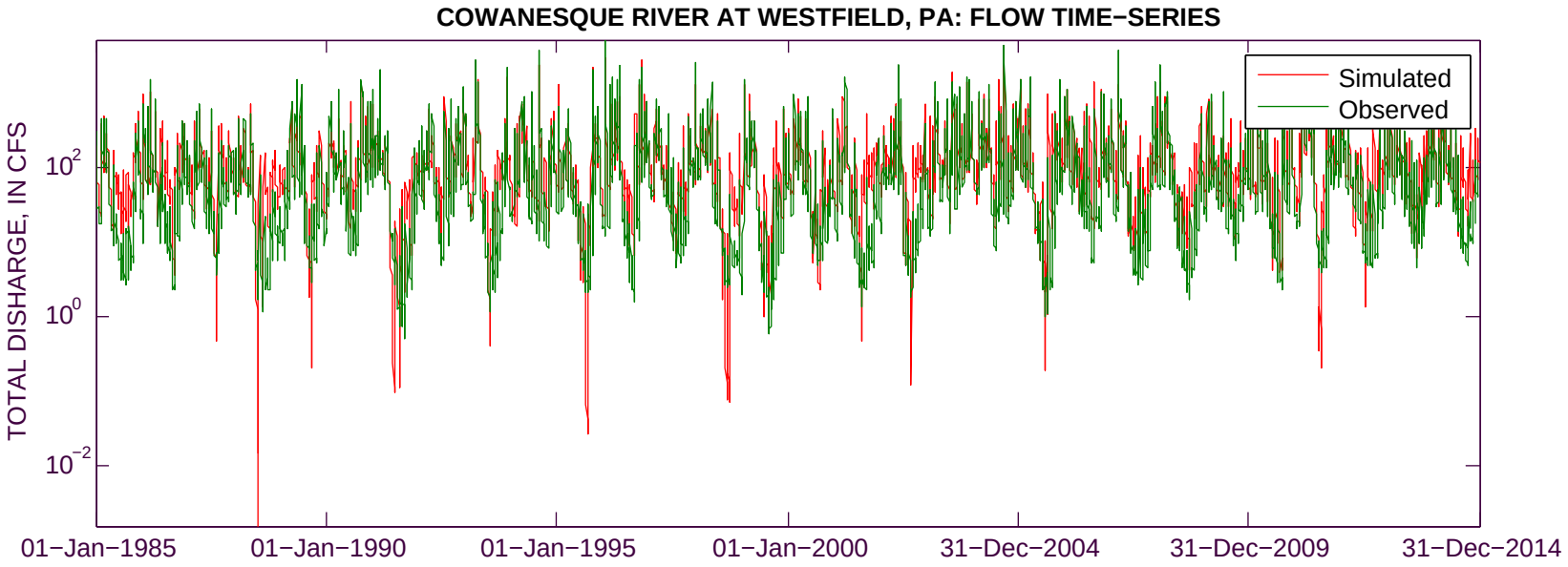
Dates: 1/1/1985 – 12/31/201

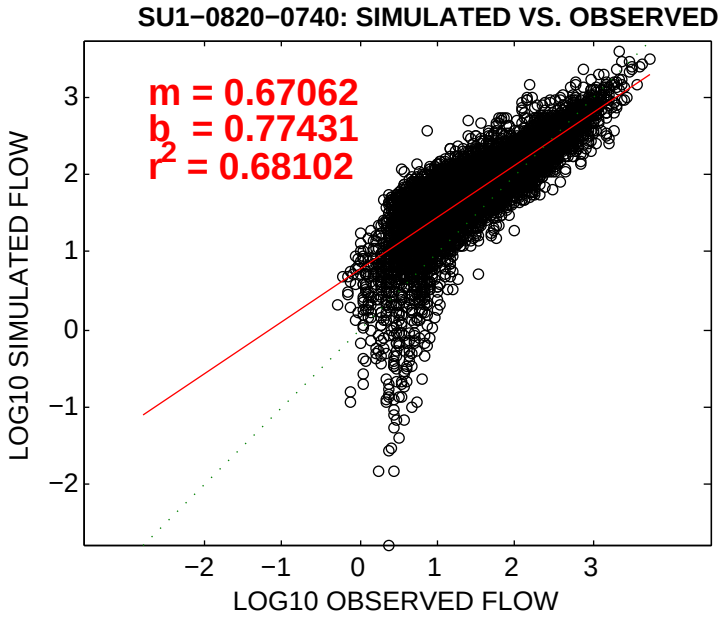
Drive	Directory	Observed
N/A	model	OBS20161101

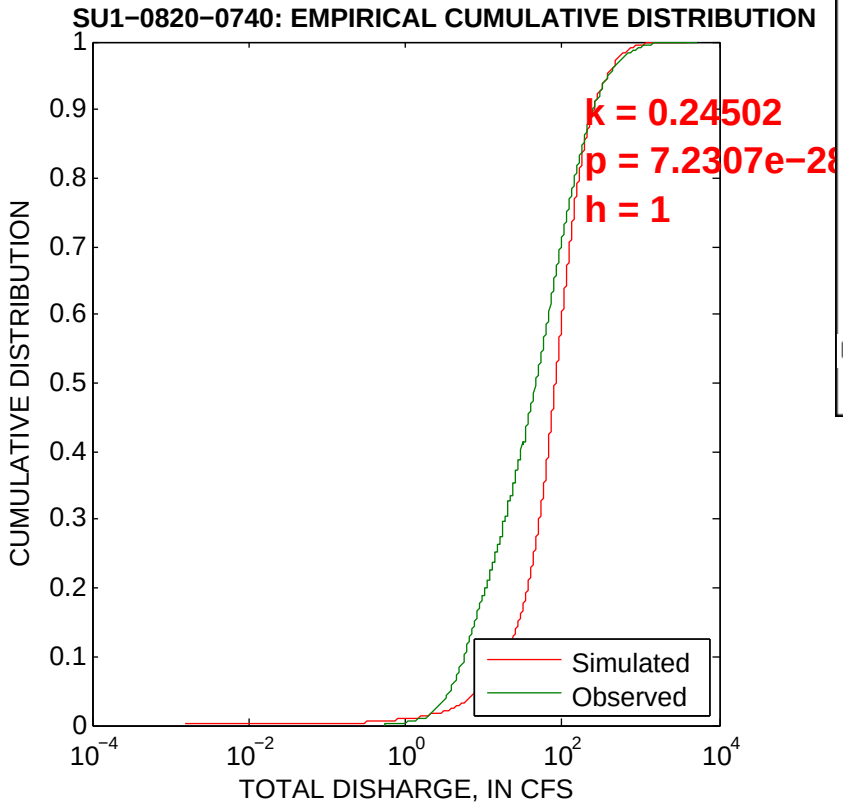
STATISTICS

	observe	simulate
n	3742	3742
min	4.8	1.1874
	0.681241	0.074597
mean	98.4198	96.186
	1.76048	1.8592
media	59	75.886
	1.77085	1.88016
max	1860	1091.3
	3.26951	3.03794
varian	16458	6835.12
	0.204681	0.114825
JB	0.001	0.001
	0.001	0.001
	ra	log
%	-2.26968	5.60778
err.va	5425.18	0.072618
rel.std.err	1.329637	0.354786
mod.eff	0.670363	0.645214

VERSION 2.1







DATA SELECTION

scenario: P620171001WQ | file: FLOW.calib

plot: FLOW - total discharge

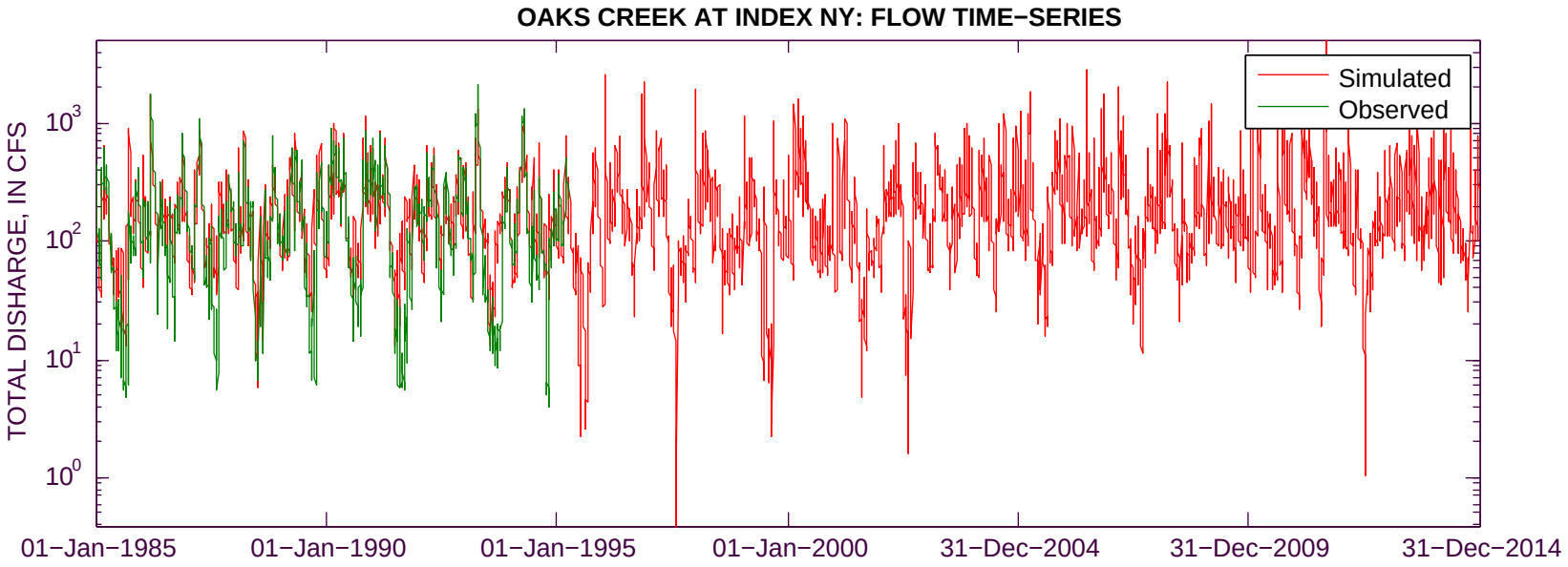
Dates: 1/1/1985 – 12/31/201

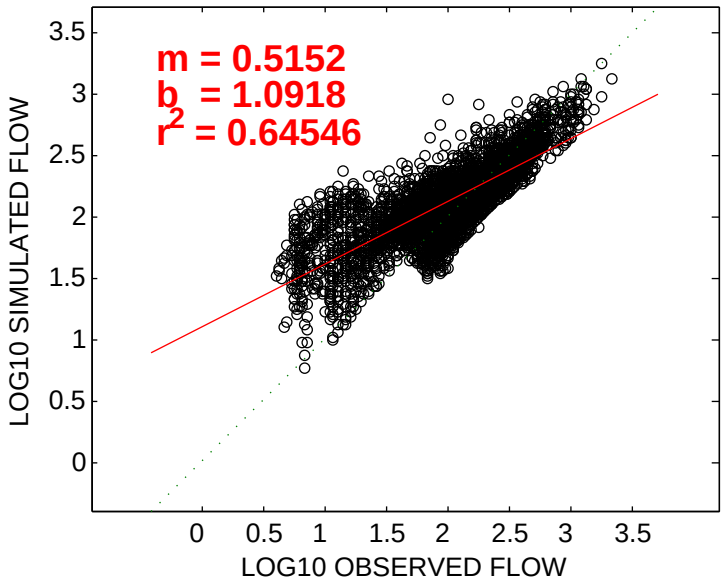
Drive: N/A | Directory: model | Observed: OBS20161101

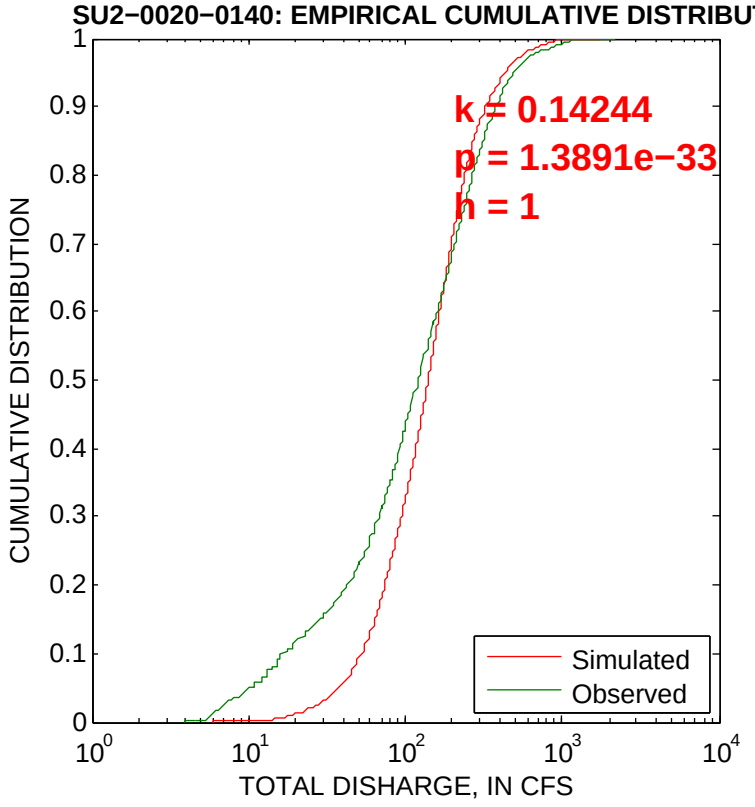
STATISTICS

		observe	simulate
n		10950	10945
min		0.53	0
		-0.275724	-2.79477
mean		108.435	124.494
		1.61944	1.86034
media		47	82.299
		1.6721	1.91578
max		5400	3811
		3.73239	3.58104
varian		45533.9	28261.9
		0.39527	0.261028
JB		0.001	0.001
		0.001	0.001
		ra	log
%		14.8091	14.8755
err.va		12852	0.184185
rel.std.err		0.282252	0.465972
mod.eff		0.717748	0.534028

VERSION 2.1







DATA SELECTION

scenario	file
P620171001WQ	FLOW.calib

plot: FLOW - total discharge

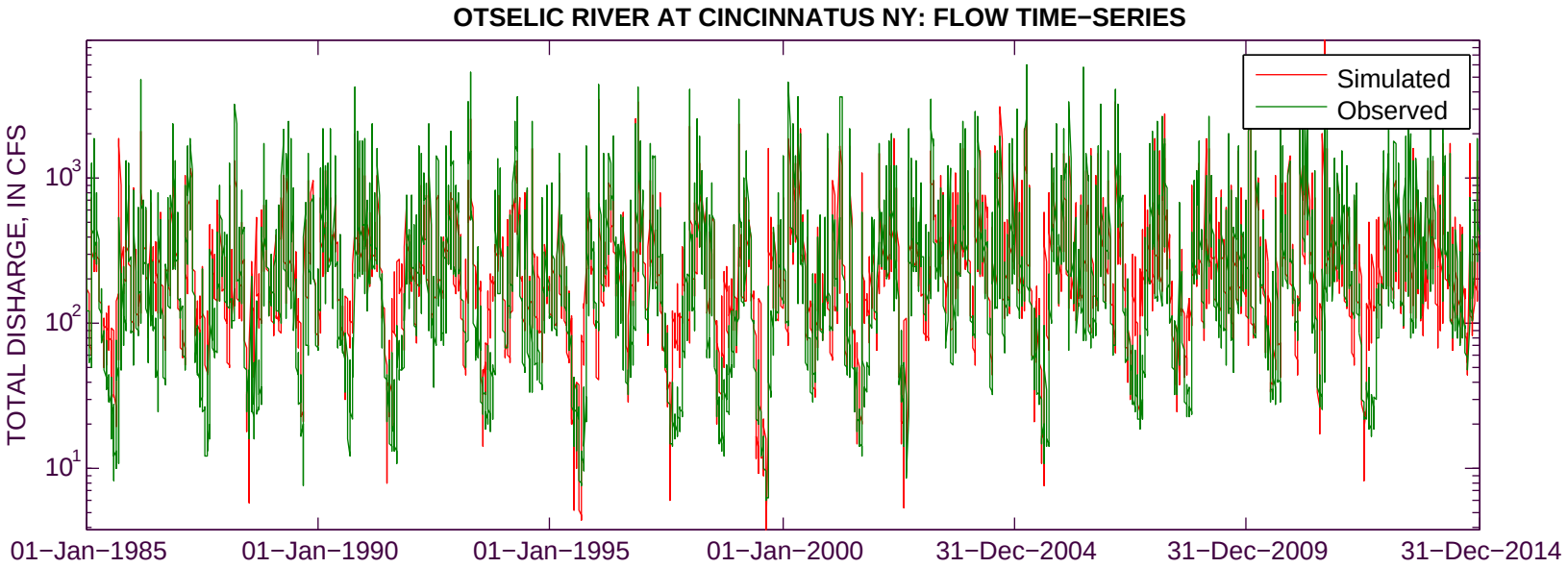
Dates: 1/1/1985 – 12/31/201

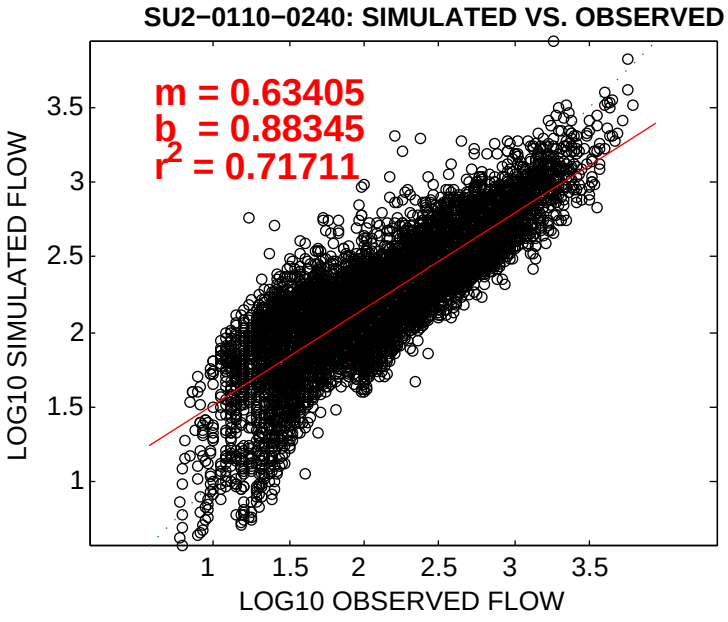
Drive	Directory	Observed
N/A	model	OBS20161101

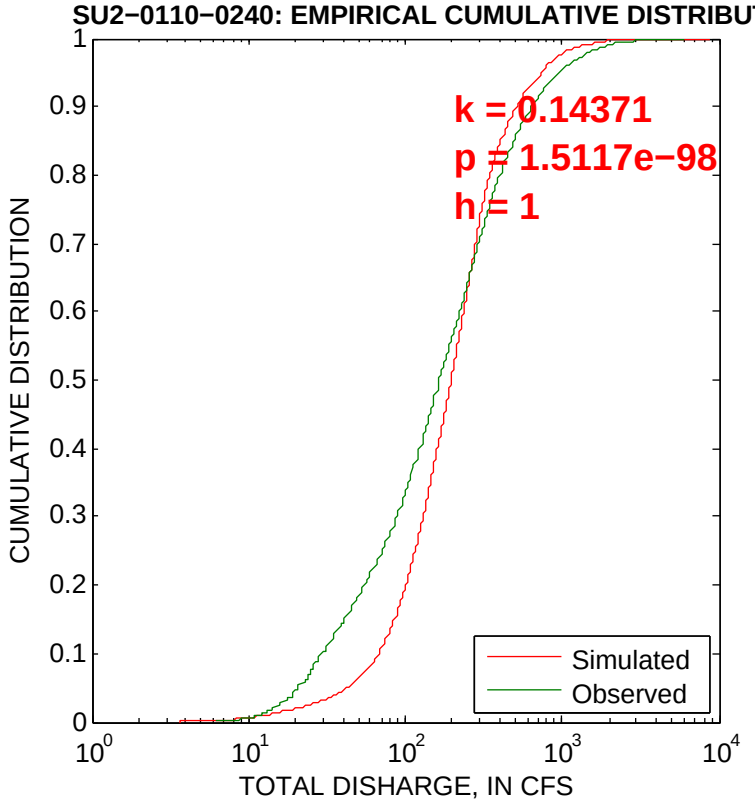
STATISTICS

	observe	simulate
n	3742	3742
min	4 0.60206	5.8956 0.770528
mean	175.289 2.01354	174.918 2.12917
media	120 2.07918	140.75 2.14845
max	2160 3.33445	1724 3.23654
varian	34296.3 0.249715	20192 0.102691
JB	0.001 0.001	0.001 0.001
	ra	log
%	-0.211227	5.74216
err.va	9116.6	0.108469
rel.std.err	0.265819	0.434373
mod.eff	0.734181	0.565627

VERSION 2.1







DATA SELECTION

scenario	file
P620171001WQ	FLOW.calib

plot: FLOW - total discharge

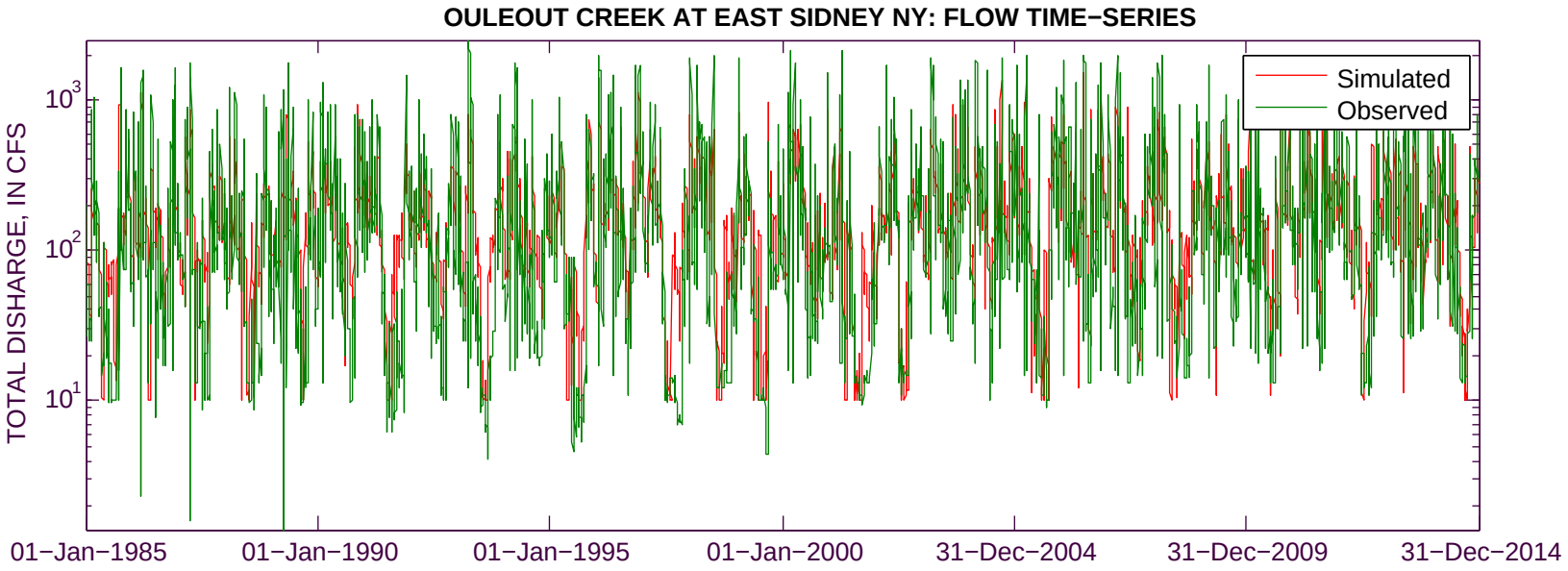
Dates: 1/1/1985 – 12/31/201

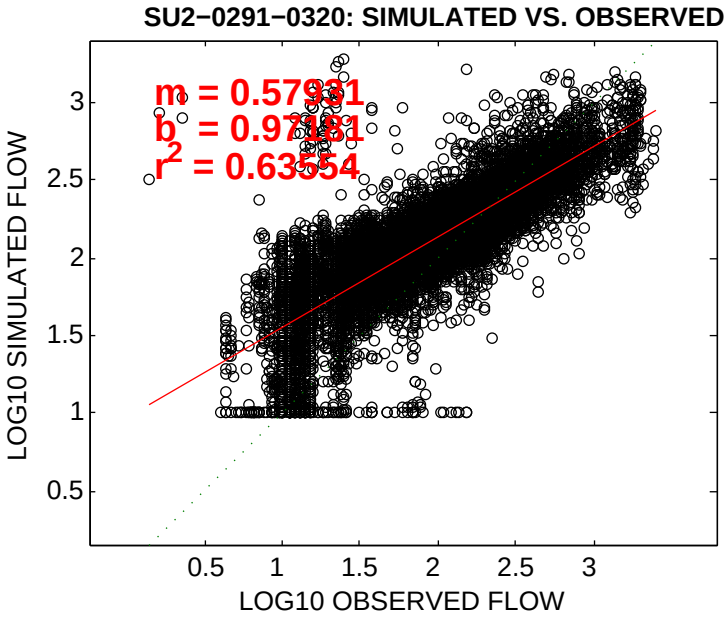
Drive	Directory	Observed
N/A	model	OBS20161101

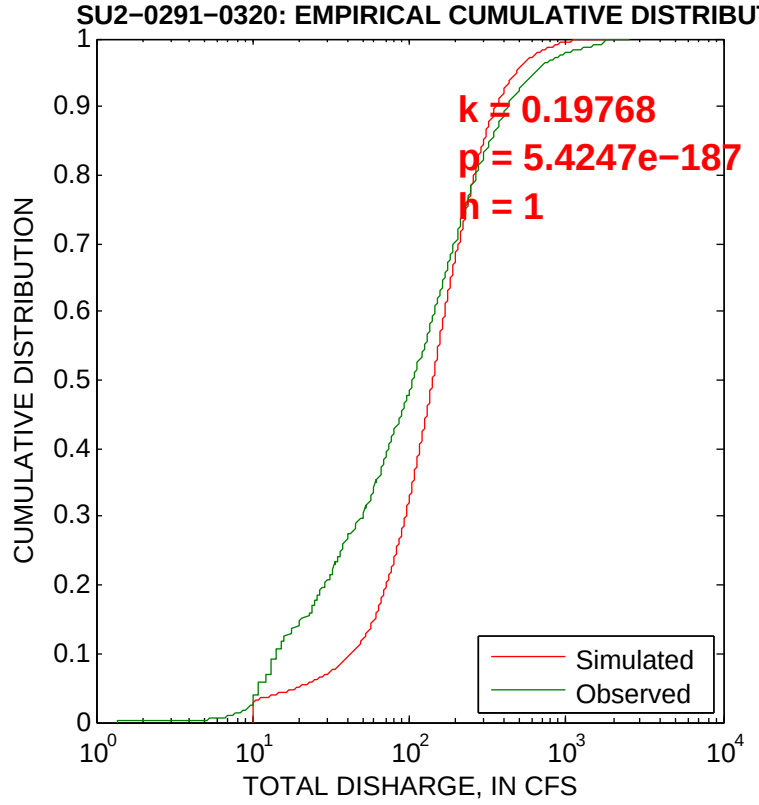
STATISTICS

n	10904	10904
	observe	simulate
min	6	3.712
	0.778151	0.569608
mean	289.623	266.324
	2.18847	2.27105
media	165	196.385
	2.21748	2.29311
max	6100	8761
	3.78533	3.94255
varian	166687	84353.2
	0.252856	0.141751
JB	0.001	0.001
	0.001	0.001
	ra	log
%	-8.04479	3.77303
err.va	56490.3	0.0807812
rel.std.err	0.3389	0.319475
mod.eff	0.6611	0.680525

VERSION 2.1







DATA SELECTION

scenario	file
P620171001WQ	FLOW.calib

plot: FLOW - total discharge

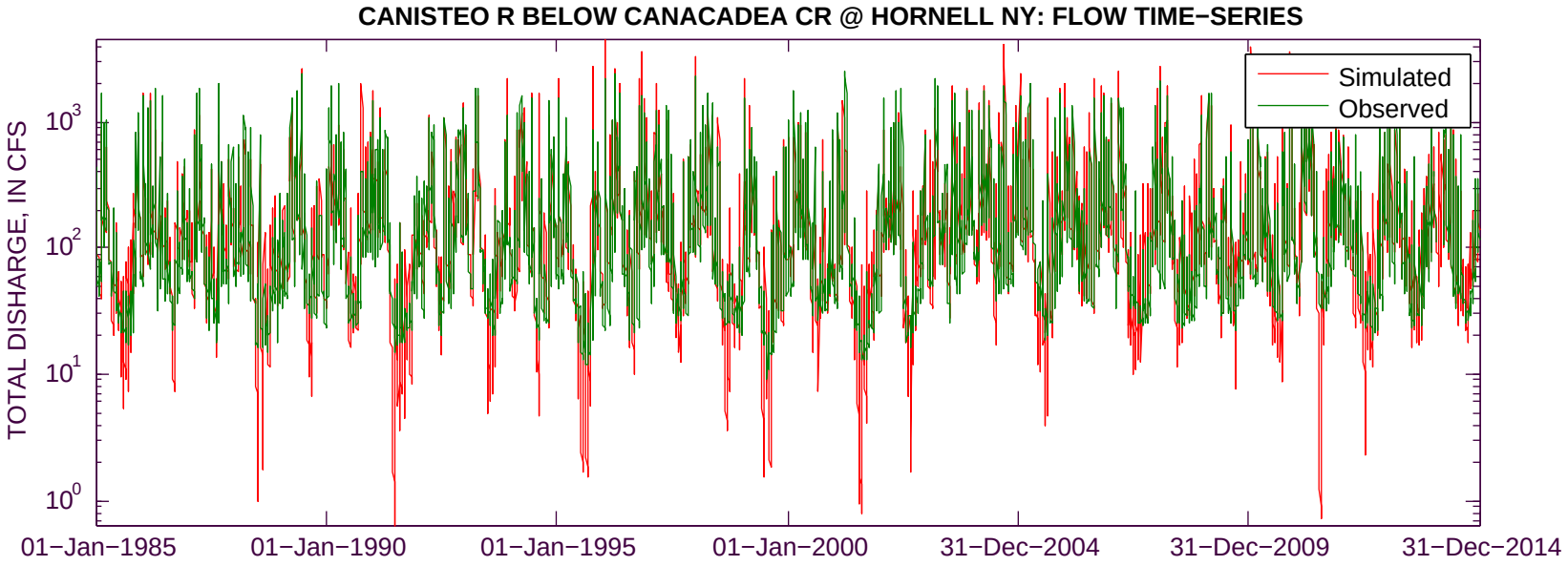
Dates	1/1/1985	12/31/201

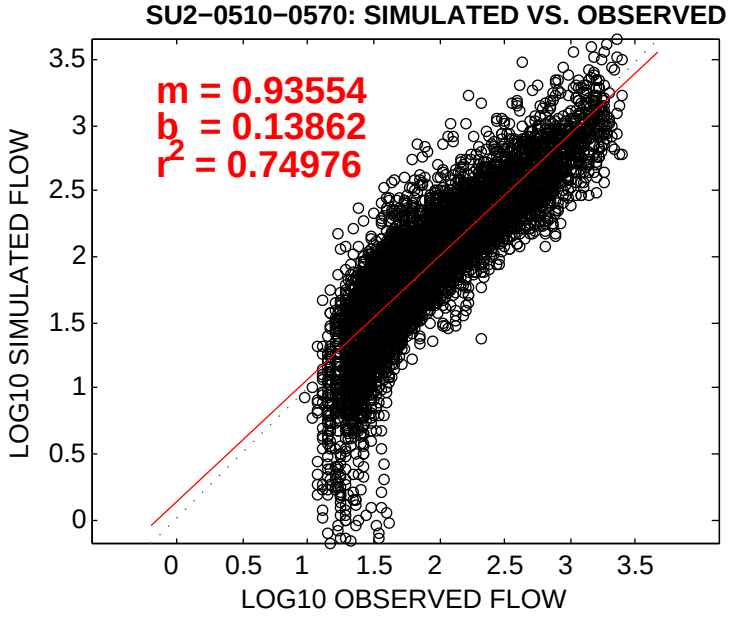
Drive	Directory	Observed
N/A	model	OBS20161101

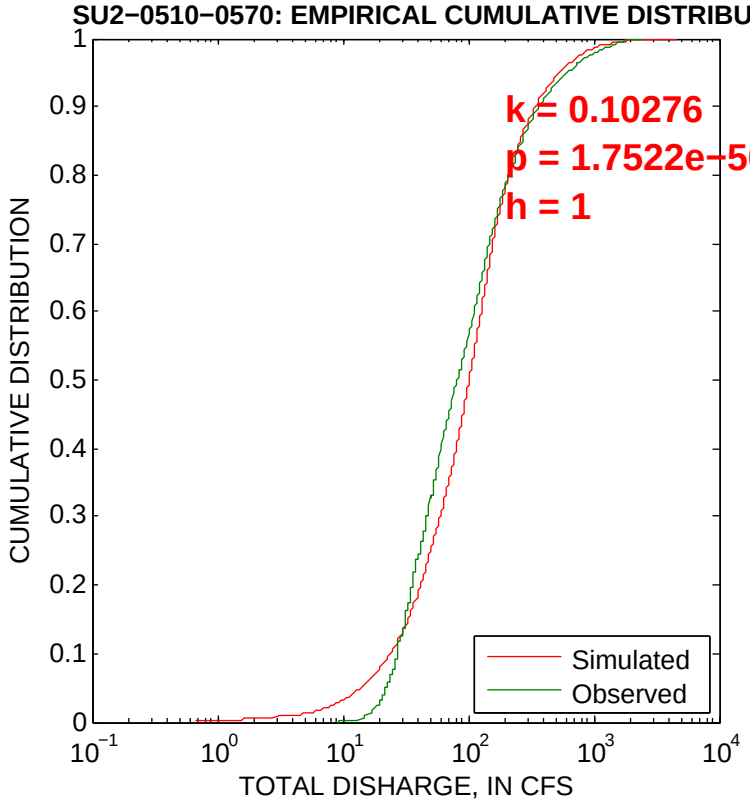
STATISTICS

		observe	simulate
n		10957	10957
min		1.4	10
		0.146128	1
mean		188.528	184.01
		1.97002	2.11306
media		106	141.63
		2.02531	2.15116
max		2510	1861.1
		3.39967	3.26977
varian		70201.3	27518.5
		0.29305	0.154747
JB		0.001	0.001
		0.001	0.001
		ra	log
%		-2.39635	7.26096
err.va		37032.4	0.128726
rel.std.err		0.527518	0.439261
mod.eff		0.472482	0.560739

VERSION 2.1







DATA SELECTION

scenario: P620171001WQ | file: FLOW.calib

plot: FLOW - total discharge

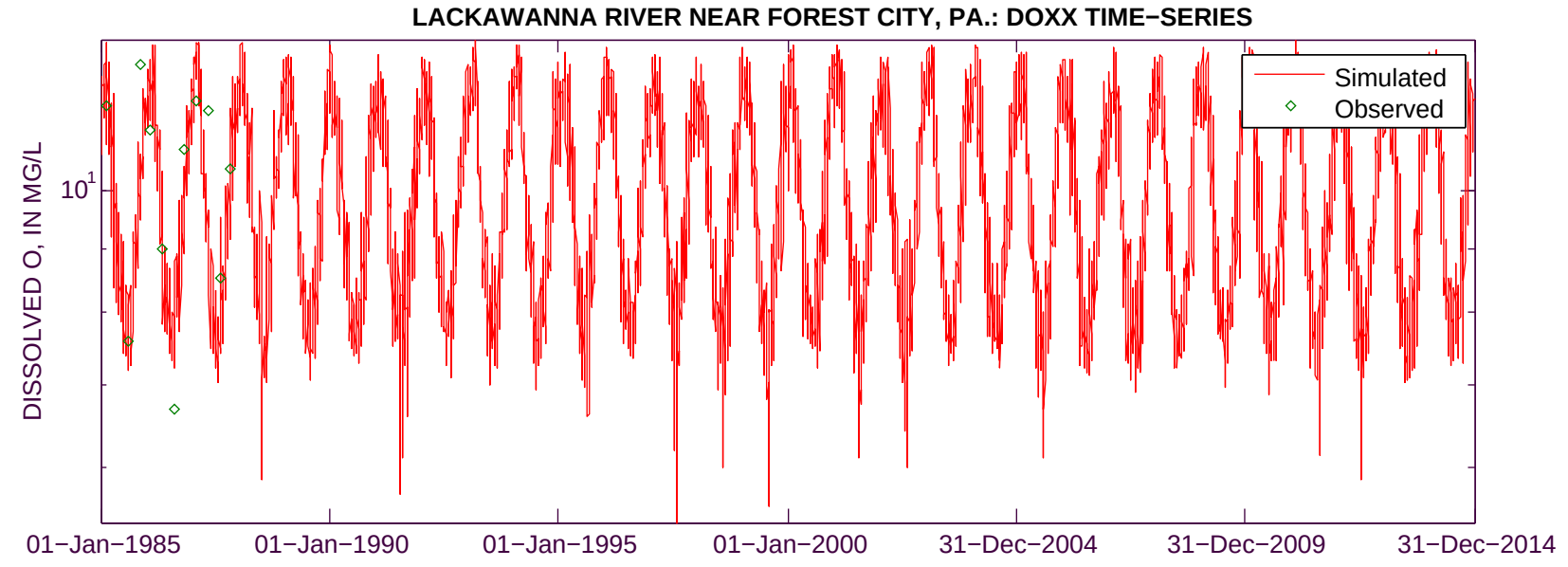
Dates: 1/1/1985 – 12/31/201

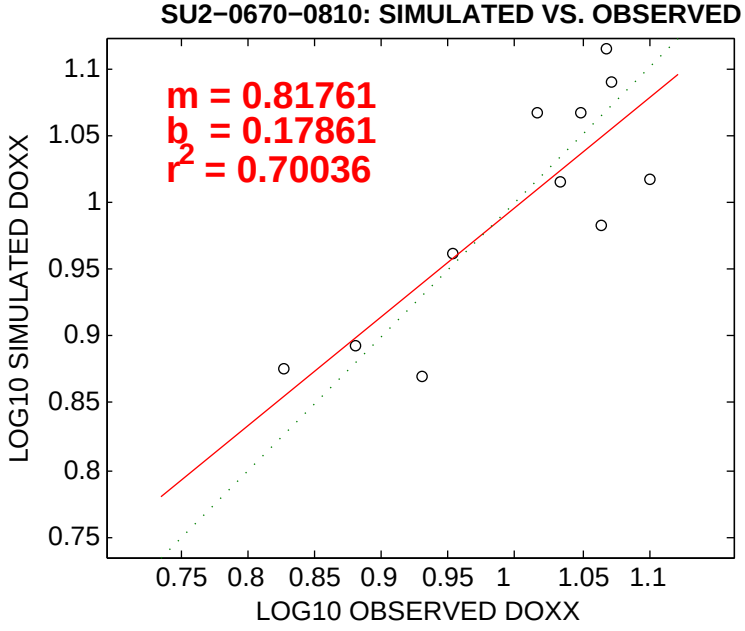
Drive: N/A | Directory: model | Observed: OBS20161101

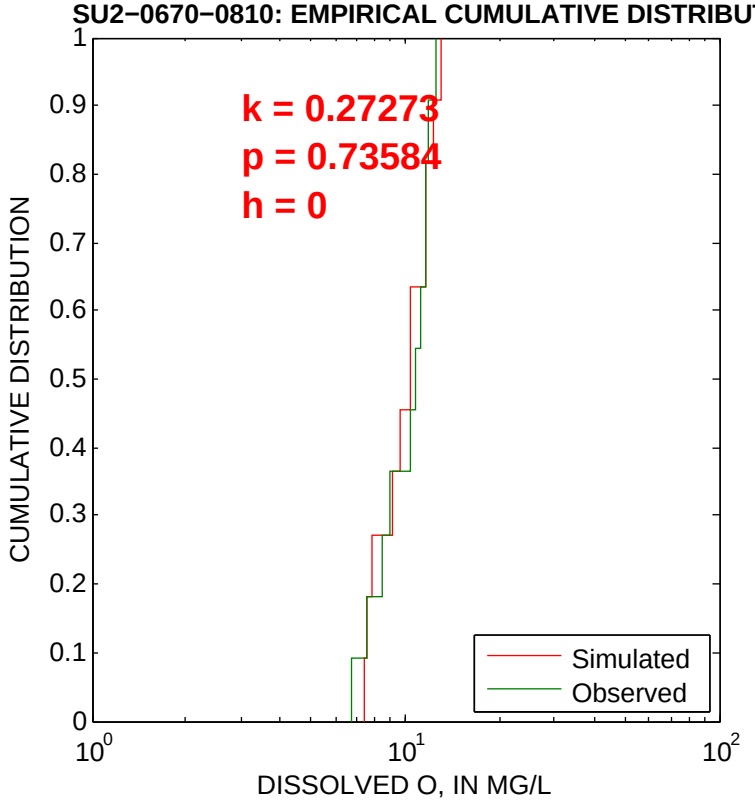
STATISTICS

		observe	simulate
n		10880	10880
min		9.3	0.64306
		0.968483	-0.191749
mean		168.052	167.487
		1.96433	1.97633
media		83	102.63
		1.91908	2.01127
max		2500	4618.8
		3.39794	3.66453
varian		65014.8	61154.1
		0.196459	0.229338
JB		0.001	0.001
		0.001	0.001
		ra	log
%		-0.335681	0.611221
err.va		25030.6	0.0583493
rel.std.err		0.384998	0.297006
mod.eff		0.615002	0.702994

VERSION 2.1







DATA SELECTION

scenario	file
P620171001WQ	DOXX.calib

plot: DOXX - dissolved oxygen

Dates: 1/1/1985 – 12/31/201

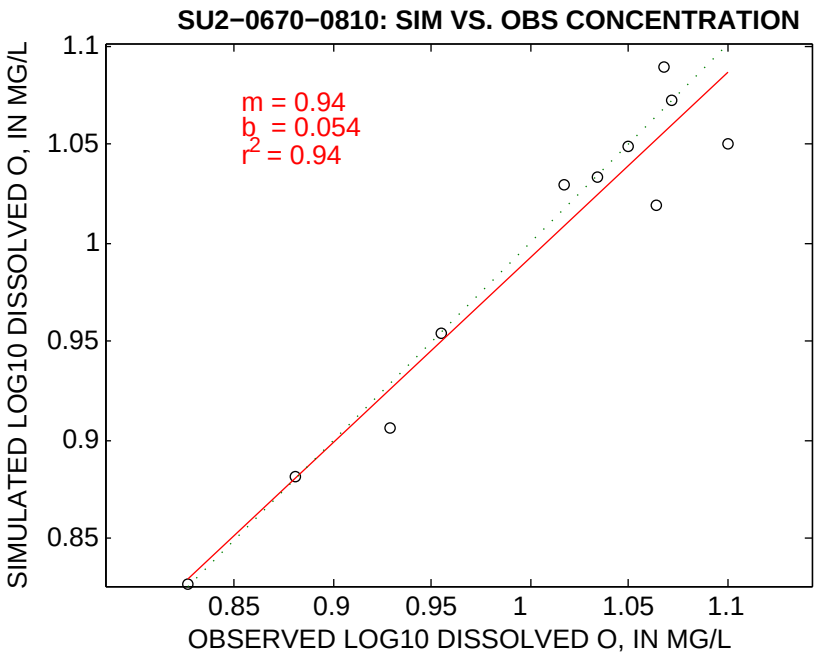
Drive	Directory	Observed
N/A	model	OBS20161101

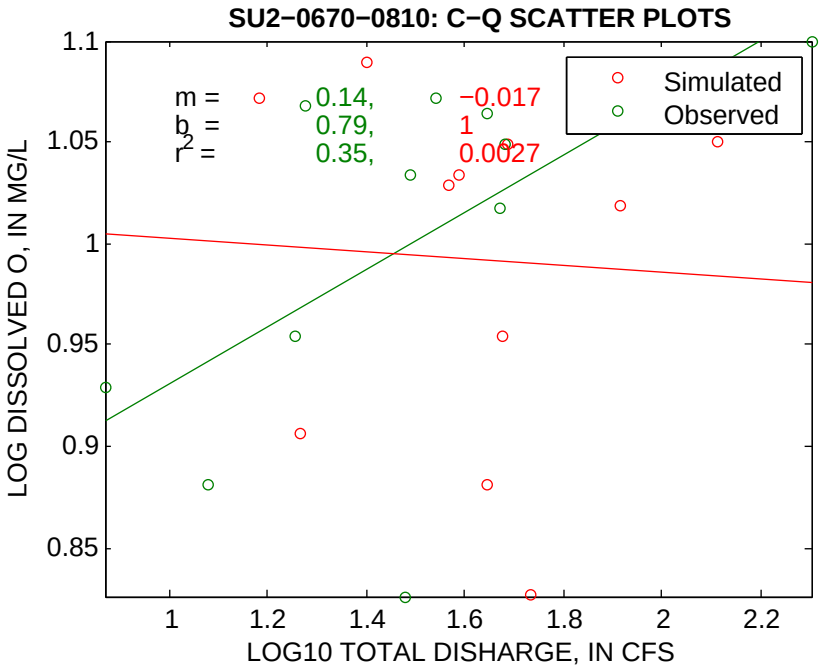
STATISTICS

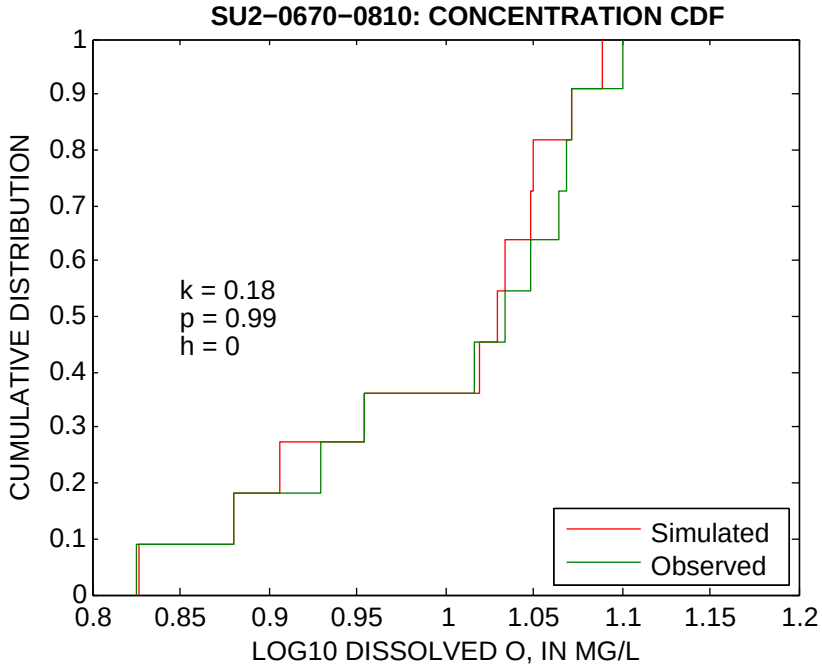
	n	11	11
		observe	simulate
min		6.7	7.4208
		0.826075	0.870451
mean		10.1727	10.084
		0.999556	0.995857
media		10.8	10.361
		1.03342	1.0154
max		12.6	13.026
		1.10037	1.11481
varian		3.72618	3.85879
		0.00794038	0.00757895
JB		0.259432	0.459032
		0.160958	0.371139
		ra	log
%		-0.872029	-0.370116
err.va		1.47592	0.00255018
rel.std.err		0.396093	0.321166
mod.eff		0.603907	0.678834

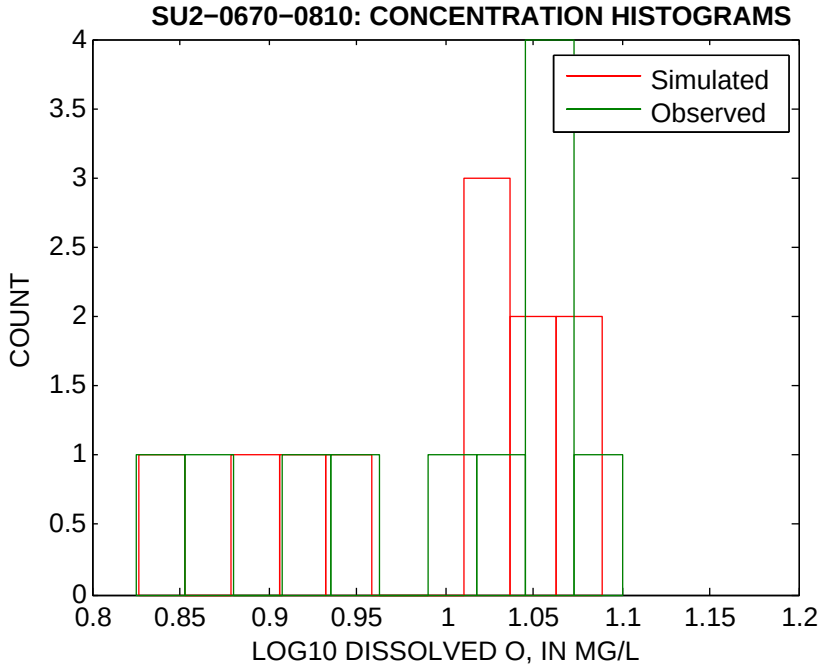
VERSION 2.1

ALL DATA
LOG10

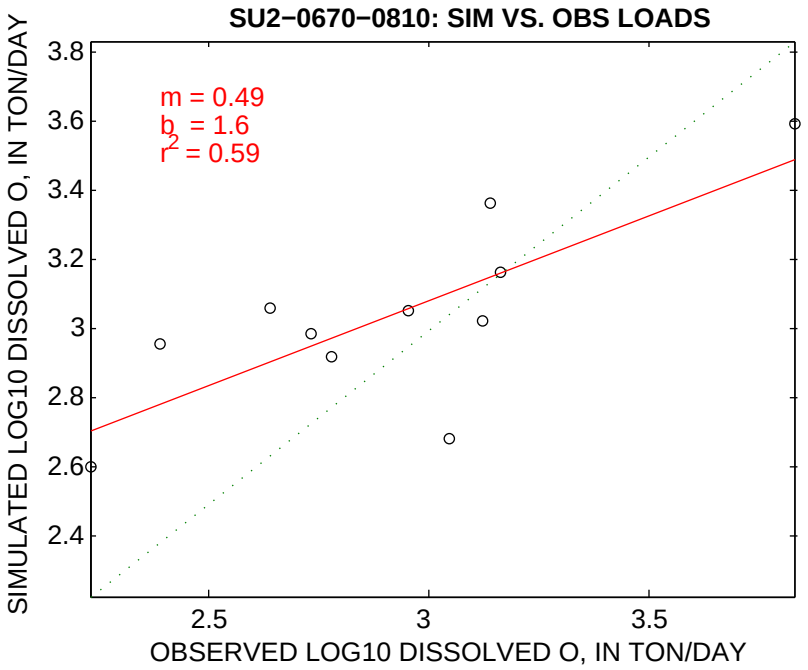




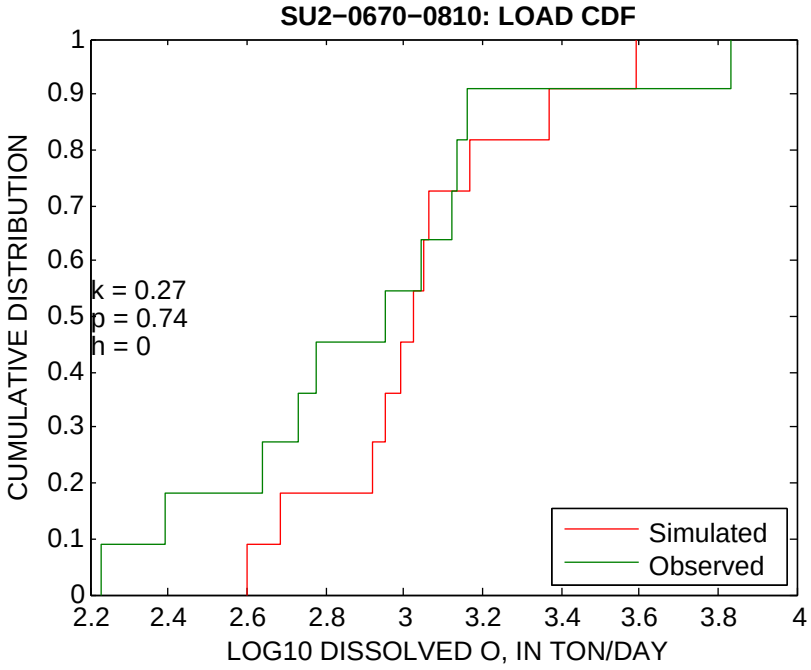


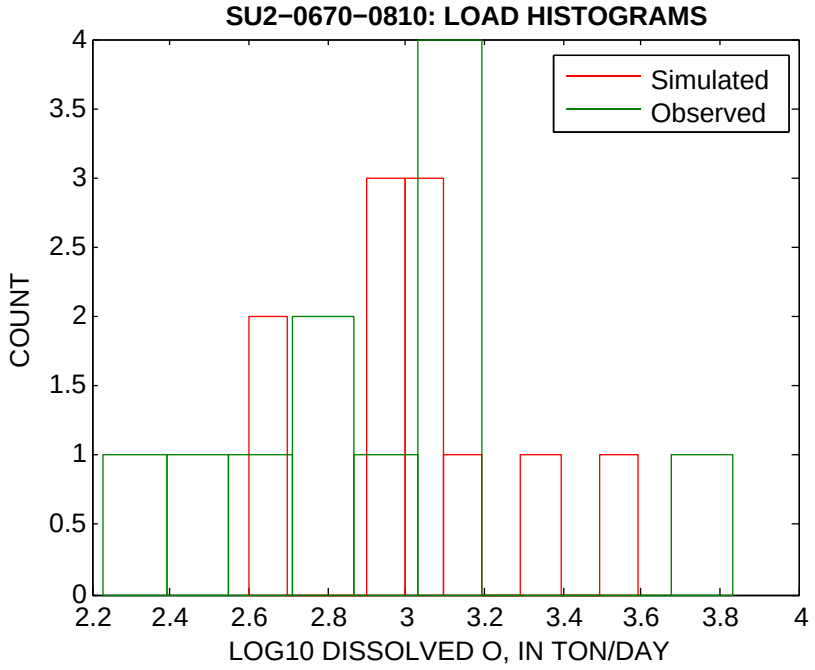


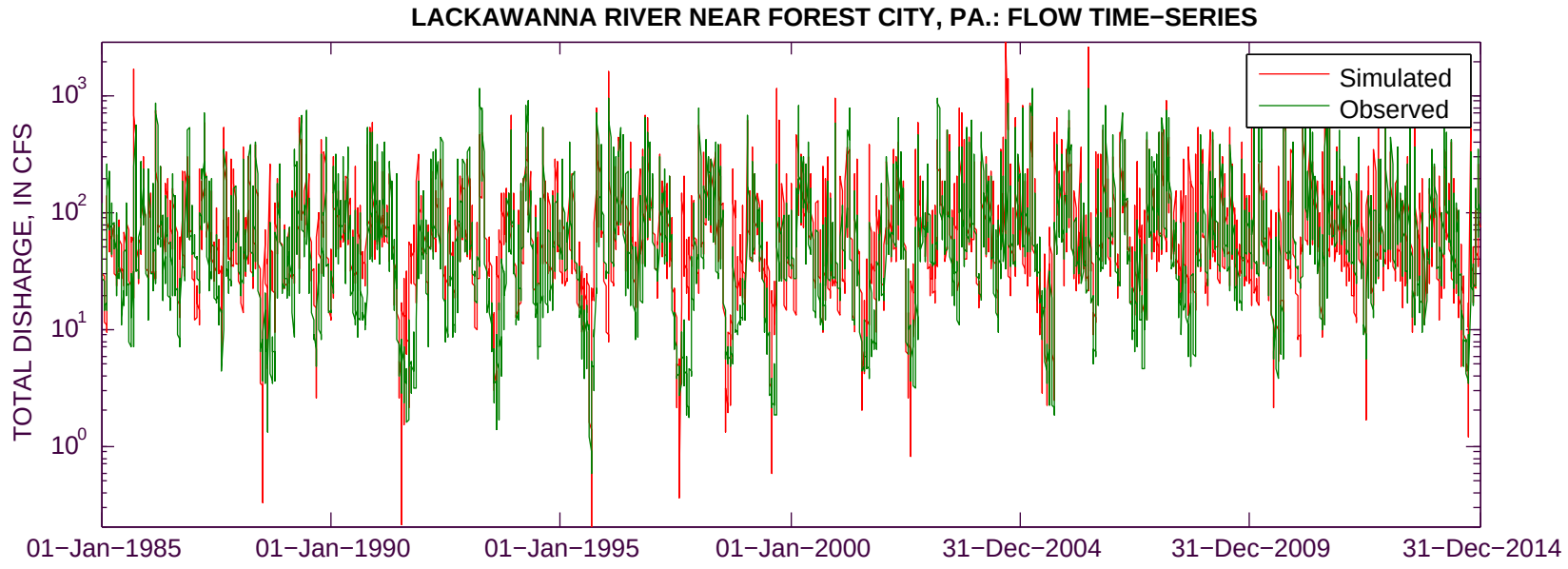
LOAD DATA
LOG10

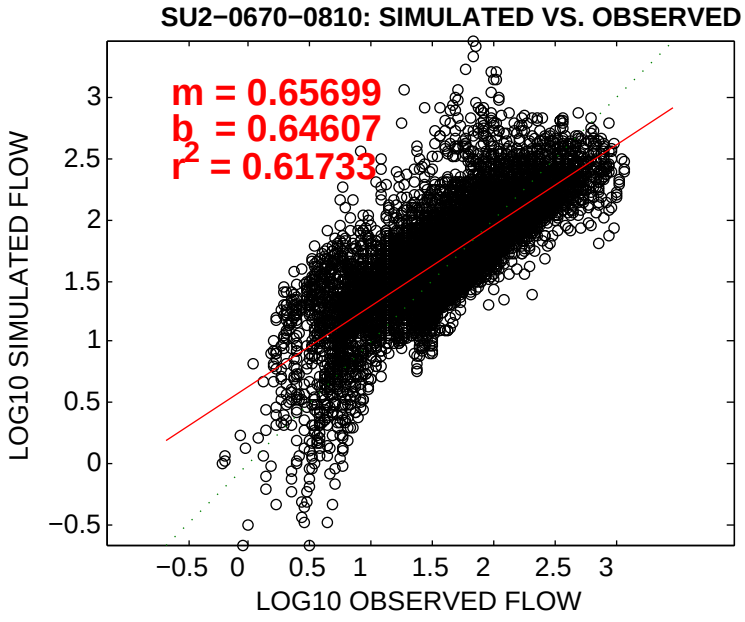


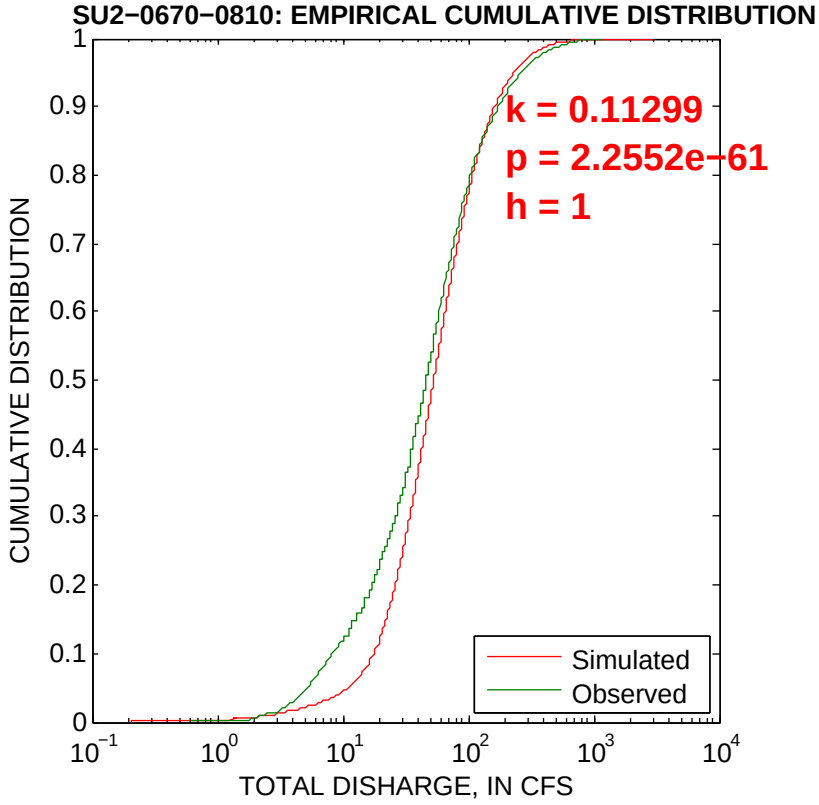












DATA SELECTION

scenario	file
P620171001WQ	FLOW.calib

plot: FLOW - total discharge

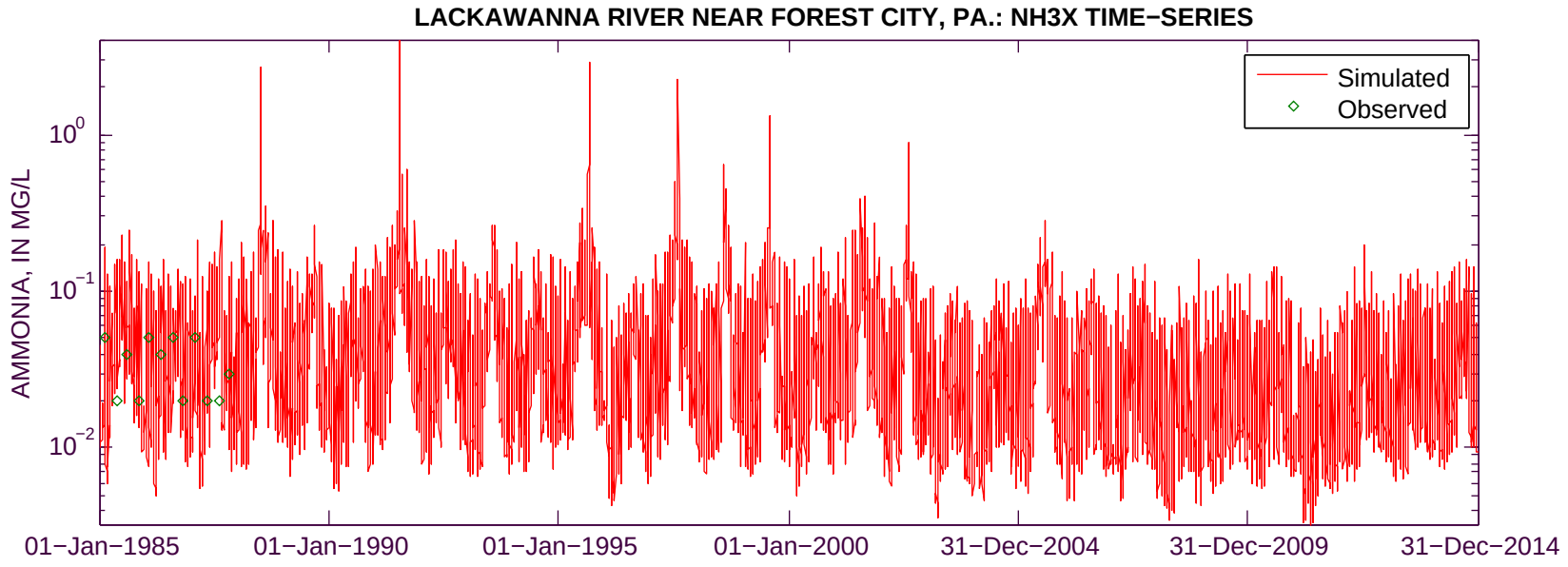
Dates: 1/1/1985 – 12/31/201

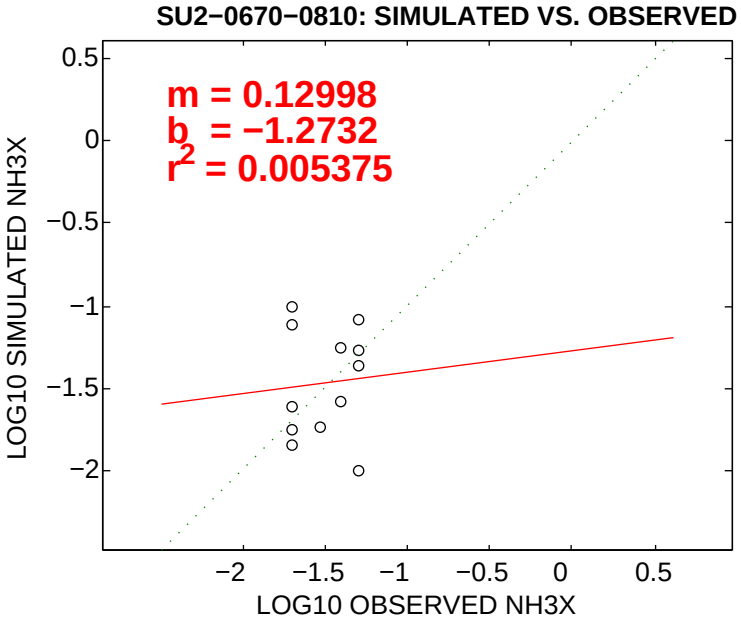
Drive	Directory	Observed
N/A	model	OBS20161101

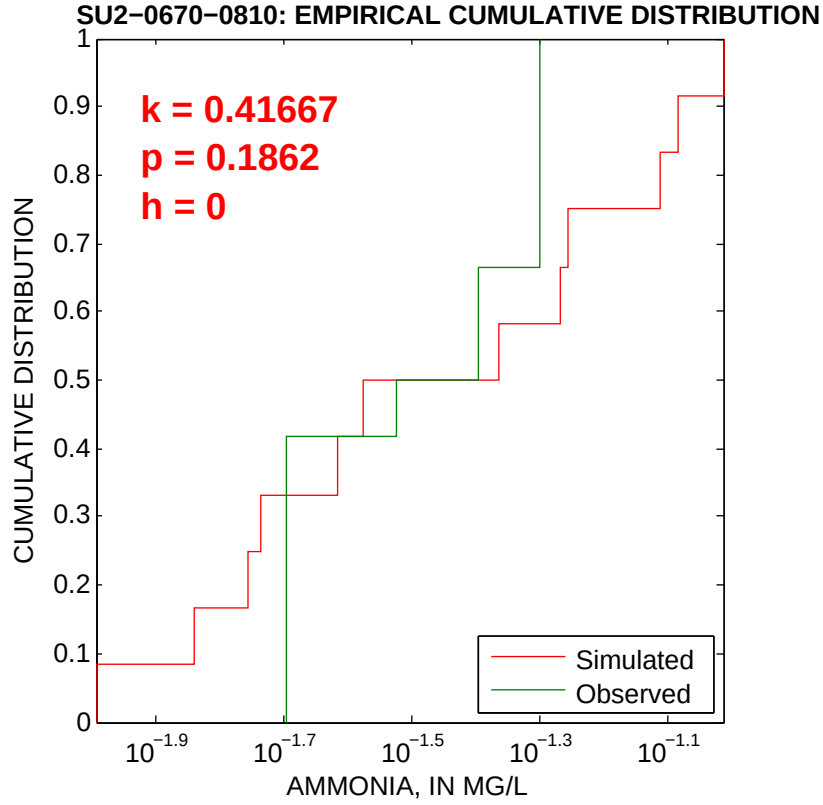
STATISTICS

		observe	simulate
n		10957	10957
min		0.59	0.20947
		-0.229148	-0.678878
mean		78.8792	80.5009
		1.63115	1.71772
media		46	53.657
		1.66276	1.72963
max		1170	2949.9
		3.06819	3.46981
varian		11740.5	10388.8
		0.250355	0.175047
JB		0.001	0.001
		0.001	0.001
		ra	log
%		2.05601	5.30736
err.va		11383.5	0.103936
rel.std.err		0.969597	0.415152
mod.eff		0.0304033	0.584848

VERSION 2.1







DATA SELECTION

scenario	file
P620171001WQ	NH3X.calib

plot: NH3X - ammonia

Dates: 1/1/1985 – 12/31/201

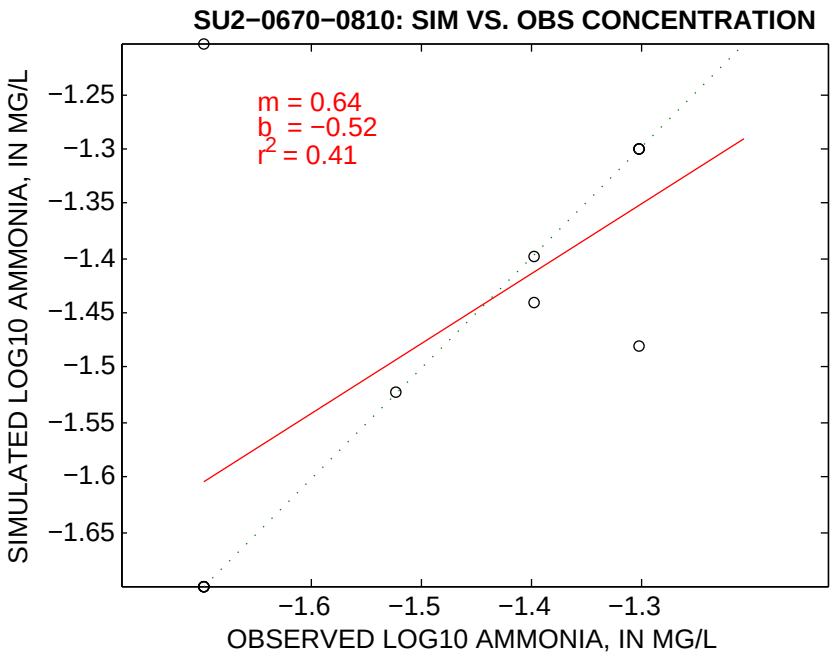
Drive	Directory	Observed
N/A	model	OBS20161101

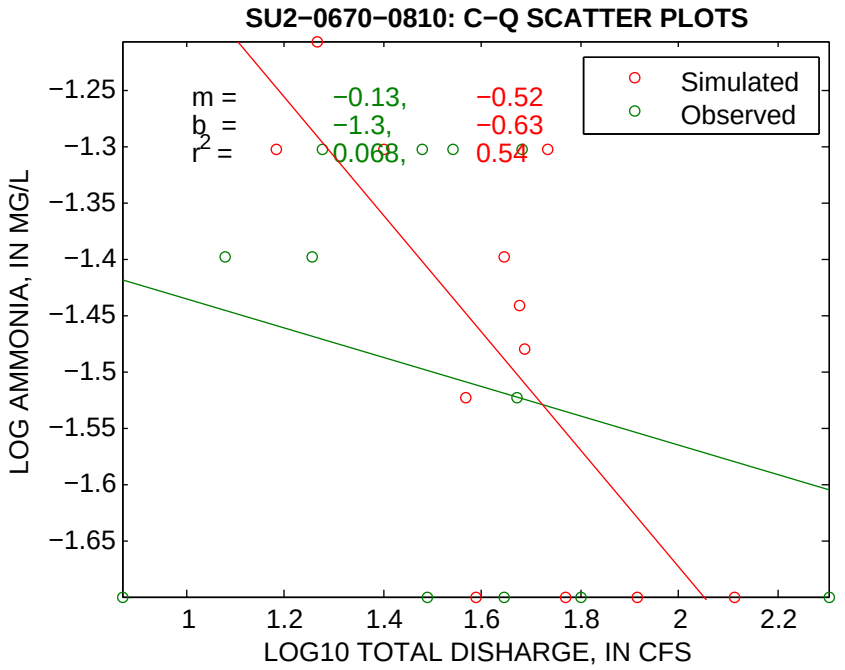
STATISTICS

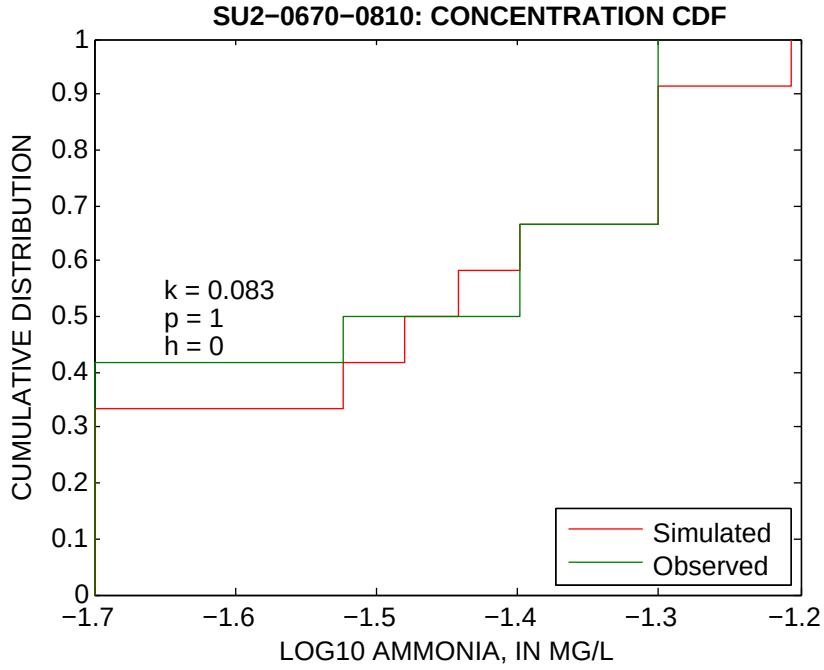
	n	12	12
		observe	simulate
min		0.02	0.010093
		-1.69897	-1.99598
mean		0.0341667	0.0433892
		-1.50148	-1.4684
media		0.035	0.0348075
		-1.46041	-1.47131
max		0.05	0.097105
		-1.30103	-1.01276
varian		0.00019015	0.00088432
		0.0343301	0.1079
JB		0.128868	0.217536
		0.118438	0.366216
		ra	log
%		26.9929	-2.20297
err.va		0.00114043	0.134499
rel.std.err		5.99748	3.91782
mod.eff		-4.99748	-2.91782

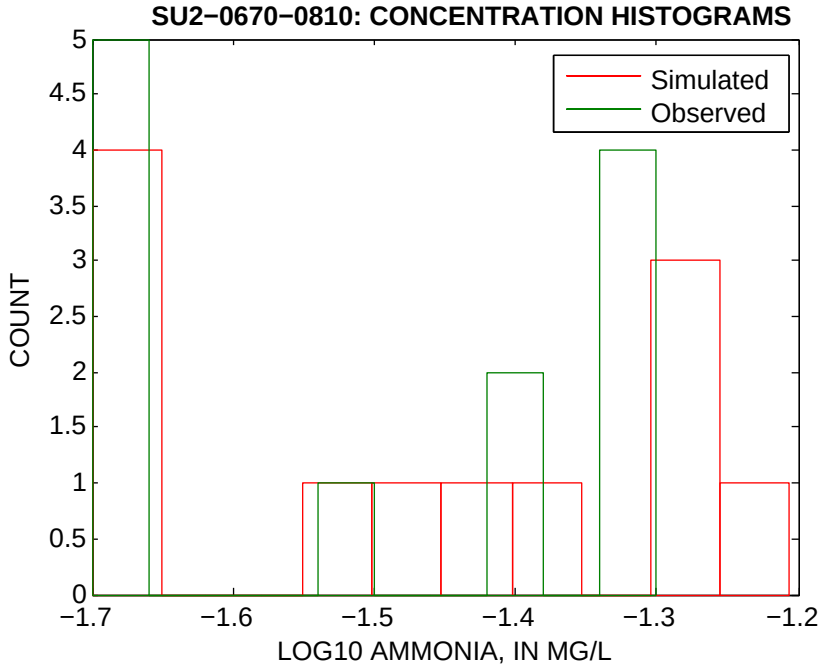
VERSION

ALL DATA
LOG10

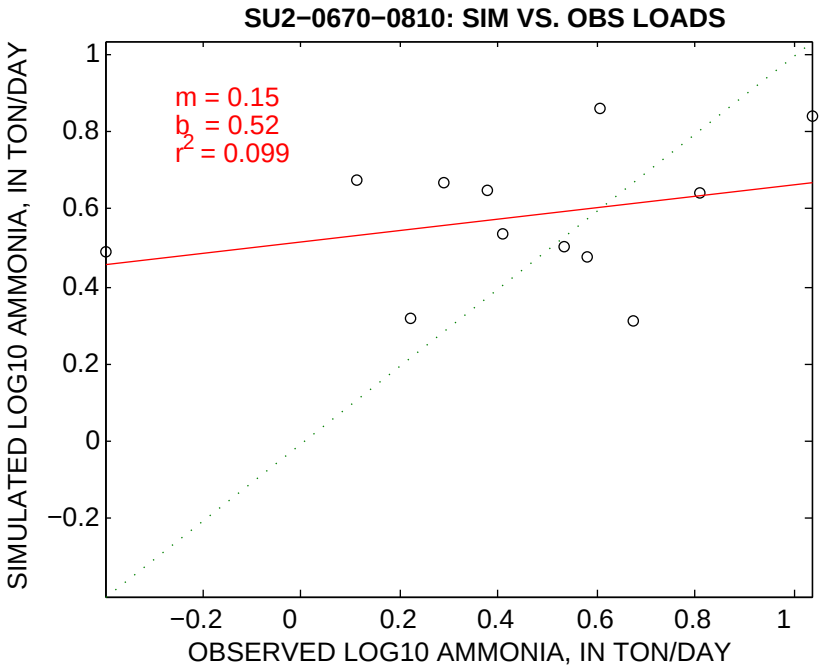


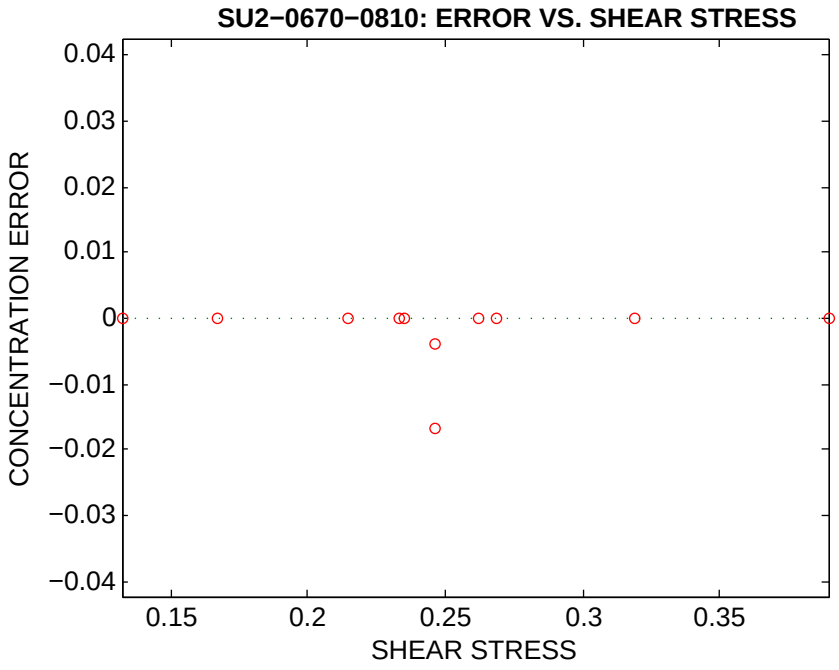


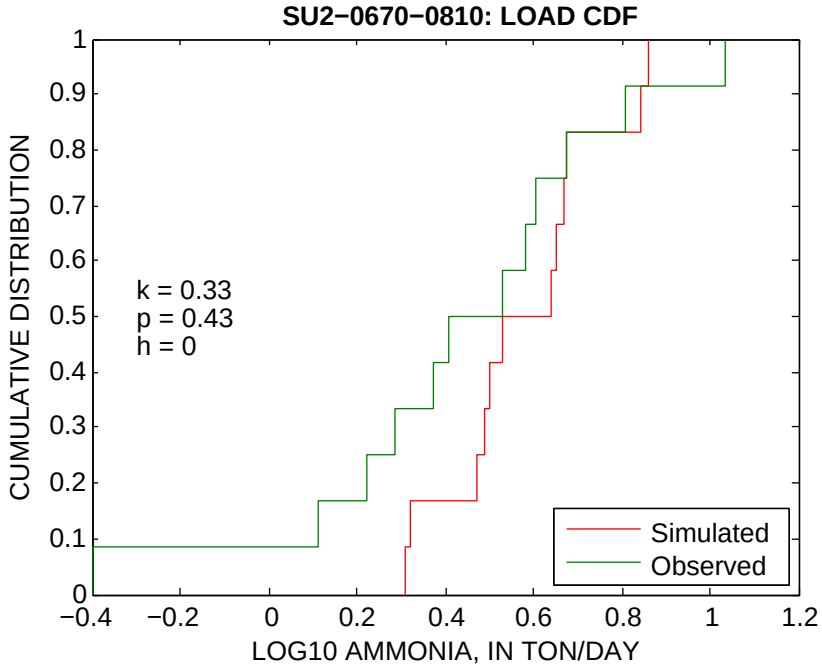


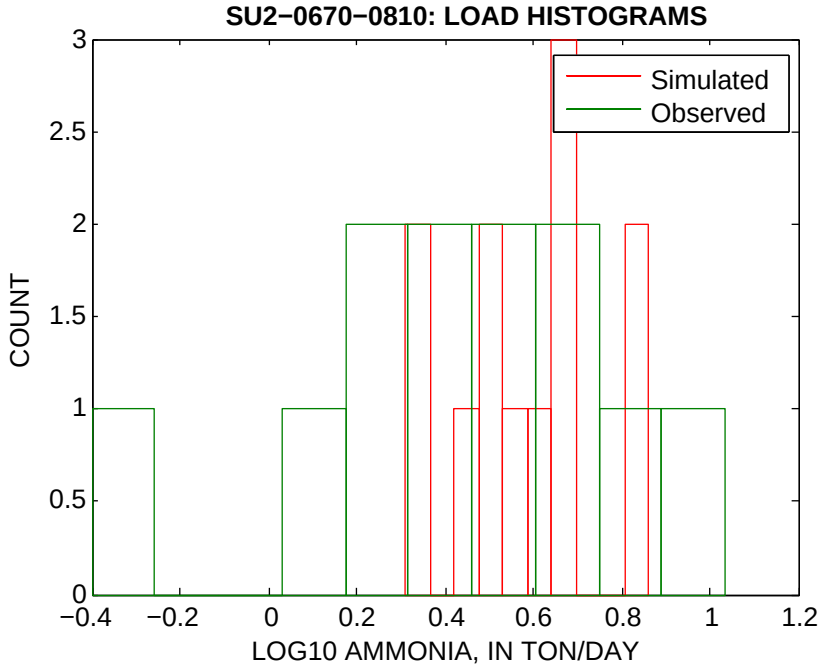


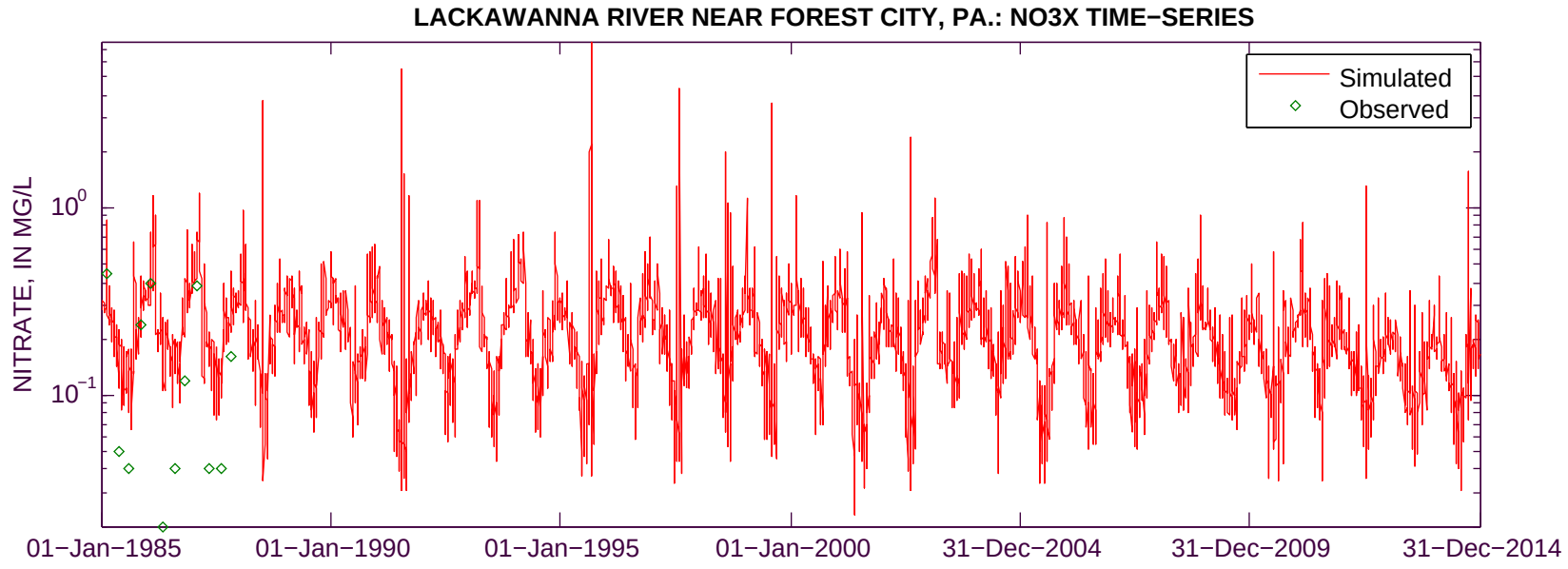
LOAD DATA
LOG10

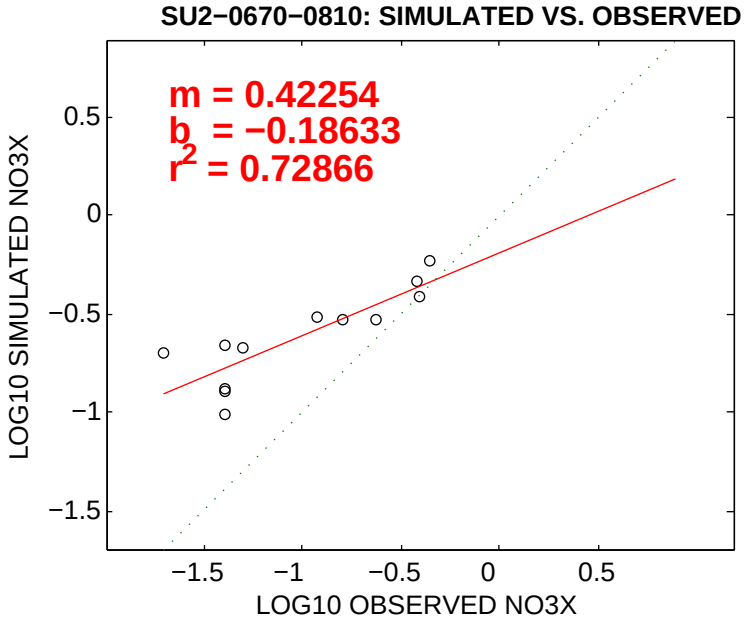


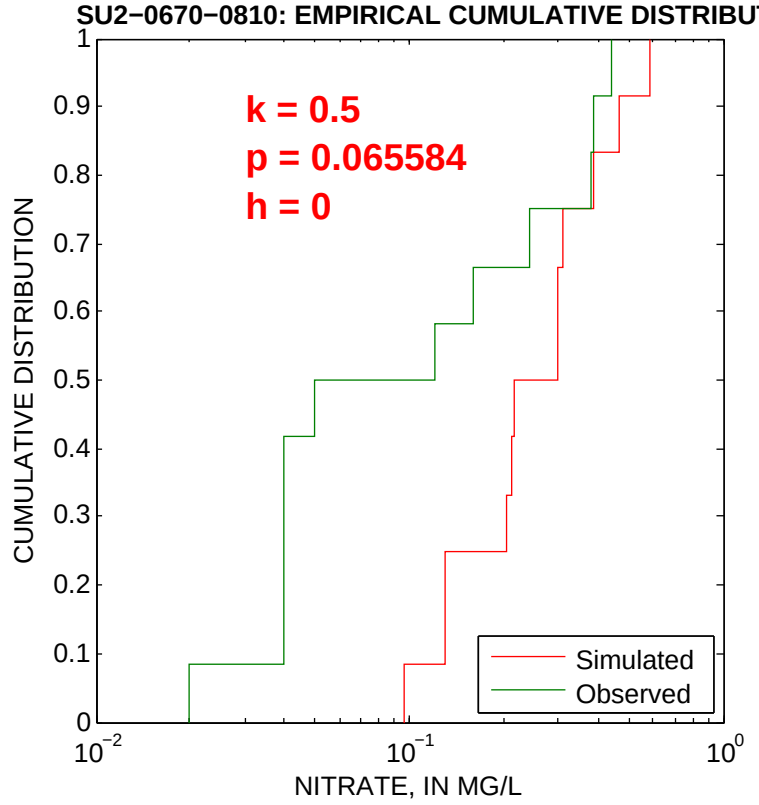












DATA SELECTION

scenario: P620171001WQ | file: NO3X.calib

plot: NO3X - nitrate

Dates: 1/1/1985 – 12/31/201

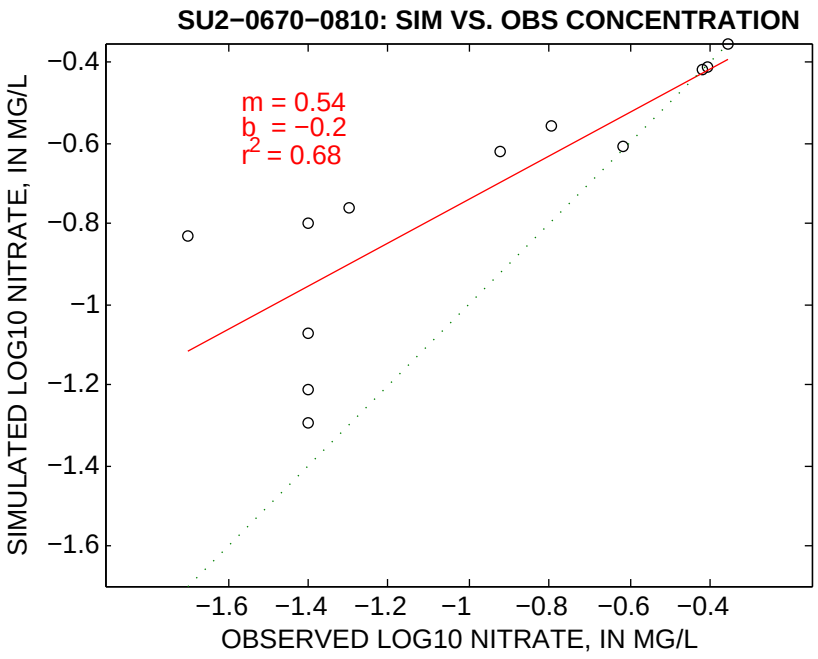
Drive: N/A | Directory: model | Observed: OBS20161101

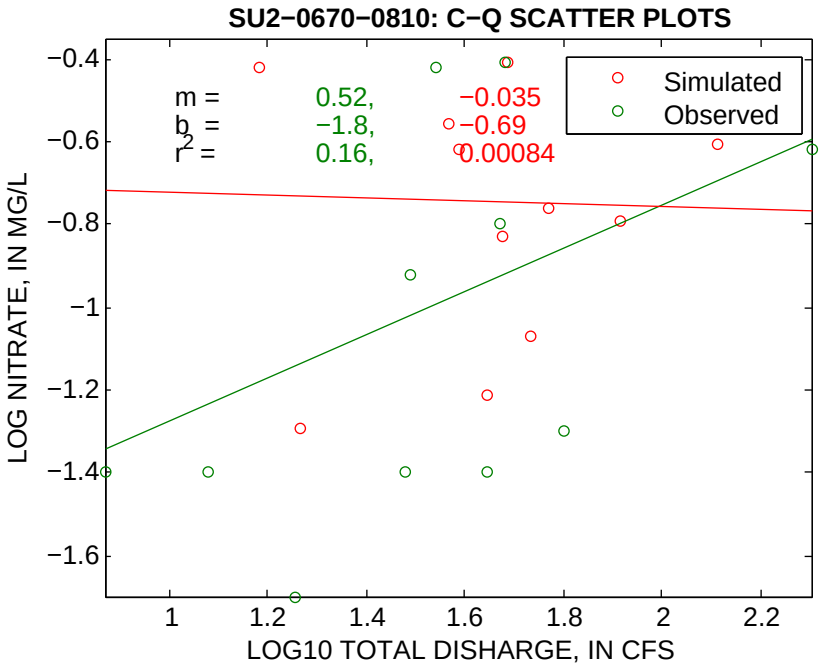
STATISTICS

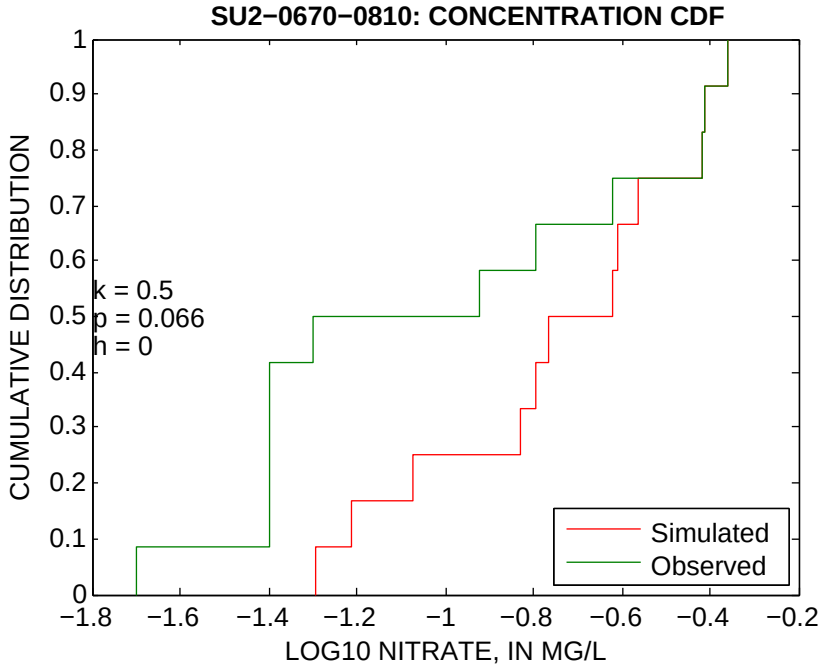
	n	12	12
		observe	simulate
min		0.02	0.097051
		-1.69897	-1.013
mean		0.163333	0.277711
		-1.0095	-0.612879
media		0.085	0.257445
		-1.11092	-0.594559
max		0.44	0.58482
		-0.356547	-0.232978
varian		0.0251697	0.0212867
		0.227596	0.0557664
JB		0.109713	0.257198
		0.221186	0.5
		ra	log
%		70.0271	-39.2886
err.va		0.0179803	0.262631
rel.std.err		0.714364	1.15394
mod.eff		0.285636	-0.153937

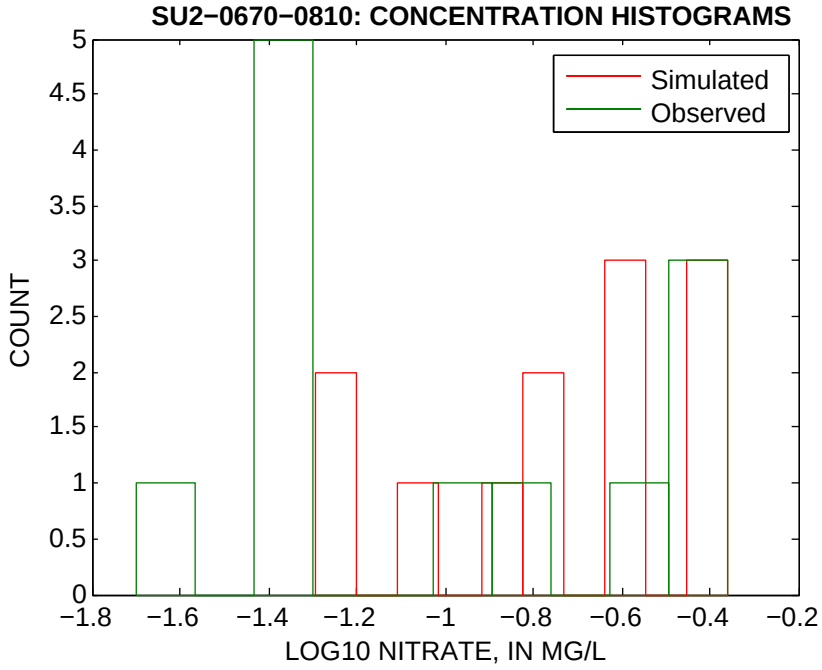
VERSION 2.1

ALL DATA
LOG10

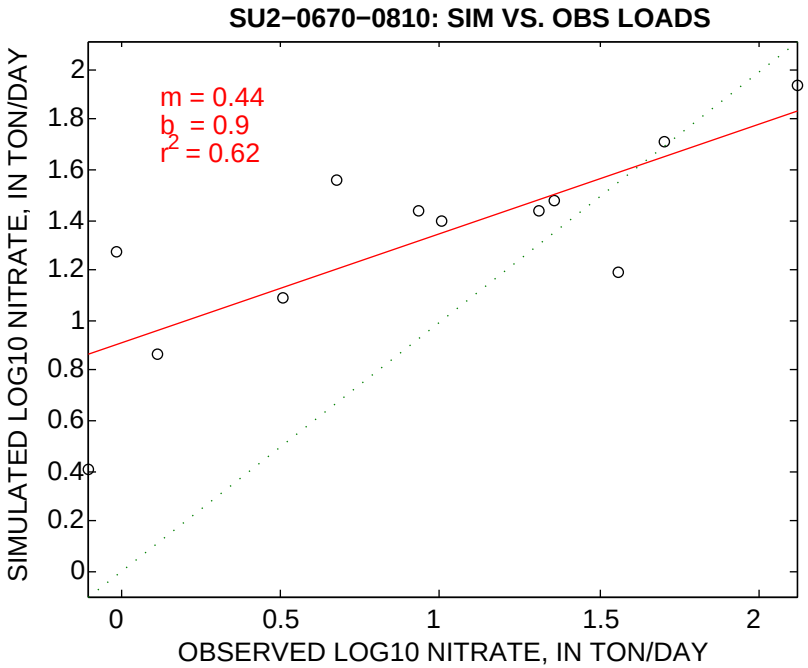


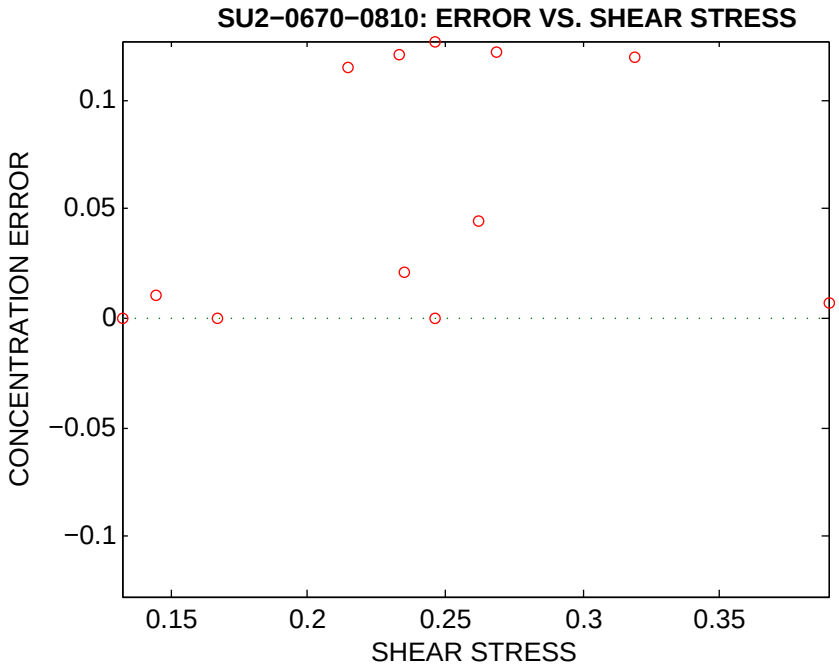


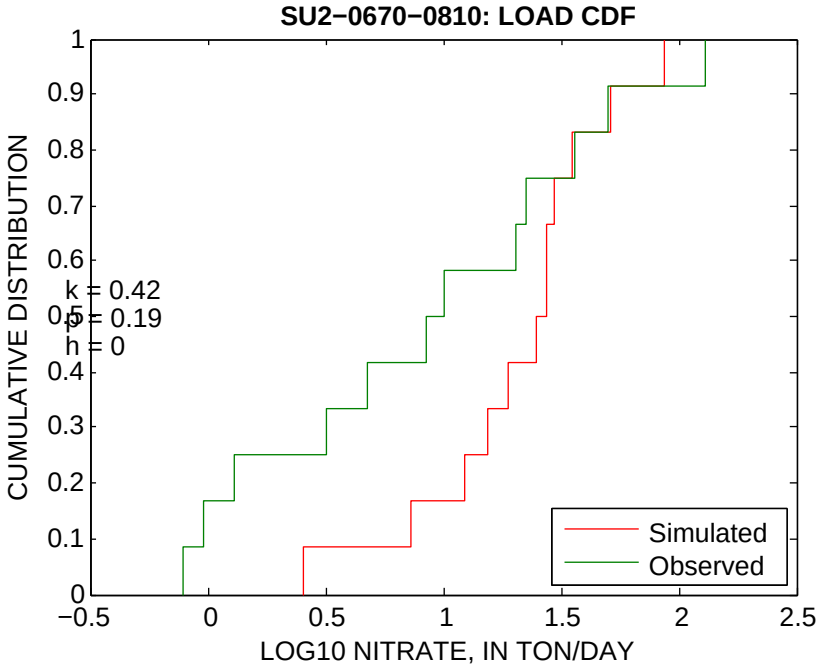


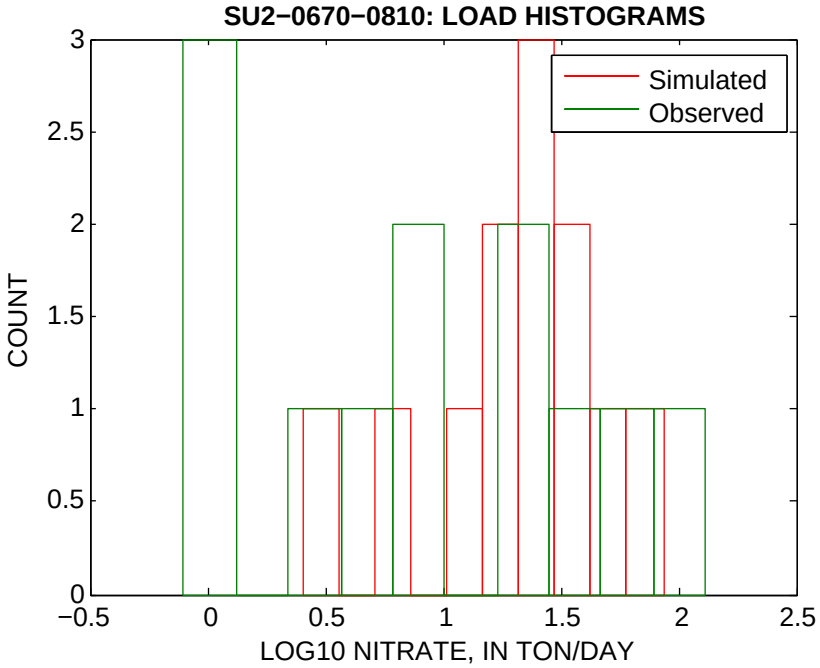


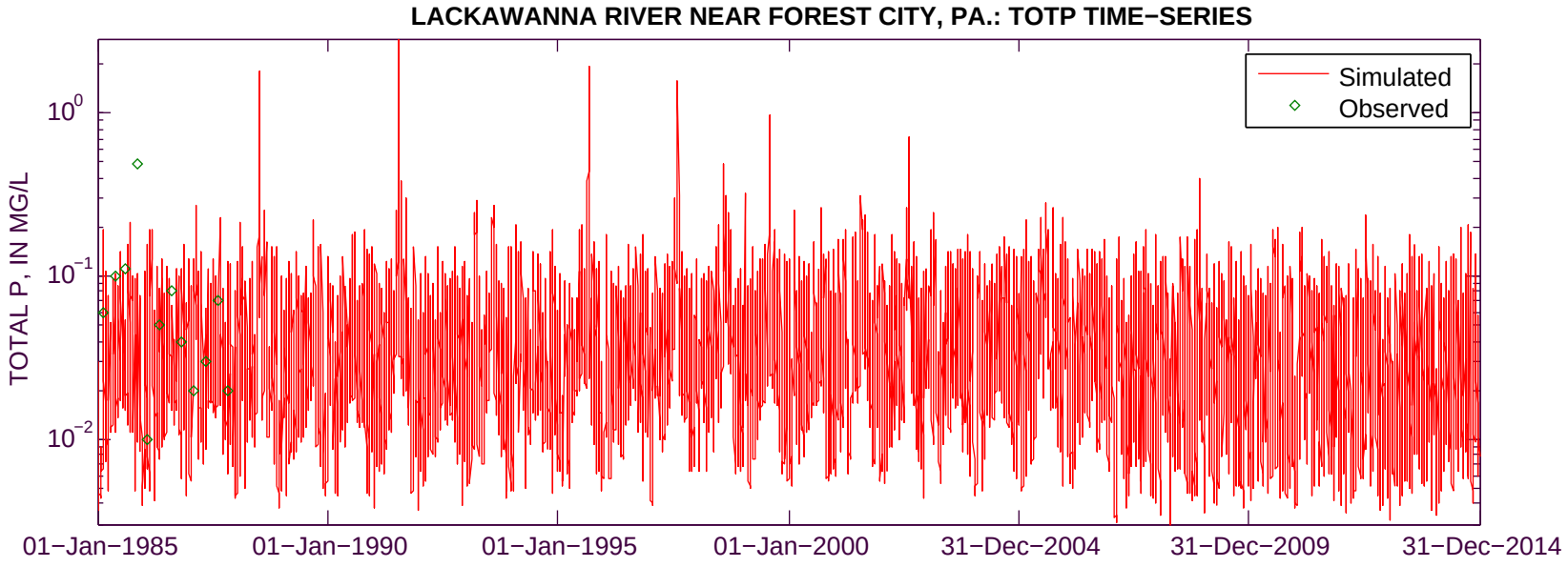
LOAD DATA
LOG10

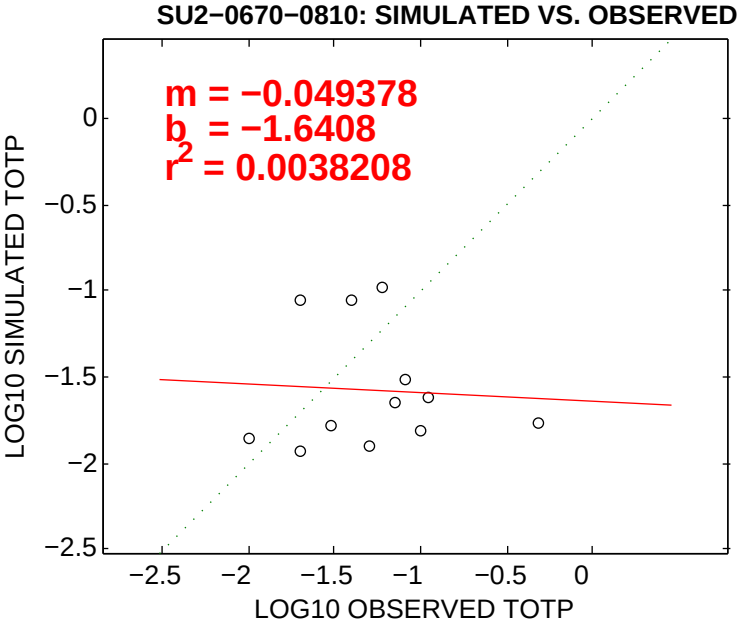


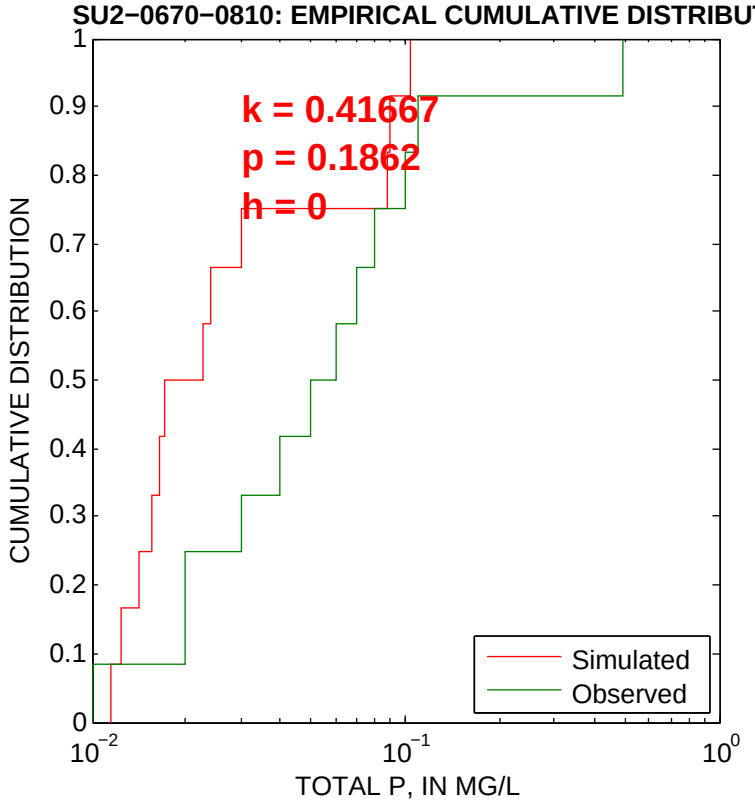












DATA SELECTION

scenario	file
P620171001WQ	TOTP.calib

plot: TOTP - total phosphorus

Dates: 1/1/1985 – 12/31/201

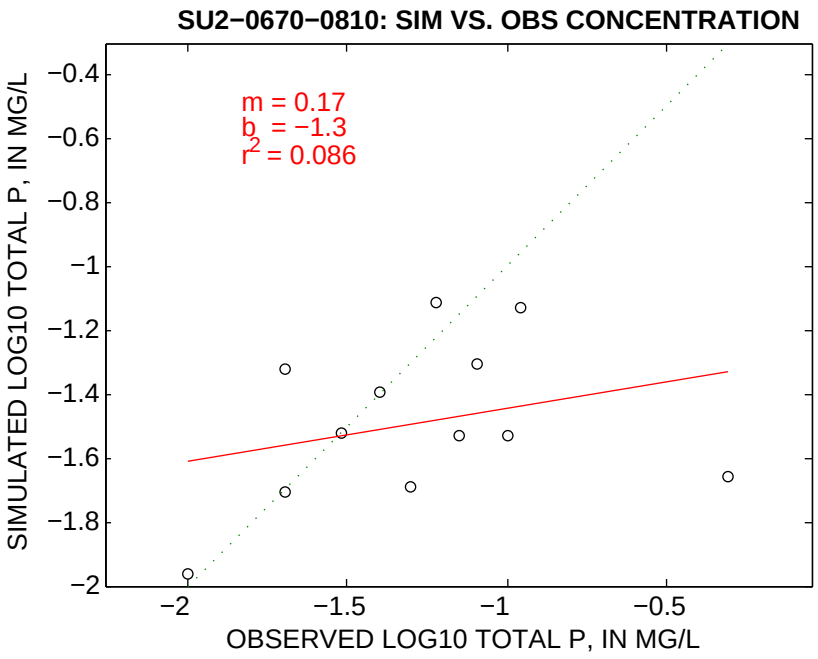
Drive	Directory	Observed
N/A	model	OBS20161101

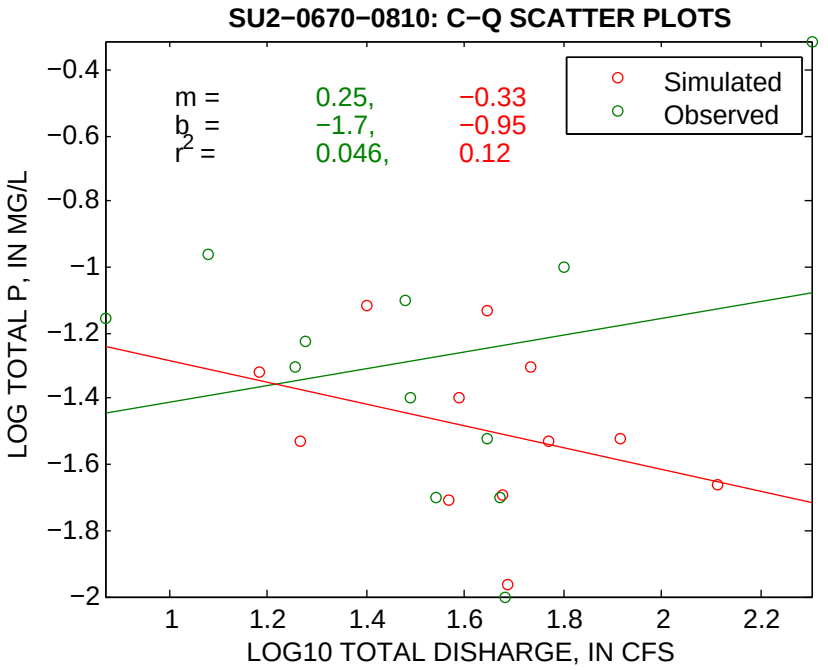
STATISTICS

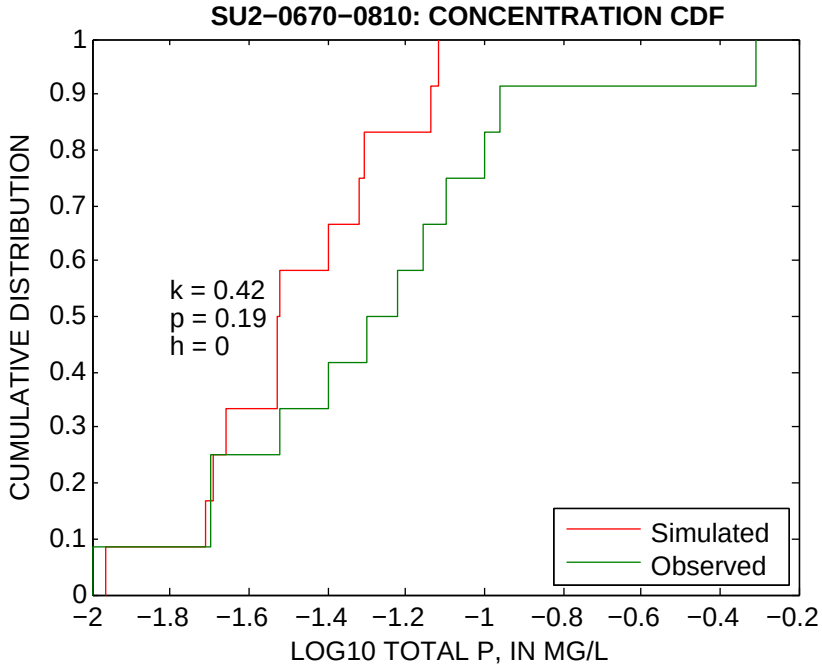
	n	12	12
		observe	simulate
min		0.01	0.01161
		-2	-1.93517
mean		0.09	0.0370109
		-1.28016	-1.57763
media		0.055	0.019786
		-1.26144	-1.70774
max		0.49	0.10358
		-0.309804	-0.984724
varian		0.0168909	0.00119809
		0.192576	0.122889
JB		0.001	0.055956
		0.5	0.105517
		ra	log
%		-58.8768	23.2378
err.va		0.0230469	0.431023
rel.std.err		1.36446	2.23819
mod.eff		-0.364457	-1.23819

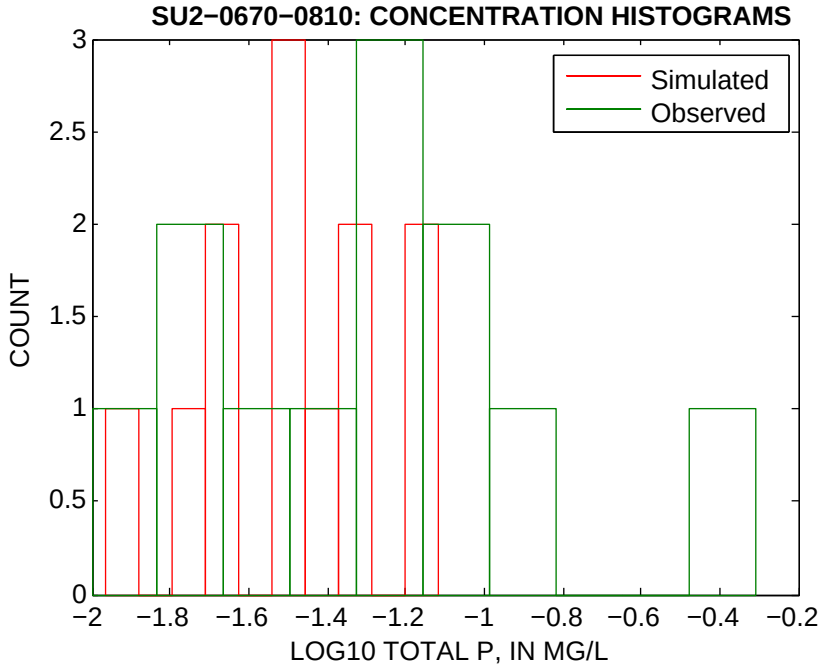
VERSION 2.1

ALL DATA
LOG10

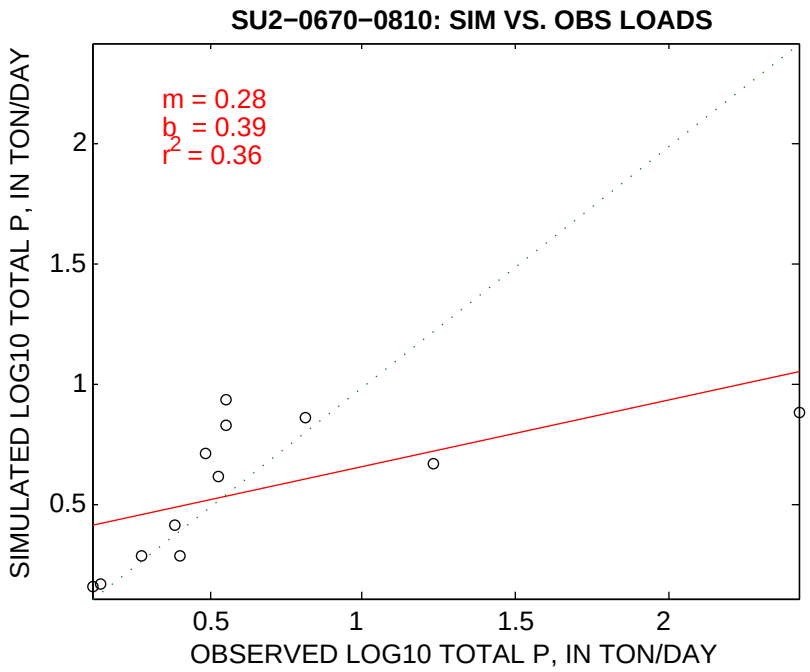


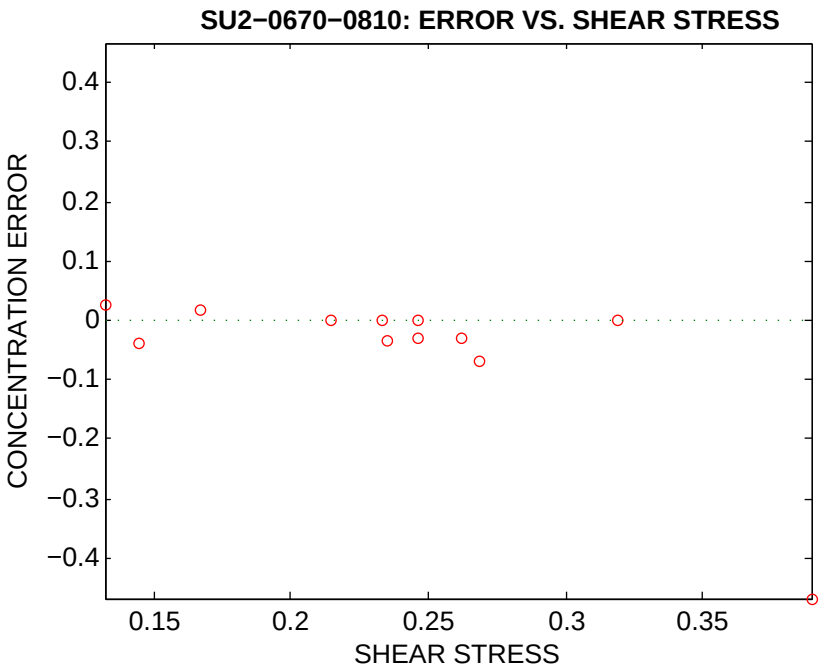


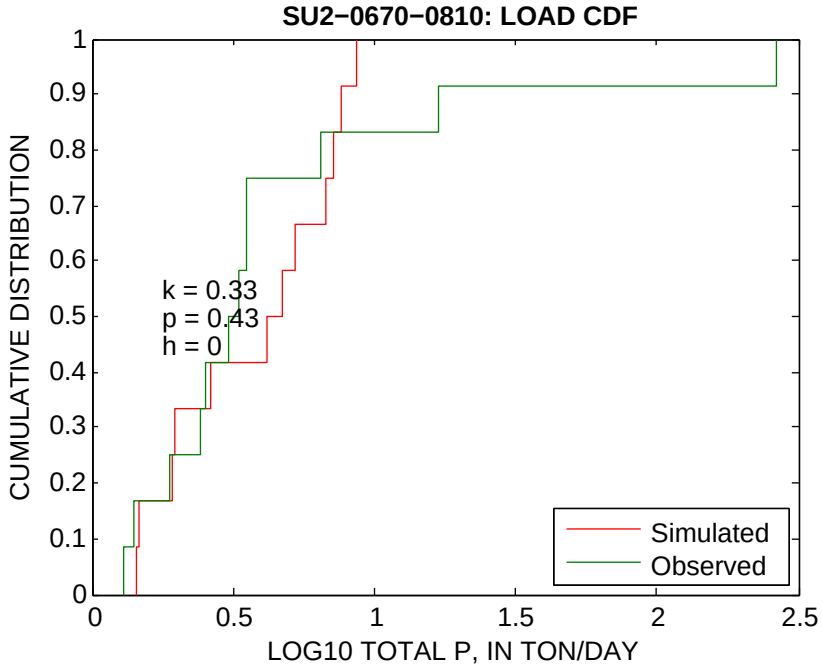


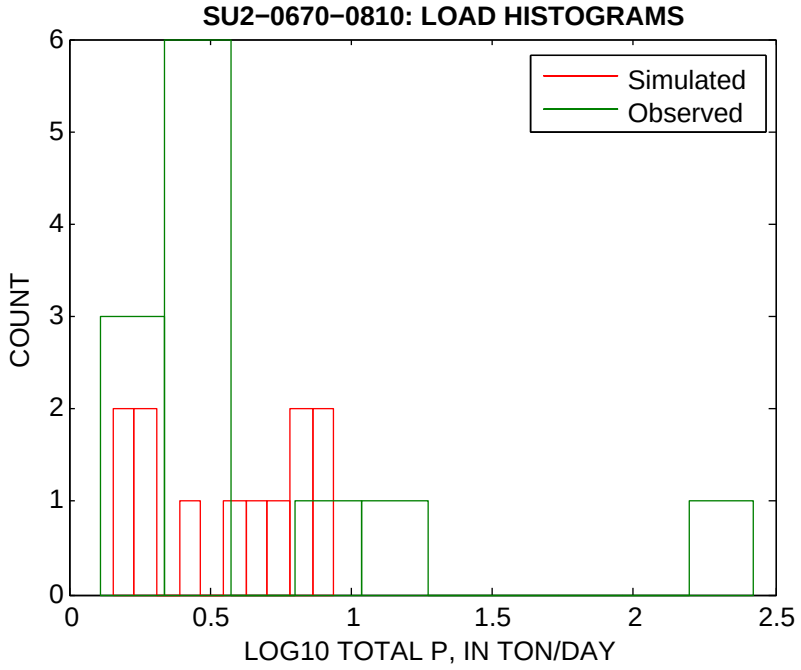


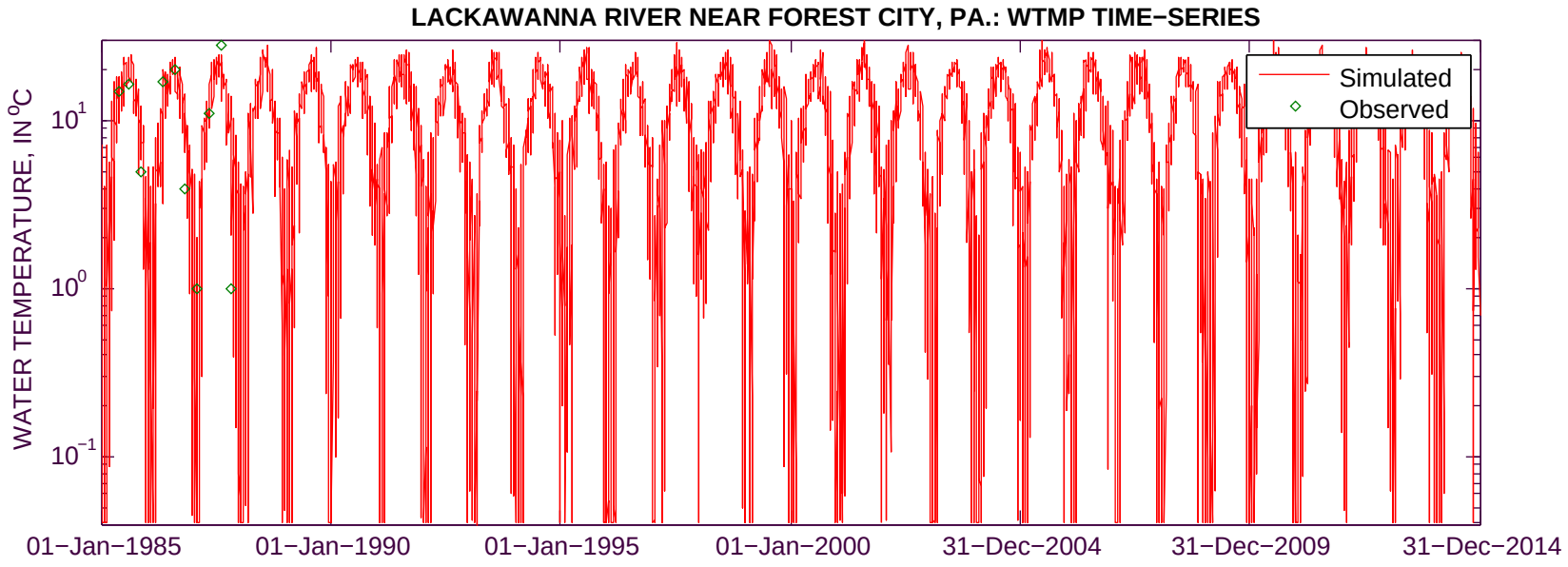
LOAD DATA
LOG10

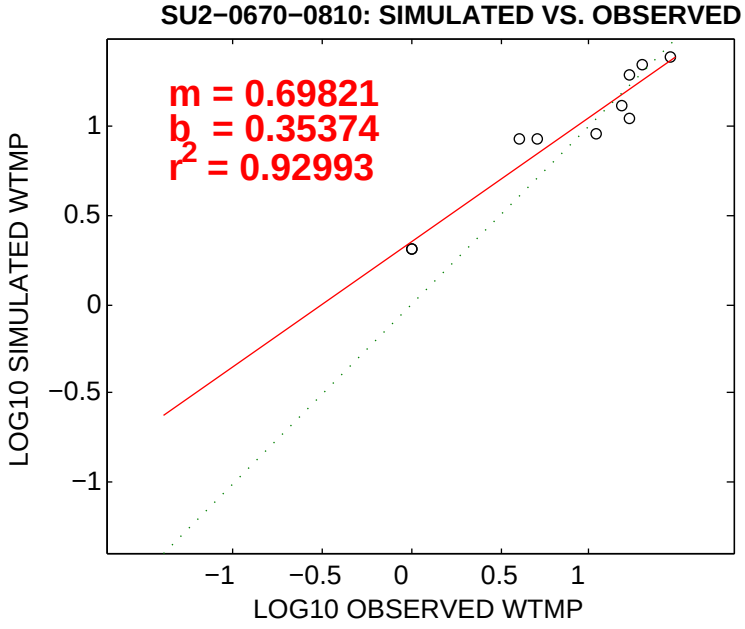


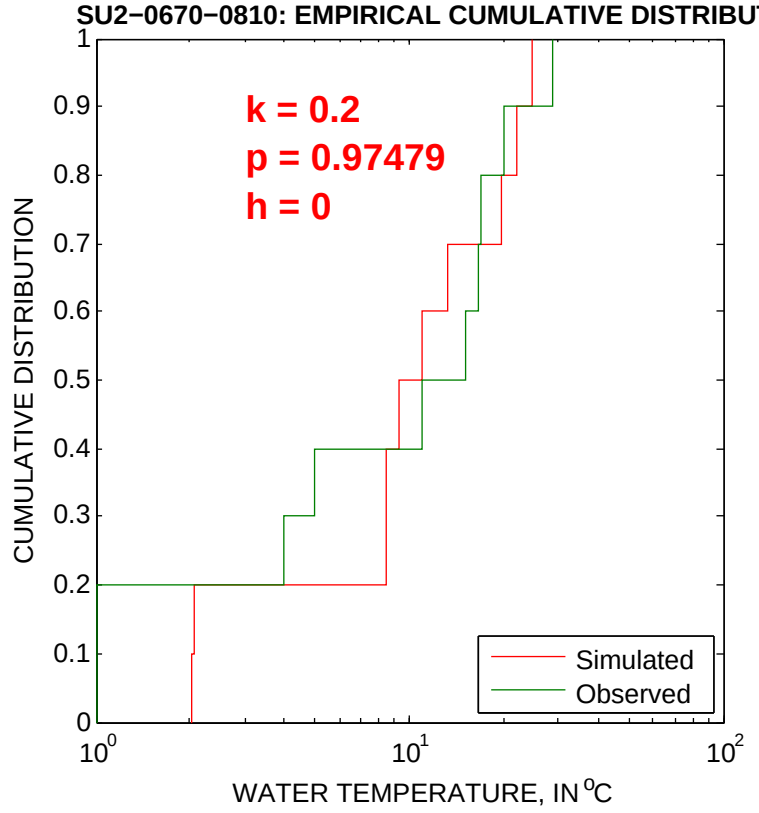












DATA SELECTION

scenario	file
P620171001WQ	WTMP.calib

plot: WTMP - water tempera...

Dates: 1/1/1985 – 12/31/201

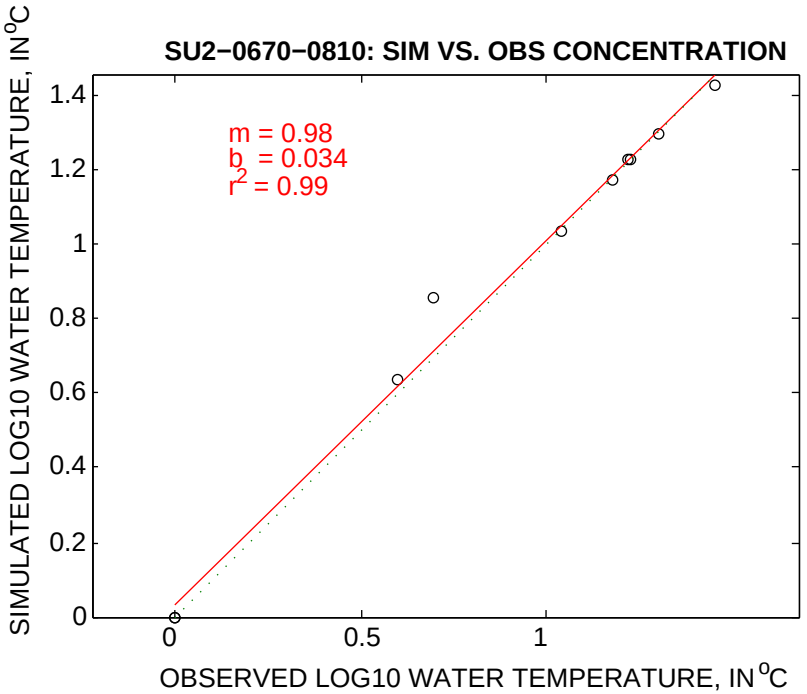
Drive	Directory	Observed
N/A	model	OBS20161101

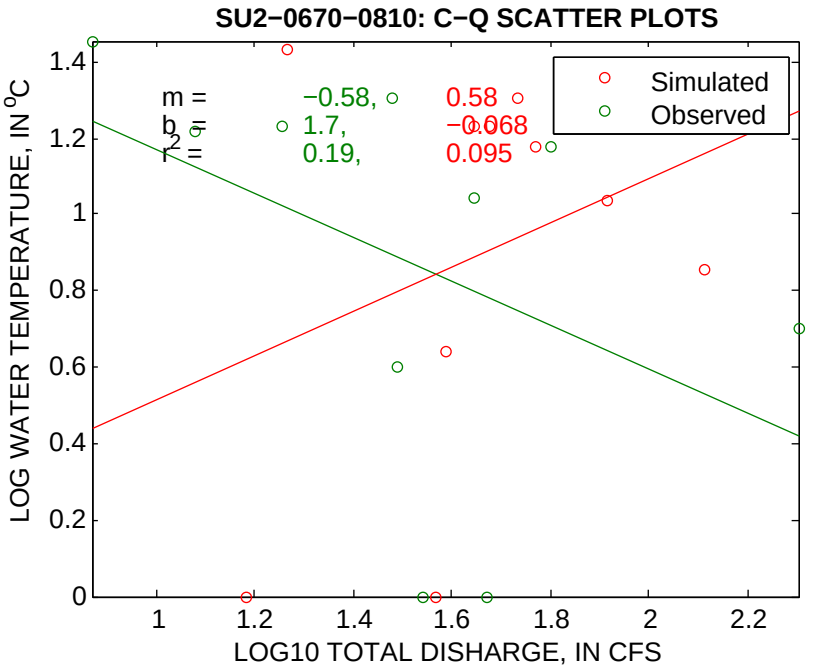
STATISTICS

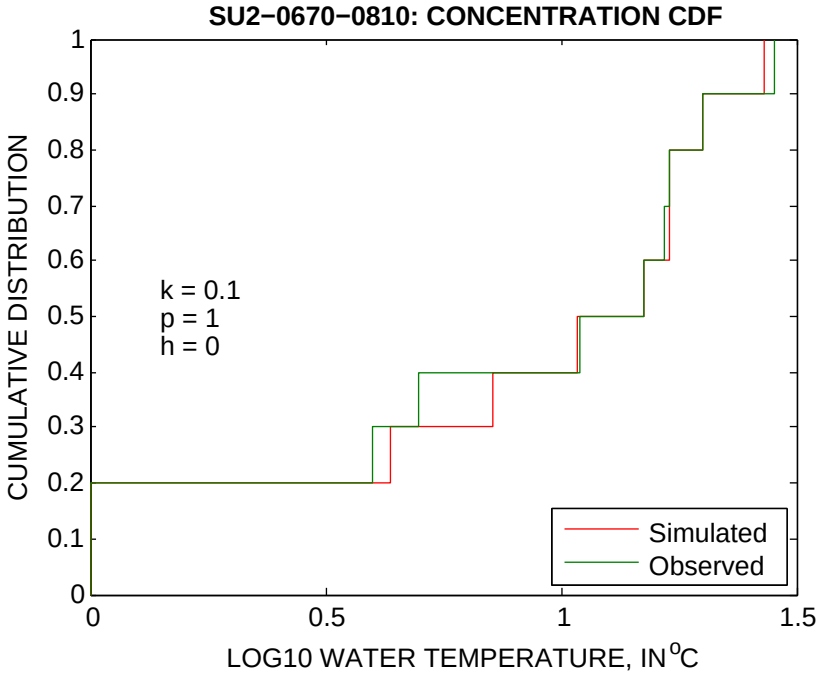
	n	10	10
		observe	simulate
min		1	2.0318
		0	0.307881
mean		11.9	12.0641
		0.872232	0.962737
media		13	10.1392
		1.10874	1.0042
max		28.5	24.697
		1.45484	1.39264
varian		82.9333	61.3821
		0.279595	0.146572
JB		0.5	0.5
		0.154044	0.185858
		ra	log
%		1.37933	10.3762
err.va		11.4316	0.044837
rel.std.err		0.137841	0.160364
mod.eff		0.862159	0.839636

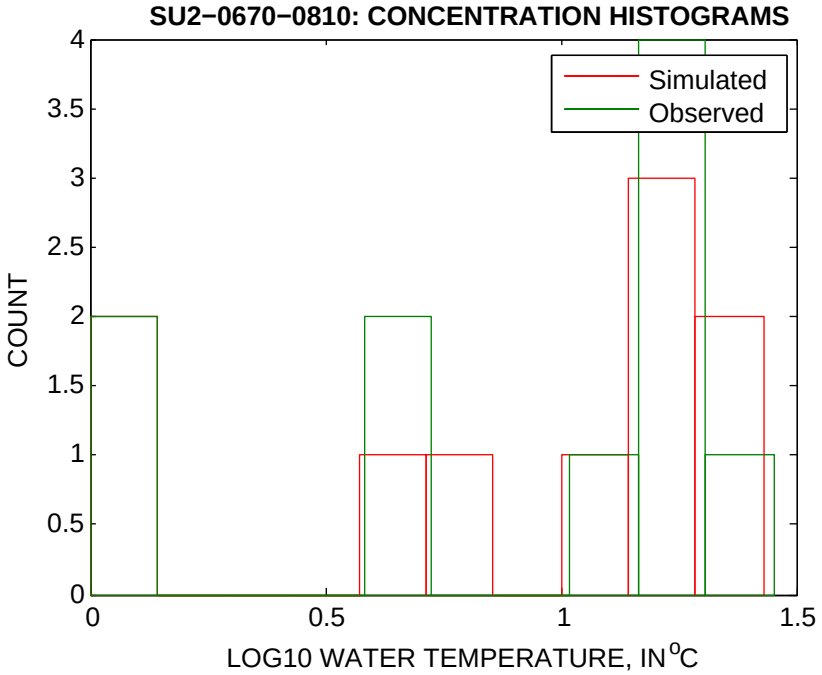
VERSION 2.1

ALL DATA
LOG10

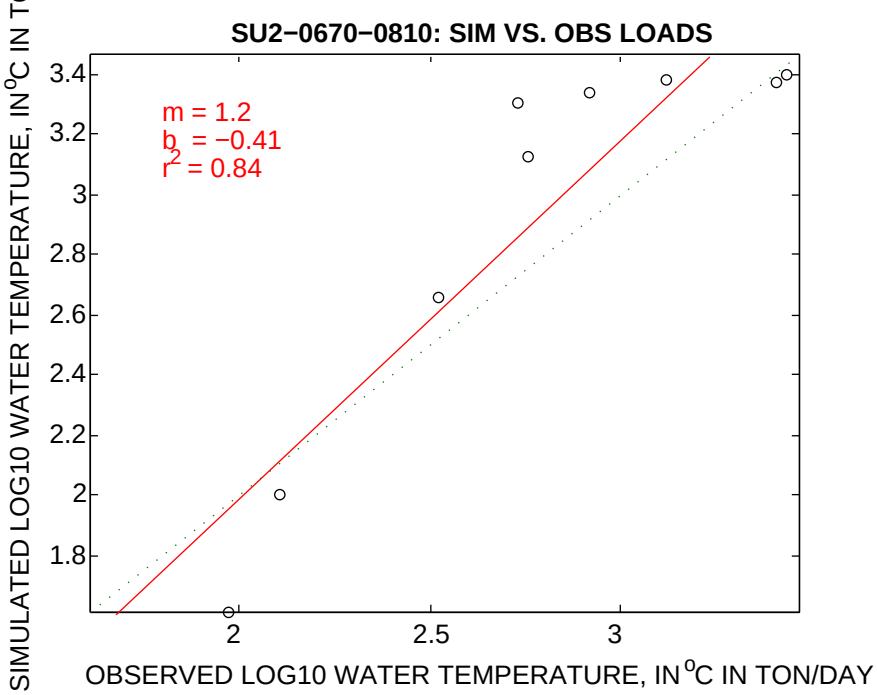


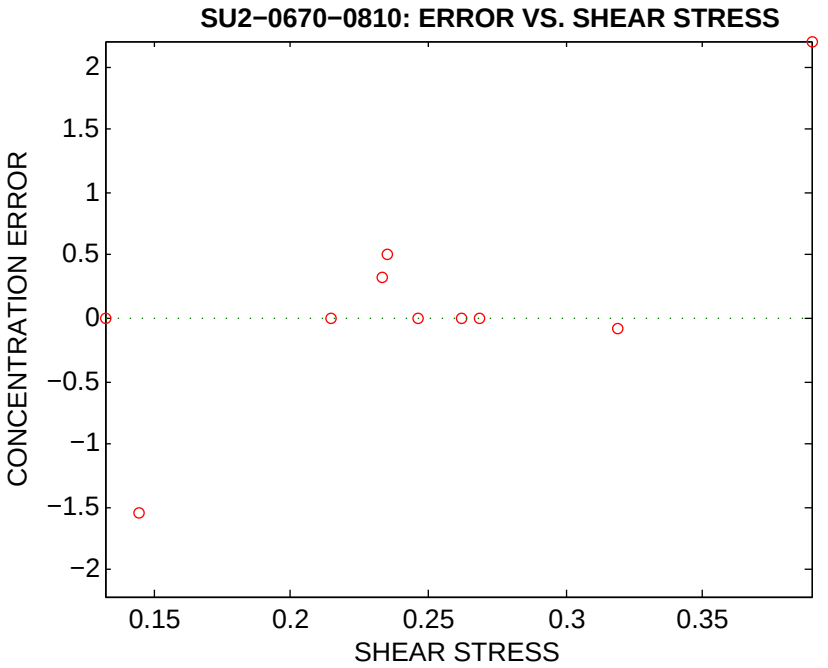


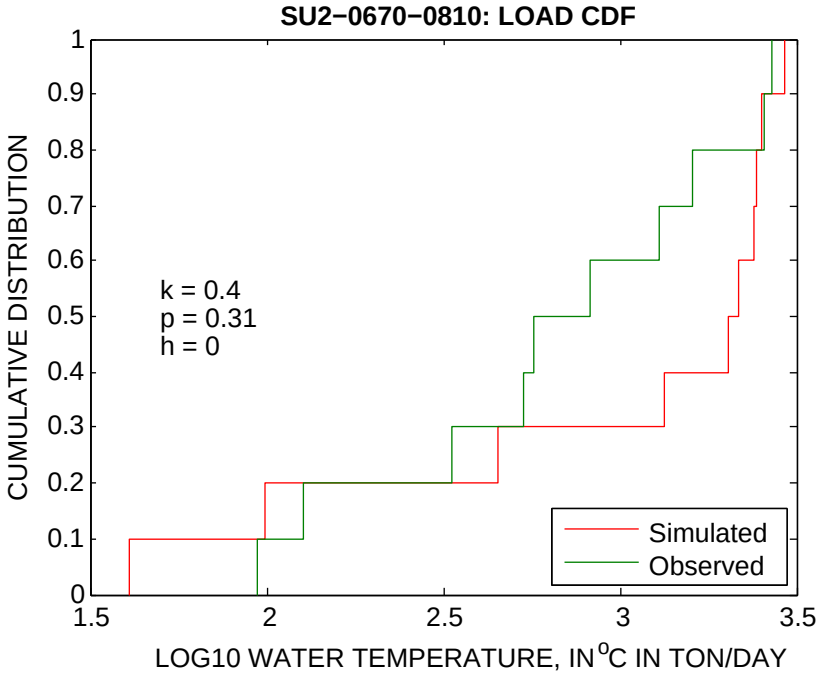


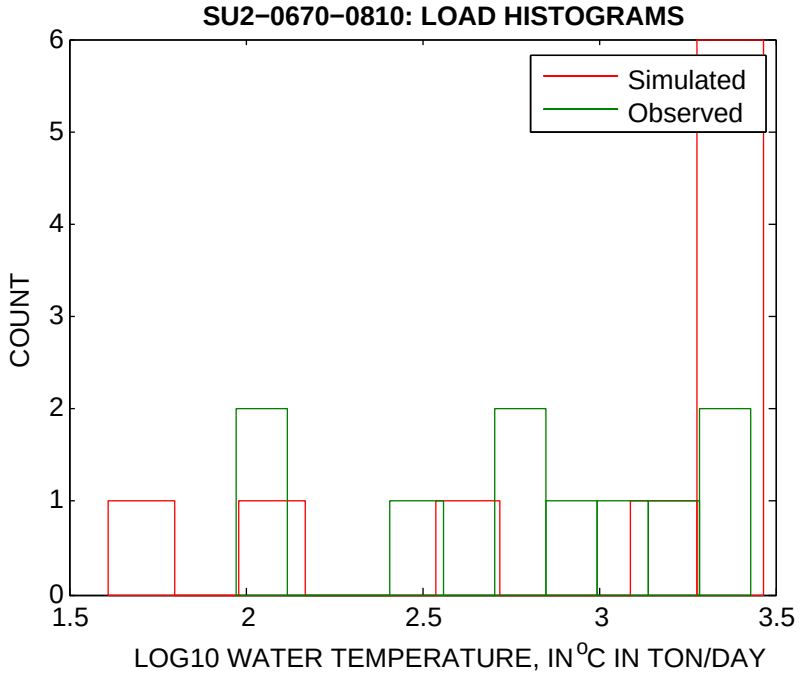


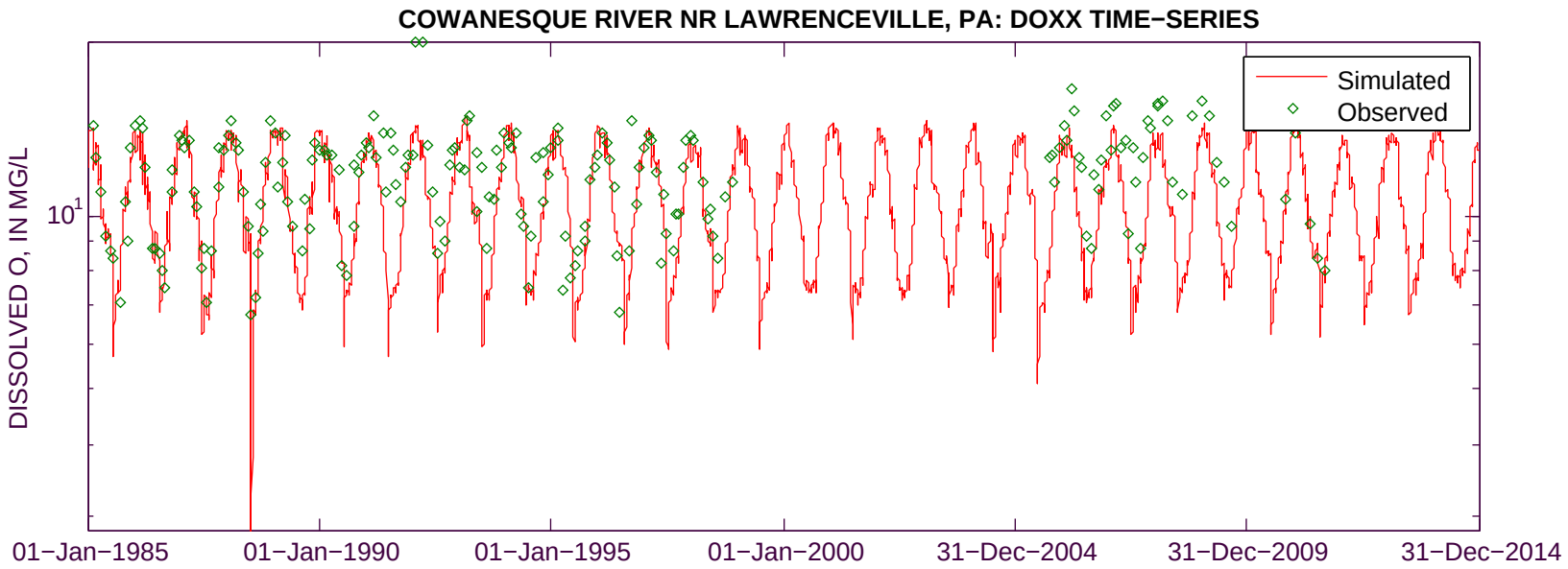
LOAD DATA
LOG10

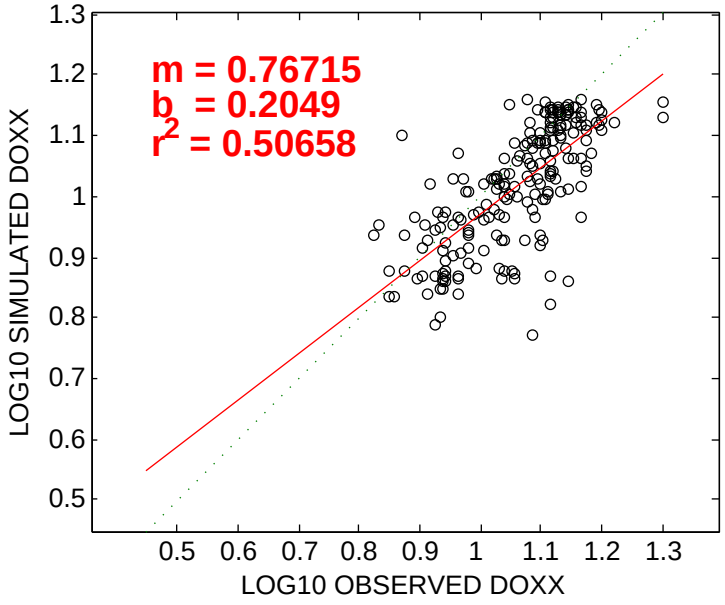


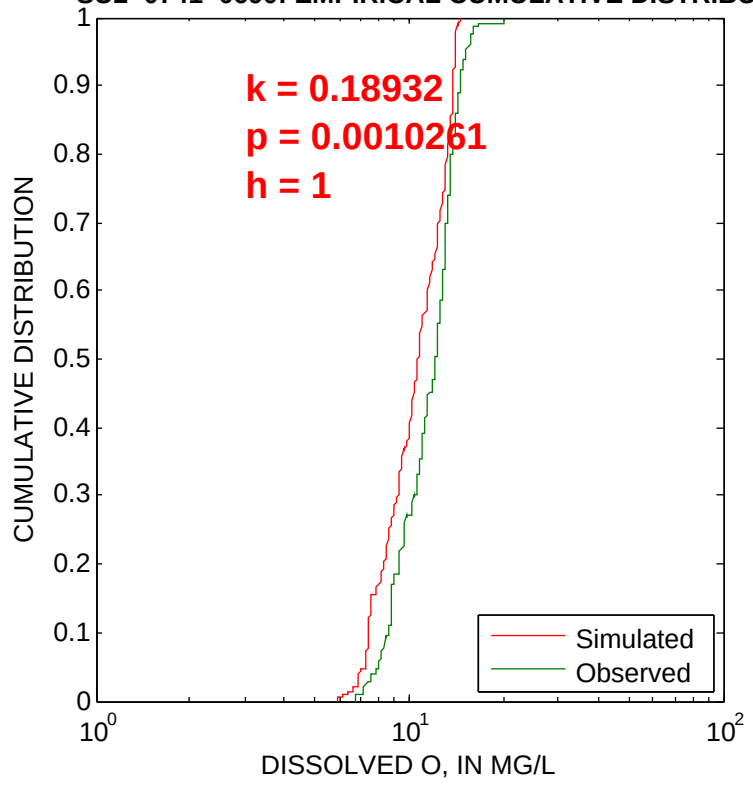












DATA SELECTION

scenario: P620171001WQ | file: DOXX.calib

plot: DOXX - dissolved oxygen

Dates: 1/1/1985 – 12/31/201

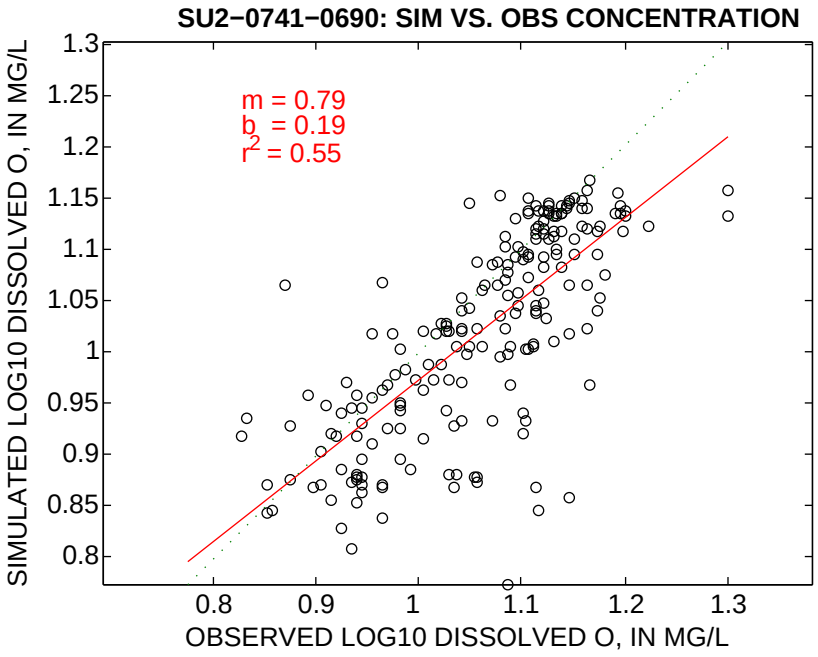
Drive: N/A | Directory: model | Observed: OBS20161101

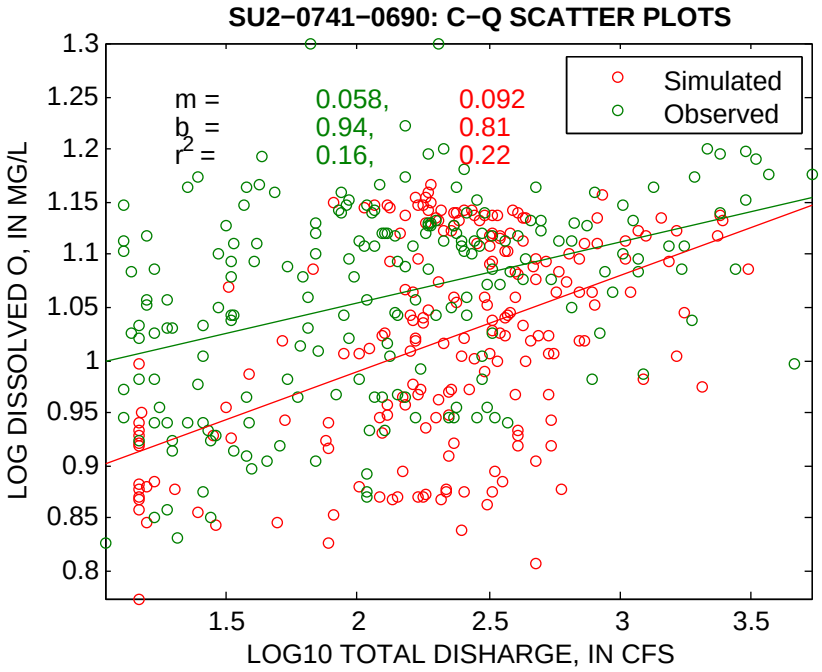
STATISTICS

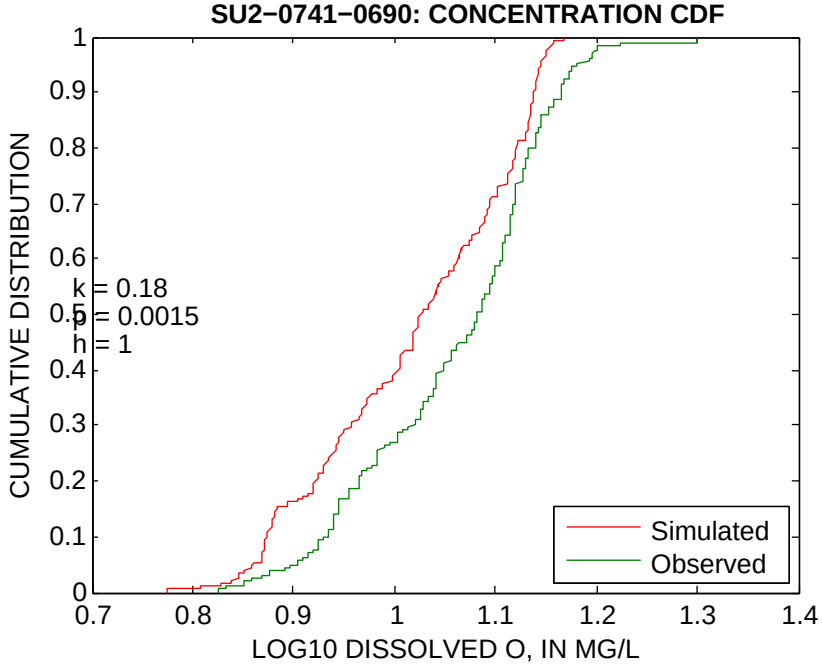
		observe	simulate
n		206	206
min		6.7	5.9113
		0.826075	0.771683
mean		11.7408	10.6962
		1.06017	1.01821
media		12.1	10.6935
		1.08279	1.02912
max		20	14.445
		1.30103	1.15972
varian		5.83316	5.48497
		0.00856195	0.00994697
JB	☑	0.5	0.007636
		0.037970	0.007451
		ra	log
%		-8.89731	-3.9573
err.va		4.26922	0.00714099
rel.std.err		0.731888	0.834038
mod.eff		0.268112	0.165962

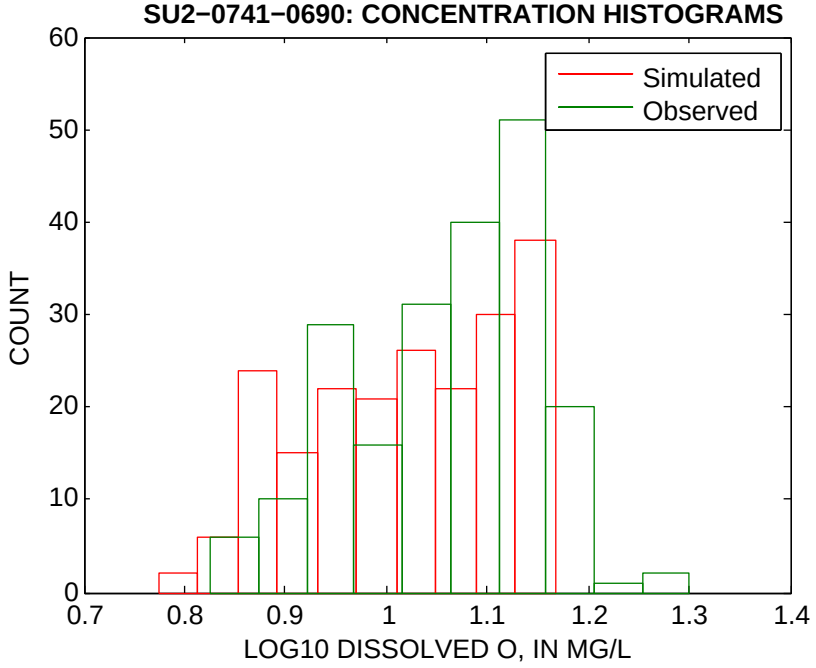
VERSION 2.1

ALL DATA
LOG10

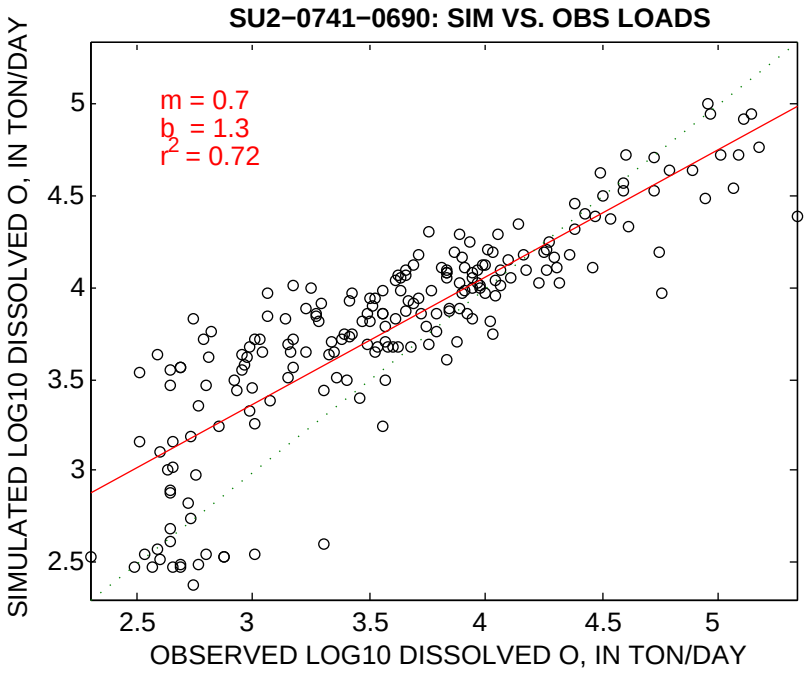


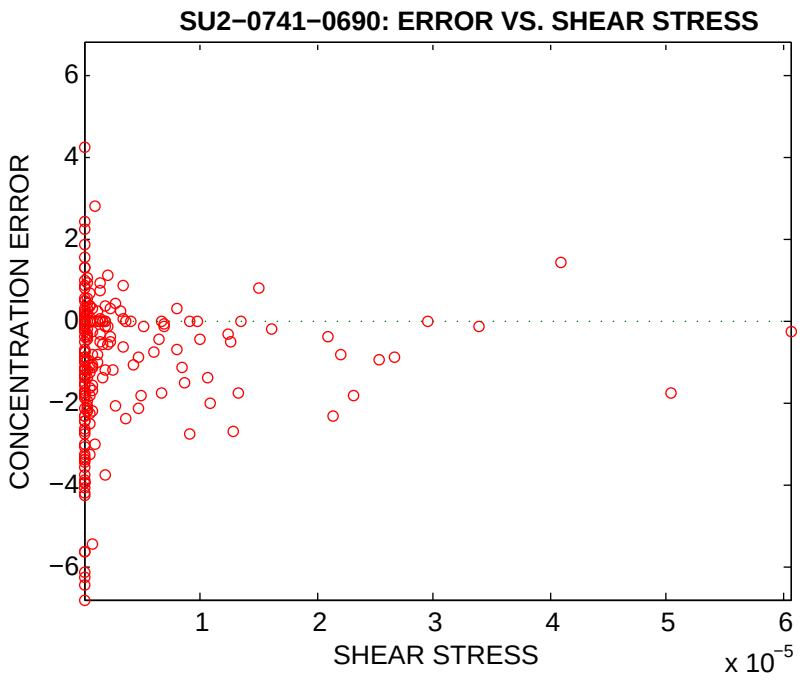


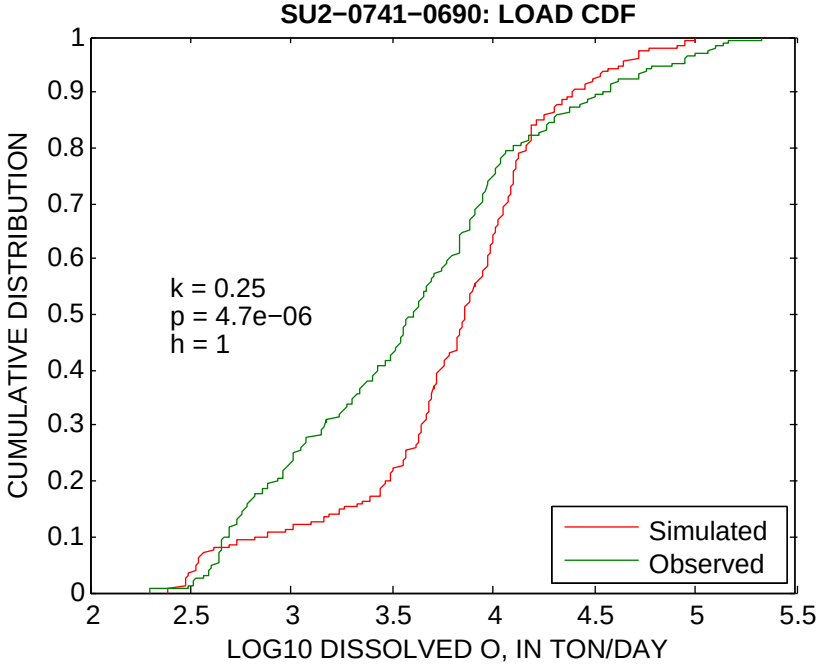


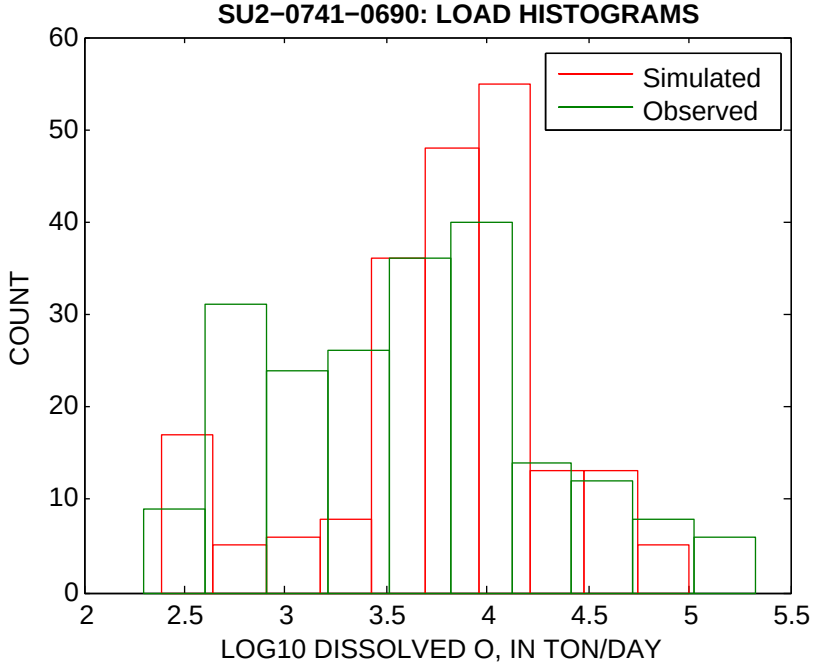


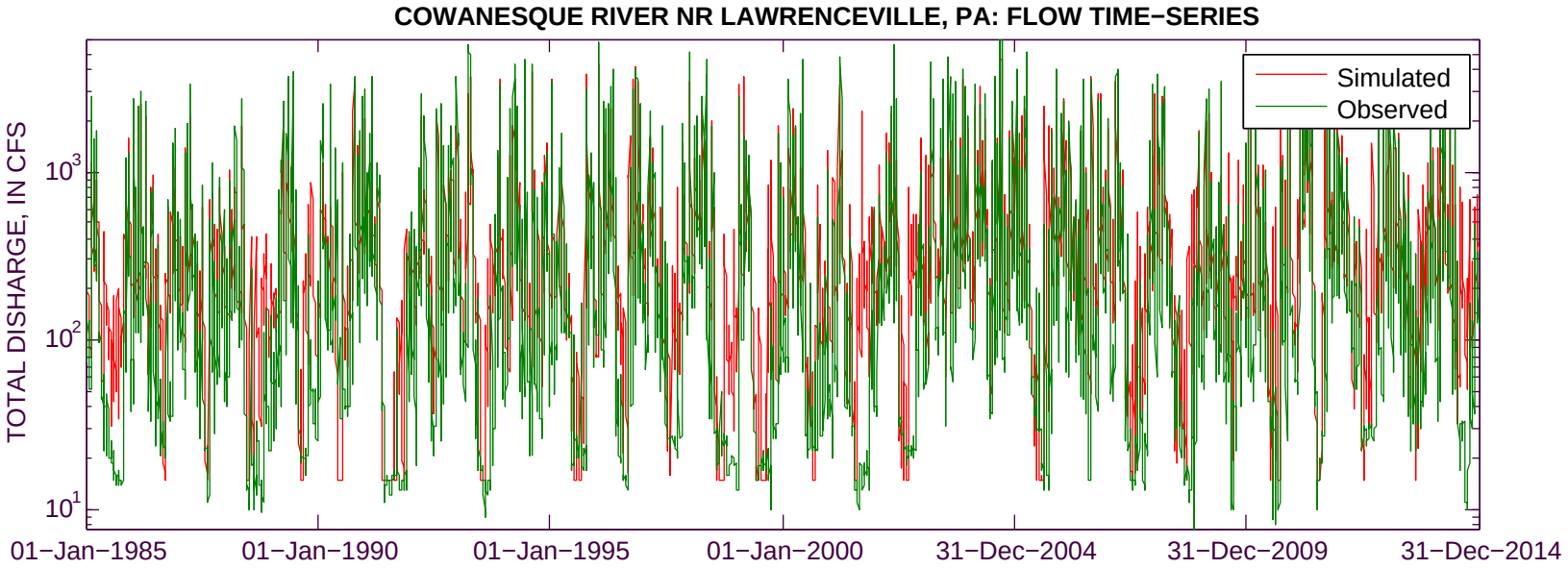
LOAD DATA
LOG10

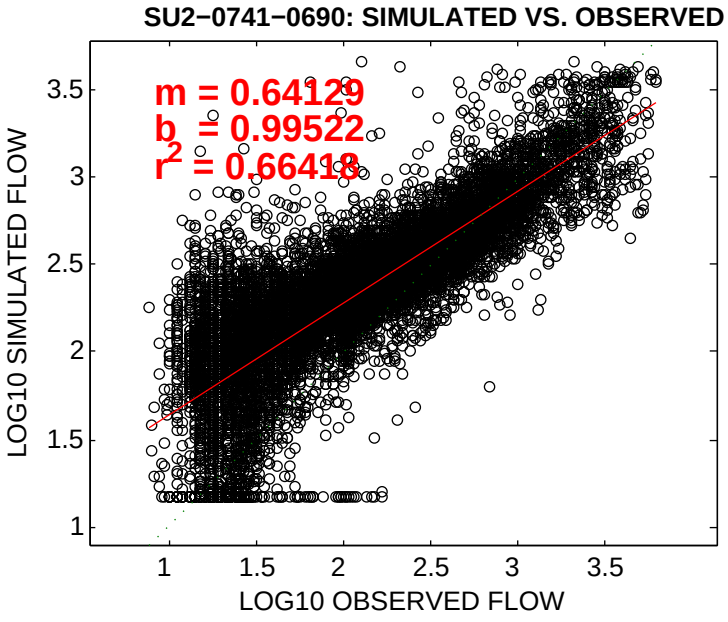


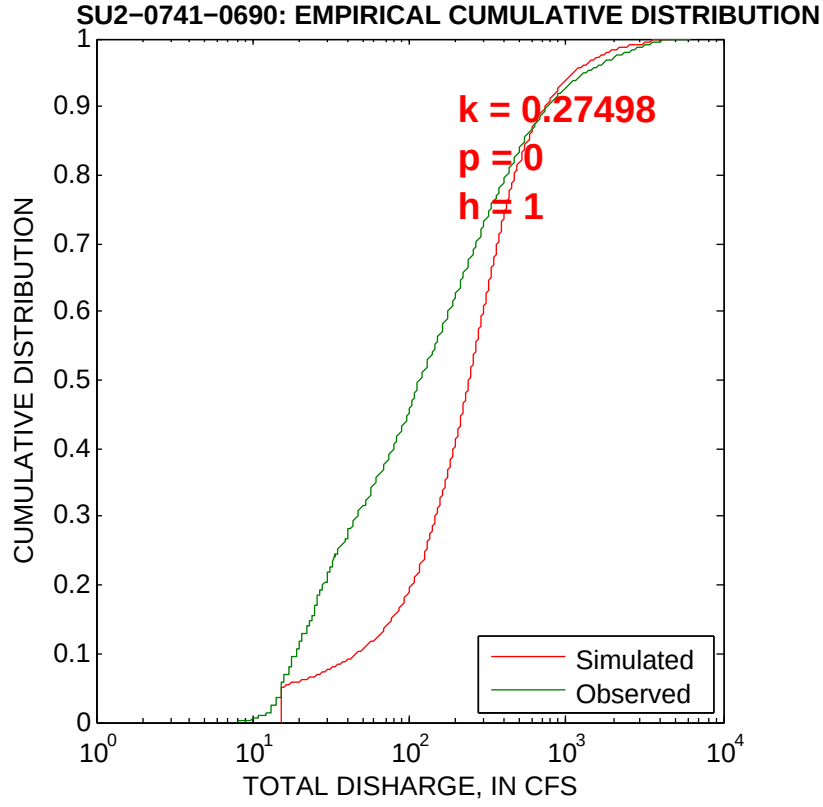












DATA SELECTION

scenario: P620171001WQ | file: FLOW.calib

plot: FLOW - total discharge

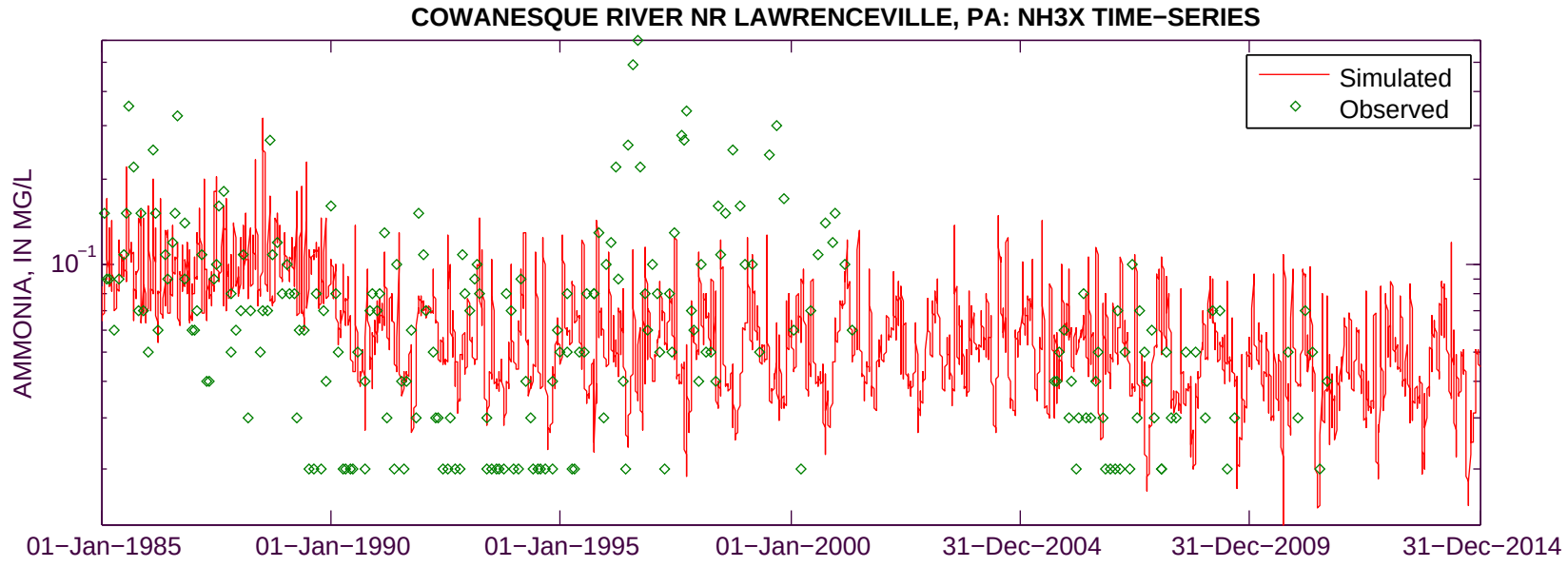
Dates: 1/1/1985 – 12/31/201

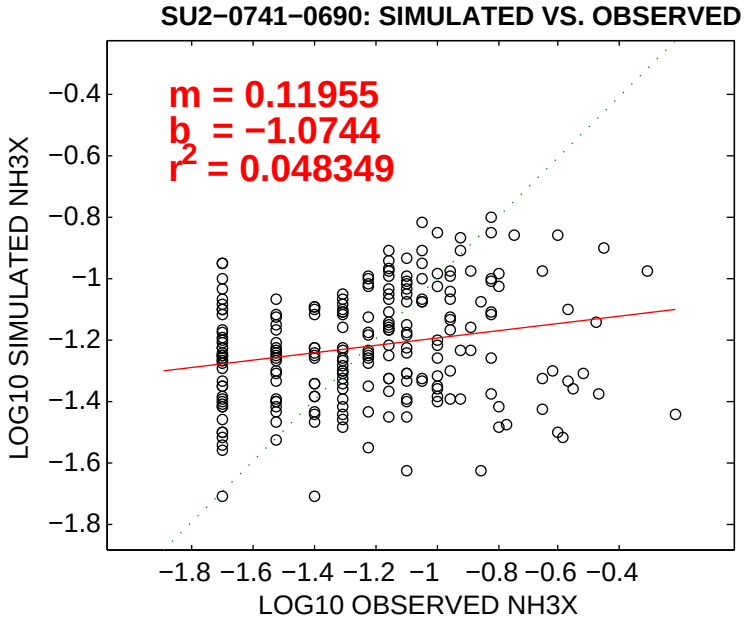
Drive: N/A | Directory: model | Observed: OBS20161101

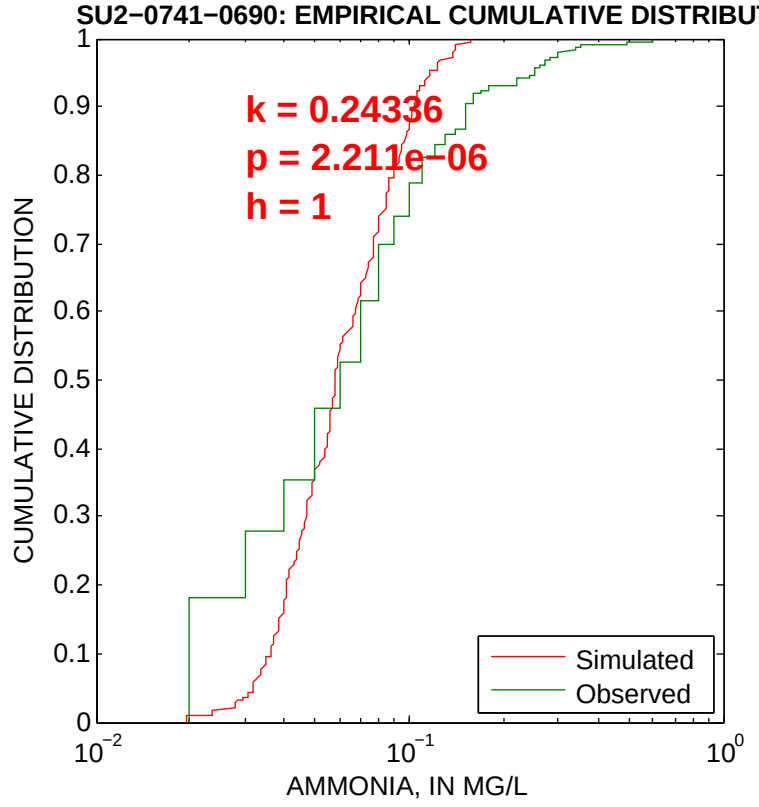
STATISTICS

		observe	simulate
n		10957	10957
min		7.7	15
		0.886491	1.17609
mean		324.642	365.978
		2.0813	2.32994
media		117	242.26
		2.06819	2.38428
max		6140	4693.2
		3.78817	3.67147
varian		359631	221217
		0.371311	0.229908
JB		0.001	0.001
		0.001	0.001
		ra	log
%		12.7327	11.946
err.va		147203	0.186809
rel.std.err		0.409315	0.503106
mod.eff		0.590685	0.496894

VERSION 2.1







DATA SELECTION

scenario	file
P620171001WQ	NH3X.calib

plot: NH3X - ammonia

Dates: 1/1/1985 – 12/31/201

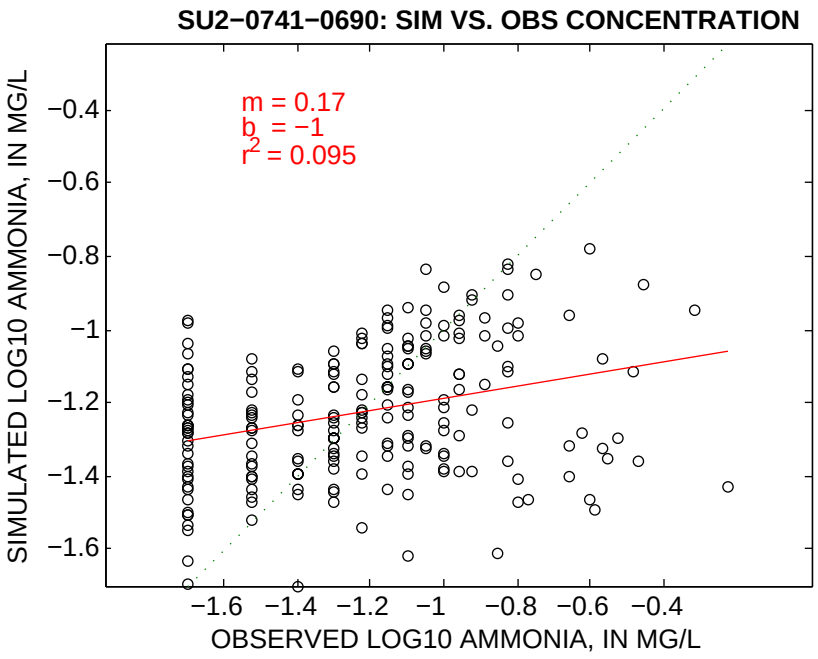
Drive	Directory	Observed
N/A	model	OBS20161101

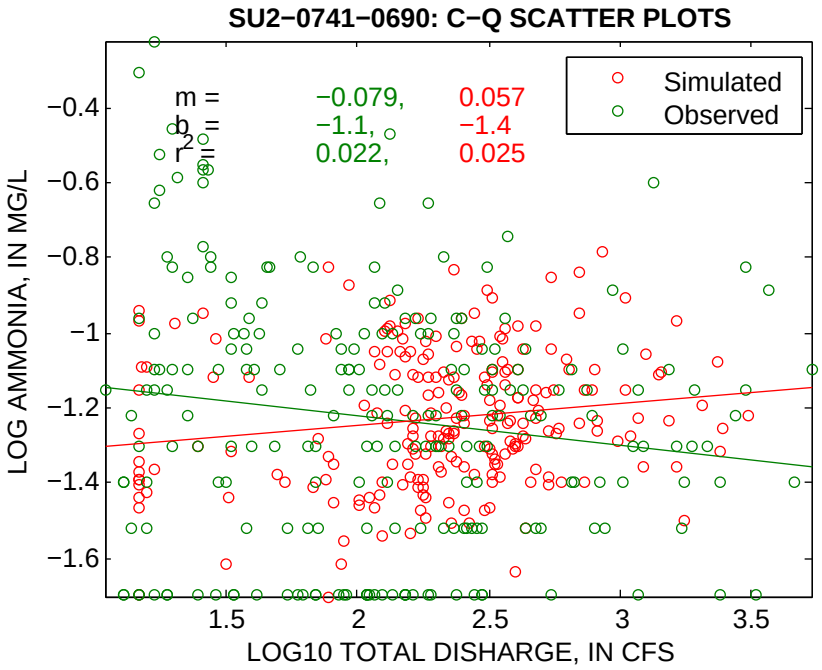
STATISTICS

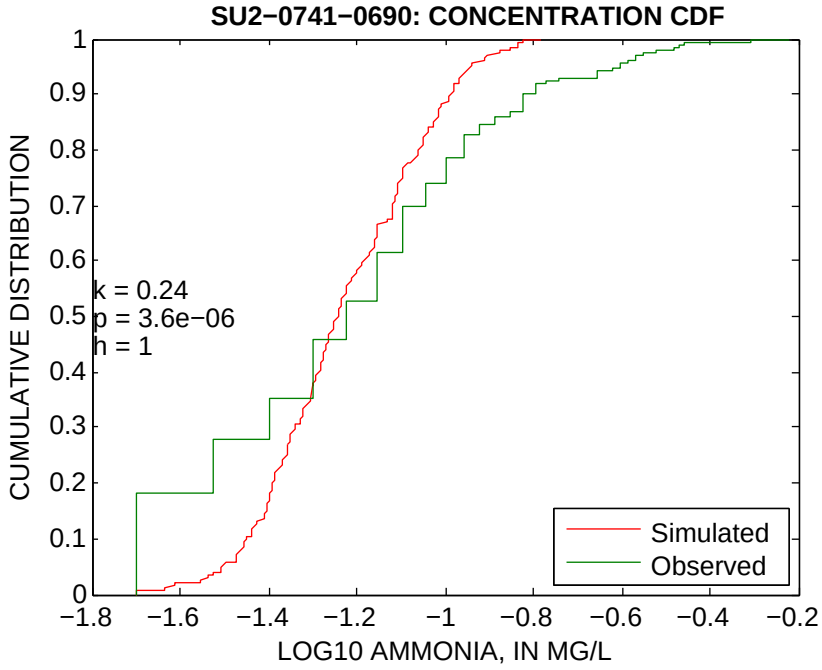
	n	226	226
		observe	simulate
min		0.02	0.019565
		-1.69897	-1.70852
mean		0.0810177	0.0655019
		-1.22711	-1.22114
media		0.06	0.058168
		-1.22185	-1.23532
max		0.6	0.15776
		-0.221849	-0.802003
varian		0.00601452	0.00076888
		0.11129	0.0328999
JB		0.001	0.001
		0.064338	0.294356
		ra	log
%		-19.1511	-0.48712
err.va		0.00633609	0.117616
rel.std.err		1.05347	1.05684
mod.eff		-0.0534661	-0.056838

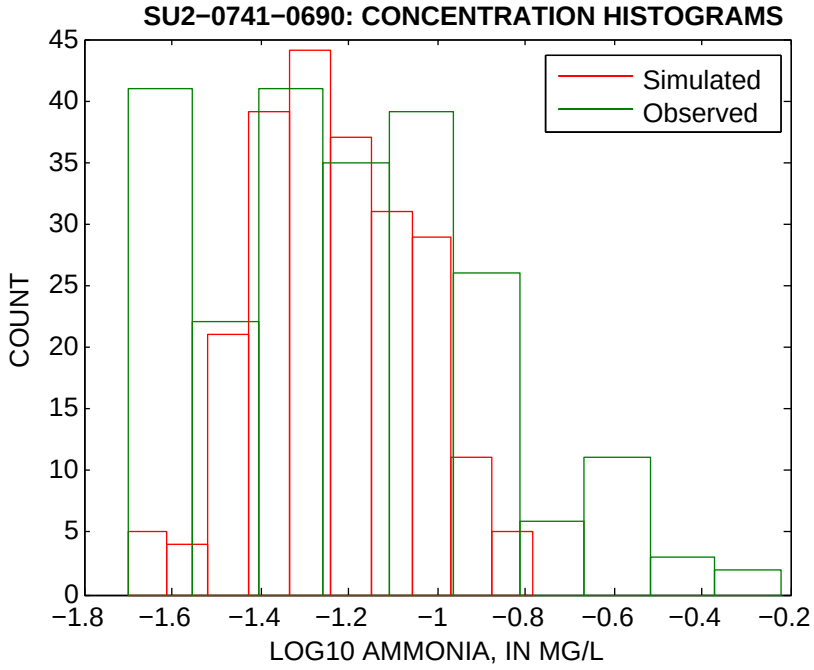
VERSION 2.1

ALL DATA
LOG10

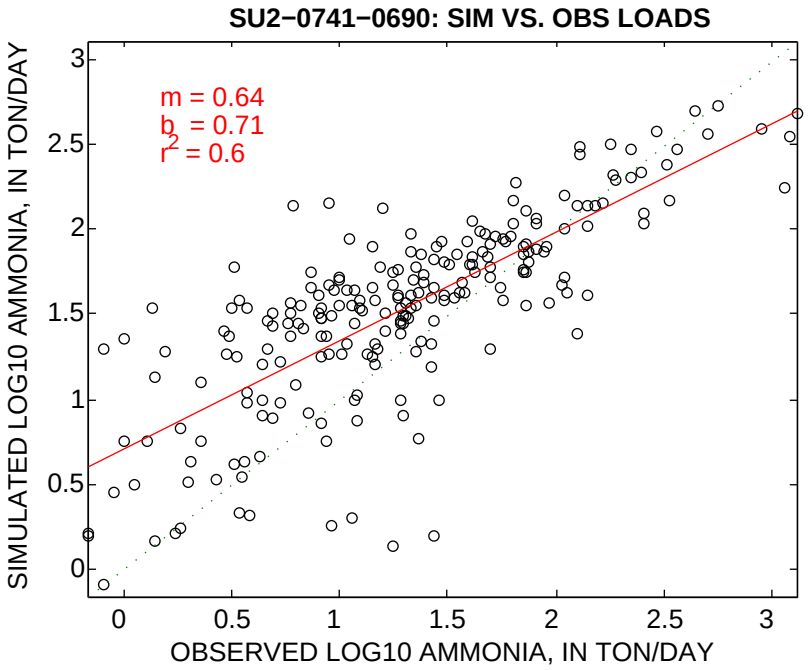


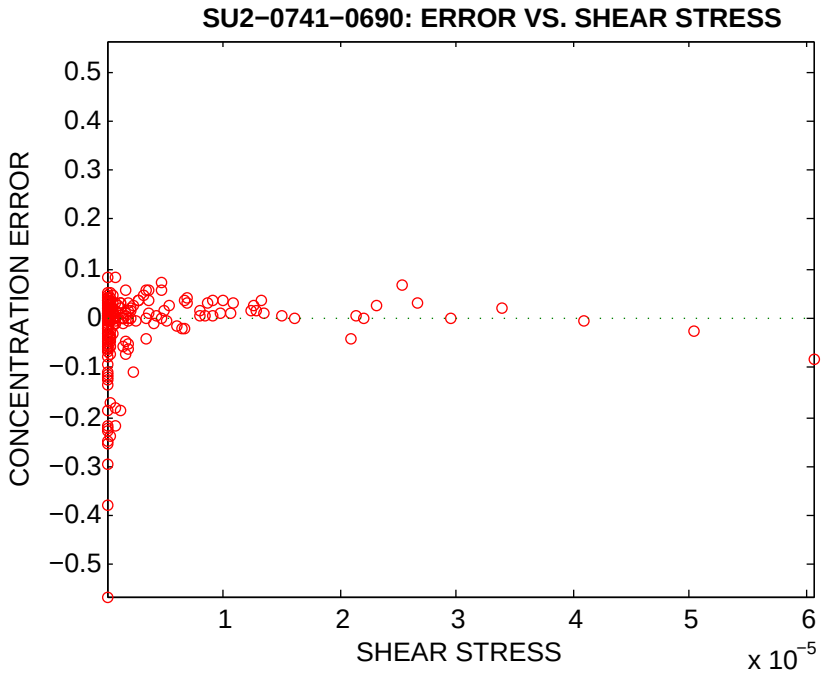


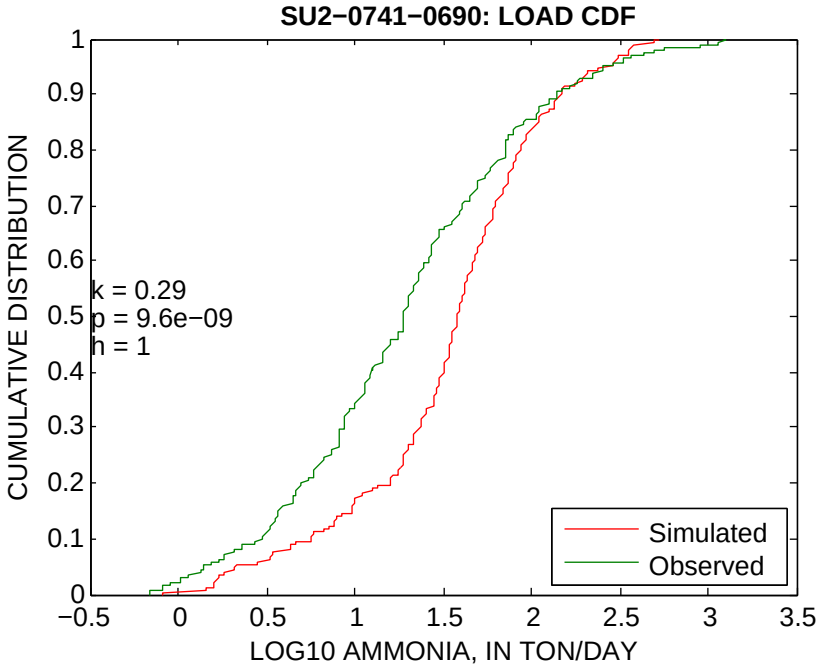


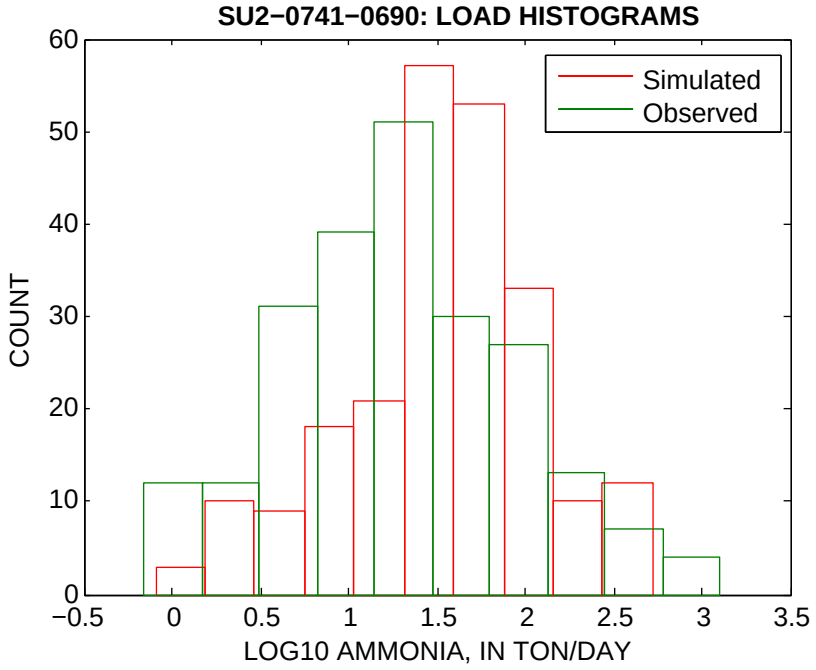


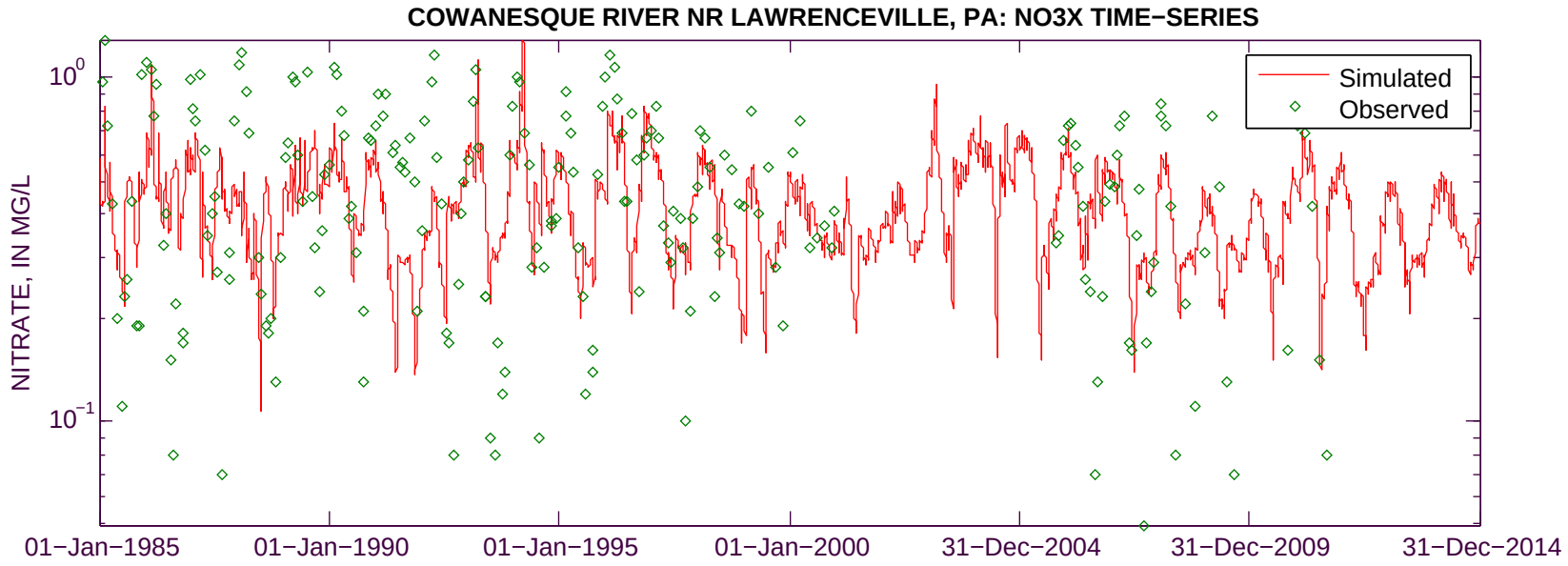
LOAD DATA
LOG10

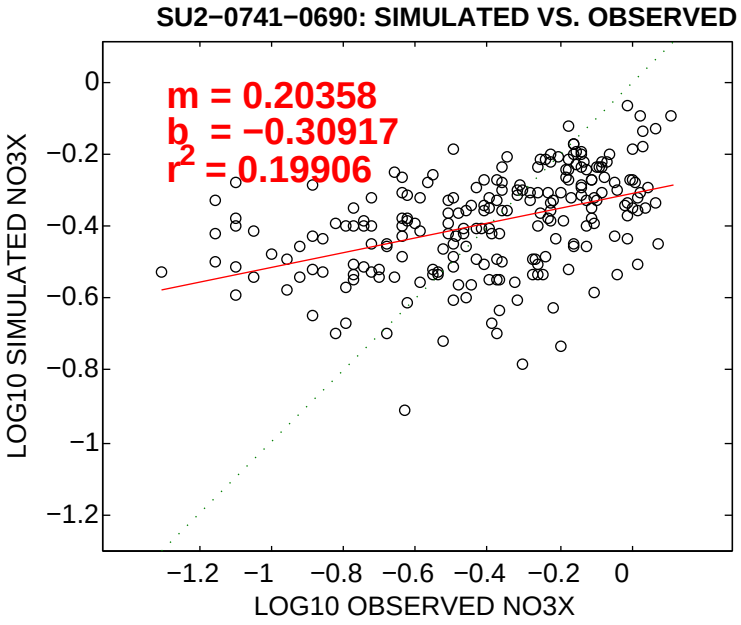


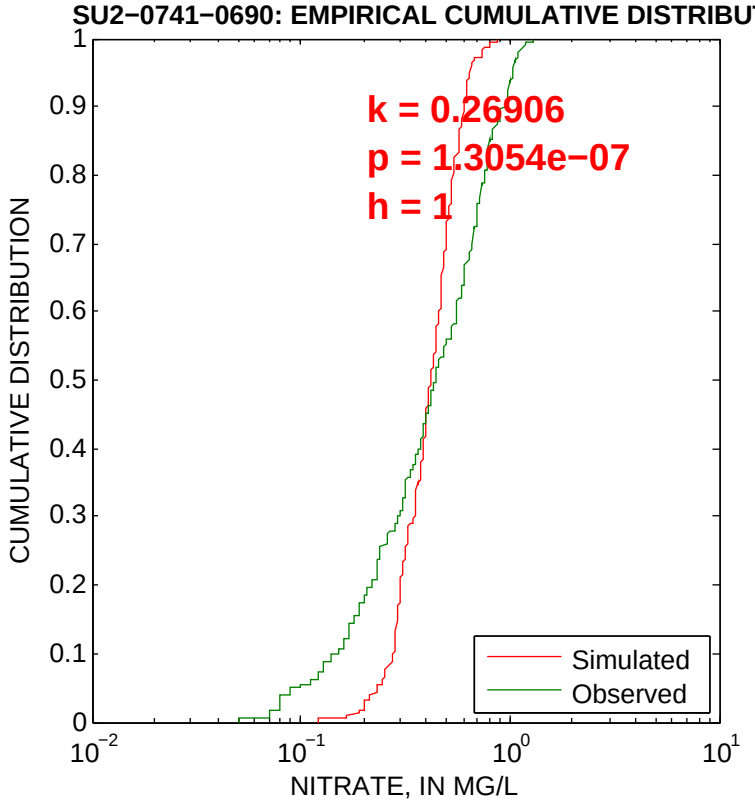












DATA SELECTION

scenario	file
P620171001WQ	NO3X.calib

plot: NO3X - nitrate

Dates: 1/1/1985 – 12/31/201

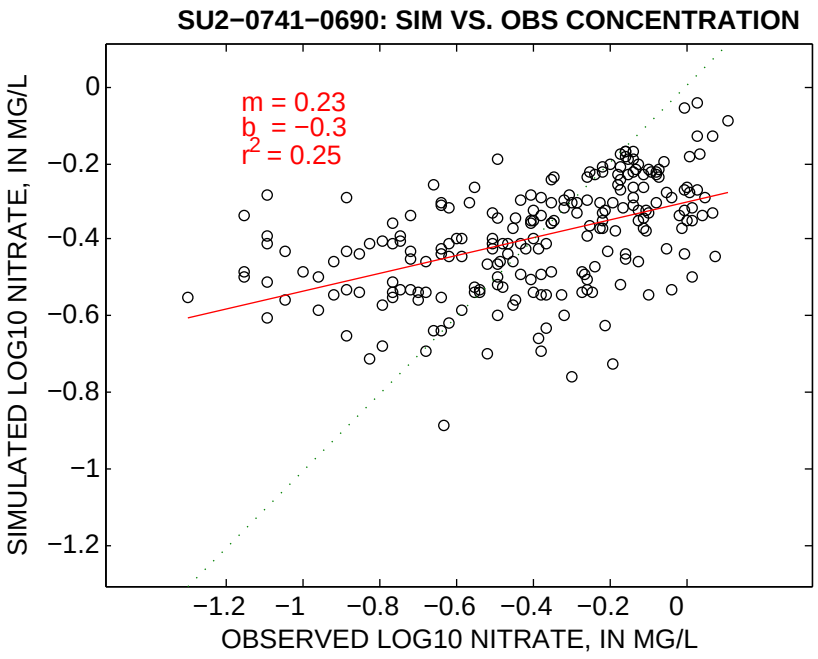
Drive	Directory	Observed
N/A	model	OBS20161101

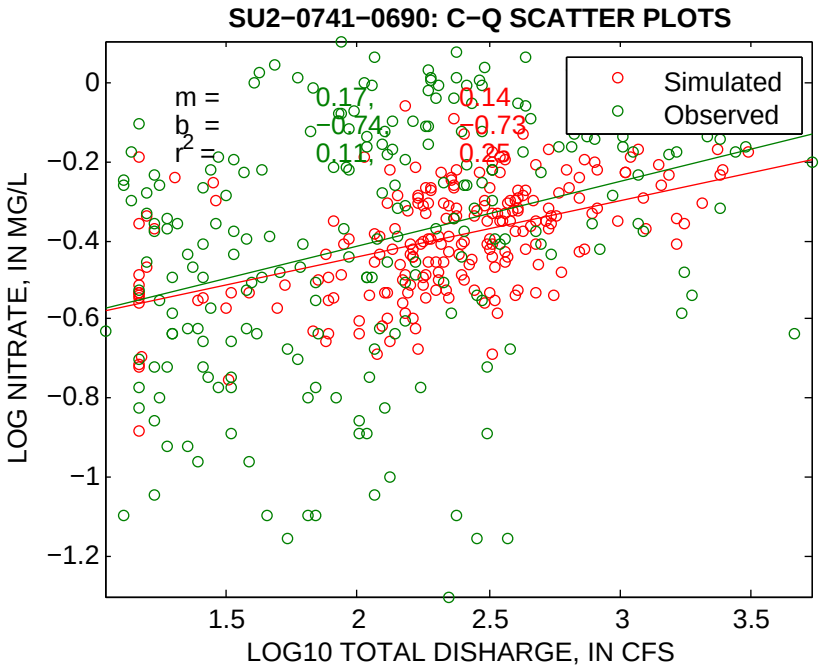
STATISTICS

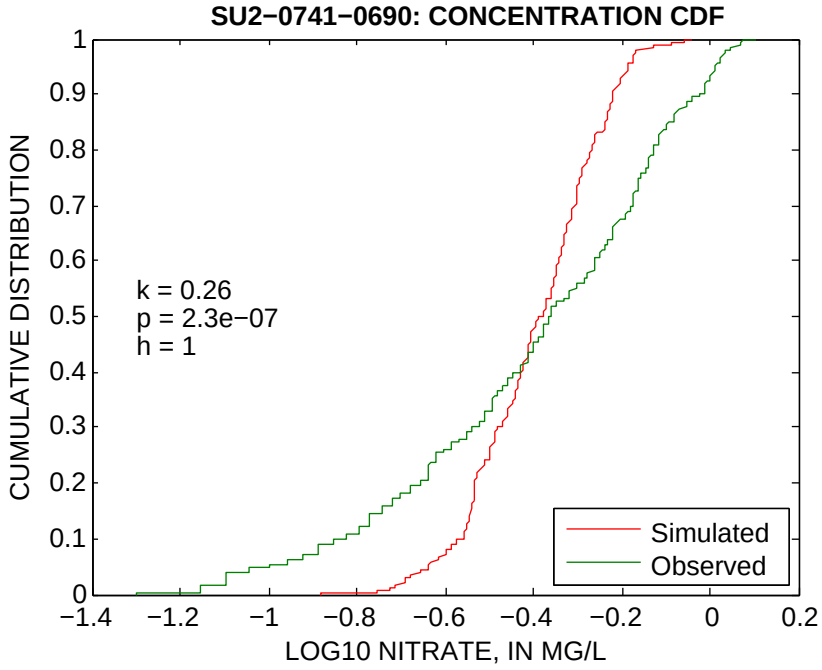
	n	223	223
		observe	simulate
min		0.05	0.12218
		-1.30103	-0.913
mean		0.494641	0.427965
		-0.39829	-0.390254
media		0.44	0.41856
		-0.356547	-0.378242
max		1.28	0.86464
		0.10721	-0.0631647
varian		0.0848809	0.0175228
		0.0950999	0.0197999
JB		0.007130	0.031714
		0.004770	0.026465
		ra	log
%		-13.4797	-2.01767
err.va		0.0669443	0.0762438
rel.std.err		0.788685	0.801722
mod.eff		0.211315	0.198278

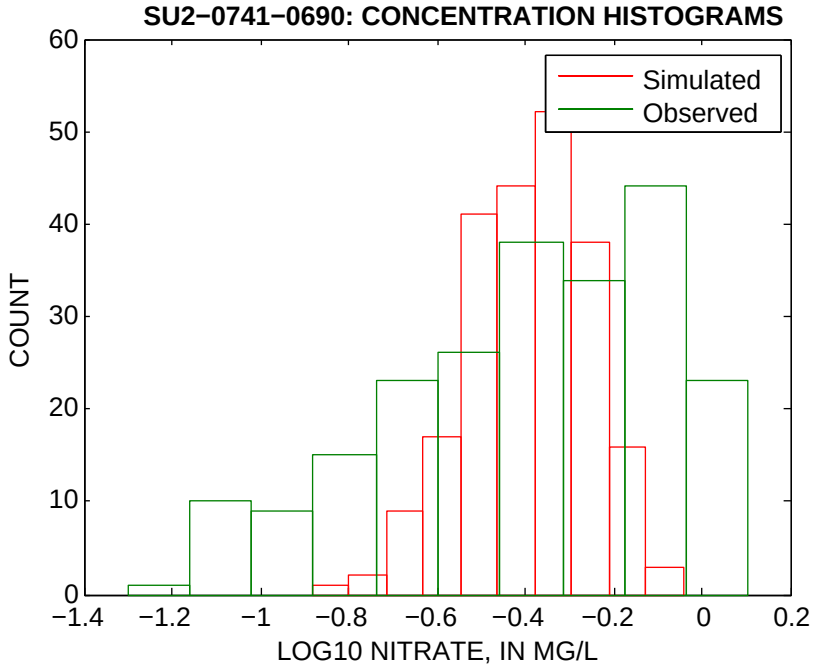
VERSION 2.1

ALL DATA
LOG10

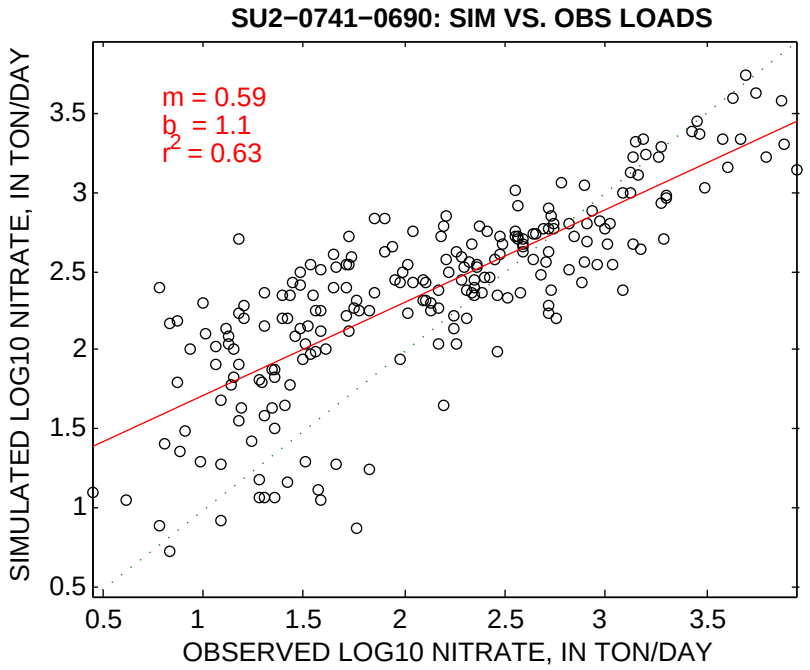


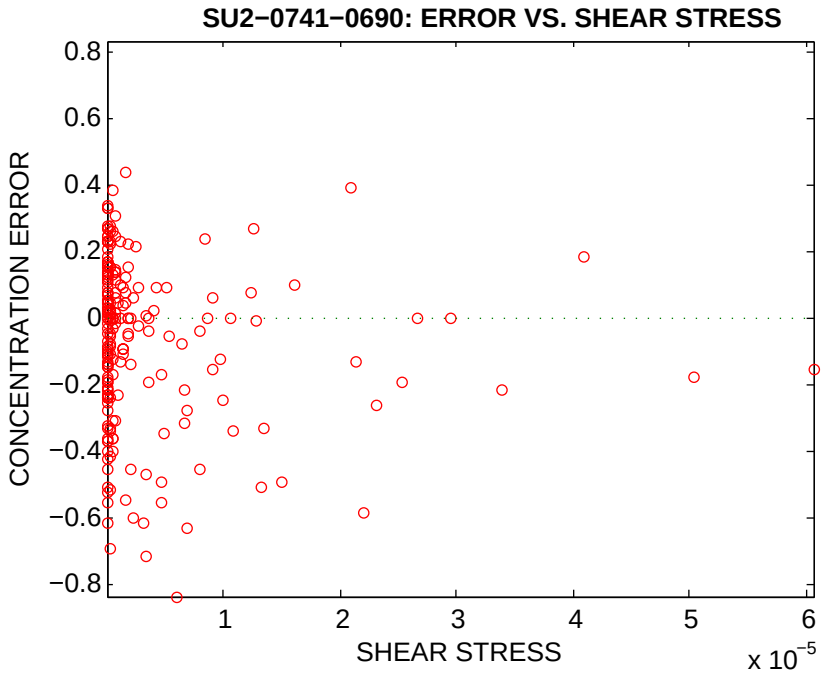


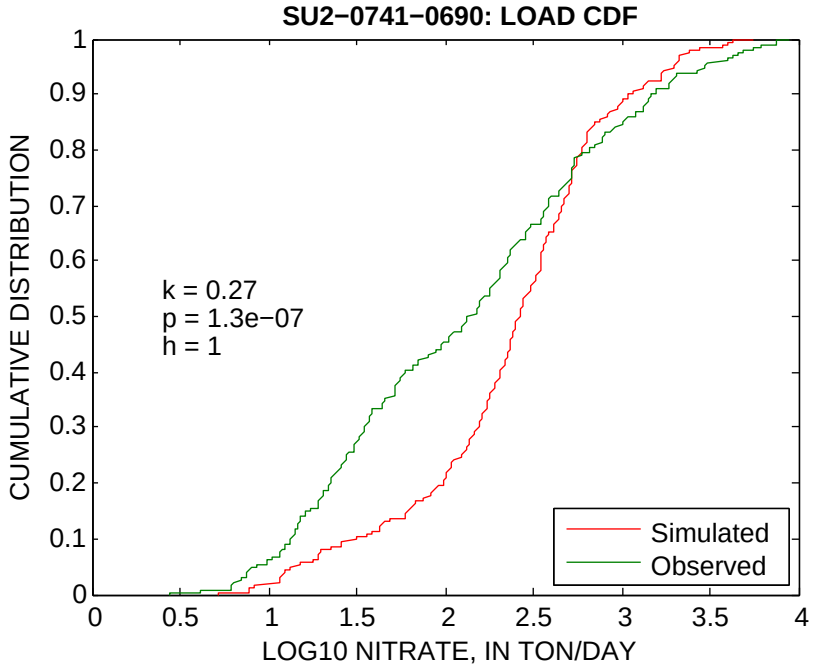


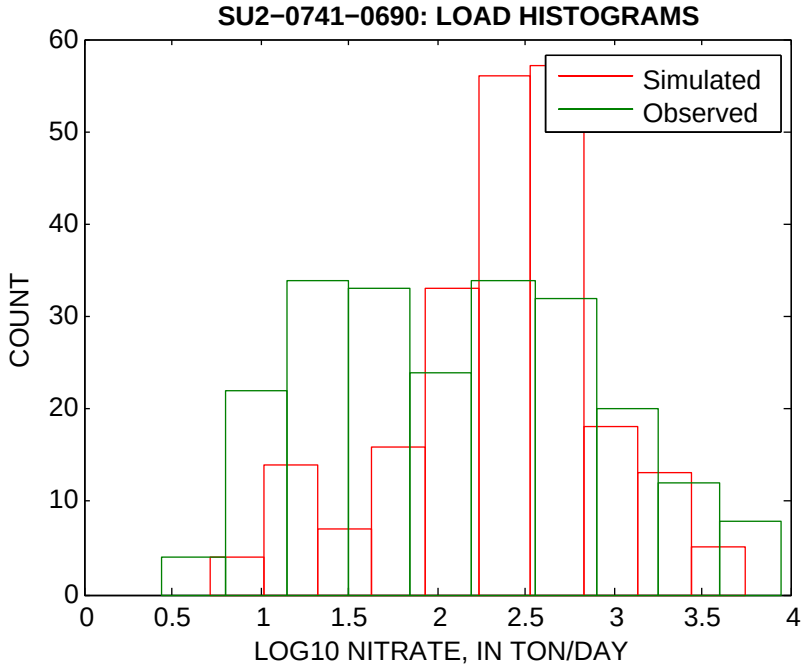


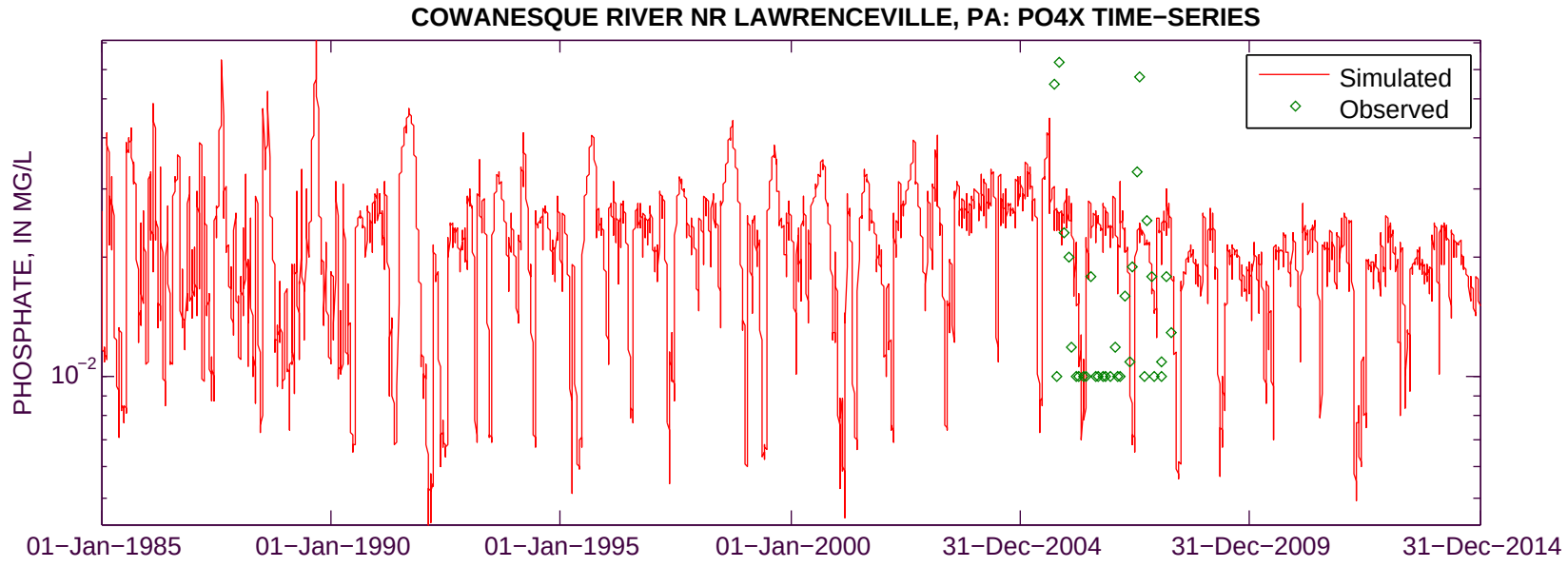
LOAD DATA
LOG10

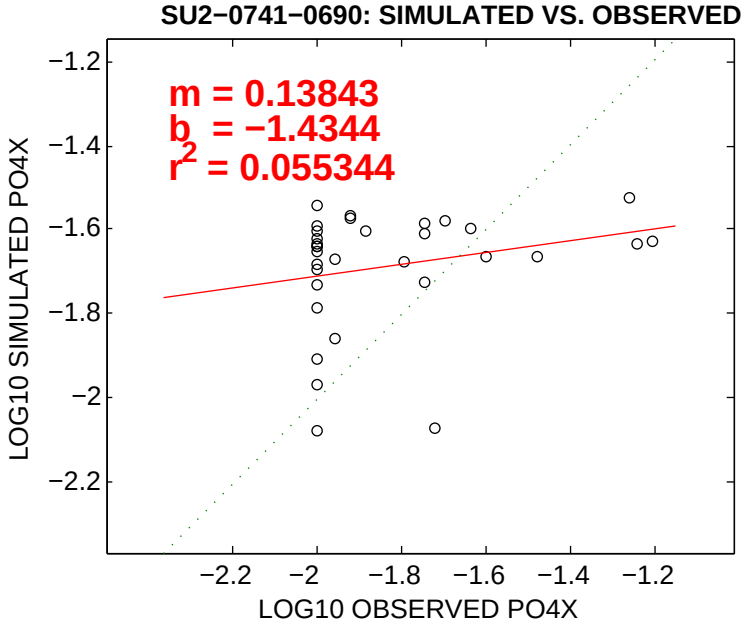


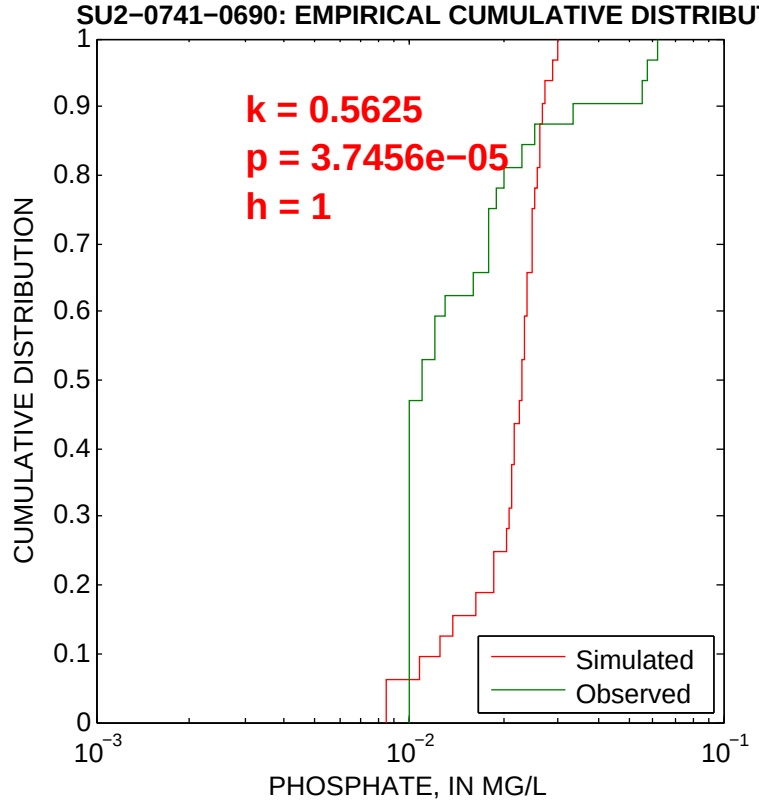












DATA SELECTION

scenario	file
P620171001WQ	PO4X.calib

plot: PO4X - phosphate

Dates	1/1/1985	12/31/201

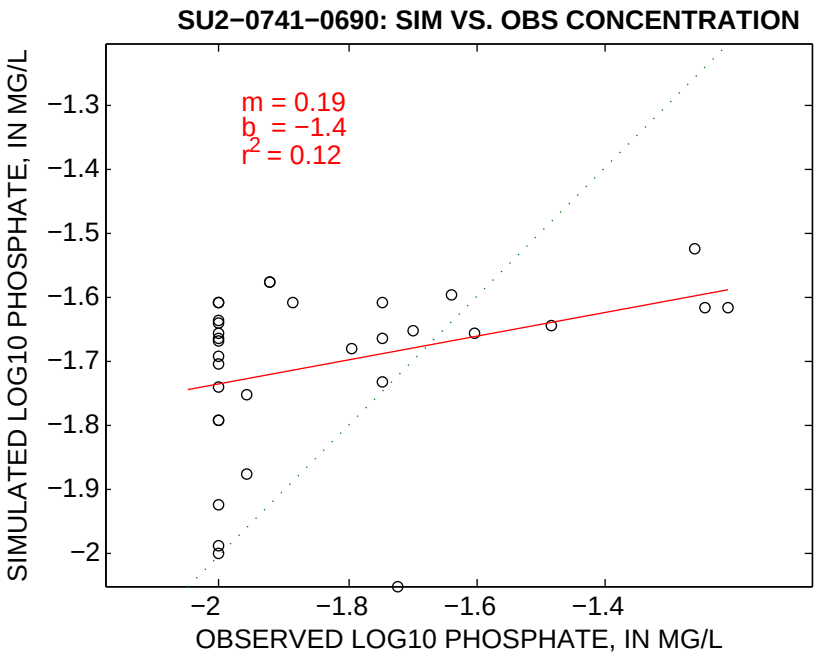
Drive	Directory	Observed
N/A	model	OBS20161101

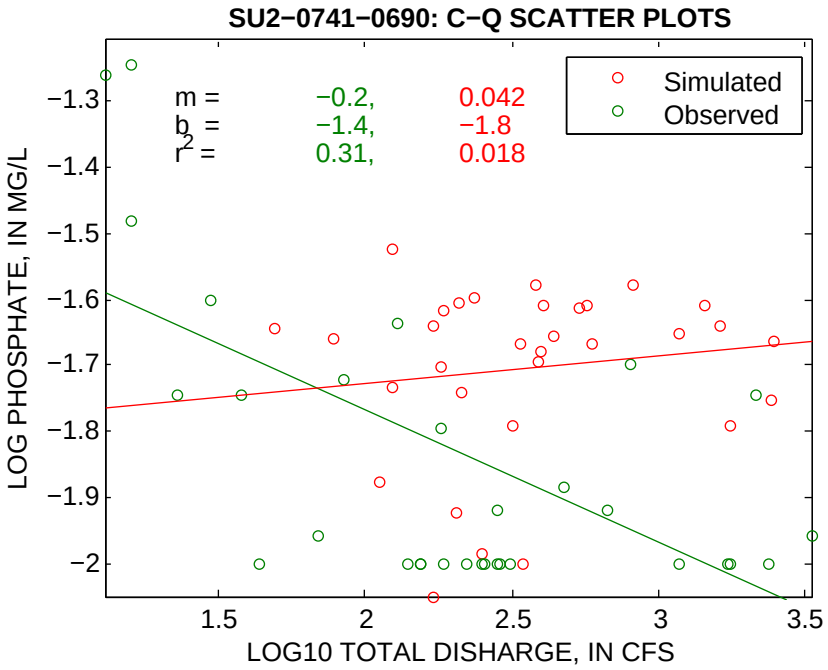
STATISTICS

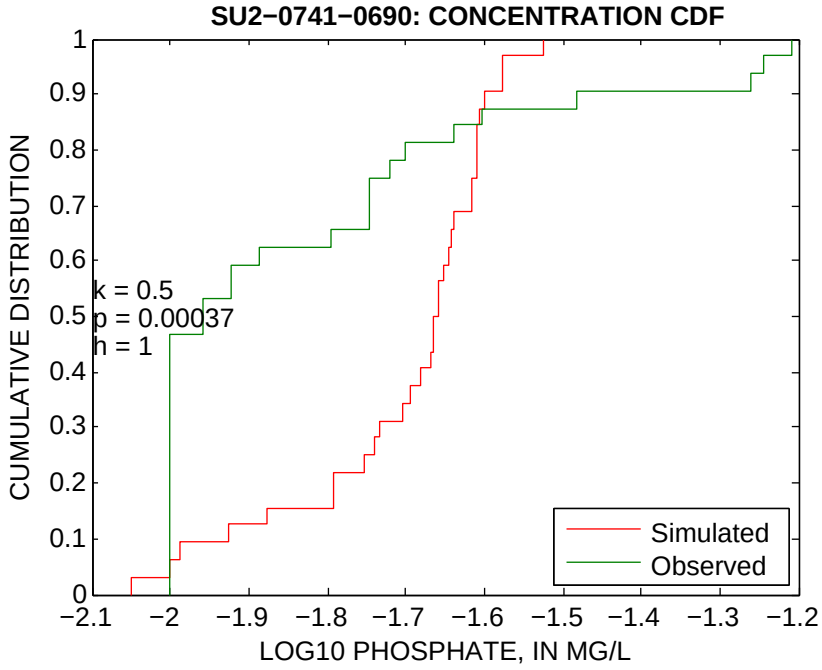
	n	32	32
		observe	simulate
min		0.01	0.0084006
		-2	-2.07569
mean		0.0179063	0.0214498
		-1.82901	-1.68763
media		0.011	0.0228665
		-1.95861	-1.6408
max		0.062	0.029847
		-1.20761	-1.5251
varian		0.00020286	3.07739e-0
		0.0582024	0.0201526
JB		0.001	0.037704
		0.009148	0.004804
		ra	log
%		19.7893	-7.72998
err.va		0.00020617	0.0828748
rel.std.err		1.01633	1.42391
mod.eff		-0.0163251	-0.423907

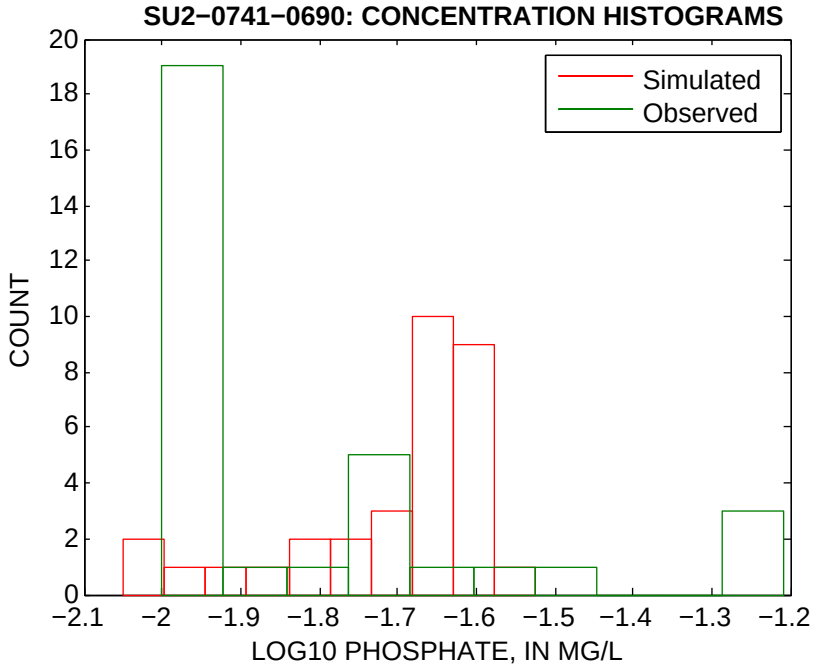
VERSION 2.1

ALL DATA
LOG10

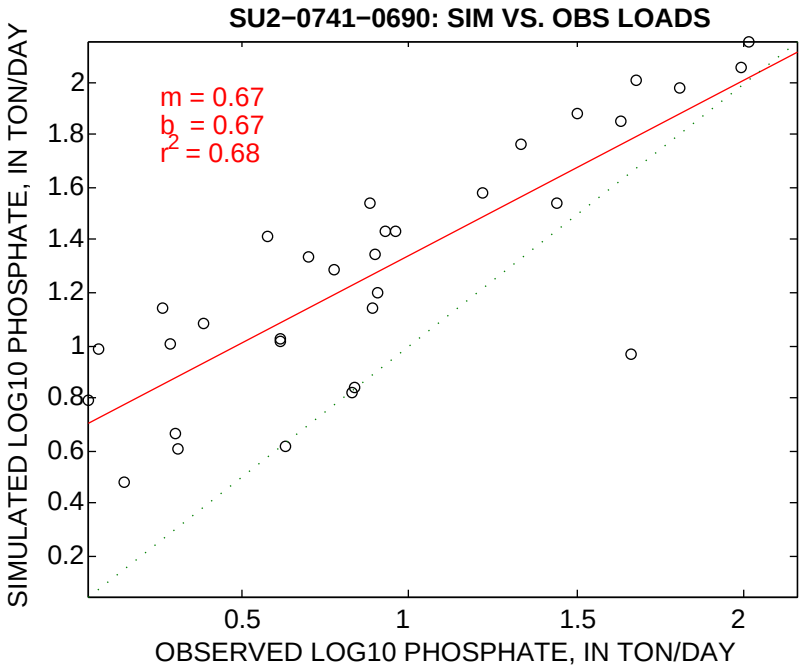


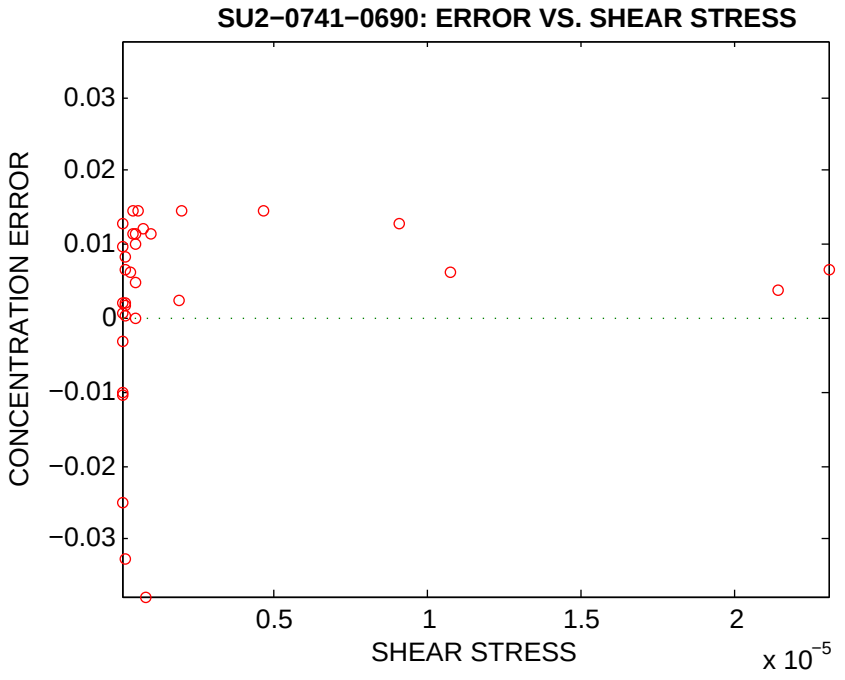


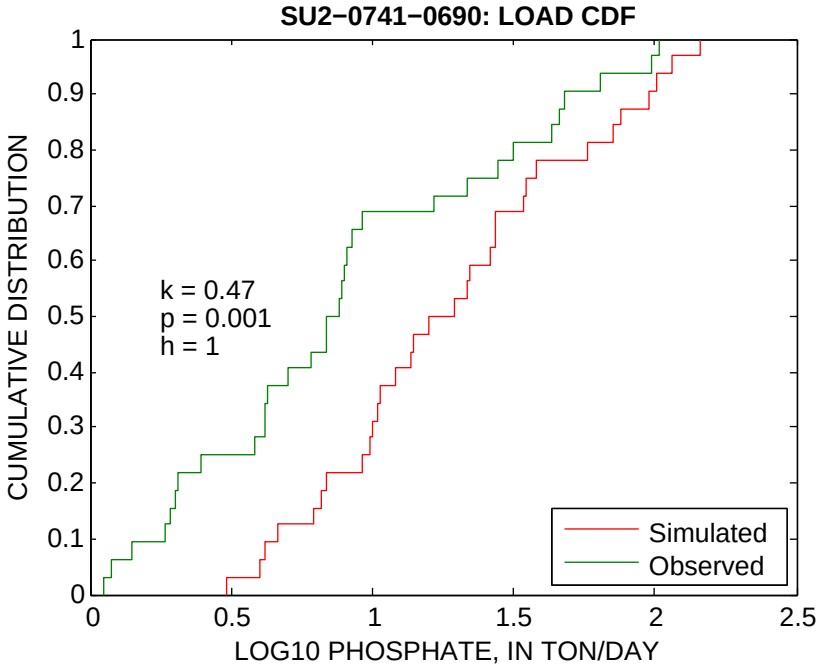


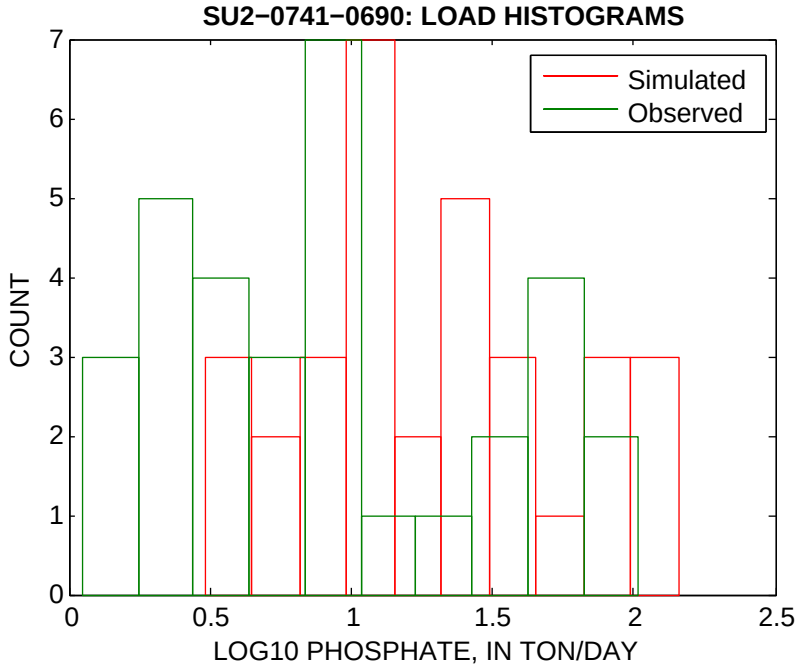


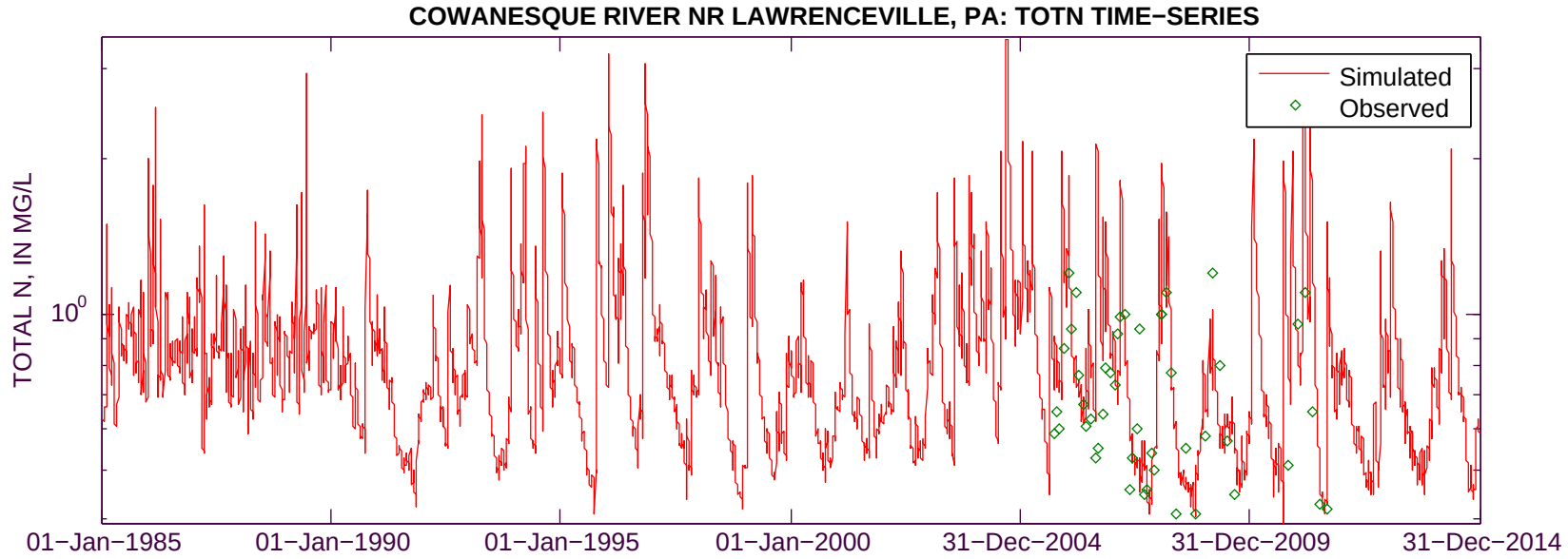
LOAD DATA
LOG10

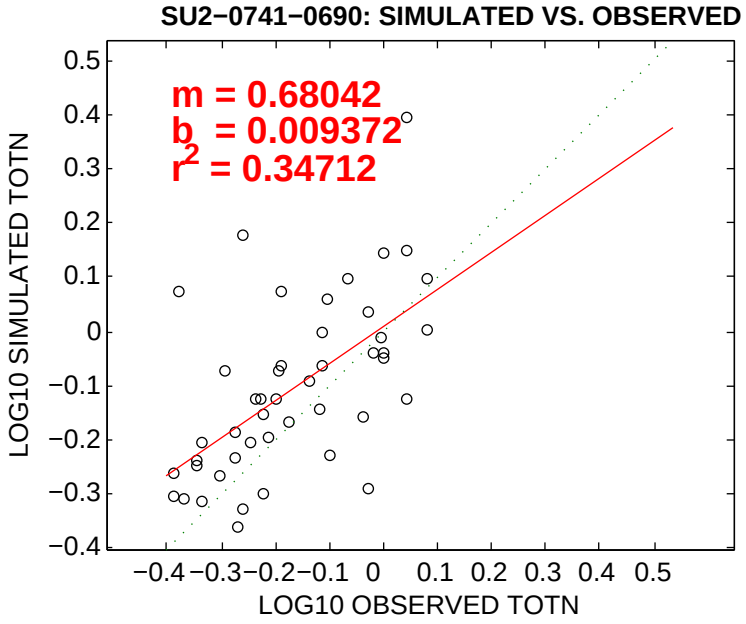


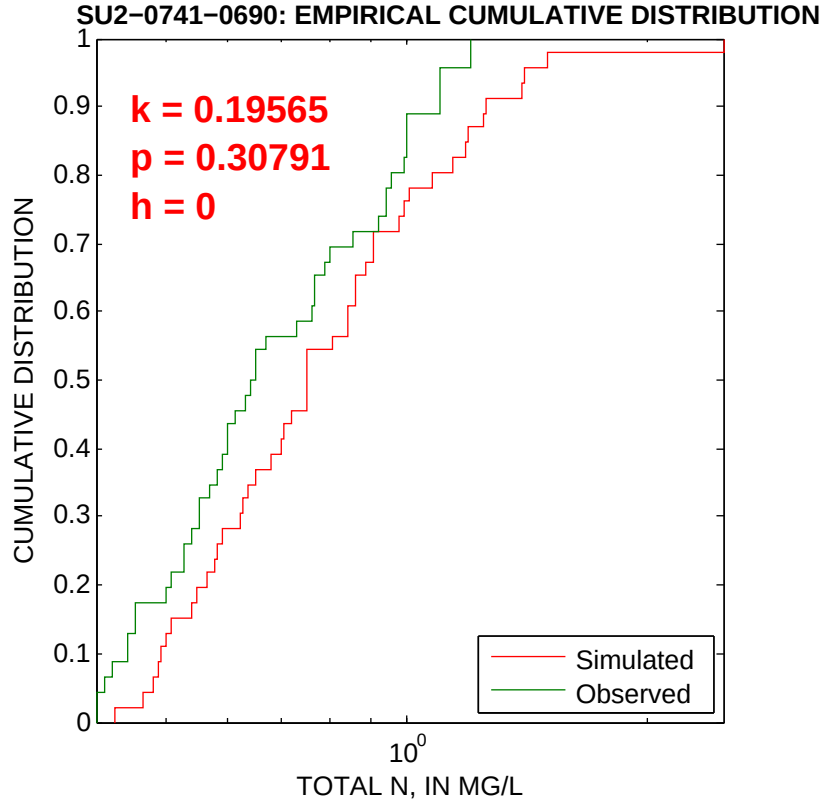












DATA SELECTION

scenario	file
P620171001WQ	TOTN.calib

plot: TOTN - total nitrogen

Dates: 1/1/1985 – 12/31/201

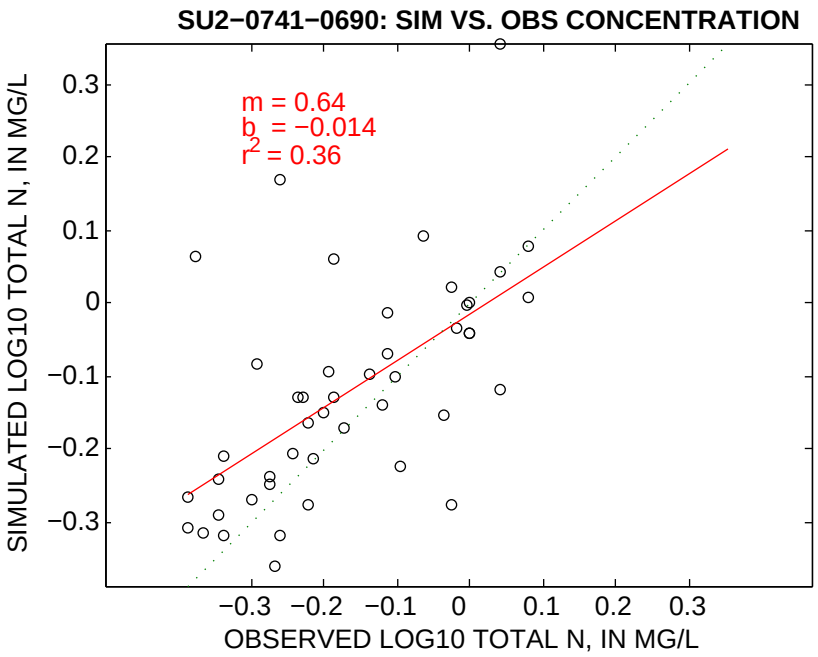
Drive	Directory	Observed
N/A	model	OBS20161101

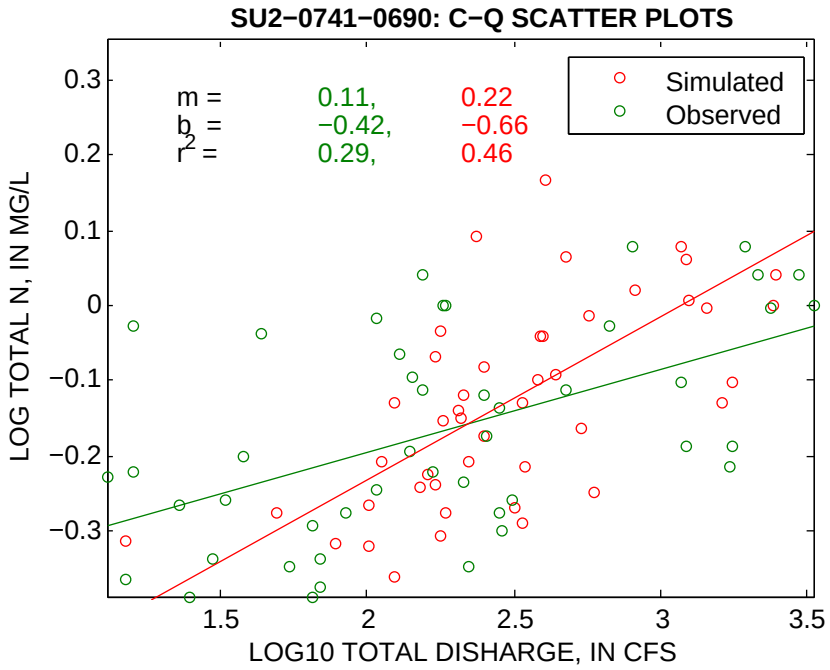
STATISTICS

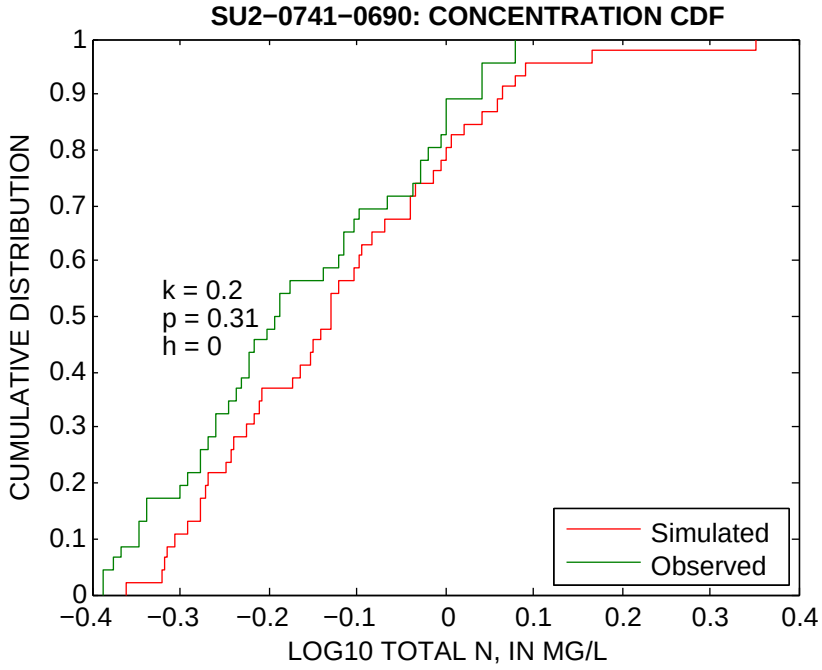
	n	observe	simulate
		46	46
min		0.41	0.43461
		-0.387216	-0.3619
mean		0.715652	0.846022
		-0.167512	-0.104607
media		0.645	0.75233
		-0.190453	-0.123592
max		1.2	2.4772
		0.0791812	0.393961
varian		0.054714	0.137213
		0.0196057	0.0261497
JB		0.072984	0.001
		0.11959	0.076618
		ra	log
%		18.2169	-37.5525
err.va		0.114727	0.0231199
rel.std.err		2.09686	1.17924
mod.eff		-1.09686	-0.179244

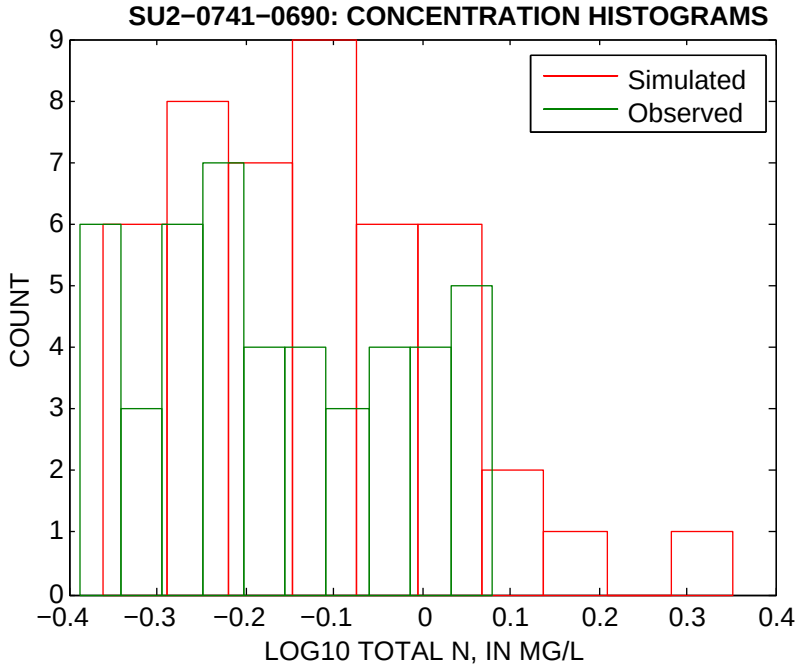
VERSION 2.1

ALL DATA
LOG10

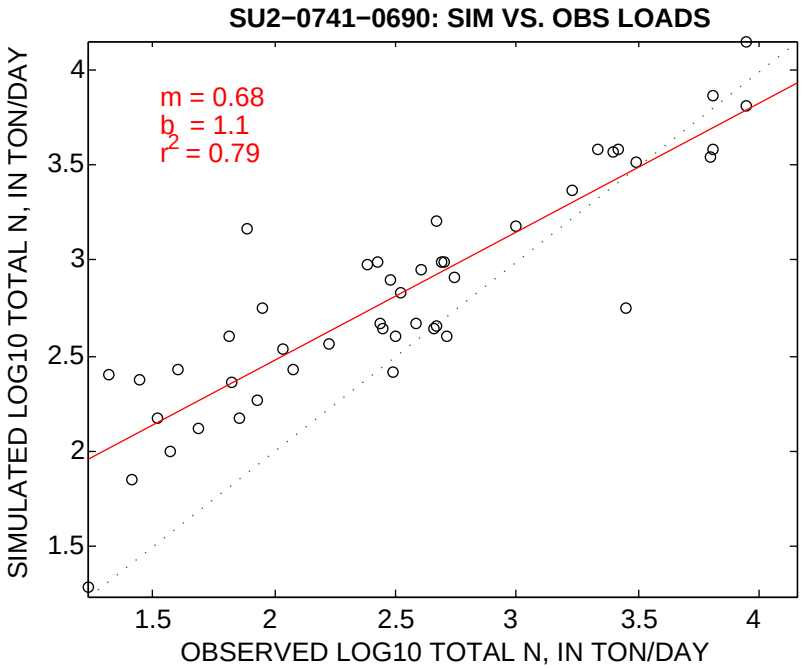


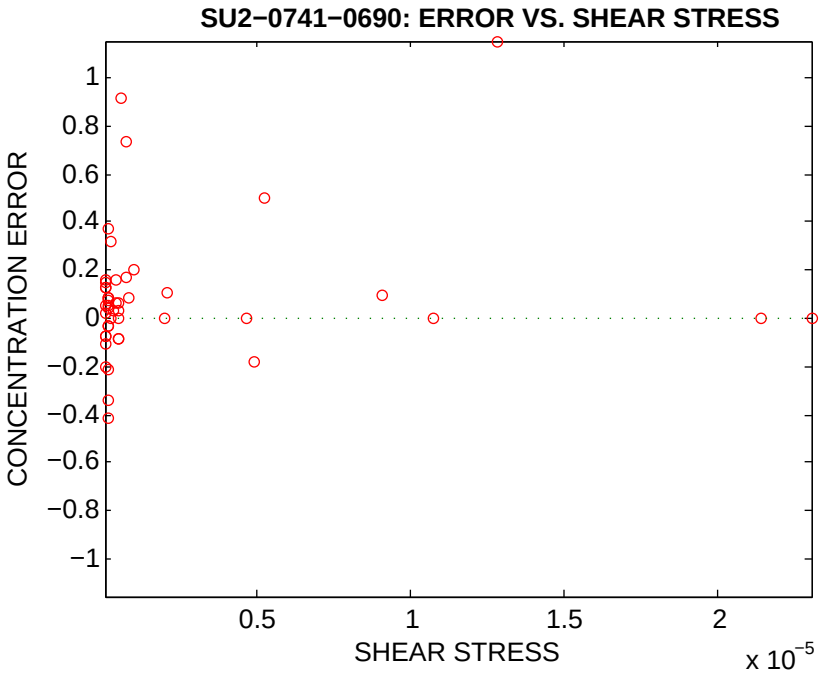


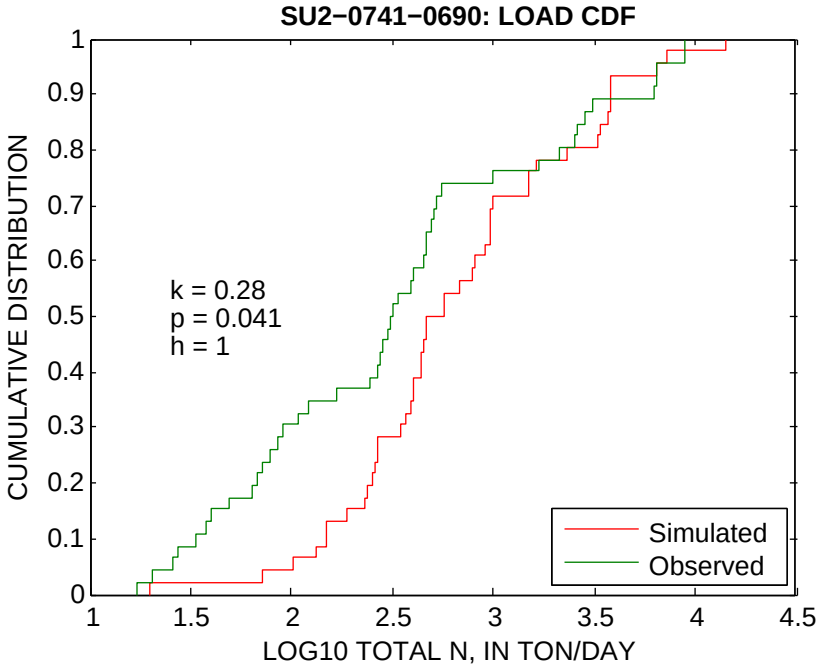


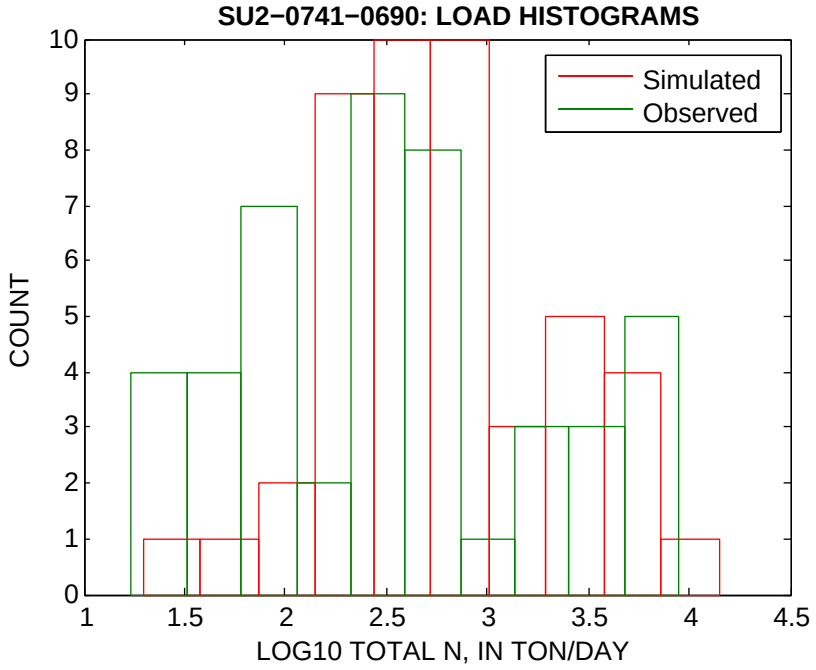


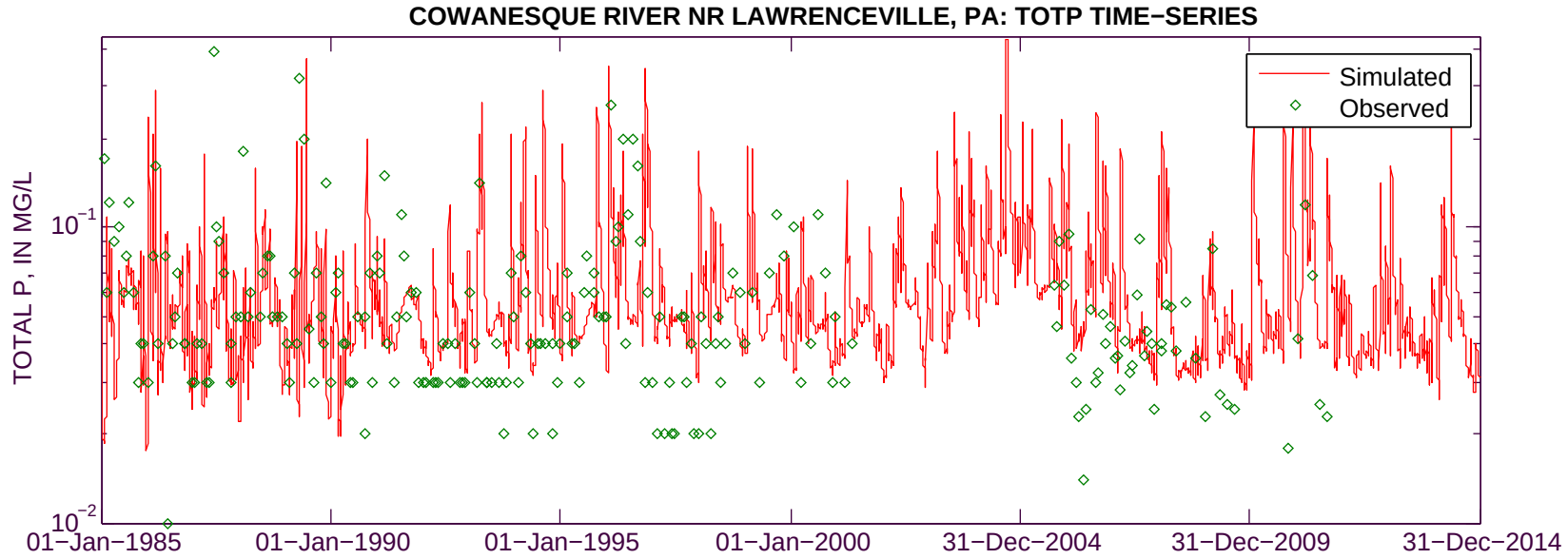
LOAD DATA
LOG10

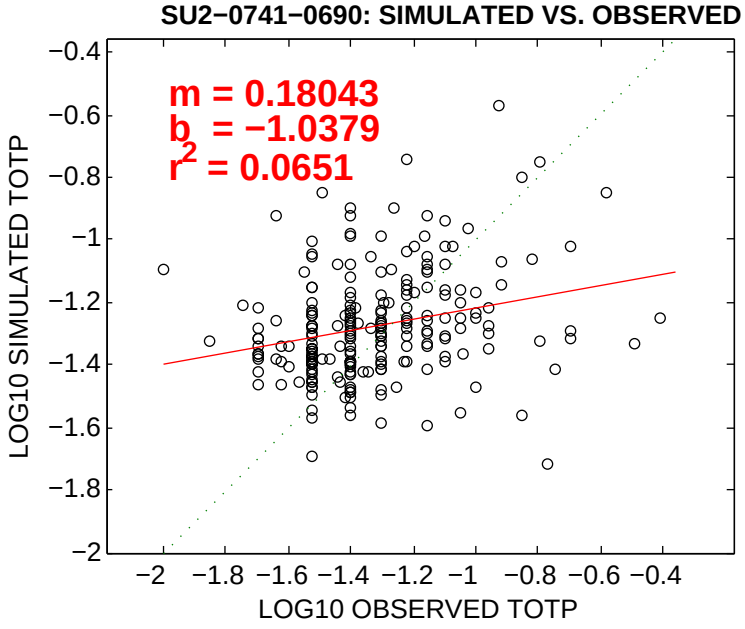


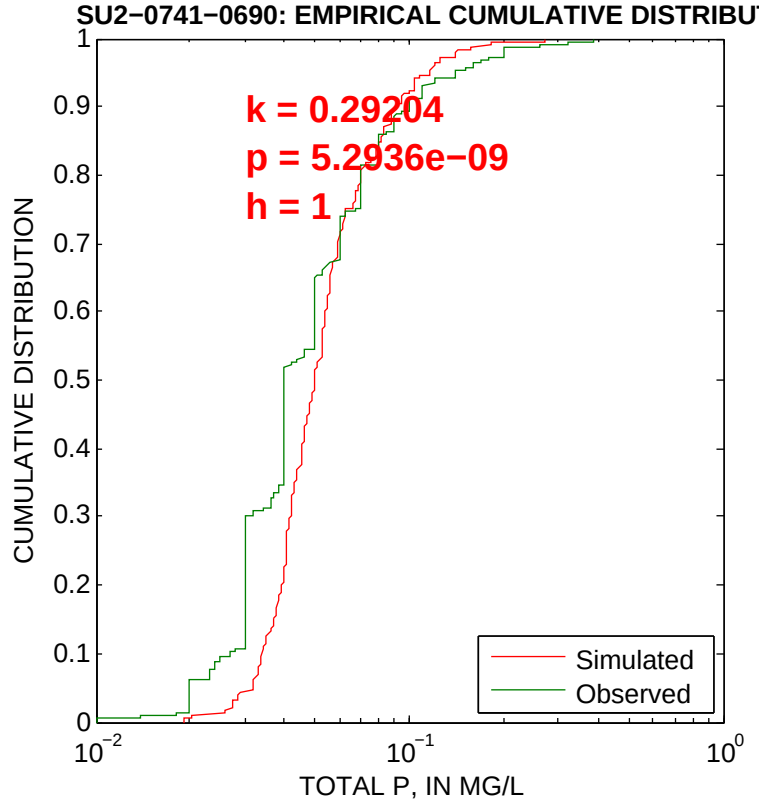












DATA SELECTION

scenario	file
P620171001WQ	TOTP.calib

plot: TOTP - total phosphorus

Dates: 1/1/1985 – 12/31/201

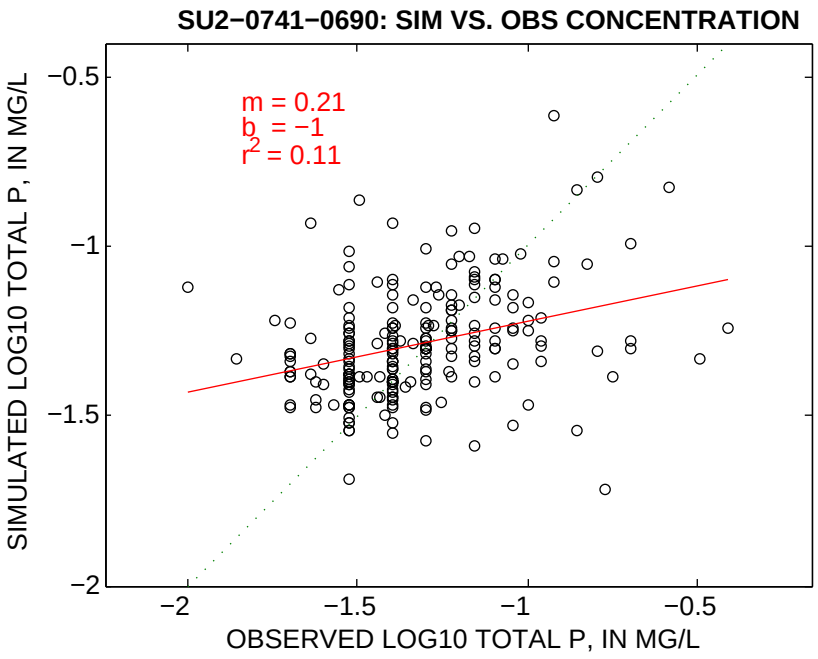
Drive	Directory	Observed
N/A	model	OBS20161101

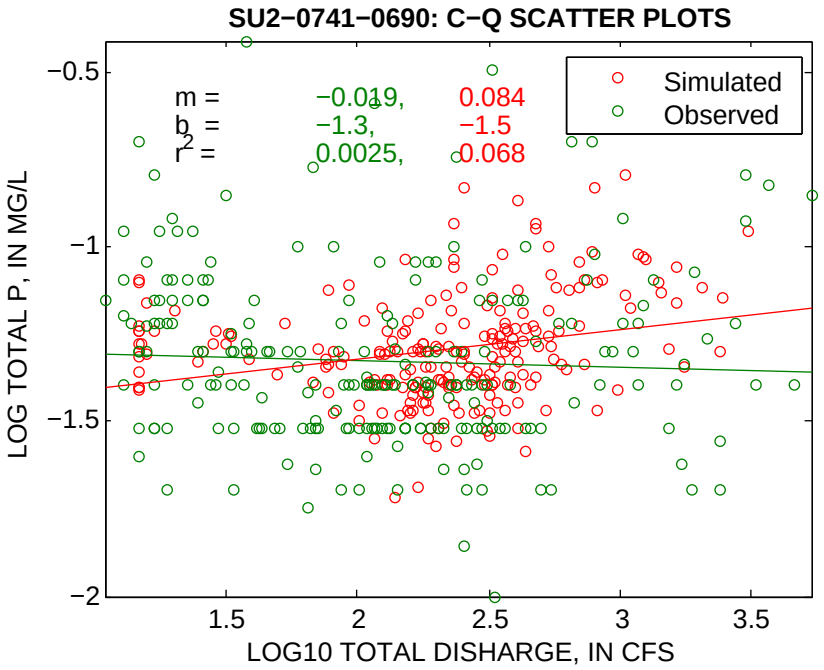
STATISTICS

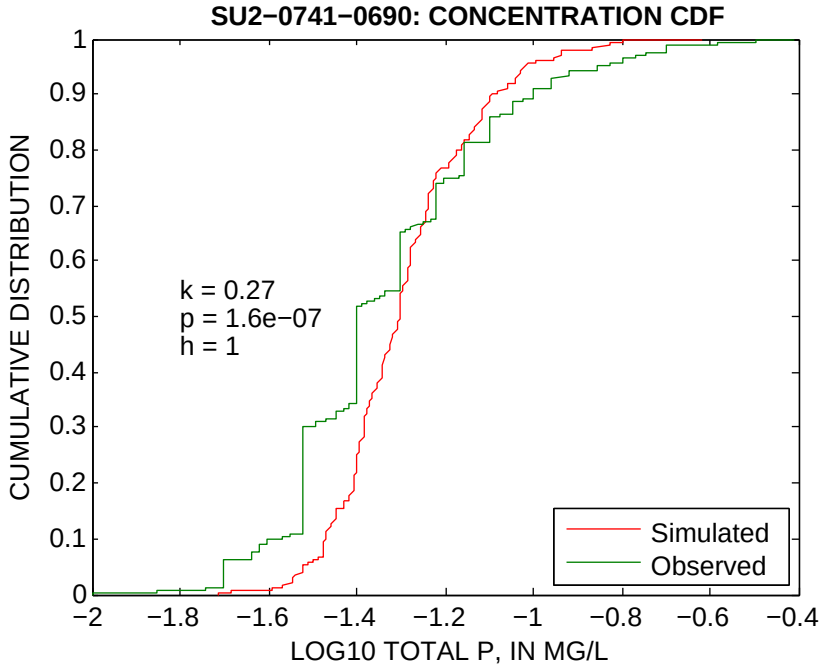
	n	226	226
		observe	simulate
min		0.01	0.019226
		-2	-1.71611
mean		0.0572522	0.0579009
		-1.32457	-1.27688
media		0.04	0.049985
		-1.39794	-1.30116
max		0.39	0.26922
		-0.408935	-0.569893
varian		0.00214542	0.00088420
		0.0611651	0.030588
JB		0.001	0.001
		0.001	0.001
		ra	log
%		1.13307	-3.60099
err.va		0.00239373	0.071966
rel.std.err		1.11574	1.17659
mod.eff		-0.115736	-0.176587

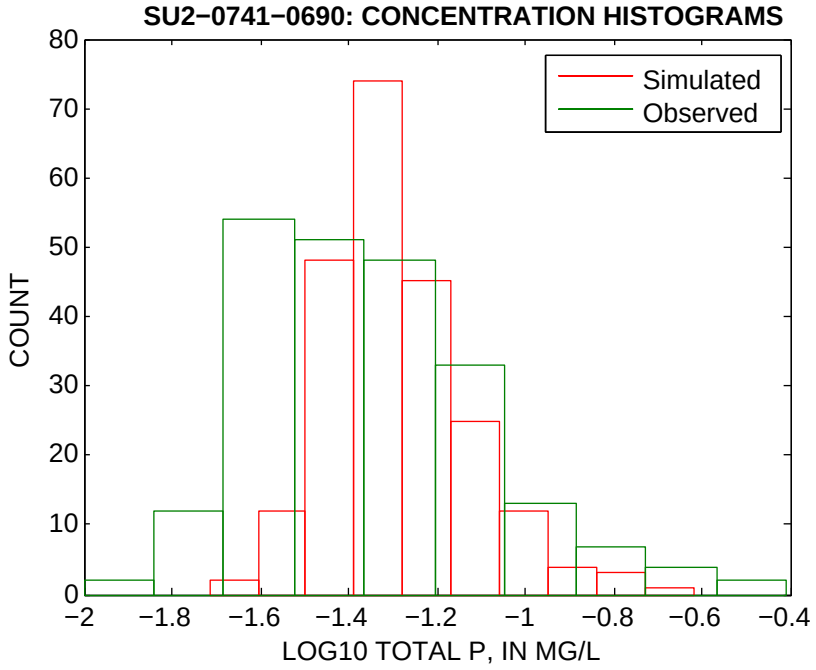
VERSION 2.1

ALL DATA
LOG10

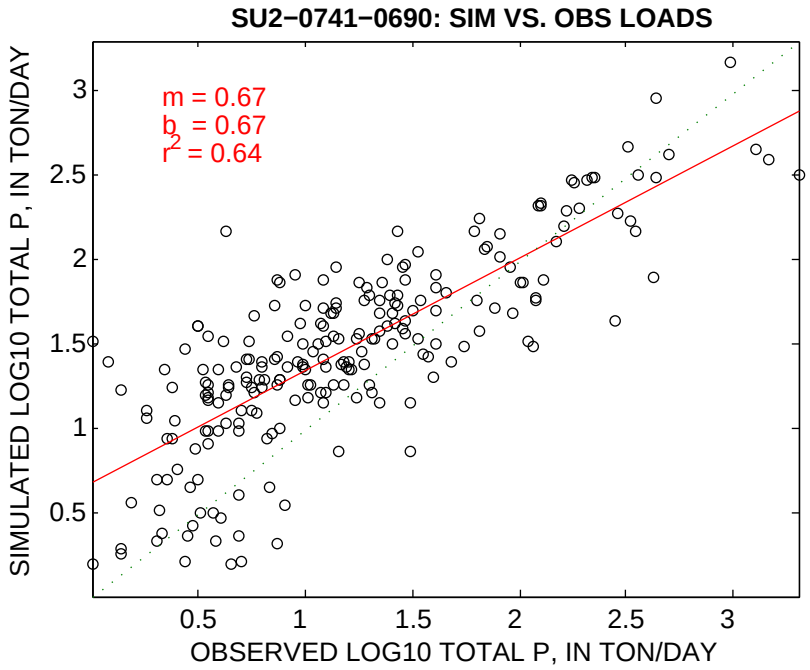


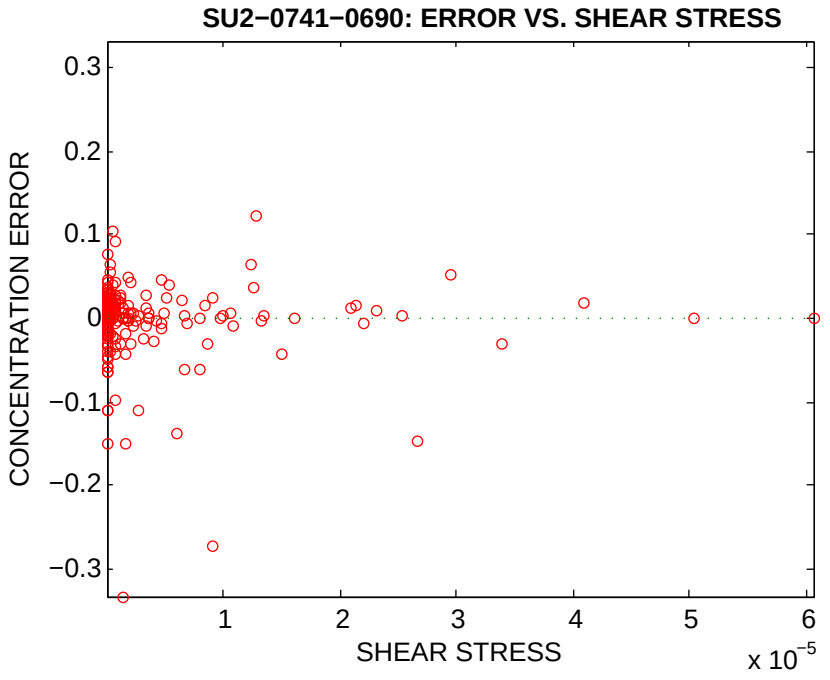


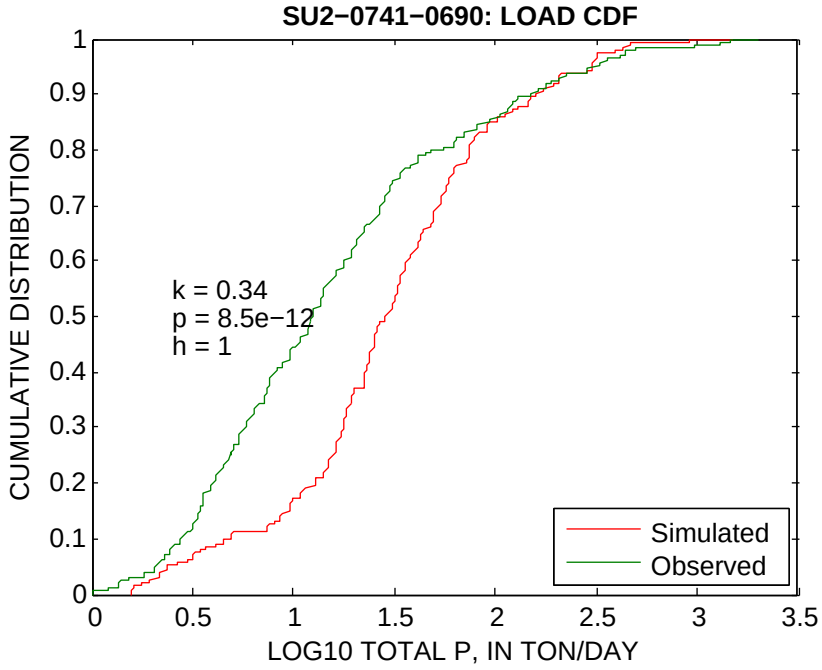


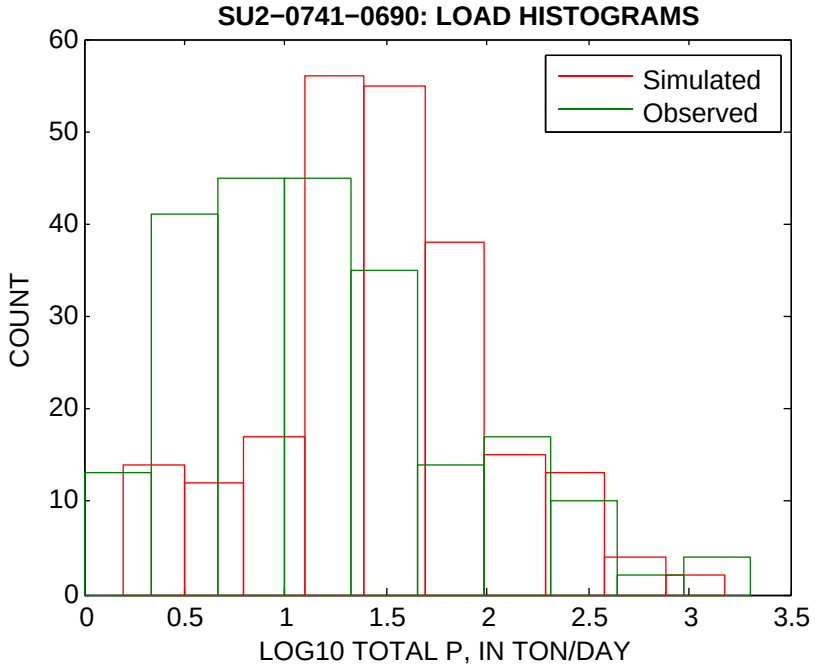


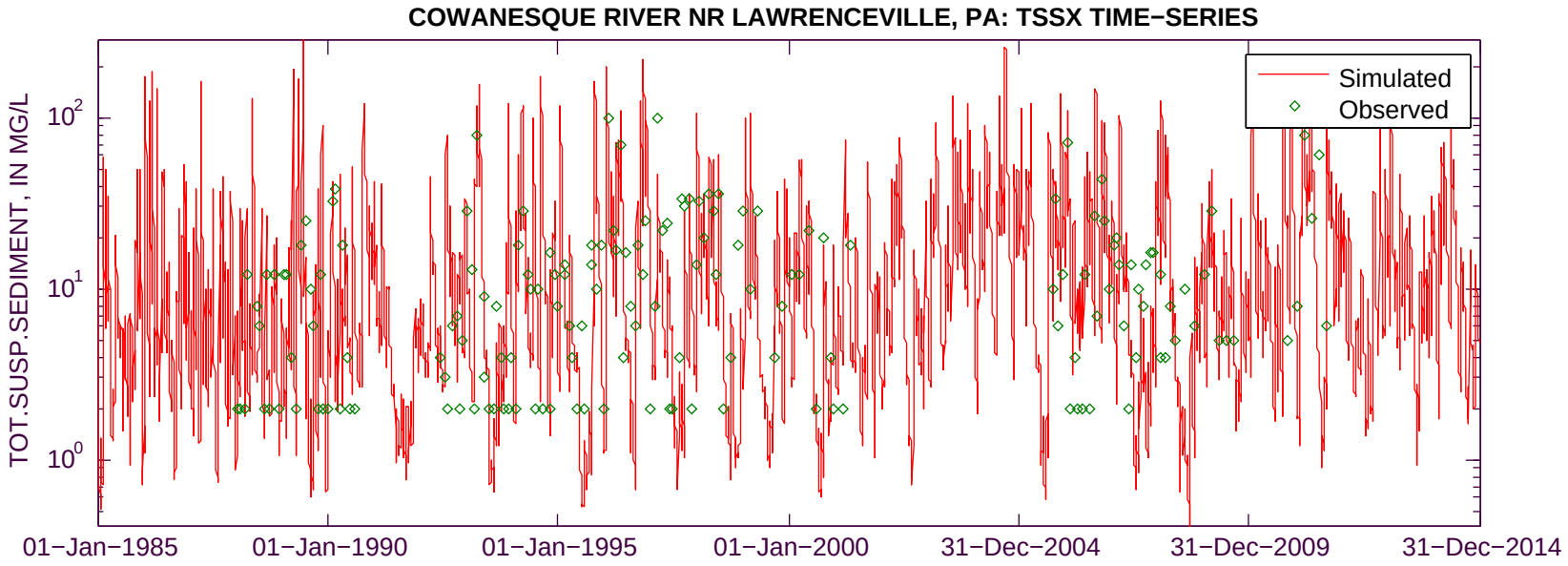
LOAD DATA
LOG10

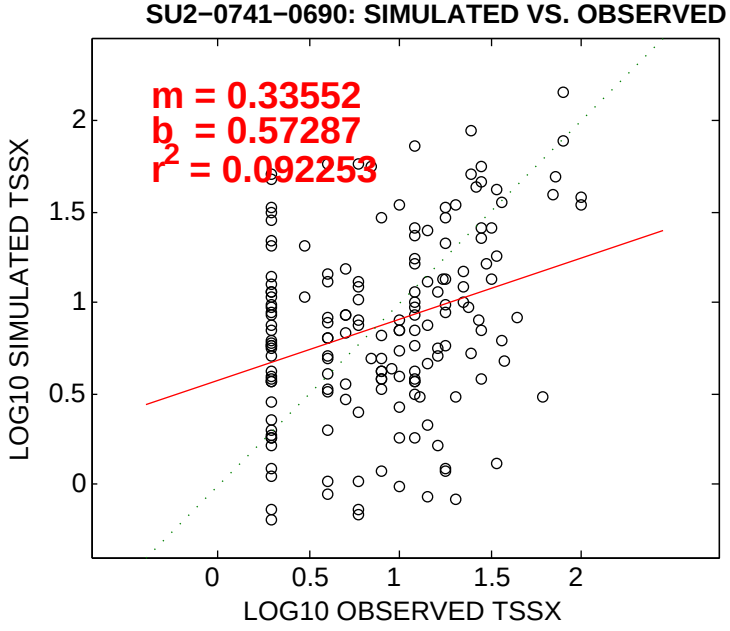


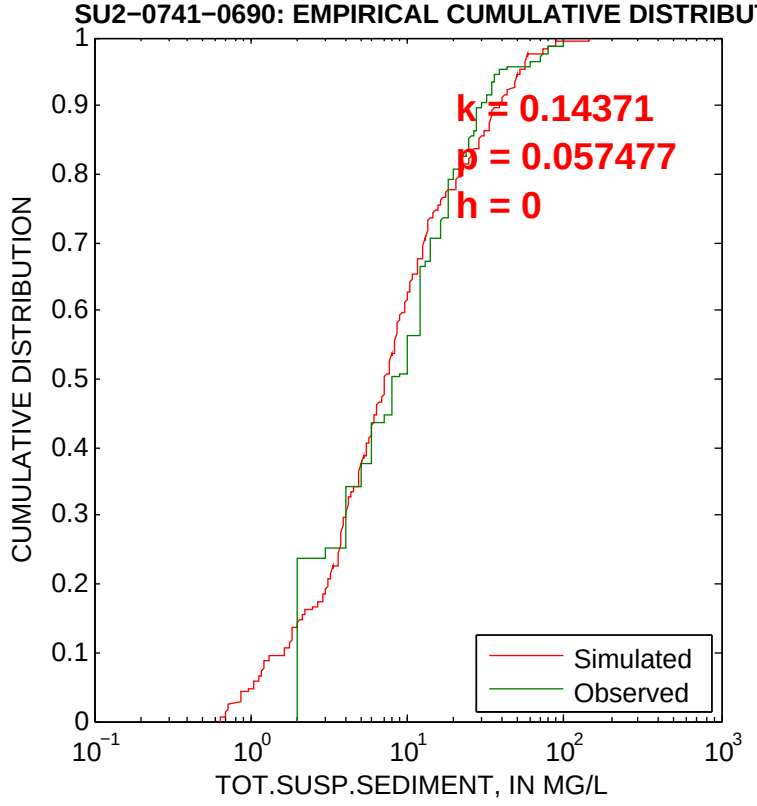












DATA SELECTION

scenario	file
P620171001WQ	TSSX.calib

plot: TSSX - total suspended ...

Dates: 1/1/1985 – 12/31/201

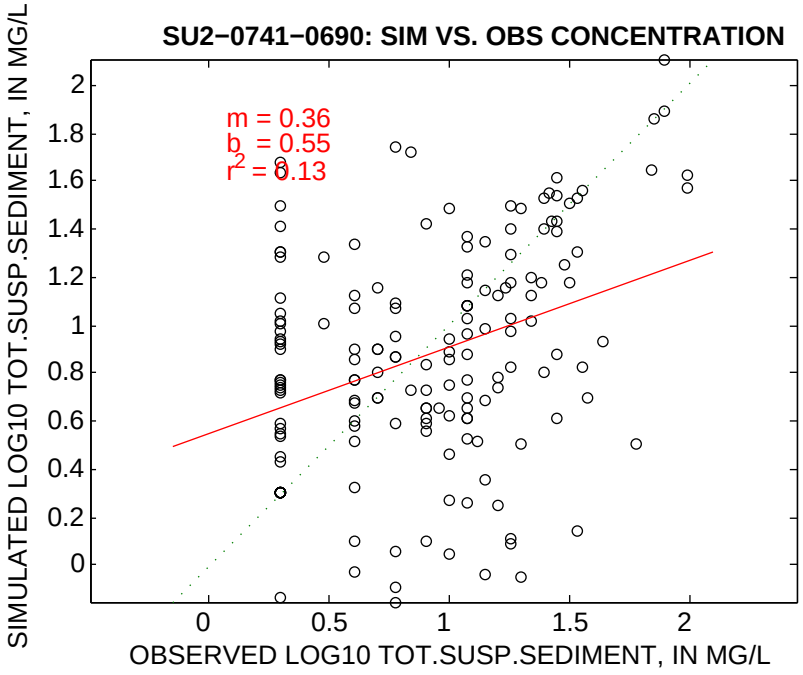
Drive	Directory	Observed
N/A	model	OBS20161101

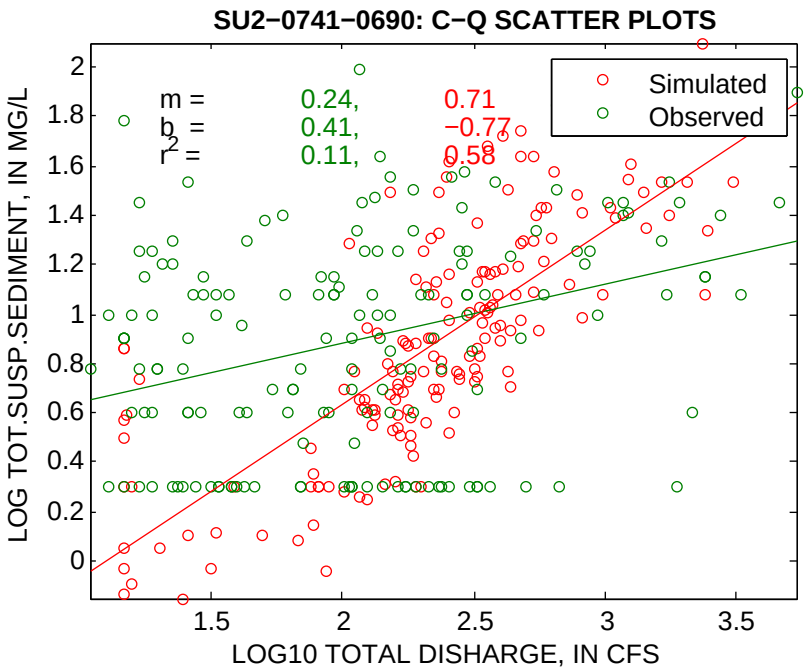
STATISTICS

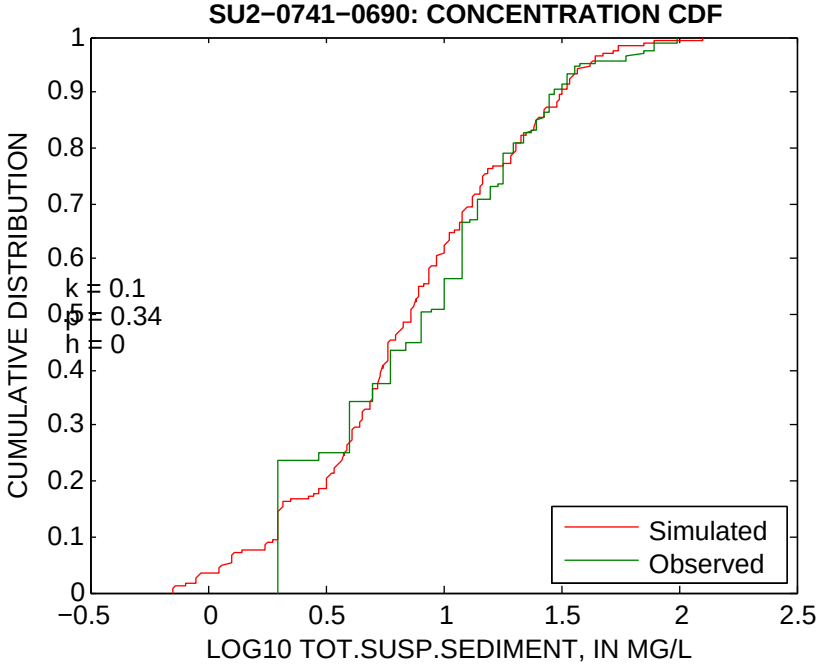
	n	observe	simulate
		167	167
min		2	0.65056
		0.30103	-0.186713
mean		13.8677	14.4019
		0.905133	0.876562
media		8	7.1512
		0.90309	0.854379
max		99	145.23
		1.99564	2.16206
varian		285.165	371.248
		0.208197	0.254058
JB		0.001	0.001
		0.045358	0.426293
		ra	log
%		3.85238	-3.15653
err.va		347.441	0.323368
rel.std.err		1.21839	1.55318
mod.eff		-0.218386	-0.553181

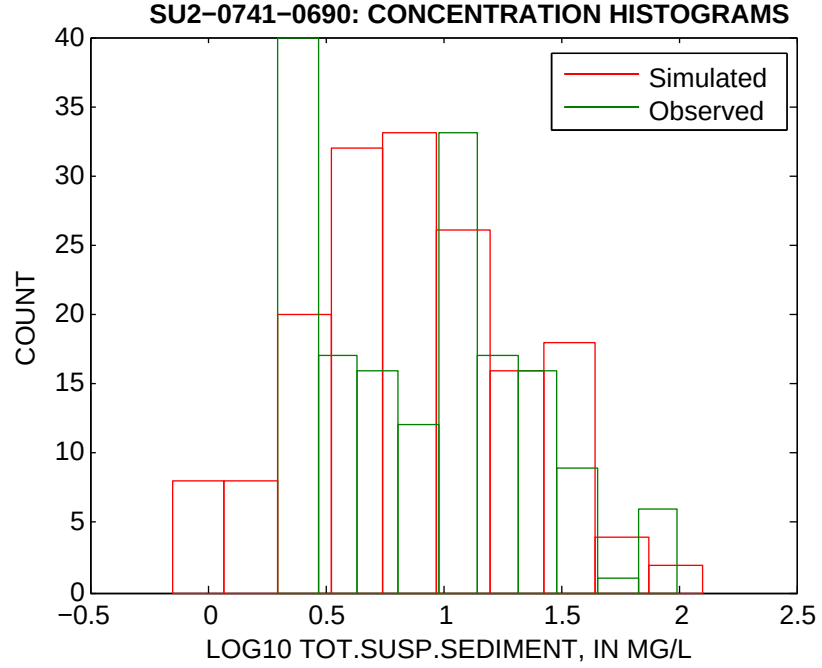
VERSION 2.1

ALL DATA
LOG10

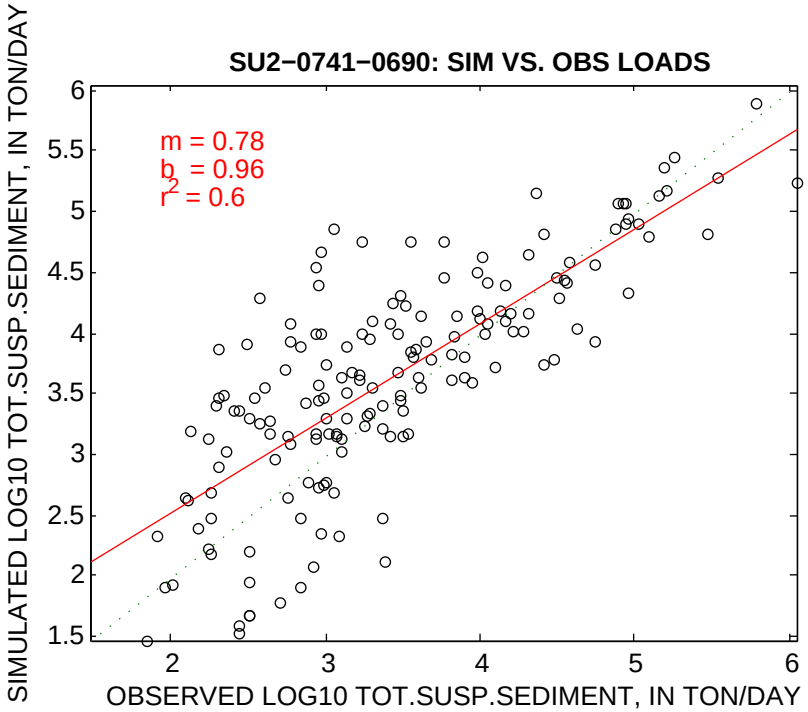


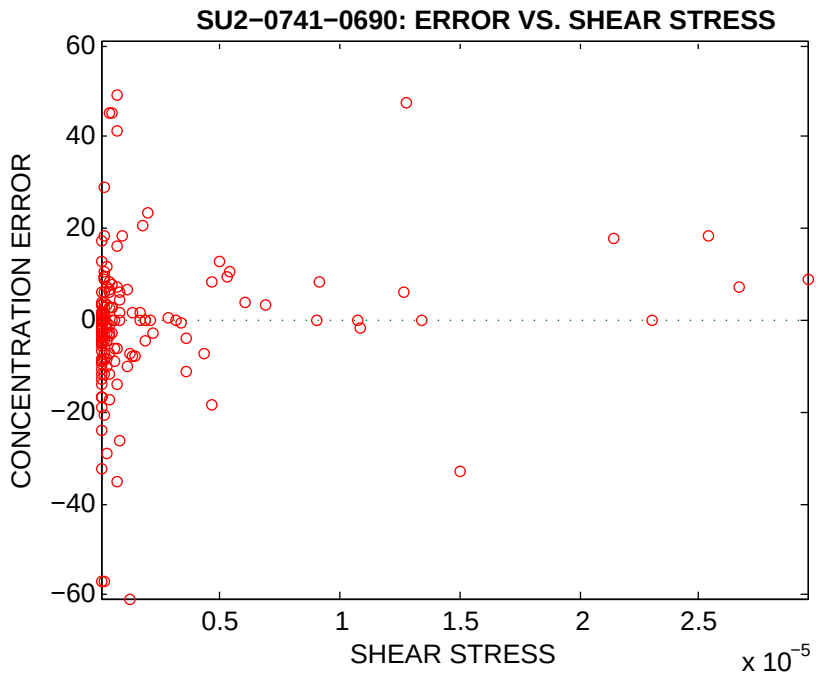


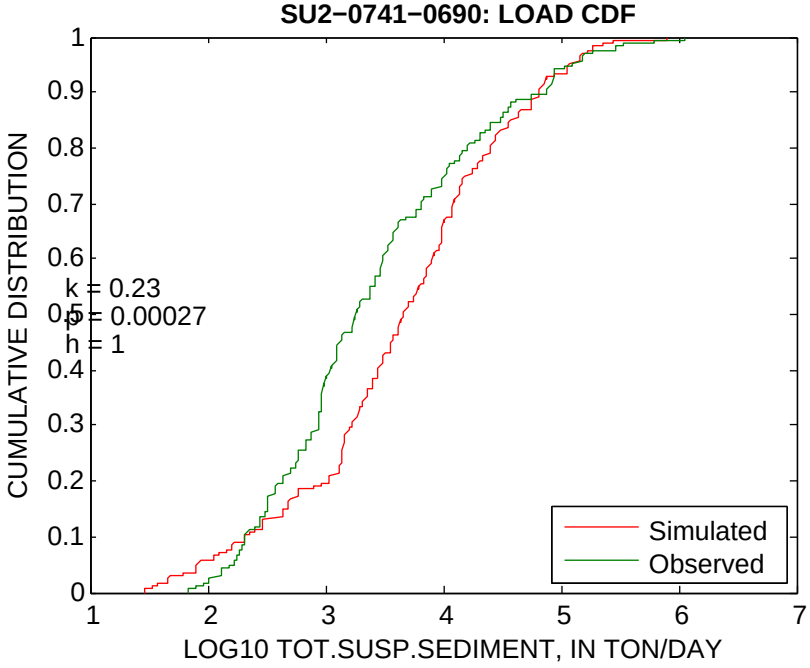


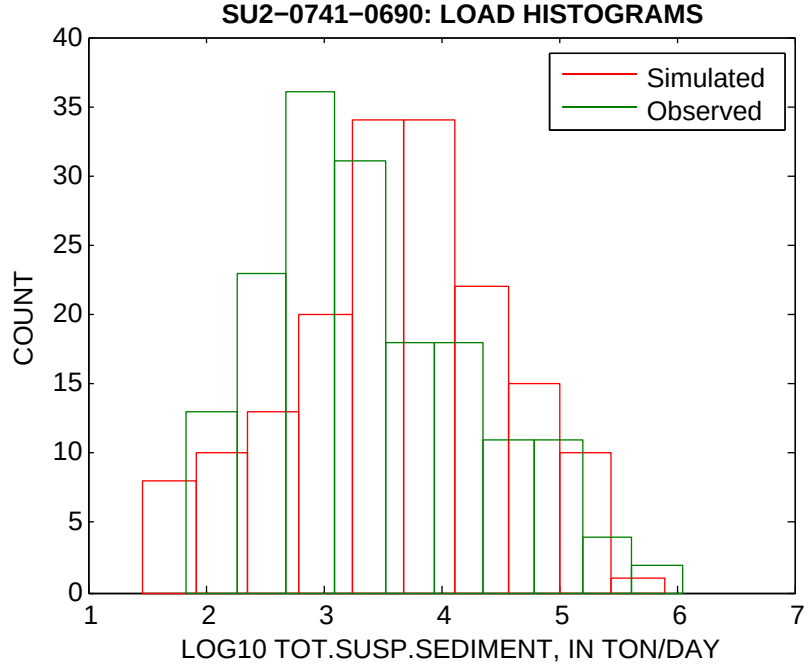


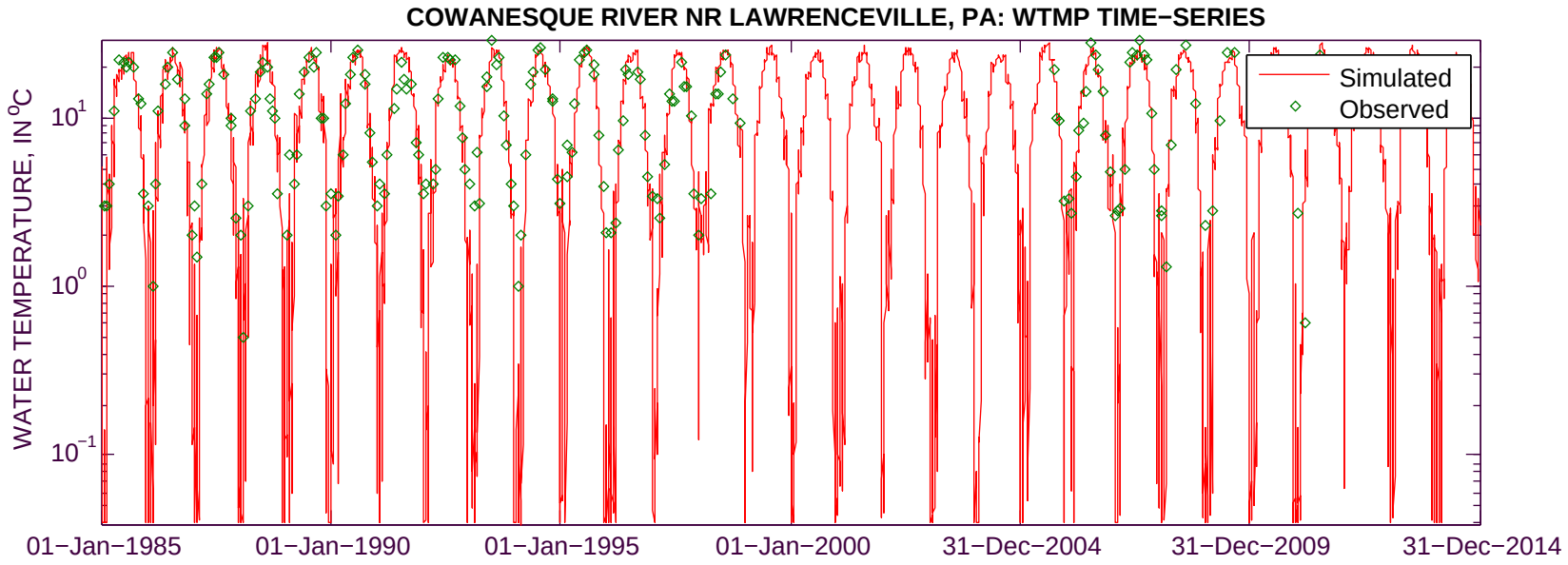
LOAD DATA
LOG10

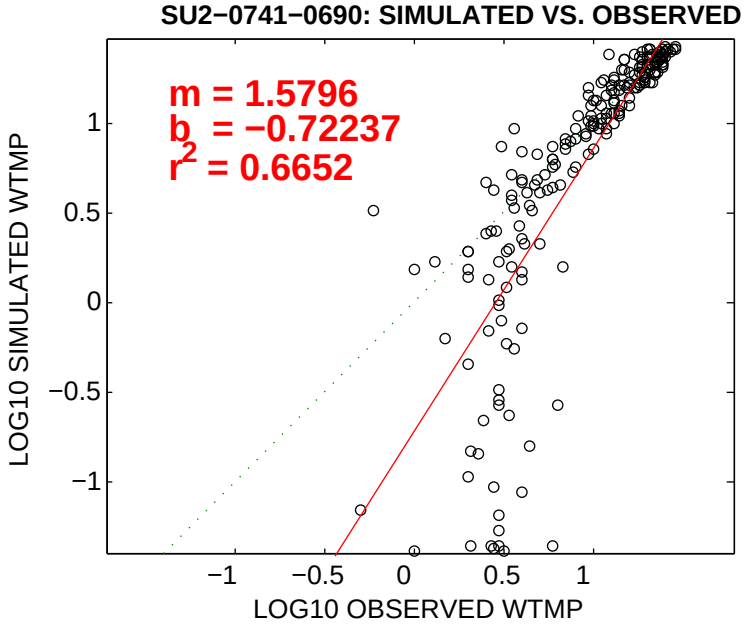


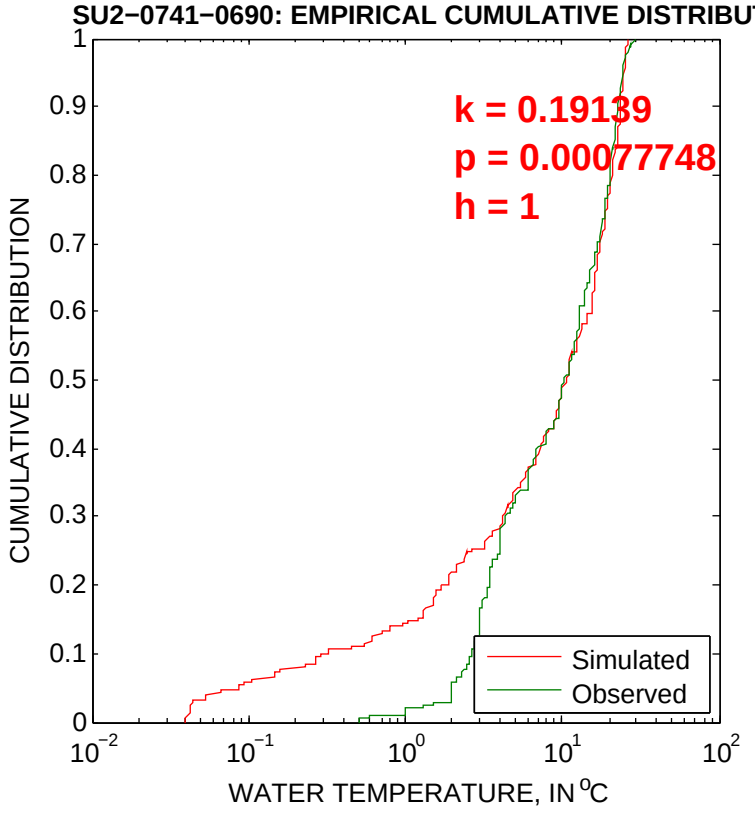












DATA SELECTION

scenario	file
P620171001WQ	WTMP.calib

plot: WTMP - water tempera...

Dates: 1/1/1985 – 12/31/201

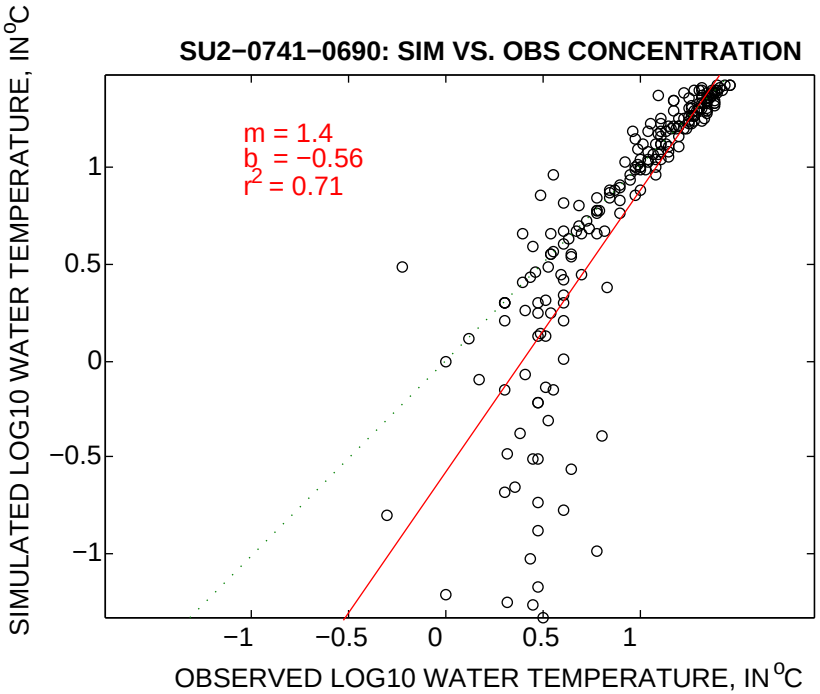
Drive	Directory	Observed
N/A	model	OBS20161101

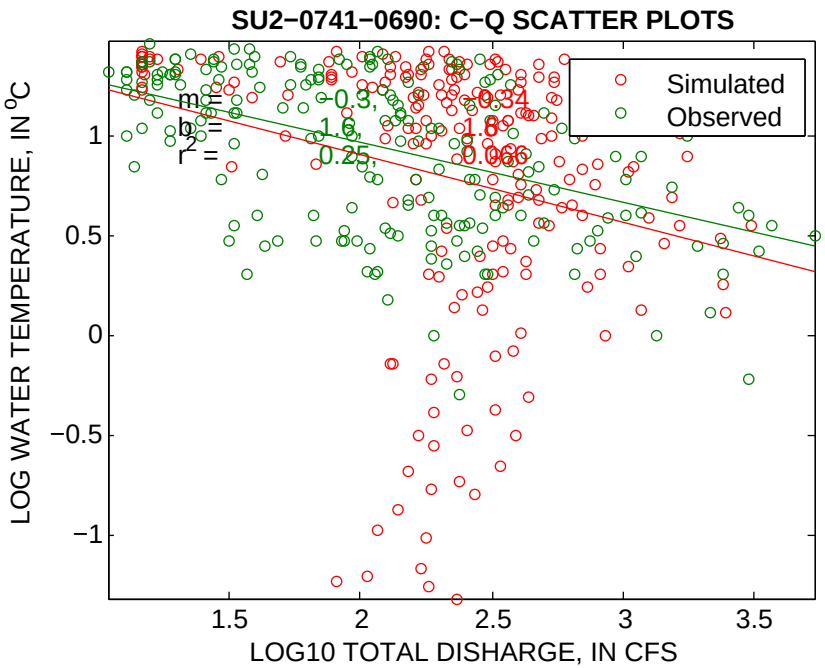
STATISTICS

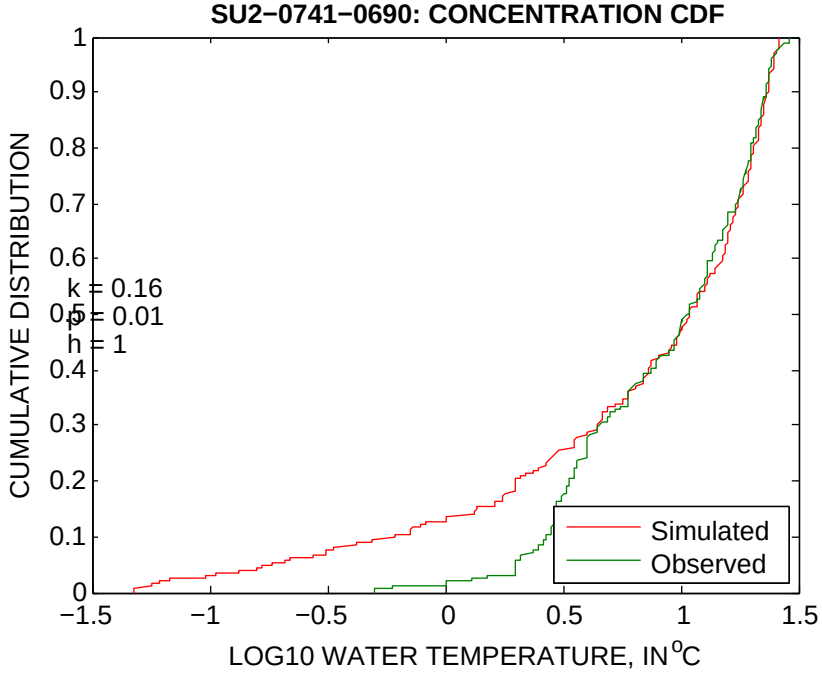
	n	209	209
		observe	simulate
min		0.5	0.040106
		-0.30103	-1.39679
mean		11.5986	11.4236
		0.92756	0.742784
media		10.4	10.582
		1.01703	1.02457
max		29.2	26.687
		1.46538	1.4263
varian		62.0243	74.9281
		0.146867	0.550876
JB		0.003945	0.003417
		0.006245	0.001
		ra	log
%		-1.50843	-19.9206
err.va		7.44896	0.268072
rel.std.err		0.120097	1.82526
mod.eff		0.879903	-0.825261

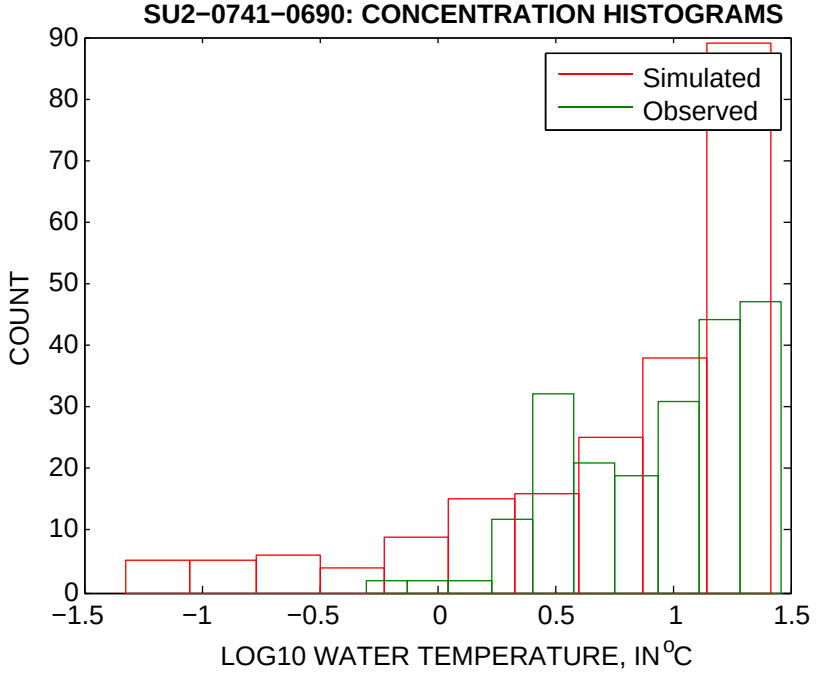
VERSION 2.1

ALL DATA
LOG10

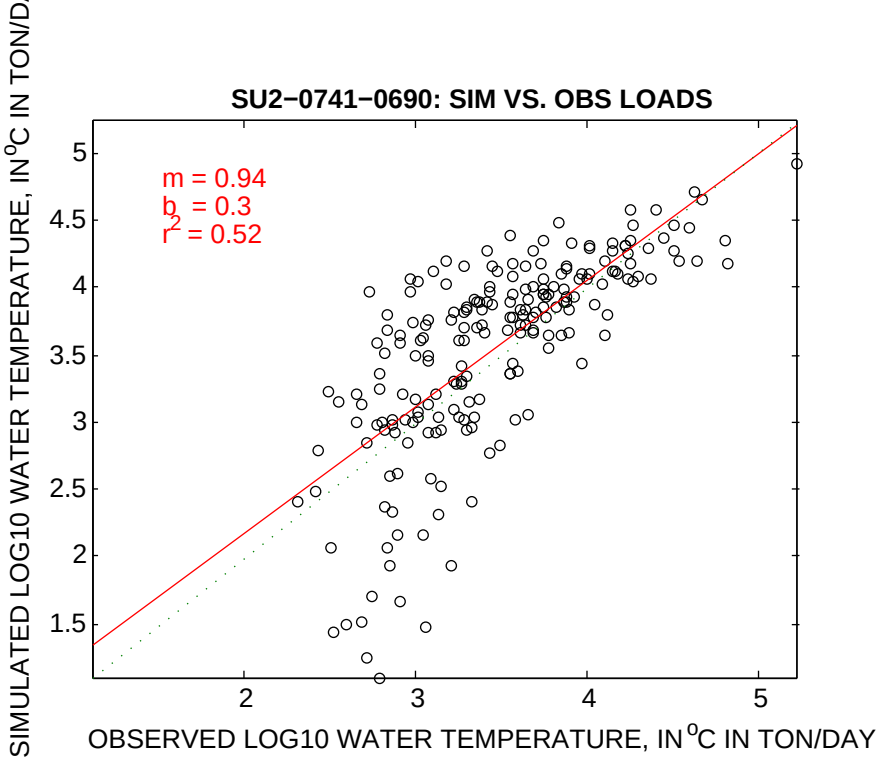


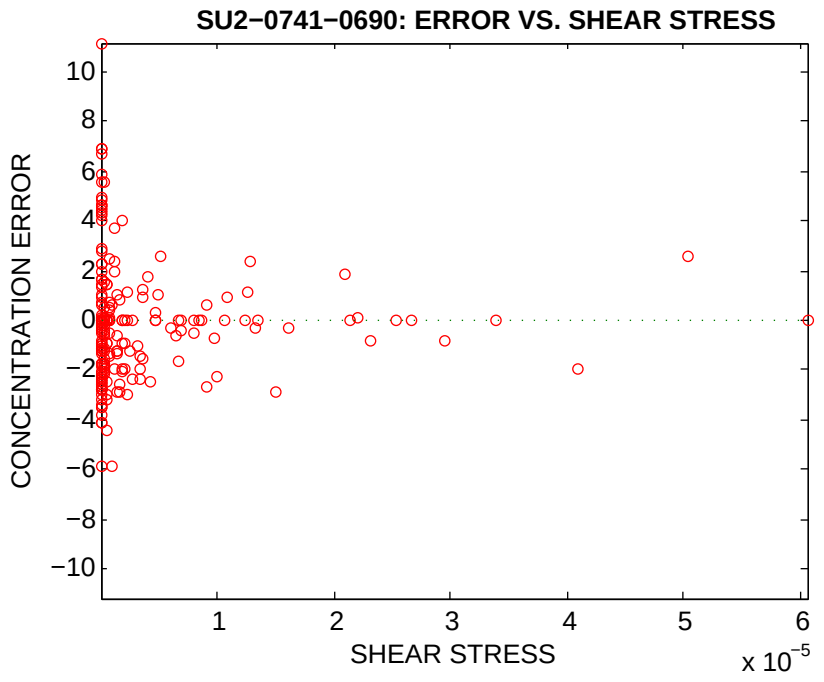


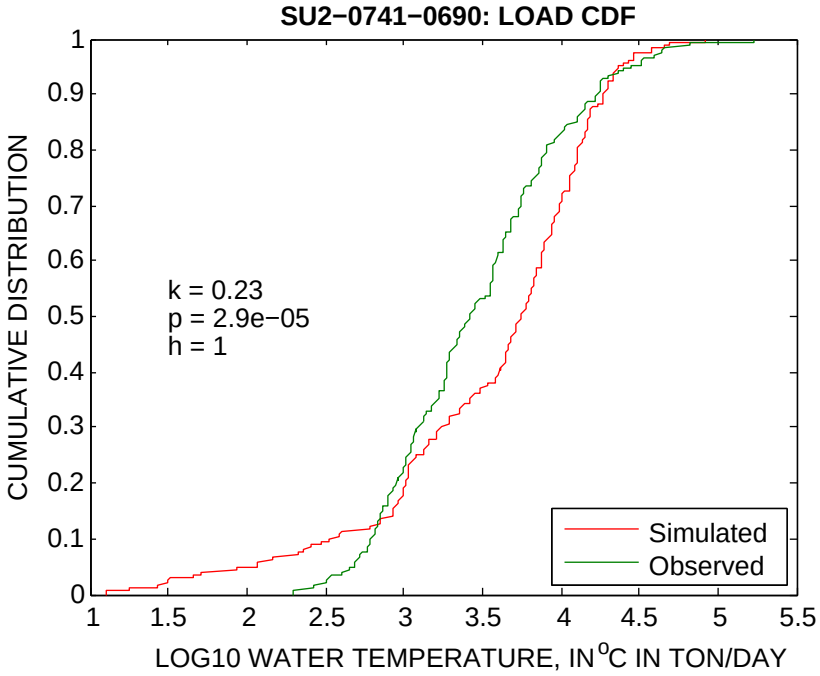


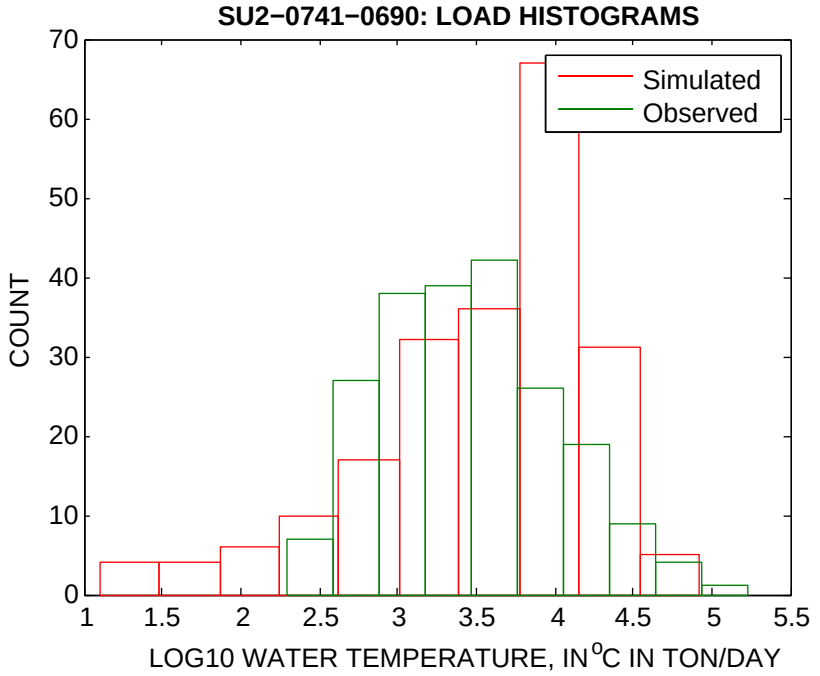


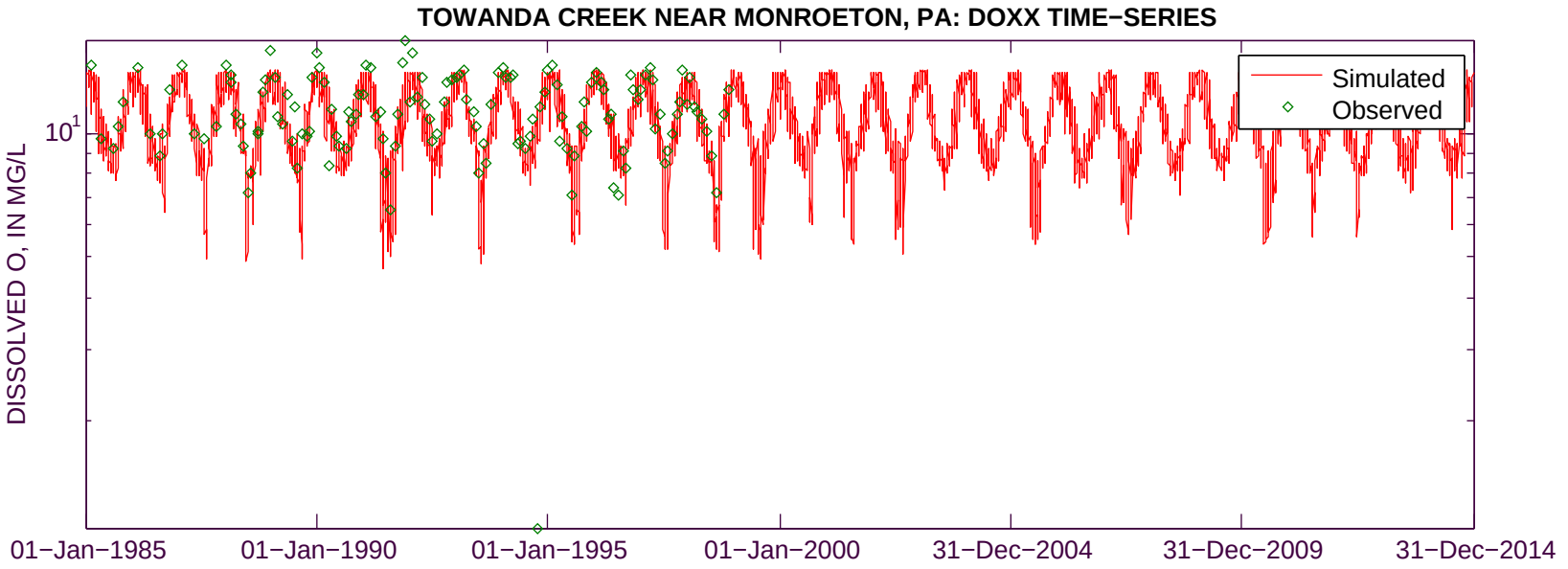
LOAD DATA
LOG10

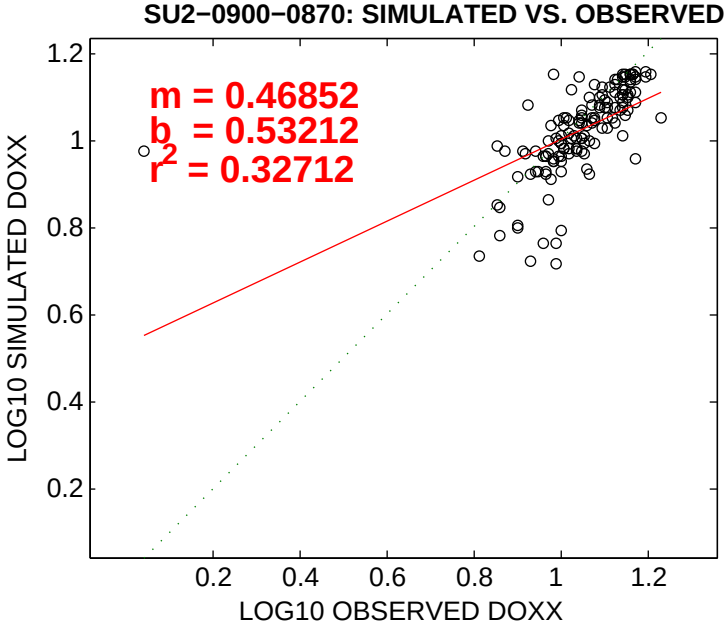


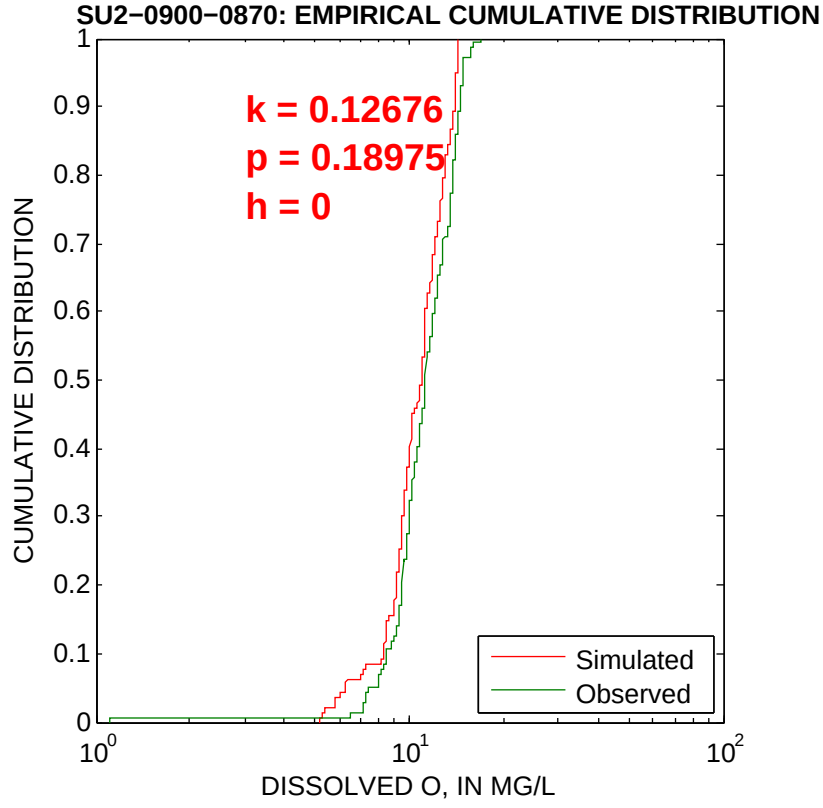












DATA SELECTION

scenario: P620171001WQ | file: DOXX.calib

plot: DOXX - dissolved oxygen

Dates: 1/1/1985 – 12/31/201

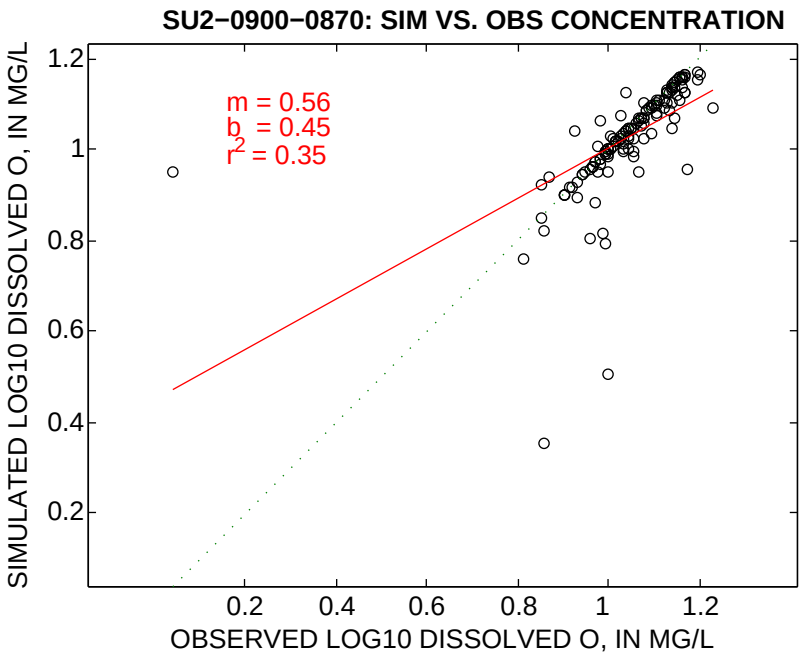
Drive | Directory | Observed: N/A | model | OBS20161101

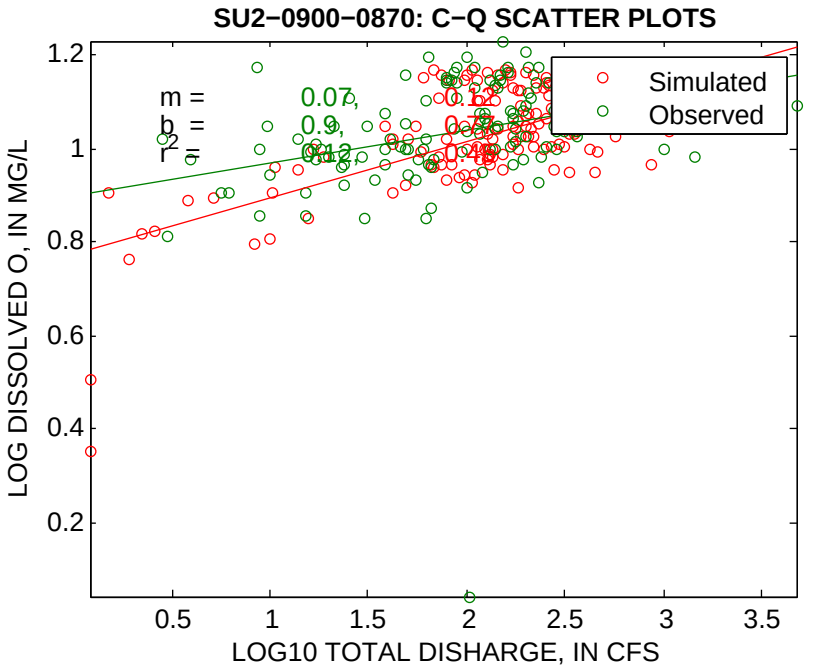
STATISTICS

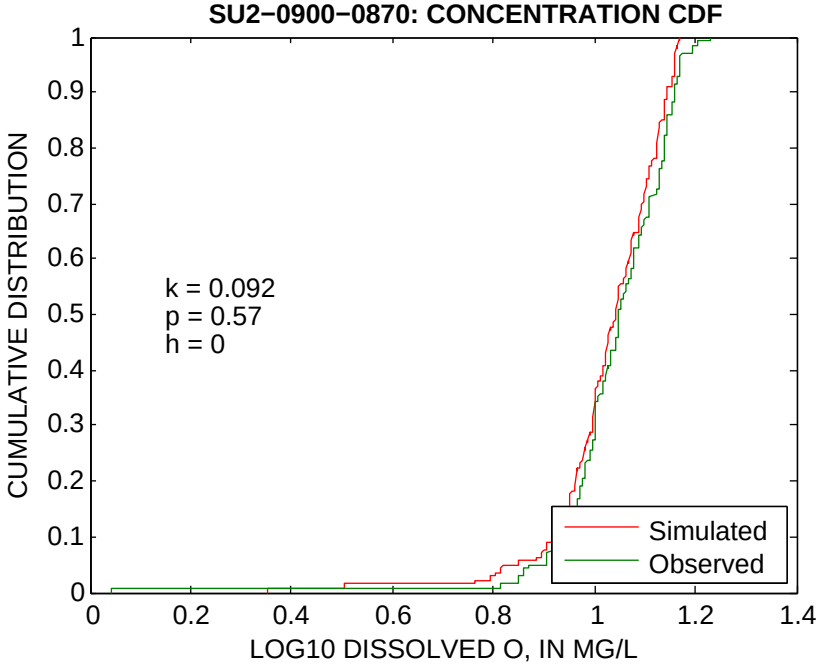
	n	142	142
		observe	simulate
min		1.1	5.2163
		0.0413927	0.717363
mean		11.4028	10.7611
		1.04417	1.02133
media		11.2	10.887
		1.04922	1.03691
max		17	14.313
		1.23045	1.15573
varian		5.72425	5.01197
		0.0147487	0.00989667
JB		0.009213	0.108383
		0.001	0.001288
		ra	log
%		-5.62746	-2.18754
err.va		3.21966	0.0113508
rel.std.err		0.562461	0.769613
mod.eff		0.437539	0.230387

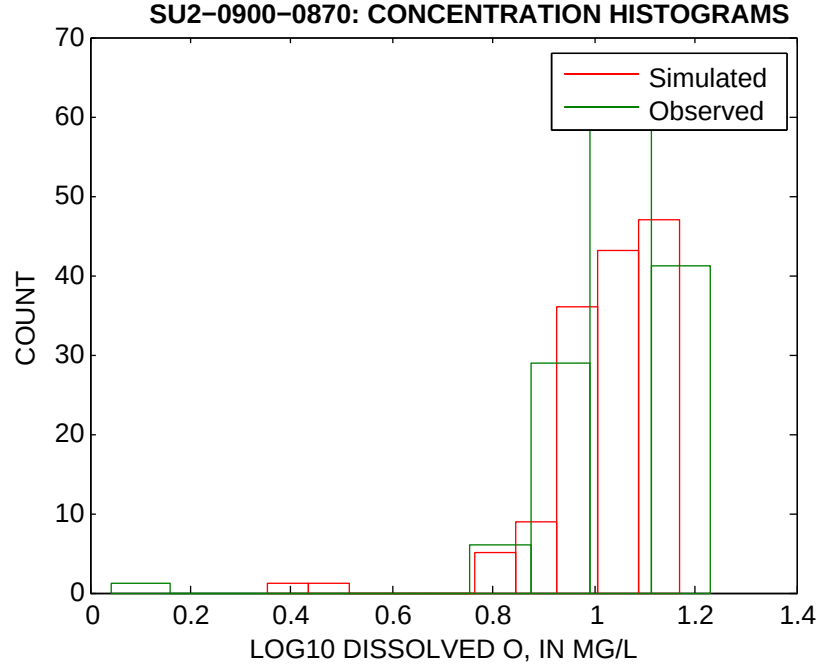
VERSION 2.1

ALL DATA
LOG10

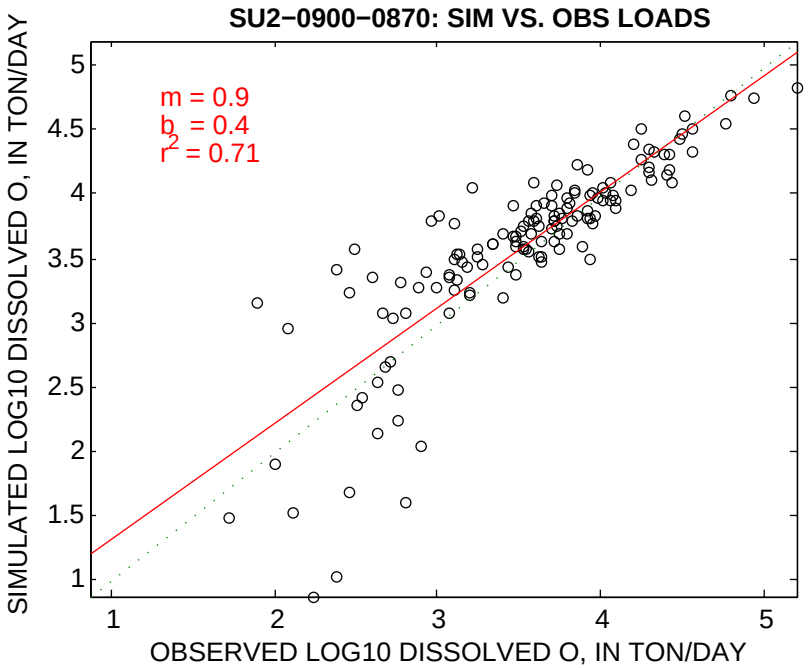


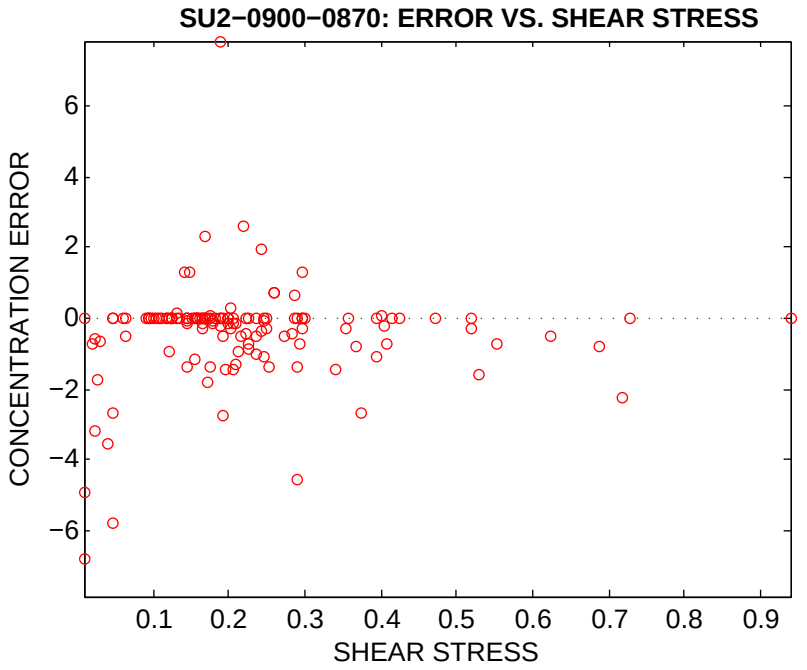


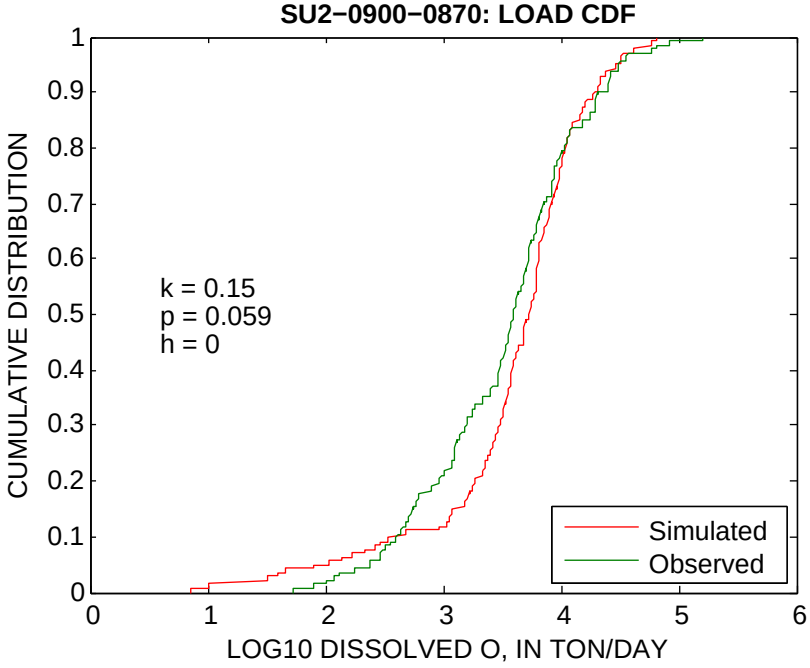


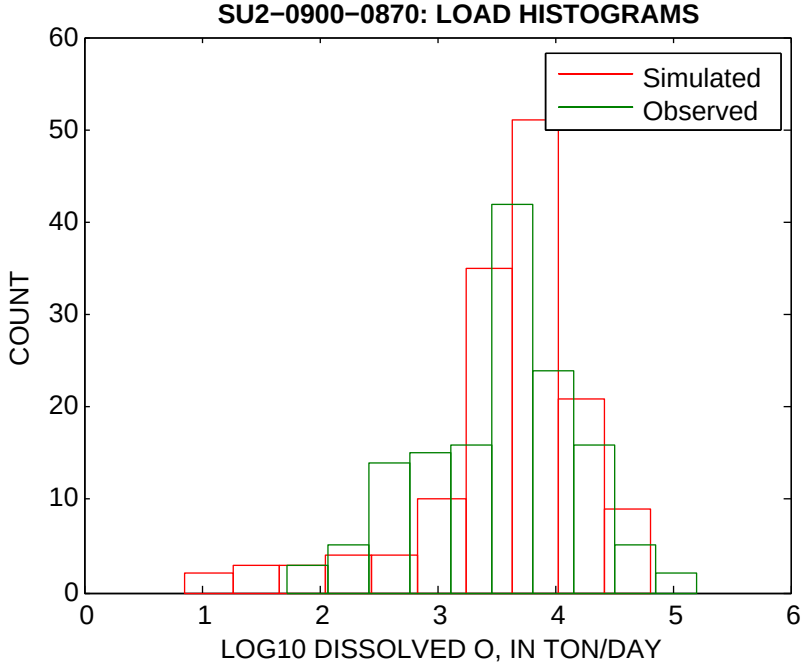


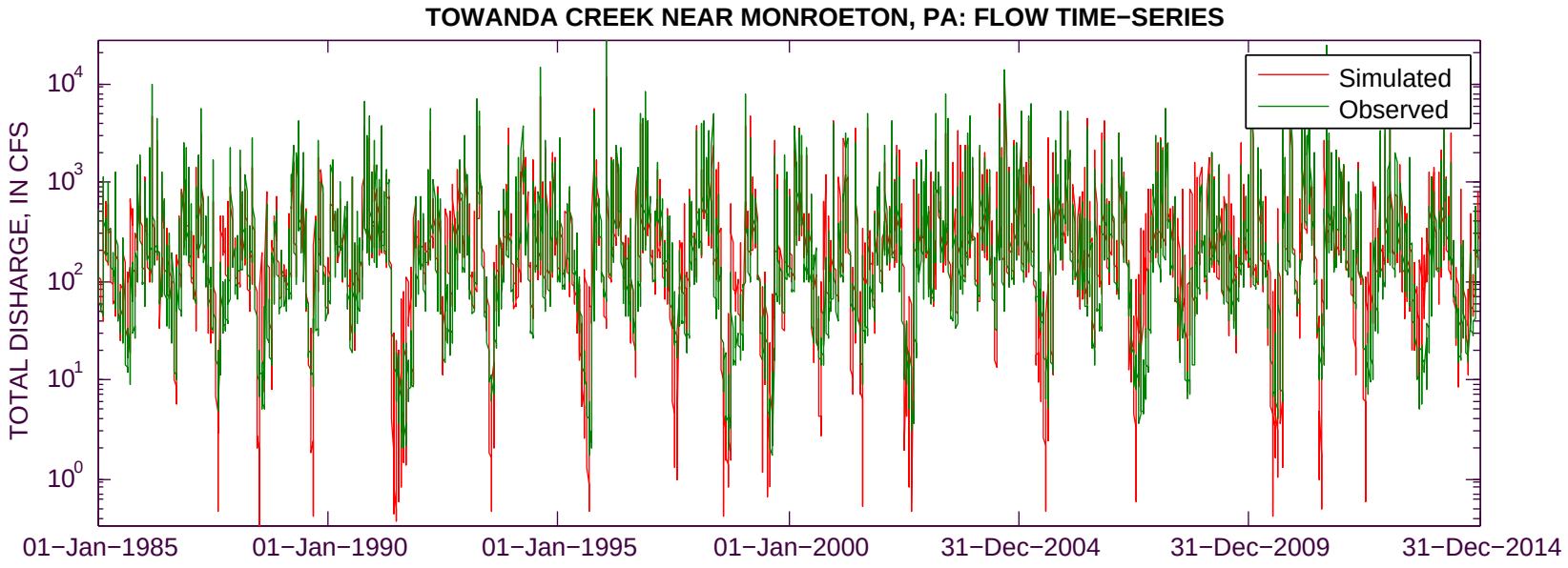
LOAD DATA
LOG10

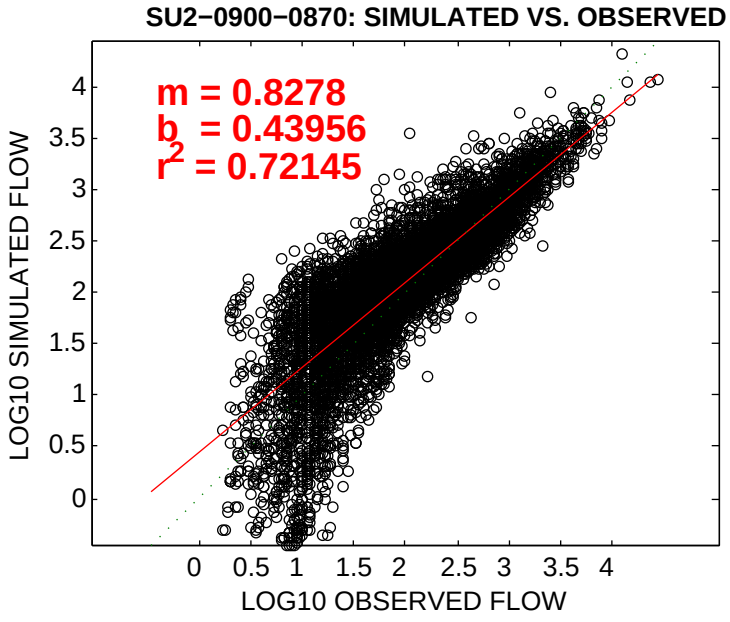


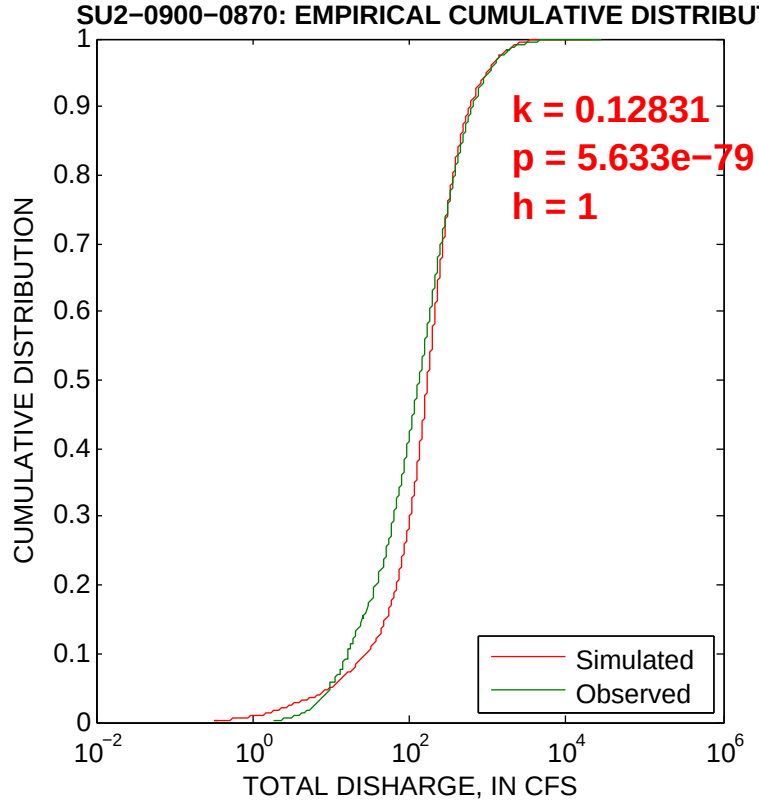












DATA SELECTION

scenario: P620171001WQ | file: FLOW.calib

plot: FLOW - total discharge

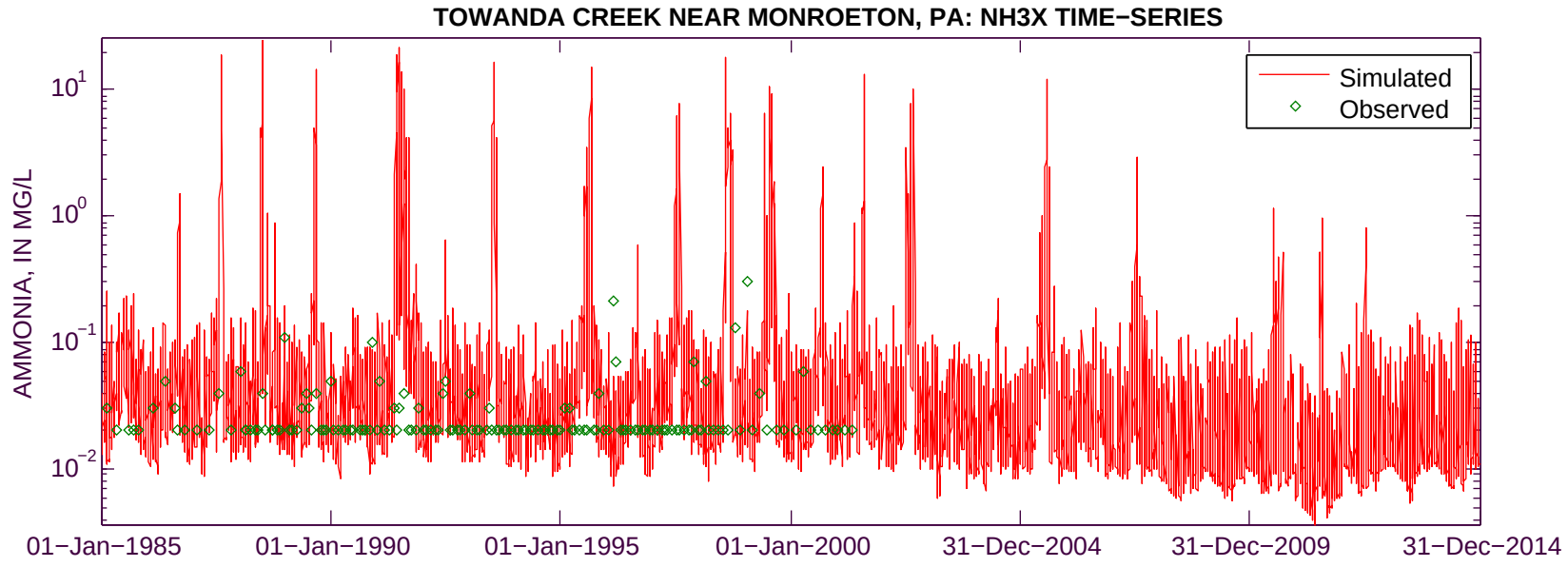
Dates: 1/1/1985 – 12/31/201

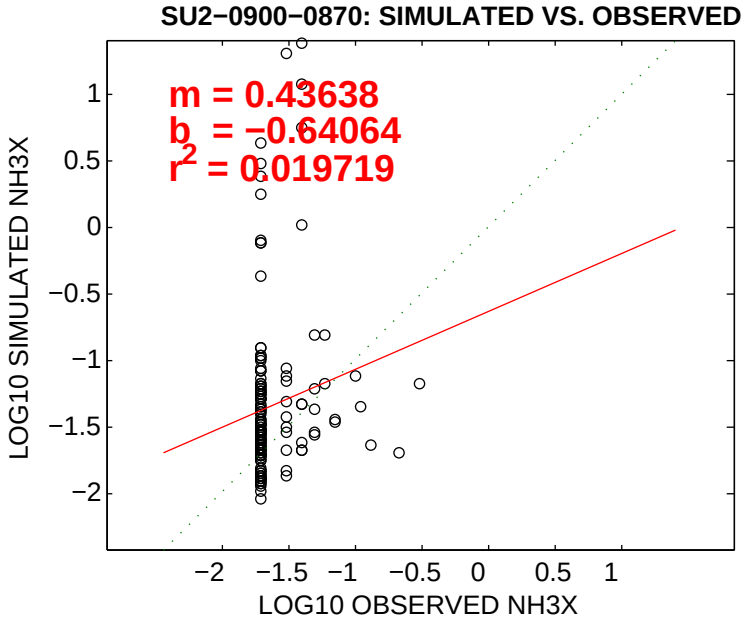
Drive: N/A | Directory: model | Observed: OBS20161101

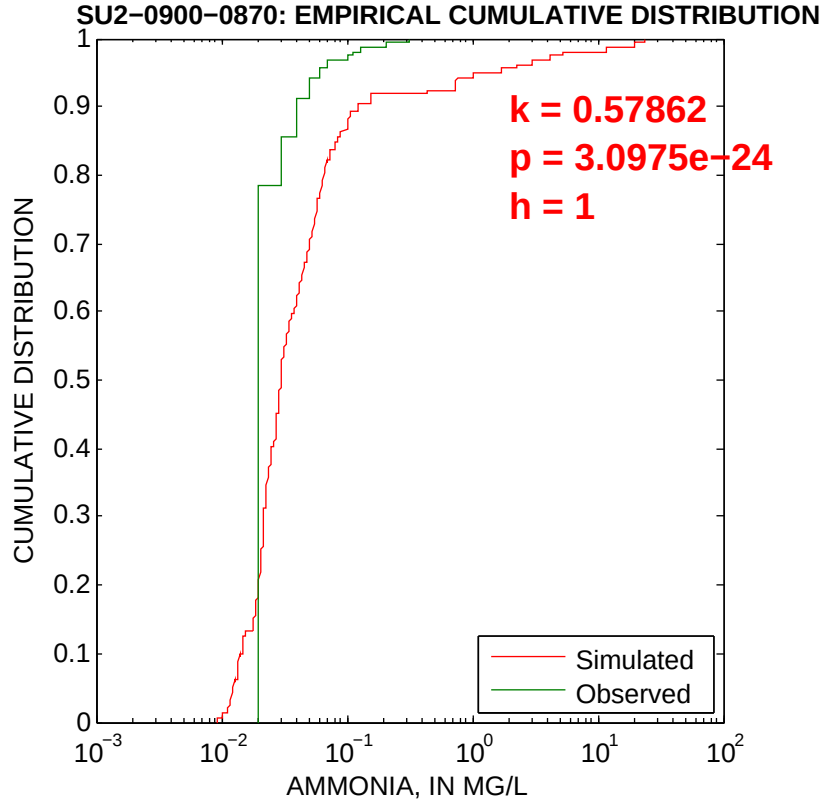
STATISTICS

		observe	simulate
n		10950	10950
min		1.7	0.33939
		0.230449	-0.469301
mean		295.203	295.497
		2.07851	2.16016
media		134.5	171.915
		2.12872	2.23531
max		28000	20249
		4.44716	4.3064
varian		453326	273913
		0.369498	0.35096
JB		0.001	0.001
		0.001	0.001
		ra	log
%		0.0996521	3.92803
err.va		124507	0.115382
rel.std.err		0.274652	0.312268
mod.eff		0.725348	0.687732

VERSION 2.1







DATA SELECTION

scenario	file
P620171001WQ	NH3X.calib

plot: NH3X - ammonia

Dates: 1/1/1985 – 12/31/201

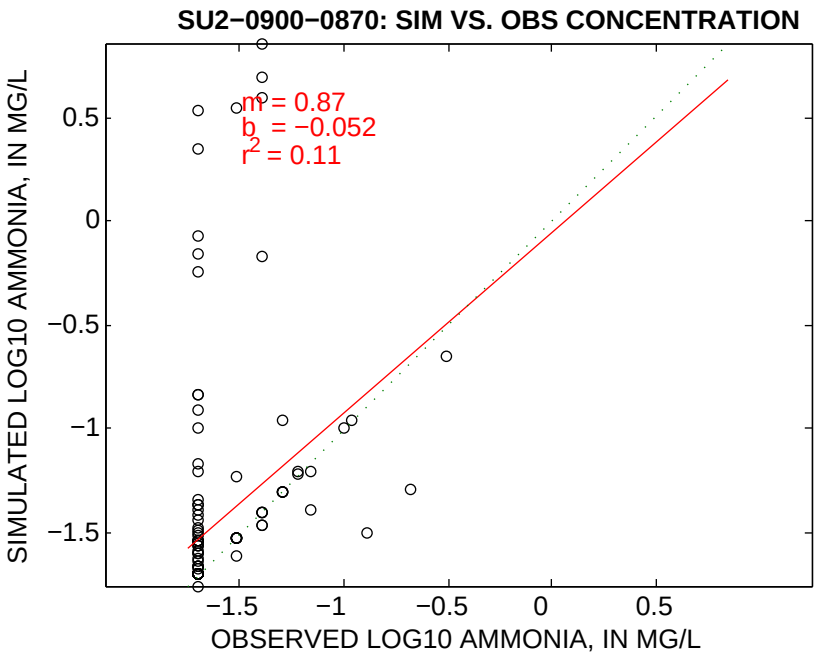
Drive	Directory	Observed
N/A	model	OBS20161101

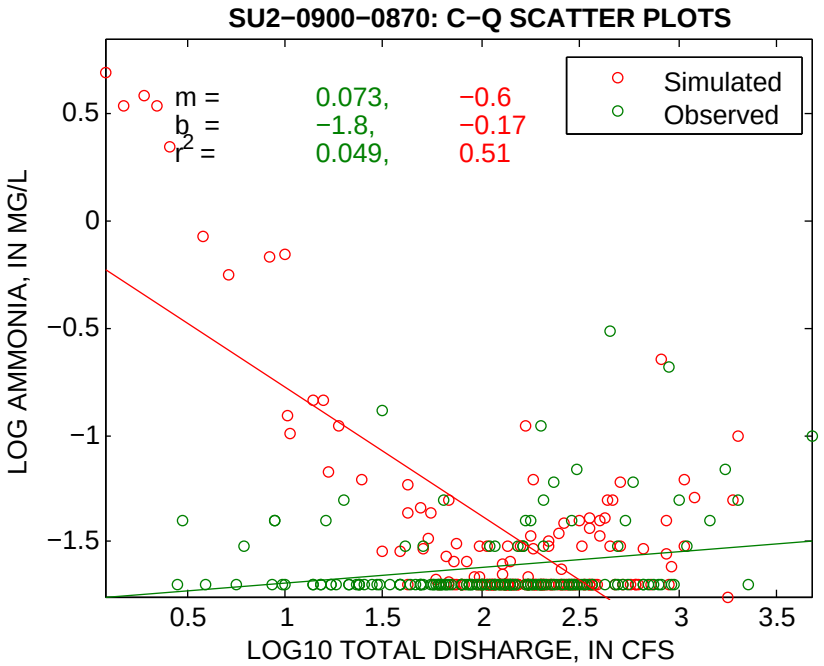
STATISTICS

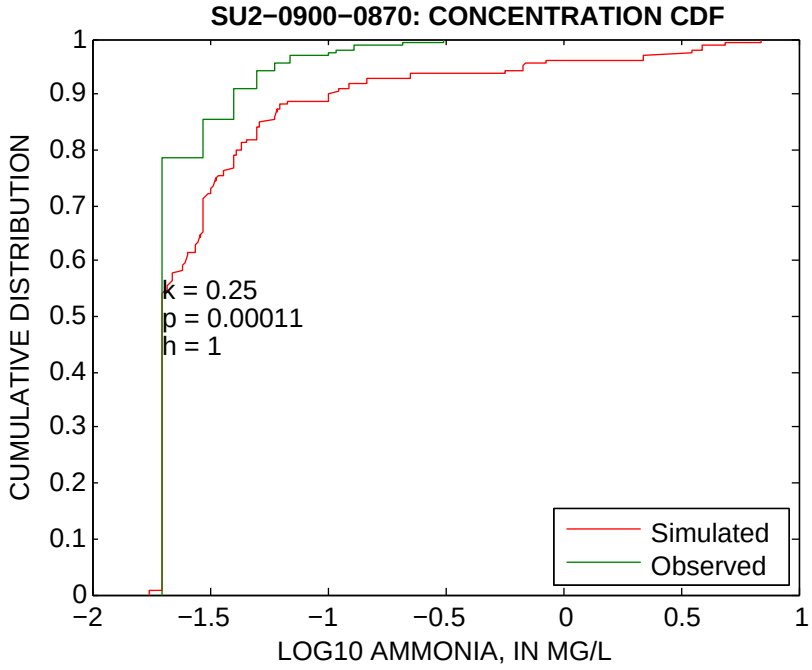
	n	159	159
		observe	simulate
min		0.02	0.00914
		-1.69897	-2.03905
mean		0.0286792	0.510968
		-1.61632	-1.34597
media		0.02	0.030249
		-1.69897	-1.51929
max		0.31	23.703
		-0.508638	1.3748
varian		0.00096343	7.05255
		0.038397	0.3708
JB		0.001	0.001
		0.001	0.001
		ra	log
%		1681.67	-16.7259
err.va		7.28258	0.449234
rel.std.err		7558.98	11.6997
mod.eff		-7557.98	-10.6997

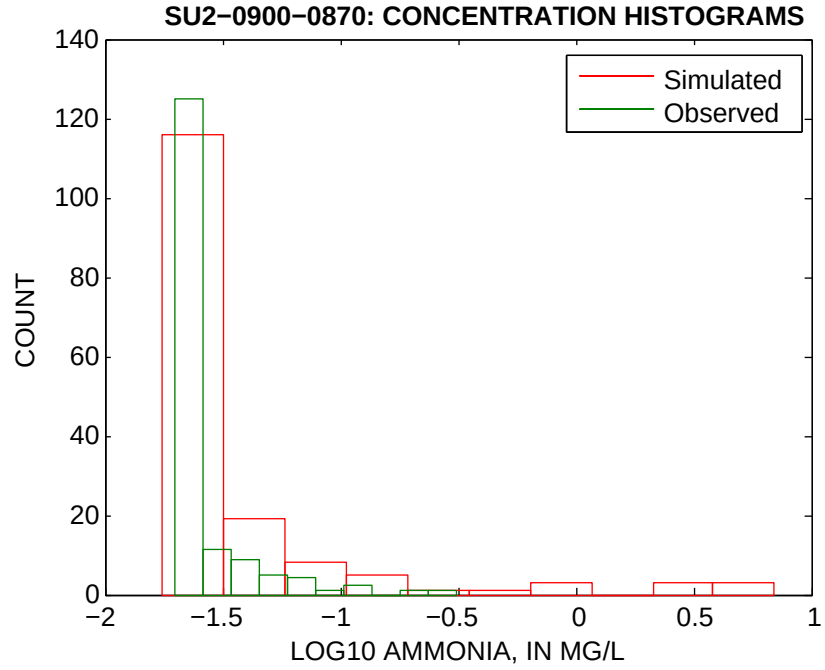
VERSION

ALL DATA
LOG10

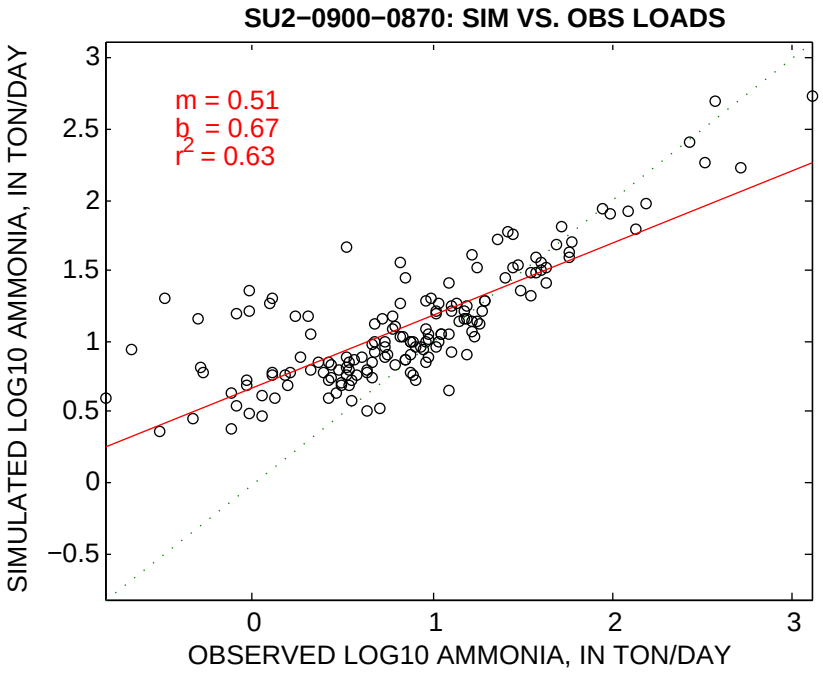


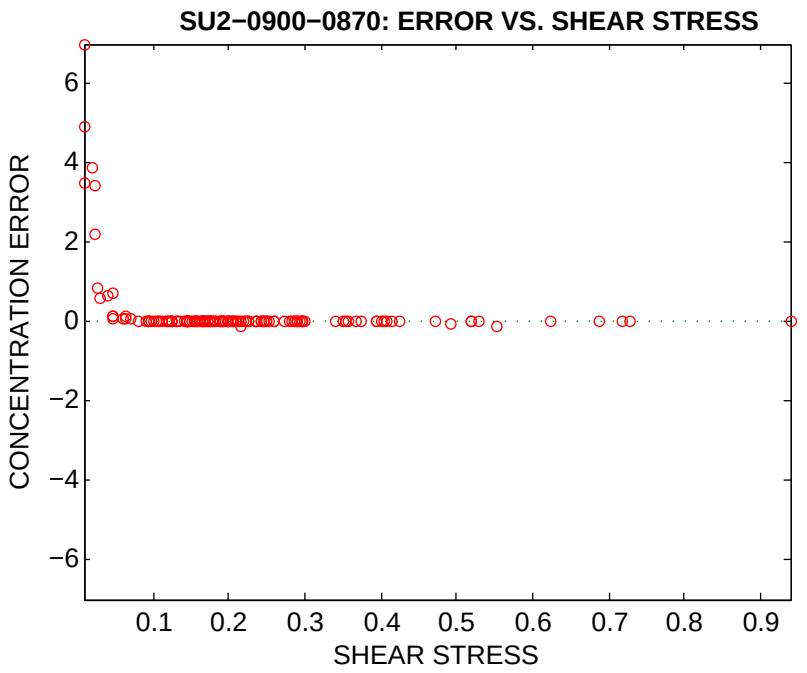


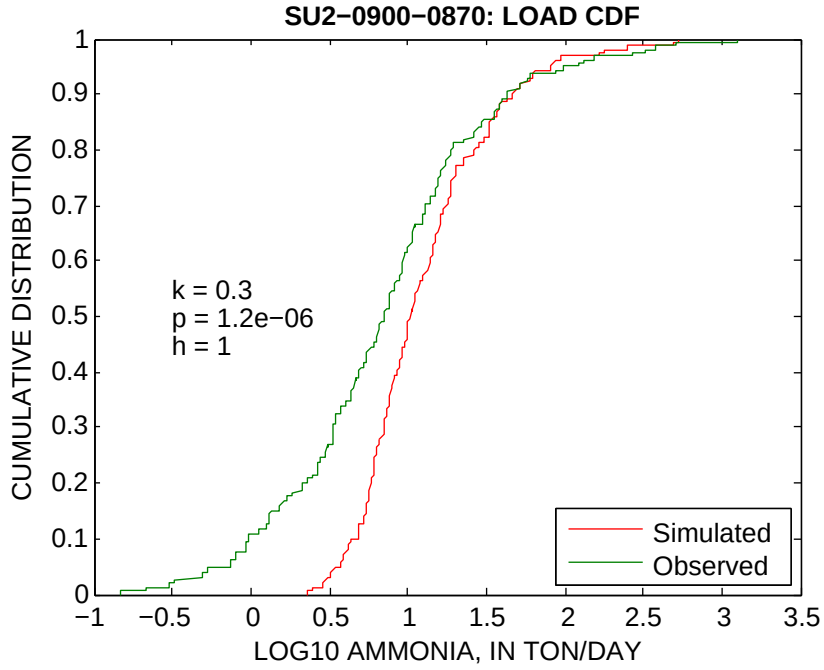


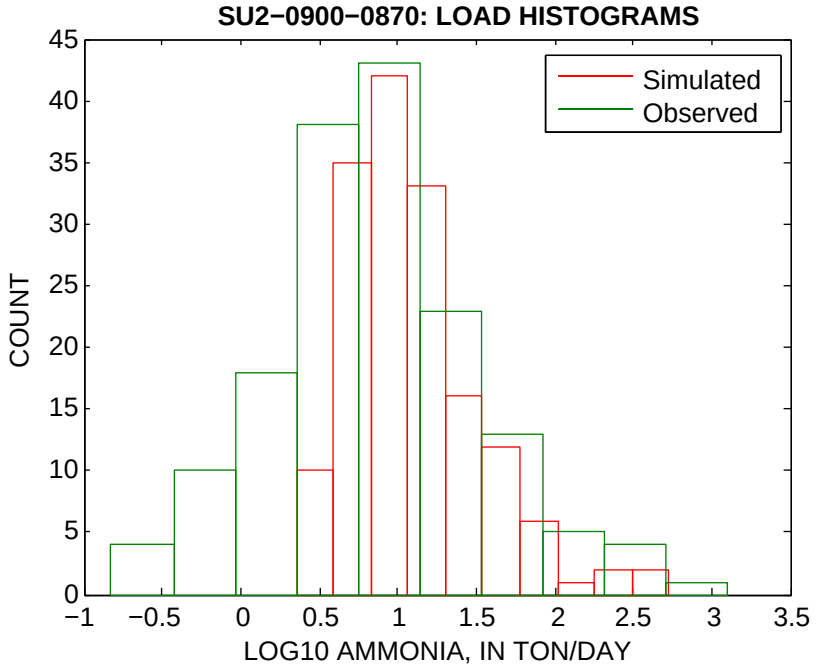


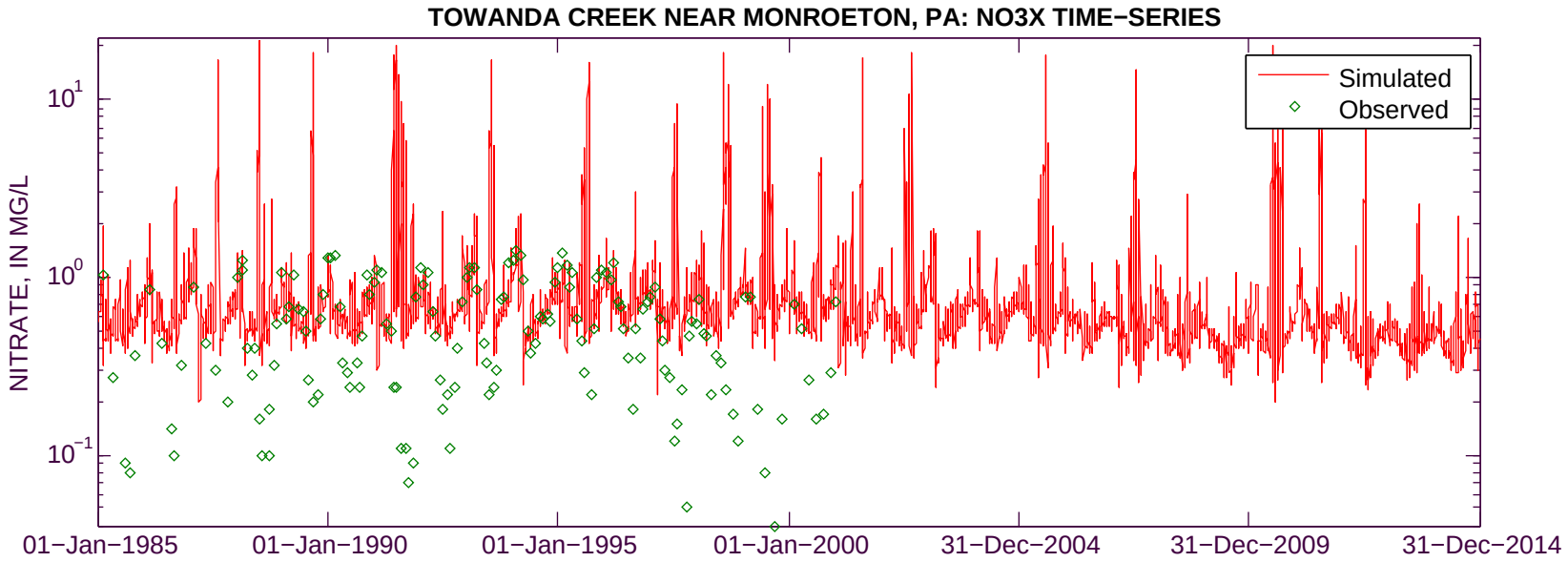
LOAD DATA
LOG10

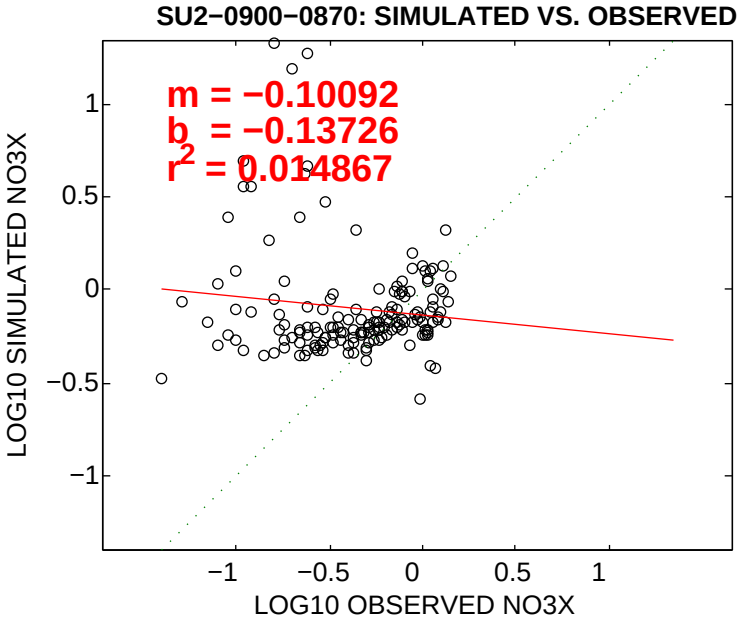


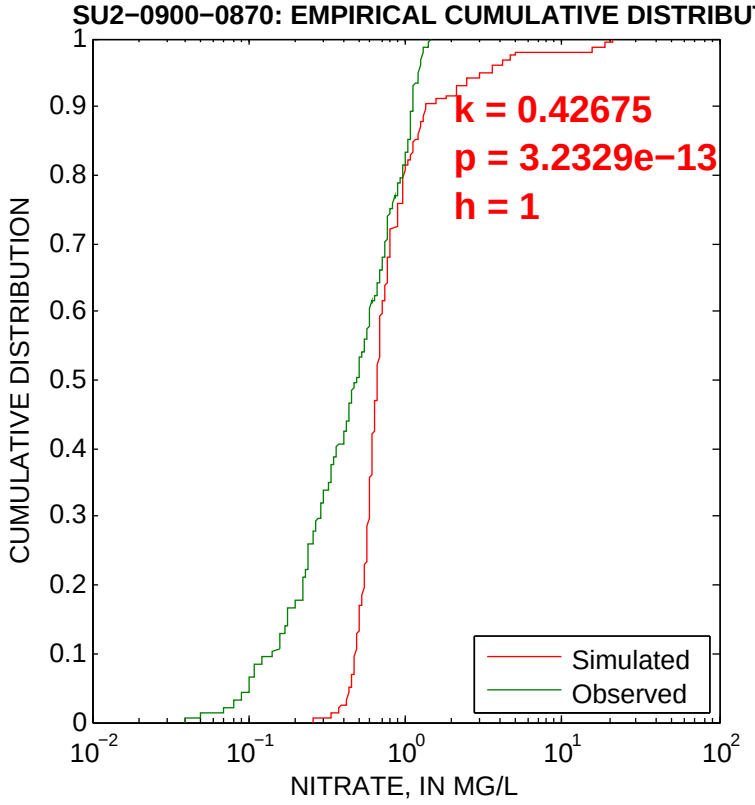












DATA SELECTION

scenario	file
P620171001WQ	NO3X.calib

plot: NO3X - nitrate

Dates: 1/1/1985 – 12/31/201

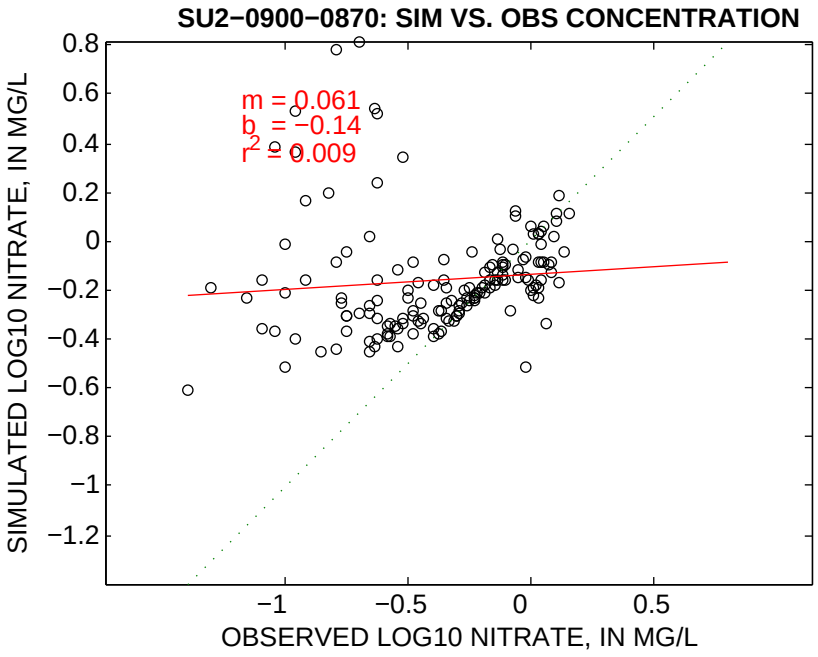
Drive	Directory	Observed
N/A	model	OBS20161101

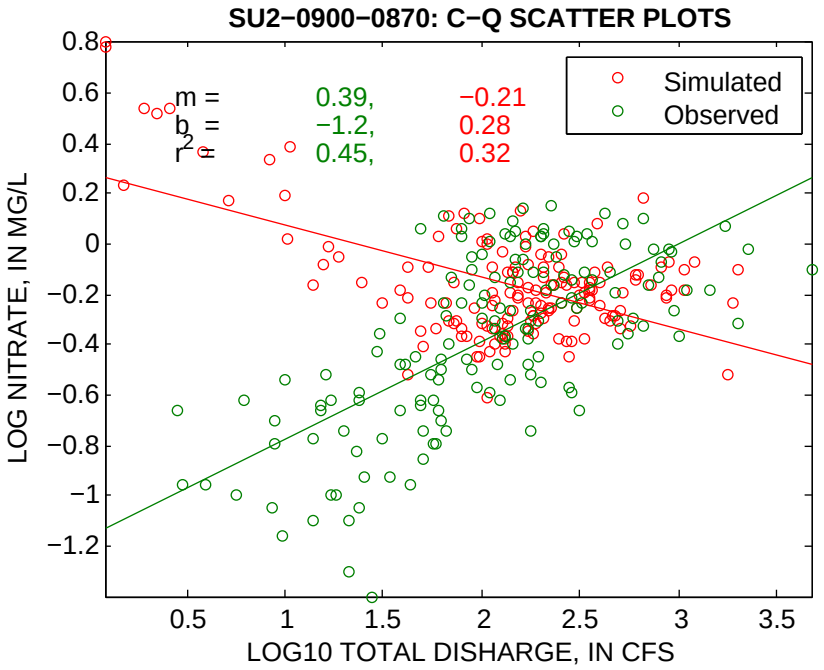
STATISTICS

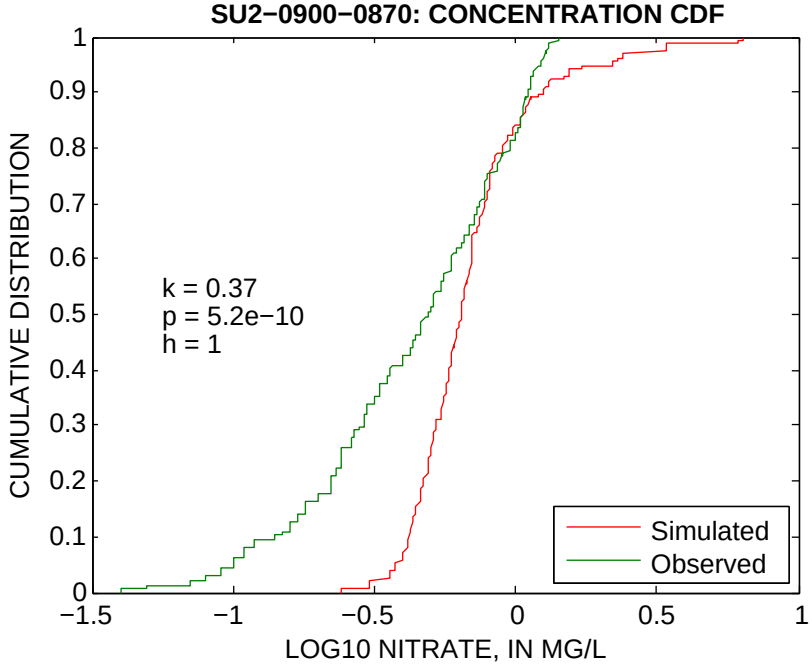
	n	157	157
		observe	simulate
min		0.04	0.259
		-1.39794	-0.5867
mean		0.559618	1.2165
		-0.366928	-0.100231
media		0.49	0.66587
		-0.309804	-0.176611
max		1.43	20.977
		0.155336	1.32174
varian		0.132417	6.4153
		0.119766	0.0820498
JB		0.009994	0.001
		0.015607	0.001
		ra	log
%		117.381	-72.6838
err.va		7.27697	0.297573
rel.std.err		54.9552	2.48462
mod.eff		-53.9552	-1.48462

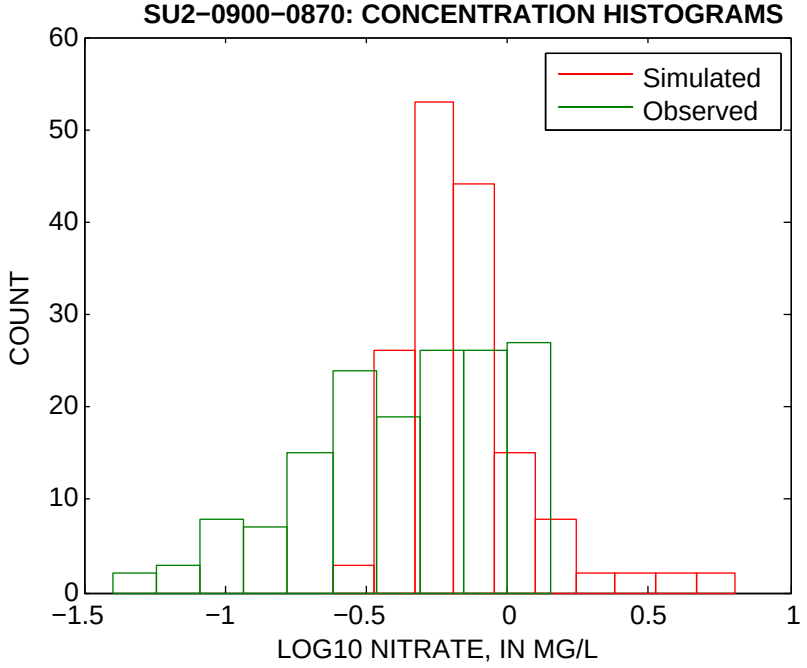
VERSION 2.1

ALL DATA
LOG10

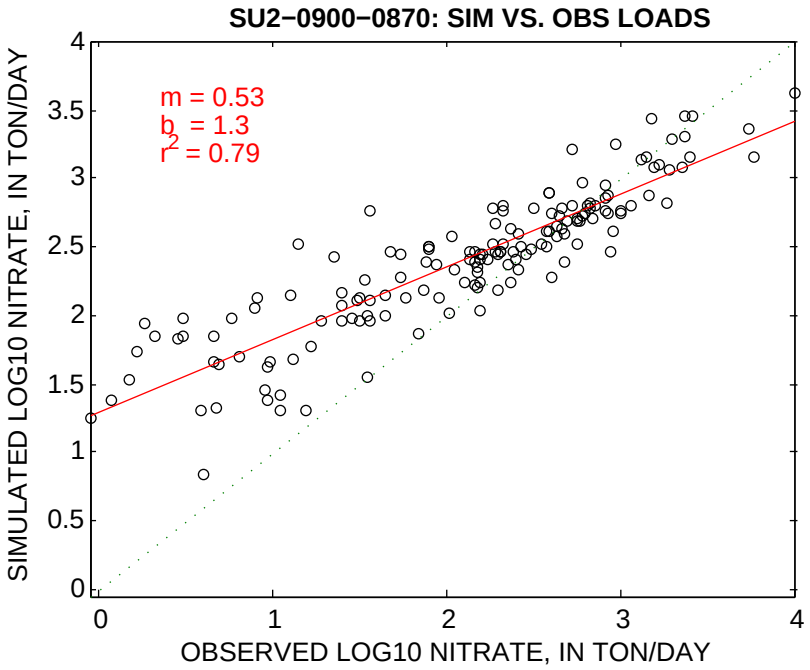


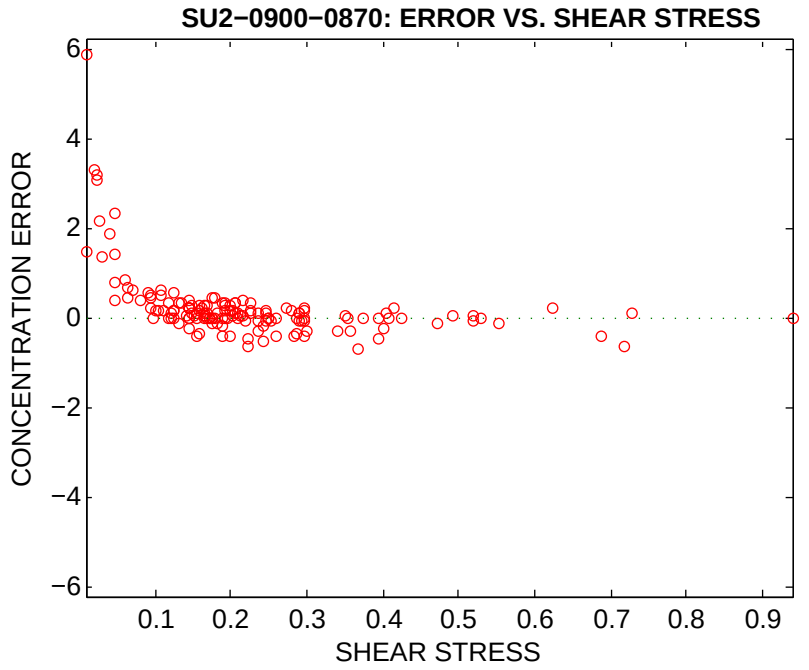


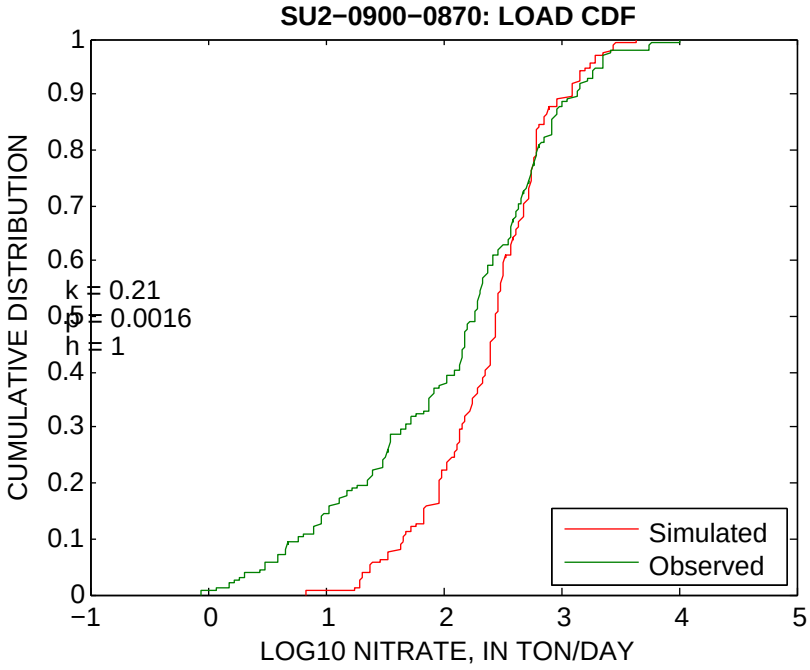


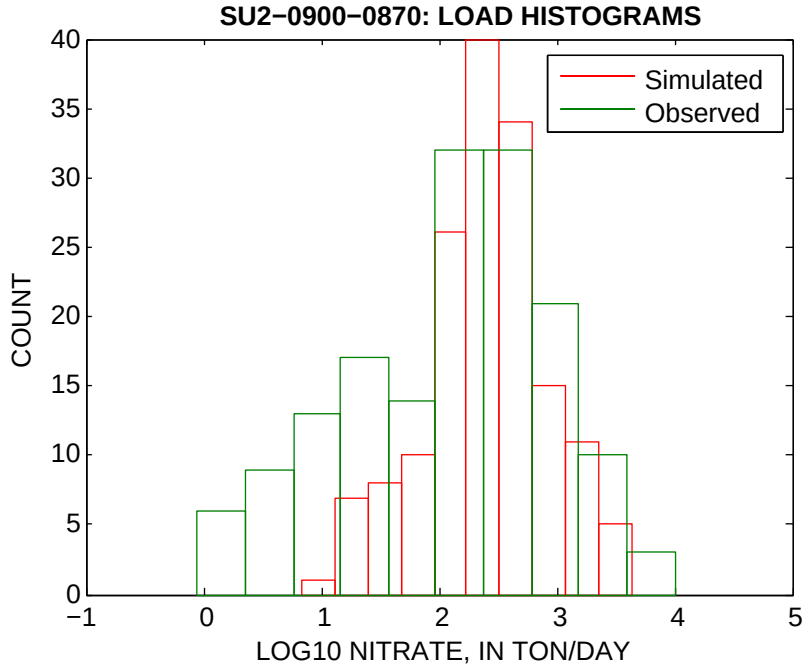


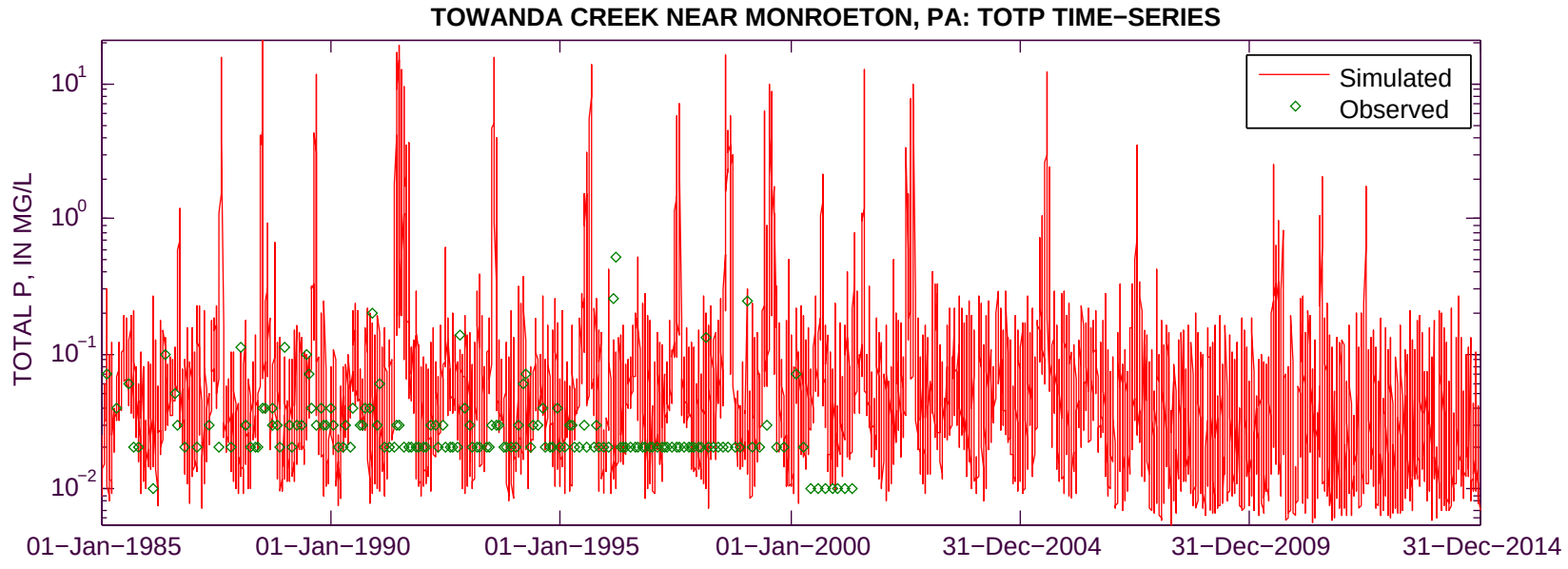
LOAD DATA
LOG10

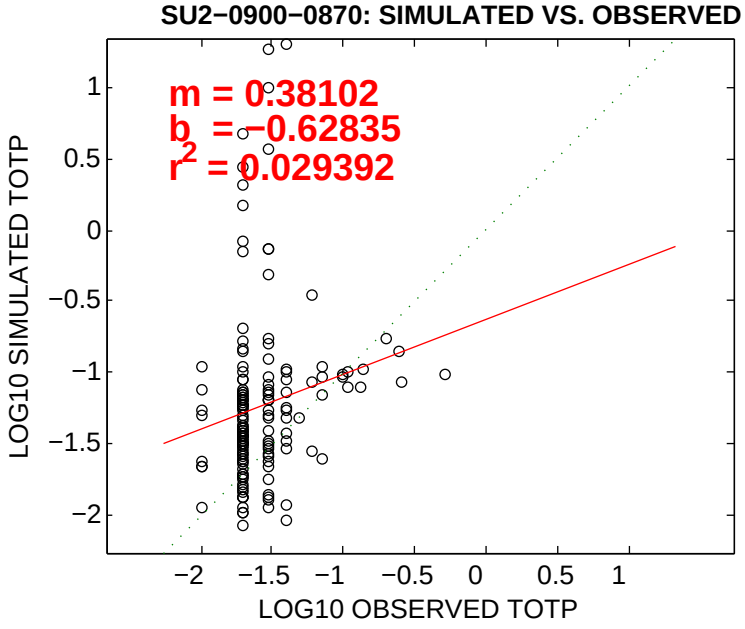


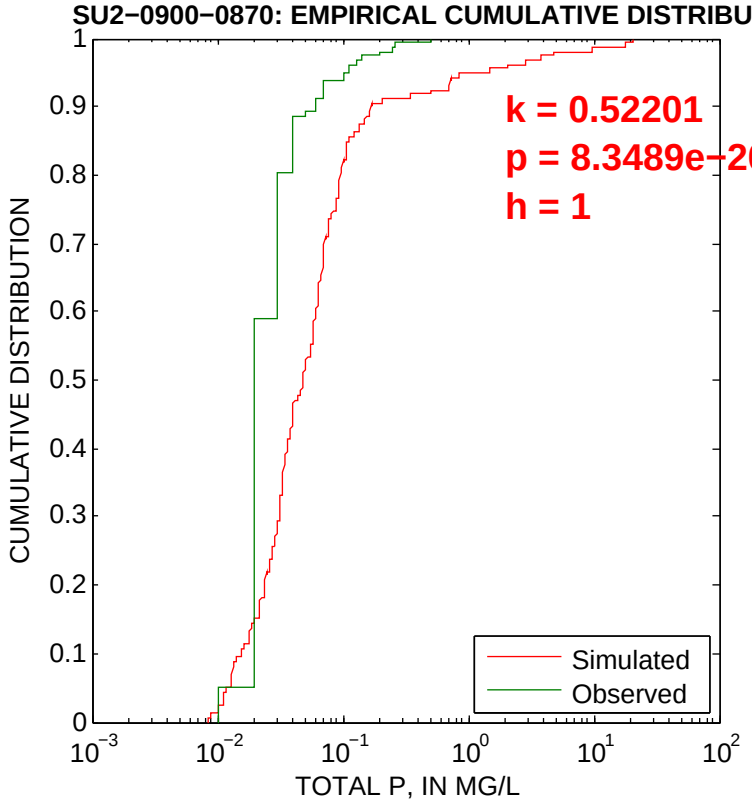












DATA SELECTION

scenario: P620171001WQ | file: TOTP.calib

plot: TOTP - total phosphorus

Dates: 1/1/1985 – 12/31/201

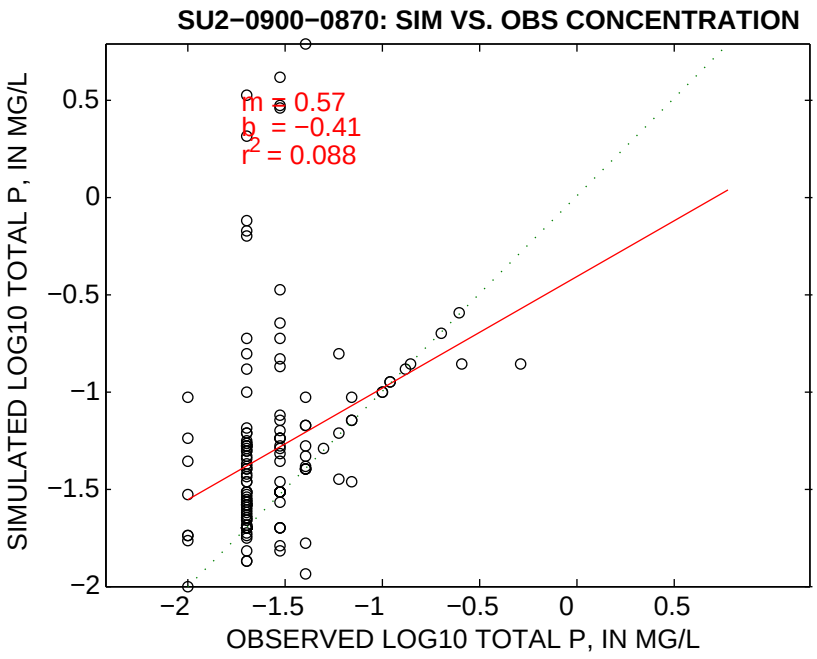
Drive: N/A | Directory: model | Observed: OBS20161101

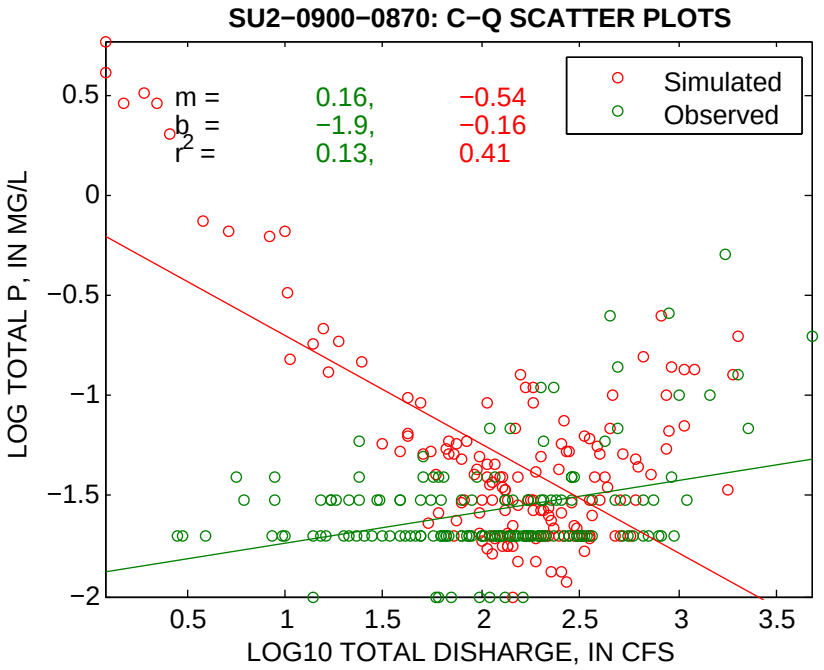
STATISTICS

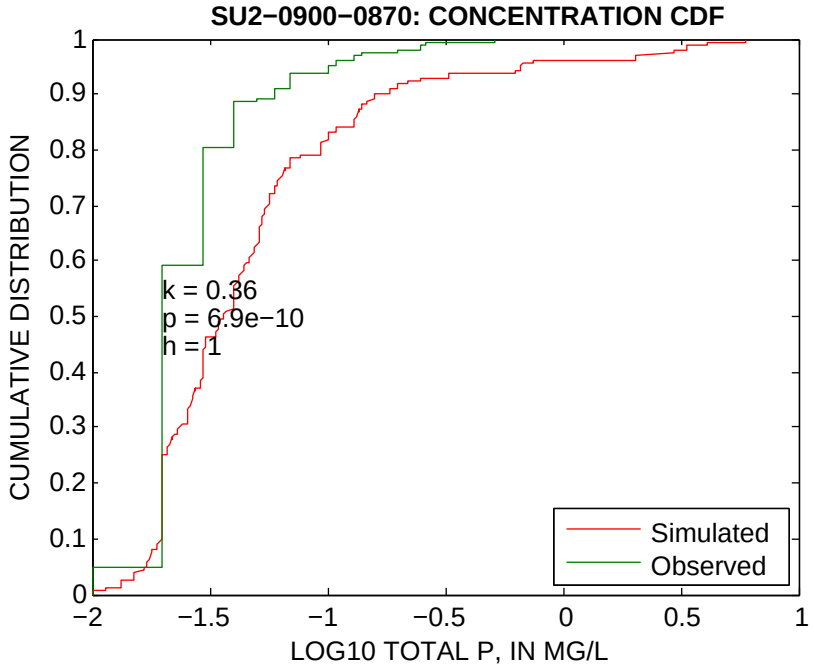
		observe	simulate
n		159	159
min		0.01	0.0084952
		-2	-2.07083
mean		0.0362264	0.471111
		-1.56908	-1.22621
media		0.02	0.048339
		-1.69897	-1.3157
max		0.51	20.238
		-0.29243	1.30617
varian		0.00266921	5.43695
		0.0707029	0.349229
JB		0.001	0.001
		0.001	0.001
		ra	log
%		1200.46	-21.8516
err.va		5.63284	0.484357
rel.std.err		2110.3	6.85059
mod.eff		-2109.3	-5.85059

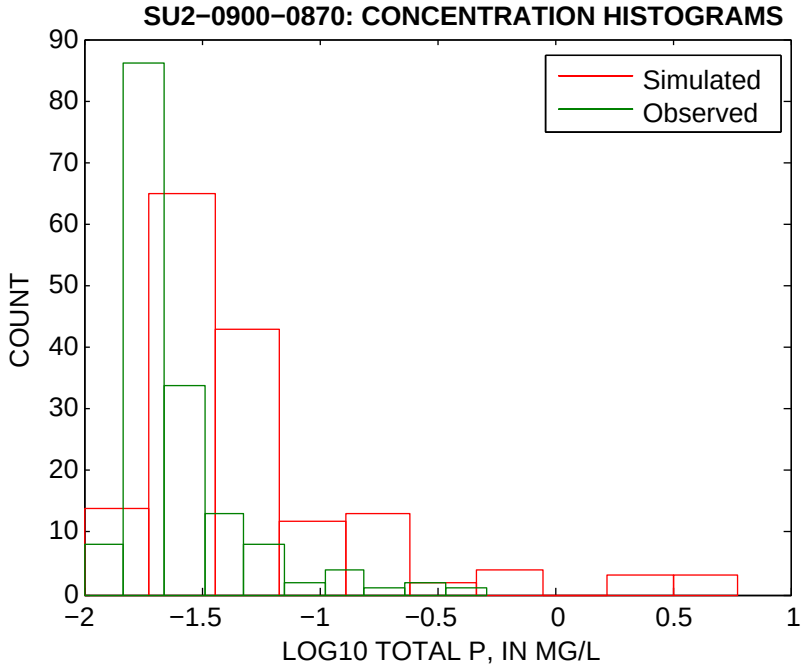
VERSION 2.1

ALL DATA
LOG10

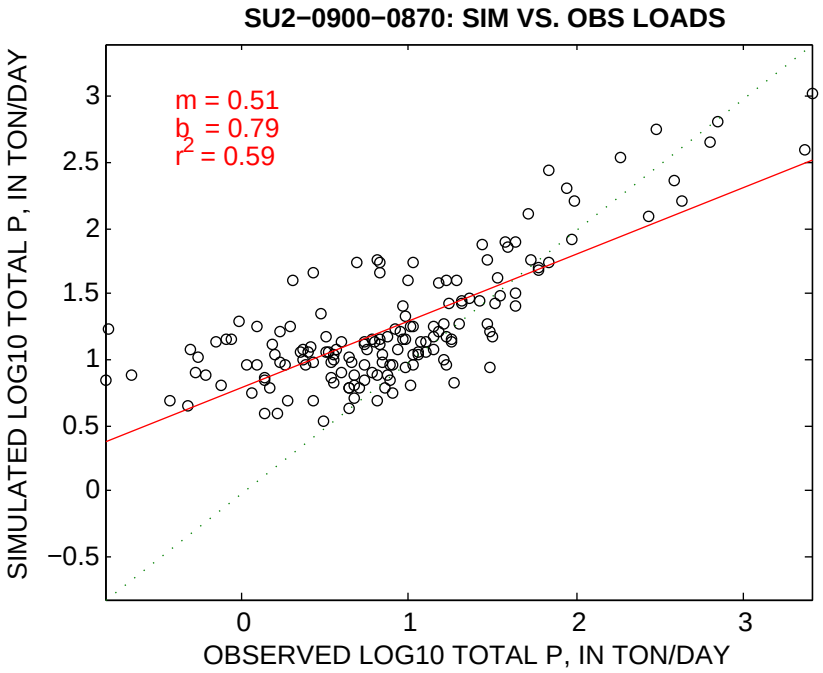


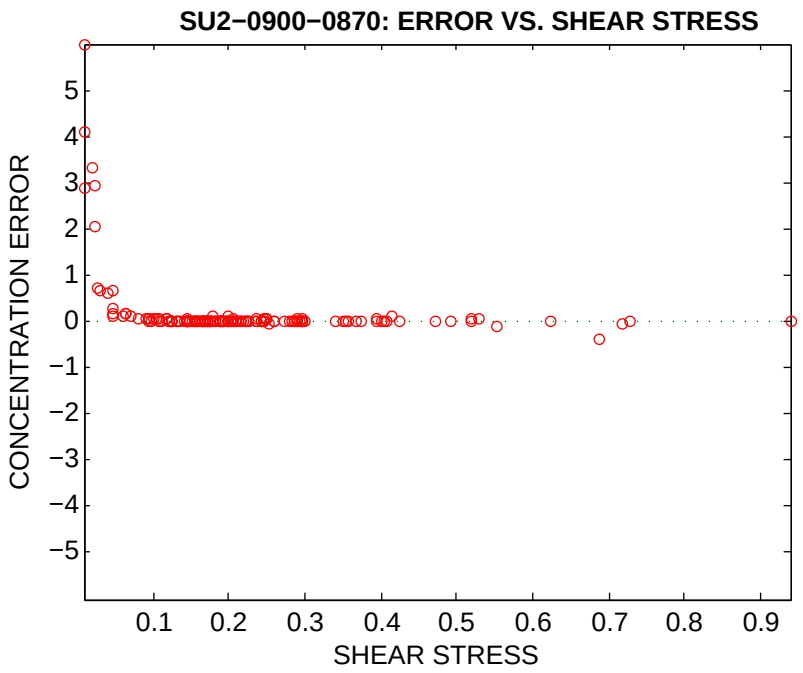


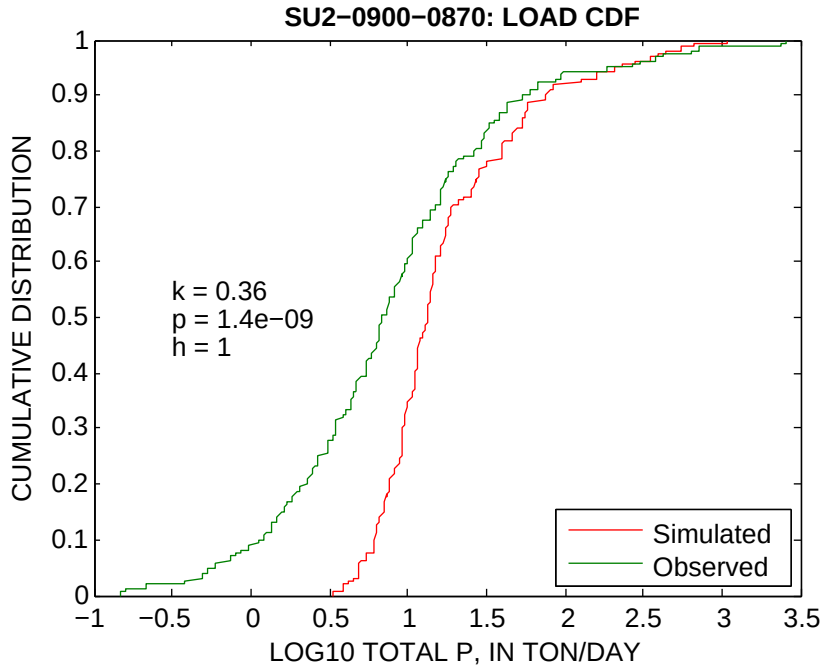


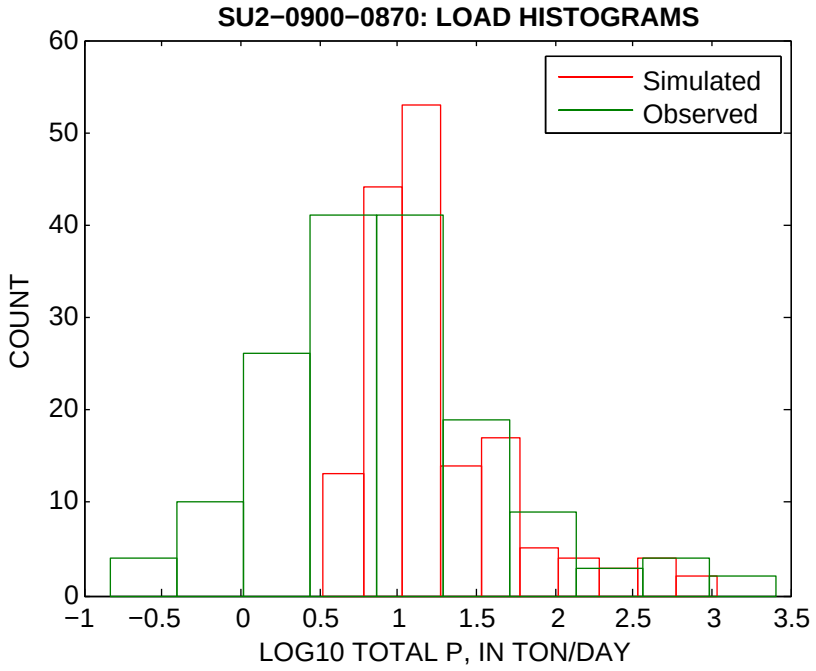


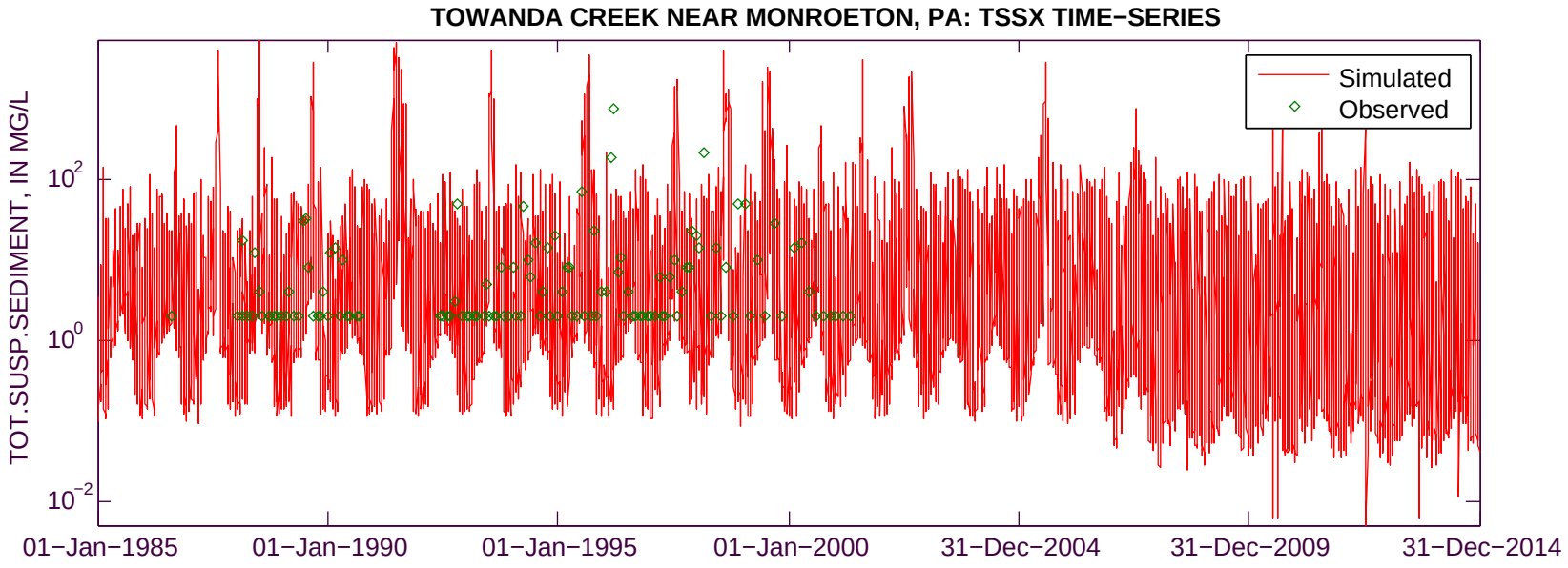
LOAD DATA
LOG10

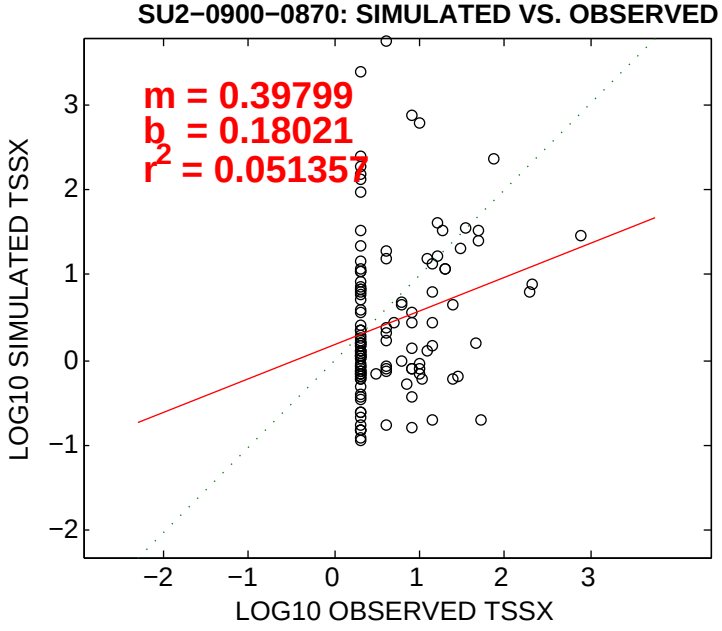


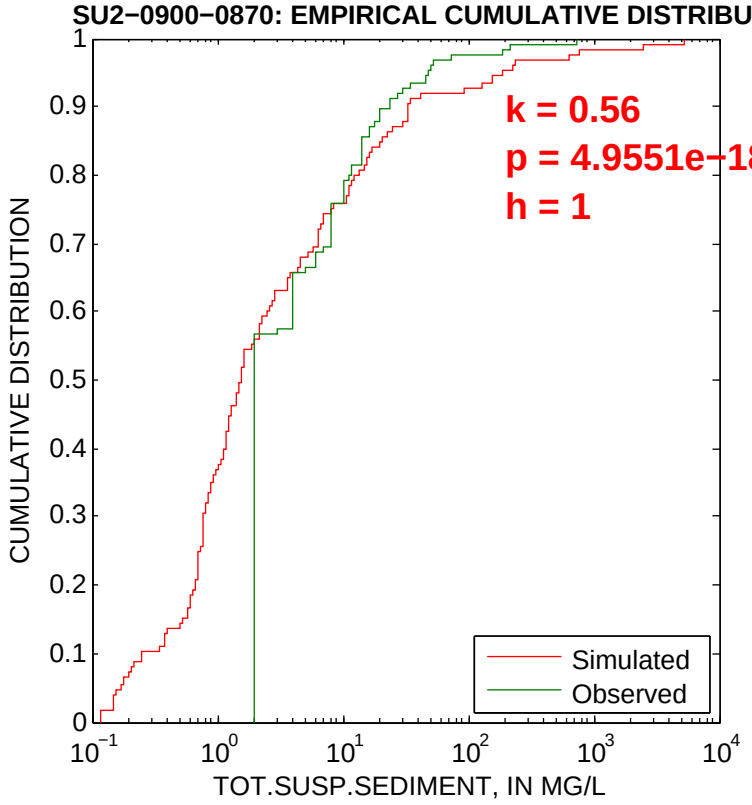












DATA SELECTION

scenario: P620171001WQ | file: TSSX.calib

plot: TSSX - total suspended ...

Dates: 1/1/1985 – 12/31/201

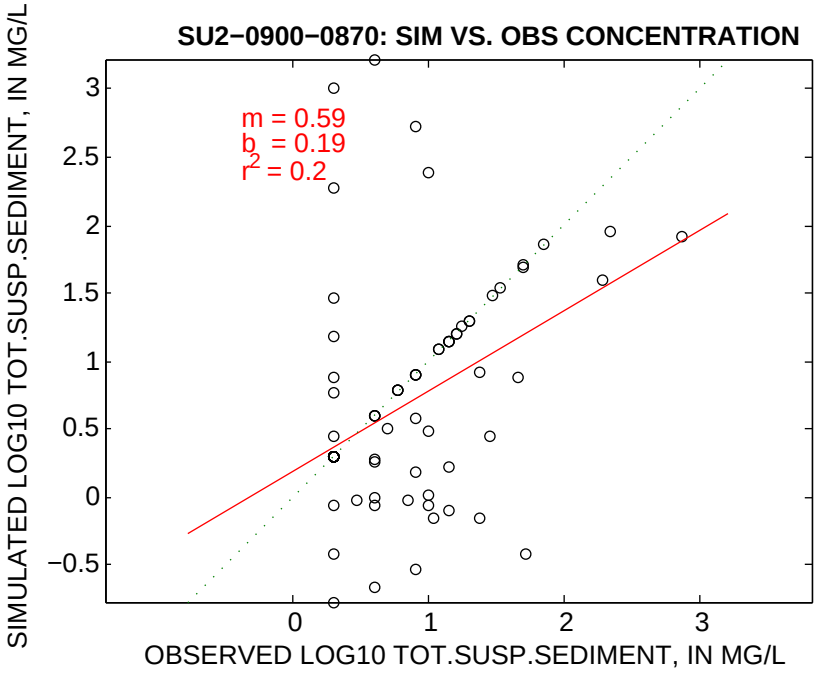
Drive: N/A | Directory: model | Observed: OBS20161101

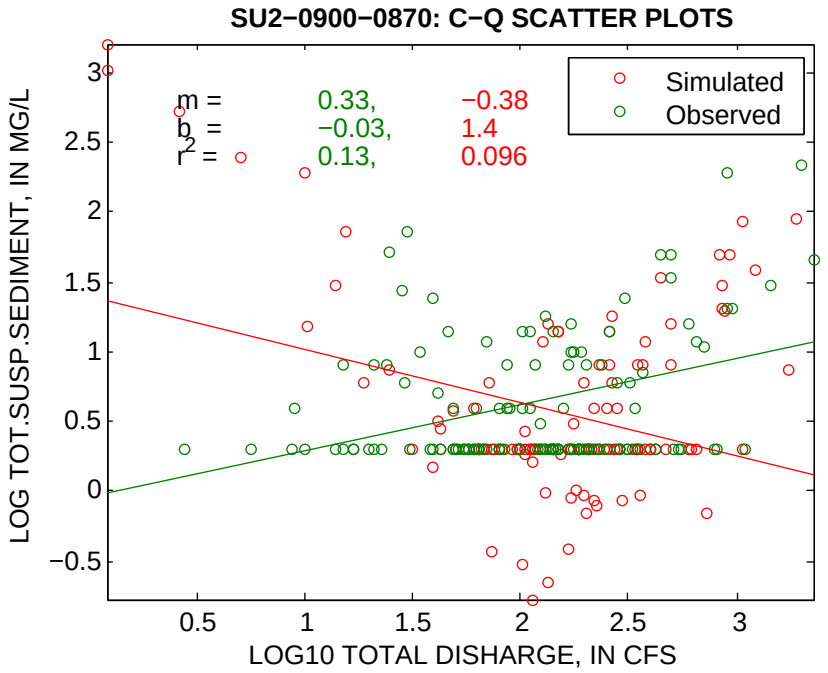
STATISTICS

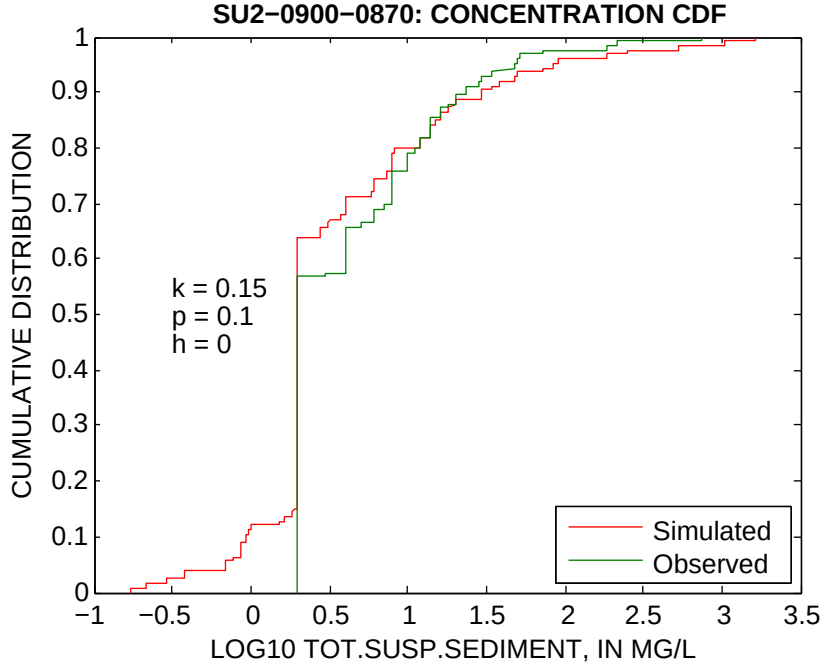
	n	observe	simulate
		125	125
min		2	0.11583
		0.30103	-0.936179
mean		16.624	87.0094
		0.651957	0.439678
media		2	1.5434
		0.30103	0.188478
max		752	5378.1
		2.87622	3.73063
varian		5128.59	284606
		0.264207	0.814859
JB		0.001	0.001
		0.001	0.001
		ra	log
%		423.396	-32.5602
err.va		296188	0.914189
rel.std.err		57.7523	3.46013
mod.eff		-56.7523	-2.46013

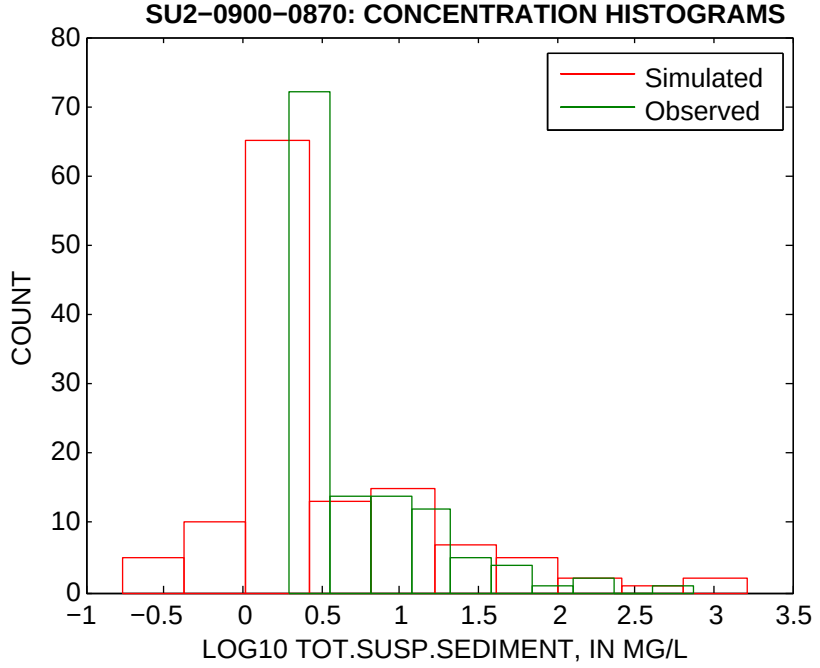
VERSION 2.1

ALL DATA
LOG10

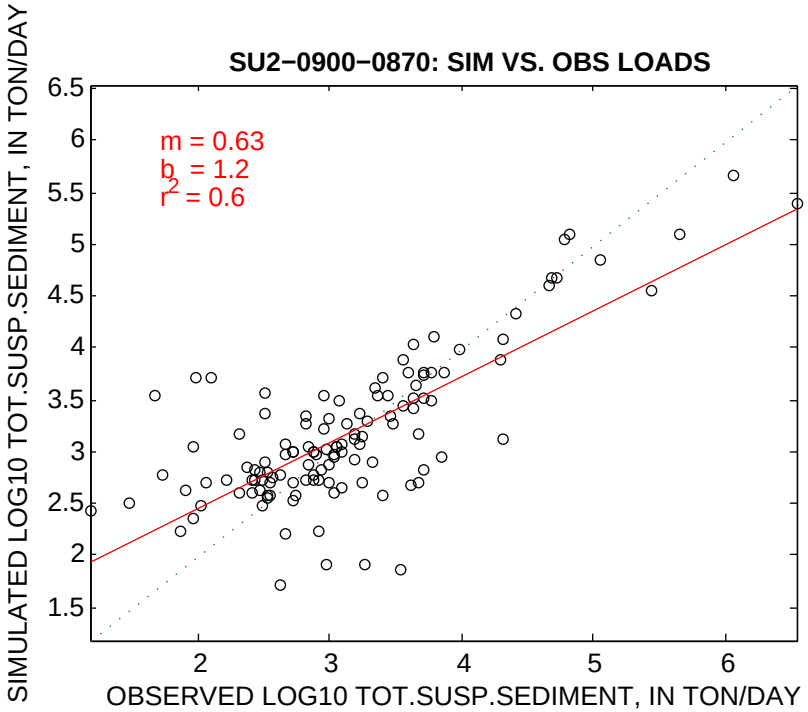


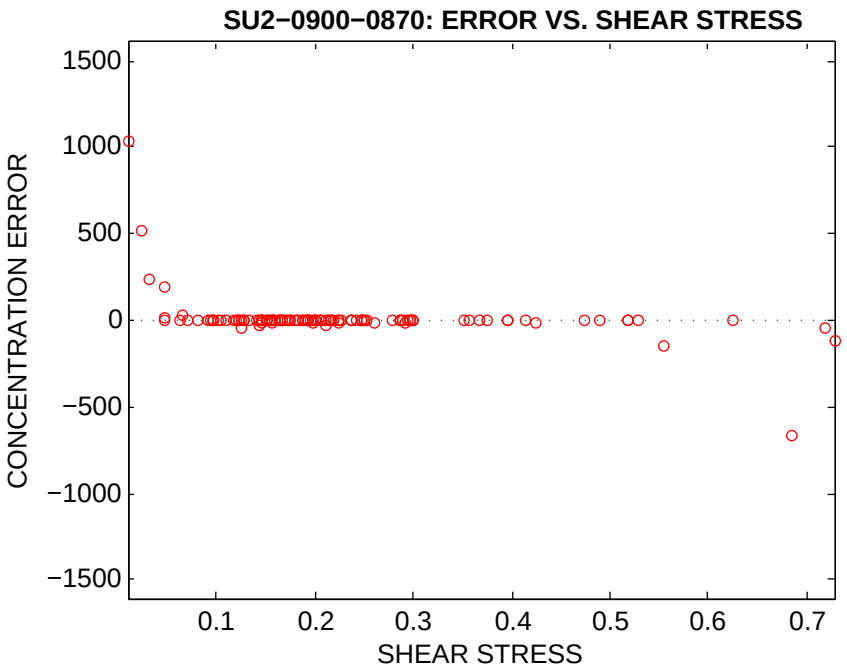


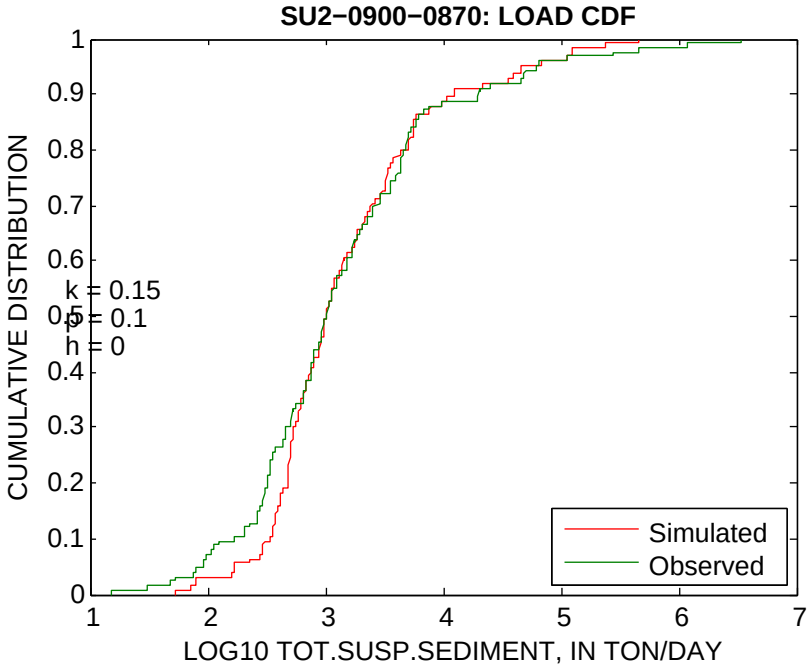


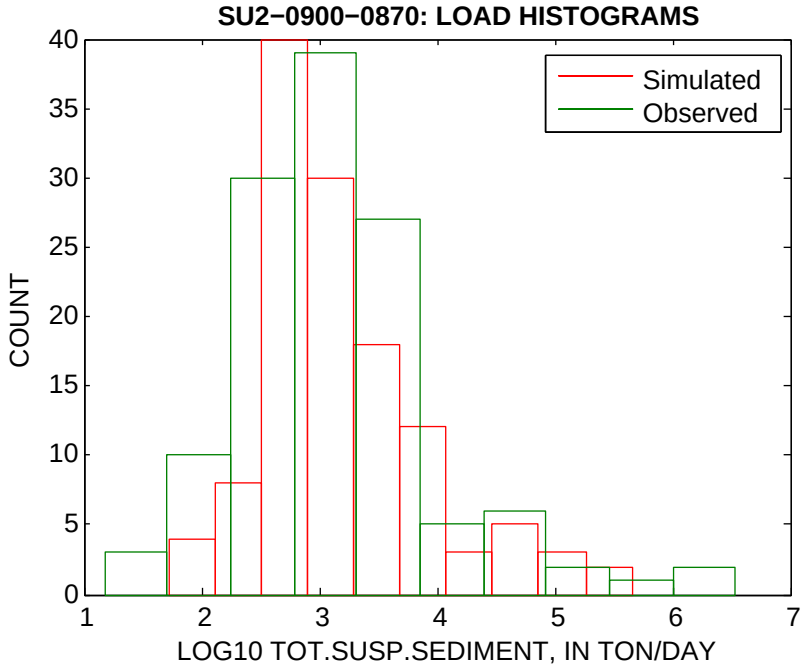


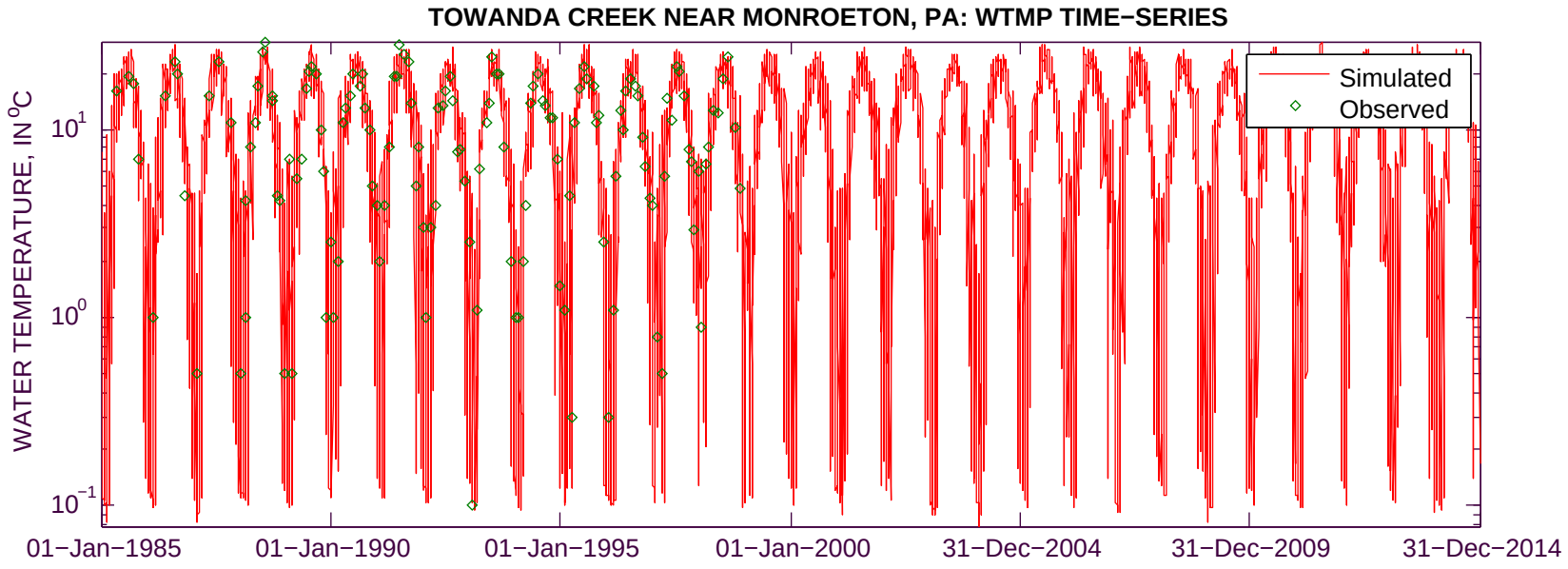
LOAD DATA
LOG10

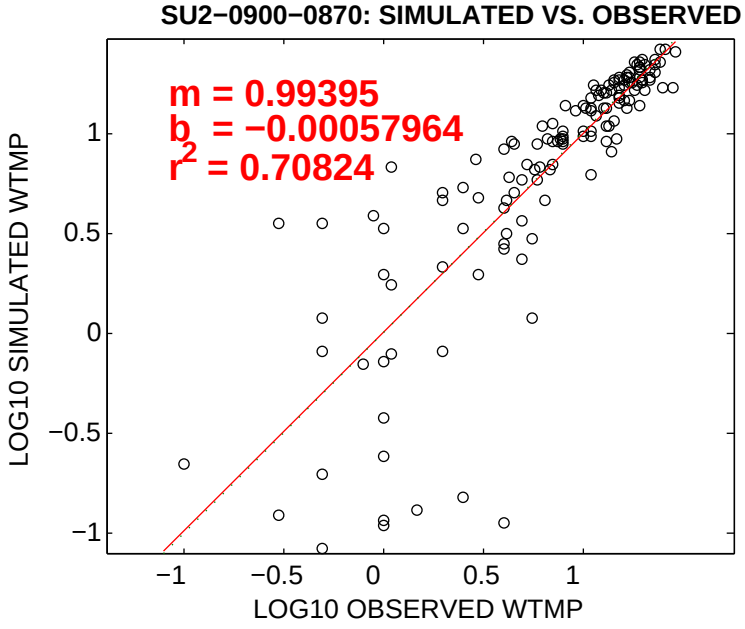


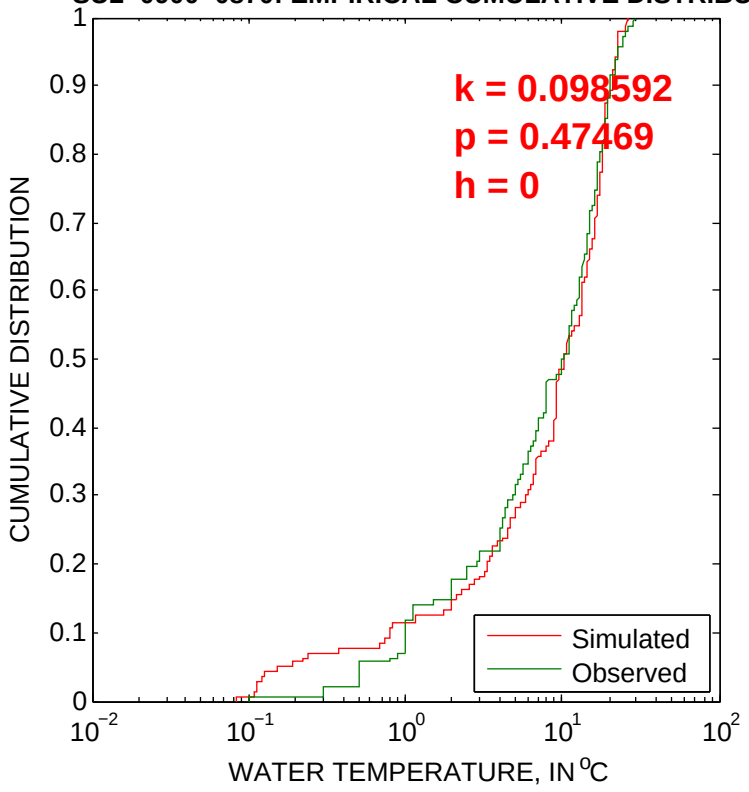












DATA SELECTION

scenario	file
P620171001WQ	WTMP.calib

plot: WTMP - water tempera...

Dates: 1/1/1985 – 12/31/201

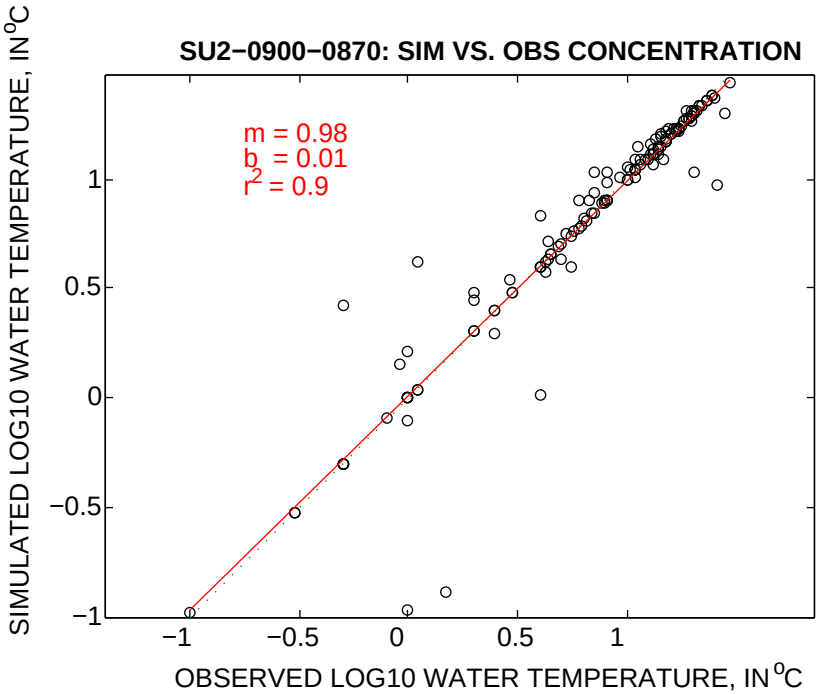
Drive	Directory	Observed
N/A	model	OBS20161101

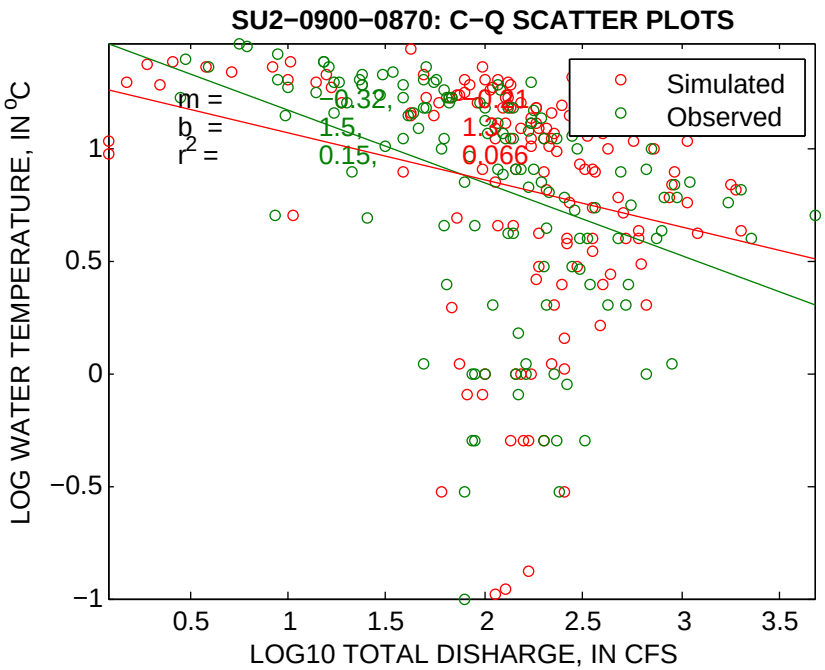
STATISTICS

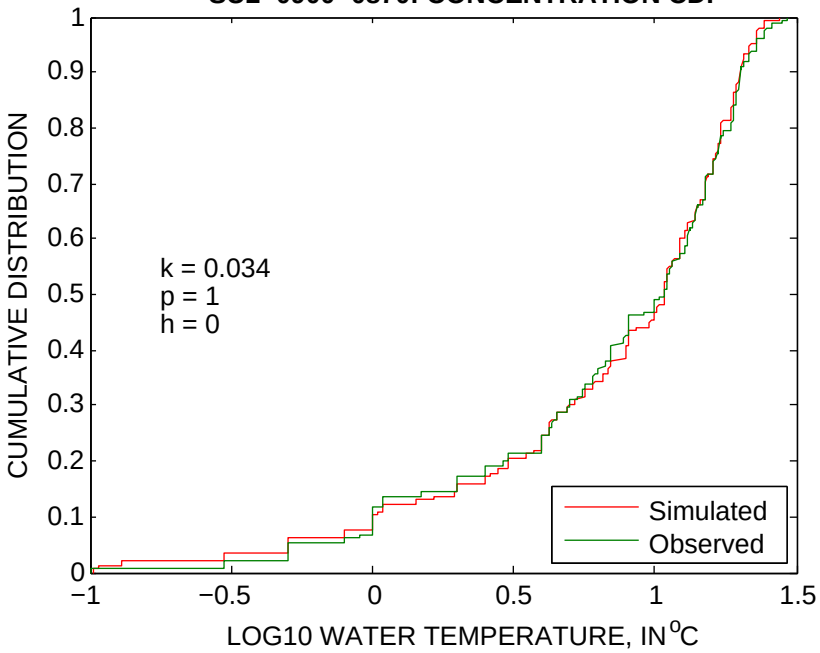
	n	142	142
		observe	simulate
min		0.1	0.083217
		-1	-1.07979
mean		10.5085	10.9944
		0.829425	0.823824
media		10.15	10.2905
		1.00642	1.01243
max		29.5	26.621
		1.46982	1.42522
varian		55.1608	52.5528
		0.257119	0.358658
JB		0.027478	0.026487
		0.001	0.001
		ra	log
%		4.6248	-0.675211
err.va		8.26752	0.104684
rel.std.err		0.14988	0.407143
mod.eff		0.85012	0.592857

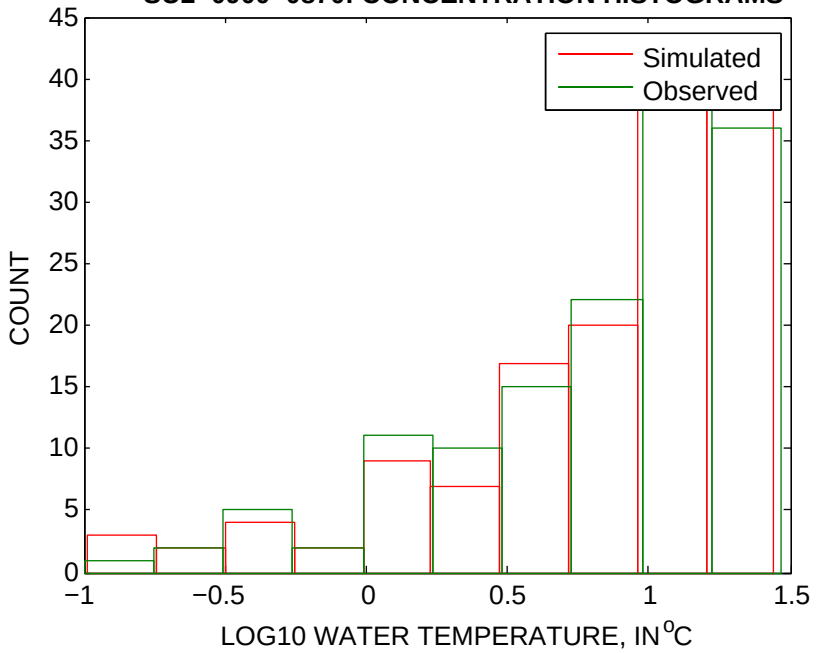
VERSION 2.1

ALL DATA
LOG10

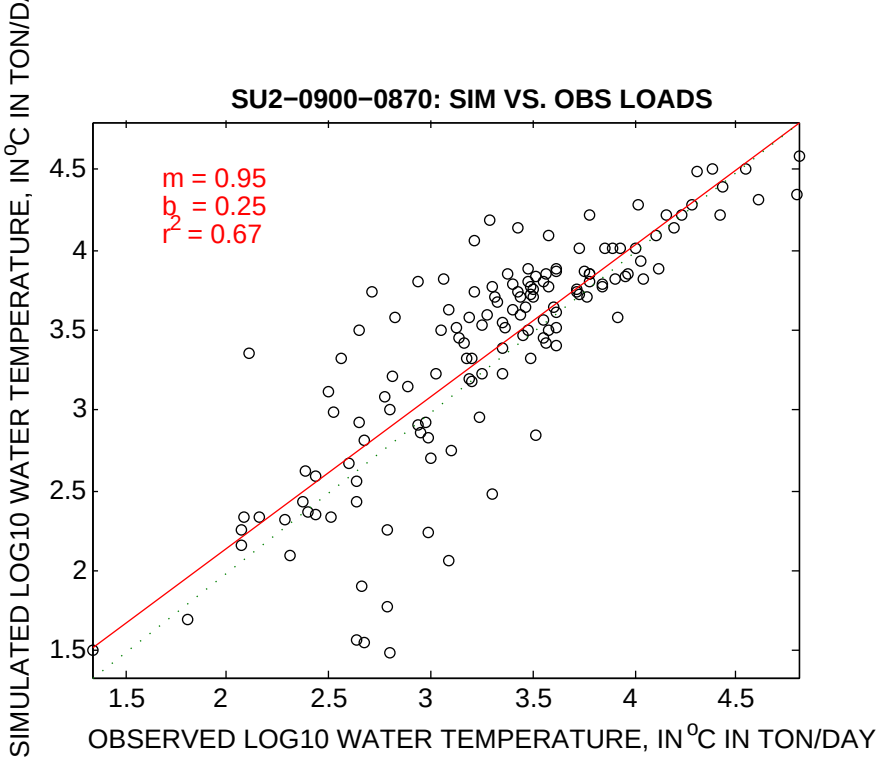


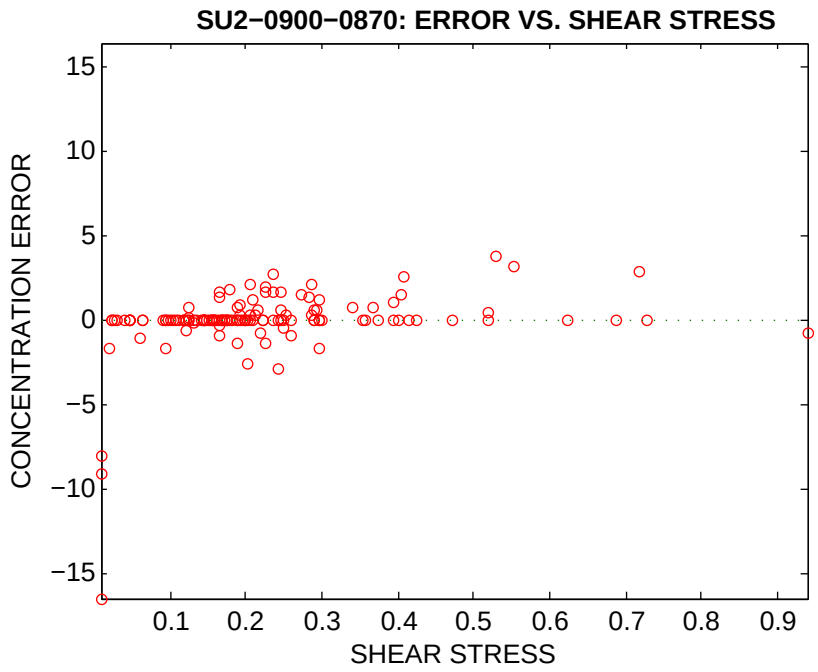


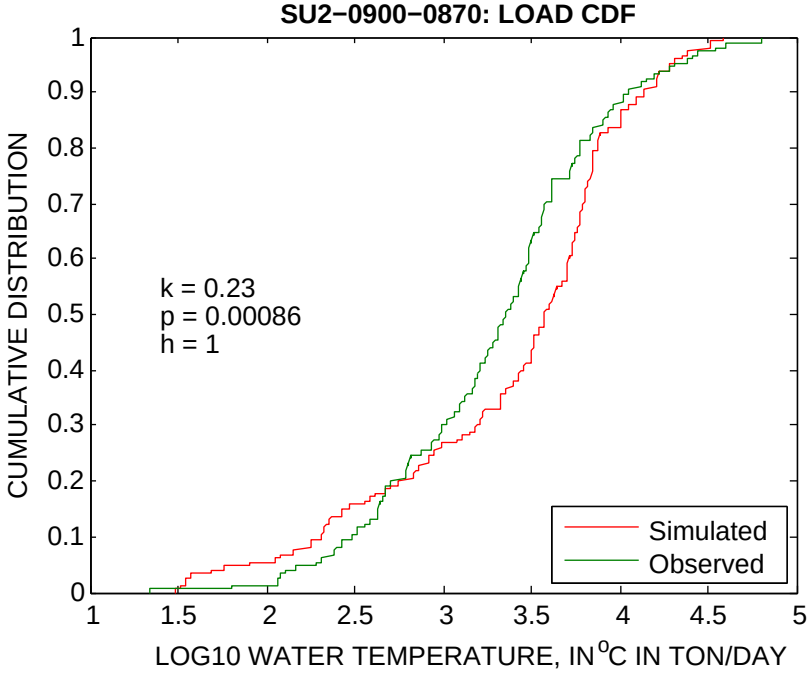


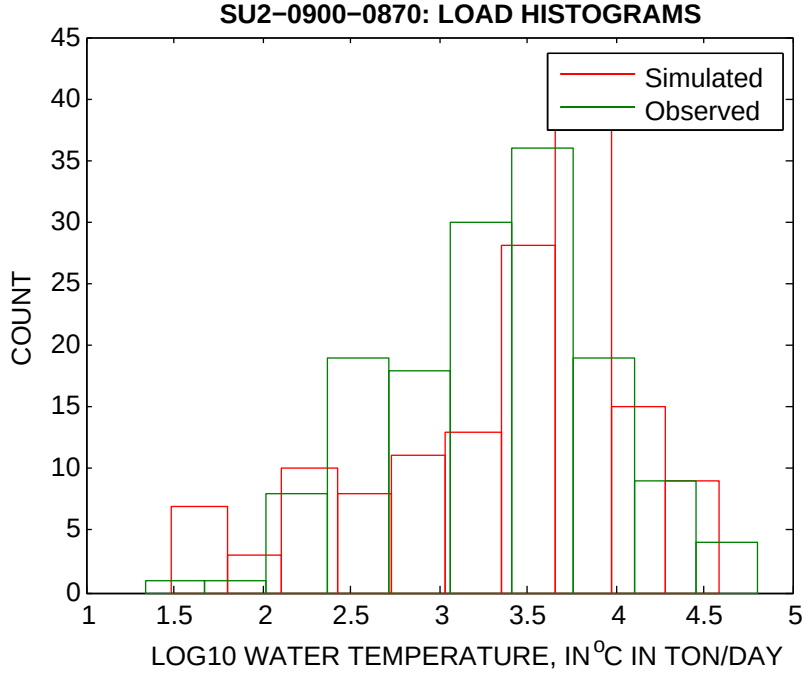


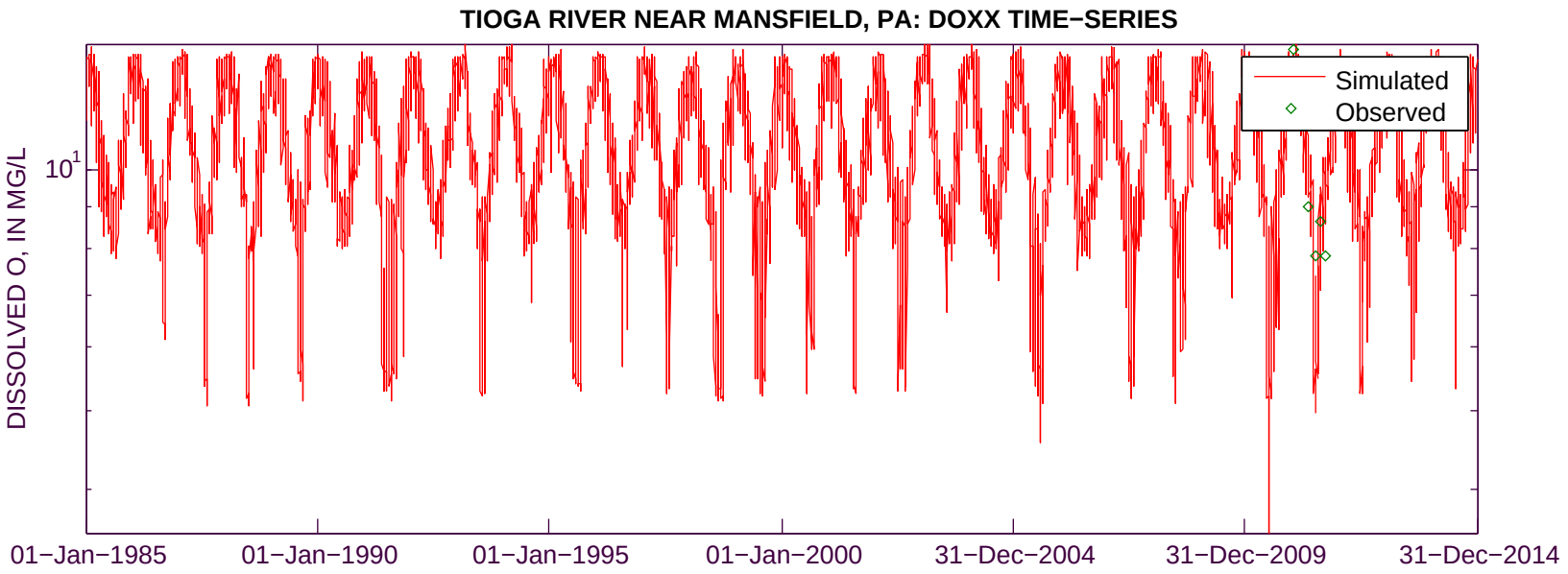
LOAD DATA
LOG10

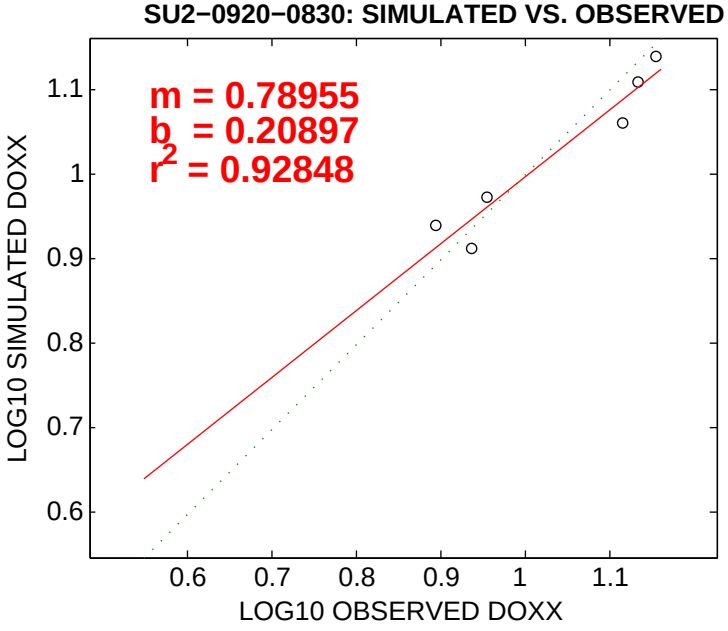


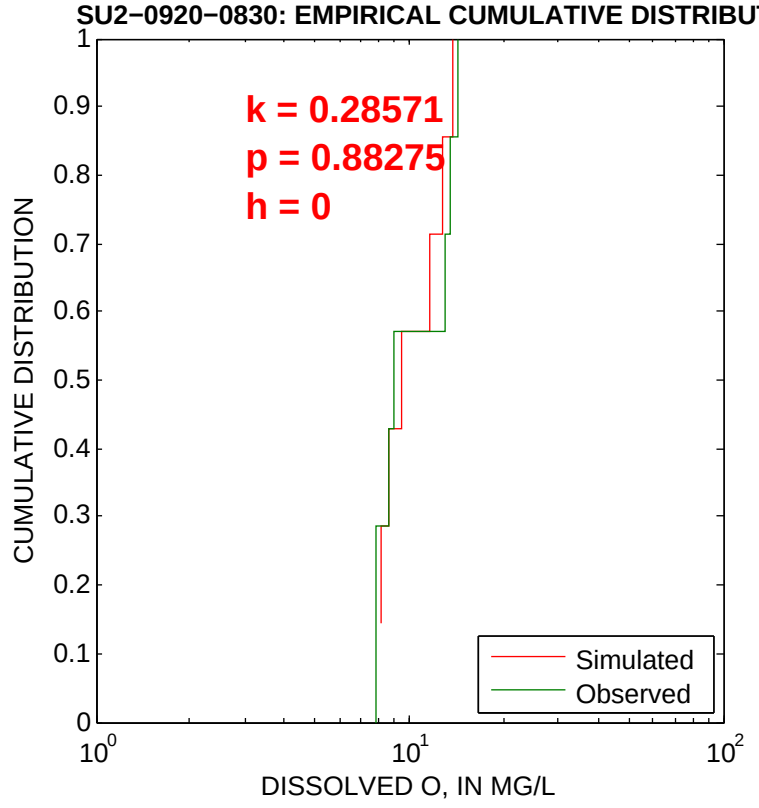












DATA SELECTION

scenario	file
P620171001WQ	DOXX.calib

plot: DOXX - dissolved oxygen

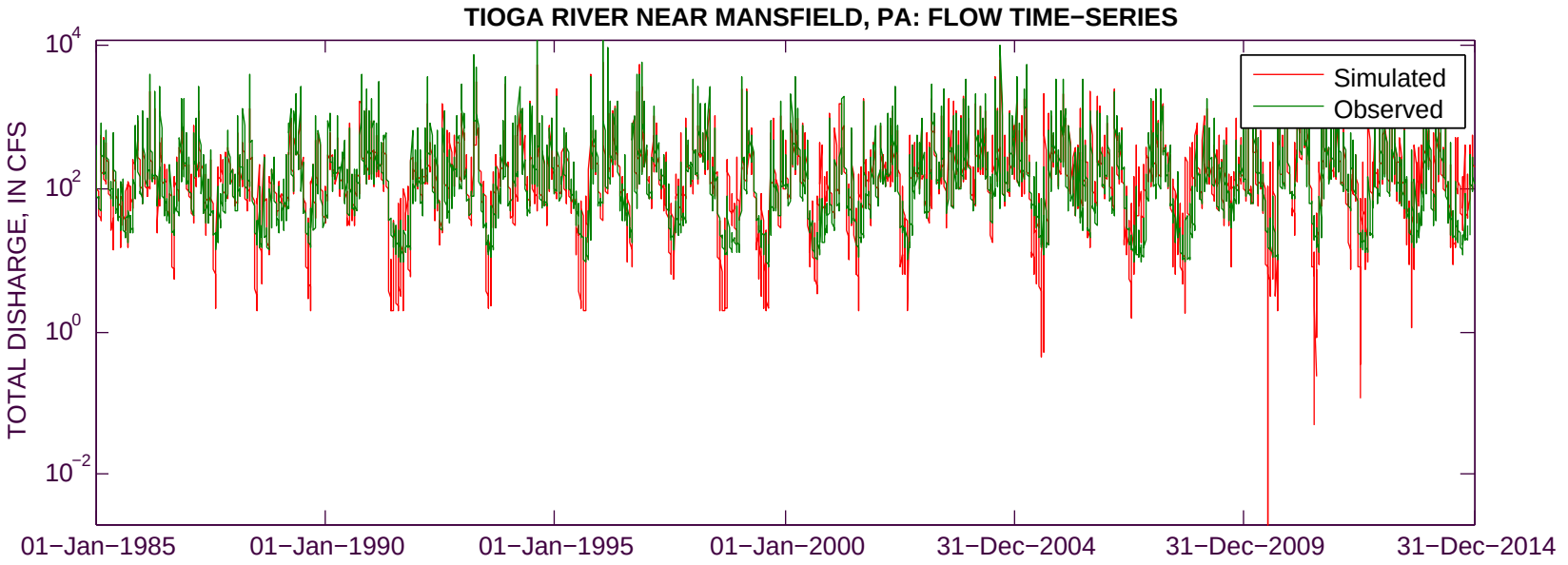
Dates: 1/1/1985 – 12/31/201

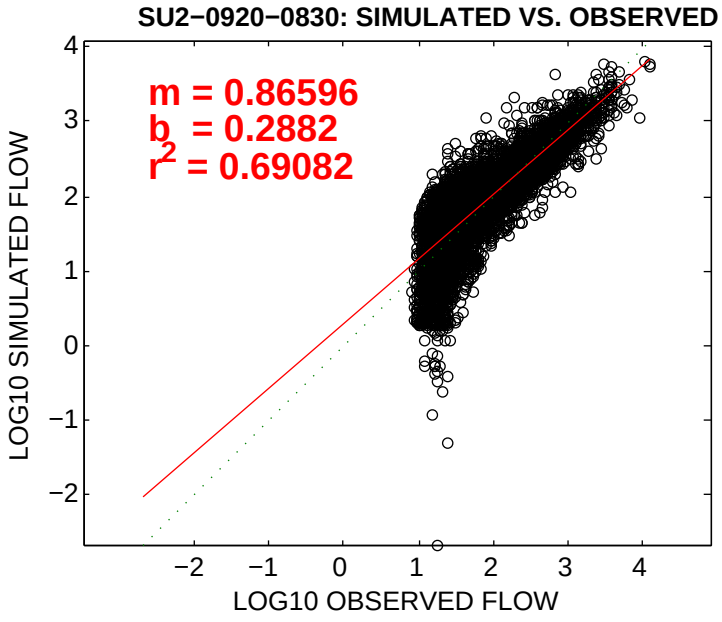
Drive	Directory	Observed
N/A	model	OBS20161101

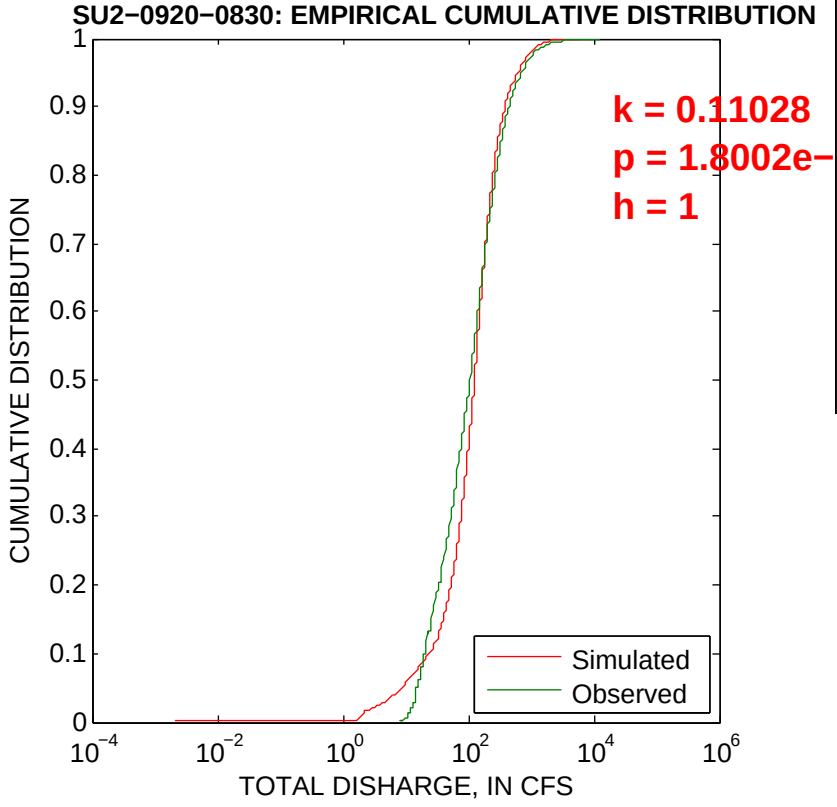
STATISTICS

	n	7	6
		observe	simulate
min		7.8	0
		0.892095	0.912987
mean		10.5776	9.2075
		1.03046	1.02256
media		9	9.3928
		1.03409	1.01729
max		14.2	13.792
		1.15229	1.13963
varian		8.29781	21.0035
		0.013238	0.00888798
JB		✓0.149782	0.061080 ✓
		✓0.190384	0.359367 ✓
		ra	log
%		-12.9524	-0.766347
err.va		10.804	0.00129679
rel.std.err		1.30203	0.0979602
mod.eff		-0.302029	0.90204

VERSION 2.1







DATA SELECTION

scenario: P620171001WQ | file: FLOW.calib

plot: FLOW - total discharge

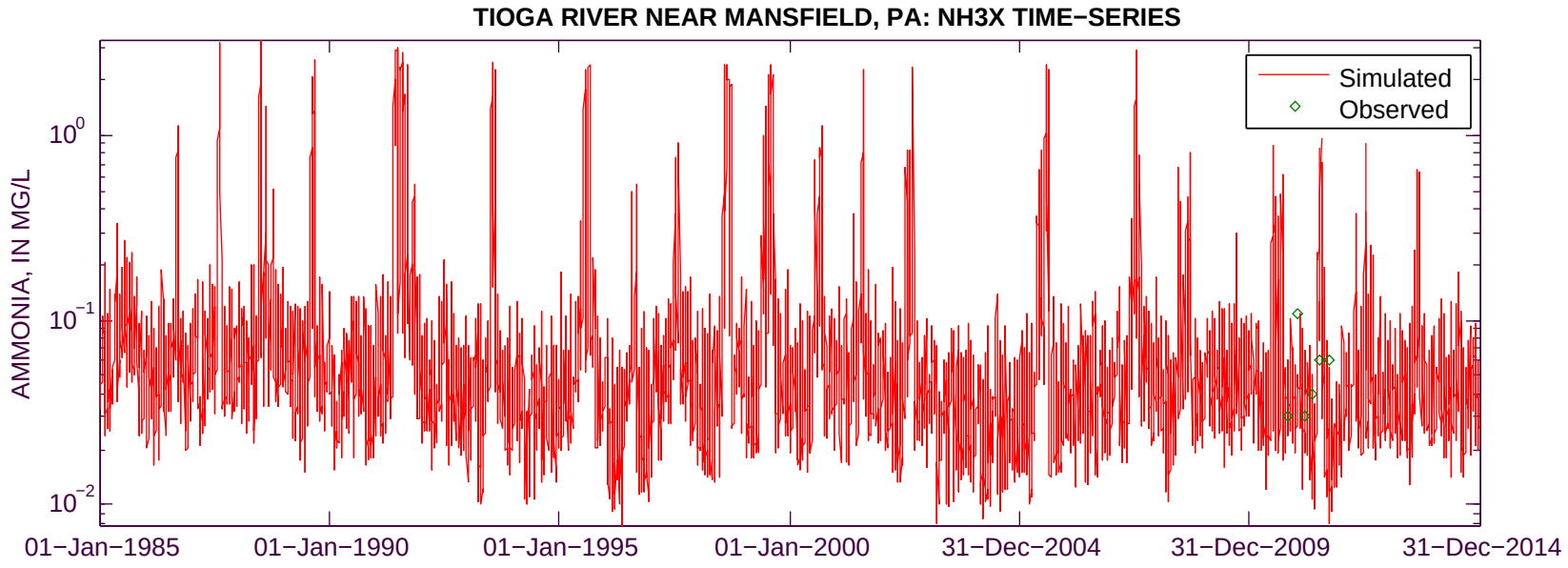
Dates: 1/1/1985 | 12/31/201

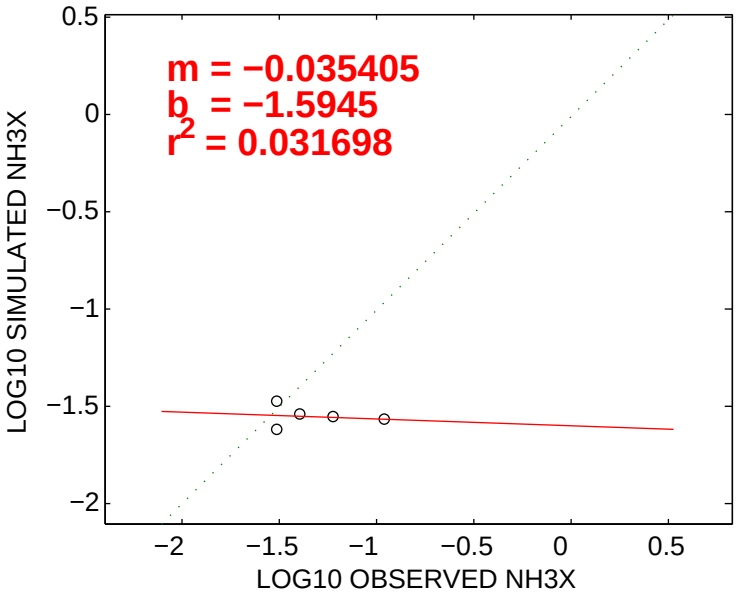
Drive: N/A | Directory: model | Observed: OBS20161101

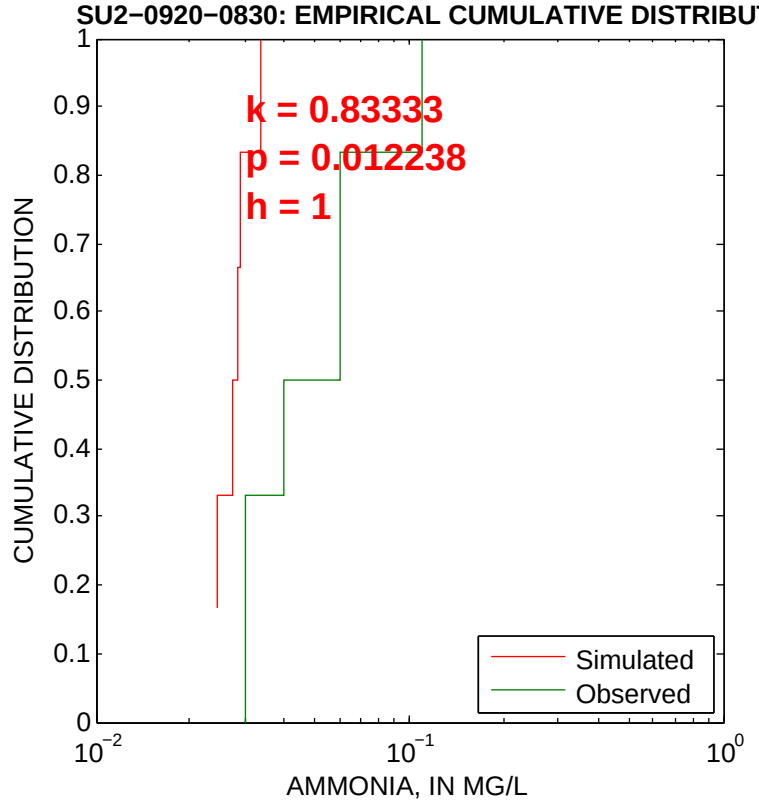
STATISTICS

n	10954	10945
	observe	simulate
min	8.1	0
	0.908485	-2.68334
mean	214.58	198.19
	2.01704	2.03487
media	110	126.11
	2.04139	2.10116
max	12200	6124.9
	4.08636	3.7871
varian	181266	90663.2
	0.258879	0.281011
JB	0.001	0.001
	0.001	0.001
	ra	log
%	-7.63825	0.883772
err.va	57450.5	0.0918519
rel.std.err	0.31694	0.354807
mod.eff	0.68306	0.645193

VERSION







DATA SELECTION

scenario	file
P620171001WQ	NH3X.calib

plot: NH3X - ammonia

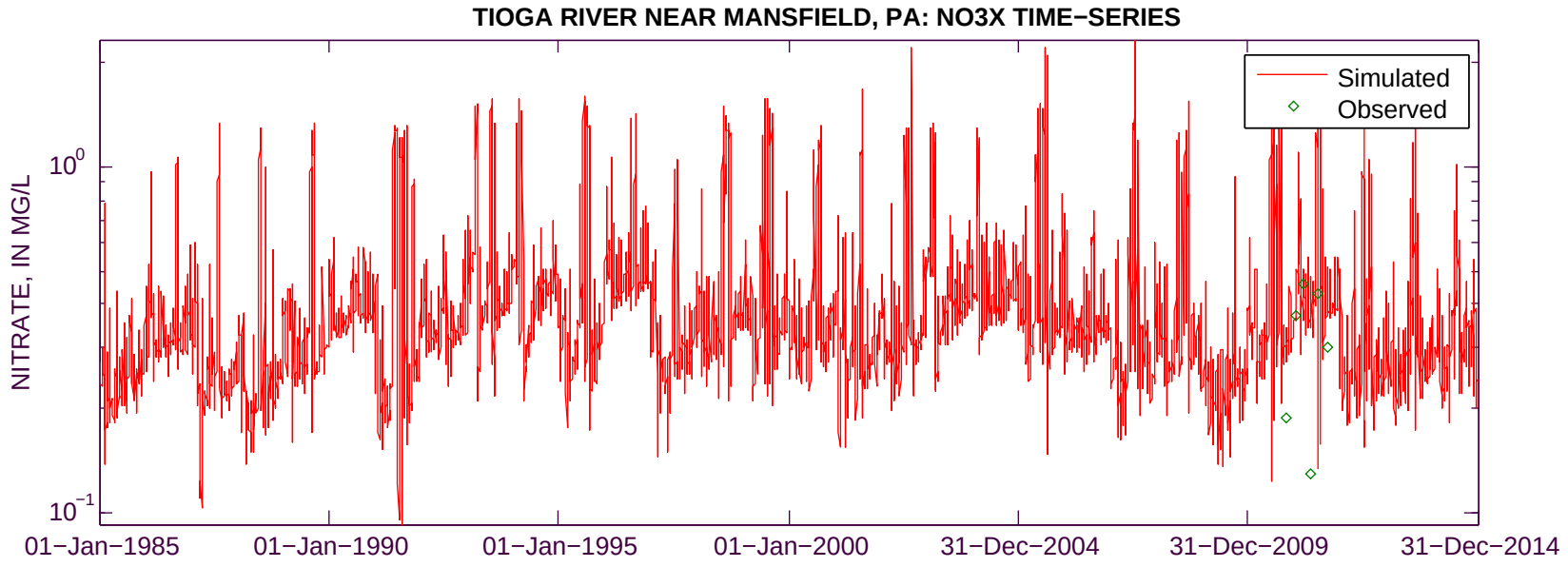
Dates: 1/1/1985 – 12/31/201

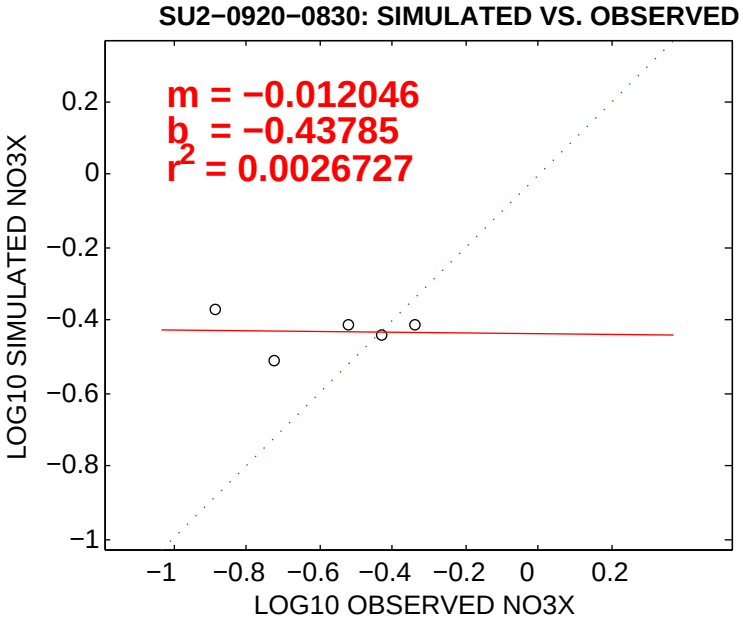
Drive	Directory	Observed
N/A	model	OBS20161101

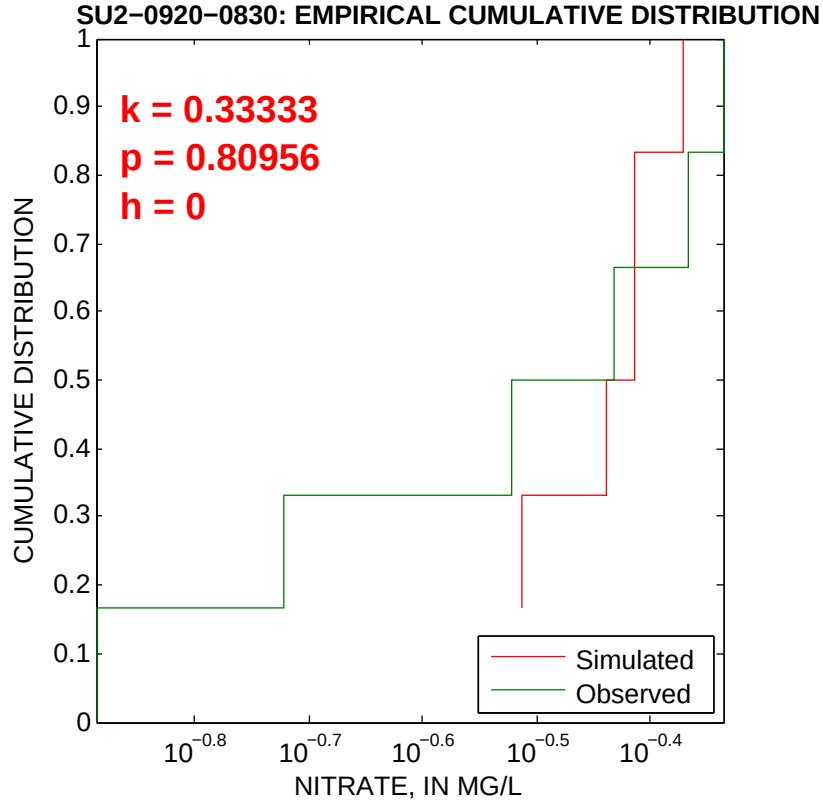
STATISTICS

	n	6	5
		observe	simulate
min		0.03	0
		-1.52288	-1.60931
mean		0.055	0.0237302
		-1.32483	-1.54762
media		0.05	0.0277885
		-1.39794	-1.54949
max		0.11	0.033305
		-0.958607	-1.47749
varian		0.00091	0.00014314
		0.057129	0.00225911
JB		0.098866	0.007866
		0.373366	0.5
		ra	log
%		-56.8542	16.8162
err.va		0.00232054	0.125475
rel.std.err		2.55004	2.19635
mod.eff		-1.55004	-1.19635

VERSION 2.1







DATA SELECTION

scenario: P620171001WQ; file: NO3X.calib

plot: NO3X - nitrate

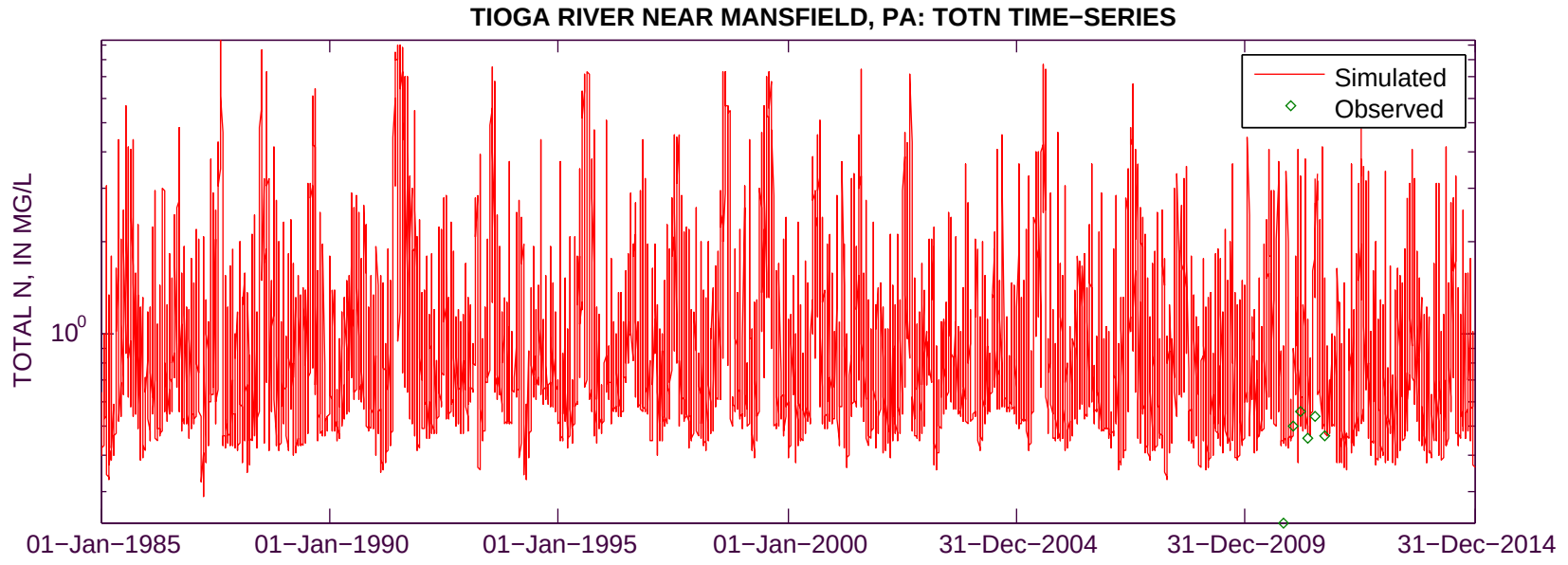
Dates: 1/1/1985 – 12/31/201

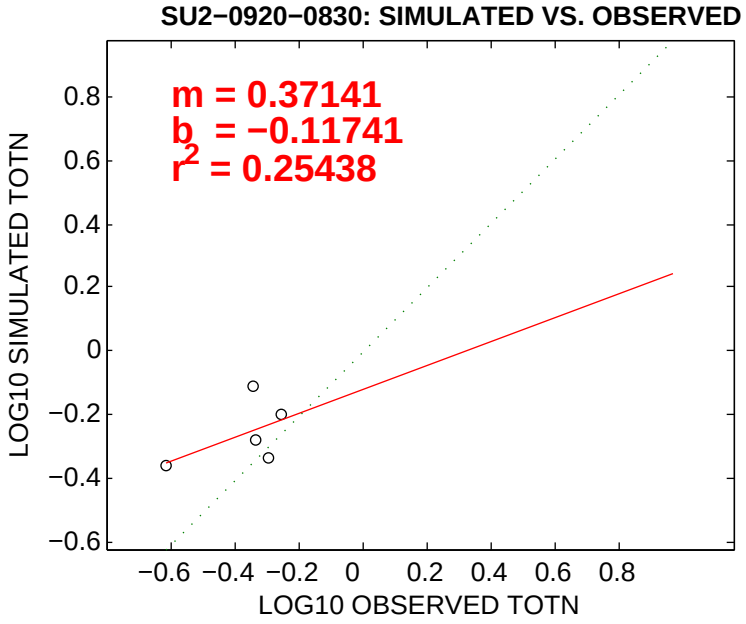
Drive: N/A; Directory: model; Observed: OBS20161101

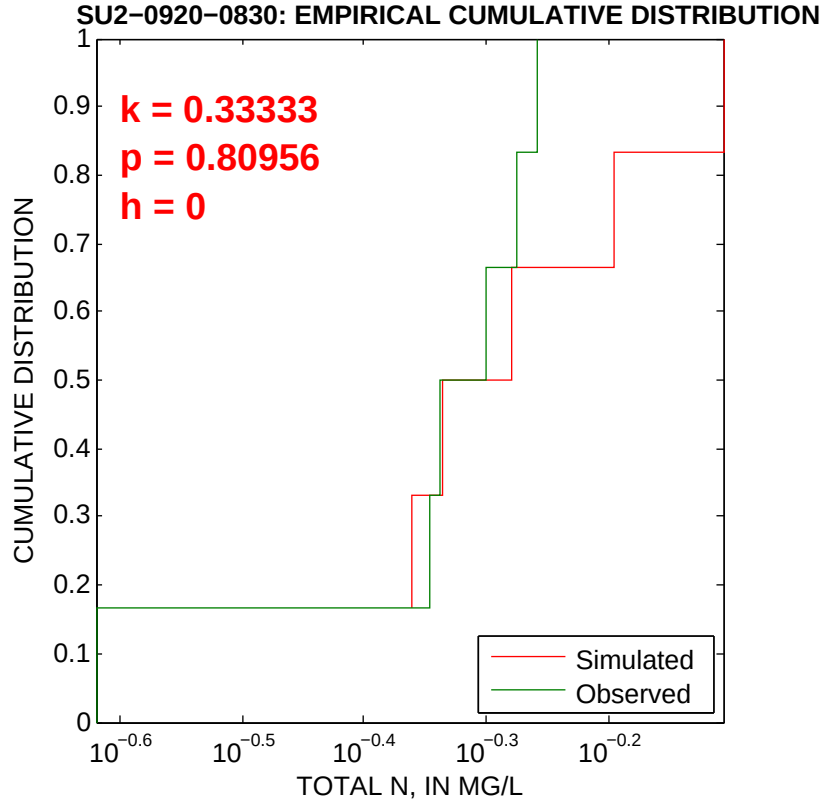
STATISTICS

	n	6	5
		observe	simulate
min		0.13	0
		-0.886057	-0.51323
mean		0.313333	0.310713
		-0.579844	-0.430867
media		0.335	0.37439
		-0.522879	-0.414596
max		0.46	0.42366
		-0.337242	-0.372983
varian		0.0174667	0.0246363
		0.0494448	0.00268427
JB		0.480973	0.008173
		0.5	0.5
		ra	log
%		-0.83617	-25.6926
err.va		0.0595258	0.081063
rel.std.err		3.40797	1.63947
mod.eff		-2.40797	-0.639466

VERSION







DATA SELECTION

scenario	file
P620171001WQ	TOTN.calib

plot: TOTN - total nitrogen

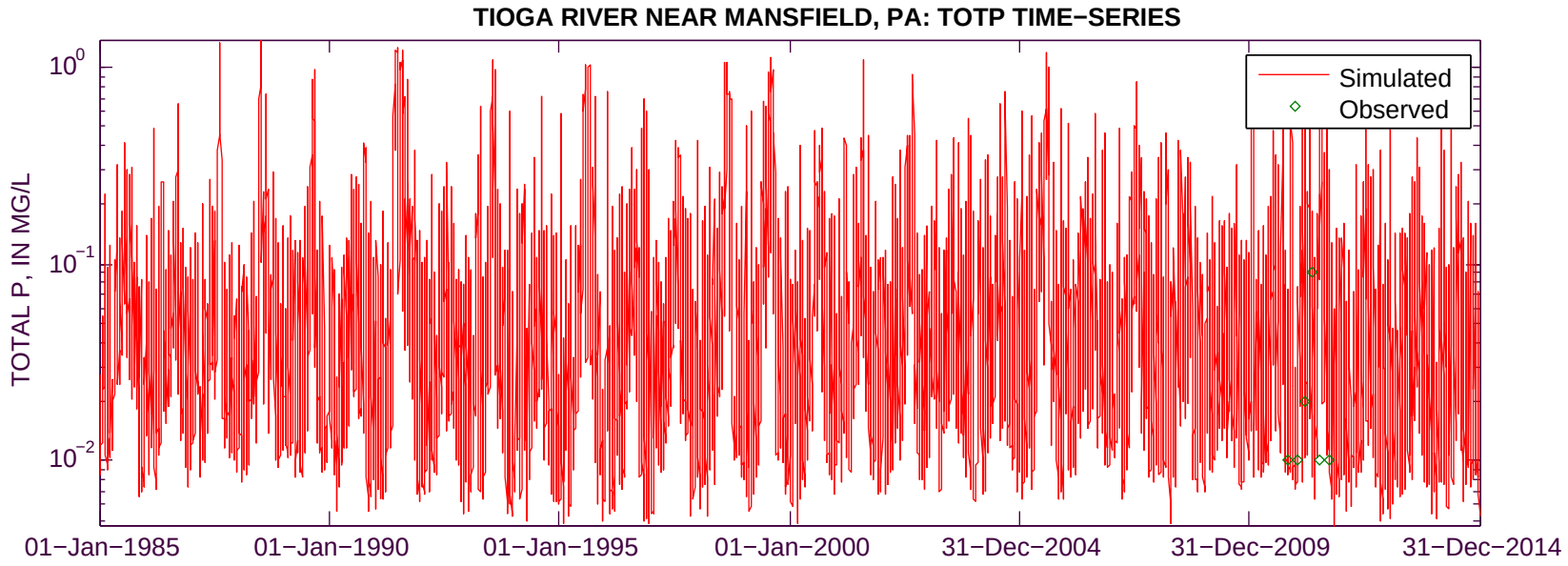
Dates 1/1/1985 12/31/201

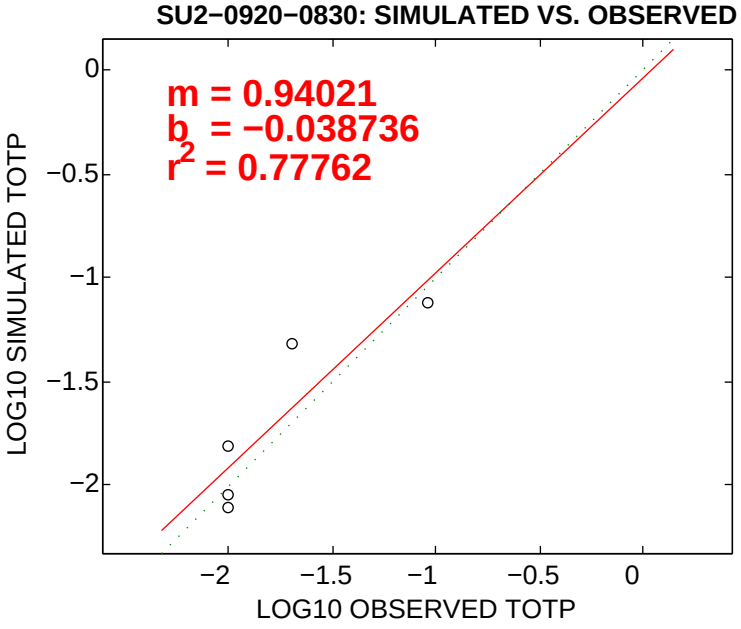
Drive	Directory	Observed
N/A	model	OBS20161101

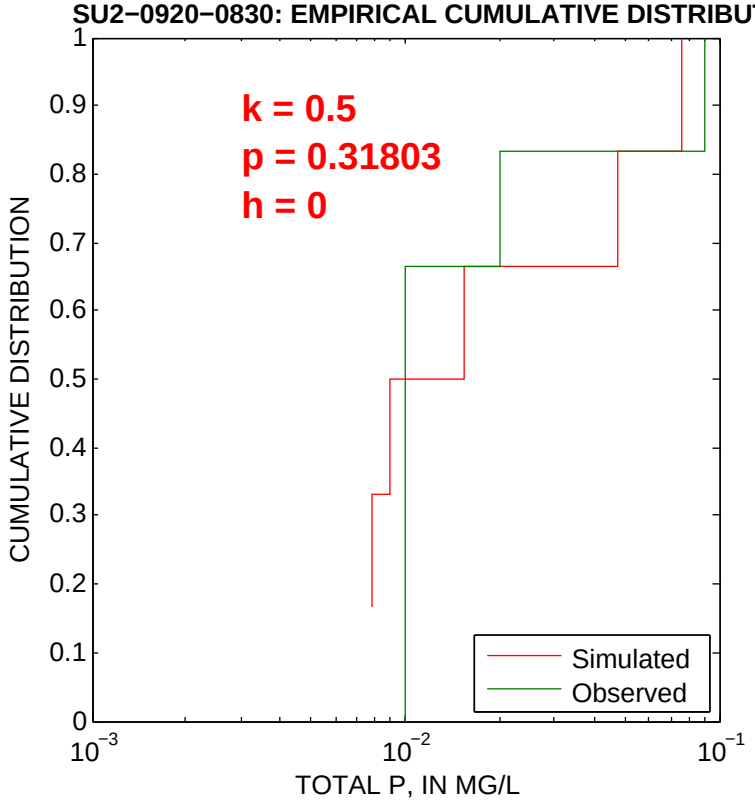
STATISTICS

	n	6	5
		observe	simulate
min		0.24	0
		-0.619789	-0.361221
mean		0.455	0.473455
		-0.372897	-0.25591
media		0.48	0.493565
		-0.337242	-0.278775
max		0.55	0.78185
		-0.259637	-0.106877
varian		0.01259	0.070049
		0.0202253	0.0109682
JB		0.032910	0.288028
		0.032163	0.5
		ra	log
%		4.05604	-31.3724
err.va		0.0885132	0.033277
rel.std.err		7.03043	1.64532
mod.eff		-6.03043	-0.645317

VERSION 2.1







DATA SELECTION

scenario	file
P620171001WQ	TOTP.calib

plot: TOTP - total phosphorus

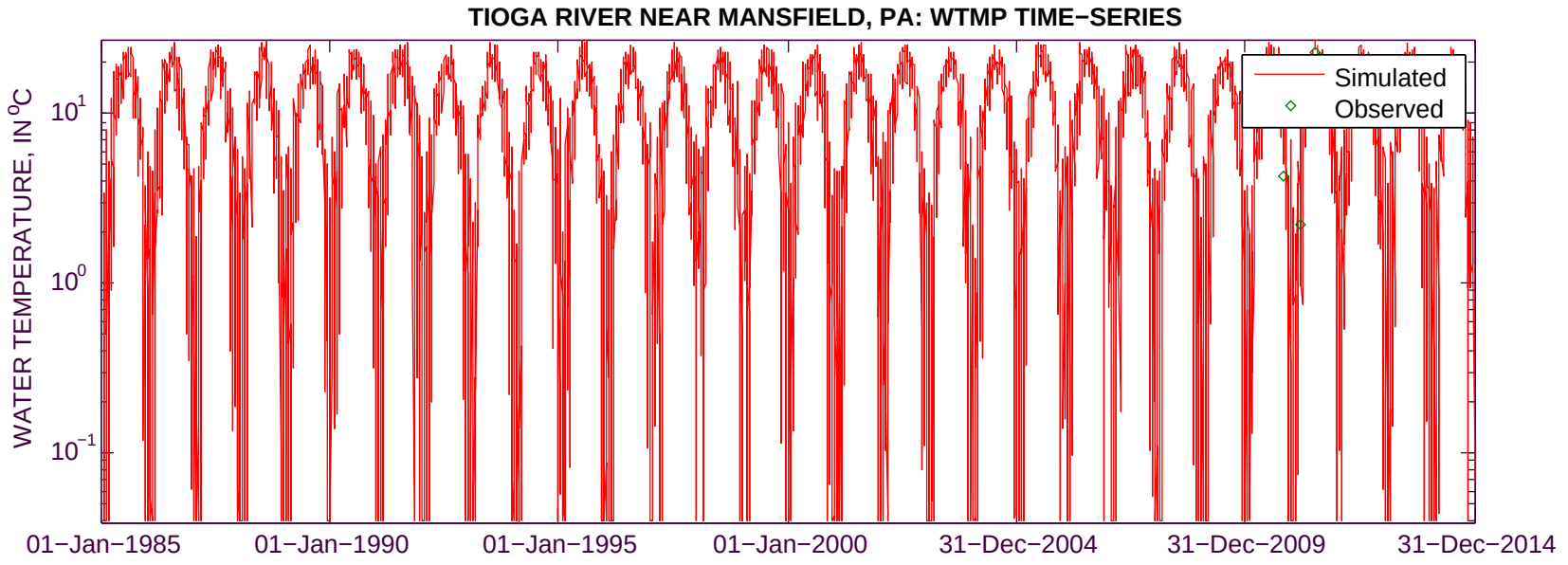
Dates 1/1/1985 12/31/201

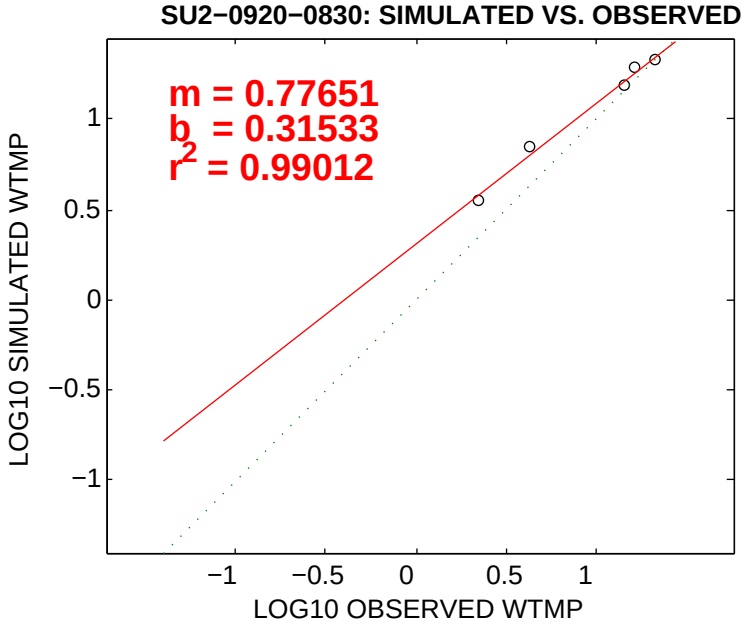
Drive	Directory	Observed
N/A	model	OBS20161101

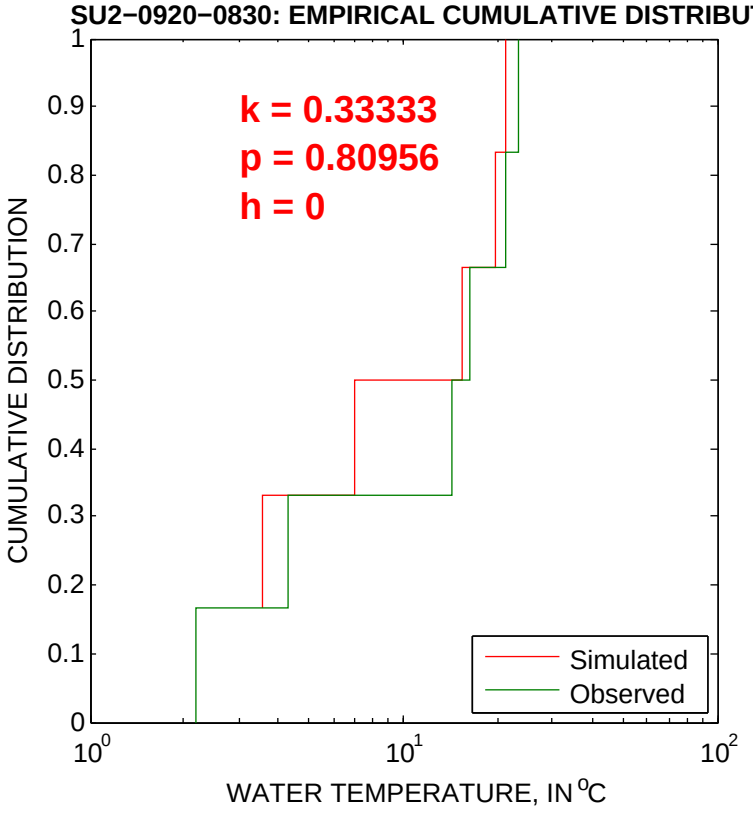
STATISTICS

	n	6	5
		observe	simulate
min		0.01 -2	0 -2.10913
mean		0.0251667 -1.74799	0.0260582 -1.68221
media		0.01 -2	0.012112 -1.81386
max		0.091 -1.04096	0.076395 -1.11694
varian		0.00105617 0.173206	0.00088725 0.196899
JB		0.001 0.054808	0.134746 0.341648
		ra	log
%		3.54252	-3.76303
err.va		0.00022589	0.0498136
rel.std.err		0.213879	0.287598
mod.eff		0.786121	0.712402

VERSION 2.1







DATA SELECTION

scenario	file
P620171001WQ	WTMP.calib

plot: WTMP - water tempera...

Dates 1/1/1985 12/31/201

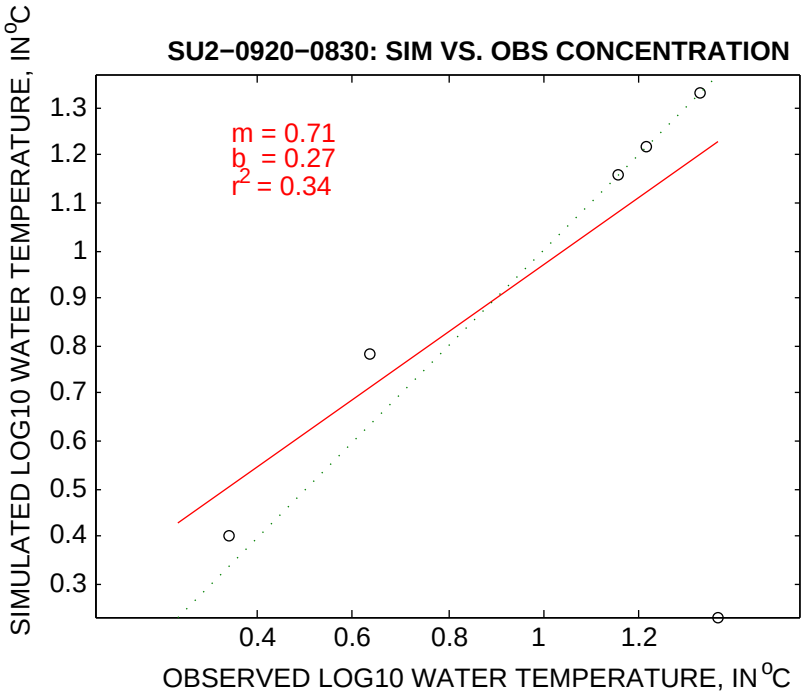
Drive	Directory	Observed
N/A	model	OBS20161101

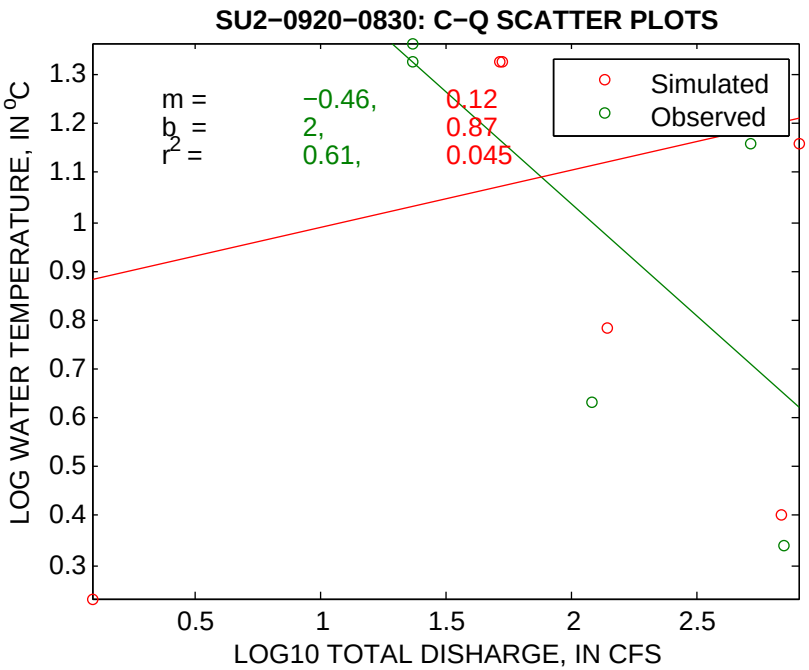
STATISTICS

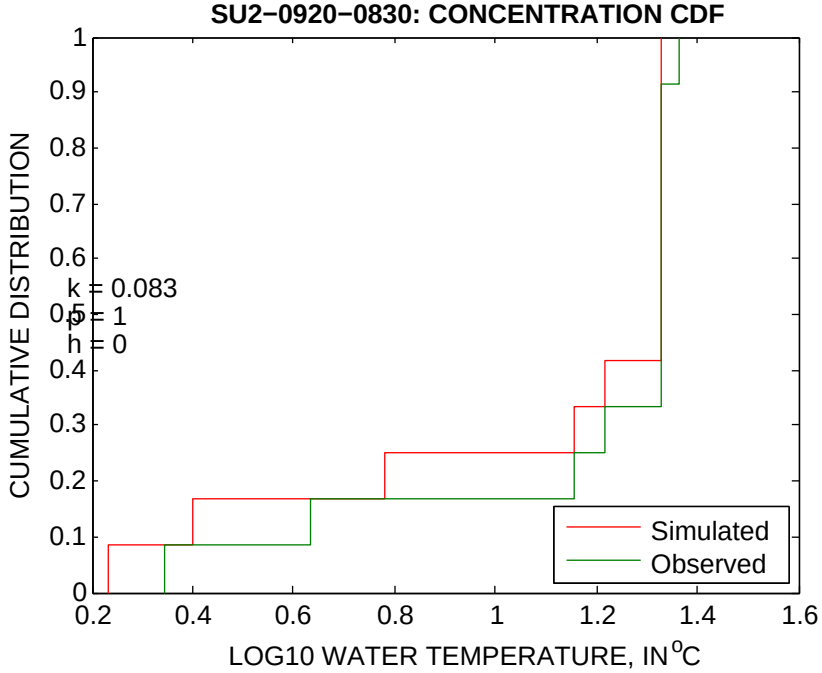
	n	6	5
		observe	simulate
min		2.2	0
		0.342423	0.553919
mean		13.6333	11.1456
		0.935495	1.04175
media		15.4	11.2612
		1.15836	1.19025
max		23.2	21.221
		1.32838	1.32677
varian		75.2747	77.9035
		0.181255	0.11038
JB		0.419815	0.369358
		0.300876	0.324046
		ra	log
%		-18.2474	11.358
err.va		111.741	0.0242562
rel.std.err		1.48444	0.133824
mod.eff		-0.484443	0.866176

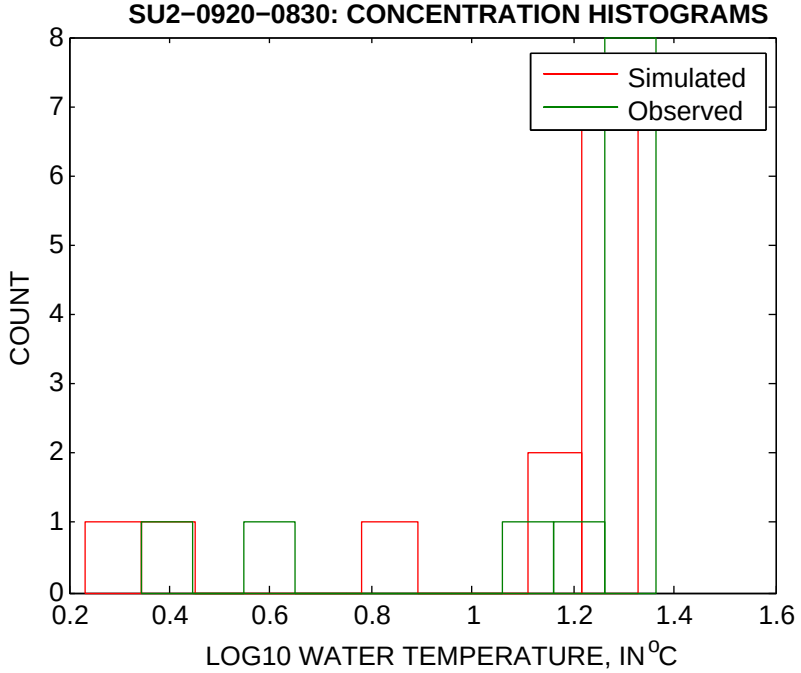
VERSION 2.1

ALL DATA
LOG10

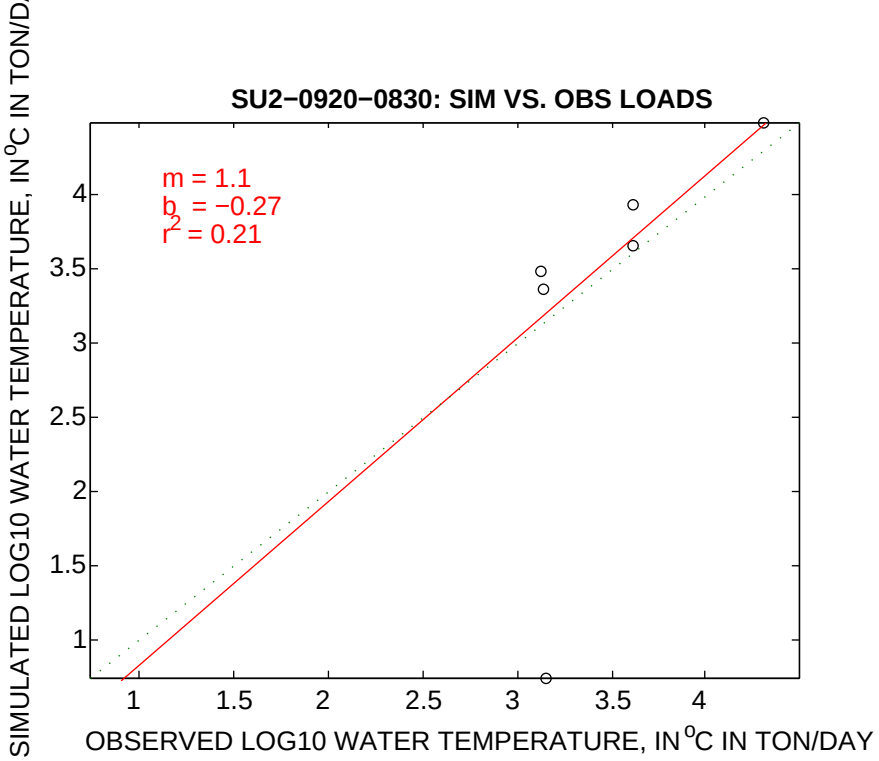


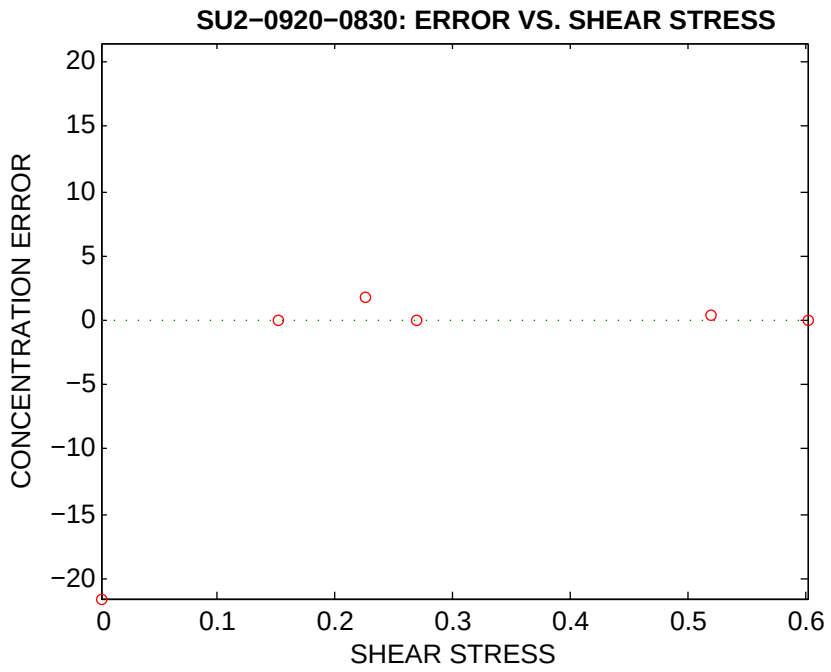


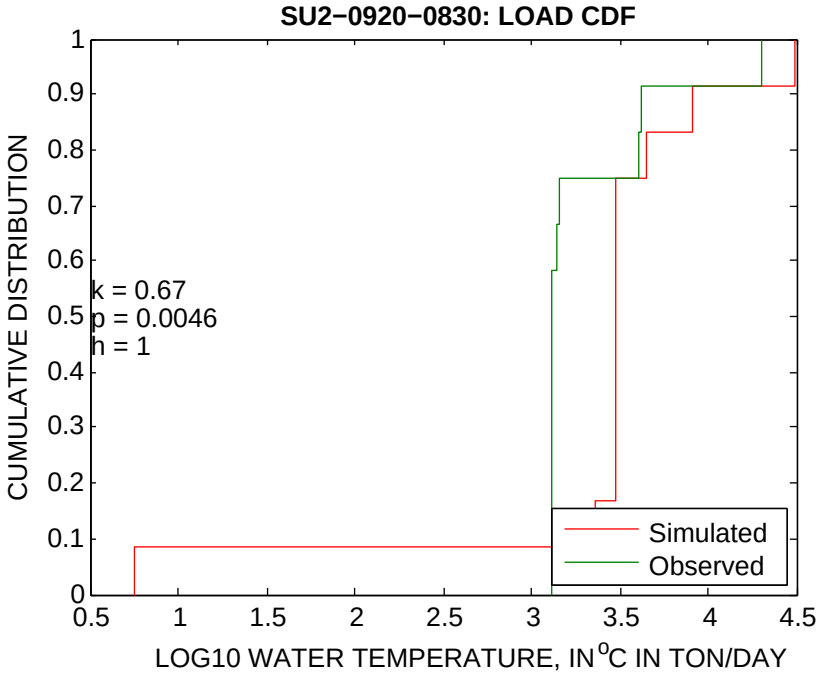


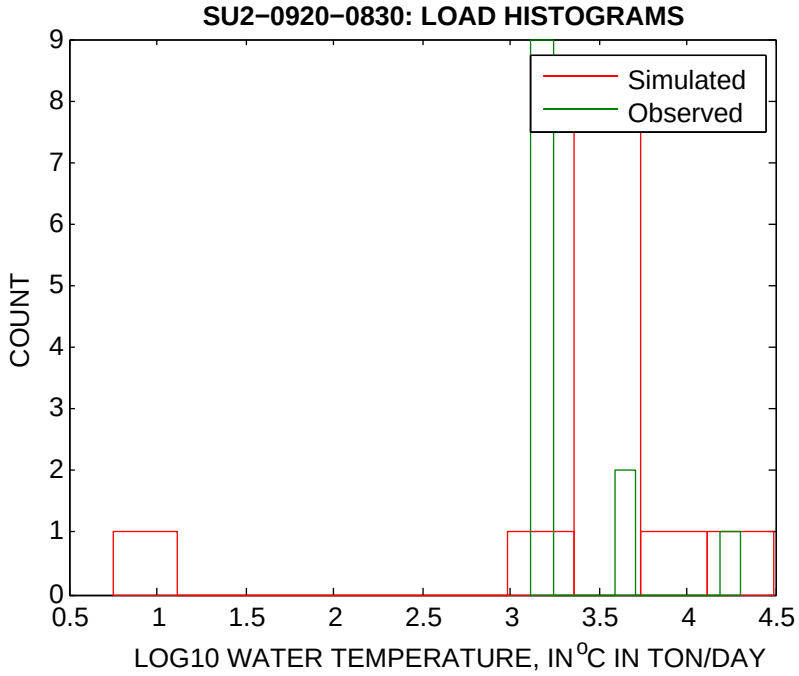


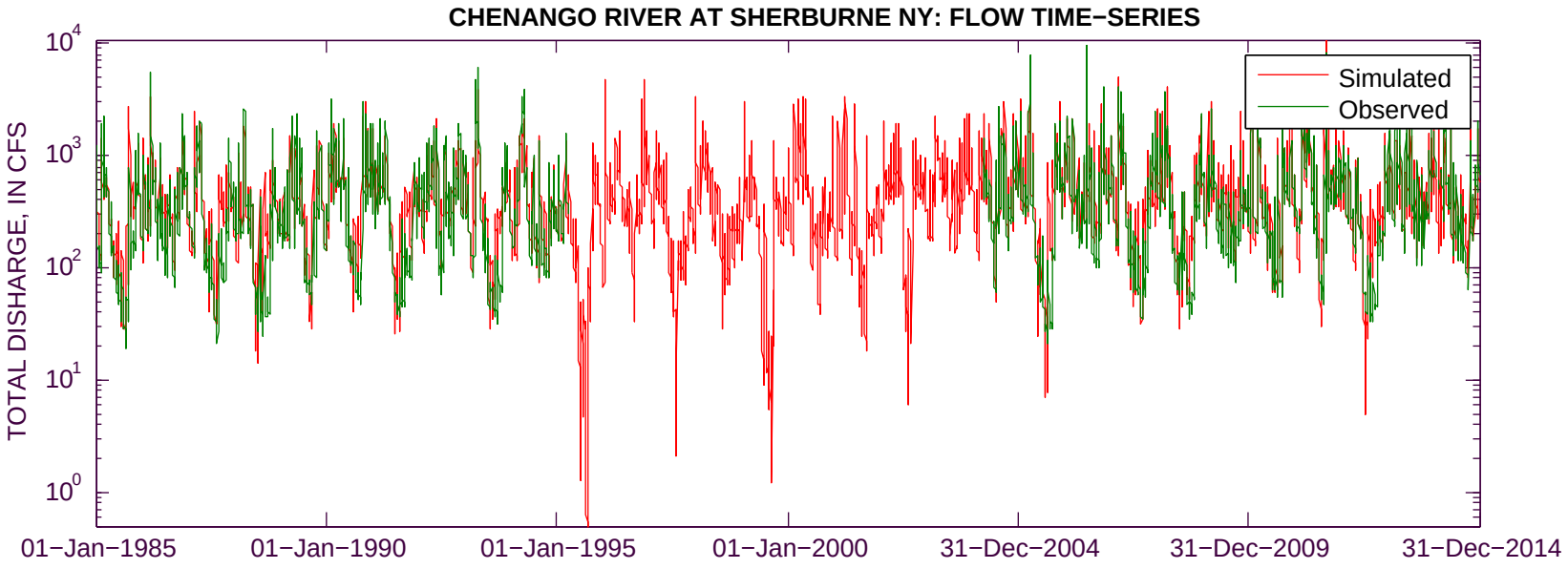
LOAD DATA
LOG10

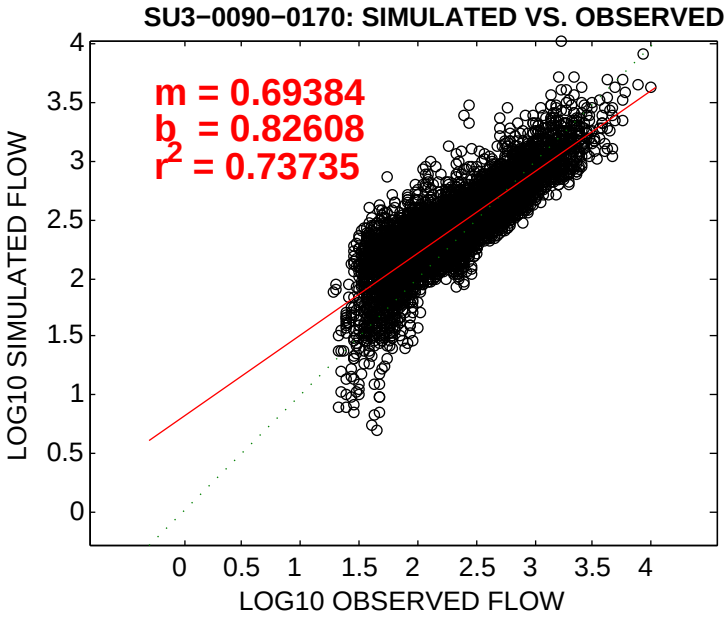


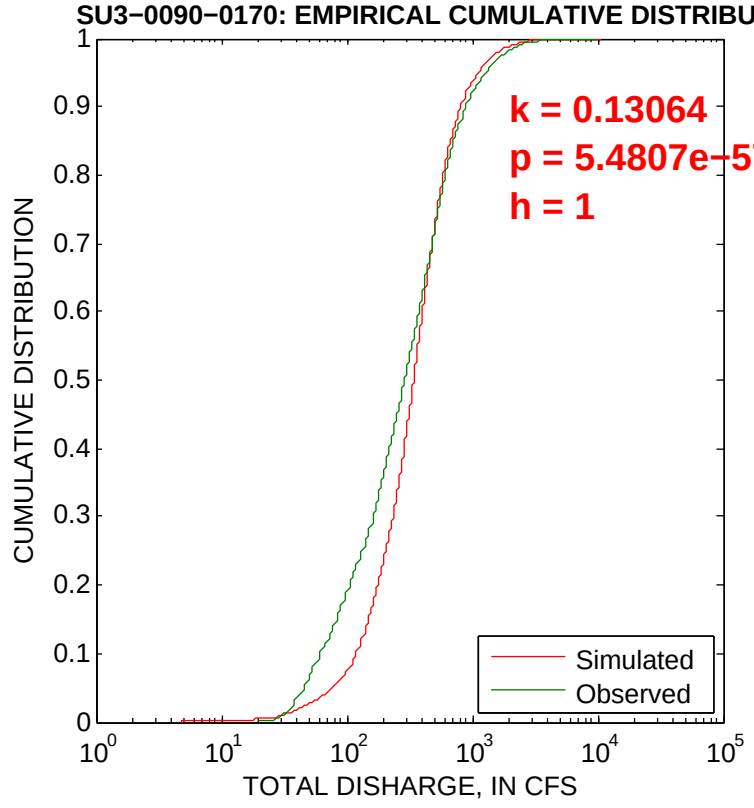












DATA SELECTION

scenario	file
P620171001WQ	FLOW.calib

plot: FLOW - total discharge

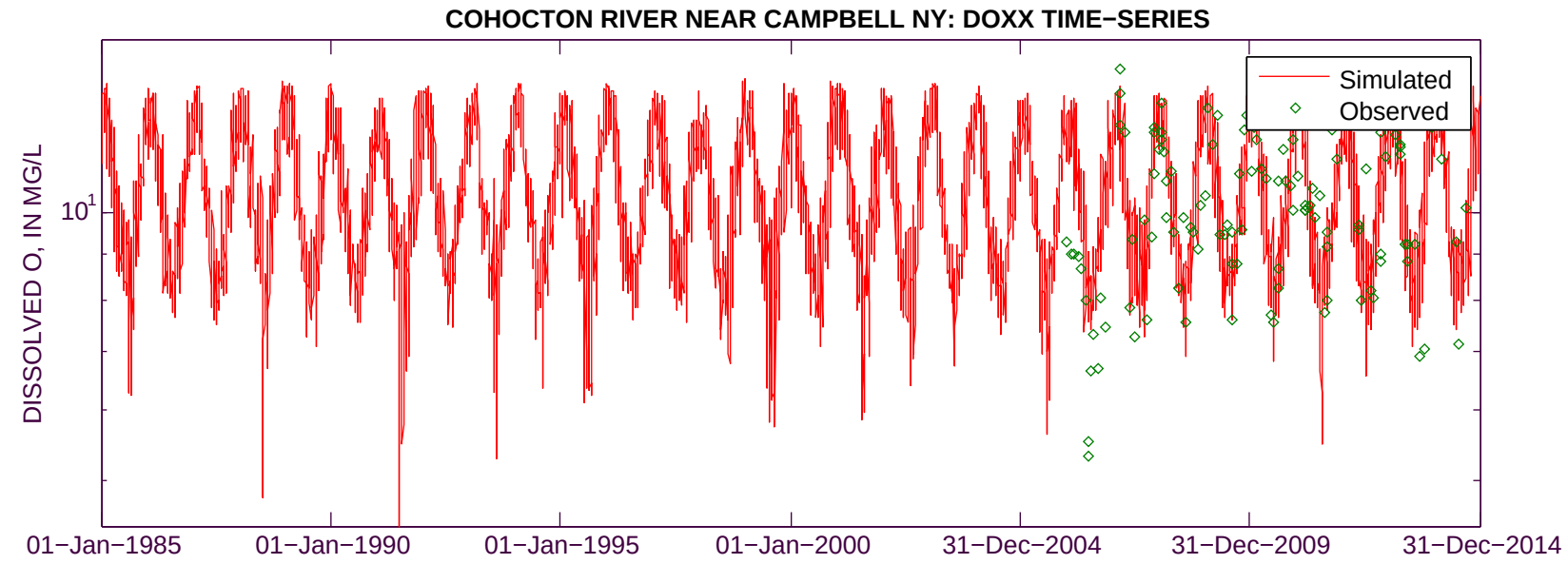
Dates: 1/1/1985 – 12/31/201

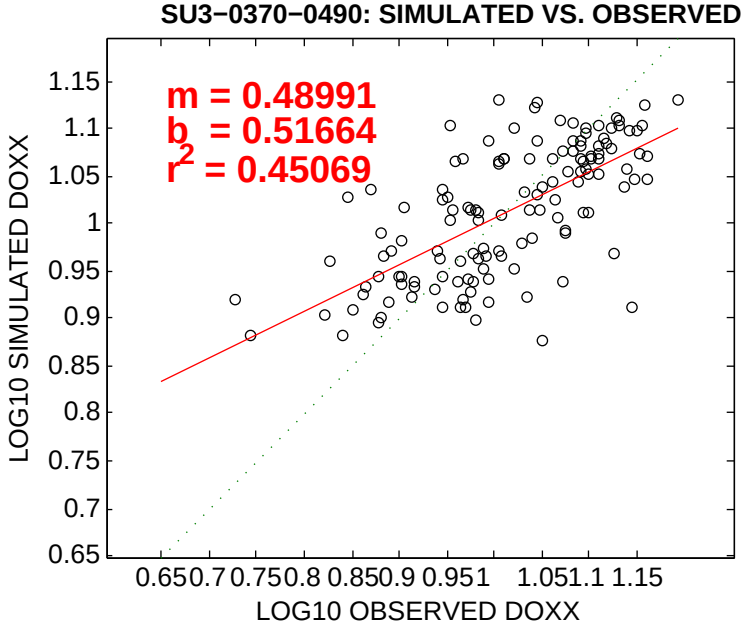
Drive	Directory	Observed
N/A	model	OBS20161101

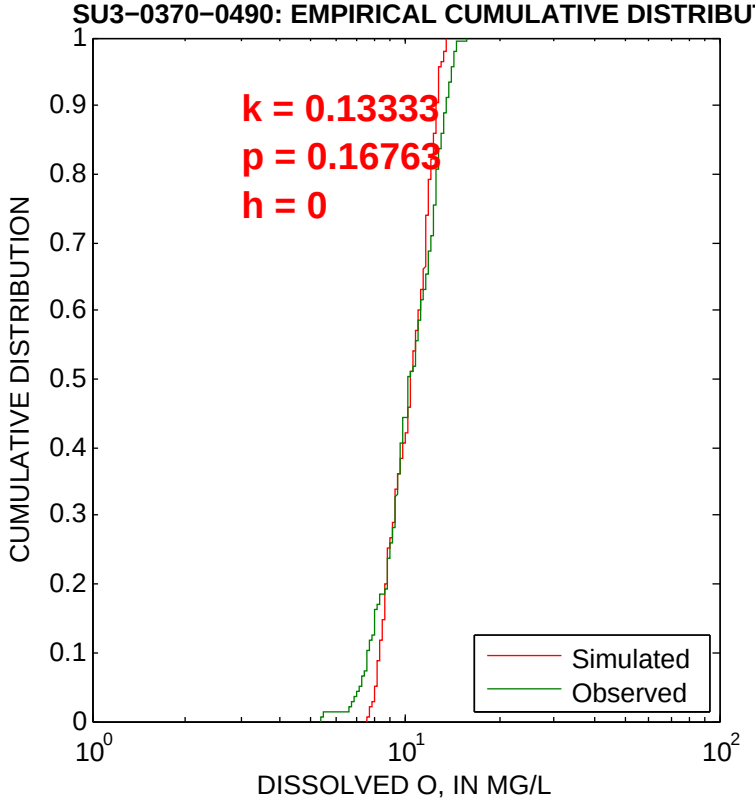
STATISTICS

n	7601	7601
	observe	simulate
min	19	4.8984
	1.27875	0.690054
mean	431.812	441.374
	2.42695	2.51
media	292	343.17
	2.46538	2.53551
max	9840	10892
	3.993	4.03711
varian	264730	186664
	0.191239	0.124859
JB	0.001	0.001
	0.001	0.001
	ra	log
%	2.21431	3.42193
err.va	96325.4	0.0576174
rel.std.err	0.363863	0.301285
mod.eff	0.636137	0.698715

VERSION 2.1







DATA SELECTION

scenario	file
P620171001WQ	DOXX.calib

plot: DOXX - dissolved oxygen

Dates: 1/1/1985 – 12/31/201

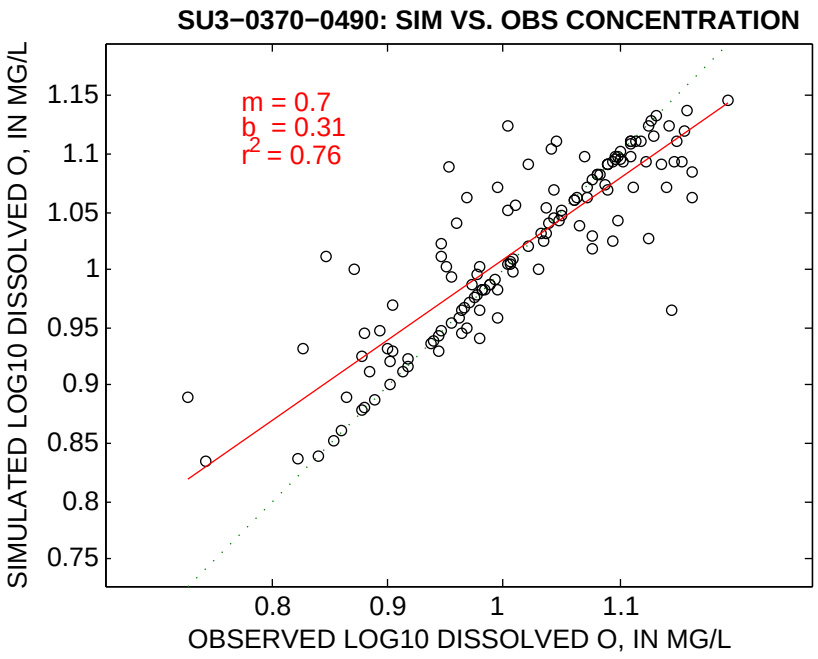
Drive	Directory	Observed
N/A	model	OBS20161101

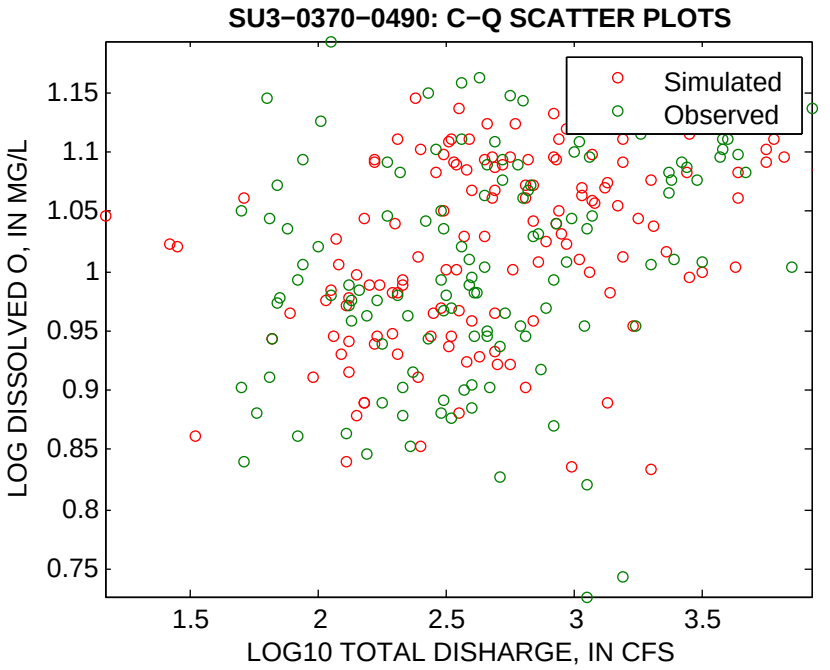
STATISTICS

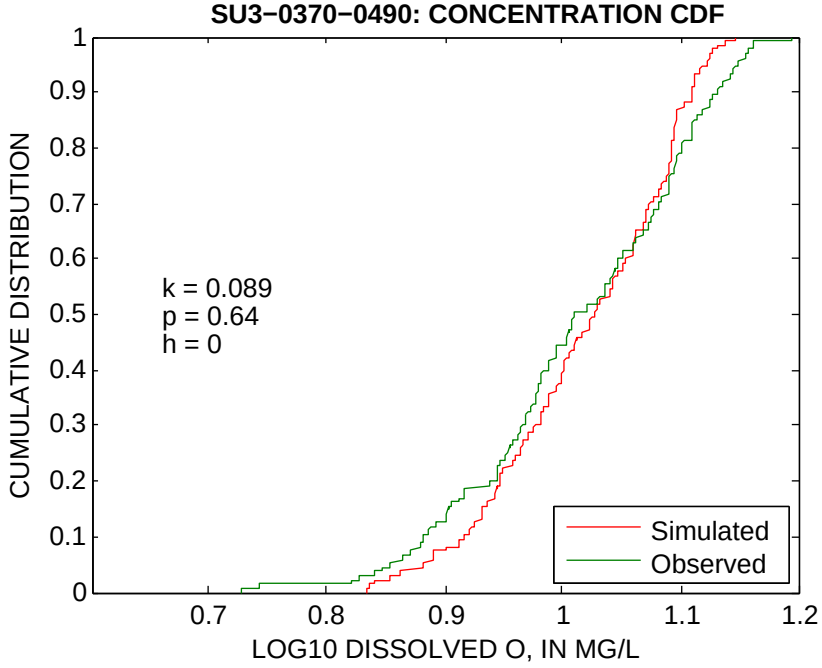
n	135	135
	observe	simulate
min	5.34	7.5254
	0.727541	0.87653
mean	10.5621	10.4408
	1.01383	1.01333
media	10.23	10.386
	1.00988	1.01645
max	15.62	13.526
	1.19368	1.13117
varian	4.86327	2.67864
	0.00897802	0.00478126
JB	☑ 0.119009	0.023084
	☑ 0.061980	0.020861
	ra	log
%	-1.14775	-0.0494275
err.va	2.70419	0.00496262
rel.std.err	0.556043	0.552752
mod.eff	0.443957	0.447248

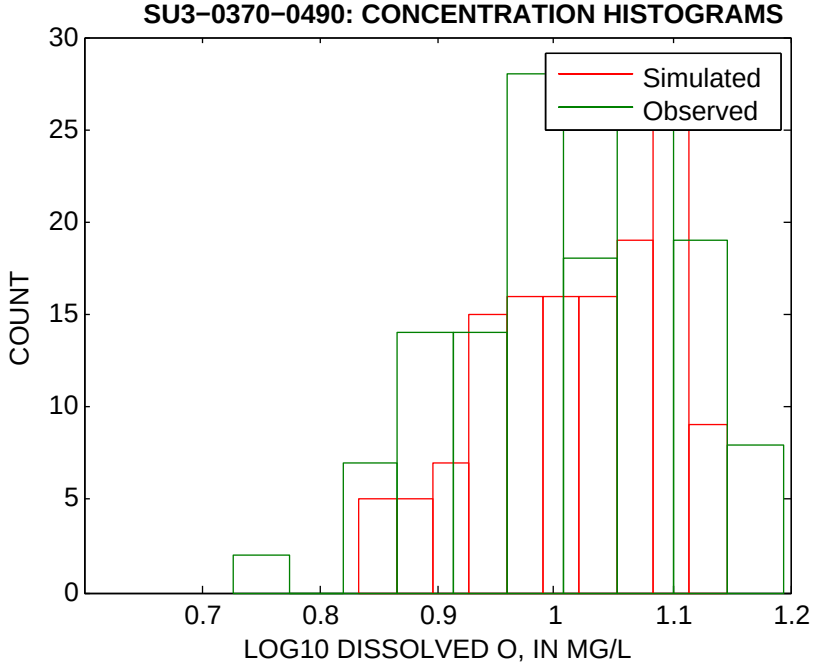
VERSION 2.1

ALL DATA
LOG10

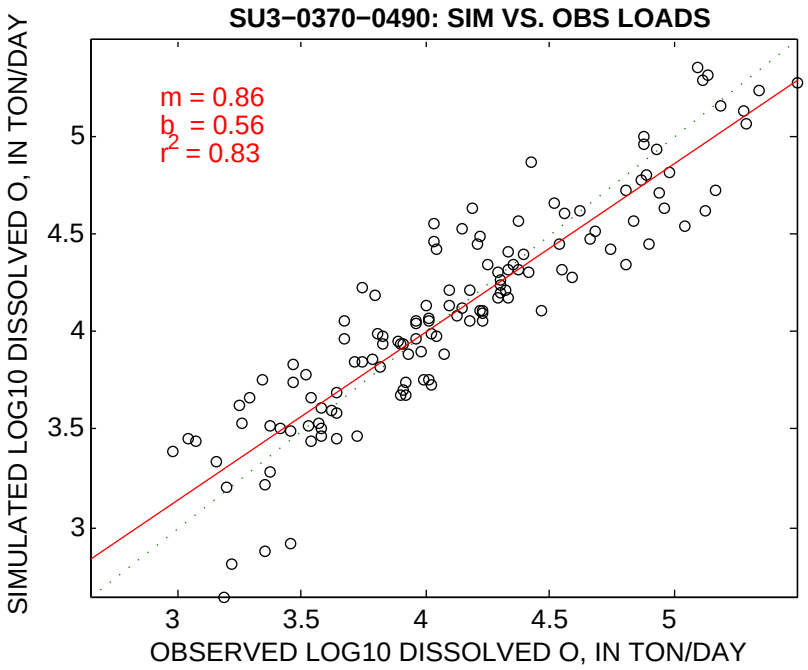


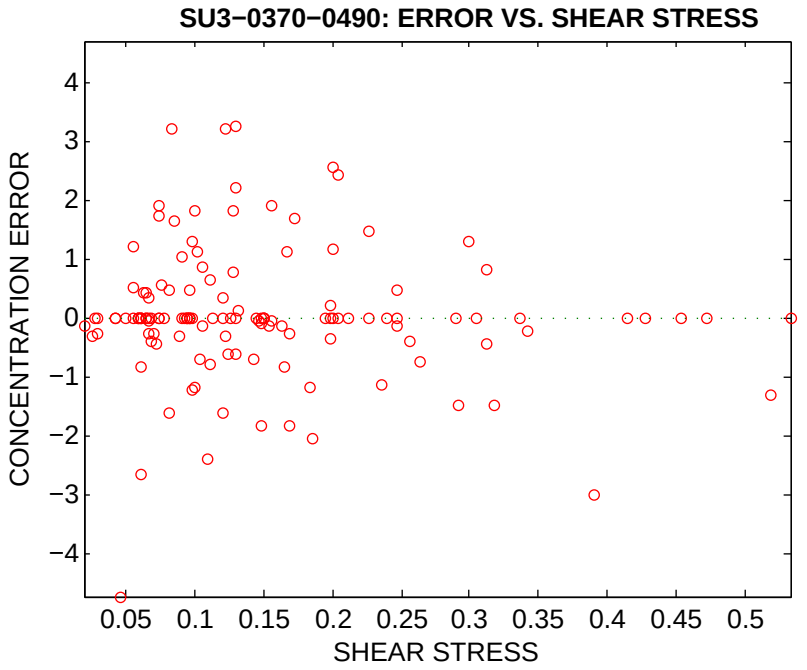


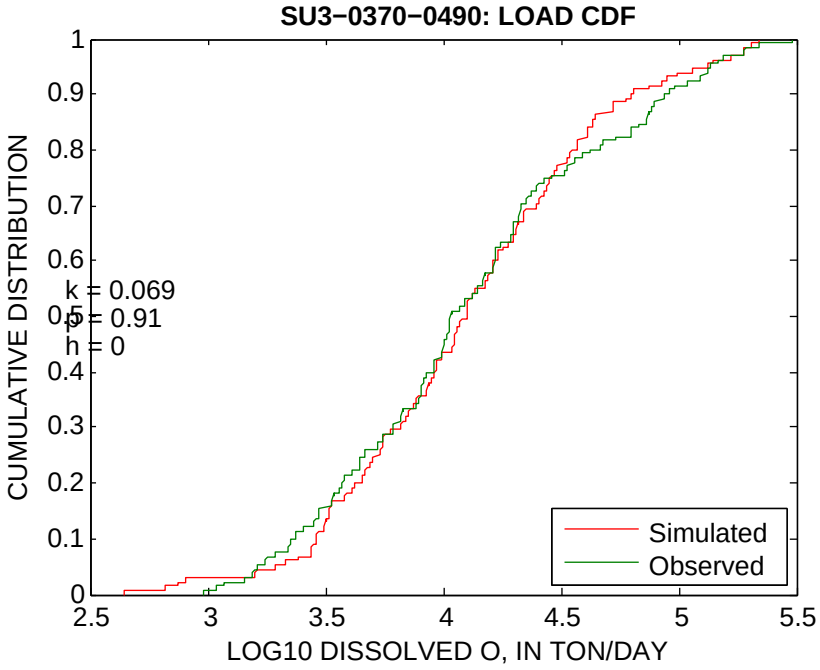


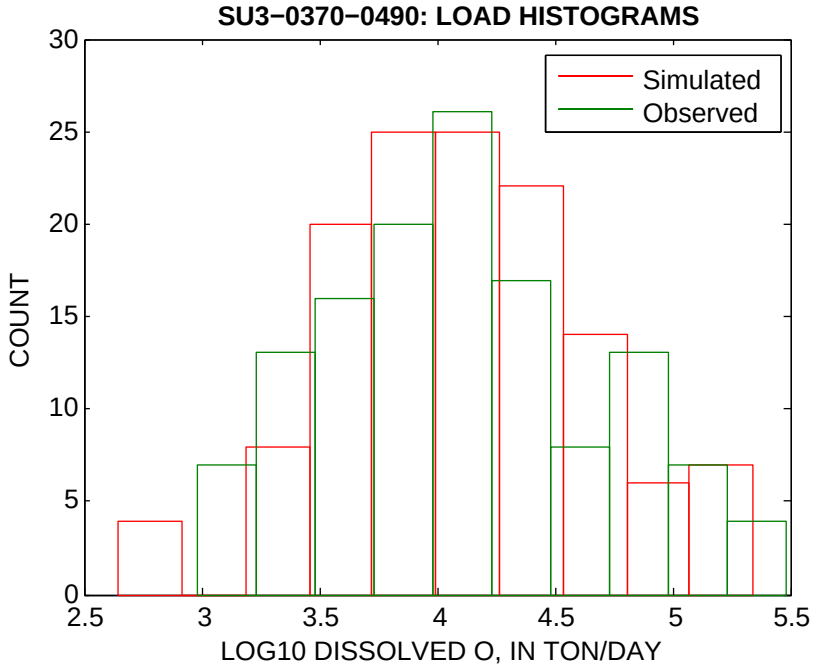


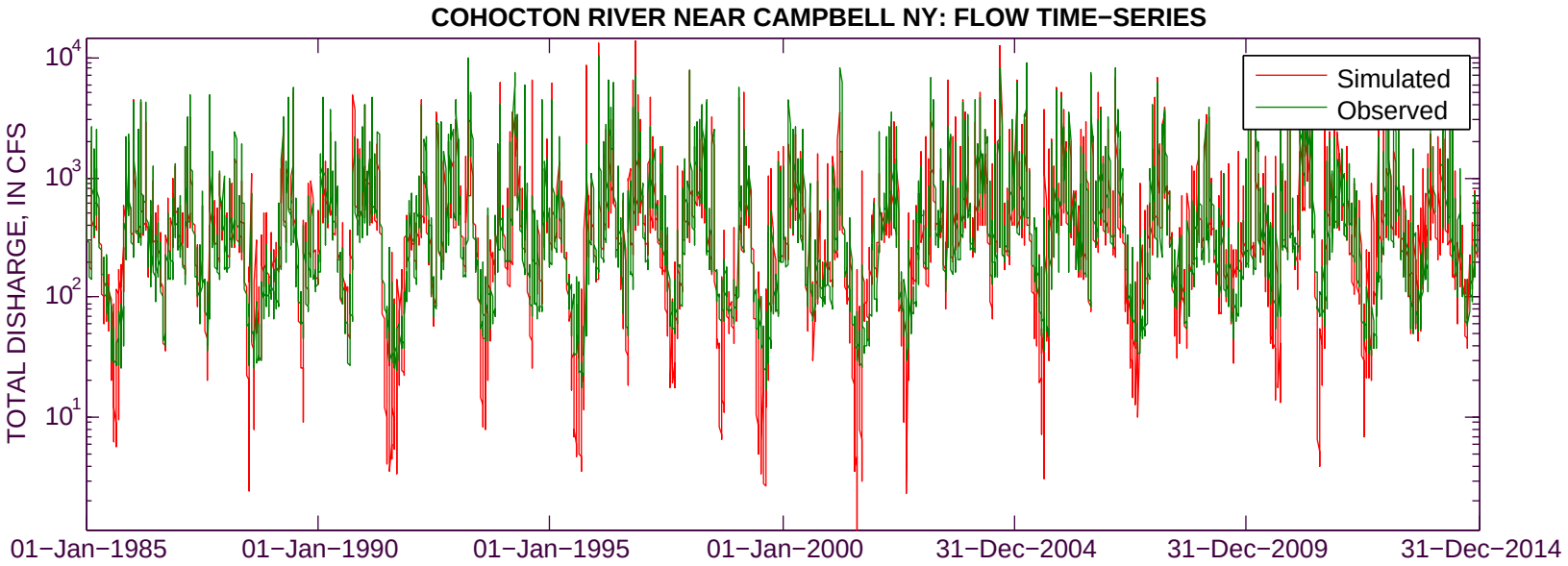
LOAD DATA
LOG10

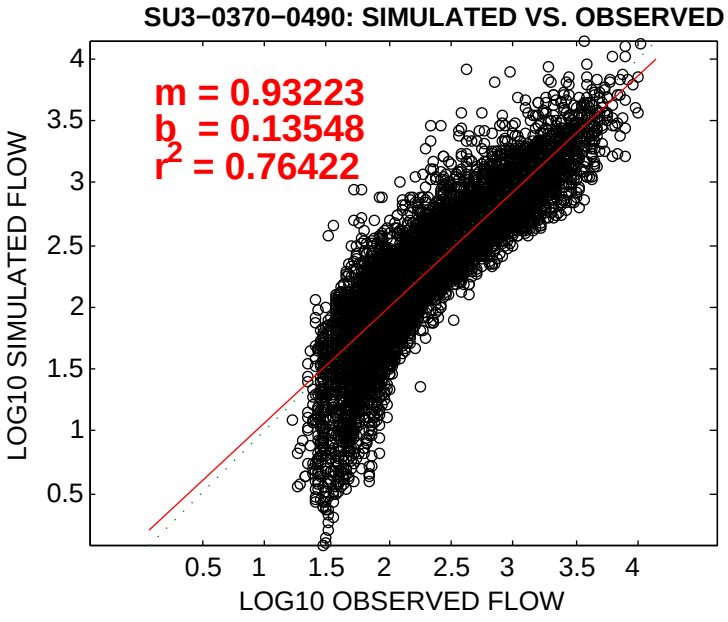


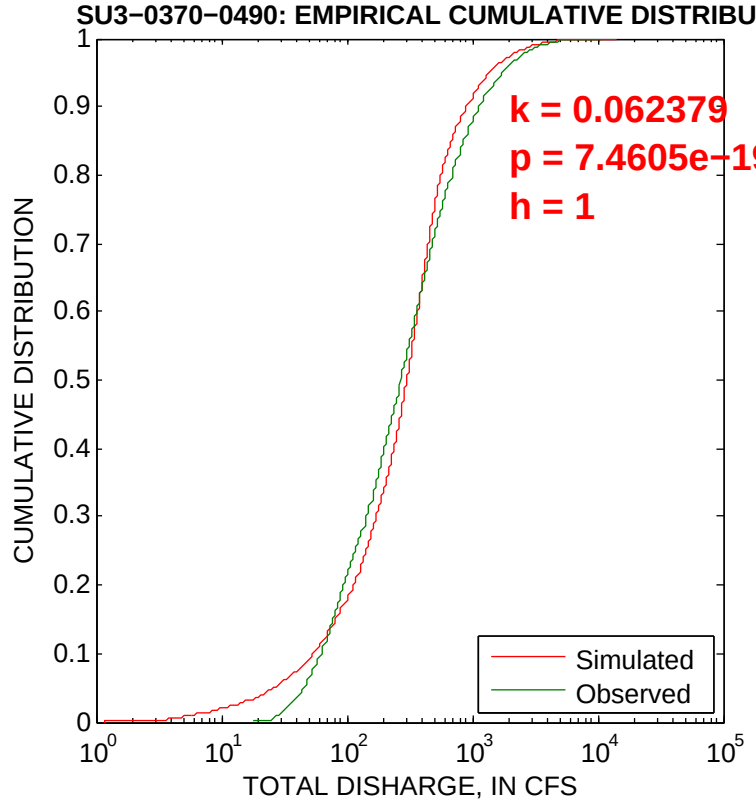












DATA SELECTION

scenario	file
P620171001WQ	FLOW.calib

plot: FLOW - total discharge

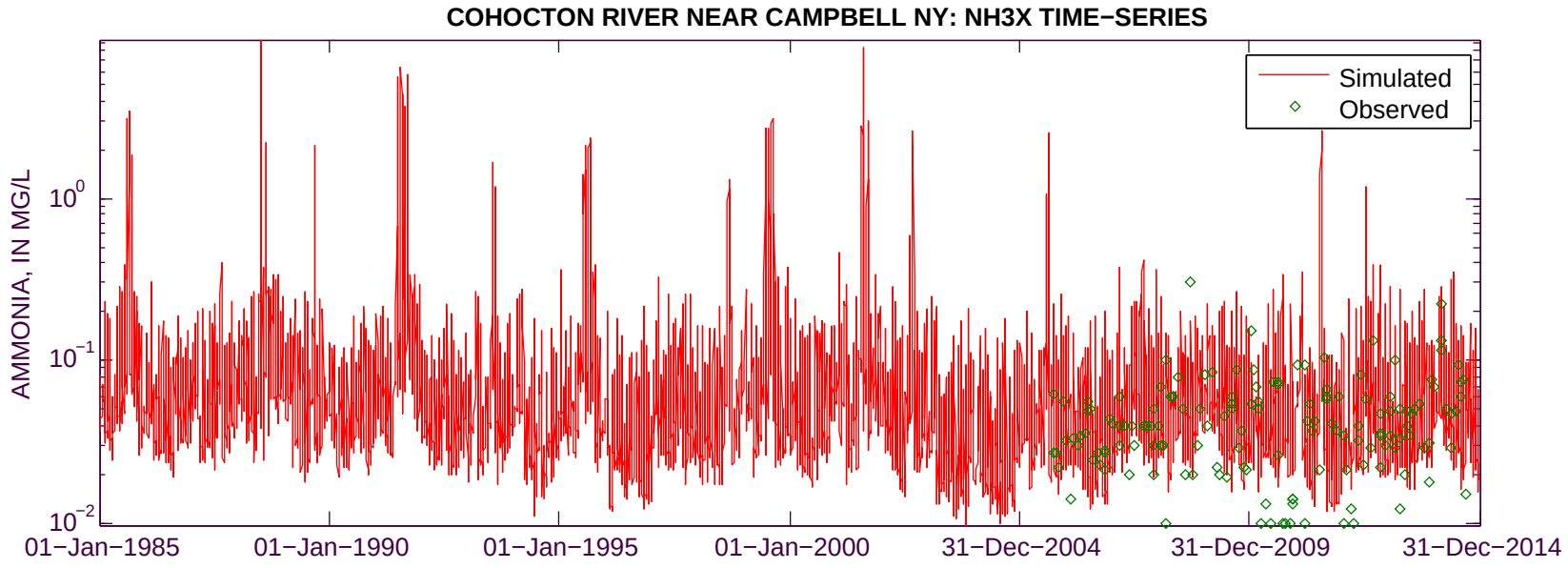
Dates: 1/1/1985 – 12/31/201

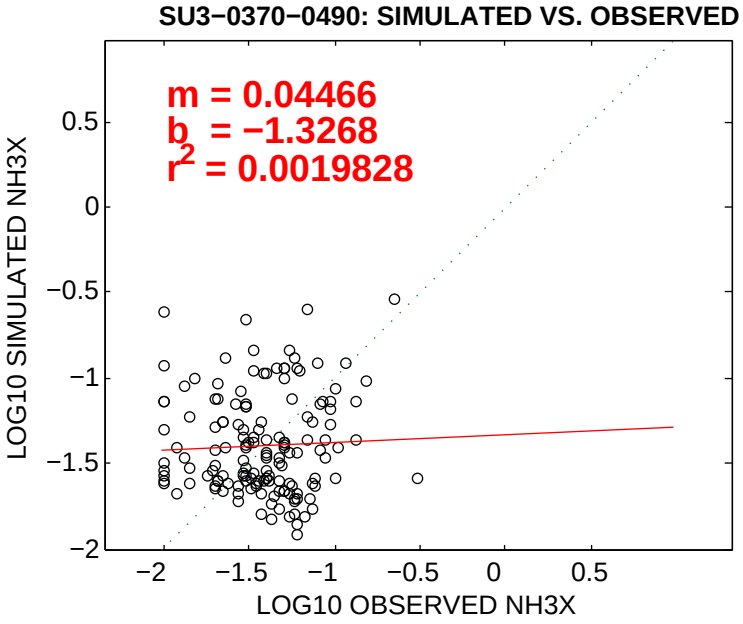
Drive	Directory	Observed
N/A	model	OBS20161101

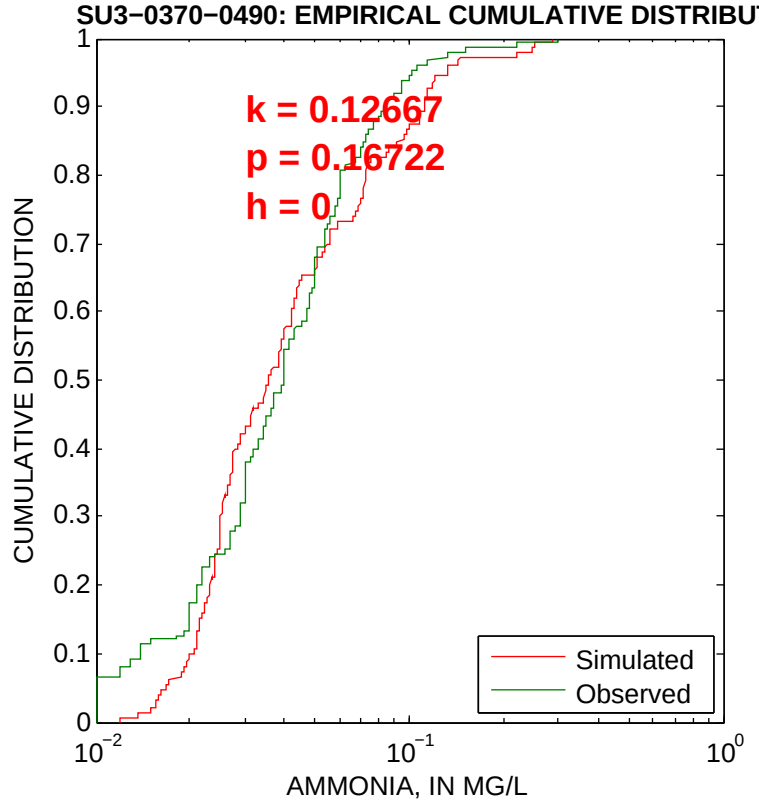
STATISTICS

	observe	simulate
n	10869	10869
min	17	1.1759
	1.23045	0.0703704
mean	506.235	455.271
	2.43222	2.40286
media	272	302.4
	2.43457	2.48058
max	10500	14040
	4.02119	4.14737
varian	553910	441455
	0.231813	0.263611
JB	0.001	0.001
	0.001	0.001
	ra	log
%	-10.0673	-1.20705
err.va	213321	0.0640822
rel.std.err	0.385118	0.27644
mod.eff	0.614882	0.72356

VERSION 2.1







DATA SELECTION

scenario	file
P620171001WQ	NH3X.calib

plot: NH3X - ammonia

Dates: 1/1/1985 – 12/31/201

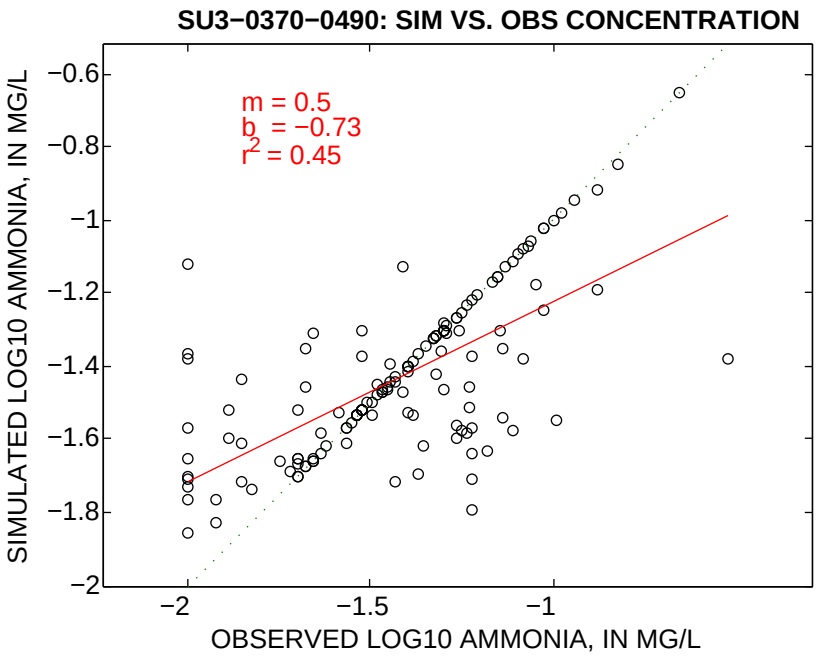
Drive	Directory	Observed
N/A	model	OBS20161101

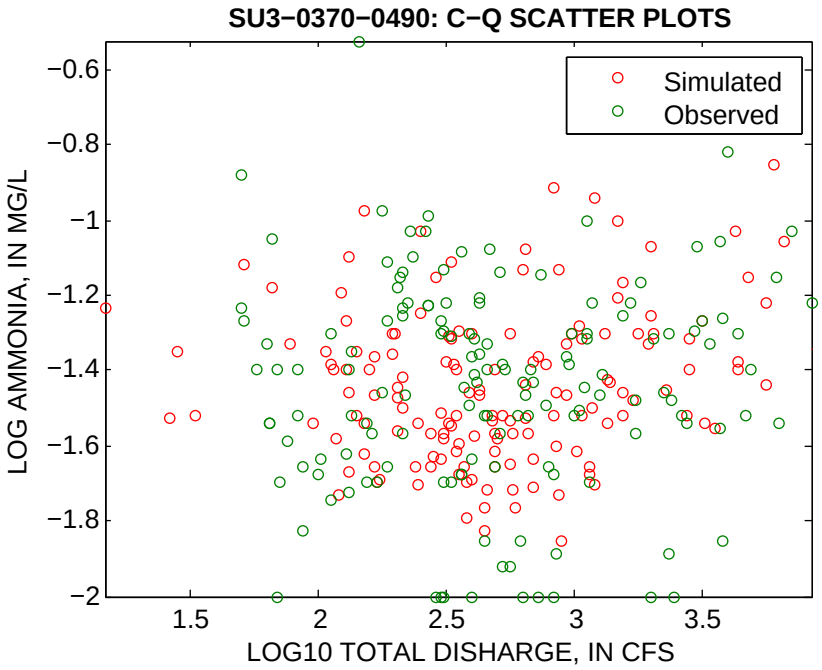
STATISTICS

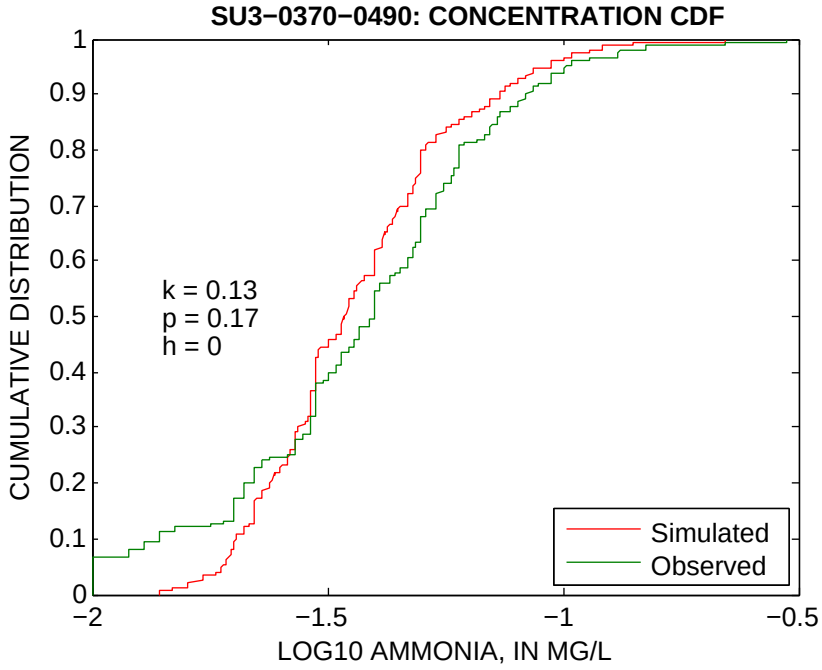
	n	150	150
		observe	simulate
min		0.01	0.011914
		-2	-1.92394
mean		0.0469467	0.0524493
		-1.42508	-1.39047
media		0.04	0.0357265
		-1.39794	-1.44701
max		0.3	0.2881
		-0.522879	-0.540457
varian		0.00135601	0.00209463
		0.0840764	0.0845723
JB		0.001	0.001
		0.5	0.009250
		ra	log
%		11.721	-2.42847
err.va		0.0028507	0.162345
rel.std.err		2.10227	1.93092
mod.eff		-1.10227	-0.93092

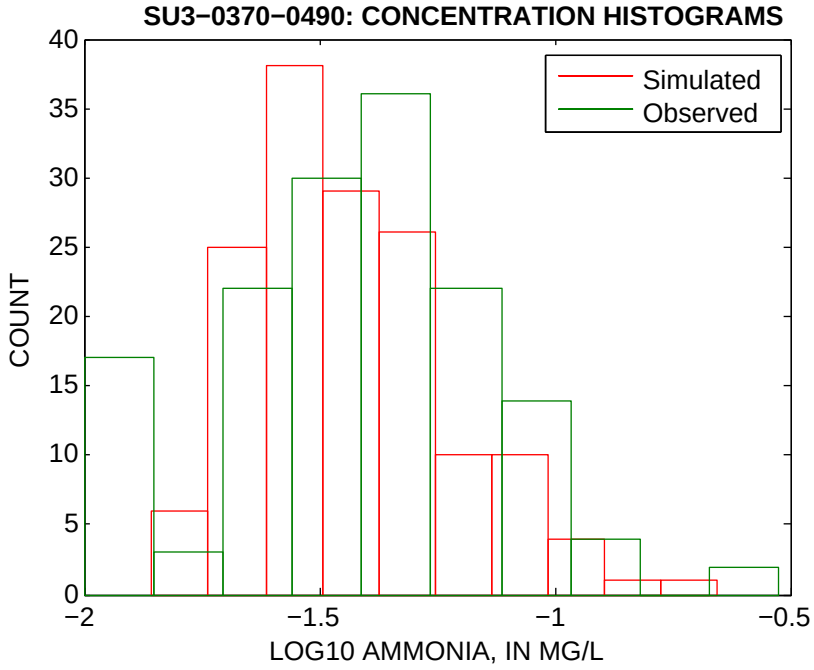
VERSION 2.1

ALL DATA
LOG10

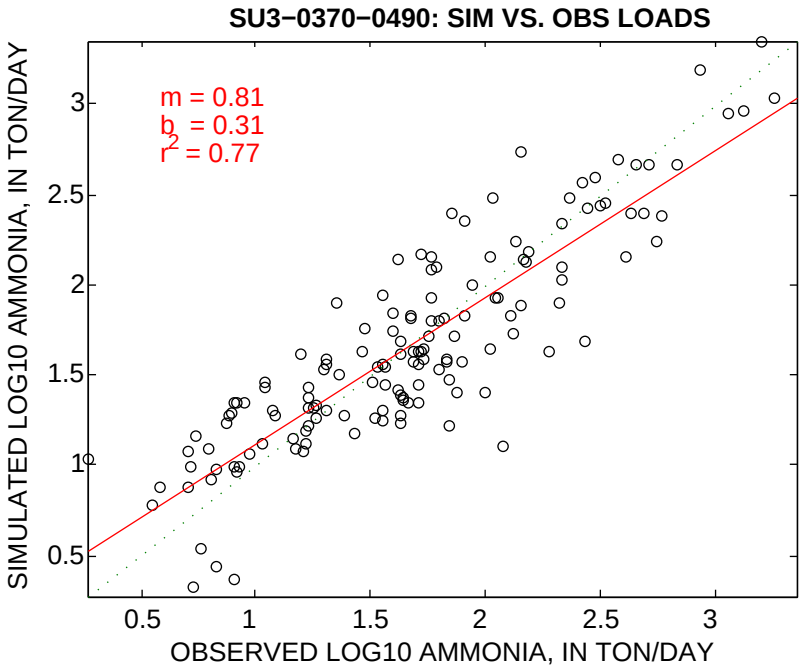


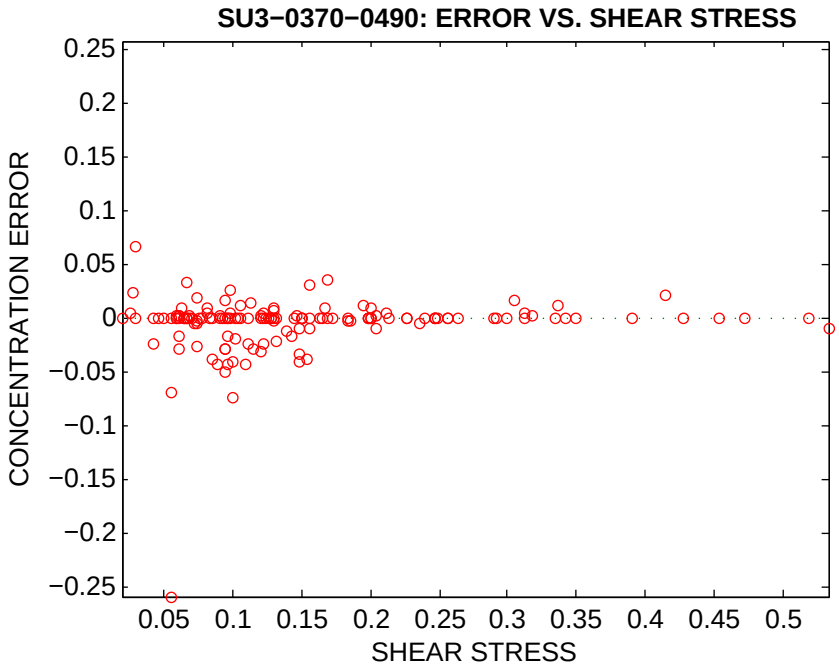


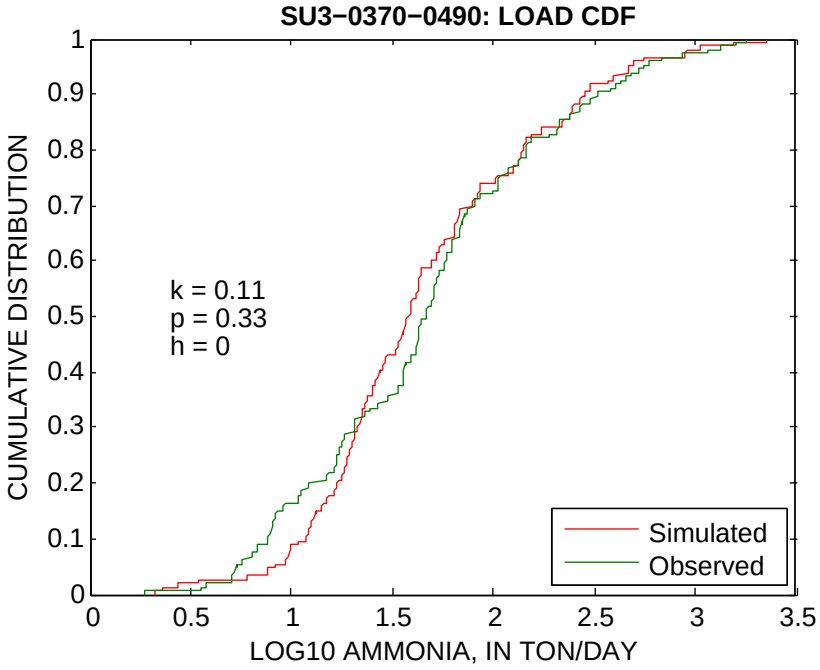


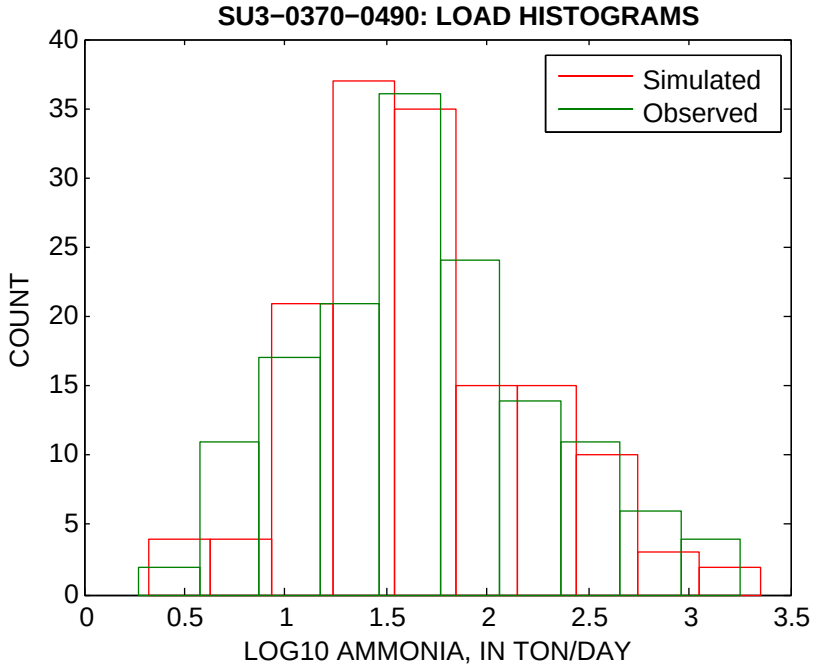


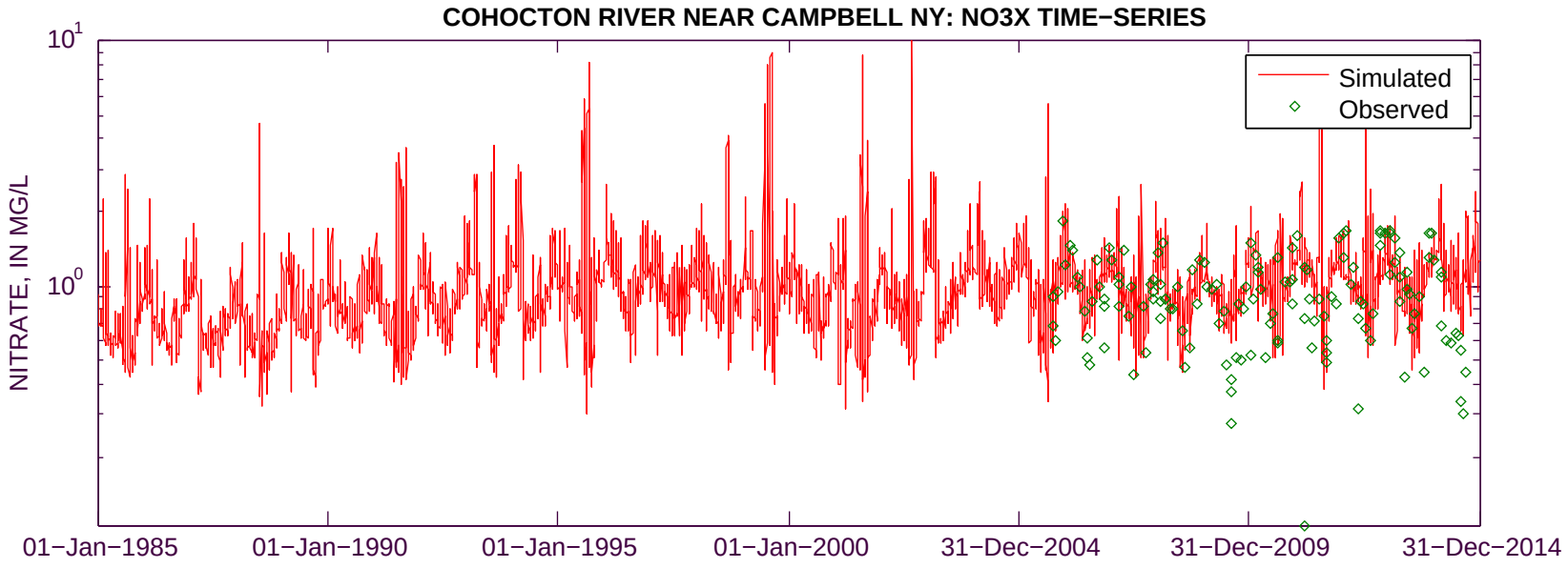
LOAD DATA
LOG10

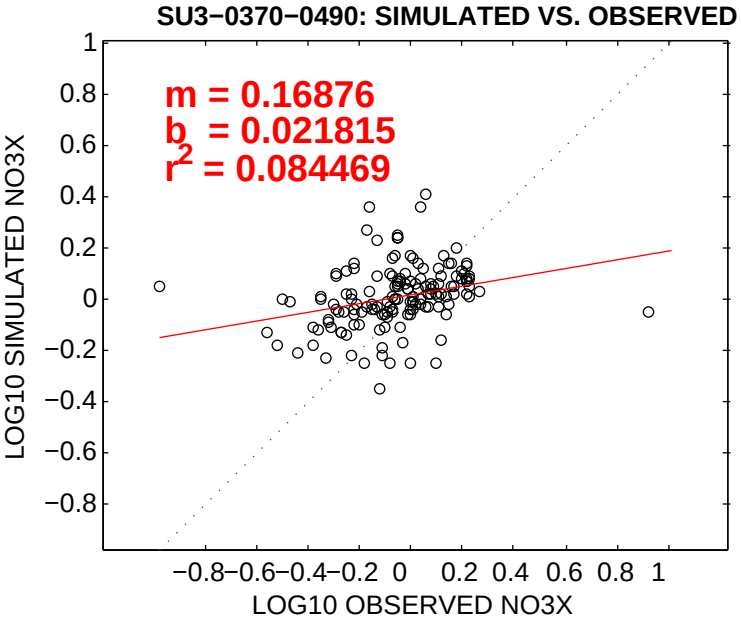


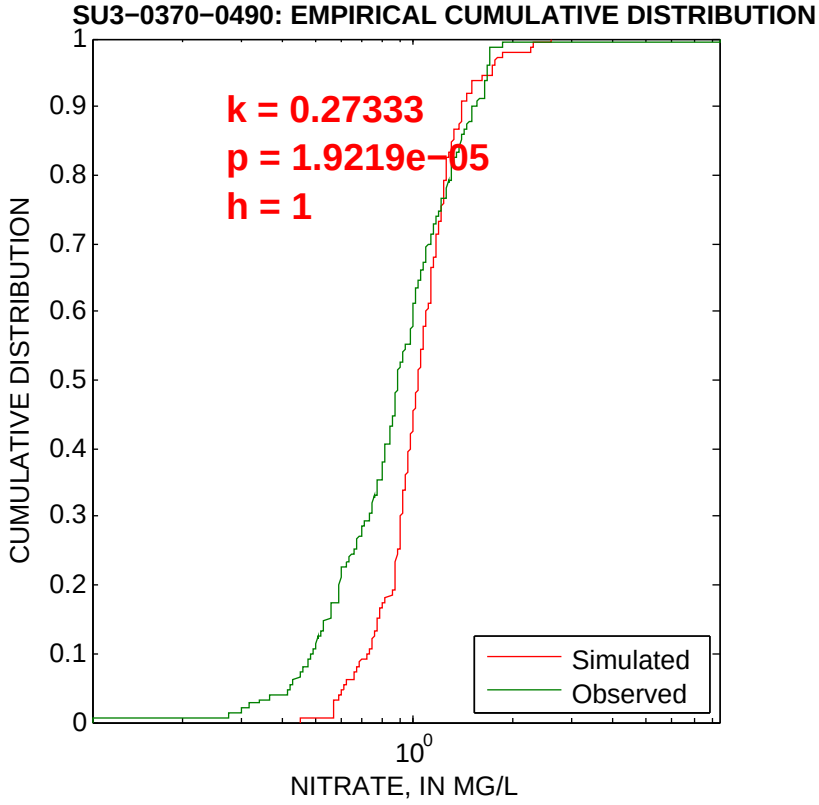












DATA SELECTION

scenario: P620171001WQ | file: NO3X.calib

plot: NO3X - nitrate

Dates: 1/1/1985 – 12/31/201

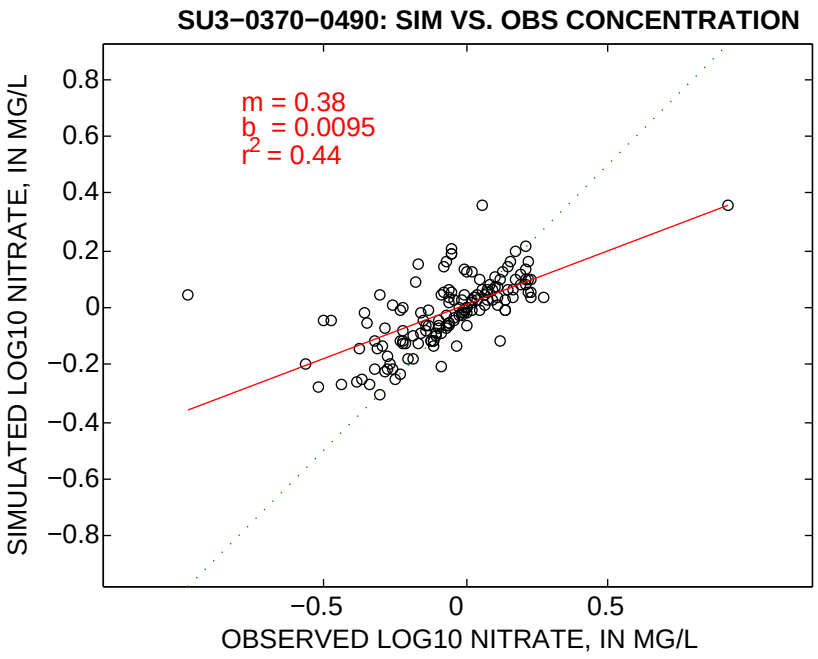
Drive | Directory | Observed: N/A | model | OBS20161101

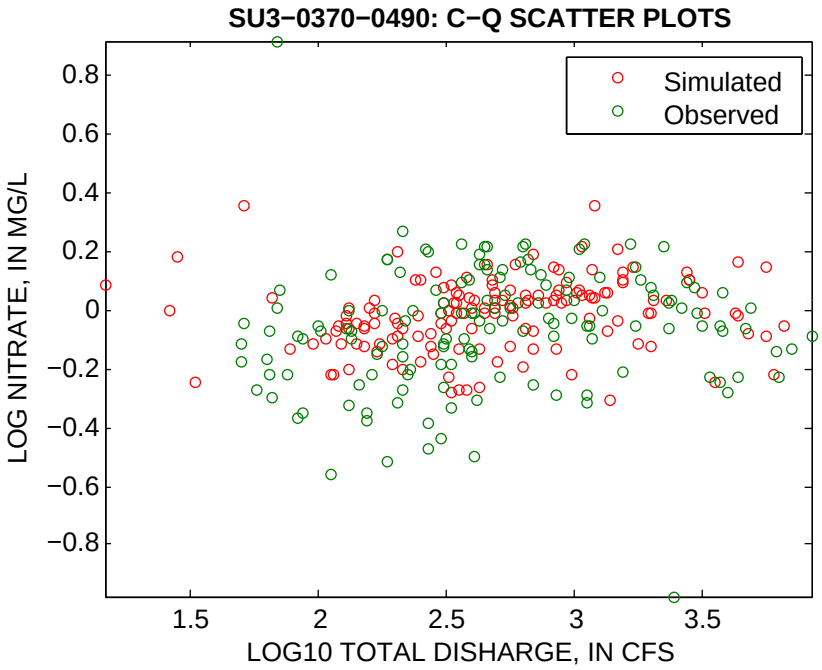
STATISTICS

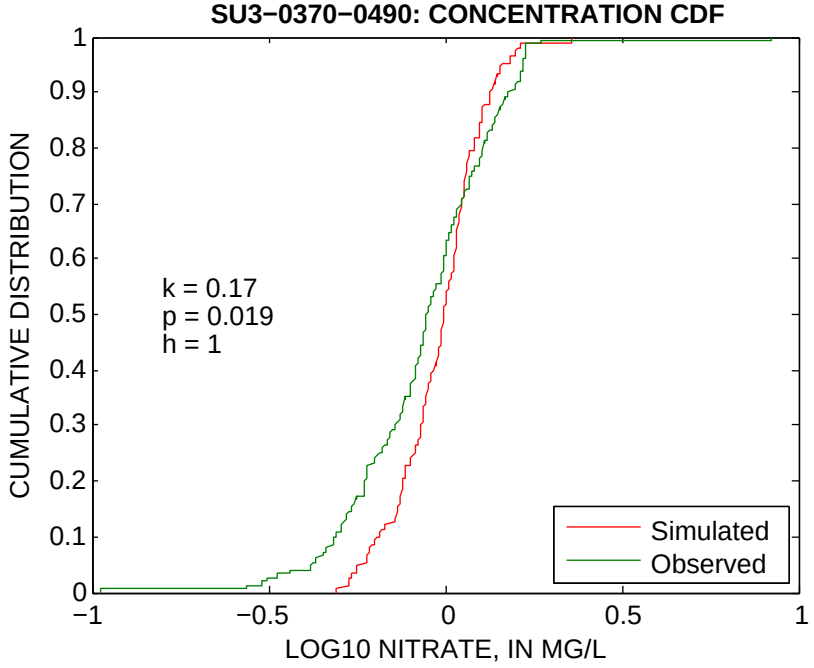
		observe	simulate
n		150	150
min		0.106	0.44904
		-0.974694	-0.347715
mean		0.9915	1.07008
		-0.057665	0.0120835
media		0.8885	1.0287
		-0.0513432	0.0122886
max		8.33	2.5821
		0.920645	0.411973
varian		0.501865	0.102724
		0.044038	0.0148482
JB		0.001	0.001
		0.001	0.029476
		ra	log
%		7.92529	-120.955
err.va		0.559365	0.0489199
rel.std.err		1.11457	1.11086
mod.eff		-0.114573	-0.110856

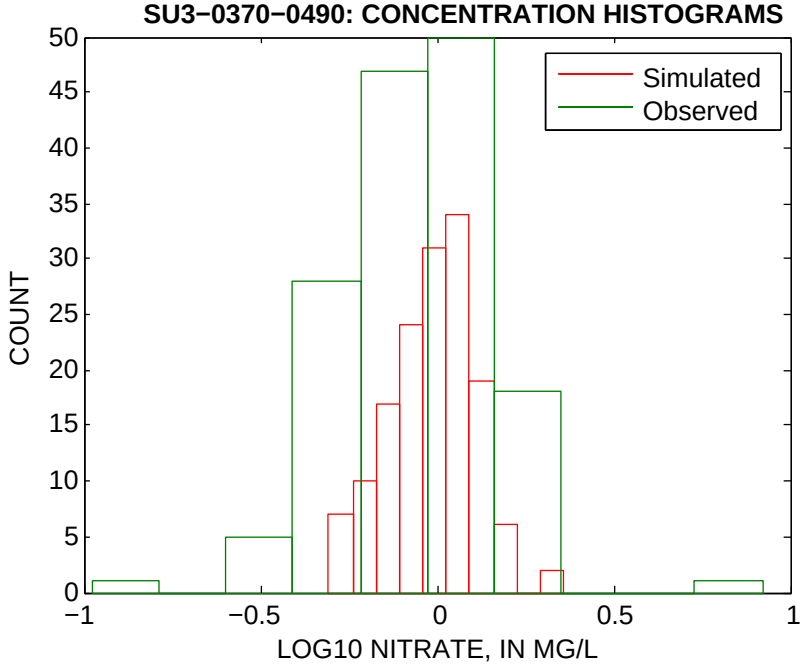
VERSION 2.1

ALL DATA
LOG10

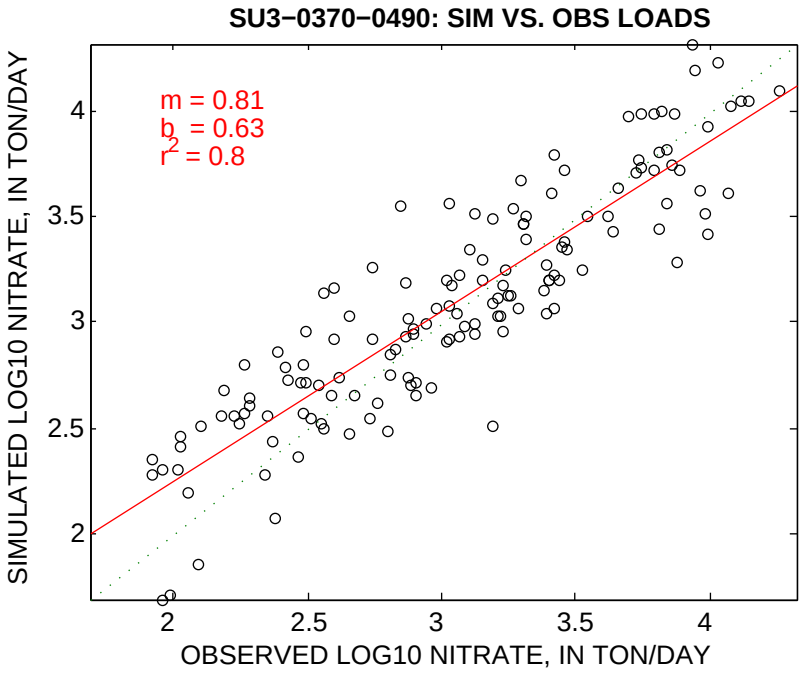


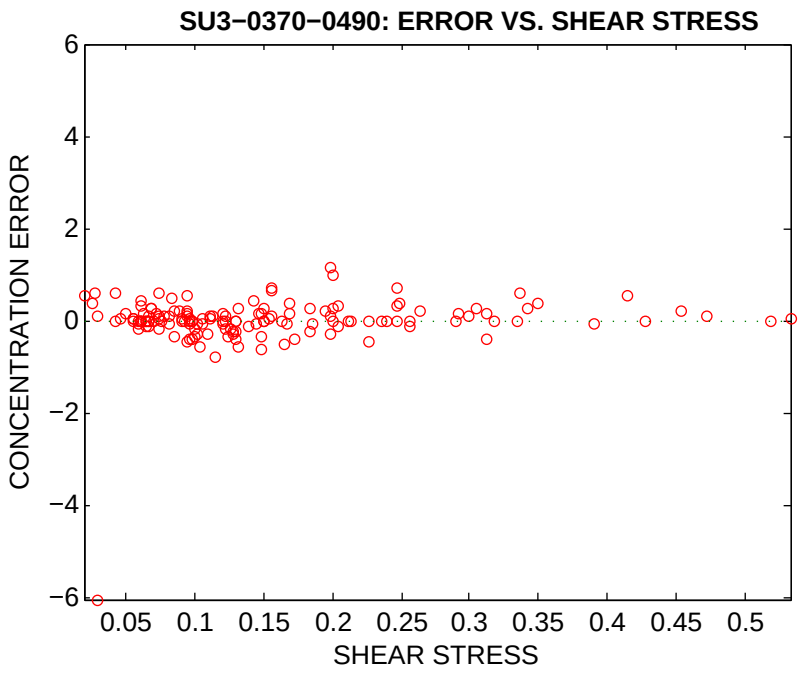


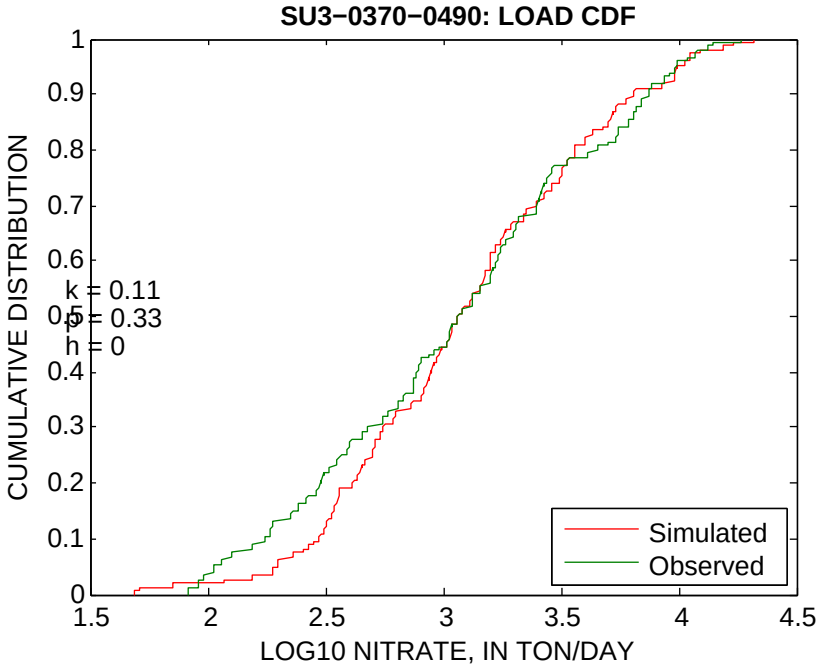


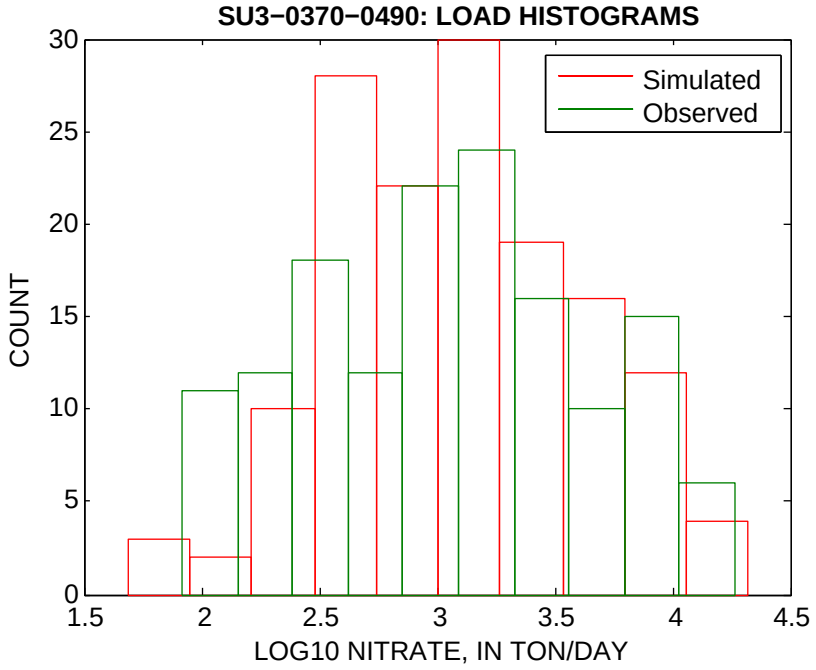


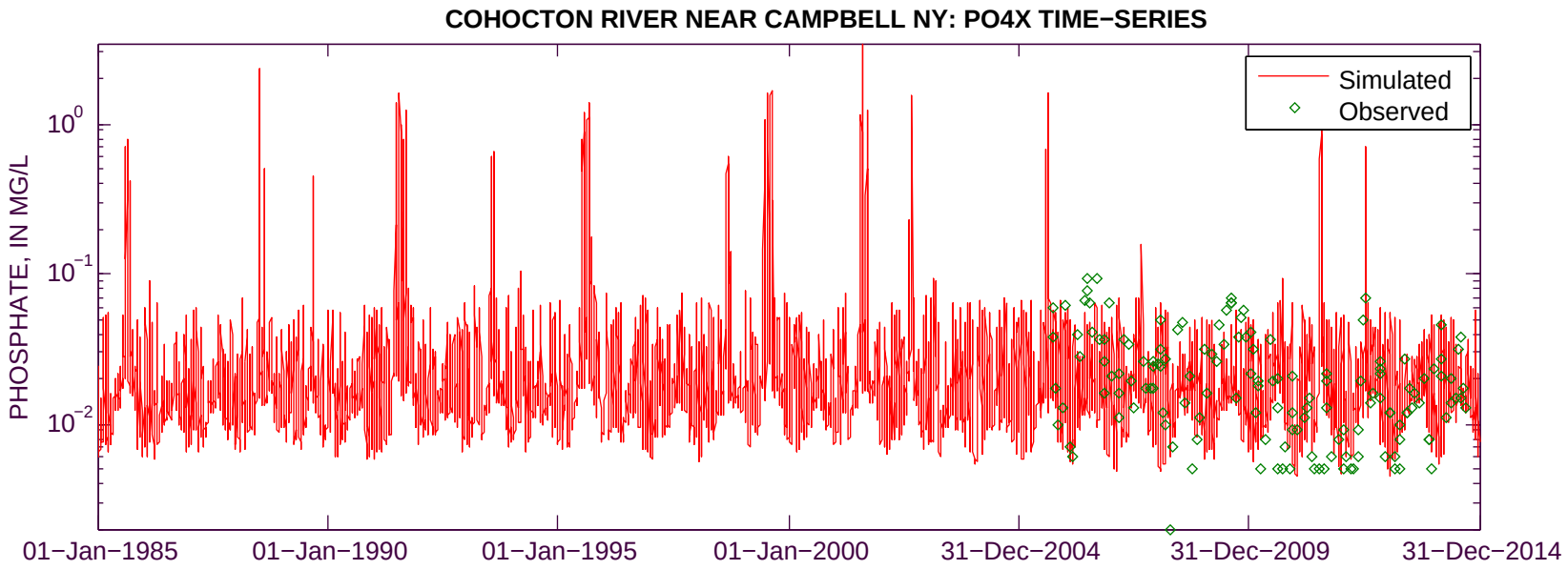
LOAD DATA
LOG10

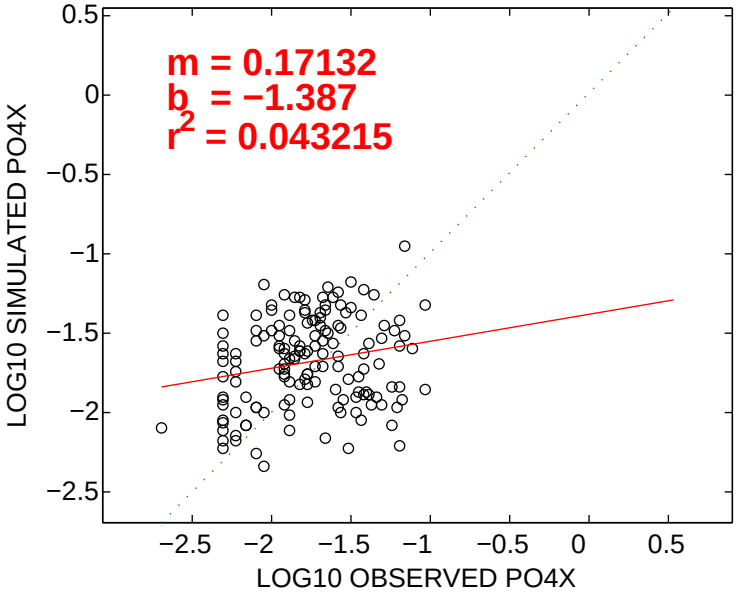


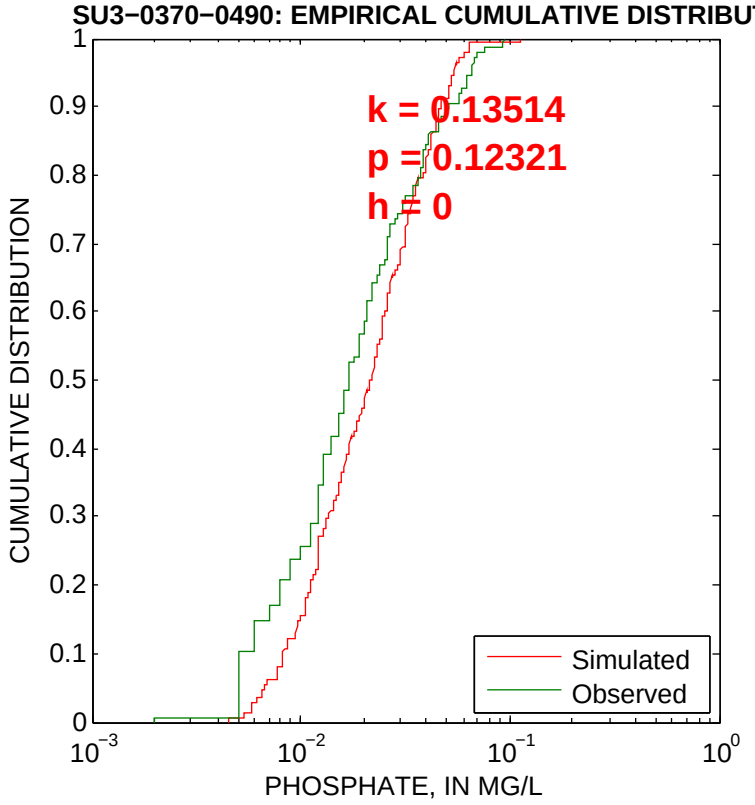












DATA SELECTION

scenario: P620171001WQ | file: PO4X.calib

plot: PO4X - phosphate

Dates: 1/1/1985 – 12/31/201

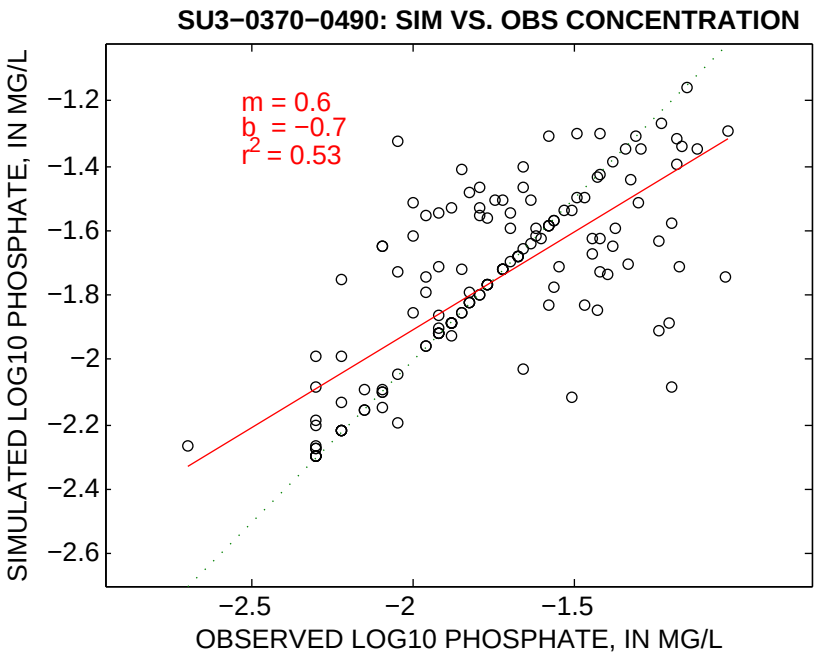
Drive: N/A | Directory: model | Observed: OBS20161101

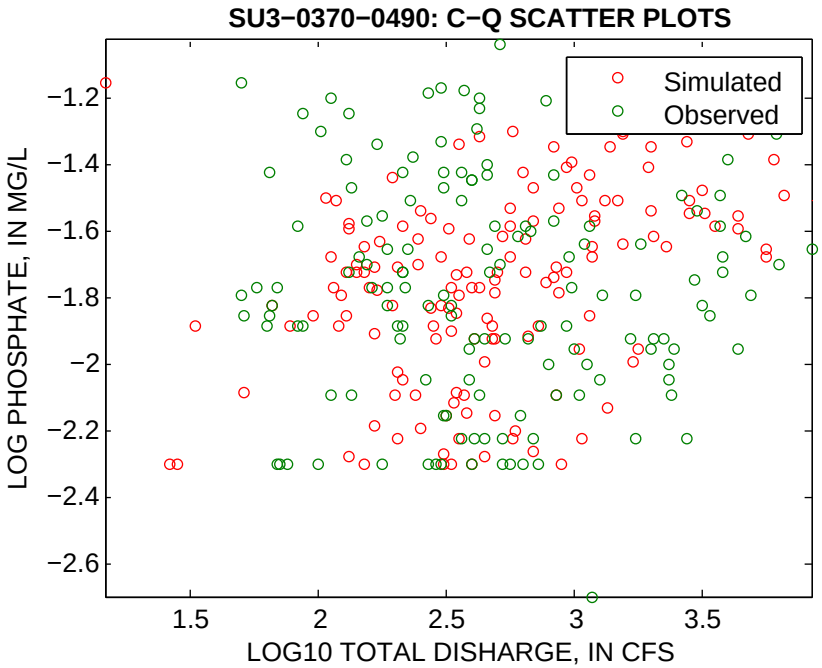
STATISTICS

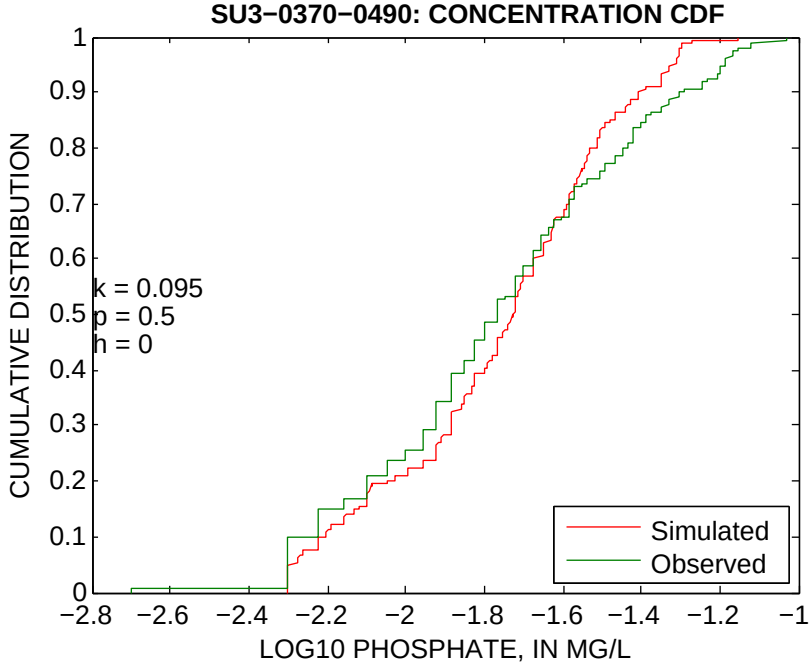
	n	observe	simulate
		148	148
min		0.002	0.004502
		-2.69897	-2.34659
mean		0.0232297	0.0249954
		-1.76377	-1.68919
media		0.017	0.021771
		-1.76955	-1.66214
max		0.094	0.1115
		-1.02687	-0.952725
varian		0.00035430	0.00026297
		0.117051	0.0794957
JB		0.001	0.001
		0.248967	0.132699
		ra	log
%		7.60073	-4.22812
err.va		0.00053883	0.16204
rel.std.err		1.52083	1.38436
mod.eff		-0.520827	-0.384355

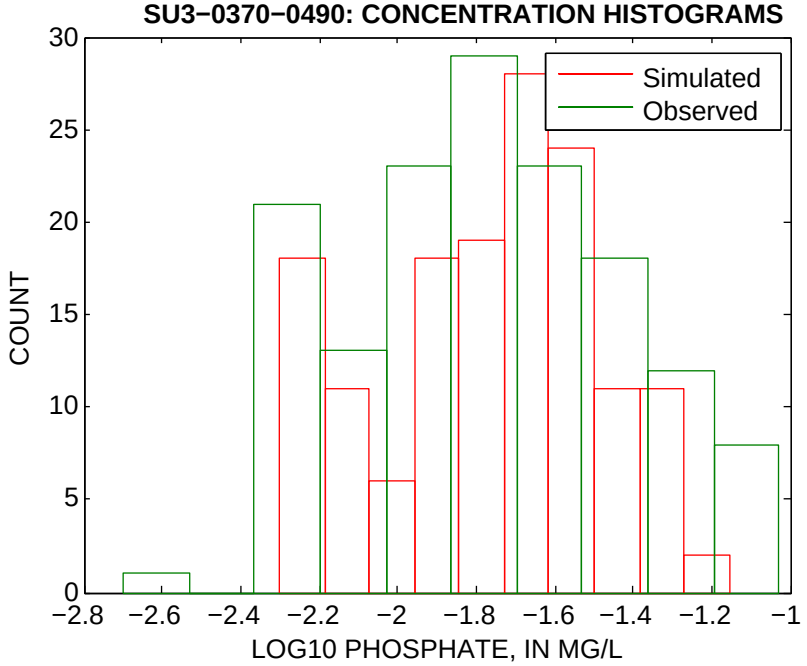
VERSION 2.1

ALL DATA
LOG10

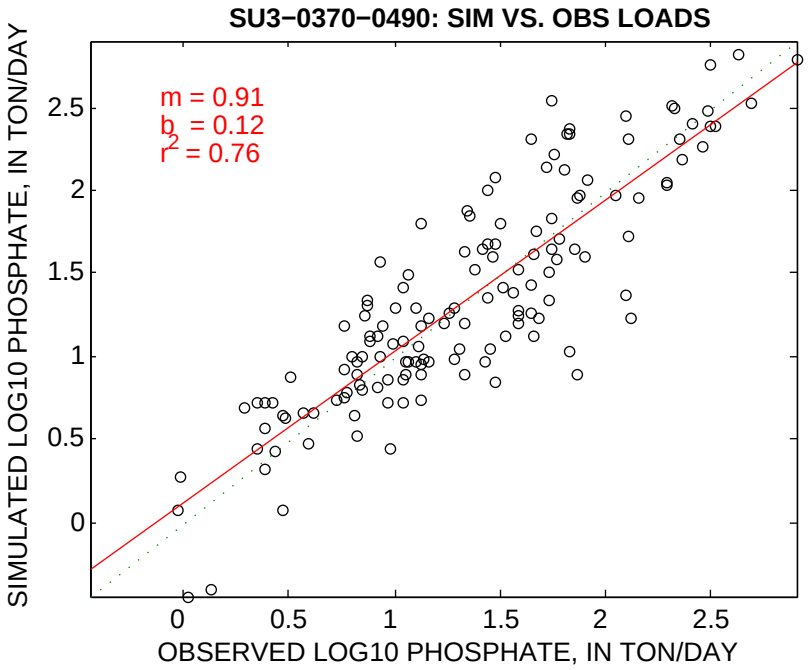


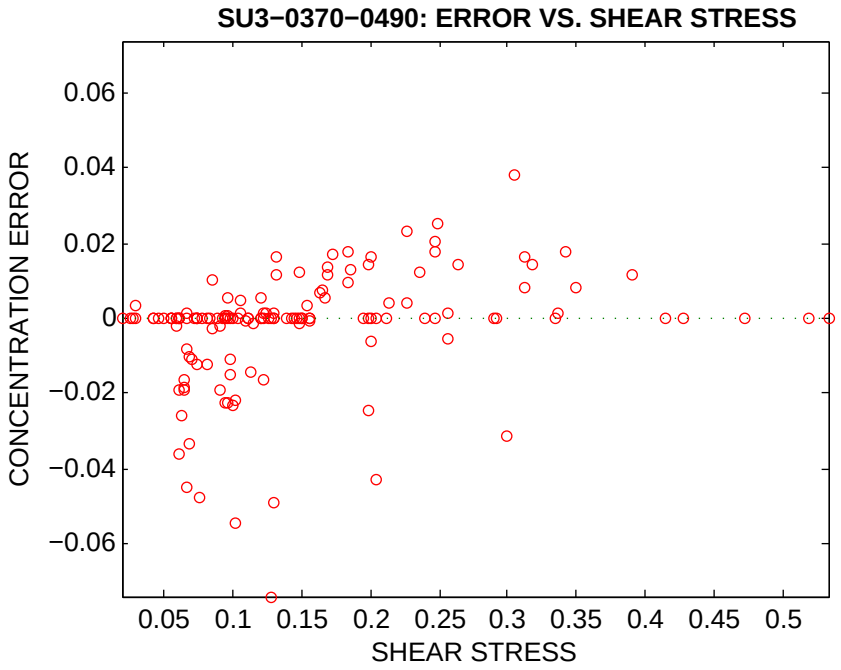


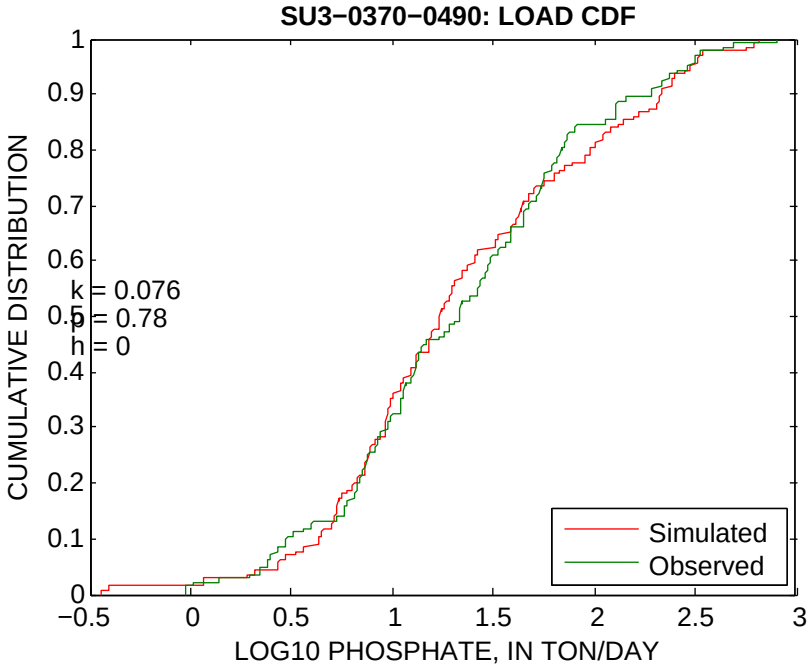


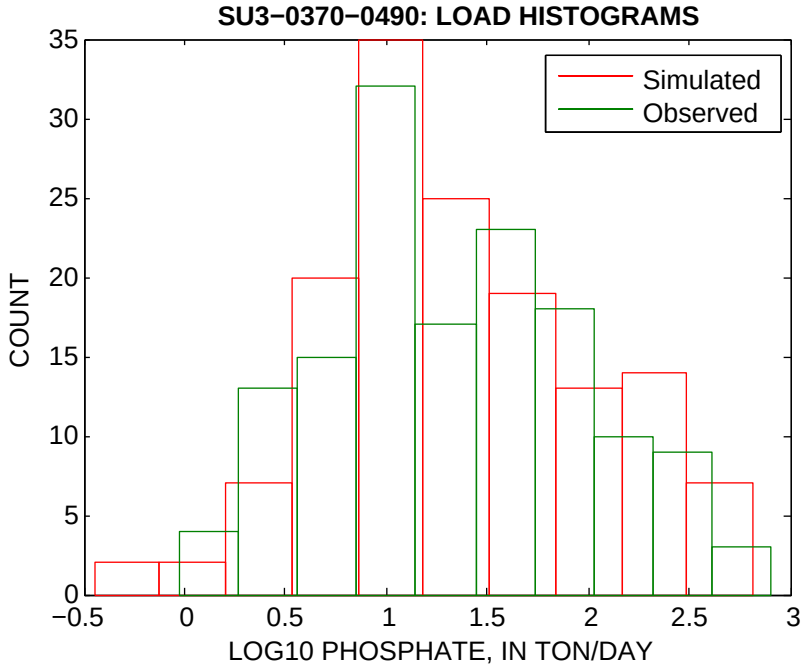


LOAD DATA
LOG10

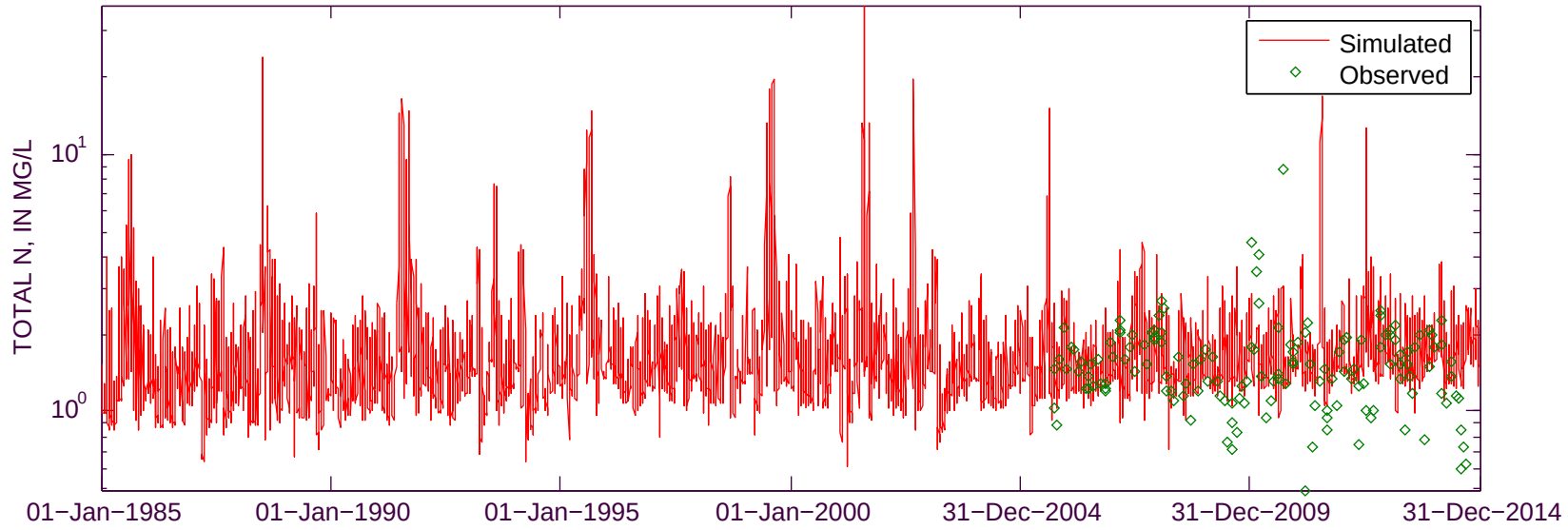




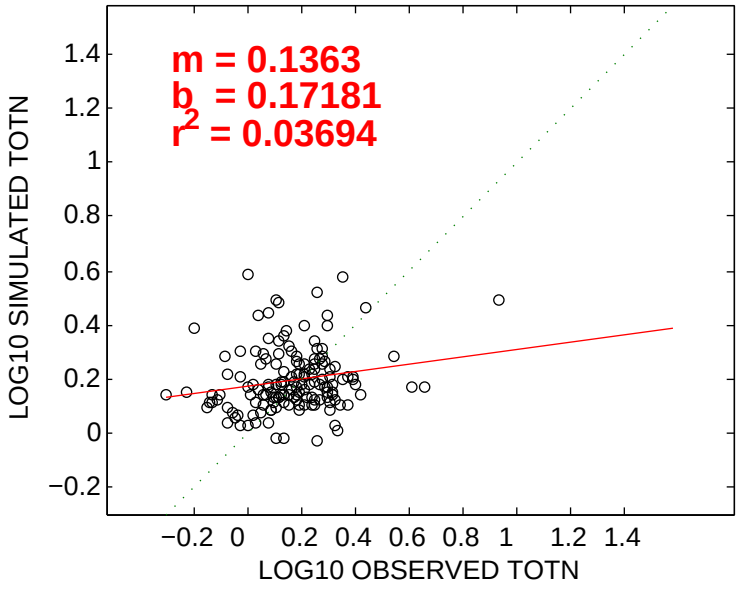




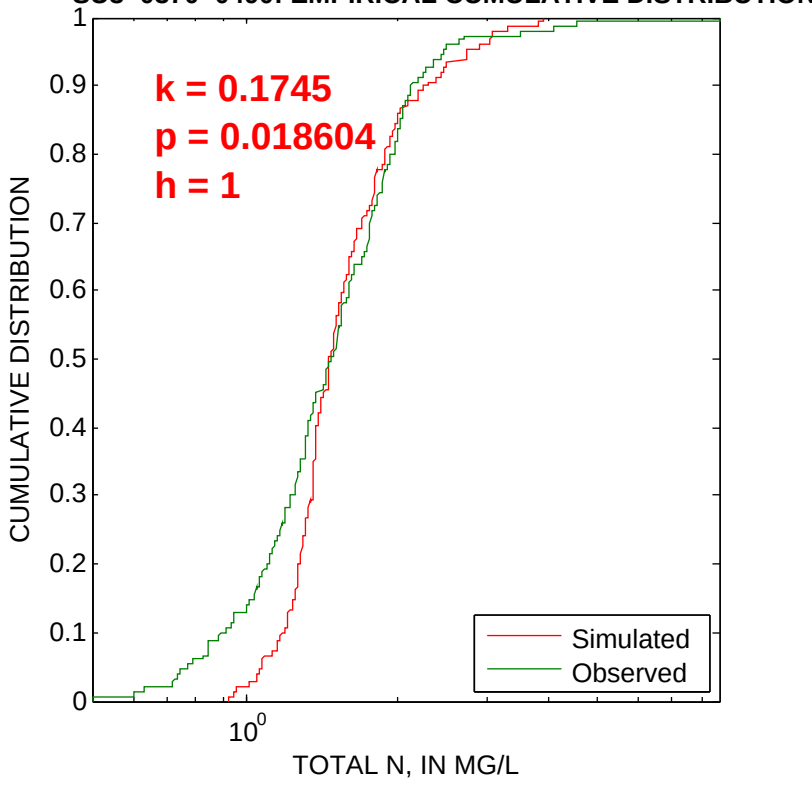
COHOCTON RIVER NEAR CAMPBELL NY: TOTN TIME-SERIES



SU3-0370-0490: SIMULATED VS. OBSERVED



SU3-0370-0490: EMPIRICAL CUMULATIVE DISTRIBUTION



DATA SELECTION

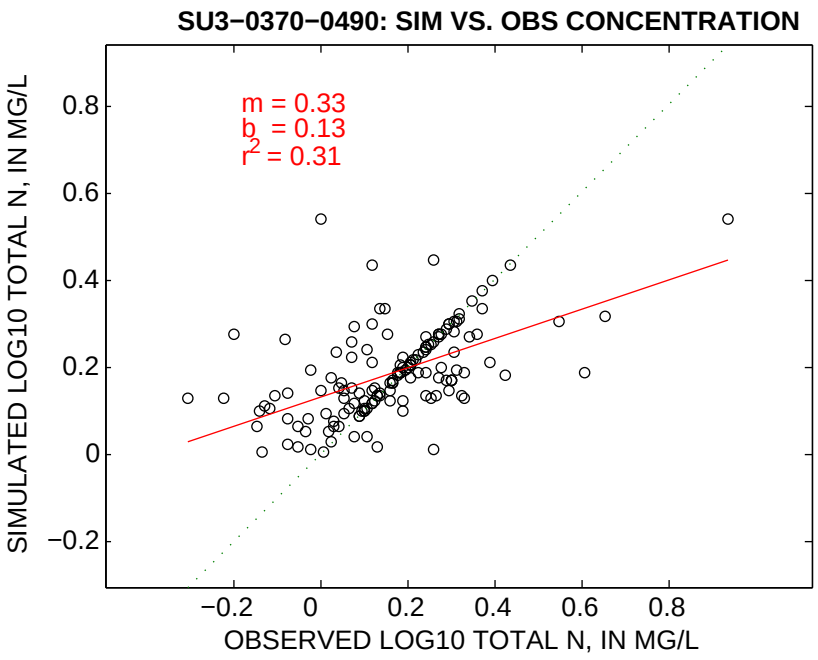
scenario: P620171001WQ
file: TOTN.calib
plot: TOTN - total nitrogen
Dates: 1/1/1985 – 12/31/201
Drive: N/A
Directory: model
Observed: OBS20161101

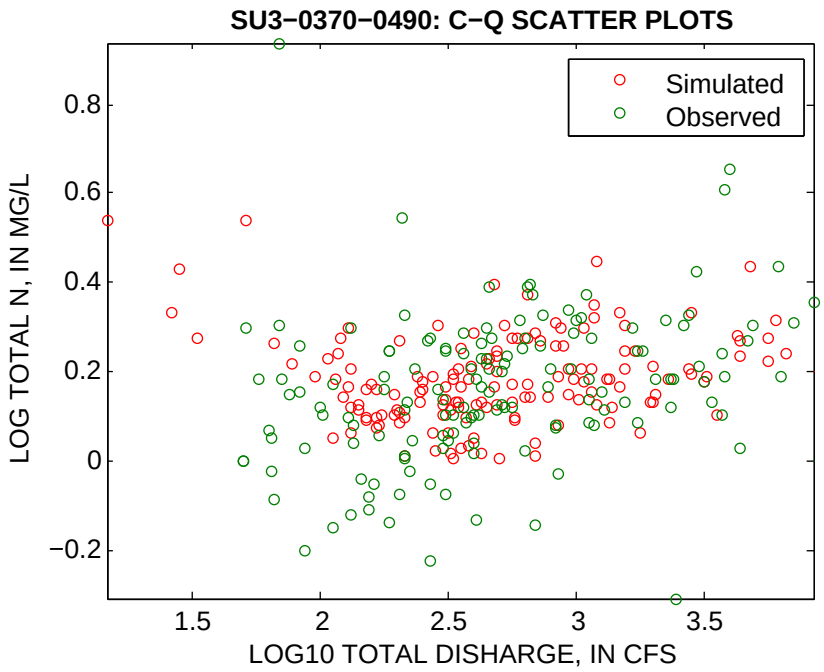
STATISTICS

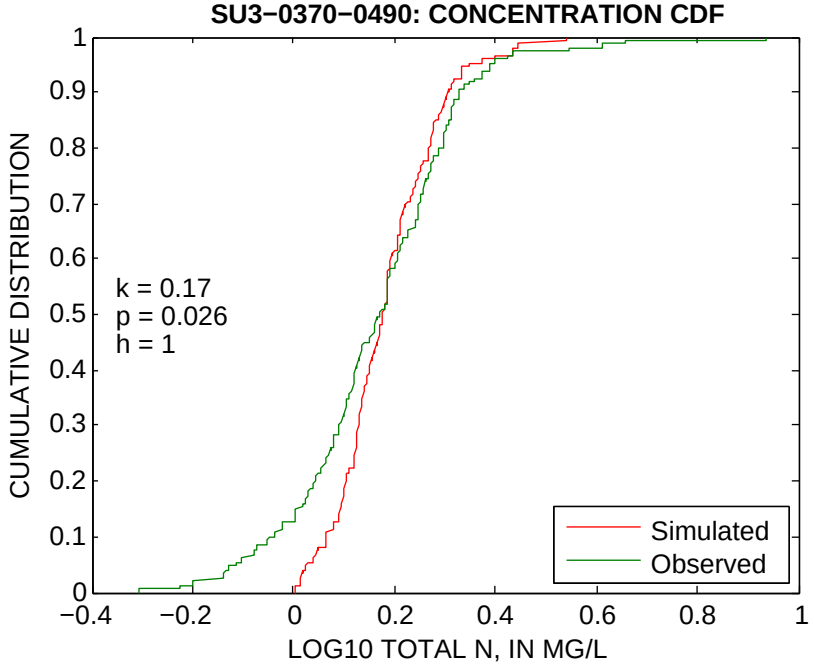
n	149	149
	observe	simulate
min	0.496	0.92326
	-0.304518	-0.034676
mean	1.59246	1.63013
	0.166354	0.194482
media	1.474	1.4677
	0.168497	0.166637
max	8.66	3.8929
	0.937518	0.590273
varian	0.678756	0.274416
	0.0280742	0.0141186
JB	0.001	0.001
	0.001	0.001
	ra	log
%	2.36549	16.9082
err.va	0.767616	0.0353364
rel.std.err	1.13092	1.25868
mod.eff	-0.130917	-0.258676

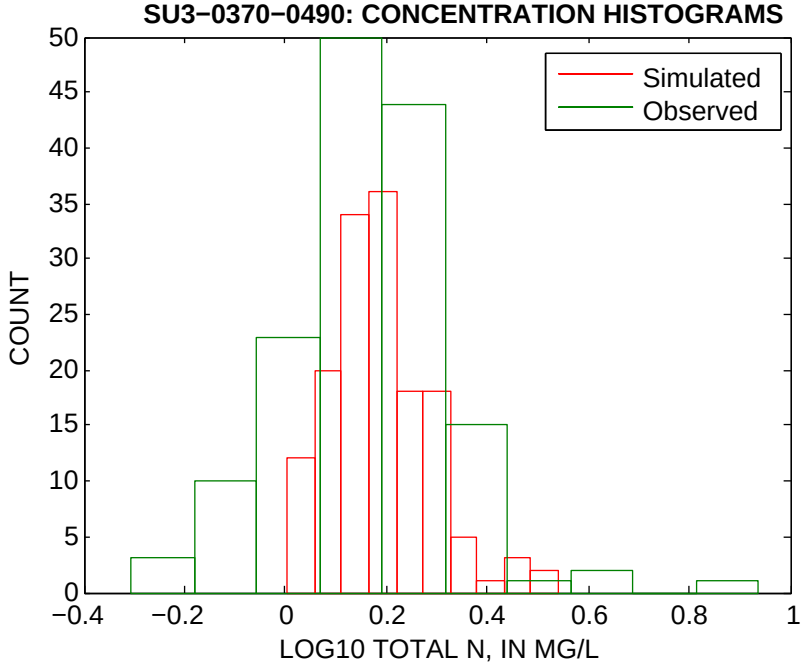
VERSION 2.1

ALL DATA
LOG10

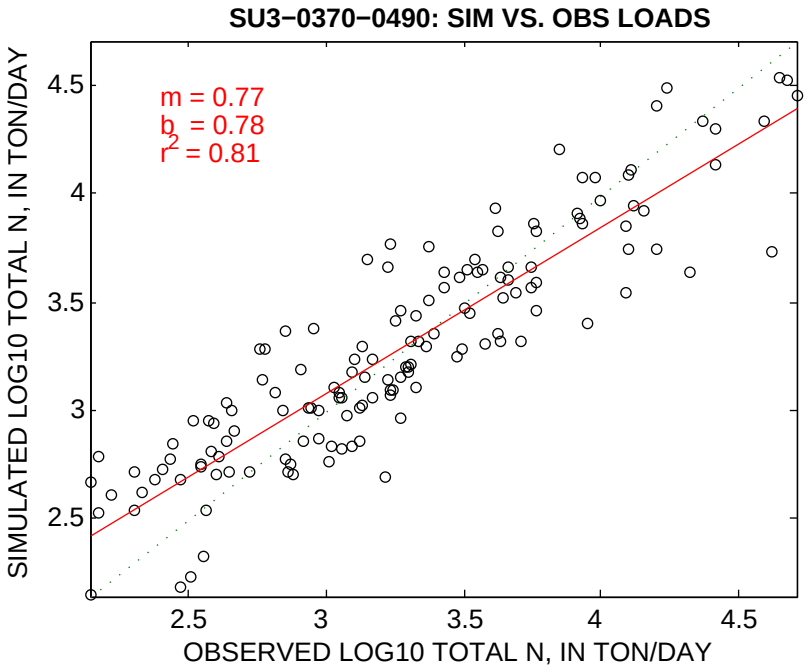


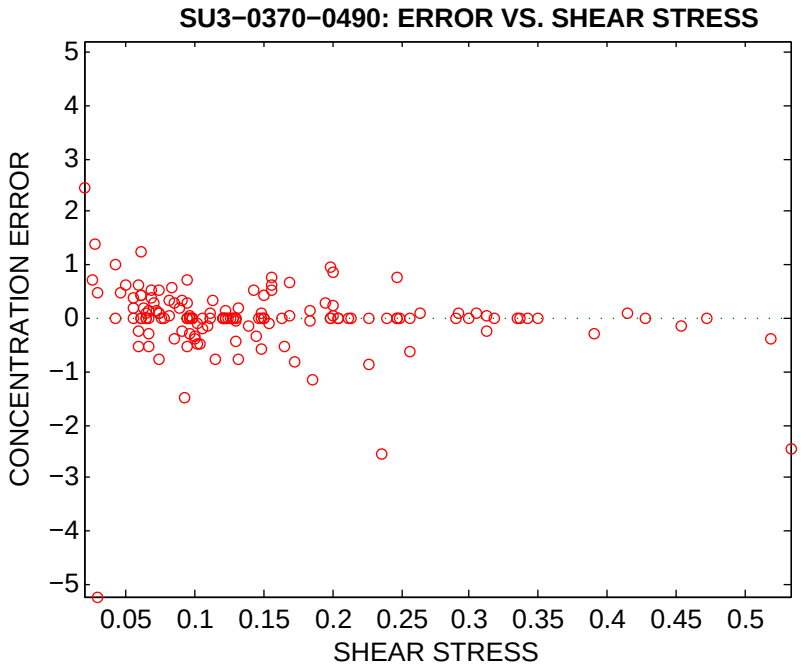


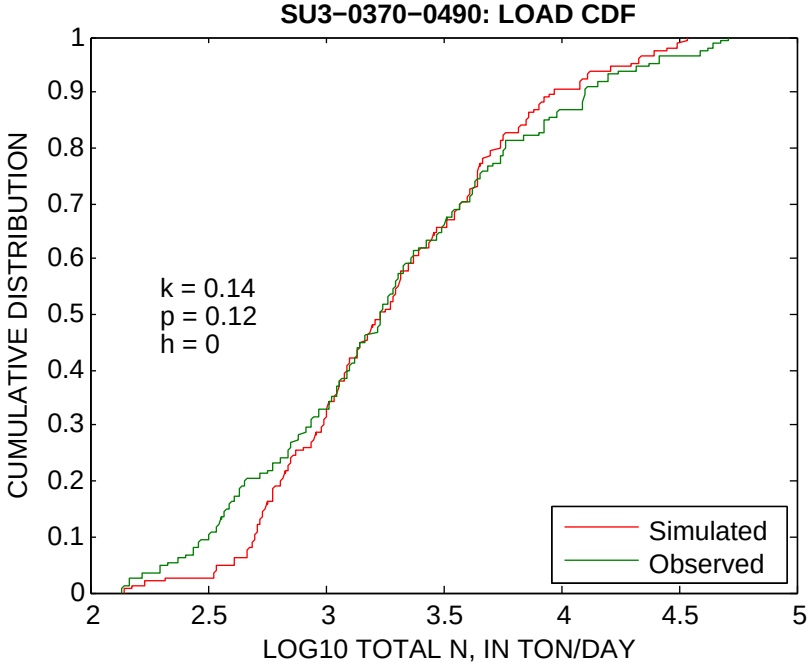


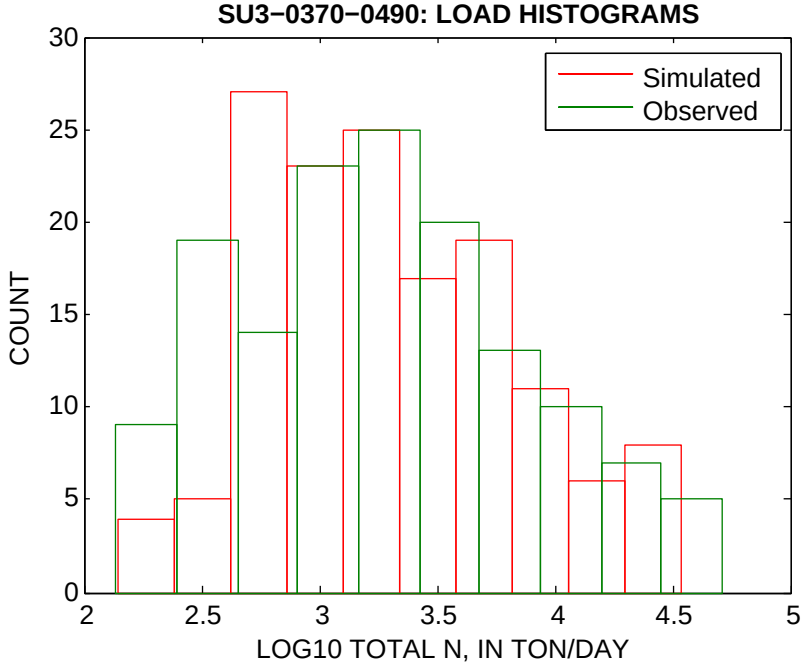


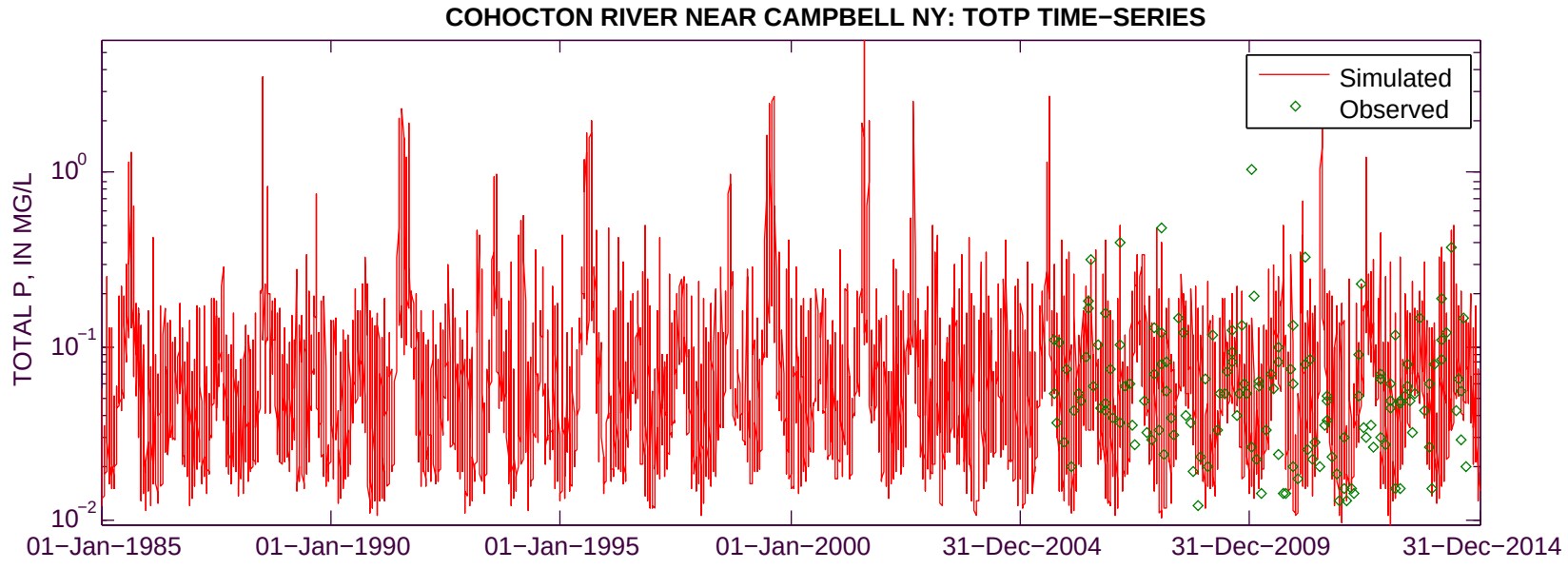
LOAD DATA
LOG10

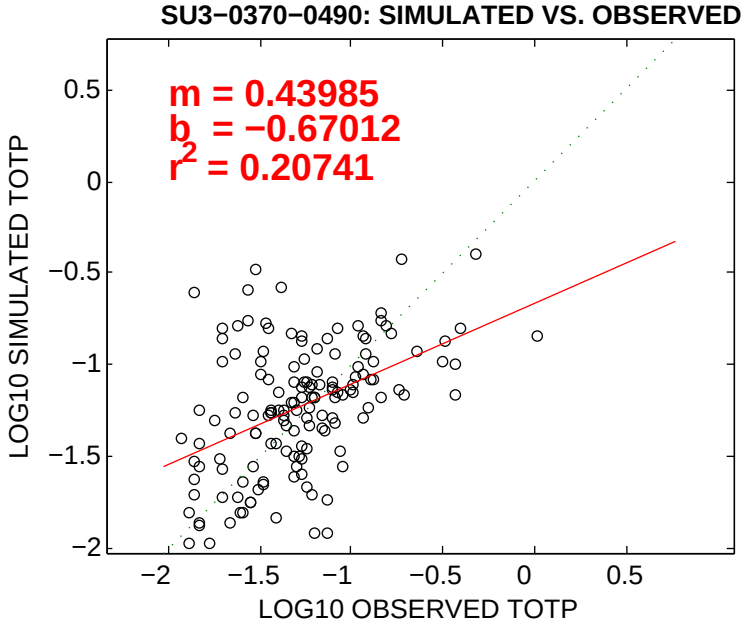


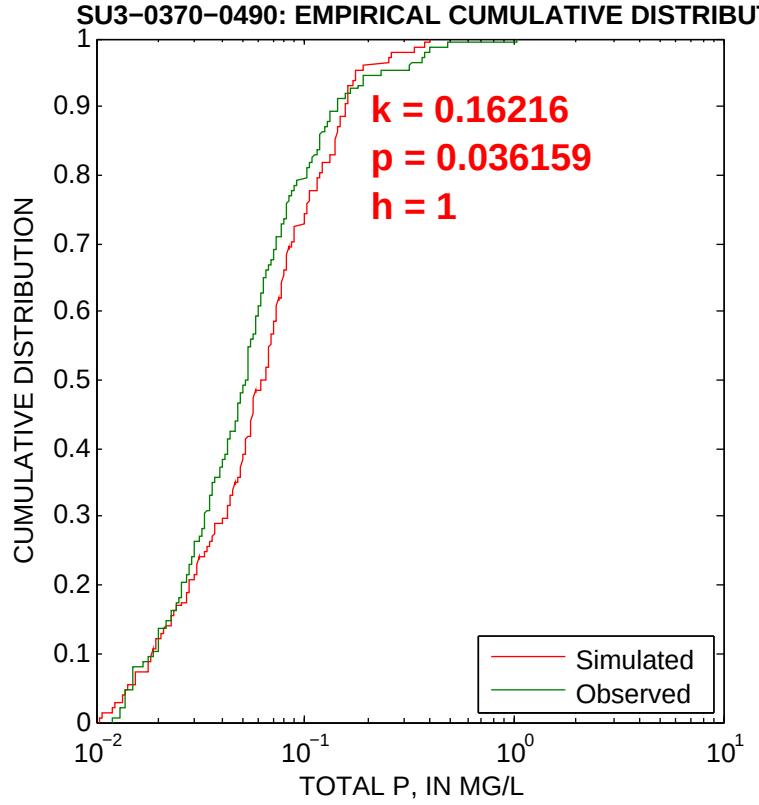












DATA SELECTION

scenario	file
P620171001WQ	TOTP.calib

plot: TOTP - total phosphorus

Dates: 1/1/1985 – 12/31/201

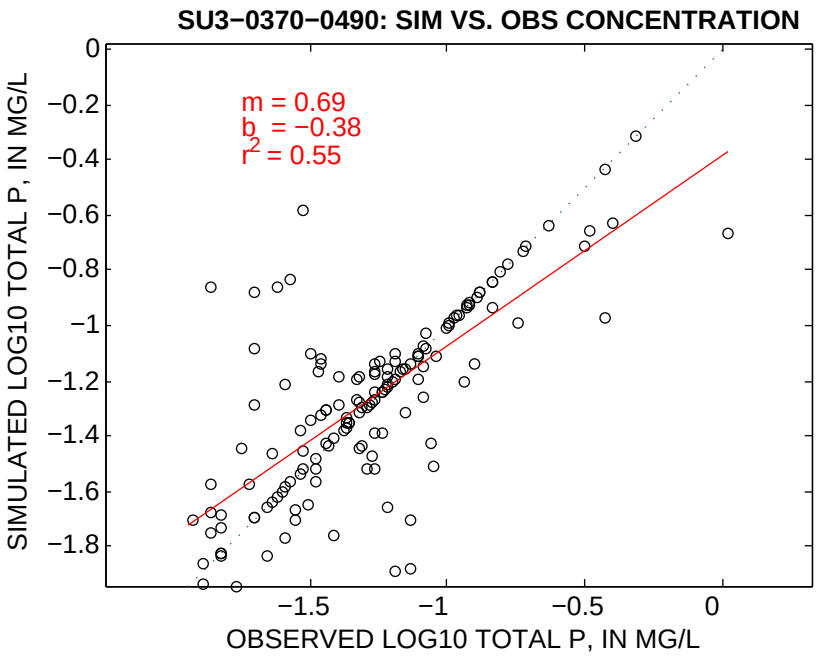
Drive	Directory	Observed
N/A	model	OBS20161101

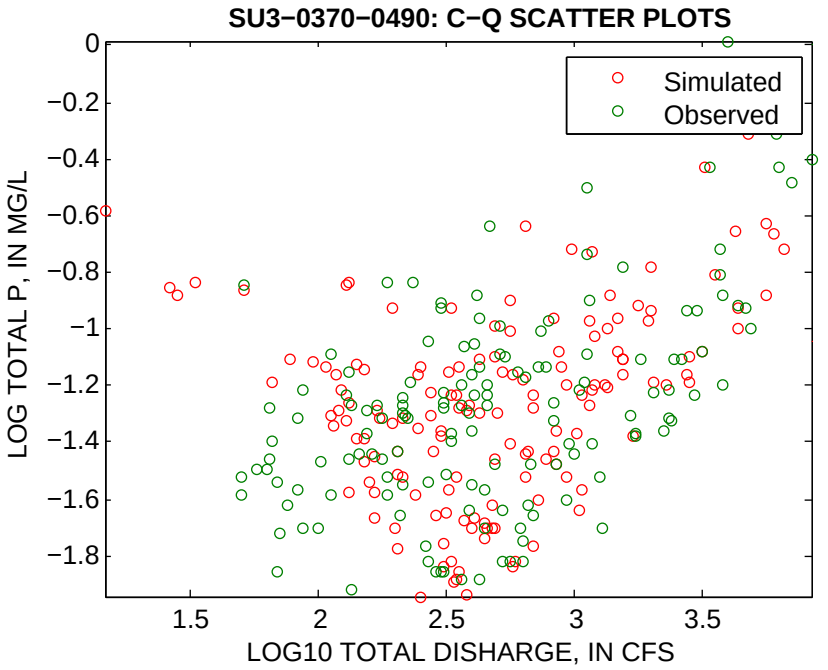
STATISTICS

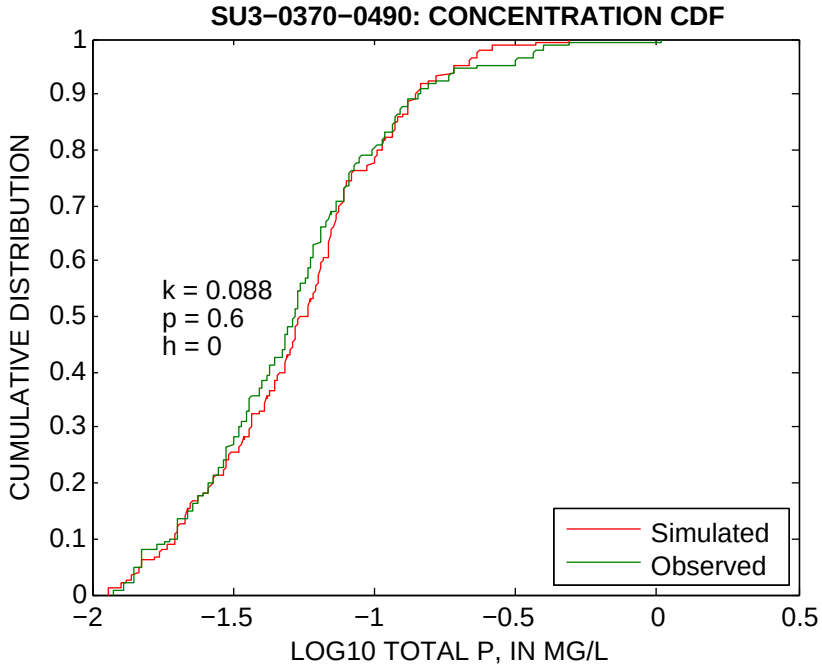
	n	observe	simulate
		148	148
min		0.012	0.010568
		-1.92082	-1.97601
mean		0.0792703	0.0790897
		-1.2773	-1.23194
media		0.0525	0.063938
		-1.27986	-1.19438
max		1.04	0.40137
		0.0170333	-0.396455
varian		0.0121071	0.00440388
		0.127519	0.118945
JB		0.001	0.001
		0.009007	0.425079
		ra	log
%		-0.227821	-3.55088
err.va		0.0115103	0.136357
rel.std.err		0.950702	1.06931
mod.eff		0.0492982	-0.0693084

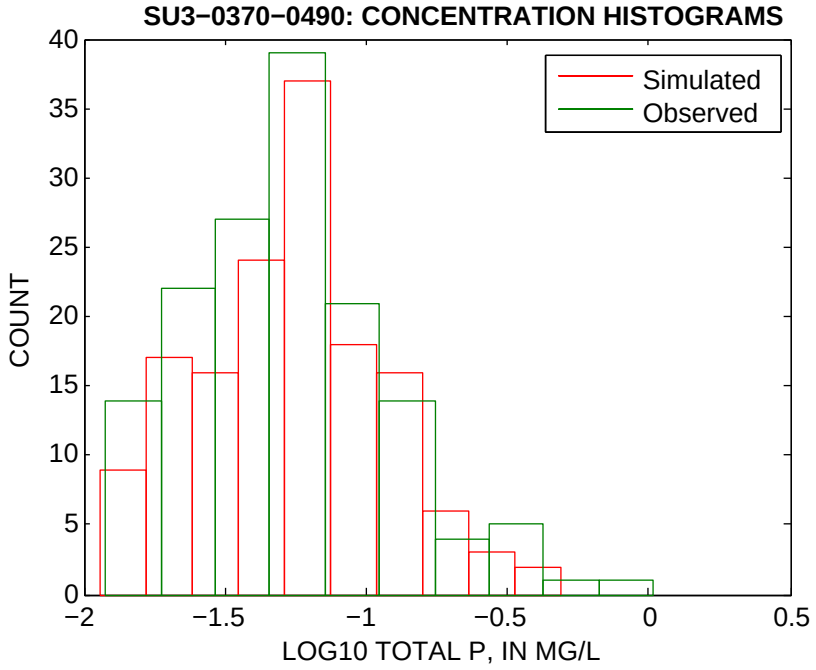
VERSION 2.1

ALL DATA
LOG10

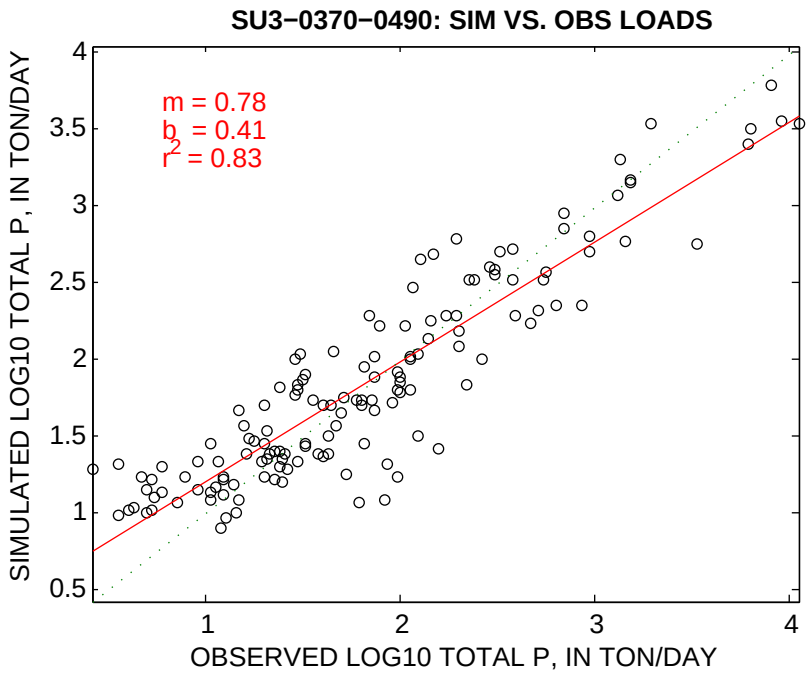


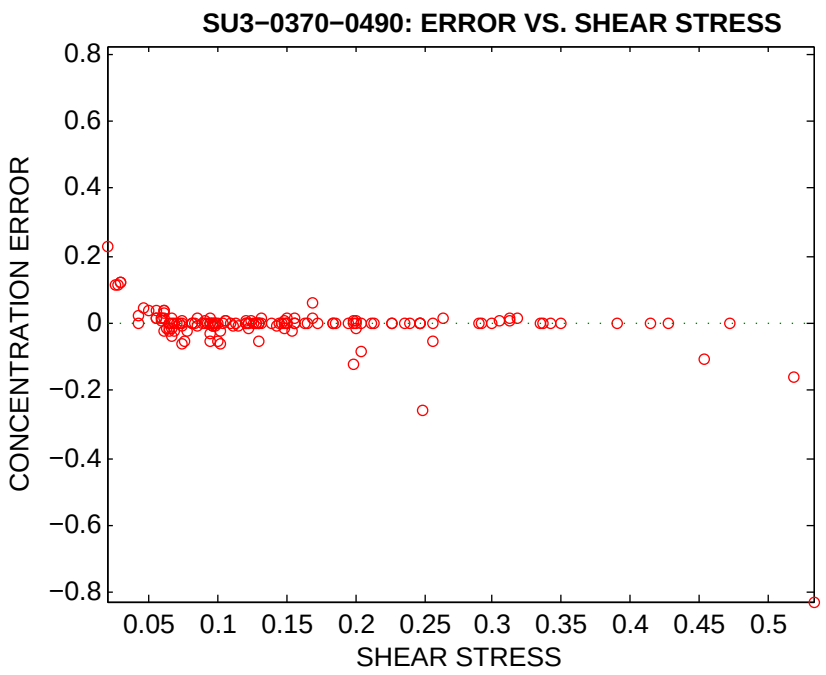


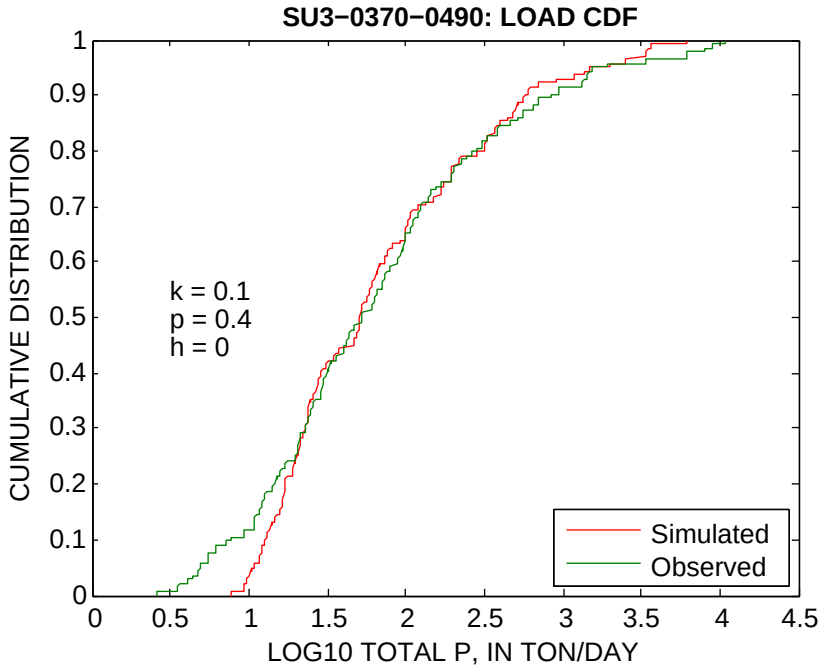


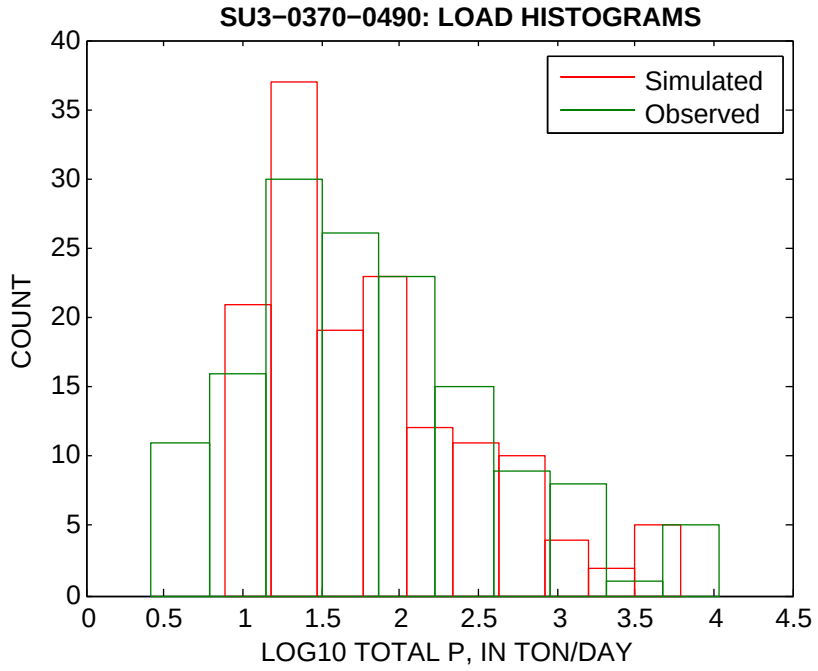


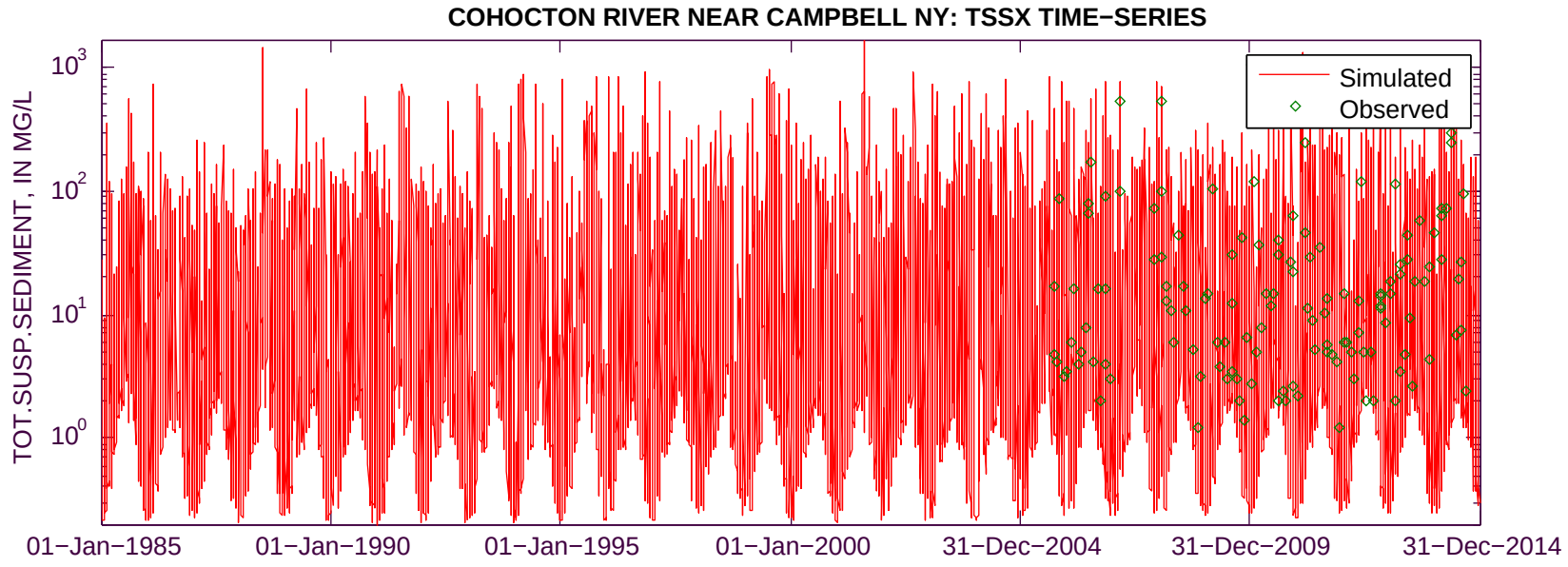
LOAD DATA
LOG10

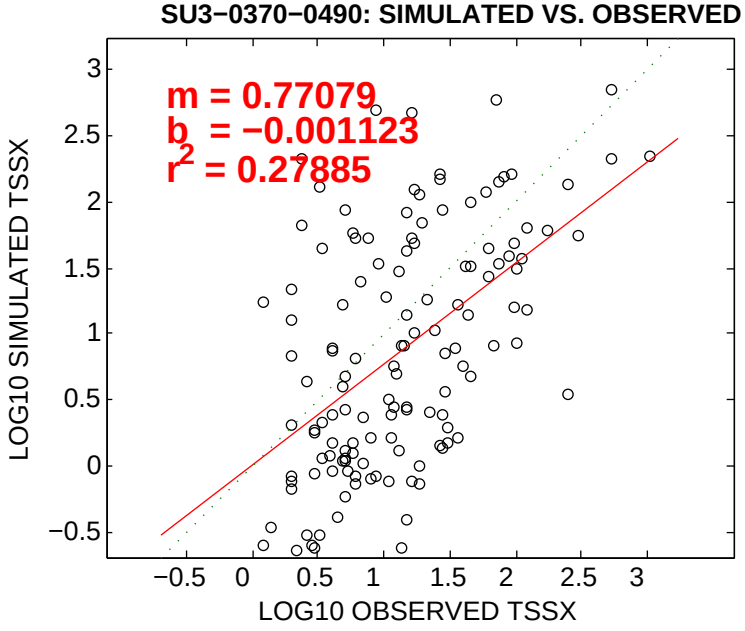


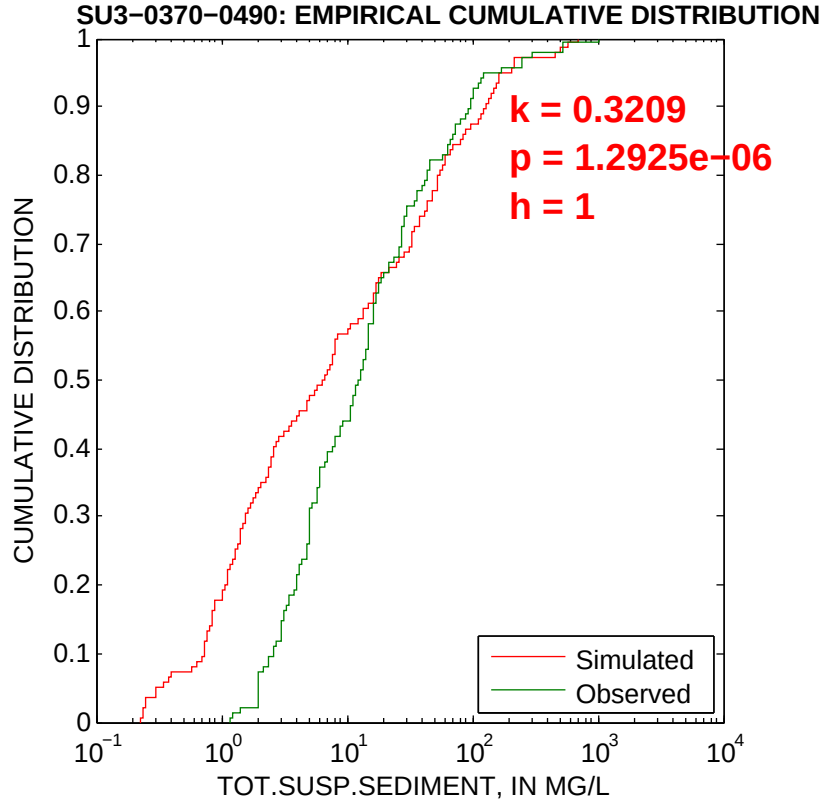












DATA SELECTION

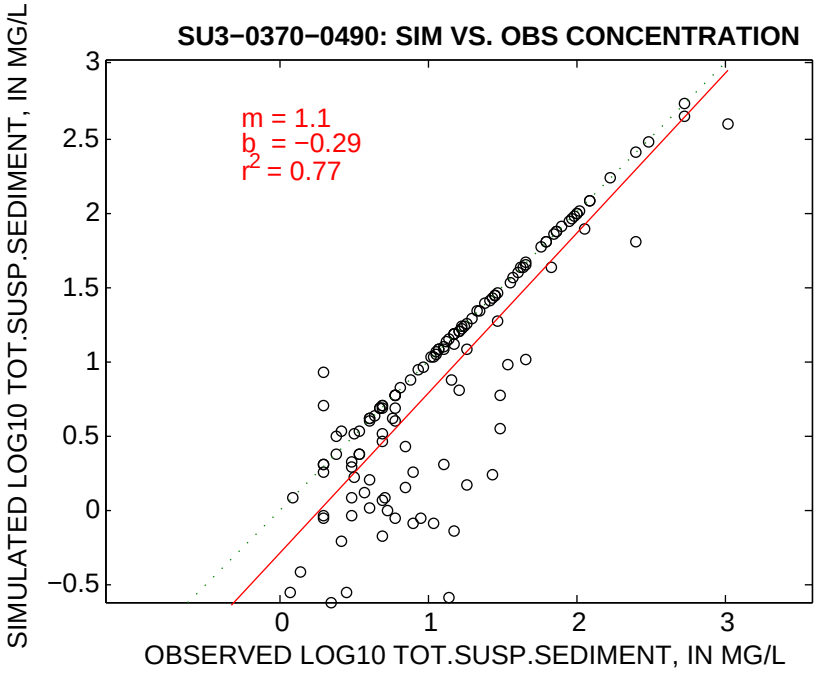
scenario: P620171001WQ
file: TSSX.calib
plot: TSSX - total suspended ...
Dates: 1/1/1985 12/31/201
Drive: N/A
Directory: model
Observed: OBS20161101

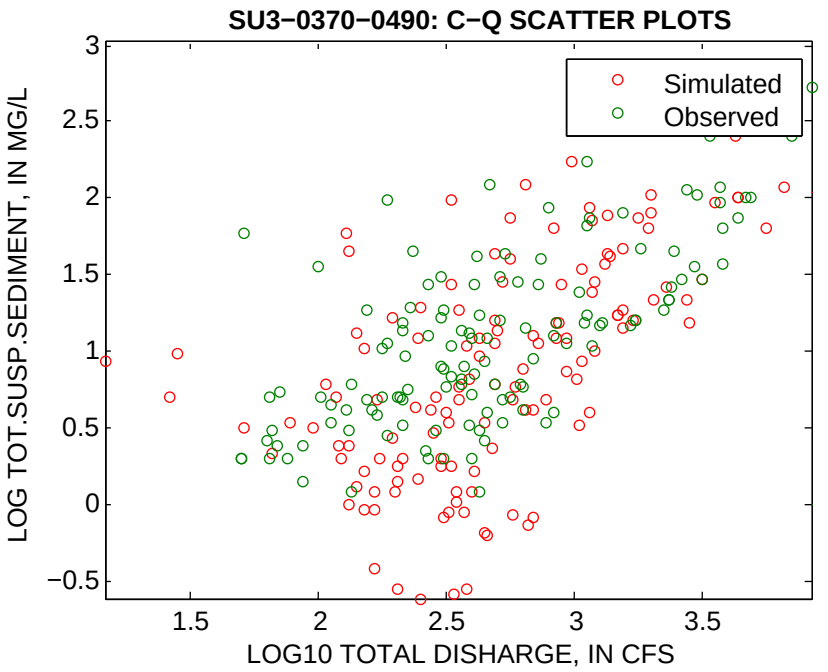
STATISTICS

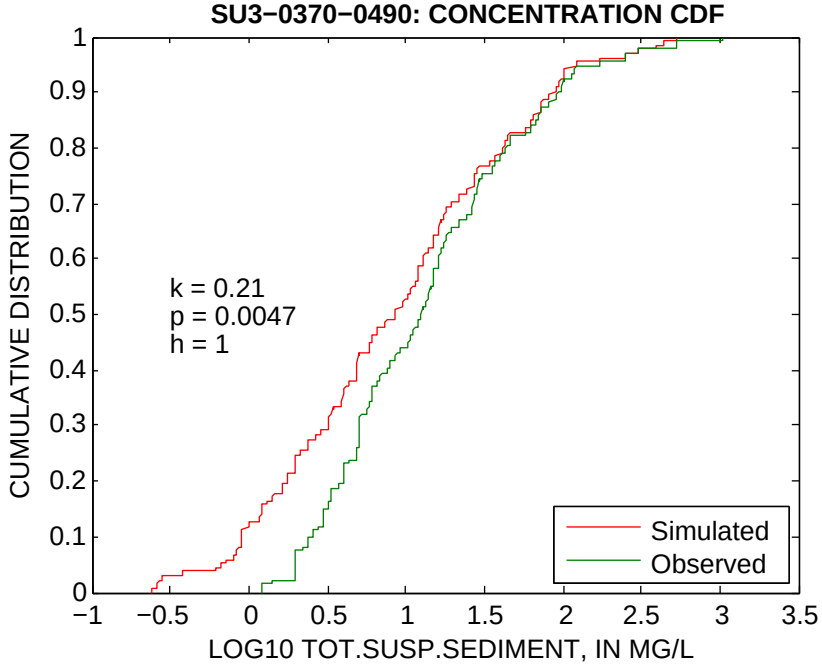
n	134	134
	observe	simulate
min	1.2	0.22757
	0.0791812	-0.642885
mean	44.3676	45.72
	1.13439	0.873253
media	12.65	6.53985
	1.10209	0.815458
max	1040	700.58
	3.01703	2.84546
varian	13449.9	10917.9
	0.3722	0.793012
JB	0.001	0.001
	0.023446	0.035478
	ra	log
%	3.04822	-23.0202
err.va	14211.2	0.660145
rel.std.err	1.0566	1.77363
mod.eff	-0.0566017	-0.77363

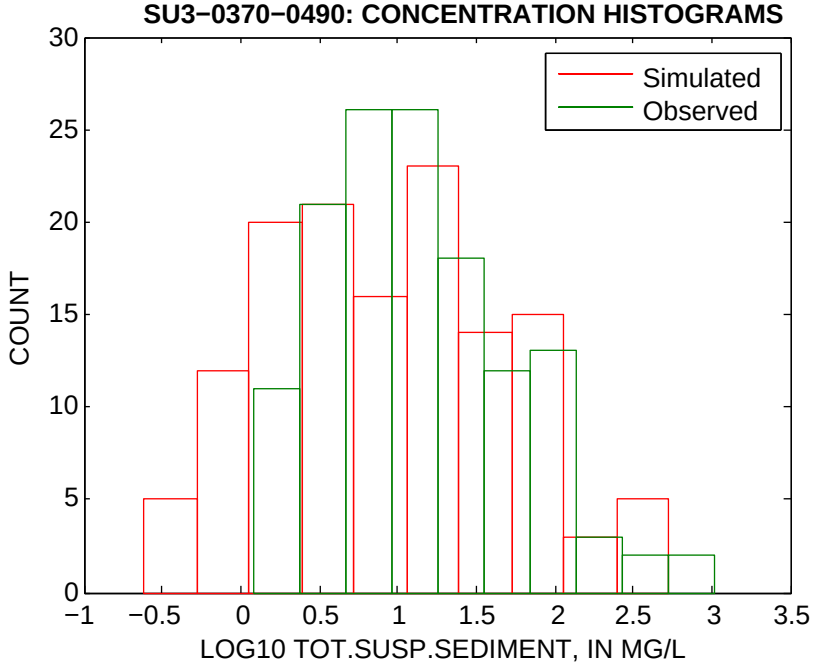
VERSION 2.1

ALL DATA
LOG10

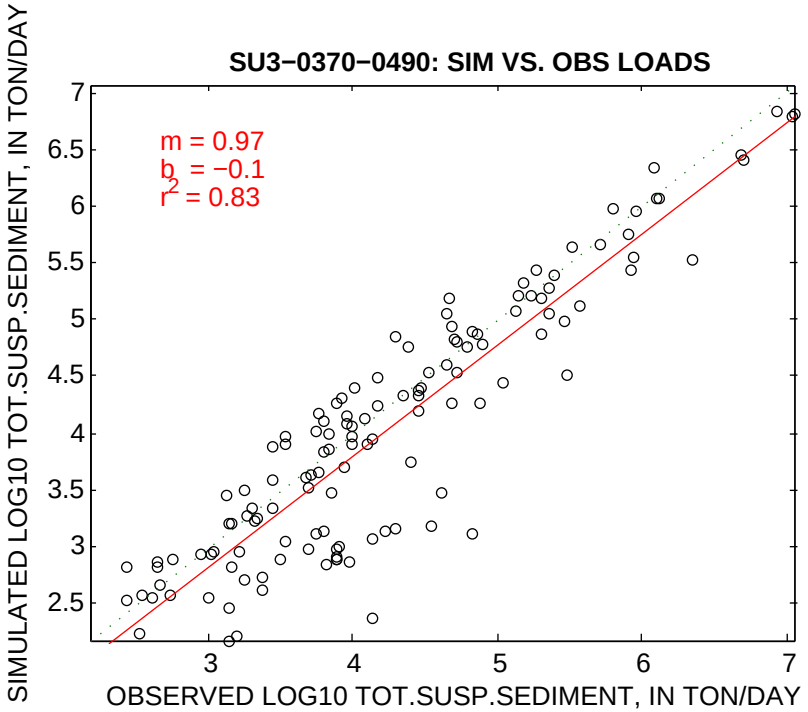


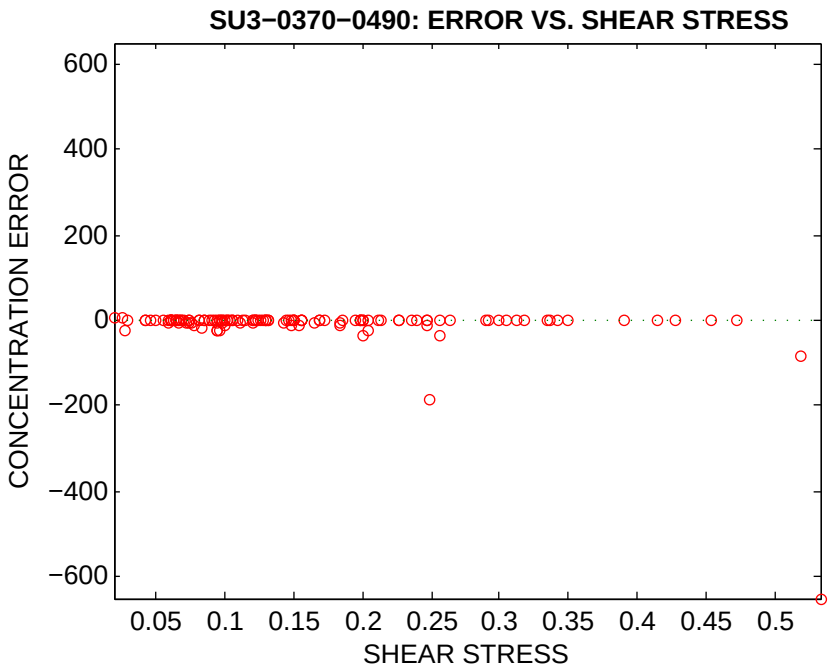


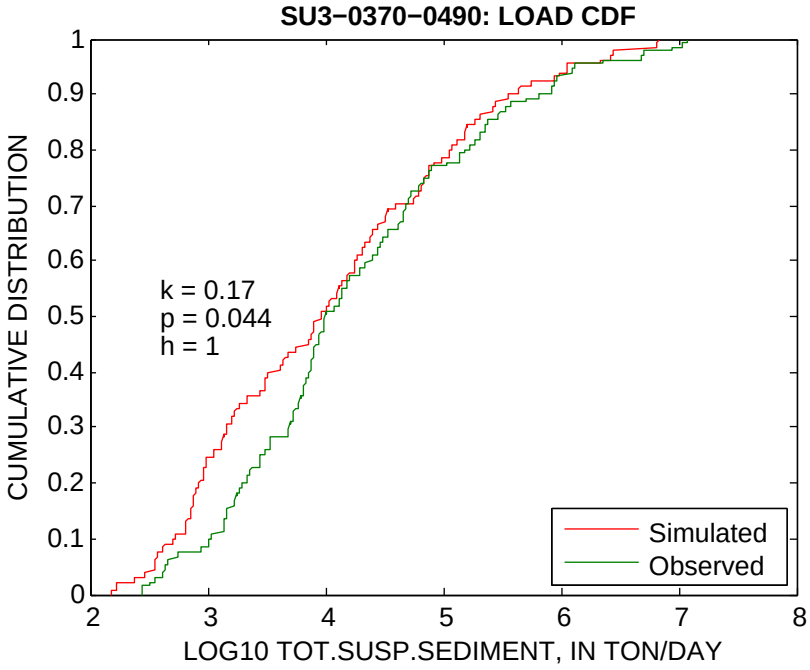


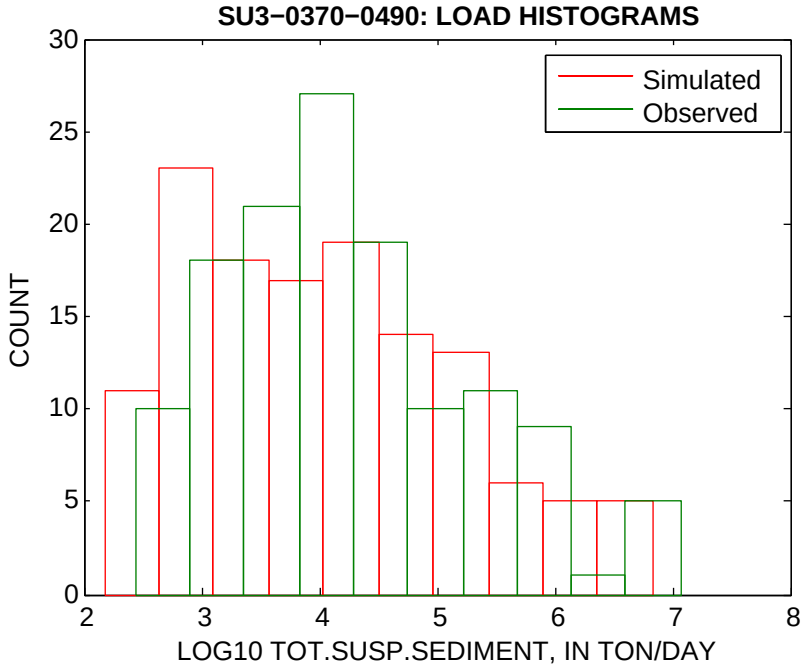


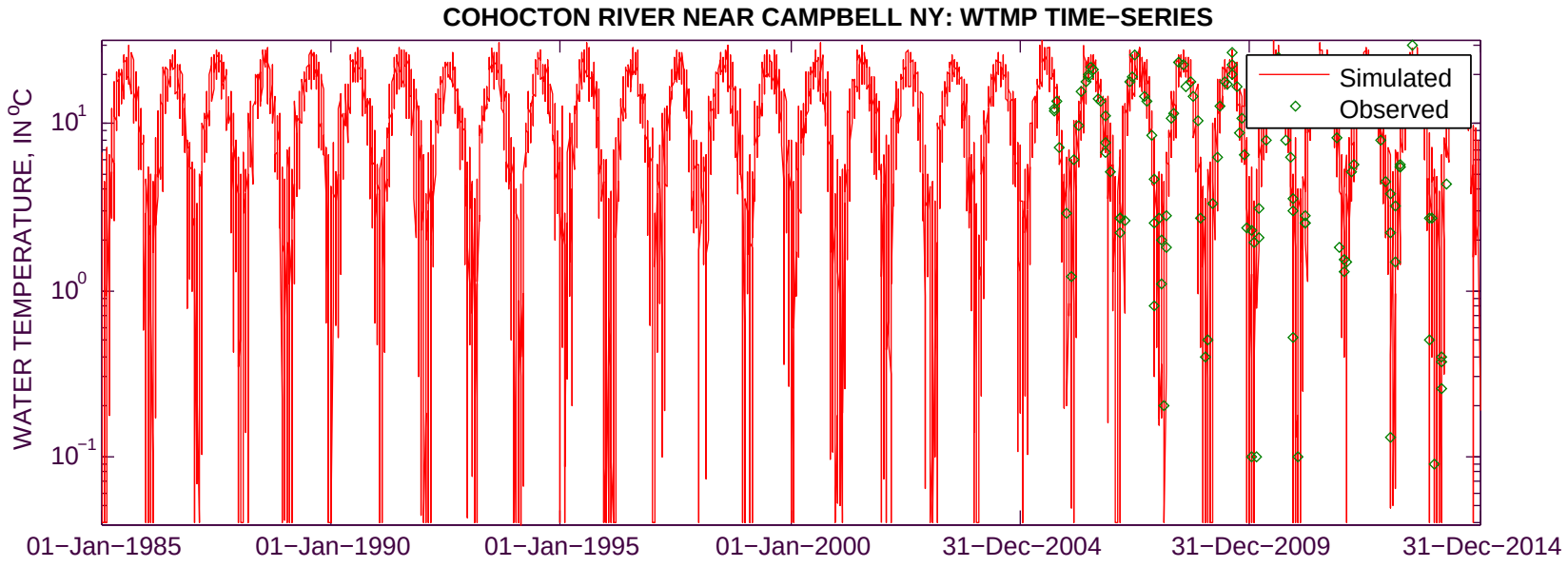
LOAD DATA
LOG10

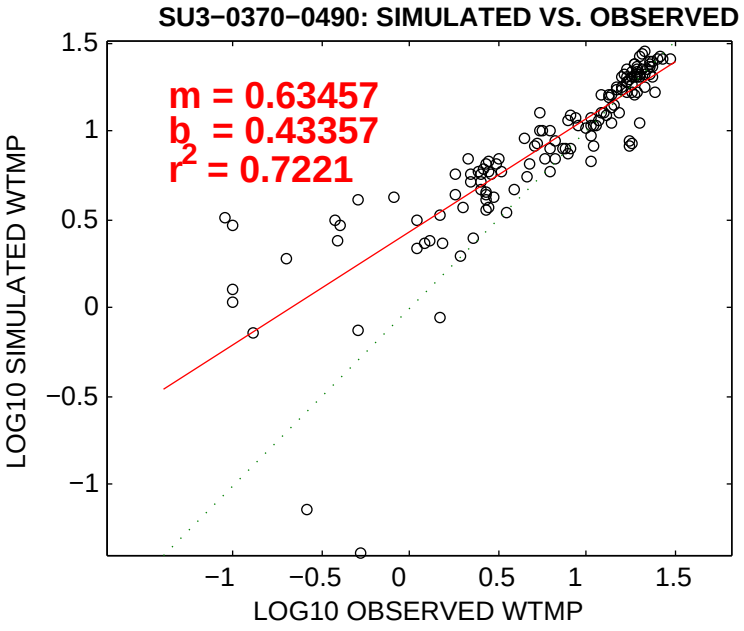


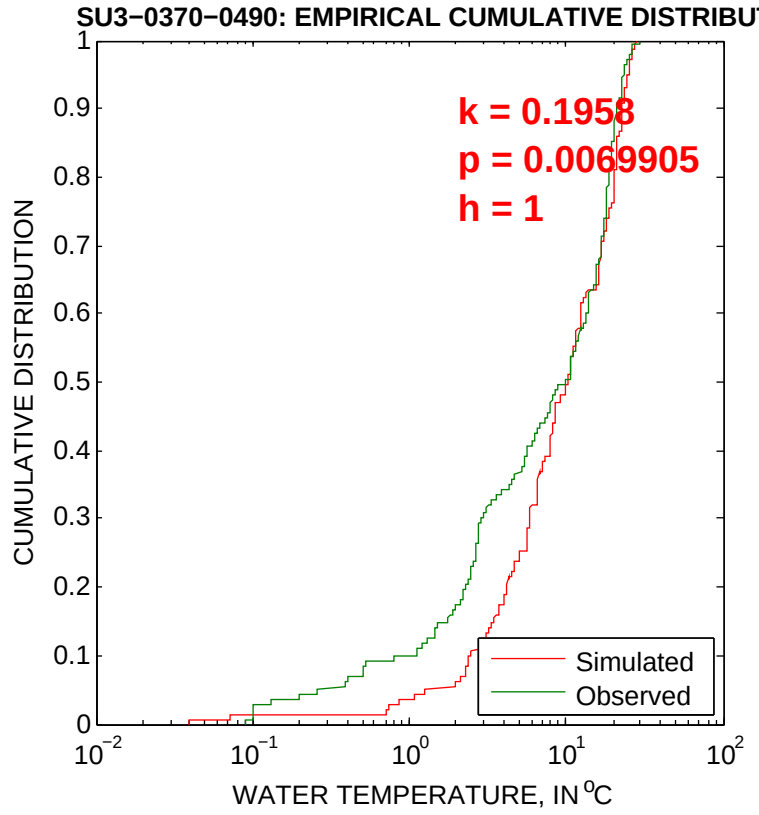












DATA SELECTION

scenario: P620171001WQ | file: WTMP.calib

plot: WTMP - water tempera...

Dates: 1/1/1985 – 12/31/201

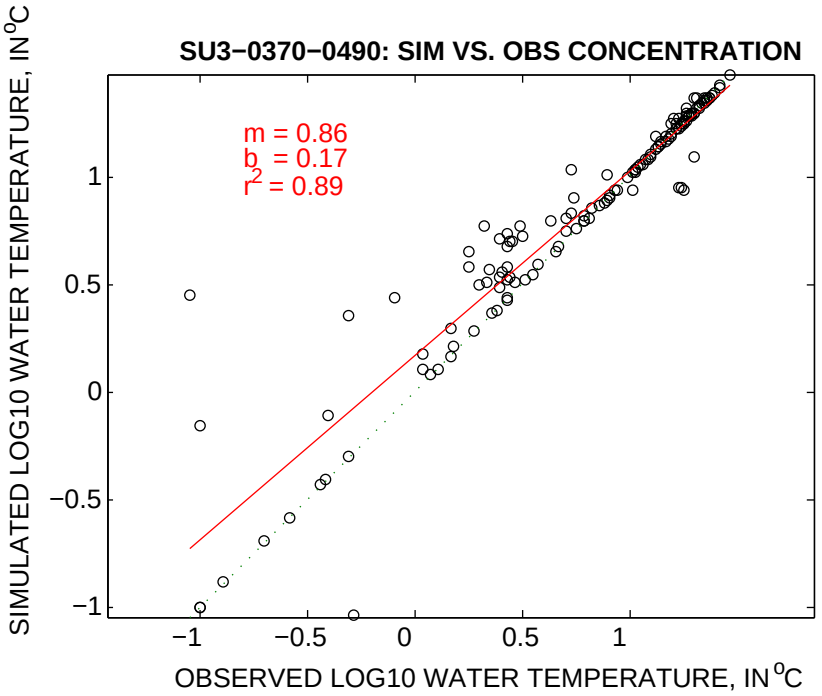
Drive | Directory: N/A | model | Observed: OBS20161101

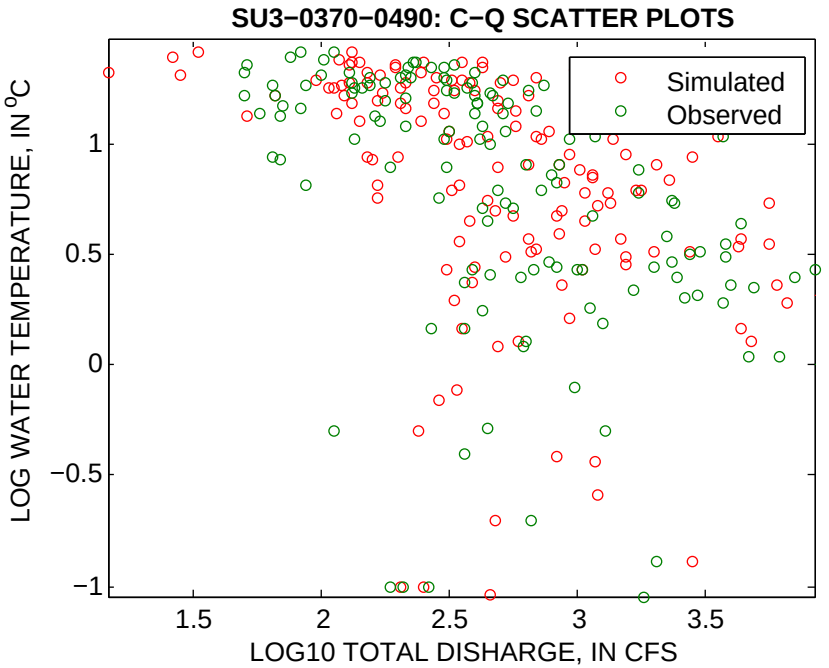
STATISTICS

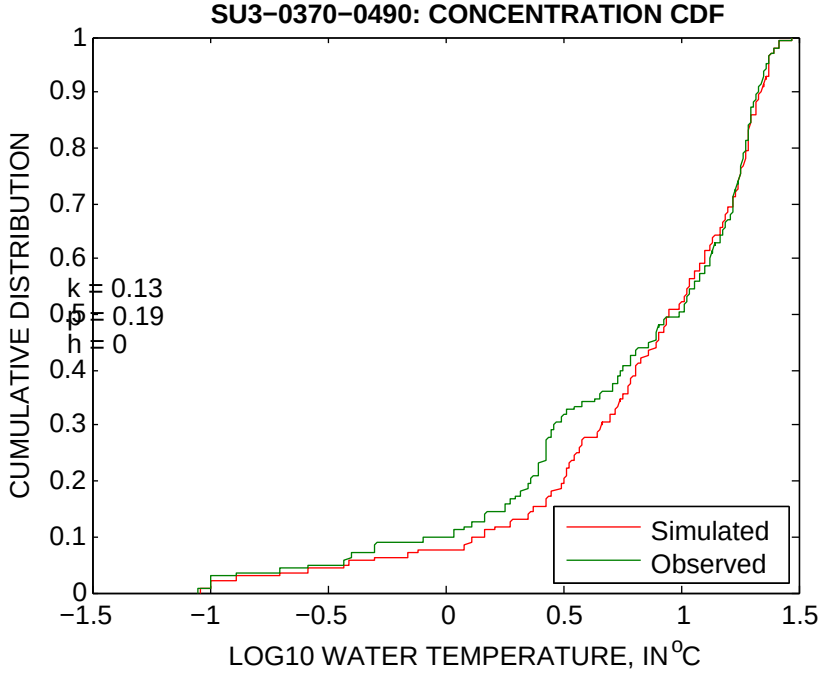
		observe	simulate
n		143	143
min		0.09	0.040078
		-1.04576	-1.39709
mean		10.4851	11.7375
		0.770854	0.922725
media		9.9	10.103
		0.995635	1.00445
max		29.56	28.194
		1.4707	1.45016
varian		65.0598	60.1035
		0.360022	0.200763
JB		0.011368	0.012153
		0.001	0.001
		ra	log
%		11.9445	19.7016
err.va		9.61833	0.127097
rel.std.err		0.147838	0.353027
mod.eff		0.852162	0.646973

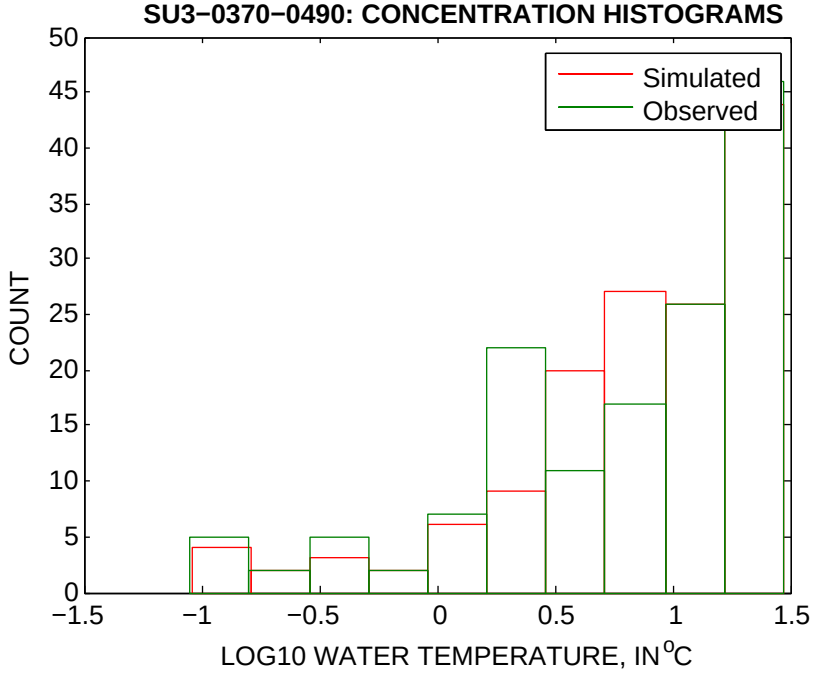
VERSION 2.1

ALL DATA
LOG10

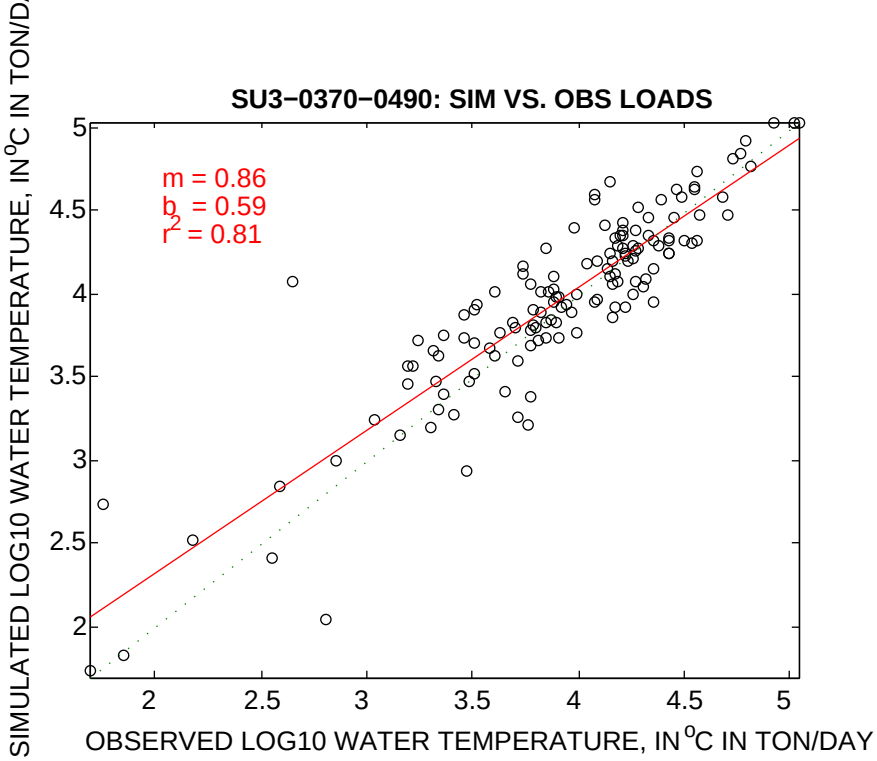


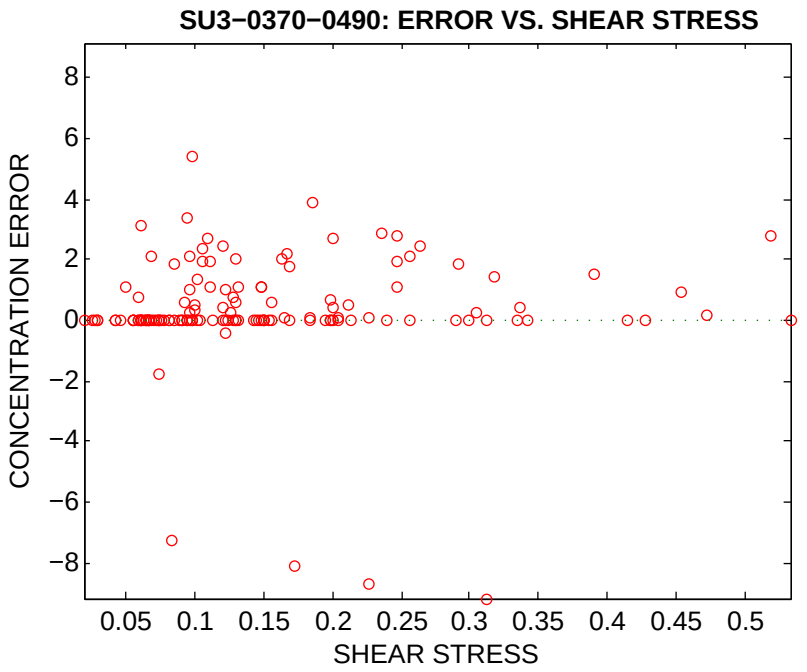


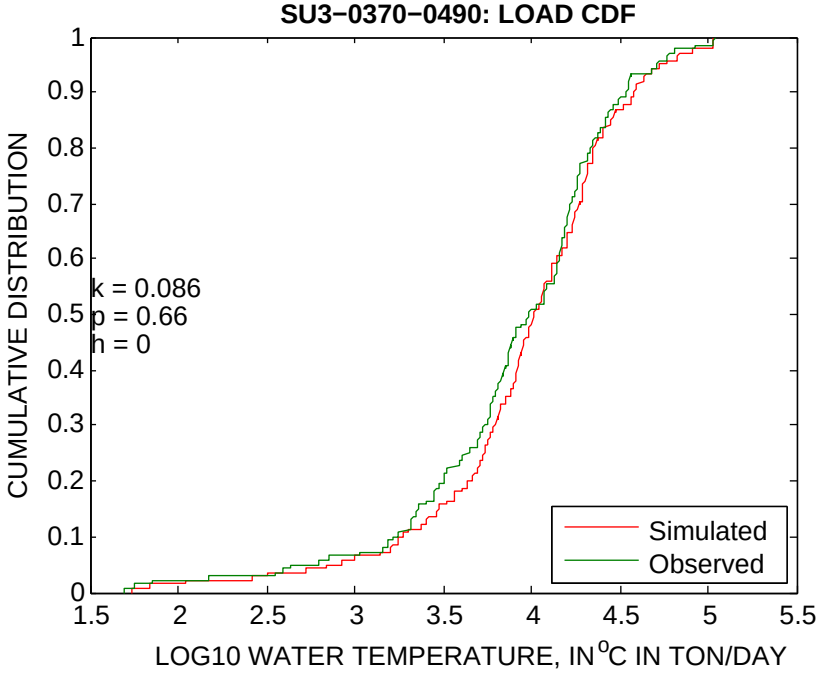


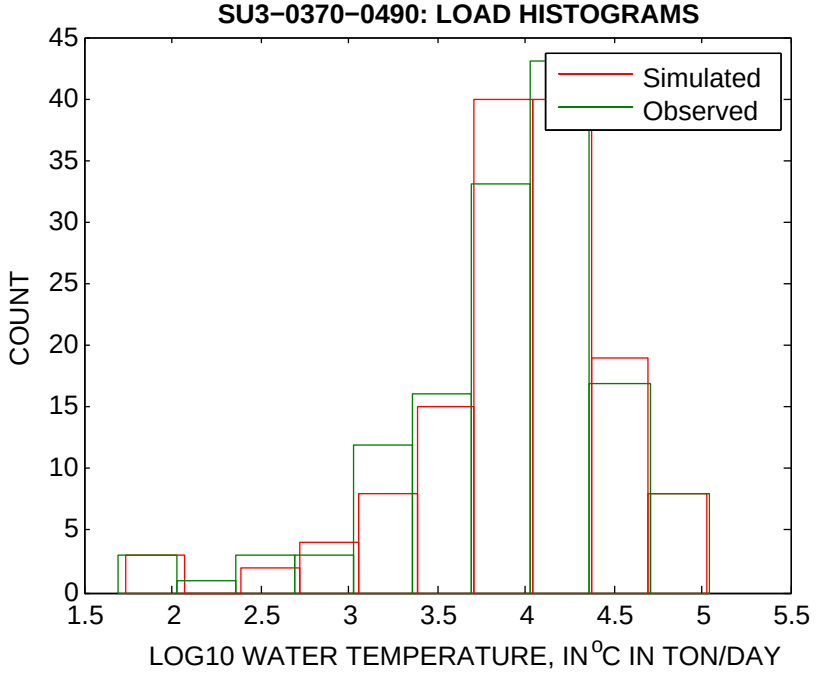


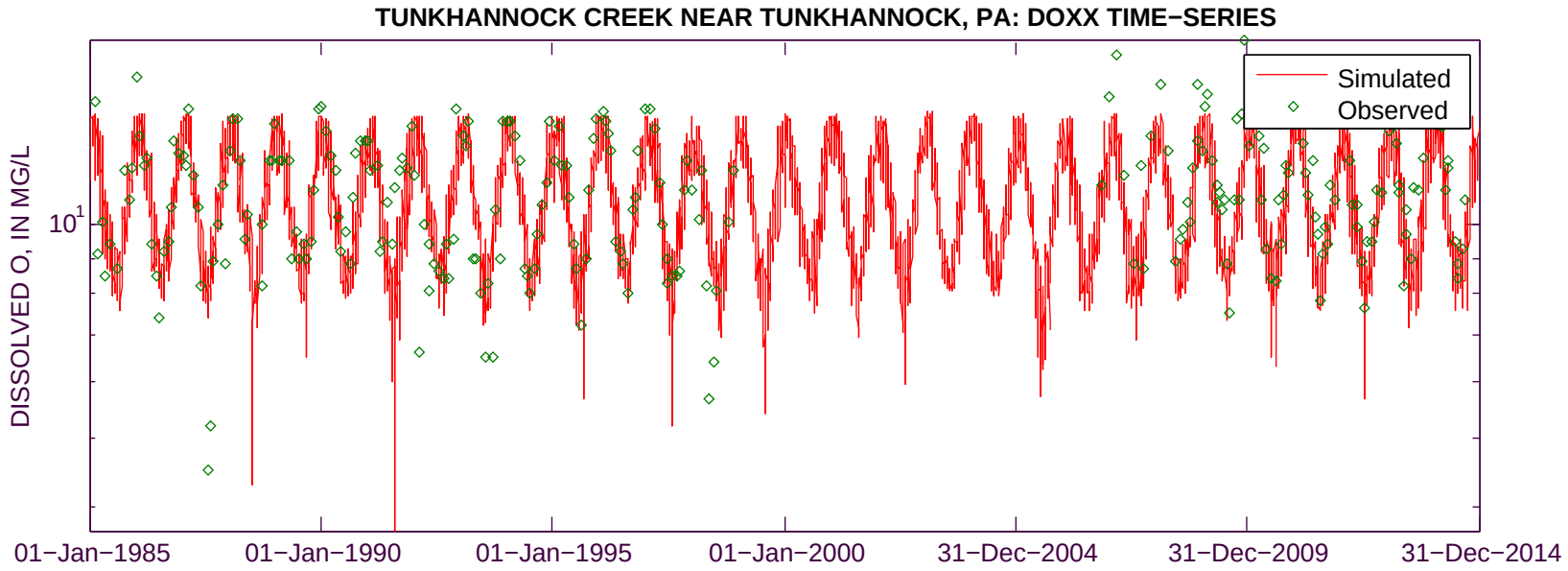
LOAD DATA
LOG10

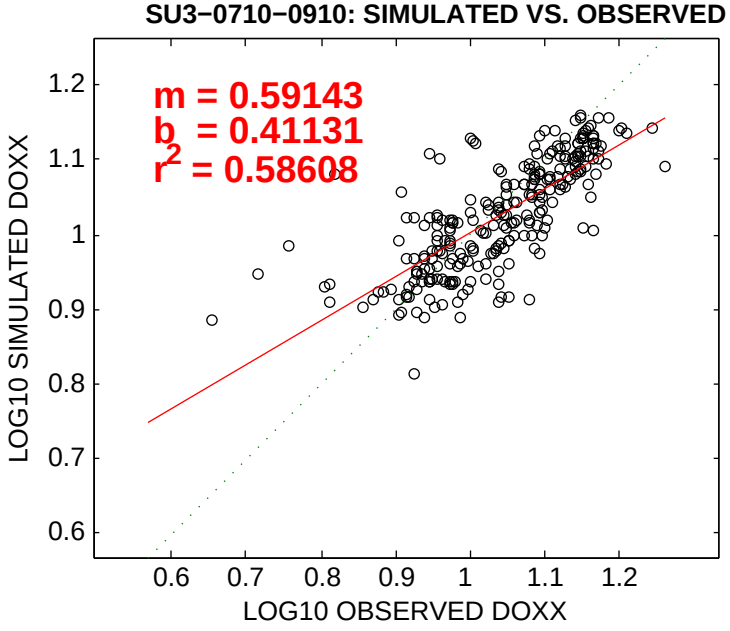


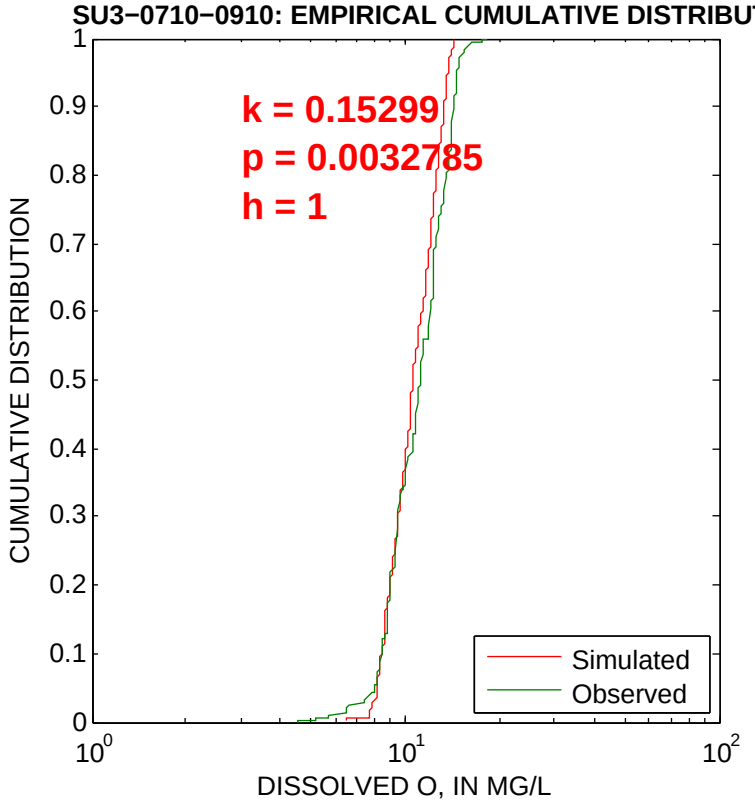












DATA SELECTION

scenario: P620171001WQ | file: DOXX.calib

plot: DOXX - dissolved oxygen

Dates: 1/1/1985 – 12/31/201

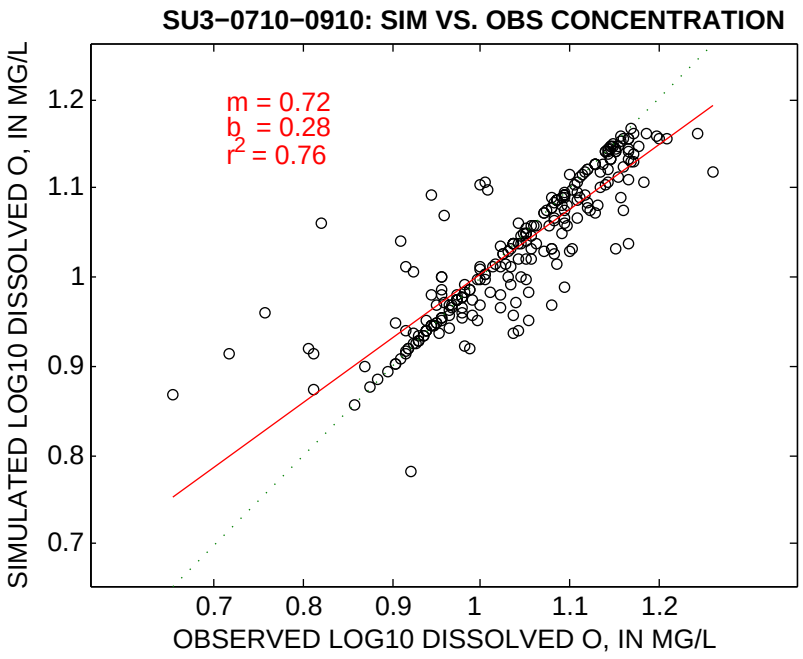
Drive | Directory | Observed: N/A | model | OBS20161101

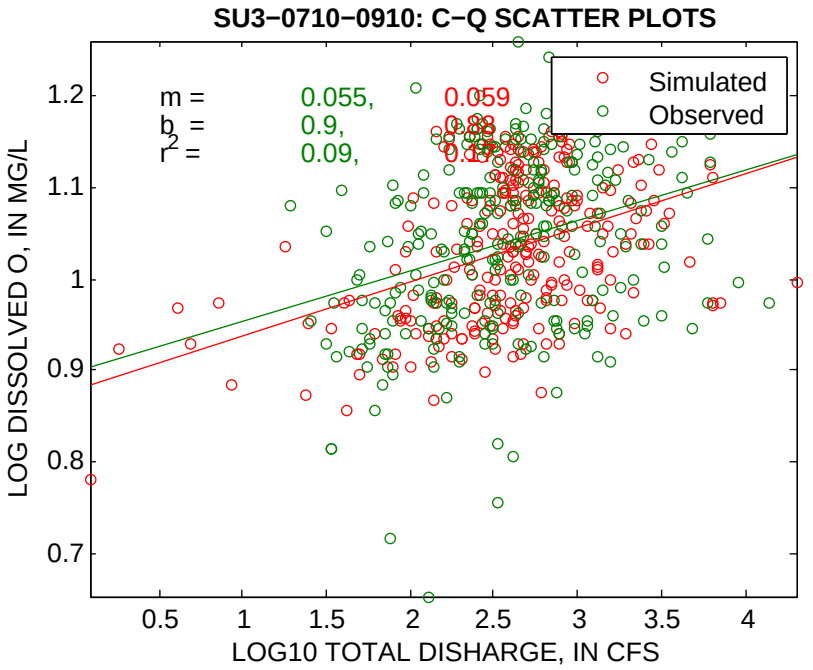
STATISTICS

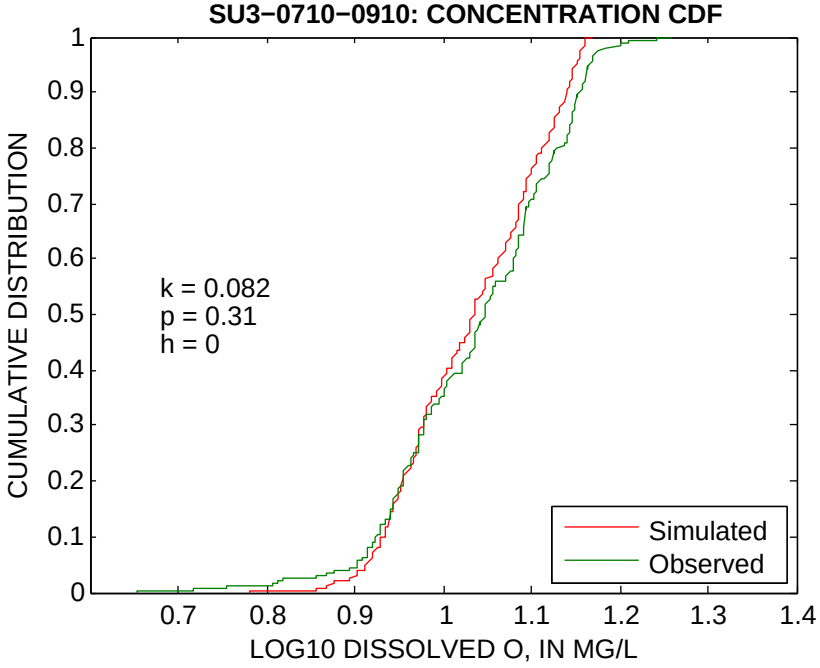
		observe	simulate
n		268	267
min		4.5	0
		0.653213	0.813748
mean		11.2216	10.7453
		1.04045	1.02667
media		11.185	10.5755
		1.04922	1.02461
max		18.23	14.409
		1.26079	1.15863
varian		5.53256	3.69192
		0.00910375	0.0054334
JB		0.258074	0.001
		0.003035	0.010281
		ra	log
%		-4.24484	-1.32417
err.va		2.5445	0.00395916
rel.std.err		0.459915	0.434894
mod.eff		0.540085	0.565106

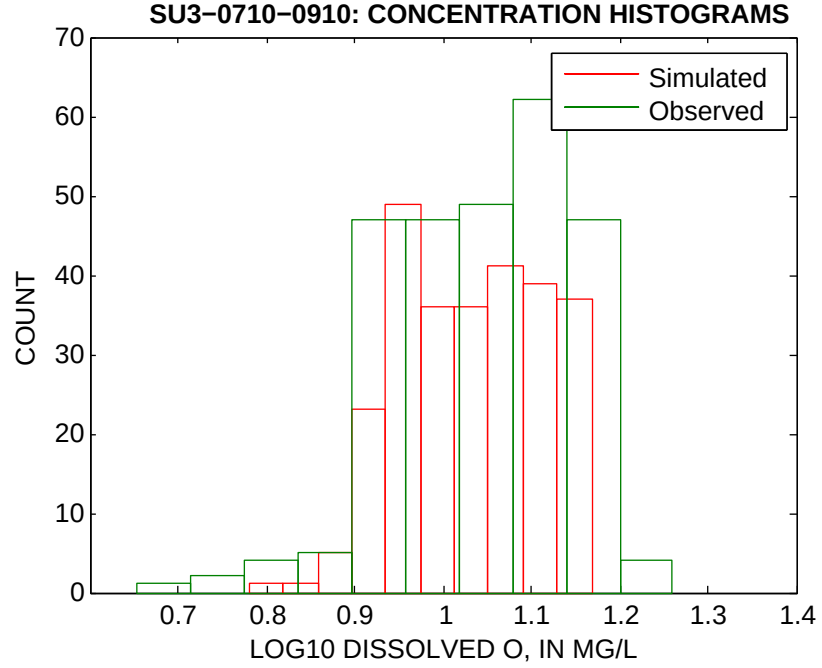
VERSION 2.1

ALL DATA
LOG10

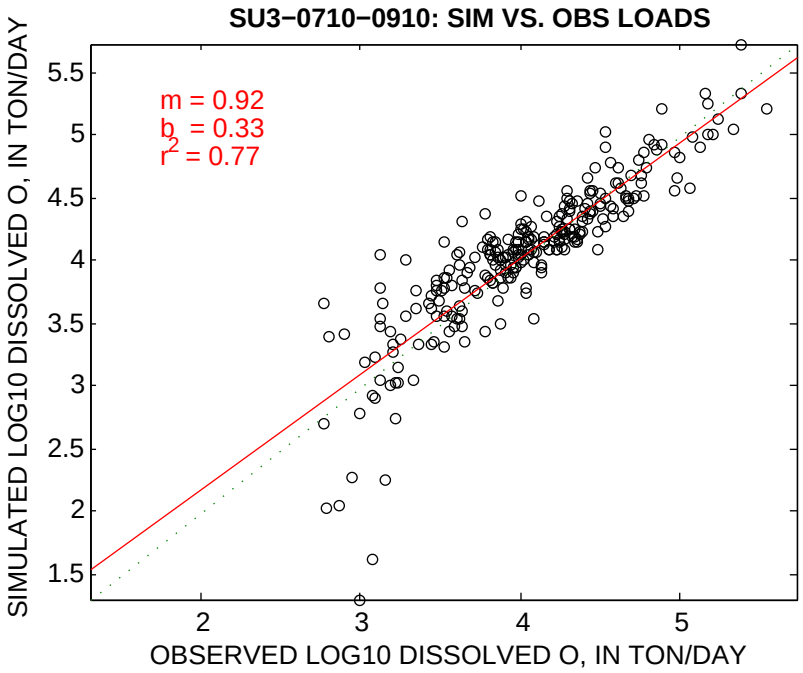


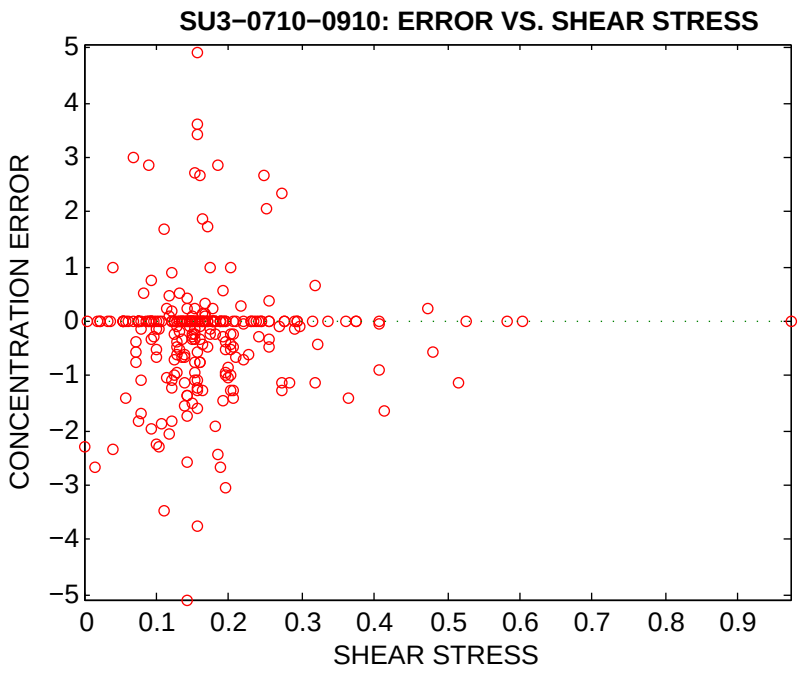


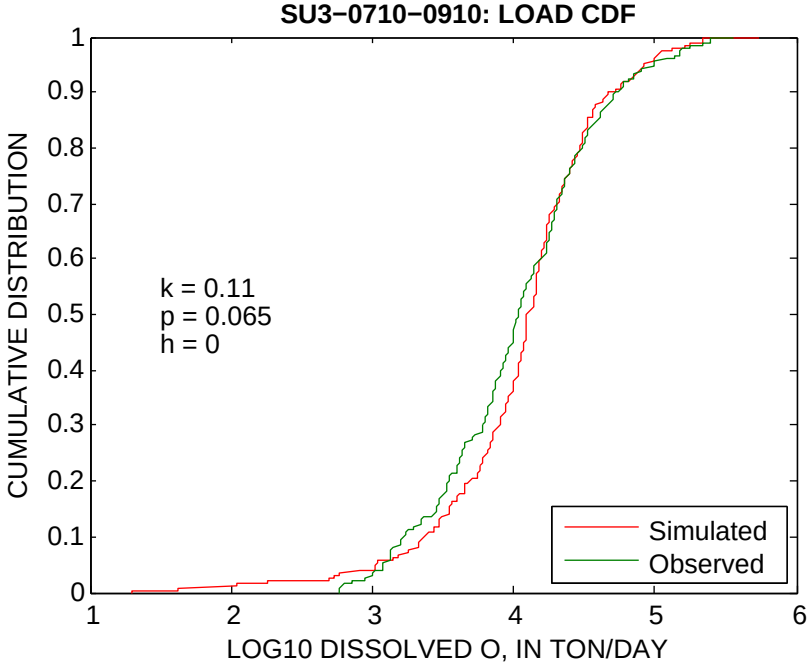


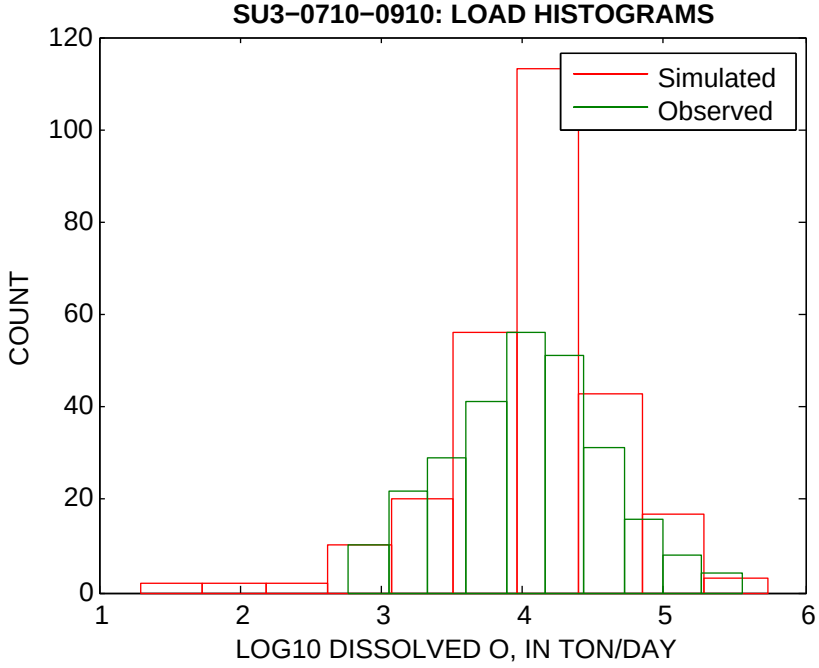


LOAD DATA
LOG10

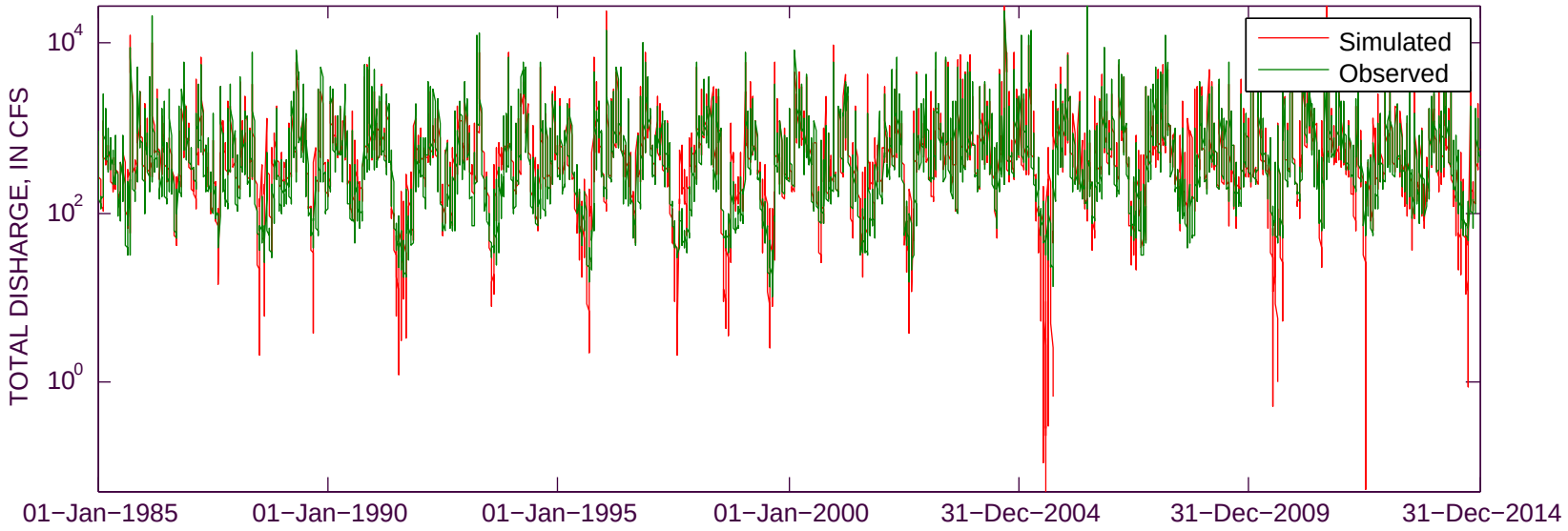




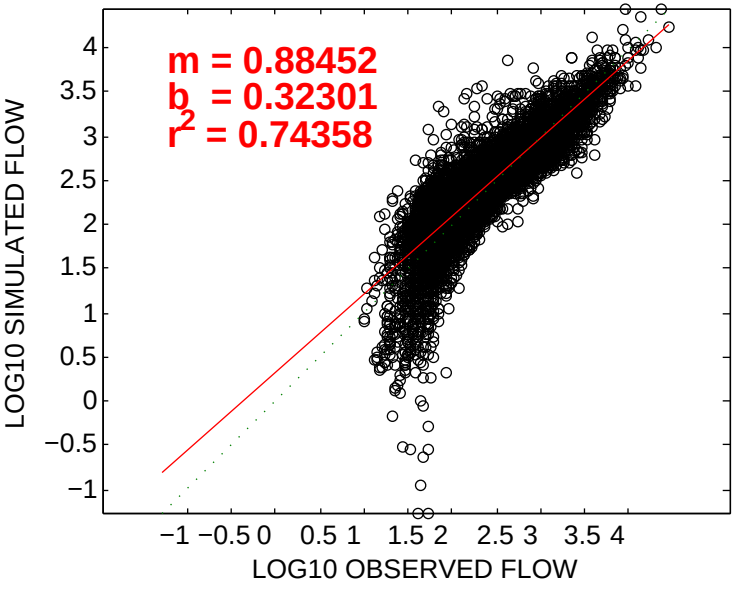




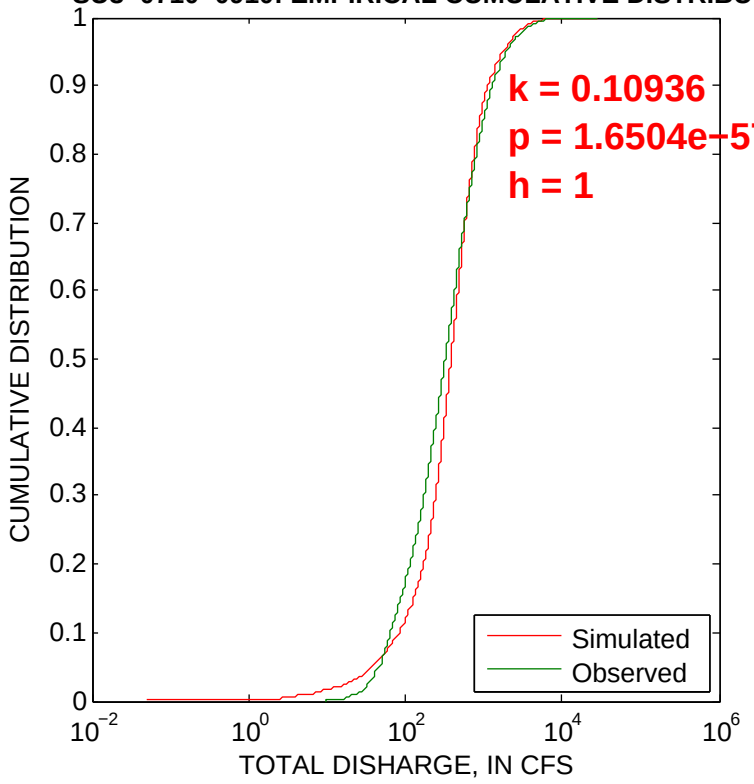
TUNKHANNOCK CREEK NEAR TUNKHANNOCK, PA: FLOW TIME-SERIES



SU3-0710-0910: SIMULATED VS. OBSERVED



SU3-0710-0910: EMPIRICAL CUMULATIVE DISTRIBUTION



DATA SELECTION

scenario	file
P620171001WQ	FLOW.calib

plot: FLOW - total discharge

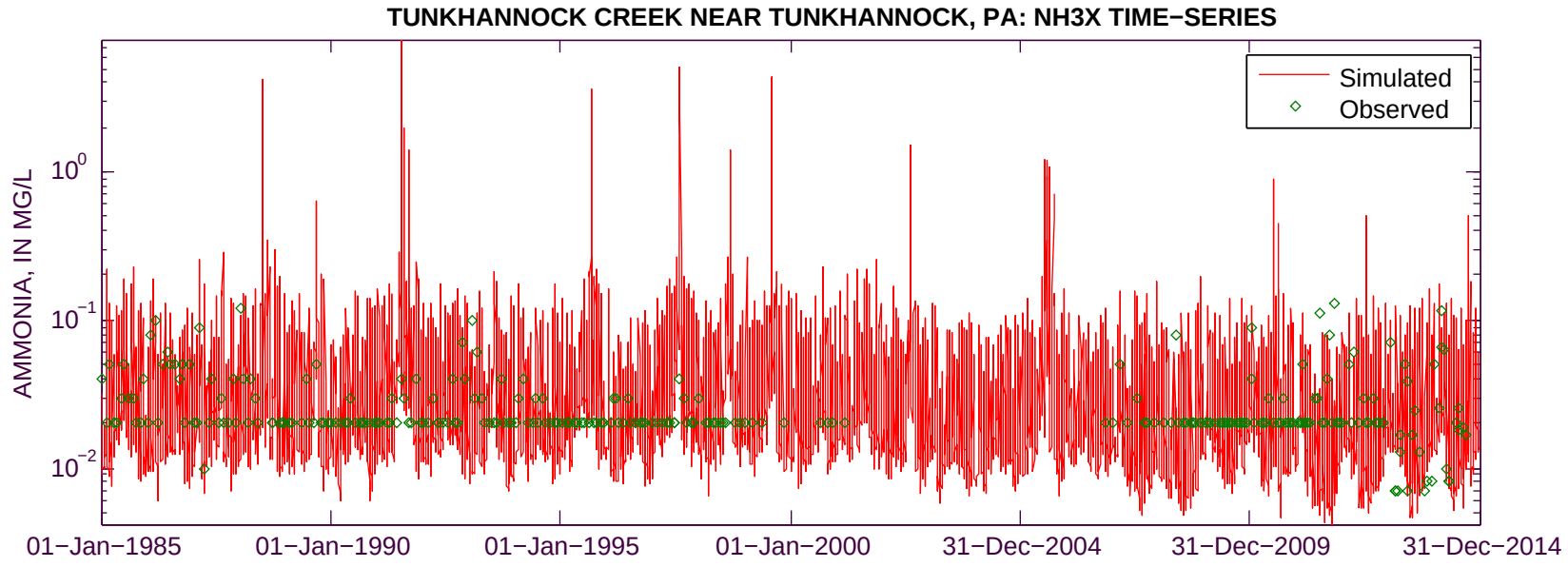
Dates: 1/1/1985 – 12/31/201

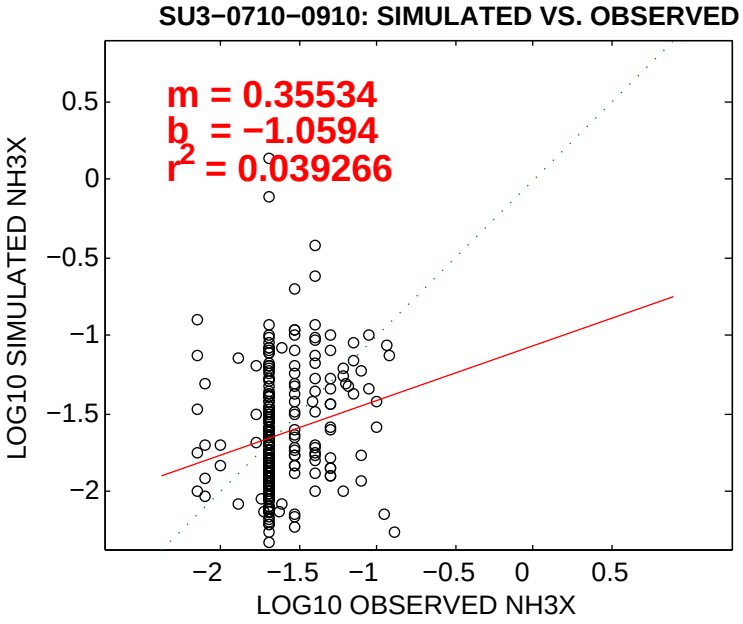
Drive	Directory	Observed
N/A	model	OBS20161101

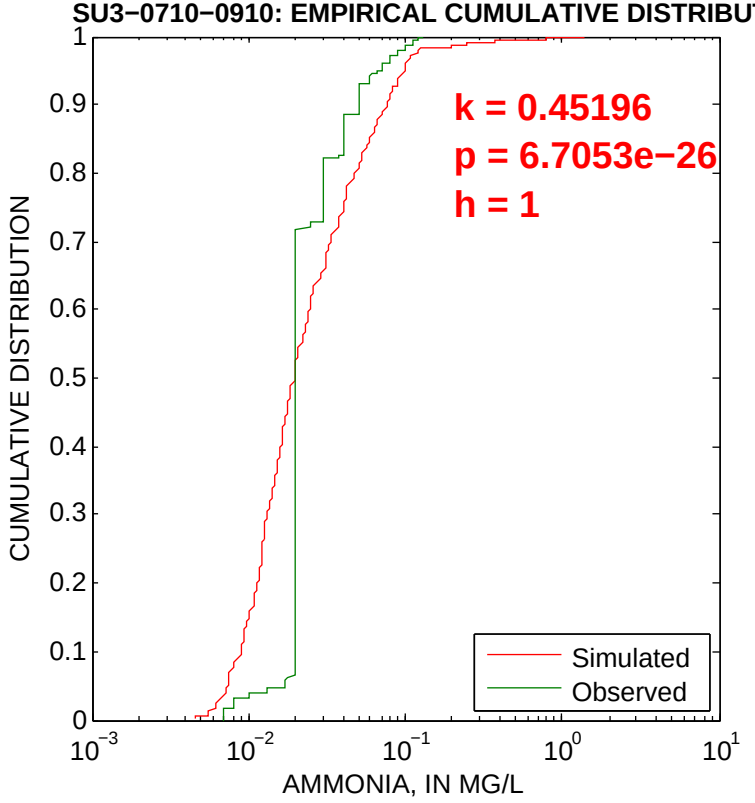
STATISTICS

	observe	simulate
n	10955	10948
min	9.9	0
	0.995635	-1.28375
mean	594.81	591.55
	2.49464	2.52957
media	323	384.81
	2.51055	2.58544
max	28100	27817
	4.44871	4.44431
varian	963155	834666
	0.244701	0.257468
JB	0.001	0.001
	0.005810	0.001
	ra	log
%	-0.548075	1.40018
err.va	277297	0.0705039
rel.std.err	0.287905	0.288123
mod.eff	0.712095	0.711877

VERSION 2.1







DATA SELECTION

scenario	file
P620171001WQ	NH3X.calib

plot: NH3X - ammonia

Dates: 1/1/1985 – 12/31/201

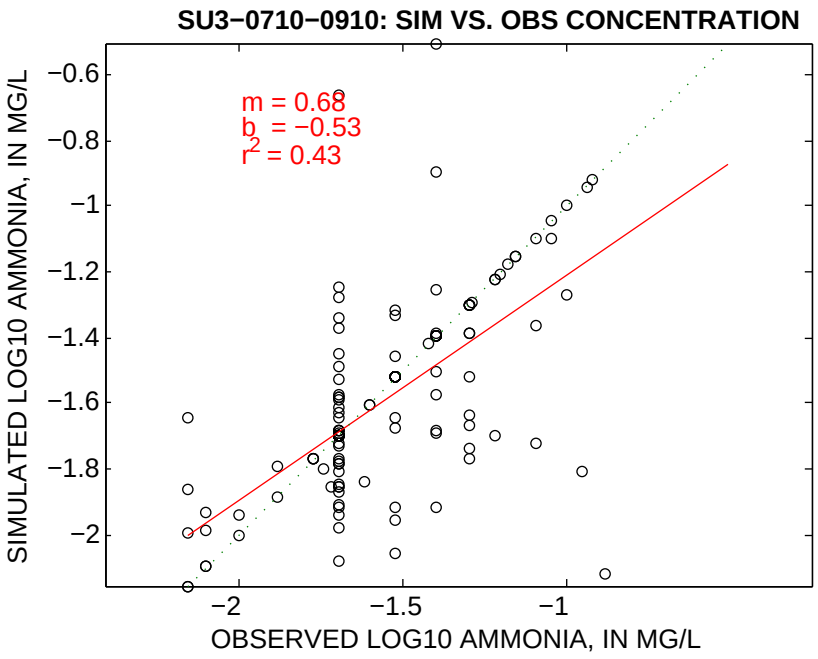
Drive: N/A Directory: model Observed: OBS20161101

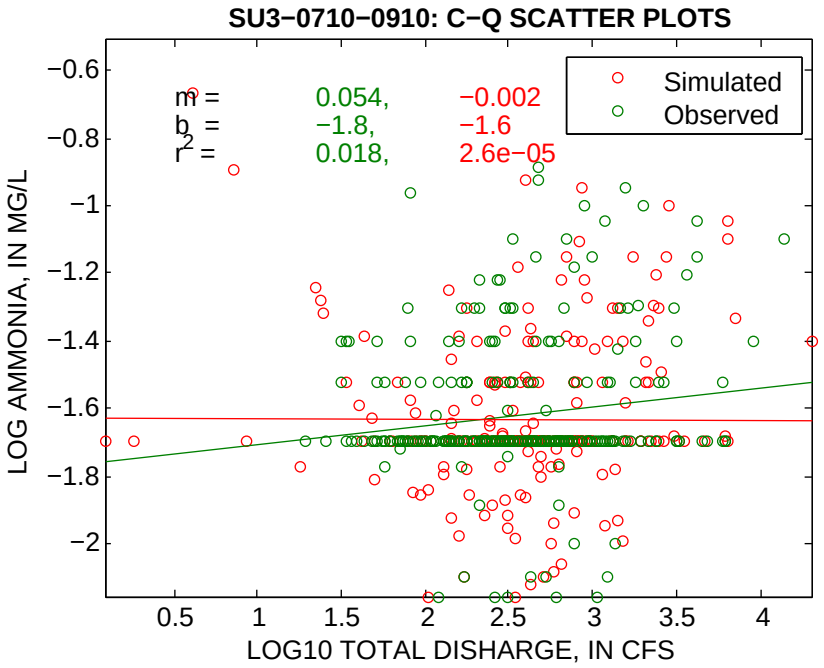
STATISTICS

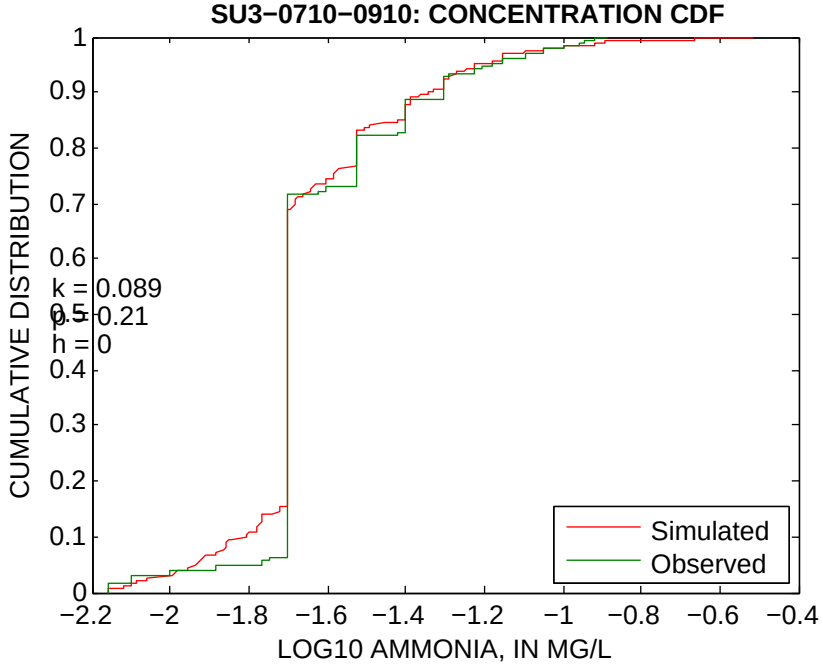
	n	281	280
		observe	simulate
min		0.007	0
		-2.1549	-2.33128
mean		0.0274591	0.0397198
		-1.62049	-1.63522
media		0.02	0.019672
		-1.69897	-1.70575
max		0.13	1.3809
		-0.886057	0.140162
varian		0.00034387	0.0097663
		0.043431	0.139659
JB		0.001	0.001
		0.001	0.001
		ra	log
%		44.651	0.90852
err.va		0.0101058	0.152442
rel.std.err		29.3885	3.50999
mod.eff		-28.3885	-2.50999

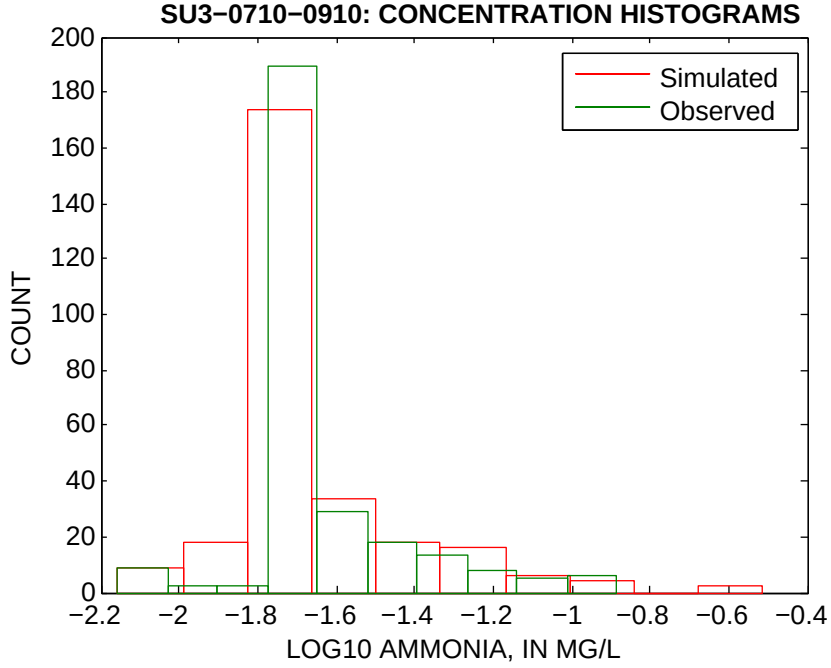
VERSION 2.1

ALL DATA
LOG10

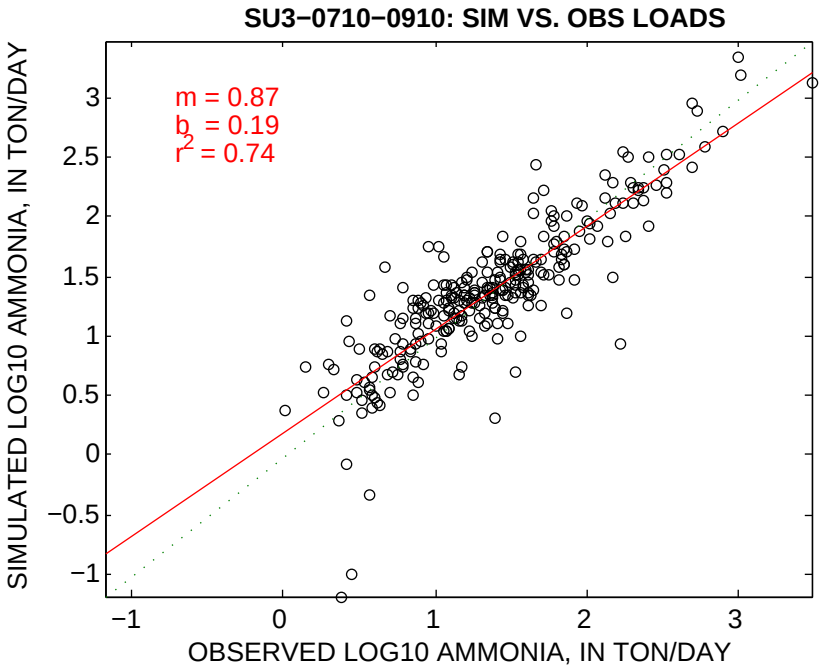


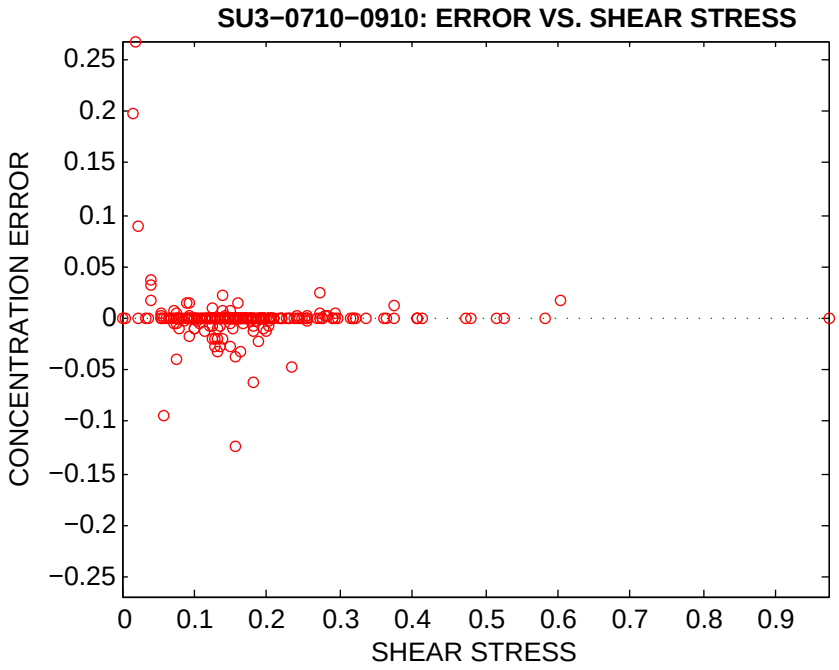


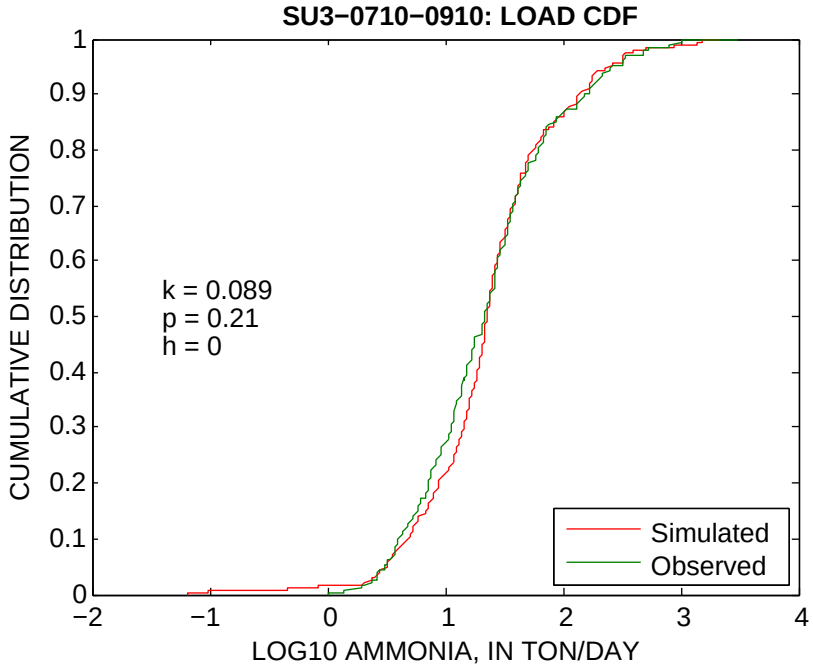


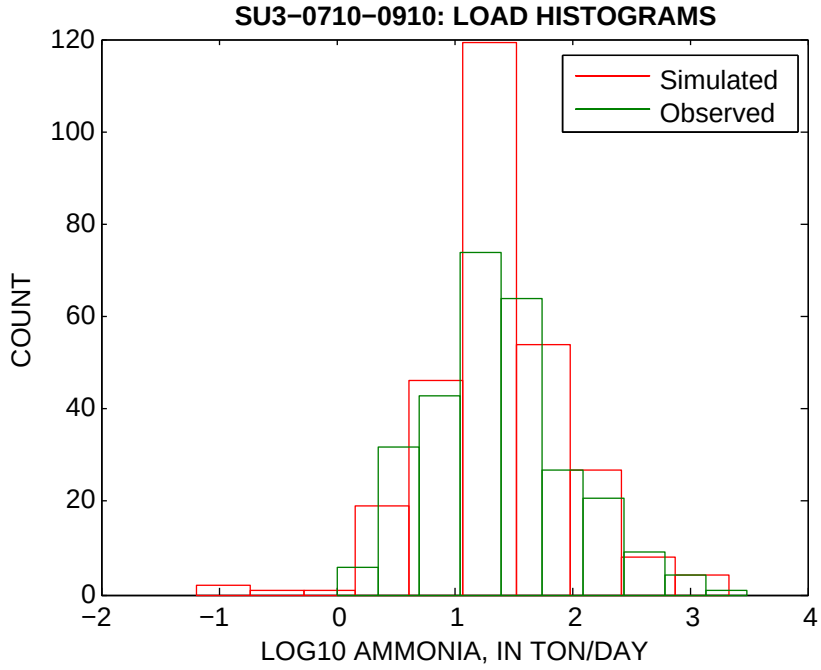


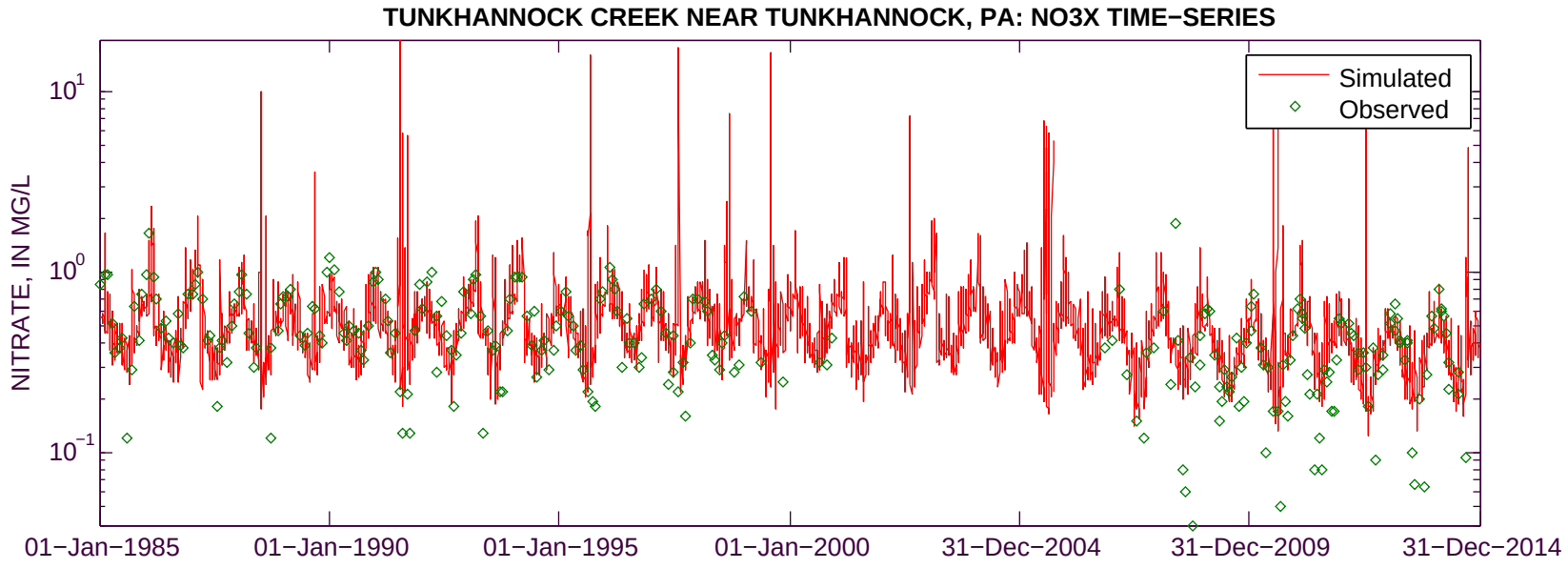
LOAD DATA
LOG10

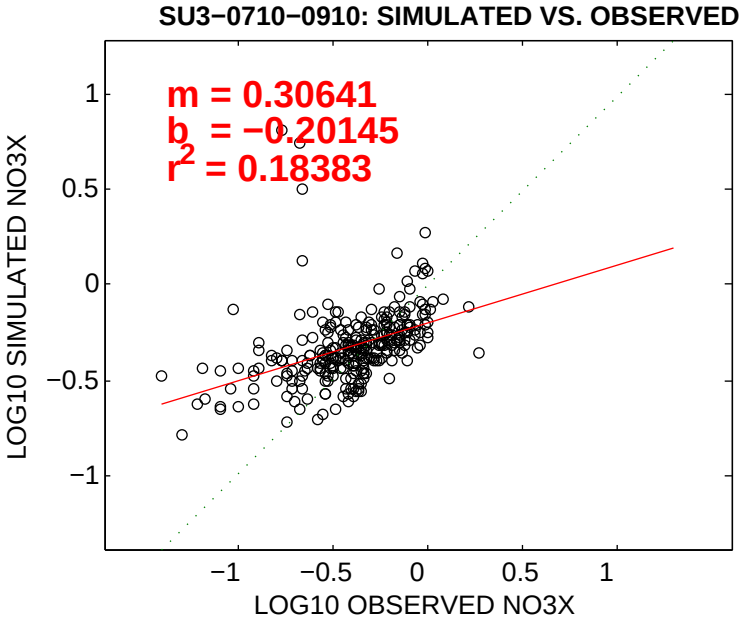


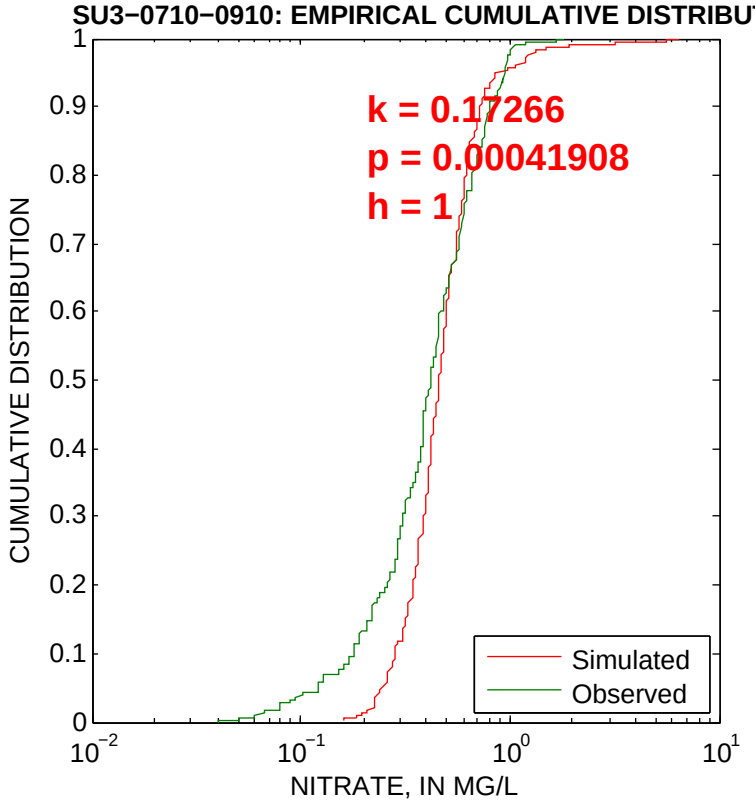












DATA SELECTION

scenario	file
P620171001WQ	NO3X.calib

plot: NO3X - nitrate

Dates: 1/1/1985 – 12/31/201

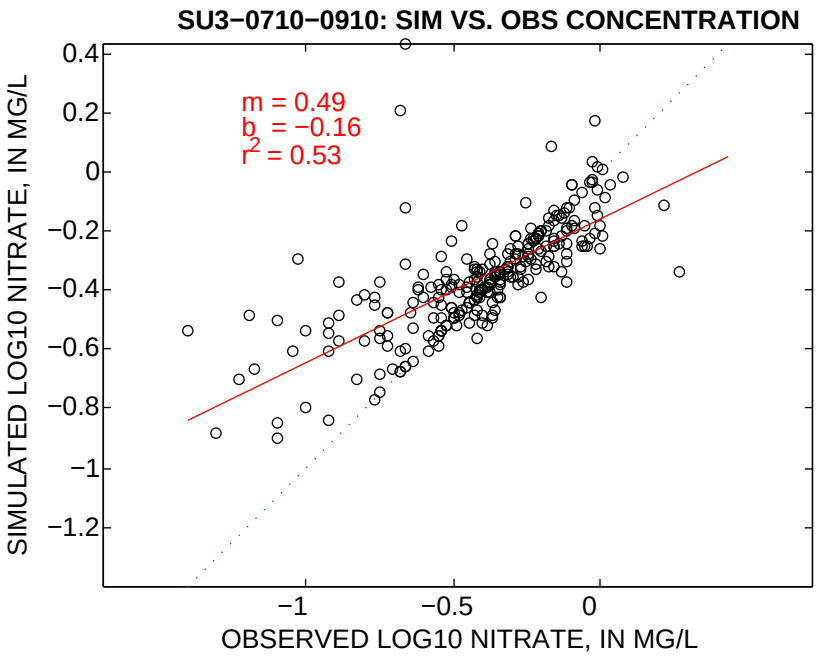
Drive	Directory	Observed
N/A	model	OBS20161101

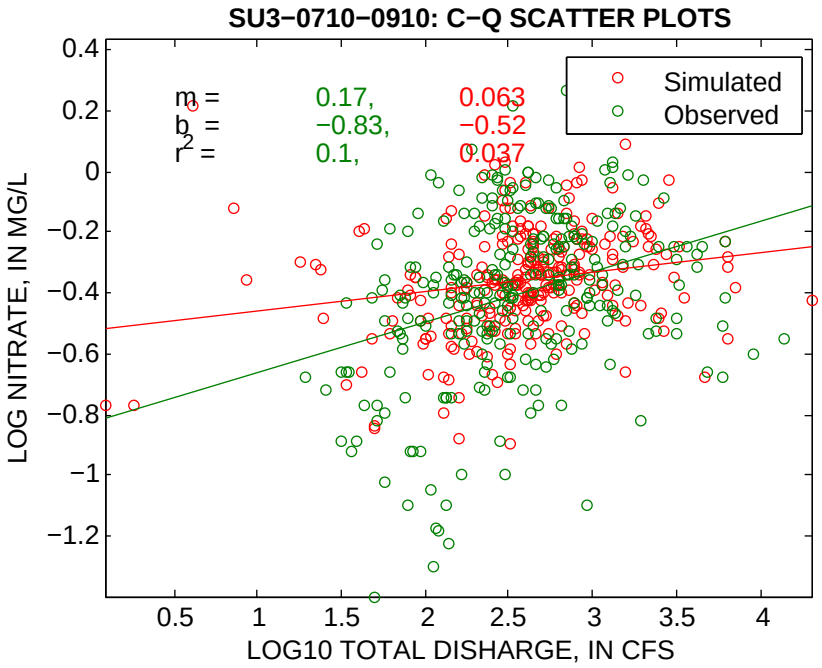
STATISTICS

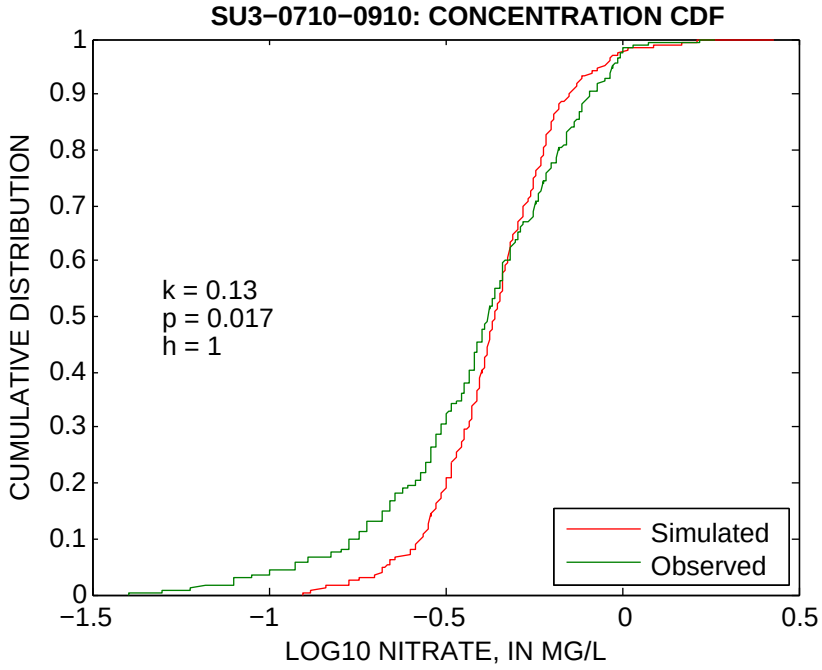
	n	observe	simulate
		278	277
min		0.04	0
		-1.39794	-0.789147
mean		0.467529	0.54487
		-0.40268	-0.324836
media		0.42	0.45864
		-0.376751	-0.338414
max		1.84	6.4664
		0.264818	0.810663
varian		0.0685845	0.295618
		0.074014	0.0378027
JB		0.001	0.001
		0.001	0.001
		ra	log
%		16.5425	-19.3315
err.va		0.335459	0.0725407
rel.std.err		4.89118	0.980093
mod.eff		-3.89118	0.0199069

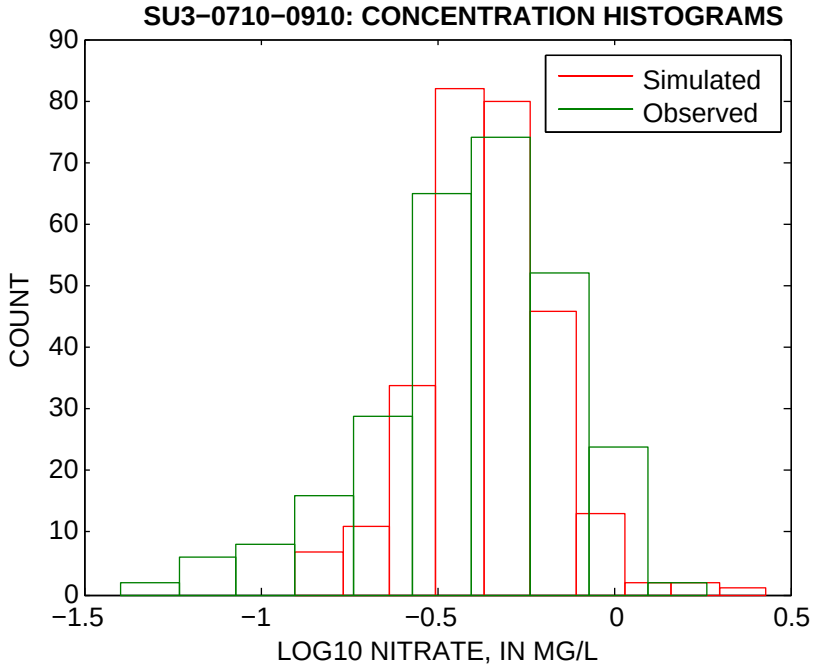
VERSION 2.1

ALL DATA
LOG10

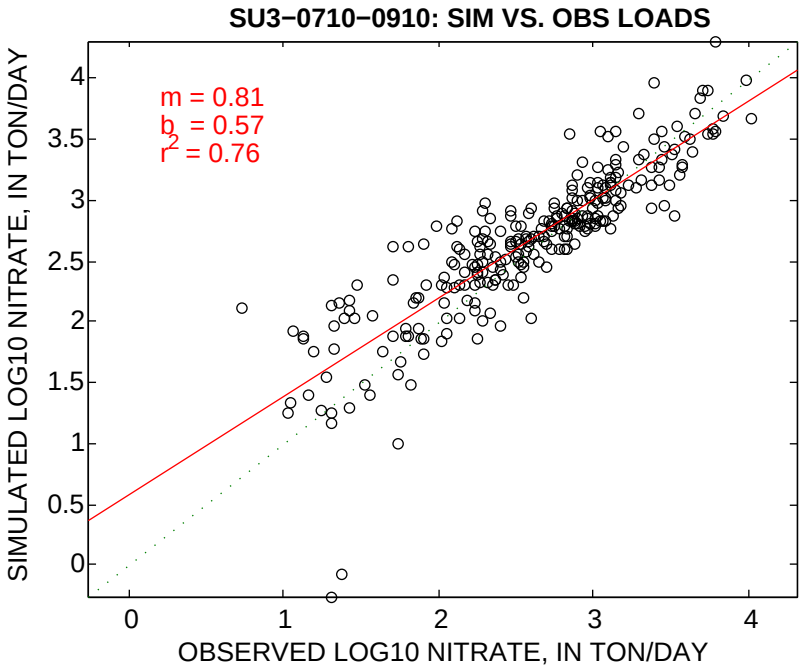


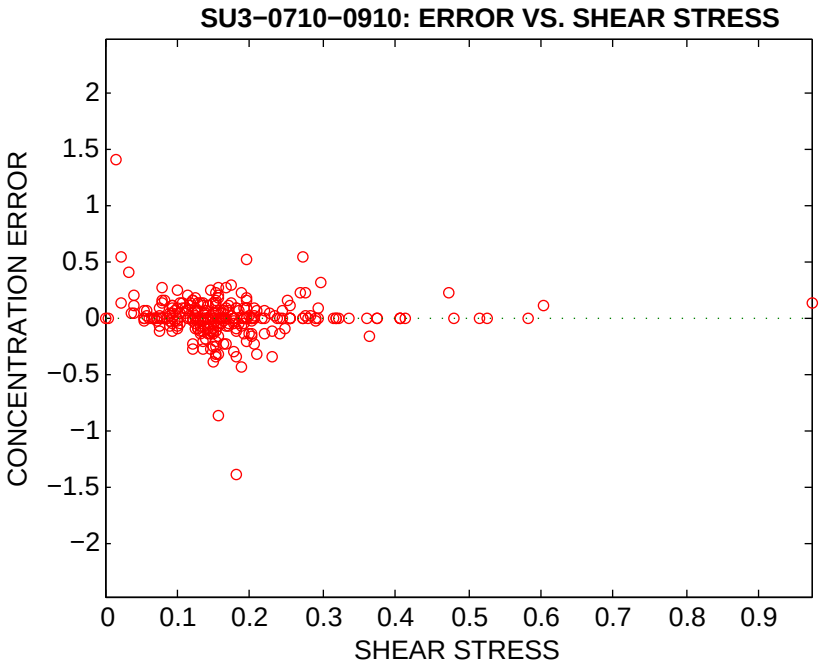


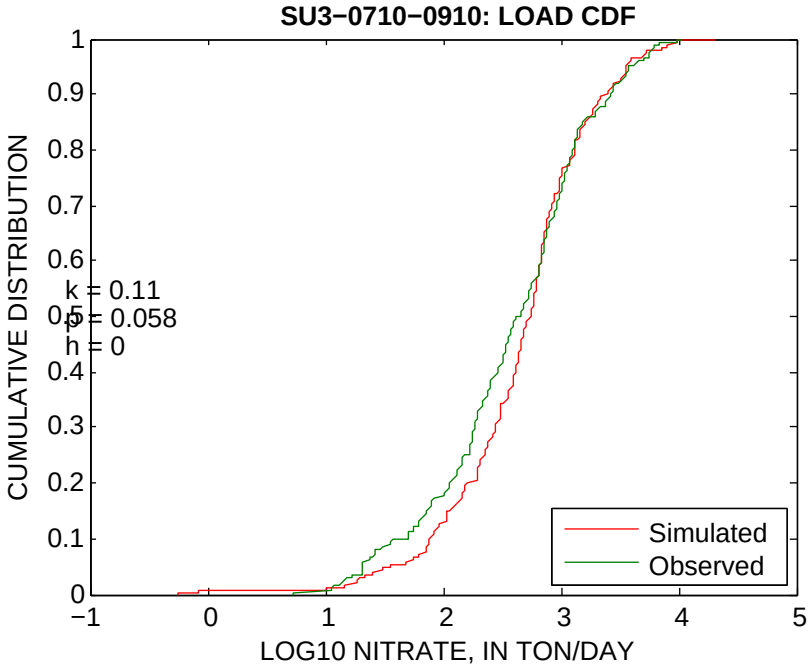


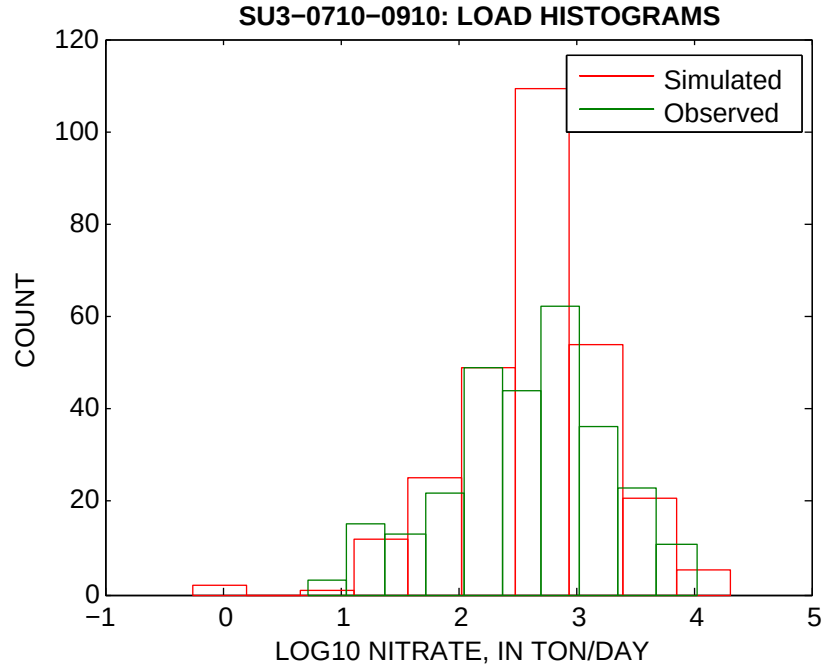


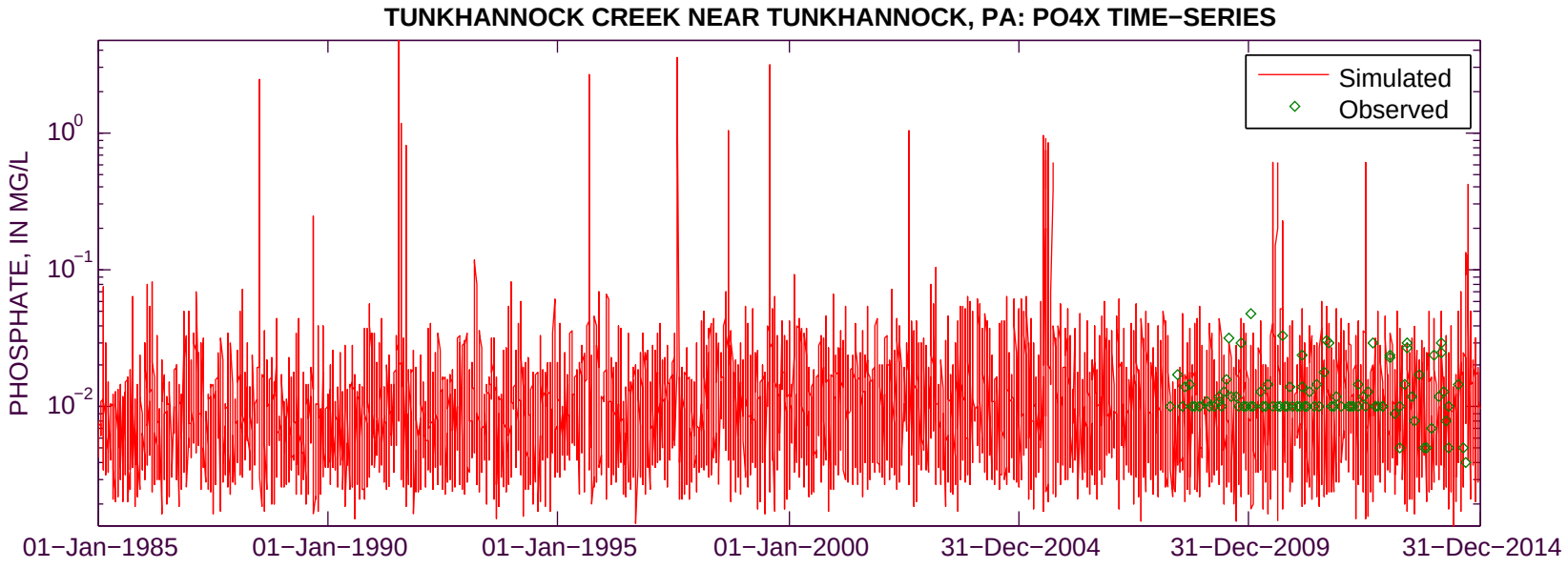
LOAD DATA
LOG10

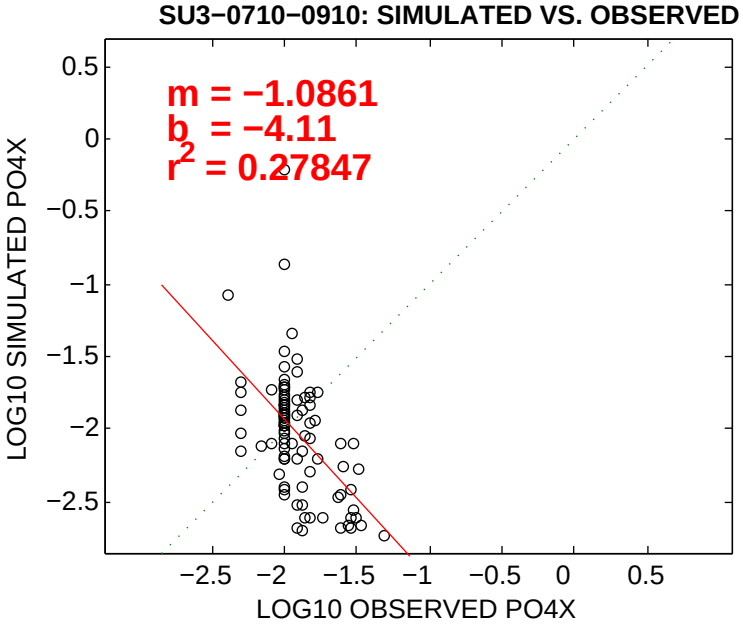


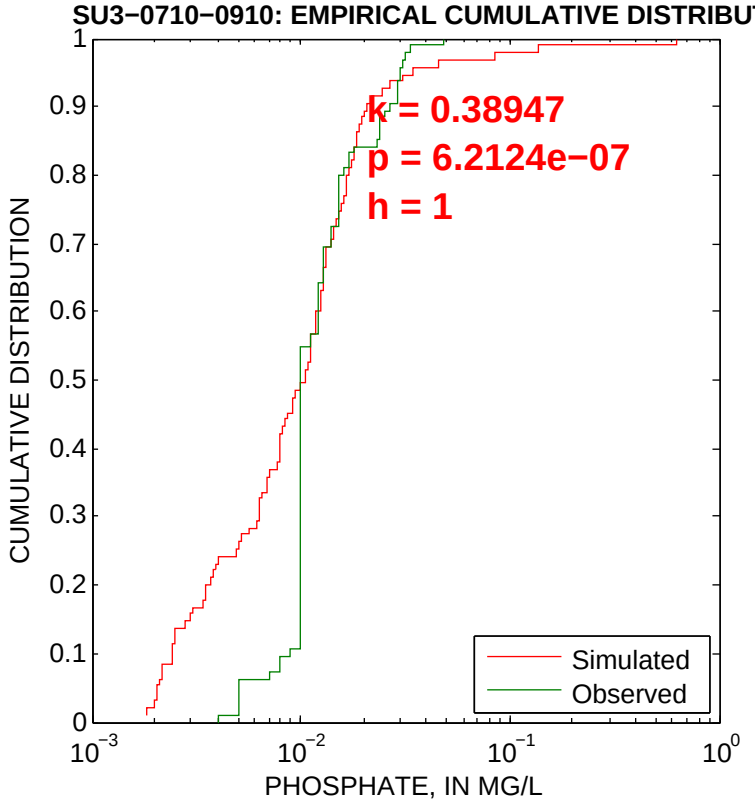












DATA SELECTION

scenario	file
P620171001WQ	PO4X.calib

plot: PO4X - phosphate

Dates: 1/1/1985 – 12/31/201

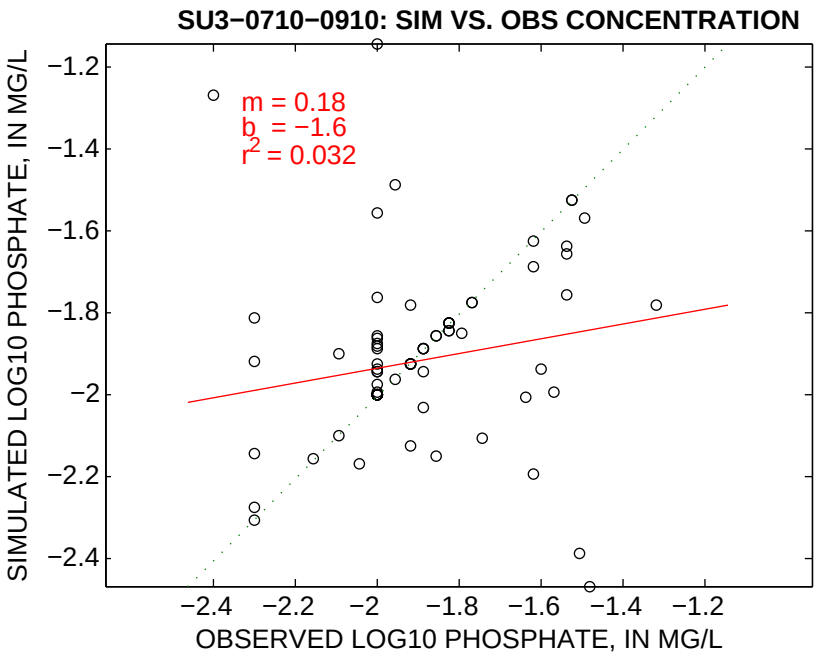
Drive	Directory	Observed
N/A	model	OBS20161101

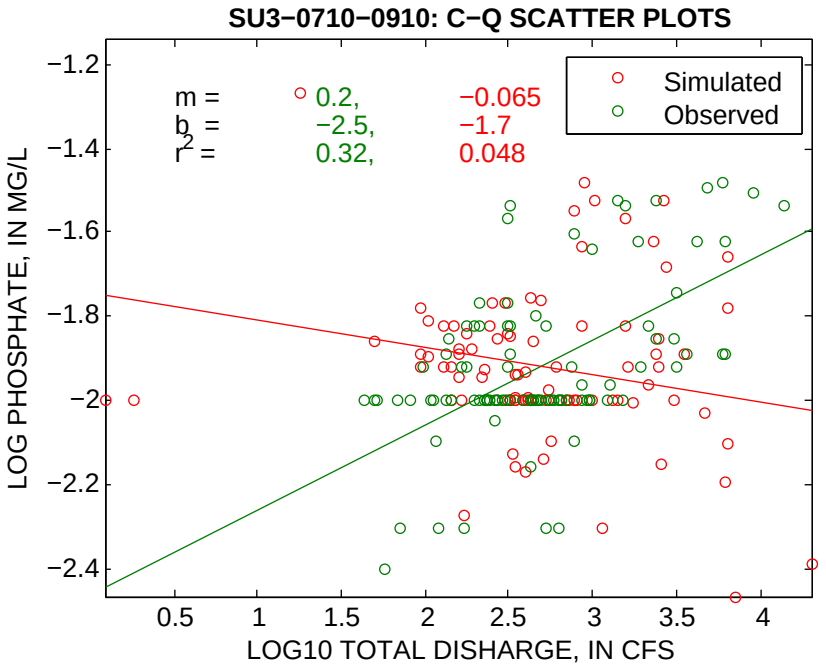
STATISTICS

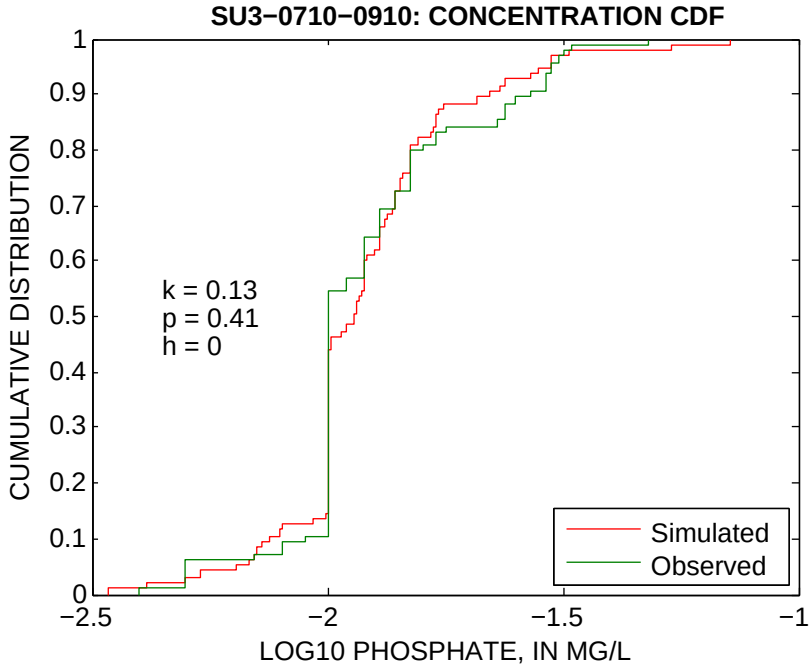
	n	observe	simulate
		95	94
min		0.004	0
		-2.39794	-2.73445
mean		0.0137368	0.019295
		-1.91096	-2.03443
media		0.01	0.010505
		-2	-1.97508
max		0.048	0.6245
		-1.31876	-0.204468
varian		5.74513e-0	0.00421564
		0.0403515	0.170944
JB		0.001	0.001
		0.037465	0.001
		ra	log
%		40.4614	6.46123
err.va		0.00442542	0.314359
rel.std.err		77.0291	7.79052
mod.eff		-76.0291	-6.79052

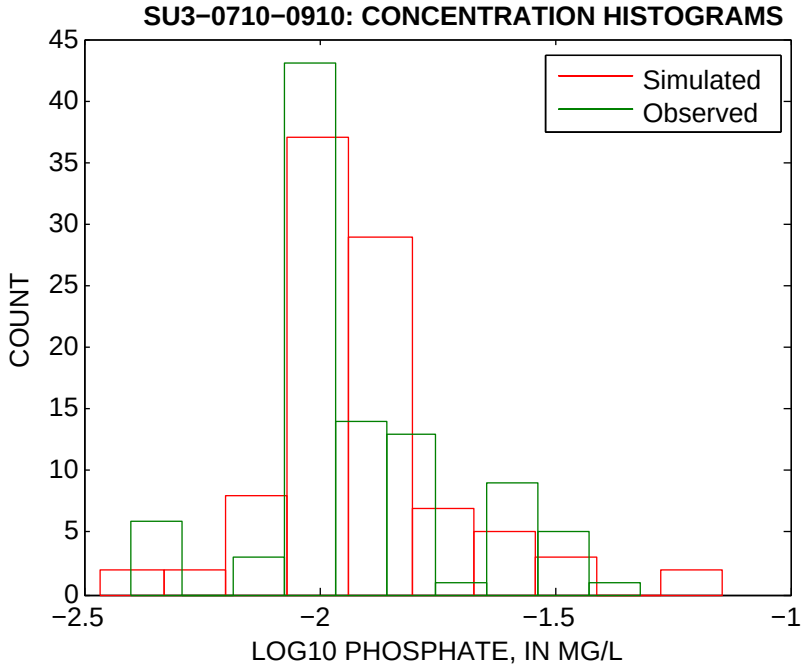
VERSION 2.1

ALL DATA
LOG10

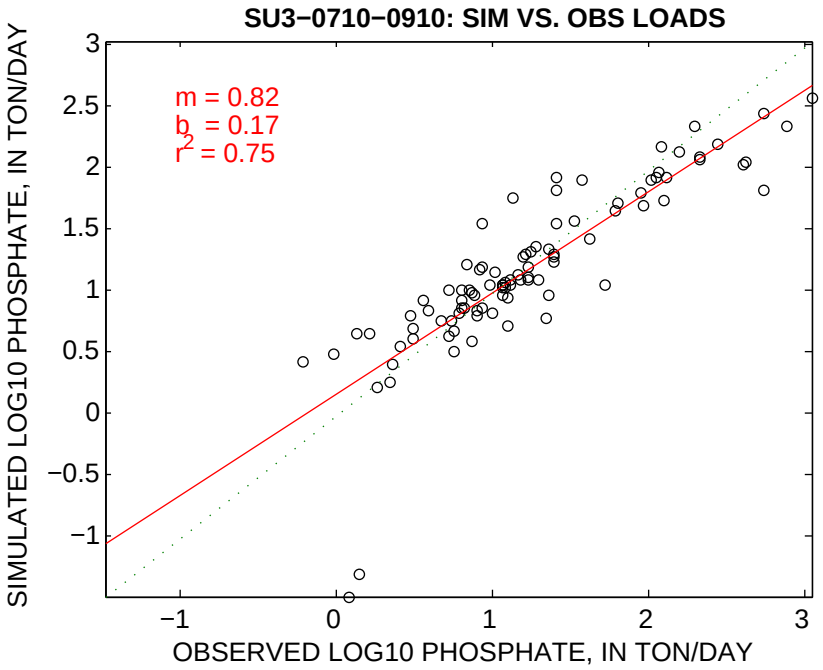


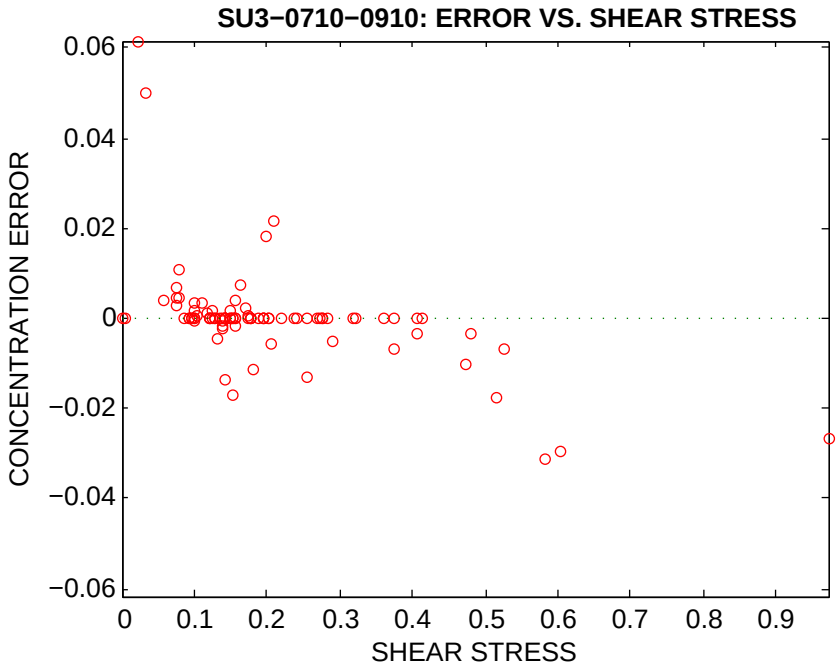


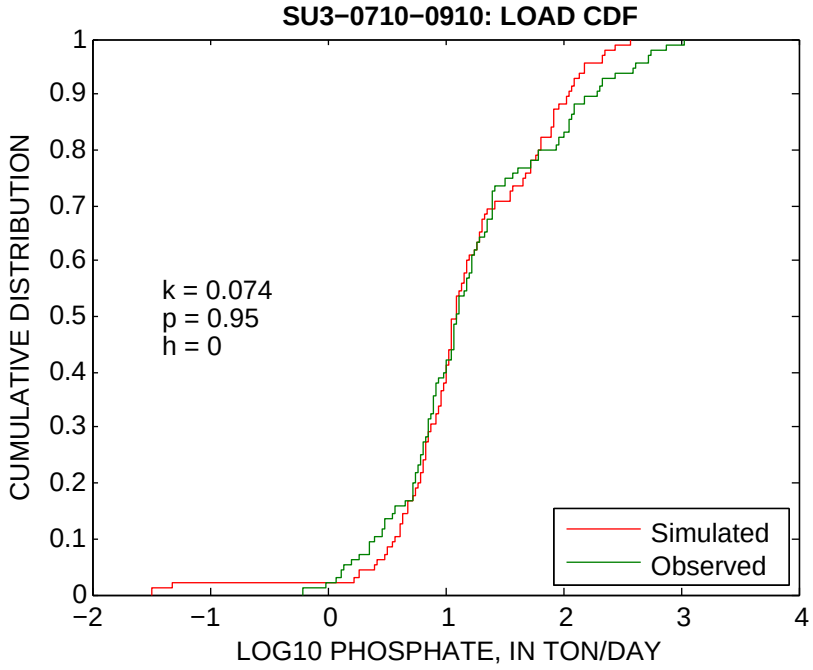


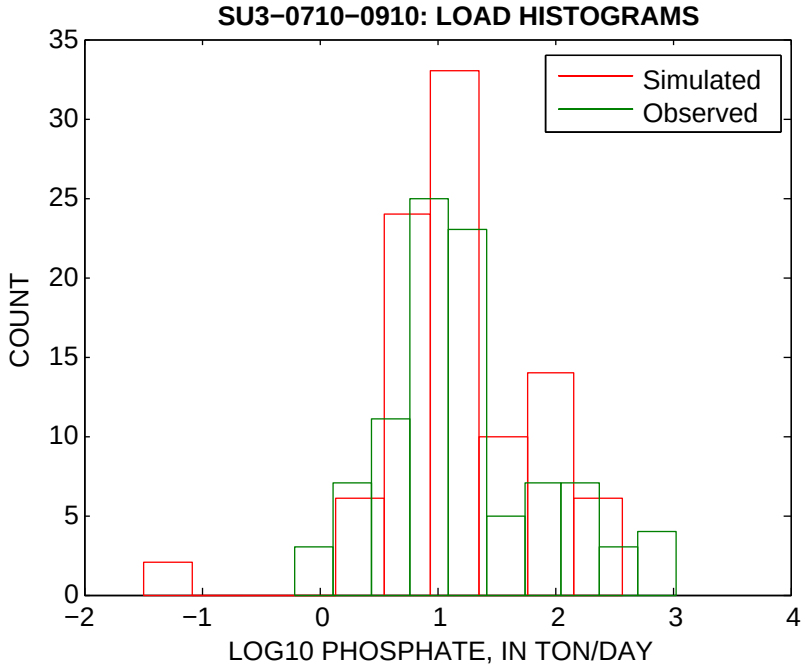


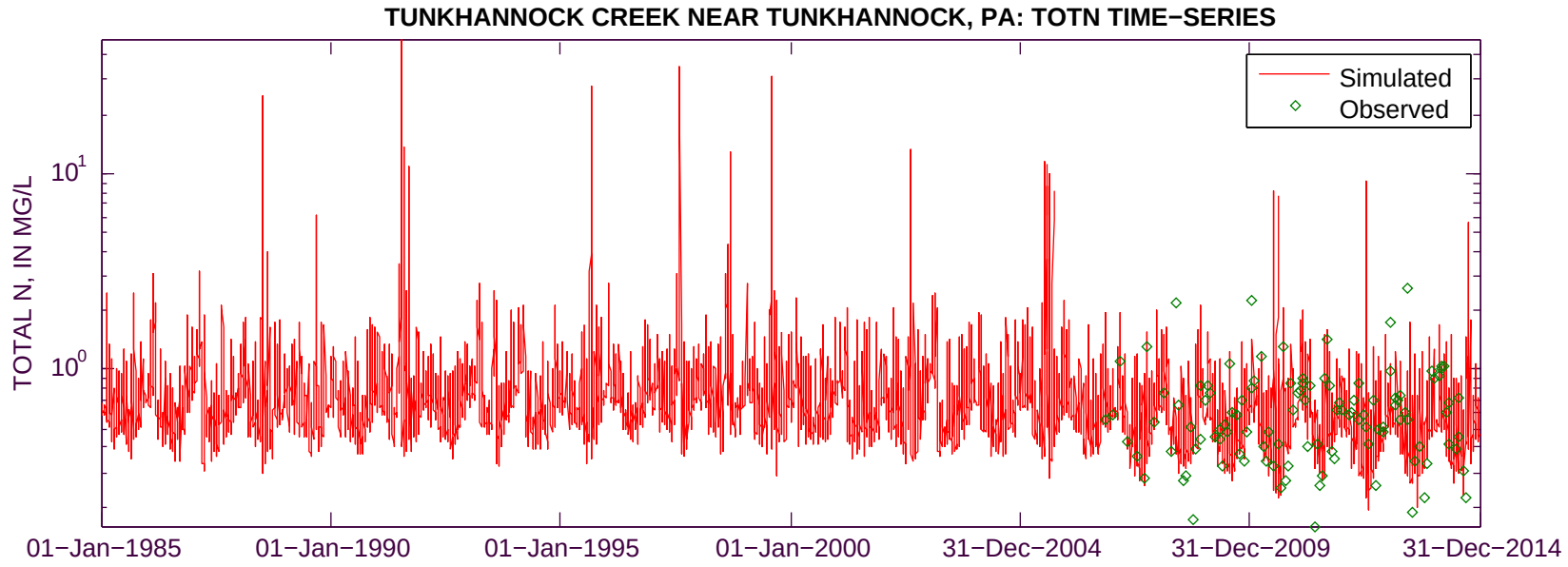
LOAD DATA
LOG10

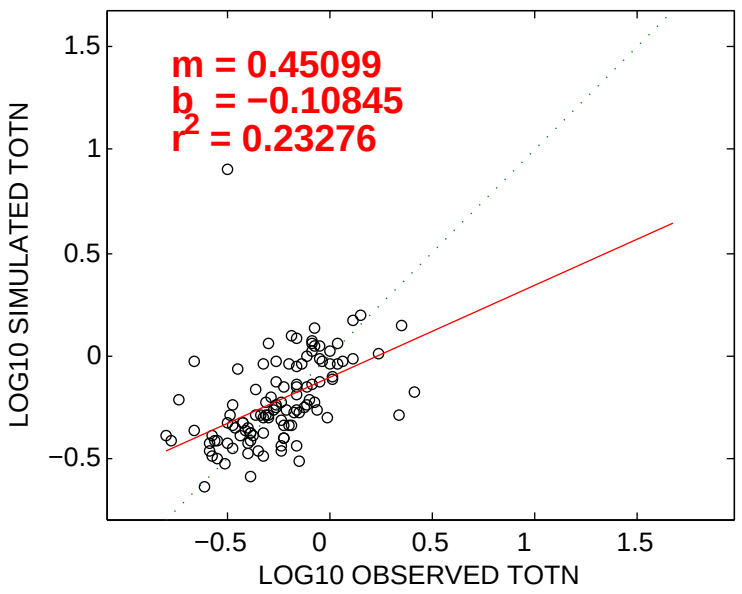


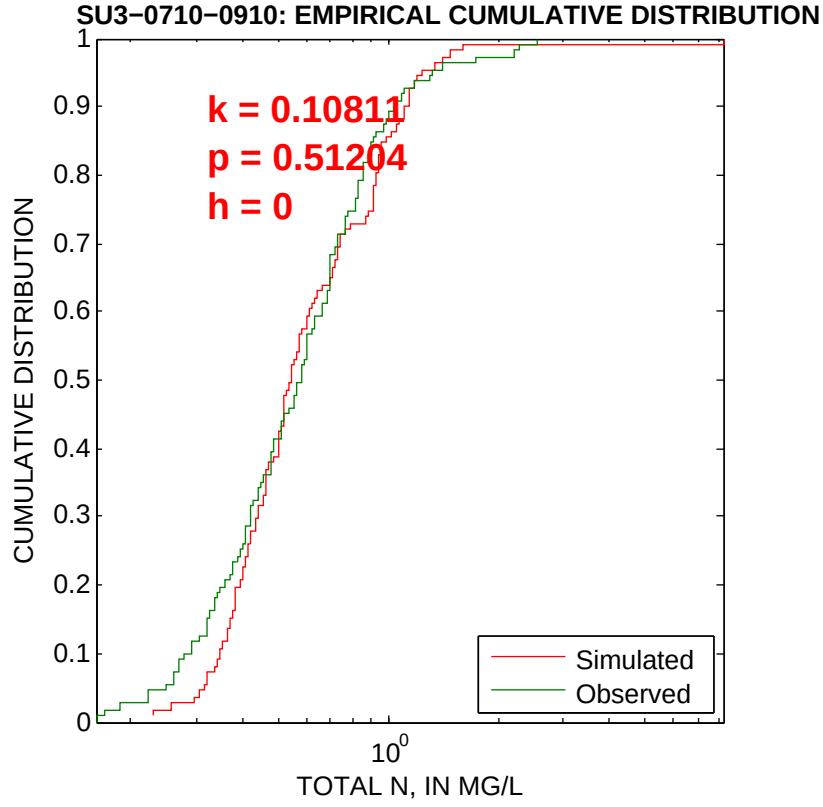












DATA SELECTION

scenario	file
P620171001WQ	TOTN.calib

plot: TOTN - total nitrogen

Dates: 1/1/1985 – 12/31/201

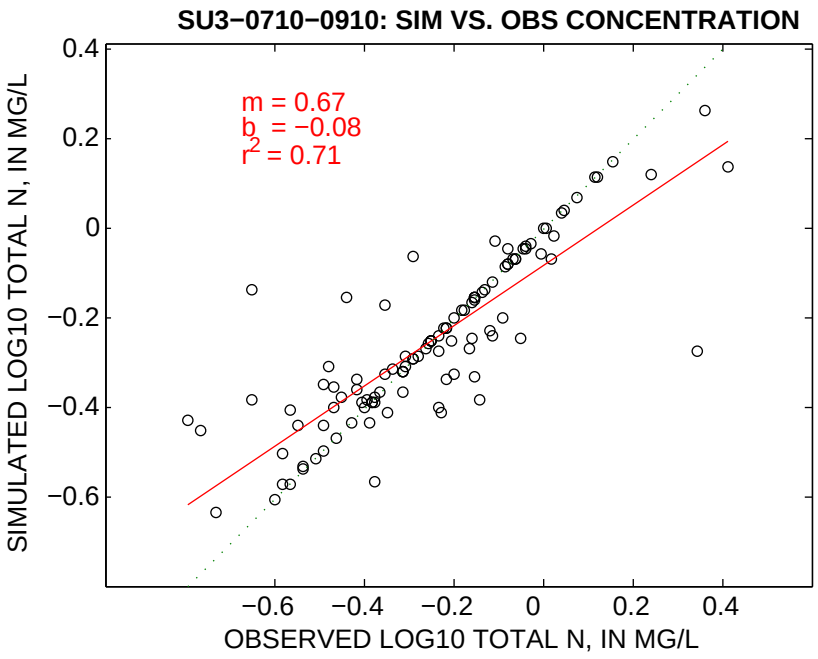
Drive	Directory	Observed
N/A	model	OBS20161101

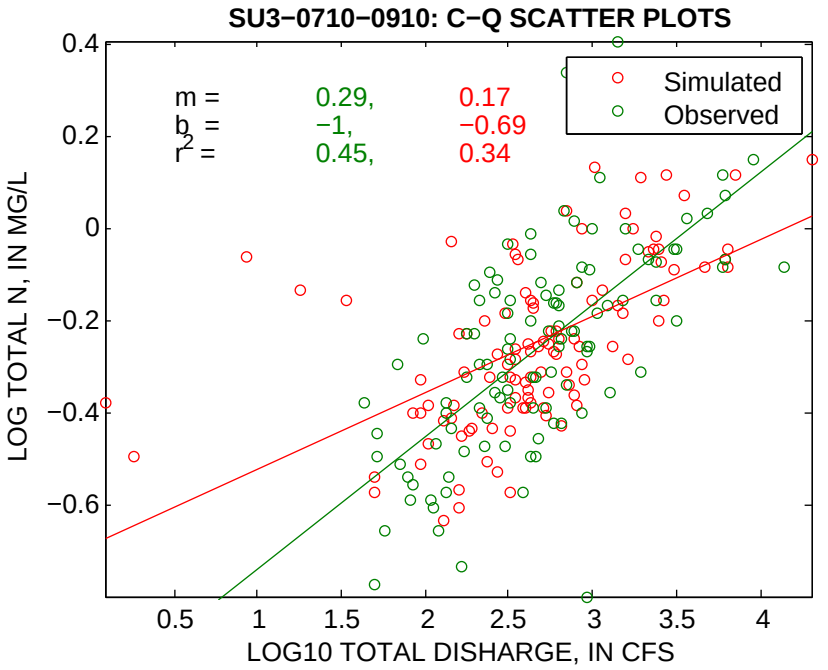
STATISTICS

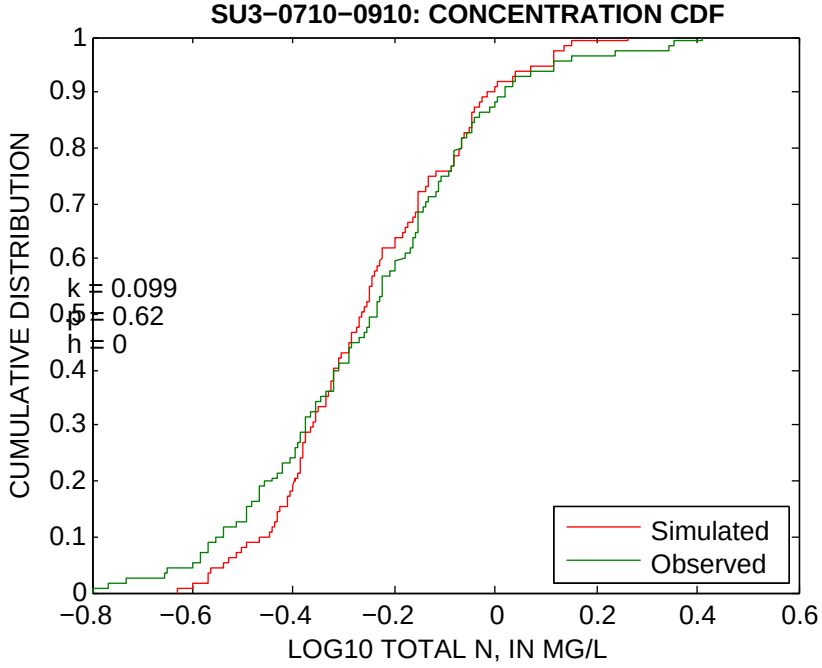
	n	observe	simulate
		111	110
min		0.16	0
		-0.79588	-0.636369
mean		0.652018	0.708832
		-0.248167	-0.220375
media		0.58	0.5444
		-0.236572	-0.263182
max		2.565	8.1545
		0.409087	0.911397
varian		0.162064	0.599834
		0.0537736	0.0469872
JB		0.001	0.001
		0.5	0.001
		ra	log
%		8.71352	-11.199
err.va		0.677747	0.0530379
rel.std.err		4.18198	0.98632
mod.eff		-3.18198	0.0136804

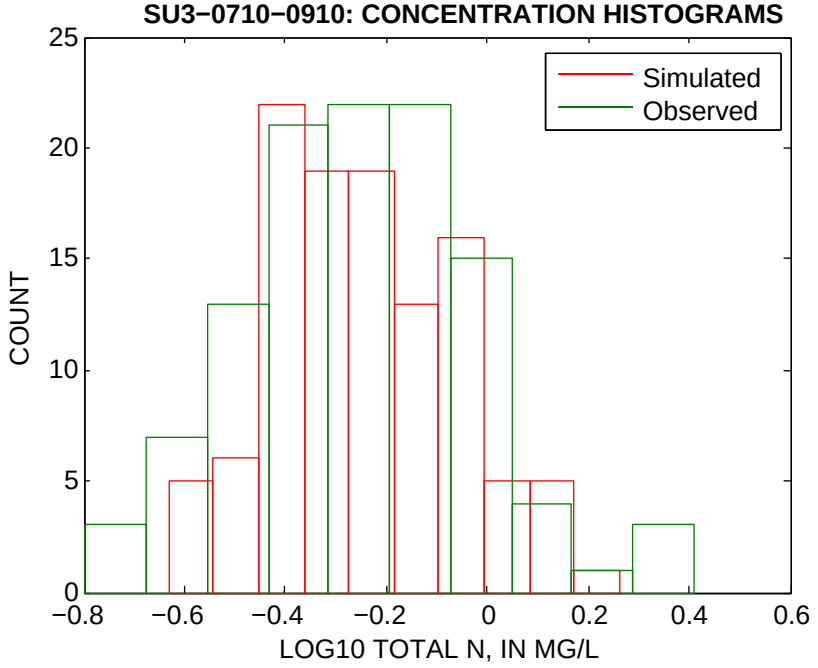
VERSION 2.1

ALL DATA
LOG10

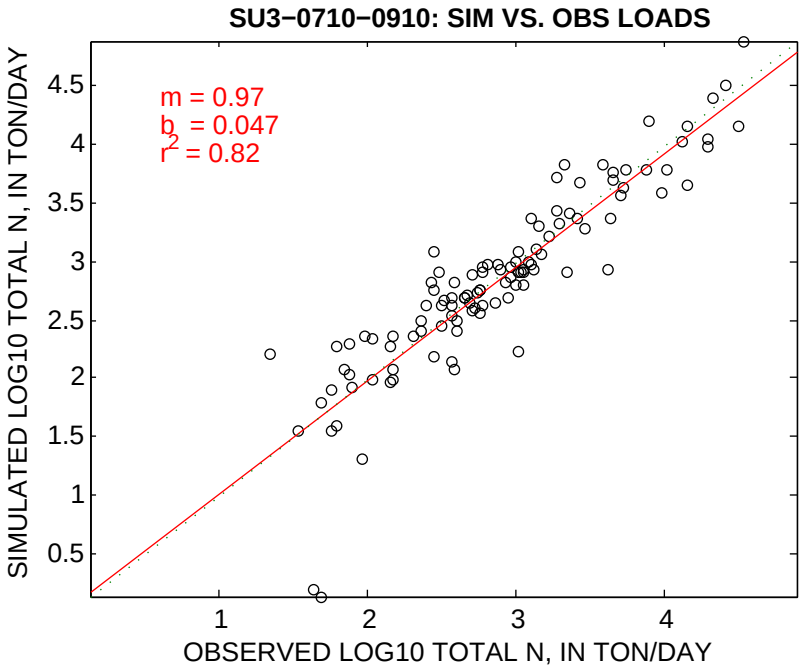


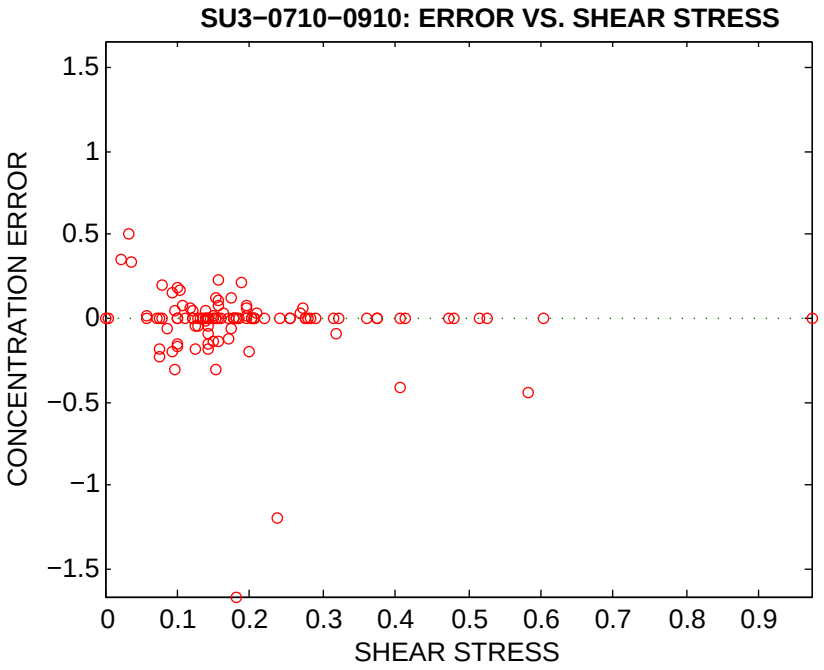


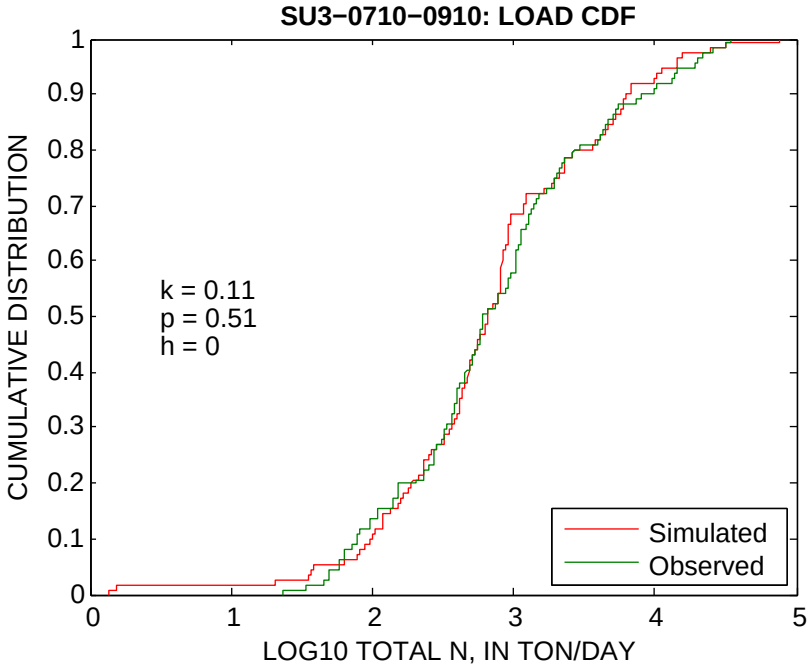


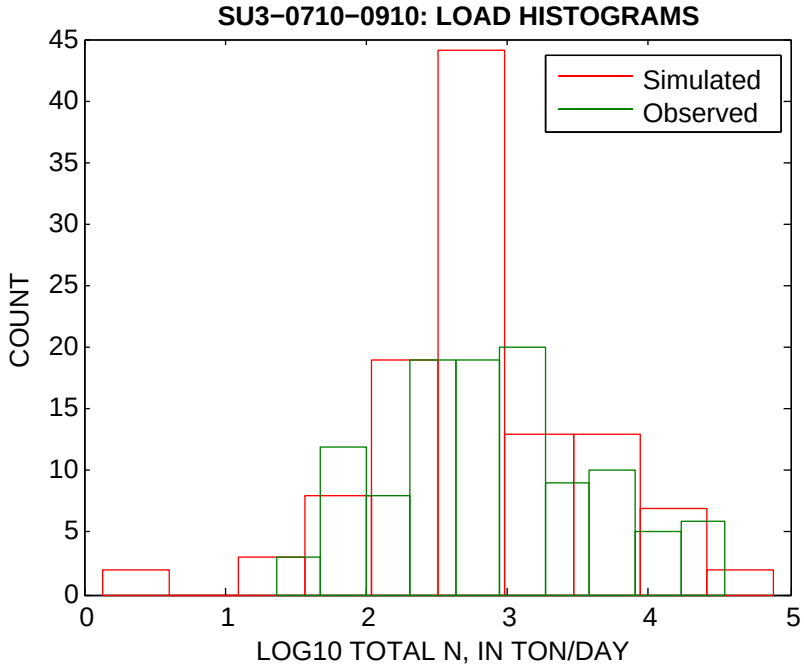


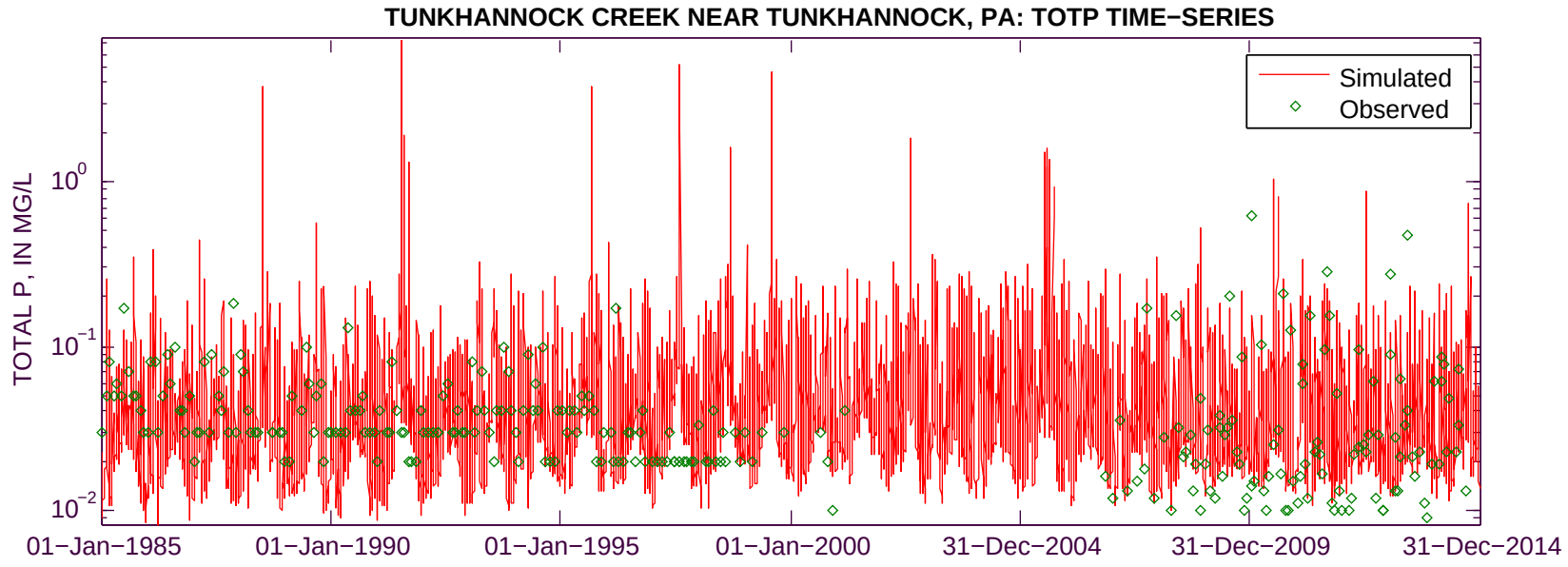
LOAD DATA
LOG10

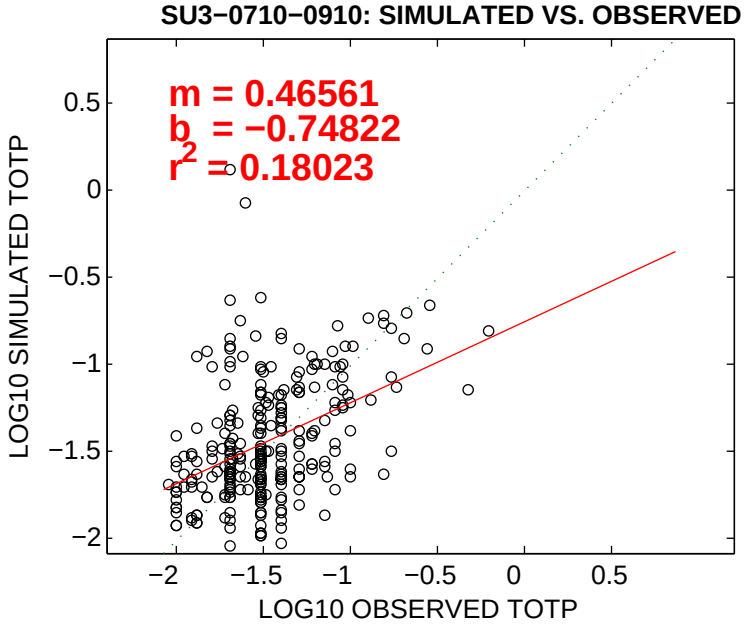


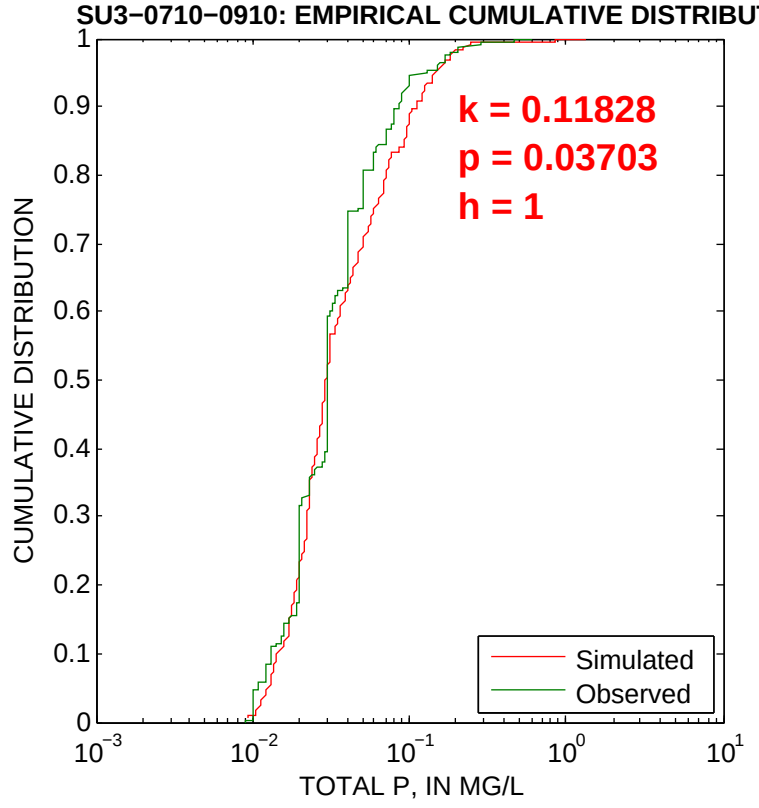












DATA SELECTION

scenario	file
P620171001WQ	TOTP.calib

plot: TOTP - total phosphorus

Dates: 1/1/1985 – 12/31/201

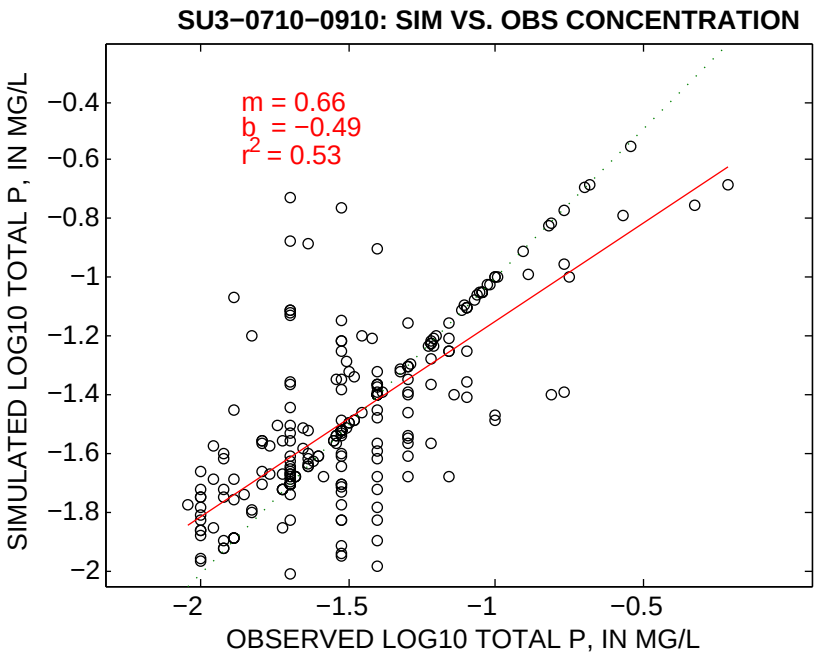
Drive	Directory	Observed
N/A	model	OBS20161101

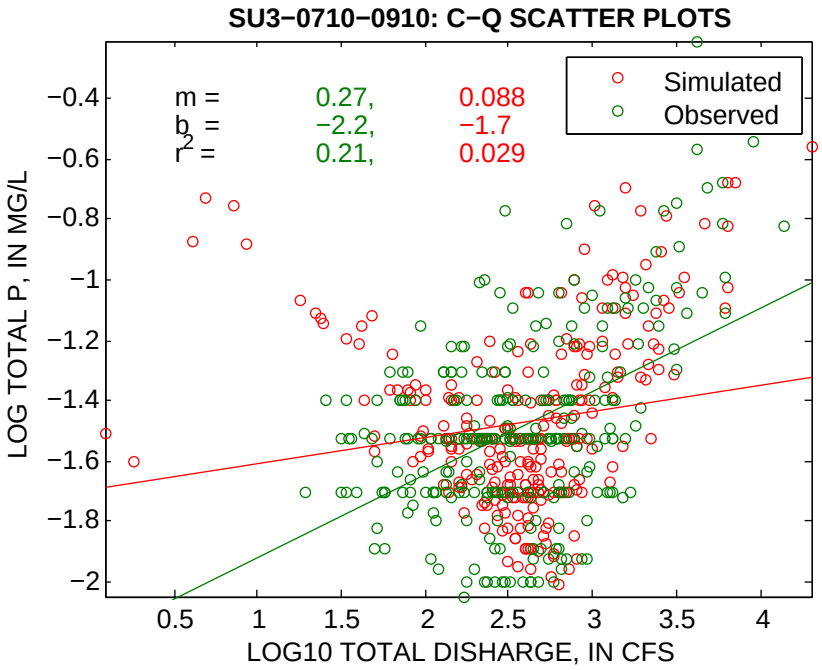
STATISTICS

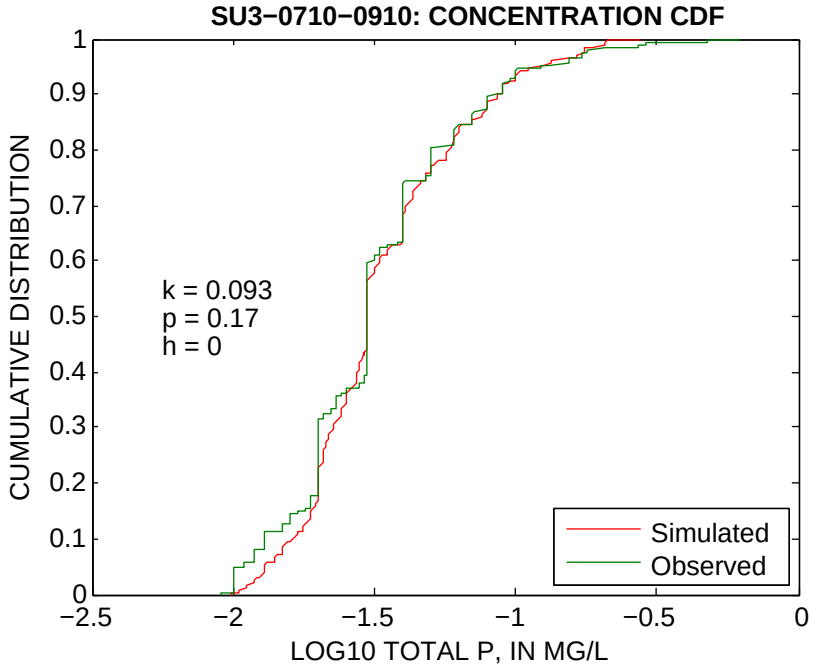
	n	observe	simulate
		279	278
min		0.009	0
		-2.04576	-2.04657
mean		0.0452043	0.0550271
		-1.48726	-1.4407
media		0.03	0.02966
		-1.52288	-1.52698
max		0.619	1.3335
		-0.208309	0.124993
varian		0.00337598	0.0100244
		0.097716	0.117539
JB		0.001	0.001
		0.001	0.001
		ra	log
%		21.7297	-3.13061
err.va		0.0116851	0.126435
rel.std.err		3.46124	1.29391
mod.eff		-2.46124	-0.293907

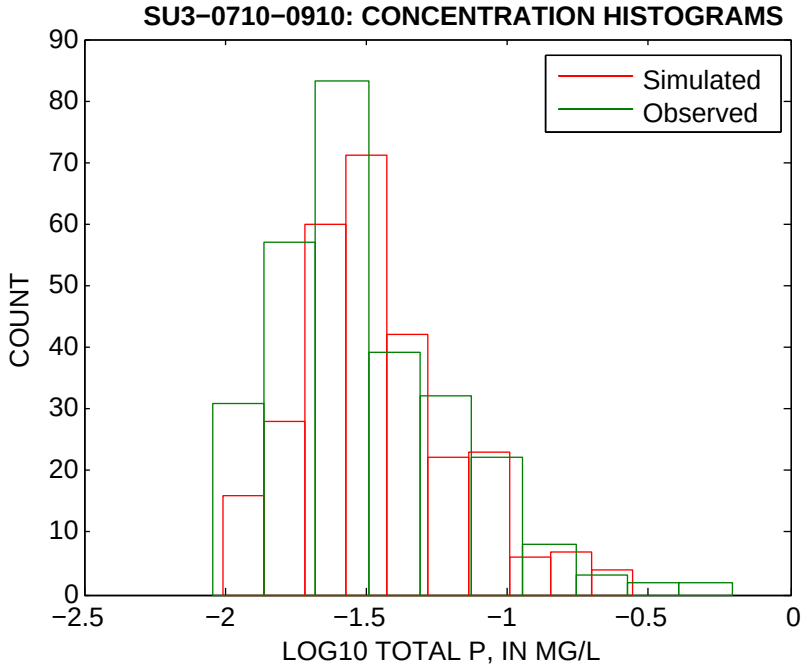
VERSION 2.1

ALL DATA
LOG10

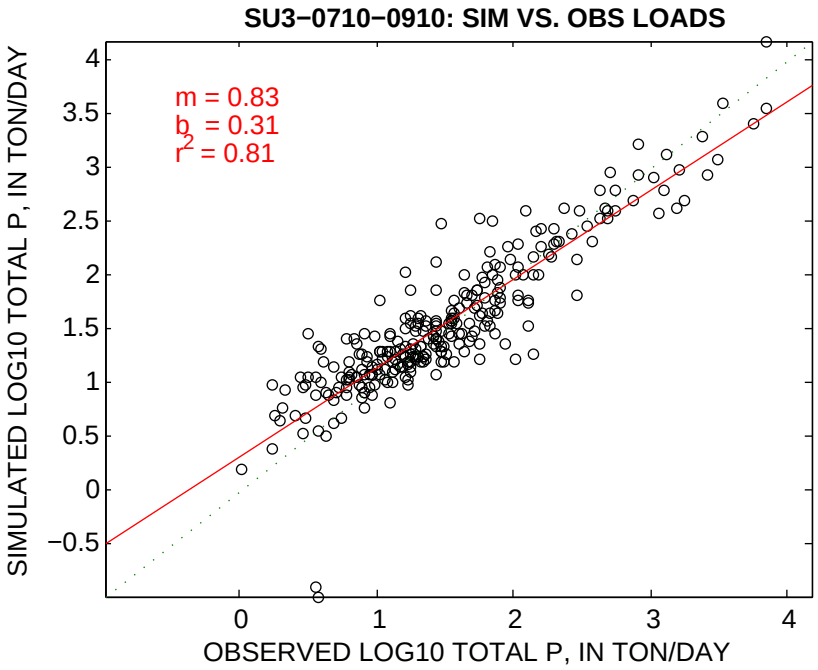


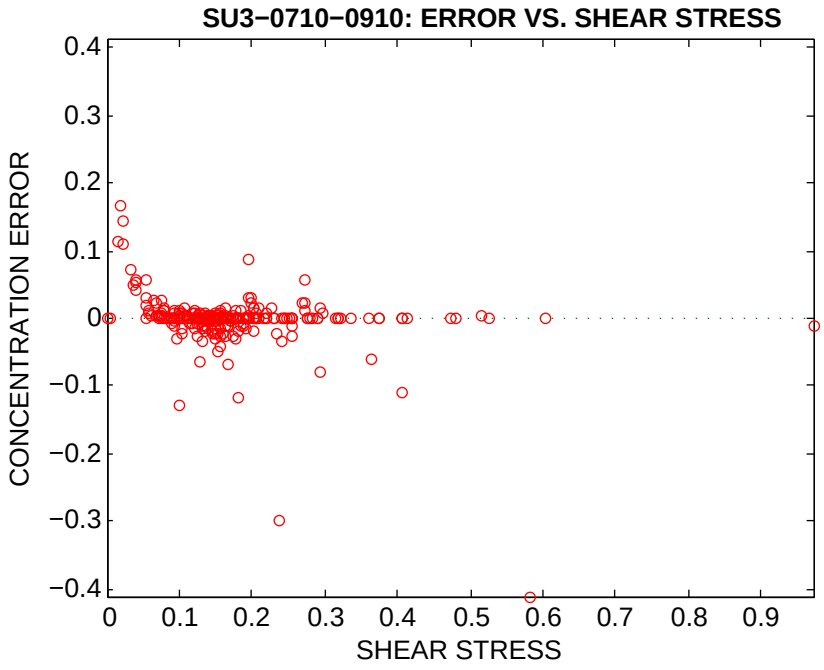


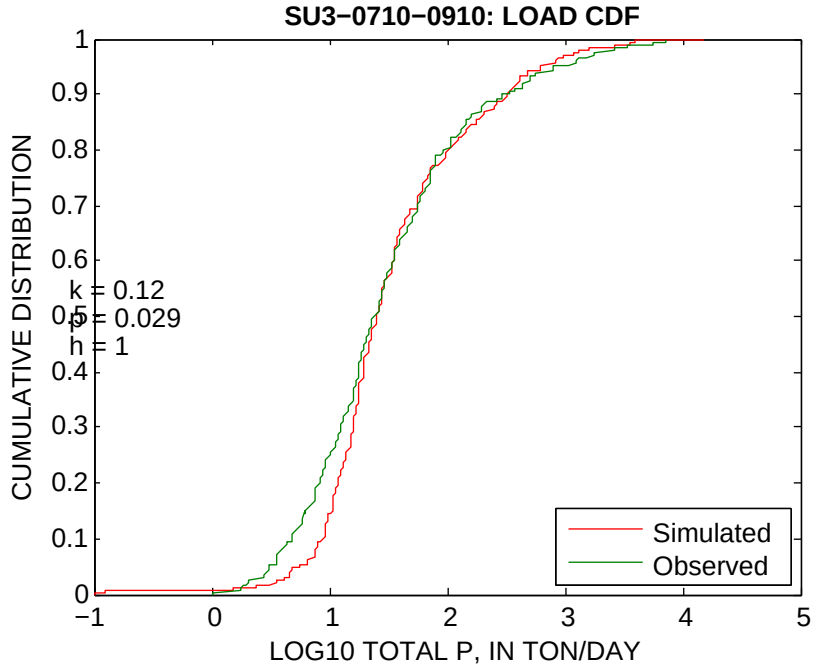


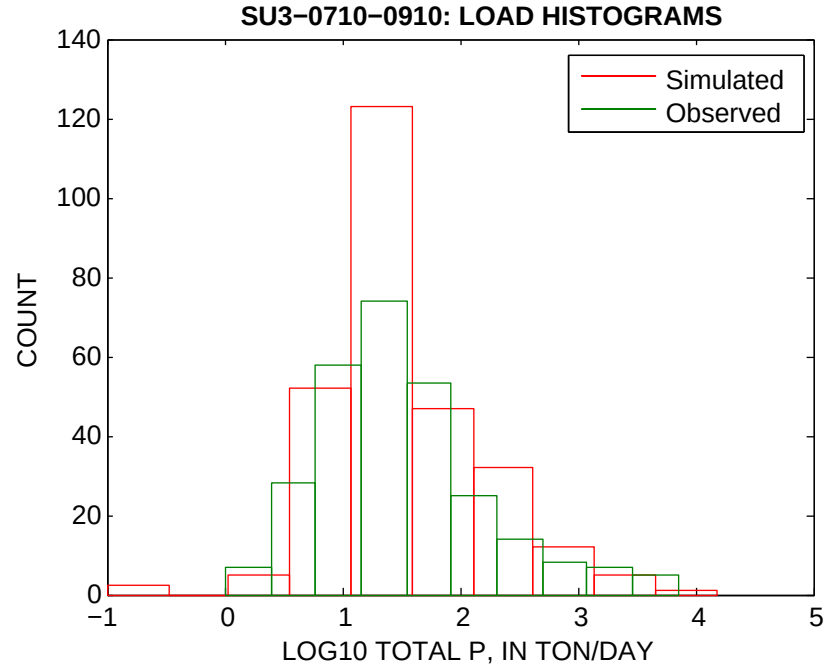


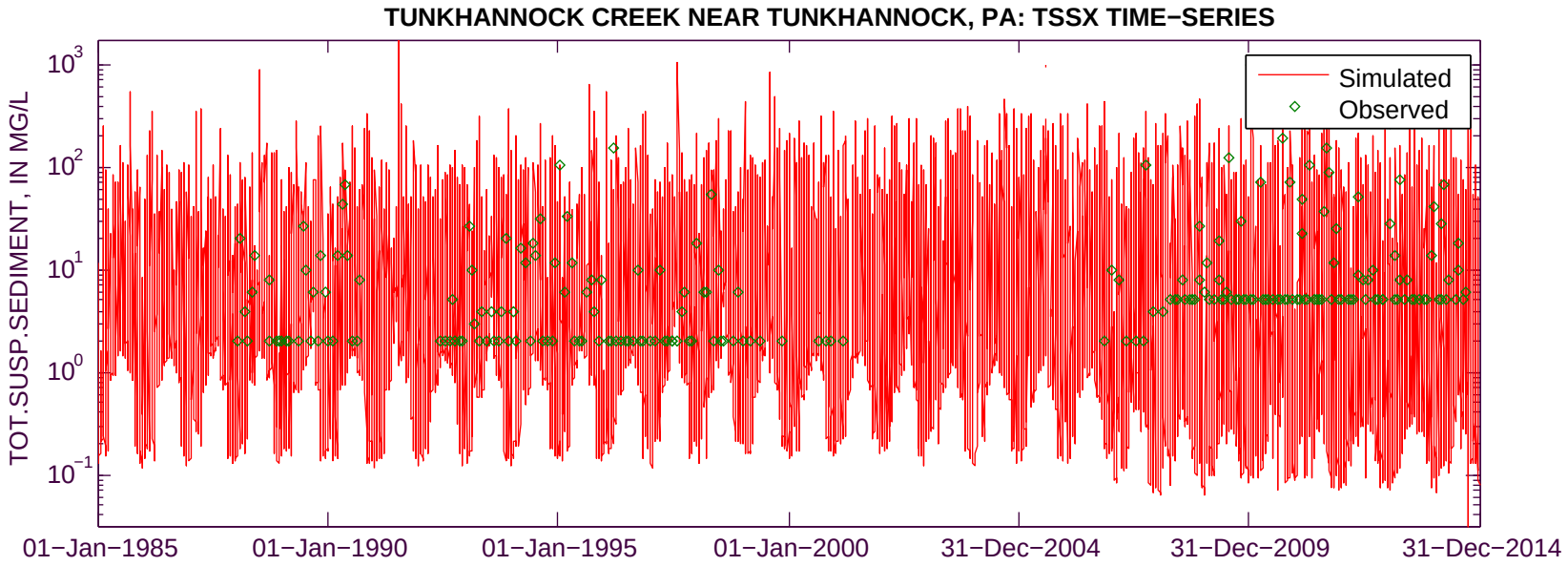
LOAD DATA
LOG10

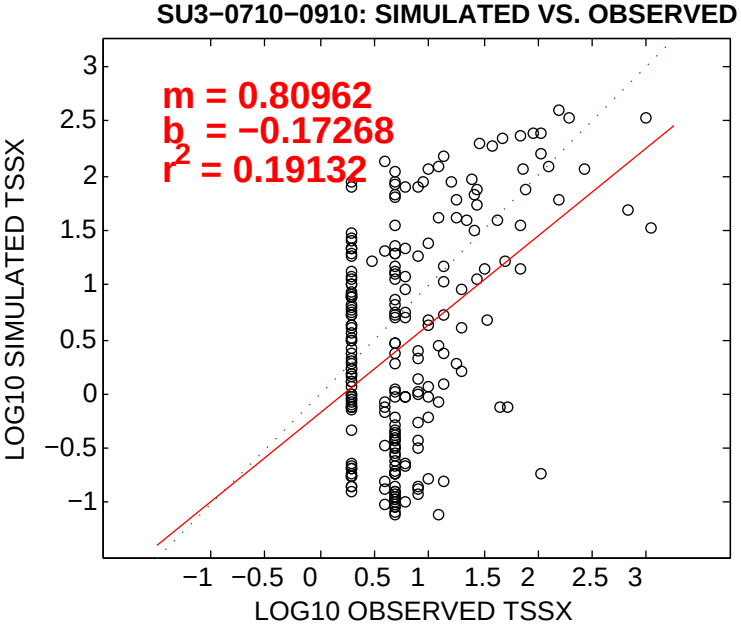


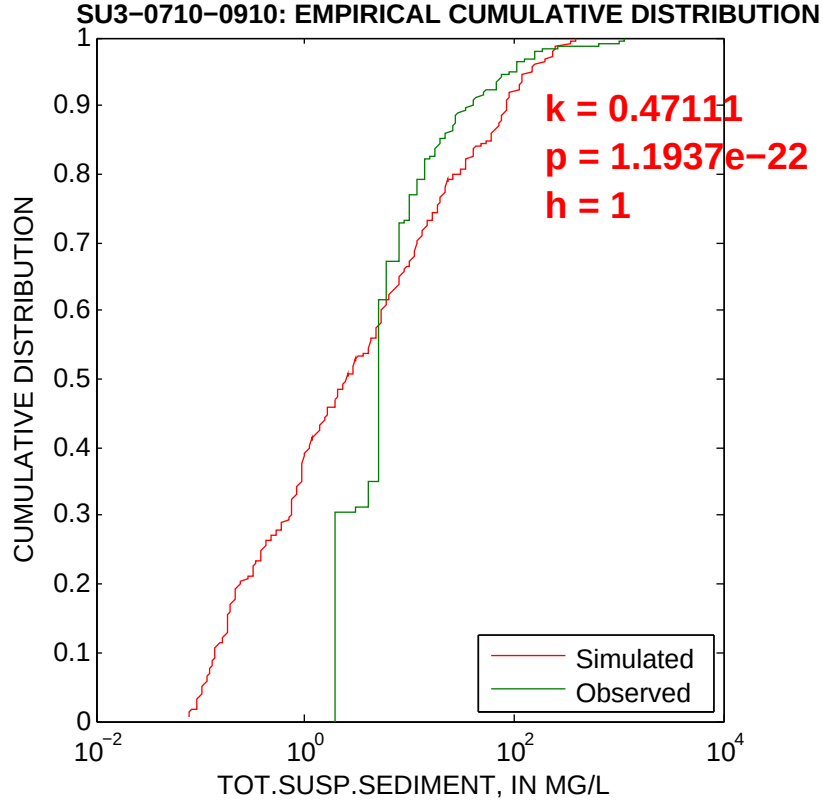












DATA SELECTION

scenario	file
P620171001WQ	TSSX.calib

plot: TSSX - total suspended ...

Dates: 1/1/1985 – 12/31/201

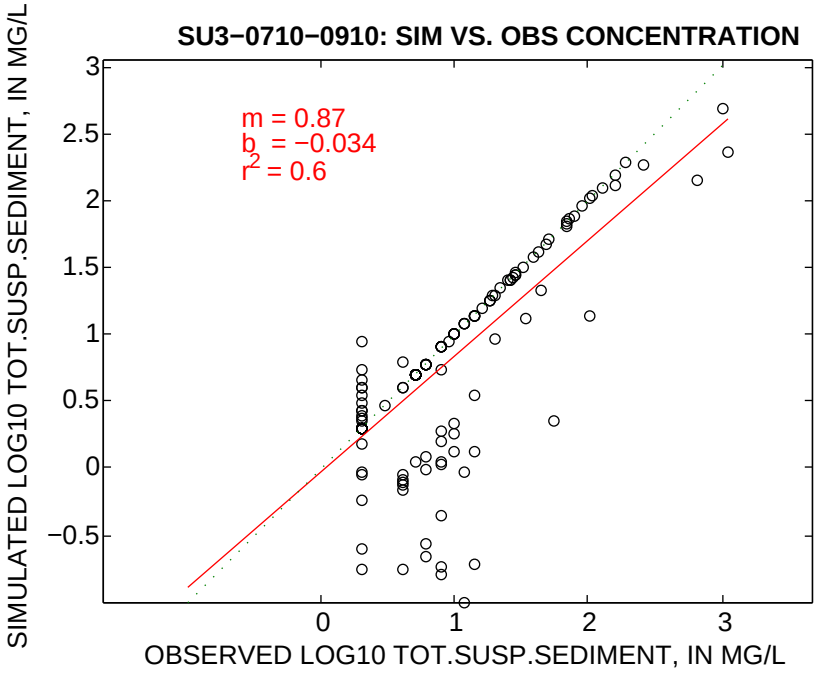
Drive	Directory	Observed
N/A	model	OBS20161101

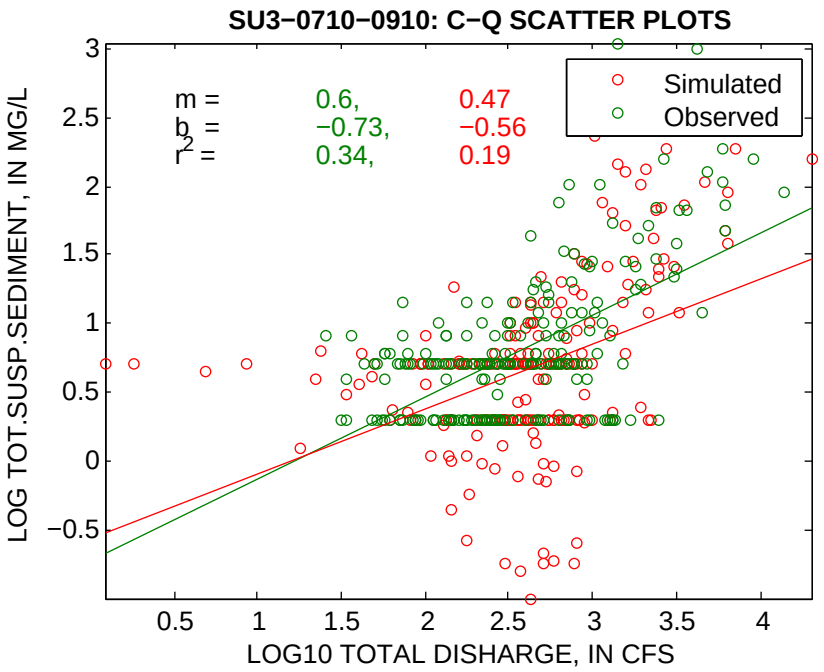
STATISTICS

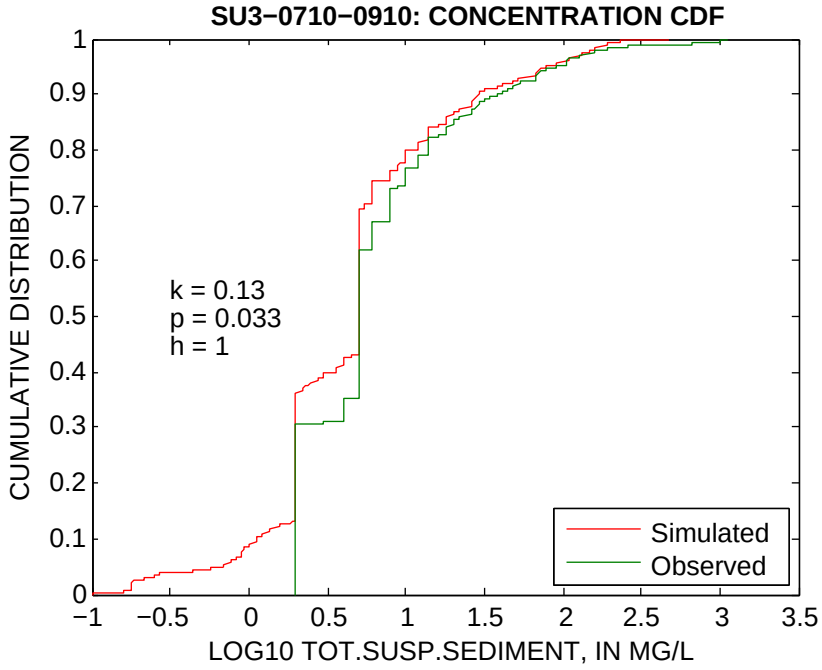
	n	observe	simulate
		225	224
min		2	0
		0.30103	-1.11733
mean		26.7351	26.7249
		0.812159	0.484855
media		5	2.5456
		0.69897	0.411623
max		1109	397.91
		3.04493	2.59978
varian		12430	3609.45
		0.29485	1.01021
JB		0.001	0.001
		0.001	0.009397
		ra	log
%		0.0380952	-40.3005
err.va		10862.1	0.935237
rel.std.err		0.873866	3.17191
mod.eff		0.126134	-2.17191

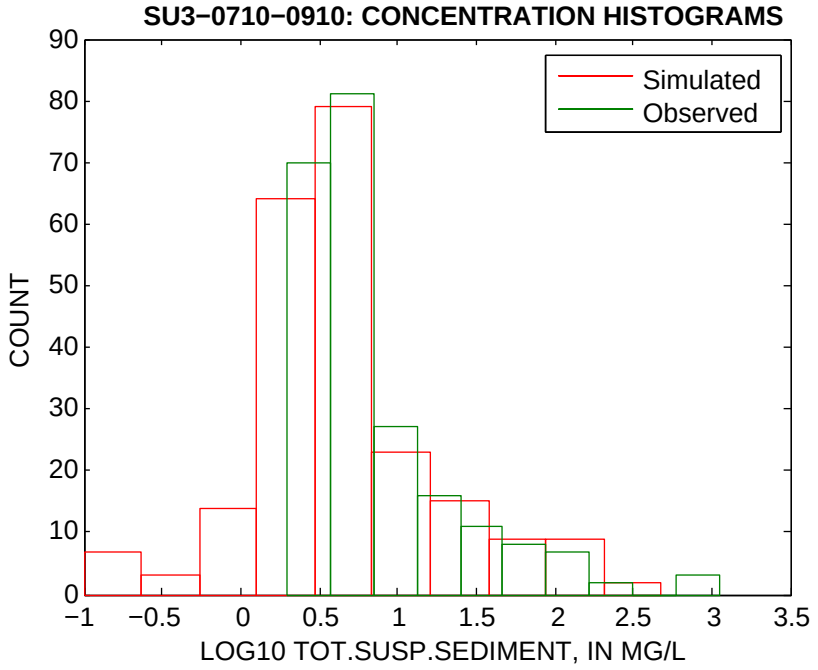
VERSION 2.1

ALL DATA
LOG10

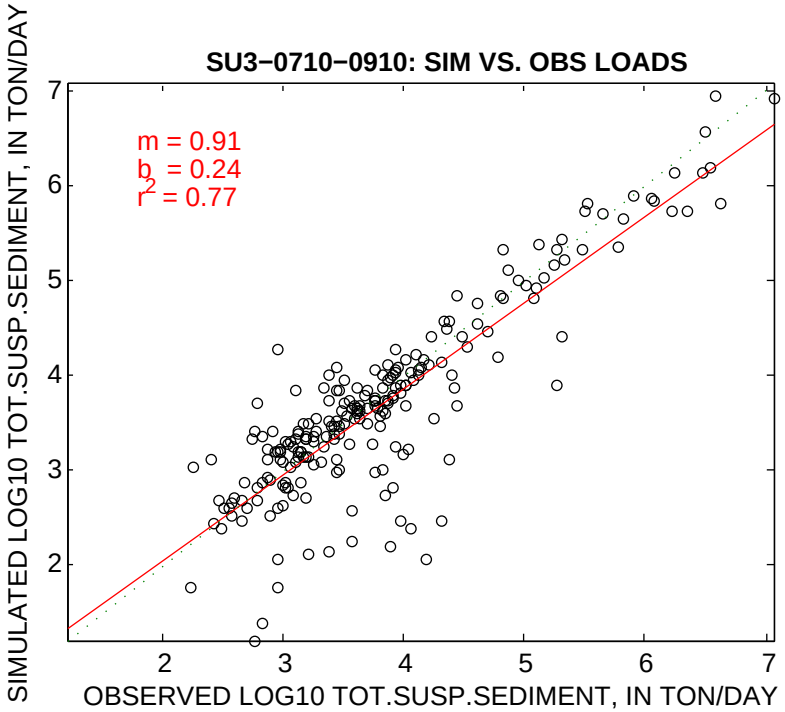


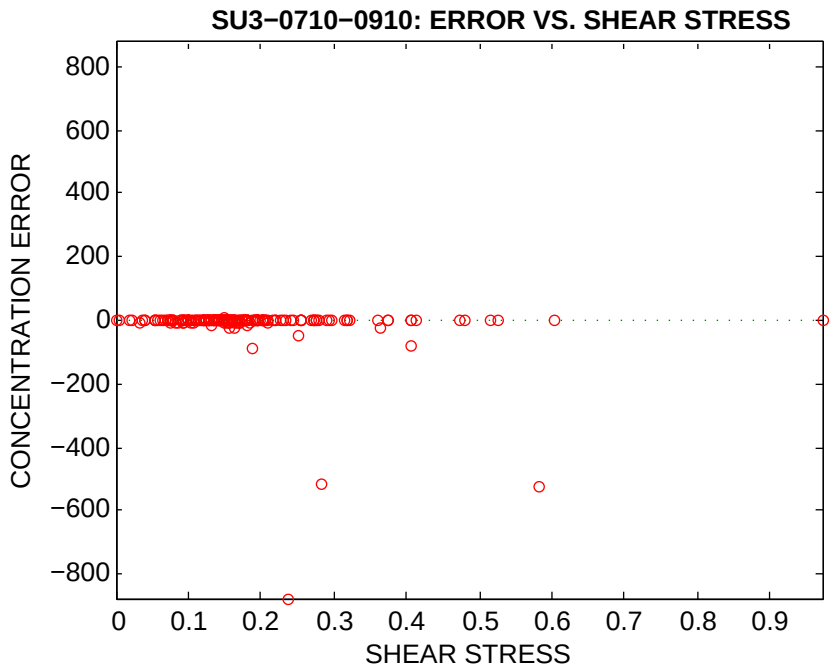


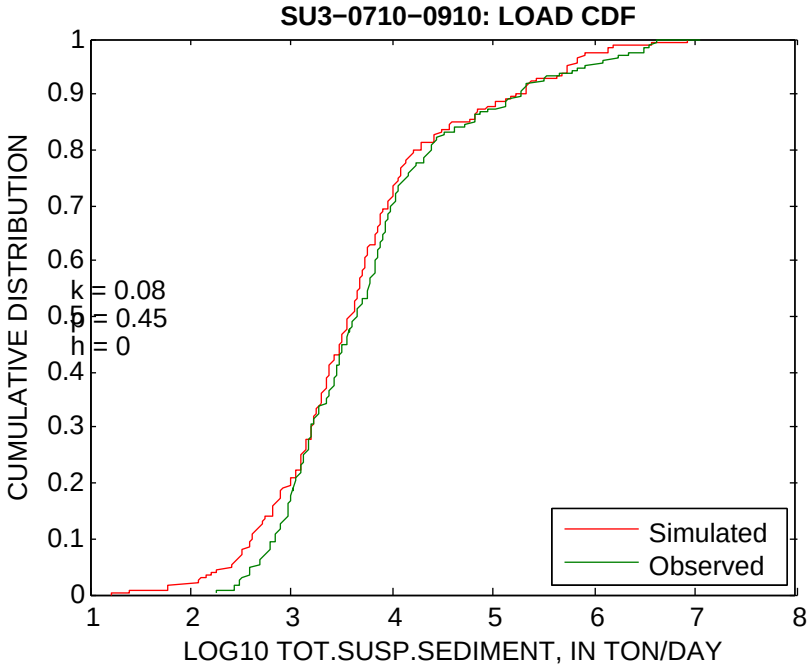


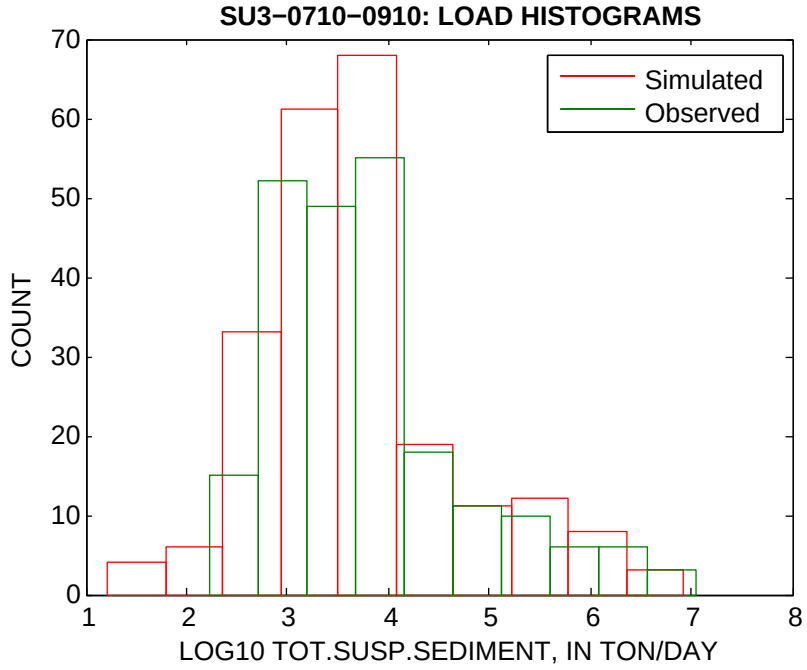


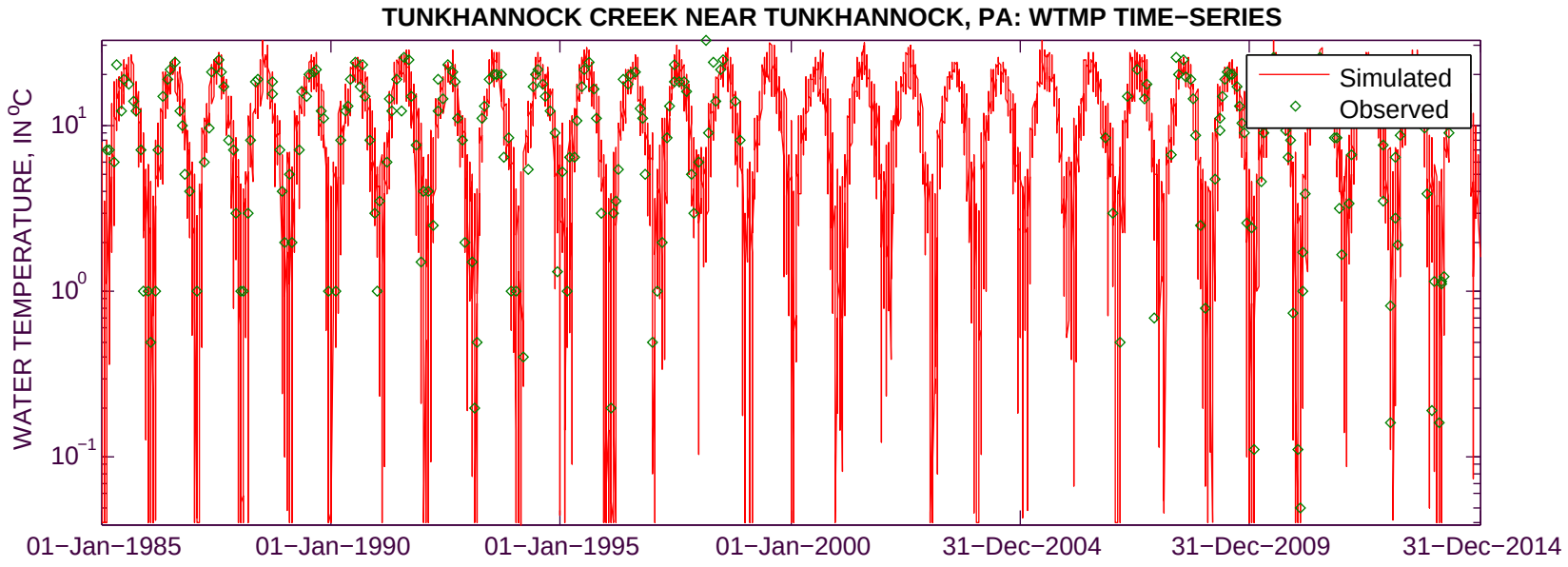
LOAD DATA
LOG10

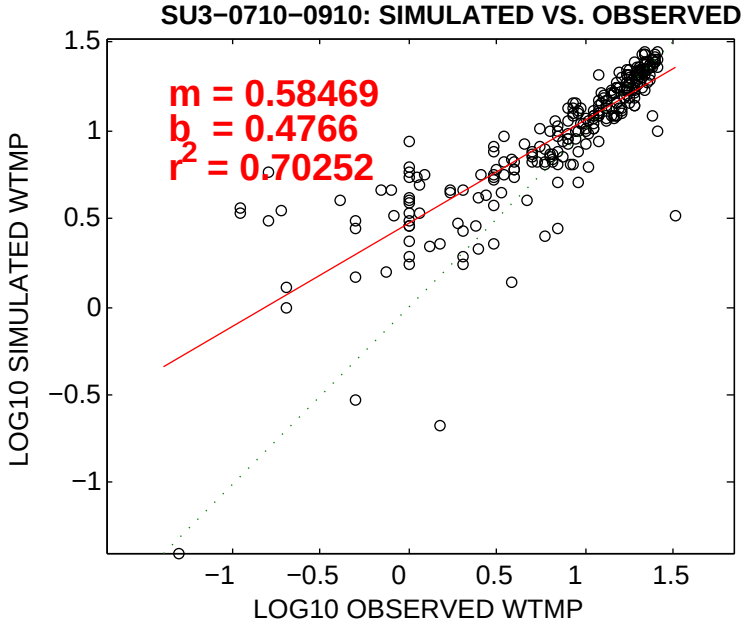


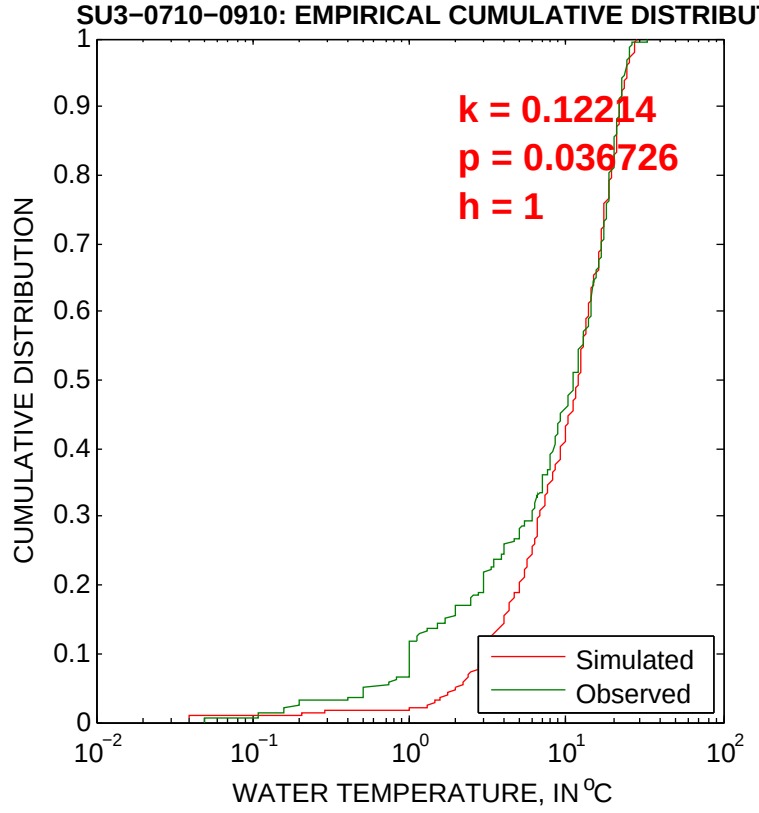












DATA SELECTION

scenario	file
P620171001WQ	WTMP.calib

plot: WTMP - water tempera...

Dates: 1/1/1985 – 12/31/201

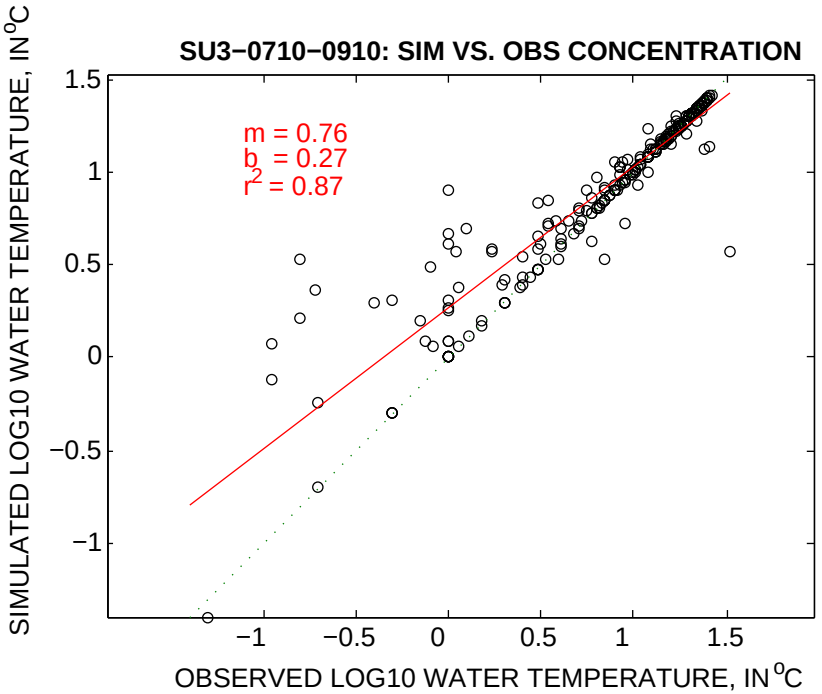
Drive	Directory	Observed
N/A	model	OBS20161101

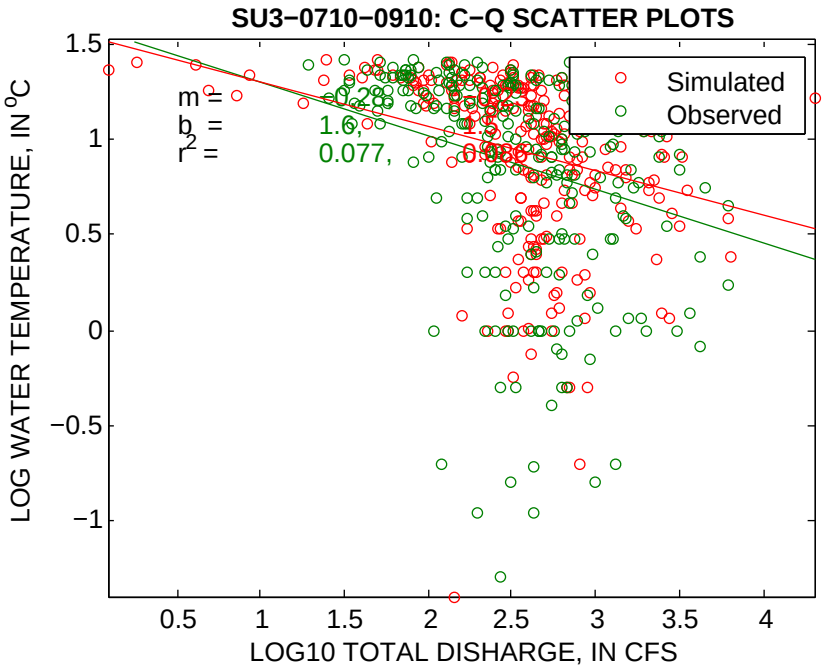
STATISTICS

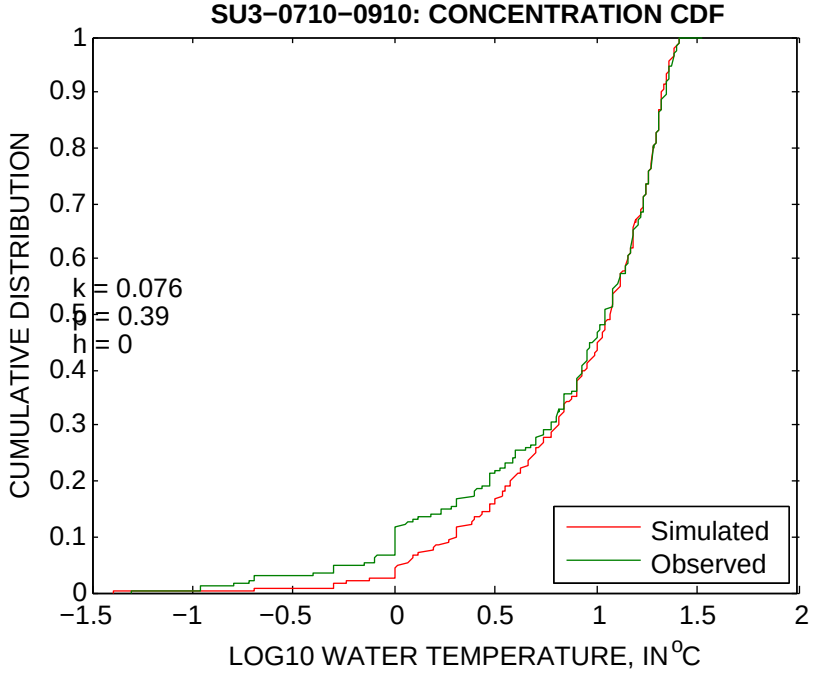
	n	observe	simulate
		262	261
min		0.05	0
		-1.30103	-1.39614
mean		11.4452	12.2126
		0.854861	0.976425
media		11	12.069
		1.04139	1.08185
max		33	28.203
		1.51851	1.4503
varian		60.6812	51.596
		0.293493	0.142819
JB		0.004830	0.006567
		0.001	0.001
		ra	log
%		6.7053	14.2203
err.va		13.8549	0.107943
rel.std.err		0.228323	0.367787
mod.eff		0.771677	0.632213

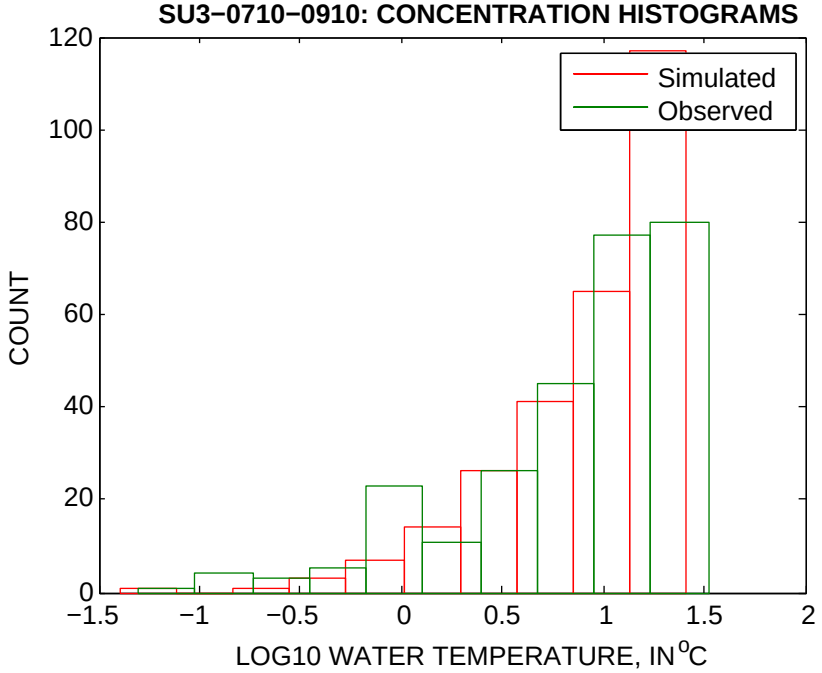
VERSION 2.1

ALL DATA
LOG10

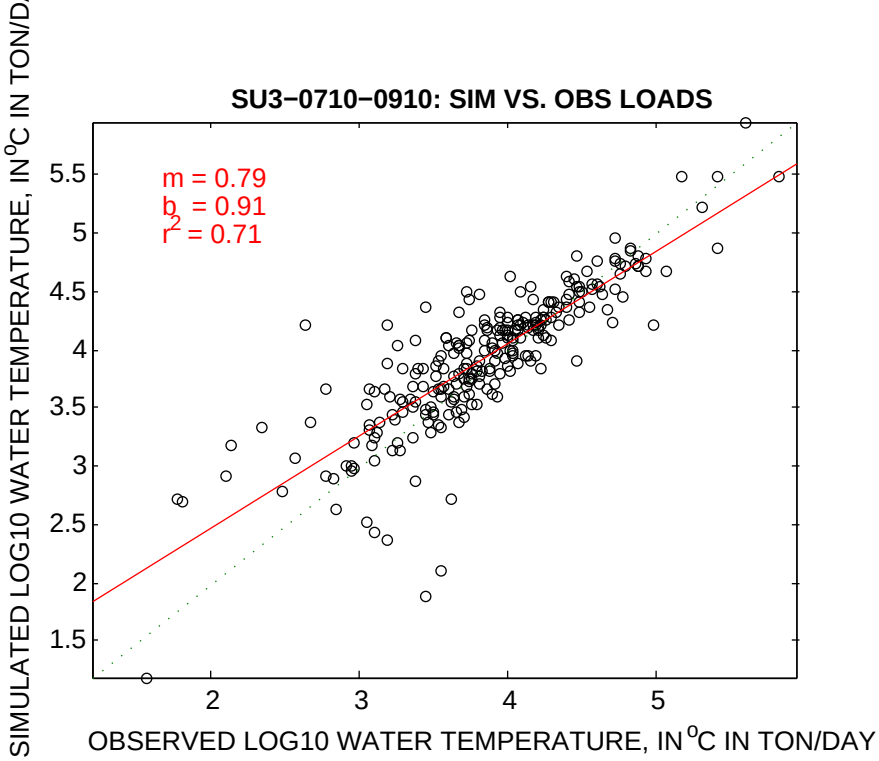


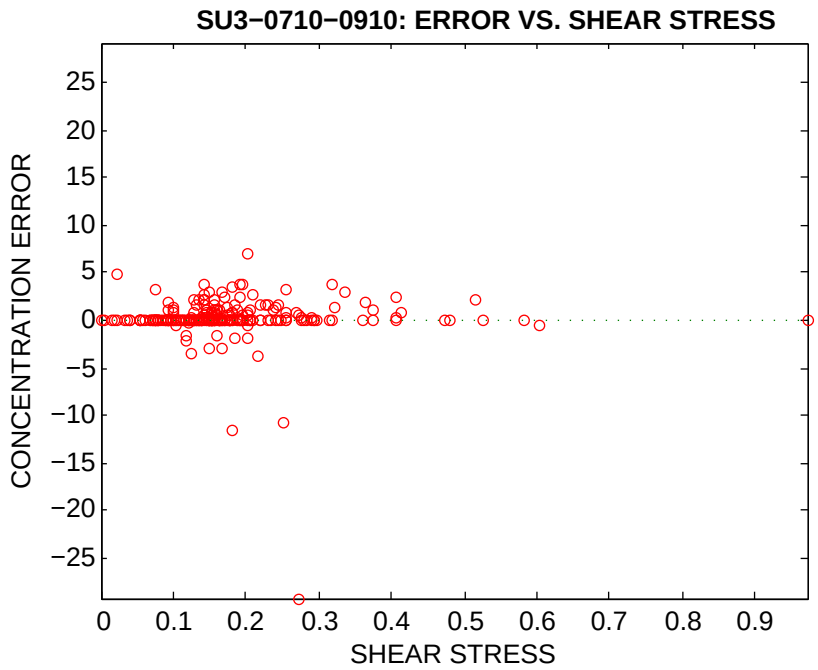


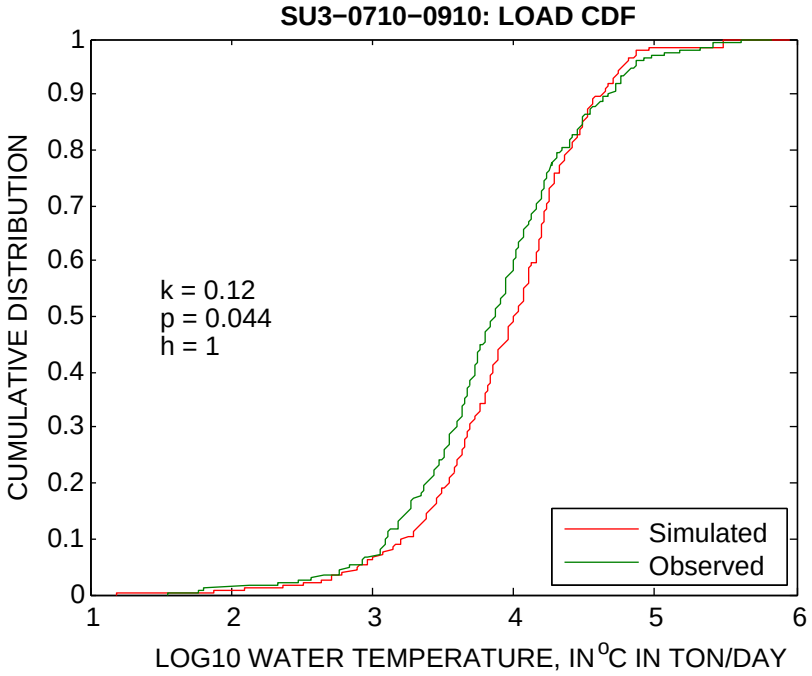


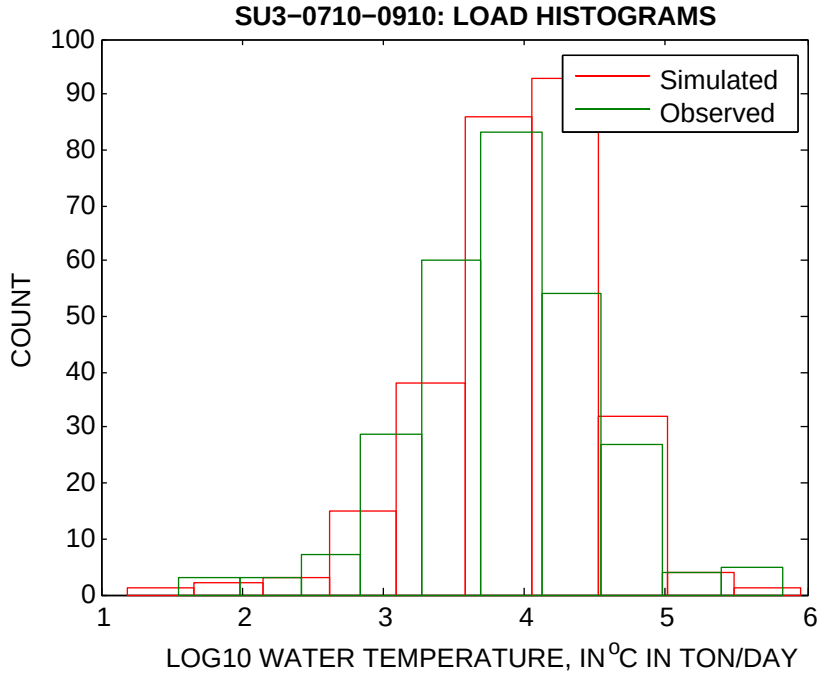


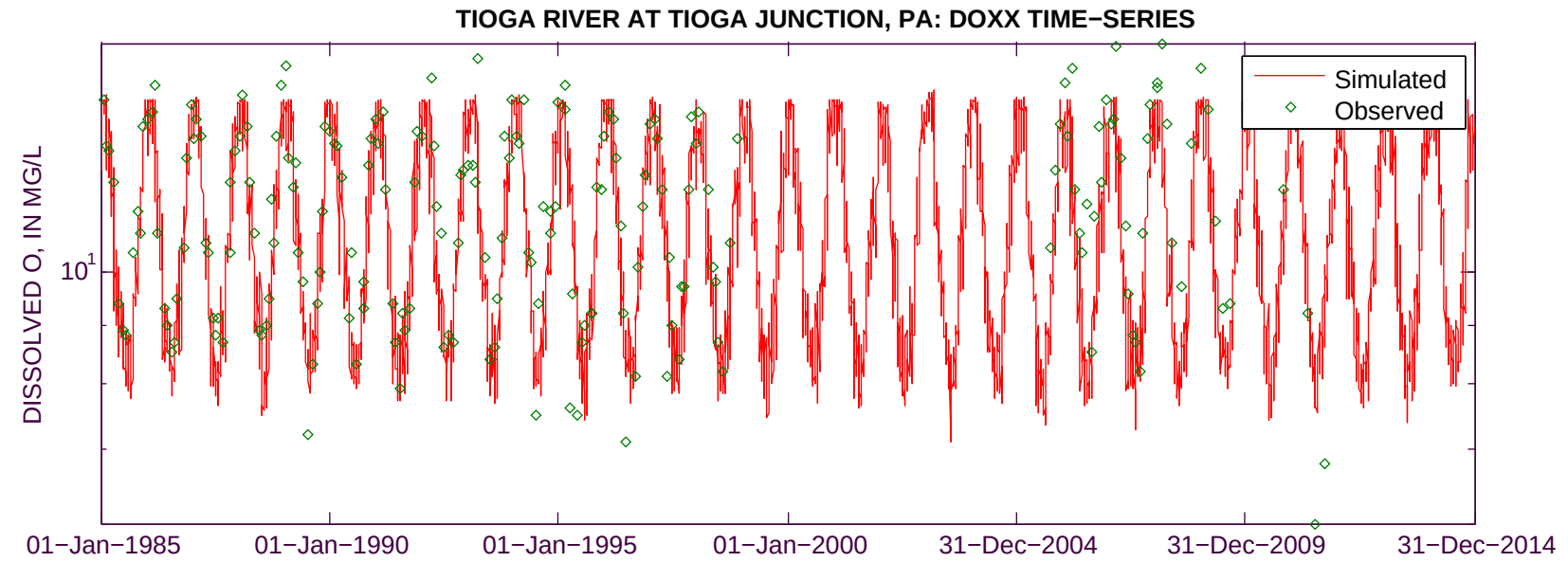
LOAD DATA
LOG10

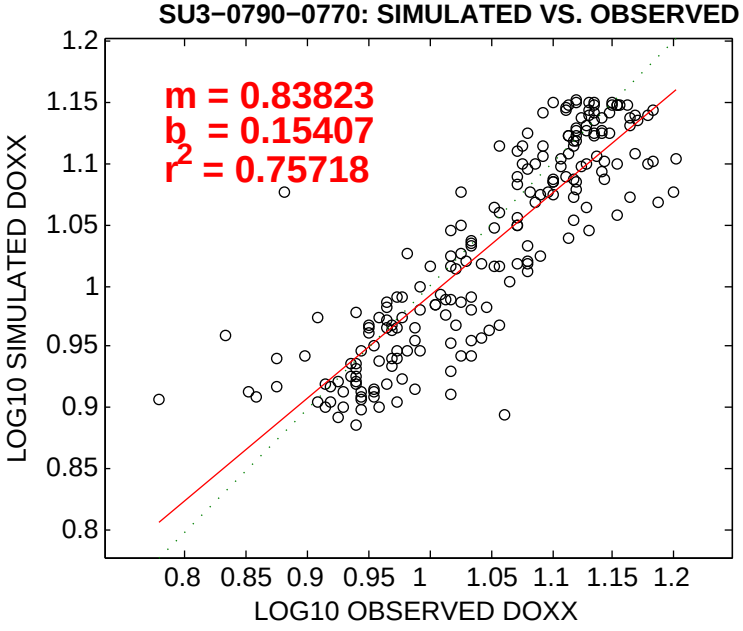


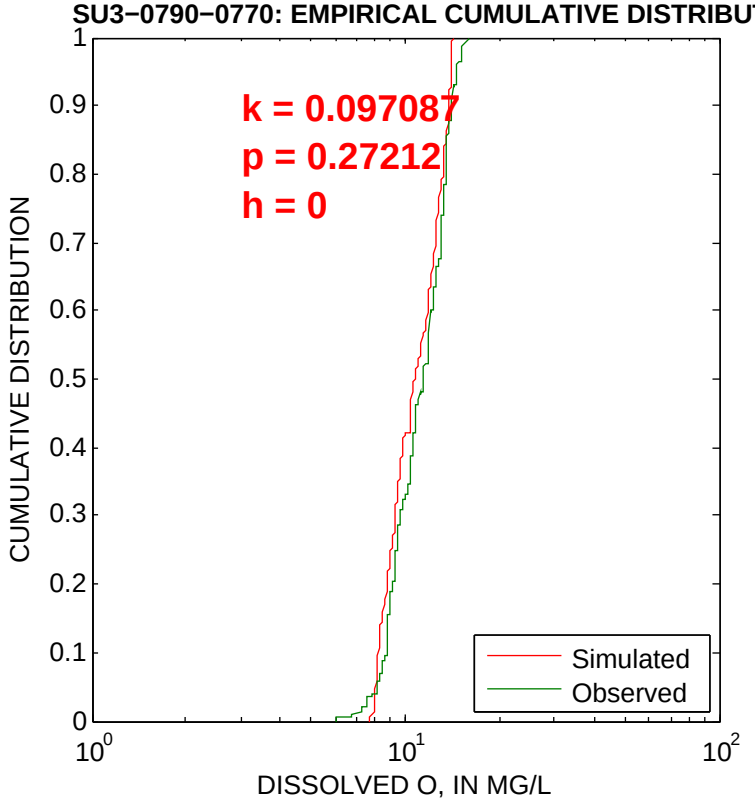












DATA SELECTION

scenario	file
P620171001WQ	DOXX.calib

plot: DOXX - dissolved oxygen

Dates: 1/1/1985 – 12/31/201

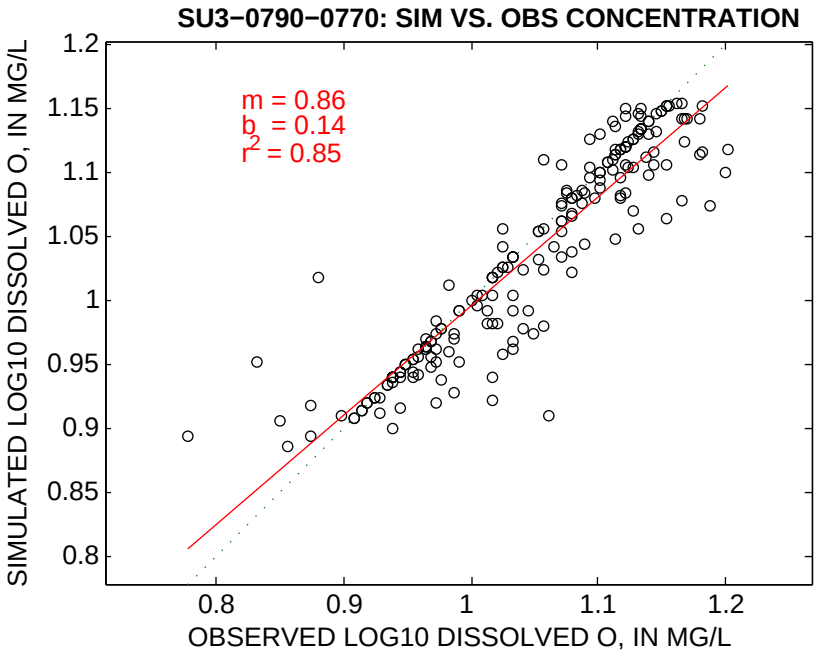
Drive	Directory	Observed
N/A	model	OBS20161101

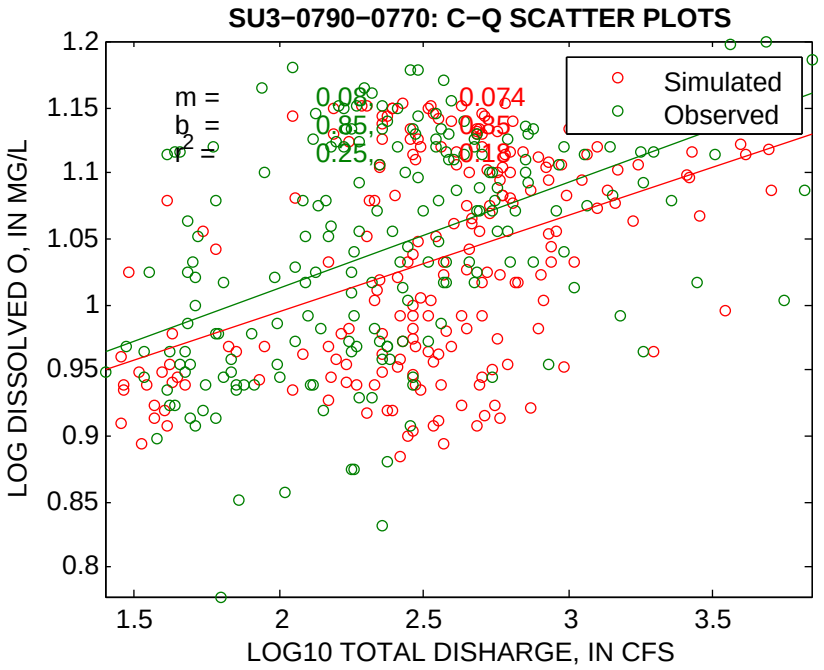
STATISTICS

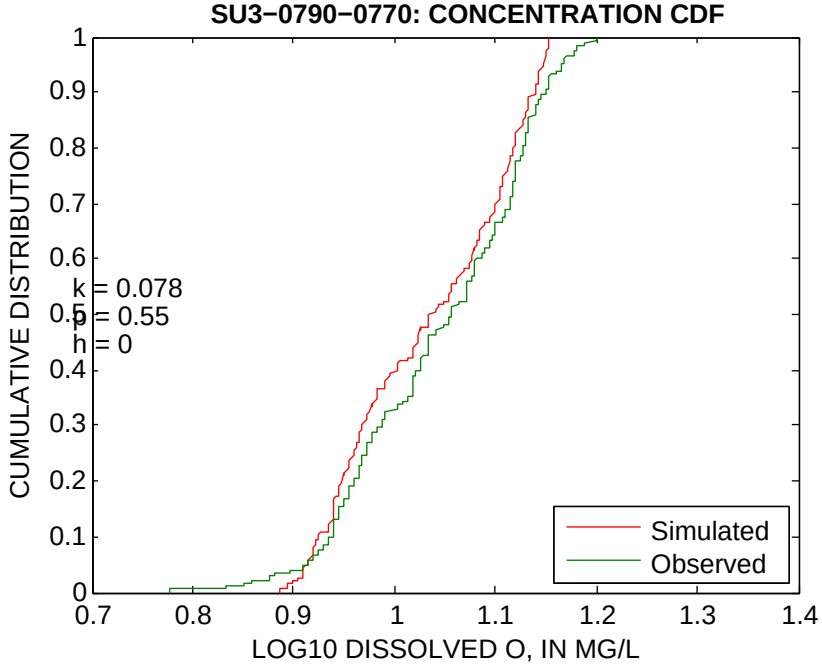
	n	206	206
		observe	simulate
min		6	7.7048
		0.778151	0.886761
mean		11.3238	10.9252
		1.04572	1.03062
media		11.4	10.776
		1.0569	1.03246
max		15.9	14.197
		1.2014	1.1522
varian		4.69977	4.23712
		0.00741363	0.00687955
JB		0.020168	0.003607
		0.022068	0.003754
		ra	log
%		-3.51957	-1.44334
err.va		1.30881	0.00209344
rel.std.err		0.278483	0.282377
mod.eff		0.721517	0.717623

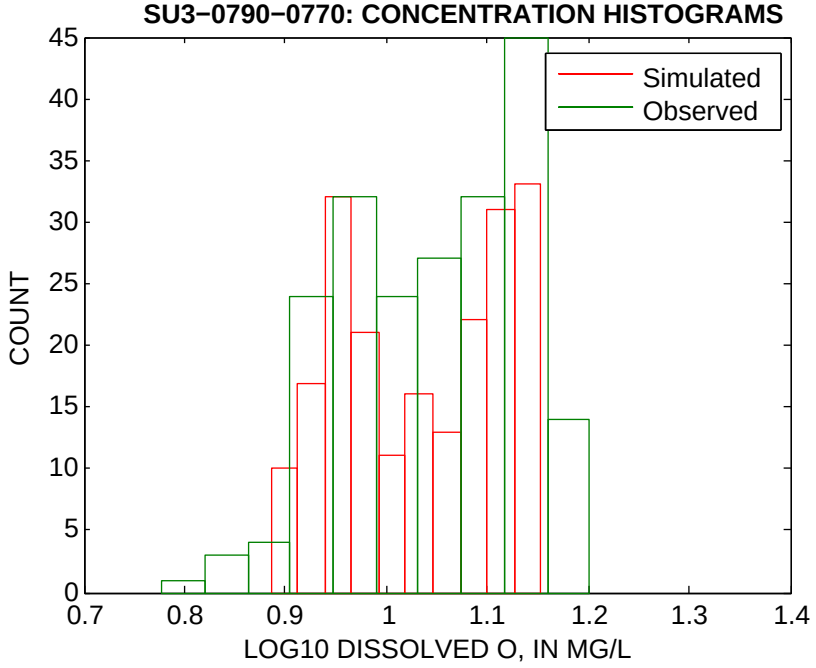
VERSION 2.1

ALL DATA
LOG10

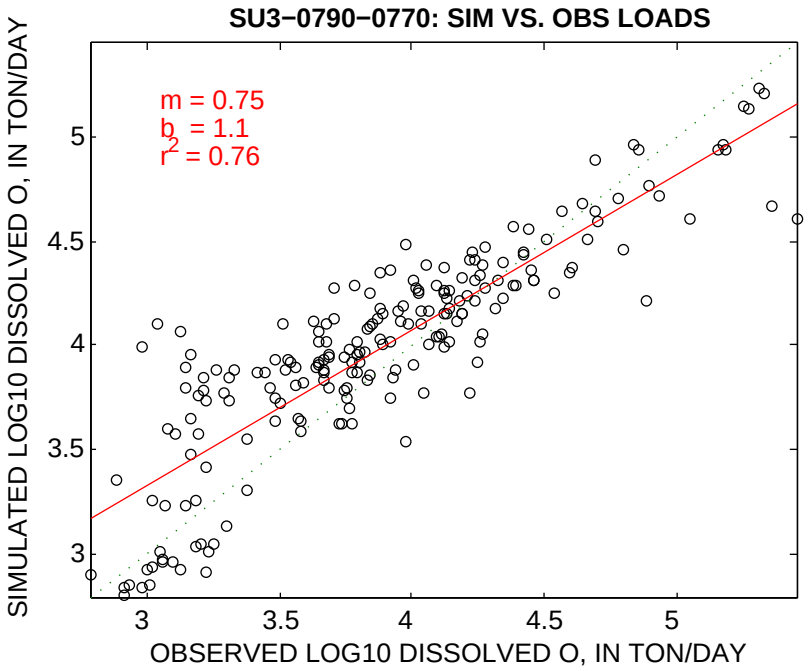


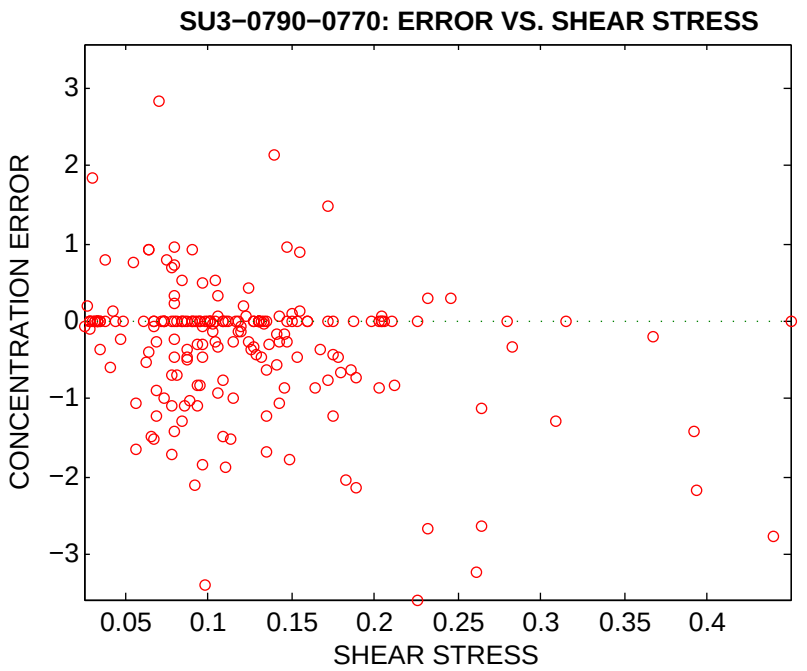


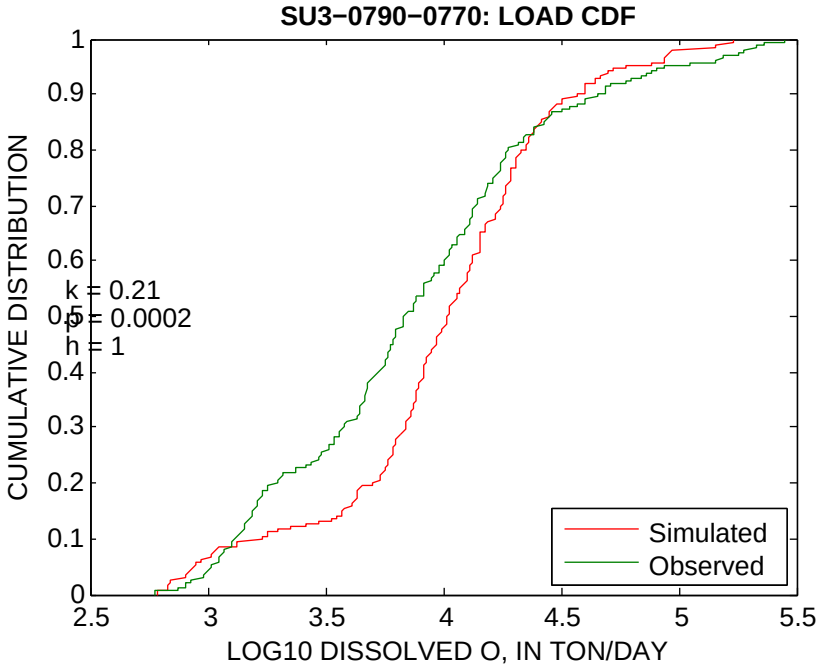


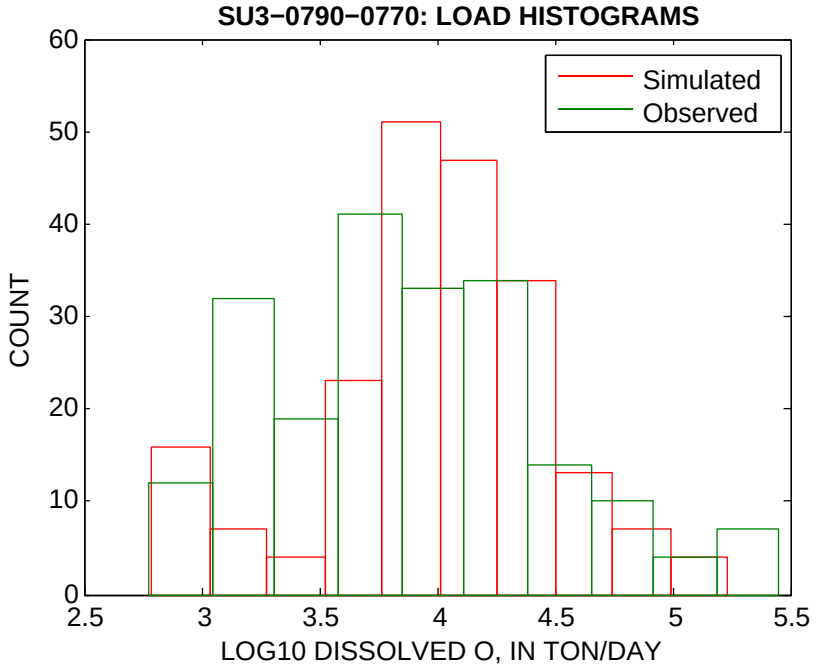


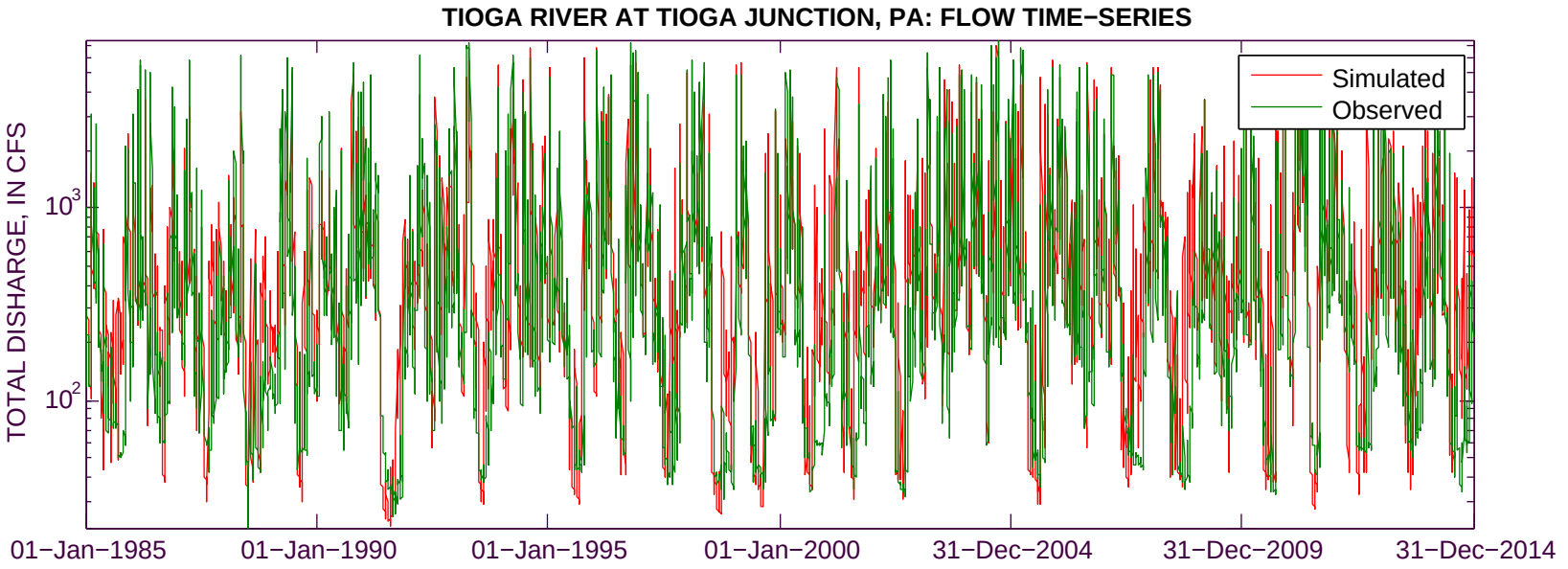
LOAD DATA
LOG10

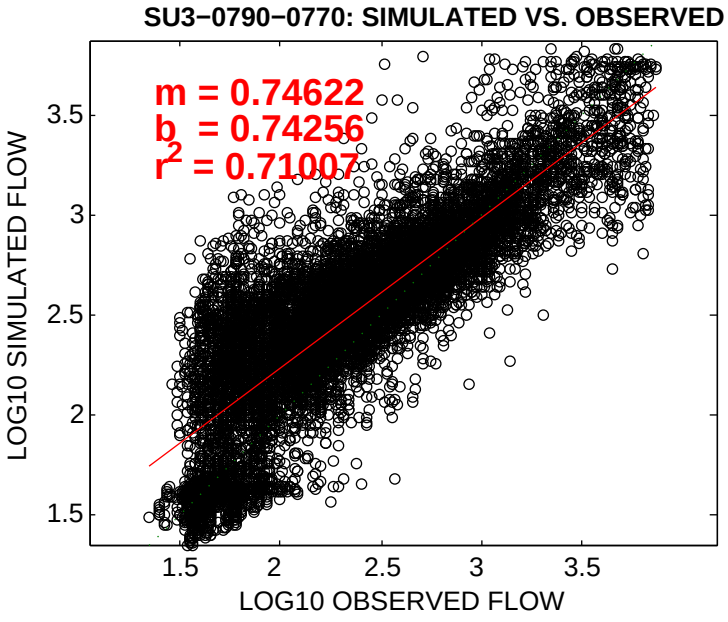


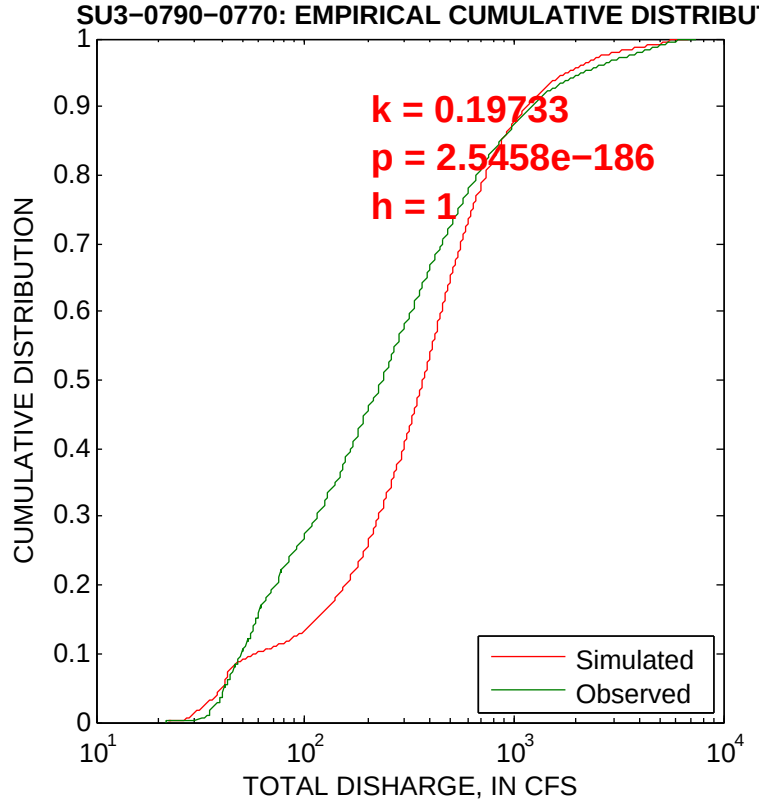












DATA SELECTION

scenario: P620171001WQ | file: FLOW.calib

plot: FLOW - total discharge

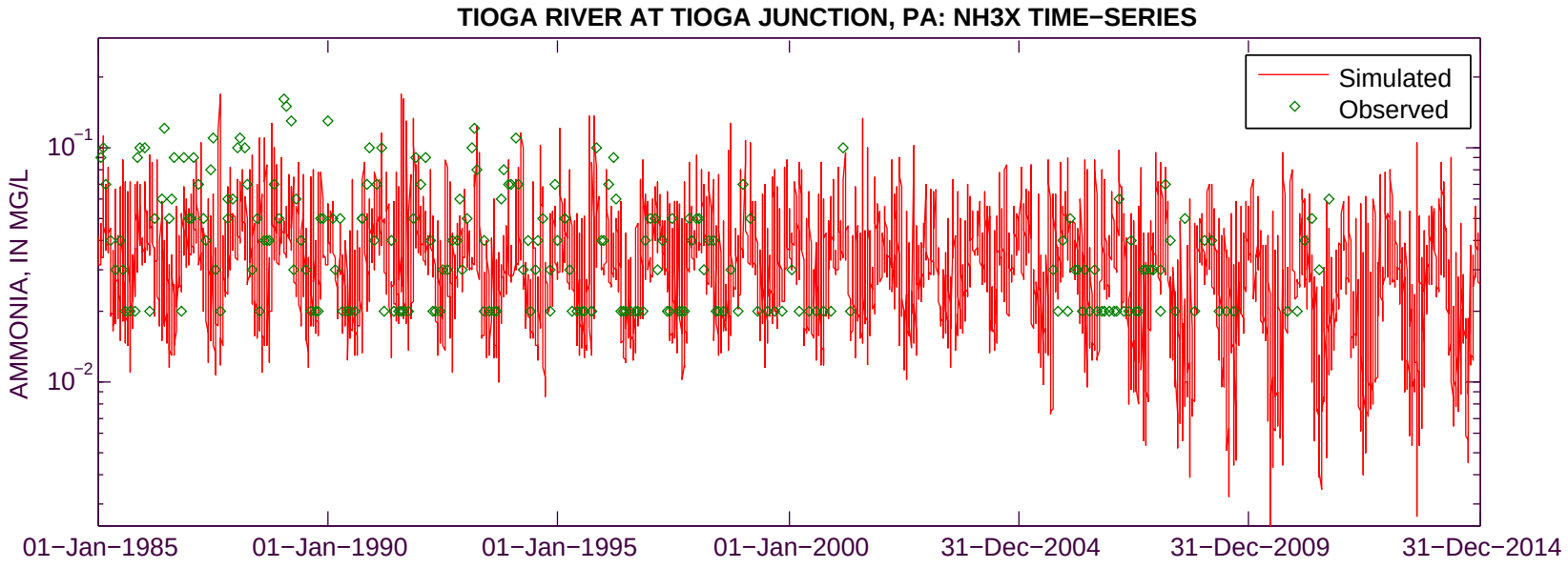
Dates: 1/1/1985 – 12/31/201

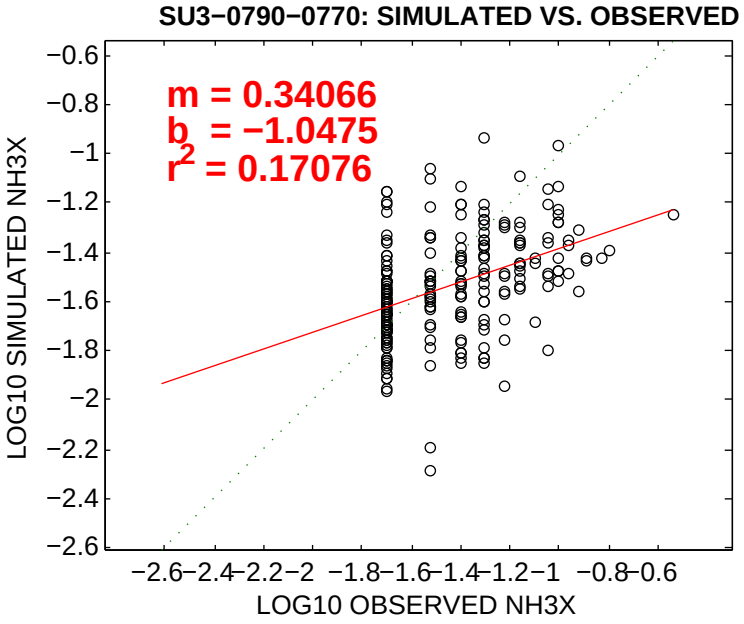
Drive: N/A | Directory: model | Observed: OBS20161101

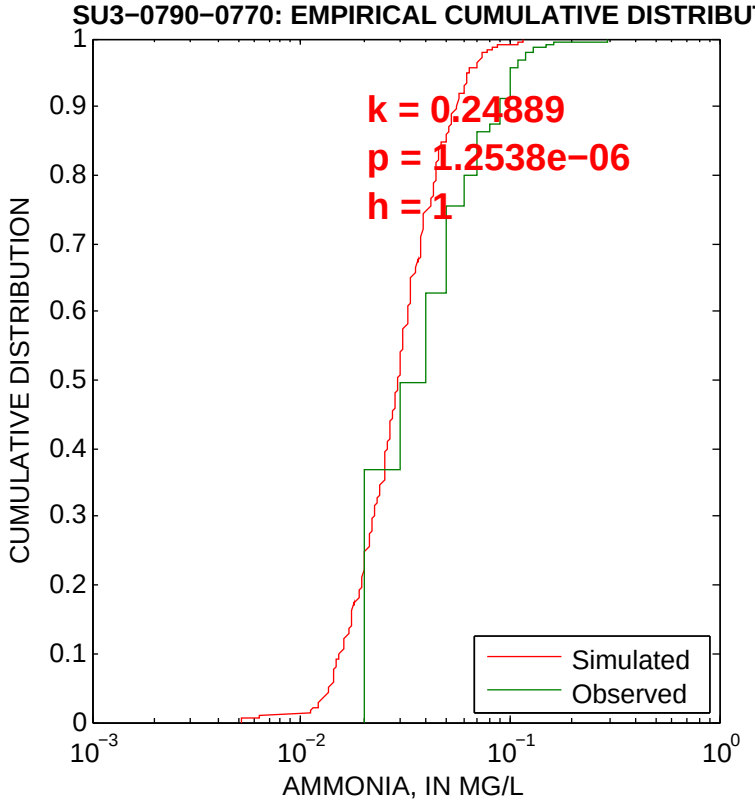
STATISTICS

		observe	simulate
n		10956	10956
min		22	22.363
		1.34242	1.34953
mean		538.742	572.791
		2.3865	2.52341
media		234	369.865
		2.36922	2.56804
max		7490	6864
		3.87448	3.83658
varian		836164	575706
		0.276773	0.217049
JB		0.001	0.001
		0.001	0.001
		ra	log
%		6.32006	5.73686
err.va		323297	0.099501
rel.std.err		0.386643	0.359504
mod.eff		0.613357	0.640496

VERSION 2.1







DATA SELECTION

scenario	file
P620171001WQ	NH3X.calib

plot: NH3X - ammonia

Dates: 1/1/1985 – 12/31/201

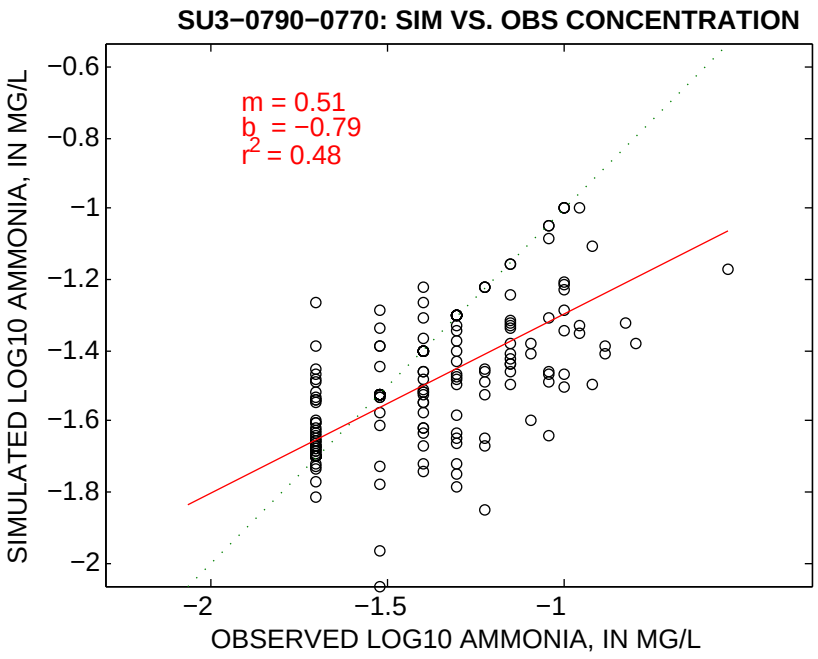
Drive: N/A | Directory: model | Observed: OBS20161101

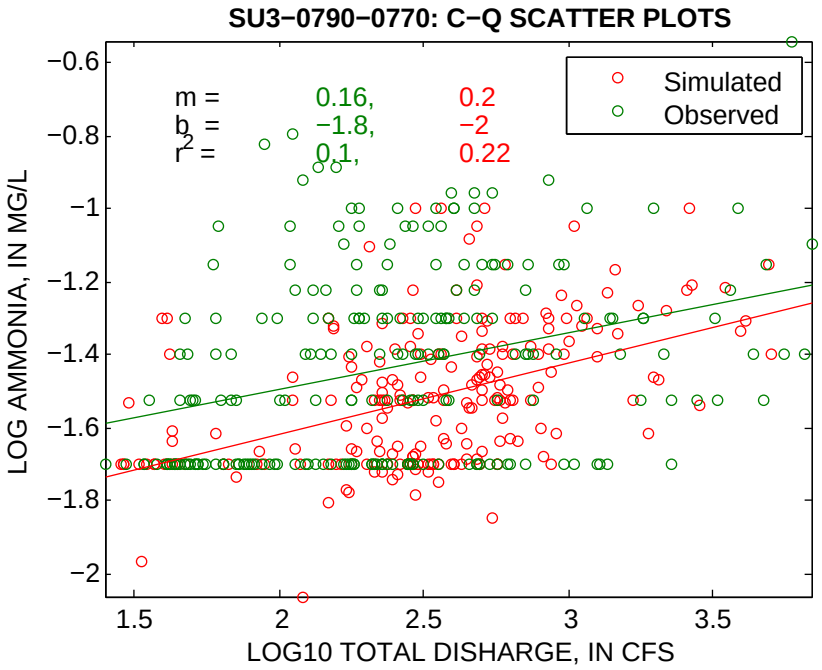
STATISTICS

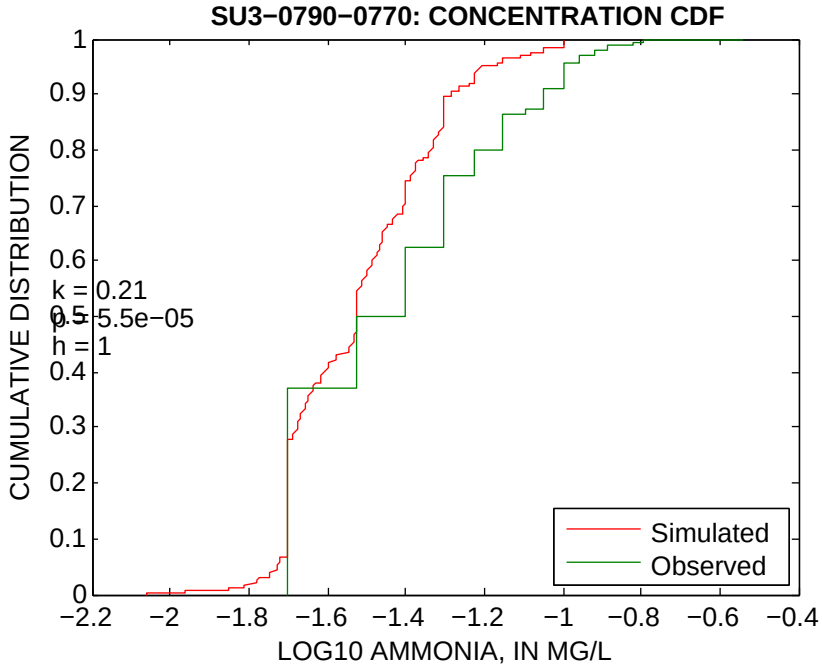
	n	225	225
		observe	simulate
min		0.02	0.0051816
		-1.69897	-2.28554
mean		0.0449333	0.0328584
		-1.43173	-1.53518
media		0.04	0.029196
		-1.39794	-1.53468
max		0.29	0.11615
		-0.537602	-0.934981
varian		0.00108761	0.00029077
		0.0668071	0.0454024
JB		0.001	0.001
		0.004527	0.5
		ra	log
%		-26.873	7.2254
err.va		0.00113441	0.0774425
rel.std.err		1.04303	1.15919
mod.eff		-0.0430343	-0.159195

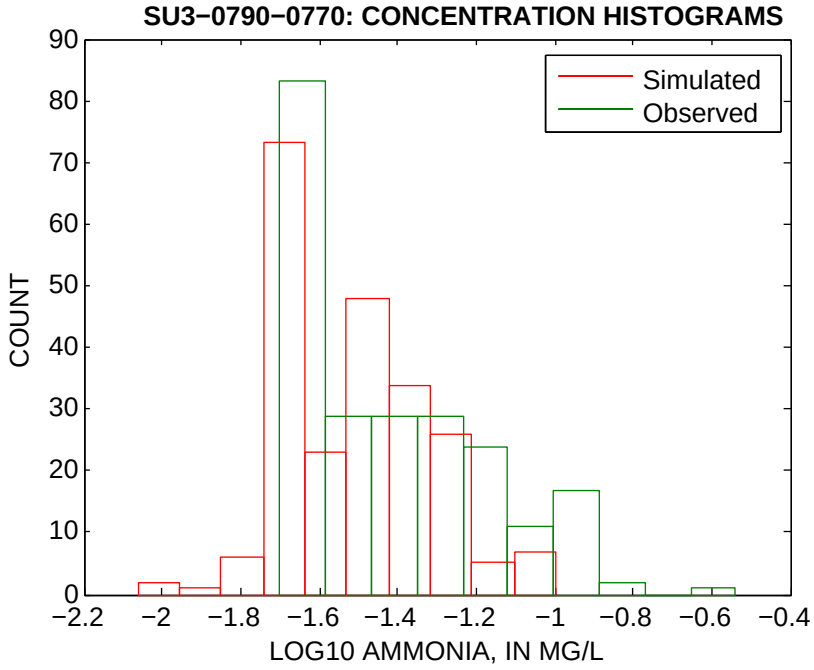
VERSION 2.1

ALL DATA
LOG10

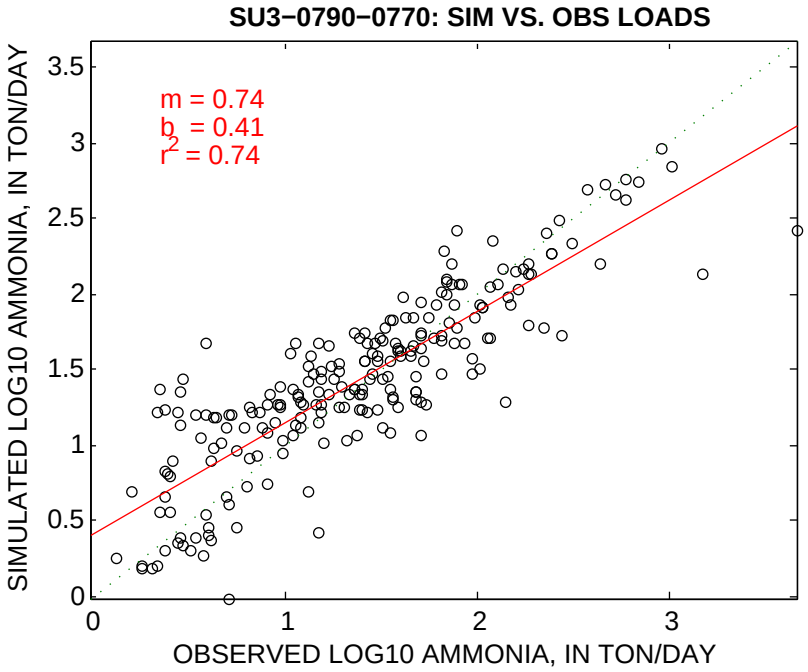


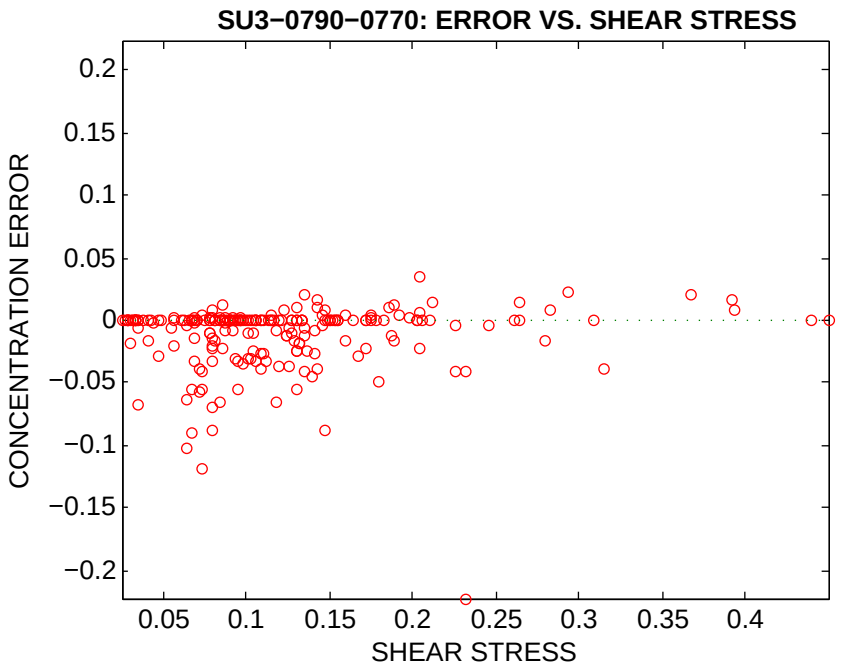


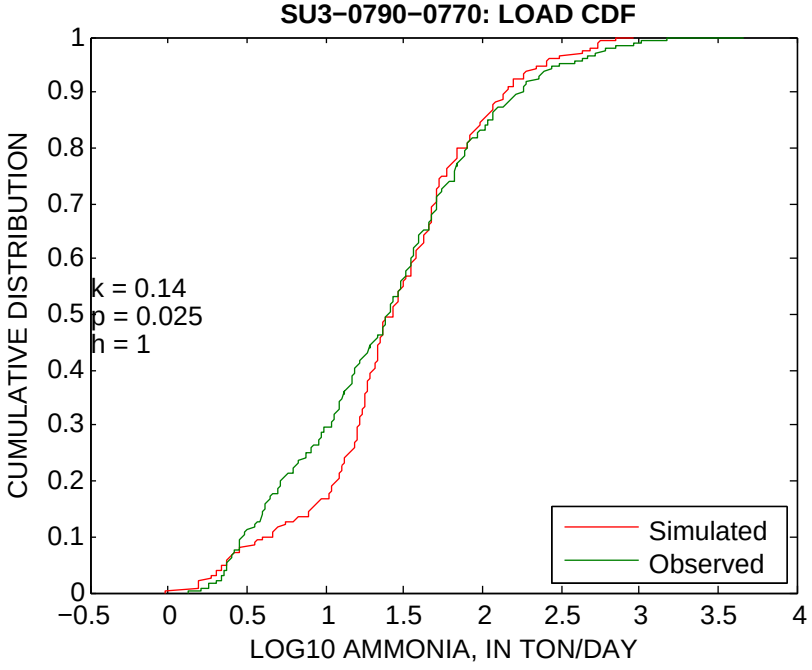


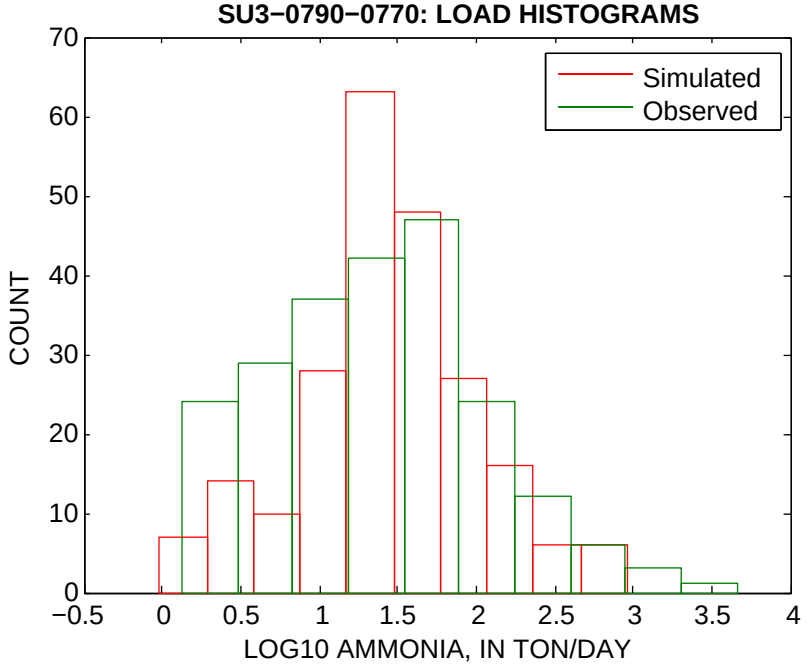


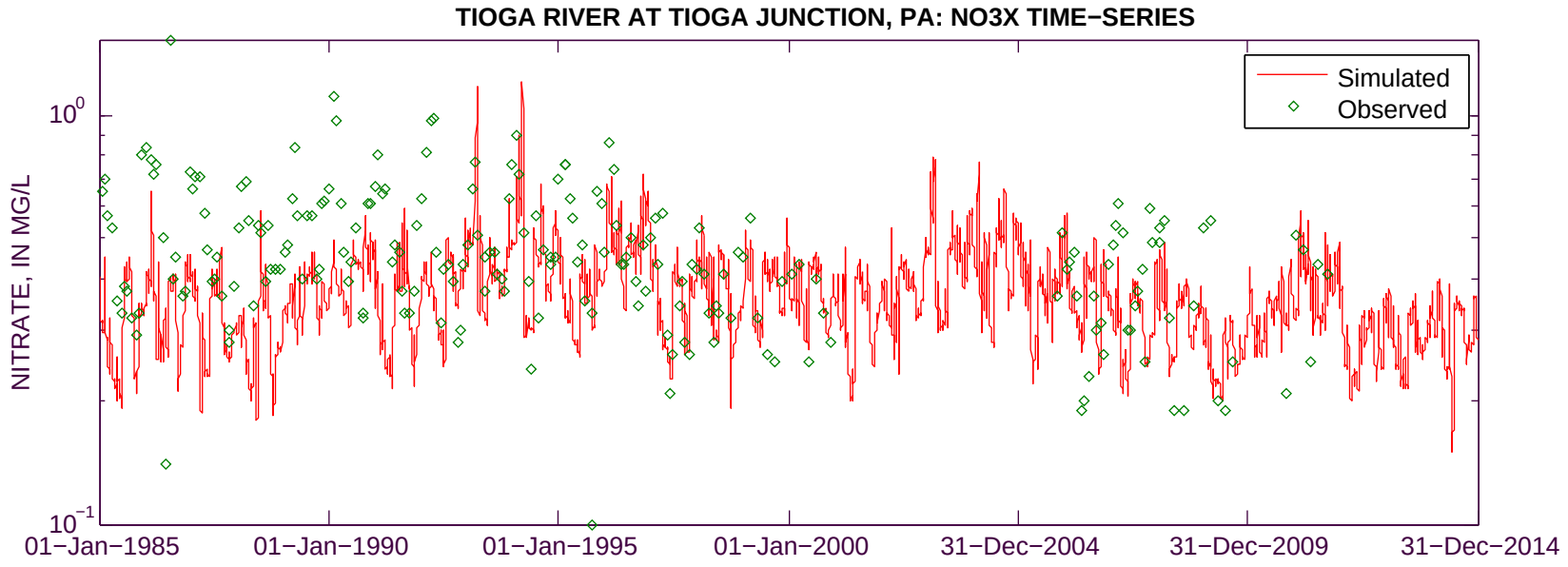
LOAD DATA
LOG10

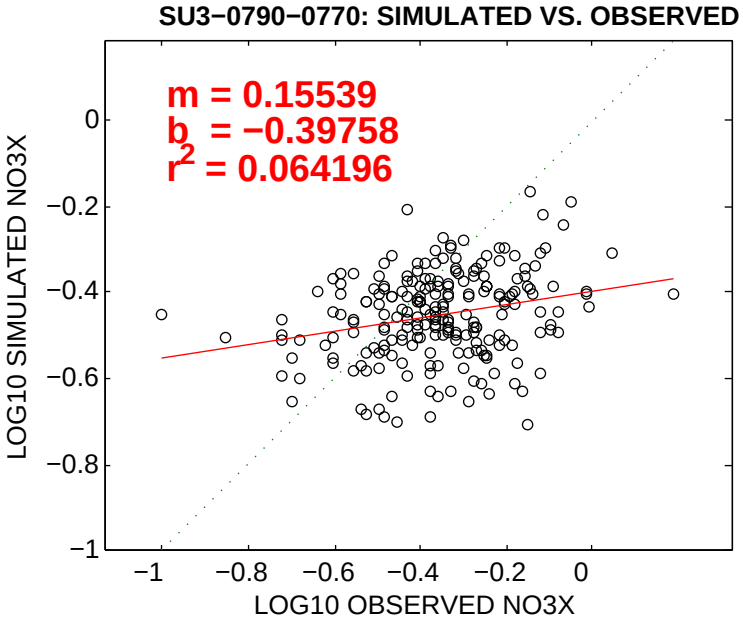


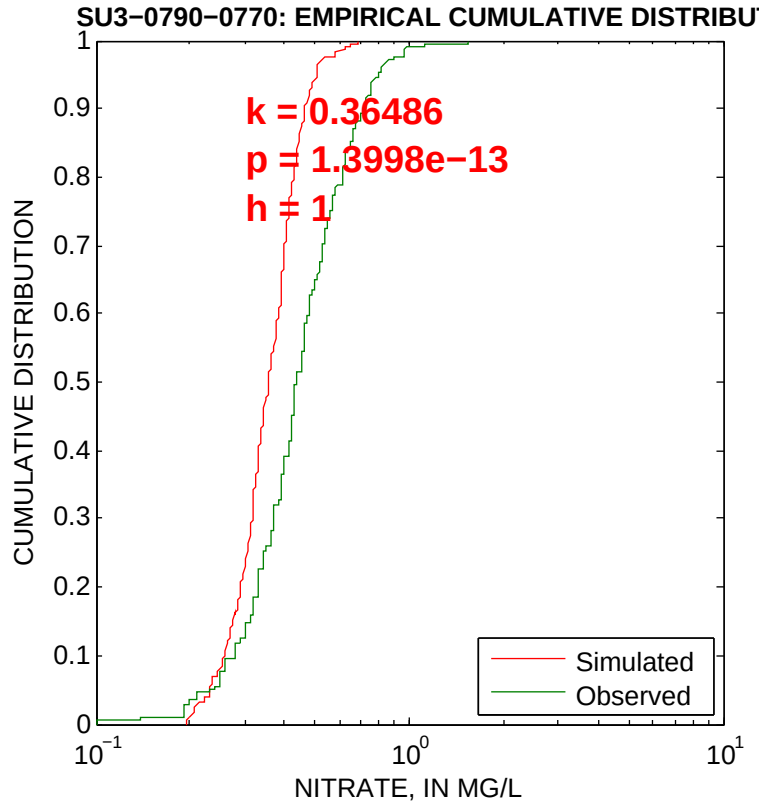












DATA SELECTION

scenario	file
P620171001WQ	NO3X.calib

plot: NO3X - nitrate

Dates: 1/1/1985 – 12/31/201

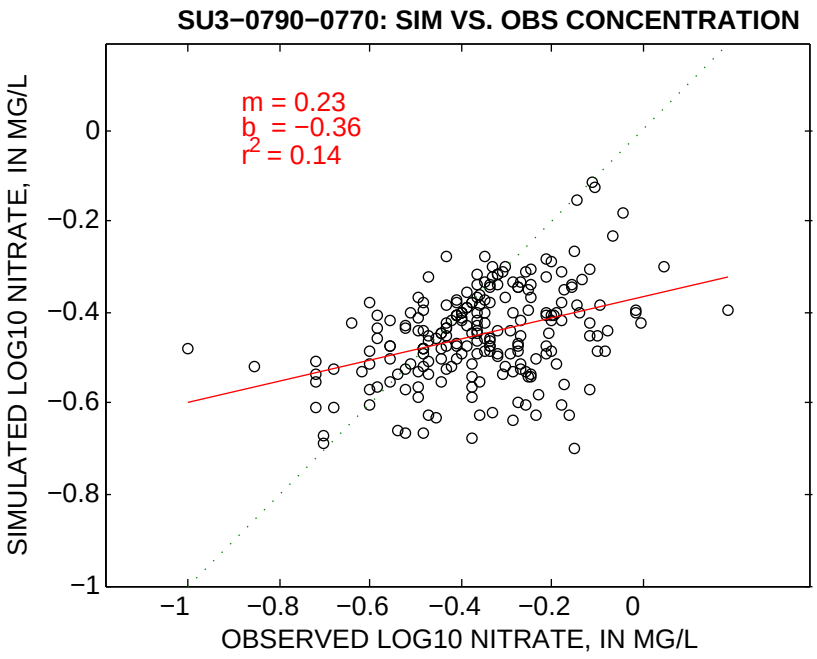
Drive	Directory	Observed
N/A	model	OBS20161101

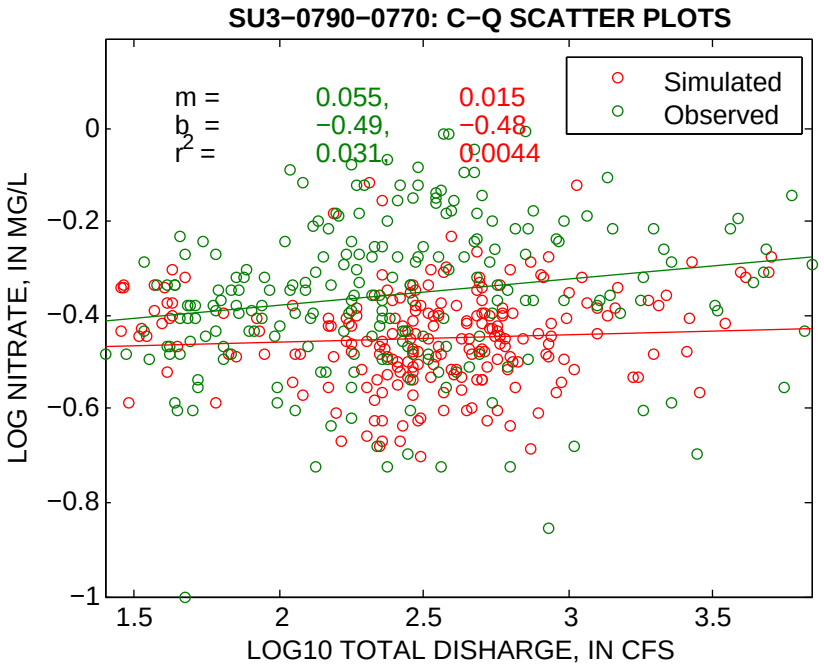
STATISTICS

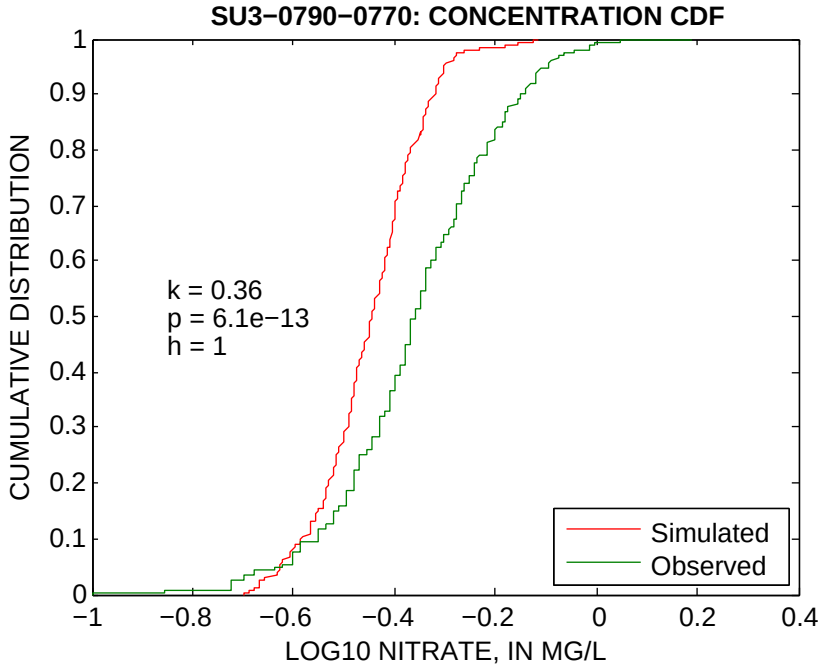
	n	observe	simulate
		222	222
min		0.1	0.19607
		-1	-0.707589
mean		0.472685	0.362126
		-0.356637	-0.452997
media		0.44	0.355685
		-0.356547	-0.448935
max		1.54	0.68465
		0.187521	-0.164531
varian		0.0344969	0.00724981
		0.027785	0.0104503
JB		0.001	0.002134
		0.014744	0.5
		ra	log
%		-23.3896	27.0191
err.va		0.0455002	0.0389278
rel.std.err		1.31896	1.40103
mod.eff		-0.318965	-0.401035

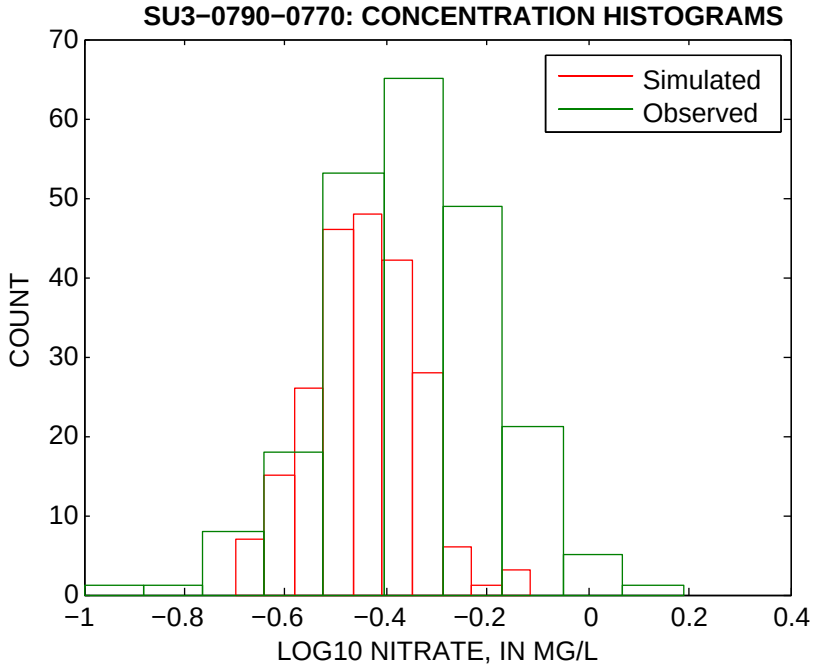
VERSION 2.1

ALL DATA
LOG10

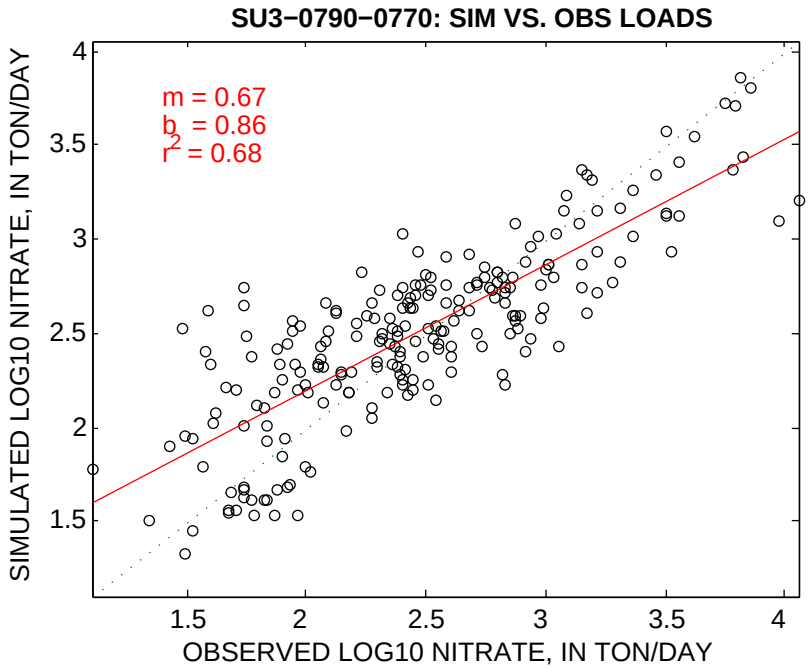


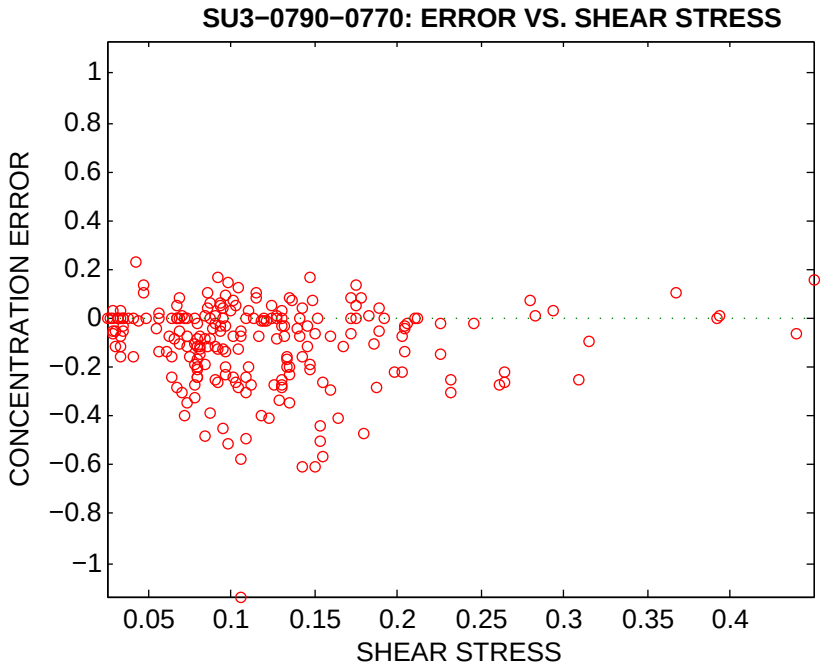


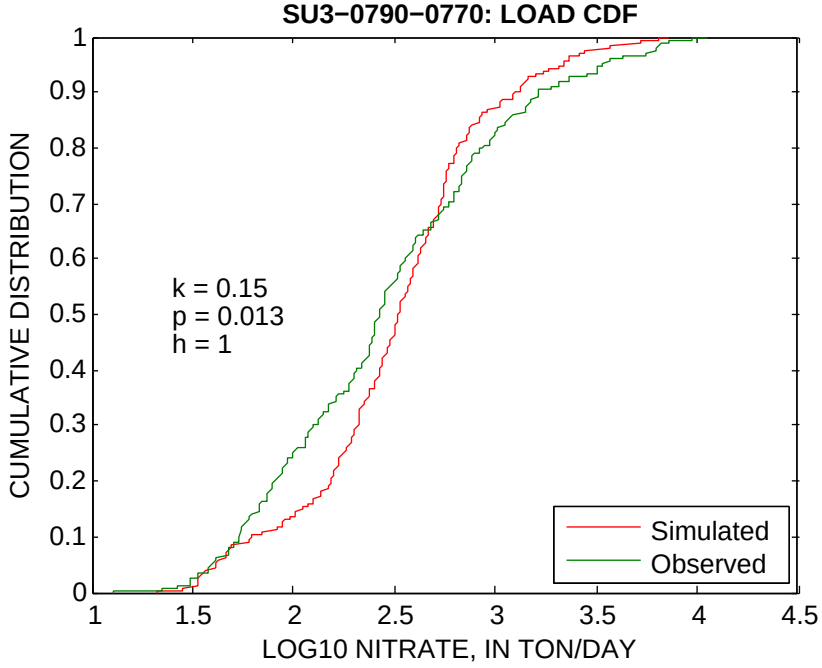


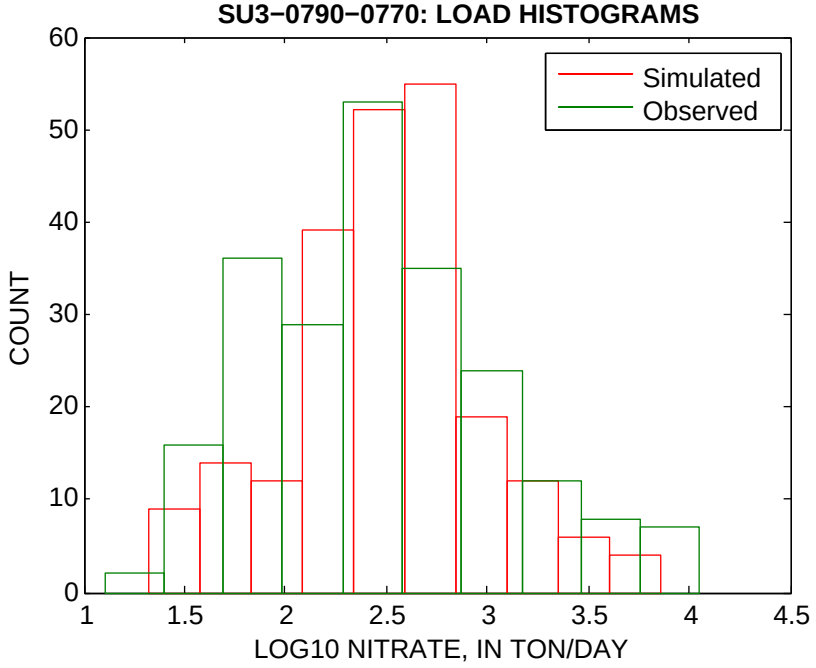


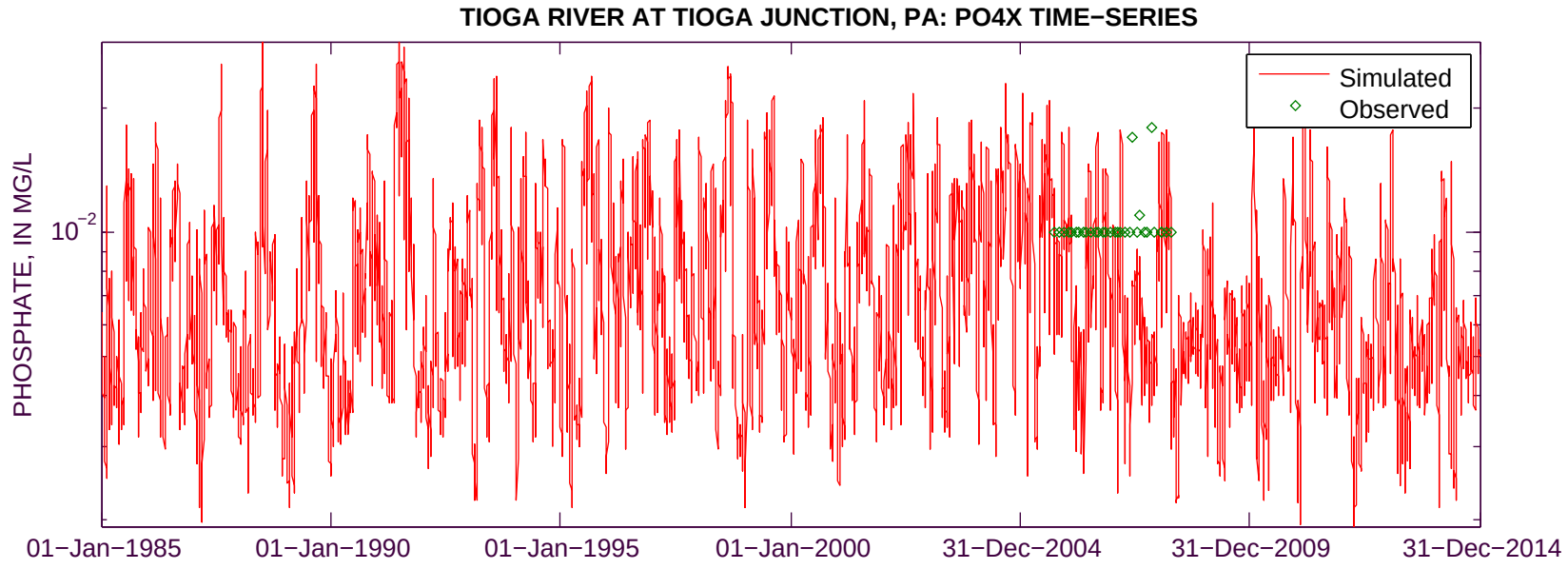
LOAD DATA
LOG10

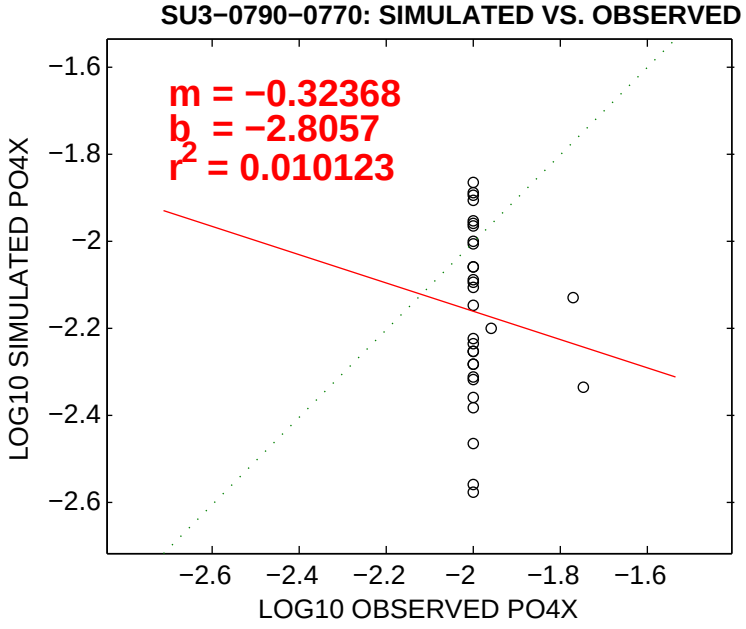


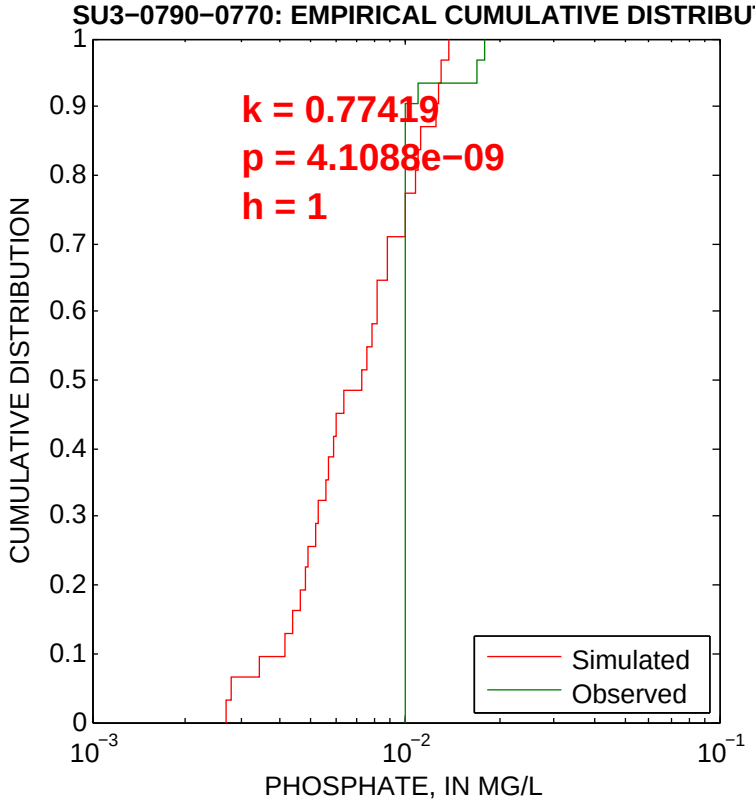












DATA SELECTION

scenario	file
P620171001WQ	PO4X.calib

plot: PO4X - phosphate

Dates: 1/1/1985 – 12/31/201

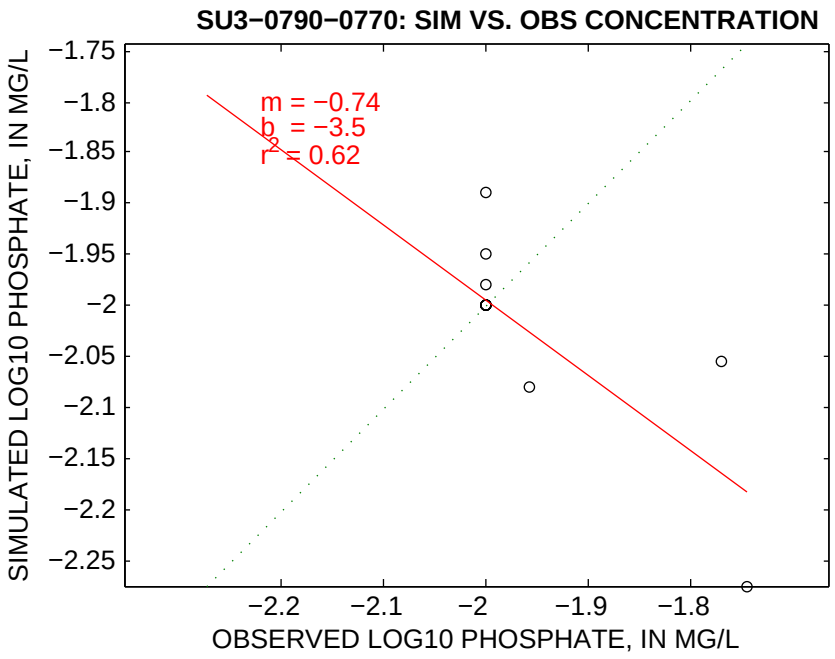
Drive	Directory	Observed
N/A	model	OBS20161101

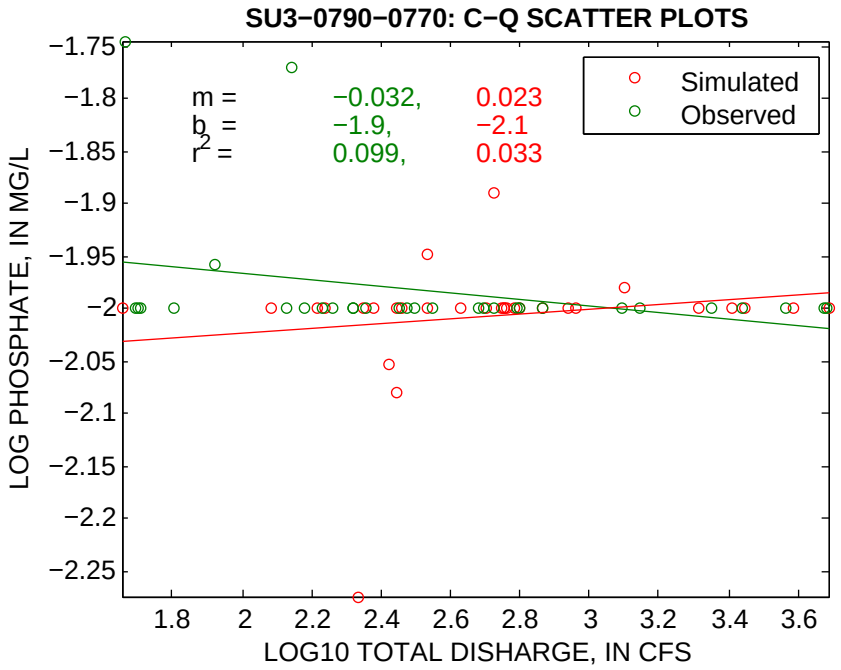
STATISTICS

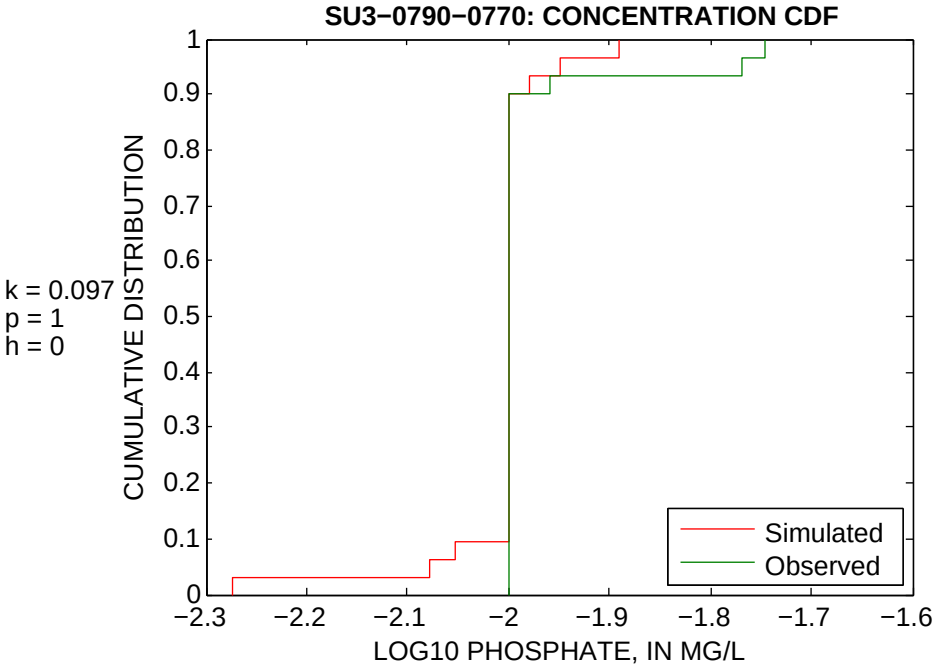
	n	31	31
		observe	simulate
min		0.01	0.0026806
		-2	-2.57177
mean		0.0105161	0.00752568
		-1.983	-2.16388
media		0.01	0.0072136
		-2	-2.14185
max		0.018	0.013724
		-1.74473	-1.86252
varian		3.52473e-0	1.01592e-0
		0.00370071	0.038299
JB		0.001	0.178718
		0.001	0.424052
		ra	log
%		-28.4368	9.12193
err.va		2.45621e-0	0.0782064
rel.std.err		6.96851	21.1328
mod.eff		-5.96851	-20.1328

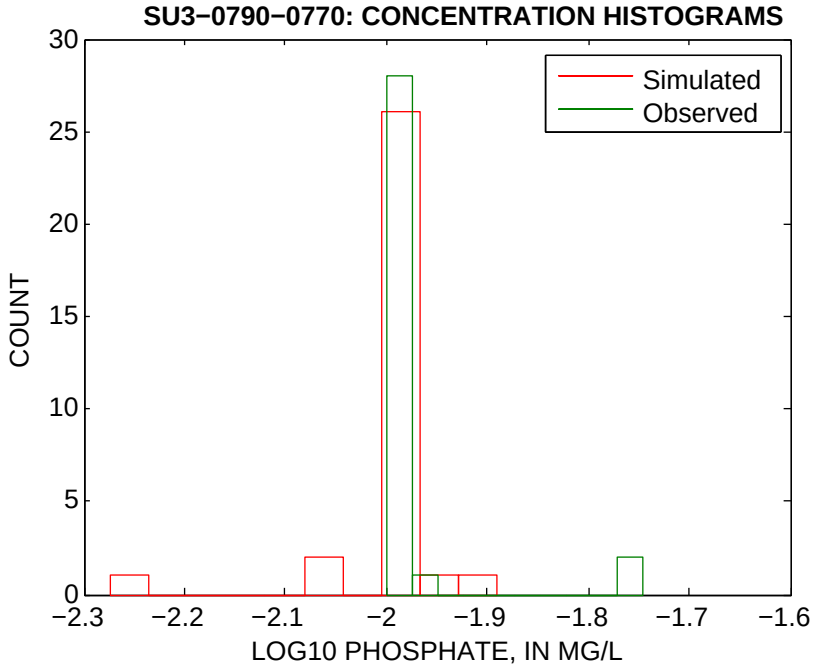
VERSION 2.1

ALL DATA
LOG10

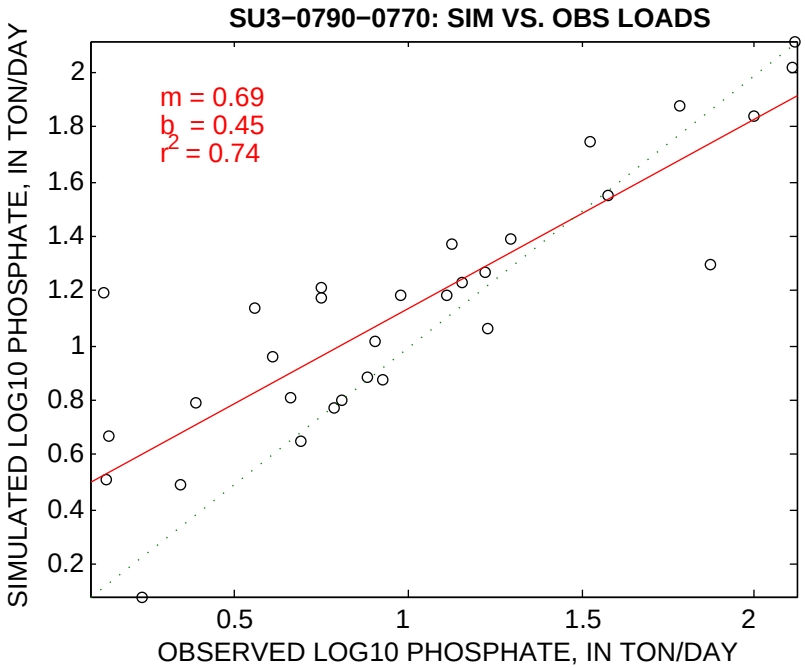


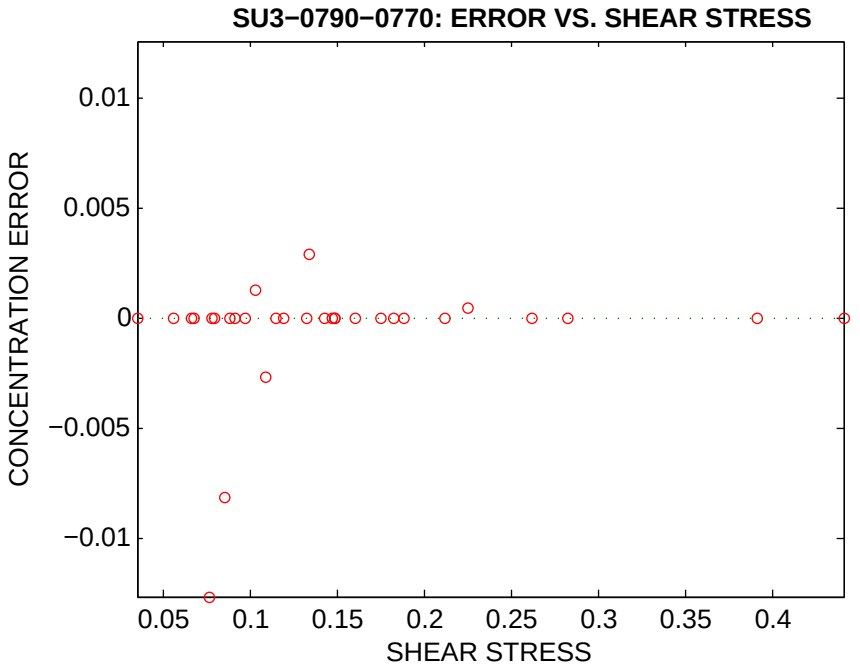


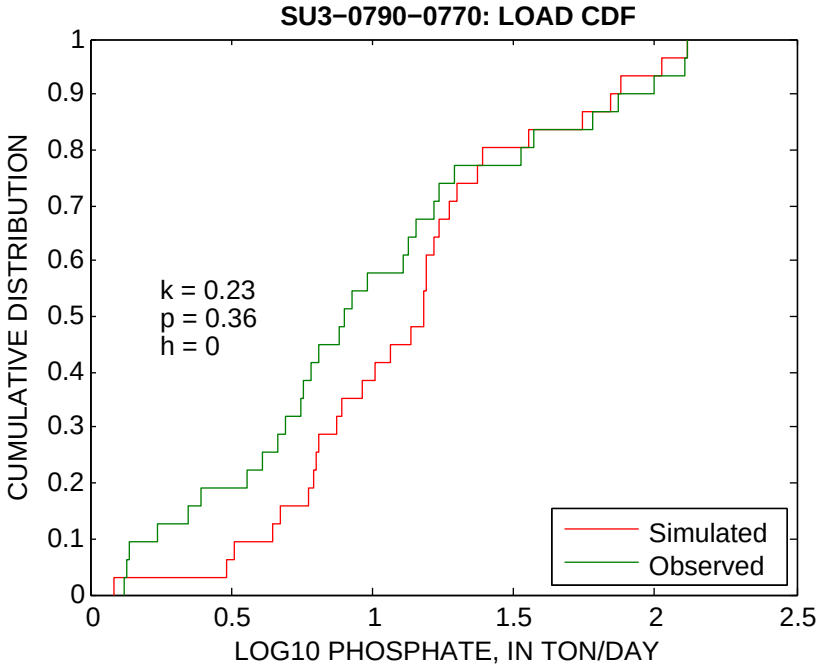


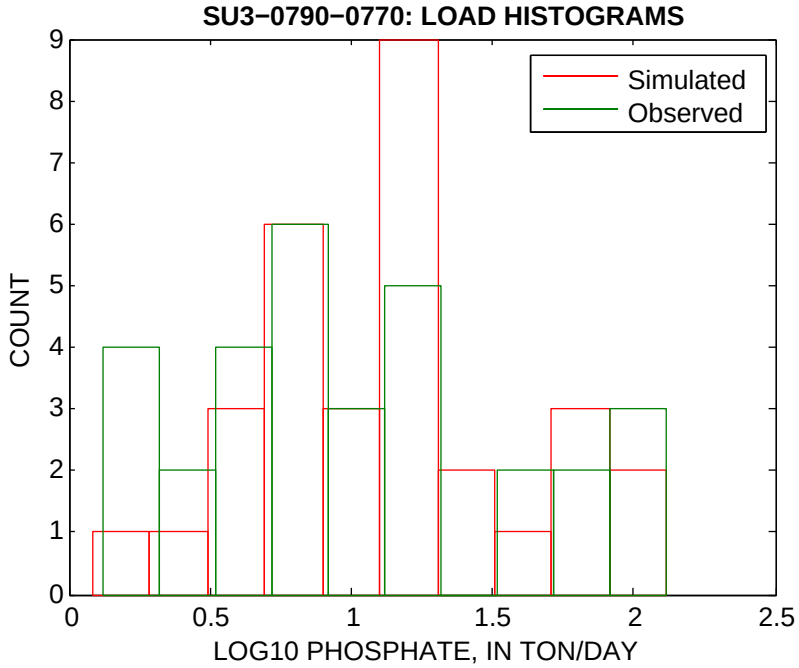


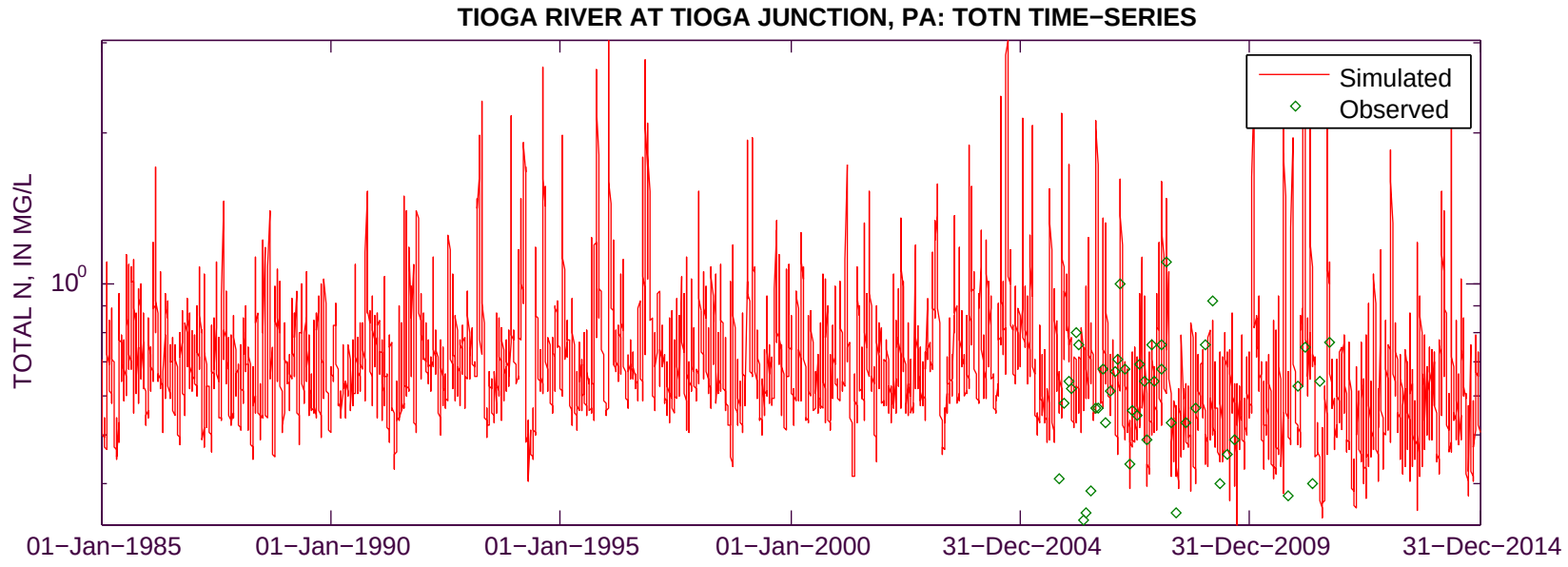
LOAD DATA
LOG10

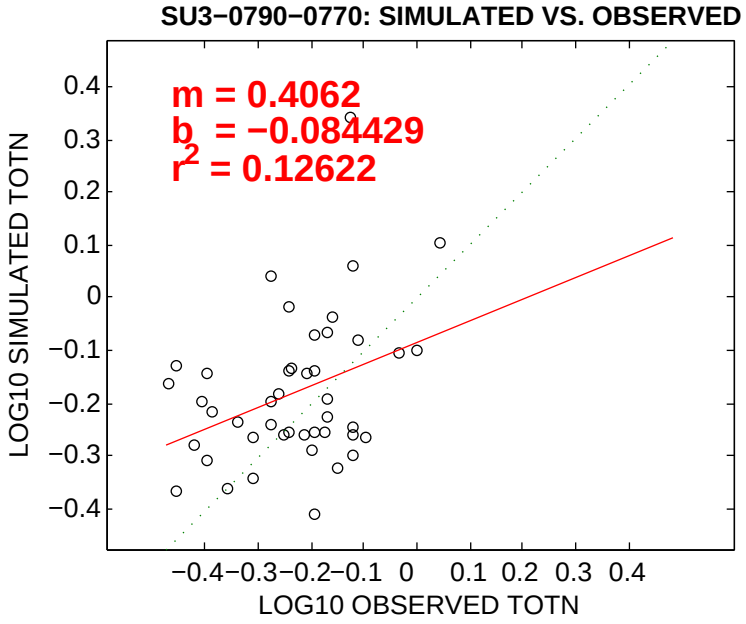


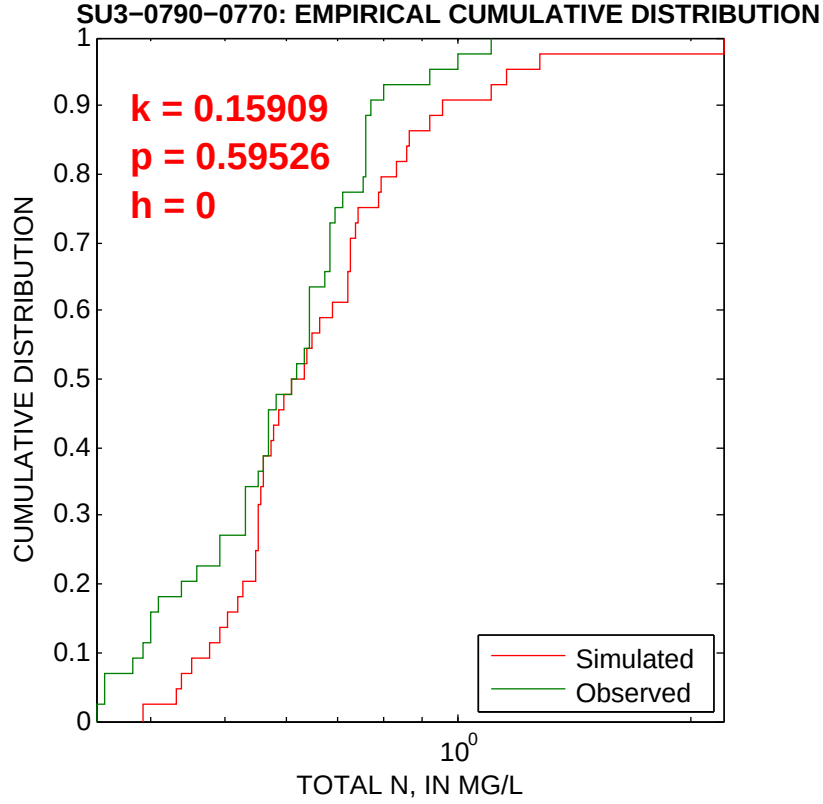












DATA SELECTION

scenario	file
P620171001WQ	TOTN.calib

plot: TOTN - total nitrogen

Dates 1/1/1985 12/31/201

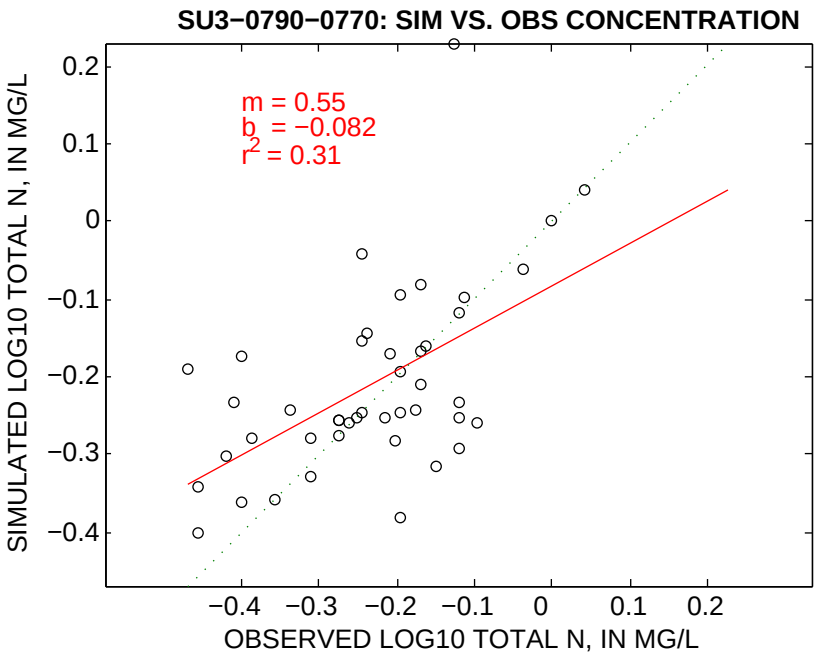
Drive	Directory	Observed
N/A	model	OBS20161101

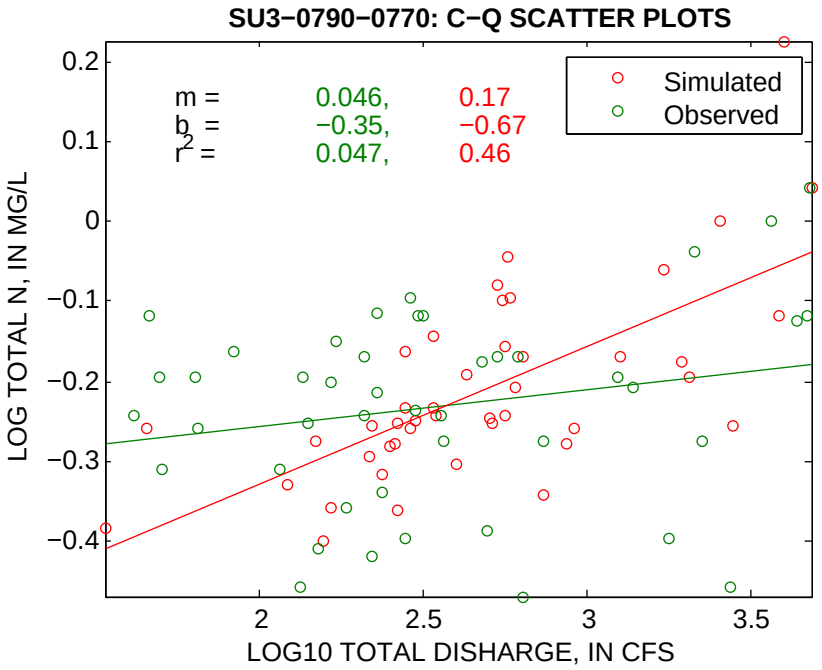
STATISTICS

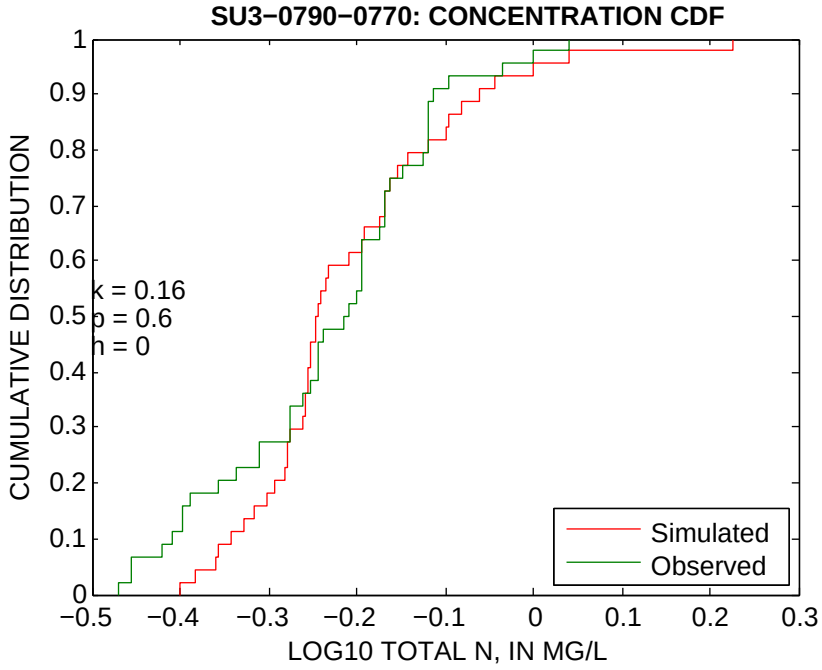
	n	observe	simulate
		44	44
min		0.34	0.39127
		-0.468521	-0.407523
mean		0.609091	0.703311
		-0.231933	-0.178641
media		0.615	0.622165
		-0.211139	-0.206178
max		1.1	2.1921
		0.0413927	0.34086
varian		0.0290038	0.0898711
		0.0150059	0.019616
JB		0.112688	0.001
		0.5	0.001611
		ra	log
%		15.4689	-22.9772
err.va		0.0913347	0.025337
rel.std.err		3.14906	1.68847
mod.eff		-2.14906	-0.688468

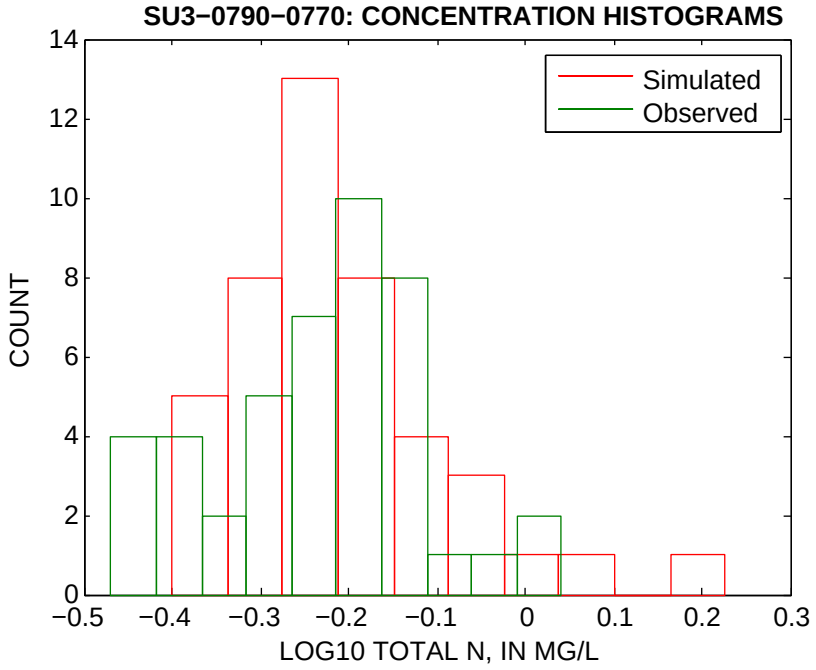
VERSION

ALL DATA
LOG10

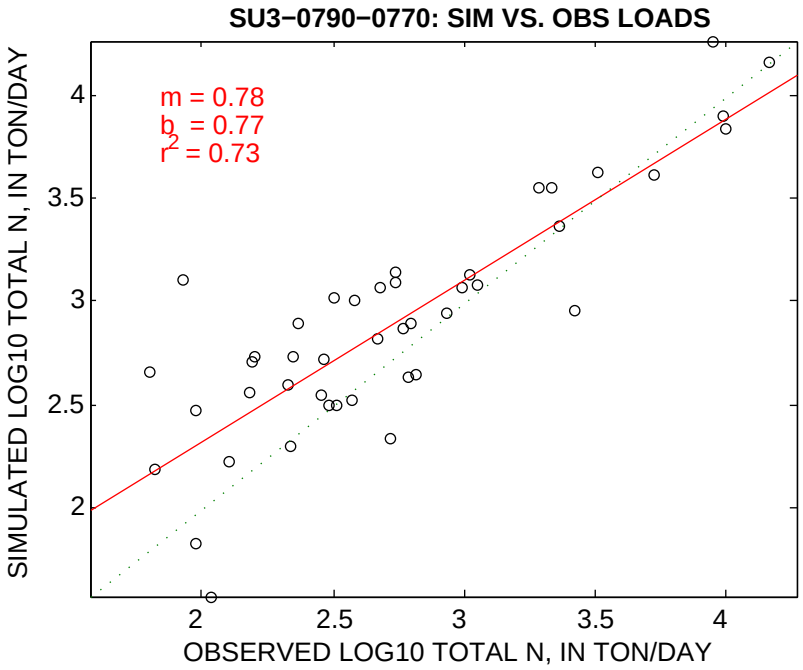


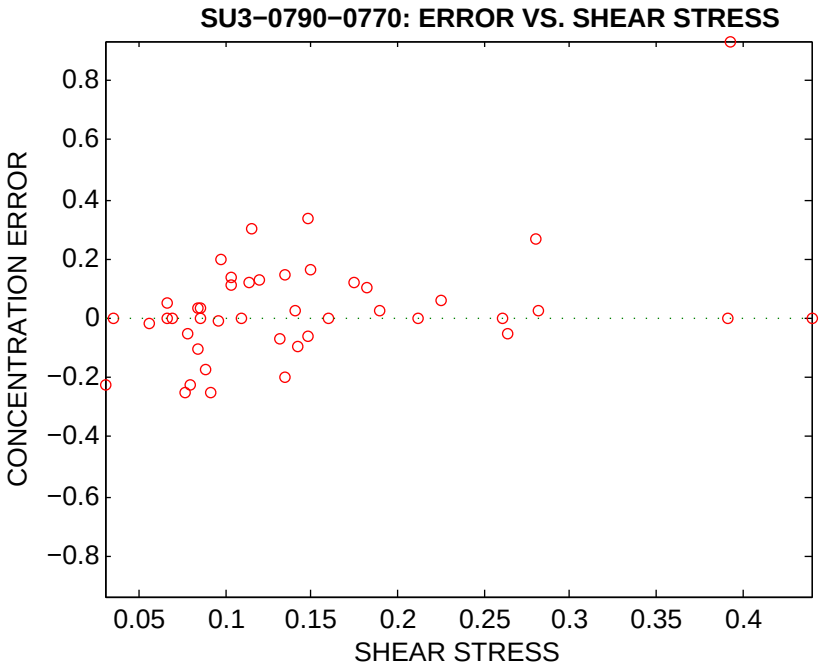


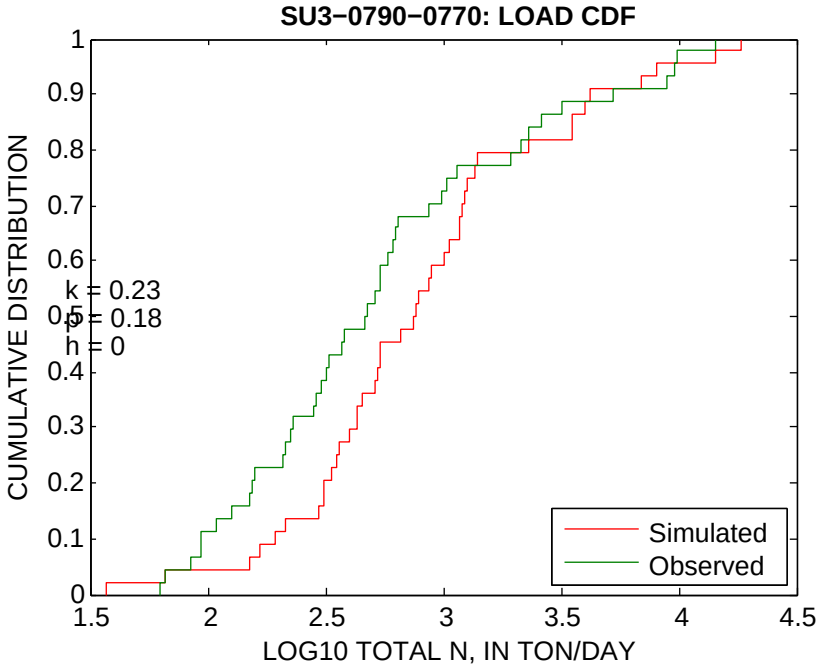


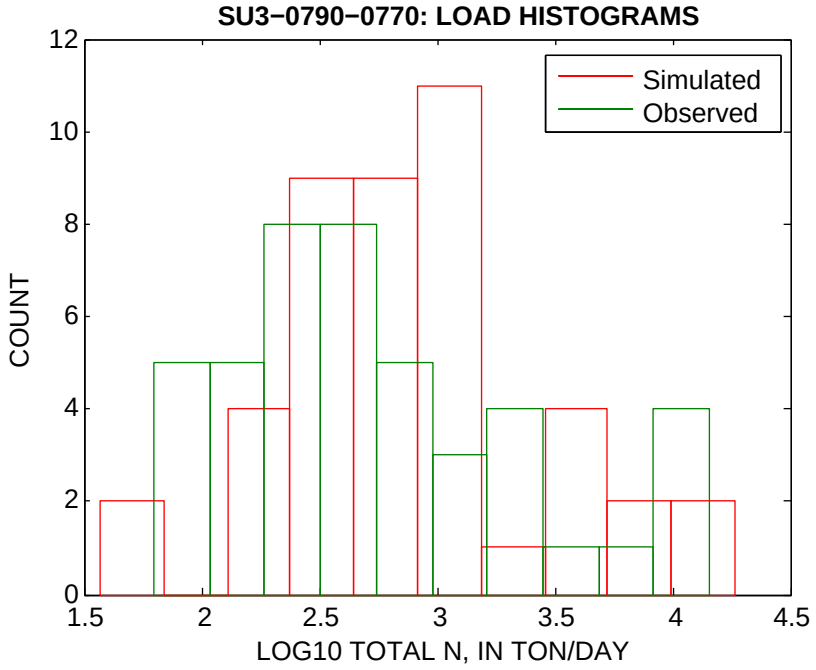


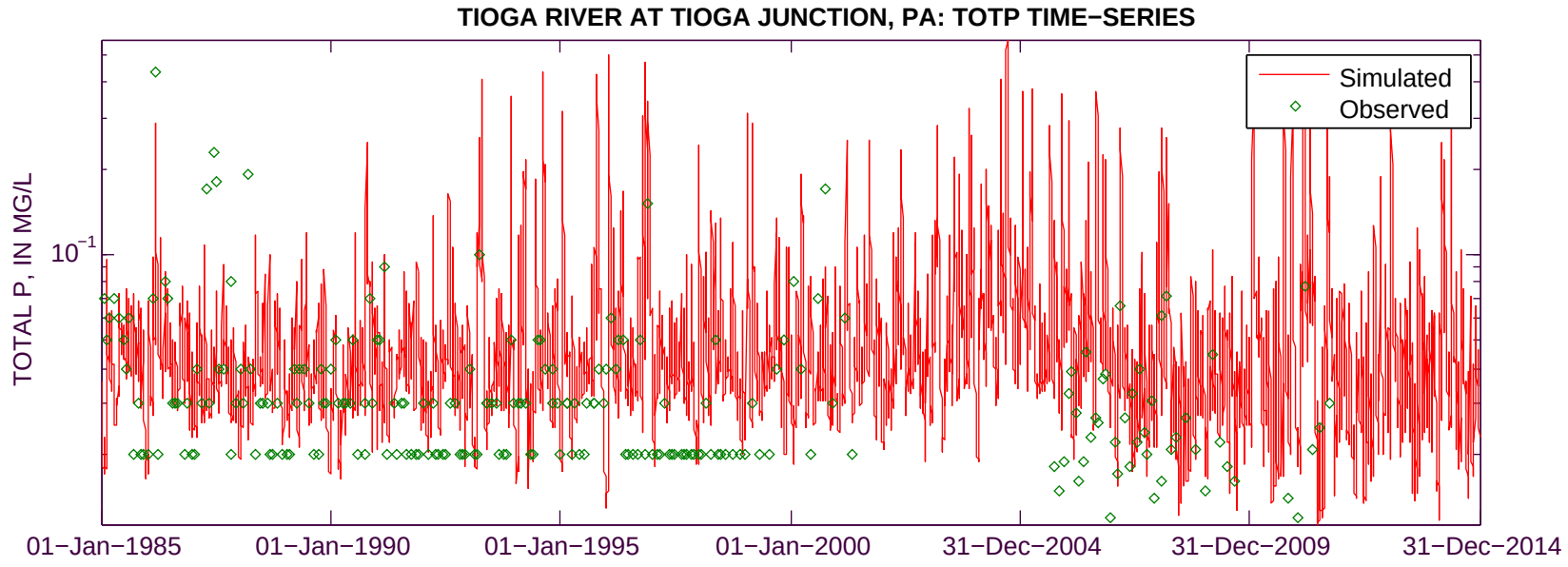
LOAD DATA
LOG10

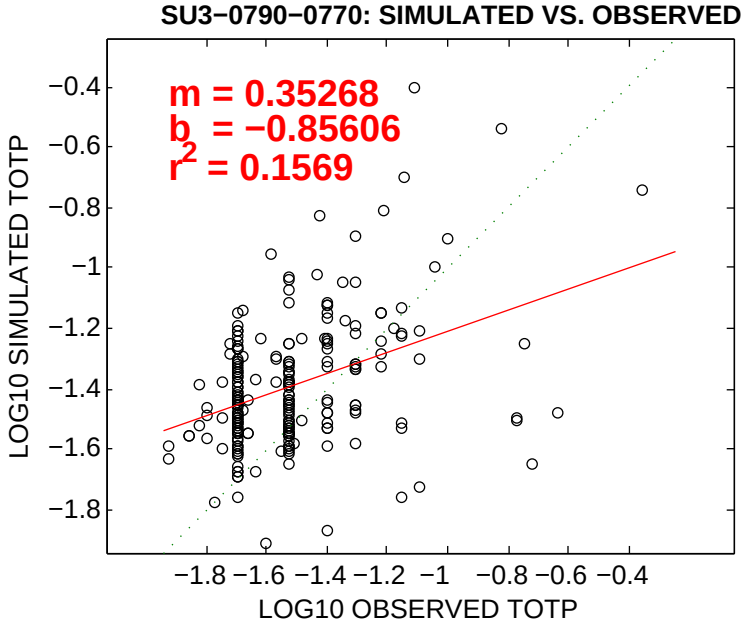


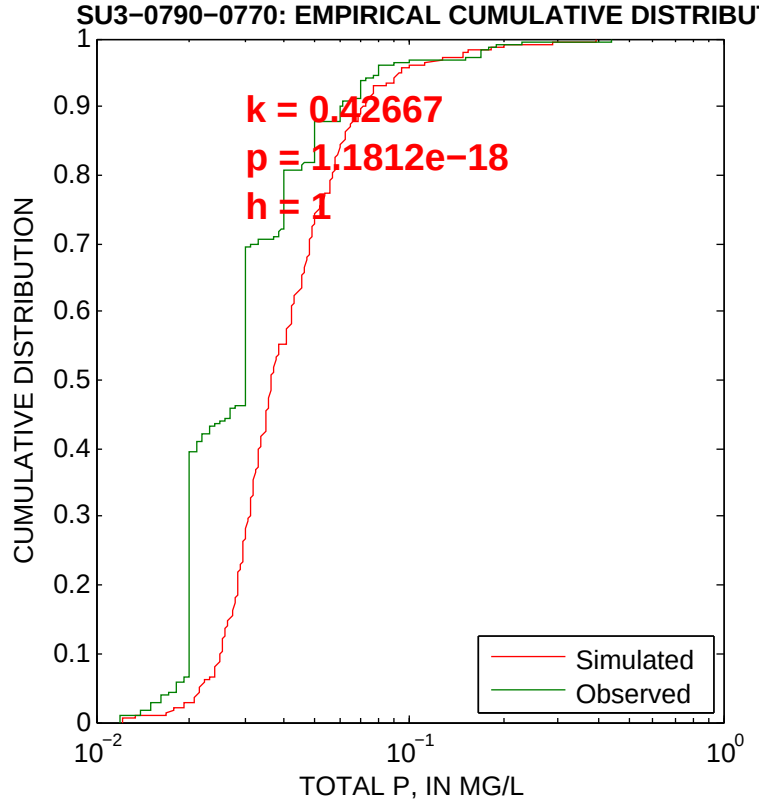












DATA SELECTION

scenario	file
P620171001WQ	TOTP.calib

plot: TOTP - total phosphorus

Dates: 1/1/1985 – 12/31/201

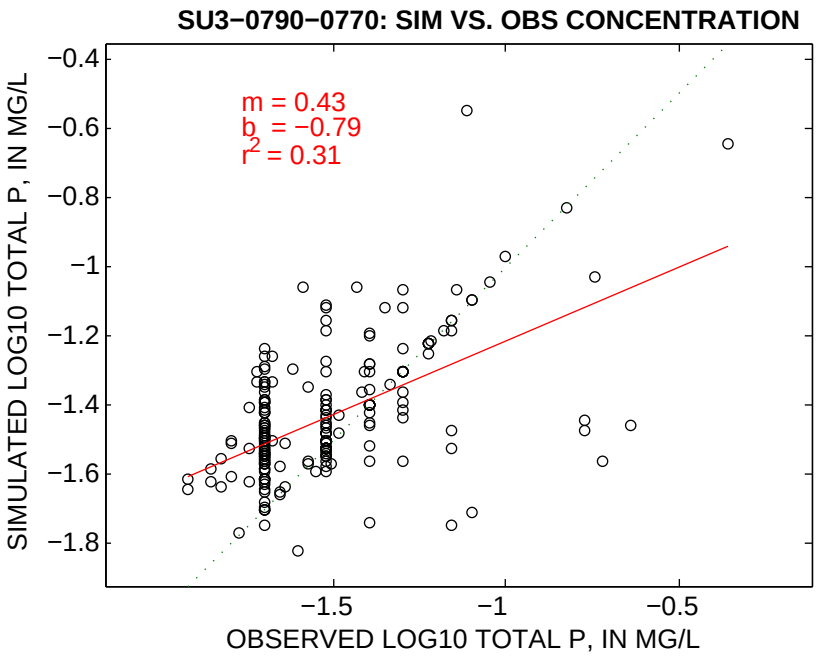
Drive	Directory	Observed
N/A	model	OBS20161101

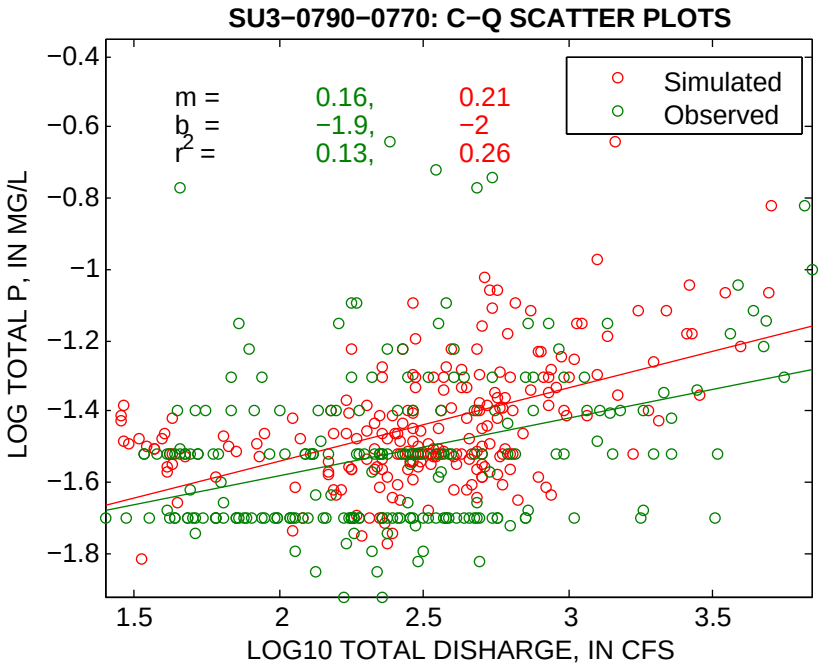
STATISTICS

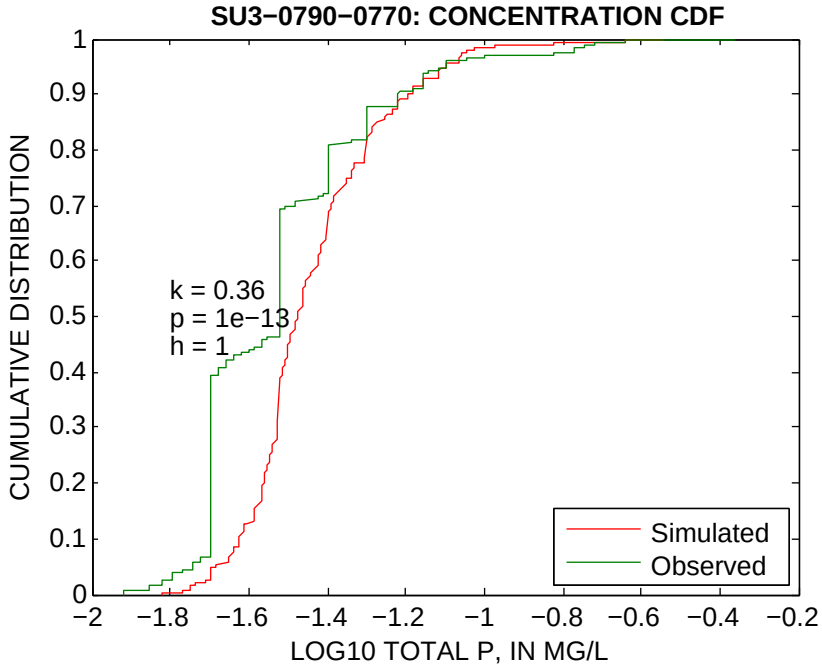
n	225	225
	observe	**simulate**
min	0.012 -1.92082	0.012174 -1.91457
mean	0.0373156 -1.51881	0.0471702 -1.39172
media	0.03 -1.52288	0.036507 -1.43762
max	0.44 -0.356547	0.3934 -0.405166
varian	0.00157797 0.0564755	0.00146077 0.0447723
JB	0.001 0.001	0.001 0.001
	ra	log
%	26.409	-8.36817
err.va	0.00200989	0.0776379
rel.std.err	1.27372	1.37472
mod.eff	-0.273722	-0.37472

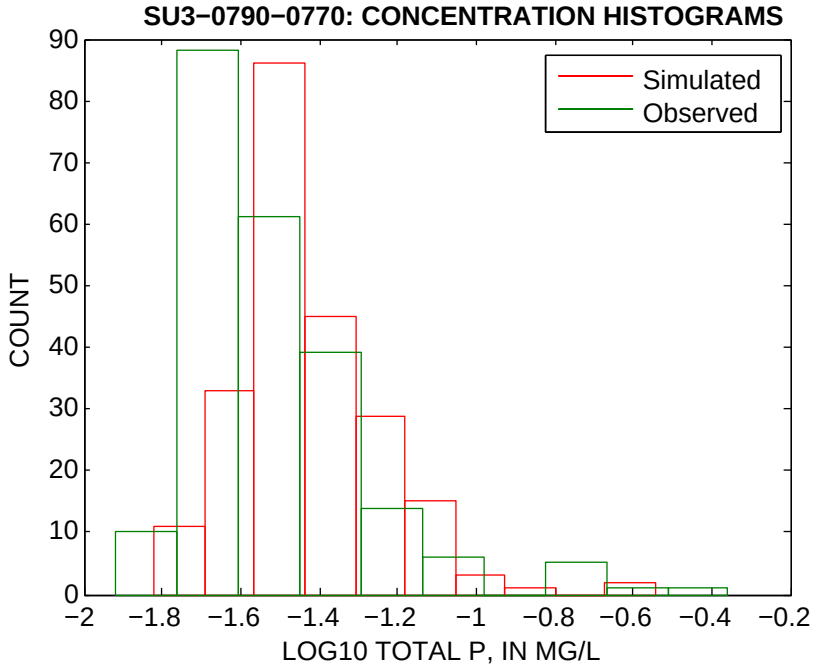
VERSION 2.1

ALL DATA
LOG10

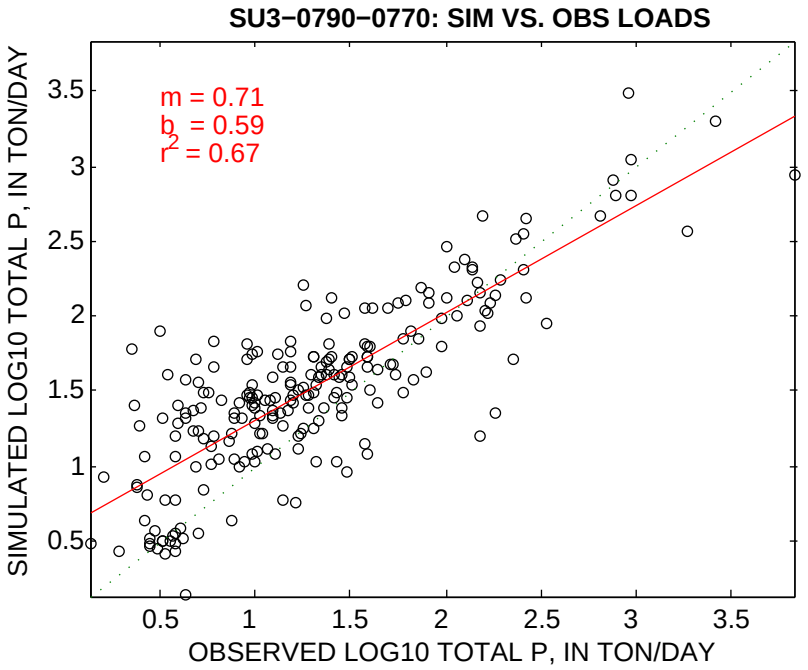


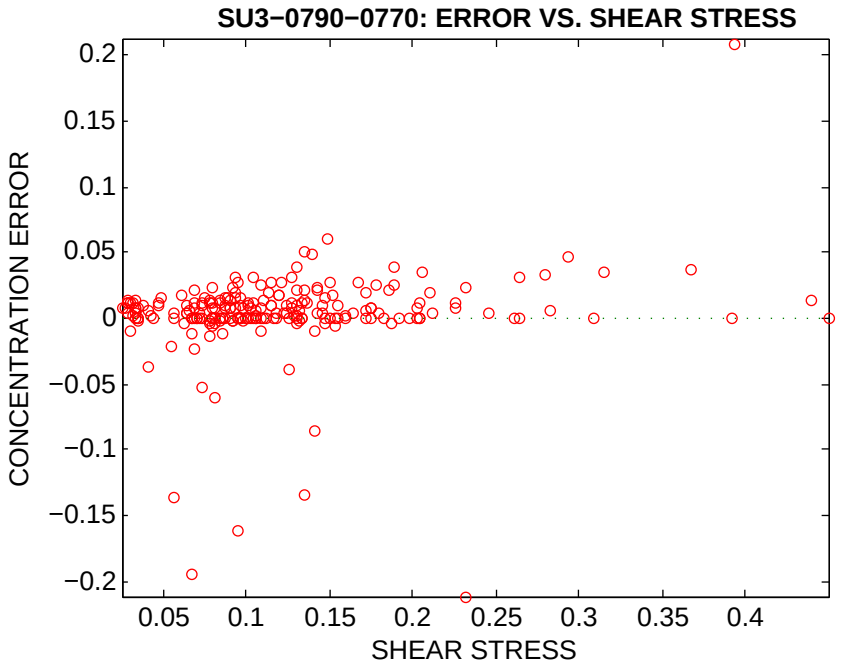


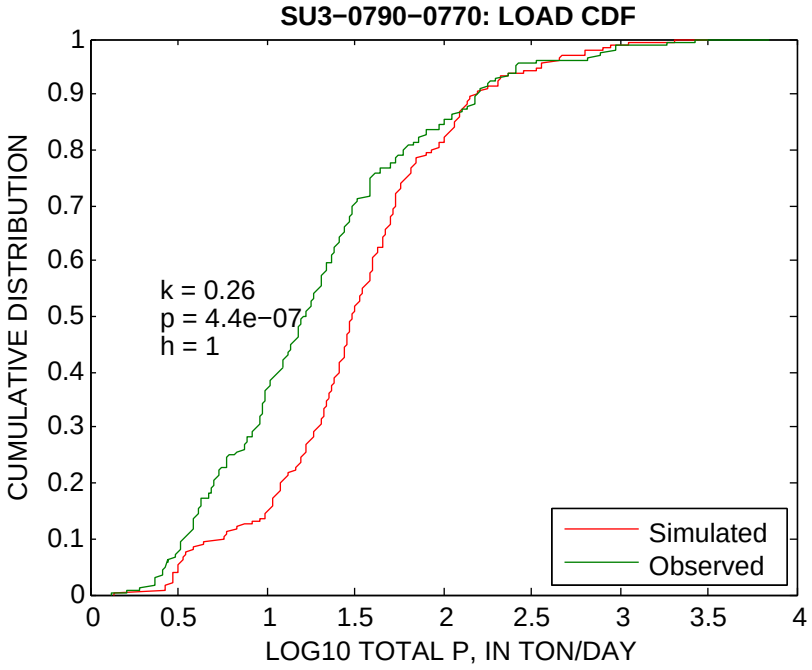


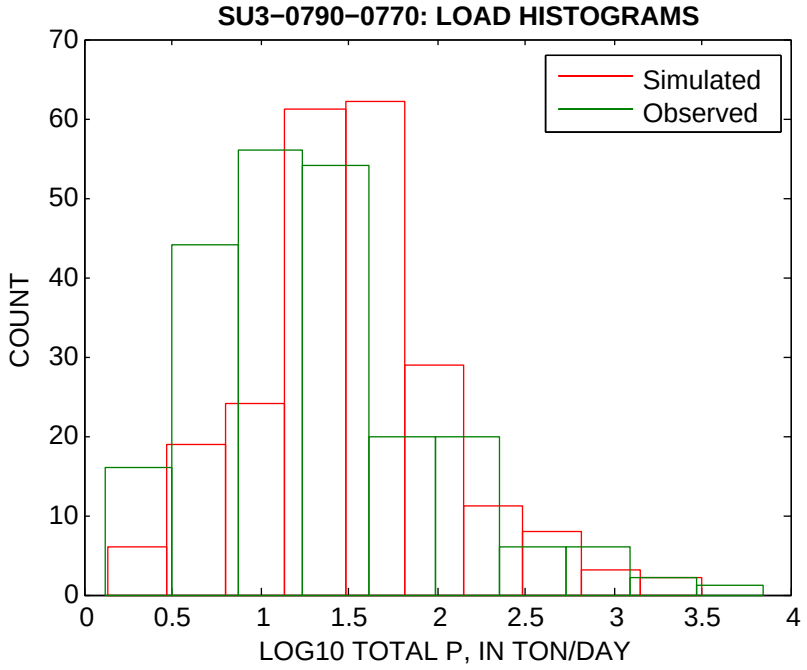


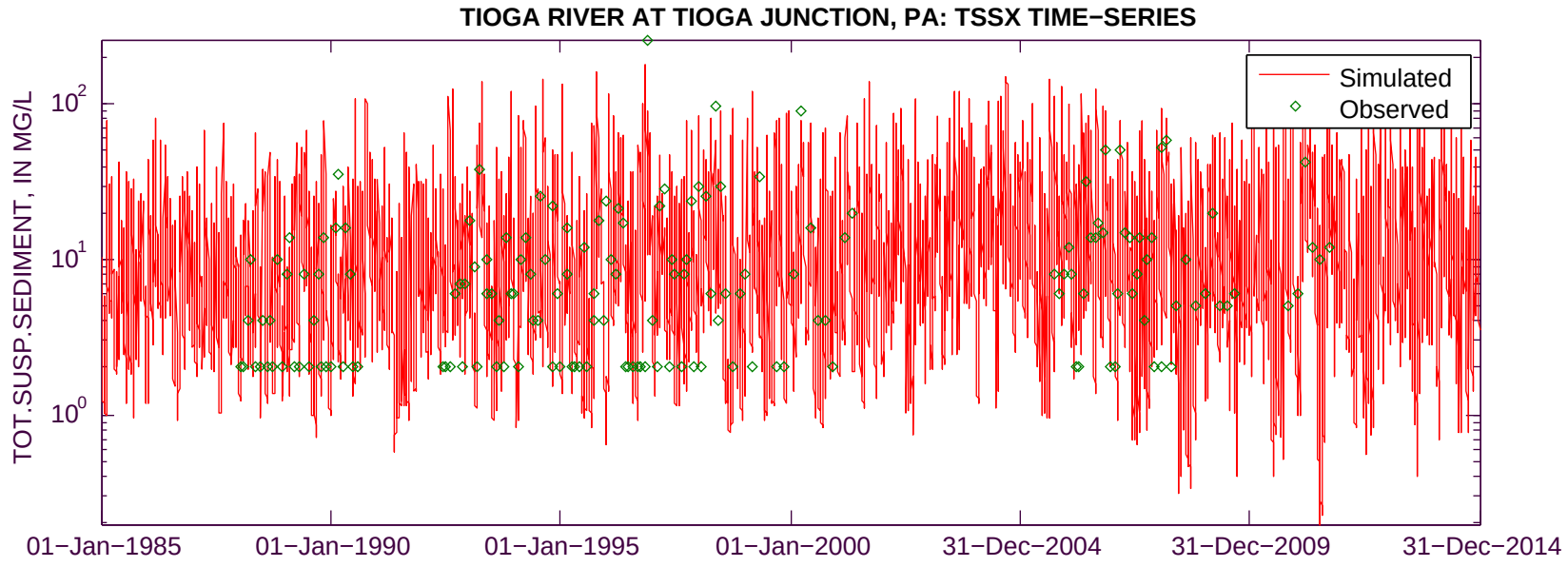
LOAD DATA
LOG10

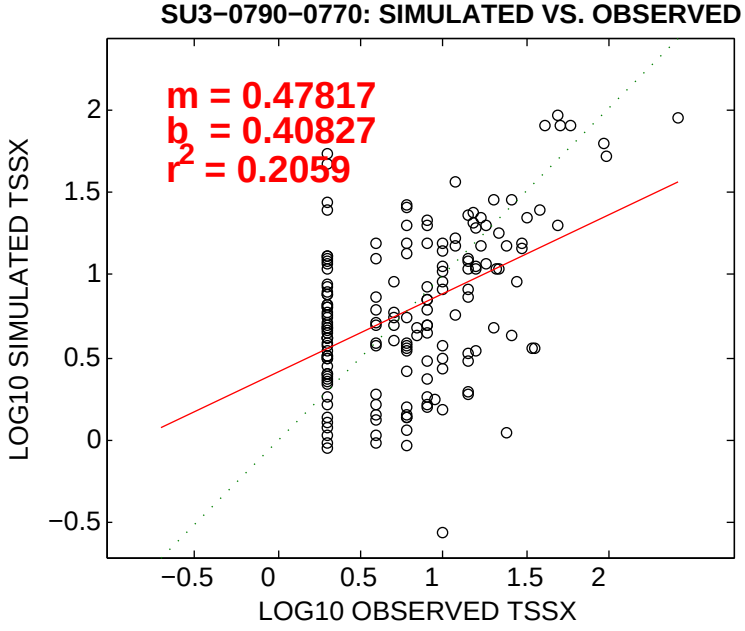


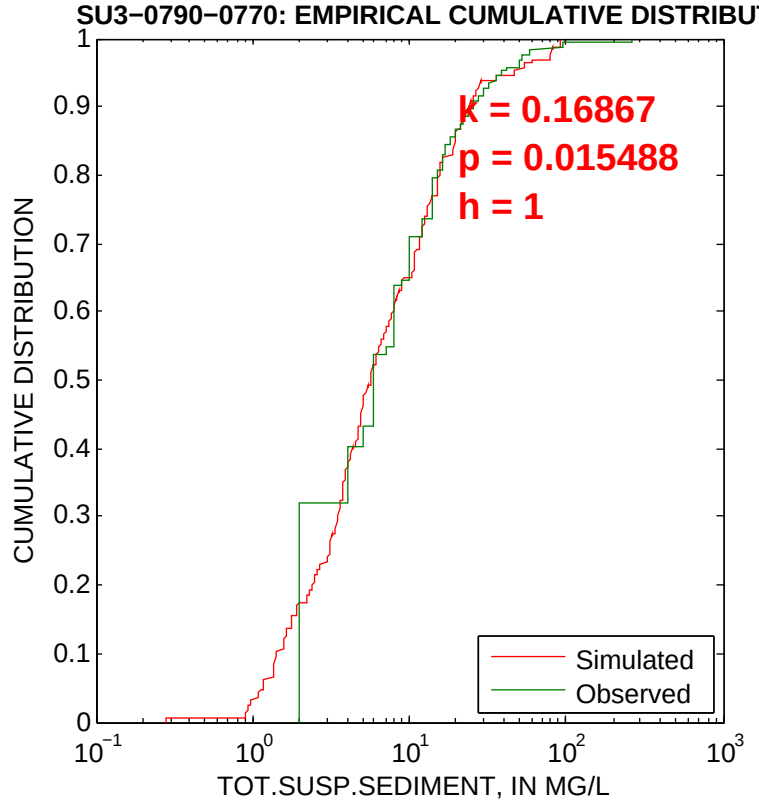












DATA SELECTION

scenario	file
P620171001WQ	TSSX.calib

plot: TSSX - total suspended ...

Dates: 1/1/1985 – 12/31/201

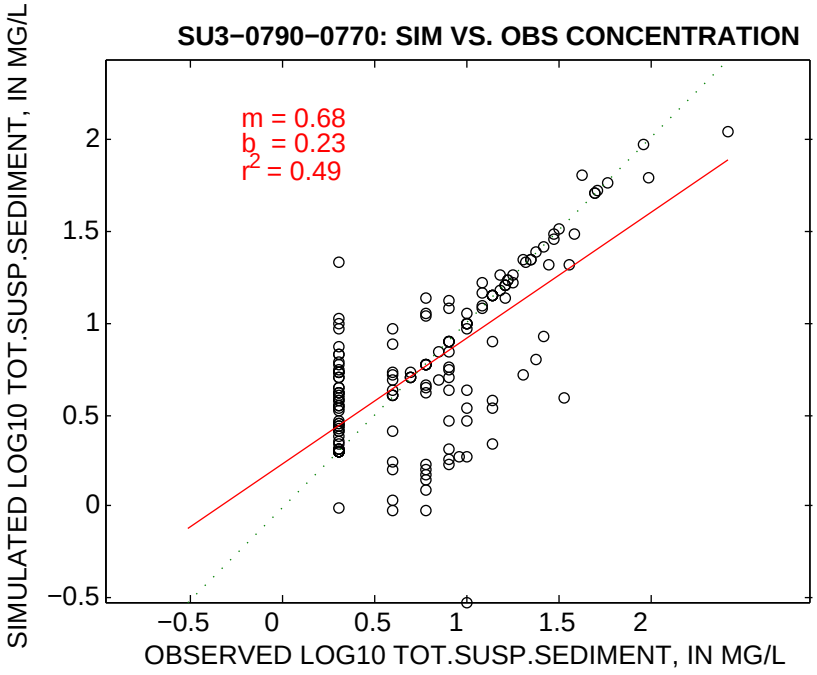
Drive	Directory	Observed
N/A	model	OBS20161101

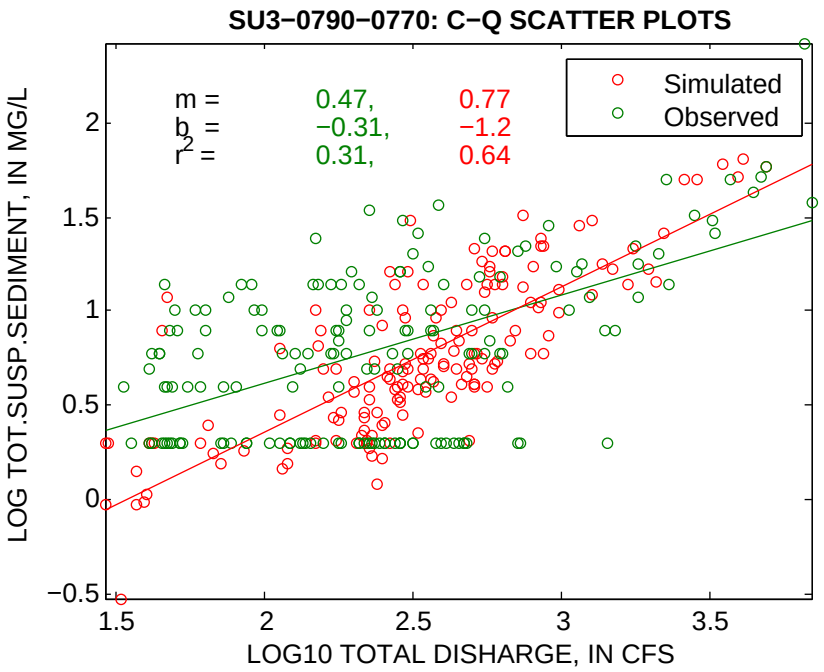
STATISTICS

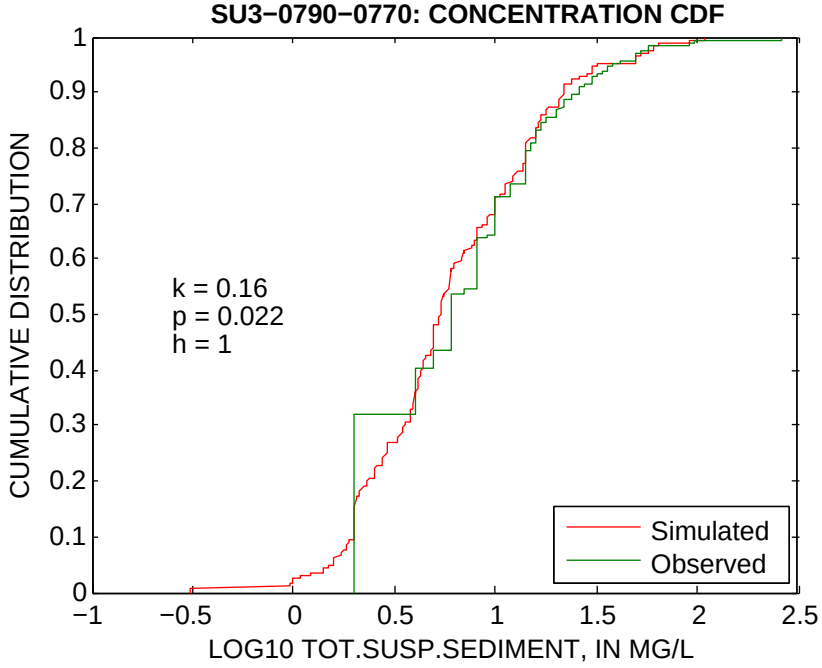
	n	166	166
		observe	simulate
min		2	0.28155
		0.30103	-0.550444
mean		12.2289	11.5413
		0.806361	0.793848
media		6	5.62845
		0.778151	0.75038
max		263	91.979
		2.41996	1.96369
varian		580.129	267.051
		0.202627	0.225015
JB		0.001	0.001
		0.013671	0.441546
		ra	log
%		-5.62275	-1.55188
err.va		327.191	0.234018
rel.std.err		0.563996	1.15492
mod.eff		0.436004	-0.154917

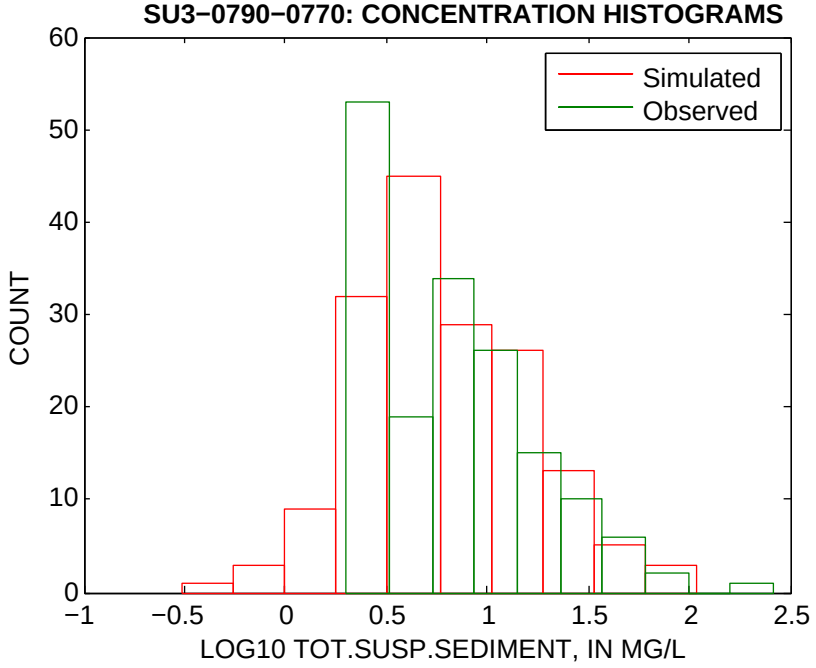
VERSION 2.1

ALL DATA
LOG10

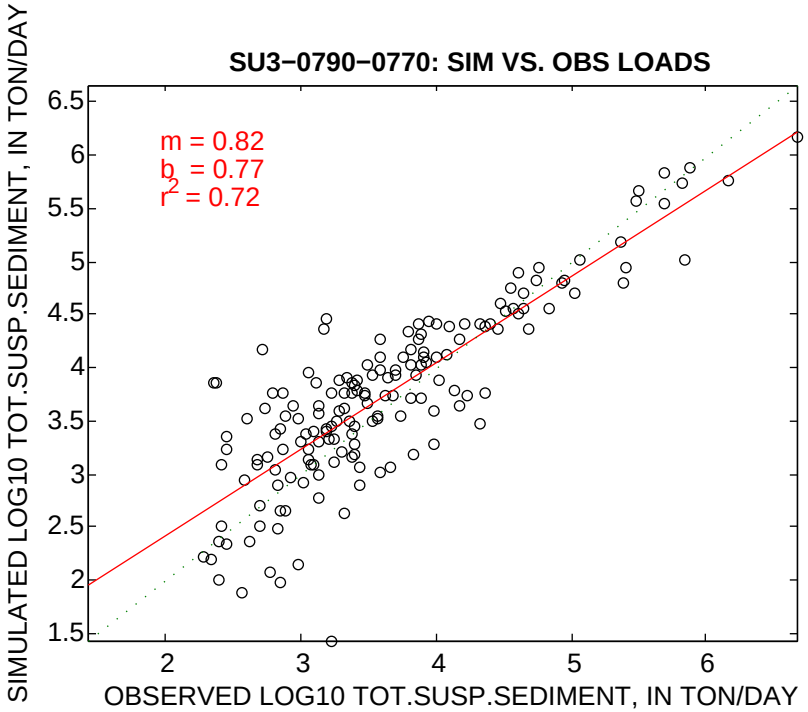


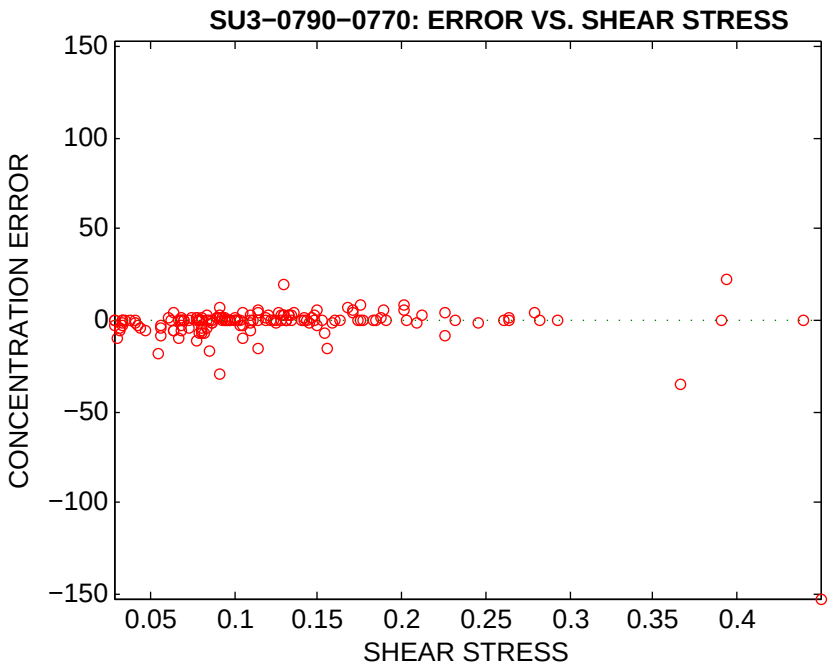


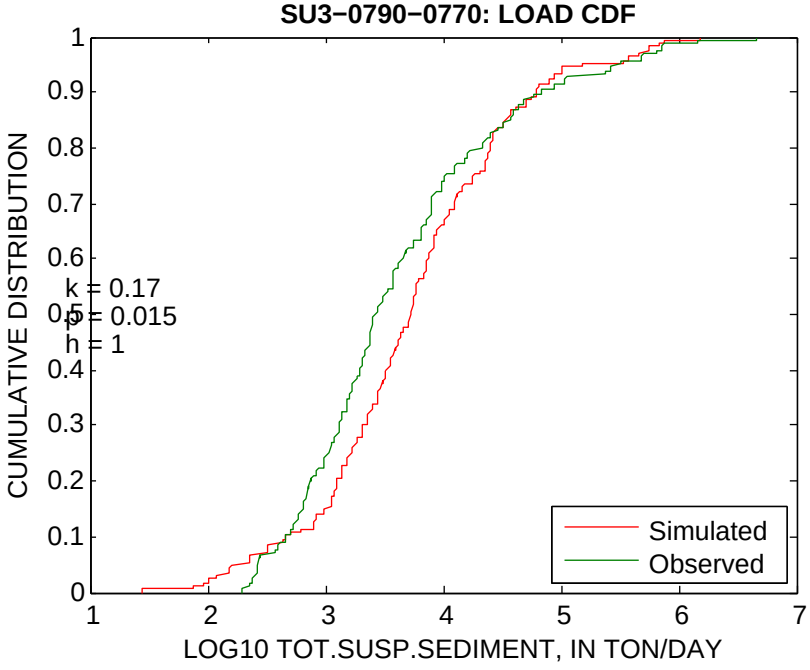


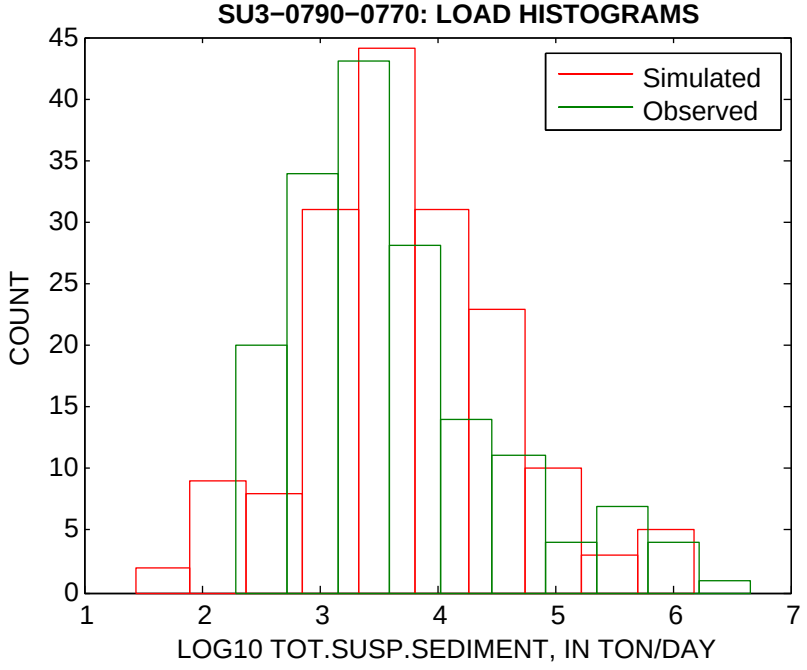


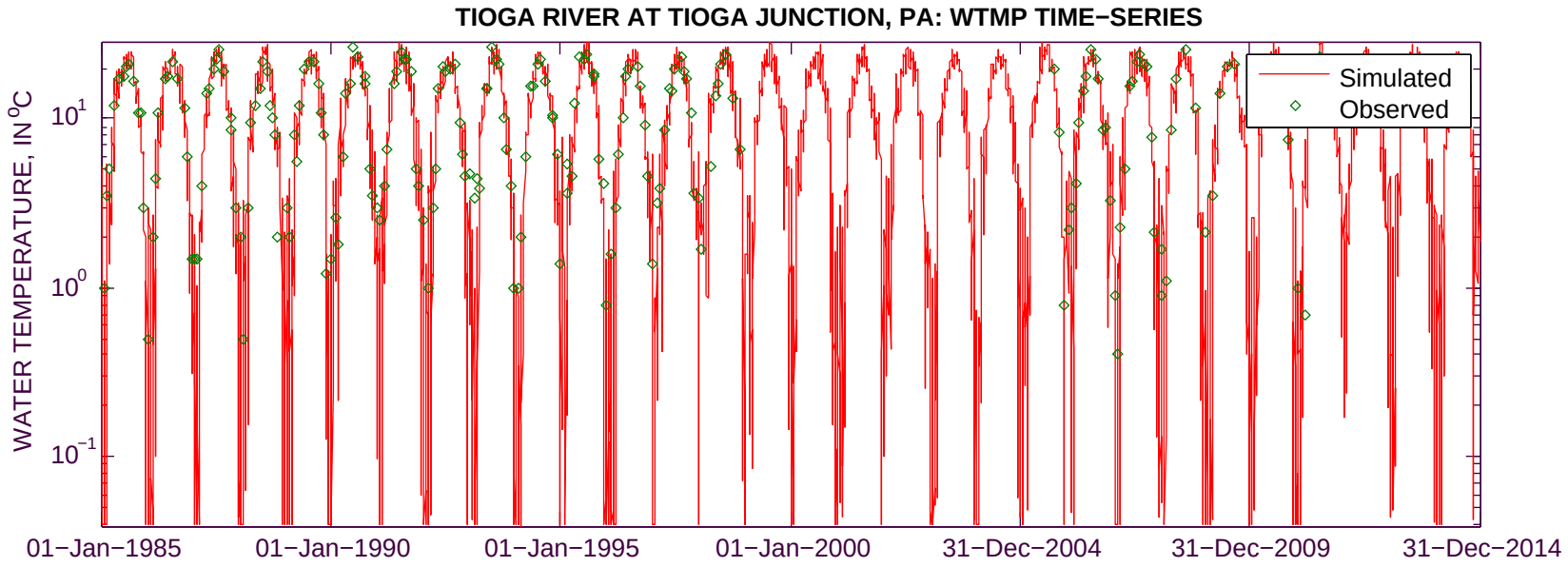
LOAD DATA
LOG10

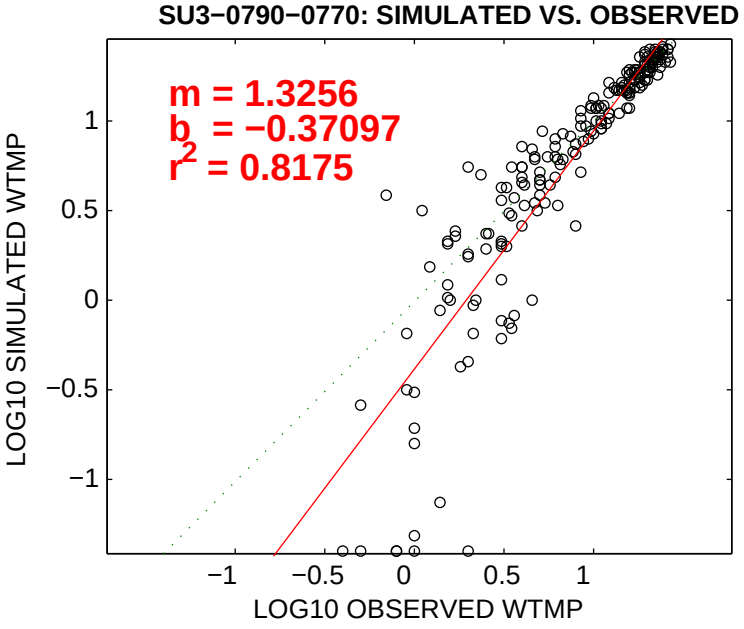


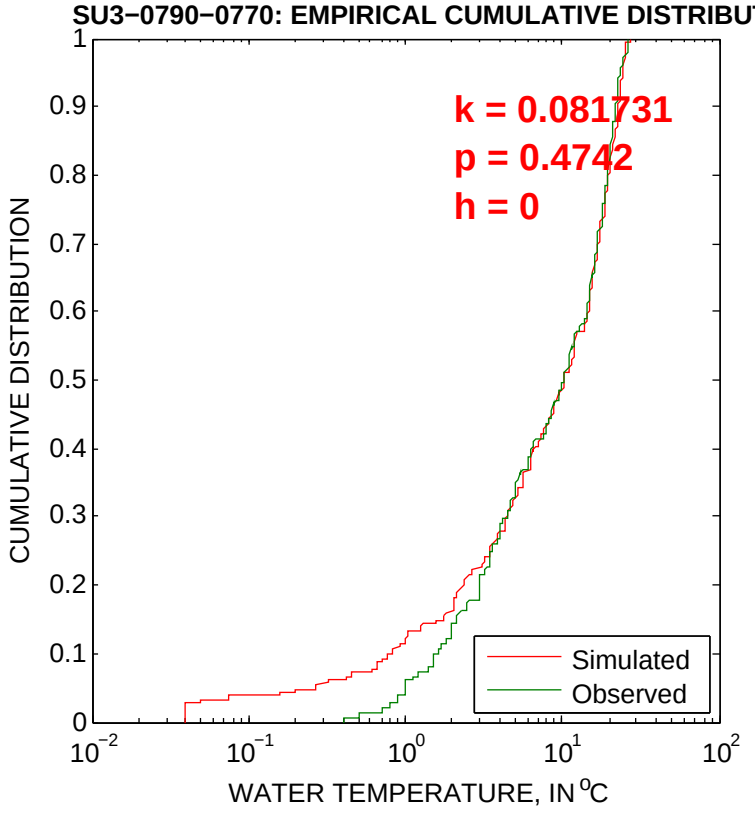












DATA SELECTION

scenario: P620171001WQ | file: WTMP.calib

plot: WTMP - water tempera...

Dates: 1/1/1985 | 12/31/201

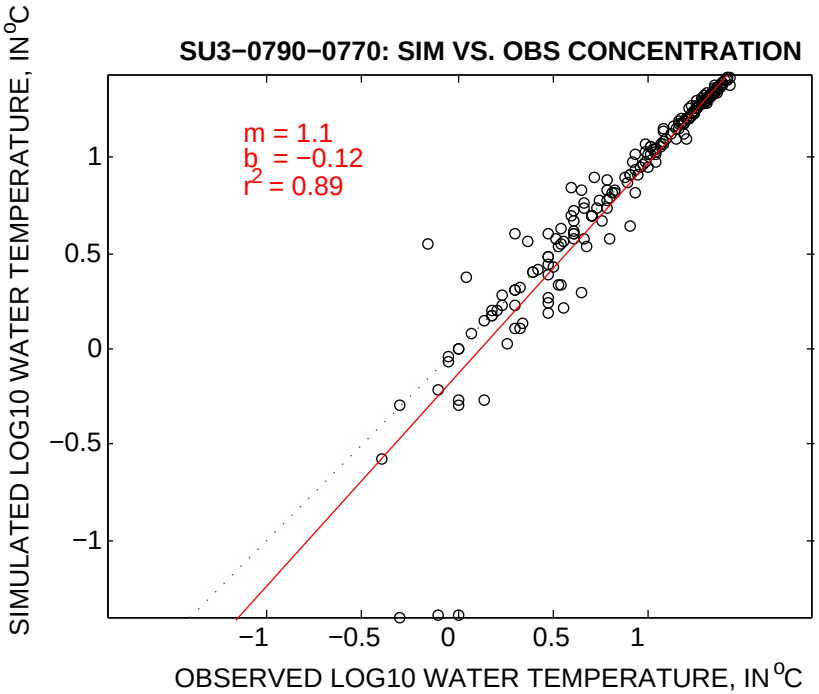
Drive: N/A | Directory: model | Observed: OBS20161101

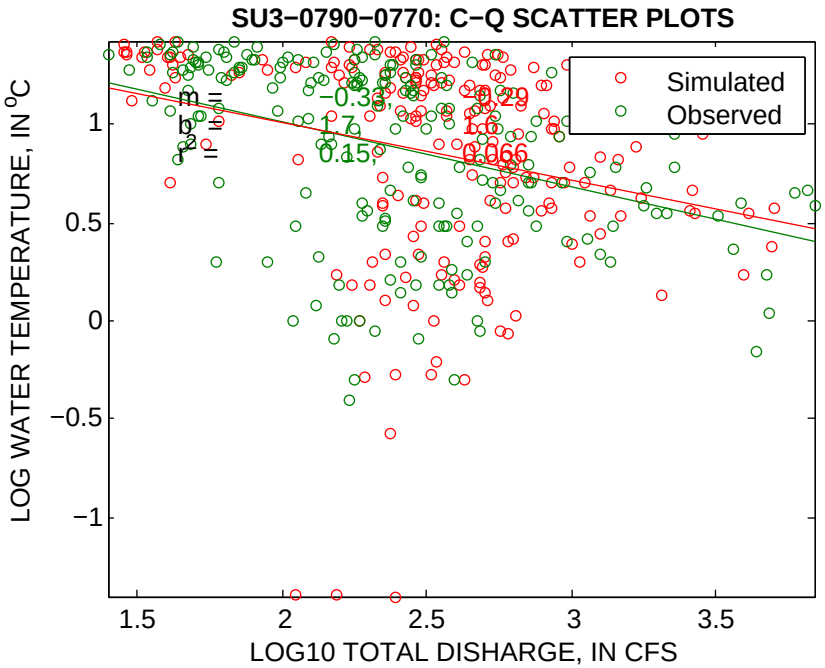
STATISTICS

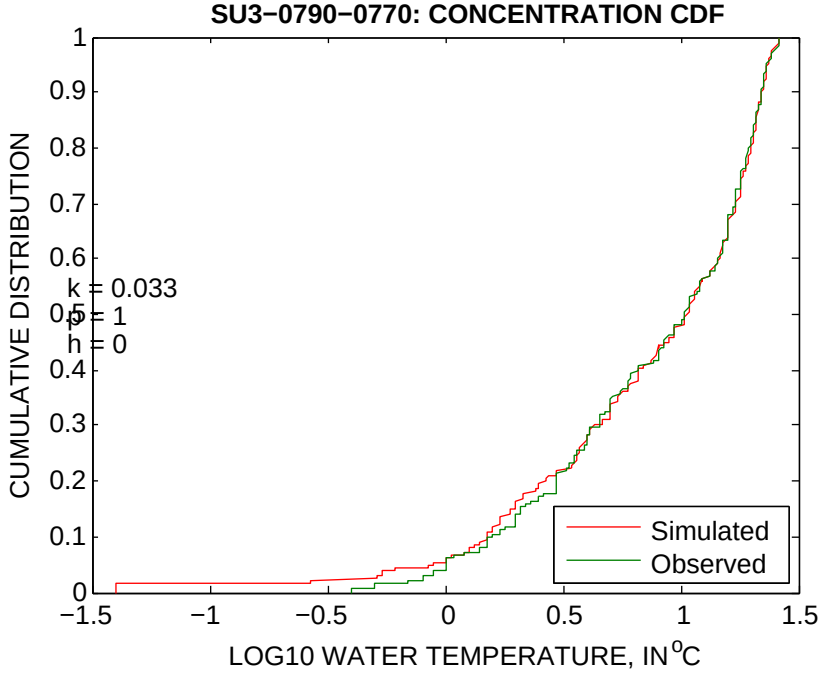
		observe	simulate
n		208	208
min		0.4	0.039923
		-0.39794	-1.39878
mean		11.1288	11.2109
		0.875927	0.790184
media		10.3	10.3345
		1.01284	1.01428
max		26.5	26.893
		1.42325	1.42964
varian		61.6257	67.7355
		0.19985	0.429593
JB		0.003524	0.003871
		0.002008	0.001
		ra	log
%		0.73768	-9.78888
err.va		3.52464	0.106977
rel.std.err		0.571943	0.535285
mod.eff		0.942806	0.464715

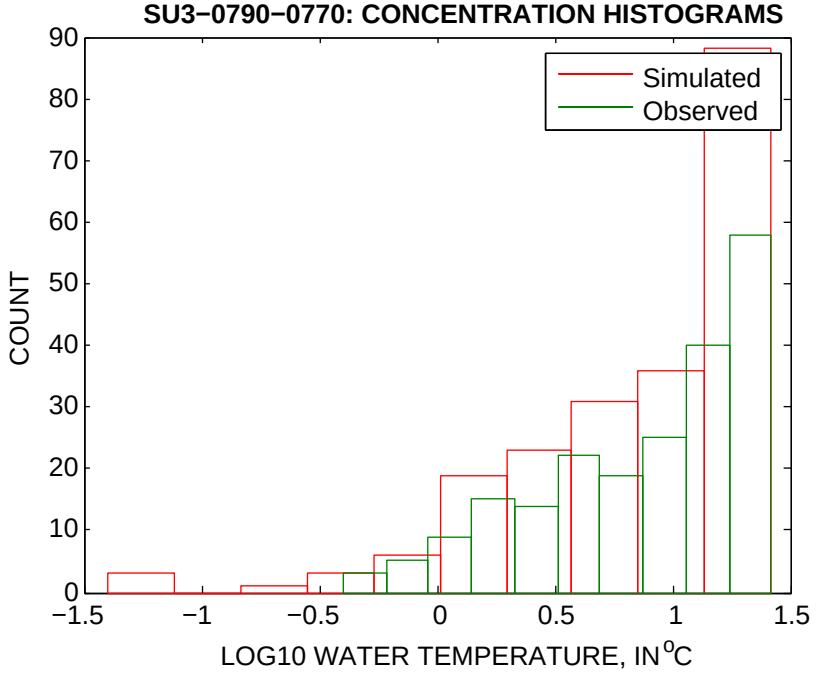
VERSION 2.1

ALL DATA
LOG10

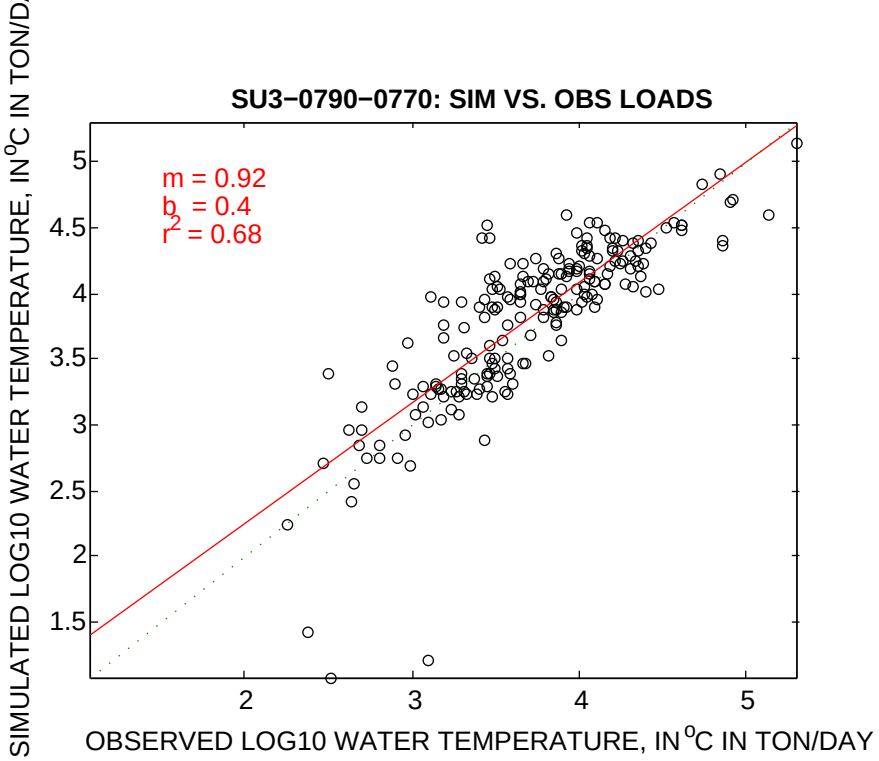


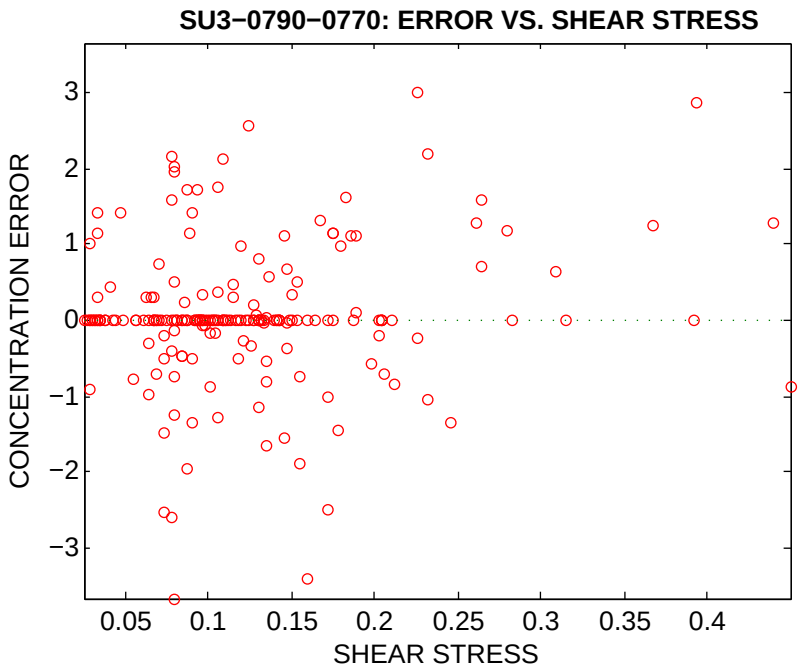


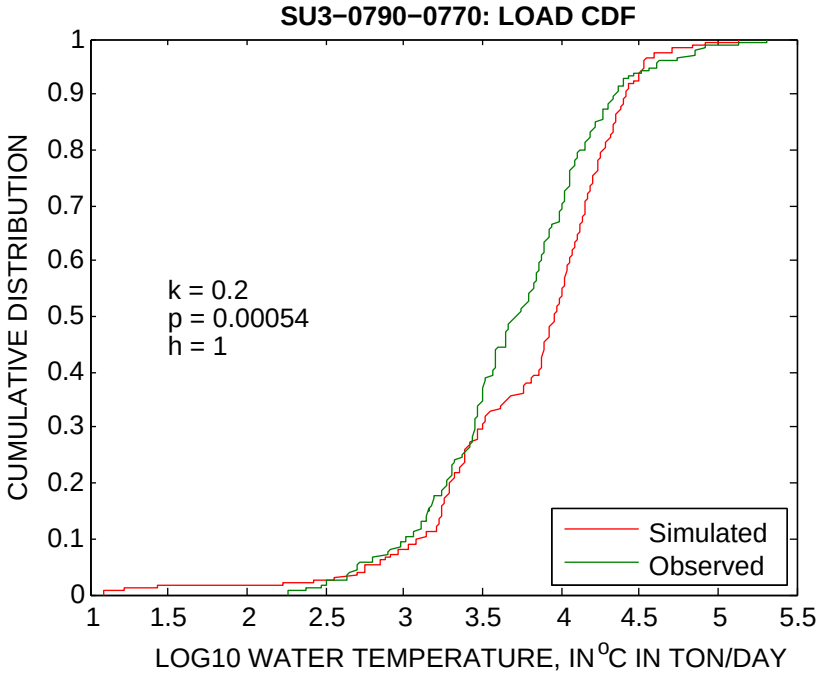


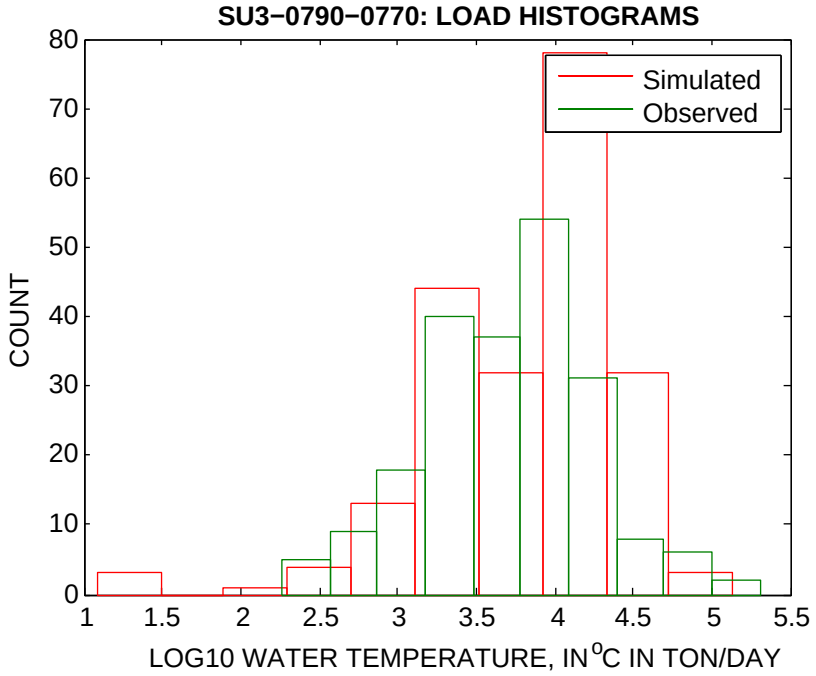


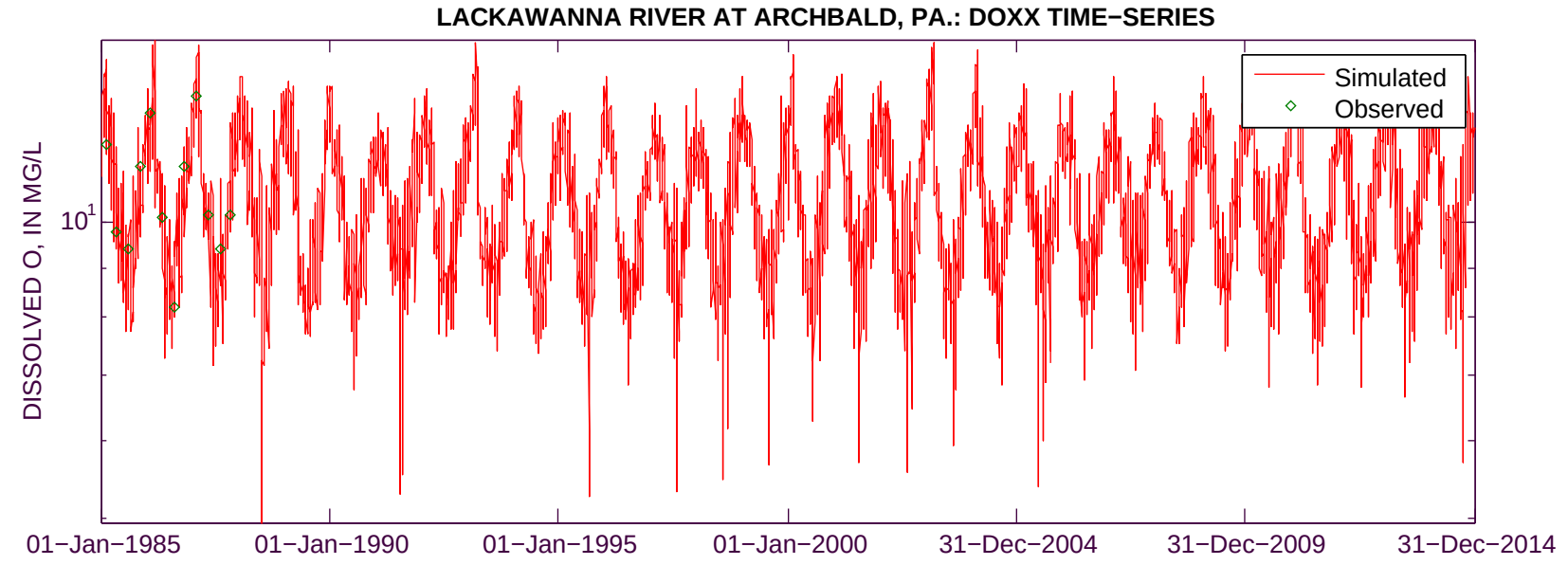
LOAD DATA
LOG10

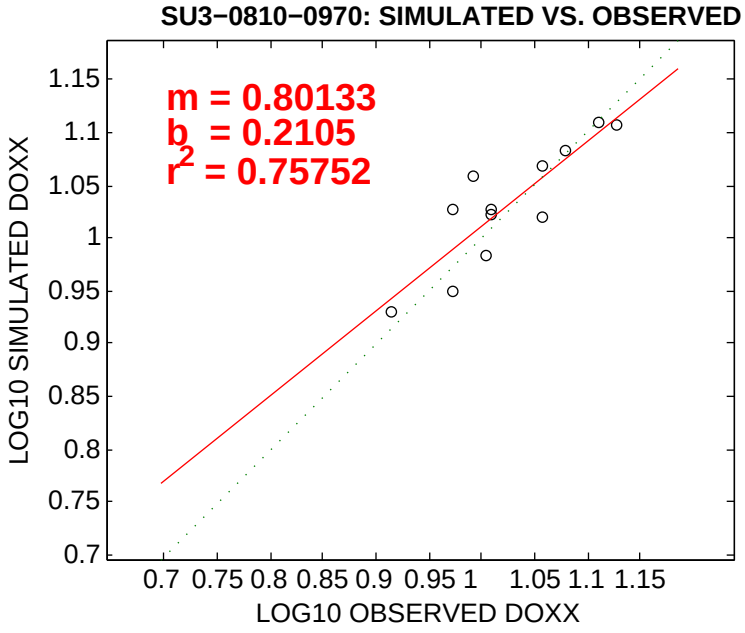


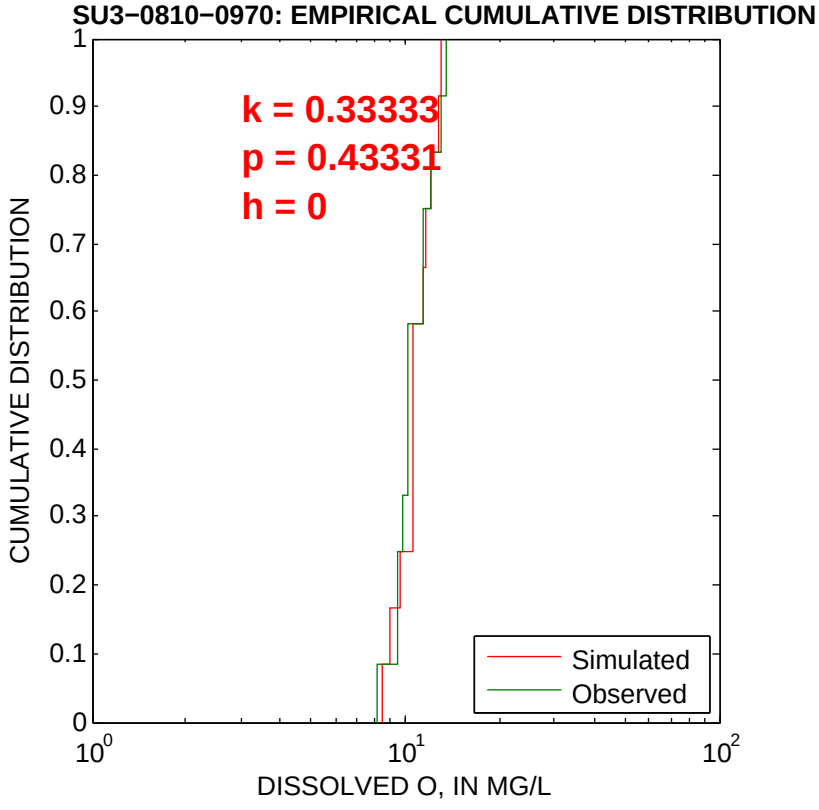












DATA SELECTION

scenario	file
P620171001WQ	DOXX.calib

plot: DOXX - dissolved oxygen

Dates: 1/1/1985 – 12/31/201

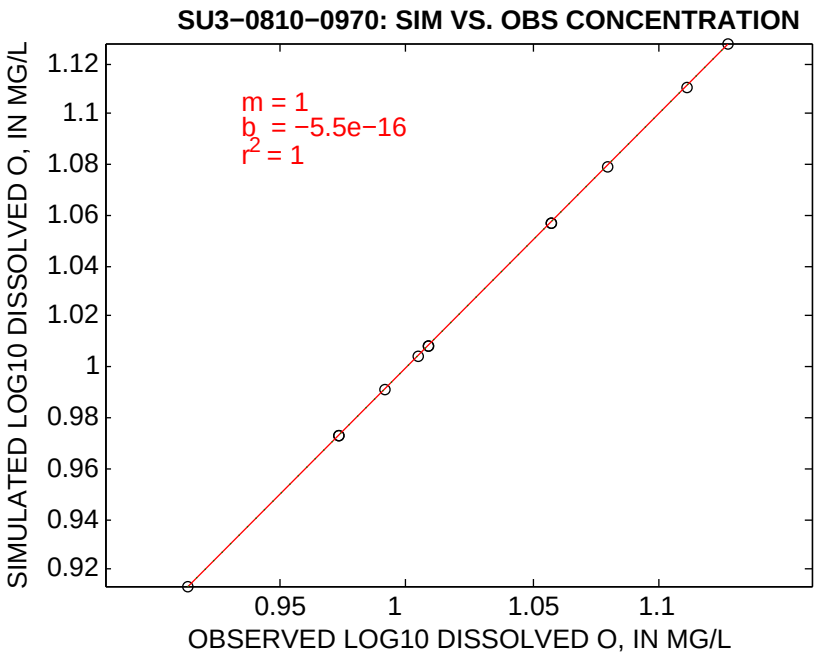
Drive	Directory	Observed
N/A	model	OBS20161101

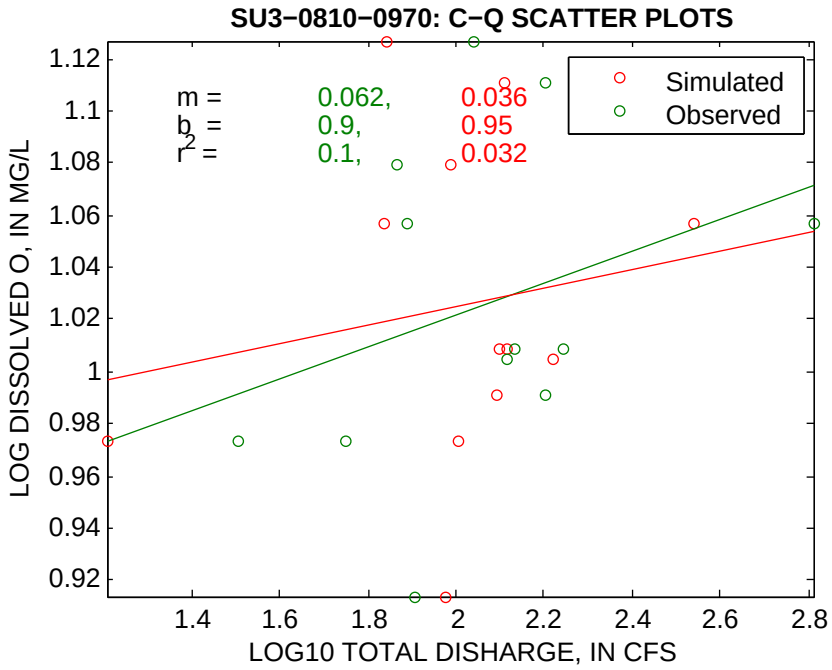
STATISTICS

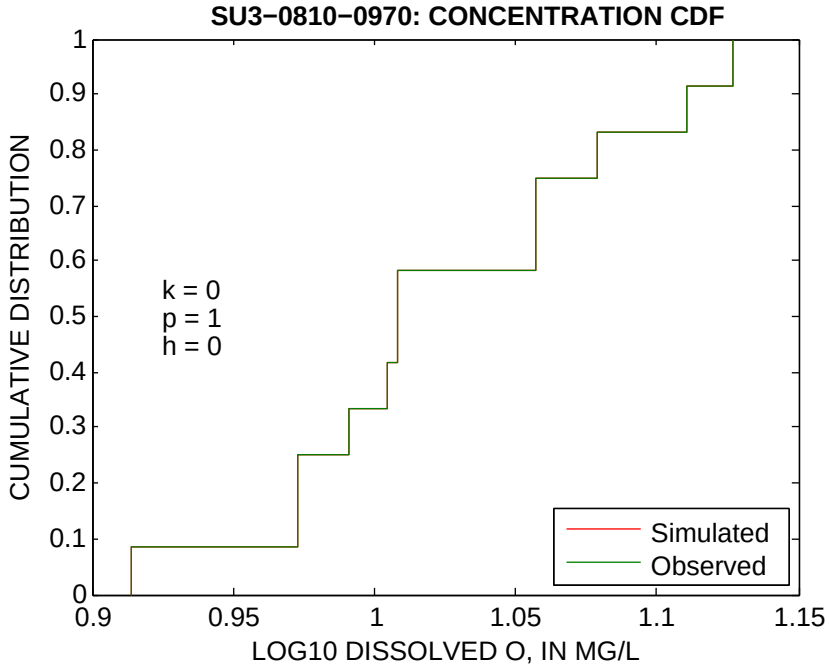
	n	12	12
		observe	simulate
min		8.2	8.4938
		0.913814	0.929102
mean		10.7	10.8518
		1.02529	1.03209
media		10.2	10.633
		1.0086	1.02666
max		13.4	12.89
		1.1271	1.11025
varian		2.37273	1.96169
		0.00387013	0.00328059
JB		0.5	0.5
		0.5	0.5
		ra	log
%		1.4183	0.663138
err.va		0.579459	0.00099867
rel.std.err		0.244217	0.258048
mod.eff		0.755783	0.741952

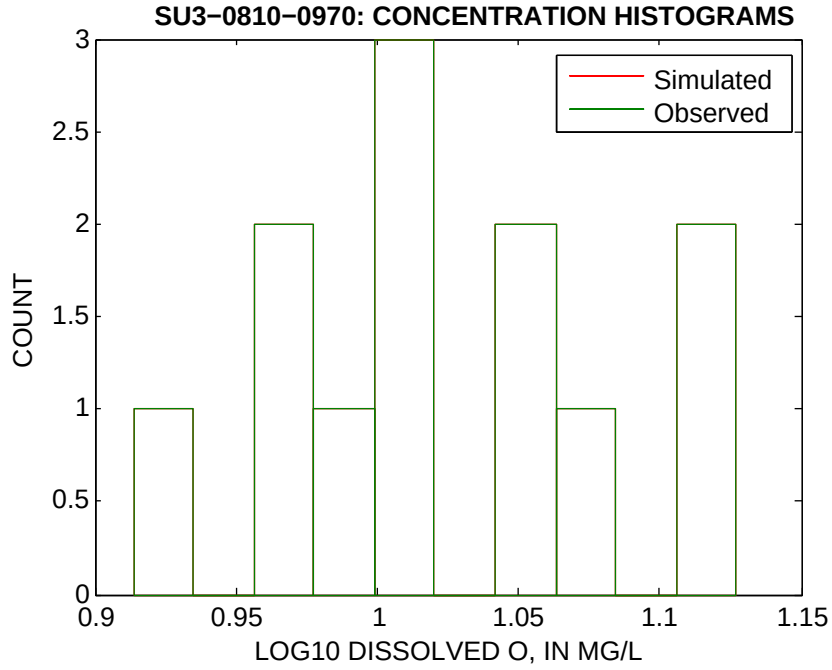
VERSION

ALL DATA
LOG10

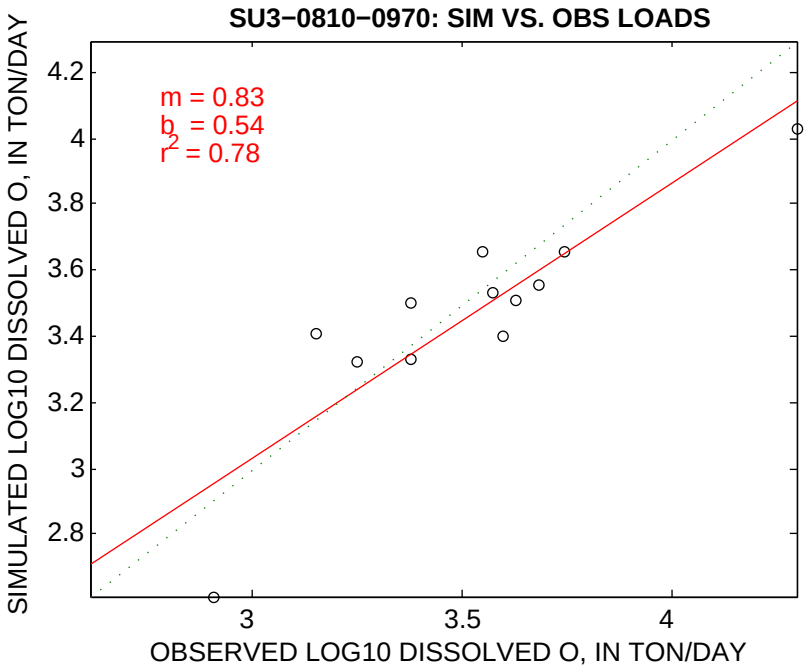


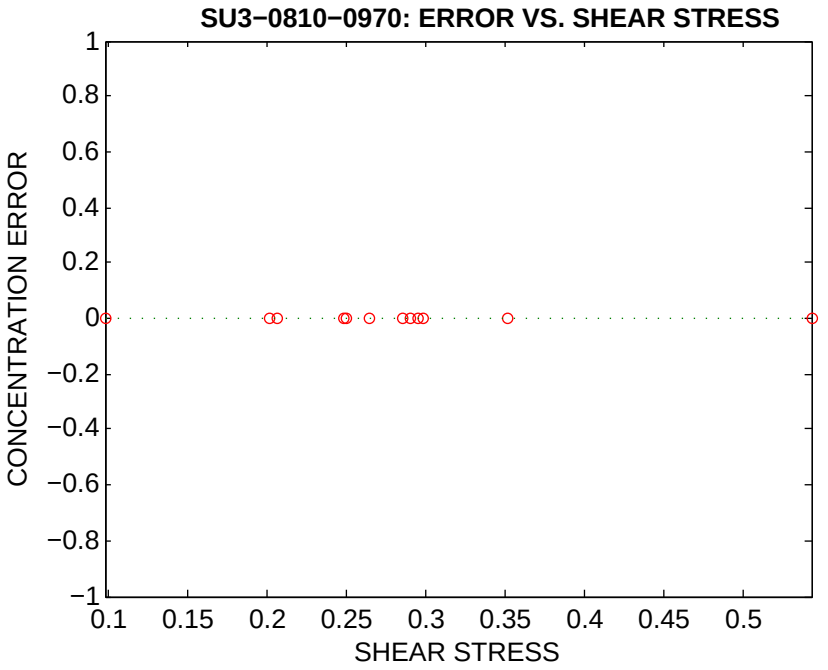


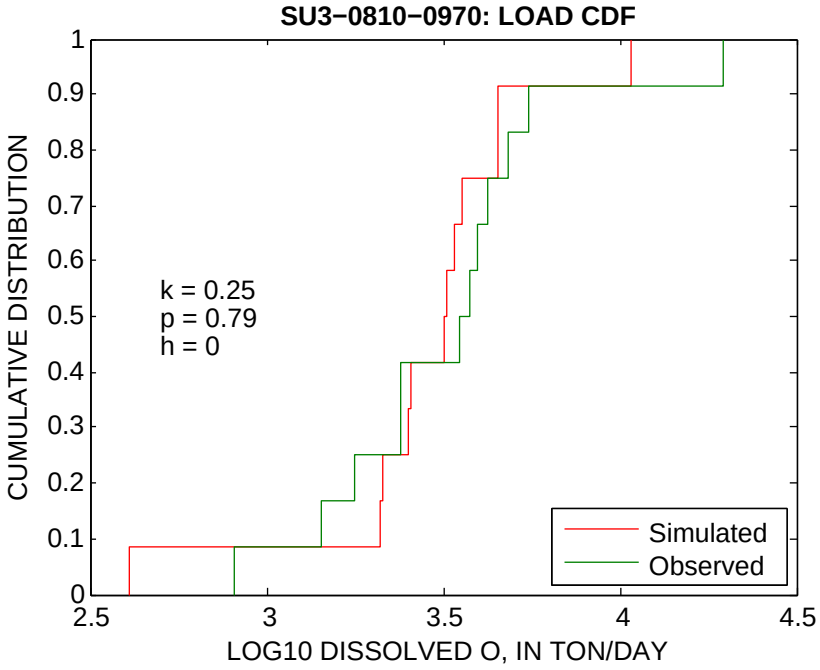


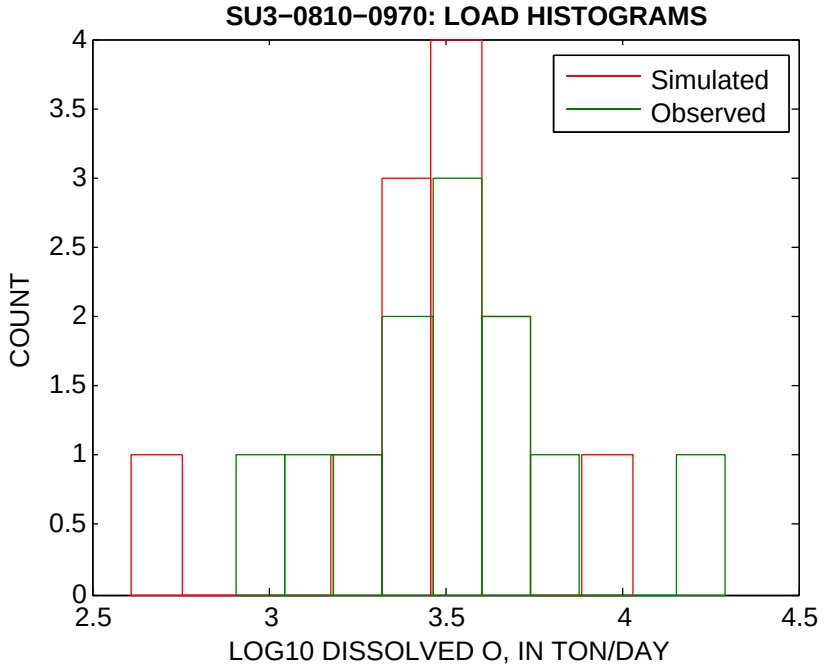


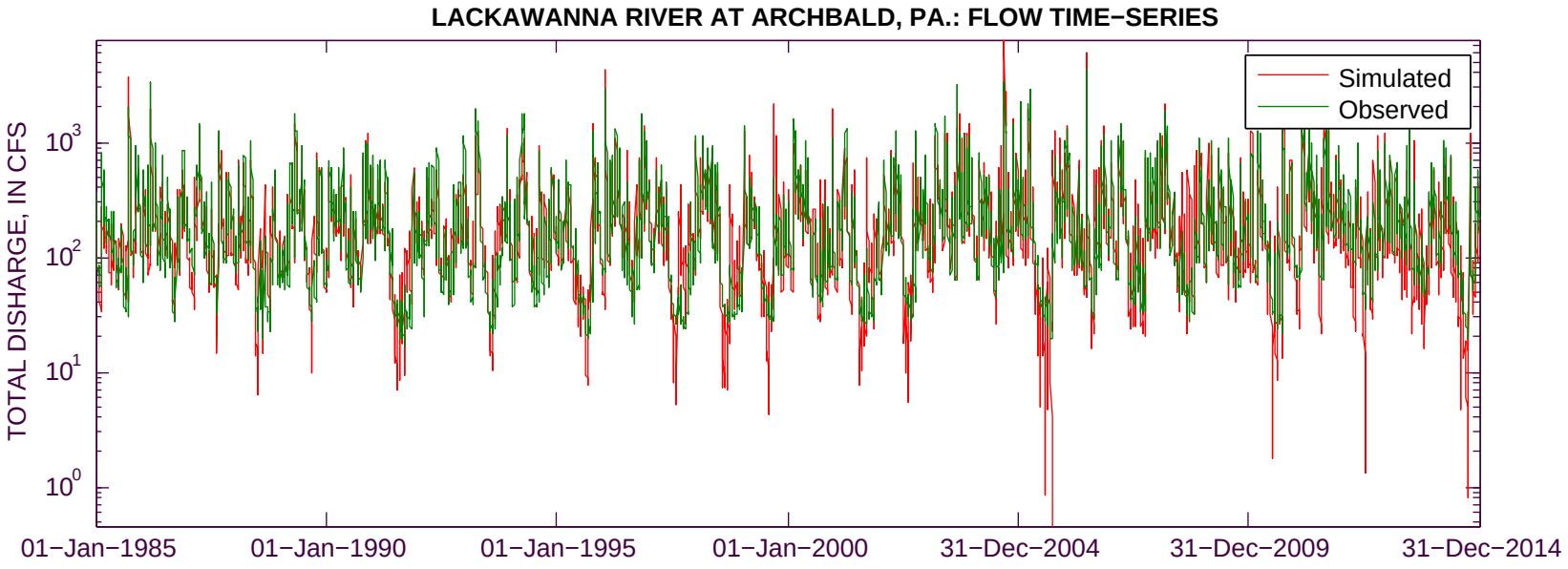
LOAD DATA
LOG10

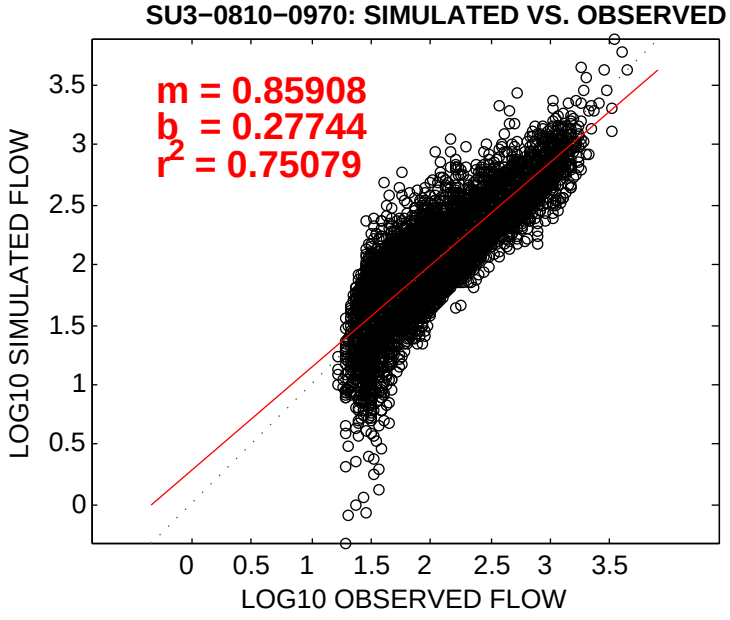


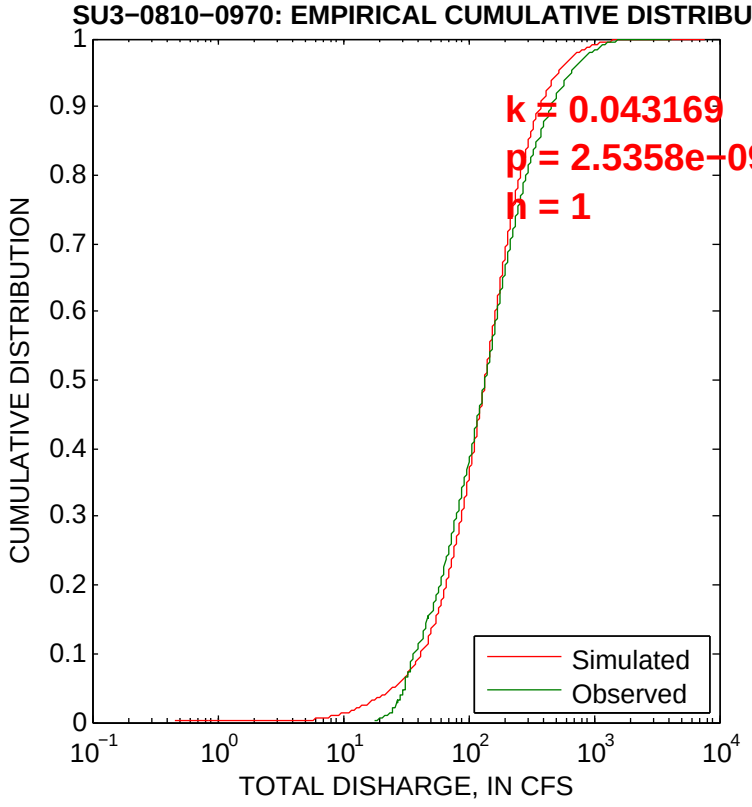












DATA SELECTION

scenario: P620171001WQ | file: FLOW.calib

plot: FLOW - total discharge

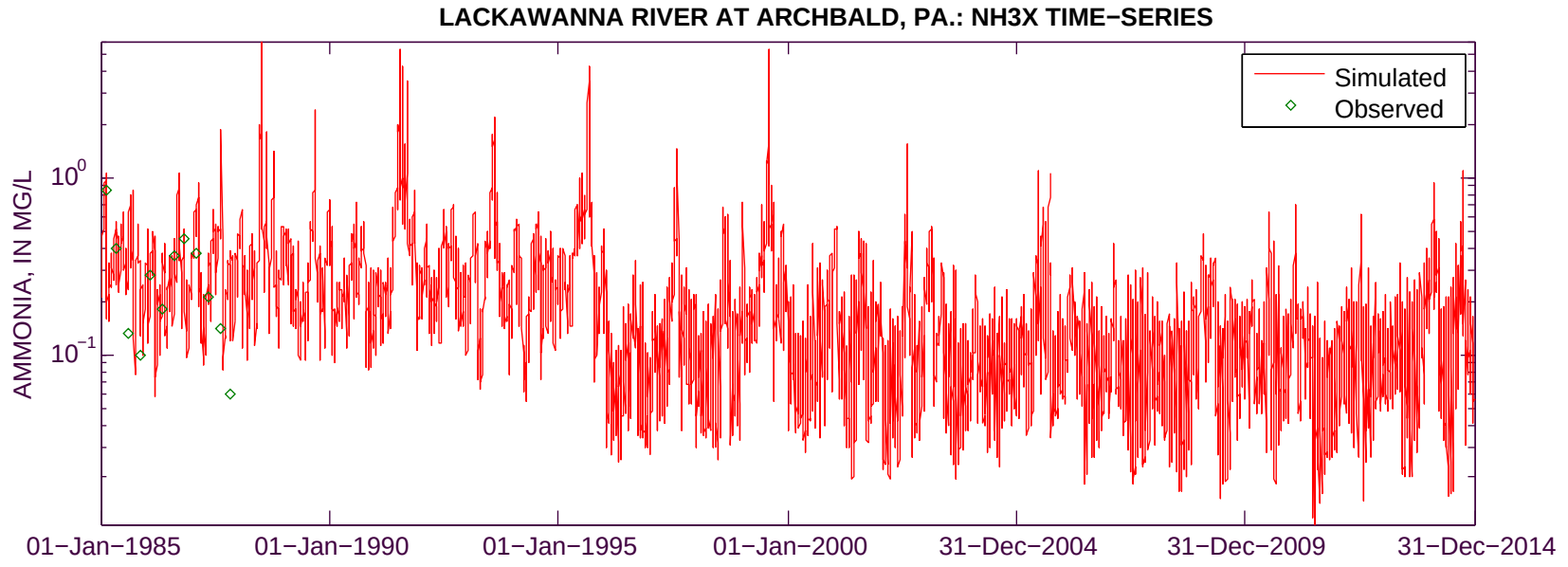
Dates: 1/1/1985 – 12/31/201

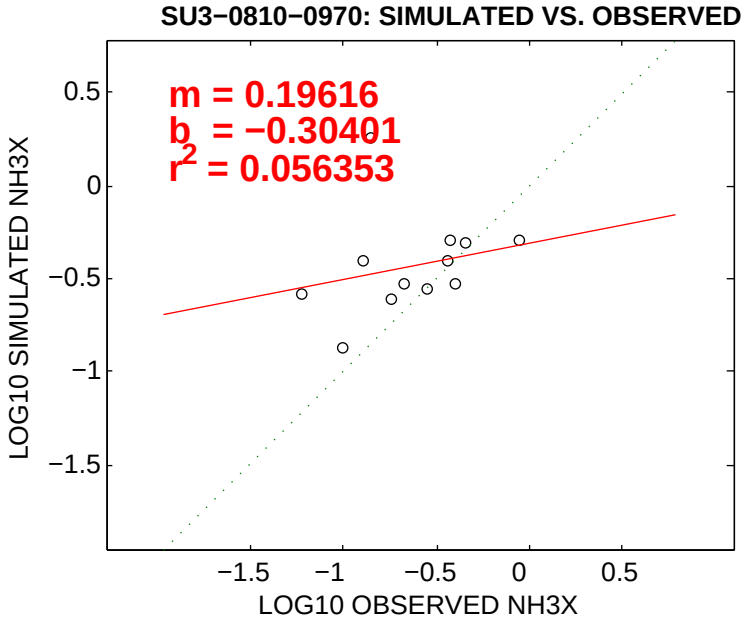
Drive: N/A | Directory: model | Observed: OBS20161101

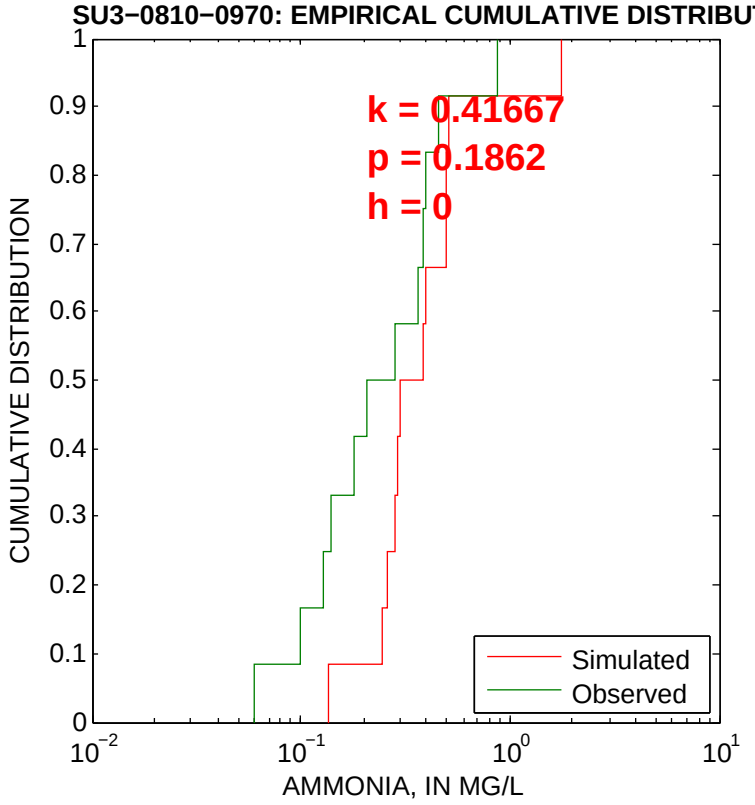
STATISTICS

		observe	simulate
n		10957	10956
min		17	0
		1.23045	-0.337478
mean		212.614	191.826
		2.13629	2.11268
media		137	137.17
		2.13672	2.13726
max		4290	7840
		3.63246	3.89432
varian		61460.4	53088.5
		0.161138	0.158397
JB		0.001	0.001
		0.001	0.001
		ra	log
%		-9.77733	-1.10539
err.va		20061.7	0.0432318
rel.std.err		0.326416	0.26829
mod.eff		0.673584	0.73171

VERSION 2.1







DATA SELECTION

scenario	file
P620171001WQ	NH3X.calib

plot: NH3X - ammonia

Dates: 1/1/1985 – 12/31/201

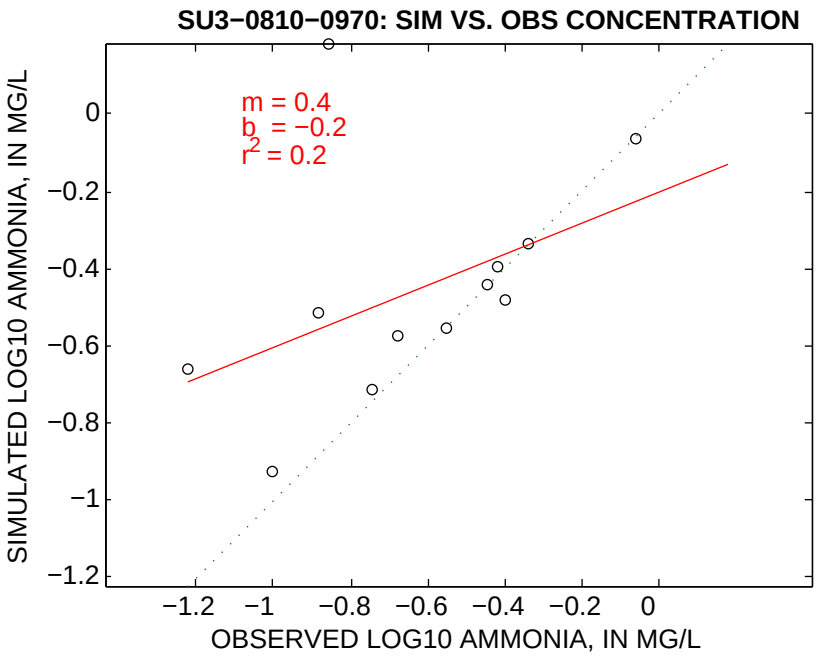
Drive	Directory	Observed
N/A	model	OBS20161101

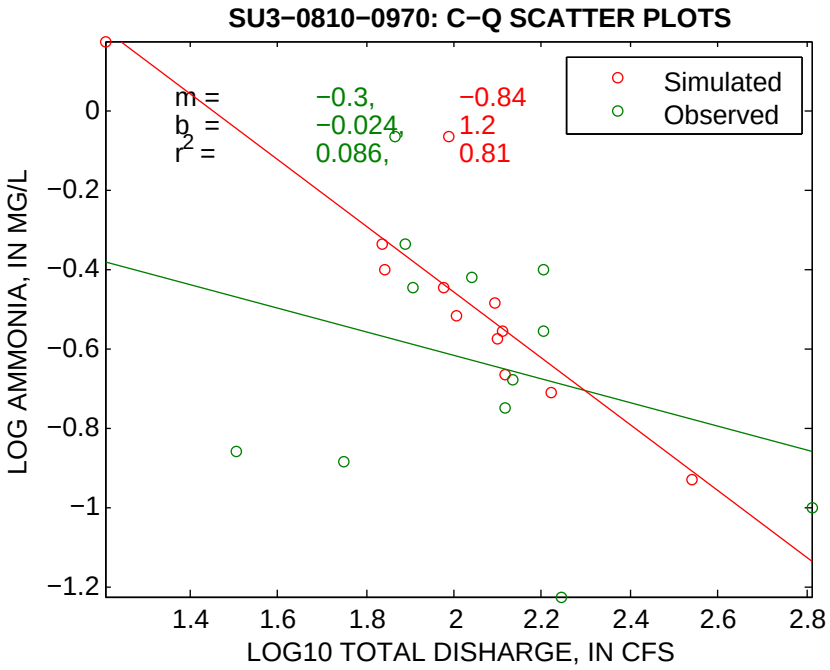
STATISTICS

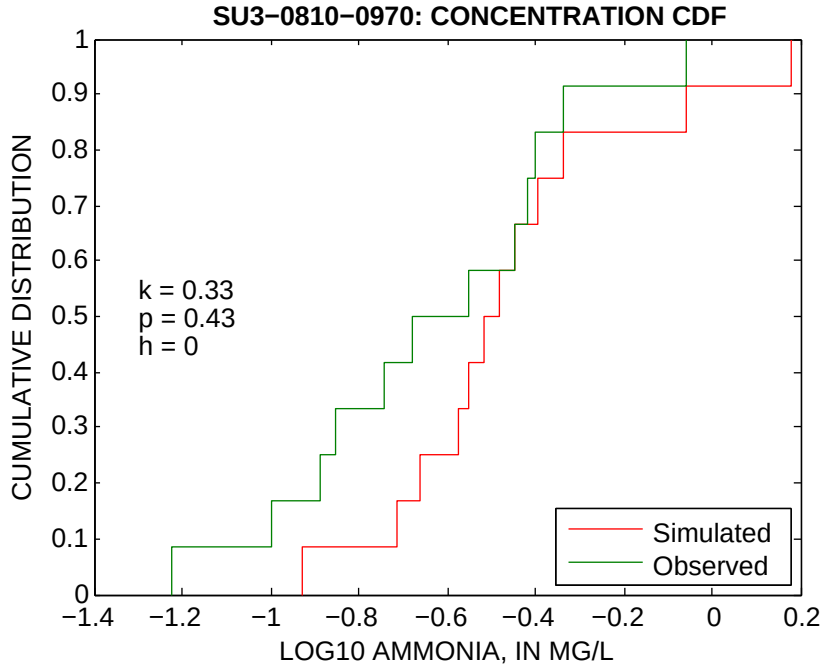
	n	12	12
		observe	simulate
min		0.06	0.13549
		-1.22185	-0.868093
mean		0.2975	0.464821
		-0.633059	-0.428194
media		0.245	0.341515
		-0.615311	-0.470584
max		0.87	1.779
		-0.0604807	0.250176
varian		0.0495841	0.18472
		0.106071	0.0724305
JB		0.018030	0.001
		0.5	0.031012
		ra	log
%		56.2423	-32.3611
err.va		0.270071	0.182672
rel.std.err		5.44673	1.72216
mod.eff		-4.44673	-0.722165

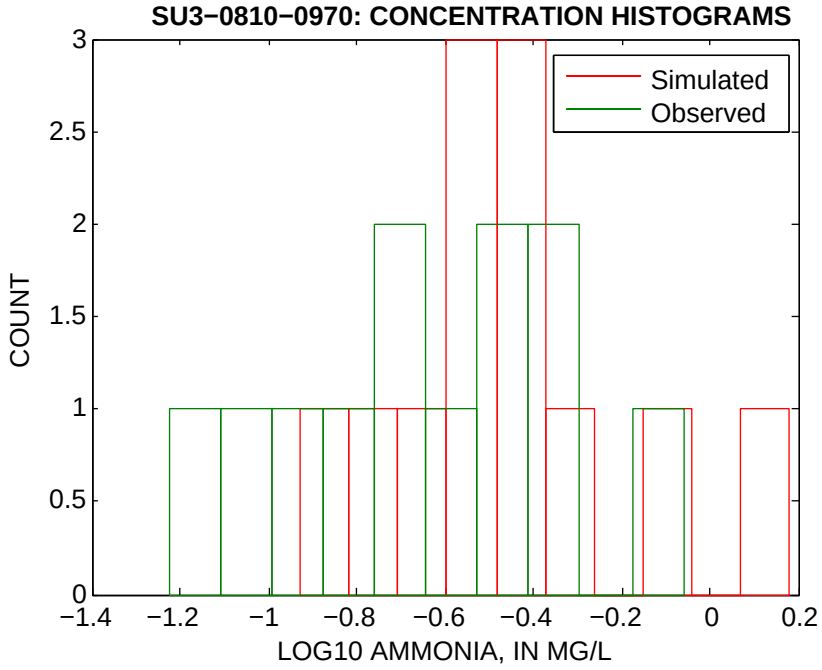
VERSION 2.1

ALL DATA
LOG10

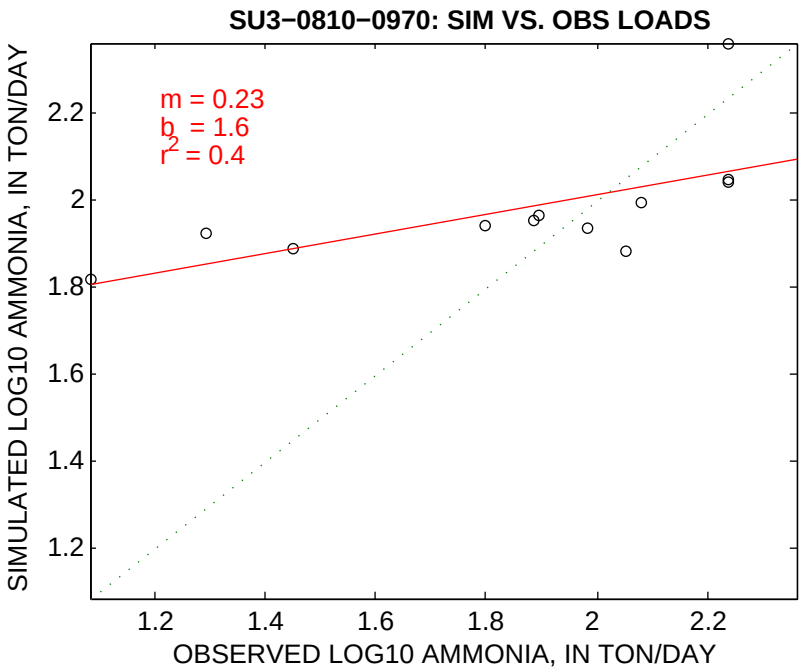


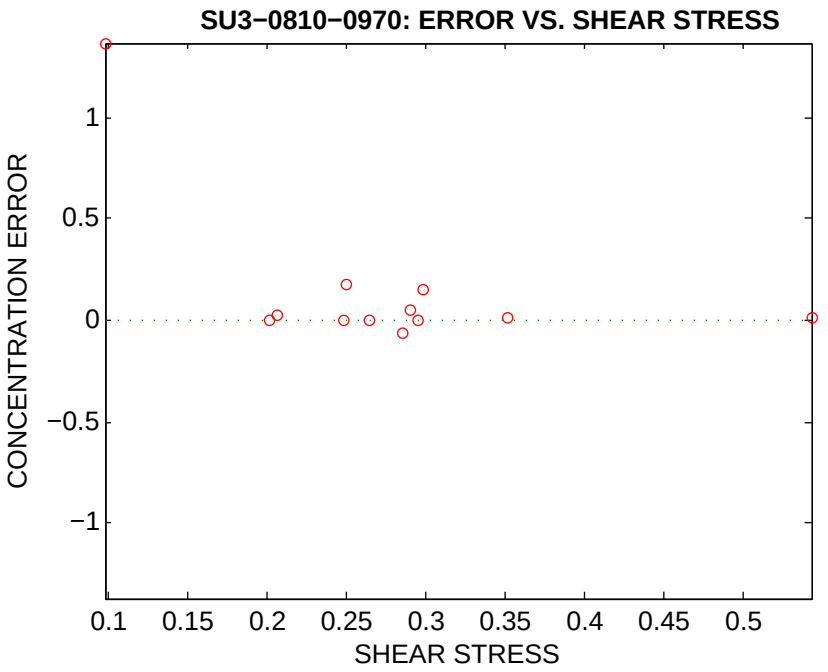


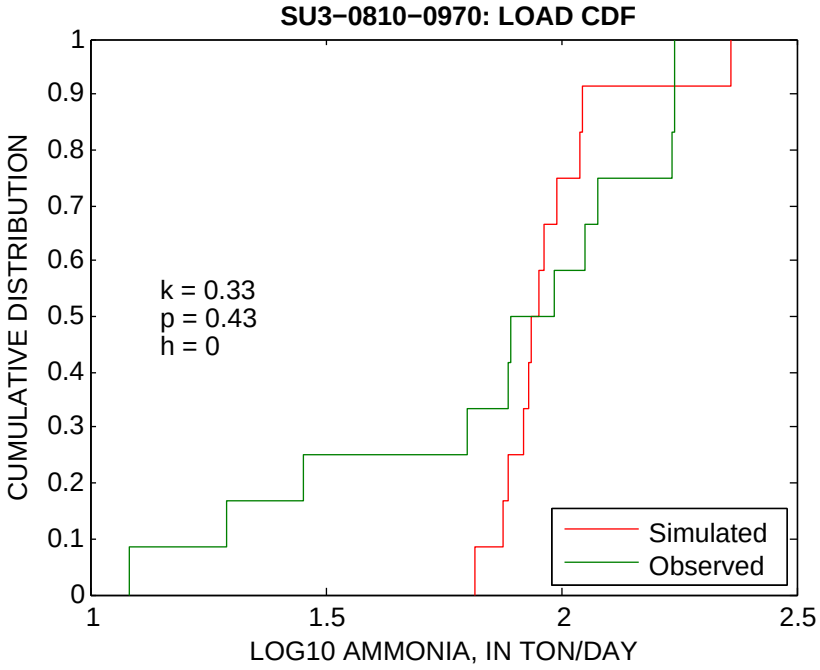


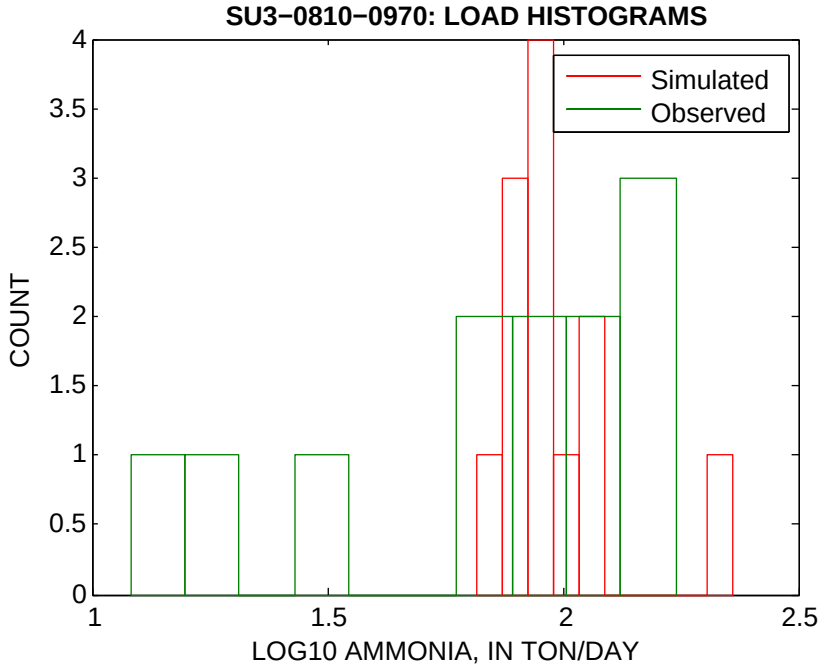


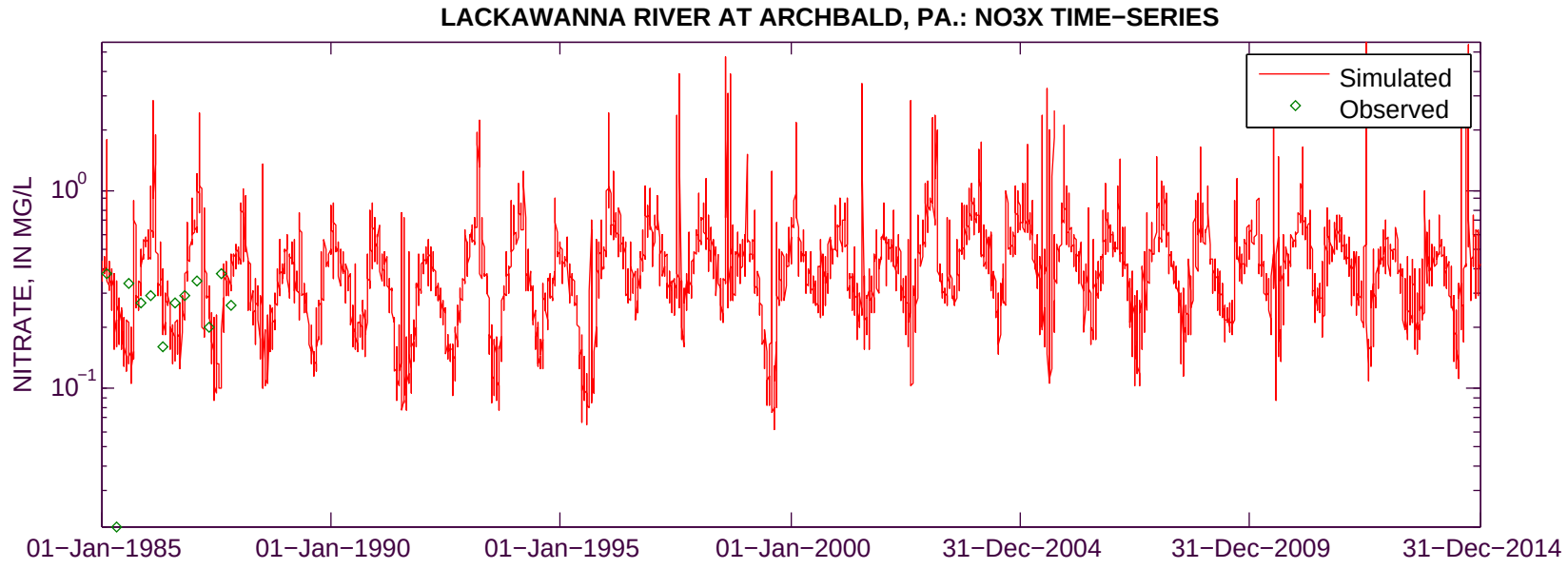
LOAD DATA
LOG10

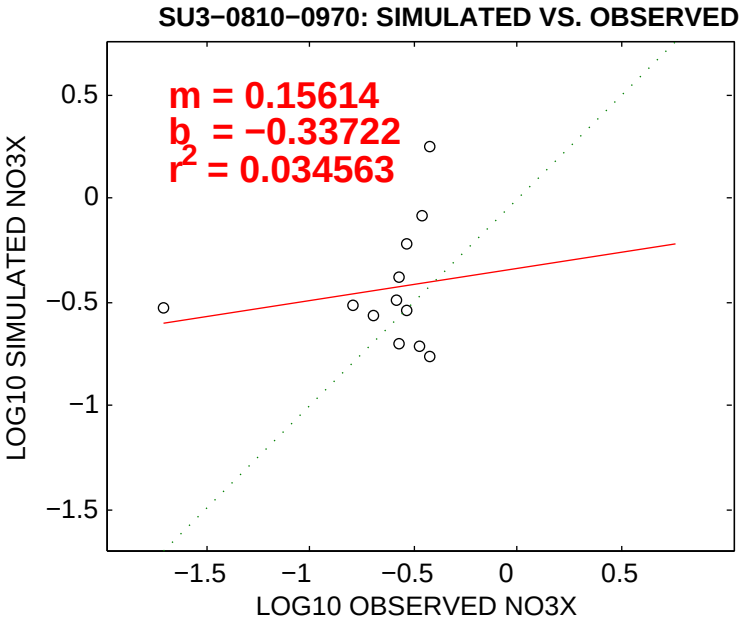


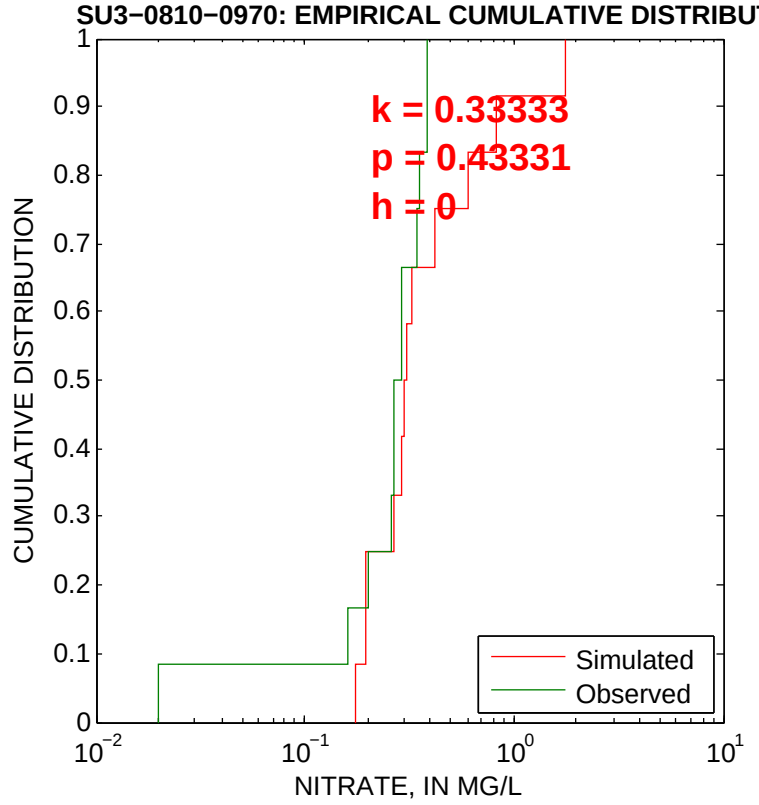












DATA SELECTION

scenario: P620171001WQ | file: NO3X.calib

plot: NO3X - nitrate

Dates: 1/1/1985 – 12/31/201

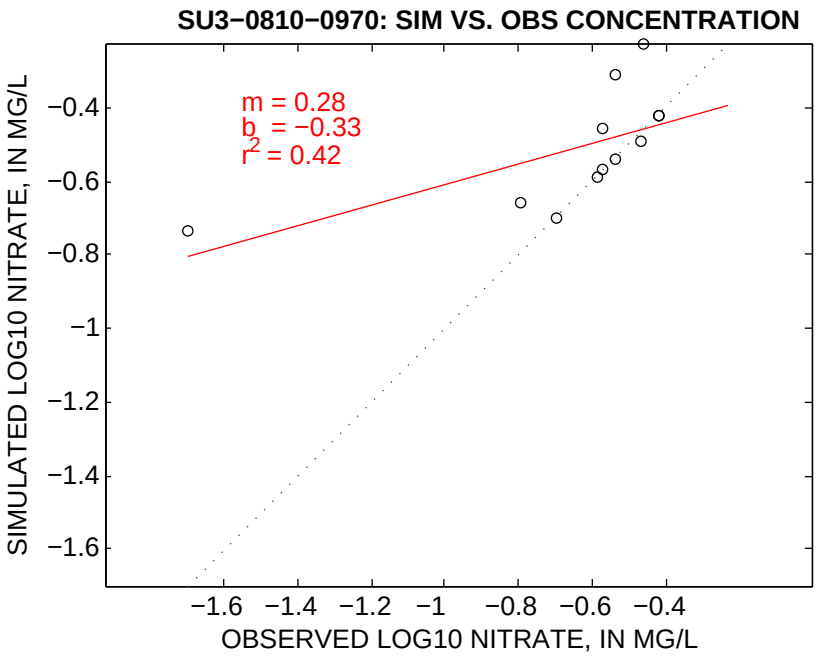
Drive: N/A | Directory: model | Observed: OBS20161101

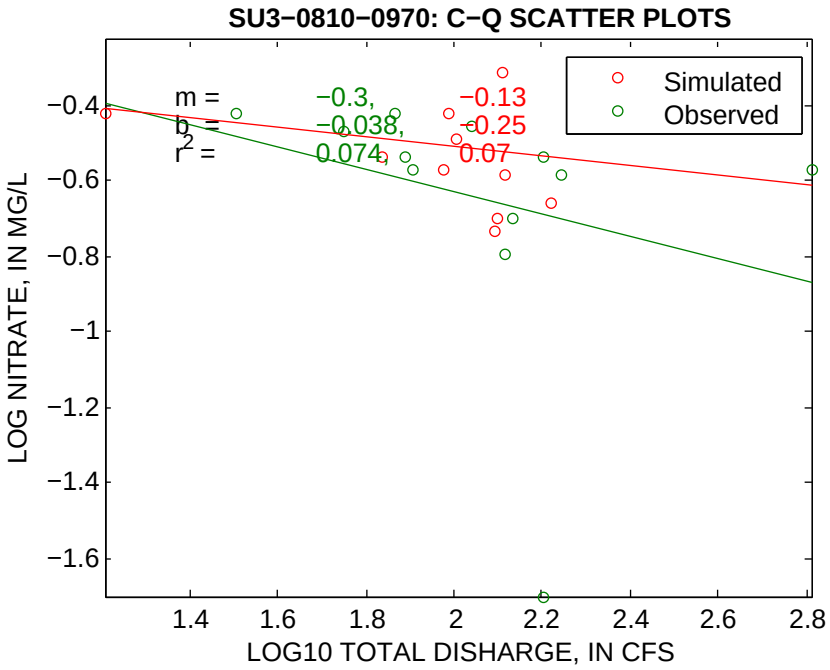
STATISTICS

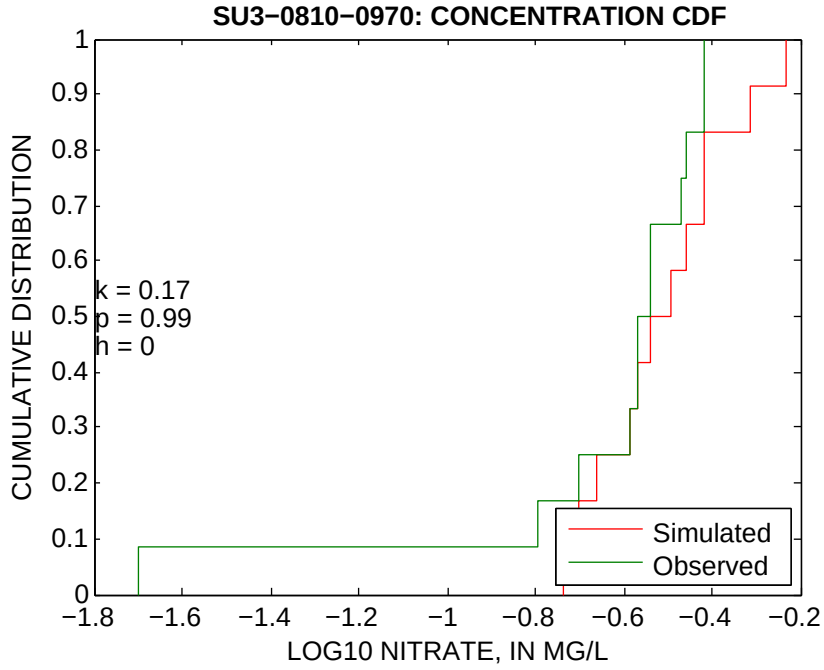
	n	12	12
		observe	simulate
min		0.02	0.17379
		-1.69897	-0.759975
mean		0.2675	0.472775
		-0.646351	-0.438148
media		0.28	0.30033
		-0.553119	-0.522464
max		0.38	1.7867
		-0.420216	0.252052
varian		0.0105295	0.206346
		0.122071	0.08611
JB		0.048654	0.001
		0.001	0.052252
		ra	log
%		76.7383	-32.212
err.va		0.226918	0.217349
rel.std.err		21.5506	1.78051
mod.eff		-20.5506	-0.780507

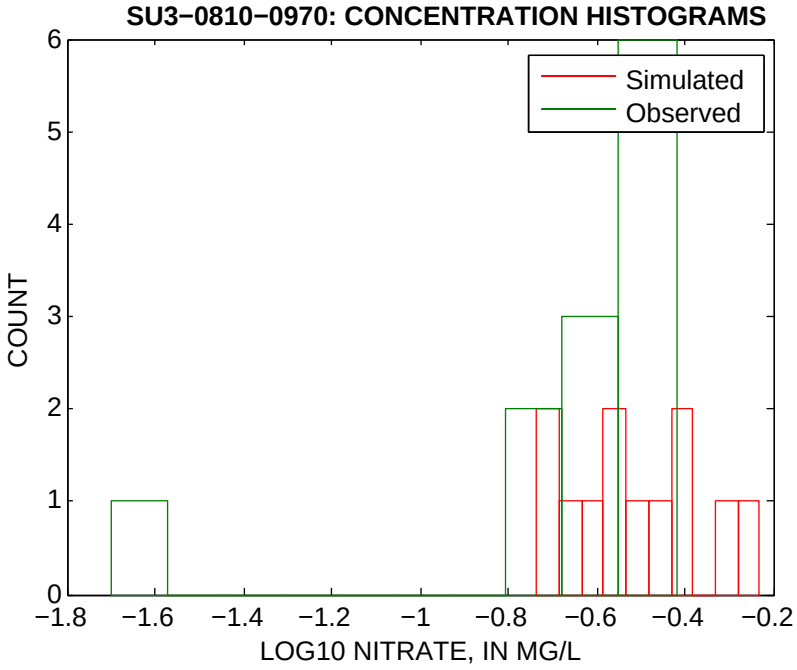
VERSION 2.1

ALL DATA
LOG10

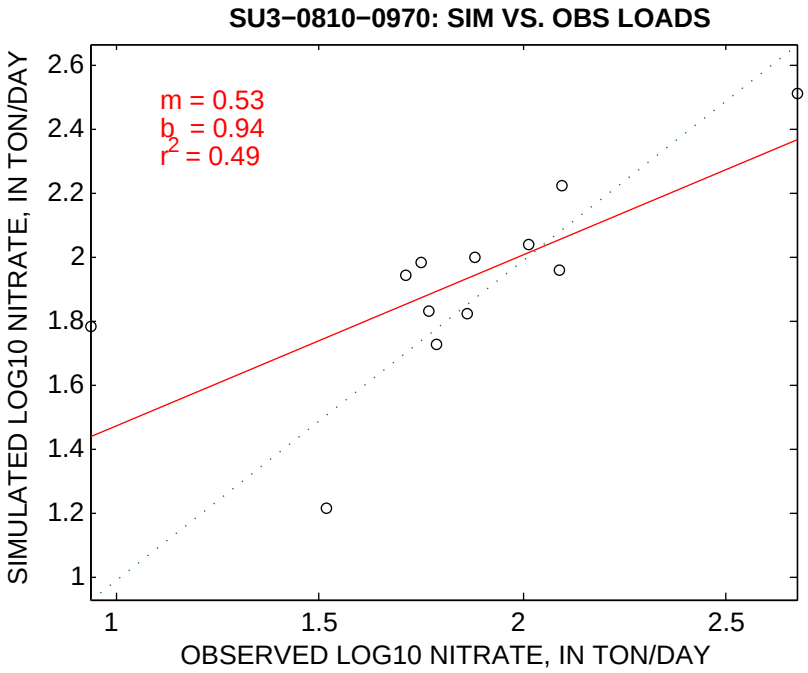


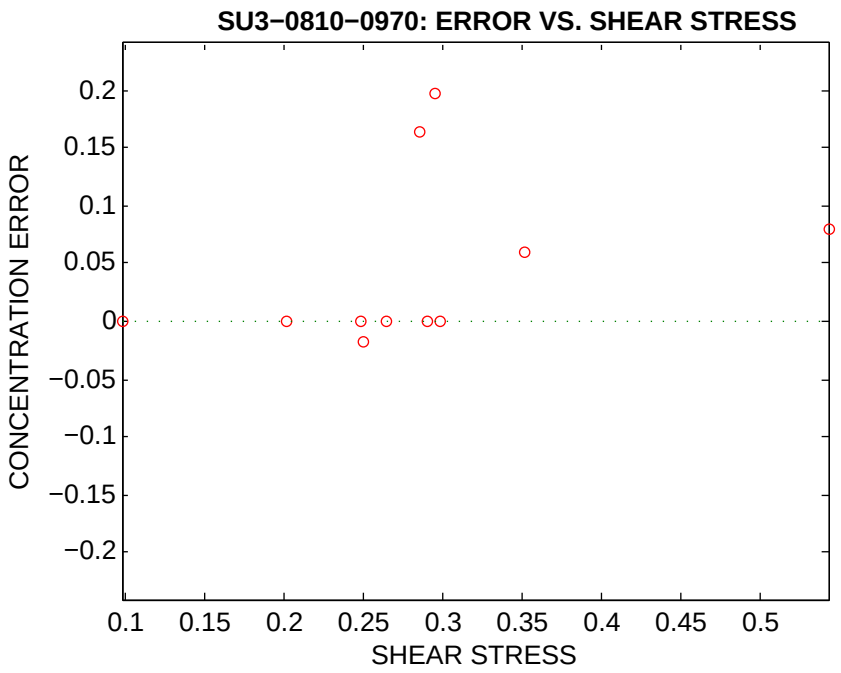


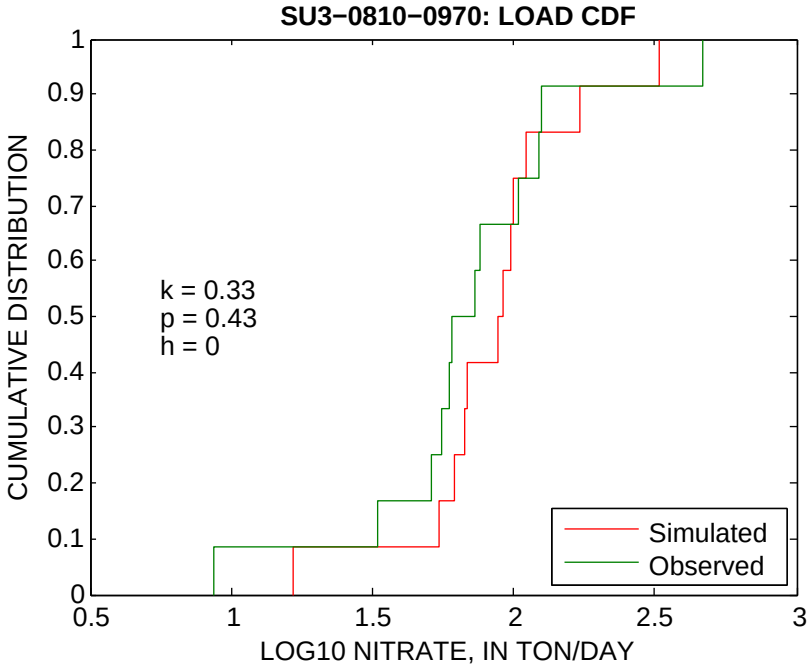


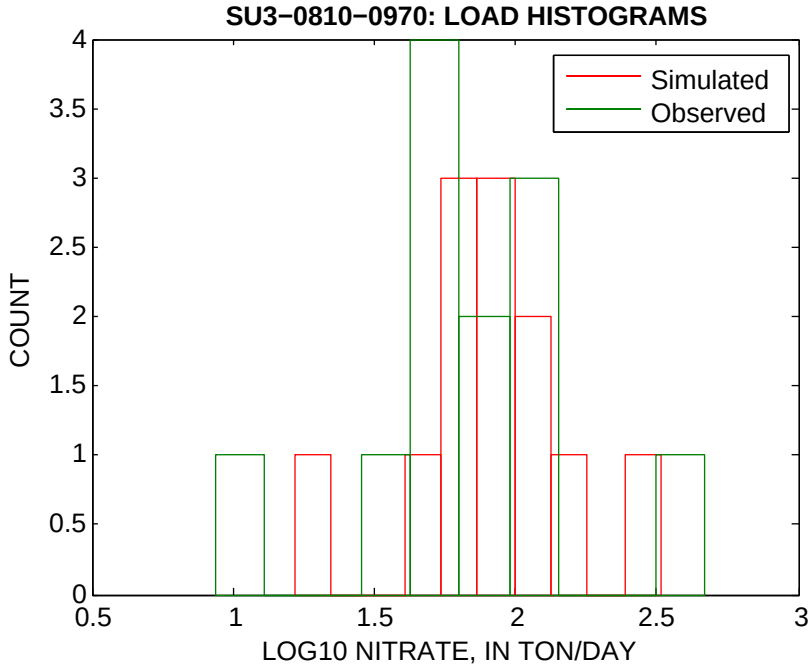


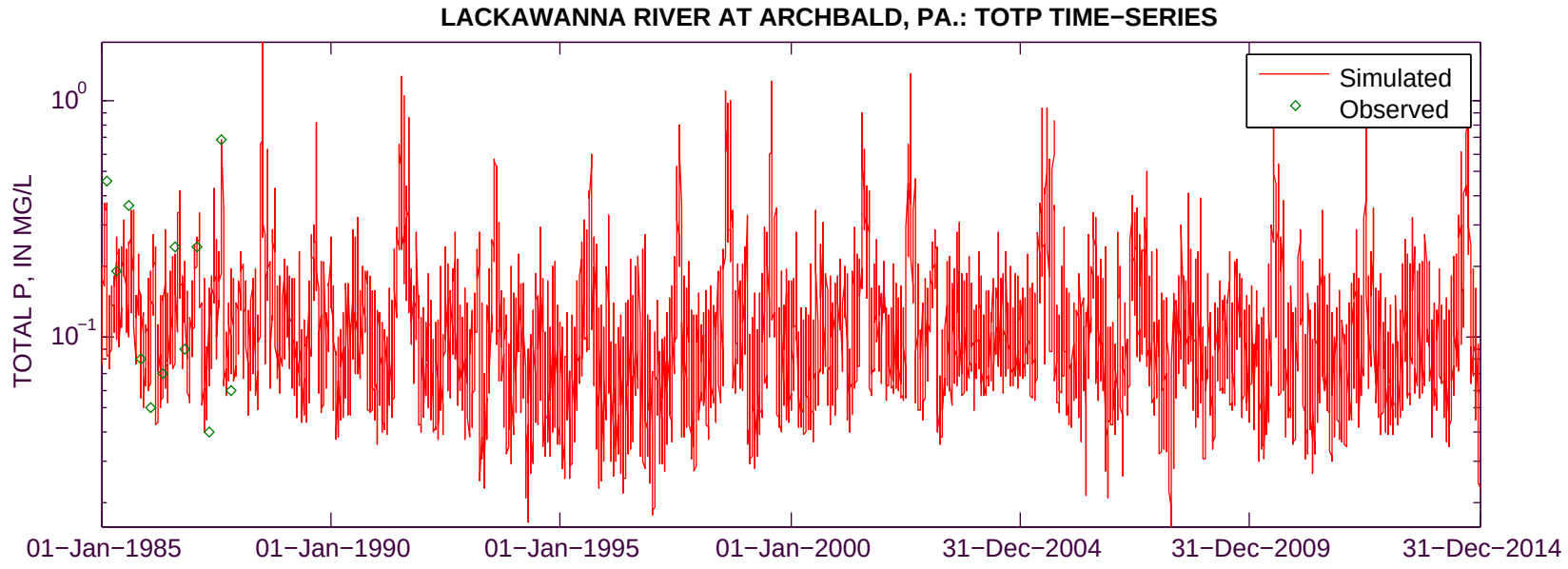
LOAD DATA
LOG10

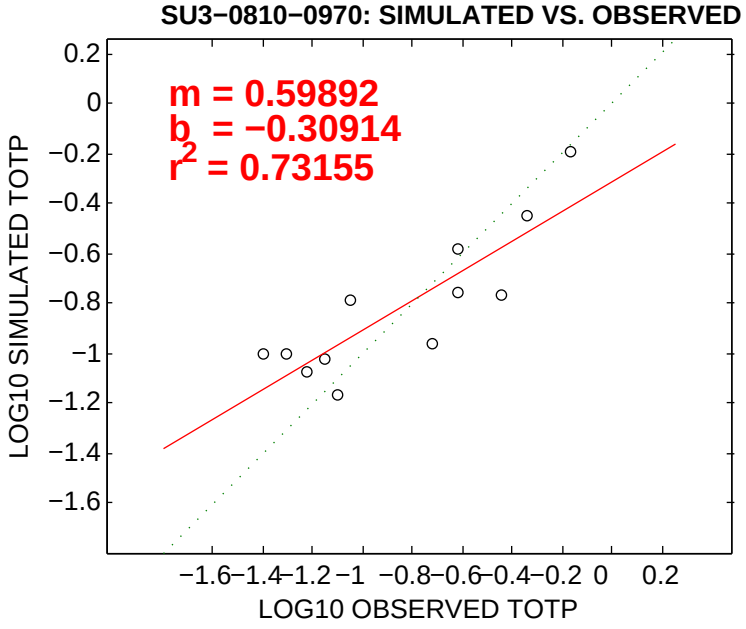


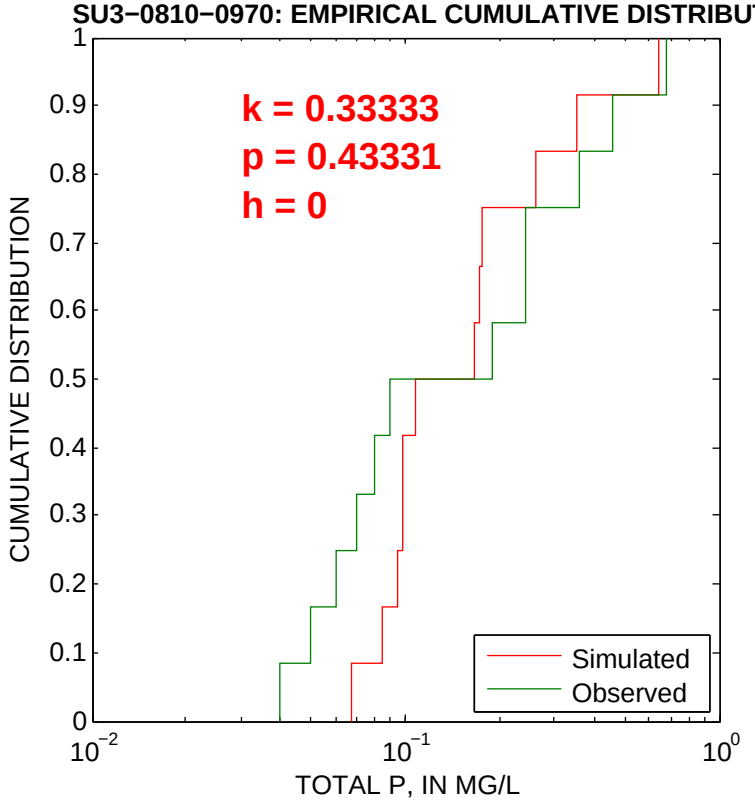












DATA SELECTION

scenario	file
P620171001WQ	TOTP.calib

plot: TOTP - total phosphorus

Dates: 1/1/1985 – 12/31/201

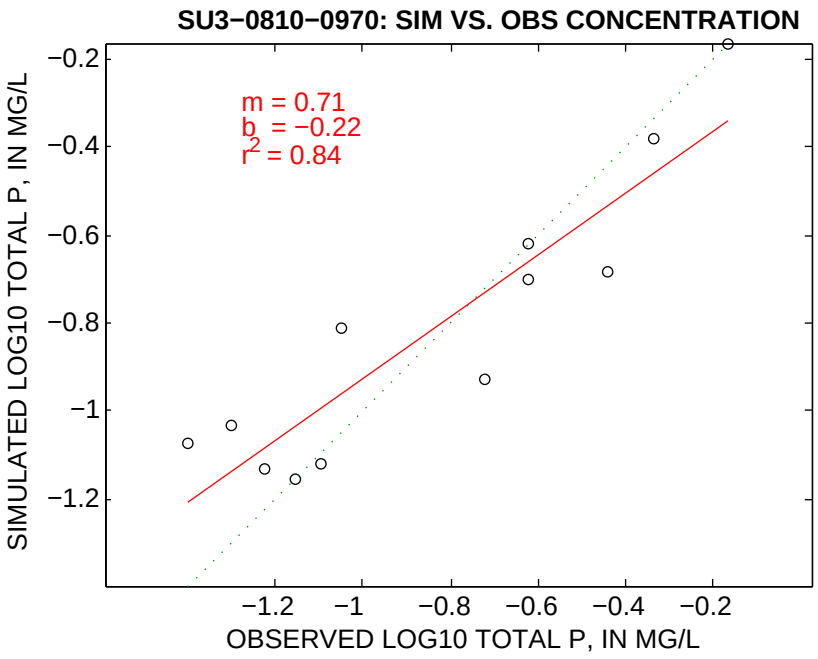
Drive	Directory	Observed
N/A	model	OBS20161101

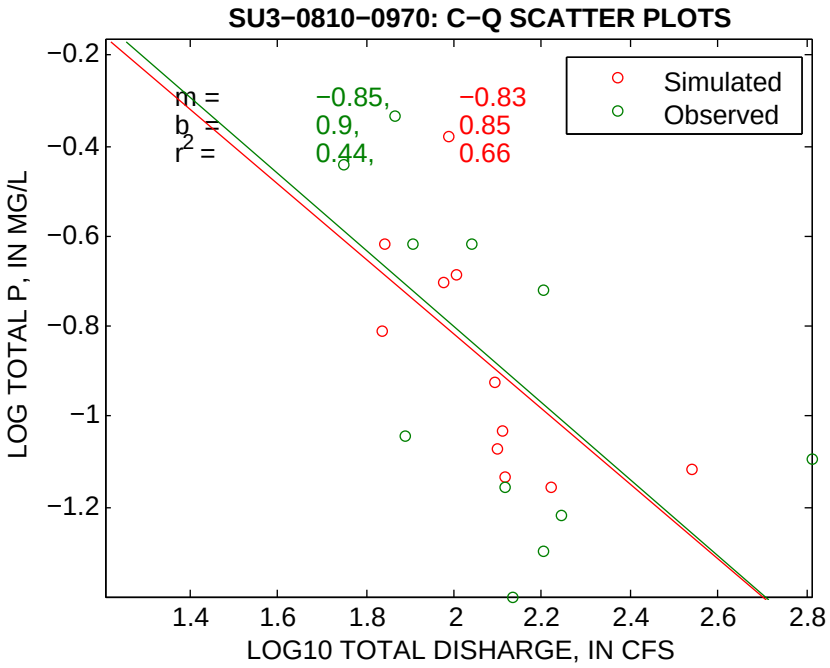
STATISTICS

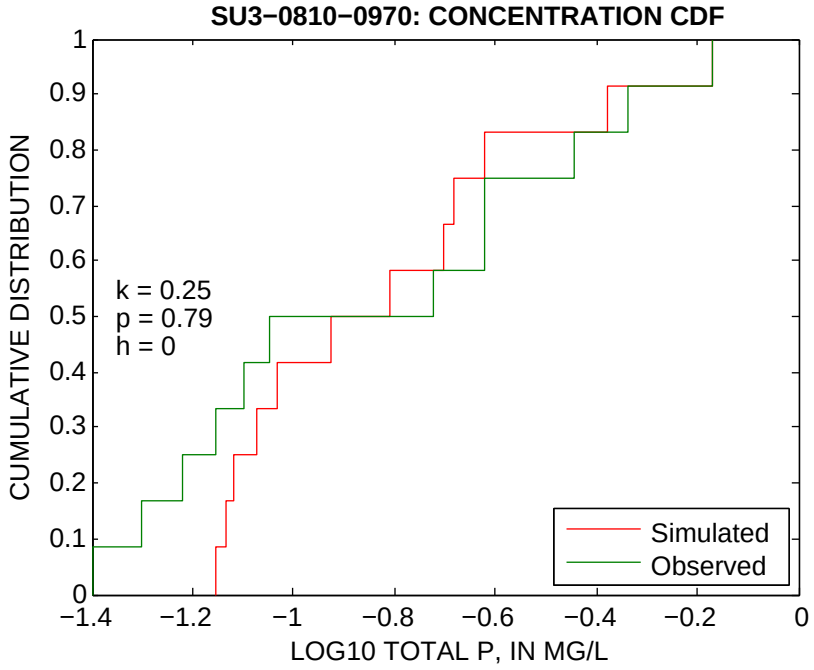
	n	12	12
		observe	simulate
min		0.04	0.067749
		-1.39794	-1.1691
mean		0.213333	0.193106
		-0.84397	-0.814611
media		0.14	0.13682
		-0.853902	-0.873318
max		0.68	0.63794
		-0.167491	-0.19522
varian		0.0396242	0.0265194
		0.168195	0.0824718
JB		0.047556	0.003058
		0.335578	0.148222
		ra	log
%		-9.48152	-3.47876
err.va		0.00662352	0.0501368
rel.std.err		0.167158	0.298087
mod.eff		0.832842	0.701913

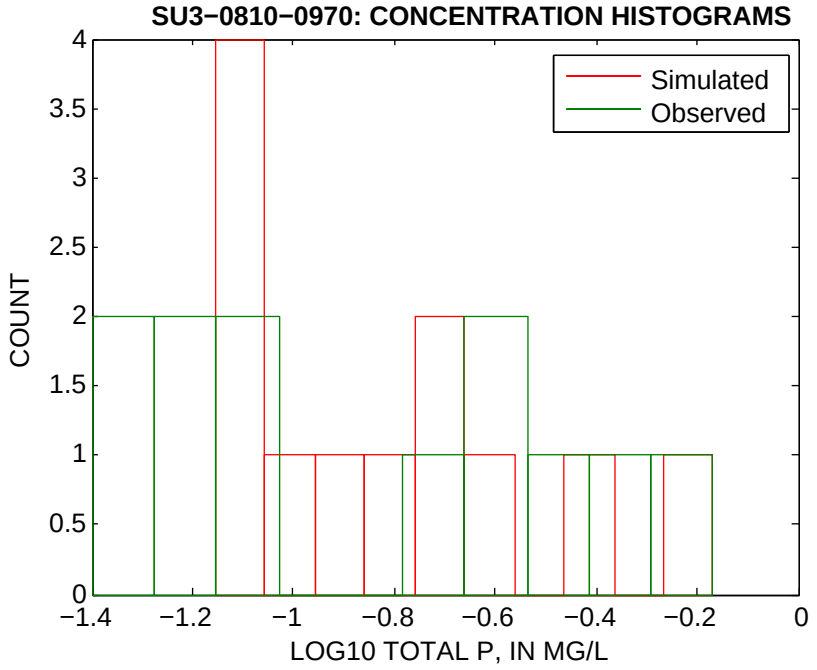
VERSION 2.1

ALL DATA
LOG10

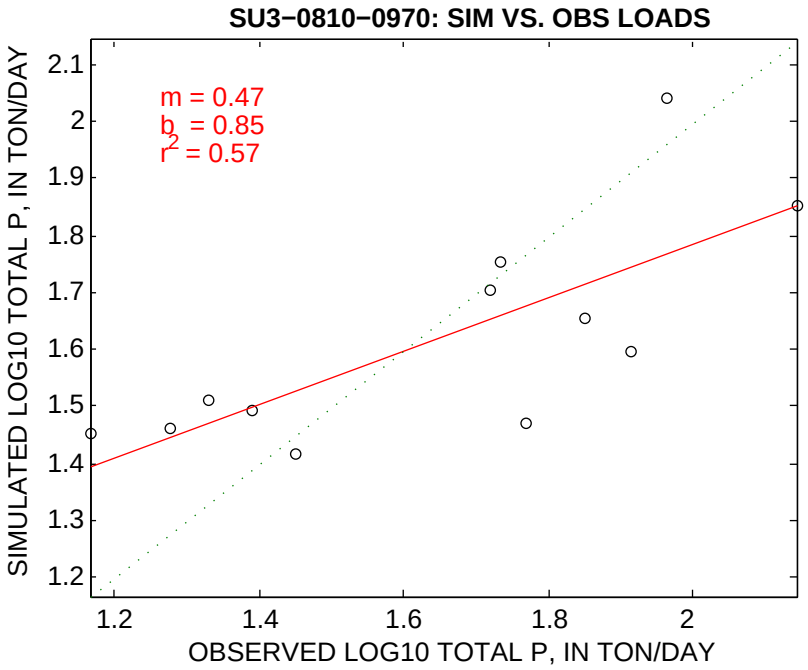


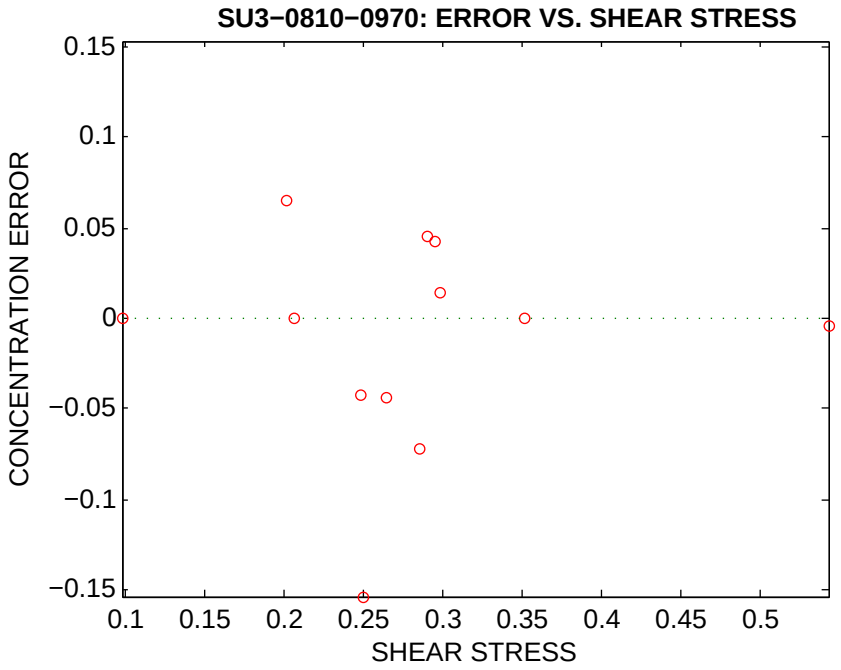


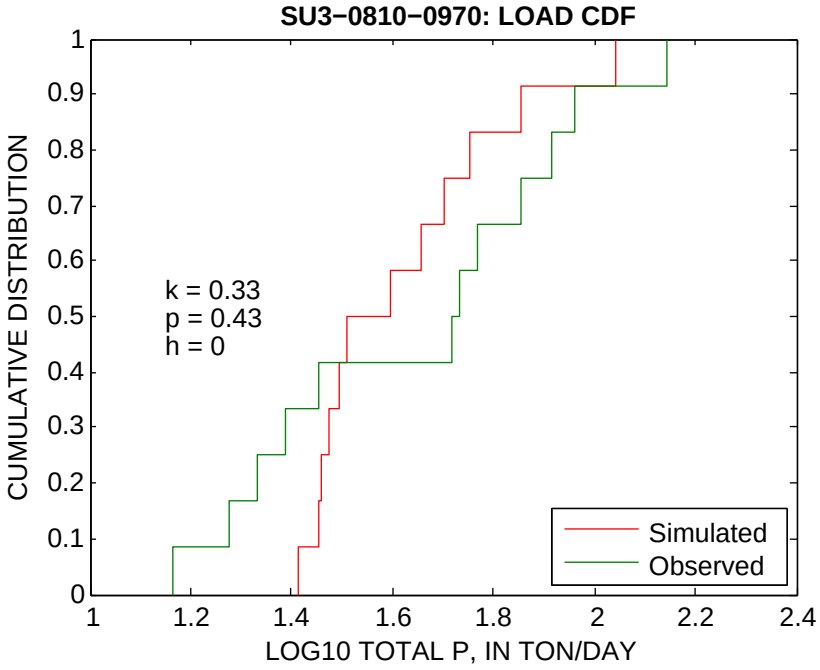


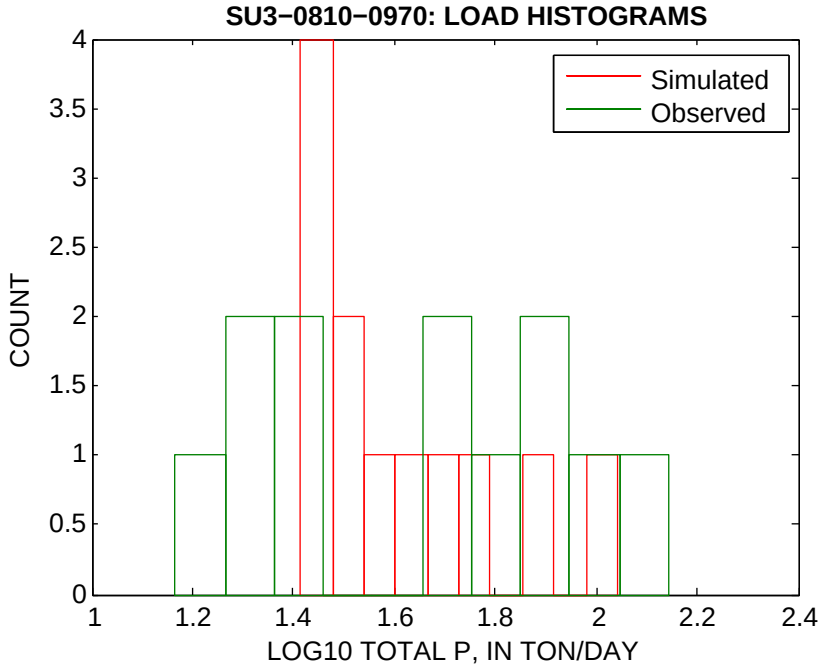


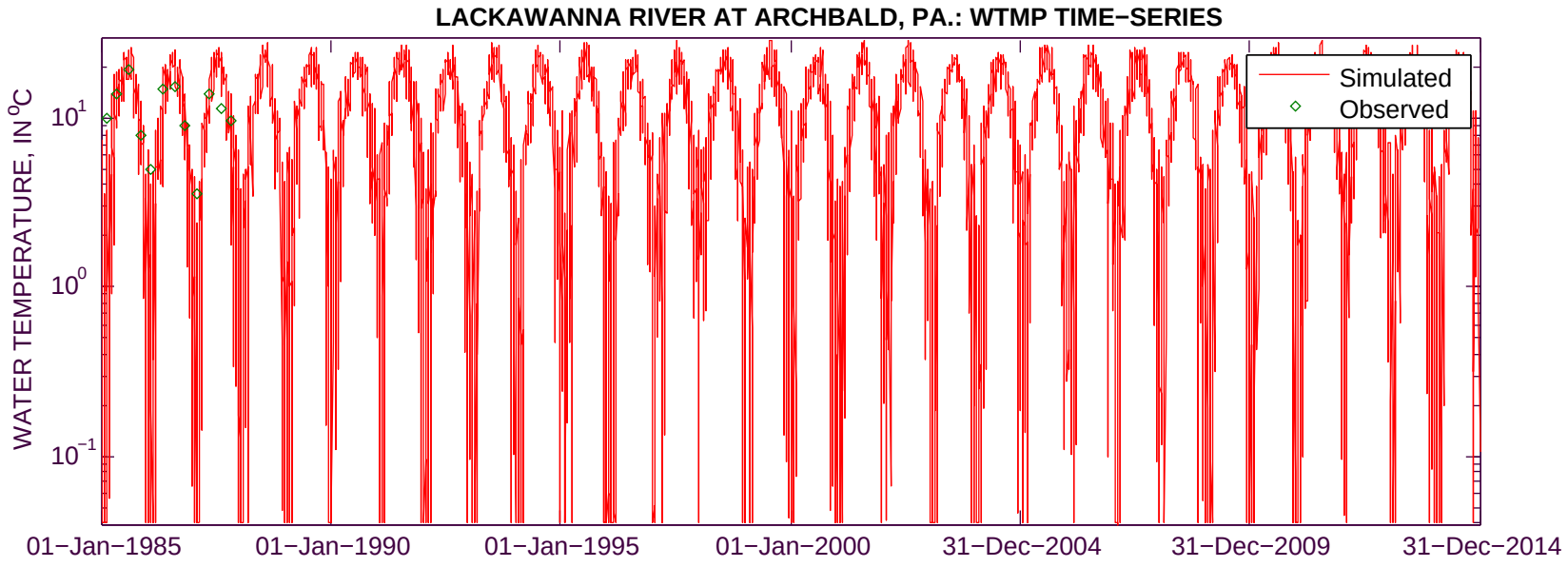
LOAD DATA
LOG10

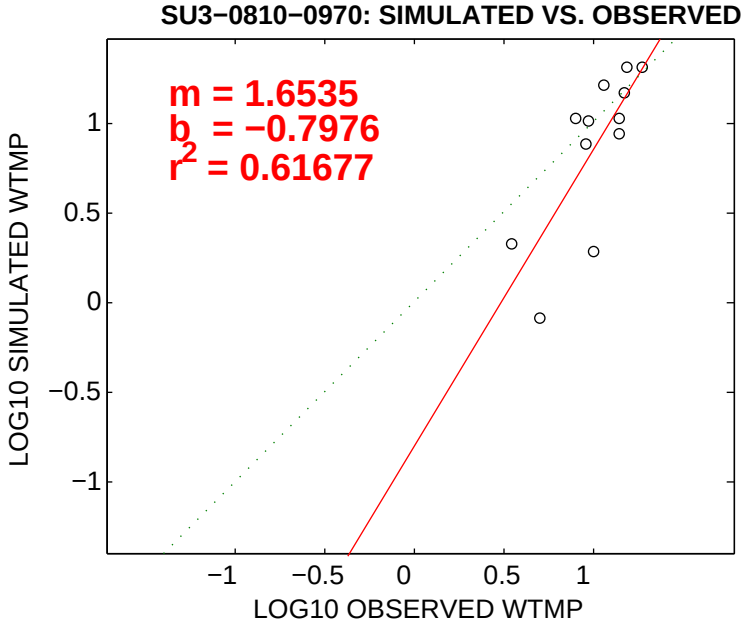


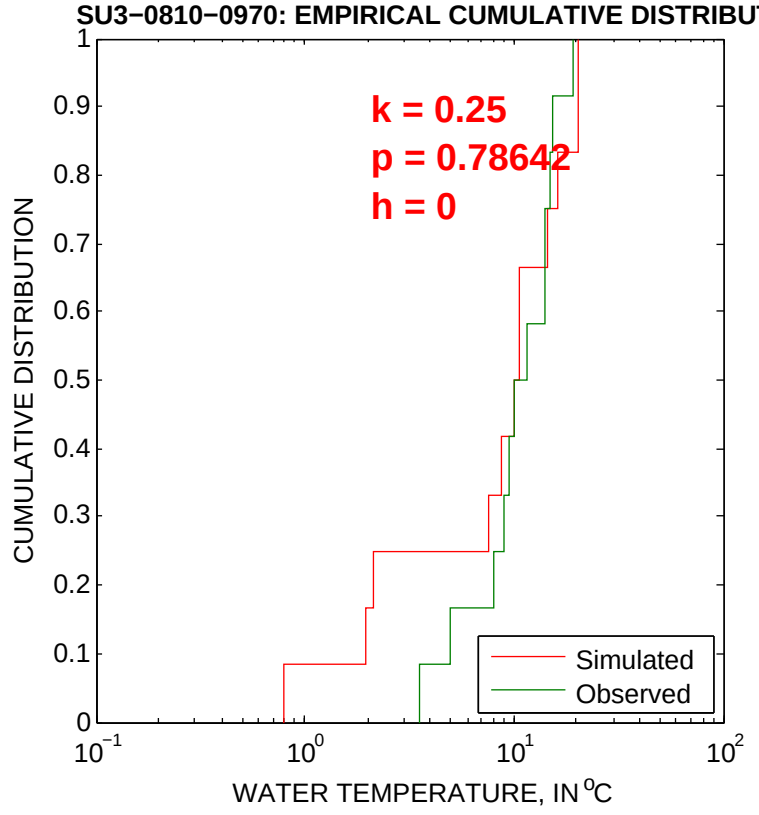












DATA SELECTION

scenario	file
P620171001WQ	WTMP.calib

plot: WTMP - water tempera...

Dates: 1/1/1985 – 12/31/201

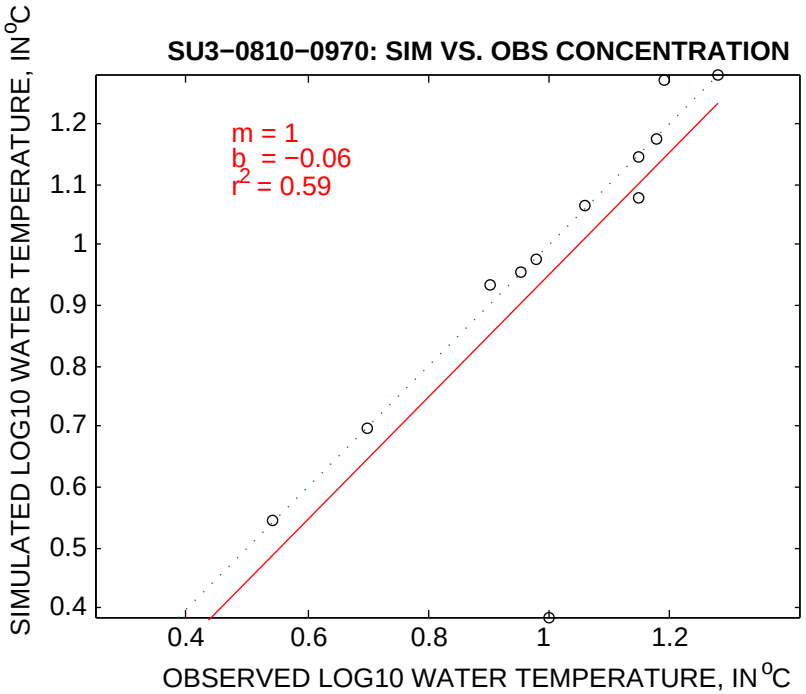
Drive	Directory	Observed
N/A	model	OBS20161101

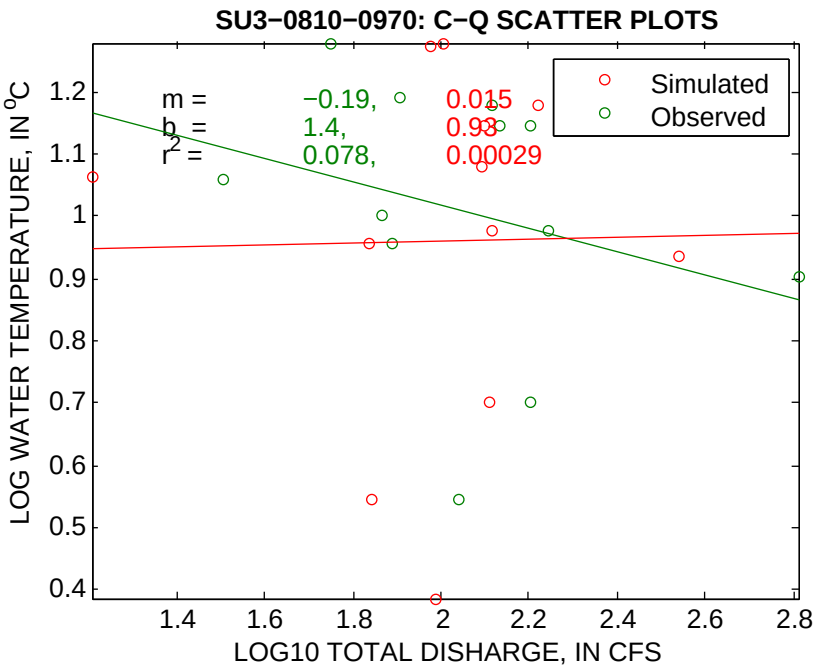
STATISTICS

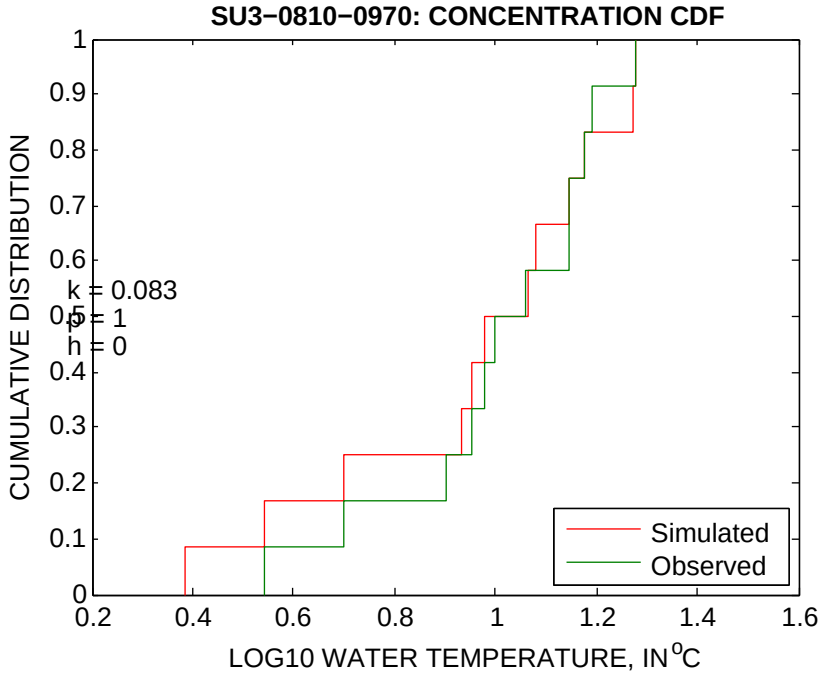
	n	12	12
		observe	simulate
min		3.5	0.80335
		0.544068	-0.0950952
mean		11.1667	10.3441
		1.00635	0.866368
media		10.75	10.3495
		1.03035	1.01479
max		19	20.29
		1.27875	1.30728
varian		20.6061	44.501
		0.0455745	0.202016
JB		0.5	0.5
		0.119017	0.077735
		ra	log
%		-7.36593	-13.91
err.va		16.4635	0.118256
rel.std.err		0.798962	2.59478
mod.eff		0.201038	-1.59478

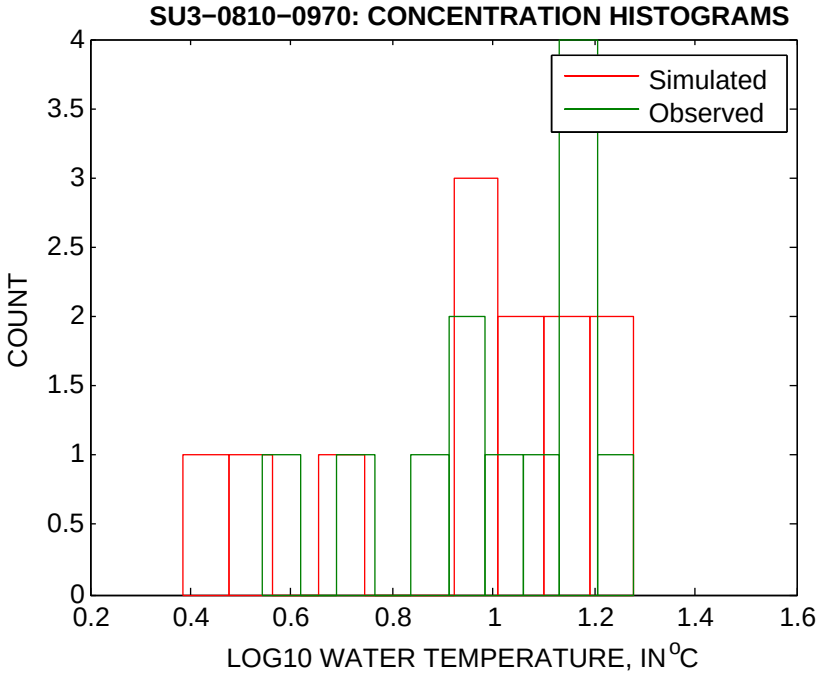
VERSION 2.1

ALL DATA
LOG10

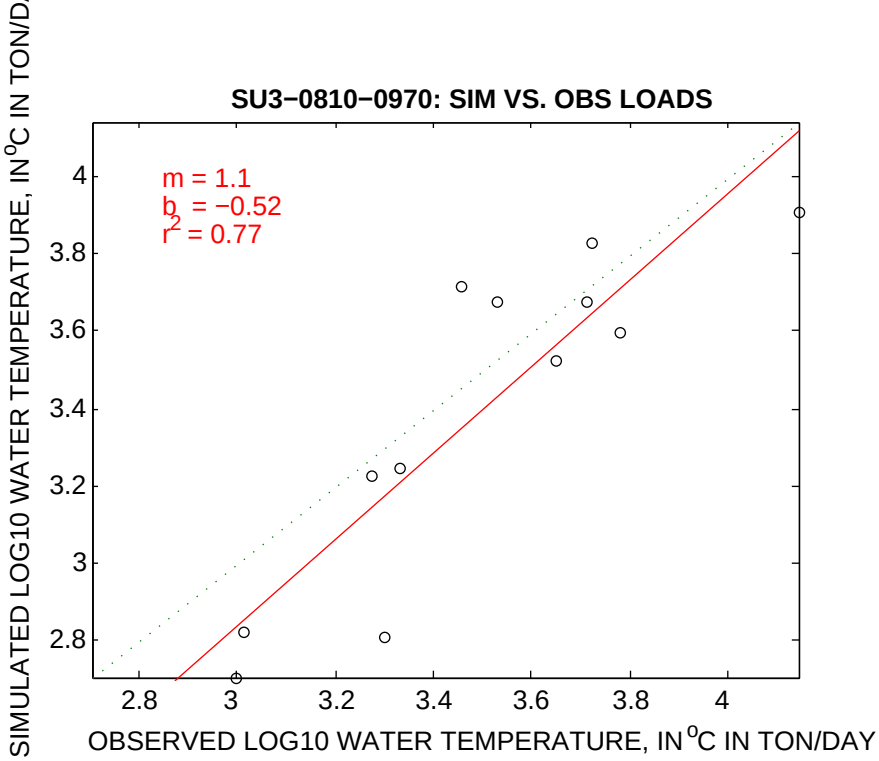


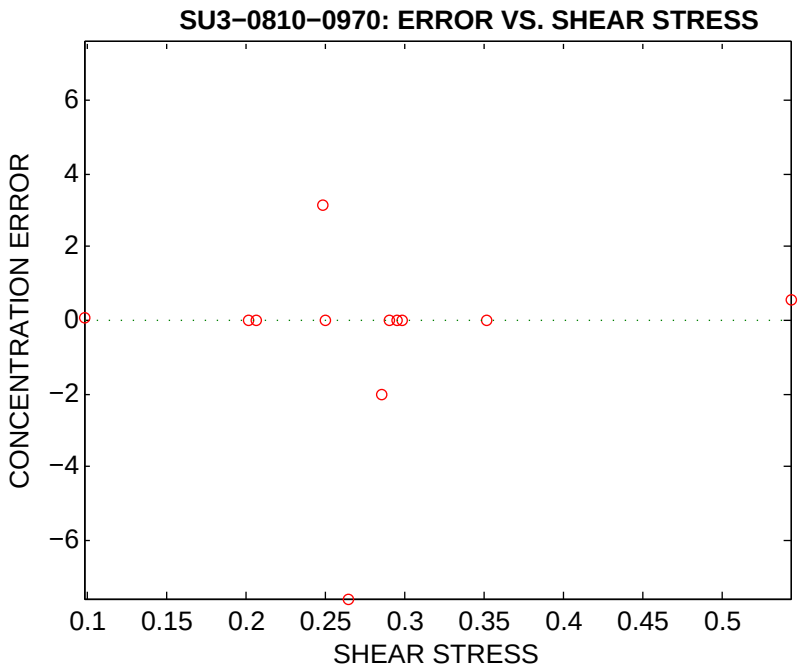


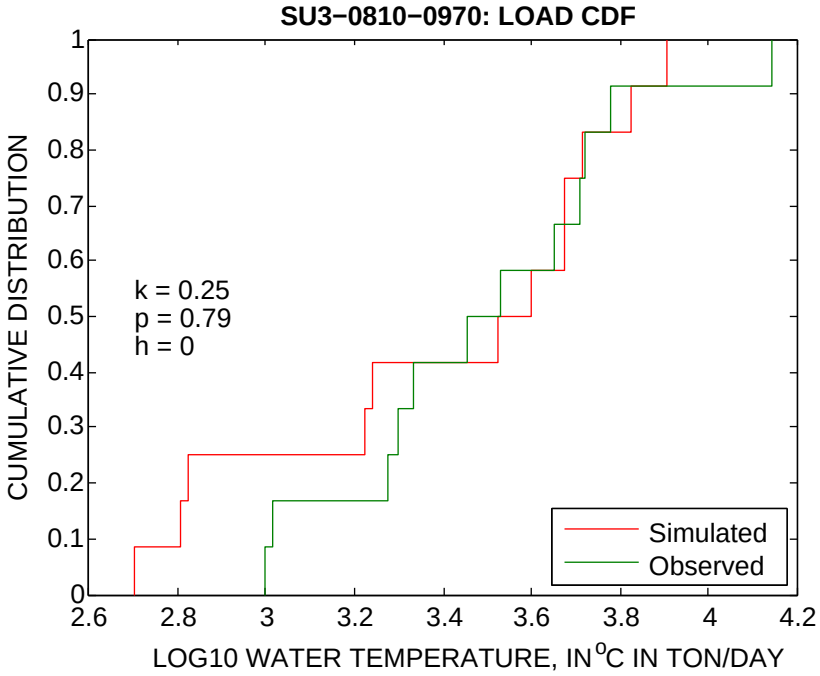


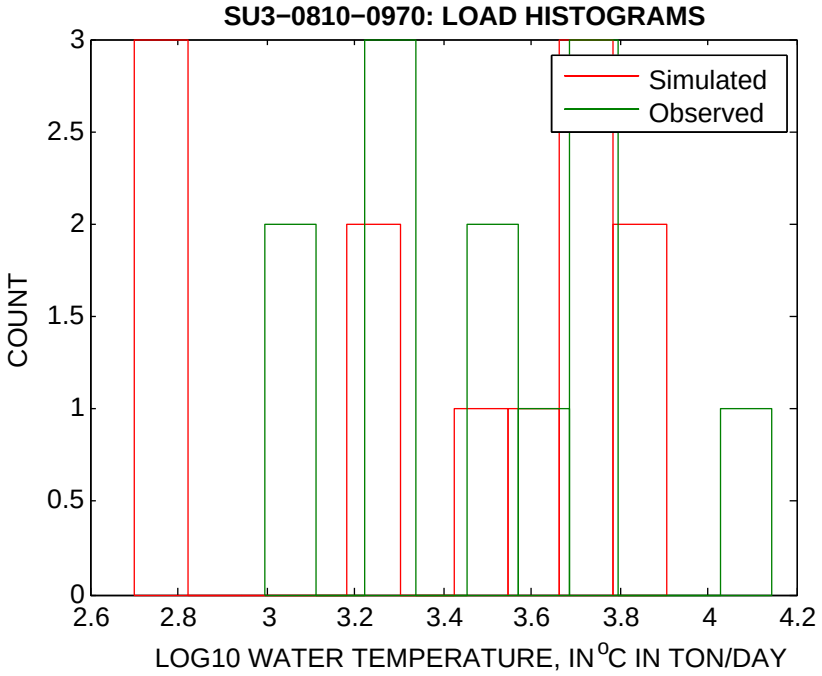


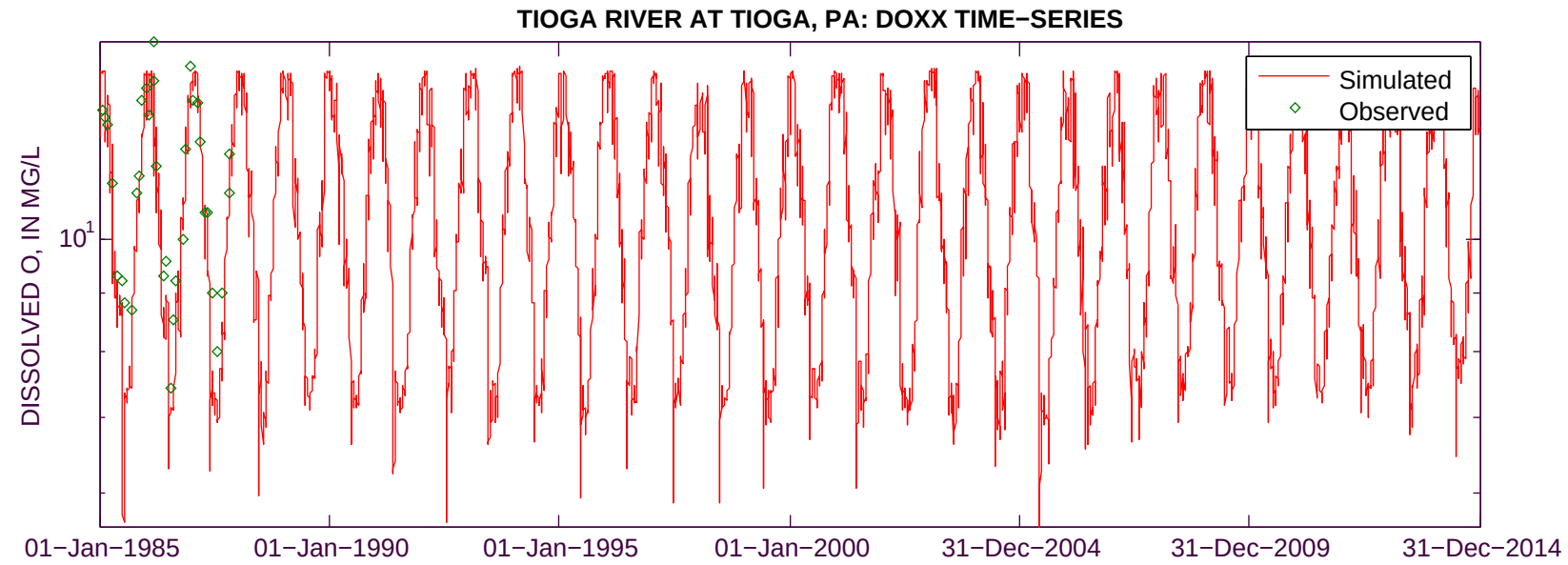
LOAD DATA
LOG10

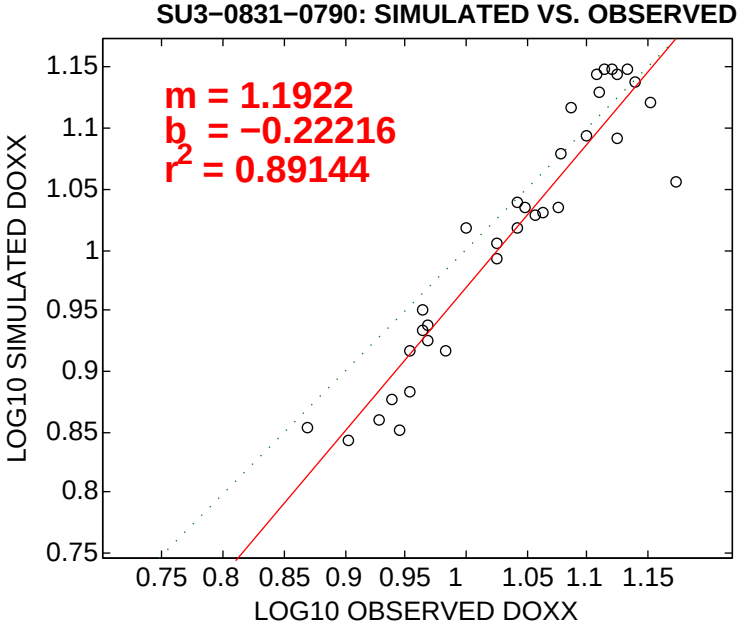


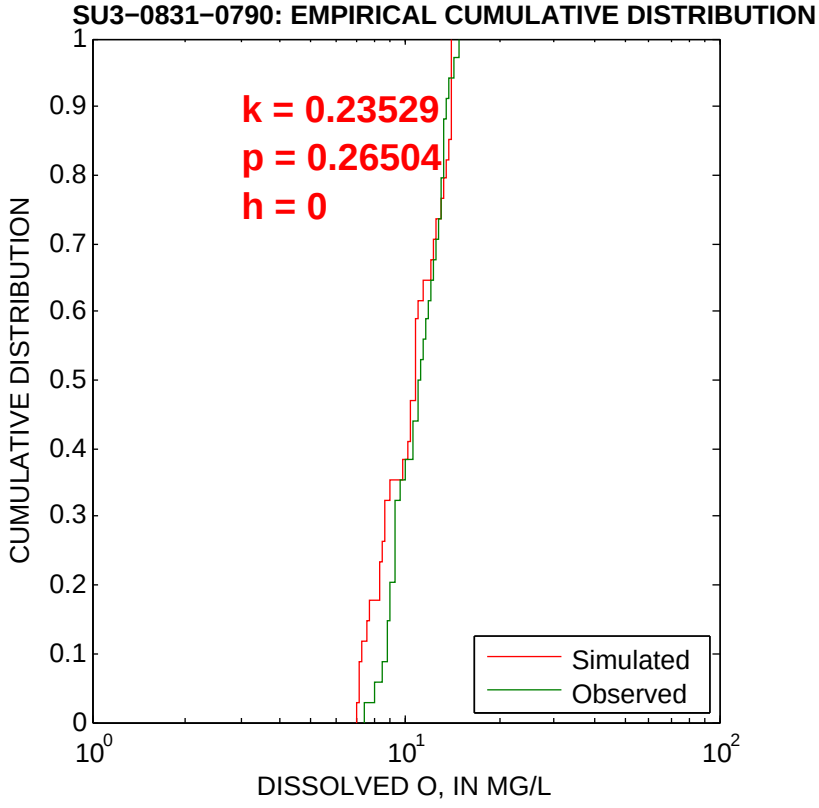












DATA SELECTION

scenario: P620171001WQ | file: DOXX.calib

plot: DOXX - dissolved oxygen

Dates: 1/1/1985 – 12/31/201

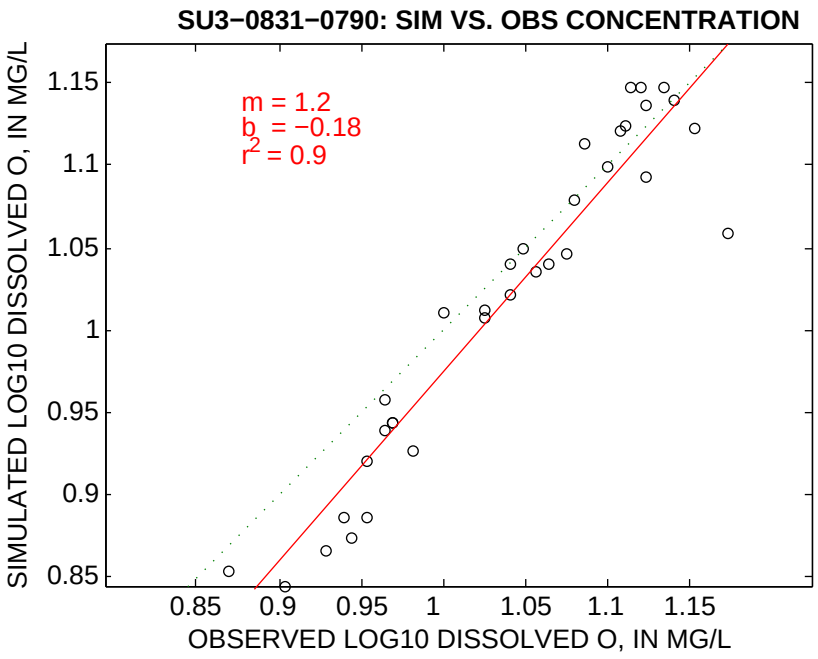
Drive | Directory | Observed: N/A | model | OBS20161101

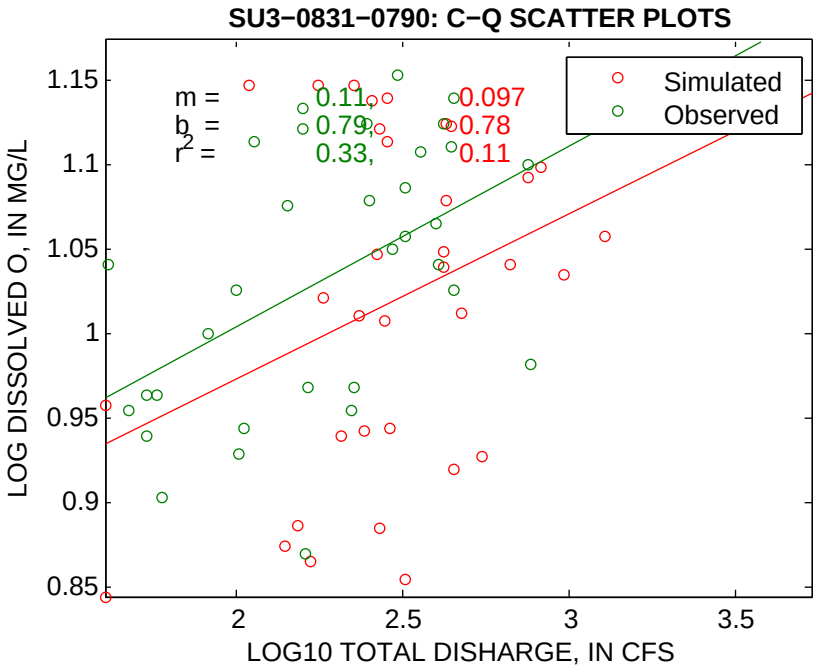
STATISTICS

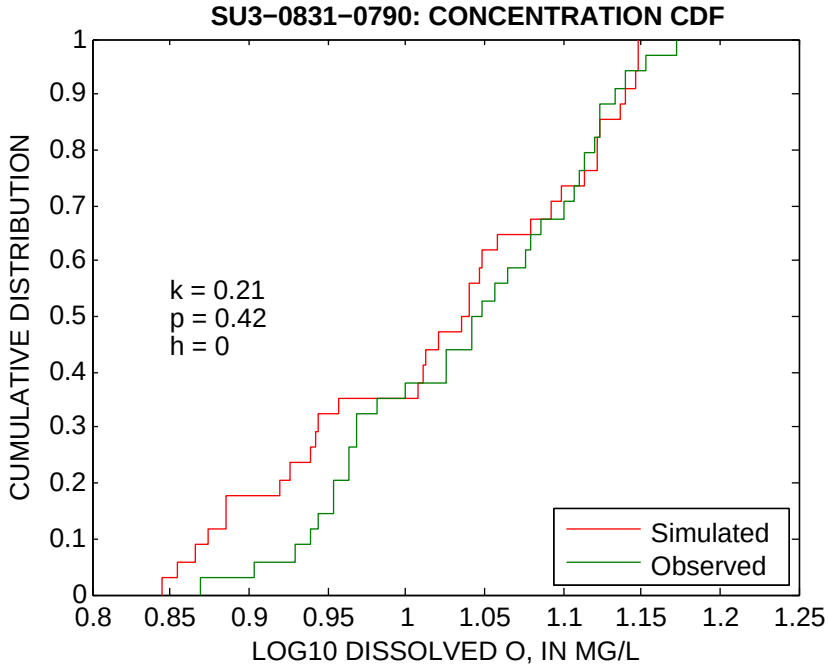
	n	34	34
		observe	simulate
min		7.4	6.9718
		0.869232	0.843345
mean		11.0912	10.629
		1.03781	1.01513
media		11.1	10.704
		1.04531	1.02955
max		14.9	14.08
		1.17319	1.1486
varian		4.06931	5.83621
		0.00652333	0.0104015
JB		0.201078	0.12737
		0.201001	0.124766
		ra	log
%		-4.16725	-2.1846
err.va		1.08686	0.00189985
rel.std.err		0.267086	0.291239
mod.eff		0.732914	0.708761

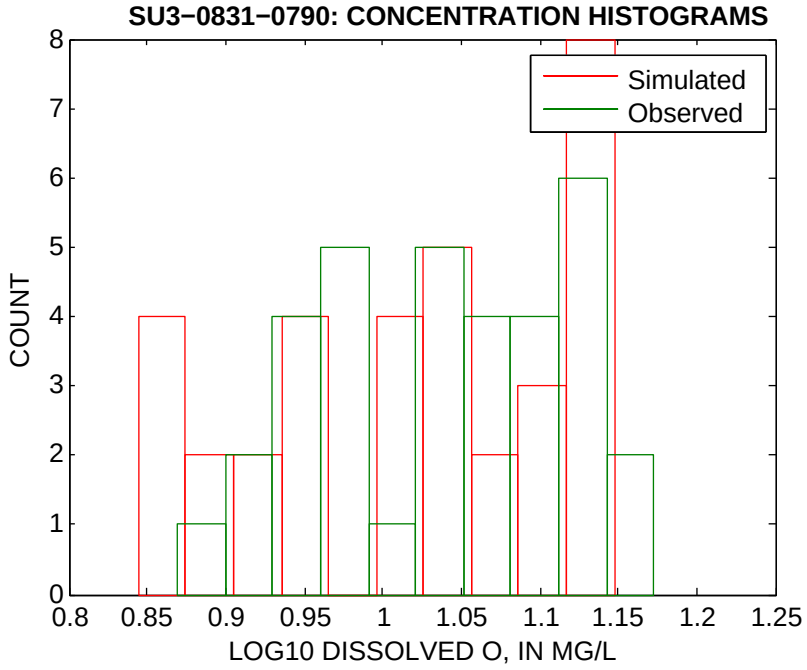
VERSION 2.1

ALL DATA
LOG10

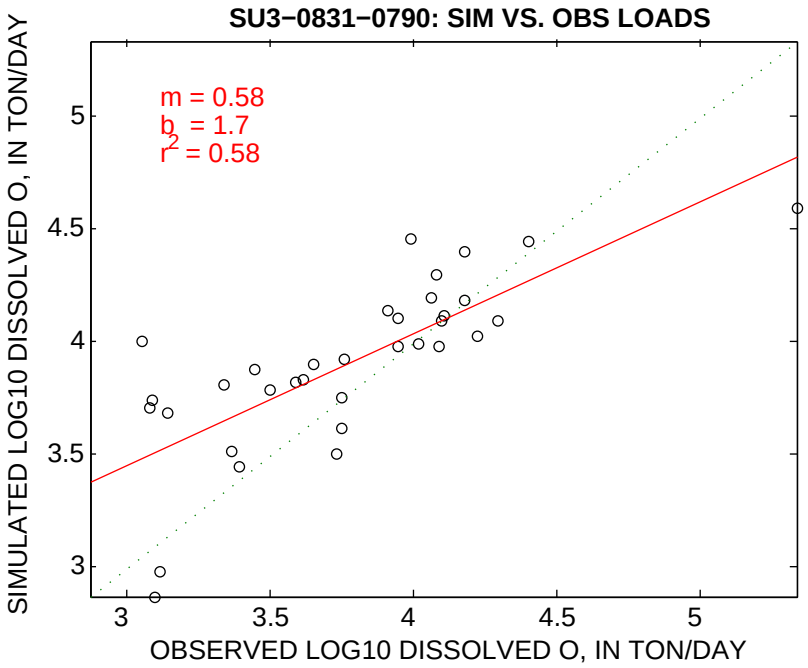


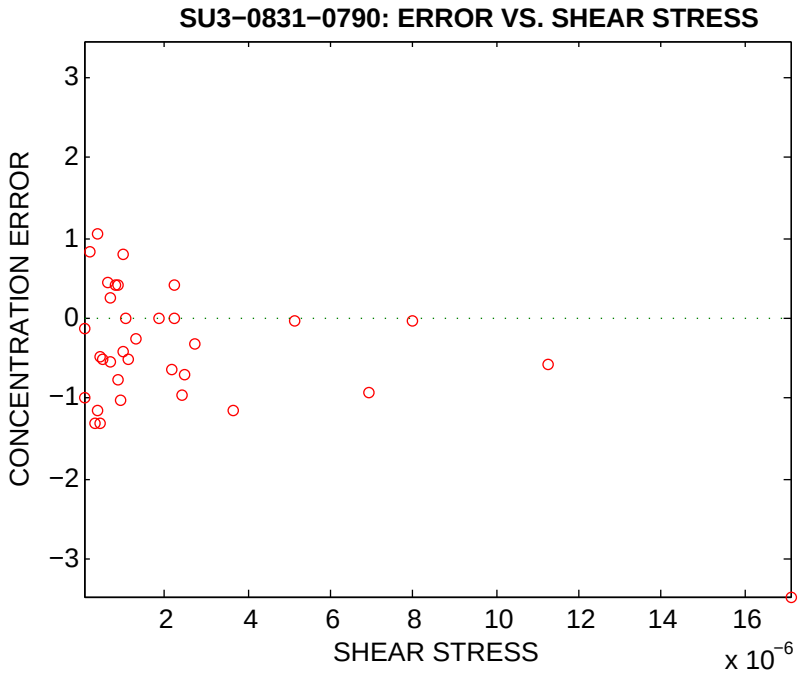


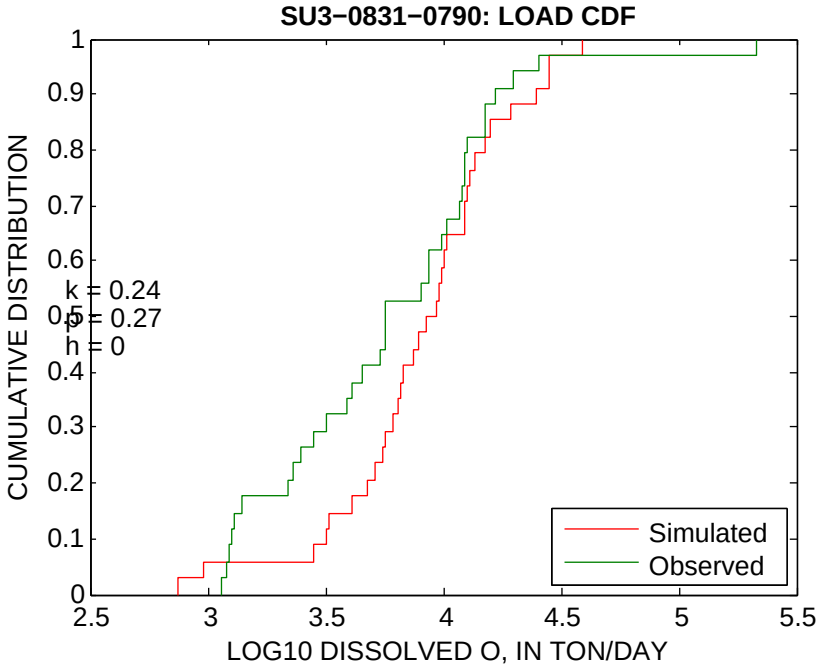


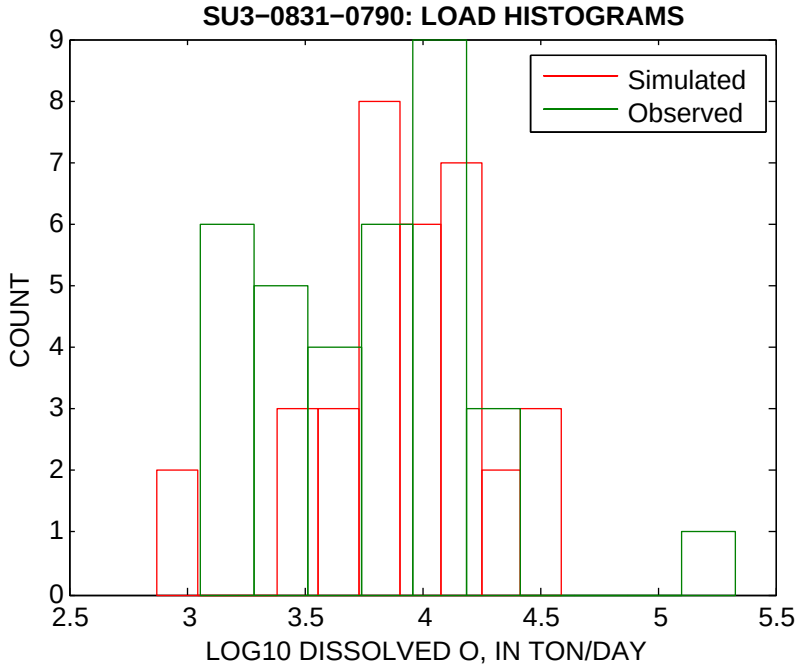


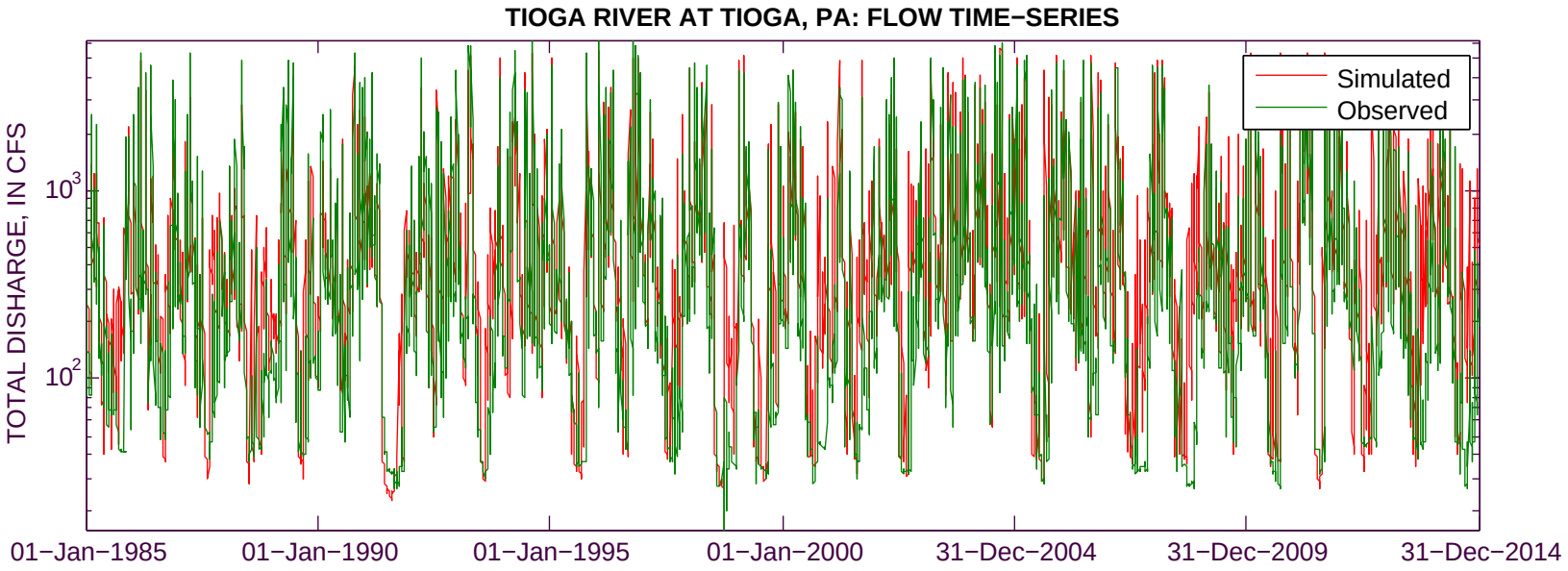
LOAD DATA
LOG10

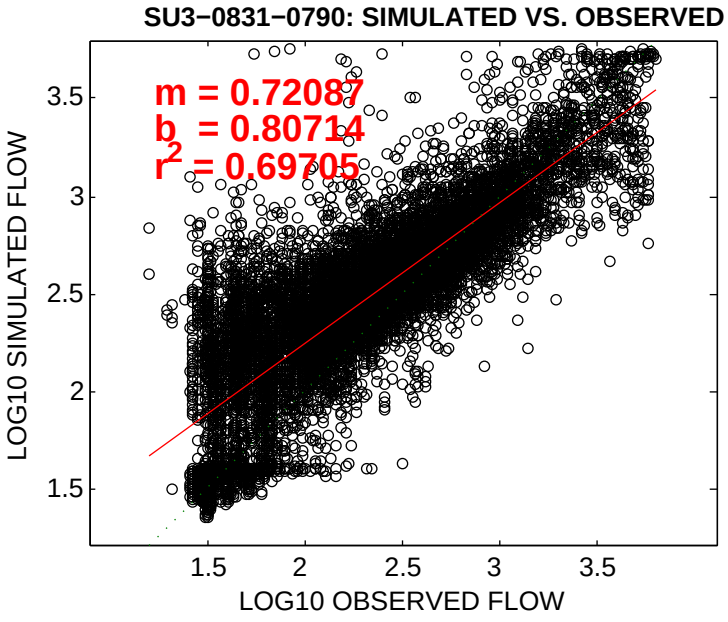


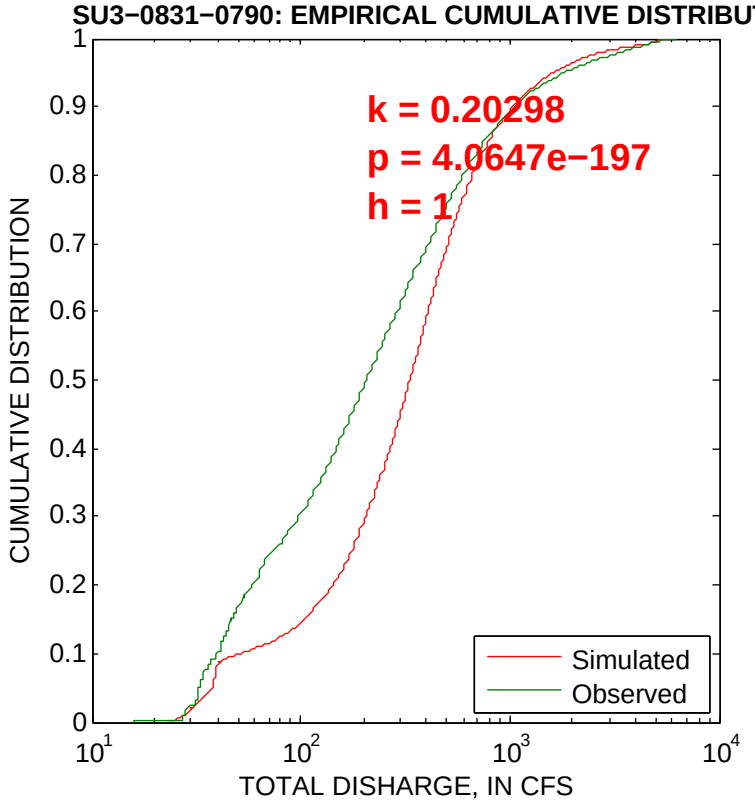












DATA SELECTION

scenario: P620171001WQ | file: FLOW.calib

plot: FLOW - total discharge

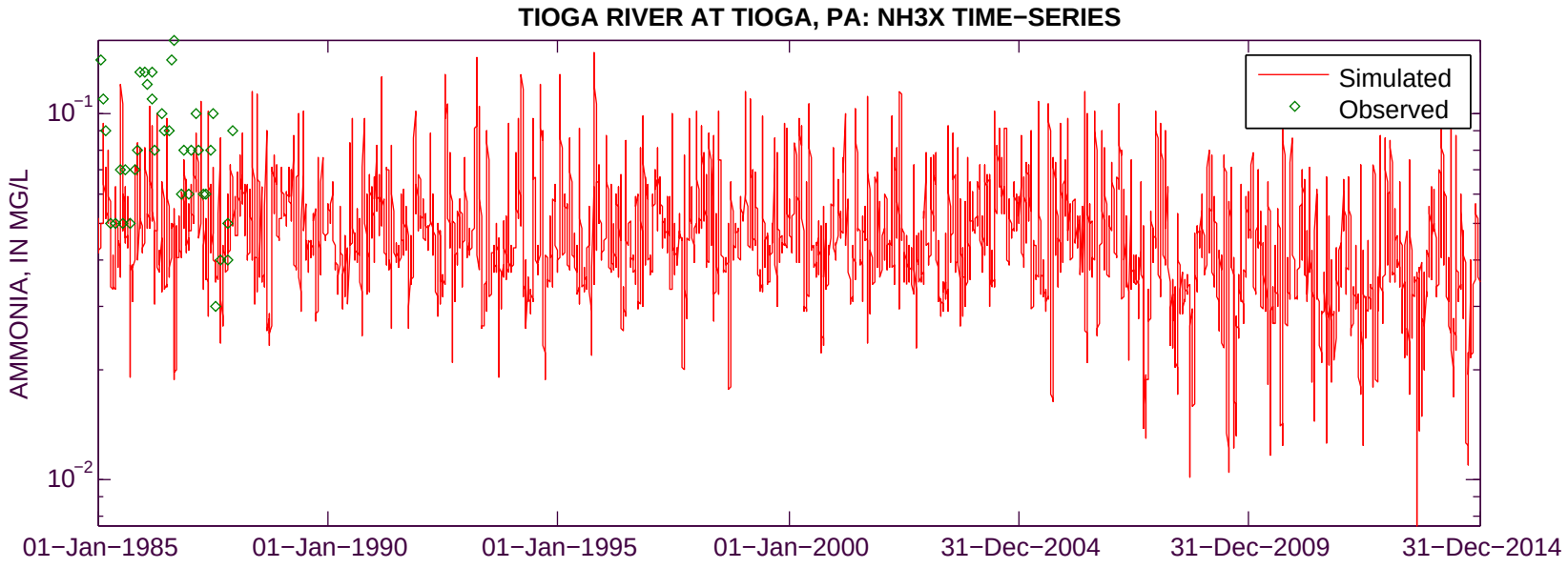
Dates: 1/1/1985 – 12/31/201

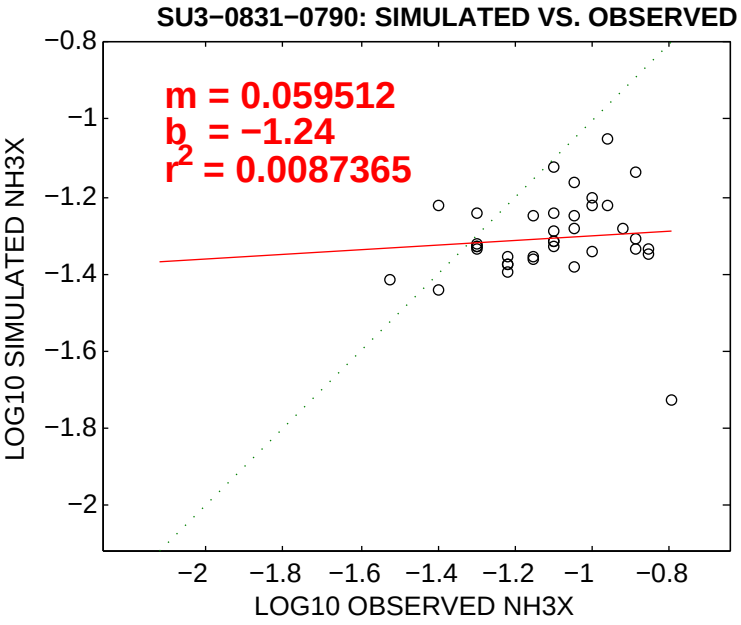
Drive: N/A | Directory: model | Observed: OBS20161101

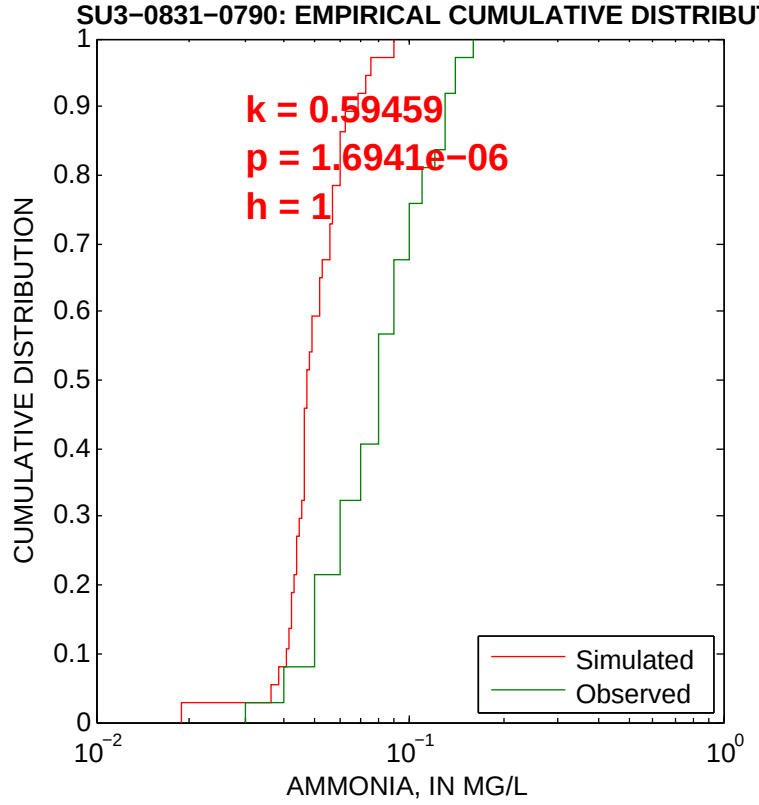
STATISTICS

		observe	simulate
n		10957	10957
min		16	22.559
		1.20412	1.35332
mean		467.145	518.255
		2.32074	2.4801
media		207	334.07
		2.31597	2.52384
max		6300	5735.1
		3.79934	3.75854
varian		608884	474628
		0.289629	0.215921
JB		0.001	0.001
		0.001	0.001
		ra	log
%		10.9411	6.86656
err.va		250034	0.113376
rel.std.err		0.410643	0.391454
mod.eff		0.589357	0.608546

VERSION 2.1







DATA SELECTION

scenario	file
P620171001WQ	NH3X.calib

plot: NH3X - ammonia

Dates: 1/1/1985 – 12/31/201

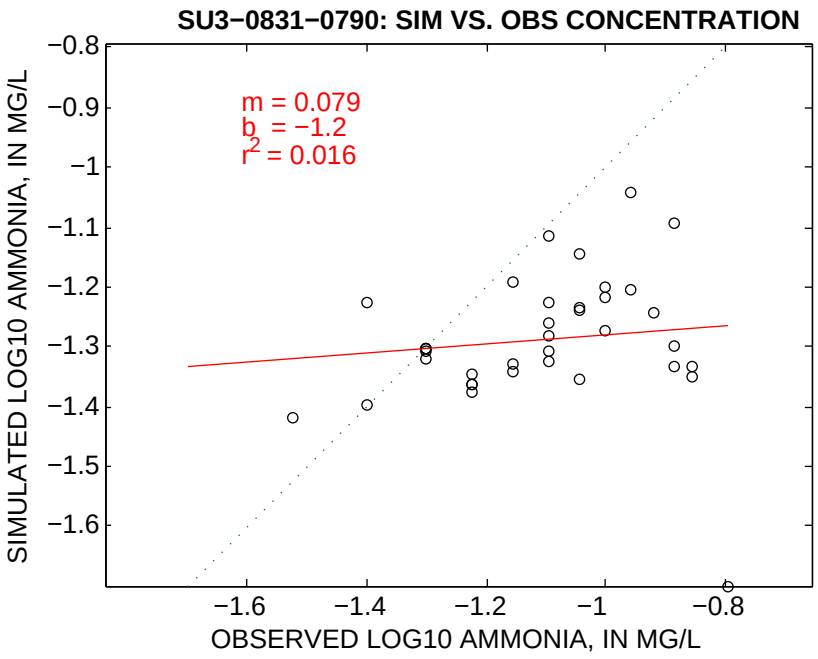
Drive	Directory	Observed
N/A	model	OBS20161101

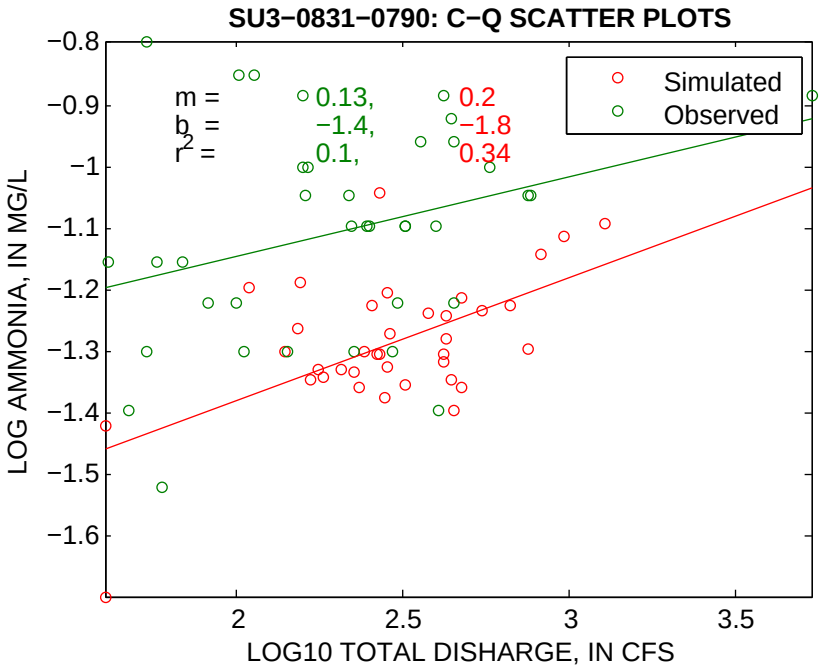
STATISTICS

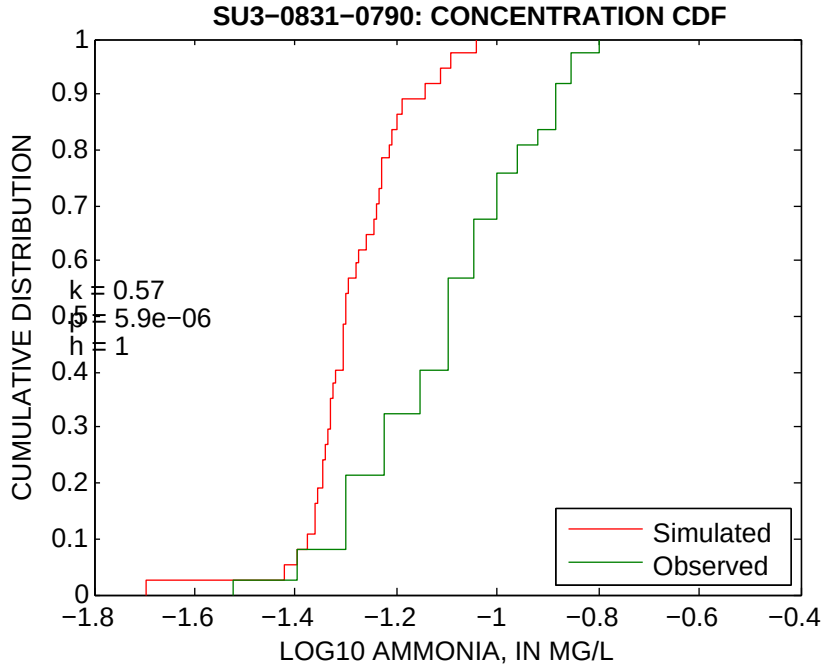
	n	37	37
		observe	simulate
min		0.03	0.01881
		-1.52288	-1.72561
mean		0.0843243	0.0509409
		-1.1065	-1.30586
media		0.08	0.047369
		-1.09691	-1.32451
max		0.16	0.088956
		-0.79588	-1.05082
varian		0.00104189	0.00015283
		0.0302827	0.0122764
JB		0.227967	0.018874
		0.5	0.001
		ra	log
%		-39.5893	18.0174
err.va		0.00226103	0.0798039
rel.std.err		2.17012	2.6353
mod.eff		-1.17012	-1.6353

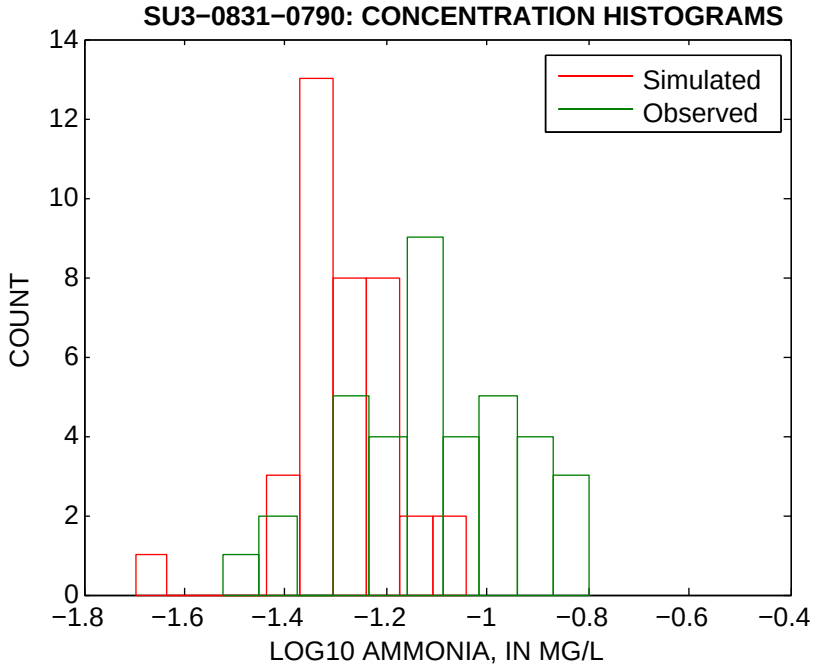
VERSION 2.1

ALL DATA
LOG10

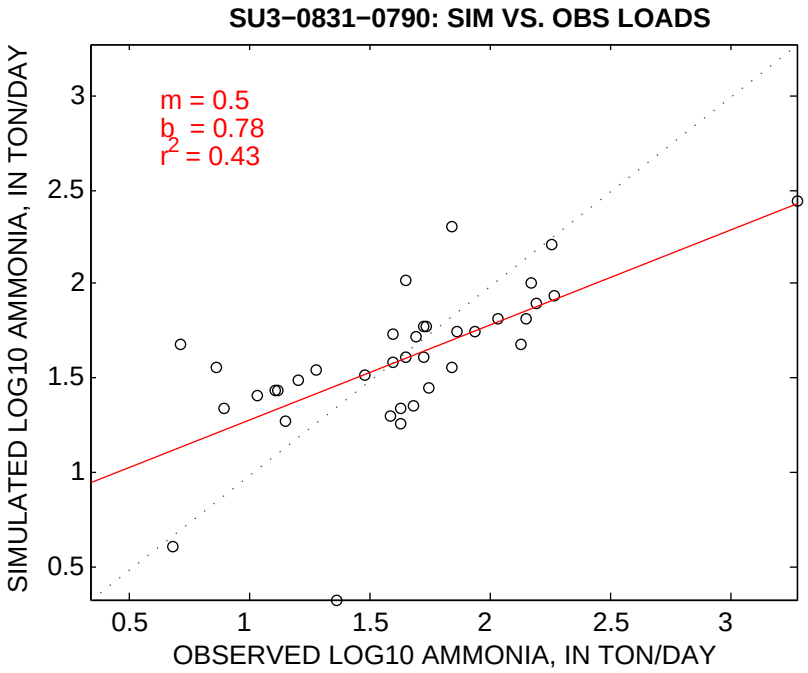


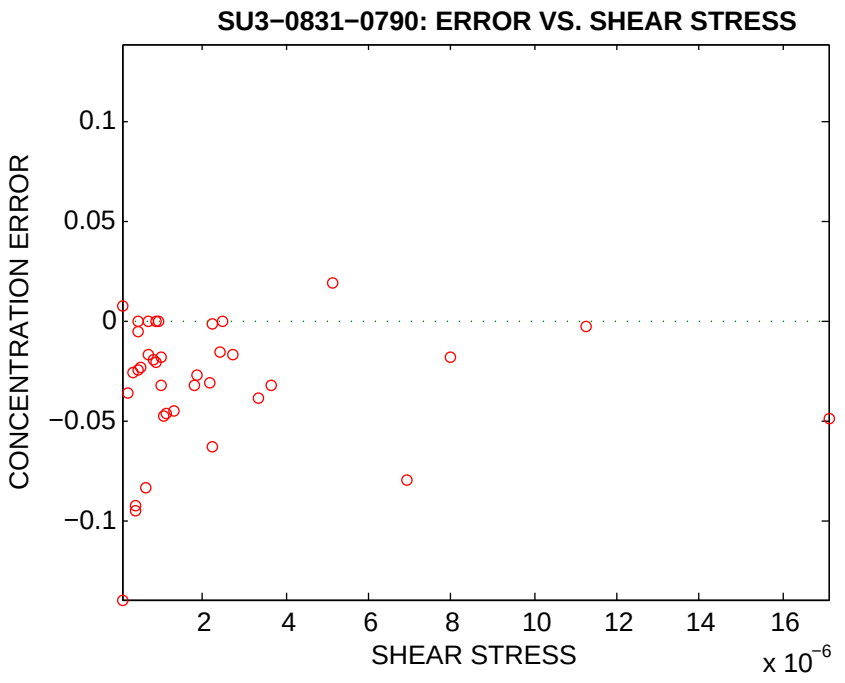


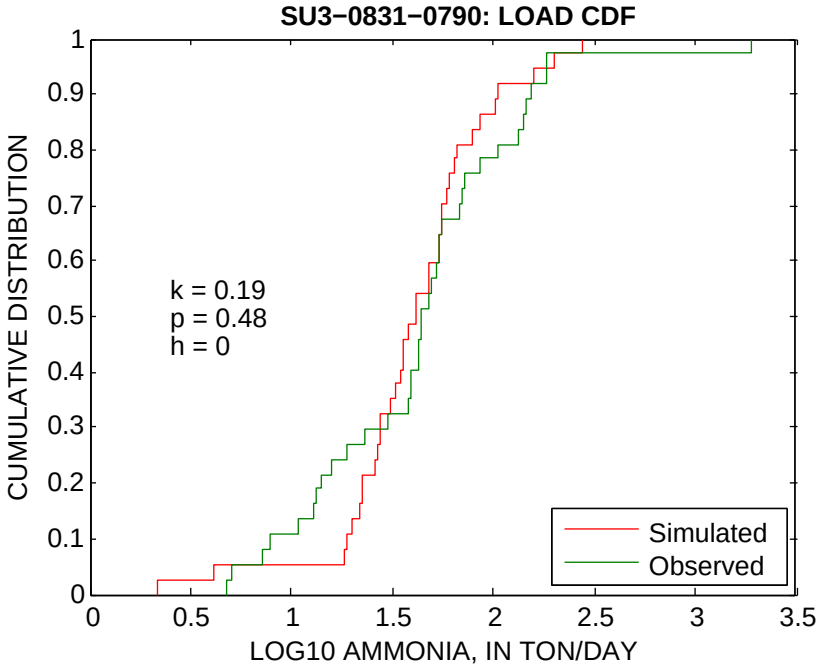


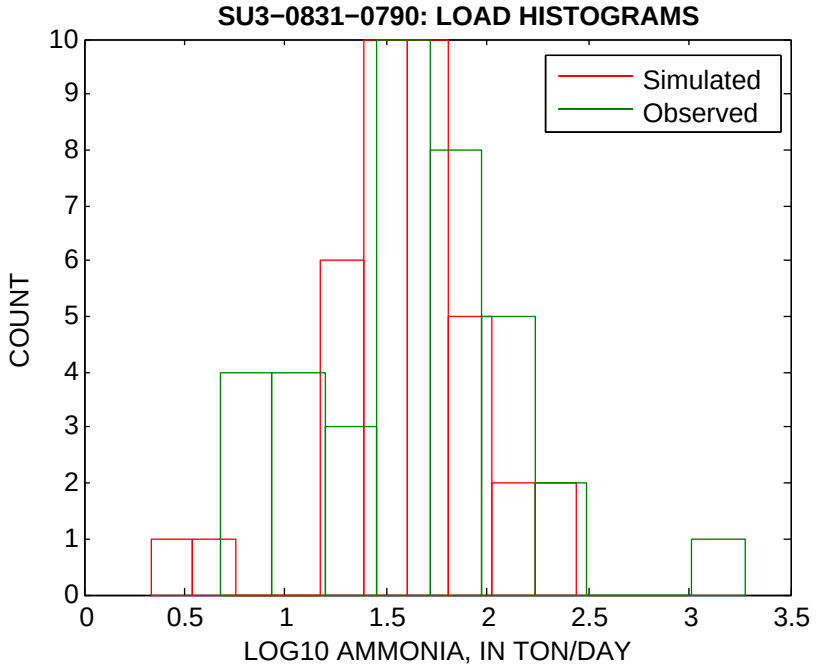


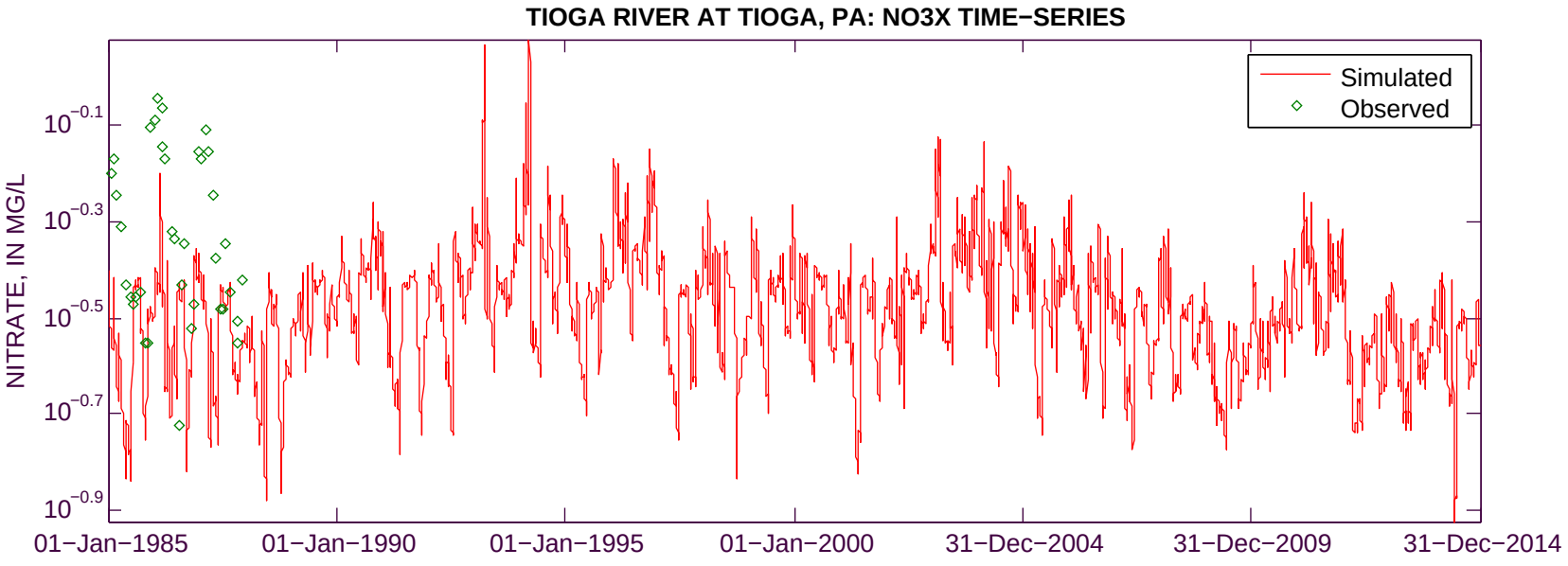
LOAD DATA
LOG10

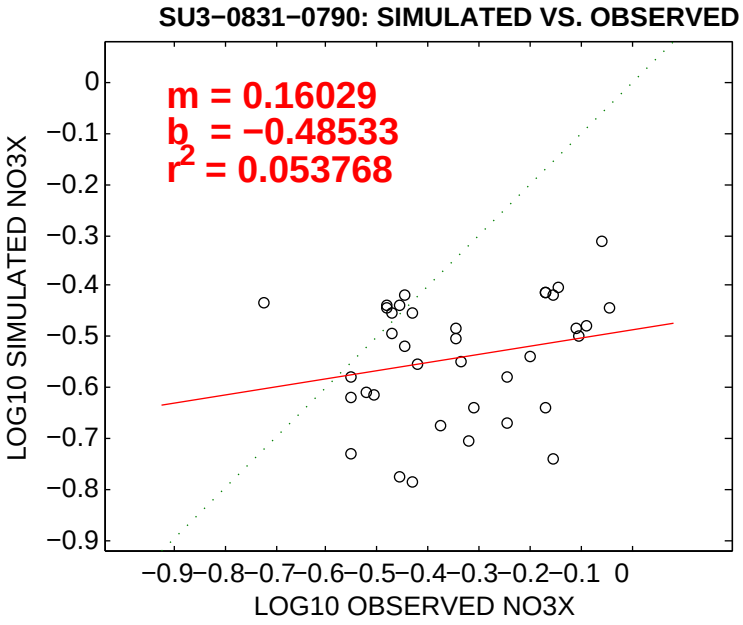


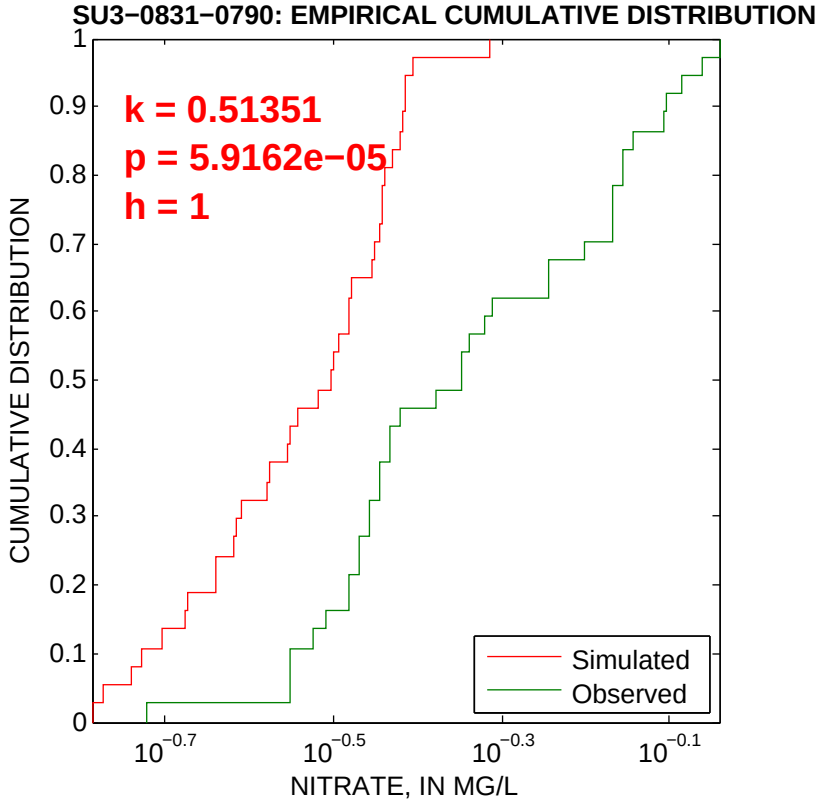












DATA SELECTION

scenario	file
P620171001WQ	NO3X.calib

plot: NO3X - nitrate

Dates: 1/1/1985 – 12/31/201

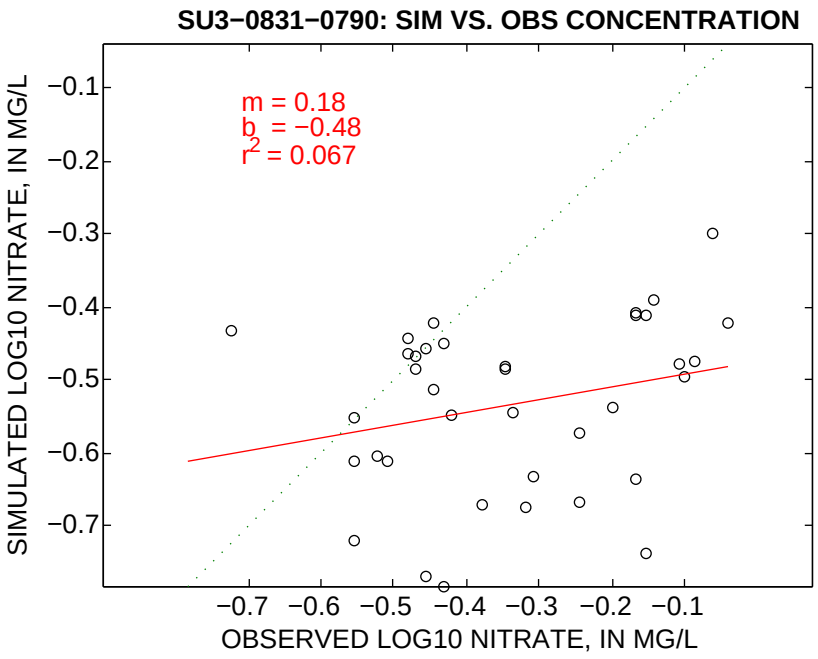
Drive	Directory	Observed
N/A	model	OBS20161101

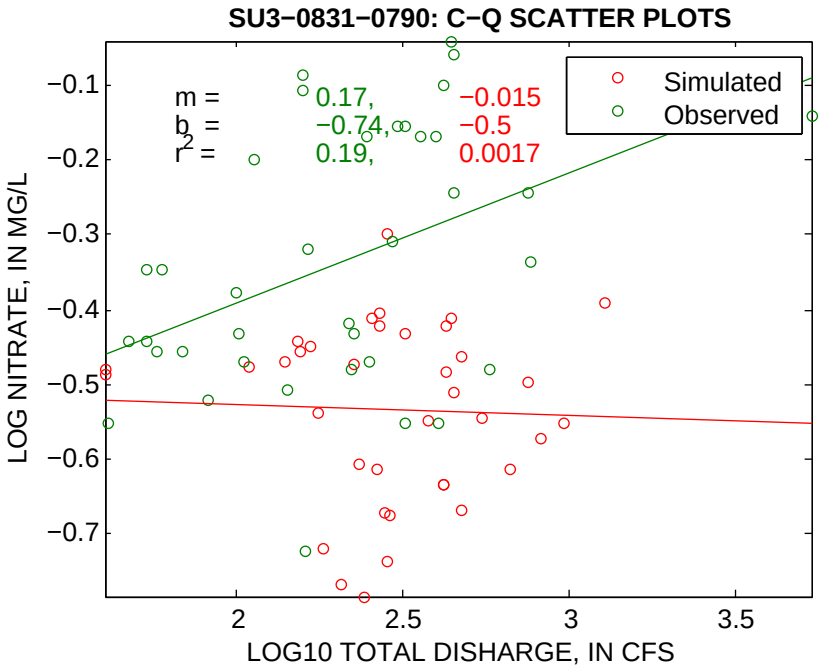
STATISTICS

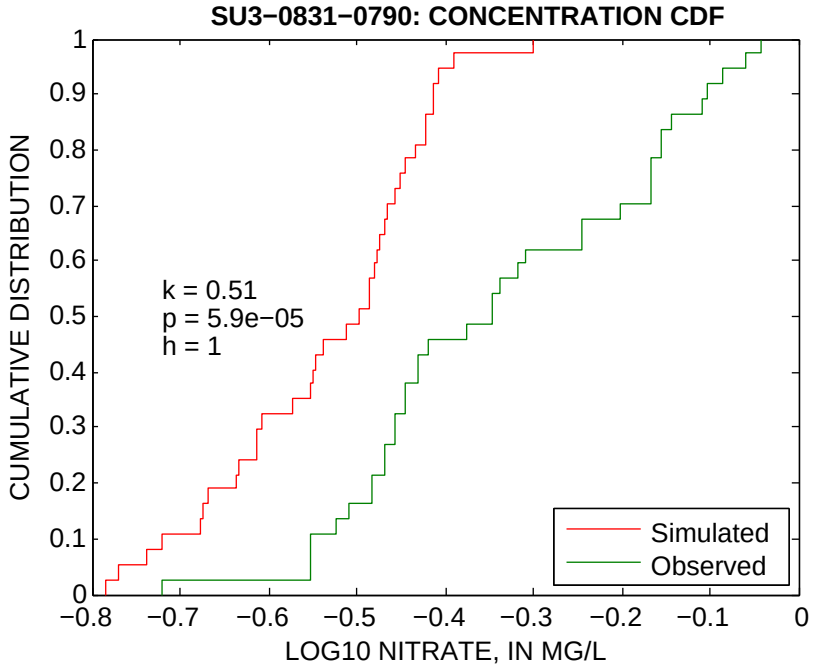
	n	37	37
		observe	simulate
min		0.19	0.16299
		-0.721246	-0.787839
mean		0.496486	0.299078
		-0.337088	-0.53936
media		0.45	0.31478
		-0.346787	-0.501993
max		0.91	0.48521
		-0.0409586	-0.31407
varian		0.0387234	0.00593429
		0.0296455	0.0141654
JB		0.084375	0.5
		0.319644	0.17273
		ra	log
%		-39.761	60.0057
err.va		0.0752024	0.0763578
rel.std.err		1.94204	2.5757
mod.eff		-0.94204	-1.5757

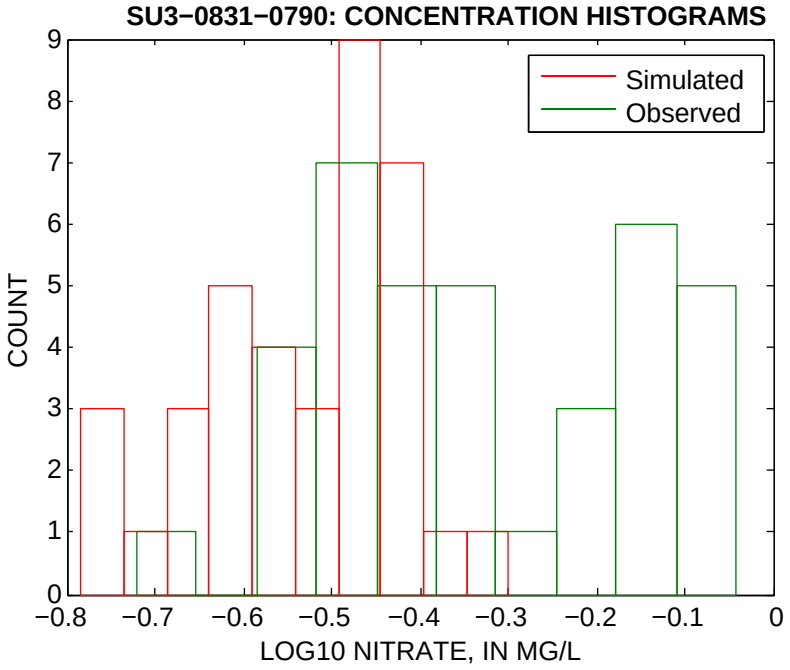
VERSION 2.1

ALL DATA
LOG10

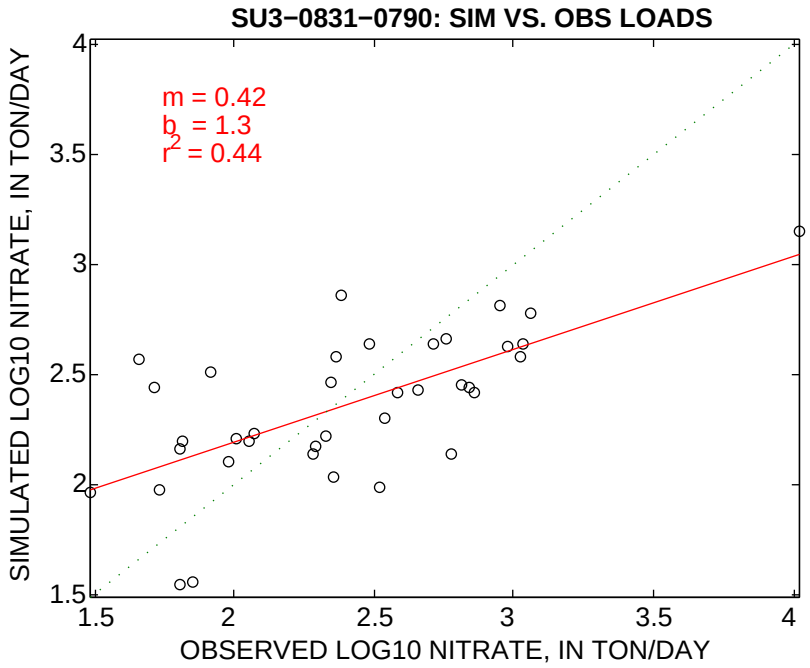


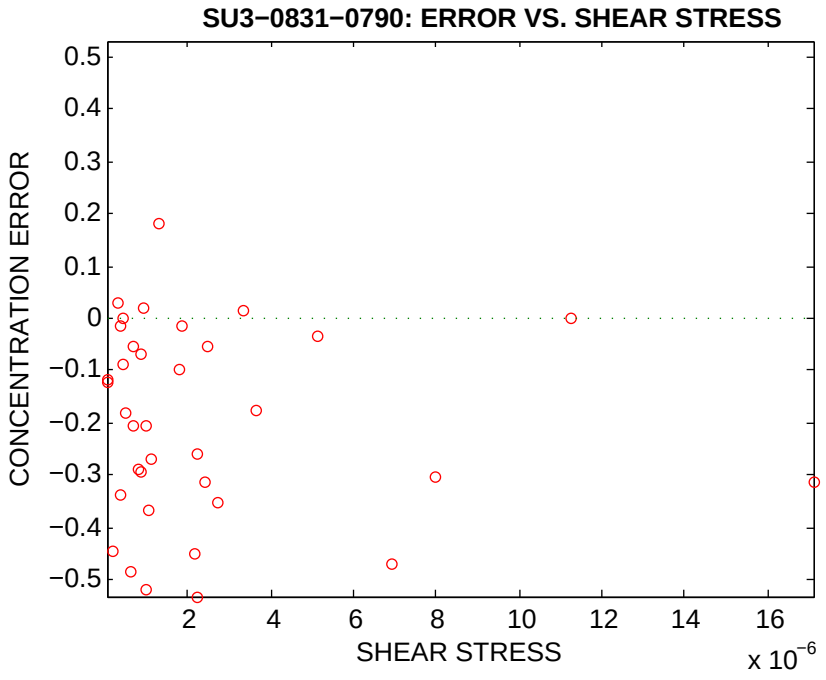


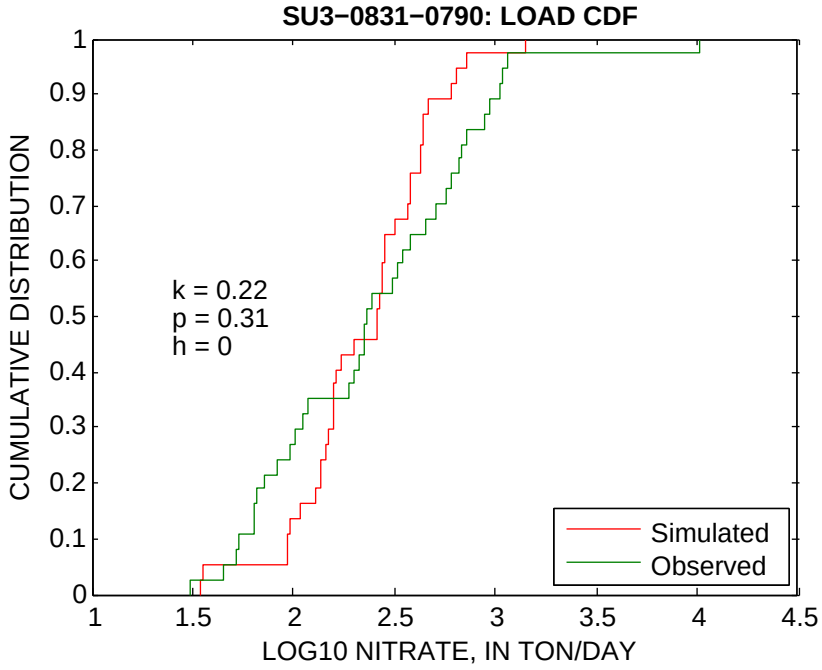


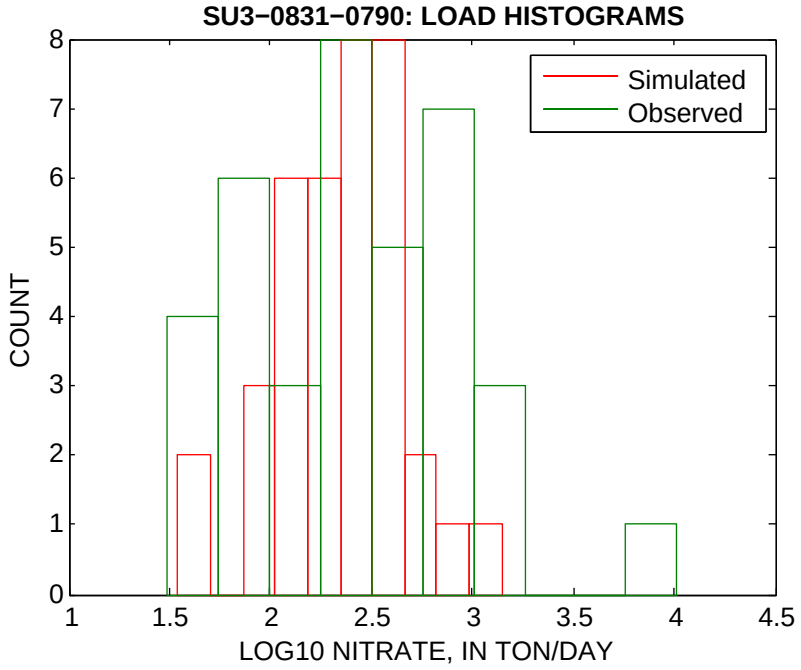


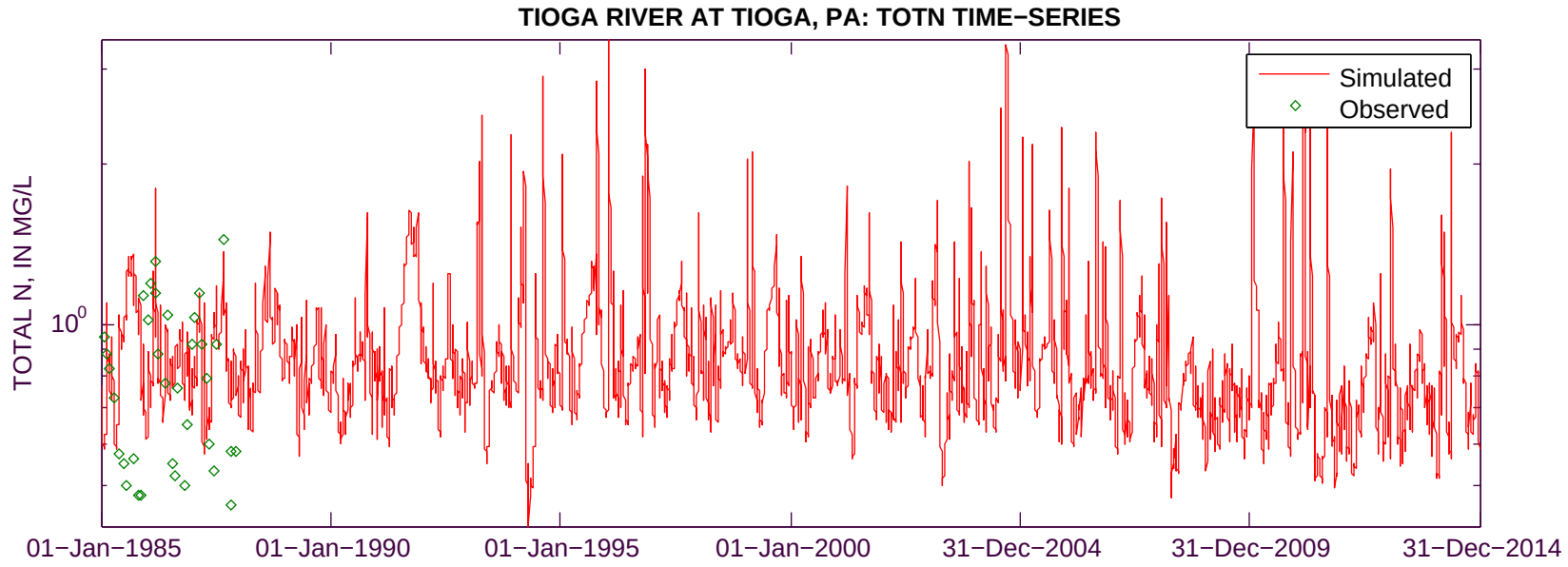
LOAD DATA
LOG10

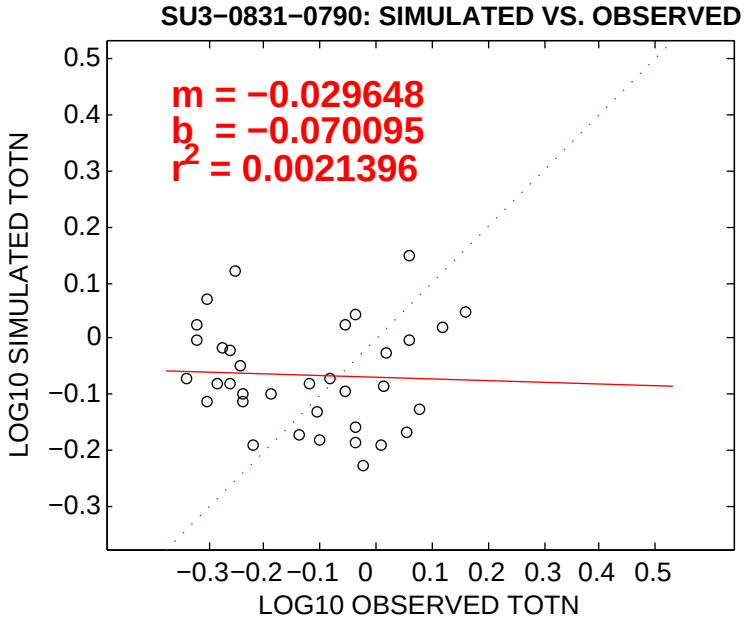


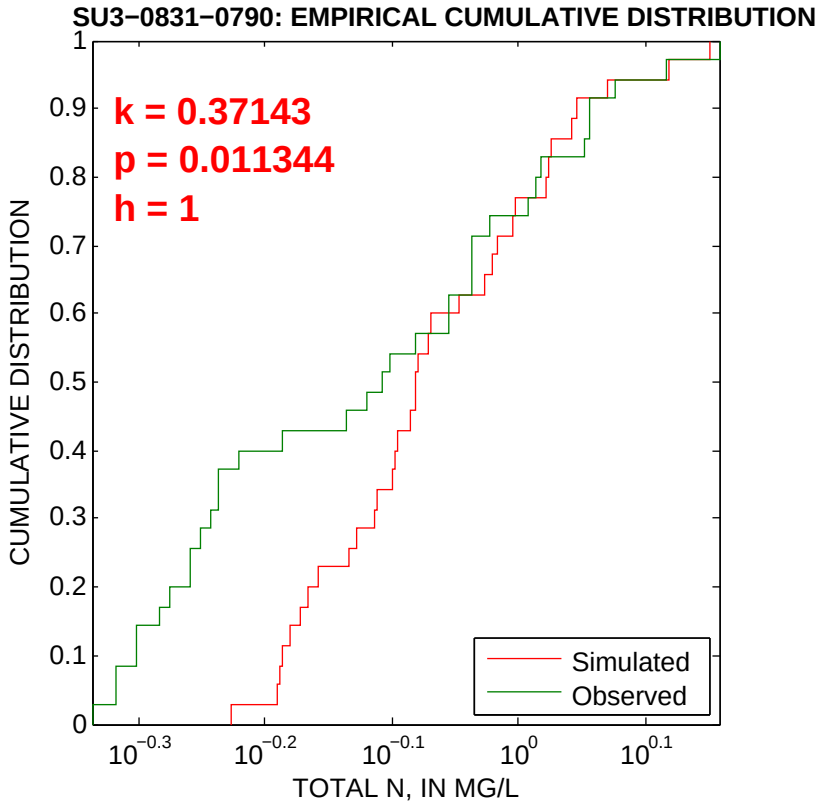












DATA SELECTION

scenario	file
P620171001WQ	TOTN.calib

plot: TOTN - total nitrogen

Dates: 1/1/1985 – 12/31/201

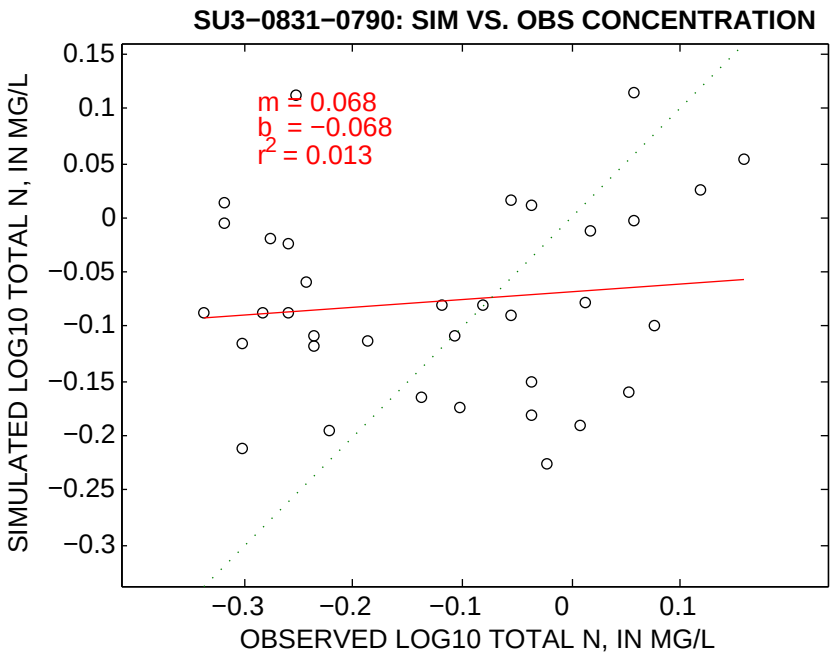
Drive	Directory	Observed
N/A	model	OBS20161101

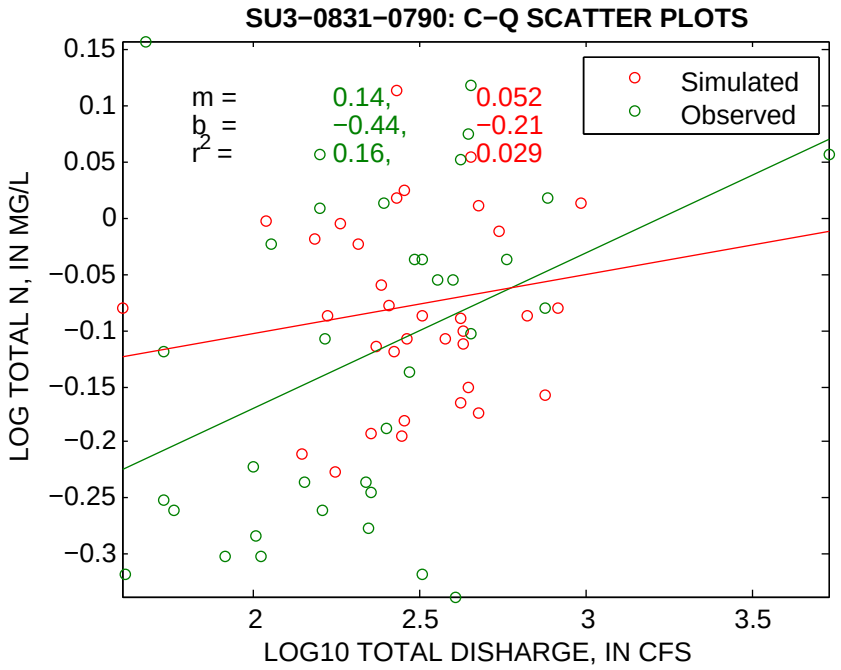
STATISTICS

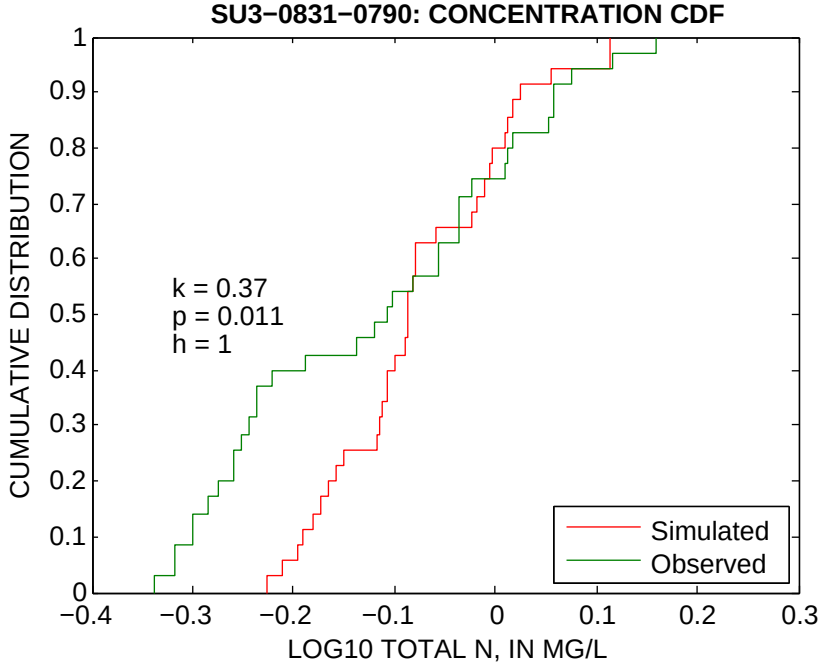
	n	35	35
		observe	simulate
min		0.46	0.59285
		-0.337242	-0.227055
mean		0.797429	0.877852
		-0.121894	-0.066481
media		0.78	0.83104
		-0.107905	-0.0803781
max		1.44	1.4139
		0.158362	0.150419
varian		0.0721608	0.0384622
		0.0210388	0.00864322
JB		☑ 0.137274	0.058933 ☑
		☑ 0.132723	0.407812 ☑
		ra	log
%		10.0854	-45.4602
err.va		0.112074	0.0340905
rel.std.err		1.55311	1.62036
mod.eff		-0.553108	-0.620364

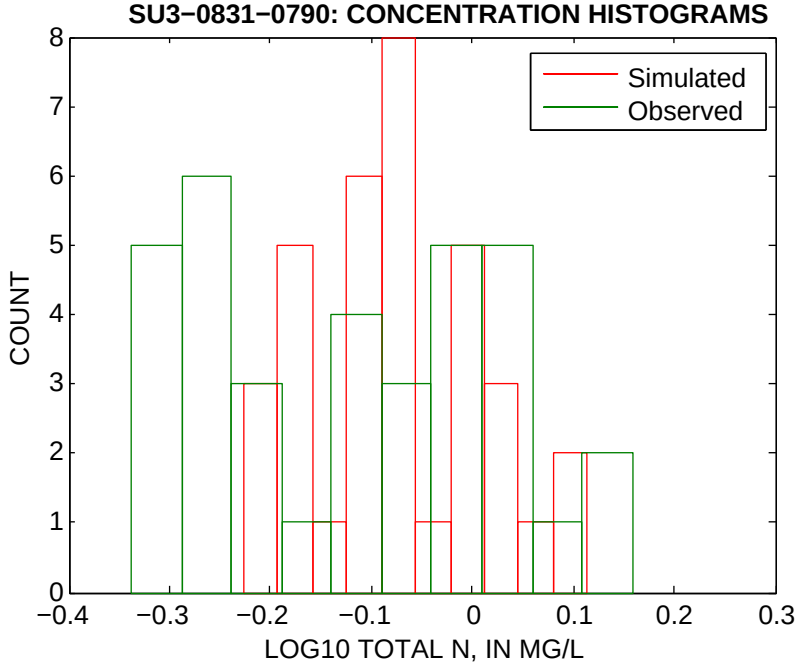
VERSION 2.1

ALL DATA
LOG10

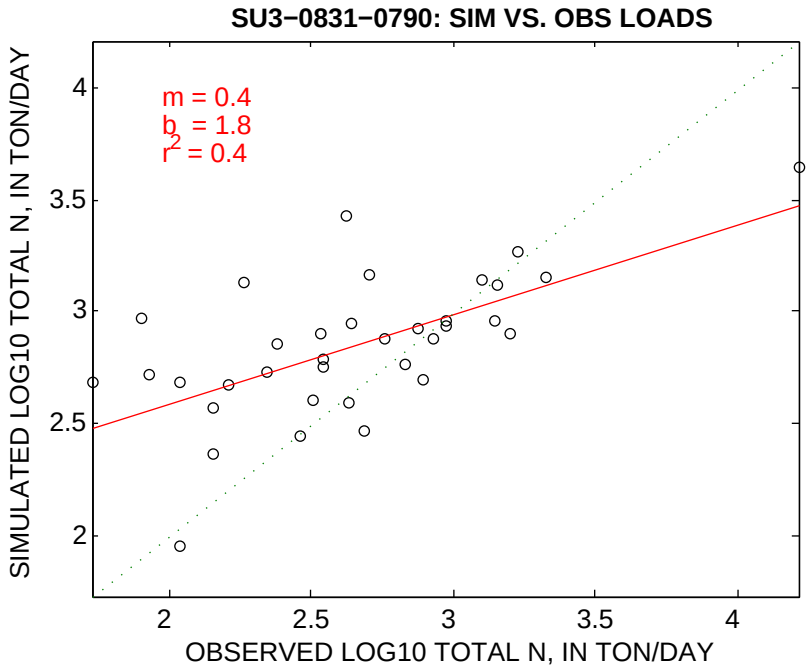


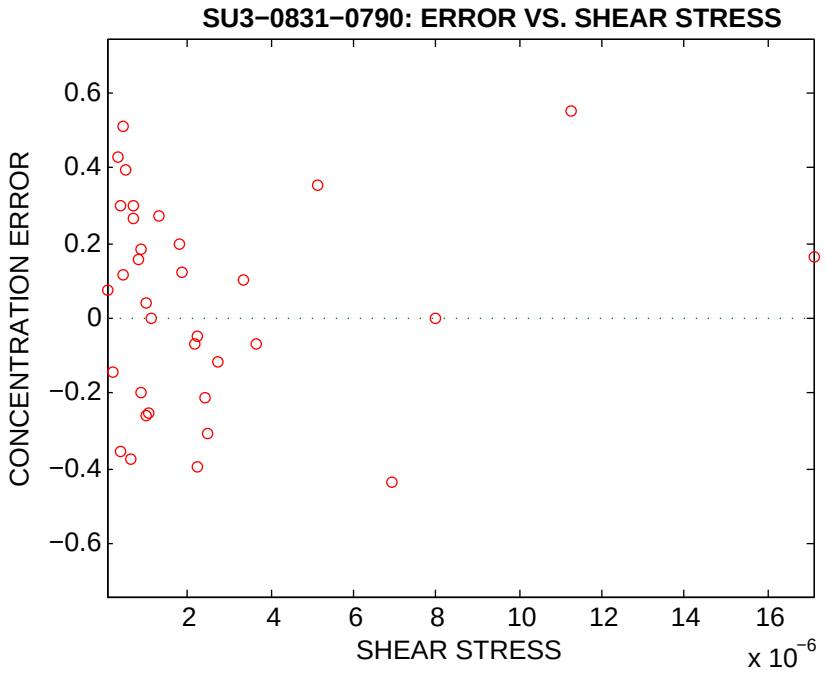


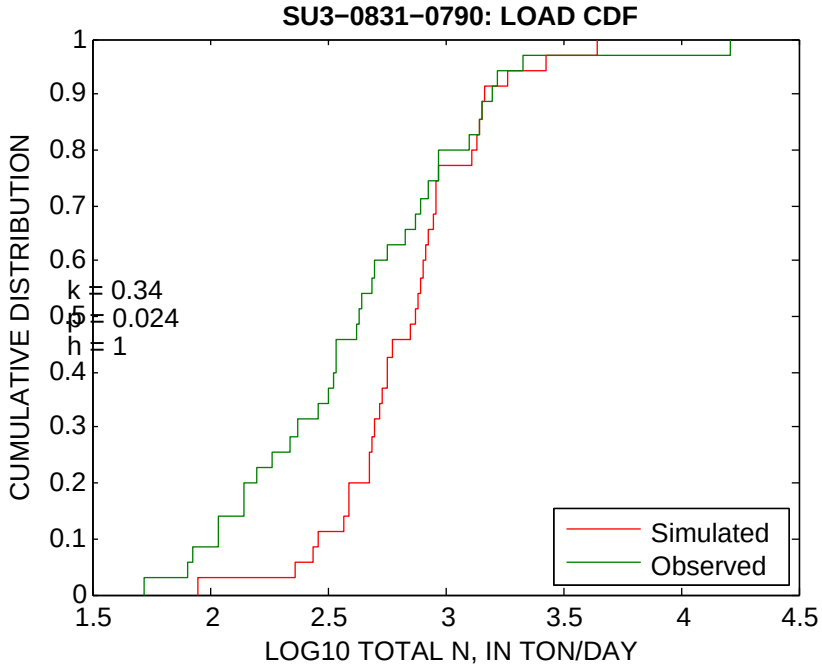


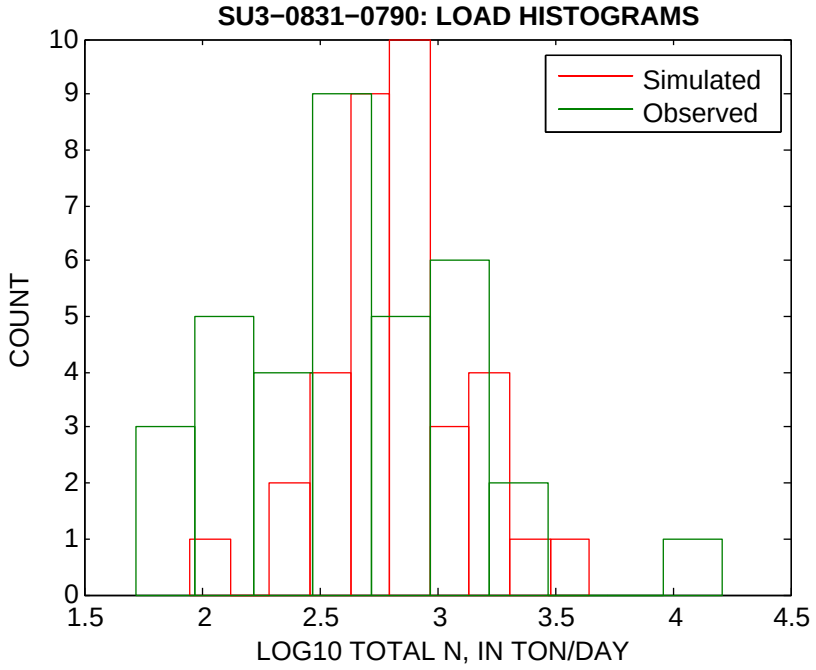


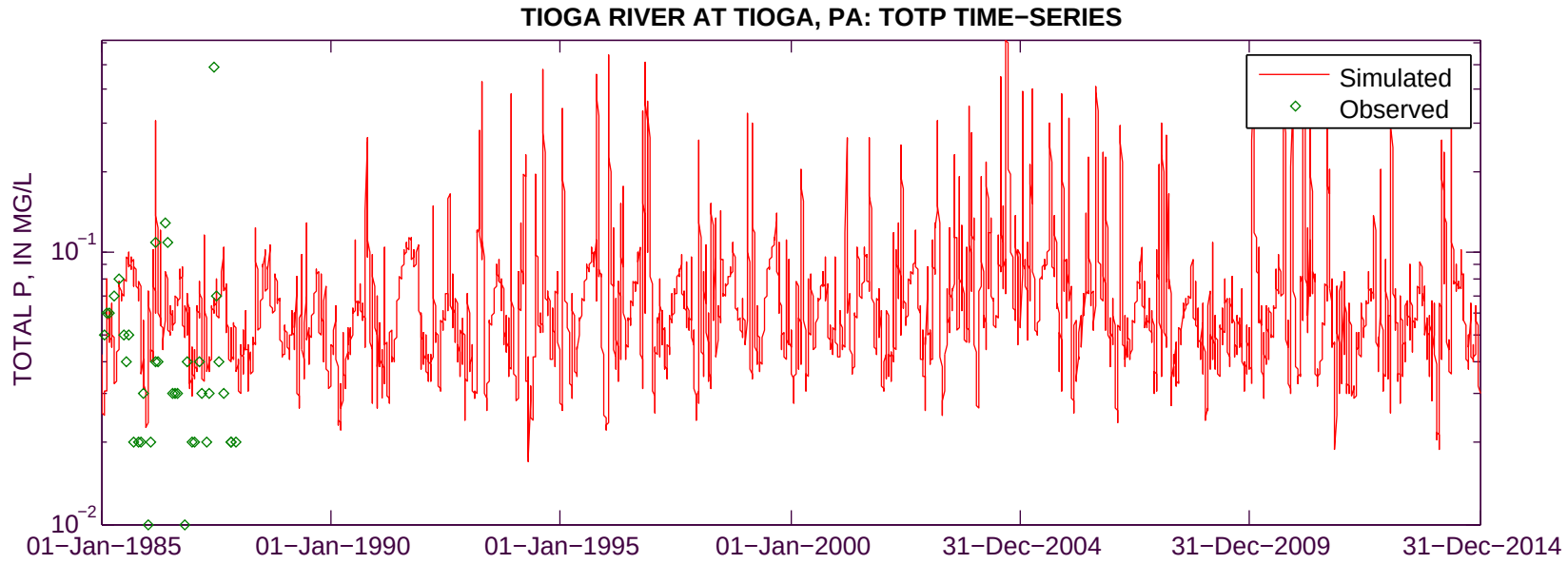
LOAD DATA
LOG10

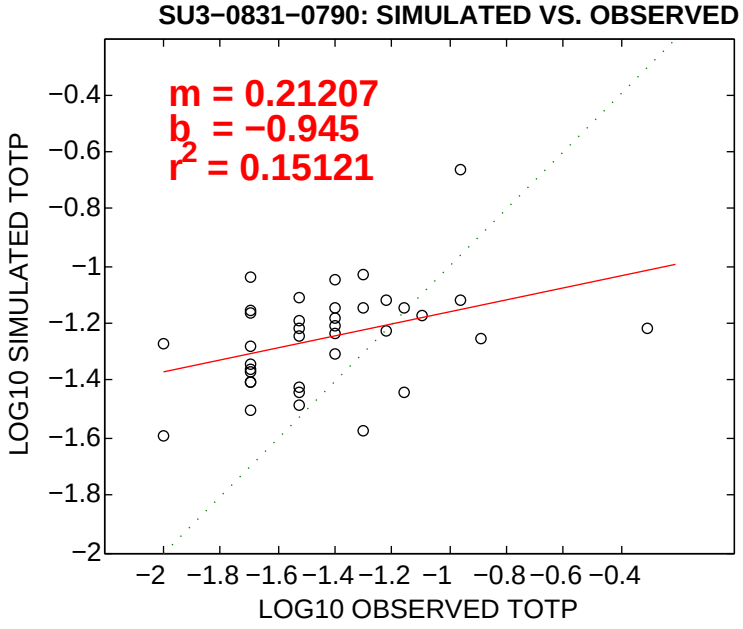


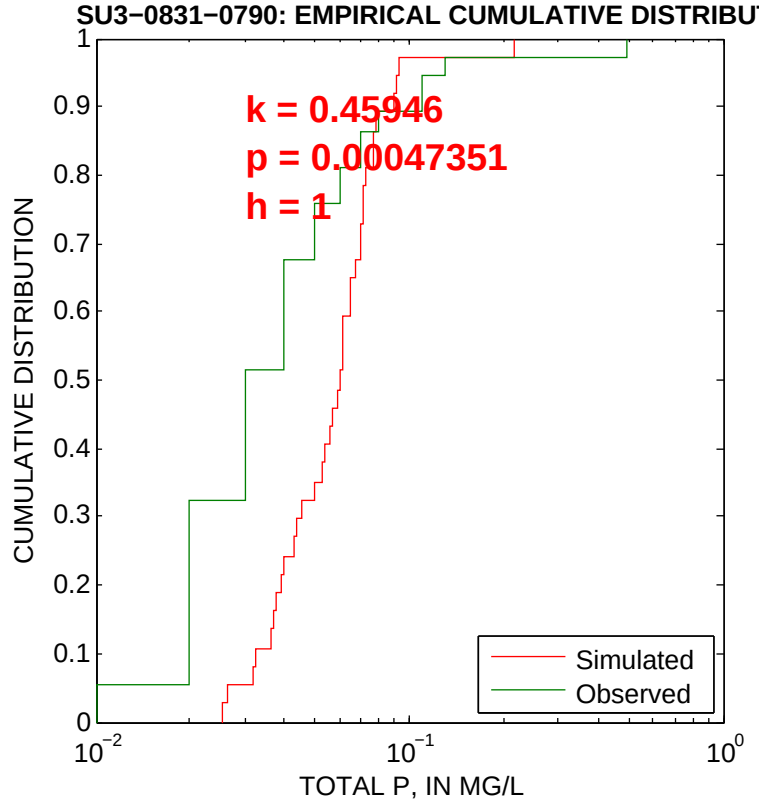












DATA SELECTION

scenario	file
P620171001WQ	TOTP.calib

plot: TOTP - total phosphorus

Dates: 1/1/1985 – 12/31/201

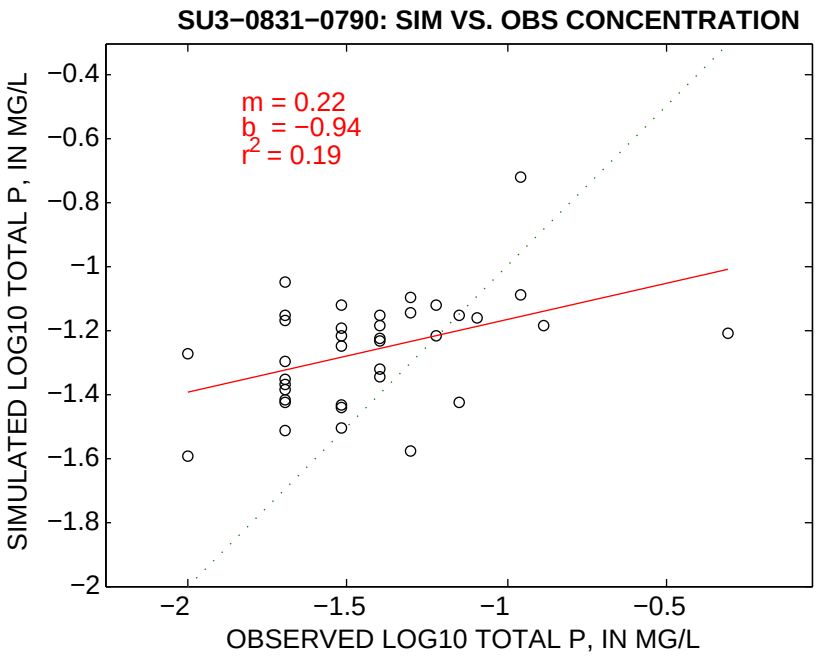
Drive	Directory	Observed
N/A	model	OBS20161101

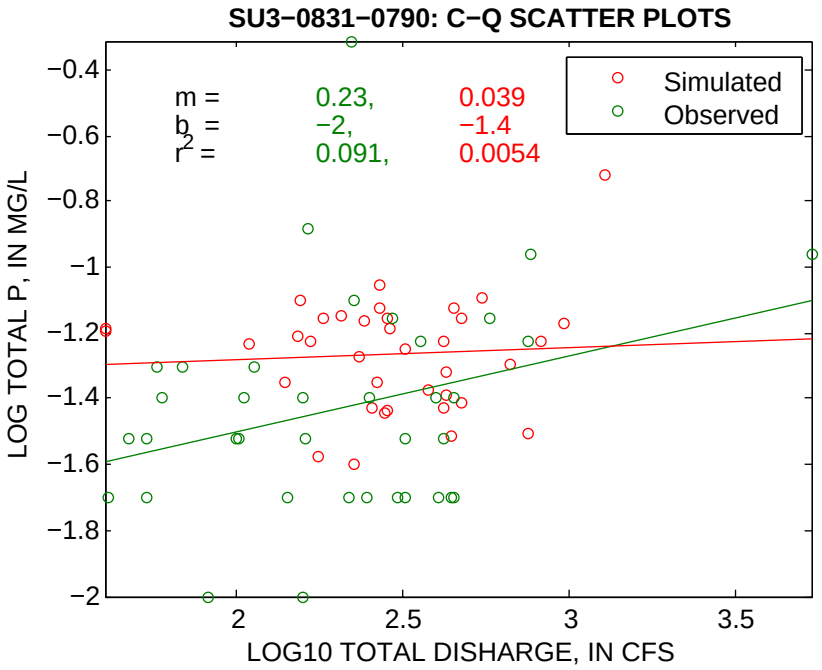
STATISTICS

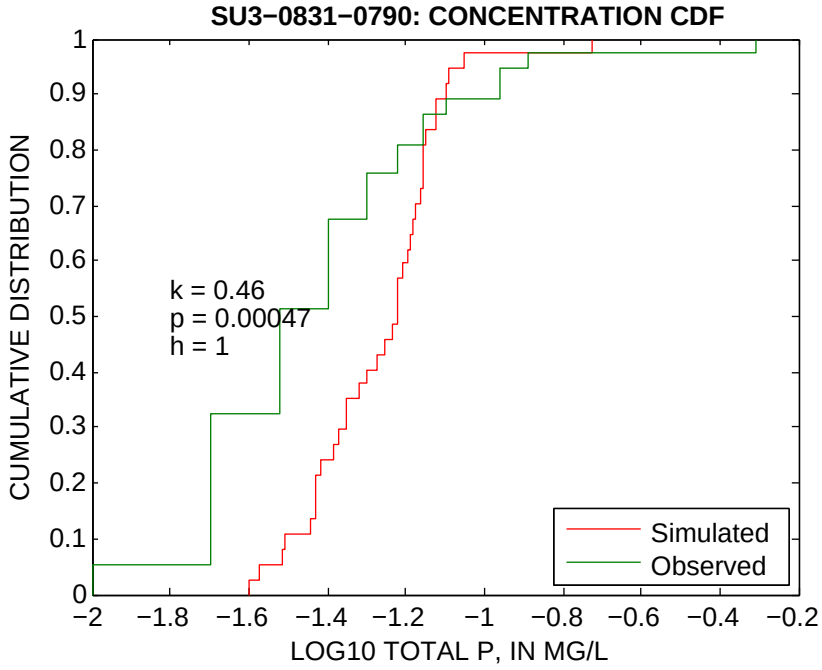
	n	observe	simulate
		37	37
min		0.01	0.025327
		-2	-1.59642
mean		0.0540541	0.0617604
		-1.42984	-1.24823
media		0.03	0.059921
		-1.52288	-1.22242
max		0.49	0.21779
		-0.309804	-0.661962
varian		0.00622477	0.00101951
		0.106494	0.0316746
JB		0.001	0.001
		0.007025	0.033507
		ra	log
%		14.2568	-12.7014
err.va		0.00646205	0.126898
rel.std.err		1.03812	1.19159
mod.eff		-0.0381171	-0.191595

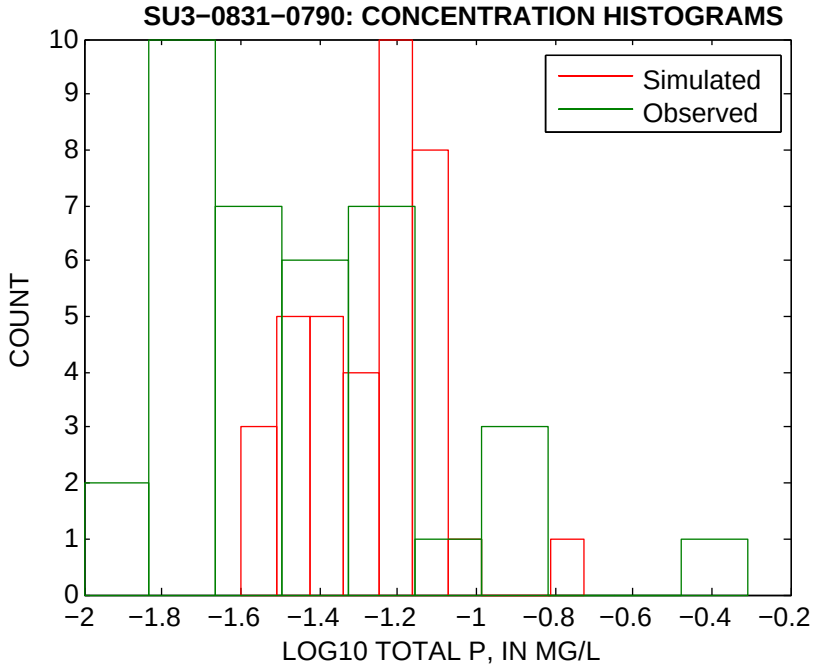
VERSION 2.1

ALL DATA
LOG10

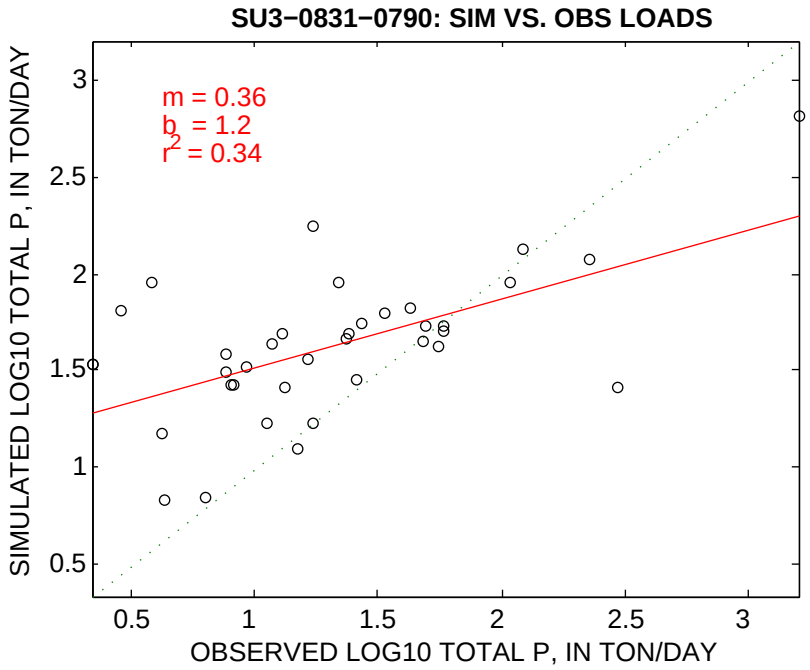


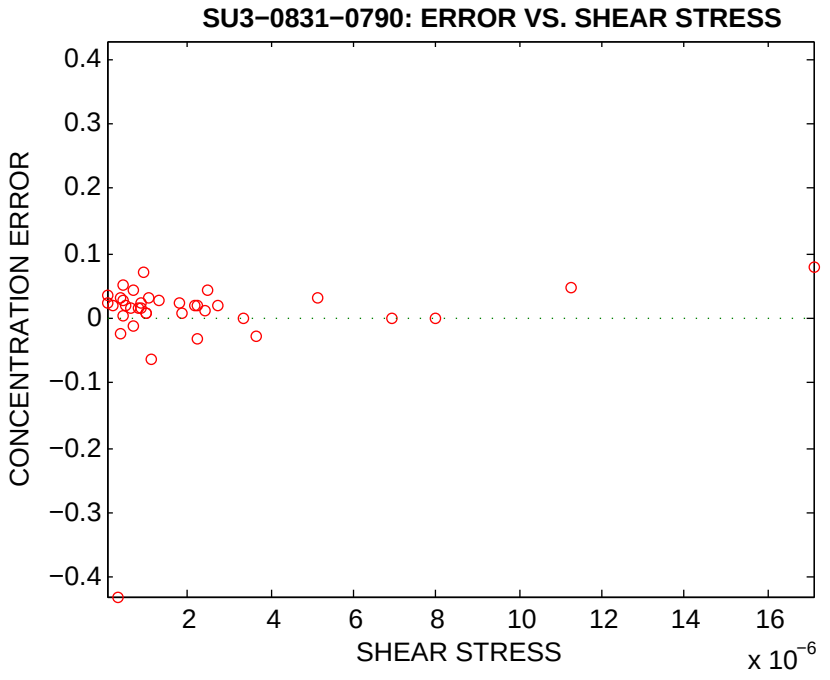


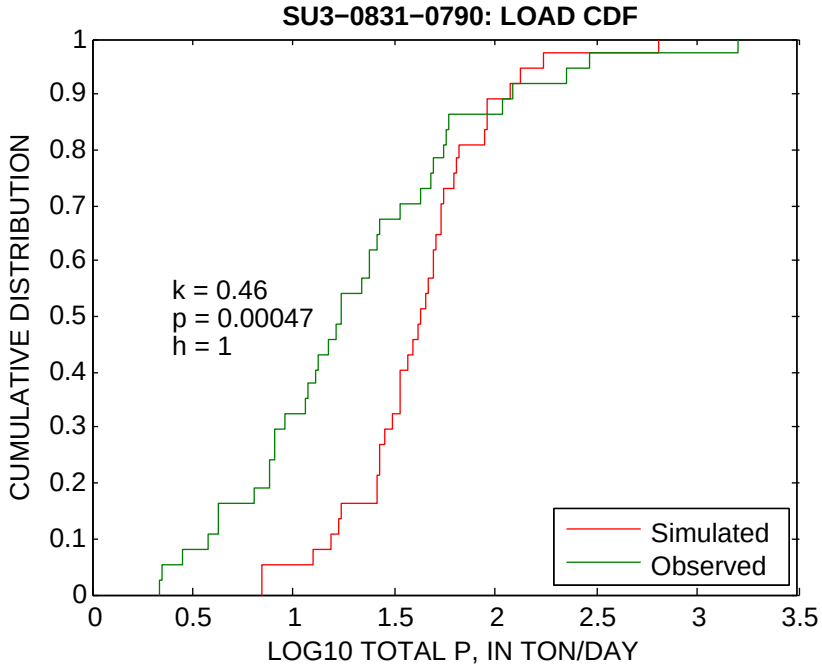


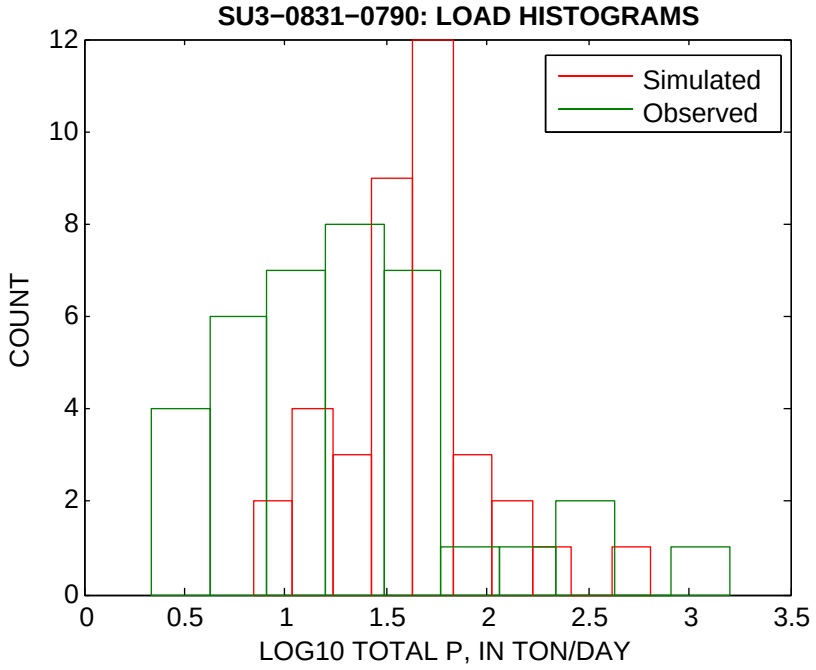


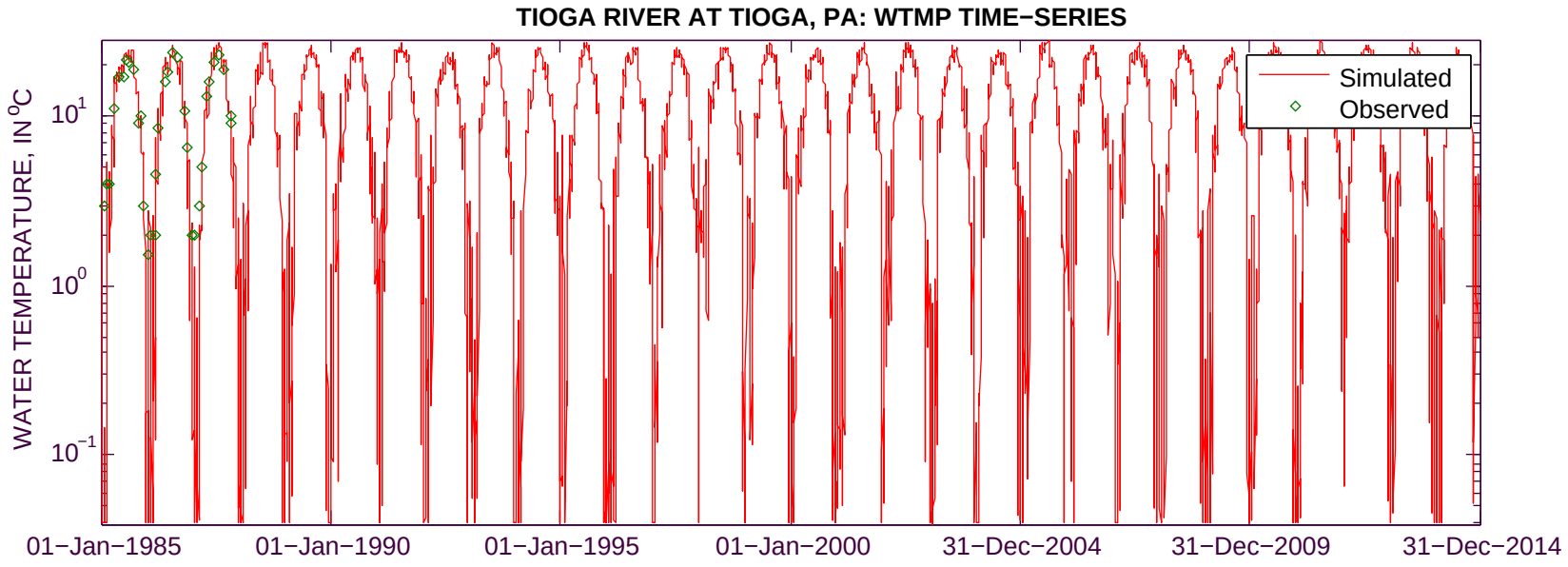
LOAD DATA
LOG10

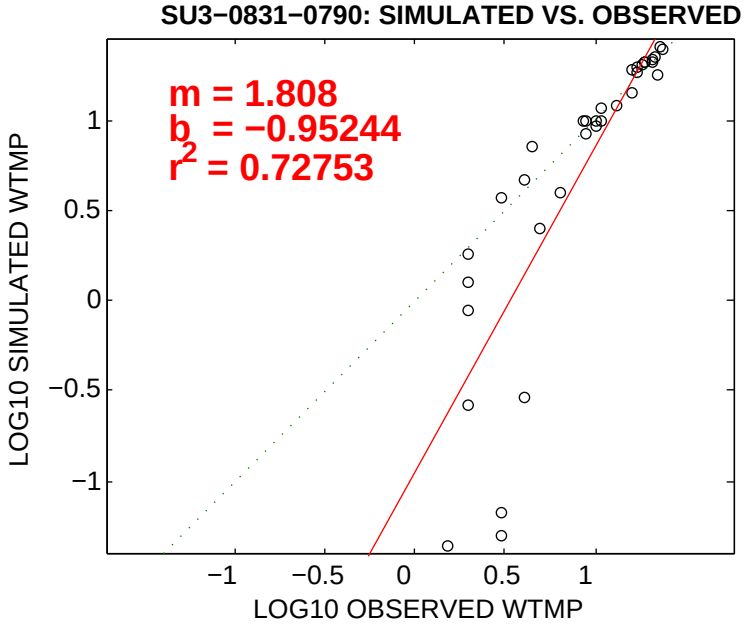


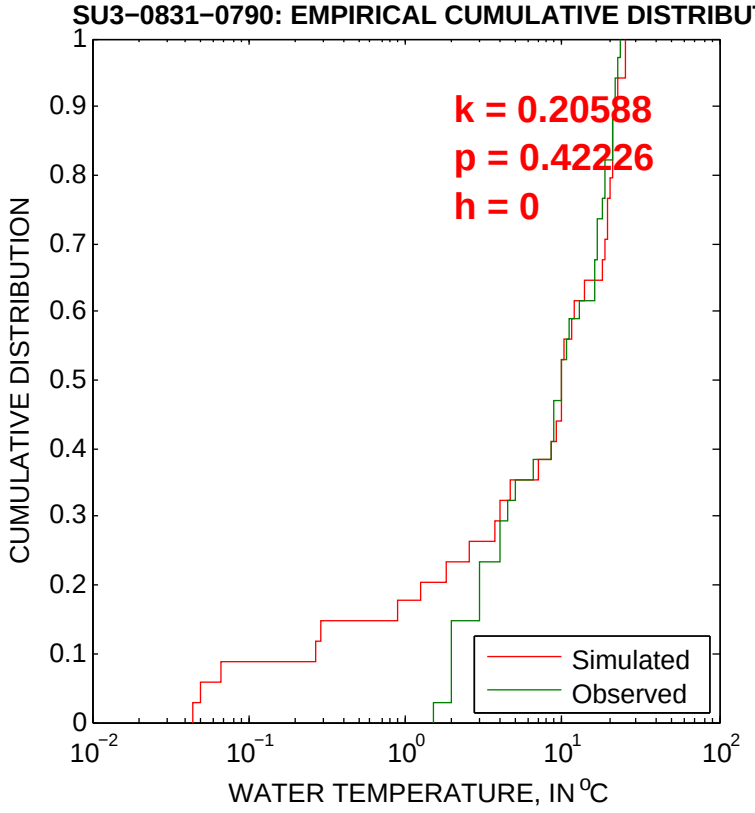












DATA SELECTION

scenario	file
P620171001WQ	WTMP.calib

plot: WTMP - water tempera...

Dates 1/1/1985 12/31/201

Drive Directory Observed

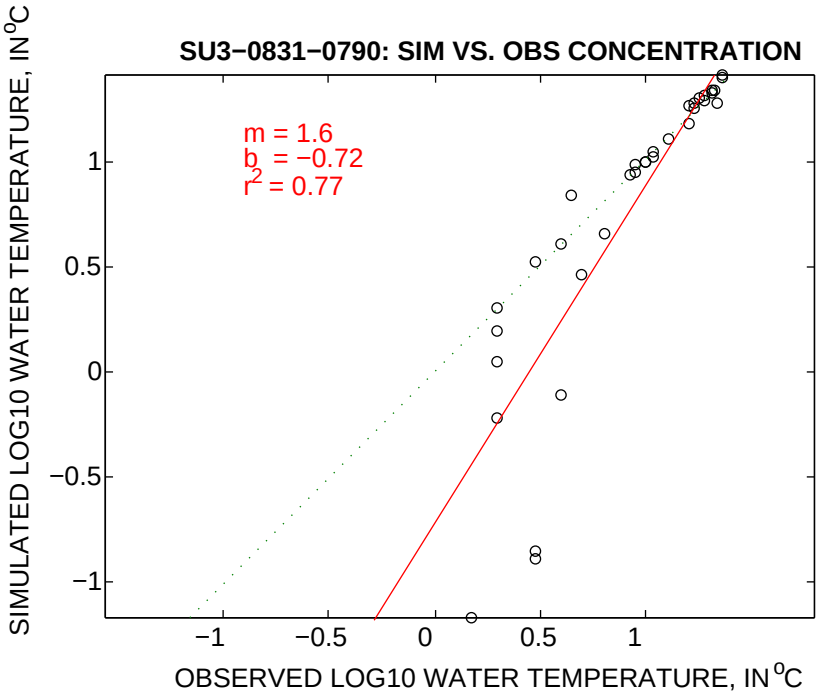
N/A model OBS20161101

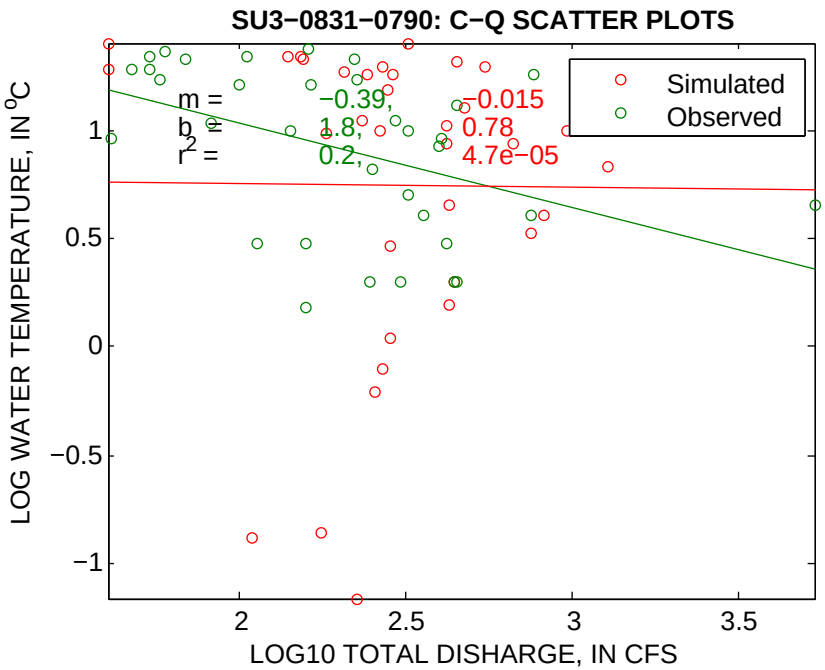
STATISTICS

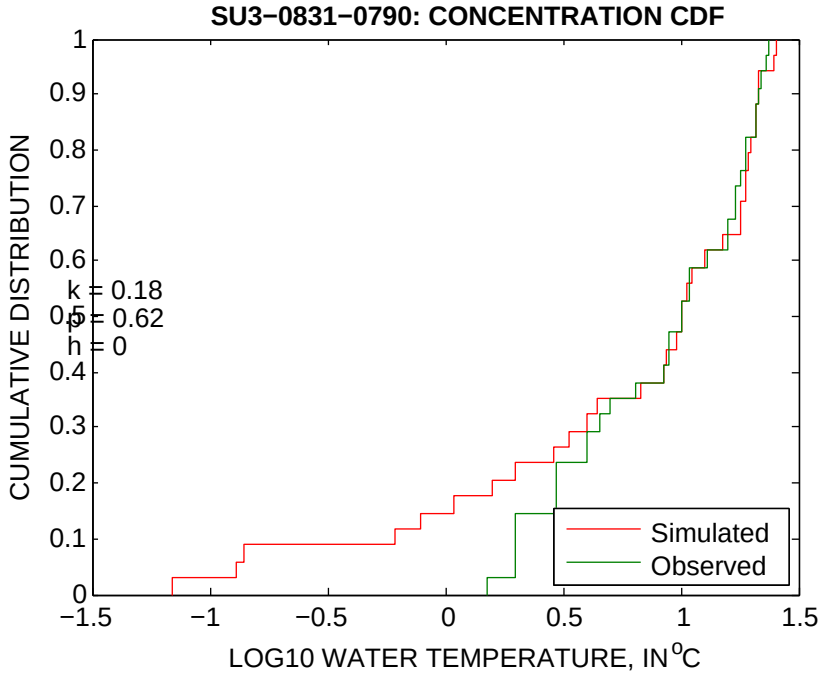
	n	34	34
		observe	simulate
min		1.5	0.043697
		0.176091	-1.35955
mean		11.1118	11.1255
		0.910043	0.692968
media		10	9.9922
		1	0.999649
max		23.5	25.835
		1.37107	1.41221
varian		56.155	74.7725
		0.147872	0.664445
JB		0.087642	0.097742
		0.082386	0.009822
		ra	log
%		0.123893	-23.8533
err.va		4.07561	0.326147
rel.std.err		0.0725778	2.2056
mod.eff		0.927422	-1.2056

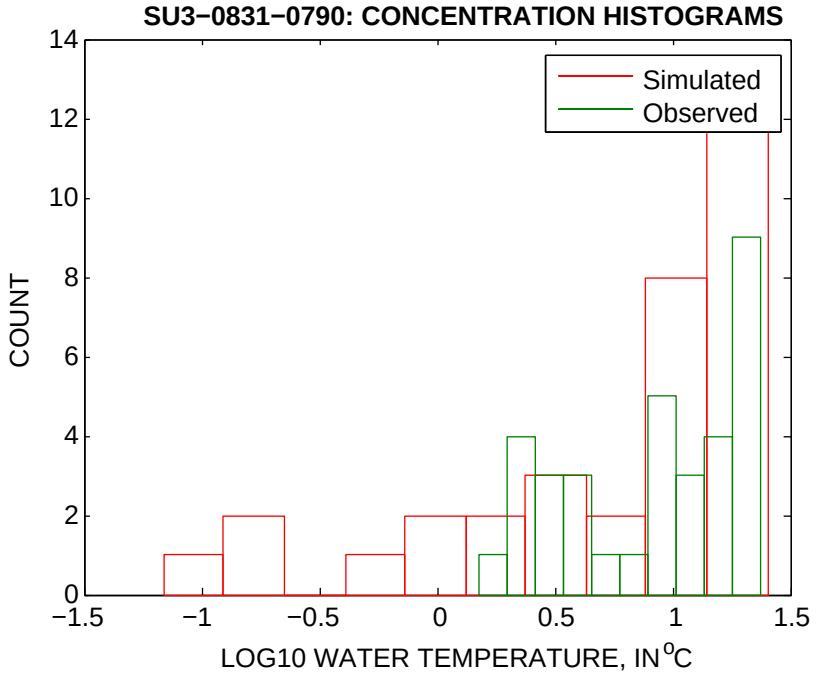
VERSION 2.1

ALL DATA
LOG10

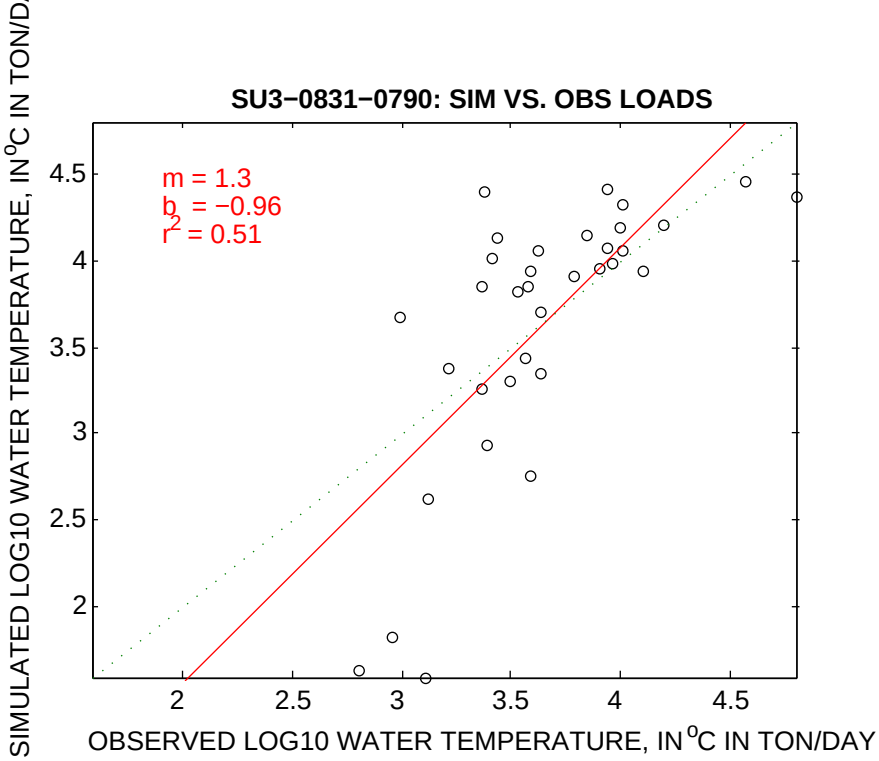


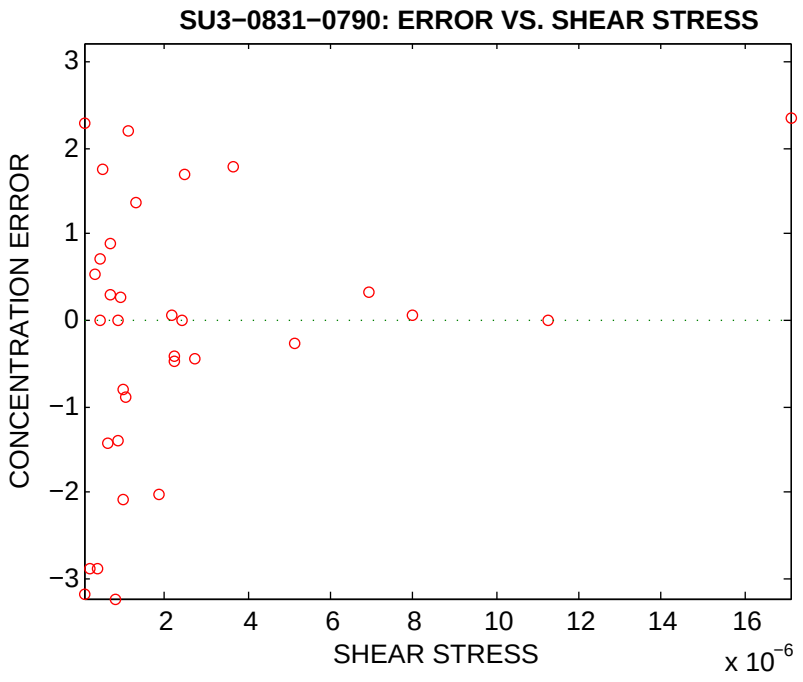


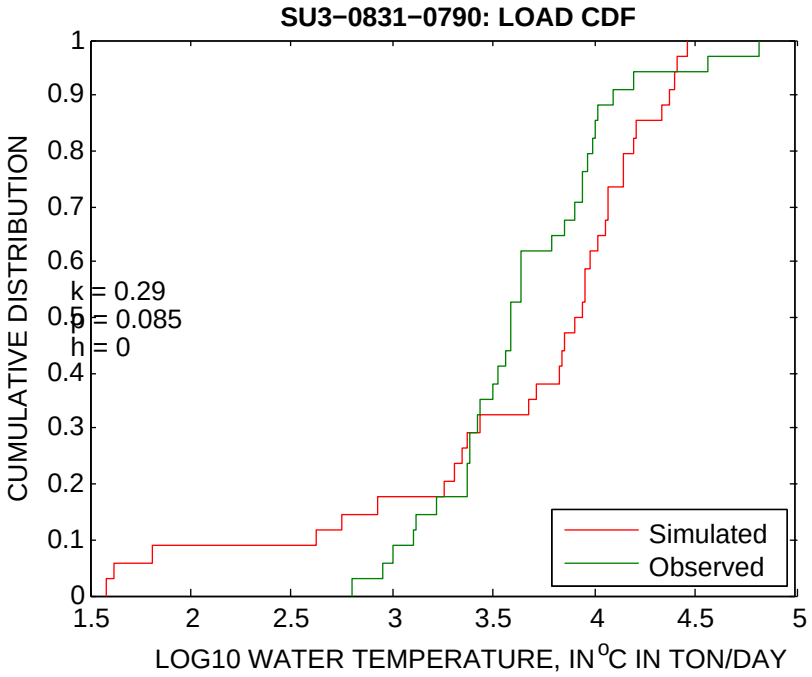


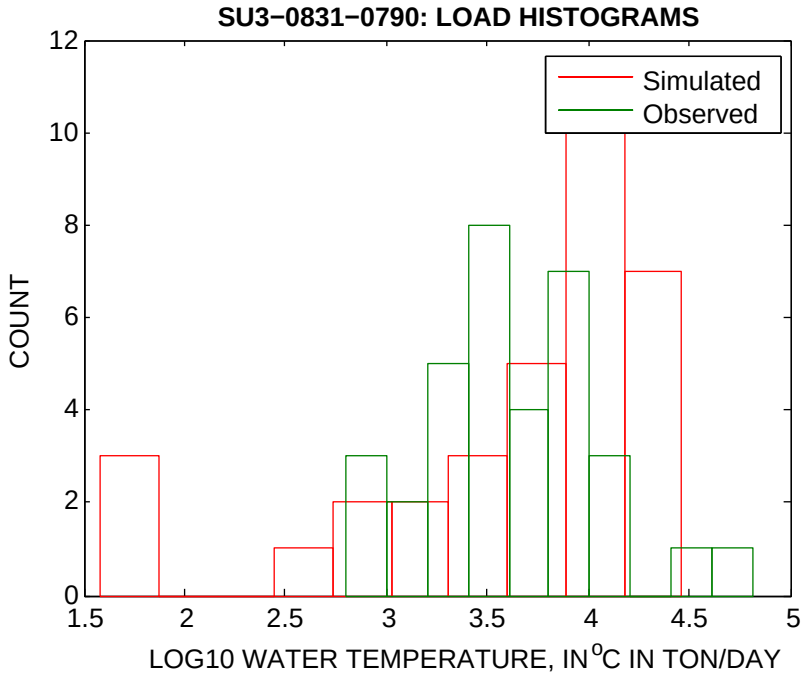


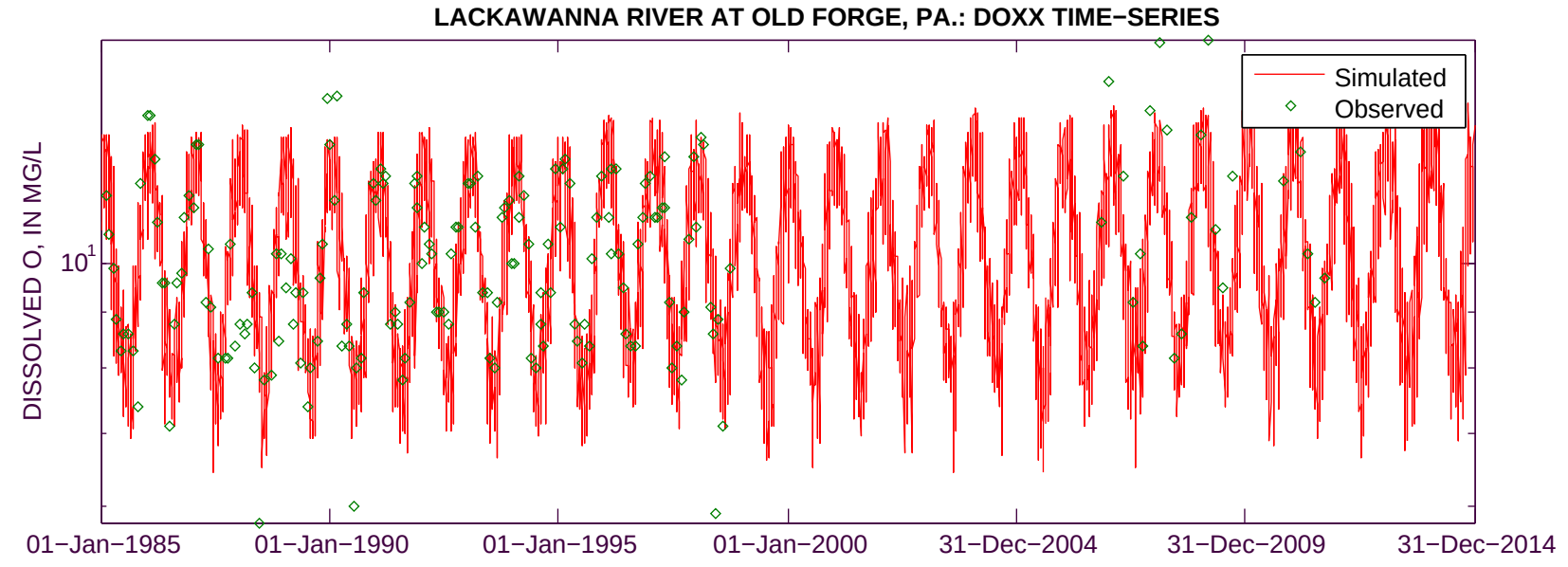
LOAD DATA
LOG10

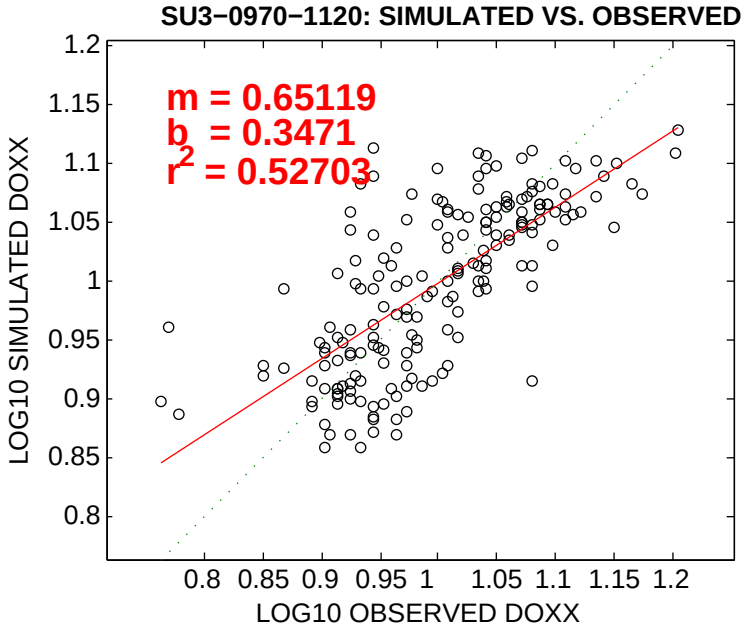


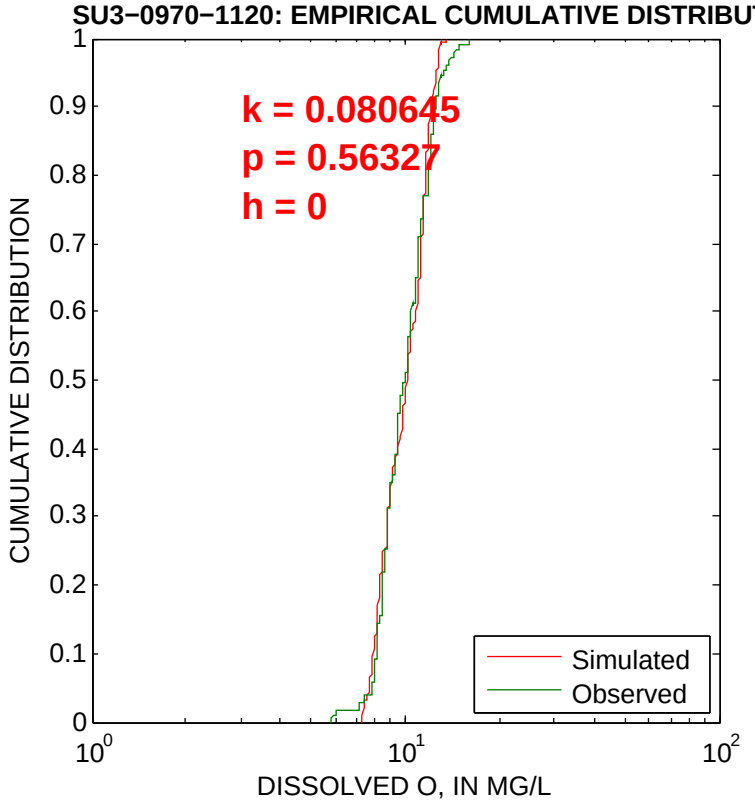












DATA SELECTION

scenario: P620171001WQ | file: DOXX.calib

plot: DOXX - dissolved oxygen

Dates: 1/1/1985 – 12/31/201

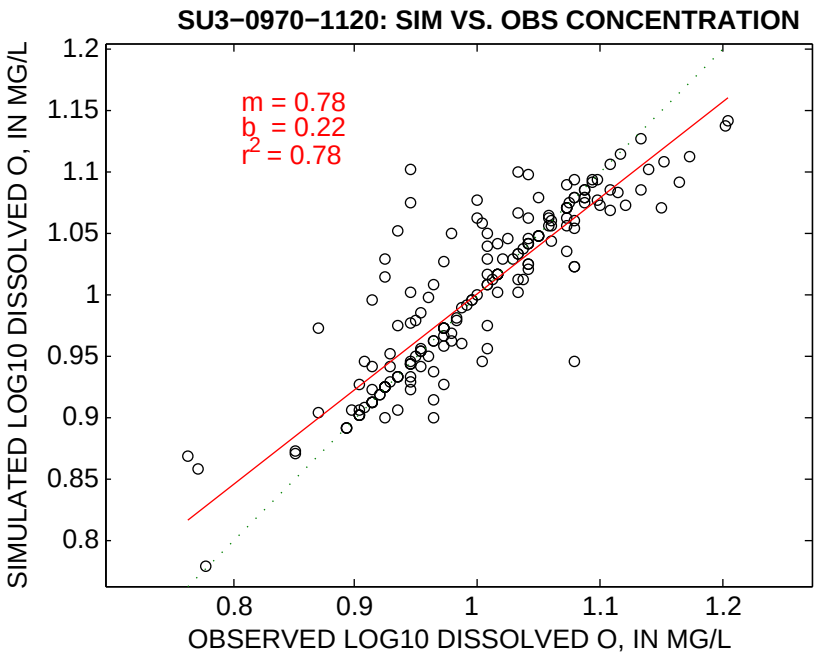
Drive: N/A | Directory: model | Observed: OBS20161101

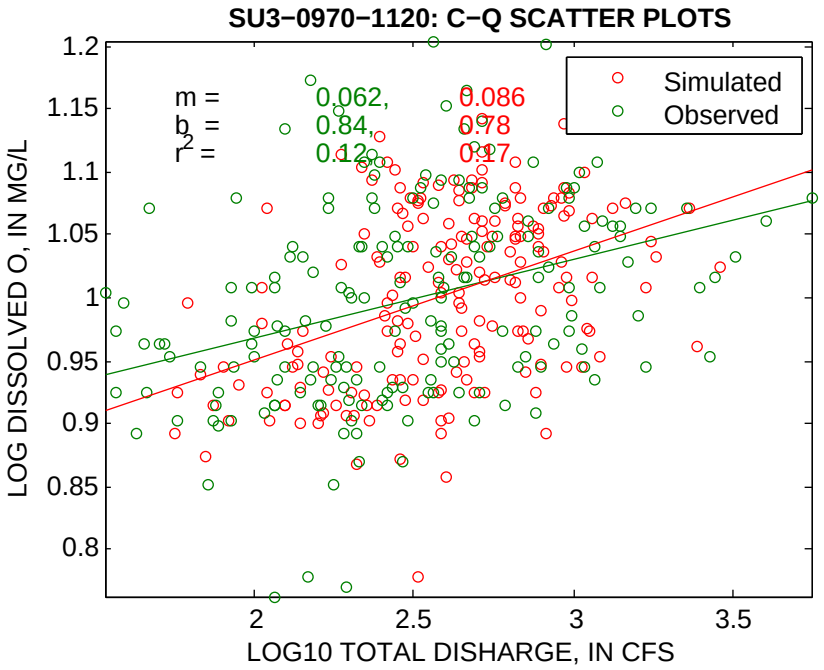
STATISTICS

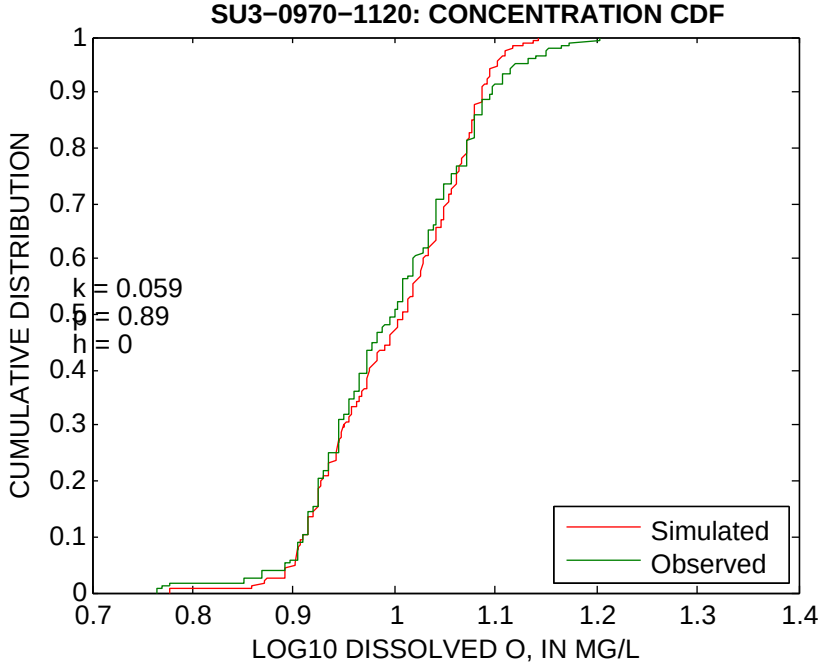
	n	observe	simulate
		186	186
min		5.8	7.2231
		0.763428	0.858724
mean		10.1349	10.072
		0.998659	0.997418
media		10	10.123
		1	1.00531
max		16	13.421
		1.20412	1.12778
varian		3.44953	2.61412
		0.00626371	0.00503982
JB		0.025535	0.010559
		0.5	0.008827
		ra	log
%		-0.621203	-0.124323
err.va		1.67299	0.00314732
rel.std.err		0.484992	0.502469
mod.eff		0.515008	0.497531

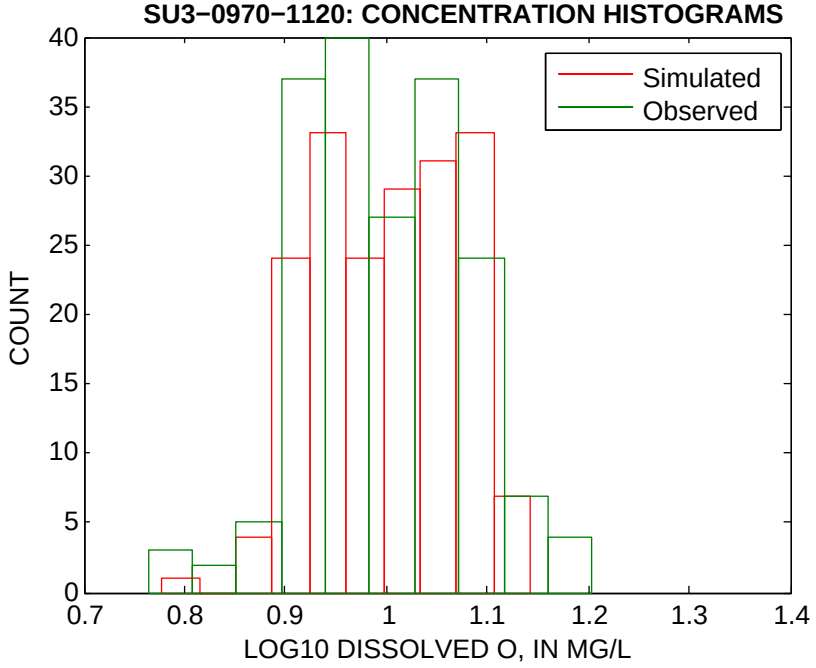
VERSION 2.1

ALL DATA
LOG10

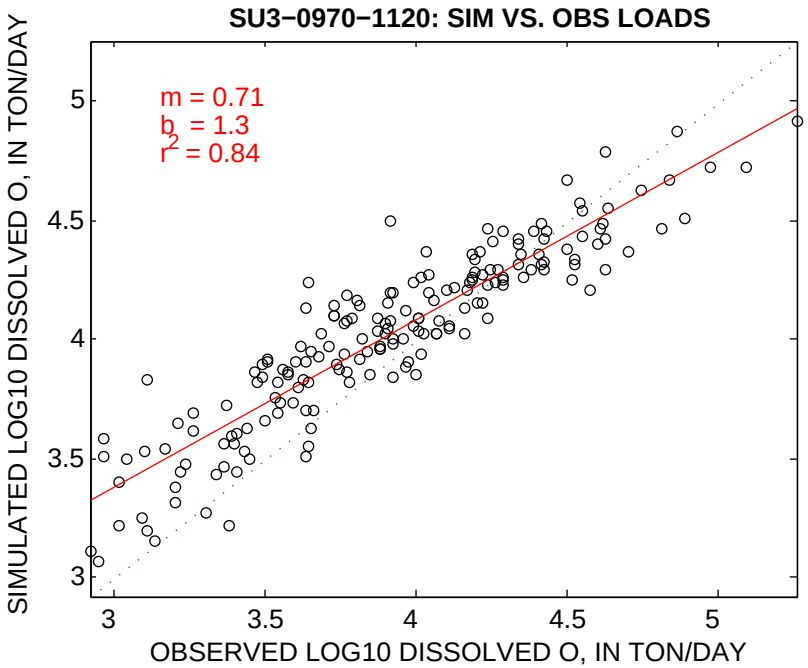


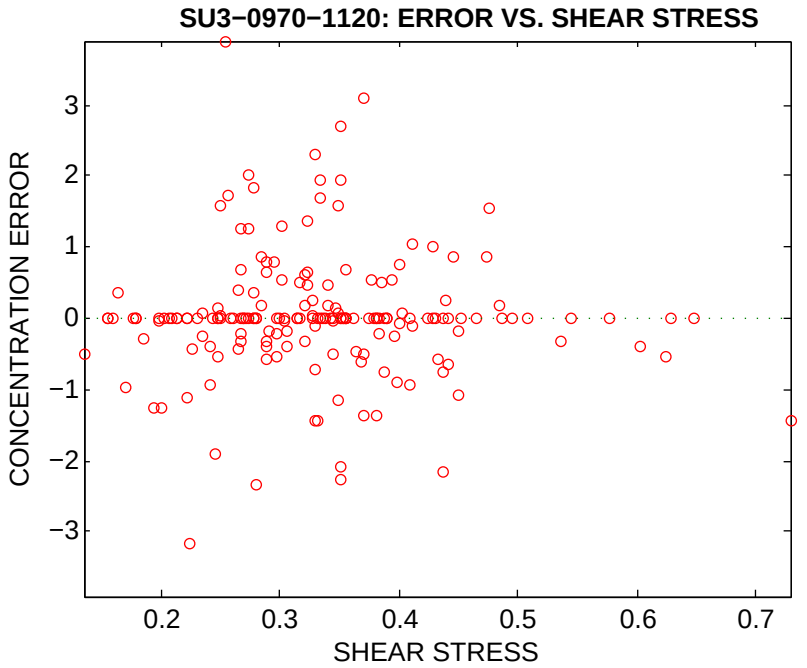


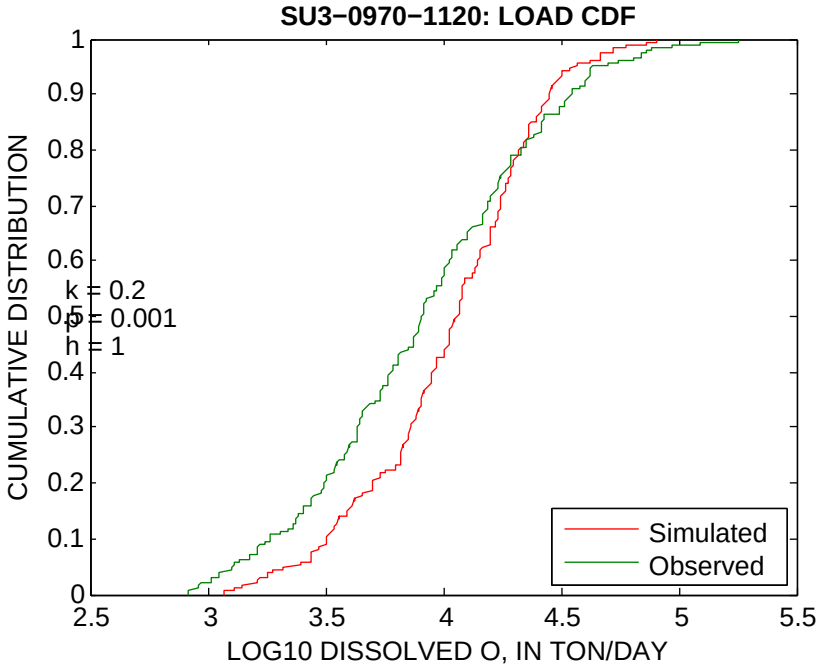


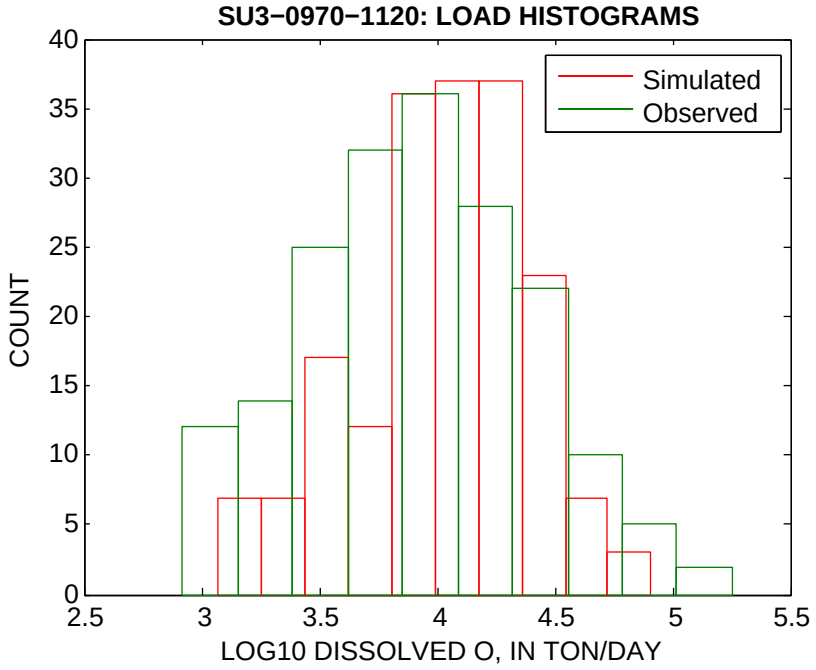


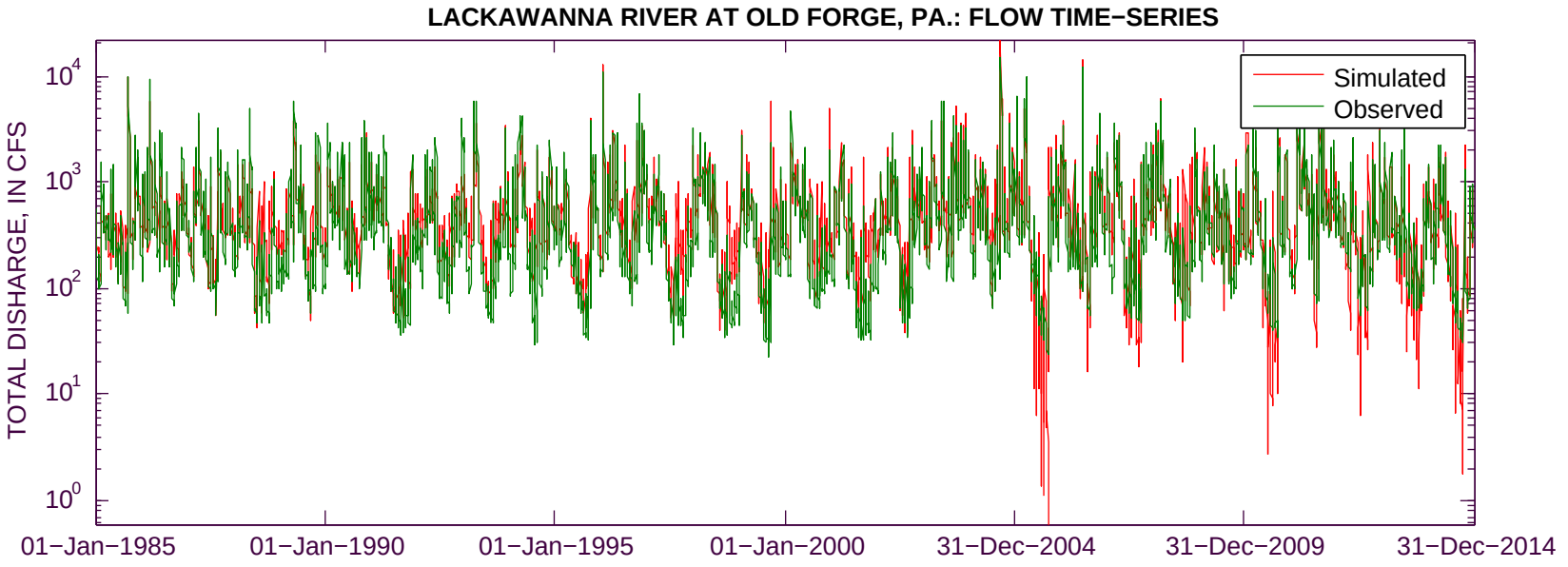
LOAD DATA
LOG10

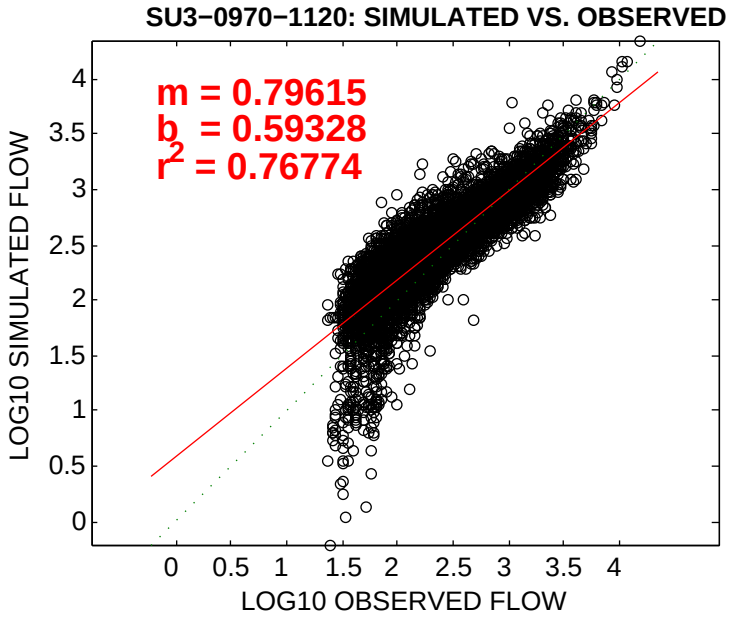


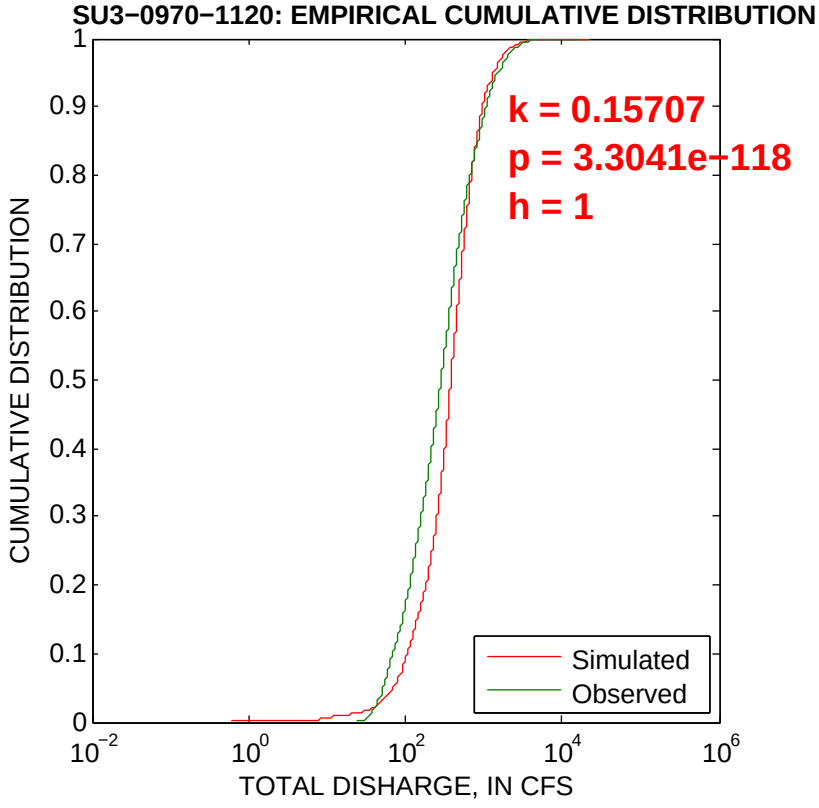












DATA SELECTION

scenario: P620171001WQ | file: FLOW.calib

plot: FLOW - total discharge

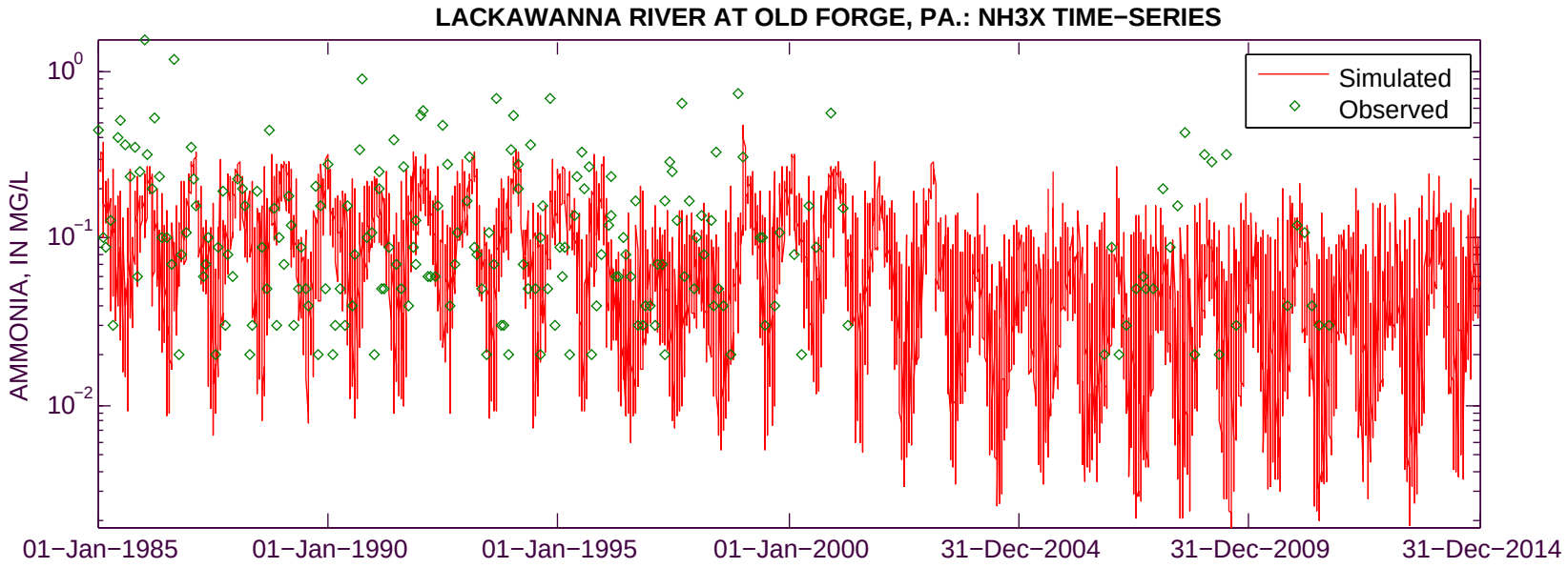
Dates: 1/1/1985 – 12/31/201

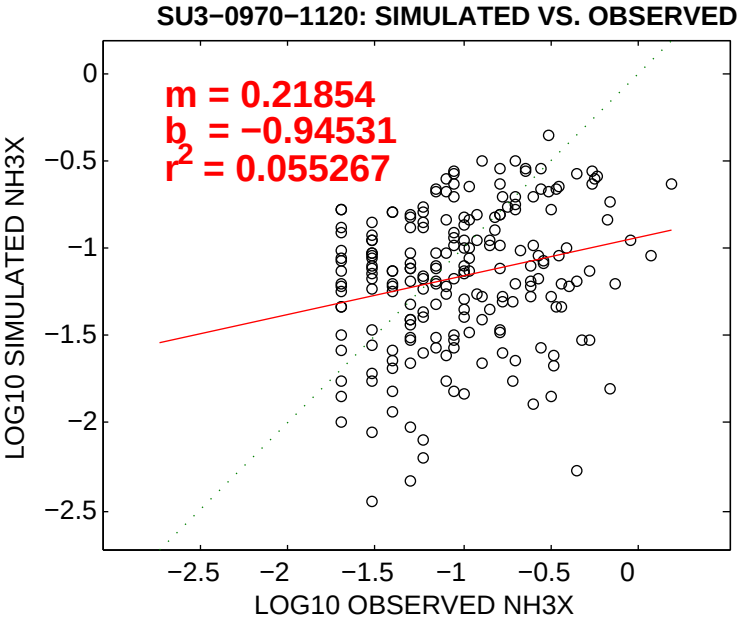
Drive: N/A | Directory: model | Observed: OBS20161101

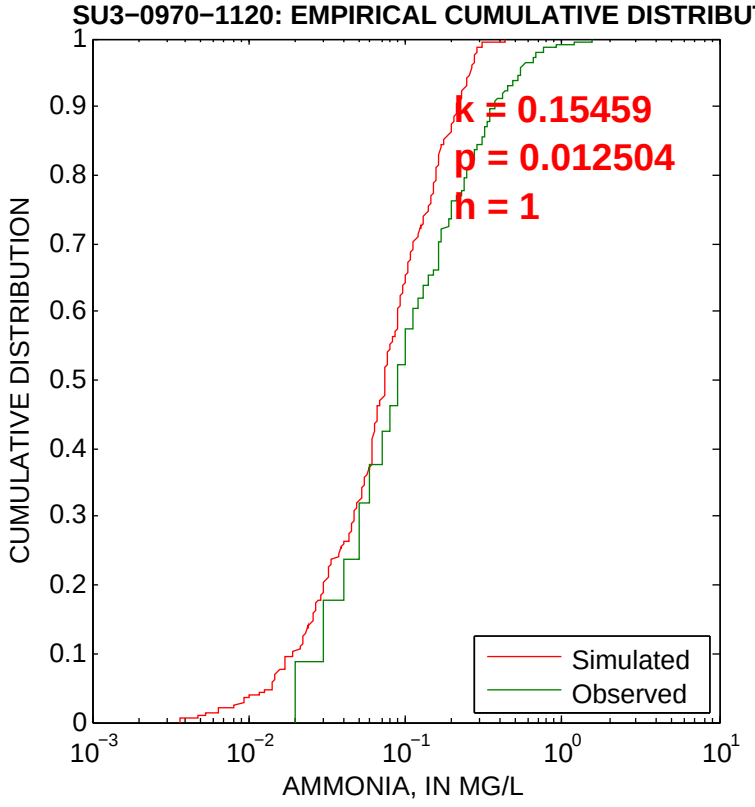
STATISTICS

		observe	simulate
n		10957	10950
min		23	0
		1.36173	-0.22245
mean		479.493	512.95
		2.45251	2.54586
media		284	382.34
		2.45484	2.58274
max		15000	22230
		4.17609	4.34694
varian		418296	360946
		0.19571	0.161582
JB		0.001	0.001
		0.001	0.001
		ra	log
%		6.97753	3.80619
err.va		88382.6	0.0543755
rel.std.err		0.211292	0.277837
mod.eff		0.788708	0.722163

VERSION 2.1







DATA SELECTION

scenario: P620171001WQ | file: NH3X.calib

plot: NH3X - ammonia

Dates: 1/1/1985 – 12/31/201

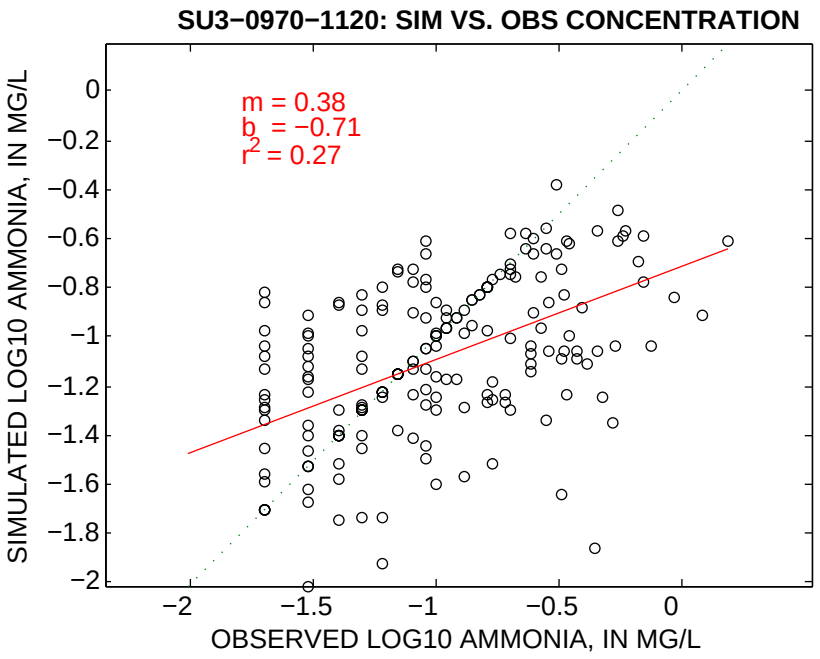
Drive: N/A | Directory: model | Observed: OBS20161101

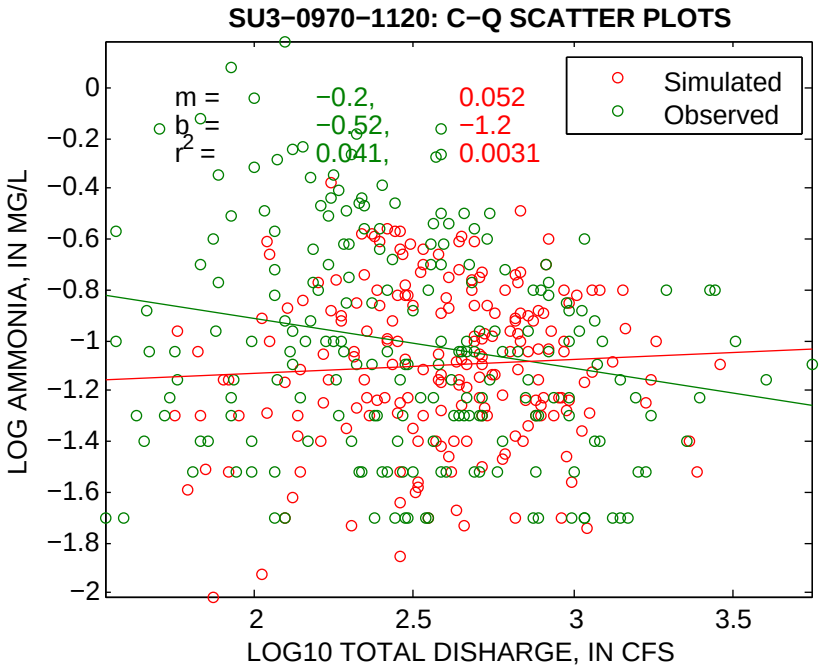
STATISTICS

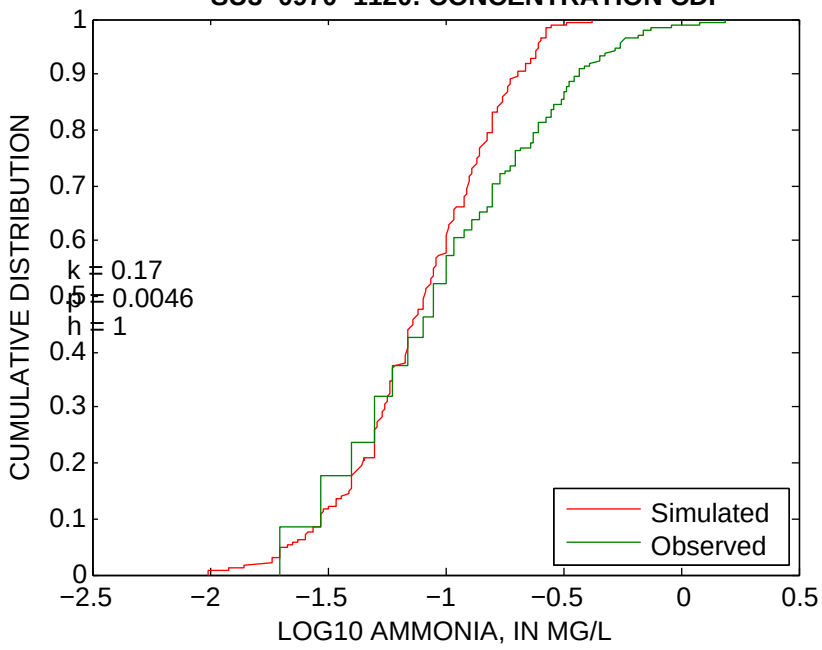
	n	207	207
		observe	simulate
min		0.02	0.0036134
		-1.69897	-2.44208
mean		0.162126	0.0972025
		-1.01179	-1.16643
media		0.09	0.074321
		-1.04576	-1.12889
max		1.54	0.44124
		0.187521	-0.355325
varian		0.039412	0.00603289
		0.186212	0.160918
JB		0.001	0.001
		0.044299	0.010181
		ra	log
%		-40.0449	15.2836
err.va		0.042439	0.289769
rel.std.err		1.0768	1.55612
mod.eff		-0.076804	-0.556123

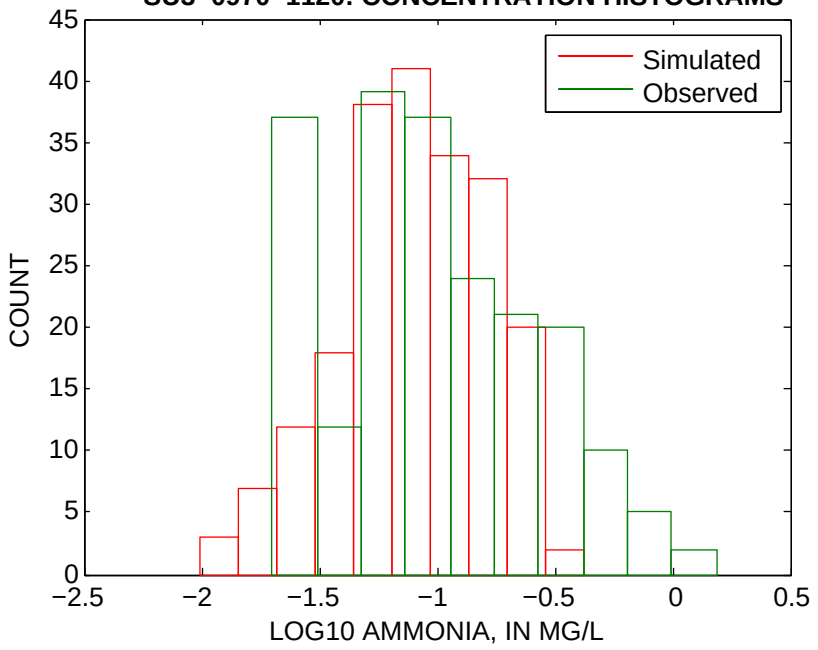
VERSION 2.1

ALL DATA
LOG10

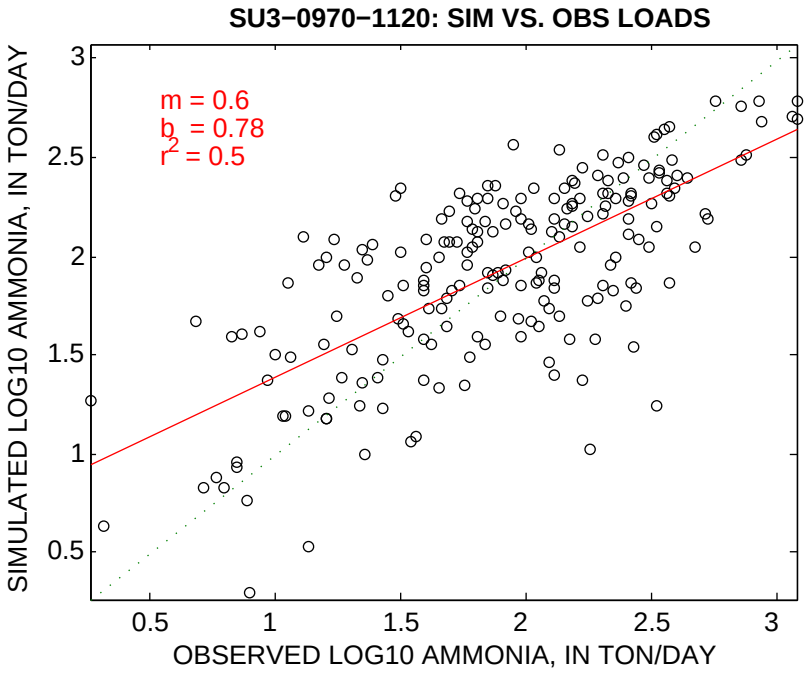


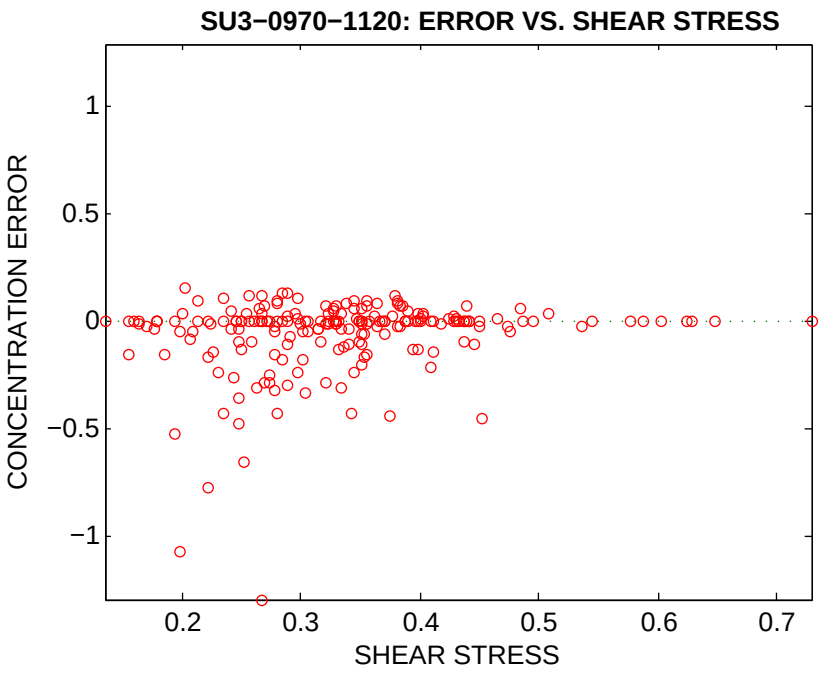


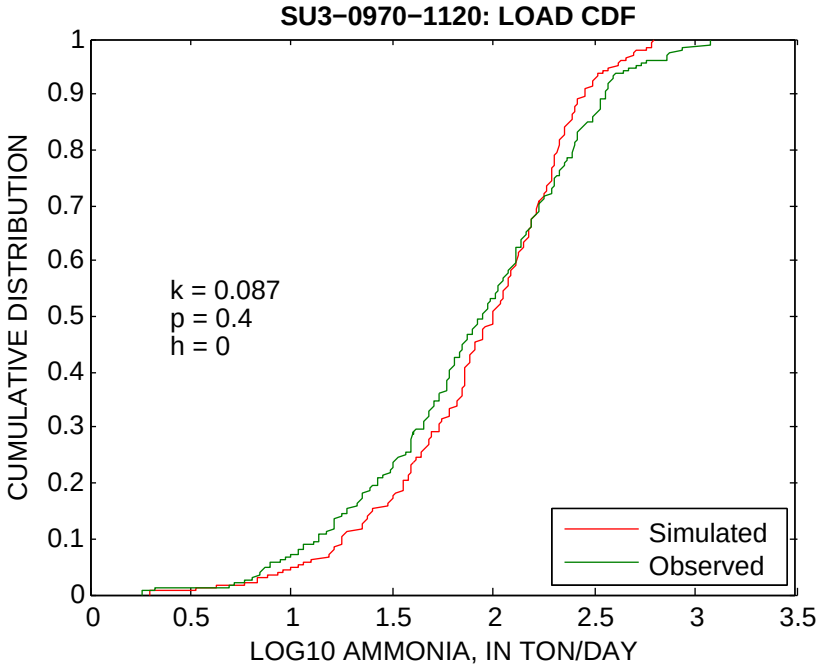


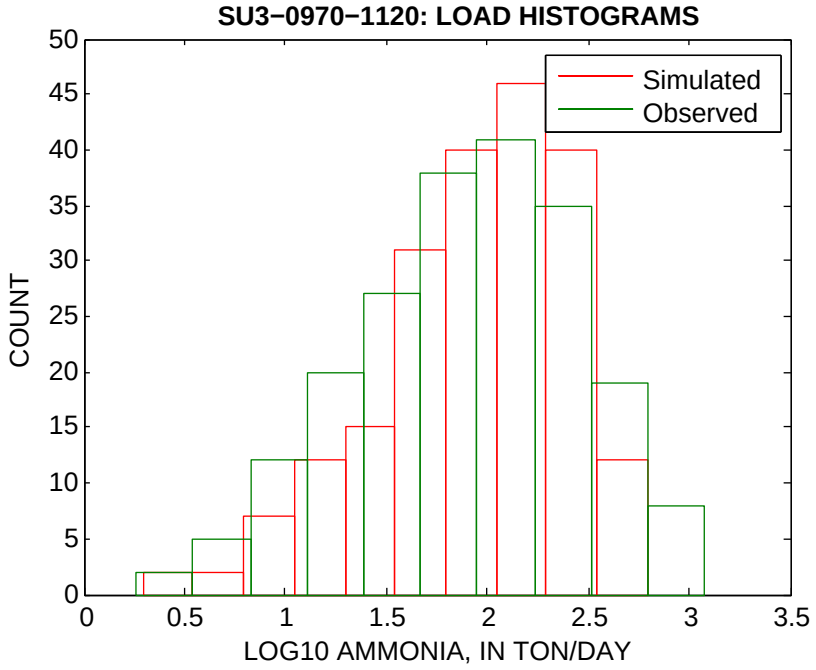


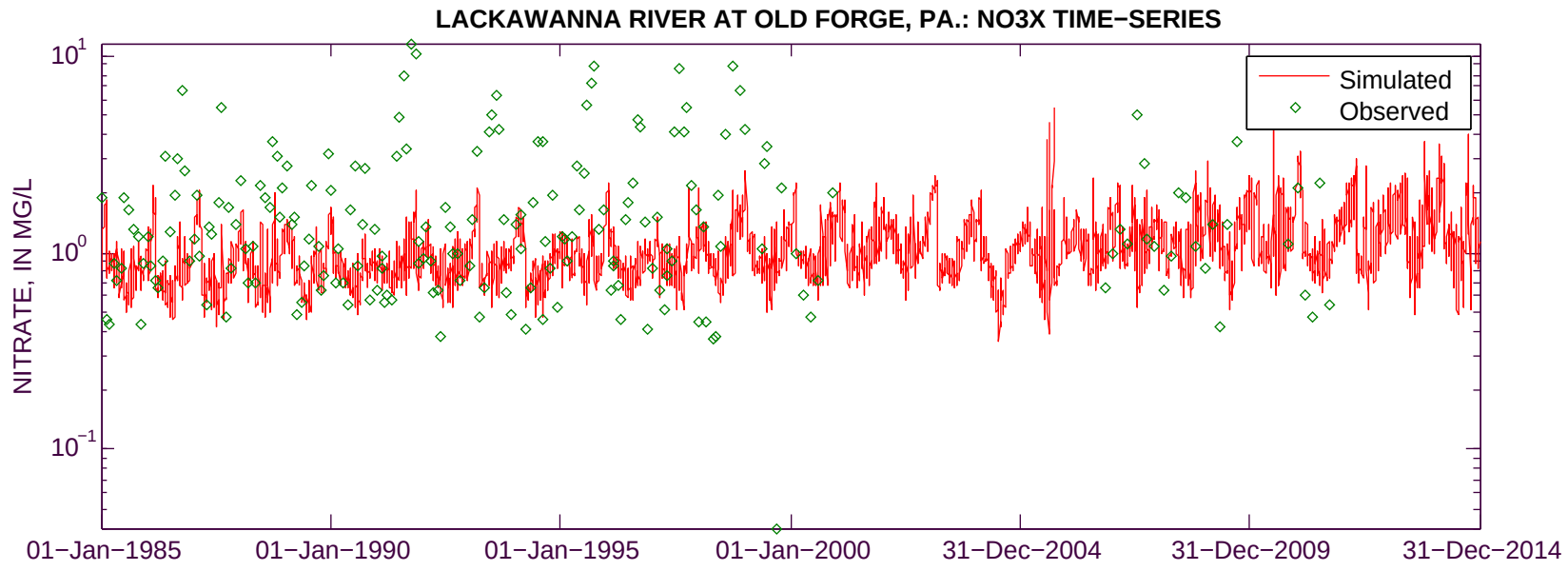
LOAD DATA
LOG10

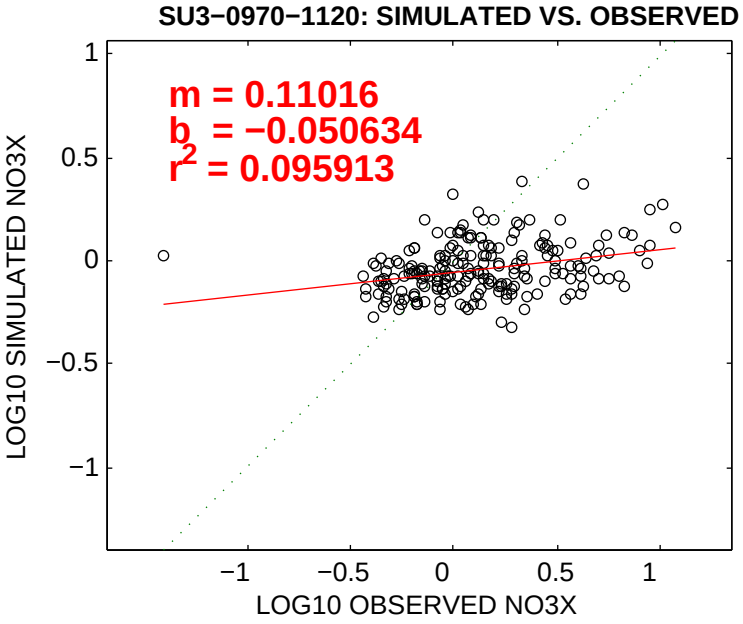


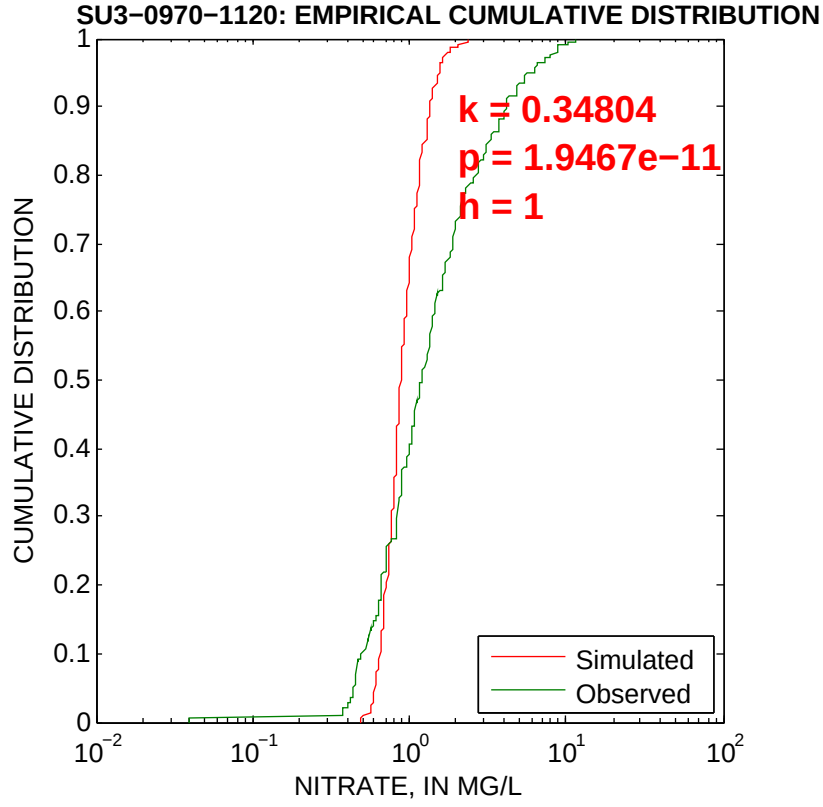












DATA SELECTION

scenario	file
P620171001WQ	NO3X.calib

plot: NO3X - nitrate

Dates: 1/1/1985 – 12/31/201

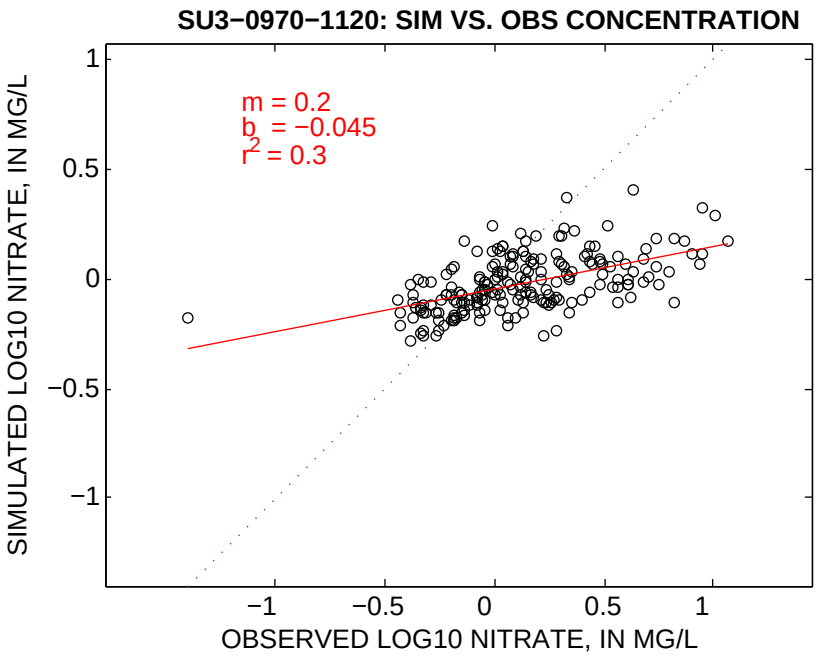
Drive	Directory	Observed
N/A	model	OBS20161101

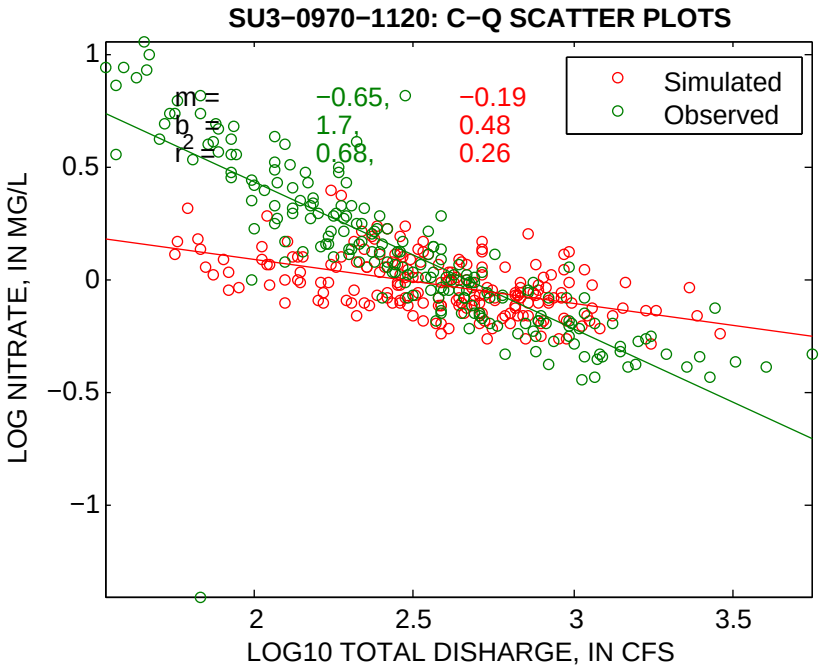
STATISTICS

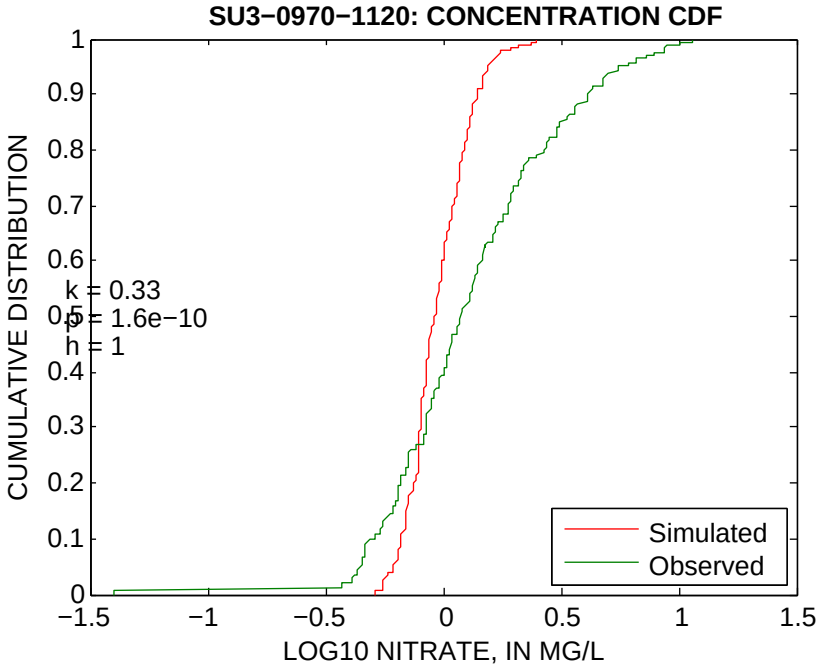
	n	204	204
		observe	simulate
min		0.04	0.48223
		-1.39794	-0.316746
mean		1.88059	0.959609
		0.12272	-0.0371156
media		1.2	0.880085
		0.0791812	-0.0554759
max		11.6	2.3941
		1.06446	0.379142
varian		3.56004	0.0963056
		0.12496	0.0158102
JB		0.001	0.001
		0.016328	0.007090
		ra	log
%		-48.9729	-130.244
err.va		4.13779	0.138913
rel.std.err		1.16229	1.11165
mod.eff		-0.162288	-0.111653

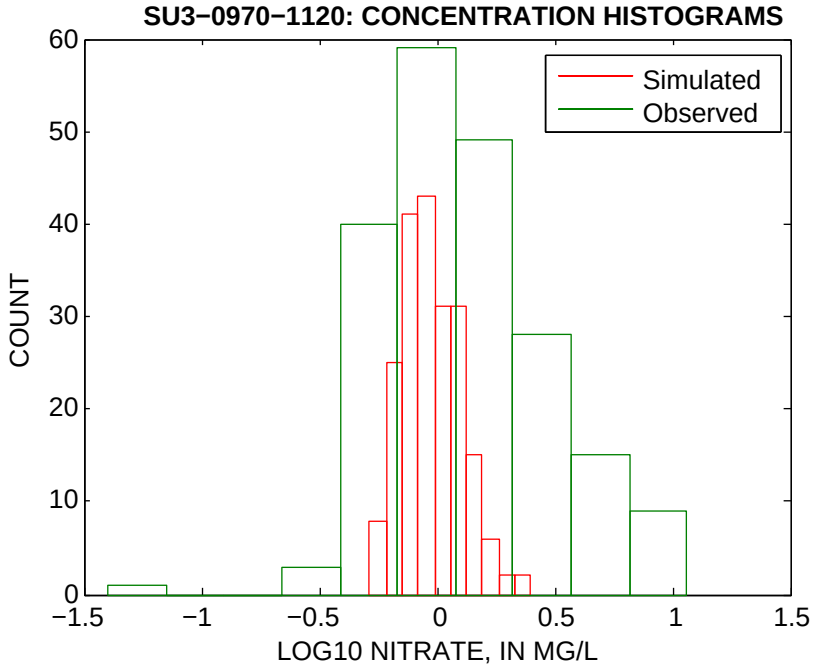
VERSION 2.1

ALL DATA
LOG10

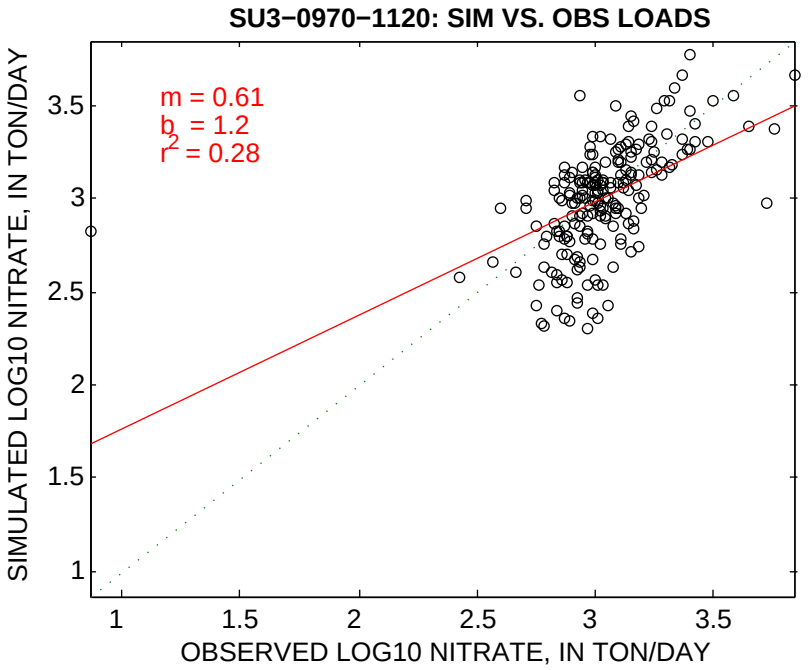


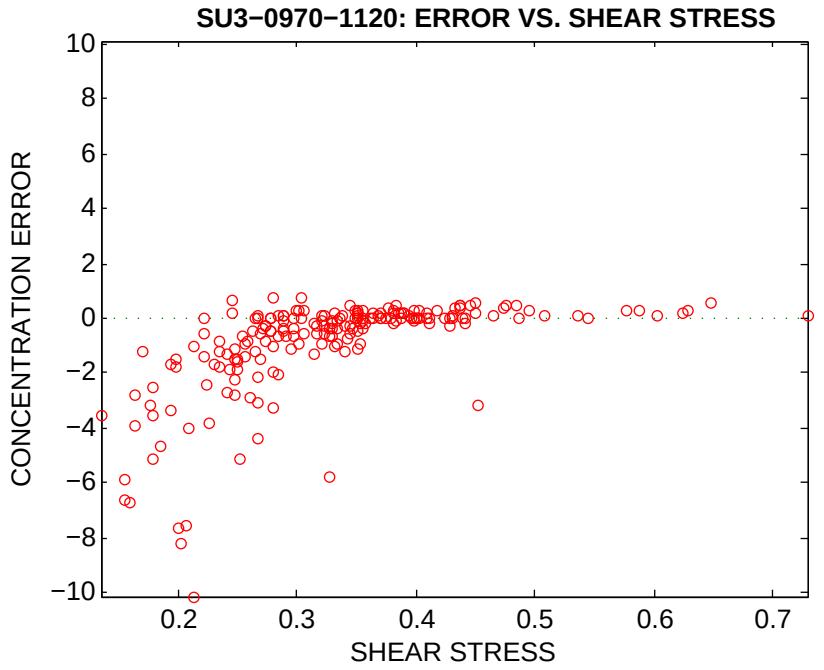


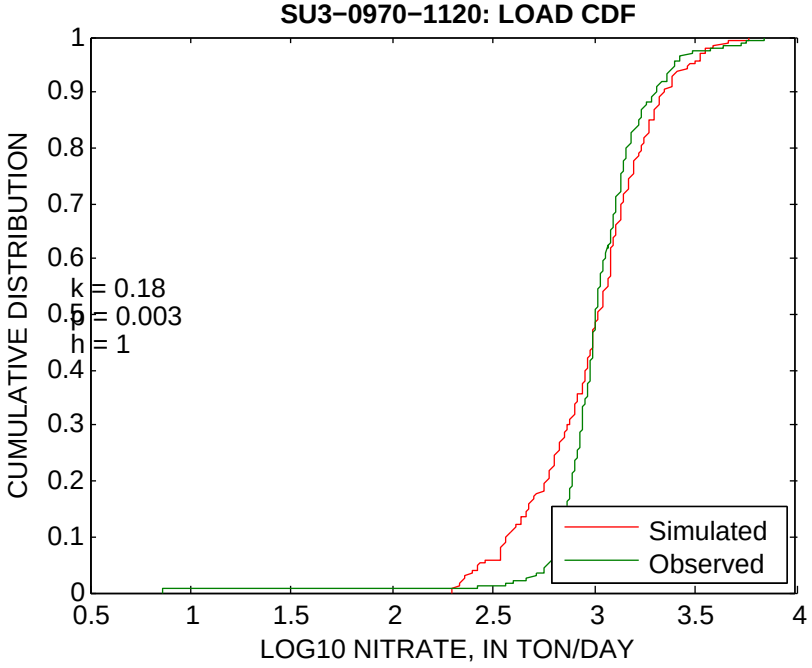


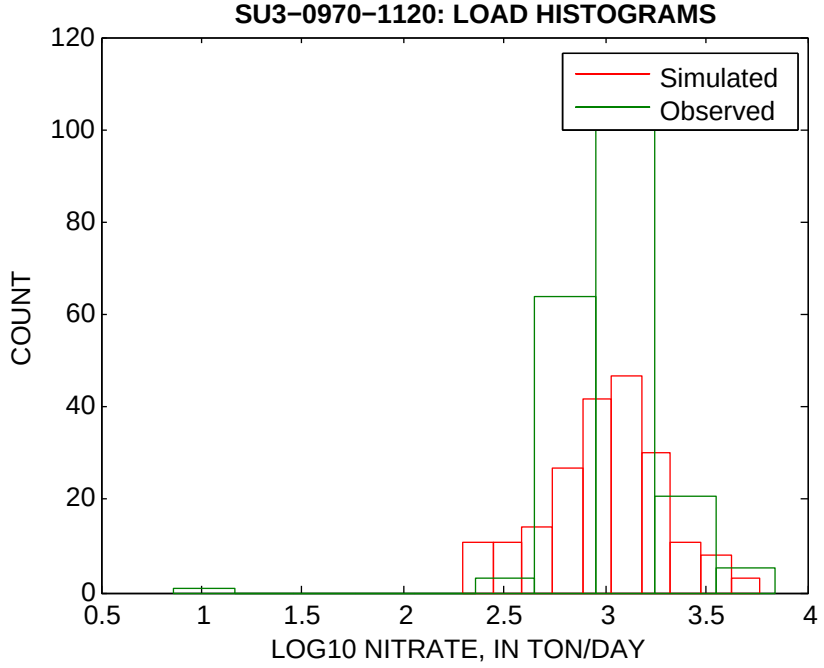


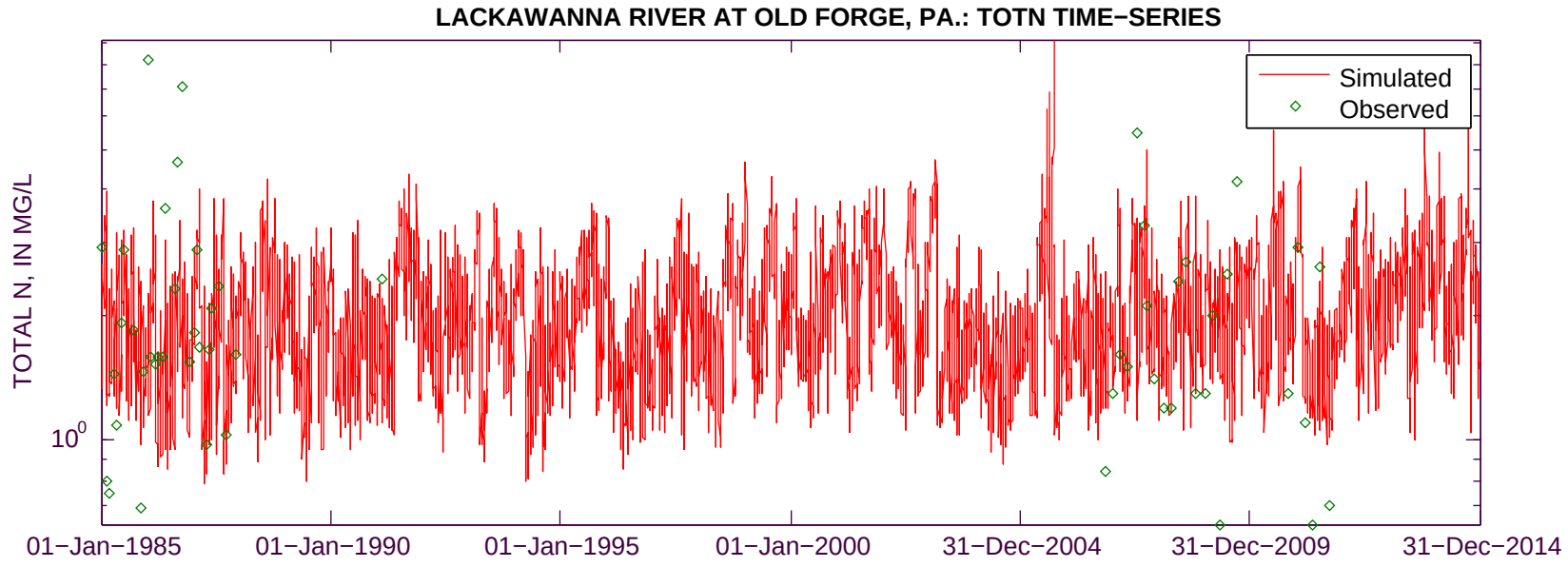
LOAD DATA
LOG10

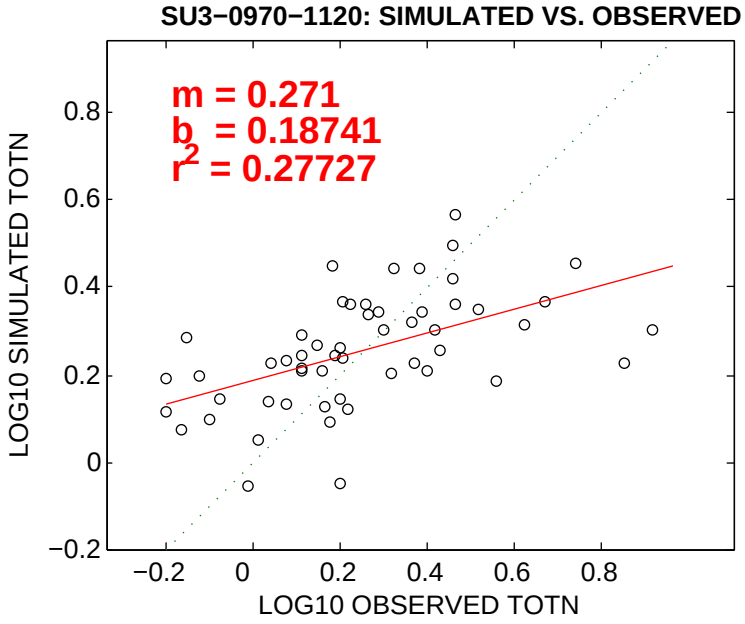


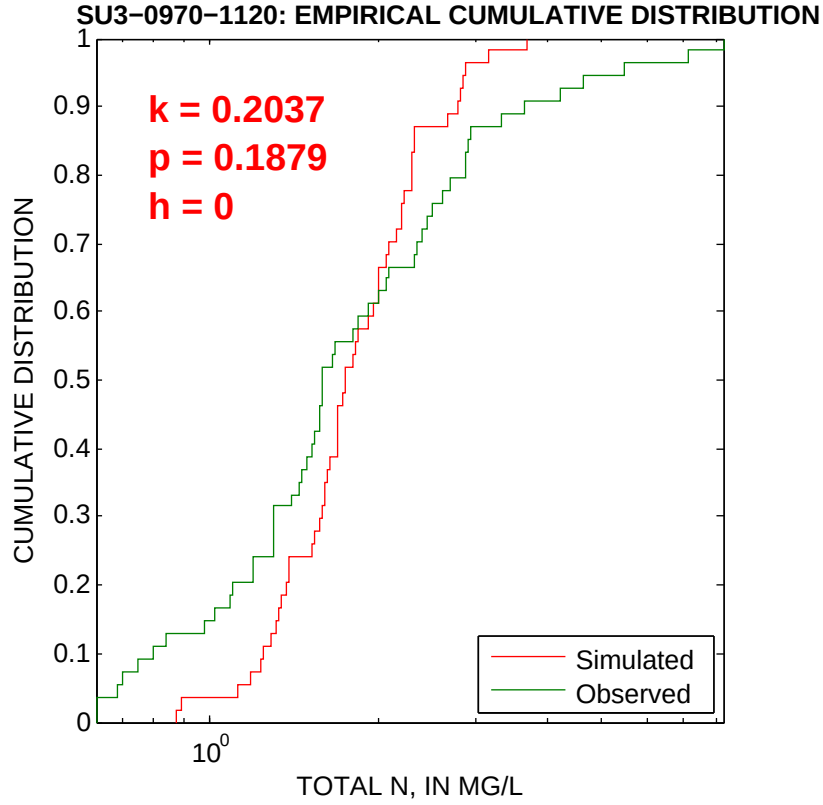












DATA SELECTION

scenario	file
P620171001WQ	TOTN.calib

plot: TOTN - total nitrogen

Dates: 1/1/1985 – 12/31/201

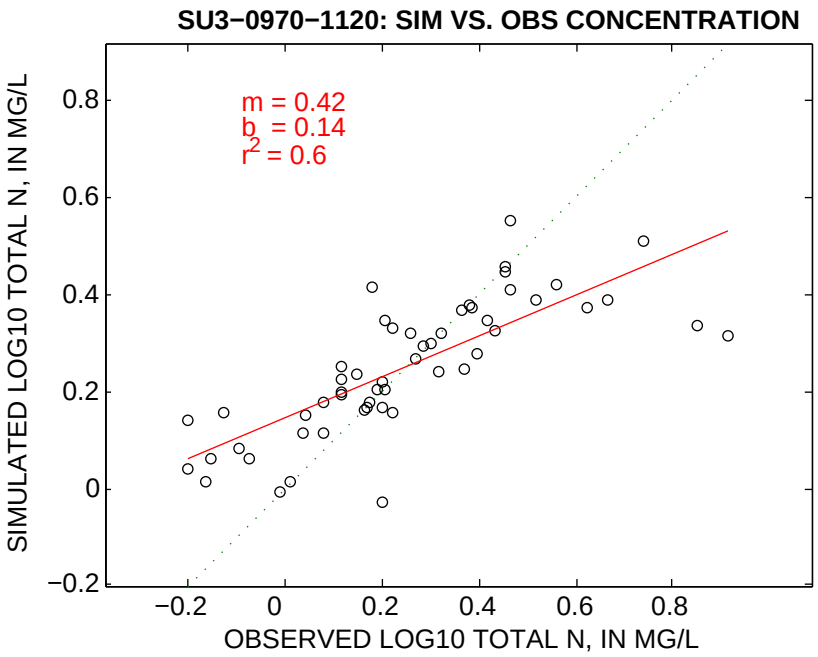
Drive	Directory	Observed
N/A	model	OBS20161101

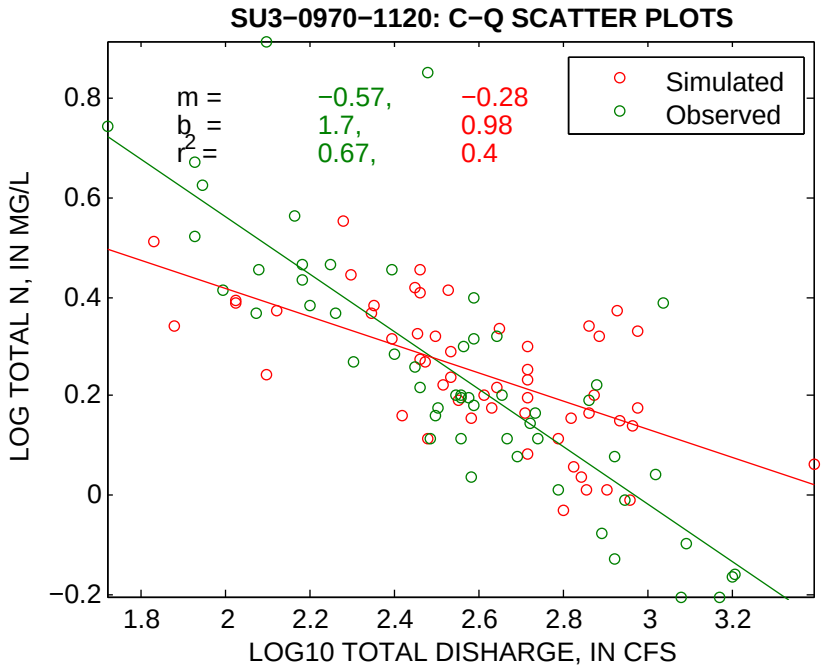
STATISTICS

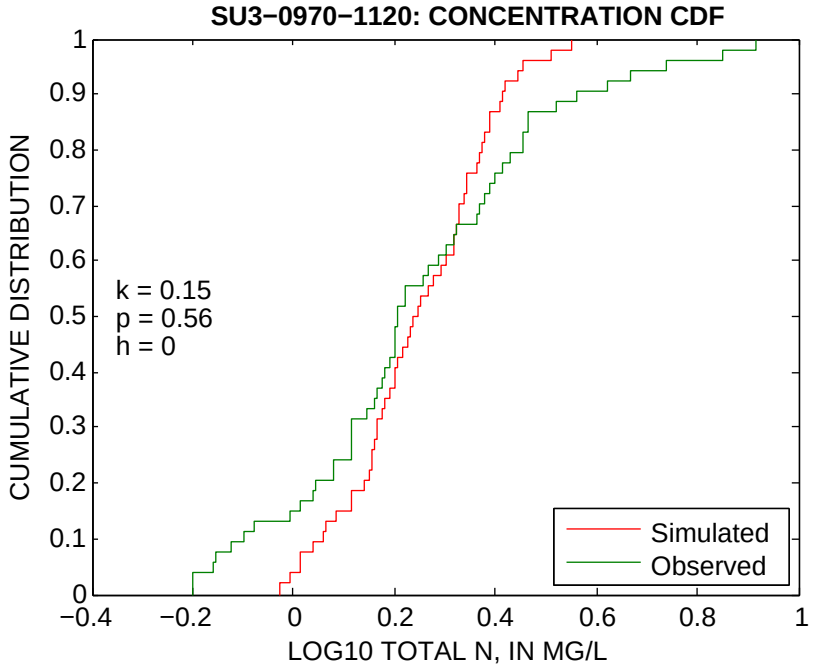
	n	54	54
		observe	simulate
min		0.63	0.87959
		-0.200659	-0.0557197
mean		2.11463	1.87666
		0.247506	0.254486
media		1.6	1.7498
		0.20412	0.242988
max		8.2	3.6956
		0.913814	0.567685
varian		2.23072	0.322602
		0.0634545	0.0168074
JB		0.001	0.024956
		0.279281	0.5
		ra	log
%		-11.2534	2.82025
err.va		1.97407	0.0459189
rel.std.err		0.884946	0.72365
mod.eff		0.115054	0.27635

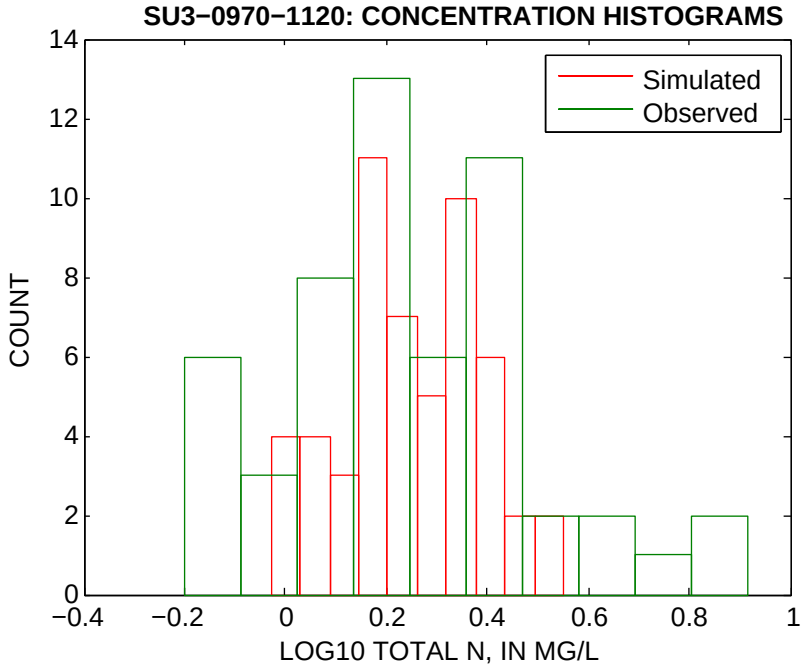
VERSION 2.1

ALL DATA
LOG10

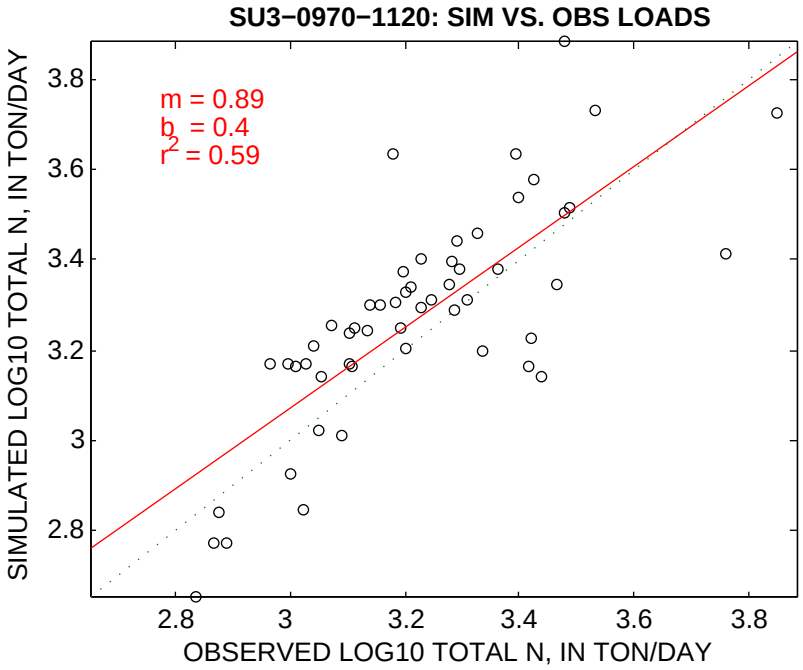


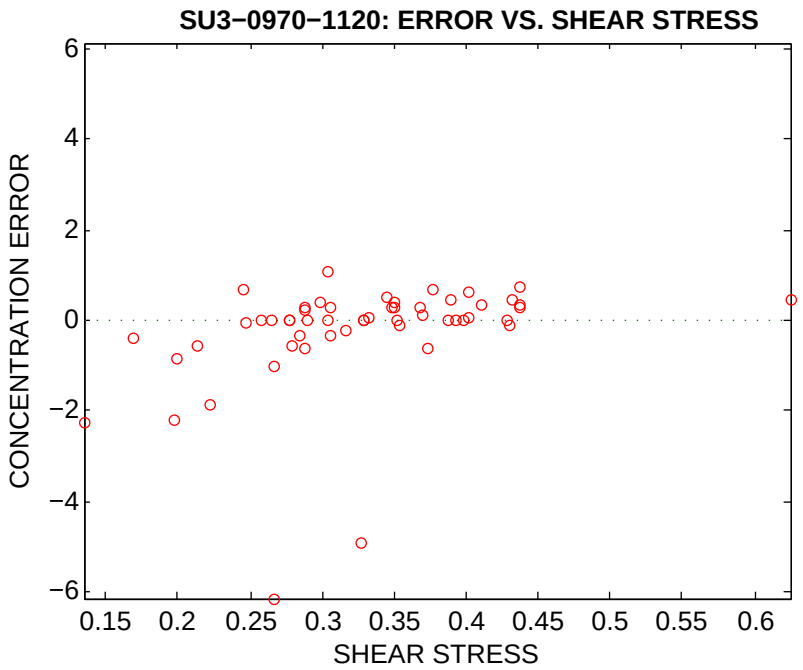


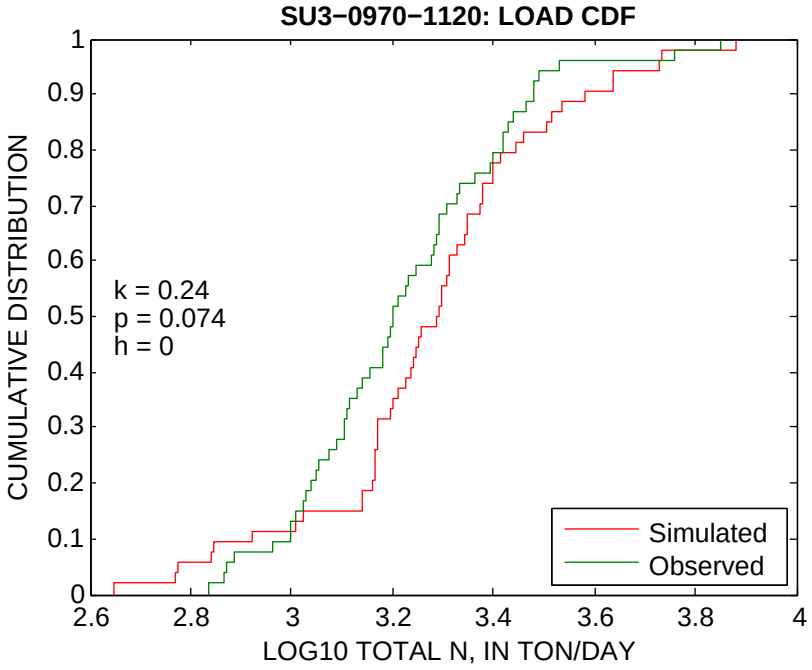


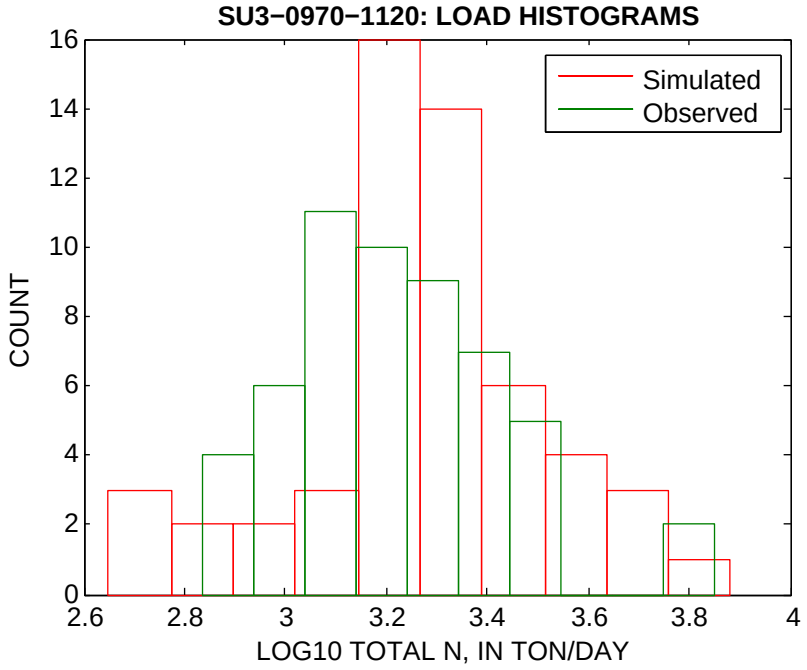


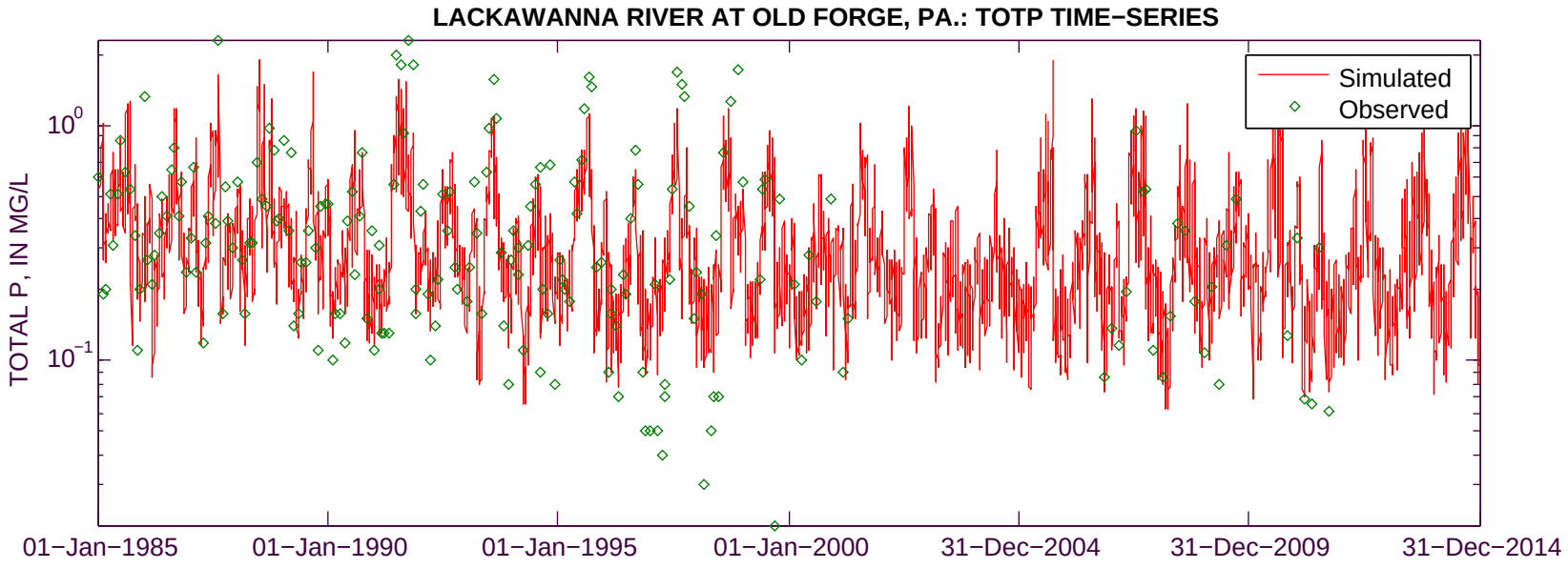
LOAD DATA
LOG10

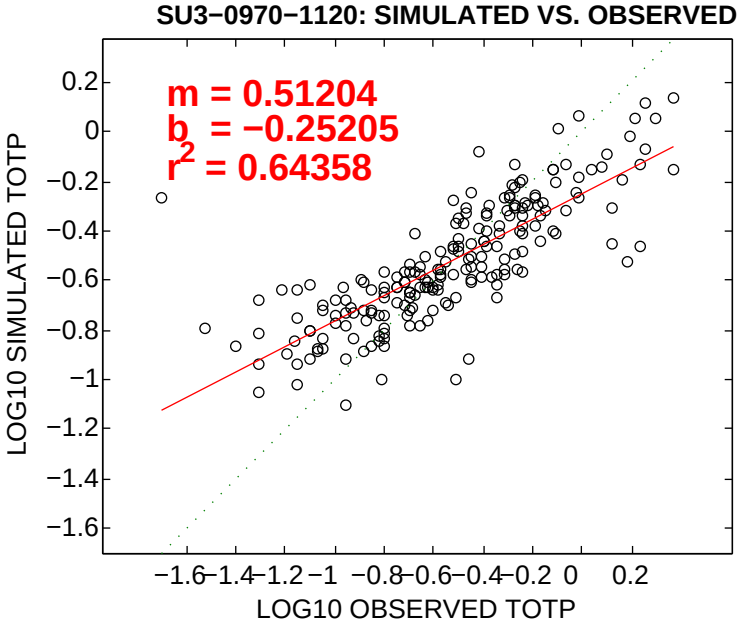


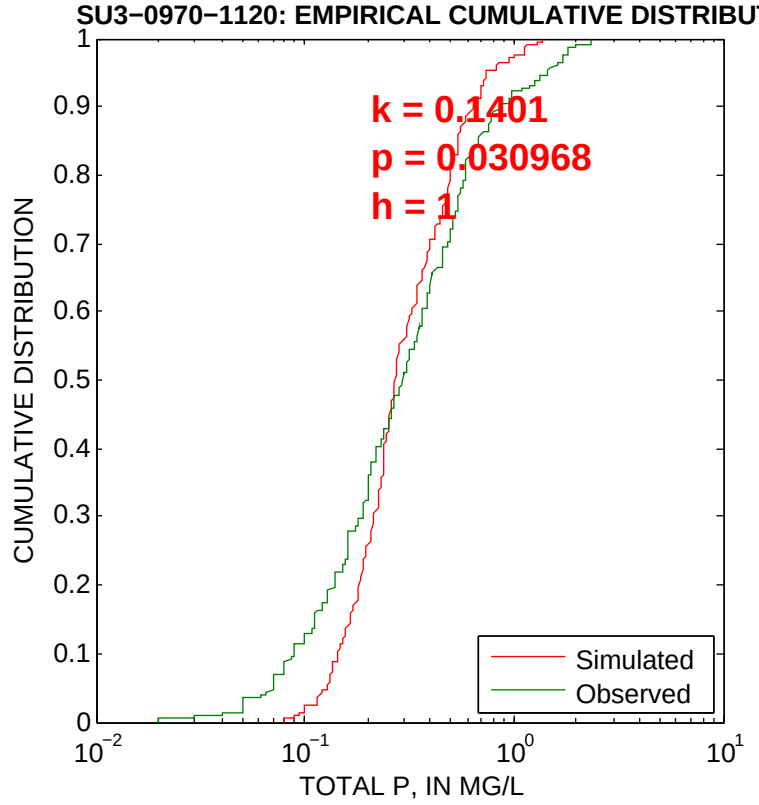












DATA SELECTION

scenario	file
P620171001WQ	TOTP.calib

plot: TOTP - total phosphorus

Dates: 1/1/1985 – 12/31/201

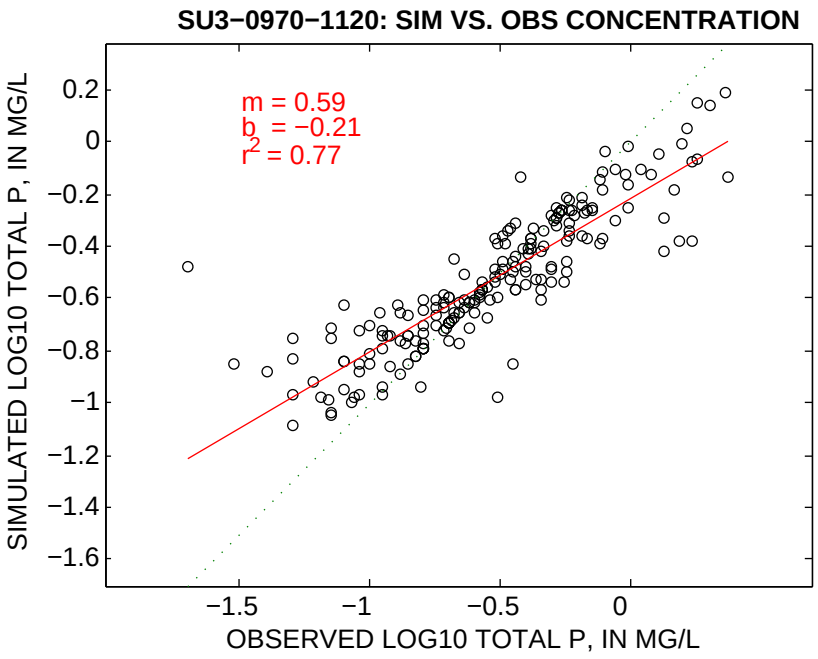
Drive	Directory	Observed
N/A	model	OBS20161101

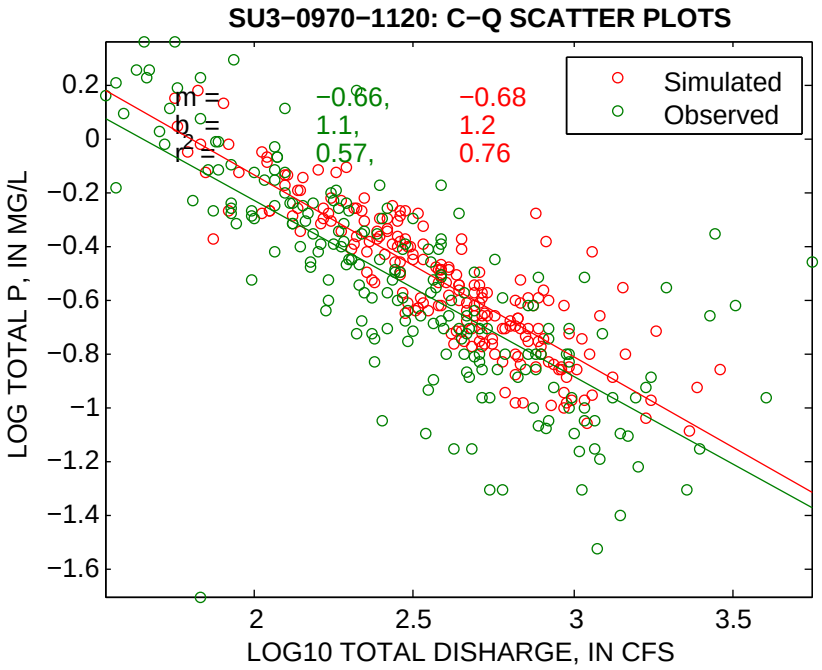
STATISTICS

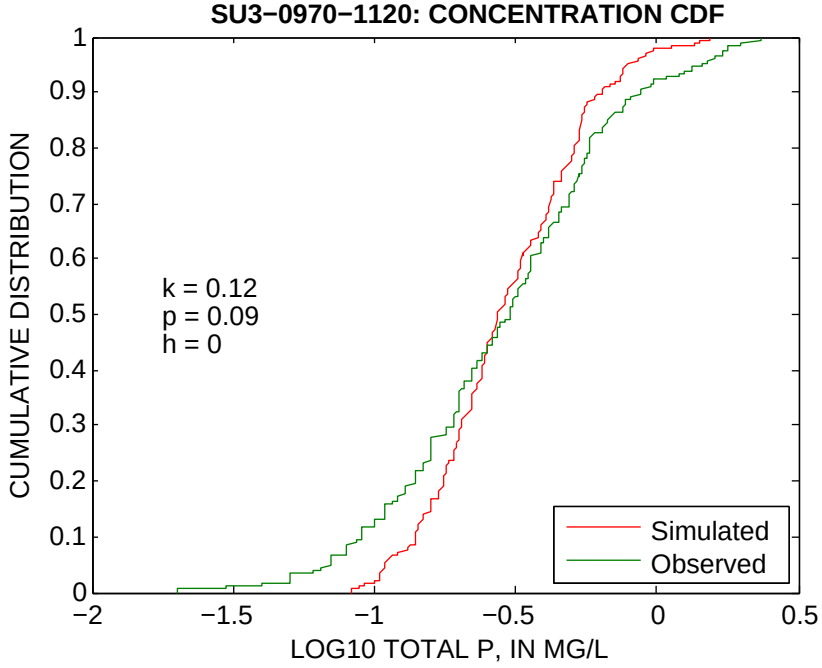
	n	207	207
		observe	simulate
min		0.02	0.079538
		-1.69897	-1.09943
mean		0.424116	0.350551
		-0.540372	-0.528741
media		0.3	0.27117
		-0.522879	-0.566758
max		2.34	1.3611
		0.369216	0.13389
varian		0.175795	0.0514315
		0.15047	0.0612985
JB		0.001	0.001
		0.5	0.104349
		ra	log
%		-17.3455	-2.15234
err.va		0.0809369	0.0578115
rel.std.err		0.460405	0.384207
mod.eff		0.539595	0.615793

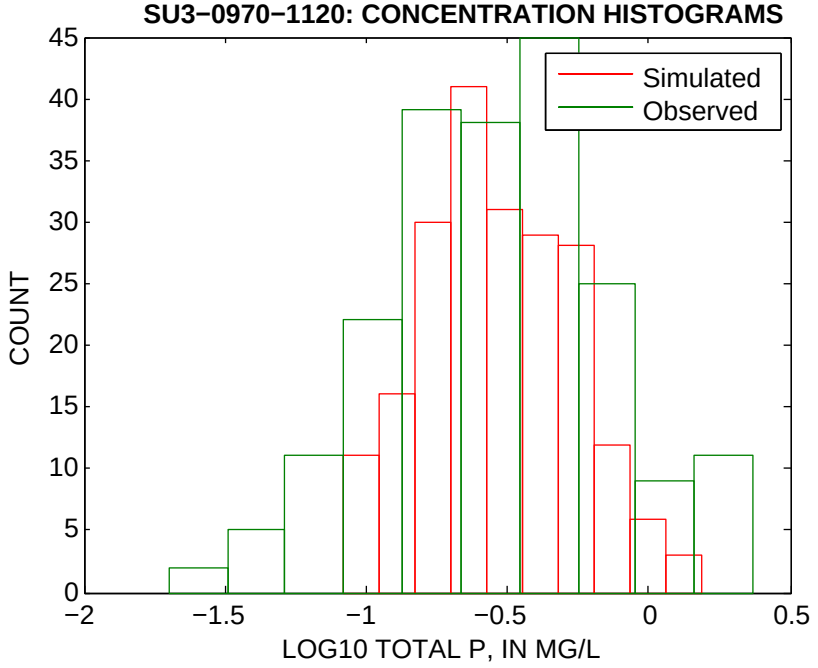
VERSION 2.1

ALL DATA
LOG10

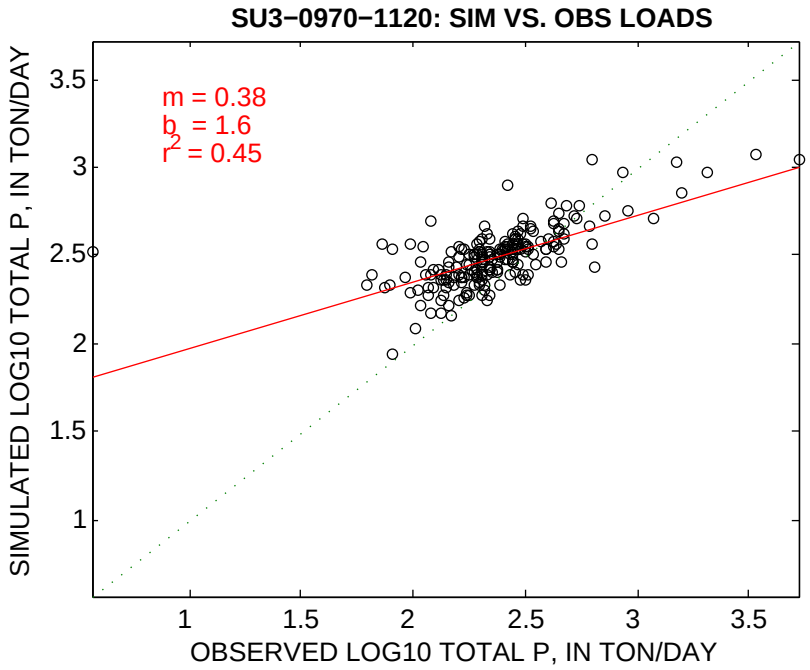


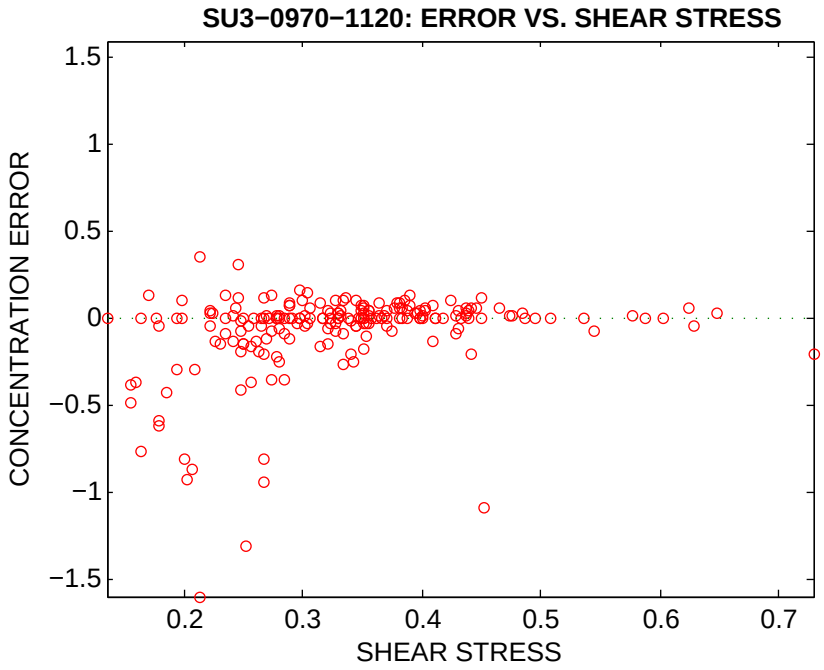


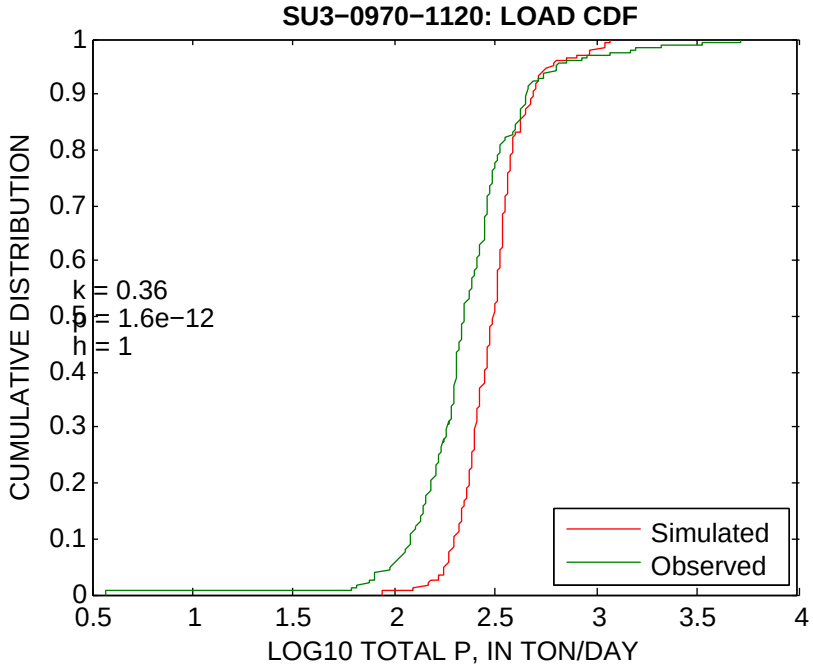


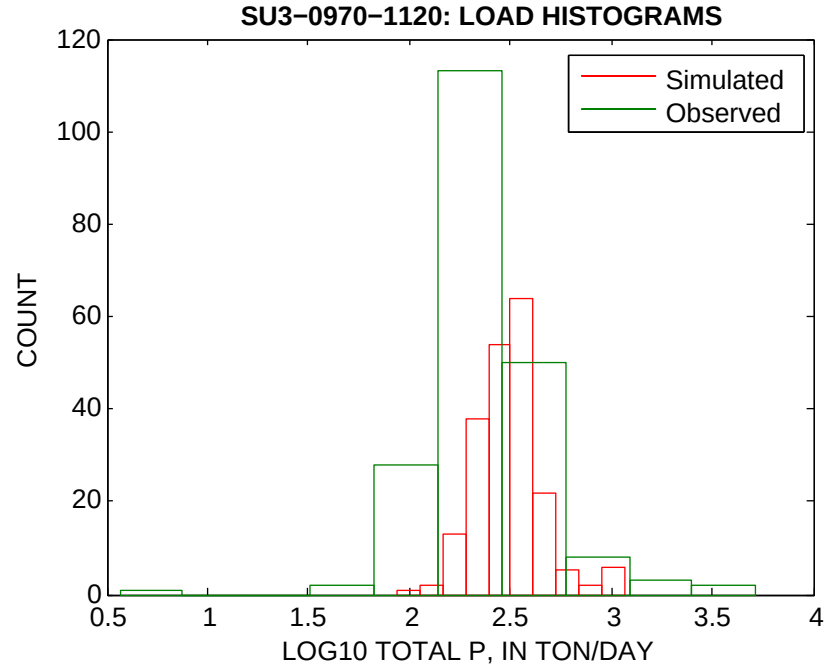


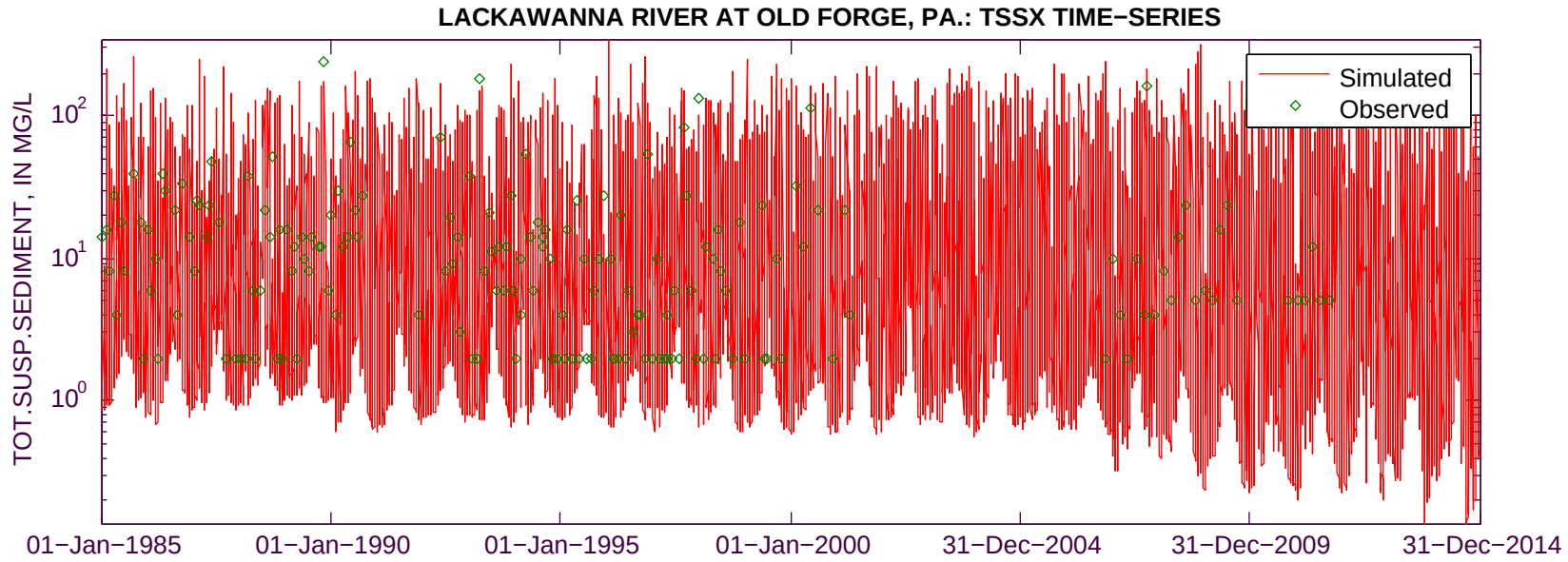
LOAD DATA
LOG10

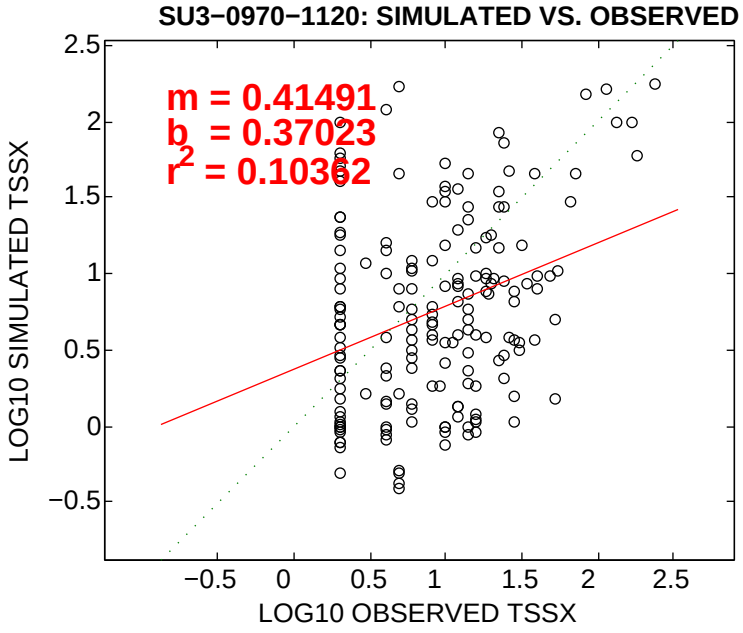


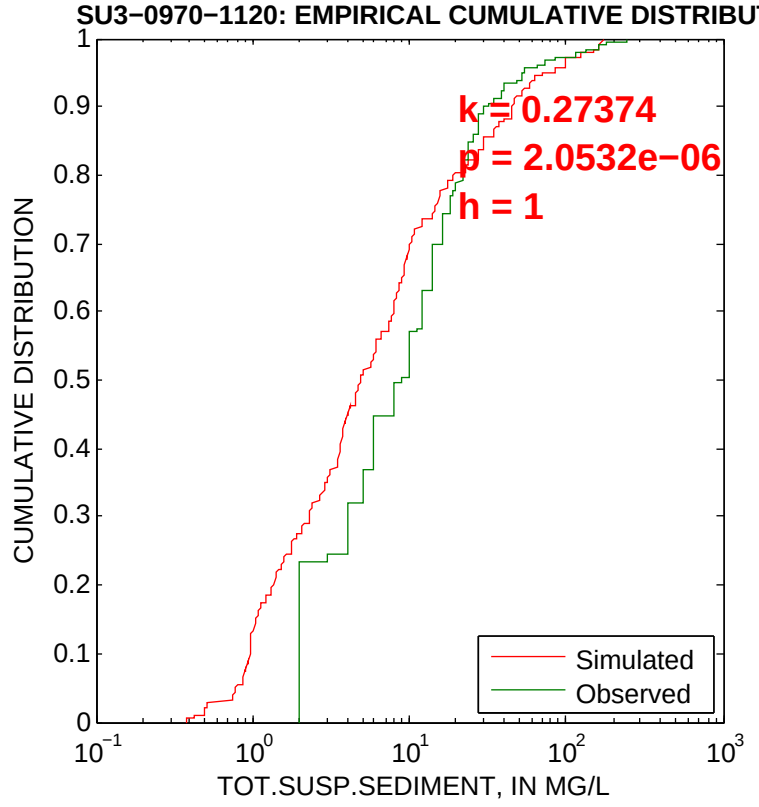












DATA SELECTION

scenario: P620171001WQ | file: TSSX.calib

plot: TSSX - total suspended ...

Dates: 1/1/1985 – 12/31/201

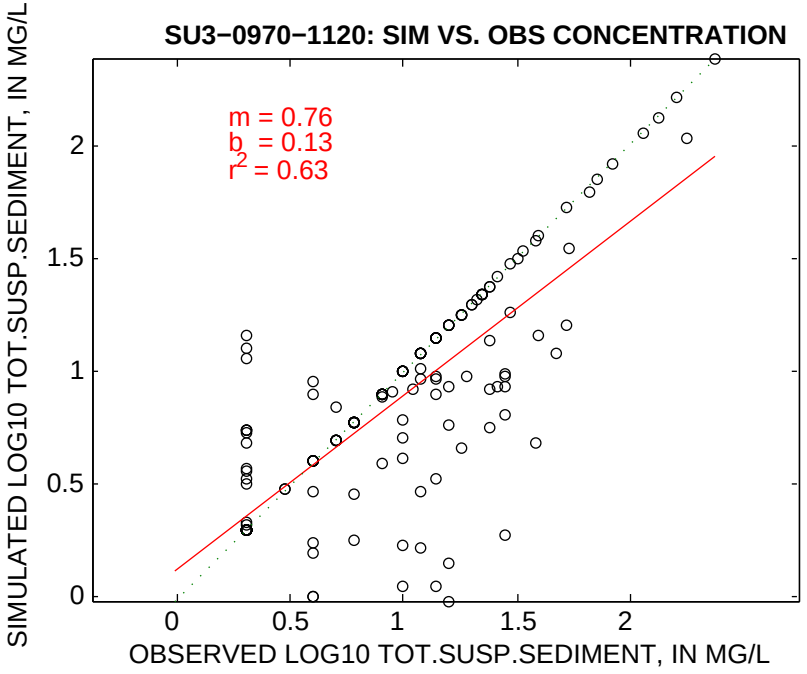
Drive: N/A | Directory: model | Observed: OBS20161101

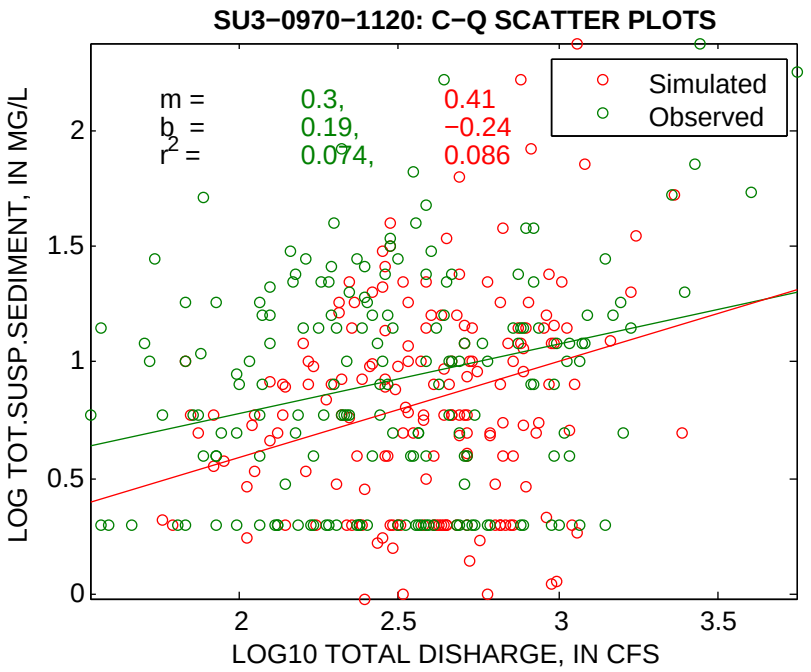
STATISTICS

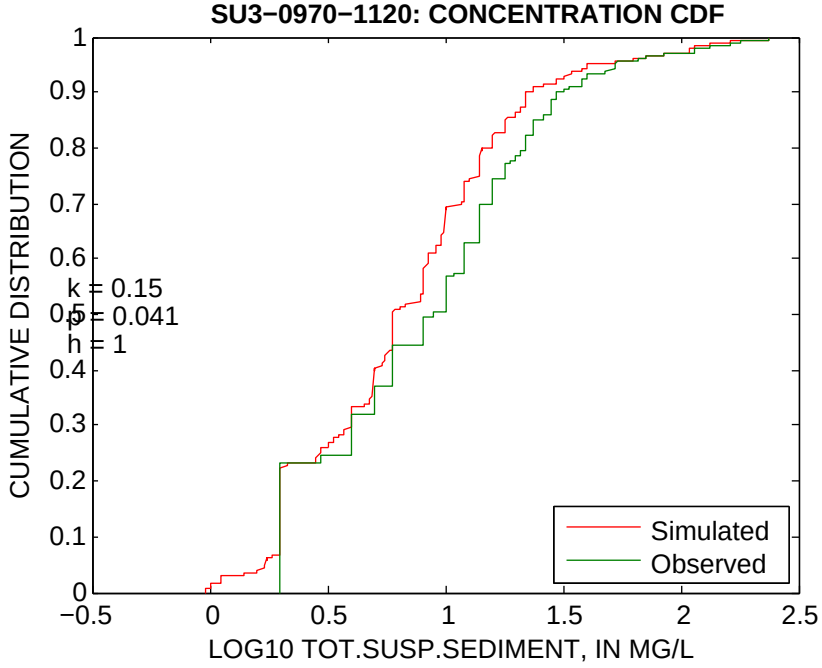
		observe	simulate
n		179	179
min		2	0.38378
		0.30103	-0.415918
mean		16.9553	16.5618
		0.926903	0.754811
media		9	4.9553
		0.954243	0.69507
max		240	176.91
		2.38021	2.24775
varian		881.358	933.052
		0.2348	0.390074
JB		0.001	0.001
		0.048353	0.034476
		ra	log
%		-2.32056	-18.5663
err.va		762.72	0.459815
rel.std.err		0.865392	1.95833
mod.eff		0.134608	-0.958329

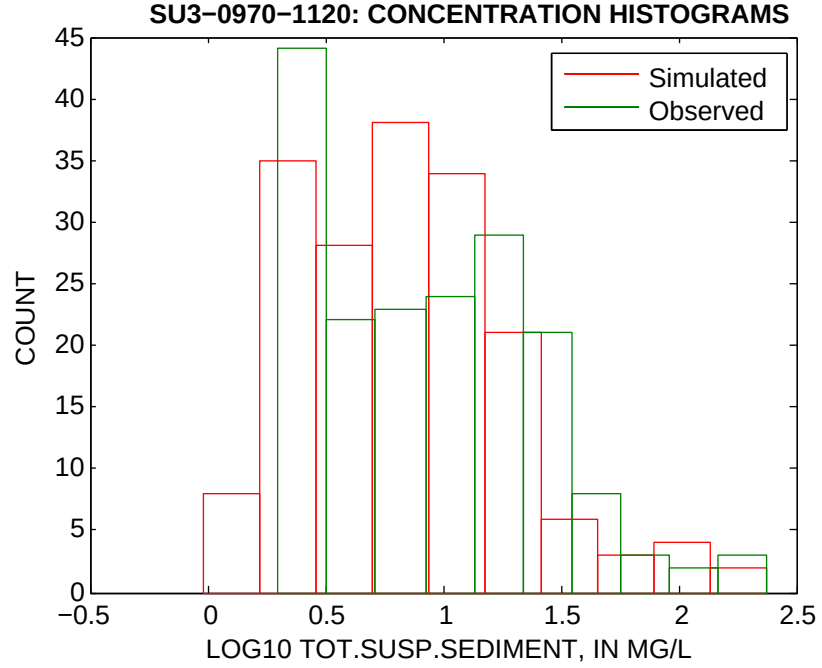
VERSION 2.1

ALL DATA
LOG10

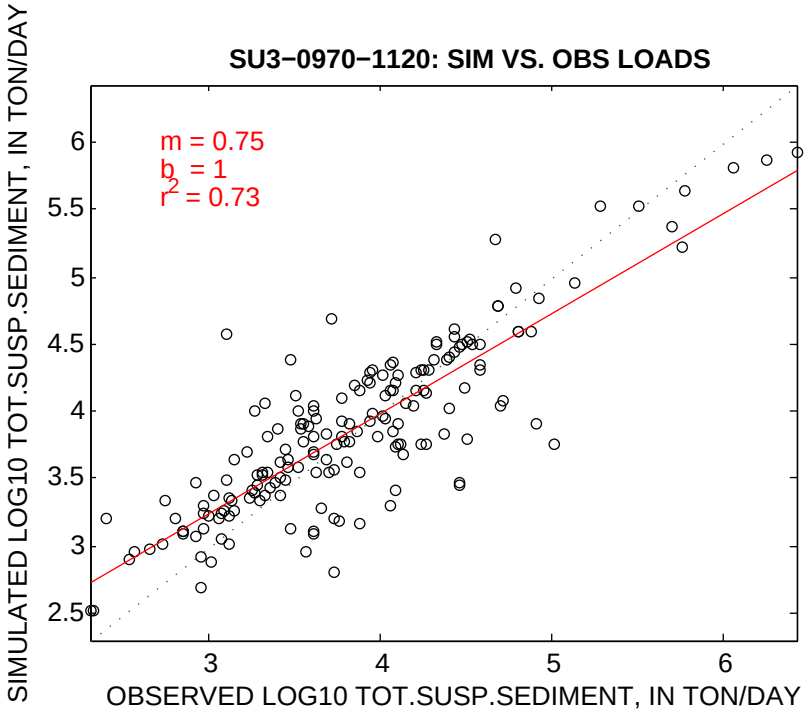


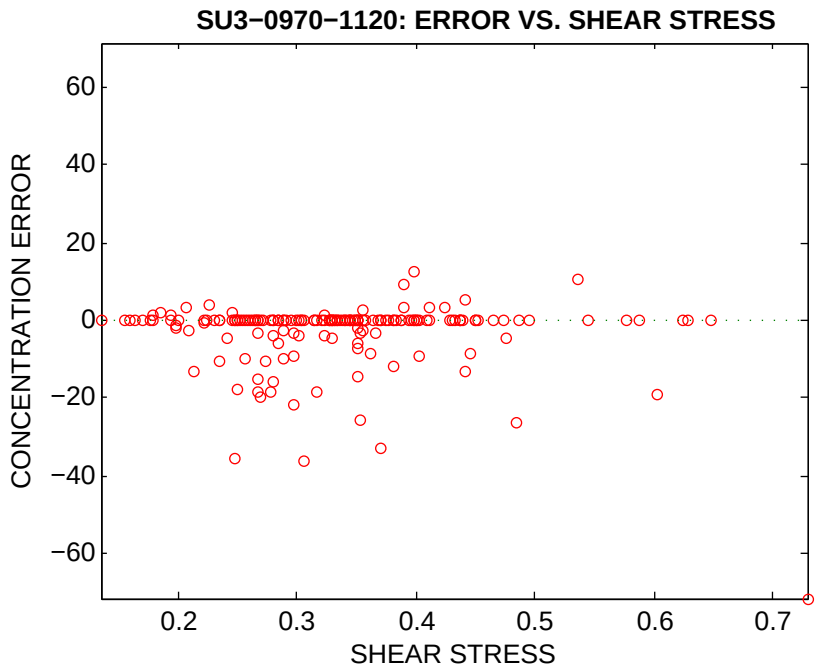


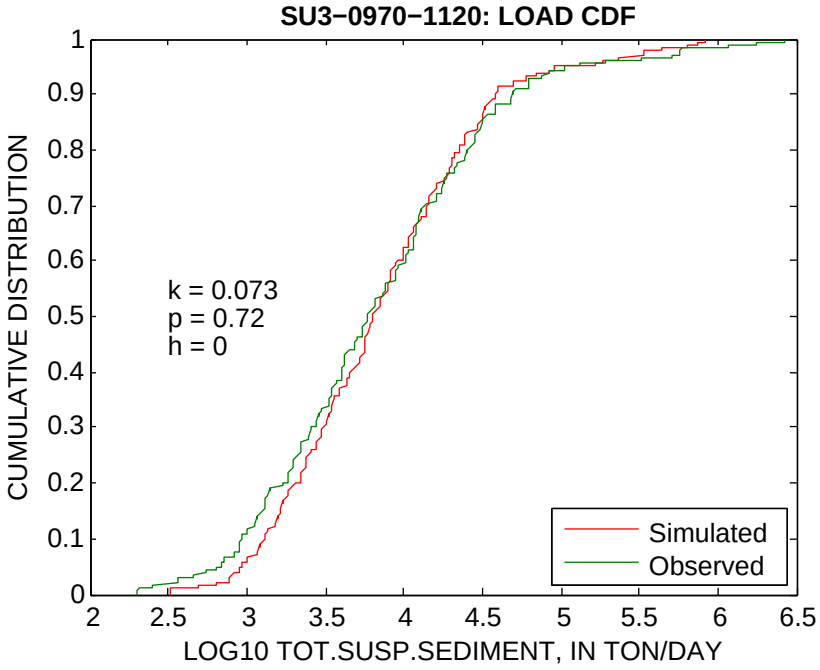


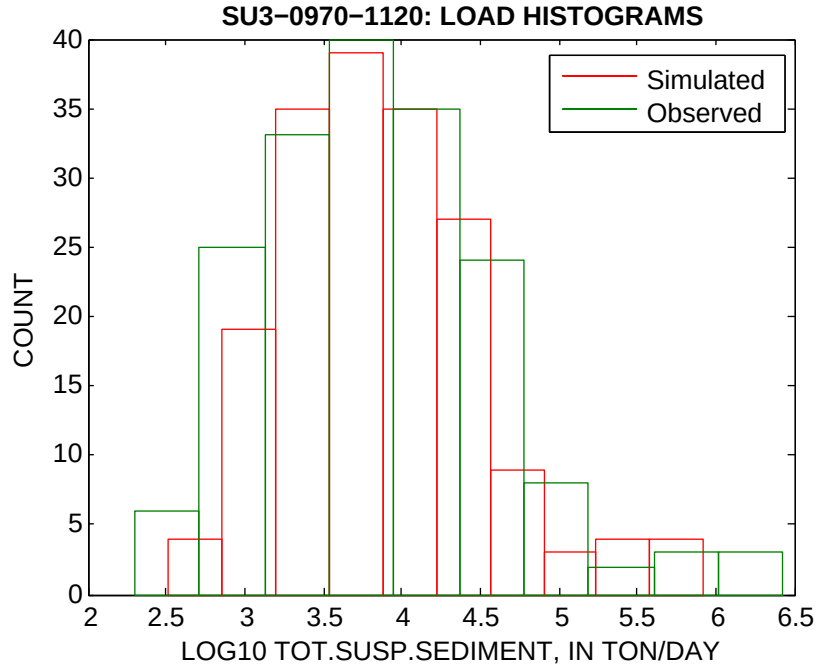


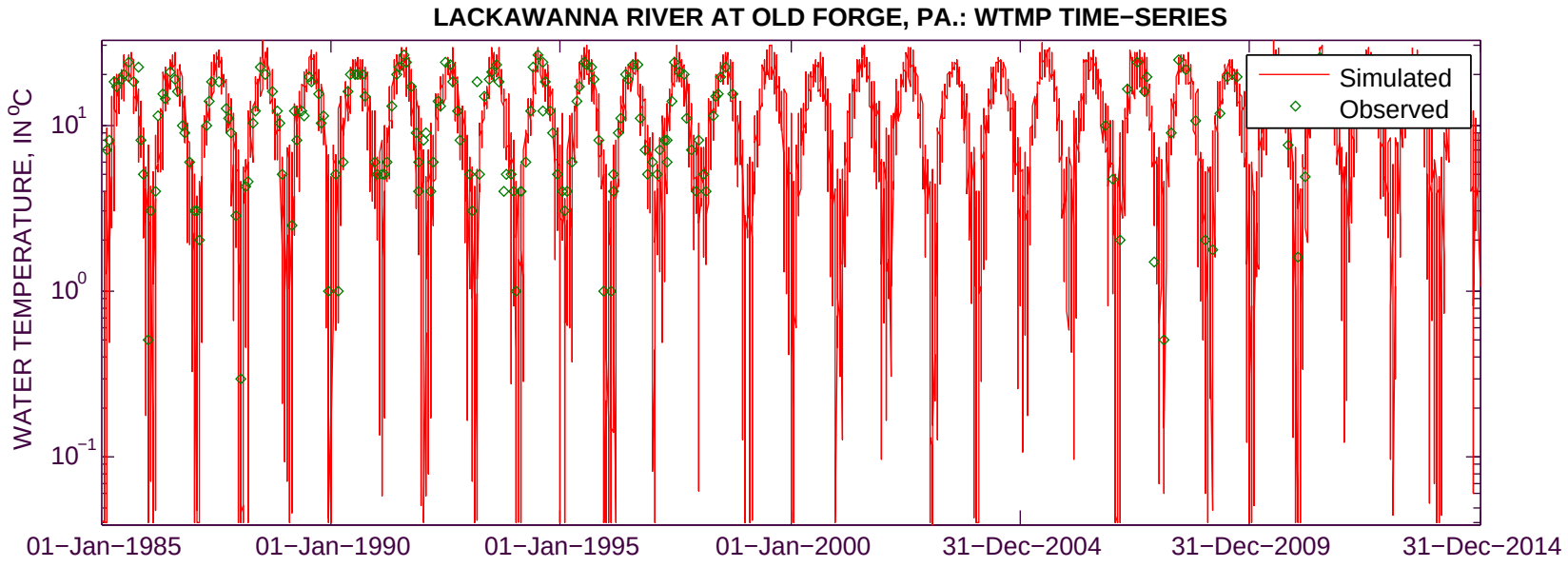
LOAD DATA
LOG10

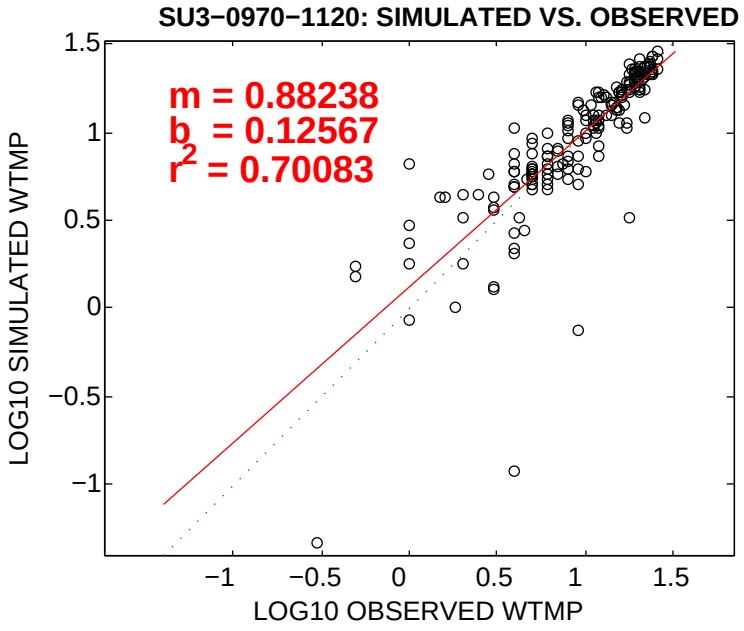


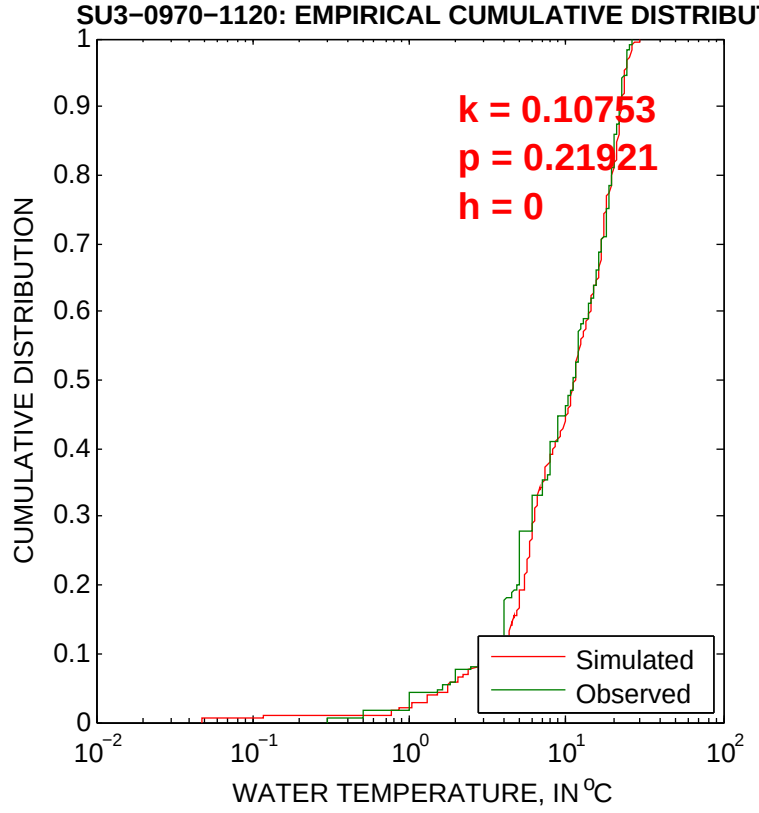












DATA SELECTION

scenario	file
P620171001WQ	WTMP.calib

plot: WTMP - water tempera...

Dates: 1/1/1985 – 12/31/201

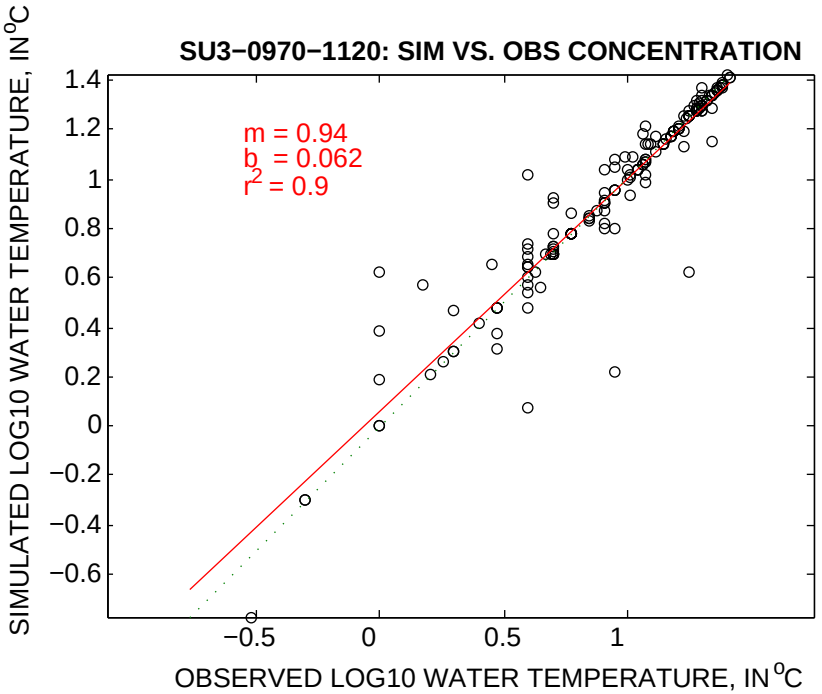
Drive	Directory	Observed
N/A	model	OBS20161101

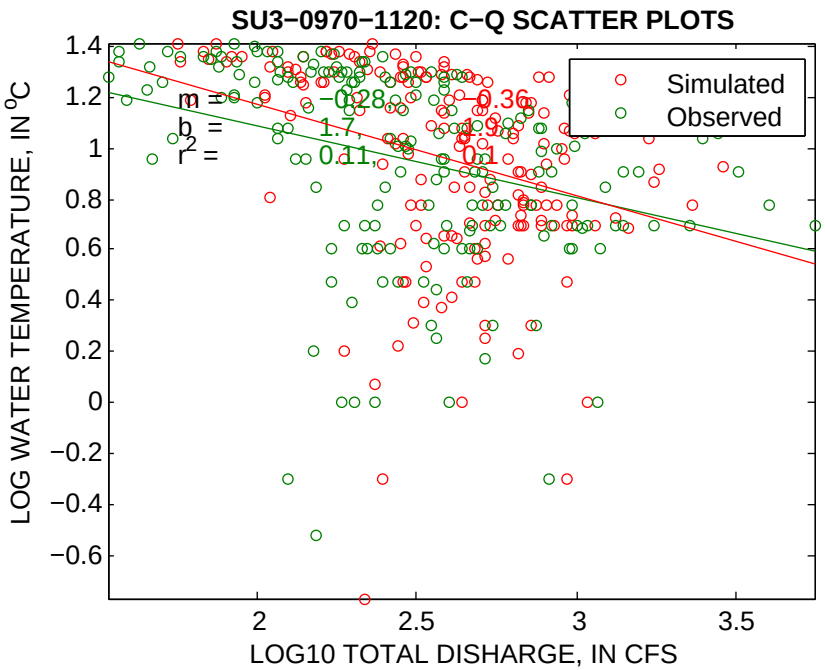
STATISTICS

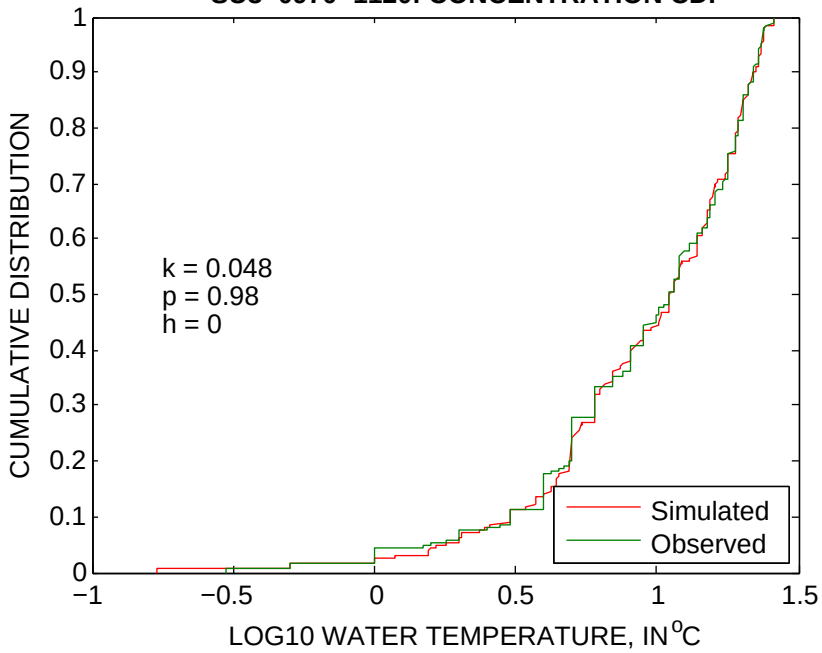
	n	observe	simulate
		186	186
min		0.3	0.047021
		-0.522879	-1.32771
mean		11.7946	12.1586
		0.950525	0.964401
media		11	11.3925
		1.04139	1.05662
max		26	28.934
		1.41497	1.46141
varian		52.0472	53.2624
		0.143938	0.159912
JB		0.007805	0.010453
		0.001	0.001
		ra	log
%		3.08627	1.45986
err.va		7.62816	0.050026
rel.std.err		0.146562	0.347552
mod.eff		0.853438	0.652448

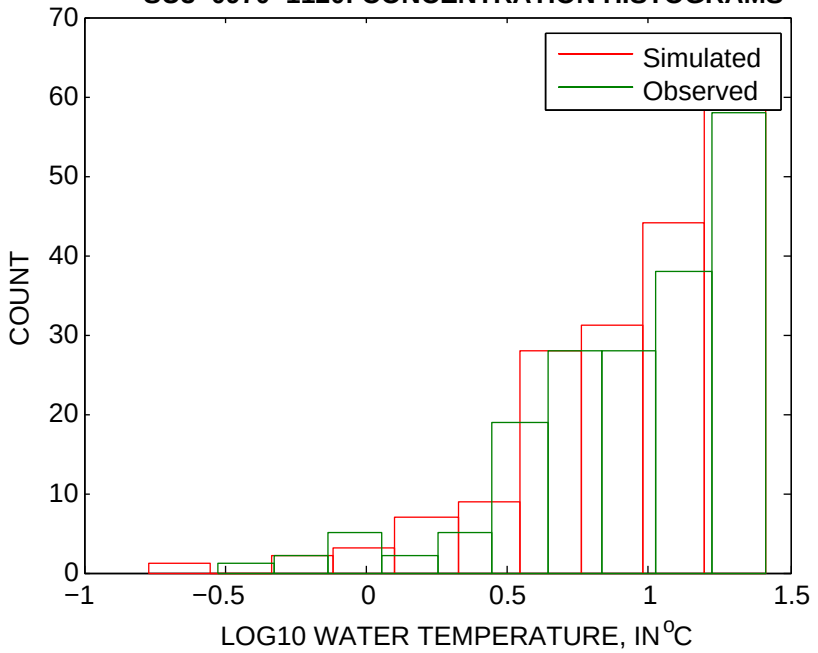
VERSION 2.1

ALL DATA
LOG10

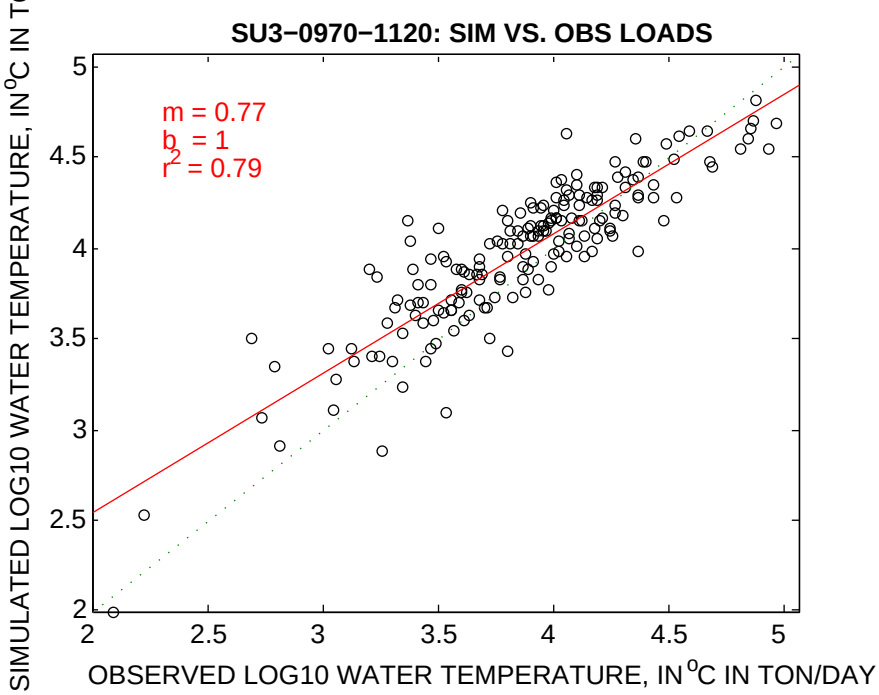


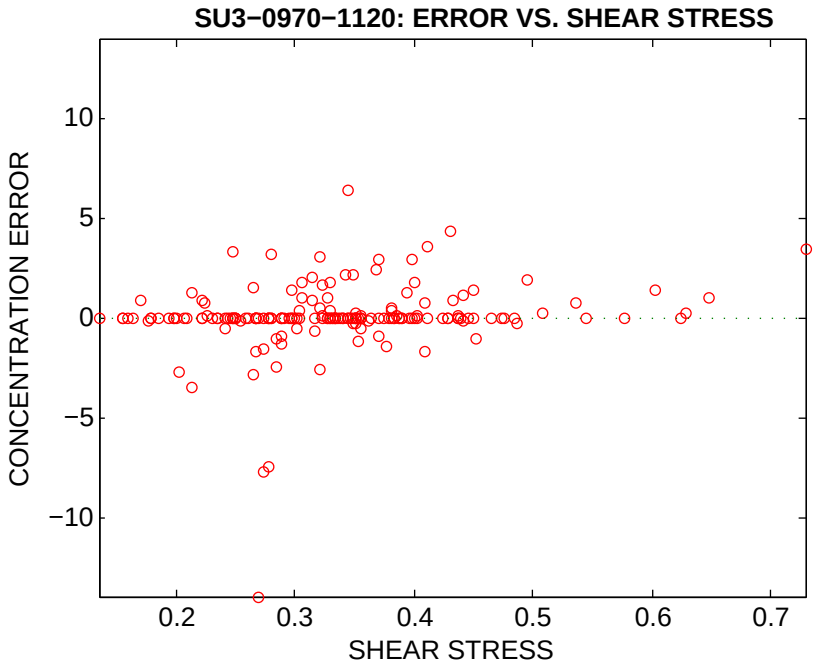


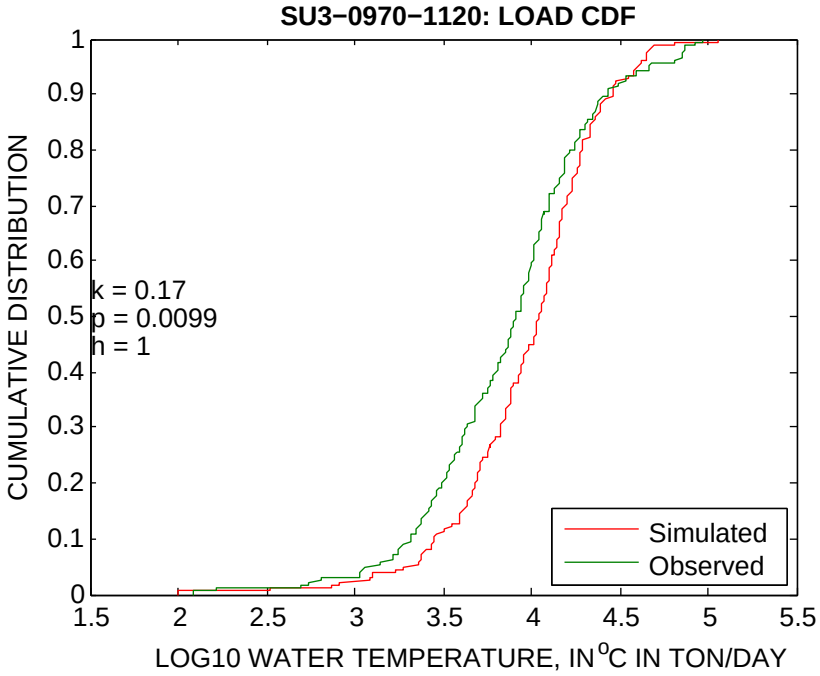


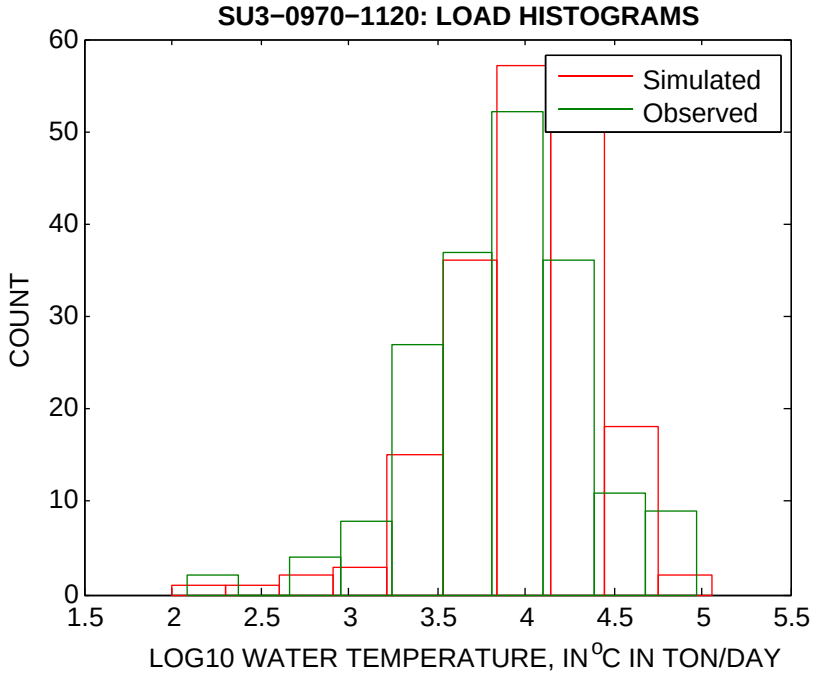


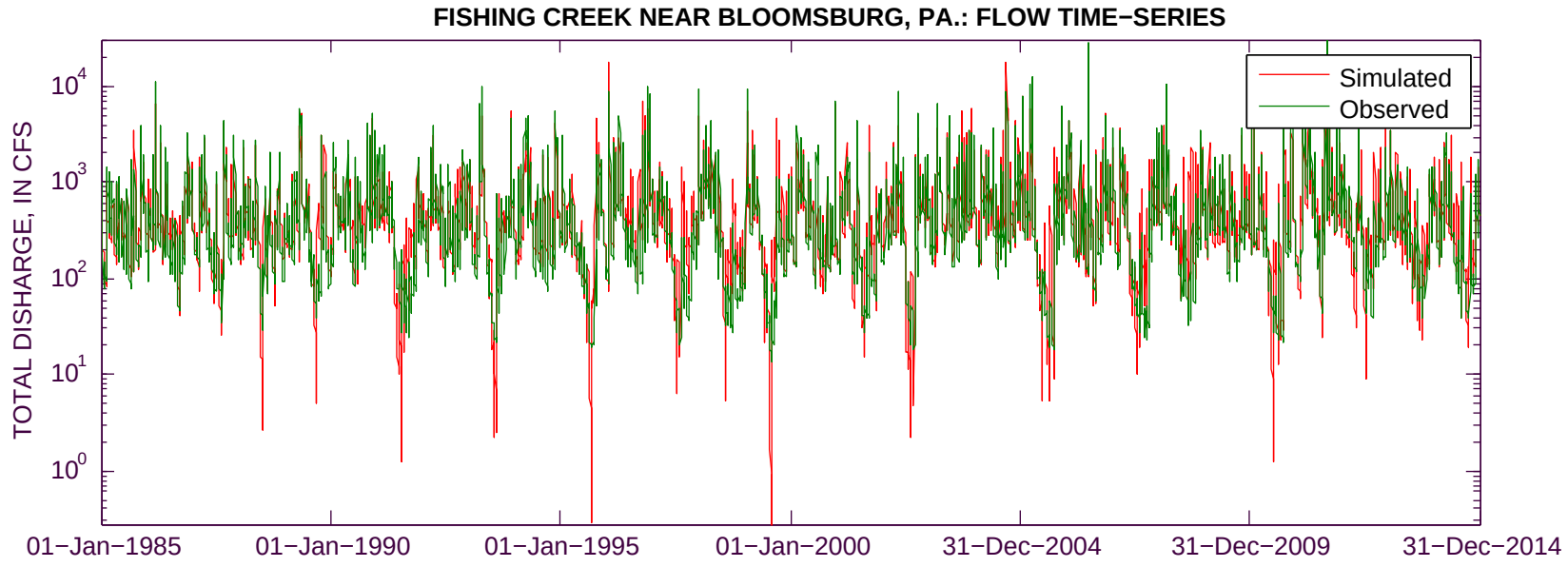
LOAD DATA
LOG10

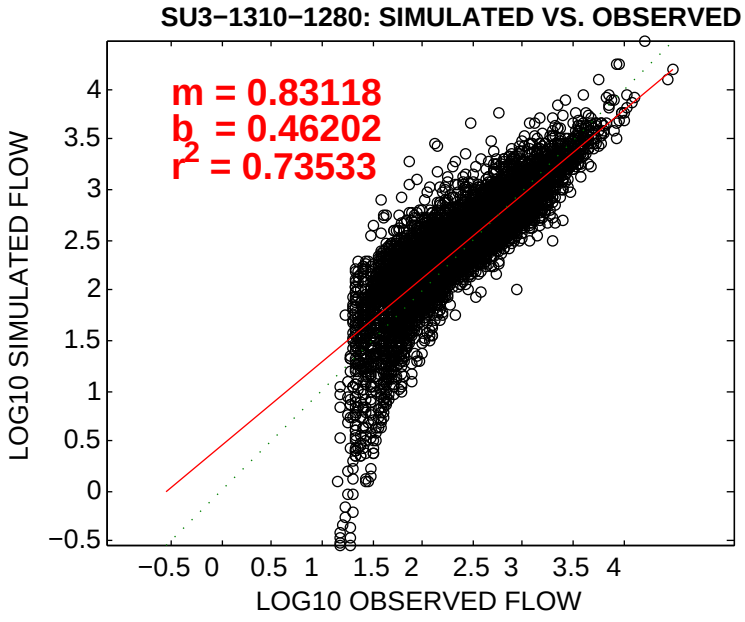


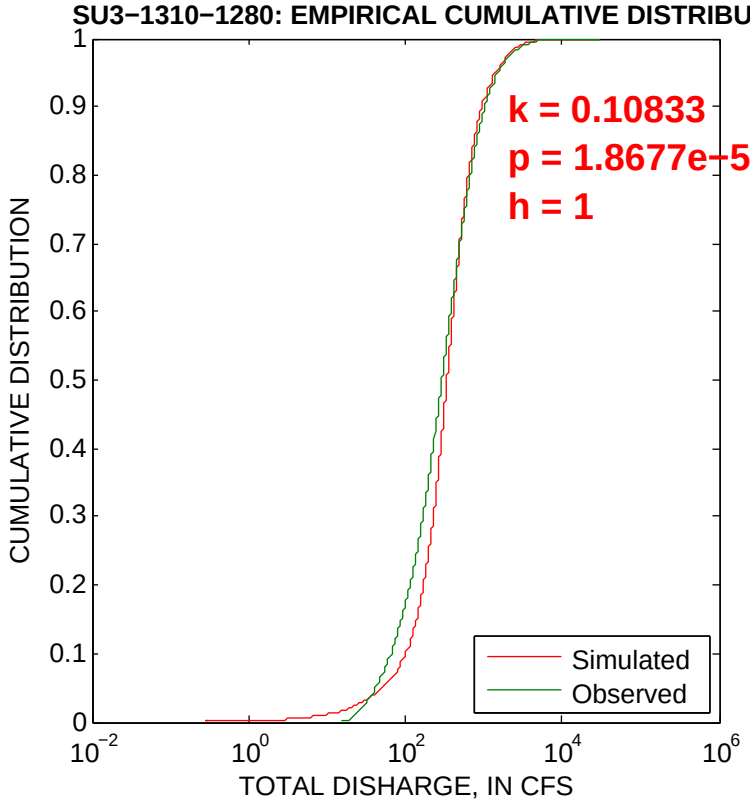












DATA SELECTION

scenario	file
P620171001WQ	FLOW.calib

plot: FLOW - total discharge

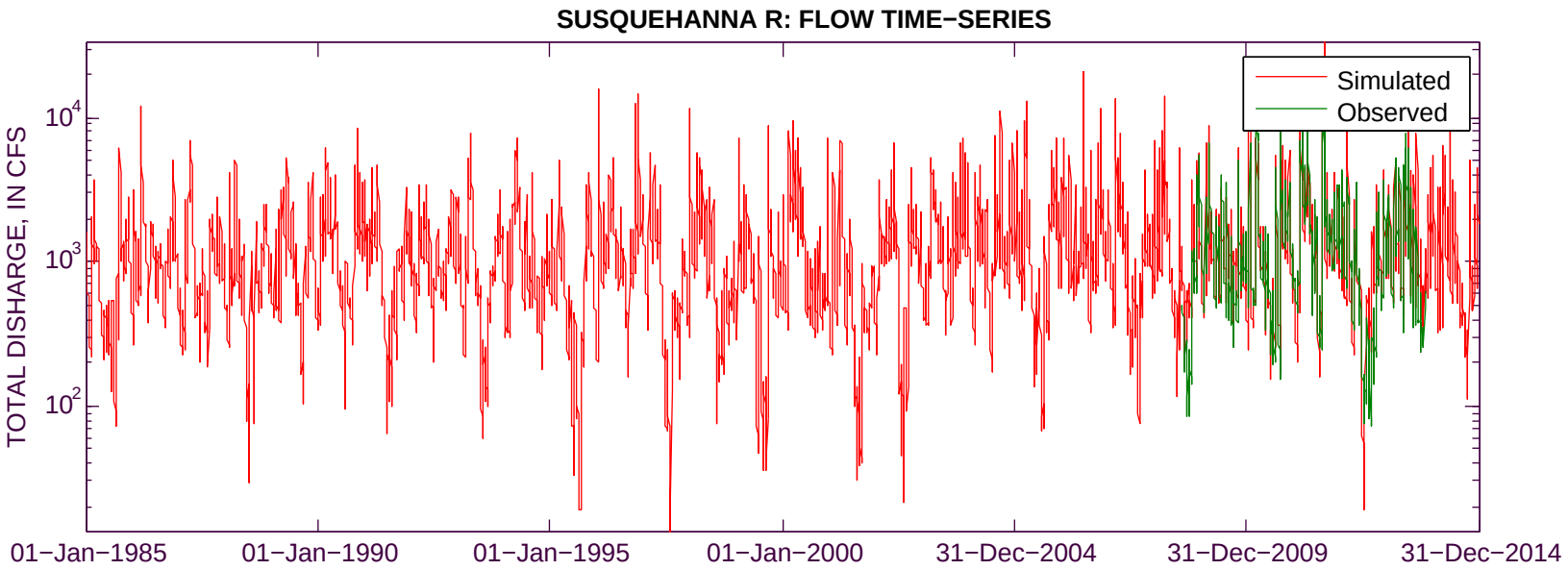
Dates: 1/1/1985 – 12/31/201

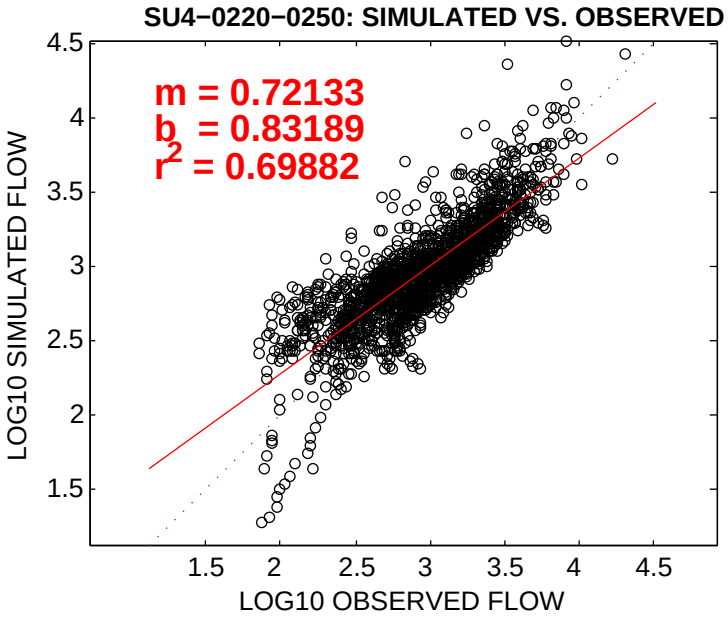
Drive	Directory	Observed
N/A	model	OBS20161101

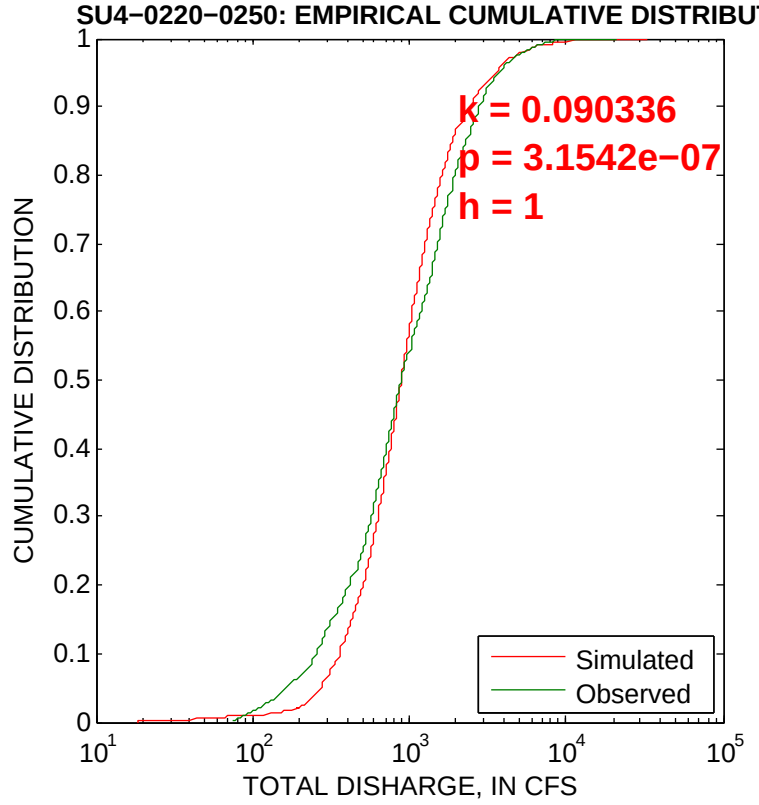
STATISTICS

	observe	simulate
n	10957	10957
min	14 1.14613	0.28095 -0.551371
mean	498.771 2.44985	500.57 2.49829
media	294 2.46835	340.58 2.53222
max	31000 4.49136	29484 4.46959
varian	678369 0.217057	527530 0.203931
JB	0.001 0.002489	0.001 0.001
	ra	log
%	0.360692	1.9772
err.va	203022	0.0625076
rel.std.err	0.299279	0.287979
mod.eff	0.700721	0.712021

VERSION 2.1







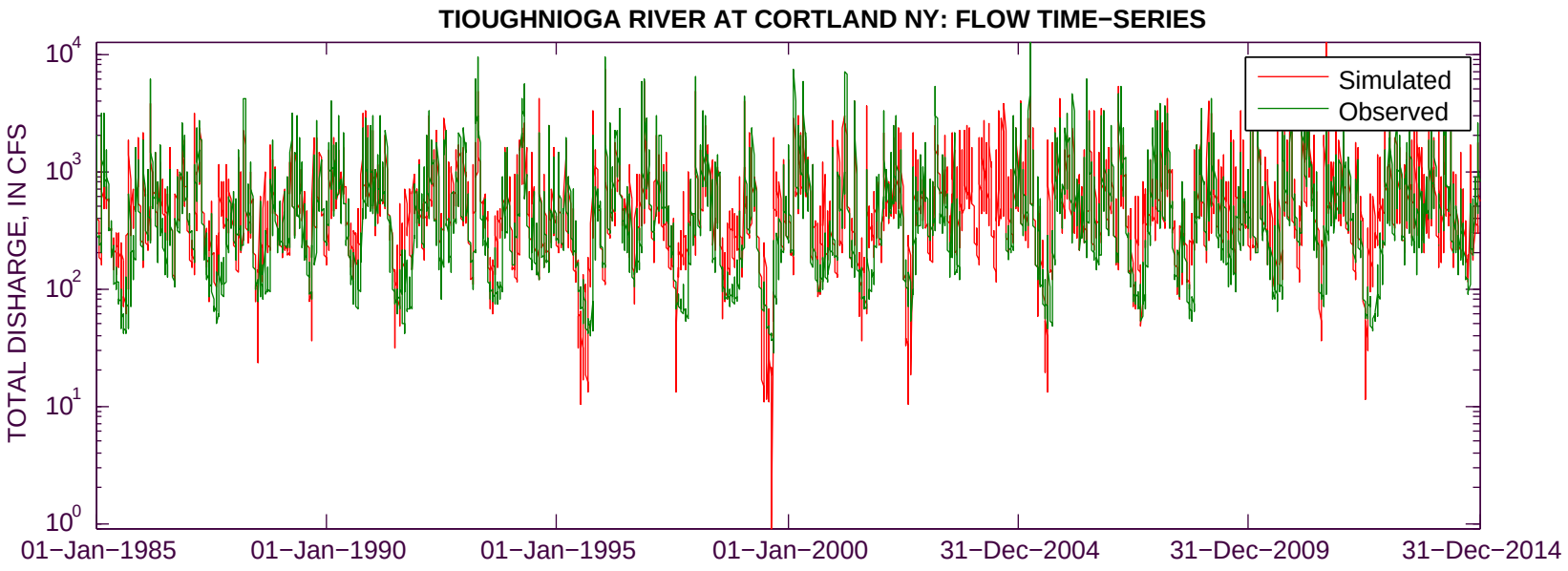
DATA SELECTION

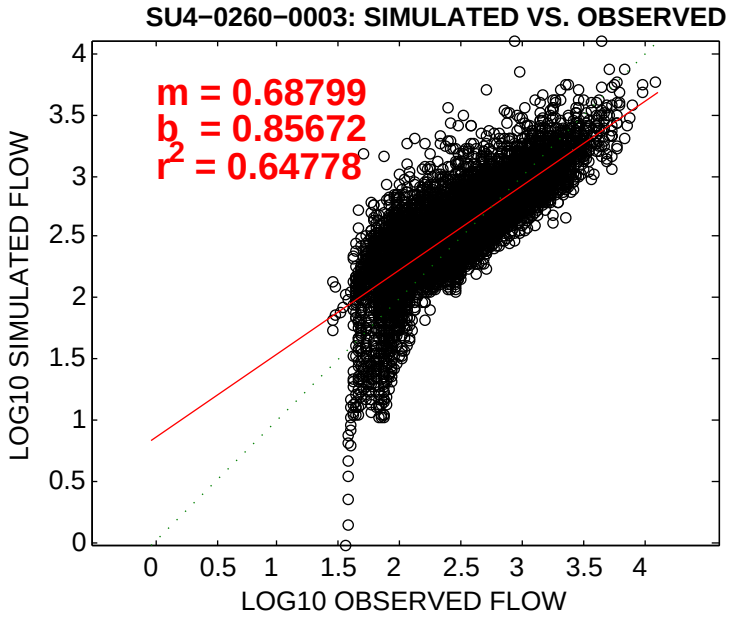
scenario: P620171001WQ
file: FLOW.calib
plot: FLOW - total discharge
Dates: 1/1/1985 – 12/31/201
Drive: N/A
Directory: model
Observed: OBS20161101

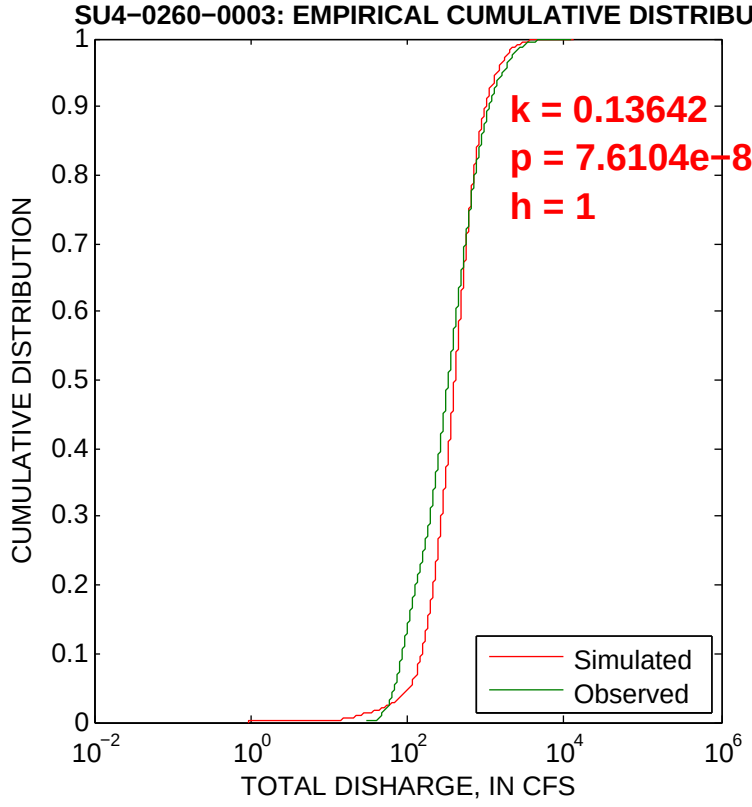
STATISTICS

	observe	simulate
n	1904	1904
min	73 1.86332	18.71 1.27207
mean	1337.35 2.94852	1288.48 2.95876
media	882.5 2.94571	896.295 2.95245
max	20800 4.31806	32804 4.51593
varian	1.98599e+0 0.163782	2.77697e+ 0.121948
JB	0.001 0.004791	0.001 0.001
	ra	log
%	-3.65453	0.347142
err.va	1.24666e+0	0.0495517
rel.std.err	0.627727	0.302547
mod.eff	0.372273	0.697453

VERSION 2.1







DATA SELECTION

scenario: P620171001WQ | file: FLOW.calib

plot: FLOW - total discharge

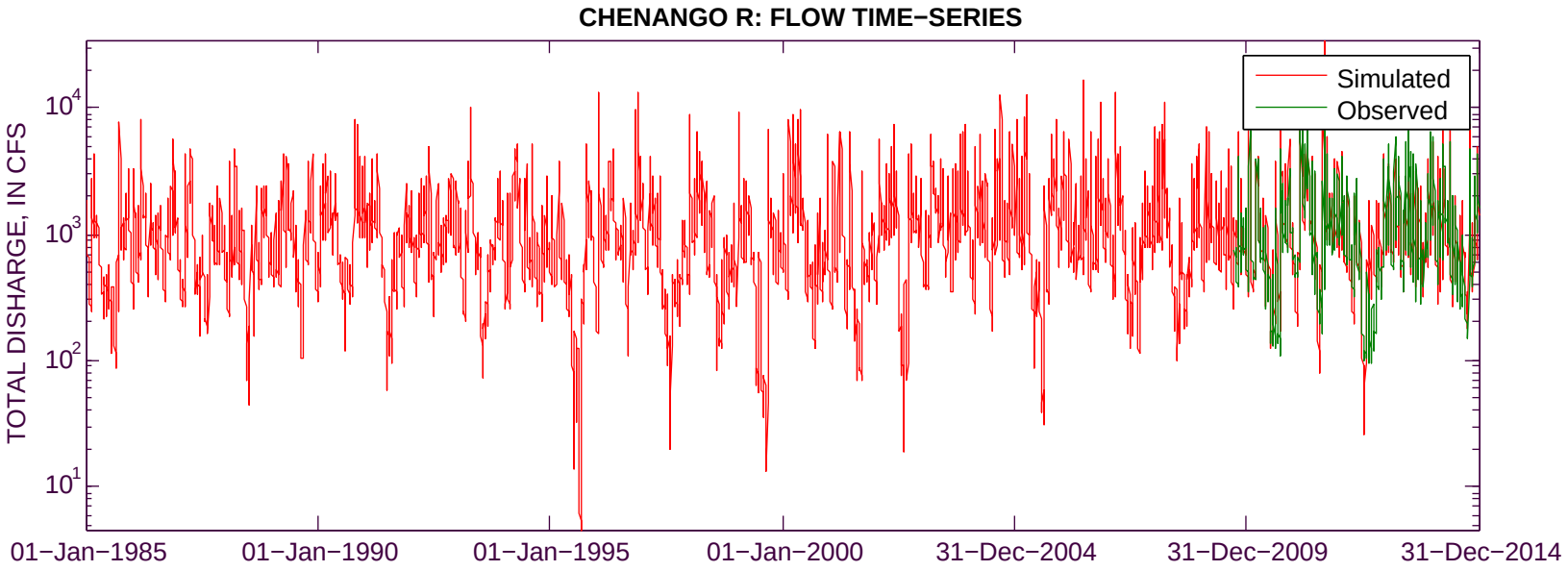
Dates: 1/1/1985 – 12/31/201

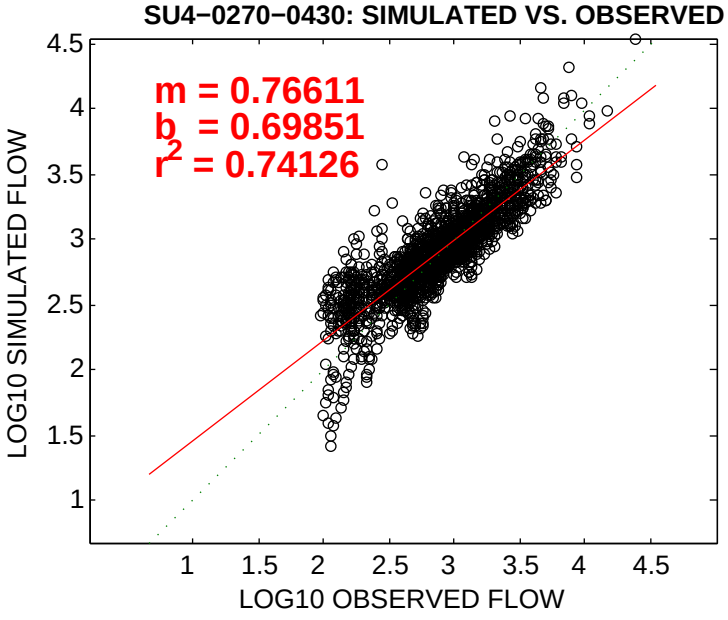
Drive: N/A | Directory: model | Observed: OBS20161101

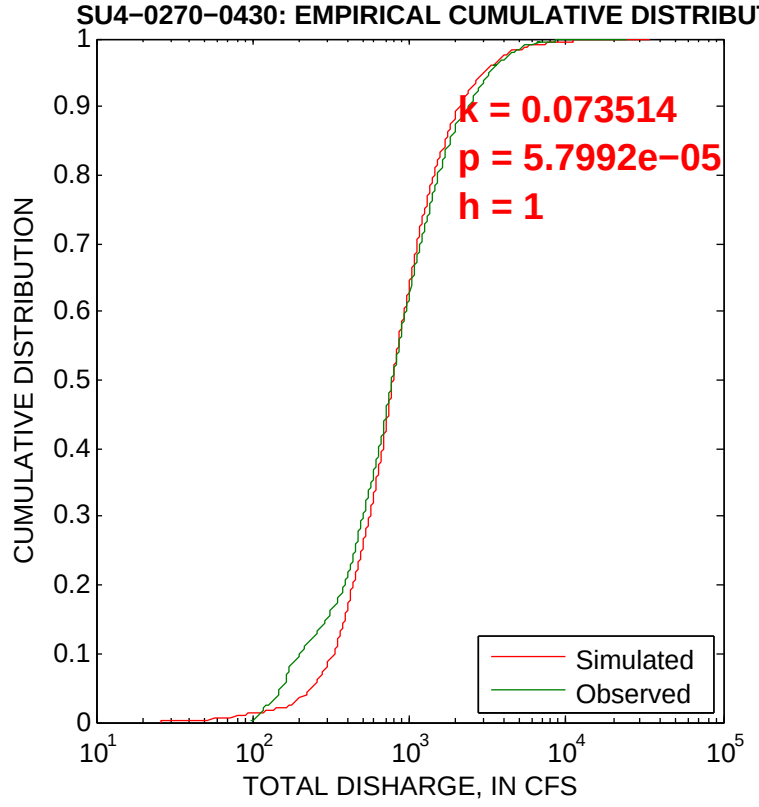
STATISTICS

n	10534	10534
	observe	simulate
min	28	0.924
	1.44716	-0.034328
mean	527.724	530.957
	2.51613	2.5878
media	335	404.79
	2.52504	2.60723
max	12600	12893
	4.10037	4.11035
varian	431405	280479
	0.176032	0.128627
JB	0.001	0.001
	0.001	0.001
	ra	log
%	0.612534	2.84873
err.va	192329	0.067579
rel.std.err	0.44582	0.383902
mod.eff	0.55418	0.616098

VERSION 2.1







DATA SELECTION

scenario: P620171001WQ | file: FLOW.calib

plot: FLOW - total discharge

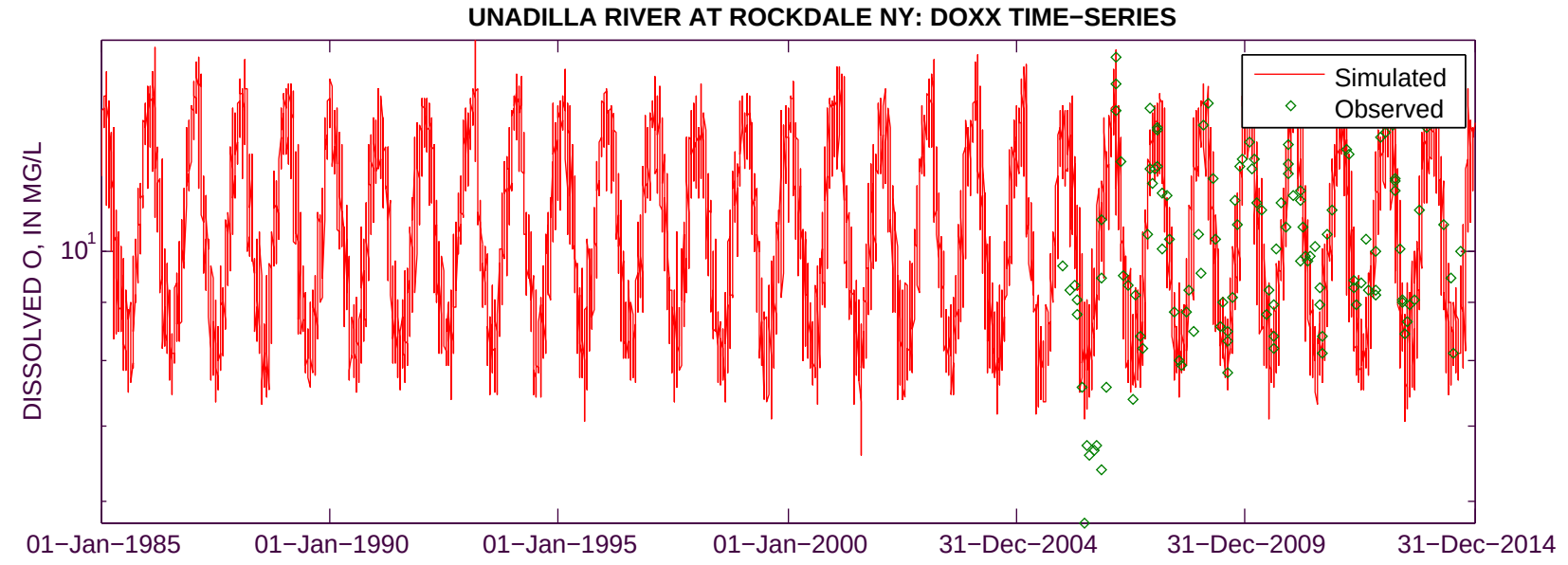
Dates: 1/1/1985 – 12/31/201

Drive: N/A | Directory: model | Observed: OBS20161101

STATISTICS

	observe	simulate
n	1918	1918
min	94 1.97313	26.321 1.4203
mean	1128.4 2.88112	1134.35 2.90578
media	778 2.89098	788.425 2.89676
max	24400 4.38739	34628 4.53943
varian	1.65336e+0 0.149406	2.19946e+ 0.1183
JB	0.001 0.5	0.001 0.001
	ra	log
%	0.52766	0.855833
err.va	667157	0.0393902
rel.std.err	0.403517	0.263646
mod.eff	0.596483	0.736354

VERSION 2.1



DATA SELECTION

scenario	file
P620171001WQ	DOXX.calib

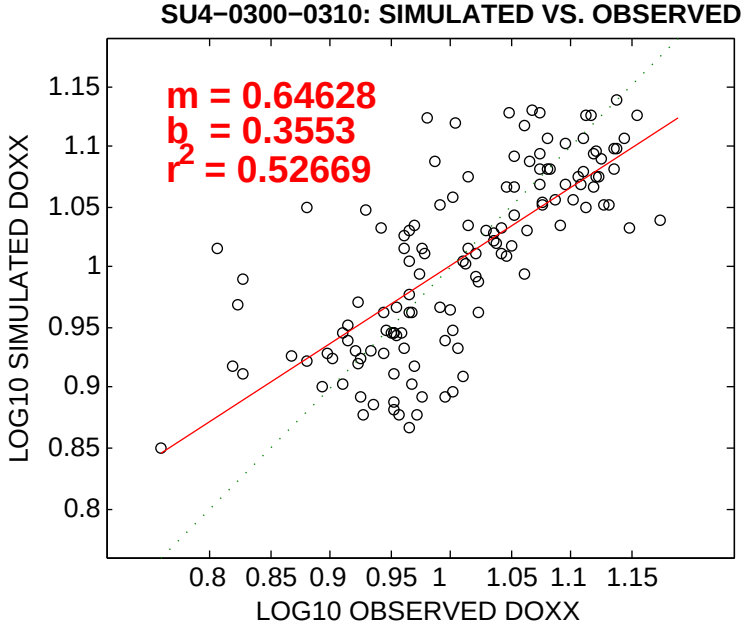
plot: DOXX - dissolved oxygen

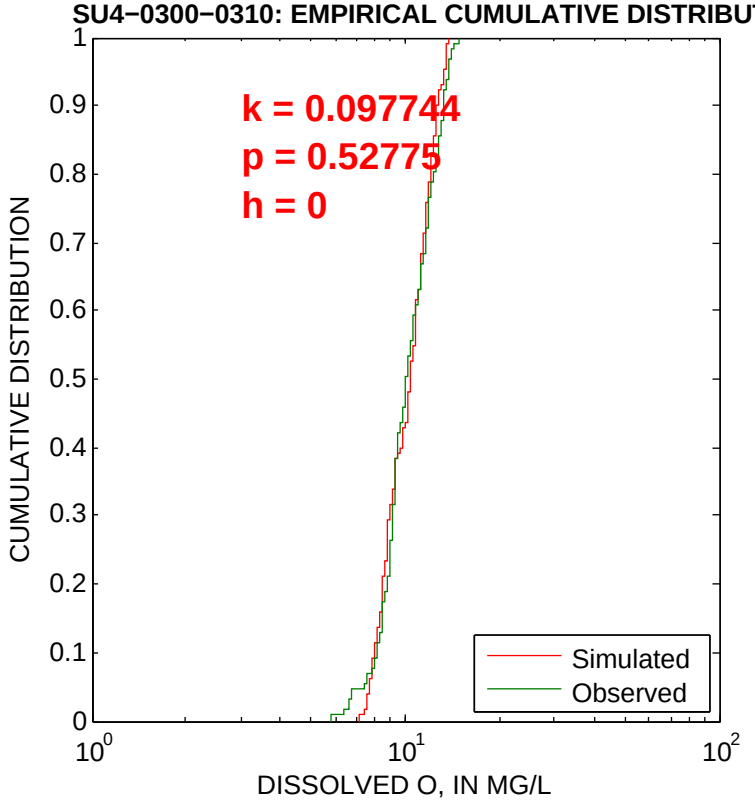
Dates: 1/1/1985 – 12/31/201

Drive	Directory	Observed
N/A	model	OBS20161101

STATISTICS

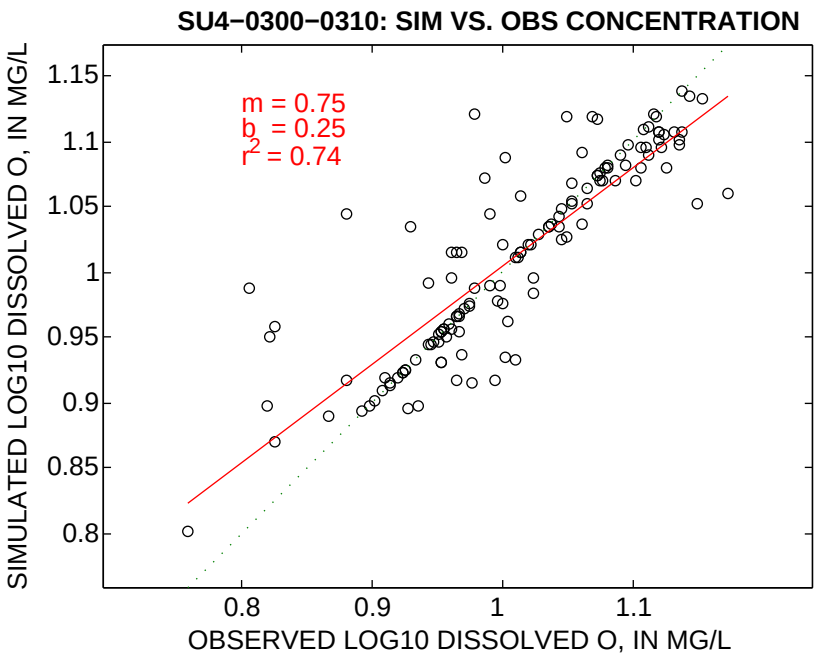
		observe	simulate
n		133	133
min		5.75	7.0894
		0.759668	0.850609
mean		10.3774	10.3089
		1.00808	1.00681
media		10.07	10.379
		1.00303	1.01616
max		14.9	13.75
		1.17319	1.1383
varian		3.89652	3.10351
		0.00714396	0.00566529
JB		0.147582	0.031981
		0.251243	0.028771
		ra	log
%		-0.660209	-0.126609
err.va		1.86171	0.00357691
rel.std.err		0.477788	0.500689
mod.eff		0.522212	0.499311

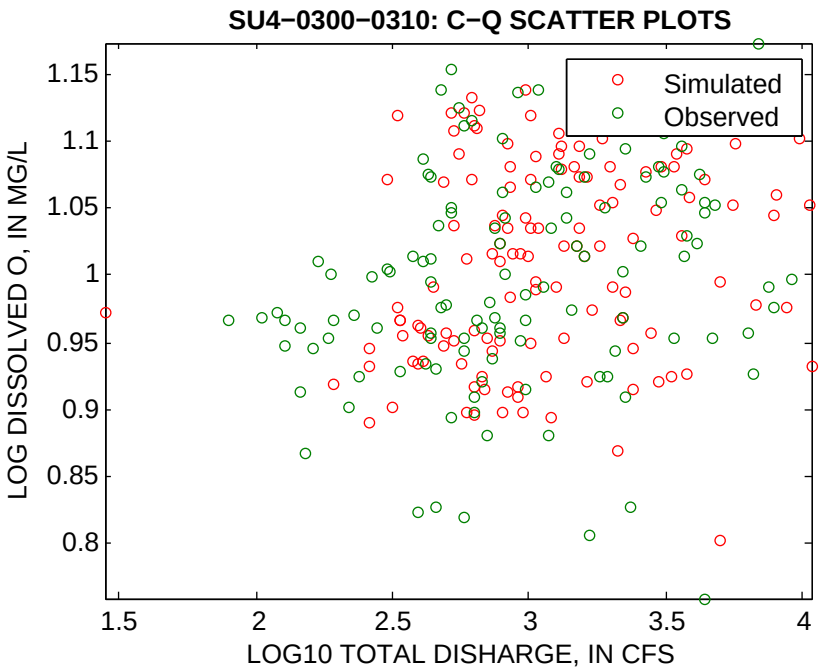


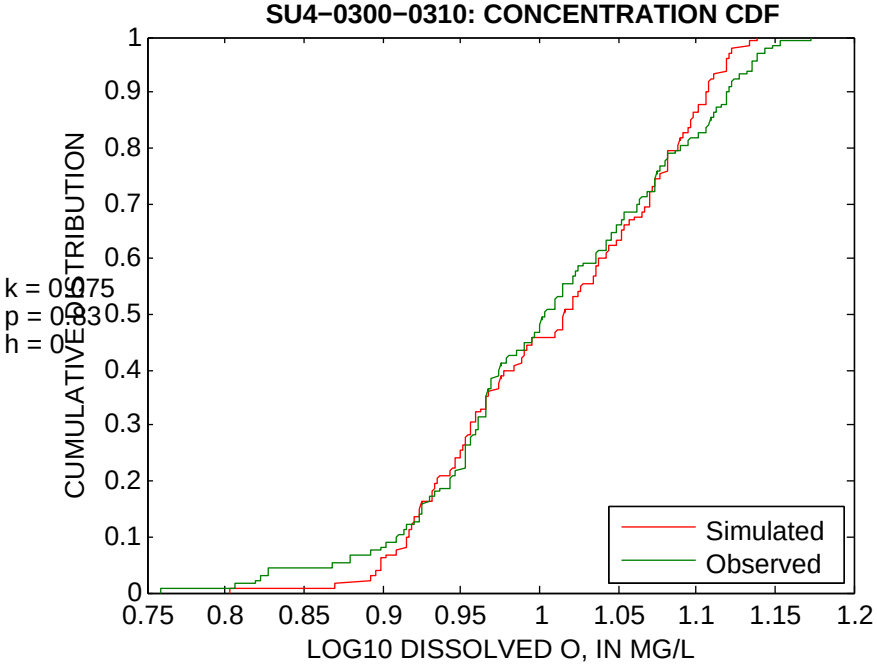


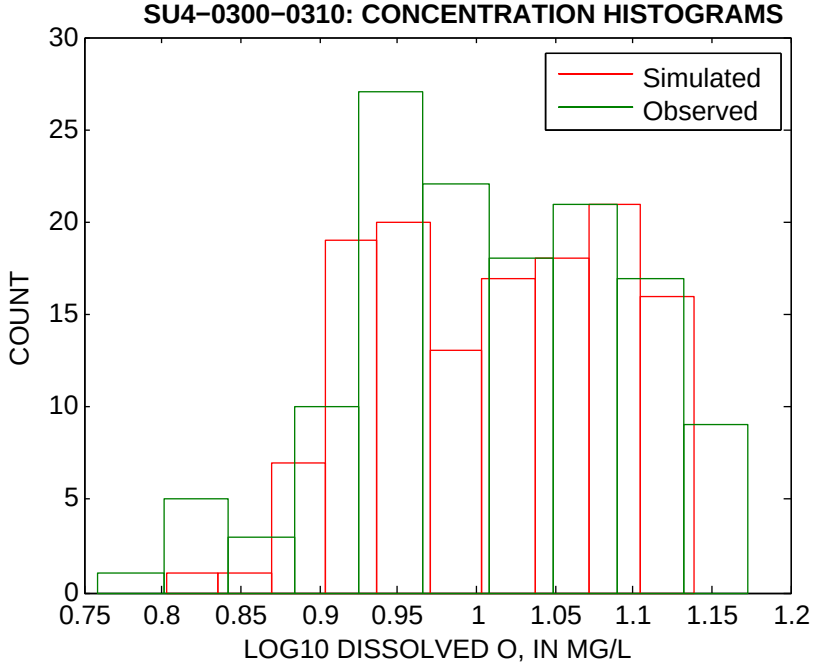
VERSION 2.1

ALL DATA
LOG10

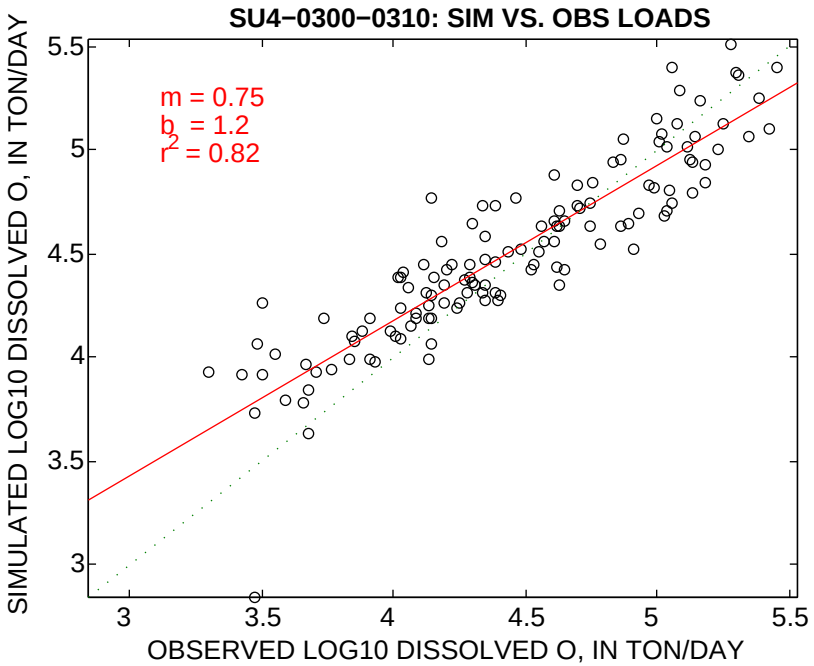


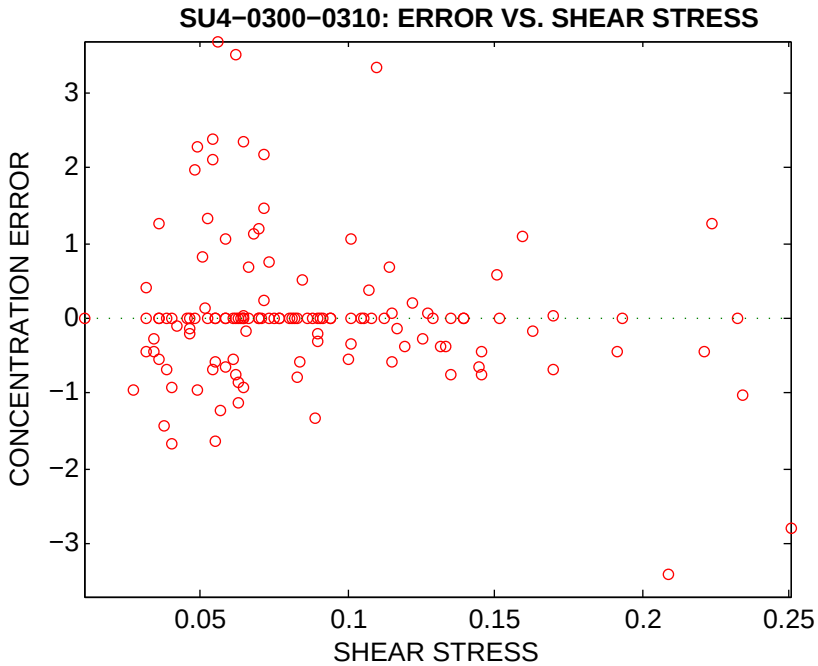


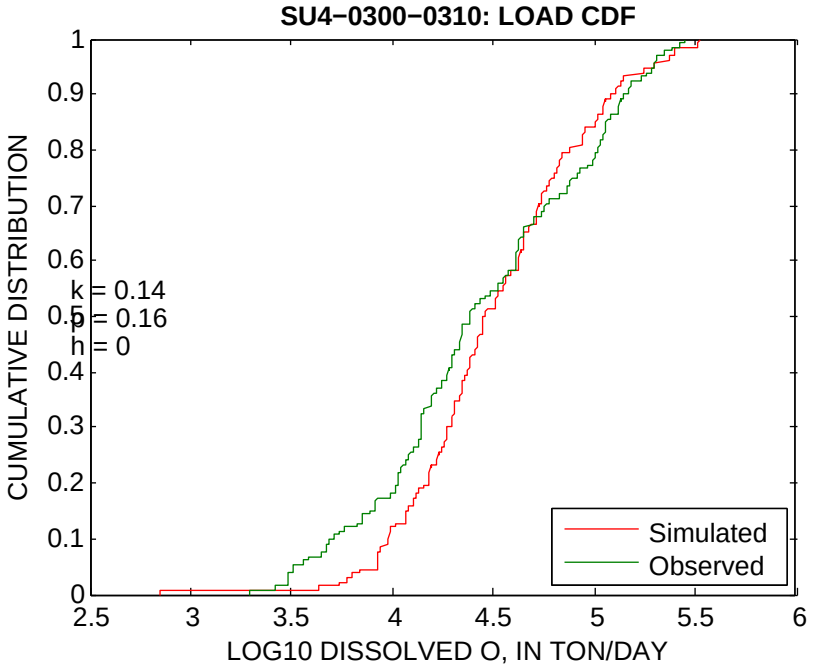


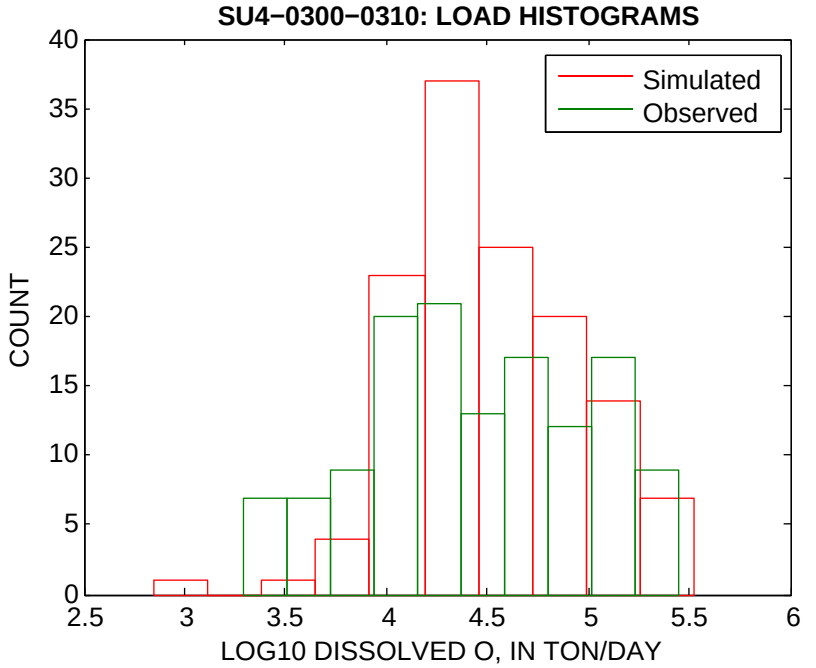


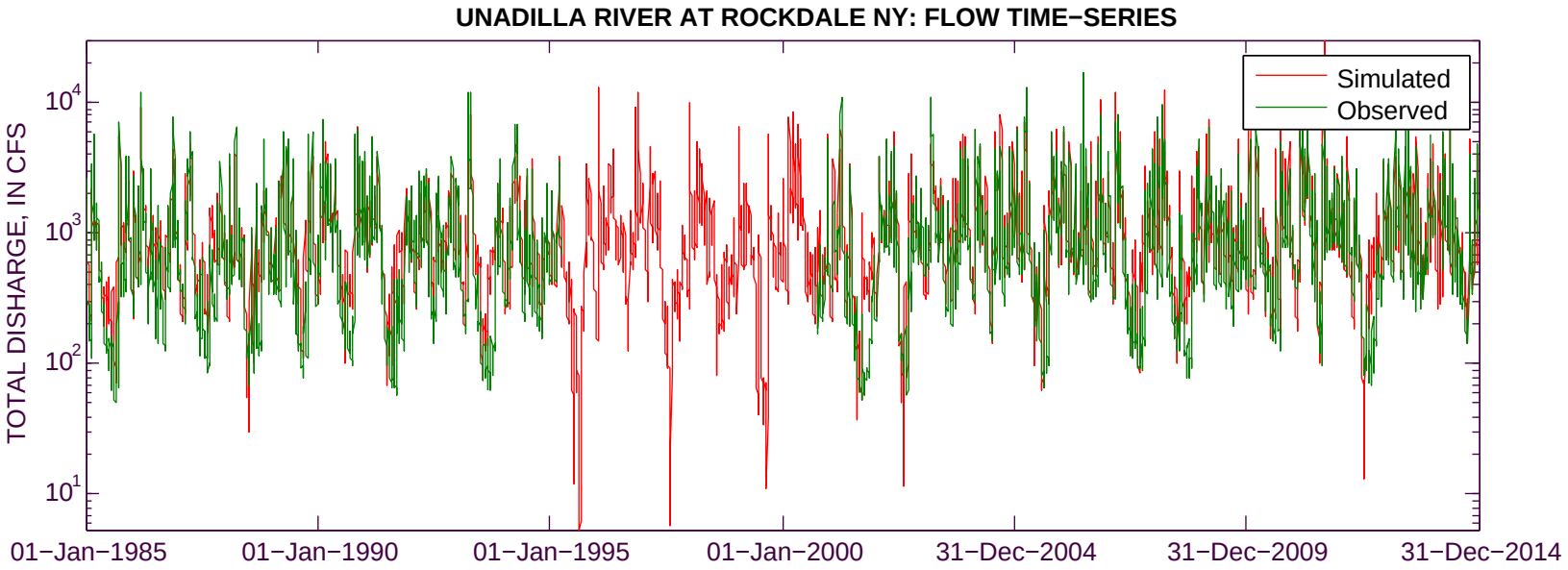
LOAD DATA
LOG10

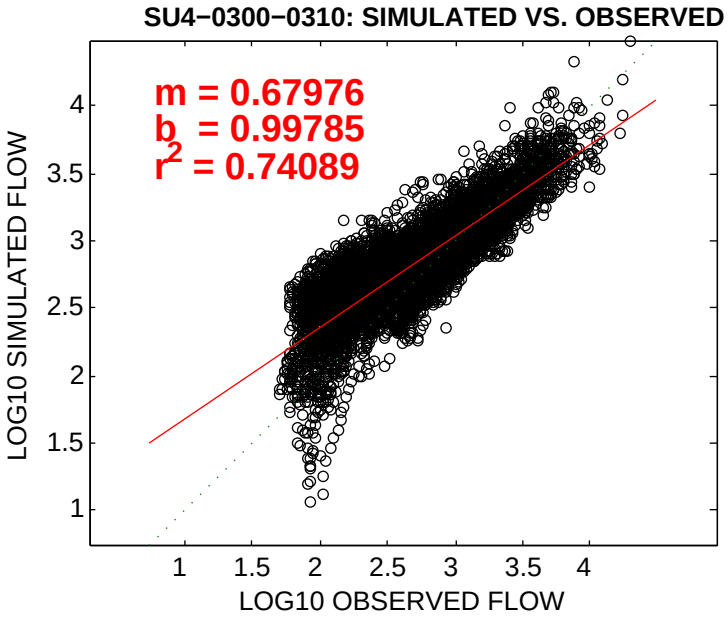


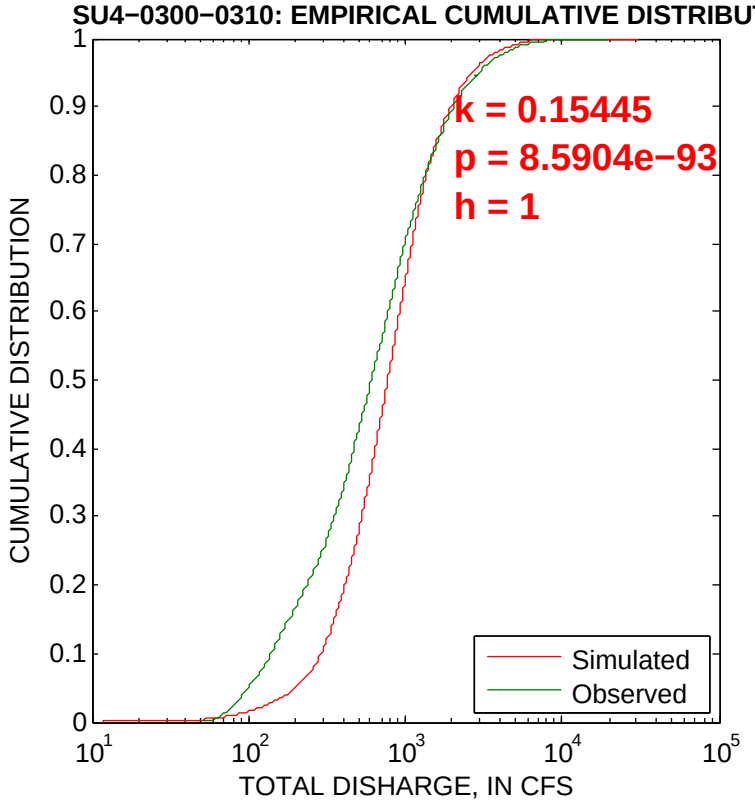












DATA SELECTION

scenario: P620171001WQ | file: FLOW.calib

plot: FLOW - total discharge

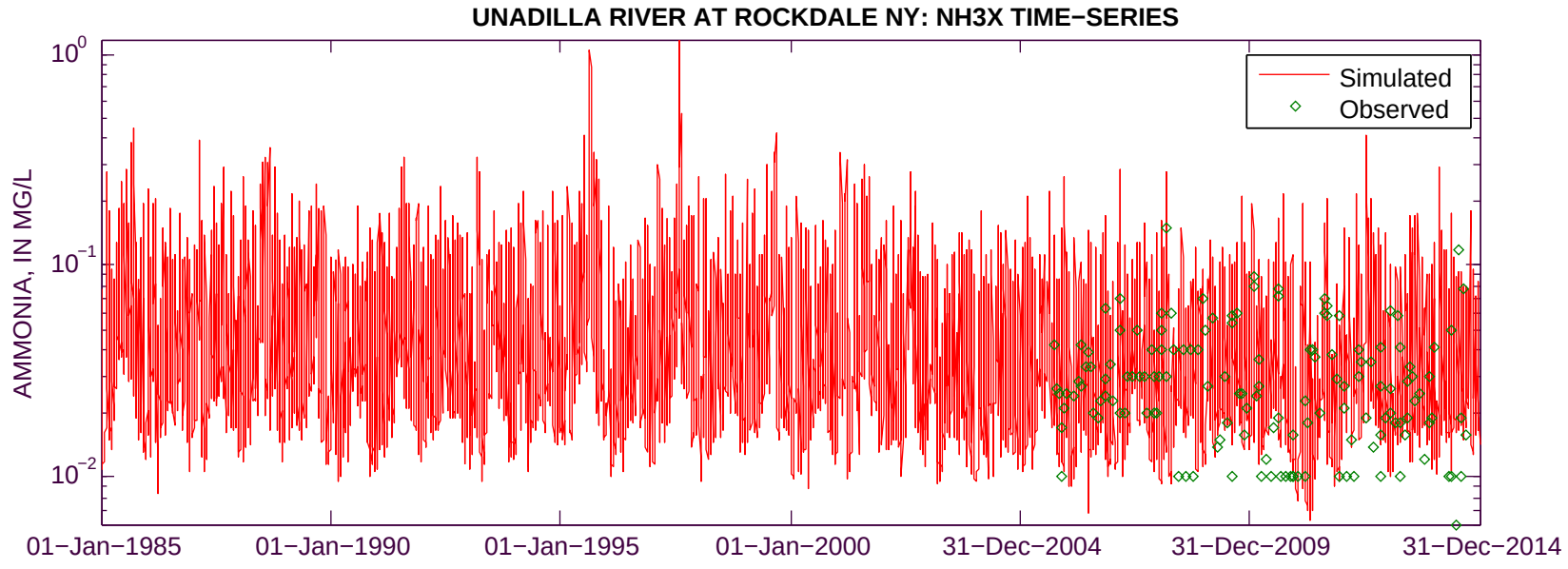
Dates: 1/1/1985 – 12/31/201

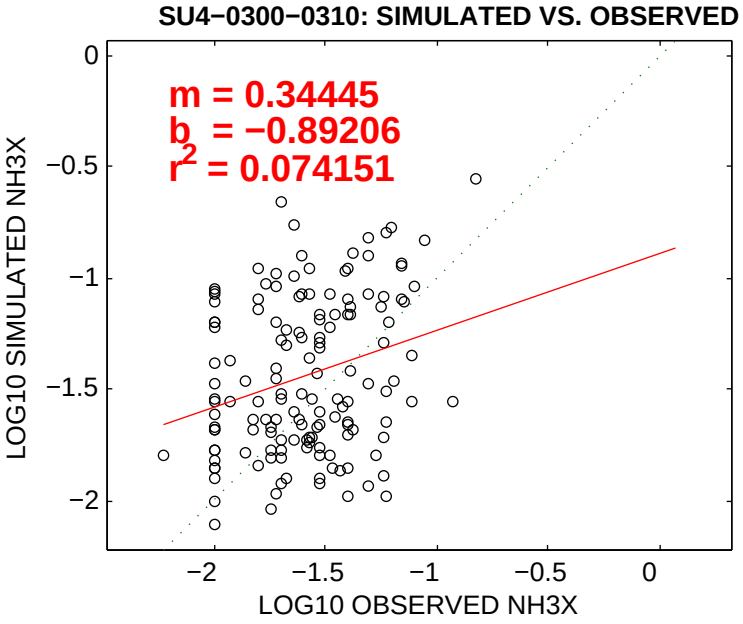
Drive: N/A | Directory: model | Observed: OBS20161101

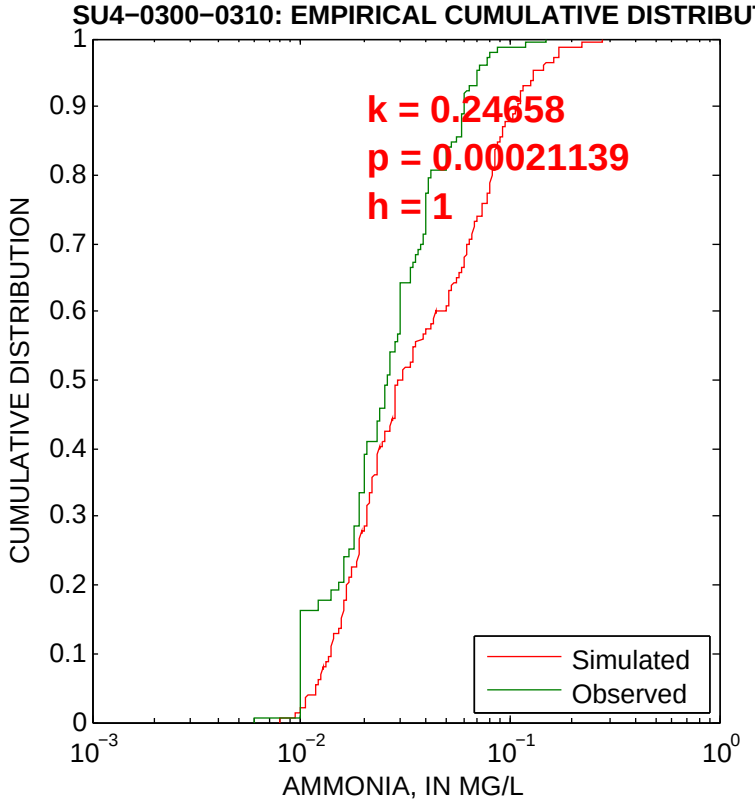
STATISTICS

		observe	simulate
n		8883	8883
min		50	11.81
		1.69897	1.07225
mean		952.595	1025.03
		2.76359	2.87642
media		608	776.37
		2.7839	2.89007
max		19700	30544
		4.29447	4.48493
varian		1.38283e+0	1.0634e+0
		0.192129	0.119824
JB		0.001	0.001
		0.001	0.001
		ra	log
%		7.60428	4.08245
err.va		421746	0.0634817
rel.std.err		0.304988	0.330412
mod.eff		0.695012	0.669588

VERSION 2.1







DATA SELECTION

scenario	file
P620171001WQ	NH3X.calib

plot: NH3X - ammonia

Dates: 1/1/1985 – 12/31/201

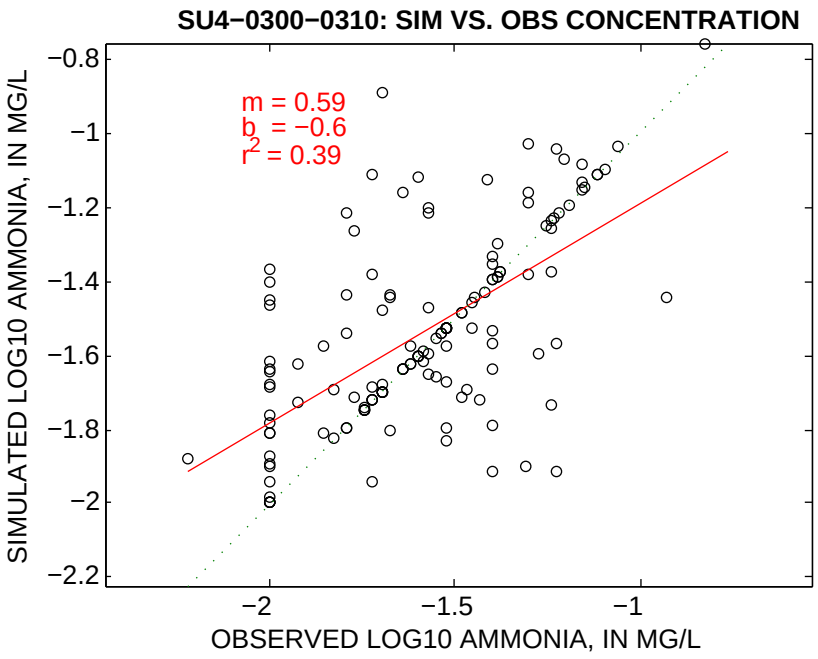
Drive	Directory	Observed
N/A	model	OBS20161101

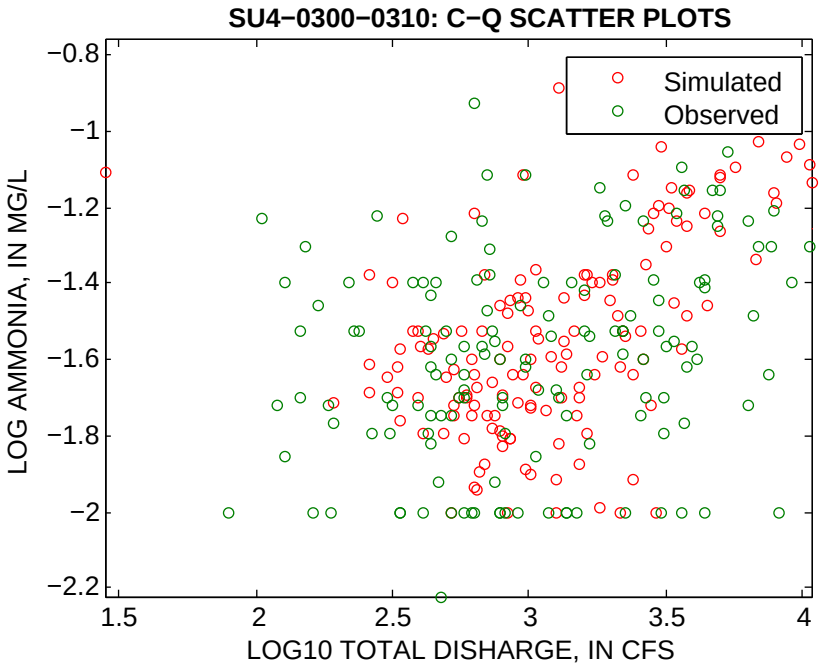
STATISTICS

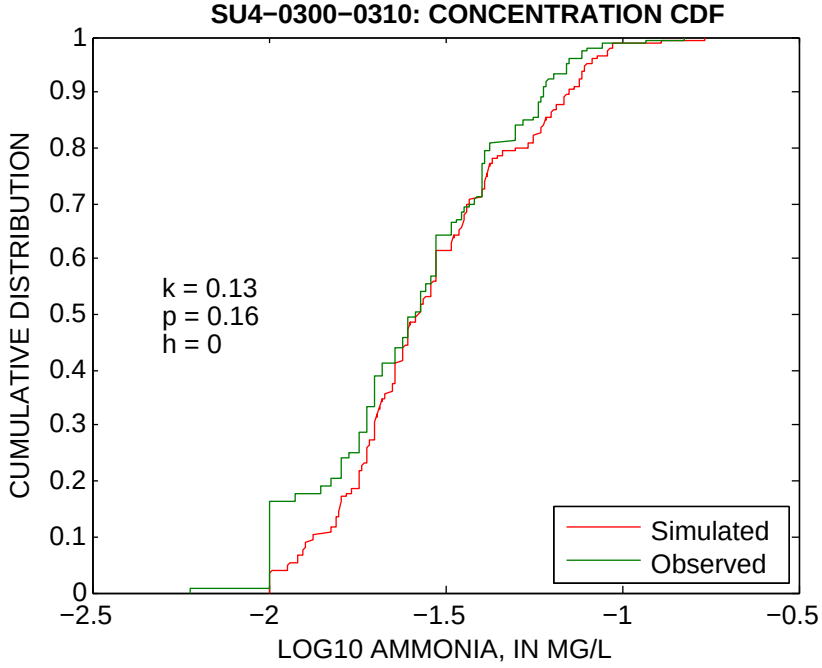
	n	146	146
		observe	simulate
min		0.006	0.0079554
		-2.22185	-2.09934
mean		0.0315411	0.0505275
		-1.58886	-1.43934
media		0.026	0.0295675
		-1.58503	-1.52937
max		0.15	0.27838
		-0.823909	-0.555362
varian		0.00047757	0.0020068
		0.0762596	0.12202
JB		0.001	0.001
		0.311817	0.027892
		ra	log
%		60.1959	-9.41015
err.va		0.0020887	0.168253
rel.std.err		4.37357	2.20631
mod.eff		-3.37357	-1.20631

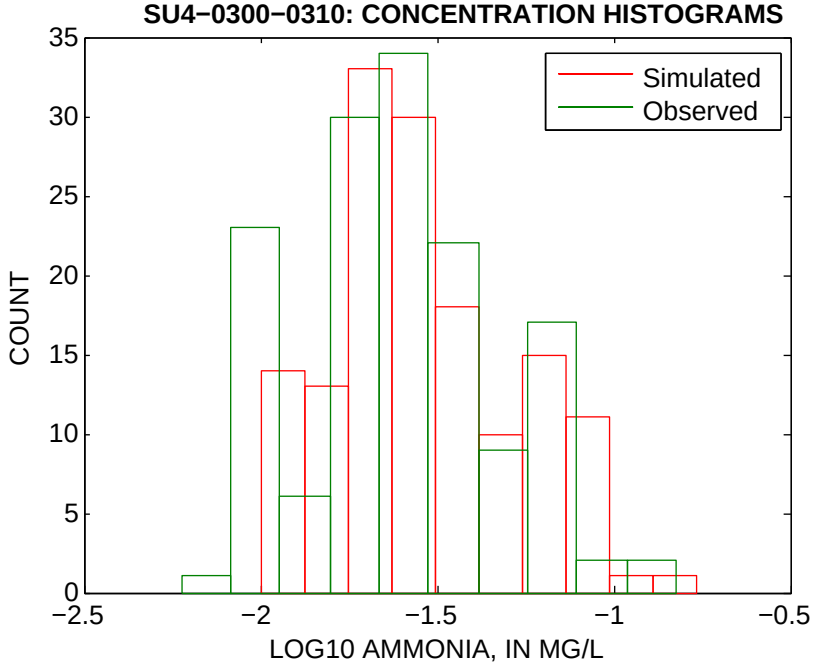
VERSION 2.1

ALL DATA
LOG10

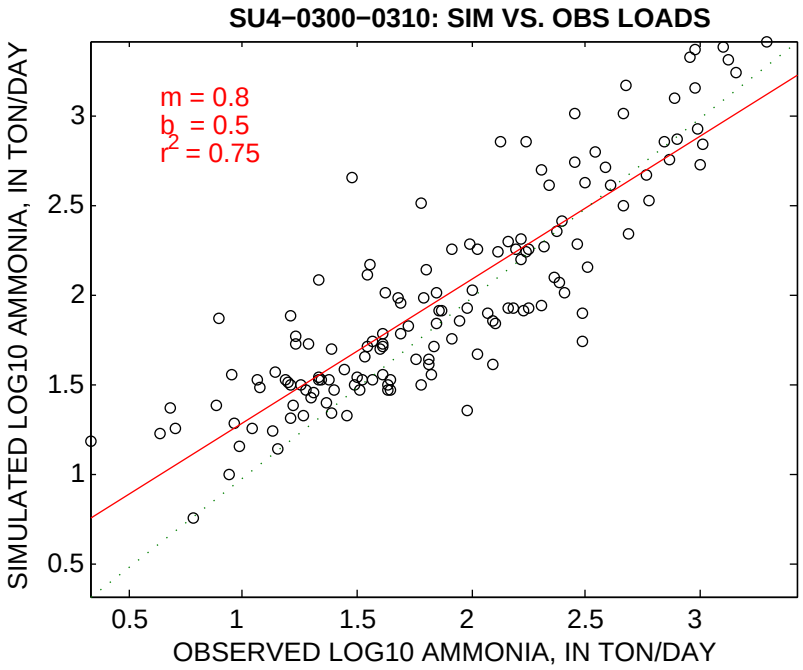


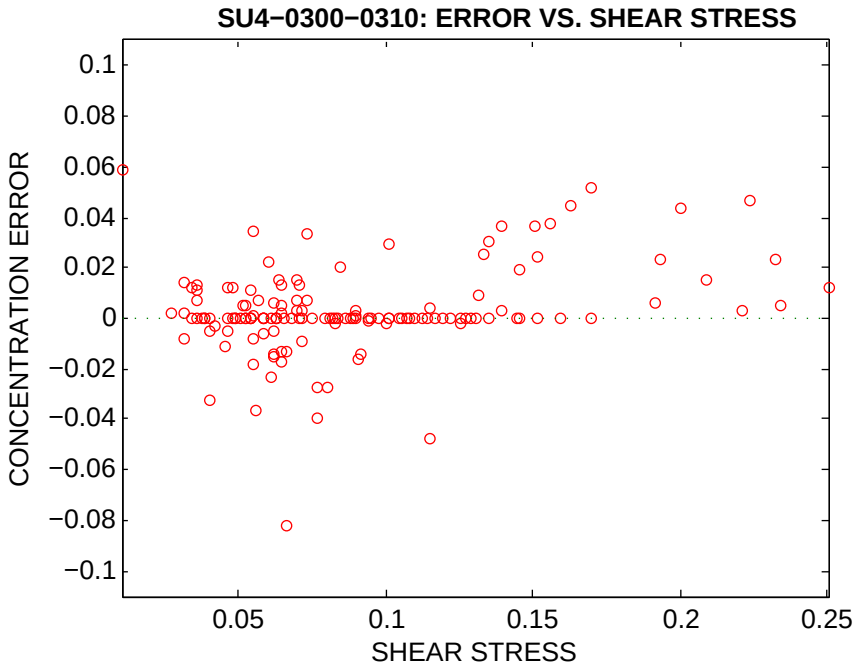


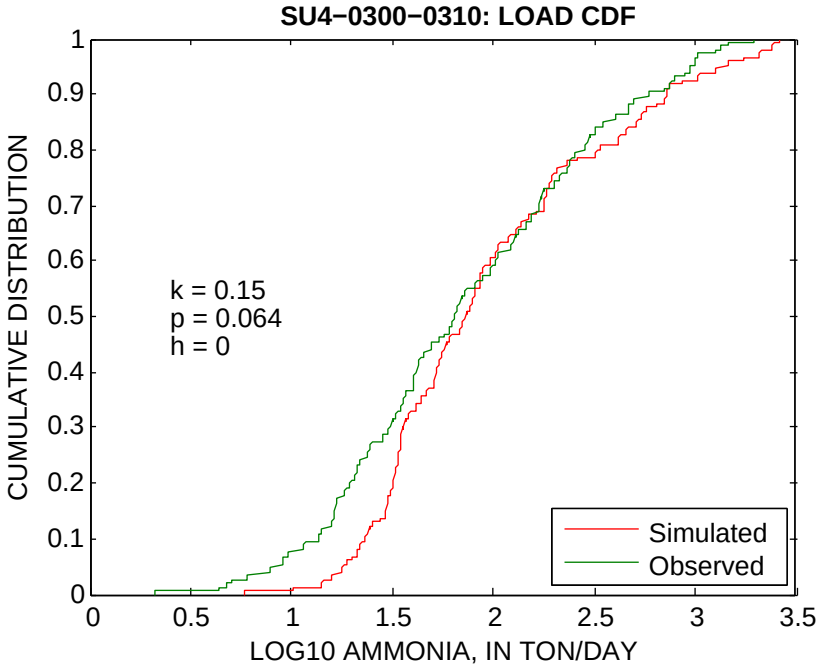


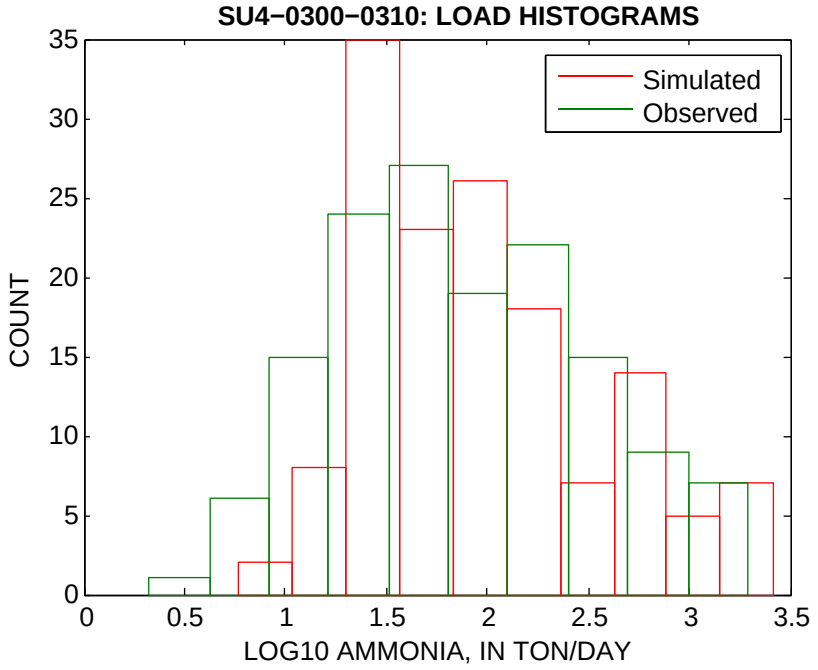


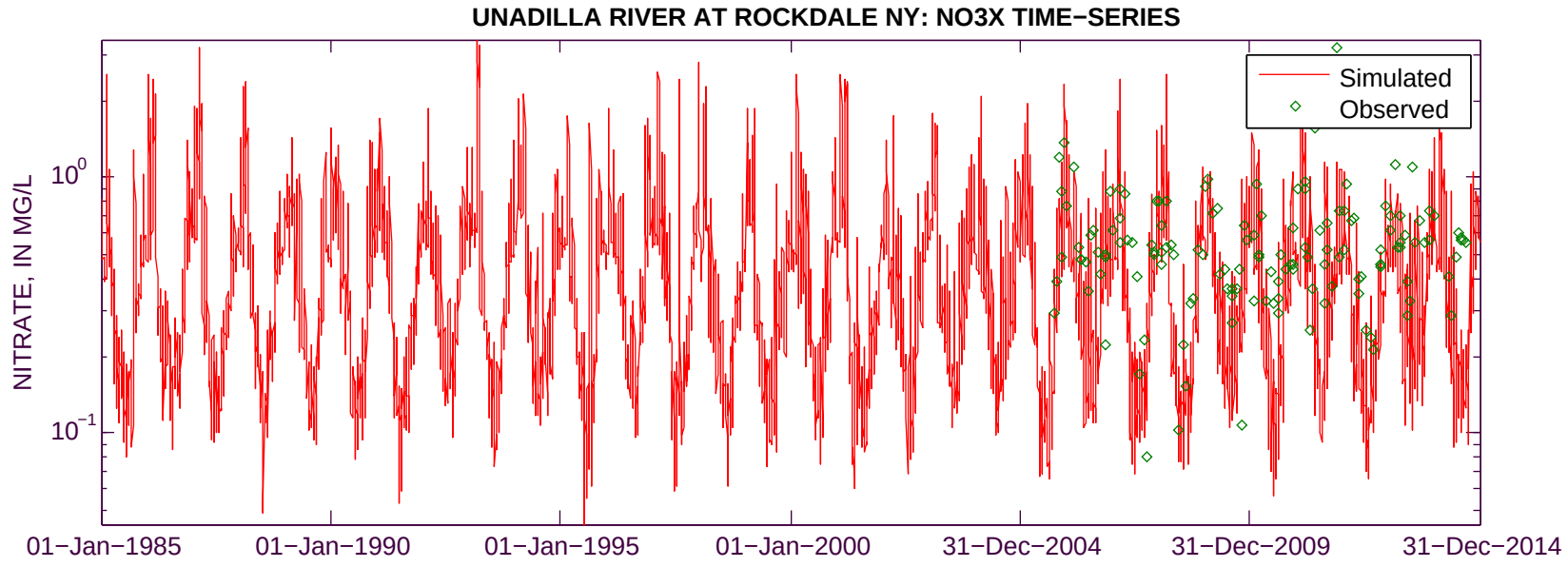
LOAD DATA
LOG10

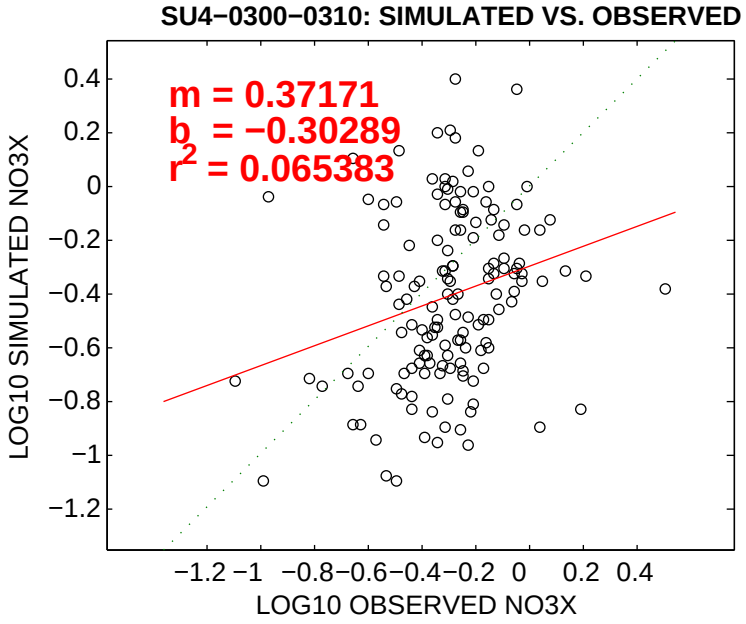


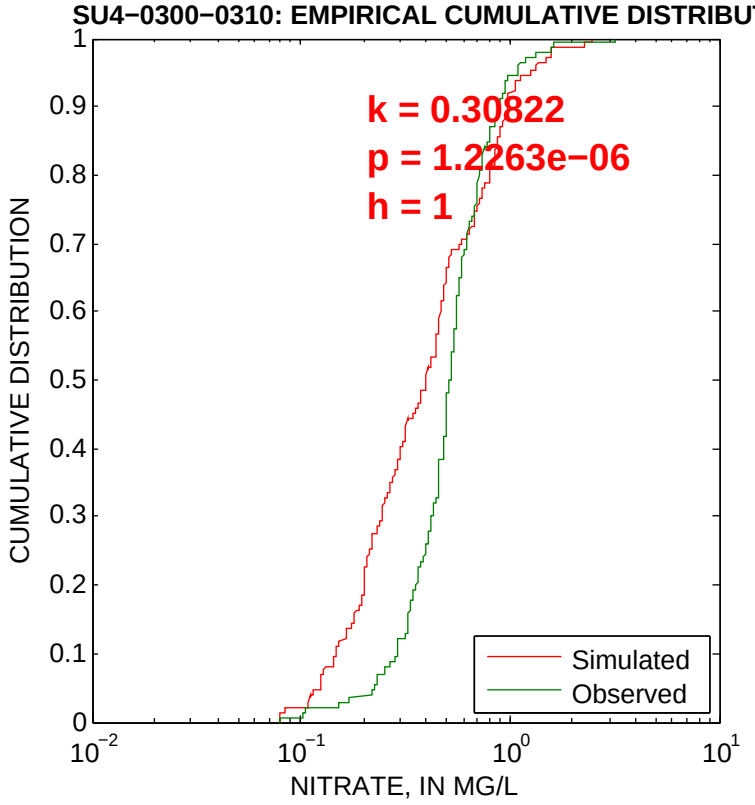












DATA SELECTION

scenario	file
P620171001WQ	NO3X.calib

plot: NO3X - nitrate

Dates: 1/1/1985 – 12/31/201

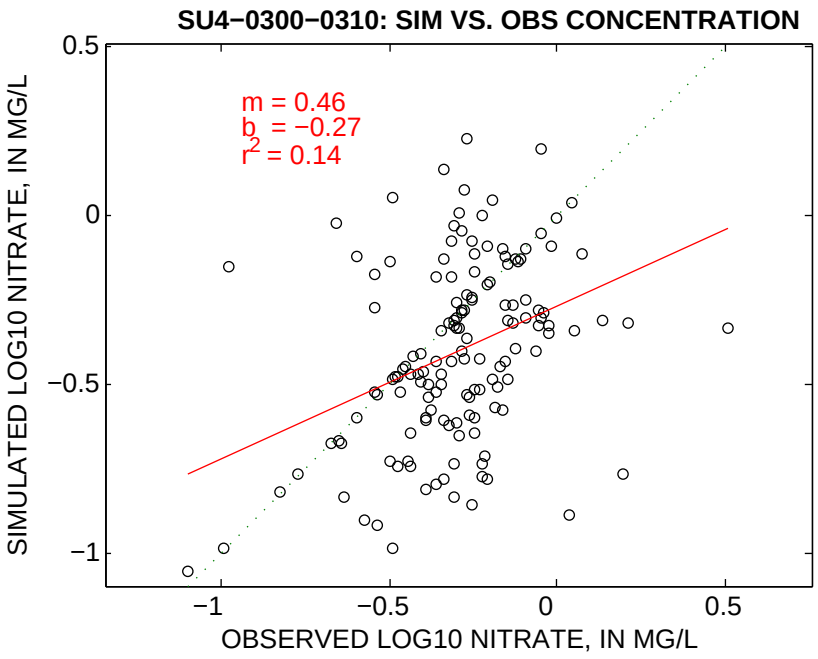
Drive	Directory	Observed
N/A	model	OBS20161101

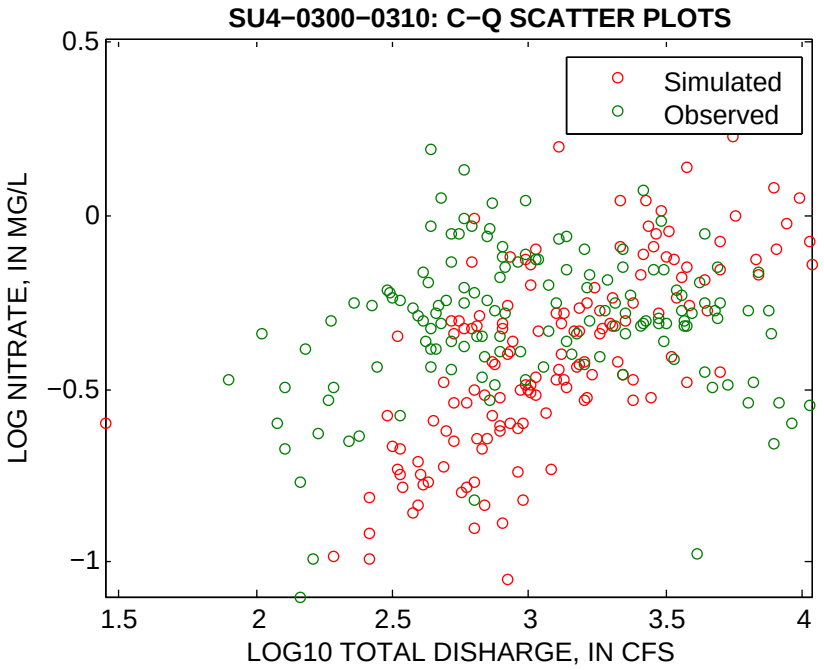
STATISTICS

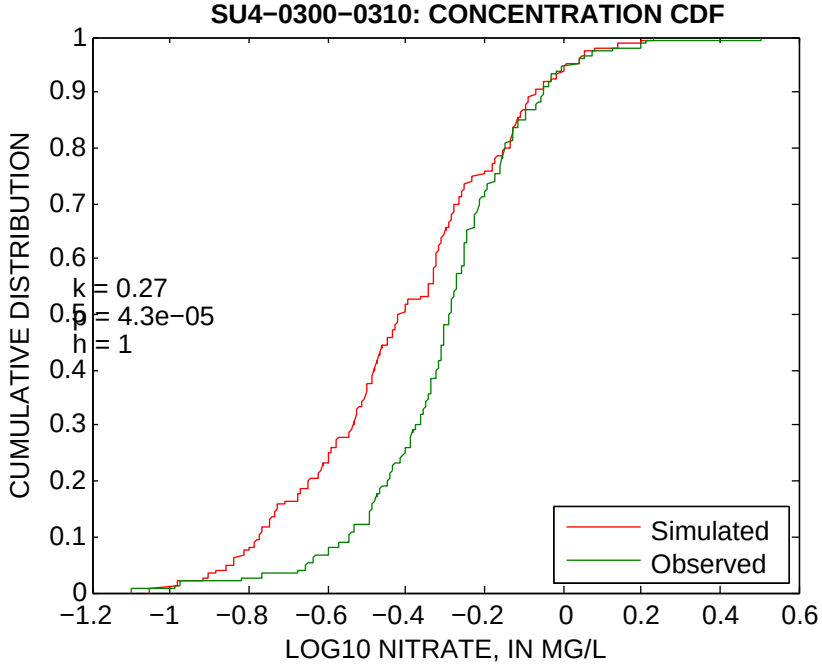
	n	146	146
		observe	simulate
min		0.08	0.079839
		-1.09691	-1.09778
mean		0.571644	0.504232
		-0.29751	-0.413482
media		0.5165	0.396785
		-0.28694	-0.401447
max		3.21	2.5065
		0.506505	0.399068
varian		0.113593	0.161502
		0.048282	0.102033
JB		0.001	0.001
		0.001	0.247453
		ra	log
%		-11.7926	38.9805
err.va		0.256898	0.127963
rel.std.err		2.26156	2.65032
mod.eff		-1.26156	-1.65032

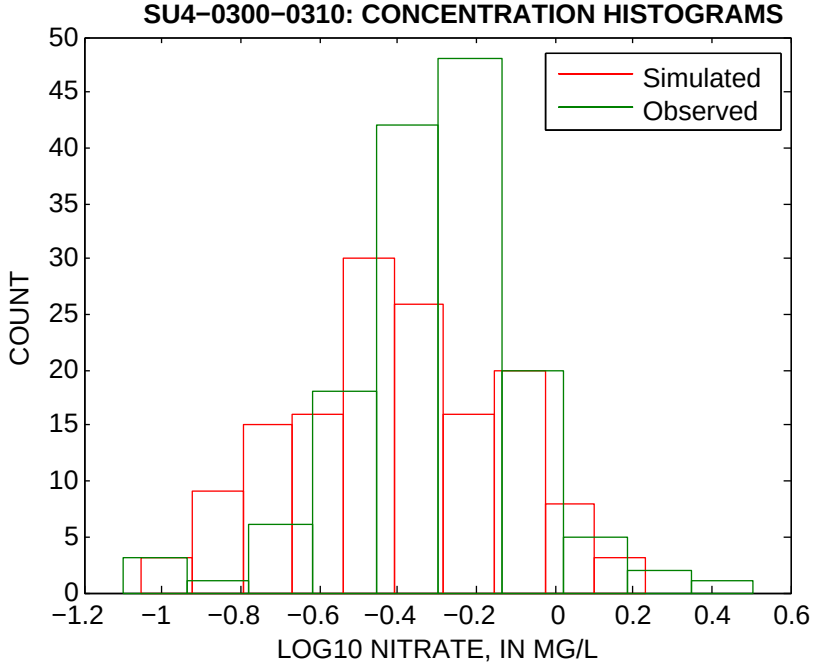
VERSION 2.1

ALL DATA
LOG10

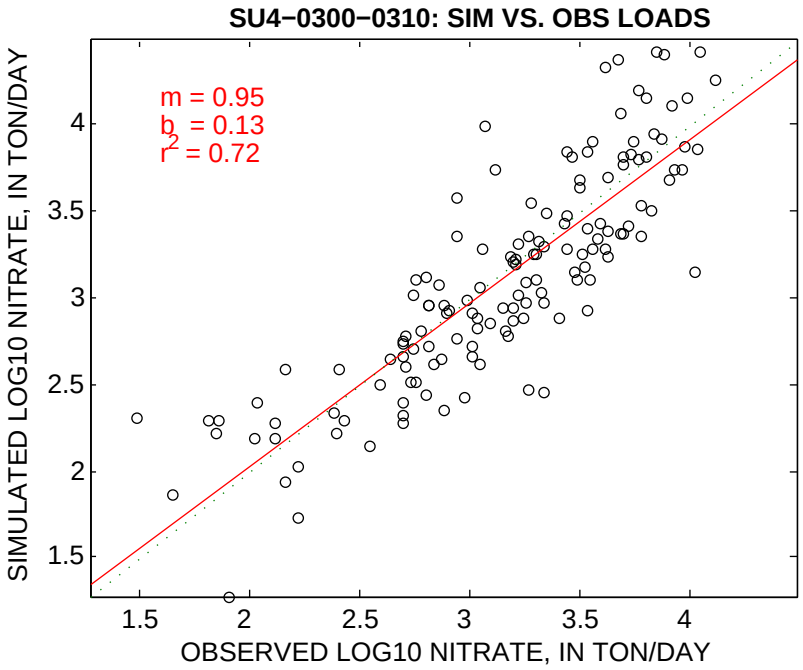


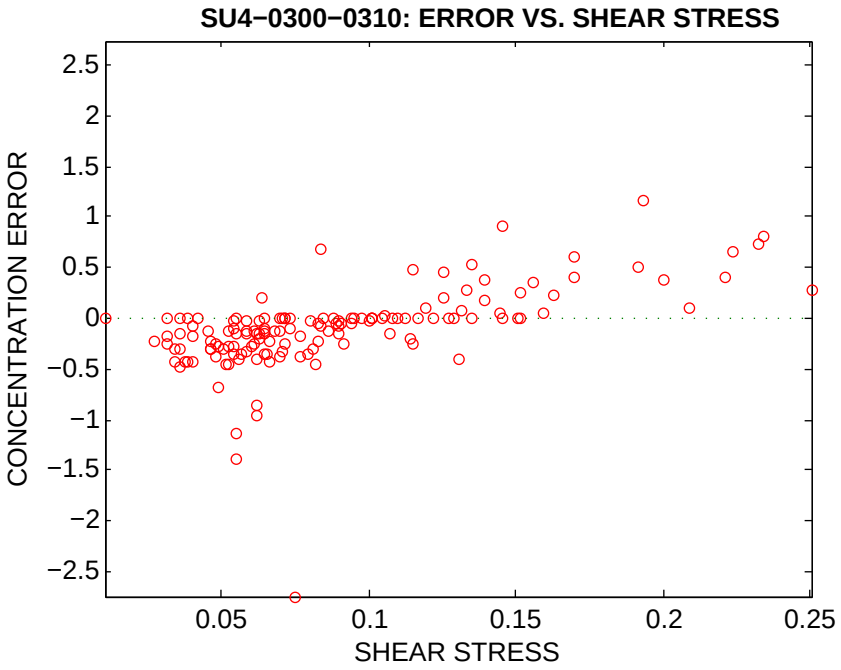


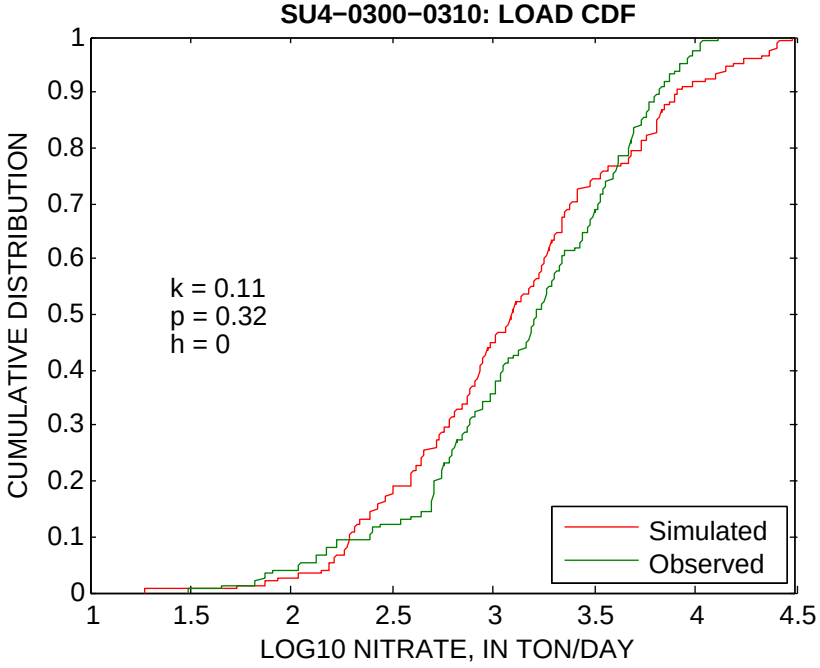


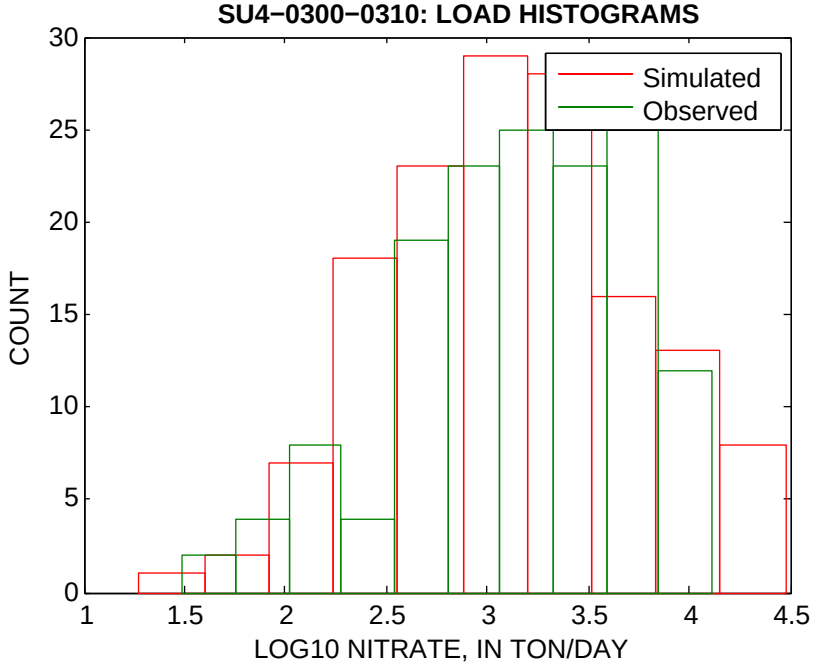


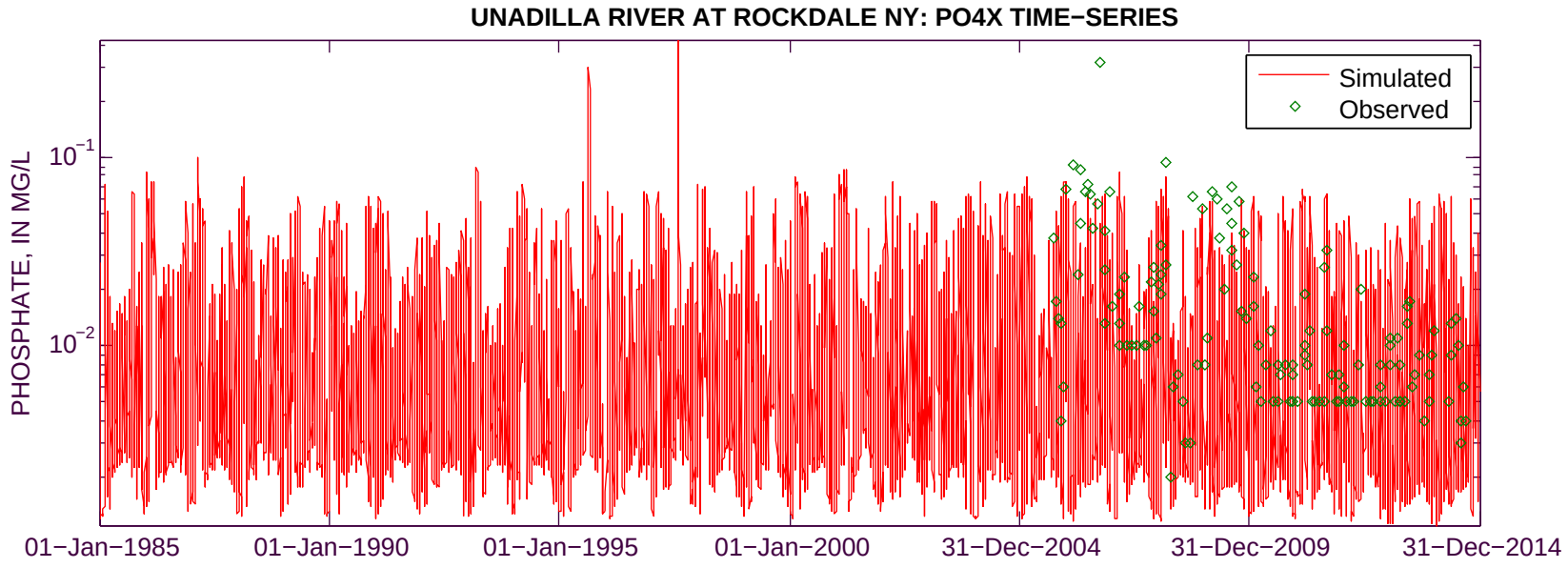
LOAD DATA
LOG10

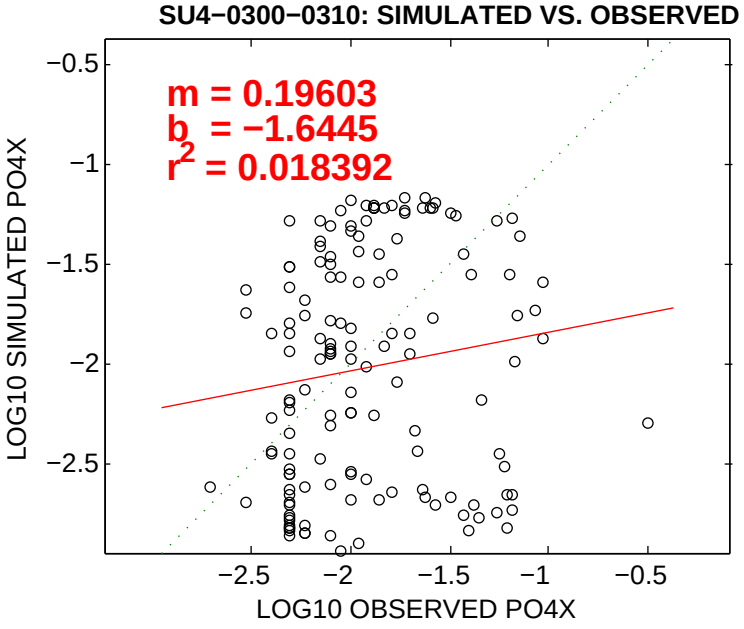


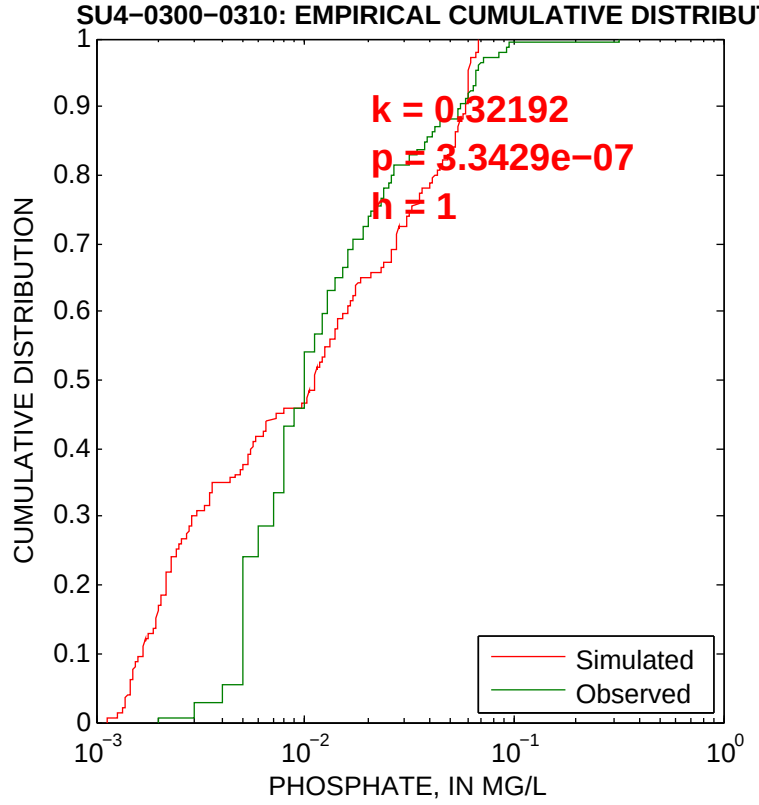












DATA SELECTION

scenario	file
P620171001WQ	PO4X.calib

plot: PO4X - phosphate

Dates: 1/1/1985 – 12/31/201

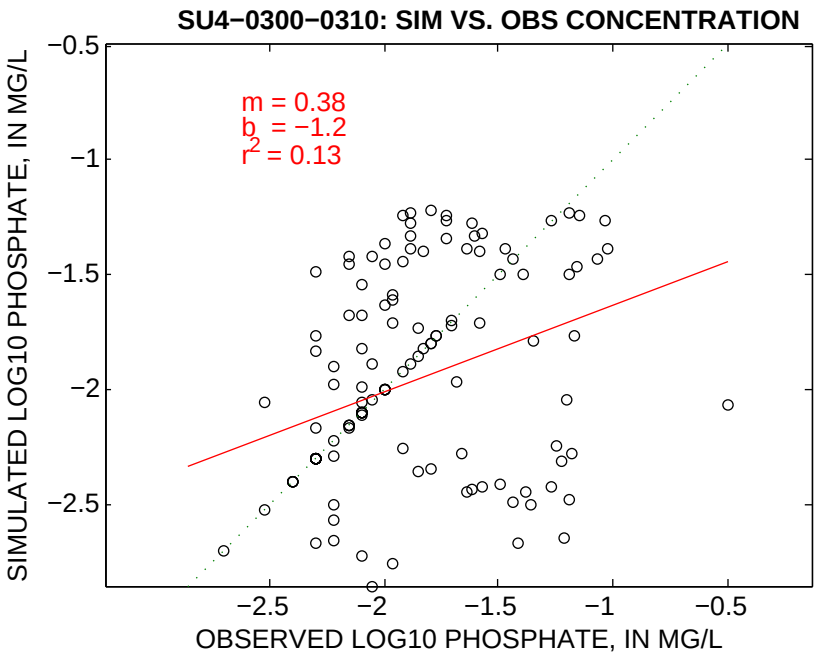
Drive	Directory	Observed
N/A	model	OBS20161101

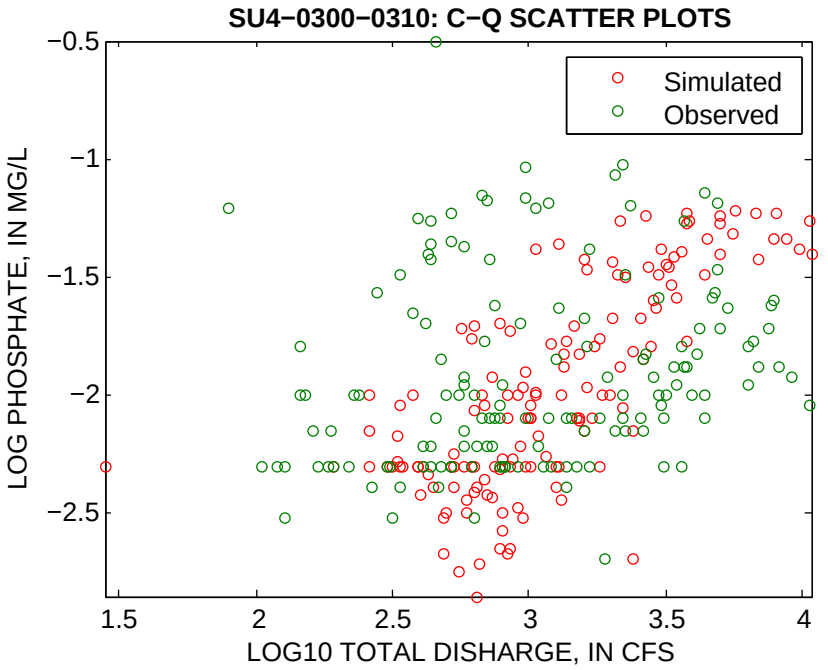
STATISTICS

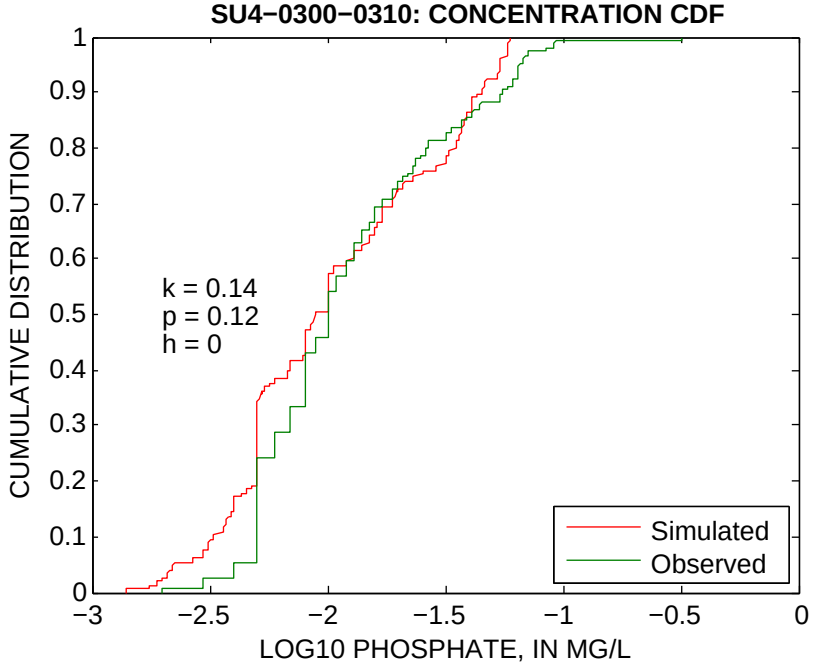
	n	146	146
		observe	simulate
min		0.002	0.0011483
		-2.69897	-2.93994
mean		0.0205479	0.0199888
		-1.90993	-2.01892
media		0.01	0.011175
		-2	-1.95176
max		0.317	0.067994
		-0.498941	-1.16753
varian		0.00101135	0.0004502
		0.159007	0.33224
JB		0.001	0.001746
		0.005815	0.009116
		ra	log
%		-2.7211	5.70682
err.va		0.00147564	0.440868
rel.std.err		1.45908	2.77263
mod.eff		-0.459076	-1.77263

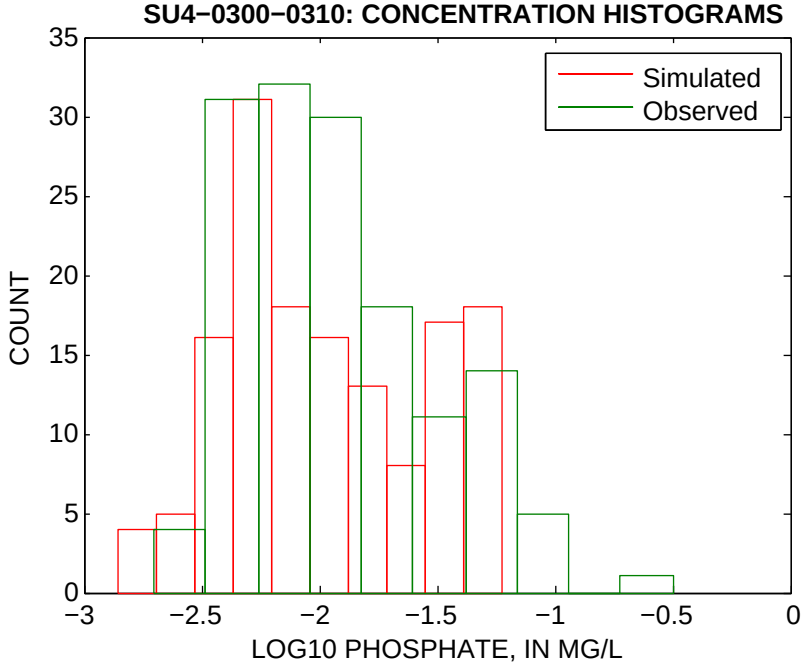
VERSION 2.1

ALL DATA
LOG10

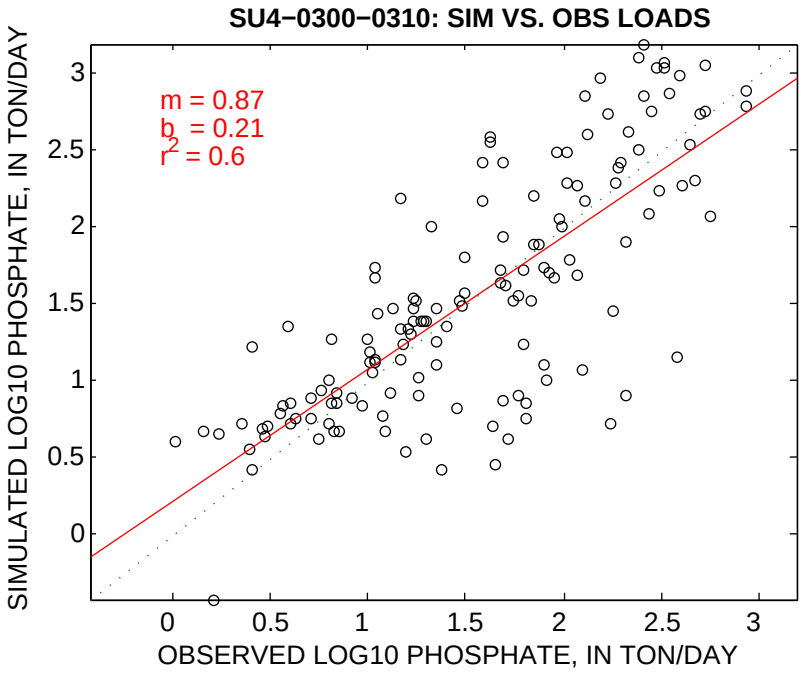


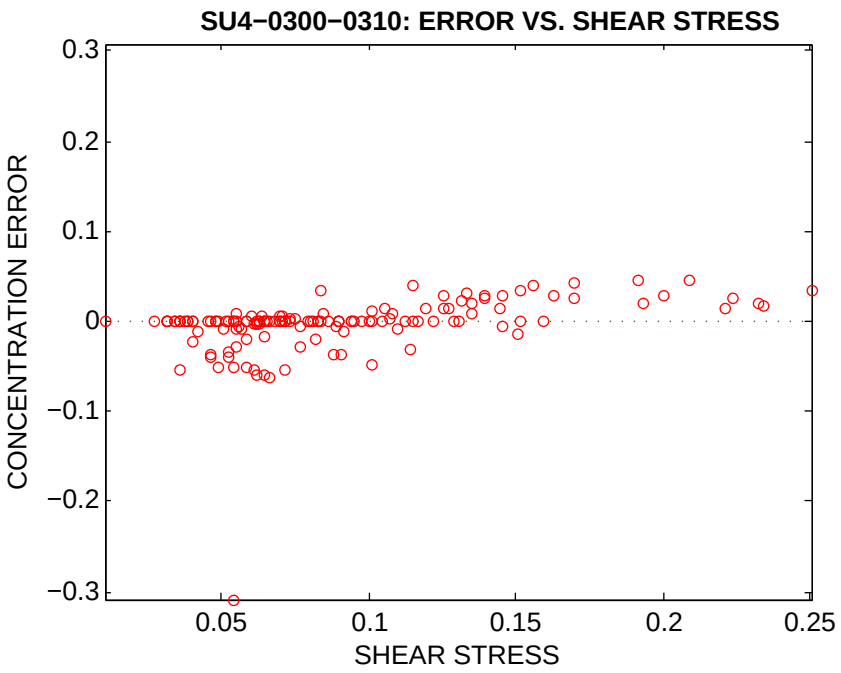


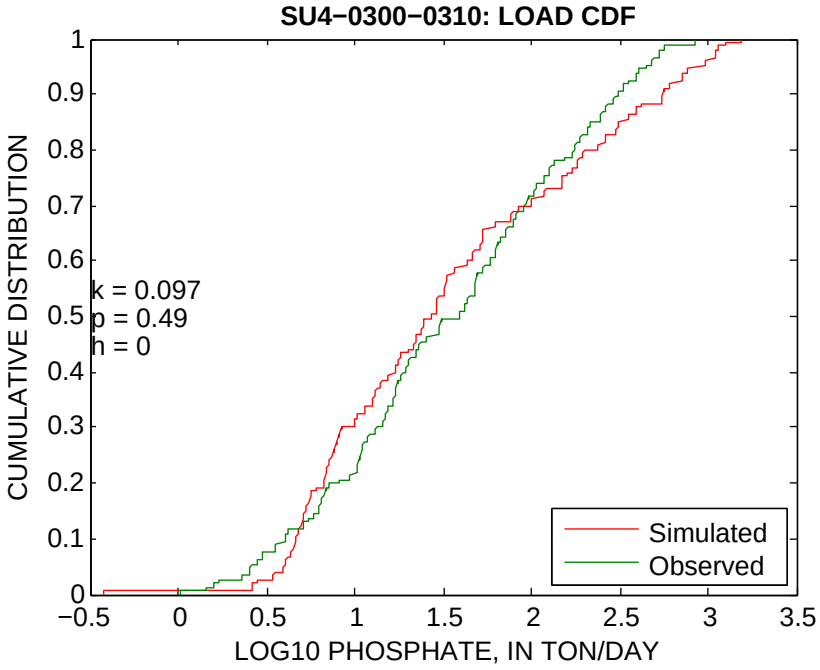


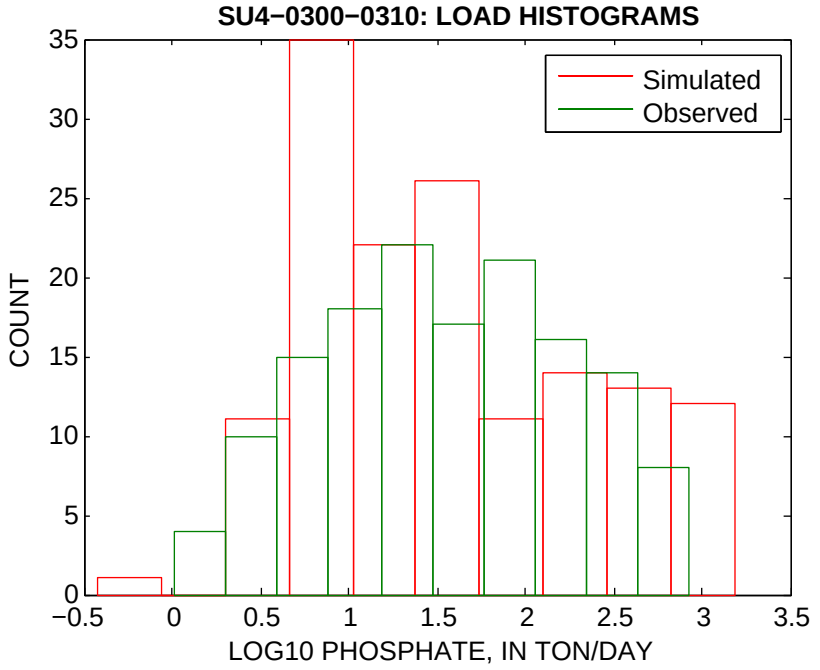


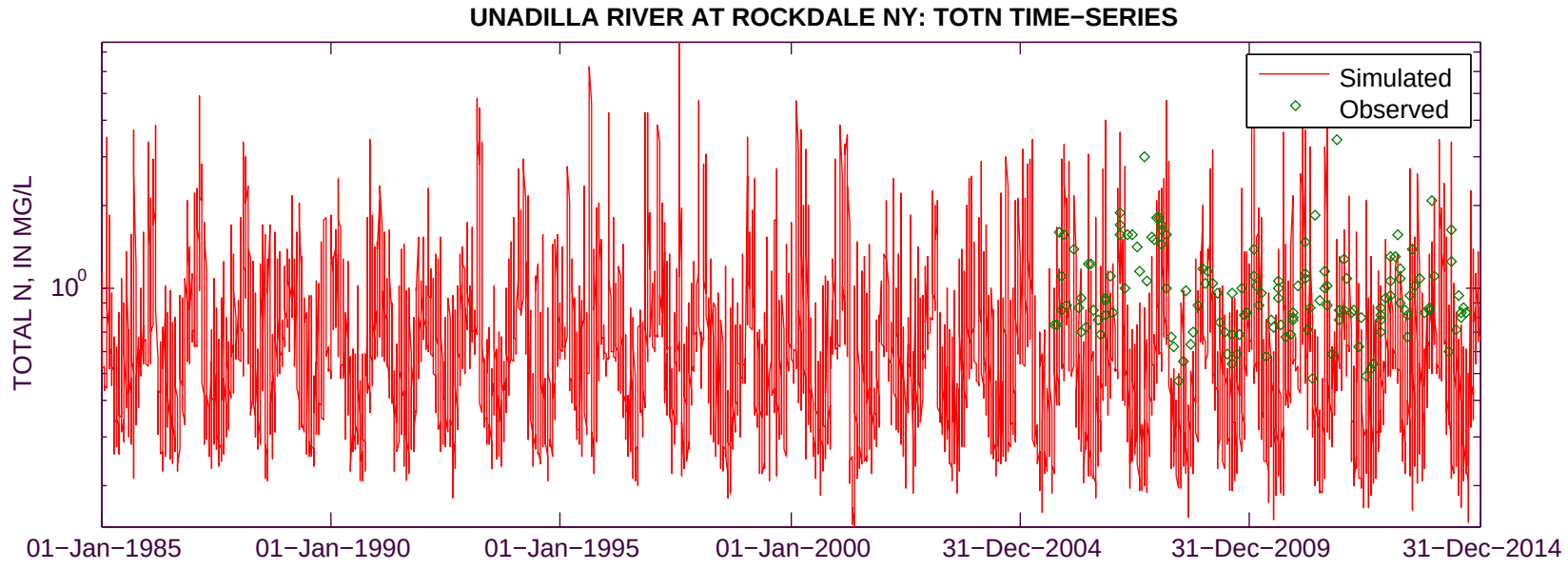
LOAD DATA
LOG10

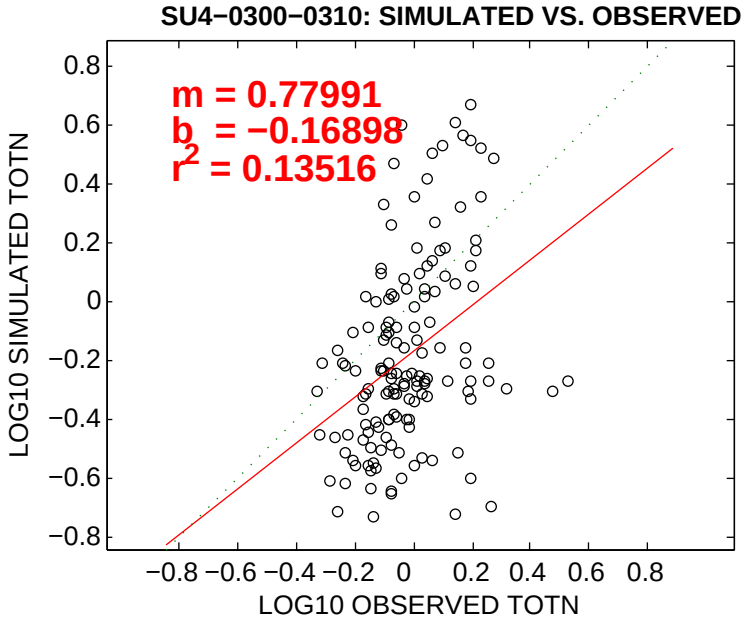


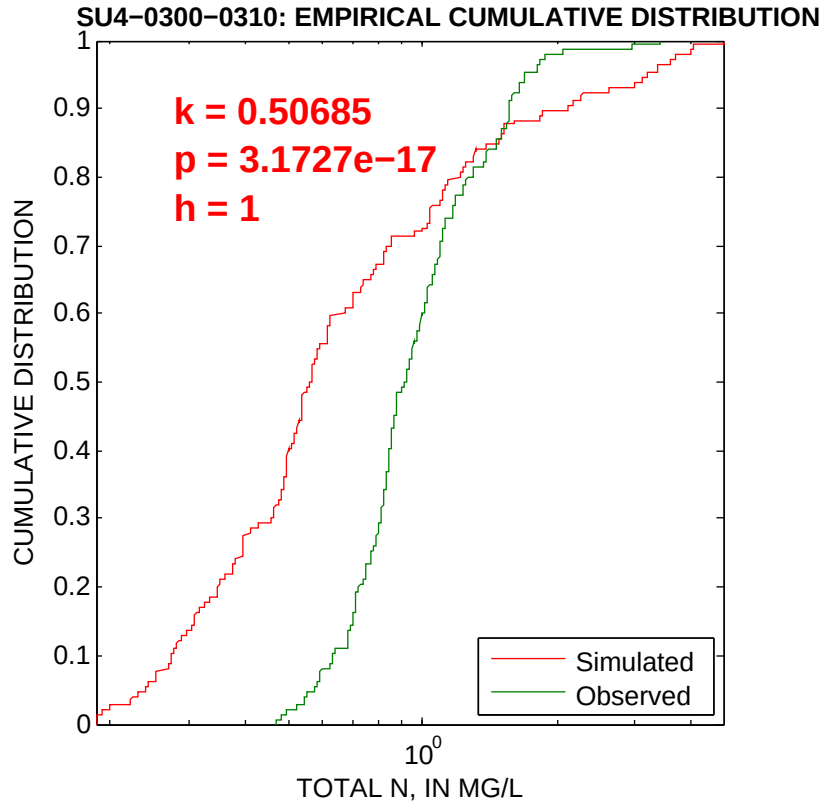












DATA SELECTION

scenario	file
P620171001WQ	TOTN.calib

plot: TOTN - total nitrogen

Dates: 1/1/1985 – 12/31/201

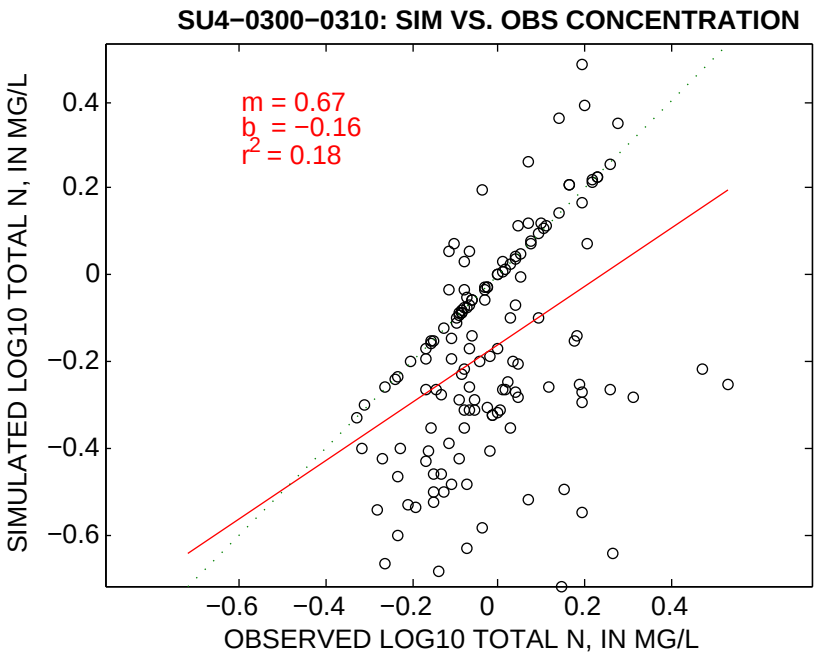
Drive	Directory	Observed
N/A	model	OBS20161101

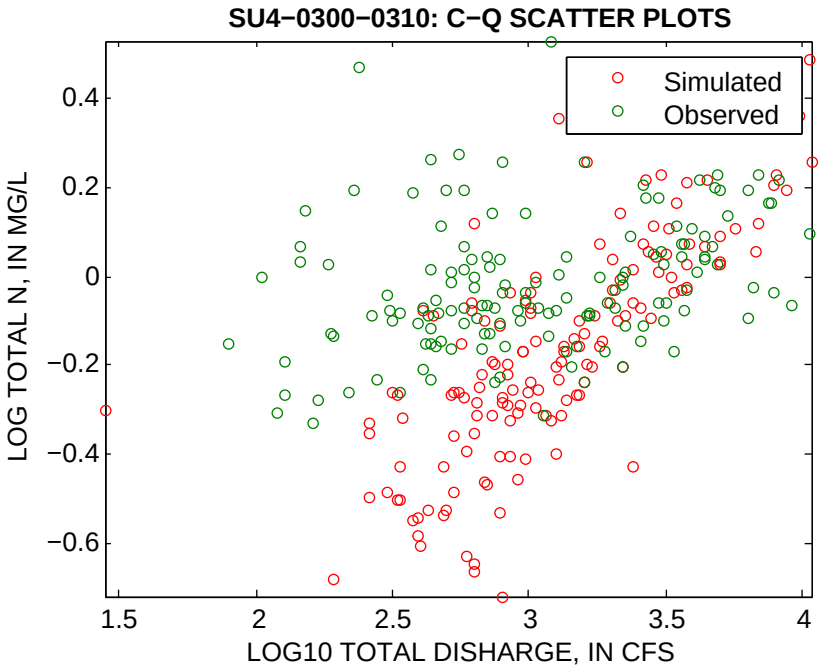
STATISTICS

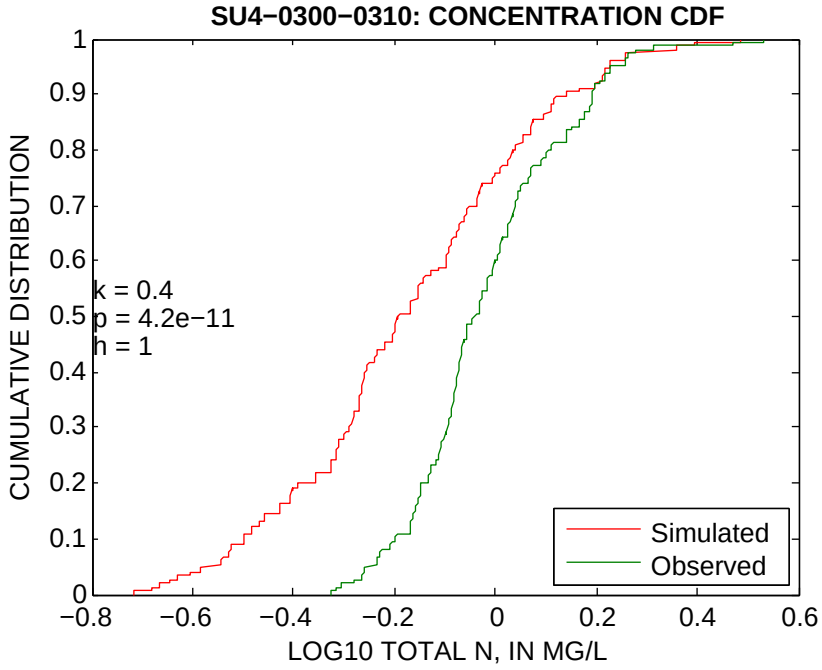
	n	146	146
		observe	simulate
min		0.47	0.18576
		-0.327902	-0.731048
mean		1.02691	0.900352
		-0.0169983	-0.182234
media		0.9165	0.561285
		-0.0378707	-0.25082
max		3.39	4.6994
		0.5302	0.672042
varian		0.177577	0.773275
		0.0230874	0.103902
JB		0.001	0.001
		0.009116	0.010550
		ra	log
%		-12.3242	972.07
err.va		0.751505	0.118468
rel.std.err		4.23199	5.13128
mod.eff		-3.23199	-4.13128

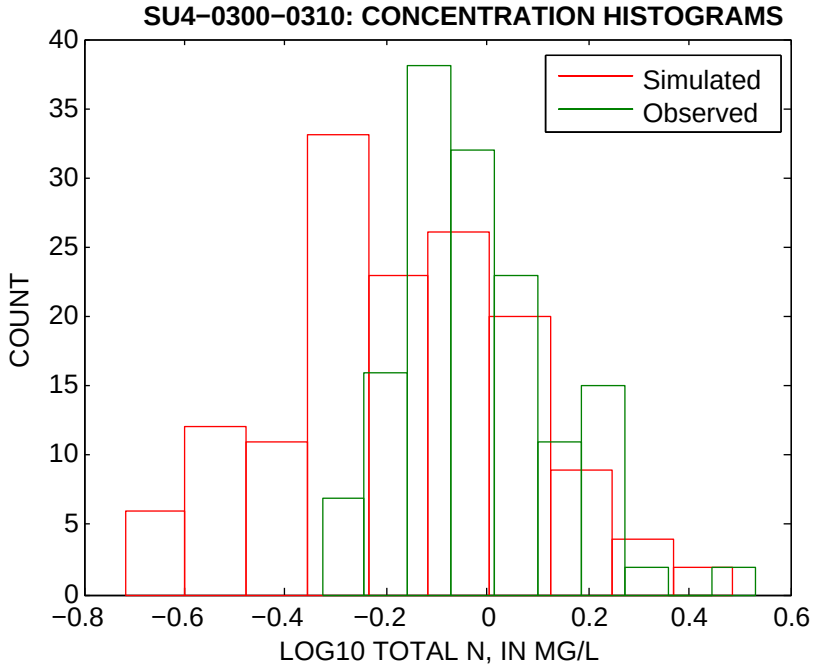
VERSION 2.1

ALL DATA
LOG10

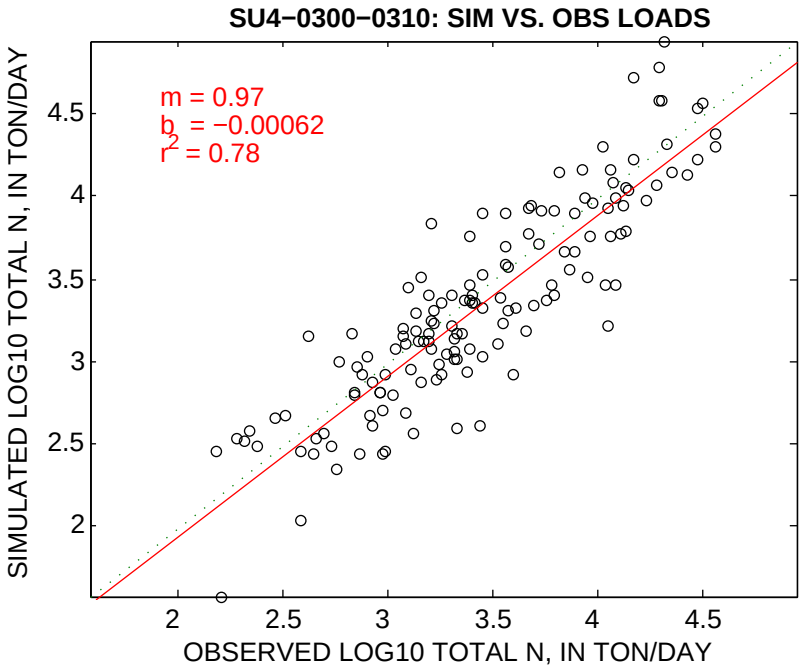


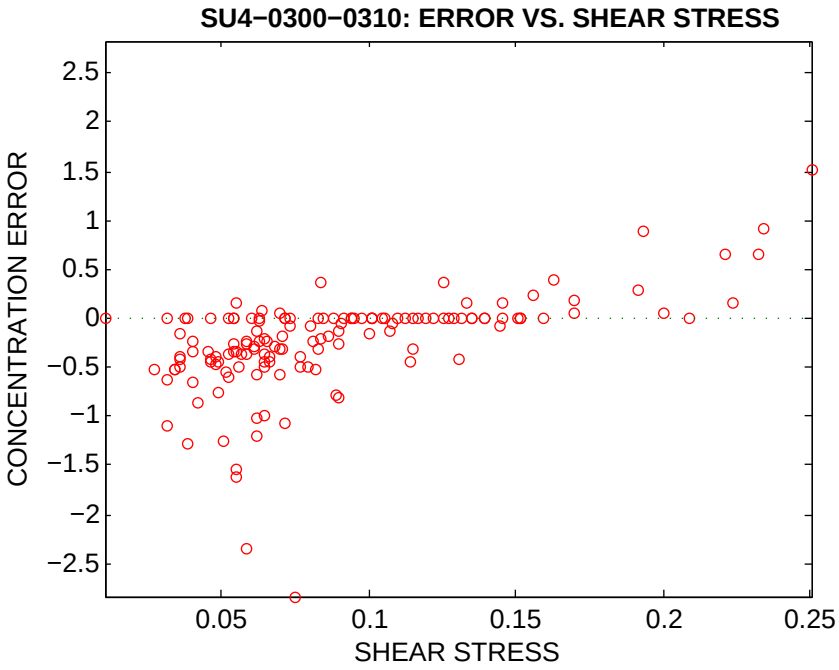


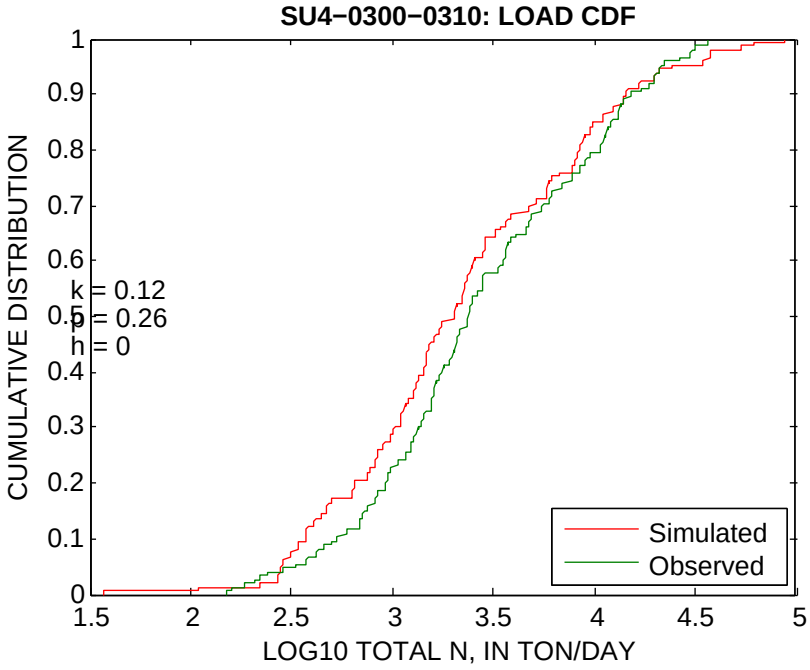


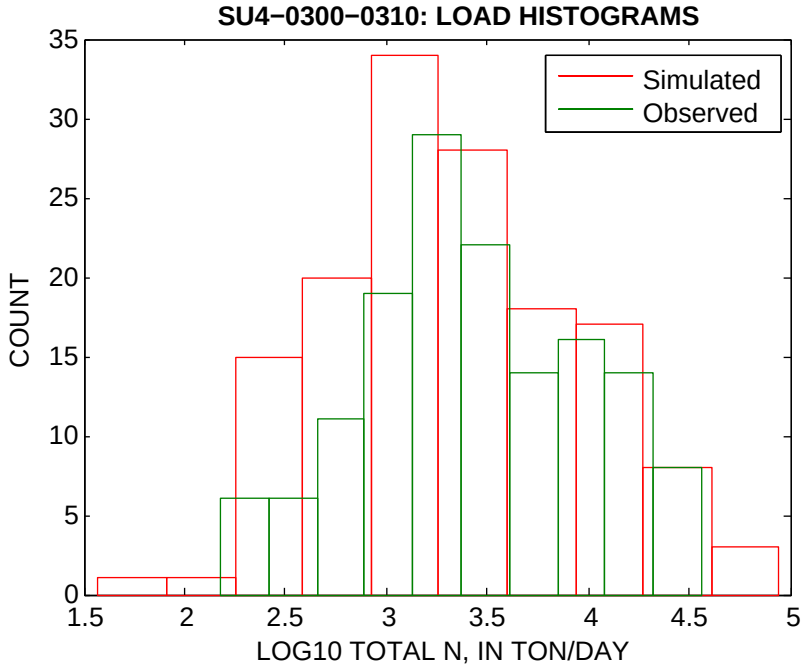


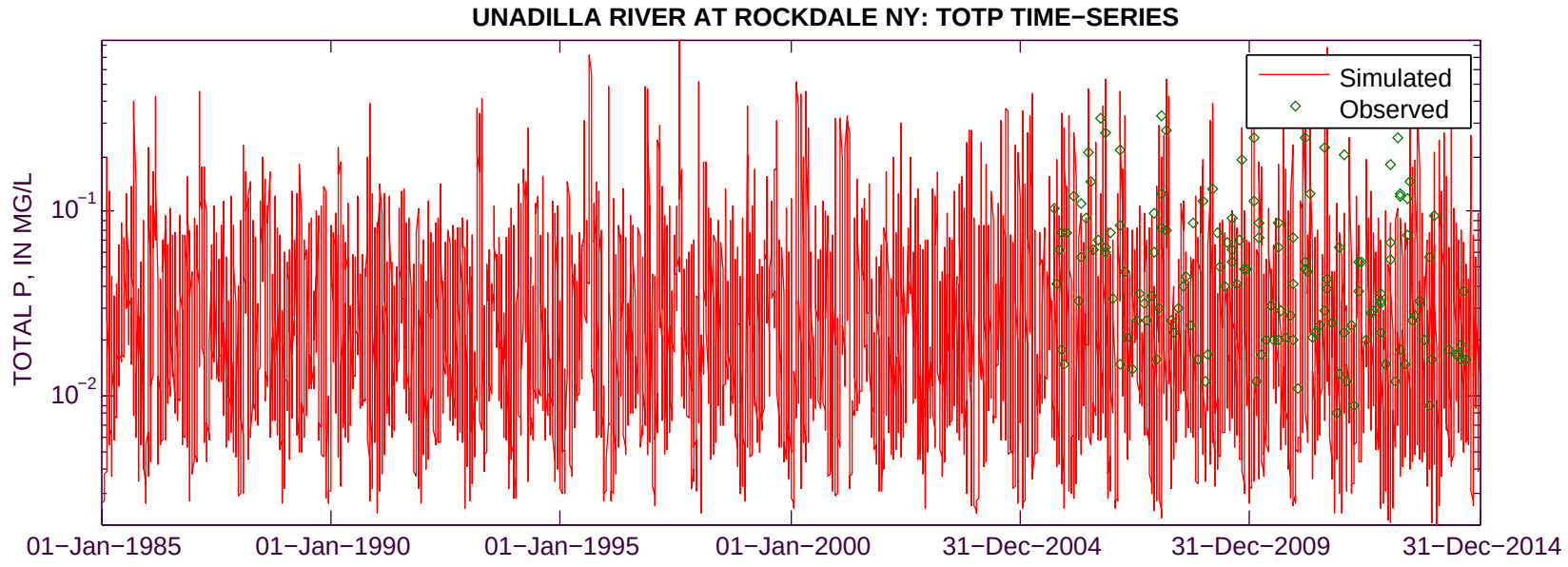
LOAD DATA
LOG10

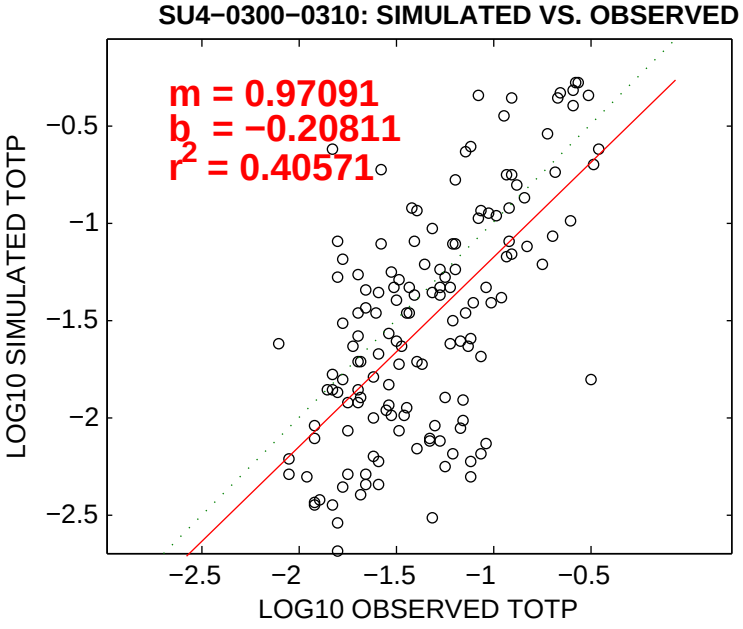


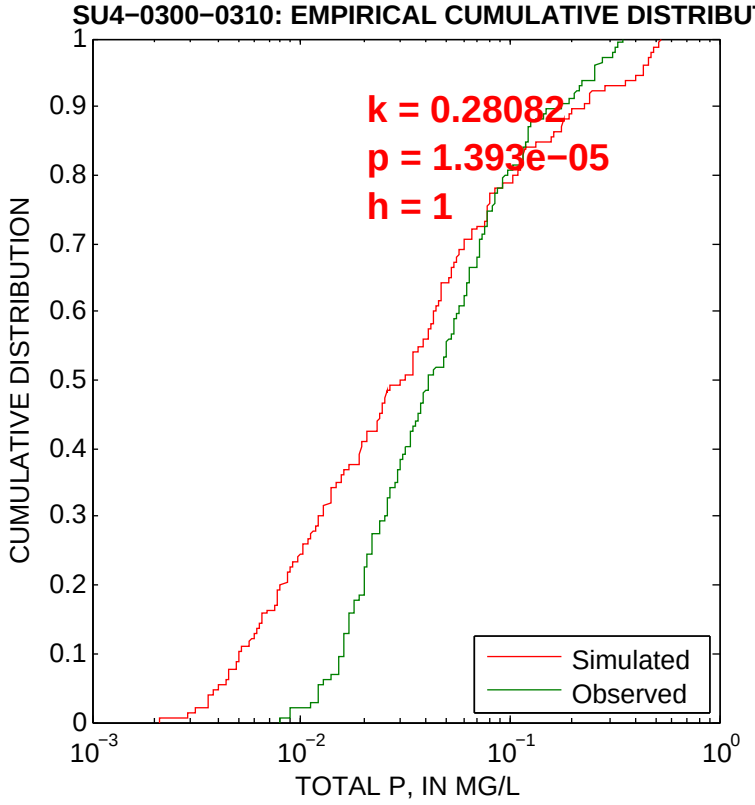












DATA SELECTION

scenario	file
P620171001WQ	TOTP.calib

plot: TOTP - total phosphorus

Dates: 1/1/1985 – 12/31/201

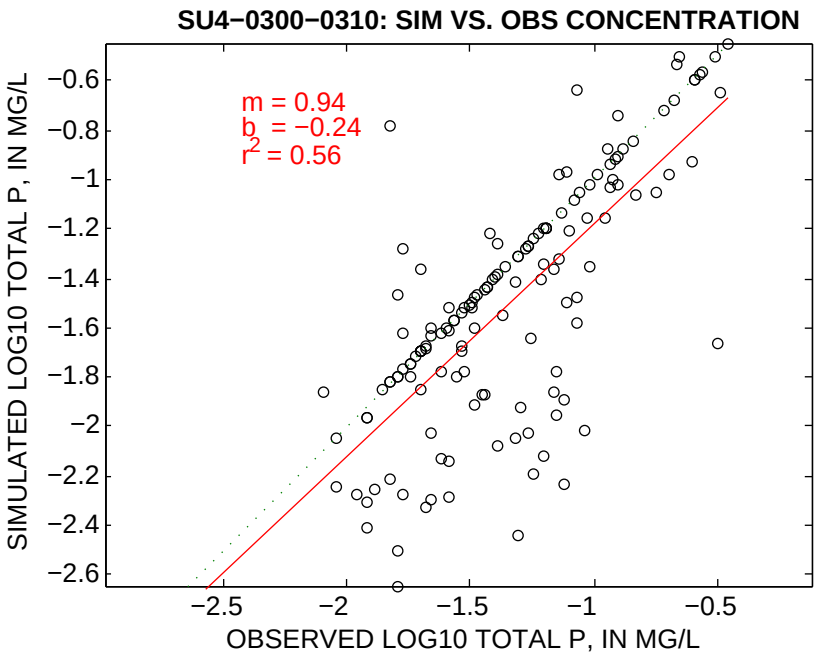
Drive	Directory	Observed
N/A	model	OBS20161101

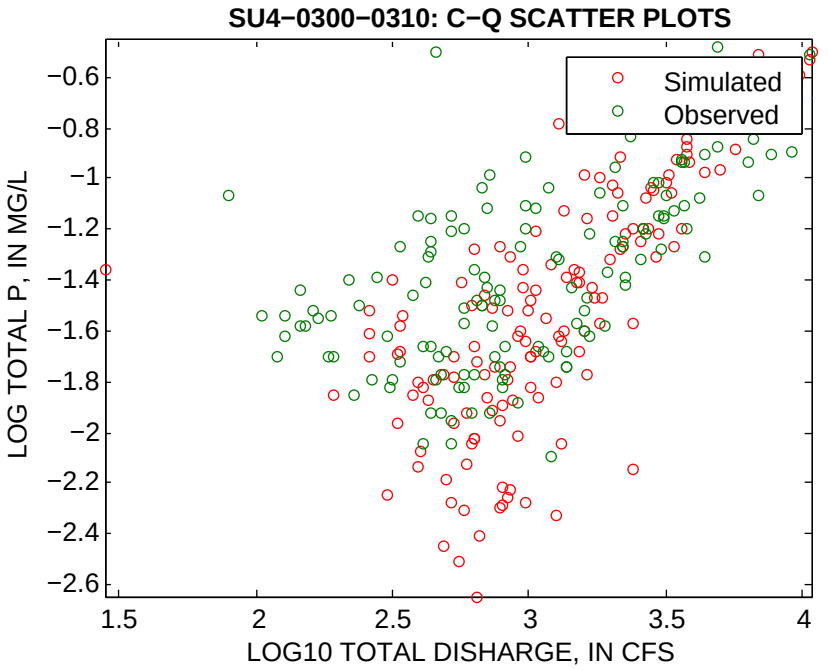
STATISTICS

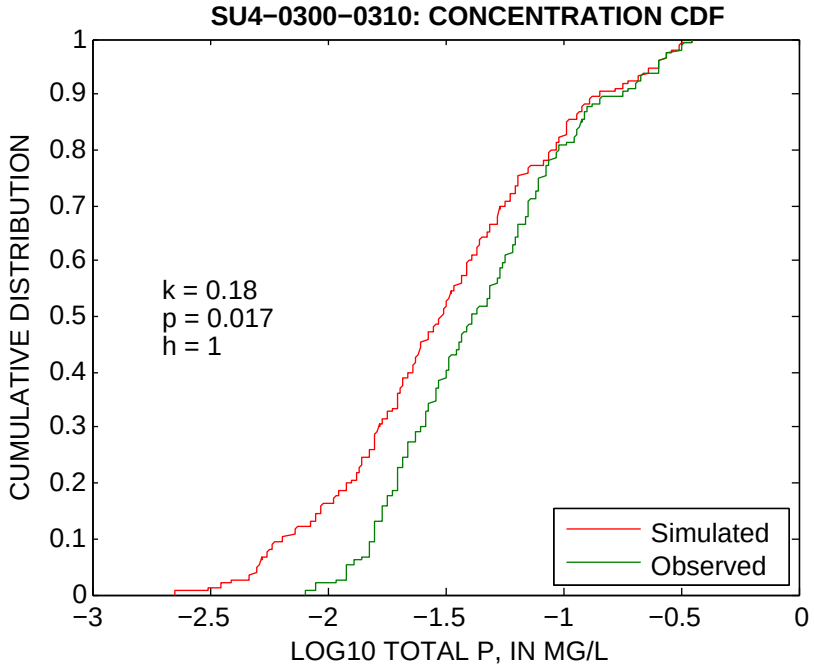
	n	146	146
		observe	simulate
min		0.008	0.0020836
		-2.09691	-2.68119
mean		0.0694452	0.0769405
		-1.34115	-1.51025
media		0.041	0.0309065
		-1.38722	-1.51009
max		0.35	0.53135
		-0.455932	-0.274619
varian		0.00531312	0.0140204
		0.152063	0.353317
JB		0.001	0.001
		0.051222	0.062188
		ra	log
%		10.7931	12.6087
err.va		0.00749804	0.238893
rel.std.err		1.41123	1.57101
mod.eff		-0.411232	-0.571013

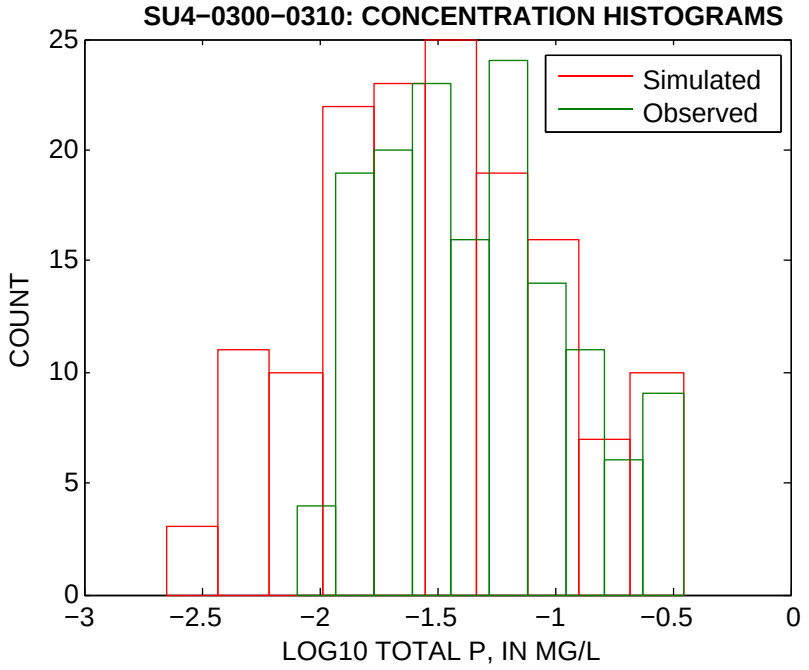
VERSION 2.1

ALL DATA
LOG10

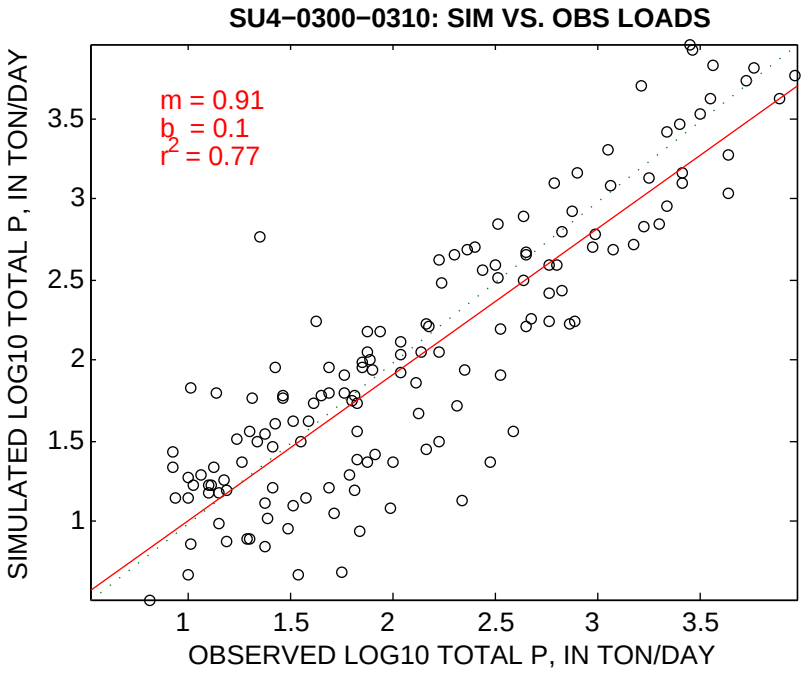


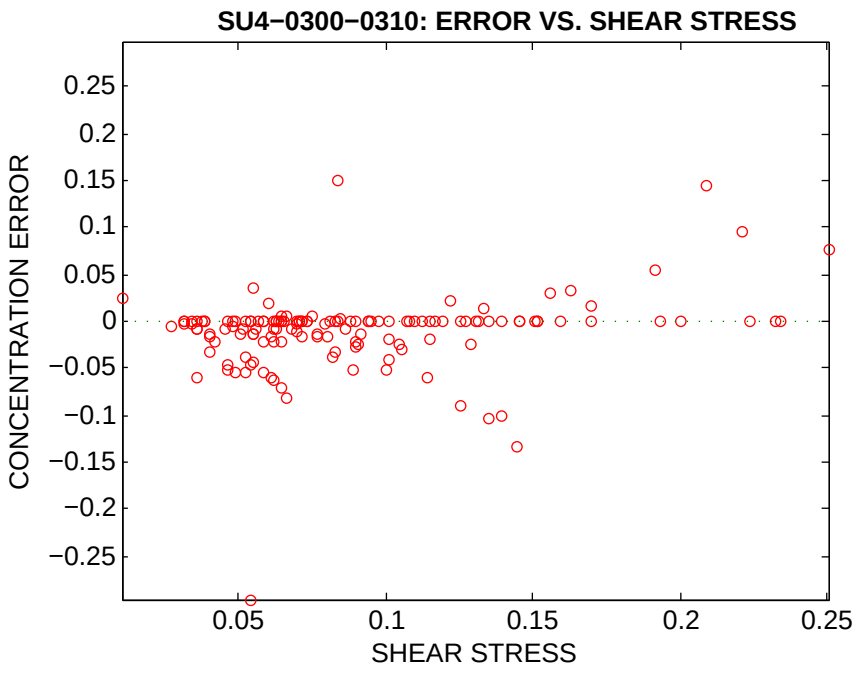


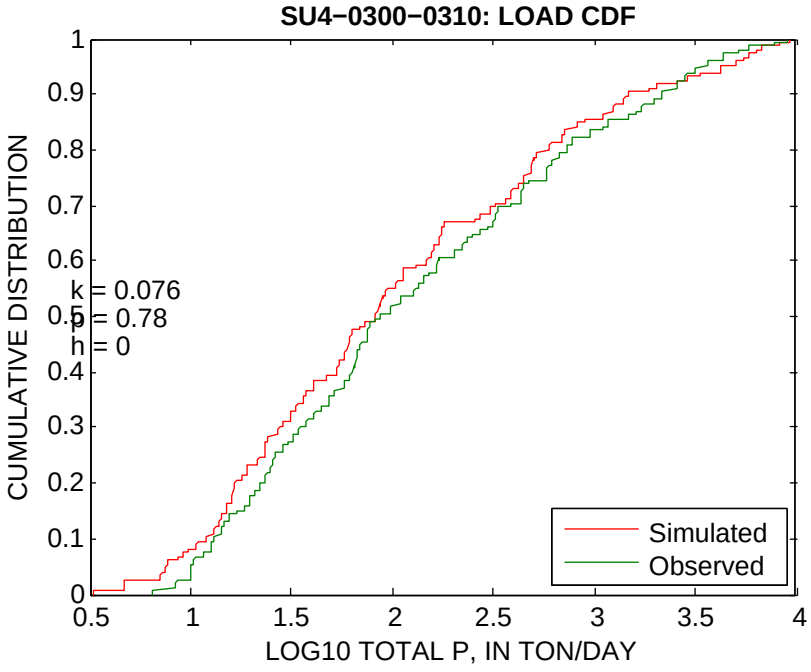


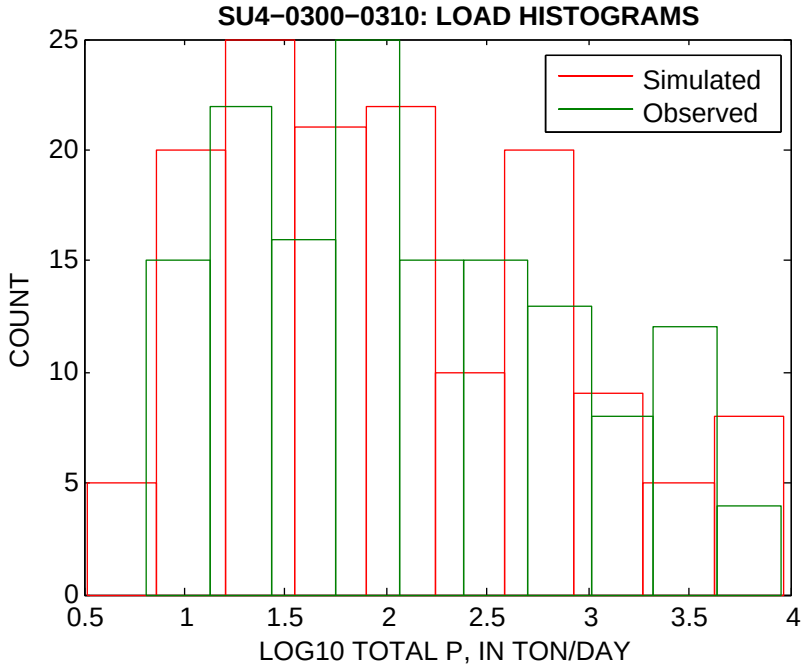


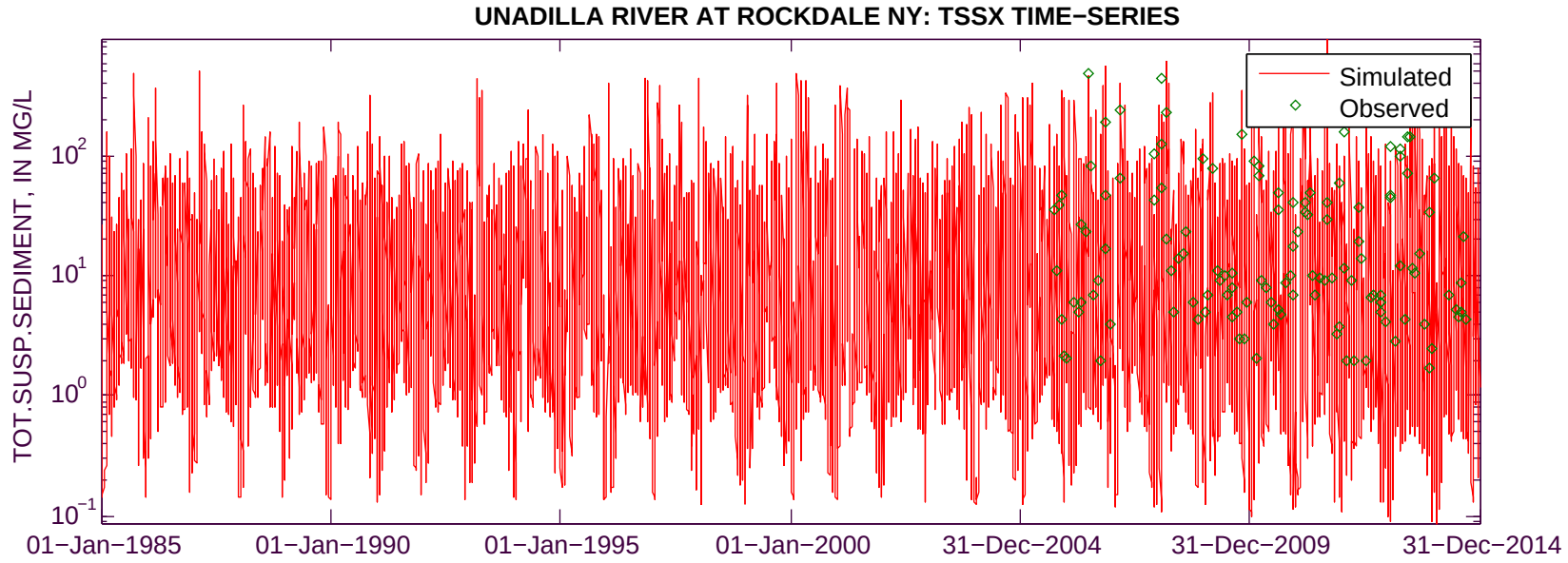
LOAD DATA
LOG10

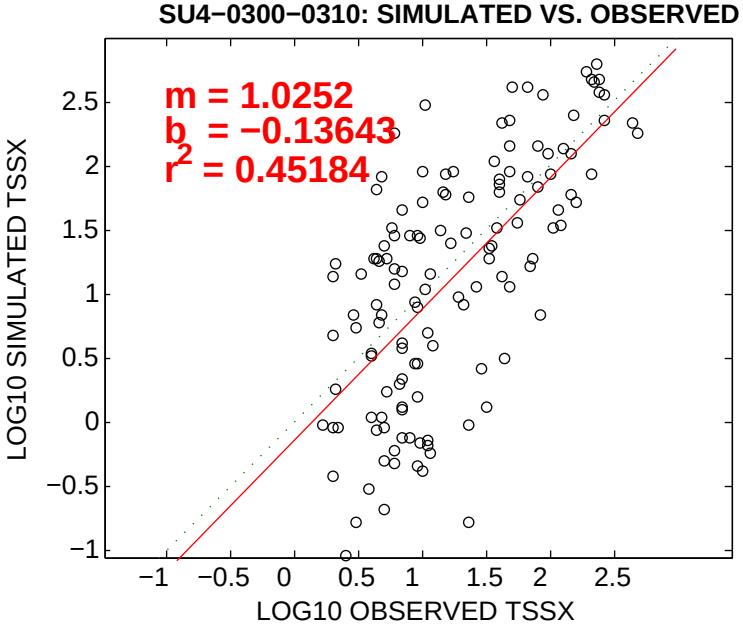


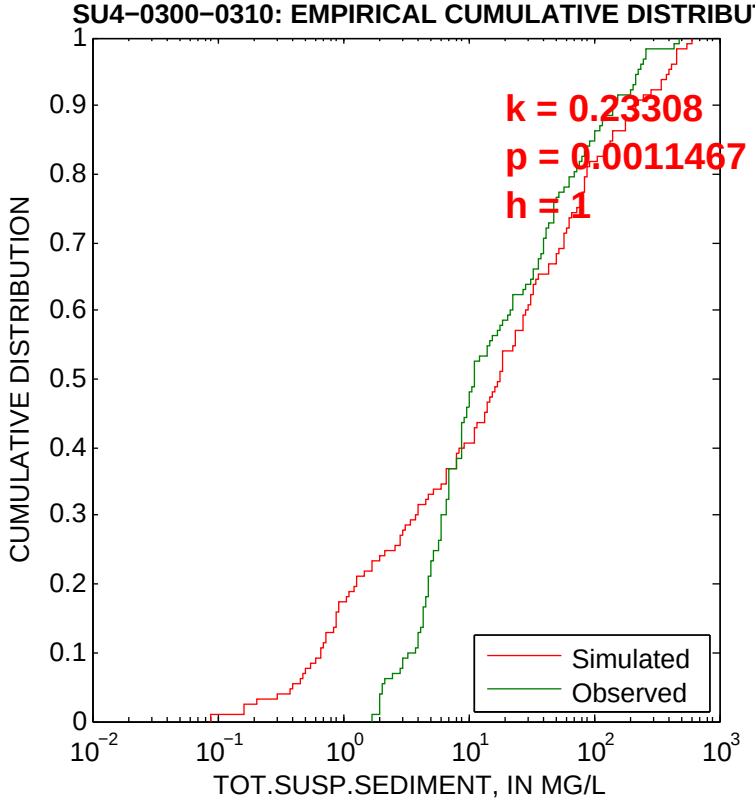












DATA SELECTION

scenario	file
P620171001WQ	TSSX.calib

plot: TSSX - total suspended ...

Dates: 1/1/1985 – 12/31/201

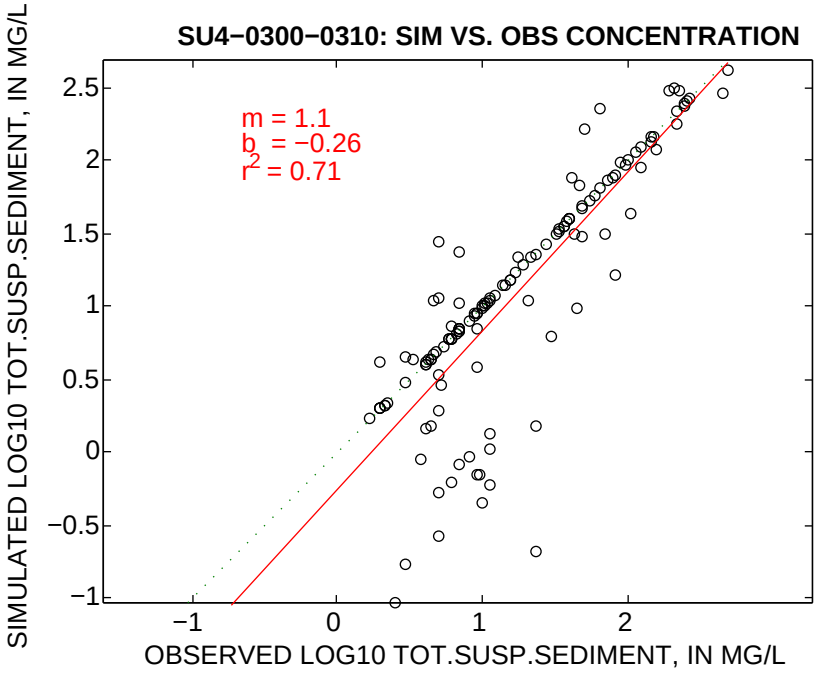
Drive	Directory	Observed
N/A	model	OBS20161101

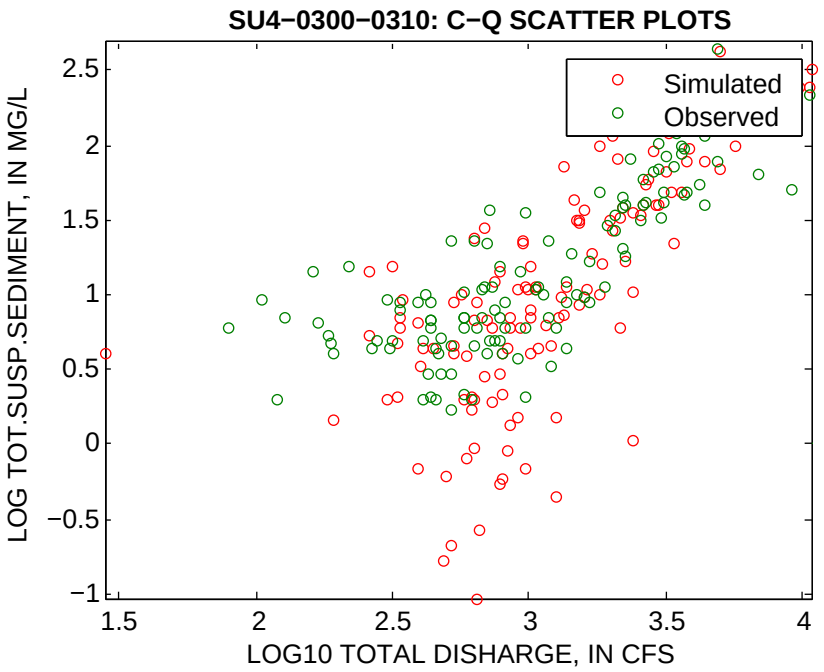
STATISTICS

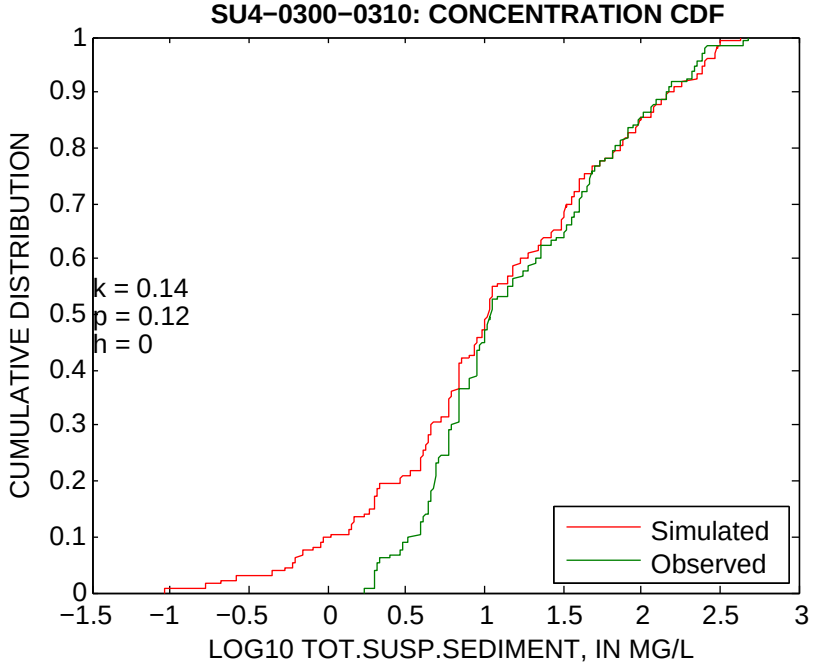
	n	observe	simulate
		133	133
min		1.7	0.087811
		0.230449	-1.05645
mean		48.0717	70.4085
		1.23417	1.12887
media		11.1	18.197
		1.04532	1.26
max		486	607.42
		2.68664	2.78349
varian		6521.52	15241.4
		0.380197	0.884423
JB		0.001	0.001
		0.021792	0.052235
		ra	log
%		46.4658	-8.53182
err.va		9420.57	0.496216
rel.std.err		1.44454	1.30516
mod.eff		-0.444537	-0.305157

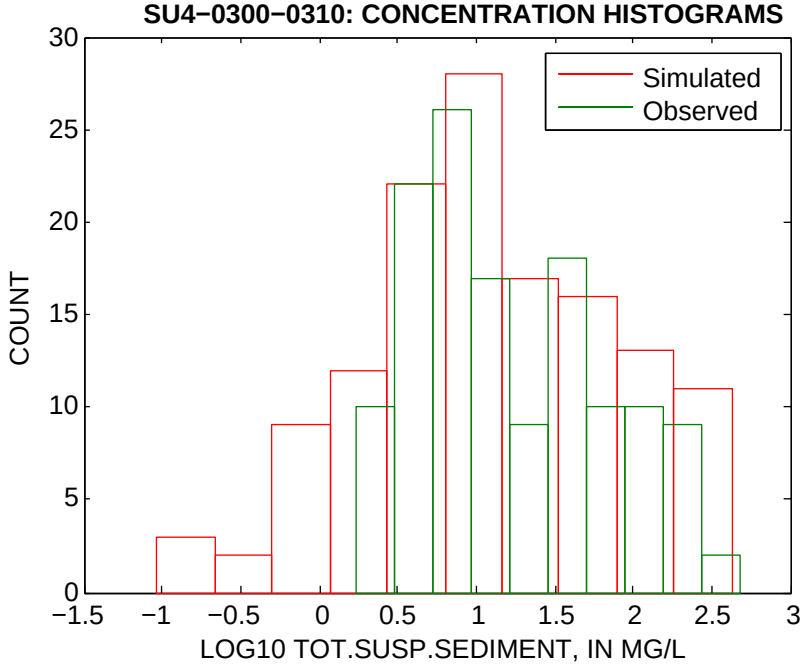
VERSION 2.1

ALL DATA
LOG10

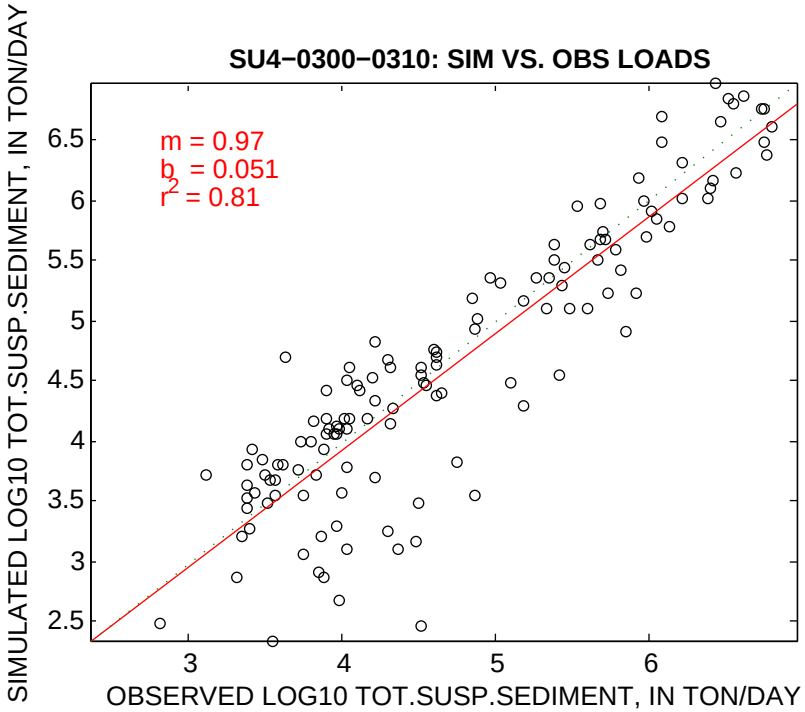


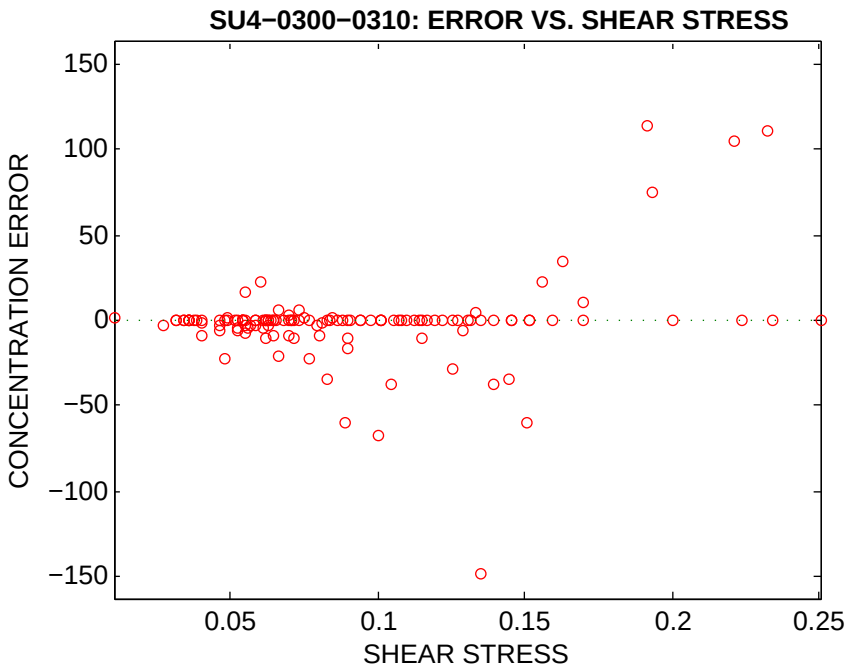


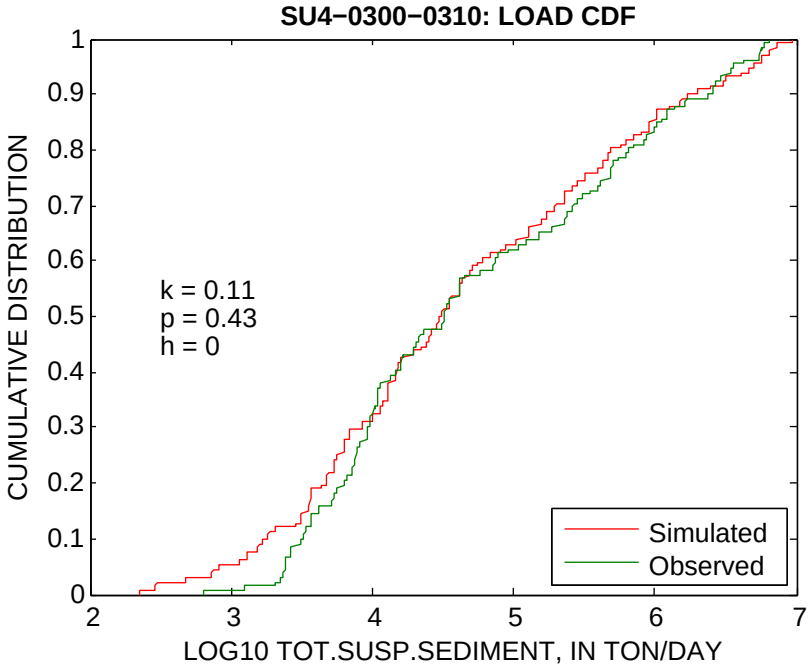


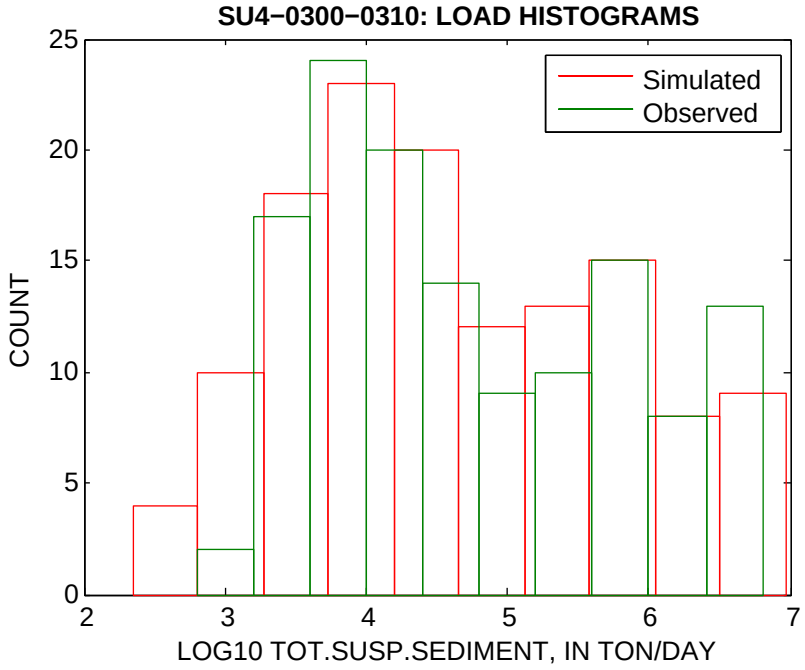


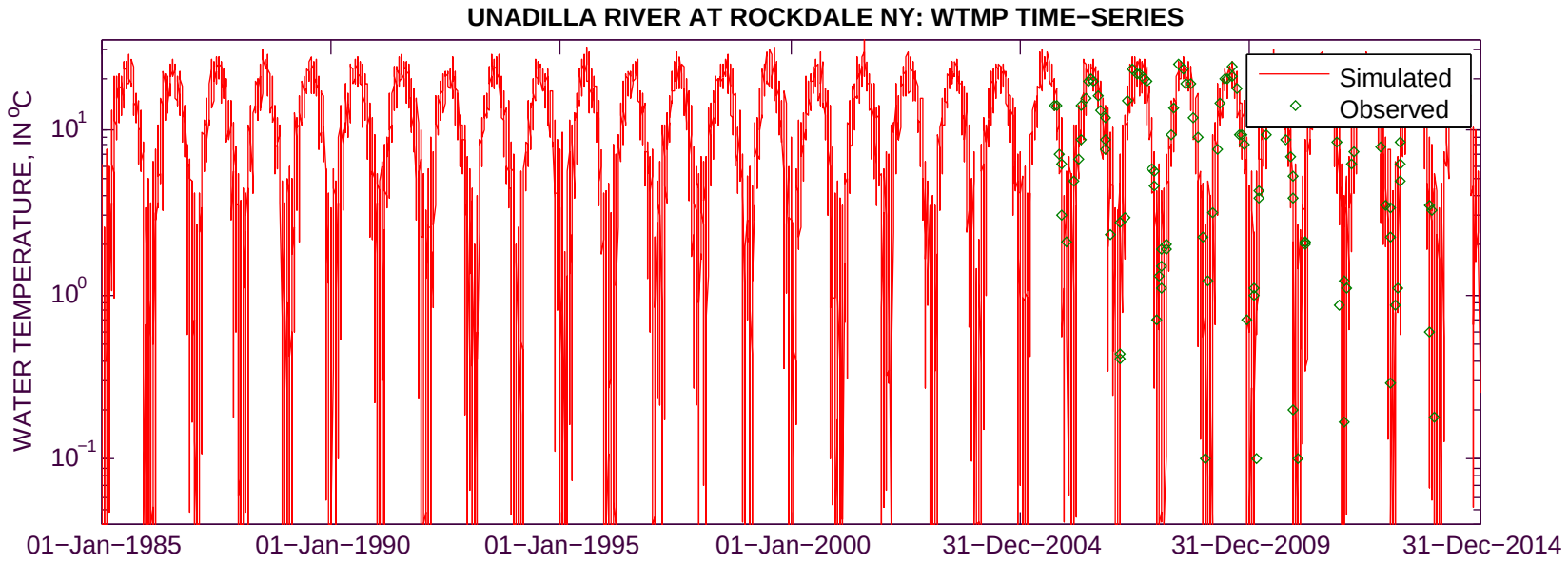
LOAD DATA
LOG10

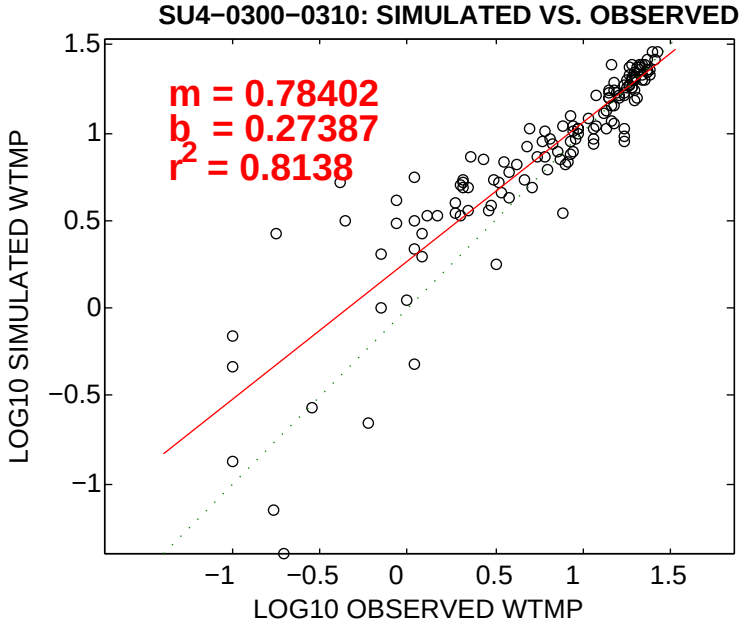


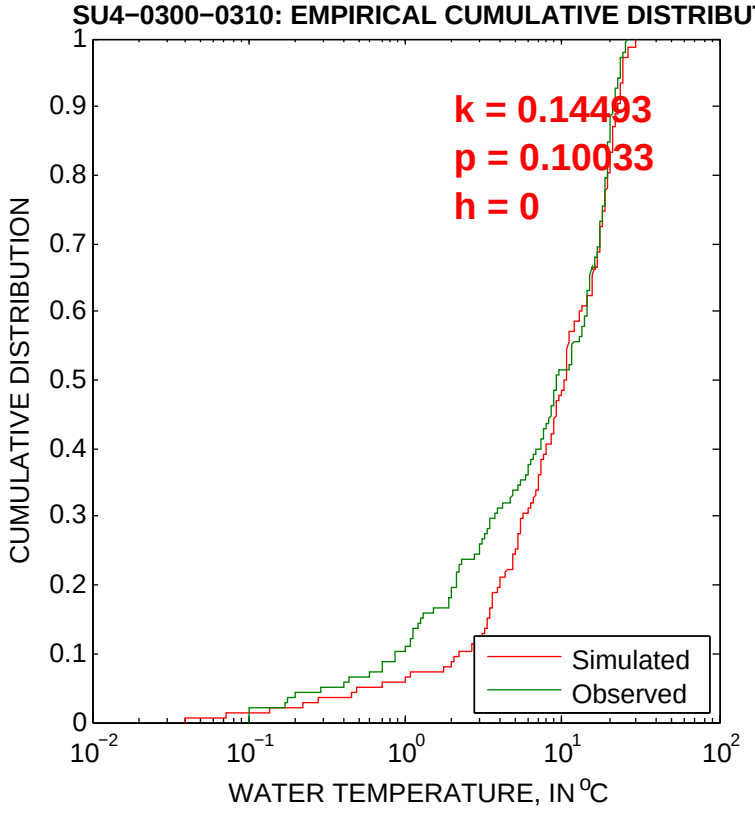












DATA SELECTION

scenario	file
P620171001WQ	WTMP.calib

plot: WTMP - water tempera...

Dates: 1/1/1985 – 12/31/201

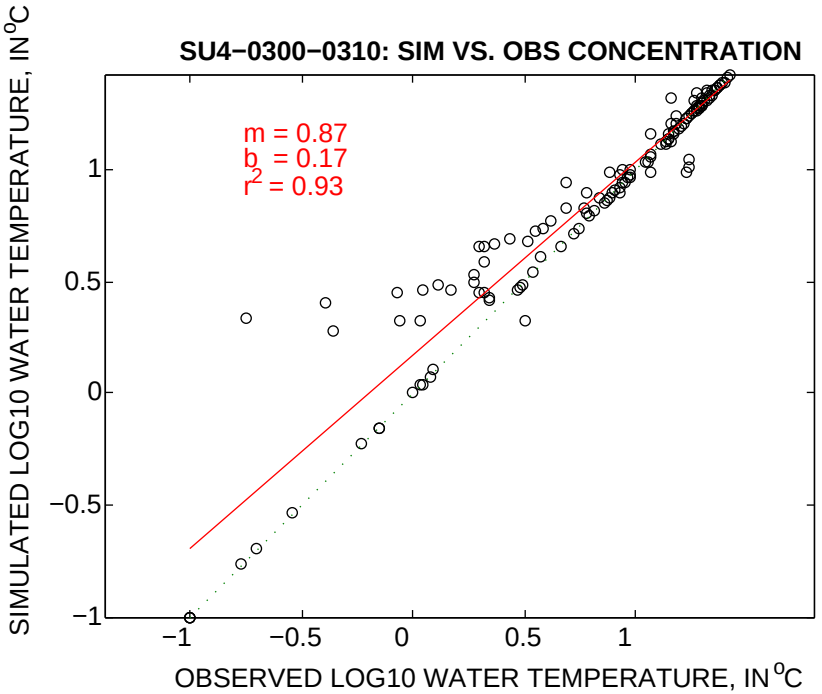
Drive	Directory	Observed
N/A	model	OBS20161101

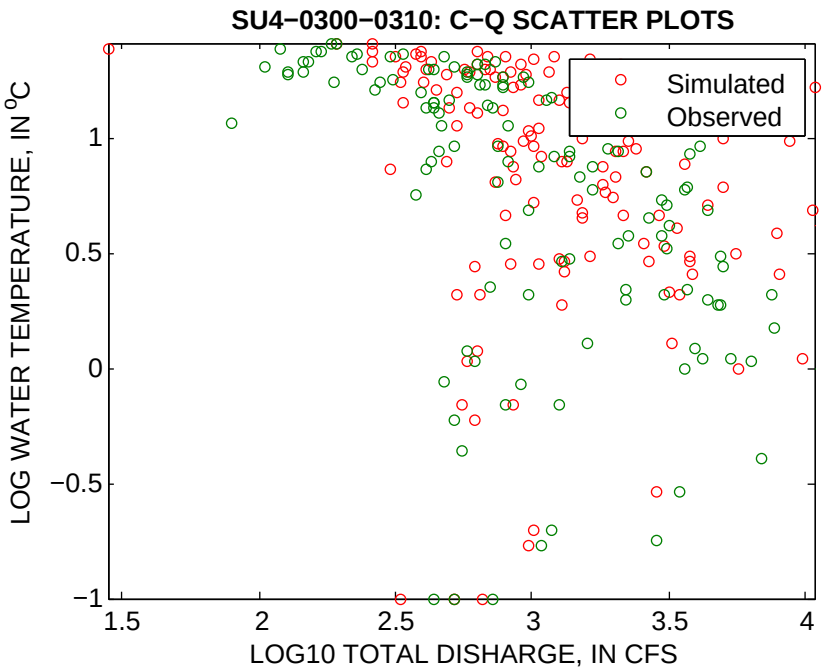
STATISTICS

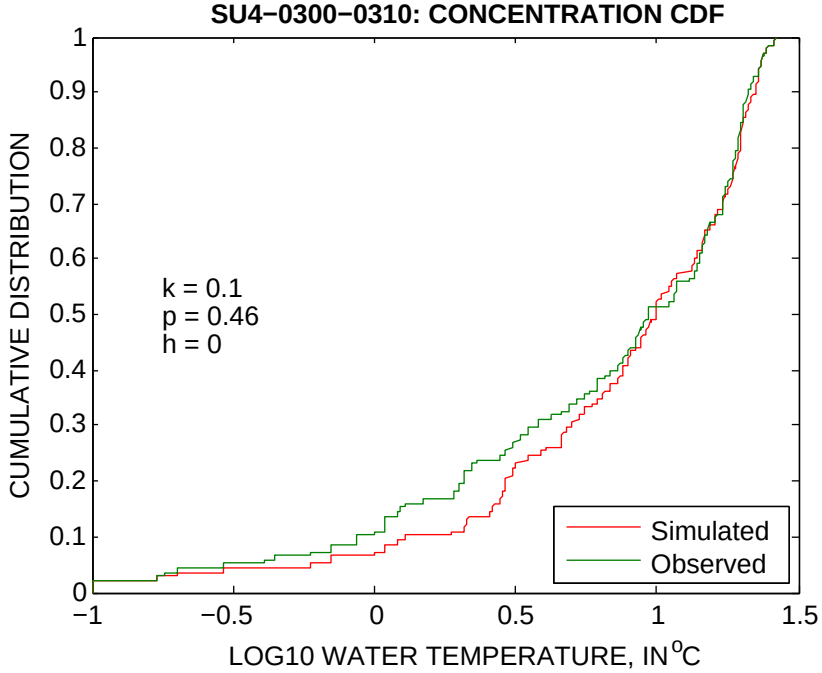
	n	138	138
		observe	simulate
min		0.1	0.040112
		-1	-1.39673
mean		10.7645	11.6861
		0.79046	0.893606
media		9.345	10.4735
		0.970579	1.02008
max		26.47	29.126
		1.42275	1.46428
varian		63.2048	60.1954
		0.351352	0.265391
JB		0.011661	0.019273
		0.001	0.001
		ra	log
%		8.56172	13.0488
err.va		7.34195	0.0765226
rel.std.err		0.116161	0.217795
mod.eff		0.883839	0.782205

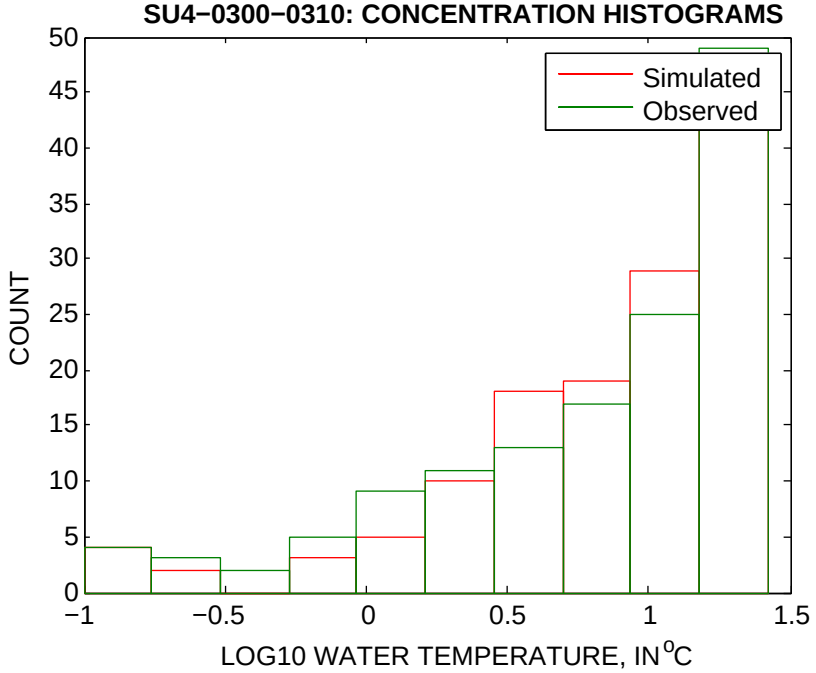
VERSION 2.1

ALL DATA
LOG10

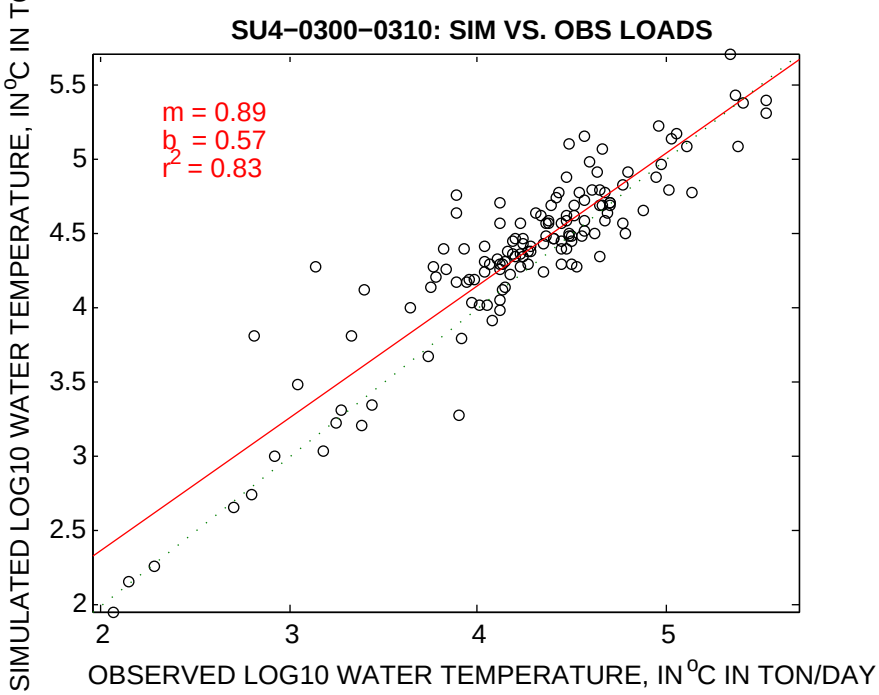


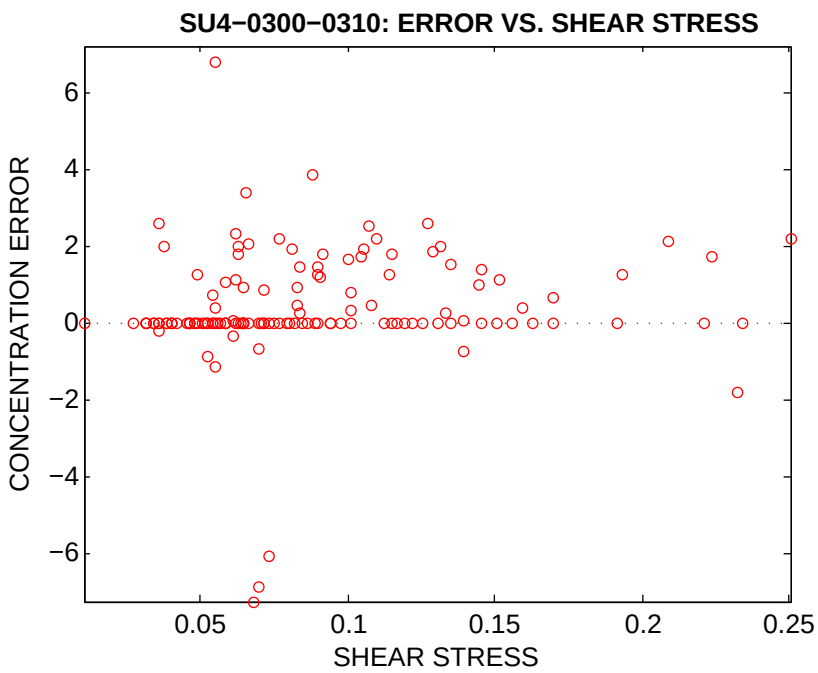


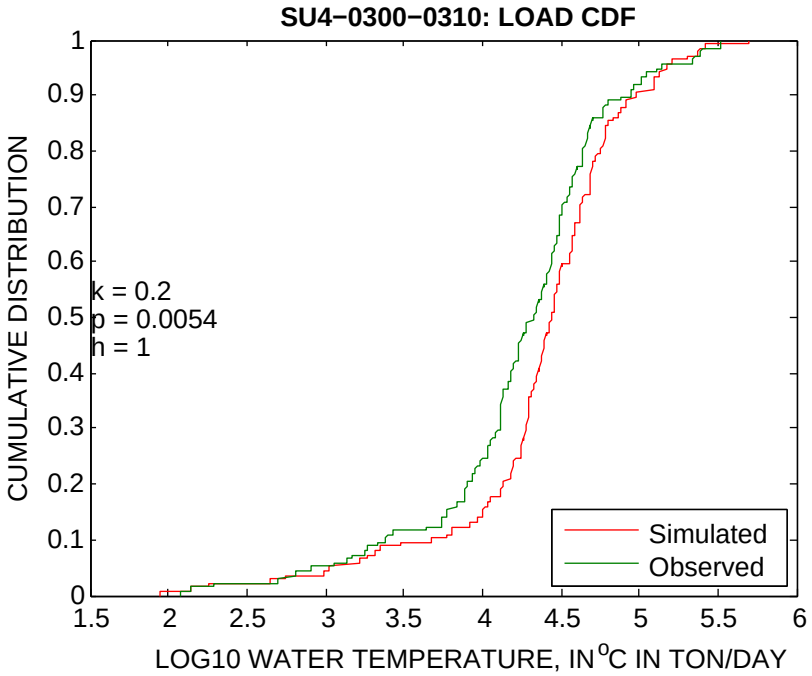


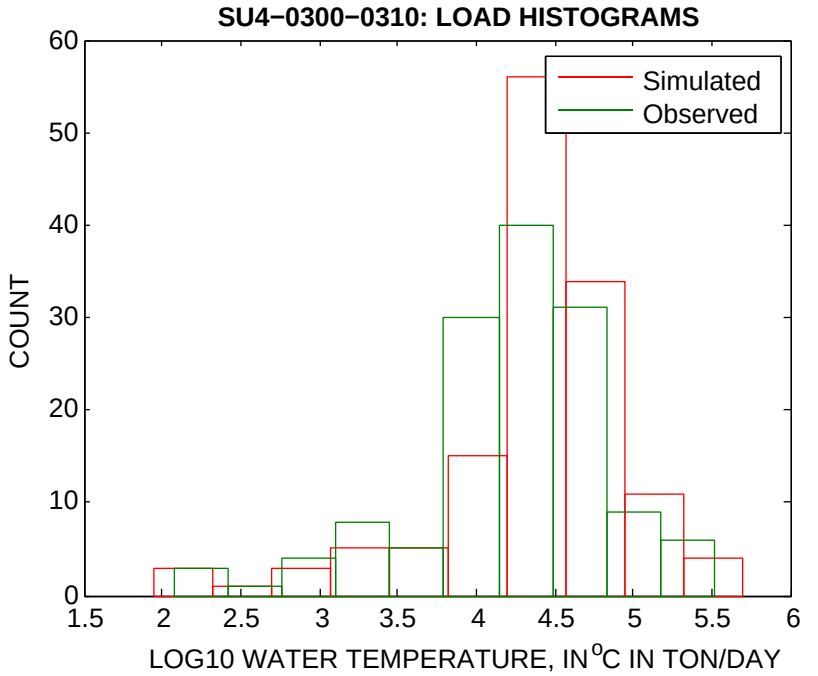


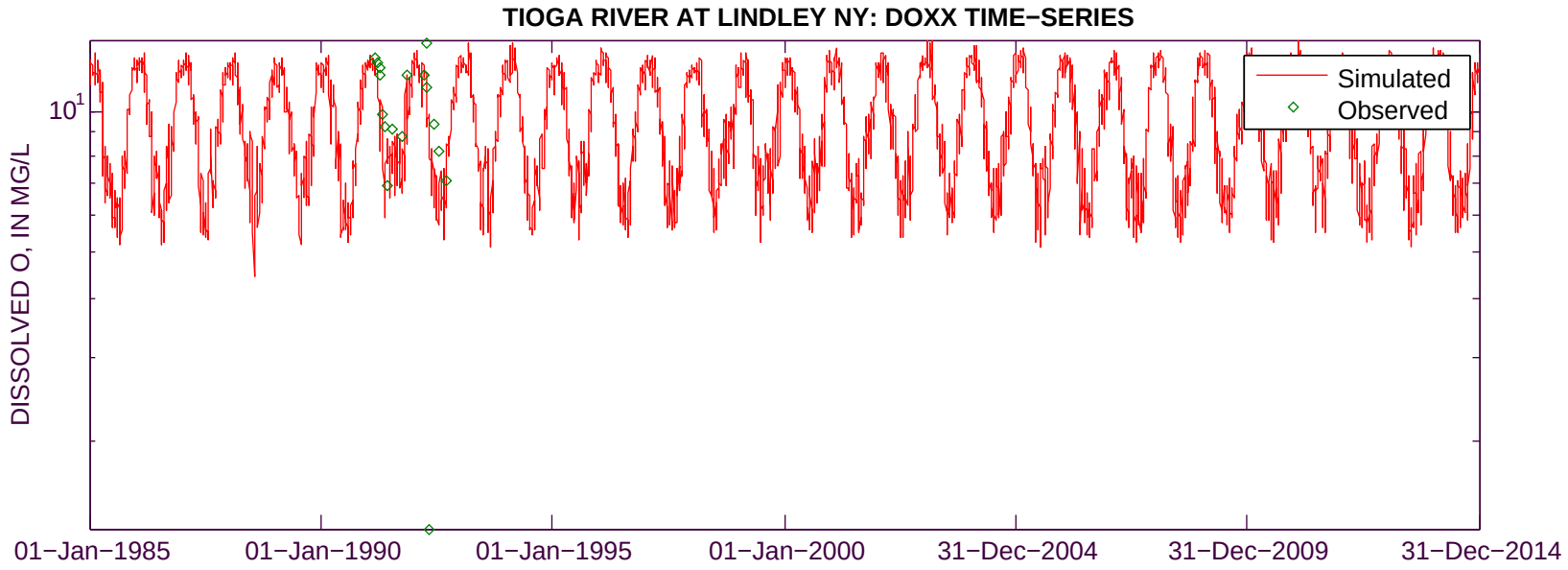
LOAD DATA
LOG10

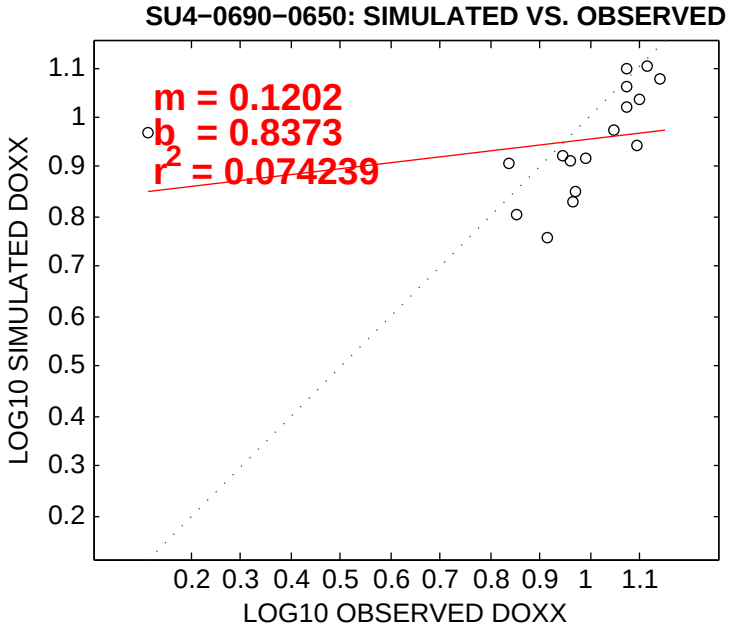


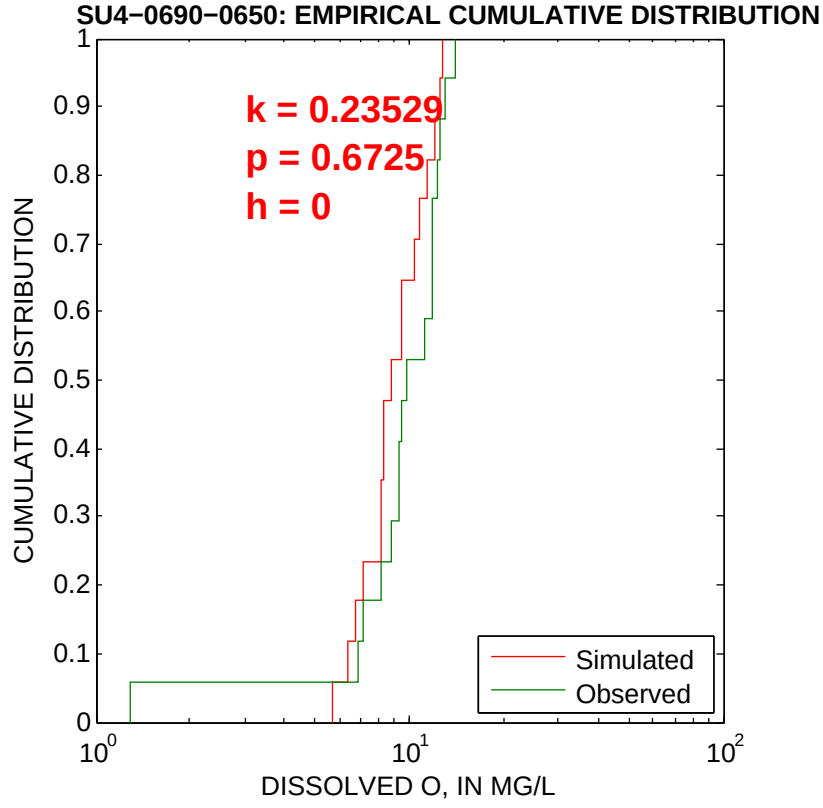












DATA SELECTION

scenario: P620171001WQ | file: DOXX.calib

plot: DOXX - dissolved oxygen

Dates: 1/1/1985 – 12/31/201

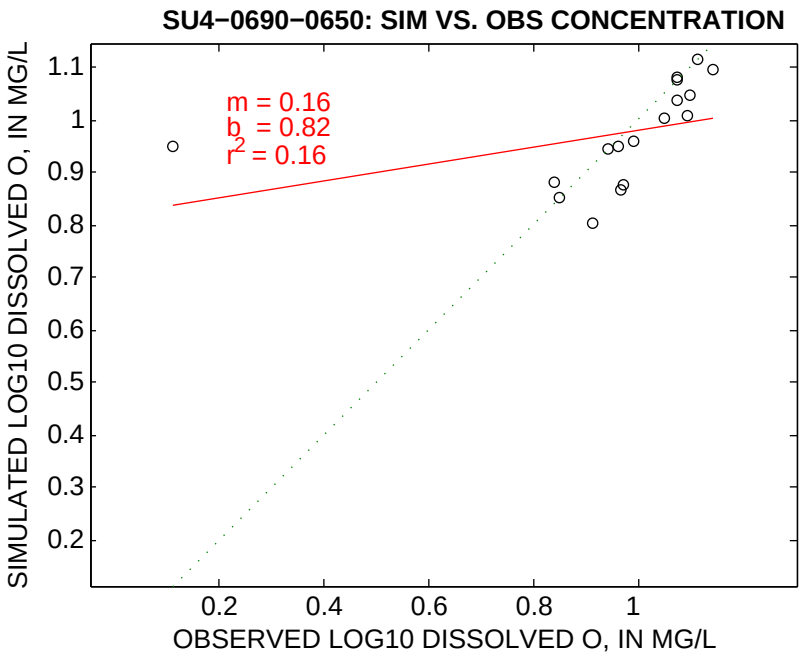
Drive: N/A | Directory: model | Observed: OBS20161101

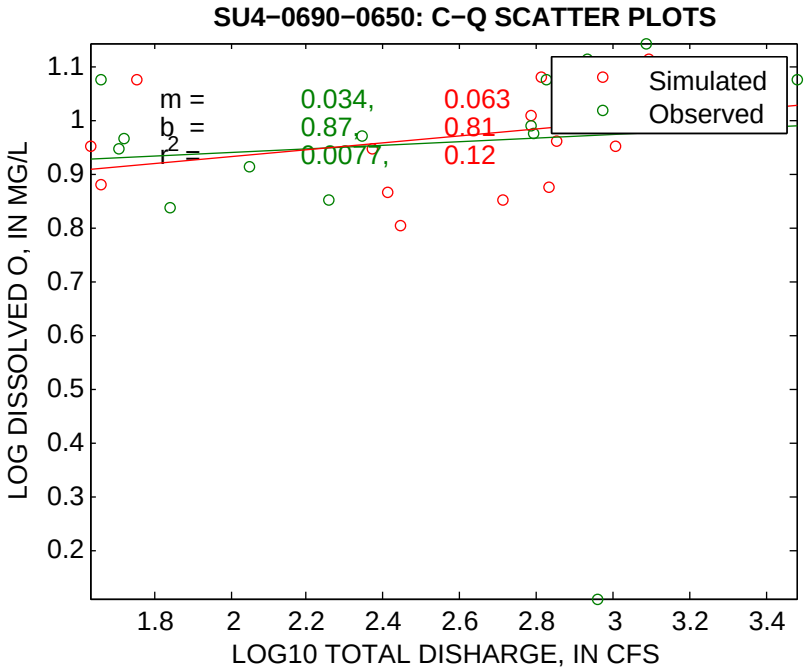
STATISTICS

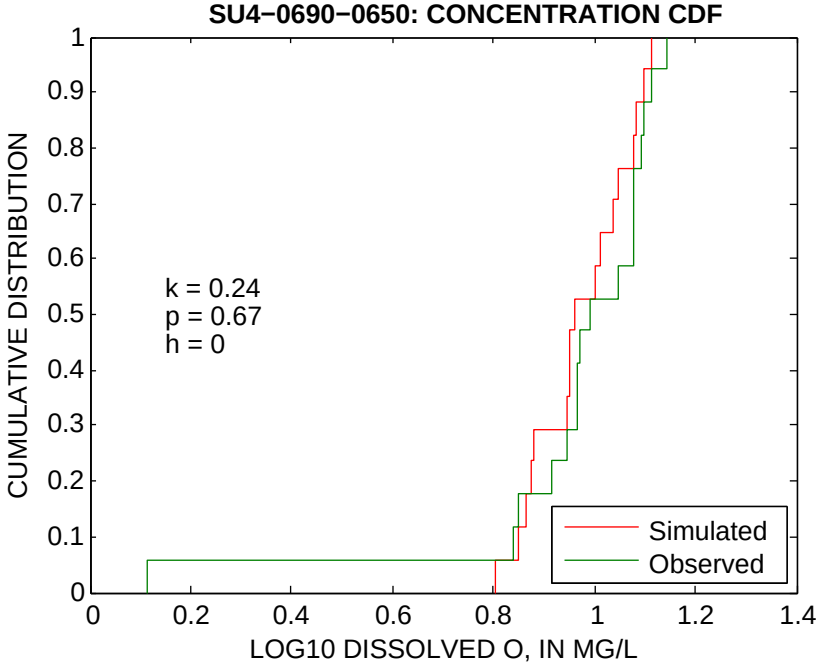
		observe	simulate
n		17	17
min		1.3	5.7399
		0.113943	0.758904
mean		9.92941	9.20342
		0.957975	0.952444
media		9.8	8.8127
		0.991226	0.945109
max		13.9	12.671
		1.14301	1.10281
varian		9.30221	4.64271
		0.0555352	0.0108075
JB		0.018025	0.437213
		0.001	0.5
		ra	log
%		-7.31149	-0.577414
err.va		7.09535	0.0530249
rel.std.err		0.76276	0.954797
mod.eff		0.23724	0.0452027

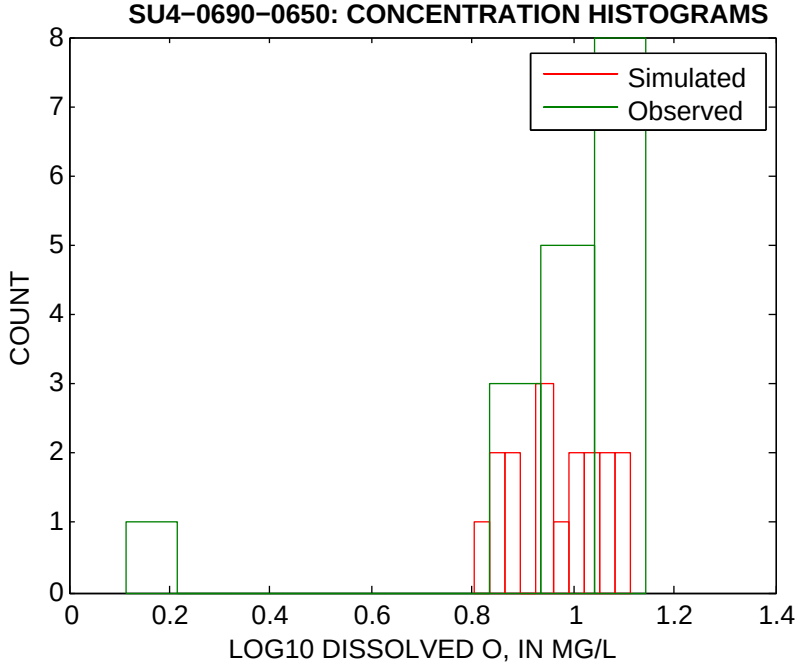
VERSION 2.1

ALL DATA
LOG10

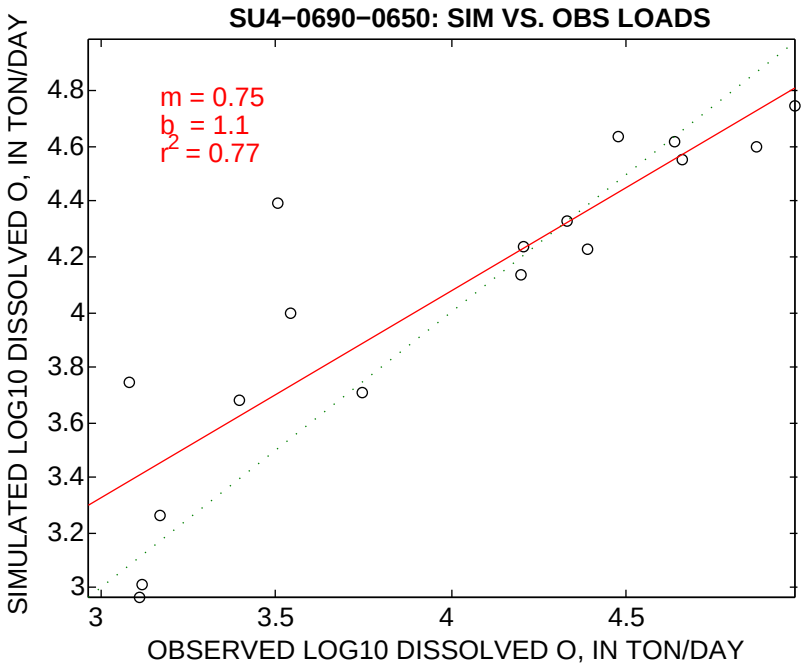


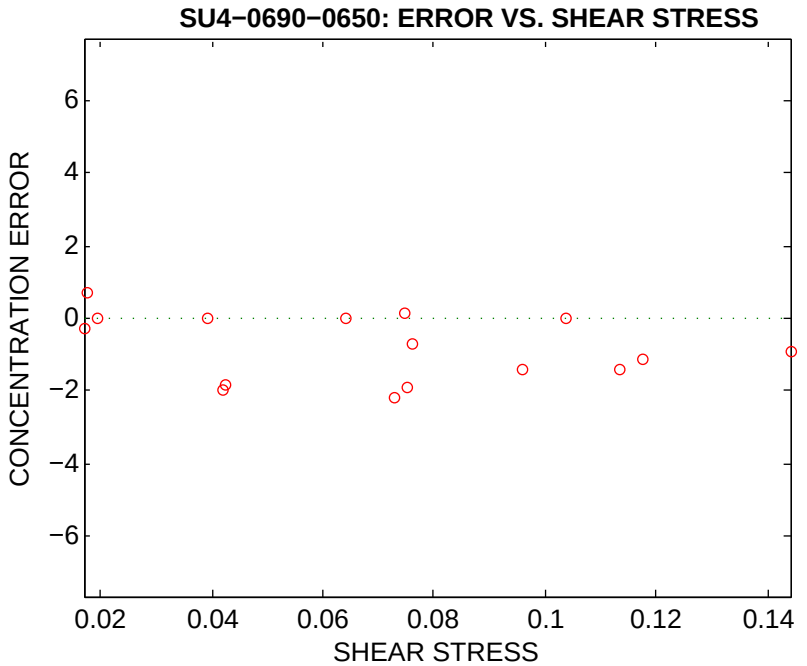


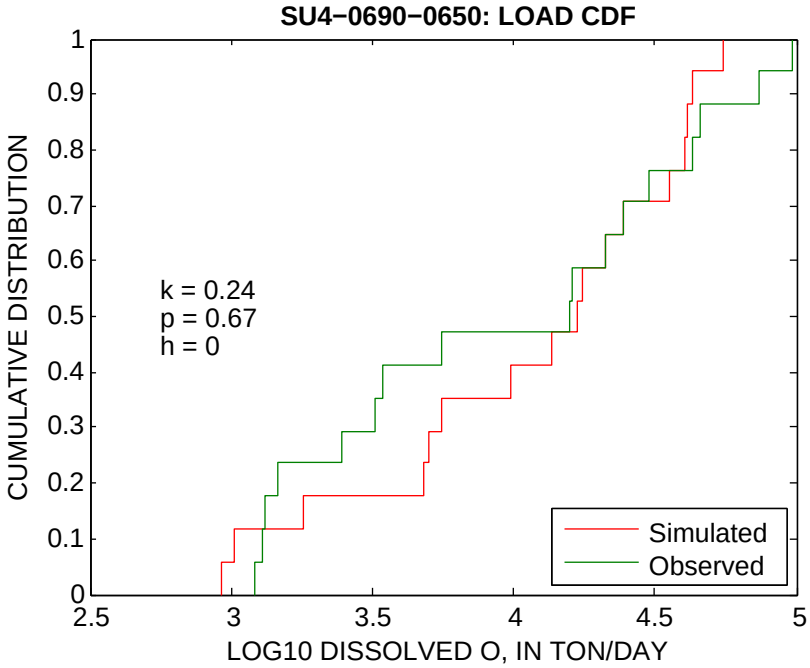


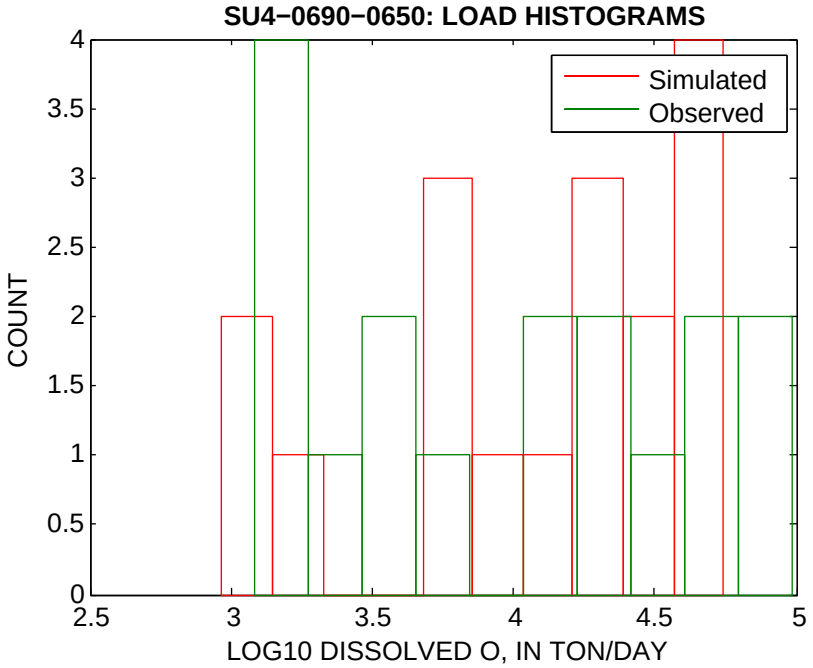


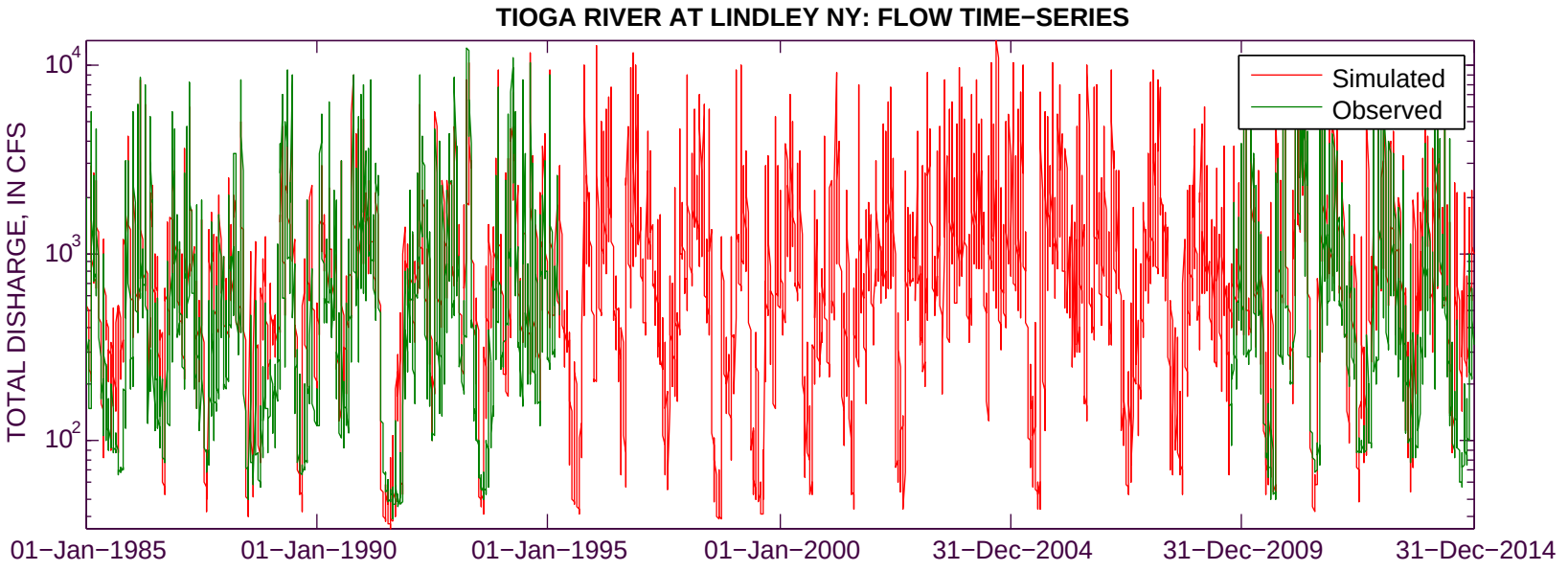
LOAD DATA
LOG10

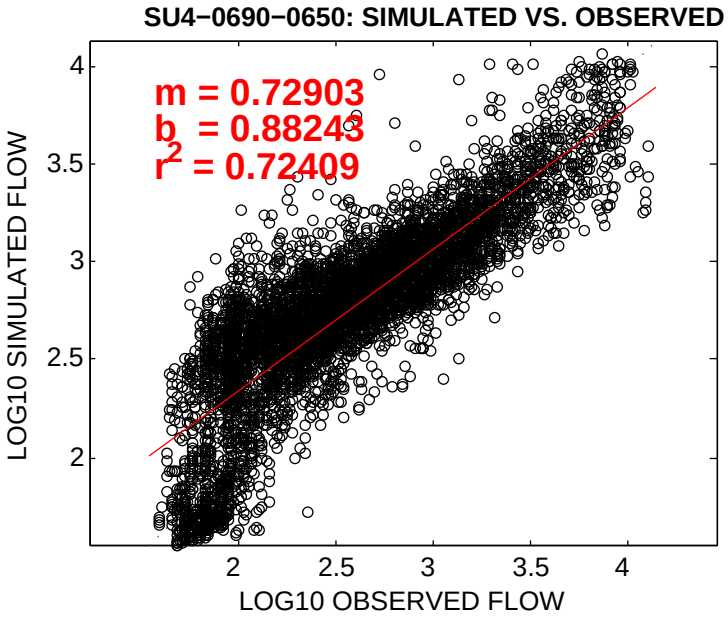


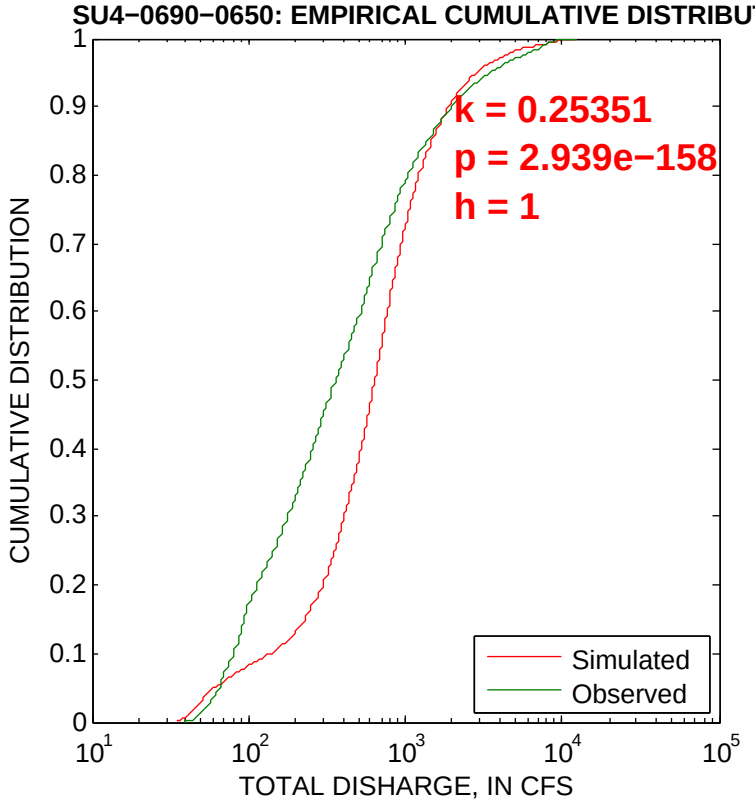












DATA SELECTION

scenario: P620171001WQ | file: FLOW.calib

plot: FLOW - total discharge

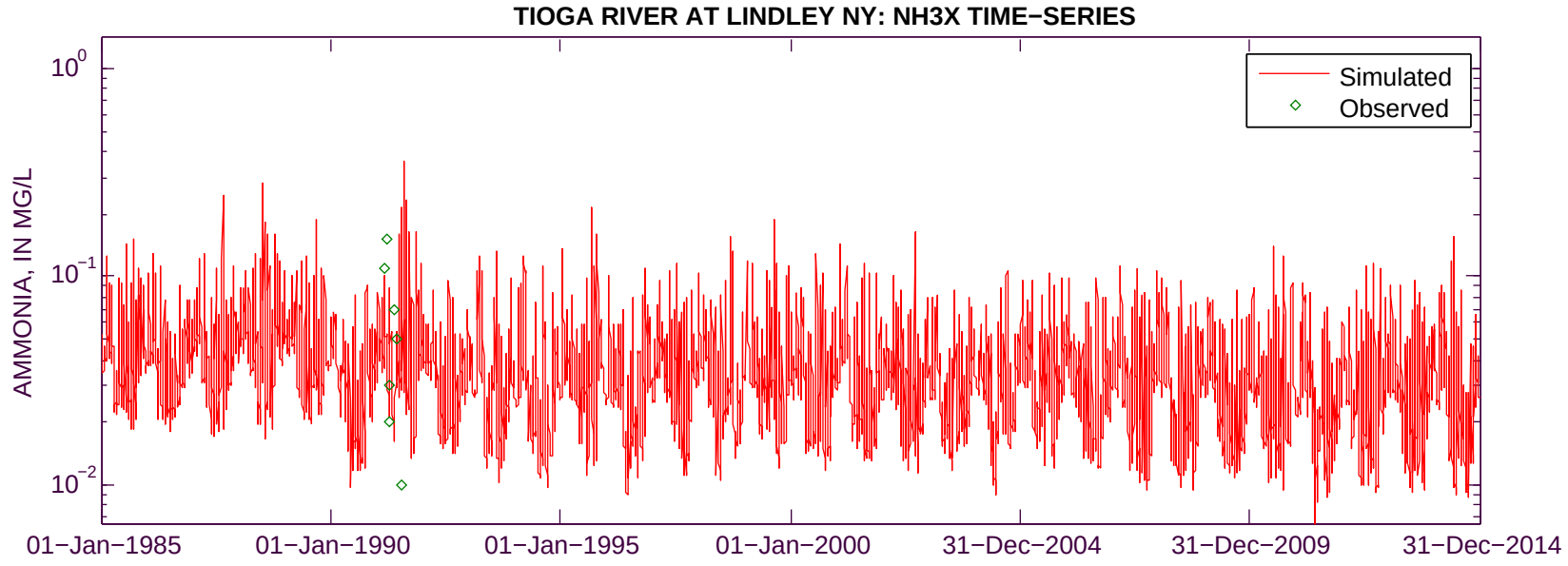
Dates: 1/1/1985 – 12/31/201

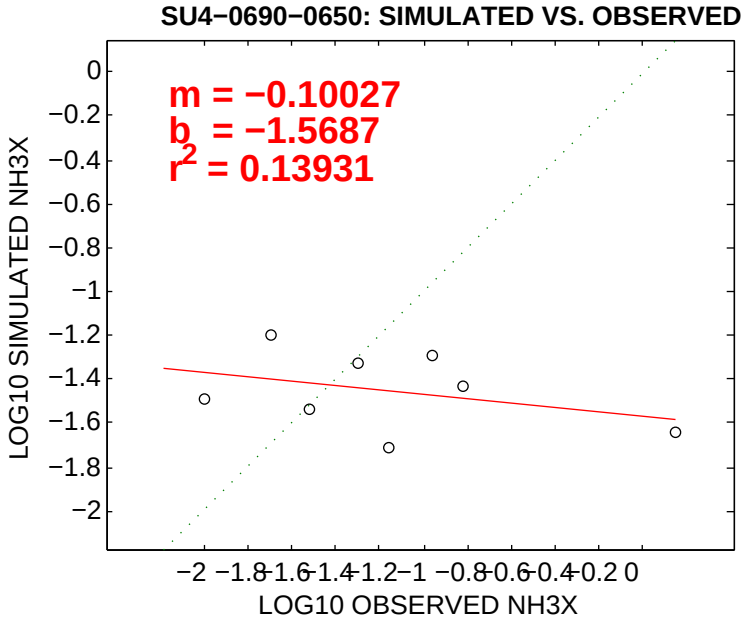
Drive: N/A | Directory: model | Observed: OBS20161101

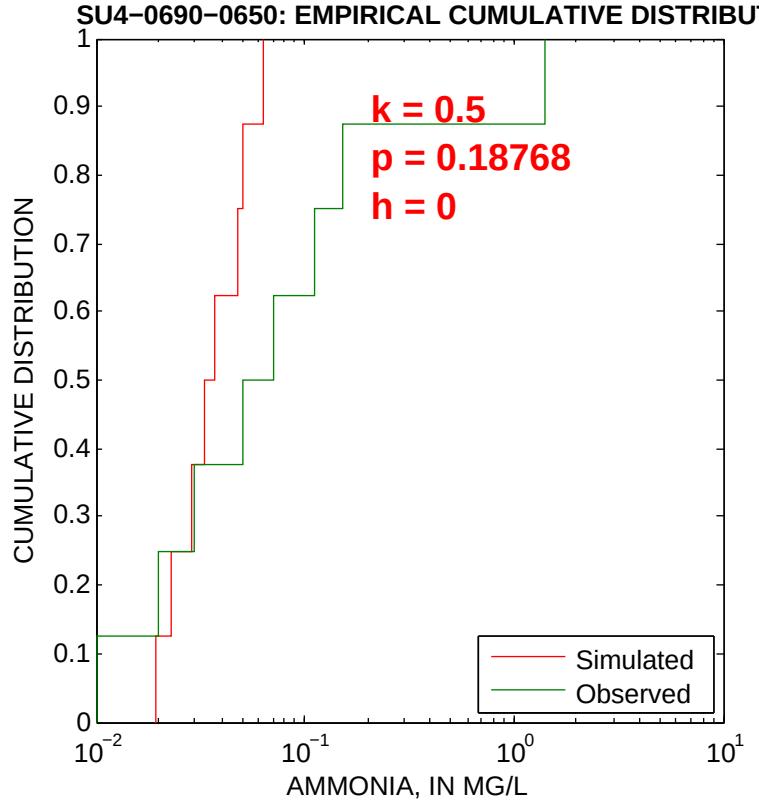
STATISTICS

		observe	simulate
n		5629	5629
min		39	34.941
		1.59106	1.54334
mean		851.576	959.166
		2.58264	2.76525
media		361	643.7
		2.55751	2.80868
max		12400	11782
		4.09342	4.07122
varian		2.07216e+0	1.48074e+
		0.279556	0.205194
JB		0.001	0.001
		0.001	0.001
		ra	log
%		12.6342	7.07089
err.va		754865	0.110495
rel.std.err		0.364289	0.395251
mod.eff		0.635711	0.604749

VERSION 2.1







DATA SELECTION

scenario	file
P620171001WQ	NH3X.calib

plot: NH3X - ammonia

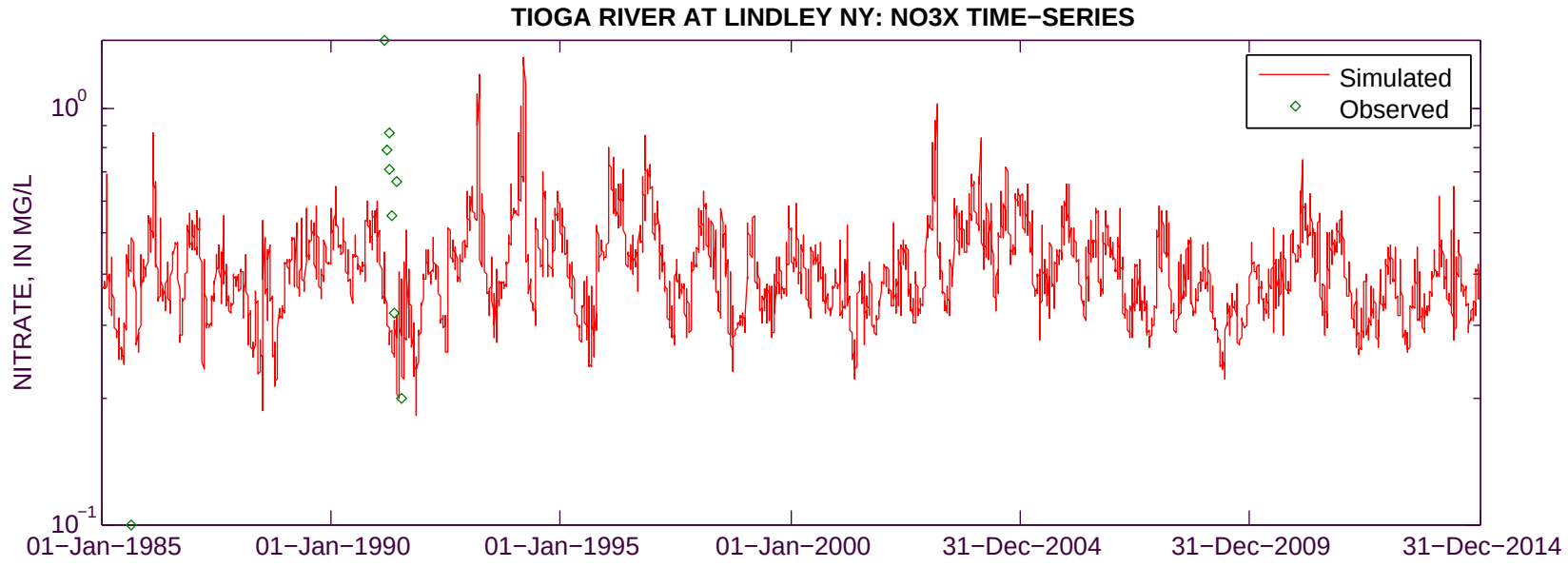
Dates: 1/1/1985 – 12/31/201

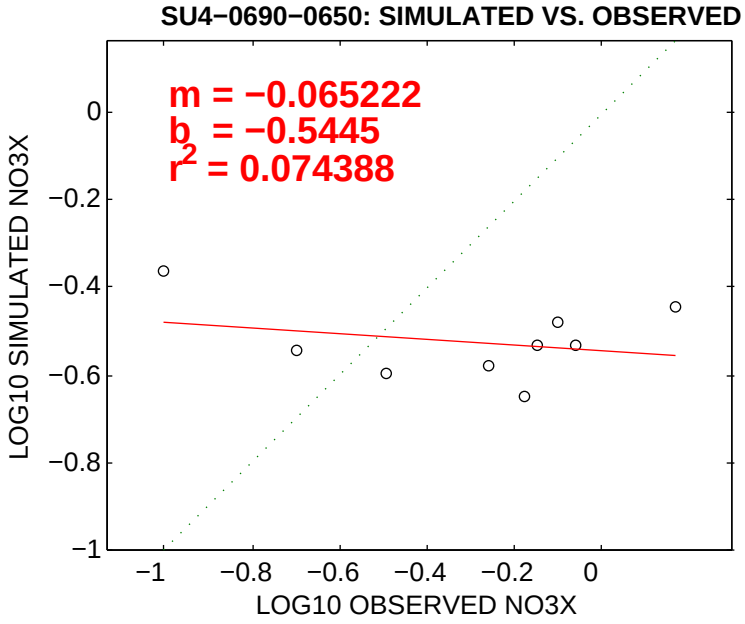
Drive: N/A | Directory: model | Observed: OBS20161101

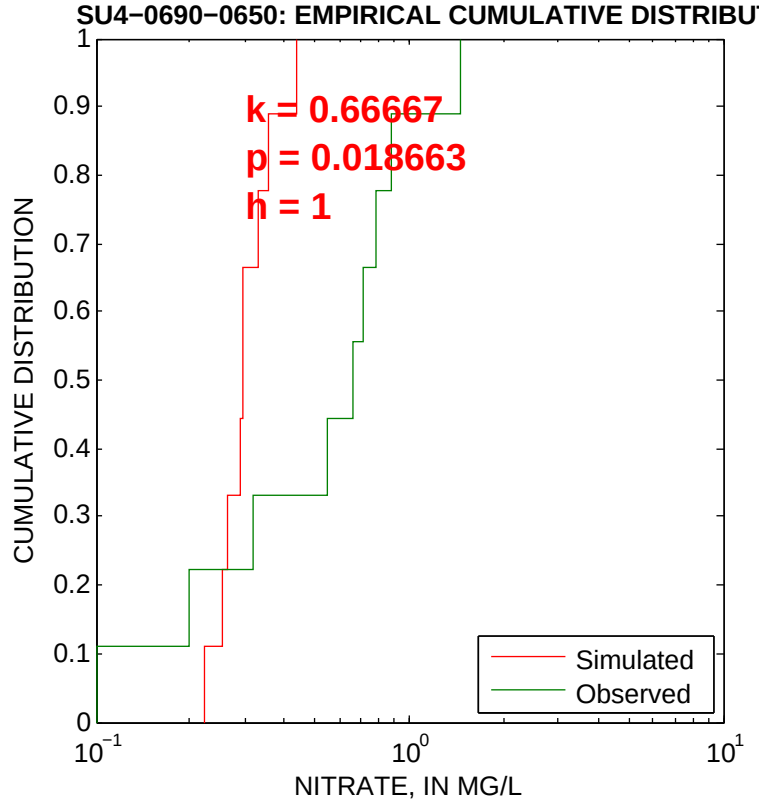
STATISTICS

	n	8	8
		observe	simulate
min		0.01	0.019383
		-2	-1.71258
mean		0.23	0.037895
		-1.16427	-1.45195
media		0.06	0.035077
		-1.22797	-1.45594
max		1.4	0.063157
		0.146128	-1.19958
varian		0.225743	0.00022411
		0.429575	0.031005
JB		0.001	0.5
		0.250288	0.5
		ra	log
%		-83.5239	24.7087
err.va		0.273911	0.641311
rel.std.err		1.21338	1.49289
mod.eff		-0.213376	-0.492895

VERSION 2.1







DATA SELECTION

scenario	file
P620171001WQ	NO3X.calib

plot: NO3X - nitrate

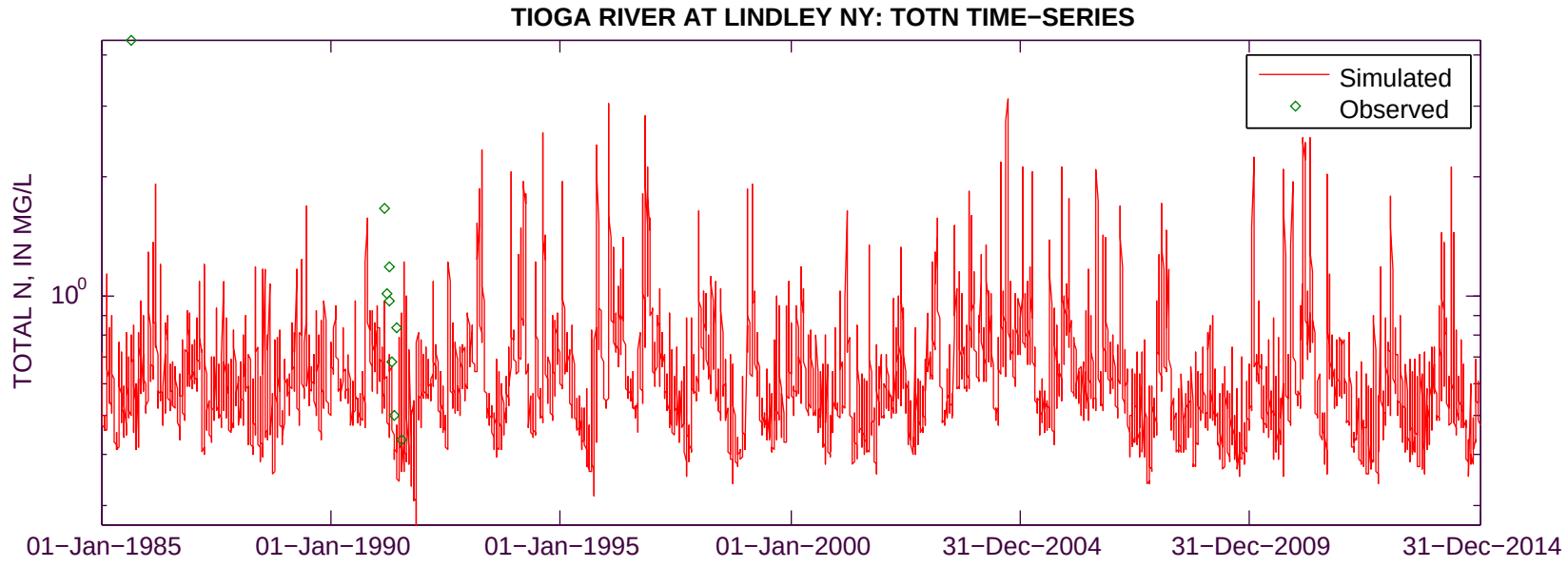
Dates: 1/1/1985 – 12/31/201

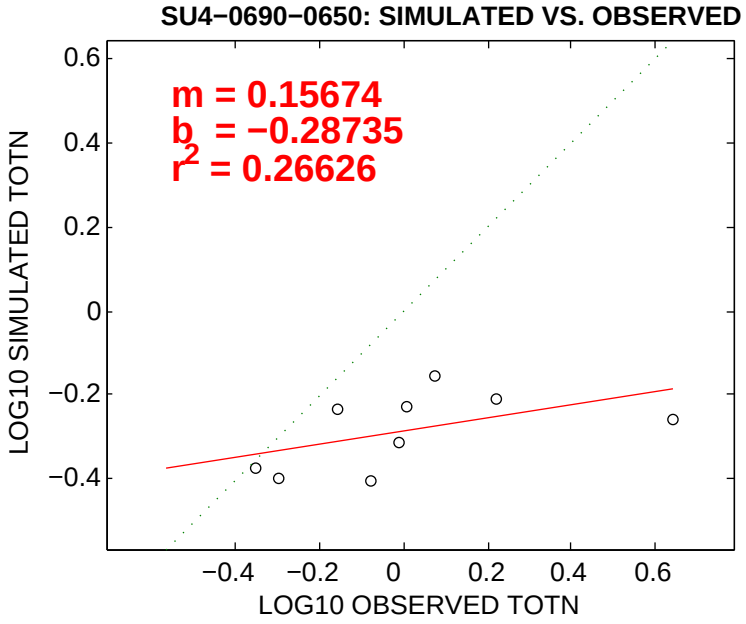
Drive	Directory	Observed
N/A	model	OBS20161101

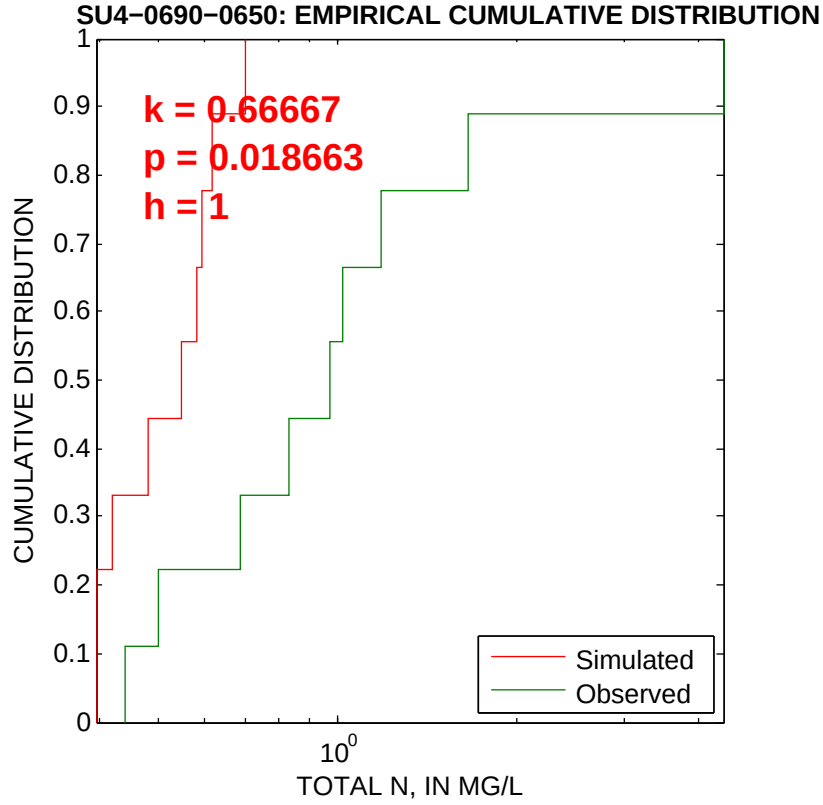
STATISTICS

	n	9	9
		observe	simulate
min		0.1	0.22334
		-1	-0.651033
mean		0.628889	0.304407
		-0.309017	-0.524348
media		0.66	0.29266
		-0.180456	-0.533637
max		1.46	0.43478
		0.164353	-0.36173
varian		0.168461	0.00400028
		0.129658	0.00741455
JB		0.5	0.176804
		0.311434	0.5
		ra	log
%		-51.5961	69.6824
err.va		0.290826	0.206148
rel.std.err		1.72637	1.58995
mod.eff		-0.726367	-0.589946

VERSION 2.1







DATA SELECTION

scenario	file
P620171001WQ	TOTN.calib

plot: TOTN - total nitrogen

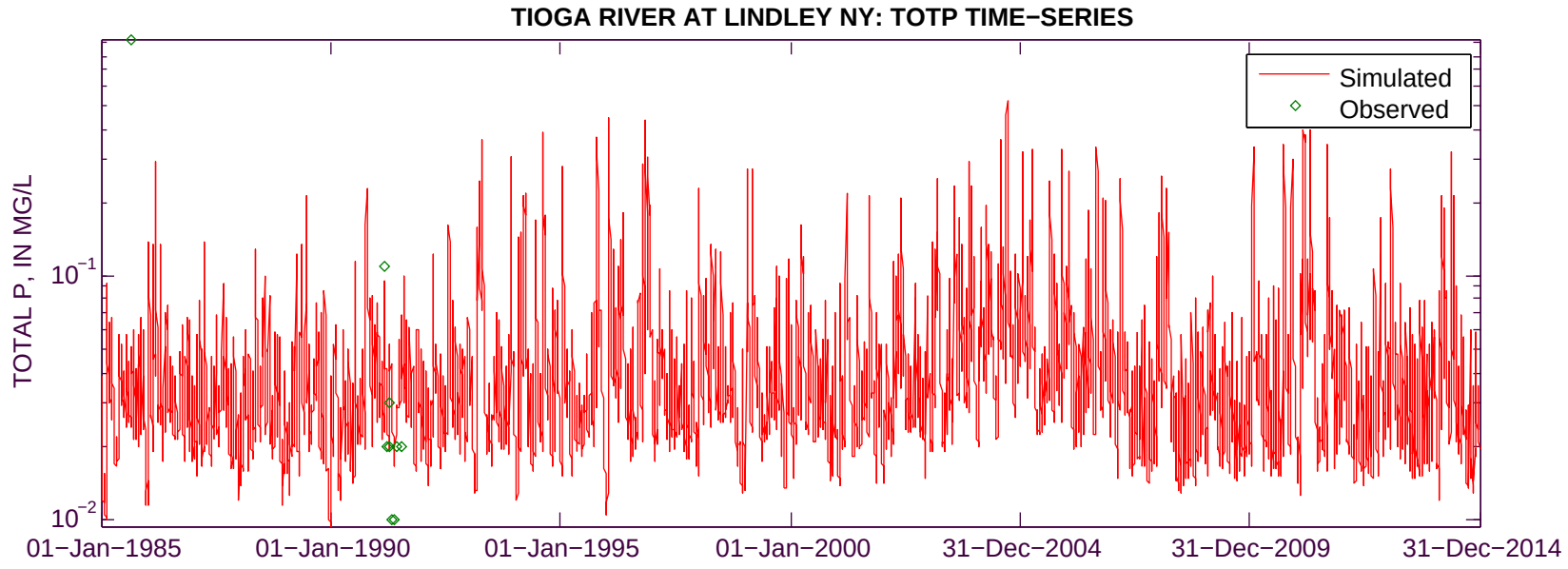
Dates: 1/1/1985 – 12/31/201

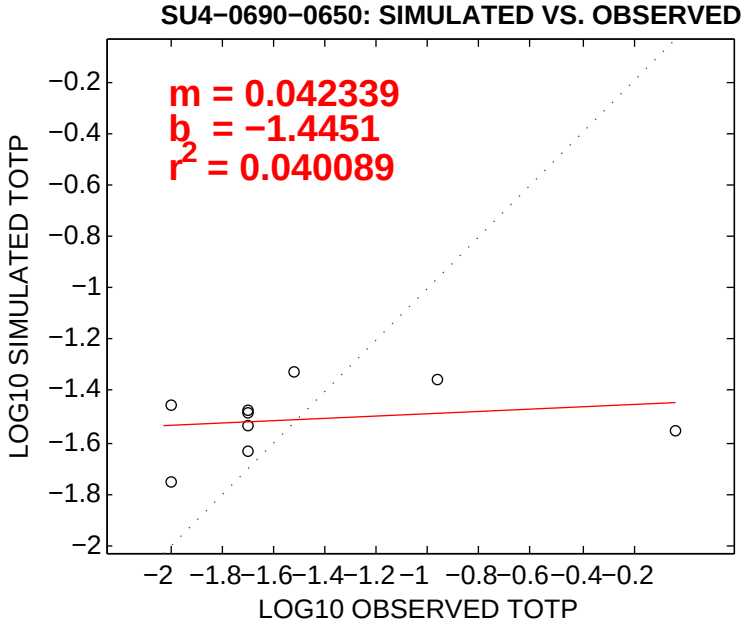
Drive	Directory	Observed
N/A	model	OBS20161101

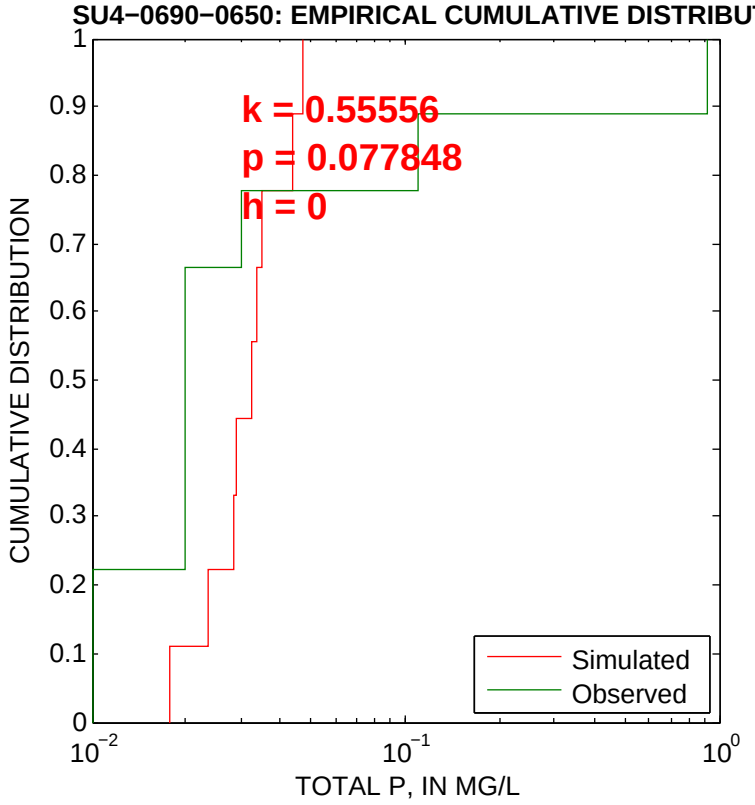
STATISTICS

	n	9	9
		observe	simulate
min		0.44	0.39458
		-0.356547	-0.403865
mean		1.29778	0.52664
		0.00317116	-0.286854
media		0.97	0.55057
		-0.0132283	-0.259187
max		4.4	0.70361
		0.643453	-0.152668
varian		1.48834	0.0117869
		0.0896149	0.00826872
JB		0.001	0.5
		0.108204	0.467049
		ra	log
%		-59.4199	-9145.73
err.va		2.09306	0.16442
rel.std.err		1.4063	1.83474
mod.eff		-0.406304	-0.834739

VERSION 2.1







DATA SELECTION

scenario	file
P620171001WQ	TOTP.calib

plot: TOTP - total phosphorus

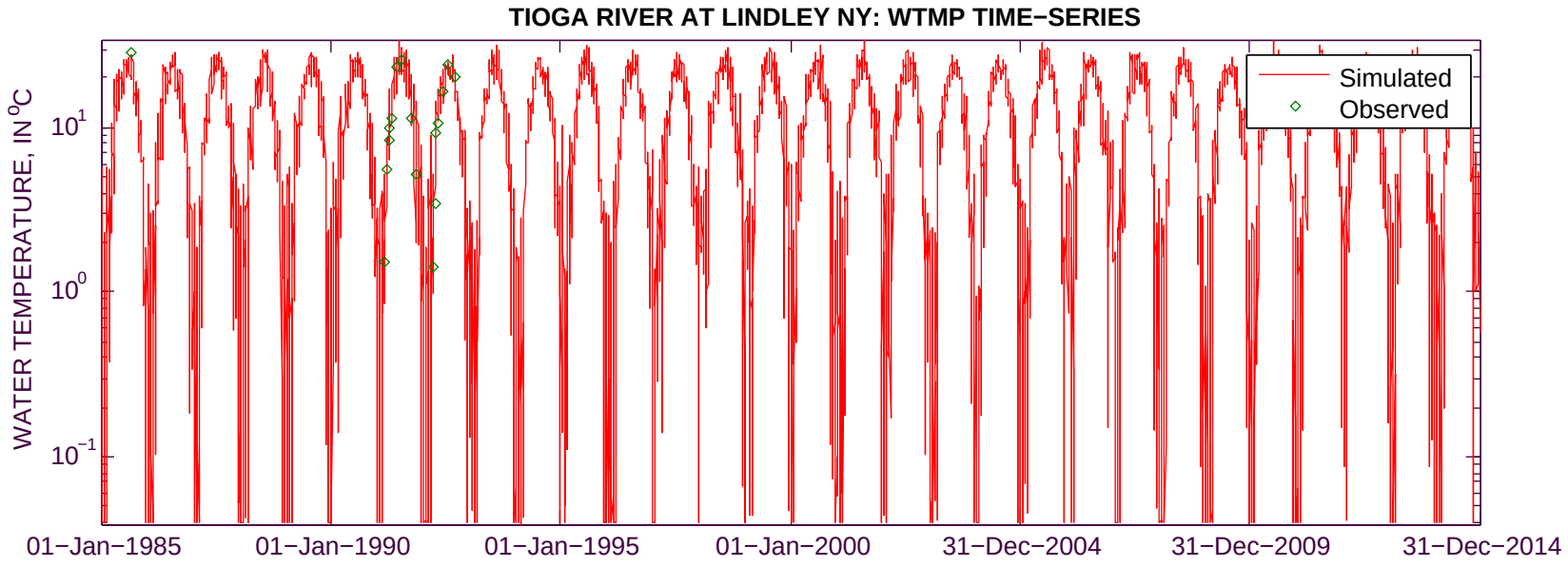
Dates: 1/1/1985 – 12/31/201

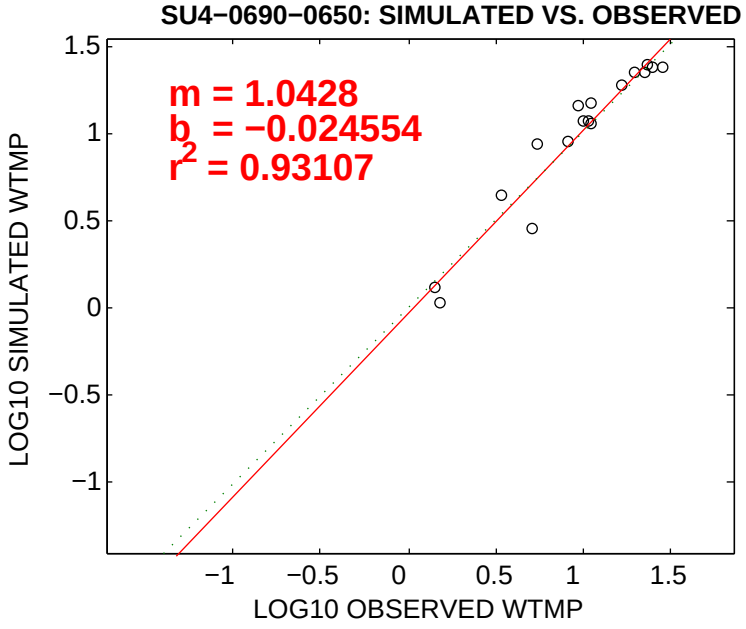
Drive	Directory	Observed
N/A	model	OBS20161101

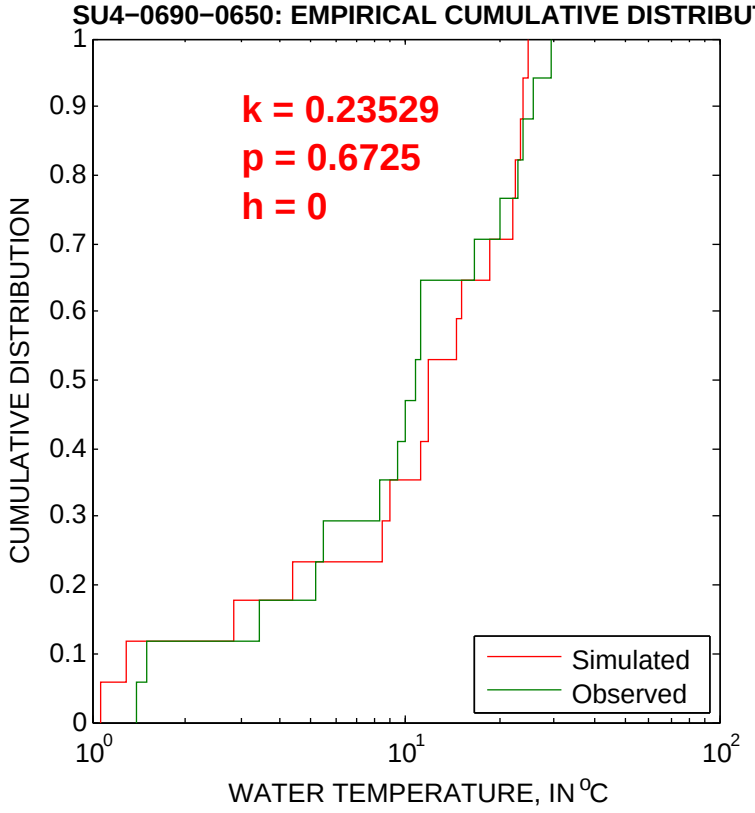
STATISTICS

	n	9	9
		observe	simulate
min		0.01	0.017719
		-2	-1.75156
mean		0.128889	0.0323017
		-1.47929	-1.50776
media		0.02	0.032361
		-1.69897	-1.48998
max		0.92	0.047442
		-0.0362122	-1.32384
varian		0.0889611	8.67809e-0
		0.38635	0.0172756
JB		0.001	0.5
		0.015005	0.5
		ra	log
%		-74.9384	1.92459
err.va		0.100147	0.371822
rel.std.err		1.12573	0.962397
mod.eff		-0.125734	0.0376025

VERSION 2.1







DATA SELECTION

scenario	file
P620171001WQ	WTMP.calib

plot: WTMP - water tempera...

Dates: 1/1/1985 – 12/31/201

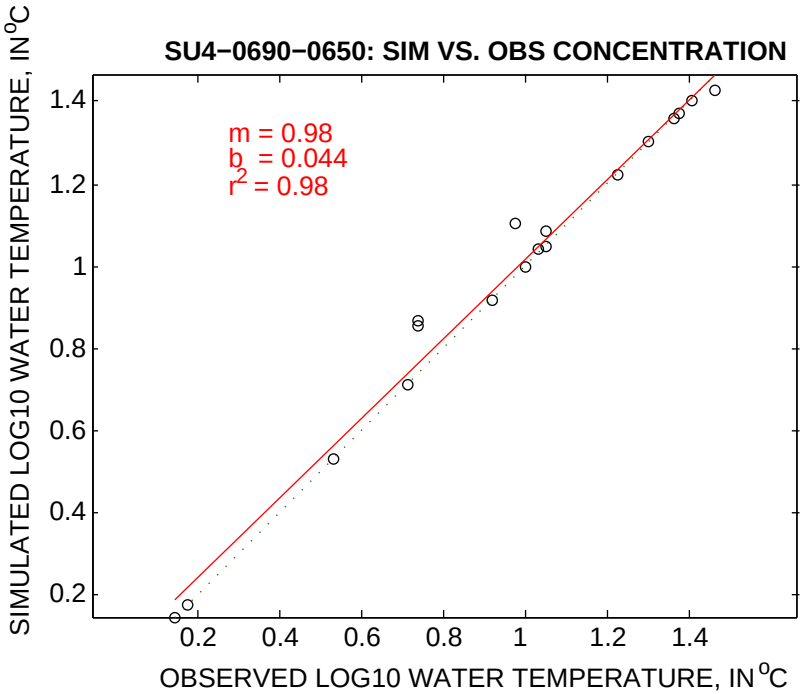
Drive	Directory	Observed
N/A	model	OBS20161101

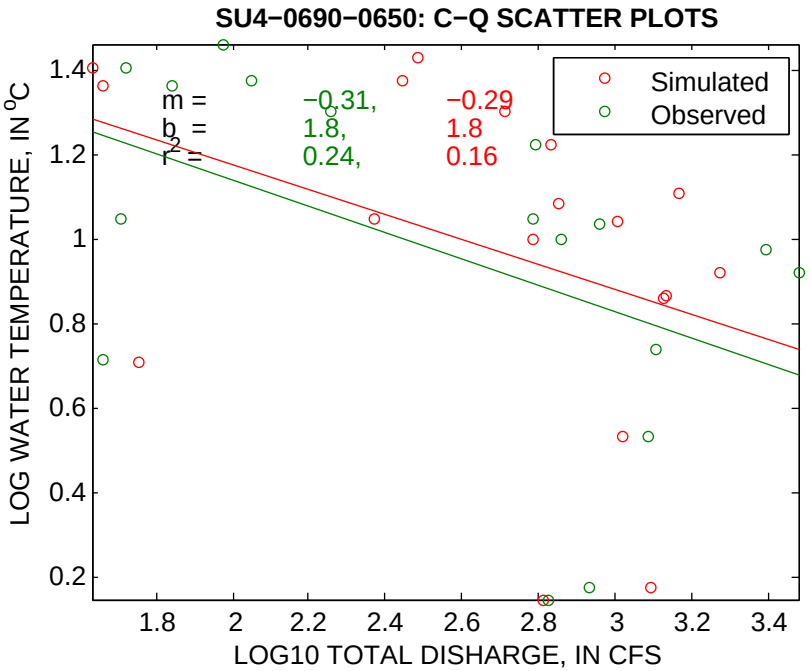
STATISTICS

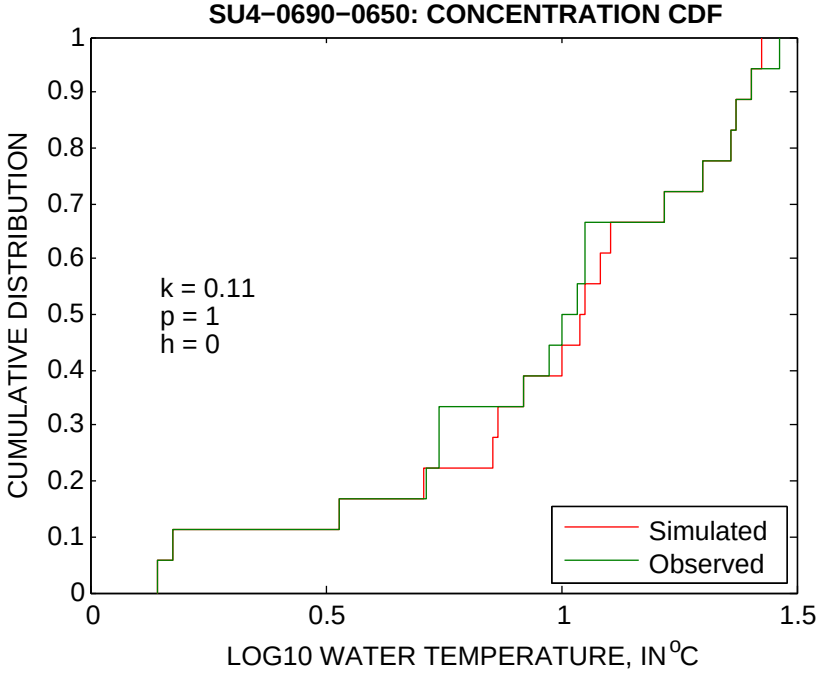
	n	17	17
		observe	simulate
min		1.4	1.0588
		0.146128	0.0248139
mean		12.6824	13.3164
		0.968217	0.985061
media		10.8	11.887
		1.03342	1.07507
max		29	24.704
		1.4624	1.39277
varian		75.9165	66.7806
		0.159963	0.18681
JB		✓ 0.238195	0.304612 ✓
		✓ 0.136692	0.046946
		ra	log
%		4.99926	1.7397
err.va		6.36232	0.01347
rel.std.err		.0838067	0.0842069
mod.eff		0.916193	0.915793

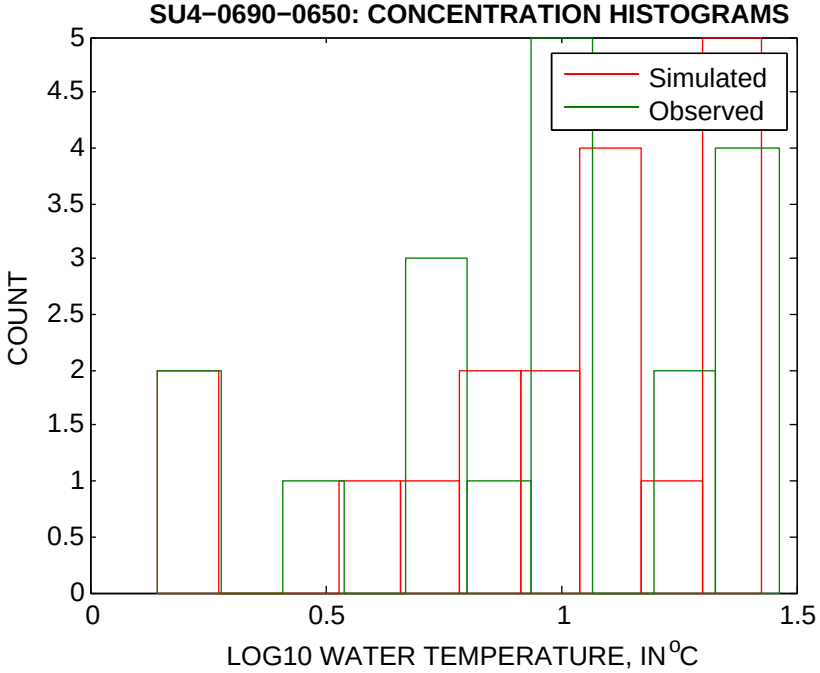
VERSION 2.1

ALL DATA
LOG10

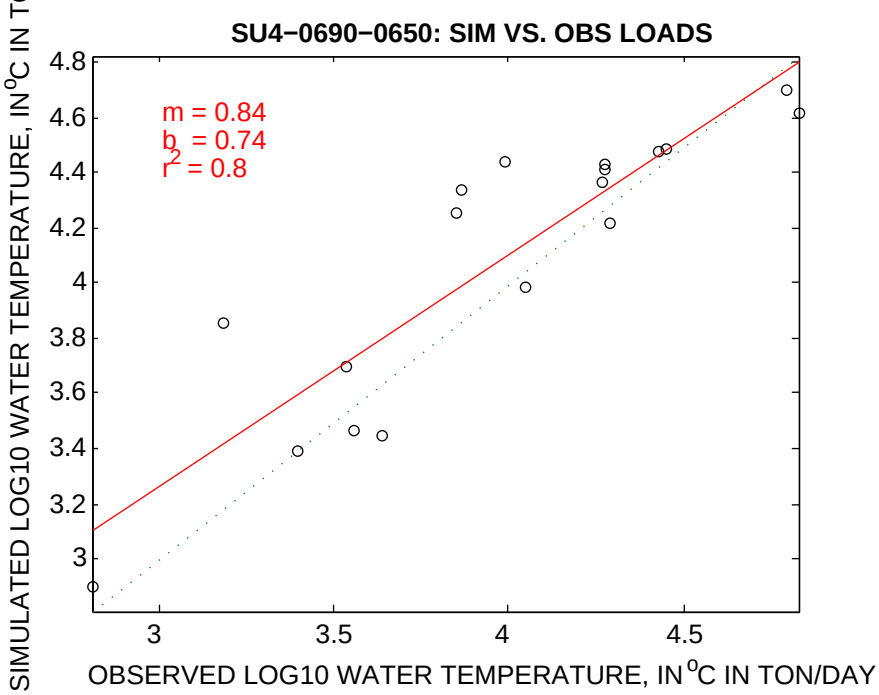


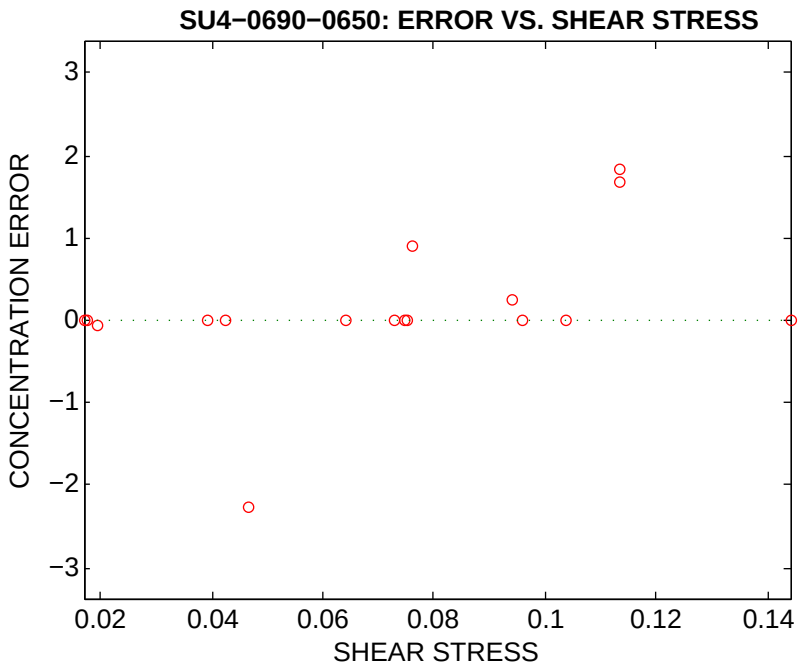


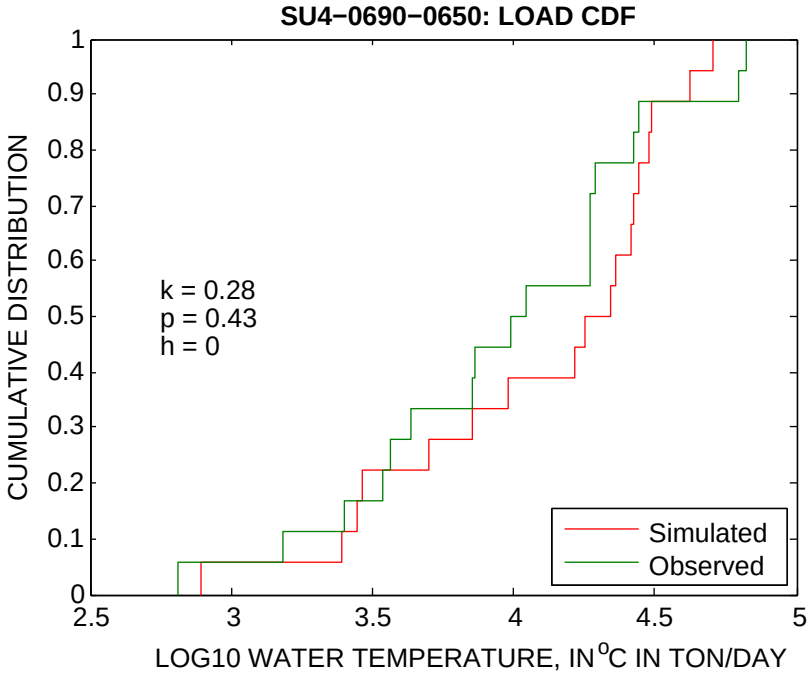


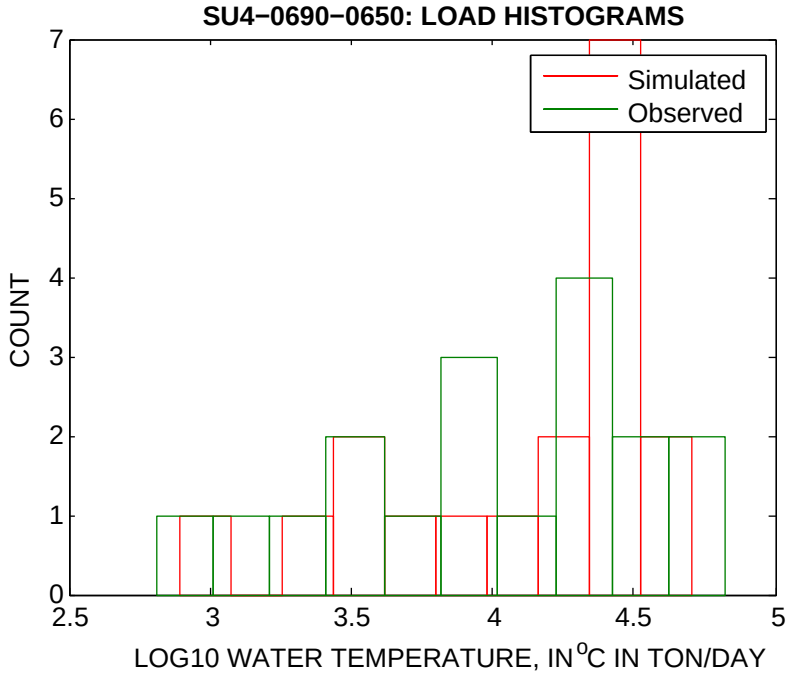


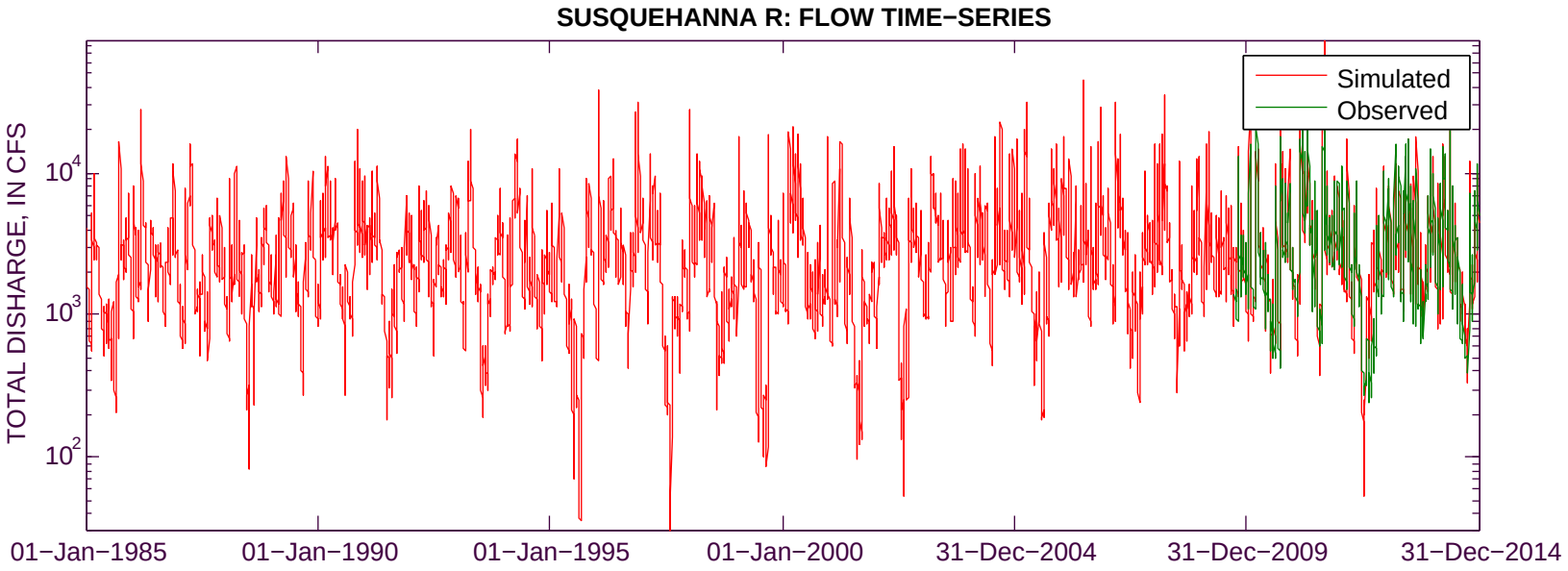
LOAD DATA
LOG10

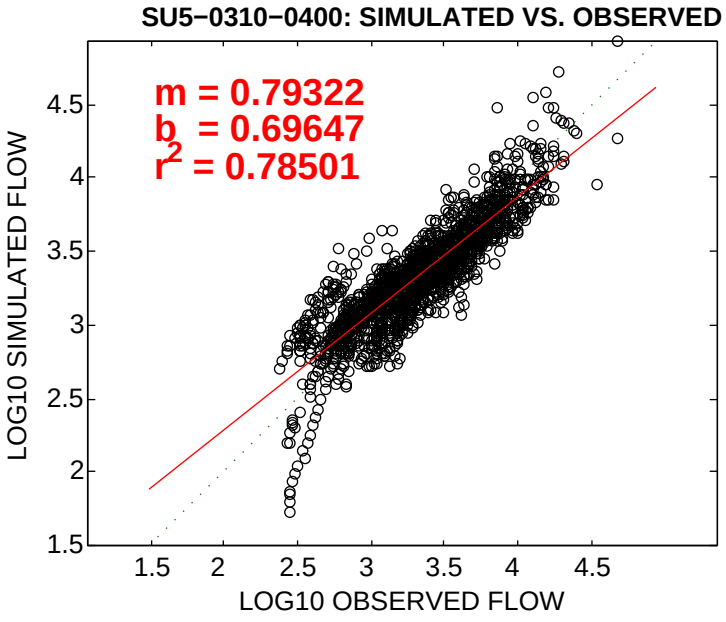


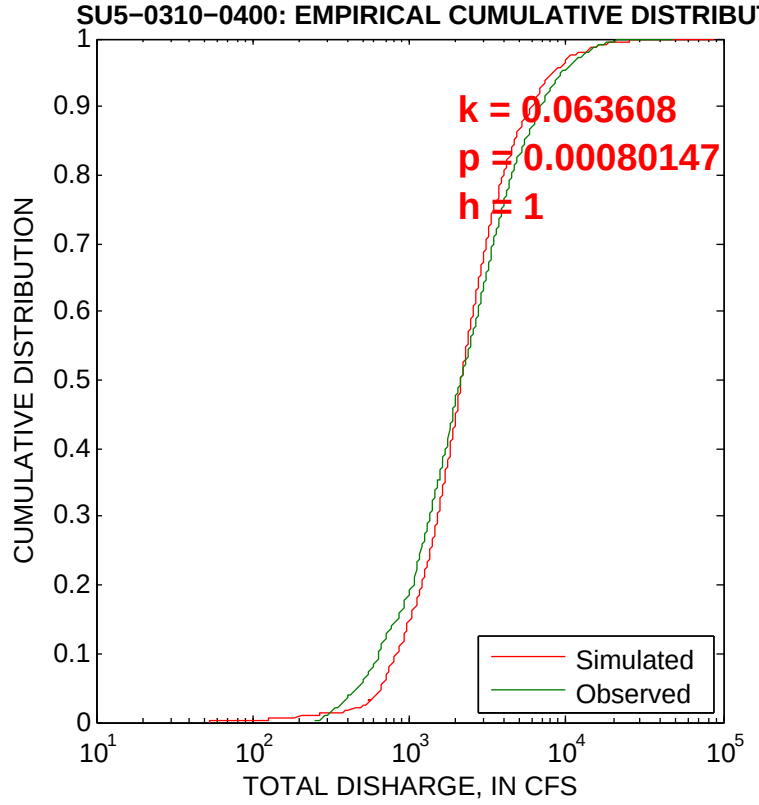












DATA SELECTION

scenario: P620171001WQ | file: FLOW.calib

plot: FLOW - total discharge

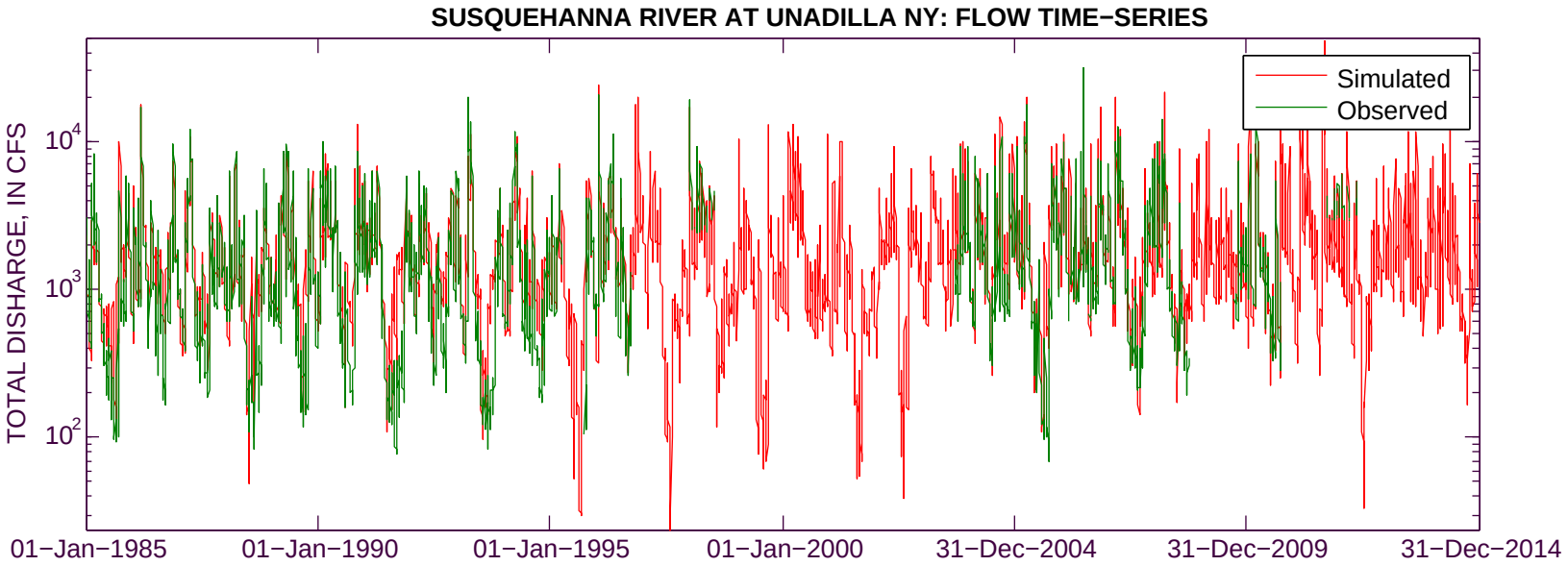
Dates: 1/1/1985 – 12/31/201

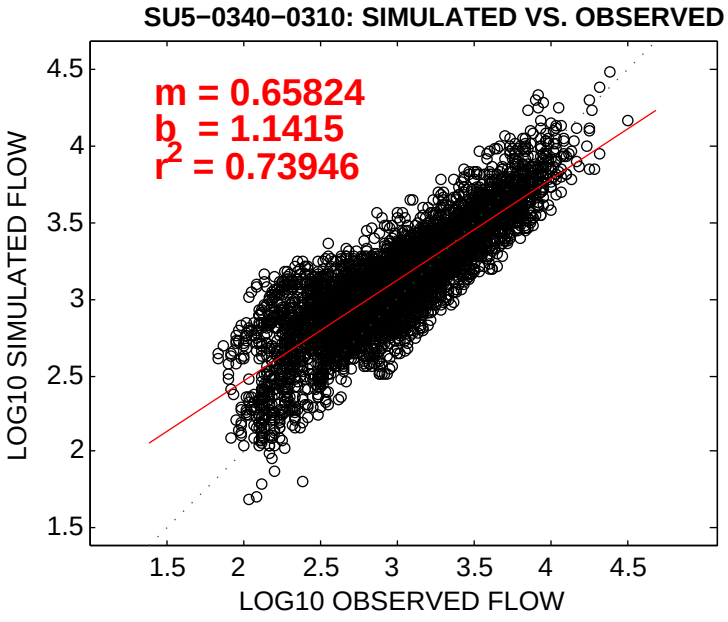
Drive: N/A | Directory: model | Observed: OBS20161101

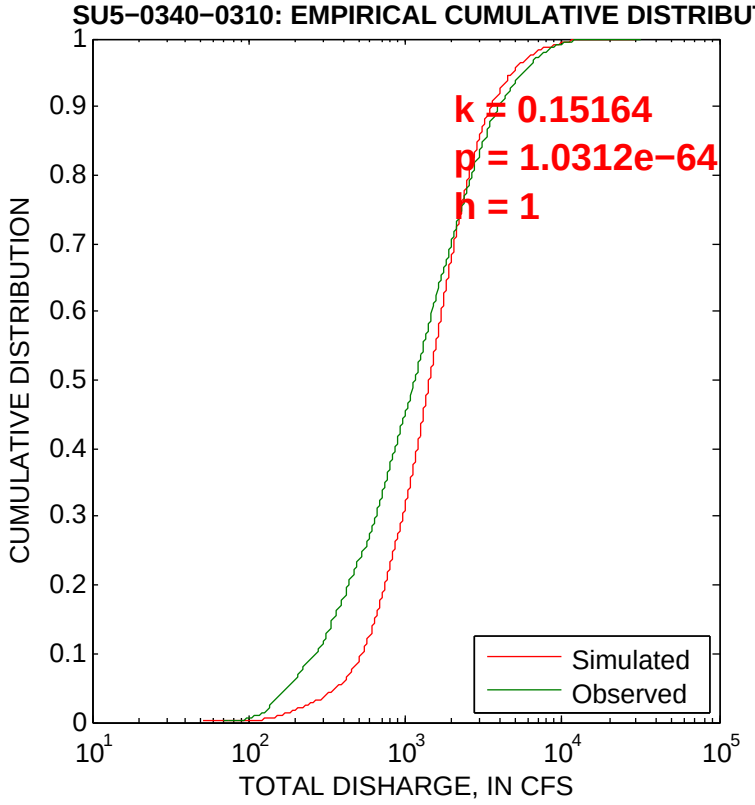
STATISTICS

		observe	simulate
n		1918	1918
min		242	52.889
		2.38382	1.72337
mean		3233.34	3099.2
		3.33509	3.34194
media		2150	2142.9
		3.33244	3.331
max		48300	86865
		4.68395	4.93884
varian		1.25182e+0	1.50029e+
		0.151627	0.121532
JB		0.001	0.001
	☑	0.096476	0.001
		ra	log
%		-4.1486	0.205406
err.va		5.4e+06	0.0326577
rel.std.err		0.431373	0.215382
mod.eff		0.568627	0.784618

VERSION 2.1







DATA SELECTION

scenario	file
P620171001WQ	FLOW.calib

plot: FLOW - total discharge

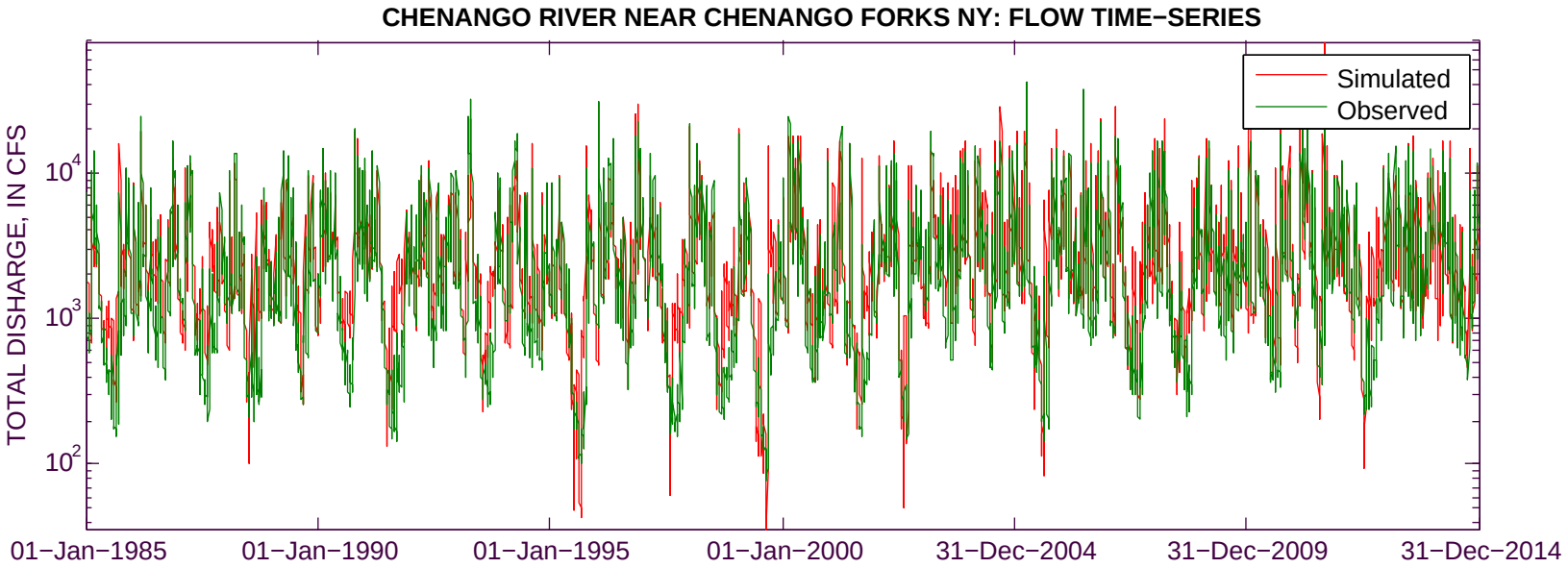
Dates: 1/1/1985 – 12/31/201

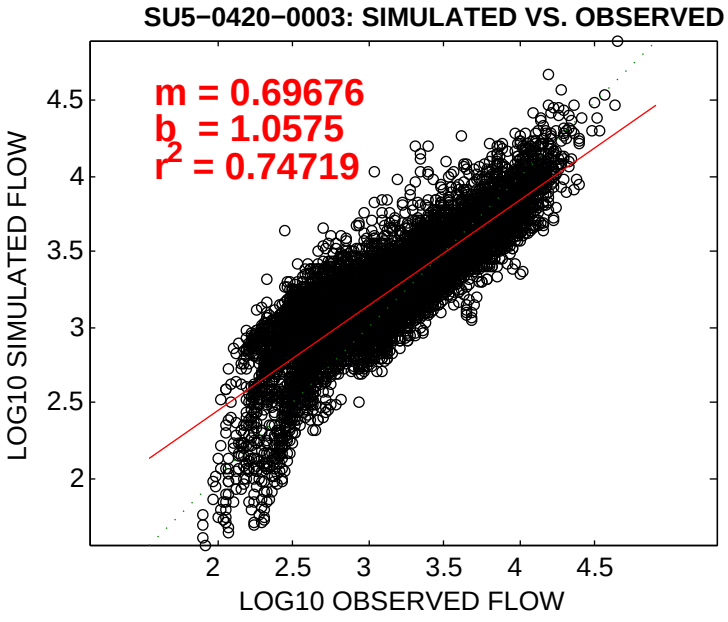
Drive	Directory	Observed
N/A	model	OBS20161101

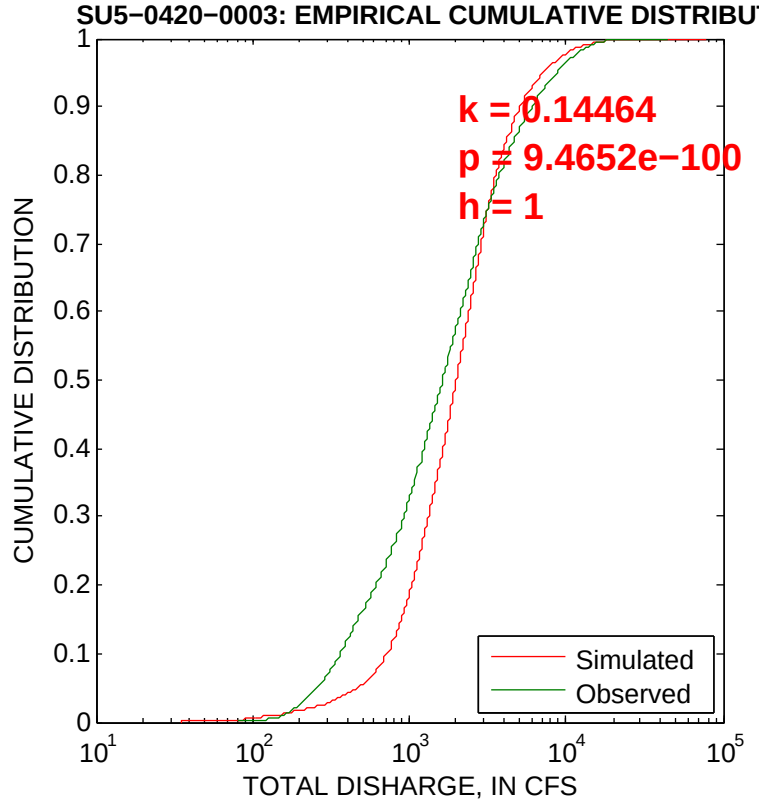
STATISTICS

	observe	simulate
n	6410	6410
min	68 1.83251	49.431 1.694
mean	1789.96 3.03875	1873.04 3.14176
media	1150 3.0607	1428.5 3.15488
max	31700 4.50106	29677 4.47242
varian	4.10259e+0 0.198854	3.07034e+ 0.116518
JB	0.001 0.001	0.001 0.001
	ra	log
%	4.64152	3.38979
err.va	1.10949e+0	0.0641954
rel.std.err	0.270437	0.322826
mod.eff	0.729563	0.677174

VERSION 2.1







DATA SELECTION

scenario	file
P620171001WQ	FLOW.calib

plot: FLOW - total discharge

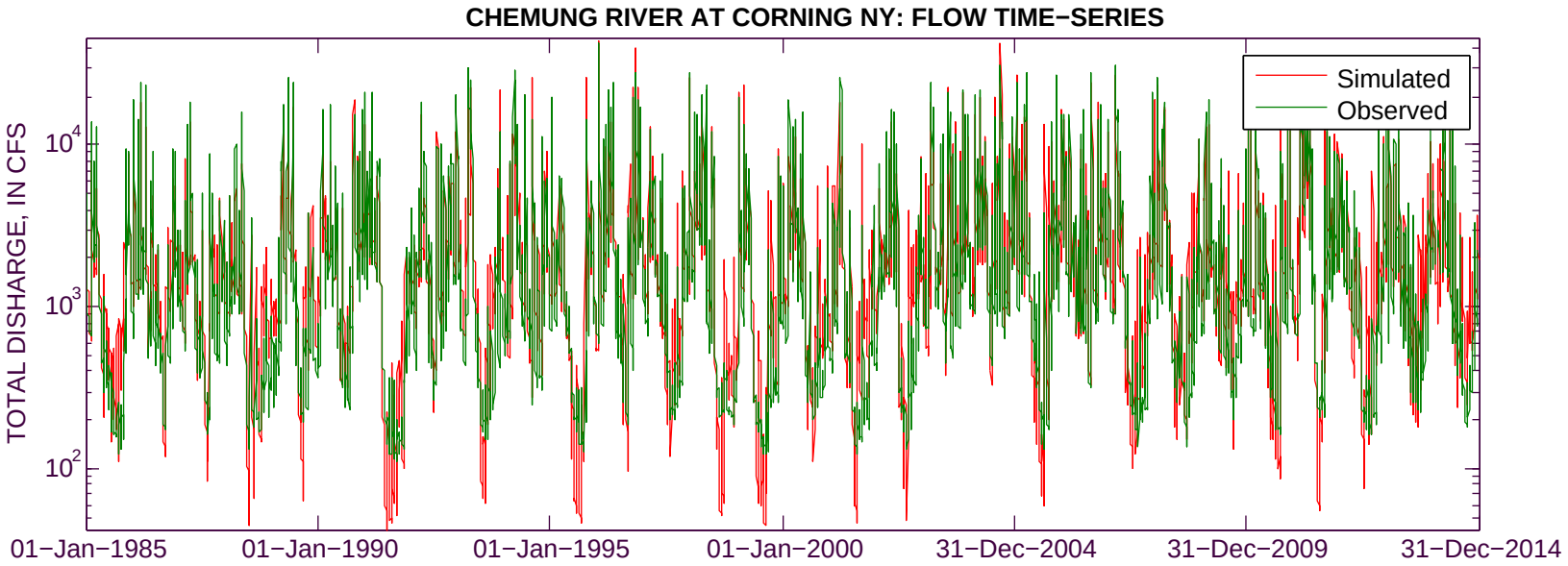
Dates: 1/1/1985 – 12/31/201

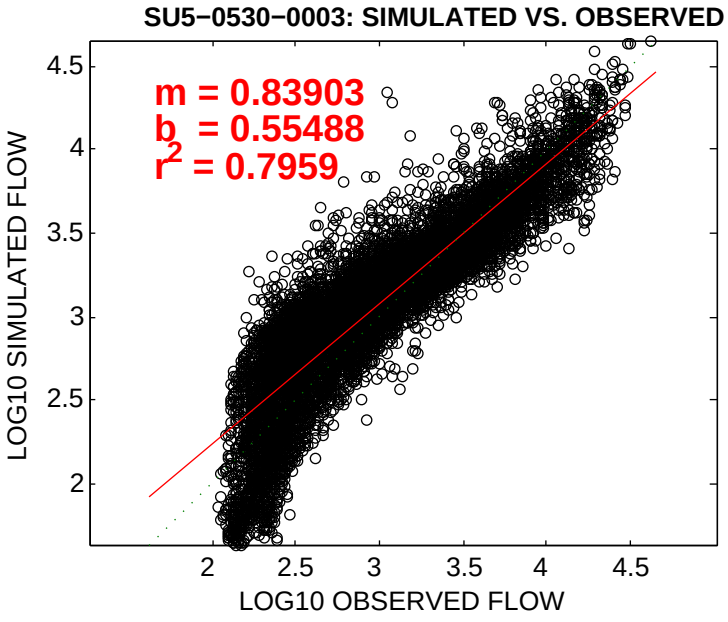
Drive	Directory	Observed
N/A	model	OBS20161101

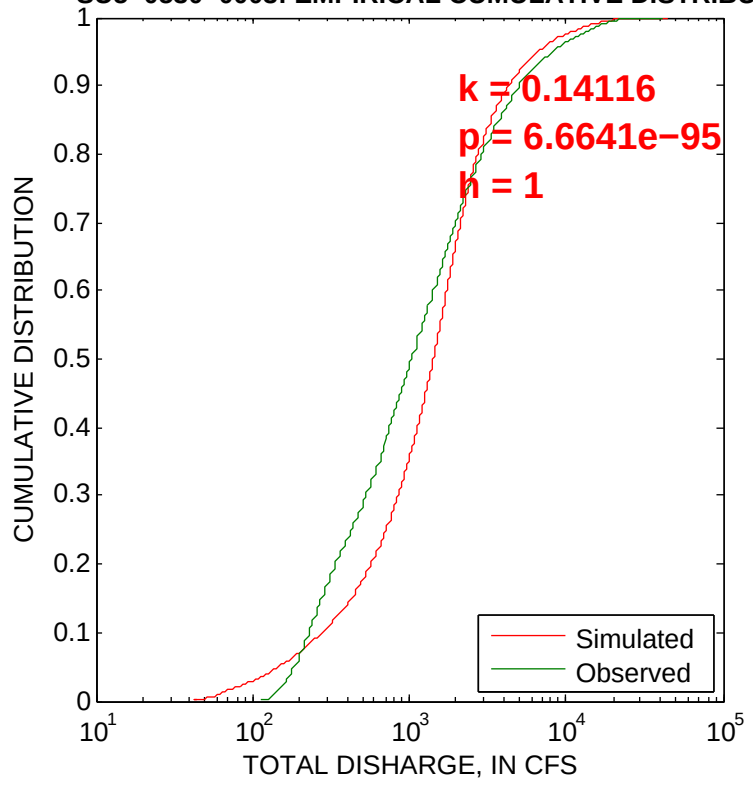
STATISTICS

	observe	simulate
n	10896	10896
min	79	34.976
	1.89763	1.54377
mean	2616.94	2676.47
	3.19332	3.28245
media	1640	1998.35
	3.21484	3.30067
max	44100	79243
	4.64444	4.89896
varian	9.26009e+0	7.38213e+
	0.206479	0.134155
JB	0.001	0.001
	0.001	0.001
	ra	log
%	2.275	2.79112
err.va	2.70168e+0	0.0608467
rel.std.err	0.291755	0.294687
mod.eff	0.708245	0.705313

VERSION 2.1







DATA SELECTION

scenario	file
P620171001WQ	FLOW.calib

plot: FLOW - total discharge

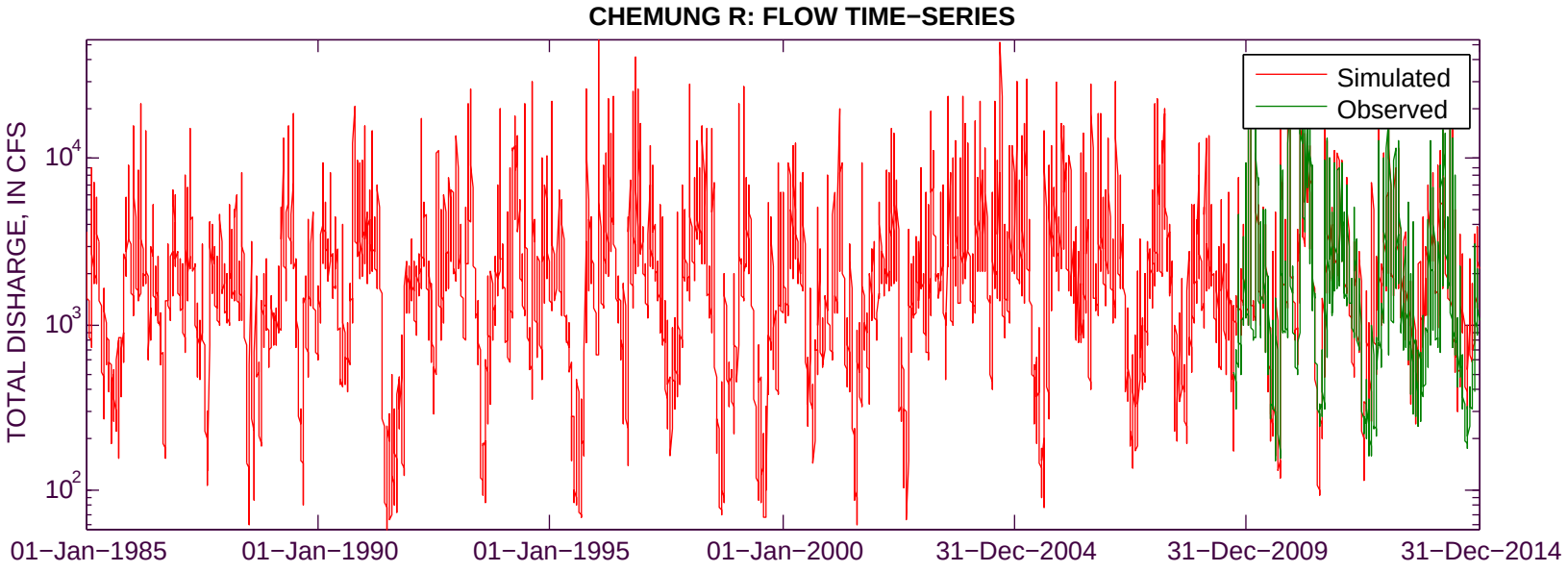
Dates: 1/1/1985 – 12/31/201

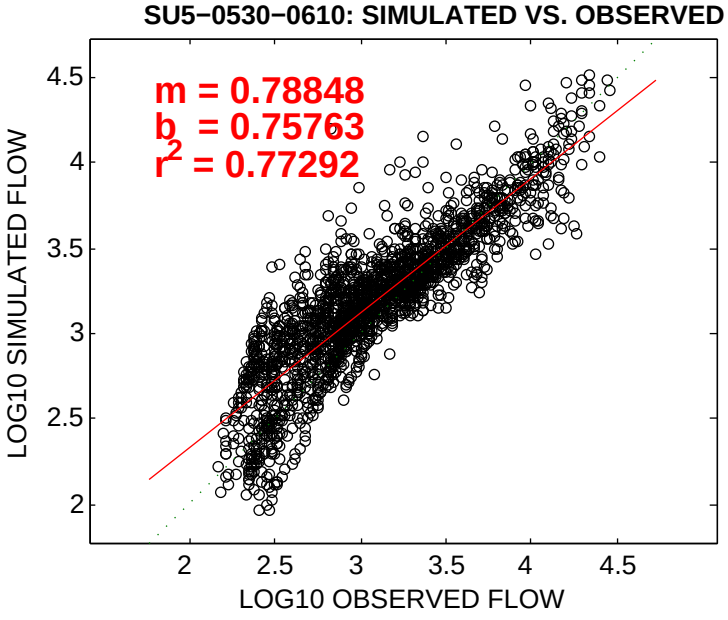
Drive	Directory	Observed
N/A	model	OBS20161101

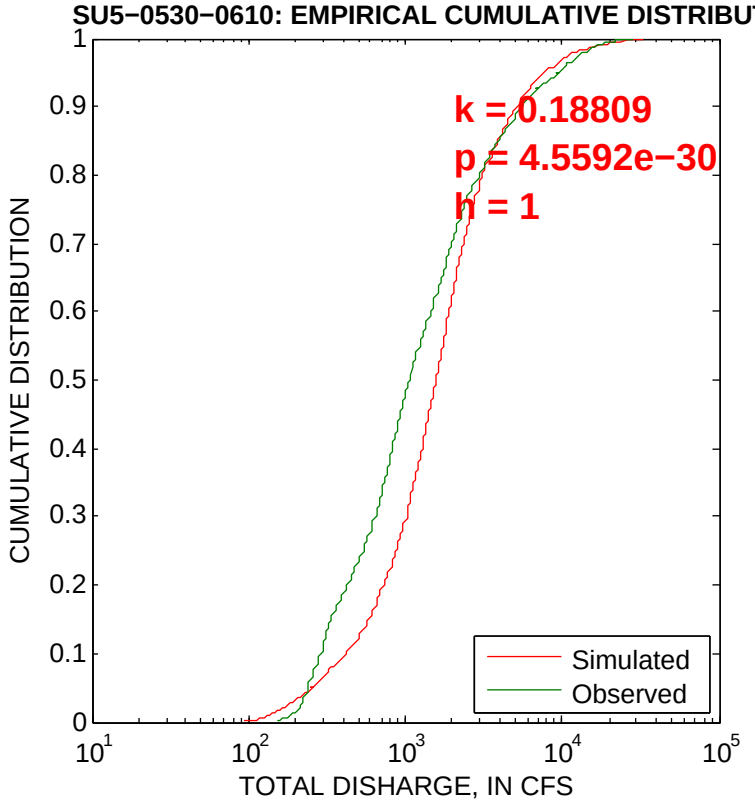
STATISTICS

	n	observe	simulate
		10881	10881
min		110	42.282
		2.04139	1.62616
mean		2170.67	2147.27
		3.03057	3.09763
media		1040	1425.7
		3.01703	3.15403
max		42000	44871
		4.62325	4.65197
varian		1.09174e+0	8.13955e+
		0.255113	0.225647
JB		0.001	0.001
		0.001	0.001
		ra	log
%		-1.07801	2.21253
err.va		2.7039e+06	0.0571621
rel.std.err		0.247669	0.224066
mod.eff		0.752331	0.775934

VERSION







DATA SELECTION

scenario	file
P620171001WQ	FLOW.calib

plot: FLOW - total discharge

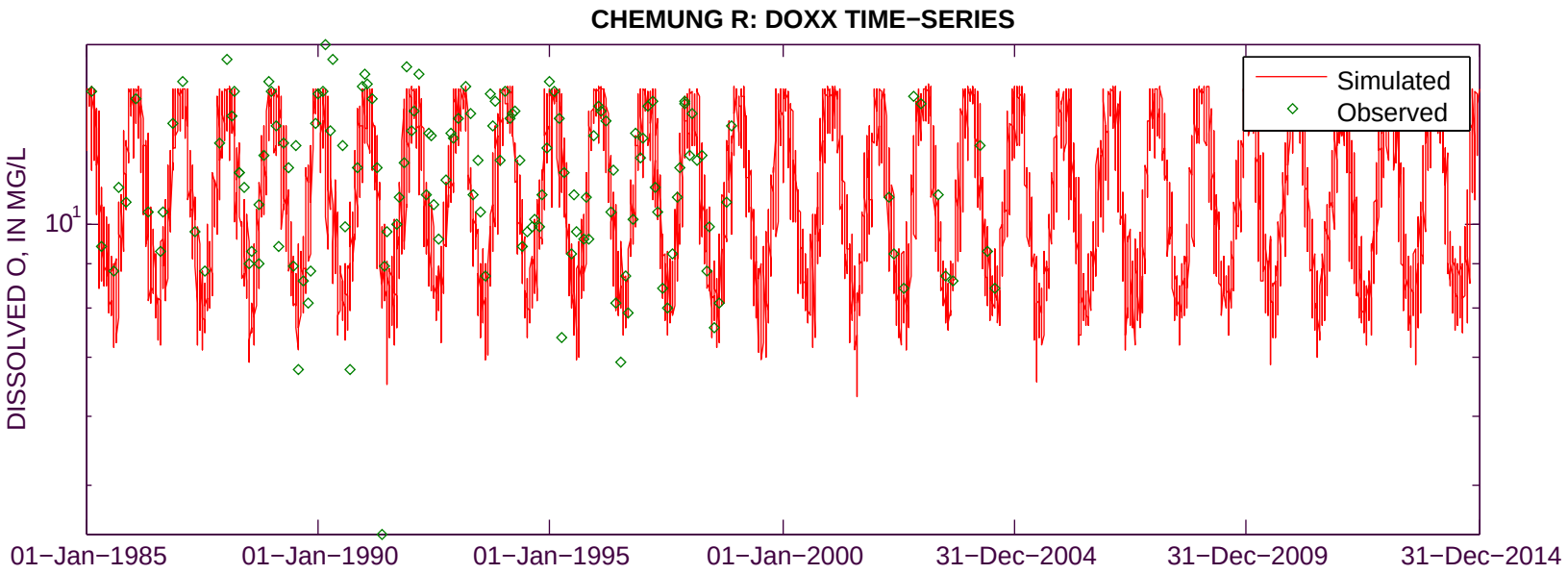
Dates: 1/1/1985 – 12/31/201

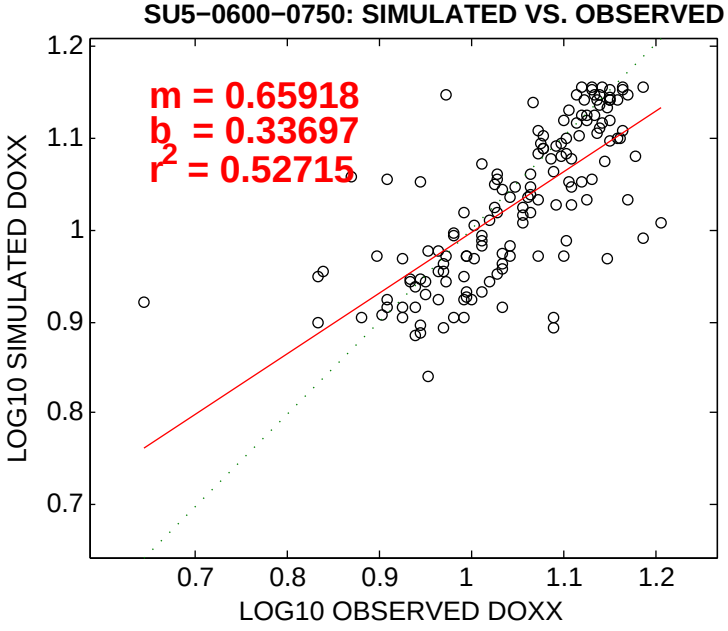
Drive	Directory	Observed
N/A	model	OBS20161101

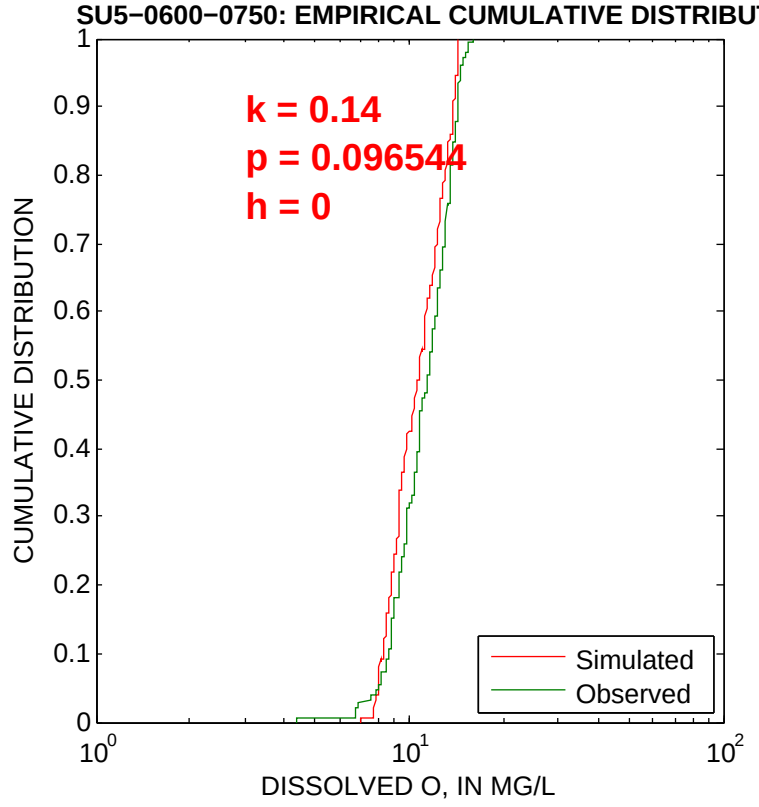
STATISTICS

	observe	simulate
n	1914	1914
min	149 2.17319	91.023 1.95915
mean	2294.63 3.07651	2484.37 3.1834
media	1070 3.02938	1576.5 3.19769
max	28900 4.4609	32616 4.51343
varian	1.14616e+0 0.22568	1.07245e+ 0.181529
JB	0.001 0.001	0.001 0.004940
	ra	log
%	8.26877	3.47445
err.va	3.21273e+0	0.062751
rel.std.err	0.280304	0.278053
mod.eff	0.719696	0.721947

VERSION 2.1







DATA SELECTION

scenario	file
P620171001WQ	DOXX.calib

plot: DOXX - dissolved oxygen

Dates: 1/1/1985 – 12/31/201

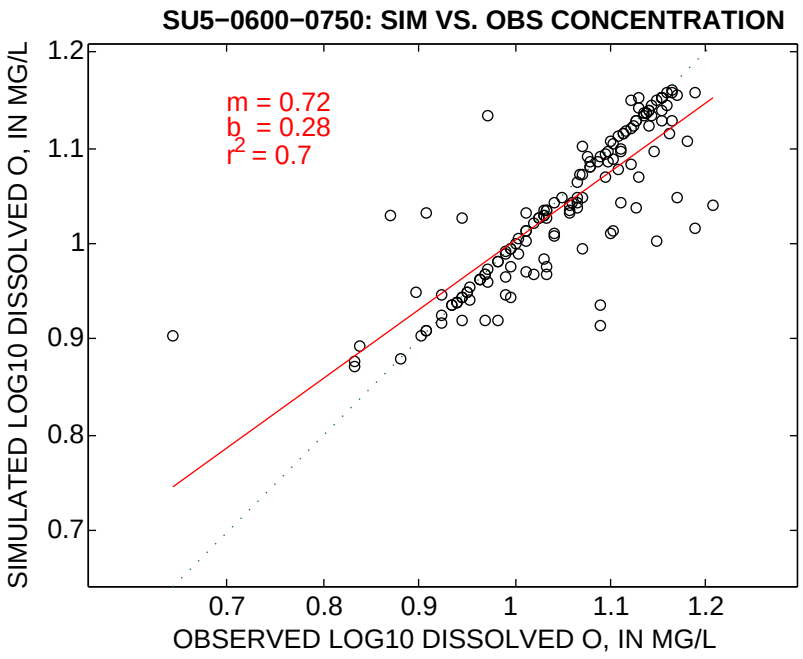
Drive	Directory	Observed
N/A	model	OBS20161101

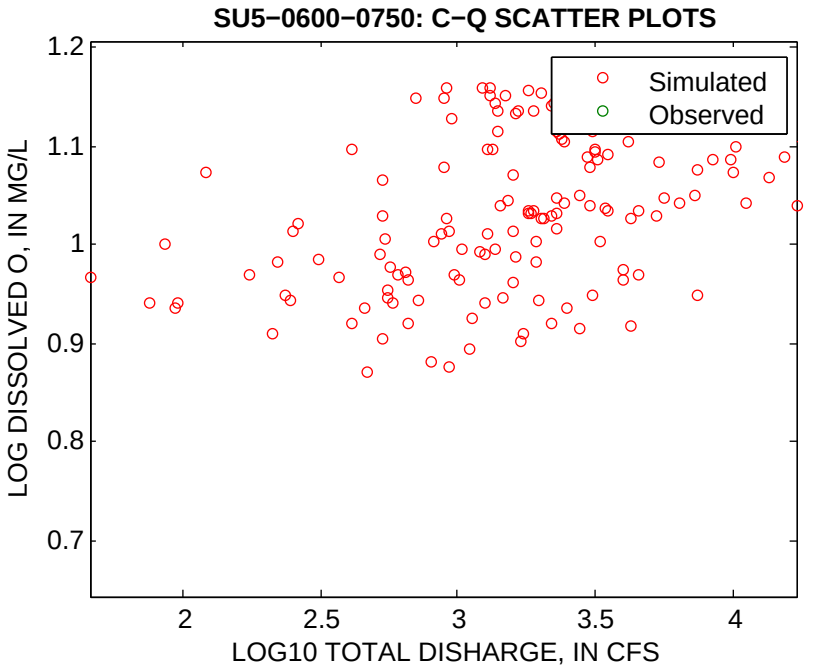
STATISTICS

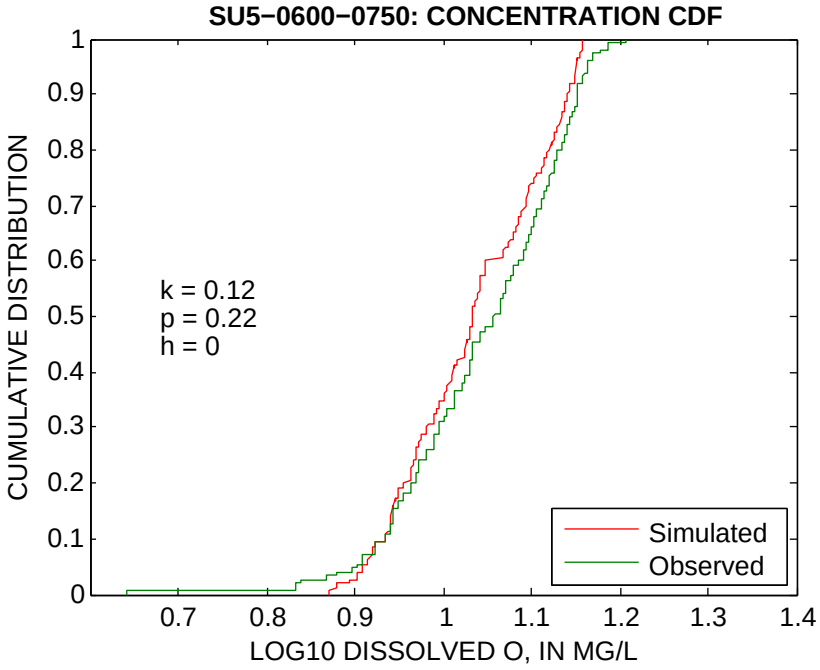
	n	150	150
		observe	simulate
min		4.4	6.9383
		0.643453	0.841253
mean		11.3587	10.8265
		1.04624	1.02663
media		11.45	10.708
		1.0588	1.02969
max		16.1	14.29
		1.20683	1.15503
varian		4.99117	4.22801
		0.00838429	0.00691096
JB		0.149907	0.014358
		0.001385	0.018032
		ra	log
%		-4.68552	-1.8745
err.va		2.65797	0.00462892
rel.std.err		0.532535	0.552094
mod.eff		0.467465	0.447906

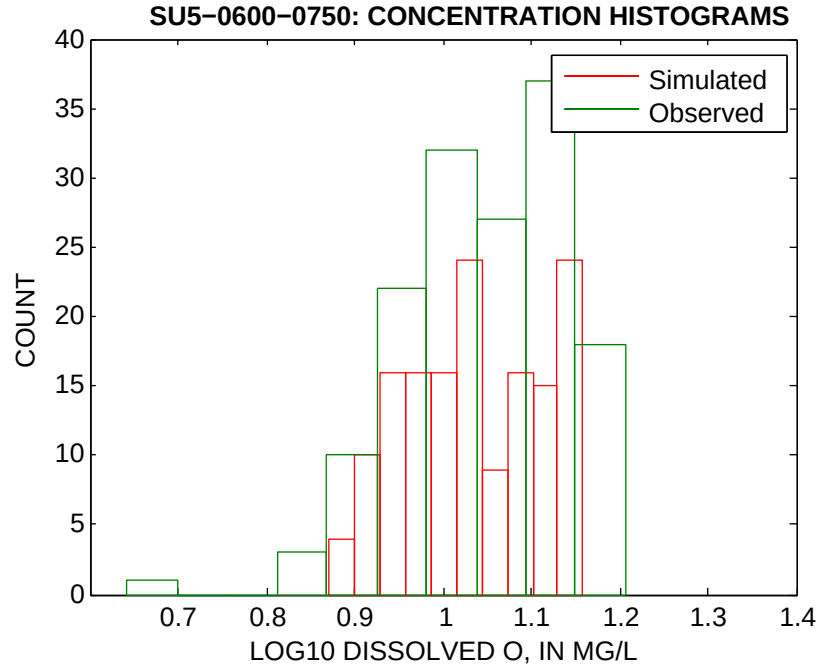
VERSION 2.1

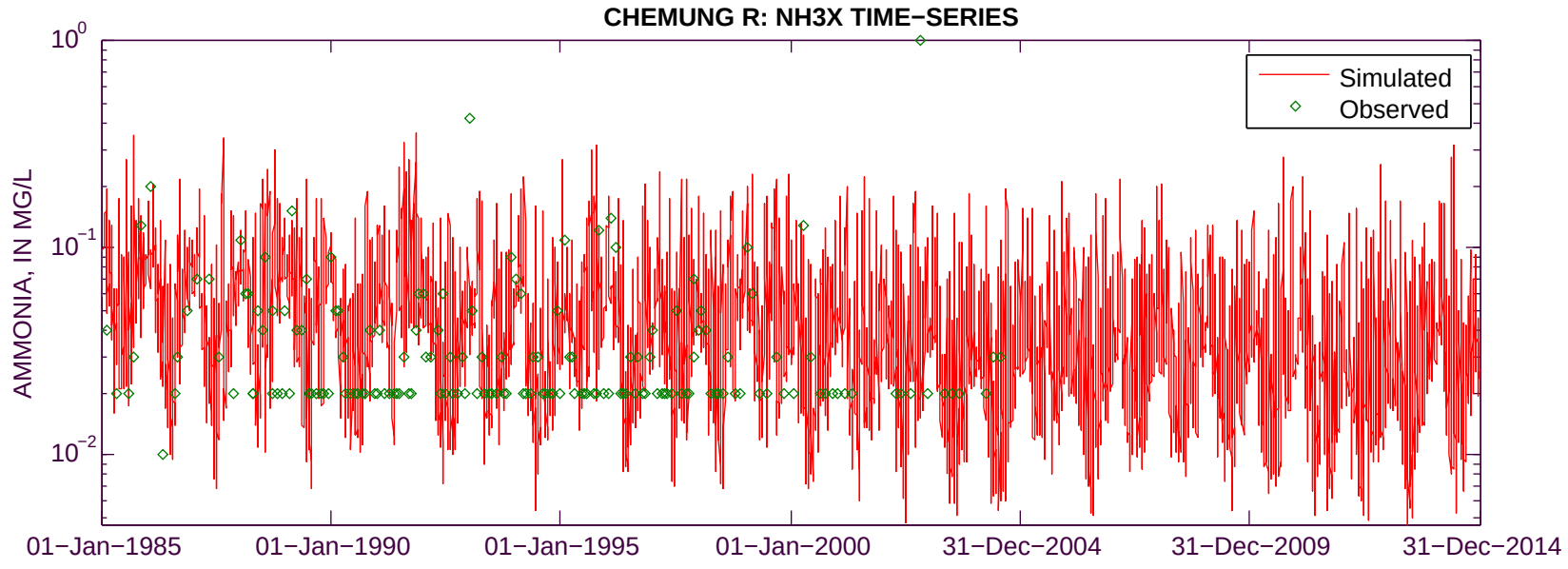
ALL DATA
LOG10

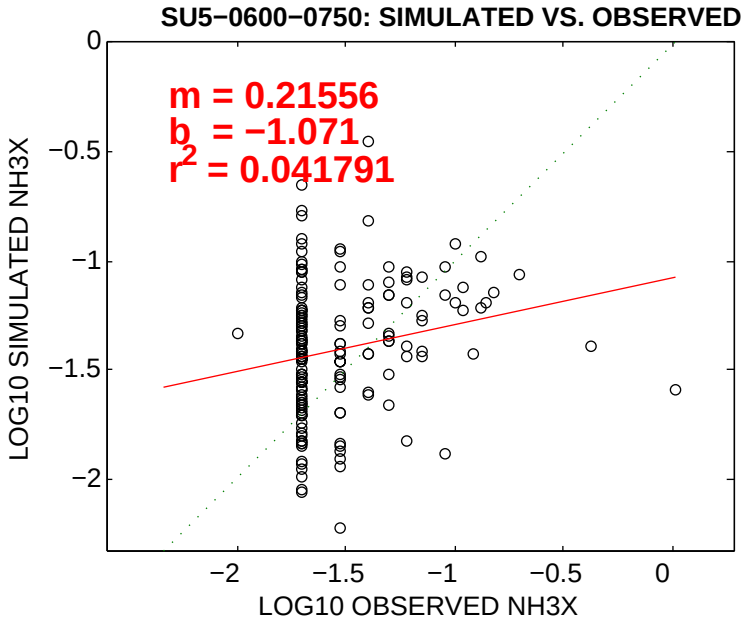


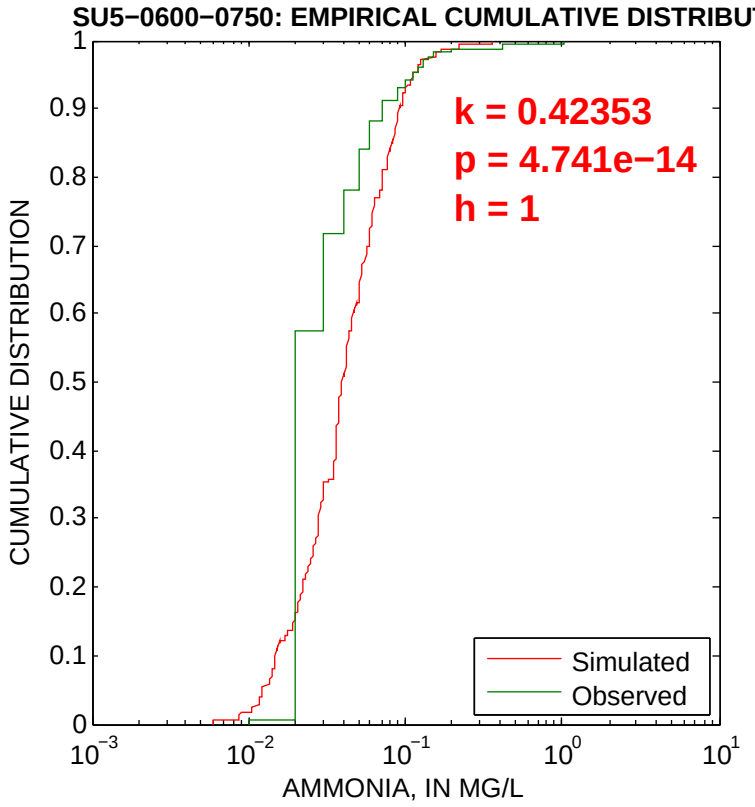












DATA SELECTION

scenario	file
P620171001WQ	NH3X.calib

plot: NH3X - ammonia

Dates: 1/1/1985 – 12/31/201

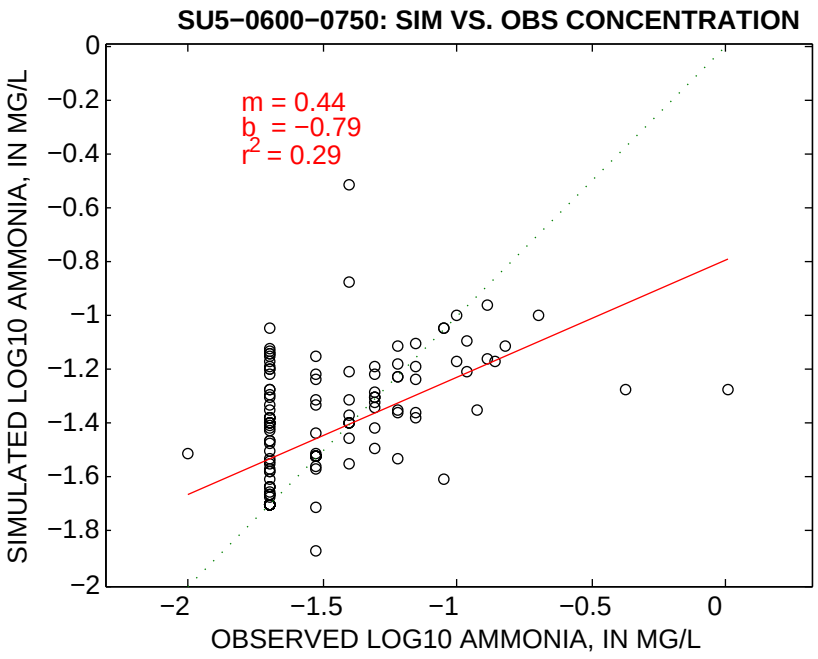
Drive	Directory	Observed
N/A	model	OBS20161101

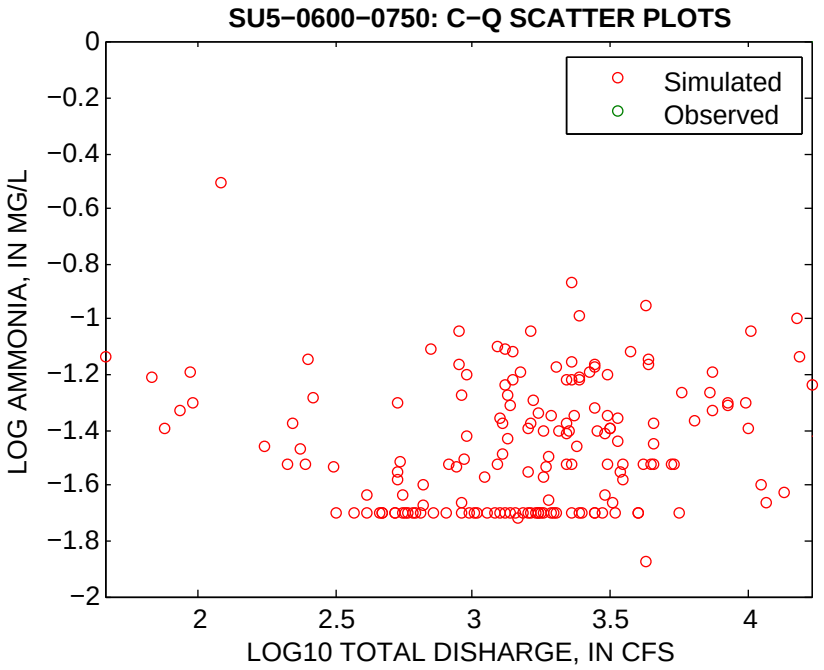
STATISTICS

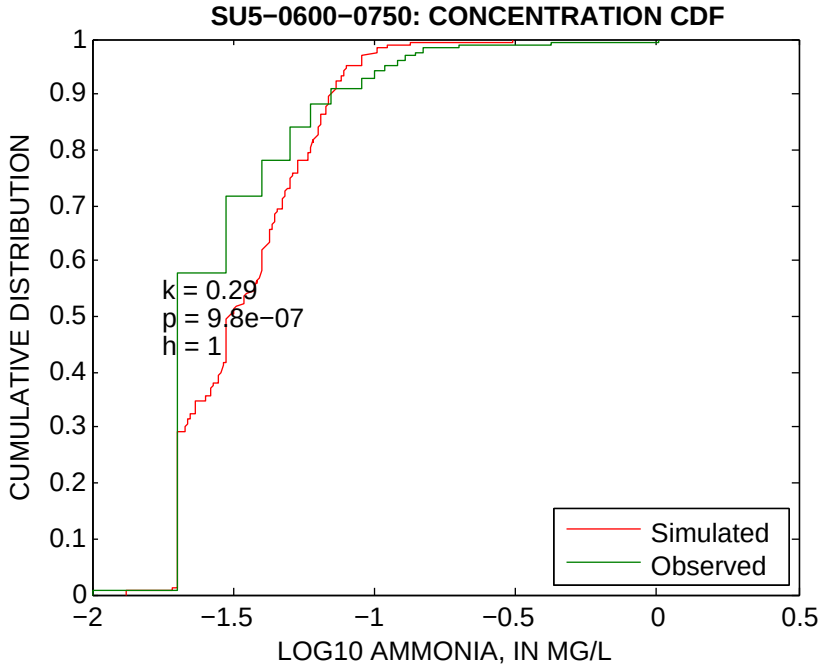
	n	170	170
		observe	simulate
min		0.01	0.006012
		-2	-2.22098
mean		0.0434118	0.0505463
		-1.52092	-1.39883
media		0.02	0.0397885
		-1.69897	-1.40026
max		1.02	0.3549
		0.00860017	-0.449894
varian		0.00738474	0.00166487
		0.0800244	0.0889745
JB		0.001	0.001
		0.001	0.5
		ra	log
%		16.4346	-8.02766
err.va		0.00900009	0.149494
rel.std.err		1.21874	1.86811
mod.eff		-0.218742	-0.868112

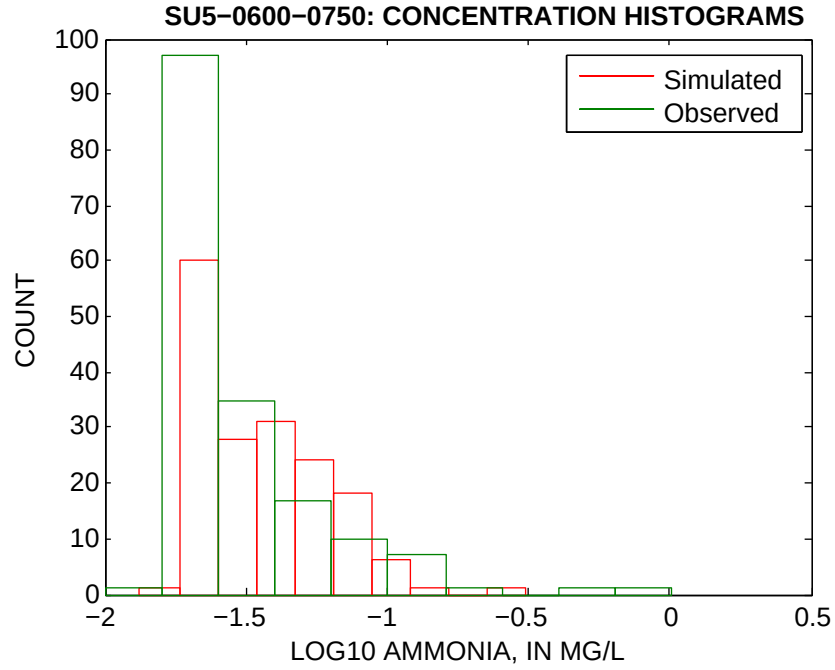
VERSION 3.1

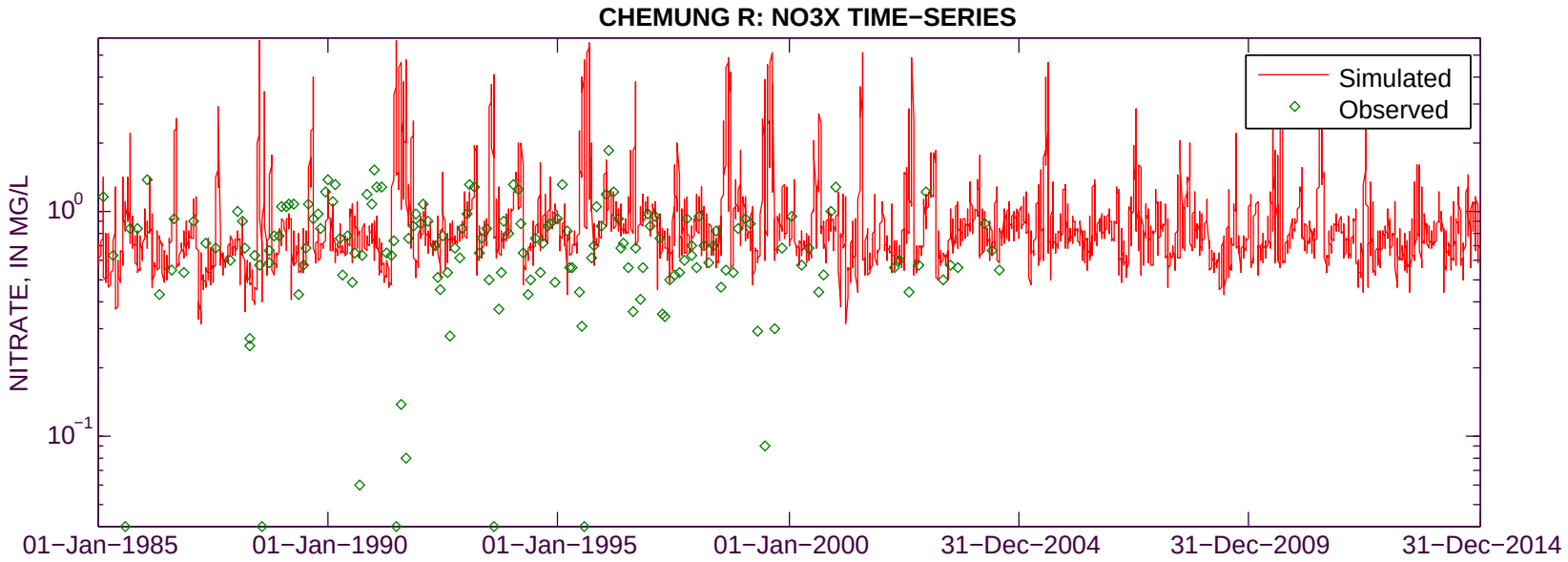
ALL DATA
LOG10

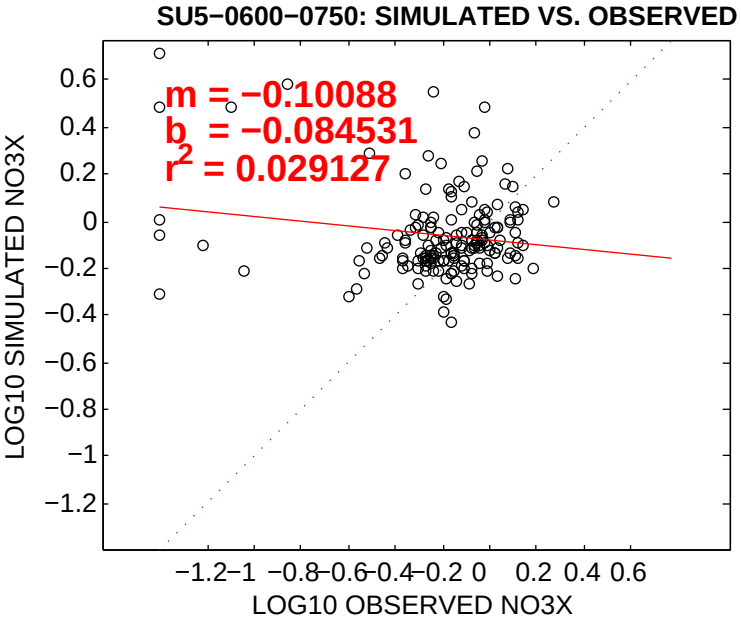


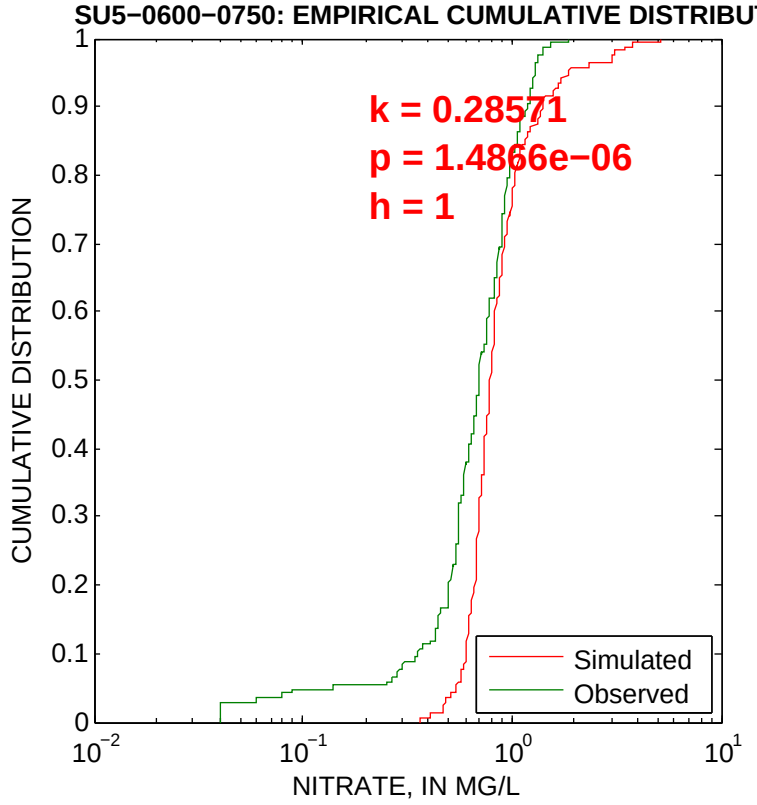












DATA SELECTION

scenario	file
P620171001WQ	NO3X.calib

plot: NO3X - nitrate

Dates: 1/1/1985 – 12/31/201

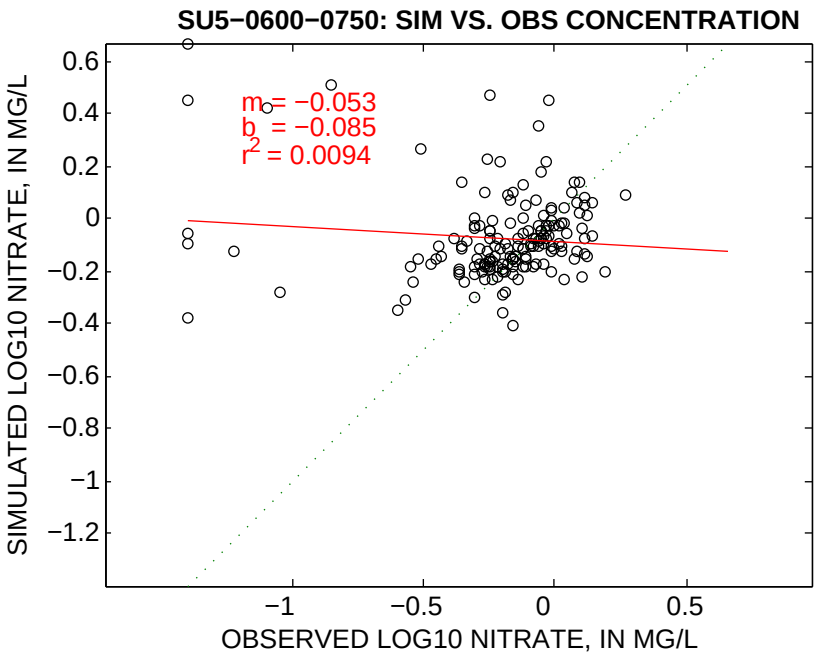
Drive	Directory	Observed
N/A	model	OBS20161101

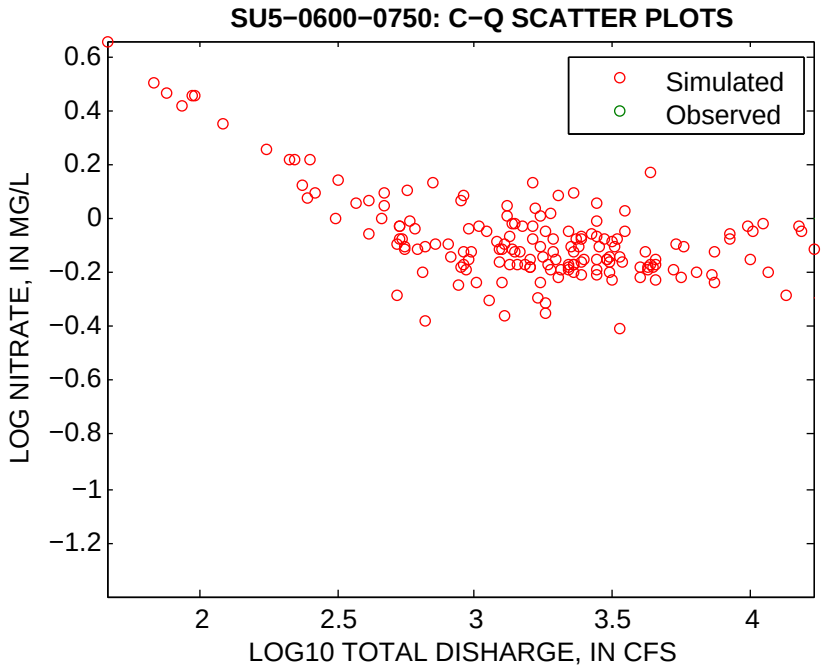
STATISTICS

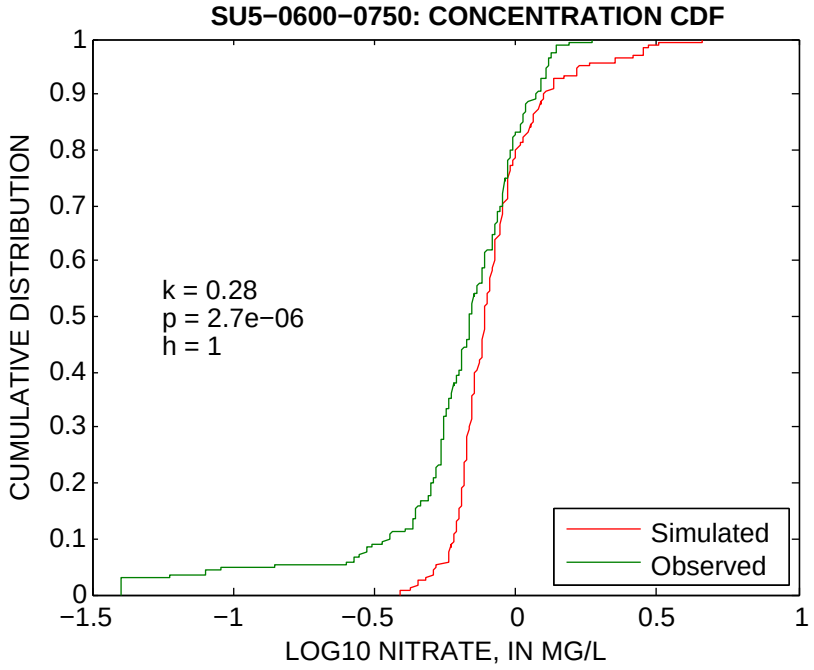
	n	168	168
		observe	simulate
min		0.04	0.36818
		-1.39794	-0.43394
mean		0.729583	0.960005
		-0.2043	-0.0639212
media		0.69	0.791355
		-0.161151	-0.101629
max		1.85	5.2127
		0.267172	0.717063
varian		0.102791	0.374946
		0.089715	0.031345
JB		0.124421	0.001
		0.001	0.001
		ra	log
%		31.5827	-68.7121
err.va		0.590629	0.158985
rel.std.err		5.74593	1.77211
mod.eff		-4.74593	-0.772113

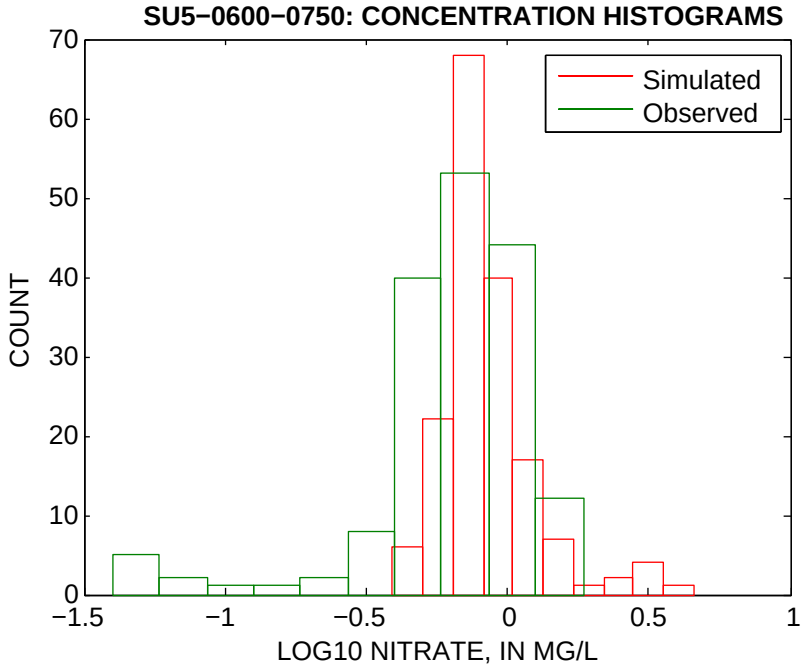
VERSION 3.1

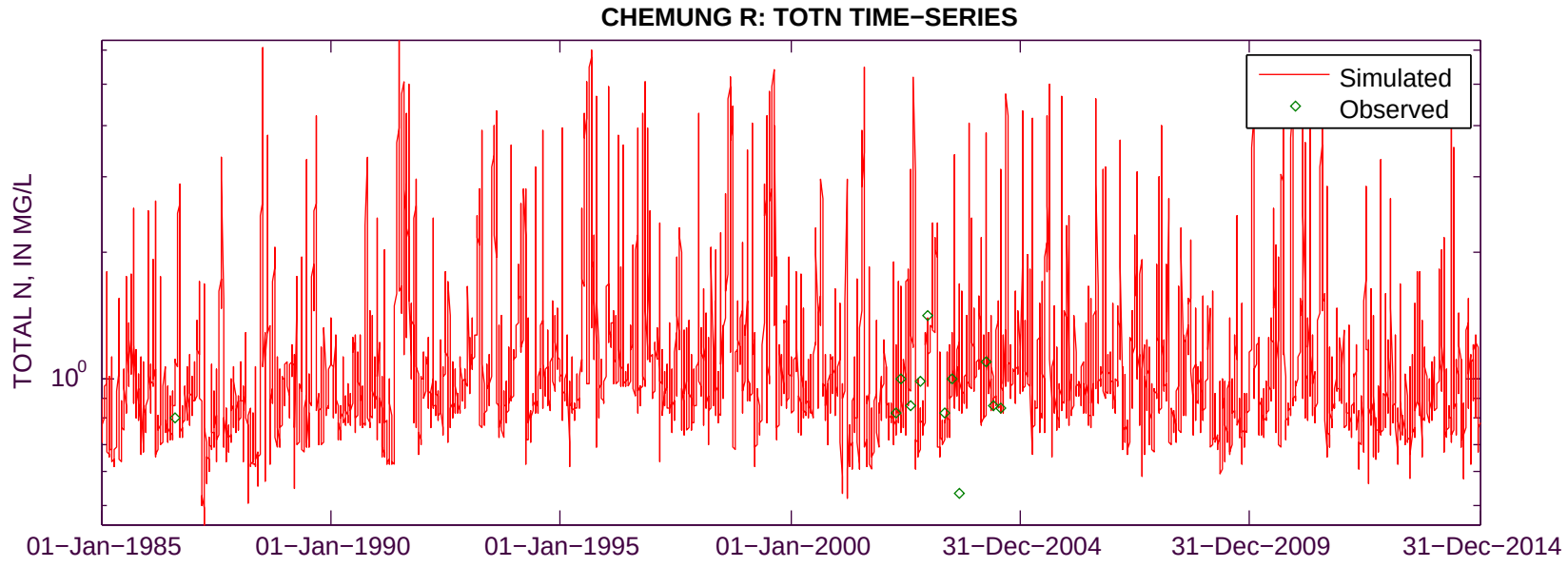
ALL DATA
LOG10

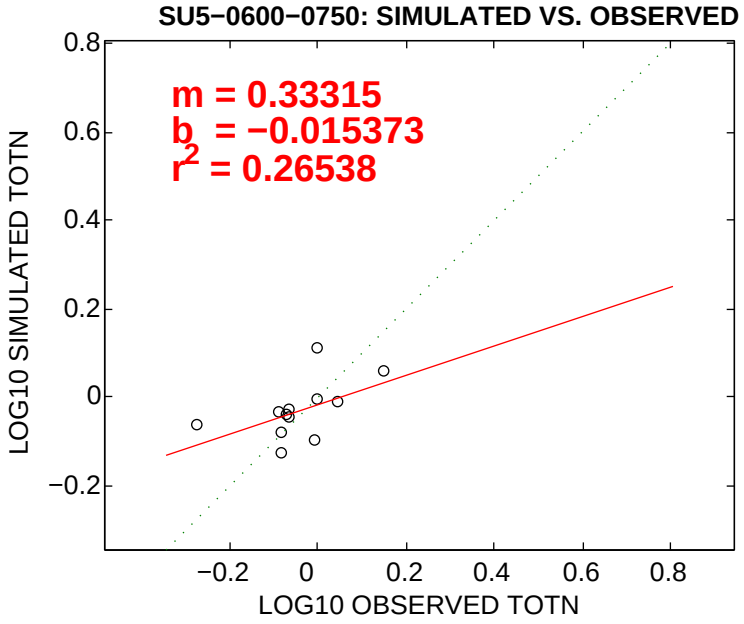


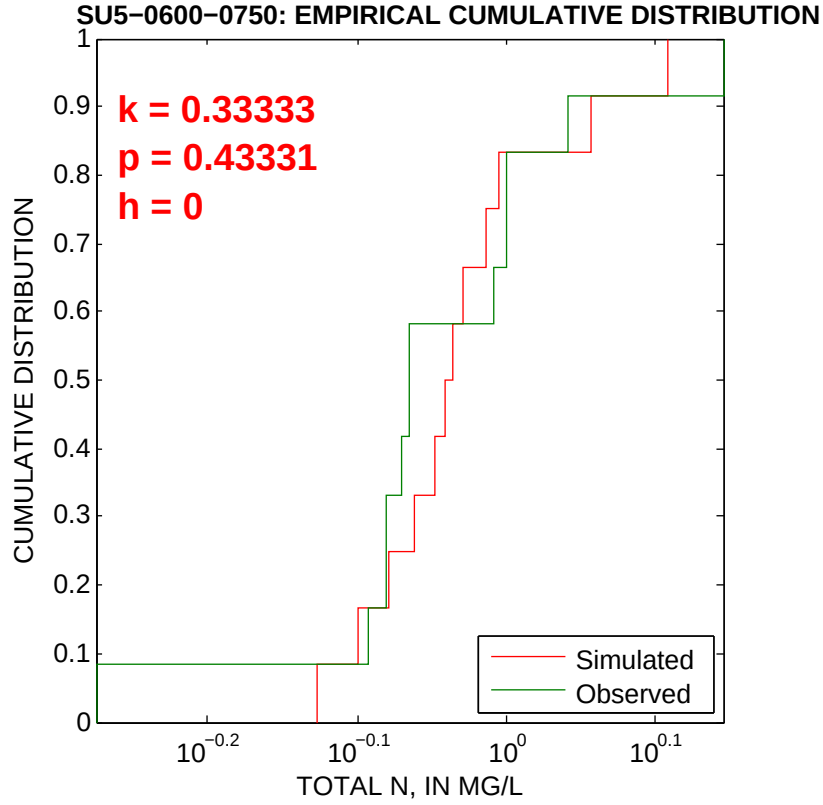












DATA SELECTION

scenario	file
P620171001WQ	TOTN.calib

plot: TOTN - total nitrogen

Dates: 1/1/1985 – 12/31/201

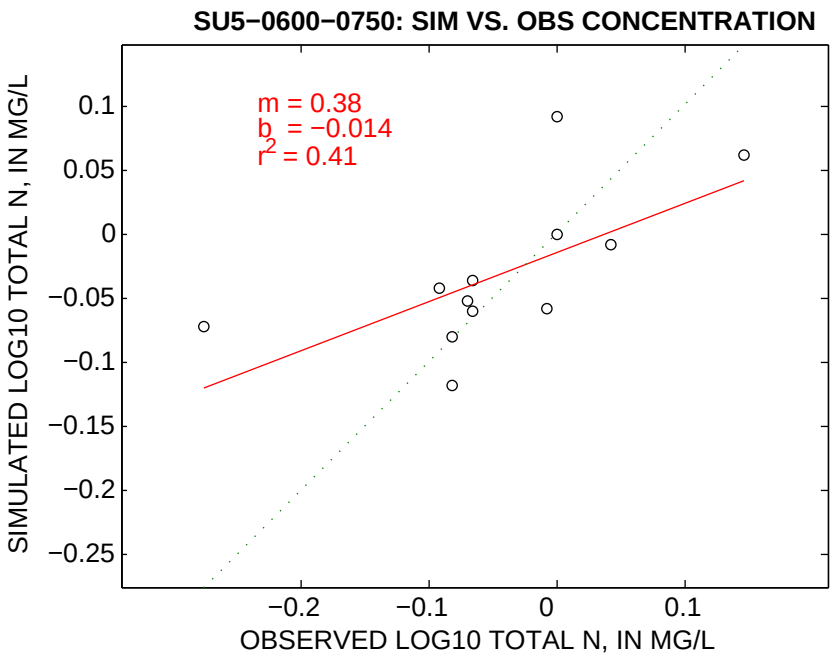
Drive	Directory	Observed
N/A	model	OBS20161101

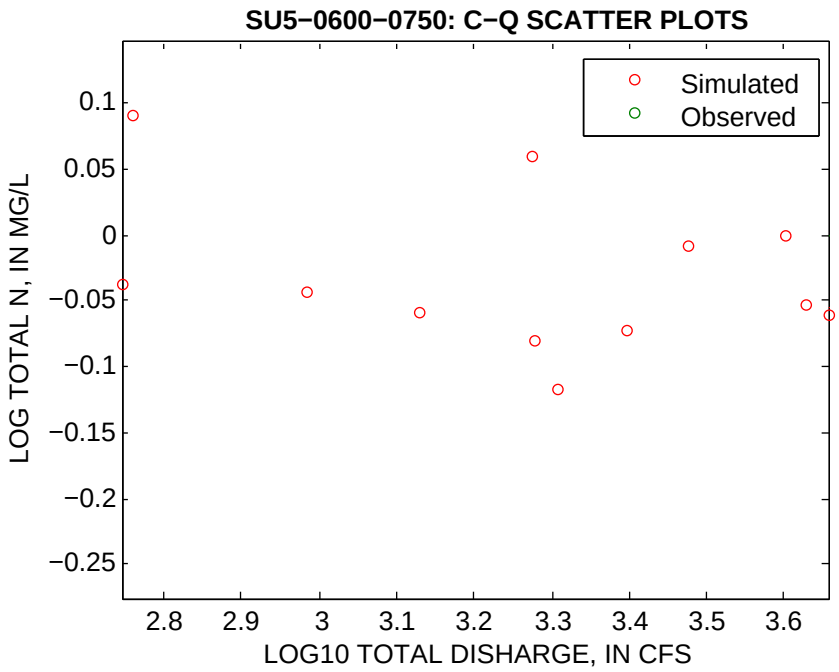
STATISTICS

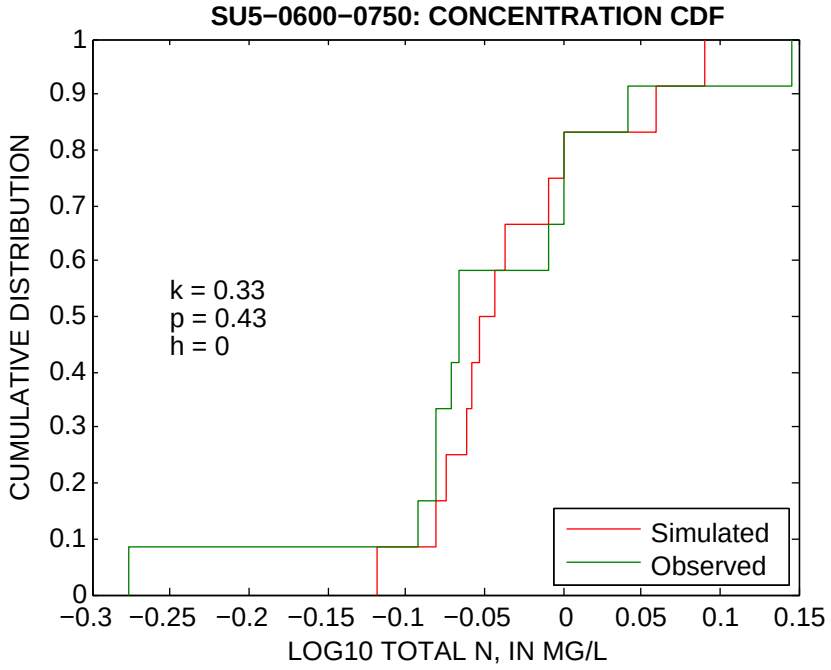
	n	12	12
		observe	simulate
min		0.53	0.74736
		-0.275724	-0.12647
mean		0.920833	0.941508
		-0.0459934	-0.0306958
media		0.86	0.91673
		-0.0655015	-0.0377635
max		1.4	1.2838
		0.146128	0.108497
varian		0.0428811	0.0217216
		0.00989247	0.00413743
JB		☑ 0.165306	0.061256 ☑
		☑ 0.225351	0.250839 ☑
		ra	log
%		2.24525	-33.2604
err.va		0.0311596	0.00769377
rel.std.err		0.726652	0.77774
mod.eff		0.273348	0.22226

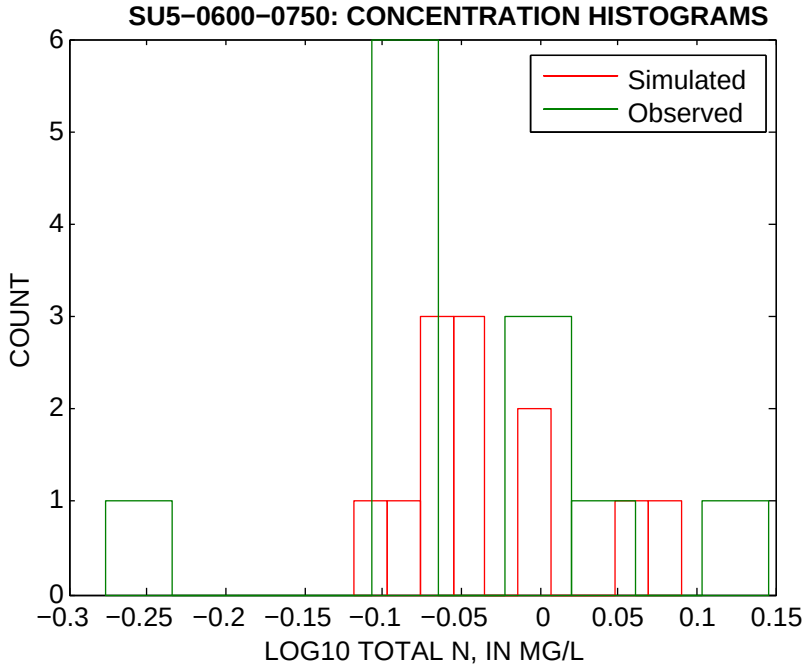
VERSION 2.1

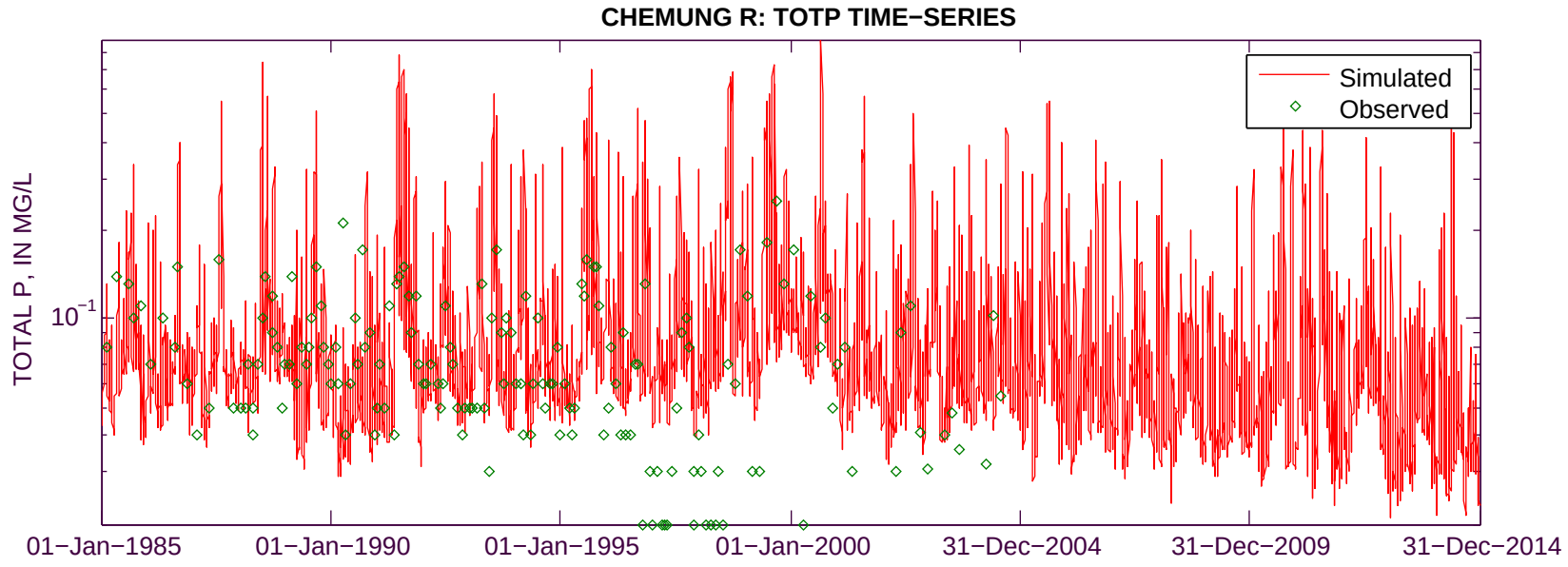
ALL DATA
LOG10

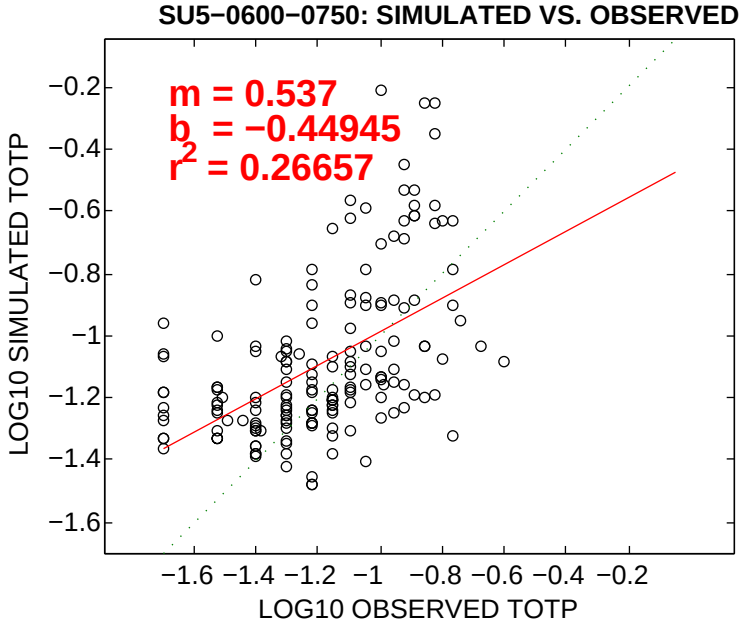


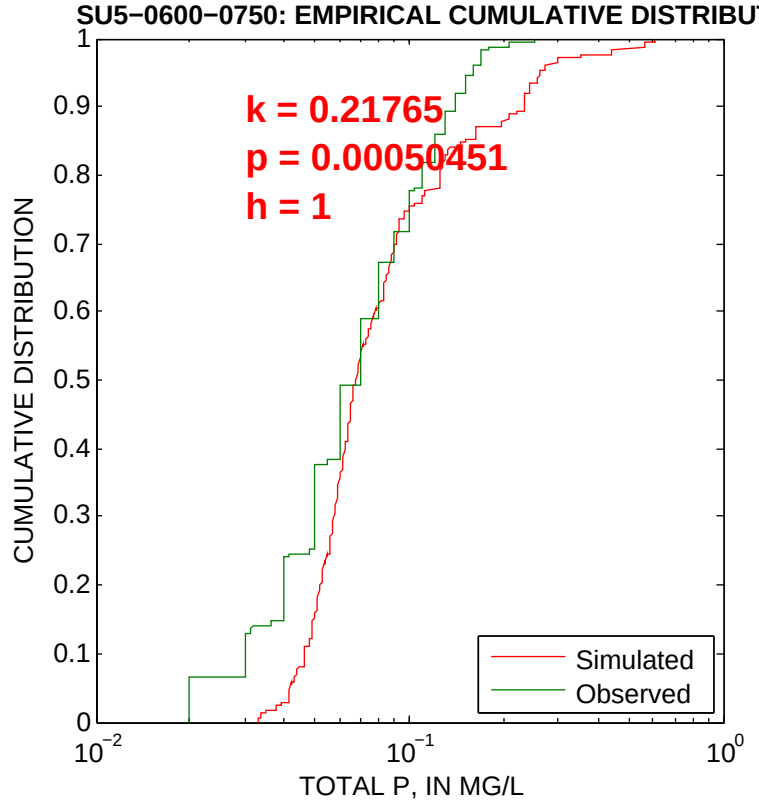












DATA SELECTION

scenario	file
P620171001WQ	TOTP.calib

plot: TOTP - total phosphorus

Dates: 1/1/1985 – 12/31/201

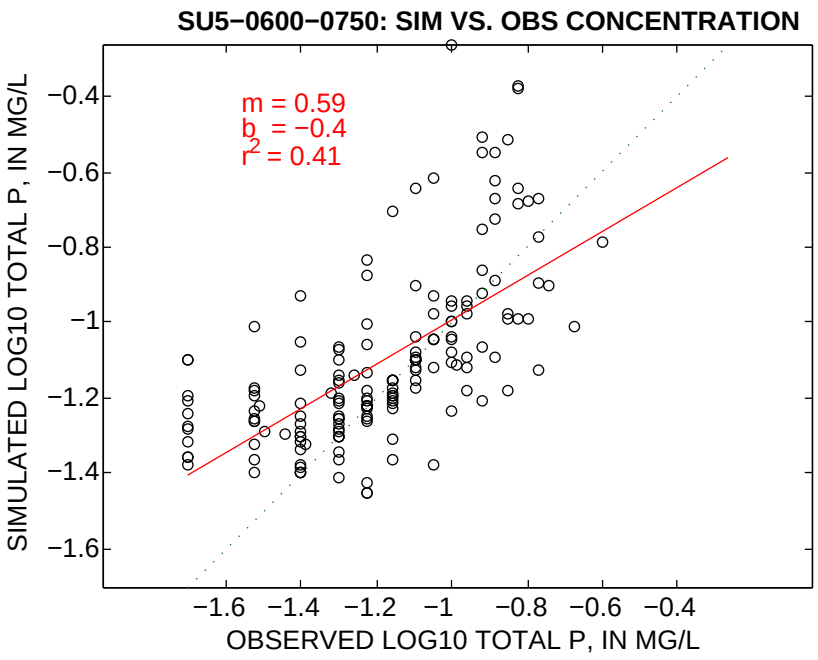
Drive	Directory	Observed
N/A	model	OBS20161101

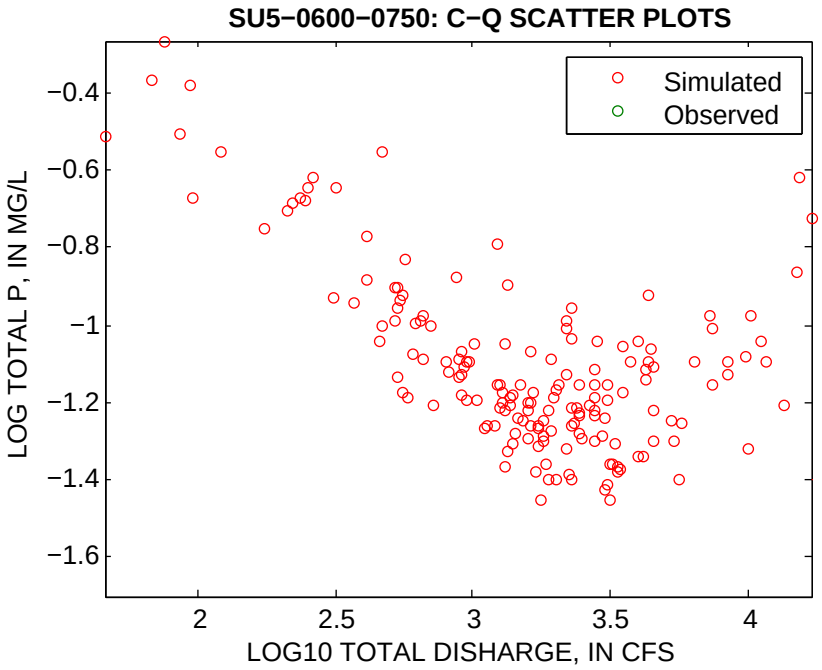
STATISTICS

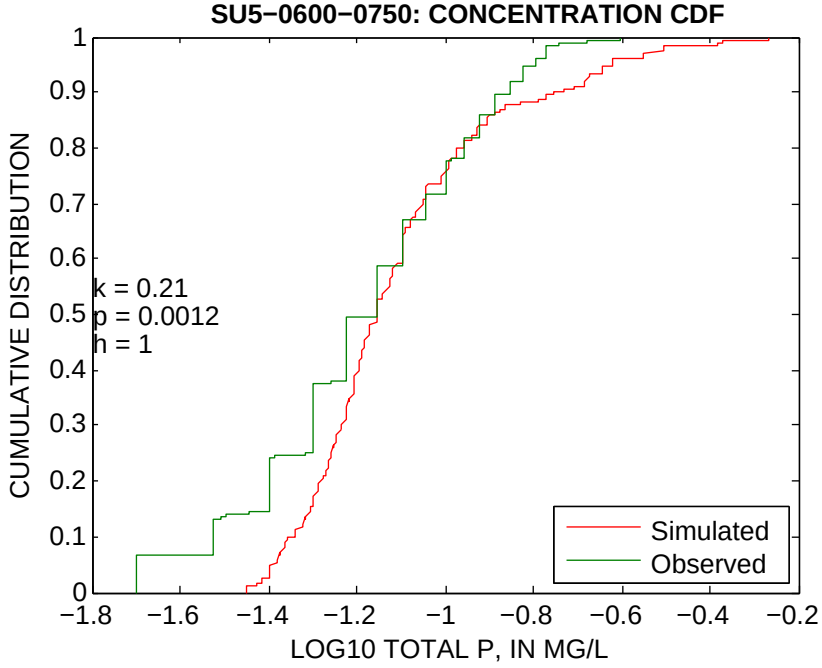
	n	170	170
		observe	simulate
min		0.02	0.03323
		-1.69897	-1.47847
mean		0.0759765	0.102418
		-1.1864	-1.08655
media		0.07	0.067479
		-1.1549	-1.17085
max		0.25	0.6116
		-0.60206	-0.213533
varian		0.00180289	0.00862077
		0.0615022	0.0665311
JB		0.001	0.001
		0.205943	0.001
		ra	log
%		34.8021	-8.41616
err.va		0.00748688	0.0720086
rel.std.err		4.15272	1.17083
mod.eff		-3.15272	-0.17083

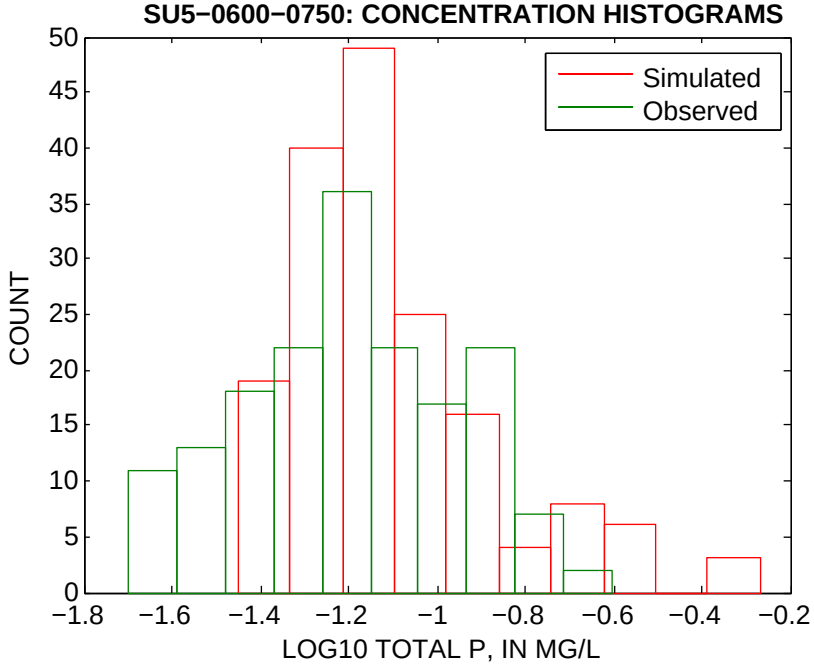
VERSION 2.1

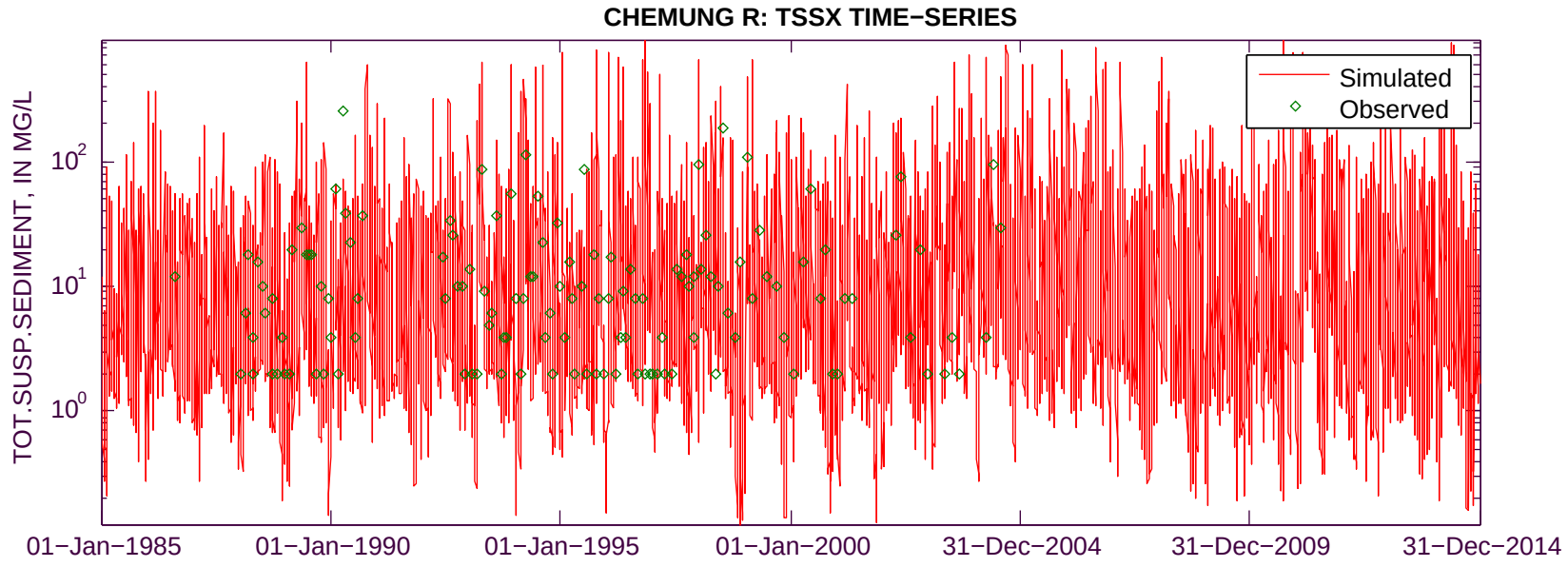
ALL DATA
LOG10

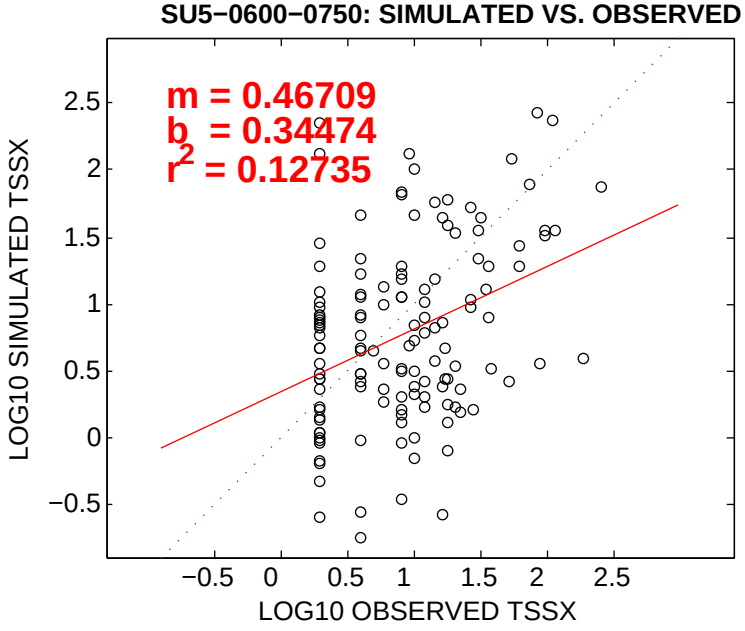


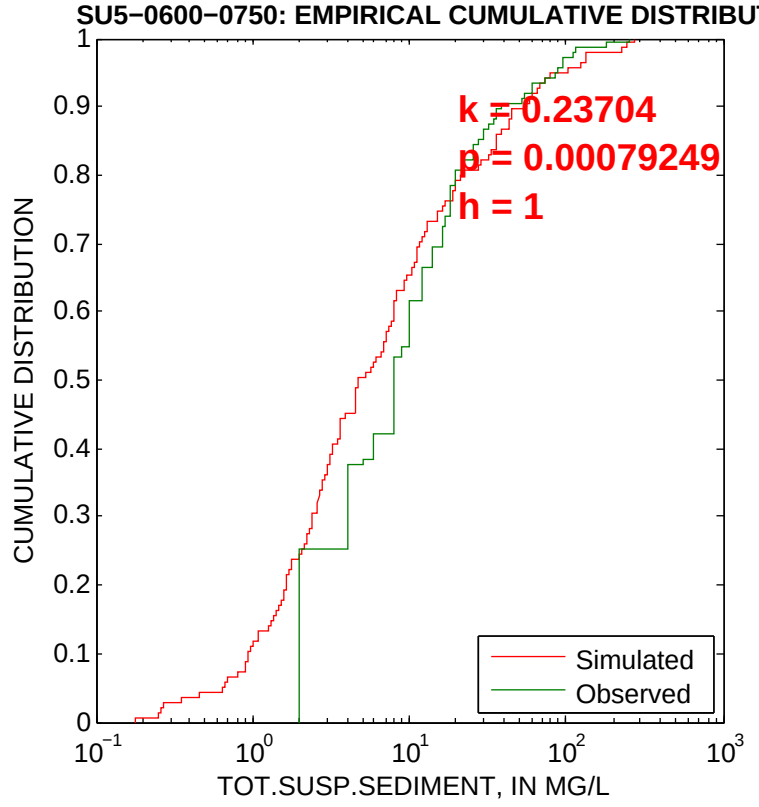












DATA SELECTION

scenario	file
P620171001WQ	TSSX.calib

plot: TSSX - total suspended ...

Dates: 1/1/1985 – 12/31/201

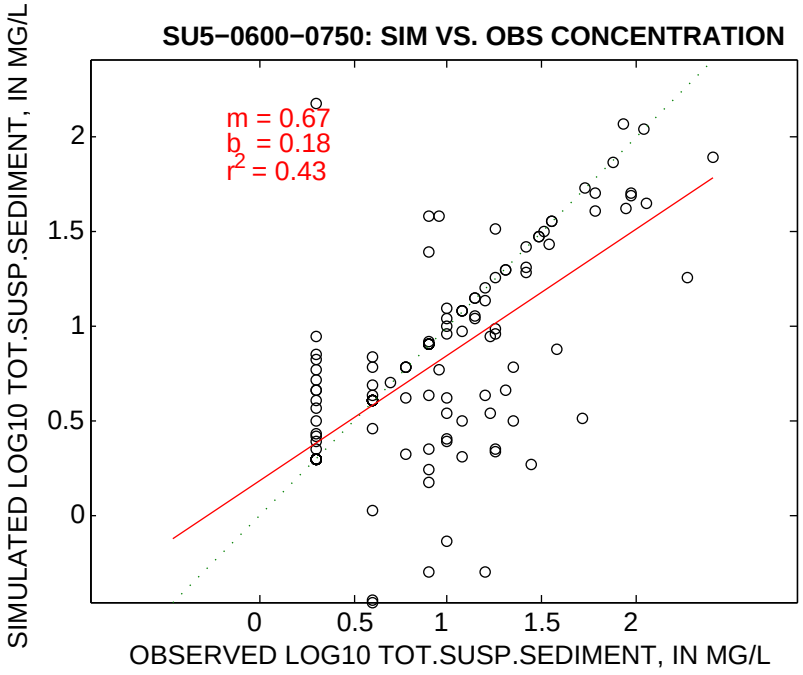
Drive	Directory	Observed
N/A	model	OBS20161101

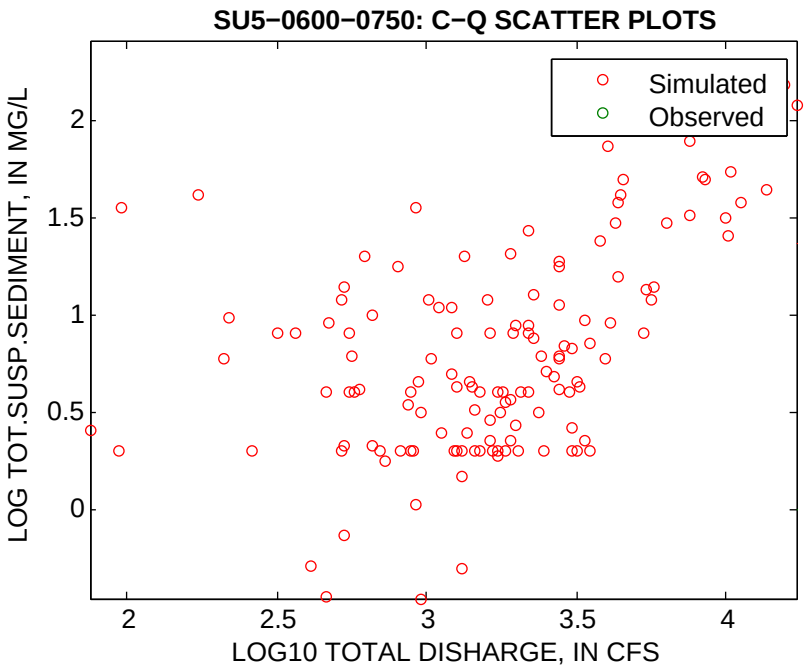
STATISTICS

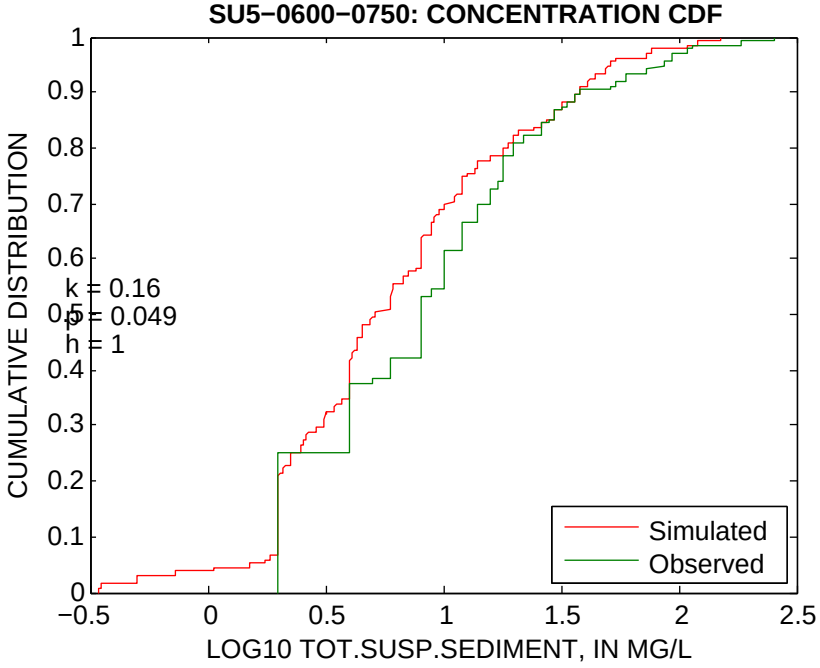
	n	135	135
		observe	simulate
min		2	0.17918
		0.30103	-0.74671
mean		18.6222	20.334
		0.925094	0.776849
media		8	4.7798
		0.90309	0.67941
max		254	269.89
		2.40483	2.43119
varian		1108.64	1797.51
		0.264417	0.452983
JB		0.001	0.001
		0.031116	0.251892
		ra	log
%		9.19216	-16.0249
err.va		1976	0.492526
rel.std.err		1.78237	1.86269
mod.eff		-0.782365	-0.862691

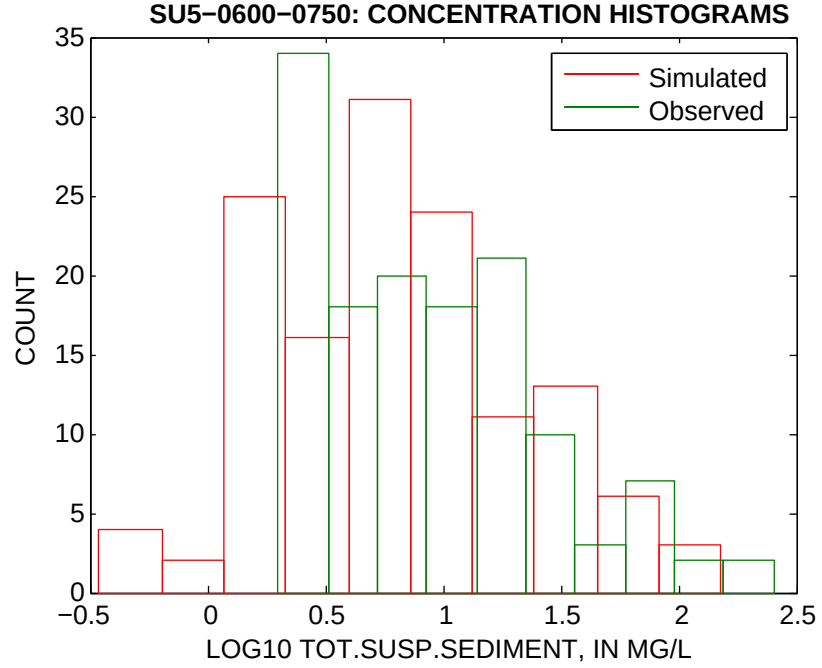
VERSION

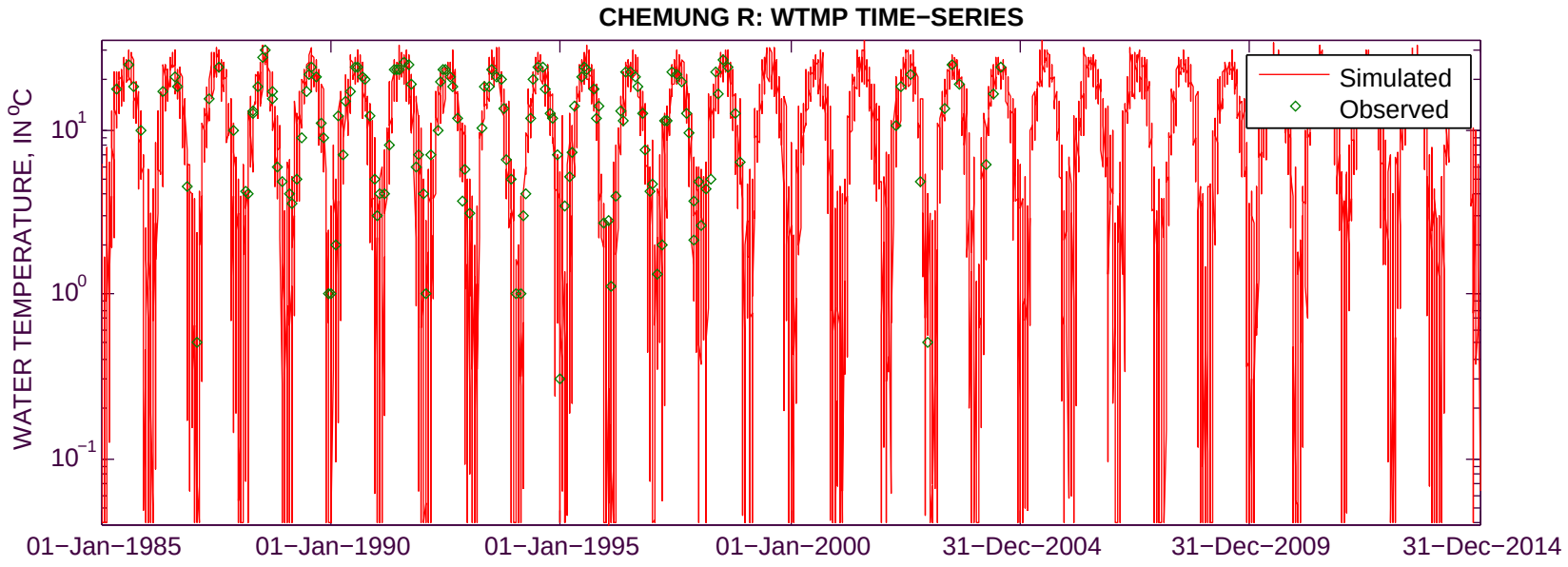
ALL DATA
LOG10

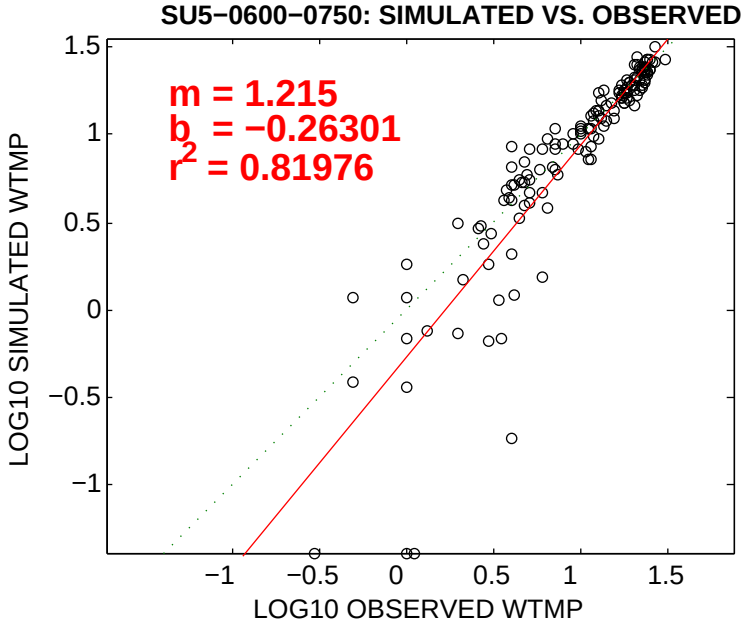


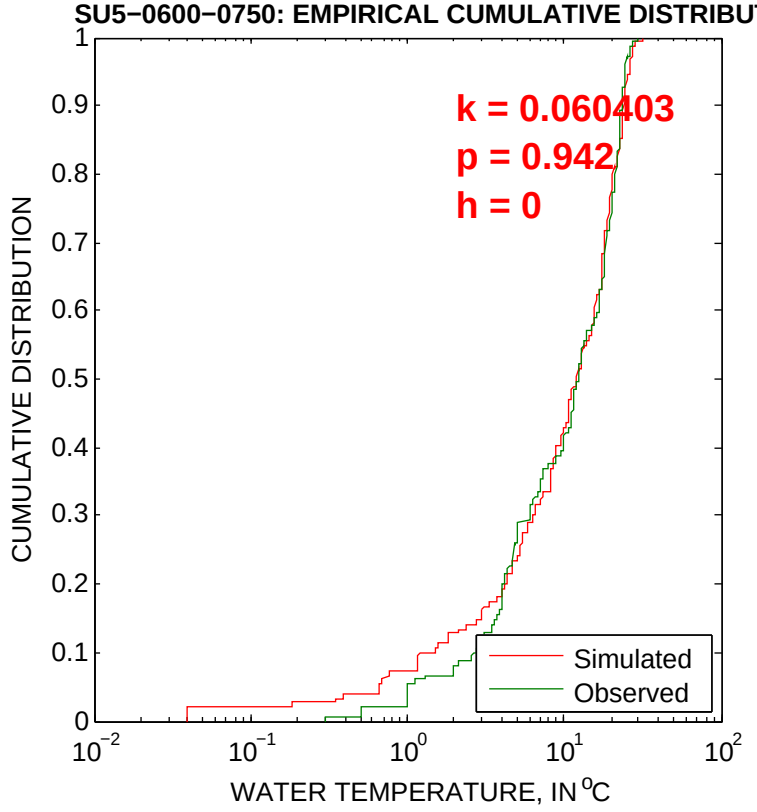












DATA SELECTION

scenario	file
P620171001WQ	WTMP.calib

plot: WTMP - water tempera...

Dates: 1/1/1985 – 12/31/201

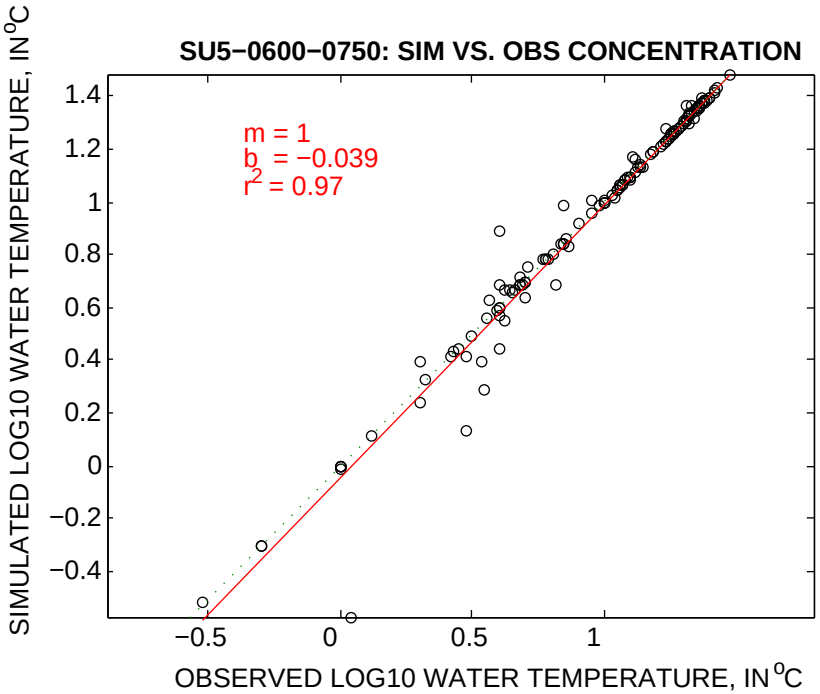
Drive	Directory	Observed
N/A	model	OBS20161101

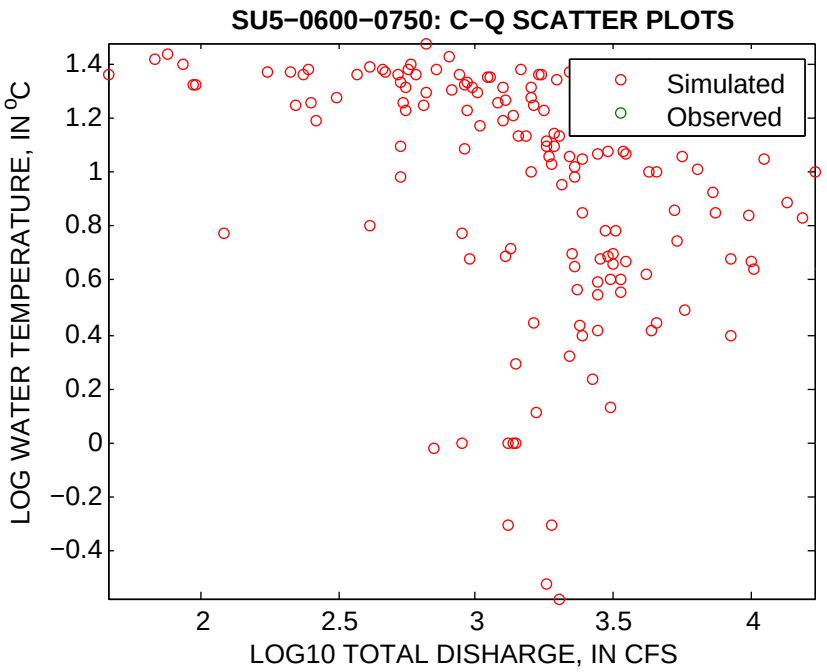
STATISTICS

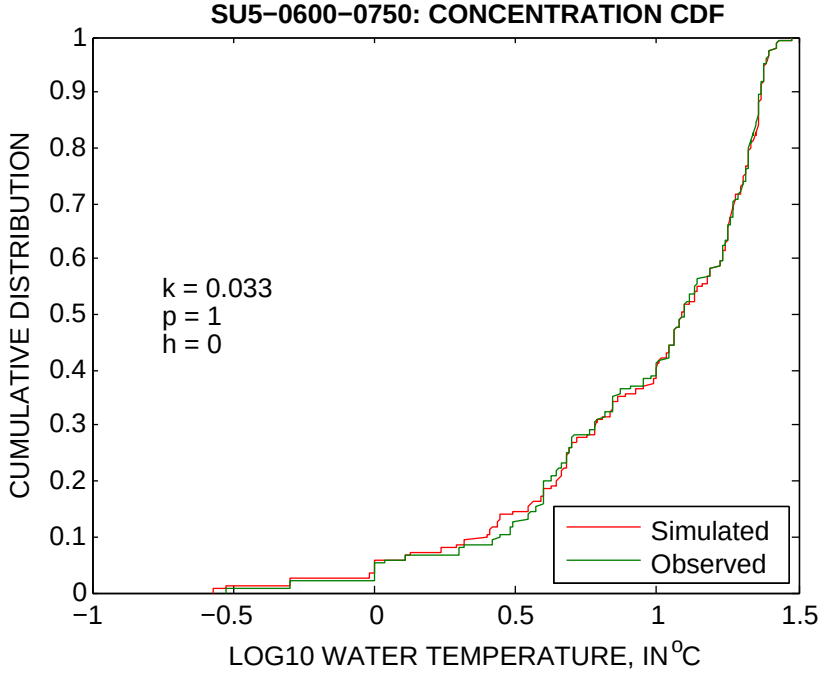
	n	149	149
		observe	simulate
min		0.3	0.039927
		-0.522879	-1.39873
mean		12.7544	12.6905
		0.963766	0.907919
media		12.3	12.107
		1.08991	1.08304
max		30	32.143
		1.47712	1.50709
varian		64.6864	69.5985
		0.175993	0.316903
JB		0.011502	0.020828
		0.001	0.001
		ra	log
%		-0.500427	-5.7947
err.va		4.52467	0.0683909
rel.std.err		0.0699477	0.3886
mod.eff		0.930052	0.6114

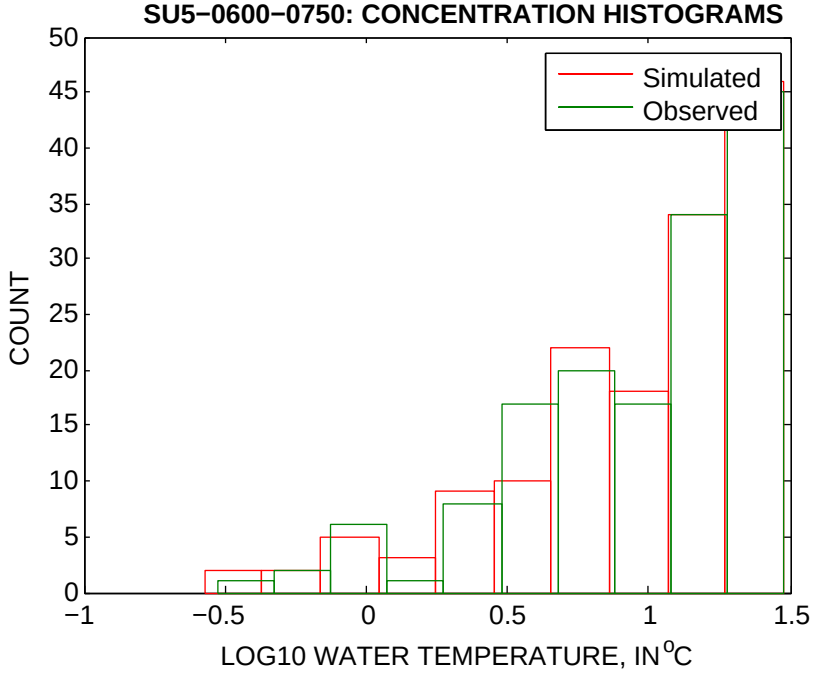
VERSION 3.1

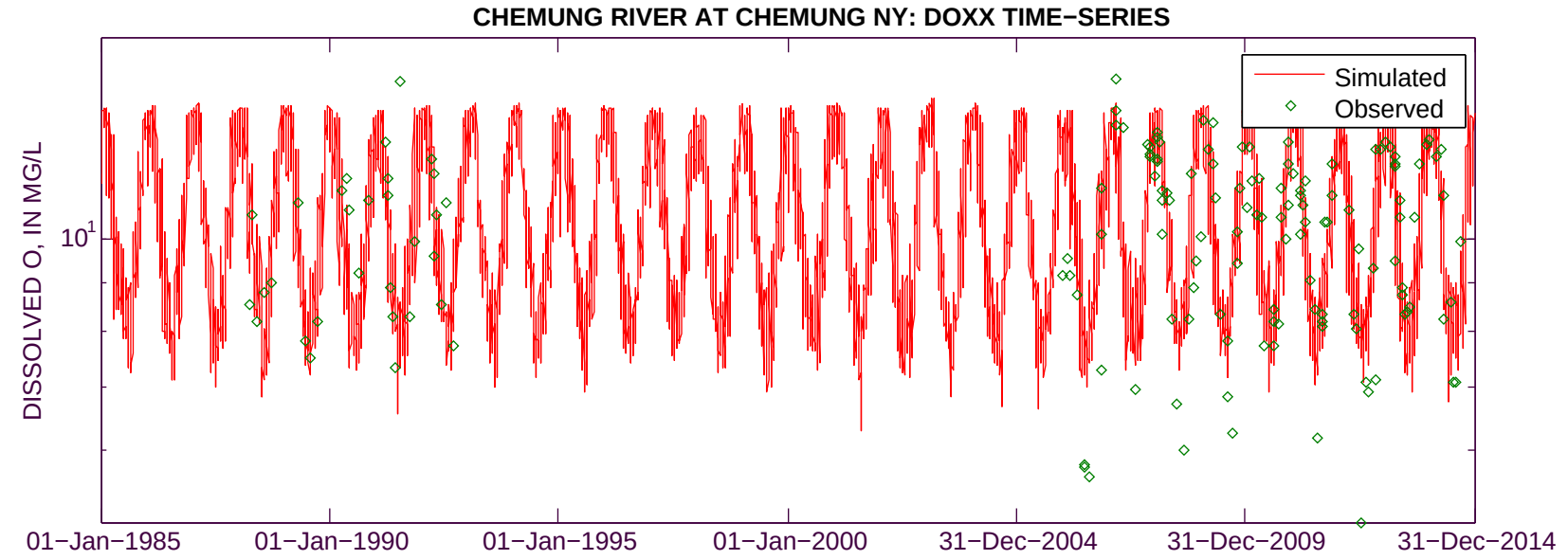
ALL DATA
LOG10

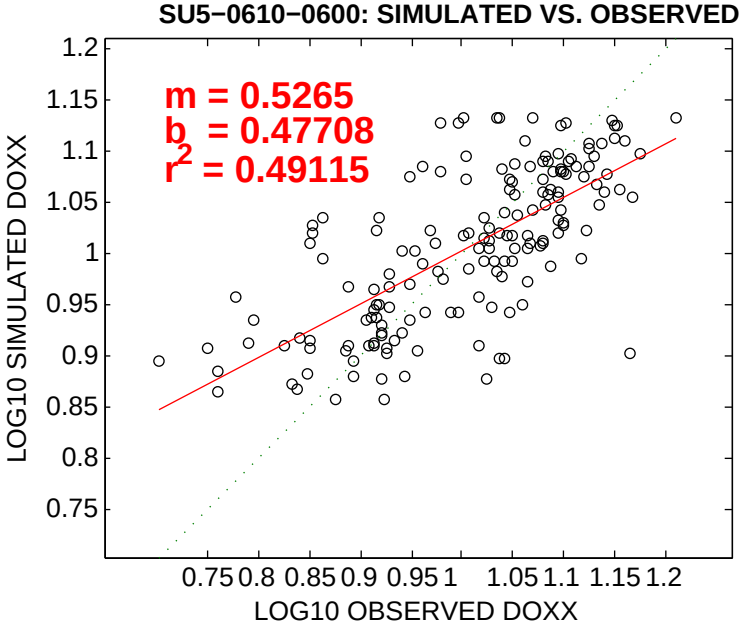


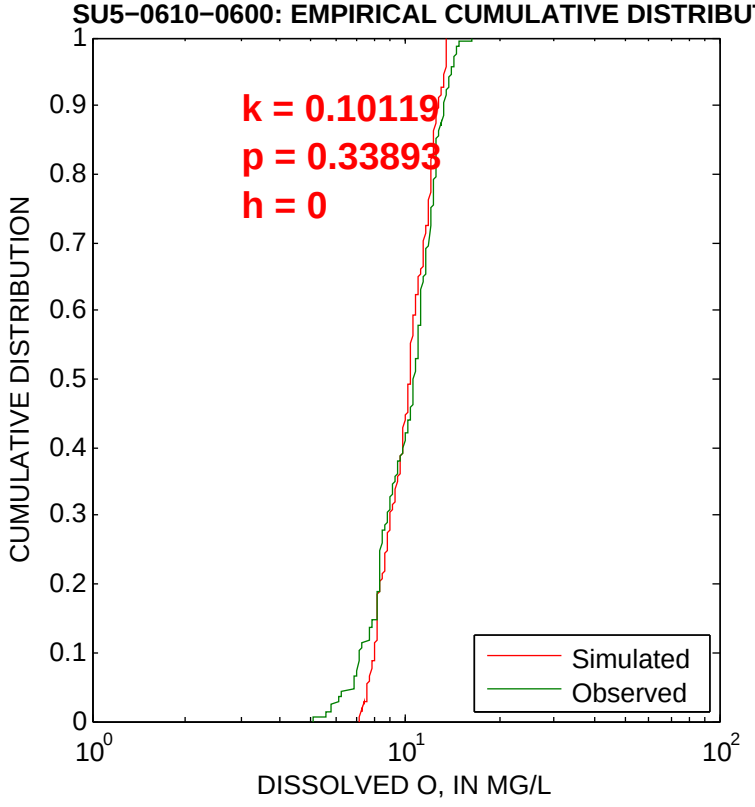












DATA SELECTION

scenario: P620171001WQ | file: DOXX.calib

plot: DOXX - dissolved oxygen

Dates: 1/1/1985 – 12/31/201

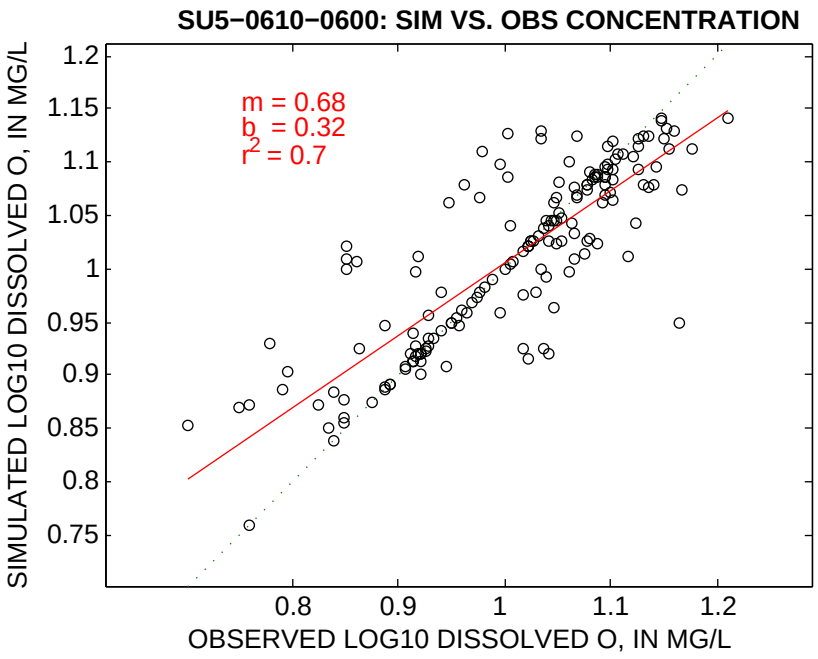
Drive: N/A | Directory: model | Observed: OBS20161101

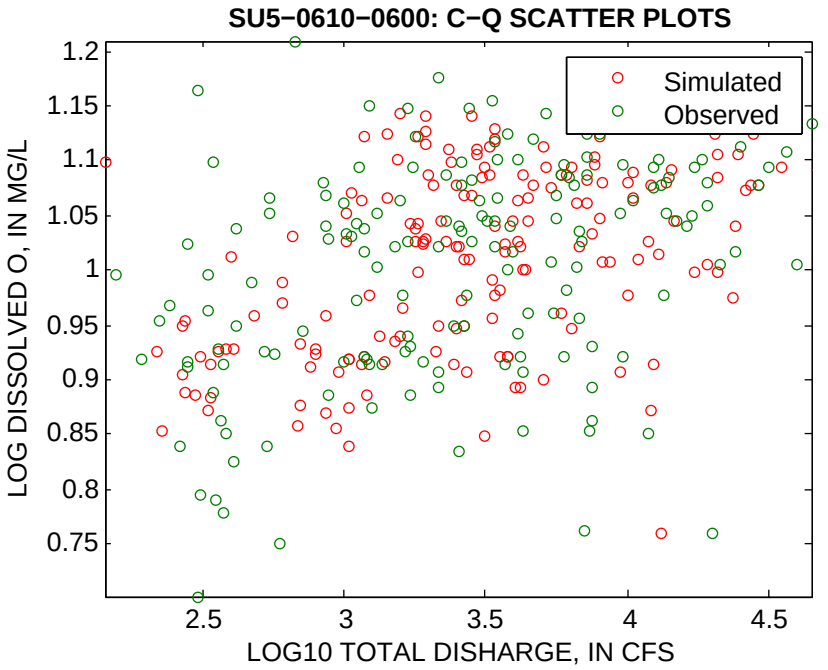
STATISTICS

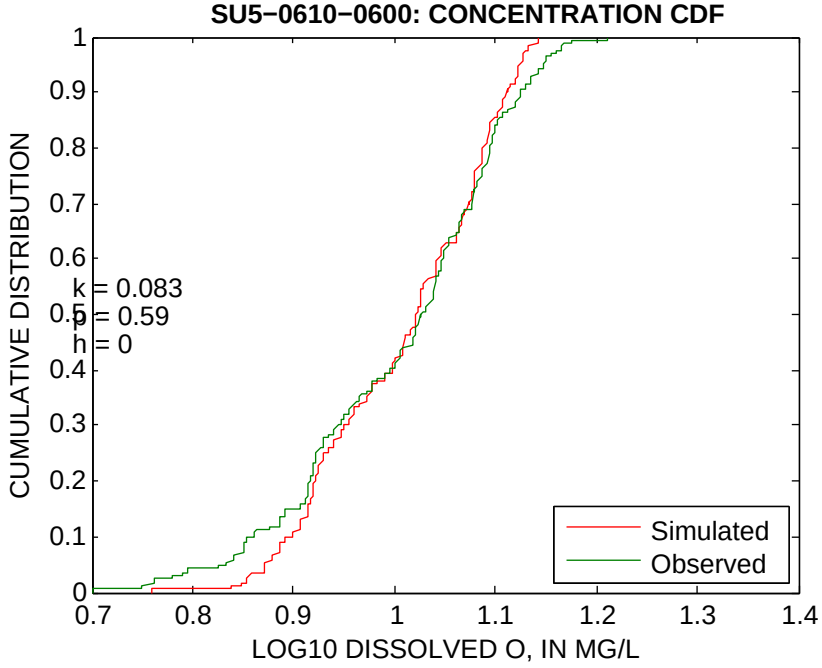
		observe	simulate
n		168	168
min		5.04	7.1786
		0.702431	0.85604
mean		10.4083	10.313
		1.00596	1.00673
media		10.66	10.3195
		1.02775	1.01366
max		16.21	13.627
		1.20978	1.1344
varian		5.32638	3.2219
		0.0104276	0.00588539
JB		0.106302	0.021817
		0.019912	0.019649
		ra	log
%		-0.914854	0.0760225
err.va		2.7738	0.00533323
rel.std.err		0.520766	0.511454
mod.eff		0.479234	0.488546

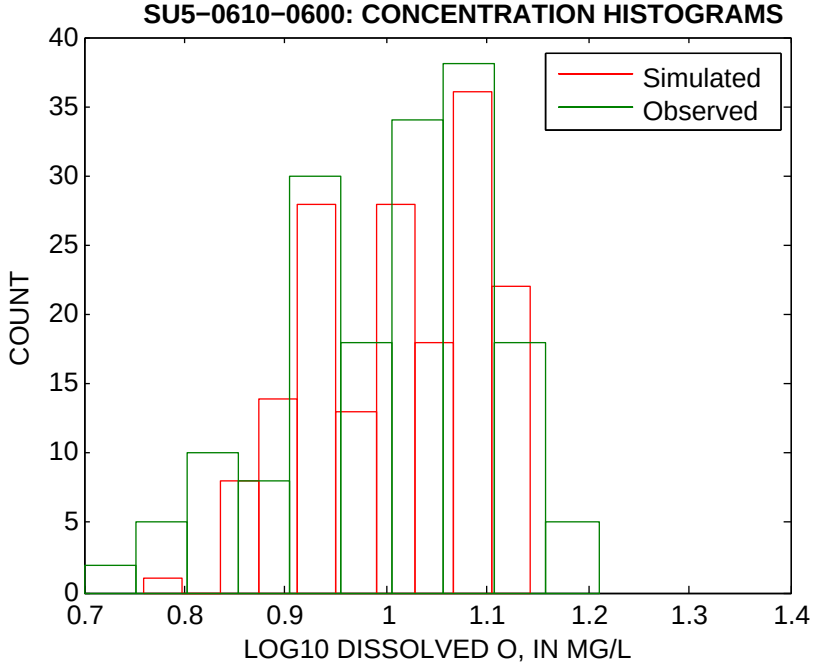
VERSION 2.1

ALL DATA
LOG10

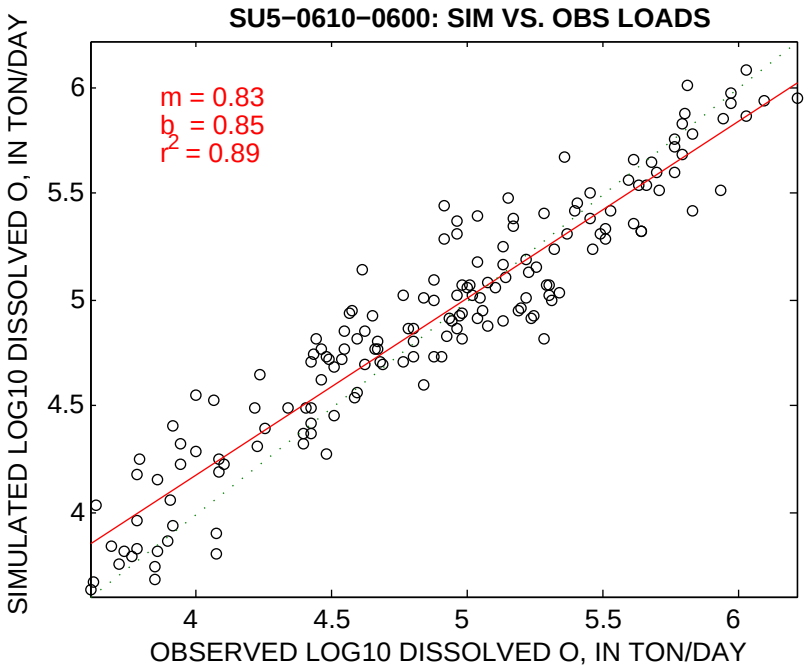


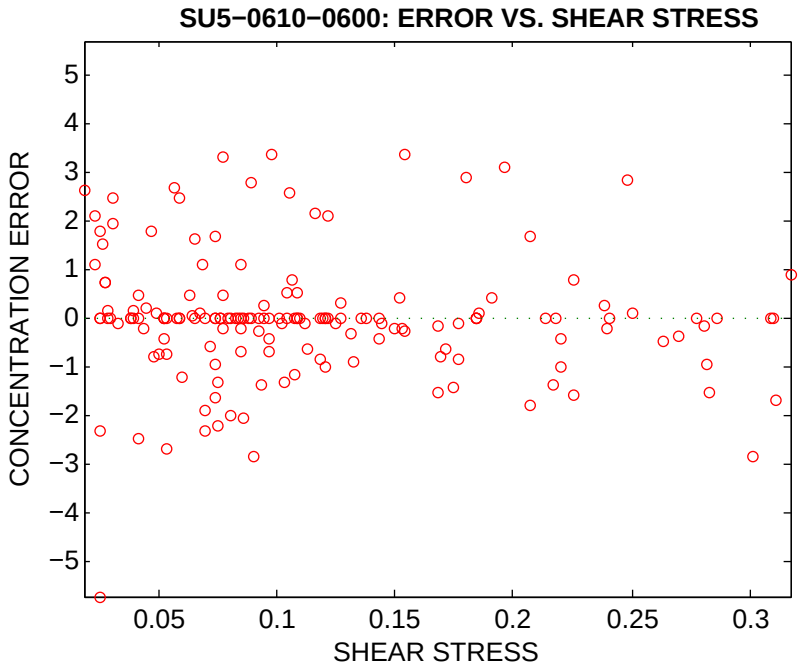


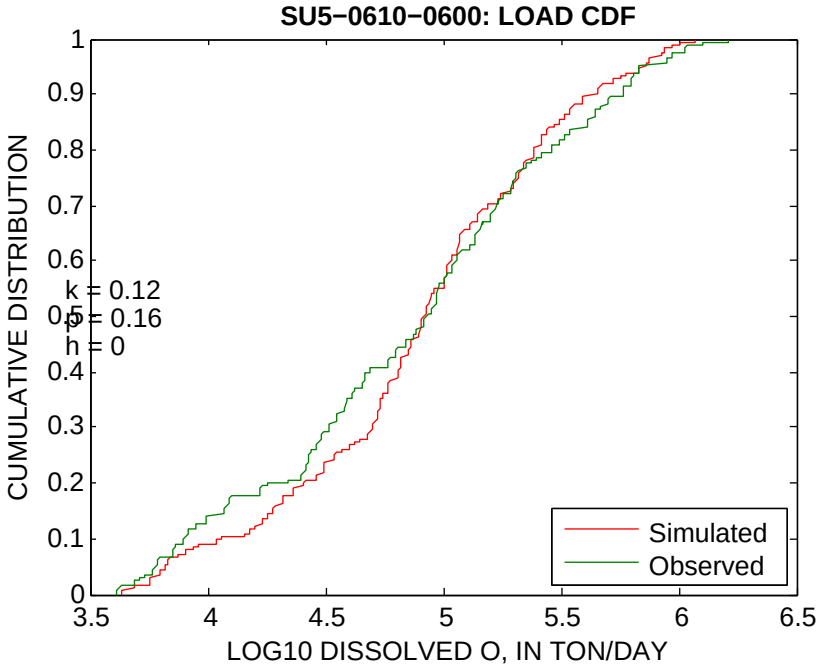


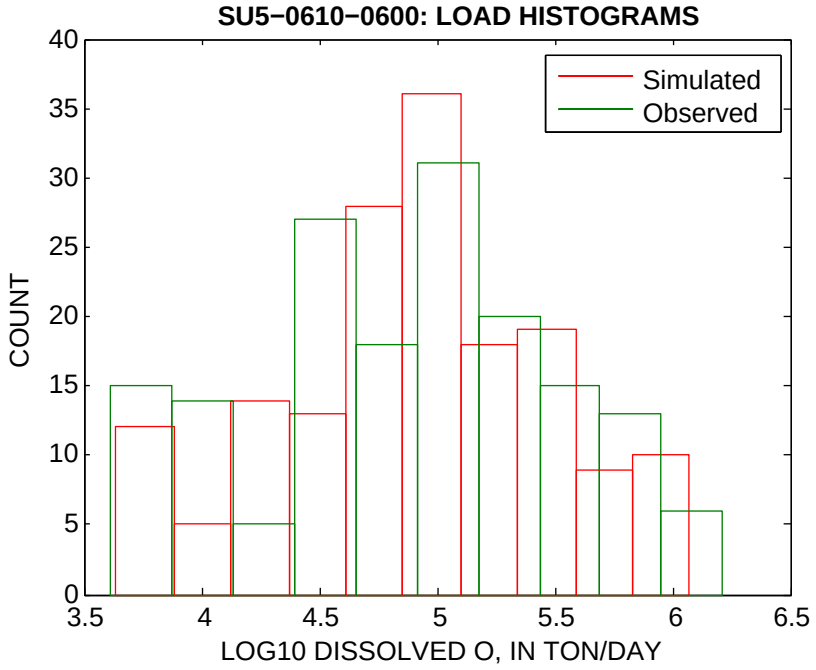


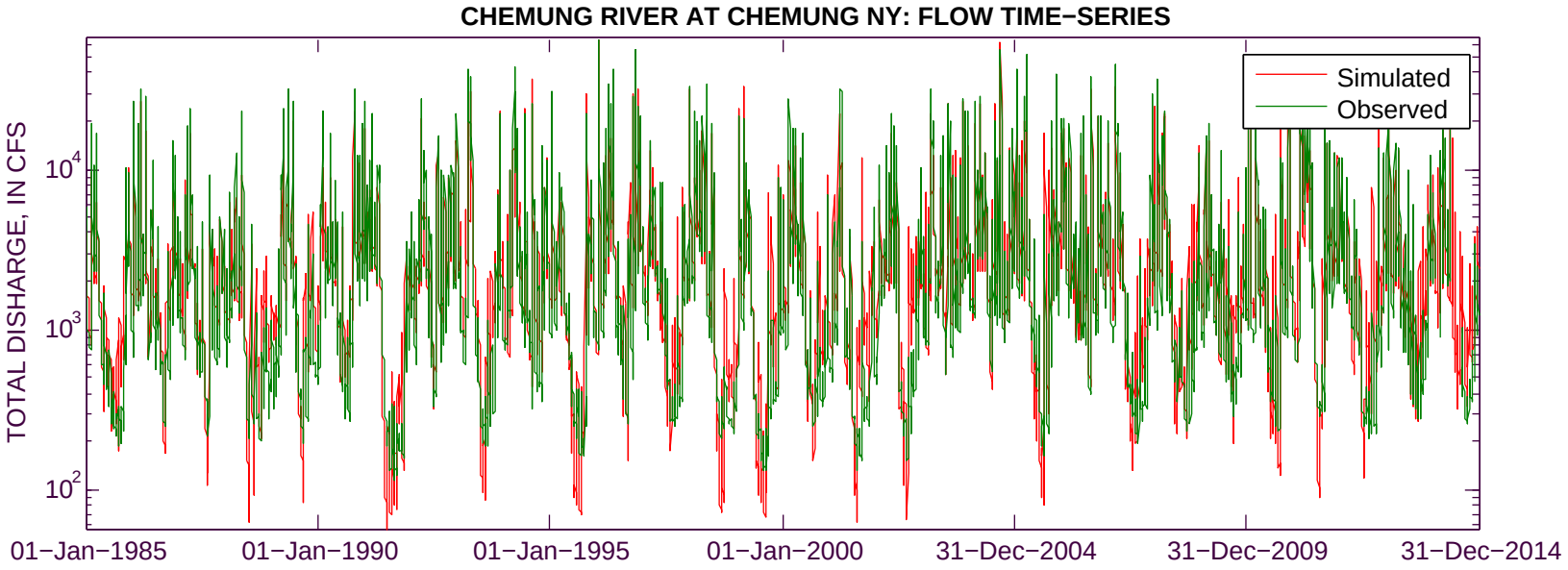
LOAD DATA
LOG10

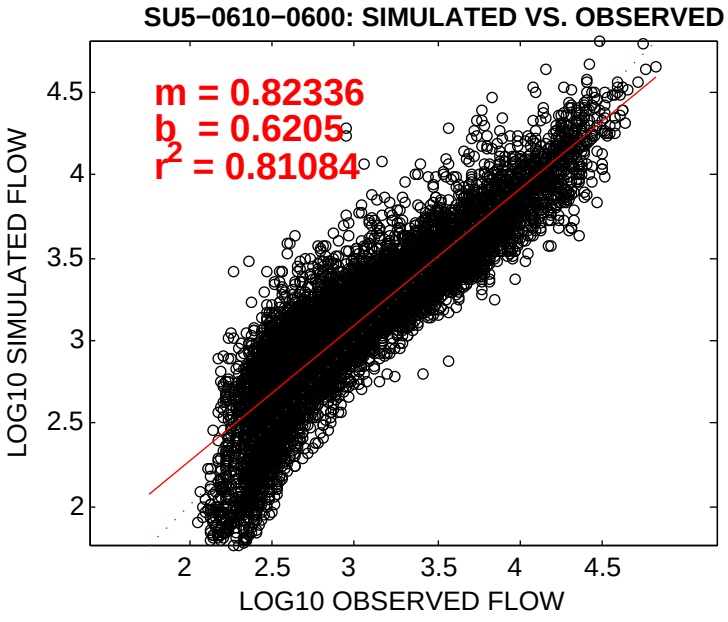


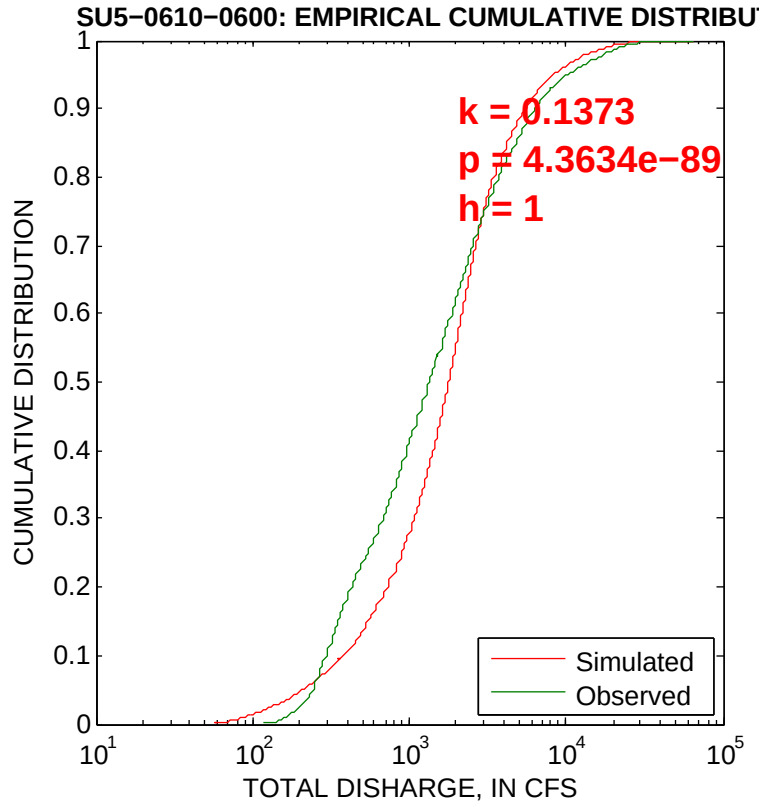












DATA SELECTION

scenario	file
P620171001WQ	FLOW.calib

plot: FLOW - total discharge

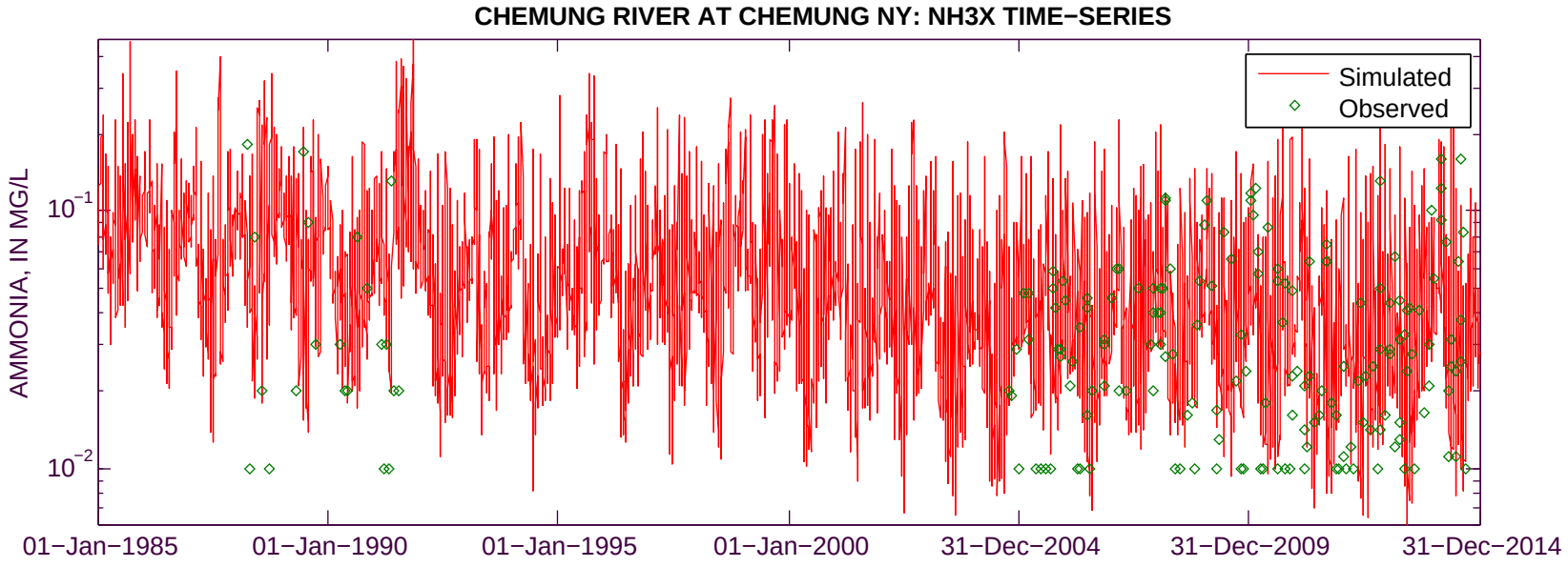
Dates: 1/1/1985 – 12/31/201

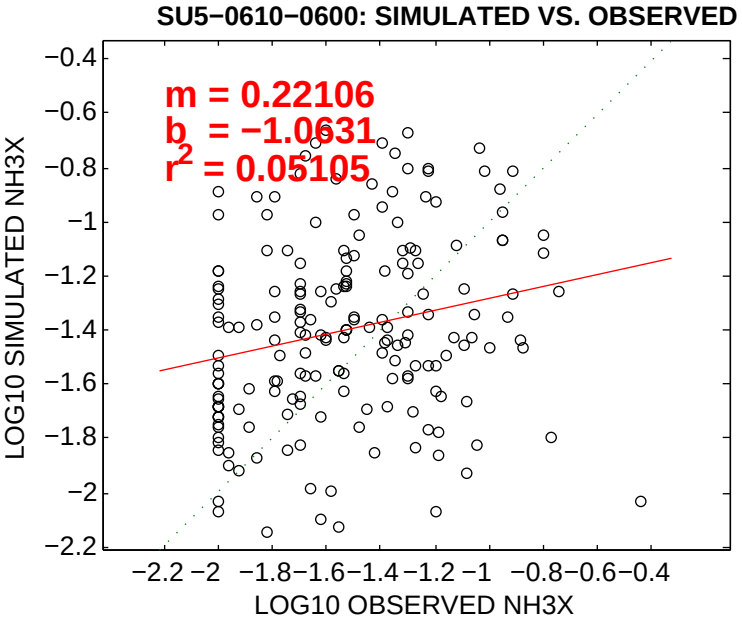
Drive	Directory	Observed
N/A	model	OBS20161101

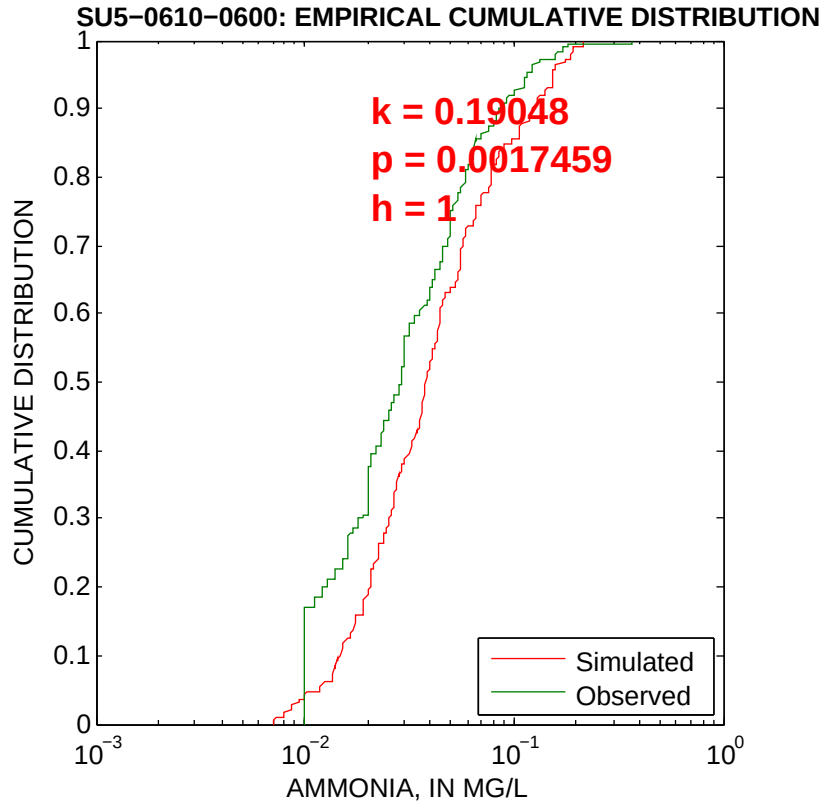
STATISTICS

n	10794	10794
	observe	simulate
min	113	57.28
	2.05308	1.758
mean	2783.9	2703.31
	3.13771	3.20396
media	1340	1784.4
	3.1271	3.25149
max	65400	64747
	4.81558	4.81122
varian	1.89229e+0	1.28546e+
	0.255781	0.21385
JB	0.001	0.001
	0.001	0.001
	ra	log
%	-2.89482	2.11152
err.va	4.52115e+0	0.0528216
rel.std.err	1.238924	0.206511
mod.eff	0.761076	0.793489

VERSION 2.1







DATA SELECTION

scenario	file
P620171001WQ	NH3X.calib

plot: NH3X - ammonia

Dates: 1/1/1985 – 12/31/201

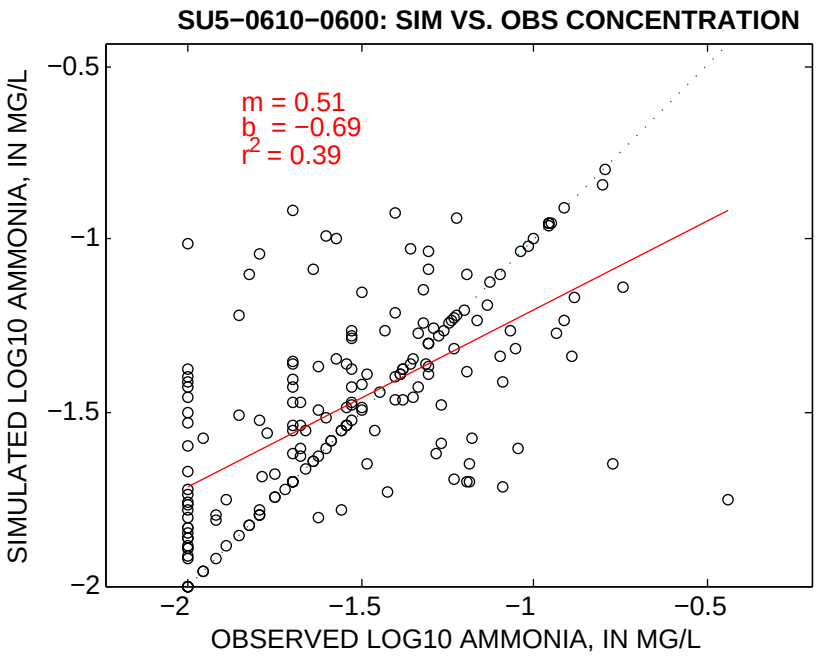
Drive	Directory	Observed
N/A	model	OBS20161101

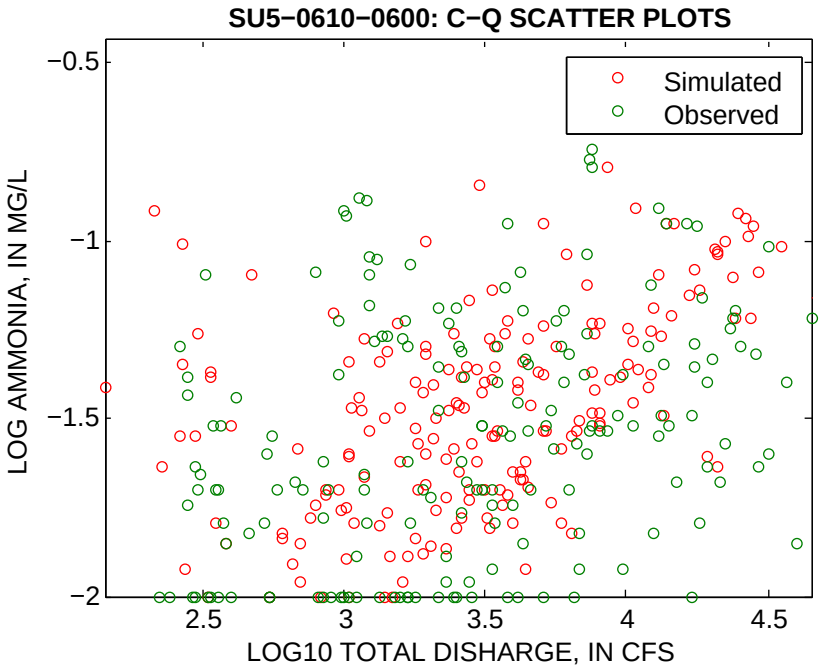
STATISTICS

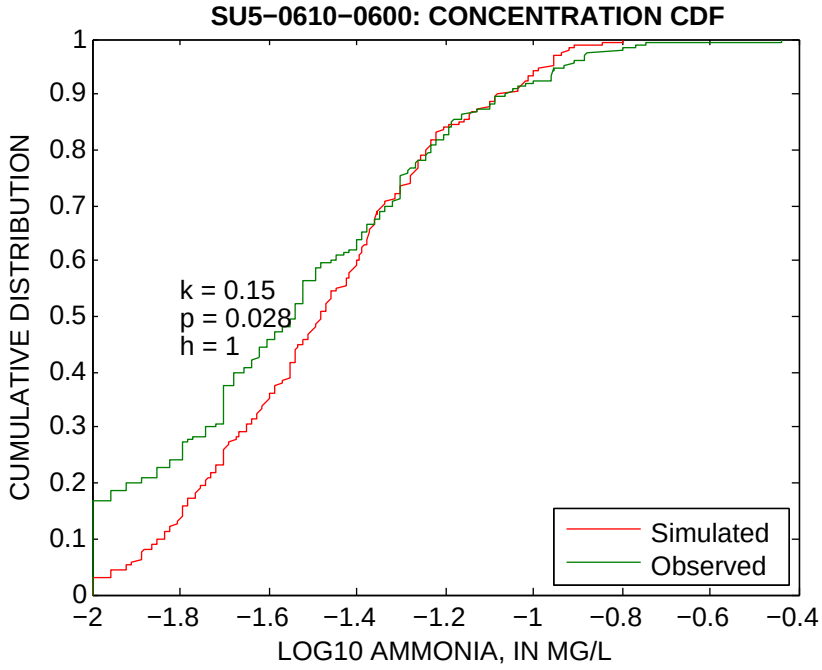
	n	189	189
		observe	simulate
min		0.01	0.0070878
		-2	-2.14949
mean		0.0410488	0.0535944
		-1.53276	-1.40195
media		0.029	0.038326
		-1.5376	-1.41651
max		0.365	0.21695
		-0.437707	-0.66364
varian		0.00170232	0.00203288
		0.119183	0.114091
JB		0.001	0.001
		0.038094	0.209519
		ra	log
%		30.5628	-8.53421
err.va		0.00348346	0.197783
rel.std.err		2.0463	1.65948
mod.eff		-1.0463	-0.65948

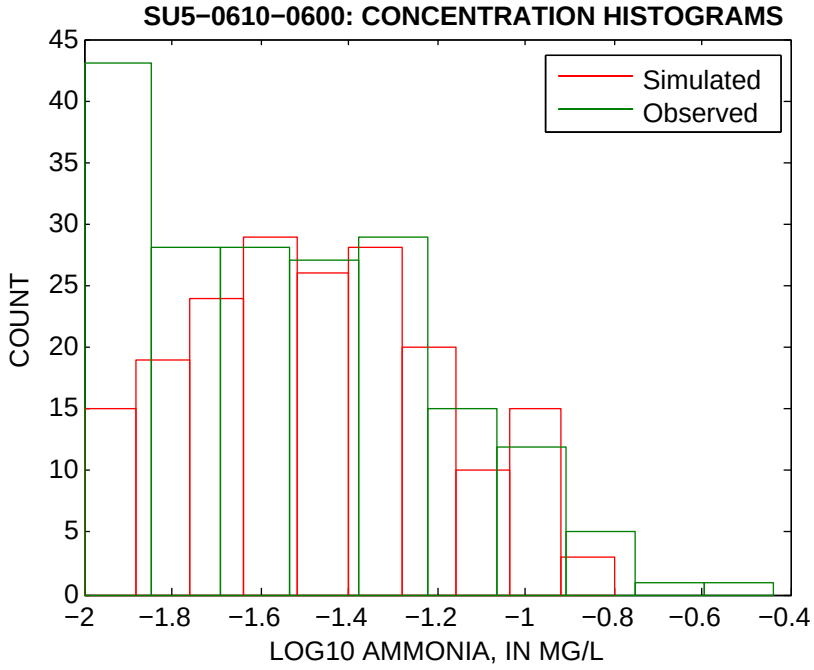
VERSION 2.1

ALL DATA
LOG10

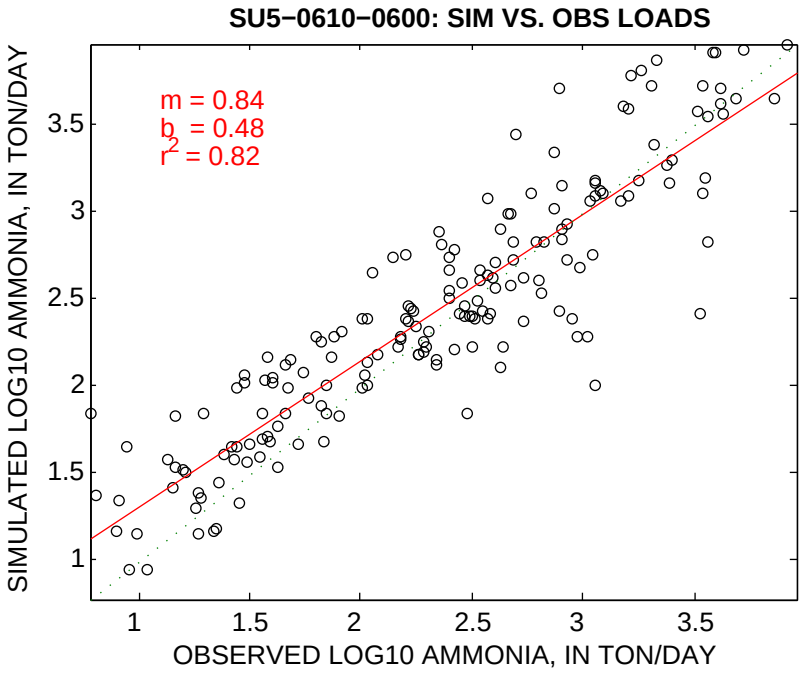


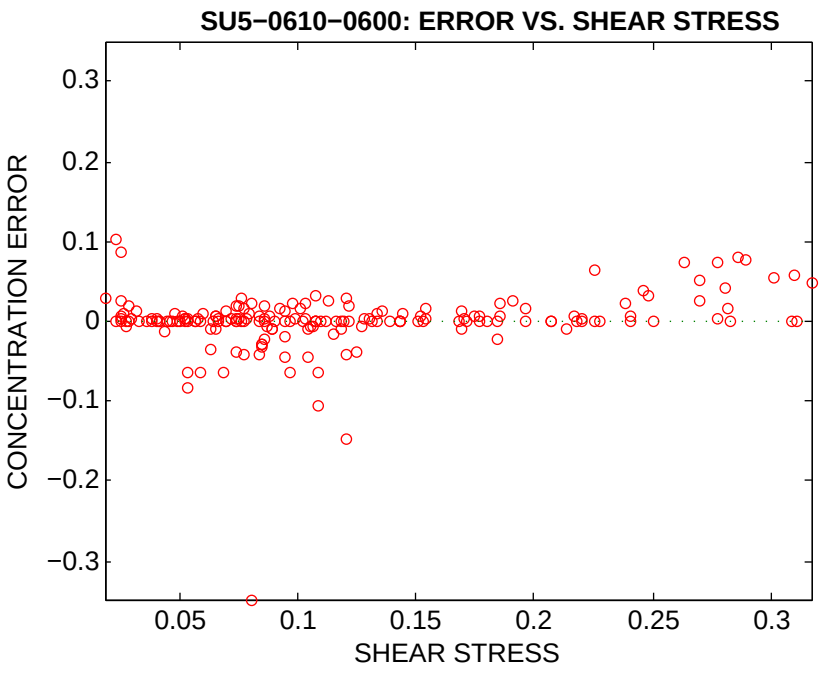


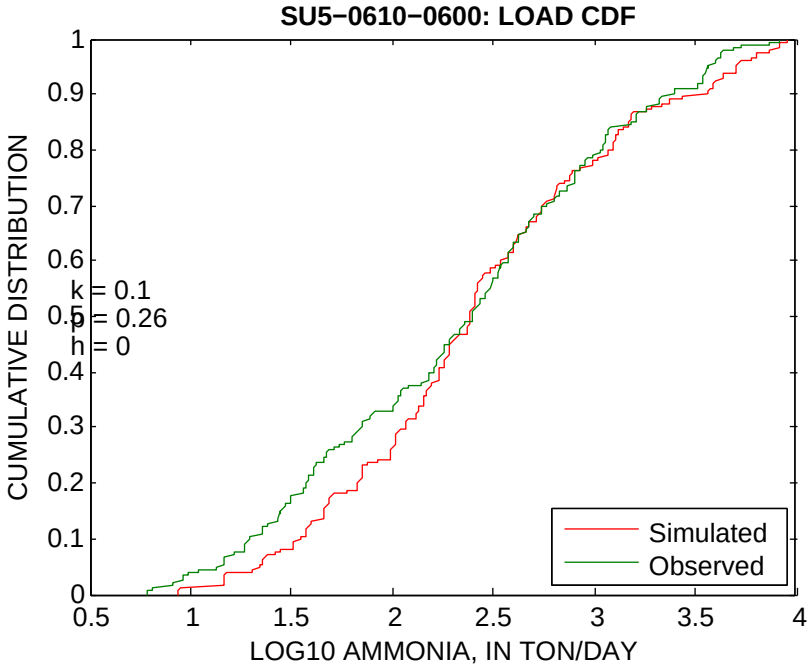


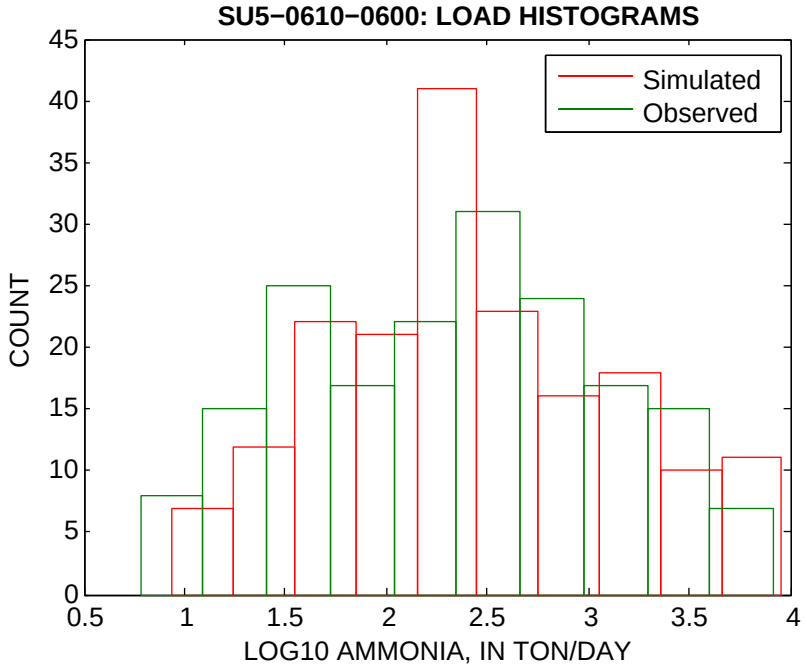


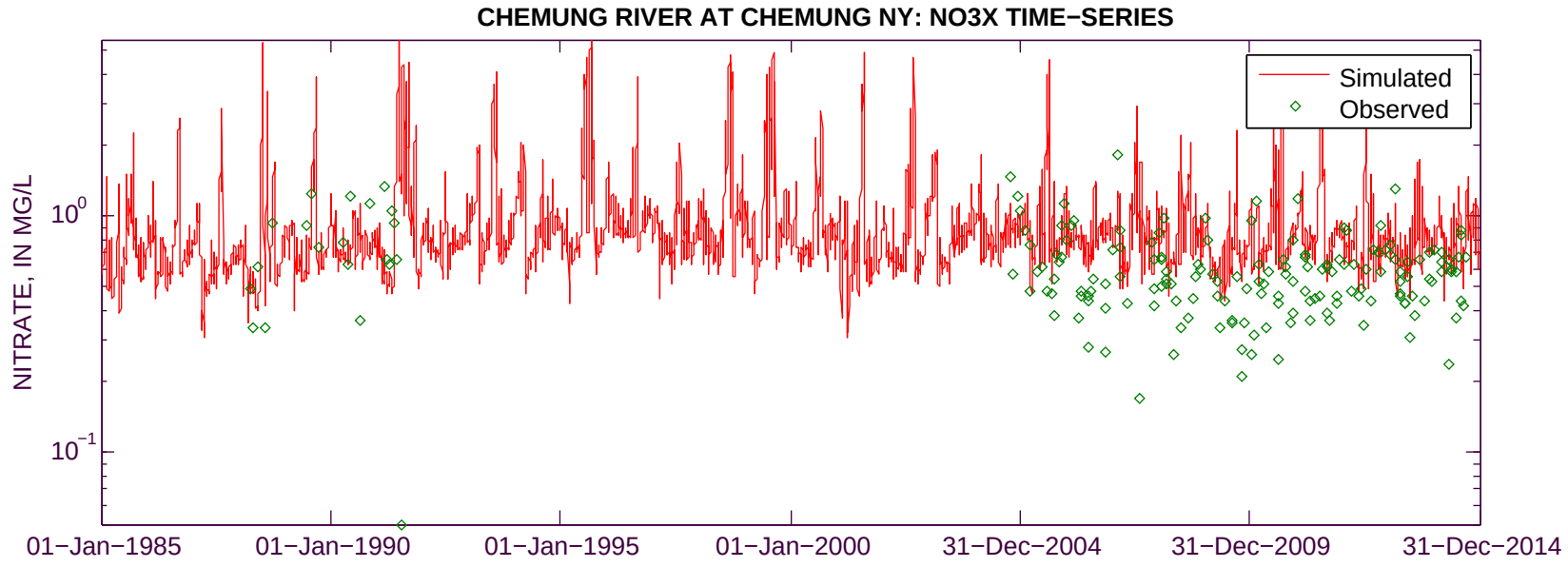
LOAD DATA
LOG10

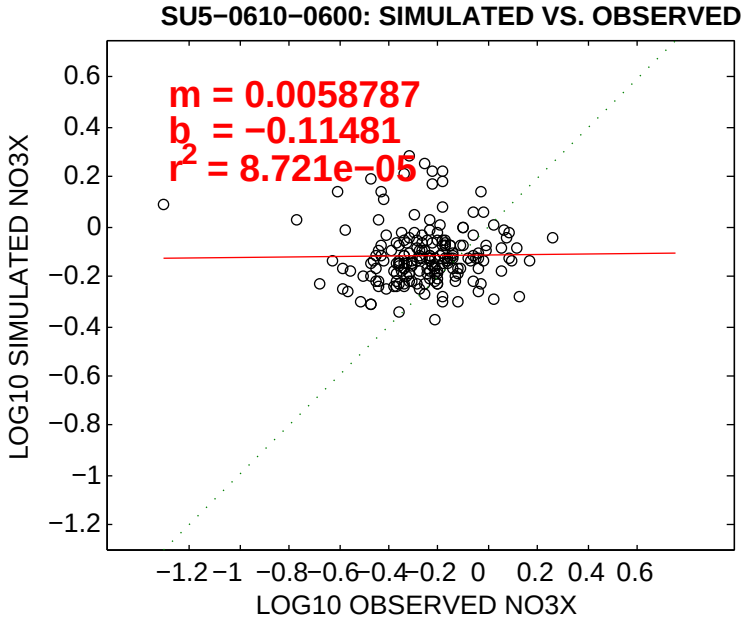


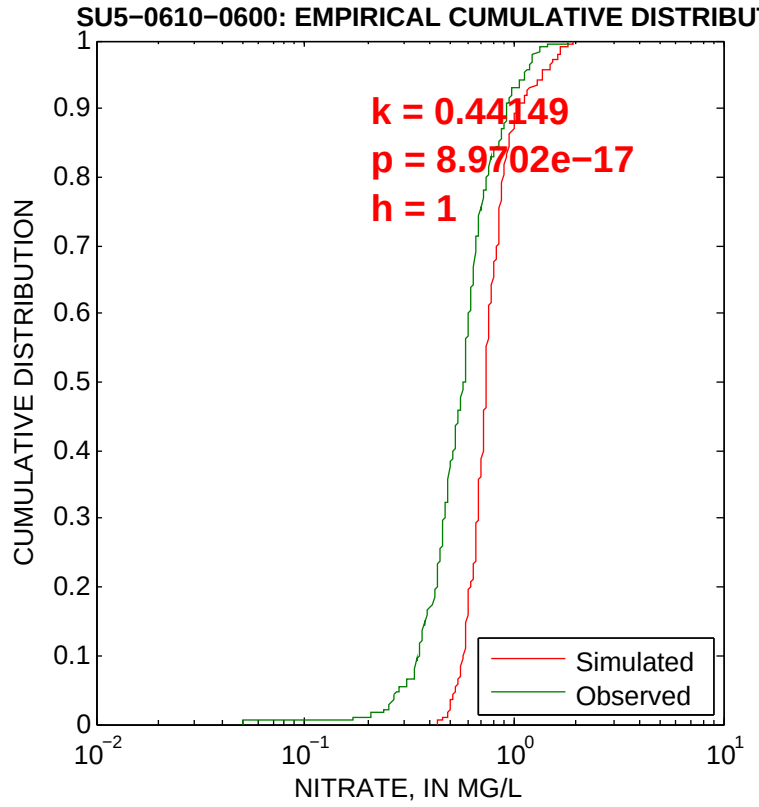












DATA SELECTION

scenario	file
P620171001WQ	NO3X.calib

plot: NO3X - nitrate

Dates: 1/1/1985 – 12/31/201

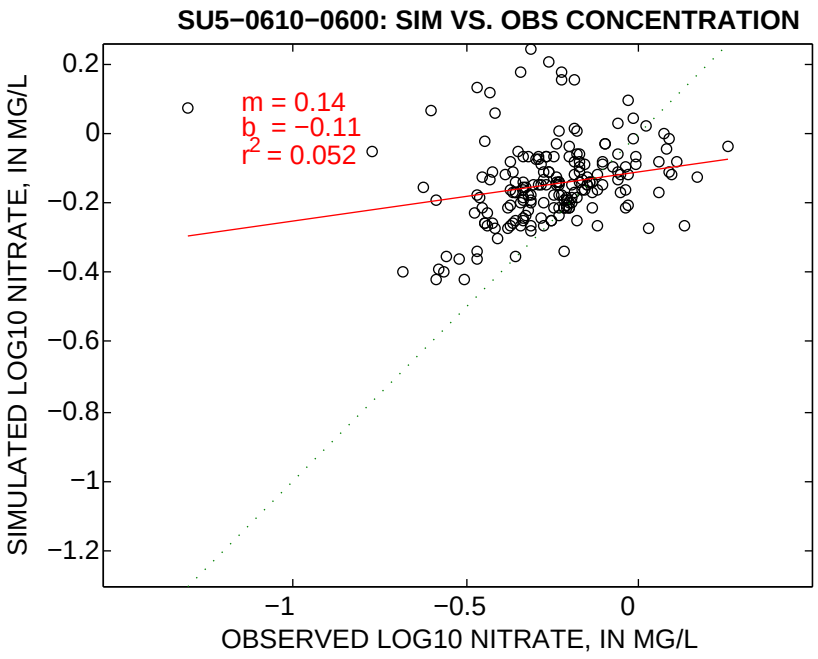
Drive	Directory	Observed
N/A	model	OBS20161101

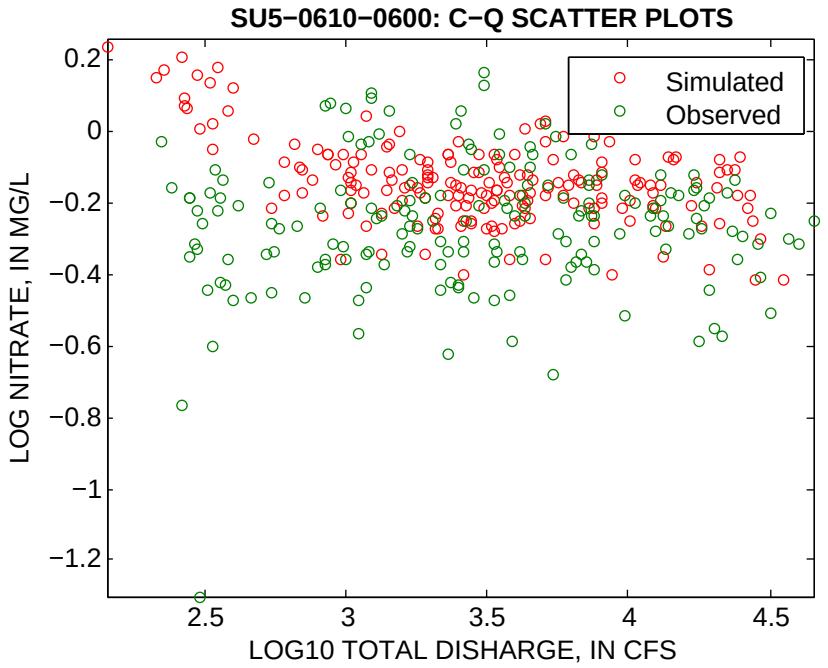
STATISTICS

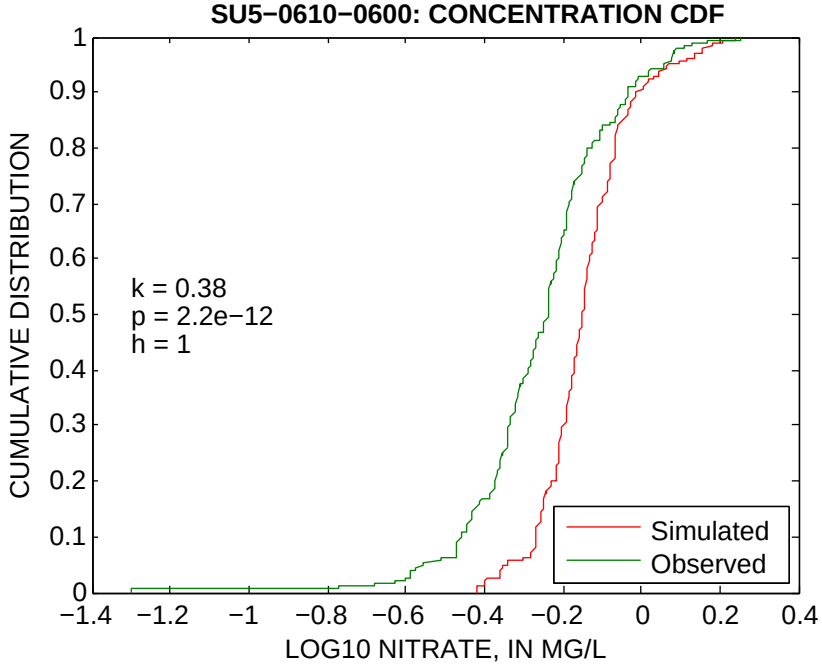
	n	188	188
		observe	simulate
min		0.05	0.42665
		-1.30103	-0.369928
mean		0.607204	0.7955
		-0.252663	-0.116297
media		0.5785	0.739345
		-0.237698	-0.131153
max		1.8	1.9262
		0.255273	0.284701
varian		0.0637106	0.062939
		0.0339021	0.0134347
JB		0.001	0.001
		0.001	0.001
		ra	log
%		31.0102	-53.9713
err.va		0.160869	0.0656332
rel.std.err		2.52499	1.93596
mod.eff		-1.52499	-0.935962

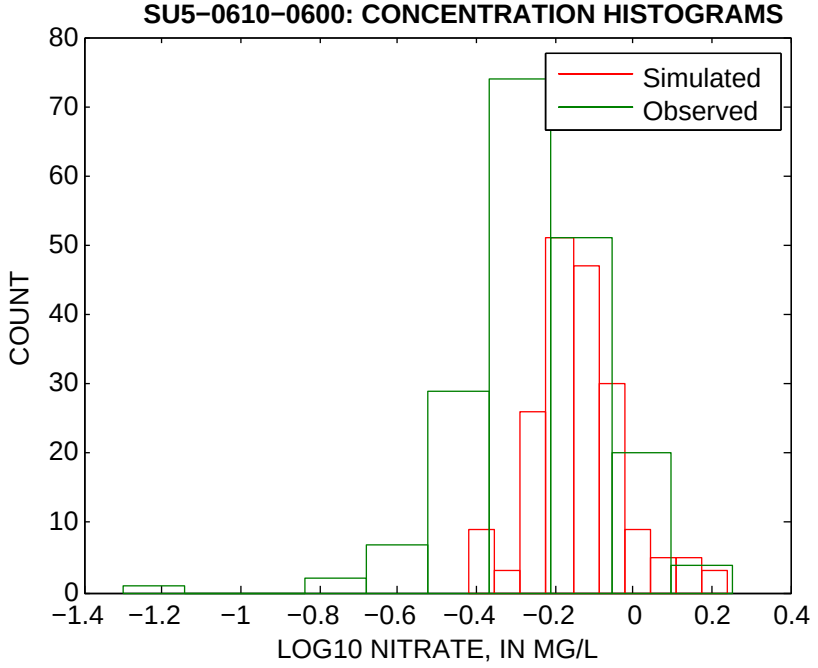
VERSION

ALL DATA
LOG10

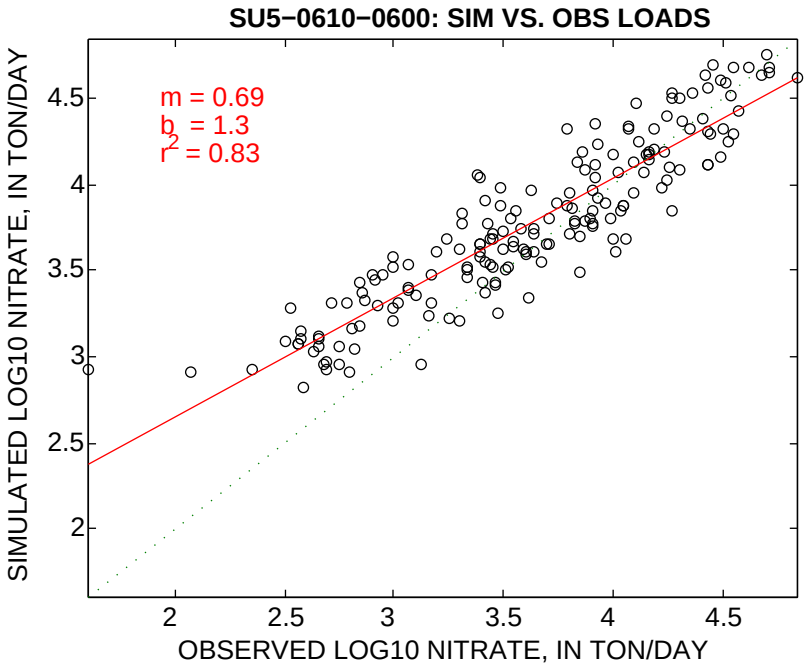


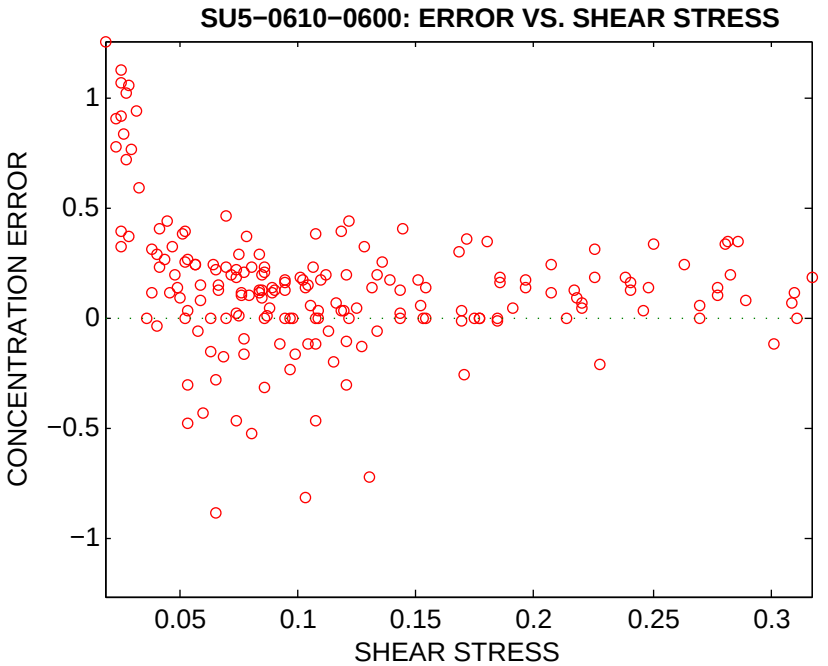


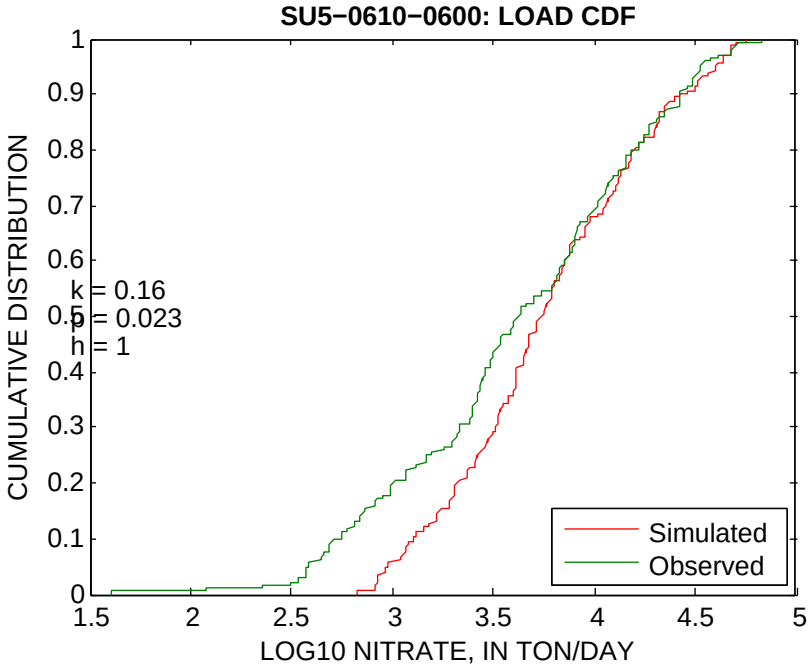


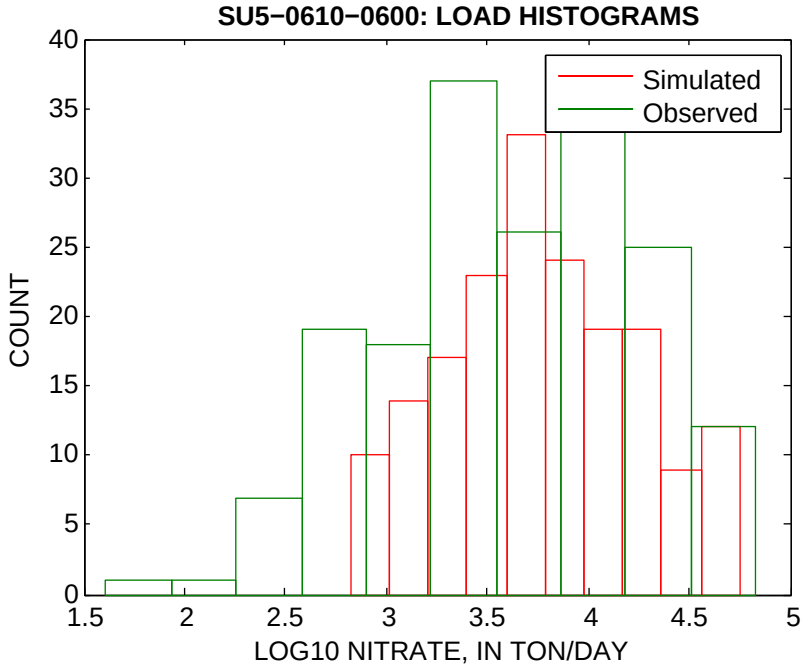


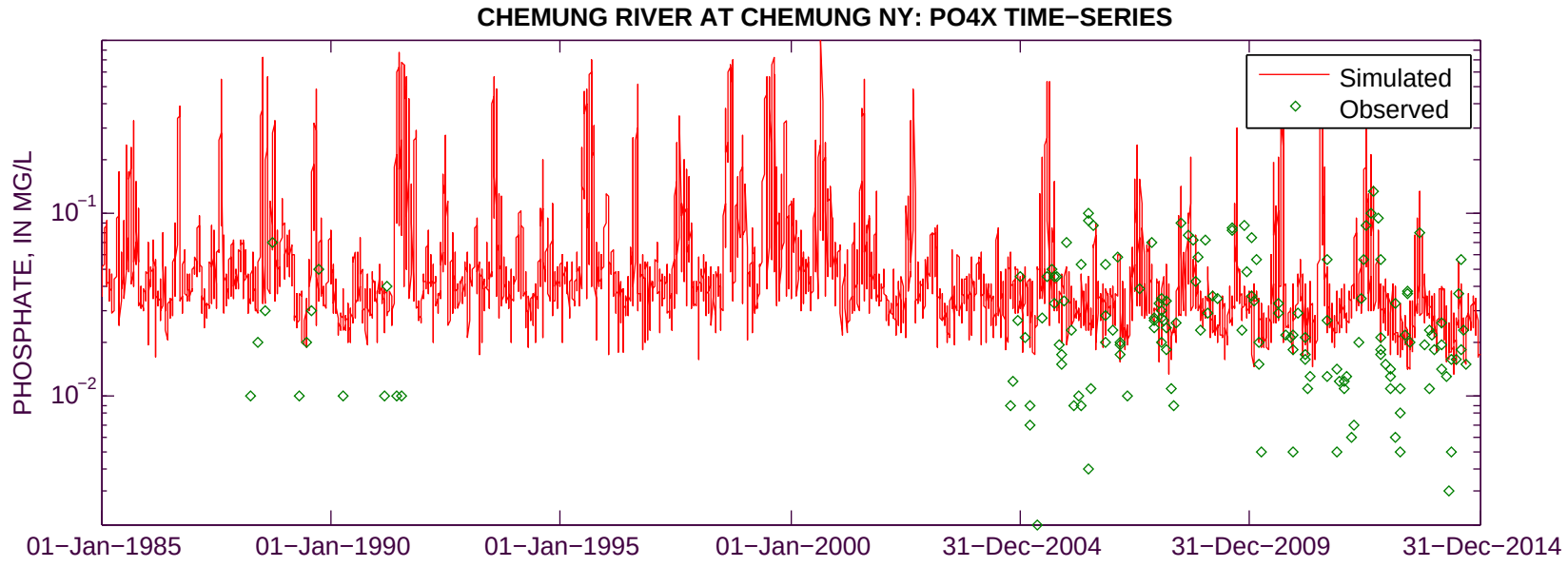
LOAD DATA
LOG10

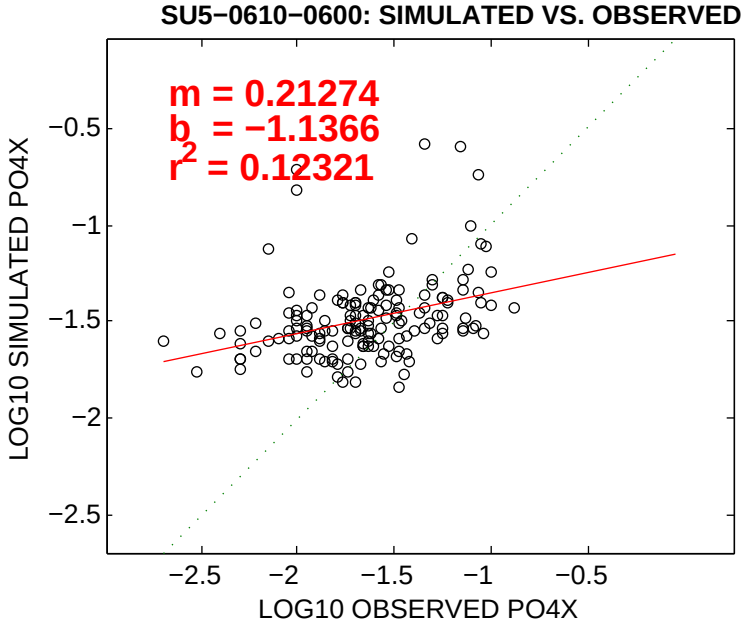


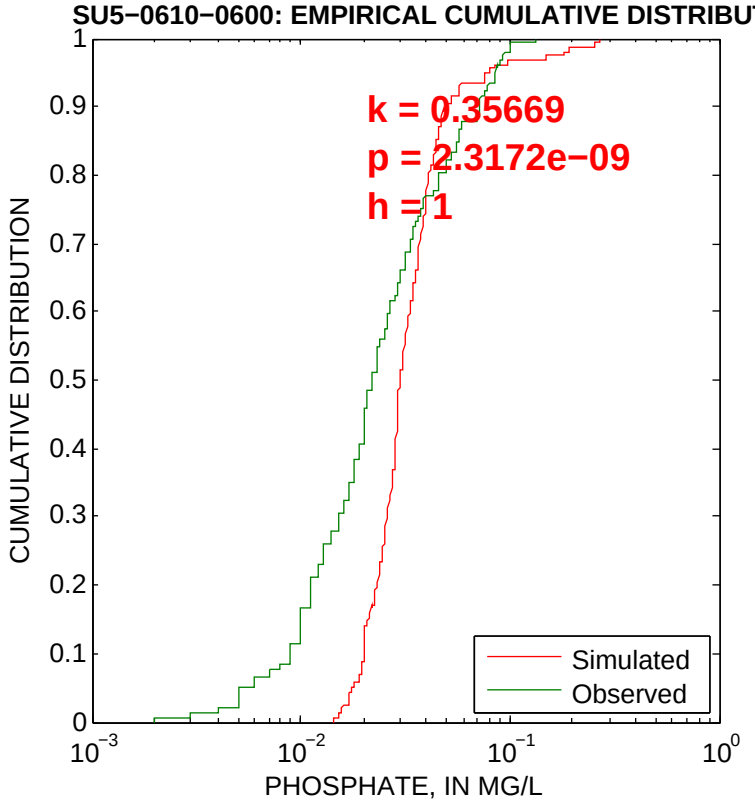












DATA SELECTION

scenario: P620171001WQ | file: PO4X.calib

plot: PO4X - phosphate

Dates: 1/1/1985 – 12/31/201

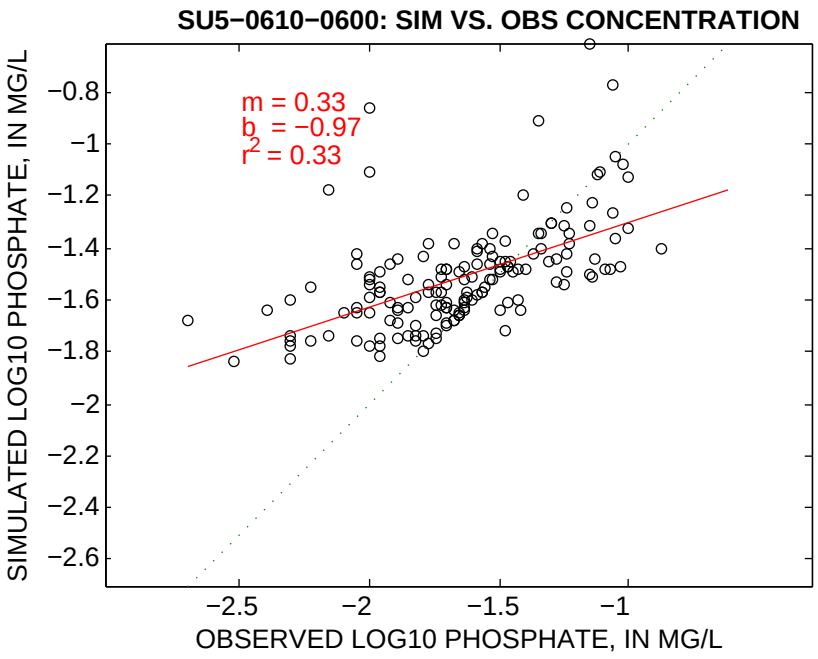
Drive: N/A | Directory: model | Observed: OBS20161101

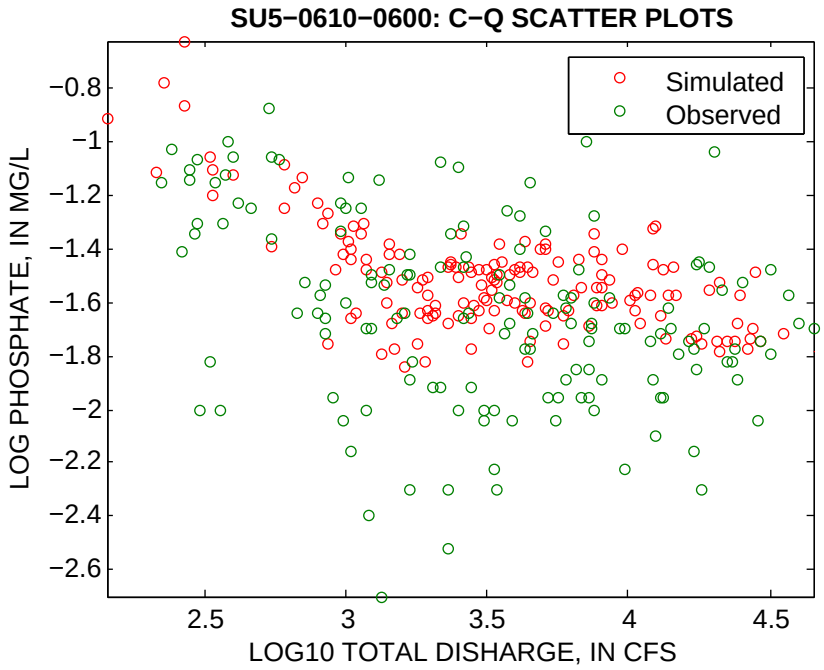
STATISTICS

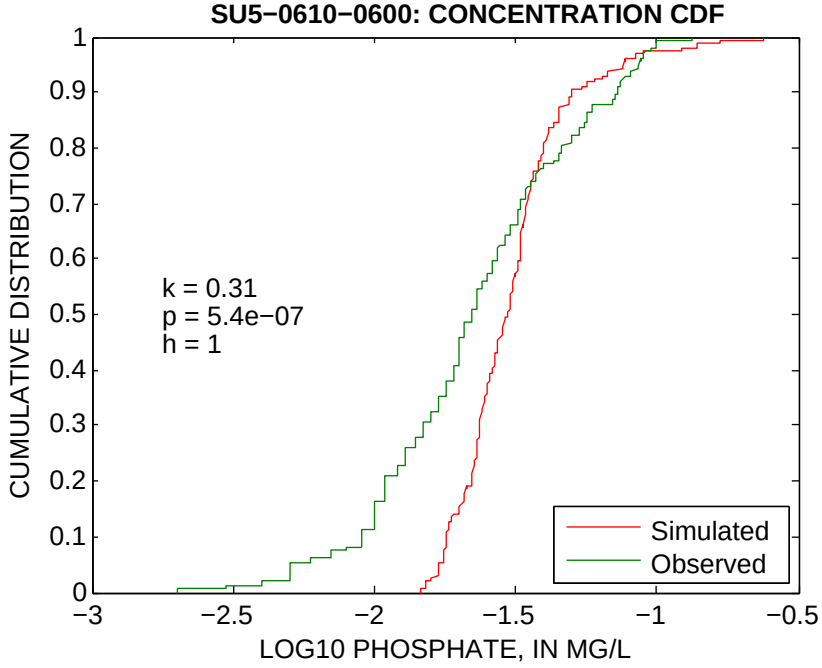
		observe	simulate
n		157	157
min		0.002	0.014506
		-2.69897	-1.83845
mean		0.0306051	0.0384336
		-1.64436	-1.48643
media		0.022	0.02953
		-1.65758	-1.52974
max		0.134	0.26611
		-0.872895	-0.574939
varian		0.00061329	0.00120687
		0.119795	0.0440026
JB		0.001	0.001
	0.5	0.001	
	ra	log	
%		25.5792	-9.6042
err.va		0.00141756	0.137928
rel.std.err		2.31139	1.15137
mod.eff		-1.31139	-0.151369

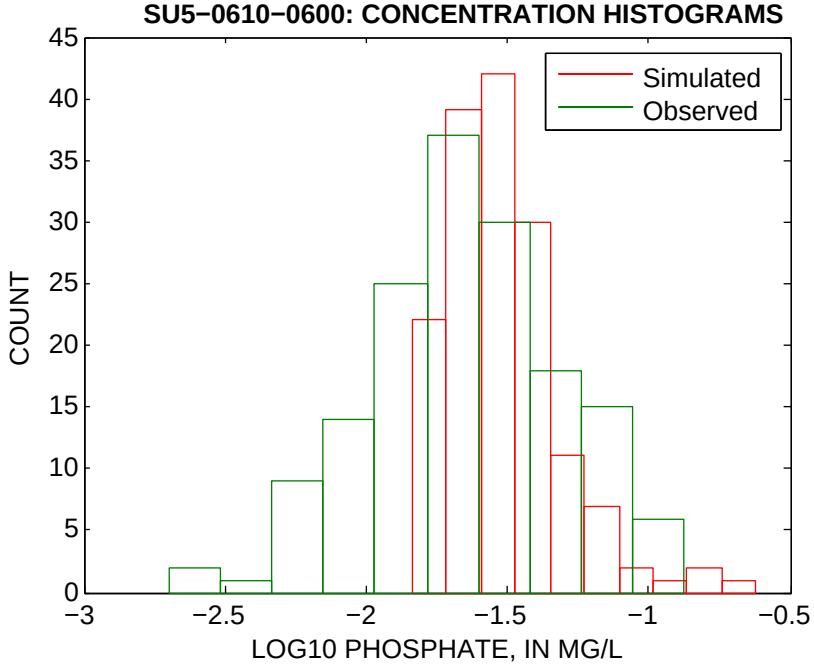
VERSION 2.1

ALL DATA
LOG10

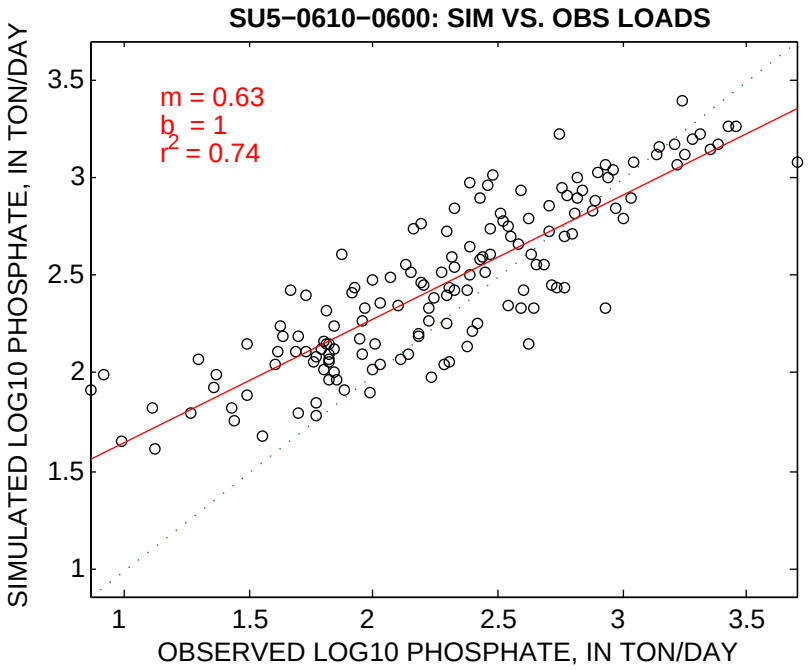


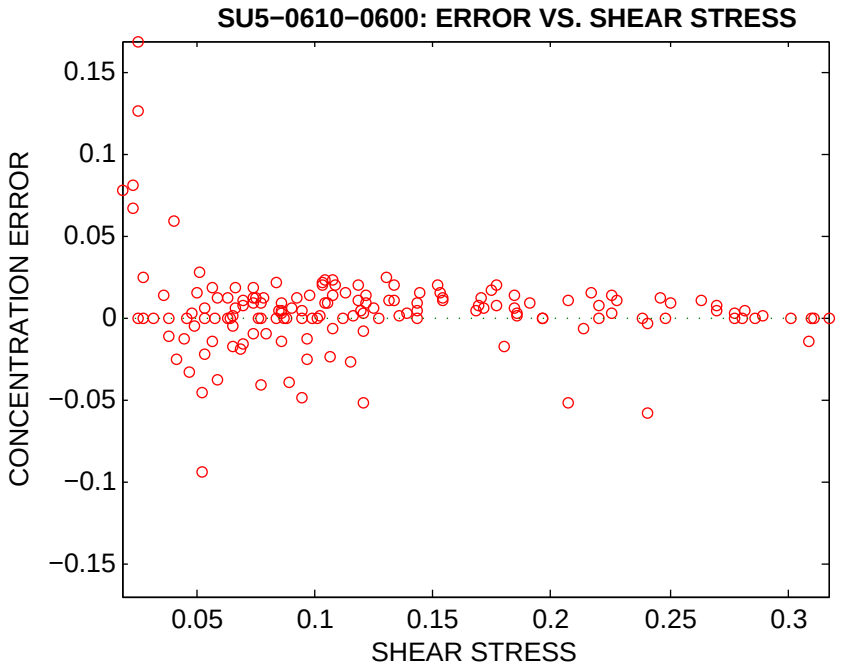


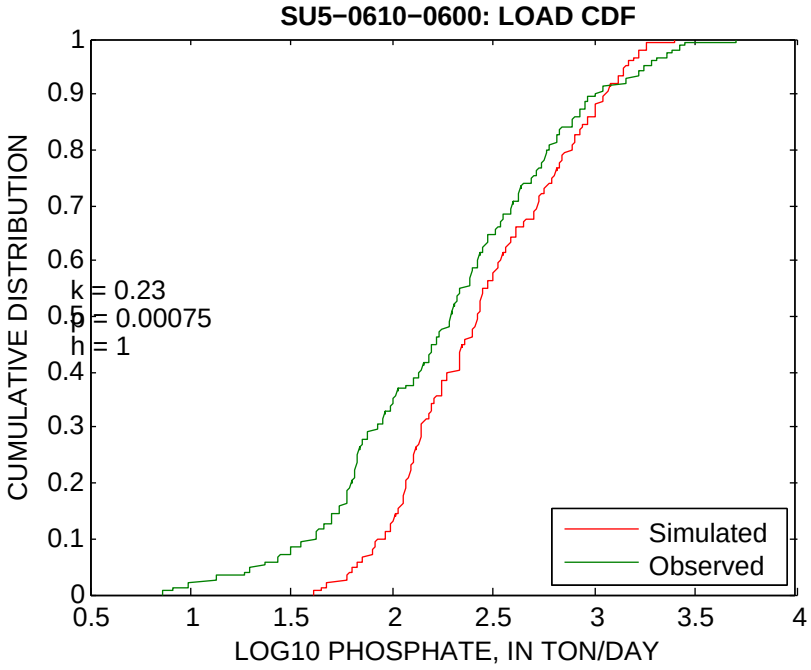


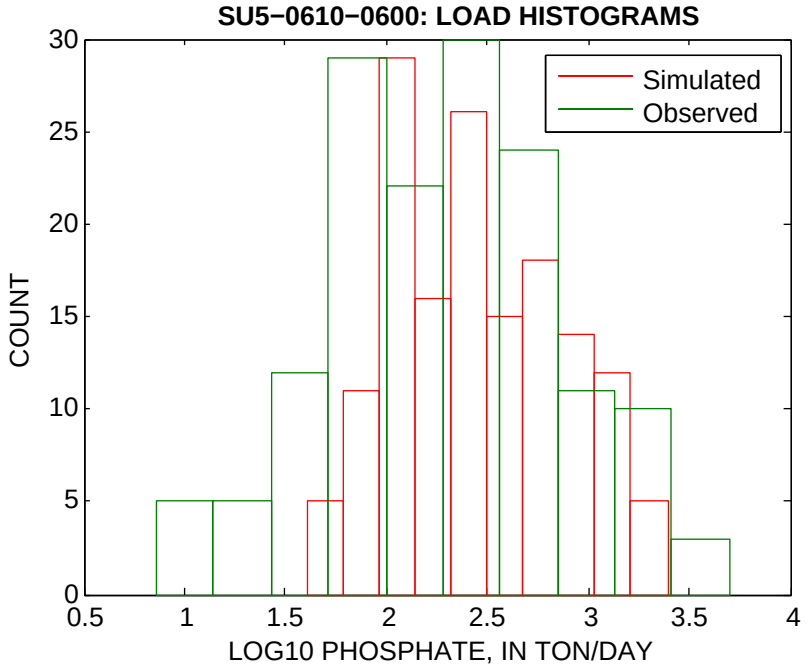


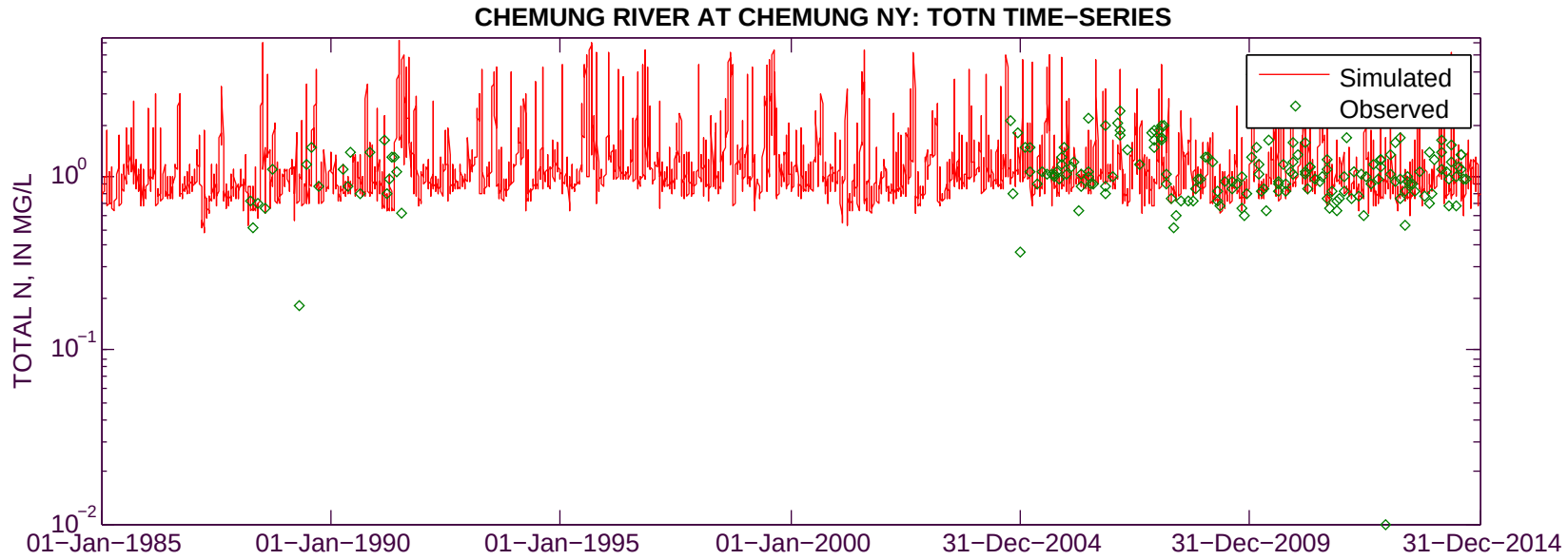
LOAD DATA
LOG10

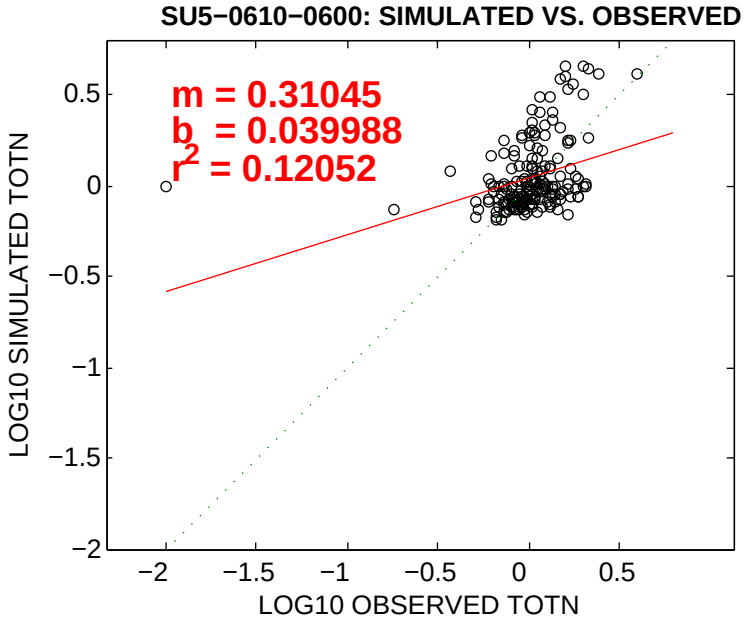


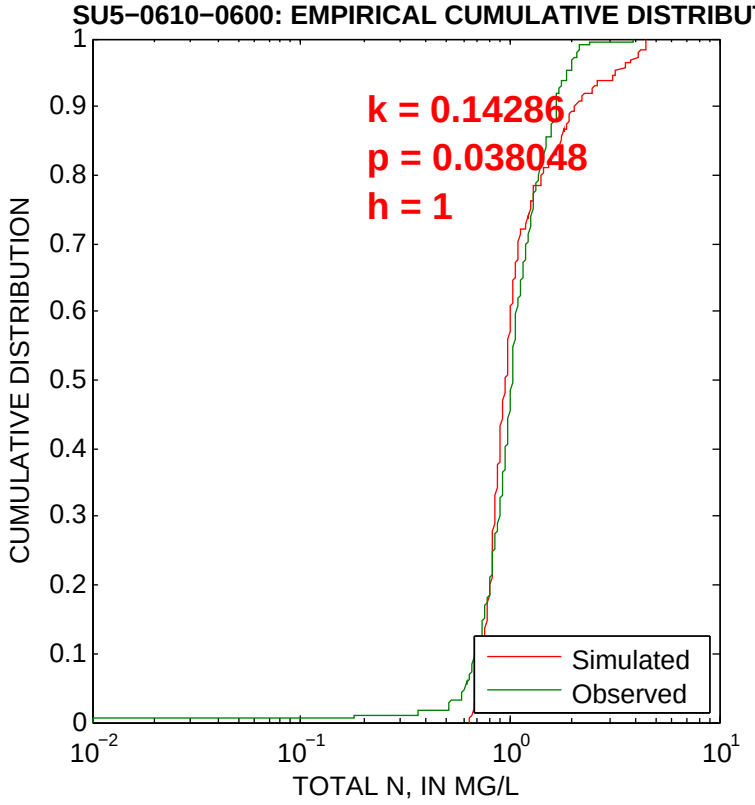












DATA SELECTION

scenario	file
P620171001WQ	TOTN.calib

plot: TOTN - total nitrogen

Dates: 1/1/1985 – 12/31/201

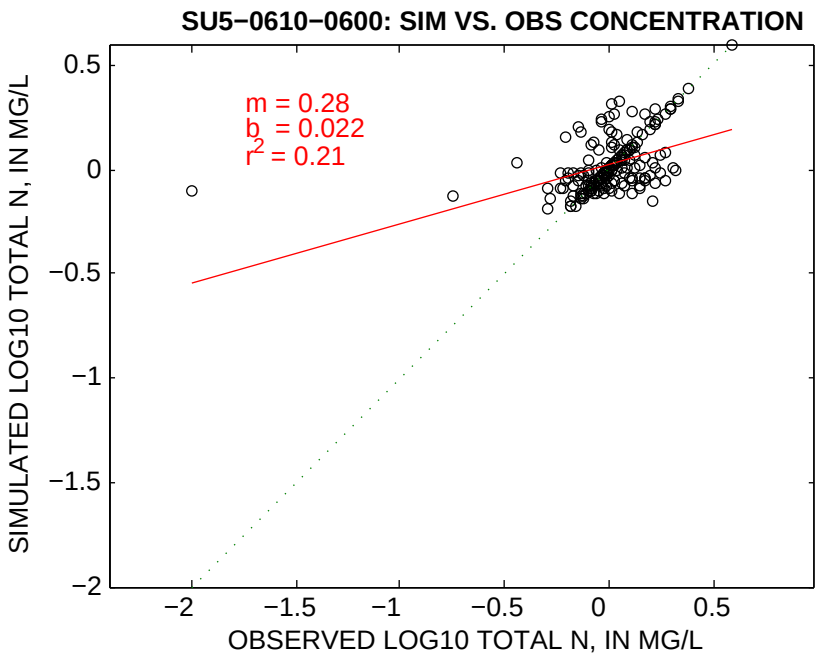
Drive	Directory	Observed
N/A	model	OBS20161101

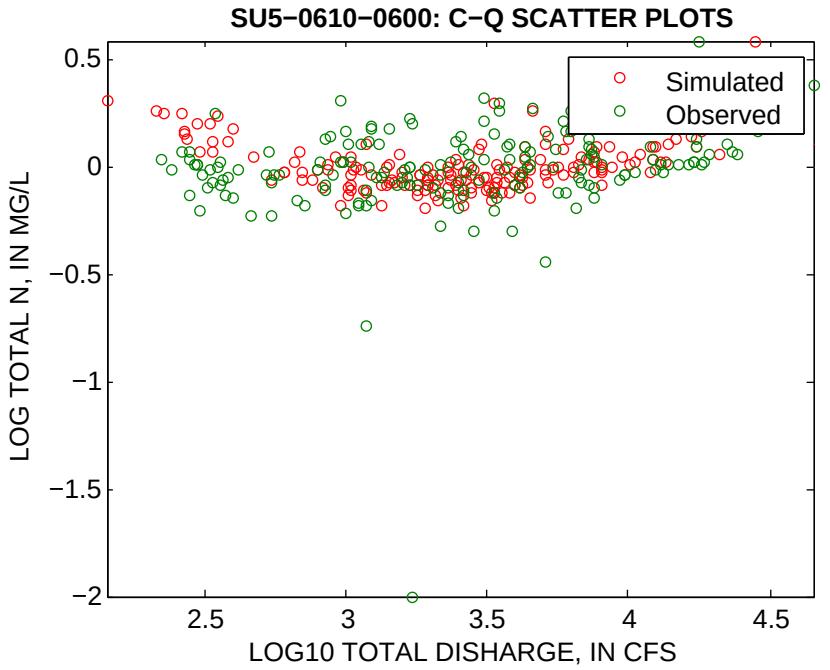
STATISTICS

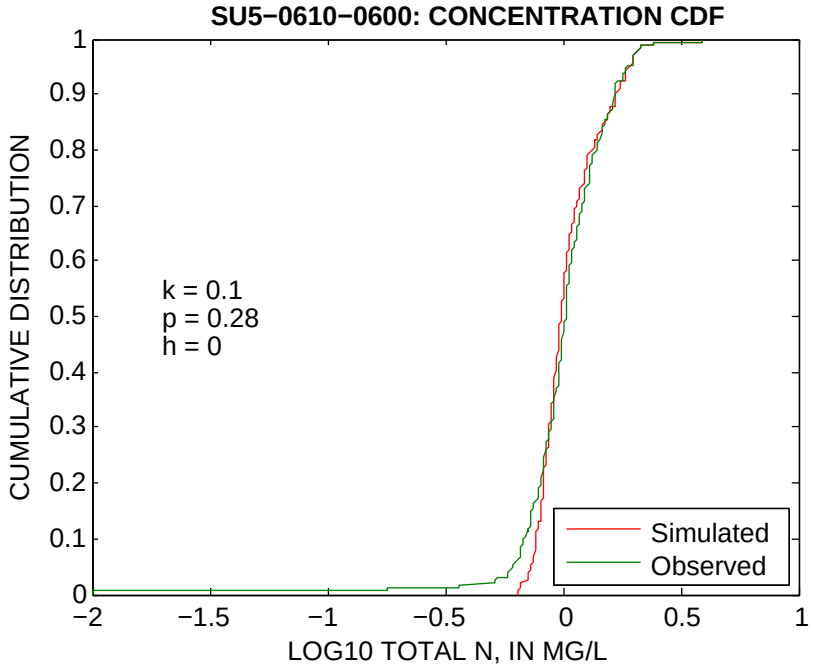
	n	189	189
		observe	simulate
min		0.01	0.64513
		-2	-0.190353
mean		1.11046	1.24624
		0.00936068	0.0428942
media		1.035	0.95901
		0.0149403	-0.0181769
max		3.909	4.5168
		0.592066	0.654831
varian		0.188243	0.623941
		0.0458735	0.0366842
JB		0.001	0.001
		0.001	0.001
		ra	log
%		12.2275	358.238
err.va		0.47346	0.0552053
rel.std.err		2.51515	1.20343
mod.eff		-1.51515	-0.203426

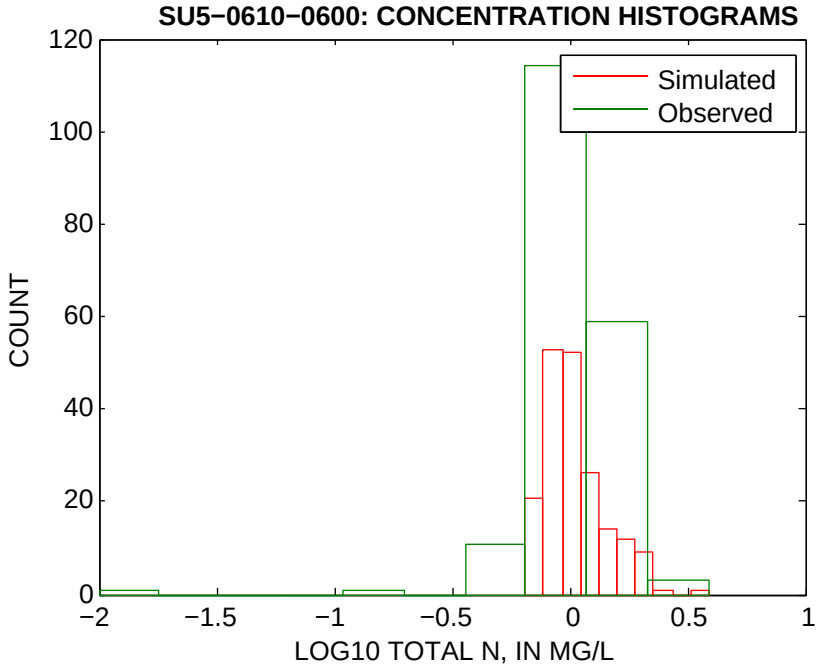
VERSION 2.1

ALL DATA
LOG10

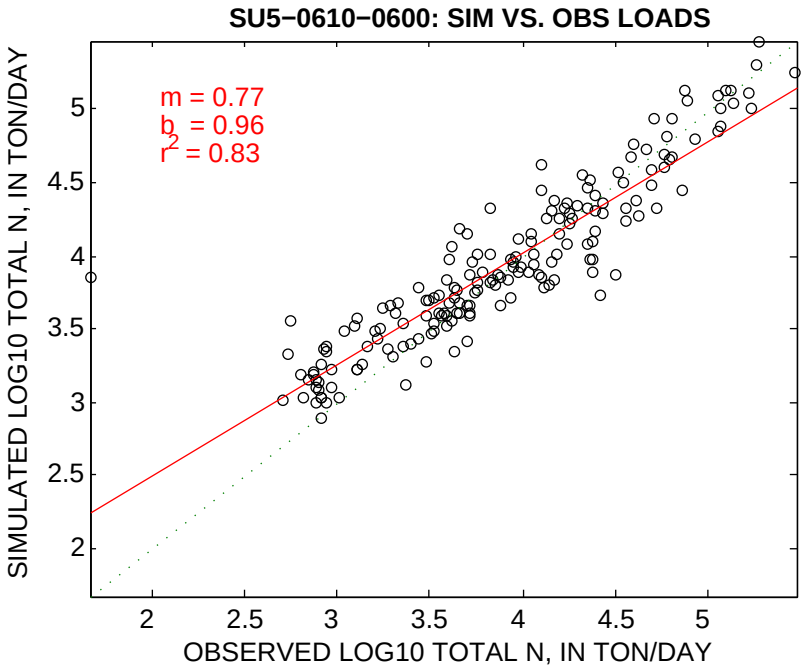


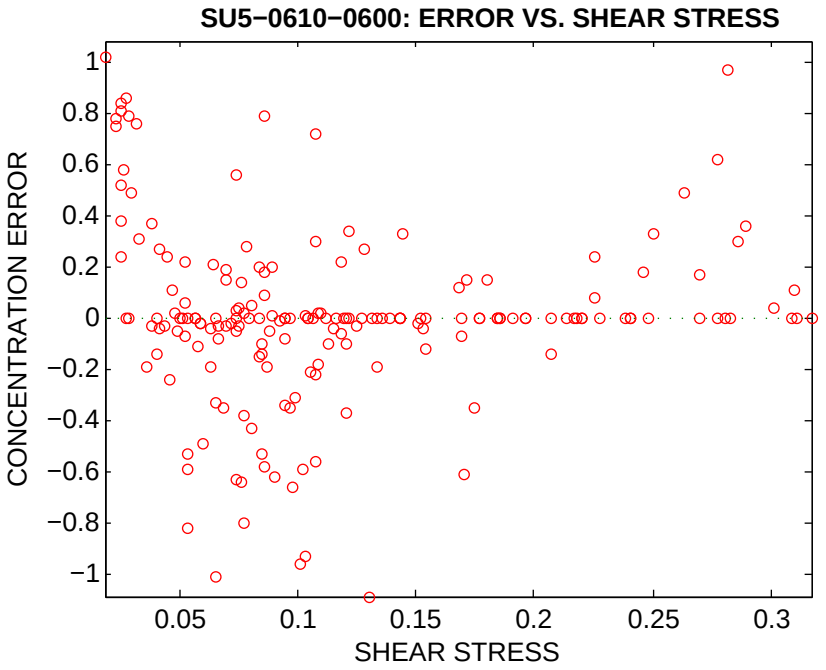


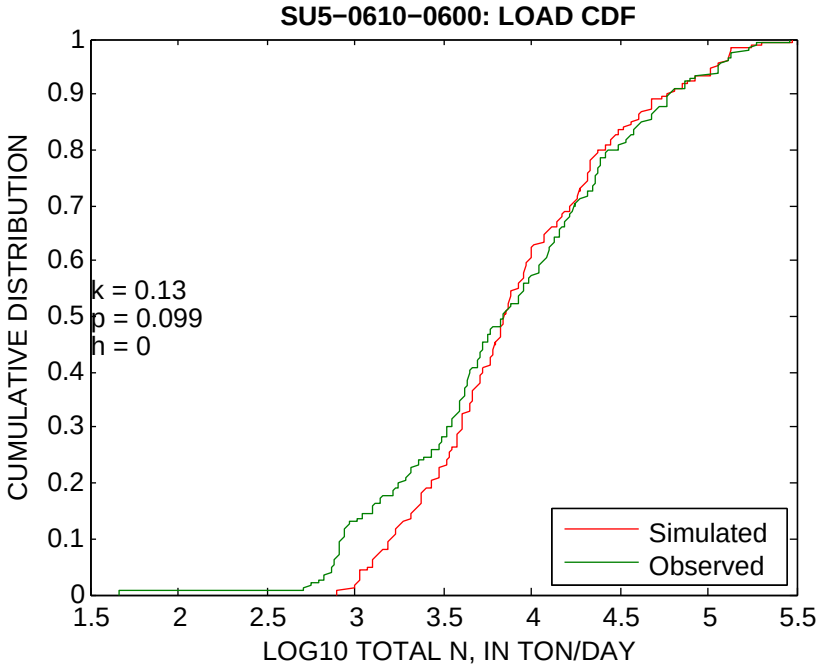


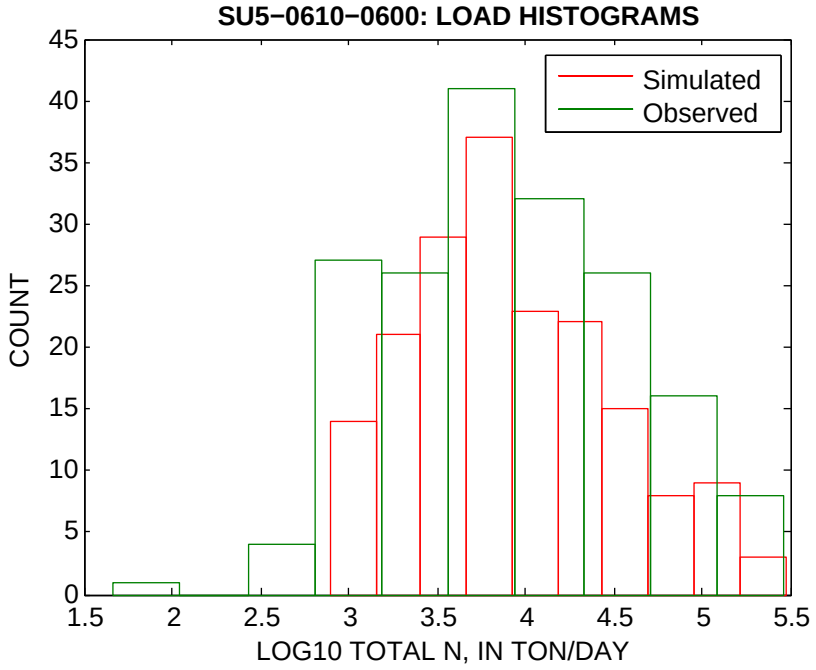


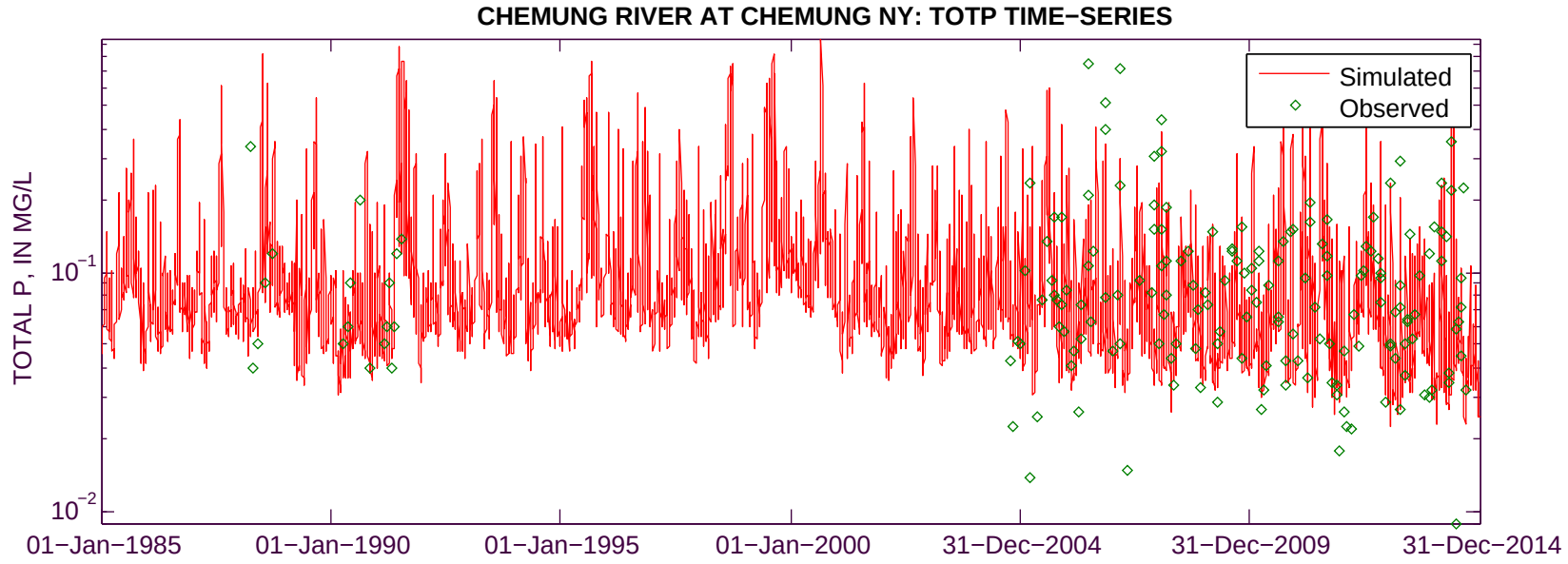
LOAD DATA
LOG10

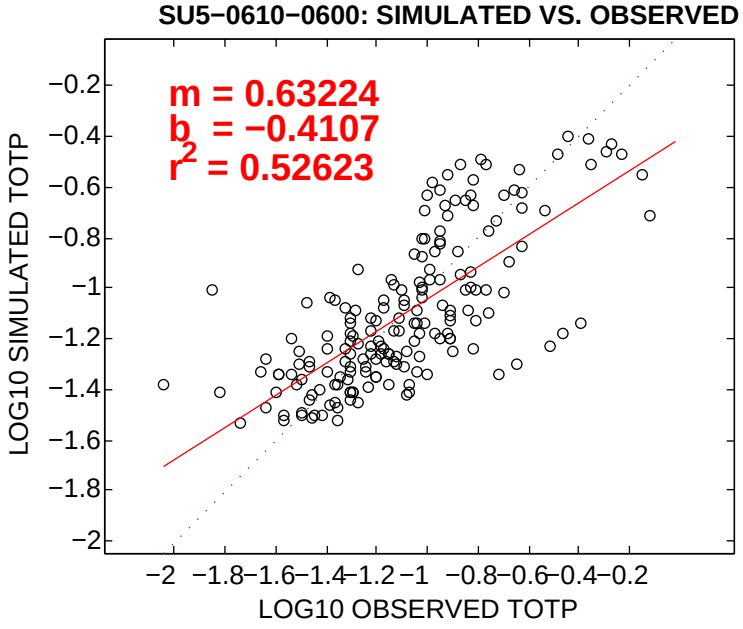


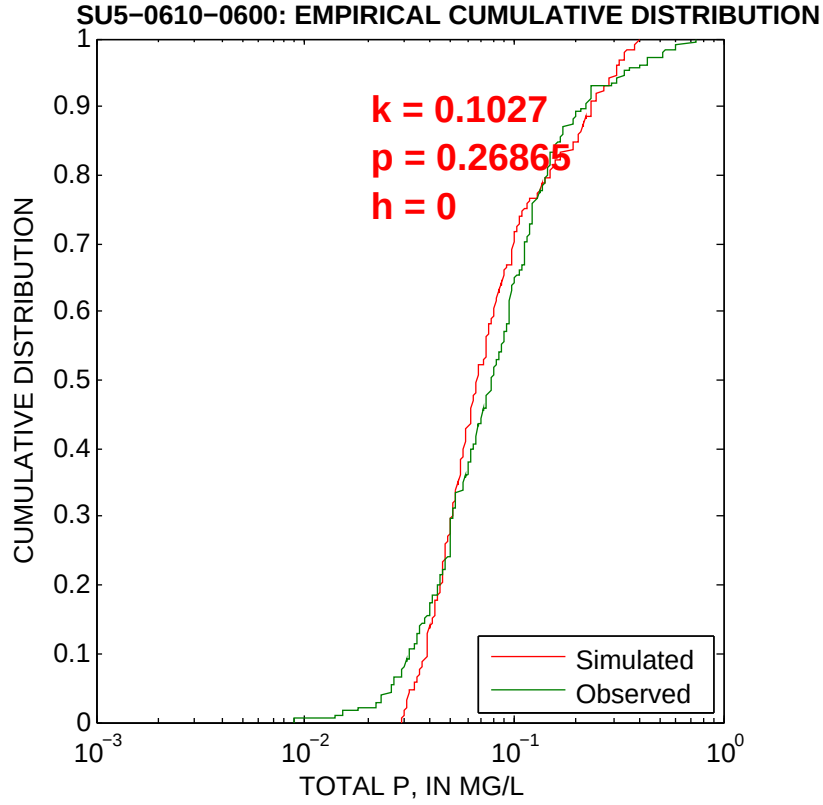












DATA SELECTION

scenario: P620171001WQ | file: TOTP.calib

plot: TOTP - total phosphorus

Dates: 1/1/1985 – 12/31/201

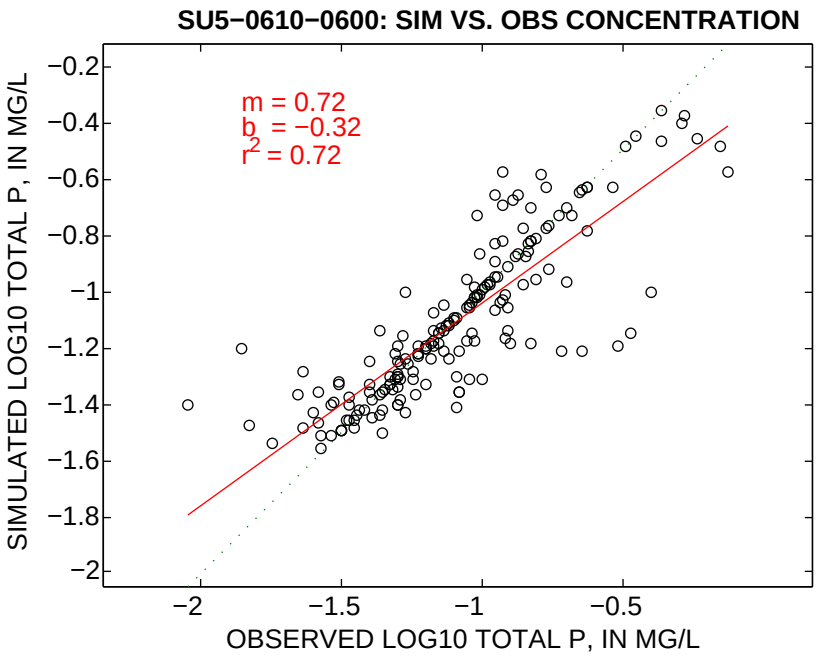
Drive: N/A | Directory: model | Observed: OBS20161101

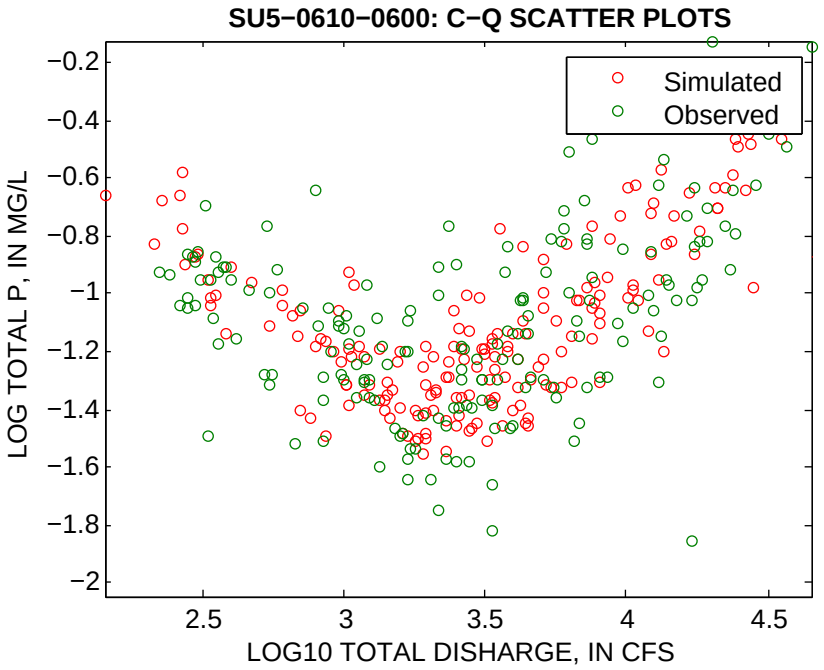
STATISTICS

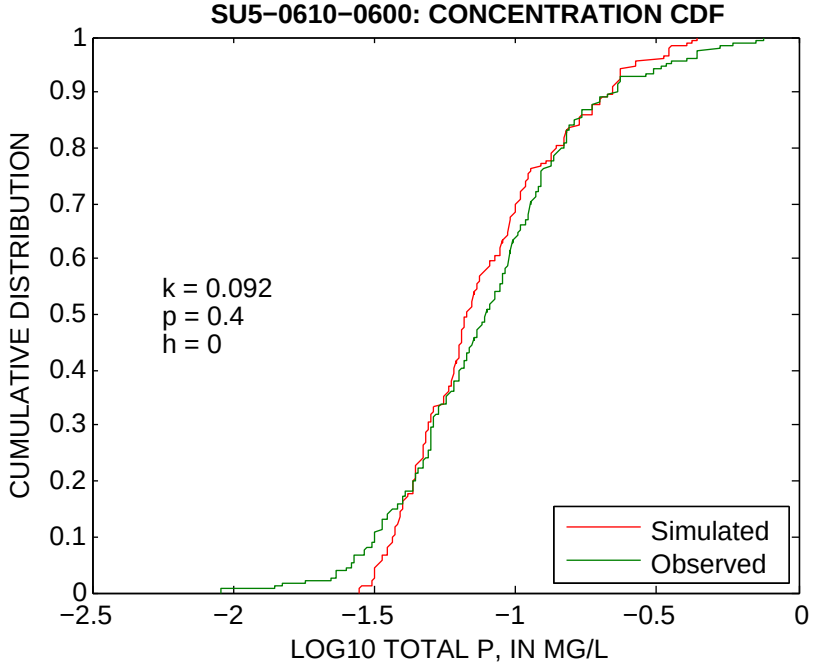
	n	observe	simulate
		185	185
min		0.009	0.029256
		-2.04576	-1.53379
mean		0.111992	0.102038
		-1.09228	-1.10128
media		0.079	0.066946
		-1.10237	-1.17428
max		0.753	0.40104
		-0.123205	-0.396812
varian		0.0132448	0.00708261
		0.112367	0.0853539
JB		0.001	0.001
		0.064359	0.003819
		ra	log
%		-8.88855	0.823854
err.va		0.00731607	0.0557168
rel.std.err		0.552373	0.495847
mod.eff		0.447627	0.504153

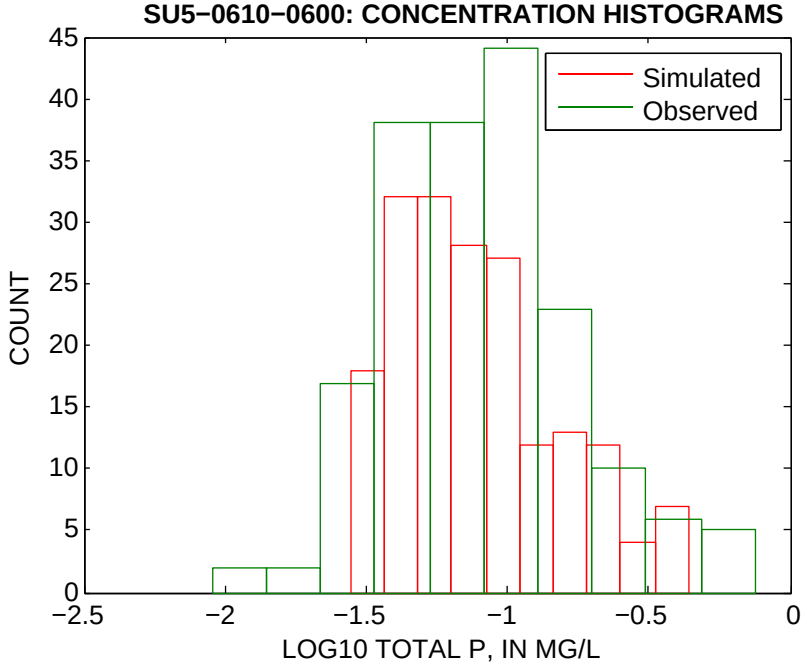
VERSION 2.1

ALL DATA
LOG10

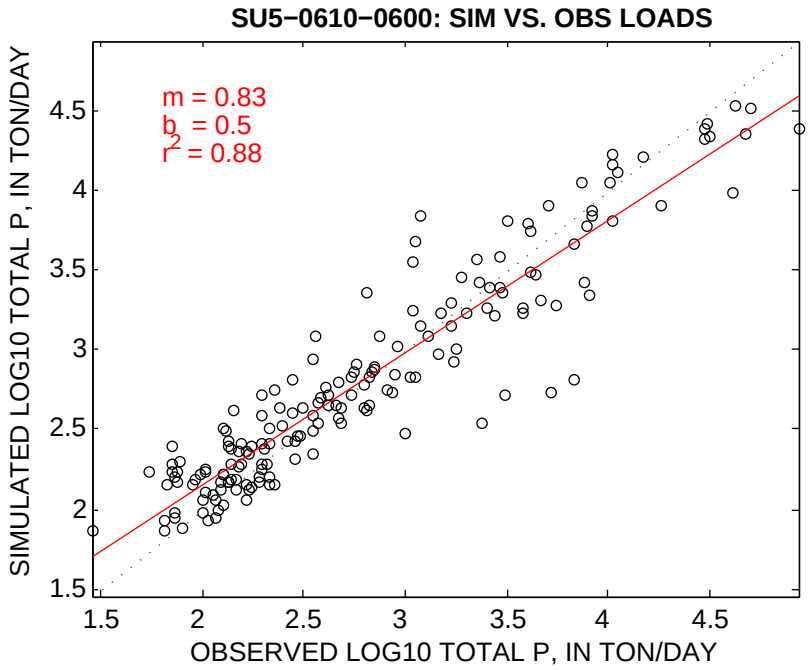


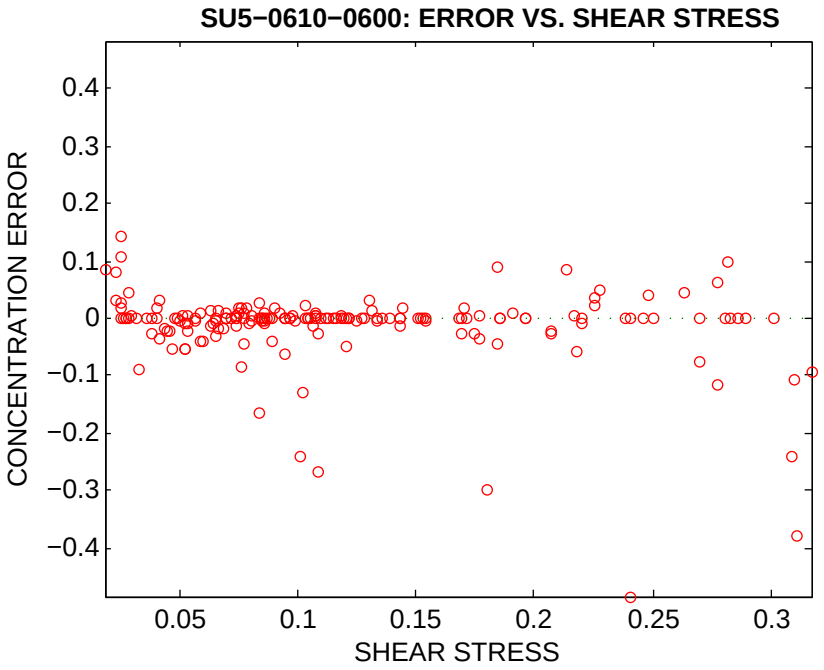


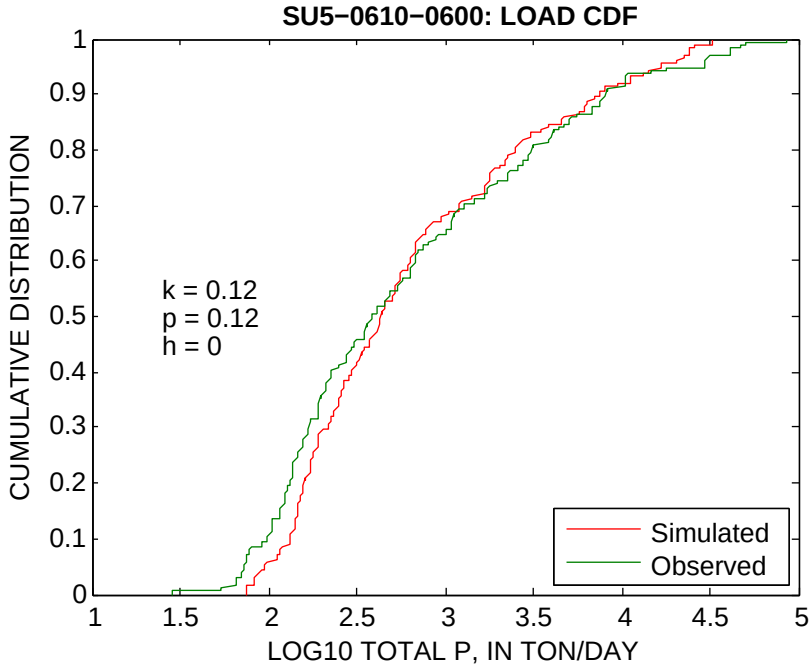


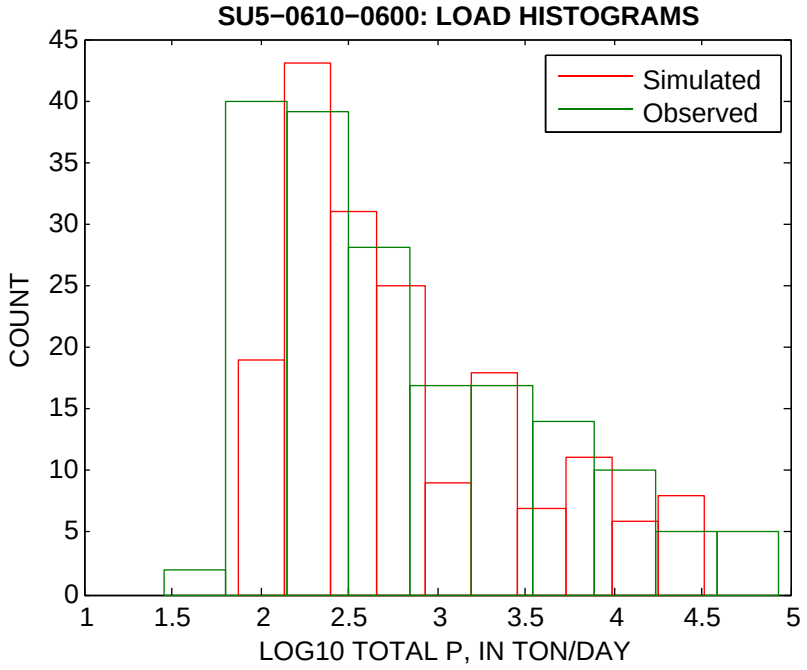


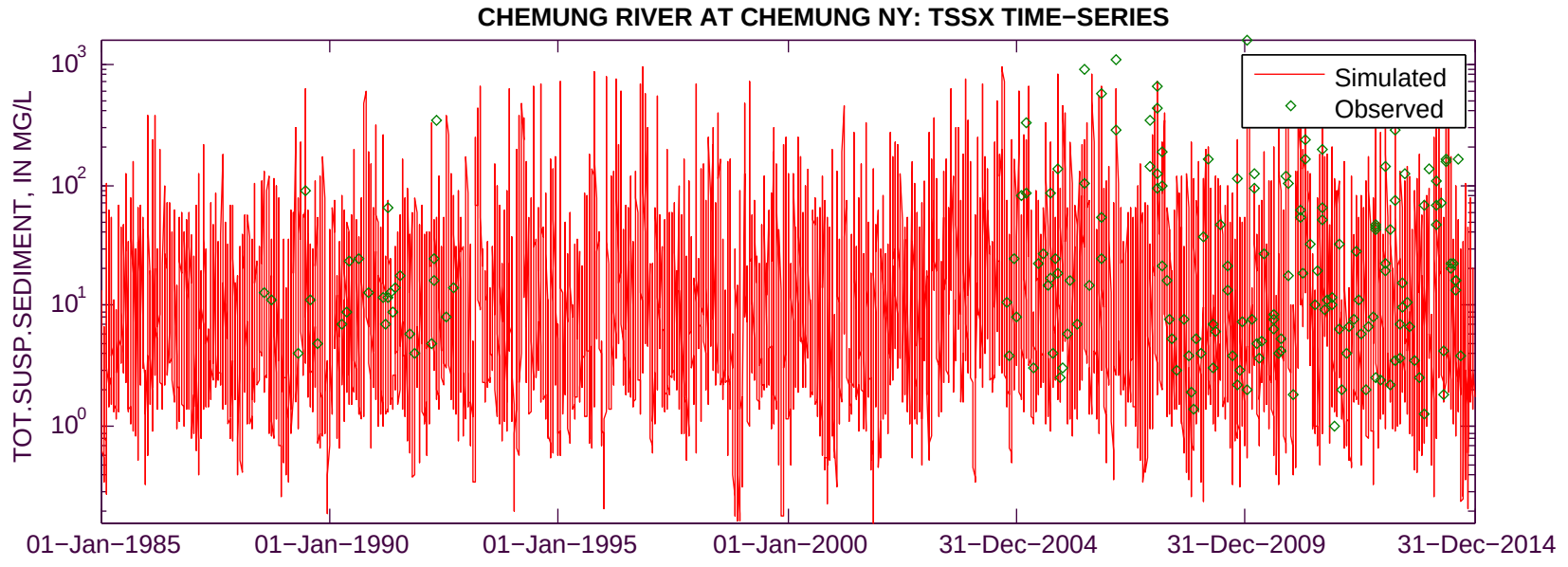
LOAD DATA
LOG10

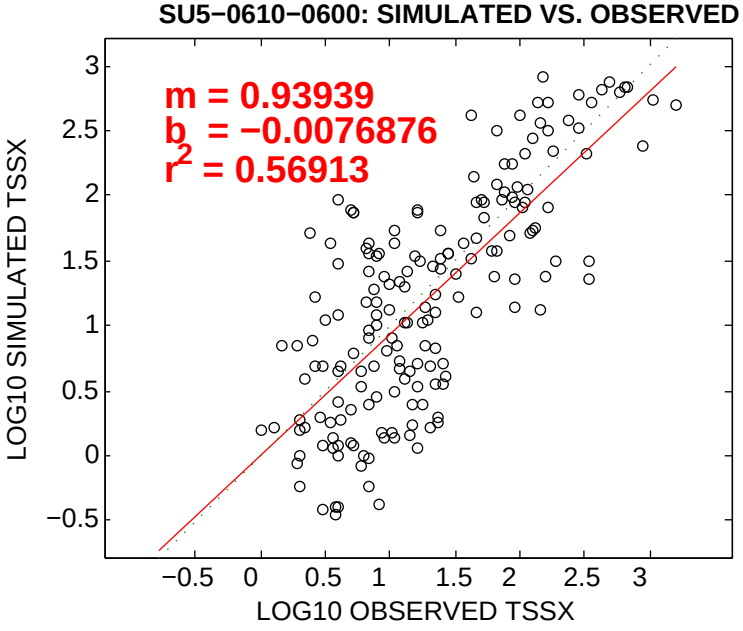


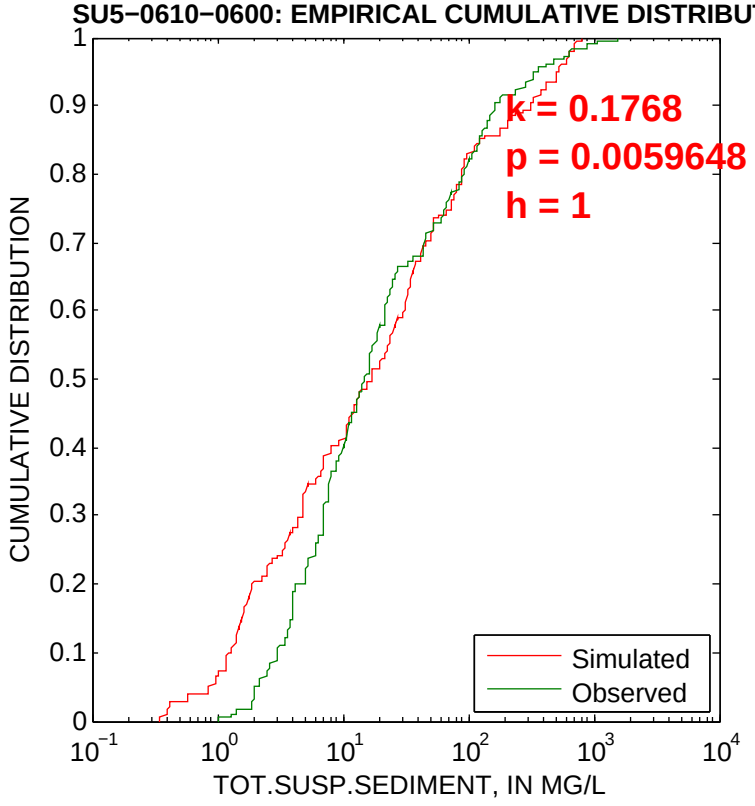












DATA SELECTION

scenario	file
P620171001WQ	TSSX.calib

plot: TSSX - total suspended ...

Dates: 1/1/1985 – 12/31/201

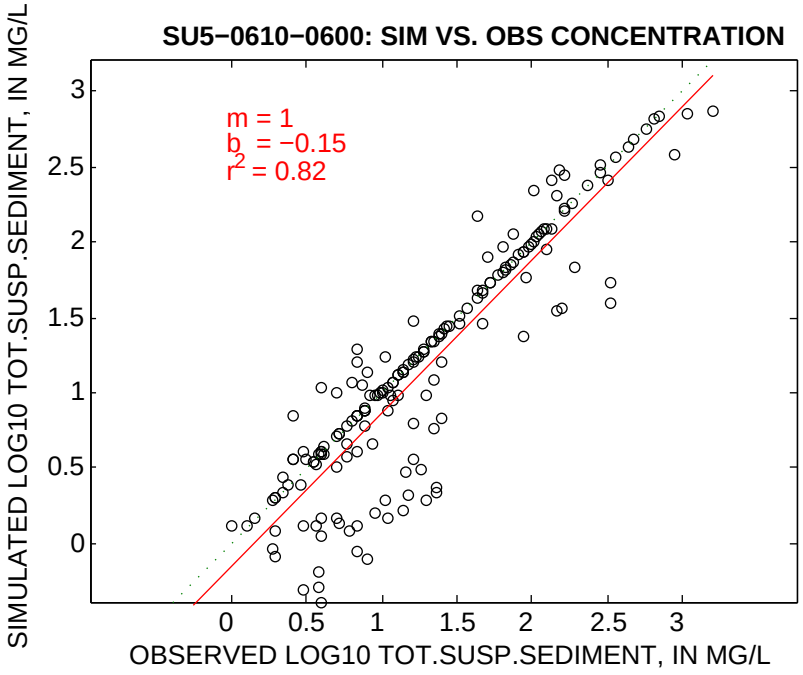
Drive	Directory	Observed
N/A	model	OBS20161101

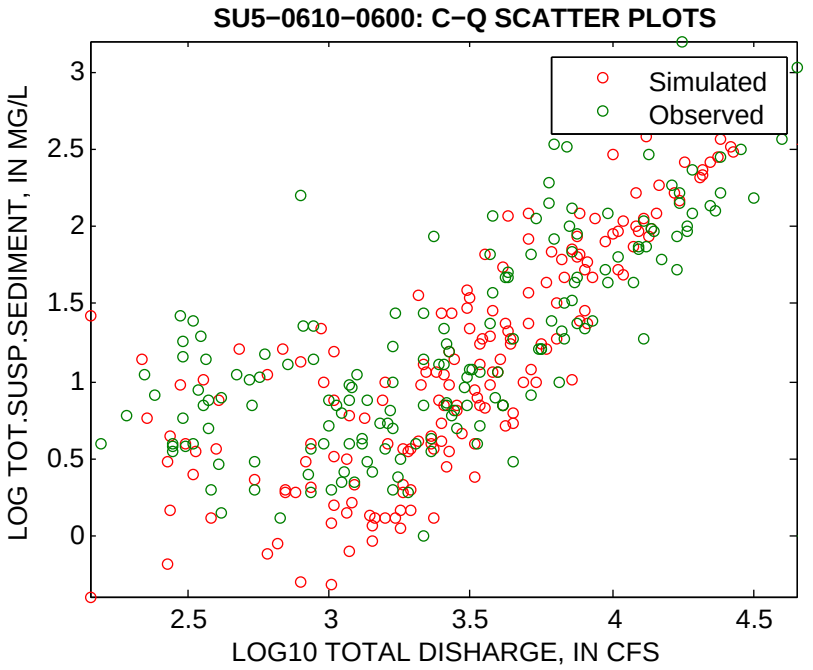
STATISTICS

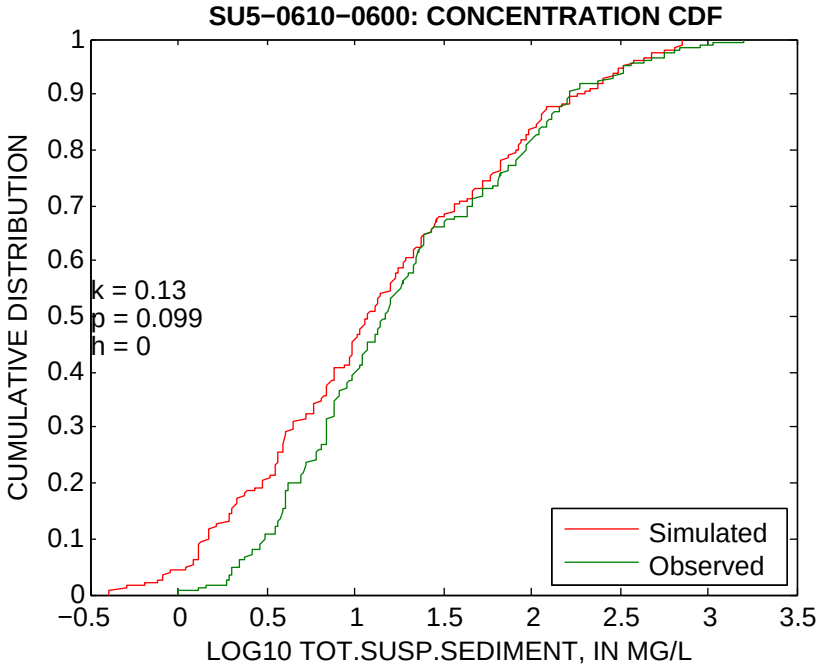
	n	181	181
		observe	simulate
min		1	0.3458
		0	-0.461175
mean		77.6191	84.8285
		1.29333	1.20725
media		15	16.868
		1.17609	1.22706
max		1587	810.92
		3.20058	2.90898
varian		34241.2	27507.7
		0.475174	0.736766
JB		0.001	0.001
		0.014741	0.044432
		ra	log
%		9.28819	-6.65548
err.va		20304.5	0.326645
rel.std.err		0.592984	0.687421
mod.eff		0.407016	0.312579

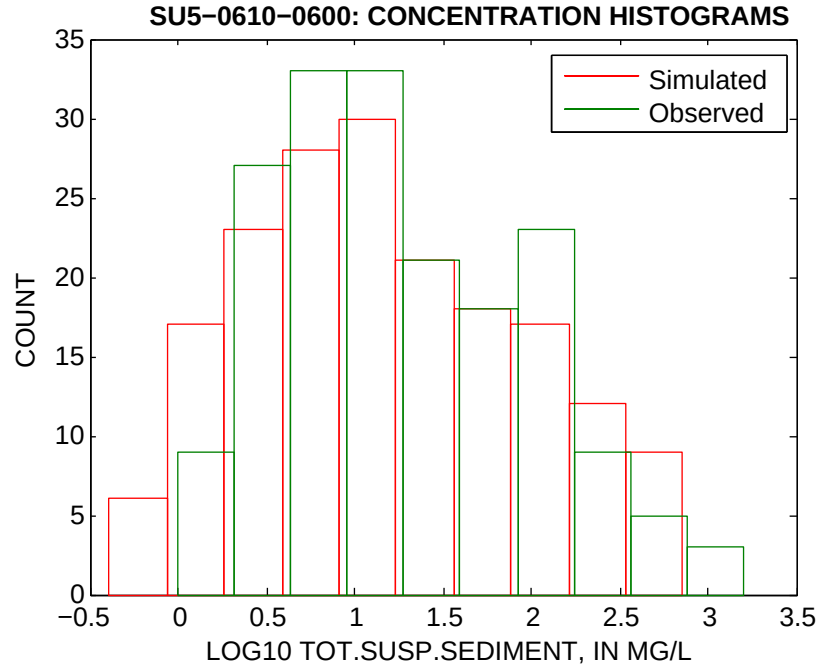
VERSION 2.1

ALL DATA
LOG10

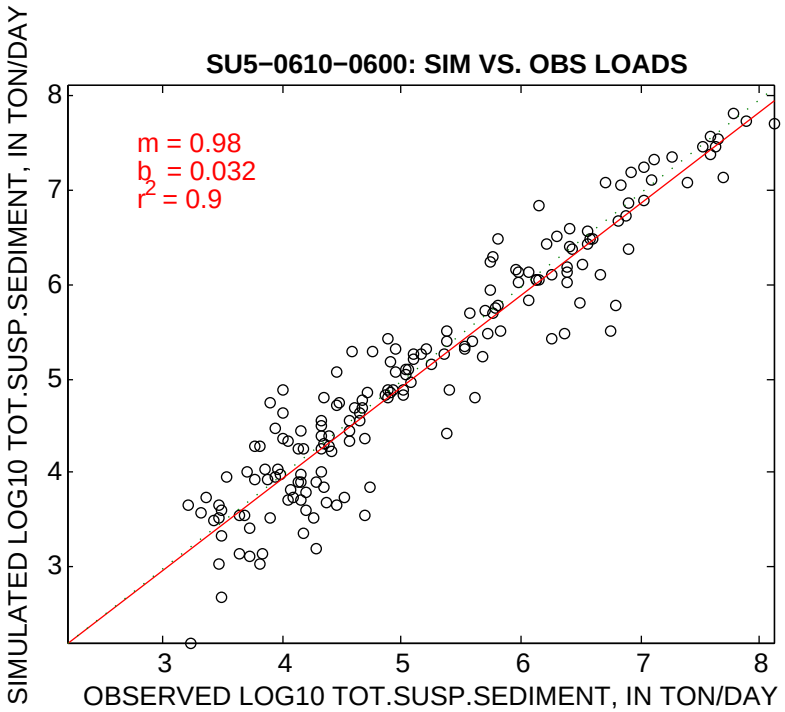


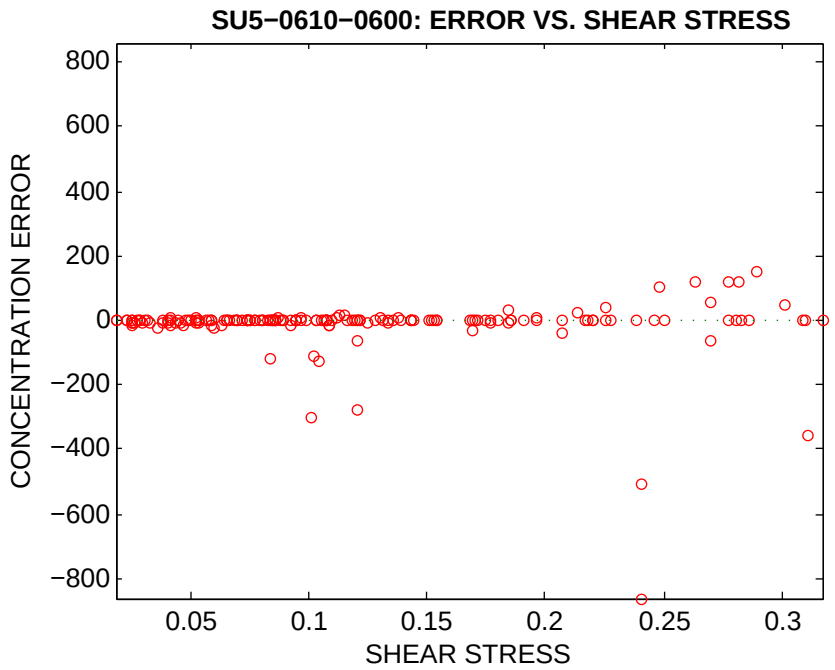


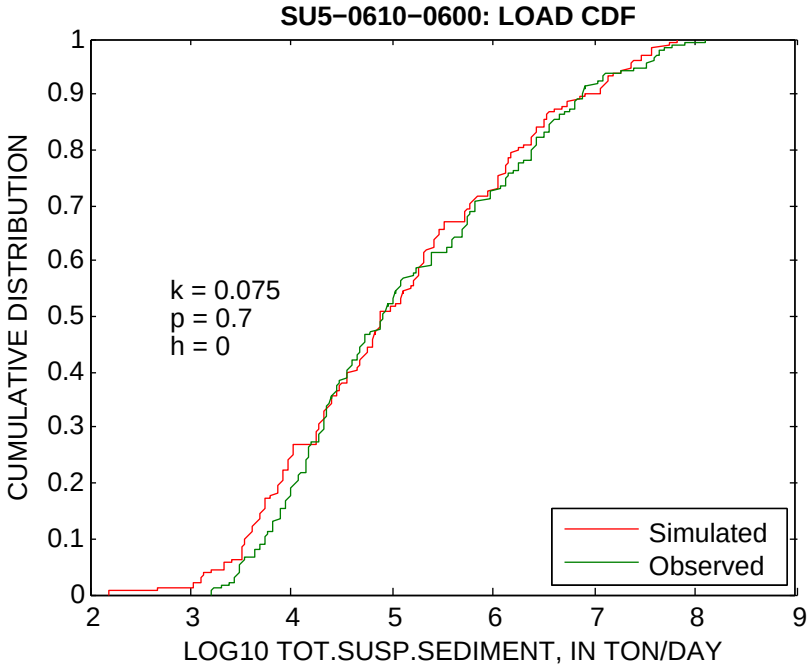


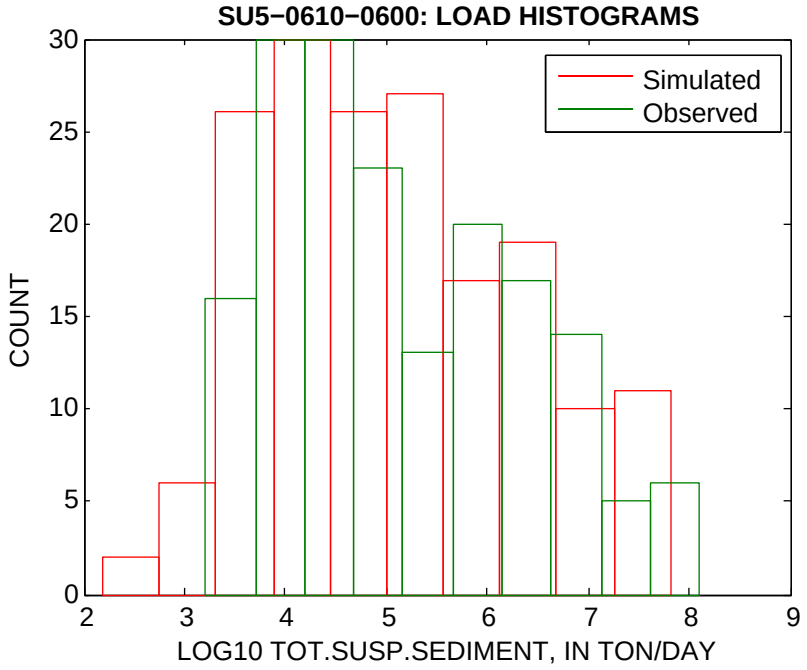


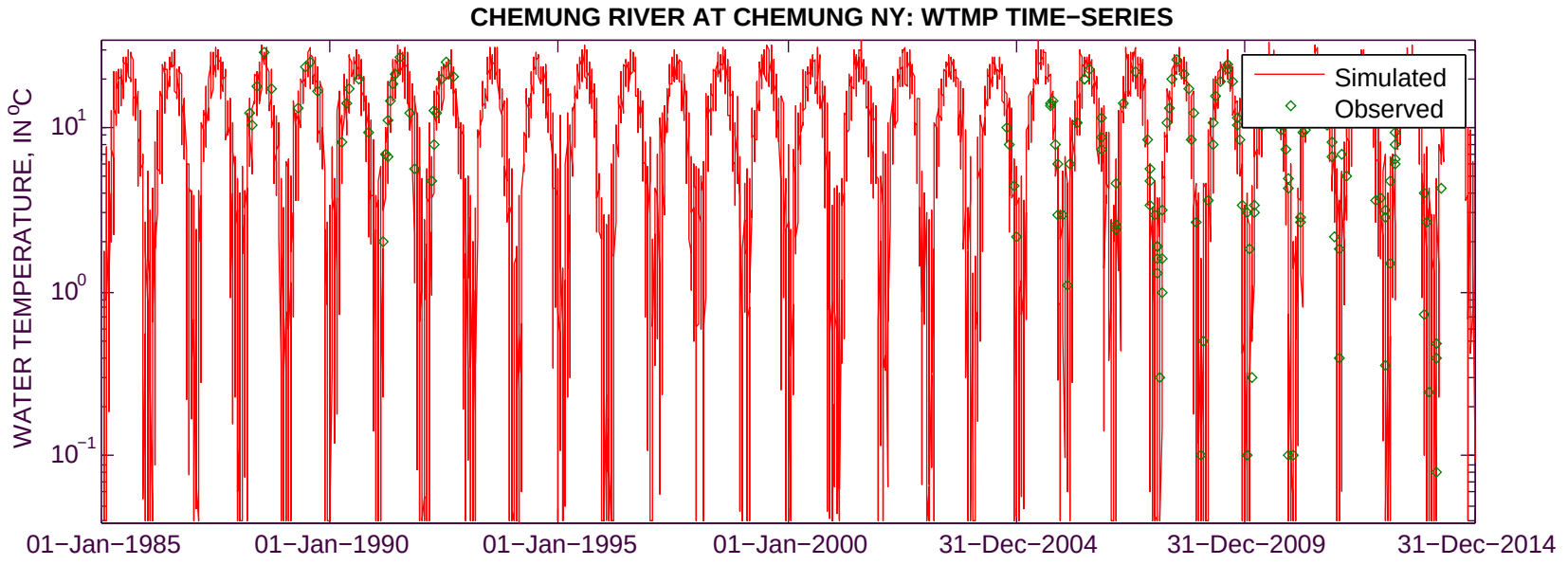
LOAD DATA
LOG10

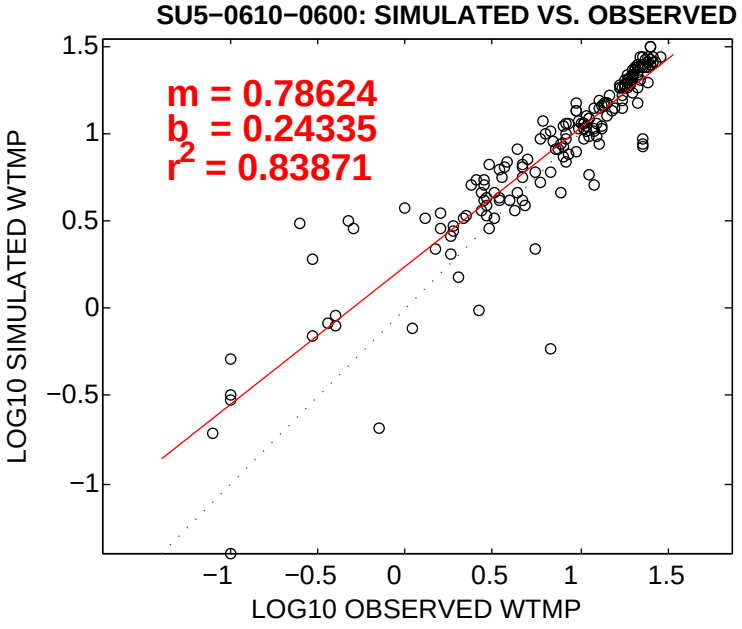


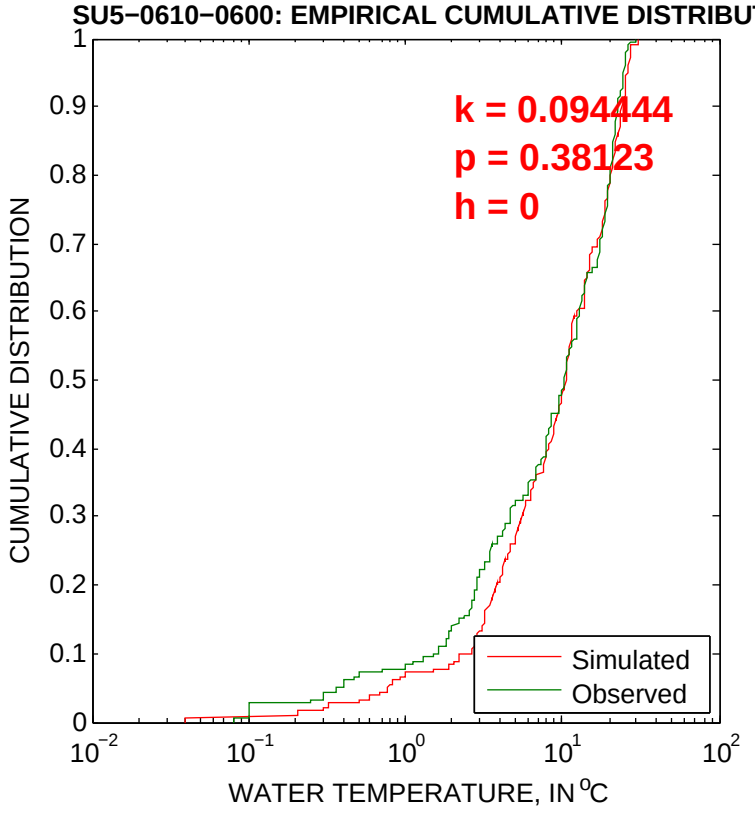












DATA SELECTION

scenario	file
P620171001WQ	WTMP.calib

plot: WTMP - water tempera...

Dates: 1/1/1985 – 12/31/201

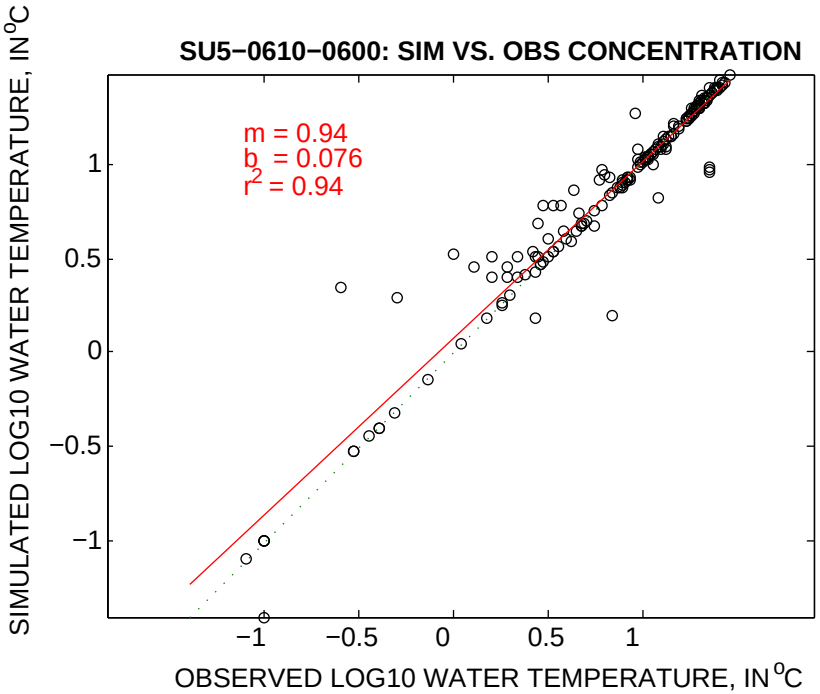
Drive	Directory	Observed
N/A	model	OBS20161101

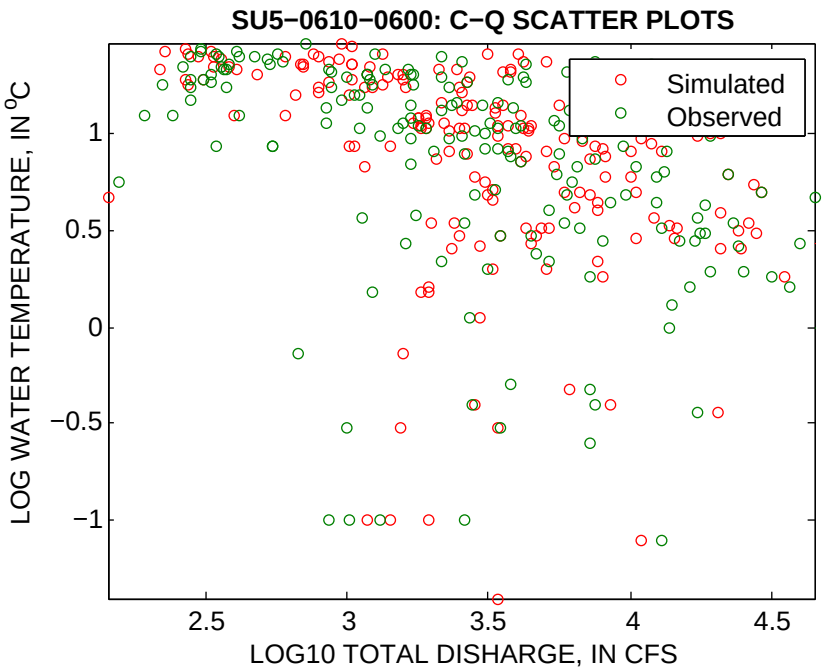
STATISTICS

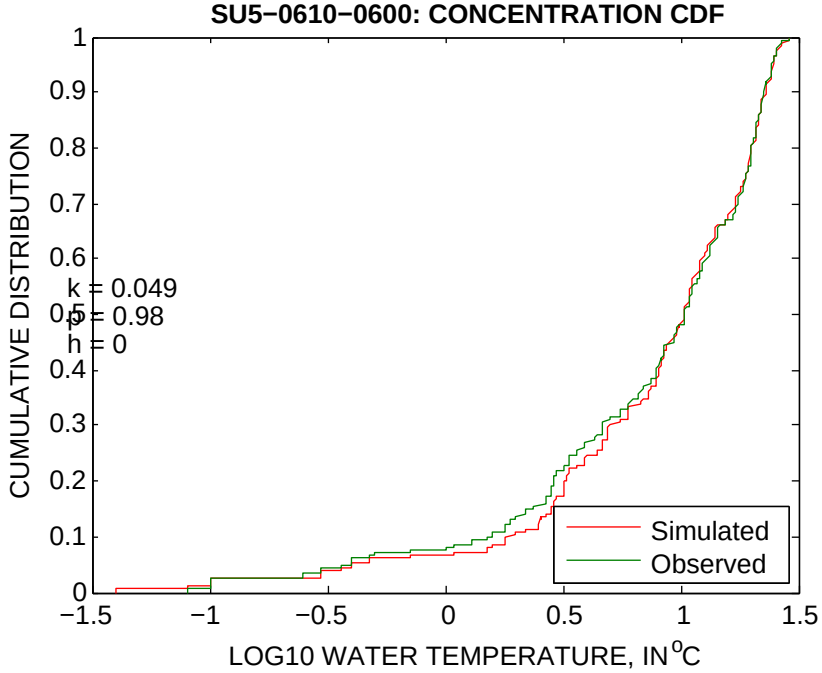
	observe	simulate
n	180	180
min	0.08	0.040144
	-1.09691	-1.39638
mean	11.4049	11.9134
	0.84365	0.906654
media	10.425	10.5615
	1.01807	1.02372
max	29	30.903
	1.4624	1.49
varian	66.6069	67.5707
	0.315789	0.232752
JB	0.007012	0.008496
	0.001	0.001
	ra	log
%	4.45807	7.46804
err.va	8.25177	0.0559627
rel.std.err	0.123888	0.177215
mod.eff	0.876112	0.822785

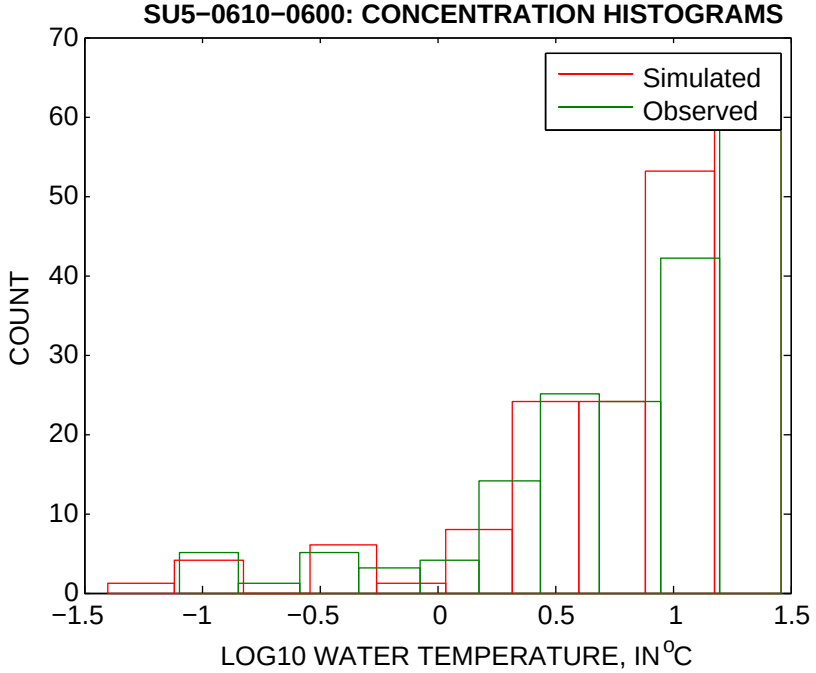
VERSION 2.1

ALL DATA
LOG10

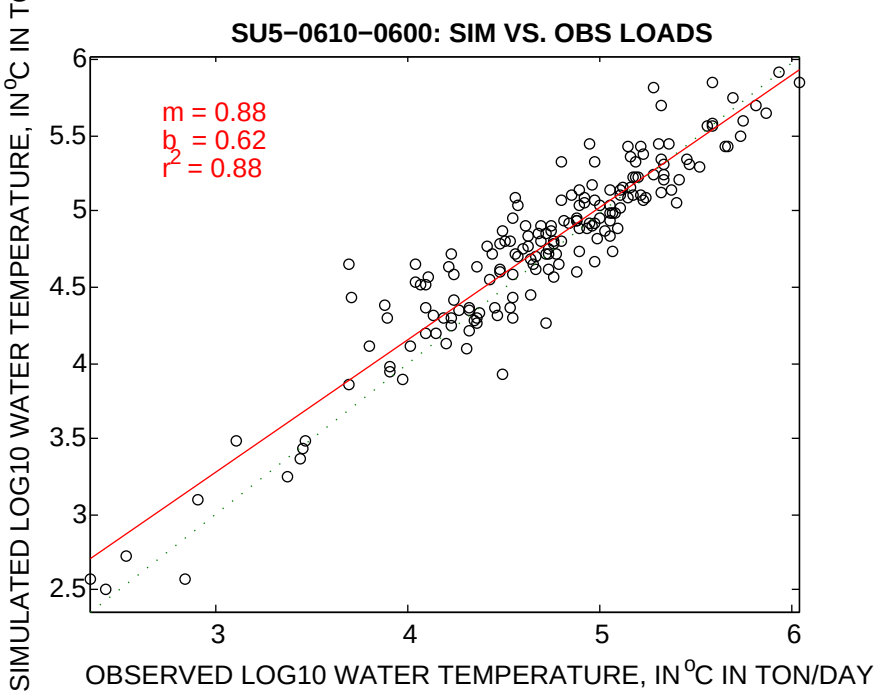


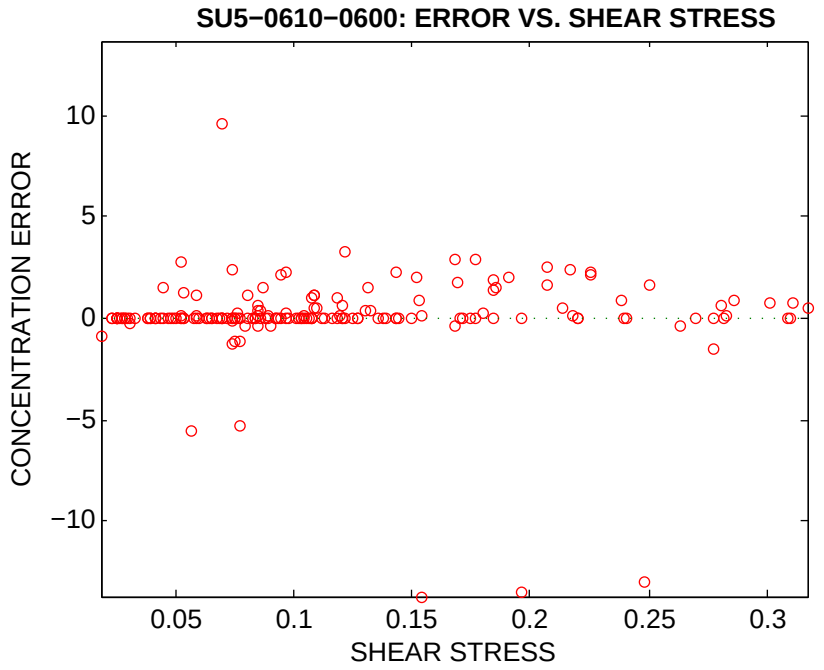


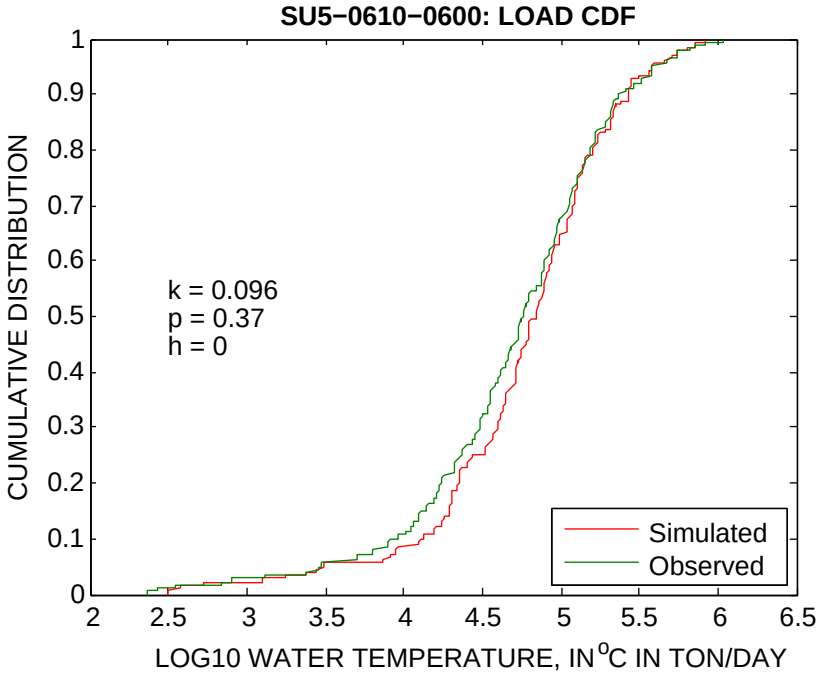


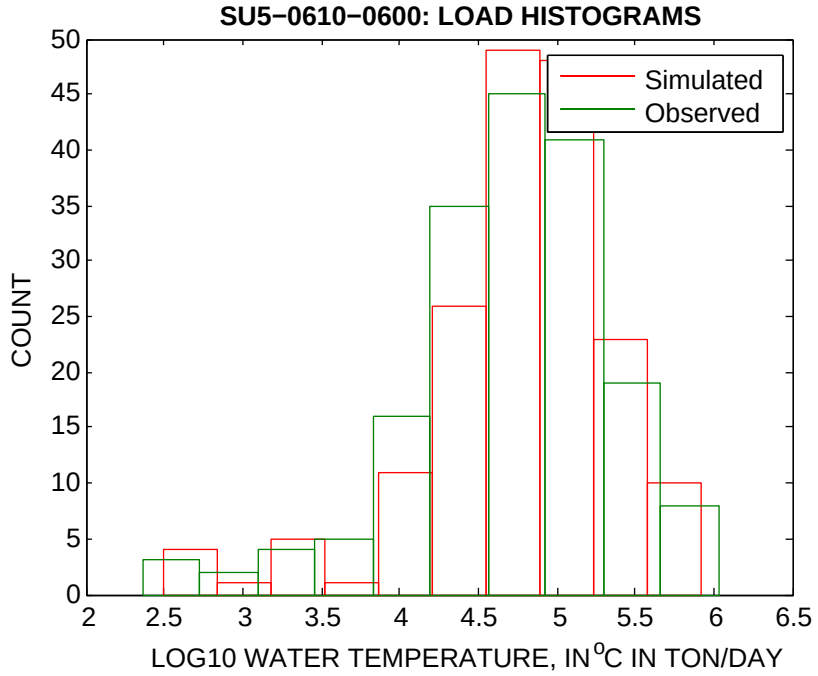


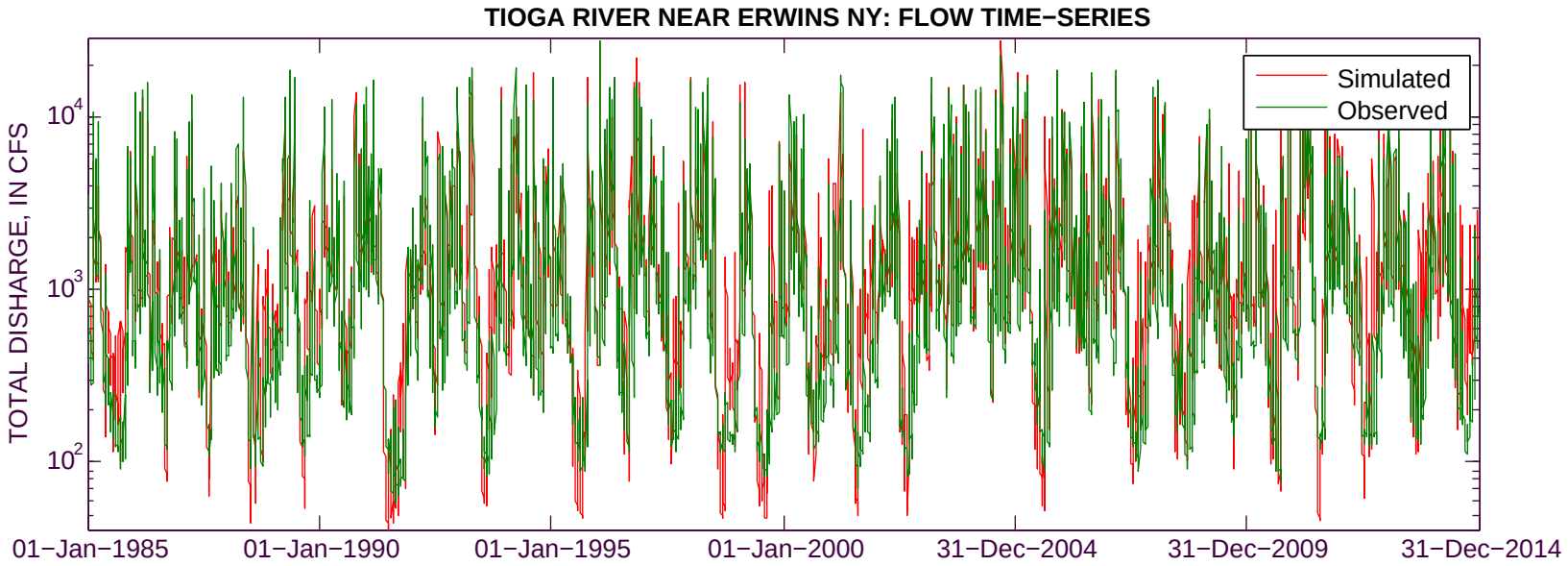
LOAD DATA
LOG10

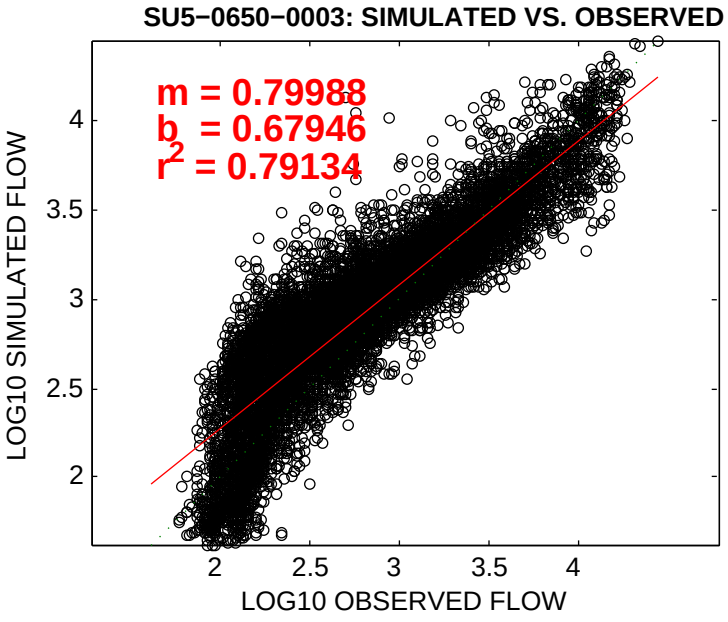


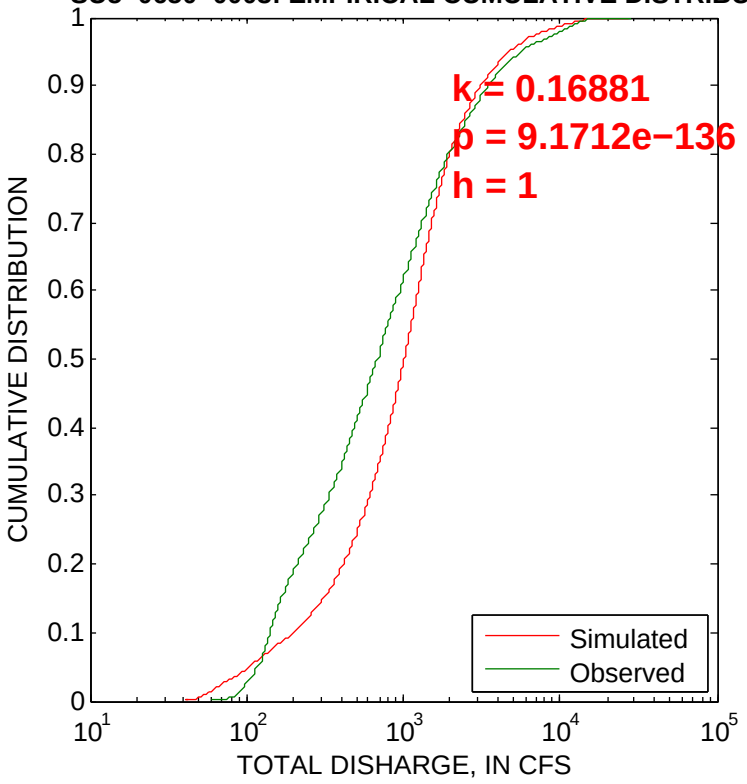












DATA SELECTION

scenario	file
P620171001WQ	FLOW.calib

plot: FLOW - total discharge

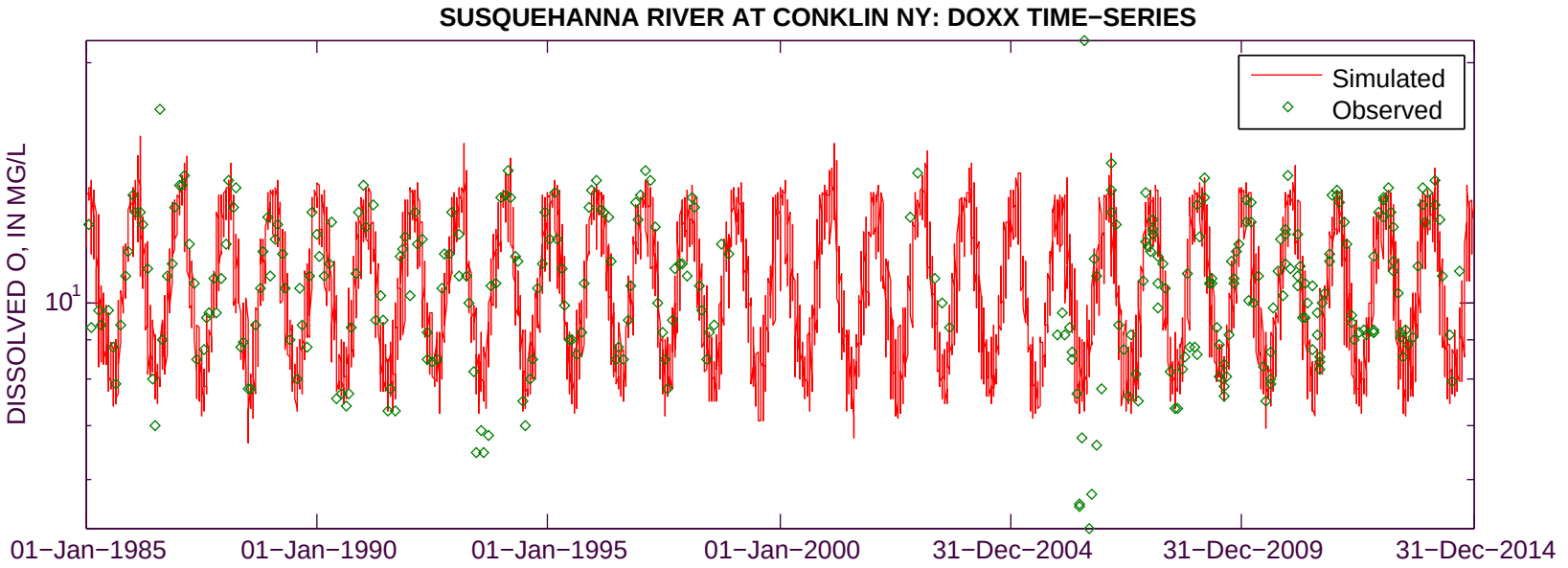
Dates: 1/1/1985 – 12/31/201

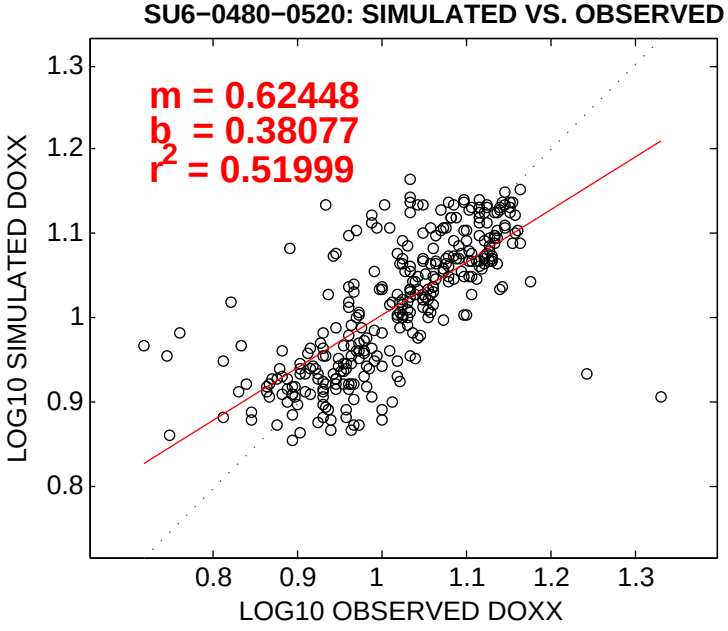
Drive	Directory	Observed
N/A	model	OBS20161101

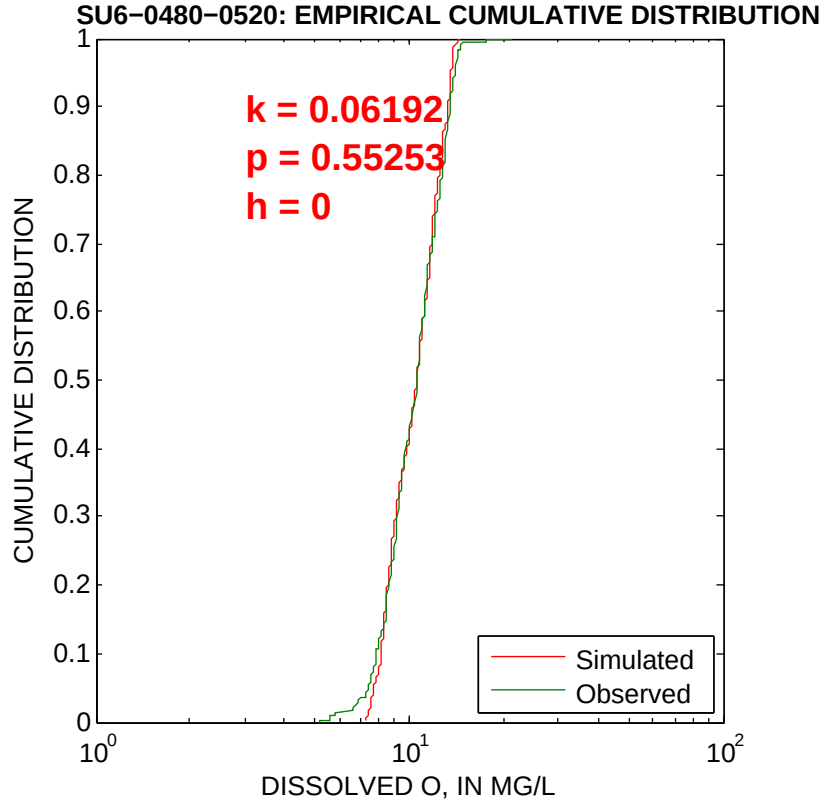
STATISTICS

	n	observe	simulate
		10900	10900
min		58	41.087
		1.76343	1.6137
mean		1485.92	1541.9
		2.84597	2.9559
media		688	1016.95
		2.83759	3.0073
max		28000	27536
		4.44716	4.4399
varian		5.43961e+0	4.07817e+
		0.272533	0.220346
JB		0.001	0.001
		0.001	0.001
		ra	log
%		3.76728	3.86257
err.va		1.40801e+0	0.0689761
rel.std.err		0.258843	0.253093
mod.eff		0.741157	0.746907

VERSION 2.1







DATA SELECTION

scenario: P620171001WQ | file: DOXX.calib

plot: DOXX - dissolved oxygen

Dates: 1/1/1985 – 12/31/201

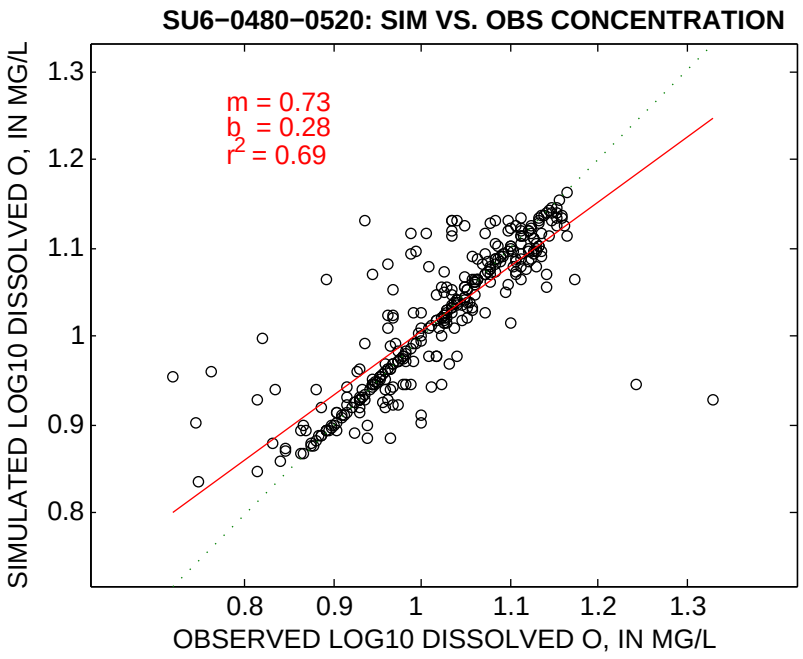
Drive: N/A | Directory: model | Observed: OBS20161101

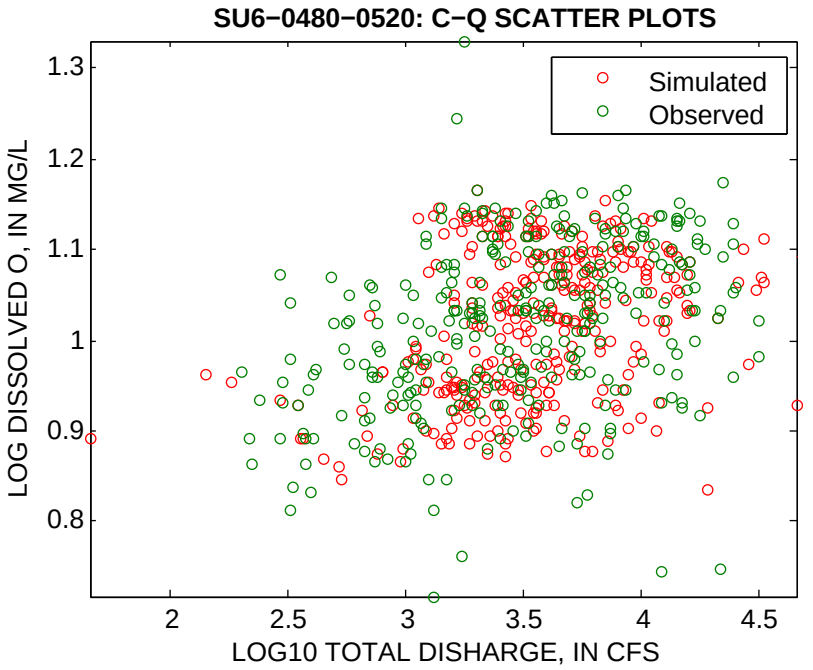
STATISTICS

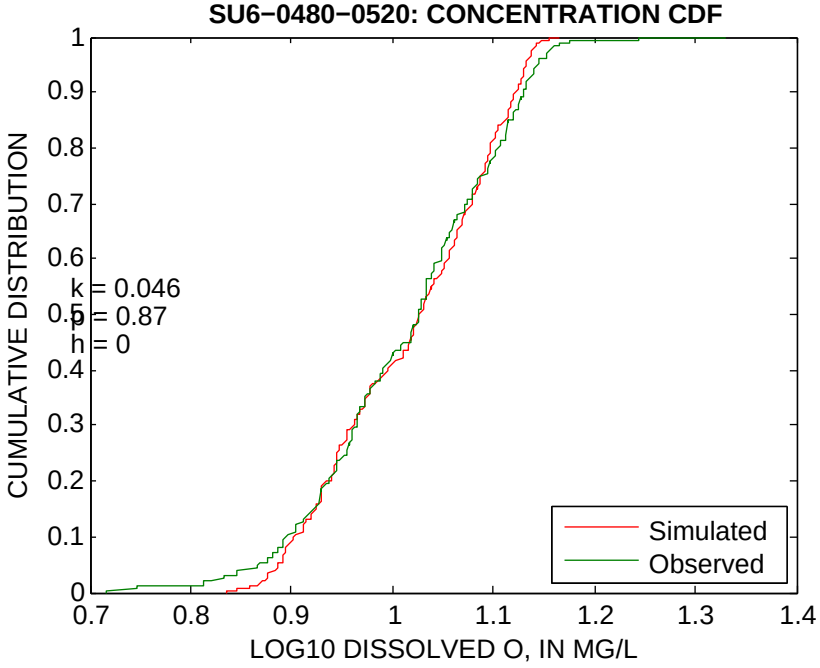
	n	323	323
		observe	simulate
min		5.22	7.1967
		0.717671	0.857133
mean		10.6204	10.5397
		1.01668	1.01566
media		10.6	10.568
		1.02531	1.02399
max		21.4	14.614
		1.33041	1.16477
varian		4.8512	3.61946
		0.00841117	0.00630807
JB		0.002606	0.002269
		0.090639	0.002146
		ra	log
%		-0.760028	-0.0999986
err.va		2.61214	0.00421511
rel.std.err		0.538452	0.501132
mod.eff		0.461548	0.498868

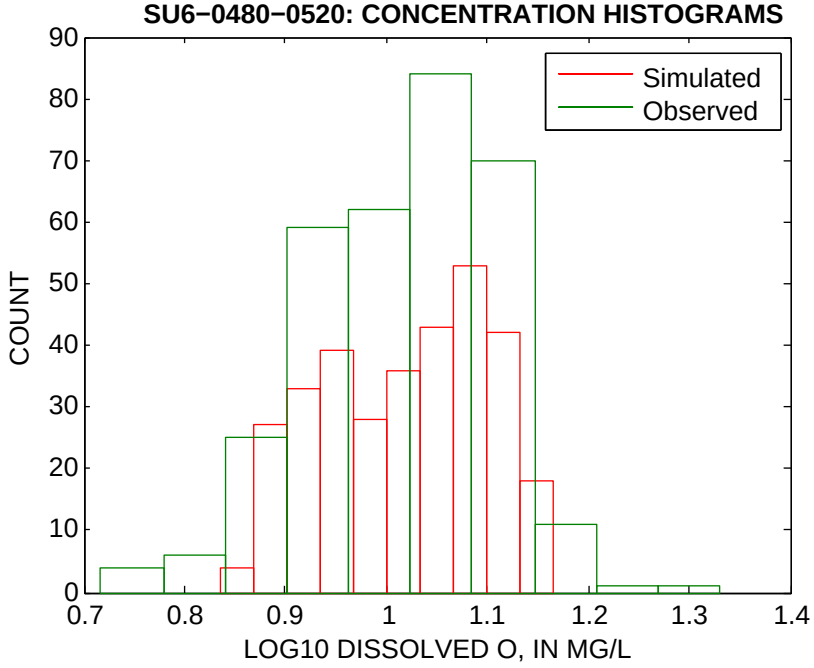
VERSION 2.1

ALL DATA
LOG10

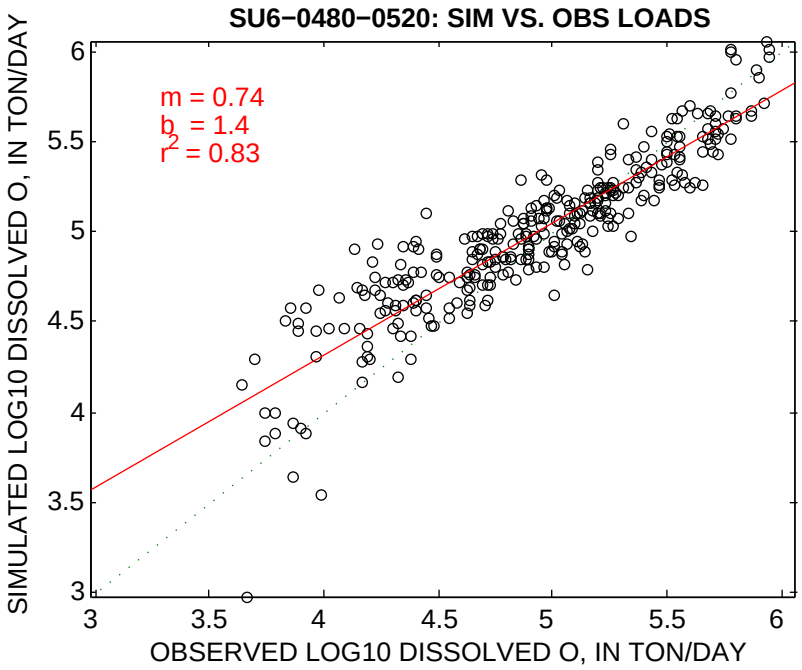


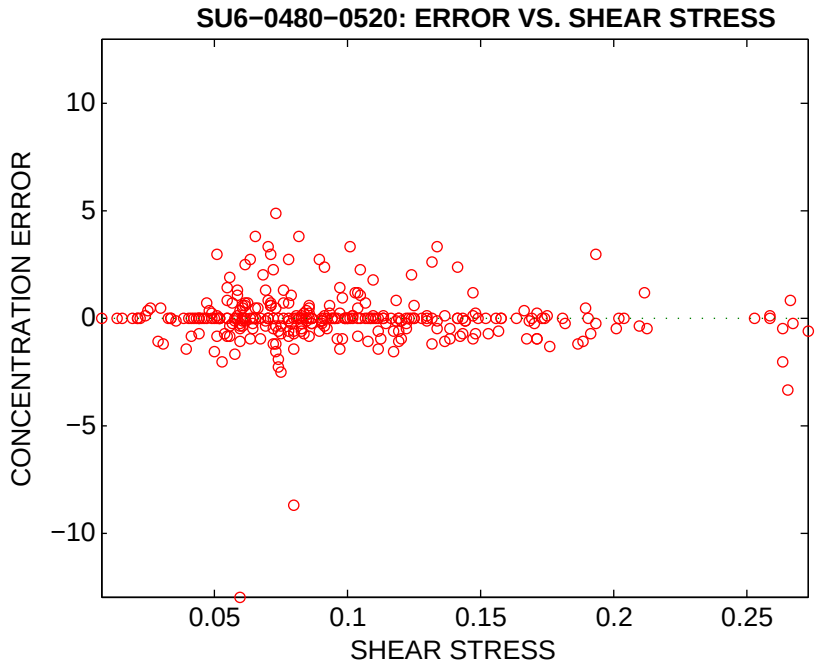


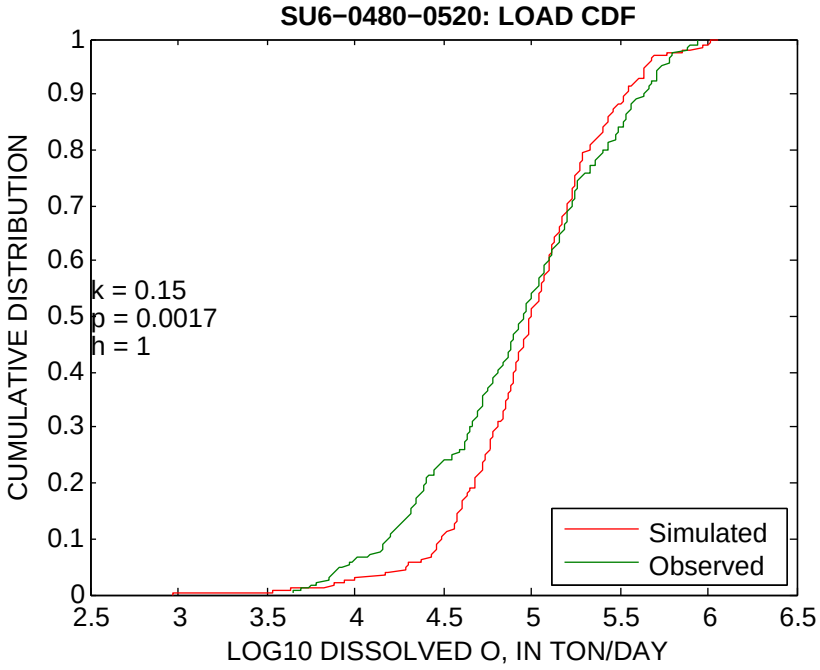


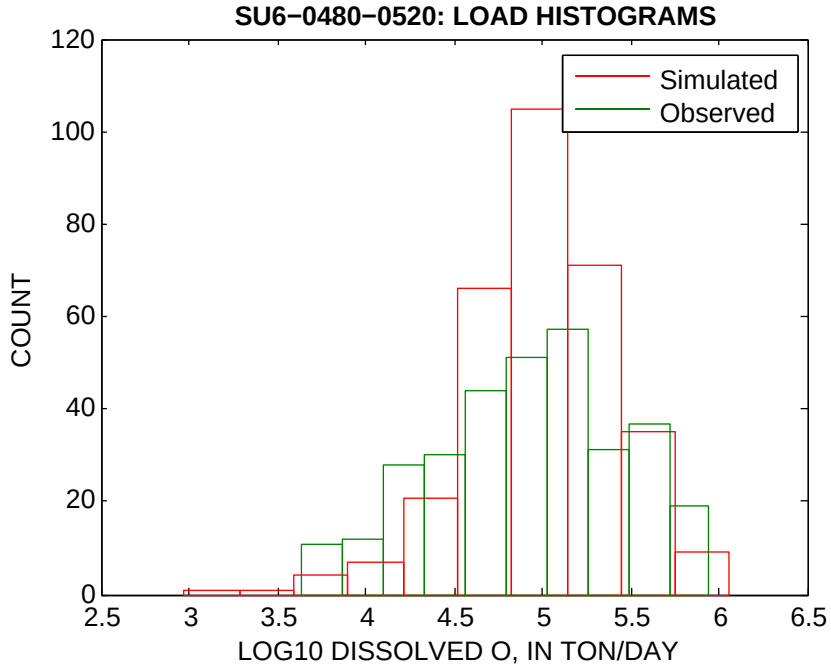


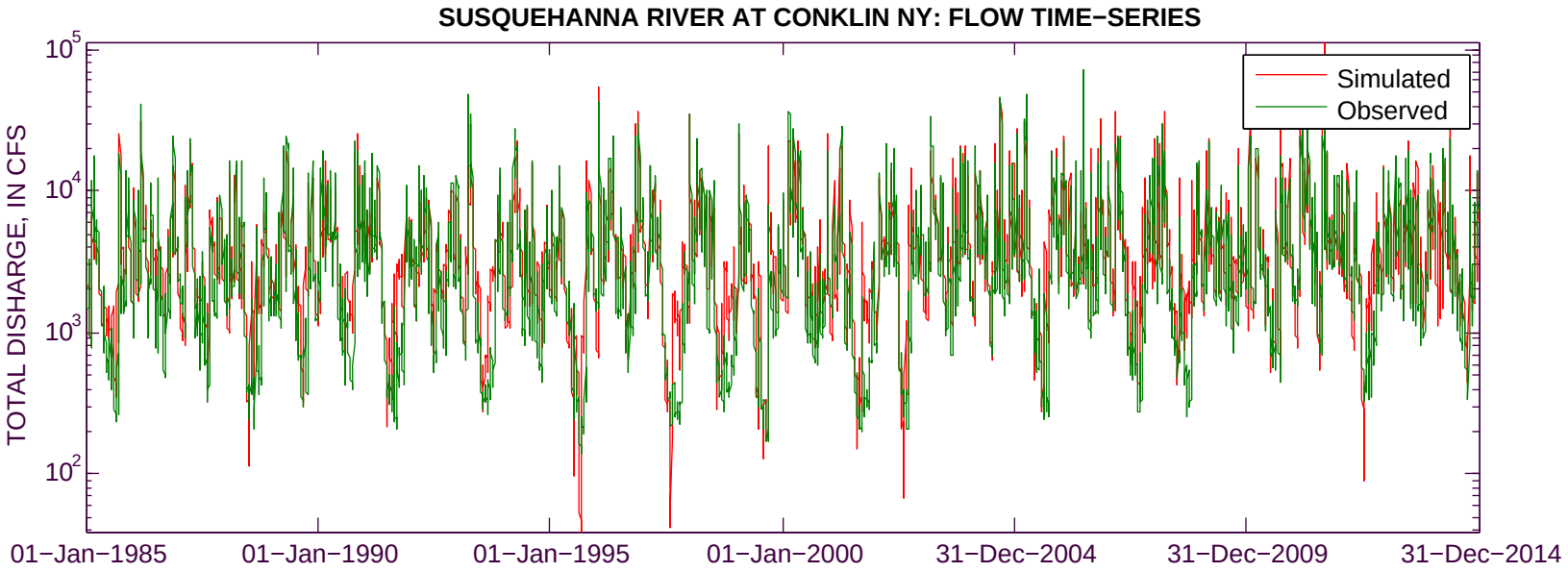
LOAD DATA
LOG10

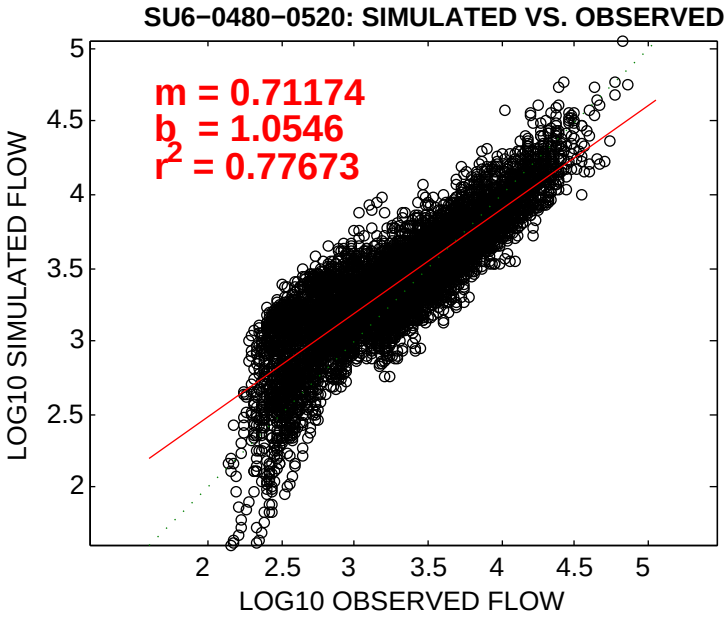


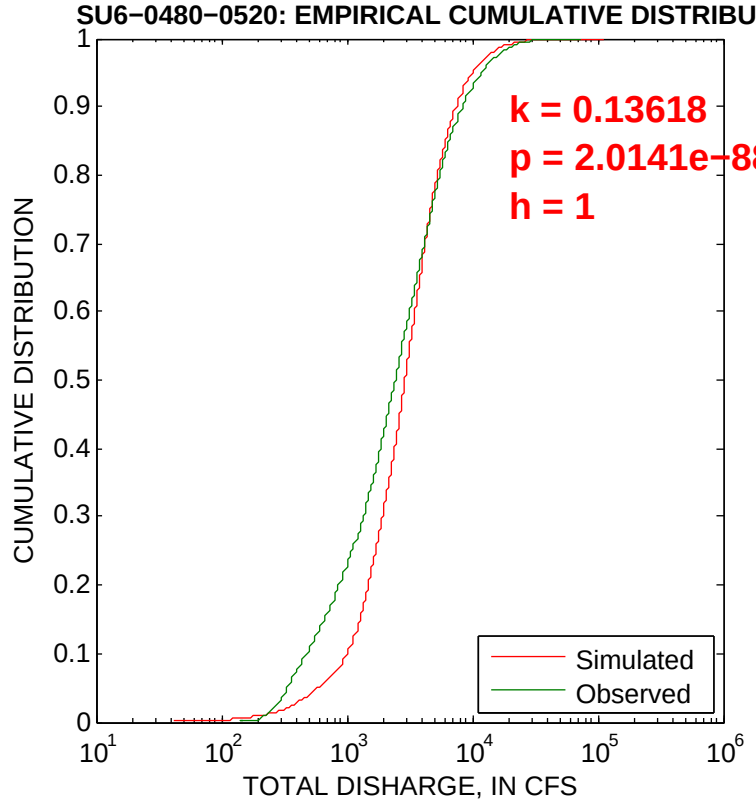












DATA SELECTION

scenario: P620171001WQ | file: FLOW.calib

plot: FLOW - total discharge

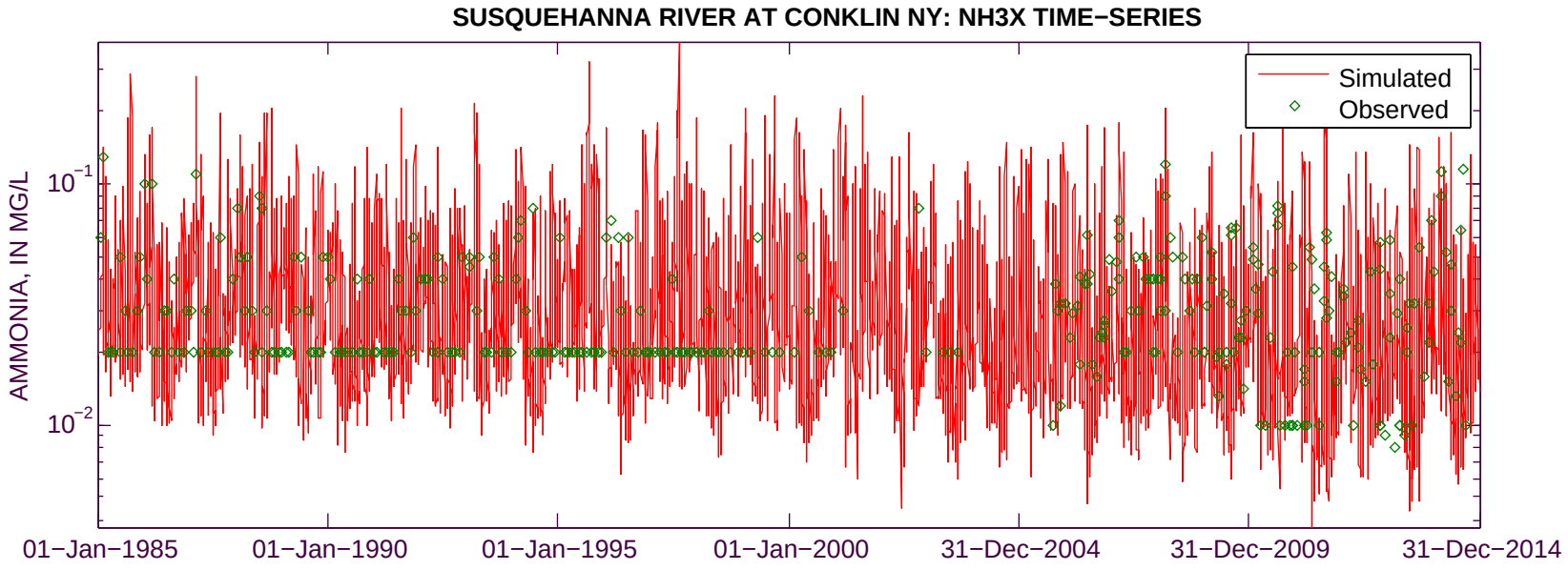
Dates: 1/1/1985 – 12/31/201

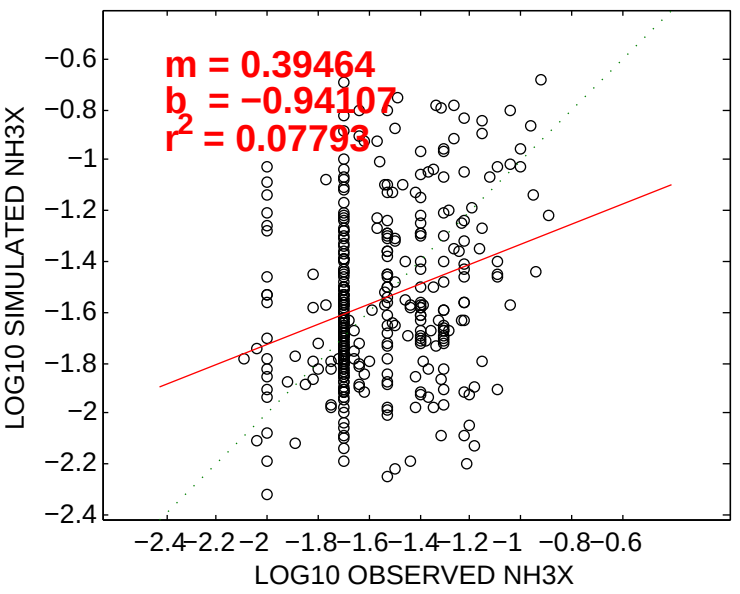
Drive: N/A | Directory: model | Observed: OBS20161101

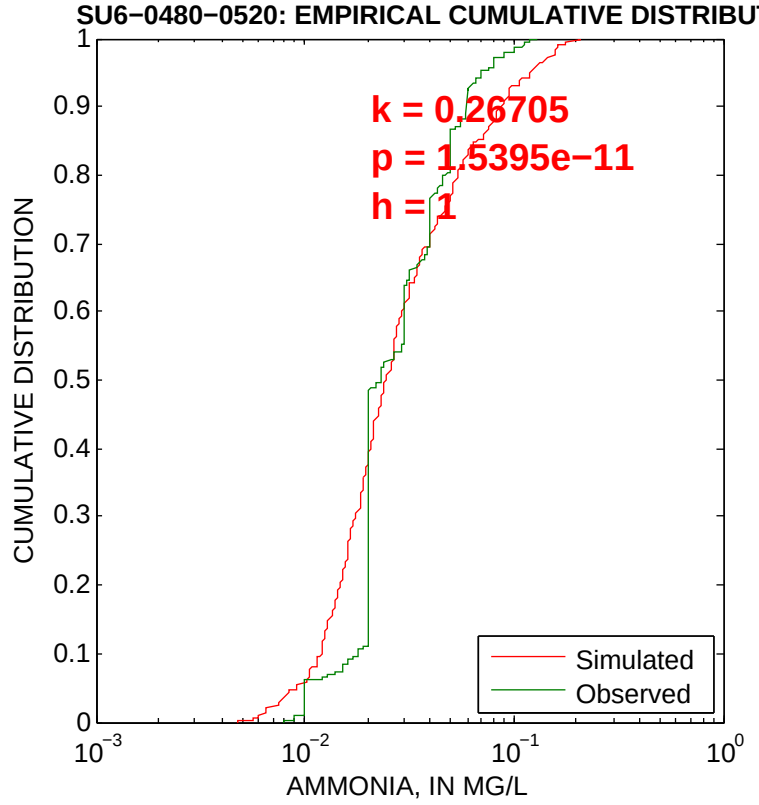
STATISTICS

		observe	simulate
n		10890	10890
min		140	39.677
		2.14613	1.59854
mean		3820.16	3893.27
		3.35554	3.44287
media		2470	2921.2
		3.3927	3.46556
max		72100	113450
		4.85794	5.0548
varian		2.07232e+0	1.57302e+
		0.212694	0.138717
JB		0.001	0.001
		0.001	0.001
		ra	log
%		1.91377	2.60237
err.va		4.84884e+0	0.0562698
rel.std.err		0.233981	0.264558
mod.eff		0.766019	0.735442

VERSION 2.1







DATA SELECTION

scenario	file
P620171001WQ	NH3X.calib

plot: NH3X - ammonia

Dates: 1/1/1985 – 12/31/201

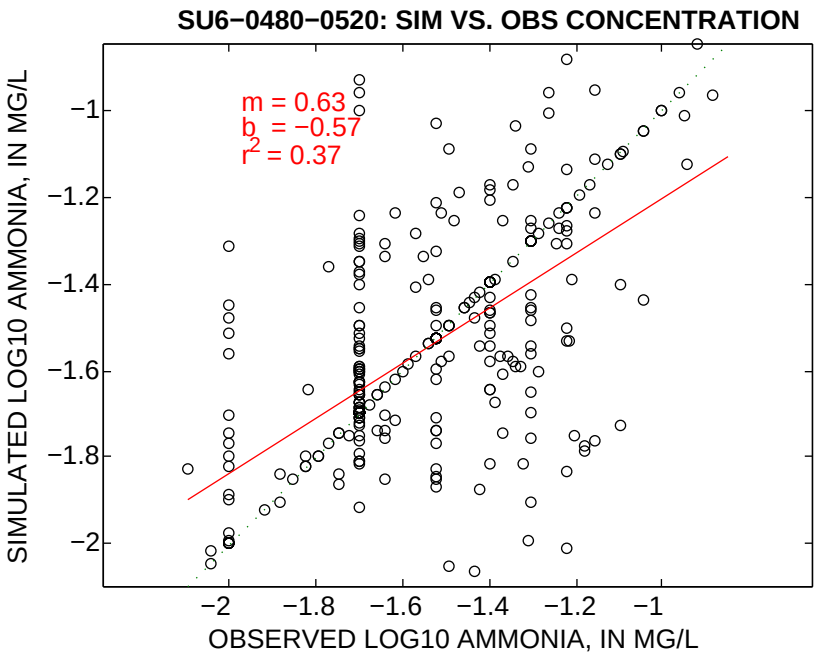
Drive	Directory	Observed
N/A	model	OBS20161101

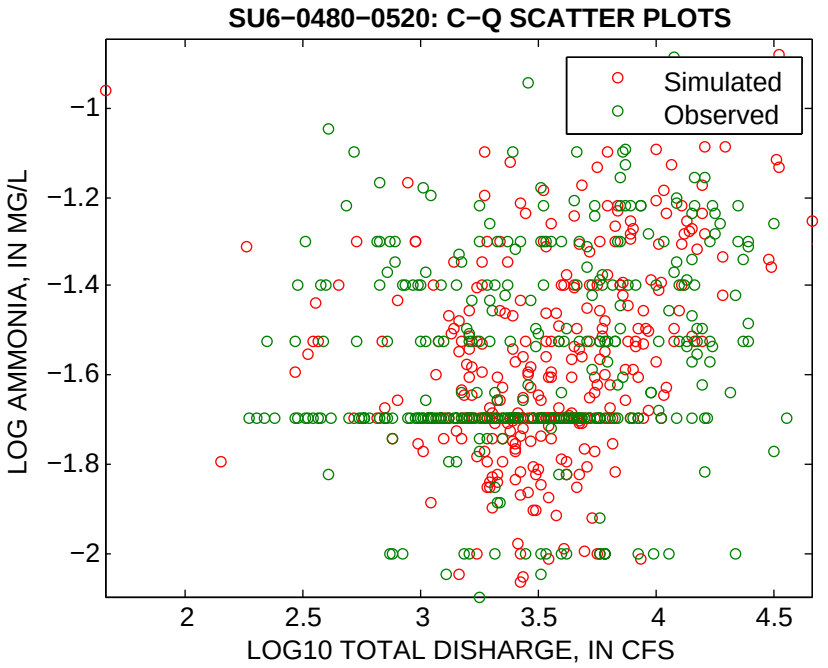
STATISTICS

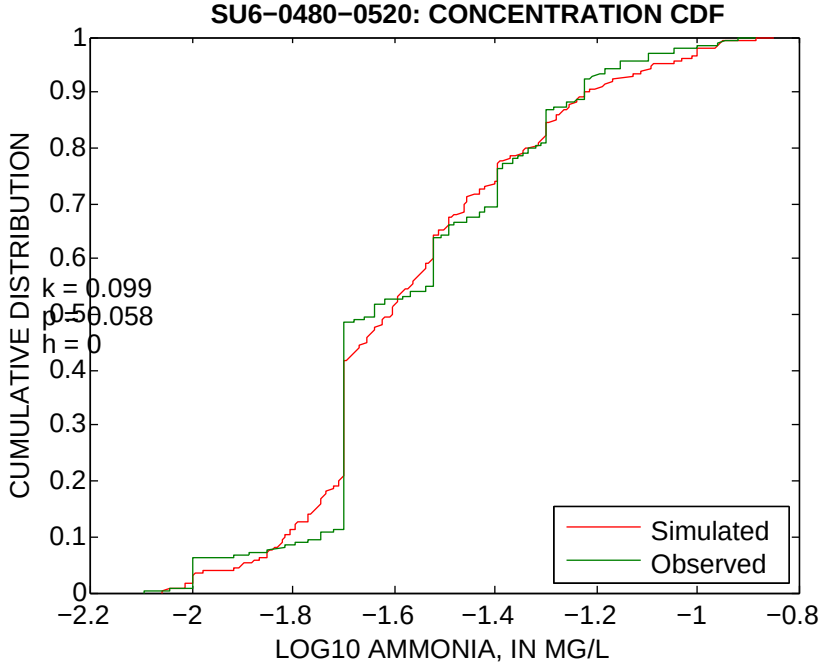
	n	352	352
		observe	simulate
min		0.008	0.0048404
		-2.09691	-2.31512
mean		0.0324296	0.0383238
		-1.55643	-1.55531
media		0.023	0.0243755
		-1.63827	-1.61305
max		0.13	0.20812
		-0.886057	-0.681686
varian		0.00040759	0.00129287
		0.055474	0.110865
JB		0.001	0.001
		0.023379	0.005067
		ra	log
%		18.1754	-0.0720734
err.va		0.00127134	0.122555
rel.std.err		3.11914	2.20923
mod.eff		-2.11914	-1.20923

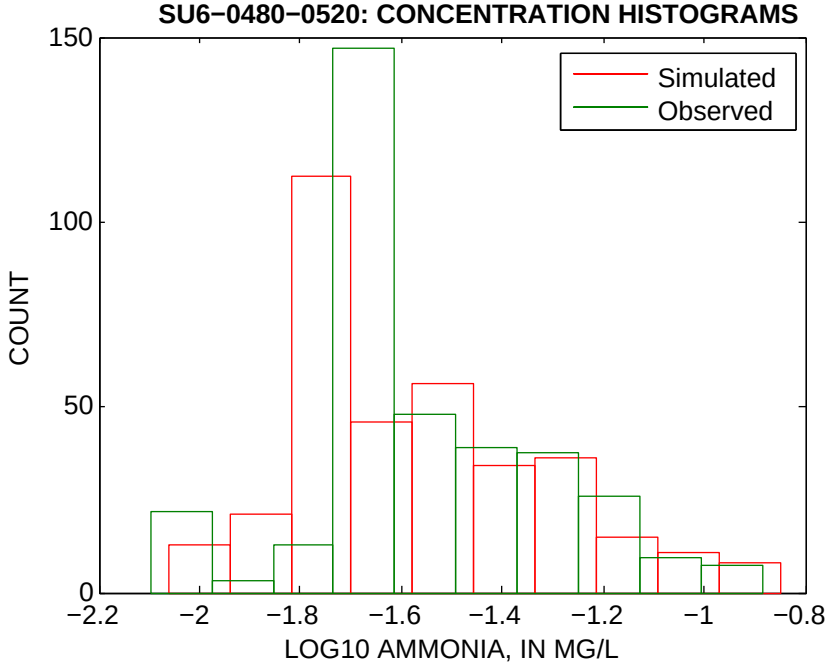
VERSION 2.1

ALL DATA
LOG10

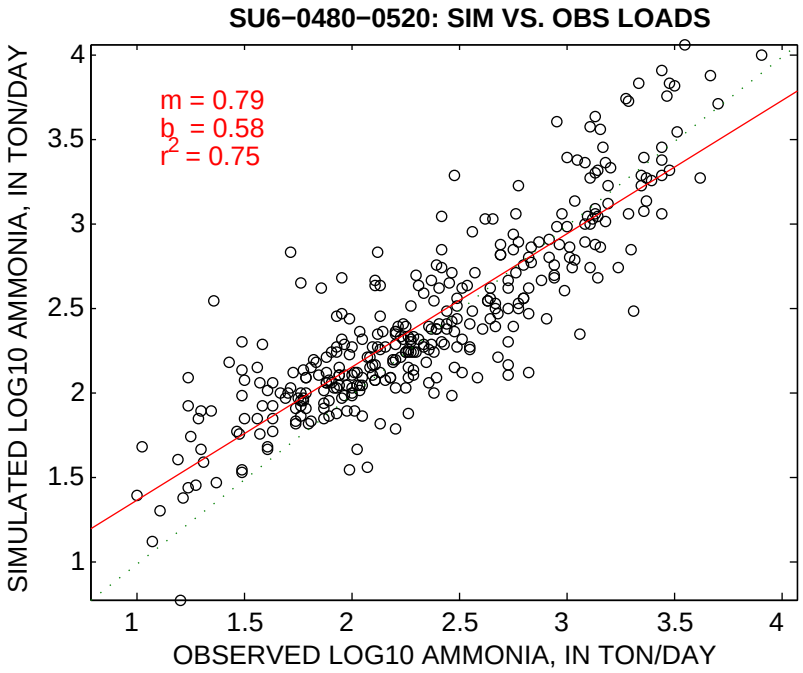


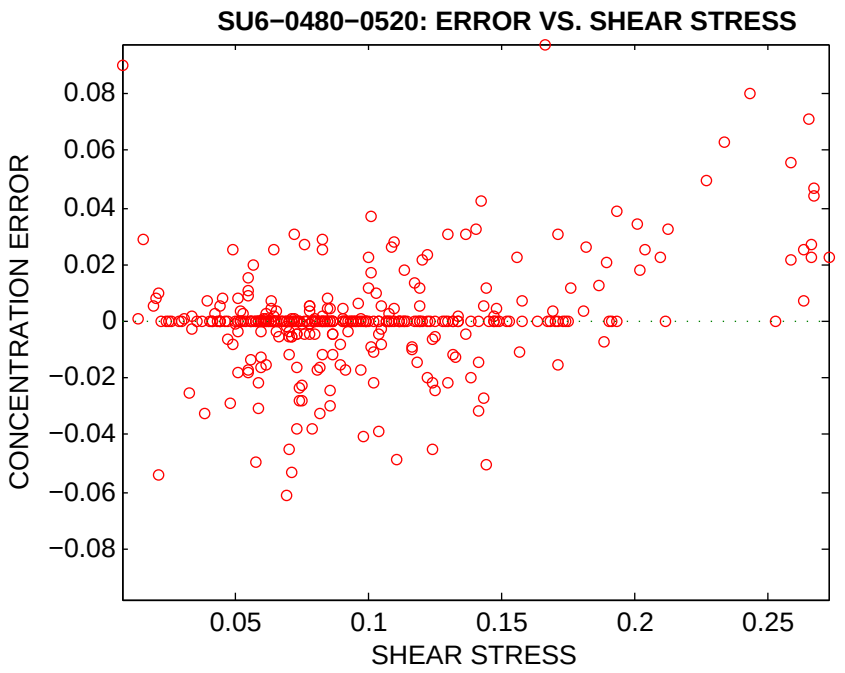


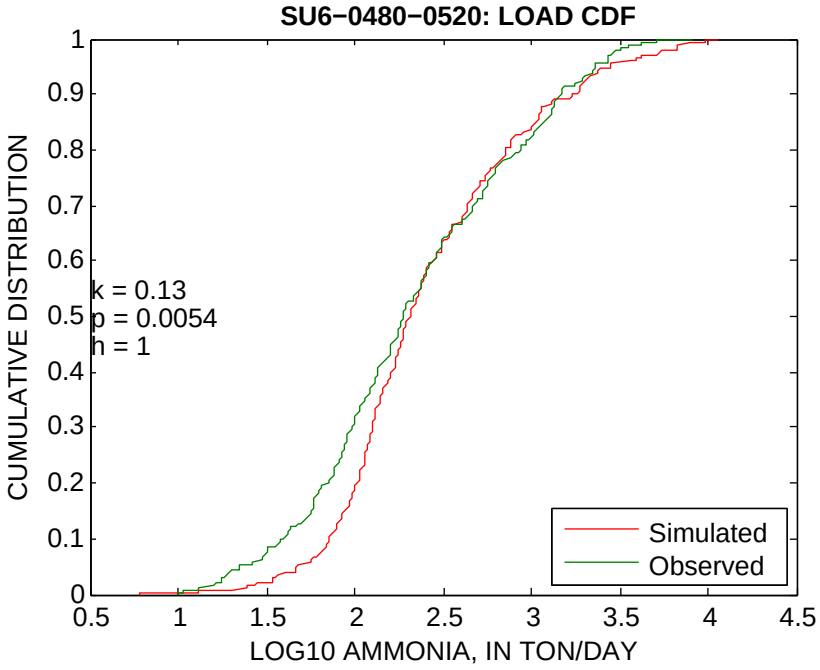


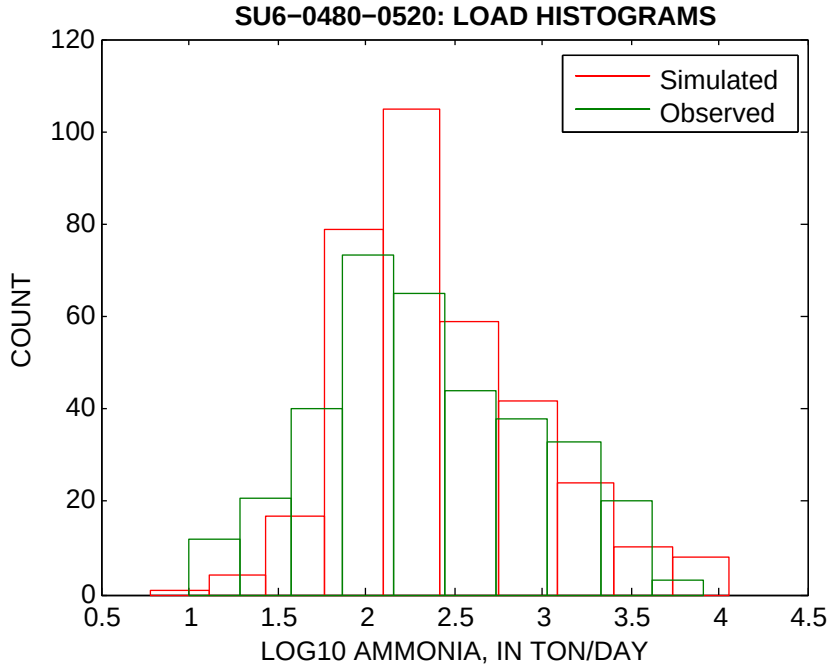


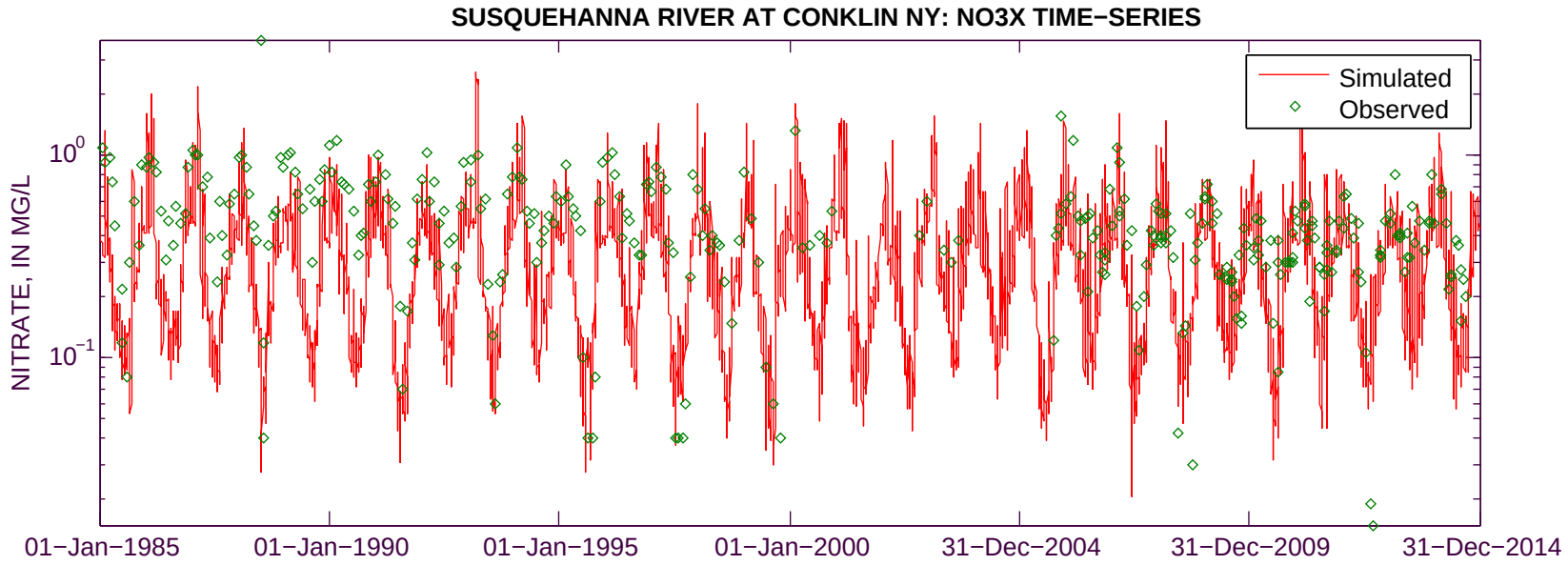
LOAD DATA
LOG10

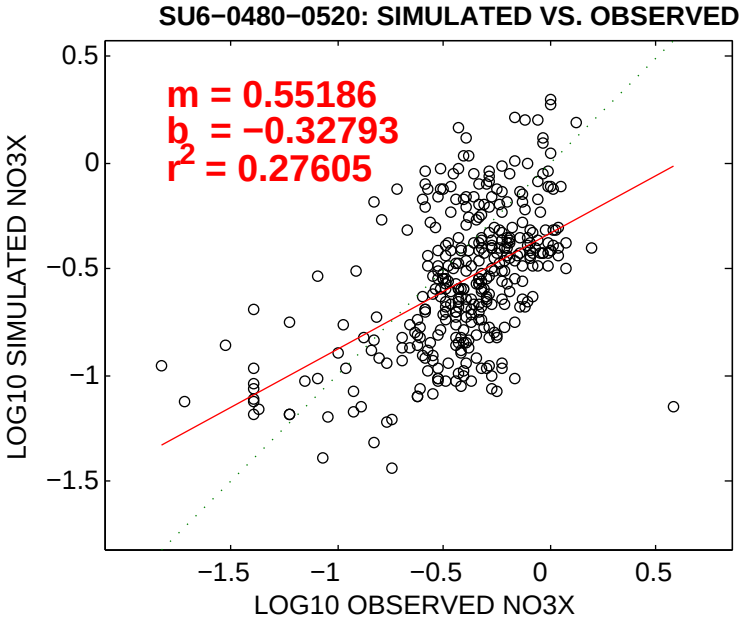


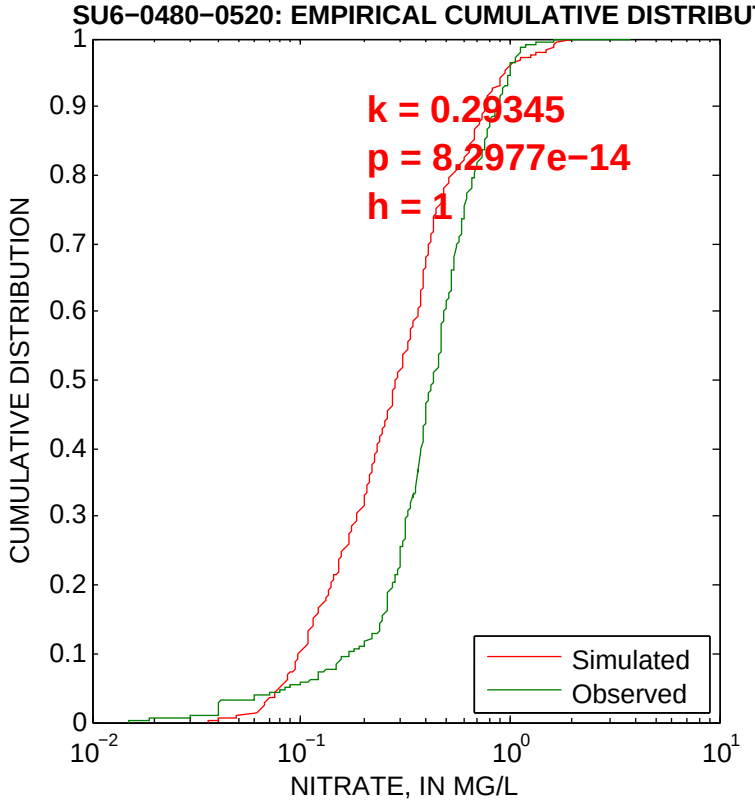












DATA SELECTION

scenario	file
P620171001WQ	NO3X.calib

plot: NO3X - nitrate

Dates: 1/1/1985 – 12/31/201

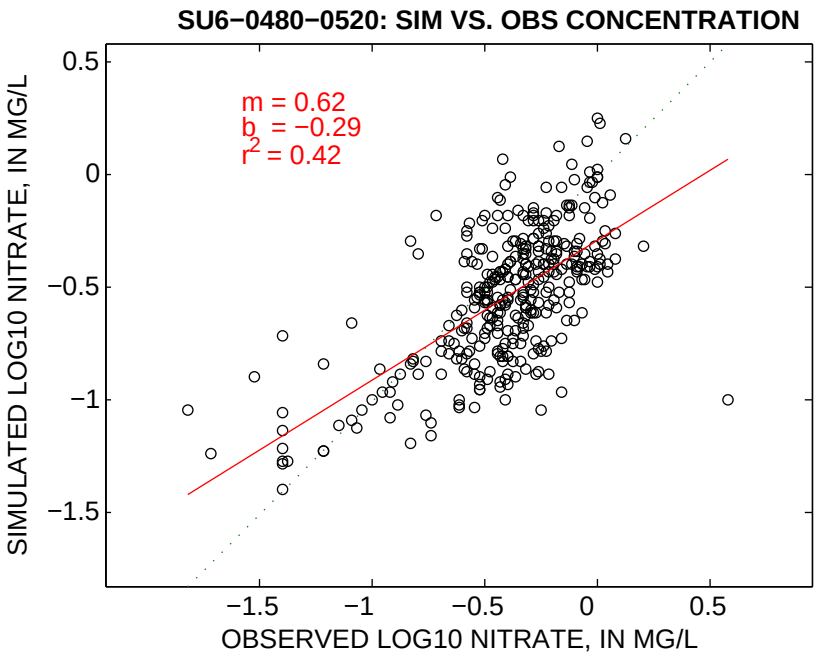
Drive	Directory	Observed
N/A	model	OBS20161101

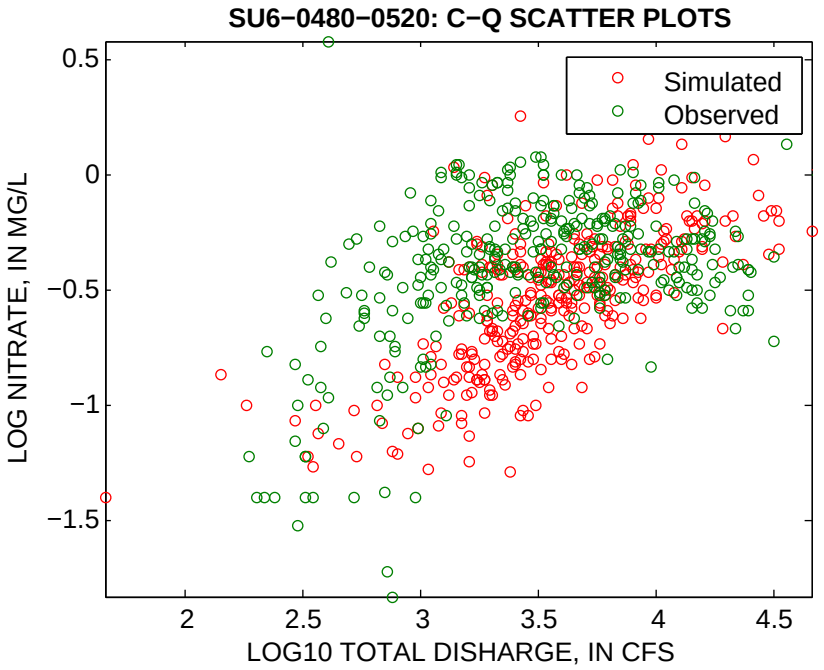
STATISTICS

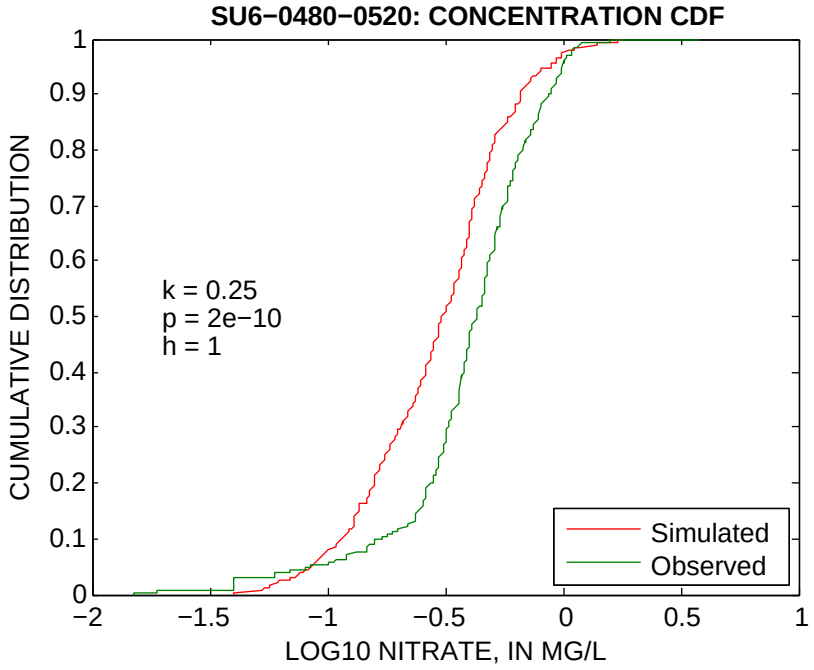
	n	observe	simulate
		351	351
min		0.015	0.036111
		-1.82391	-1.44236
mean		0.486404	0.375178
		-0.403359	-0.550533
media		0.43	0.28676
		-0.366532	-0.542481
max		3.79	1.9723
		0.578639	0.294973
varian		0.100139	0.0966948
		0.100347	0.11071
JB		0.001	0.001
		0.001	0.276793
		ra	log
%		-22.8672	36.4872
err.va		0.143008	0.122023
rel.std.err		1.4281	1.21602
mod.eff		-0.428098	-0.216017

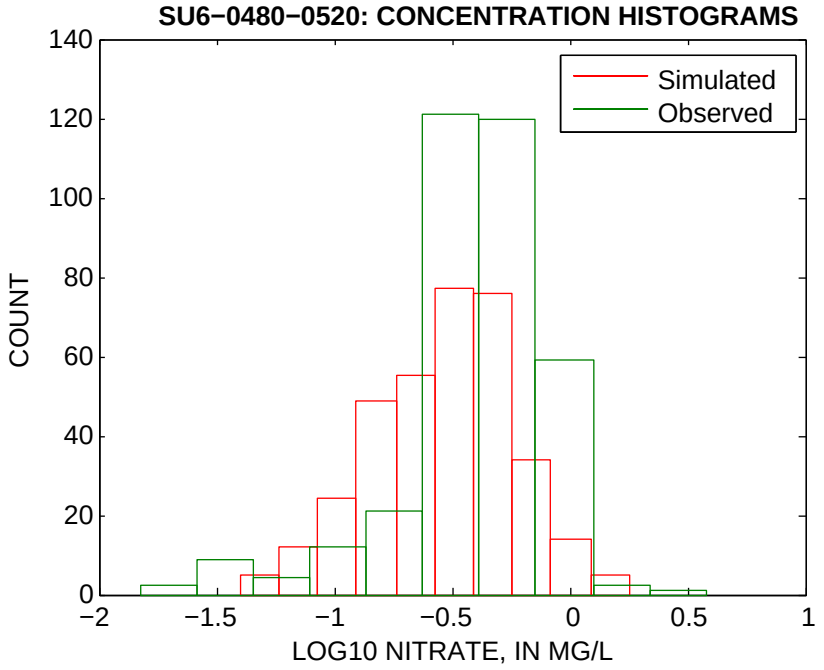
VERSION 2.1

ALL DATA
LOG10

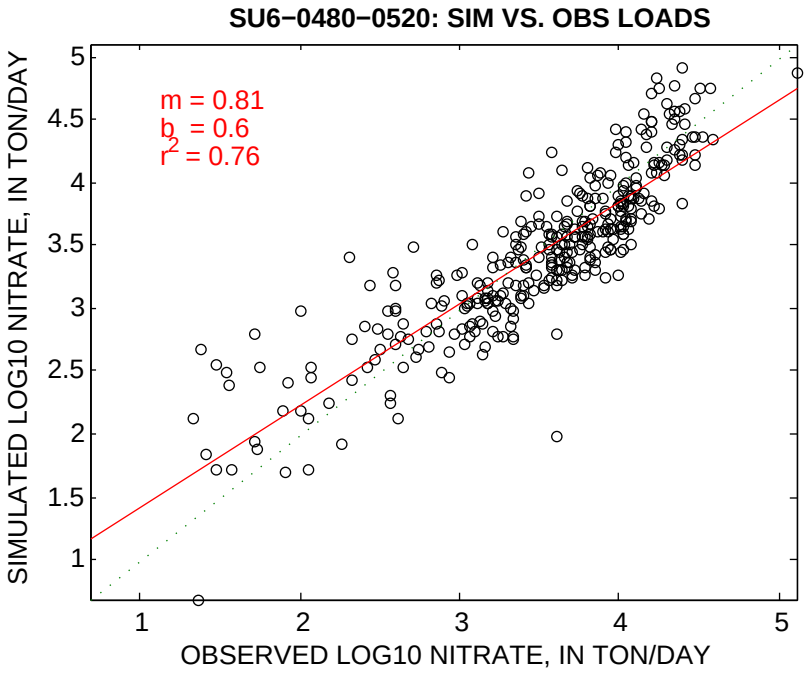


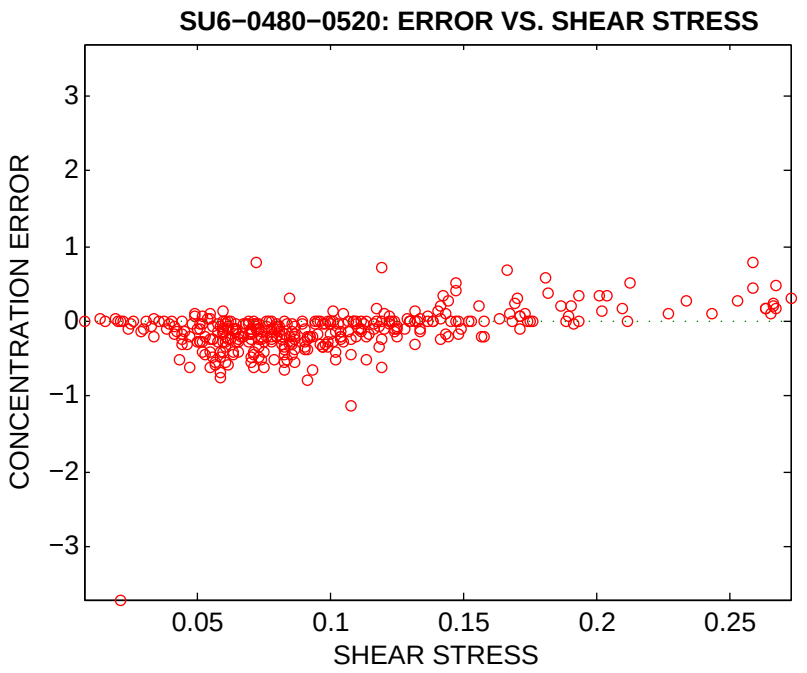


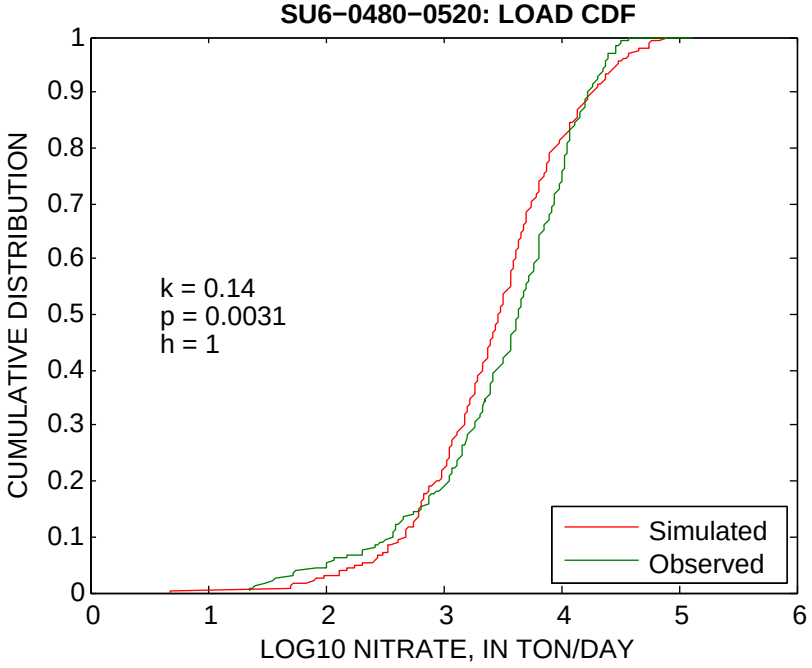


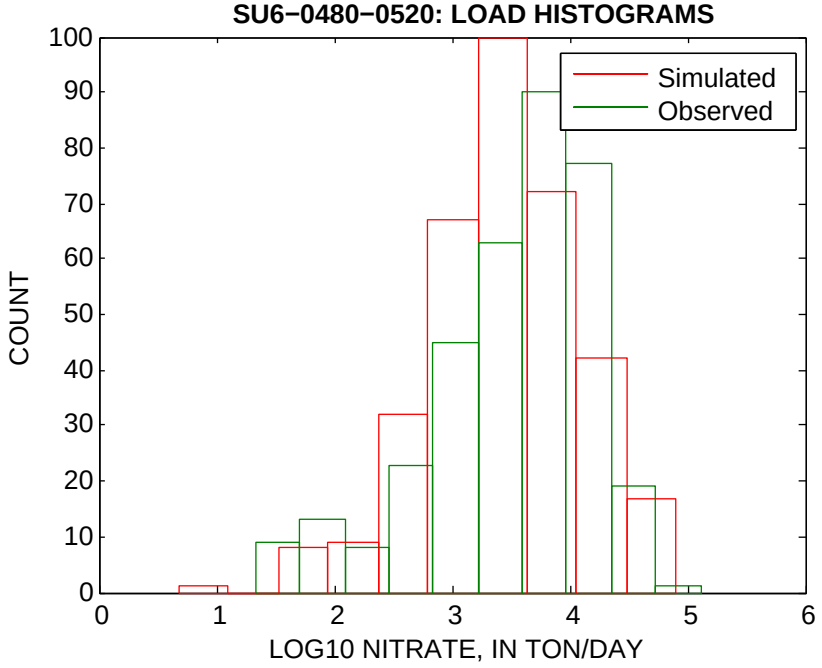


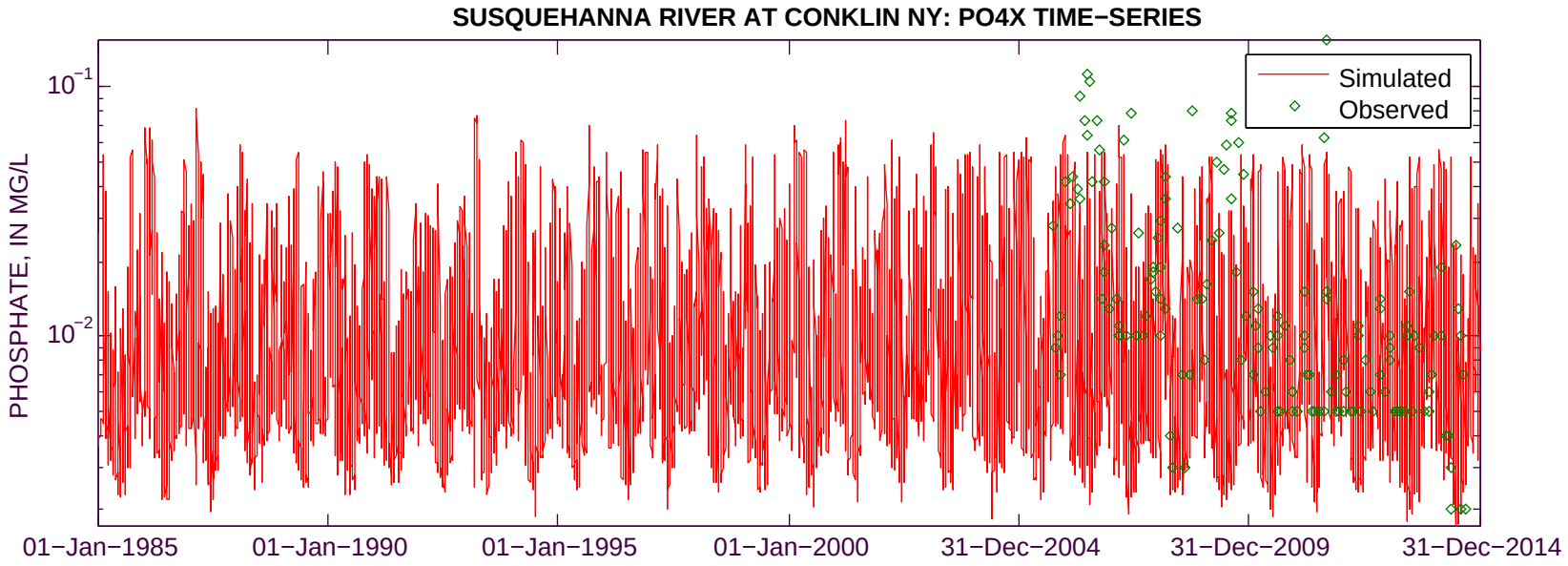
LOAD DATA
LOG10

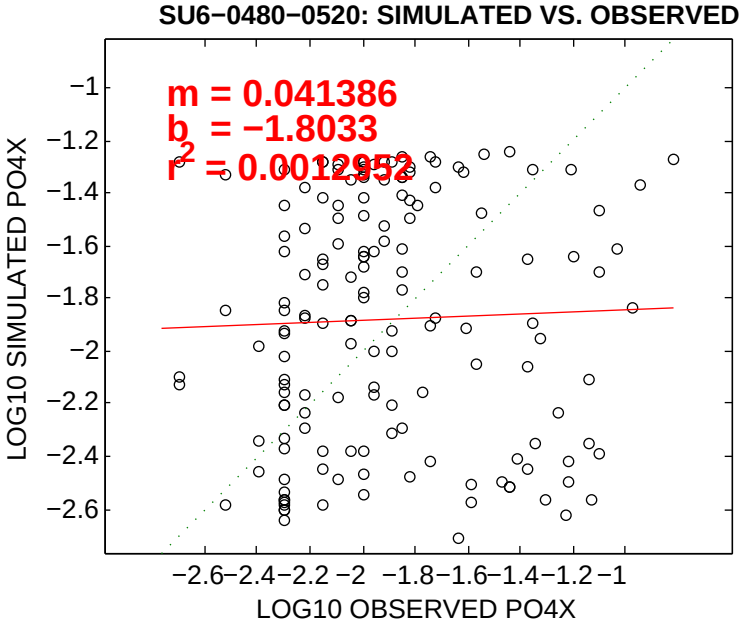


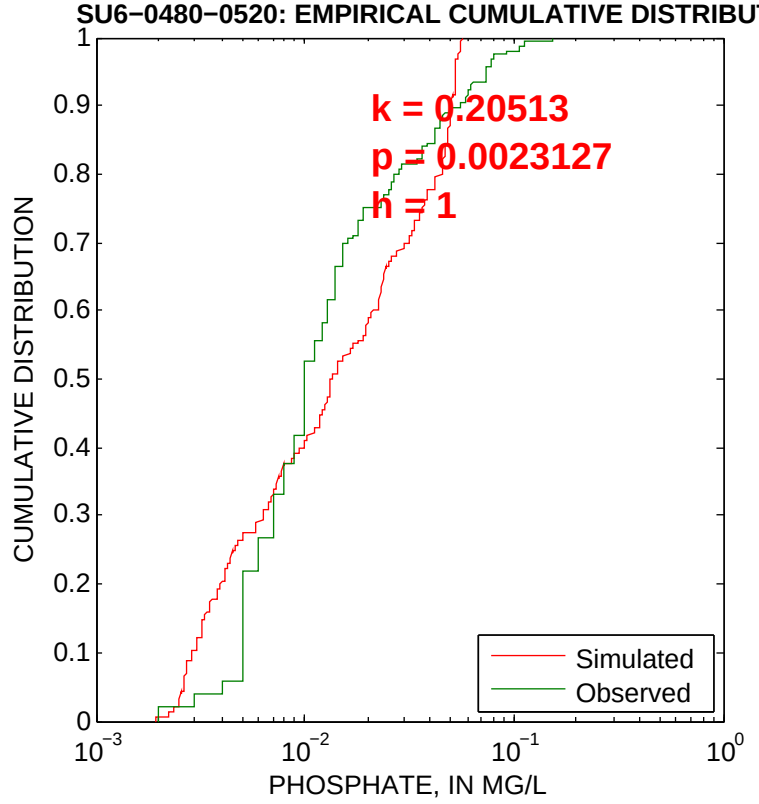












DATA SELECTION

scenario	file
P620171001WQ	PO4X.calib

plot: PO4X - phosphate

Dates: 1/1/1985 – 12/31/201

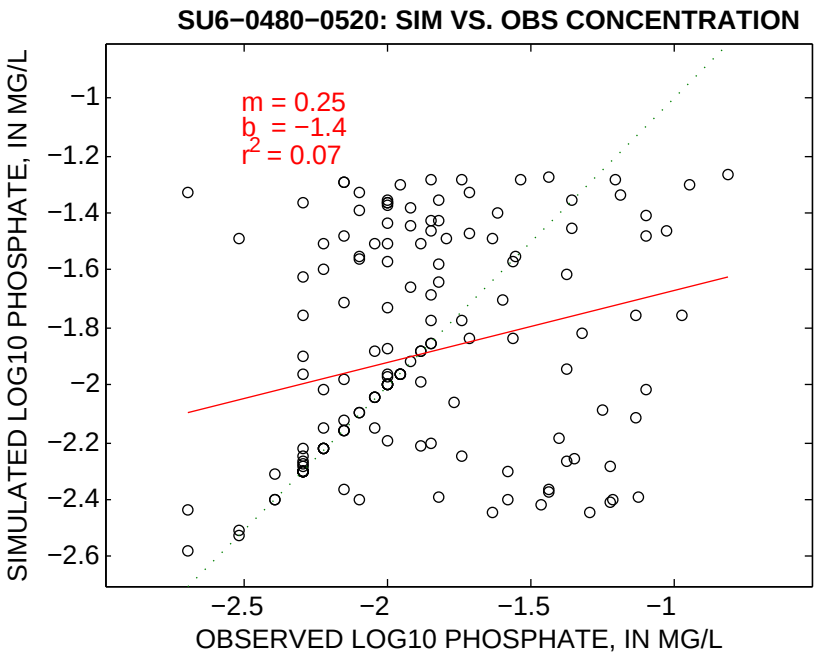
Drive	Directory	Observed
N/A	model	OBS20161101

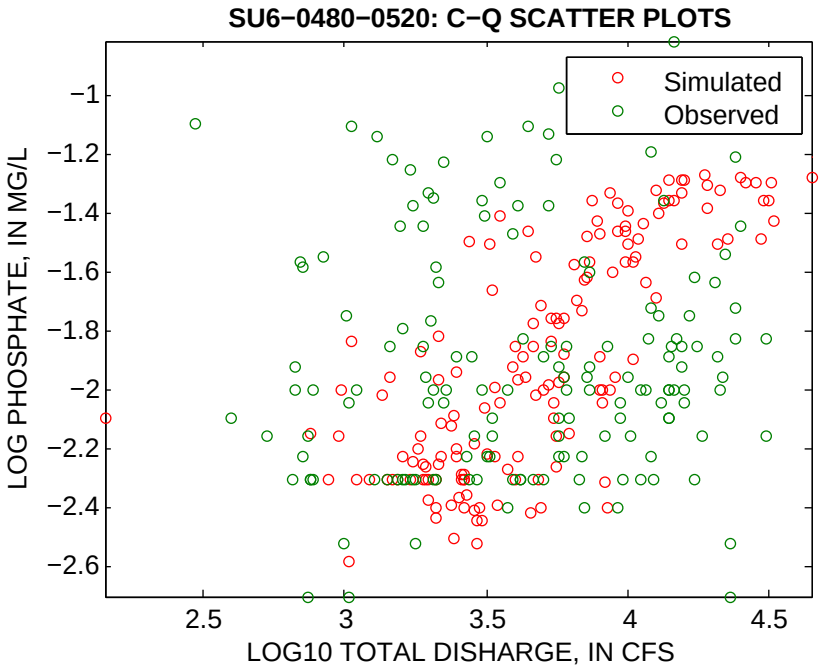
STATISTICS

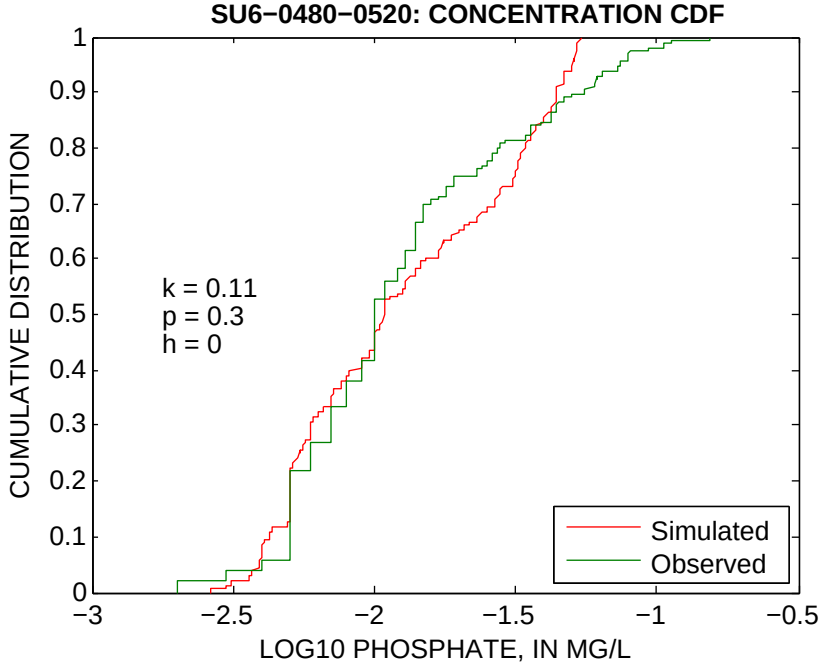
	n	156	156
		observe	simulate
min		0.002	0.0019266
		-2.69897	-2.71521
mean		0.0200577	0.0210906
		-1.90512	-1.88218
media		0.01	0.01351
		-2	-1.86942
max		0.153	0.057128
		-0.815309	-1.24315
varian		0.00058578	0.0003269
		0.159526	0.210949
JB		0.001	0.003475
		0.014172	0.008609
		ra	log
%		5.14955	-1.20429
err.va		0.00089376	0.3578
rel.std.err		1.52575	2.2429
mod.eff		-0.52575	-1.2429

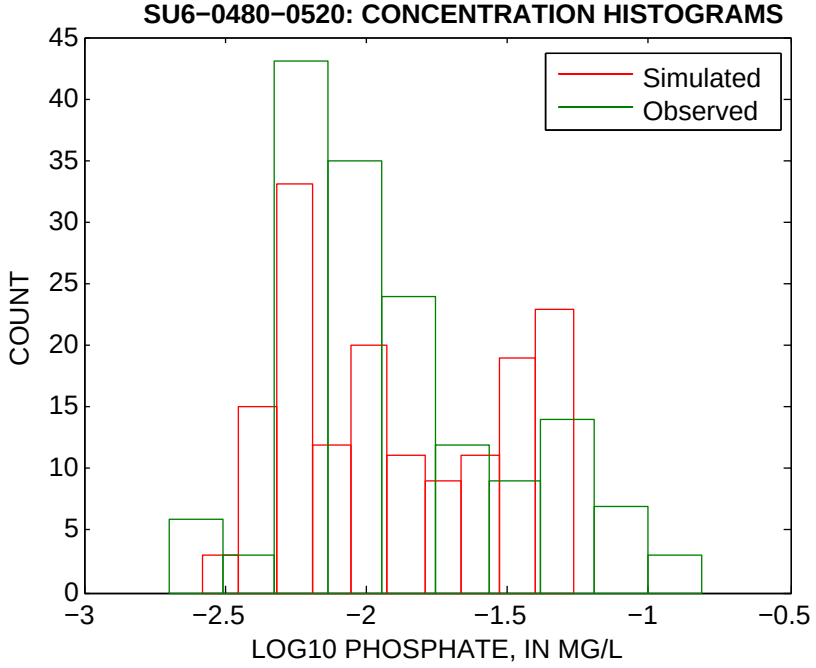
VERSION 3.1

ALL DATA
LOG10

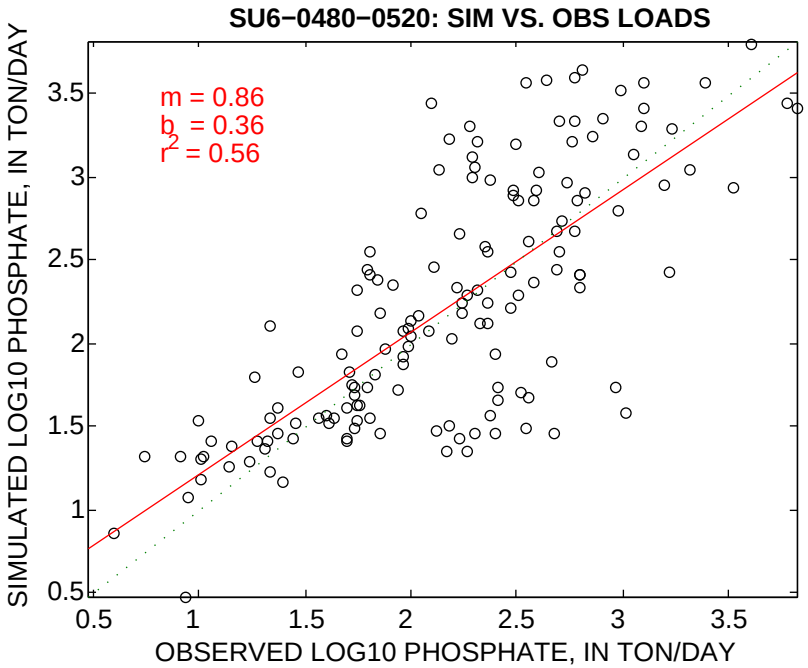


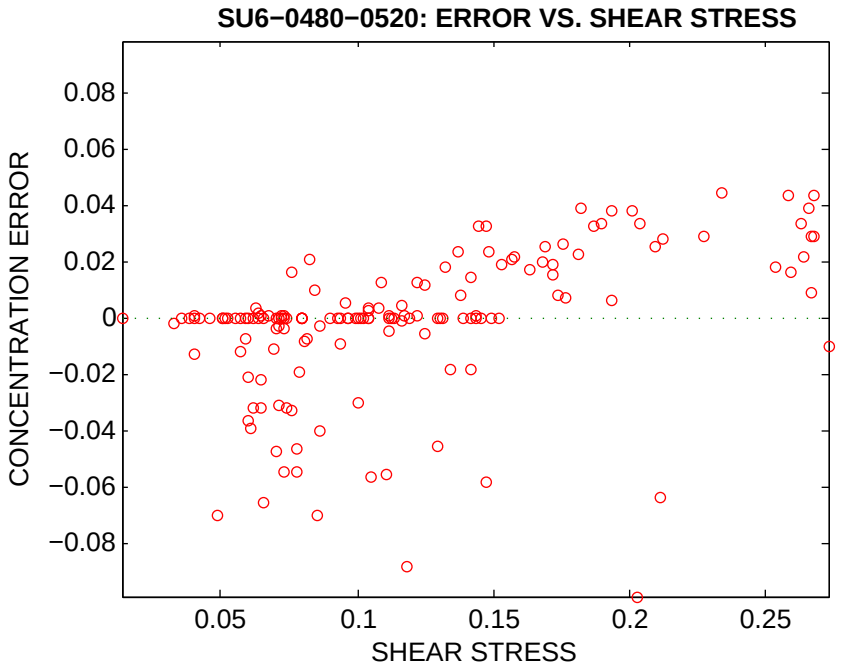


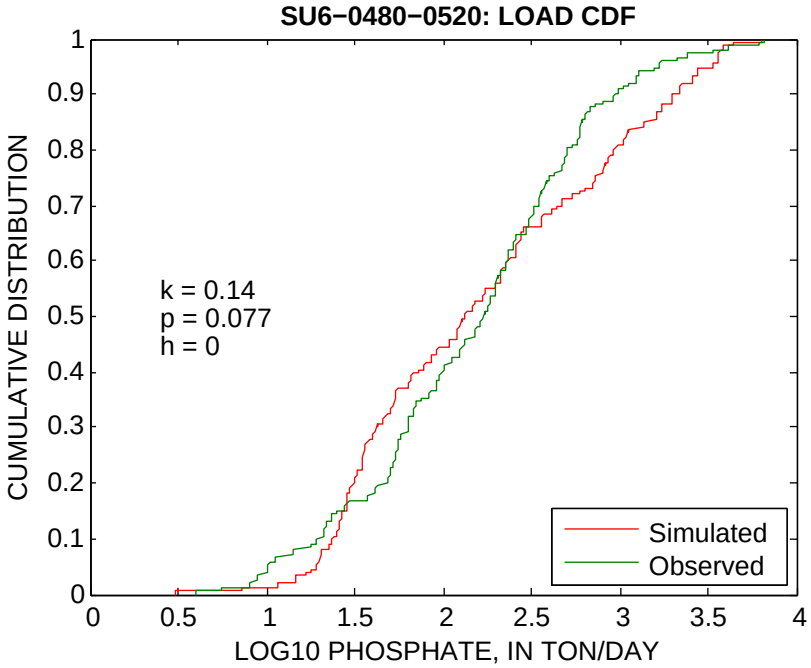


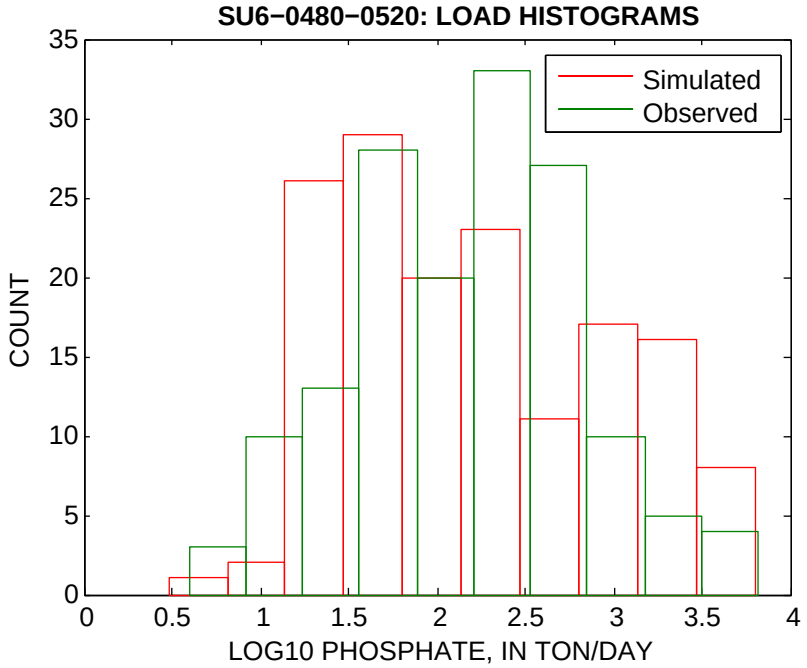


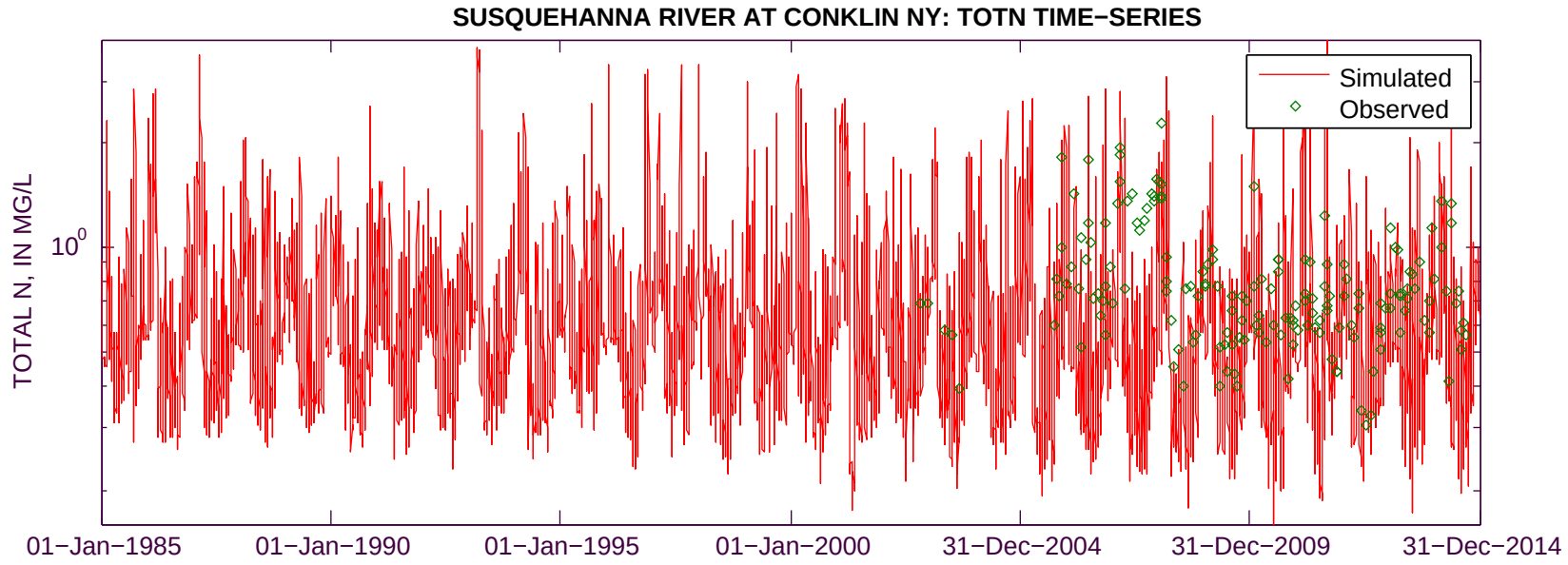
LOAD DATA
LOG10

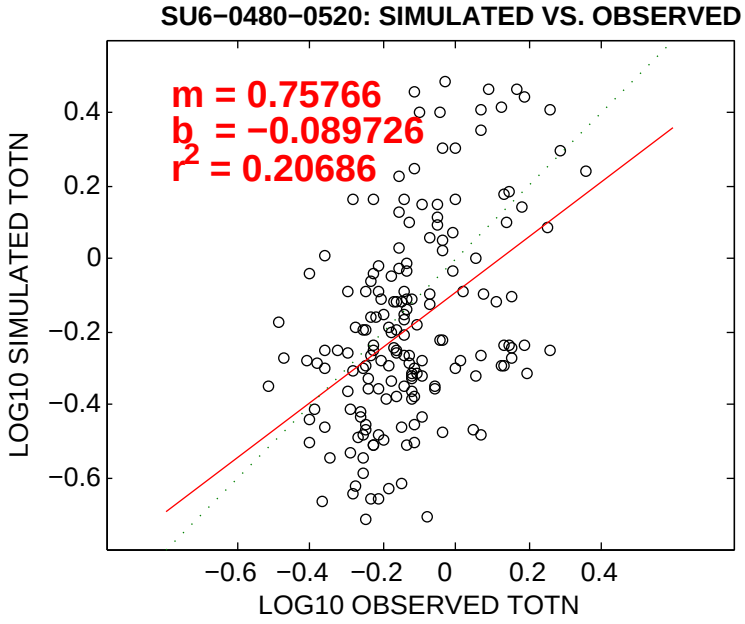


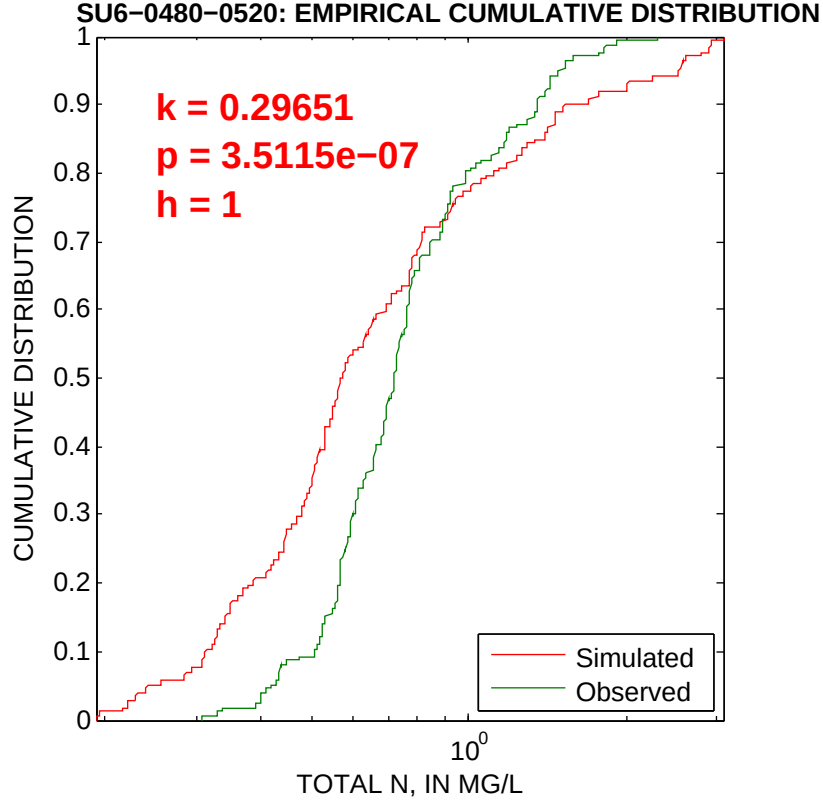












DATA SELECTION

scenario: P620171001WQ | file: TOTN.calib

plot: TOTN - total nitrogen

Dates: 1/1/1985 – 12/31/201

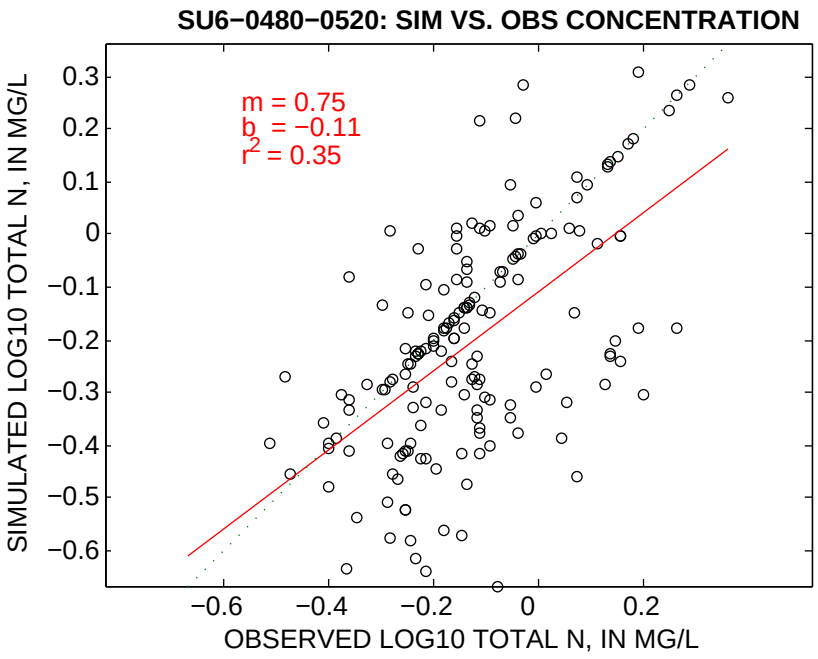
Drive: N/A | Directory: model | Observed: OBS20161101

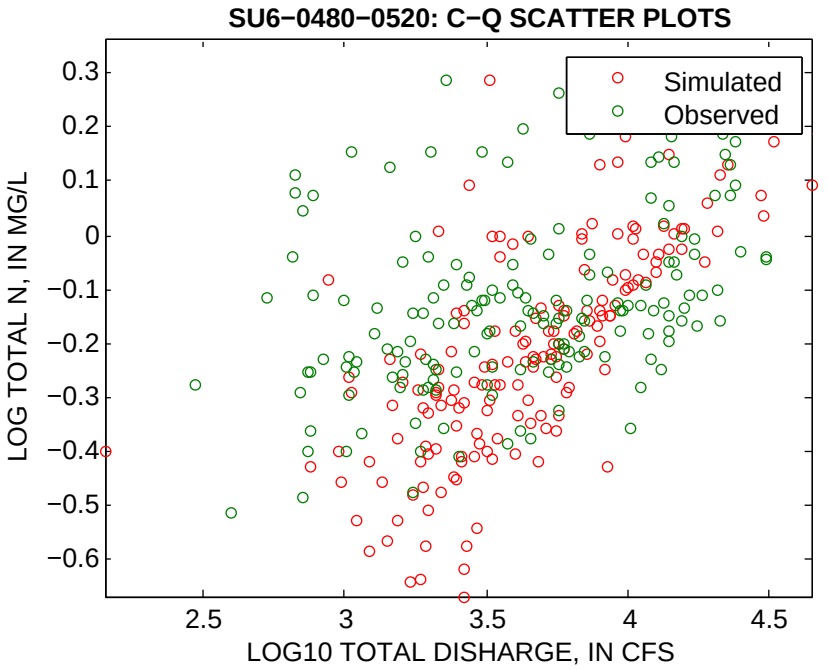
STATISTICS

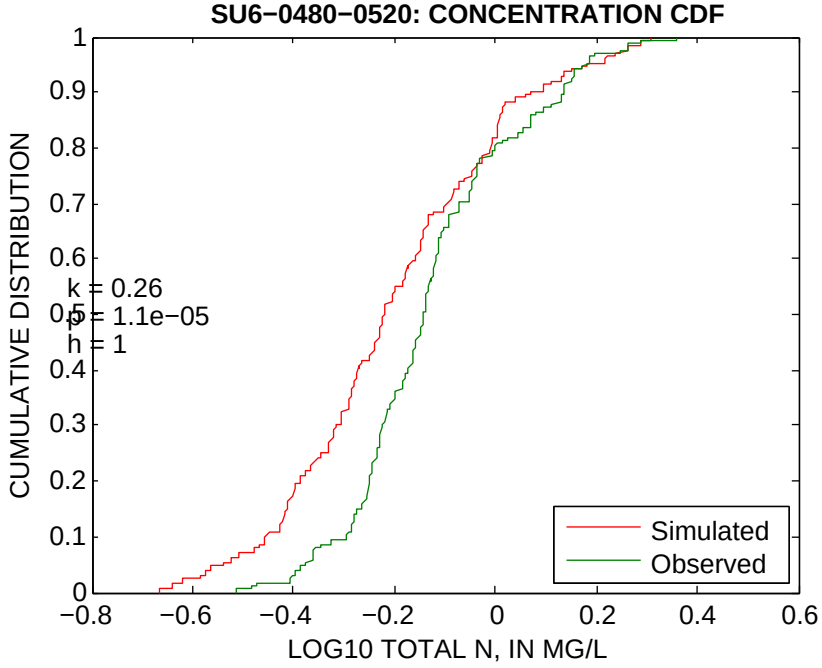
n	172	172
	observe	simulate
min	0.307	0.19288
	-0.512862	-0.714713
mean	0.81054	0.815078
	-0.124122	-0.183768
media	0.7225	0.57142
	-0.141162	-0.243047
max	2.29	3.0707
	0.359835	0.487237
varian	0.118625	0.393224
	0.0271702	0.075397
JB	0.001	0.001
	0.040608	0.019839
	ra	log
%	0.559944	48.0547
err.va	0.317511	0.0649744
rel.std.err	2.67658	2.39138
mod.eff	-1.67658	-1.39138

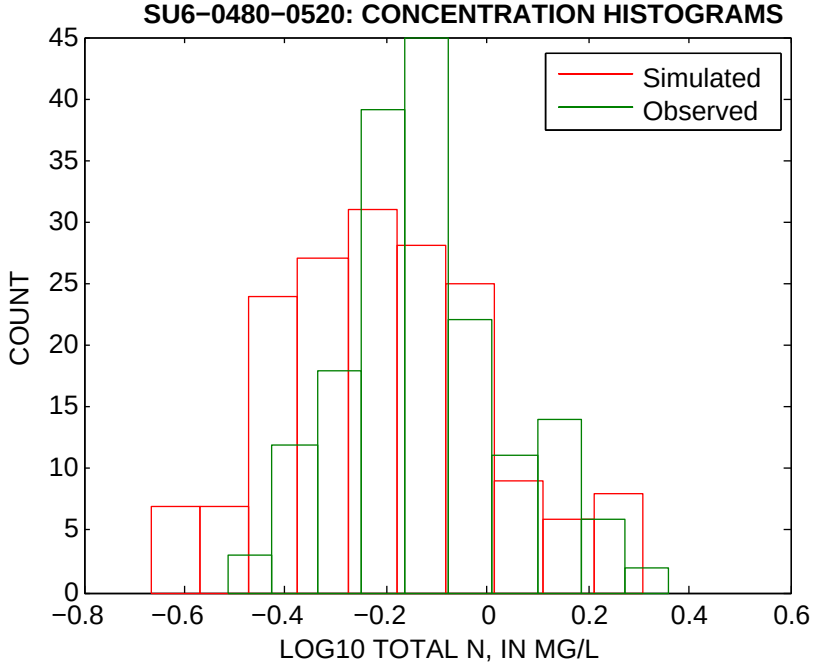
VERSION 2.1

ALL DATA
LOG10

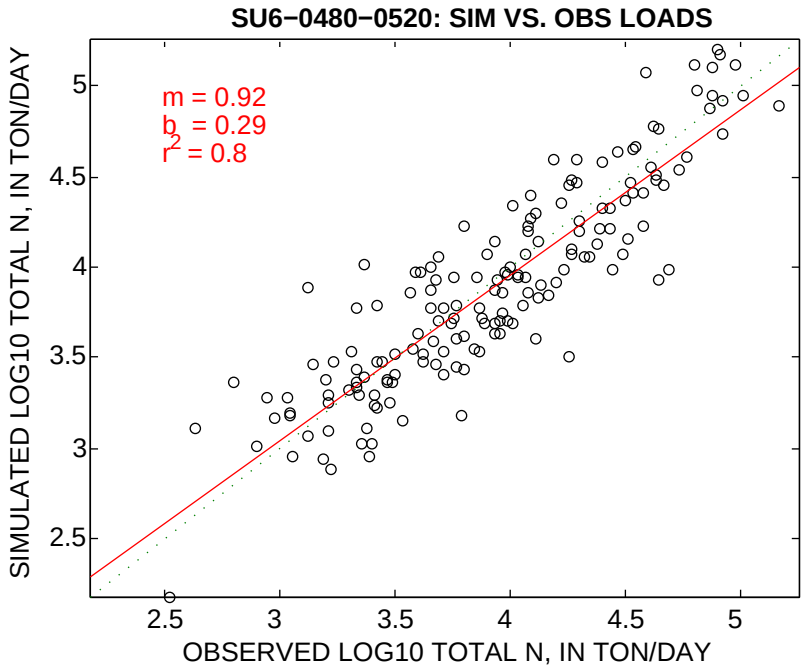


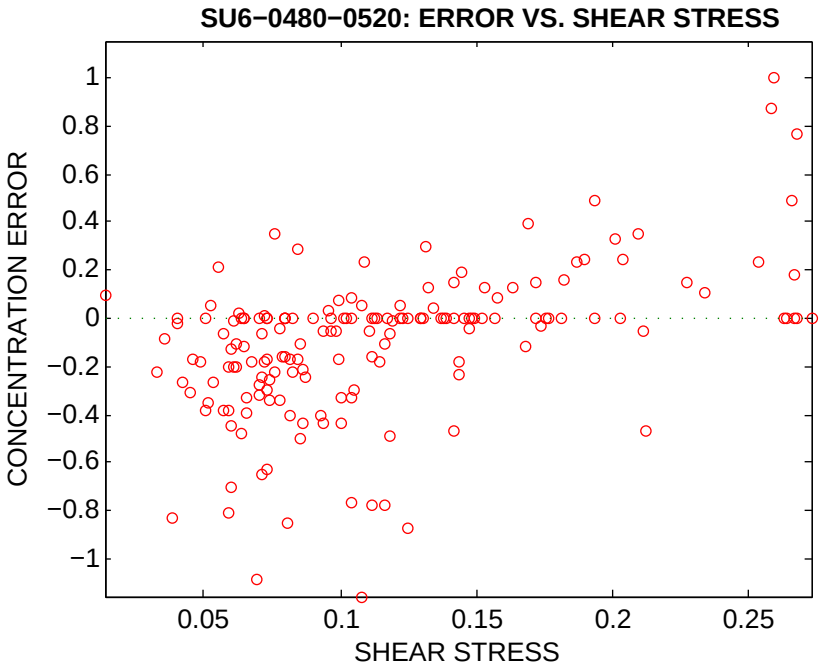


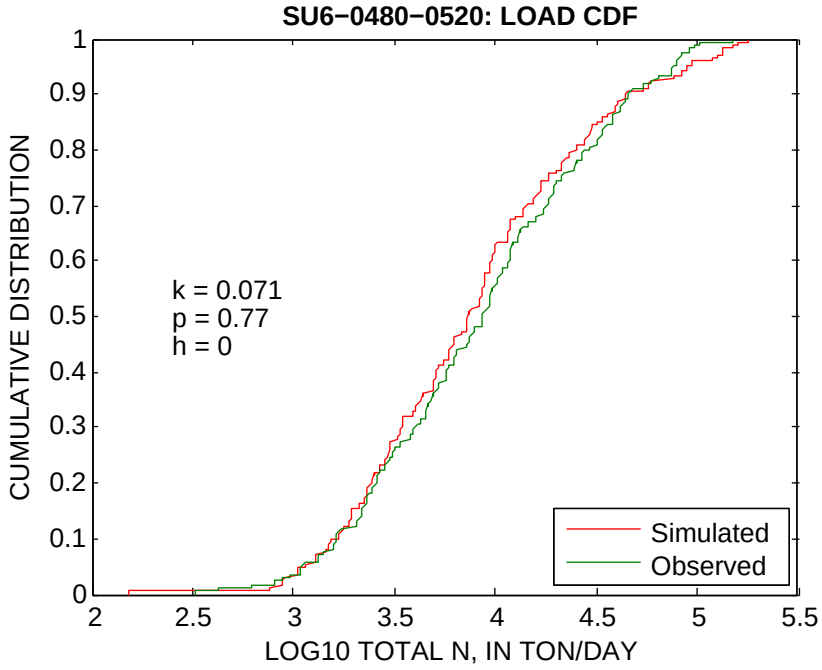


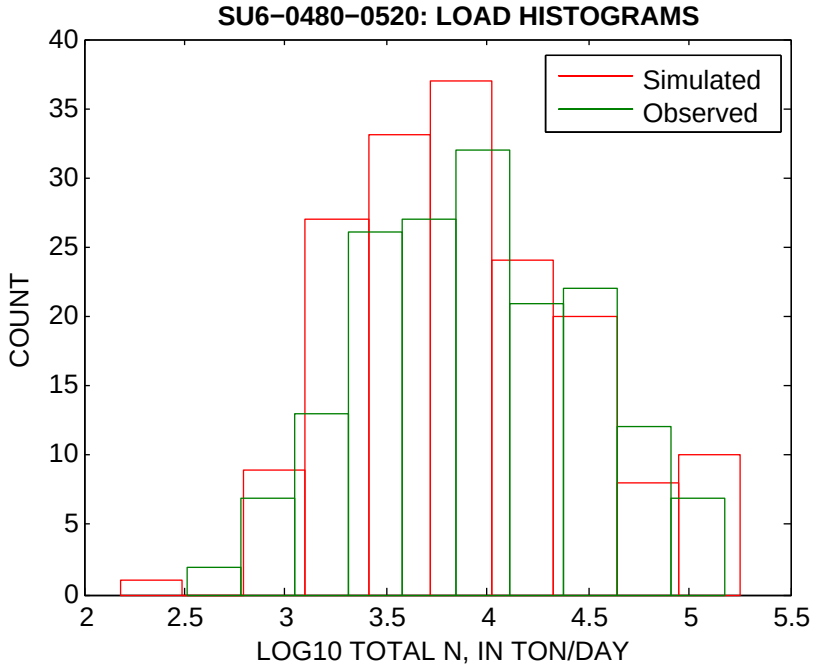


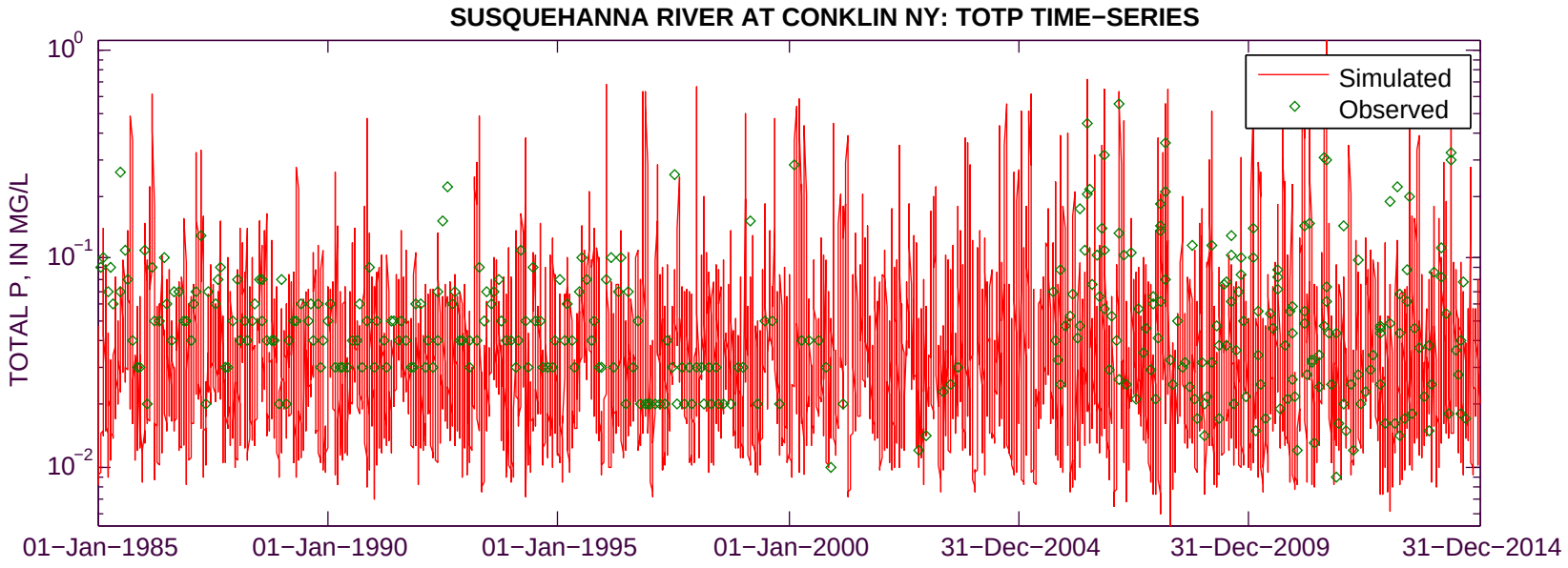
LOAD DATA
LOG10

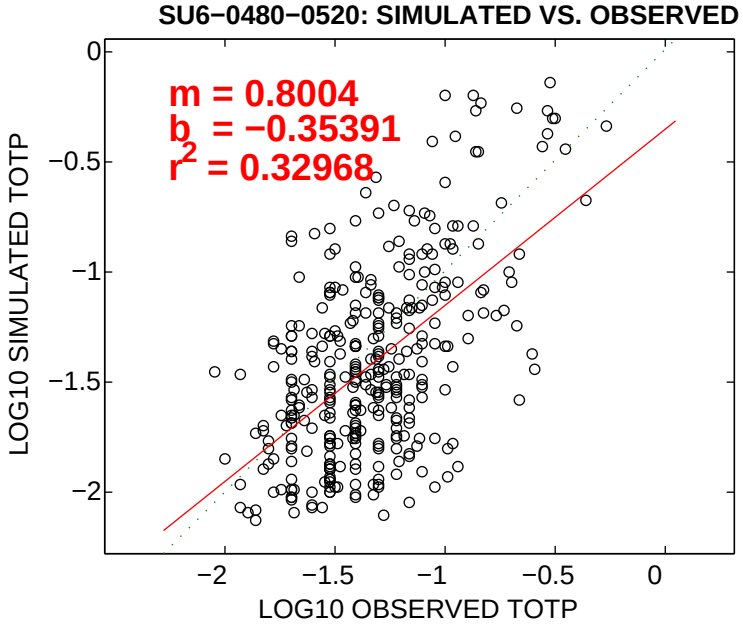


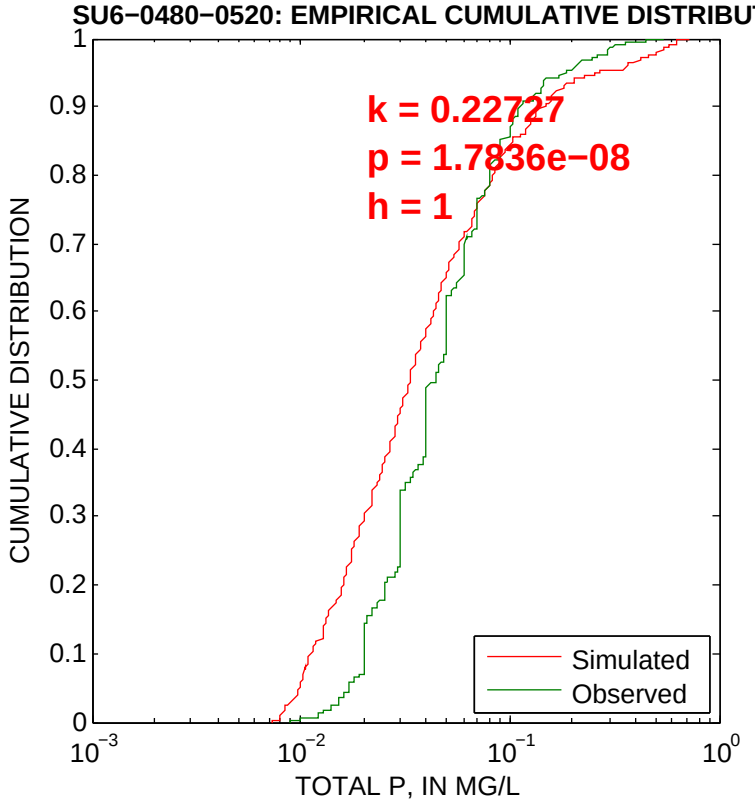












DATA SELECTION

scenario	file
P620171001WQ	TOTP.calib

plot: TOTP - total phosphorus

Dates	1/1/1985	12/31/201

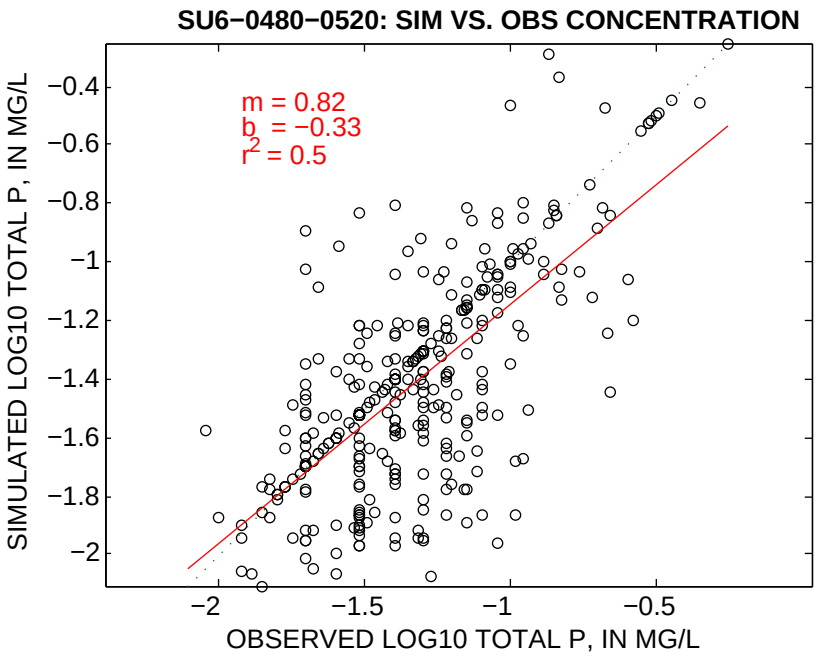
Drive	Directory	Observed
N/A	model	OBS20161101

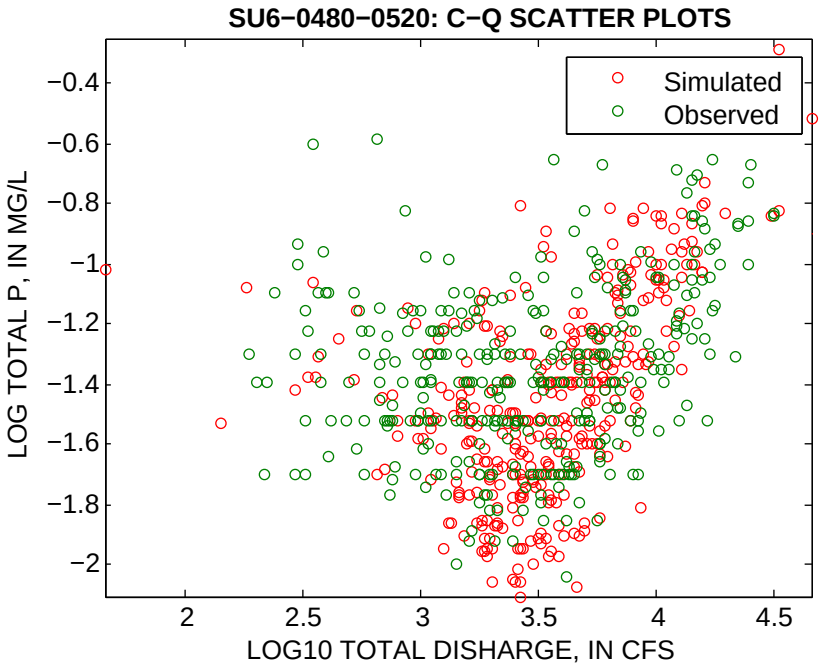
STATISTICS

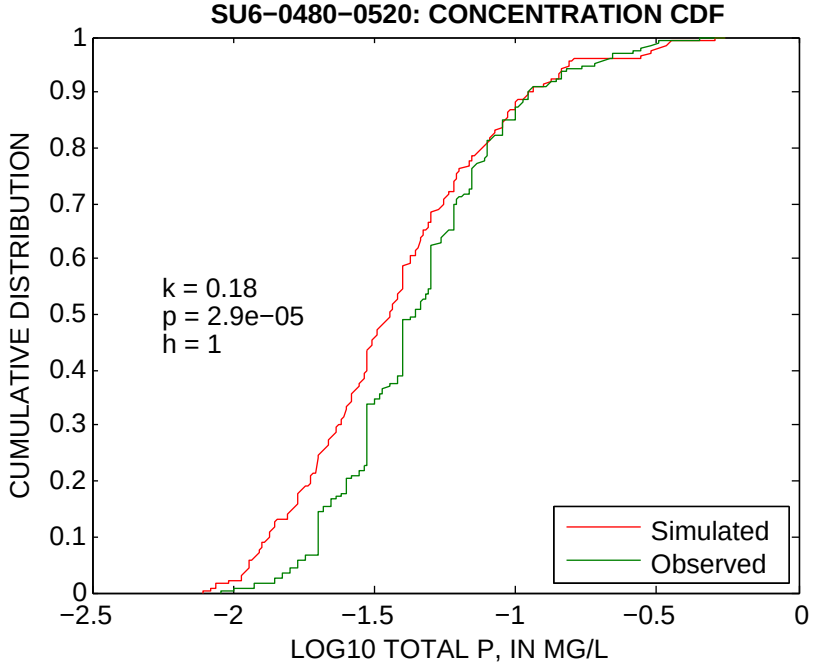
	n	352	352
		observe	simulate
min		0.009	0.0073785
		-2.04576	-2.13203
mean		0.0626431	0.0692943
		-1.33049	-1.41883
media		0.044	0.03329
		-1.35655	-1.47769
max		0.551	0.72656
		-0.258848	-0.138729
varian		0.00404769	0.0115016
		0.0959091	0.186374
JB		0.001	0.001
		0.001	0.001
		ra	log
%		10.6176	6.64006
err.va		0.00694276	0.136579
rel.std.err		1.71524	1.42405
mod.eff		-0.715238	-0.424048

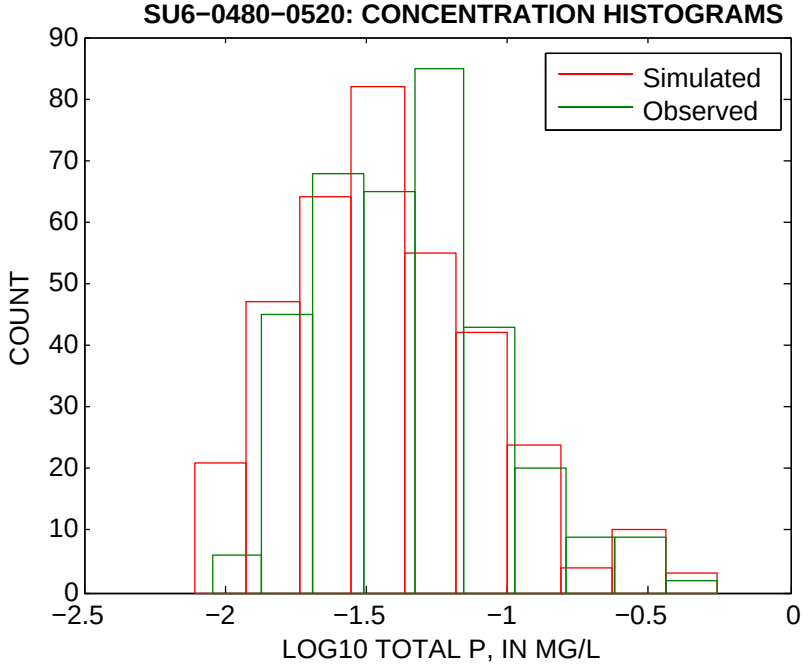
VERSION 2.1

ALL DATA
LOG10

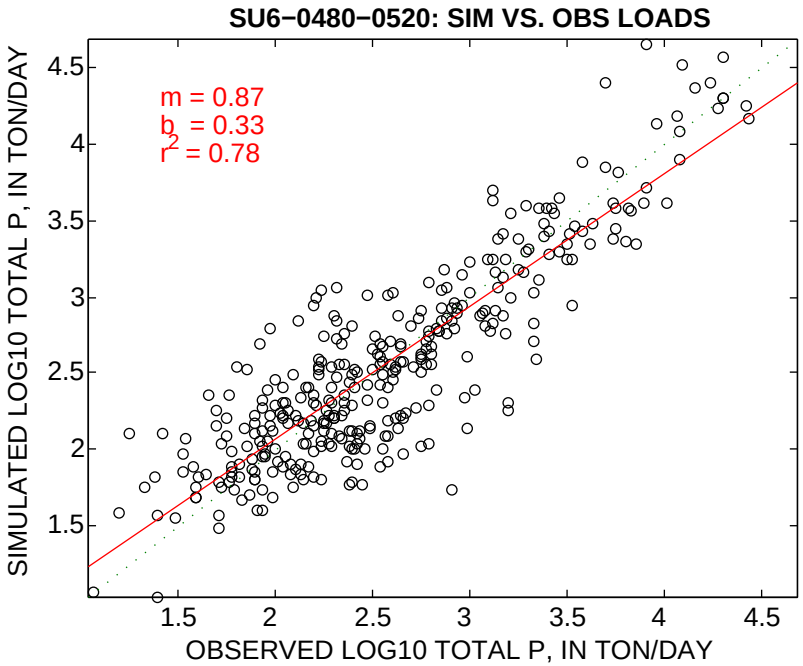


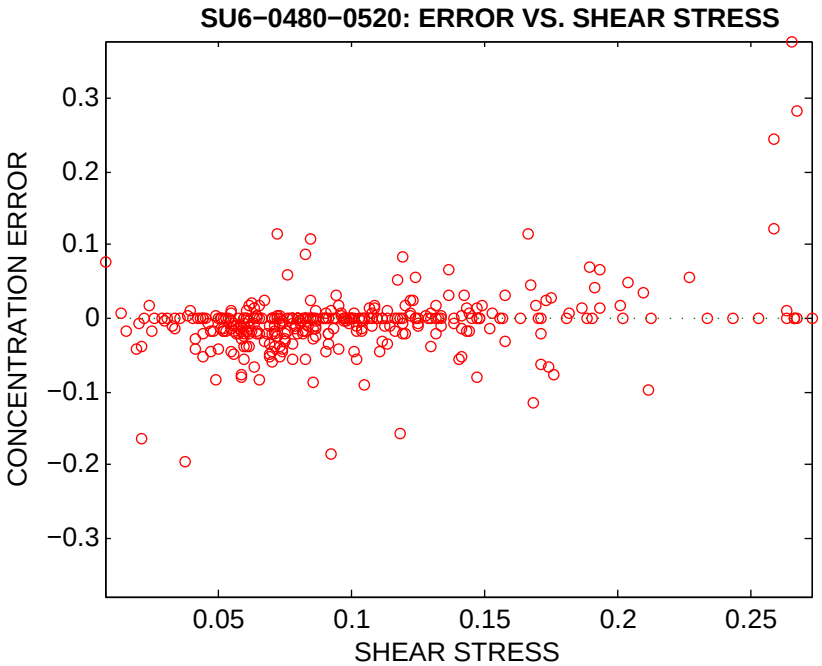


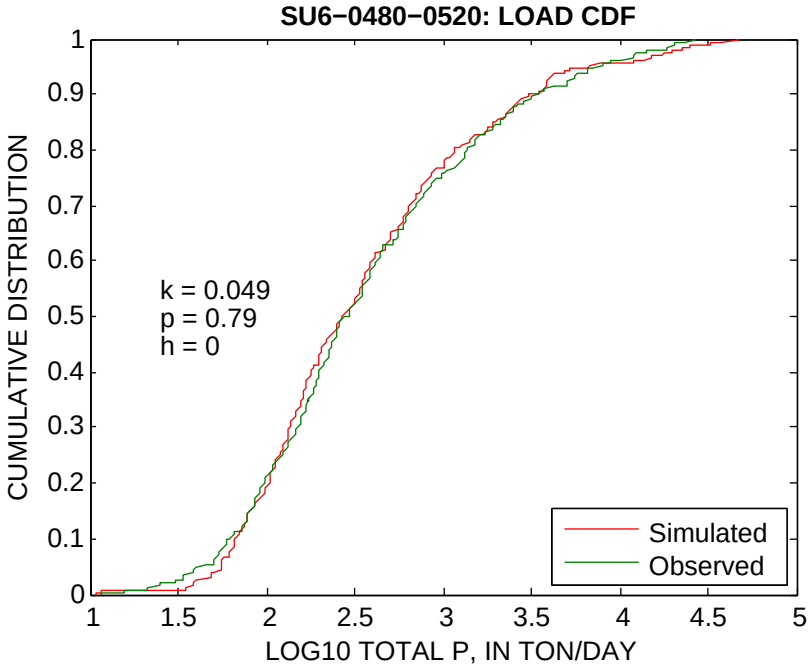


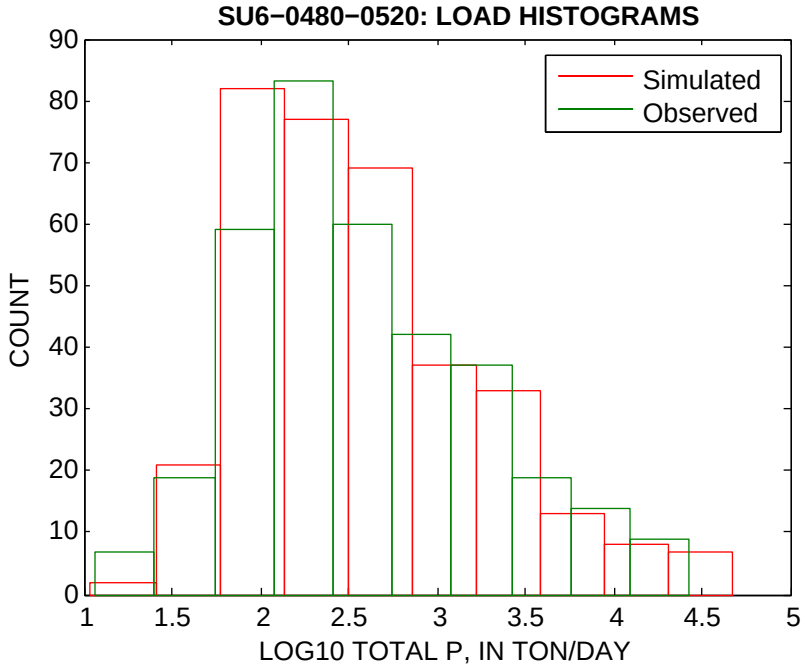


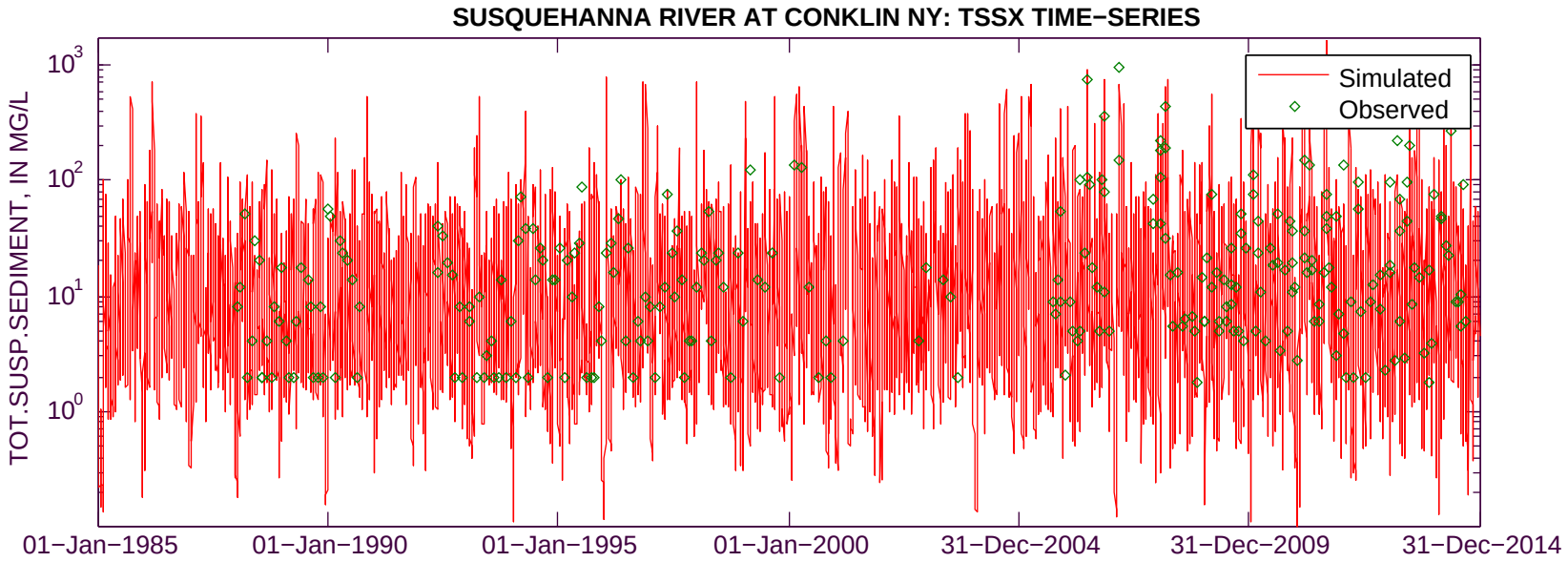
LOAD DATA
LOG10

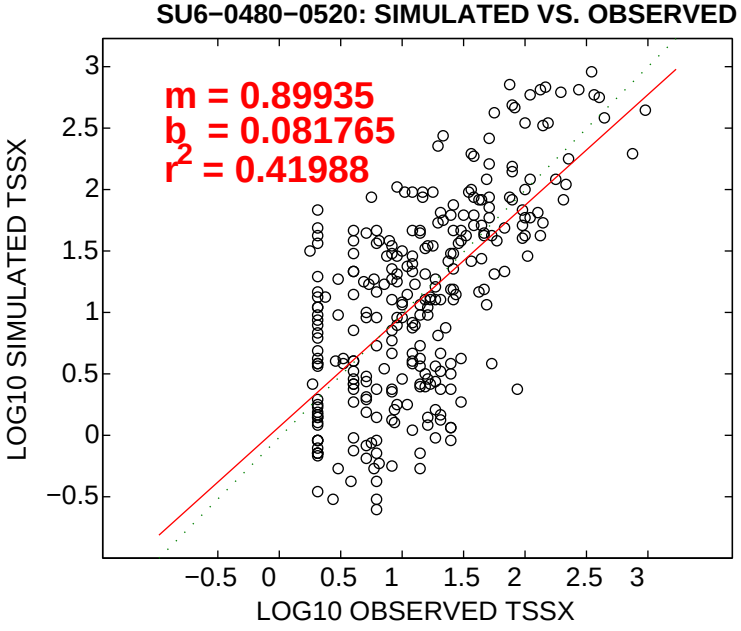


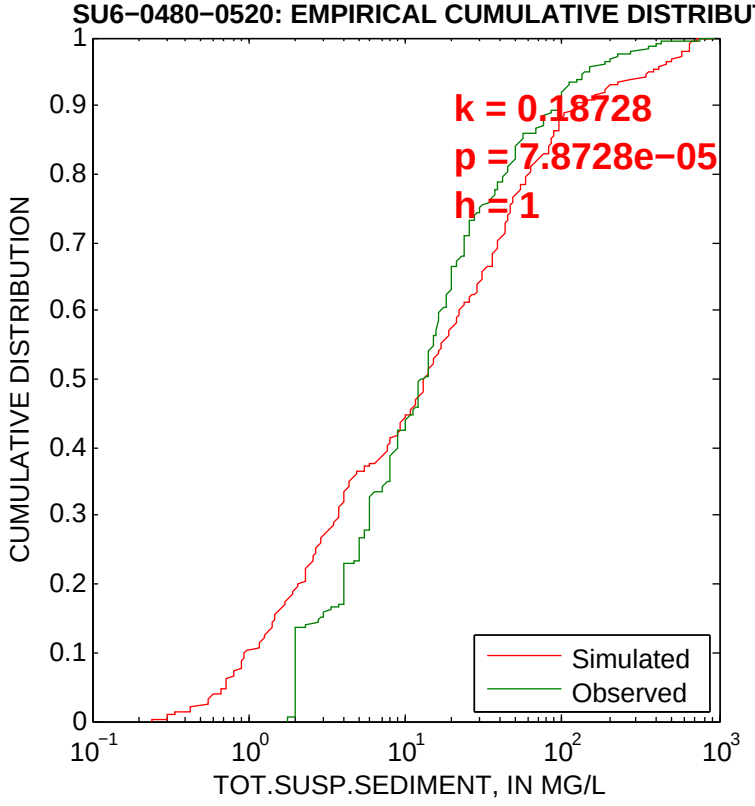












DATA SELECTION

scenario	file
P620171001WQ	TSSX.calib

plot: TSSX - total suspended ...

Dates: 1/1/1985 – 12/31/201

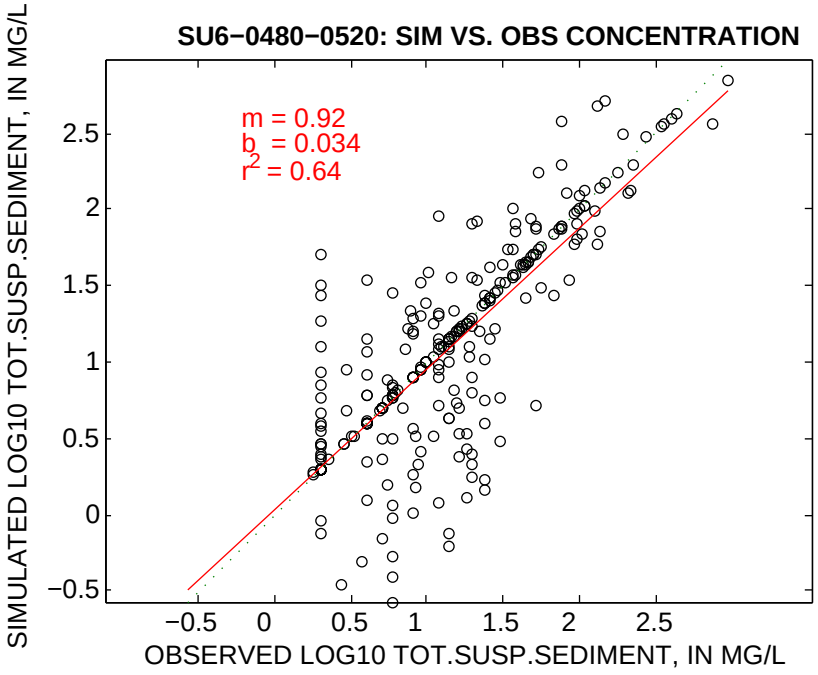
Drive	Directory	Observed
N/A	model	OBS20161101

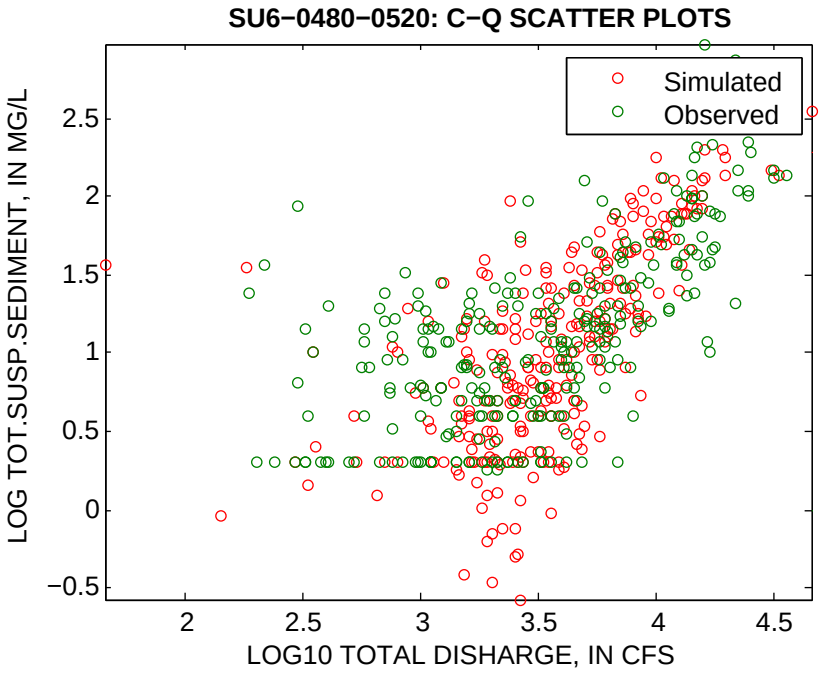
STATISTICS

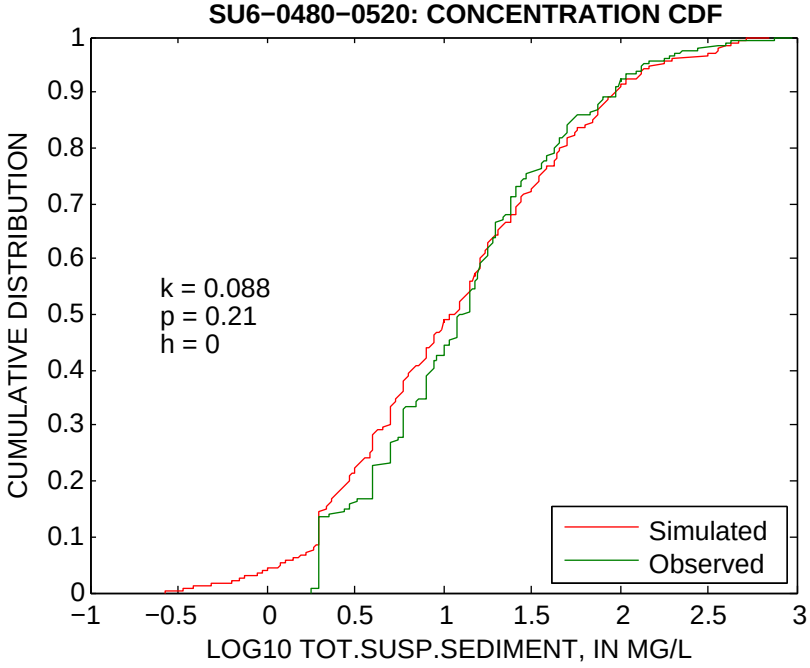
	n	observe	simulate
		283	283
min		1.78	0.2445
		0.25042	-0.611721
mean		38.4012	60.8165
		1.13333	1.10103
media		12.8	13.264
		1.10721	1.12267
max		943	931.05
		2.97451	2.96897
varian		8174.61	18344.1
		0.341887	0.658589
JB		0.001	0.001
		0.009926	0.038908
		ra	log
%		58.3714	-2.85028
err.va		12567.2	0.386569
rel.std.err		1.53735	1.13069
mod.eff		-0.537351	-0.130692

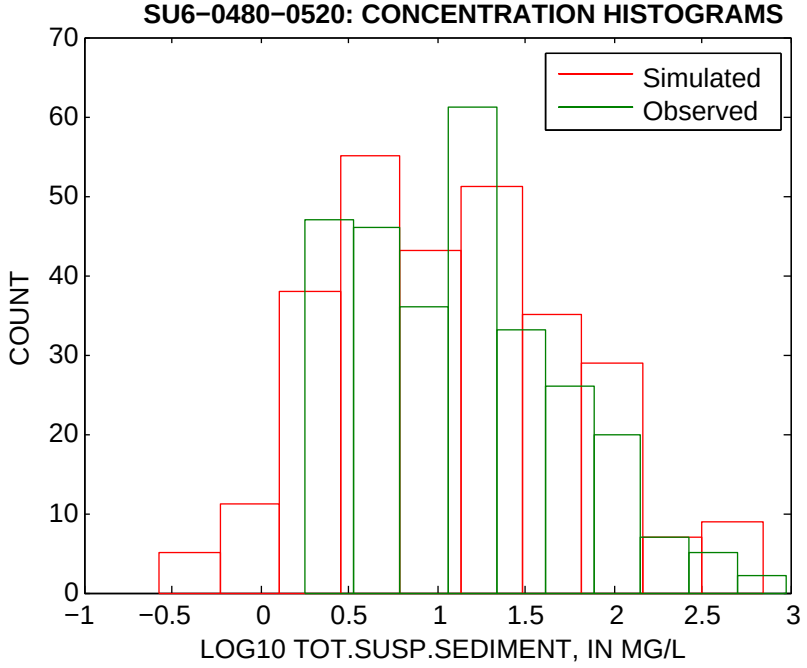
VERSION 2.1

ALL DATA
LOG10

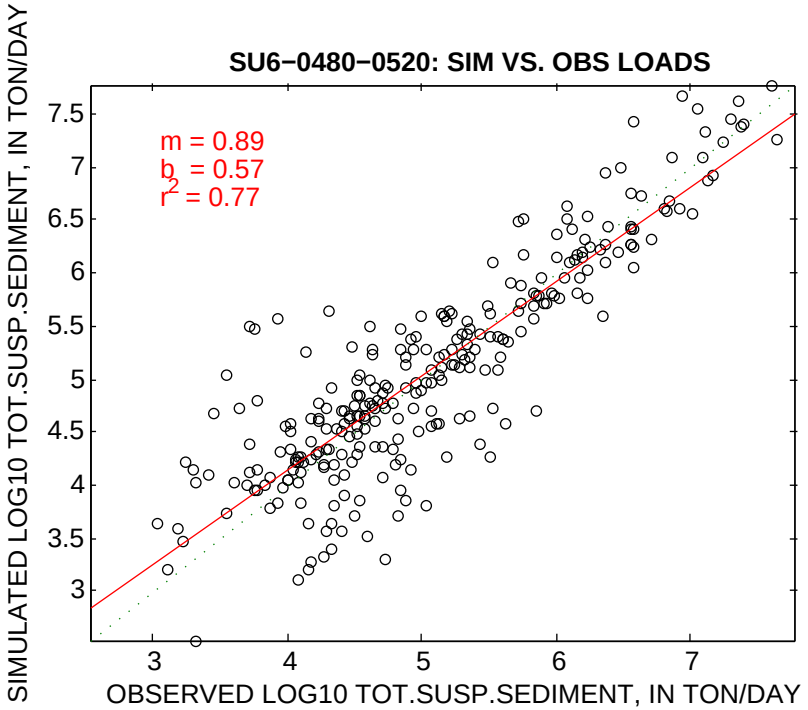


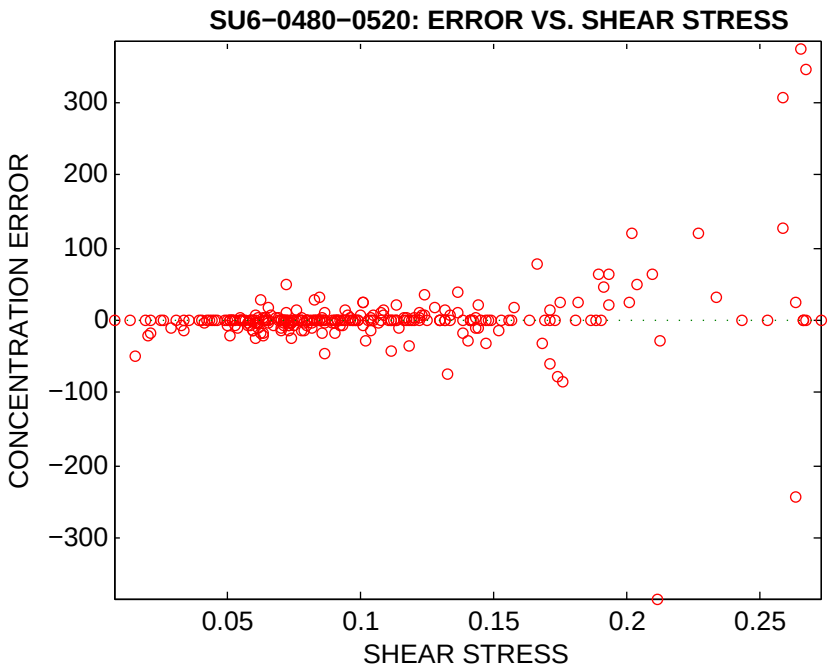


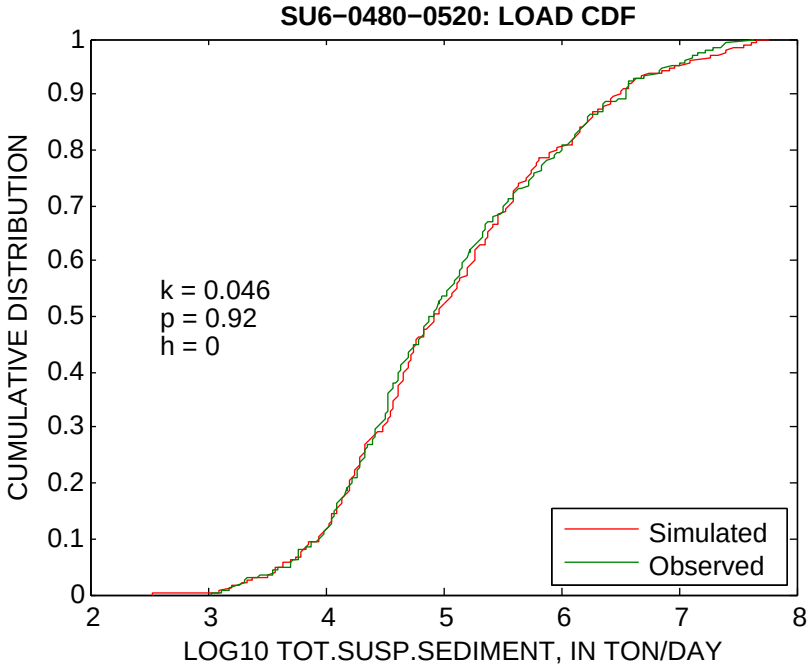


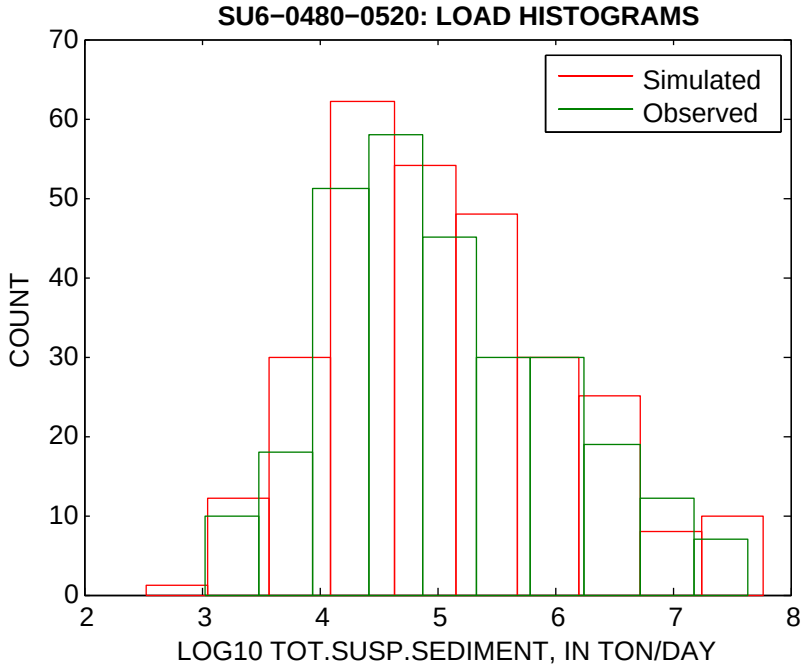


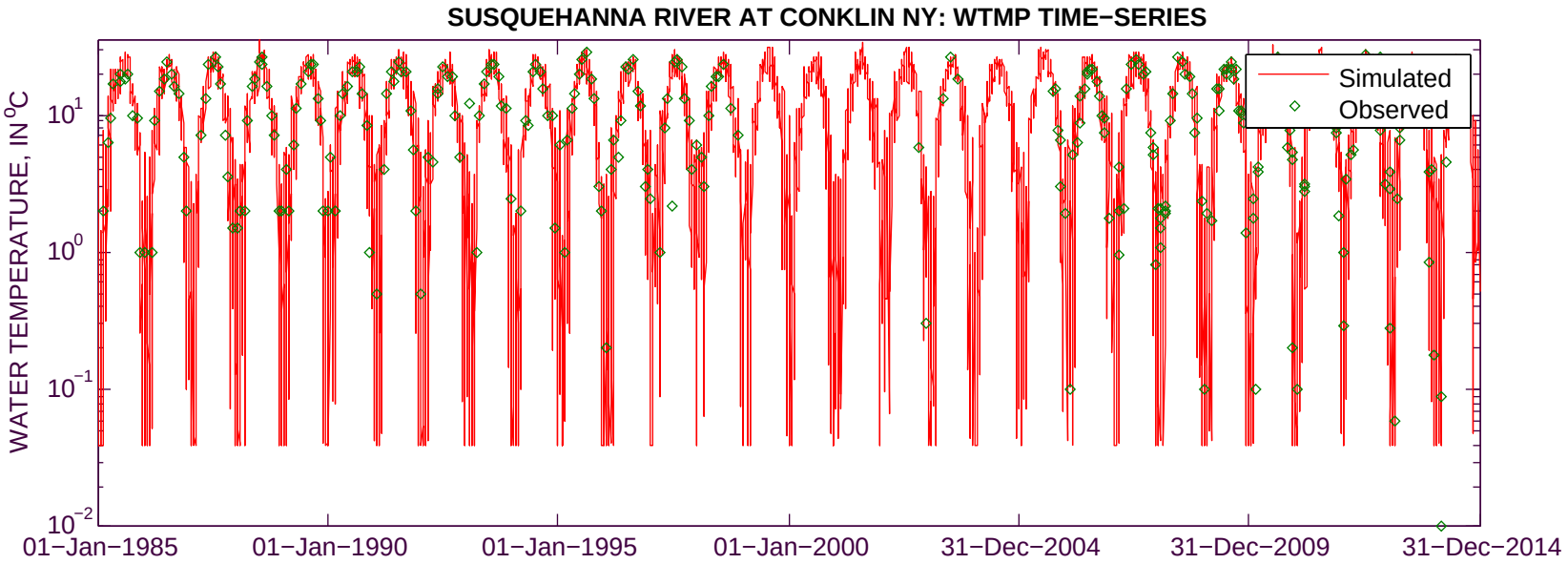
LOAD DATA
LOG10

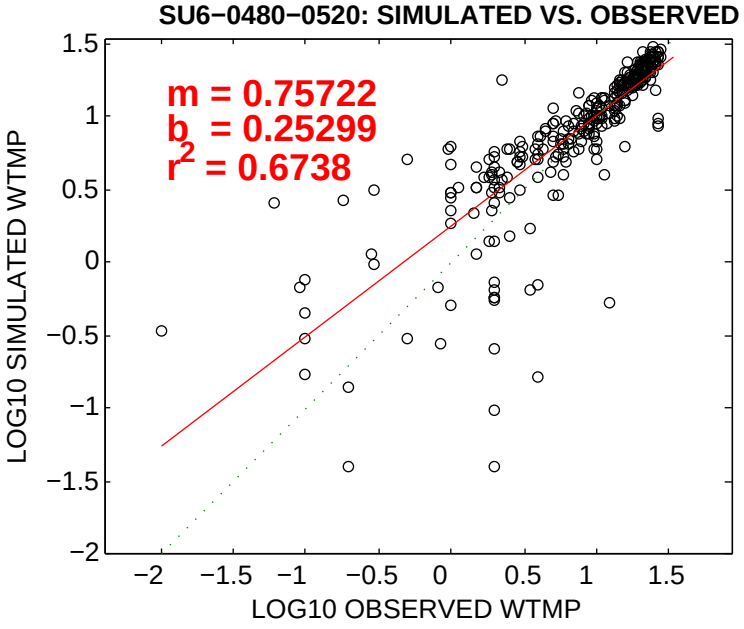


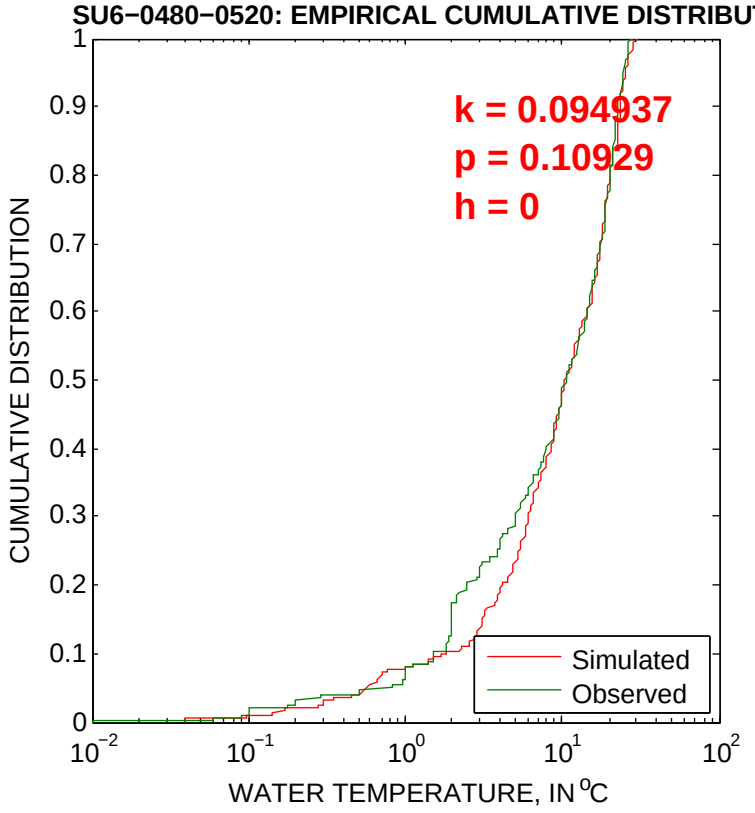












DATA SELECTION

scenario: P620171001WQ | file: WTMP.calib

plot: WTMP - water tempera...

Dates: 1/1/1985 – 12/31/201

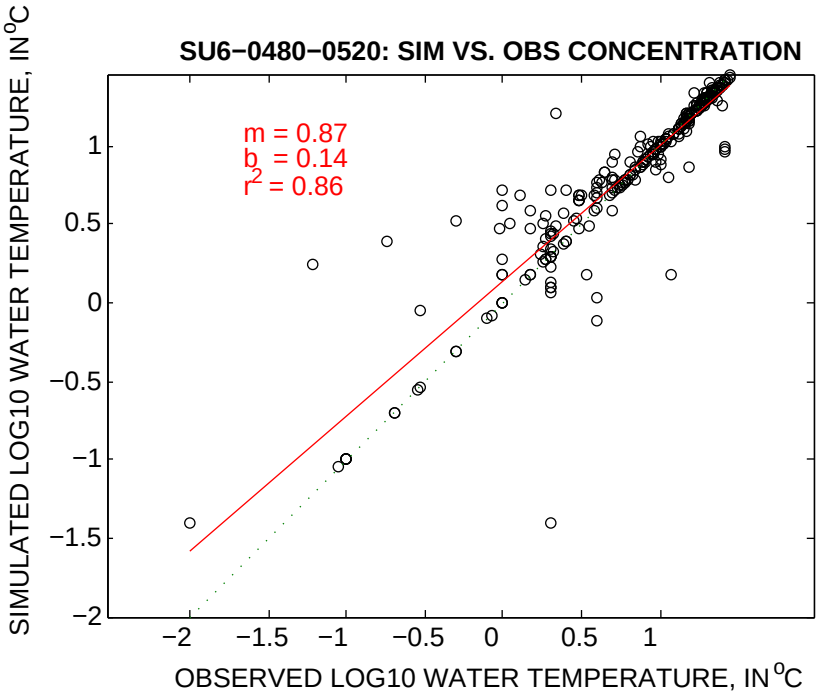
Drive: N/A | Directory: model | Observed: OBS20161101

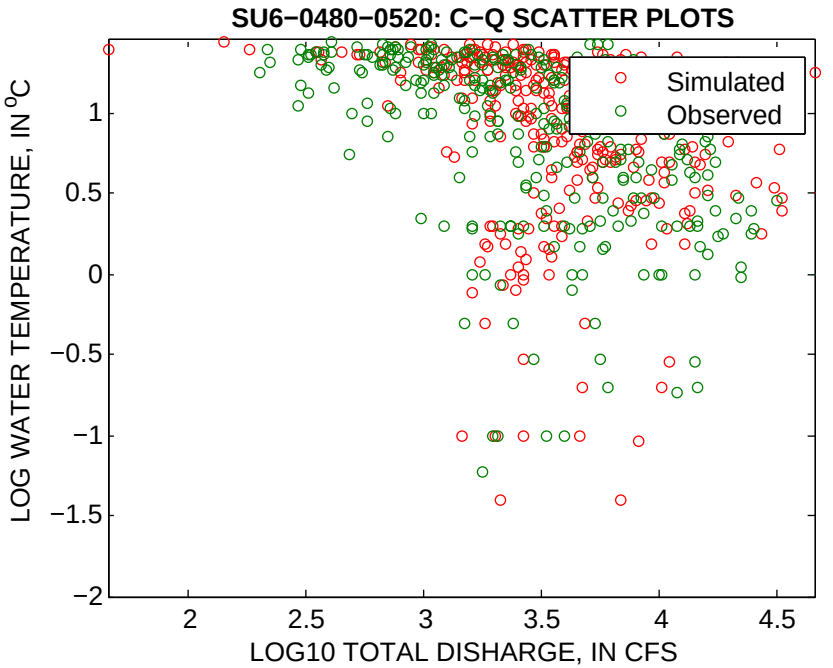
STATISTICS

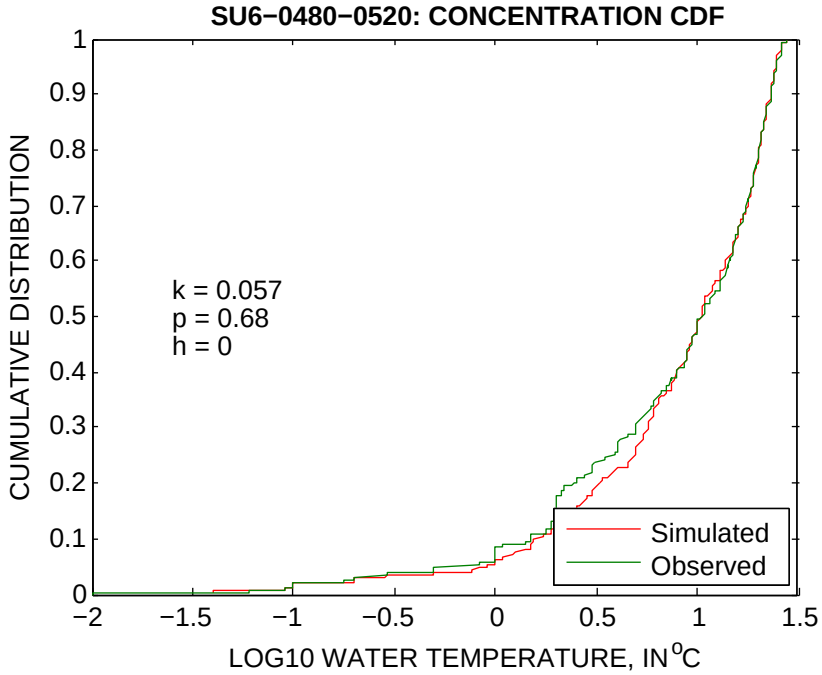
		observe	simulate
n		316	316
min		0.01	0.040036
		-2	-1.39755
mean		11.7103	12.1136
		0.859867	0.9041
media		10.65	10.4845
		1.02731	1.02053
max		28	30.377
		1.44716	1.48254
varian		67.2141	64.9101
		0.31249	0.26592
JB		0.001004	0.001853
		0.001	0.001
		ra	log
%		3.44376	5.14408
err.va		9.84577	0.107125
rel.std.err		0.146484	0.34281
mod.eff		0.853516	0.65719

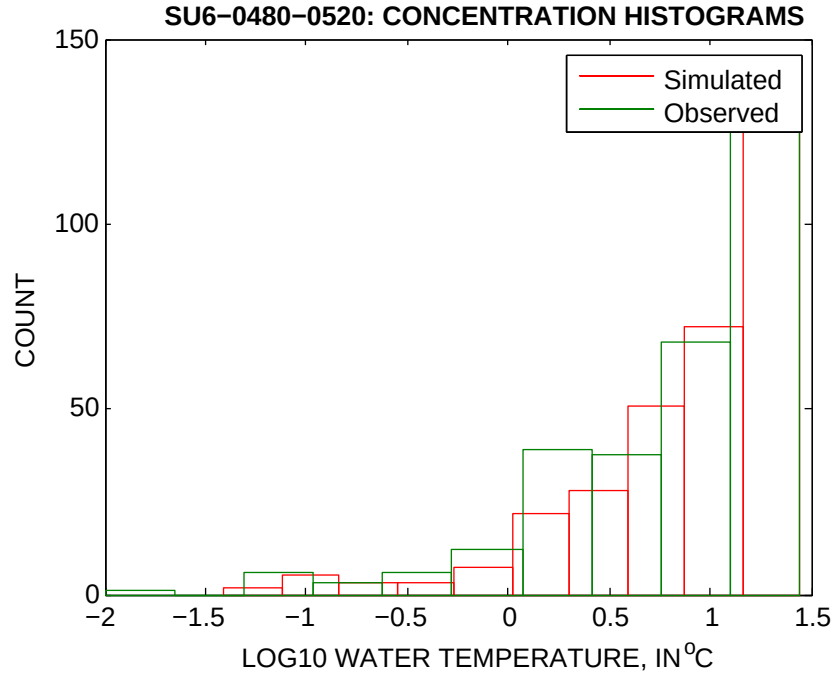
VERSION 2.1

ALL DATA
LOG10

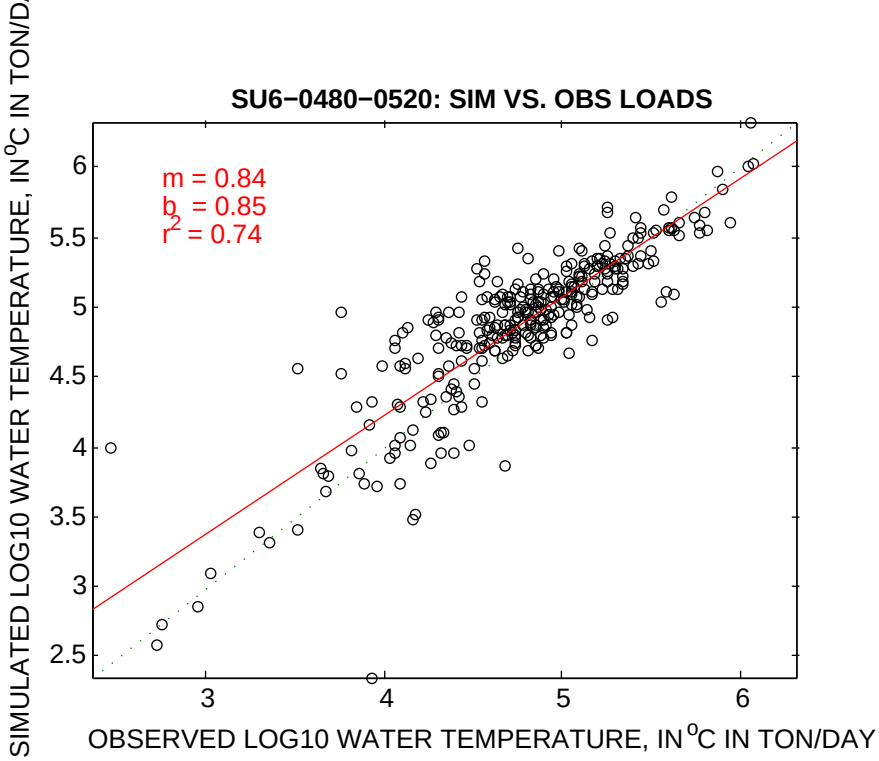


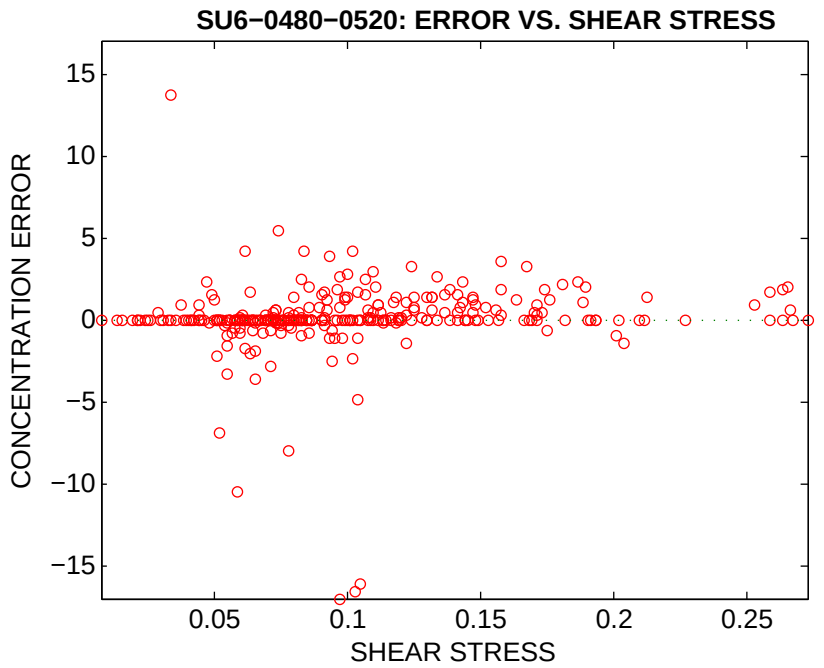


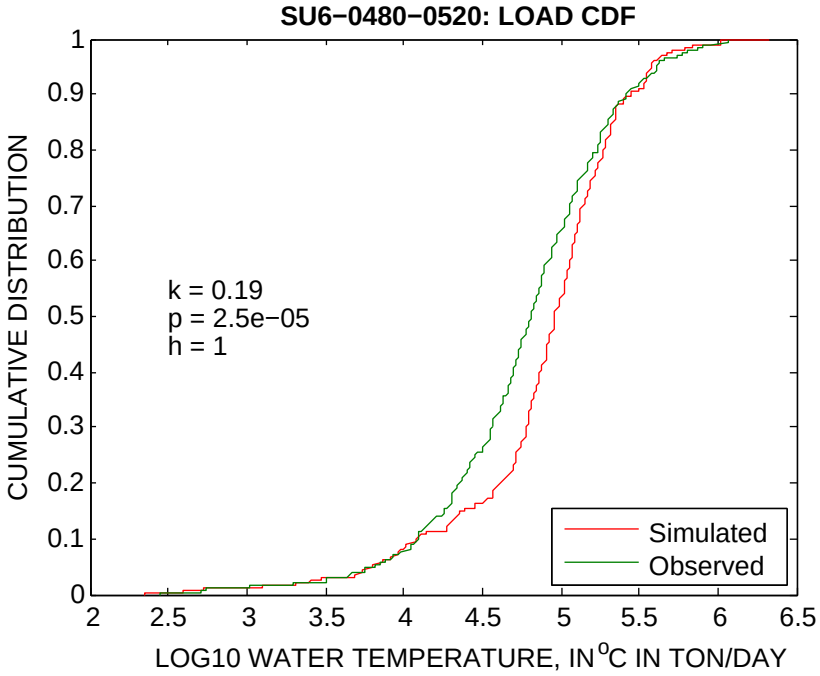


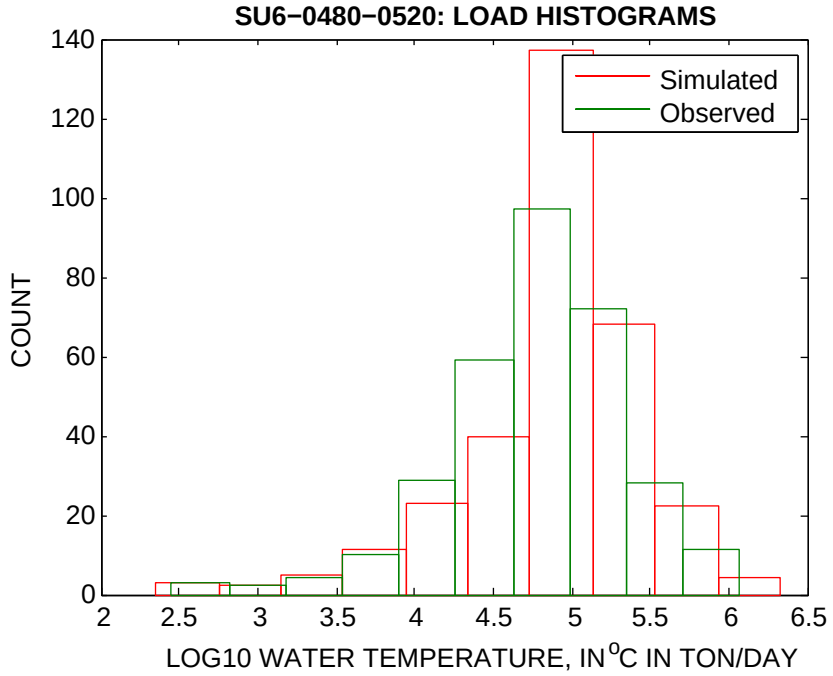


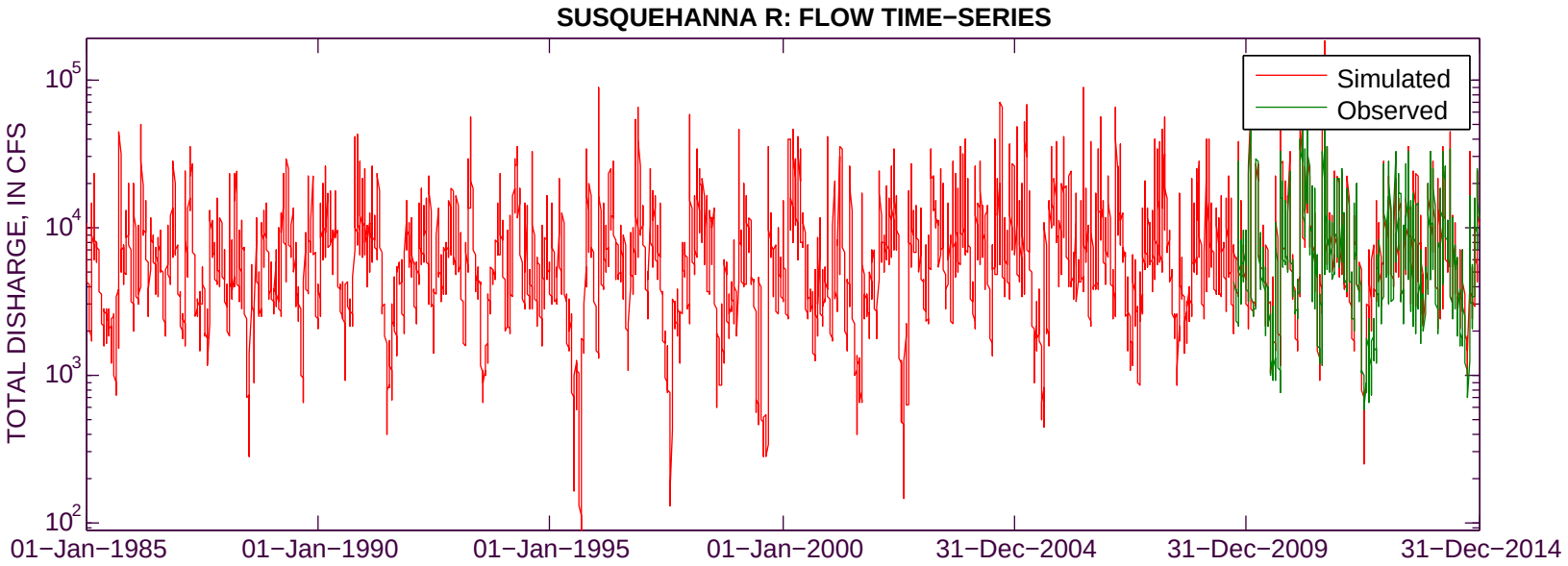
LOAD DATA
LOG10

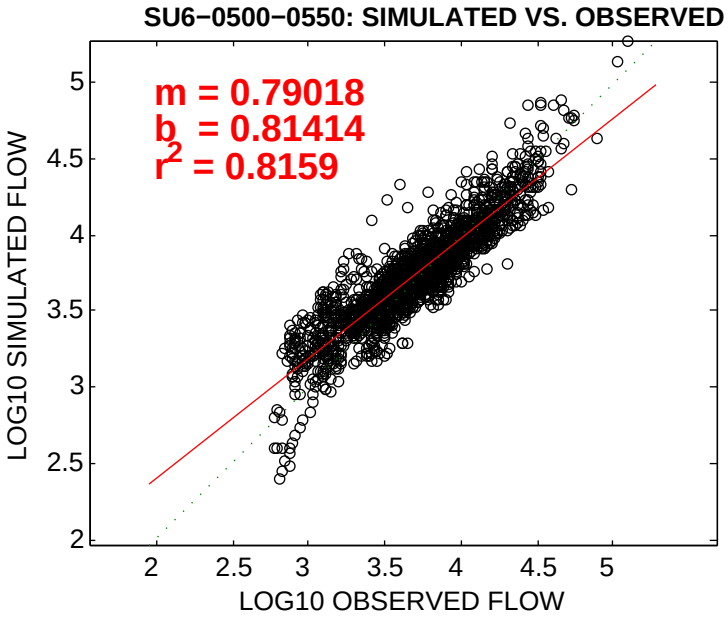


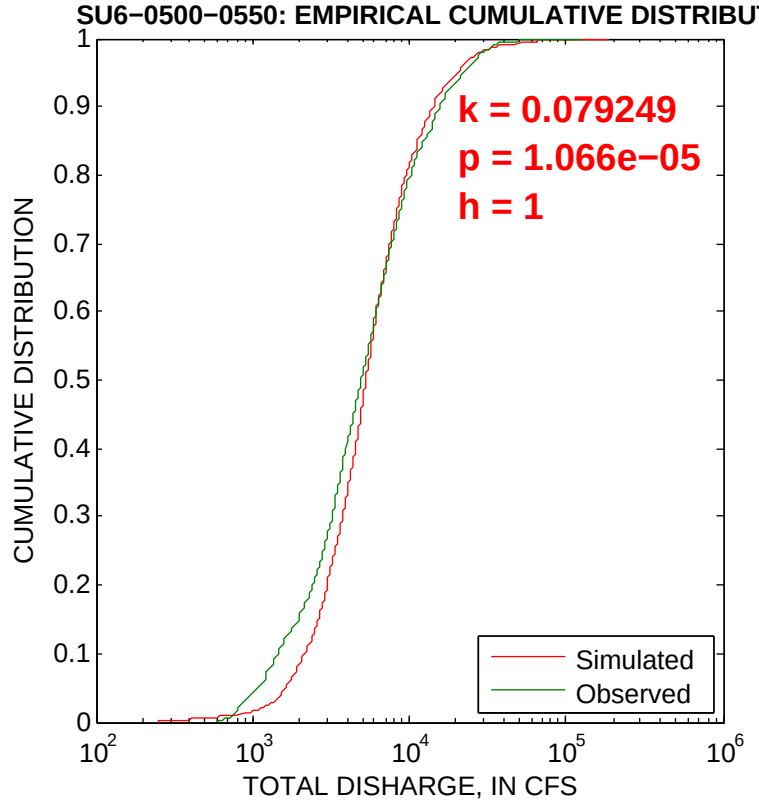












DATA SELECTION

scenario: P620171001WQ | file: FLOW.calib

plot: FLOW - total discharge

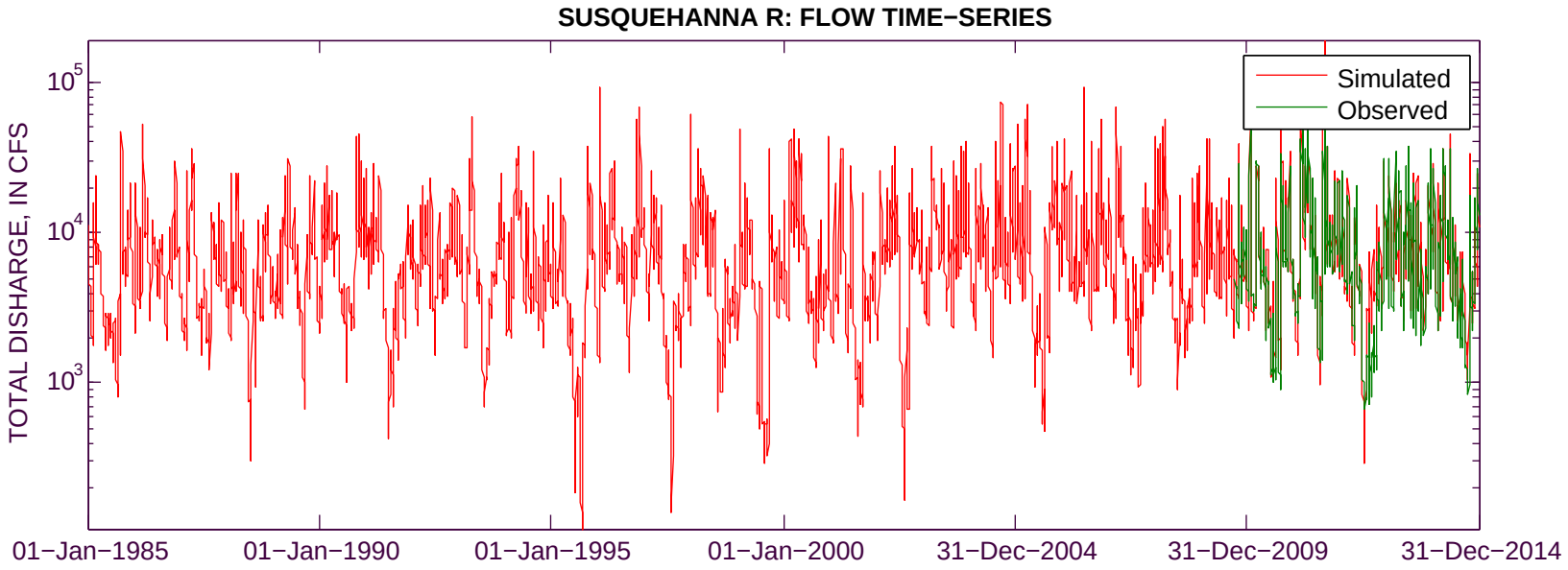
Dates: 1/1/1985 – 12/31/201

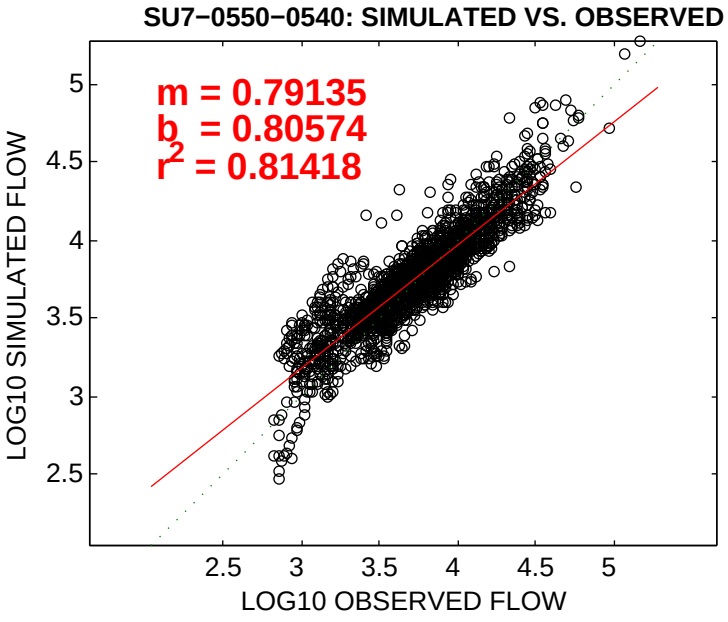
Drive: N/A | Directory: model | Observed: OBS20161101

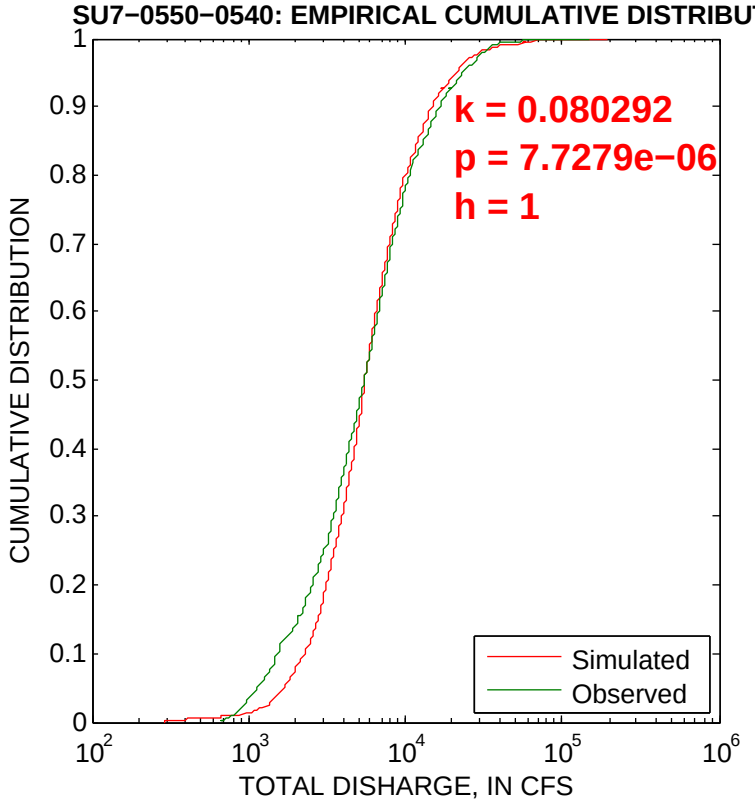
STATISTICS

		observe	simulate
n		1918	1918
min		587	247.8
		2.76864	2.3941
mean		7345.95	7514.2
		3.69586	3.73452
media		4925	5302.8
		3.69241	3.72451
max		124000	190120
		5.09342	5.27903
varian		6.50344e+0	8.24555e+
		0.146684	0.112252
JB		0.001	0.001
		0.187467	0.001
		ra	log
%		2.29047	1.04605
err.va		1.79638e+0	0.0286191
rel.std.err		0.27622	0.195107
mod.eff		0.72378	0.804893

VERSION 2.1







DATA SELECTION

scenario: P620171001WQ | file: FLOW.calib

plot: FLOW - total discharge

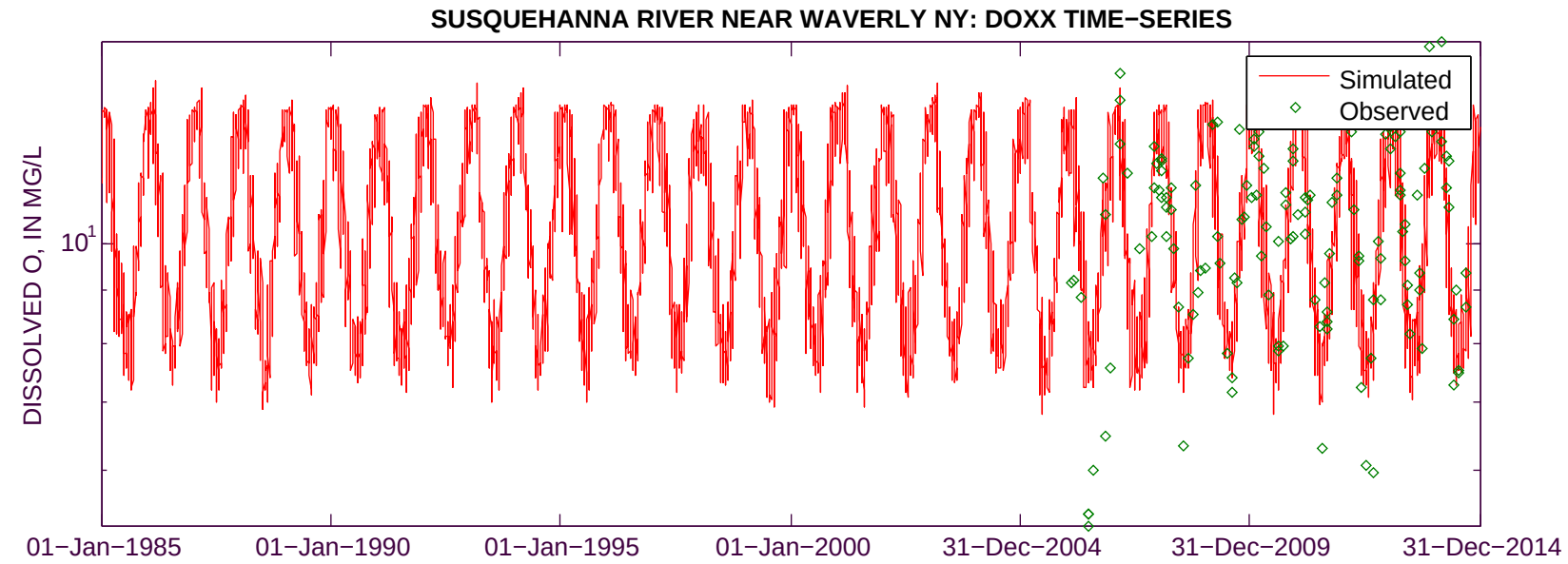
Dates: 1/1/1985 – 12/31/201

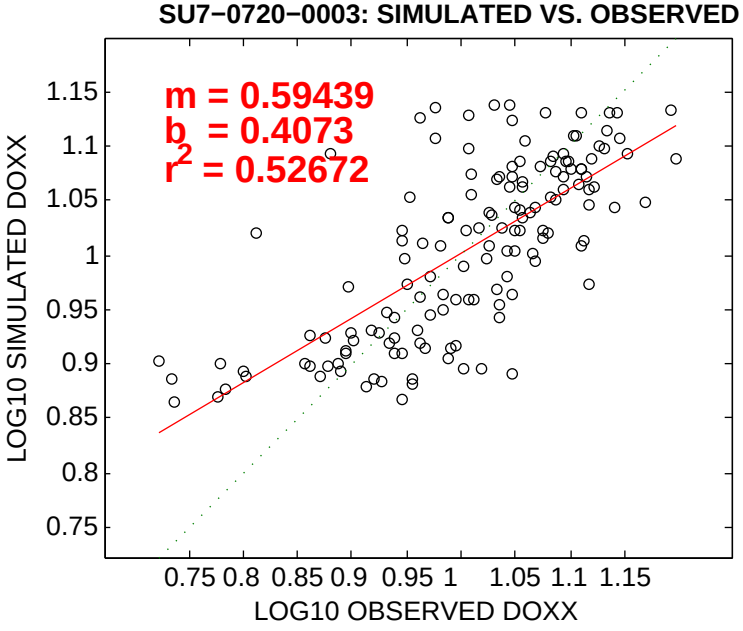
Drive | Directory: N/A | model | Observed: OBS20161101

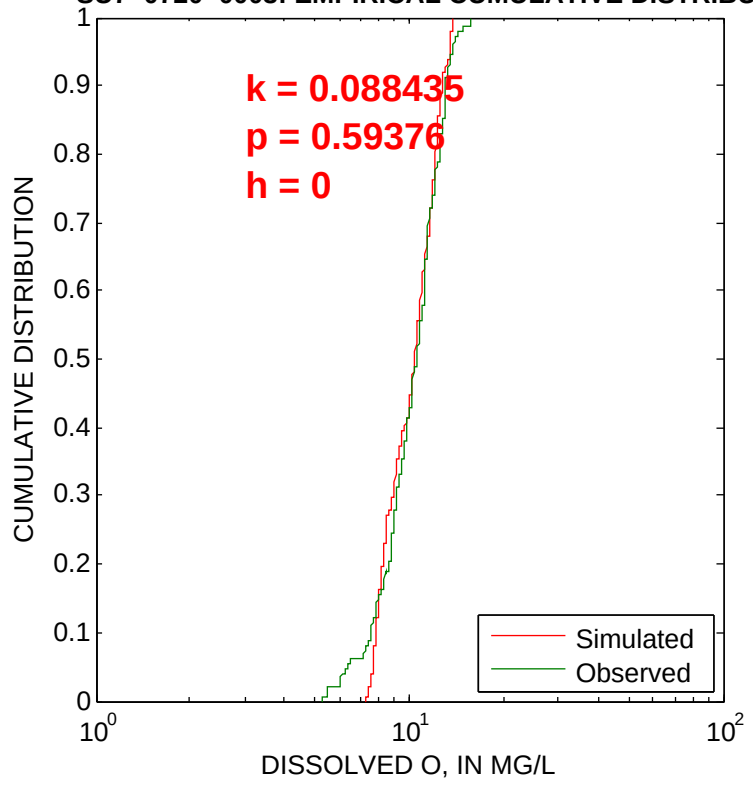
STATISTICS

		observe	simulate
n		1918	1918
min		663	291.57
		2.82151	2.46474
mean		7871.07	7881.99
		3.72716	3.75524
media		5490	5549.05
		3.73957	3.74422
max		150000	192330
		5.17609	5.28405
varian		7.77483e+0	9.06646e+
		0.145793	0.11214
JB		0.001	0.001
		0.388869	0.001
		ra	log
%		0.138768	0.753334
err.va		1.83022e+0	0.027974
rel.std.err		0.235403	0.191874
mod.eff		0.764597	0.808126

VERSION 2.1







DATA SELECTION

scenario: P620171001WQ | file: DOXX.calib

plot: DOXX - dissolved oxygen

Dates: 1/1/1985 – 12/31/201

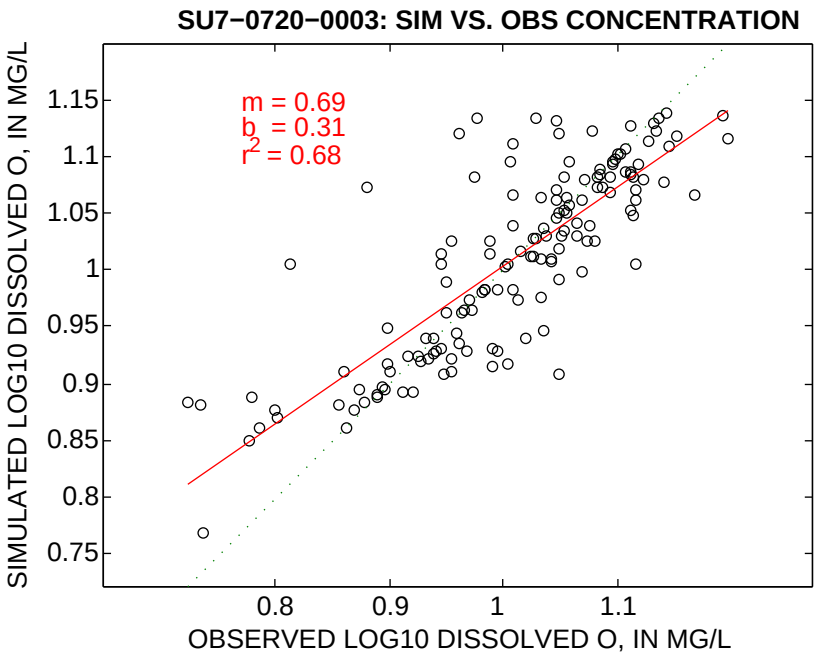
Drive: N/A | Directory: model | Observed: OBS20161101

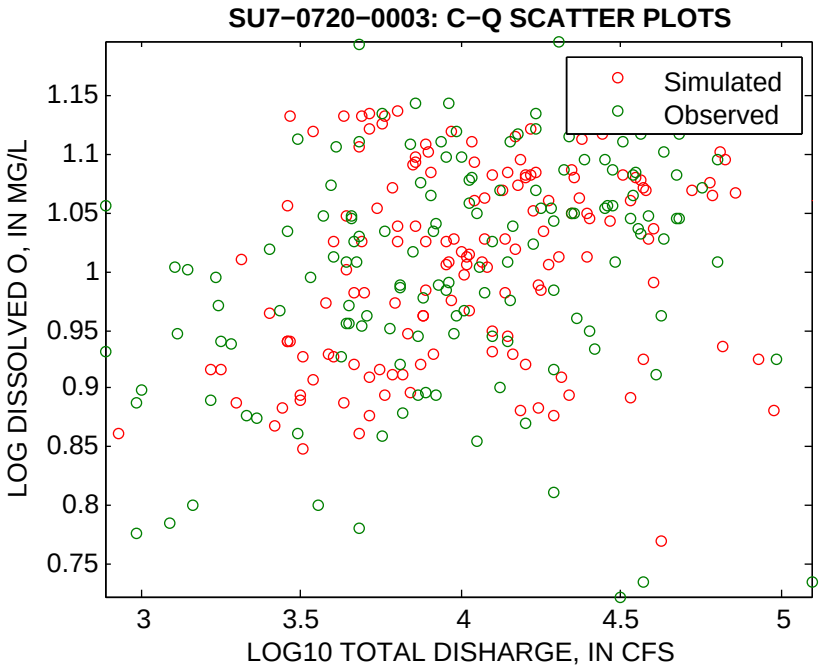
STATISTICS

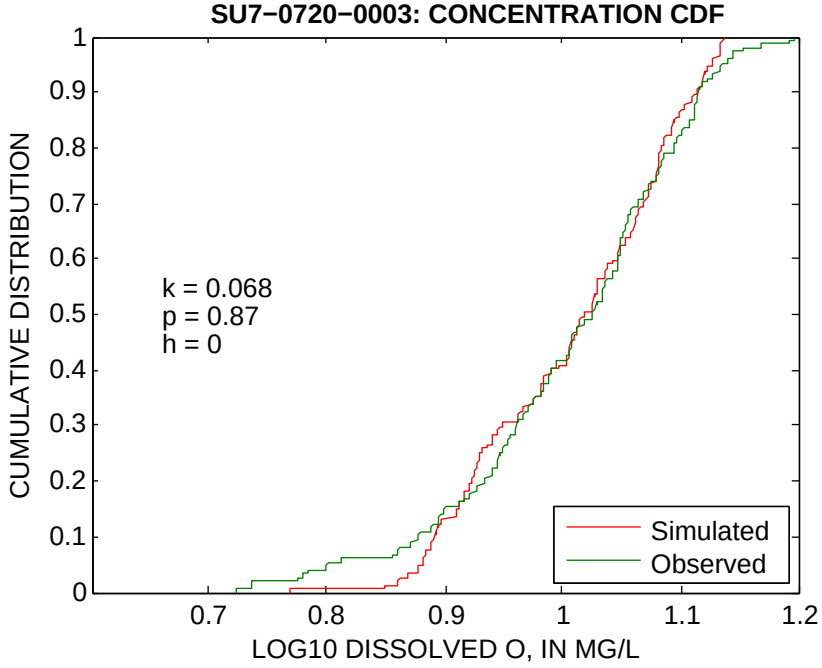
	n	observe	simulate
		147	147
min		5.28	7.3322
		0.722634	0.865234
mean		10.4022	10.3028
		1.00675	1.0057
media		10.61	10.449
		1.02572	1.01907
max		15.76	13.694
		1.19756	1.13653
varian		4.78898	3.49746
		0.00956049	0.00641278
JB		0.456931	0.018321
		0.010014	0.014664
		ra	log
%		-0.955875	-0.103627
err.va		2.43604	0.00460899
rel.std.err		0.508677	0.482087
mod.eff		0.491323	0.517913

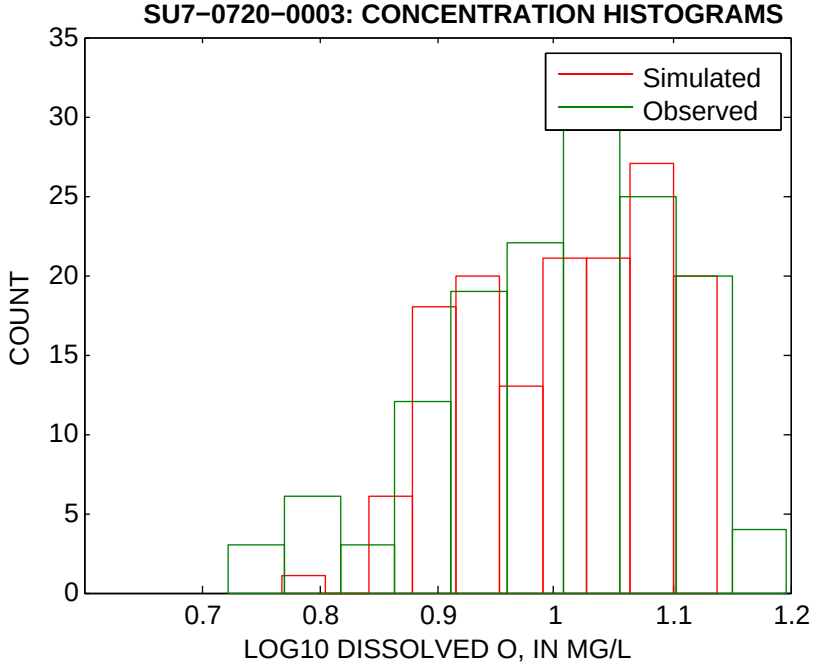
VERSION 2.1

ALL DATA
LOG10

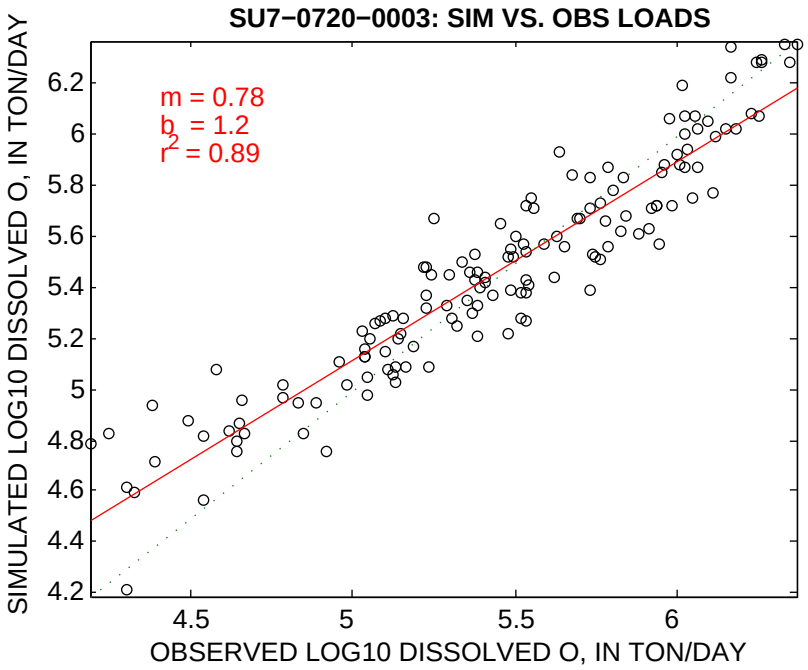


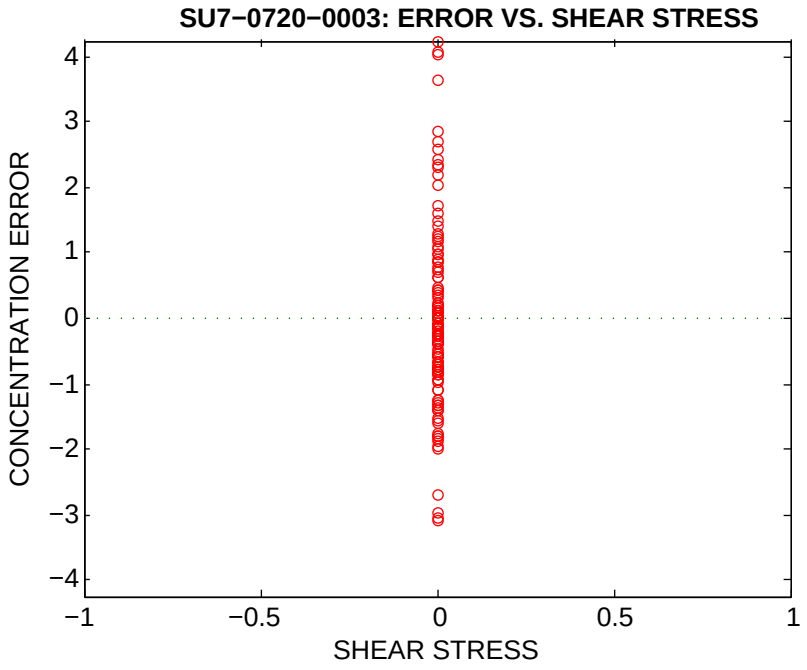


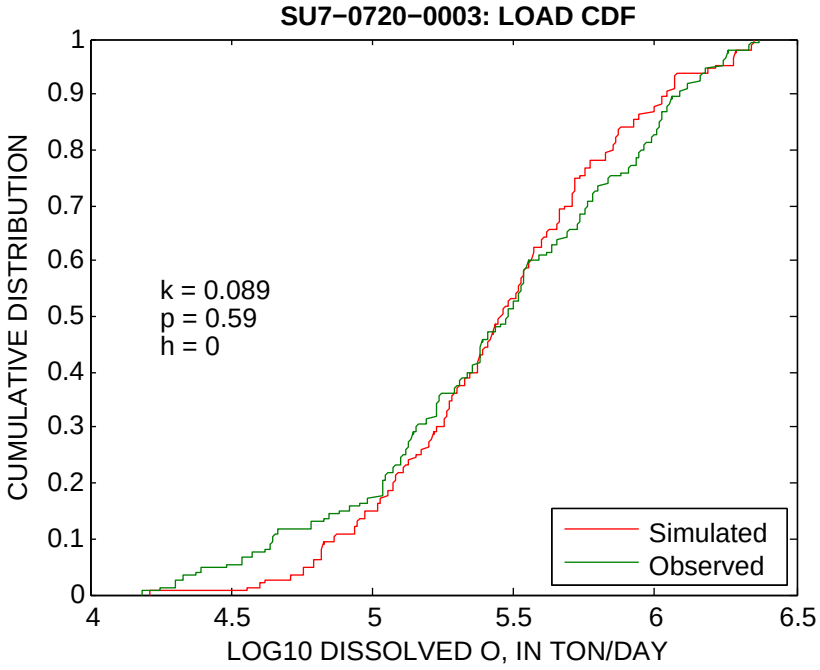


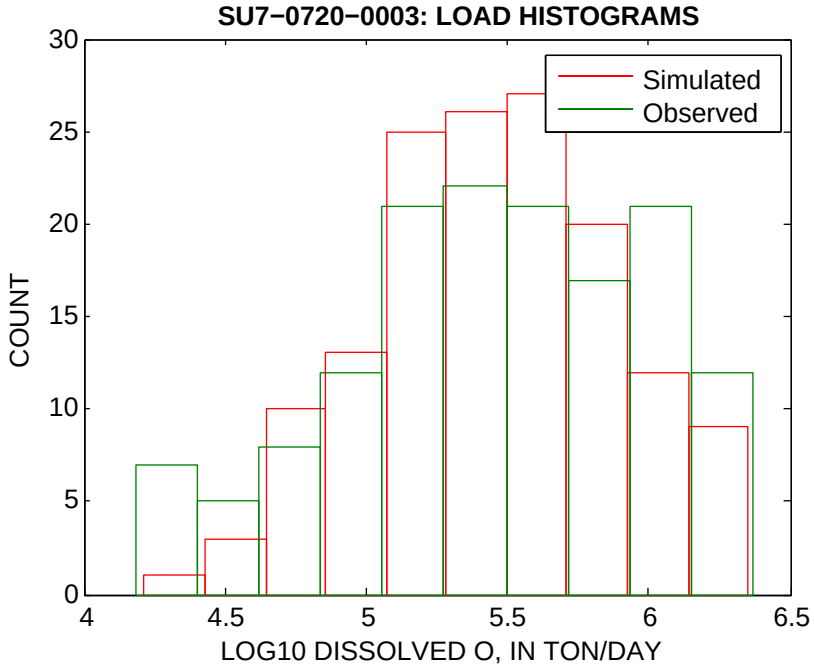


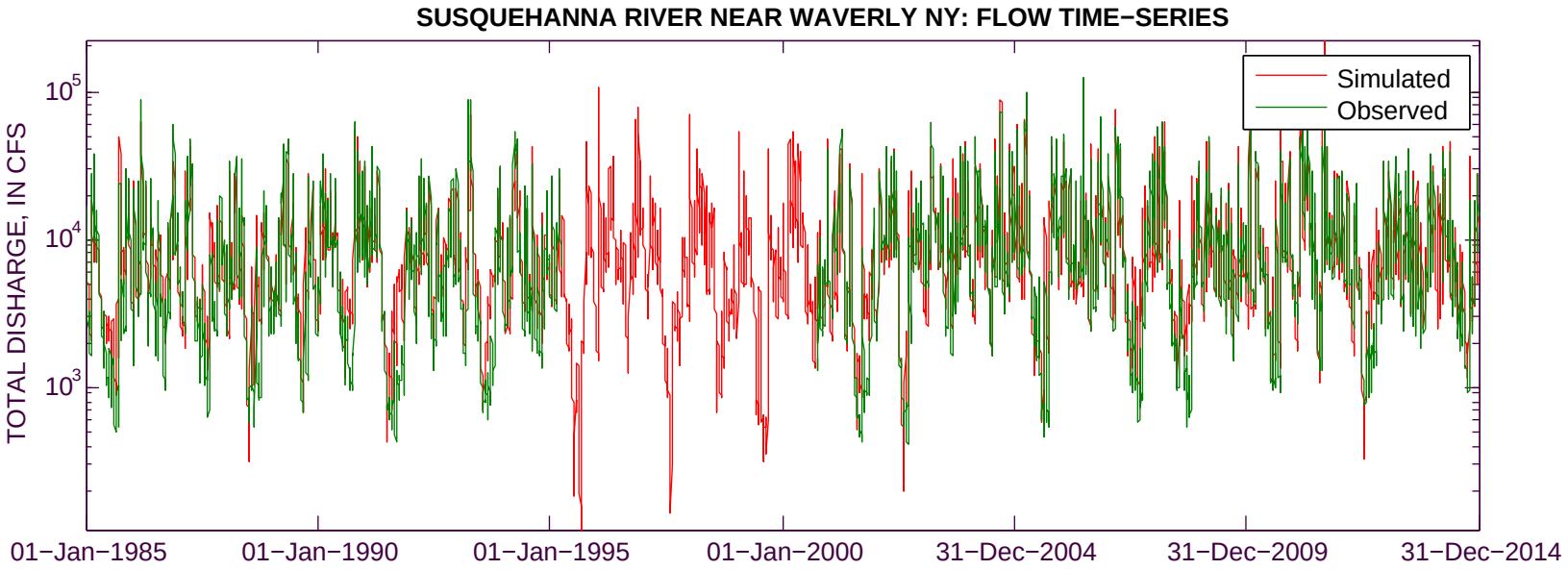
LOAD DATA
LOG10

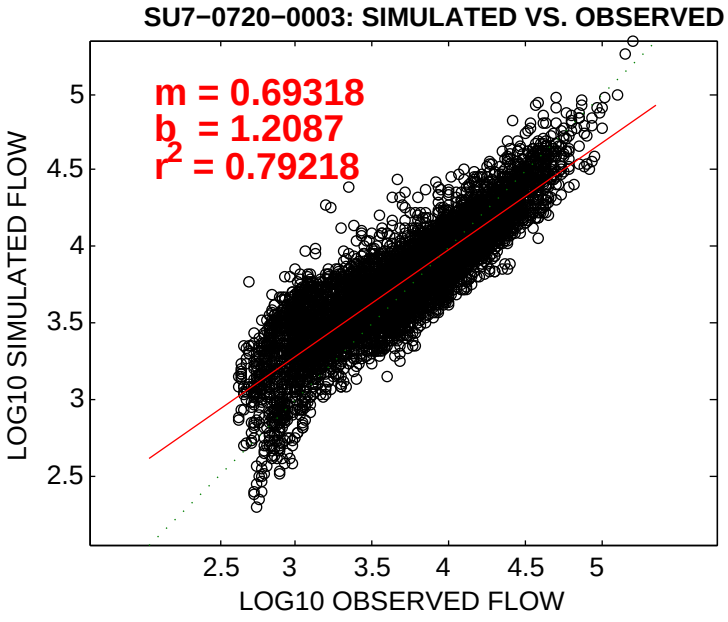


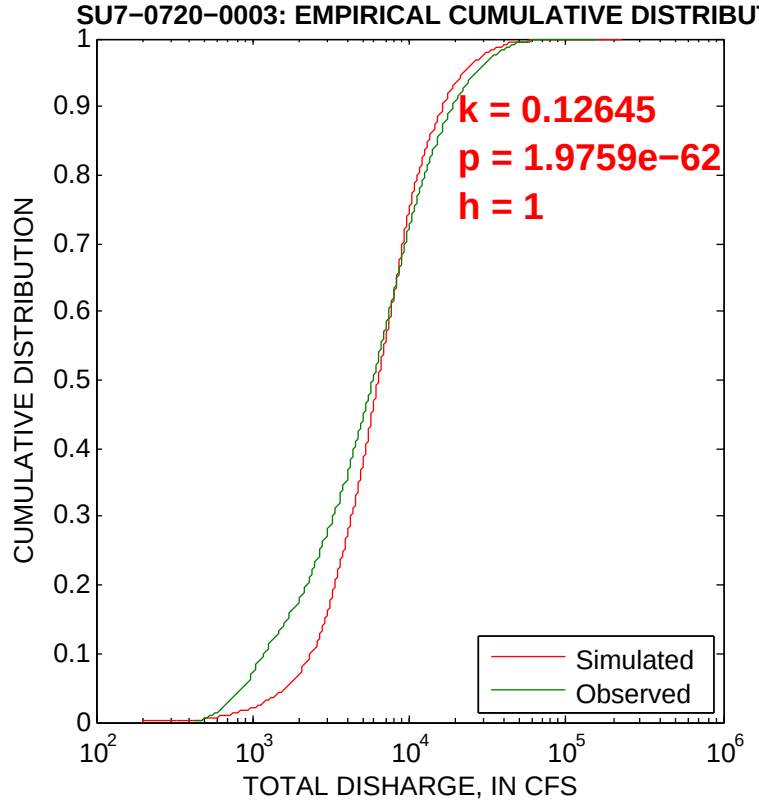












DATA SELECTION

scenario	file
P620171001WQ	FLOW.calib

plot: FLOW - total discharge

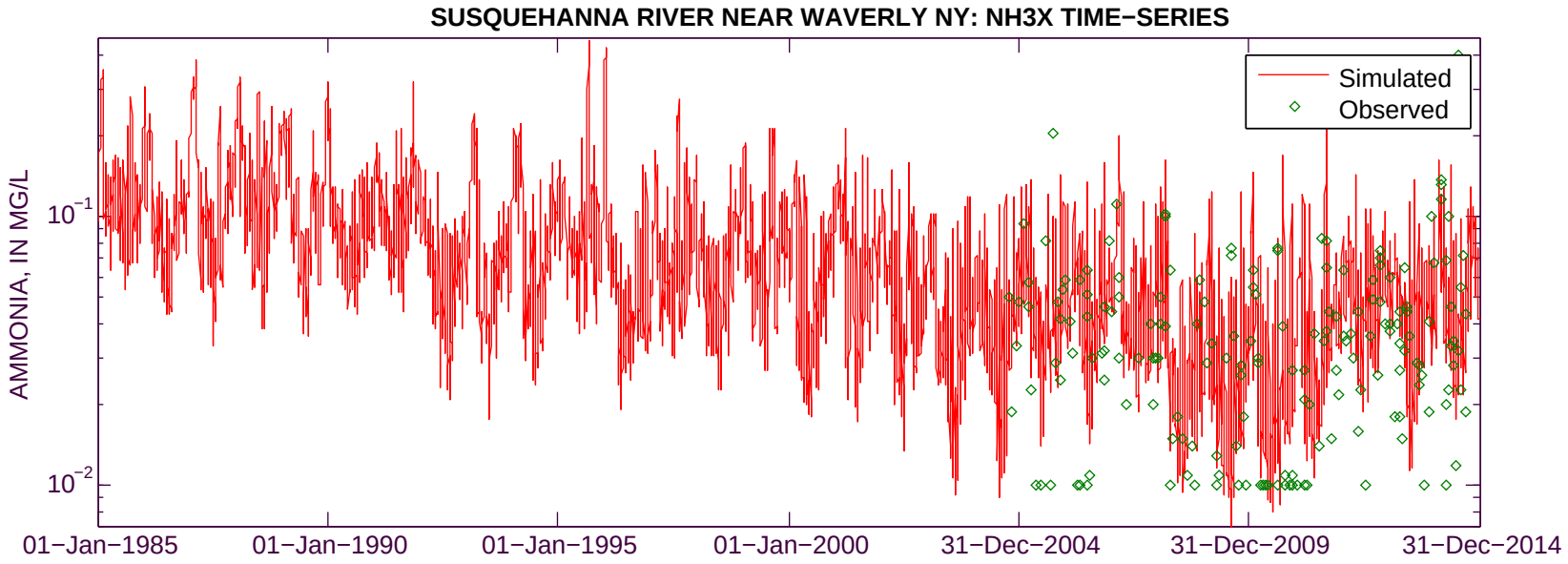
Dates: 1/1/1985 – 12/31/201

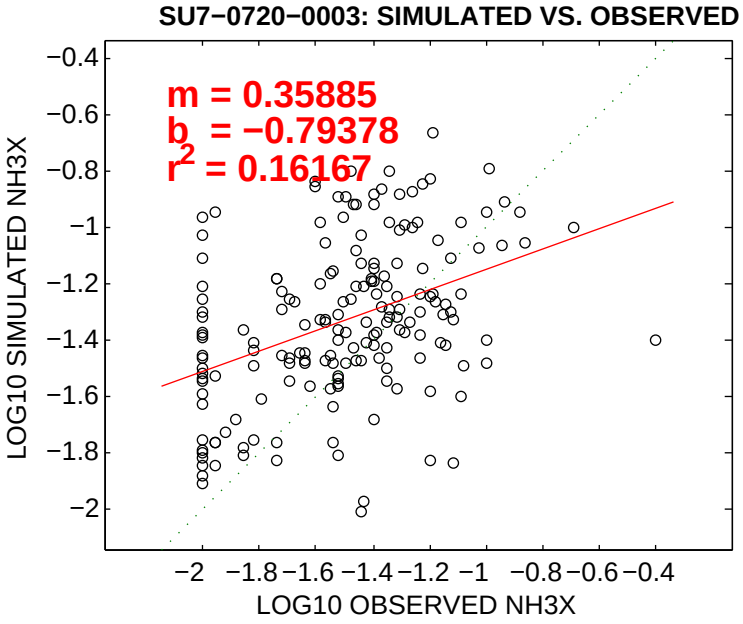
Drive	Directory	Observed
N/A	model	OBS20161101

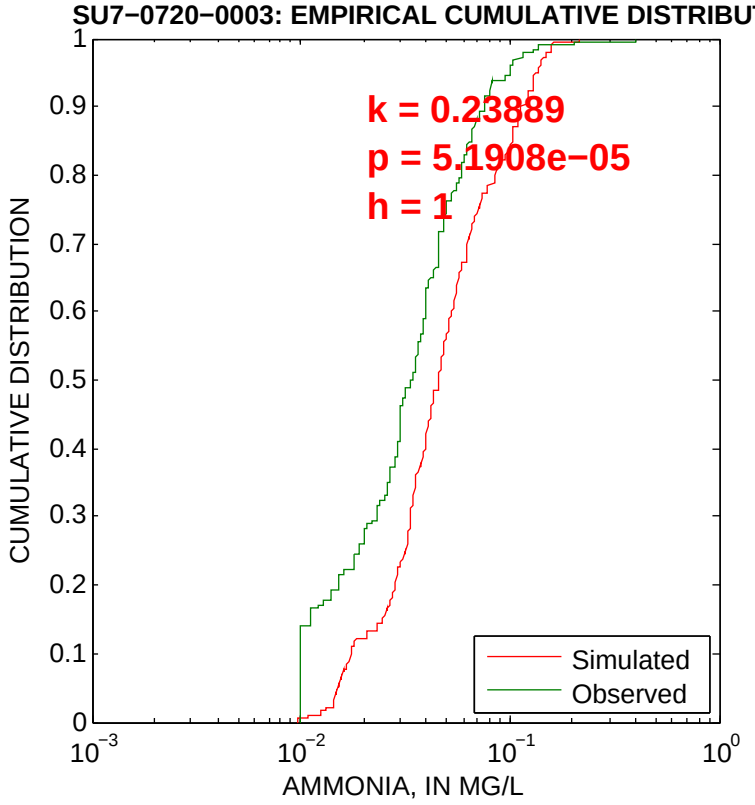
STATISTICS

	observe	simulate
n	8897	8897
min	415	197.35
	2.61805	2.29524
mean	8675.11	8506.93
	3.72955	3.79399
media	5870	6341.8
	3.76864	3.80221
max	156000	224190
	5.19312	5.35062
varian	9.49079e+0	7.25008e+
	0.196496	0.119185
JB	0.001	0.001
	0.001	0.001
	ra	log
%	-1.93863	1.72793
err.va	2.04099e+0	0.0474196
rel.std.err	0.215049	0.241327
mod.eff	0.784951	0.758673

VERSION 2.1







DATA SELECTION

scenario: P620171001WQ; file: NH3X.calib

plot: NH3X - ammonia

Dates: 1/1/1985 – 12/31/201

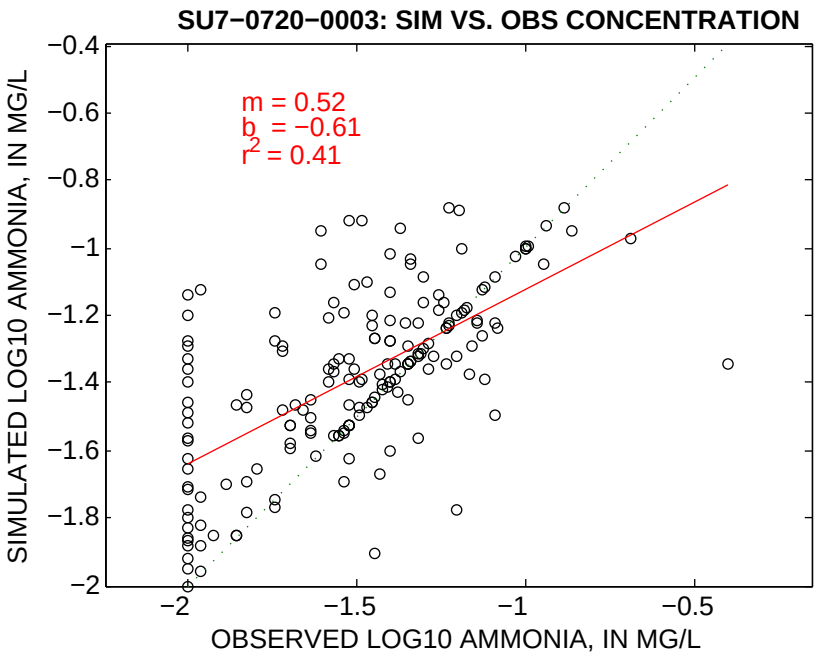
Drive: N/A; Directory: model; Observed: OBS20161101

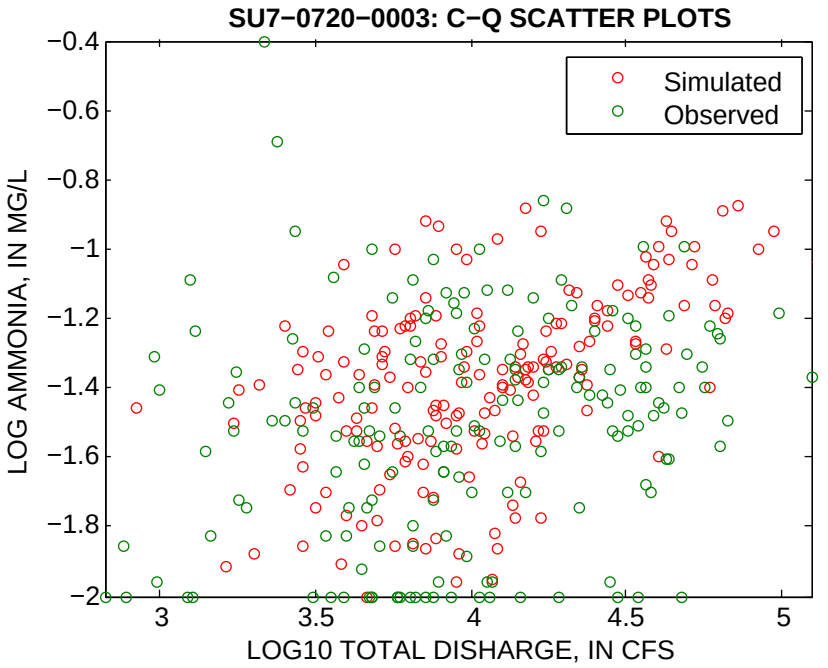
STATISTICS

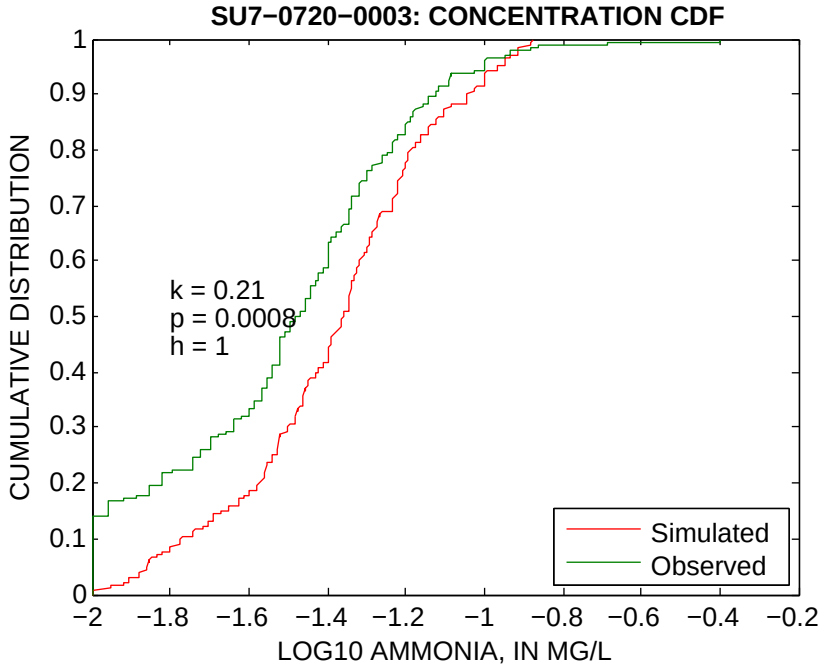
		observe	simulate
n		180	180
min		0.01	0.0097752
		-2	-2.00987
mean		0.041155	0.0569146
		-1.5035	-1.33332
media		0.0335	0.0459495
		-1.475	-1.33772
max		0.4	0.21581
		-0.39794	-0.665928
varian		0.00152581	0.0014198
		0.099654	0.0793765
JB		0.001	0.001
		0.5	0.338795
		ra	log
%		38.2931	-11.3194
err.va		0.00251989	0.136634
rel.std.err		1.65151	1.37108
mod.eff		-0.651508	-0.371084

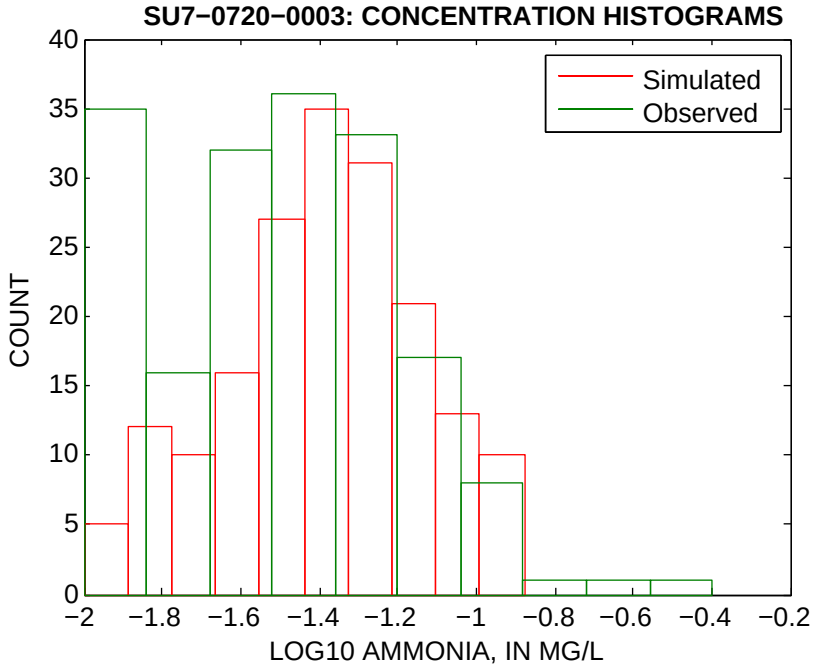
VERSION 2.1

ALL DATA
LOG10

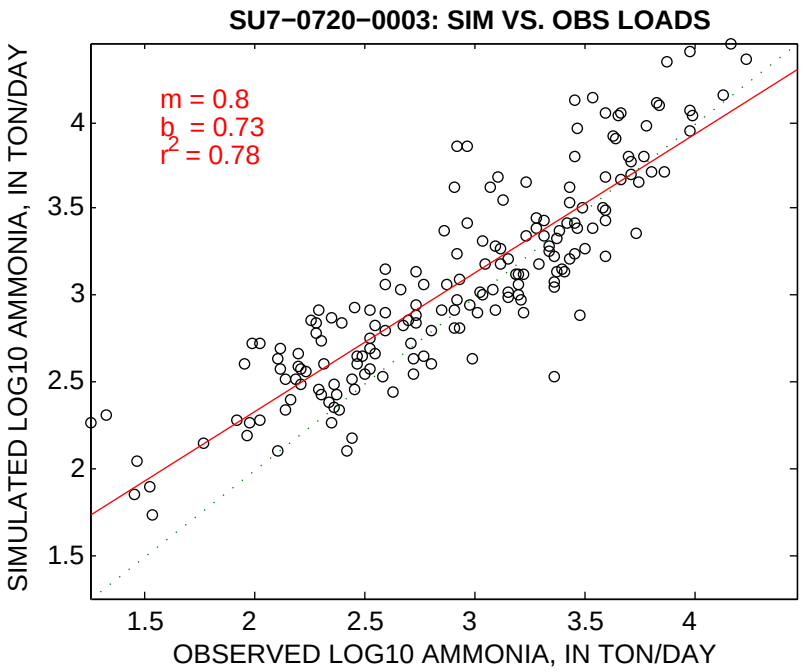


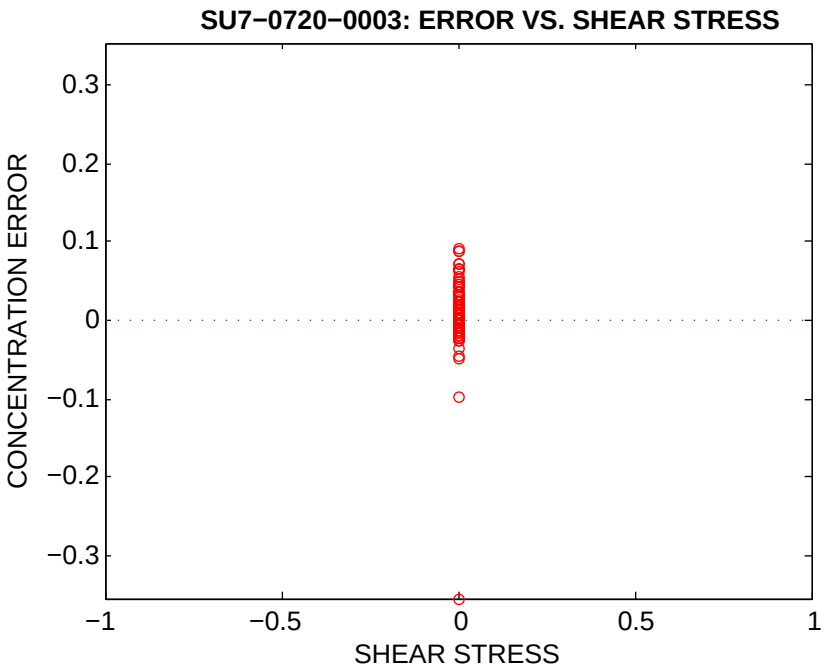


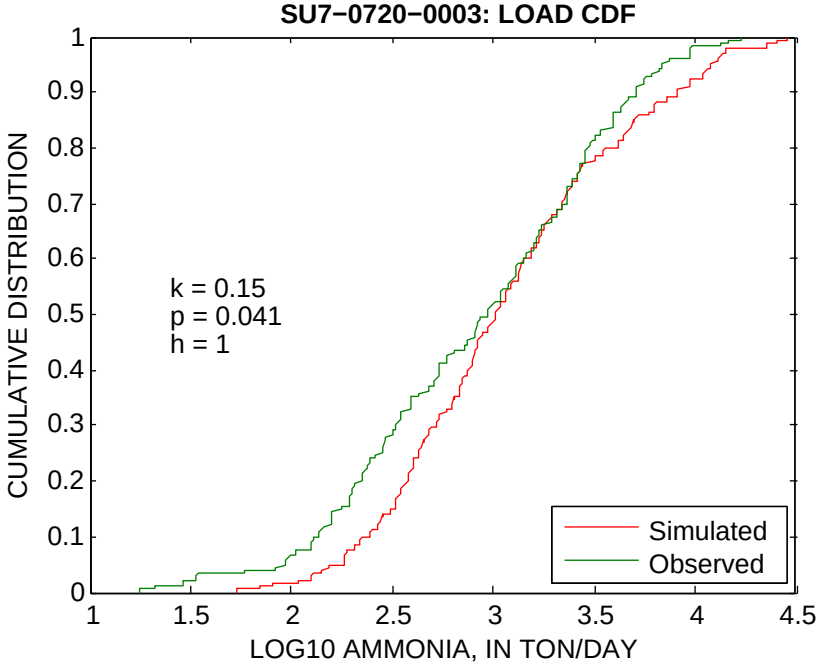


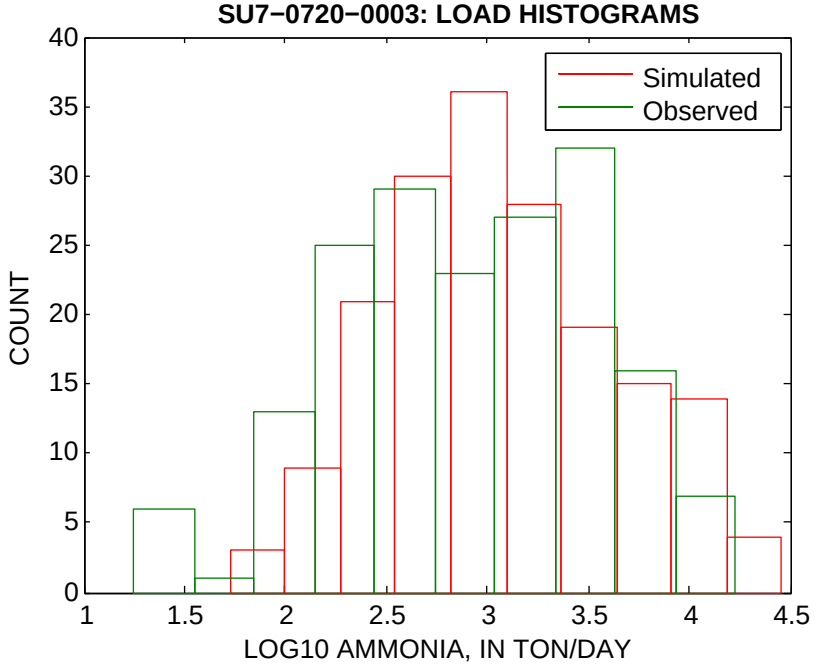


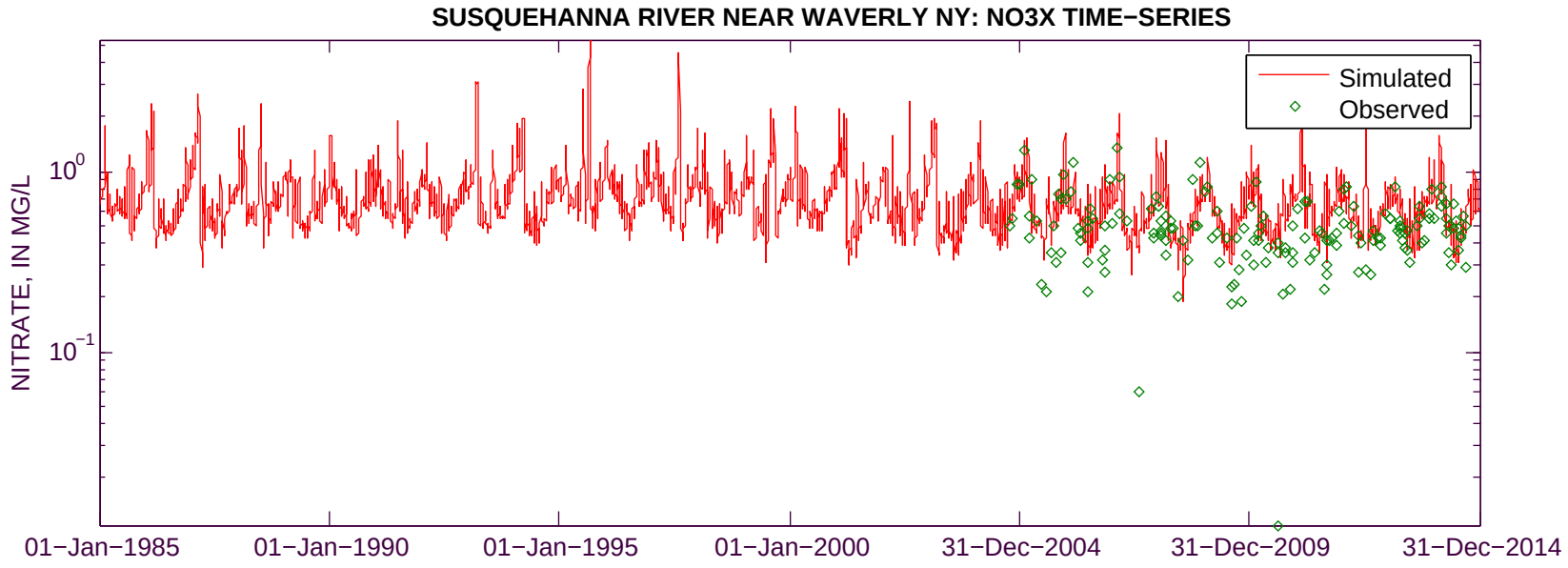
LOAD DATA
LOG10

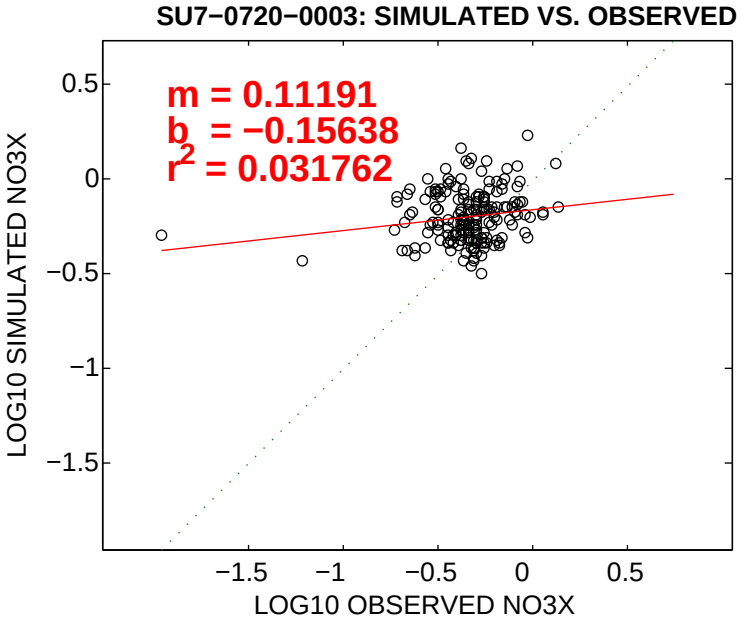


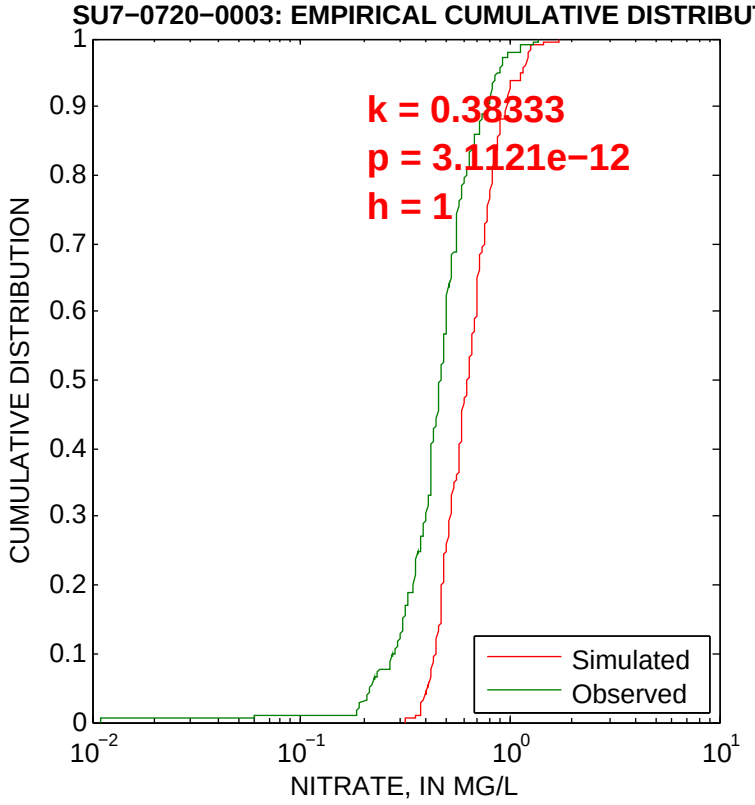












DATA SELECTION

scenario	file
P620171001WQ	NO3X.calib

plot: NO3X - nitrate

Dates: 1/1/1985 – 12/31/201

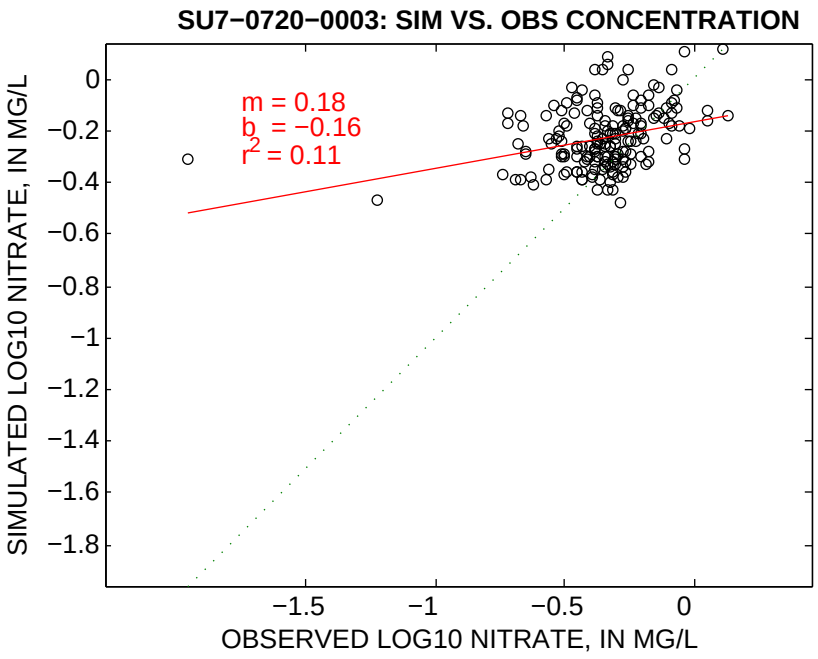
Drive	Directory	Observed
N/A	model	OBS20161101

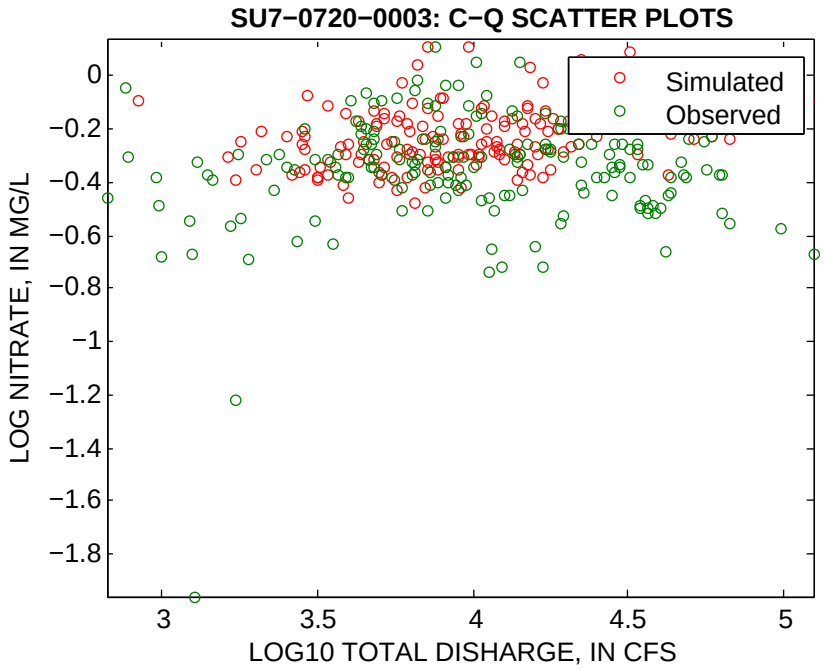
STATISTICS

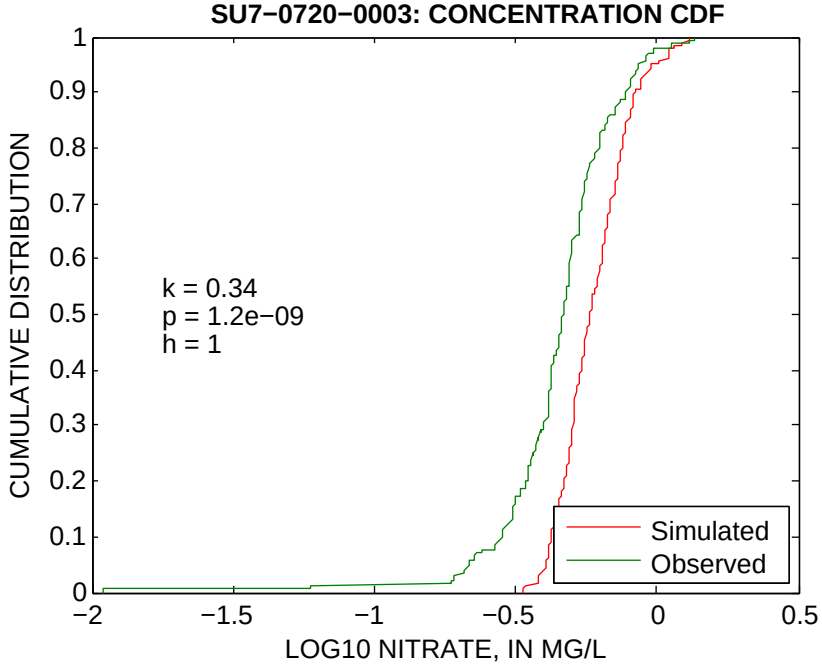
	n	180	180
		observe	simulate
min		0.011	0.31405
		-1.95861	-0.503001
mean		0.495178	0.670693
		-0.346219	-0.195125
media		0.4665	0.628875
		-0.331151	-0.201447
max		1.36	1.7051
		0.133539	0.23175
varian		0.0421185	0.0509464
		0.046076	0.0181687
JB		0.001	0.001
		0.001	0.060980
		ra	log
%		35.4448	-43.6411
err.va		0.105407	0.0768886
rel.std.err		2.50264	1.66873
mod.eff		-1.50264	-0.668734

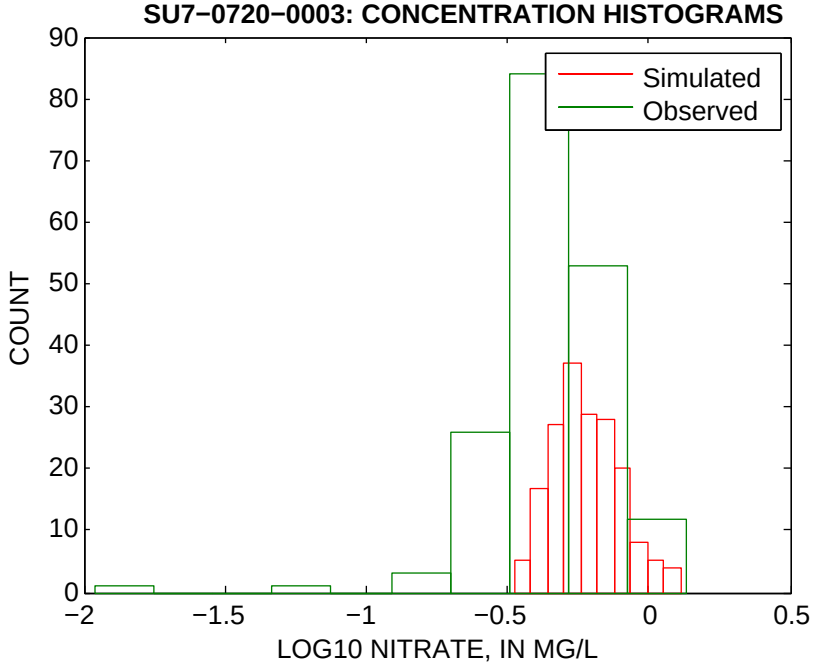
VERSION 2.1

ALL DATA
LOG10

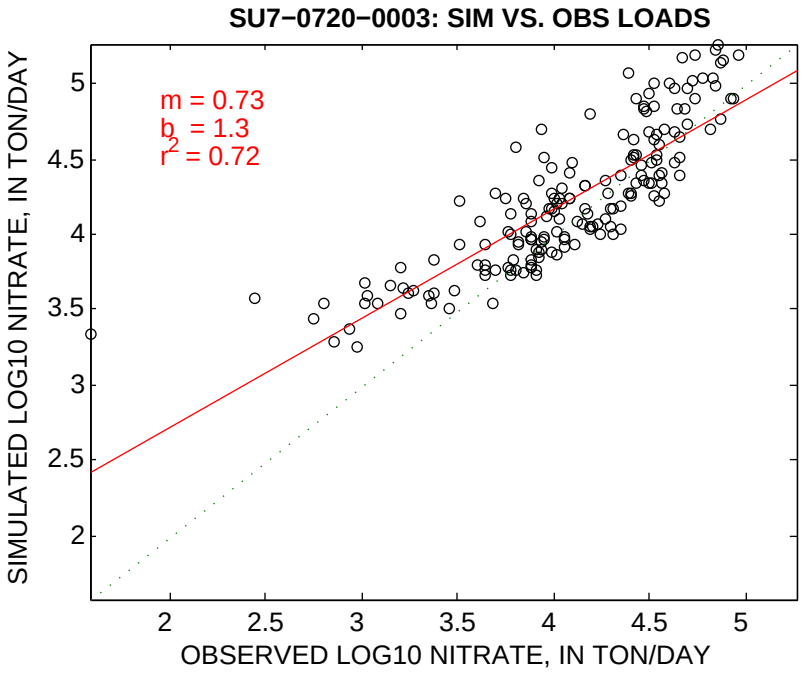




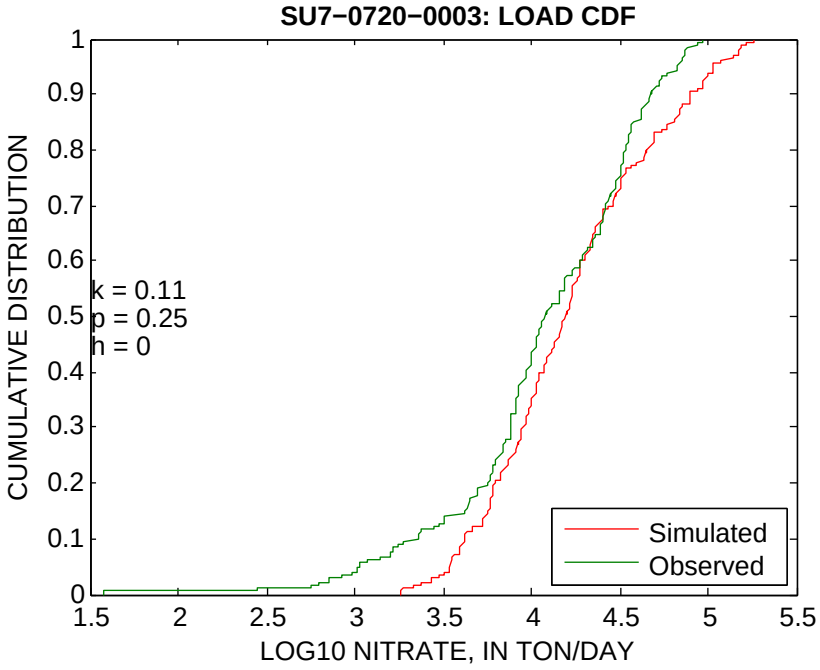


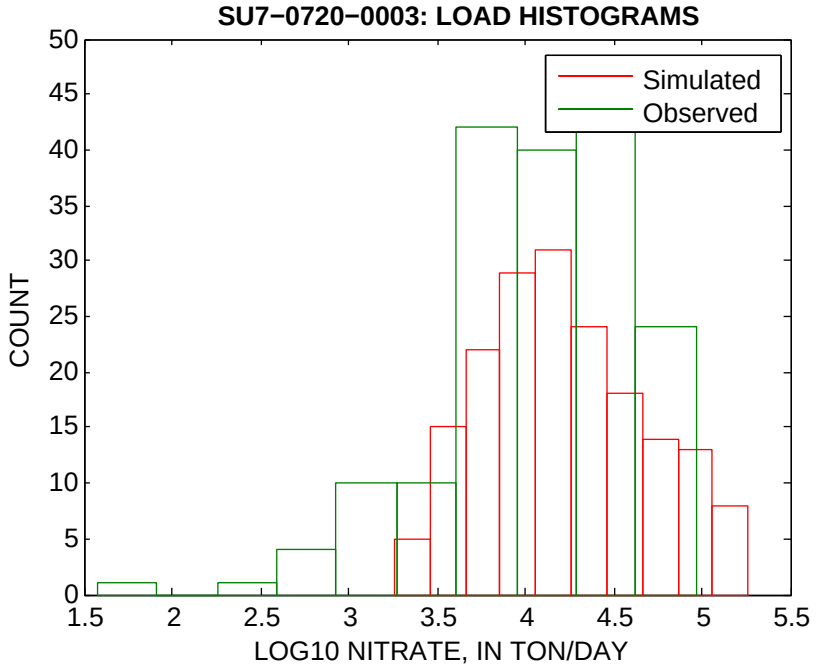


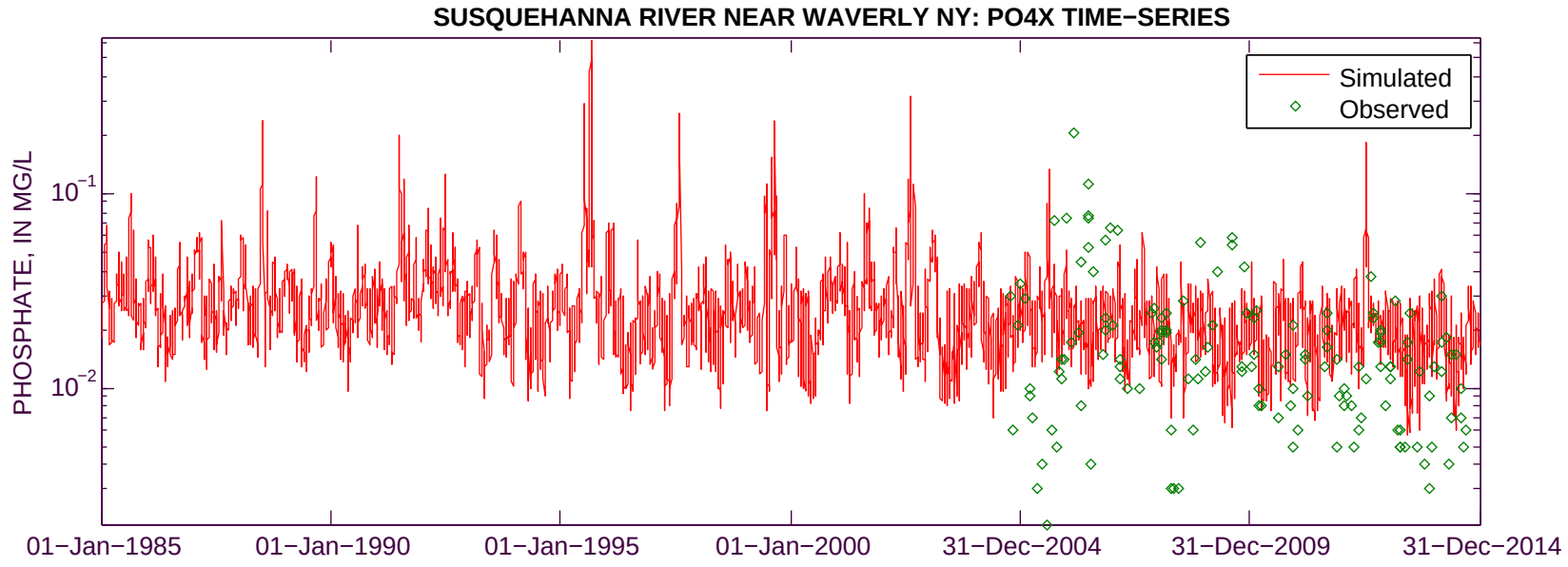
LOAD DATA
LOG10

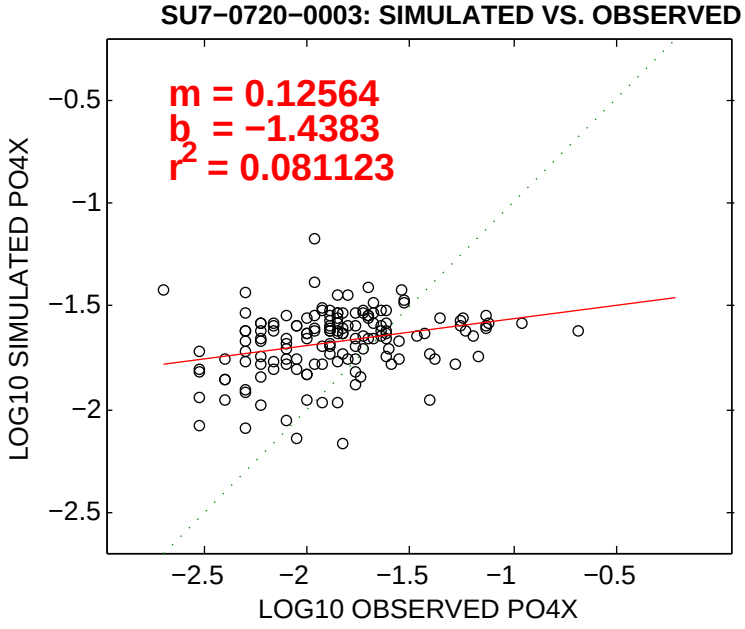


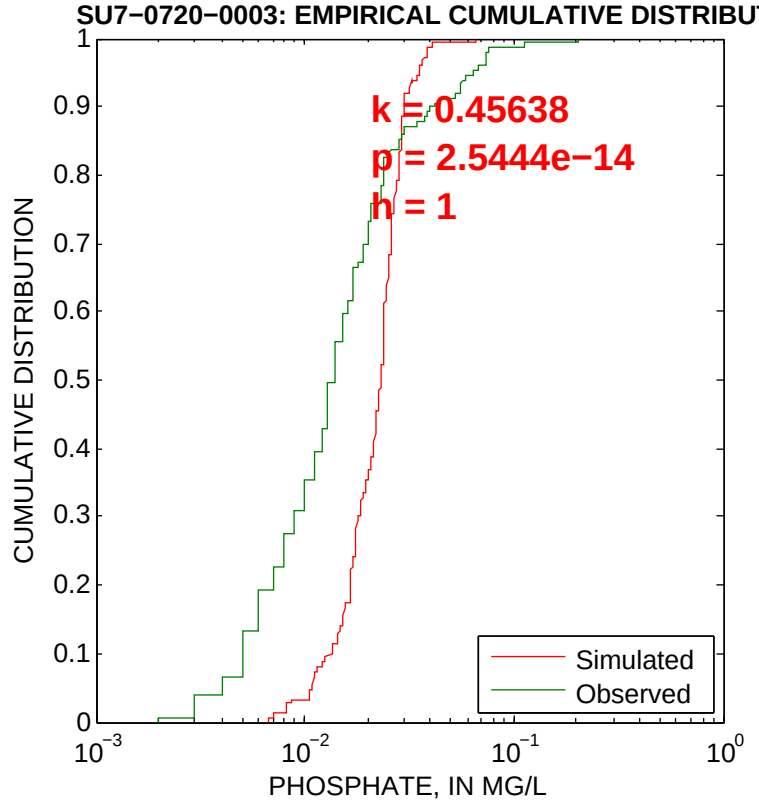












DATA SELECTION

scenario: P620171001WQ | file: PO4X.calib

plot: PO4X - phosphate

Dates: 1/1/1985 – 12/31/201

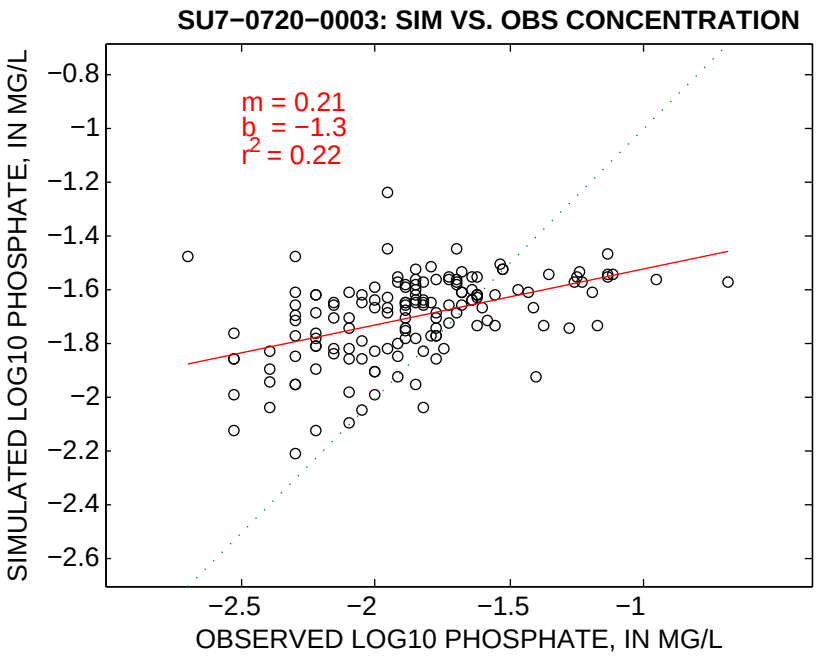
Drive: N/A | Directory: model | Observed: OBS20161101

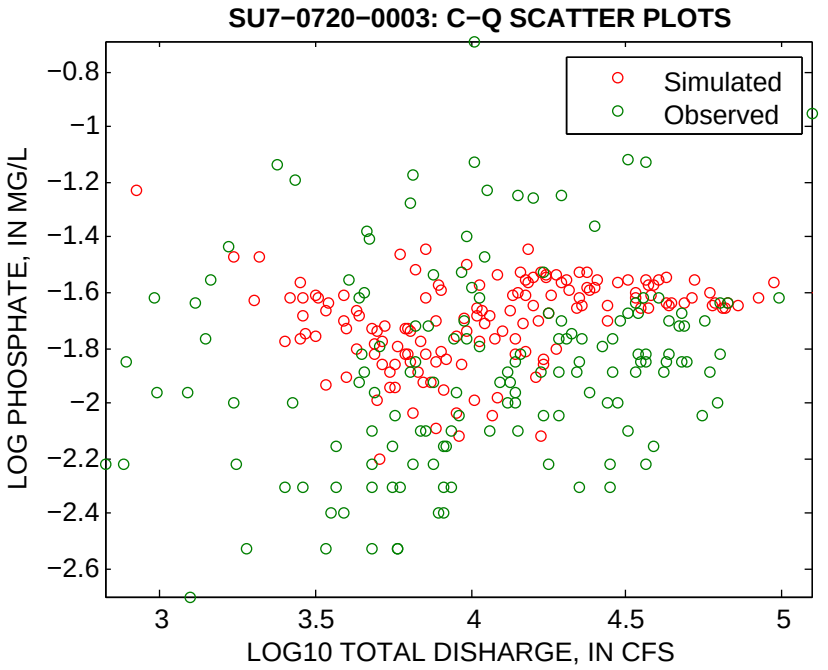
STATISTICS

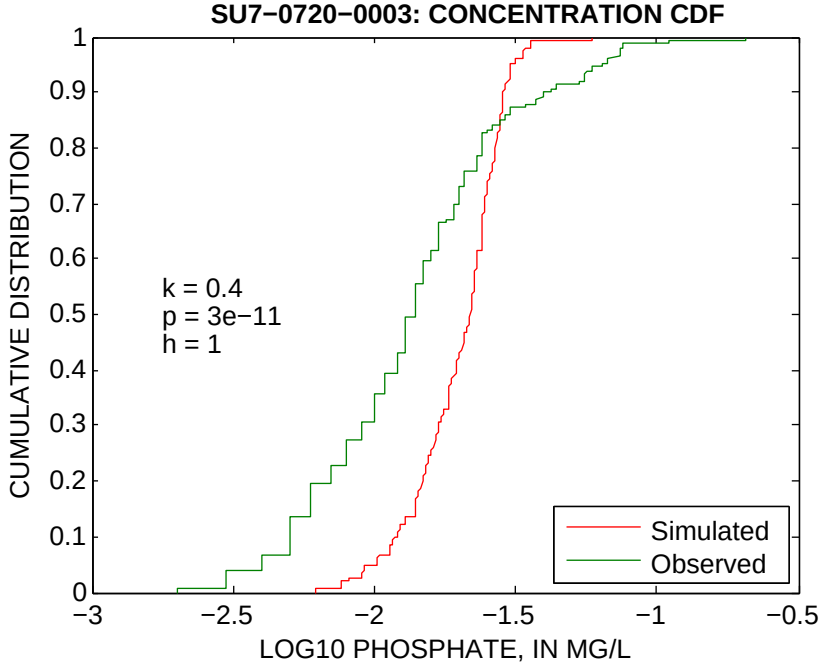
	observe	simulate
n	149	149
min	0.002	0.0067734
	-2.69897	-2.16919
mean	0.0198188	0.0225715
	-1.8619	-1.67221
media	0.014	0.023138
	-1.85387	-1.63567
max	0.206	0.066316
	-0.686133	-1.17838
varian	0.00054094	5.91213e-0
	0.124156	0.0241595
JB	0.001	0.001
	0.075452	0.002990
	ra	log
%	13.8895	-10.1881
err.va	0.00056444	0.153344
rel.std.err	1.04344	1.23509
mod.eff	-0.0434385	-0.23509

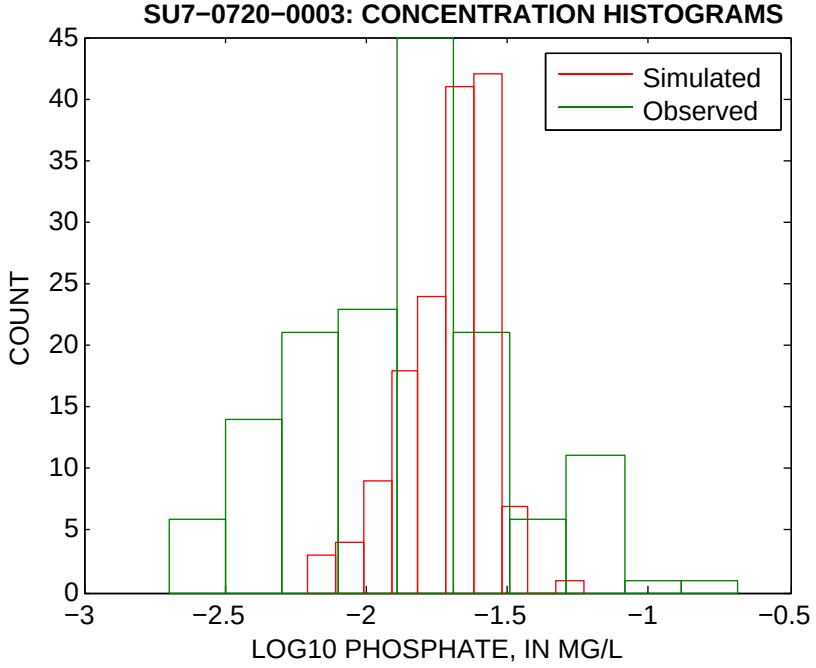
VERSION 2.1

ALL DATA
LOG10

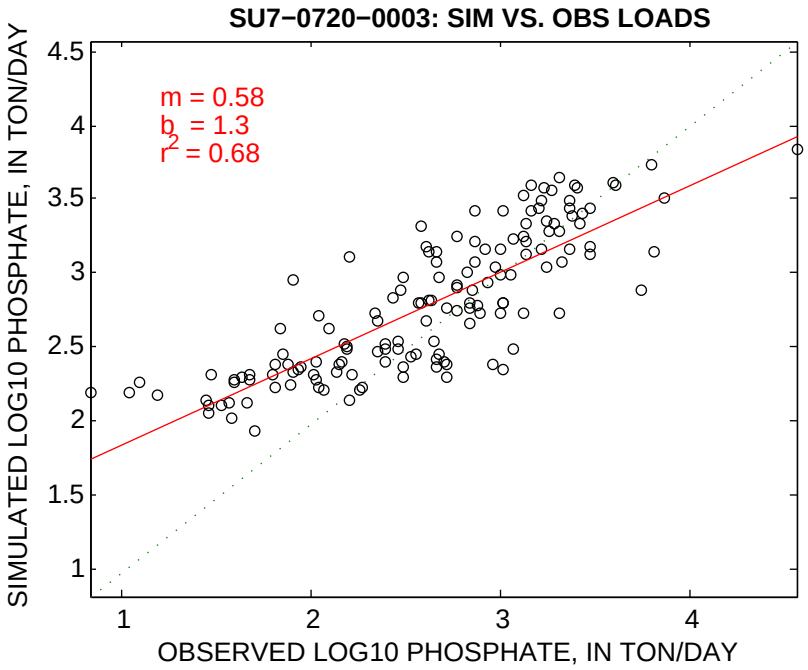


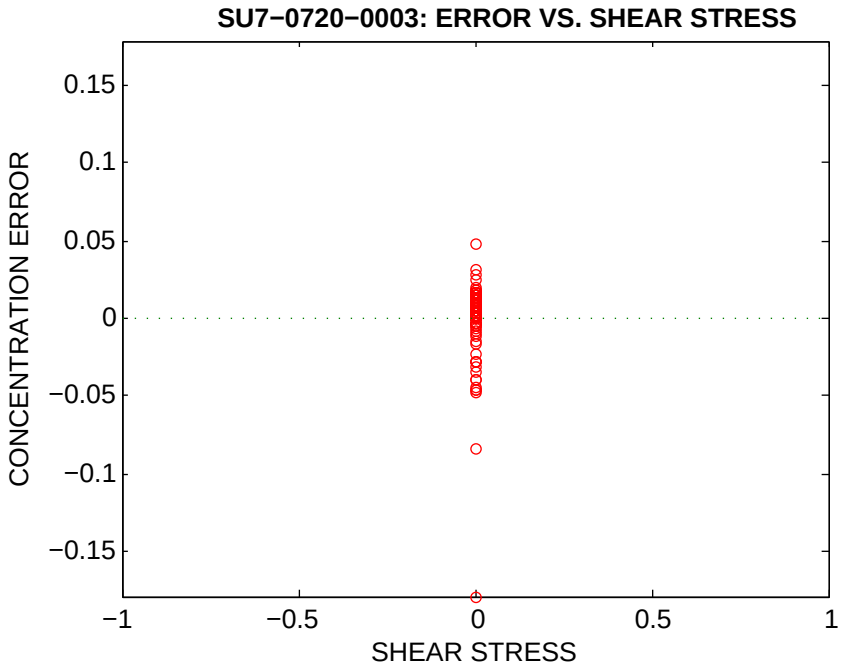


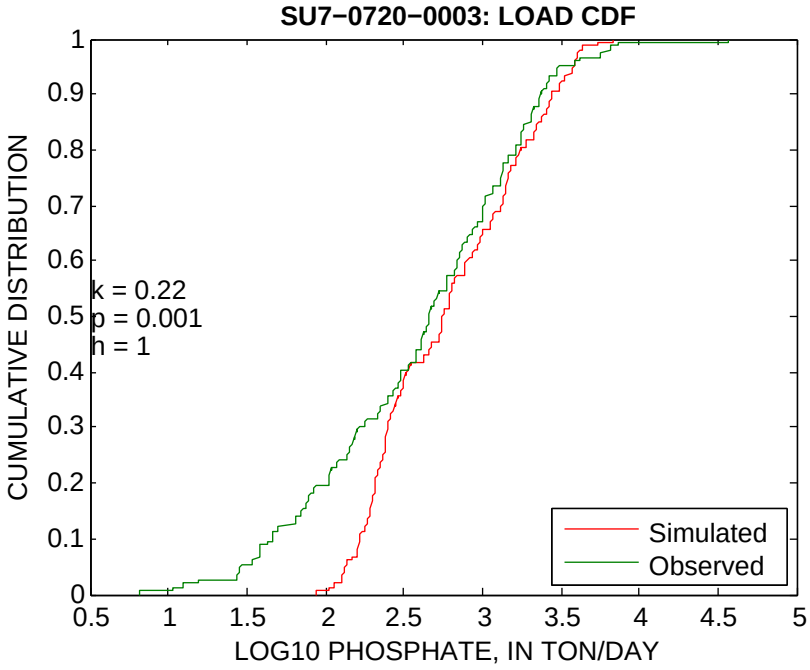


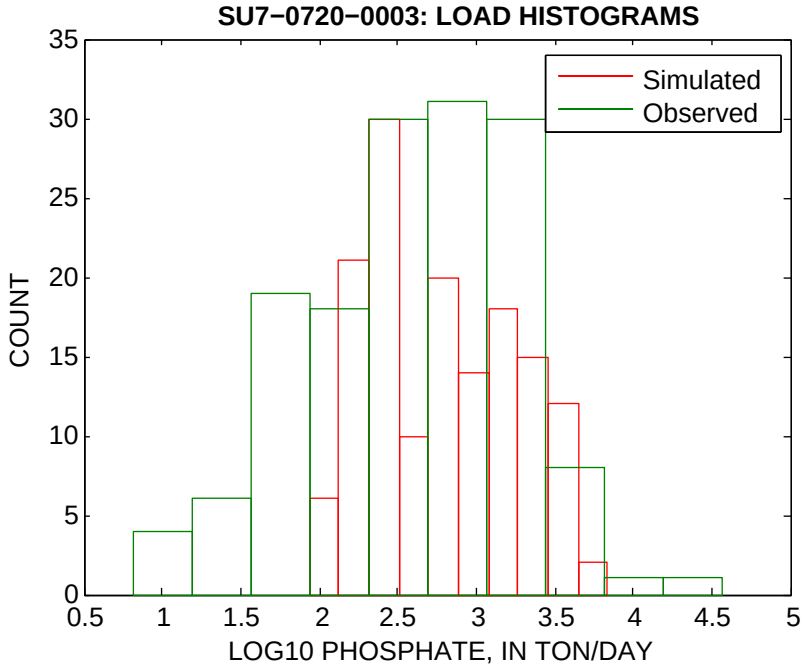


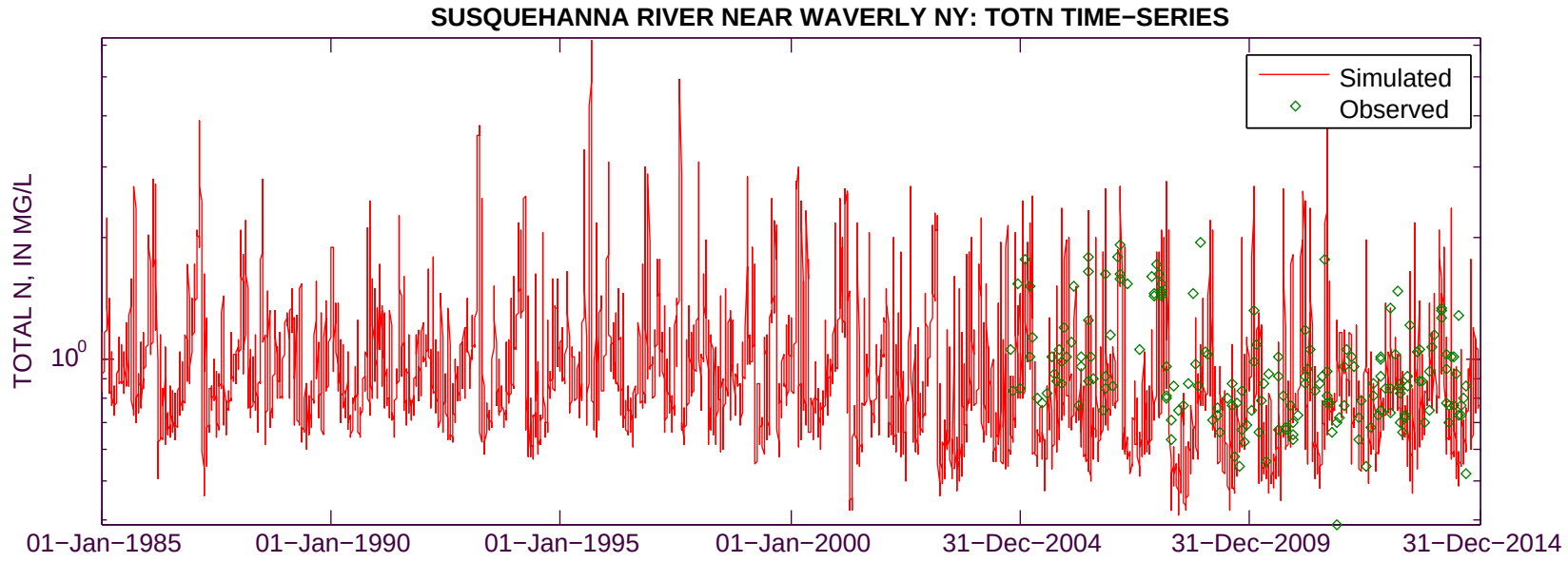
LOAD DATA
LOG10

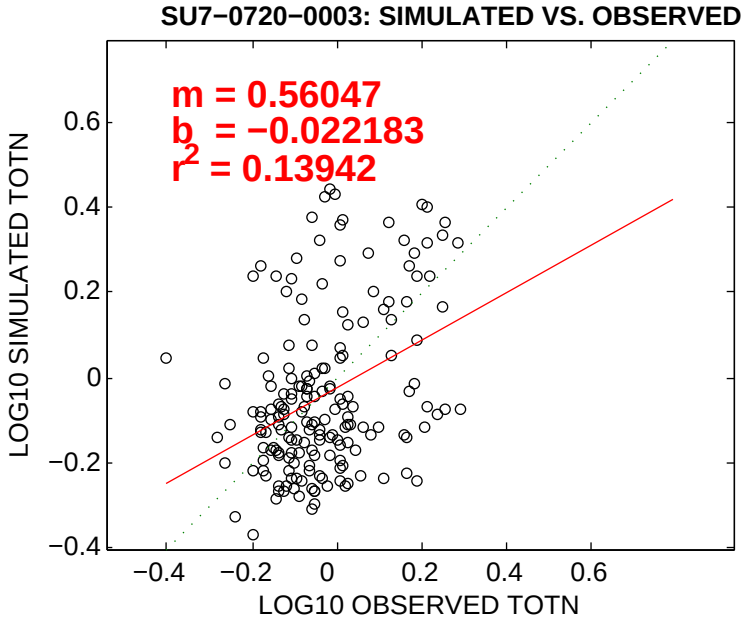


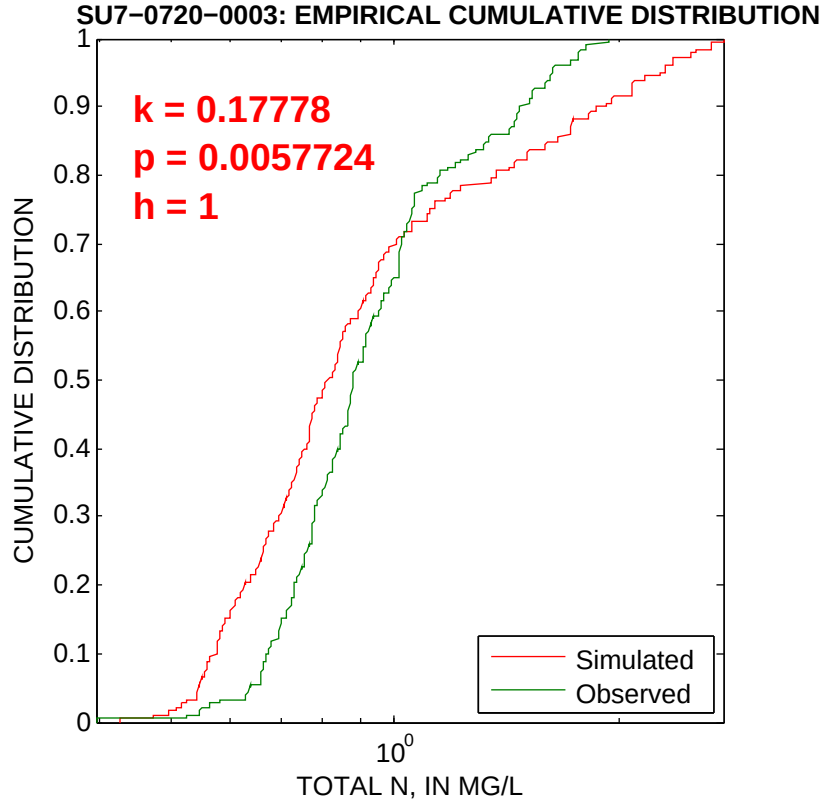












DATA SELECTION

scenario	file
P620171001WQ	TOTN.calib

plot: TOTN - total nitrogen

Dates: 1/1/1985 – 12/31/201

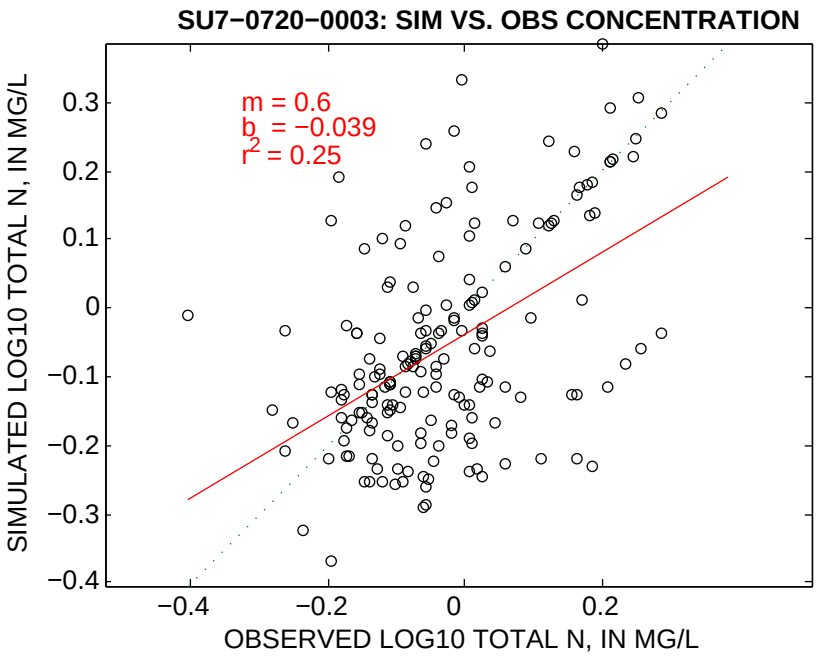
Drive	Directory	Observed
N/A	model	OBS20161101

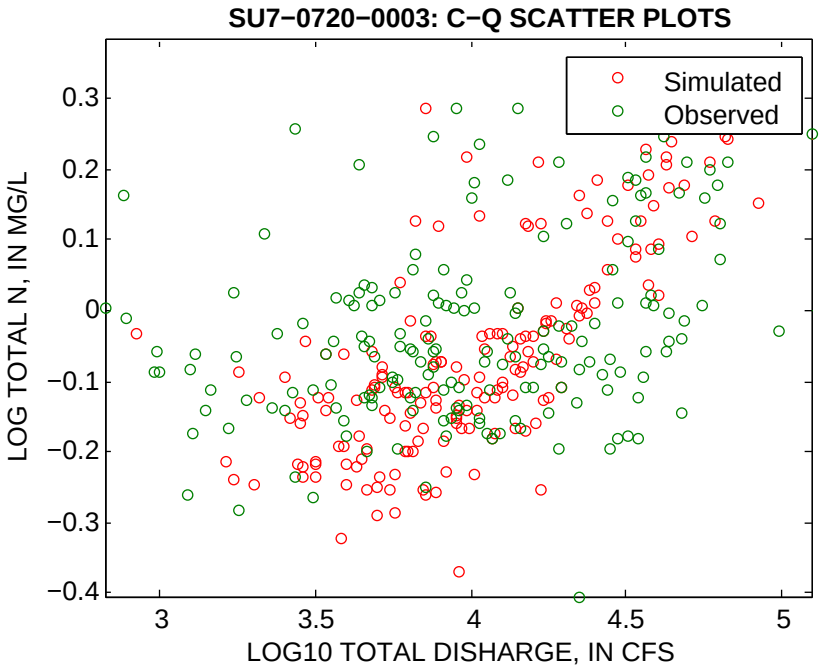
STATISTICS

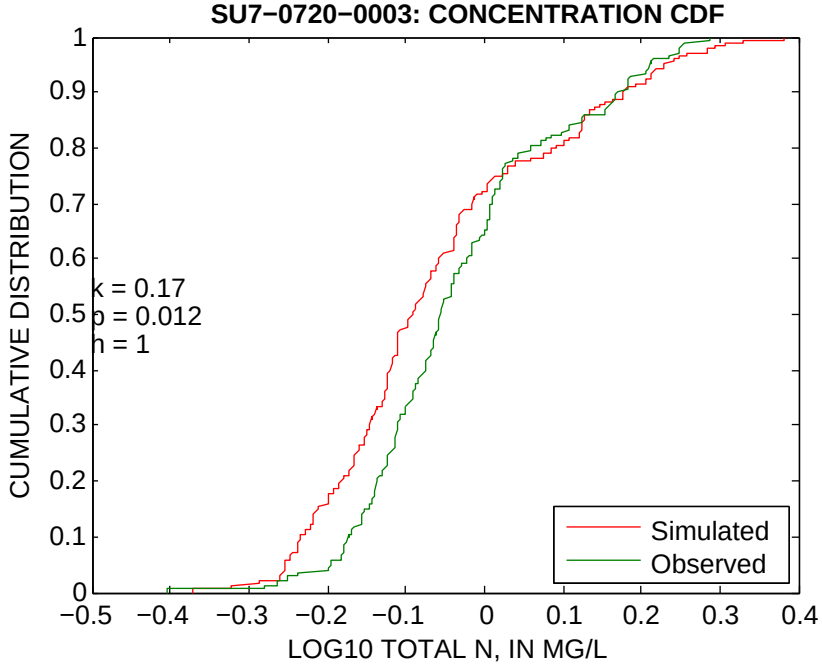
	n	observe	simulate
		180	180
min		0.394	0.42469
		-0.404504	-0.371928
mean		0.972191	1.01528
		-0.0316282	-0.0399101
media		0.8785	0.81233
		-0.0562583	-0.0902735
max		1.938	2.7706
		0.287354	0.442574
varian		0.0960926	0.284548
		0.0161379	0.0363602
JB		0.001	0.001
		0.025250	0.001931
		ra	log
%		4.43242	26.1853
err.va		0.254736	0.0344775
rel.std.err		2.65094	2.13643
mod.eff		-1.65094	-1.13643

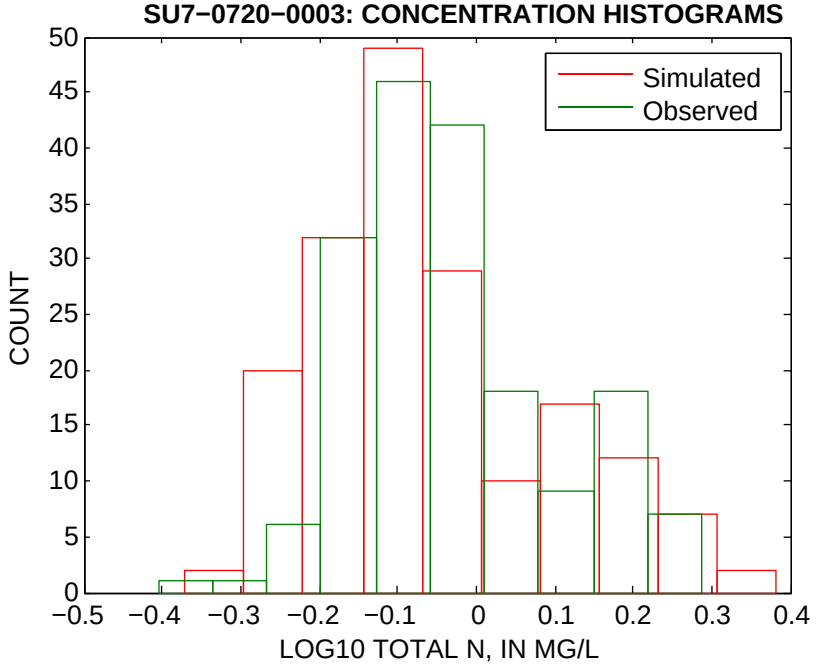
VERSION 2.1

ALL DATA
LOG10

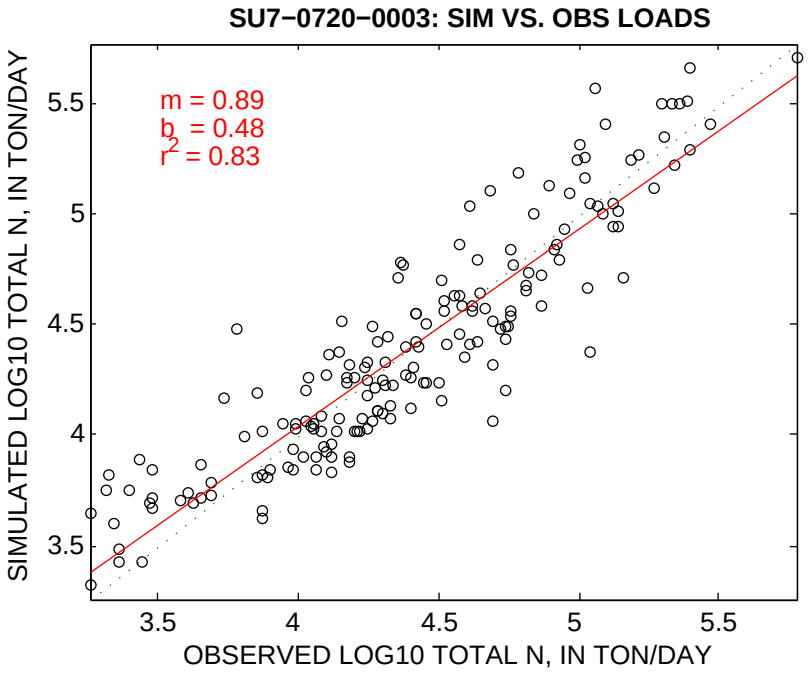




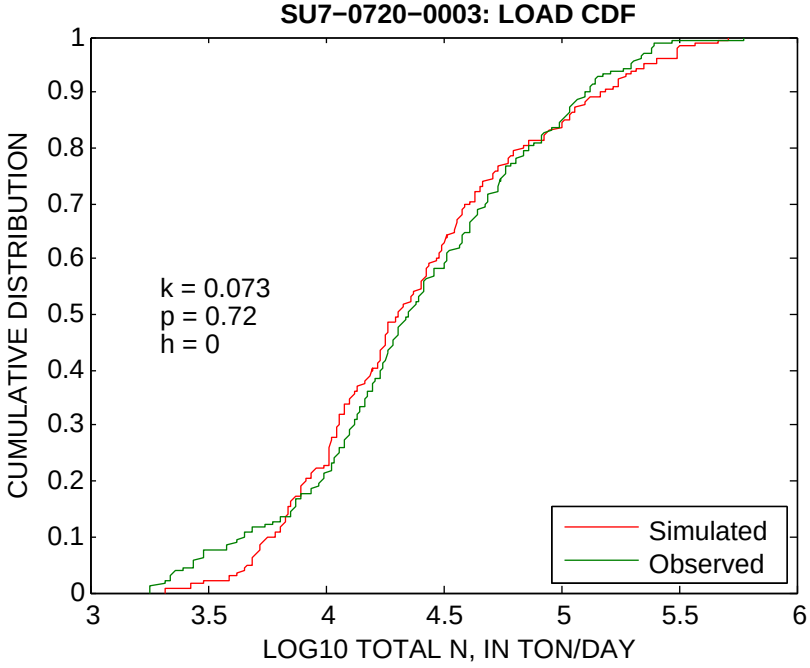


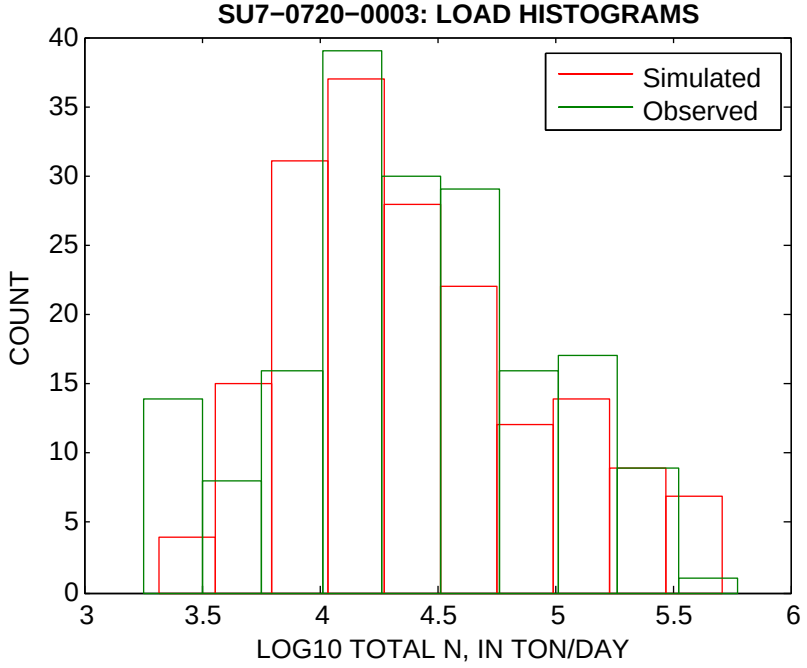


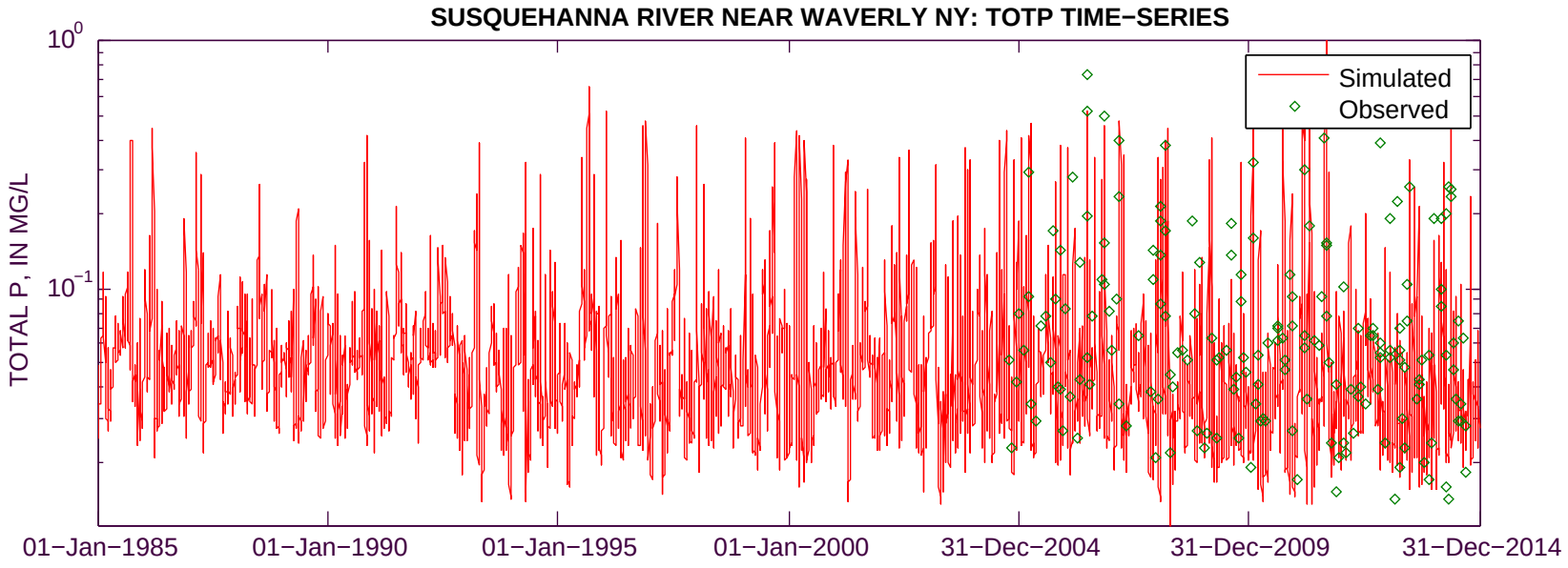
LOAD DATA
LOG10

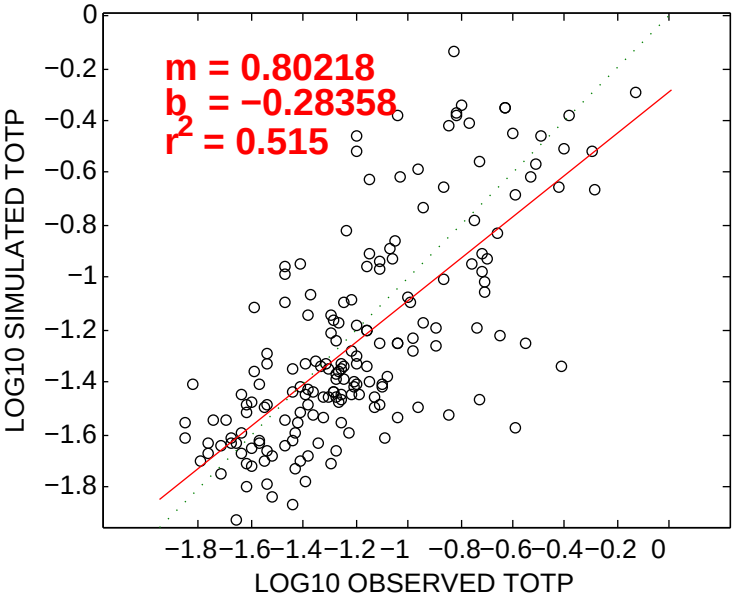


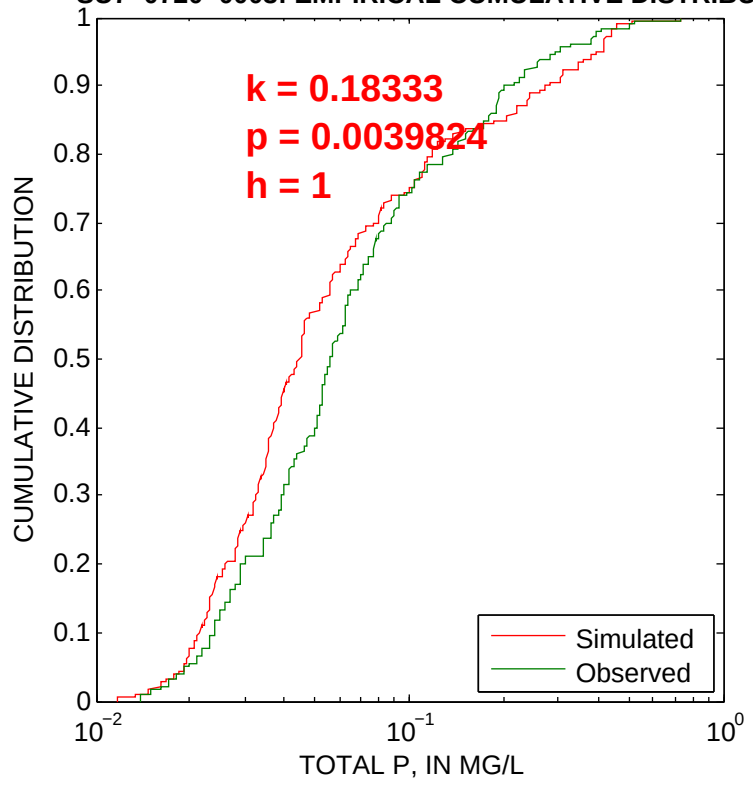












DATA SELECTION

scenario	file
P620171001WQ	TOTP.calib

plot: TOTP - total phosphorus

Dates: 1/1/1985 – 12/31/201

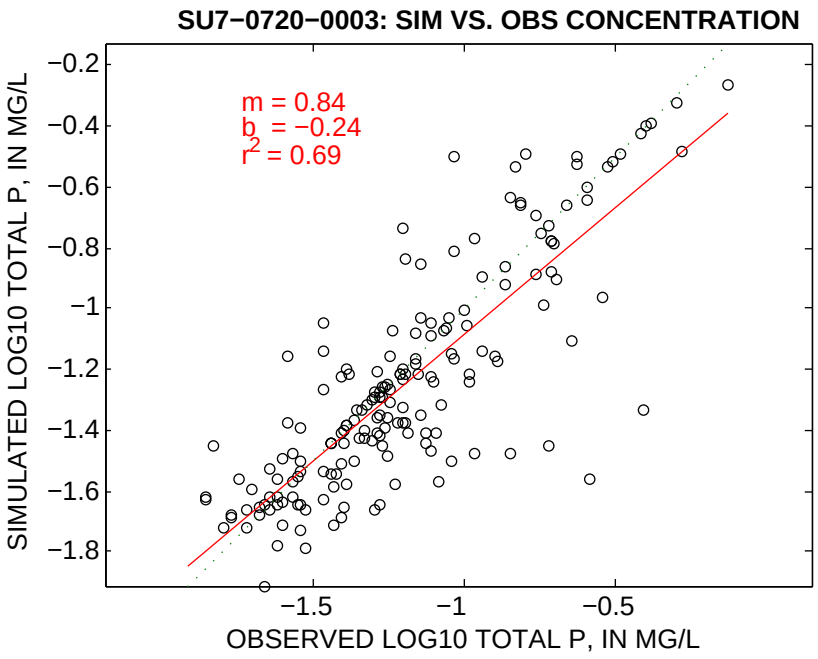
Drive	Directory	Observed
N/A	model	OBS20161101

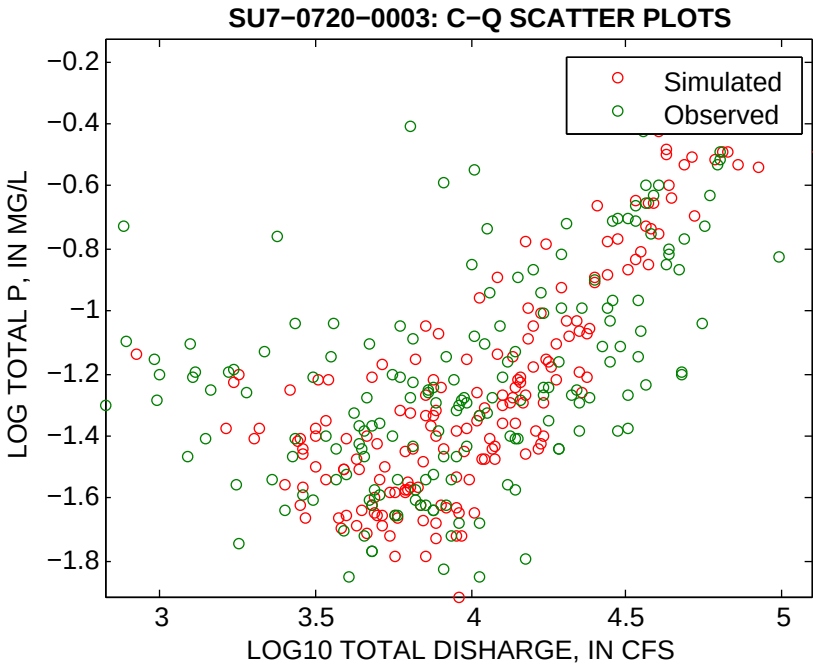
STATISTICS

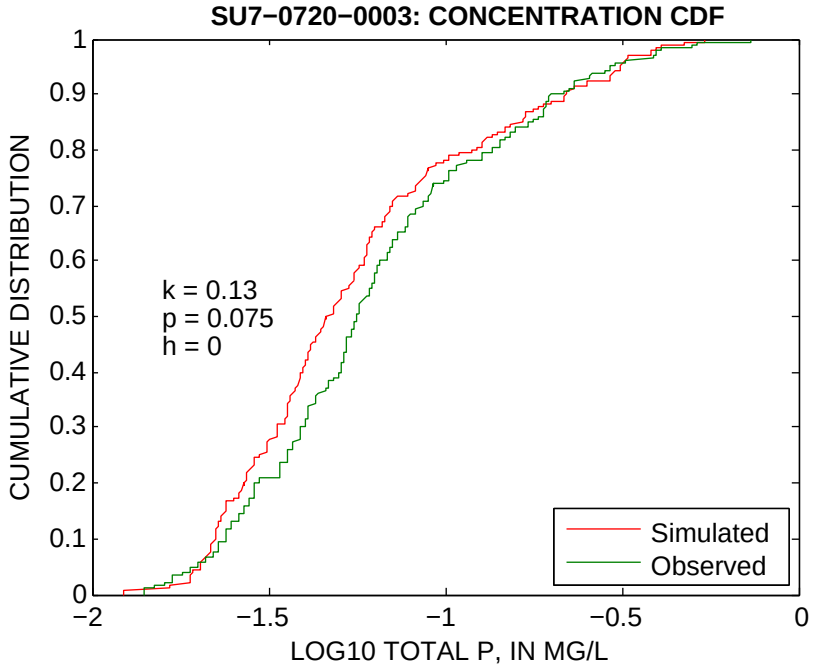
	n	180	180
		observe	simulate
min		0.014	0.011788
		-1.85387	-1.92856
mean		0.0936352	0.0949891
		-1.19578	-1.24281
media		0.056	0.044745
		-1.25181	-1.34926
max		0.736	0.73667
		-0.133122	-0.132727
varian		0.0106724	0.0143291
		0.129307	0.16157
JB		0.001	0.001
		0.015118	0.002177
		ra	log
%		1.44595	3.93309
err.va		0.0100326	0.0856466
rel.std.err		0.940052	0.66235
mod.eff		0.0599485	0.33765

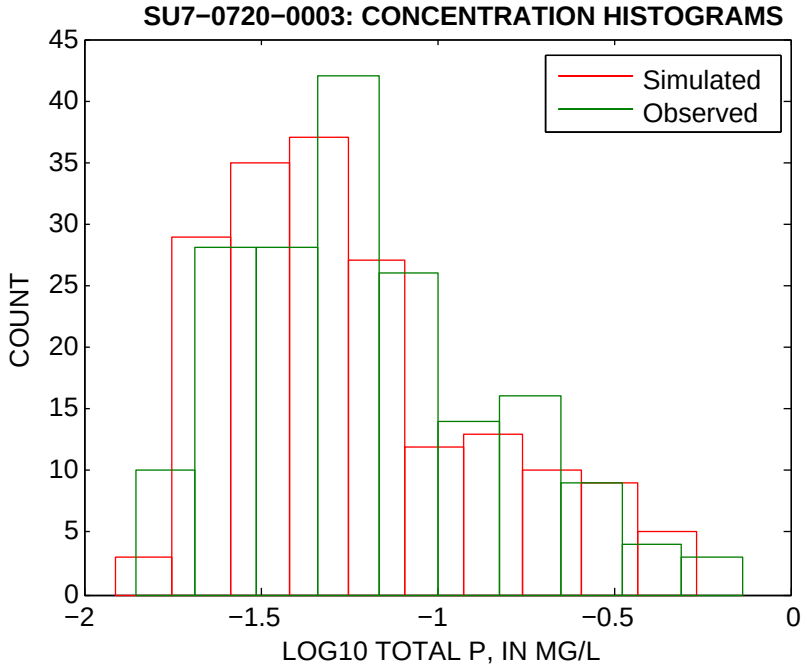
VERSION 2.1

ALL DATA
LOG10

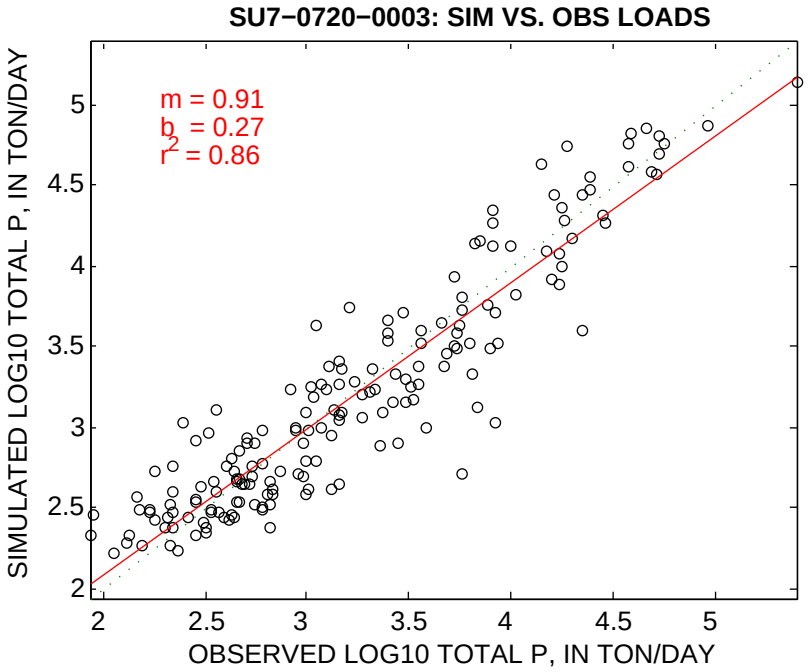


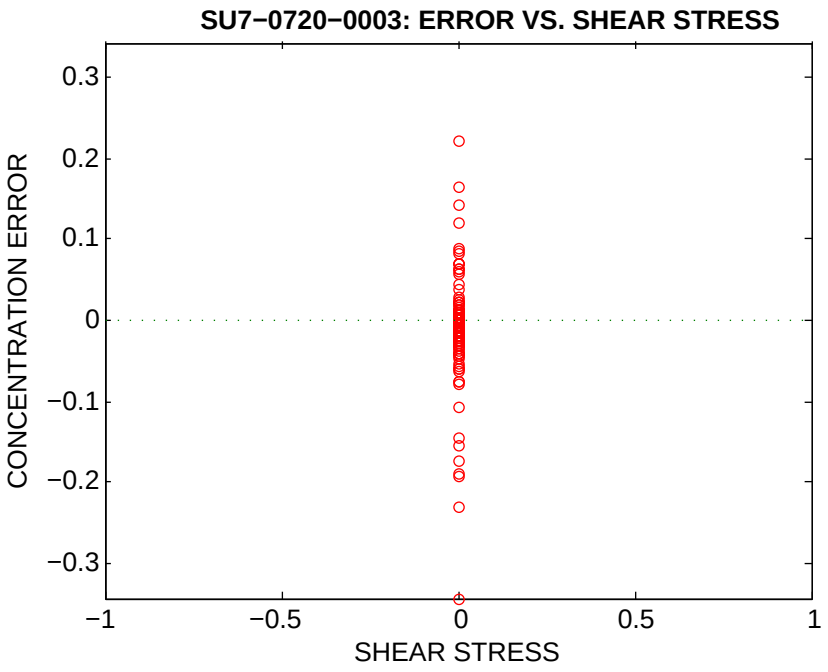


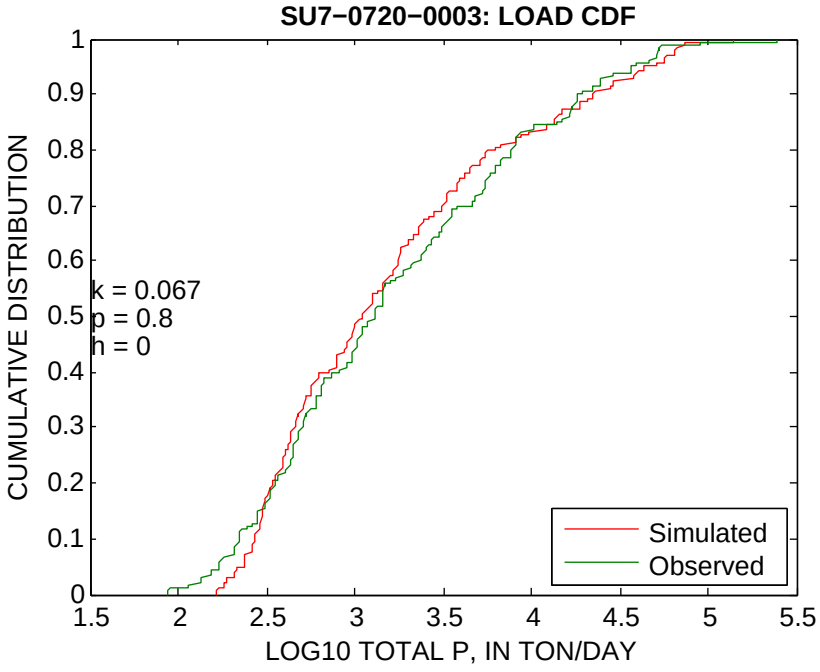


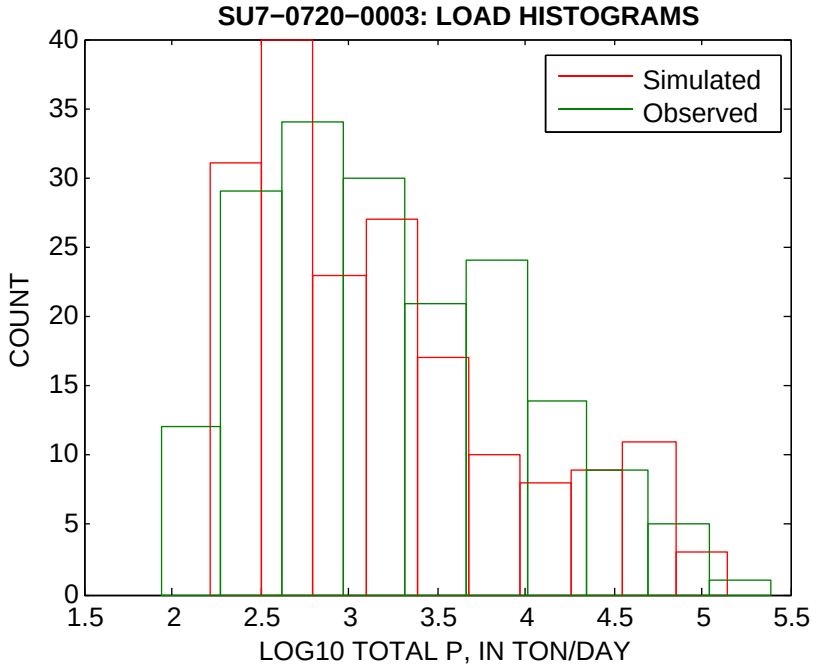


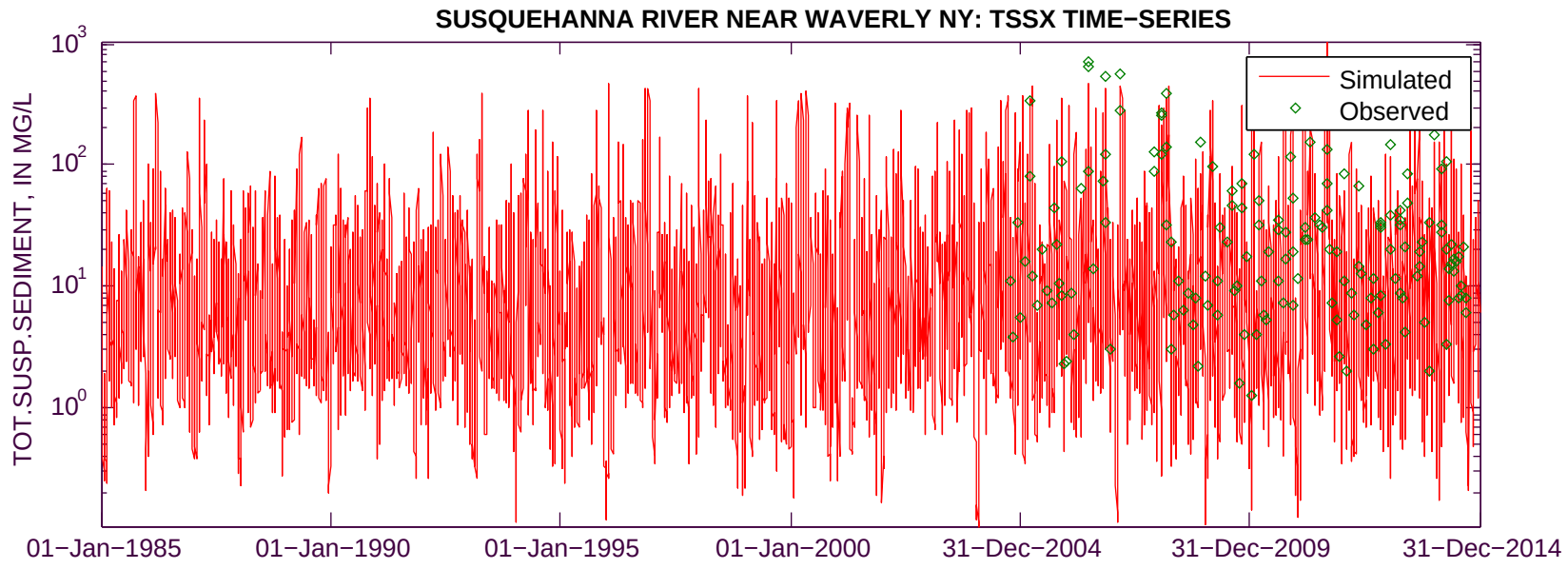
LOAD DATA
LOG10

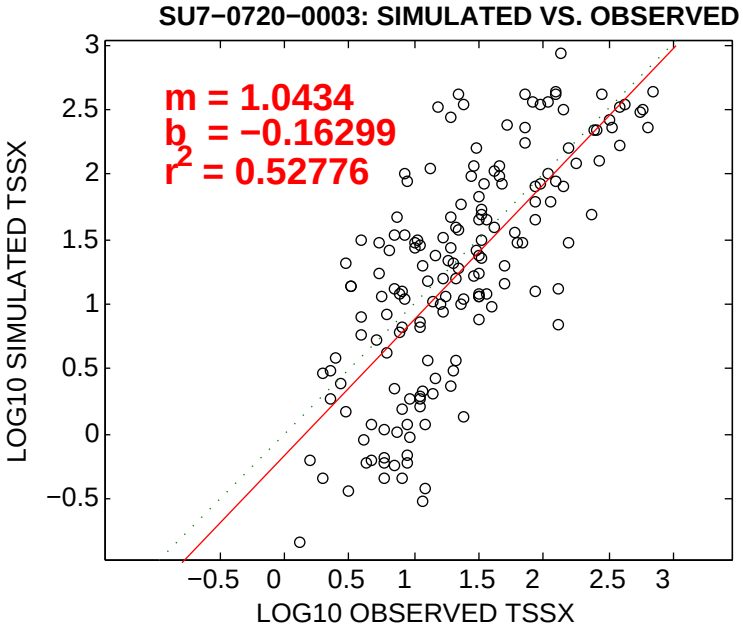


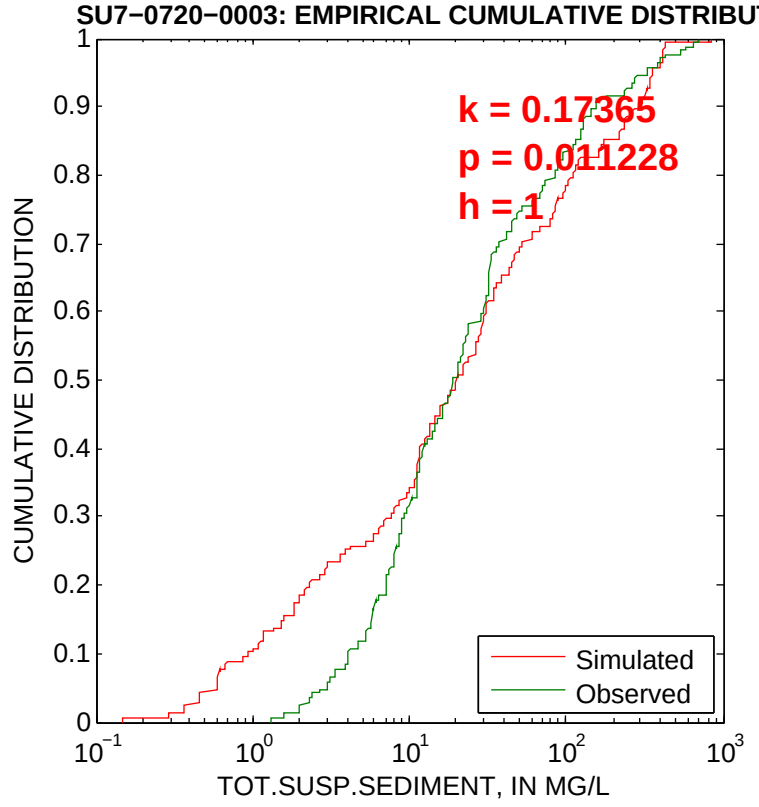












DATA SELECTION

scenario	file
P620171001WQ	TSSX.calib

plot: TSSX - total suspended ...

Dates 1/1/1985 12/31/201

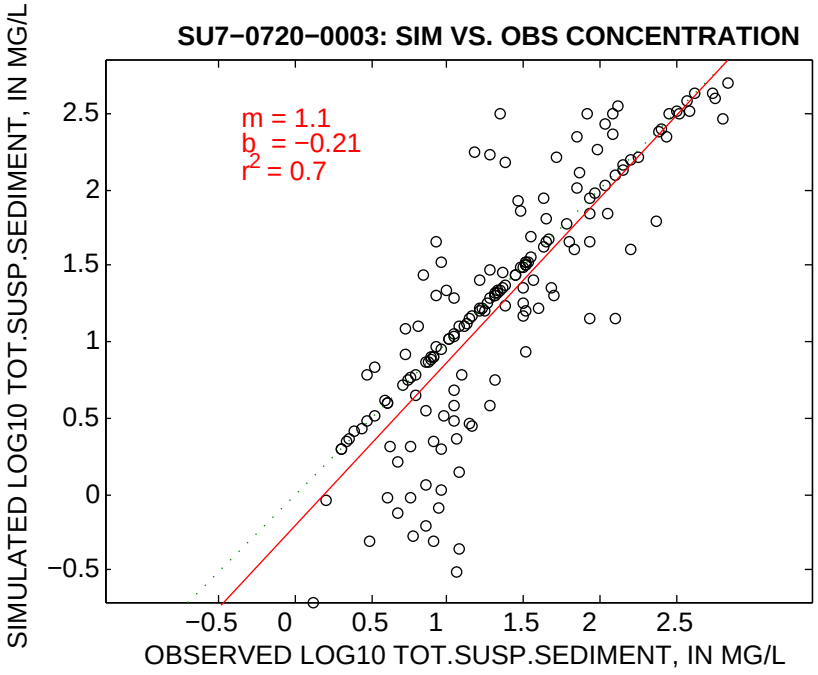
Drive	Directory	Observed
N/A	model	OBS20161101

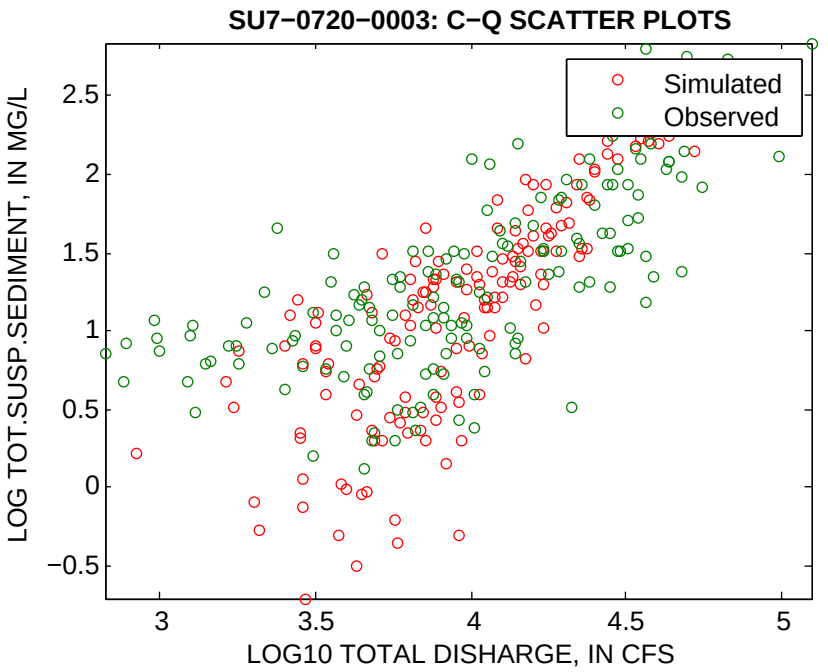
STATISTICS

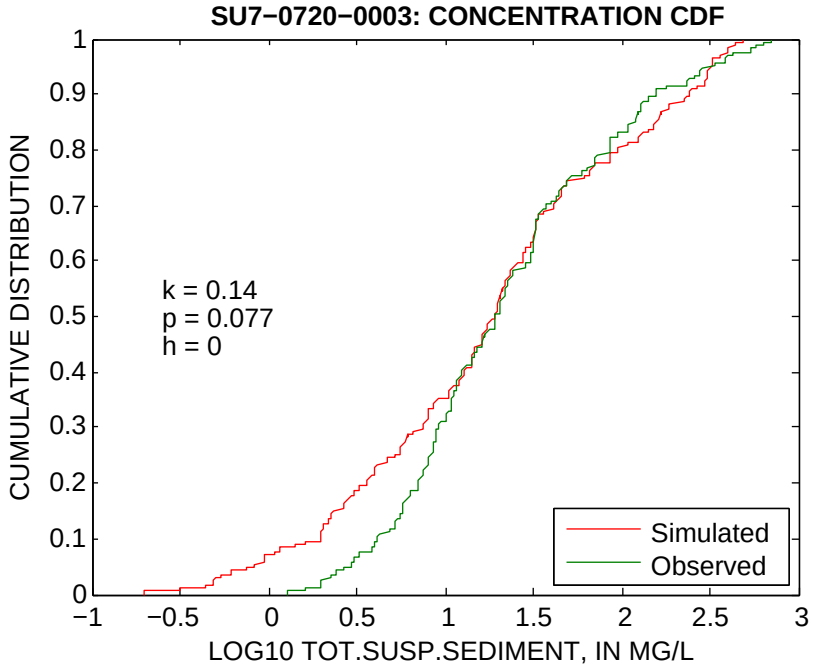
	n	observe	simulate
		167	167
min		1.3	0.14698
		0.113943	-0.832742
mean		63.3728	76.8843
		1.35279	1.24846
media		19.3	20.139
		1.28556	1.30404
max		697	852.73
		2.84323	2.93081
varian		13696.6	16242.1
		0.365964	0.754863
JB		0.001	0.001
		0.041202	0.048434
		ra	log
%		21.3207	-7.7126
err.va		13280	0.368117
rel.std.err		0.969589	1.00588
mod.eff		0.0304108	-0.005882

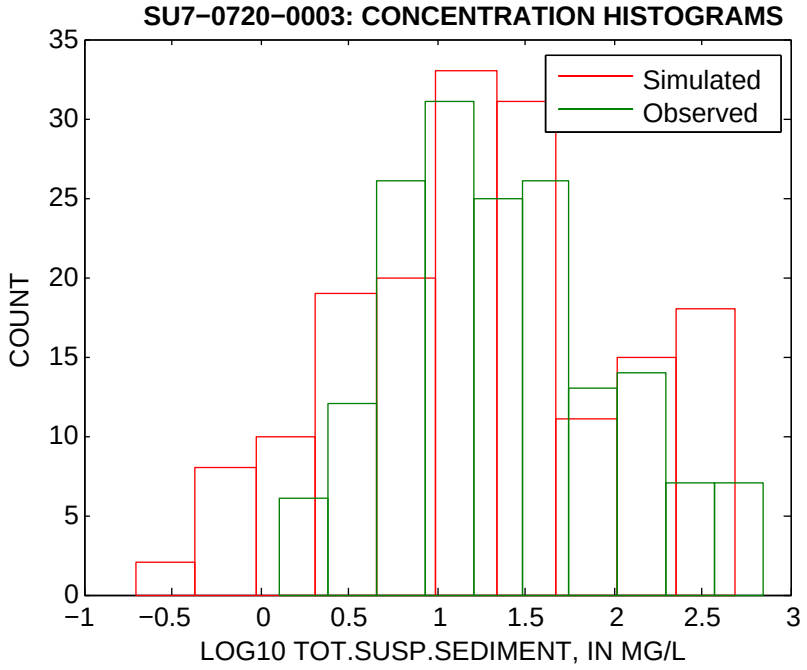
VERSION 2.1

ALL DATA
LOG10

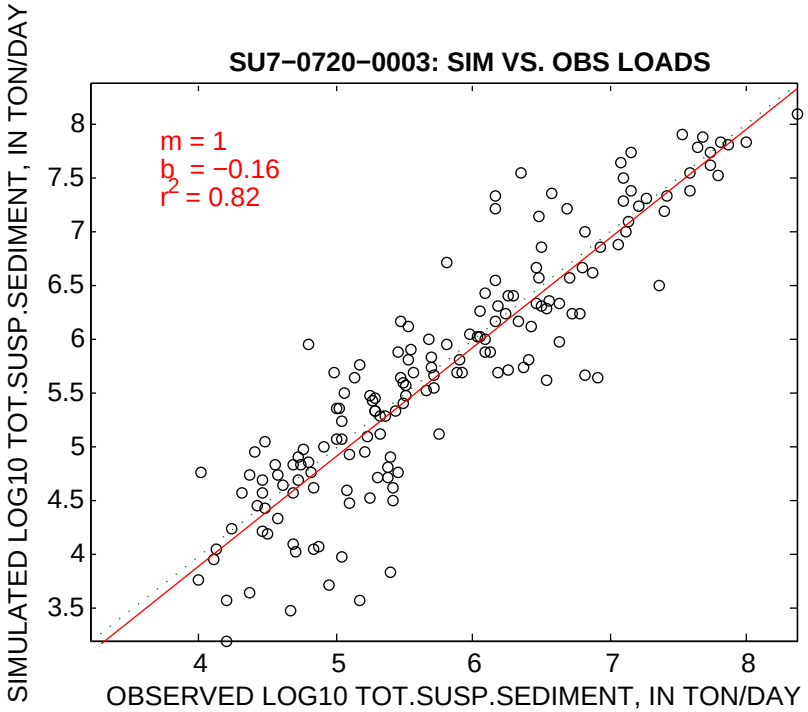




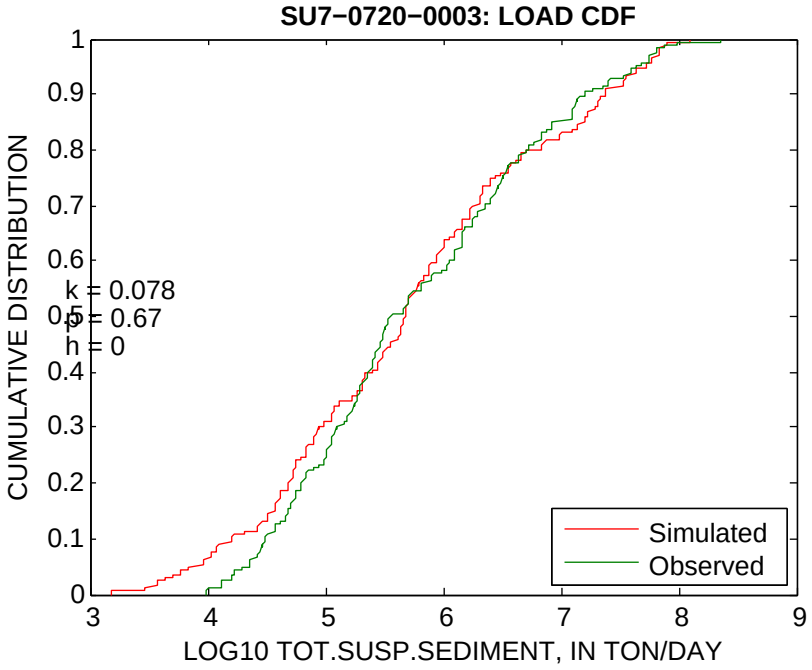


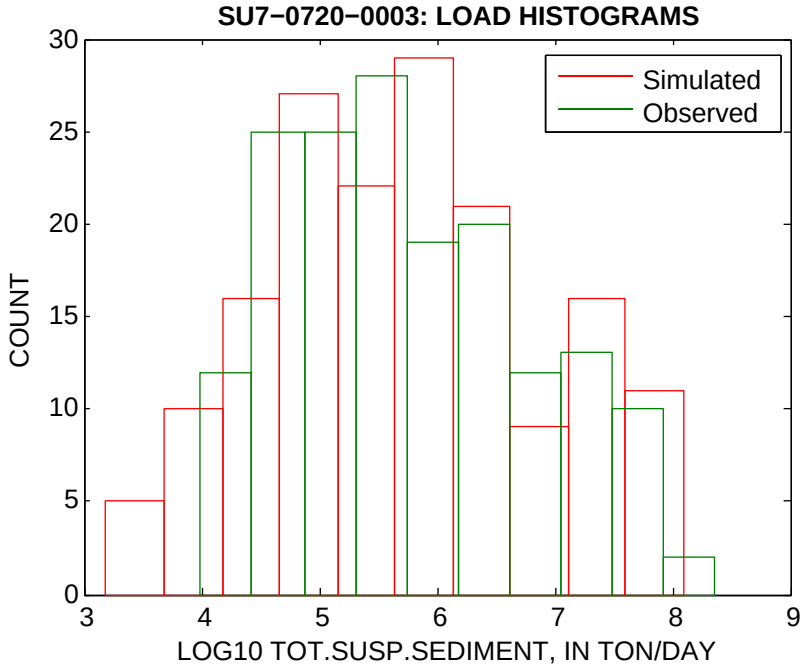


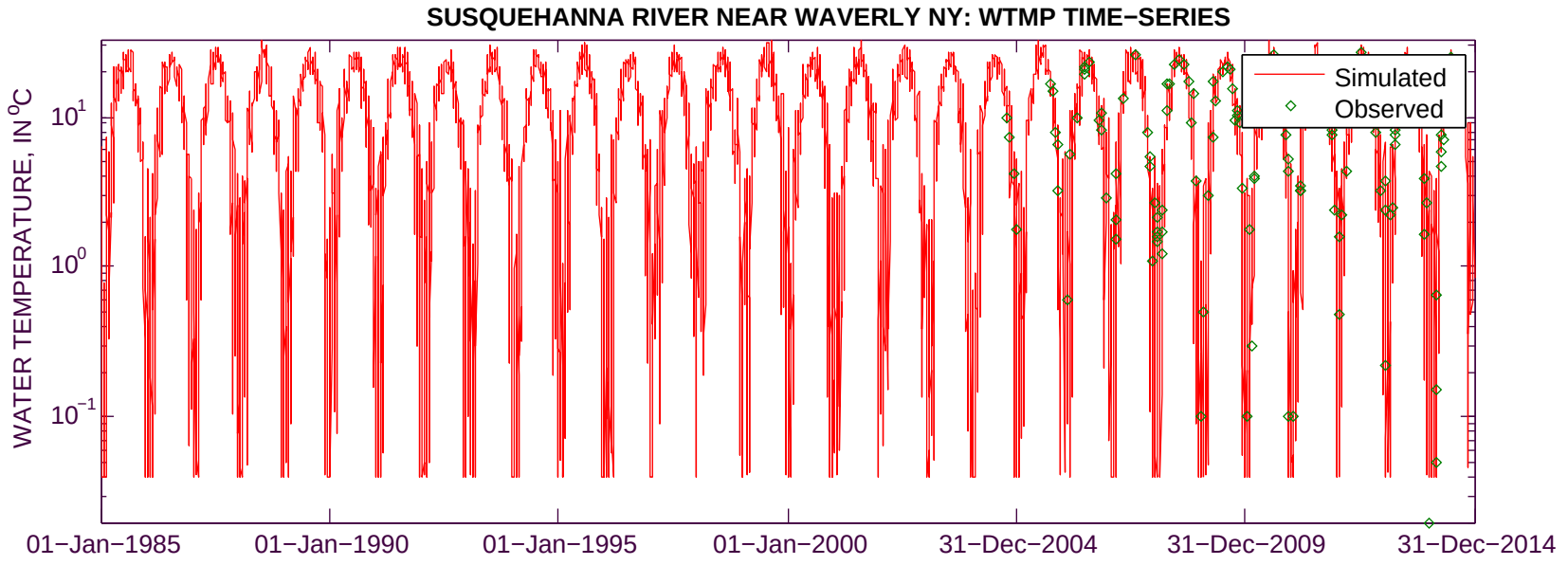
LOAD DATA
LOG10

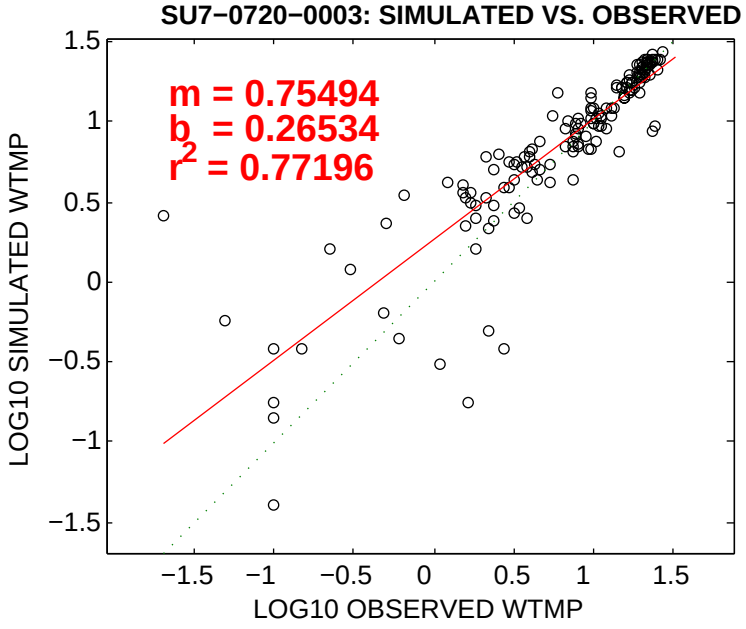


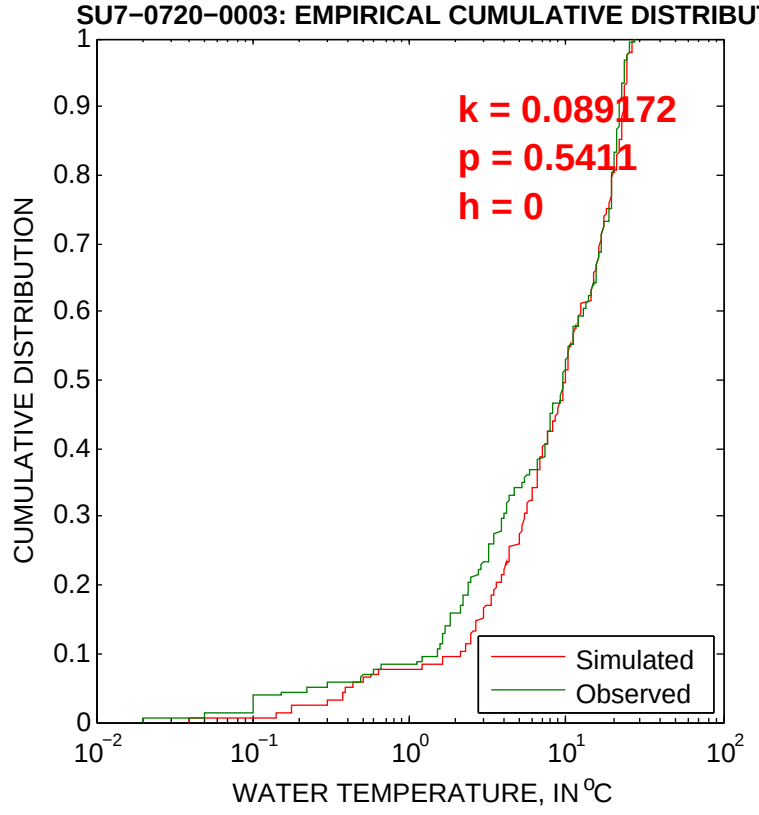












DATA SELECTION

scenario	file
P620171001WQ	WTMP.calib

plot: WTMP - water tempera...

Dates: 1/1/1985 – 12/31/201

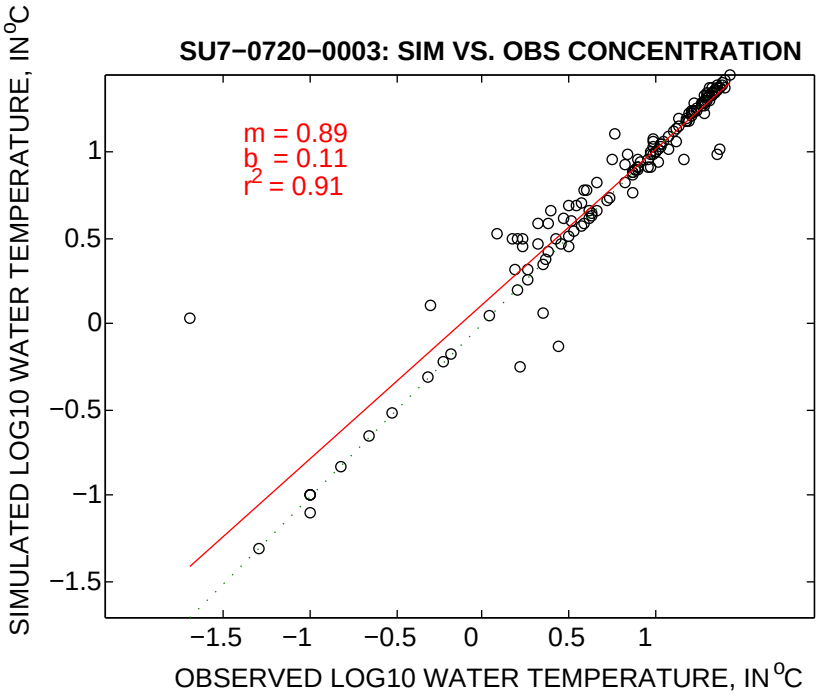
Drive	Directory	Observed
N/A	model	OBS20161101

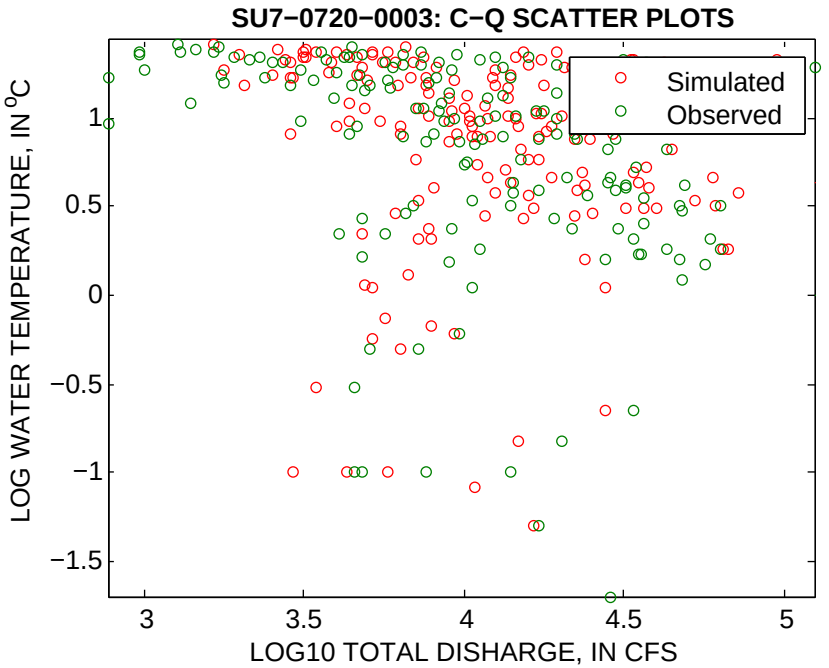
STATISTICS

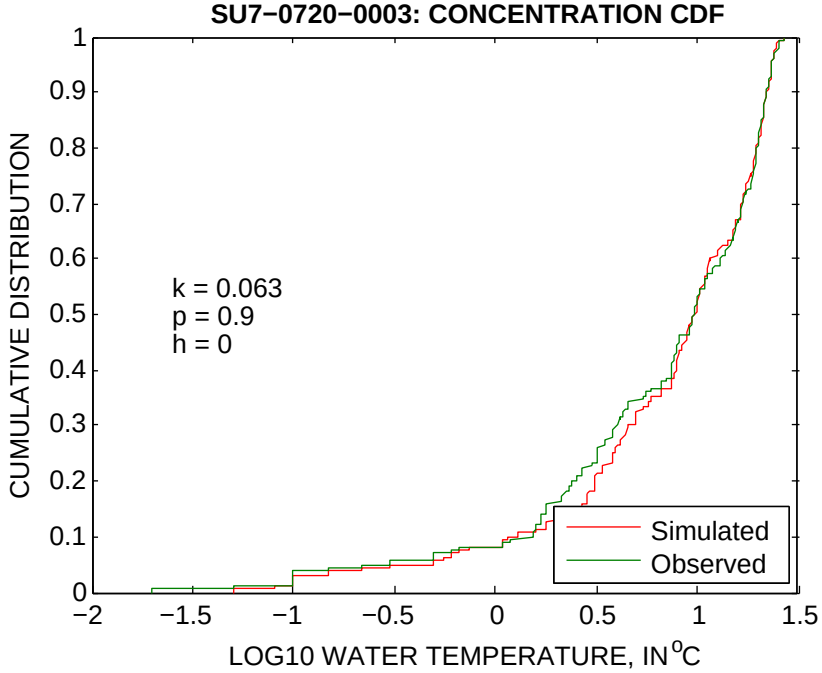
	n	157	157
		observe	simulate
min		0.02	0.040117
		-1.69897	-1.39667
mean		10.8819	11.4034
		0.798433	0.868107
media		9.67	9.9228
		0.985426	0.996634
max		27.3	27.565
		1.43616	1.44036
varian		64.4524	62.8586
		0.374171	0.276248
JB		0.007954	0.009777
		0.001	0.001
		ra	log
%		4.7921	8.72631
err.va		7.17758	0.0903507
rel.std.err		0.111362	0.241469
mod.eff		0.888638	0.758531

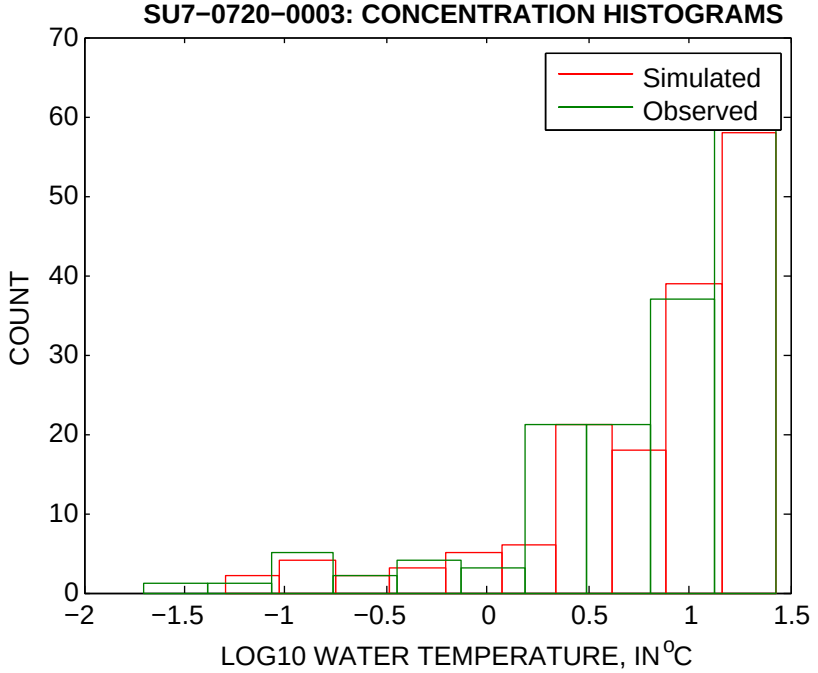
VERSION 2.1

ALL DATA
LOG10

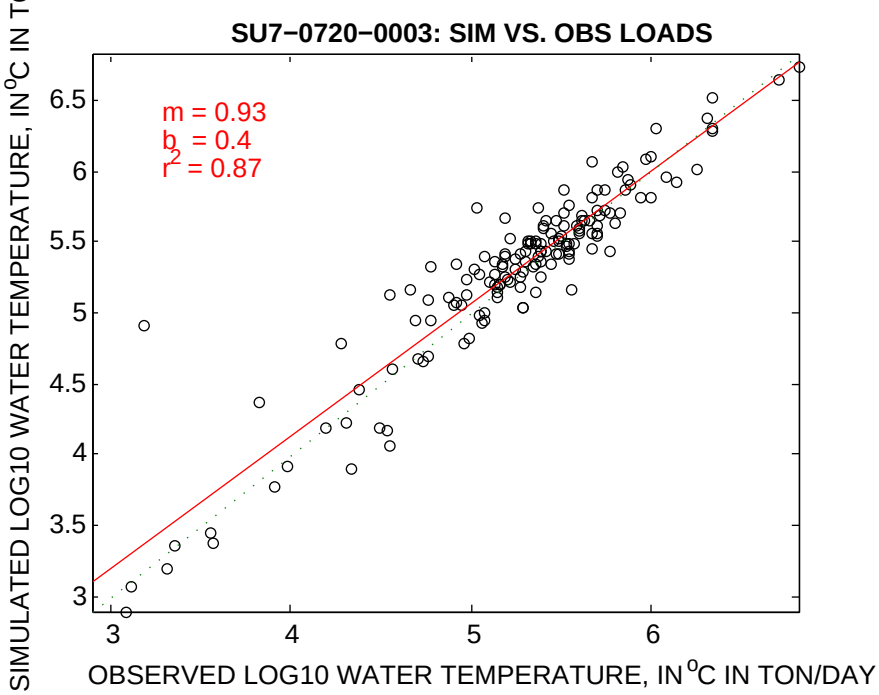




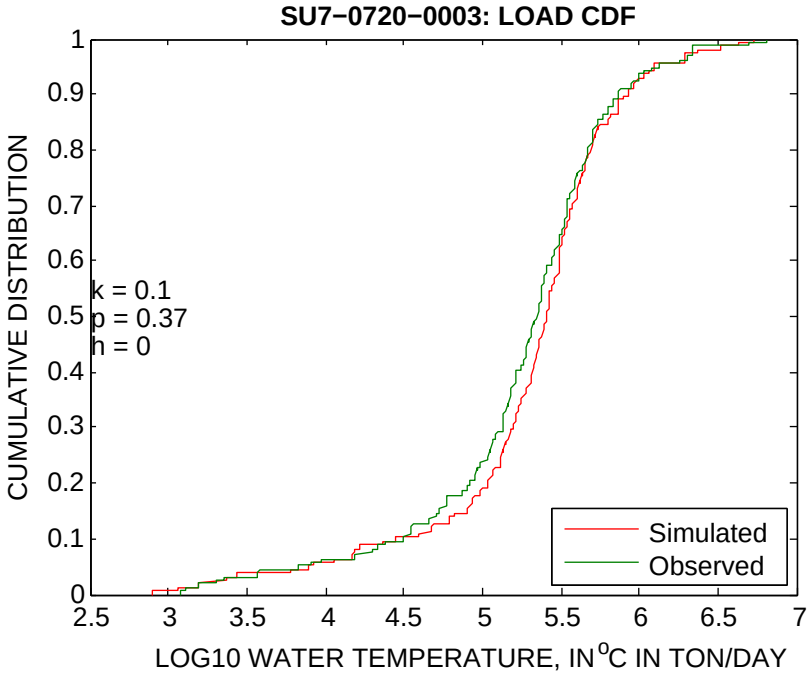


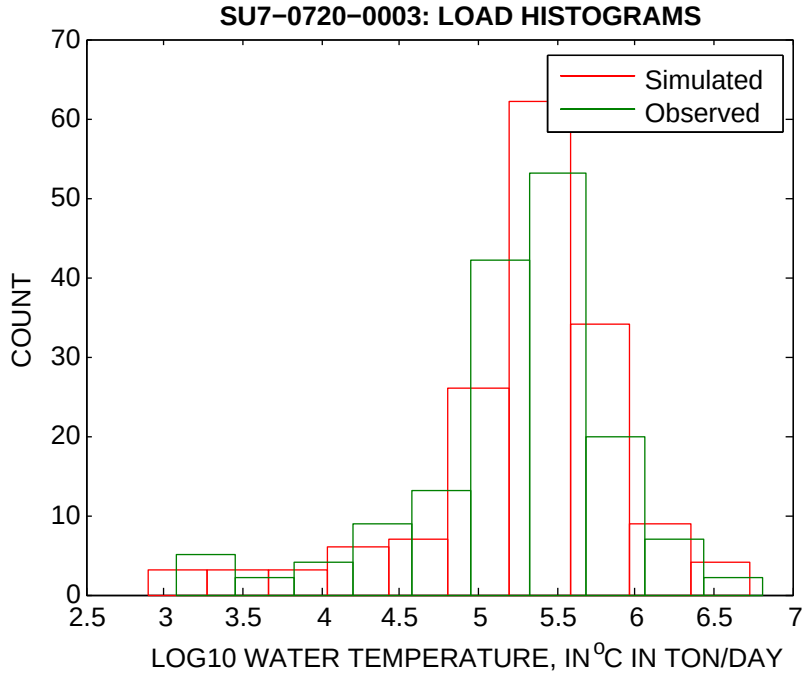


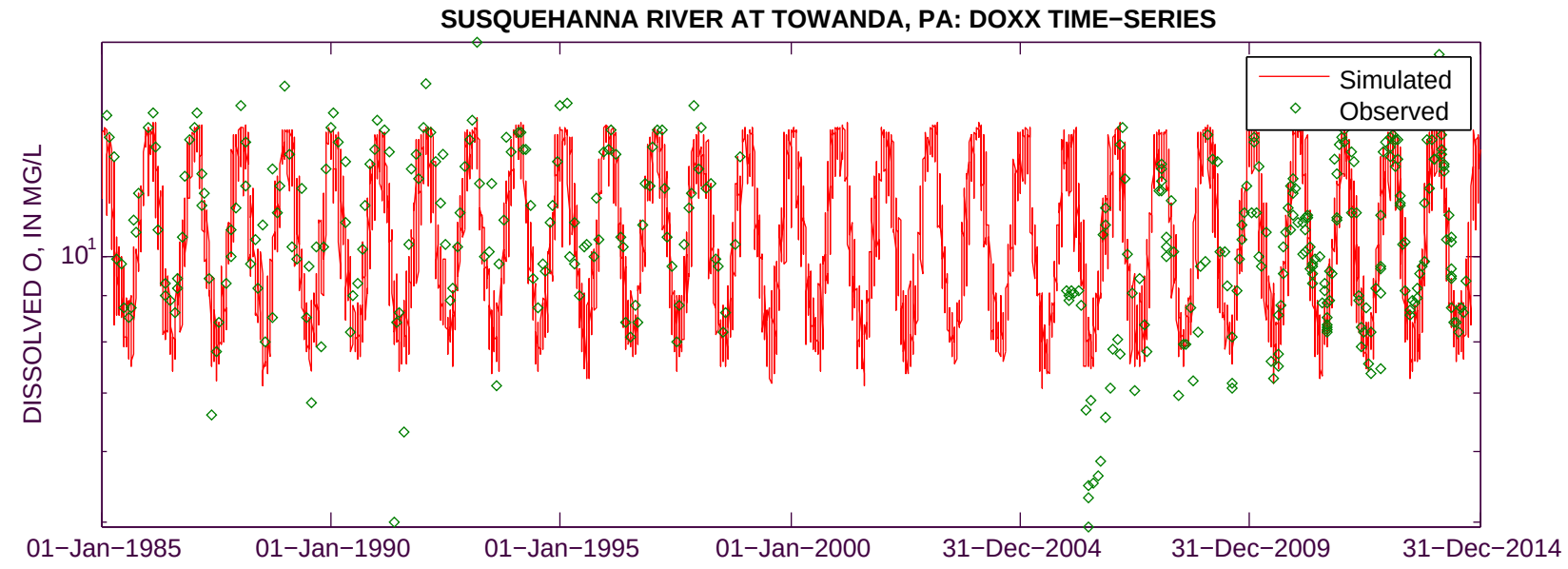
LOAD DATA
LOG10

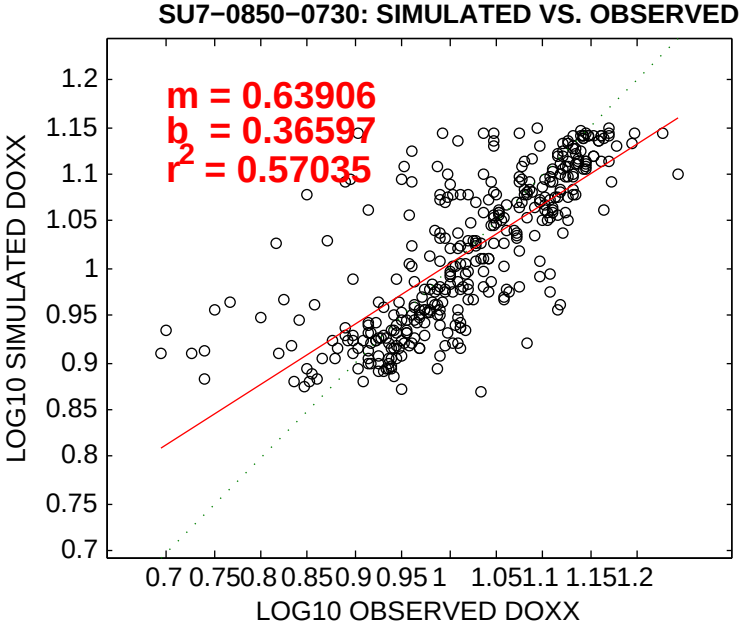


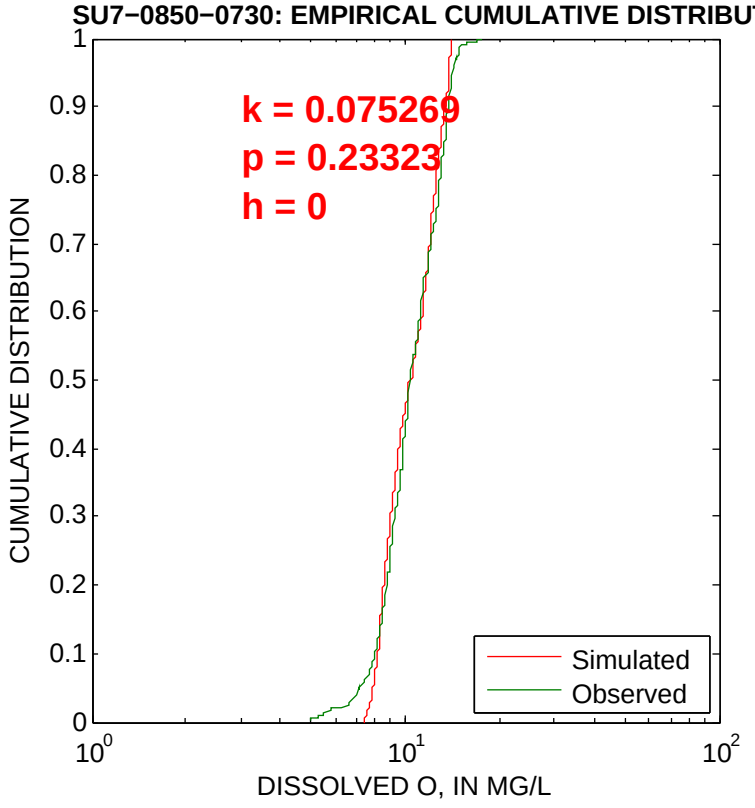












DATA SELECTION

scenario	file
P620171001WQ	DOXX.calib

plot: DOXX - dissolved oxygen

Dates: 1/1/1985 – 12/31/201

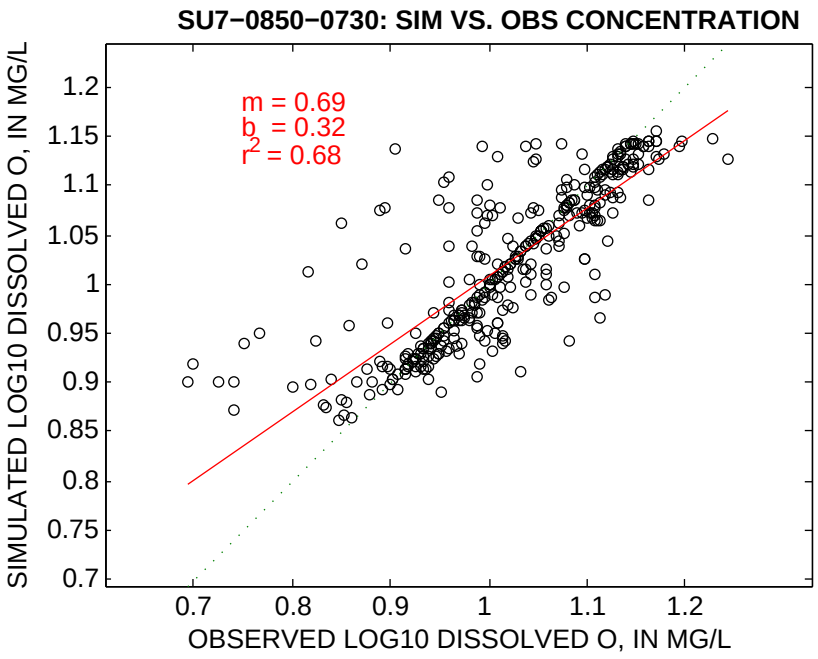
Drive	Directory	Observed
N/A	model	OBS20161101

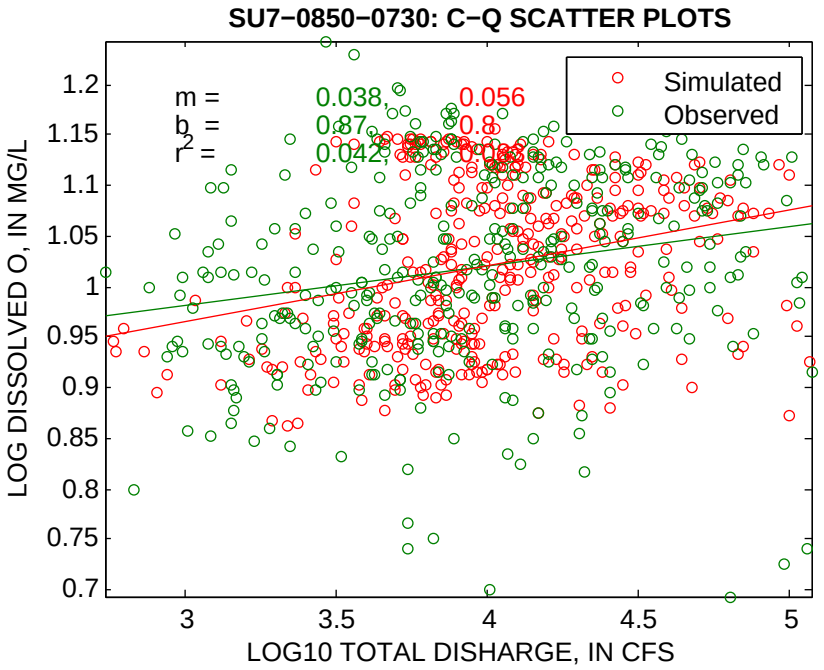
STATISTICS

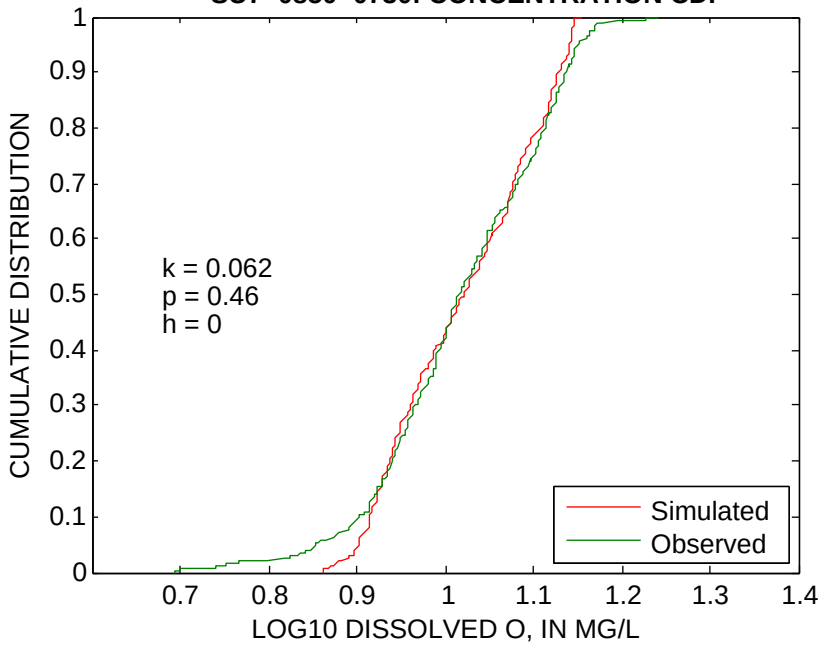
	n	observe	simulate
		372	372
min		4.94	7.3779
		0.693727	0.867933
mean		10.6868	10.5795
		1.01871	1.01699
media		10.39	10.494
		1.01662	1.02094
max		17.5	14.091
		1.24304	1.14894
varian		5.09499	3.84467
		0.00913326	0.00653976
JB		0.107044	0.001
		0.004819	0.001
		ra	log
%		-1.00379	-0.169707
err.va		2.09582	0.00400266
rel.std.err		0.411349	0.438251
mod.eff		0.588651	0.561749

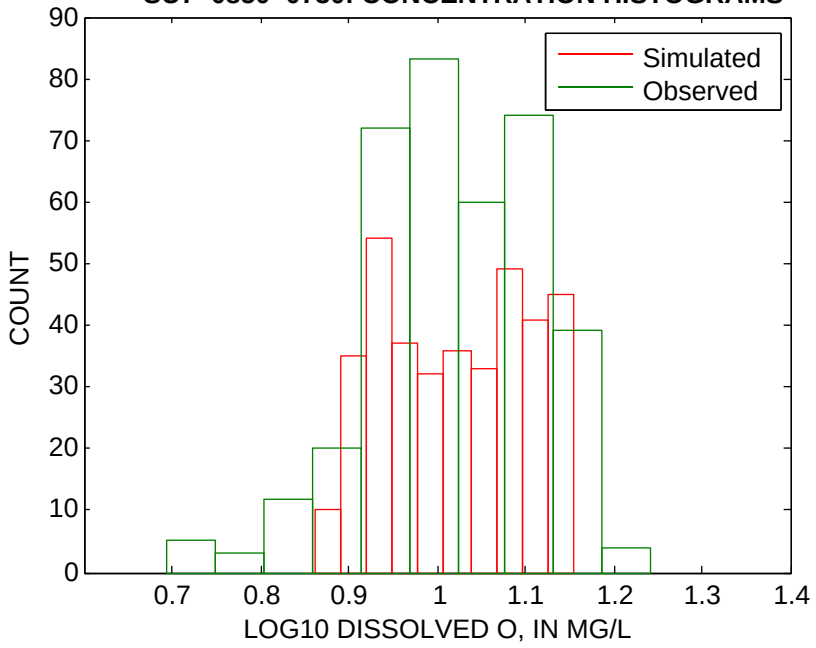
VERSION 2.1

ALL DATA
LOG10

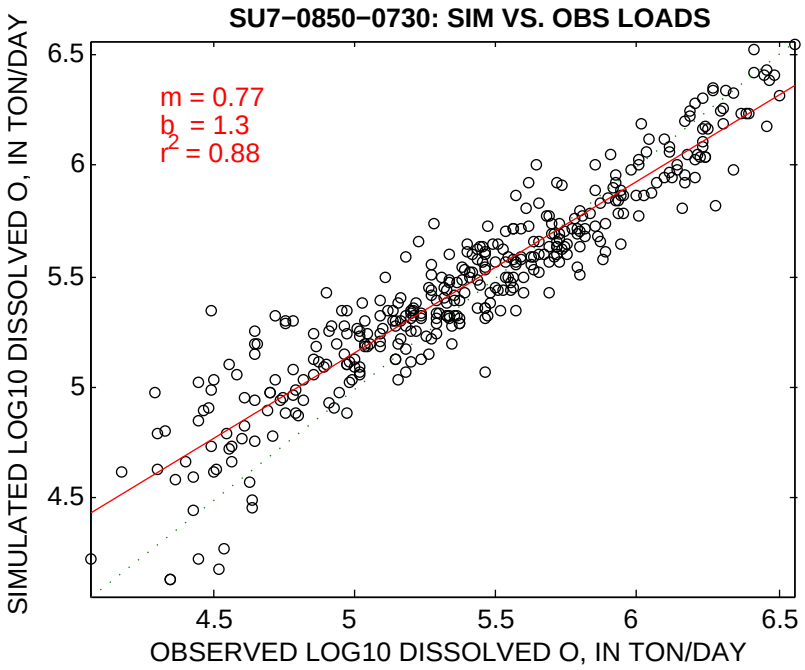


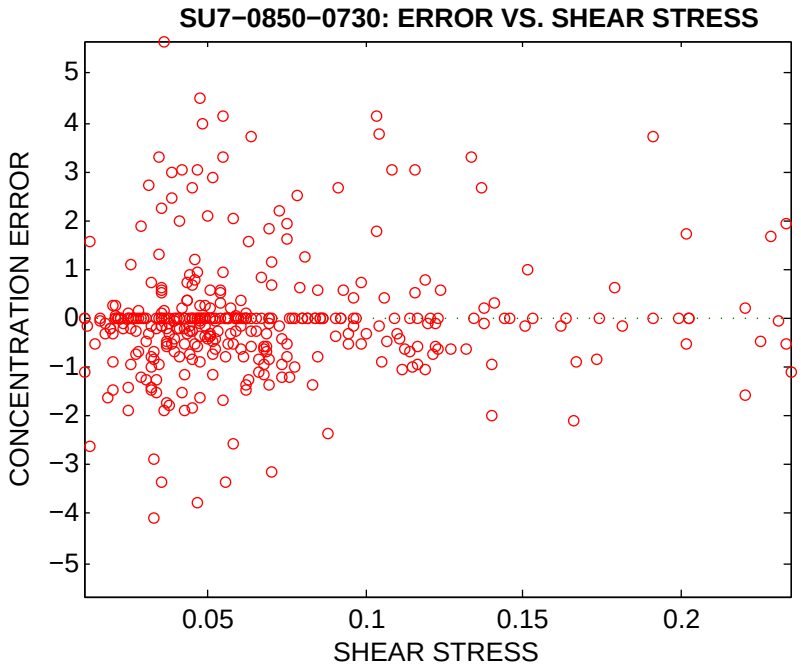


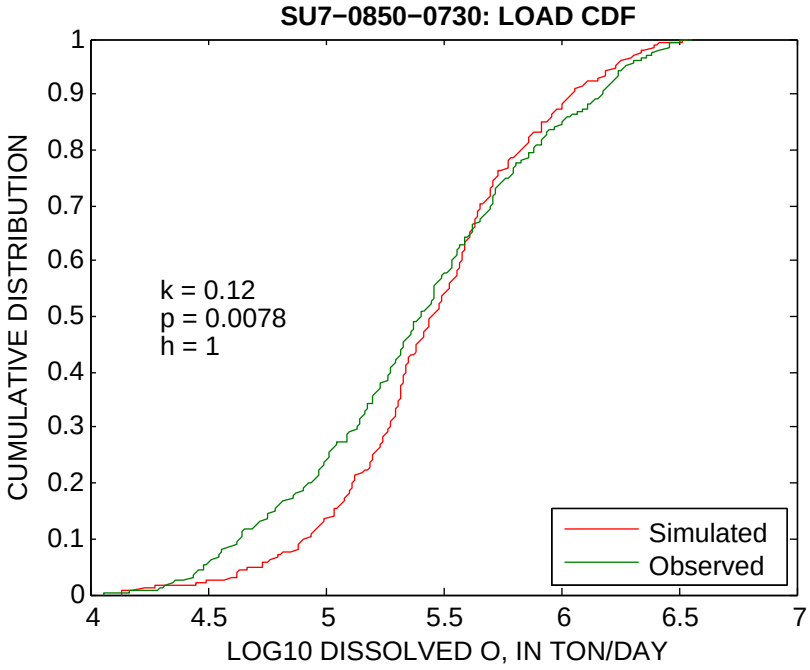


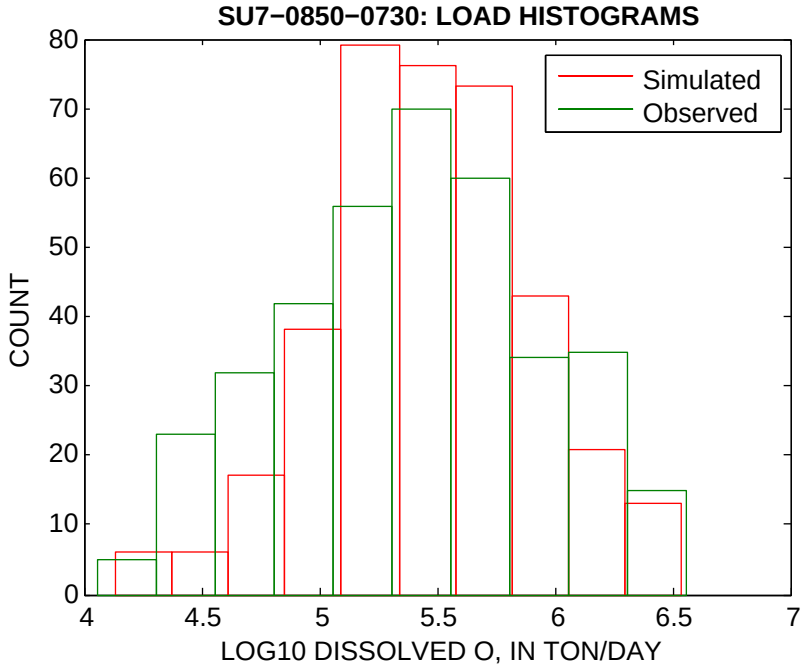


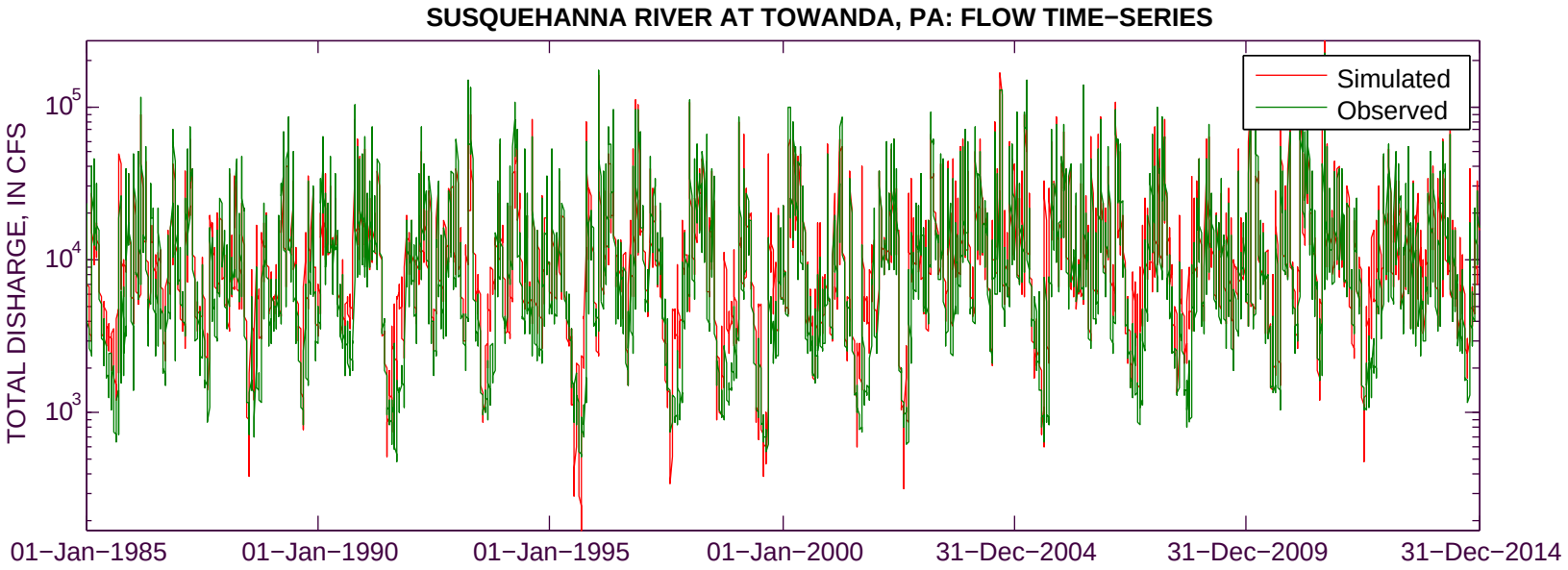
LOAD DATA
LOG10

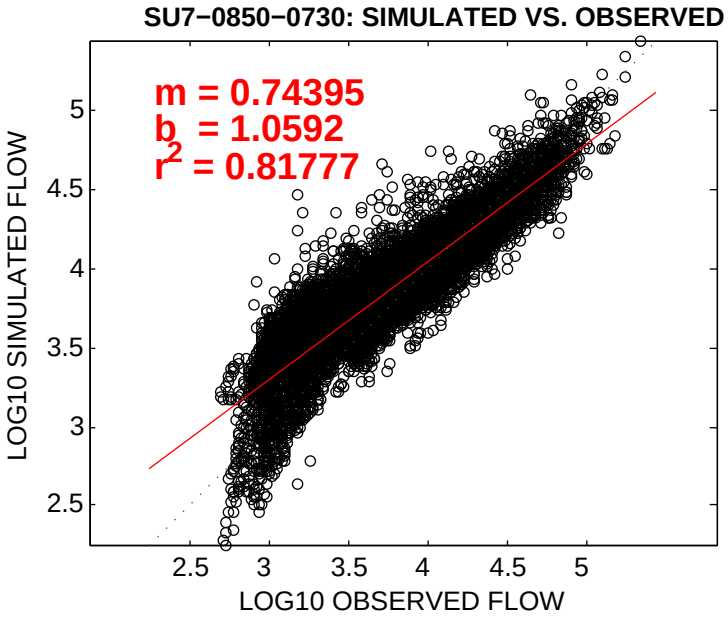


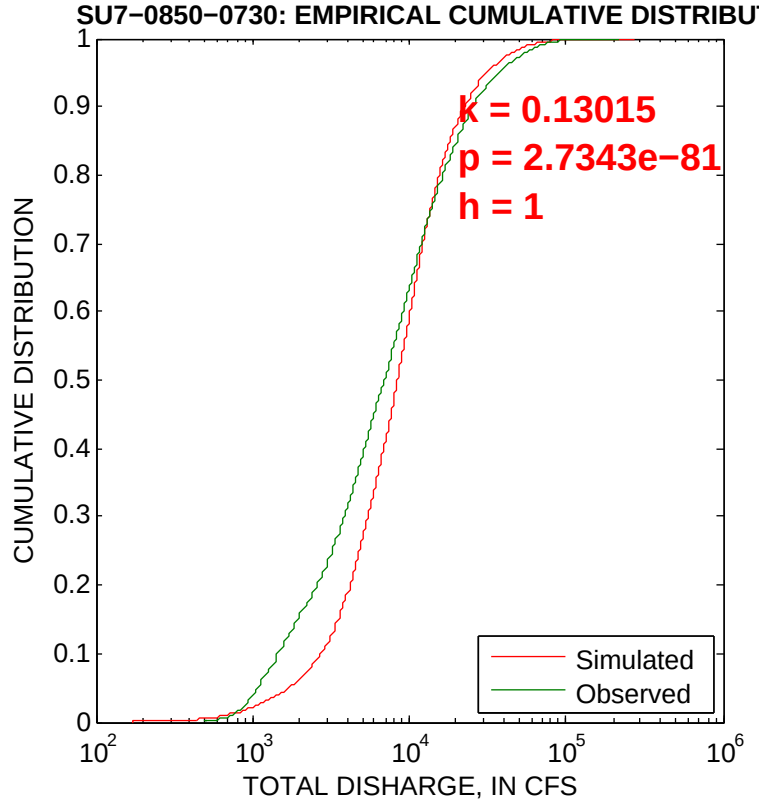












DATA SELECTION

scenario	file
P620171001WQ	FLOW.calib

plot: FLOW - total discharge

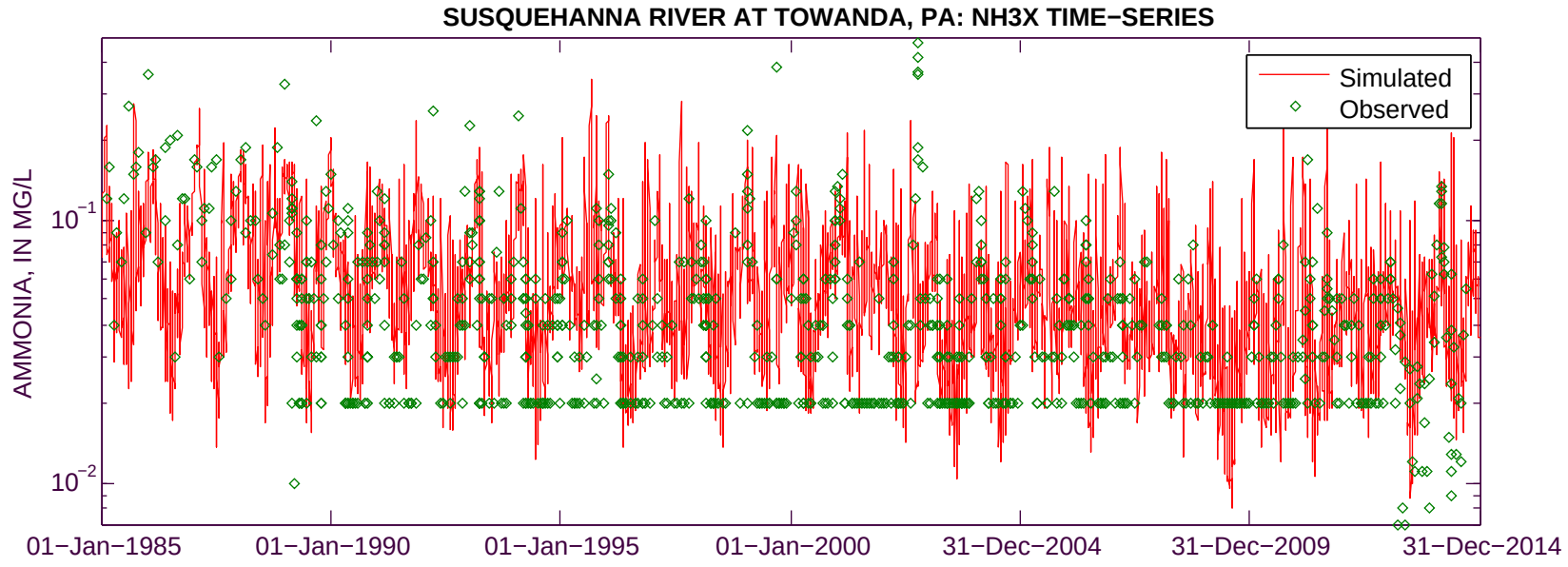
Dates: 1/1/1985 – 12/31/201

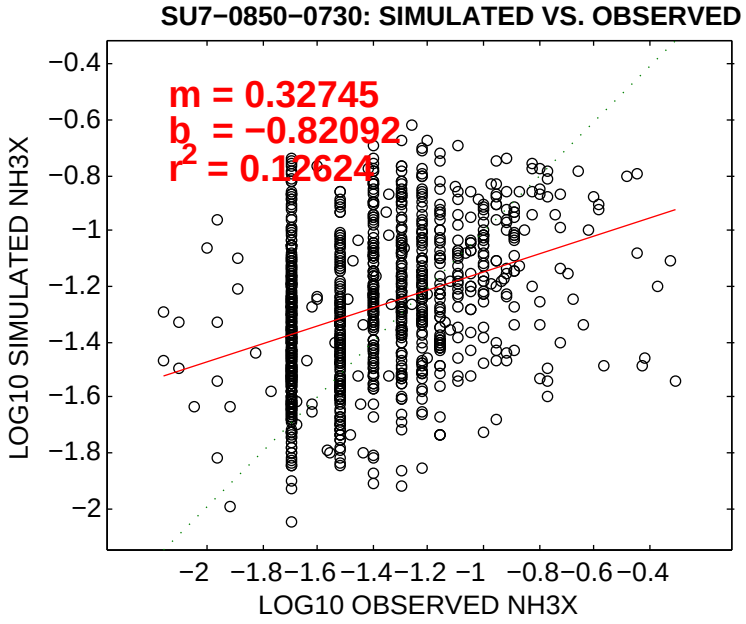
Drive	Directory	Observed
N/A	model	OBS20161101

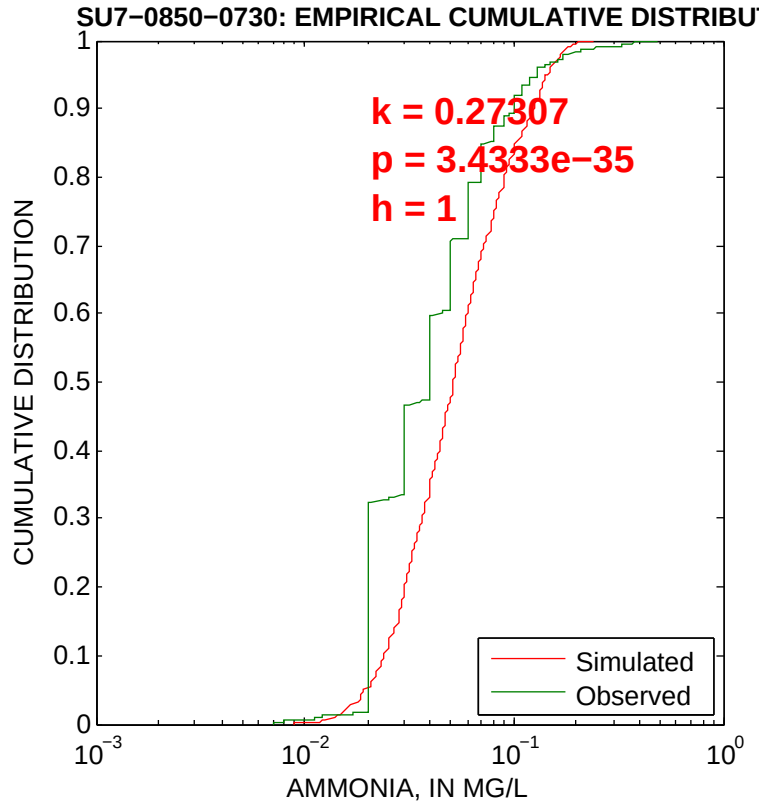
STATISTICS

	observe	simulate
n	10957	10957
min	485	174.96
	2.68574	2.24294
mean	11446	11503.1
	3.82347	3.9037
media	7000	8437
	3.8451	3.92619
max	220000	273200
	5.34242	5.43648
varian	2.02242e+0	1.46035e+
	0.212238	0.143641
JB	0.001	0.001
	0.001	0.001
	ra	log
%	0.498467	2.09821
err.va	3.96041e+0	0.0465281
rel.std.err	0.195825	0.219226
mod.eff	0.804175	0.780774

VERSION 2.1







DATA SELECTION

scenario	file
P620171001WQ	NH3X.calib

plot: NH3X - ammonia

Dates: 1/1/1985 — 12/31/201

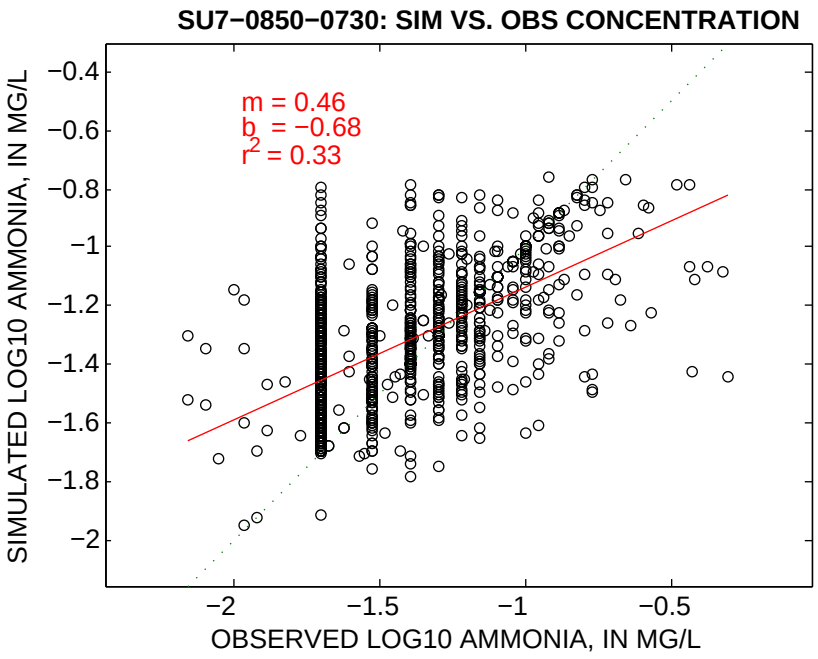
Drive	Directory	Observed
N/A	model	OBS20161101

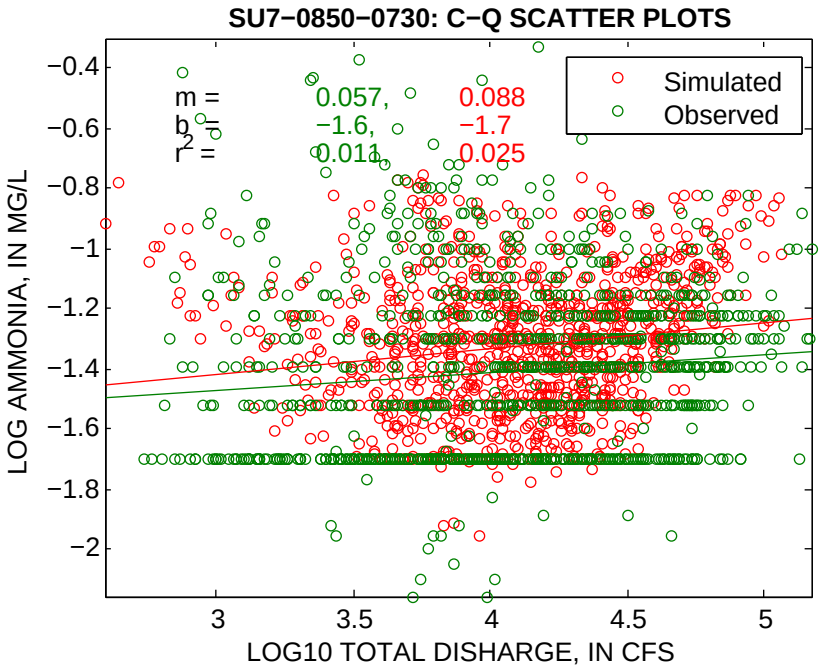
STATISTICS

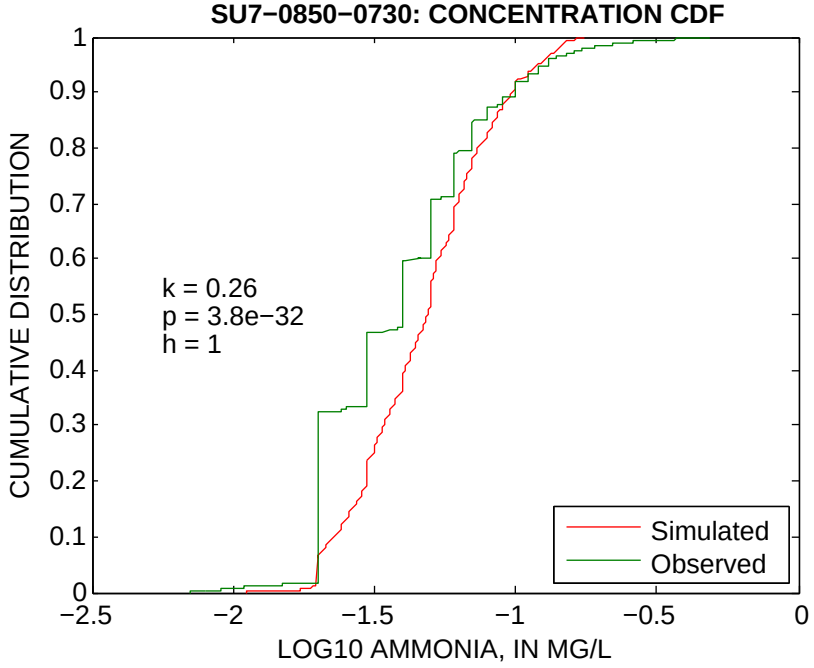
	n	observe	simulate
		1062	1062
min		0.007	0.0089189
		-2.1549	-2.04969
mean		0.0503852	0.0627744
		-1.40741	-1.28178
media		0.04	0.051651
		-1.39794	-1.28692
max		0.49	0.23925
		-0.309804	-0.621148
varian		0.00227348	0.00156718
		0.0821356	0.0697643
JB		0.001	0.001
		0.001	0.003017
		ra	log
%		24.5891	-8.92657
err.va		0.00301094	0.113908
rel.std.err		1.32438	1.38683
mod.eff		-0.324376	-0.386829

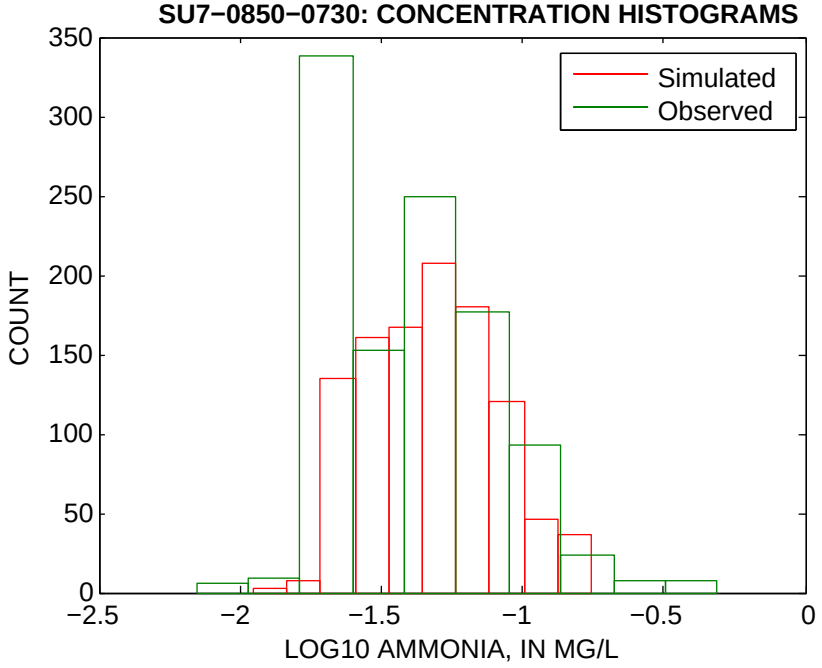
VERSION 2.1

ALL DATA
LOG10

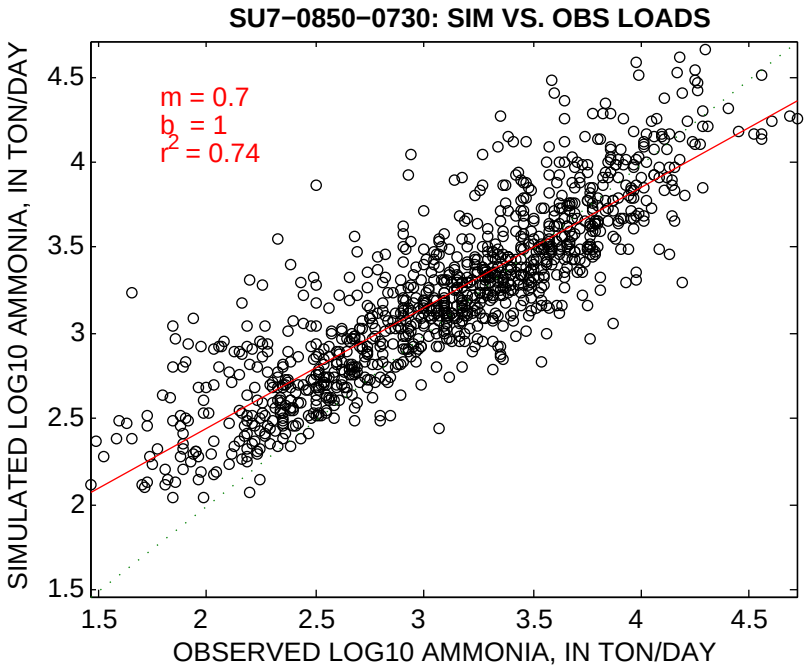


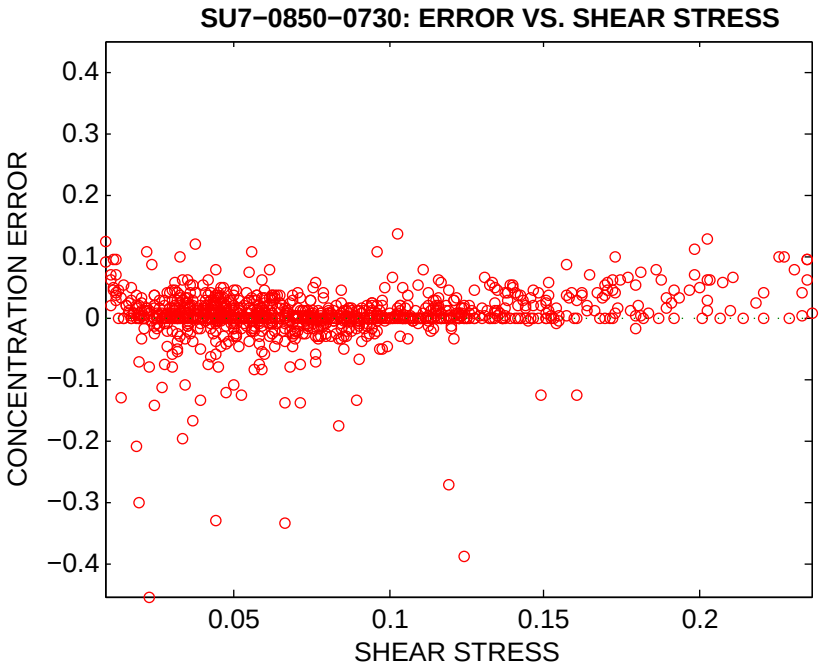


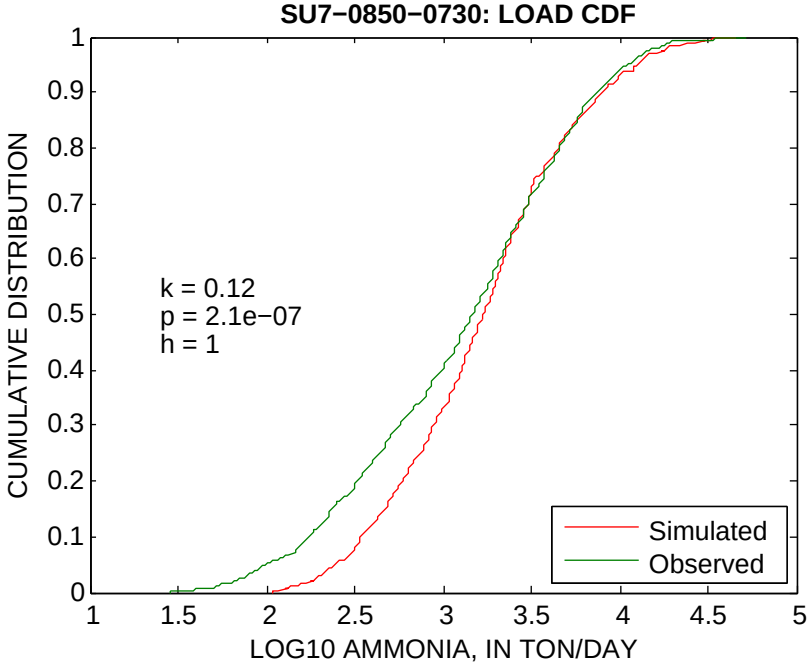


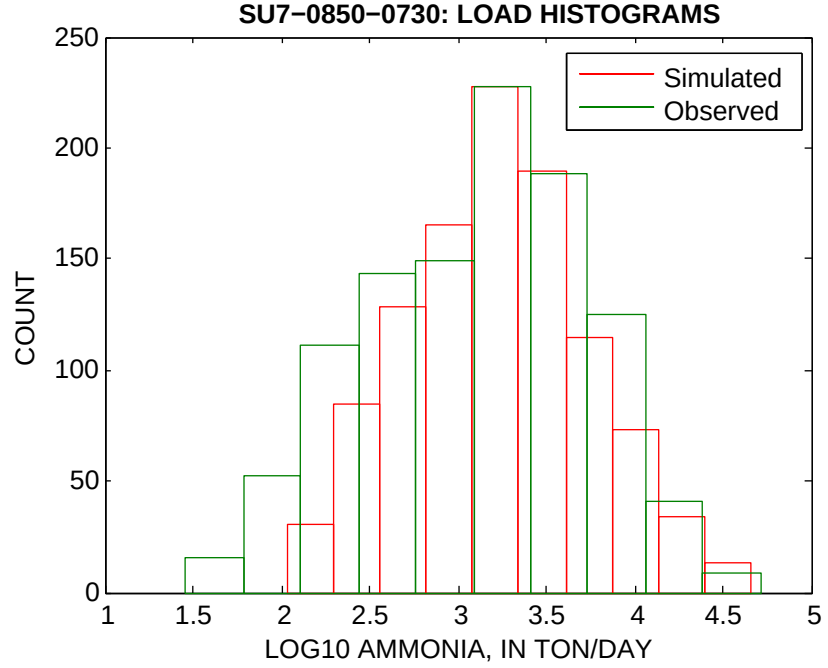


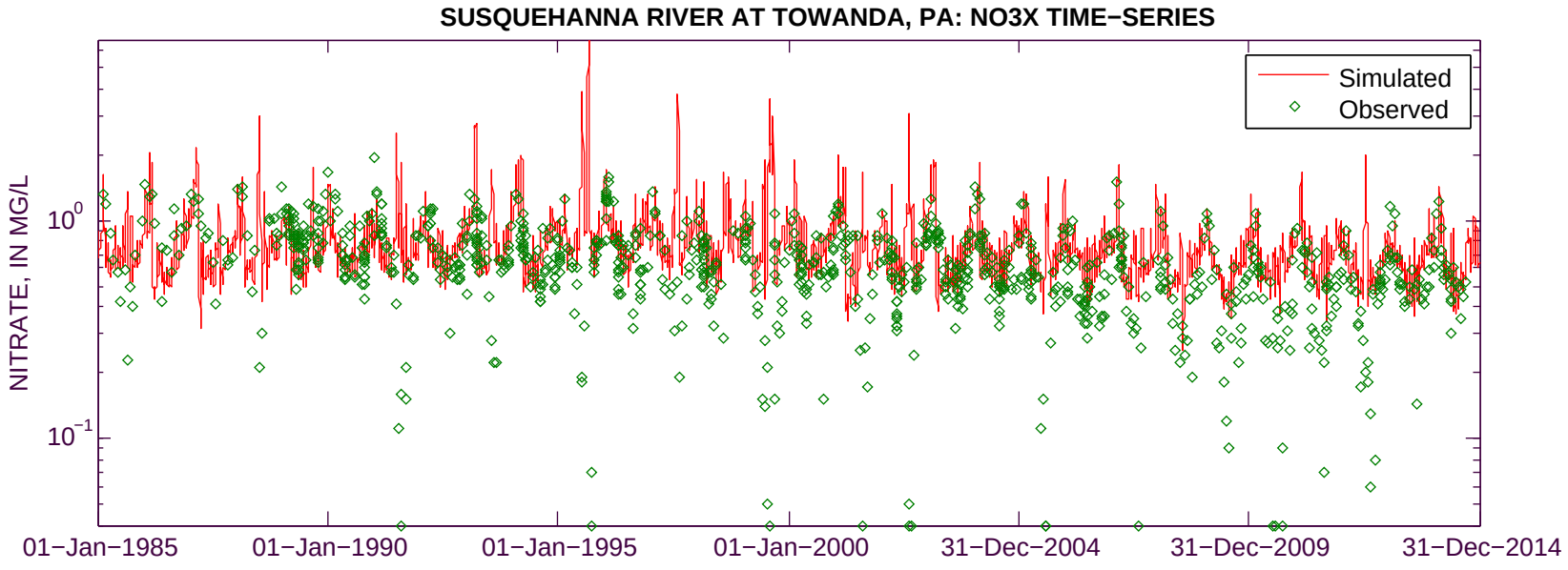
LOAD DATA
LOG10

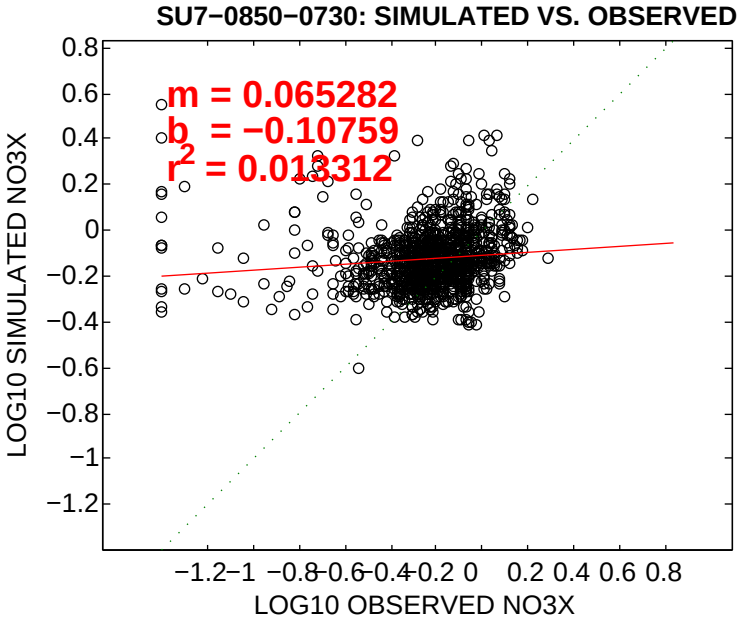


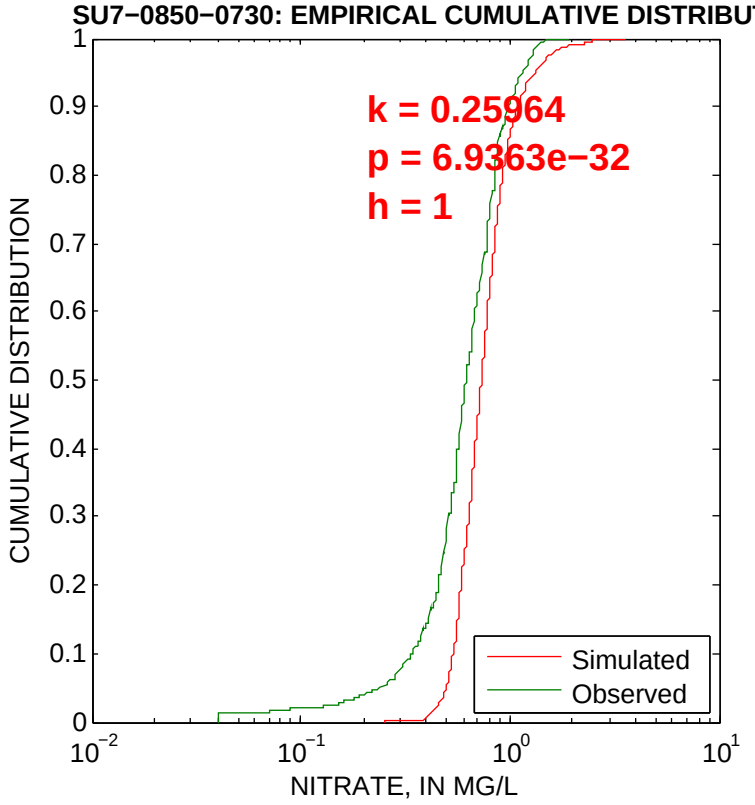












DATA SELECTION

scenario	file
P620171001WQ	NO3X.calib

plot: NO3X - nitrate

Dates 1/1/1985 12/31/201

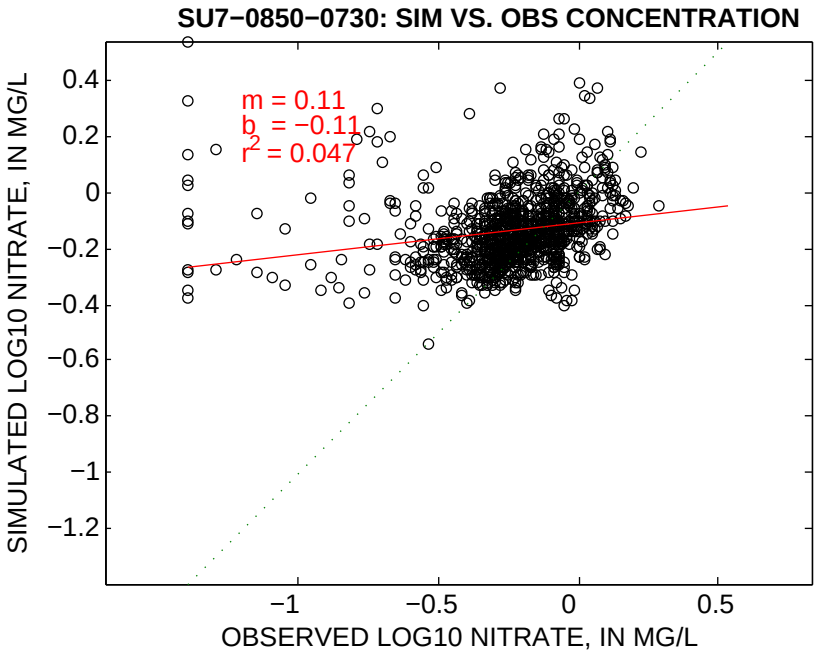
Drive	Directory	Observed
N/A	model	OBS20161101

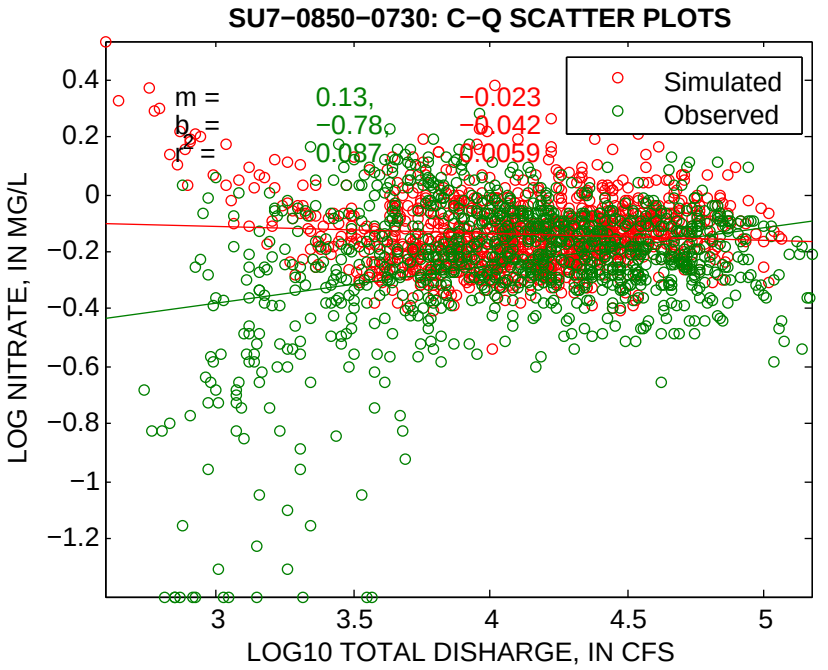
STATISTICS

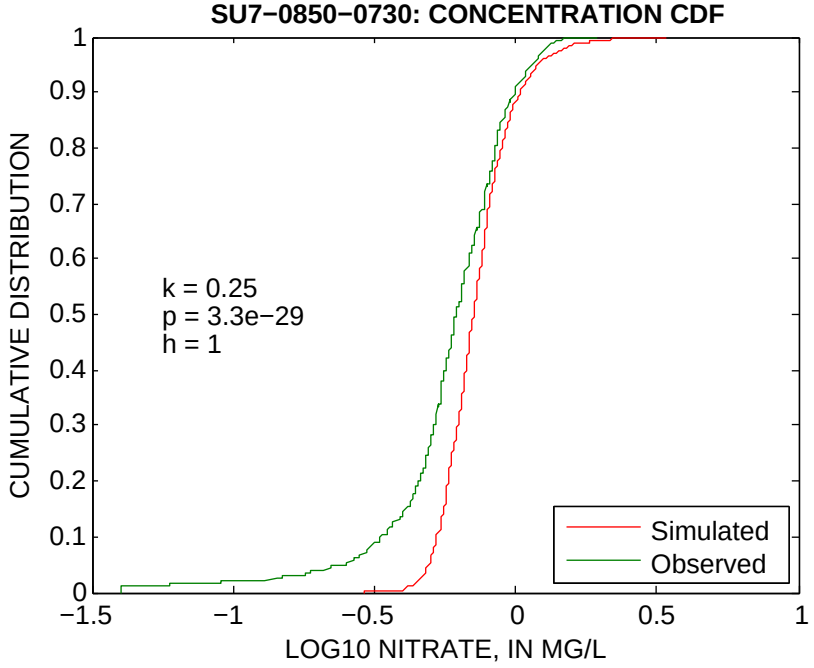
	n	observe	simulate
		1063	1063
min		0.04	0.25066
		-1.39794	-0.600915
mean		0.651634	0.793619
		-0.233806	-0.12285
media		0.62	0.73185
		-0.207608	-0.135578
max		1.93	3.595
		0.285557	0.555699
varian		0.0713214	0.0886953
		0.0549729	0.017599
JB		0.001	0.001
		0.001	0.001
		ra	log
%		21.7891	-47.4565
err.va		0.151953	0.0777173
rel.std.err		2.13054	1.41374
mod.eff		-1.13054	-0.413739

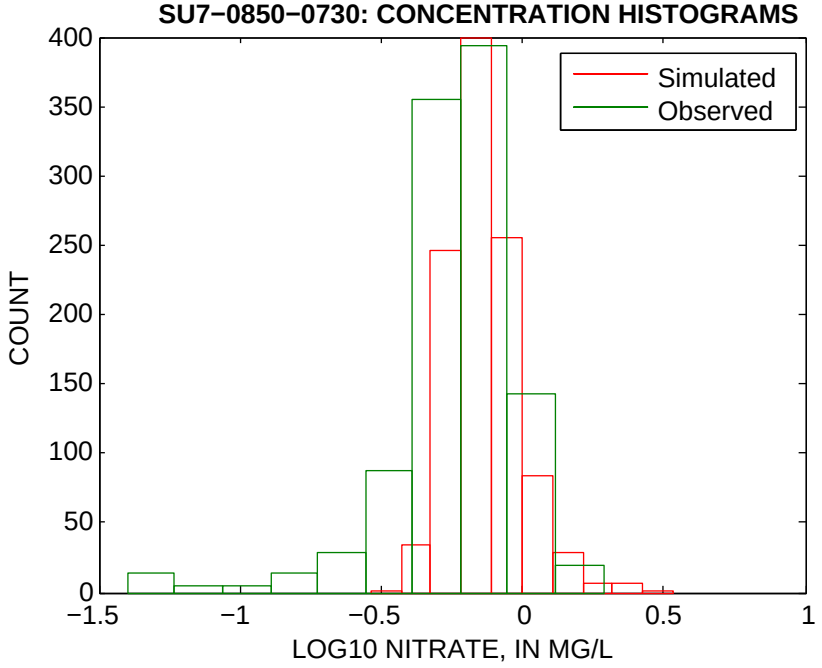
VERSION 2.1

ALL DATA
LOG10

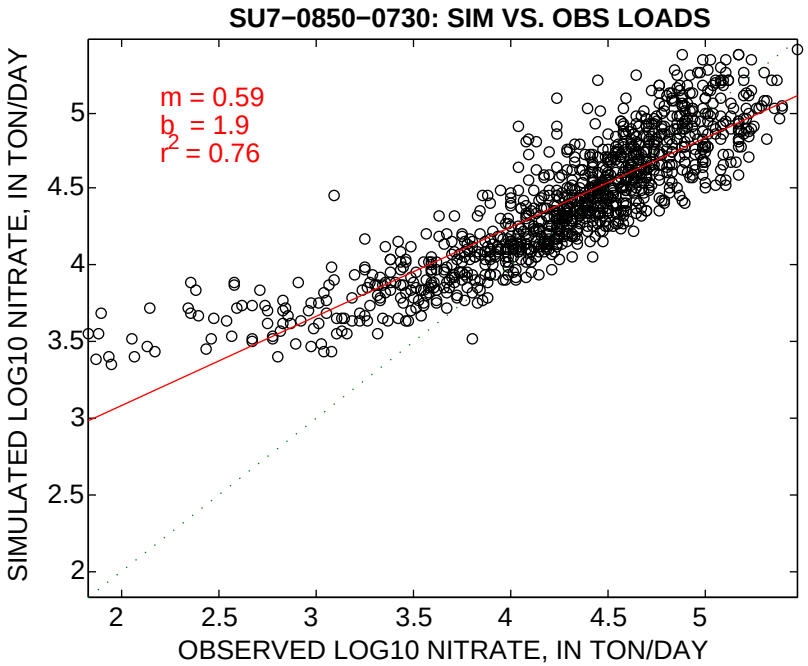


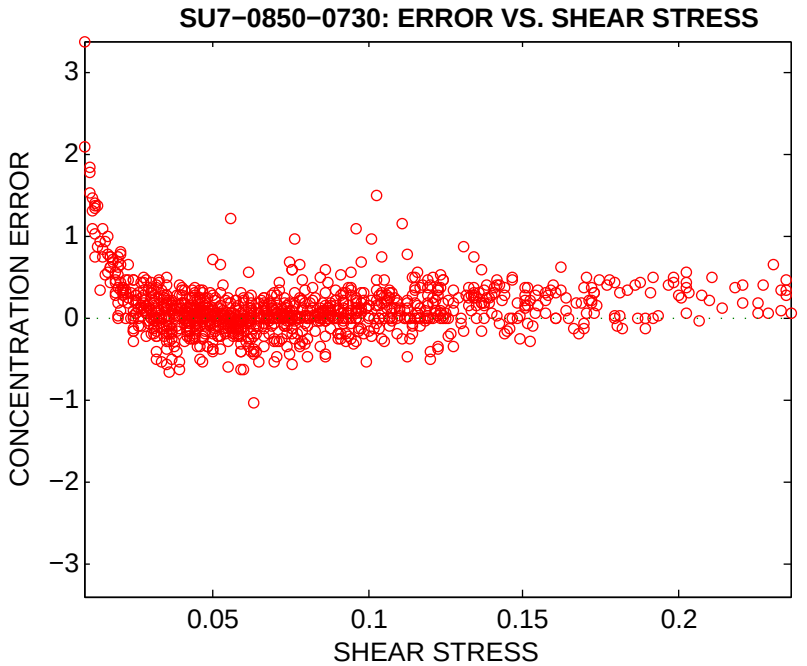


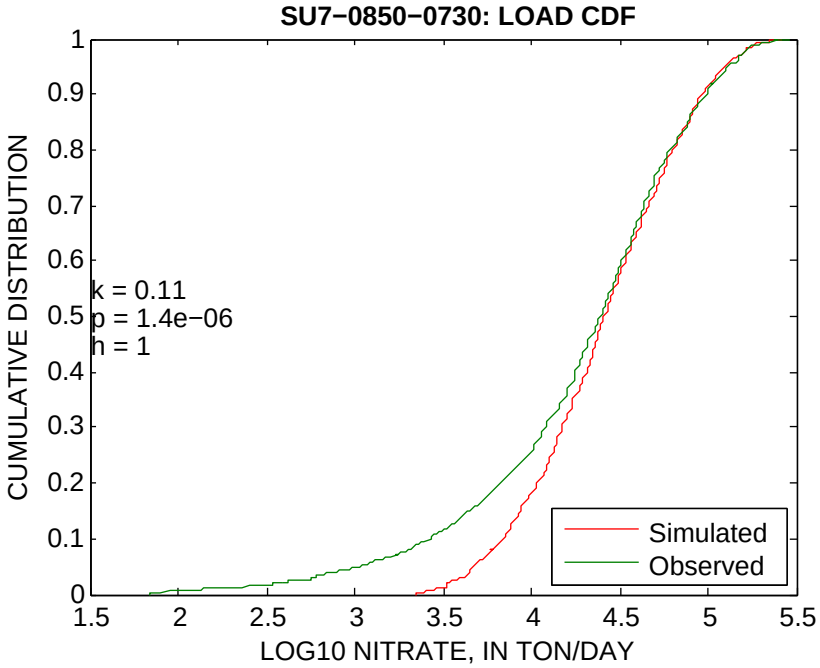


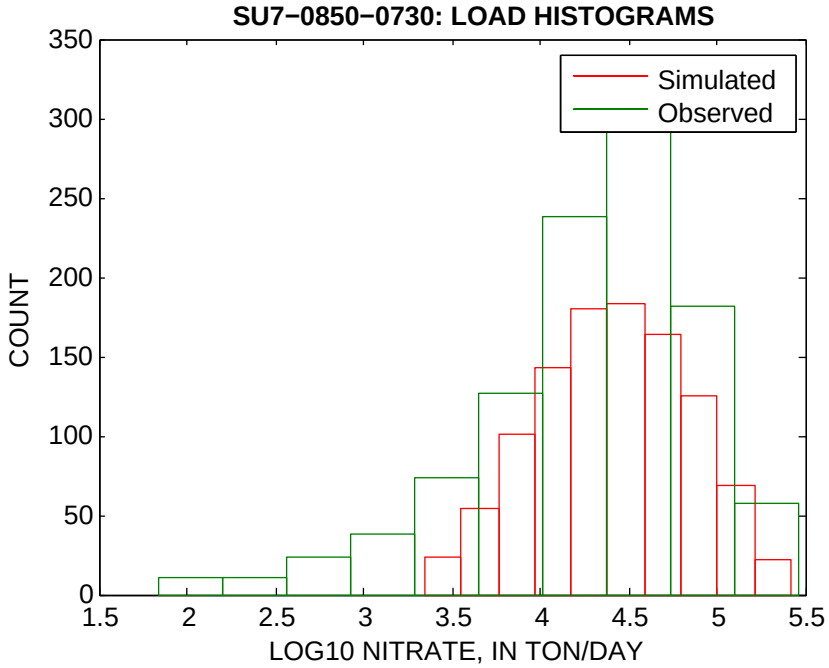


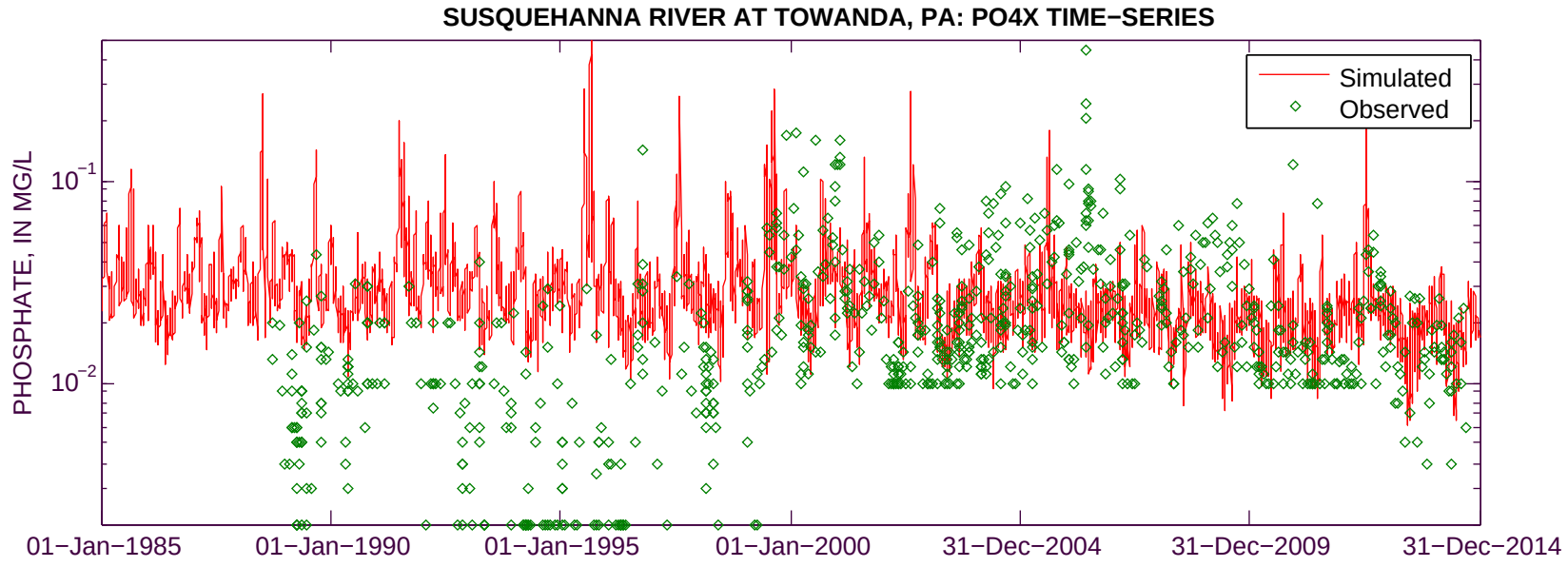
LOAD DATA
LOG10

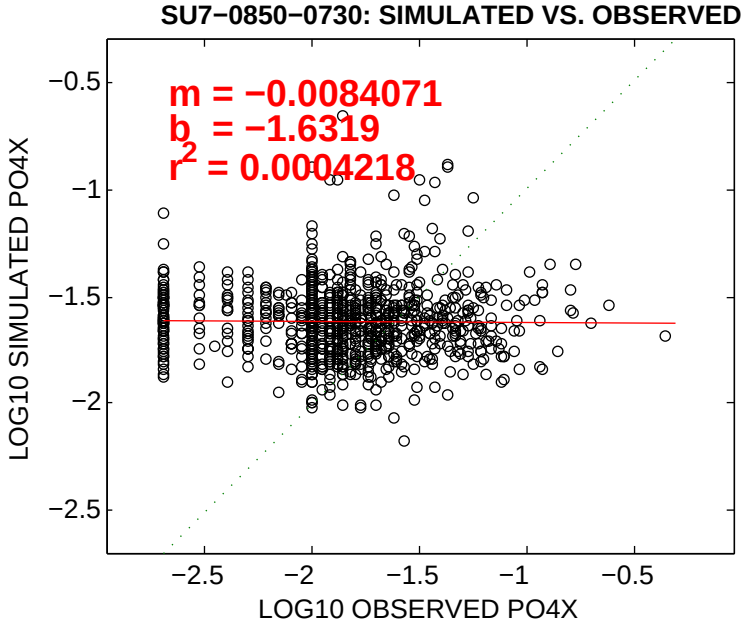


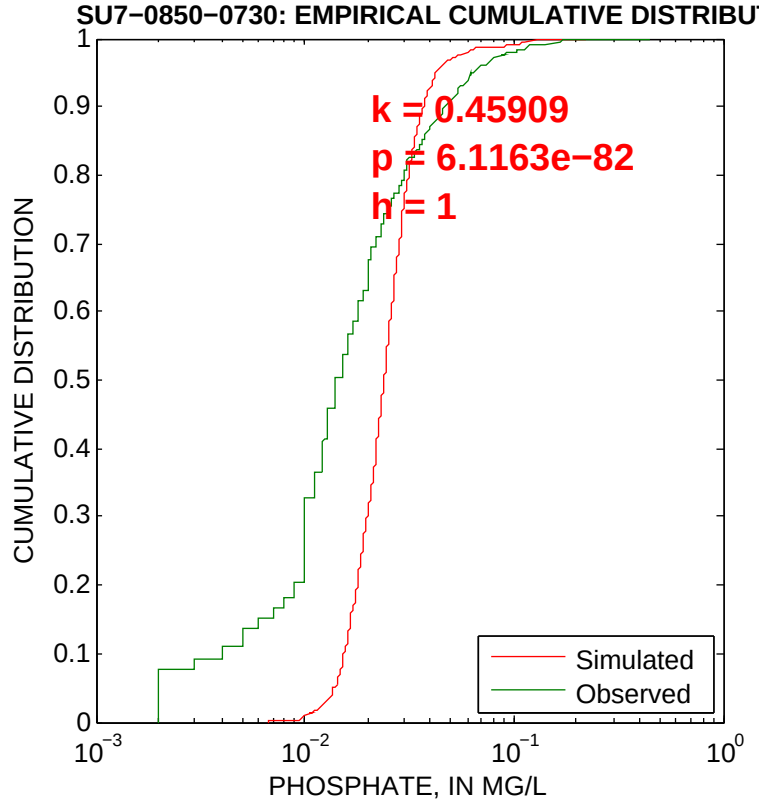












DATA SELECTION

scenario	file
P620171001WQ	PO4X.calib

plot: PO4X - phosphate

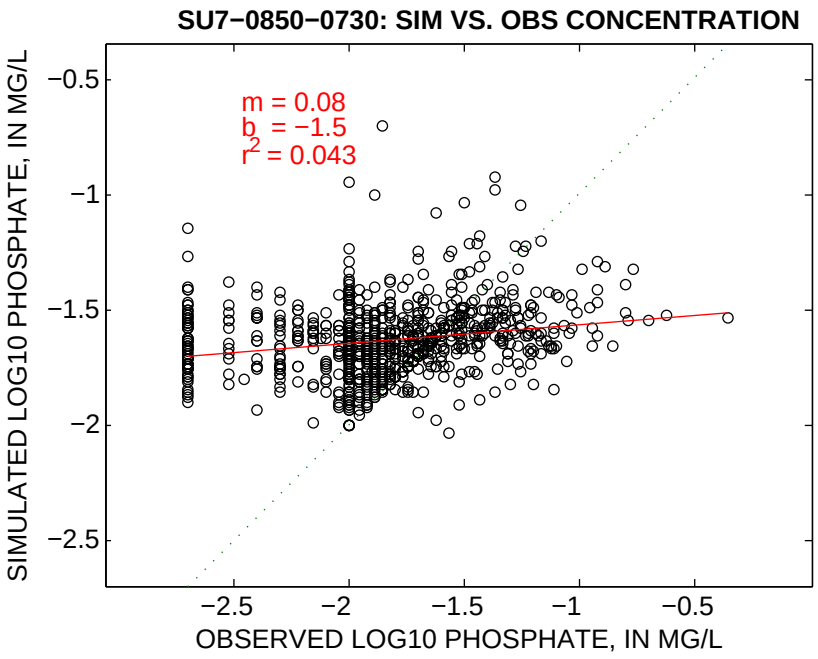
Dates	1/1/1985	12/31/201
Drive	Directory	Observed
N/A	model	OBS20161101

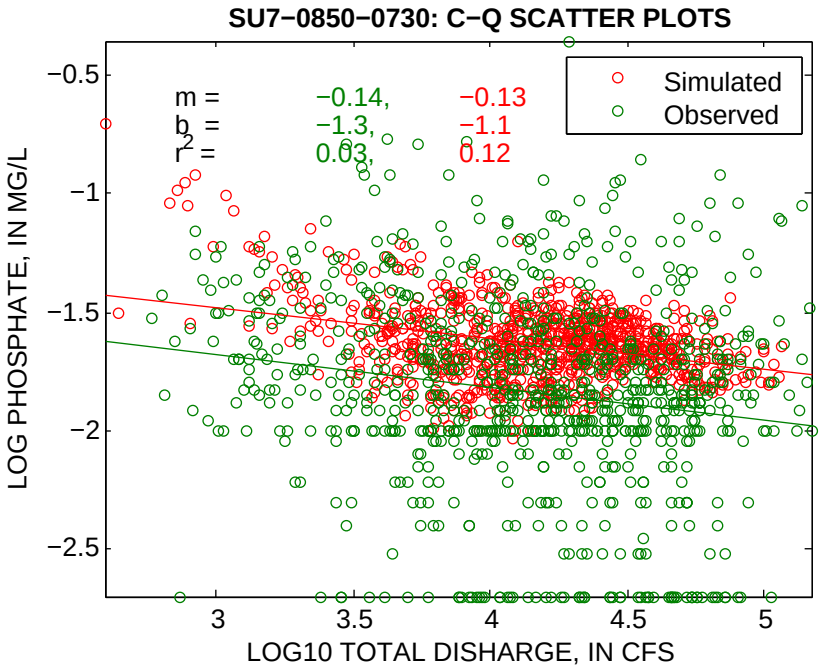
STATISTICS

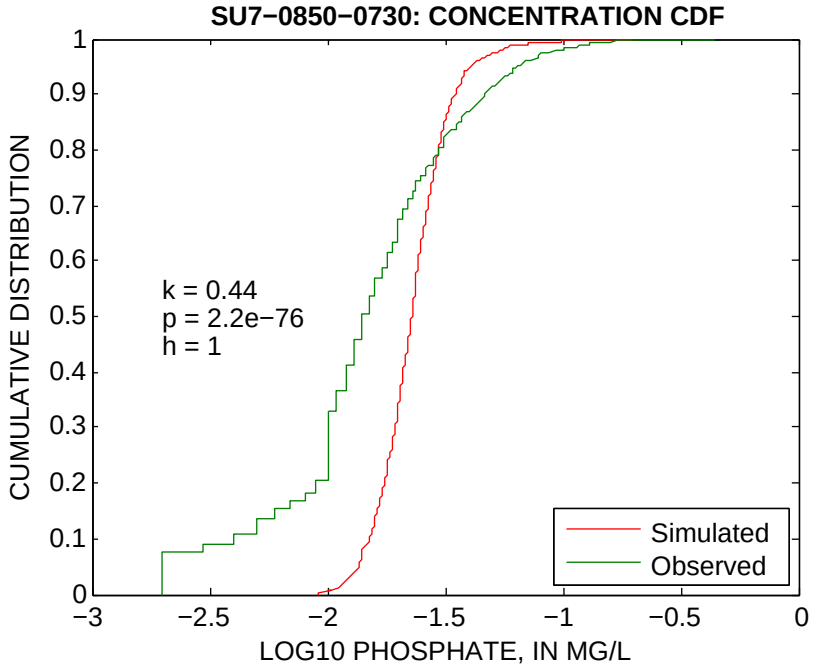
	n	880	880
		observe	simulate
min		0.002	0.0067112
		-2.69897	-2.1732
mean		0.0224128	0.0263017
		-1.83443	-1.61652
media		0.014	0.023973
		-1.85387	-1.62028
max		0.442	0.21892
		-0.354578	-0.659715
varian		0.00077569	0.00020439
		0.163489	0.0273948
JB		0.001	0.001
		0.008359	0.001
		ra	log
%		17.3515	-11.879
err.va		0.00098390	0.241172
rel.std.err		1.26841	1.47516
mod.eff		-0.268411	-0.475162

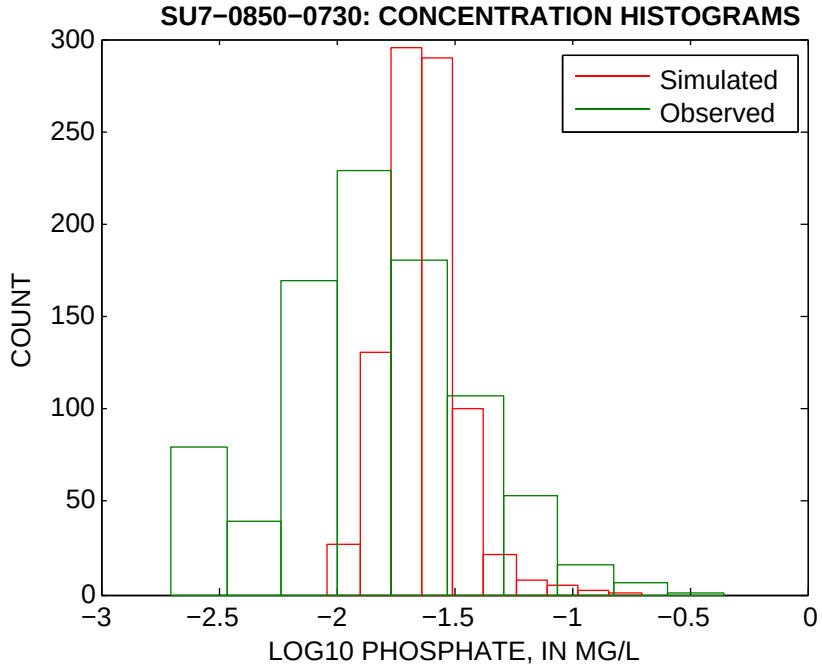
VERSION 2.1

ALL DATA
LOG10

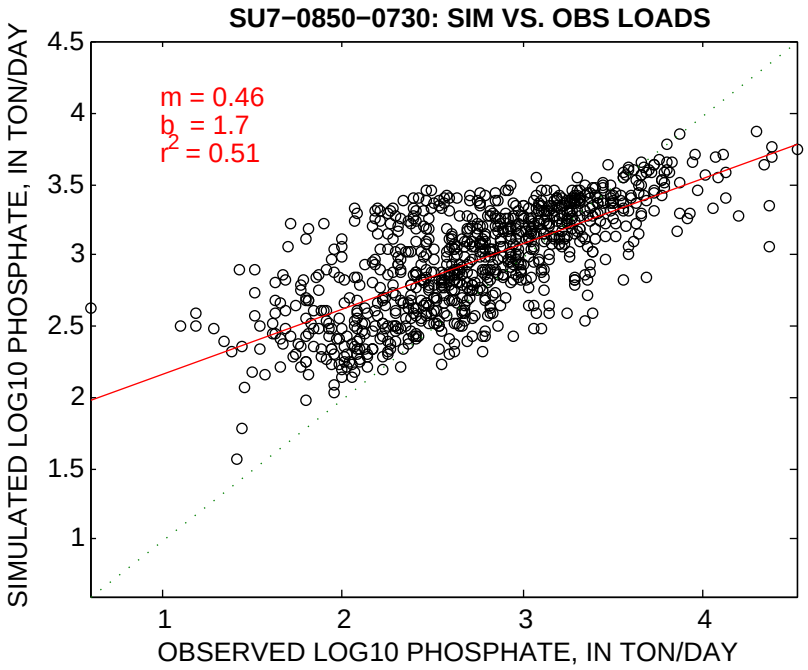


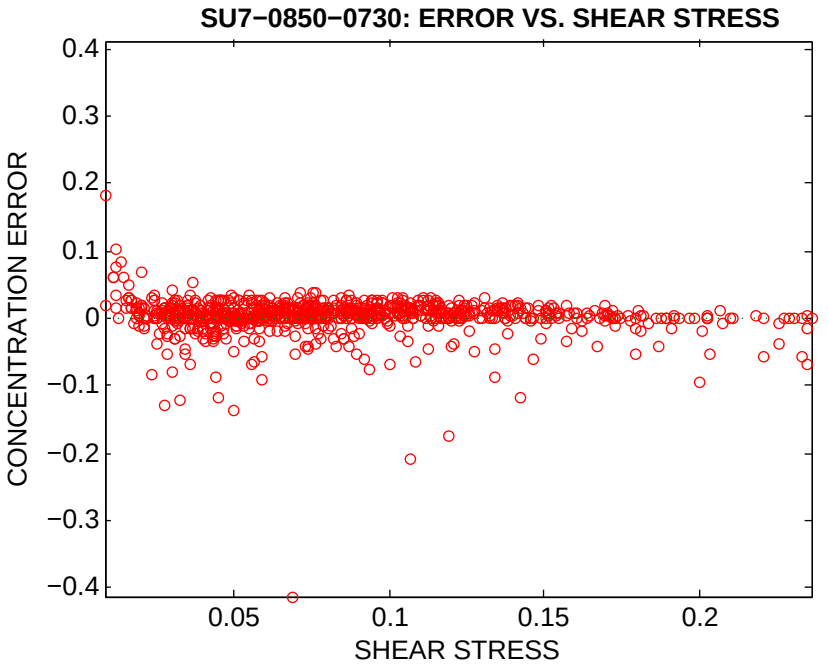


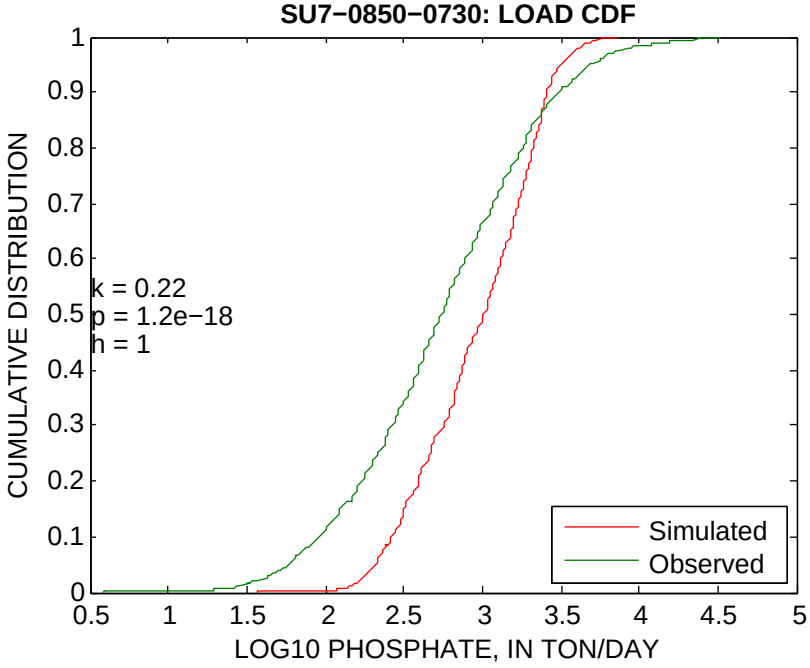


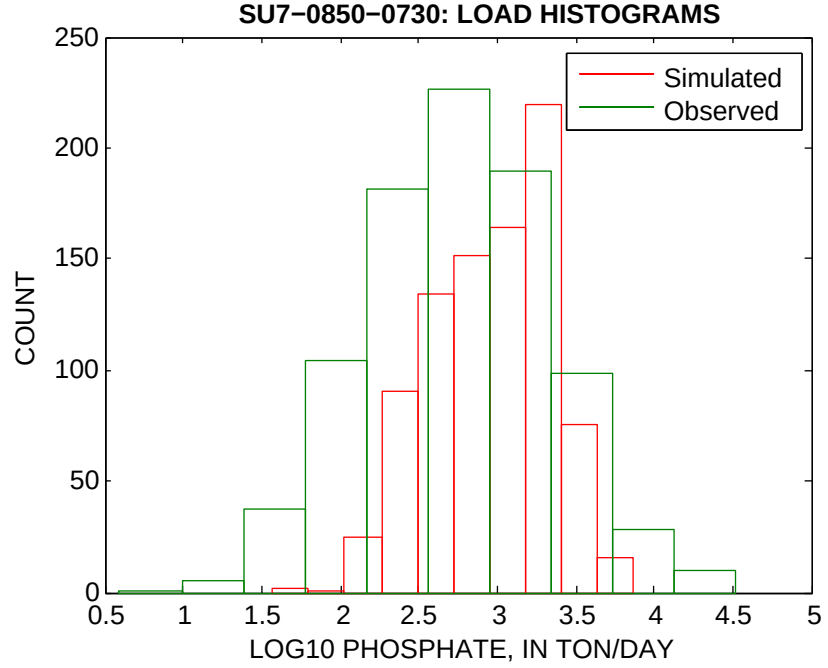


LOAD DATA
LOG10

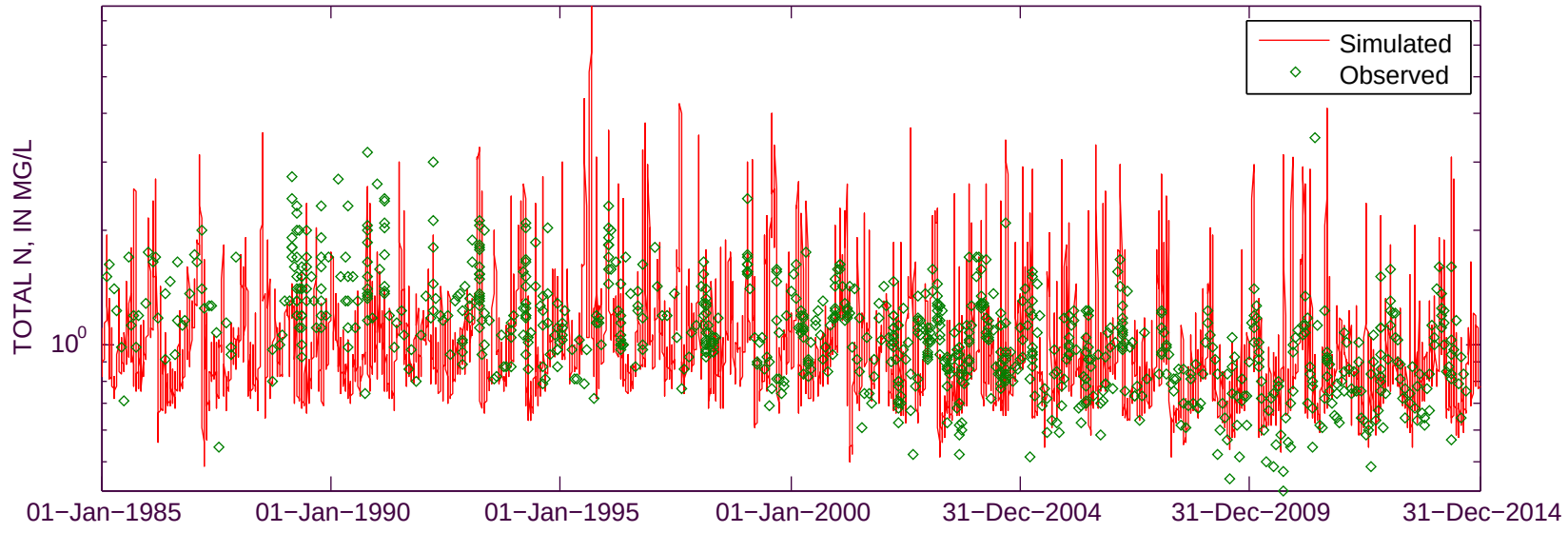




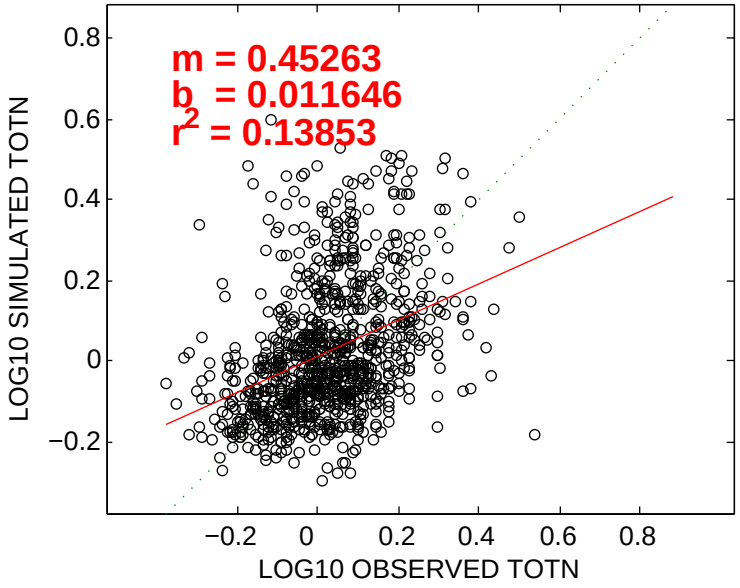




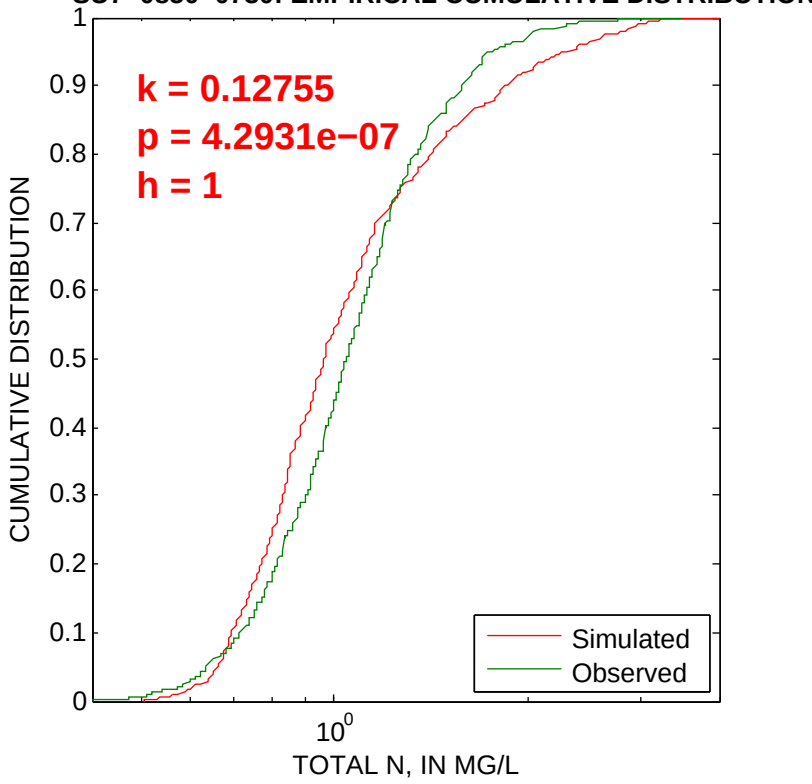
SUSQUEHANNA RIVER AT TOWANDA, PA: TOTN TIME-SERIES



SU7-0850-0730: SIMULATED VS. OBSERVED



SU7-0850-0730: EMPIRICAL CUMULATIVE DISTRIBUTION



DATA SELECTION

scenario	file
P620171001WQ	TOTN.calib

plot: TOTN - total nitrogen

Dates: 1/1/1985 – 12/31/201

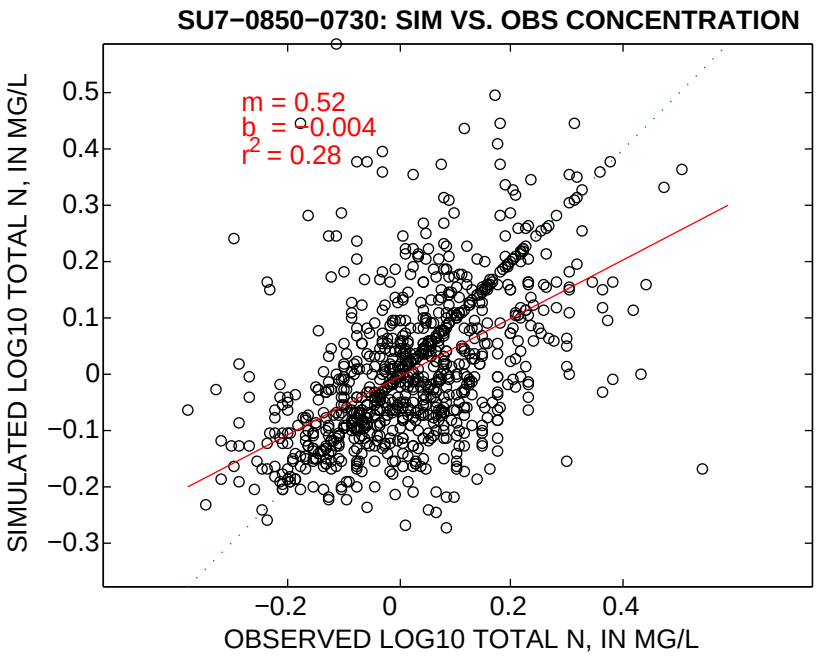
Drive	Directory	Observed
N/A	model	OBS20161101

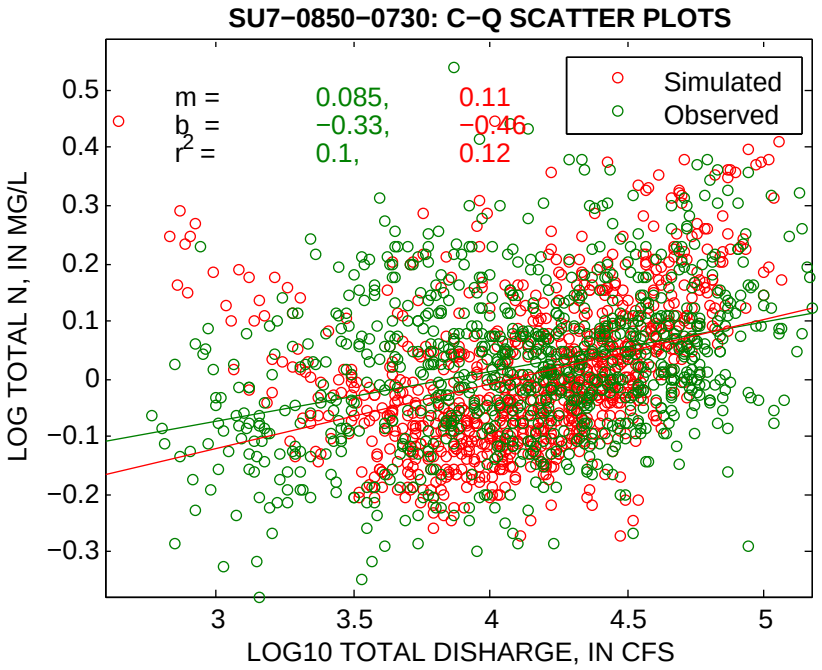
STATISTICS

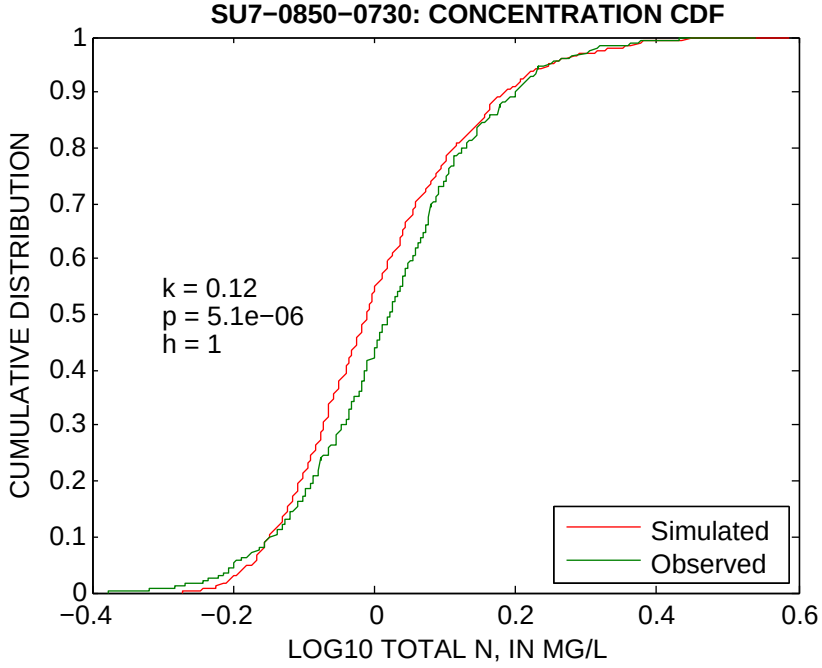
	n	observe	simulate
		933	933
min		0.42	0.50811
		-0.376751	-0.294042
mean		1.11023	1.1407
		0.0238258	0.0224307
media		1.05	0.96734
		0.0211893	-0.0144209
max		3.47	3.9768
		0.540329	0.599534
varian		0.137999	0.273189
		0.0182749	0.0270274
JB		0.001	0.001
		0.003307	0.001
		ra	log
%		2.74446	-5.85539
err.va		0.288173	0.0287607
rel.std.err		2.08822	1.57378
mod.eff		-1.08822	-0.573783

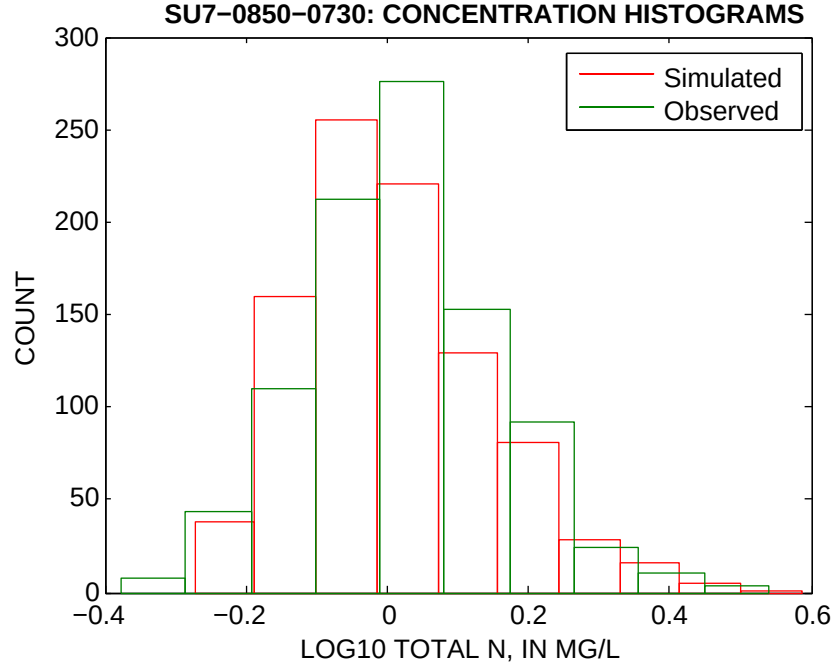
VERSION 2.1

ALL DATA
LOG10

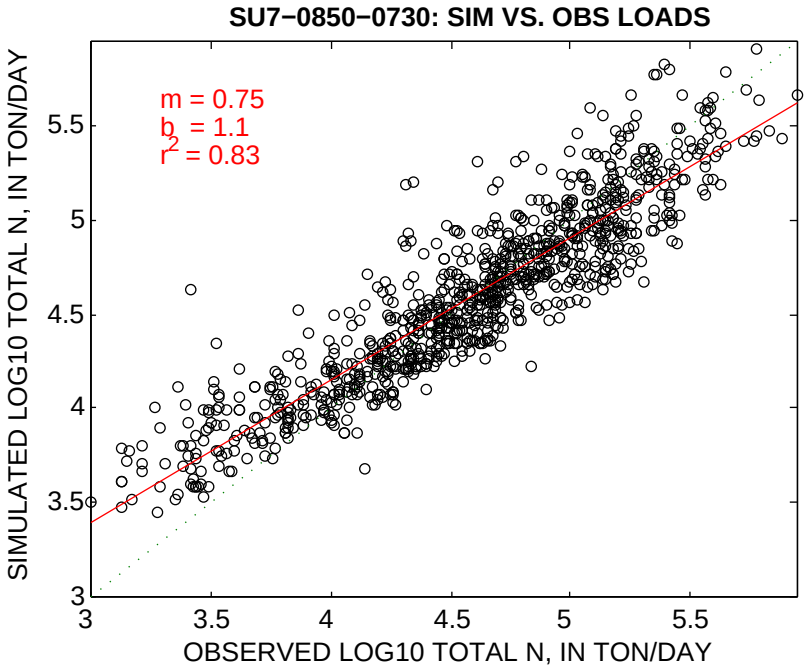


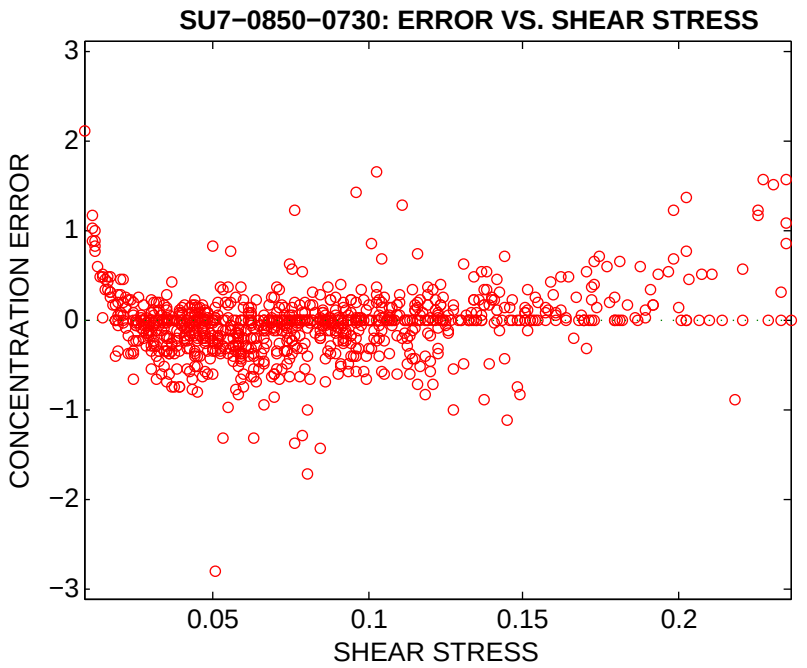


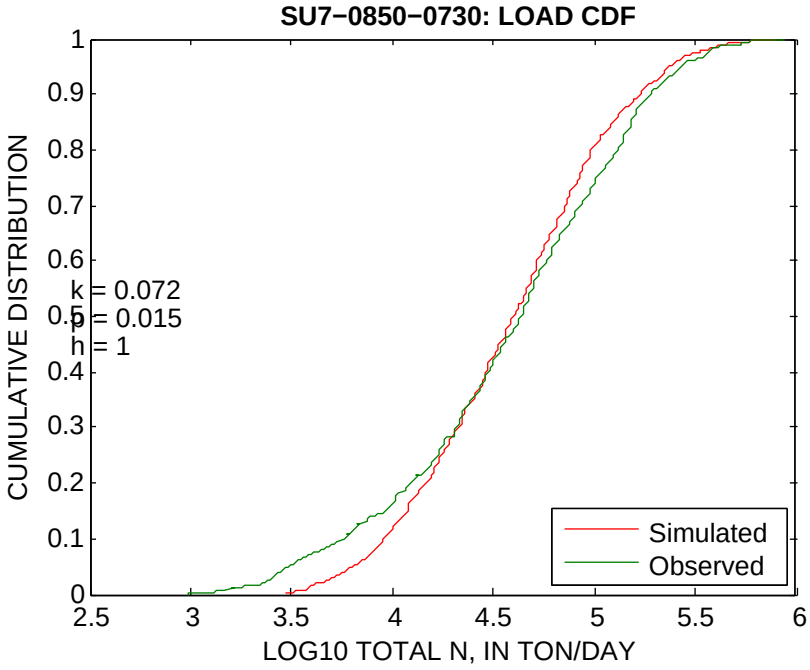


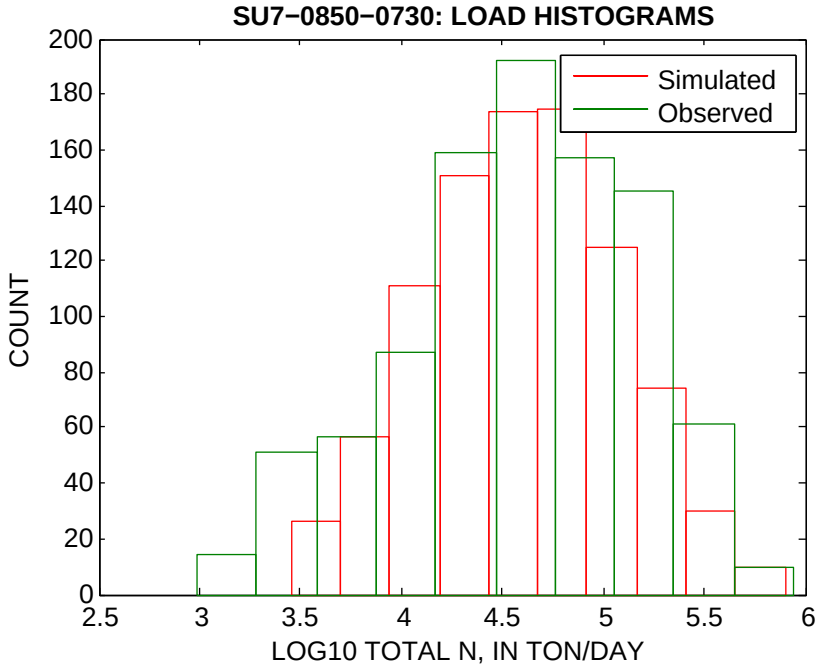


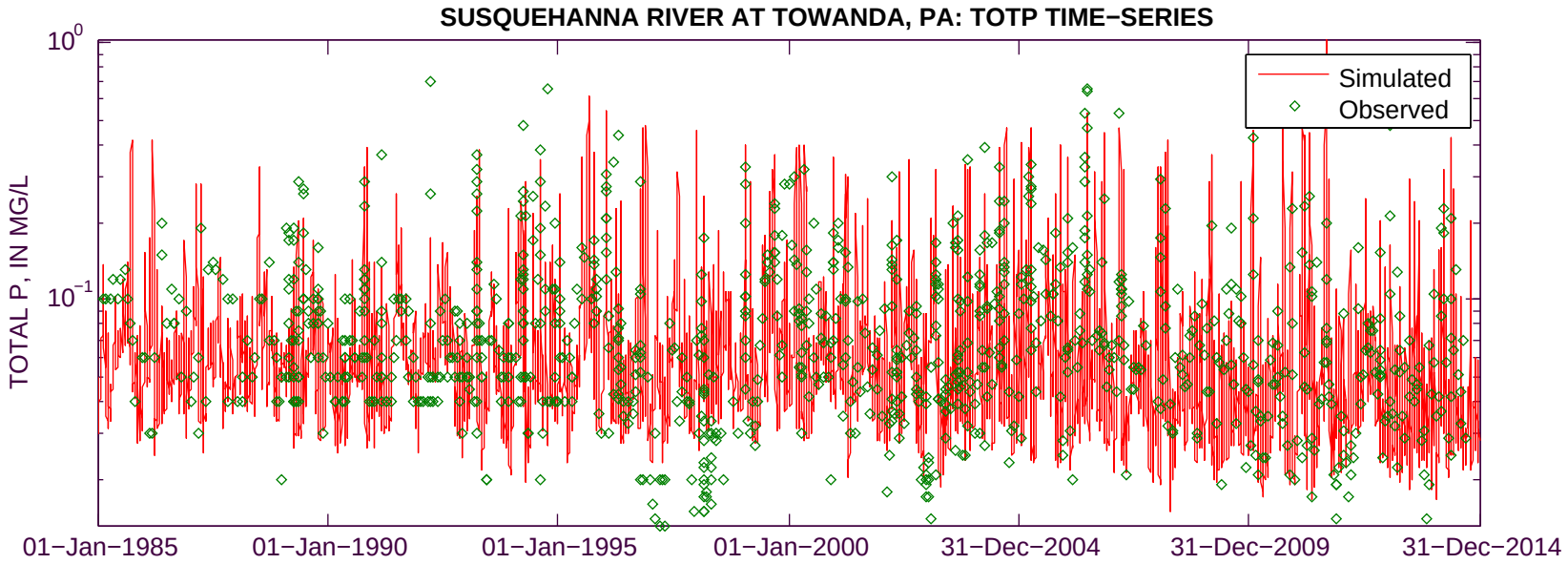
LOAD DATA
LOG10

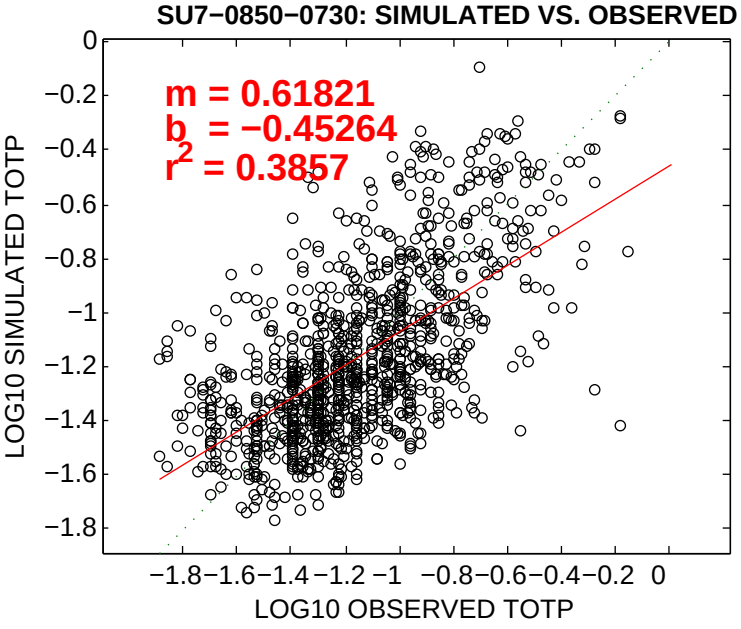


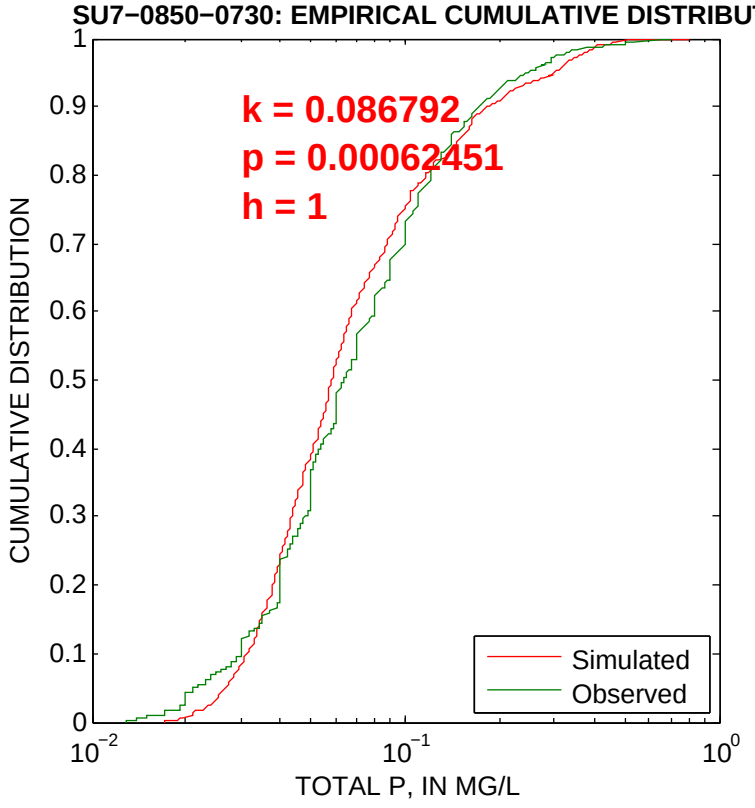












DATA SELECTION

scenario: P620171001WQ | file: TOTP.calib

plot: TOTP - total phosphorus

Dates: 1/1/1985 – 12/31/201

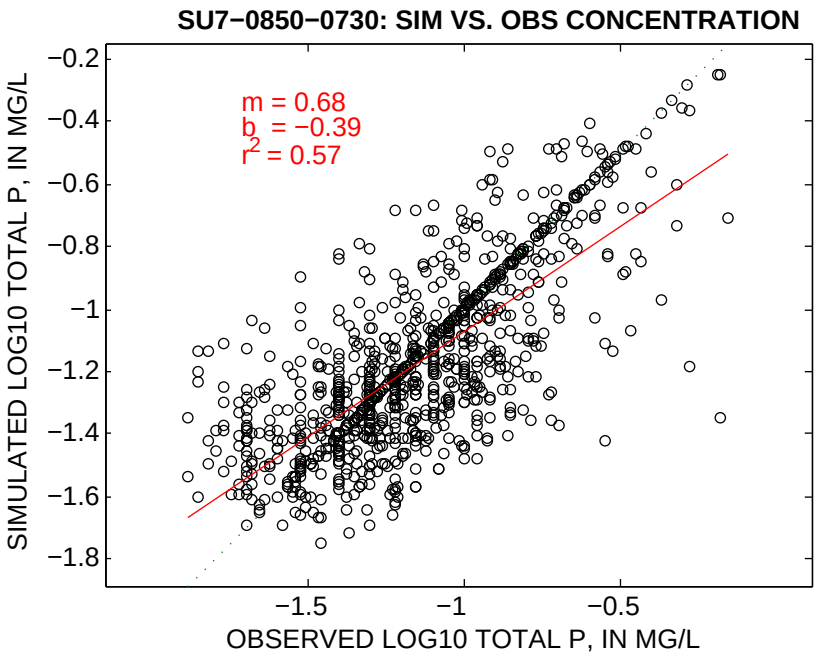
Drive: N/A | Directory: model | Observed: OBS20161101

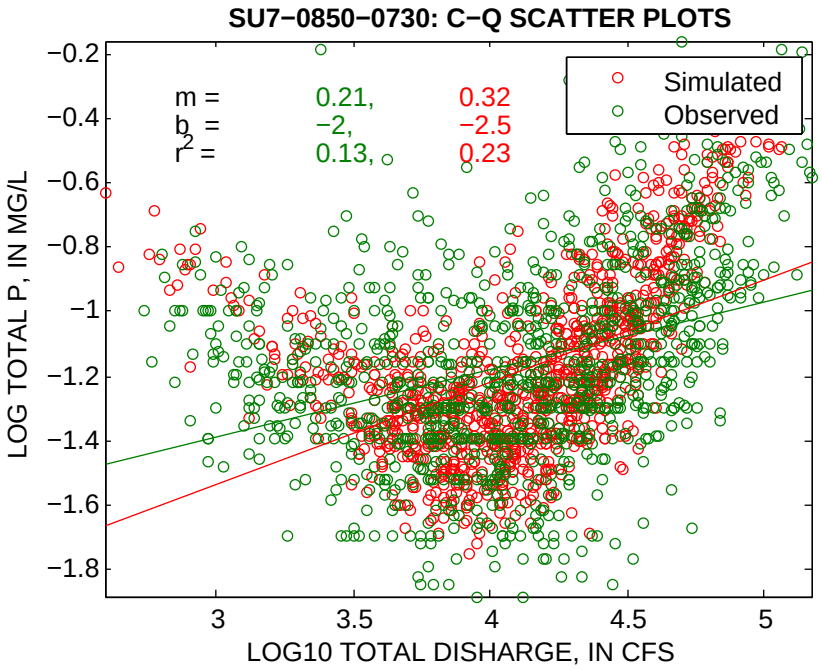
STATISTICS

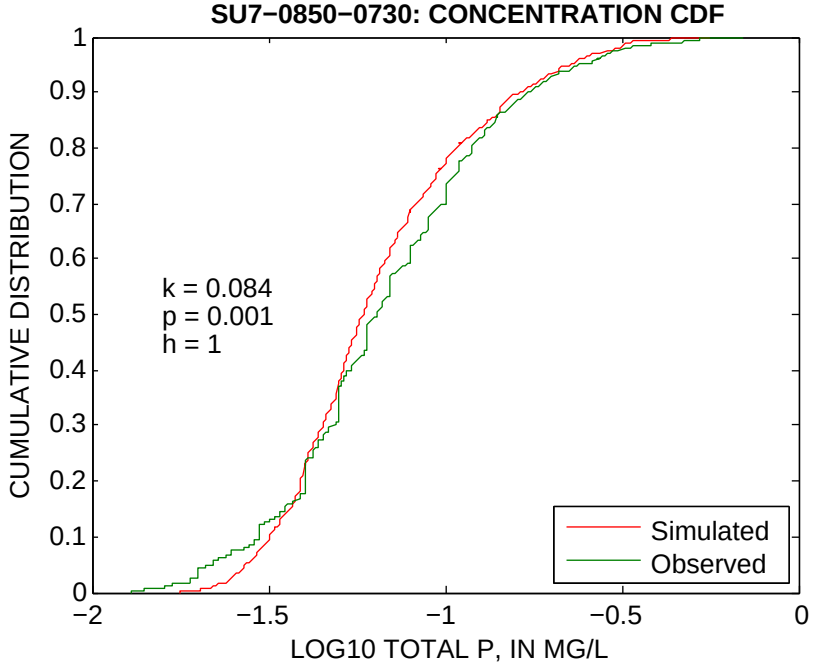
		observe	simulate
n		1060	1060
min		0.013	0.017078
		-1.88606	-1.76756
mean		0.0898862	0.0898011
		-1.16225	-1.17115
media		0.064	0.0581025
		-1.19382	-1.23581
max		0.7	0.80887
		-0.154902	-0.0921213
varian		0.00658627	0.00741784
		0.0927519	0.0919047
JB		0.001	0.001
		0.001	0.001
		ra	log
%		0.0946671	0.765653
err.va		0.00583098	0.0700563
rel.std.err		0.885323	0.755309
mod.eff		0.114677	0.244691

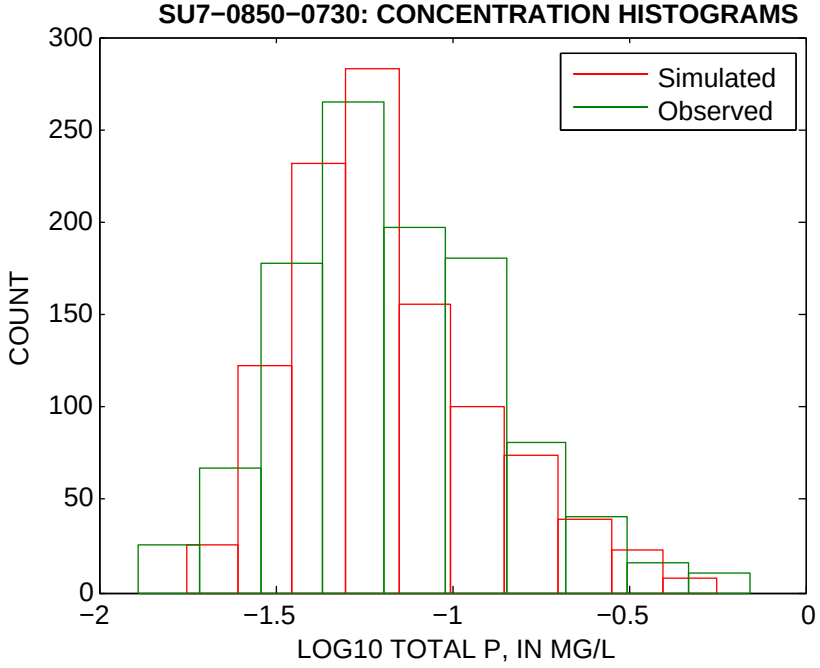
VERSION 2.1

ALL DATA
LOG10

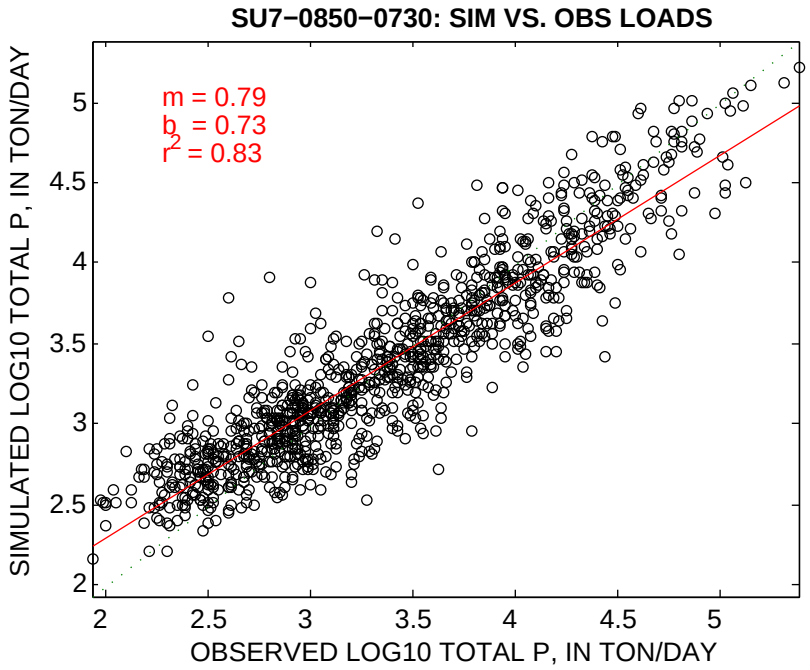


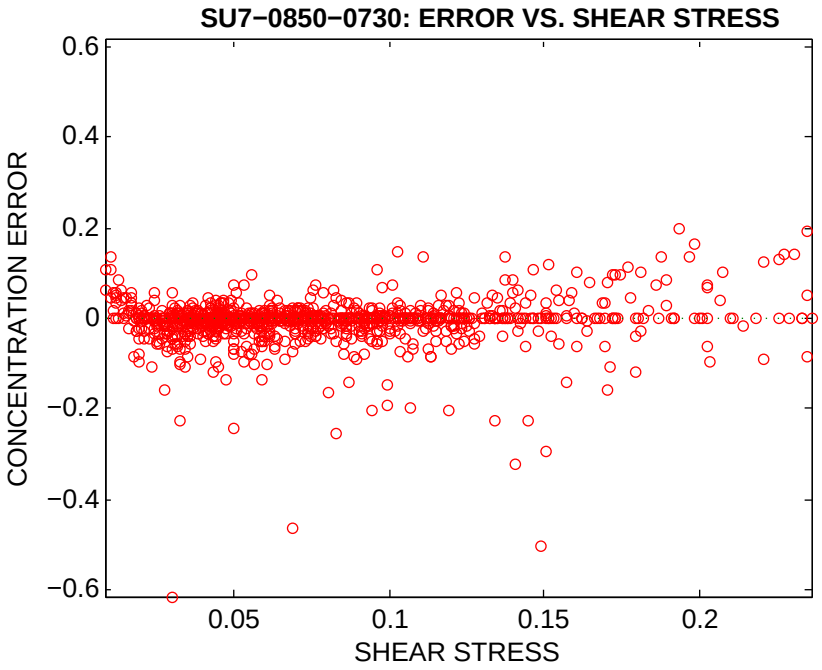


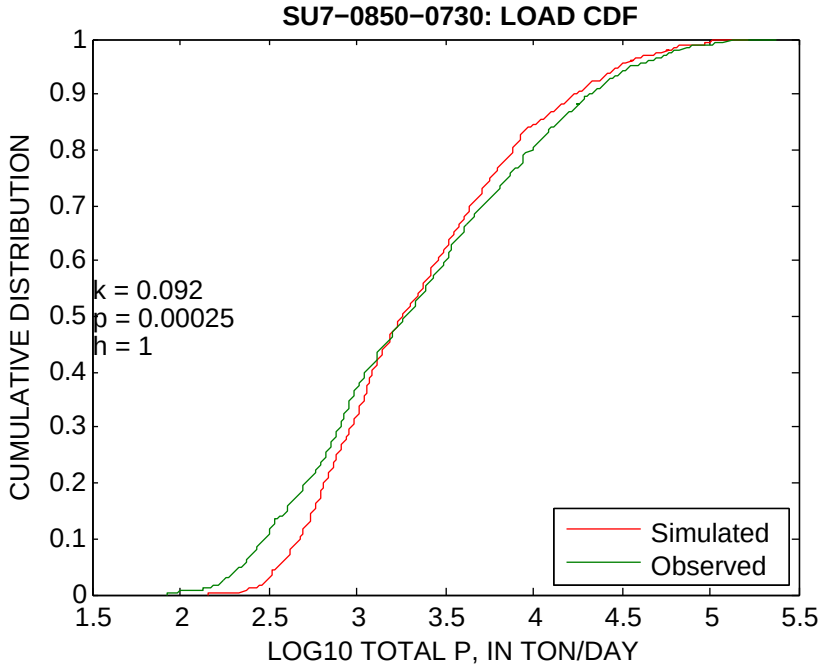


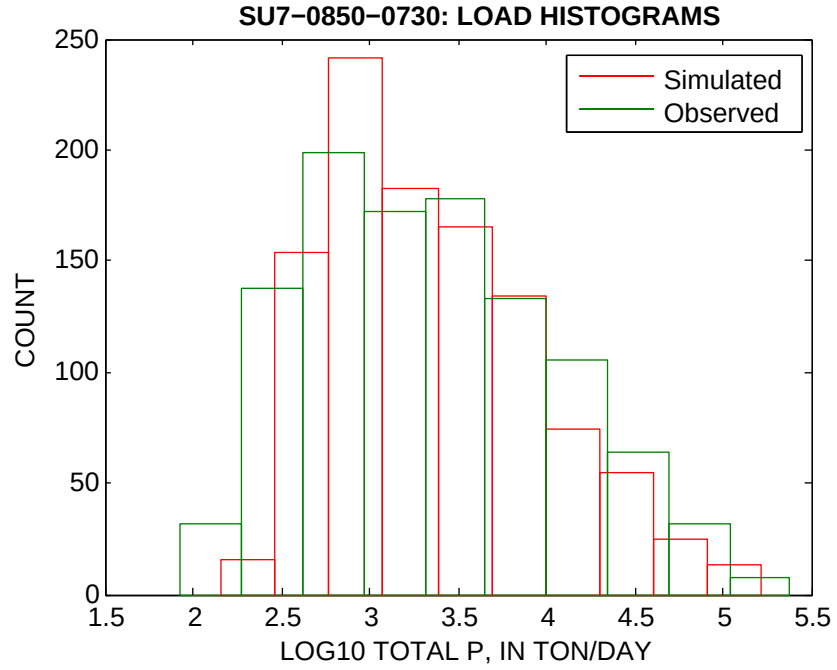


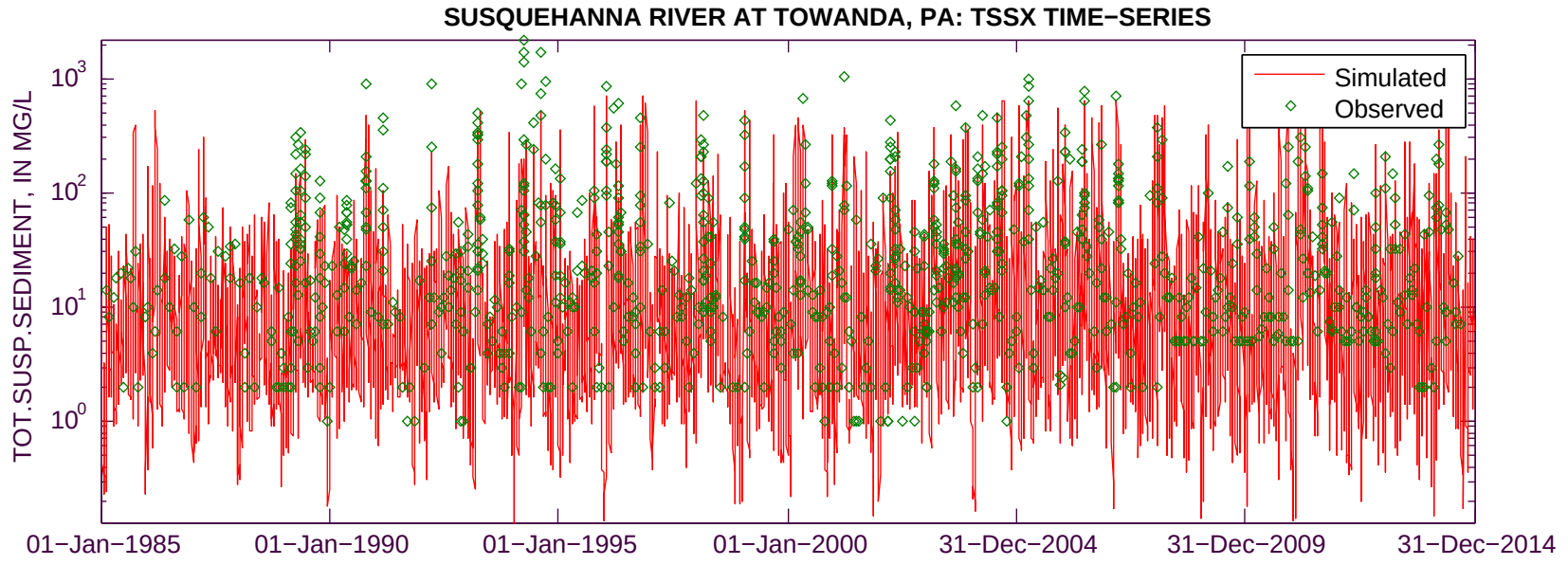
LOAD DATA
LOG10

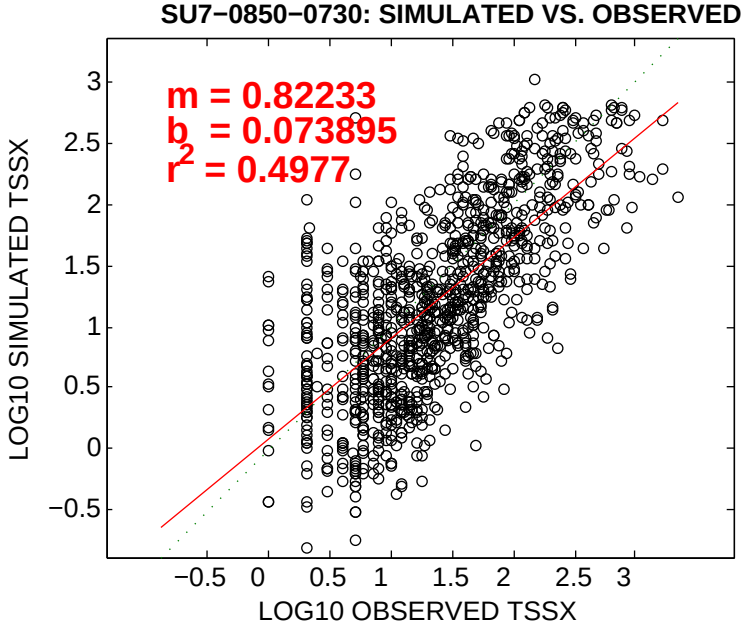


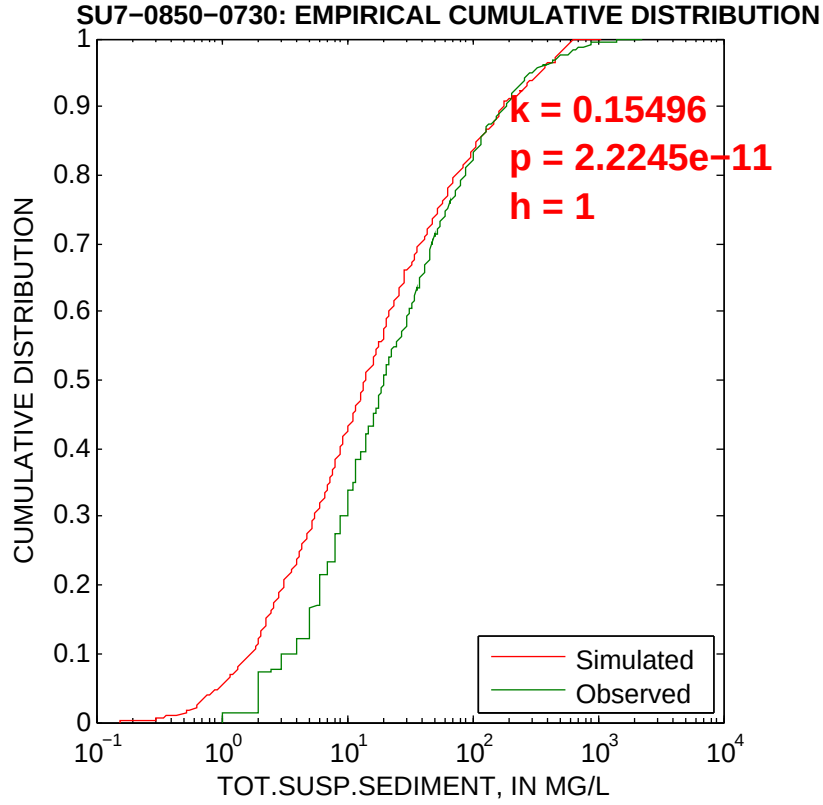












DATA SELECTION

scenario	file
P620171001WQ	TSSX.calib

plot: TSSX - total suspended ...

Dates: 1/1/1985 — 12/31/201

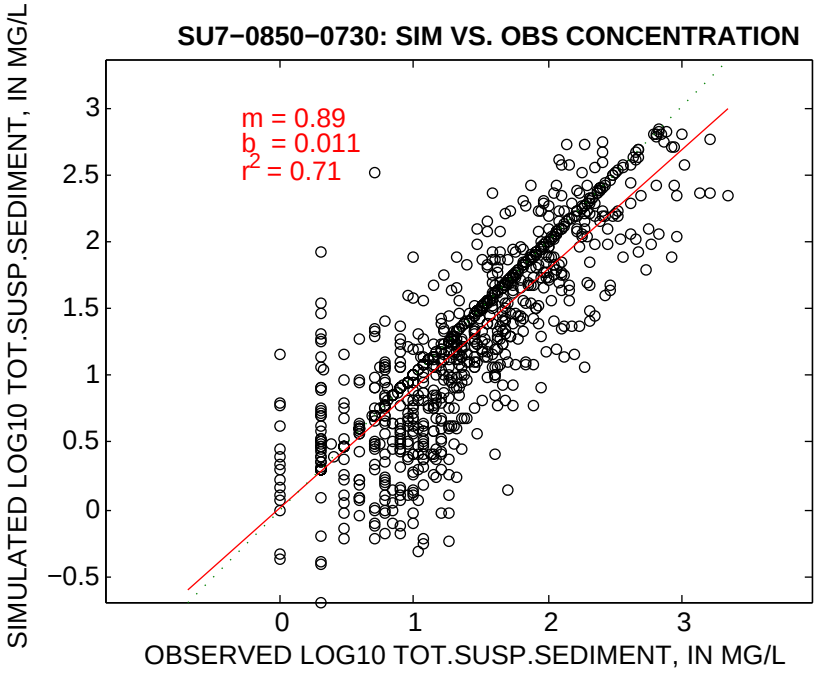
Drive	Directory	Observed
N/A	model	OBS20161101

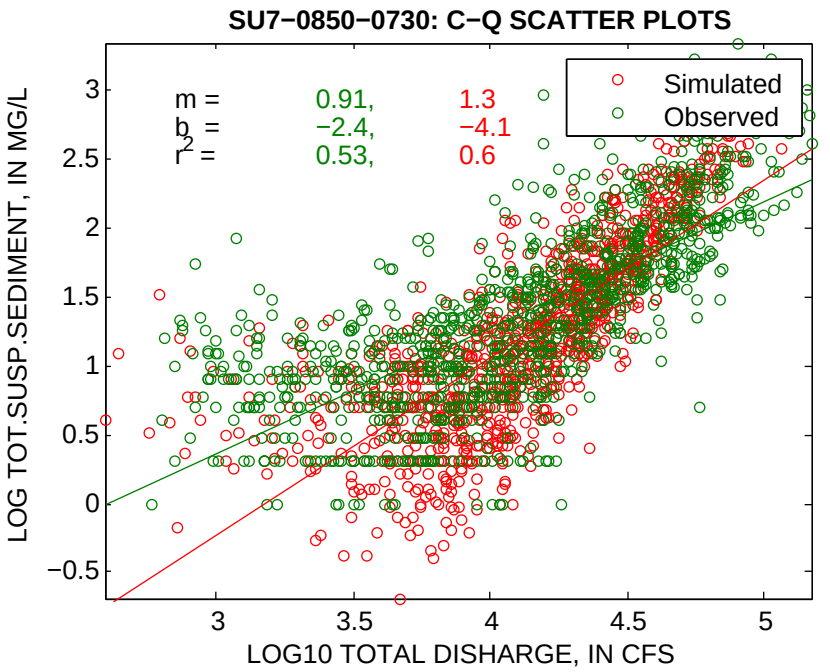
STATISTICS

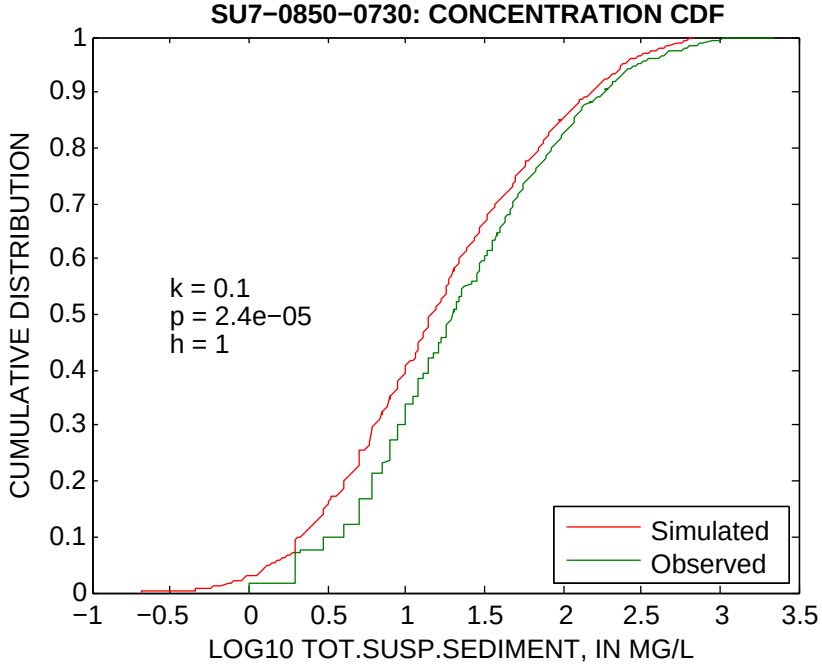
	n	observe	simulate
		1039	1039
min		1	0.15518
		0	-0.809164
mean		74.0674	62.6697
		1.36069	1.19283
media		20	14.106
		1.30103	1.1494
max		2226	1061.2
		3.34753	3.0258
varian		28331.6	14629.9
		0.42355	0.575473
JB		0.001	0.001
		0.001	0.001
		ra	log
%		-15.3882	-12.3366
err.va		22497.9	0.330635
rel.std.err		0.794092	0.780627
mod.eff		0.205908	0.219373

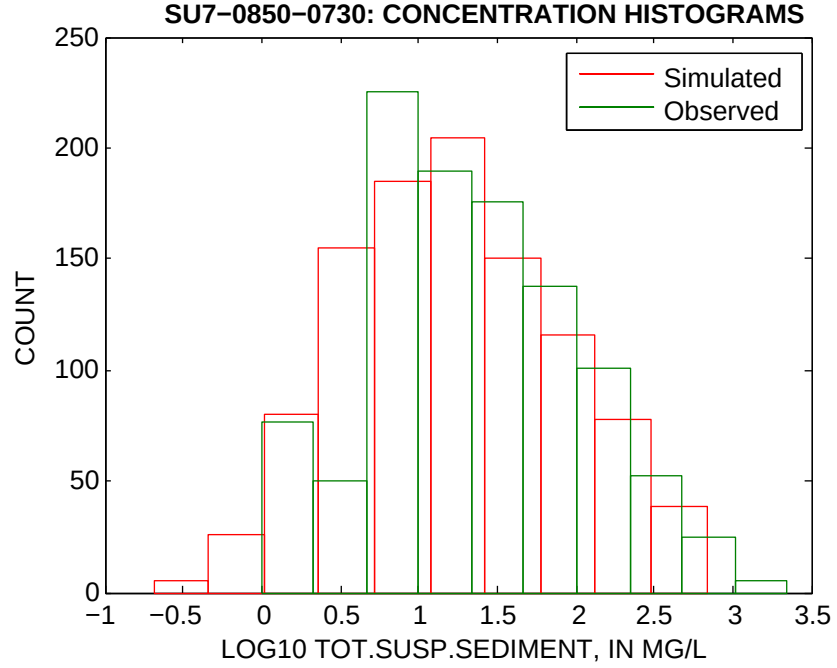
VERSION 2.1

ALL DATA
LOG10

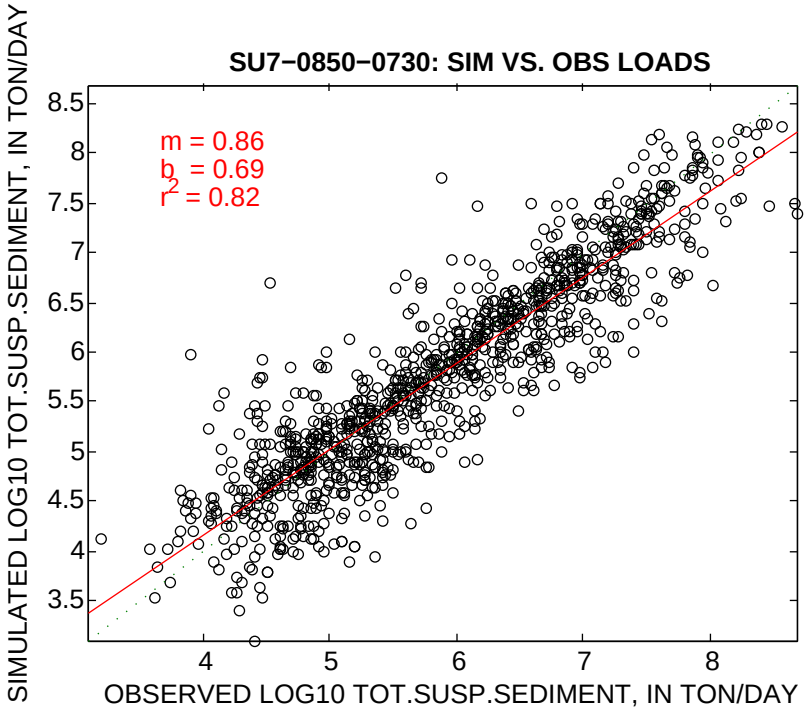


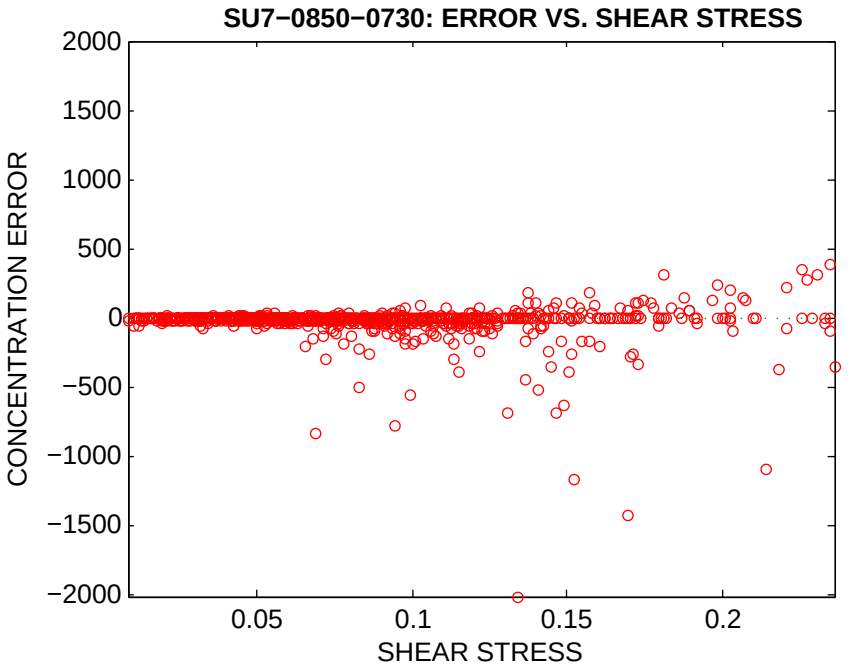


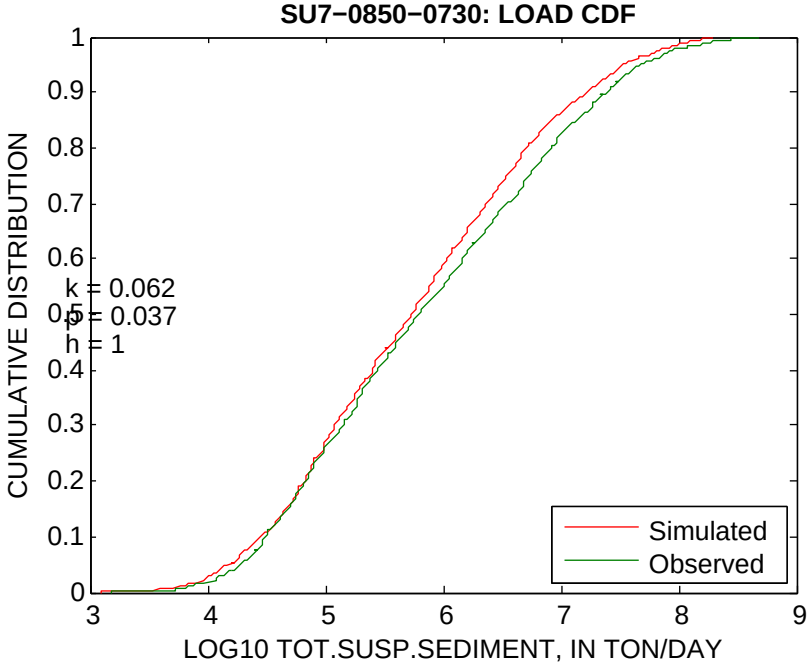


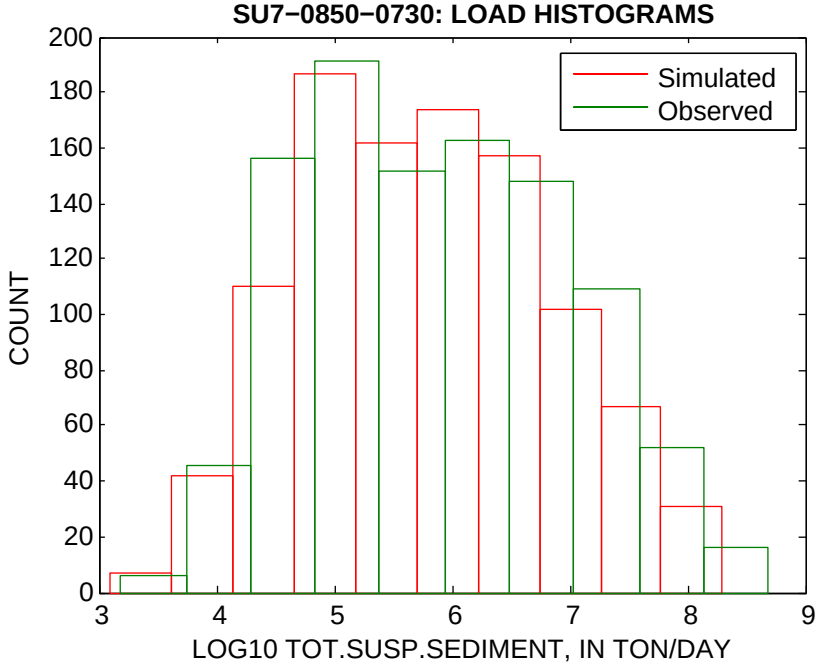


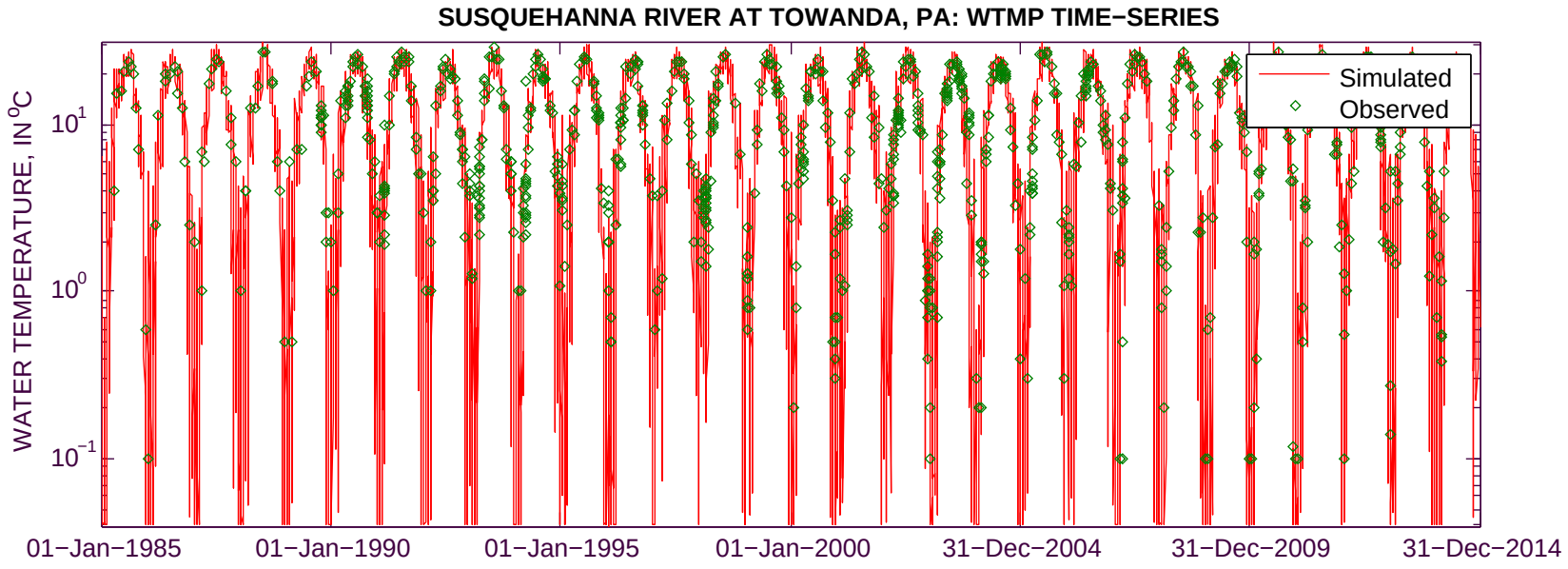
LOAD DATA
LOG10

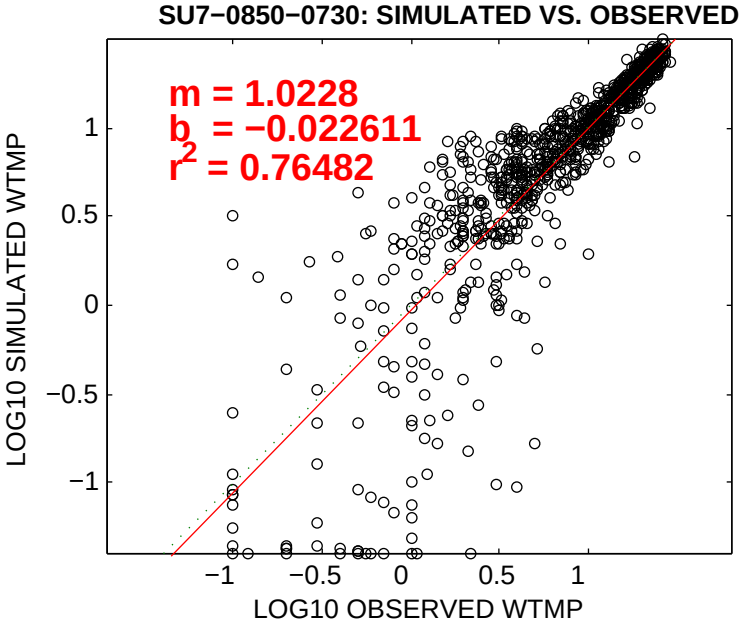


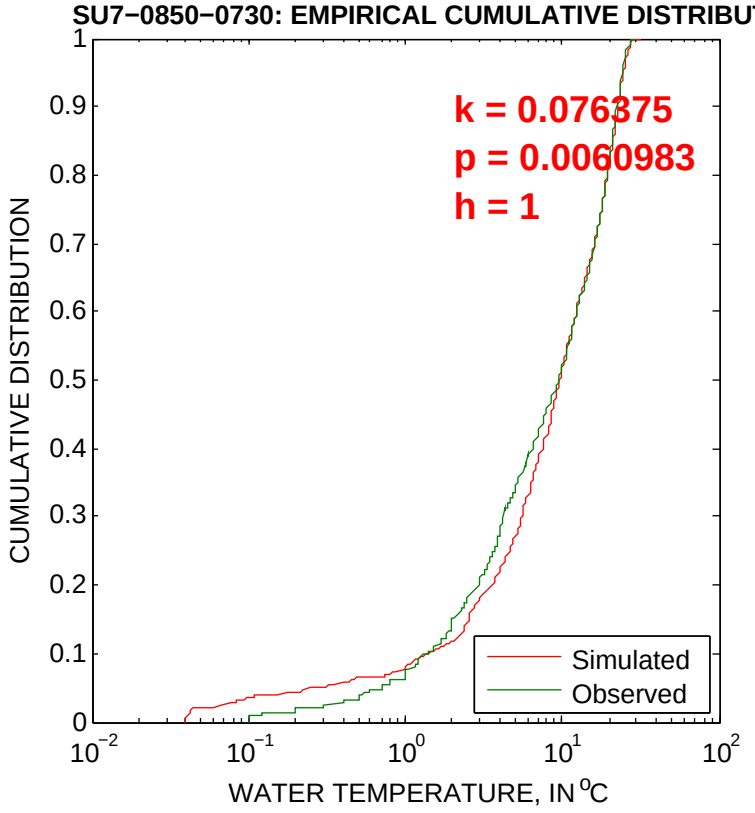












DATA SELECTION

scenario	file
P620171001WQ	WTMP.calib

plot: WTMP - water tempera...

Dates: 1/1/1985 – 12/31/201

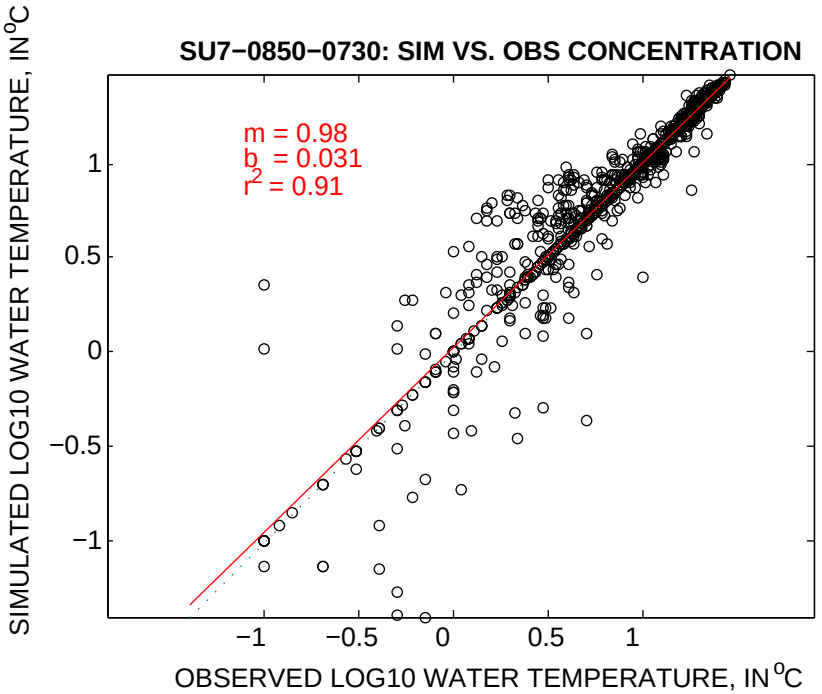
Drive	Directory	Observed
N/A	model	OBS20161101

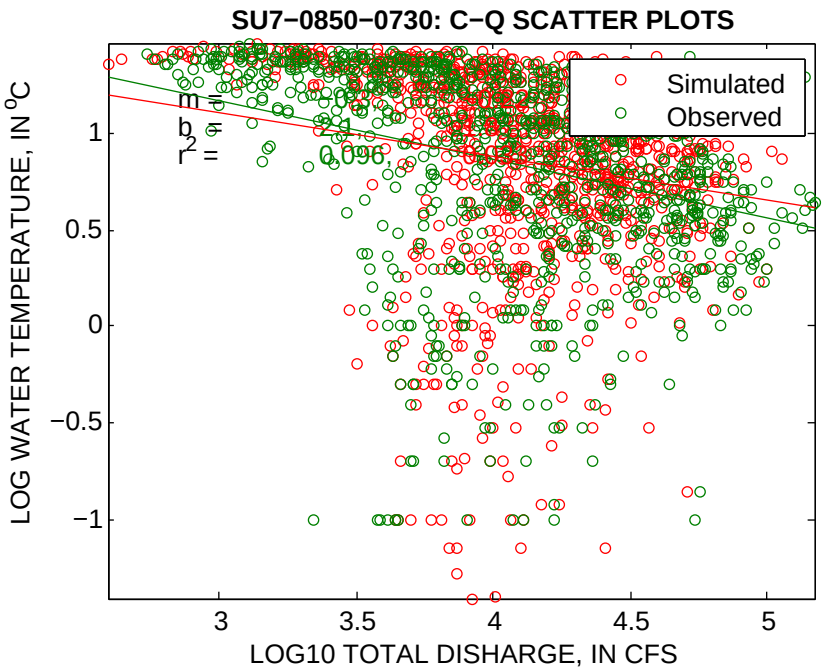
STATISTICS

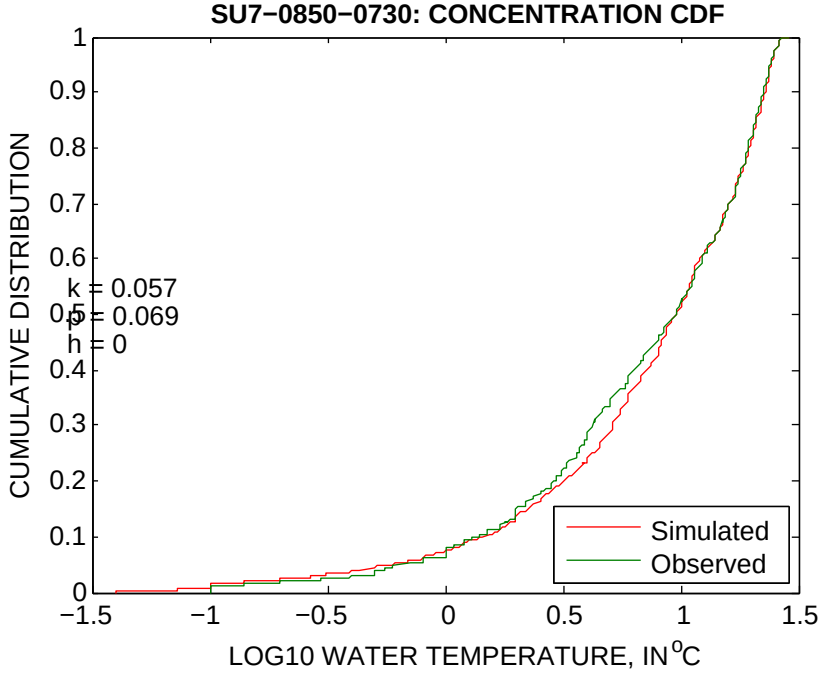
	observe	simulate
n	982	982
min	0.1	0.04001
	-1	-1.39783
mean	10.8403	11.2016
	0.83793	0.834458
media	9.5	9.6396
	0.977724	0.984059
max	29	31.563
	1.4624	1.49918
varian	63.1606	62.013
	0.258845	0.354076
JB	0.001	0.001
	0.001	0.001
	ra	log
%	3.33276	-0.414277
err.va	5.09041	0.0834176
rel.std.err	0.0805947	0.322268
mod.eff	0.919405	0.677732

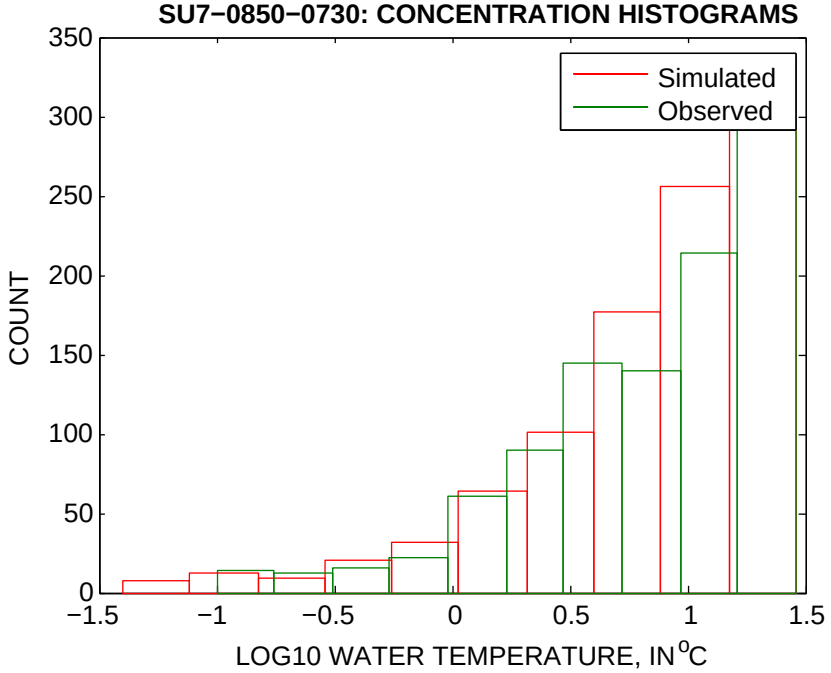
VERSION 3.1

ALL DATA
LOG10

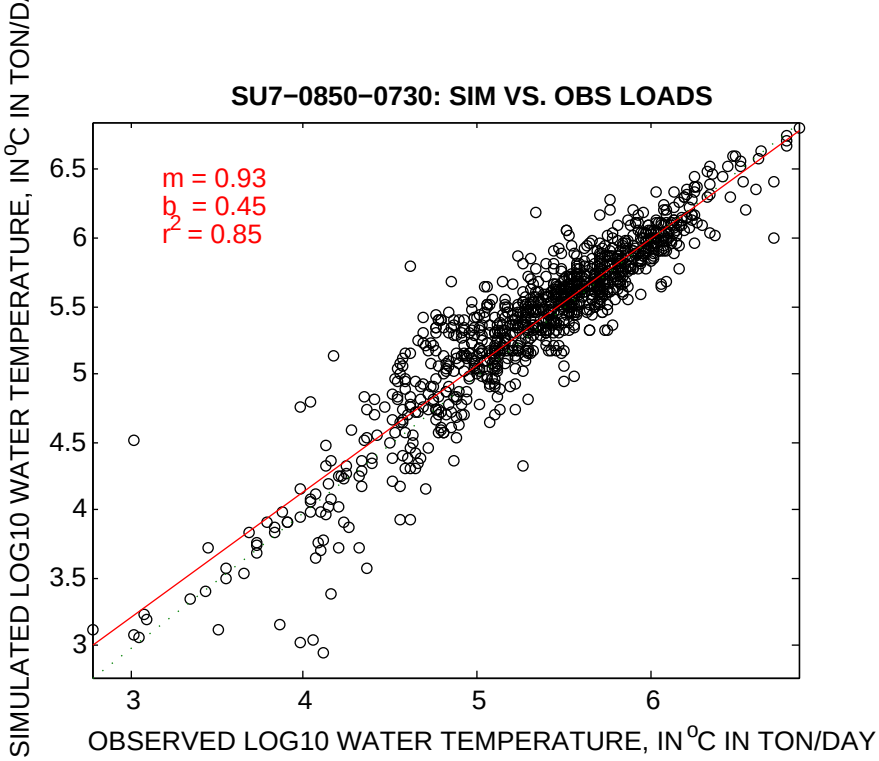


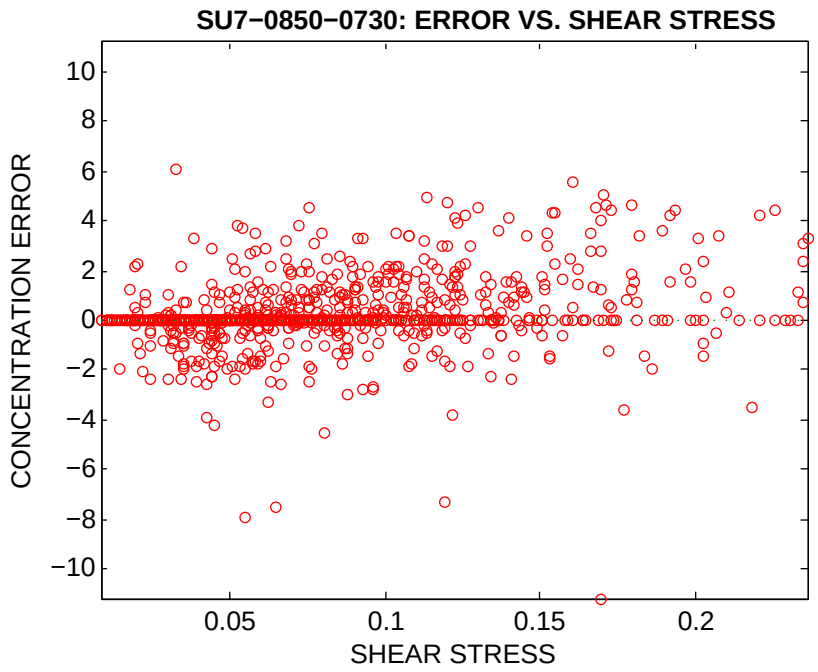


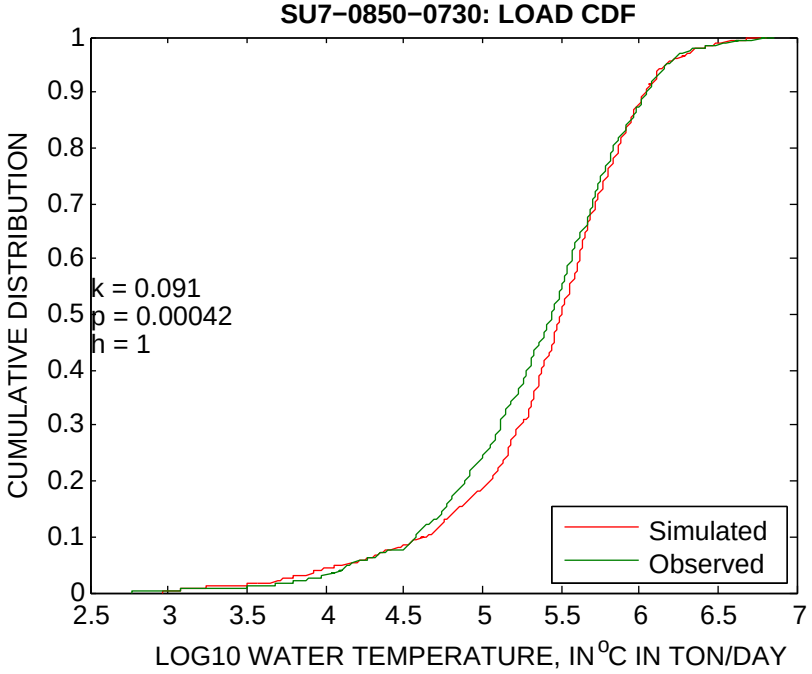


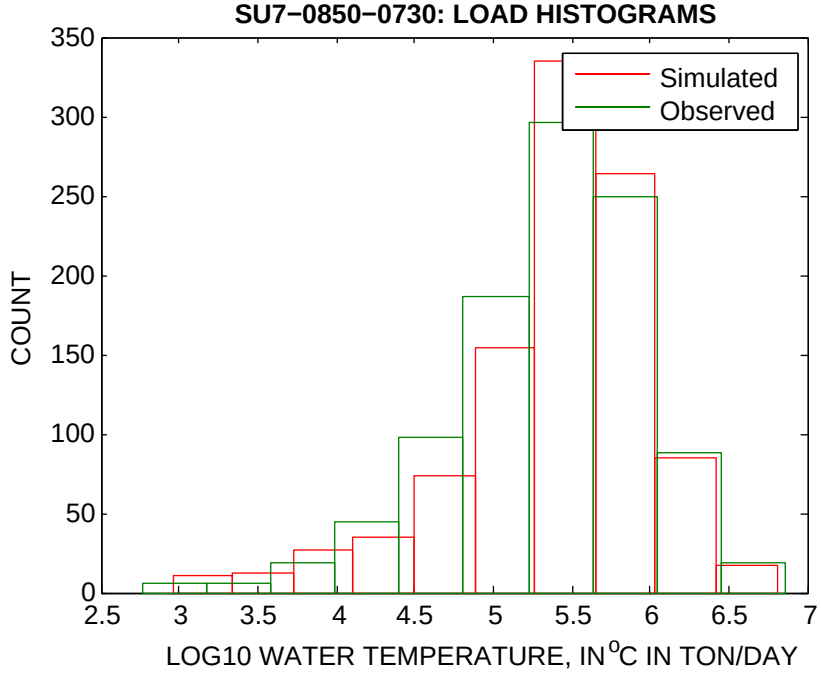


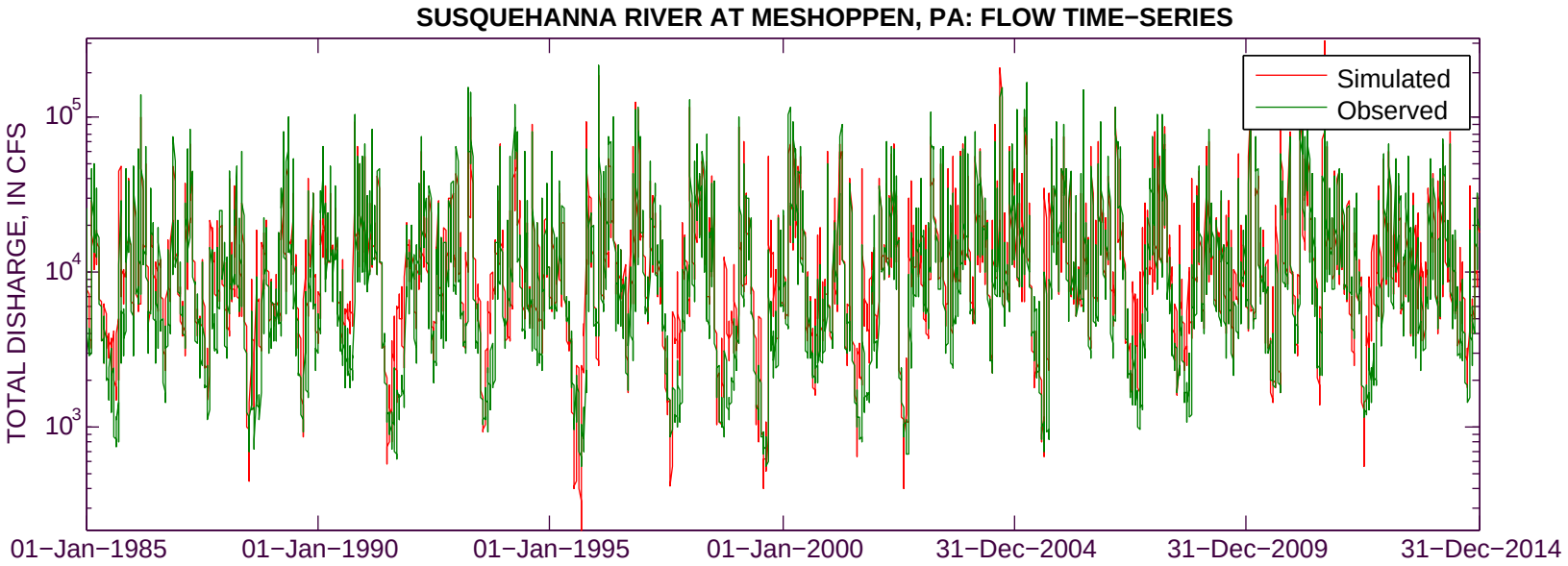
LOAD DATA
LOG10

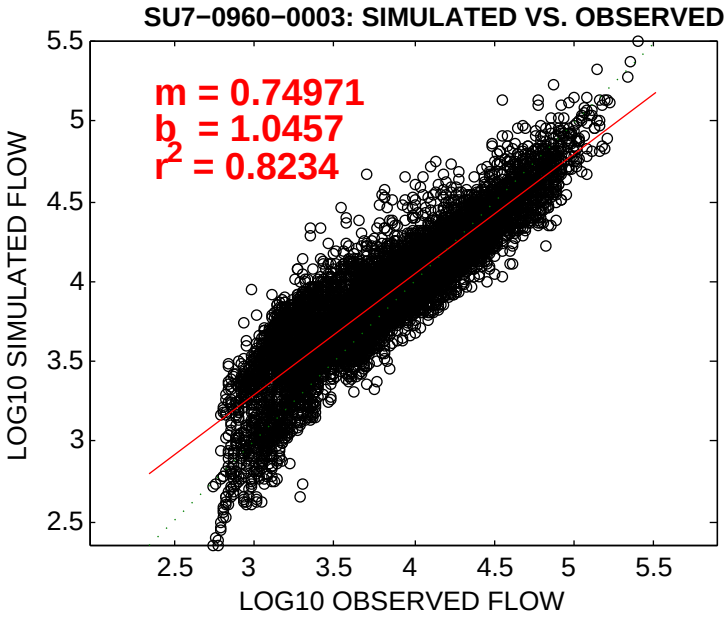


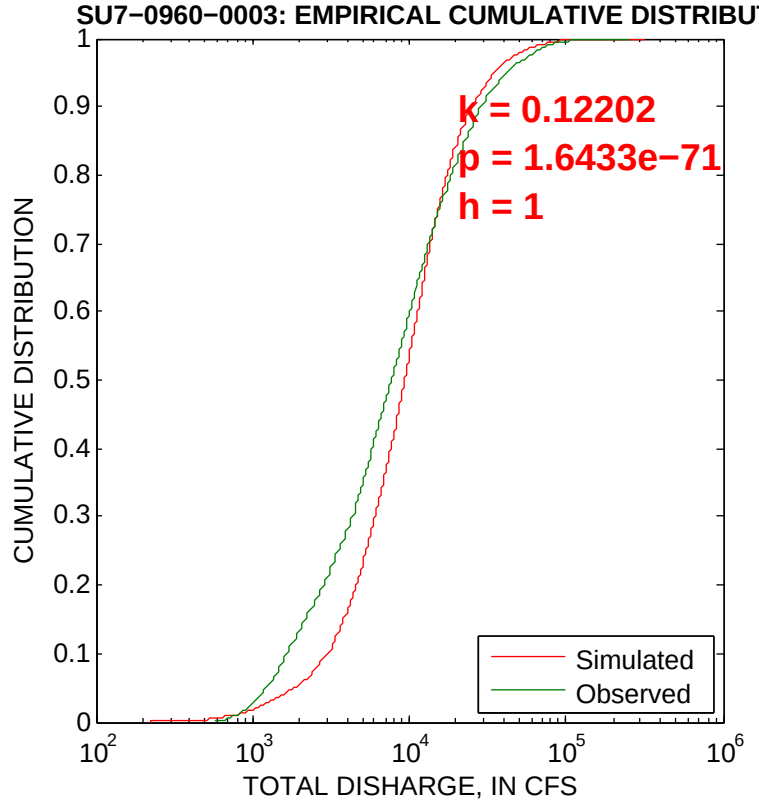












DATA SELECTION

scenario: P620171001WQ | file: FLOW.calib

plot: FLOW - total discharge

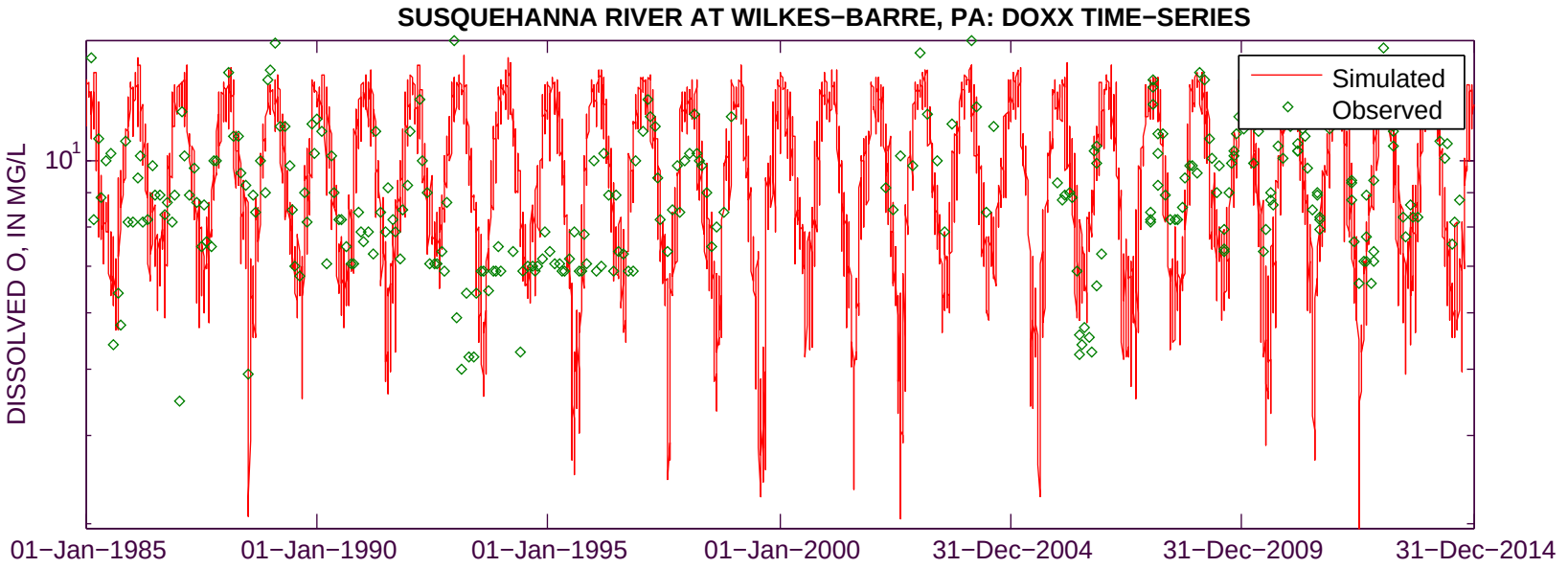
Dates: 1/1/1985 – 12/31/201

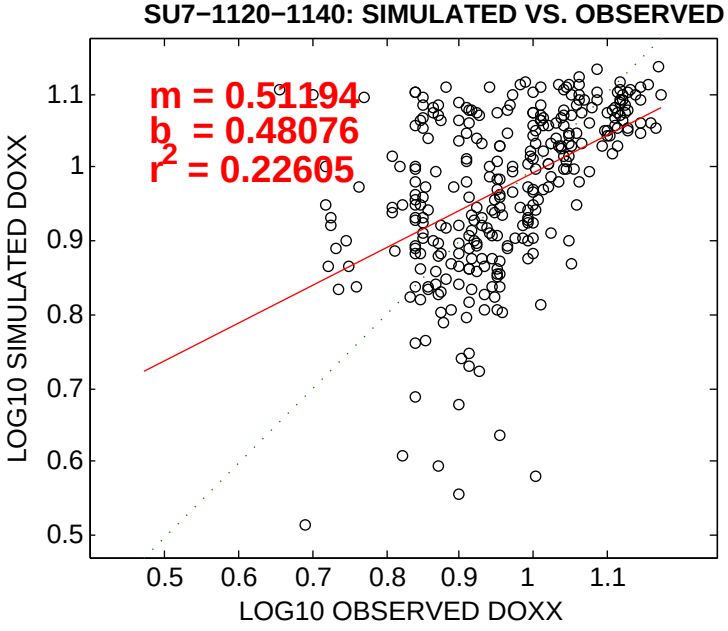
Drive: N/A | Directory: model | Observed: OBS20161101

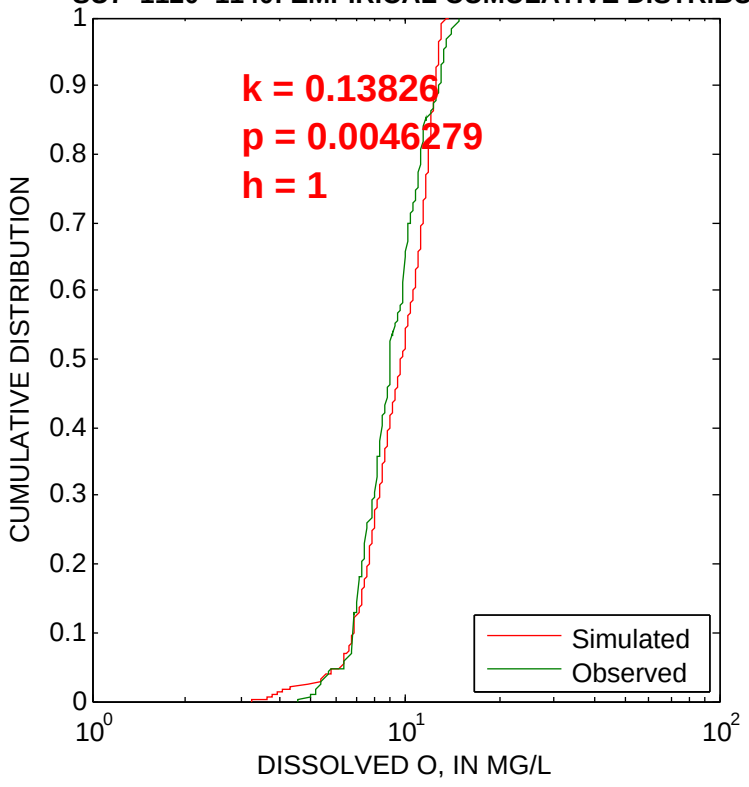
STATISTICS

		observe	simulate
n		10957	10957
min		557	220.6
		2.74586	2.34361
mean		12894.6	12841.1
		3.87226	3.94881
media		7740	9382.1
		3.88874	3.9723
max		254000	322150
		5.40483	5.50806
varian		2.62923e+0	1.86809e+
		0.214143	0.146176
JB		0.001	0.001
		0.001	0.001
		ra	log
%		-0.414985	1.97684
err.va		5.1625e+07	0.0450903
rel.std.err		0.19635	0.210562
mod.eff		0.80365	0.789438

VERSION 2.1







DATA SELECTION

scenario: P620171001WQ | file: DOXX.calib

plot: DOXX - dissolved oxygen

Dates: 1/1/1985 – 12/31/201

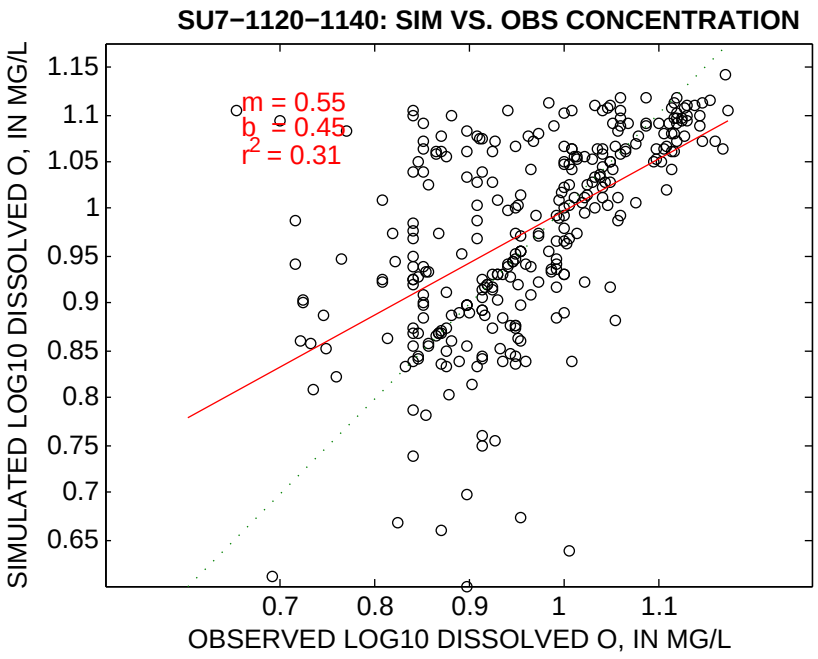
Drive: N/A | Directory: model | Observed: OBS20161101

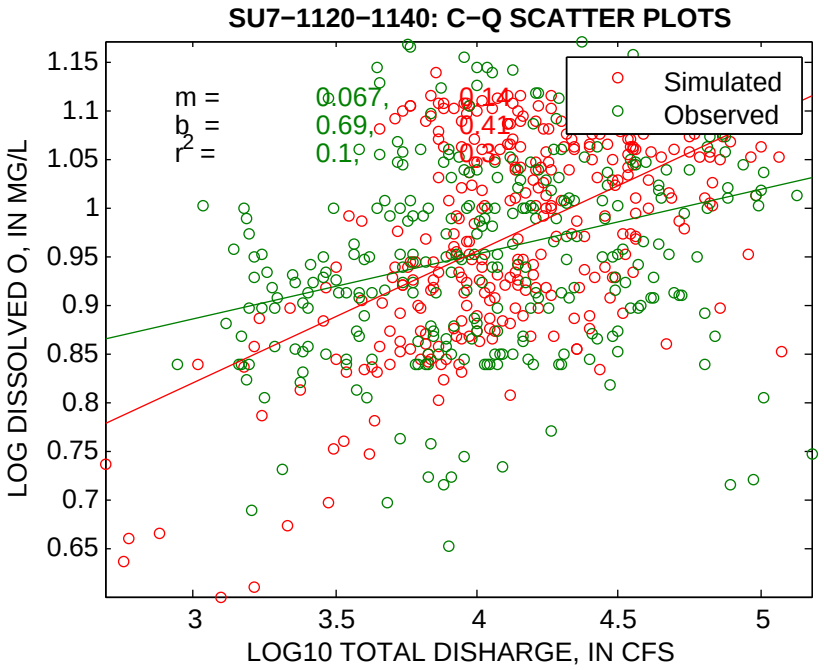
STATISTICS

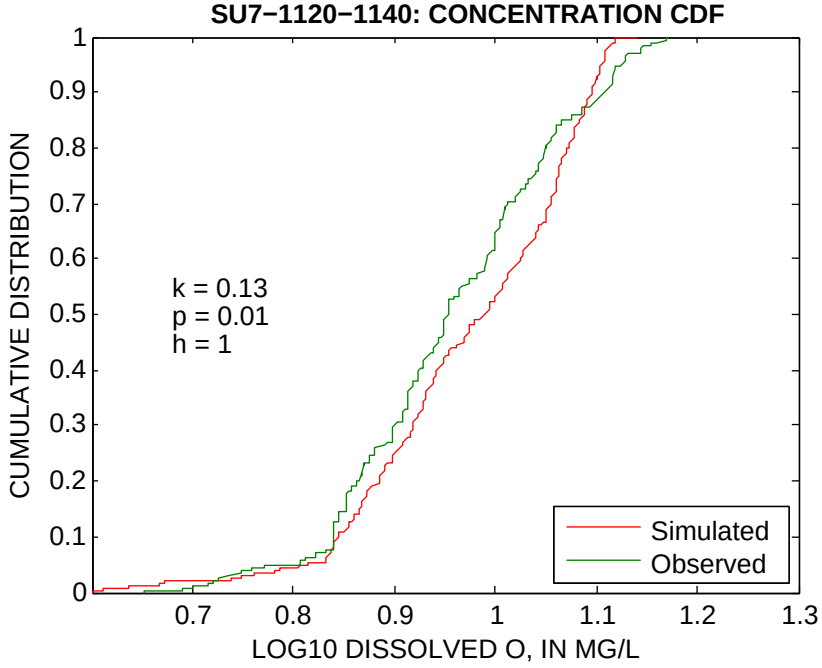
	n	311	311
		observe	simulate
min		4.5	3.259
		0.653213	0.513084
mean		9.34135	9.65045
		0.958101	0.971249
media		8.96	9.8304
		0.952308	0.992571
max		14.9	13.653
		1.17319	1.13523
varian		4.921	4.99052
		0.0108753	0.0126089
JB		0.011866	0.010410
		0.210202	0.001
		ra	log
%		3.30894	1.37226
err.va		4.79306	0.0125227
rel.std.err		0.974001	1.15147
mod.eff		0.0259989	-0.151473

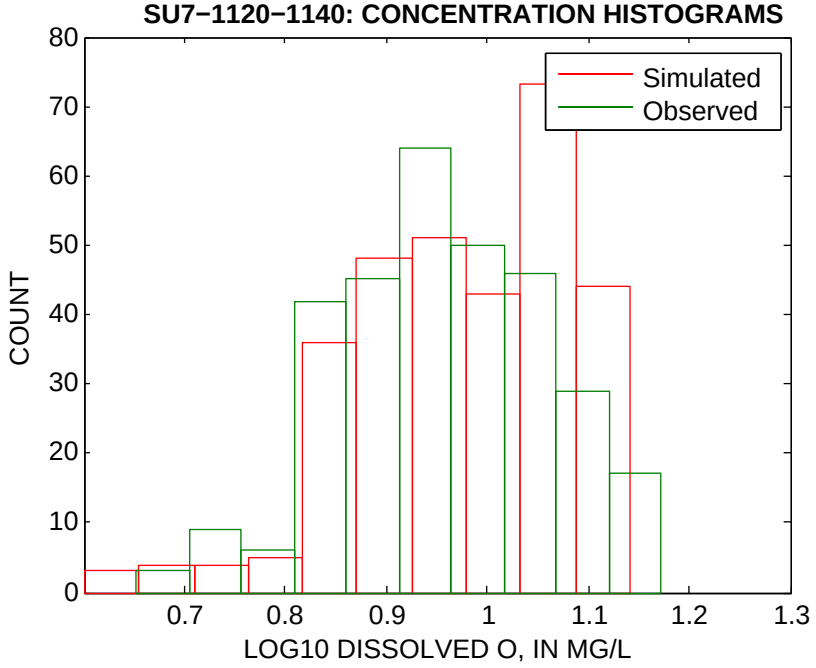
VERSION 2.1

ALL DATA
LOG10

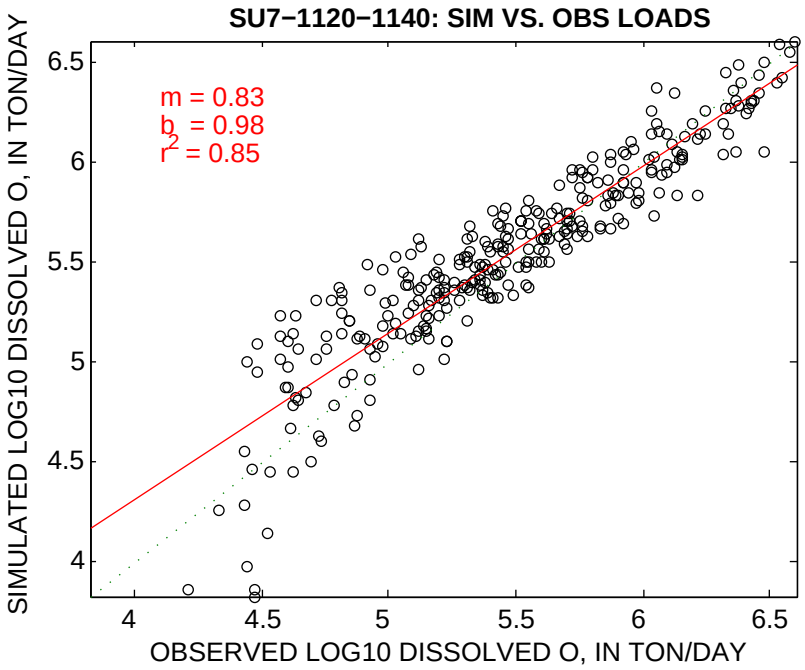


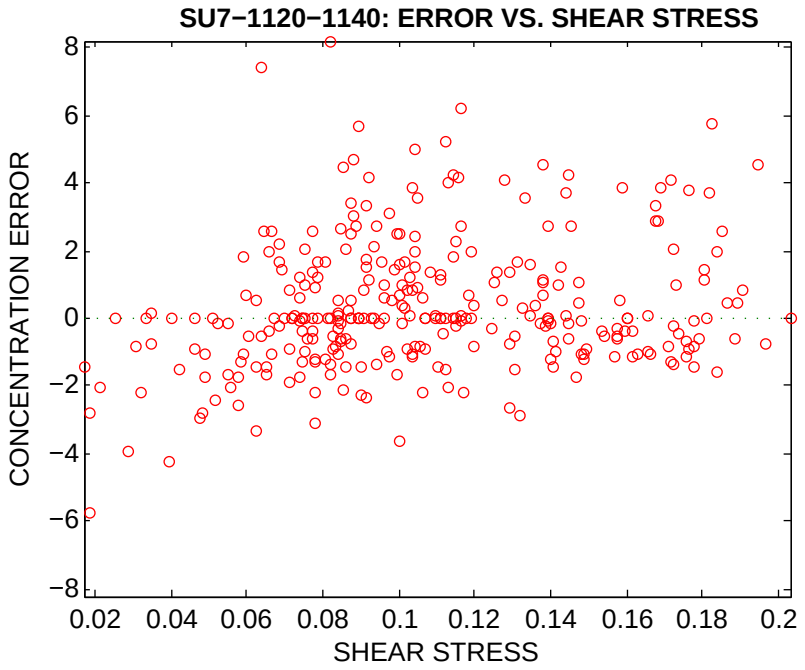


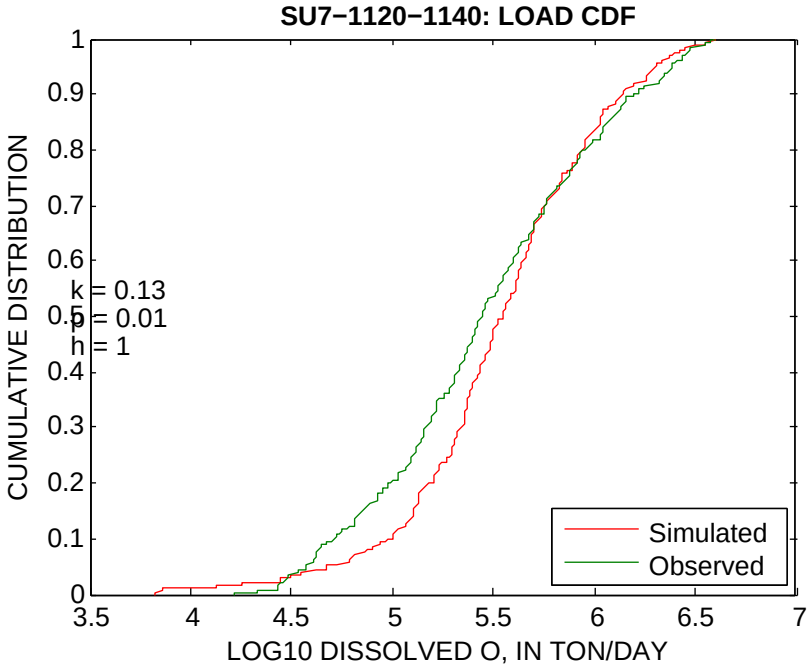


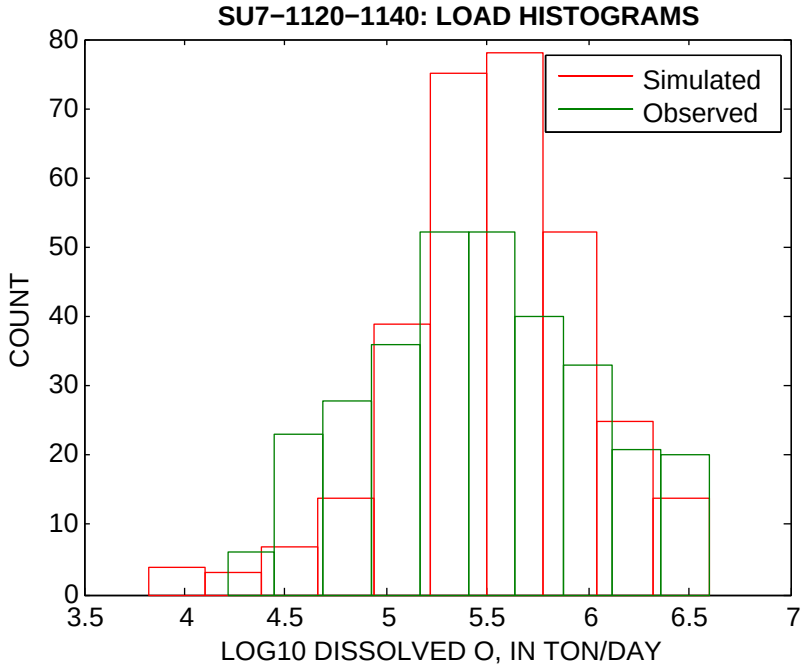


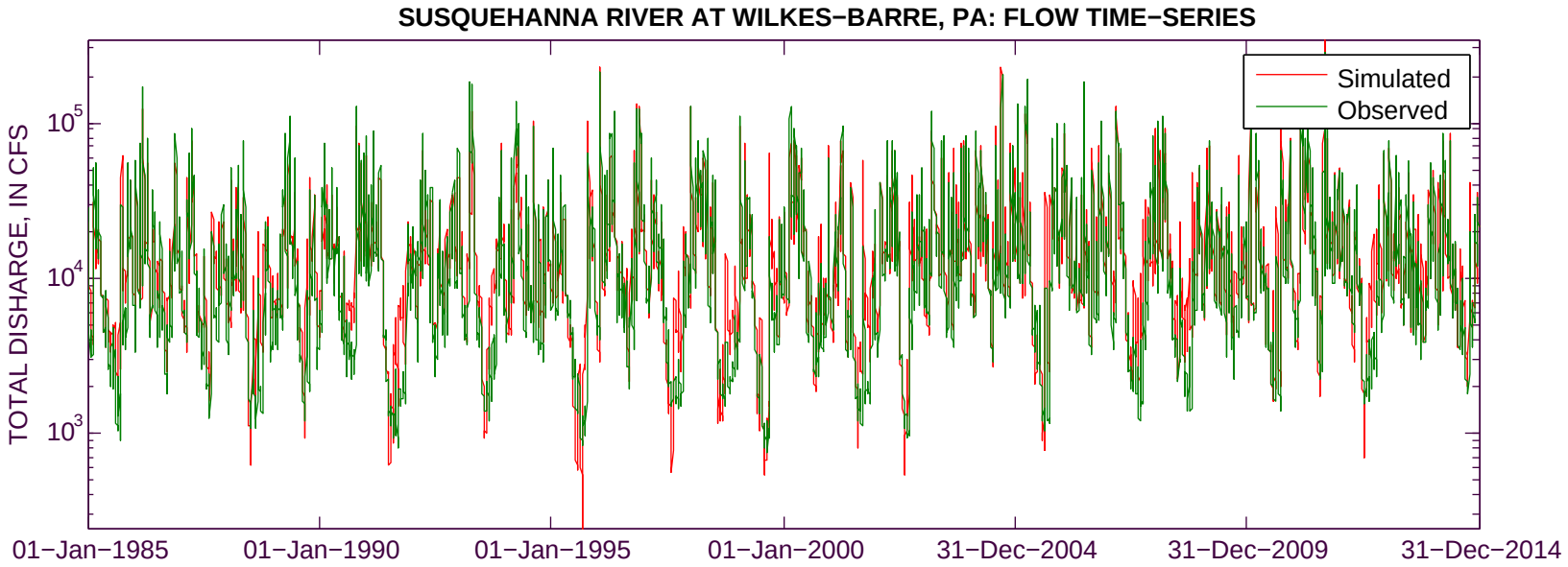
LOAD DATA
LOG10

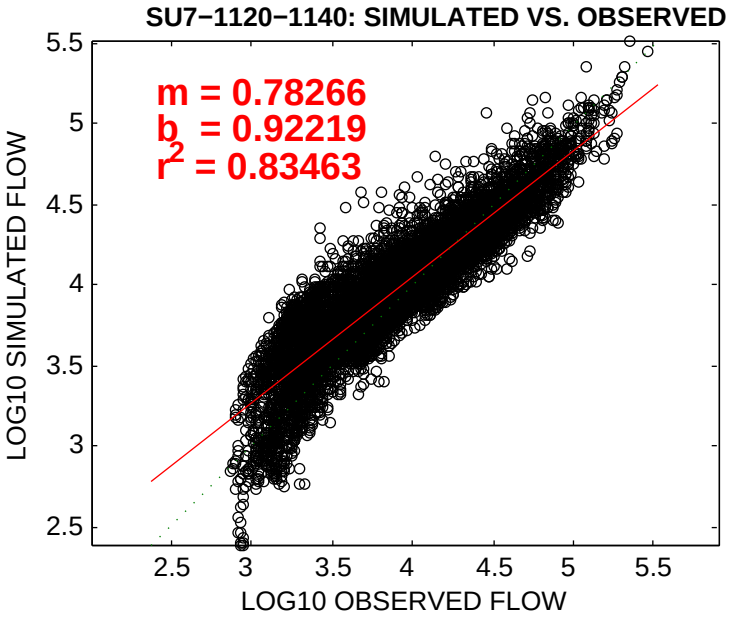


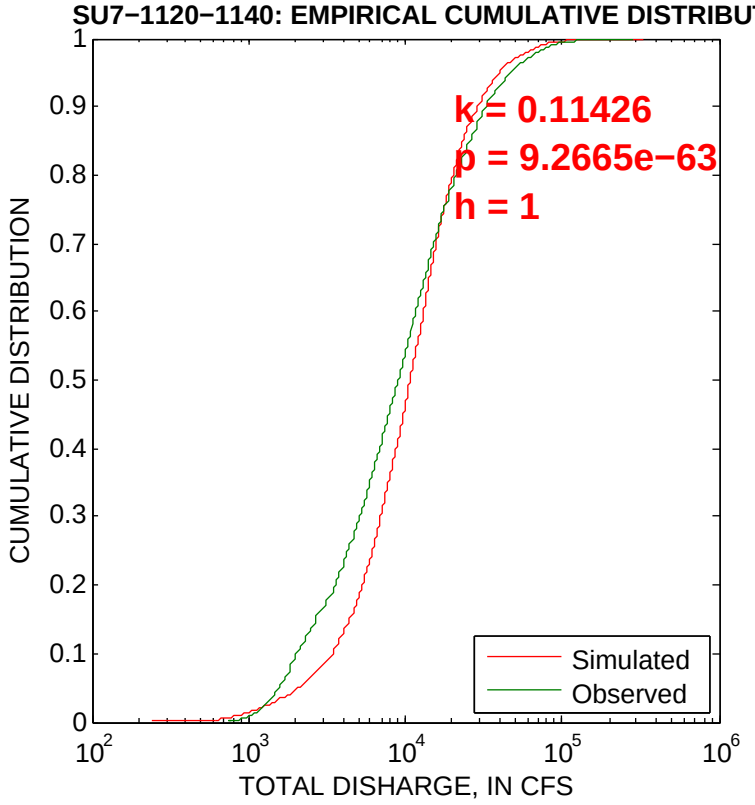












DATA SELECTION

scenario: P620171001WQ | file: FLOW.calib

plot: FLOW - total discharge

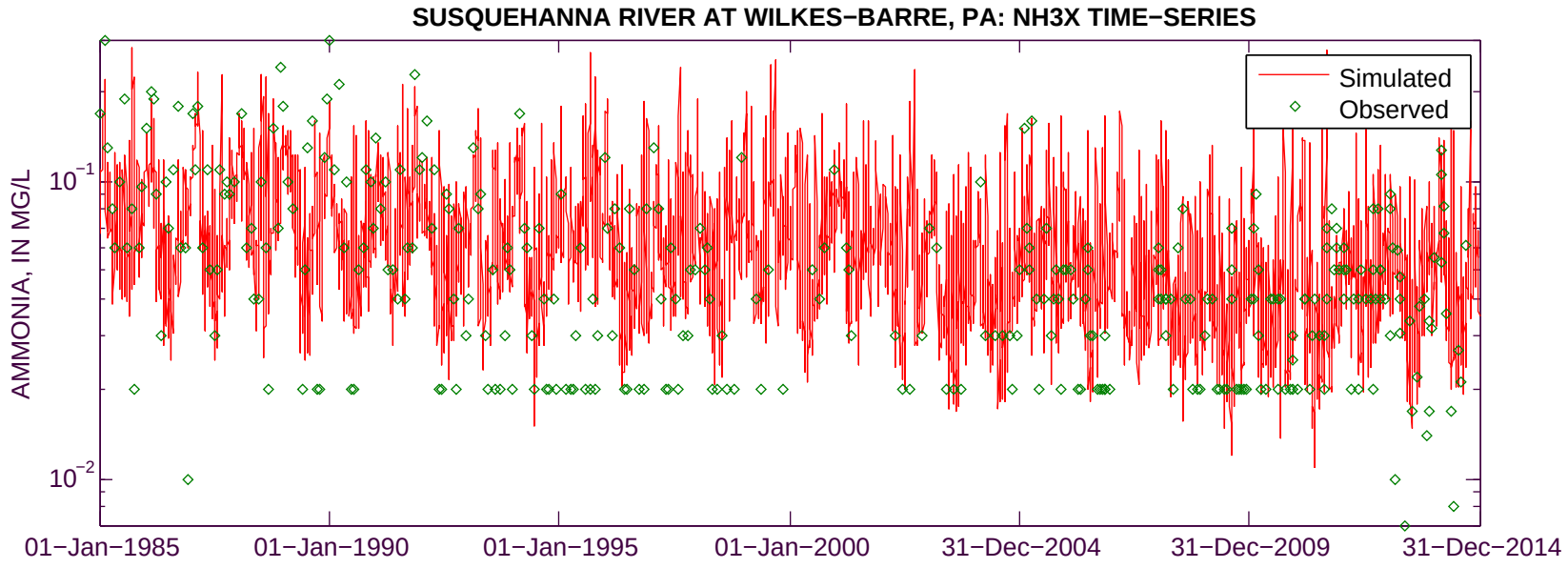
Dates: 1/1/1985 – 12/31/201

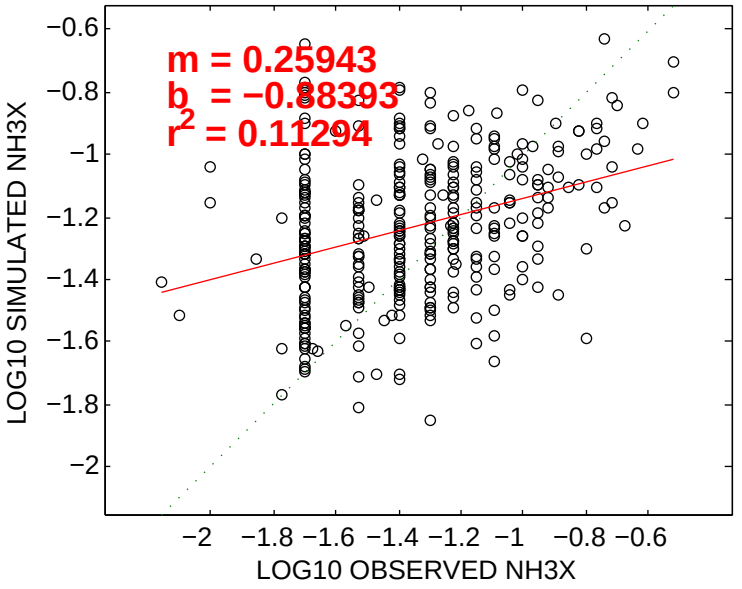
Drive: N/A | Directory: model | Observed: OBS20161101

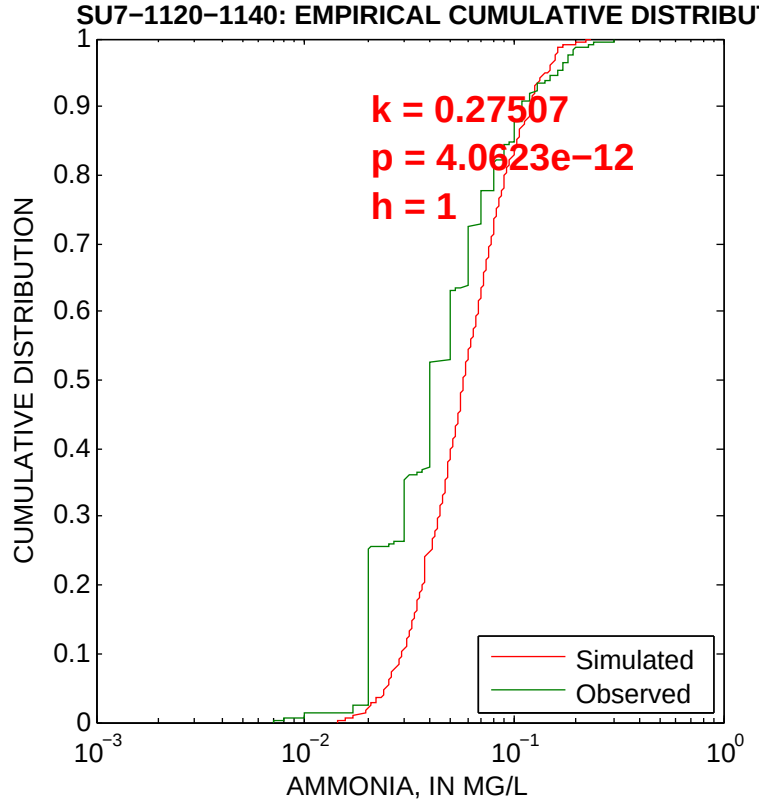
STATISTICS

		observe	simulate
n		10957	10957
min		749	236.92
		2.87448	2.3746
mean		14742.9	14720.4
		3.94432	4.00926
media		9070	10755
		3.95761	4.03161
max		287000	334020
		5.45788	5.52377
varian		3.31501e+0	2.40964e+
		0.198553	0.145724
JB		0.001	0.001
		0.001	0.001
		ra	log
%		-0.153116	1.64655
err.va		6.01994e+0	0.0376947
rel.std.err		0.181597	0.189847
mod.eff		0.818403	0.810153

VERSION 2.1







DATA SELECTION

scenario	file
P620171001WQ	NH3X.calib

plot: NH3X - ammonia

Dates: 1/1/1985 – 12/31/201

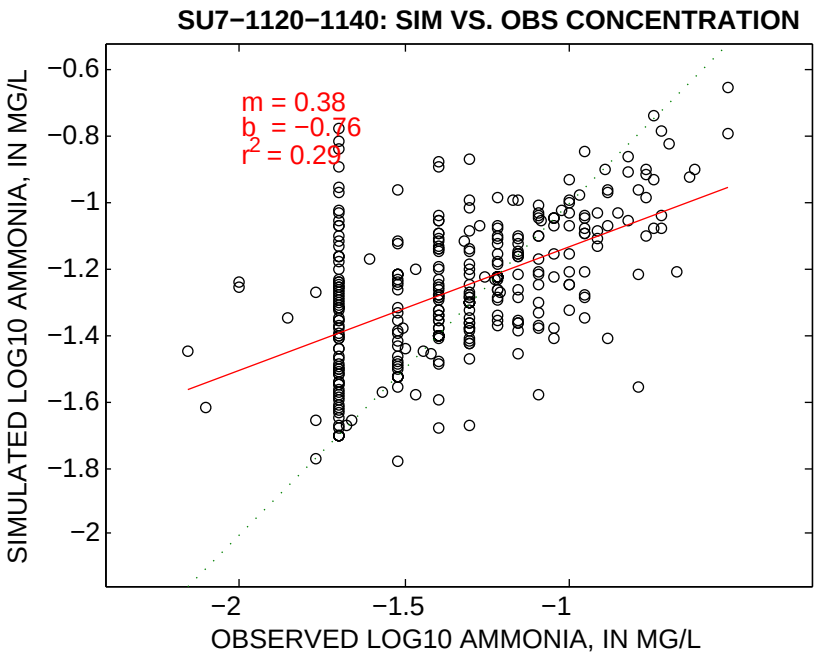
Drive	Directory	Observed
N/A	model	OBS20161101

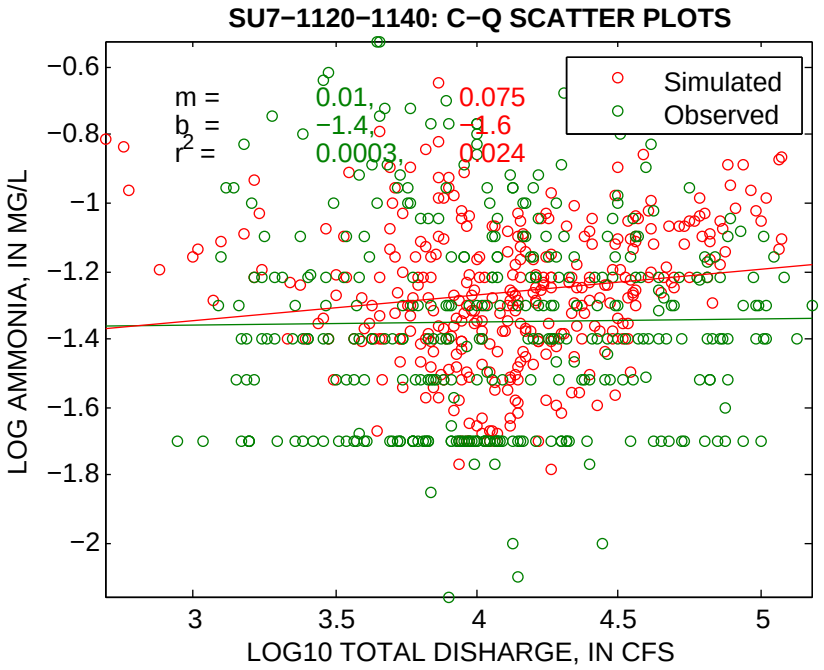
STATISTICS

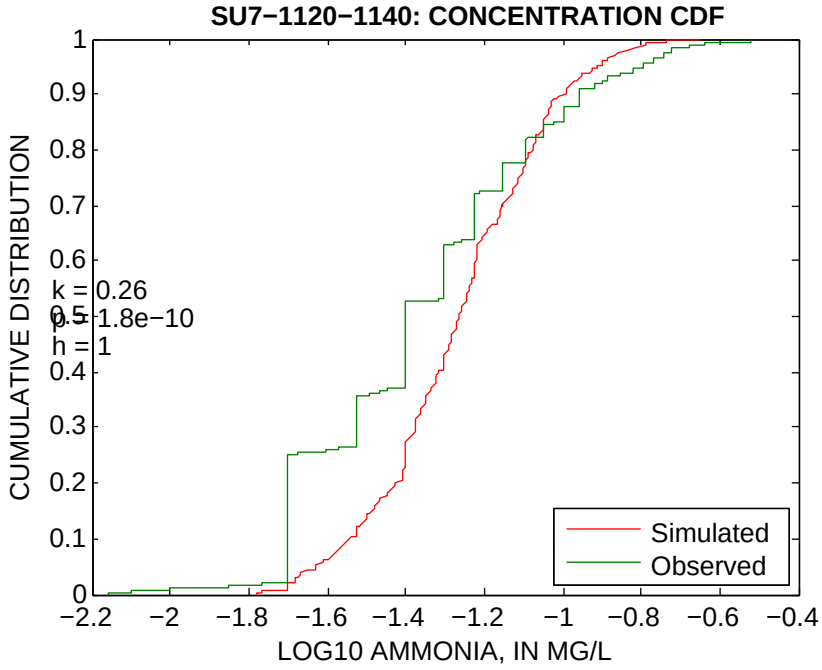
	n	observe	simulate
		349	349
min		0.007	0.014259
		-2.1549	-1.84591
mean		0.0570573	0.0669582
		-1.35078	-1.23436
media		0.04	0.057791
		-1.39794	-1.23814
max		0.3	0.23395
		-0.522879	-0.630877
varian		0.00208751	0.00135188
		0.0886104	0.0528025
JB		0.001	0.001
		0.026049	0.25802
		ra	log
%		17.3525	-8.6183
err.va		0.0023104	0.109028
rel.std.err		1.10677	1.23042
mod.eff		-0.106772	-0.230419

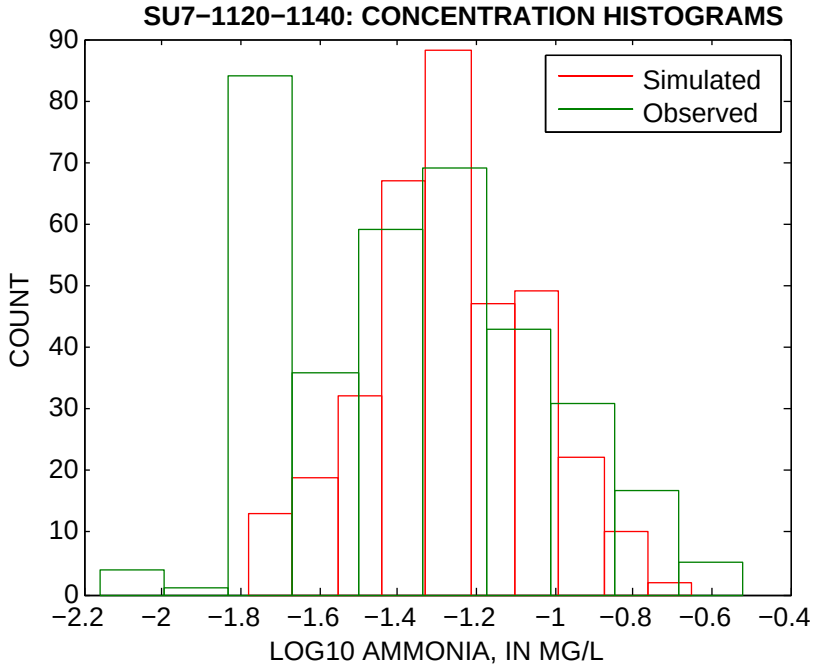
VERSION 2.1

ALL DATA
LOG10

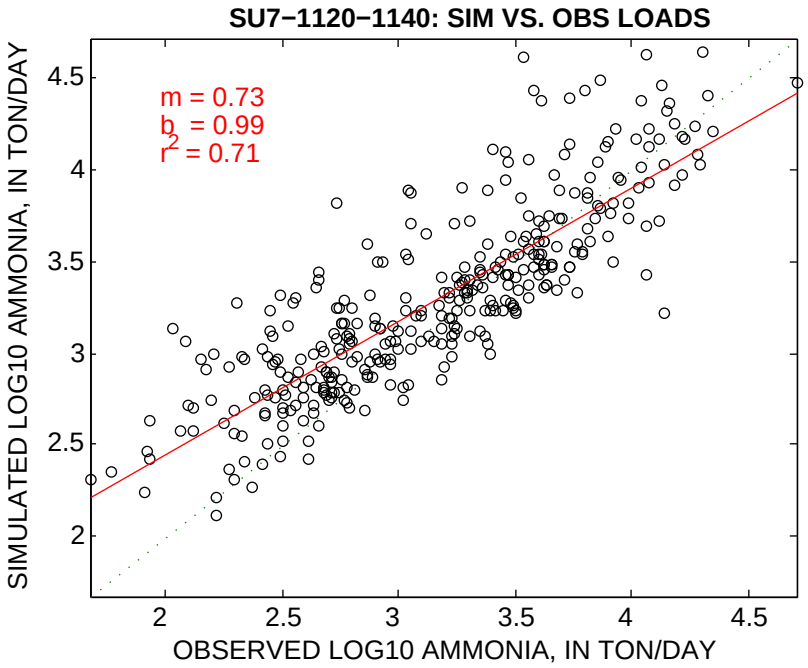


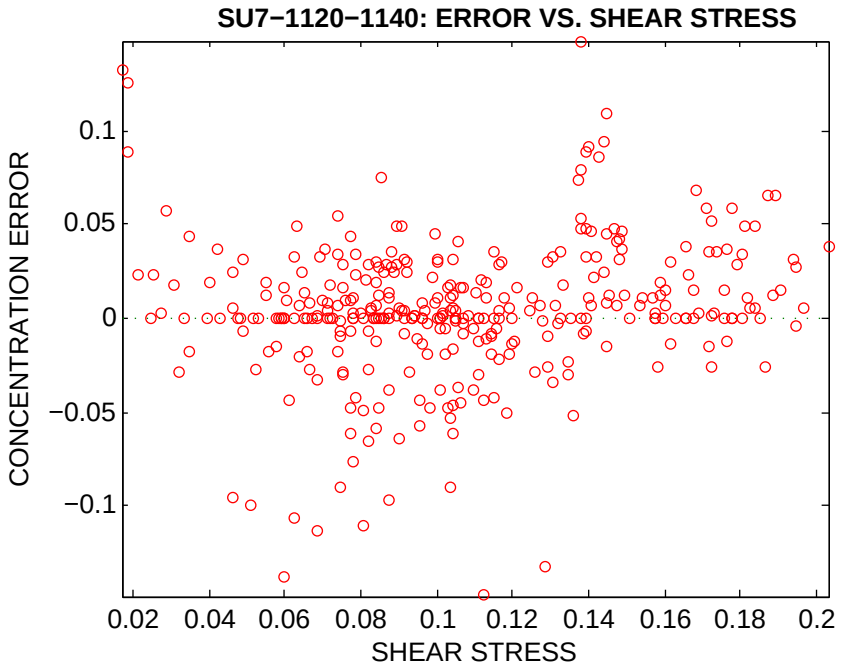


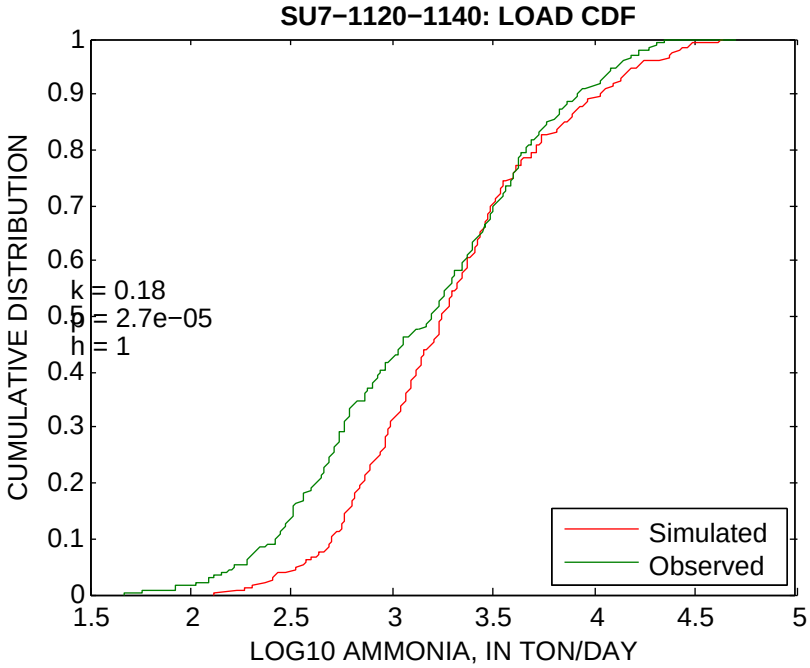


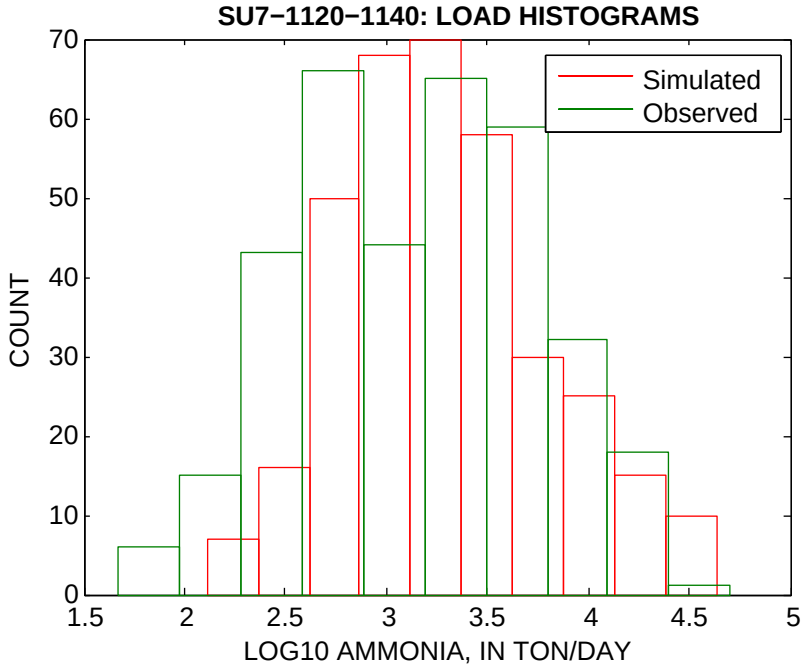


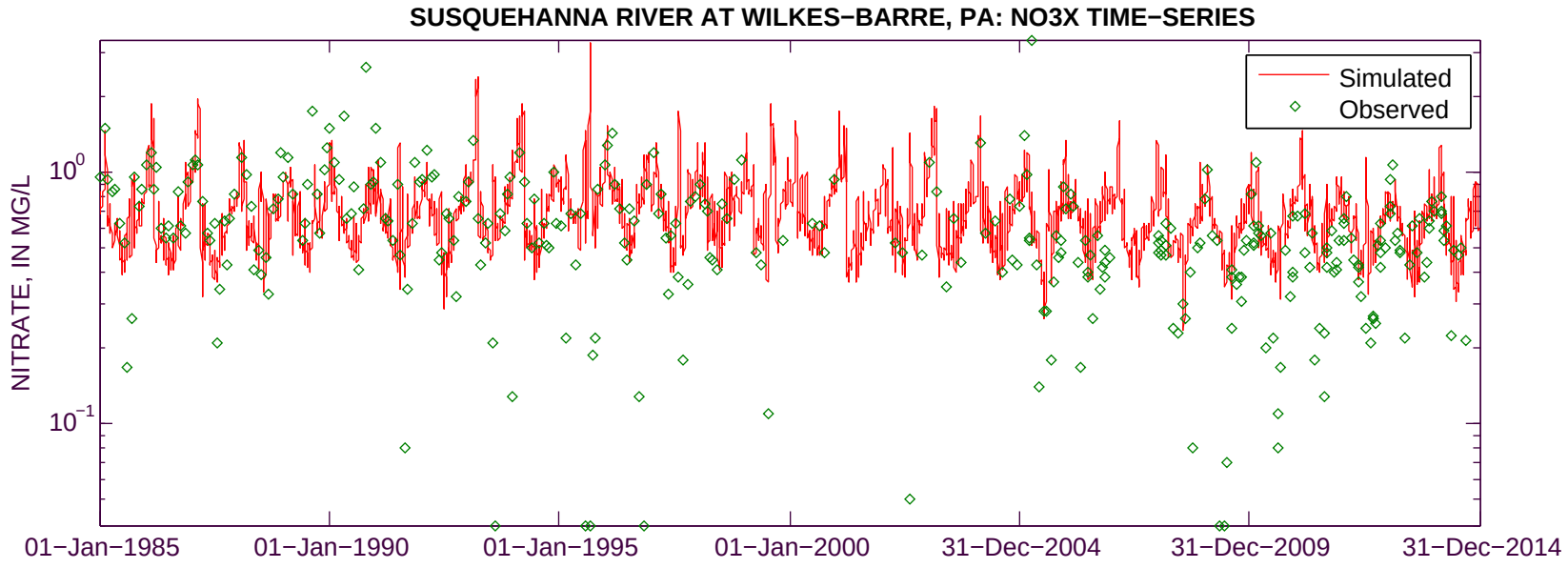
LOAD DATA
LOG10

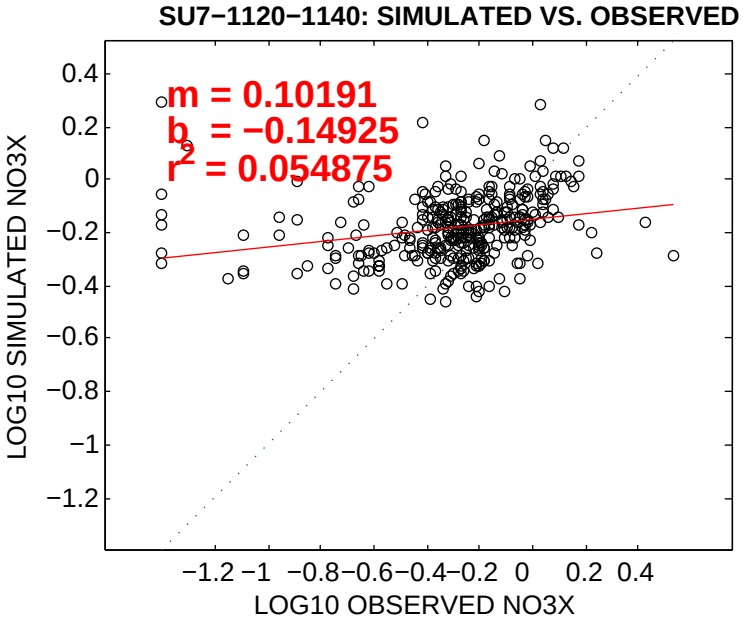


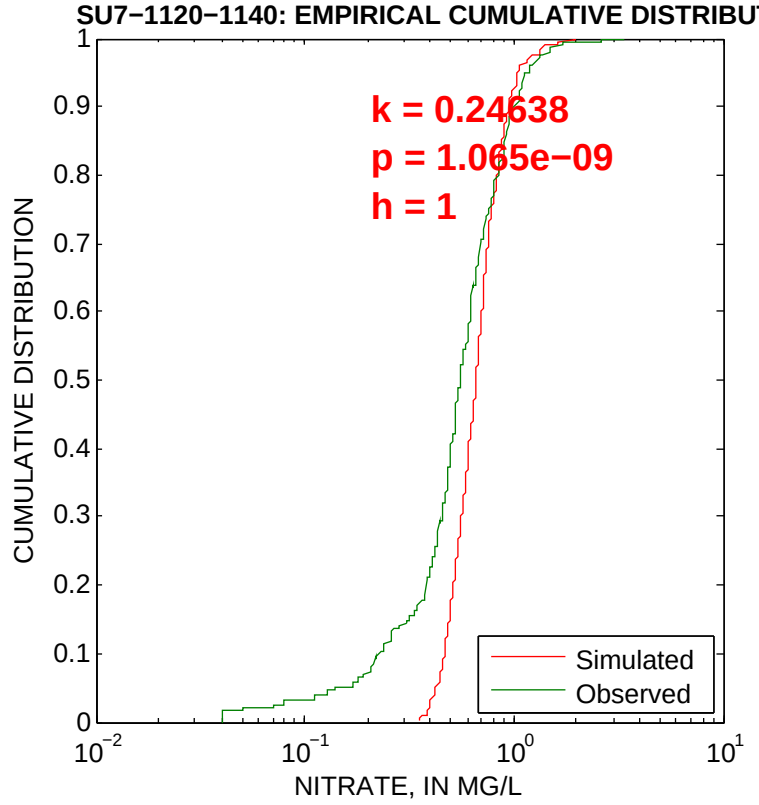












DATA SELECTION

scenario: P620171001WQ | file: NO3X.calib

plot: NO3X - nitrate

Dates: 1/1/1985 – 12/31/201

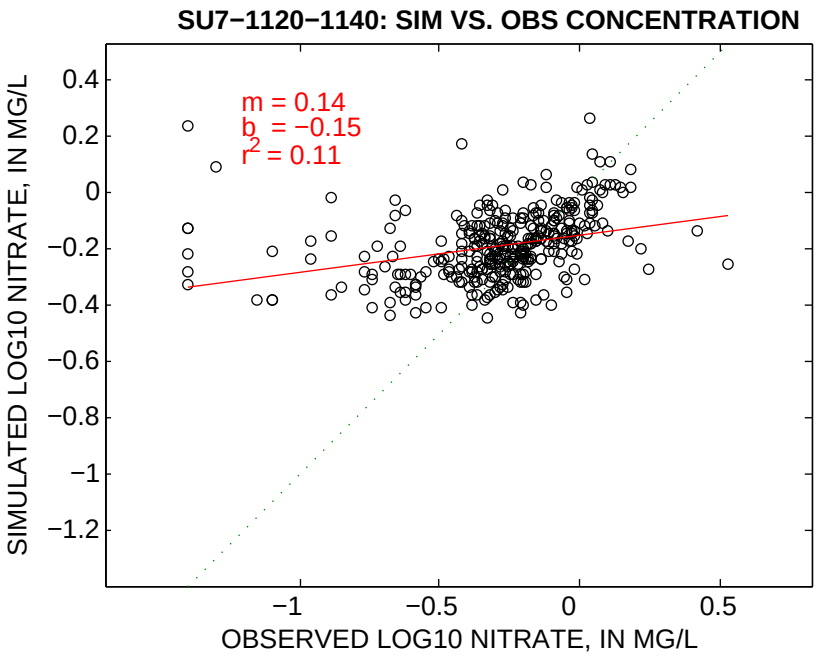
Drive | Directory | Observed: N/A | model | OBS20161101

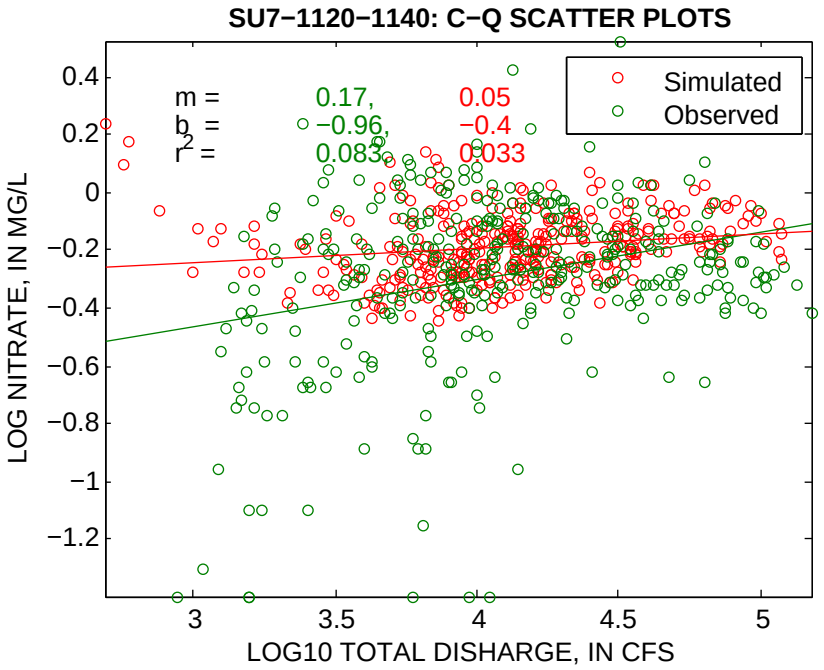
STATISTICS

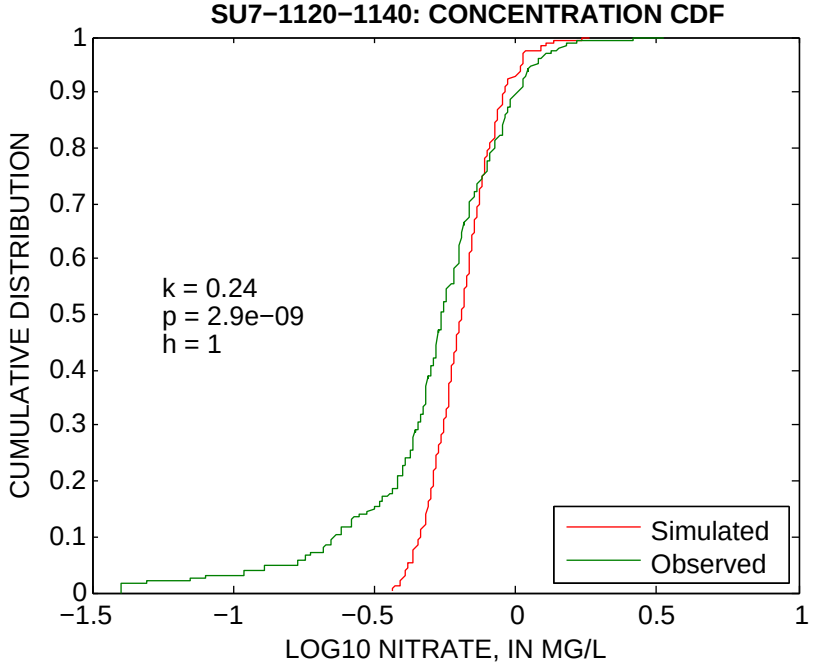
		observe	simulate
n		345	345
min		0.04	0.34686
		-1.39794	-0.459846
mean		0.612391	0.692075
		-0.288078	-0.178606
media		0.55	0.65942
		-0.259637	-0.180838
max		3.36	1.9888
		0.526339	0.298591
varian		0.123042	0.0489515
		0.0820663	0.0155311
JB		0.001	0.001
		0.001	0.001645
		ra	log
%		13.0119	-38.0006
err.va		0.137663	0.0928898
rel.std.err		1.11883	1.13189
mod.eff		-0.118832	-0.131888

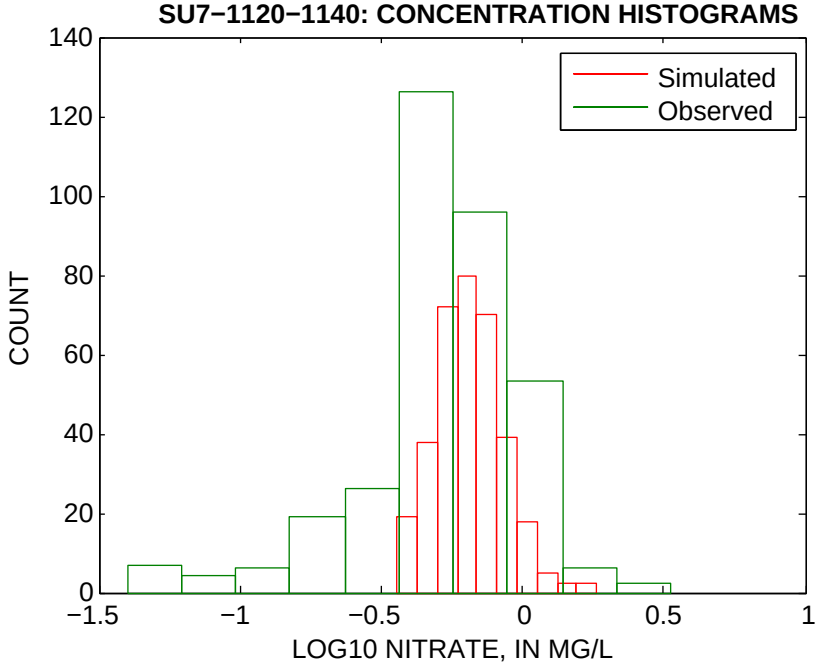
VERSION 2.1

ALL DATA
LOG10

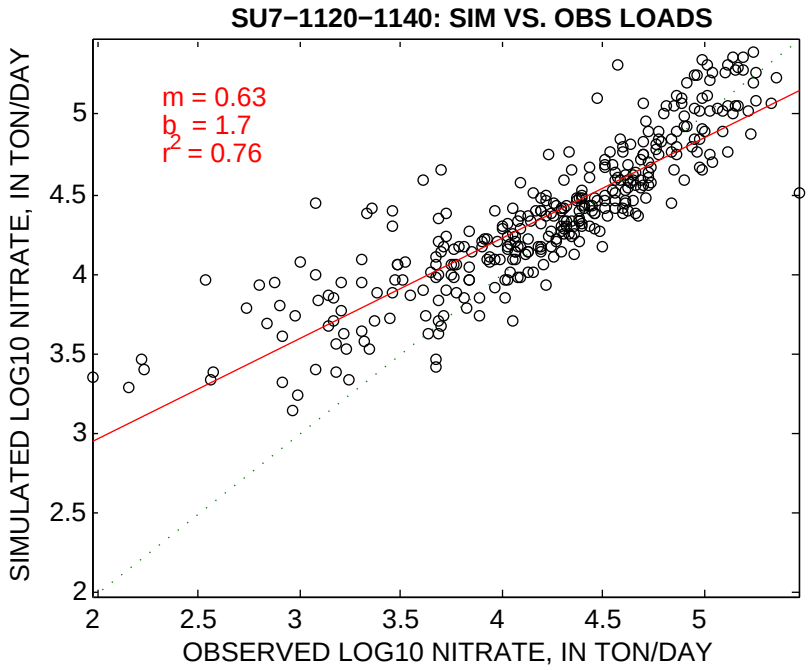


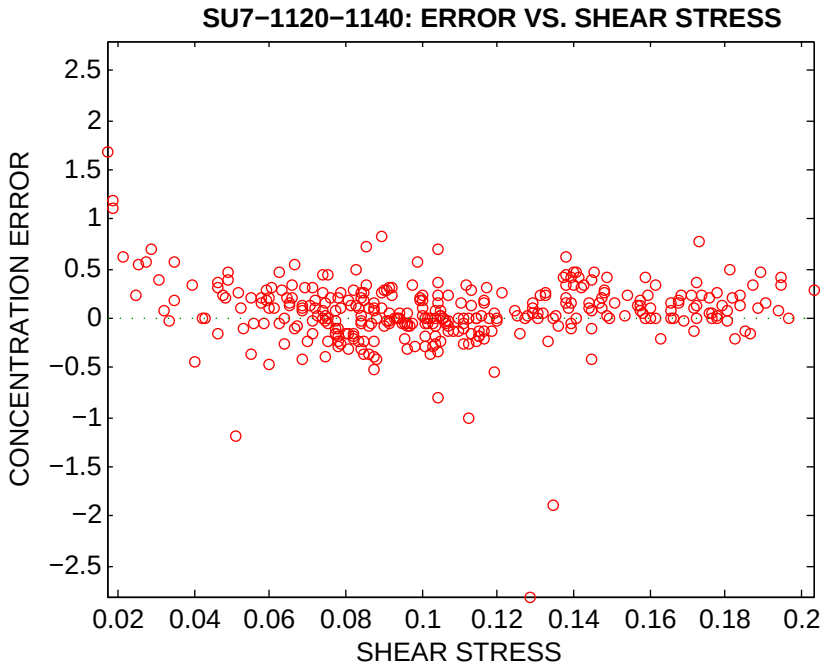


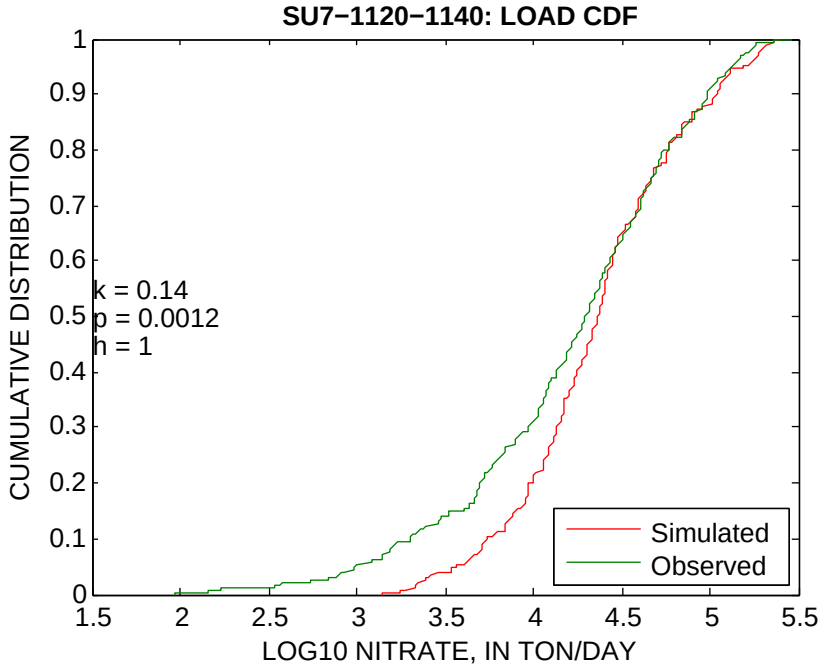


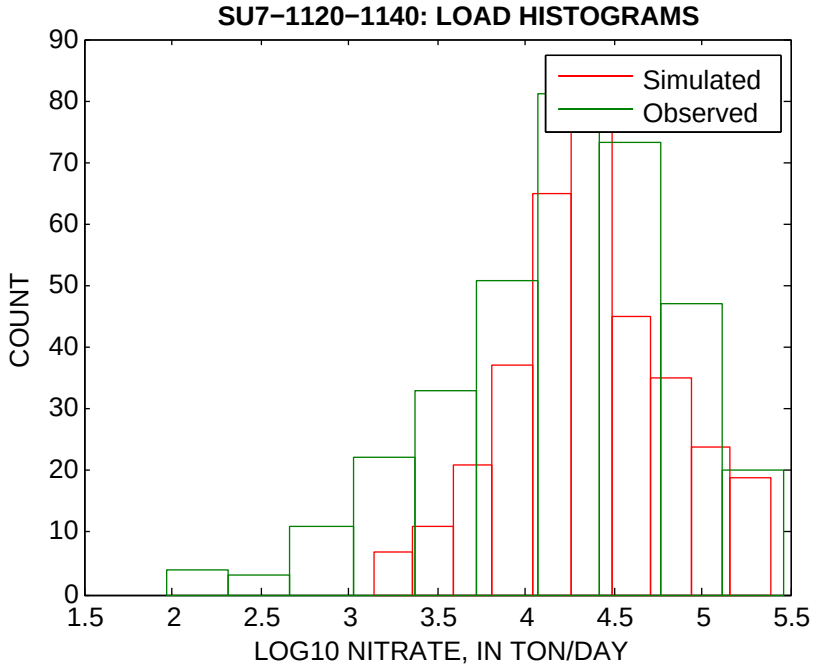


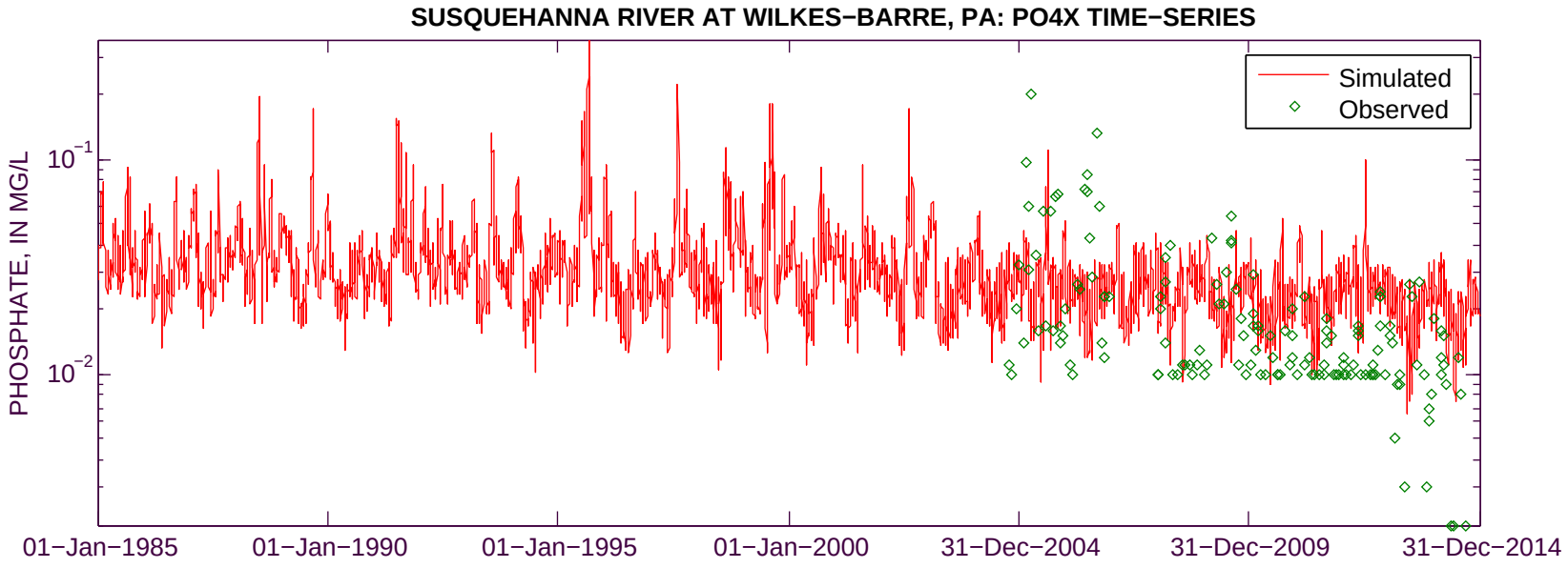
LOAD DATA
LOG10

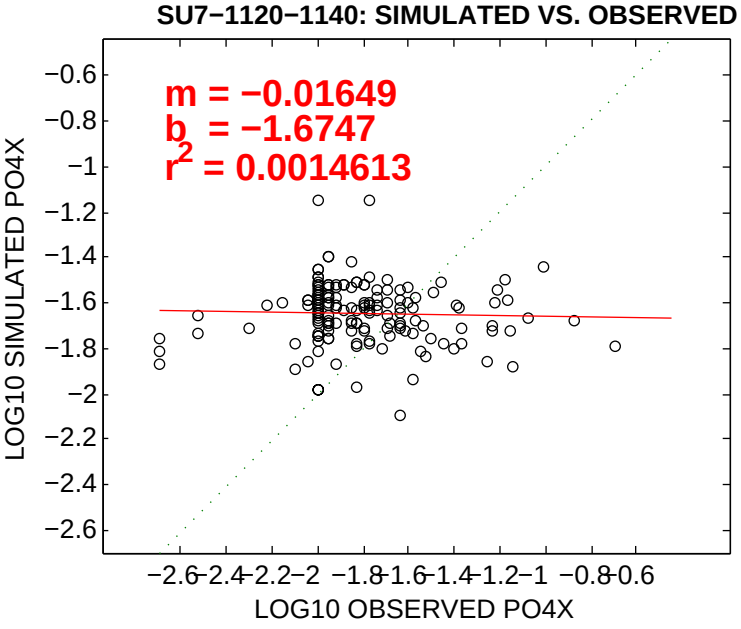


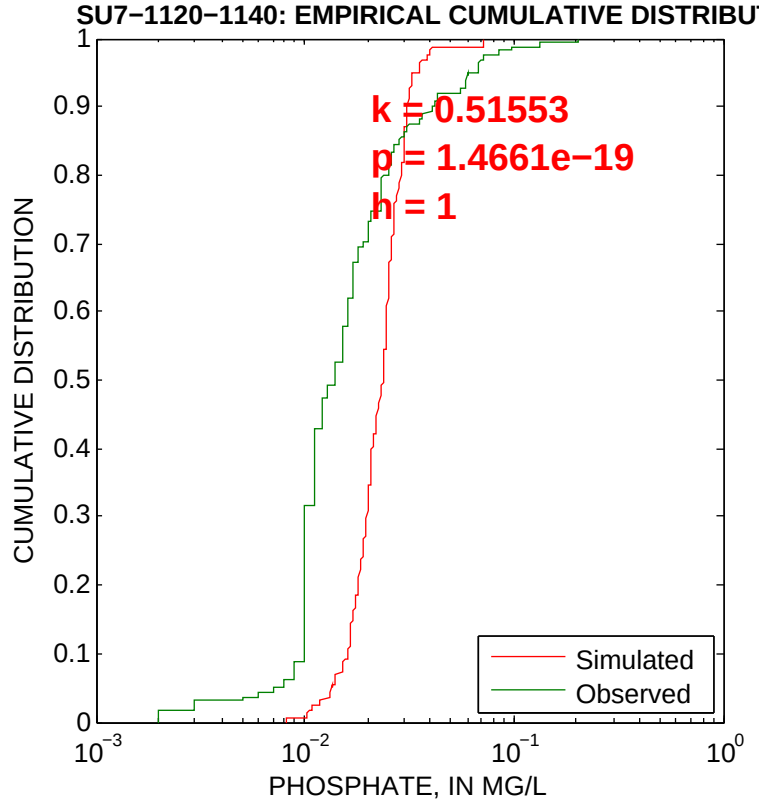












DATA SELECTION

scenario: P620171001WQ | file: PO4X.calib

plot: PO4X - phosphate

Dates: 1/1/1985 – 12/31/201

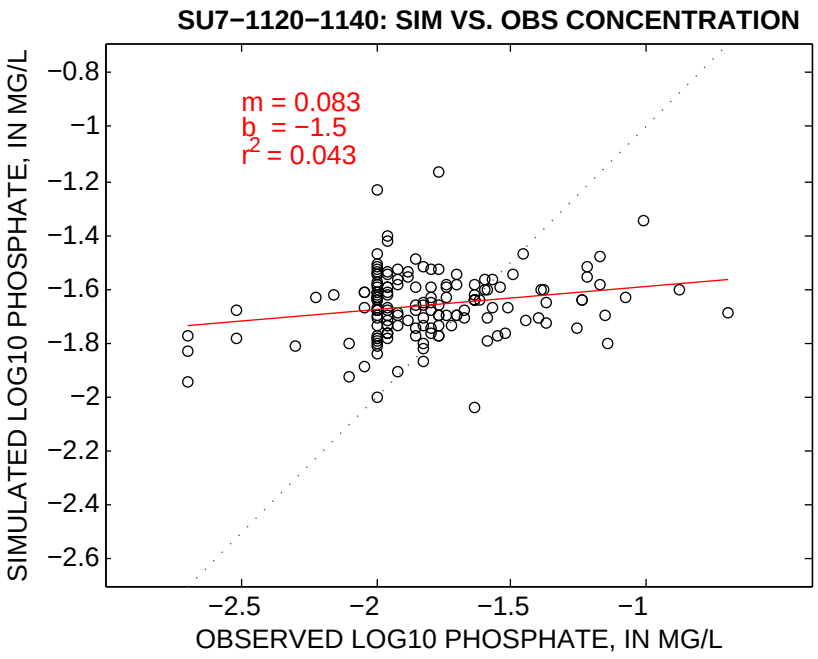
Drive: N/A | Directory: model | Observed: OBS20161101

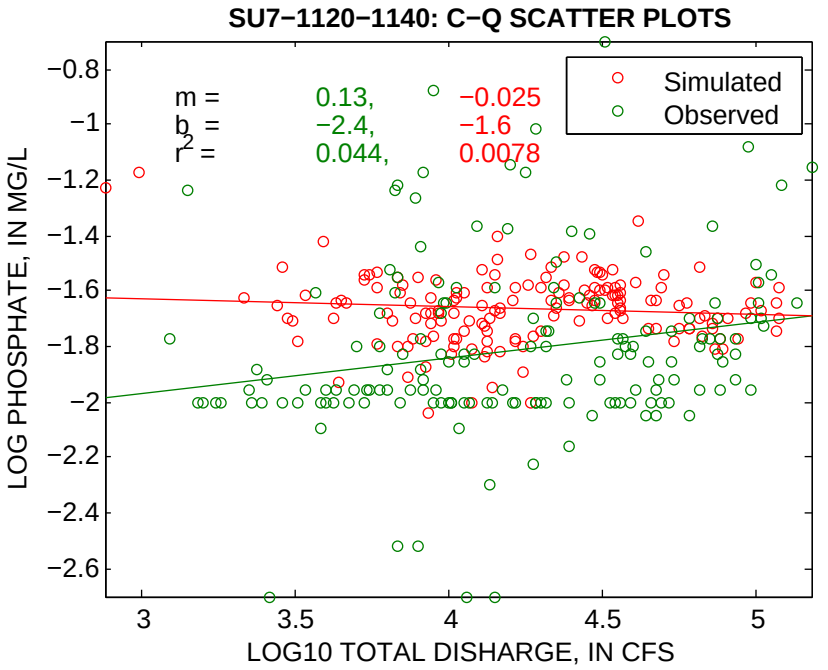
STATISTICS

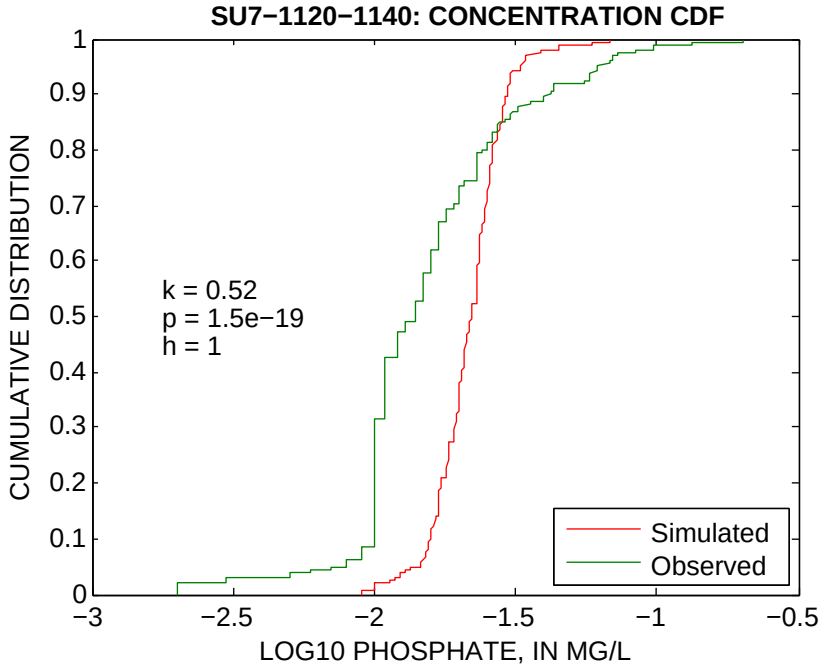
	observe	simulate
n	161	161
min	0.002 -2.69897	0.0081377 -2.0895
mean	0.020882 -1.80902	0.0237585 -1.64483
media	0.014 -1.85387	0.023543 -1.62814
max	0.201 -0.696804	0.071743 -1.14422
varian	0.00053464 0.0947272	6.46646e-0 0.0176255
JB	0.001 0.001	0.001 0.001
	ra	log
%	13.7749	-9.07639
err.va	0.00064077	0.142605
rel.std.err	1.19851	1.50543
mod.eff	-0.198508	-0.505427

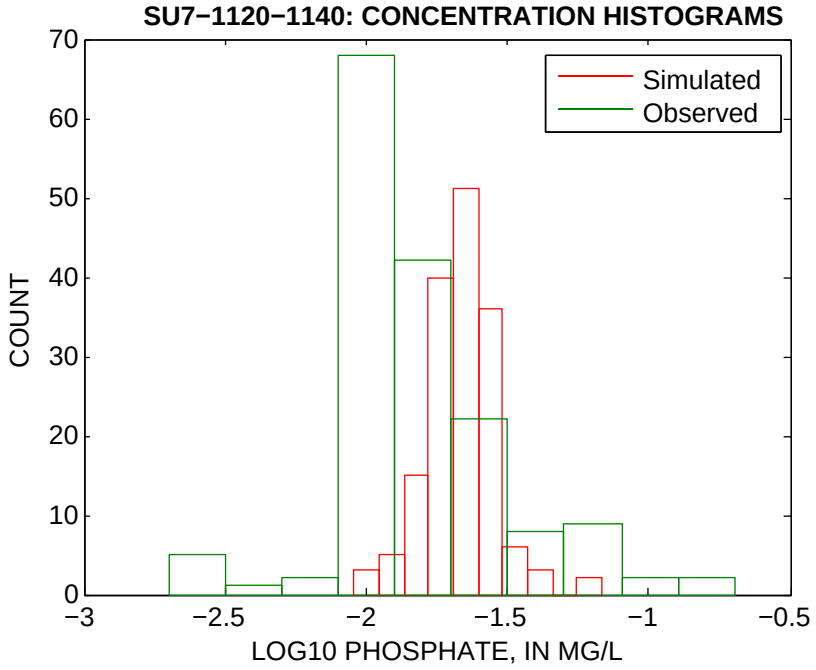
VERSION 2.1

ALL DATA
LOG10

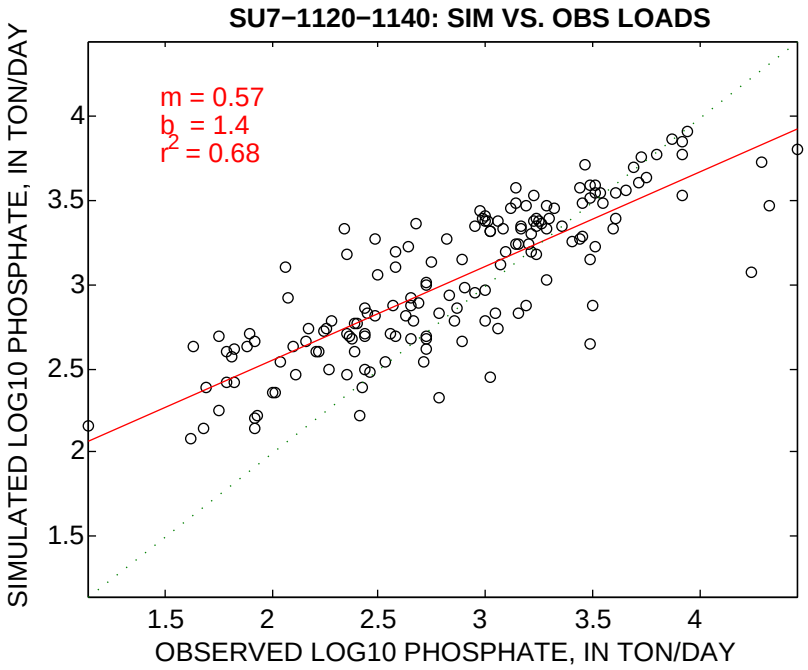


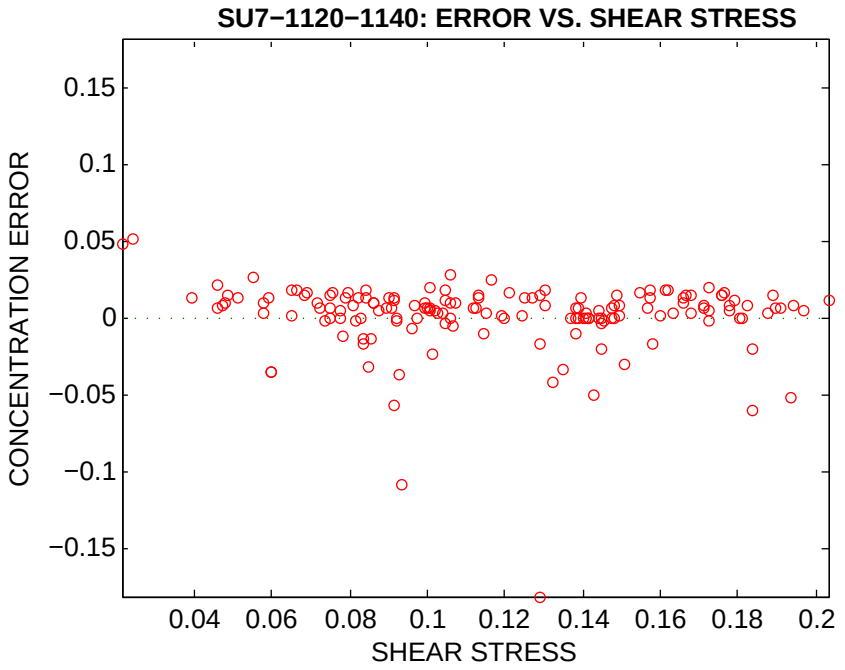


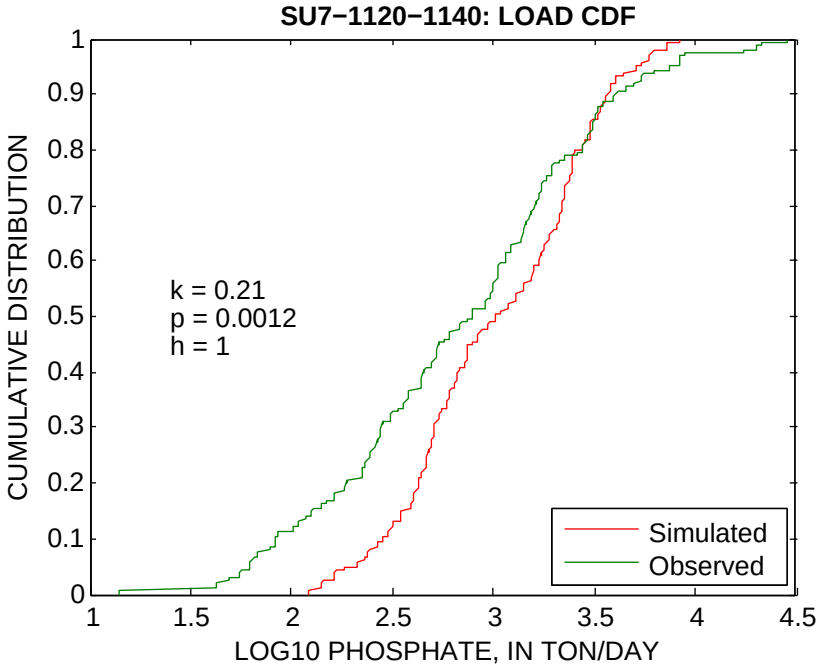


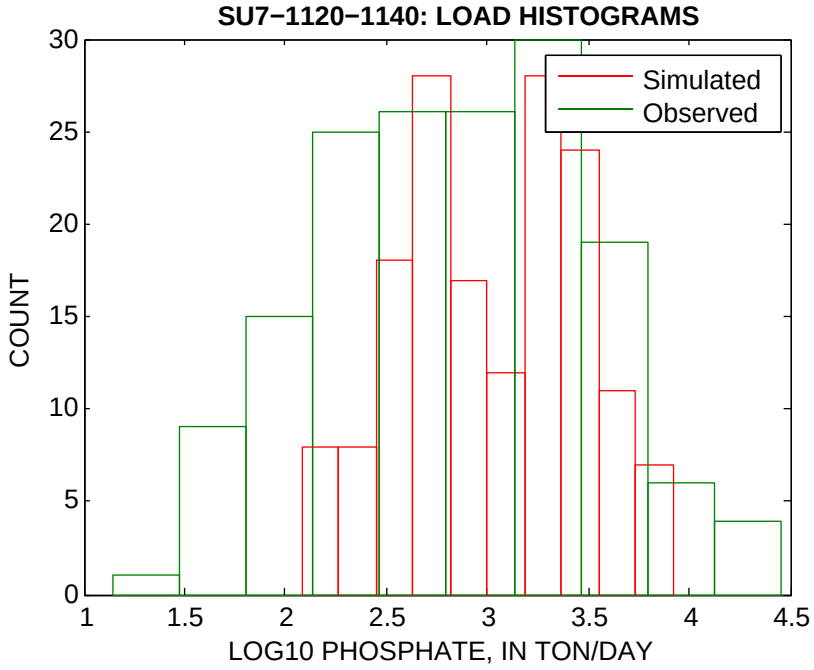


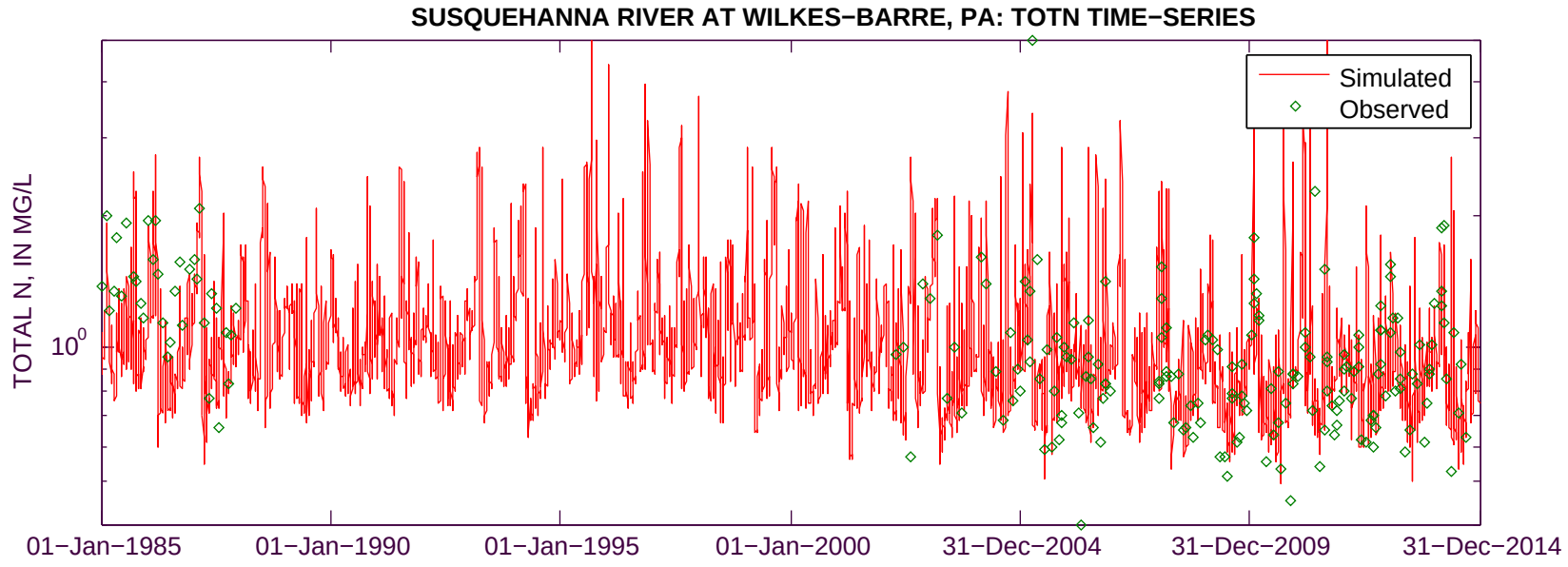
LOAD DATA
LOG10

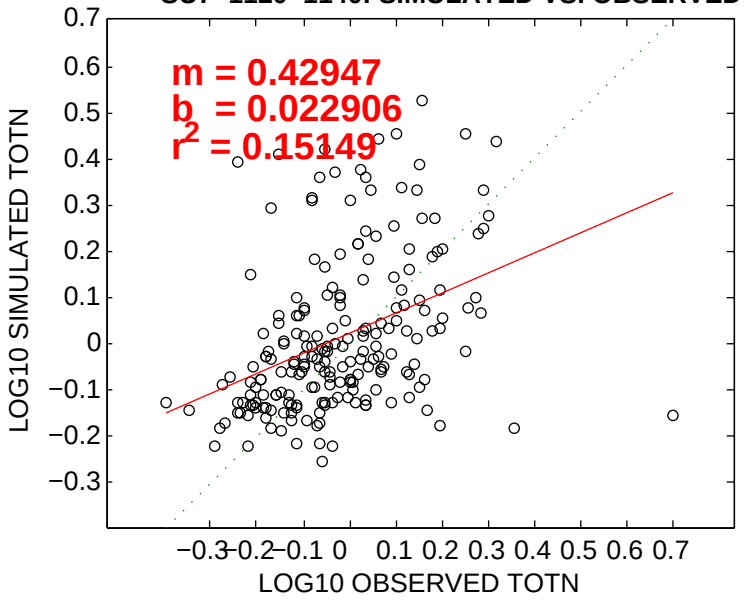


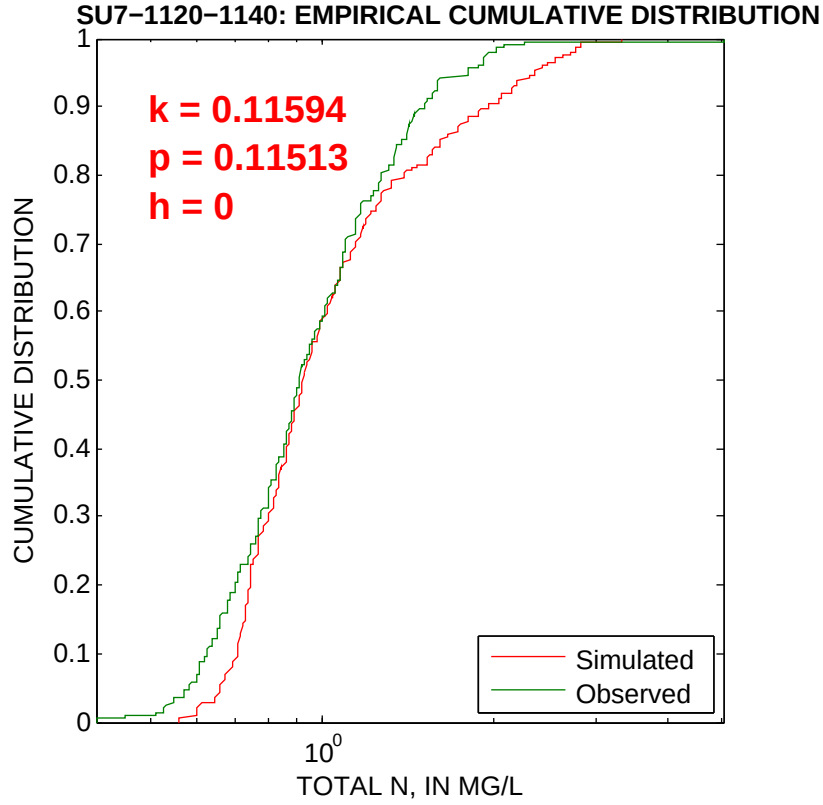












DATA SELECTION

scenario	file
P620171001WQ	TOTN.calib

plot: TOTN - total nitrogen

Dates: 1/1/1985 – 12/31/201

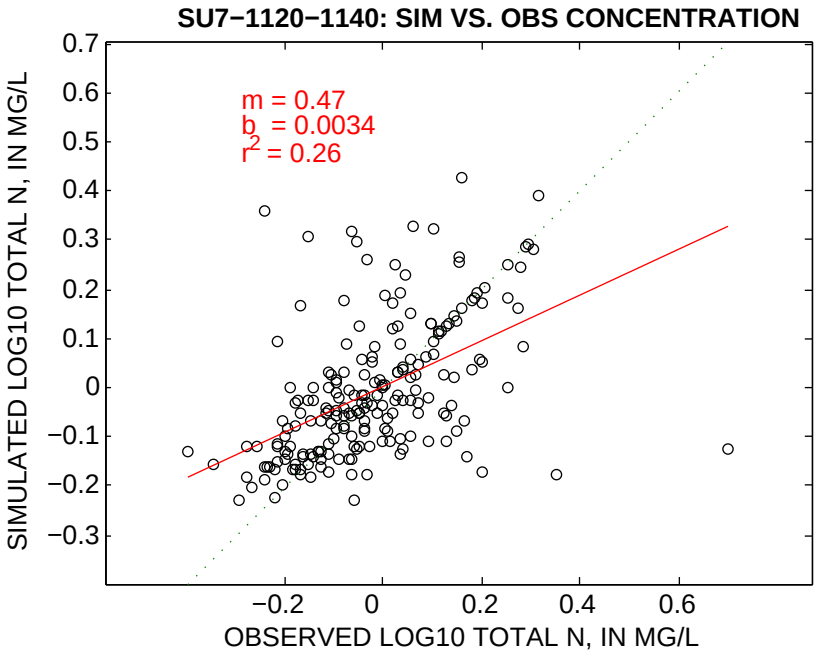
Drive	Directory	Observed
N/A	model	OBS20161101

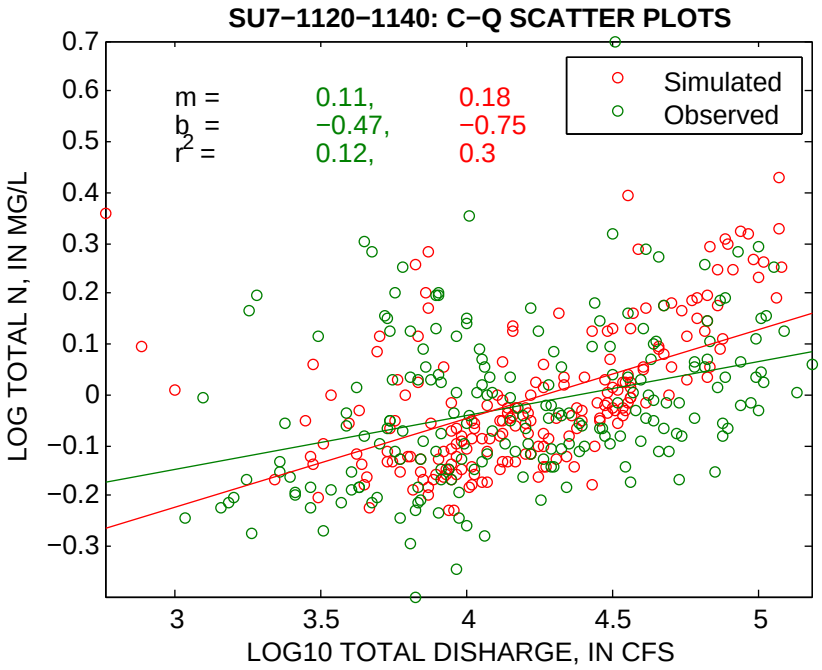
STATISTICS

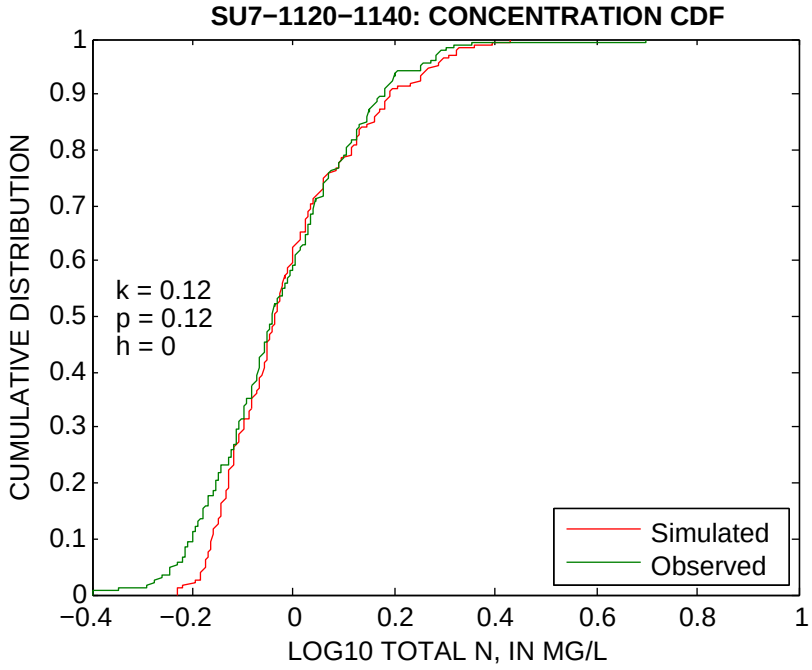
	n	observe	simulate
		207	207
min		0.4	0.55849
		-0.39794	-0.252985
mean		1.01813	1.12219
		-0.0213591	0.0137332
media		0.91	0.92483
		-0.0409586	-0.0339381
max		5.02	3.3439
		0.700704	0.524253
varian		0.200622	0.278514
		0.0230767	0.0280969
JB		0.001	0.001
		0.001	0.001
		ra	log
%		10.2214	-164.296
err.va		0.361722	0.0325894
rel.std.err		1.803	1.41222
mod.eff		-0.803005	-0.412219

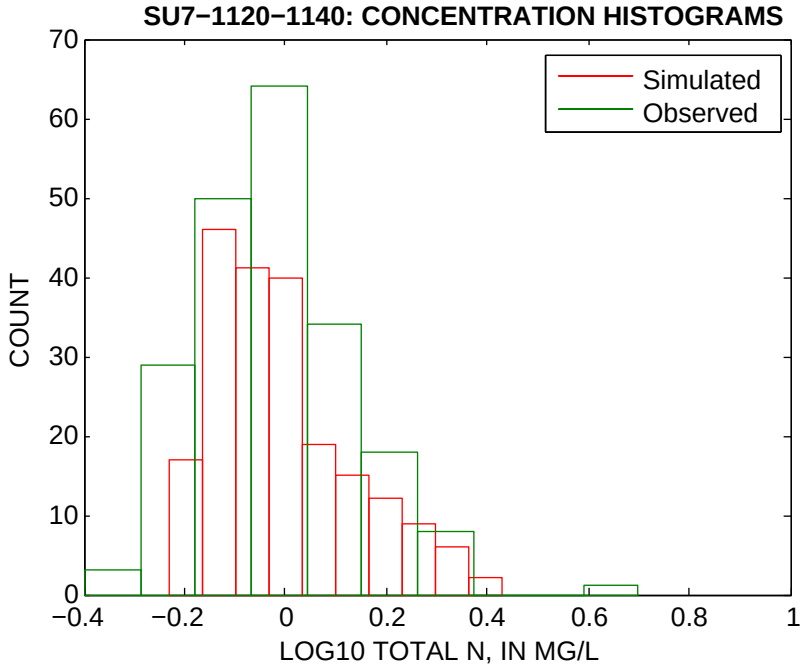
VERSION 2.1

ALL DATA
LOG10

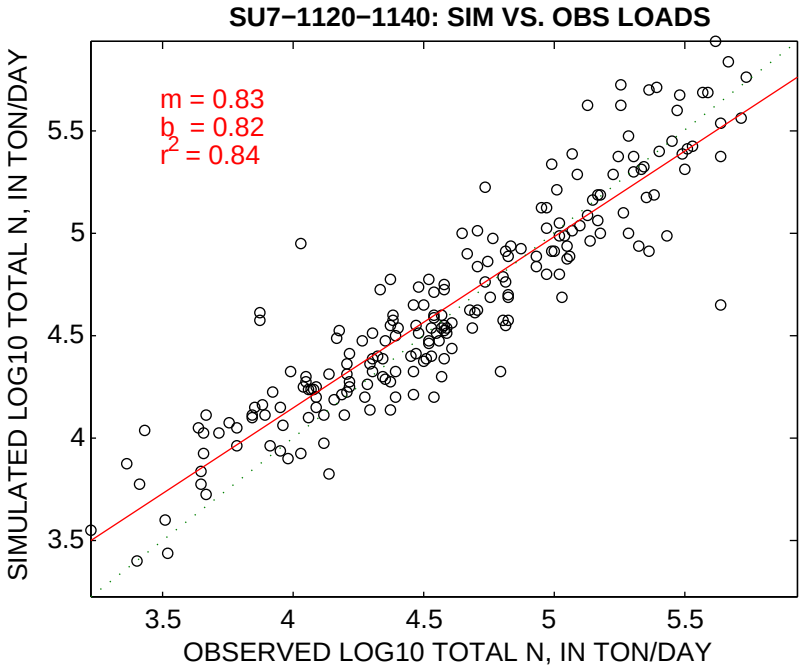


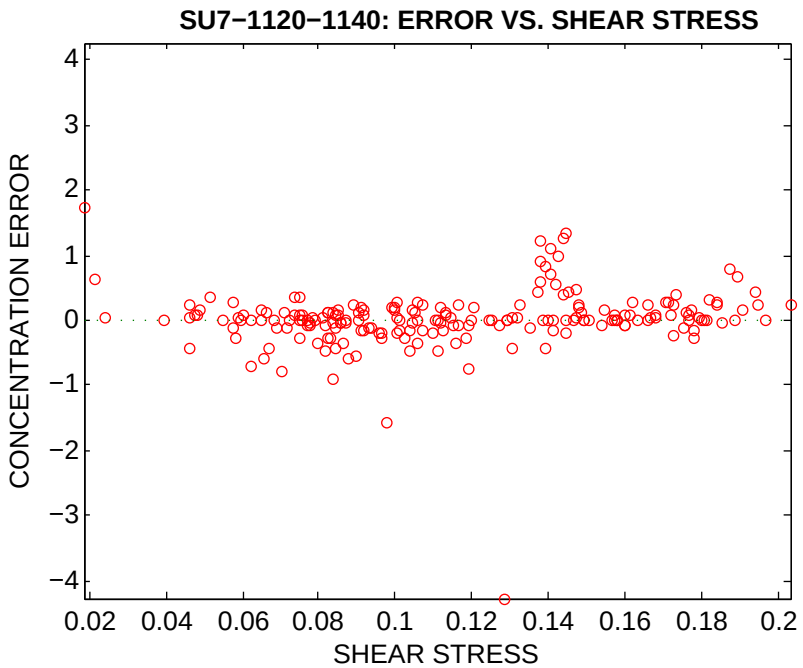


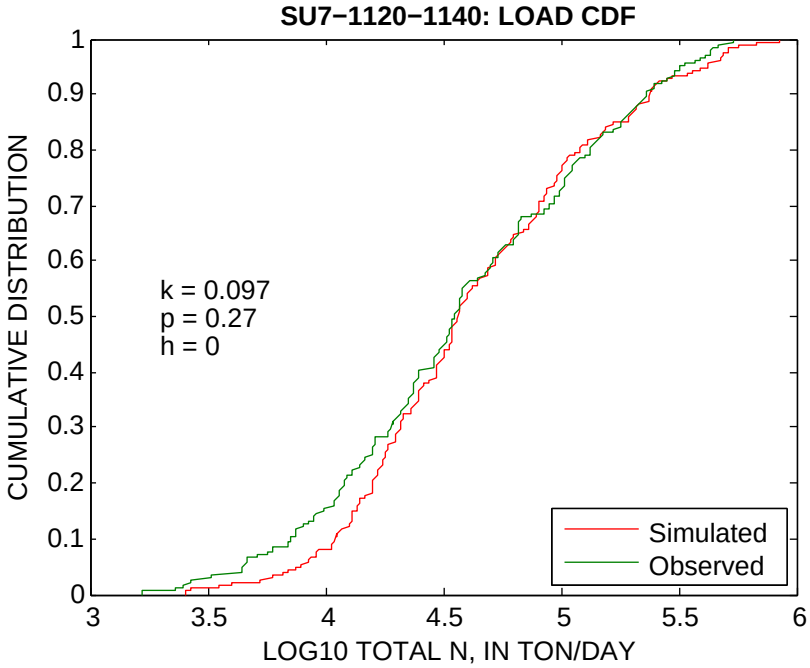


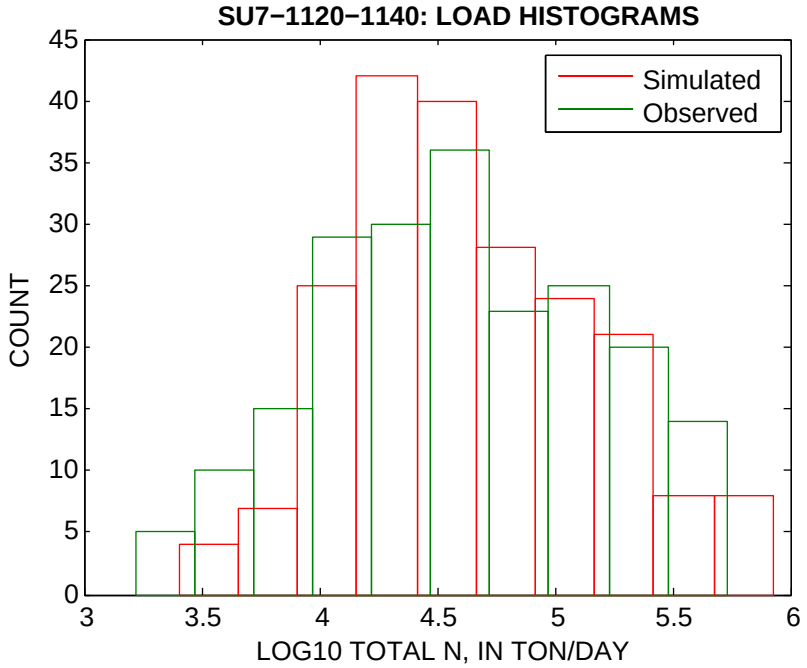


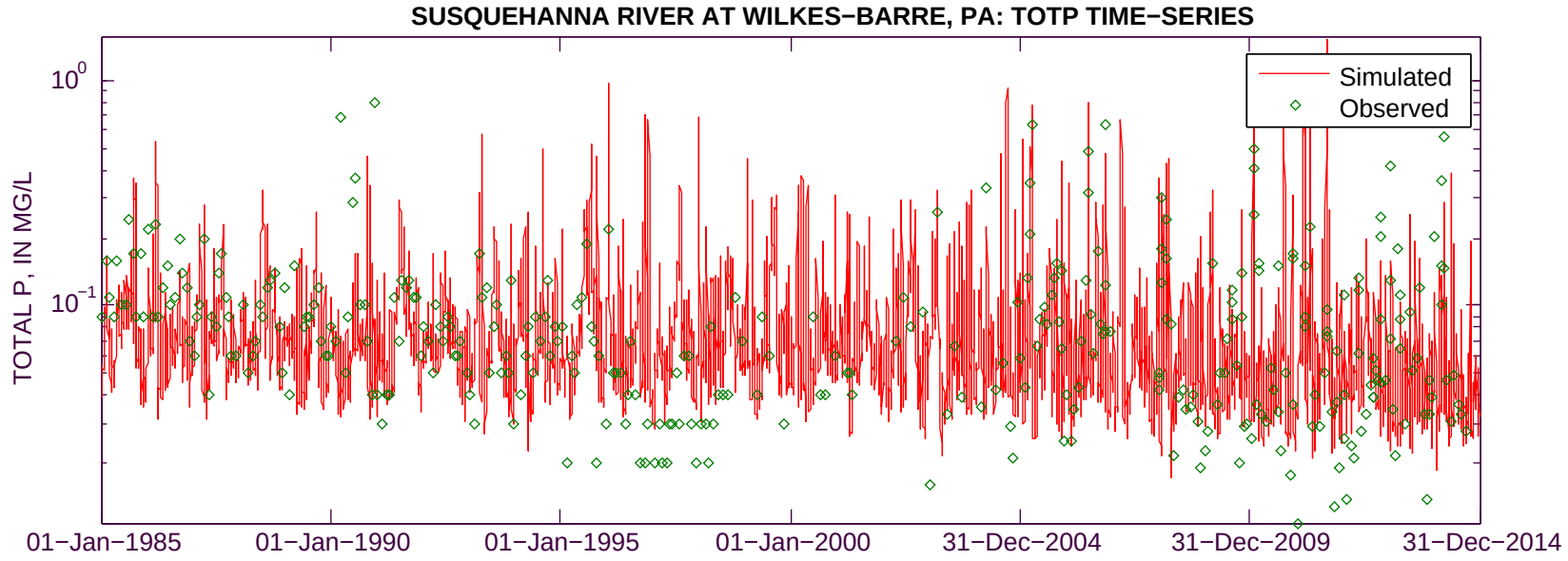
LOAD DATA
LOG10

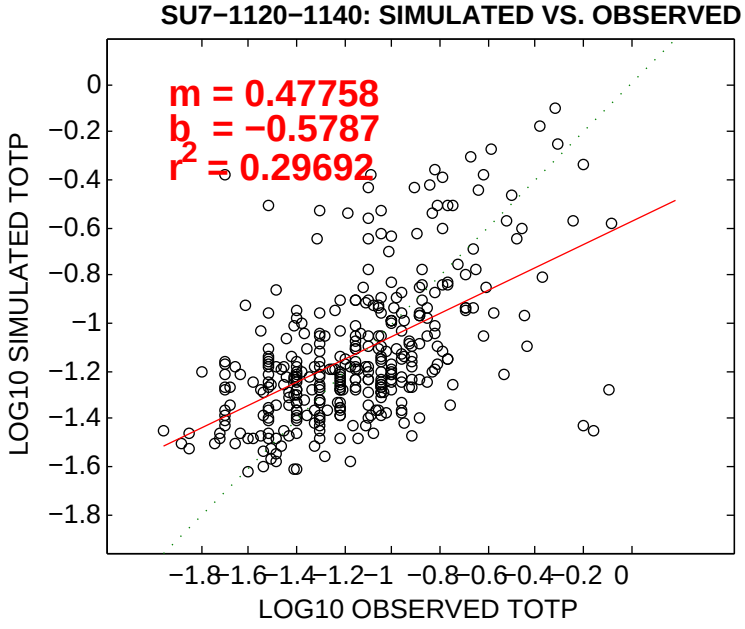


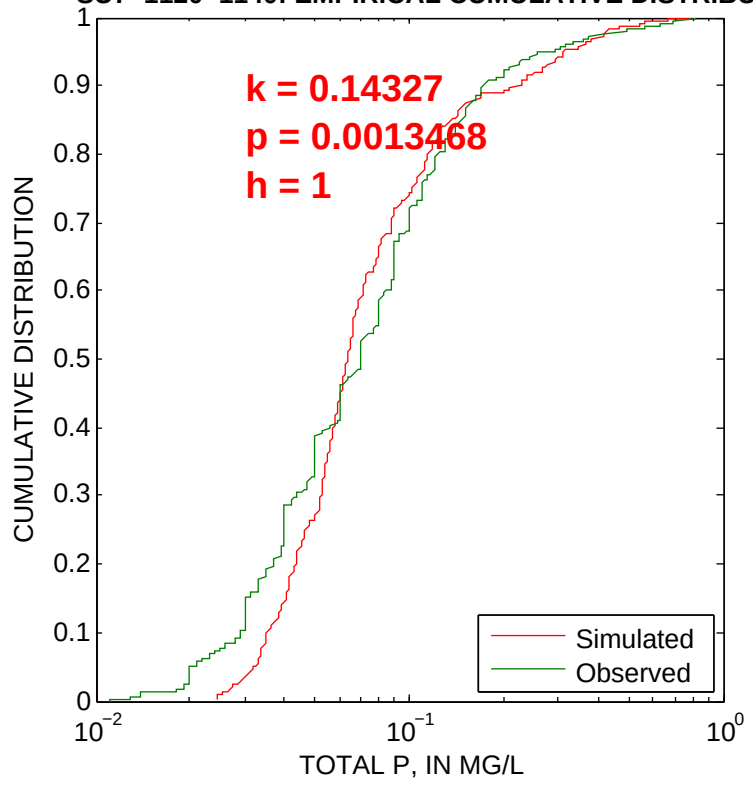












DATA SELECTION

scenario	file
P620171001WQ	TOTP.calib

plot: TOTP - total phosphorus

Dates: 1/1/1985 – 12/31/201

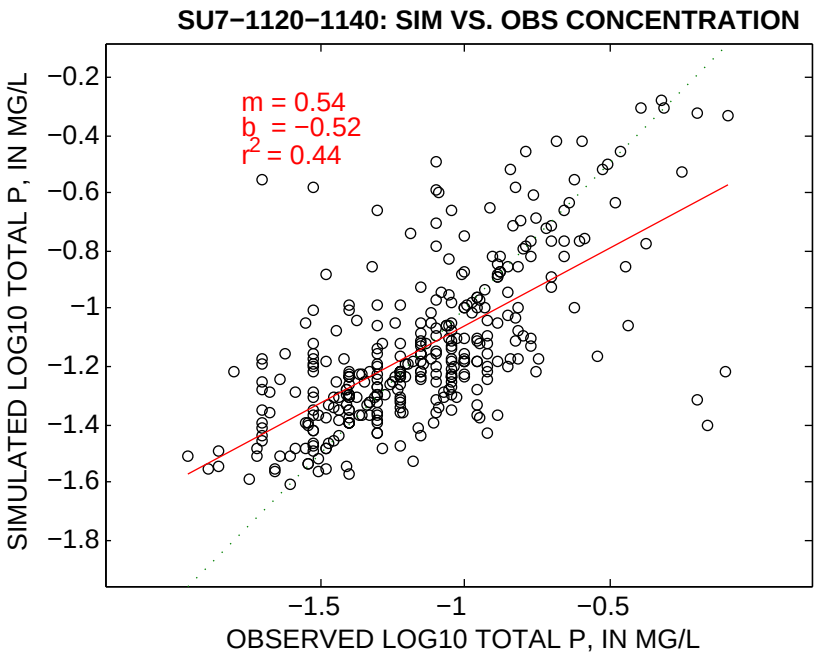
Drive	Directory	Observed
N/A	model	OBS20161101

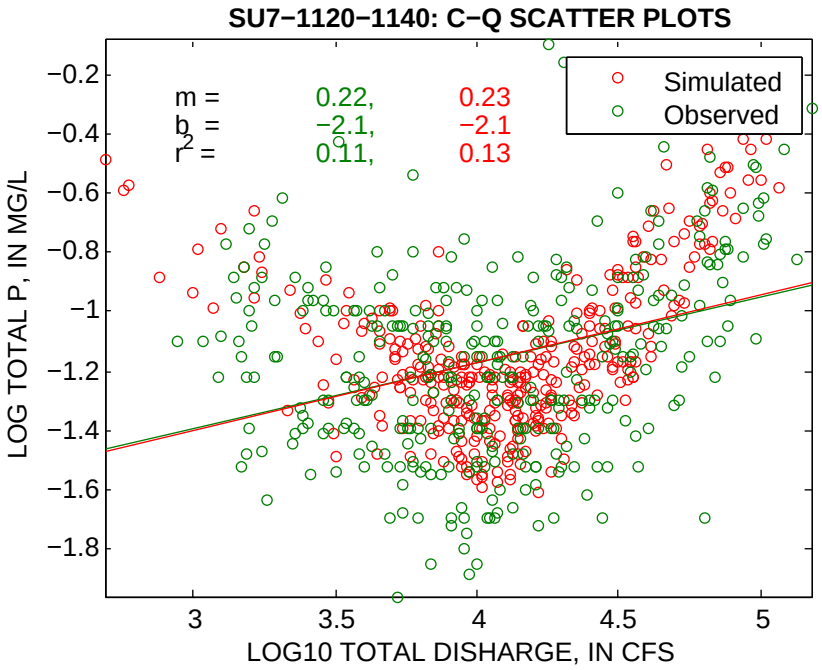
STATISTICS

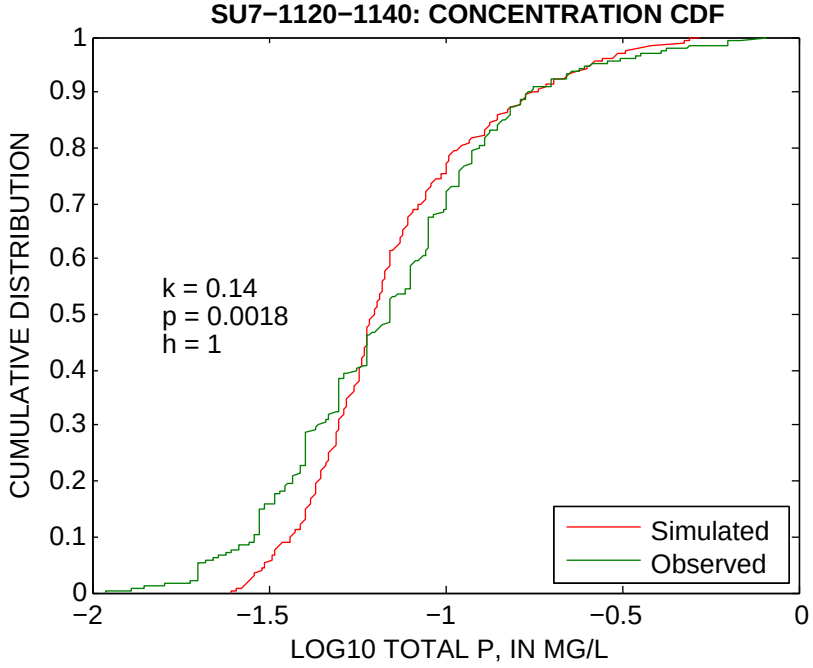
	n	349	349
		observe	simulate
min		0.011	0.024046
		-1.95861	-1.61896
mean		0.097851	0.0985786
		-1.15433	-1.12999
media		0.07	0.063554
		-1.1549	-1.19686
max		0.817	0.79178
		-0.0877779	-0.101395
varian		0.0115779	0.0103345
		0.111191	0.0854128
JB		0.001	0.001
		0.004247	0.001
		ra	log
%		0.743549	-2.1093
err.va		0.0115411	0.0909935
rel.std.err		0.99682	0.818356
mod.eff		0.00318049	0.181644

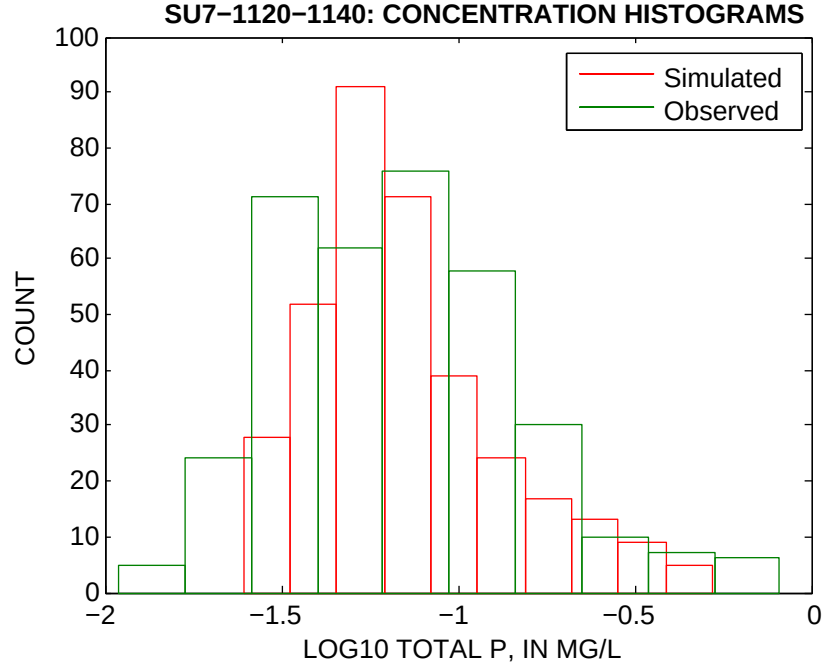
VERSION 2.1

ALL DATA
LOG10

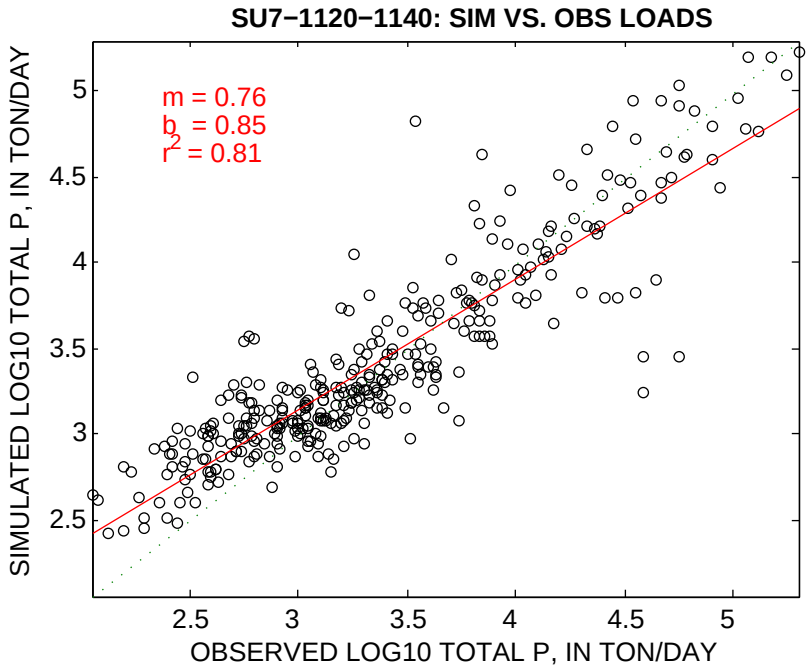


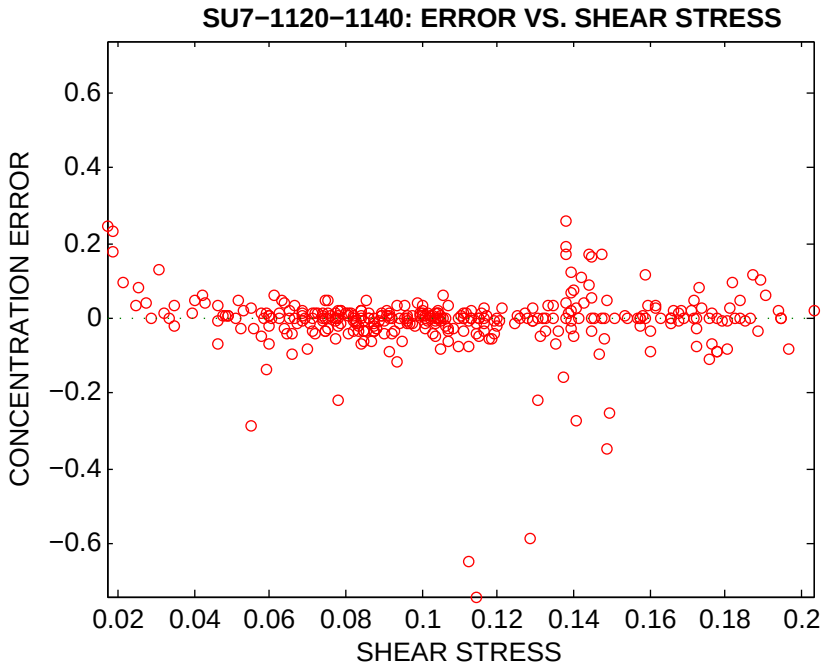


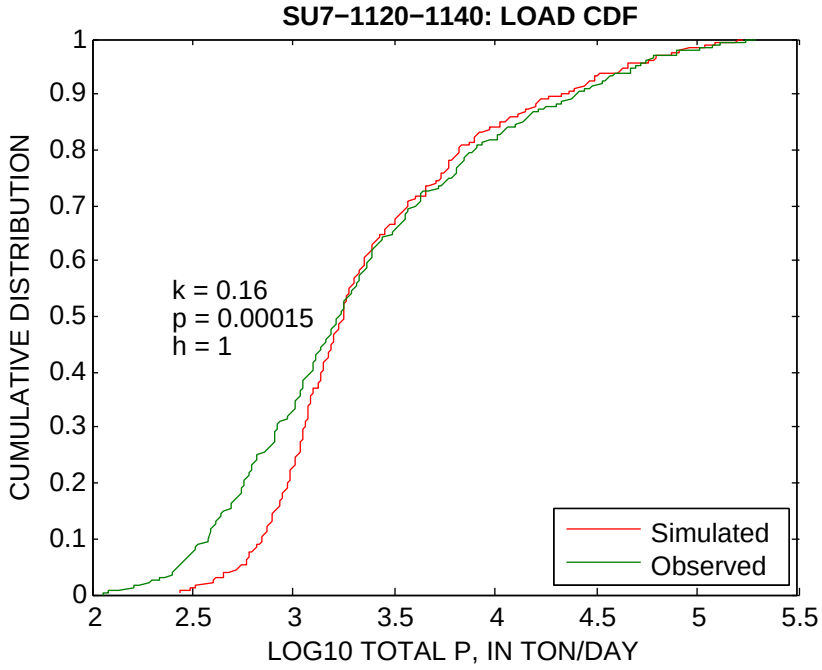


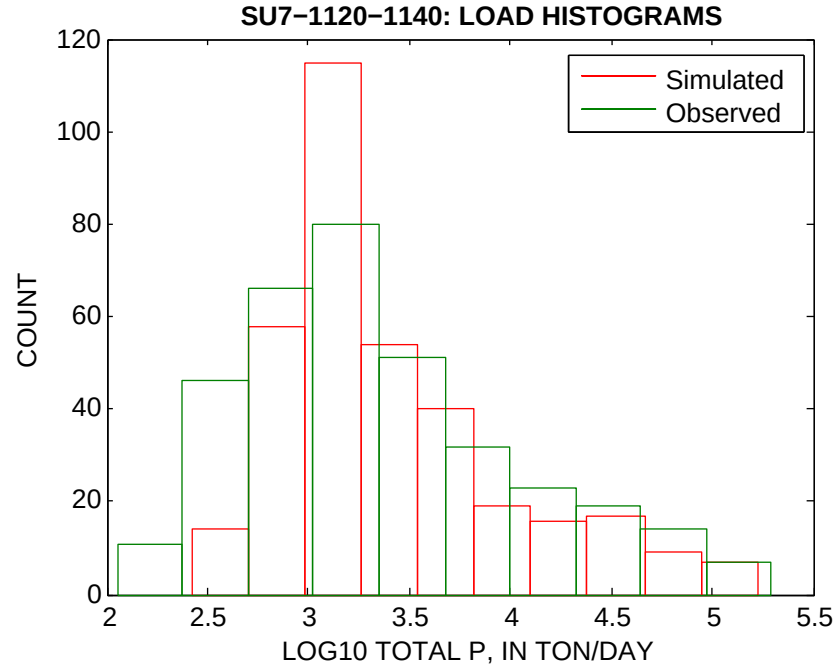


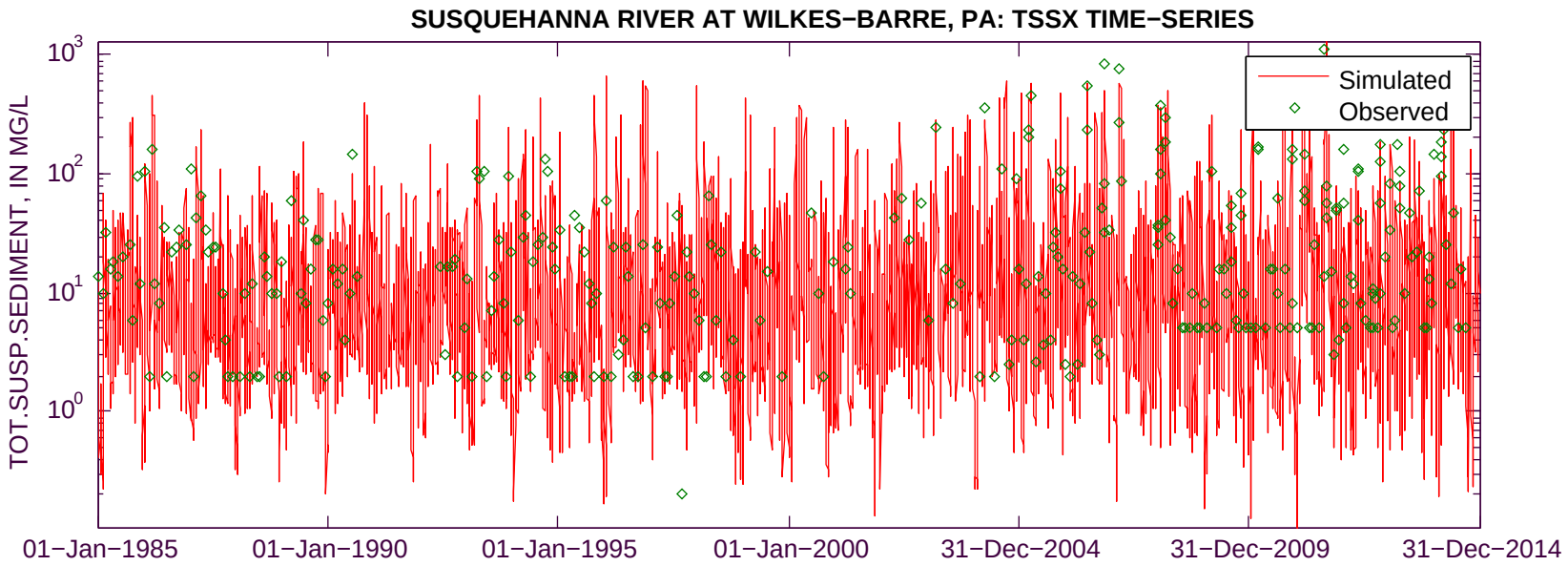
LOAD DATA
LOG10

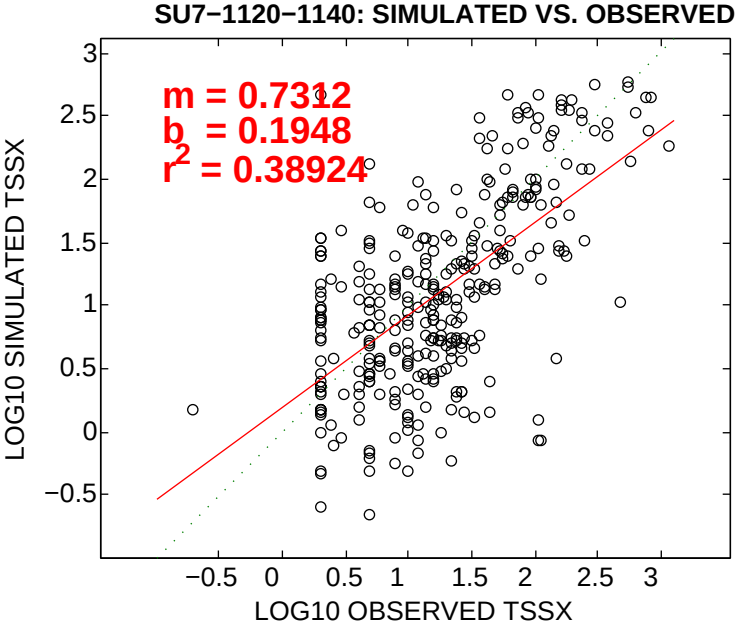


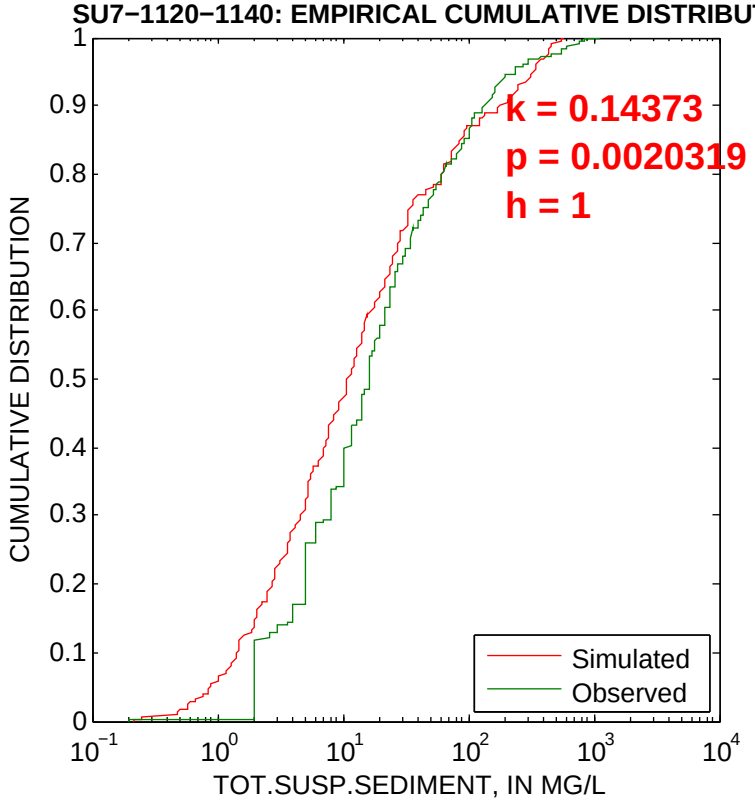












DATA SELECTION

scenario	file
P620171001WQ	TSSX.calib

plot: TSSX - total suspended ...

Dates: 1/1/1985 – 12/31/201

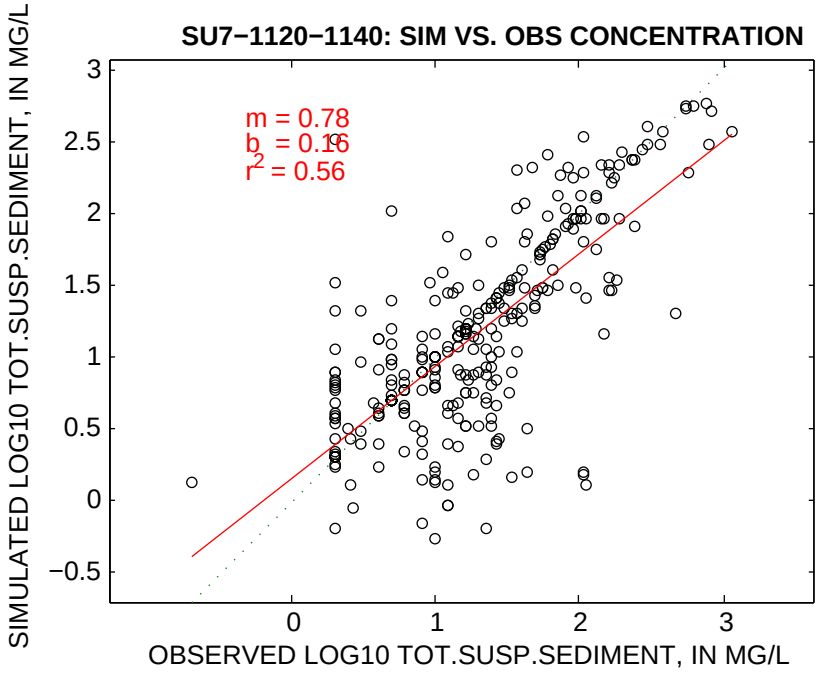
Drive	Directory	Observed
N/A	model	OBS20161101

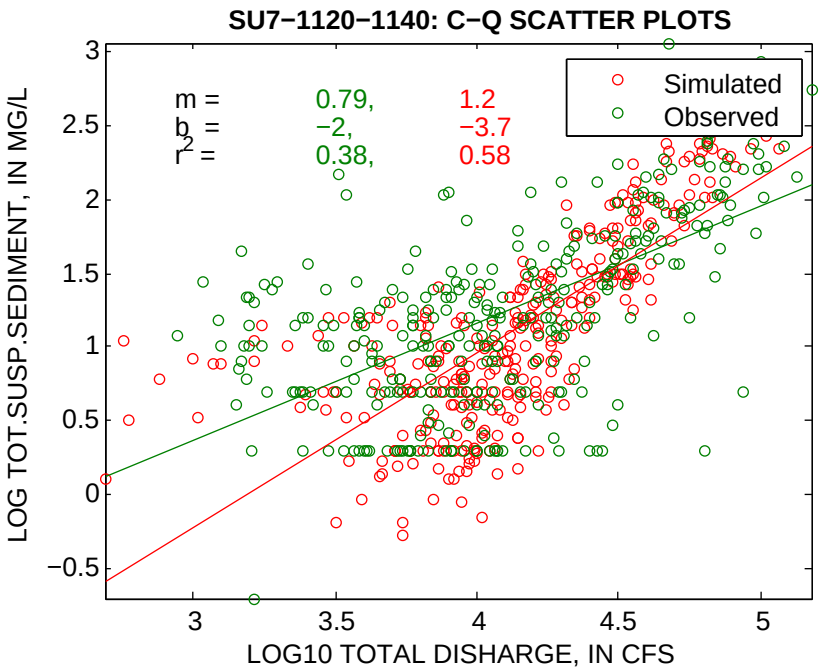
STATISTICS

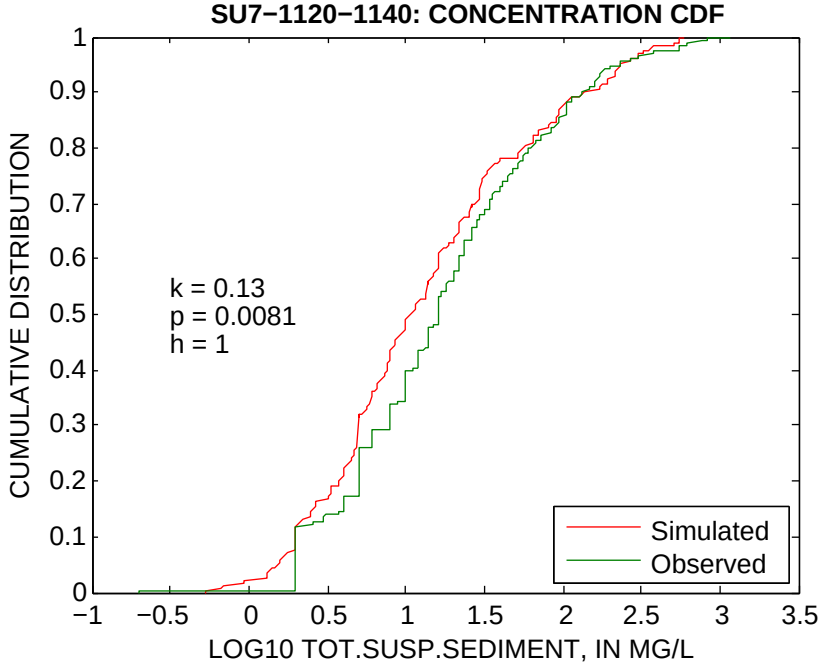
	n	observe	simulate
		327	327
min		0.2	0.21752
		-0.69897	-0.662501
mean		56.6248	54.063
		1.24192	1.10289
media		16	11.23
		1.20412	1.05038
max		1150	578.76
		3.0607	2.7625
varian		16181.3	11501.5
		0.413521	0.568007
JB		0.001	0.001
		0.027464	0.023574
		ra	log
%		-4.52405	-11.1943
err.va		11424.2	0.39618
rel.std.err		0.706013	0.958066
mod.eff		0.293987	0.0419342

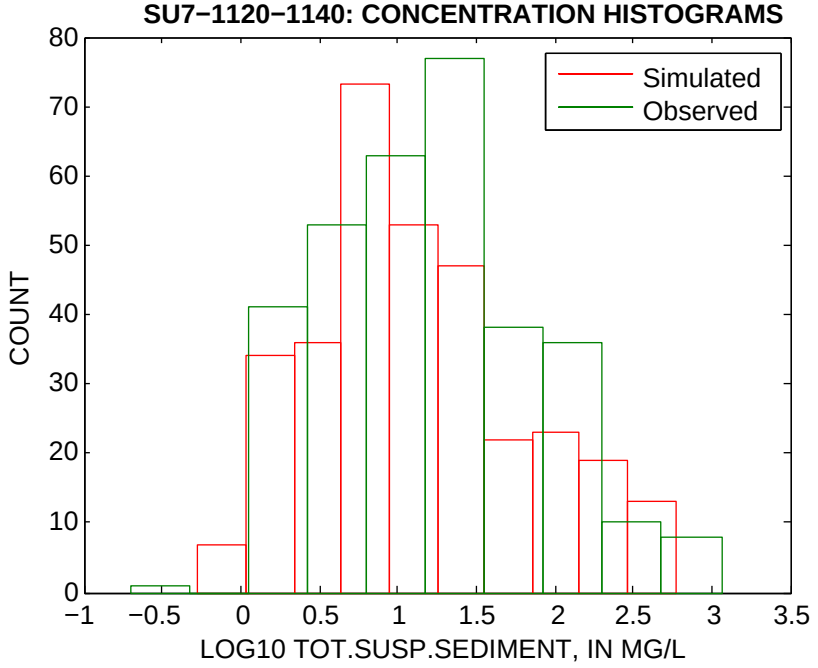
VERSION 3.1

ALL DATA
LOG10

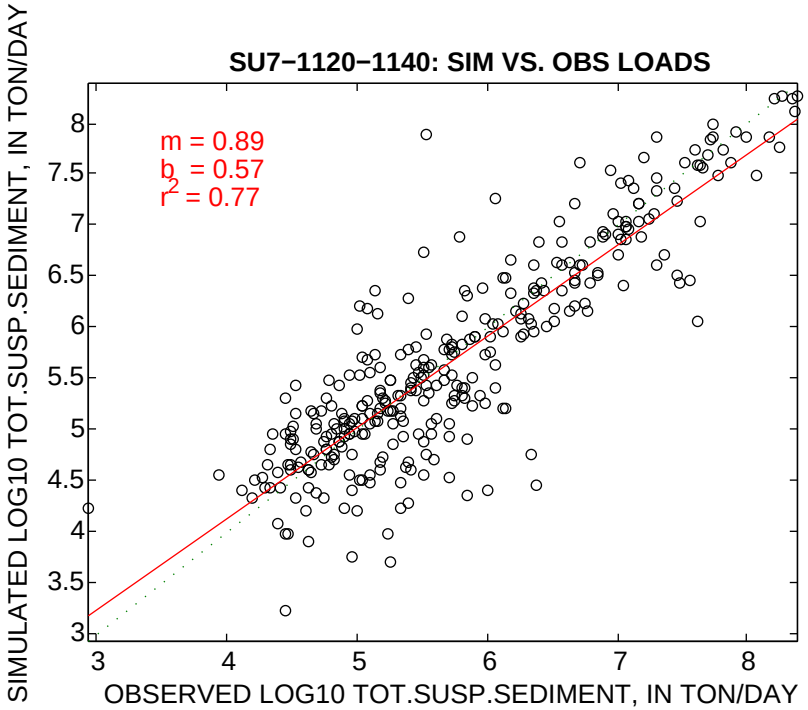


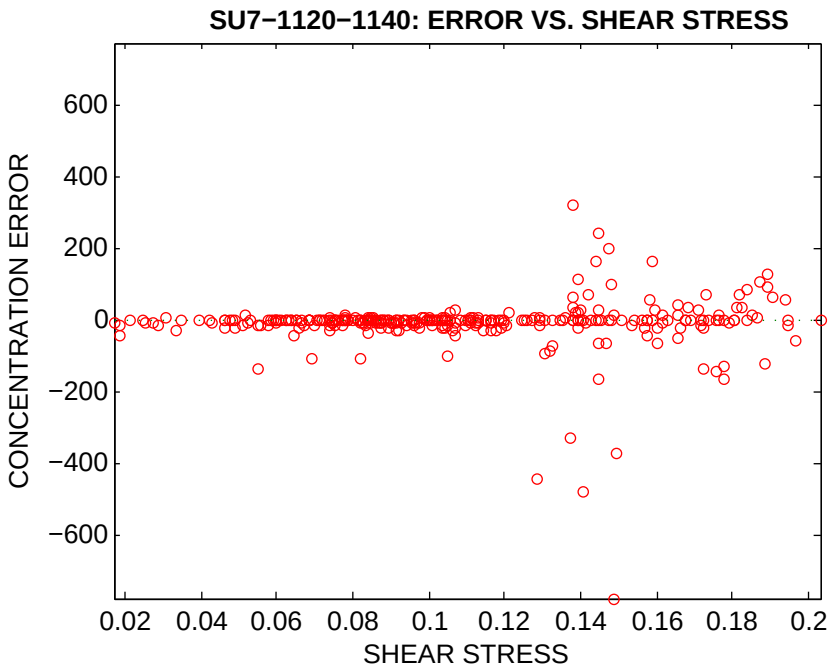


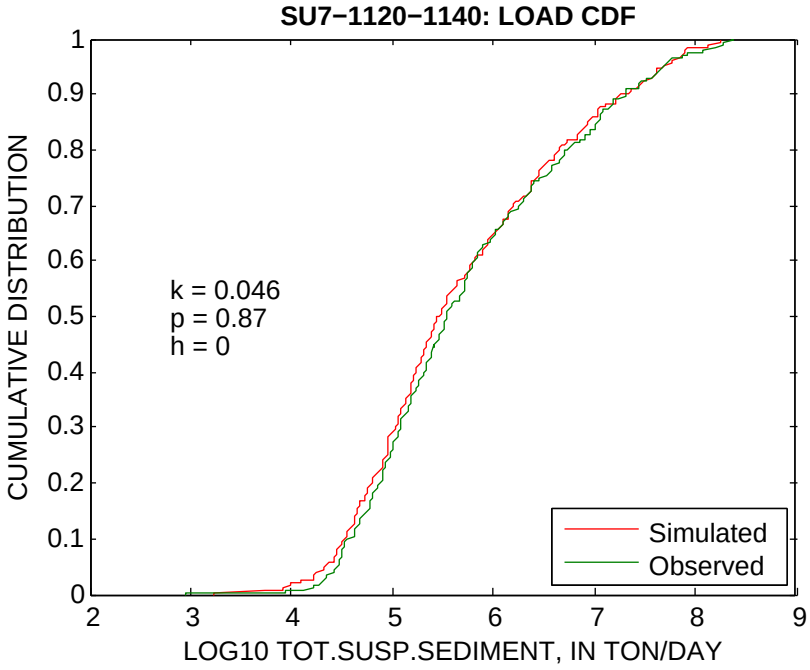


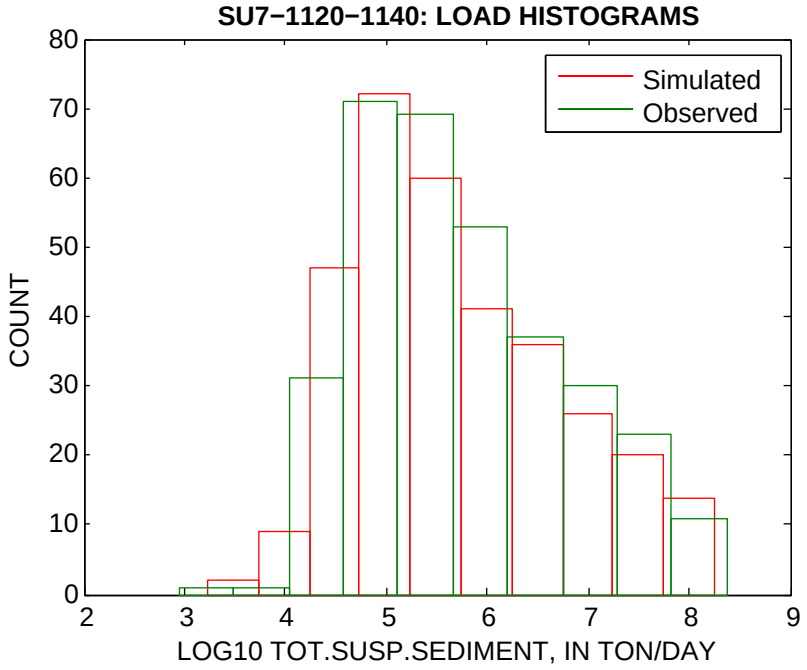


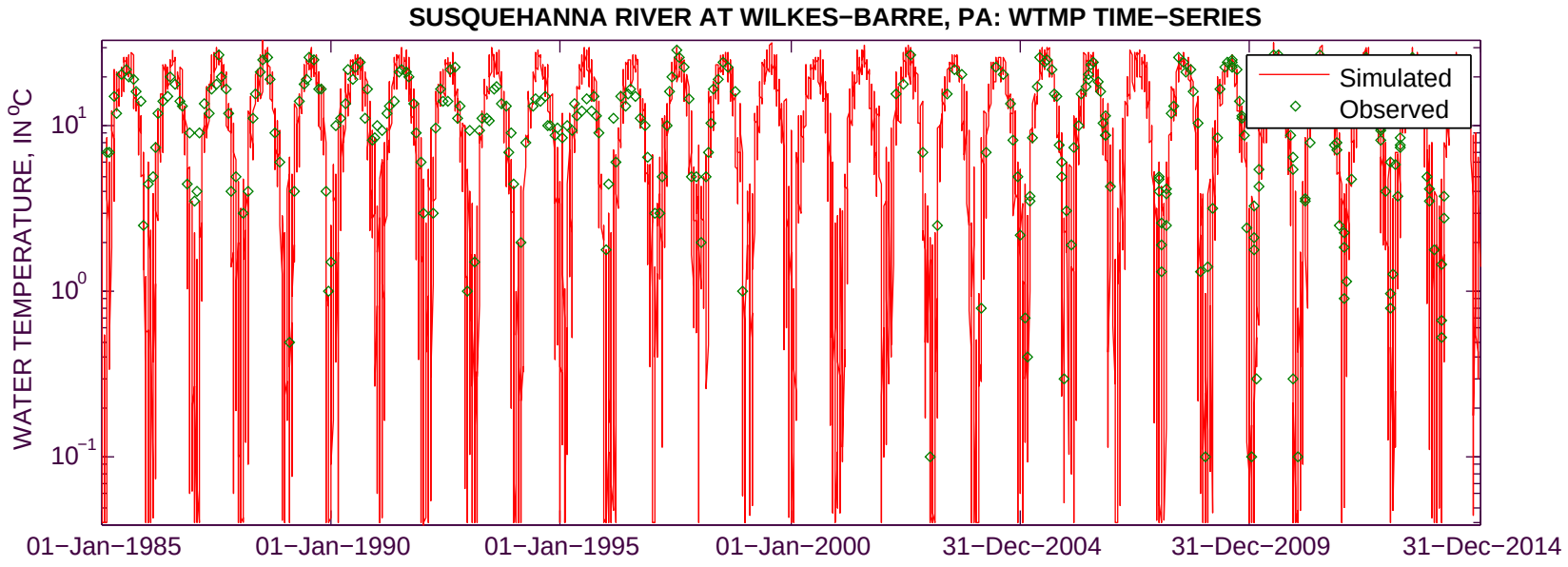
LOAD DATA
LOG10

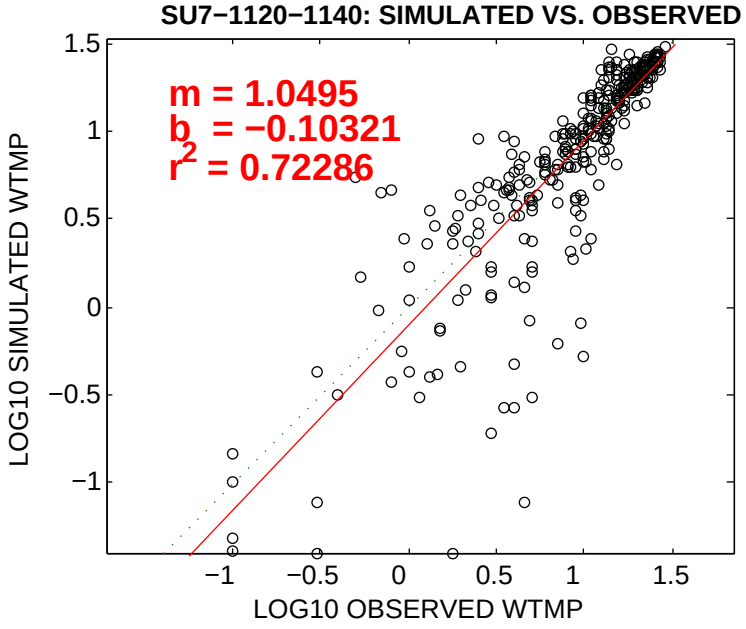


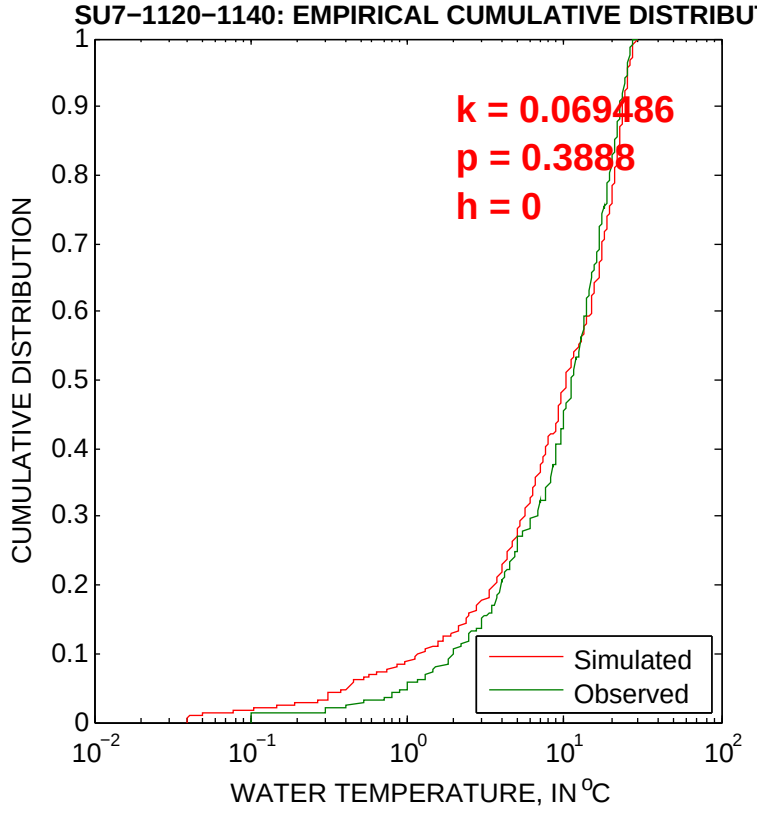












DATA SELECTION

scenario	file
P620171001WQ	WTMP.calib

plot: WTMP - water tempera...

Dates: 1/1/1985 — 12/31/201

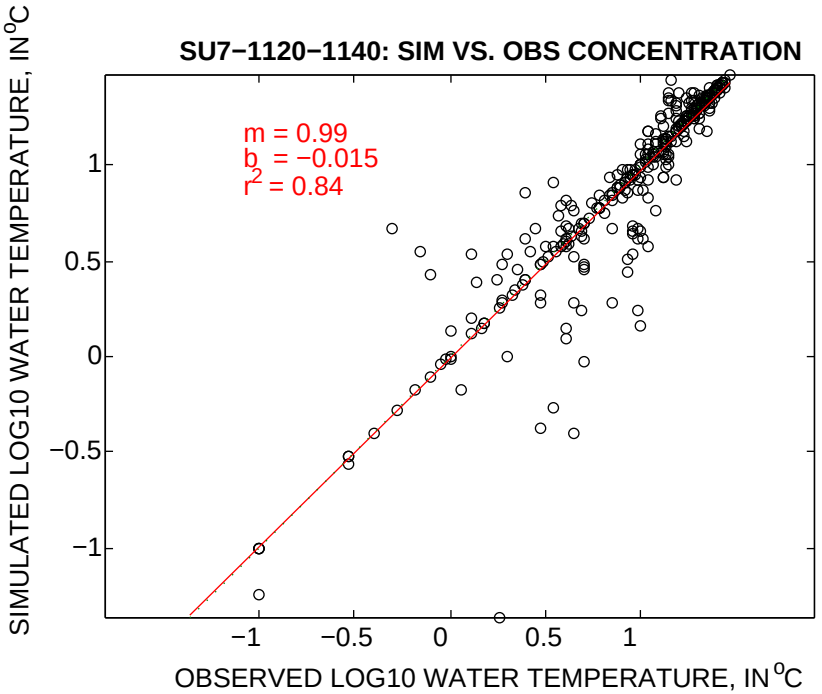
Drive	Directory	Observed
N/A	model	OBS20161101

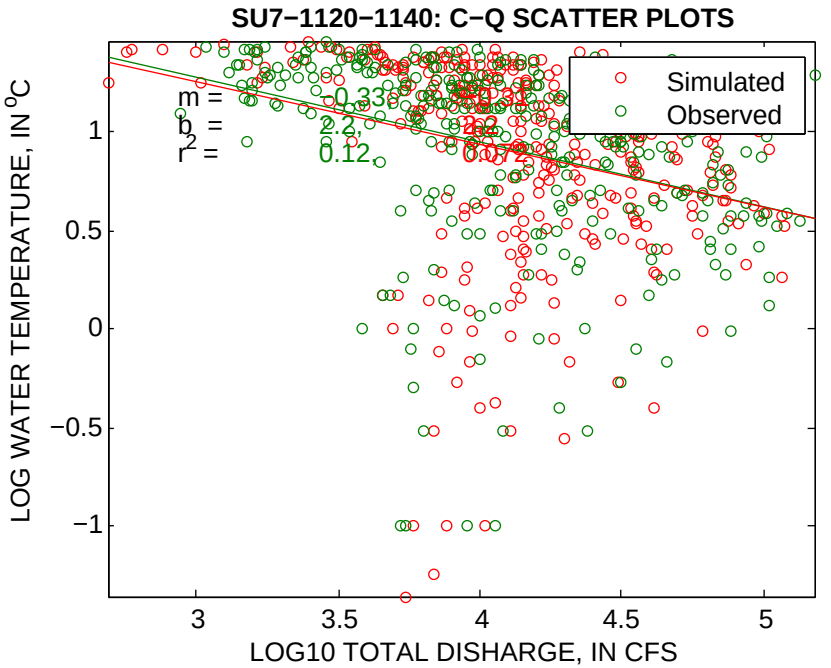
STATISTICS

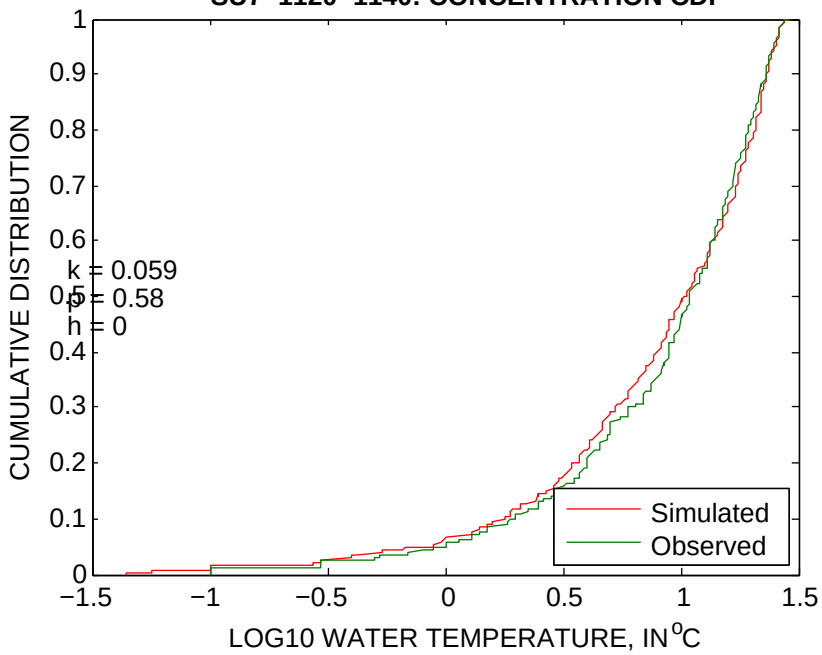
	n	observe	simulate
		331	331
min		0.1	0.040024
		-1	-1.39768
mean		11.9728	11.9522
		0.921545	0.863921
media		11	10.262
		1.04139	1.01123
max		29	29.951
		1.4624	1.47641
varian		58.7424	70.8715
		0.215936	0.329012
JB		0.002402	0.001
		0.001	0.001
		ra	log
%		-0.172073	-6.25299
err.va		10.7207	0.0950413
rel.std.err		0.182504	0.440136
mod.eff		0.817496	0.559864

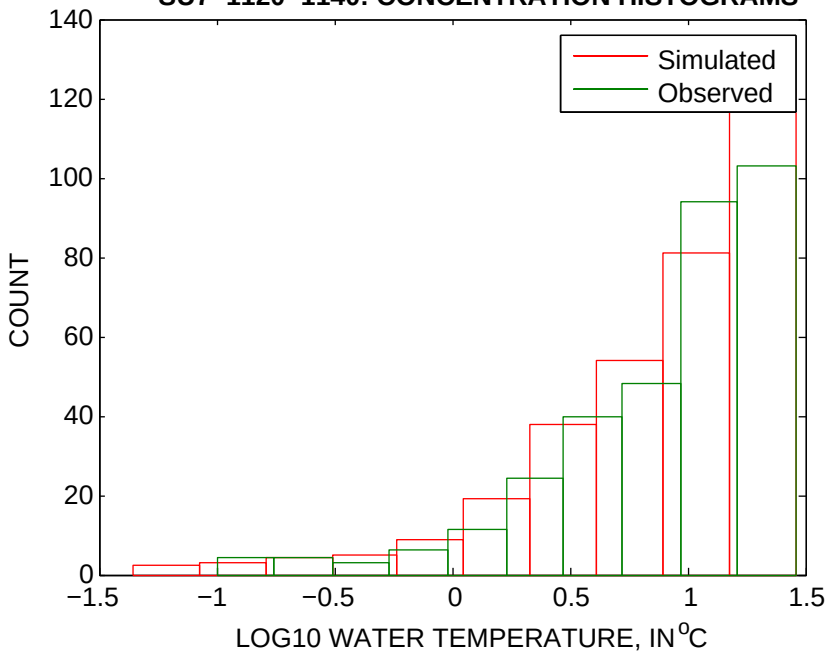
VERSION 2.1

ALL DATA
LOG10

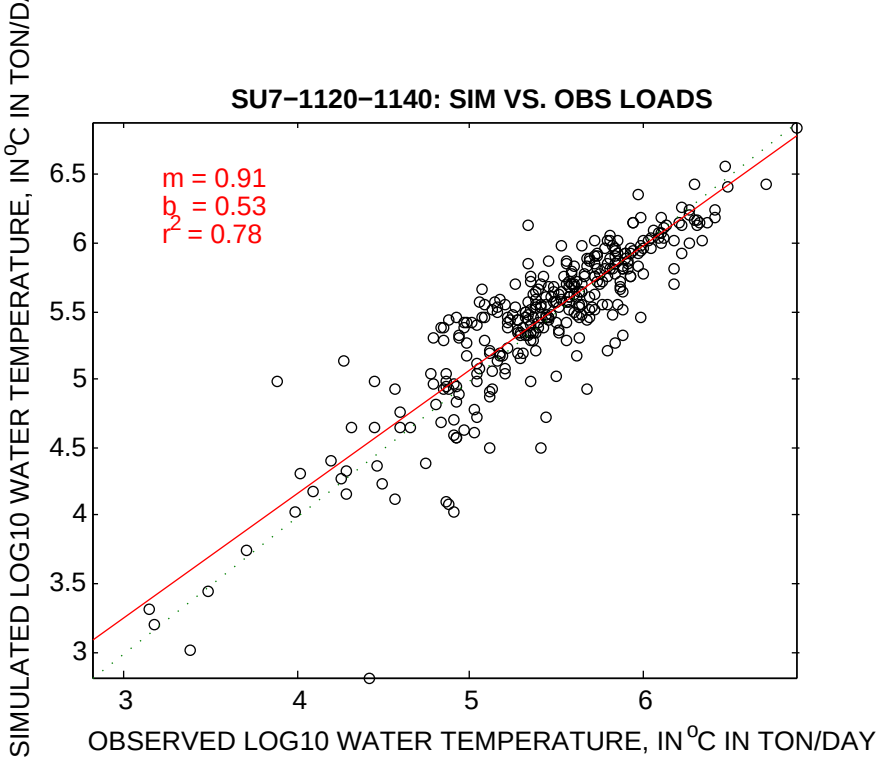


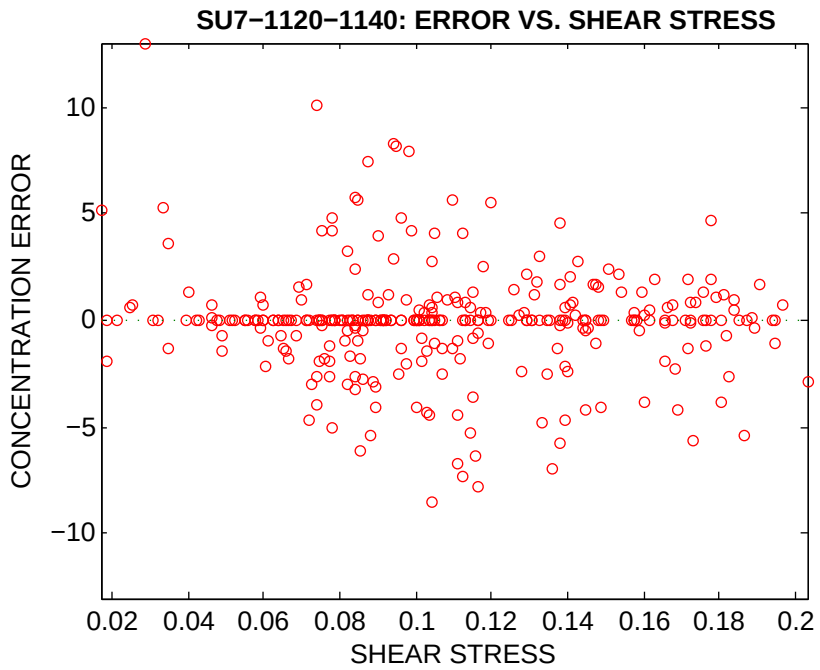


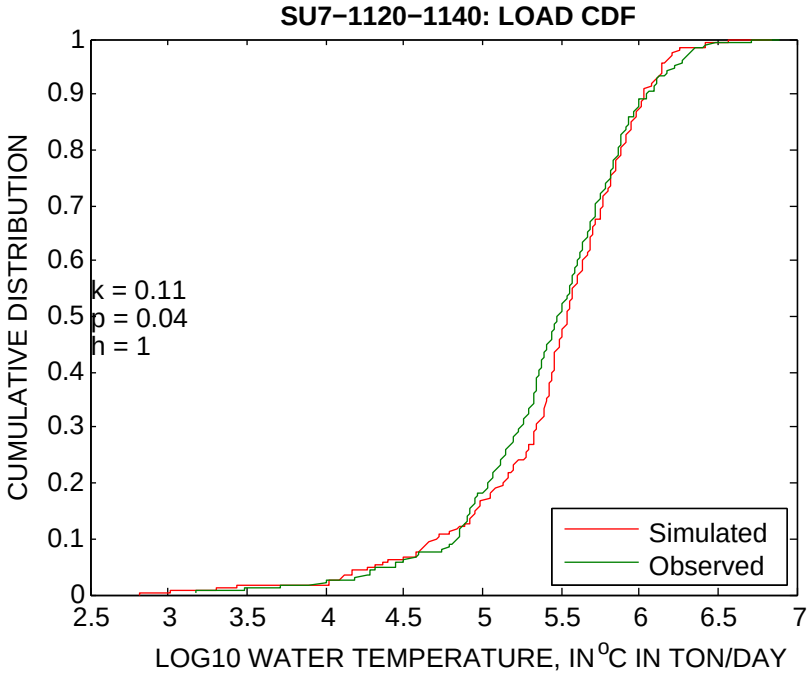


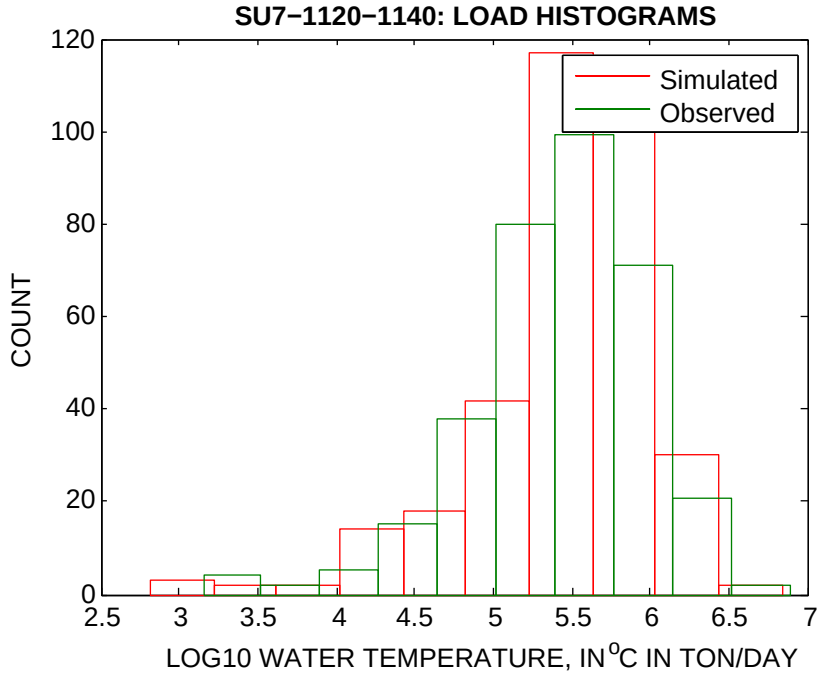


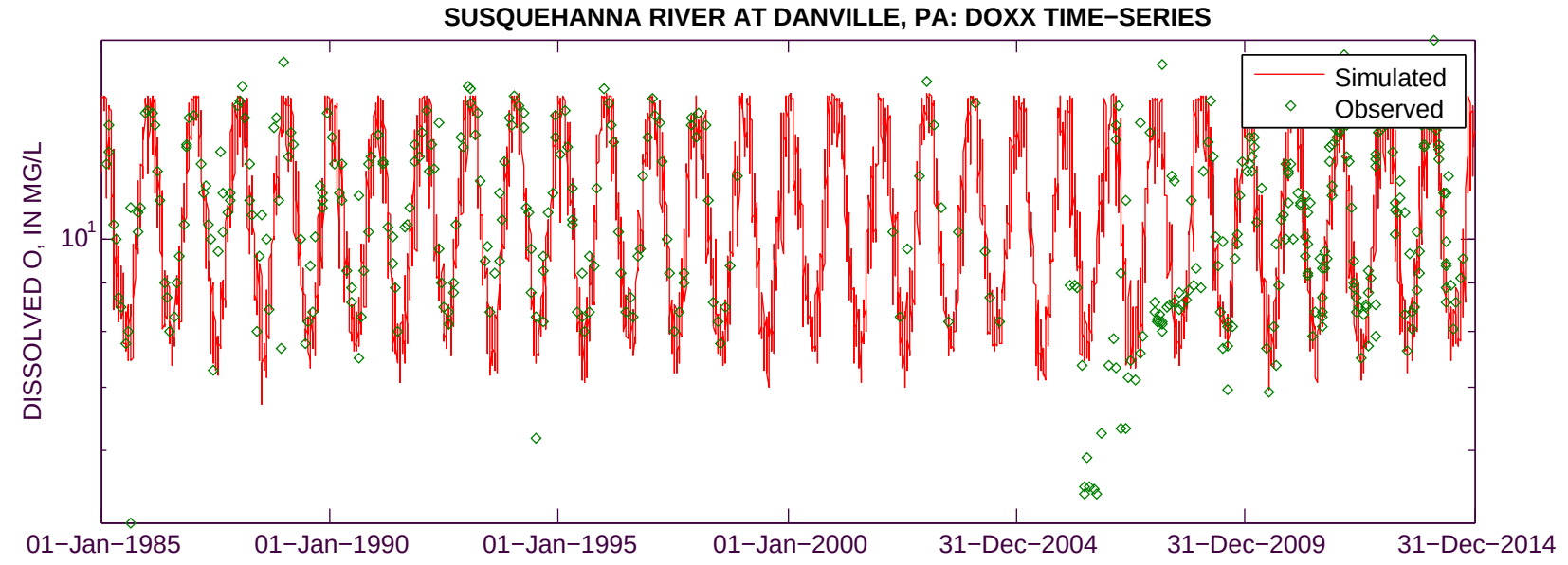
LOAD DATA
LOG10

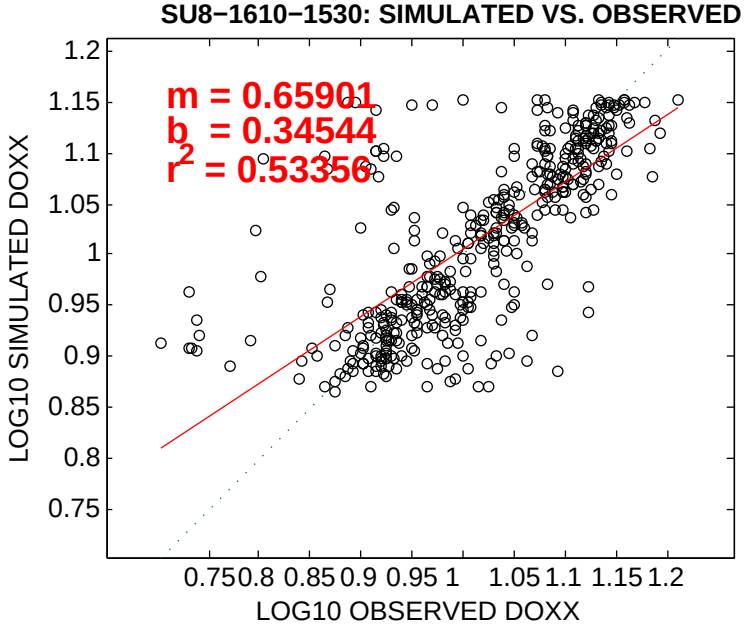


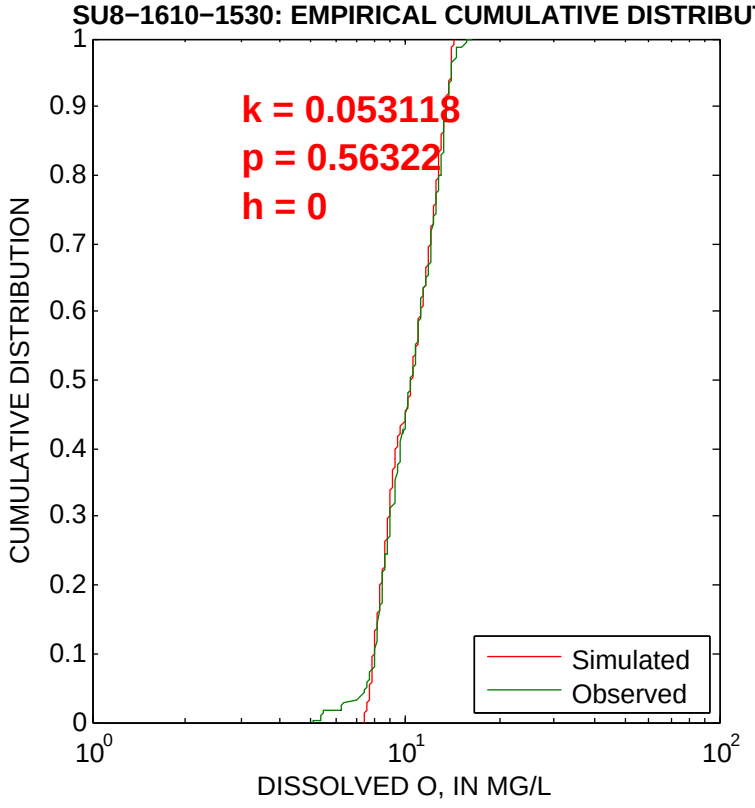












DATA SELECTION

scenario	file
P620171001WQ	DOXX.calib

plot: DOXX - dissolved oxygen

Dates: 1/1/1985 – 12/31/201

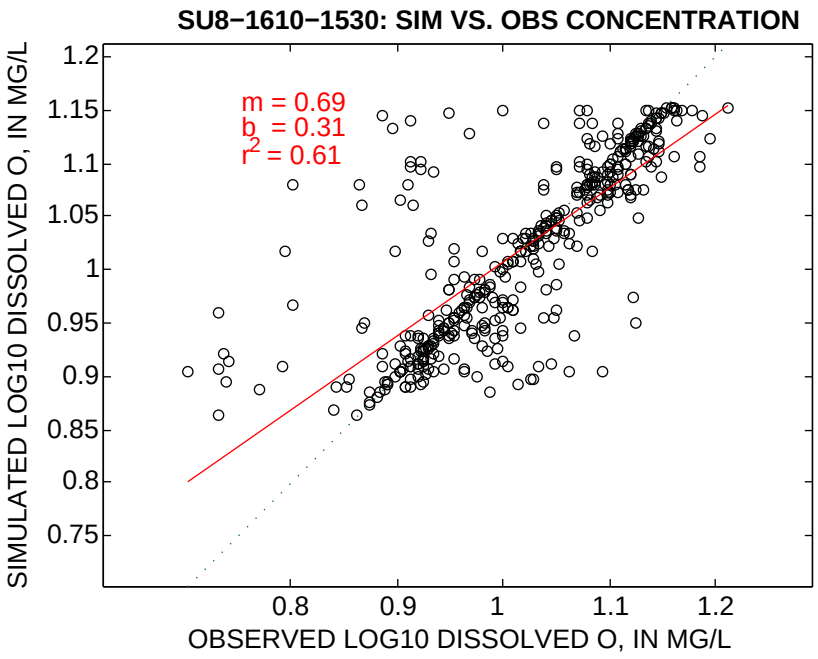
Drive	Directory	Observed
N/A	model	OBS20161101

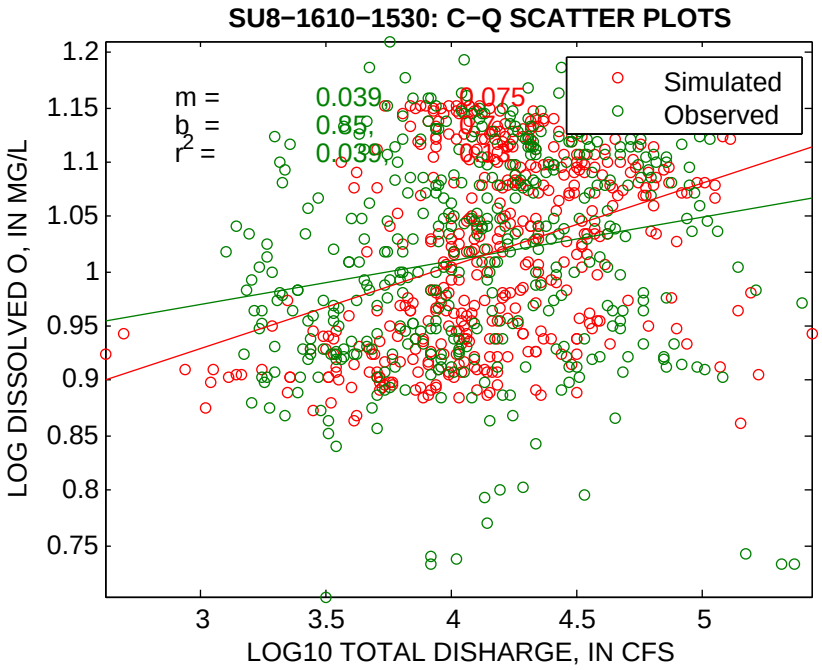
STATISTICS

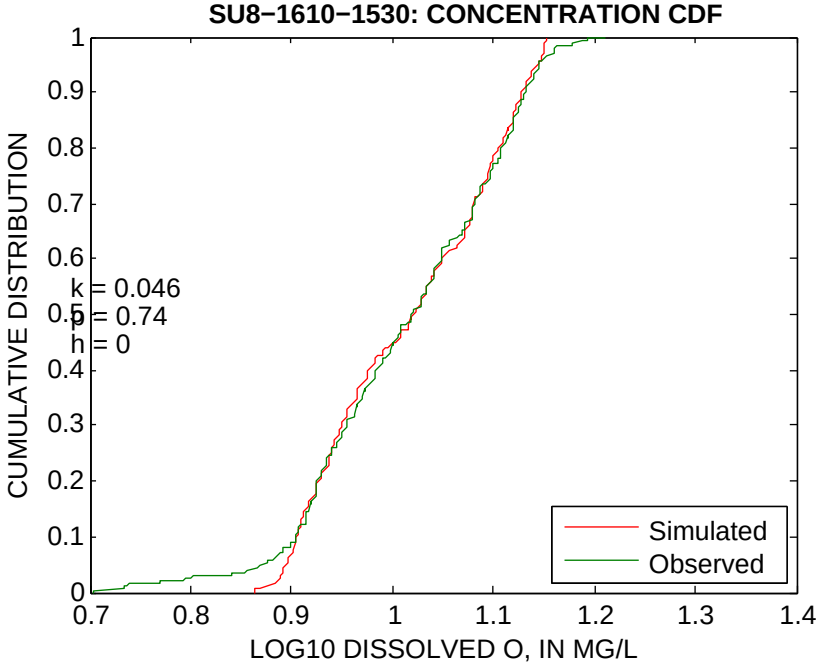
	n	observe	simulate
		433	433
min		5.05	7.3466
		0.703291	0.866086
mean		10.5855	10.532
		1.01471	1.01414
media		10.44	10.476
		1.0187	1.0202
max		16.26	14.186
		1.21112	1.15186
varian		4.93115	4.25164
		0.00898776	0.00731568
JB		0.009340	0.001
		0.005688	0.001
		ra	log
%		-0.505608	-0.0557689
err.va		2.26776	0.00445772
rel.std.err		0.459885	0.495976
mod.eff		0.540115	0.504024

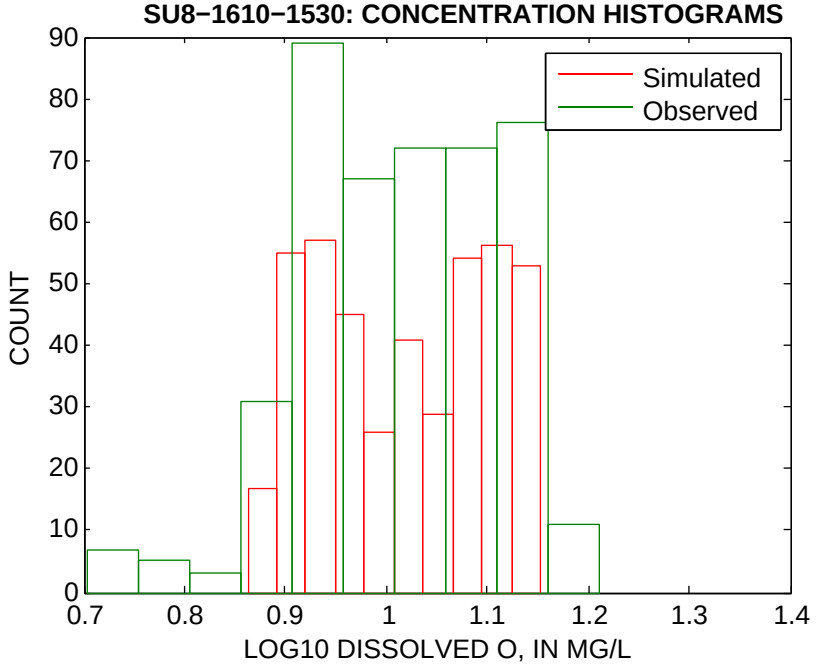
VERSION 2.1

ALL DATA
LOG10

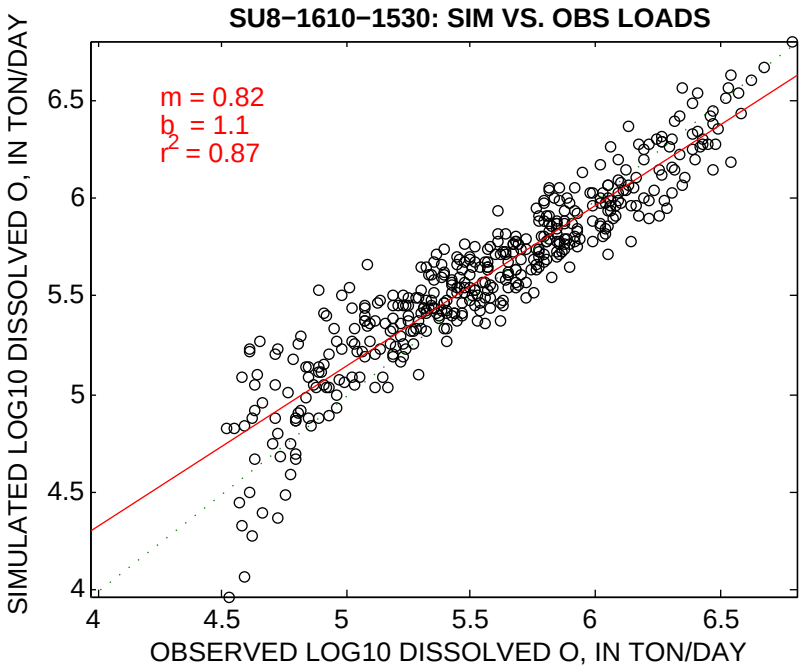


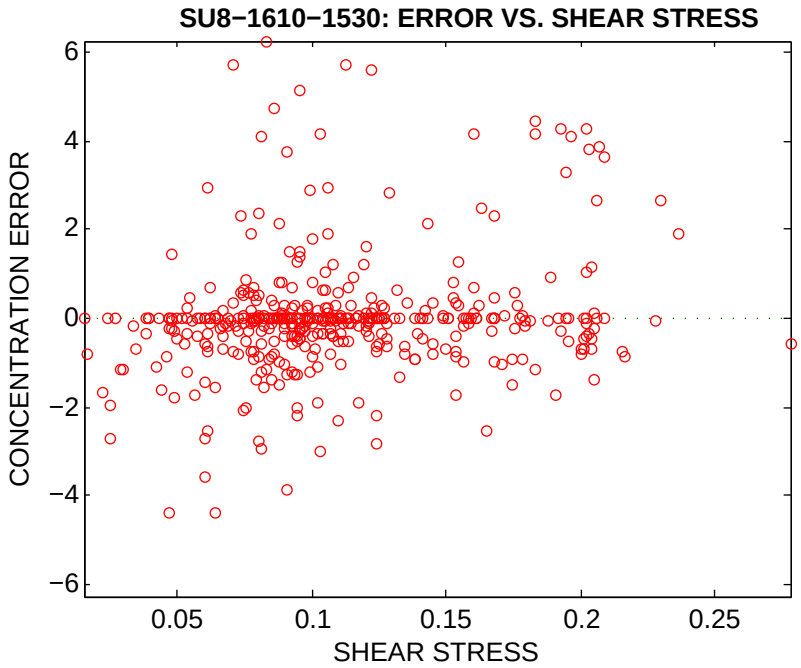


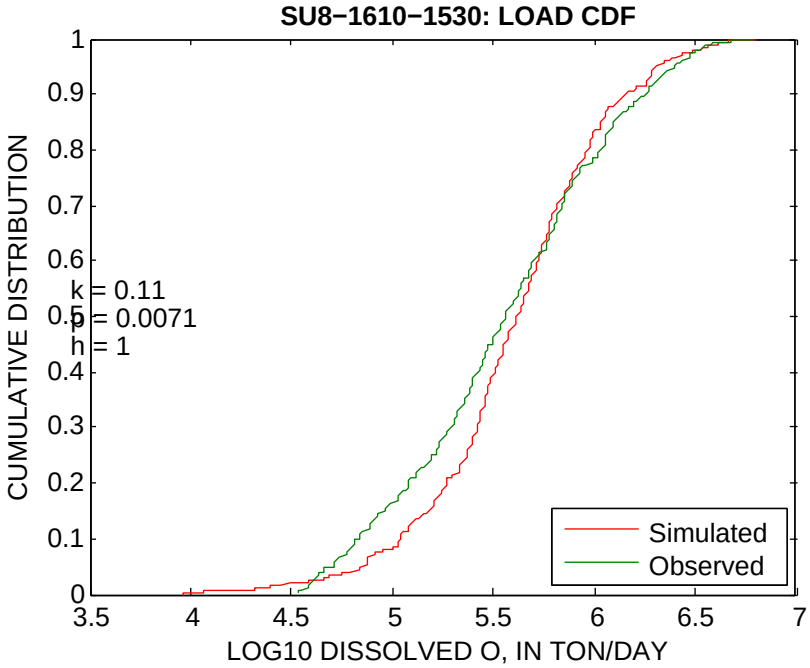


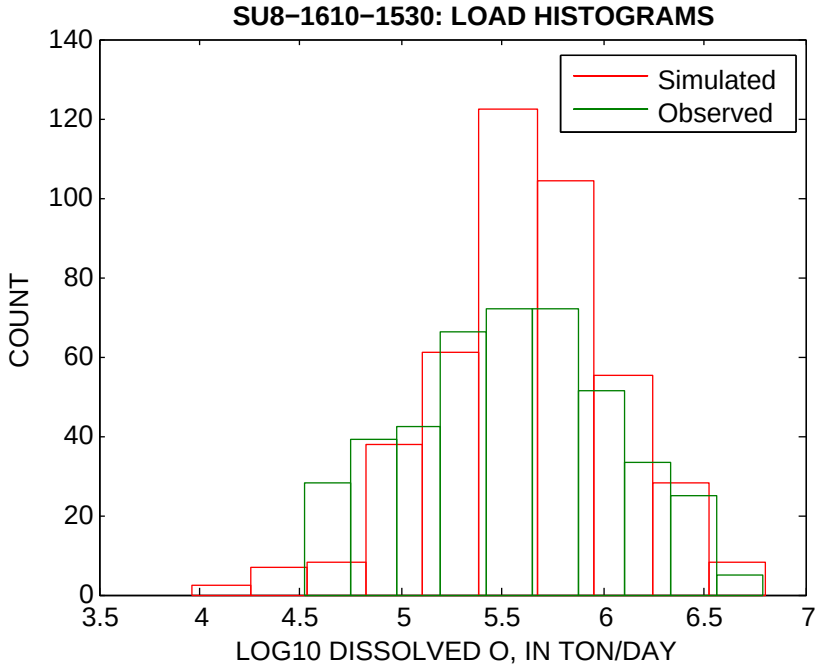


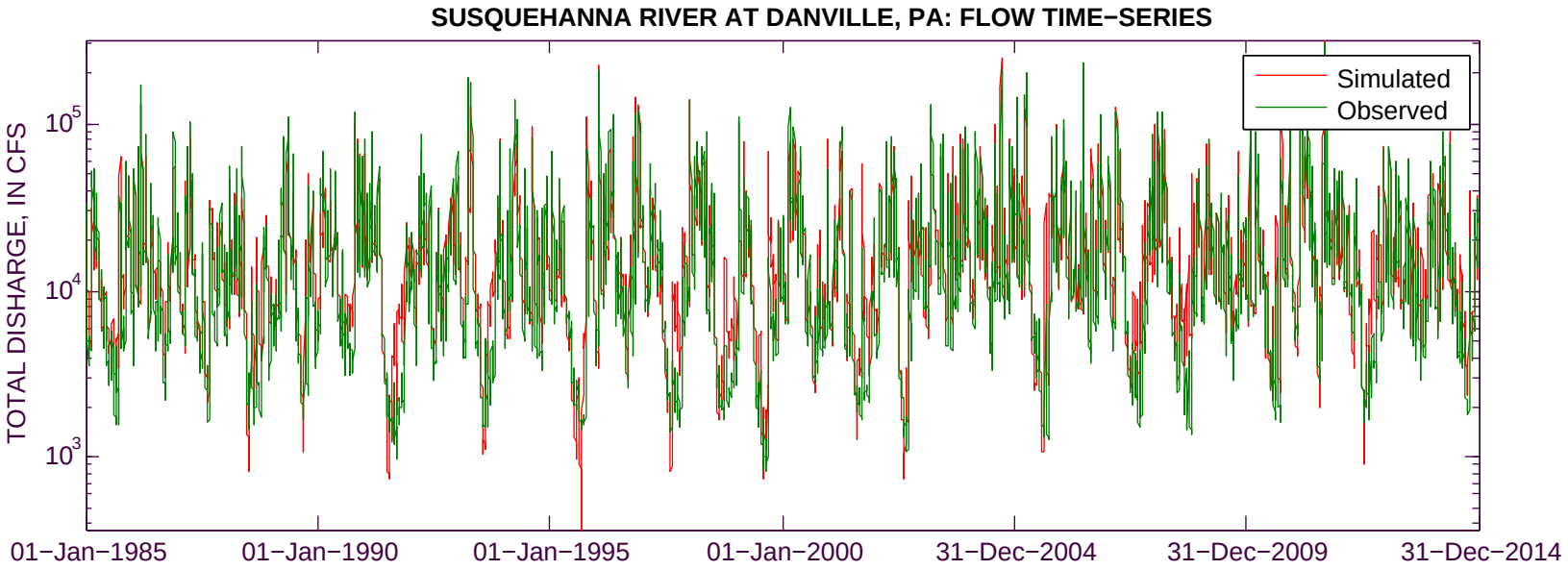
LOAD DATA
LOG10

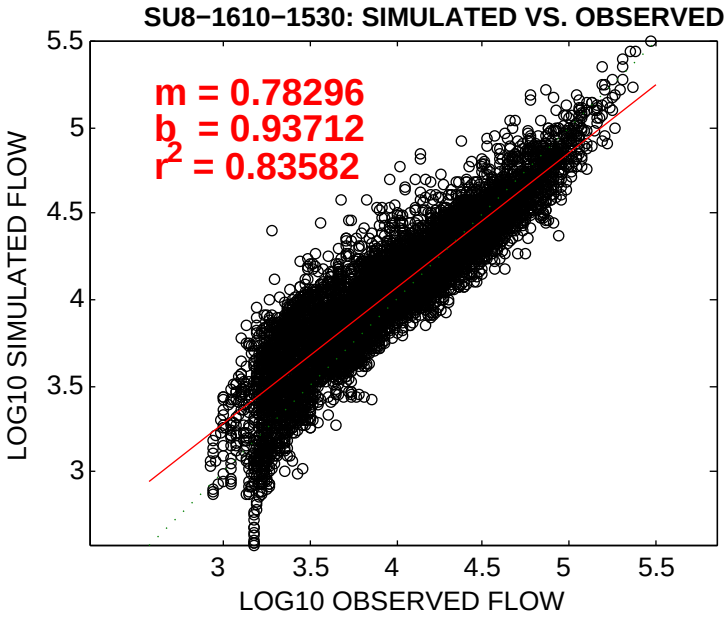


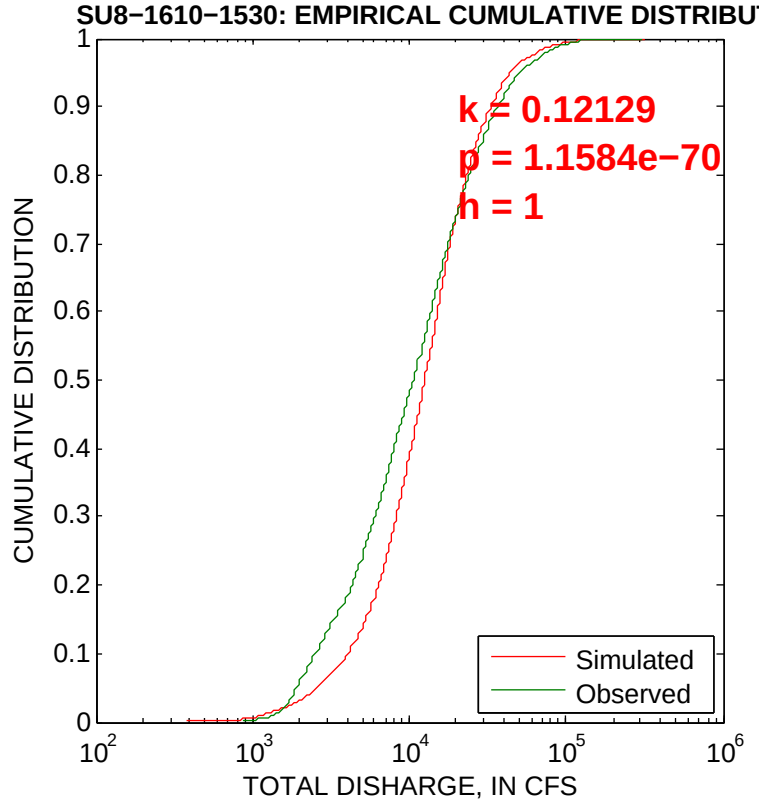












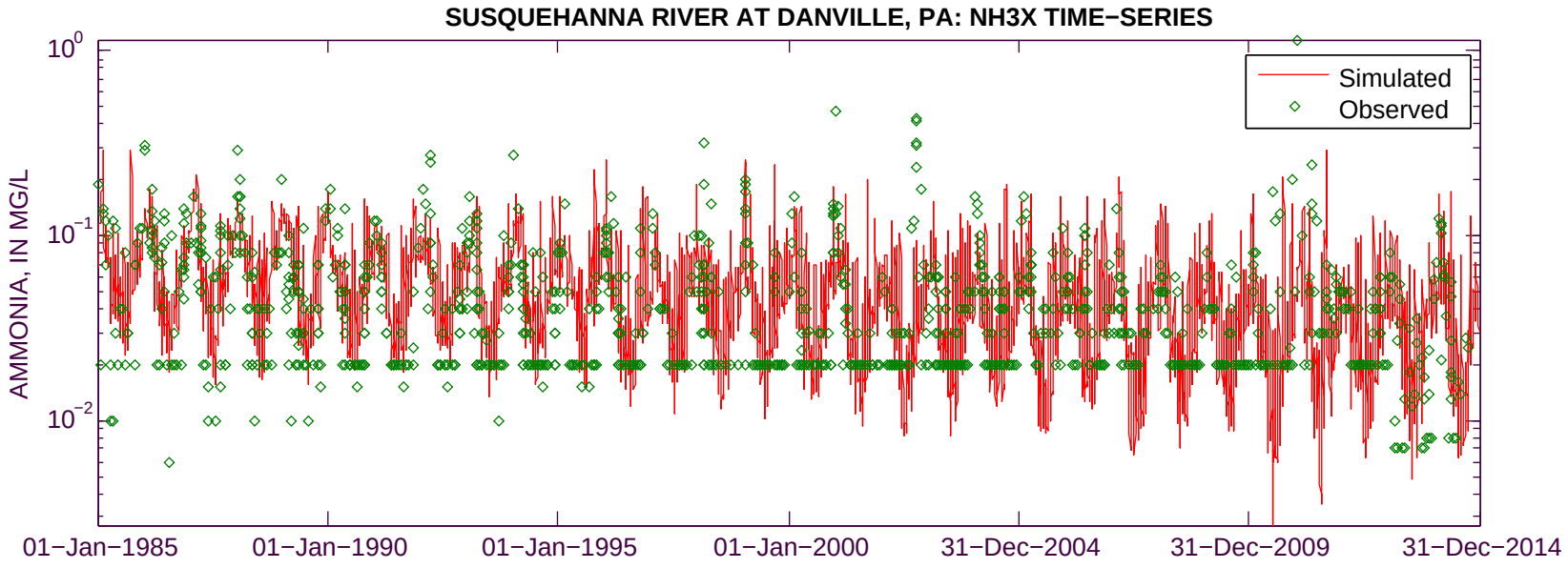
DATA SELECTION

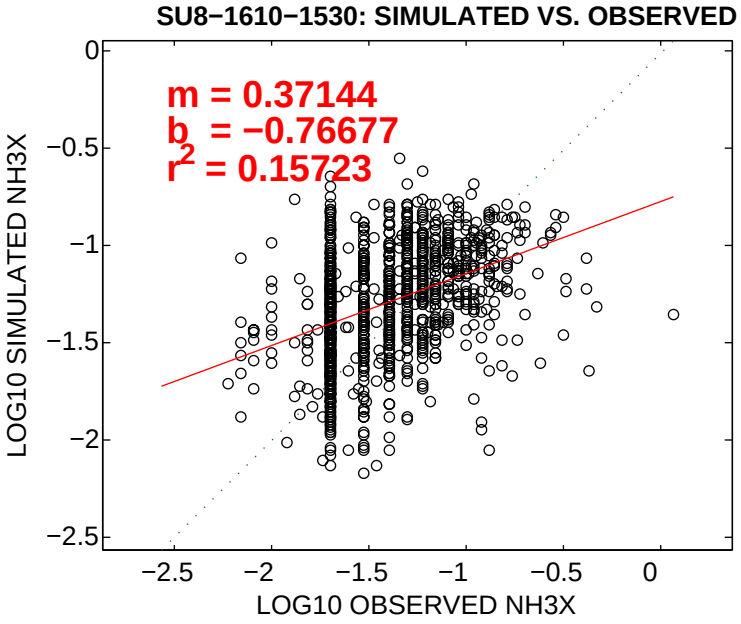
scenario: P620171001WQ
file: FLOW.calib
plot: FLOW - total discharge
Dates: 1/1/1985 12/31/201
Drive: N/A
Directory: model
Observed: OBS20161101

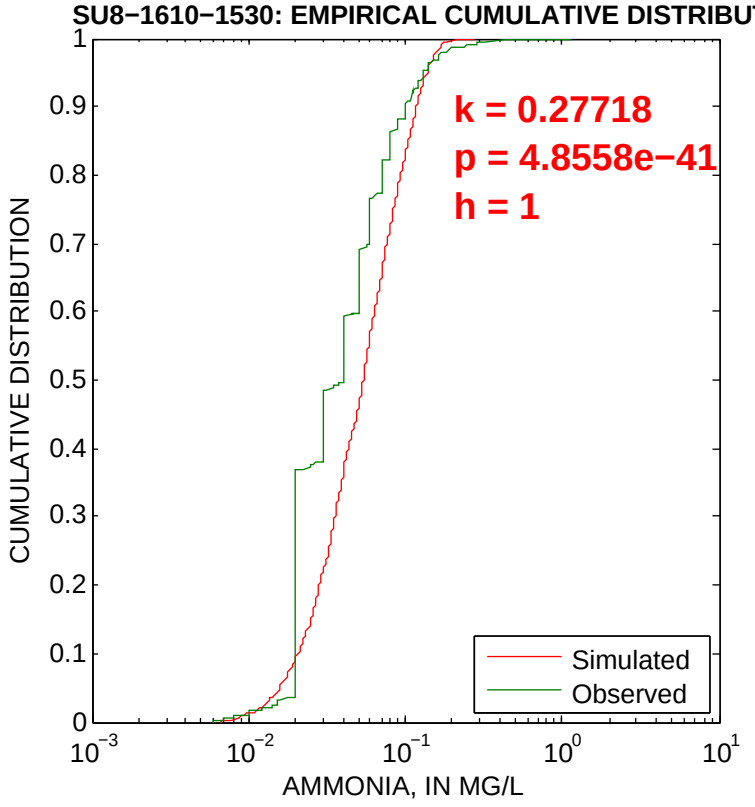
STATISTICS

n	10957	10957
	observe	simulate
min	840	372.56
	2.92428	2.5712
mean	16703.7	16941.9
	4.01326	4.07934
media	10600	12572
	4.02531	4.0994
max	301000	318330
	5.47857	5.50288
varian	3.84365e+0	2.93048e+
	0.185963	0.136392
JB	0.001	0.001
	0.001	0.001
	ra	log
%	1.42598	1.6465
err.va	6.37606e+0	0.0355197
rel.std.err	0.165886	0.191005
mod.eff	0.834114	0.808995

VERSION 2.1







DATA SELECTION

scenario	file
P620171001WQ	NH3X.calib

plot: NH3X - ammonia

Dates: 1/1/1985 – 12/31/201

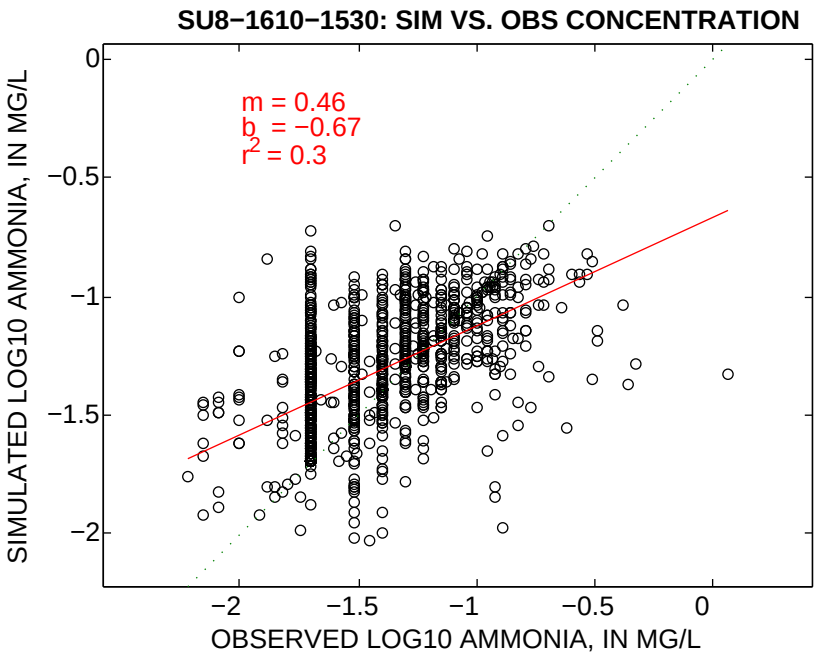
Drive	Directory	Observed
N/A	model	OBS20161101

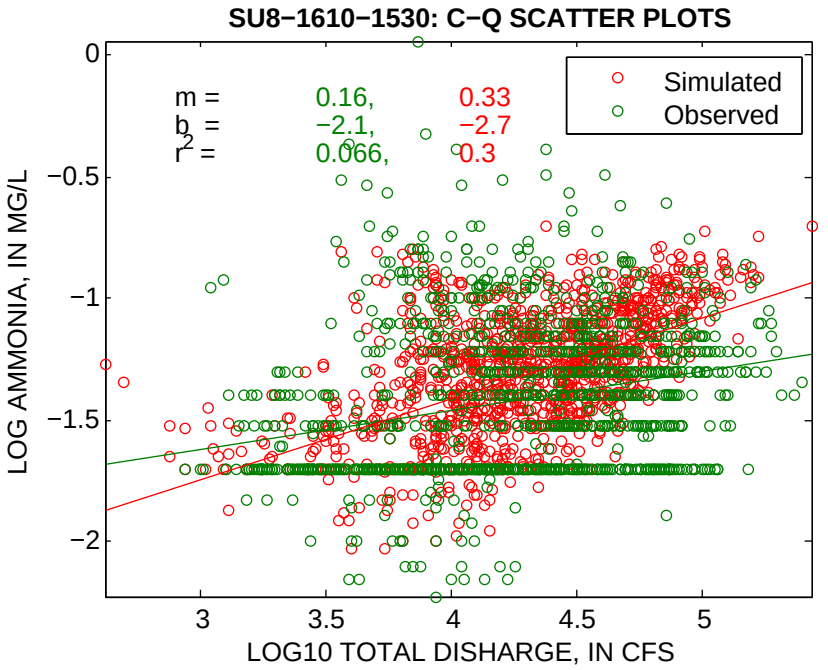
STATISTICS

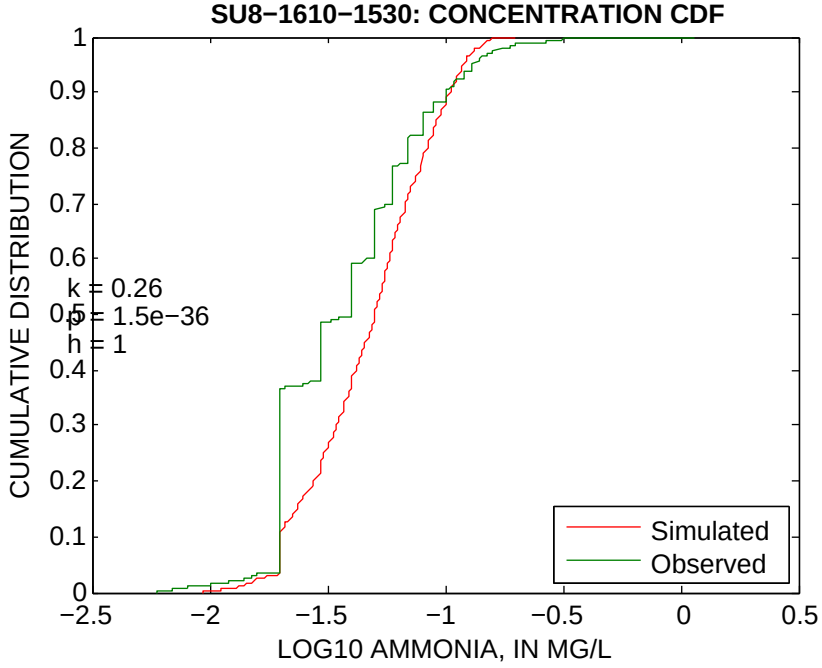
	n	observe	simulate
		1205	1205
min		0.006	0.0067892
		-2.22185	-2.16818
mean		0.0513378	0.0624281
		-1.41524	-1.29245
media		0.04	0.053908
		-1.39794	-1.26835
max		1.15	0.28046
		0.0606978	-0.552129
varian		0.00320754	0.00151693
		0.0946826	0.0830873
JB		0.001	0.001
		0.001	0.001
		ra	log
%		21.6025	-8.67603
err.va		0.00383562	0.12252
rel.std.err		1.19581	1.29401
mod.eff		-0.195815	-0.294012

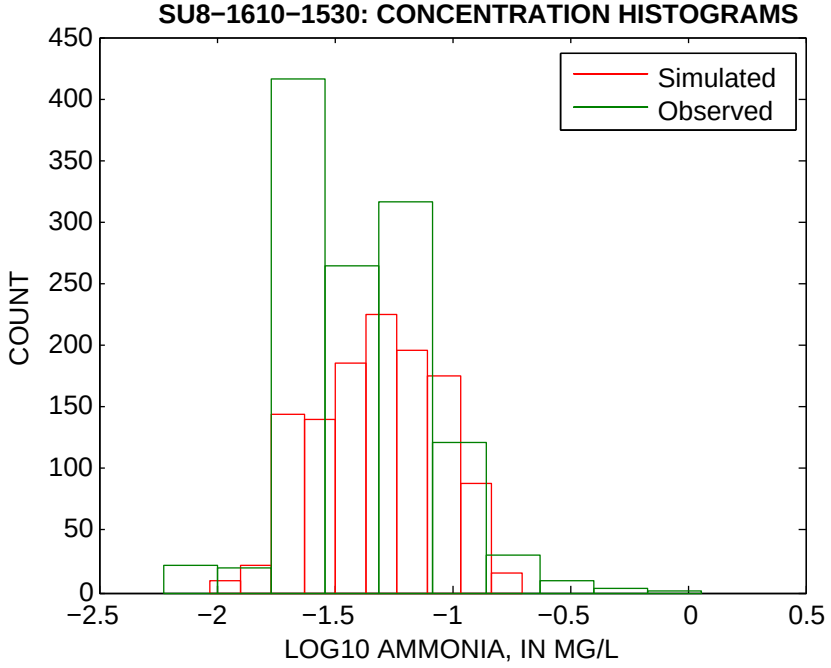
VERSION 2.1

ALL DATA
LOG10

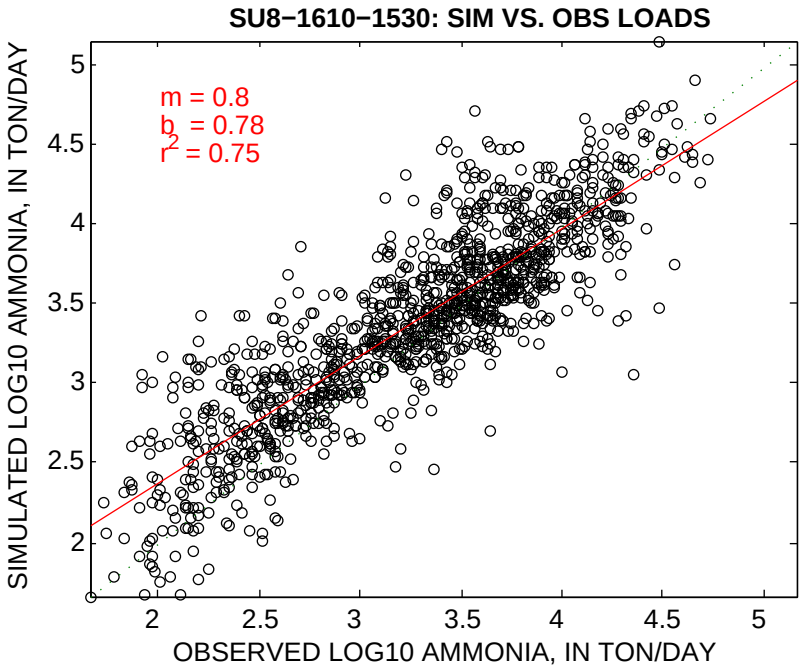


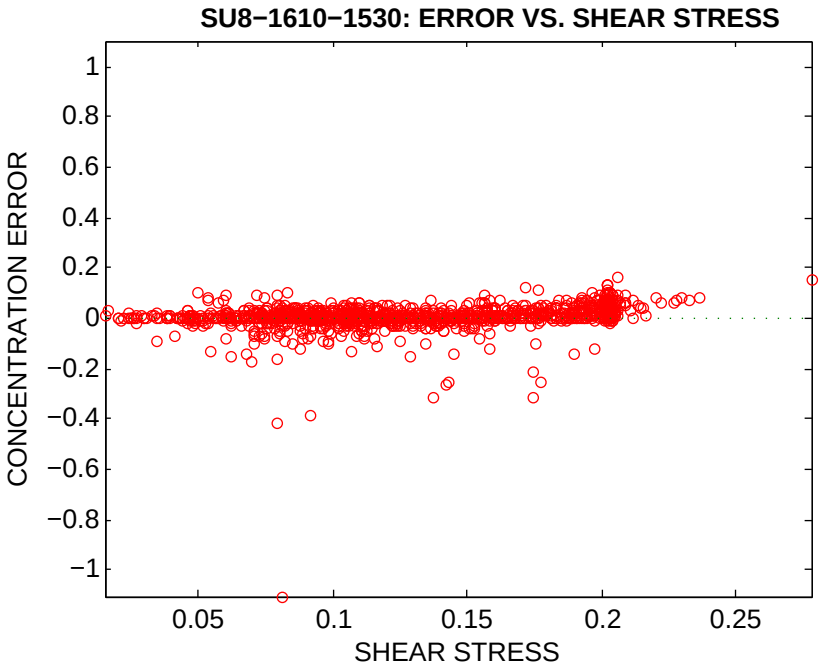


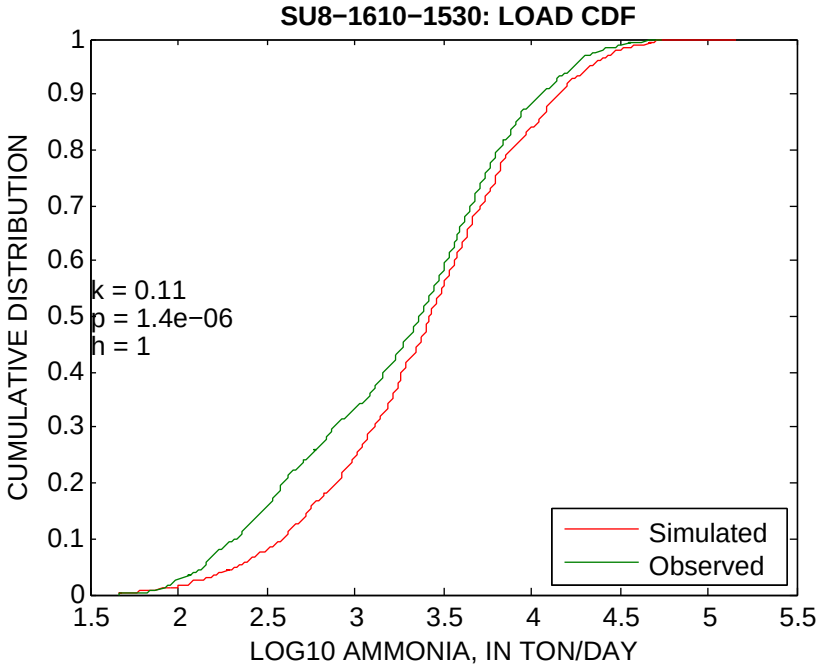


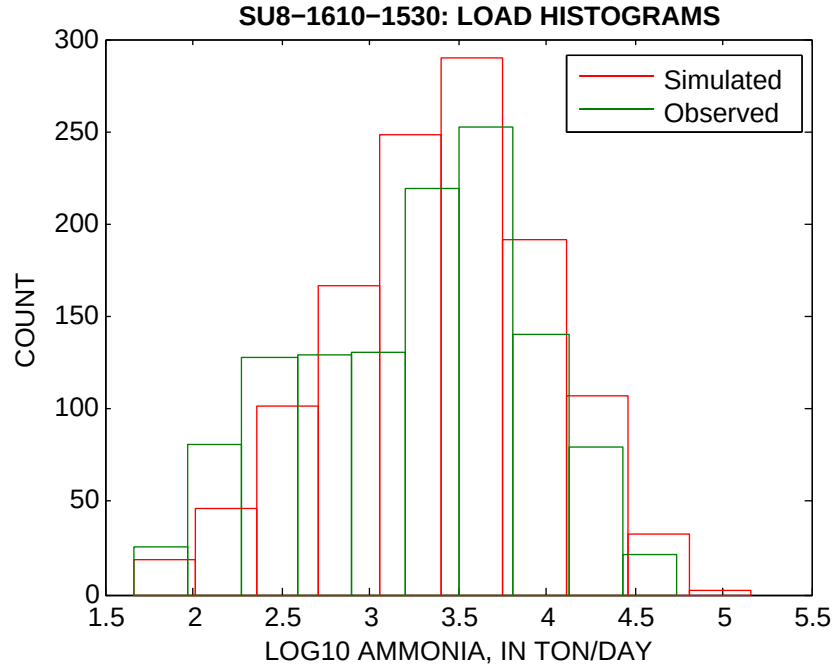


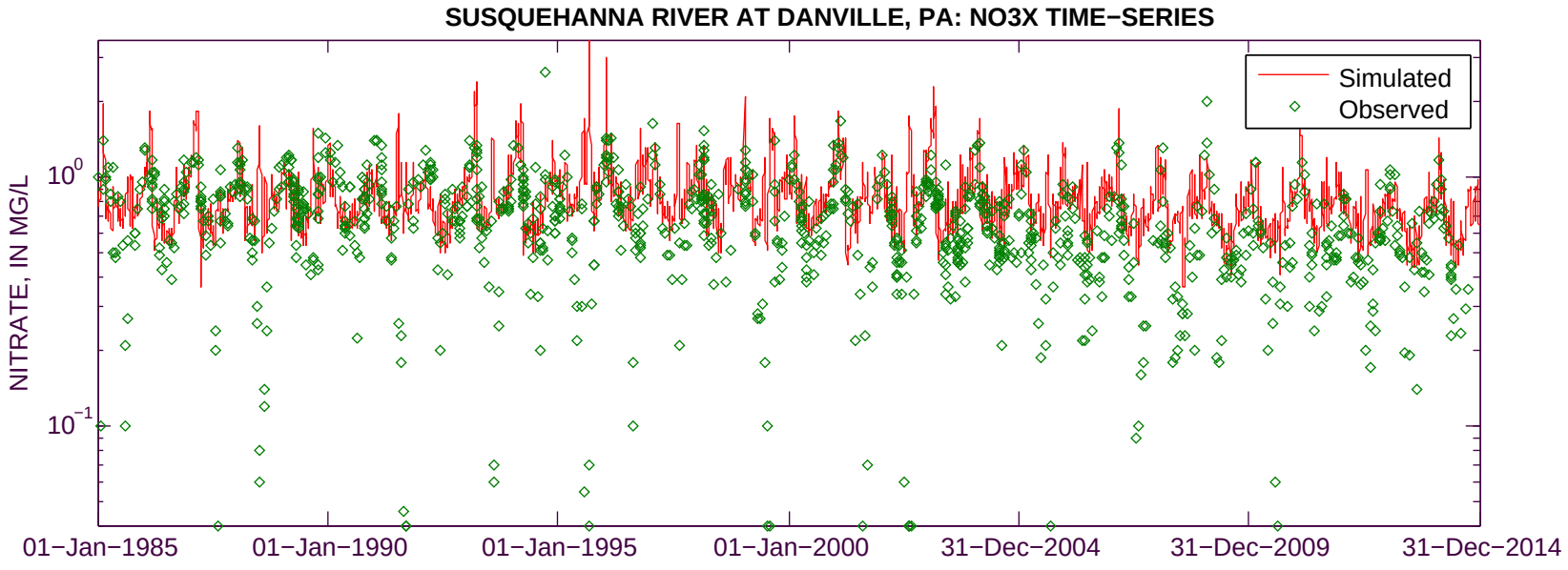
LOAD DATA
LOG10

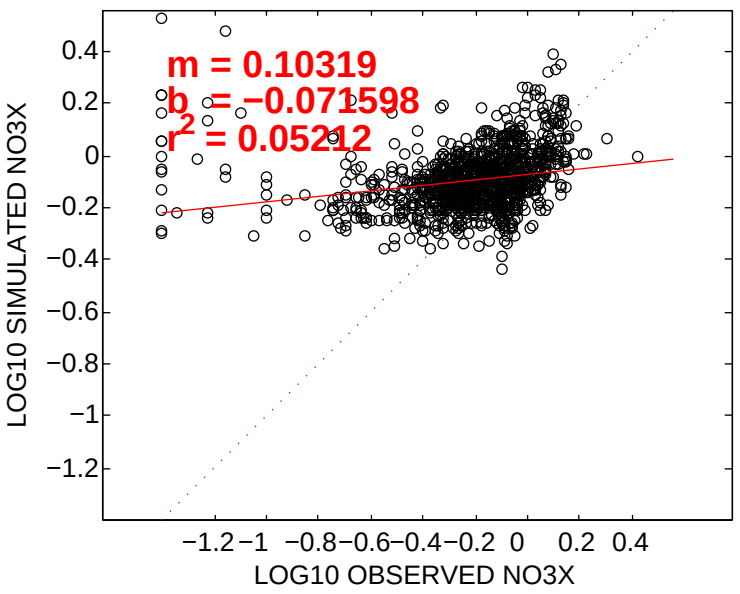


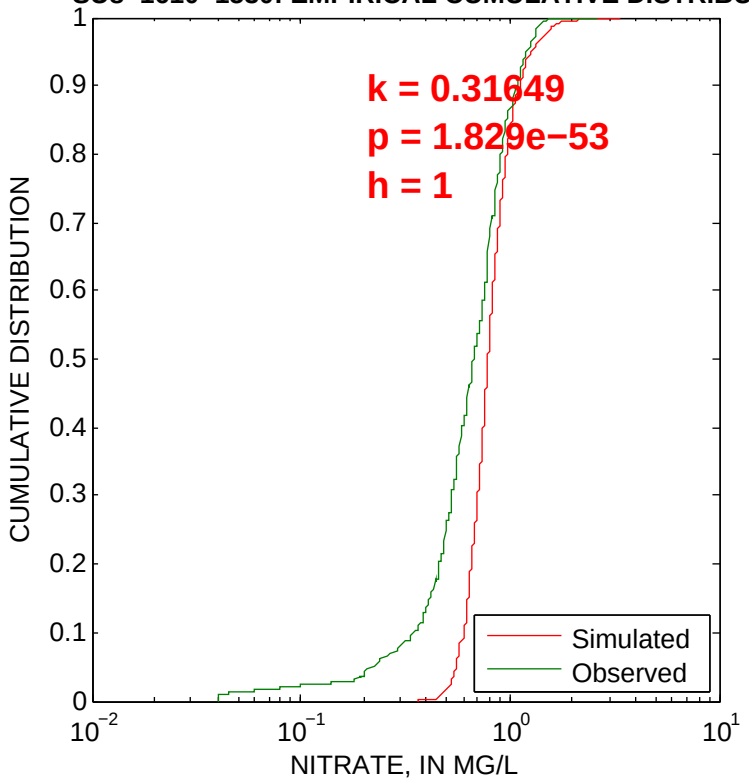












DATA SELECTION

scenario	file
P620171001WQ	NO3X.calib

plot: NO3X - nitrate

Dates: 1/1/1985 – 12/31/201

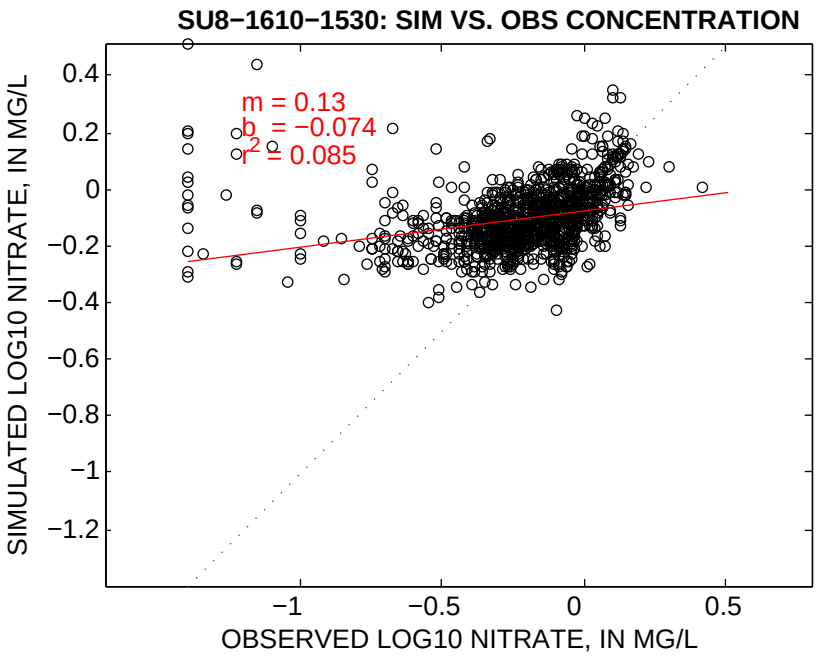
Drive	Directory	Observed
N/A	model	OBS20161101

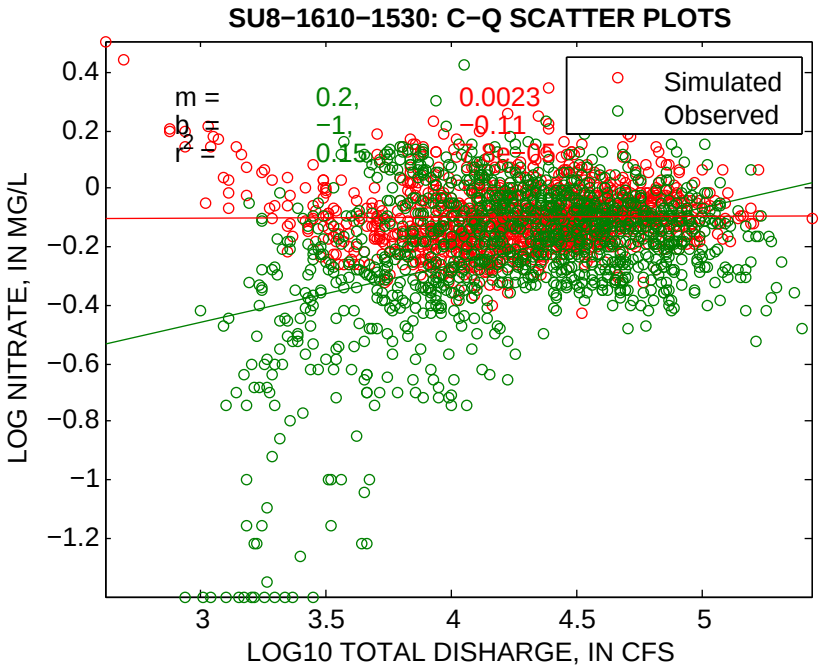
STATISTICS

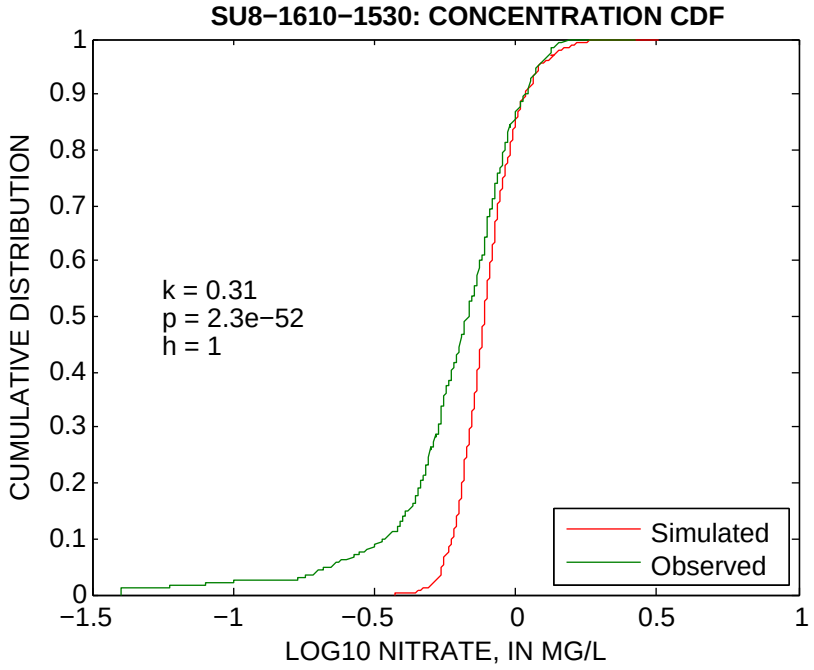
	n	1207	1207
		observe	simulate
min		0.04	0.3676
		-1.39794	-0.434624
mean		0.69271	0.835799
		-0.21208	-0.0934819
media		0.67	0.78738
		-0.173925	-0.103816
max		2.64	3.3841
		0.421604	0.529443
varian		0.0865173	0.0637137
		0.0612793	0.0125188
JB		0.001	0.001
		0.001	0.001
		ra	log
%		20.6564	-55.9214
err.va		0.121282	0.0752288
rel.std.err		1.40183	1.22764
mod.eff		-0.401828	-0.227639

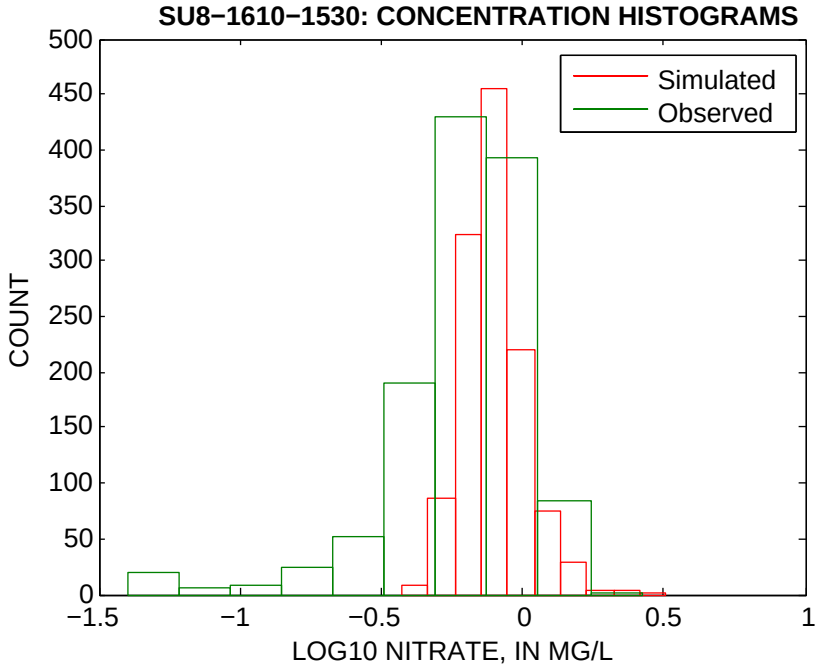
VERSION 2.1

ALL DATA
LOG10

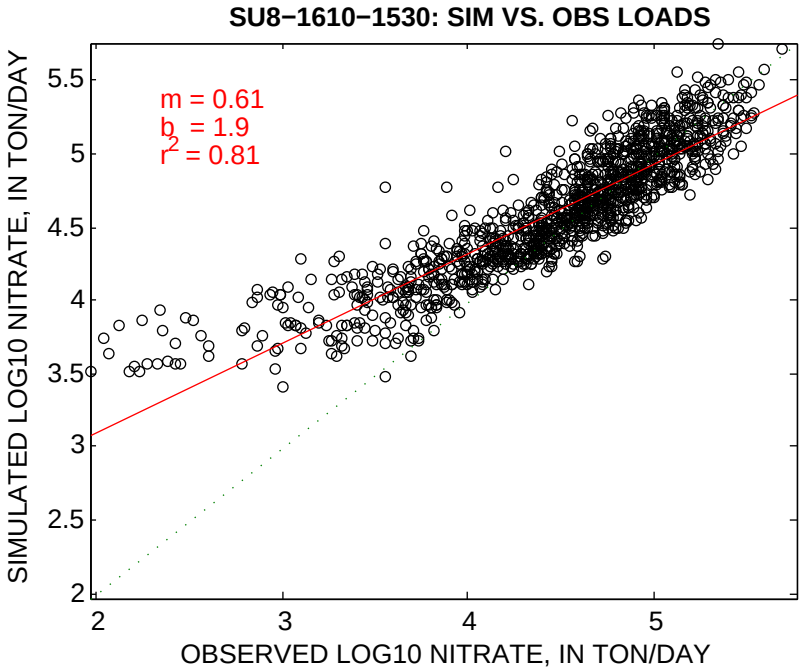


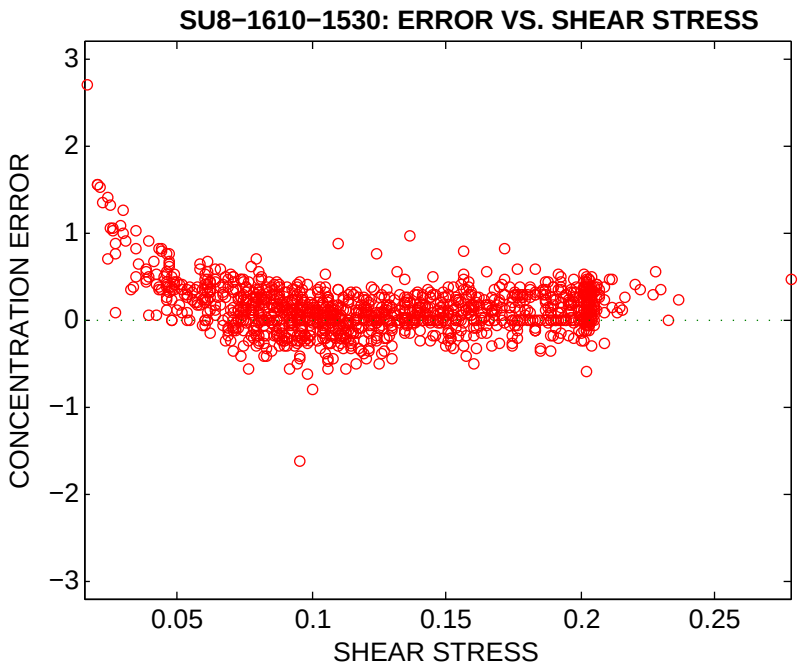


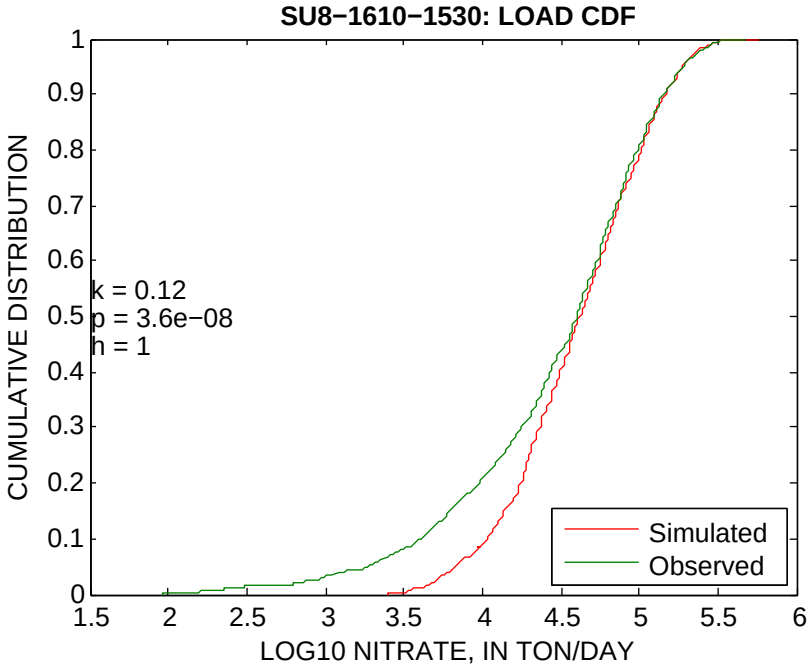


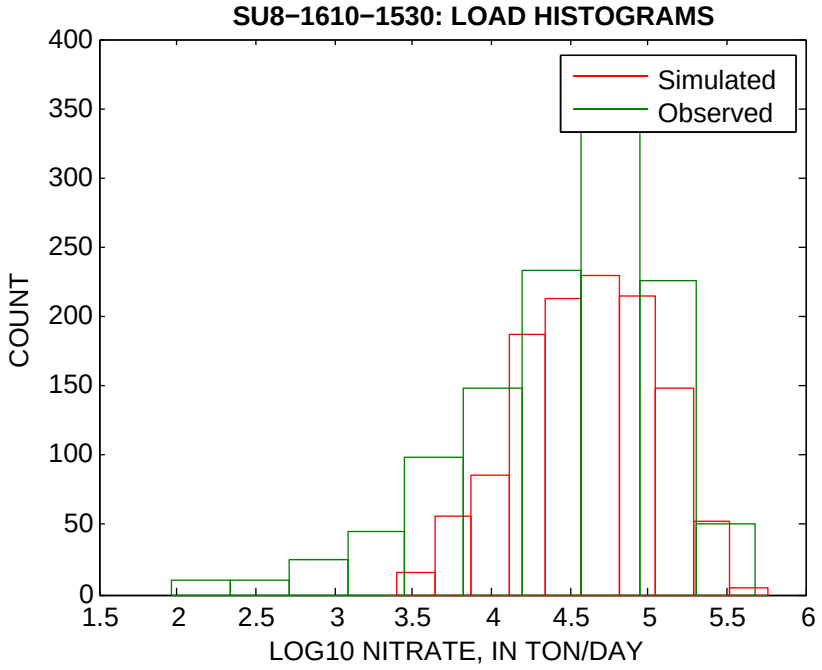


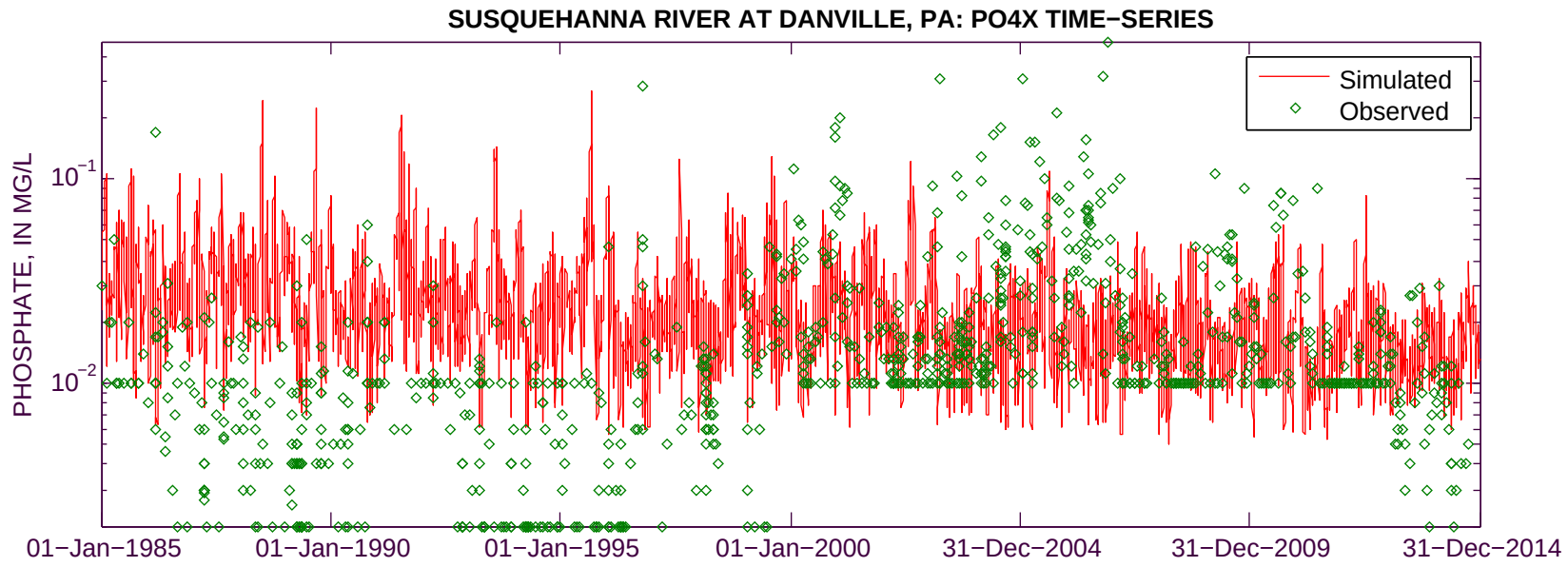
LOAD DATA
LOG10

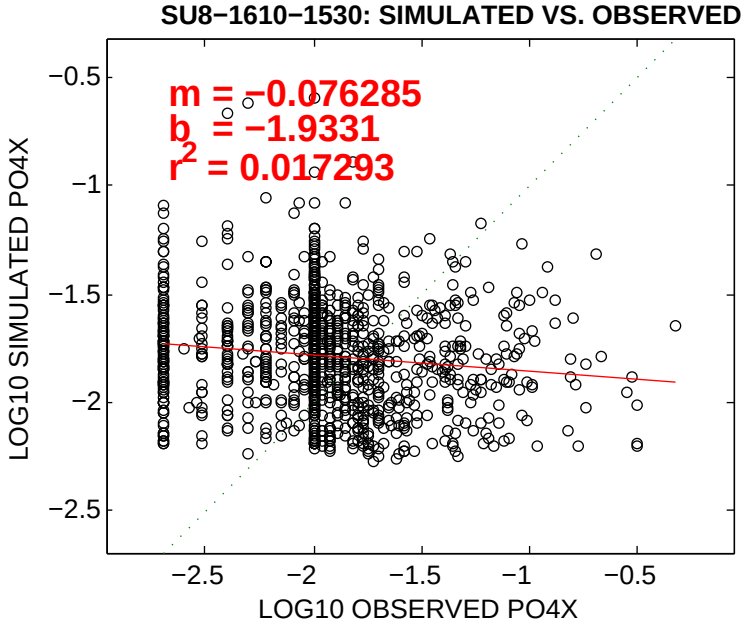


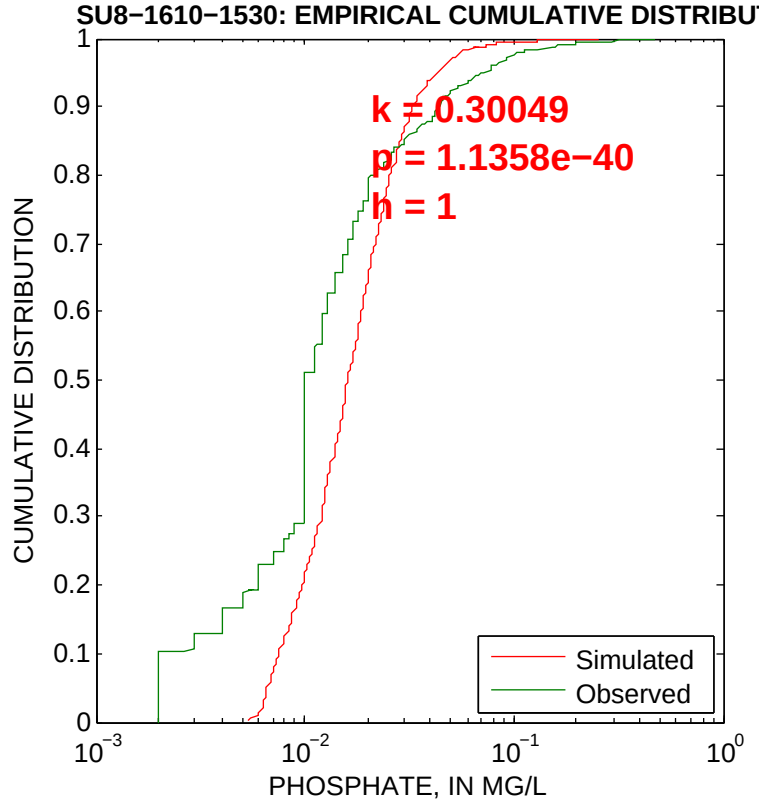












DATA SELECTION

scenario	file
P620171001WQ	PO4X.calib

plot: PO4X - phosphate

Dates: 1/1/1985 – 12/31/201

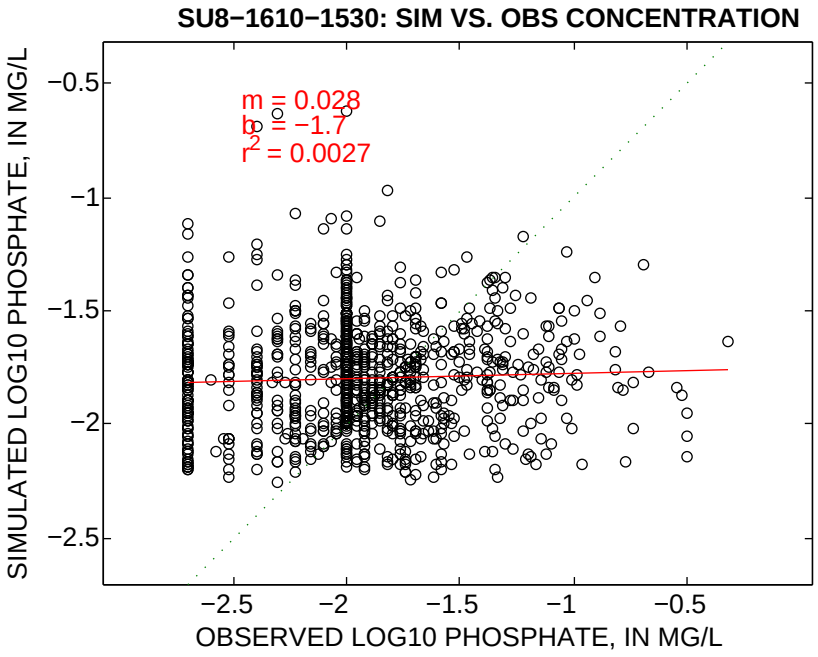
Drive	Directory	Observed
N/A	model	OBS20161101

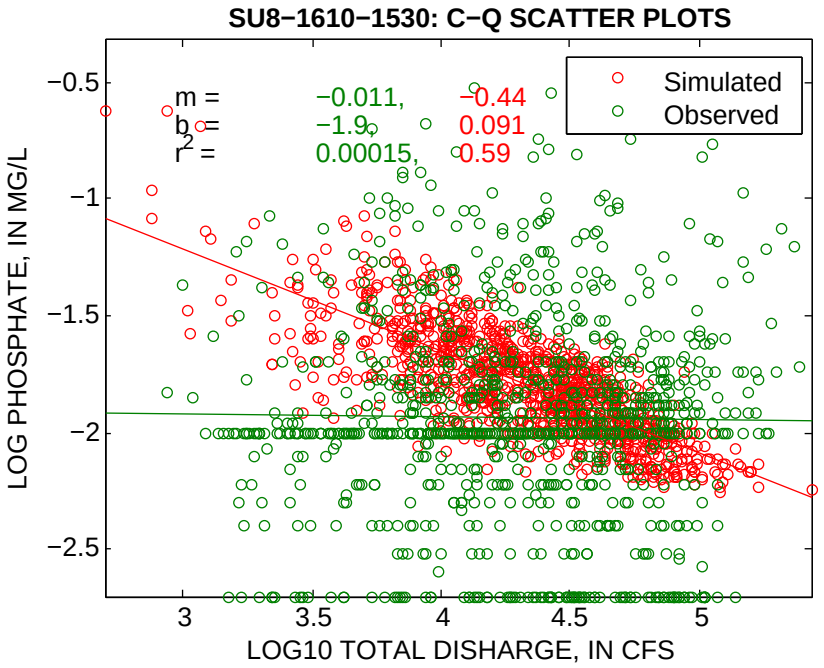
STATISTICS

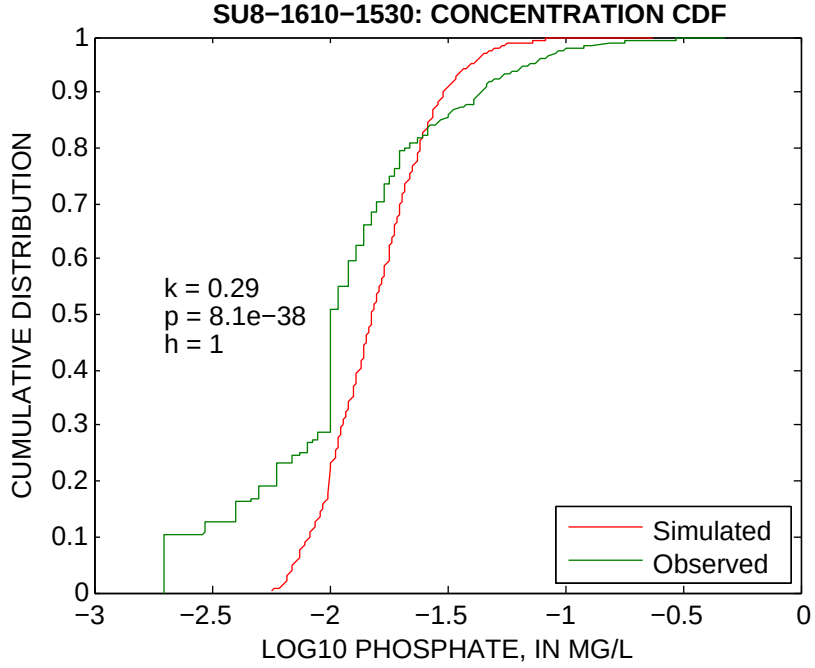
	n	1015	1015
		observe	simulate
min		0.002	0.0052599
		-2.69897	-2.27902
mean		0.0205042	0.0198085
		-1.935	-1.78548
media		0.01	0.01607
		-2	-1.79398
max		0.475	0.2516
		-0.323306	-0.599289
varian		0.0012055	0.00029991
		0.186372	0.0627197
JB		0.001	0.001
		0.001	0.001
		ra	log
%		-3.39309	-7.72705
err.va		0.00158131	0.299904
rel.std.err		1.31175	1.60917
mod.eff		-0.311749	-0.609172

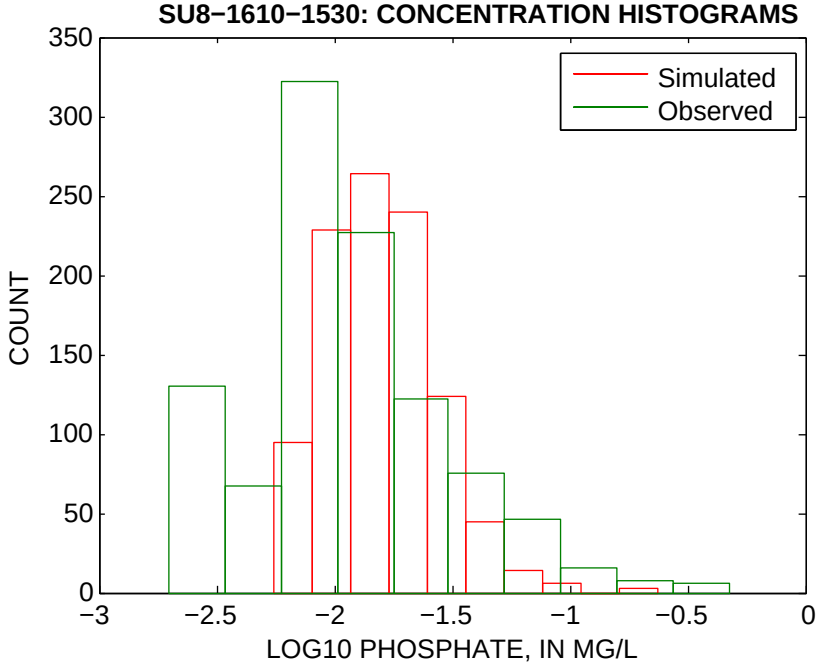
VERSION 2.1

ALL DATA
LOG10

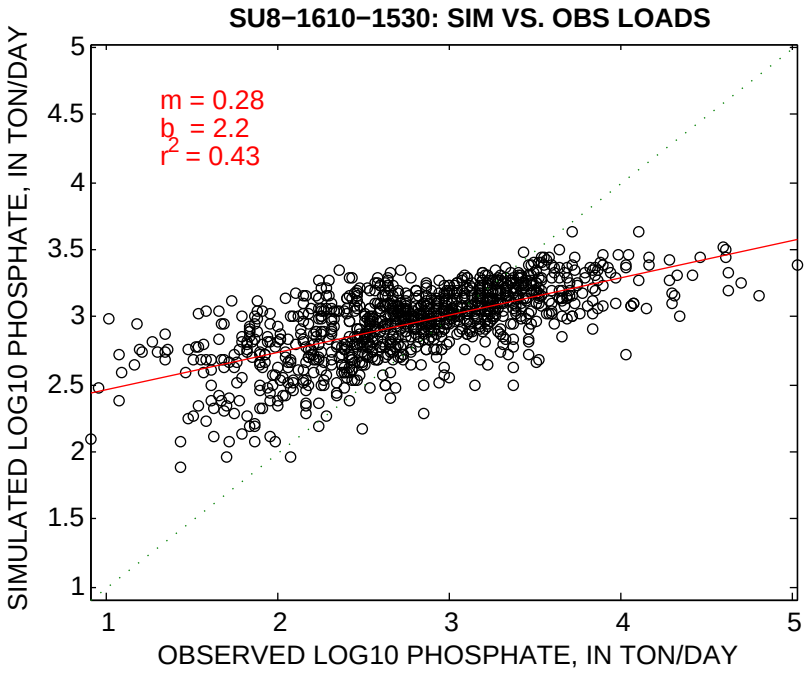


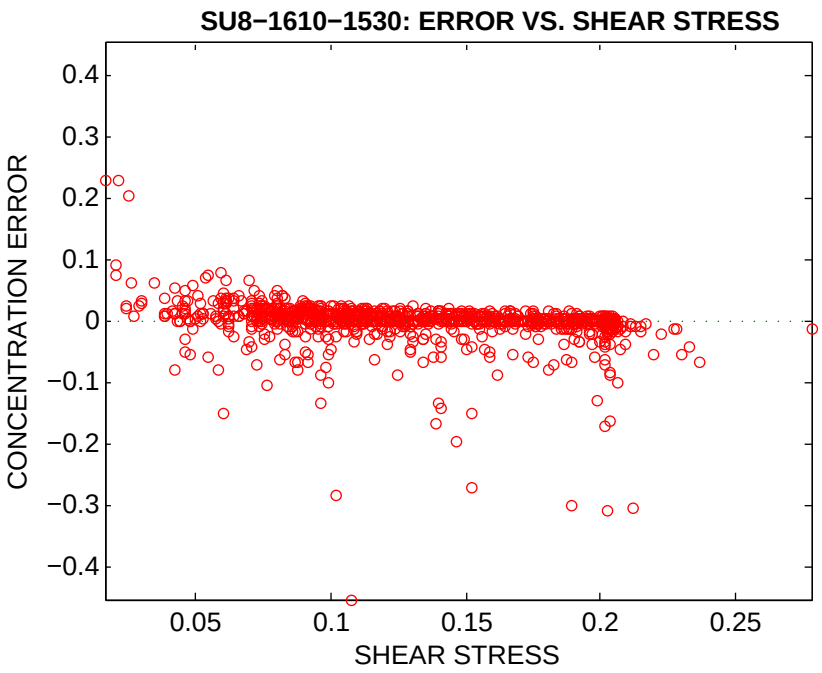


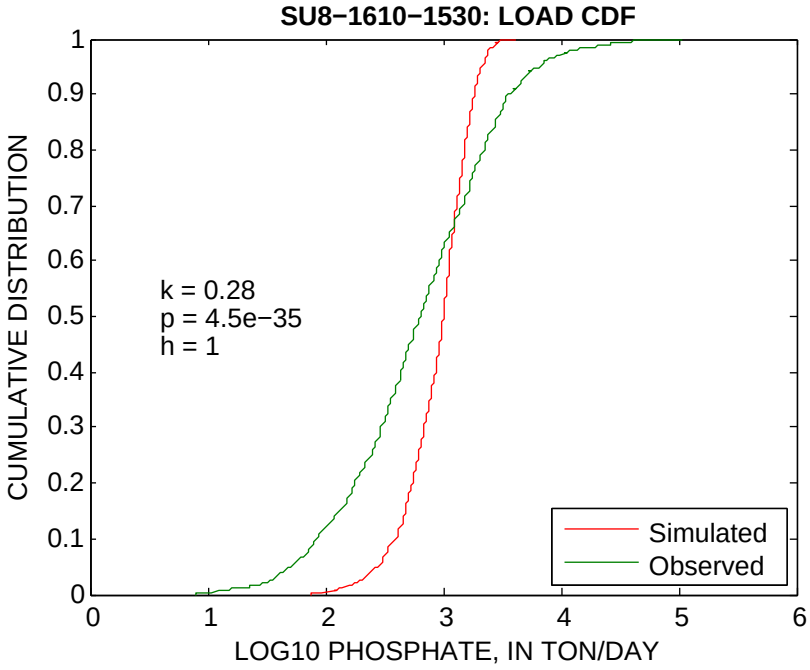


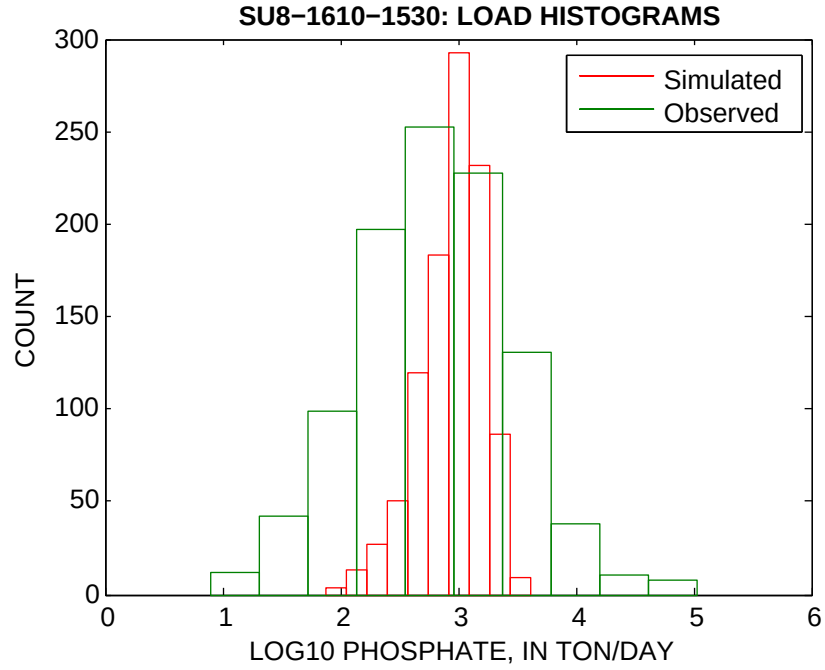


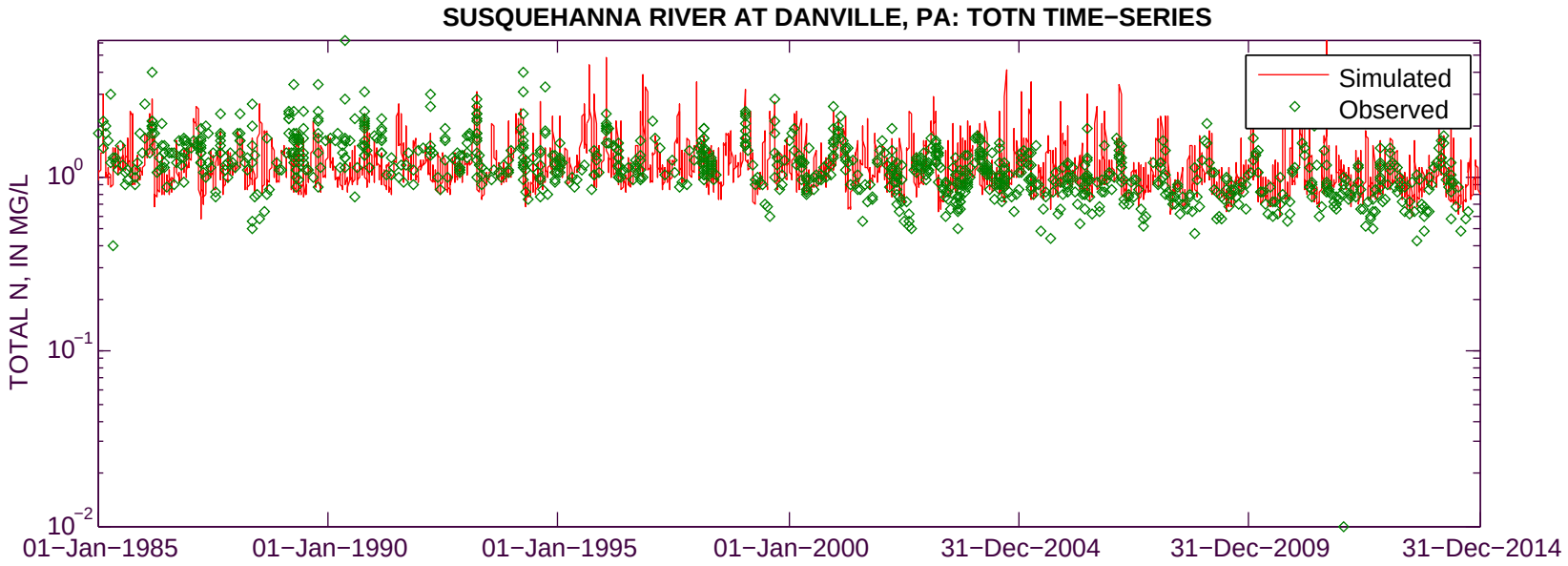
LOAD DATA
LOG10

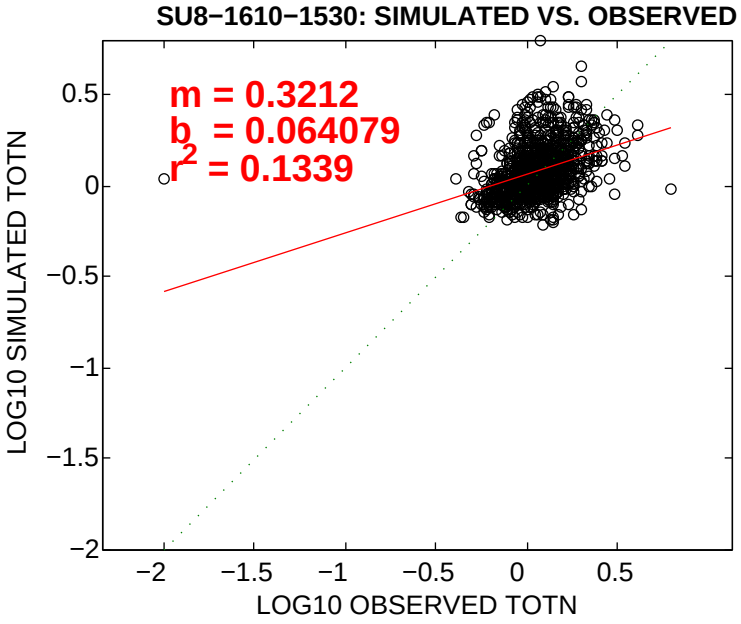


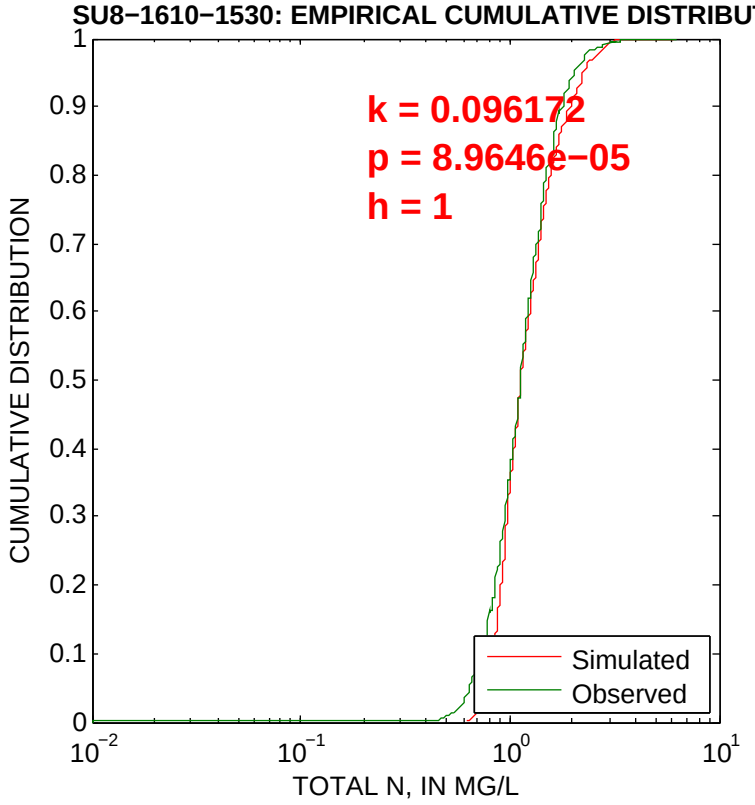












DATA SELECTION

scenario	file
P620171001WQ	TOTN.calib

plot: TOTN - total nitrogen

Dates: 1/1/1985 – 12/31/201

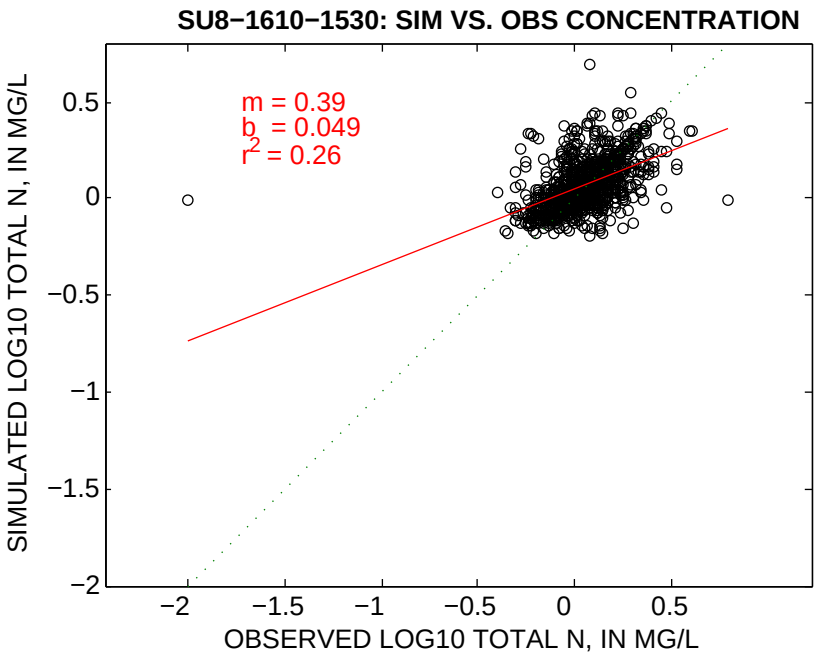
Drive	Directory	Observed
N/A	model	OBS20161101

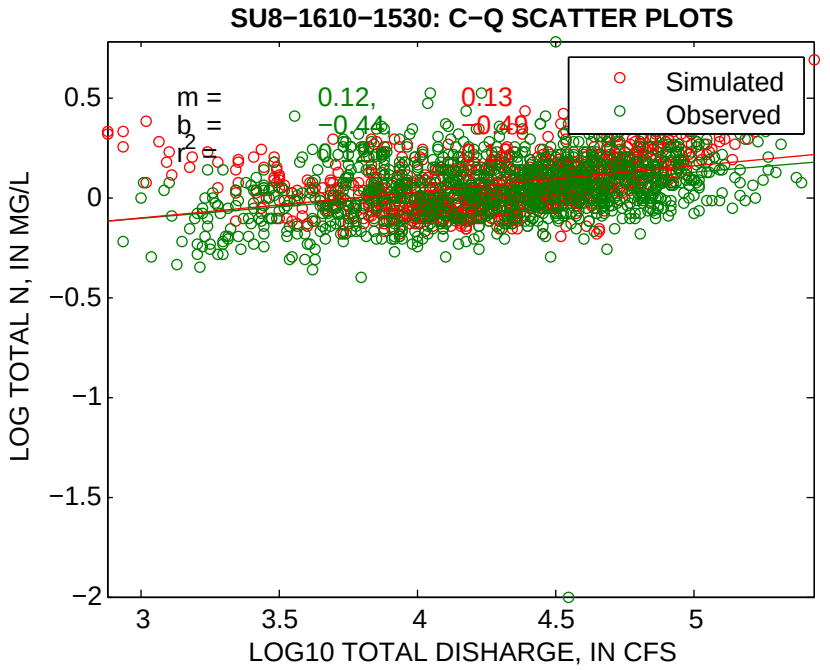
STATISTICS

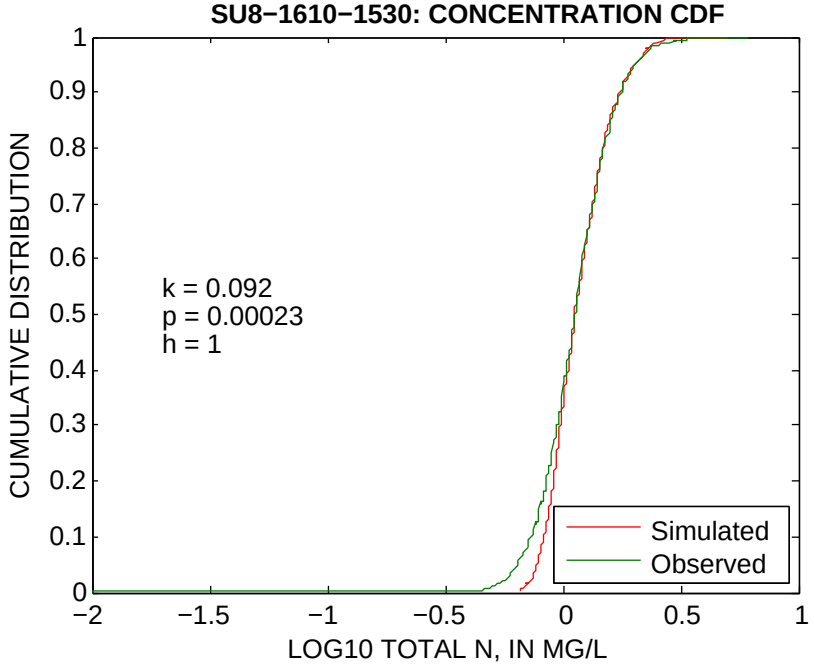
	n	
	1071	1071
	observe	simulate
min	0.01	0.60486
	-2	-0.218345
mean	1.21271	1.28222
	0.054396	0.0815508
media	1.13	1.1299
	0.0530784	0.05304
max	6.2	6.1591
	0.792392	0.789517
varian	0.229552	0.257772
	0.0271893	0.0209496
JB	0.001	0.001
	0.001	0.001
	ra	log
%	5.73186	49.9206
err.va	0.339645	0.0314103
rel.std.err	1.4796	1.15525
mod.eff	-0.479602	-0.155247

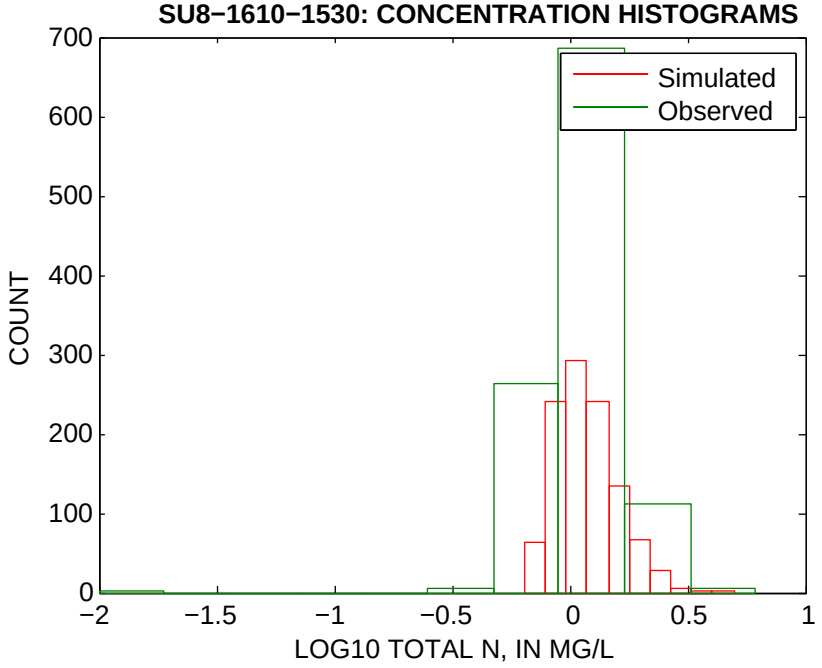
VERSION 2.1

ALL DATA
LOG10

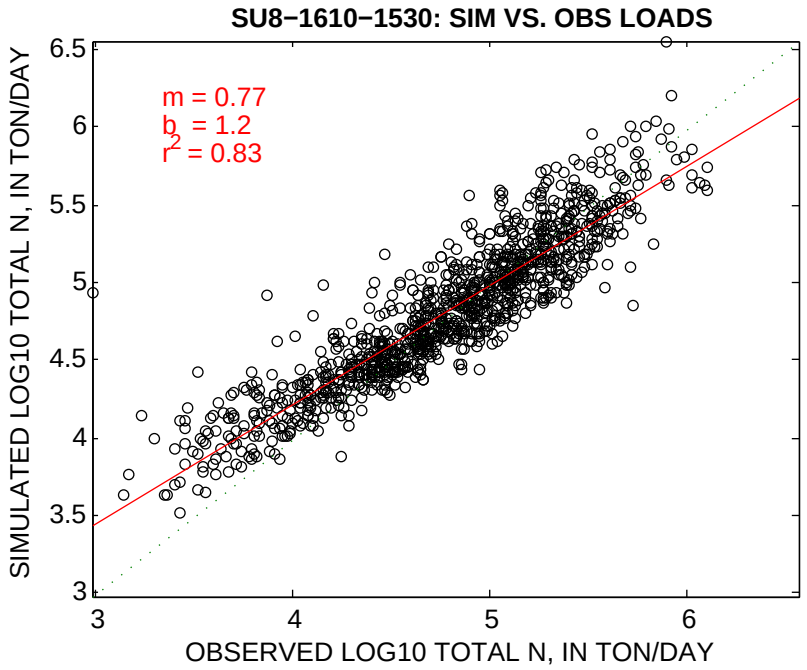


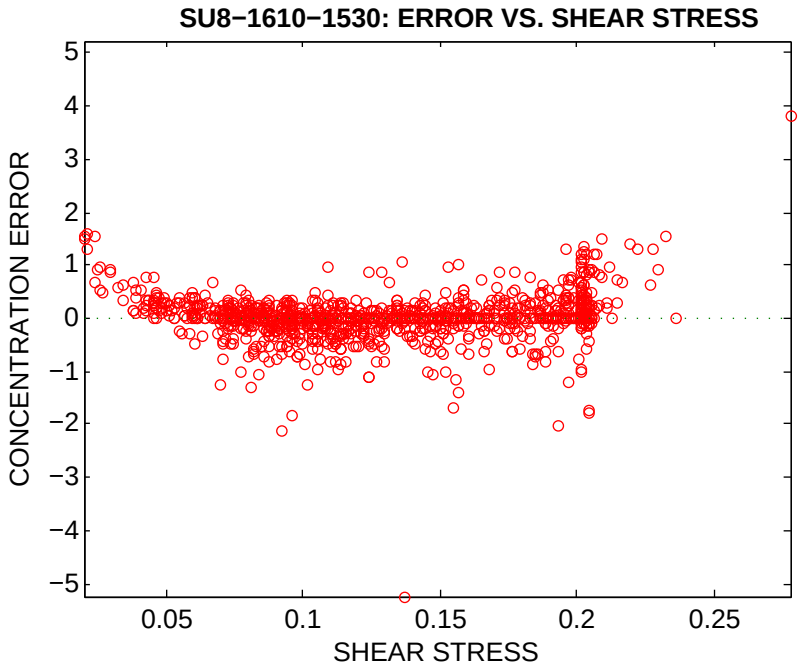


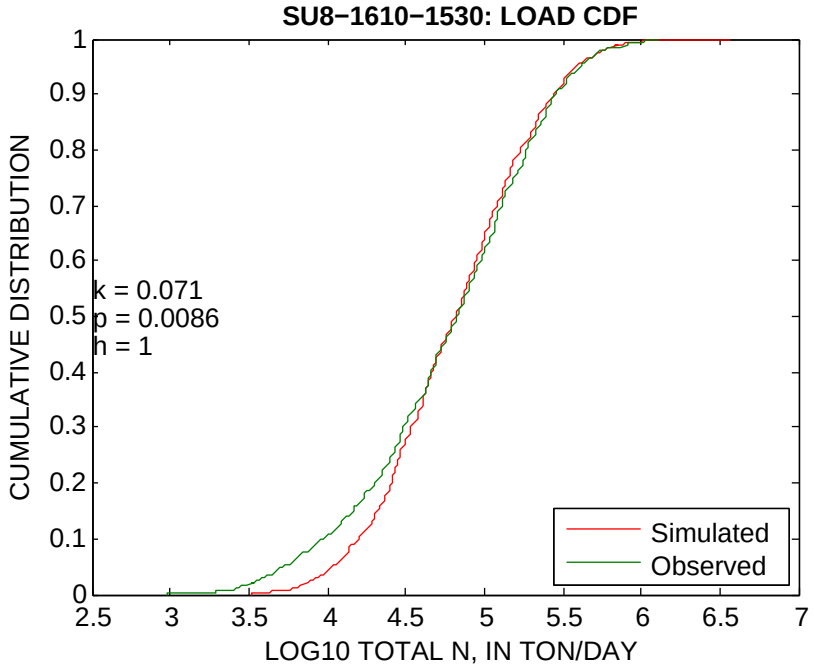


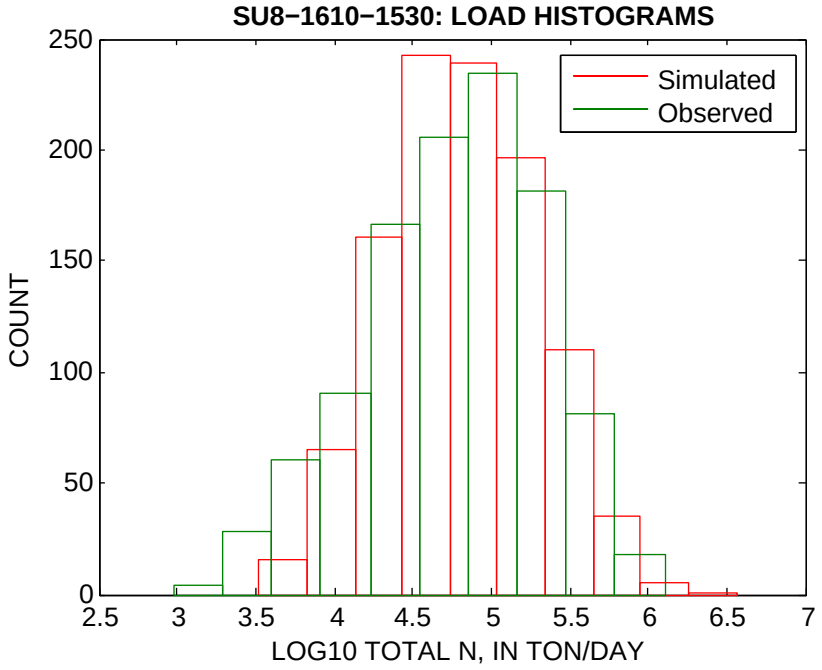


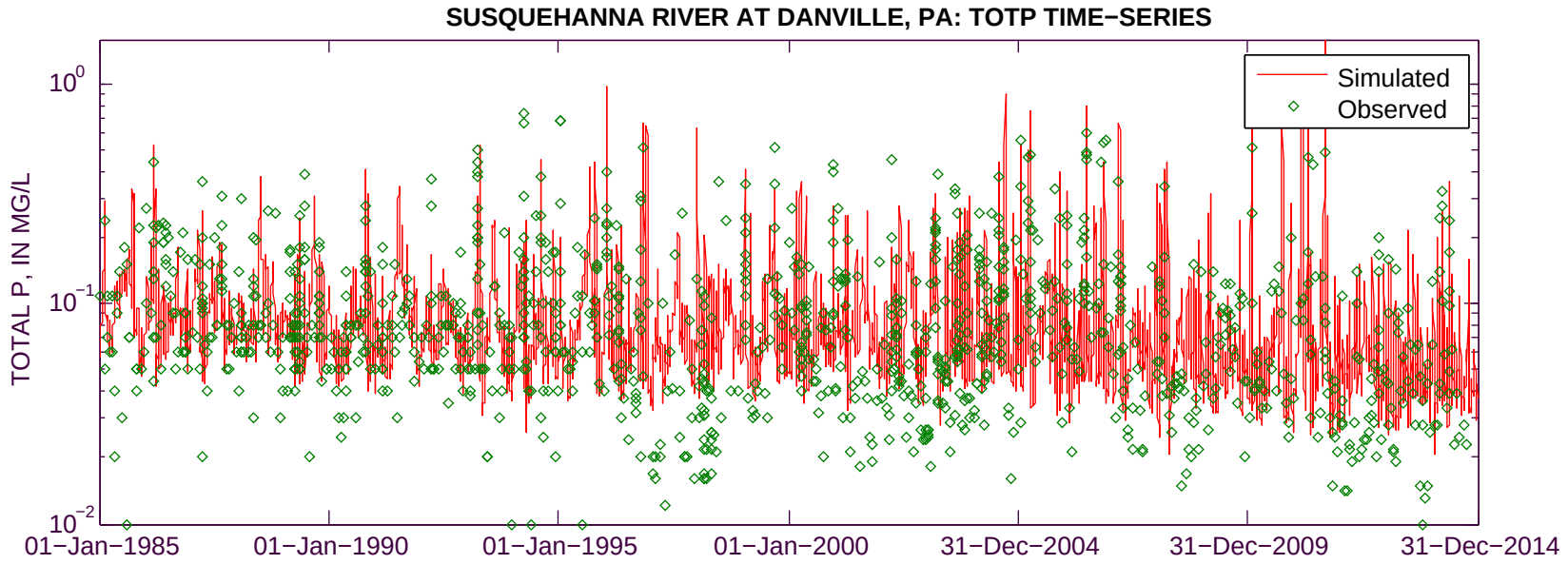
LOAD DATA
LOG10

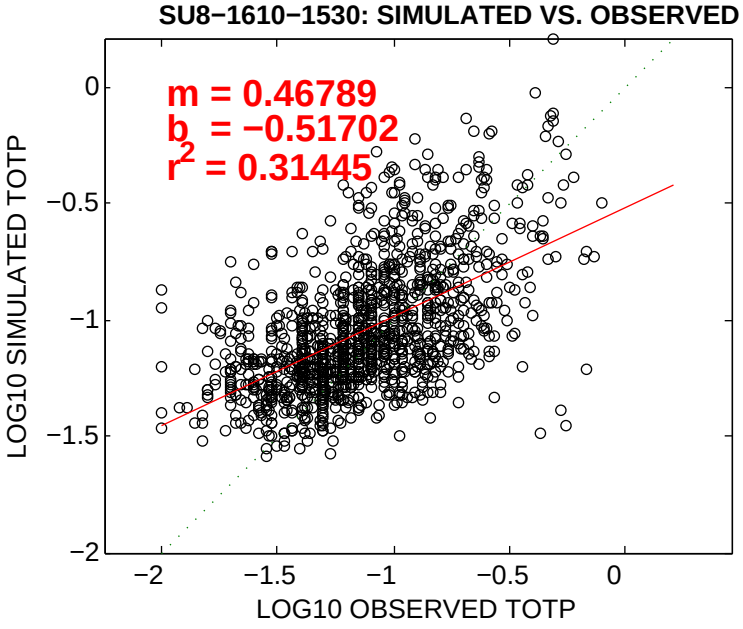


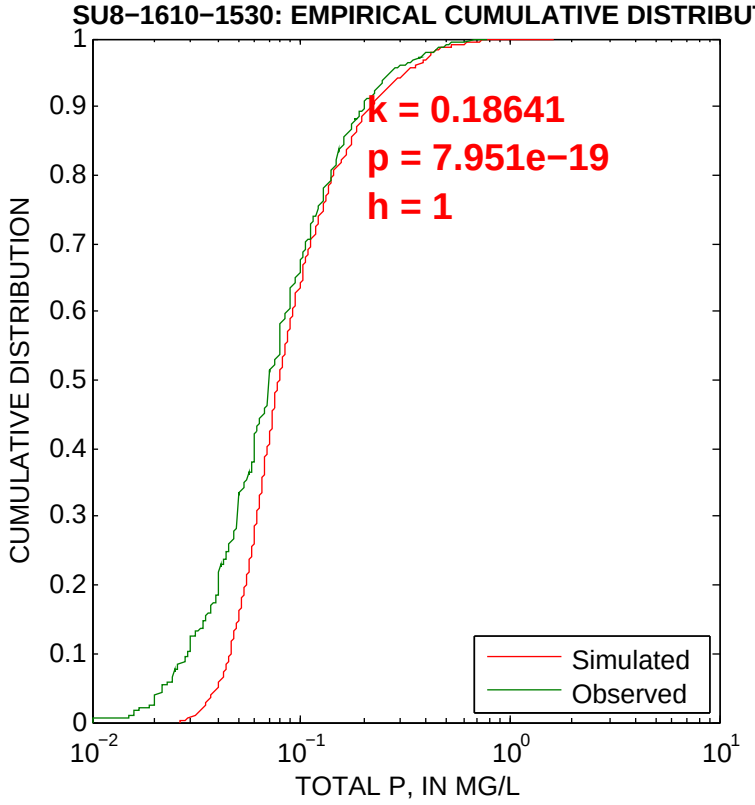












DATA SELECTION

scenario	file
P620171001WQ	TOTP.calib

plot: TOTP - total phosphorus

Dates: 1/1/1985 – 12/31/201

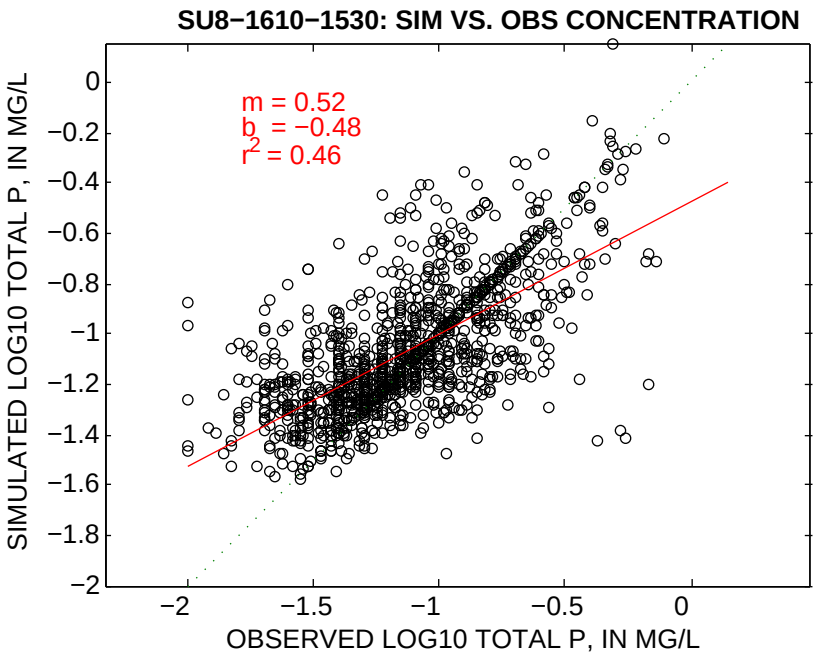
Drive	Directory	Observed
N/A	model	OBS20161101

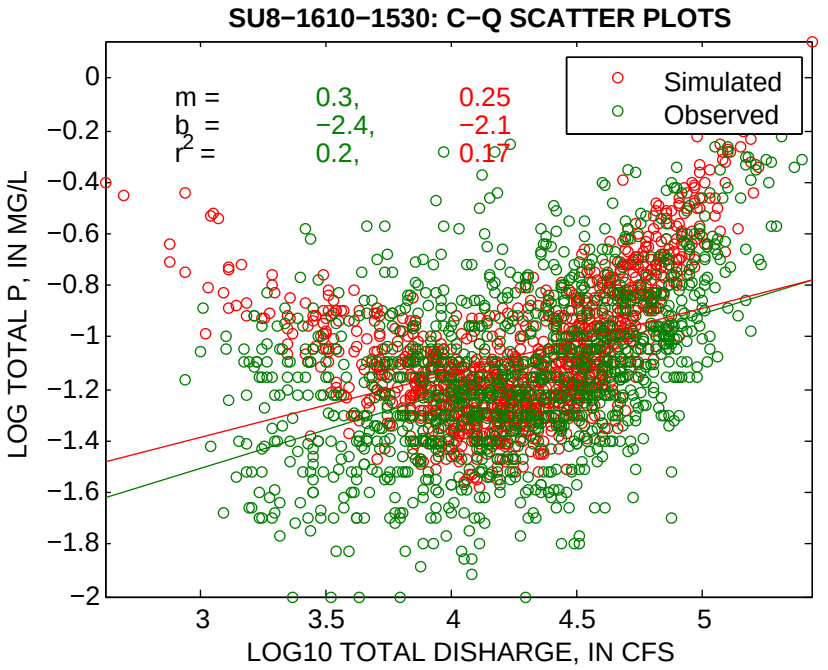
STATISTICS

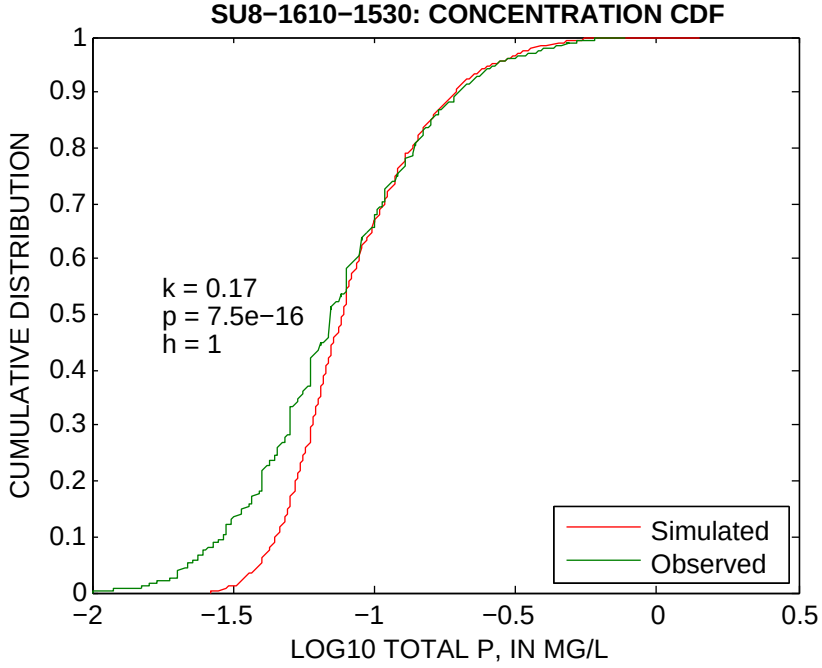
	n	observe	simulate
		1207	1207
min		0.01	0.026234
		-2	-1.58114
mean		0.100673	0.114853
		-1.12763	-1.04462
media		0.07	0.078612
		-1.1549	-1.10451
max		0.779	1.6047
		-0.108463	0.205394
varian		0.0089017	0.0121224
		0.107177	0.0746167
JB		0.001	0.001
		0.004240	0.001
		ra	log
%		14.0858	-7.36083
err.va		0.0104734	0.0883948
rel.std.err		1.17656	0.824754
mod.eff		-0.176563	0.175246

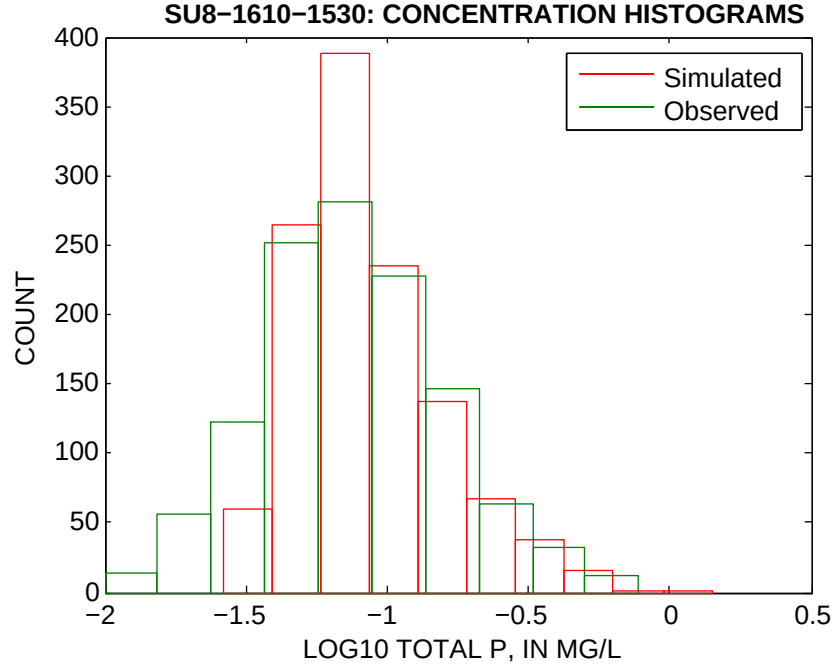
VERSION 2.1

ALL DATA
LOG10

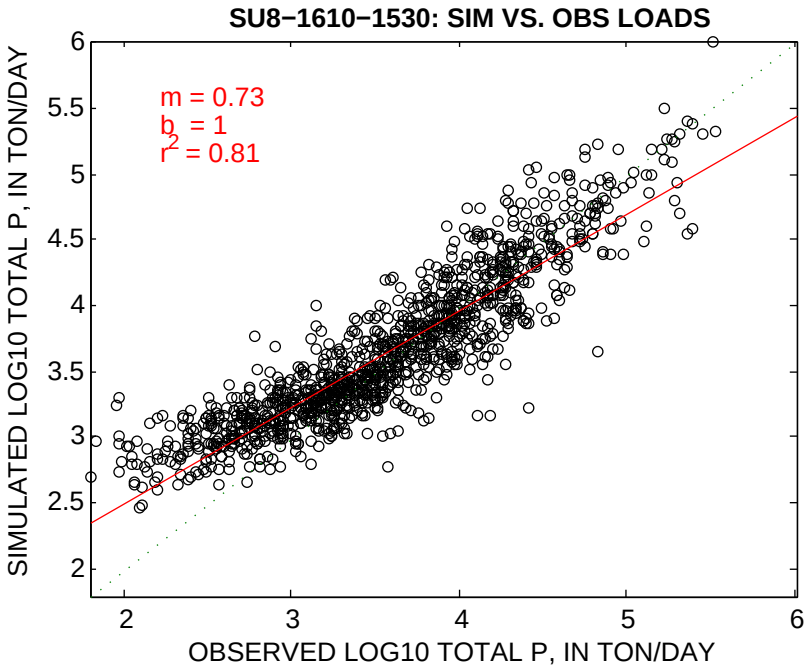


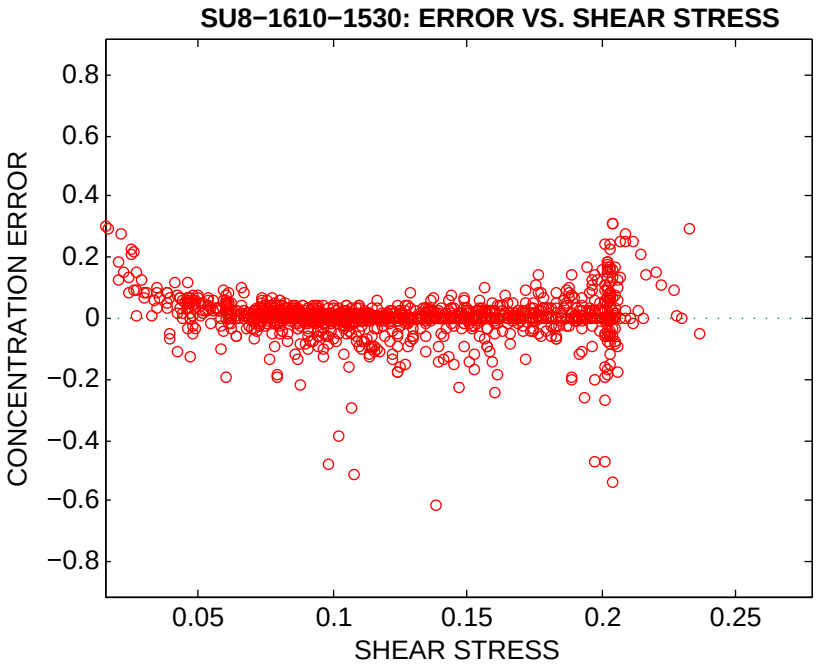


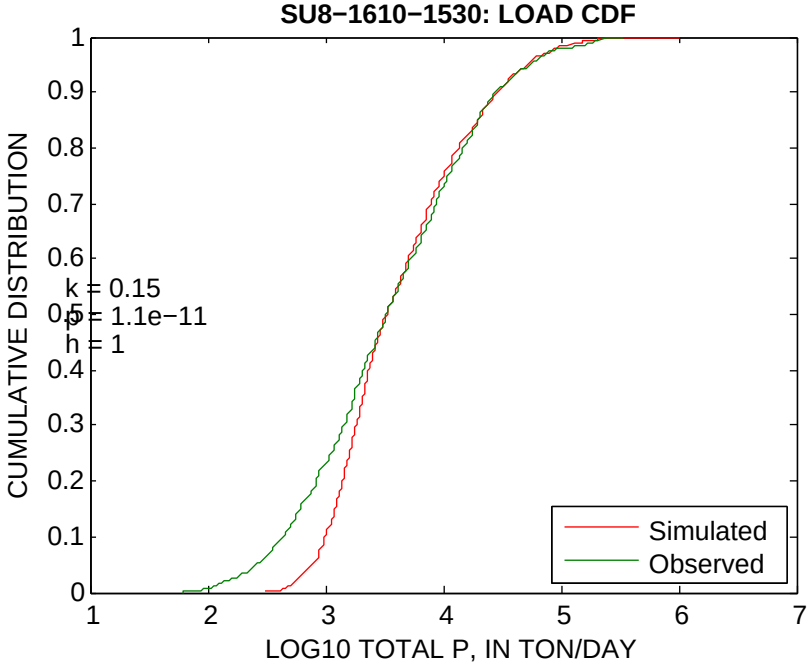


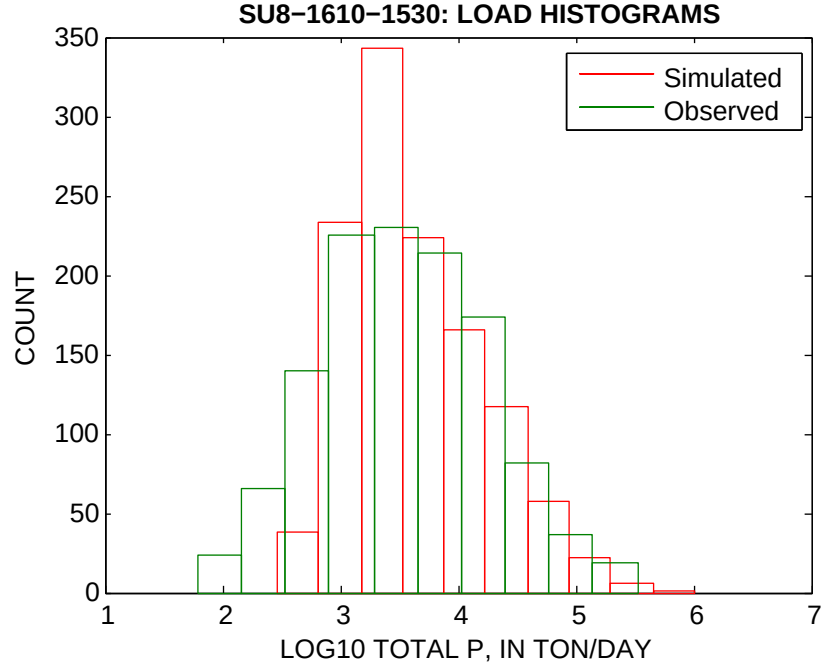


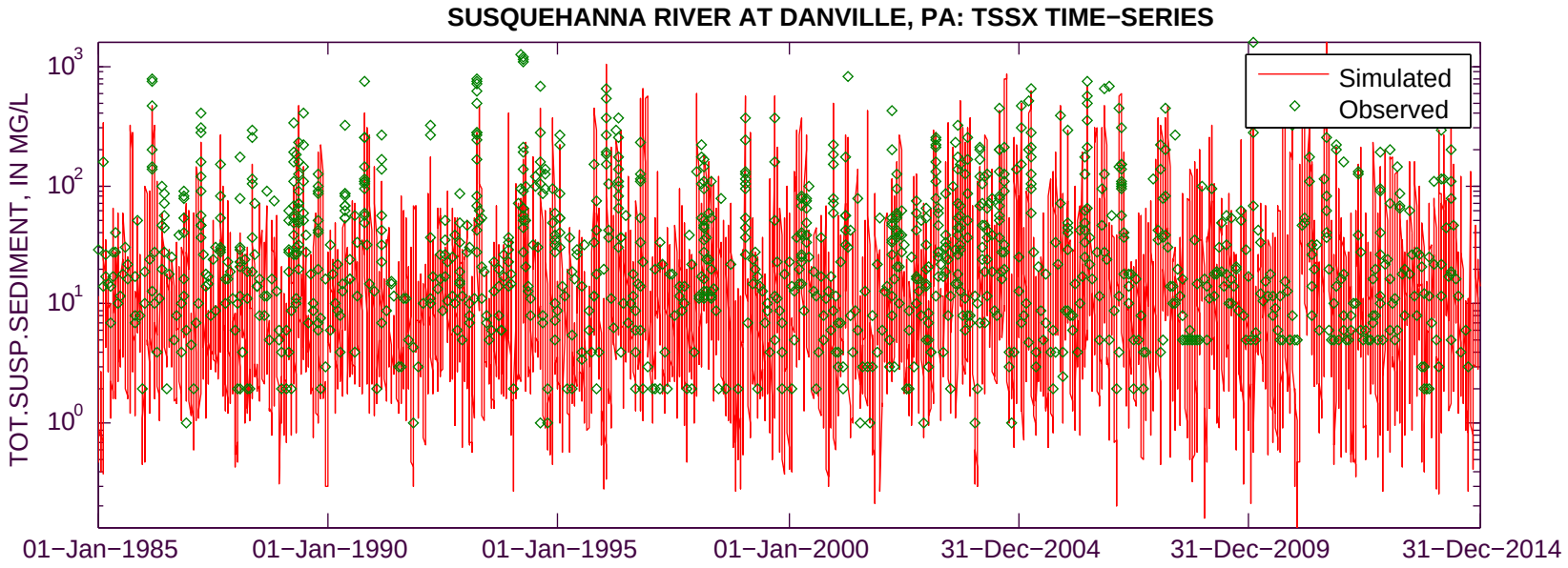
LOAD DATA
LOG10

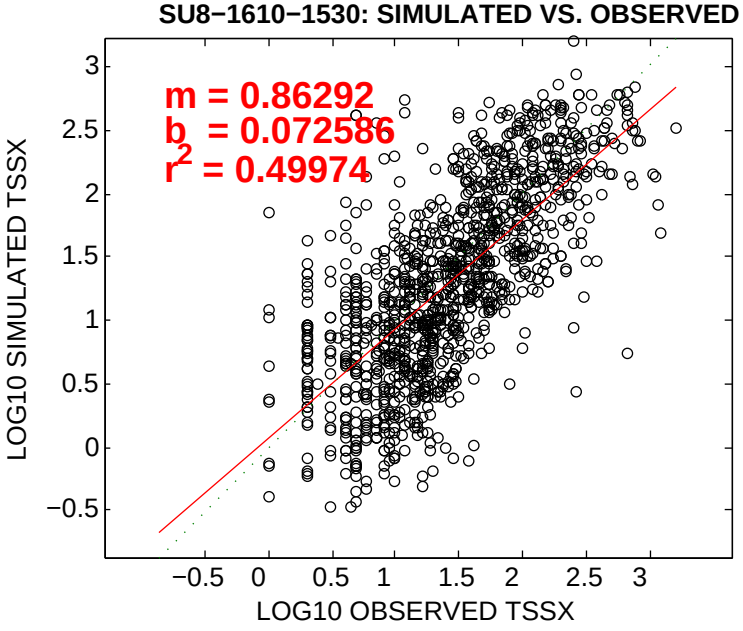


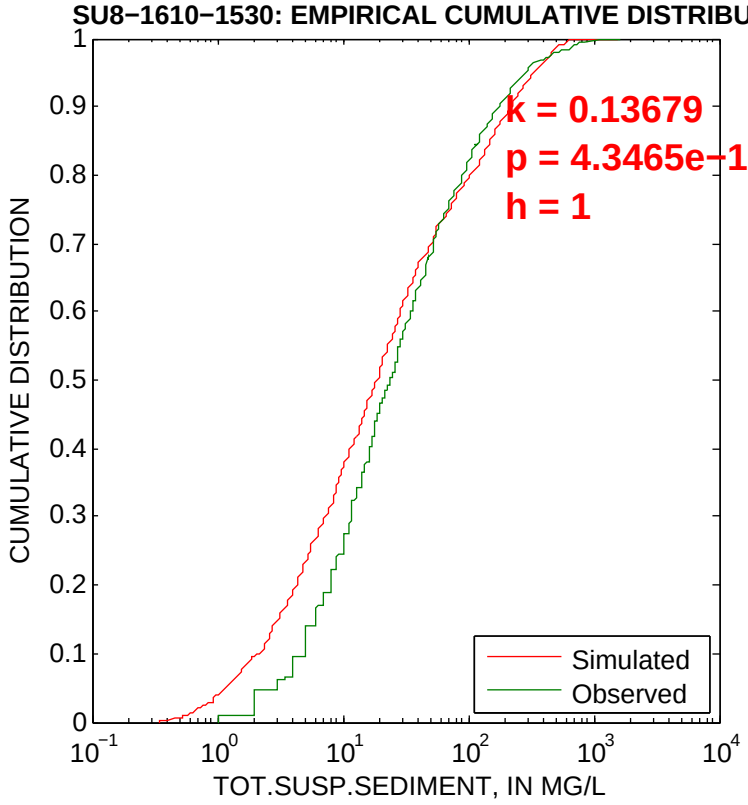












DATA SELECTION

scenario: P620171001WQ | file: TSSX.calib

plot: TSSX - total suspended ...

Dates: 1/1/1985 – 12/31/201

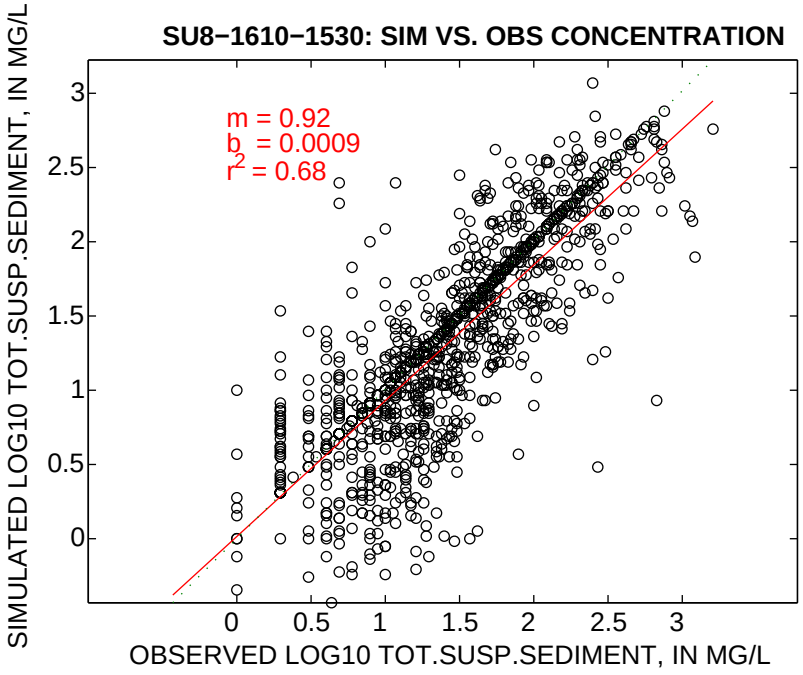
Drive | Directory: N/A | model | Observed: OBS20161101

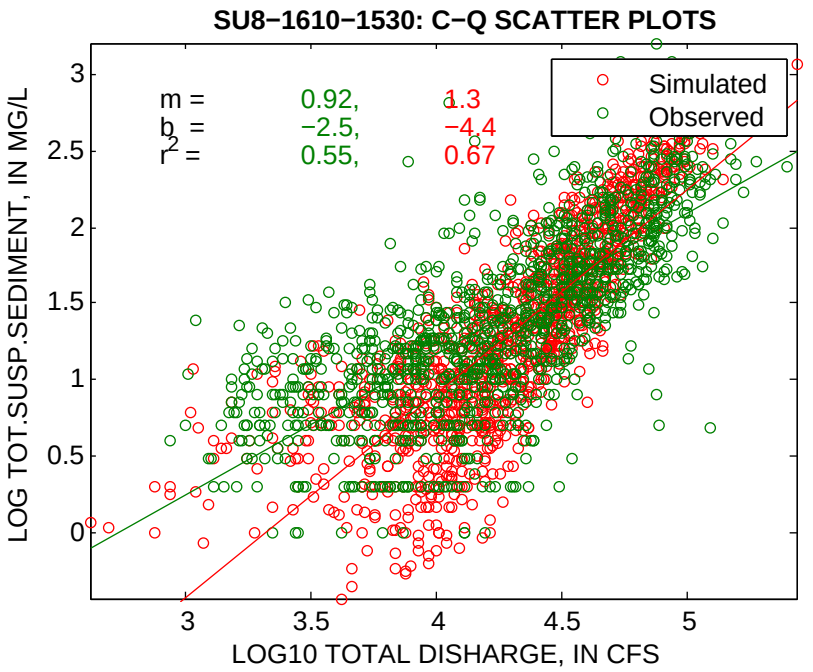
STATISTICS

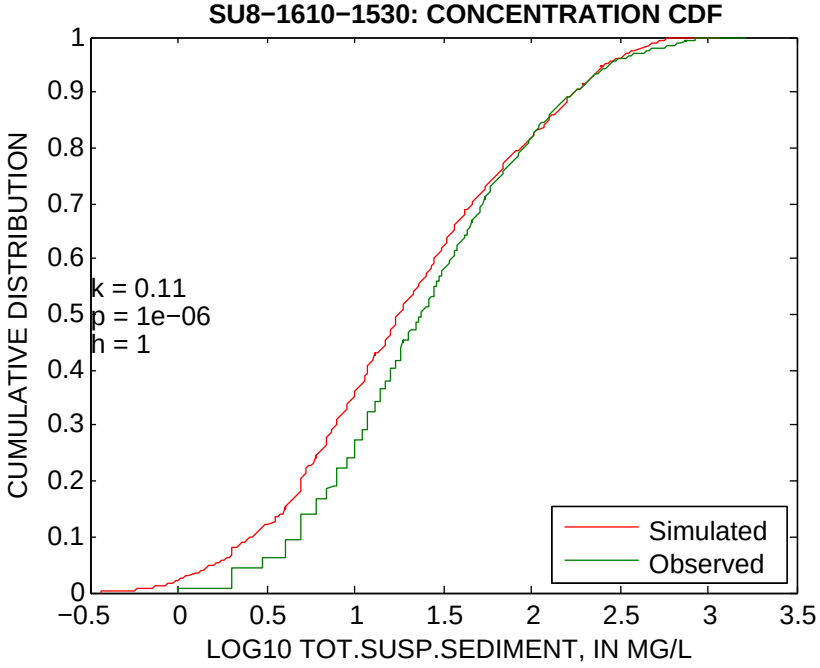
		observe	simulate
n		1177	1177
min		1	0.33984
		0	-0.468726
mean		70.6662	70.4181
		1.41574	1.29426
media		24	18.877
		1.38021	1.27593
max		1627	1583.7
		3.21139	3.19967
varian		18866.2	15633.2
		0.369663	0.550817
JB		0.001	0.001
		0.001862	0.001
		ra	log
%		-0.351096	-8.5807
err.va		17442.9	0.297269
rel.std.err		0.924562	0.804163
mod.eff		0.0754383	0.195837

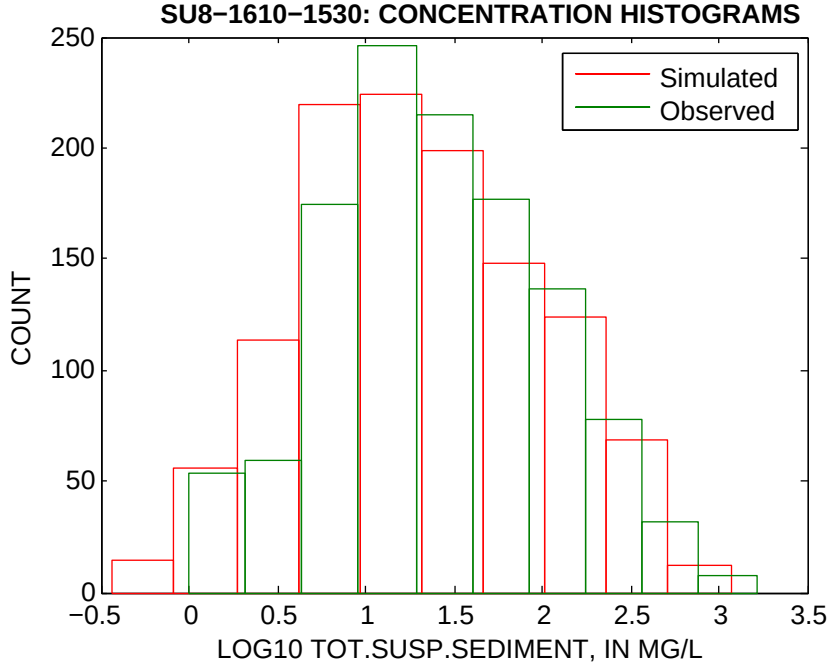
VERSION 2.1

ALL DATA
LOG10

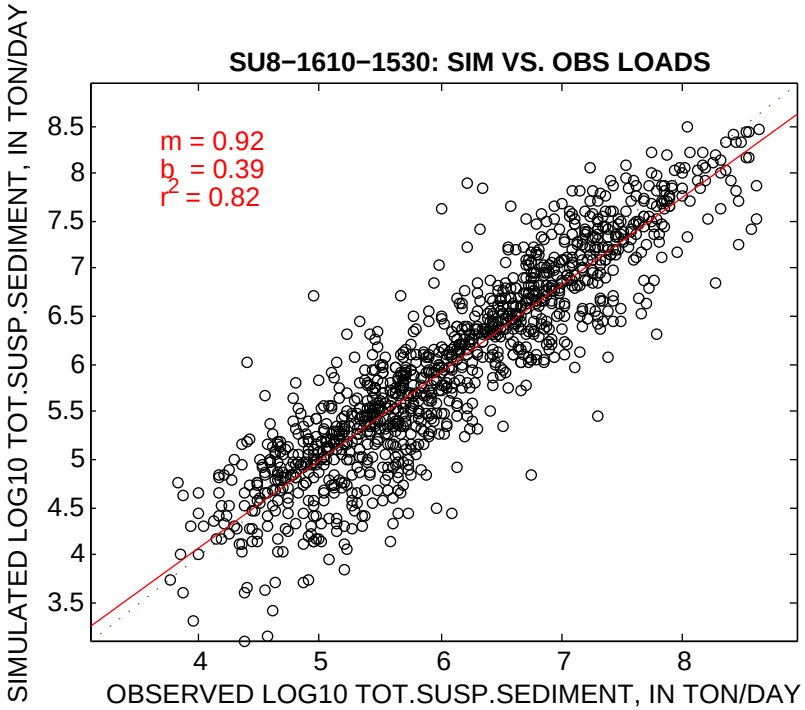


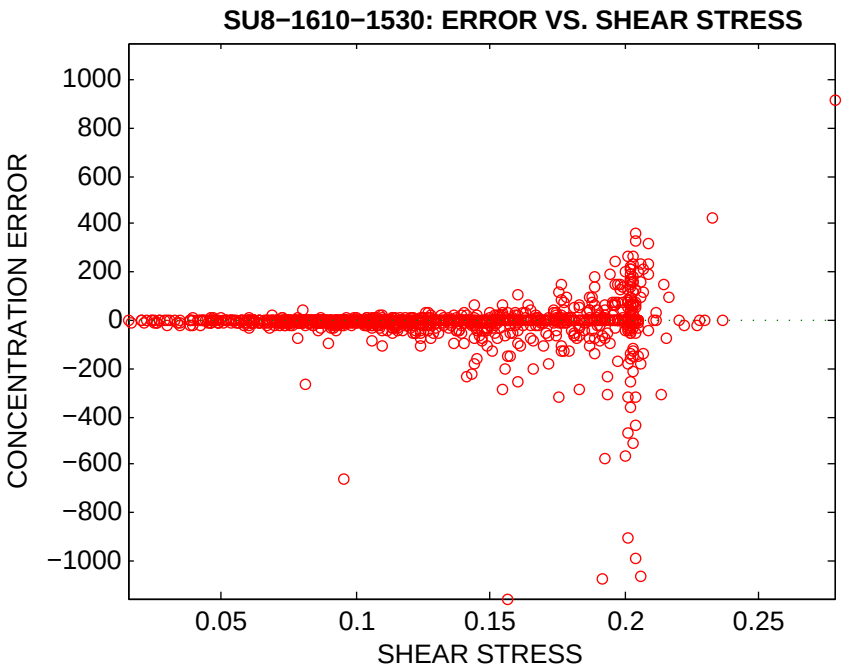


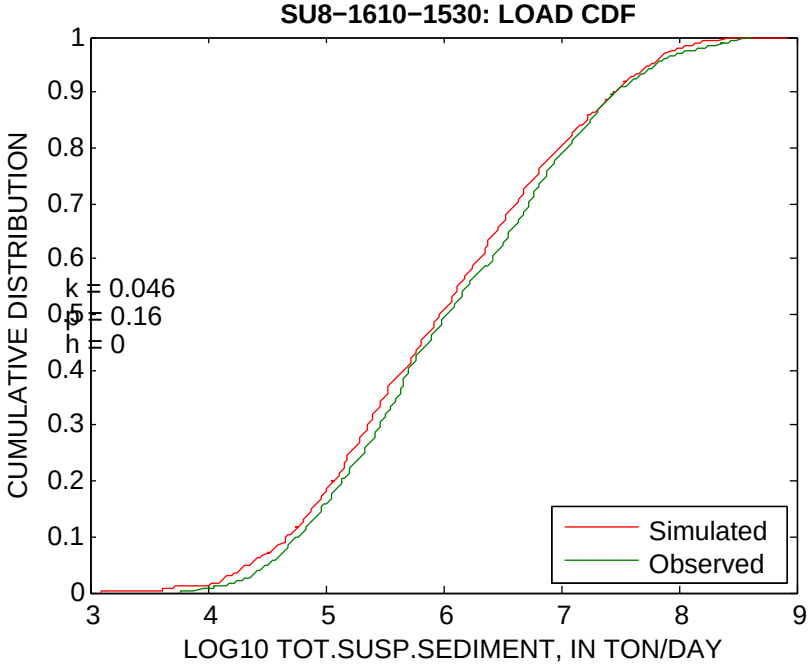


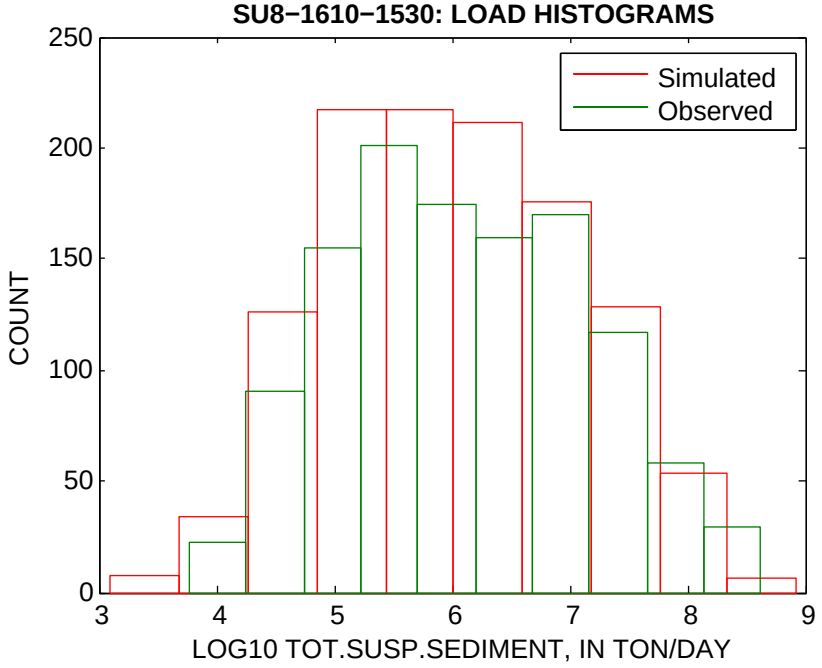


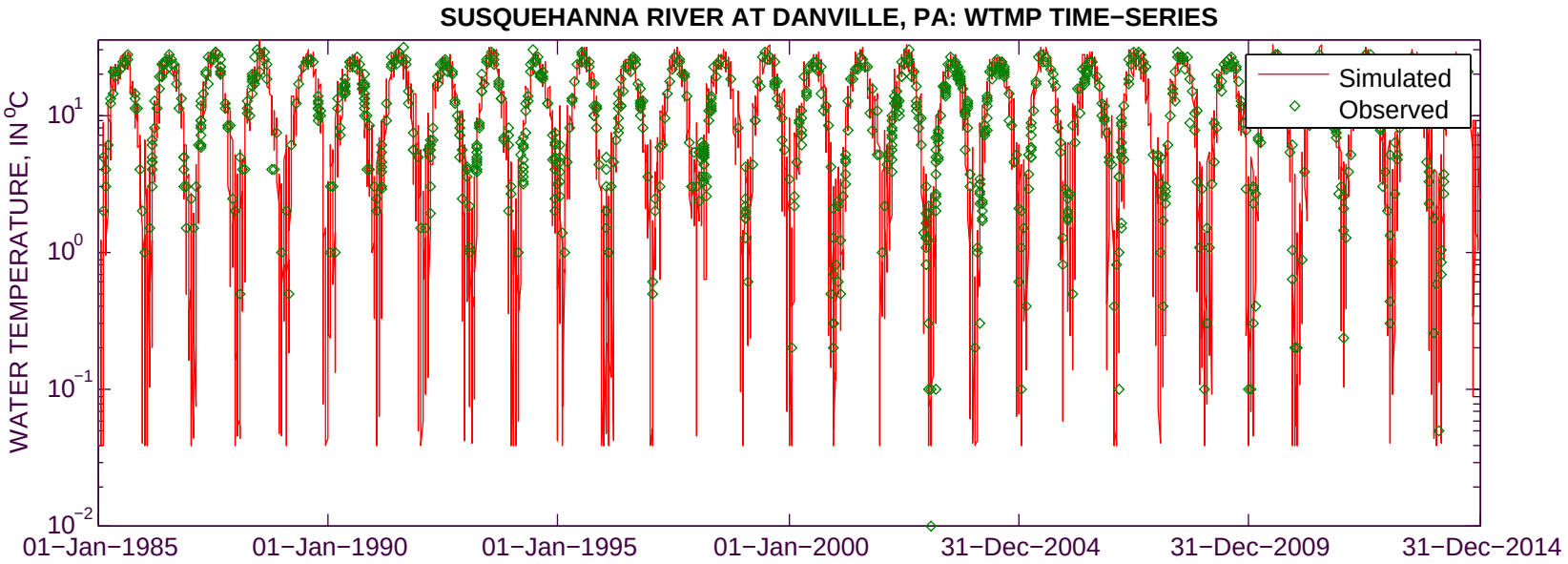
LOAD DATA
LOG10

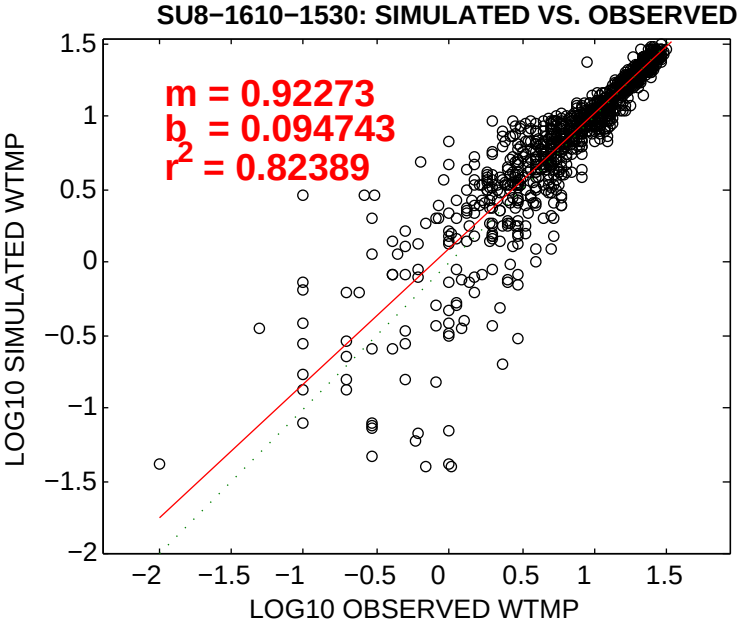


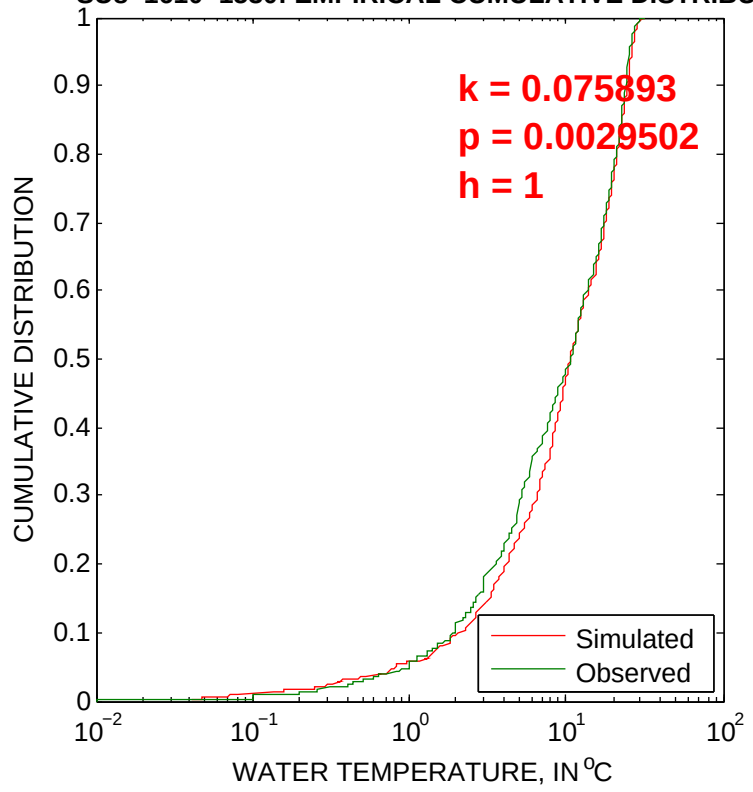












DATA SELECTION

scenario	file
P620171001WQ	WTMP.calib

plot: WTMP - water tempera...

Dates 1/1/1985 12/31/201

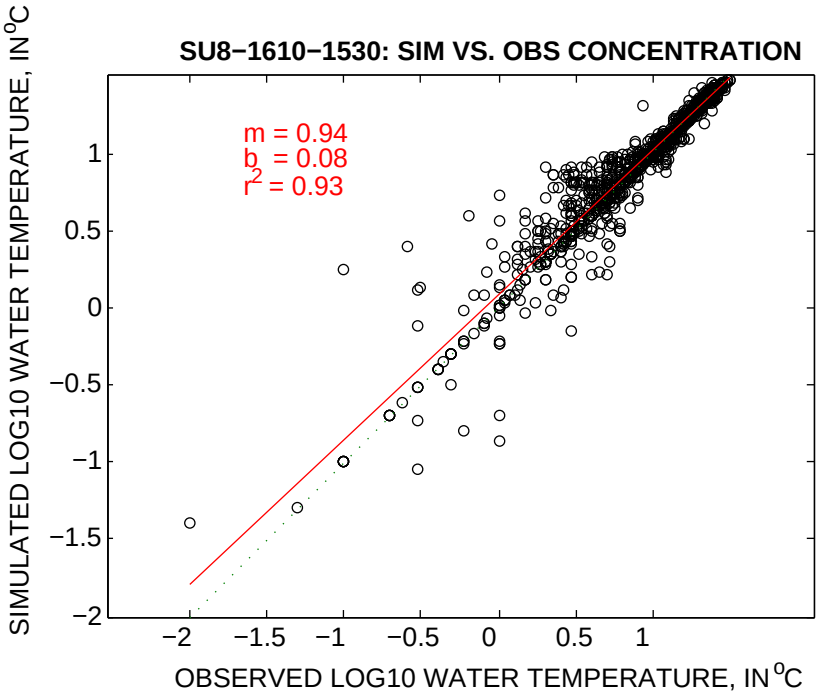
Drive	Directory	Observed
N/A	model	OBS20161101

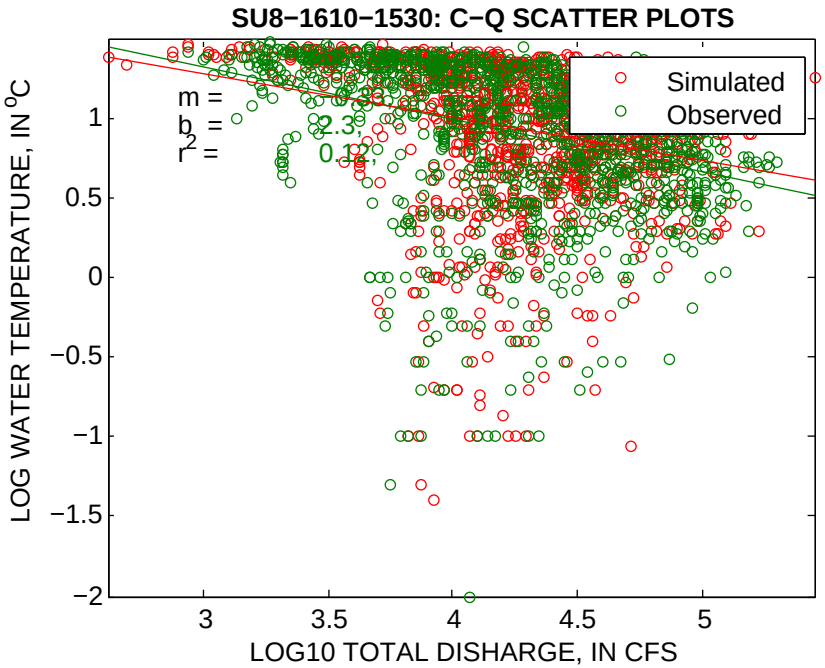
STATISTICS

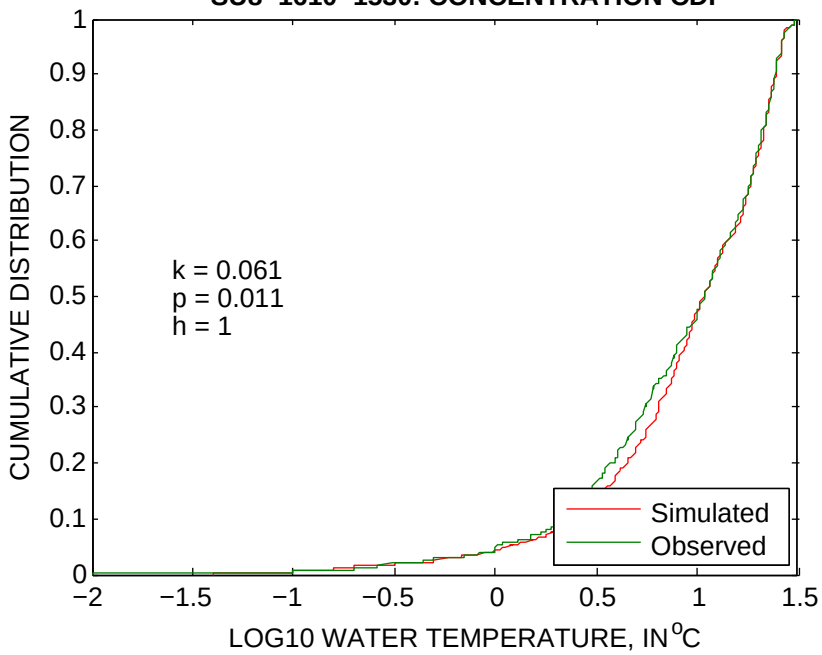
n	1120	1120
	observe	simulate
min	0.01	0.040005
	-2	-1.39789
mean	11.8772	12.3919
	0.897648	0.923028
media	10.75	10.668
	1.0314	1.02808
max	31.5	31.219
	1.49831	1.49442
varian	68.7444	68.5133
	0.235963	0.243849
JB	0.001	0.001
	0.001	0.001
	ra	log
%	4.33311	2.82736
err.va	4.32055	0.0449975
rel.std.err	.0628494	0.190697
mod.eff	0.937151	0.809303

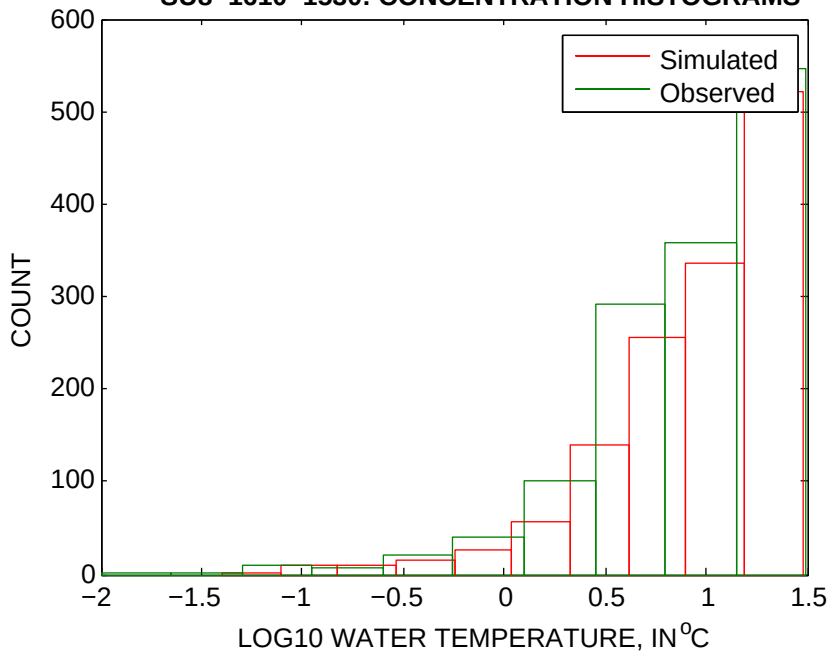
VERSION 2.1

ALL DATA
LOG10

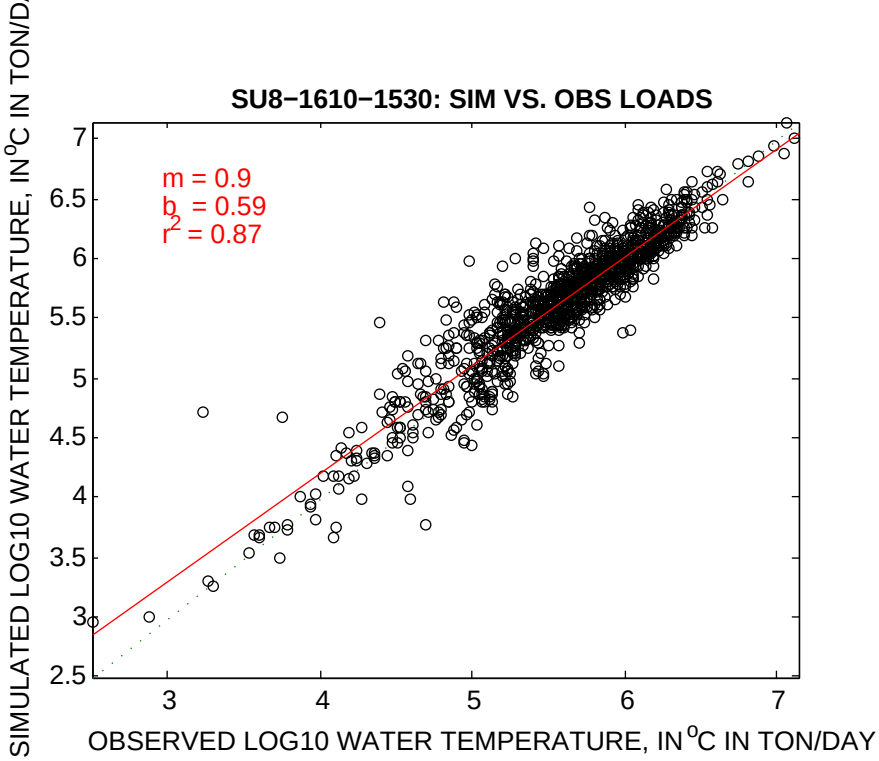


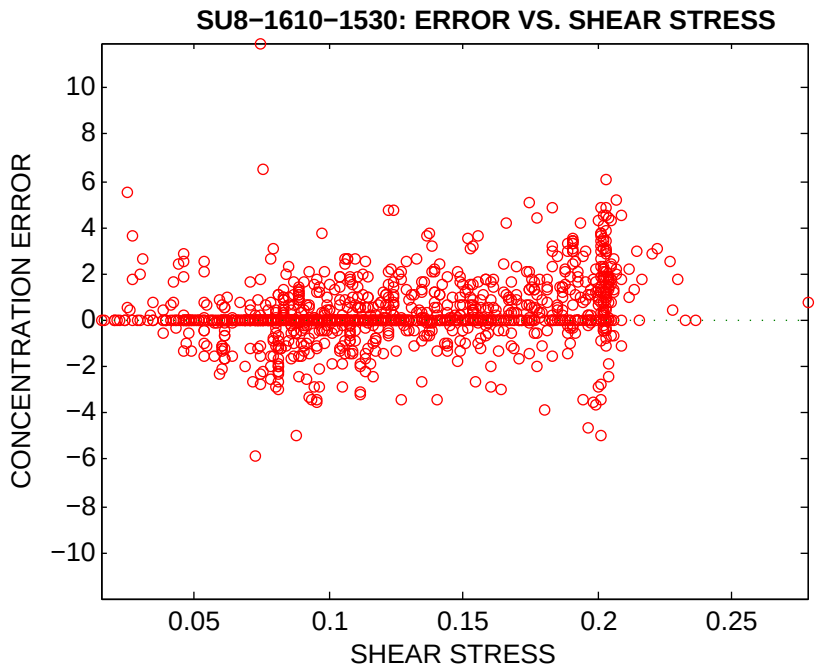


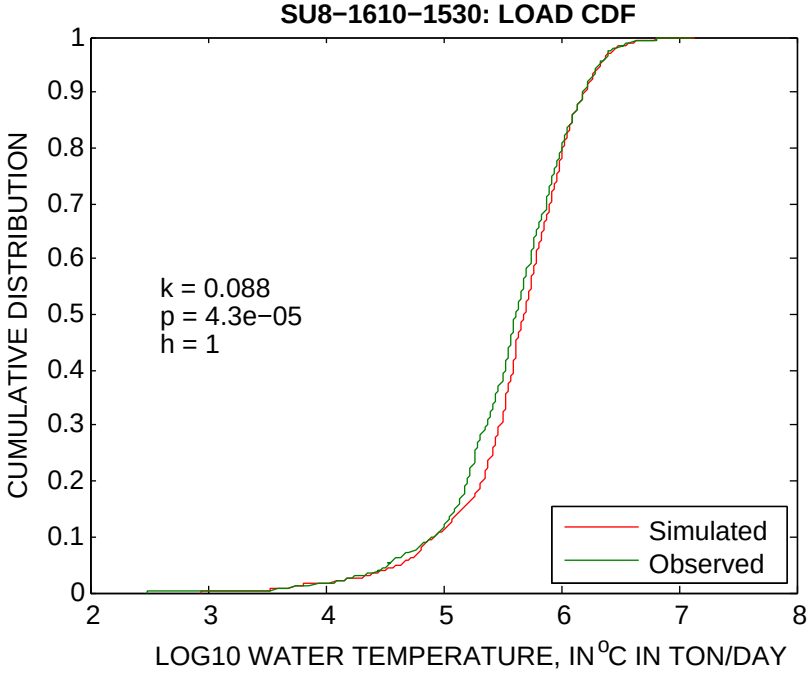


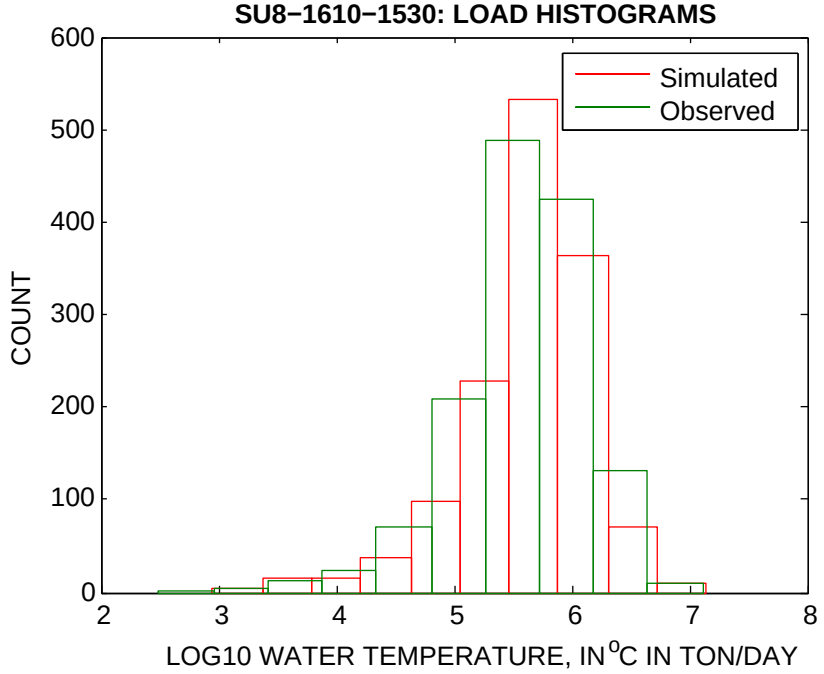


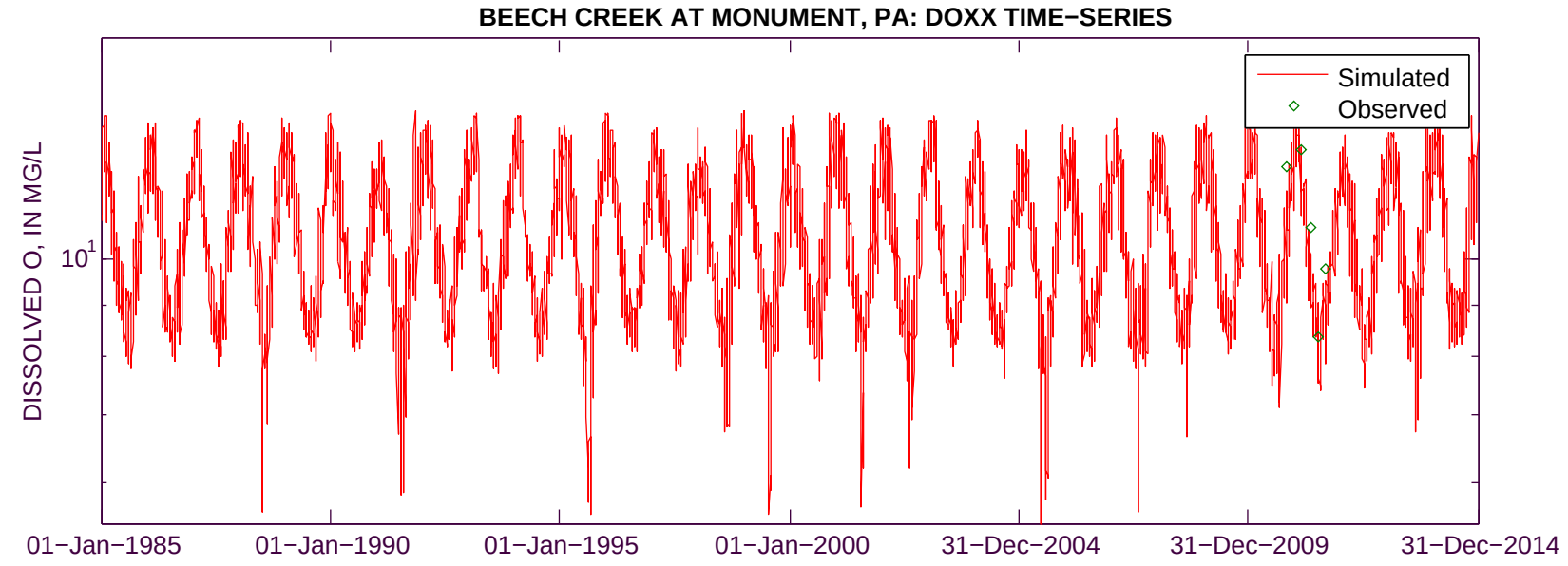
LOAD DATA
LOG10

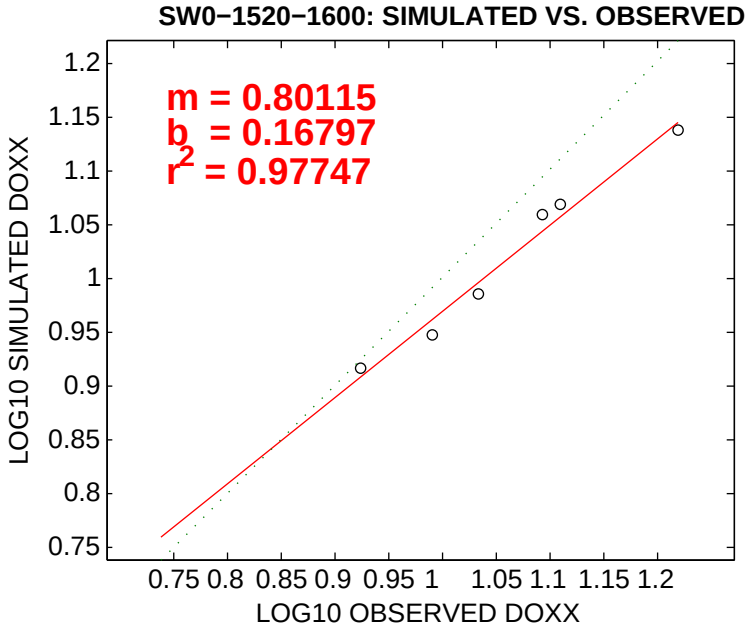


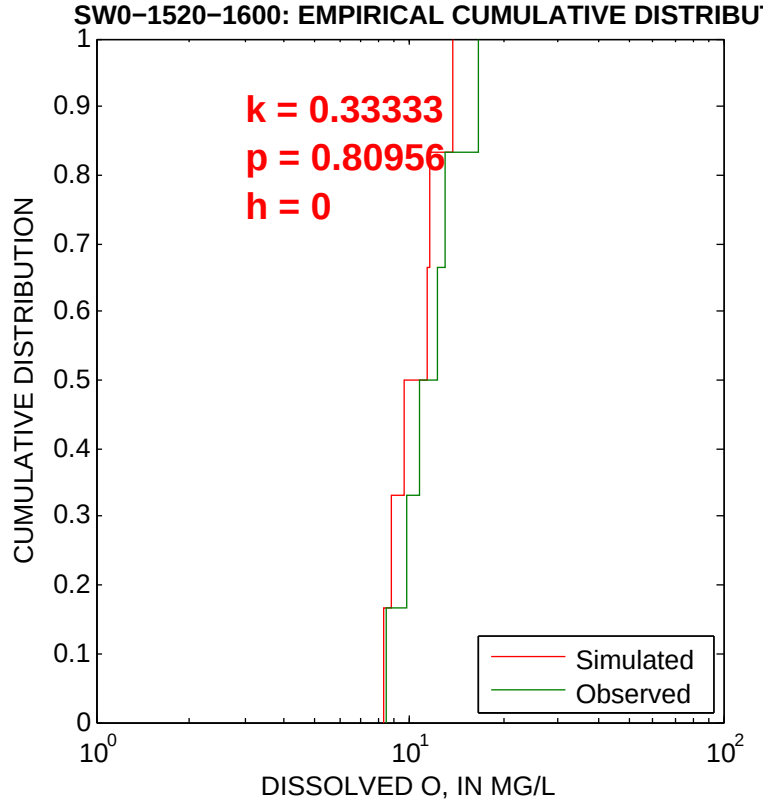












DATA SELECTION

scenario: P620171001WQ | file: DOXX.calib

plot: DOXX - dissolved oxygen

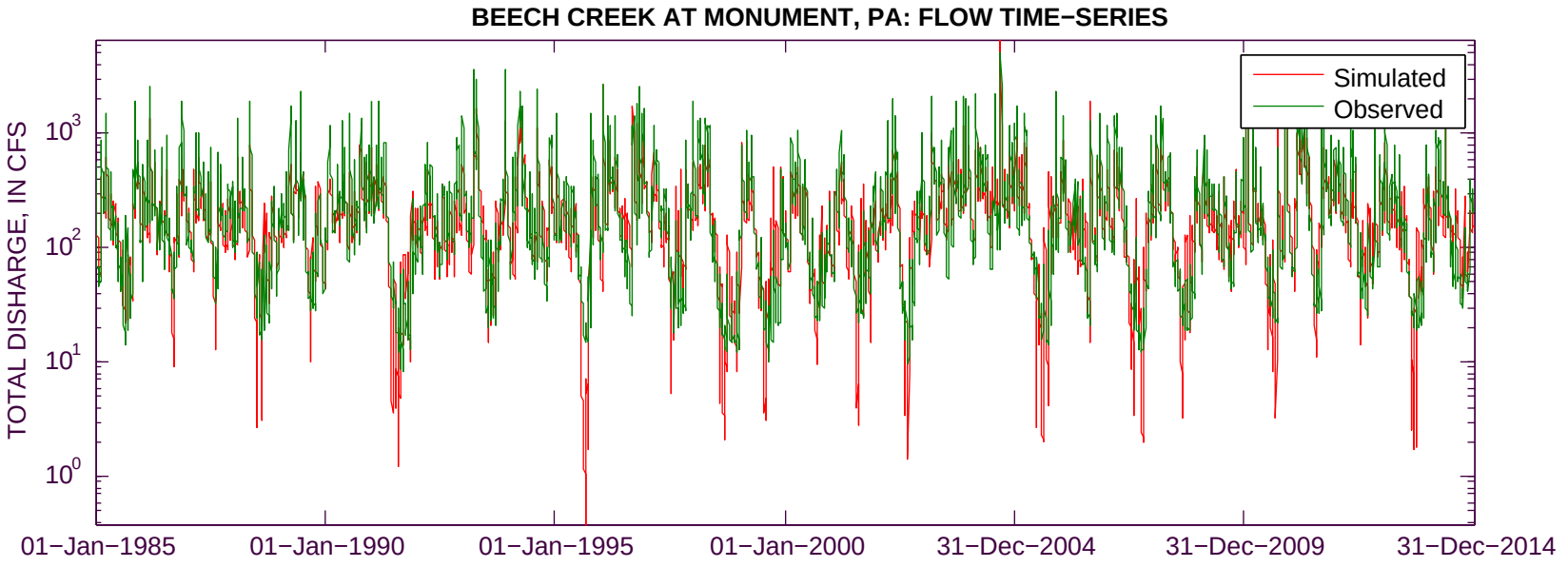
Dates: 1/1/1985 – 12/31/201

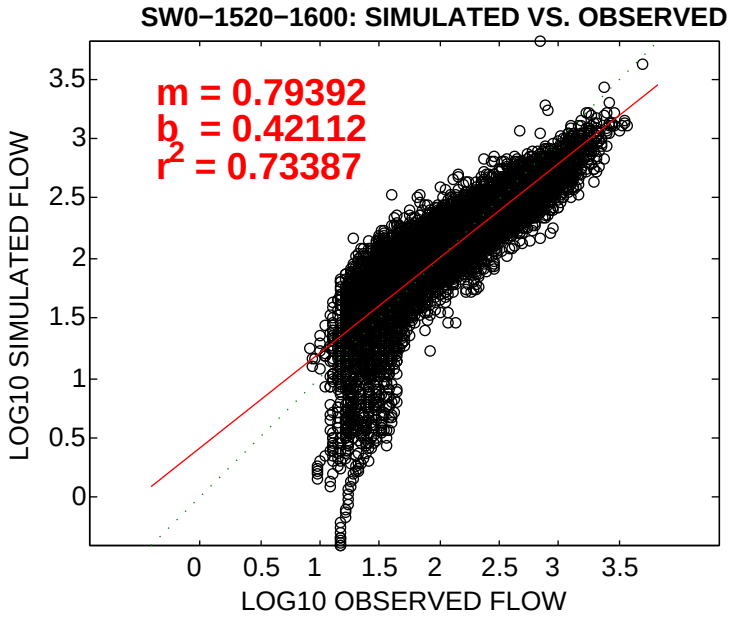
Drive: N/A | Directory: model | Observed: OBS20161101

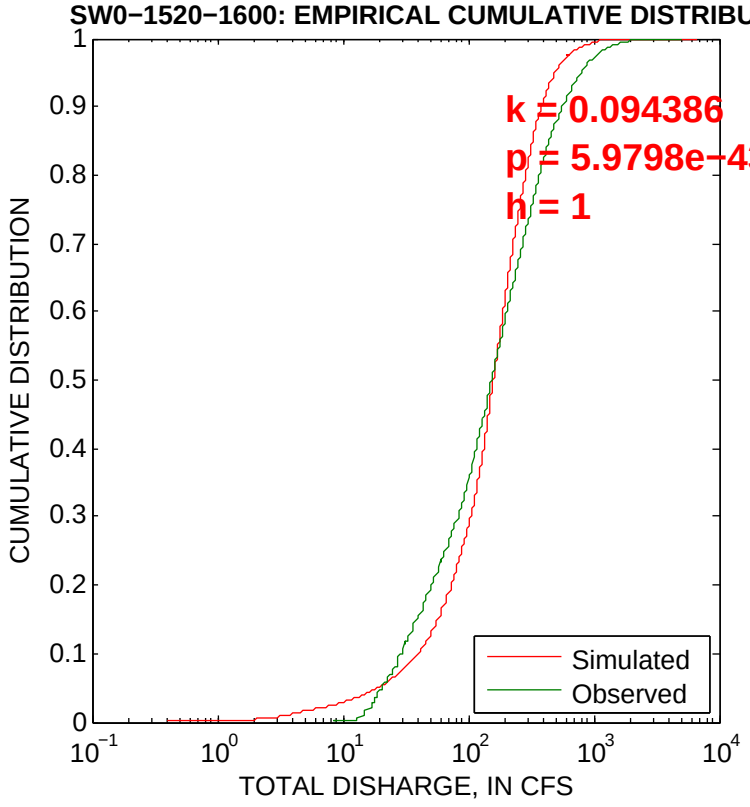
STATISTICS

	n	6	6
		observe	simulate
min		8.4	8.2611
		0.924279	0.917038
mean		11.8167	10.6086
		1.06217	1.01893
media		11.6	10.5573
		1.06342	1.02203
max		16.6	13.745
		1.22011	1.13814
varian		8.23367	4.2405
		0.0106278	0.00697852
JB		0.5	0.5
		0.5	0.5
		ra	log
%		-10.223	-4.07147
err.va		2.54853	0.00282173
rel.std.err		0.309525	0.265506
mod.eff		0.690475	0.734494

VERSION 2.1







DATA SELECTION

scenario: P620171001WQ | file: FLOW.calib

plot: FLOW - total discharge

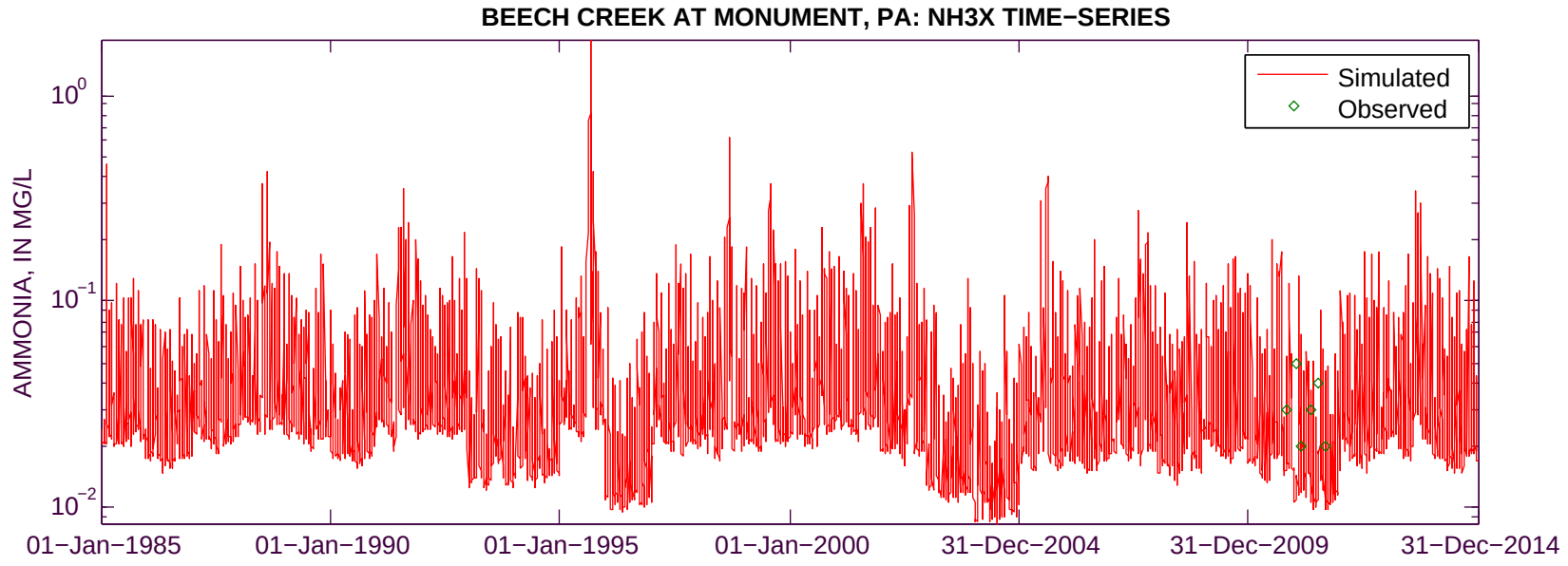
Dates: 1/1/1985 – 12/31/201

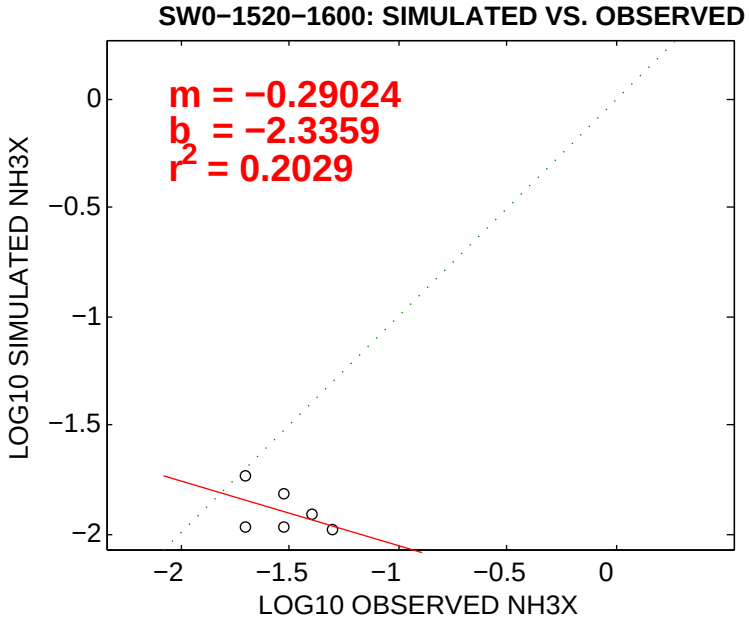
Drive | Directory | Observed: N/A | model | OBS20161101

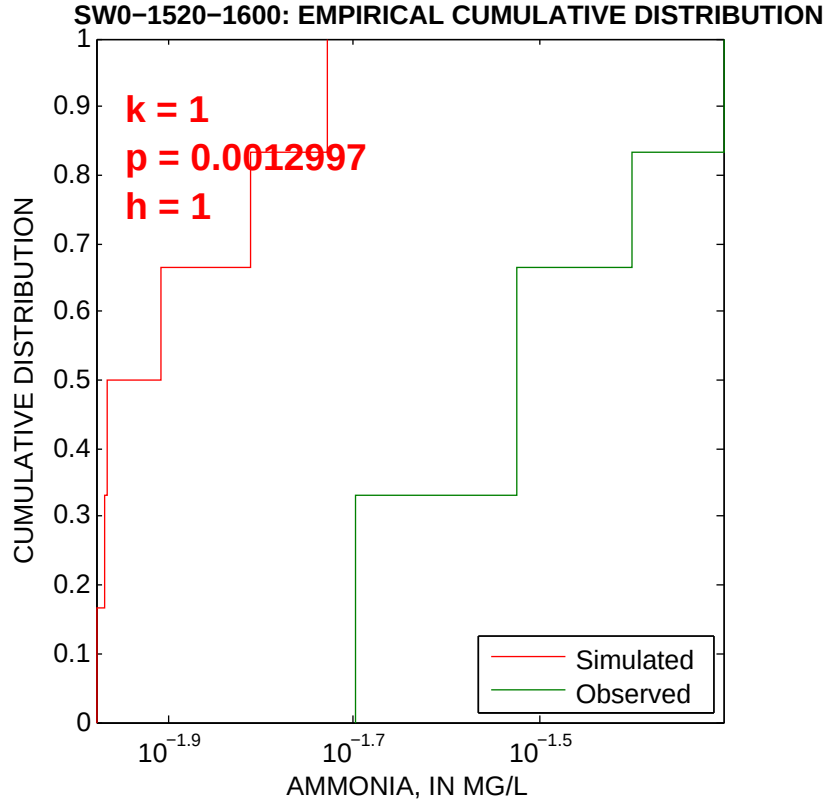
STATISTICS

		observe	simulate
n		10955	10955
min		8.3	0.38723
		0.919078	-0.412031
mean		250.795	199.606
		2.15746	2.13397
media		154	159.61
		2.18752	2.20306
max		5040	6701.9
		3.70243	3.8262
varian		92299.3	34956.1
		0.228522	0.196276
JB		0.001	0.001
		0.001	0.001
		ra	log
%		-20.4108	-1.08854
err.va		34991.2	0.0624921
rel.std.err		0.379105	0.273462
mod.eff		0.620895	0.726538

VERSION 2.1







DATA SELECTION

scenario	file
P620171001WQ	NH3X.calib

plot: NH3X - ammonia

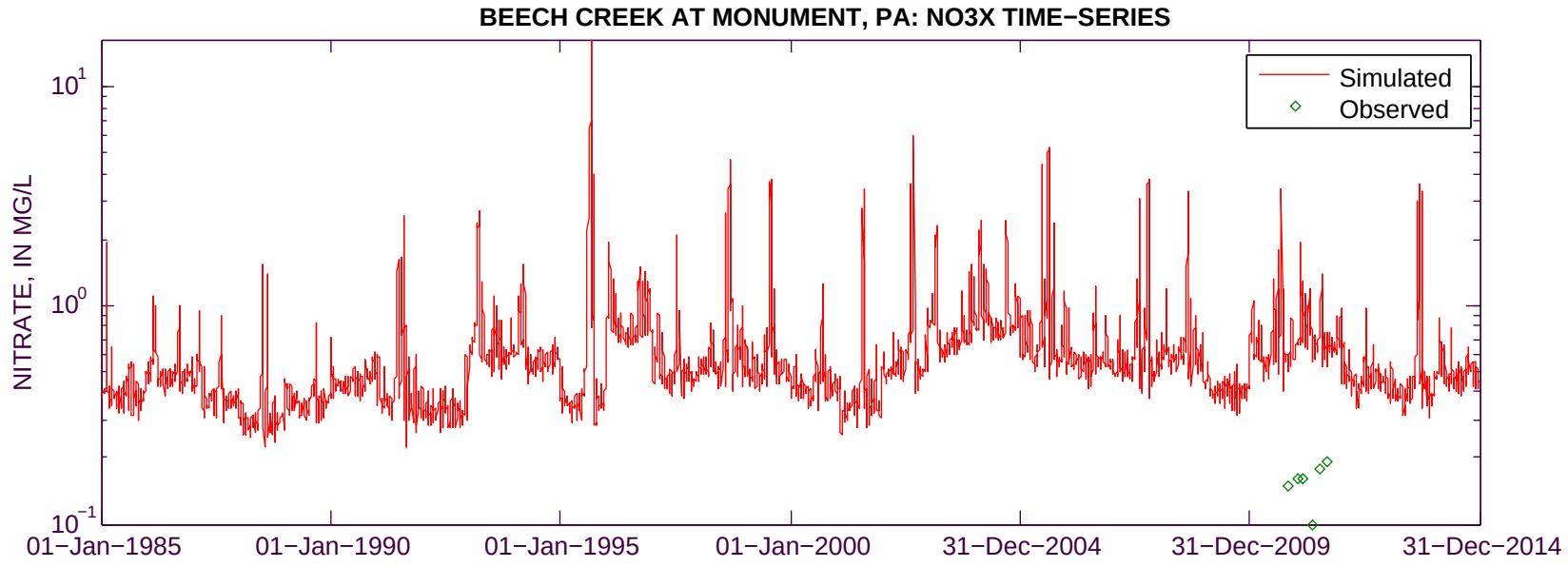
Dates 1/1/1985 12/31/201

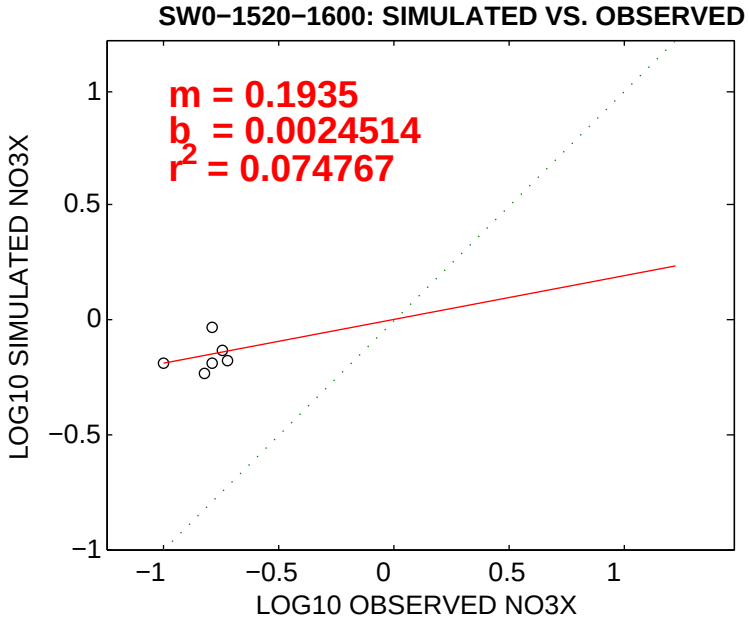
Drive	Directory	Observed
N/A	model	OBS20161101

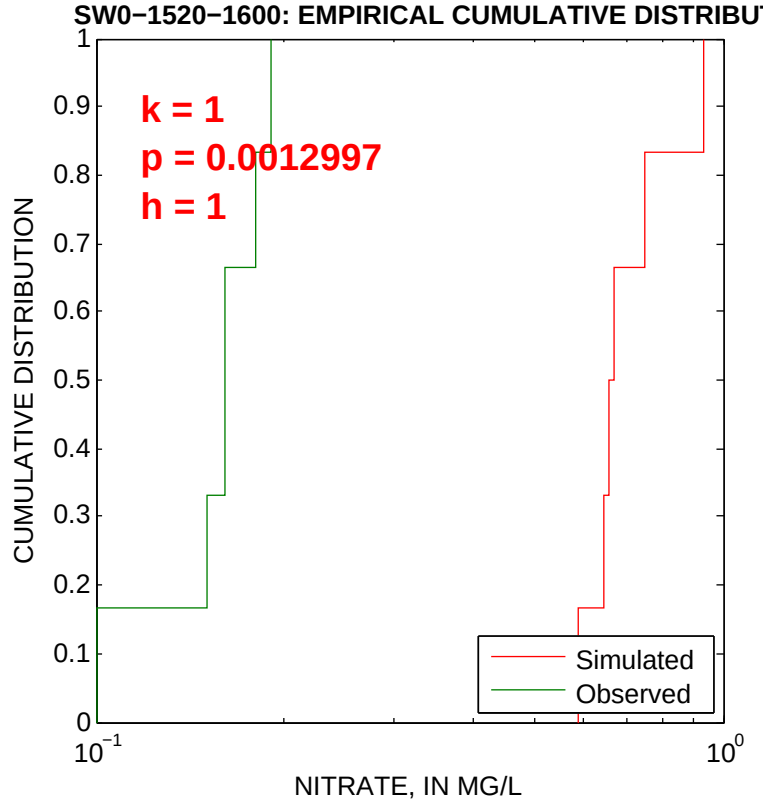
STATISTICS

	n	6	6
		observe	simulate
min		0.02	0.010492
		-1.69897	-1.97914
mean		0.0316667	0.0130908
		-1.52378	-1.89363
media		0.03	0.011582
		-1.52288	-1.93724
max		0.05	0.01873
		-1.30103	-1.72746
varian		0.00013666	1.10282e-0
		0.0253676	0.0105322
JB	✓	0.5	0.140719 ✓
	✓	0.5	0.20709 ✓
		ra	log
%		-58.6605	24.2722
err.va		0.00059864	0.214776
rel.std.err		4.38032	8.46656
mod.eff		-3.38032	-7.46656

VERSION







DATA SELECTION

scenario	file
P620171001WQ	NO3X.calib

plot: NO3X - nitrate

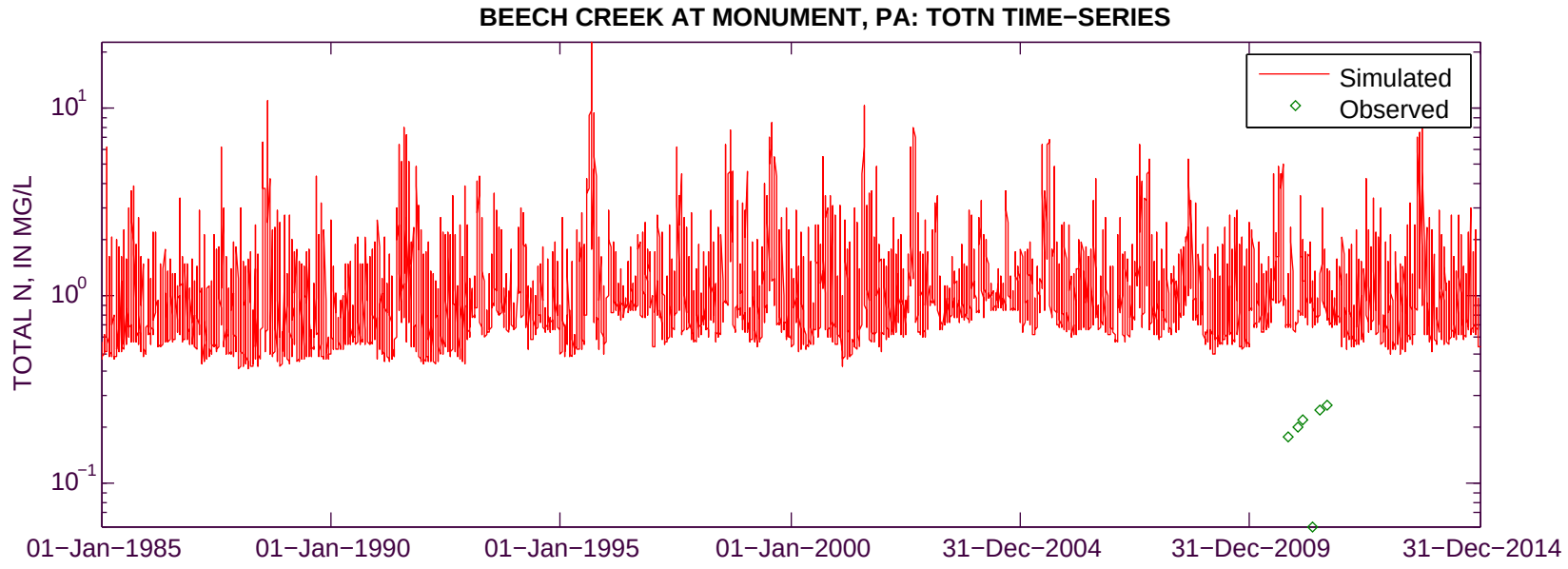
Dates: 1/1/1985 – 12/31/201

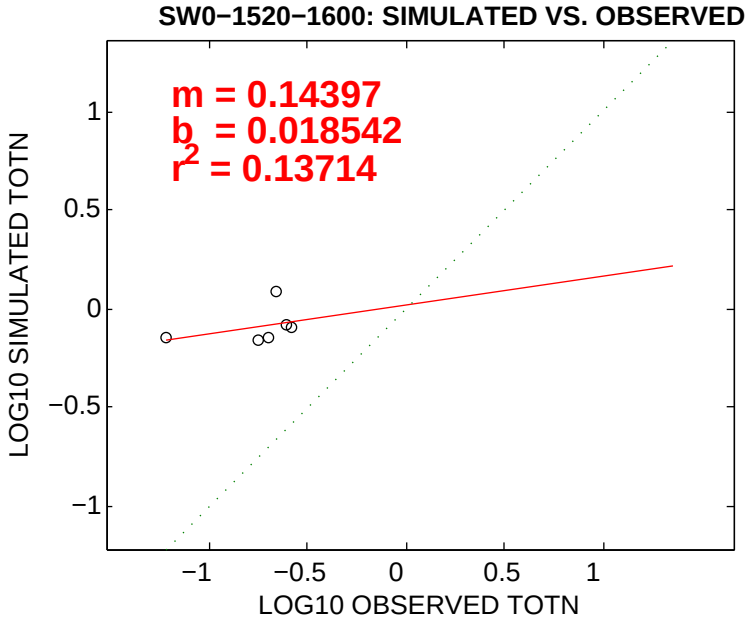
Drive	Directory	Observed
N/A	model	OBS20161101

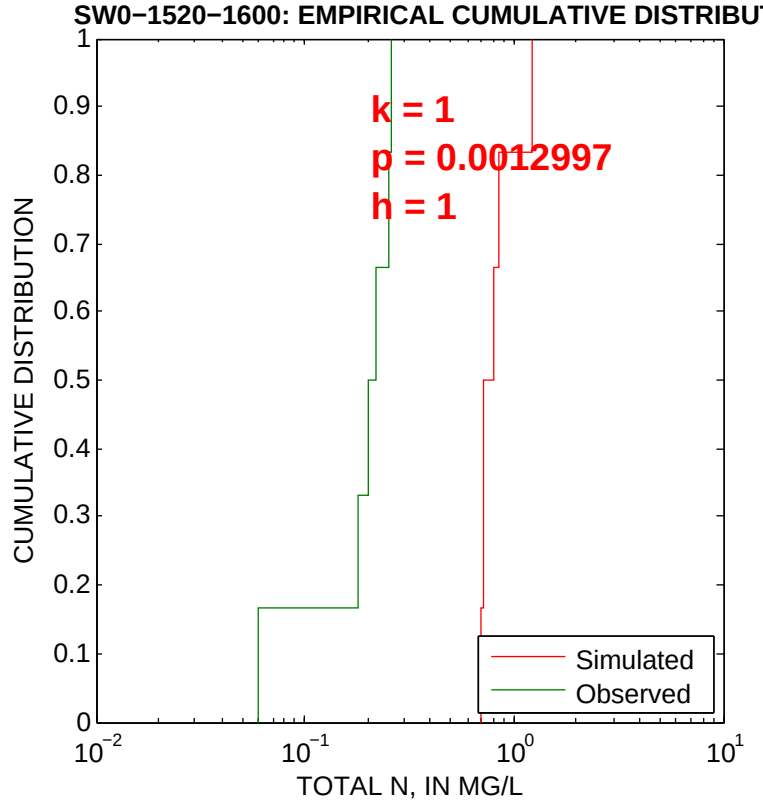
STATISTICS

	n	6	6
		observe	simulate
min		0.1	0.58827
		-1	-0.230423
mean		0.156667	0.707817
		-0.813607	-0.154981
media		0.16	0.665785
		-0.79588	-0.176689
max		0.19	0.93394
		-0.721246	-0.029681
varian		0.00098666	0.0148959
		0.00975037	0.0048828
JB		0.163904	0.071153
		0.052750	0.141587
		ra	log
%		351.798	-80.9513
err.va		0.378538	0.531405
rel.std.err		383.653	54.5011
mod.eff		-382.653	-53.5011

VERSION 2.1







DATA SELECTION

scenario	file
P620171001WQ	TOTN.calib

plot: TOTN - total nitrogen

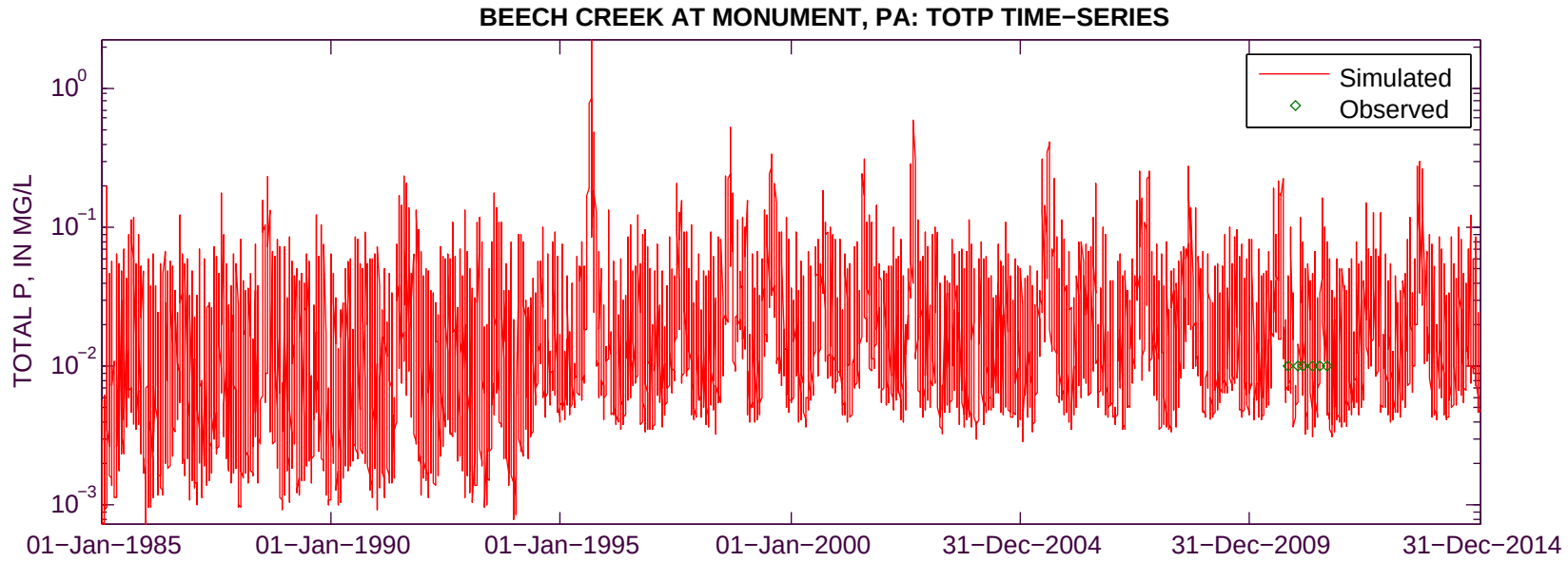
Dates: 1/1/1985 – 12/31/201

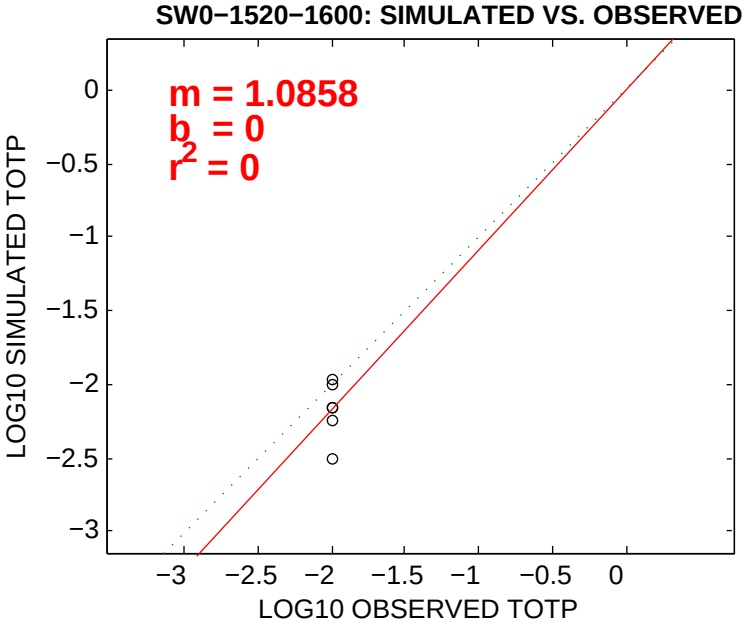
Drive	Directory	Observed
N/A	model	OBS20161101

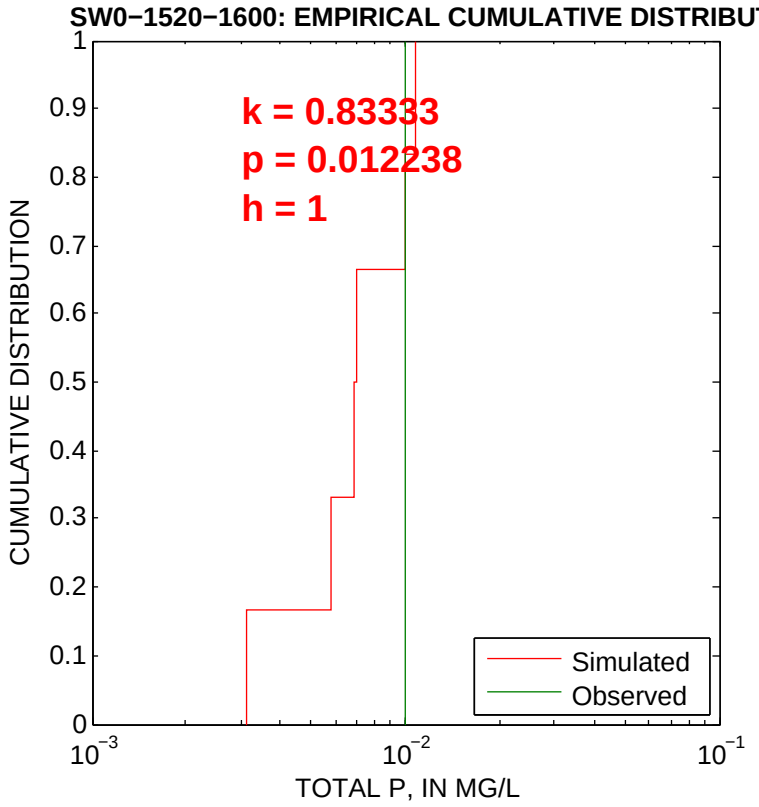
STATISTICS

	n	6	6
		observe	simulate
min		0.06	0.69322
		-1.22185	-0.159129
mean		0.195	0.830327
		-0.751702	-0.0896788
media		0.21	0.75654
		-0.678274	-0.121715
max		0.26	1.2236
		-0.585027	0.0876395
varian		0.00527	0.0402343
		0.05658	0.0085516
JB		0.070278	0.013467
		0.009296	0.029593
		ra	log
%		325.809	-88.0699
err.va		0.519714	0.574769
rel.std.err		98.6175	10.1585
mod.eff		-97.6175	-9.15852

VERSION 2.1







DATA SELECTION

scenario	file
P620171001WQ	TOTP.calib

plot: TOTP - total phosphorus

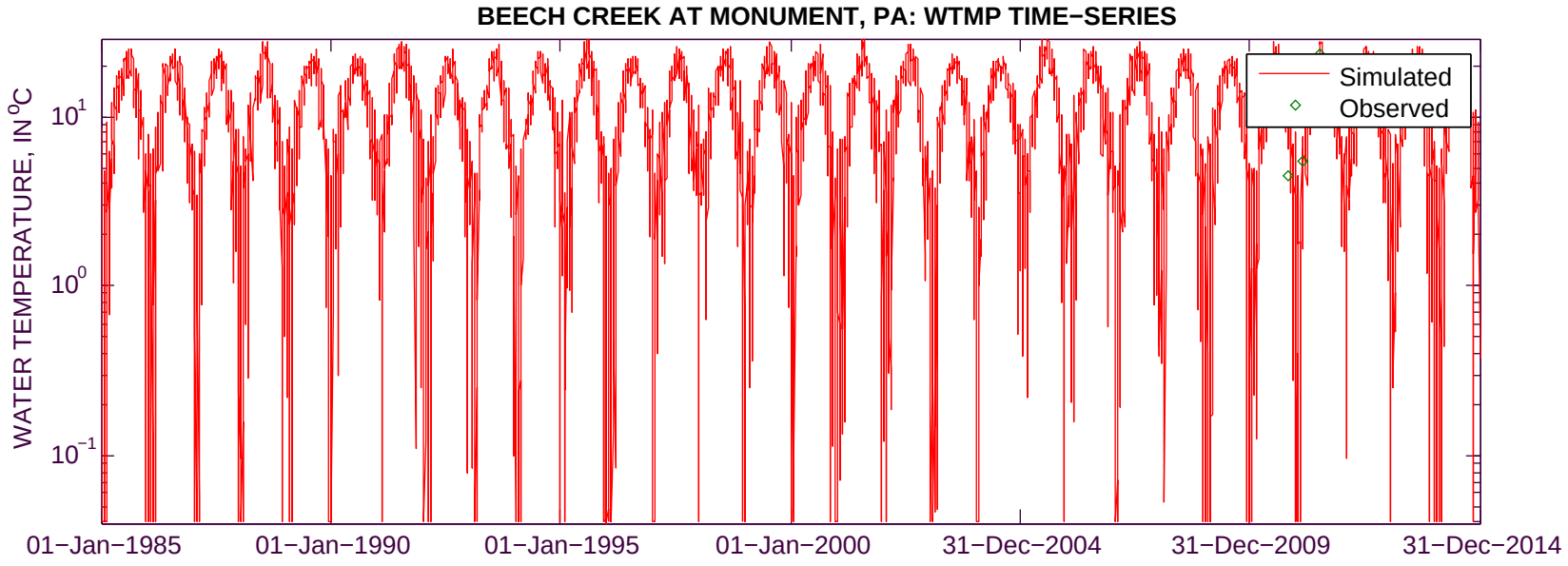
Dates: 1/1/1985 – 12/31/201

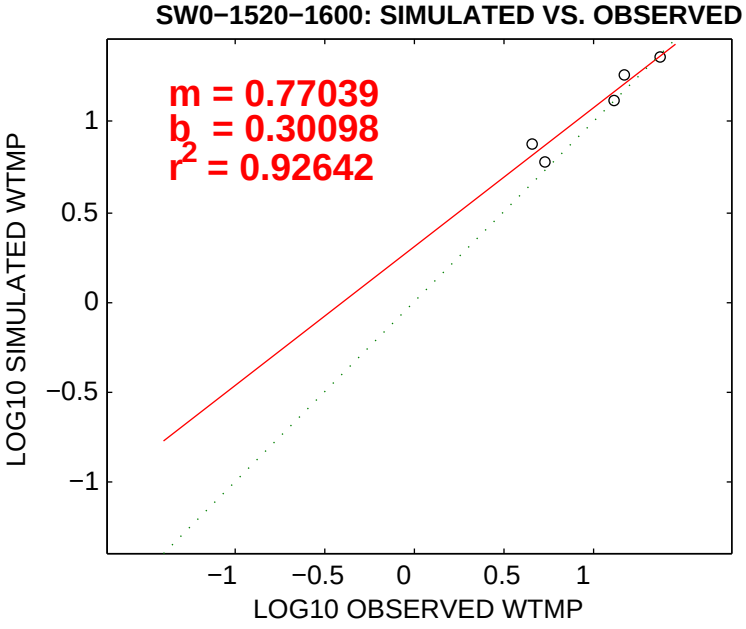
Drive	Directory	Observed
N/A	model	OBS20161101

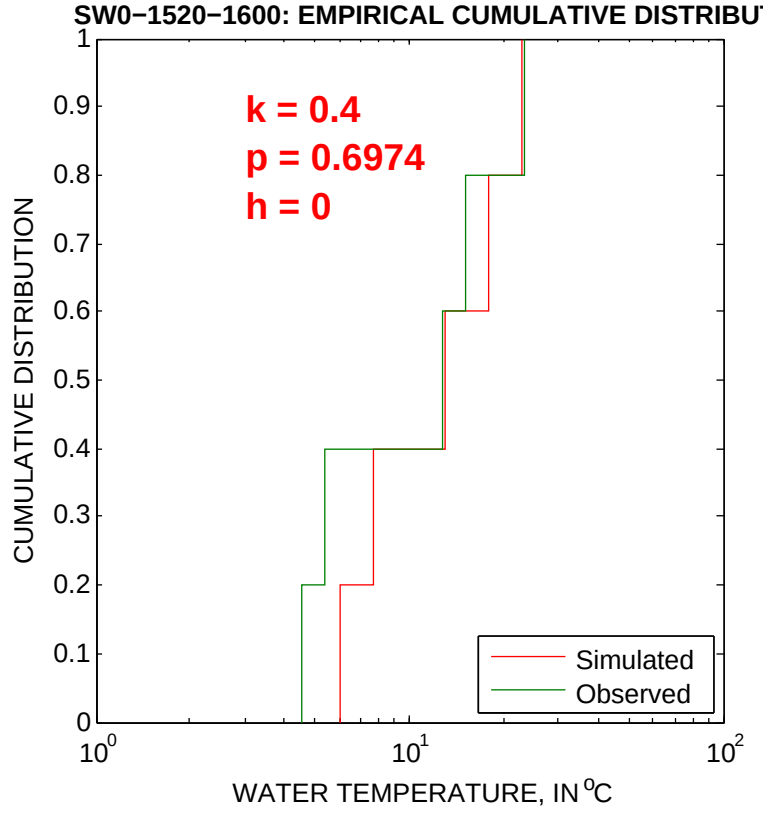
STATISTICS

	n	6	6
		observe	simulate
min		0.01	0.0031097
		-2	-2.50728
mean		0.01	0.00725945
		-2	-2.17168
media		0.01	0.00695675
		-2	-2.15764
max		0.01	0.01082
		-2	-1.96577
varian		0	7.93029e-0
		0	0.0378045
JB	✓	NaN	0.5 ✓
	✓	NaN	0.492289 ✓
		ra	log
%		-27.4055	8.58416
err.va		1.6943e-05	0.0731747
rel.std.err		Inf	Inf
mod.eff		-Inf	-Inf

VERSION 2.1







DATA SELECTION

scenario	file
P620171001WQ	WTMP.calib

plot: WTMP - water tempera...

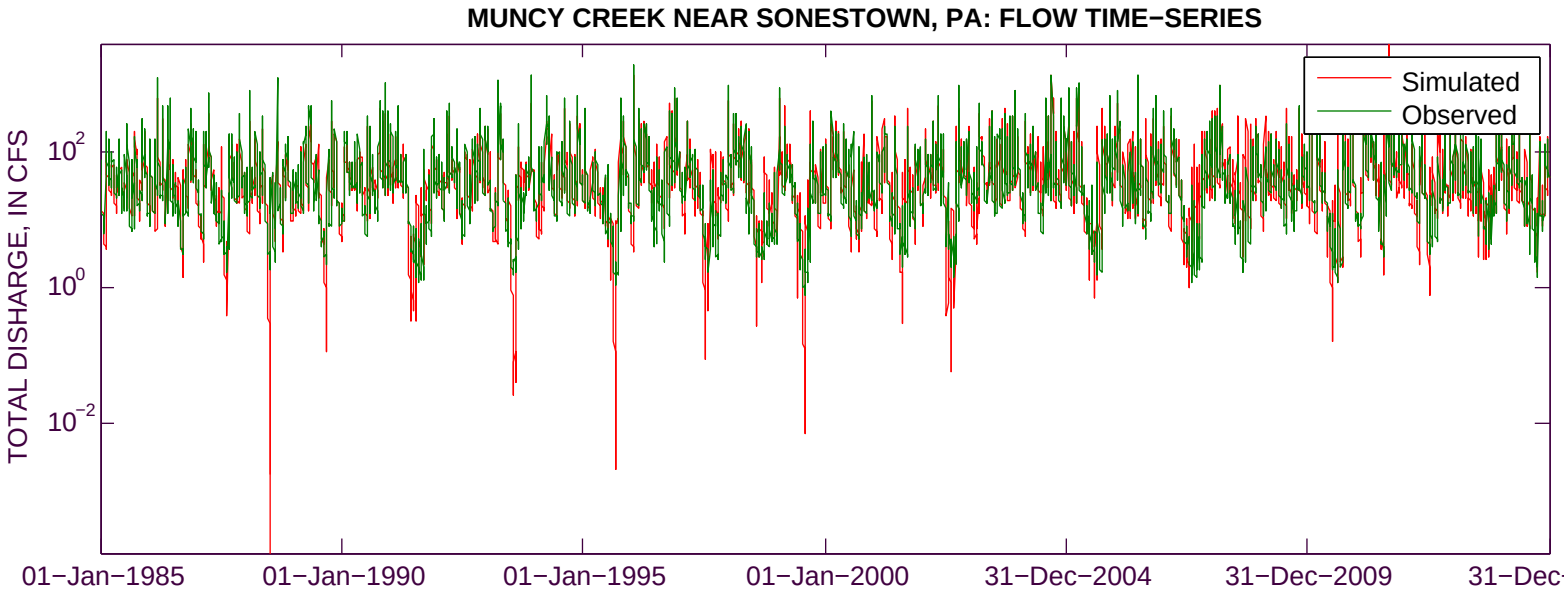
Dates 1/1/1985 12/31/201

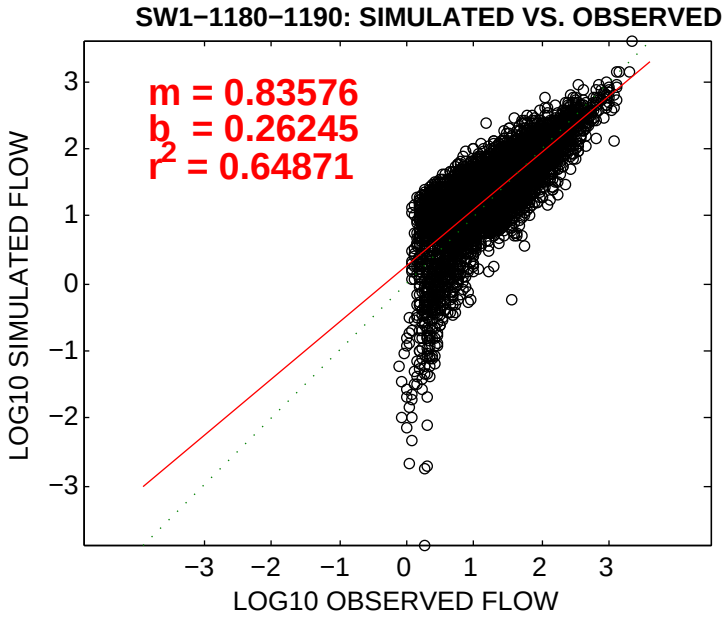
Drive	Directory	Observed
N/A	model	OBS20161101

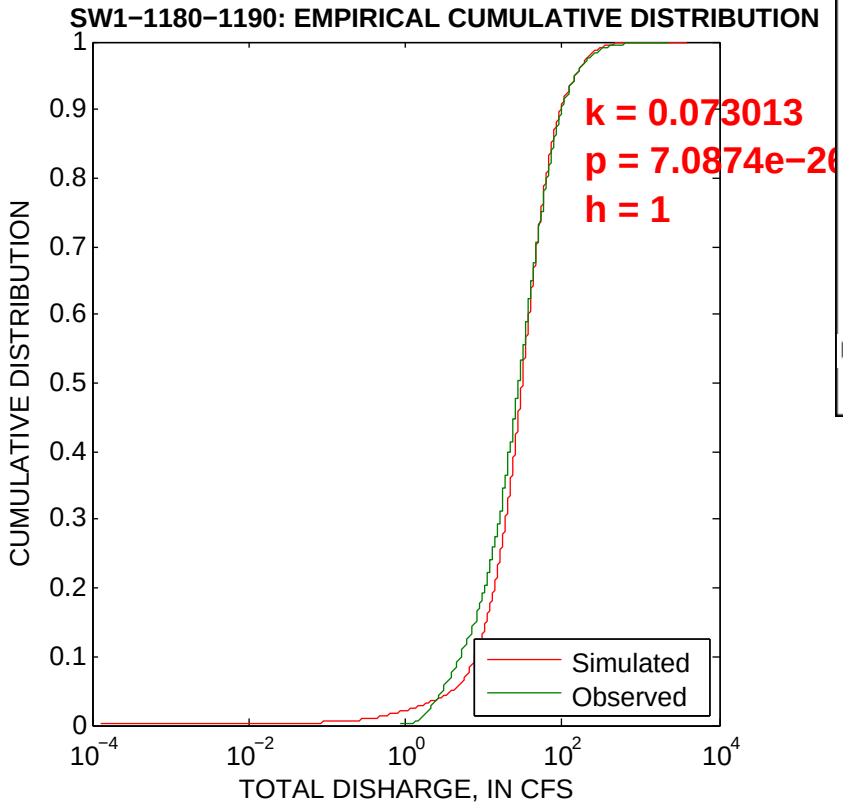
STATISTICS

	n	5	5
		observe	simulate
min		4.5	6.0145
		0.653213	0.7792
mean		12.24	13.4772
		1.008	1.07753
media		12.8	12.995
		1.10721	1.11378
max		23.5	22.703
		1.37107	1.35608
varian		60.353	49.0639
		0.0929371	0.0595395
JB		0.5	0.5
		0.5	0.5
		ra	log
%		10.1082	6.89807
err.va		5.02764	0.0153239
rel.std.err		.0833039	0.164884
mod.eff		0.916696	0.835116

VERSION 3.1







DATA SELECTION

scenario: P620171001WQ | file: FLOW.calib

plot: FLOW - total discharge

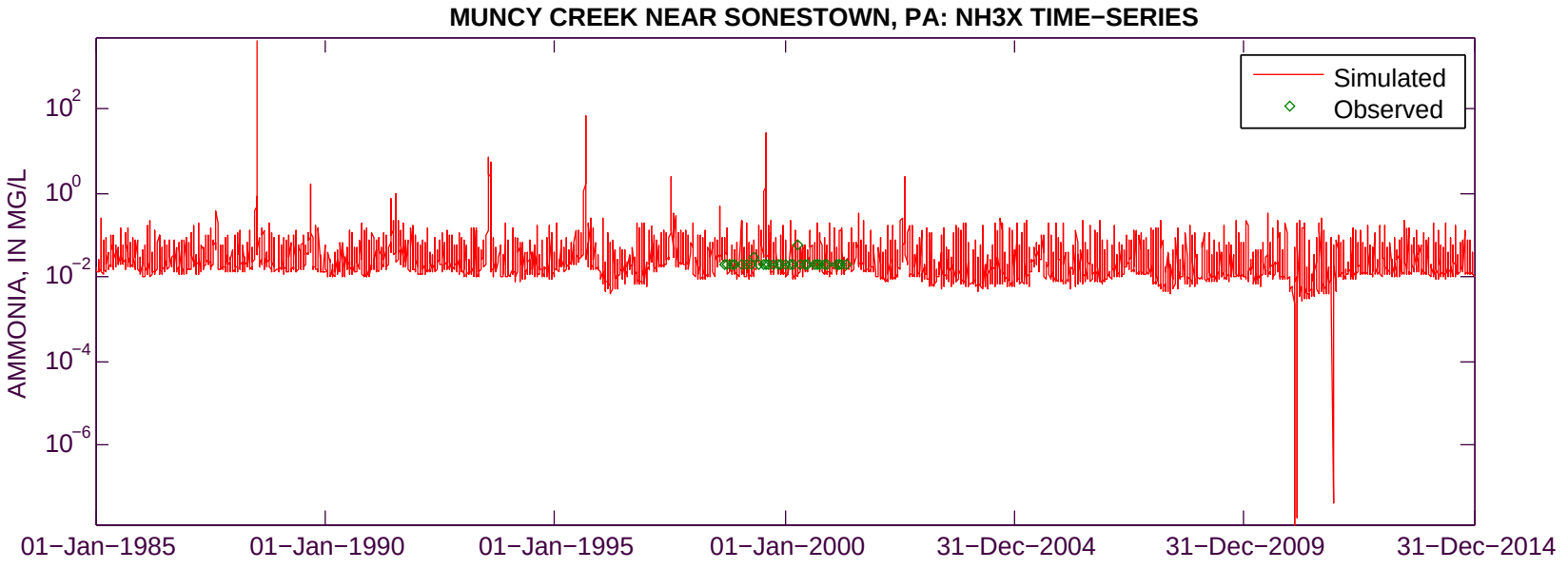
Dates: 1/1/1985 – 12/31/201

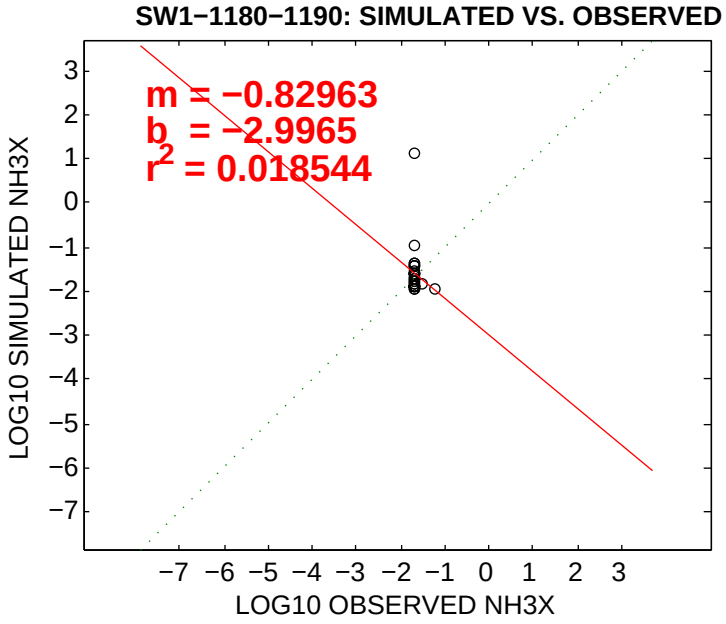
Drive: N/A | Directory: model | Observed: OBS20161101

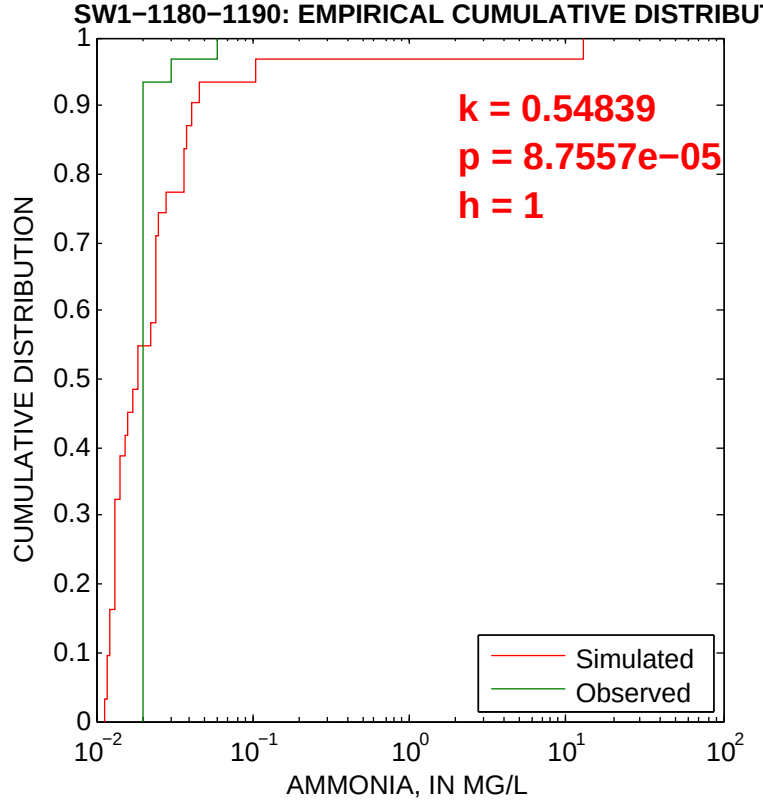
STATISTICS

		observe	simulate
n		10957	10954
min		0.81	0
		-0.091515	-3.90094
mean		48.7053	48.2838
		1.41099	1.4417
media		28	31.015
		1.44716	1.49162
max		2290	4031.4
		3.35984	3.60546
varian		7003.52	5782.37
		0.250775	0.27002
JB		0.001	0.001
		0.001	0.001
		ra	log
%		-0.865257	2.17678
err.va		2029.94	0.102563
rel.std.err		0.289846	0.408984
mod.eff		0.710154	0.591016

VERSION 2.1







DATA SELECTION

scenario	file
P620171001WQ	NH3X.calib

plot: NH3X - ammonia

Dates: 1/1/1985 – 12/31/201

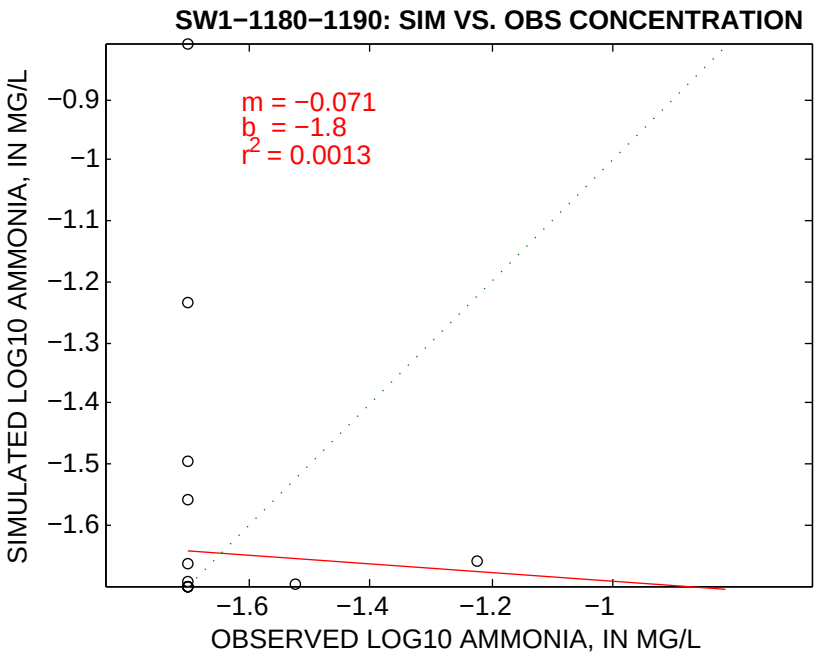
Drive	Directory	Observed
N/A	model	OBS20161101

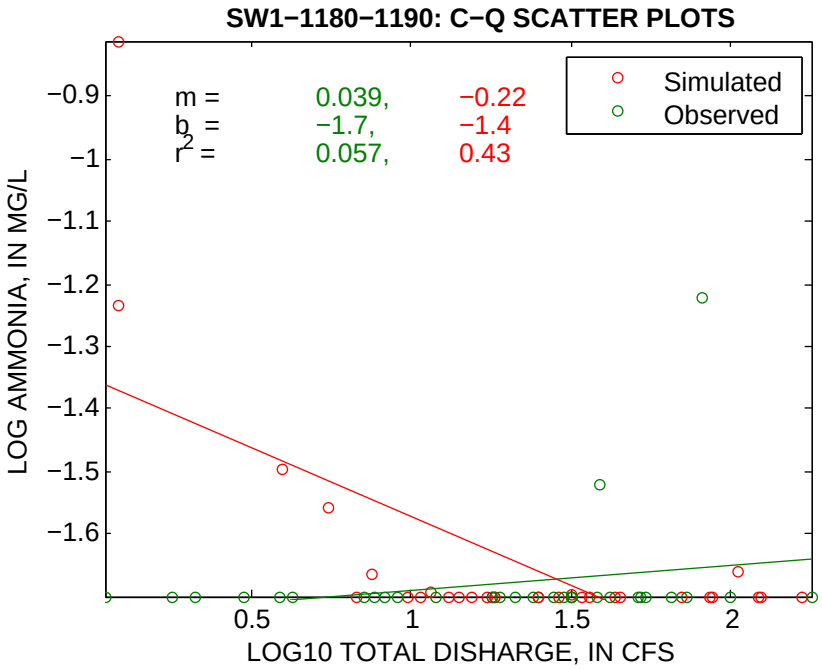
STATISTICS

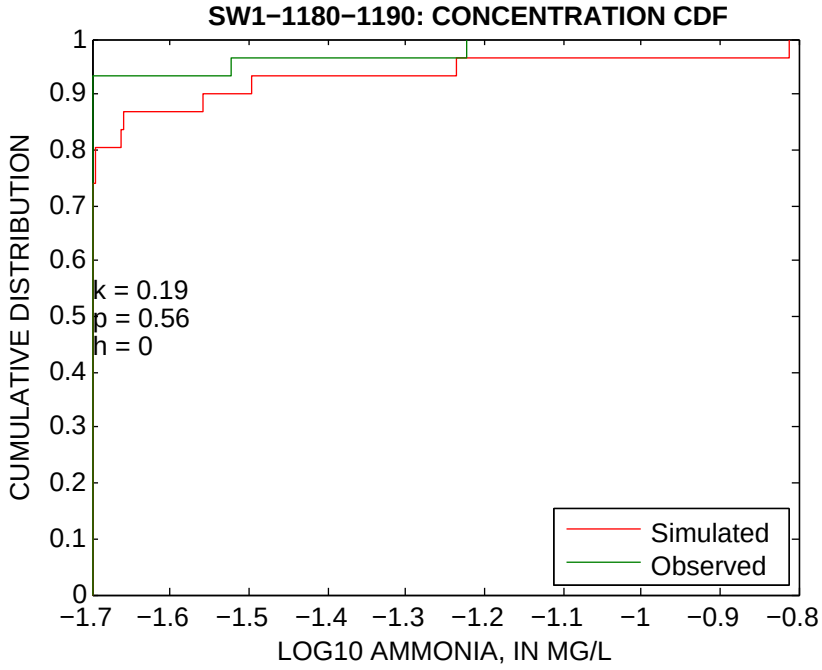
	n	31	31
		observe	simulate
min		0.02	0.011453
		-1.69897	-1.94108
mean		0.0216129	0.435123
		-1.6779	-1.60443
media		0.02	0.018524
		-1.69897	-1.73227
max		0.06	12.777
		-1.22185	1.10643
varian		5.39785e-0	5.24695
		0.00816296	0.302978
JB		0.001	0.001
		0.001	0.001
		ra	log
%		1913.25	-4.37857
err.va		5.42511	0.330263
rel.std.err		100505	40.4587
mod.eff		-100504	-39.4587

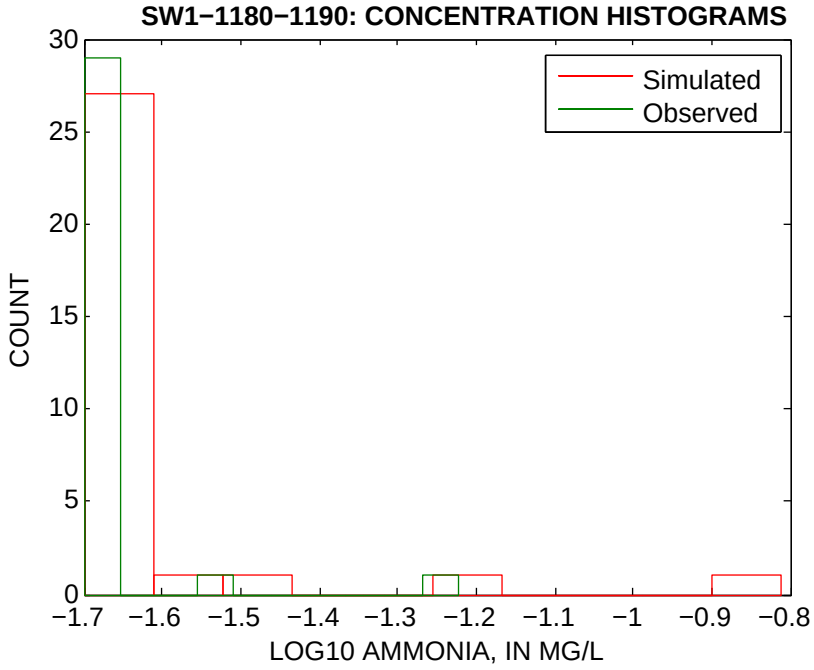
VERSION 2.1

ALL DATA
LOG10

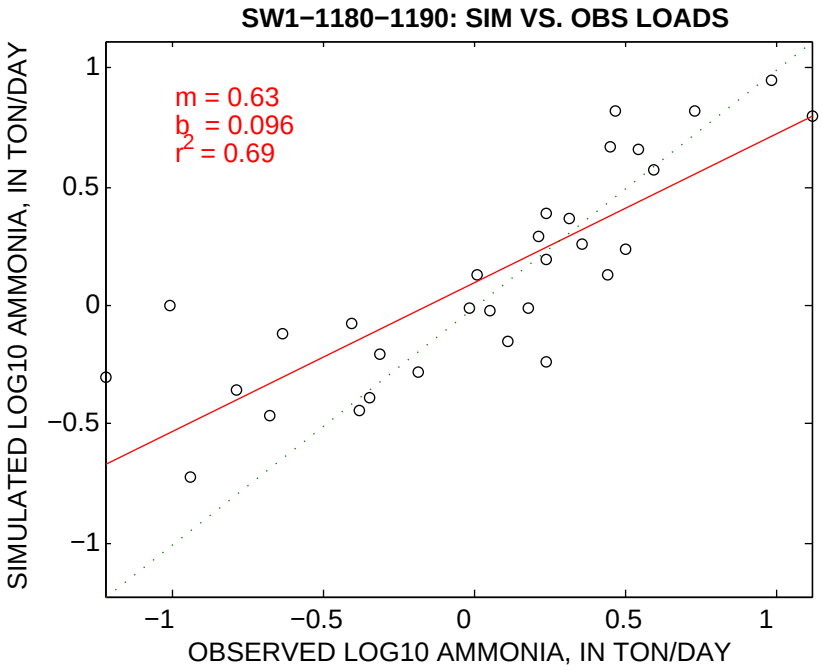


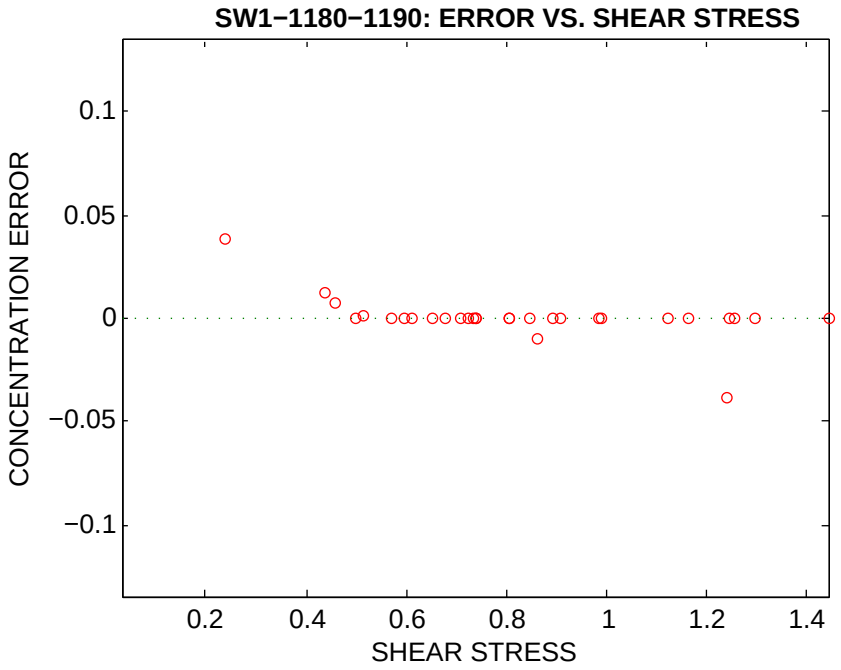


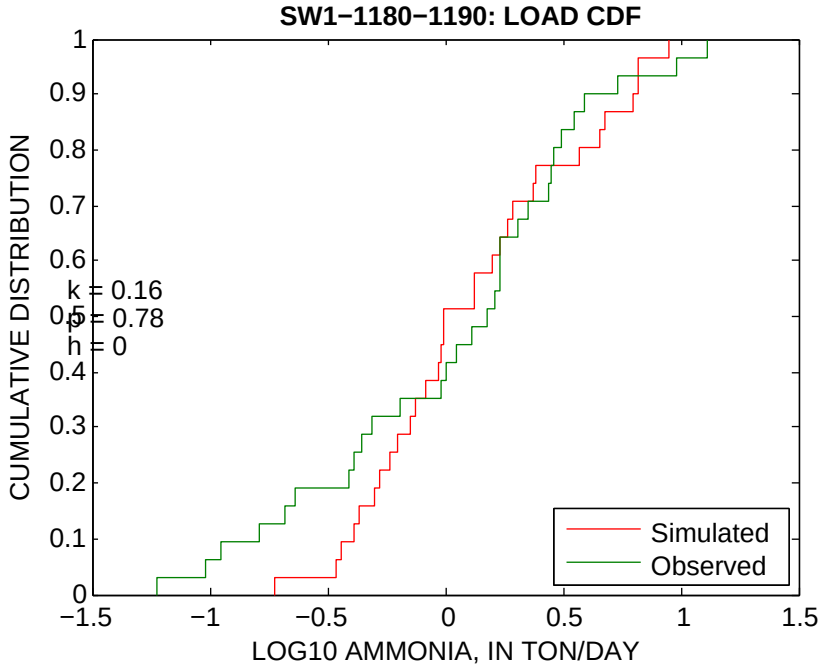


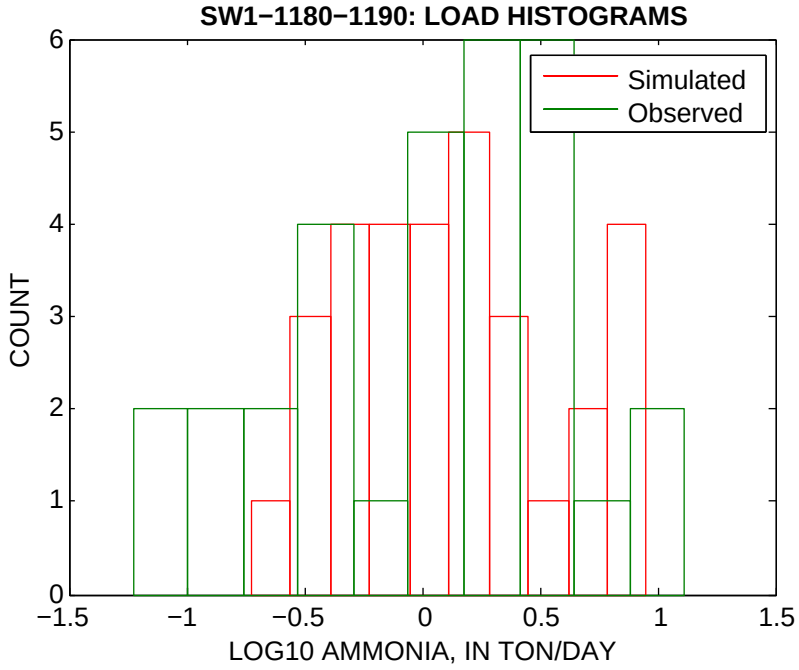


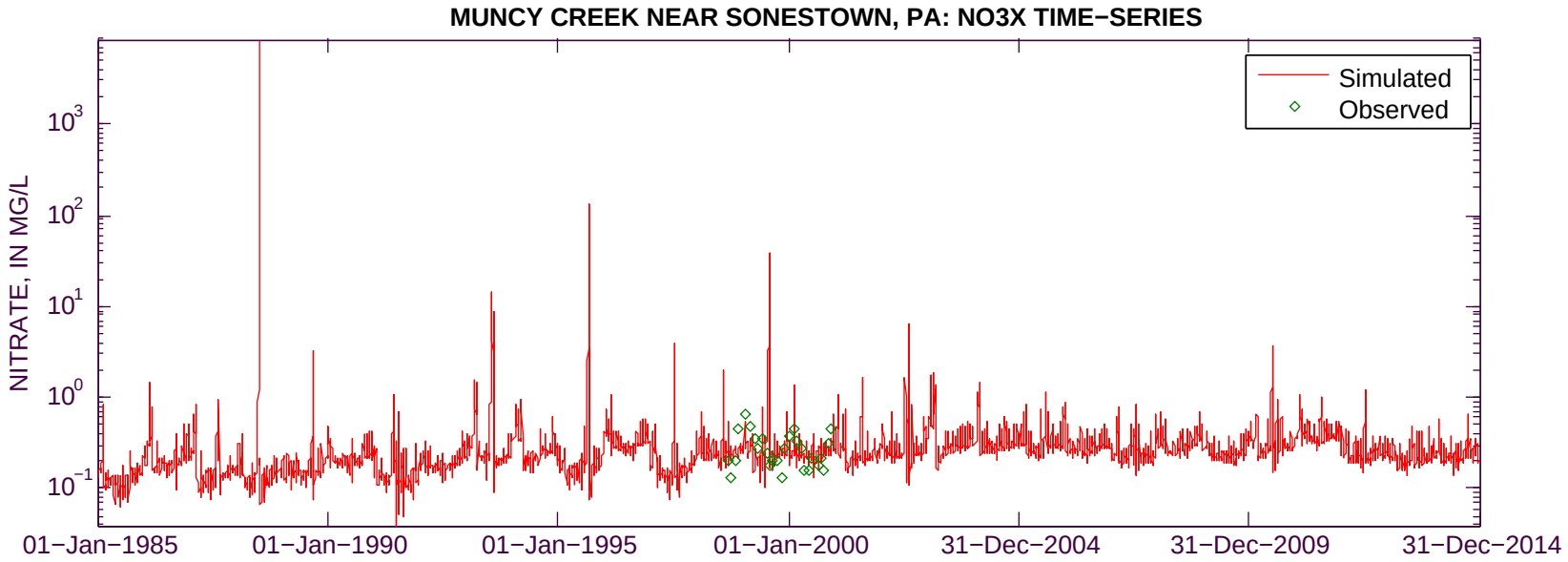
LOAD DATA
LOG10

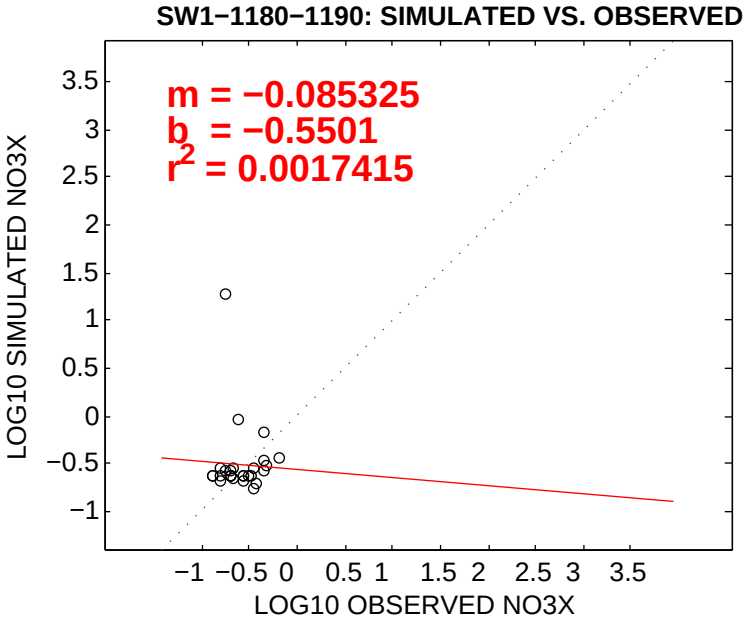


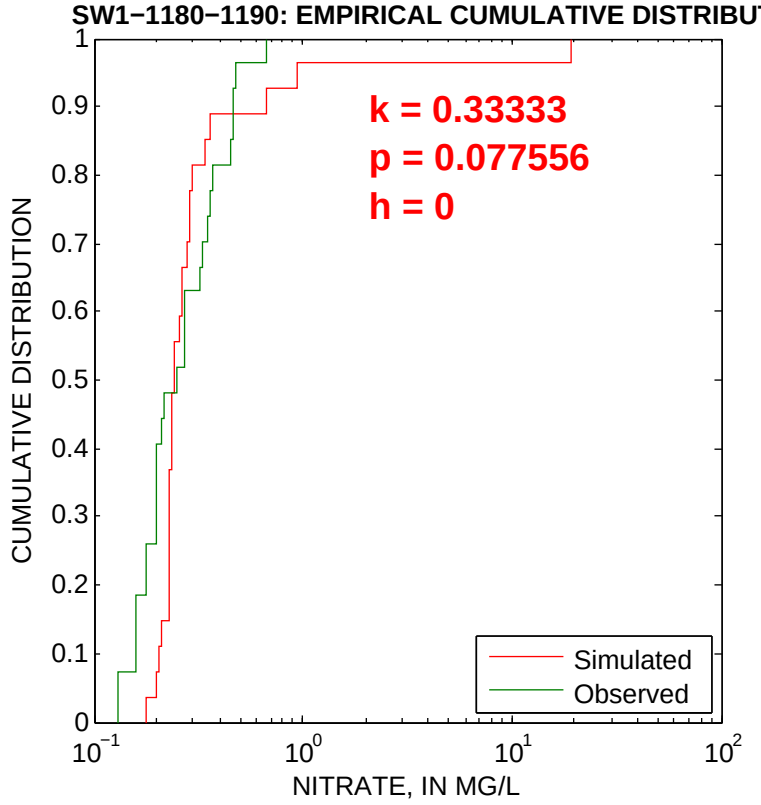












DATA SELECTION

scenario: P620171001WQ | file: NO3X.calib

plot: NO3X - nitrate

Dates: 1/1/1985 – 12/31/201

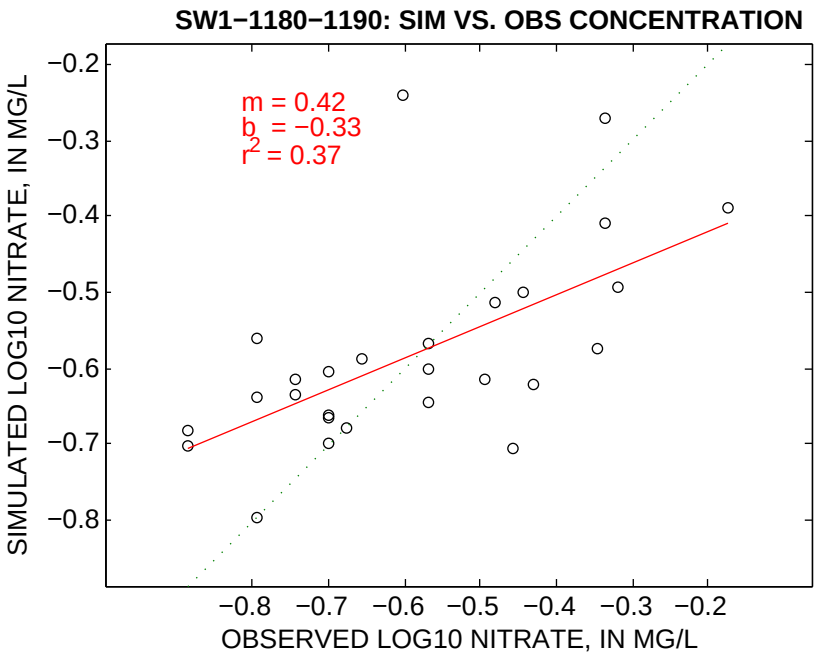
Drive: N/A | Directory: model | Observed: OBS20161101

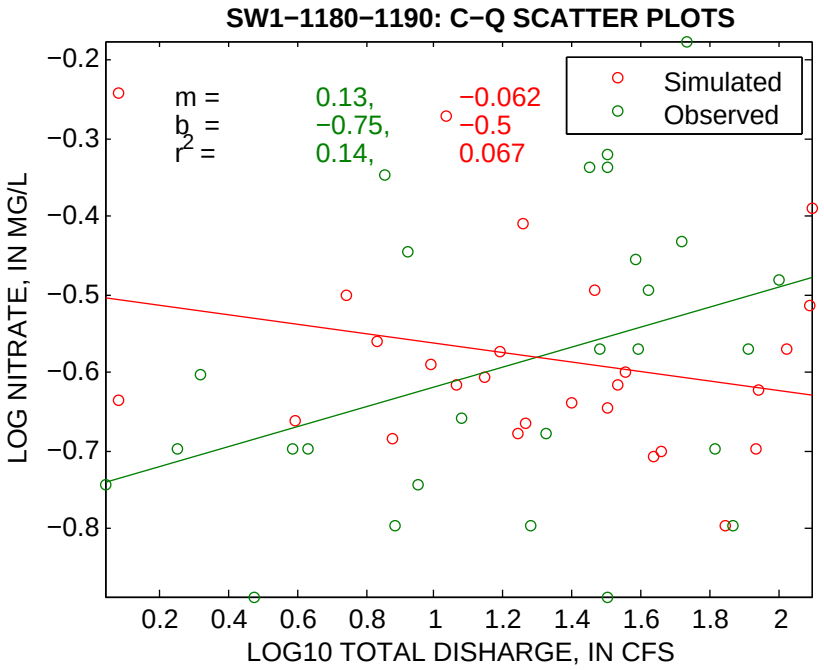
STATISTICS

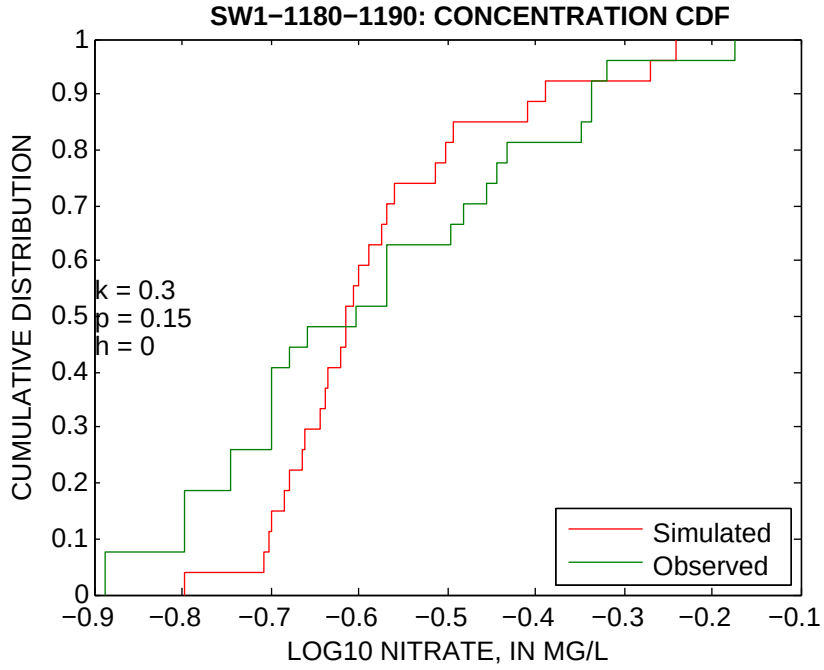
	n	27	27
		observe	simulate
min		0.13	0.17605
		-0.886057	-0.754364
mean		0.282963	0.991516
		-0.589264	-0.499818
media		0.25	0.24081
		-0.60206	-0.618325
max		0.67	19.168
		-0.173925	1.28258
varian		0.0174063	13.22
		0.035787	0.149611
JB		0.026912	0.001
		0.379868	0.001
		ra	log
%		250.405	-15.1793
err.va		13.8993	0.199813
rel.std.err		798.52	5.58341
mod.eff		-797.52	-4.58341

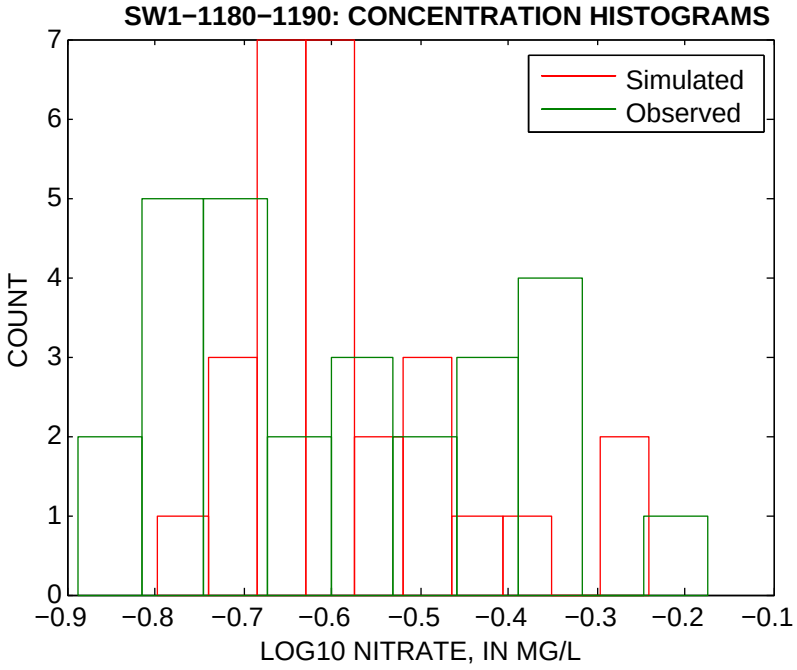
VERSION

ALL DATA
LOG10

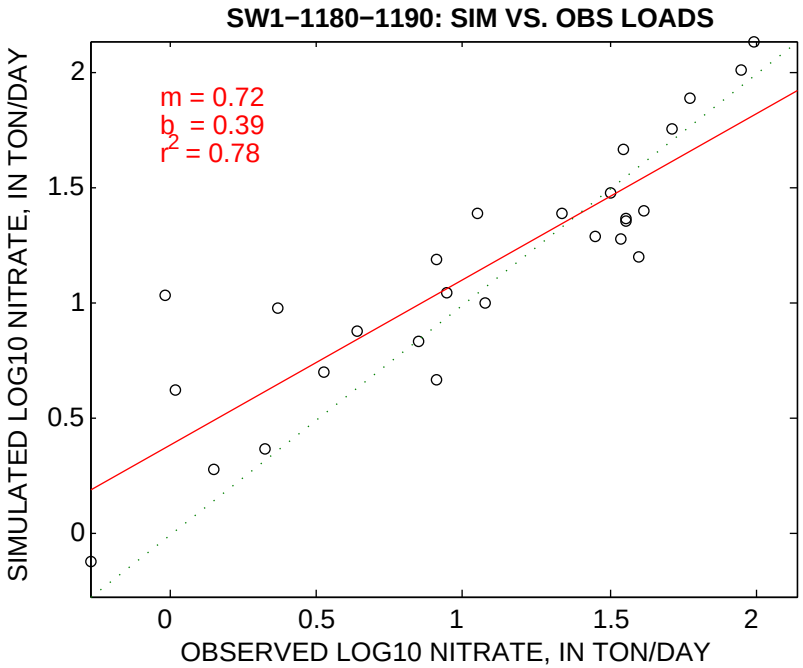


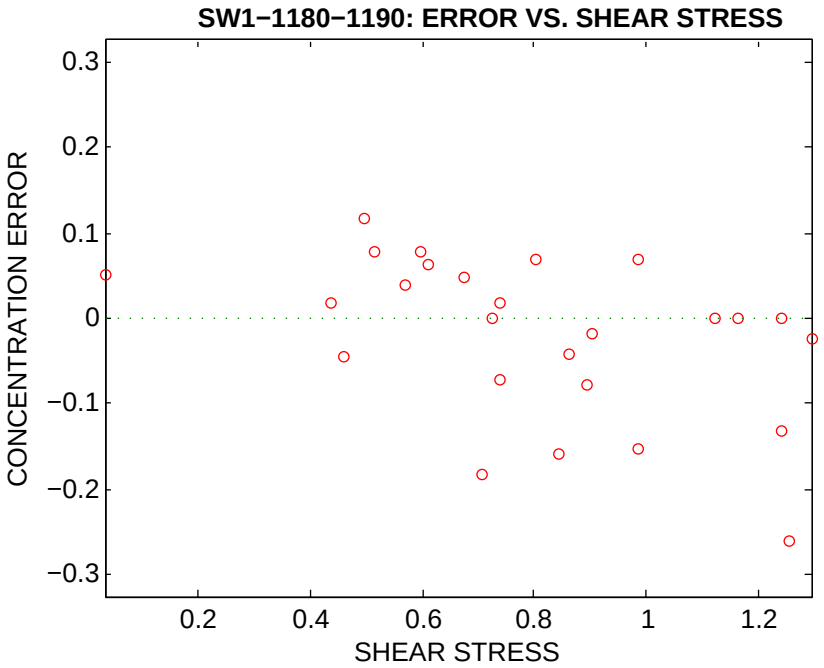


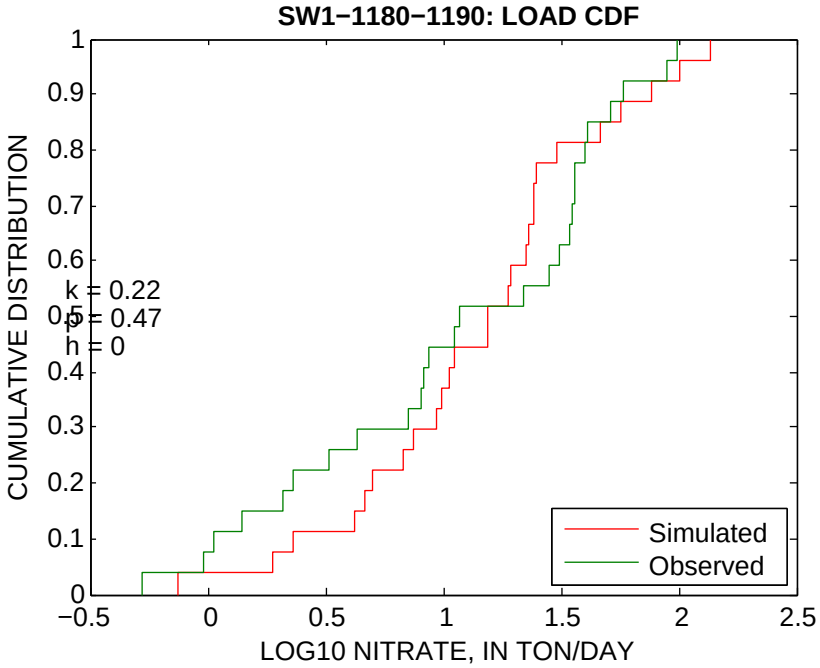


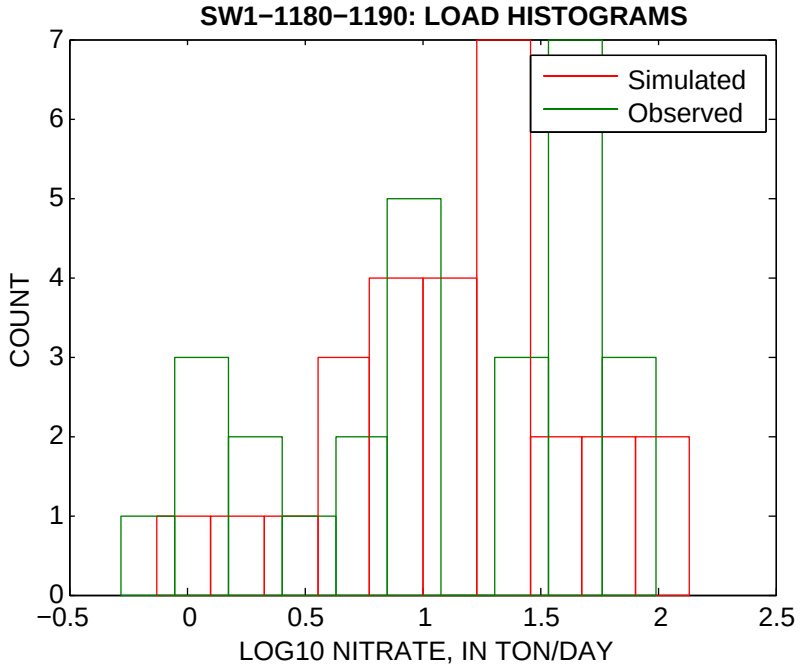


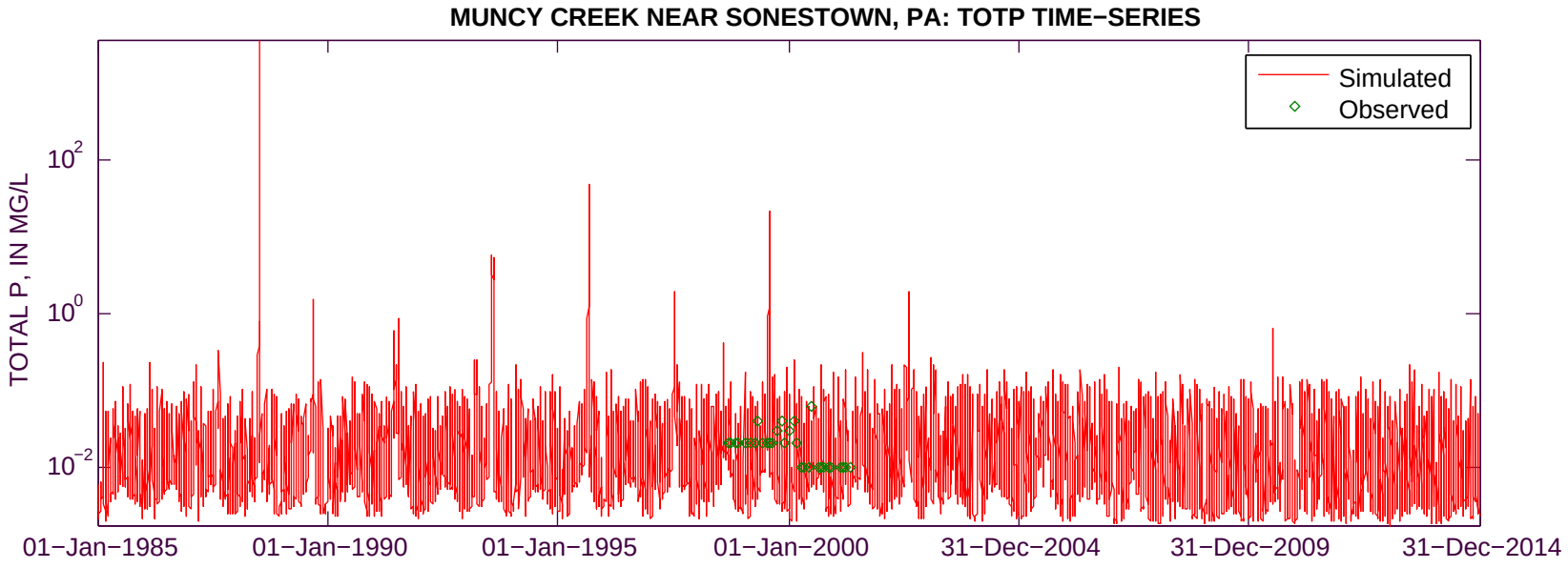
LOAD DATA
LOG10

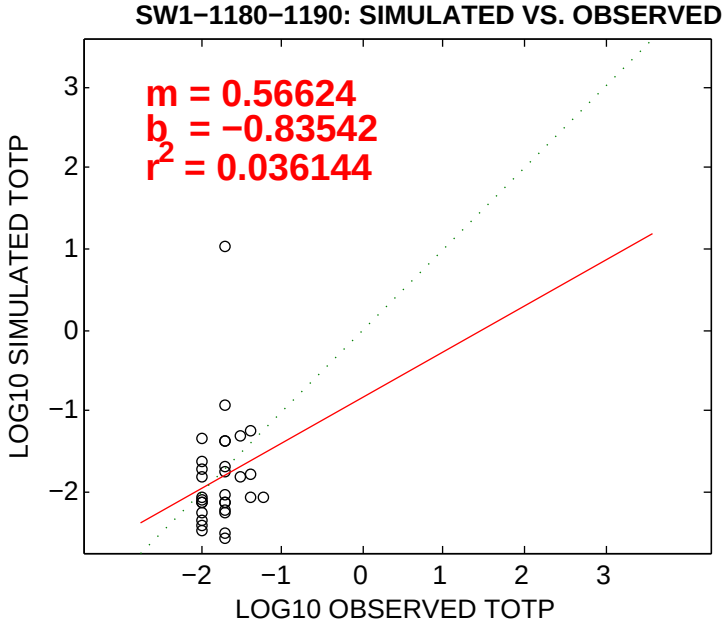


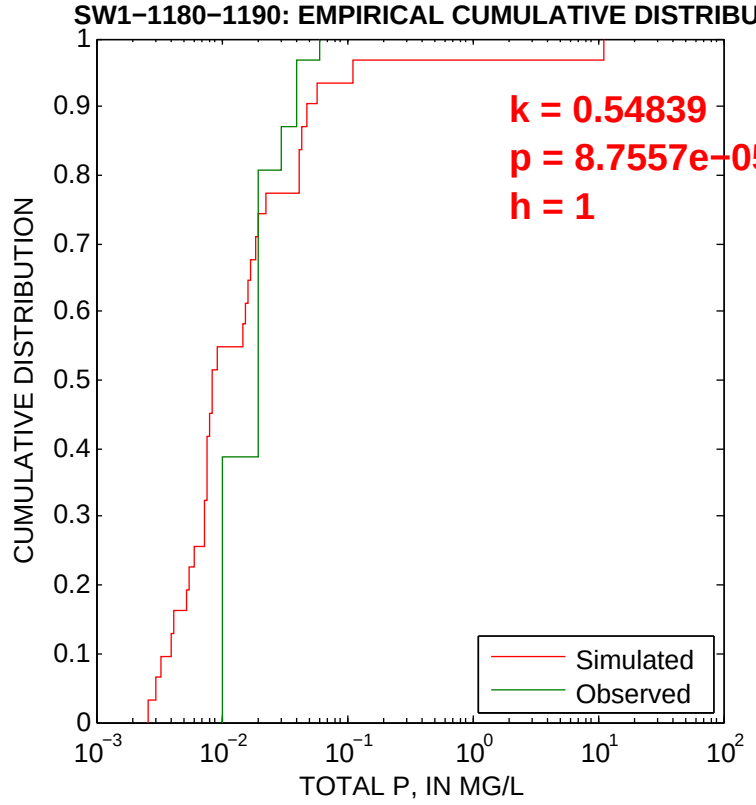












DATA SELECTION

scenario	file
P620171001WQ	TOTP.calib

plot: TOTP - total phosphorus

Dates: 1/1/1985 – 12/31/201

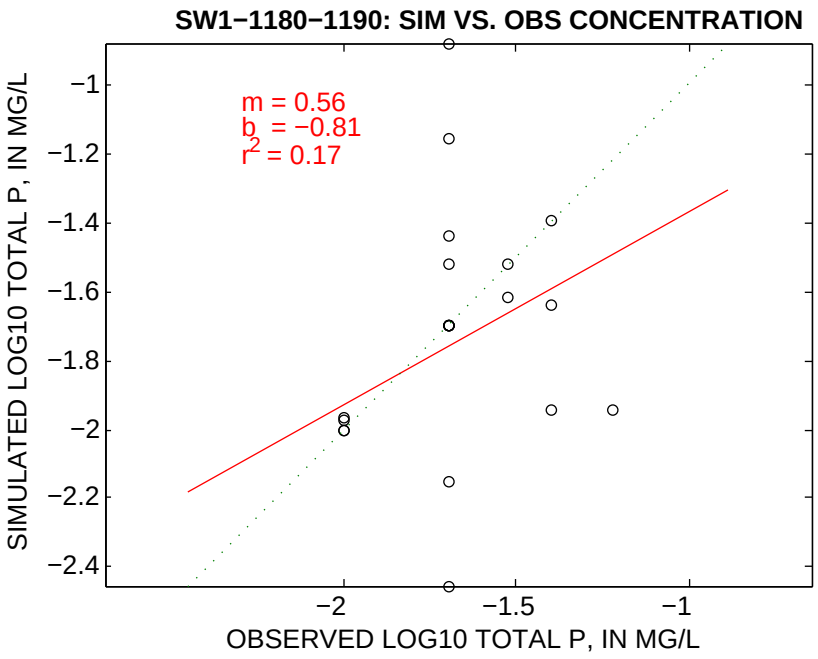
Drive	Directory	Observed
N/A	model	OBS20161101

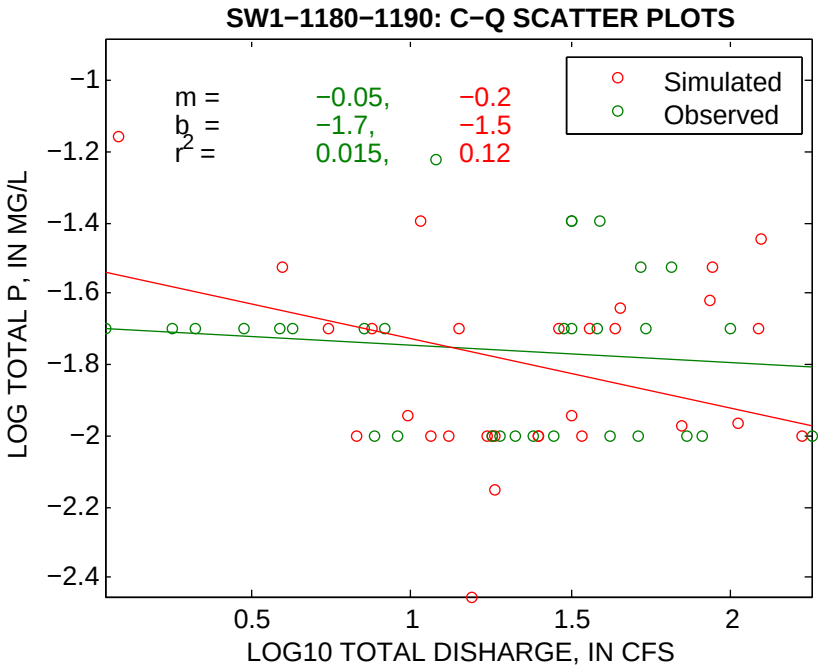
STATISTICS

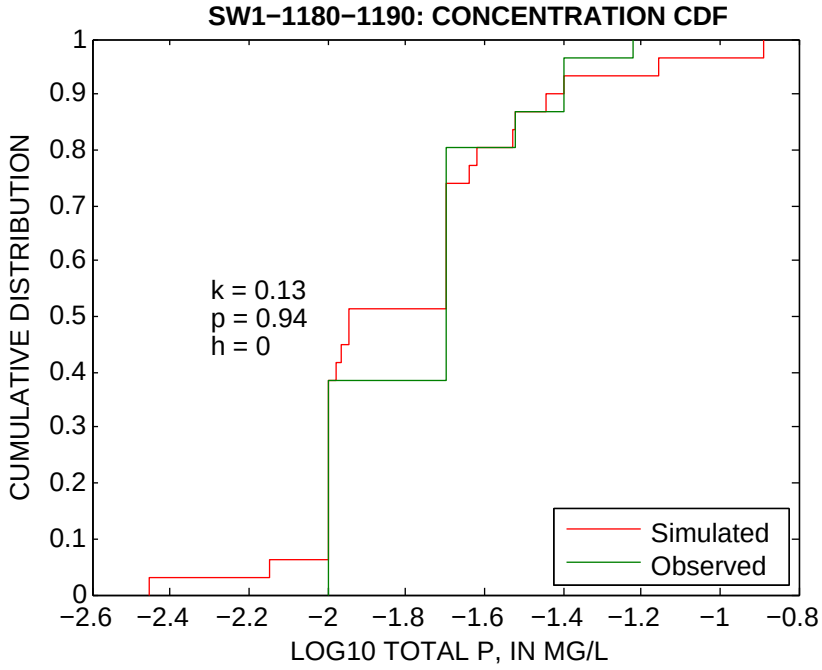
	n	31	31
		observe	simulate
min		0.01	0.0026821
		-2	-2.57153
mean		0.02	0.374763
		-1.75961	-1.8318
media		0.02	0.0086155
		-1.69897	-2.06472
max		0.06	11.038
		-1.22185	1.04289
varian		0.00014	3.91702
		0.0511646	0.453882
JB		0.002457	0.001
		0.250195	0.001
		ra	log
%		1773.82	4.10217
err.va		4.04714	0.452488
rel.std.err		28908.1	8.84376
mod.eff		-28907.1	-7.84376

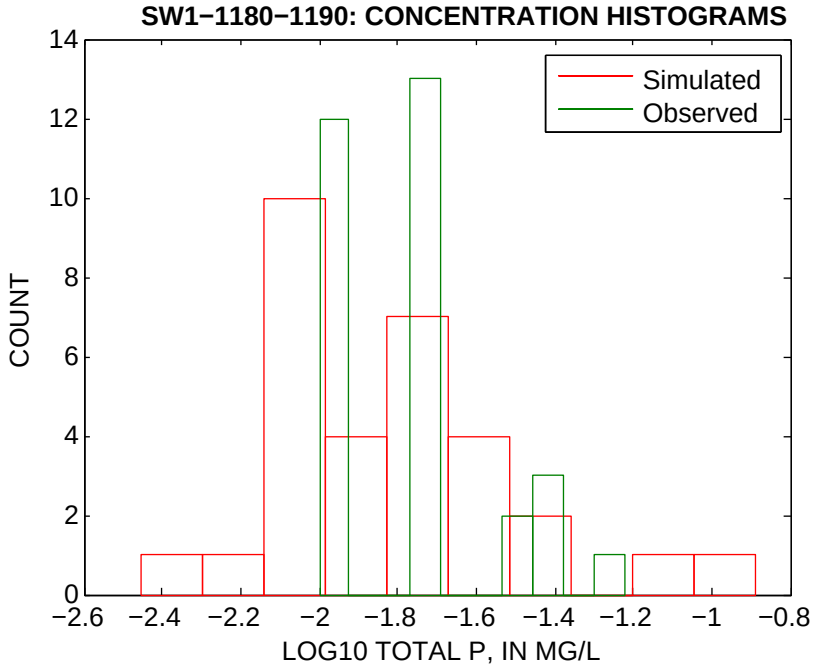
VERSION

ALL DATA
LOG10

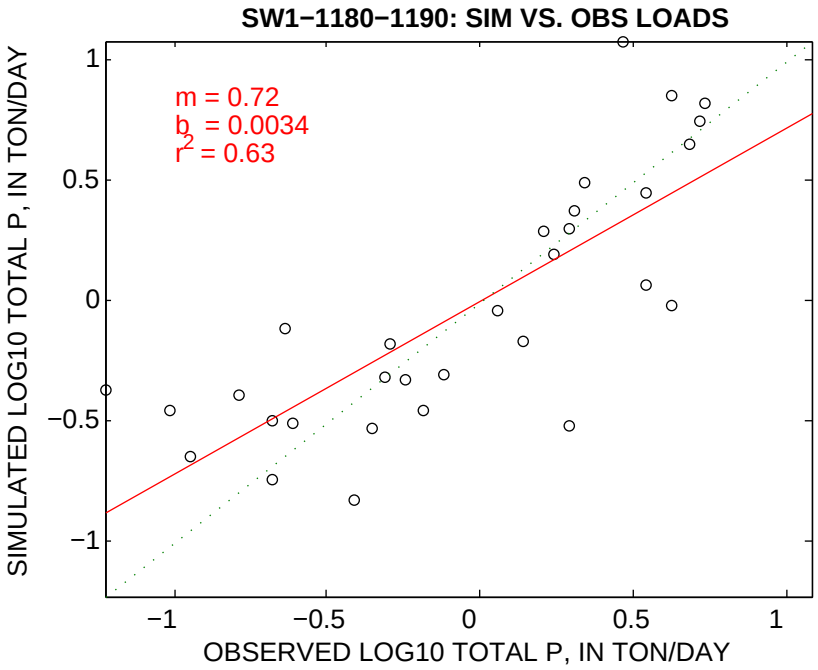


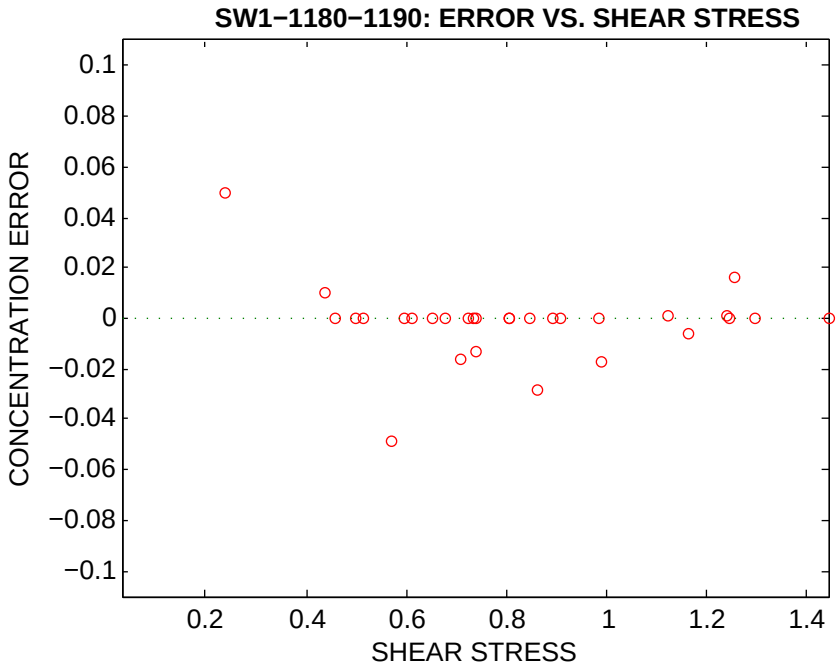


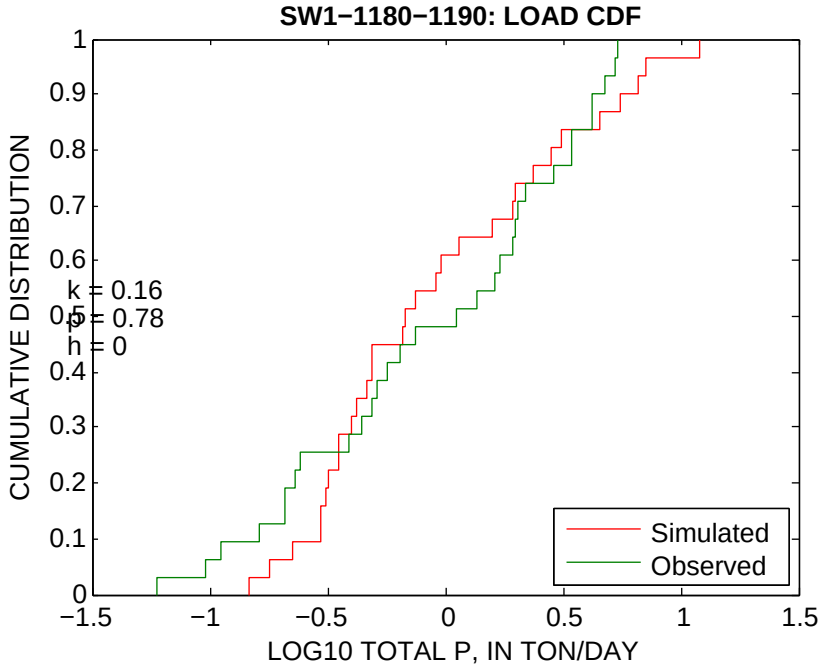


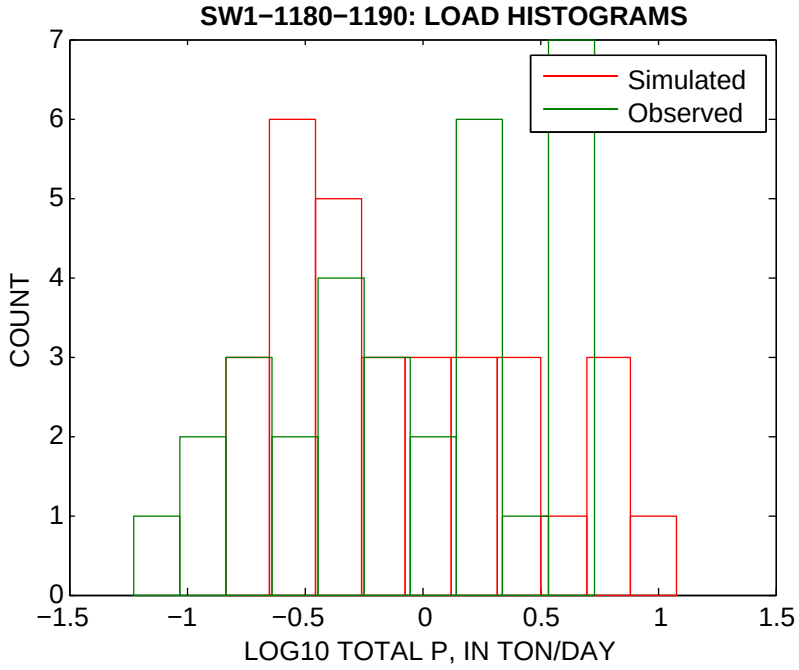


LOAD DATA
LOG10

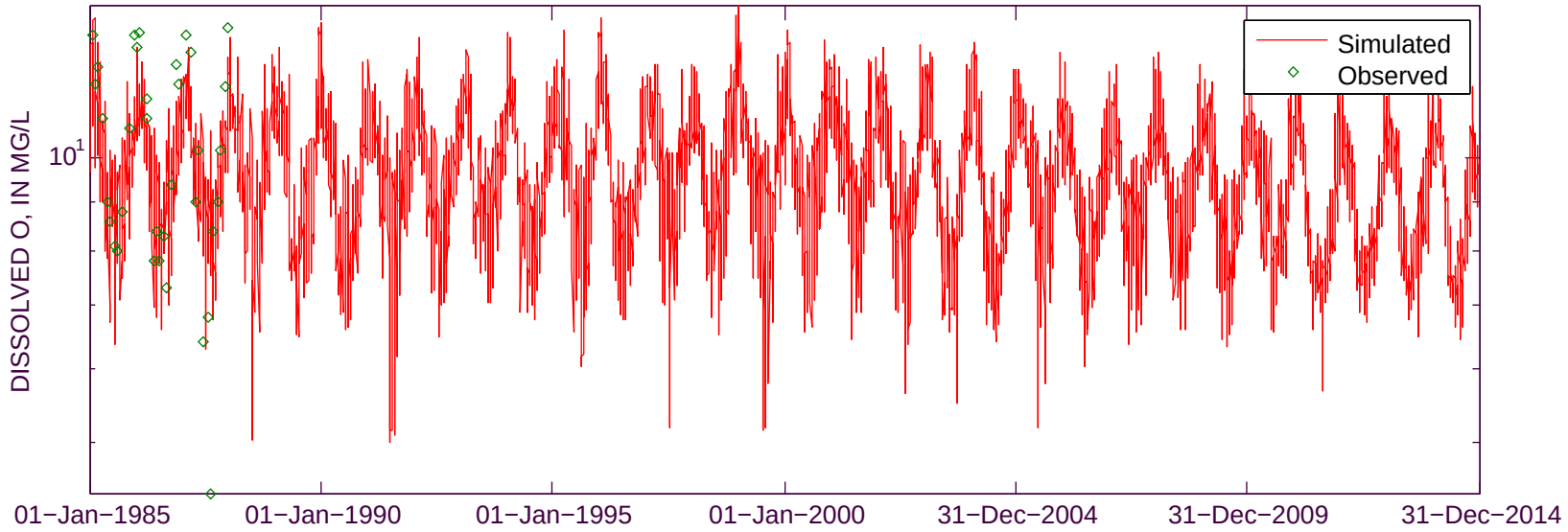




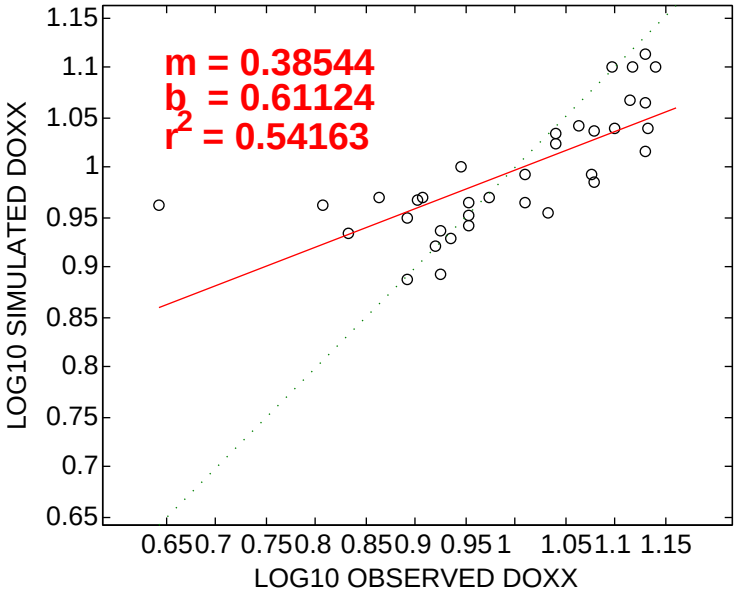




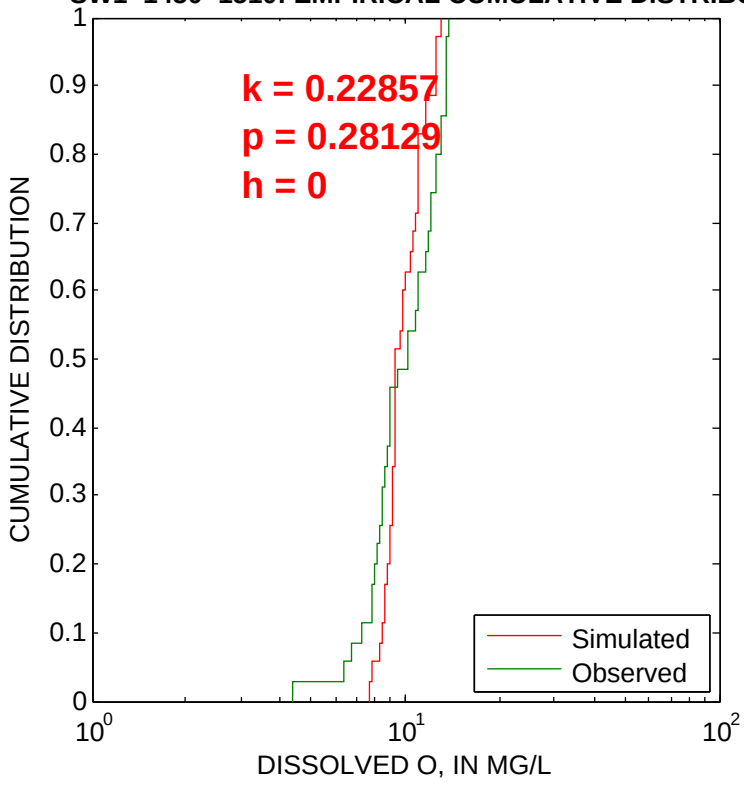
CHILLISQUAQUE CREEK AT WASHINGTONVILLE, PA: DOXX TIME-SERIES



SW1-1450-1510: SIMULATED VS. OBSERVED



SW1-1450-1510: EMPIRICAL CUMULATIVE DISTRIBUTION



DATA SELECTION

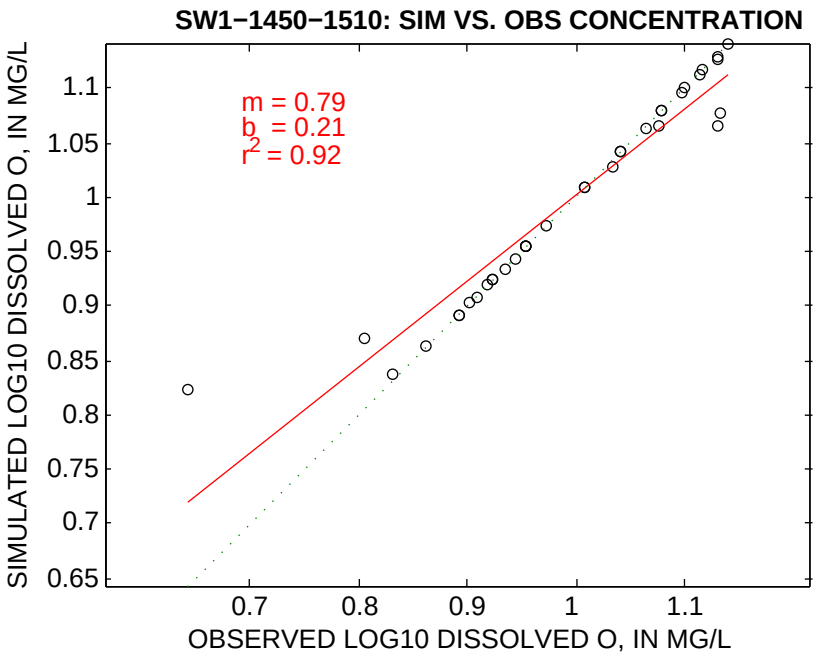
scenario: P620171001WQ
file: DOXX.calib
plot: DOXX - dissolved oxygen
Dates: 1/1/1985 – 12/31/201
Drive: N/A
Directory: model
Observed: OBS20161101

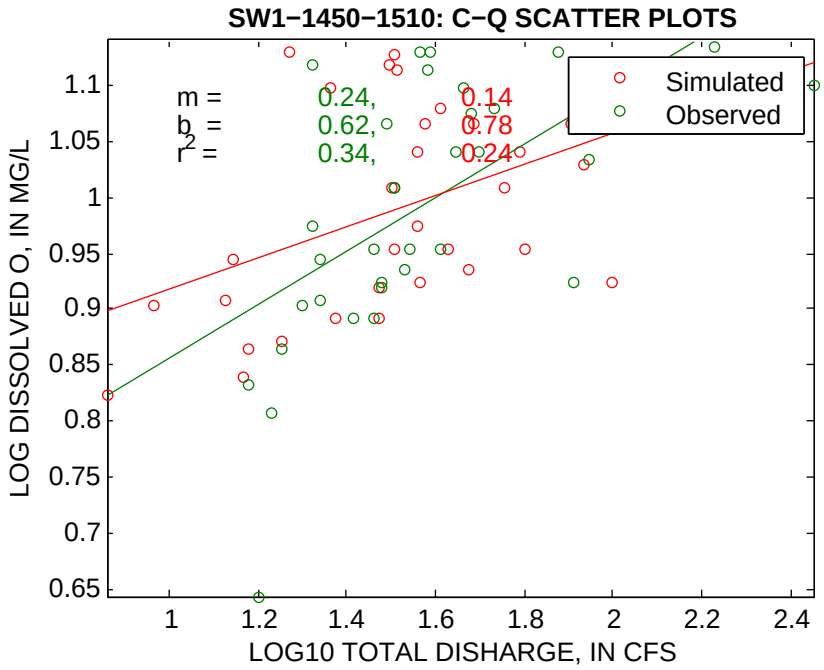
STATISTICS

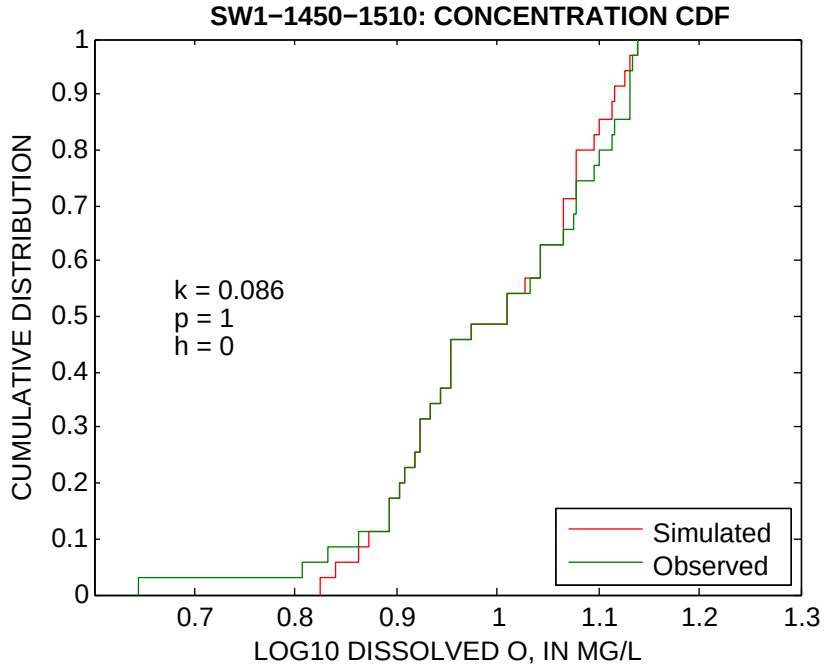
	n	observe	simulate
		35	35
min		4.4	7.7389
		0.643453	0.888679
mean		10.1514	9.95368
		0.992811	0.993905
media		10.2	9.3565
		1.0086	0.971113
max		13.8	13.016
		1.13988	1.11448
varian		6.05198	1.9878
		0.0130799	0.00358761
JB		0.38486	0.114372
		0.064739	0.281689
		ra	log
%		-1.94796	0.110138
err.va		2.5407	0.00658579
rel.std.err		0.419812	0.503505
mod.eff		0.580188	0.496495

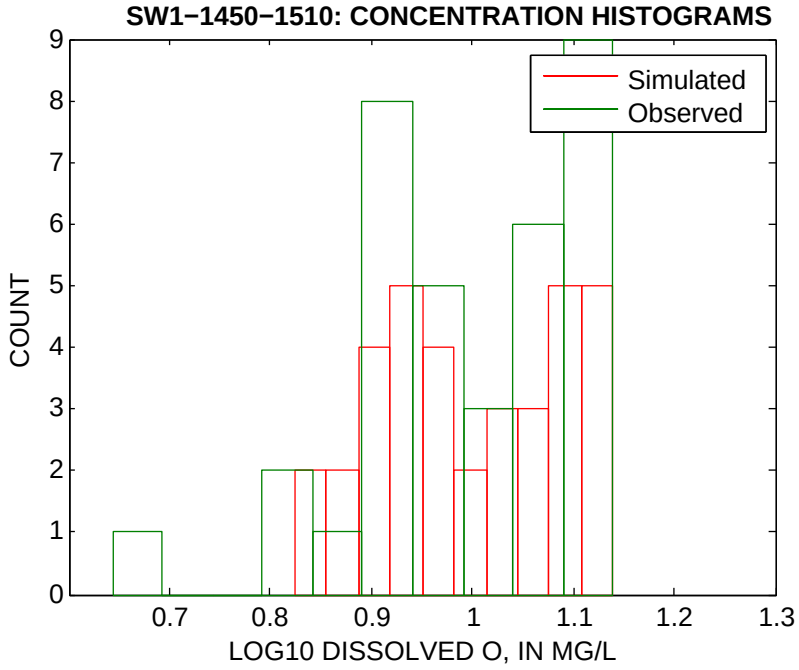
VERSION 2.1

ALL DATA
LOG10

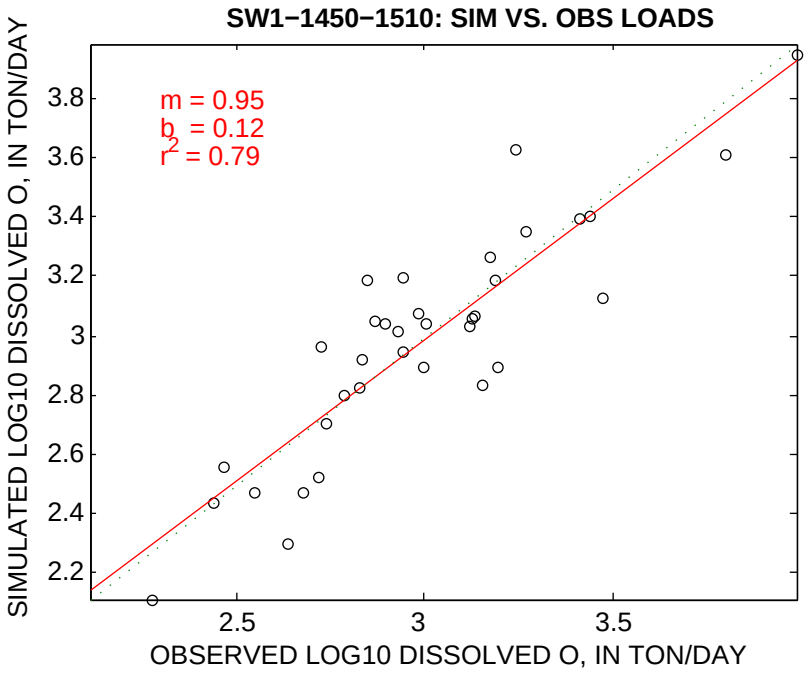


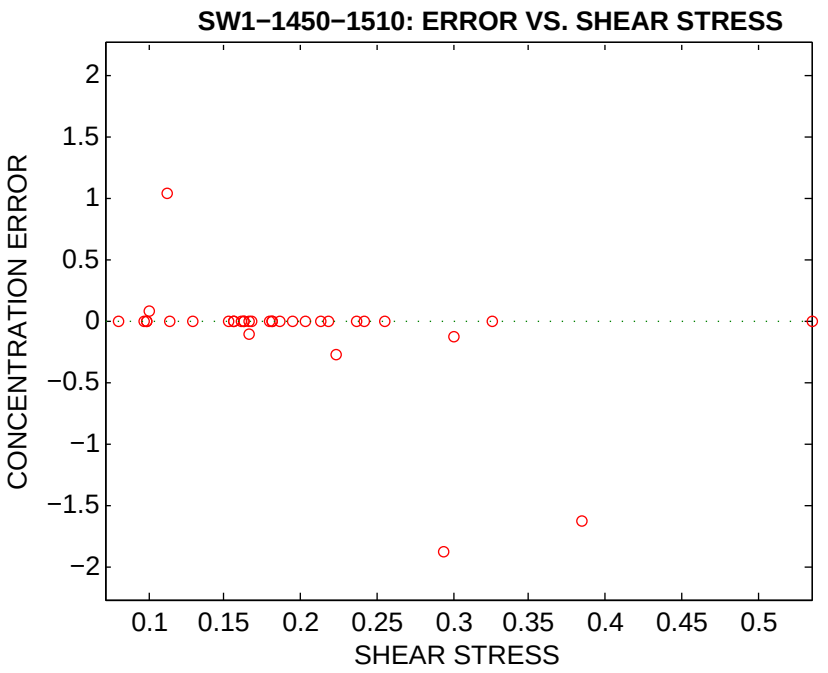


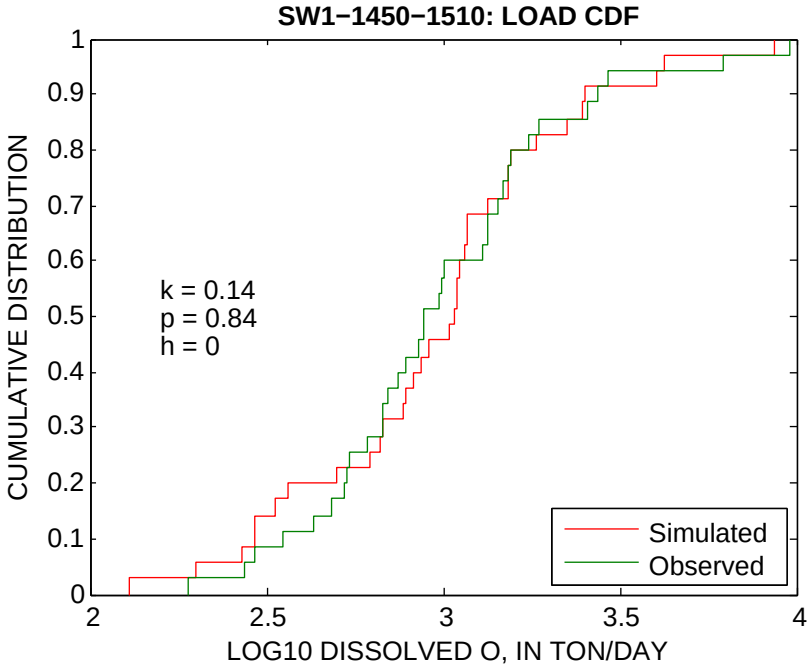


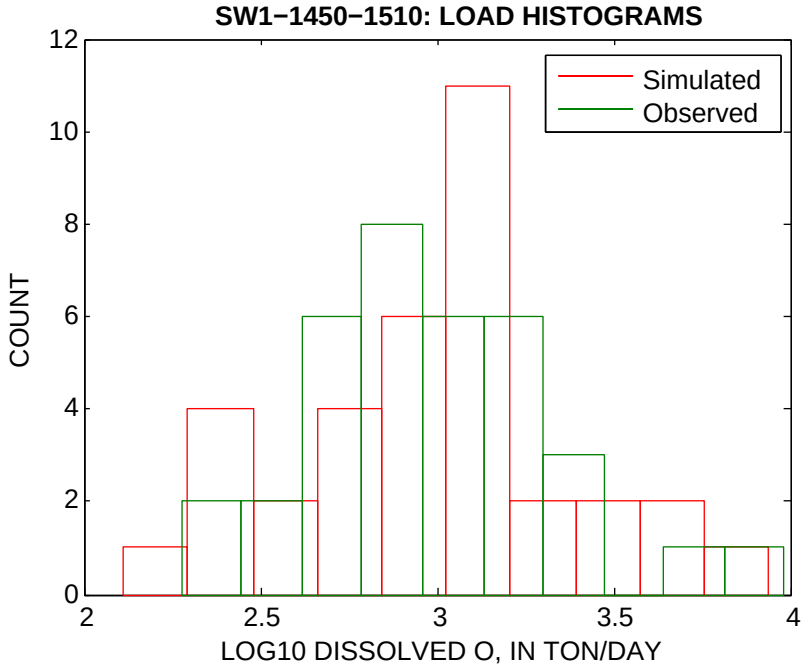


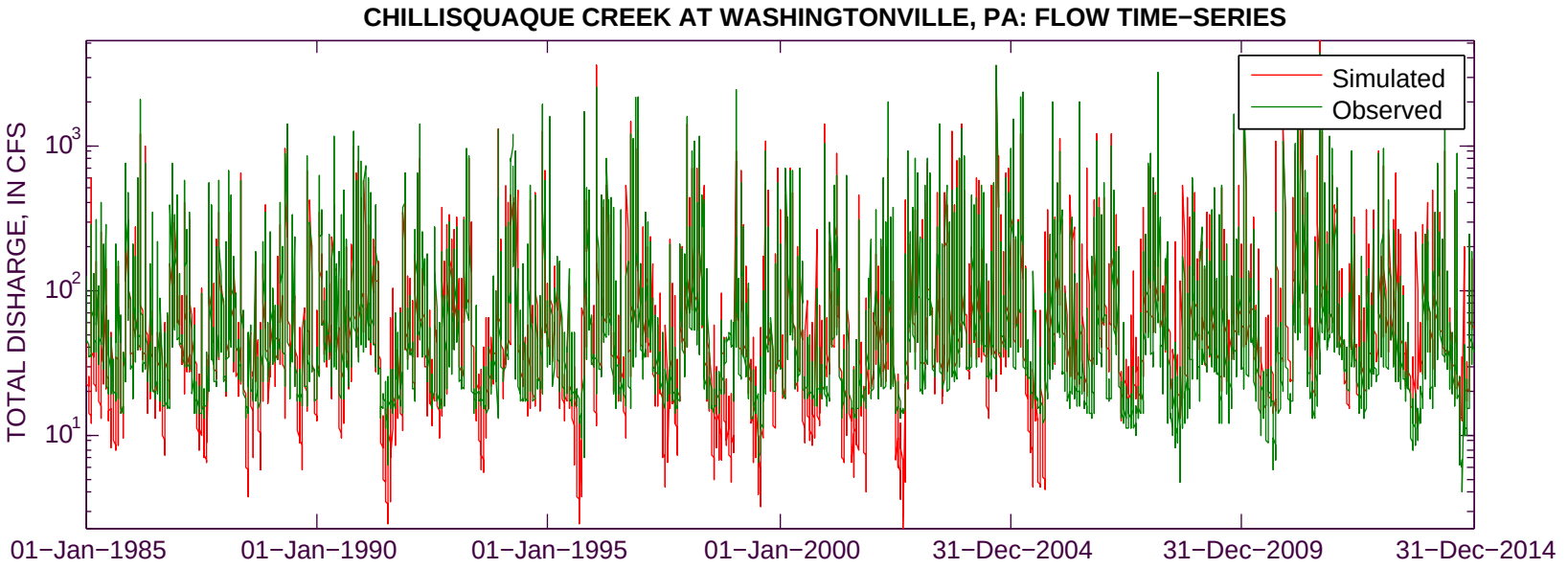
LOAD DATA
LOG10

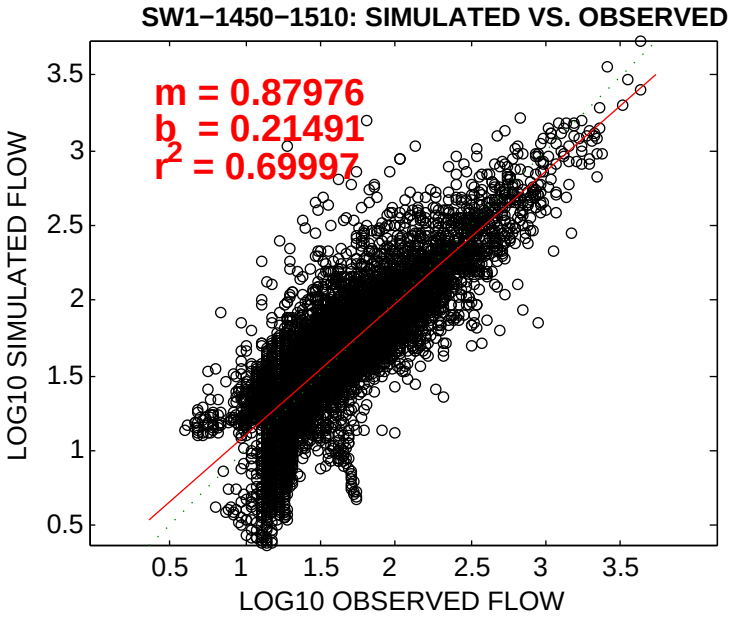


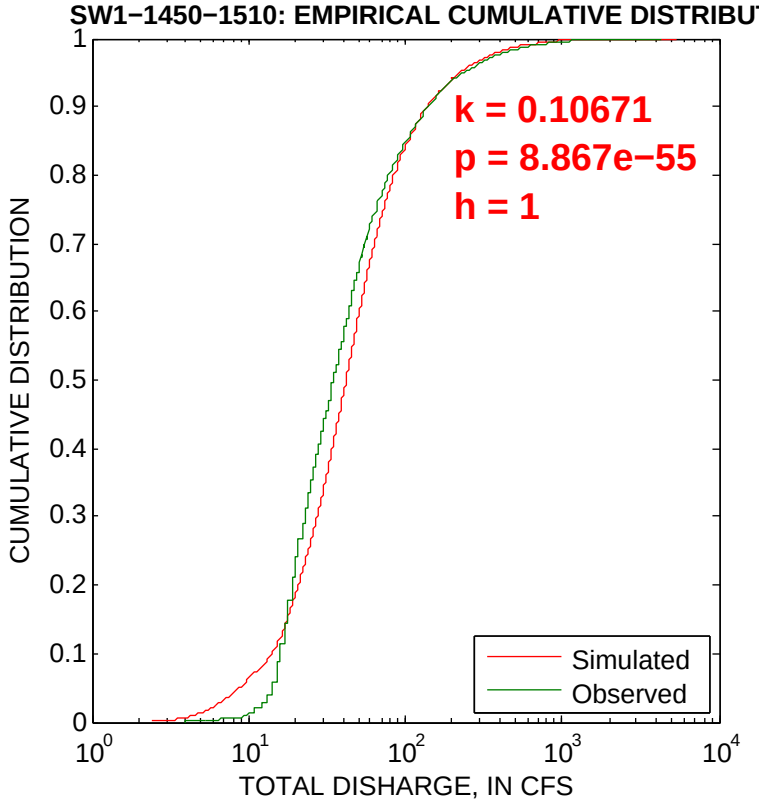












DATA SELECTION

scenario	file
P620171001WQ	FLOW.calib

plot: FLOW - total discharge

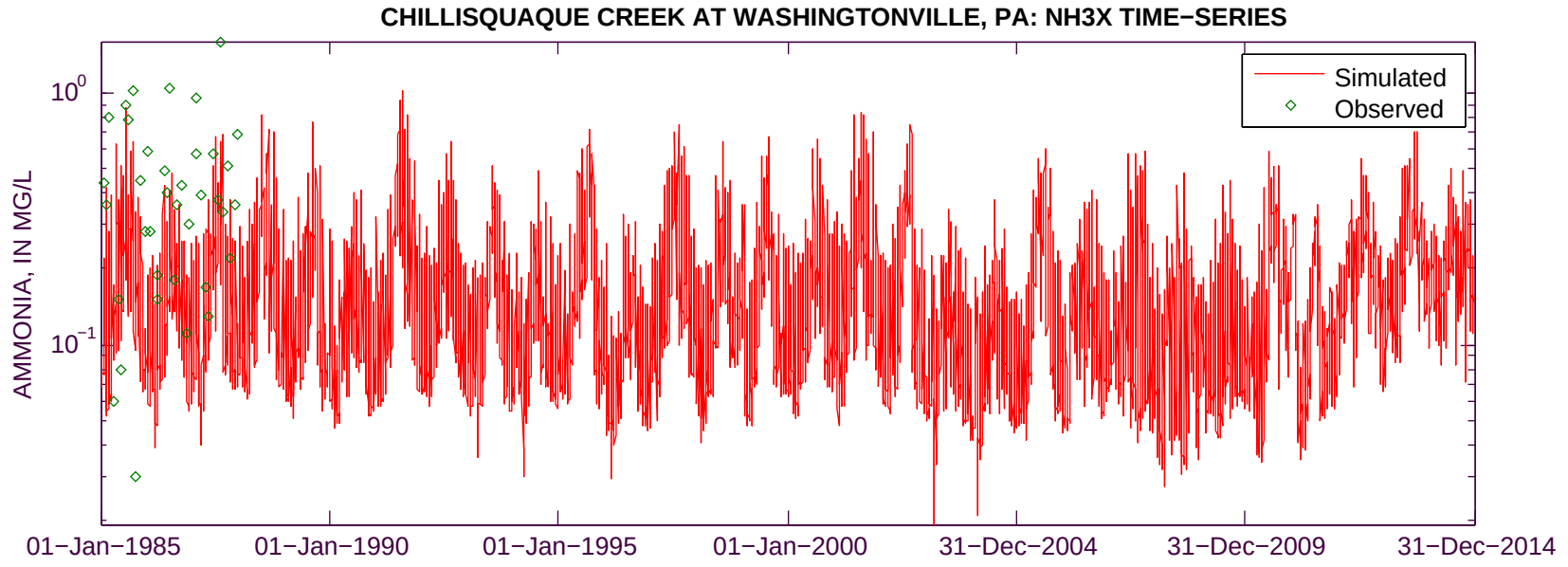
Dates: 1/1/1985 – 12/31/201

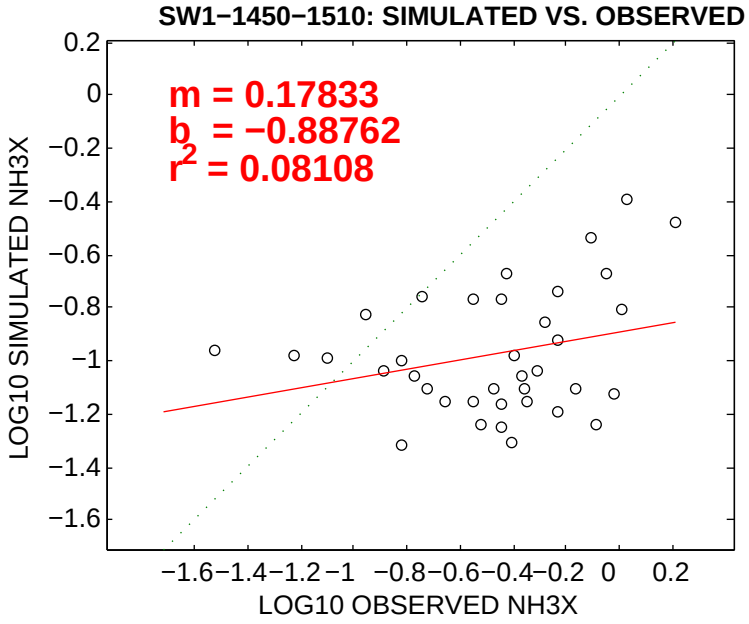
Drive	Directory	Observed
N/A	model	OBS20161101

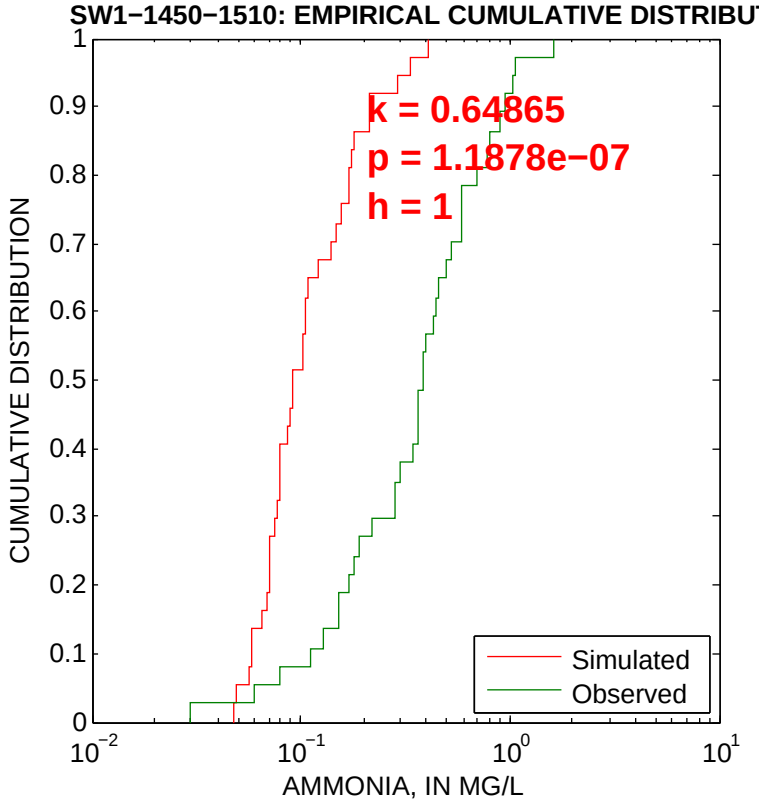
STATISTICS

		observe	simulate
n		10955	10955
min		4	2.2976
		0.60206	0.361274
mean		73.4882	73.27
		1.61384	1.6347
media		35	42.174
		1.54407	1.62504
max		4350	5397.1
		3.63849	3.73216
varian		25551.5	18686.4
		0.154093	0.170384
JB		0.001	0.001
		0.001	0.001
		ra	log
%		-0.296987	1.29244
err.va		6865.58	0.0537826
rel.std.err		0.268695	0.349028
mod.eff		0.731305	0.650972

VERSION 2.1







DATA SELECTION

scenario	file
P620171001WQ	NH3X.calib

plot: NH3X - ammonia

Dates: 1/1/1985 – 12/31/201

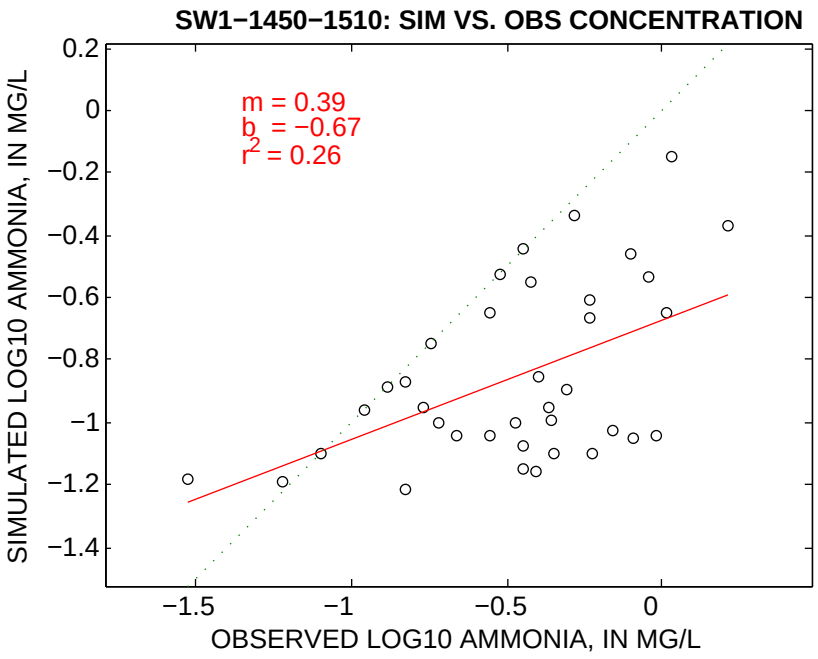
Drive	Directory	Observed
N/A	model	OBS20161101

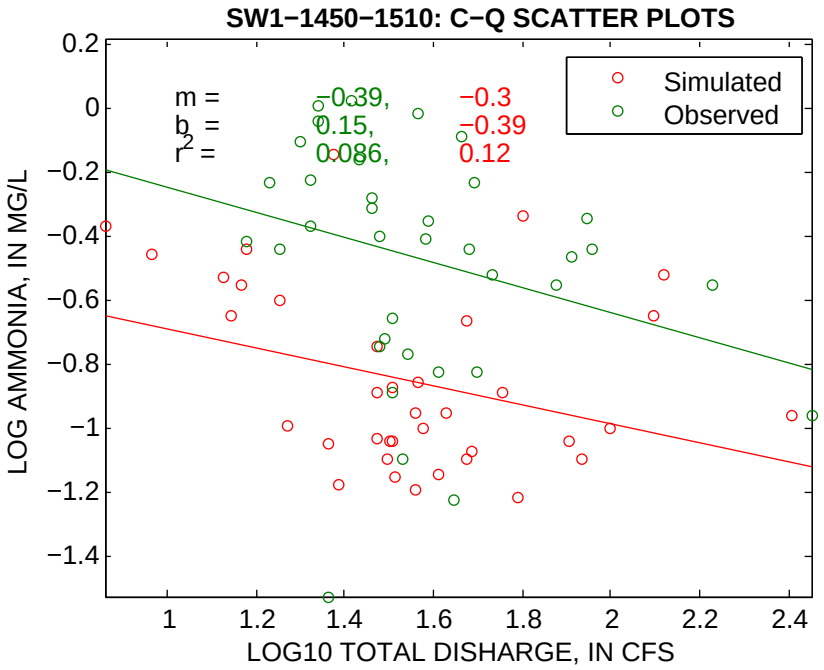
STATISTICS

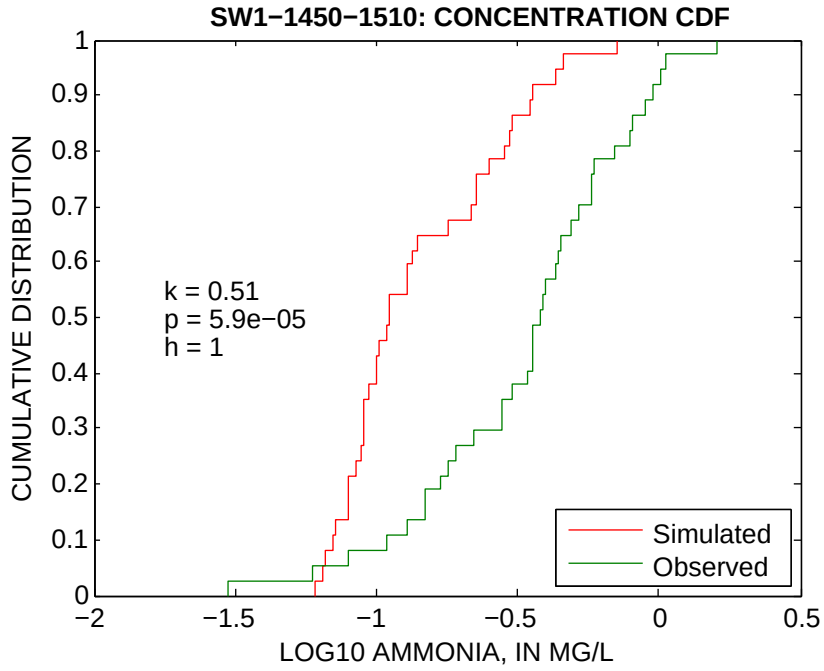
	n	37	37
		observe	simulate
min		0.03	0.048099
		-1.52288	-1.31786
mean		0.455405	0.124784
		-0.470907	-0.971596
media		0.38	0.092675
		-0.420216	-1.03304
max		1.62	0.40704
		0.209515	-0.390363
varian		0.115376	0.00663148
		0.13842	0.0542898
JB		0.004352	0.001
		0.085079	0.087028
		ra	log
%		-72.5995	106.324
err.va		0.202532	0.400995
rel.std.err		1.75542	2.89694
mod.eff		-0.755417	-1.89694

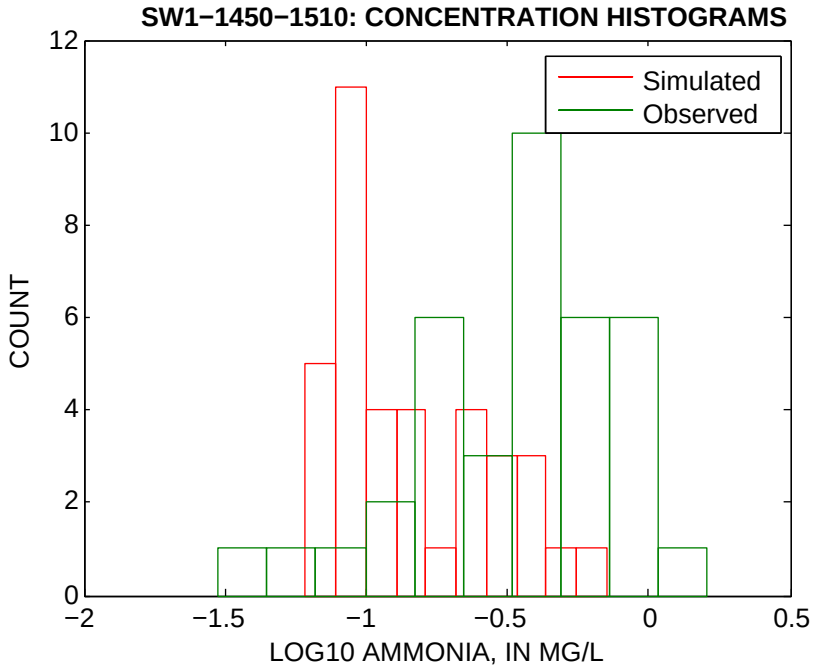
VERSION

ALL DATA
LOG10

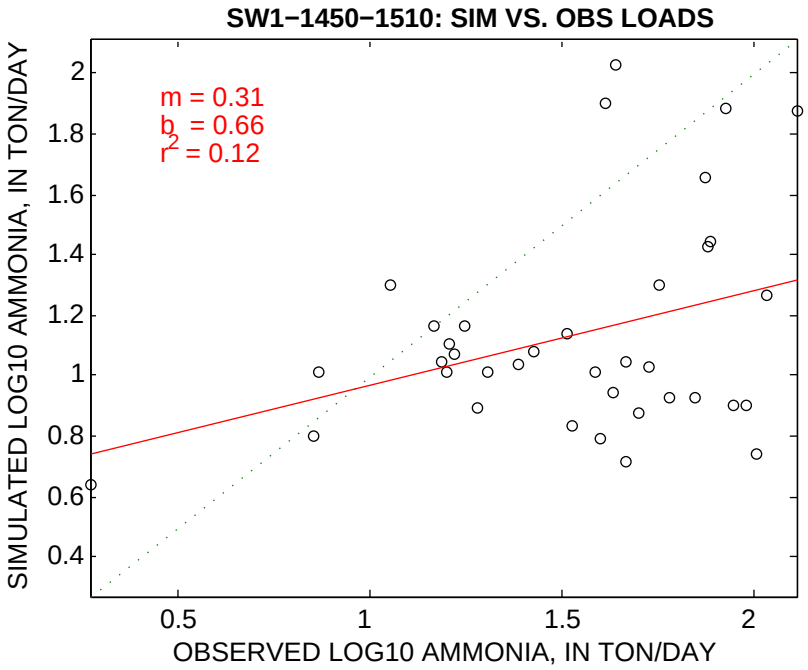


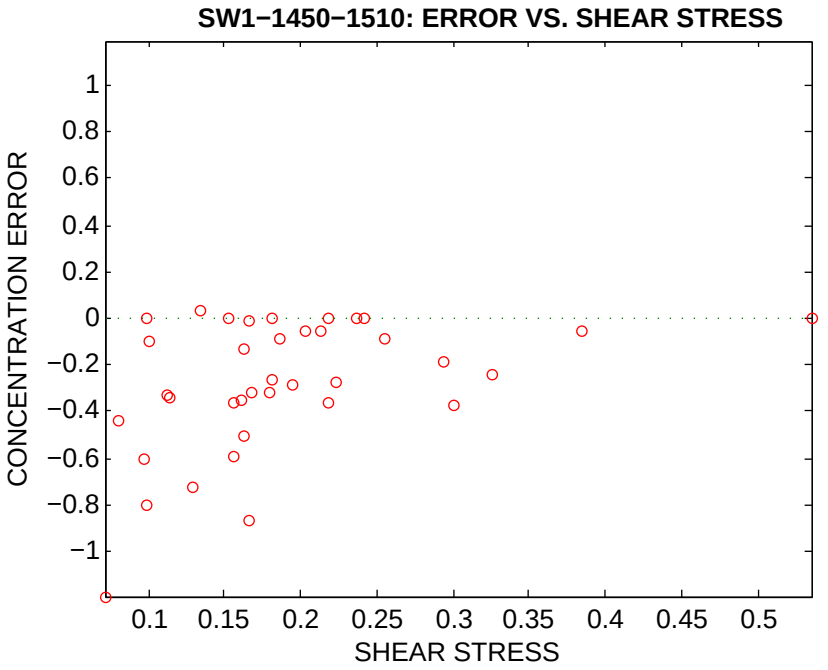


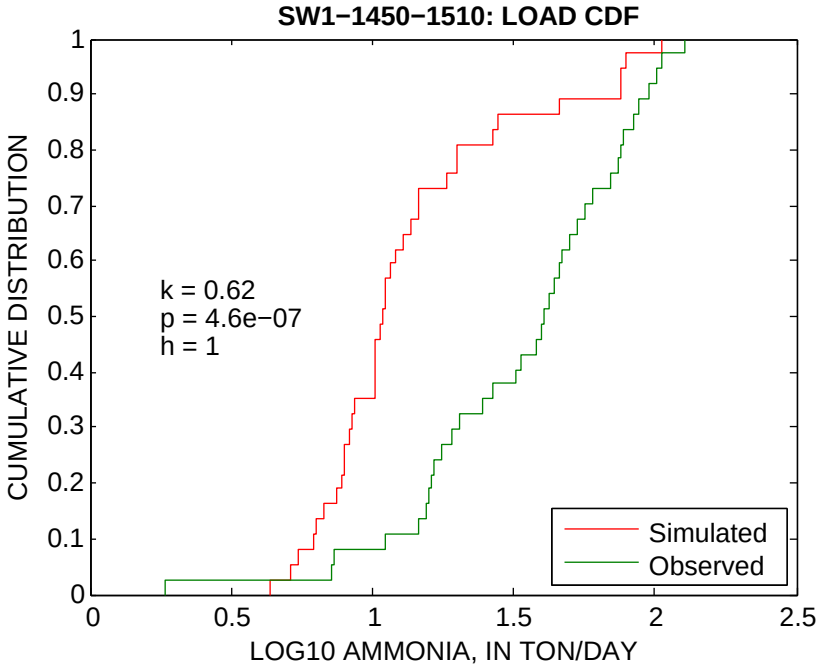


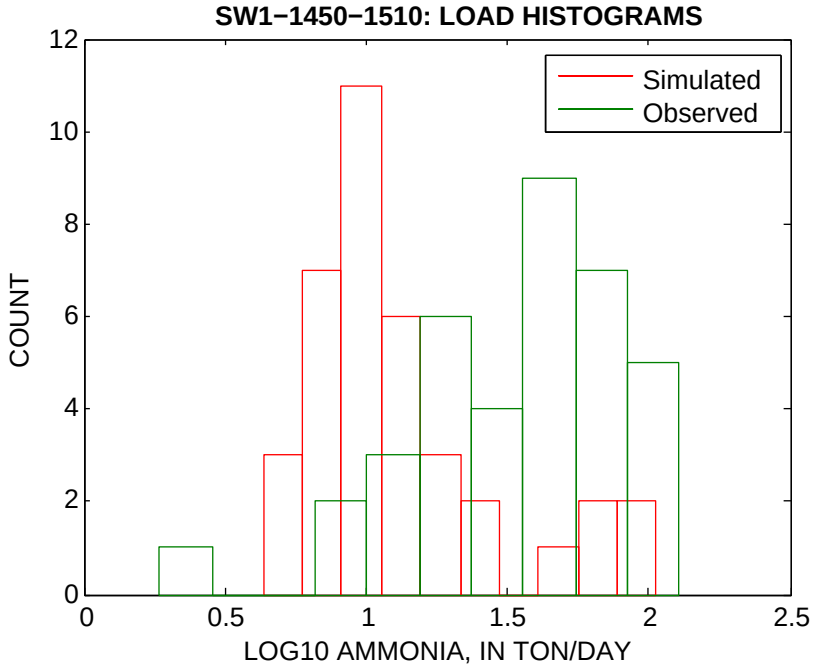


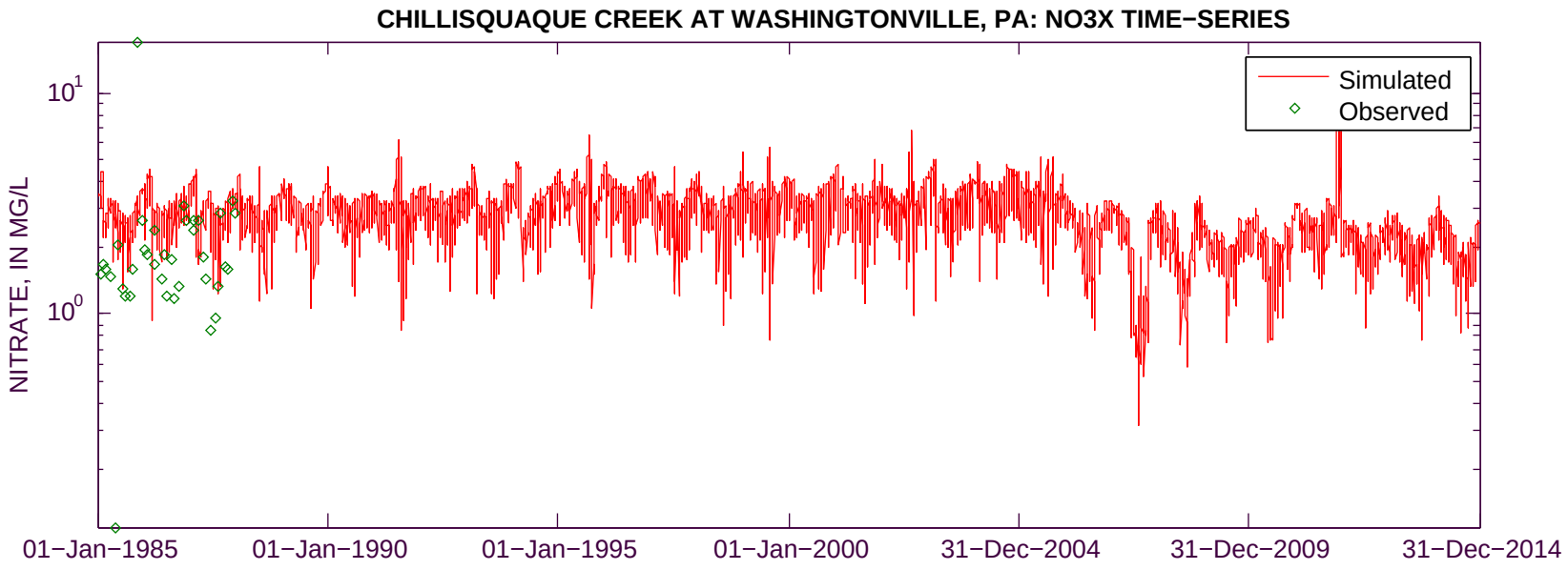
LOAD DATA
LOG10

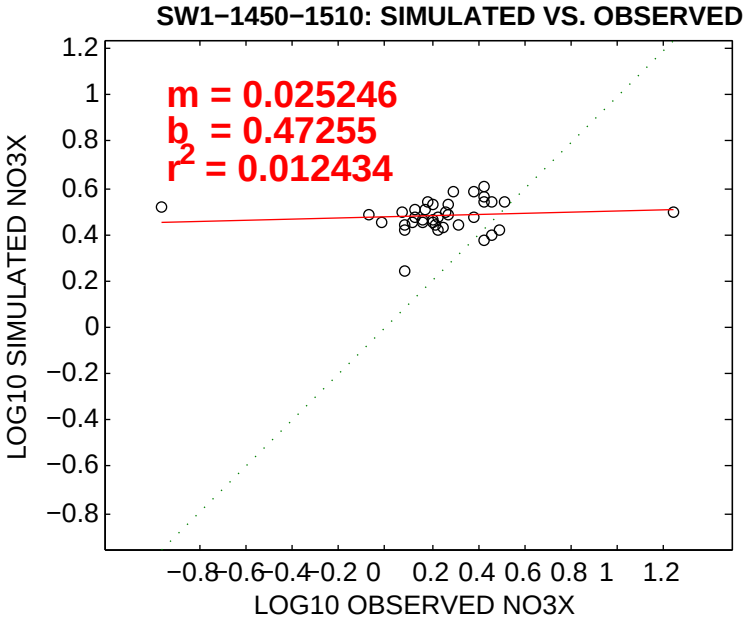


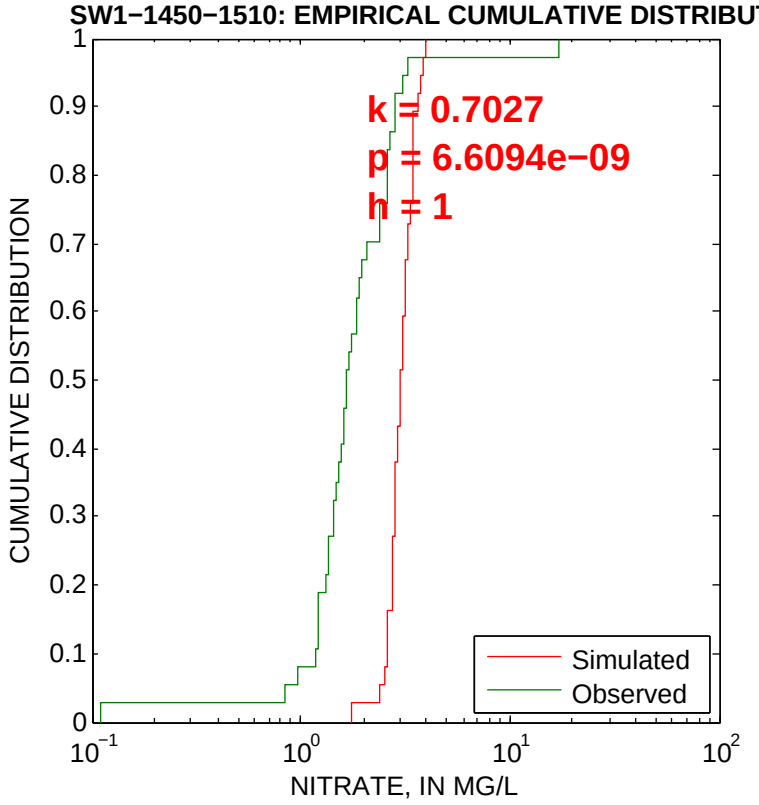












DATA SELECTION

scenario	file
P620171001WQ	NO3X.calib

plot: NO3X - nitrate

Dates 1/1/1985 12/31/201

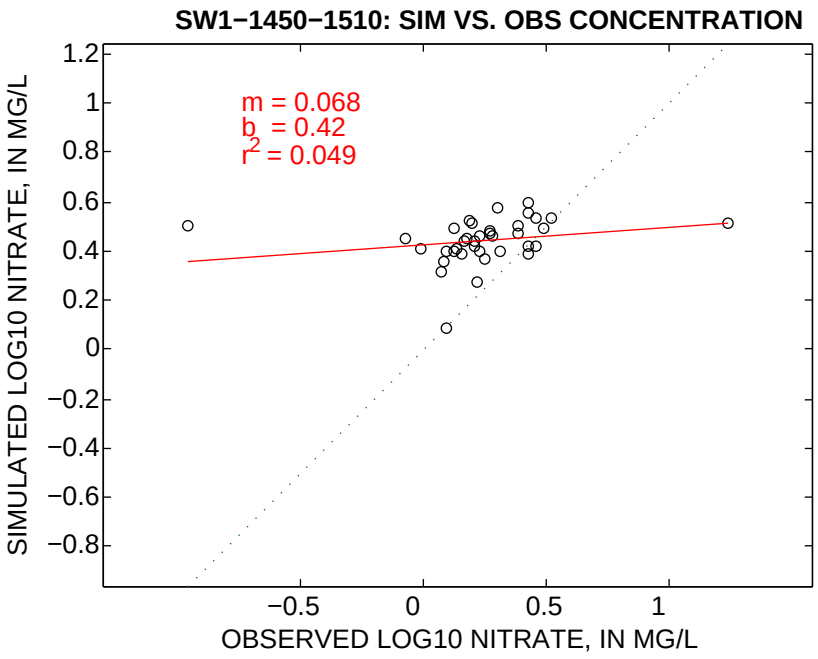
Drive	Directory	Observed
N/A	model	OBS20161101

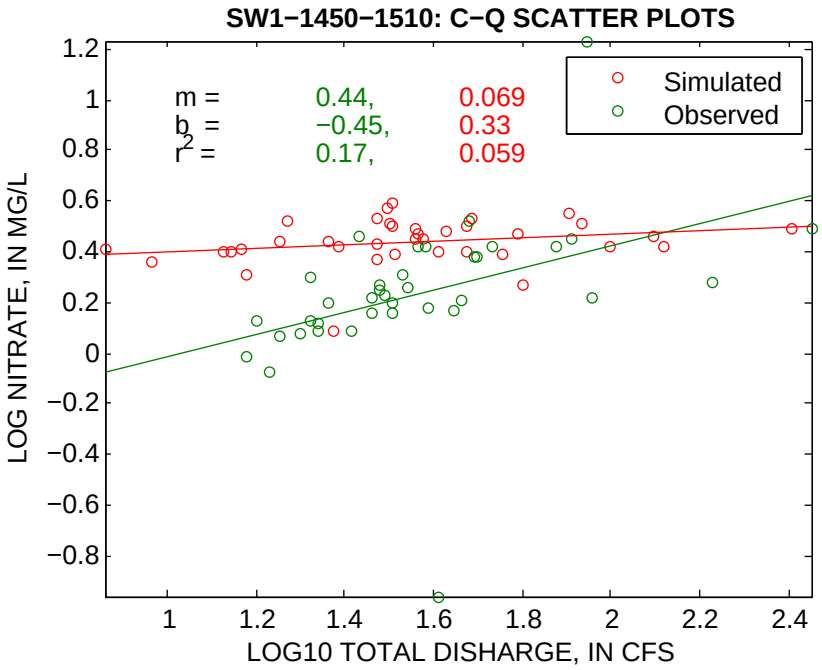
STATISTICS

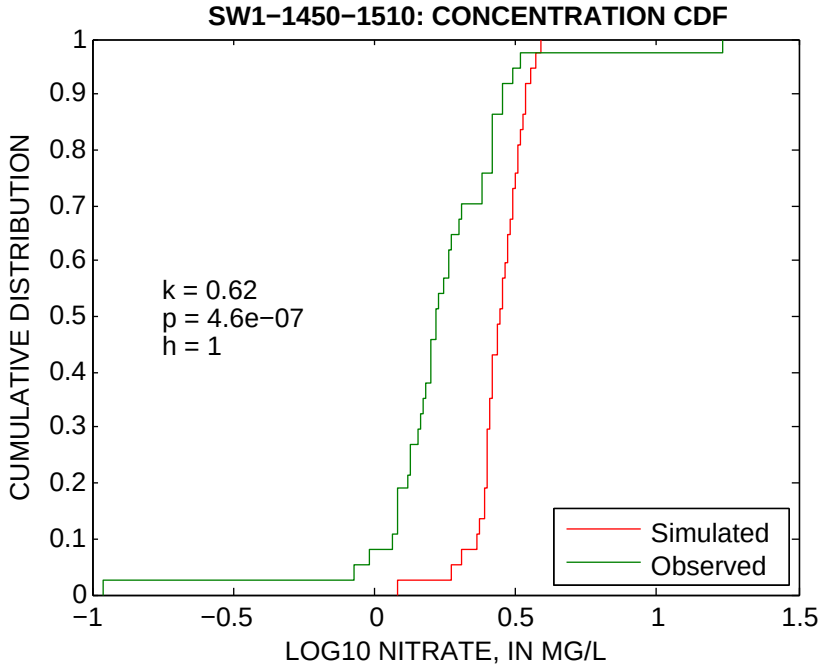
	n	37	37
		observe	simulate
min		0.11	1.7525
		-0.958607	0.243658
mean		2.22324	3.04383
		0.238794	0.478578
media		1.67	3.0025
		0.222716	0.477483
max		17.14	3.9961
		1.23401	0.601636
varian		6.81882	0.199426
		0.0879565	0.0045084
JB		0.001	0.5
		0.001	0.007408
		ra	log
%		36.9094	100.415
err.va		7.46168	0.147118
rel.std.err		1.09428	1.67262
mod.eff		-0.094277	-0.672618

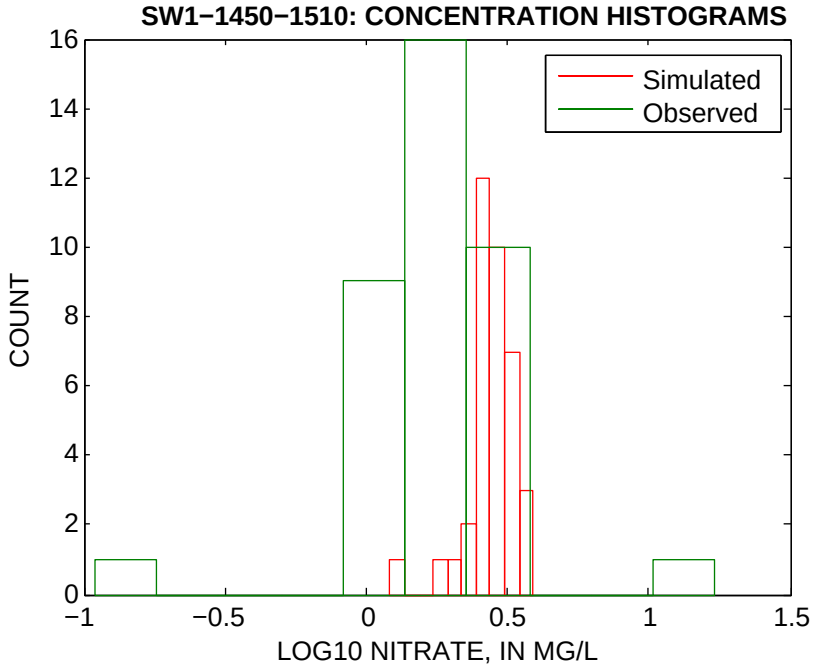
VERSION 2.1

ALL DATA
LOG10

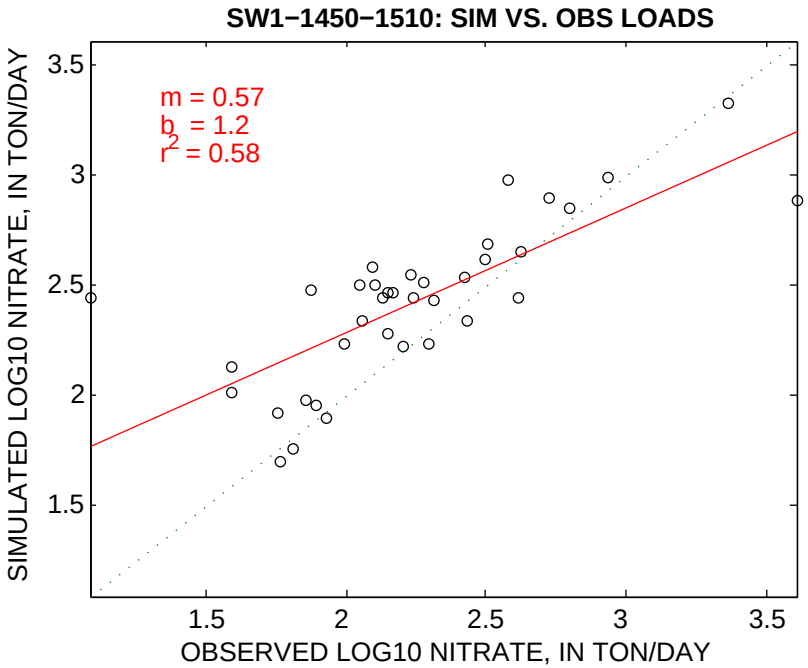


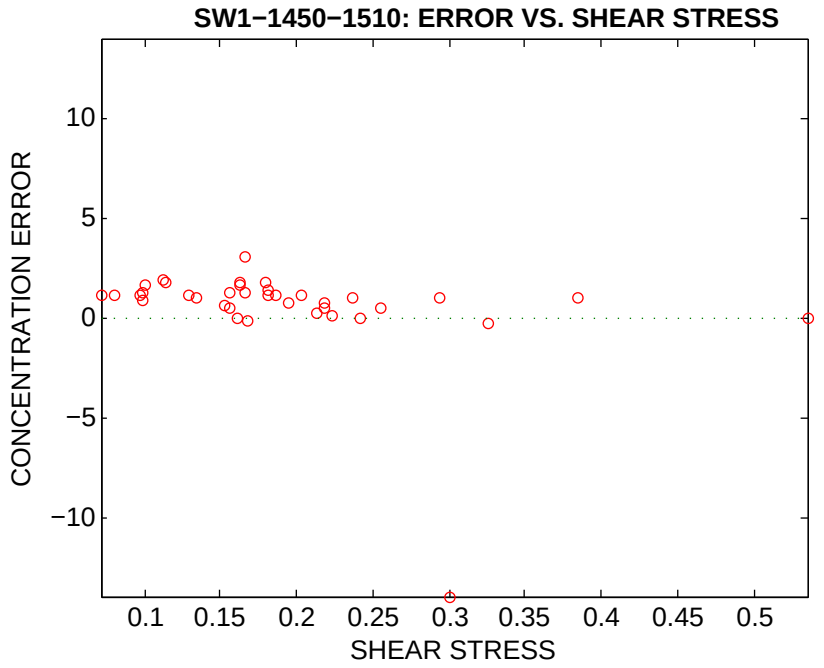


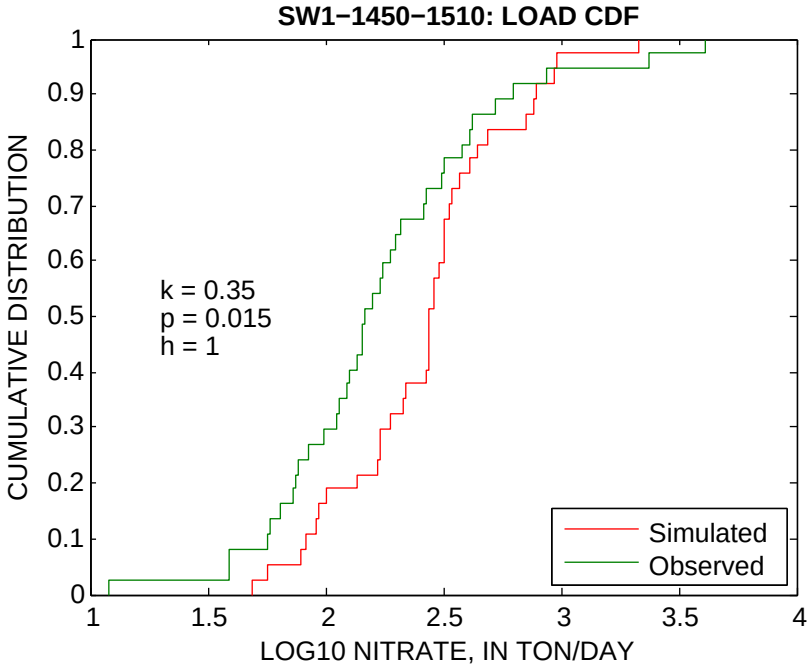


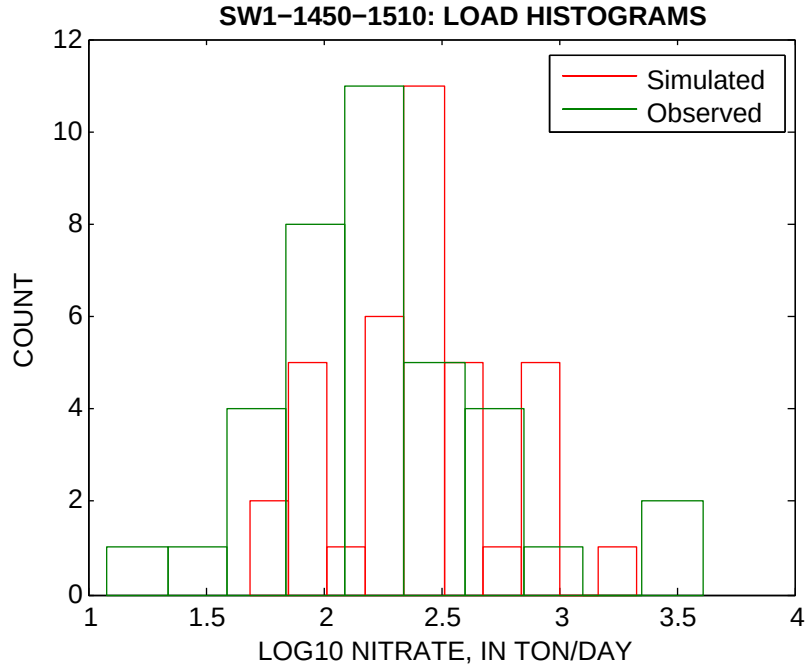


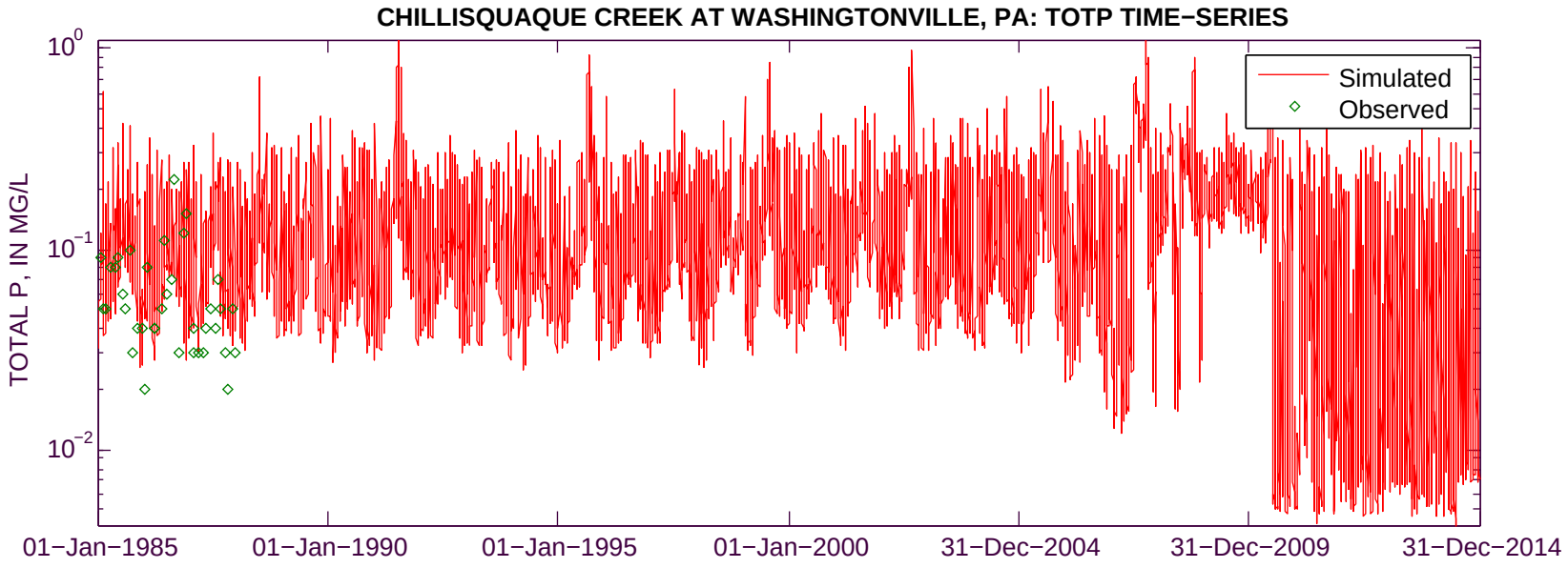
LOAD DATA
LOG10

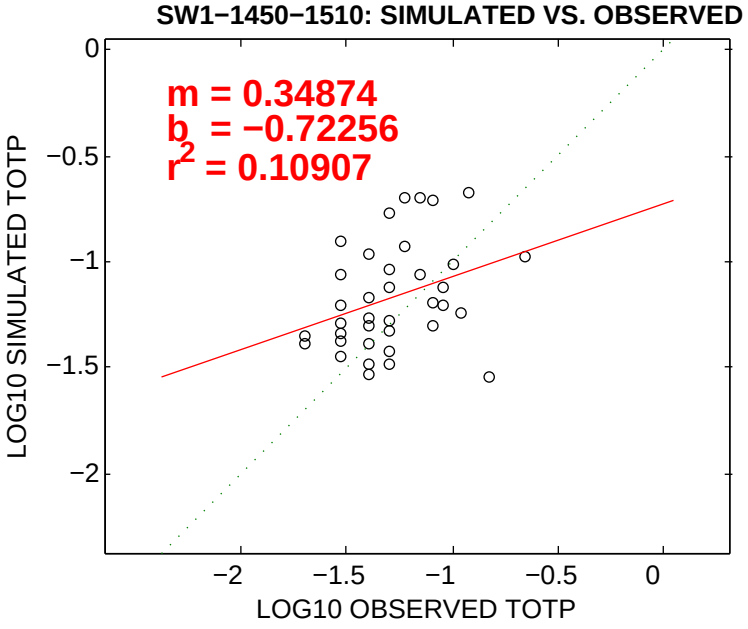


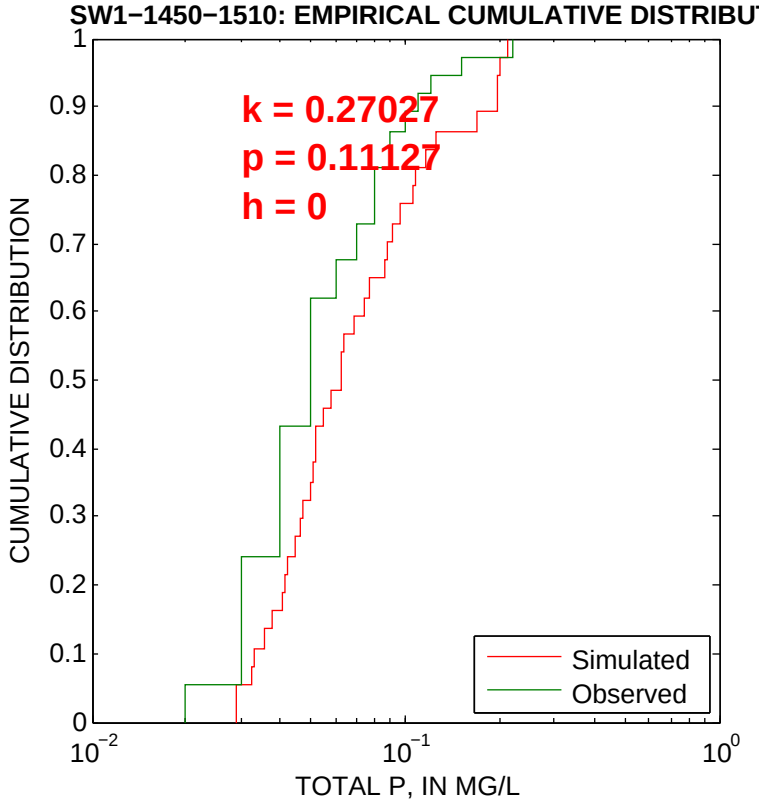












DATA SELECTION

scenario	file
P620171001WQ	TOTP.calib

plot: TOTP - total phosphorus

Dates: 1/1/1985 – 12/31/201

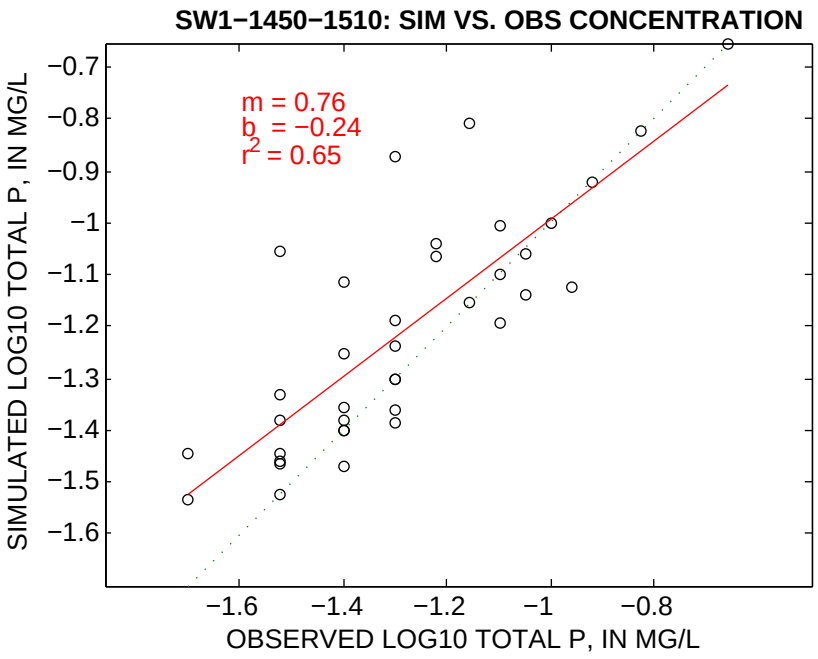
Drive	Directory	Observed
N/A	model	OBS20161101

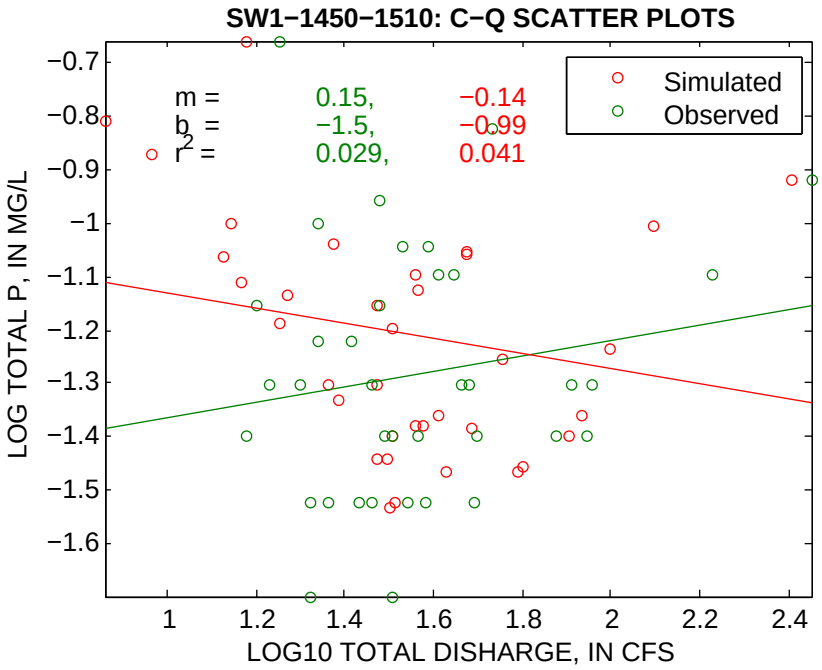
STATISTICS

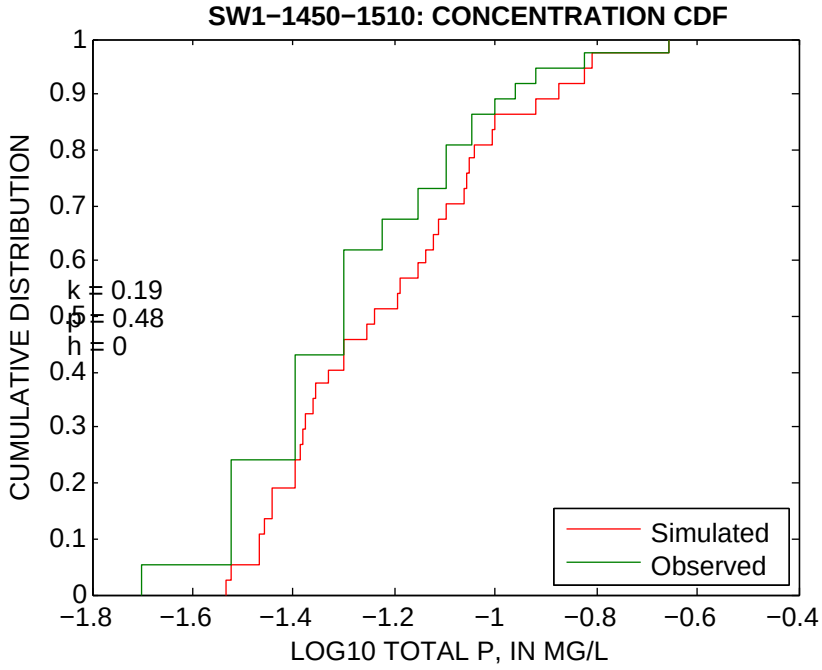
	n	37	37
		observe	simulate
min		0.02	0.028804
		-1.69897	-1.54055
mean		0.0610811	0.0804482
		-1.28237	-1.16977
media		0.05	0.062011
		-1.30103	-1.20753
max		0.22	0.21129
		-0.657577	-0.675121
varian		0.0015988	0.0027766
		0.0560767	0.0625274
JB		0.001	0.010086
		0.273764	0.132683
		ra	log
%		31.7072	-8.78038
err.va		0.00370138	0.0925218
rel.std.err		2.3151	1.64992
mod.eff		-1.3151	-0.649916

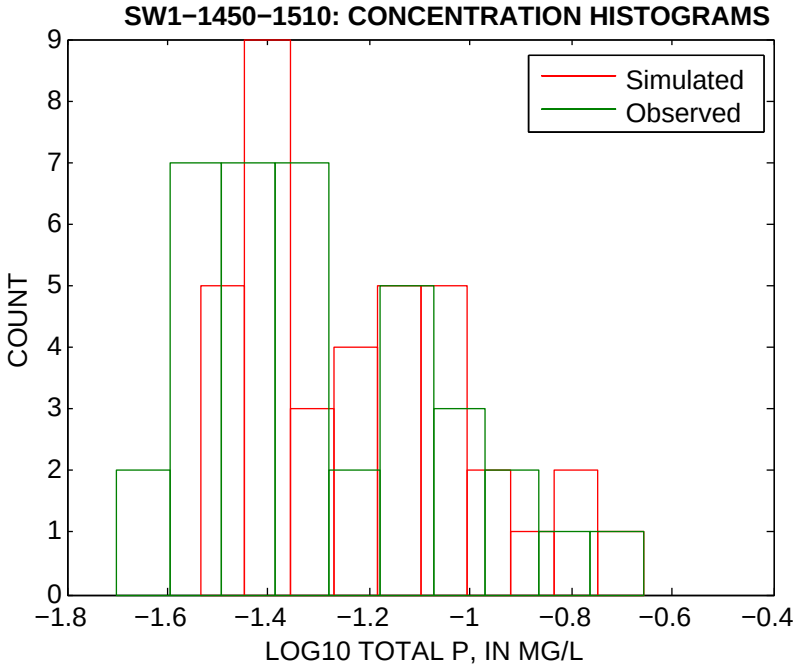
VERSION

ALL DATA
LOG10

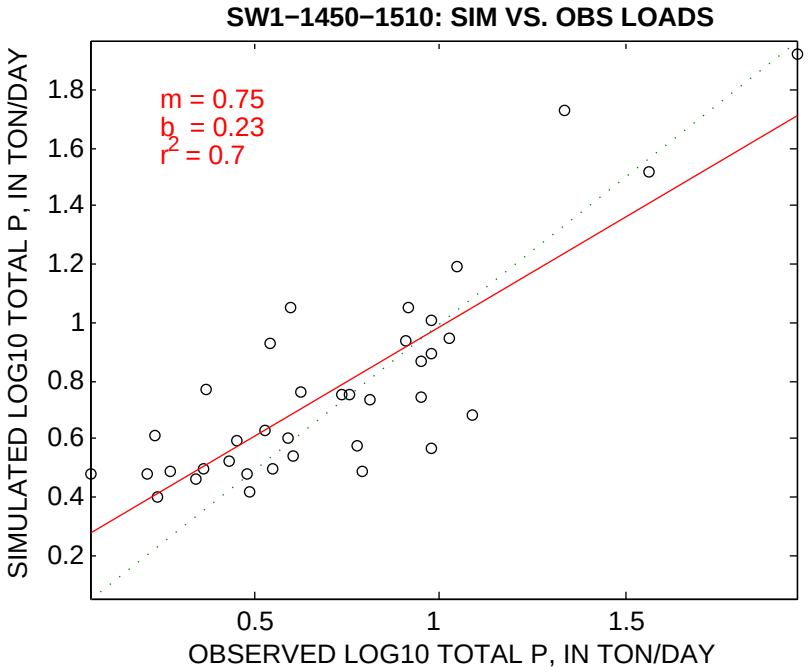


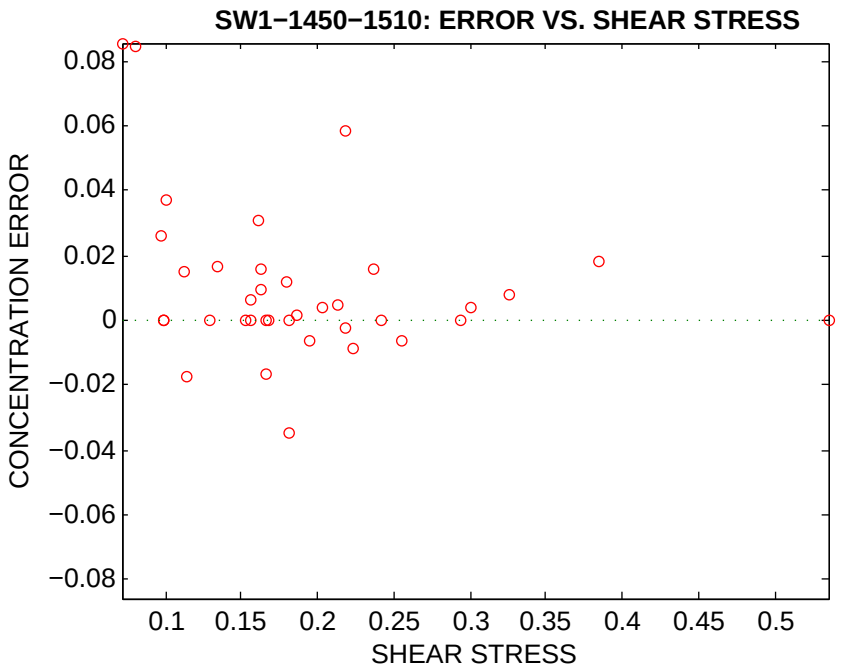


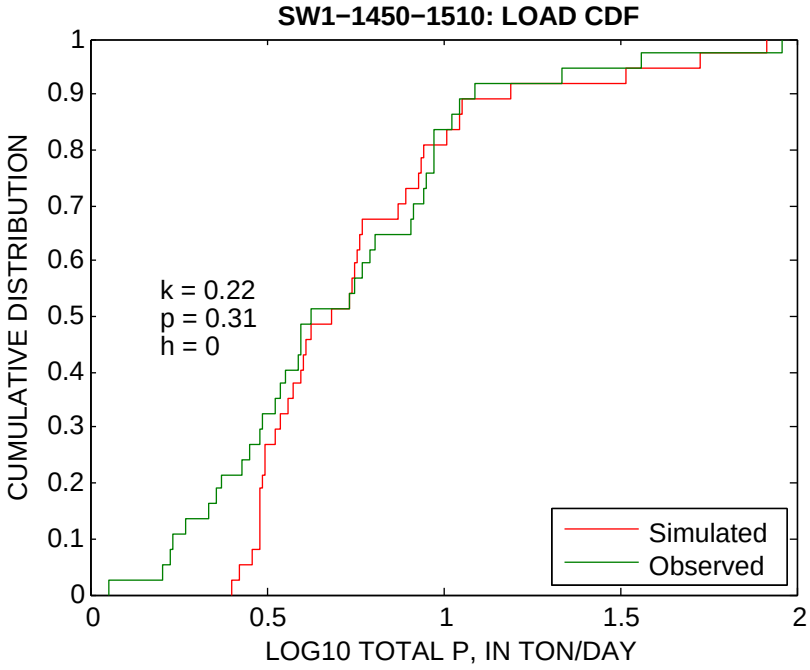


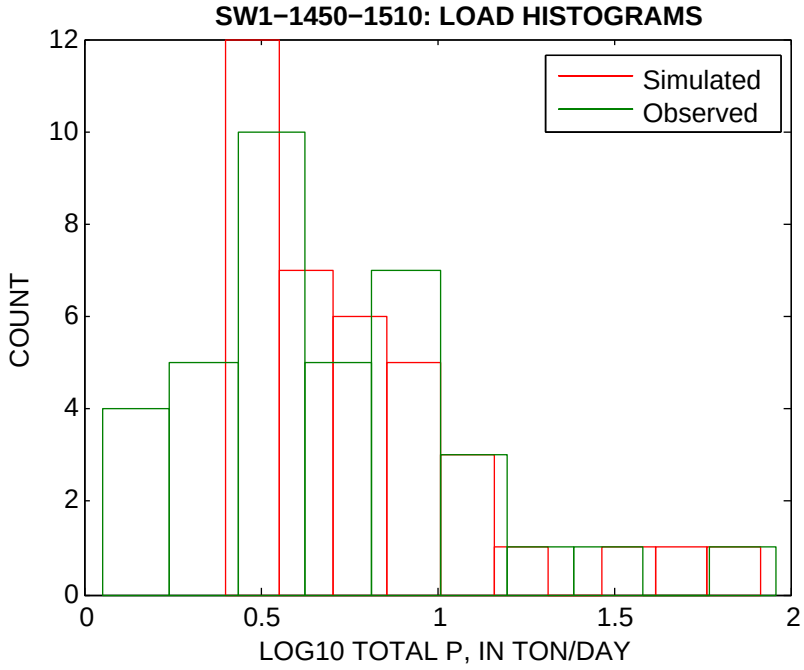


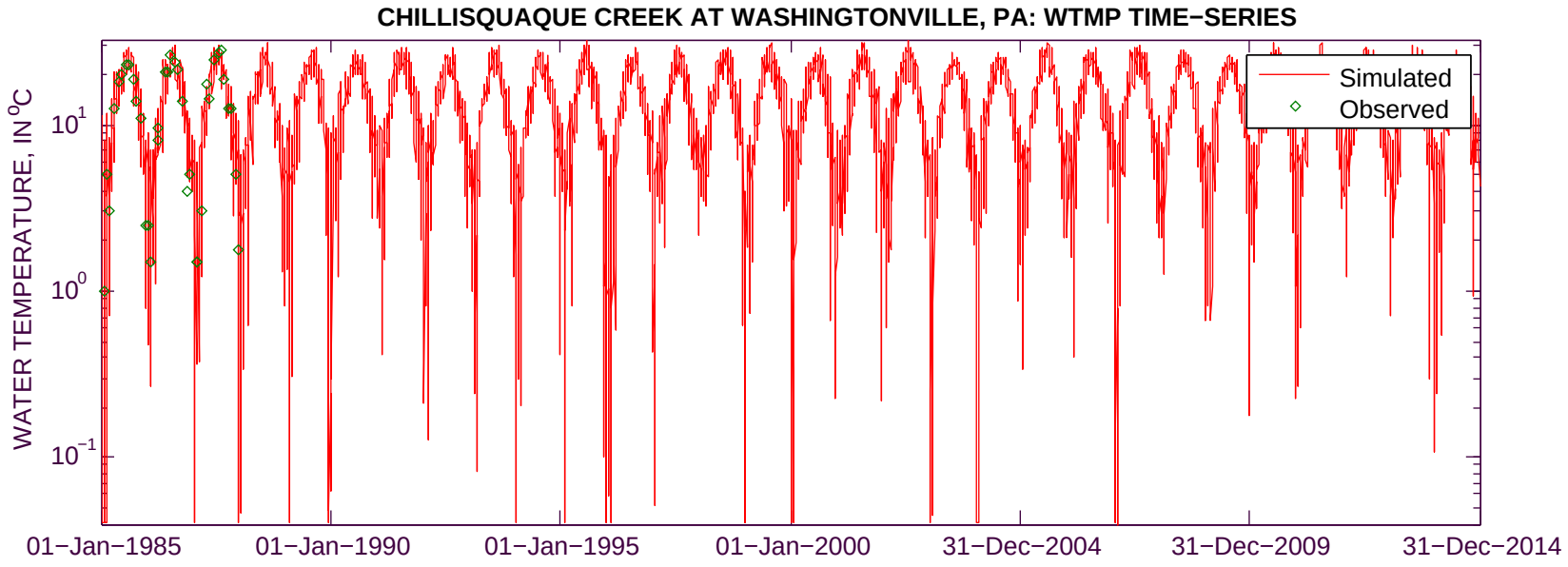
LOAD DATA
LOG10

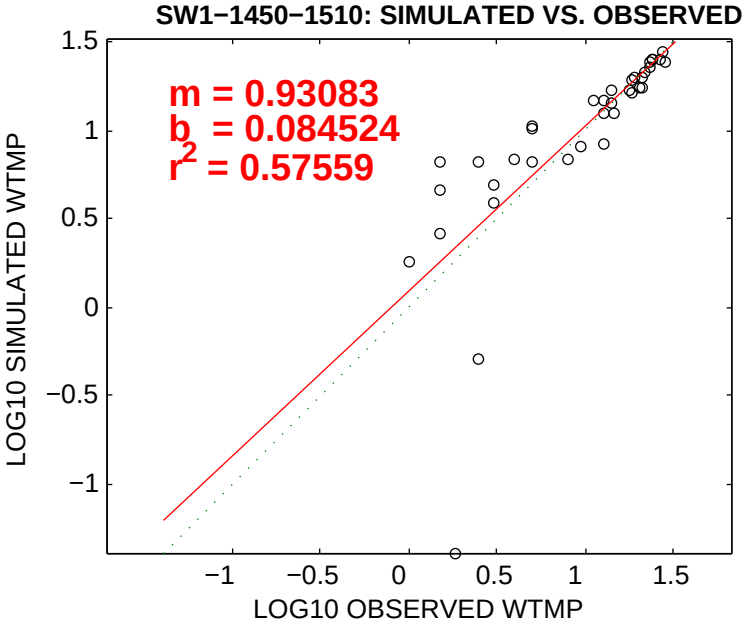


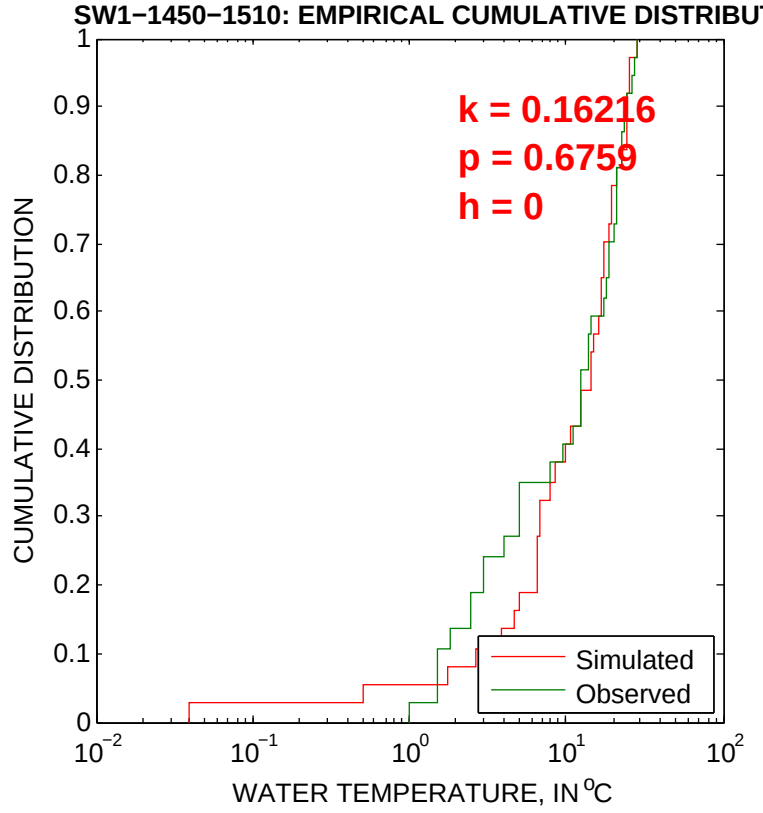












DATA SELECTION

scenario	file
P620171001WQ	WTMP.calib

plot: WTMP - water tempera...

Dates: 1/1/1985 – 12/31/201

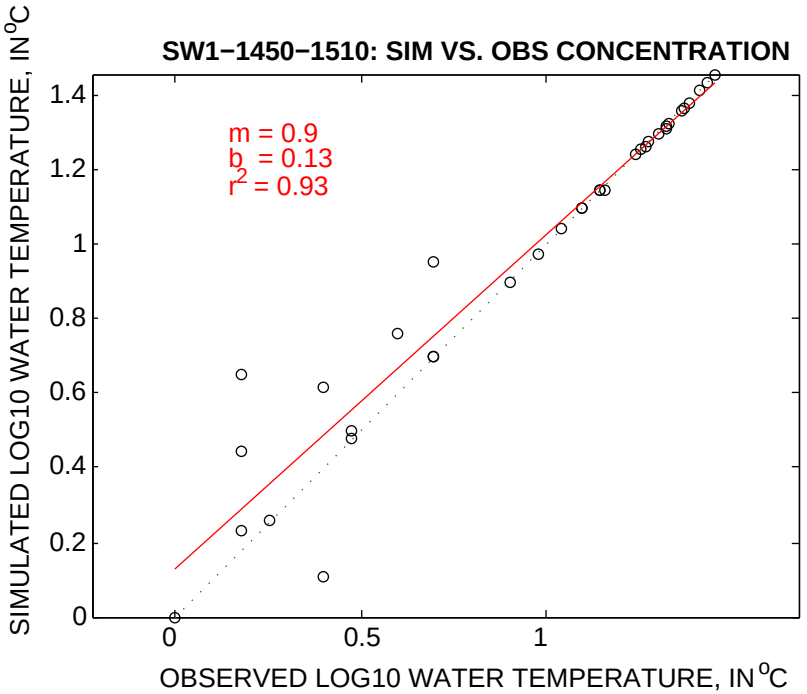
Drive	Directory	Observed
N/A	model	OBS20161101

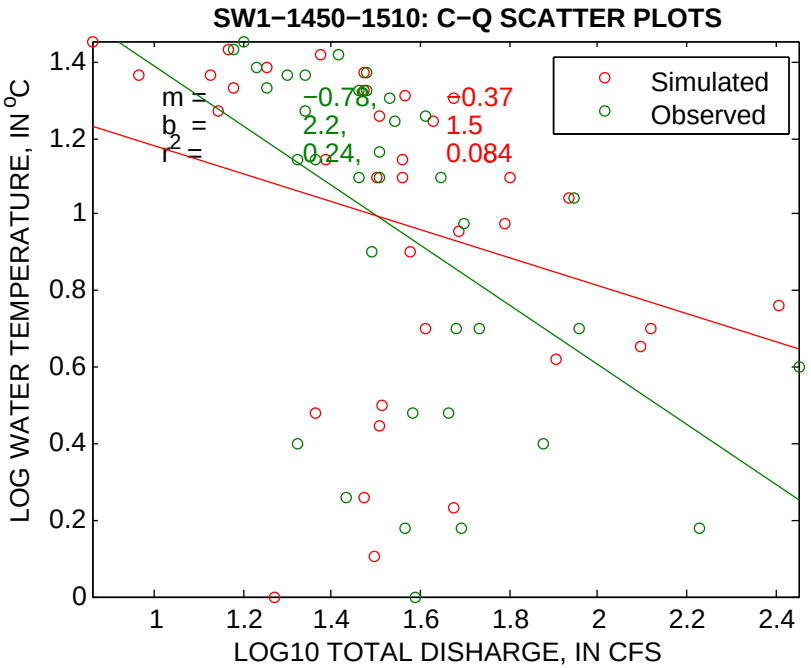
STATISTICS

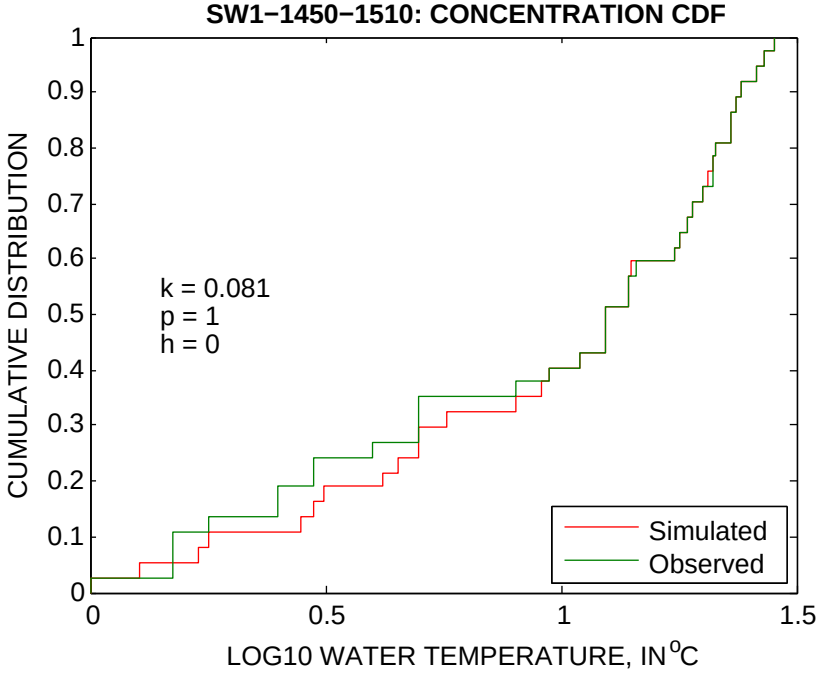
	n	37	37
		observe	simulate
min		1	0.040044
		0	-1.39746
mean		12.9054	13.4387
		0.945946	0.965041
media		12.5	14.334
		1.09691	1.15637
max		28.5	28.067
		1.45484	1.4482
varian		78.0439	64.8812
		0.196876	0.296363
JB		0.098522	0.169463
		0.057205	0.001
		ra	log
%		4.13249	2.0186
err.va		6.39781	0.127097
rel.std.err		.0819771	0.64557
mod.eff		0.918023	0.35443

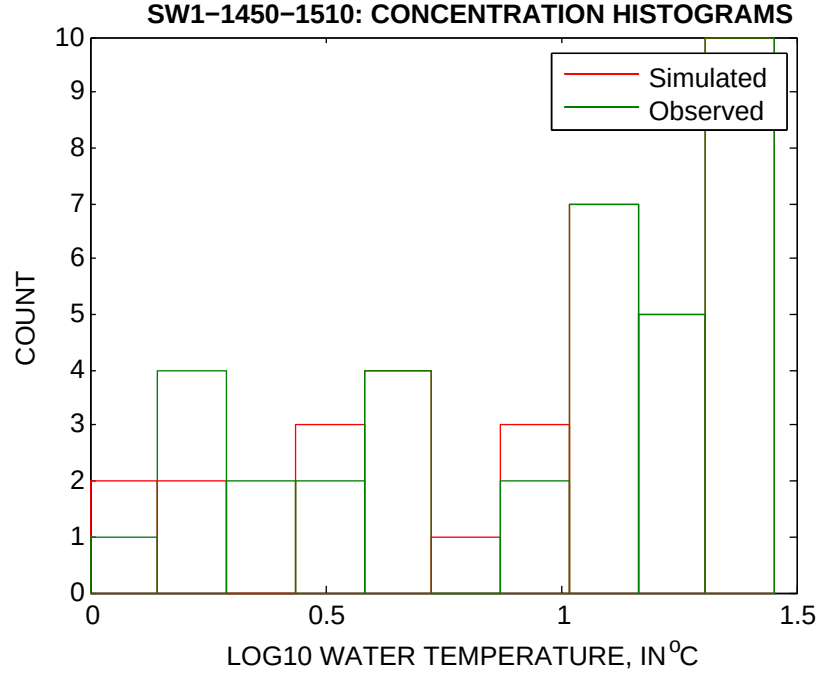
VERSION 2.1

ALL DATA
LOG10

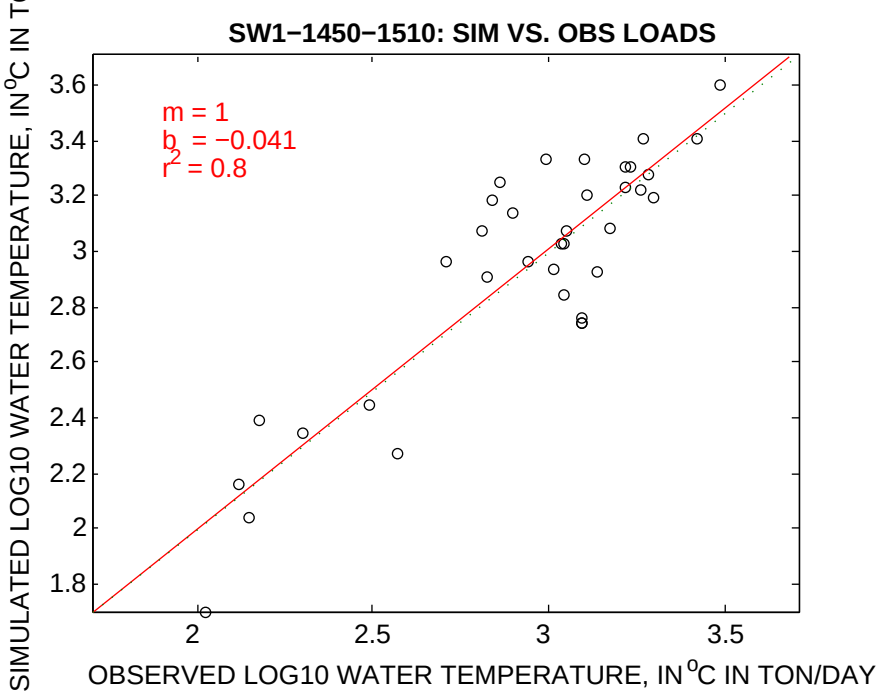


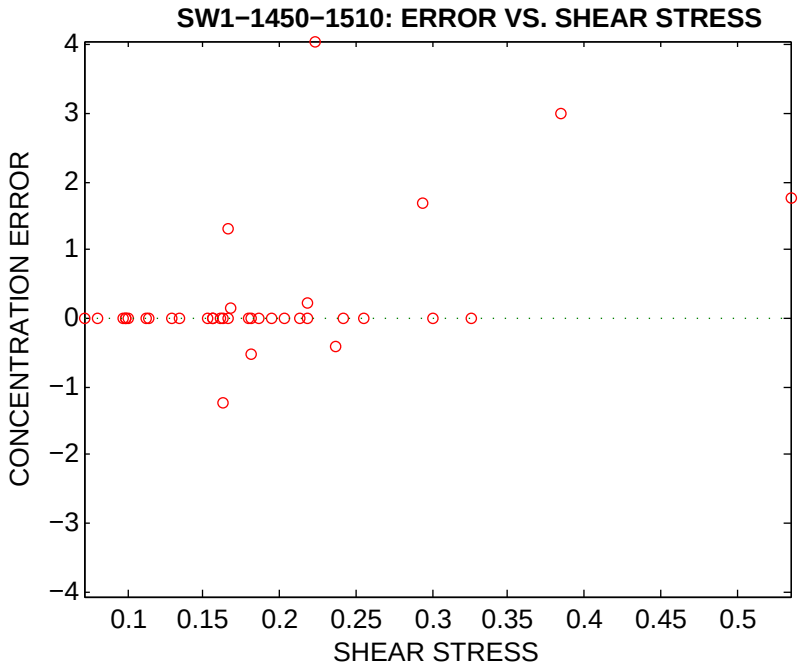


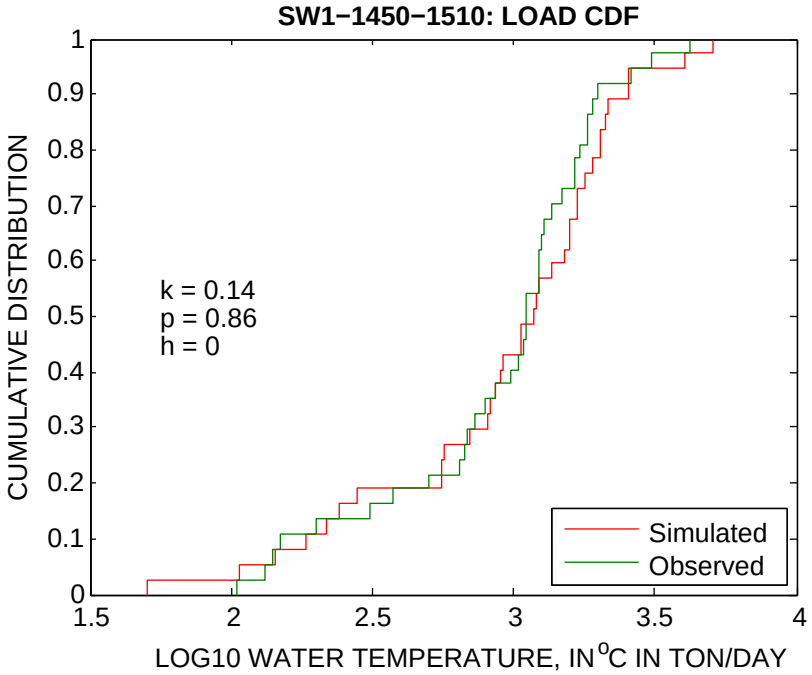


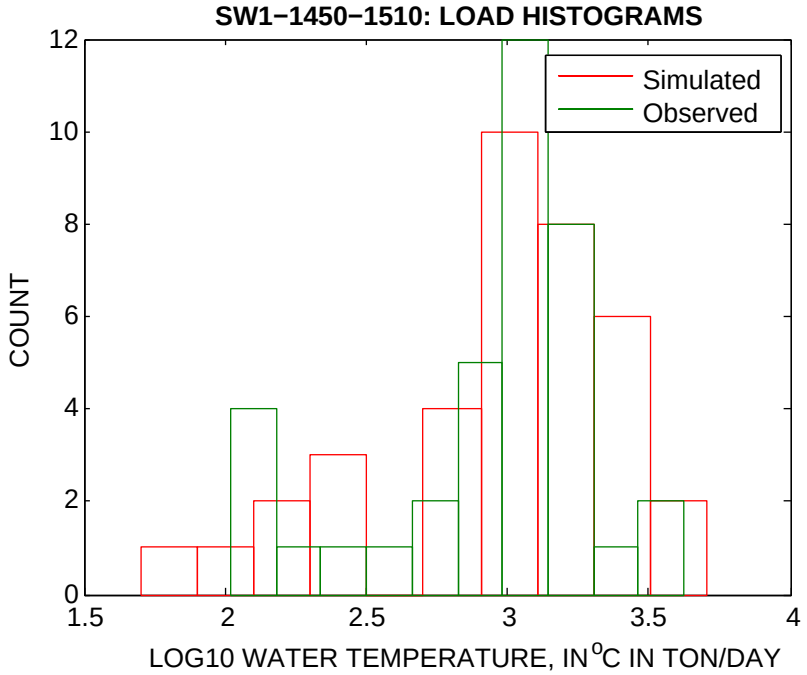


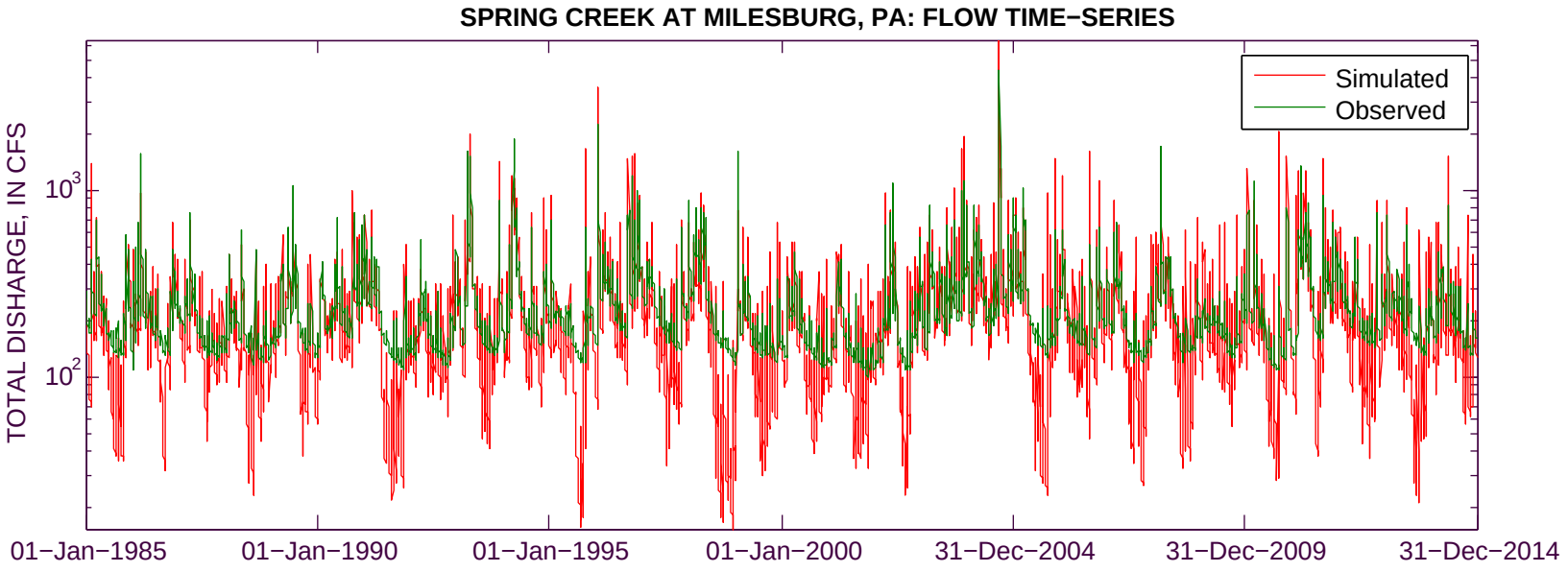
LOAD DATA
LOG10

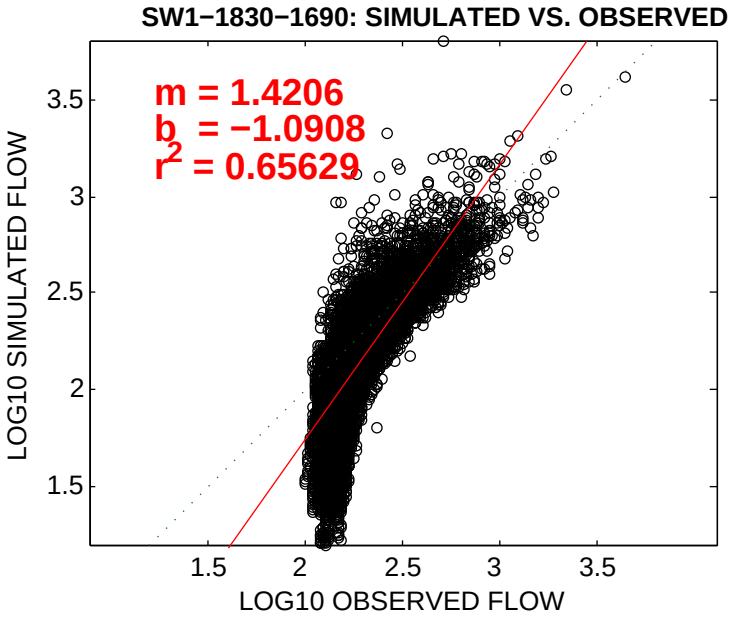


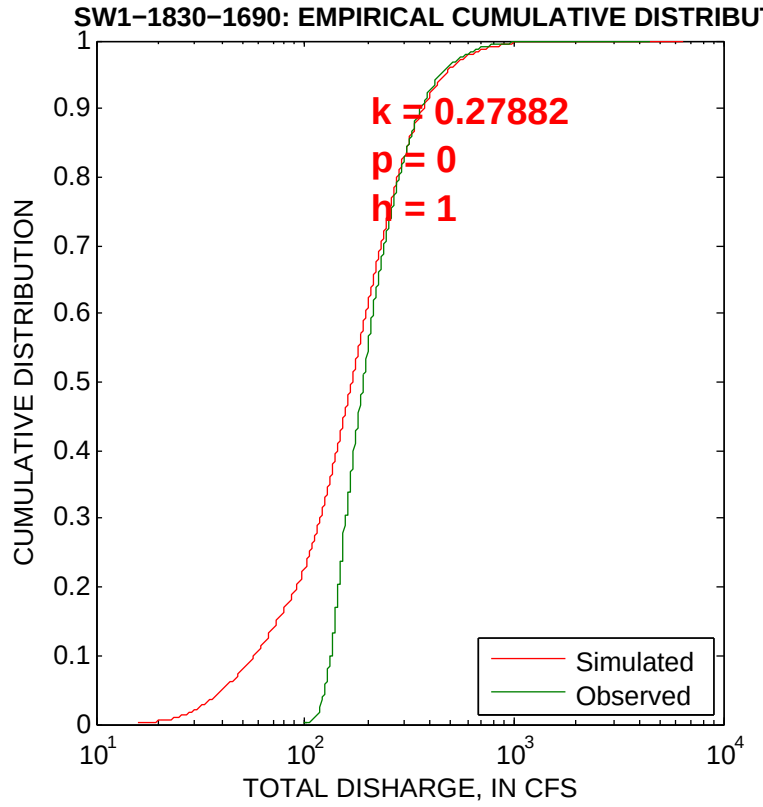












DATA SELECTION

scenario	file
P620171001WQ	FLOW.calib

plot: FLOW - total discharge

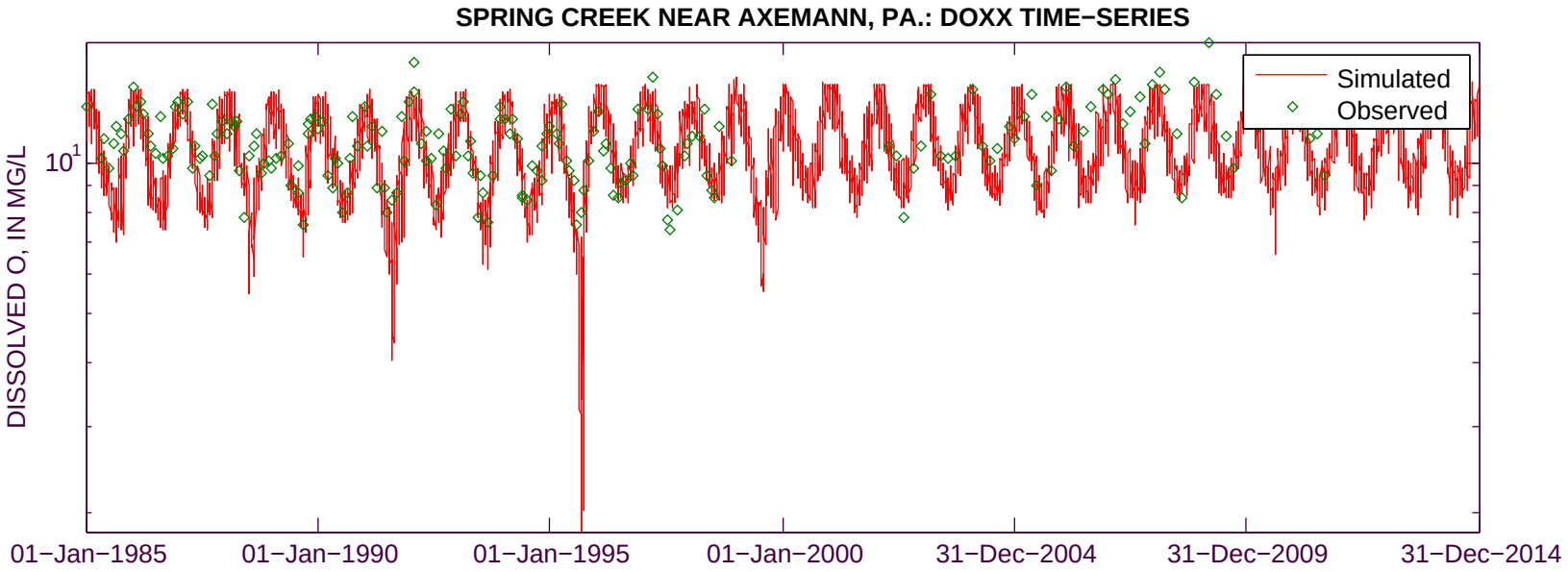
Dates: 1/1/1985 – 12/31/201

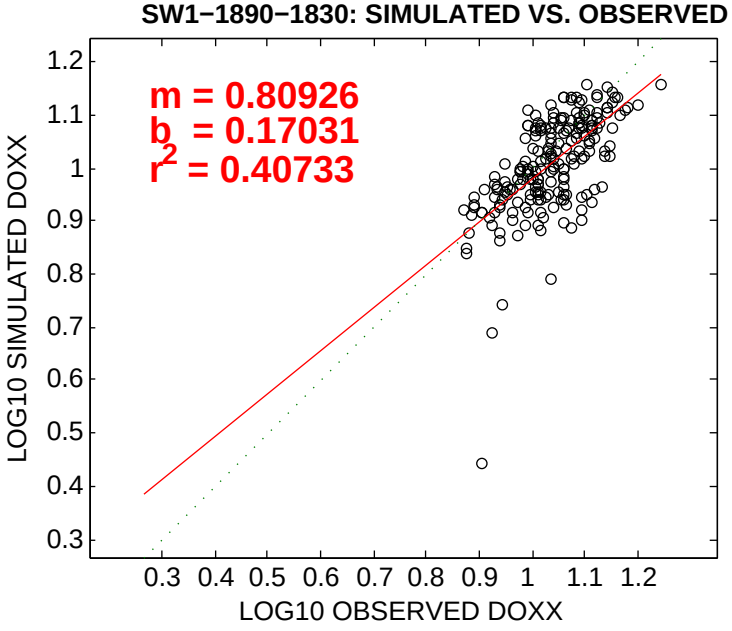
Drive	Directory	Observed
N/A	model	OBS20161101

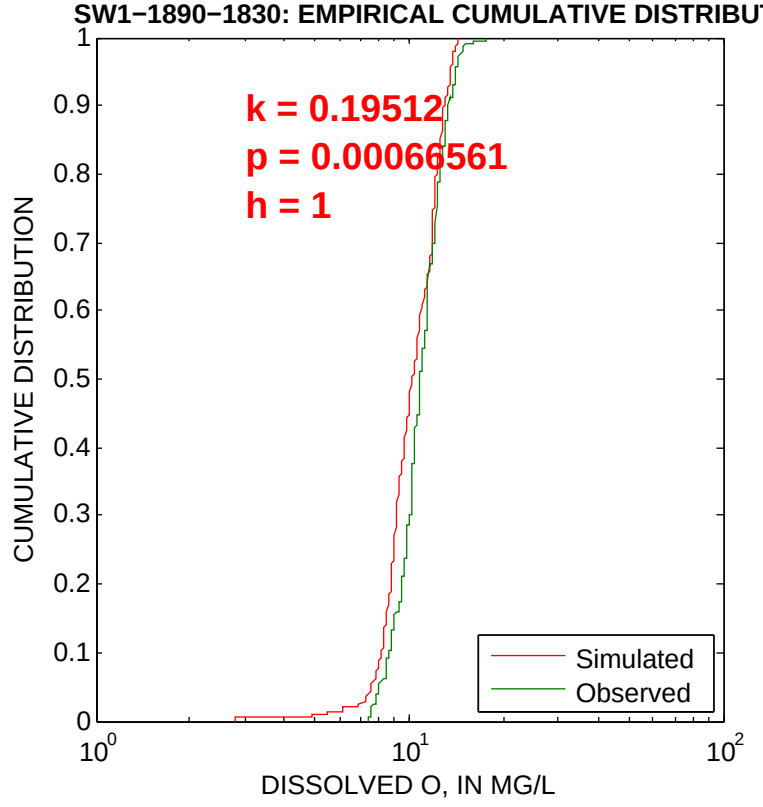
STATISTICS

	n	observe	simulate
		10957	10957
min		99	15.546
		1.99564	1.19162
mean		228.95	202.883
		2.31595	2.1993
media		191	168.3
		2.28103	2.22608
max		4420	6419.3
		3.64542	3.80749
varian		18436.2	30163
		0.0320249	0.0984838
JB		0.001	0.001
		0.001	0.001
		ra	log
%		-11.3853	-5.03657
err.va		12627.1	0.0531236
rel.std.err		0.684911	1.65882
mod.eff		0.315089	-0.658824

VERSION 2.1







DATA SELECTION

scenario: P620171001WQ | file: DOXX.calib

plot: DOXX - dissolved oxygen

Dates: 1/1/1985 – 12/31/201

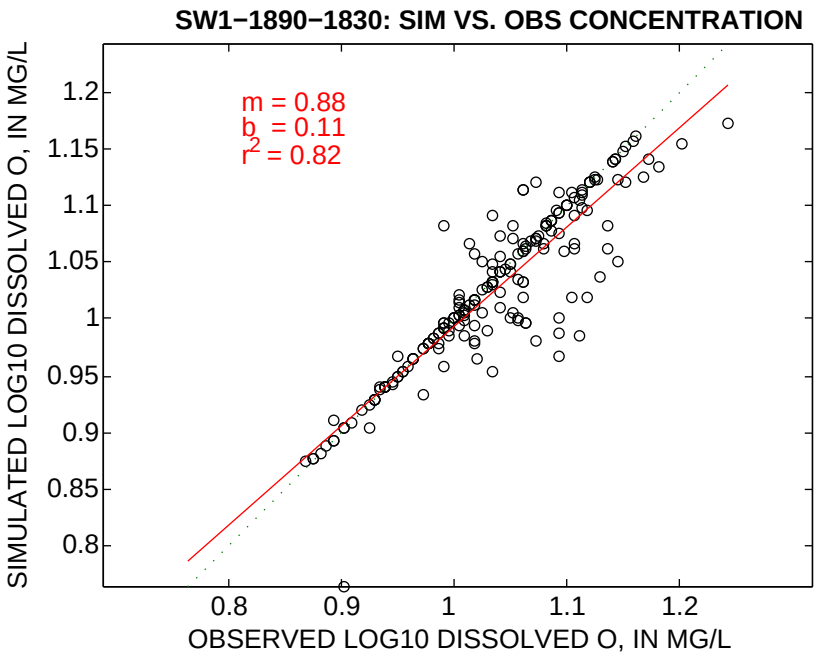
Drive: N/A | Directory: model | Observed: OBS20161101

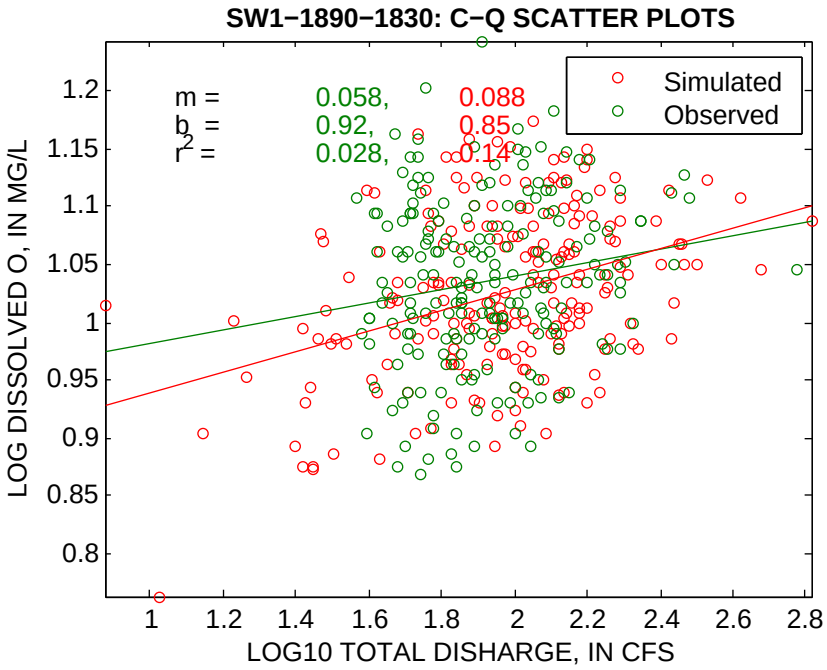
STATISTICS

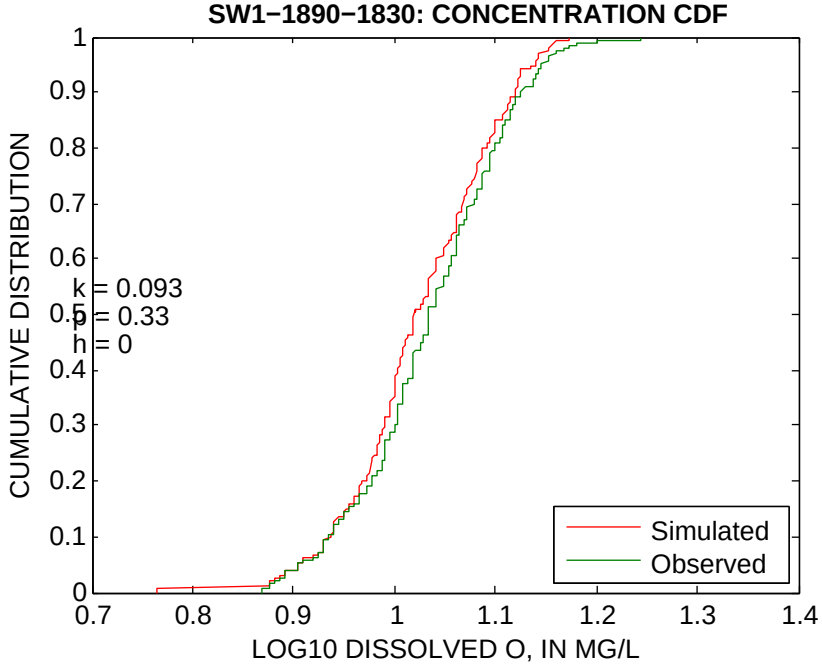
	observe	simulate
n	205	205
min	7.4	2.7657
	0.869232	0.441805
mean	11	10.4009
	1.03546	1.00827
media	10.8	10.234
	1.03342	1.01005
max	17.5	14.415
	1.24304	1.15881
varian	3.3202	3.92432
	0.00520934	0.00837552
JB	0.106975	0.321981
	0.5	0.001
	ra	log
%	-5.44619	-2.62602
err.va	2.82913	0.00589641
rel.std.err	0.852099	1.13189
mod.eff	0.147901	-0.131892

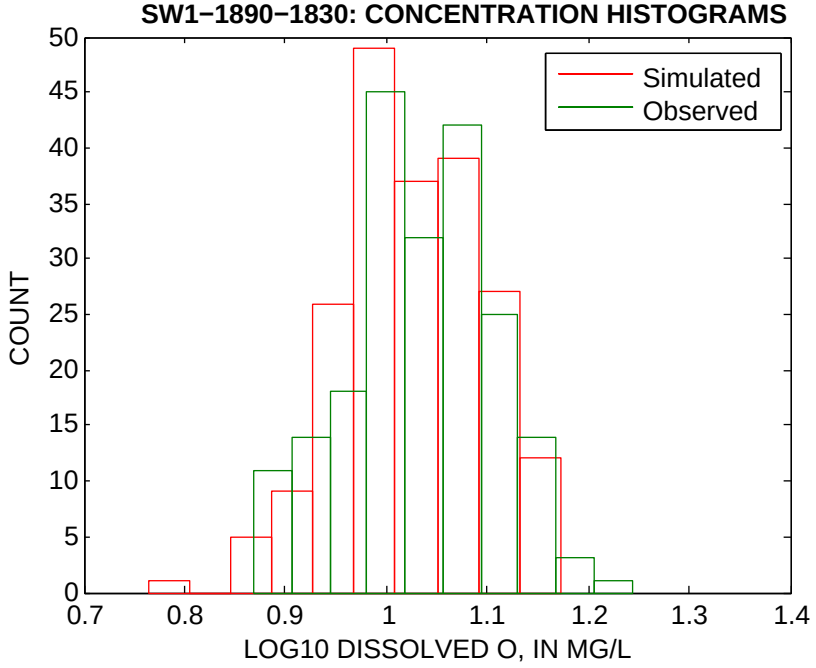
VERSION 2.1

ALL DATA
LOG10

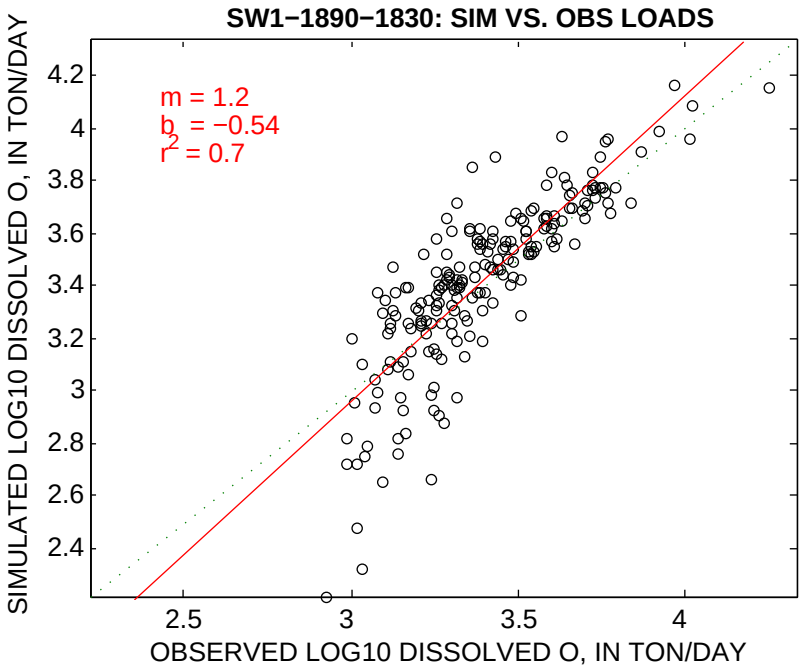


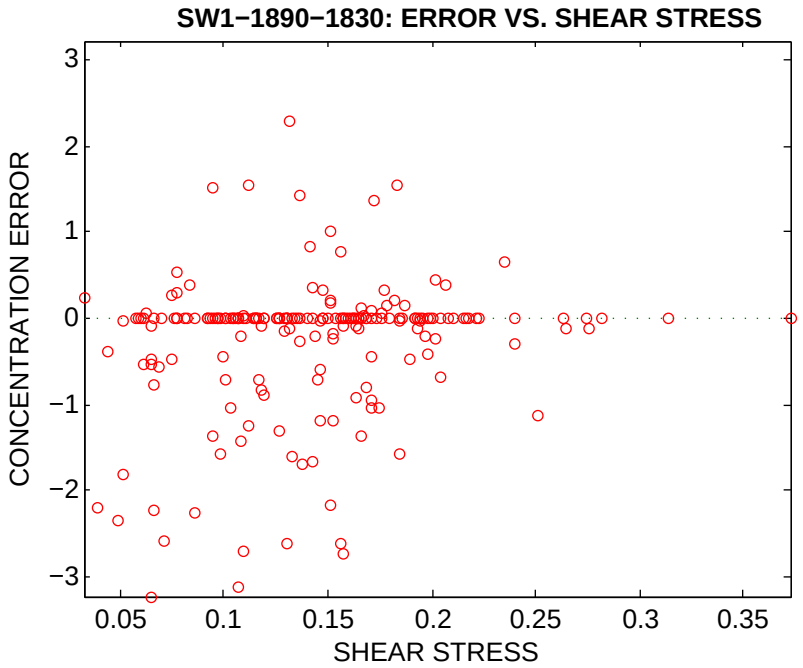


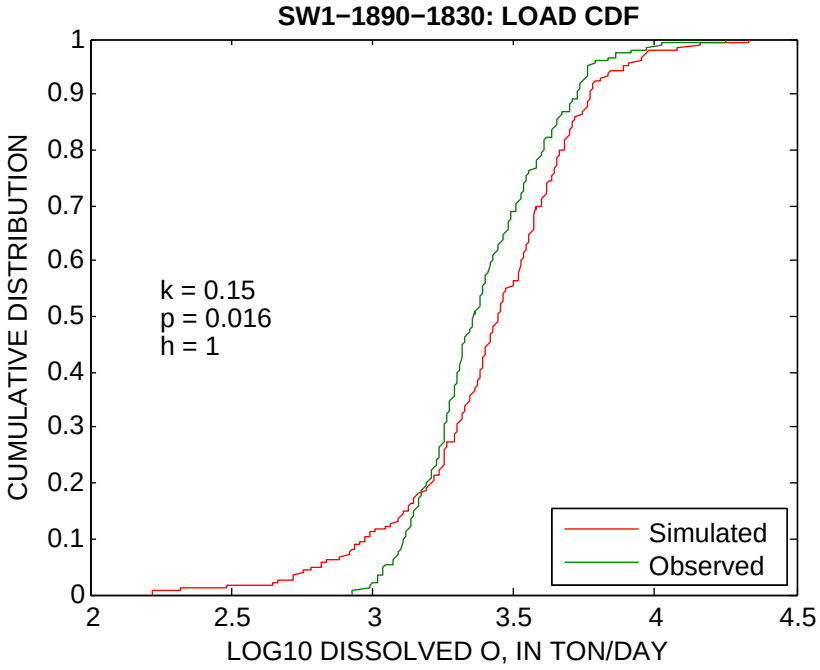


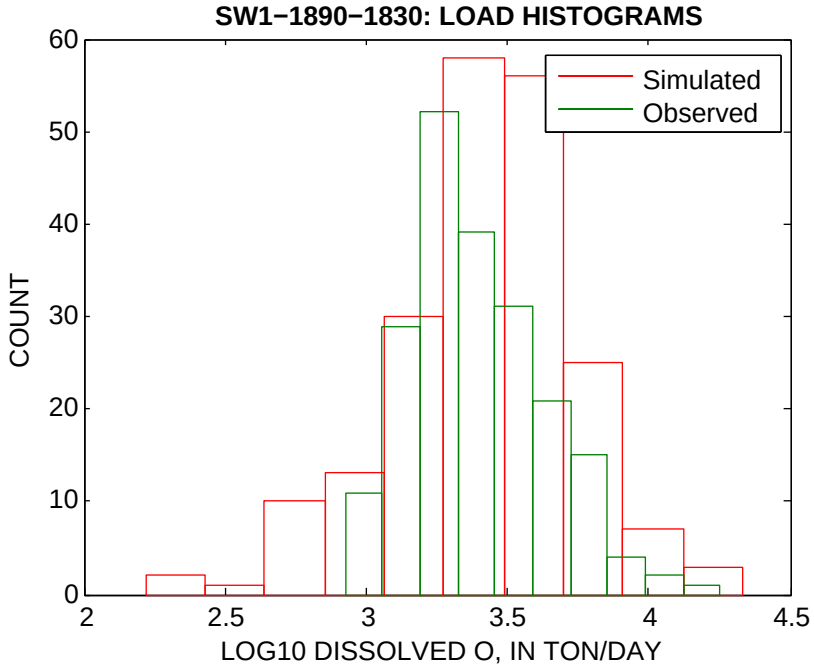


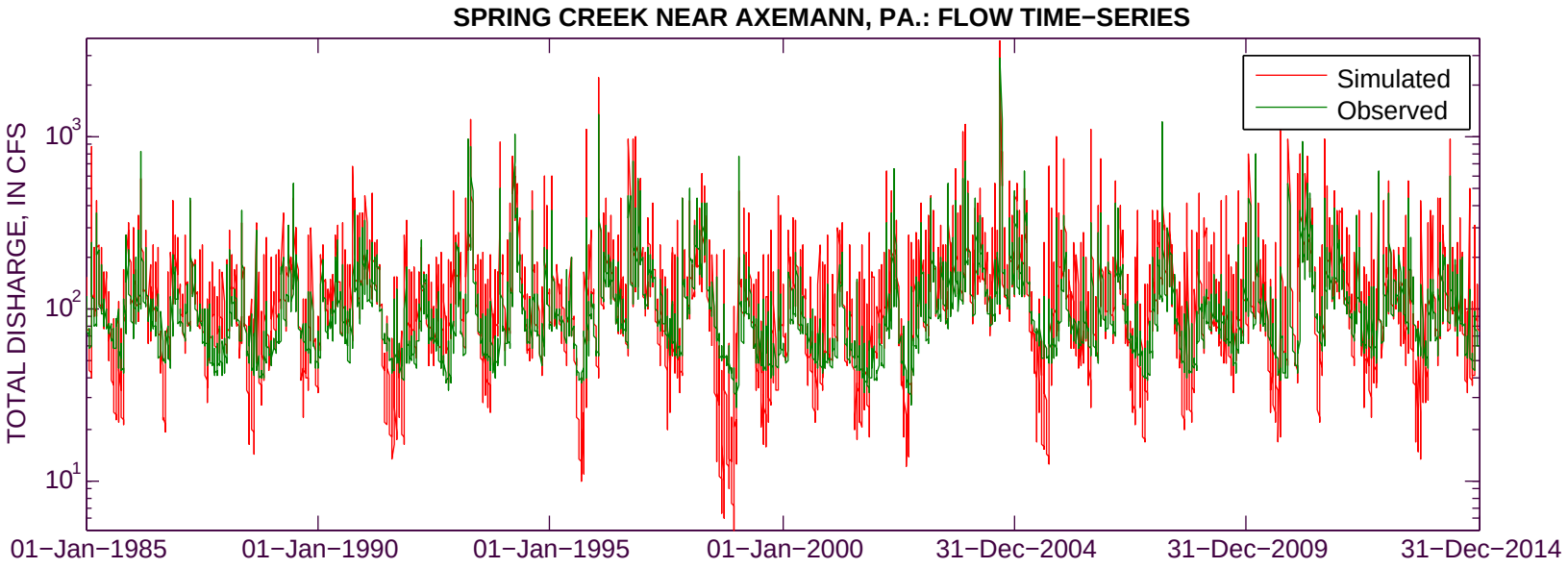
LOAD DATA
LOG10

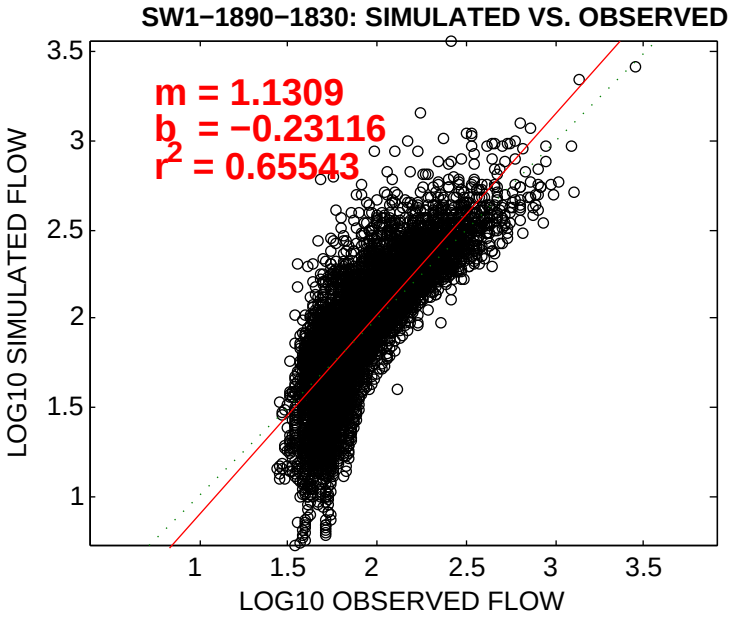


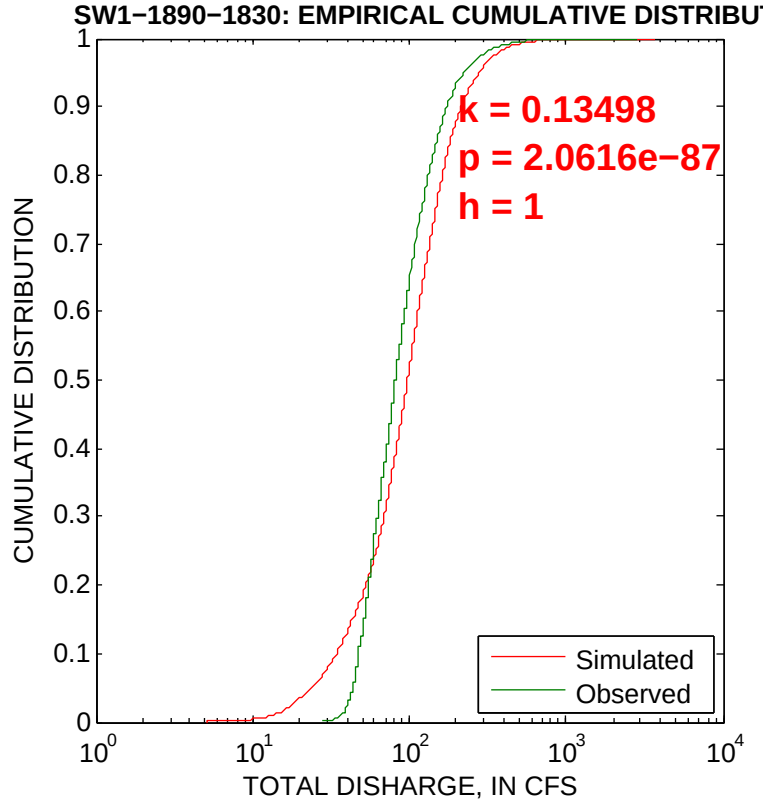












DATA SELECTION

scenario: P620171001WQ | file: FLOW.calib

plot: FLOW - total discharge

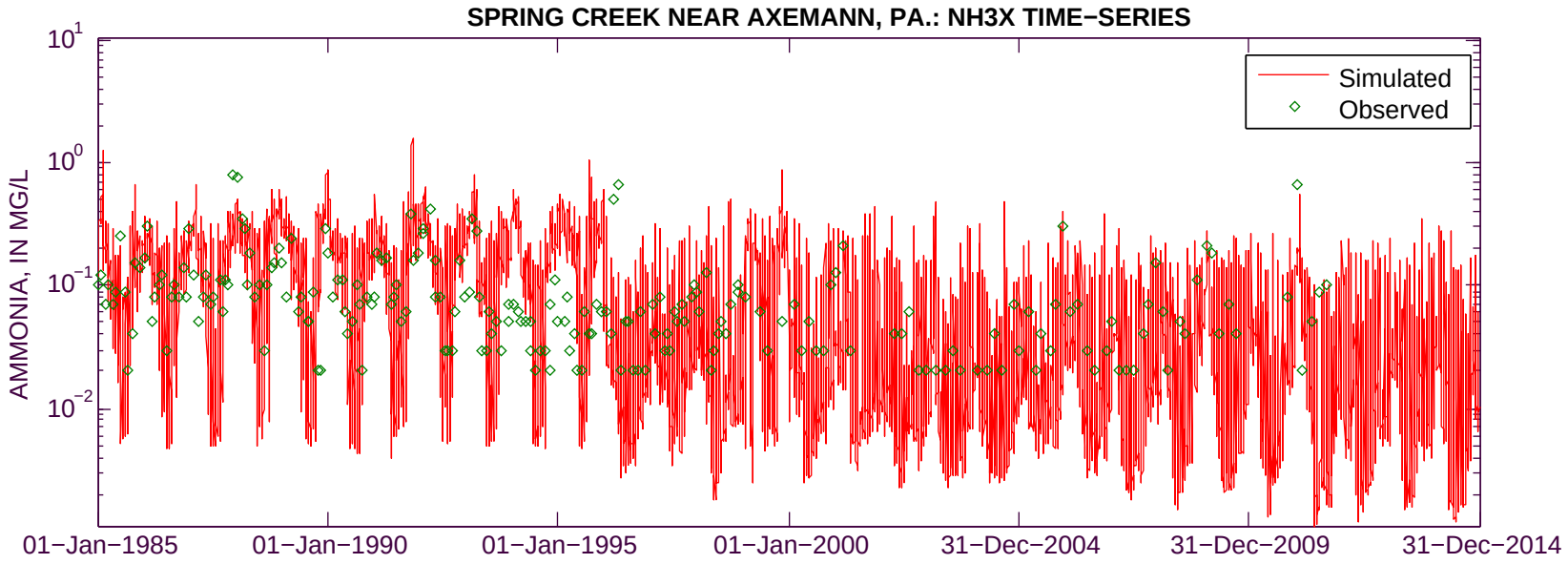
Dates: 1/1/1985 – 12/31/201

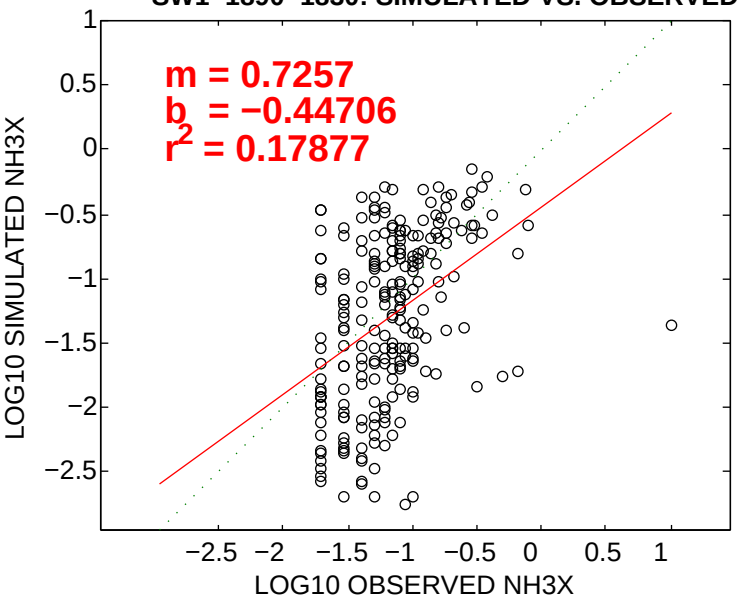
Drive: N/A | Directory: model | Observed: OBS20161101

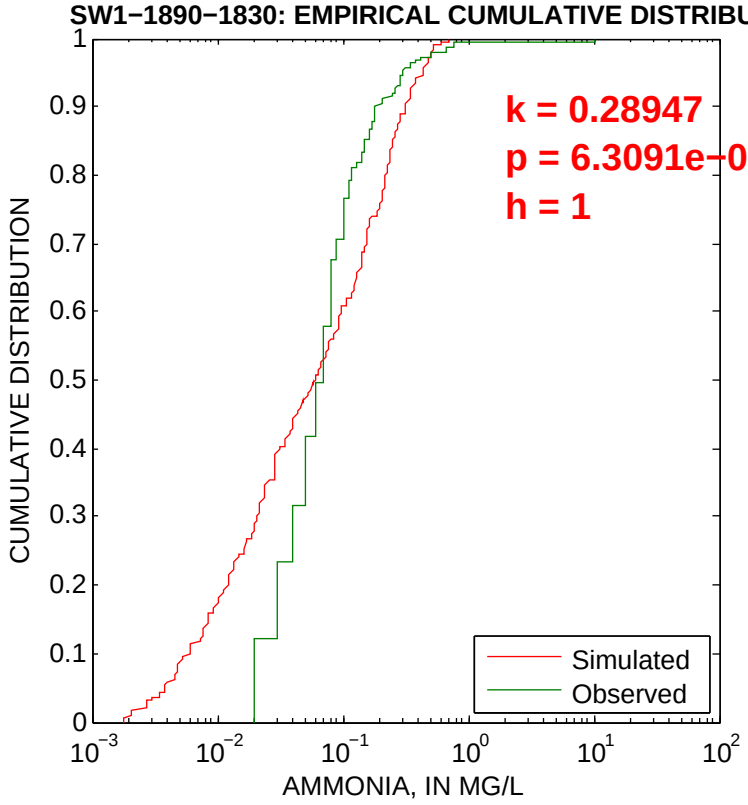
STATISTICS

		observe	simulate
n		10957	10957
min		27	5.2245
		1.43136	0.718045
mean		102.881	119.228
		1.94197	1.96504
media		82	97.832
		1.91381	1.99048
max		2840	3679.7
		3.45332	3.56581
varian		6502.88	11127.7
		0.0518881	0.101251
JB		0.001	0.001
		0.001	0.001
		ra	log
%		15.8898	1.18801
err.va		5058.56	0.0363095
rel.std.err		0.777895	0.699765
mod.eff		0.222105	0.300235

VERSION 2.1







DATA SELECTION

scenario	file
P620171001WQ	NH3X.calib

plot: NH3X - ammonia

Dates: 1/1/1985 – 12/31/201

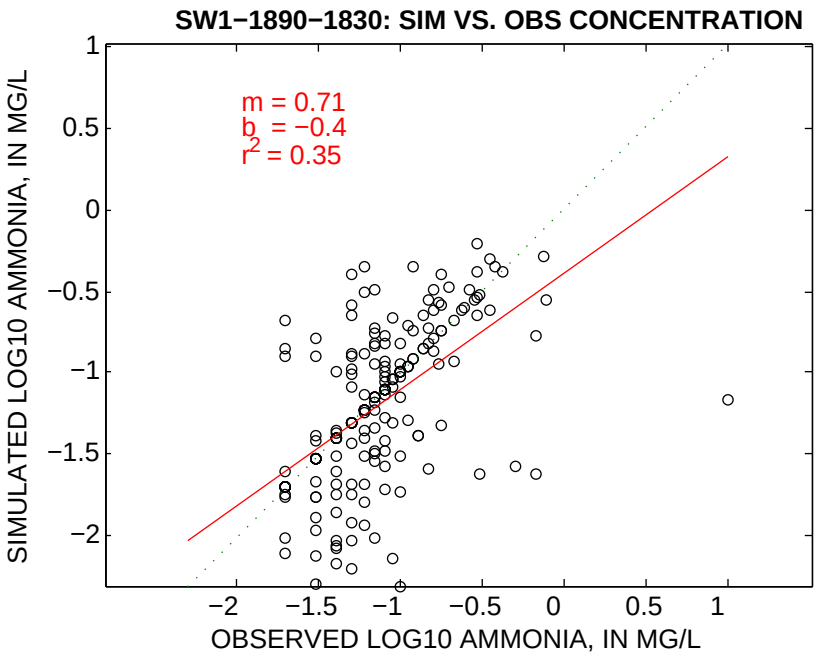
Drive	Directory	Observed
N/A	model	OBS20161101

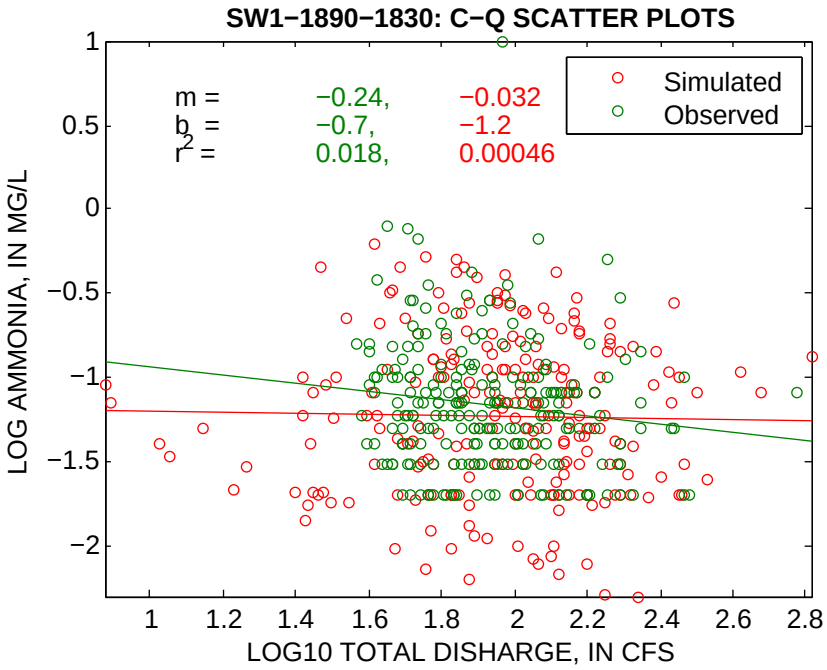
STATISTICS

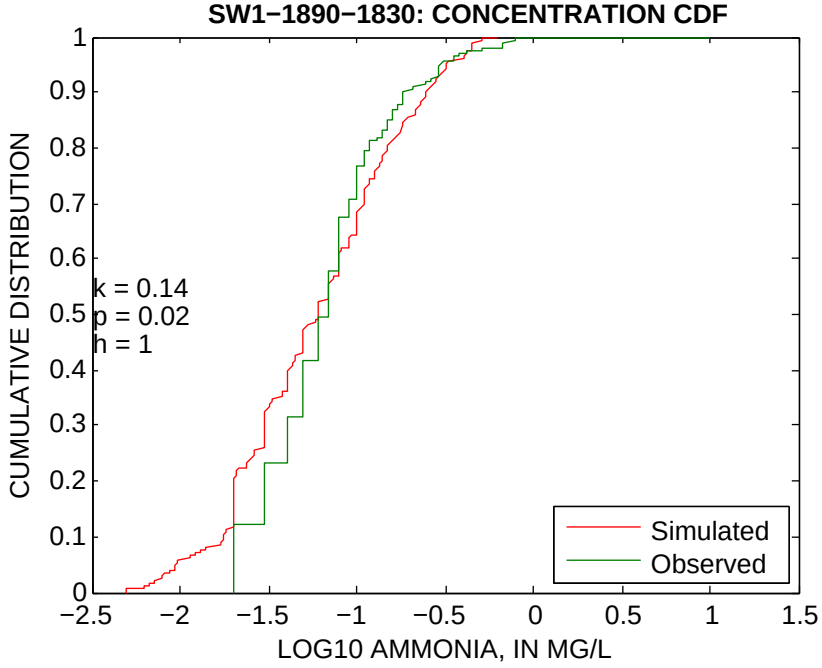
	n	observe	simulate
		228	228
min		0.02	0.0017623
		-1.69897	-2.75392
mean		0.140921	0.119577
		-1.16752	-1.29433
media		0.07	0.061078
		-1.1549	-1.21414
max		10.1	0.69246
		1.00432	-0.159605
varian		0.451809	0.0190901
		0.144005	0.424222
JB		0.001	0.001
		0.001	0.008791
		ra	log
%		-15.1464	10.8617
err.va		0.465493	0.37537
rel.std.err		1.03029	2.60665
mod.eff		-0.0302859	-1.60665

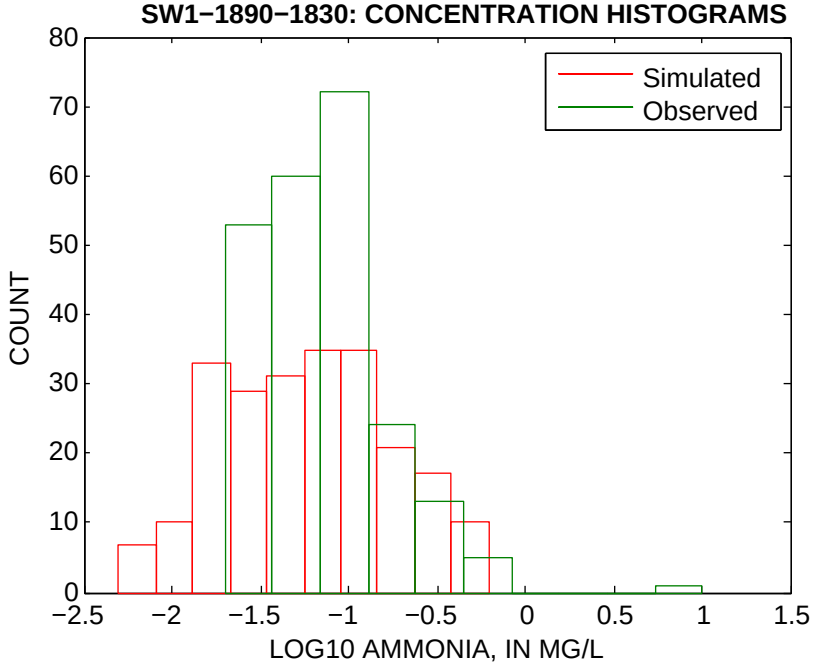
VERSION 2.1

ALL DATA
LOG10

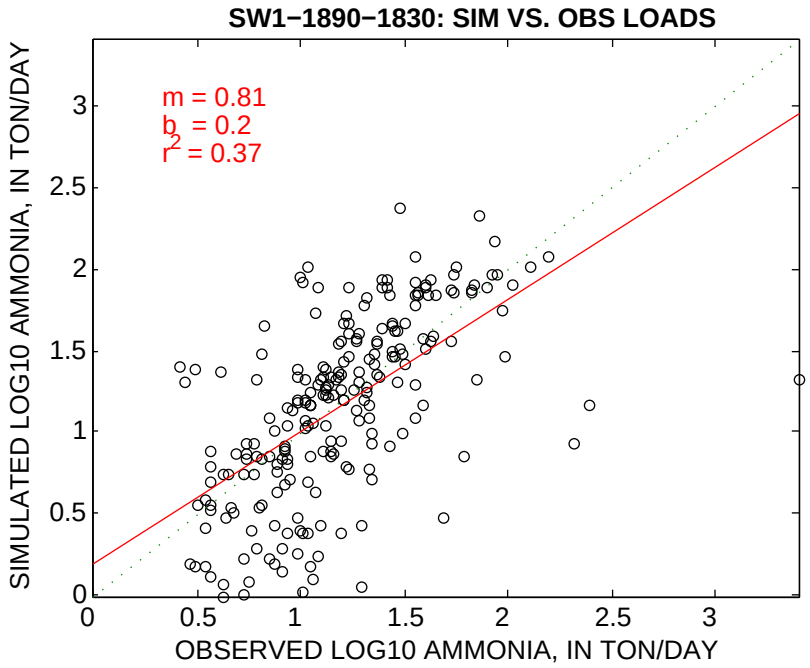


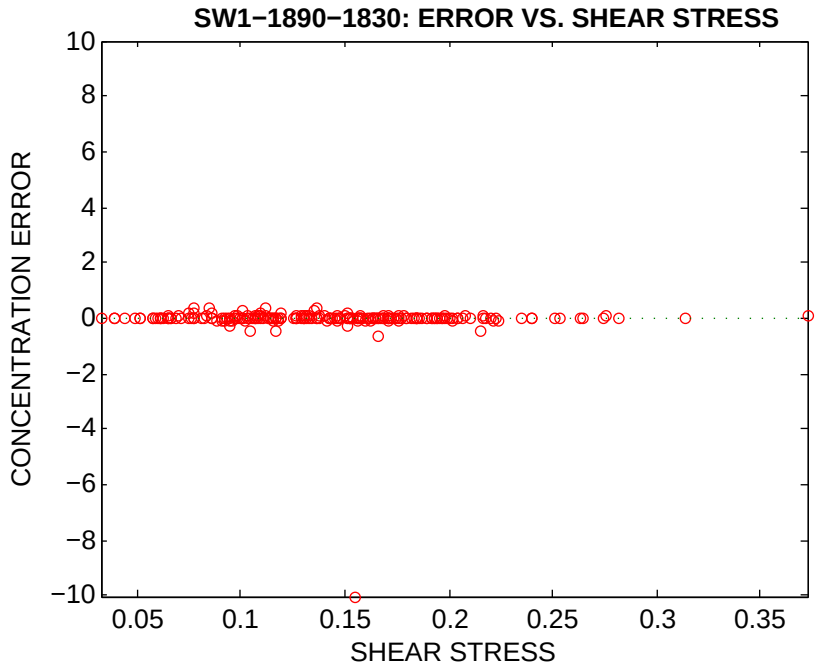


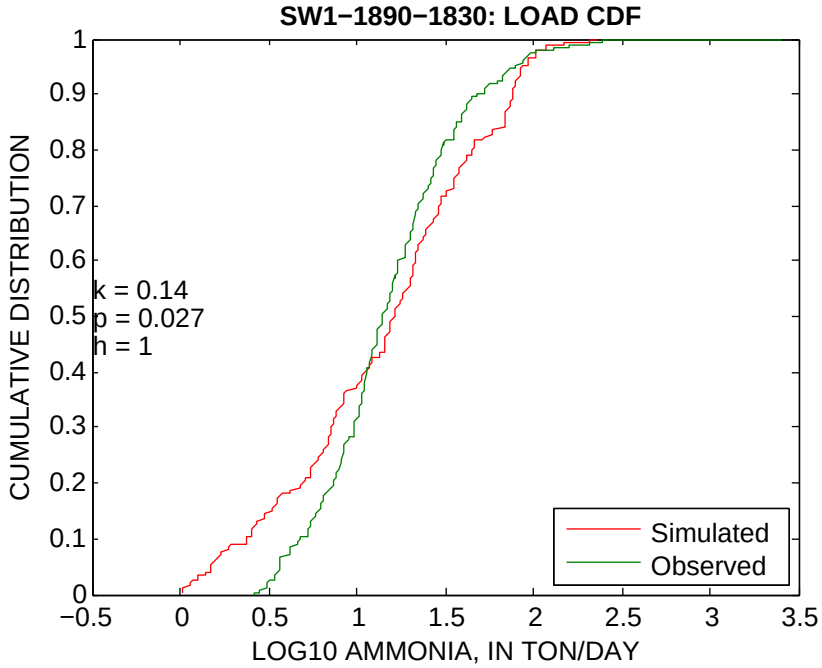


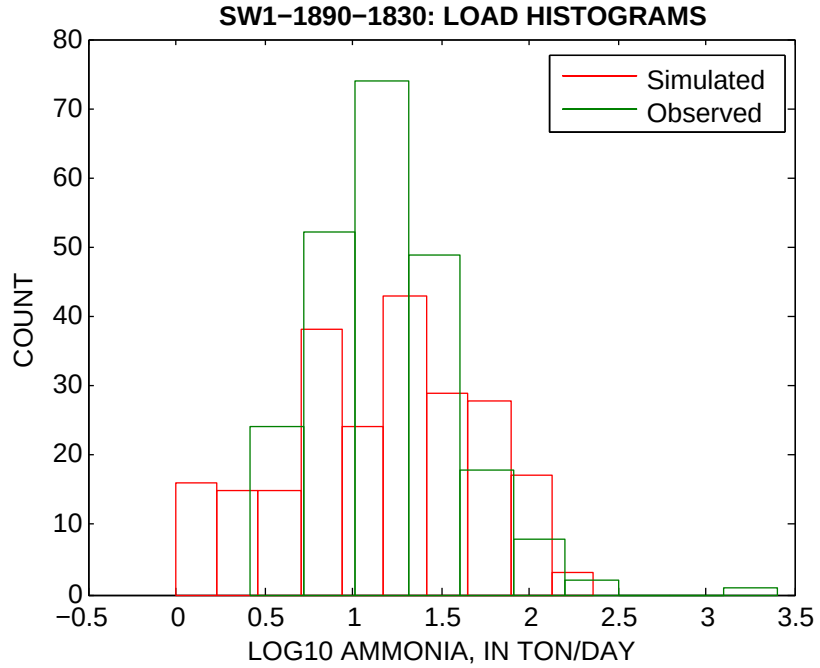


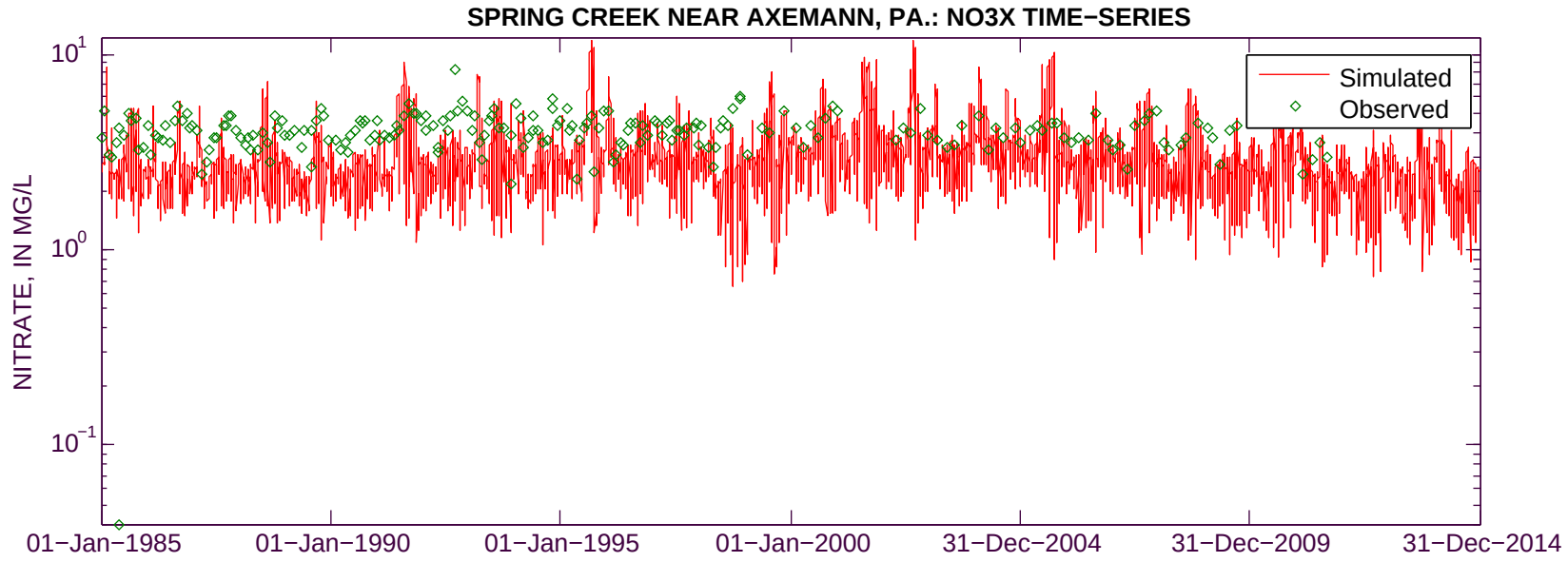
LOAD DATA
LOG10

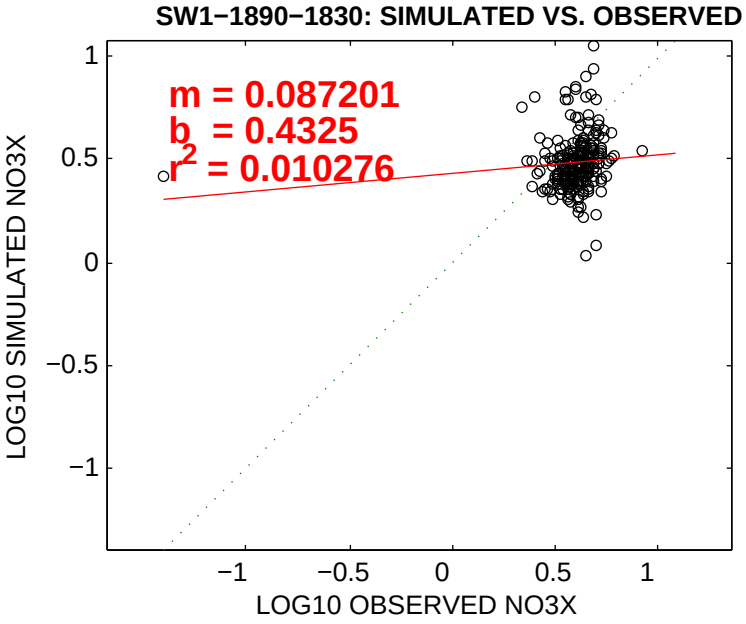


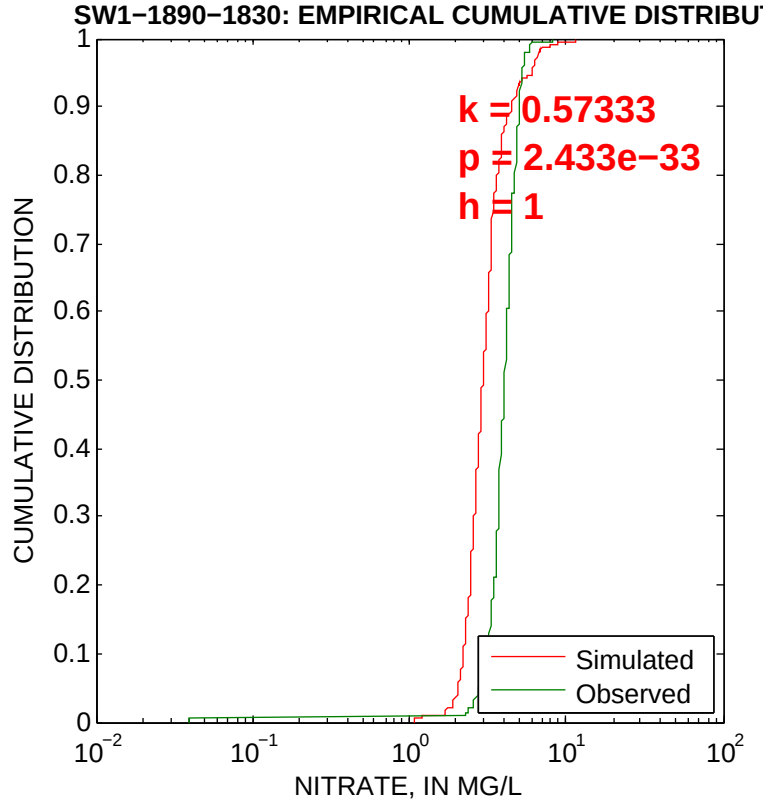












DATA SELECTION

scenario: P620171001WQ | file: NO3X.calib

plot: NO3X - nitrate

Dates: 1/1/1985 – 12/31/201

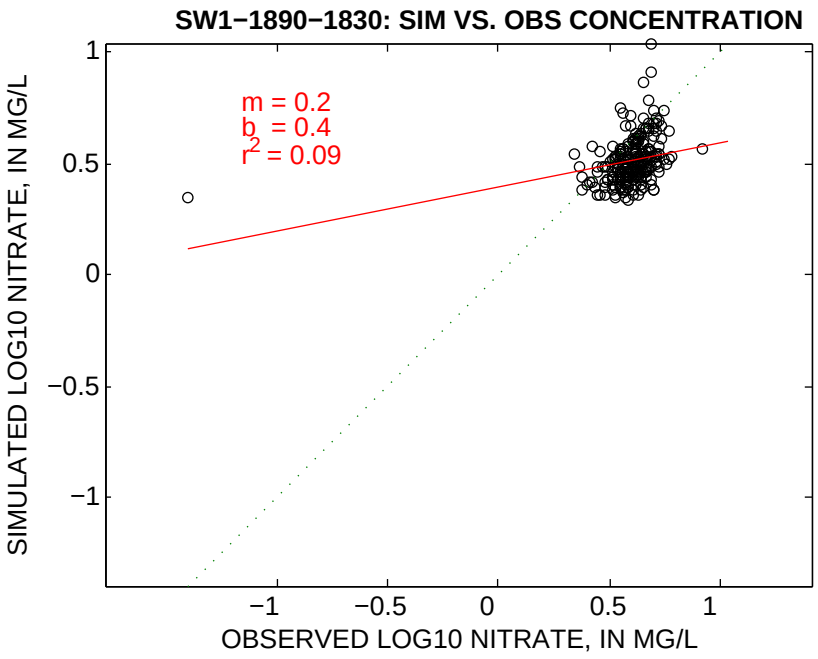
Drive: N/A | Directory: model | Observed: OBS20161101

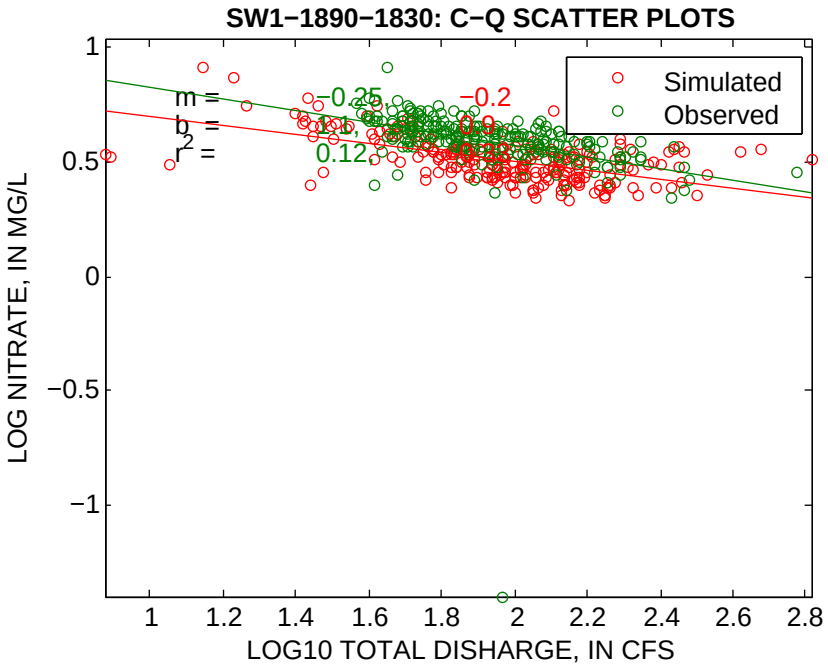
STATISTICS

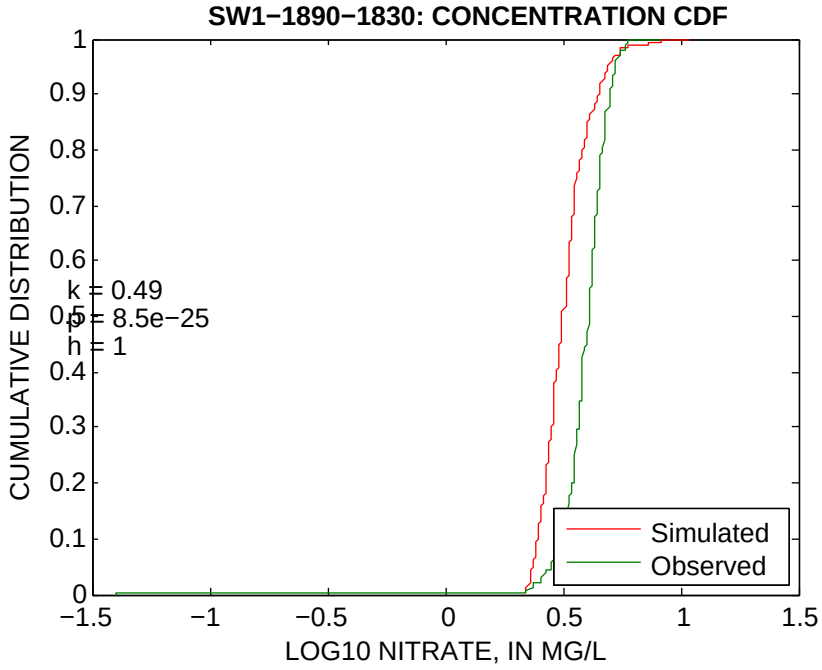
	n	225	225
		observe	simulate
min		0.04	1.0795
		-1.39794	0.0332226
mean		4.0708	3.21838
		0.594815	0.484366
media		4.09	2.9641
		0.611723	0.471893
max		8.3	11.407
		0.919078	1.05717
varian		0.680964	1.51347
		0.0247584	0.0183203
JB		0.001	0.001
		0.001	0.001
		ra	log
%		-20.94	-18.5686
err.va		2.62888	0.0510143
rel.std.err		3.86052	2.06048
mod.eff		-2.86052	-1.06048

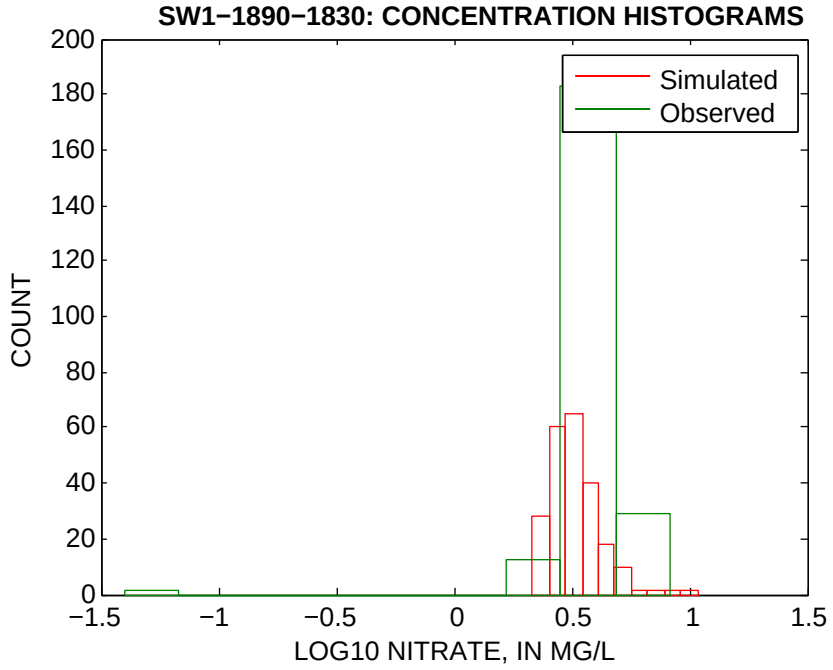
VERSION 2.1

ALL DATA
LOG10

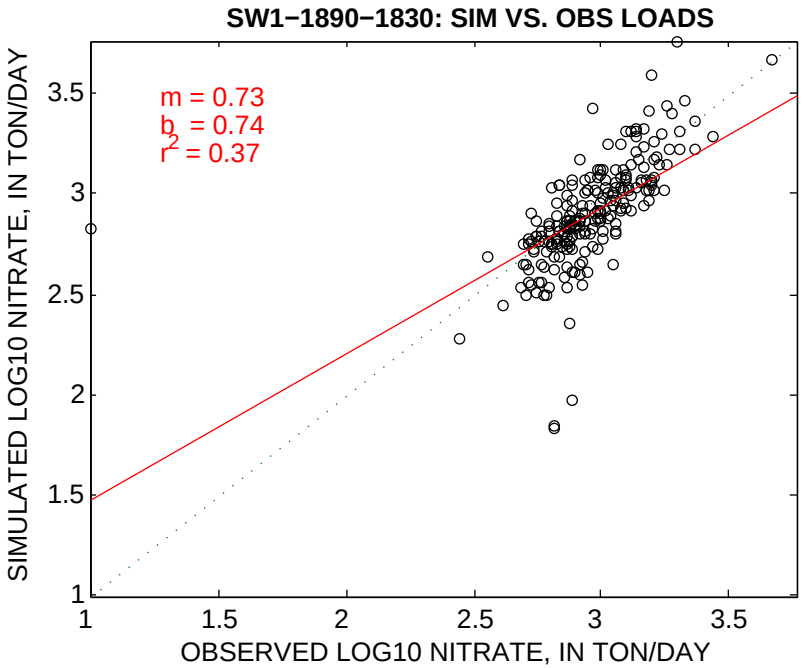


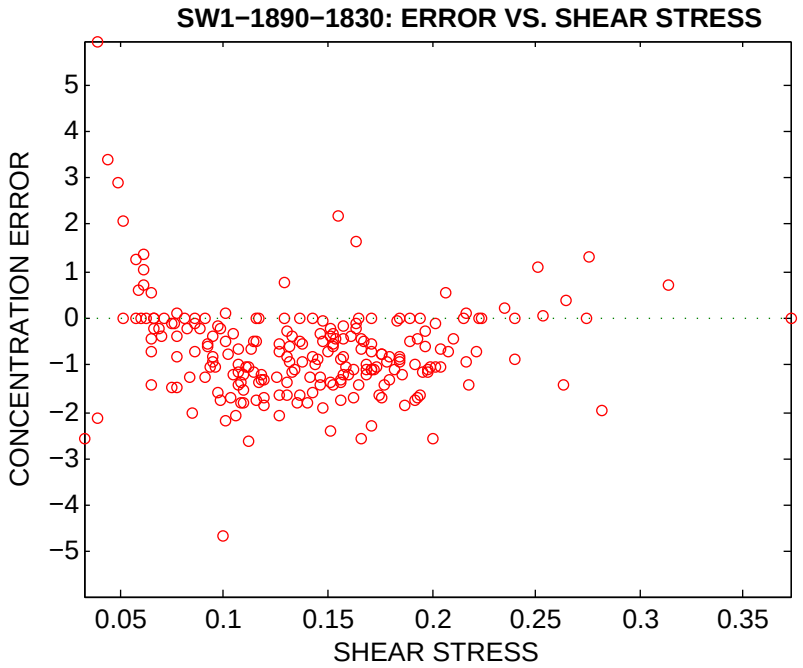


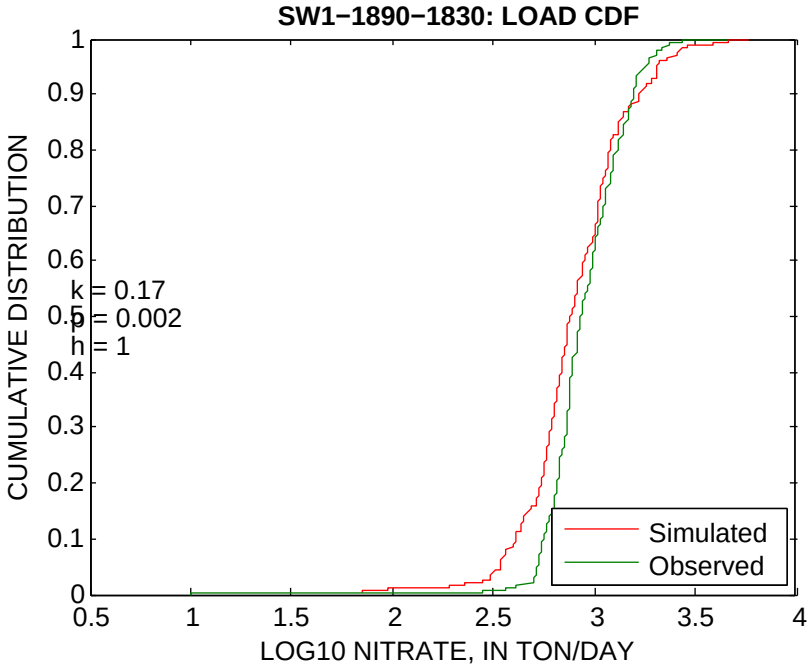


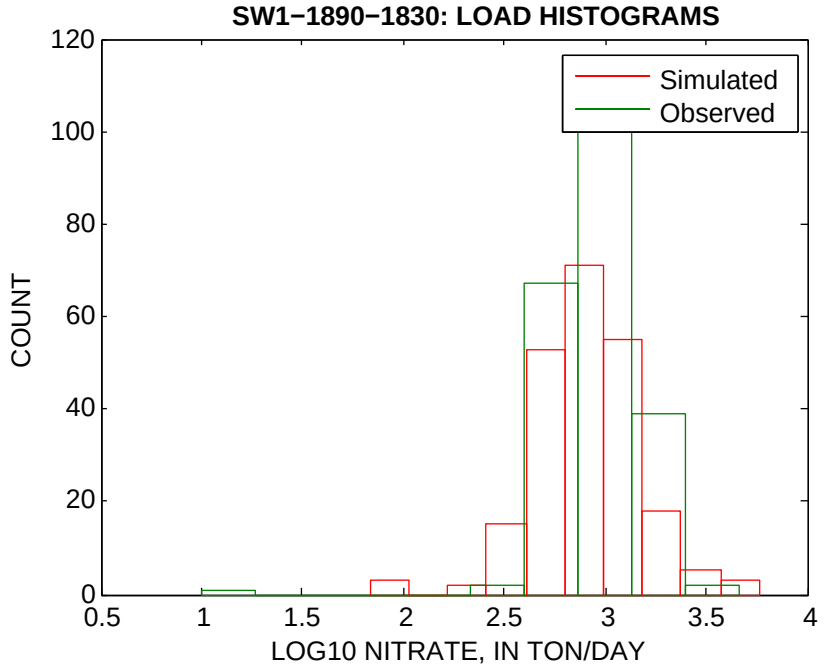


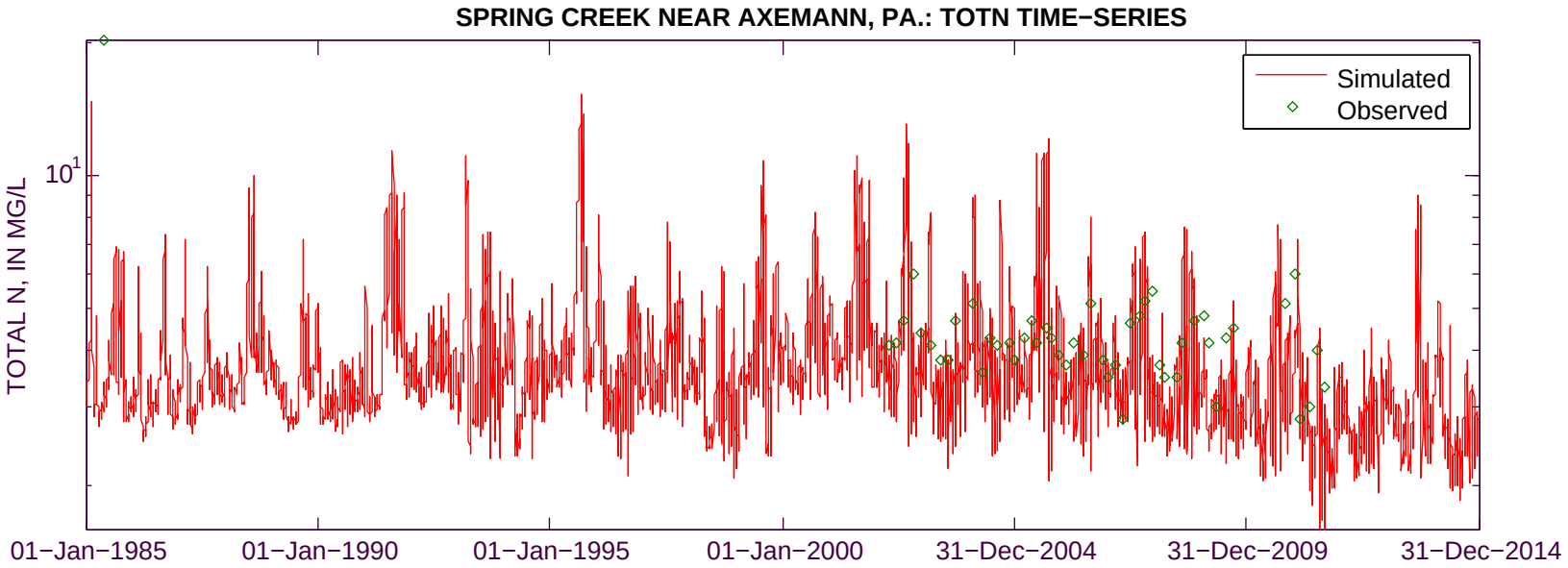
LOAD DATA
LOG10

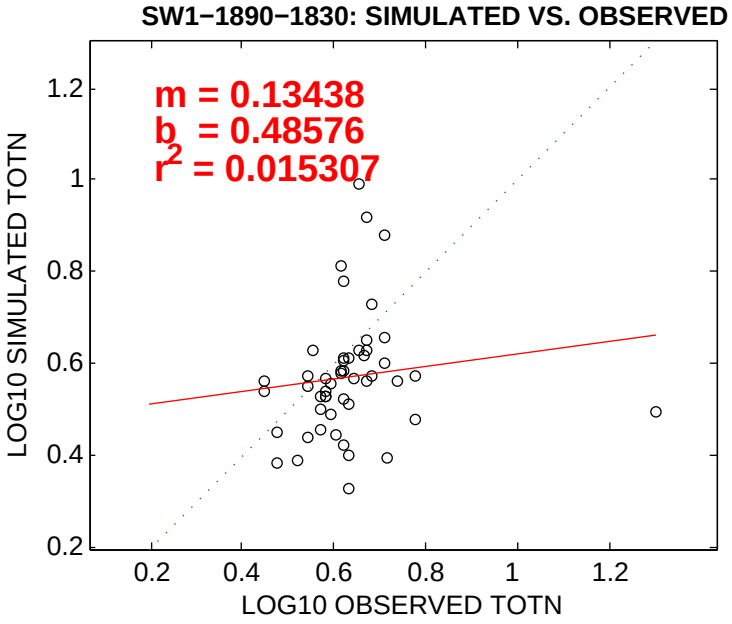


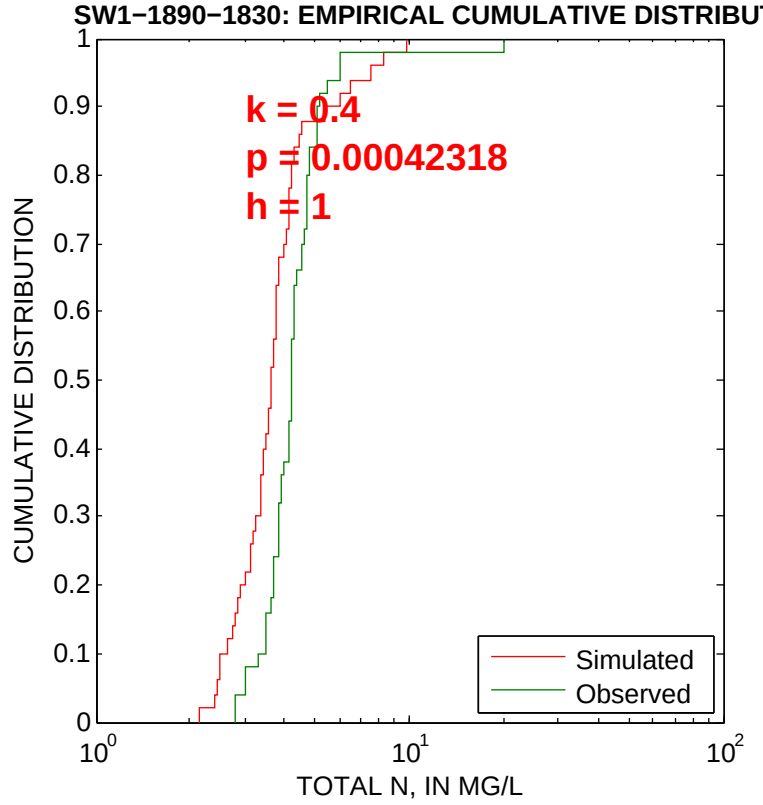












DATA SELECTION

scenario	file
P620171001WQ	TOTN.calib

plot: TOTN - total nitrogen

Dates: 1/1/1985 – 12/31/201

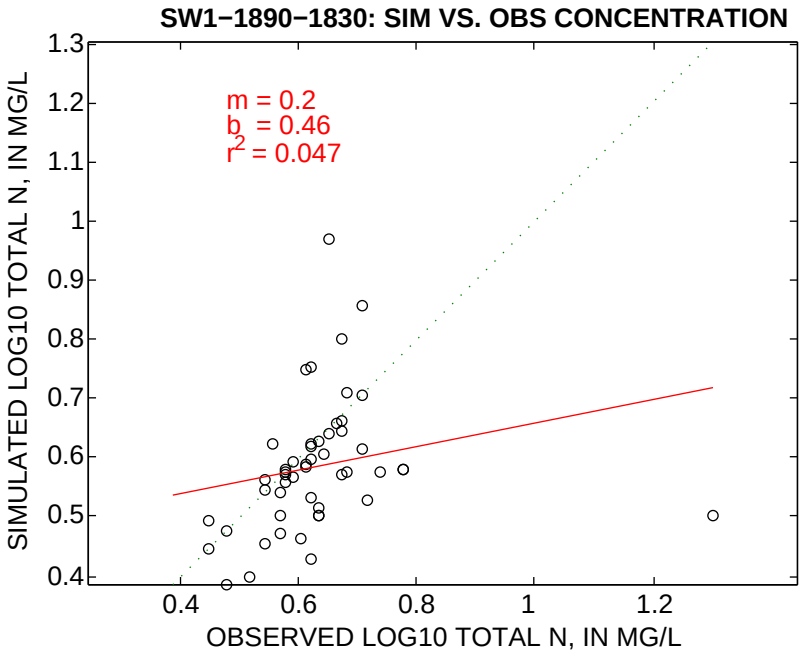
Drive	Directory	Observed
N/A	model	OBS20161101

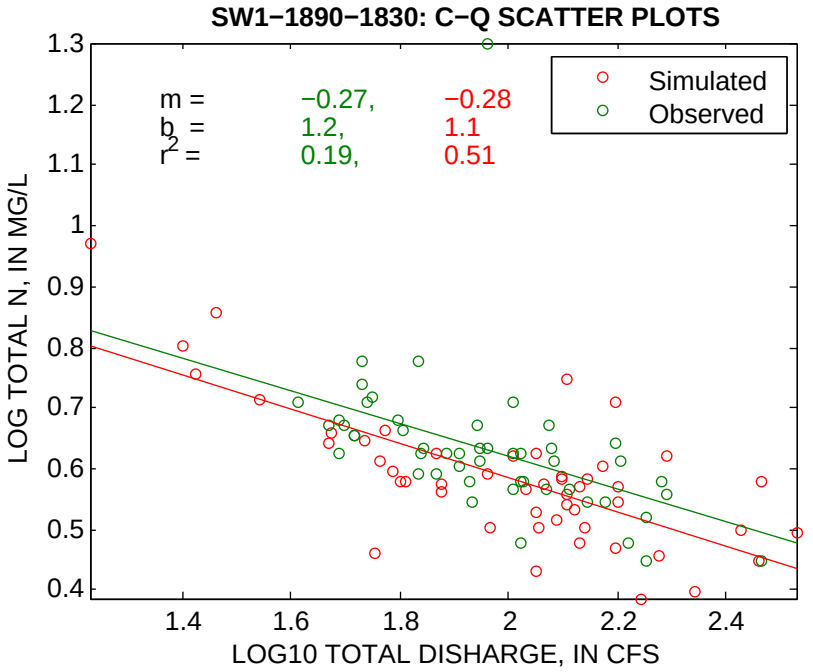
STATISTICS

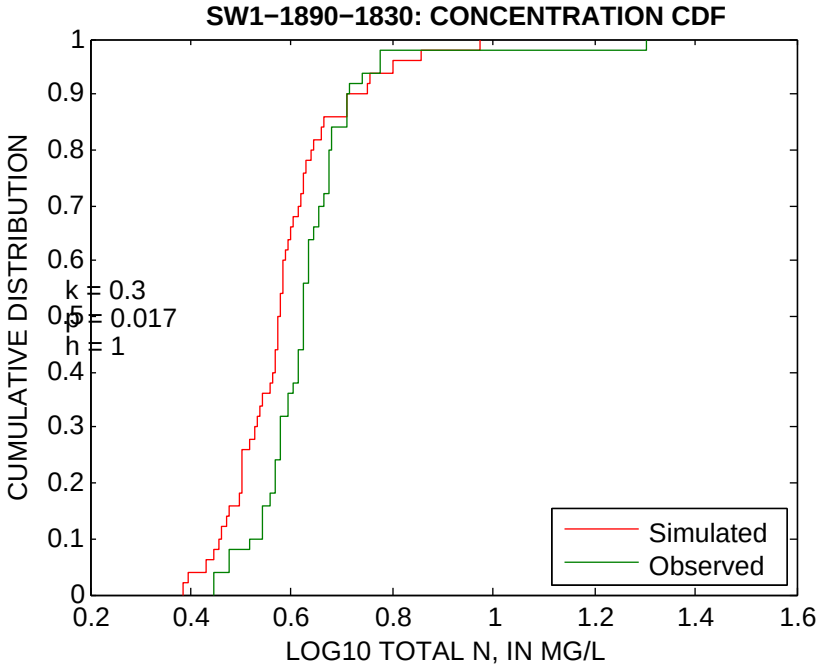
	n	50	50
		observe	simulate
min		2.8	2.1373
		0.447158	0.329865
mean		4.5248	3.91603
		0.63152	0.570629
media		4.2	3.64285
		0.623249	0.56144
max		20.04	9.8034
		1.3019	0.991377
varian		5.51941	2.13678
		0.0148513	0.0175203
JB		0.001	0.001
		0.001	0.005444
		ra	log
%		-13.4541	-9.64205
err.va		7.98811	0.0321636
rel.std.err		1.44728	2.16571
mod.eff		-0.447278	-1.16571

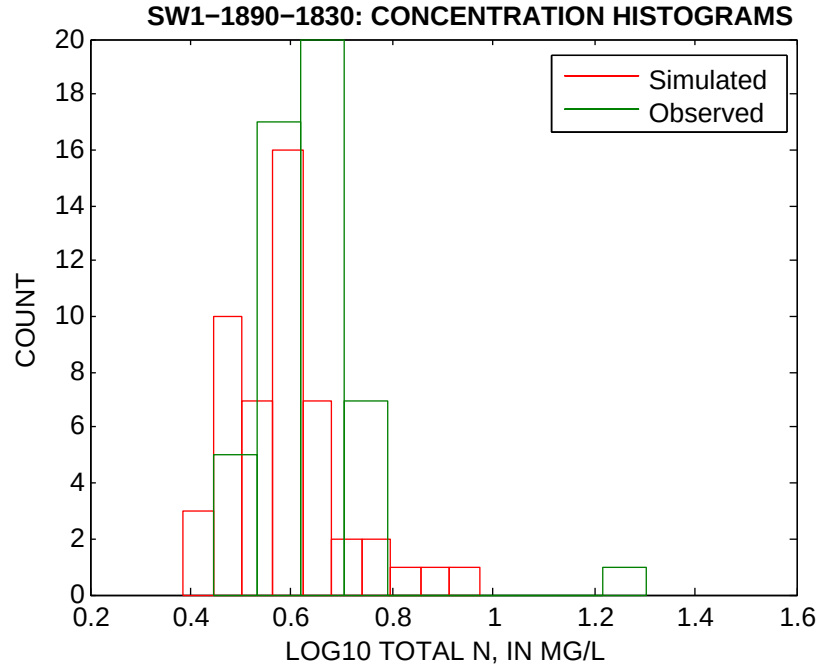
VERSION 2.1

ALL DATA
LOG10

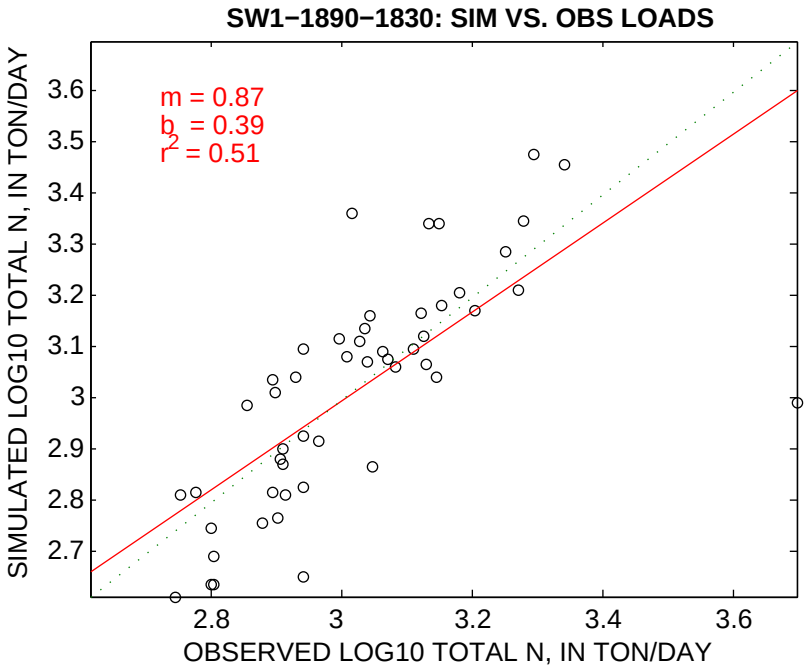


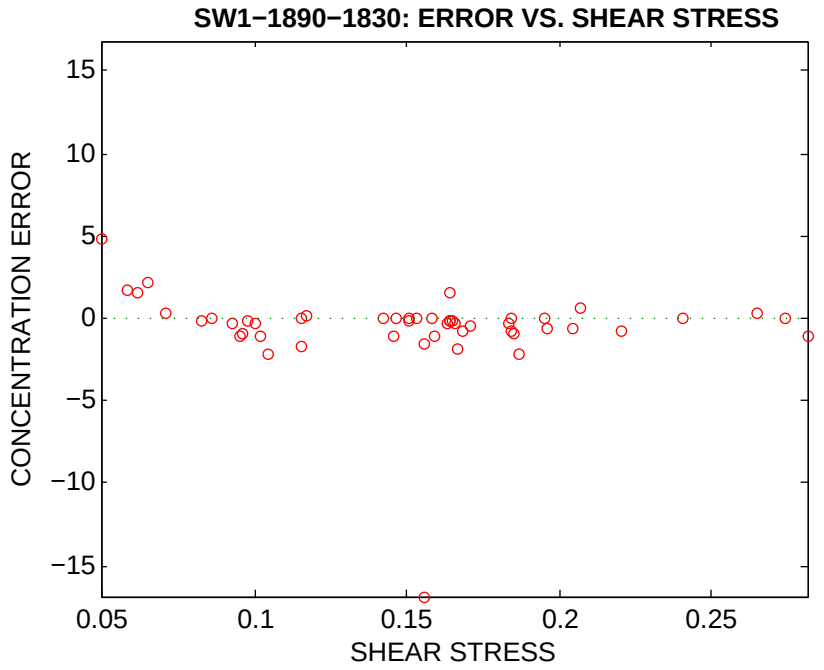


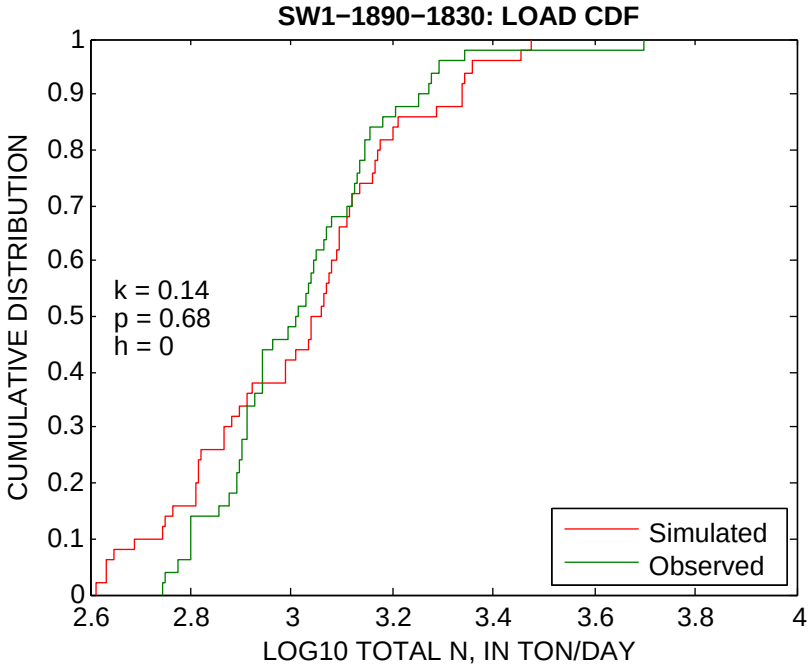


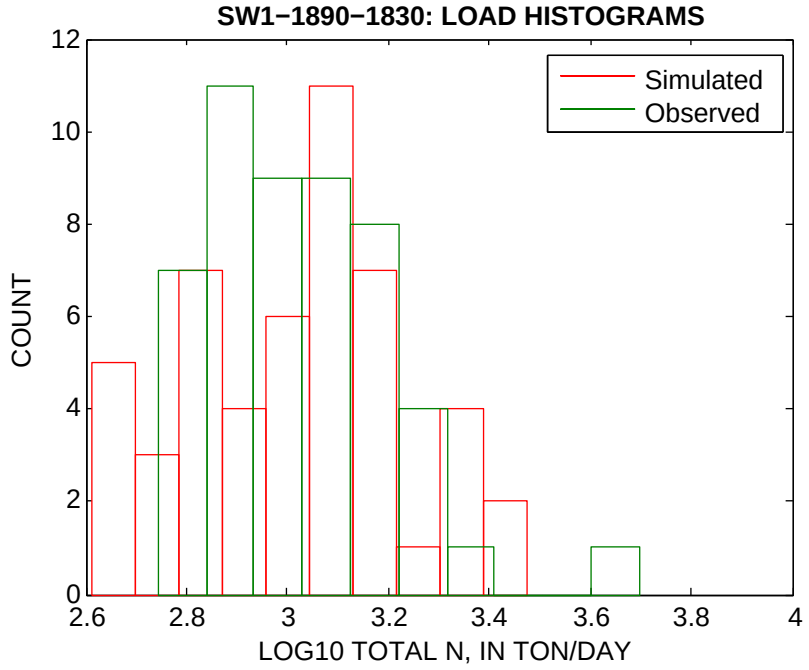


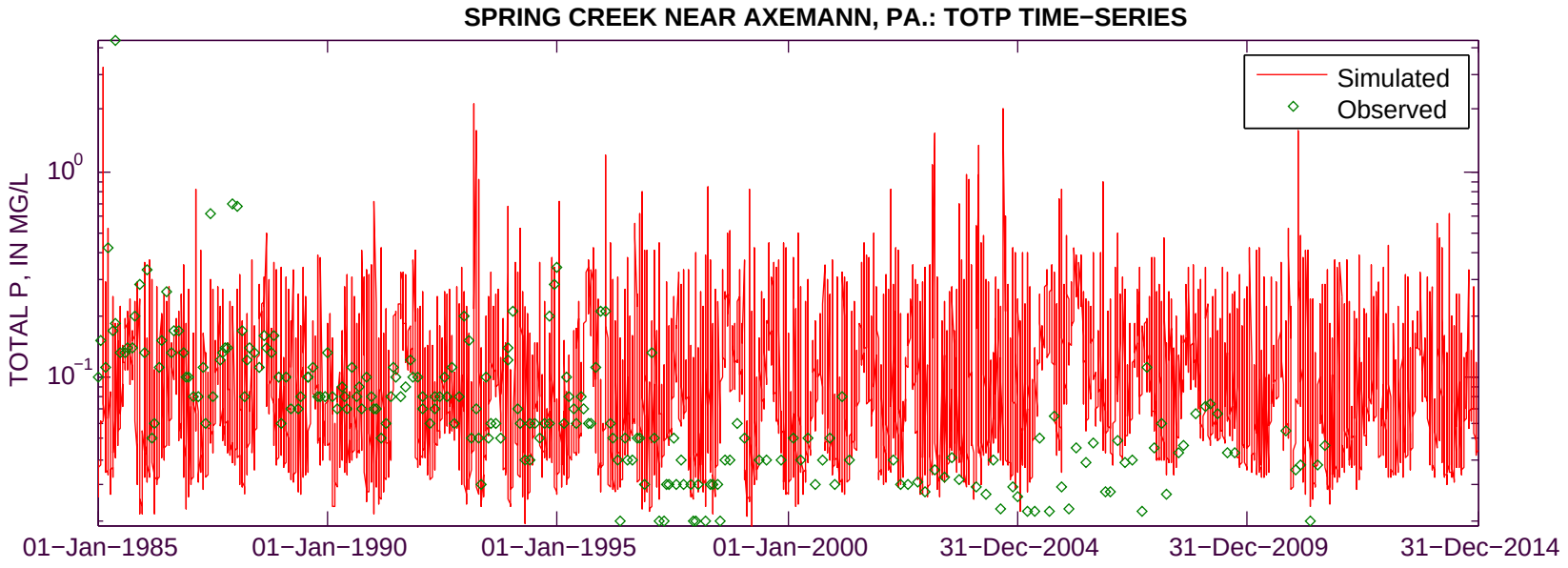
LOAD DATA
LOG10

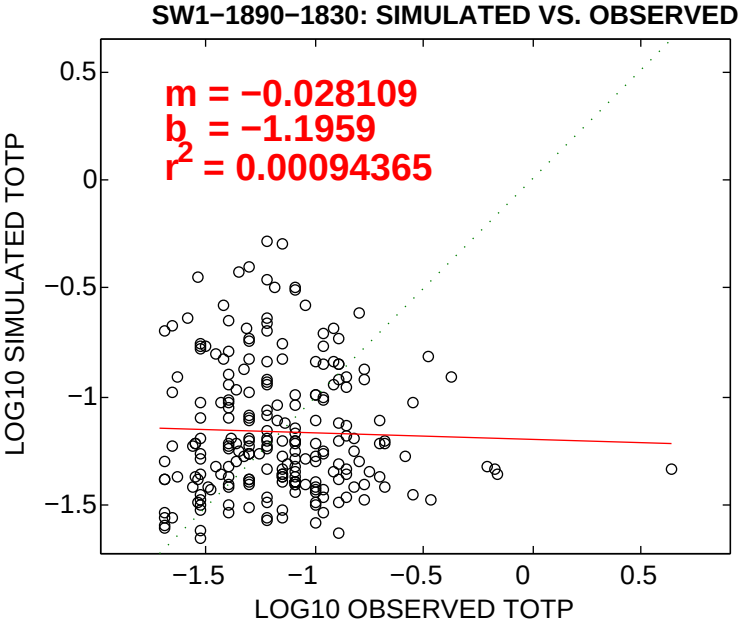


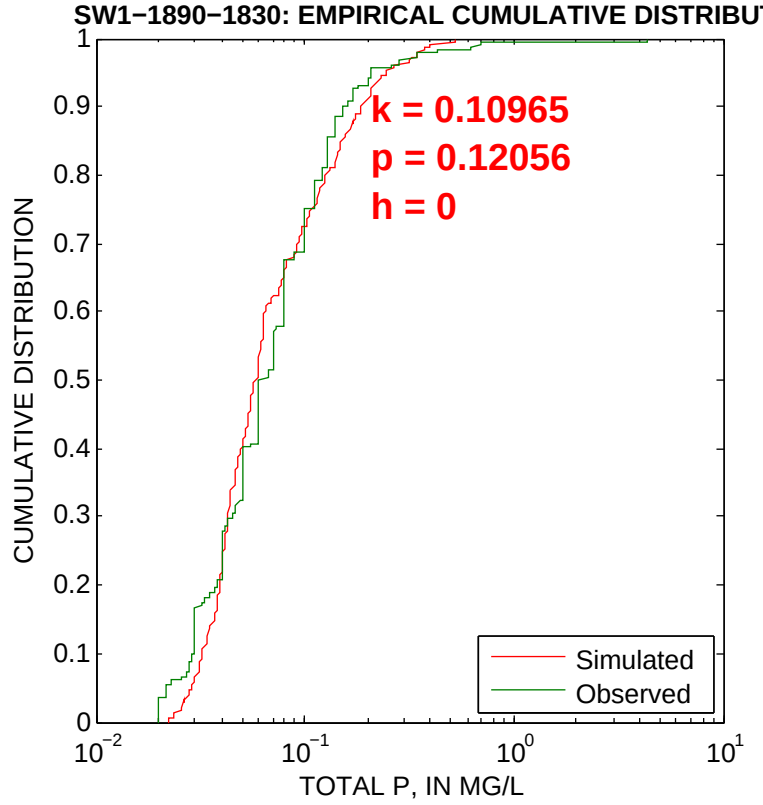












DATA SELECTION

scenario	file
P620171001WQ	TOTP.calib

plot: TOTP - total phosphorus

Dates: 1/1/1985 – 12/31/201

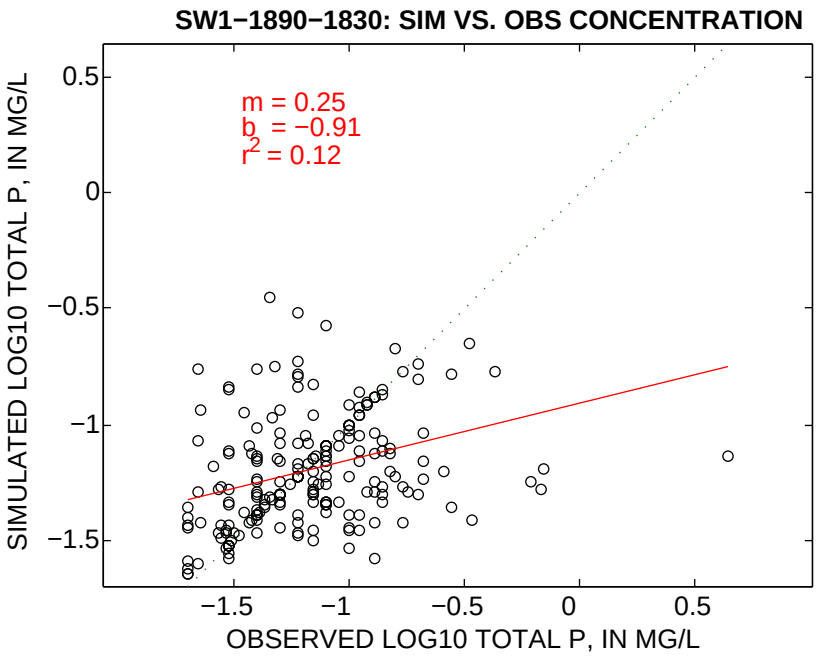
Drive	Directory	Observed
N/A	model	OBS20161101

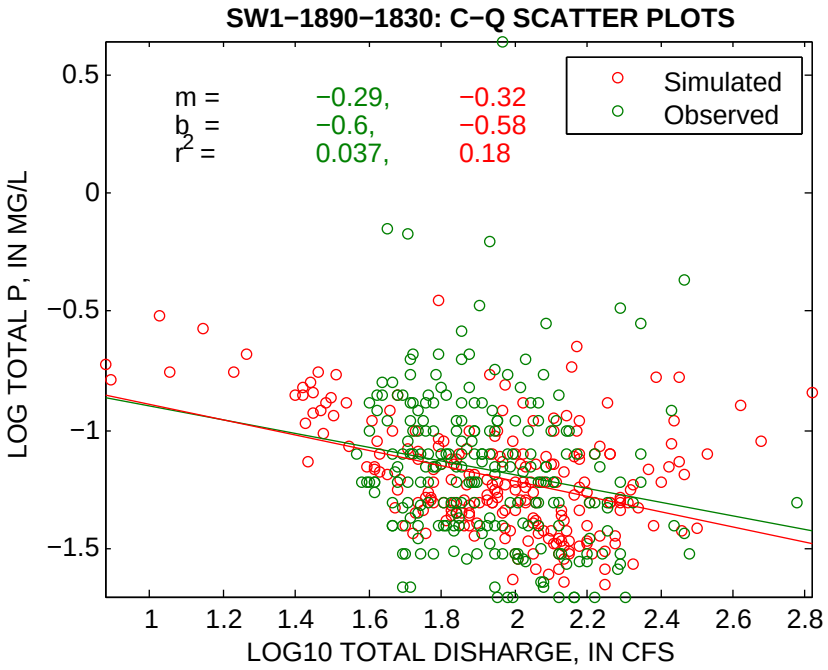
STATISTICS

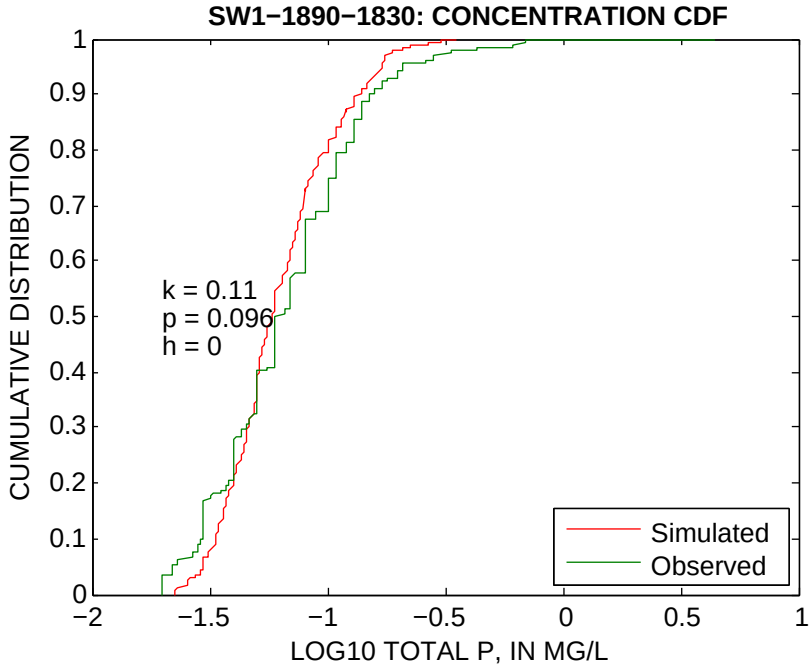
	n	228	228
		observe	simulate
min		0.02	0.022504
		-1.69897	-1.64774
mean		0.106939	0.0898047
		-1.16716	-1.16308
media		0.0625	0.0586835
		-1.20447	-1.23149
max		4.4	0.52653
		0.643453	-0.278577
varian		0.089554	0.00660348
		0.104586	0.0875697
JB		0.001	0.001
		0.001	0.001438
		ra	log
% err.va		-16.0222	-0.348951
		0.0992824	0.198052
rel.std.err		1.10863	1.89368
mod.eff		-0.108631	-0.893676

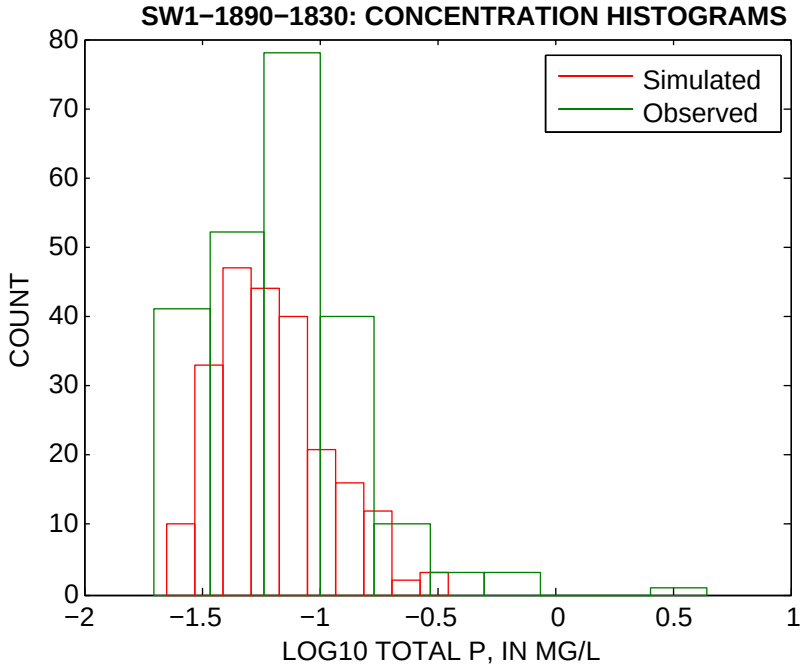
VERSION

ALL DATA
LOG10

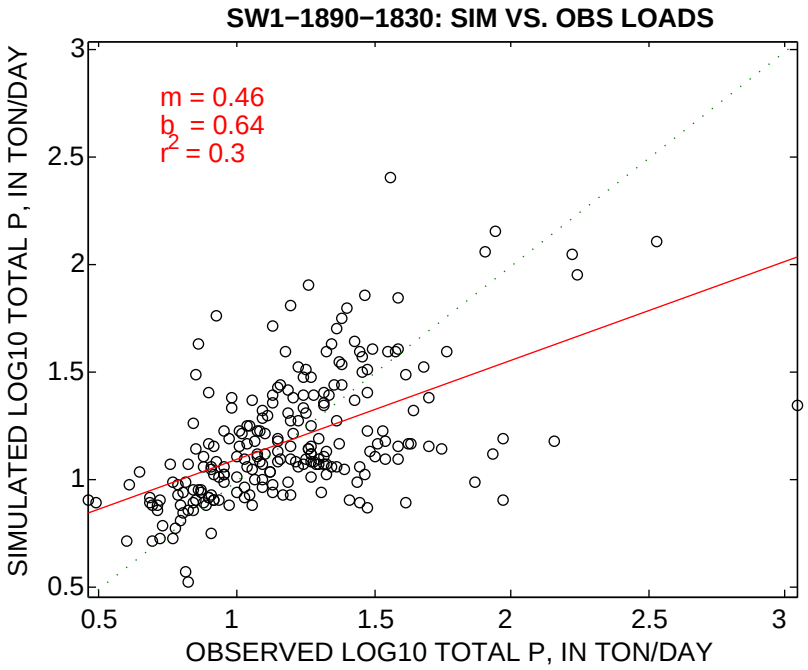


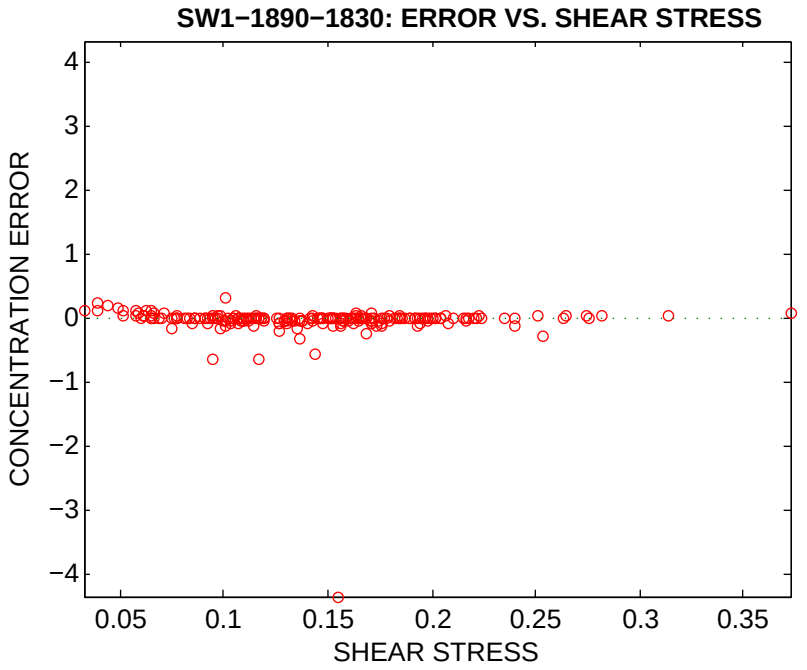


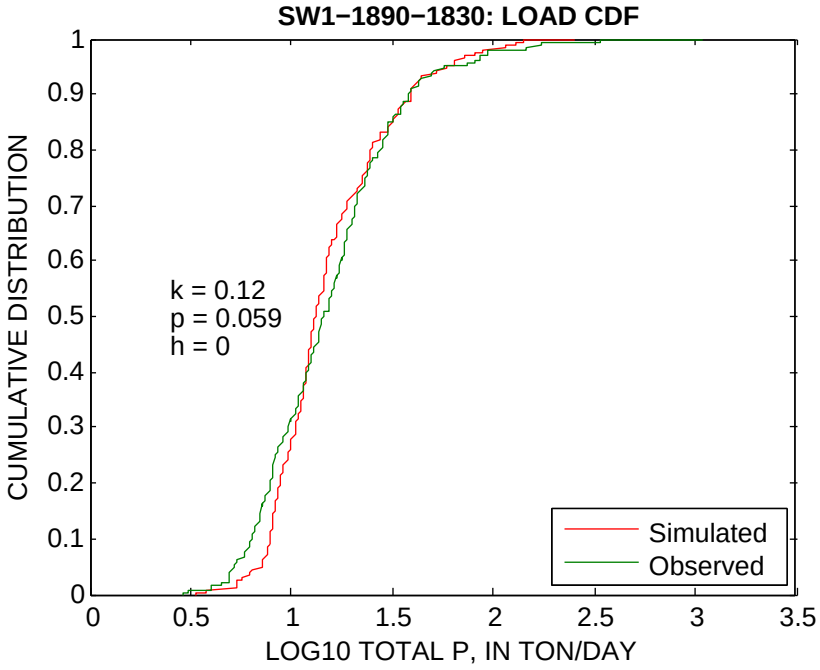


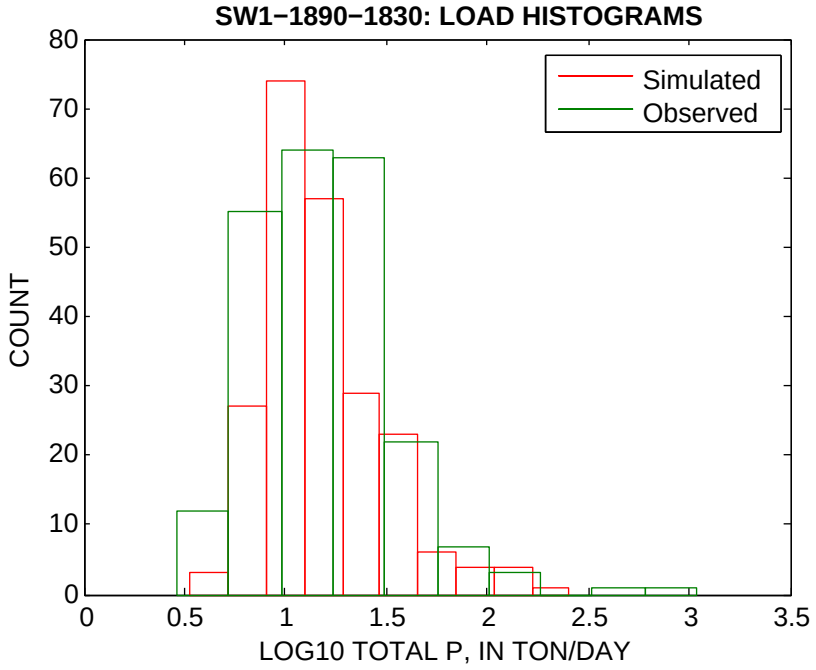


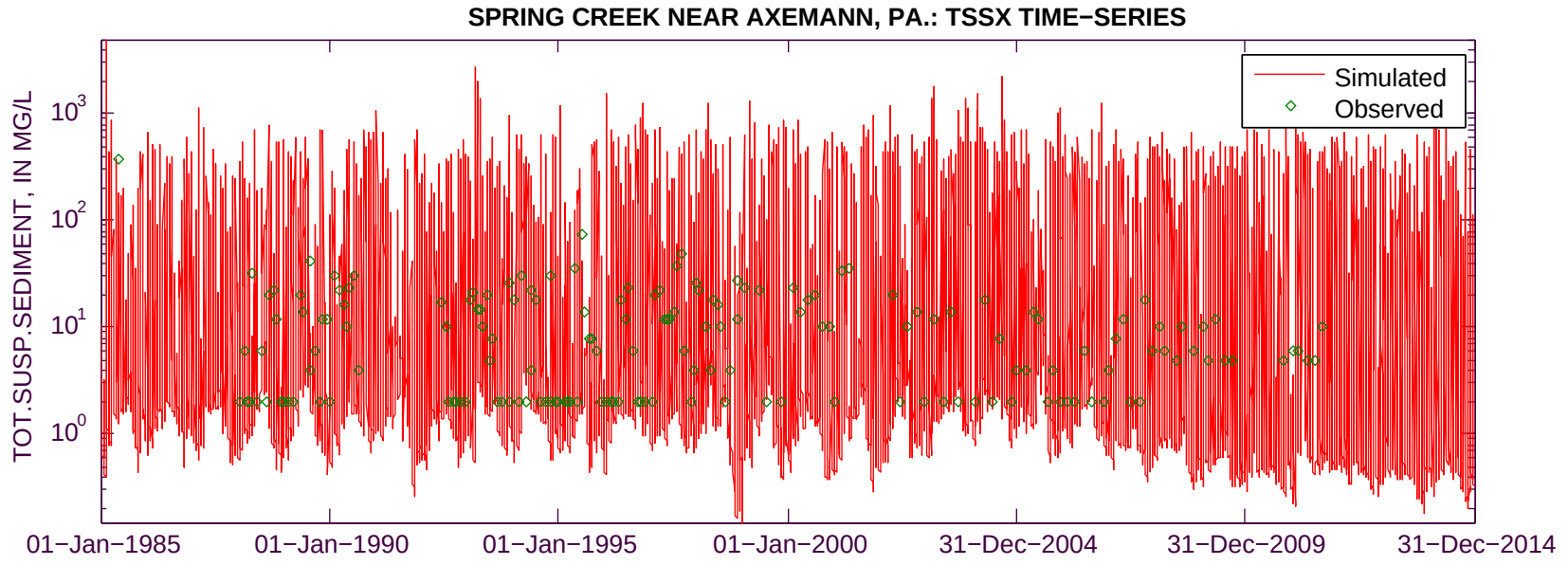
LOAD DATA
LOG10

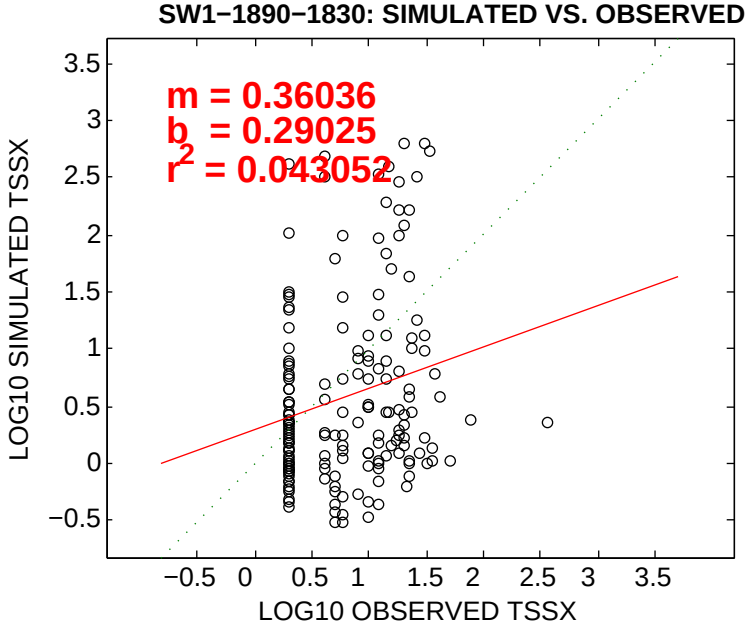


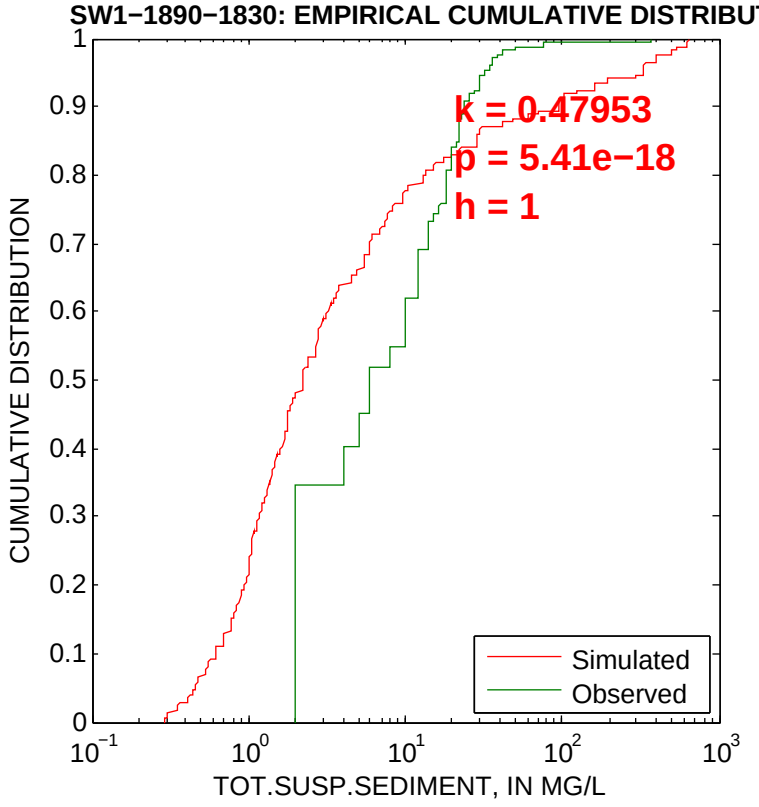












DATA SELECTION

scenario: P620171001WQ | file: TSSX.calib

plot: TSSX - total suspended ...

Dates: 1/1/1985 – 12/31/201

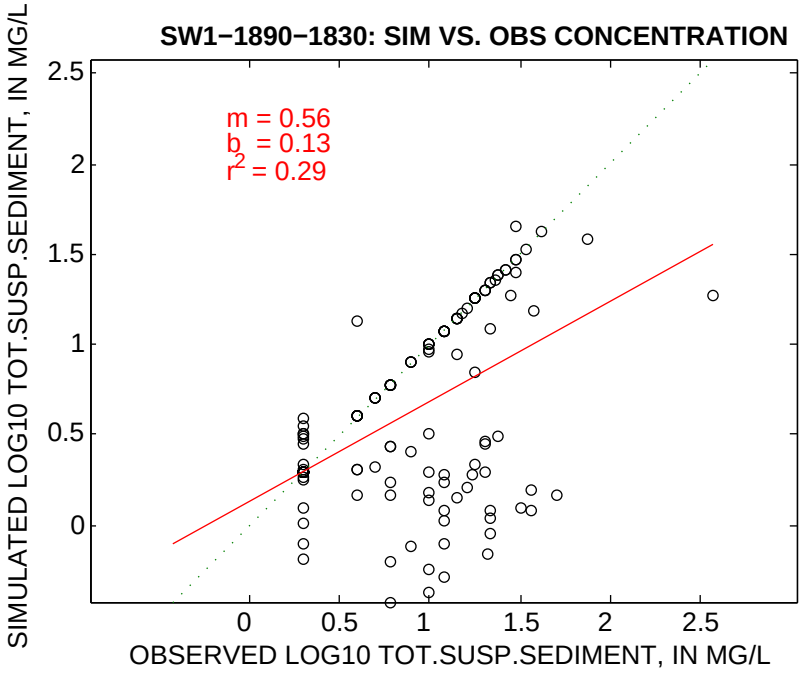
Drive | Directory: N/A | model | Observed: OBS20161101

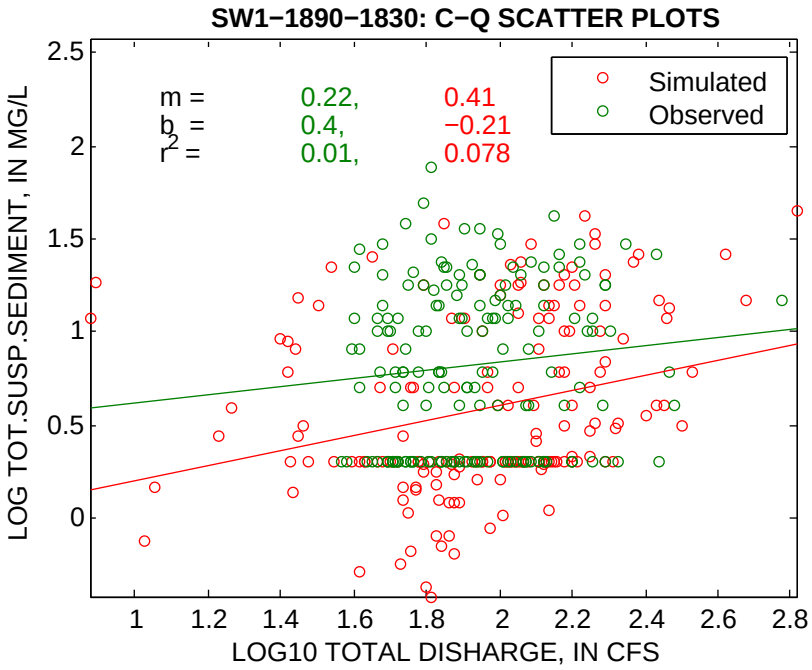
STATISTICS

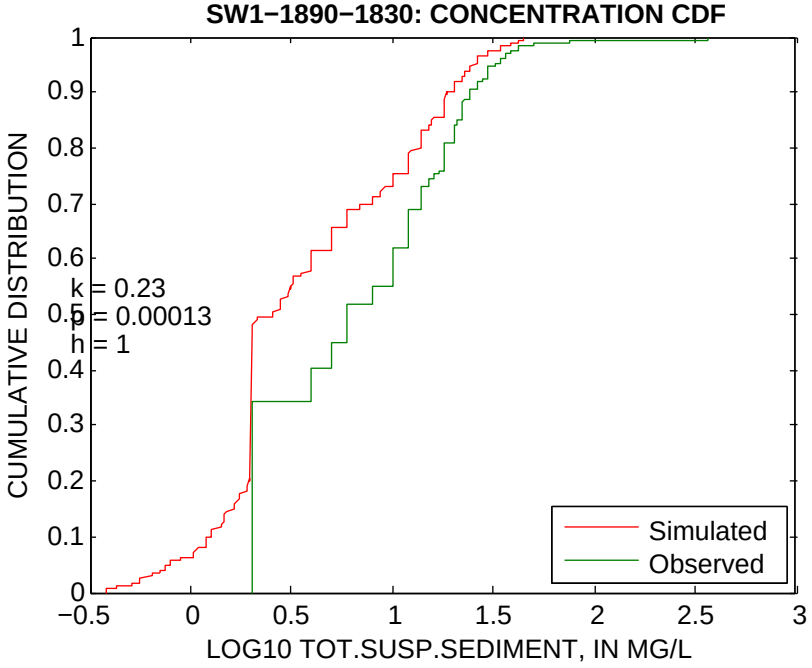
n	171	171
	observe	simulate
min	2	0.29521
	0.30103	-0.529869
mean	12.731	36.8311
	0.822244	0.586558
media	6	2.2325
	0.778151	0.348791
max	370	637.6
	2.5682	2.80455
varian	874.527	11855.2
	0.213457	0.64386
JB	0.001	0.001
	0.051802	0.001
	ra	log
%	189.303	-28.6637
err.va	13039.1	0.759349
rel.std.err	14.9099	3.55738
mod.eff	-13.9099	-2.55738

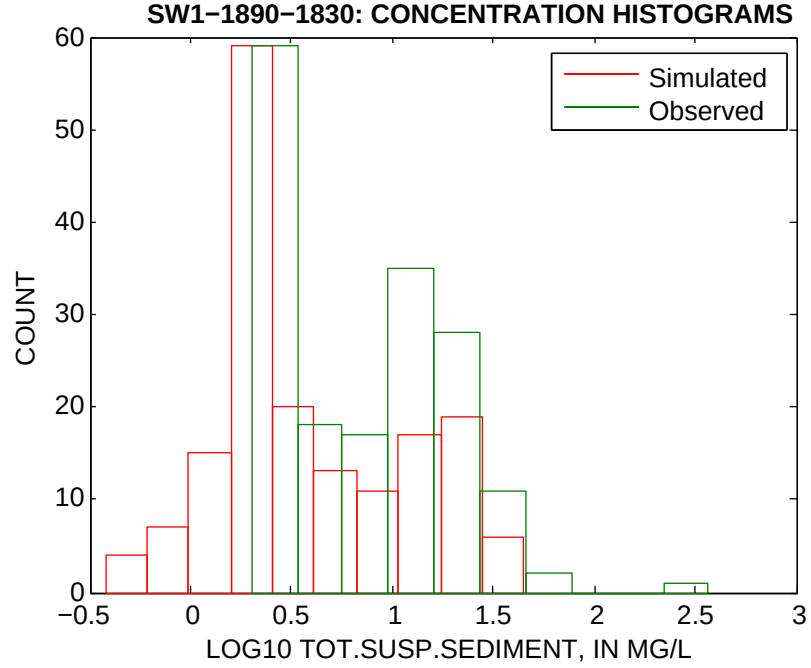
VERSION 2.1

ALL DATA
LOG10

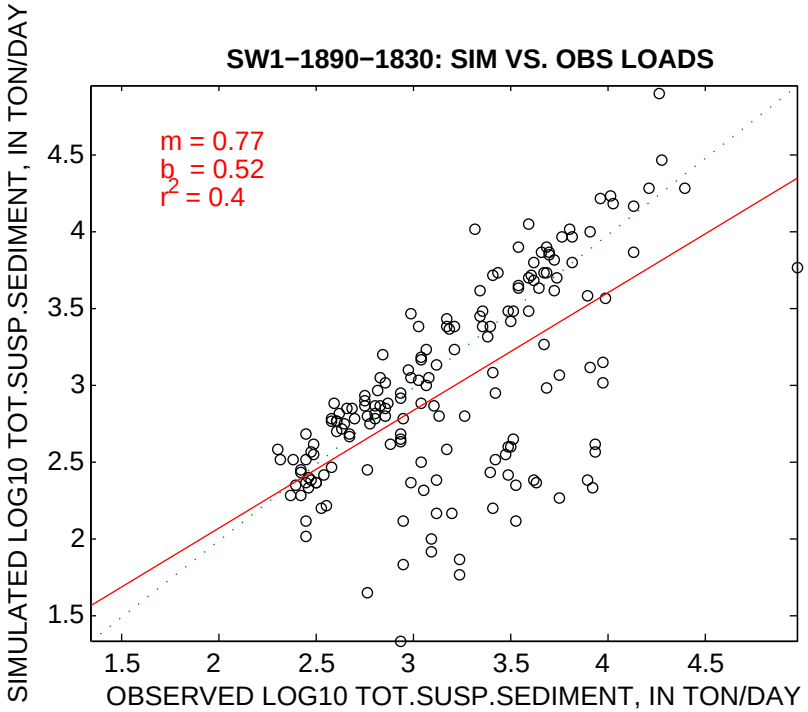


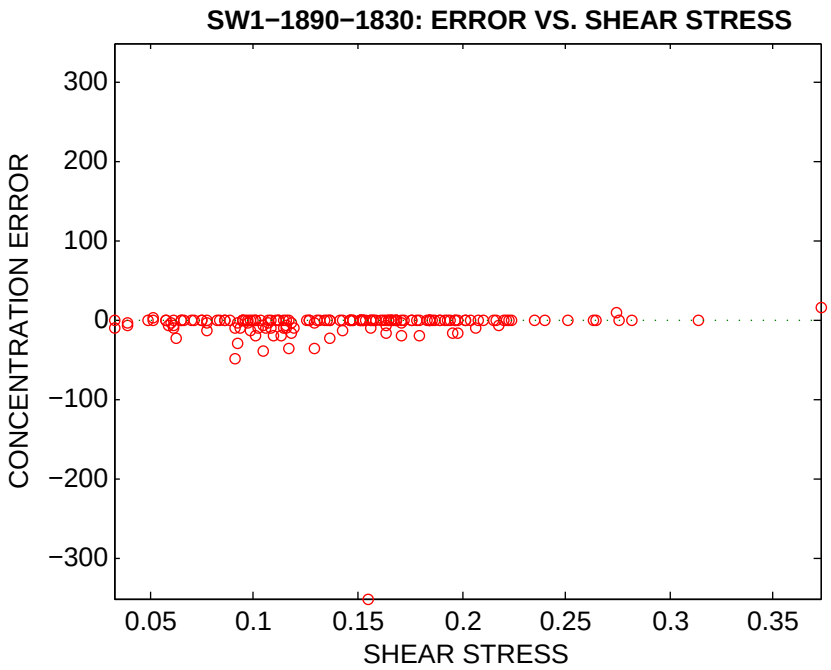


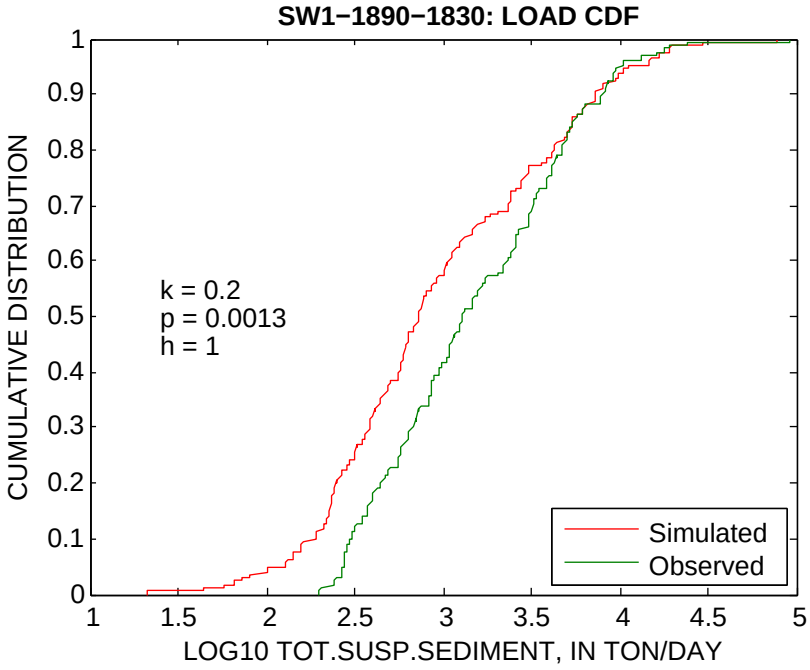


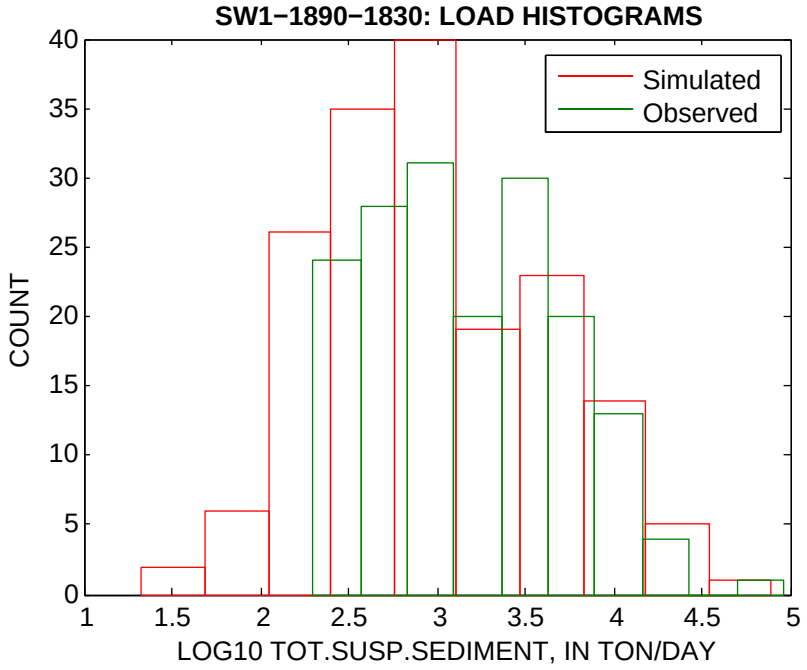


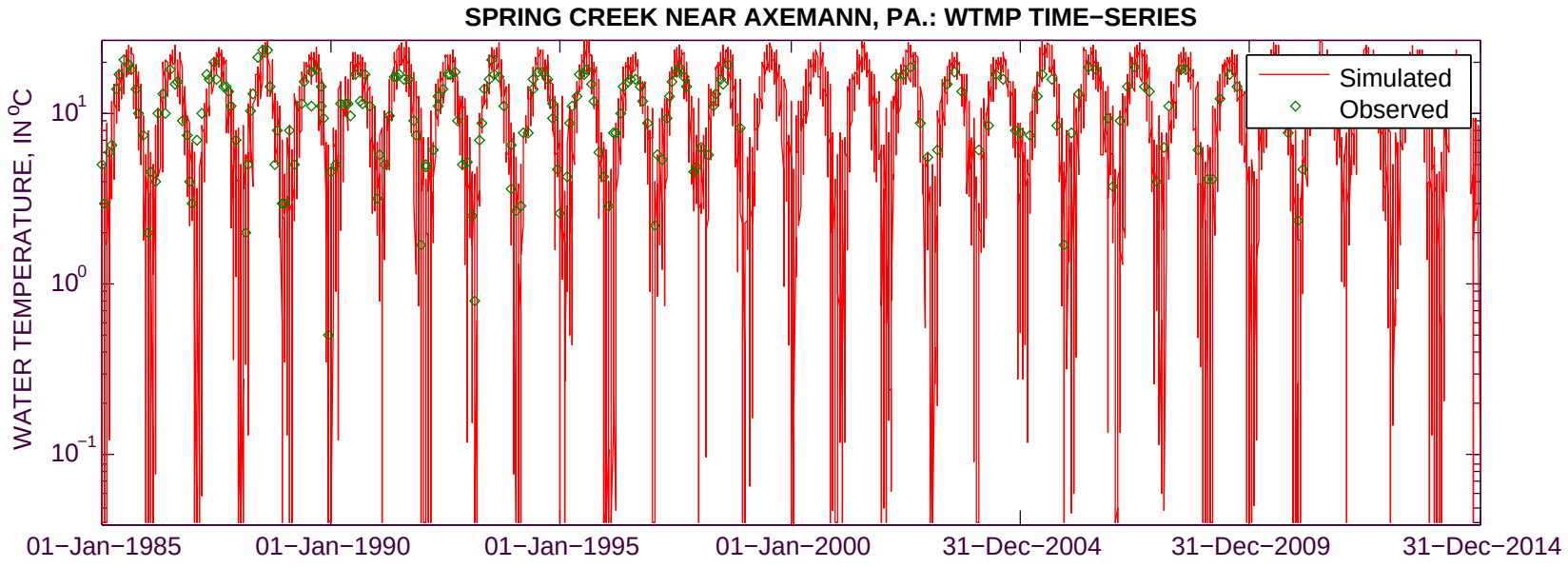
LOAD DATA
LOG10

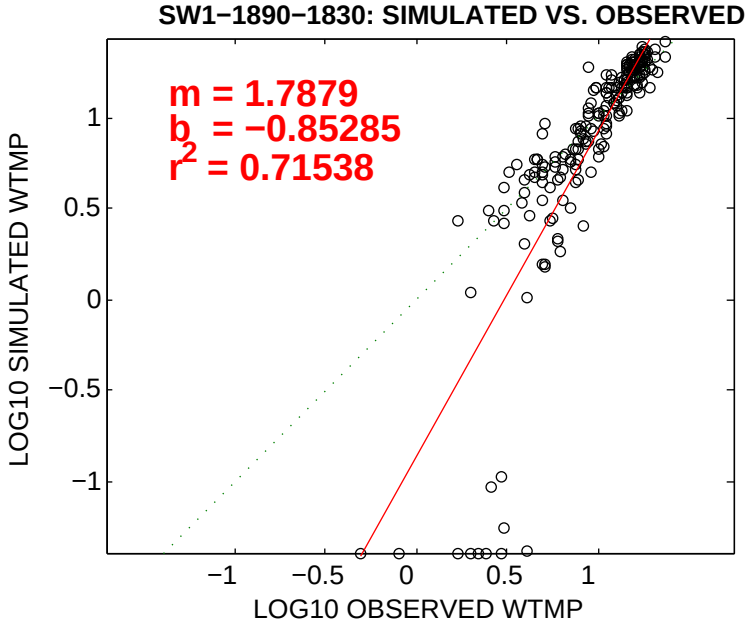


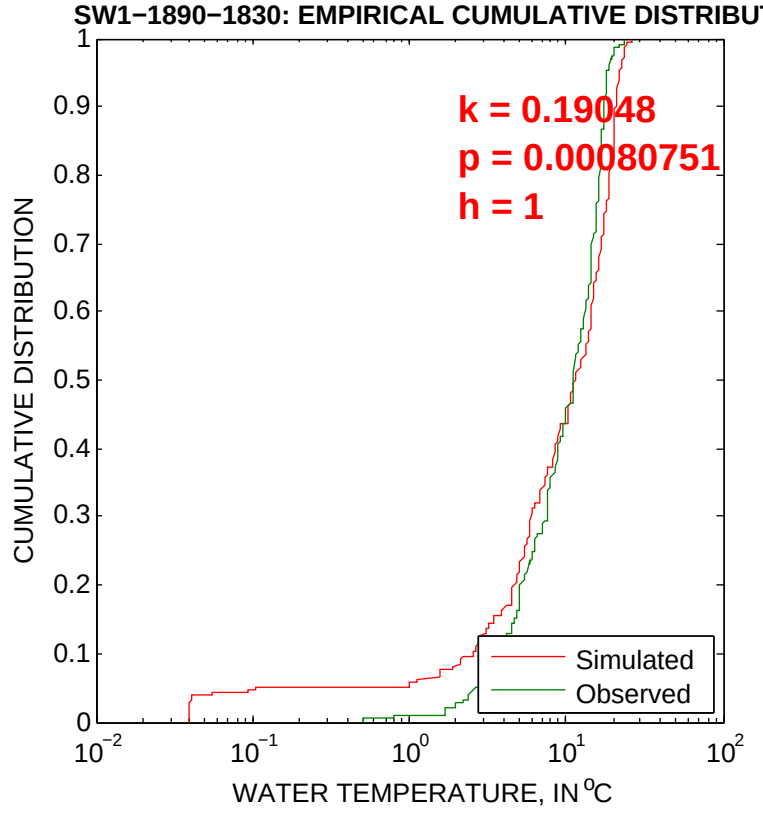












DATA SELECTION

scenario: P620171001WQ | file: WTMP.calib

plot: WTMP - water tempera...

Dates: 1/1/1985 | 12/31/201

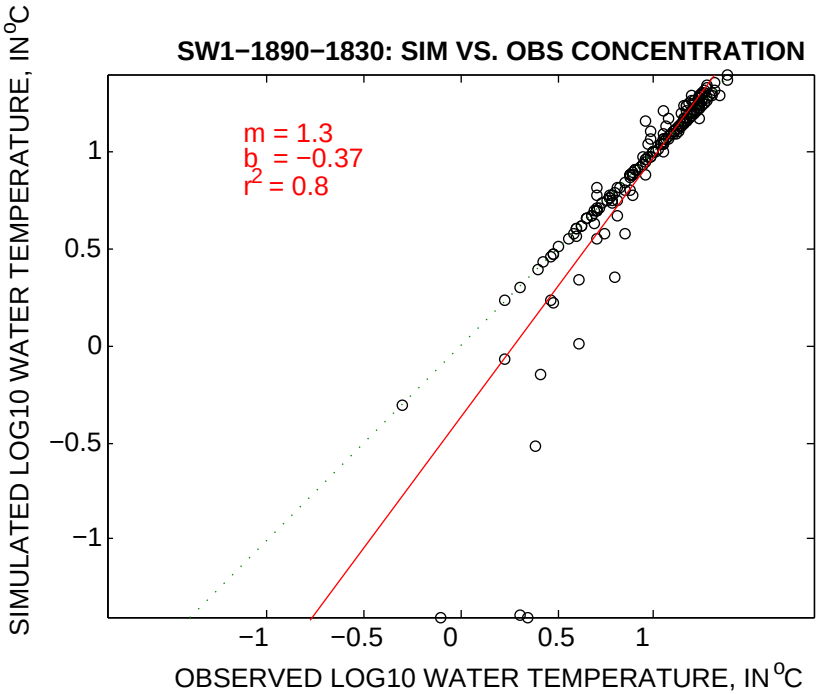
Drive: N/A | Directory: model | Observed: OBS20161101

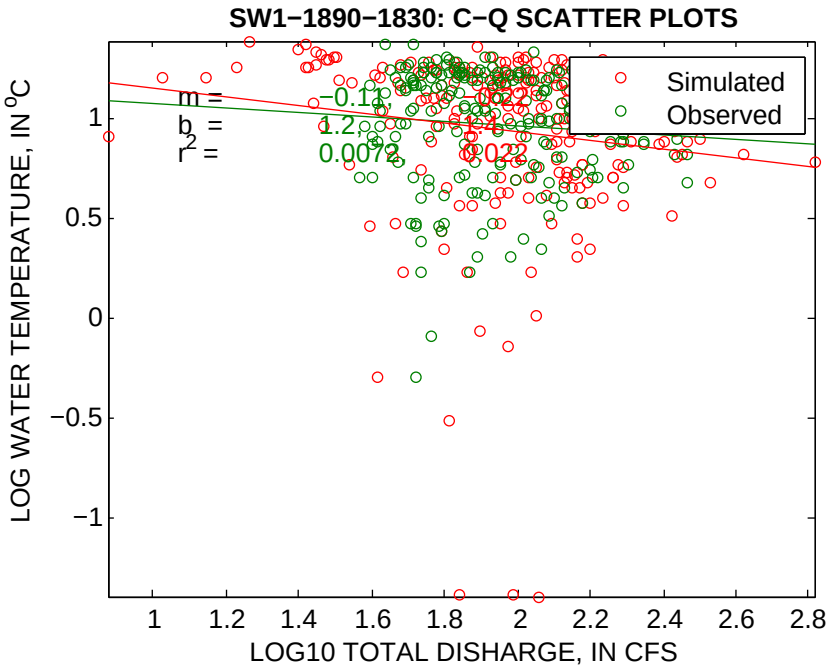
STATISTICS

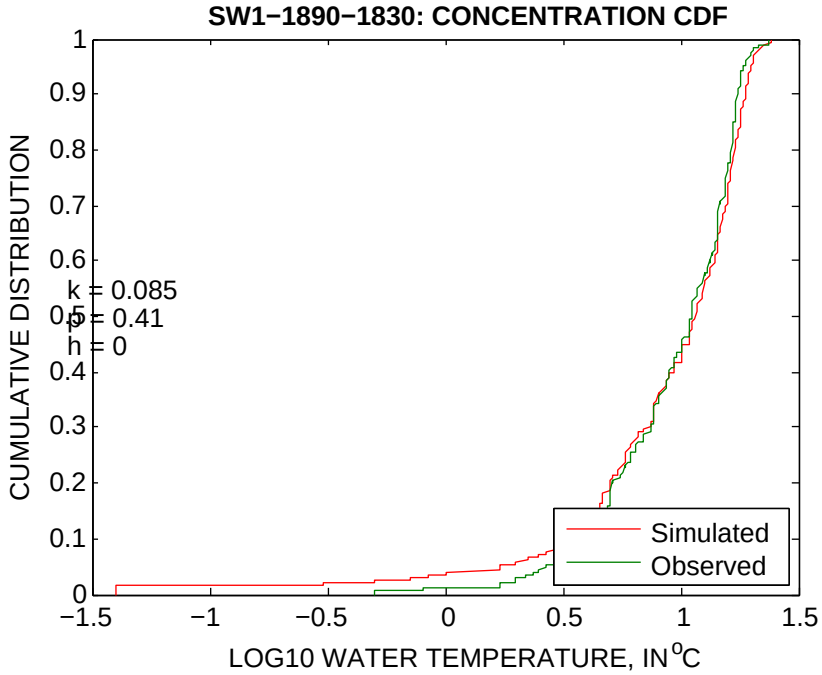
		observe	simulate
n		210	210
min		0.5	0.040013
		-0.30103	-1.3978
mean		10.9986	11.6728
		0.968526	0.878802
media		11.05	11.4615
		1.04336	1.05922
max		23.5	25.969
		1.37107	1.41446
varian		28.806	49.6674
		0.0809631	0.361784
JB		0.014199	0.006515
		0.001	0.001
		ra	log
%		6.12991	-9.26392
err.va		8.35599	0.161324
rel.std.err		0.290078	1.99256
mod.eff		0.709922	-0.992563

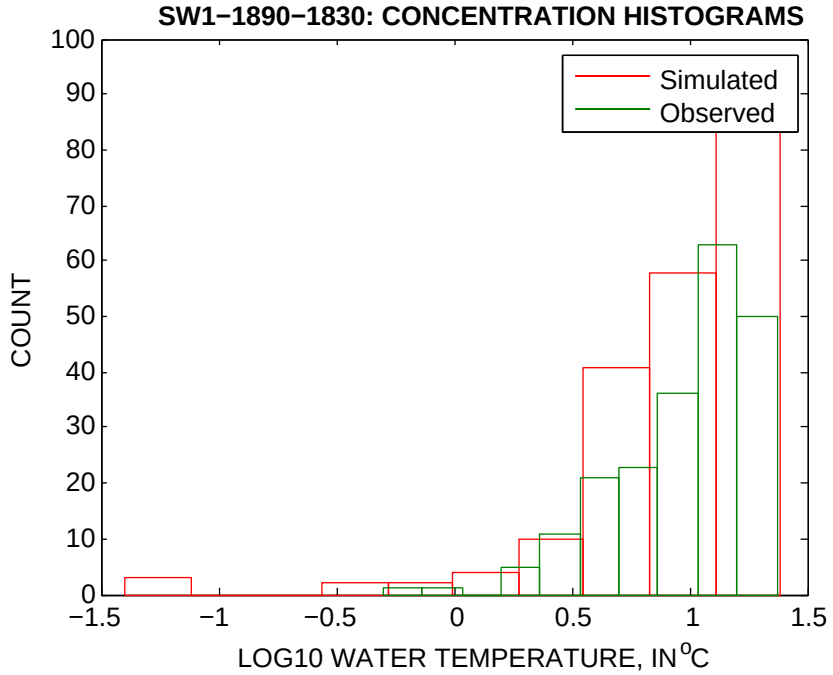
VERSION 2.1

ALL DATA
LOG10

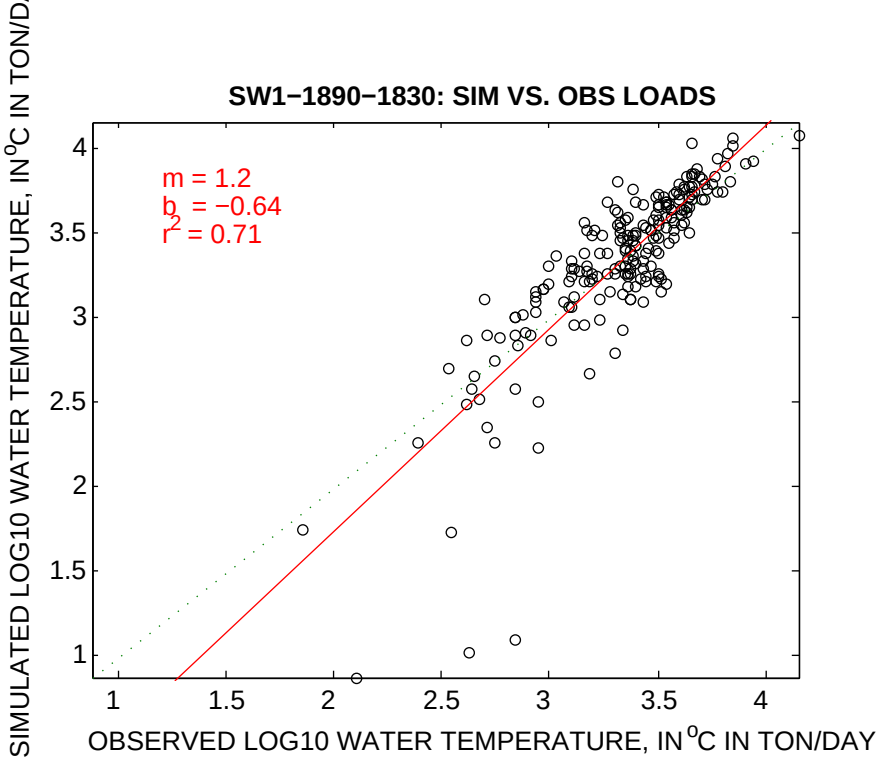


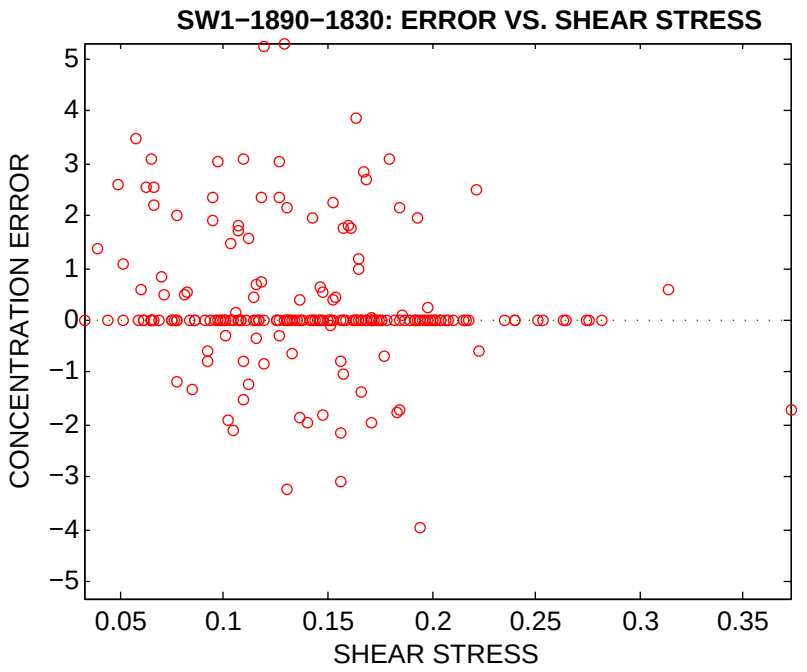


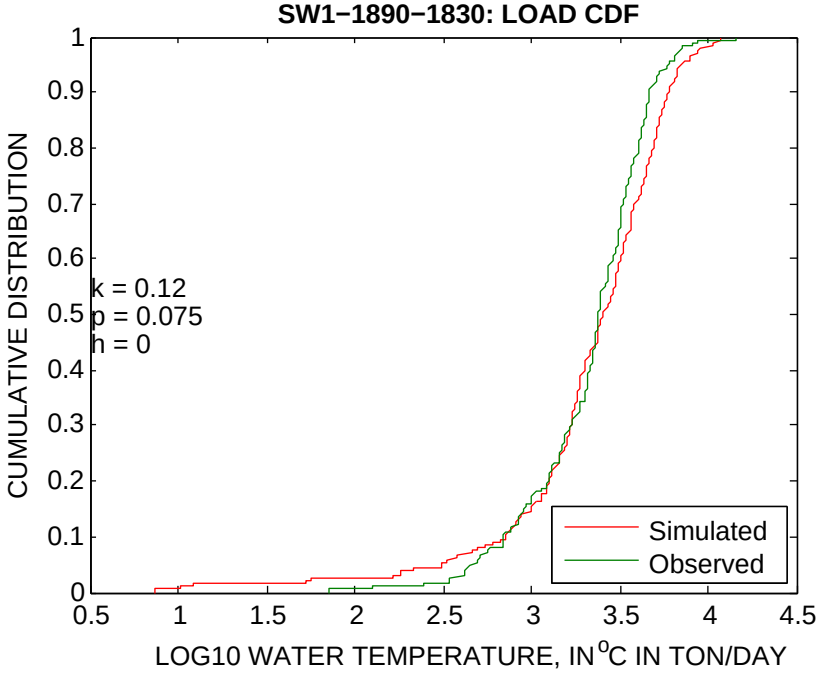


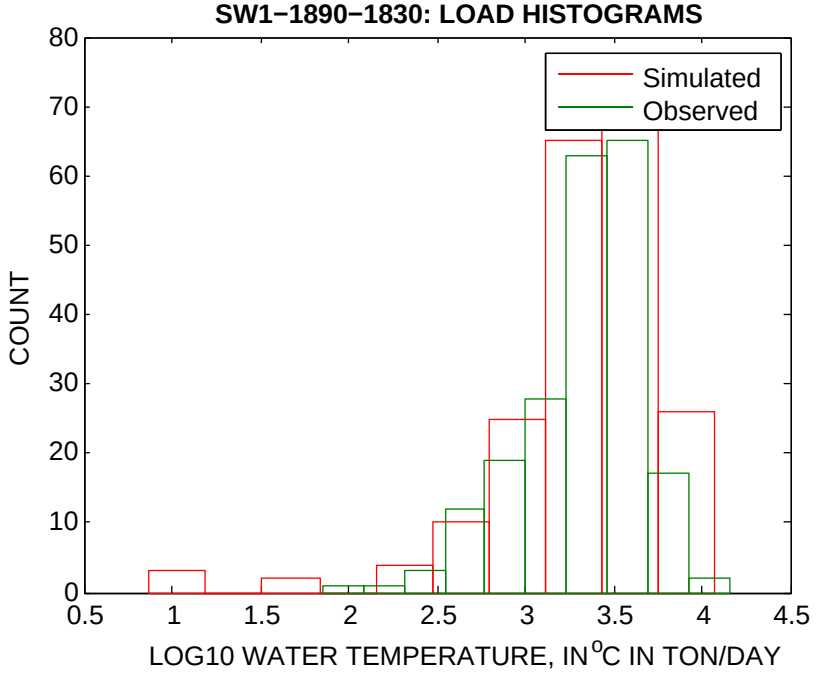


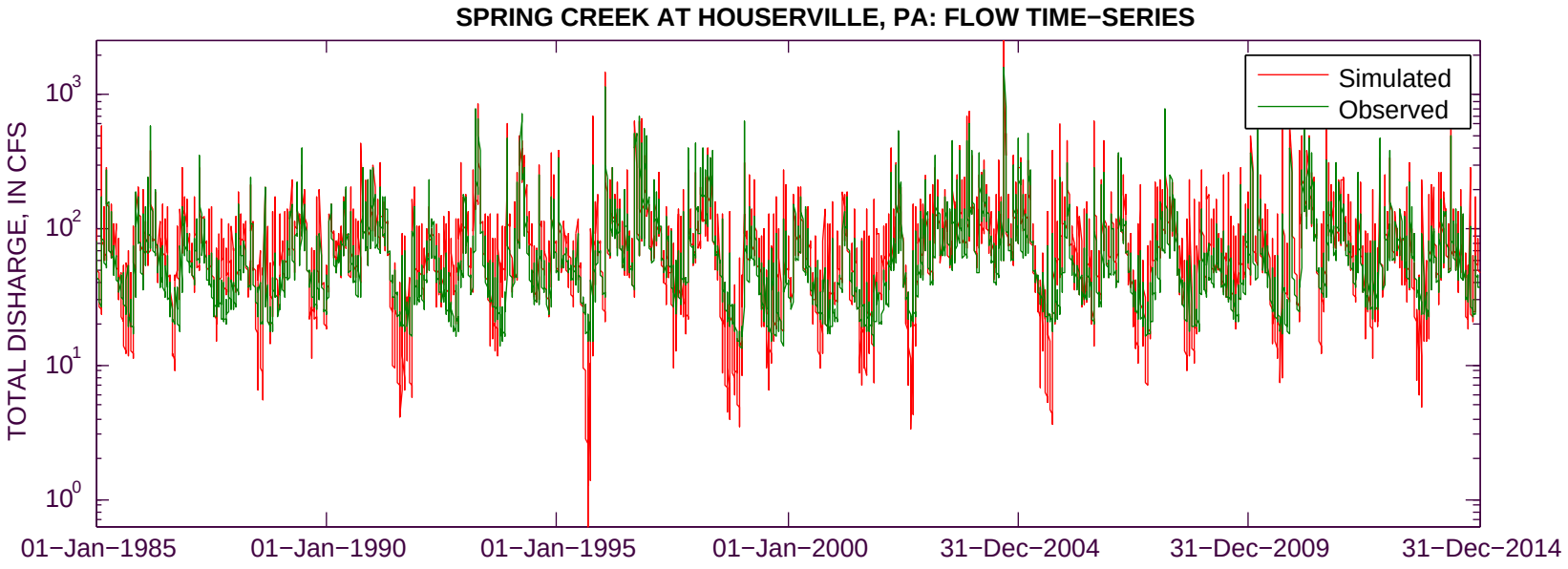
LOAD DATA
LOG10

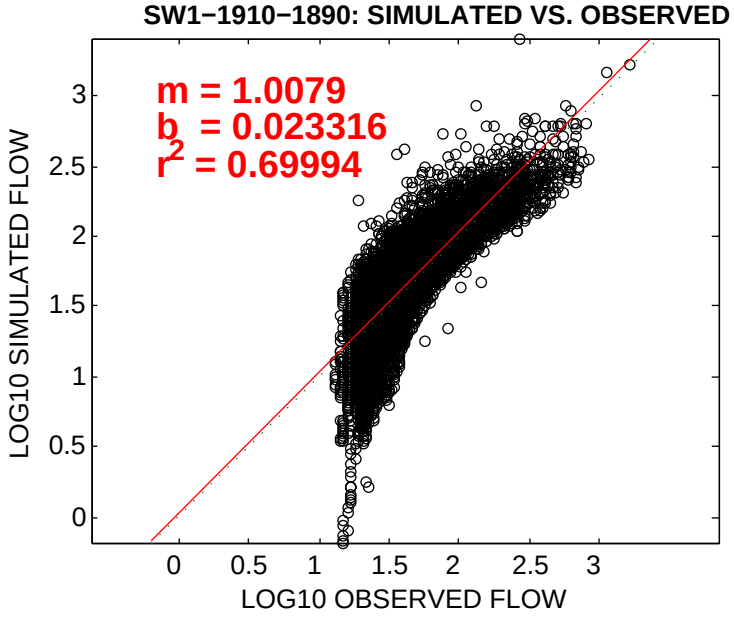


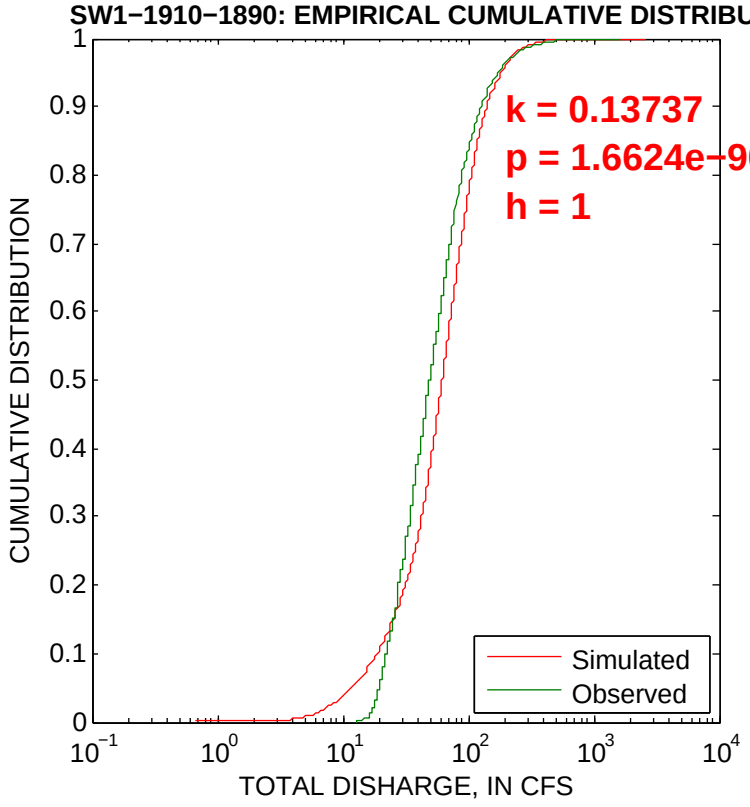












DATA SELECTION

scenario: P620171001WQ | file: FLOW.calib

plot: FLOW - total discharge

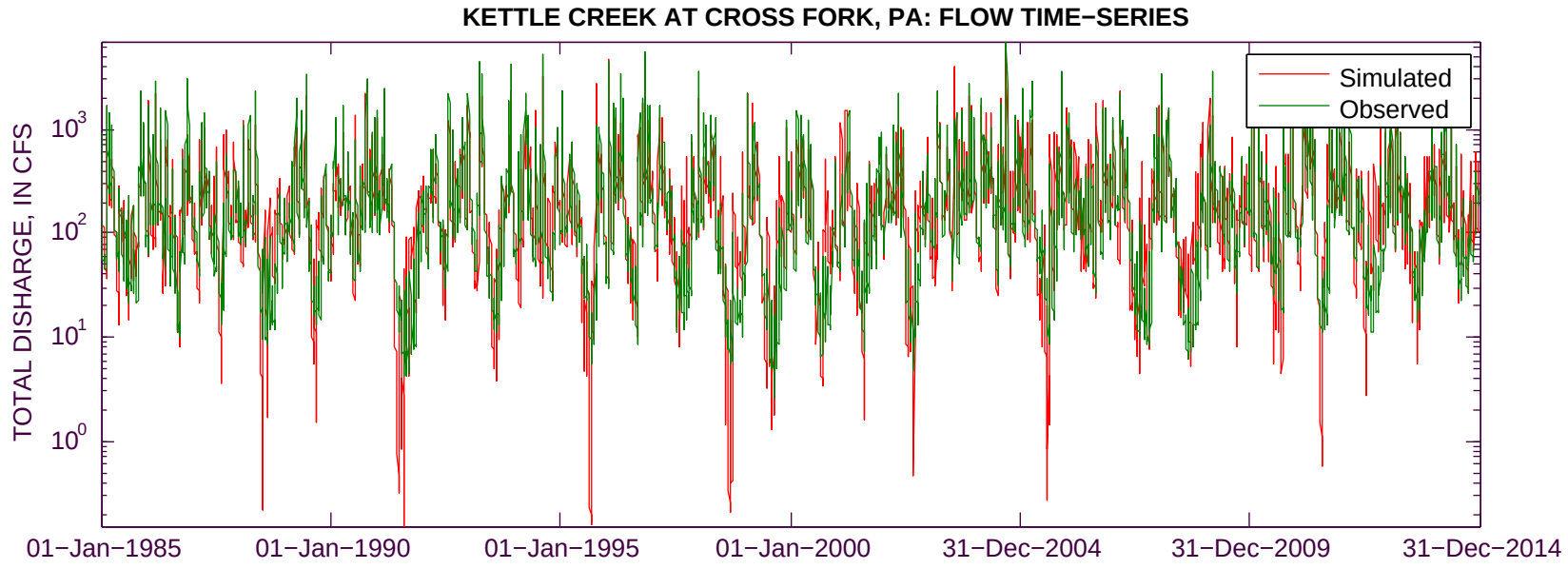
Dates: 1/1/1985 – 12/31/201

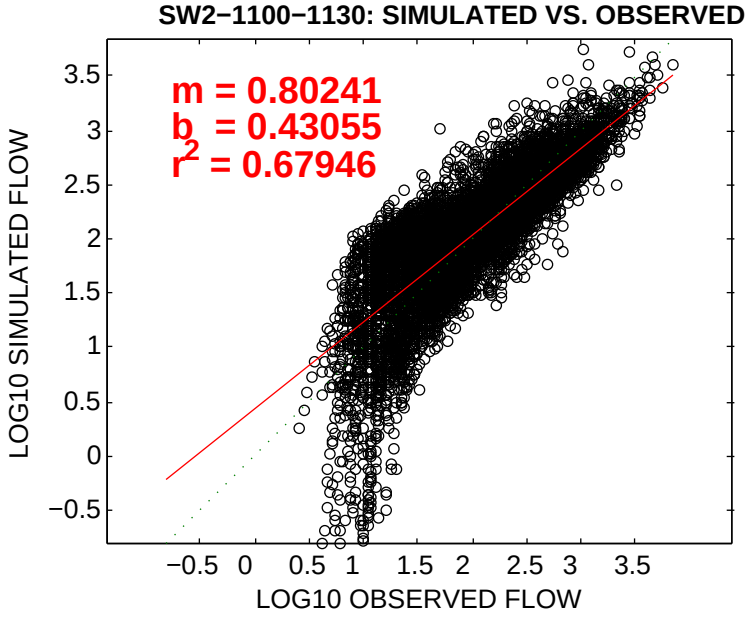
Drive: N/A | Directory: model | Observed: OBS20161101

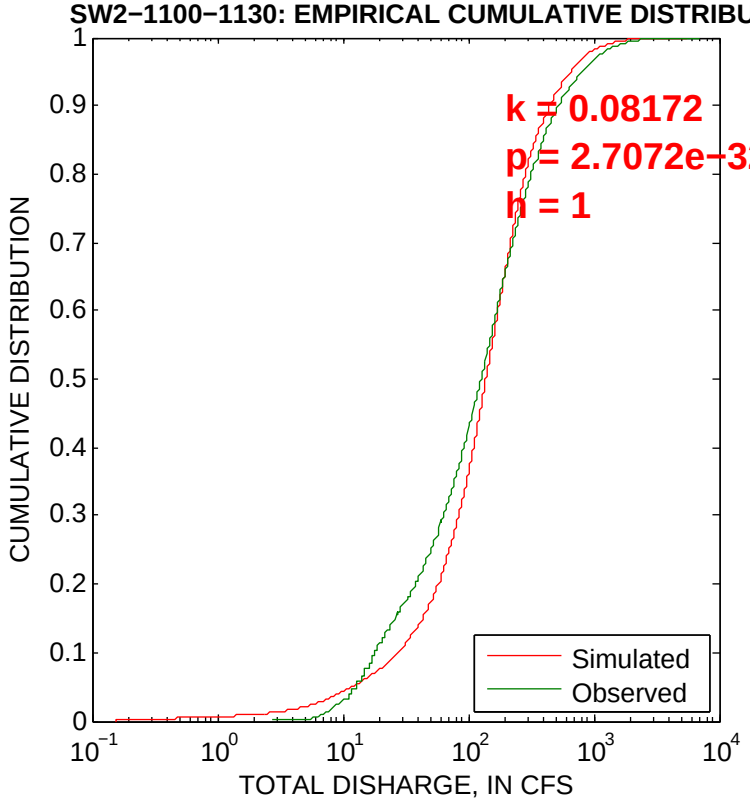
STATISTICS

		observe	simulate
n		10956	10956
min		13	0.63926
		1.11394	-0.194322
mean		68.1629	76.4918
		1.71841	1.75533
media		49	62.551
		1.6902	1.79623
max		1620	2584.4
		3.20952	3.41236
varian		4552.77	4884.62
		0.0869154	0.126149
JB		0.001	0.001
		0.001	0.001
		ra	log
%		12.219	2.14846
err.va		2115.7	0.0392203
rel.std.err		0.464706	0.451247
mod.eff		0.535294	0.548753

VERSION 2.1







DATA SELECTION

scenario: P620171001WQ | file: FLOW.calib

plot: FLOW - total discharge

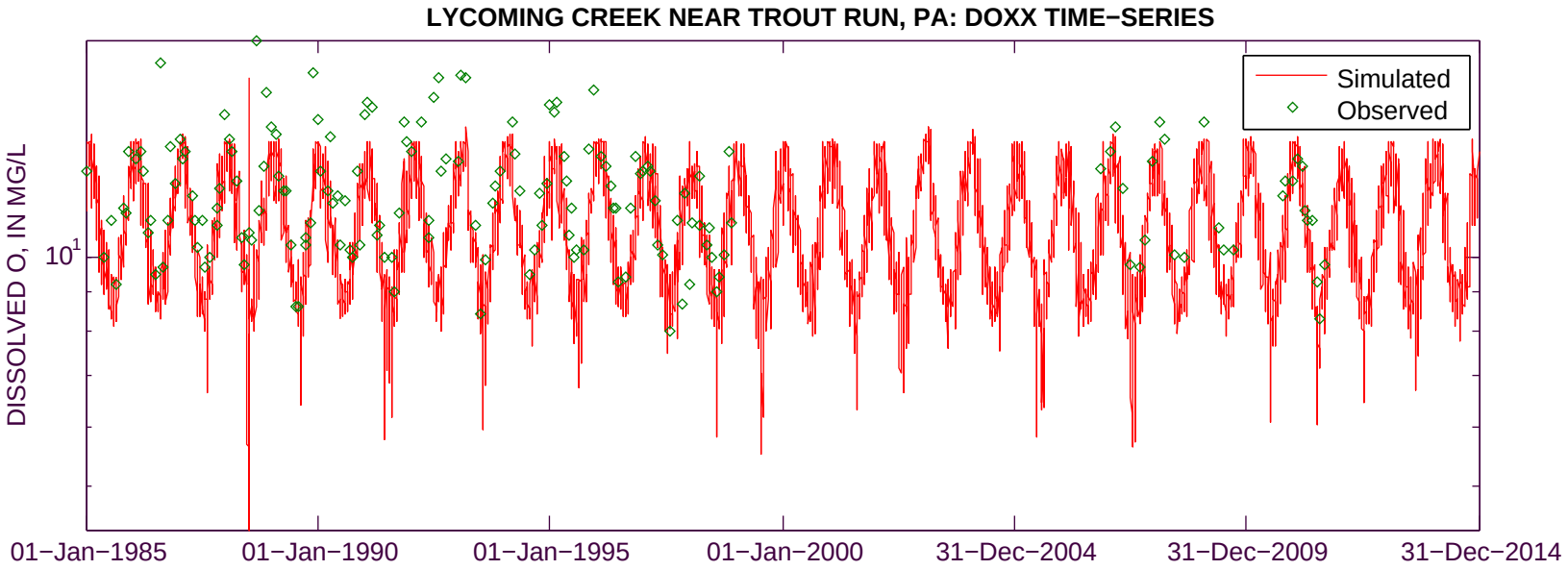
Dates: 1/1/1985 – 12/31/201

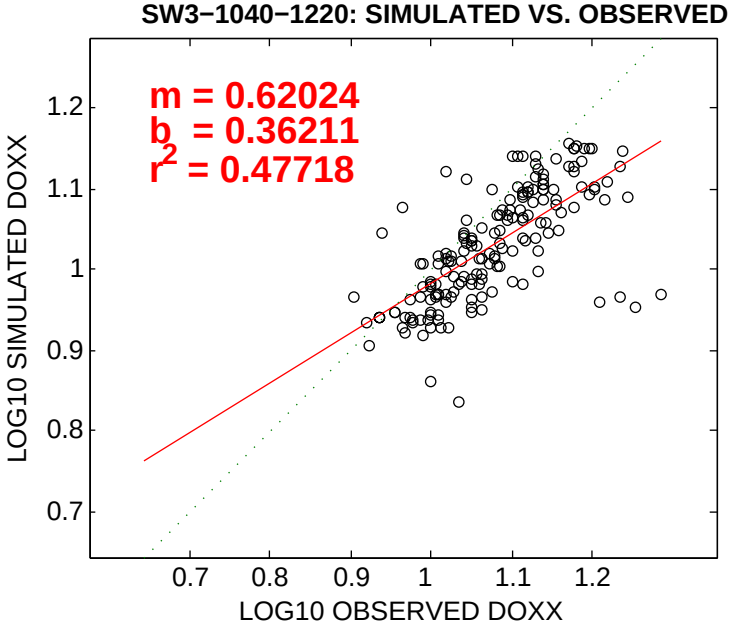
Drive | Directory | Observed: N/A | model | OBS20161101

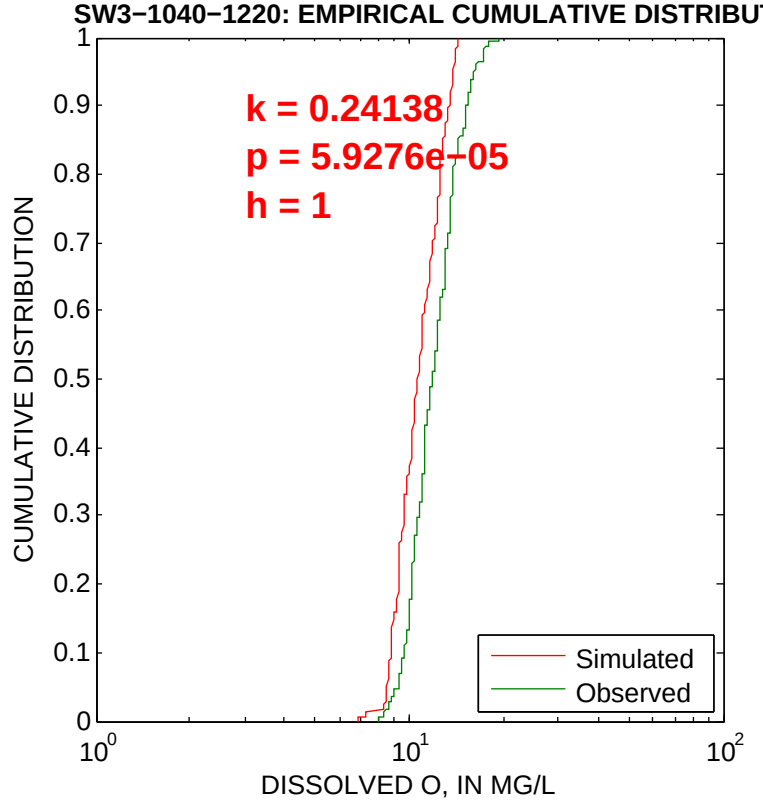
STATISTICS

		observe	simulate
n		10952	10952
min		2.6	0.15461
		0.414973	-0.810762
mean		233.001	212.909
		2.05765	2.08162
media		129	139.4
		2.11059	2.14426
max		7010	5579.2
		3.84572	3.74657
varian		126517	76344.1
		0.294325	0.278903
JB		0.001	0.001
		0.001	0.001
		ra	log
%		-8.62321	1.16529
err.va		40865.7	0.101466
rel.std.err		0.323005	0.344742
mod.eff		0.676995	0.655258

VERSION 2.1







DATA SELECTION

scenario: P620171001WQ | file: DOXX.calib

plot: DOXX - dissolved oxygen

Dates: 1/1/1985 – 12/31/201

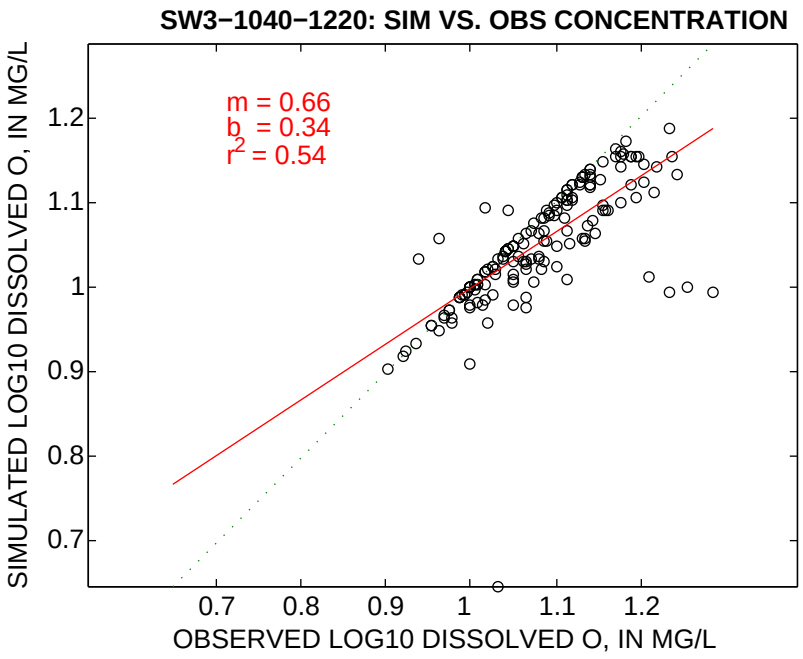
Drive: N/A | Directory: model | Observed: OBS20161101

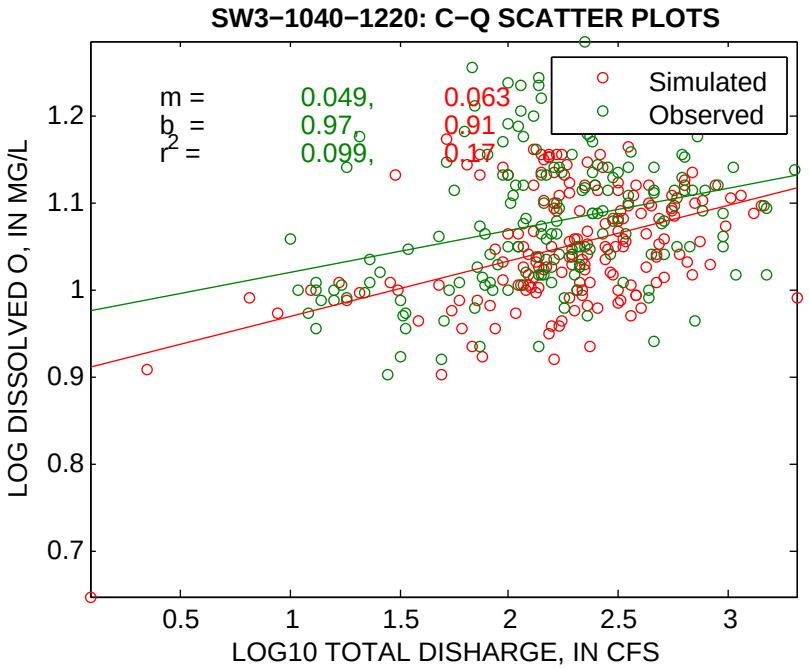
STATISTICS

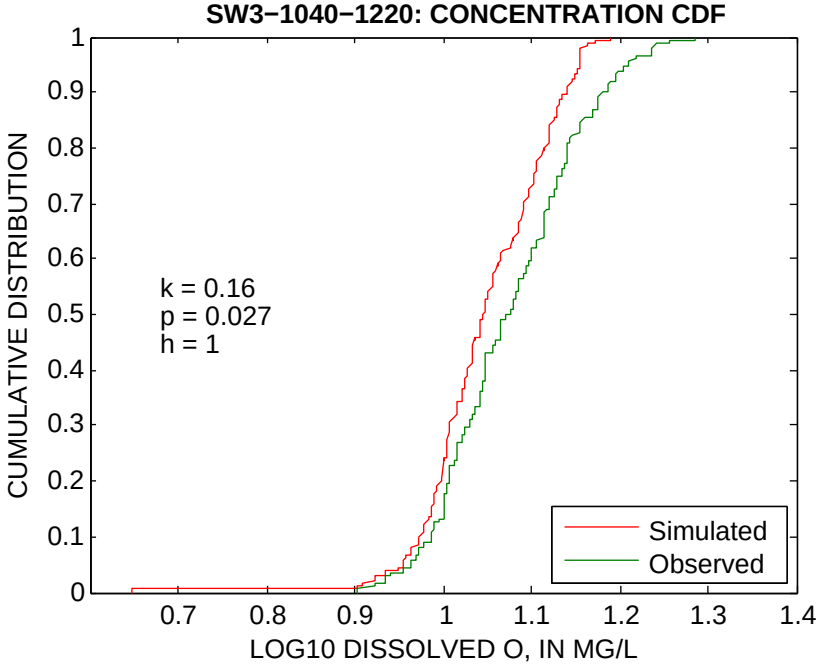
n	174	174
	observe	simulate
min	8	6.8392
	0.90309	0.835005
mean	12.1528	10.8662
	1.07777	1.0306
media	11.85	10.68
	1.07371	1.02857
max	19.3	14.358
	1.28556	1.15709
varian	4.87614	2.99073
	0.00596263	0.00480708
JB	0.012792	0.027145
	0.164298	0.066454
	ra	log
%	-10.5865	-4.37729
err.va	4.41848	0.00561172
rel.std.err	1.906143	0.941148
mod.eff	0.0938565	0.0588521

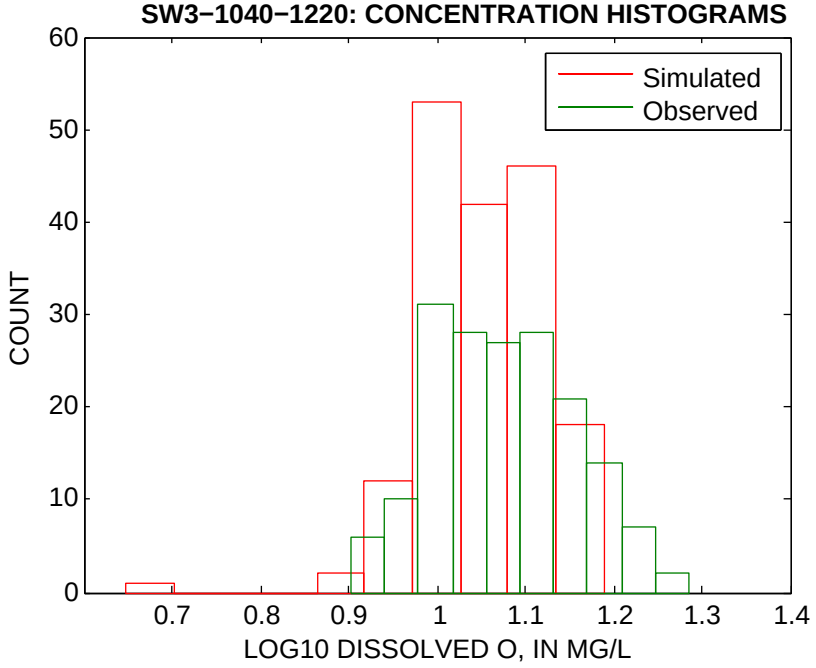
VERSION 2.1

ALL DATA
LOG10

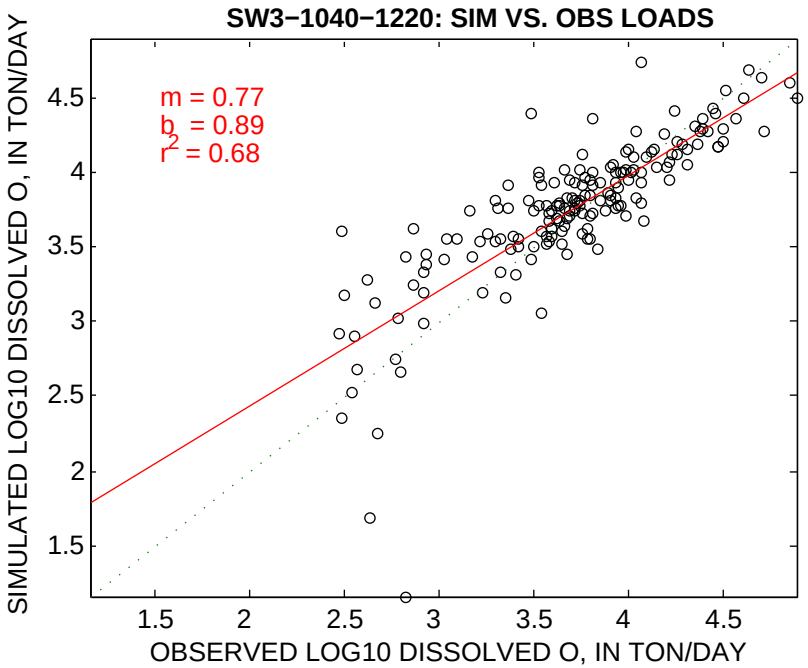


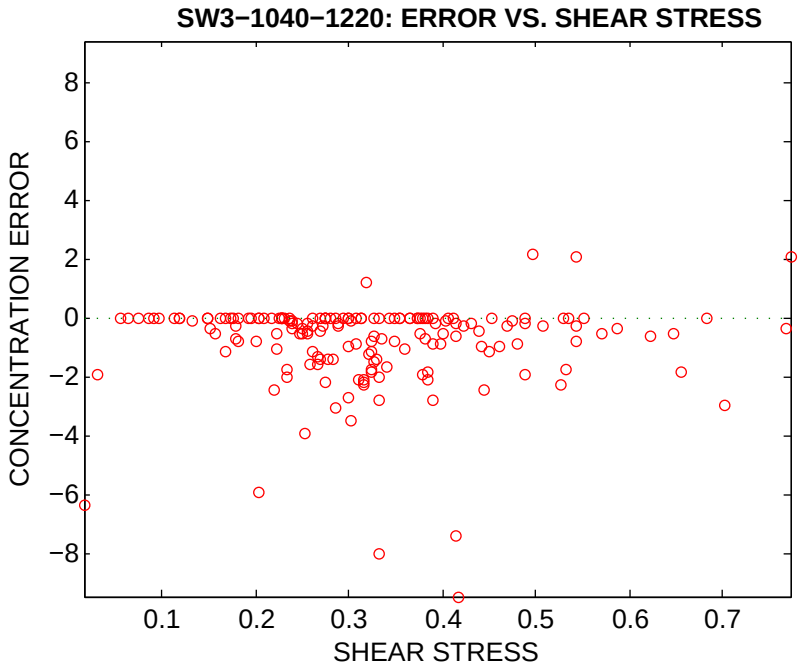


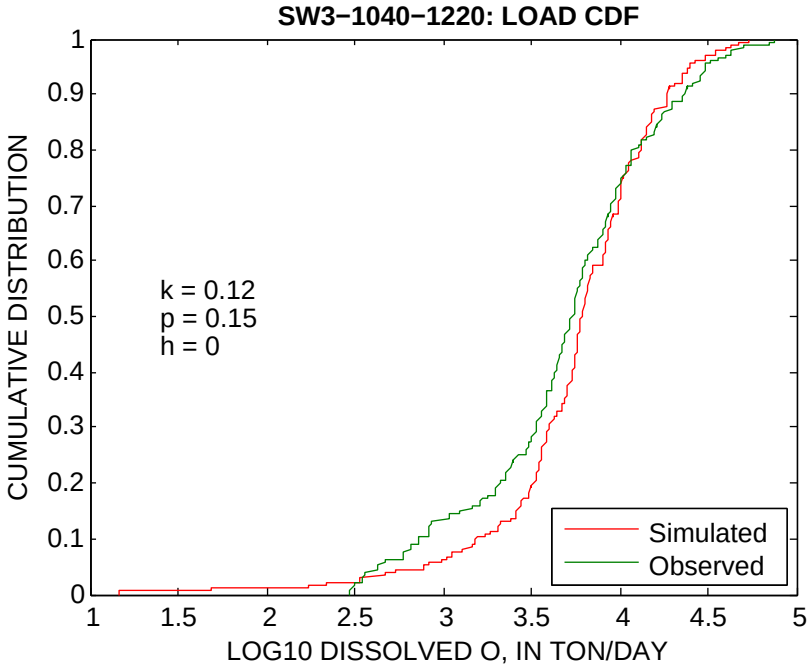


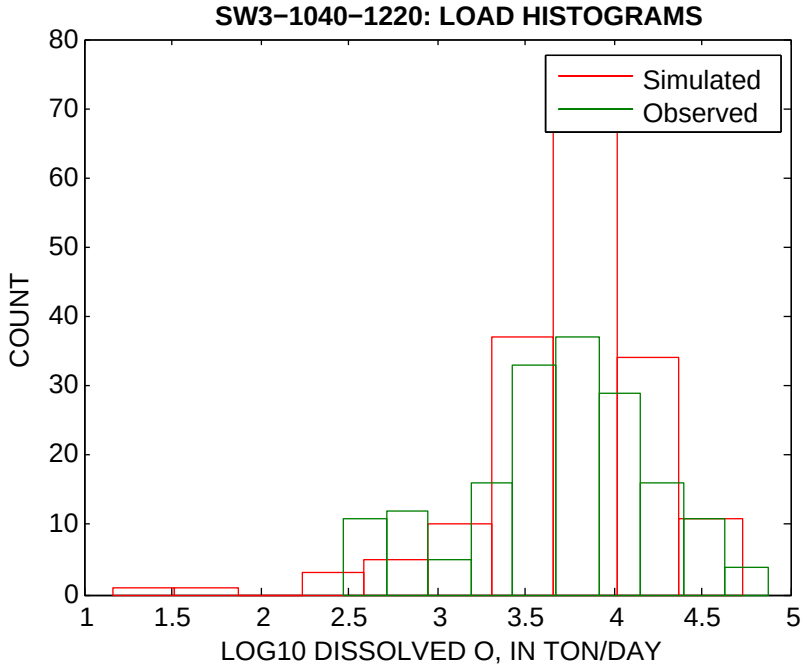


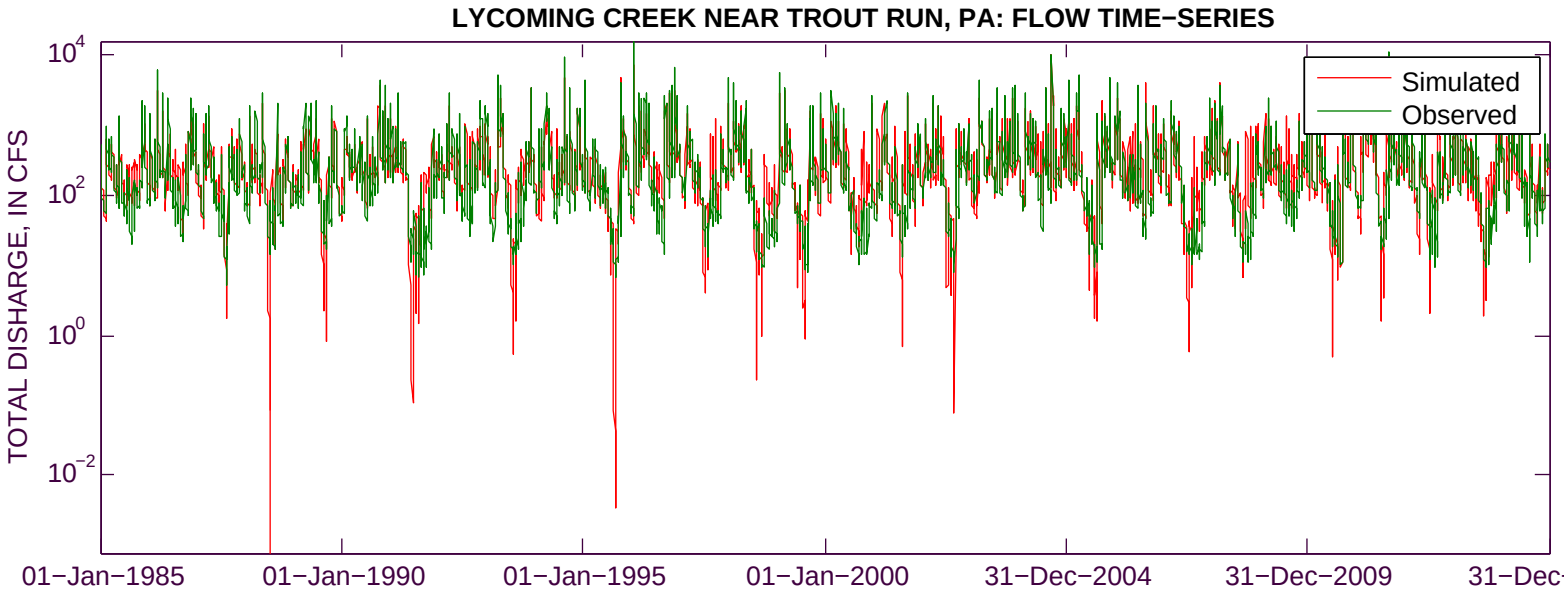
LOAD DATA
LOG10

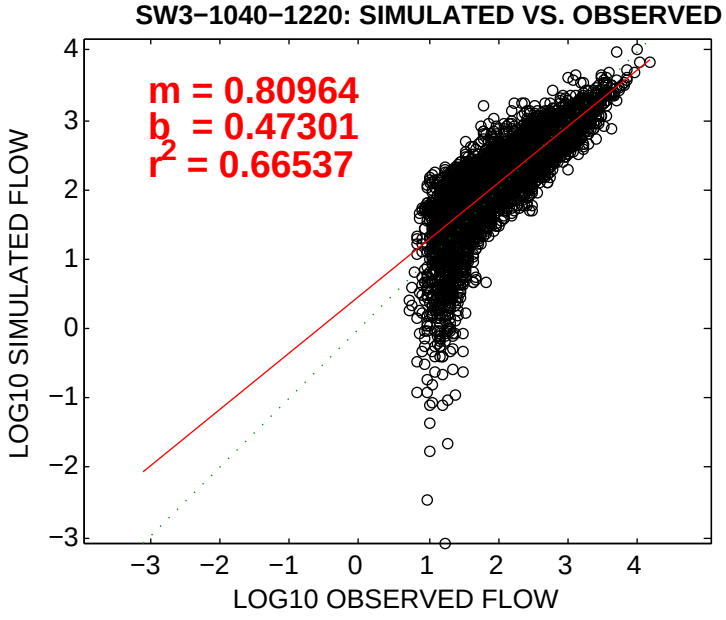


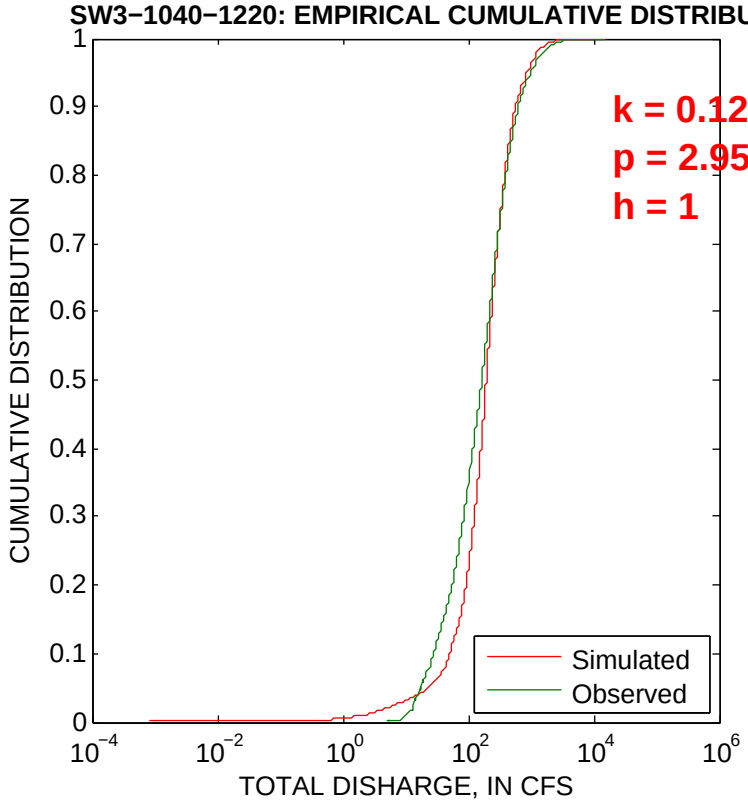












DATA SELECTION

scenario	file
P620171001WQ	FLOW.calib

plot: FLOW - total discharge

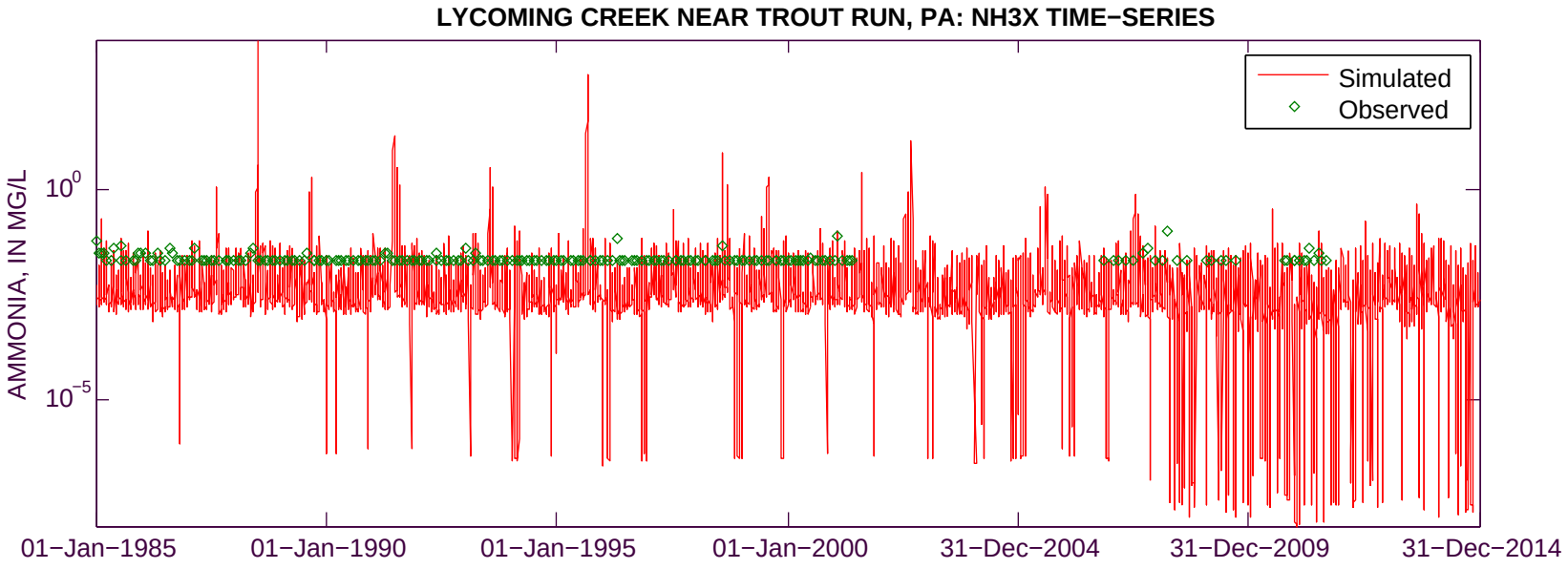
Dates 1/1/1985 12/31/201

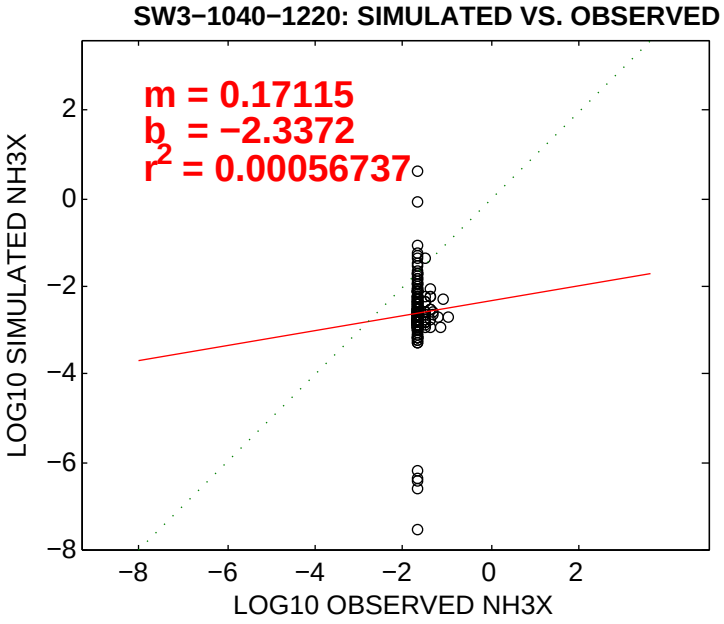
Drive	Directory	Observed
N/A	model	OBS20161101

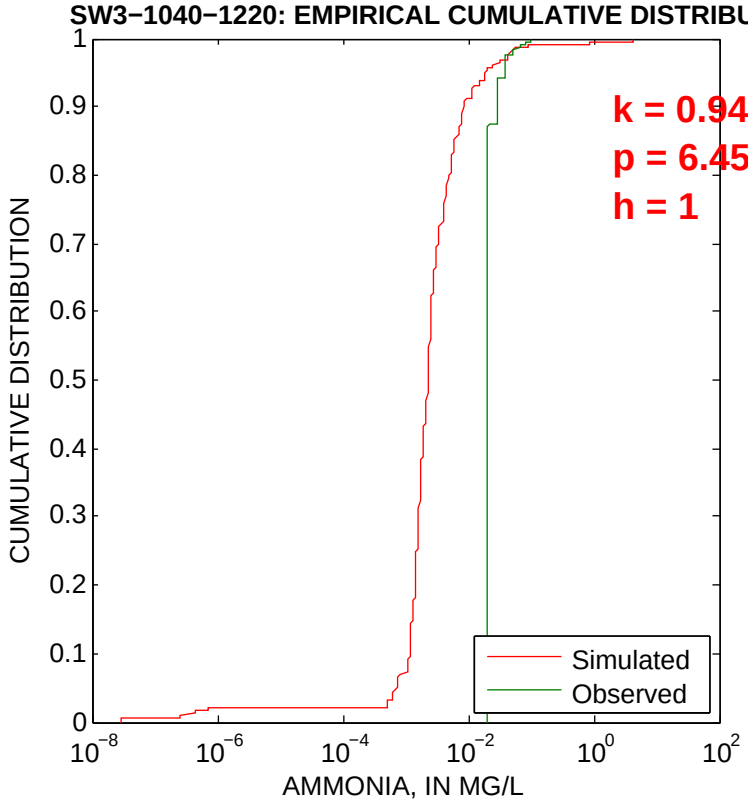
STATISTICS

	observe	simulate
n	10957	10953
min	5.3	0
	0.724276	-3.10181
mean	301.156	292.443
	2.18475	2.24188
media	165	195.78
	2.21748	2.29183
max	15000	10469
	4.17609	4.01991
varian	254220	147413
	0.26595	0.262013
JB	0.001	0.001
	0.001	0.001
	ra	log
%	-2.89296	2.61458
err.va	67275.3	0.100578
rel.std.err	0.264634	0.378186
mod.eff	0.735366	0.621814

VERSION







DATA SELECTION

scenario: P620171001WQ | file: NH3X.calib

plot: NH3X - ammonia

Dates: 1/1/1985 – 12/31/201

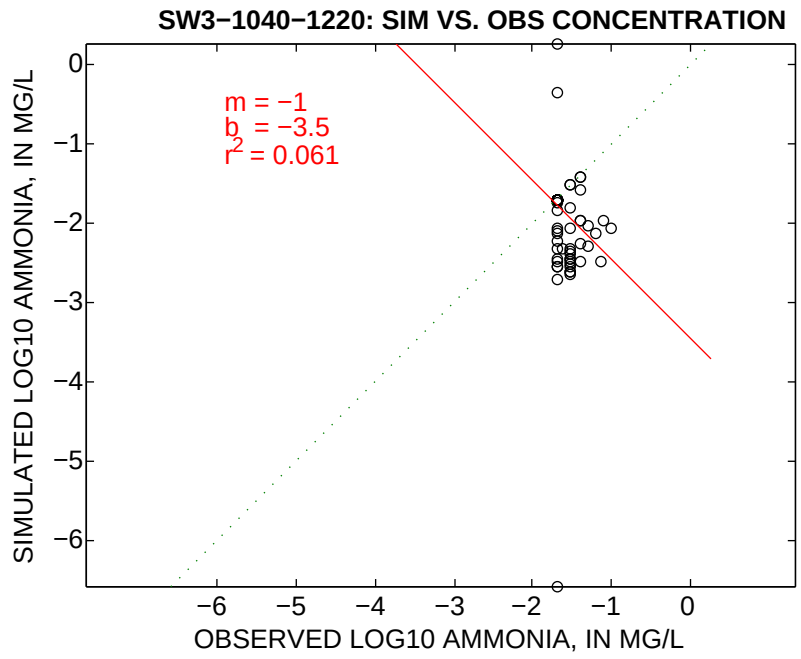
Drive: N/A | Directory: model | Observed: OBS20161101

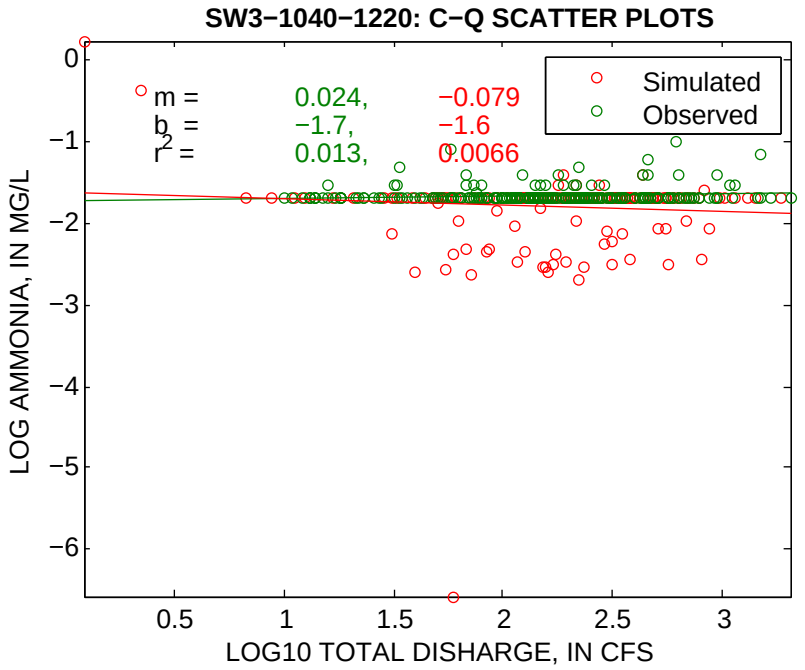
STATISTICS

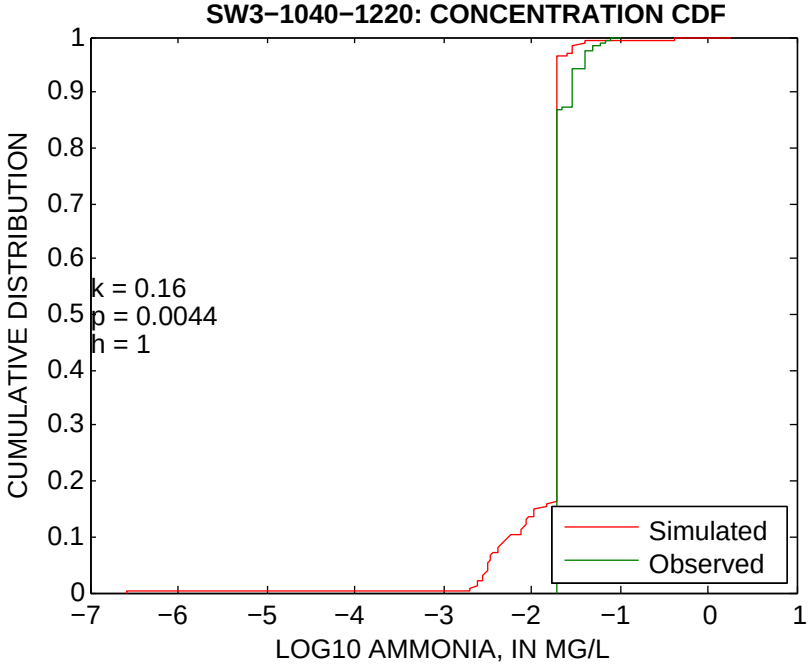
		observe	simulate
n		229	229
min		0.02	2.9336e-08
		-1.69897	-7.5326
mean		0.0225895	0.0268699
		-1.66358	-2.62189
media		0.02	0.0023411
		-1.69897	-2.63058
max		0.1	4.2001
		-1	0.62326
varian		8.23395e-0	0.080008
		0.0111351	0.574882
JB		0.001	0.001
		0.001	0.001
		ra	log
%		18.9487	57.605
err.va		0.0802293	1.50459
rel.std.err		974.371	135.121
mod.eff		-973.371	-134.121

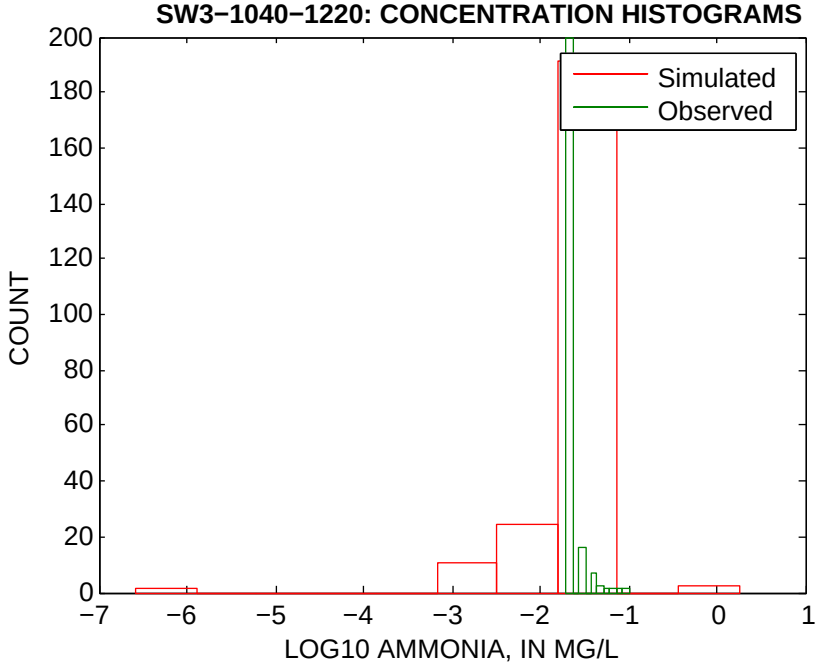
VERSION 2.1

ALL DATA
LOG10

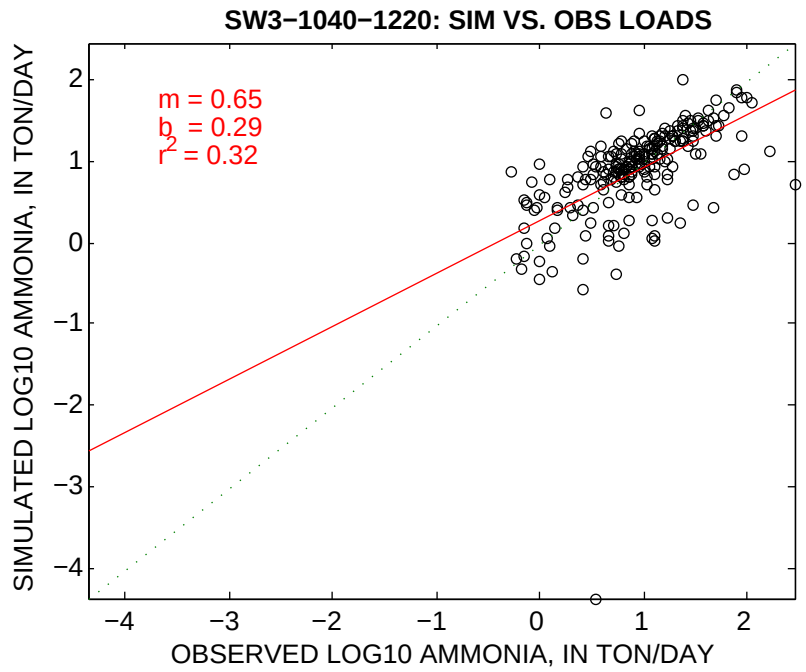


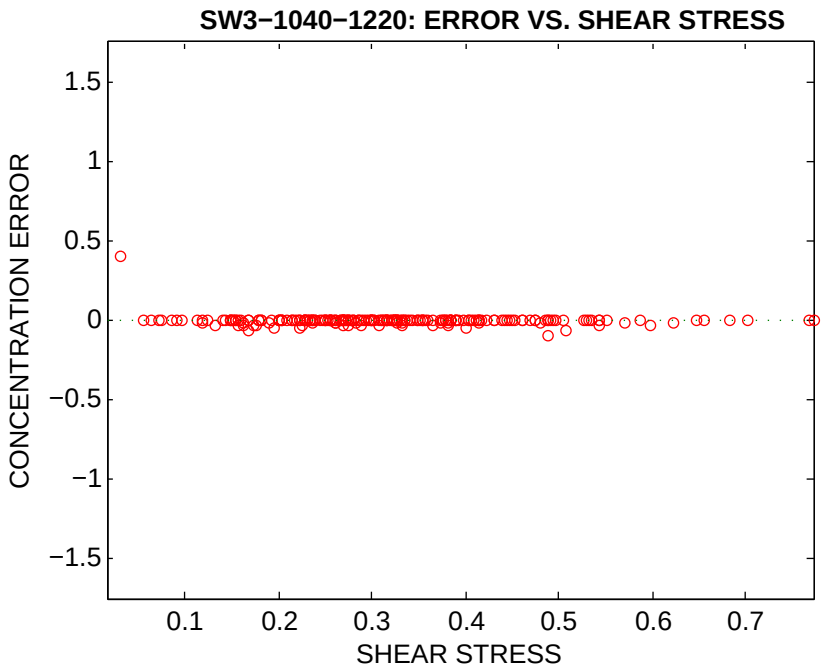


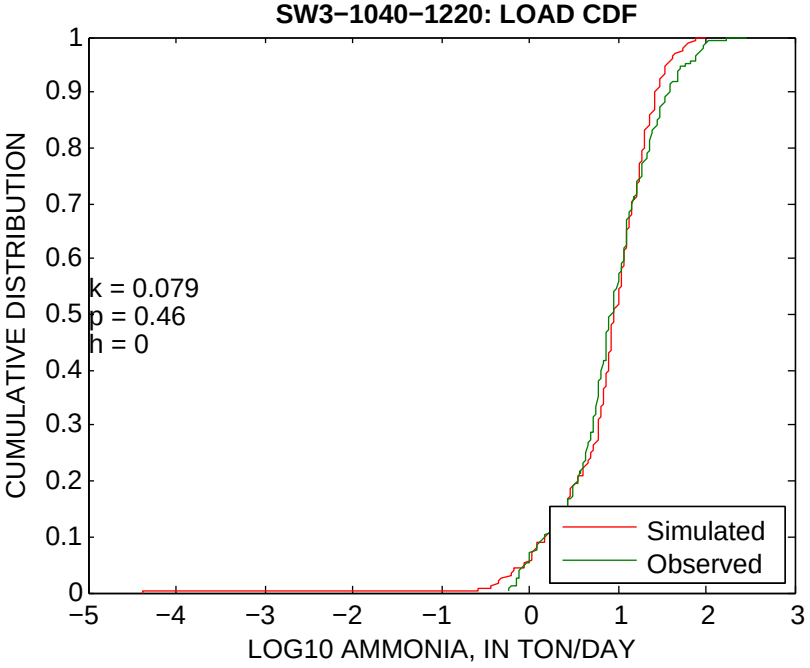


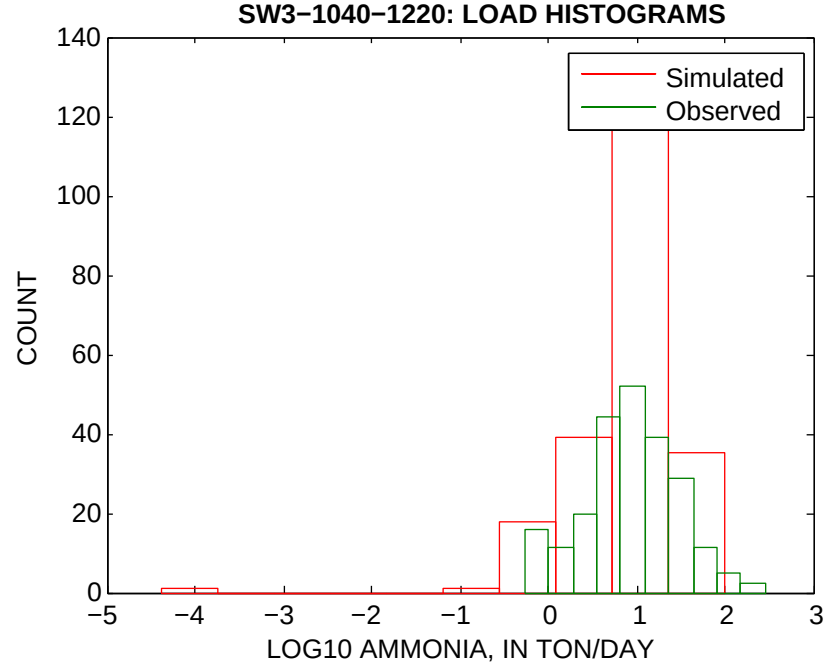


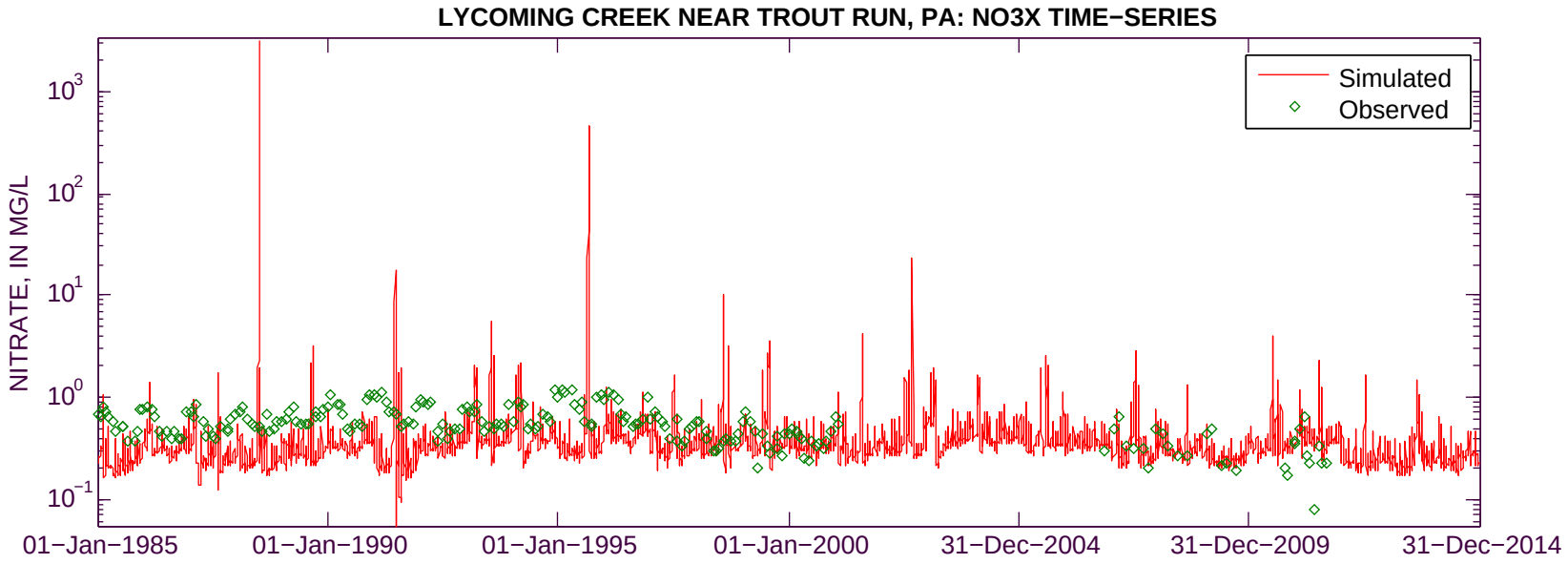
LOAD DATA
LOG10

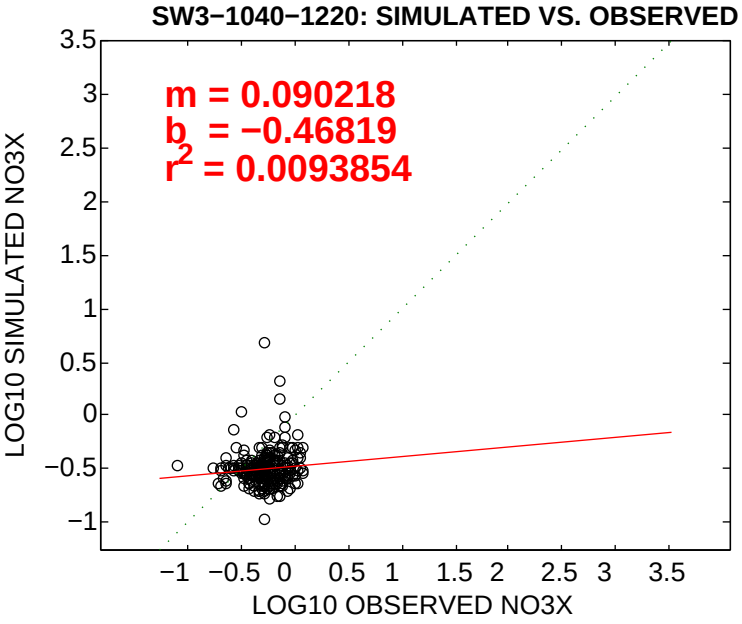


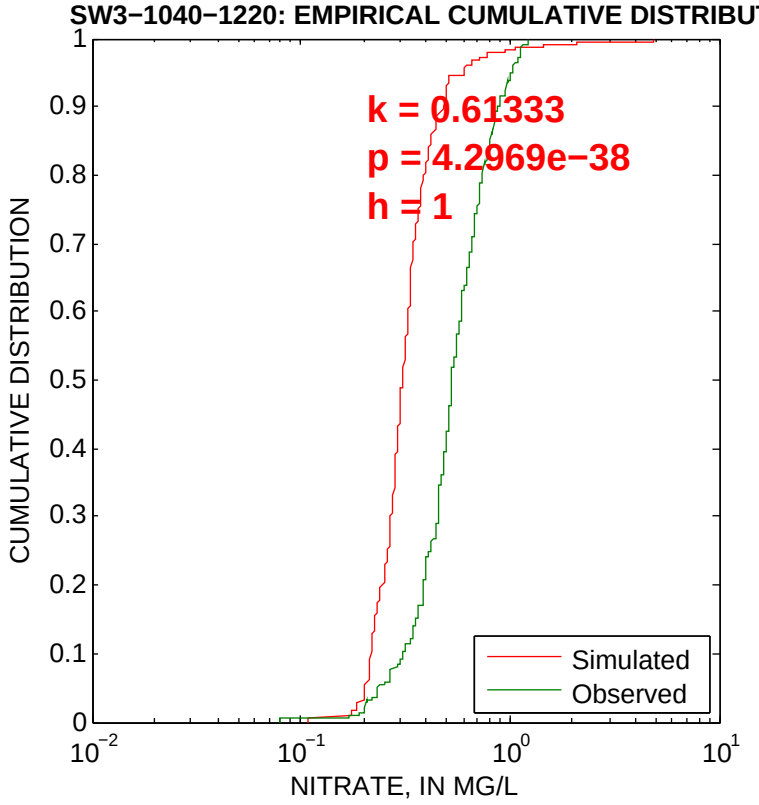












DATA SELECTION

scenario	file
P620171001WQ	NO3X.calib

plot: NO3X - nitrate

Dates: 1/1/1985 – 12/31/201

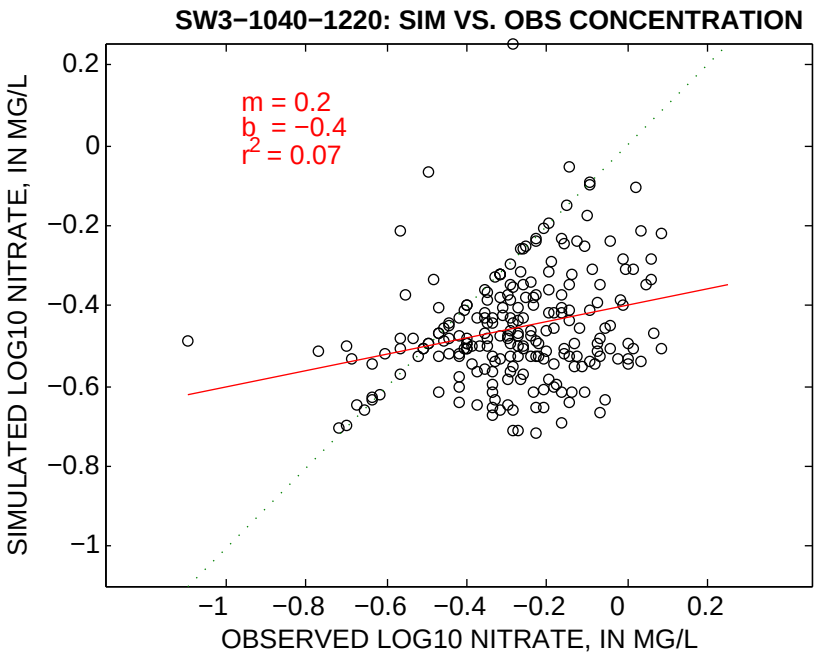
Drive	Directory	Observed
N/A	model	OBS20161101

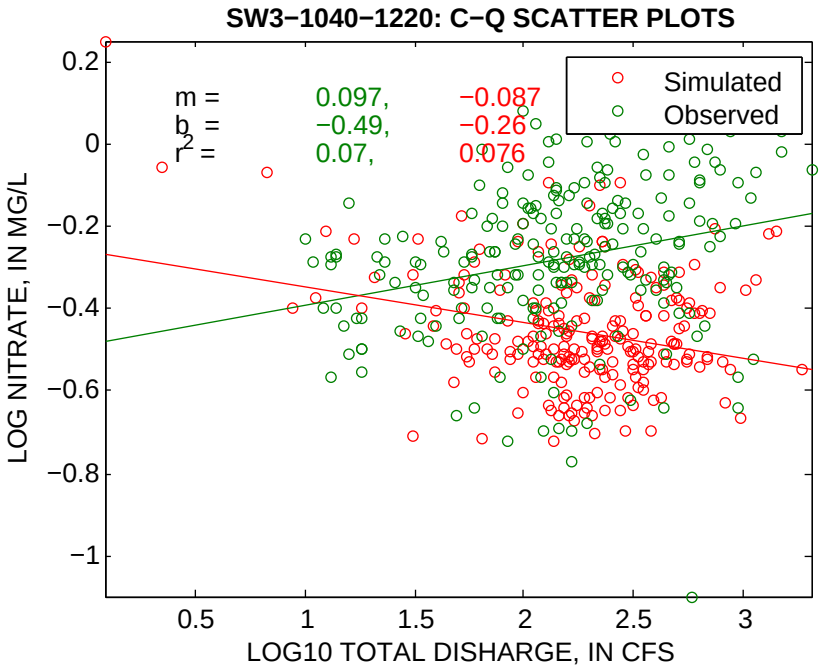
STATISTICS

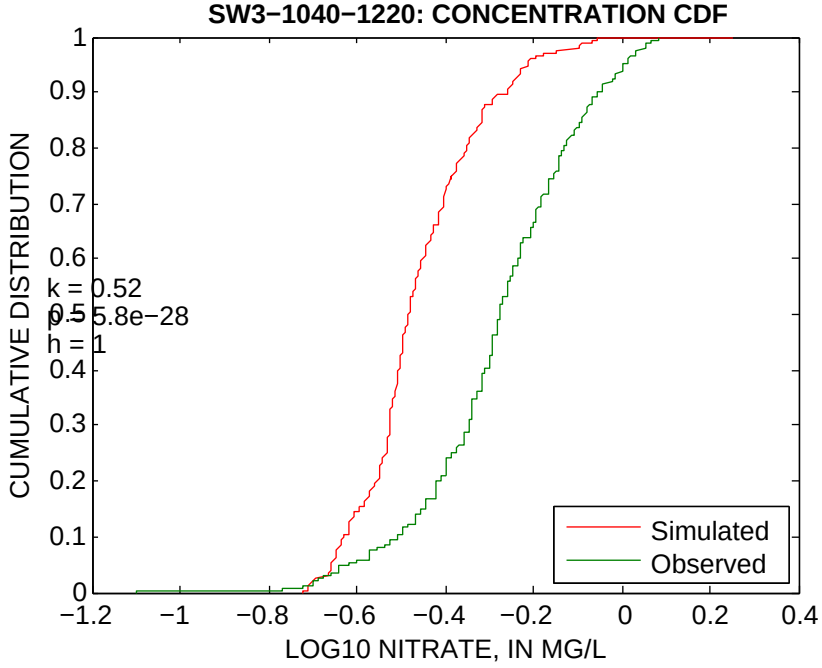
	n	225	225
		observe	simulate
min		0.08	0.10741
		-1.09691	-0.968955
mean		0.570644	0.361669
		-0.278944	-0.493354
media		0.53	0.30701
		-0.275724	-0.512847
max		1.21	4.8667
		0.0827854	0.687235
varian		0.0504573	0.124329
		0.0332028	0.0287947
JB		0.003834	0.001
		0.001	0.001
		ra	log
%		-36.6209	76.8645
err.va		0.210191	0.102183
rel.std.err		4.16572	3.07755
mod.eff		-3.16572	-2.07755

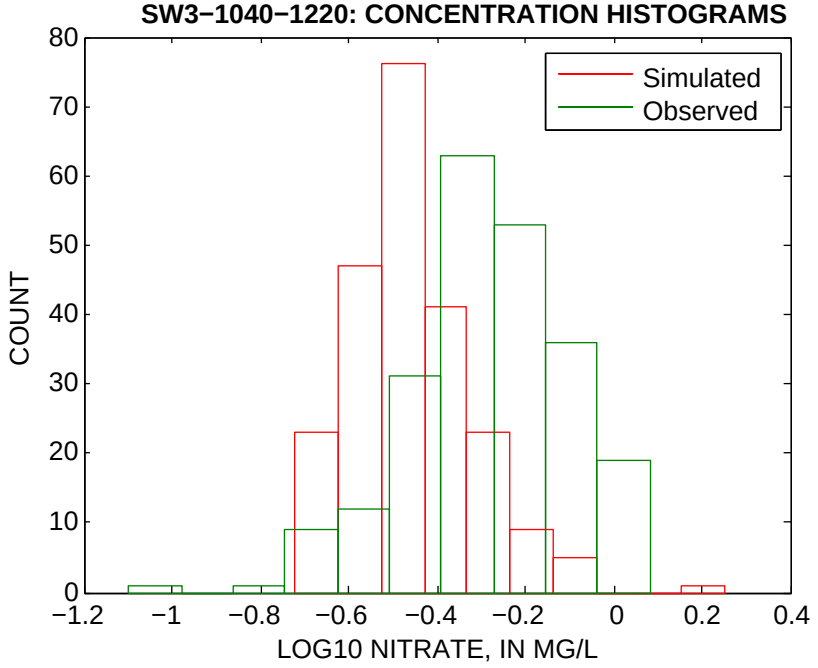
VERSION 2.1

ALL DATA
LOG10

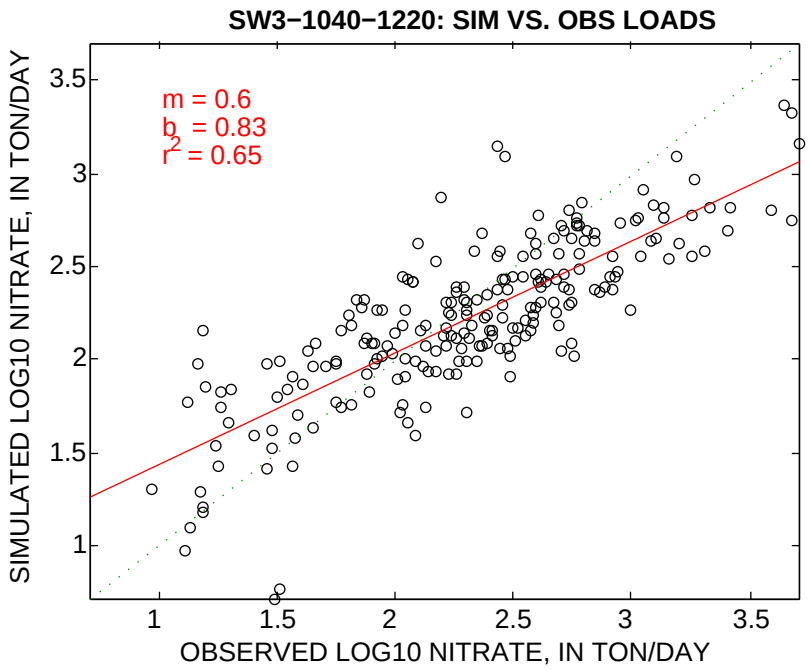


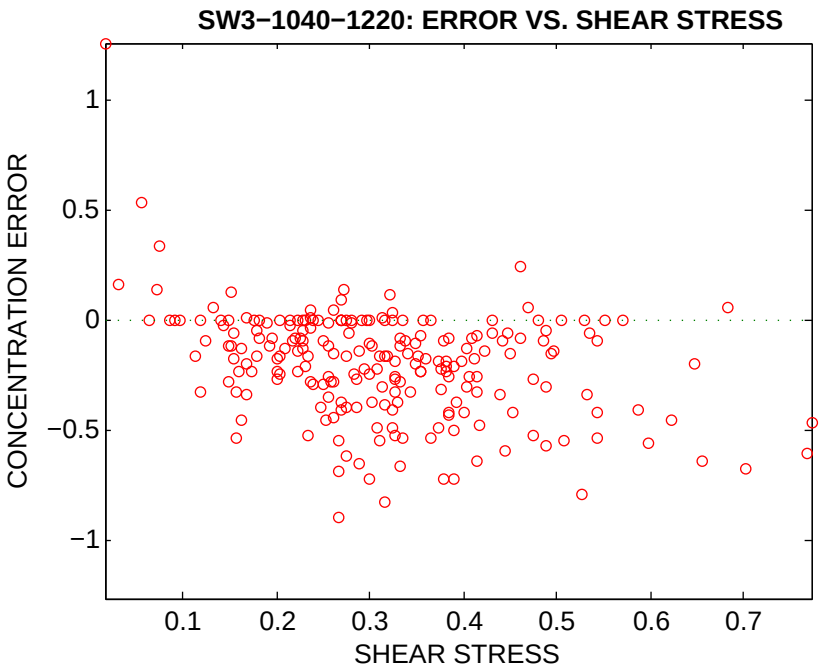


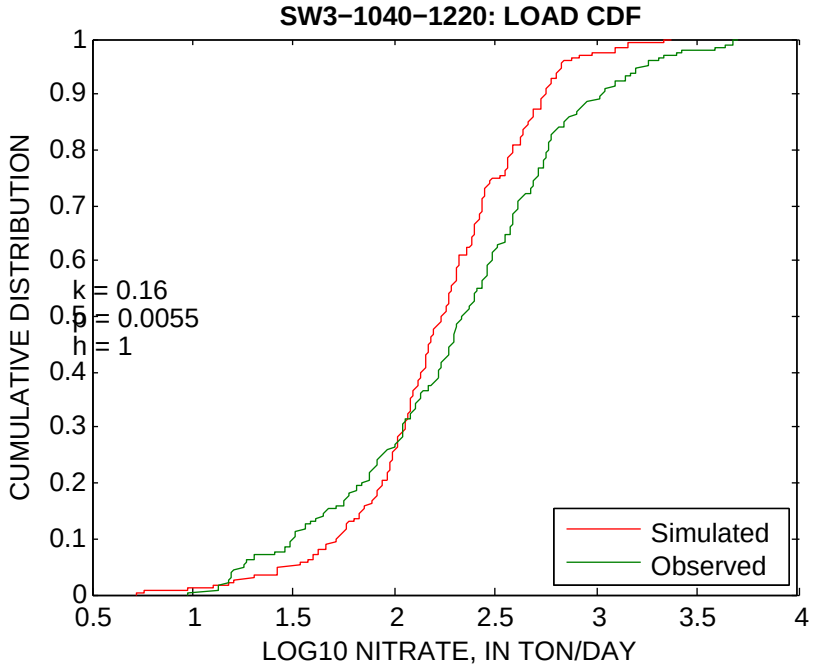


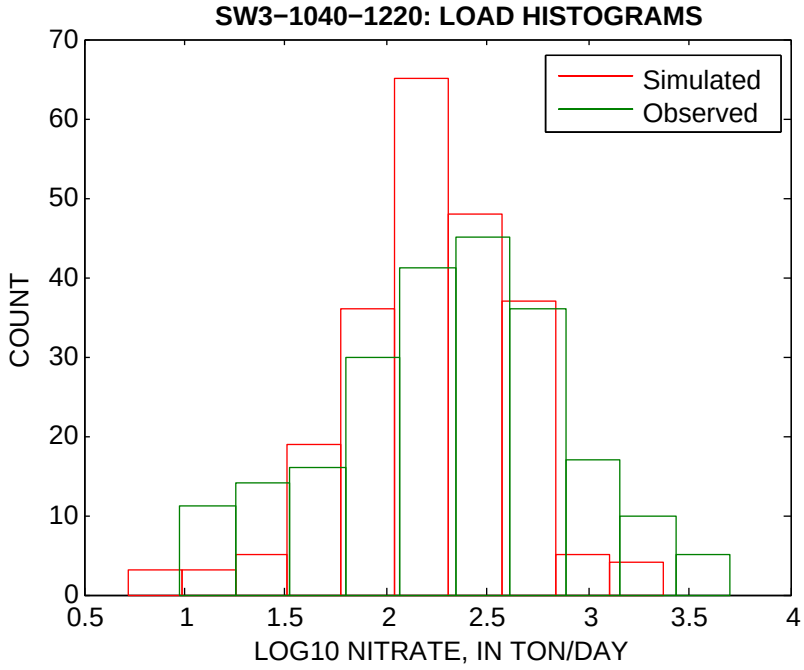


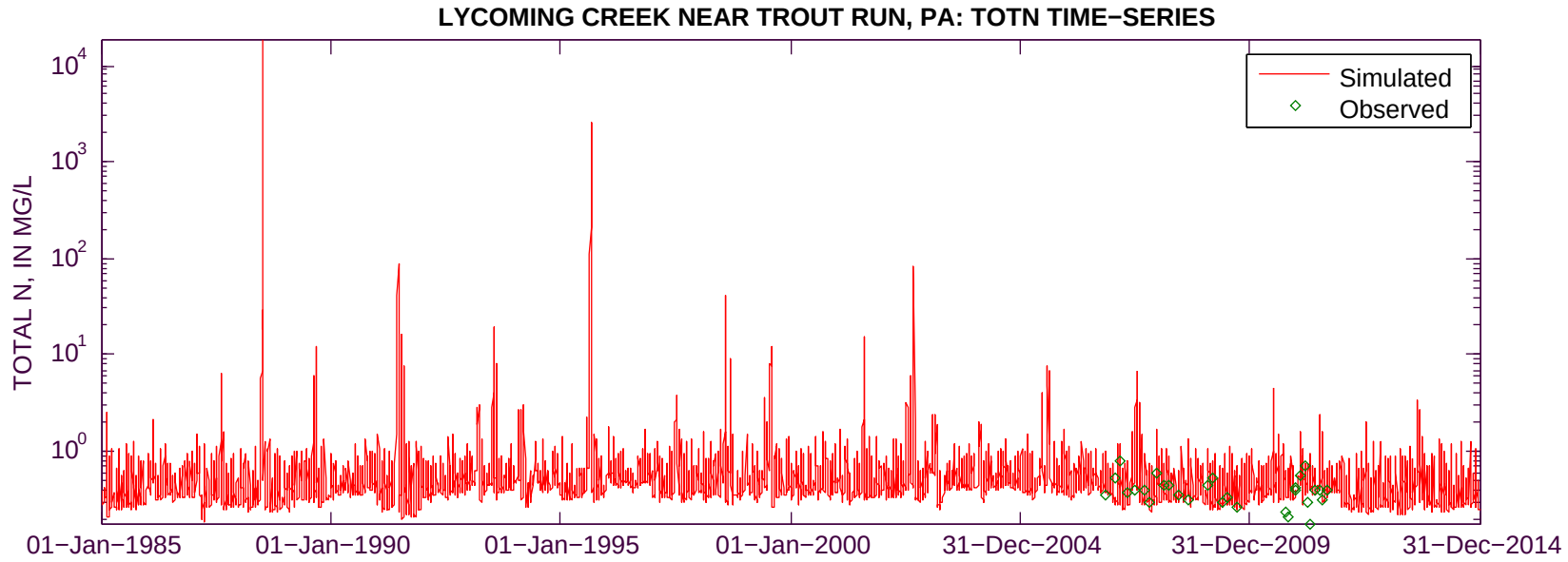
LOAD DATA
LOG10

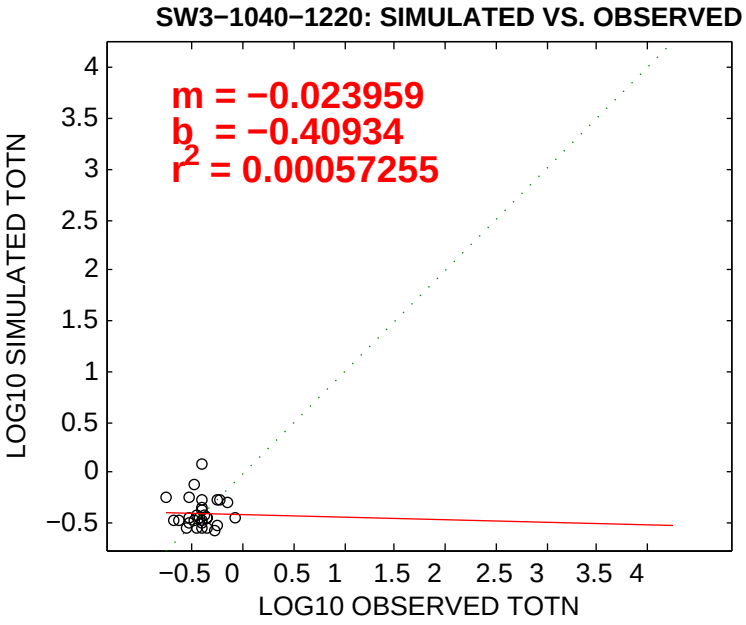


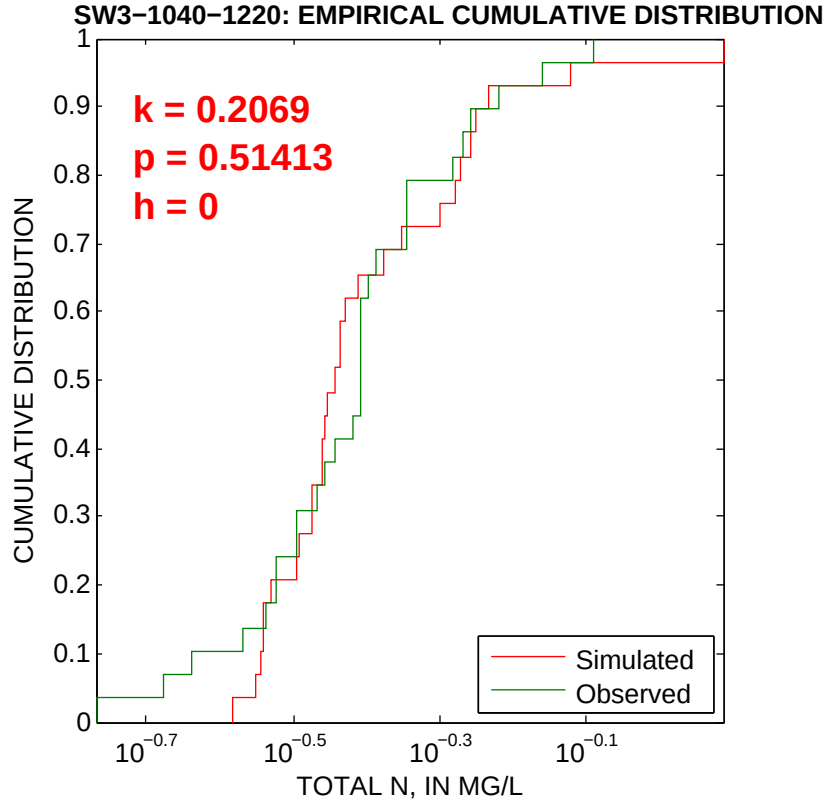












DATA SELECTION

scenario: P620171001WQ | file: TOTN.calib

plot: TOTN - total nitrogen

Dates: 1/1/1985 – 12/31/201

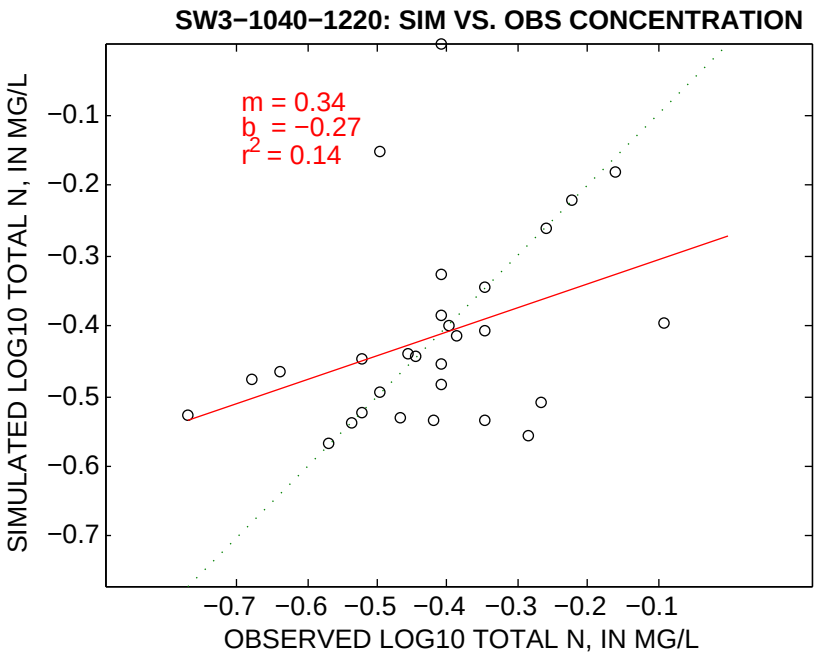
Drive | Directory: N/A | model | Observed: OBS20161101

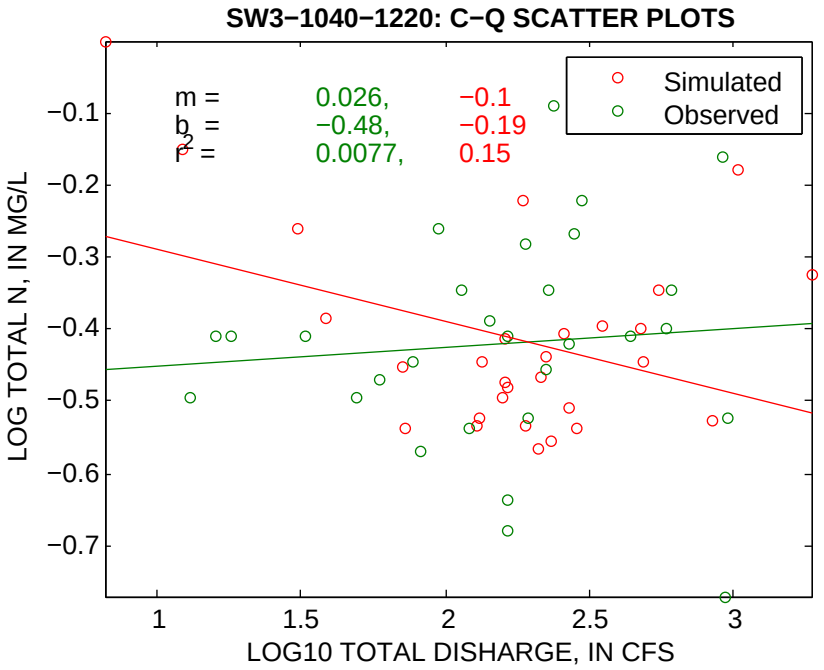
STATISTICS

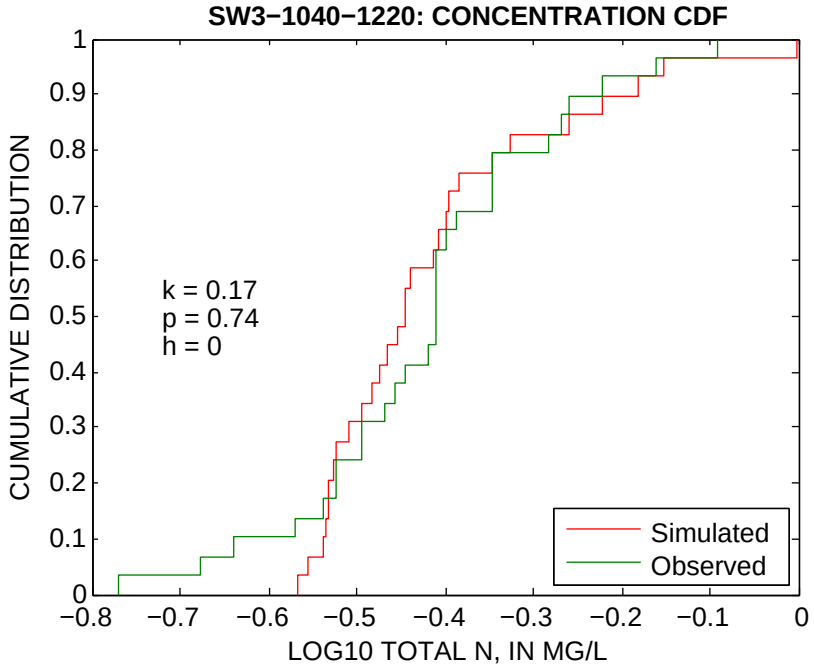
n	29	29
	observe	simulate
min	0.17	0.26174
	-0.769551	-0.58213
mean	0.402069	0.425859
	-0.419711	-0.399279
media	0.39	0.36055
	-0.408935	-0.443035
max	0.81	1.2163
	-0.091515	0.0850407
varian	0.0194456	0.0365289
	0.0217371	0.021793
JB	0.025362	0.001
	0.5	0.005096
	ra	log
%	5.9169	-4.86798
err.va	0.0576185	0.0450041
rel.std.err	2.96307	2.07038
mod.eff	-1.96307	-1.07038

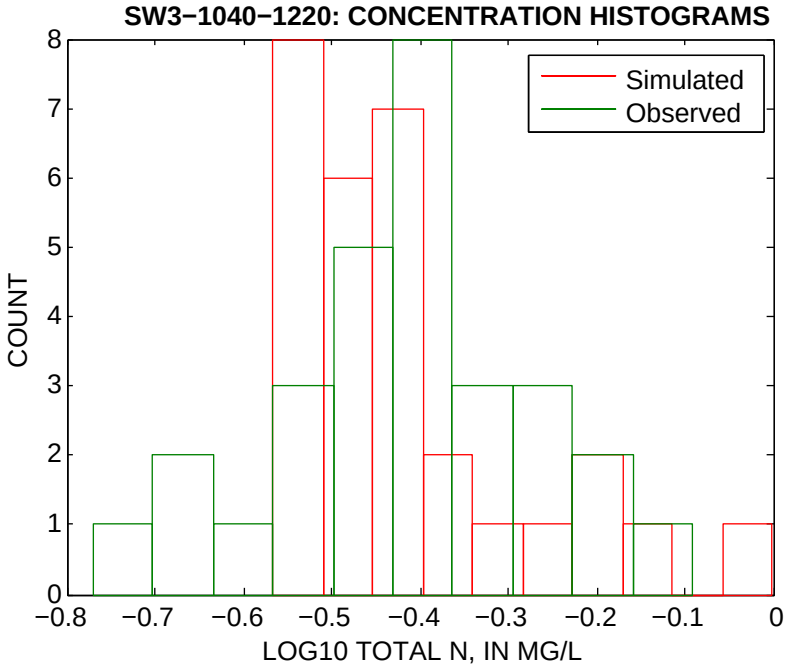
VERSION 2.1

ALL DATA
LOG10

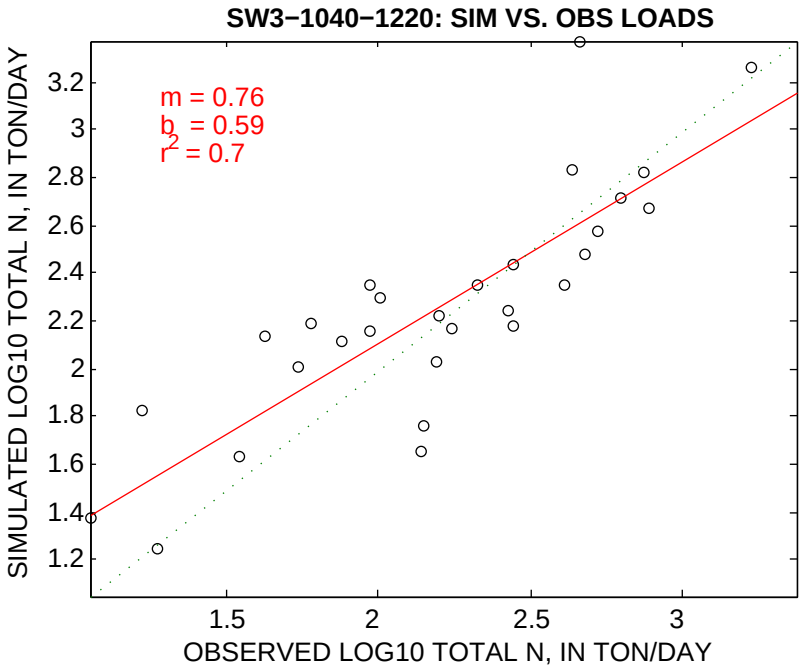


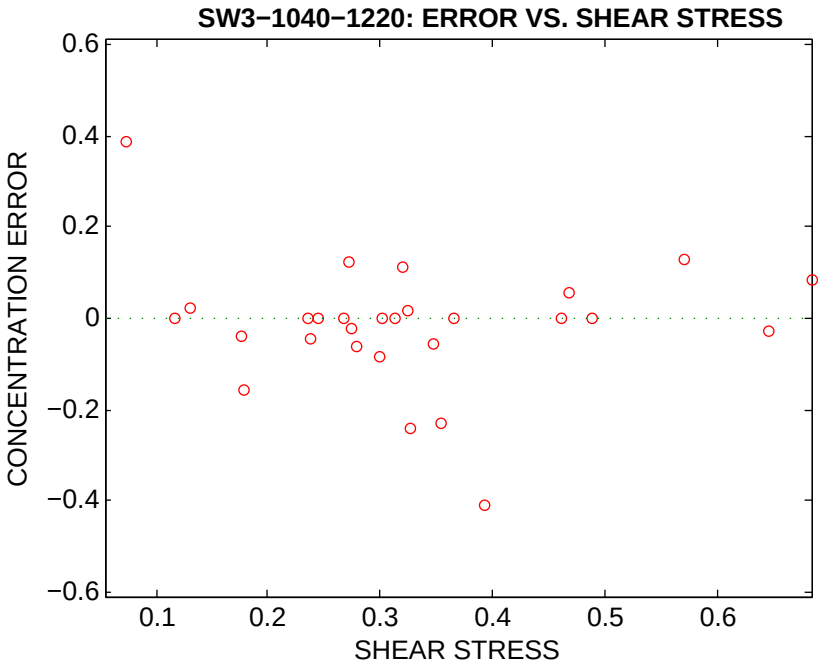


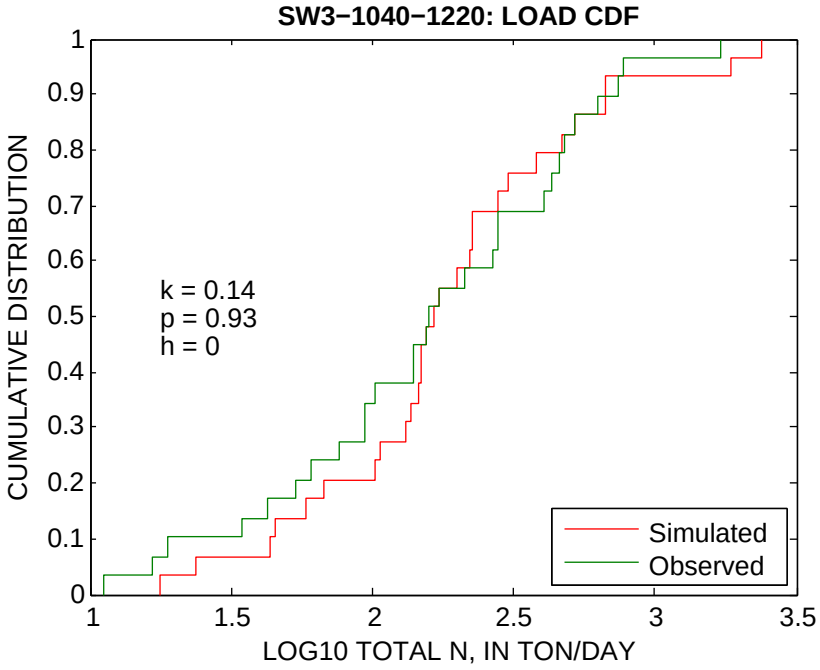


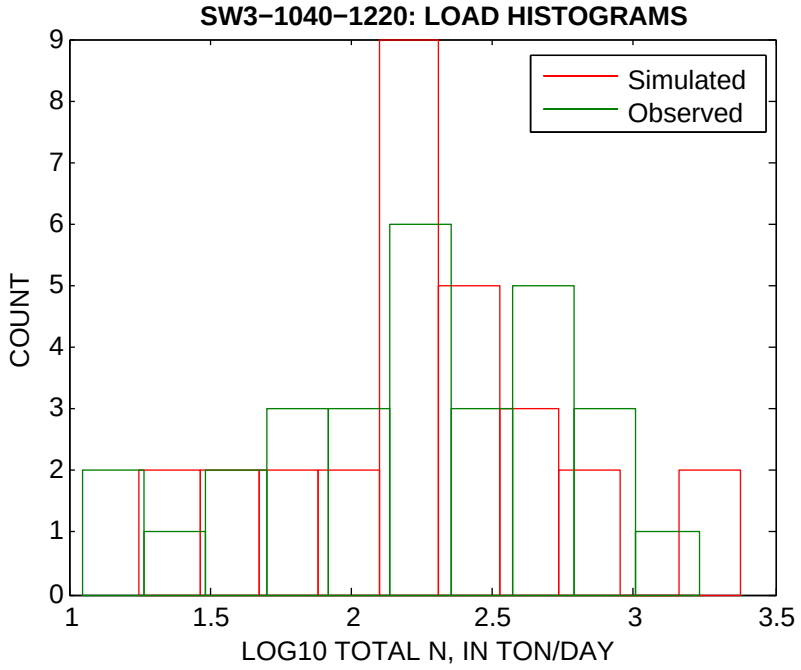


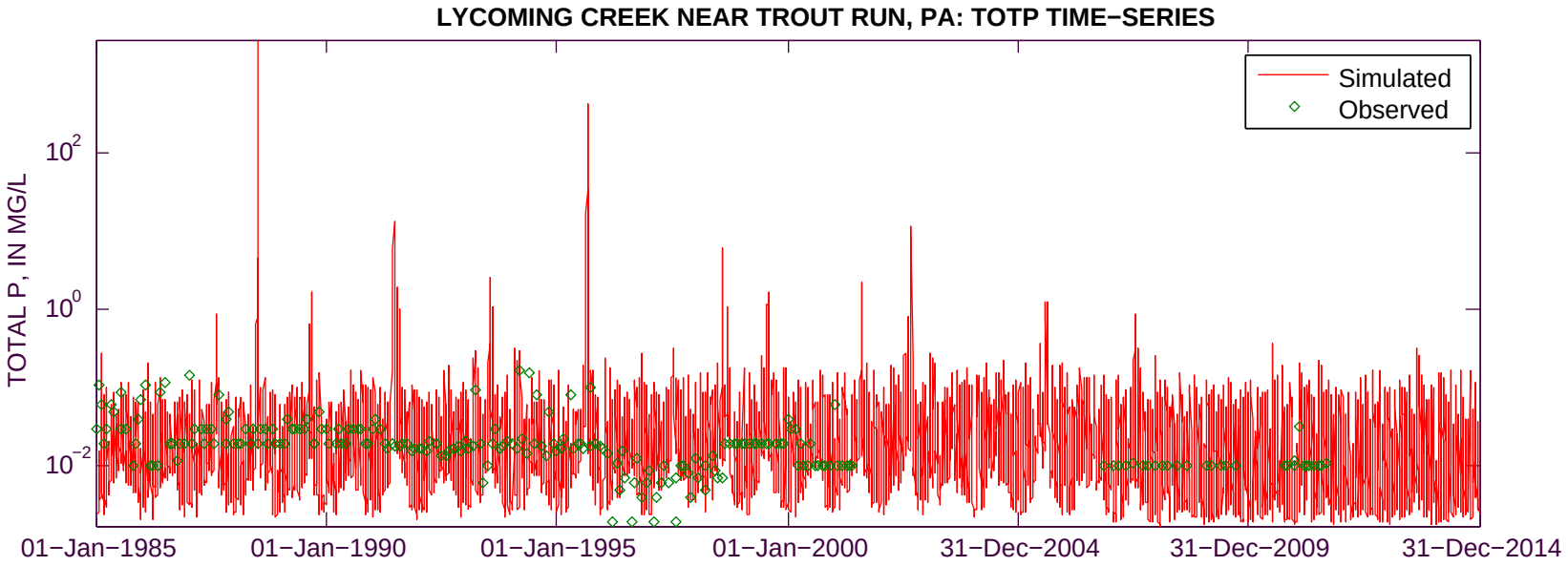
LOAD DATA
LOG10

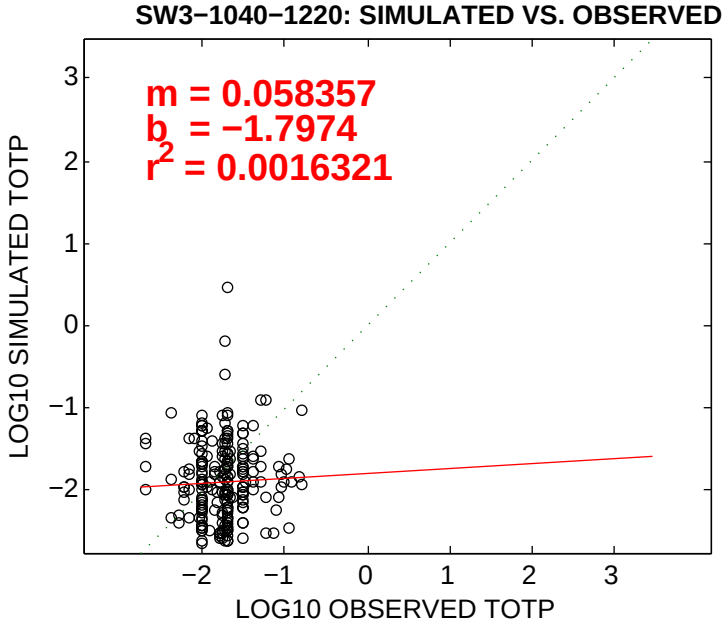


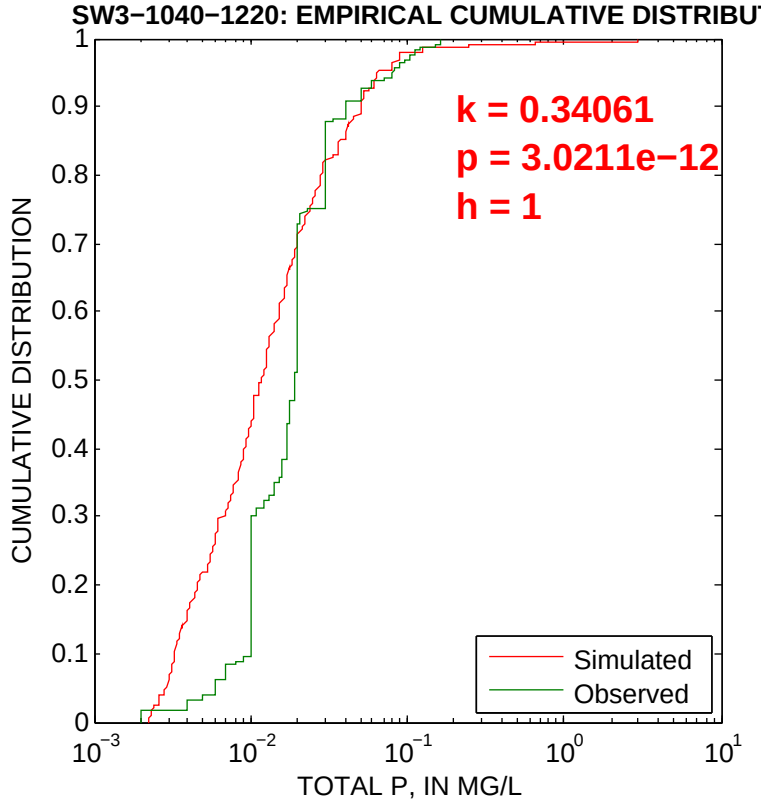












DATA SELECTION

scenario	file
P620171001WQ	TOTP.calib

plot: TOTP - total phosphorus

Dates: 1/1/1985 – 12/31/201

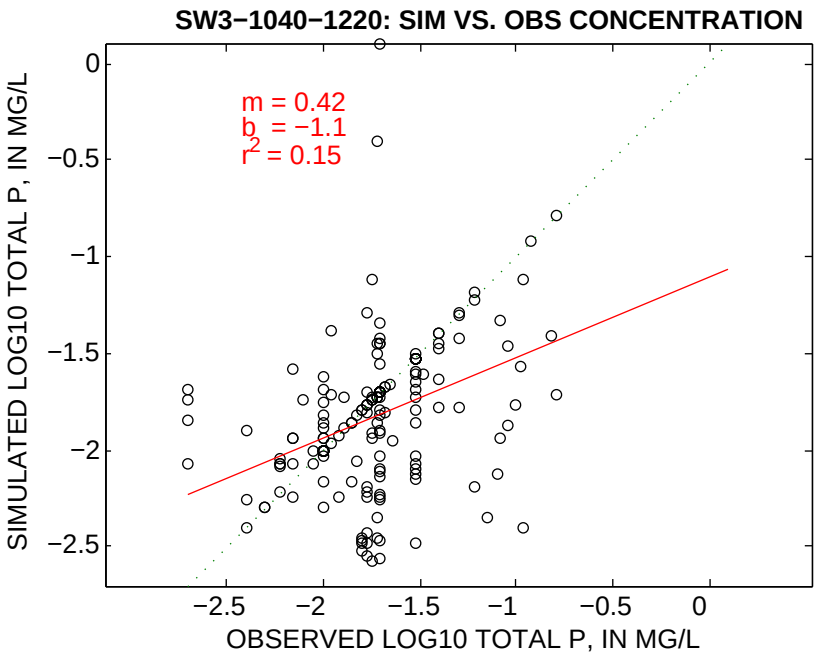
Drive	Directory	Observed
N/A	model	OBS20161101

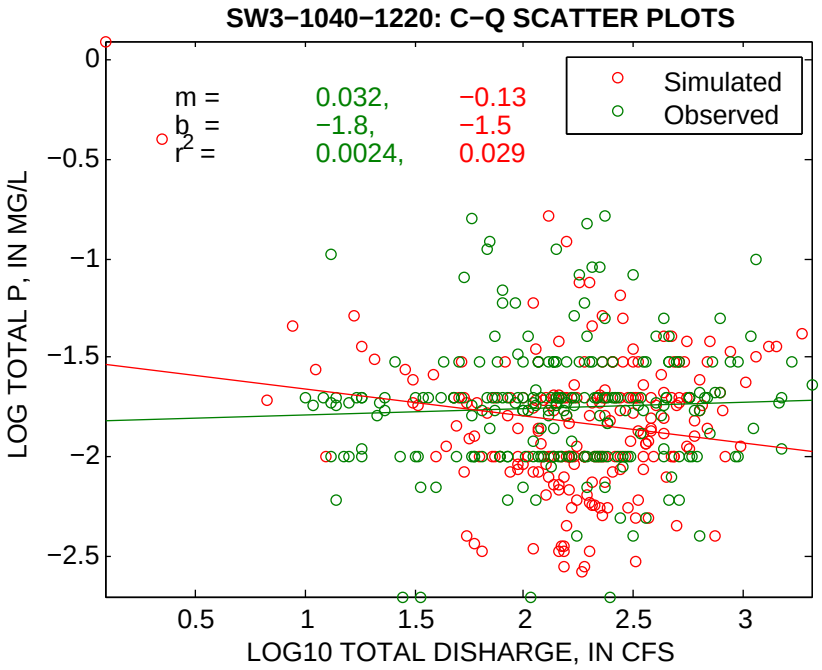
STATISTICS

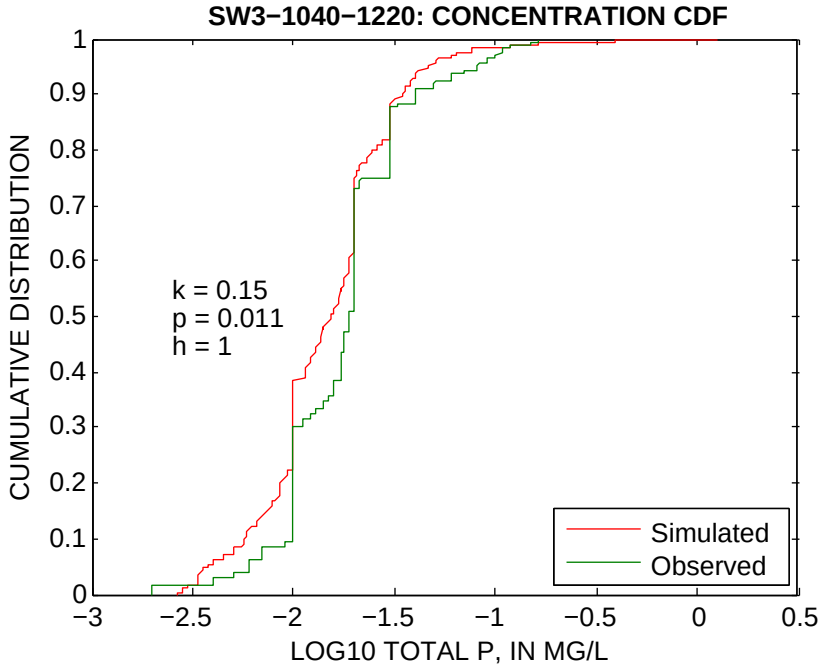
	n	229	229
		observe	simulate
min		0.002	0.0022322
		-2.69897	-2.65127
mean		0.0240961	0.0355303
		-1.74931	-1.89953
media		0.019	0.011633
		-1.72125	-1.93431
max		0.163	2.9404
		-0.787812	0.468406
varian		0.00061719	0.0396399
		0.1031	0.215119
JB		0.001	0.001
		0.001912	0.001
		ra	log
%		47.4528	8.58715
err.va		0.0404433	0.32885
rel.std.err		65.5279	3.18963
mod.eff		-64.5279	-2.18963

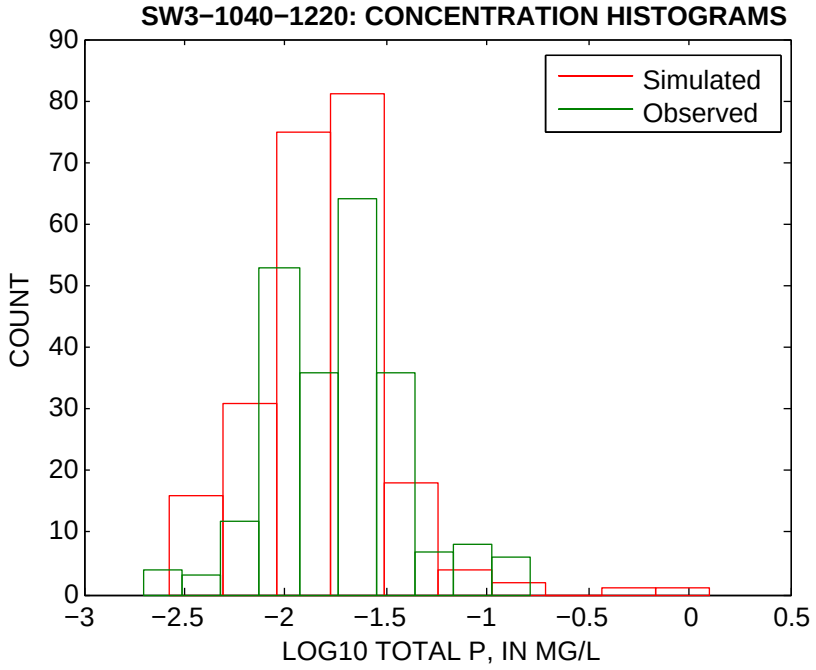
VERSION 2.1

ALL DATA
LOG10

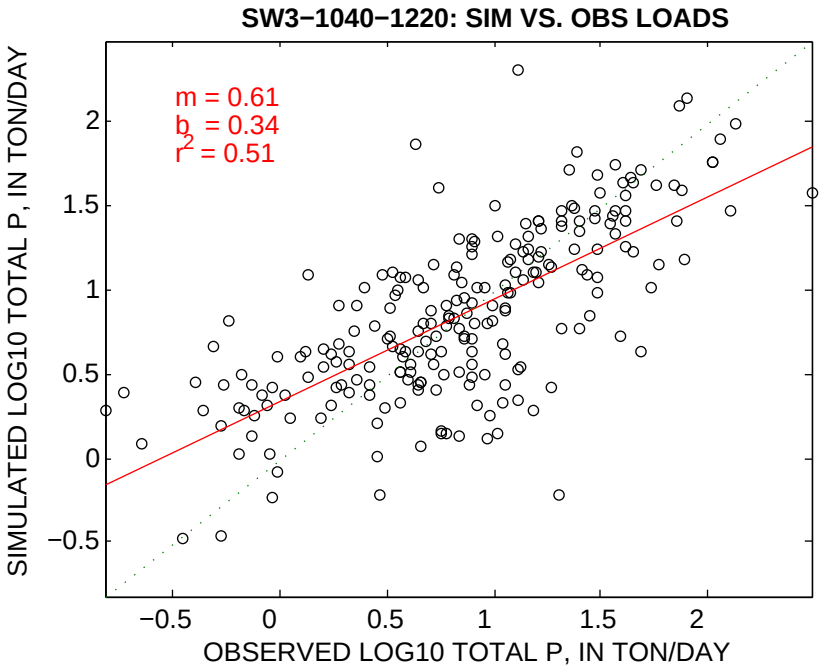


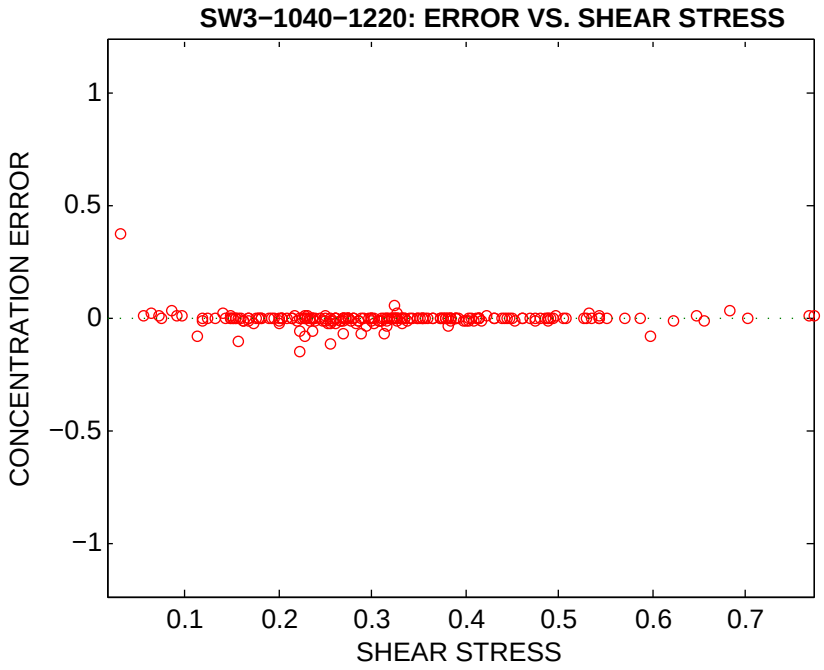


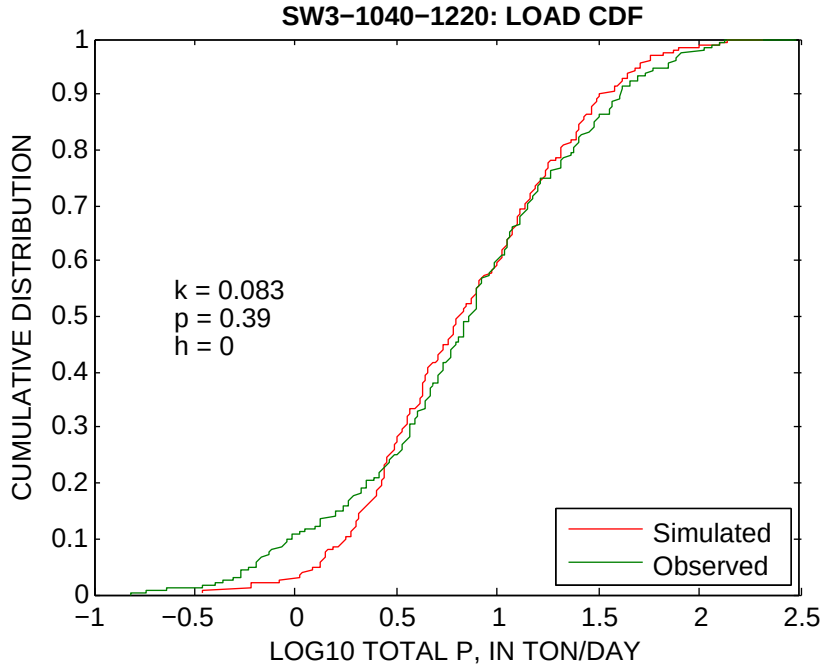


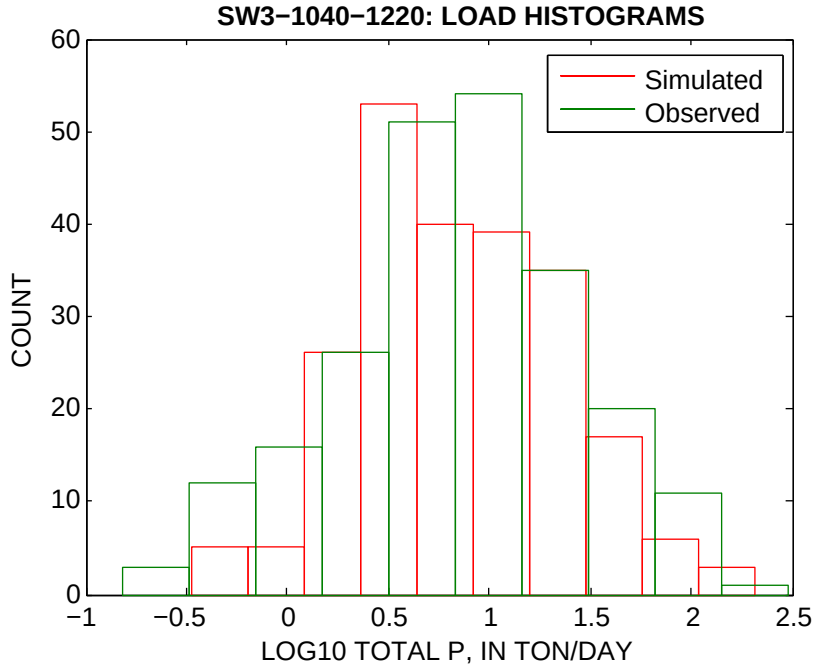


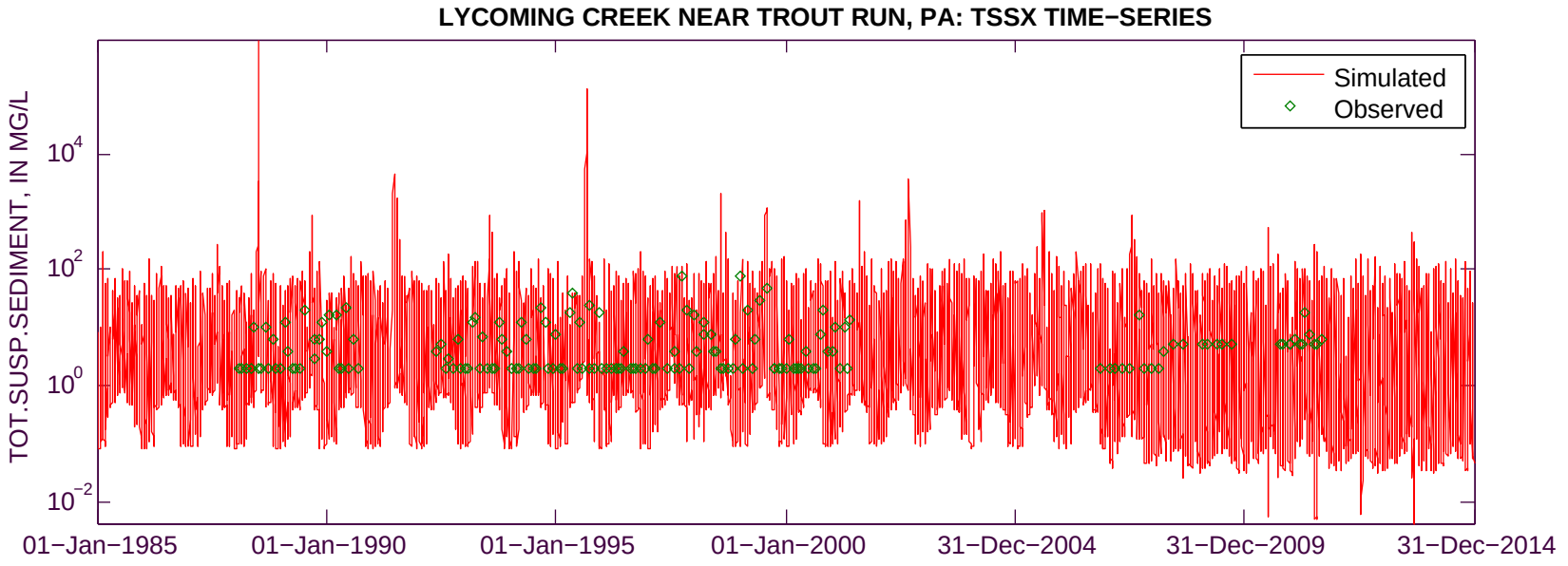
LOAD DATA
LOG10

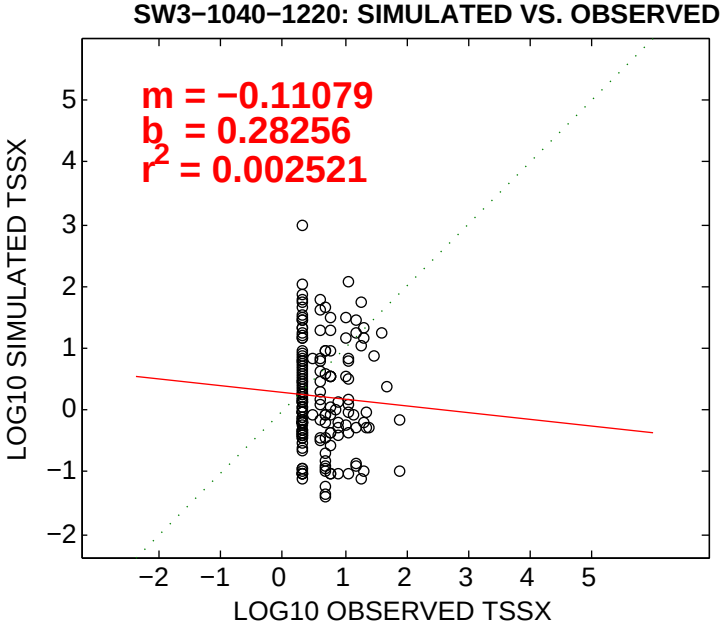


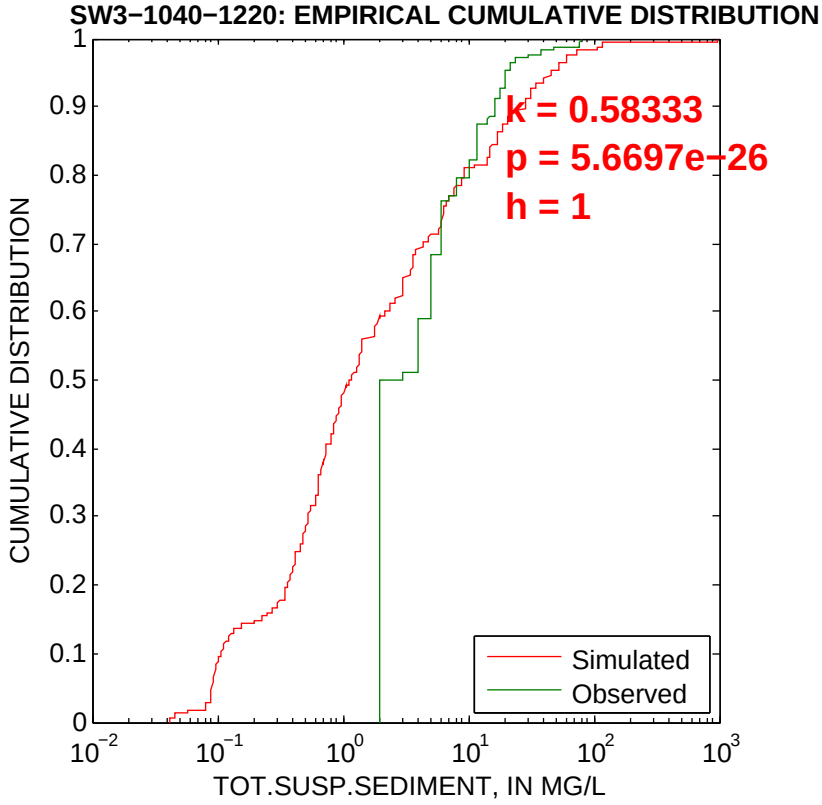












DATA SELECTION

scenario: P620171001WQ | file: TSSX.calib

plot: TSSX - total suspended ...

Dates: 1/1/1985 – 12/31/201

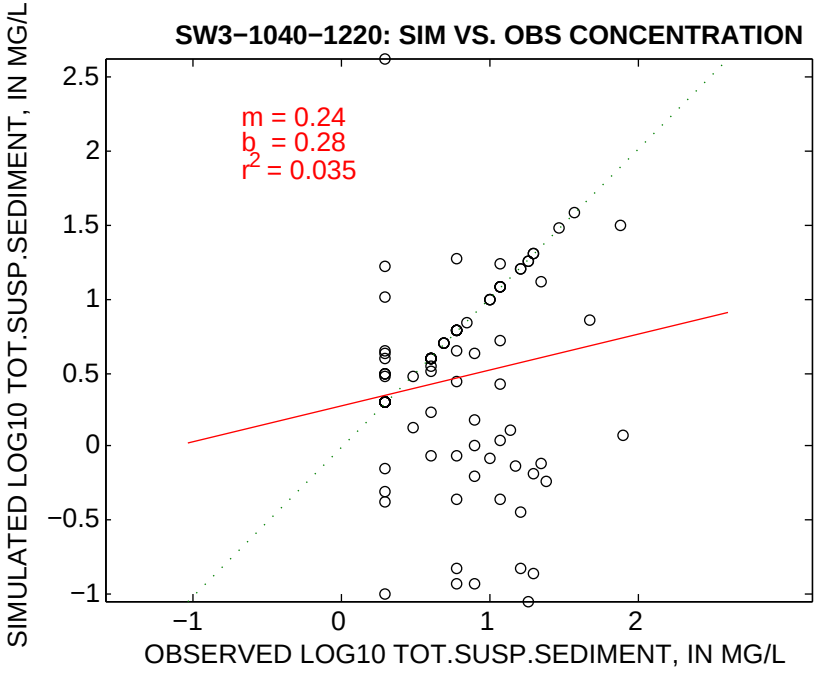
Drive | Directory: N/A | model | Observed: OBS20161101

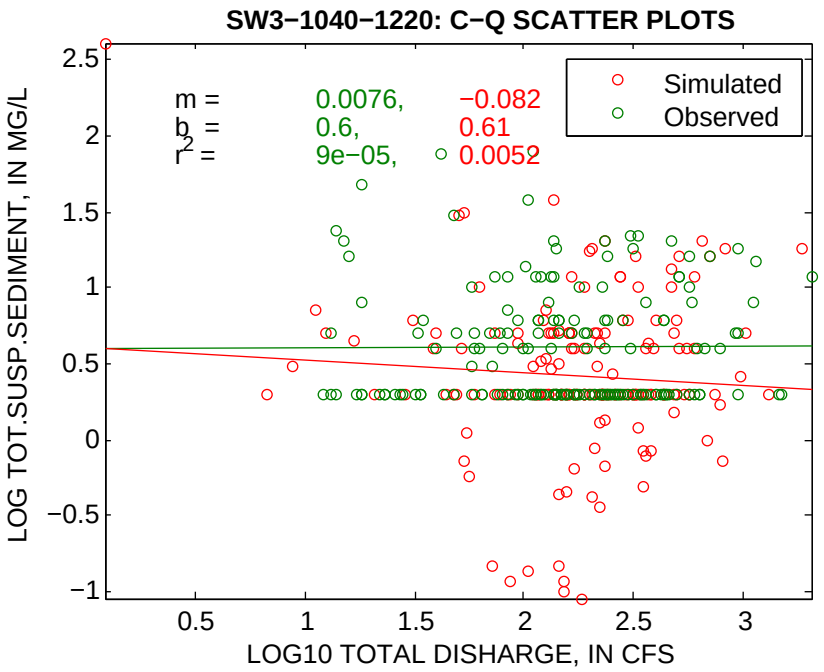
STATISTICS

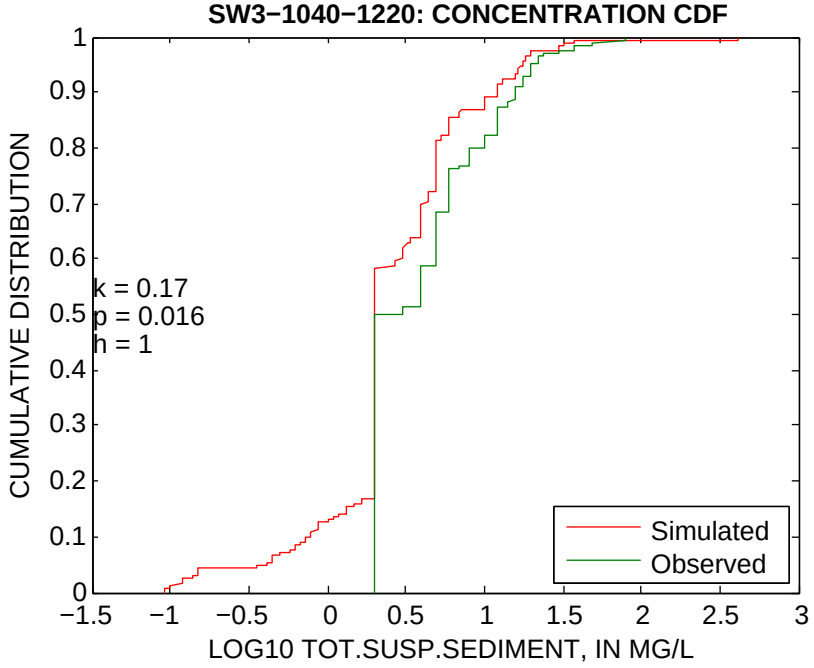
		observe	simulate
n		168	168
min		2	0.041576
		0.30103	-1.38116
mean		6.82143	13.8625
		0.613904	0.214543
media		2.5	1.16315
		0.389076	0.0654614
max		80	961.84
		1.90309	2.9831
varian		108.16	5722.43
		0.147264	0.717013
JB		0.001	0.001
		0.001	0.062296
		ra	log
%		103.22	-65.0528
err.va		5942.66	1.05735
rel.std.err		54.9435	7.17997
mod.eff		-53.9435	-6.17997

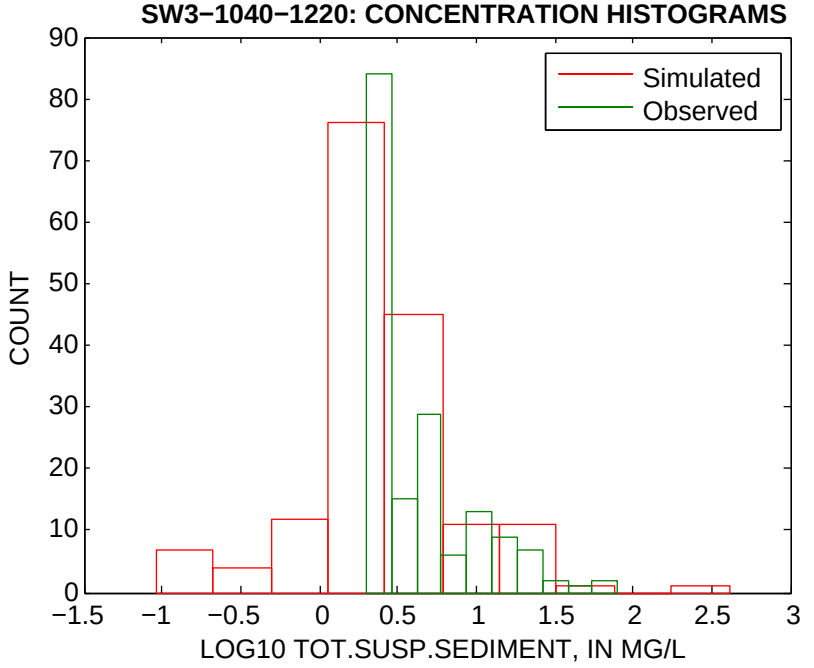
VERSION

ALL DATA
LOG10

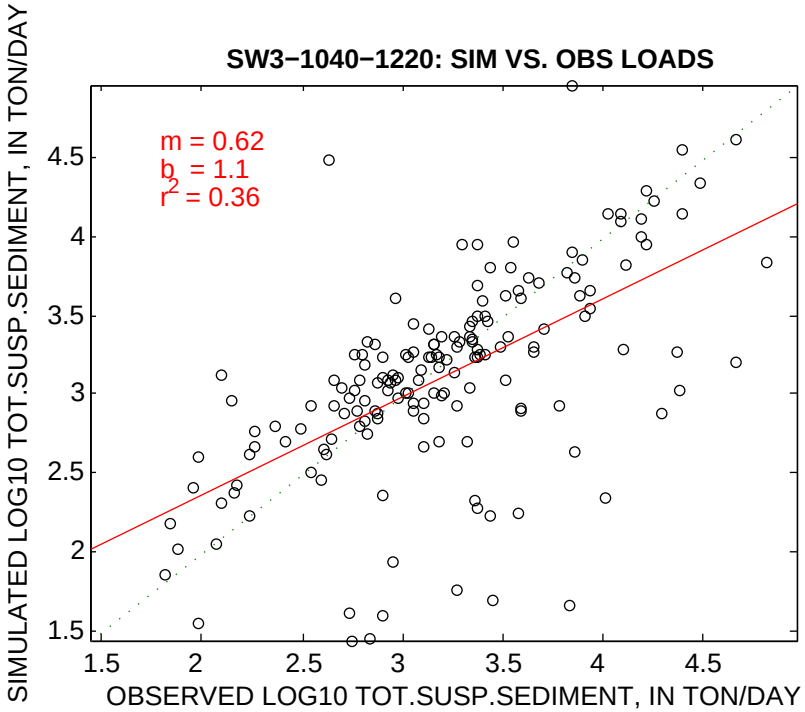


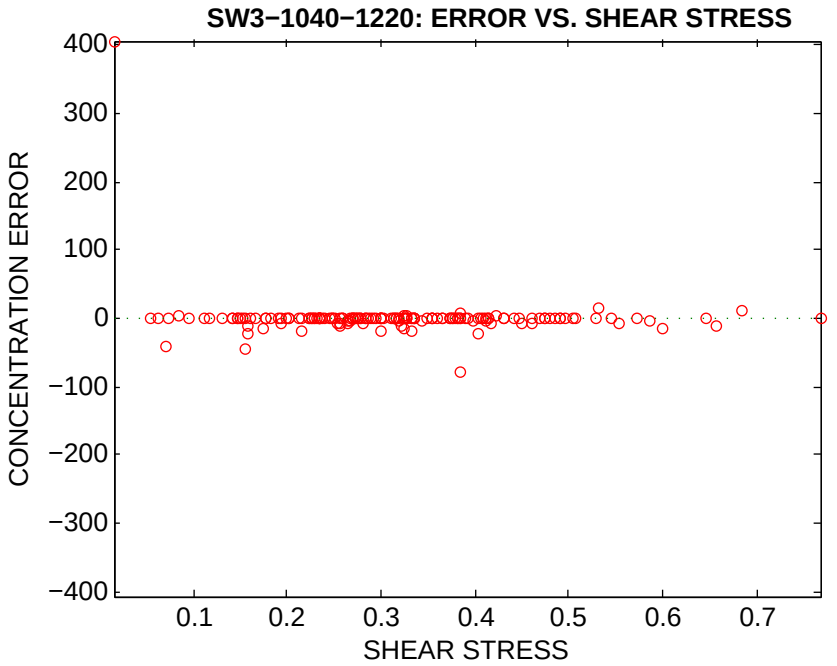


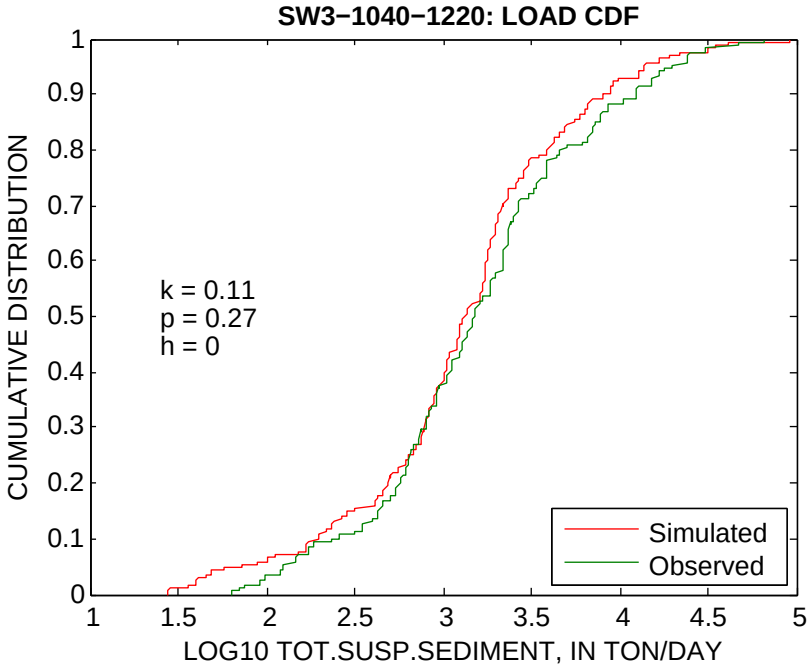


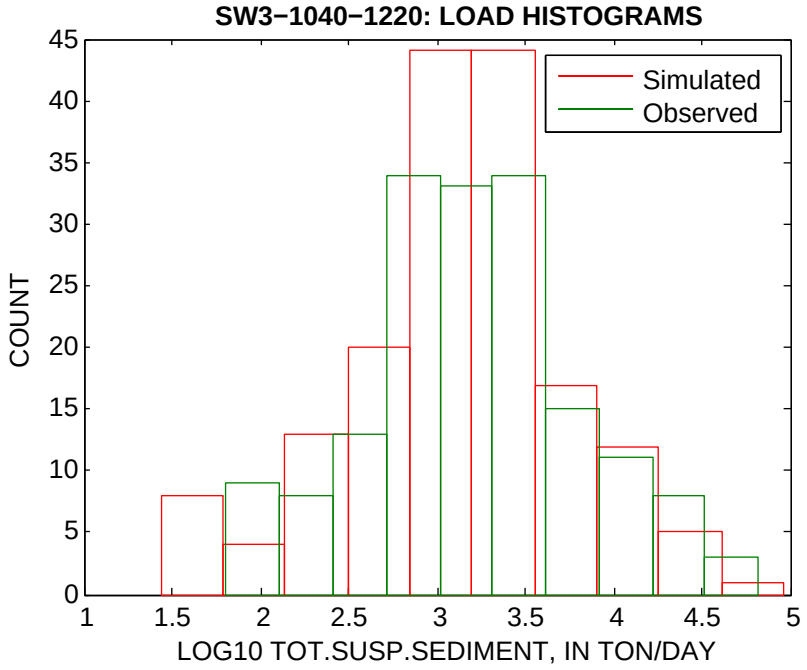


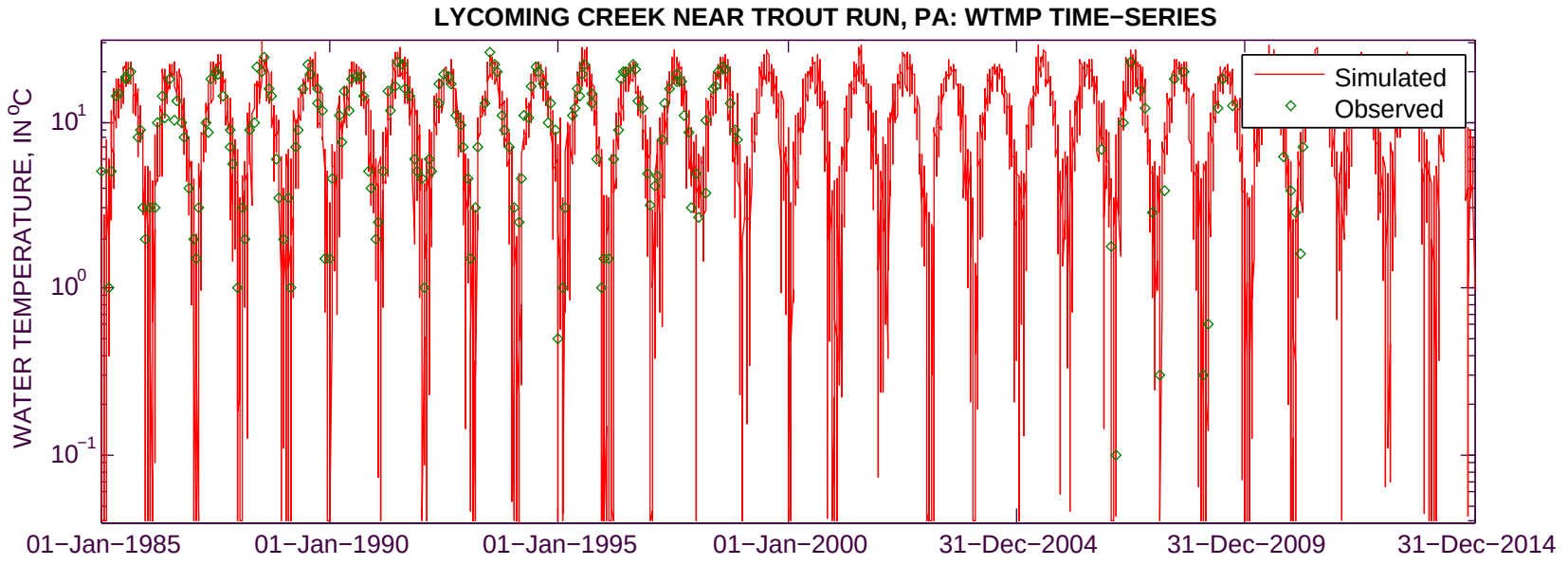
LOAD DATA
LOG10

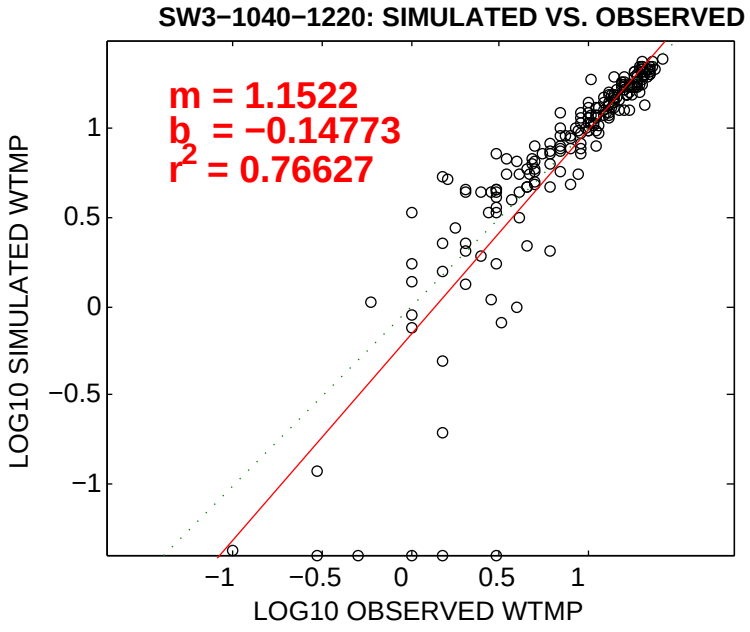


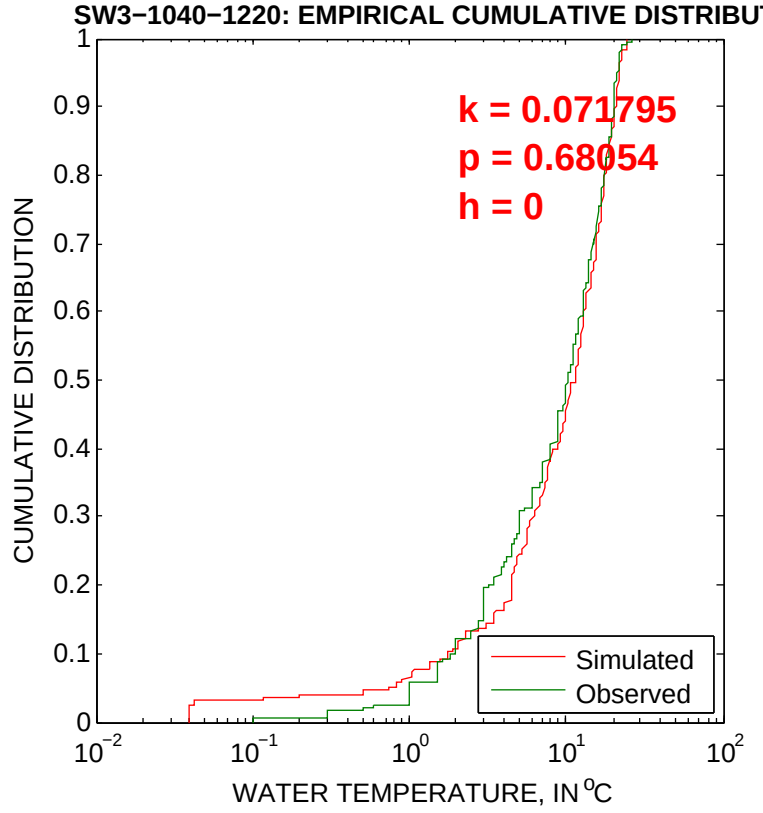












DATA SELECTION

scenario	file
P620171001WQ	WTMP.calib

plot: WTMP - water tempera...

Dates 1/1/1985 12/31/201

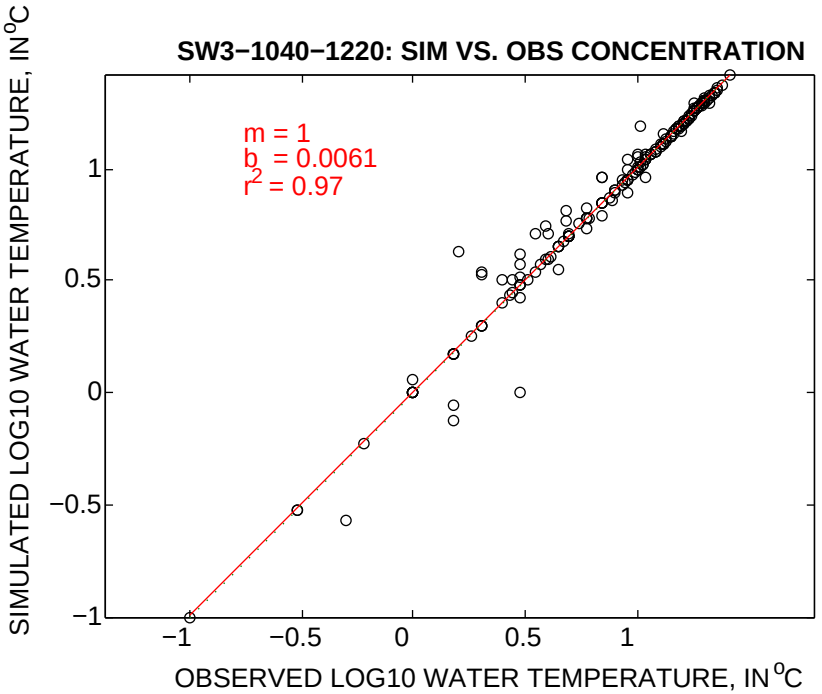
Drive	Directory	Observed
N/A	model	OBS20161101

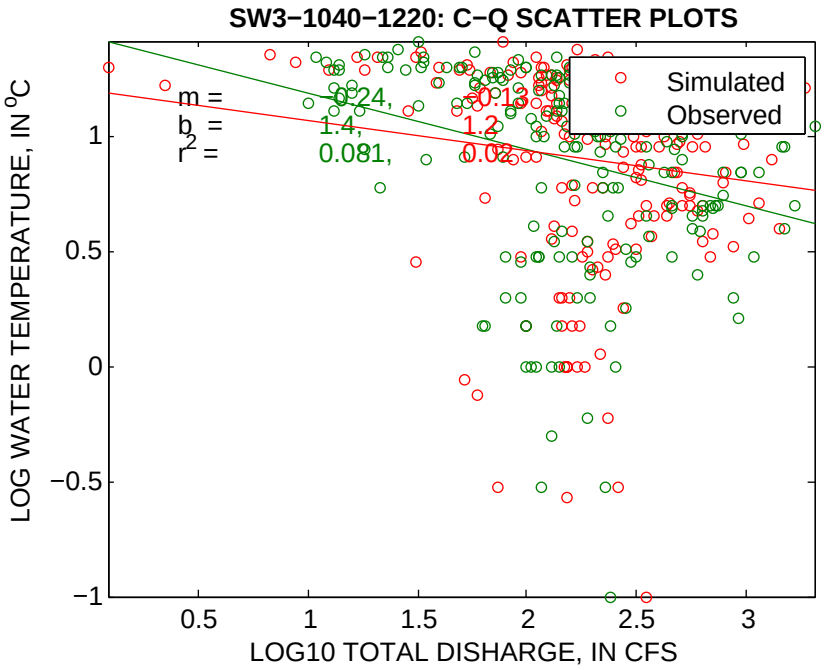
STATISTICS

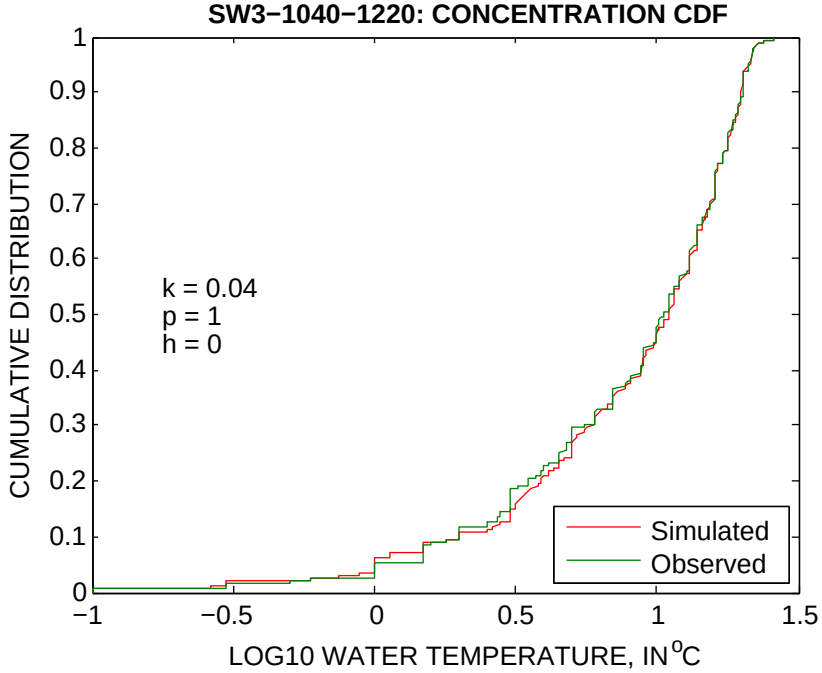
	n	195	195
		observe	**simulate**
min		0.1	0.040041
		-1	-1.3975
mean		10.6246	11.1647
		0.88216	0.868693
media		10.2	11.396
		1.0086	1.05675
max		26	24.663
		1.41497	1.39205
varian		45.3688	46.1346
		0.183537	0.317976
JB		0.009286	0.013164
		0.001	0.001
		ra	log
%		5.08328	-1.5266
err.va		4.03046	0.0787528
rel.std.err		0.0888378	0.429084
mod.eff		0.911162	0.570916

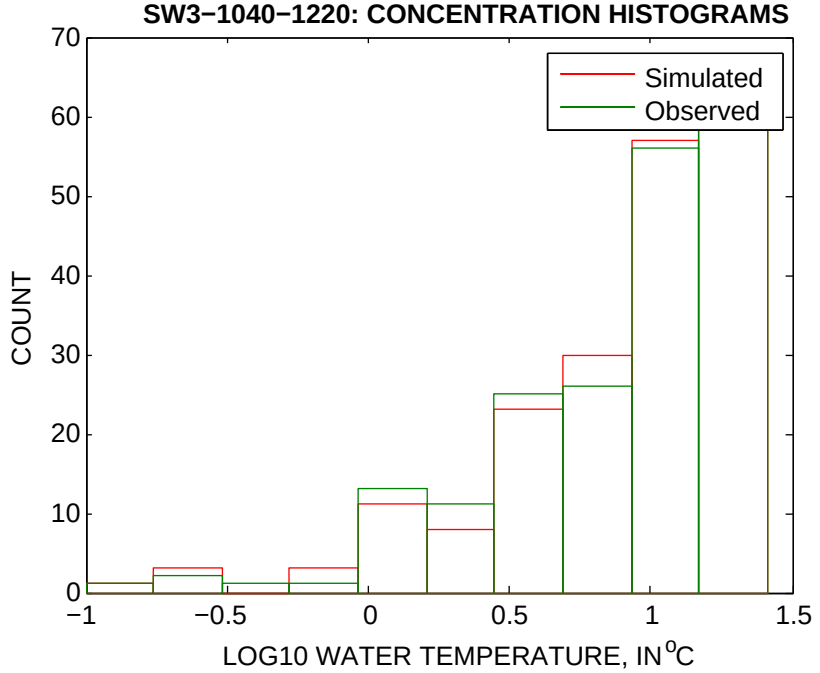
VERSION 2.1

ALL DATA
LOG10

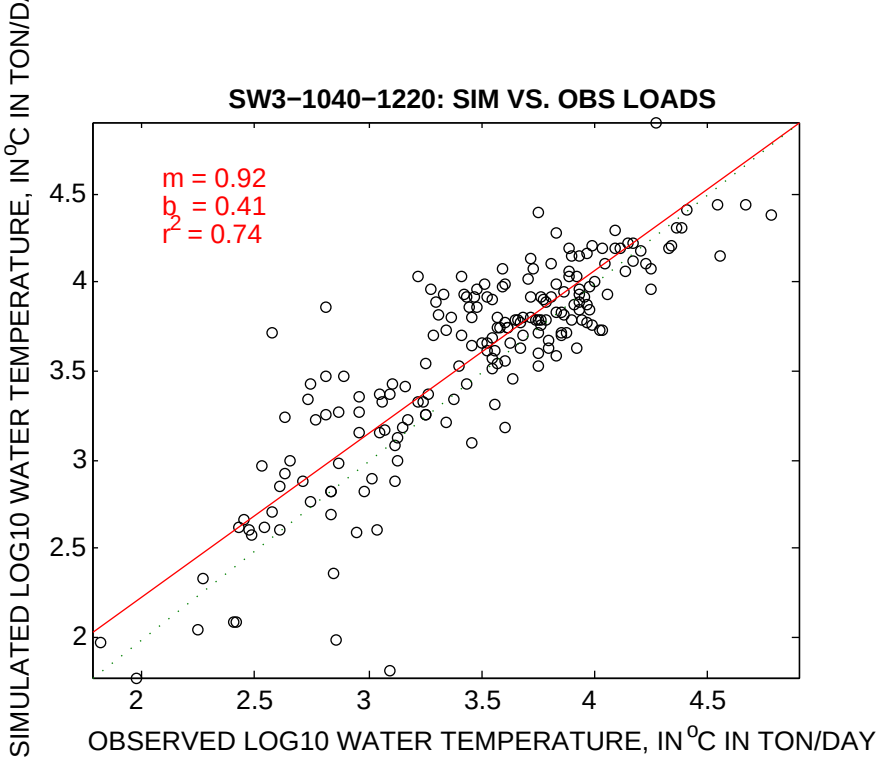


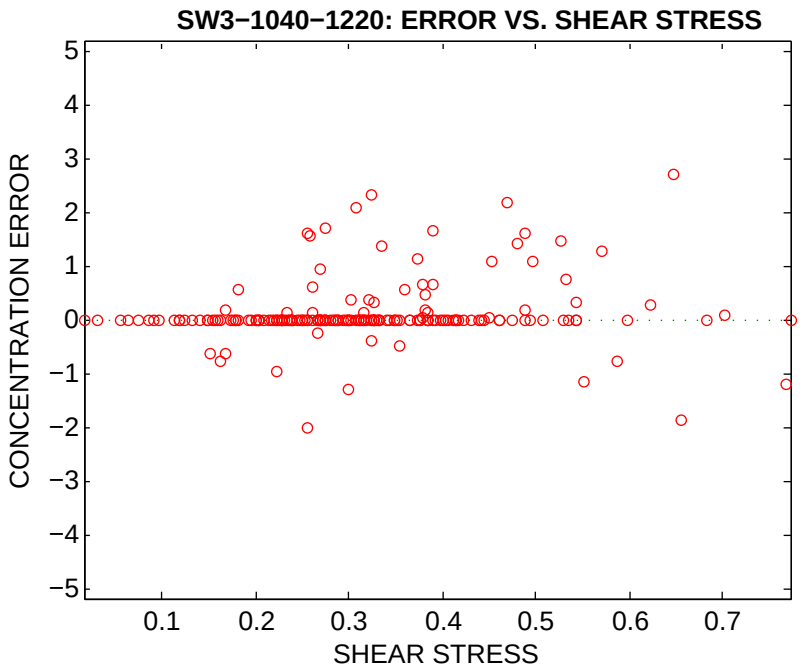


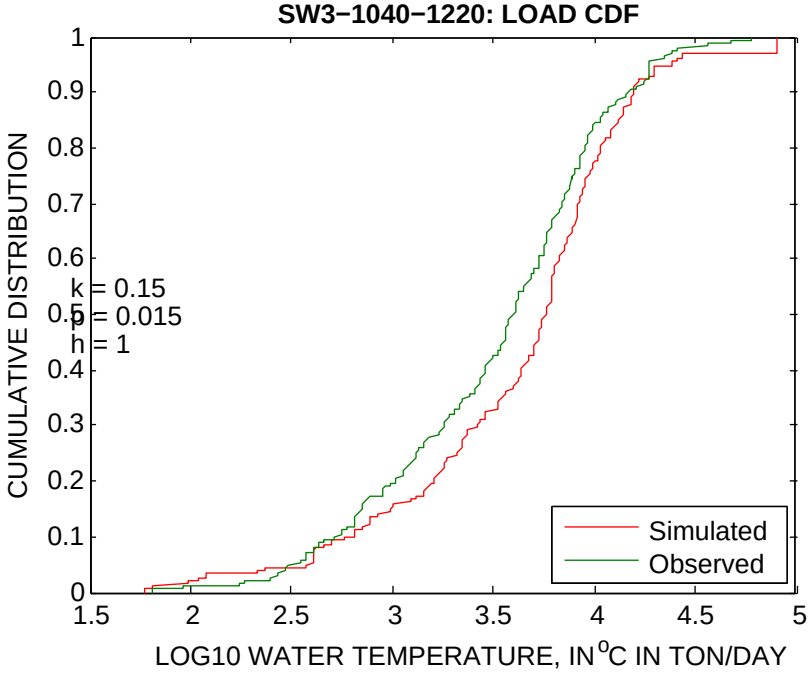


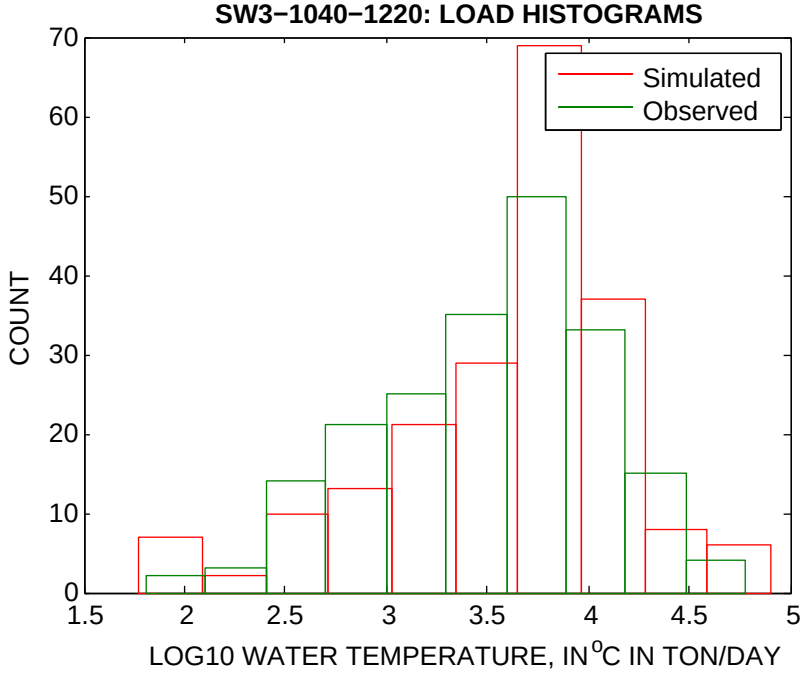


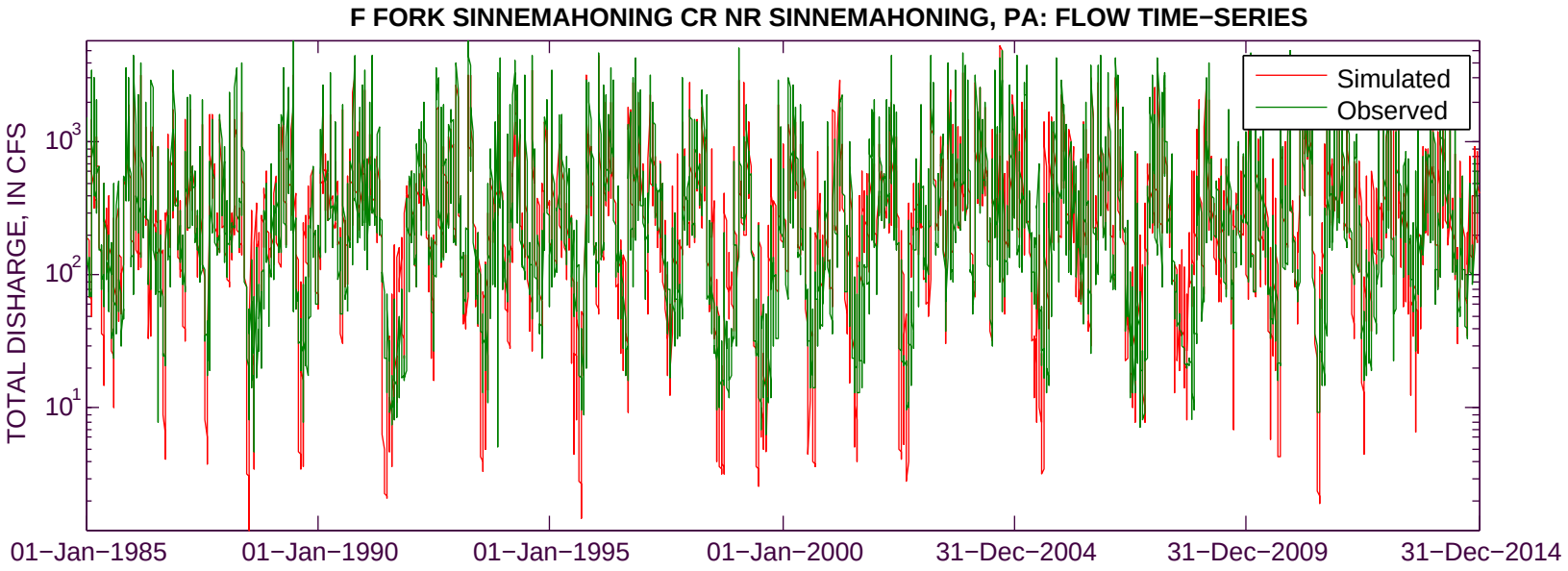
LOAD DATA
LOG10

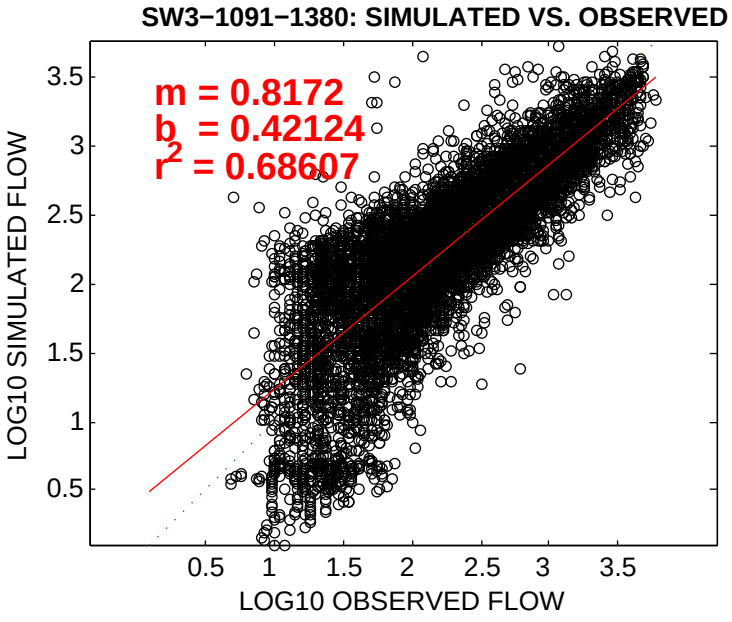


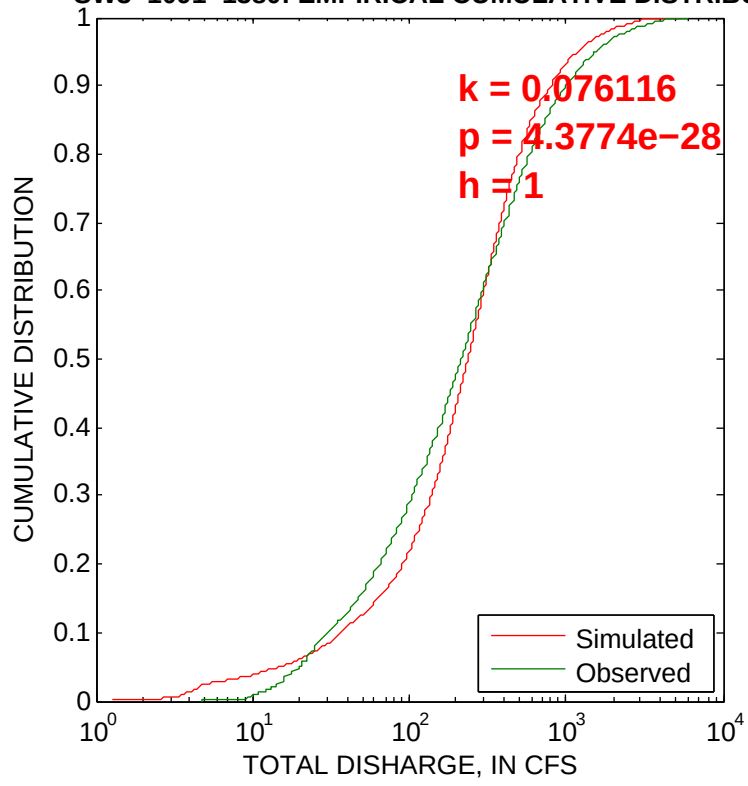












DATA SELECTION

scenario	file
P620171001WQ	FLOW.calib

plot: FLOW - total discharge

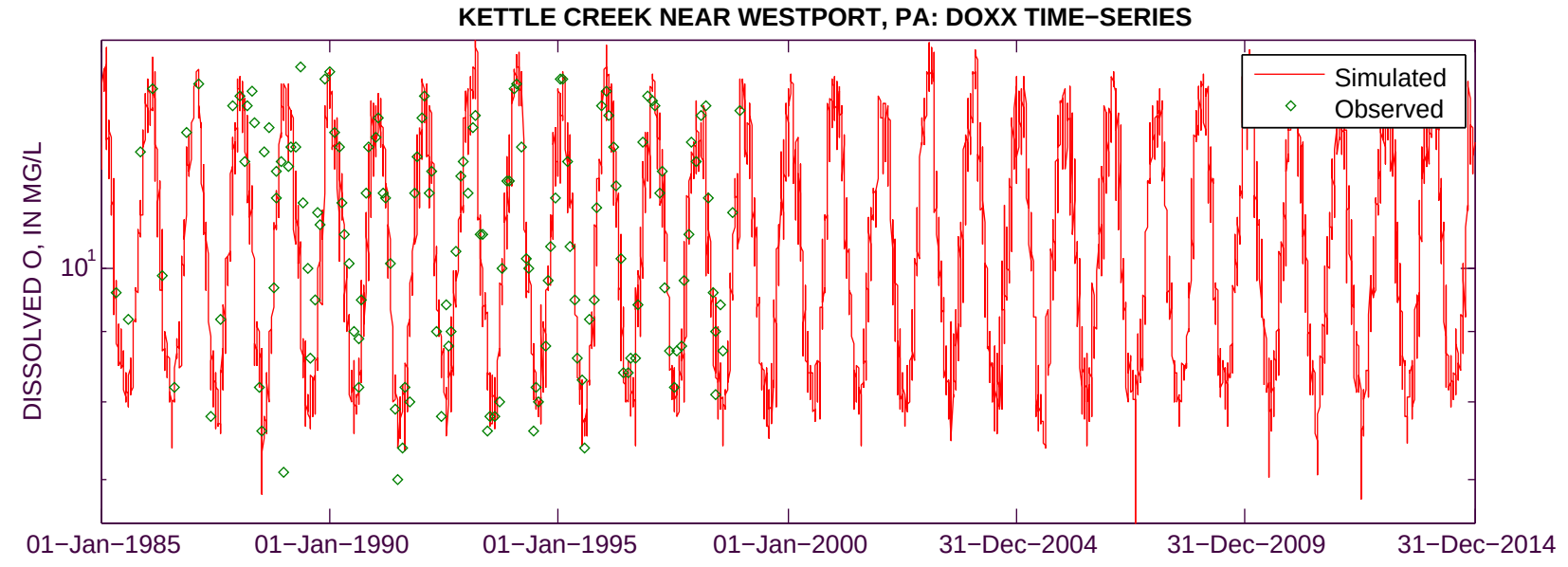
Dates: 1/1/1985 – 12/31/201

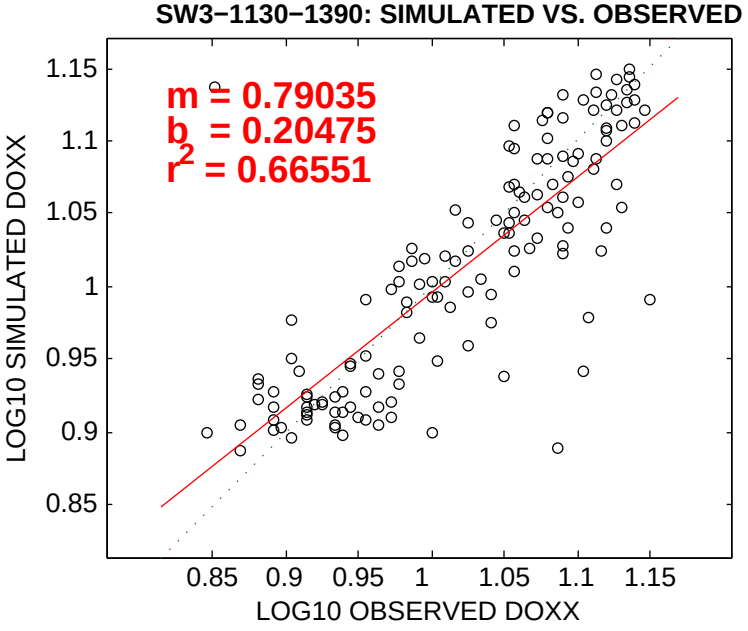
Drive	Directory	Observed
N/A	model	OBS20161101

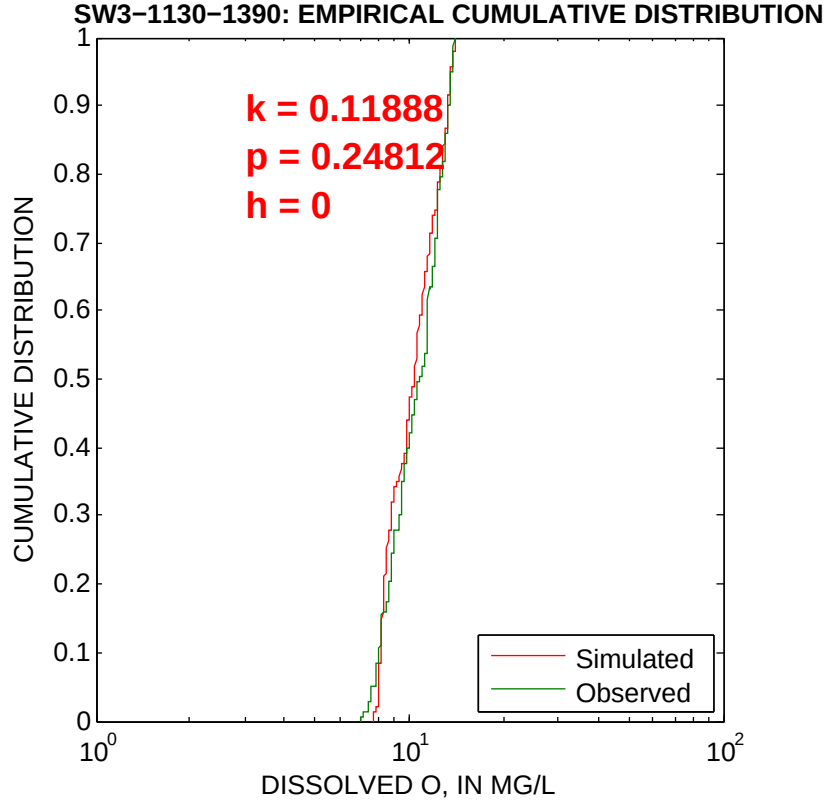
STATISTICS

		observe	simulate
n		10957	10957
min		4.8	1.2304
		0.681241	0.0900463
mean		421.639	368.709
		2.29602	2.29753
media		215	237.07
		2.33244	2.37488
max		5930	5335.5
		3.77305	3.72718
varian		380412	211903
		0.316342	0.307923
JB		0.001	0.001
		0.001	0.001
		ra	log
%		-12.5533	0.0659889
err.va		137690	0.10724
rel.std.err		0.361949	0.339001
mod.eff		0.638051	0.660999

VERSION 2.1







DATA SELECTION

scenario	file
P620171001WQ	DOXX.calib

plot: DOXX - dissolved oxygen

Dates: 1/1/1985 – 12/31/201

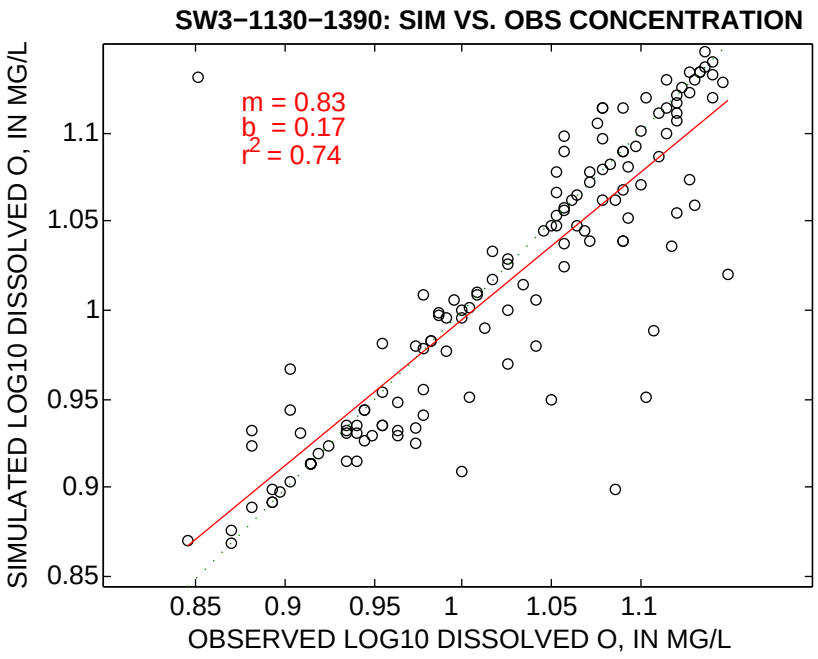
Drive	Directory	Observed
N/A	model	OBS20161101

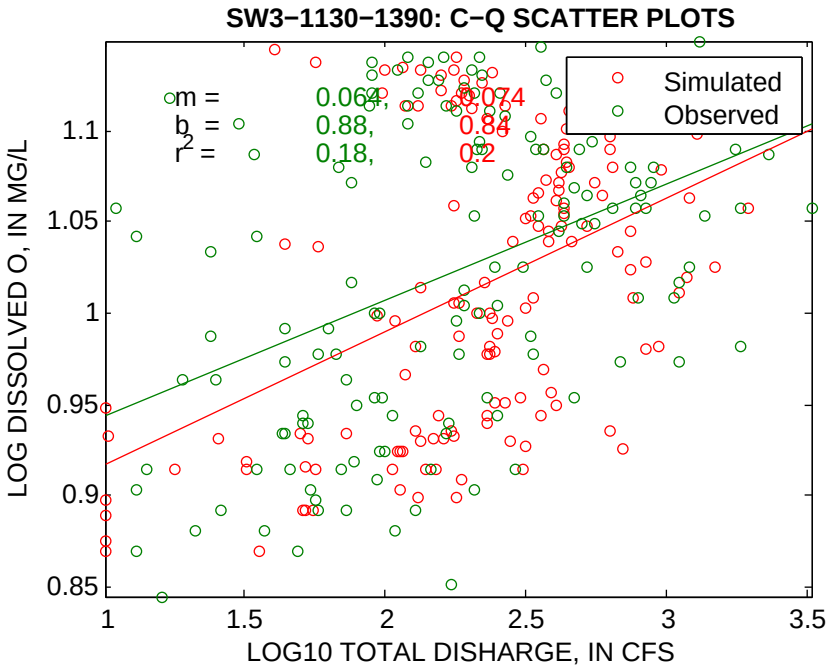
STATISTICS

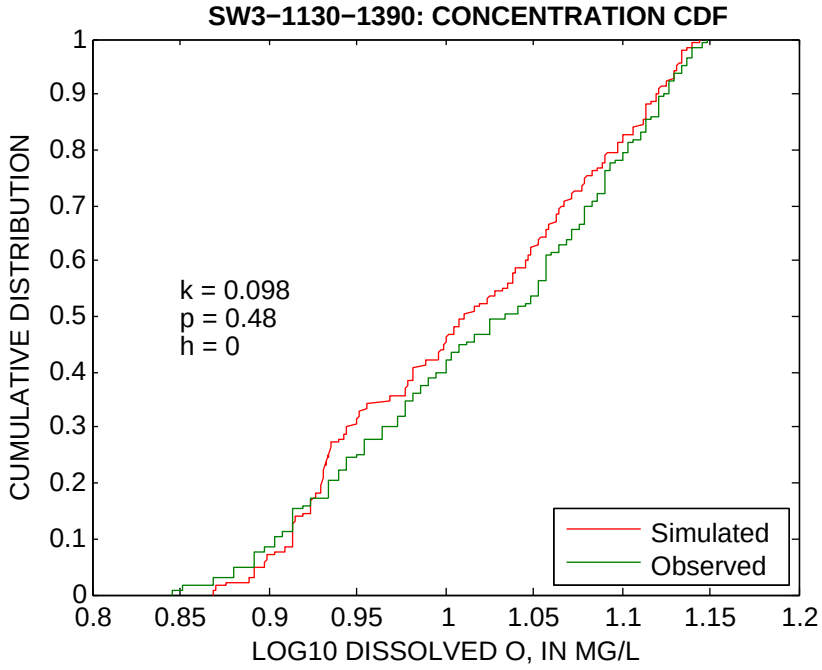
	n	143	143
		observe	simulate
min		7	7.7204
		0.845098	0.88764
mean		10.686	10.4506
		1.02124	1.01188
media		10.8	10.426
		1.03342	1.01812
max		14.1	14.095
		1.14922	1.14907
varian		3.86783	3.69045
		0.00676281	0.00634762
JB		0.017922	0.013671
		0.017255	0.013514
		ra	log
%		-2.20299	-0.916405
err.va		1.44495	0.00250868
rel.std.err		0.373581	0.370952
mod.eff		0.626419	0.629048

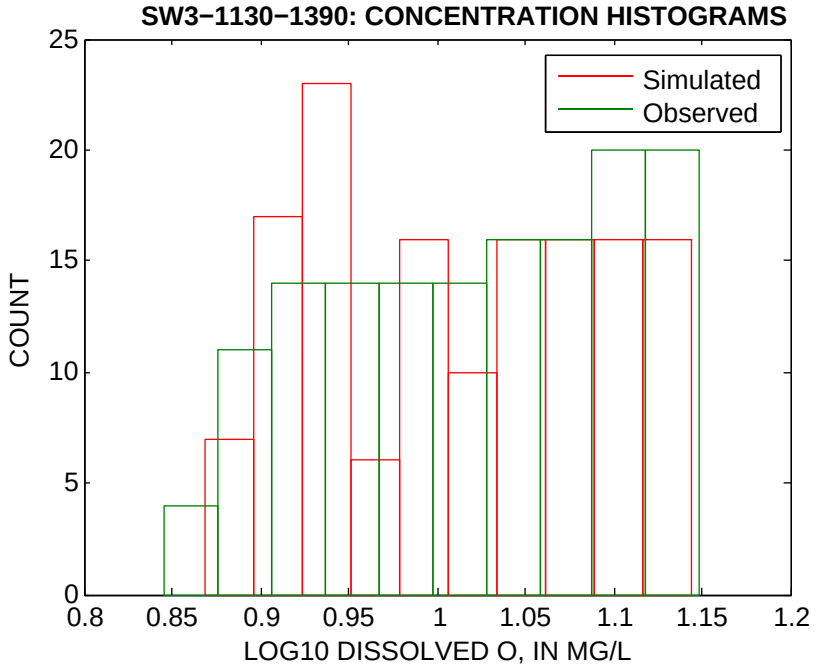
VERSION 2.1

ALL DATA
LOG10

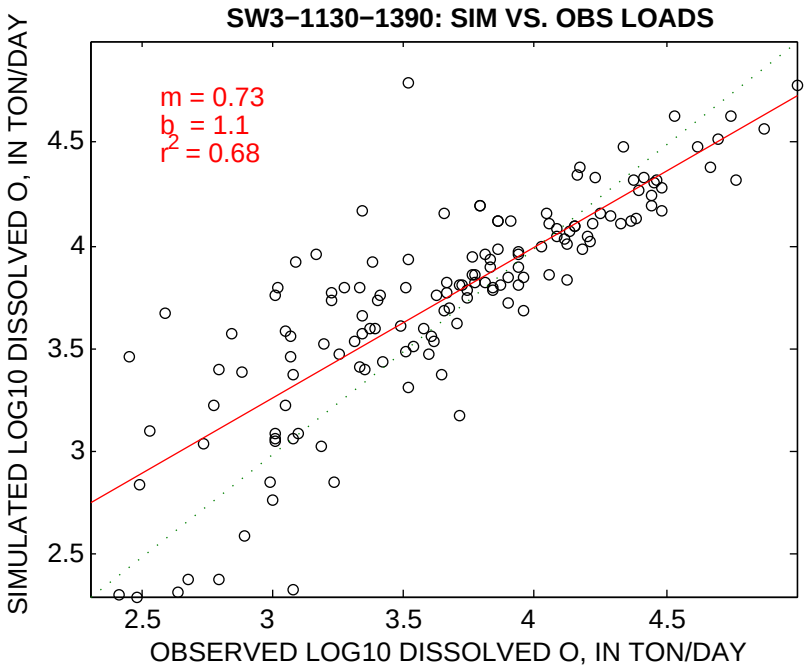


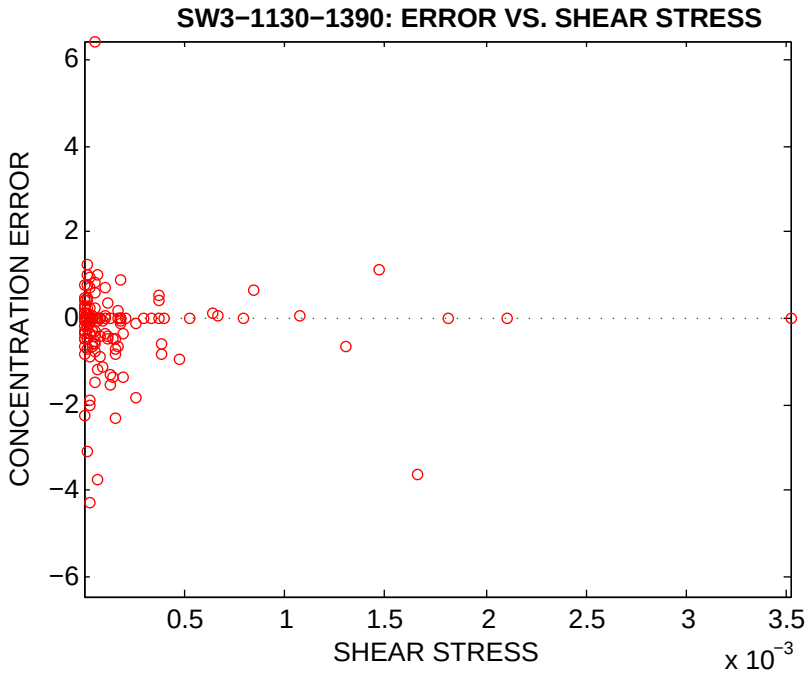


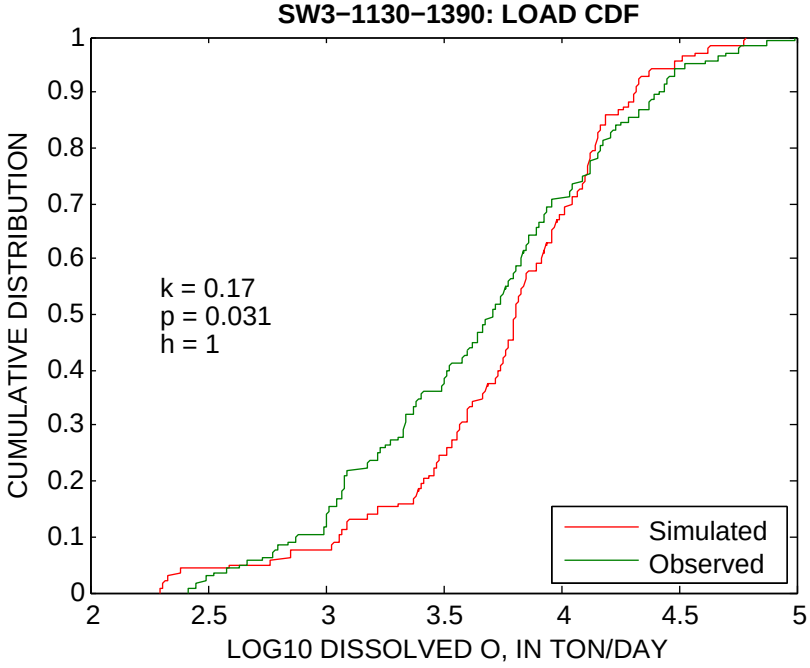


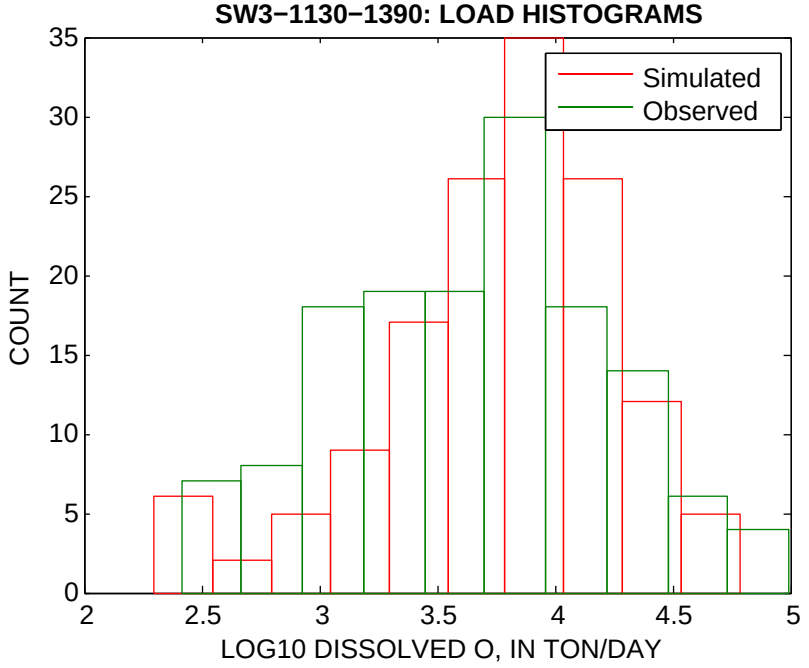


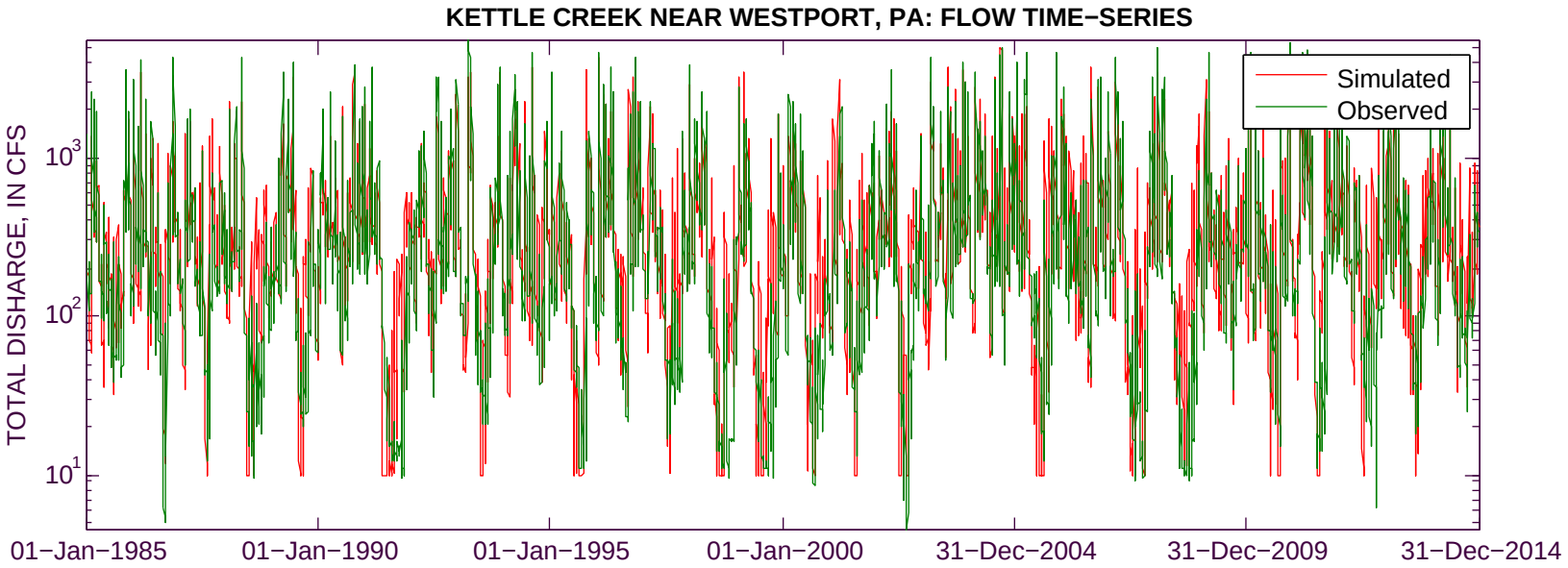
LOAD DATA
LOG10

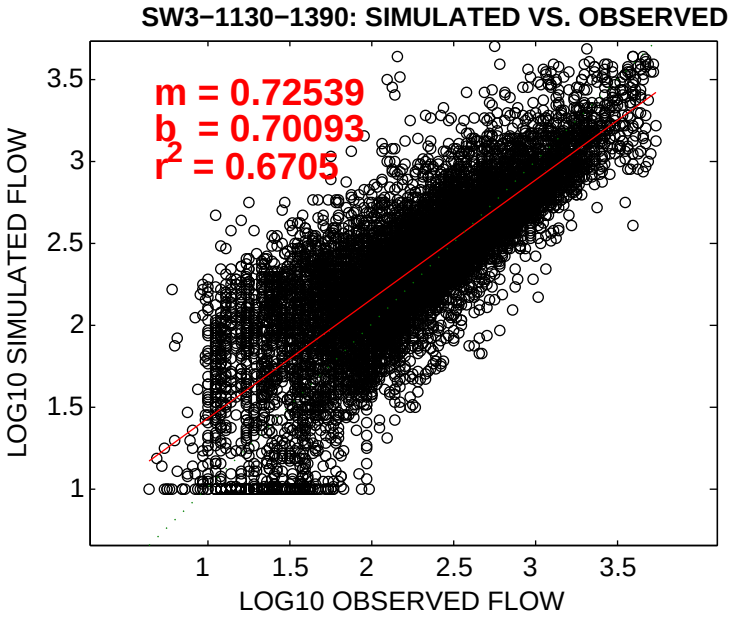


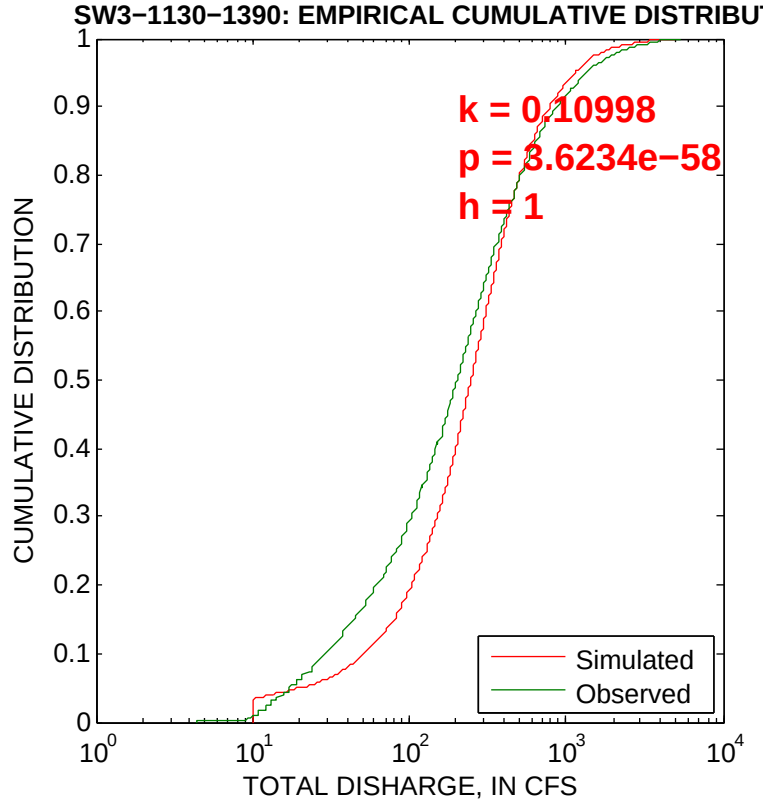












DATA SELECTION

scenario: P620171001WQ | file: FLOW.calib

plot: FLOW - total discharge

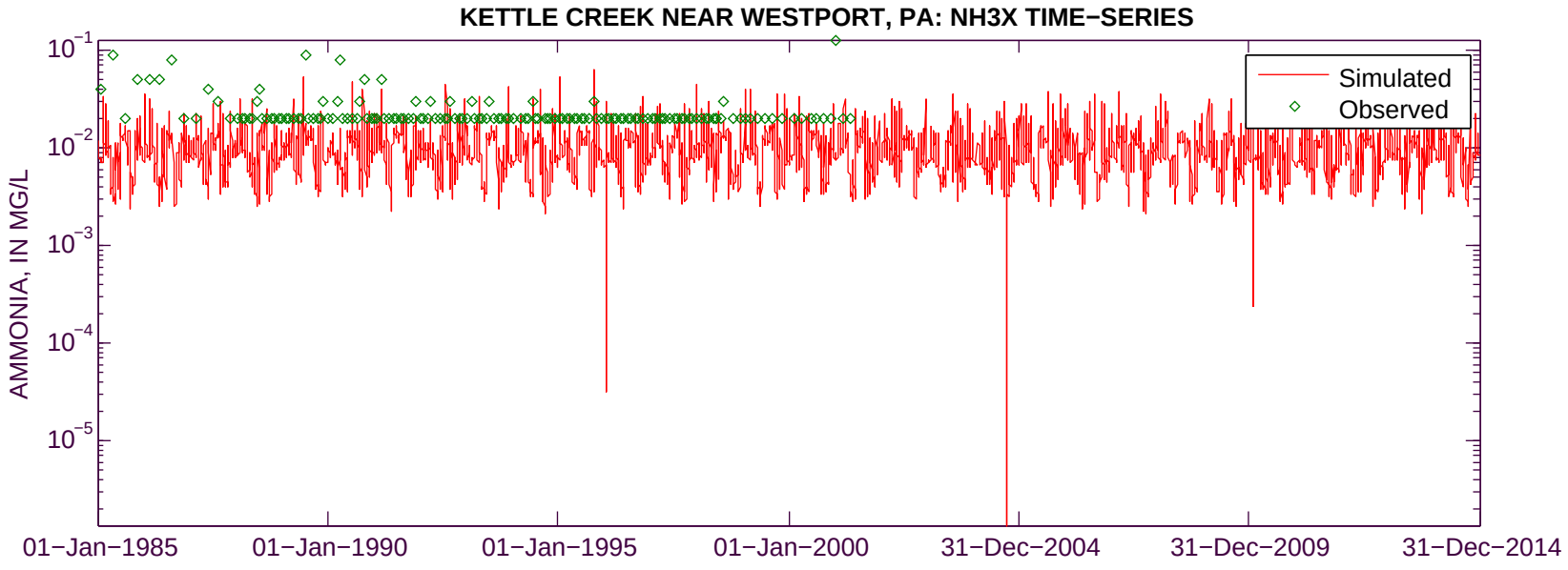
Dates: 1/1/1985 – 12/31/201

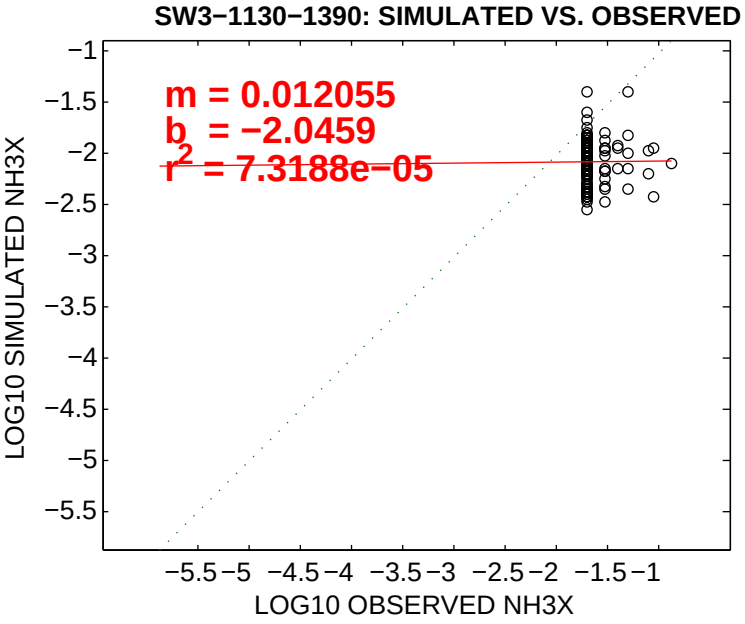
Drive: N/A | Directory: model | Observed: OBS20161101

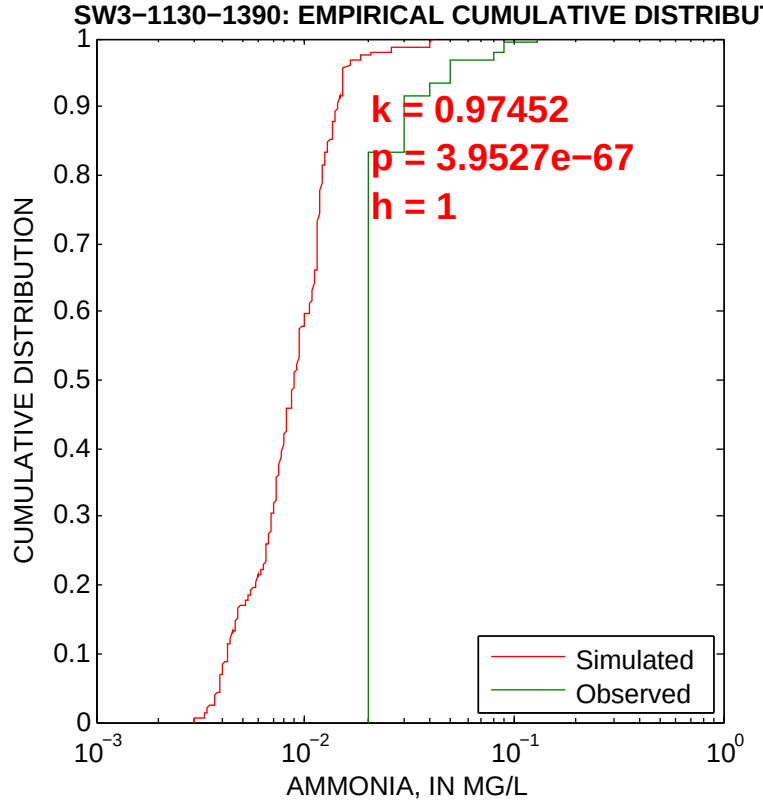
STATISTICS

n	10957	10957
	observe	simulate
min	4.4	10
	0.643453	1
mean	379.56	373.413
	2.26215	2.34187
media	204	247.98
	2.30963	2.39442
max	5440	4972.3
	3.7356	3.69656
varian	313577	201998
	0.304928	0.239298
JB	0.001	0.001
	0.001	0.001
	ra	log
%	-1.61957	3.52395
err.va	123858	0.108198
rel.std.err	0.394985	0.35483
mod.eff	0.605015	0.64517

VERSION 2.1







DATA SELECTION

scenario: P620171001WQ | file: NH3X.calib

plot: NH3X - ammonia

Dates: 1/1/1985 – 12/31/201

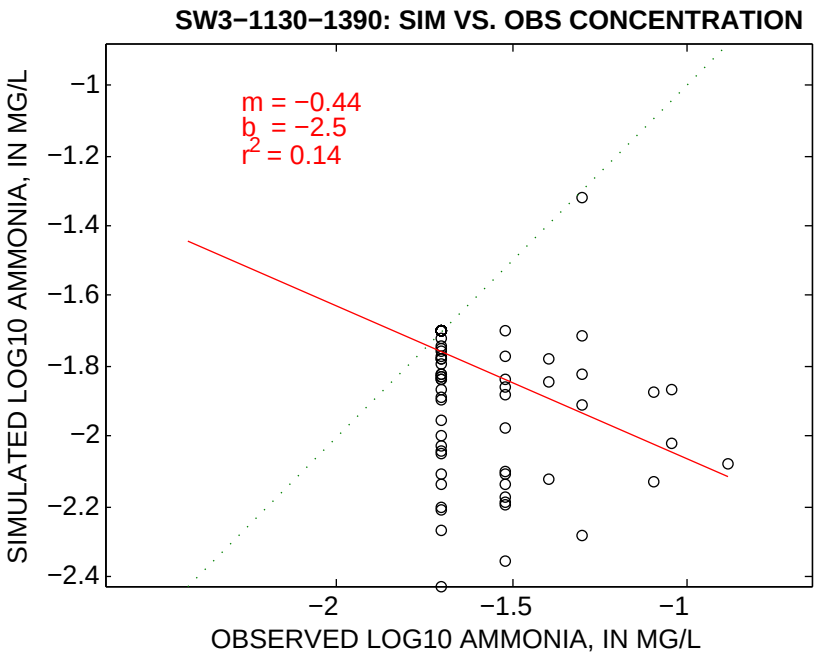
Drive: N/A | Directory: model | Observed: OBS20161101

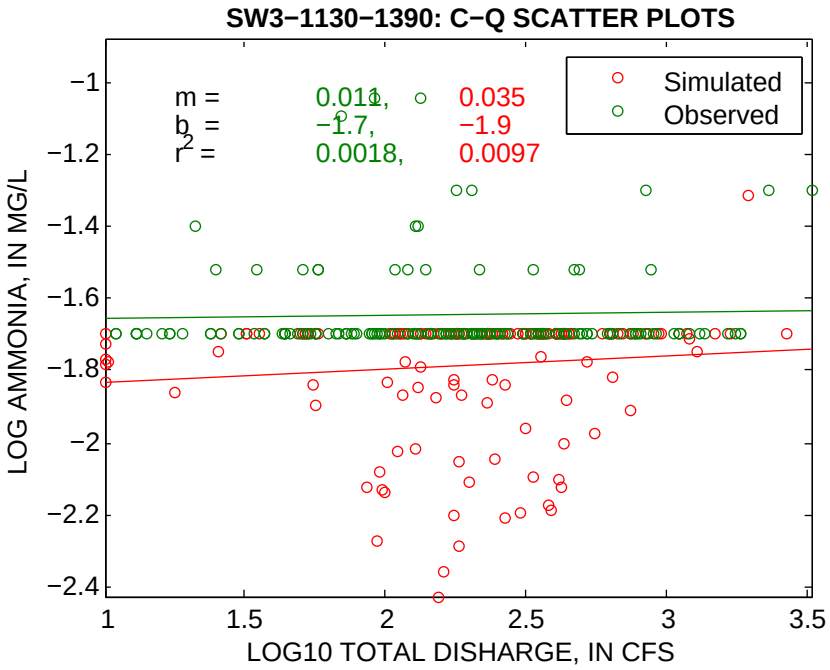
STATISTICS

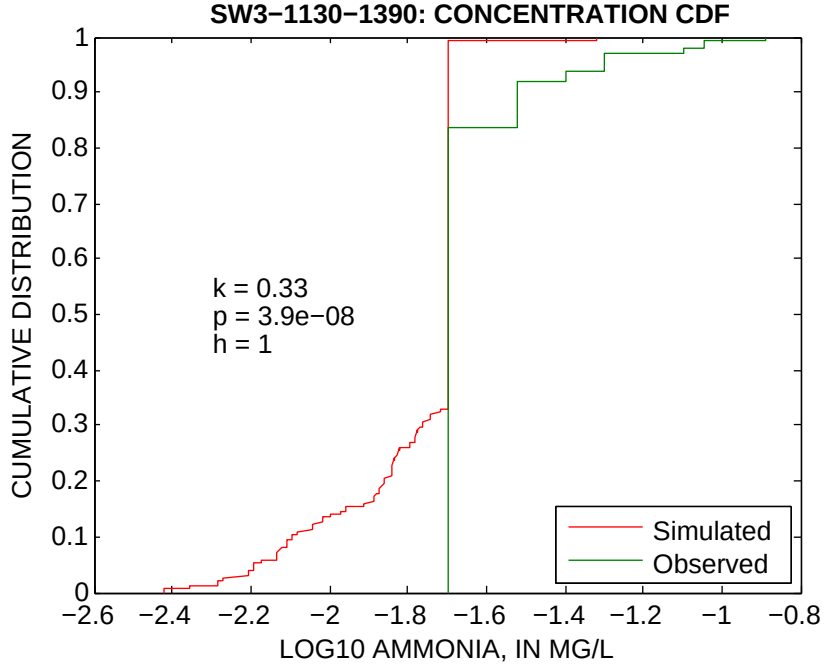
n	157	157
	observe	simulate
min	0.02	0.0029267
	-1.69897	-2.53362
mean	0.0245223	0.00960836
	-1.6448	-2.06577
media	0.02	0.0089159
	-1.69897	-2.04983
max	0.13	0.040485
	-0.886057	-1.39271
varian	0.00021082	2.65913e-0
	0.020802	0.0413072
JB	0.001	0.001
	0.001	0.432311
	ra	log
%	-60.8178	25.5943
err.va	0.00045811	0.239962
rel.std.err	2.17295	11.5355
mod.eff	-1.17295	-10.5355

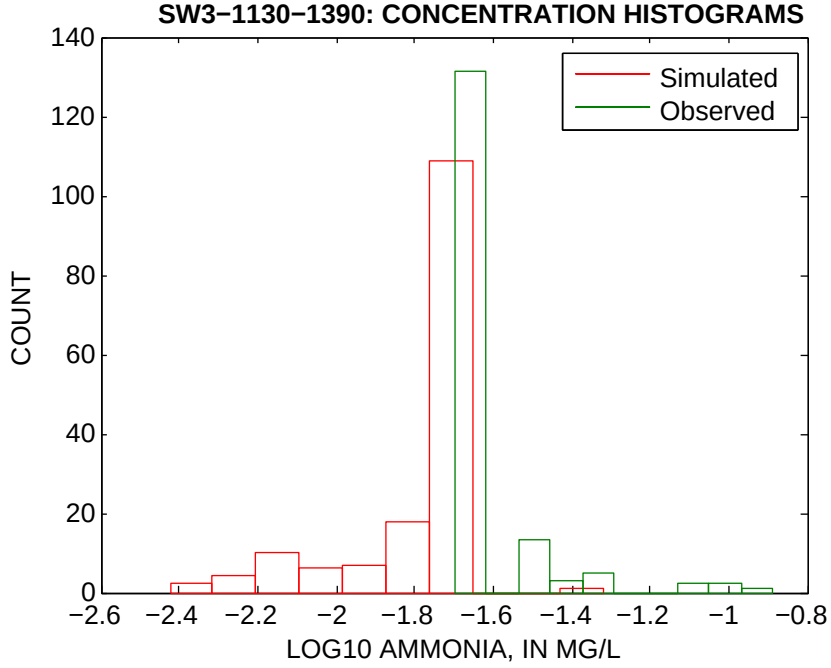
VERSION 2.1

ALL DATA
LOG10

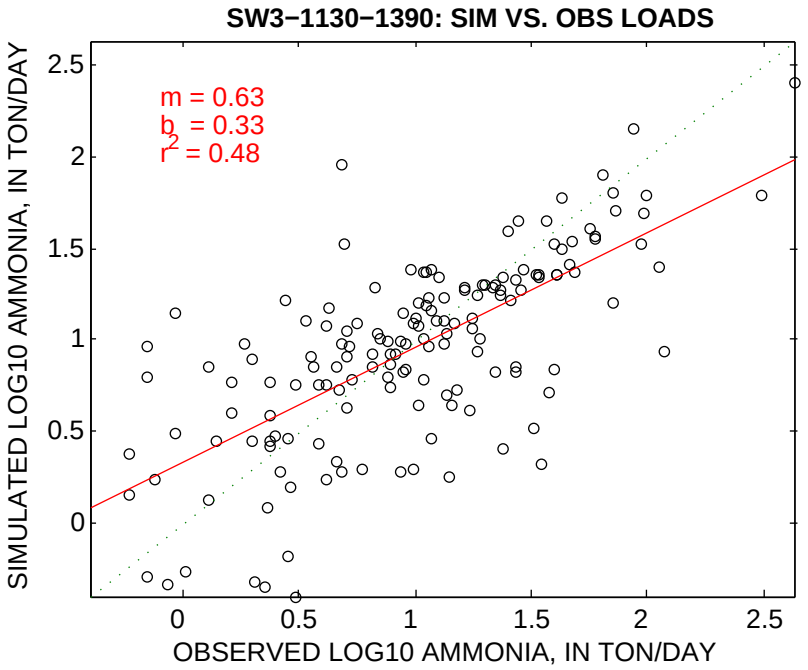


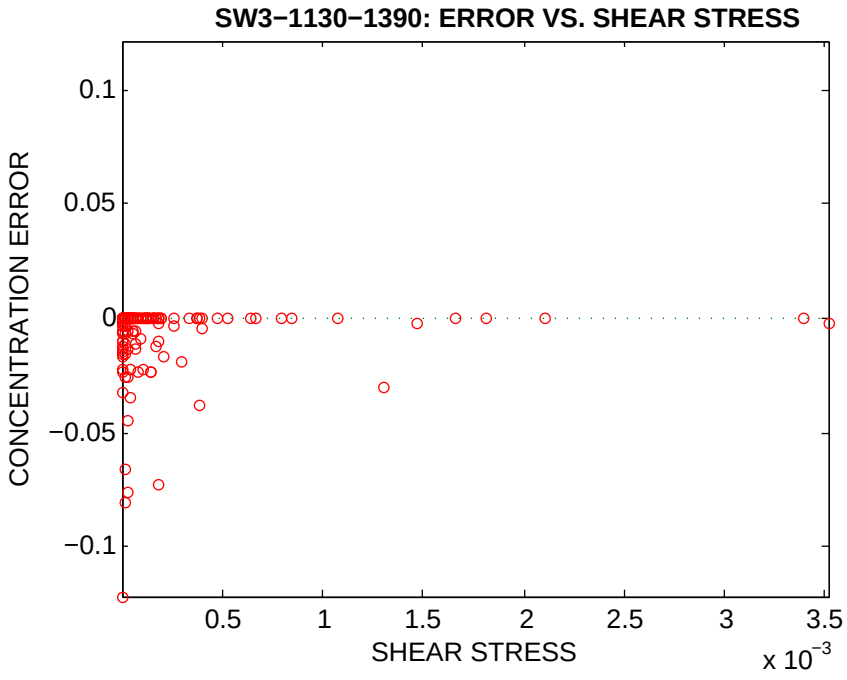


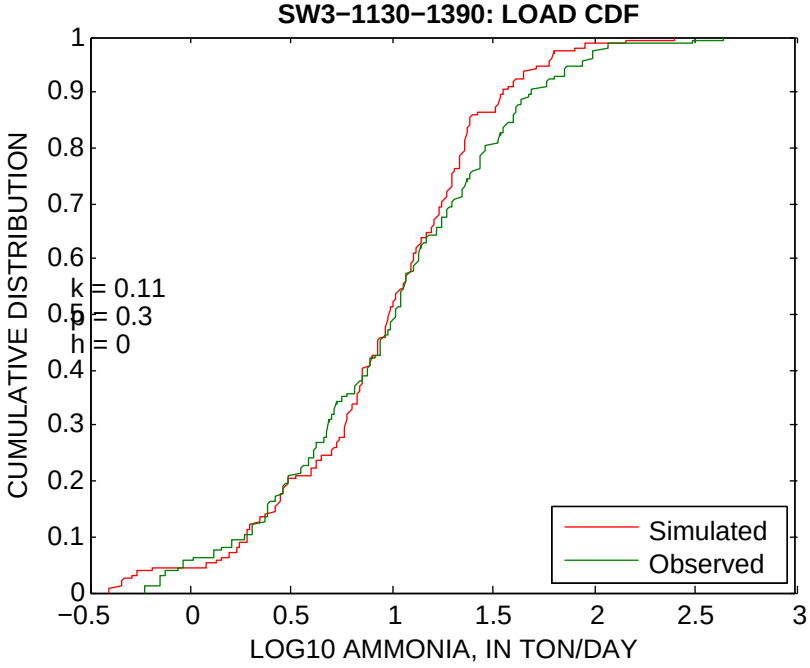


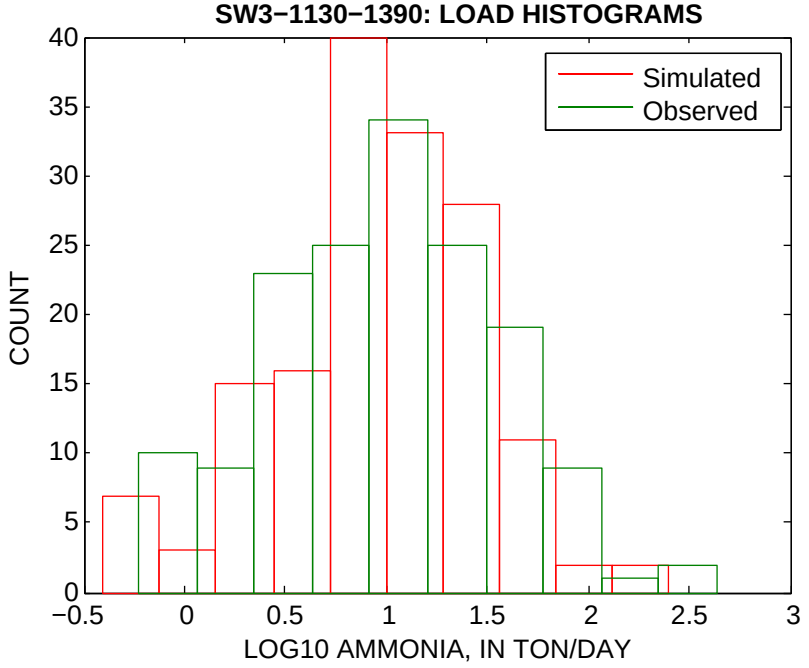


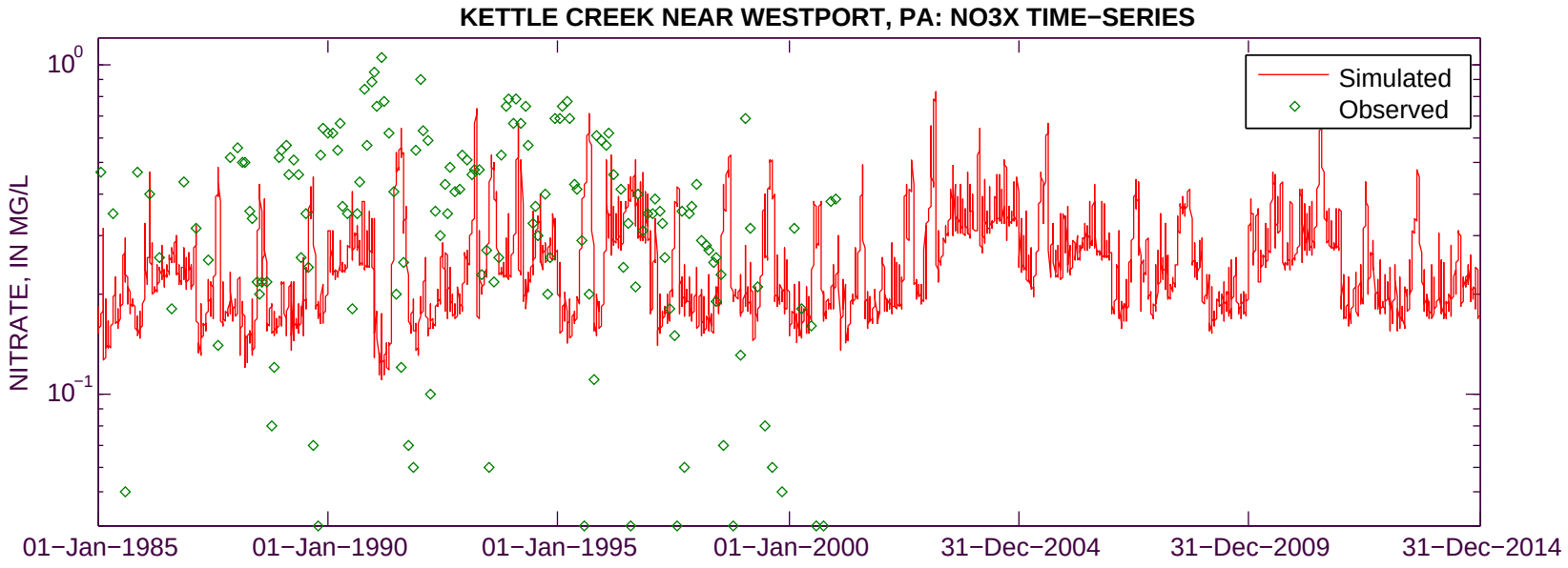
LOAD DATA
LOG10

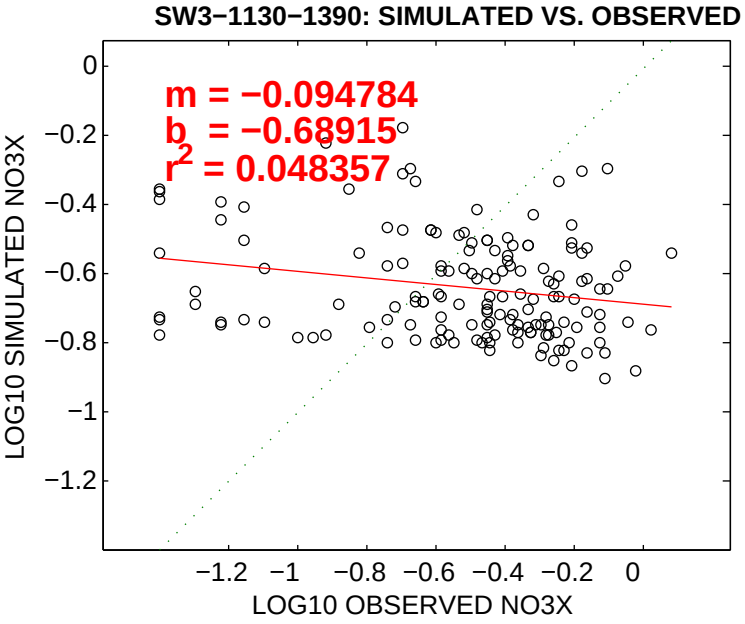


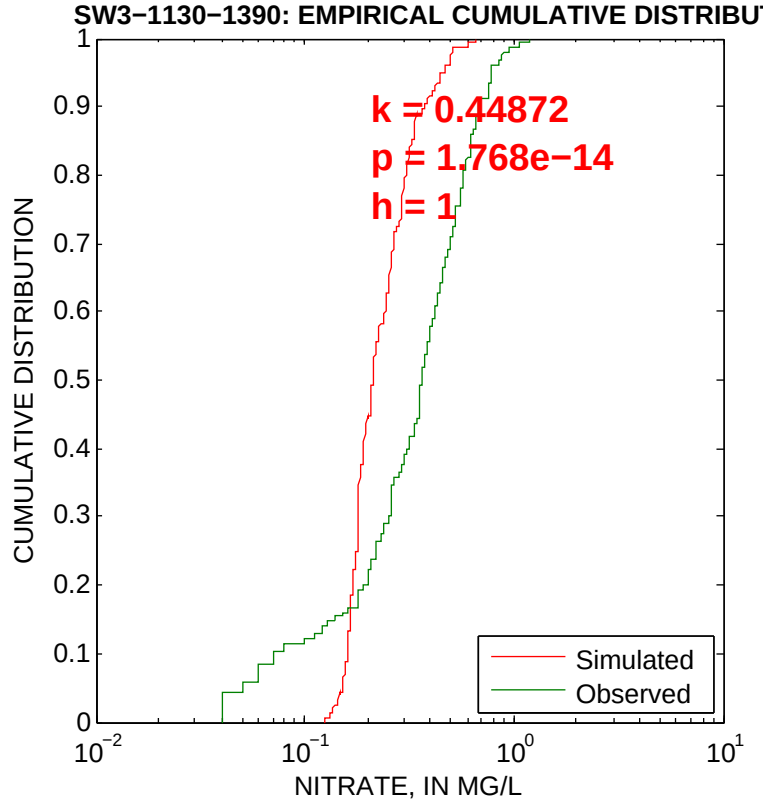












DATA SELECTION

scenario: P620171001WQ | file: NO3X.calib

plot: NO3X - nitrate

Dates: 1/1/1985 – 12/31/201

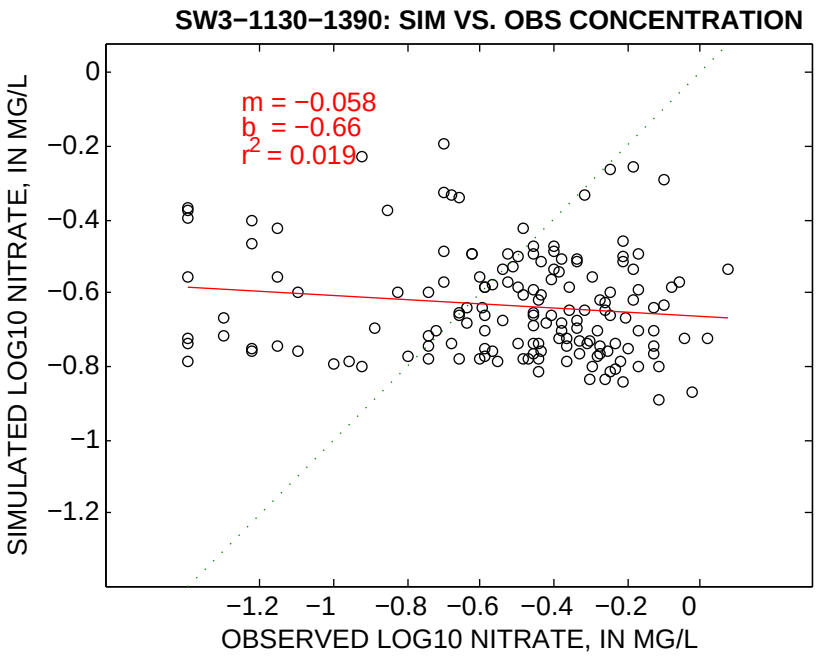
Drive: N/A | Directory: model | Observed: OBS20161101

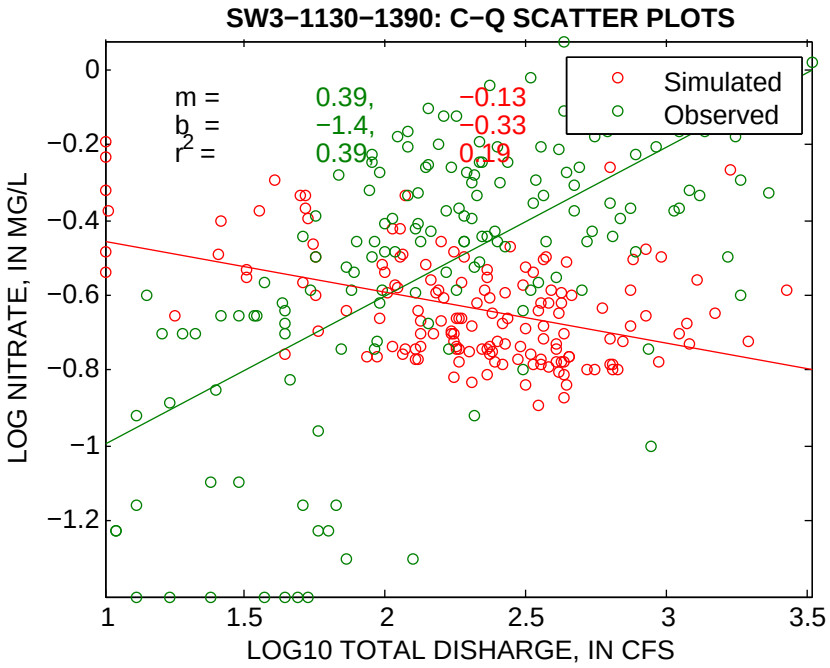
STATISTICS

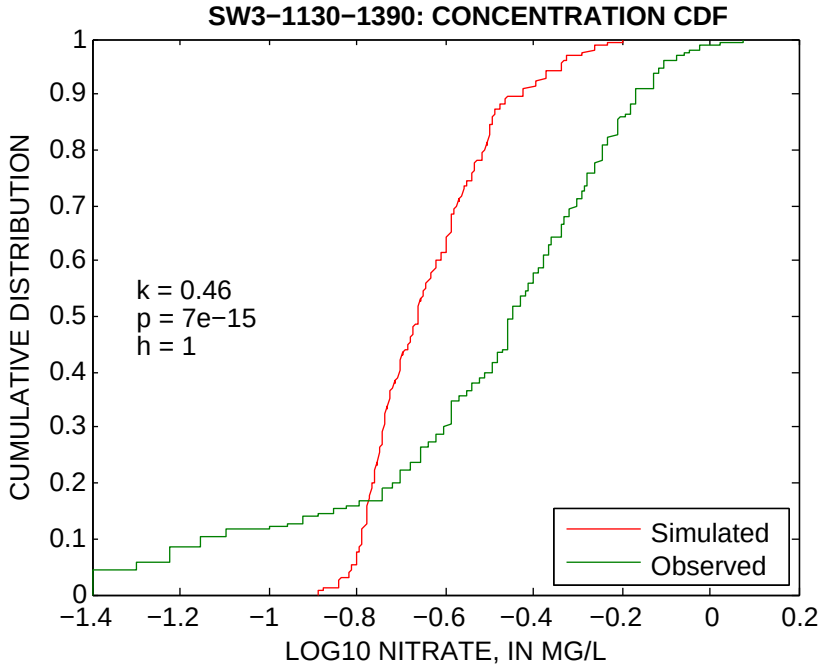
n	156	156
	observe	simulate
min	0.04	0.12592
	-1.39794	-0.899905
mean	0.38709	0.244076
	-0.517092	-0.64014
media	0.36	0.211185
	-0.443697	-0.675337
max	1.19	0.66472
	0.075547	-0.177361
varian	0.0527989	0.00939469
	0.119638	0.0222267
JB	0.013850	0.001
	0.001	0.005148
	ra	log
%	-36.9459	23.796
err.va	0.0916921	0.179783
rel.std.err	1.73663	1.50272
mod.eff	-0.736628	-0.50272

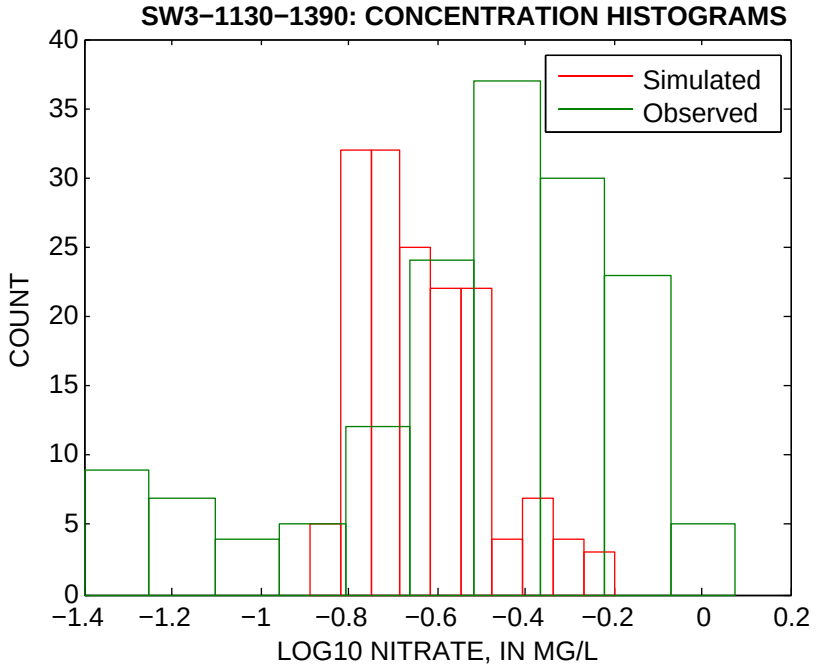
VERSION 2.1

ALL DATA
LOG10

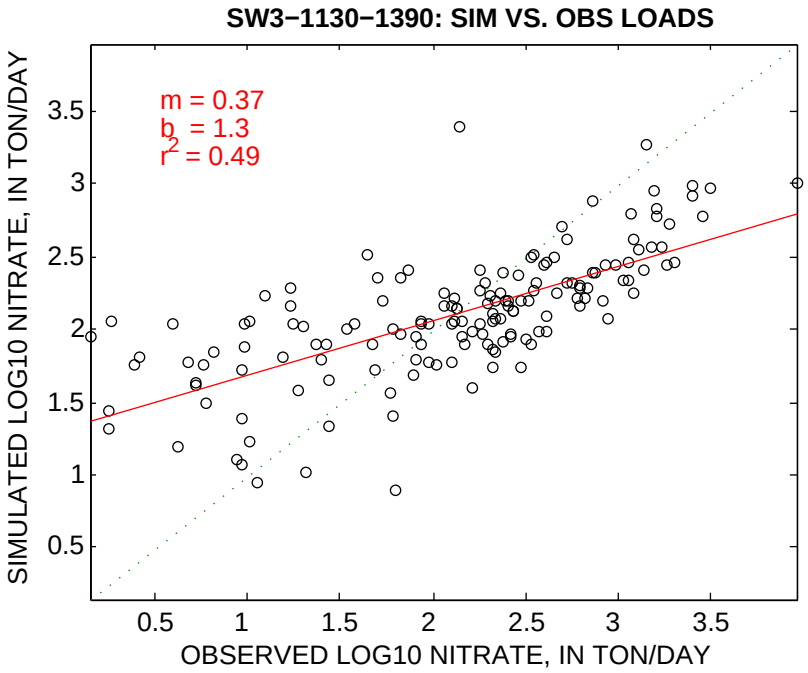


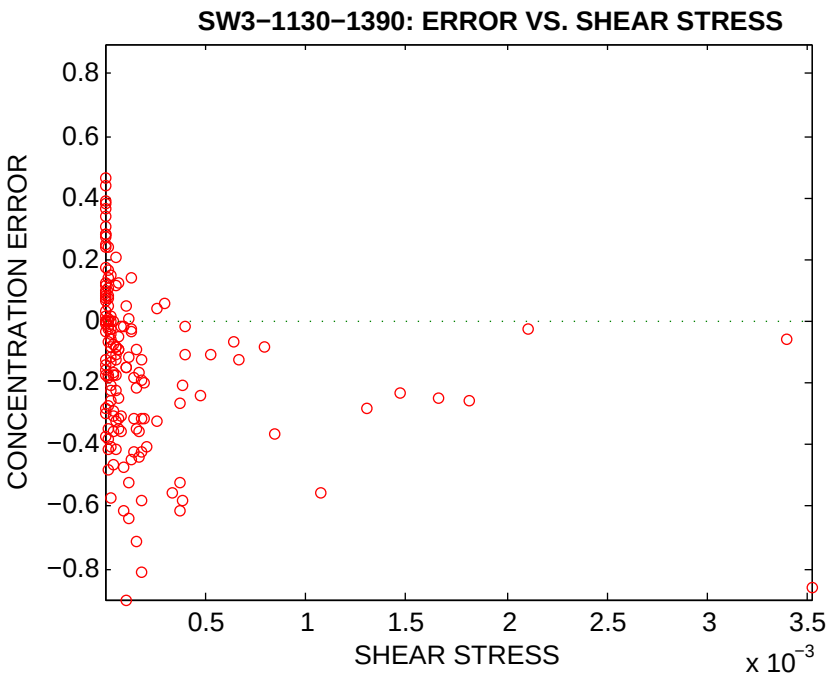


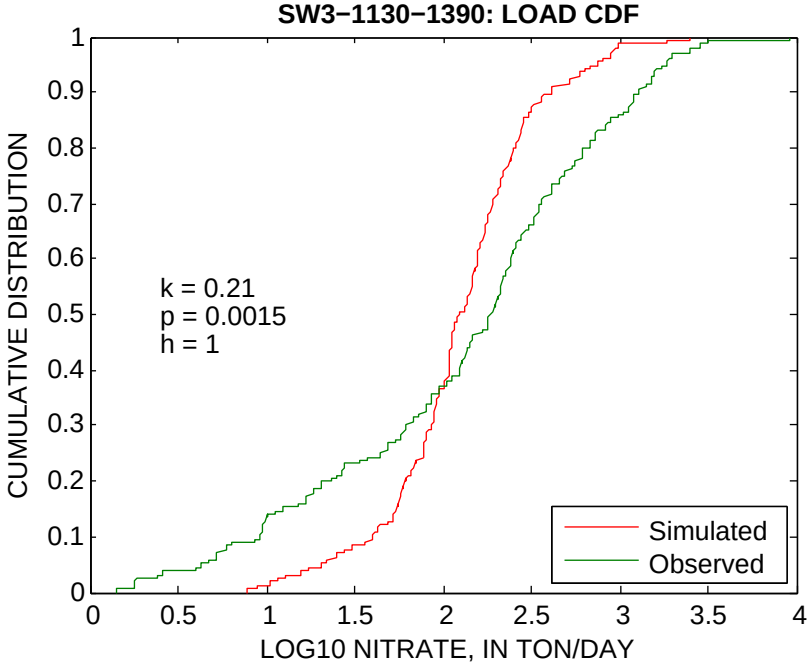


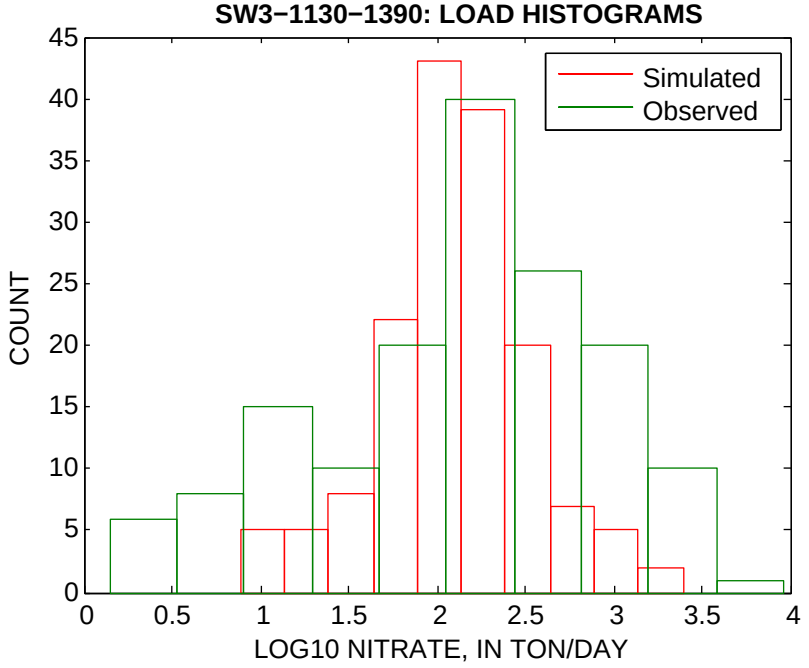


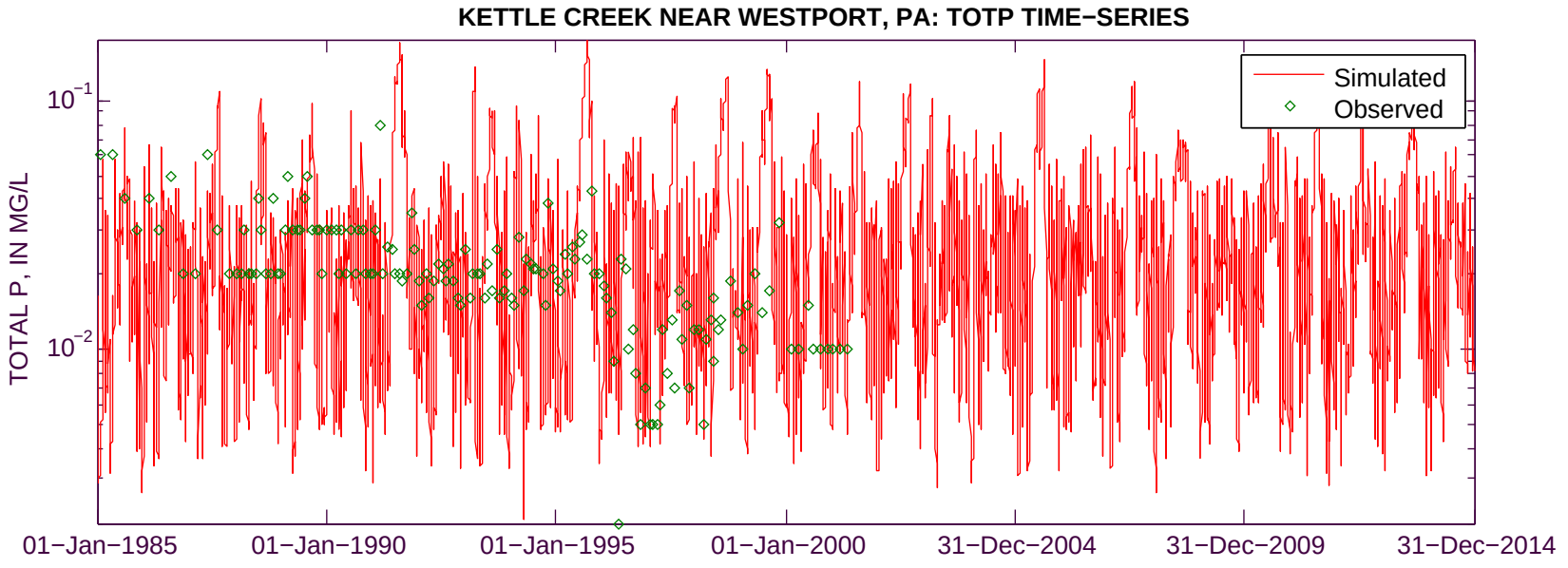
LOAD DATA
LOG10

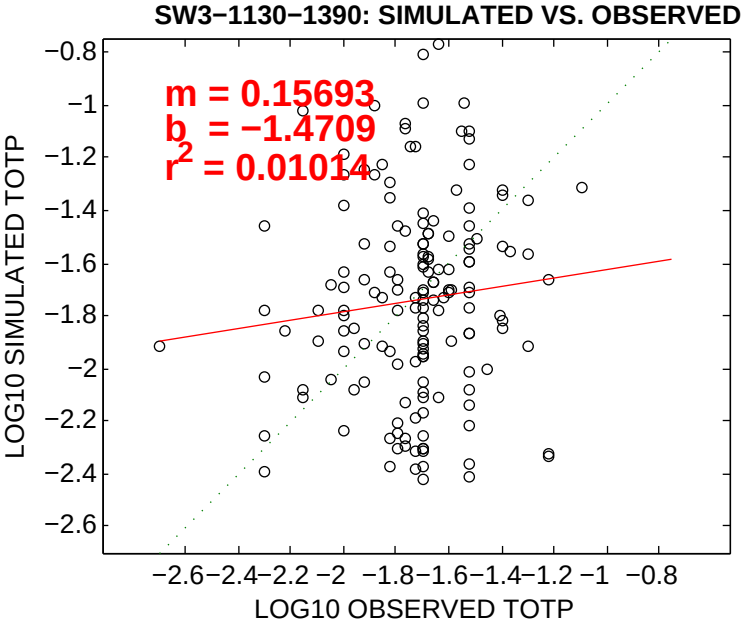


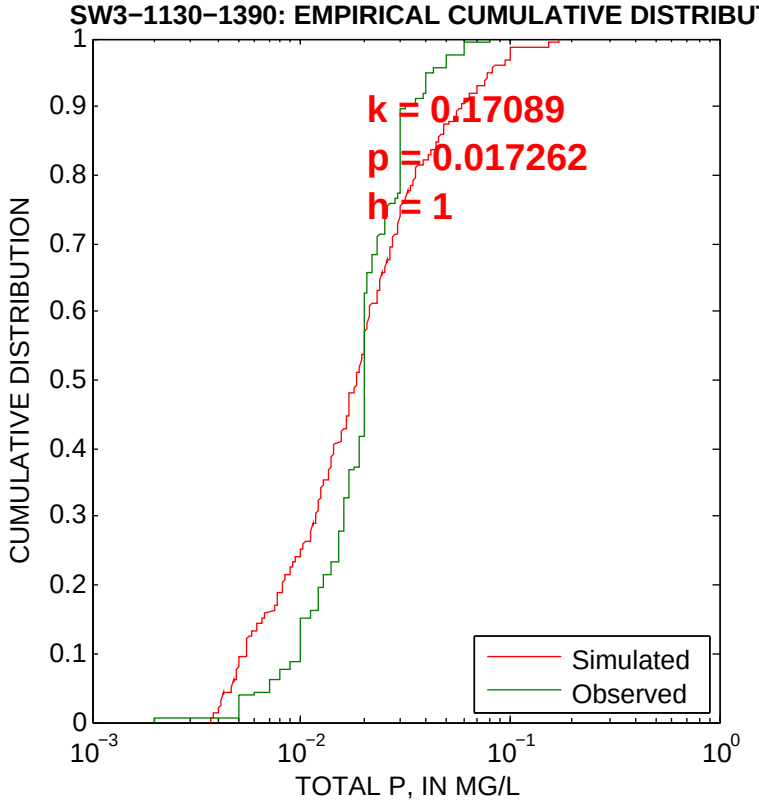












DATA SELECTION

scenario	file
P620171001WQ	TOTP.calib

plot: TOTP - total phosphorus

Dates: 1/1/1985 – 12/31/201

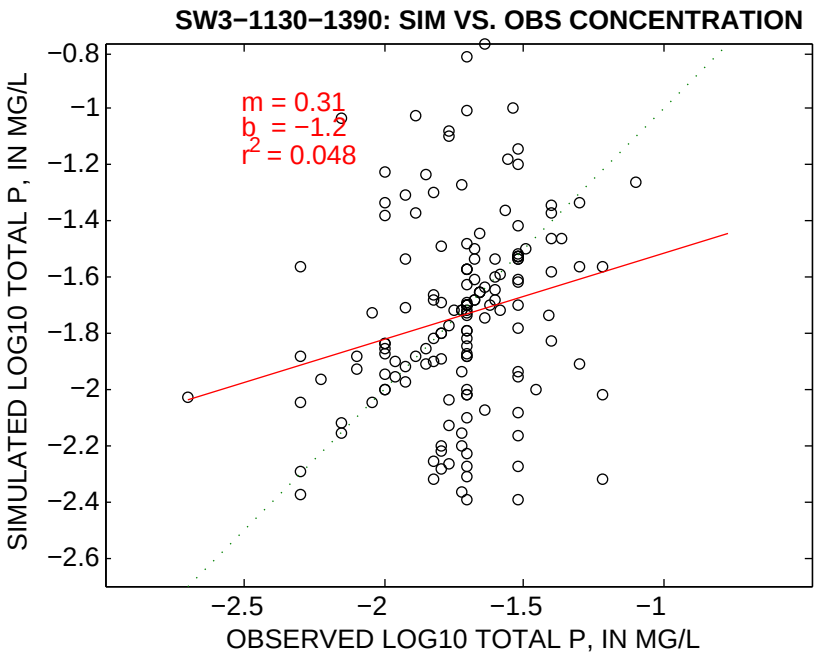
Drive	Directory	Observed
N/A	model	OBS20161101

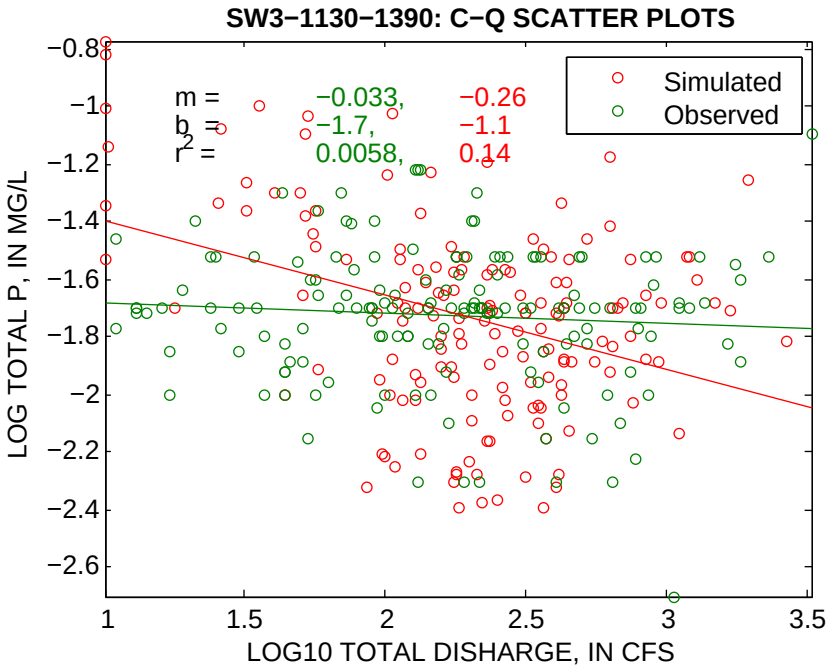
STATISTICS

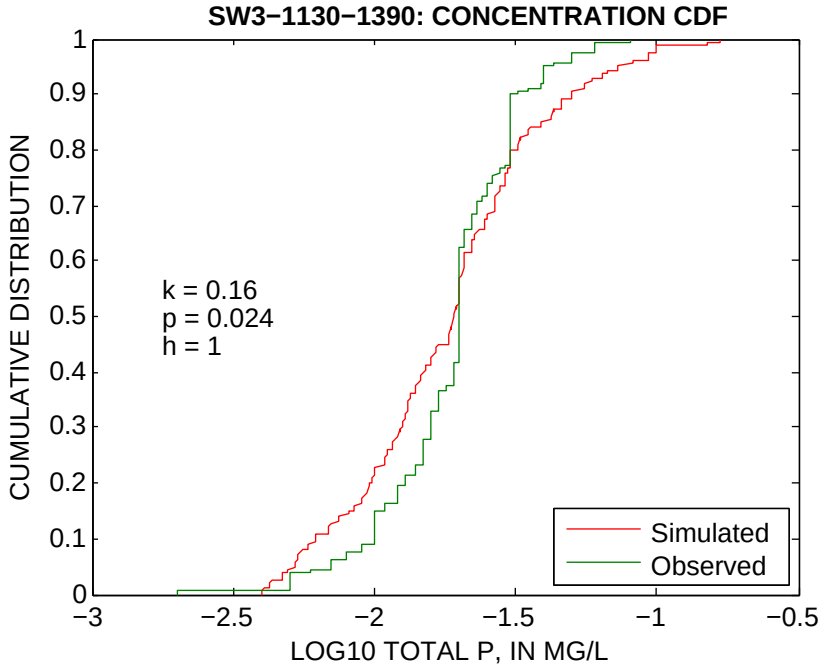
	n	observe	simulate
		158	158
min		0.002	0.0037613
		-2.69897	-2.42466
mean		0.0215253	0.0262744
		-1.72656	-1.74182
media		0.02	0.018517
		-1.69897	-1.73243
max		0.08	0.1722
		-1.09691	-0.763967
varian		0.00013514	0.00070258
		0.0565441	0.137319
JB		0.001	0.001
		0.001114	0.263615
		ra	log
%		22.0627	0.883913
err.va		0.00083396	0.176351
rel.std.err		6.17099	3.11883
mod.eff		-5.17099	-2.11883

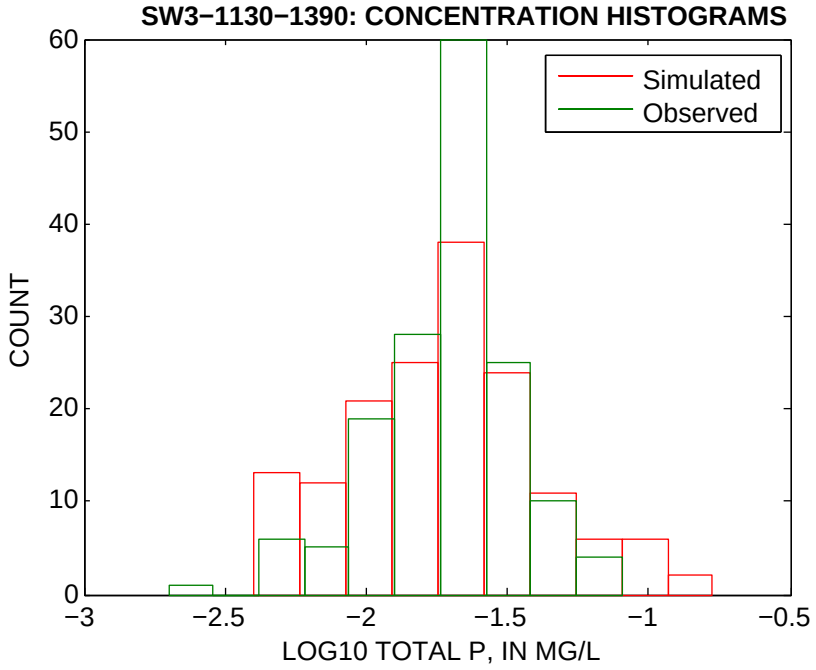
VERSION 2.1

ALL DATA
LOG10

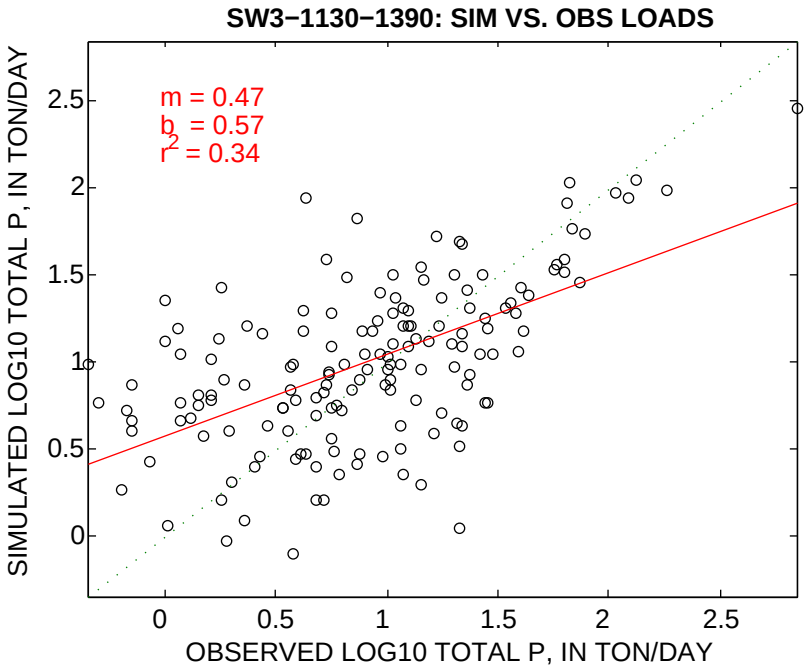


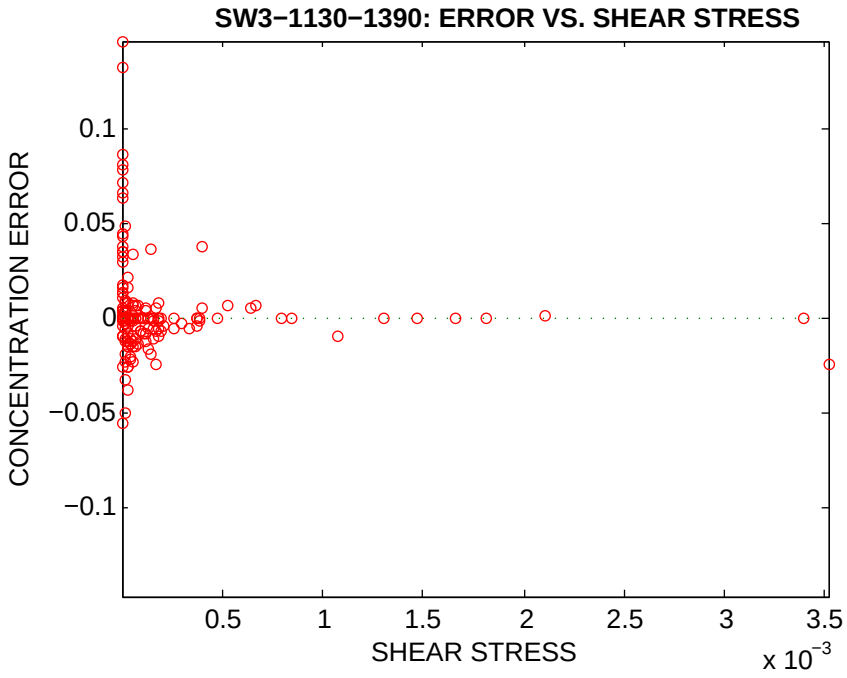


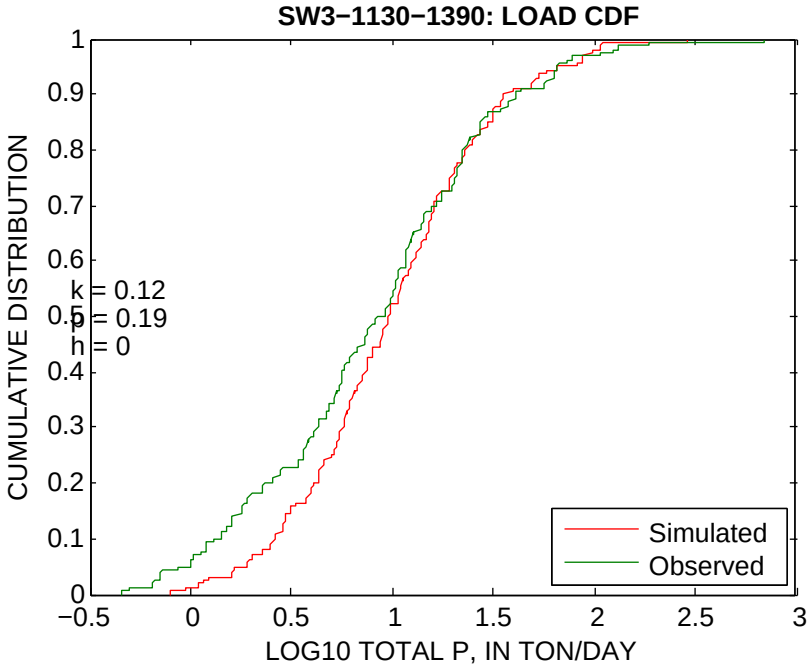


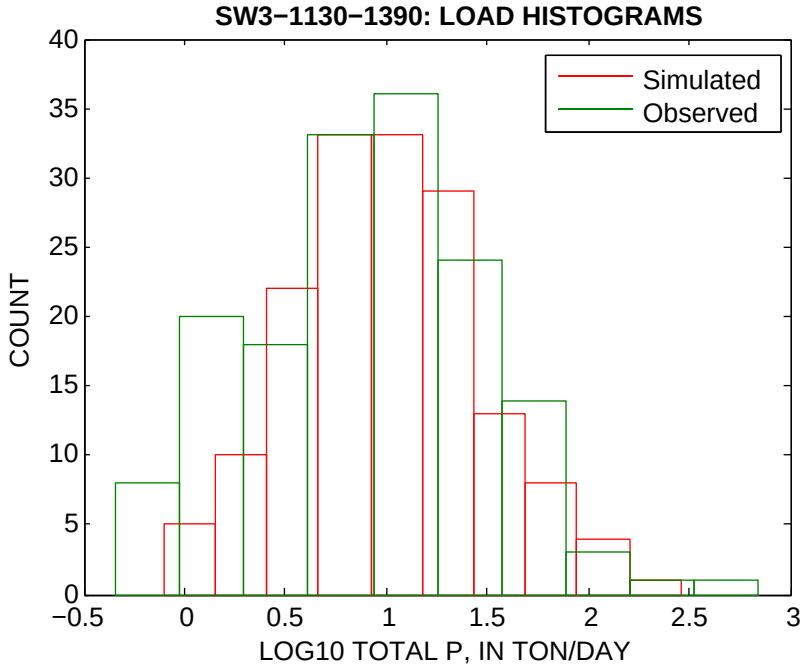


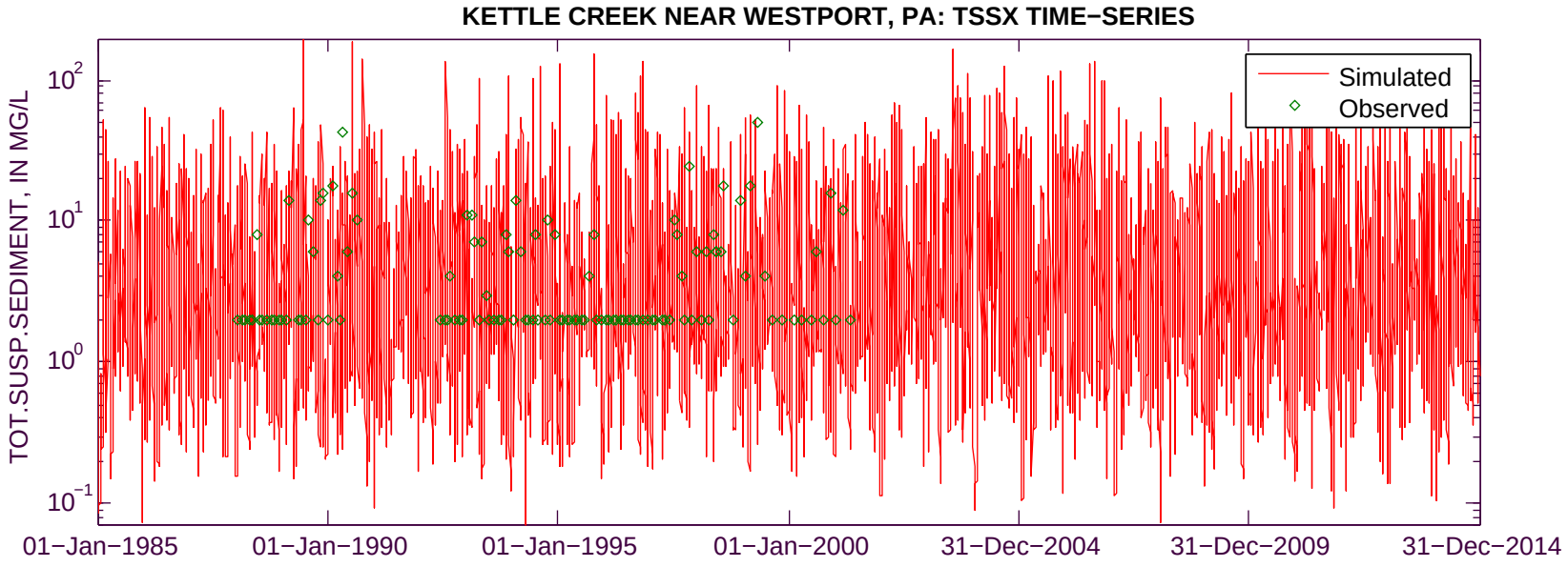
LOAD DATA
LOG10

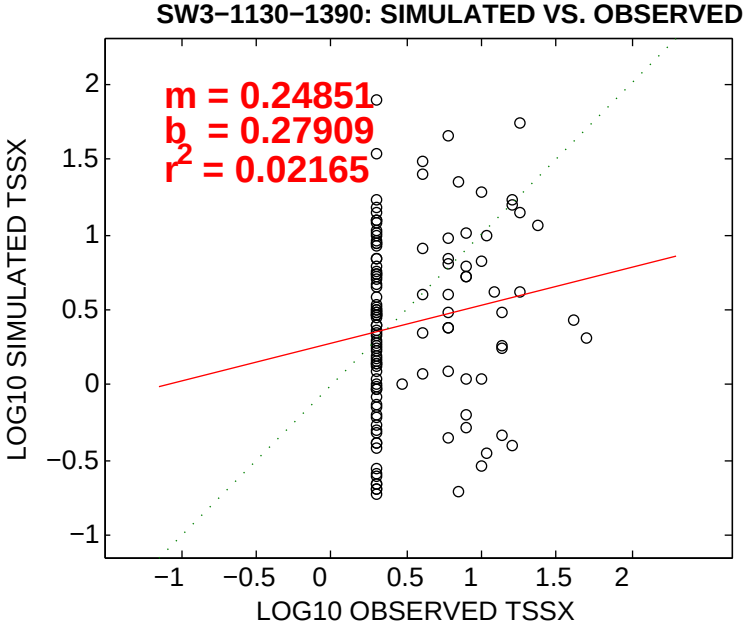


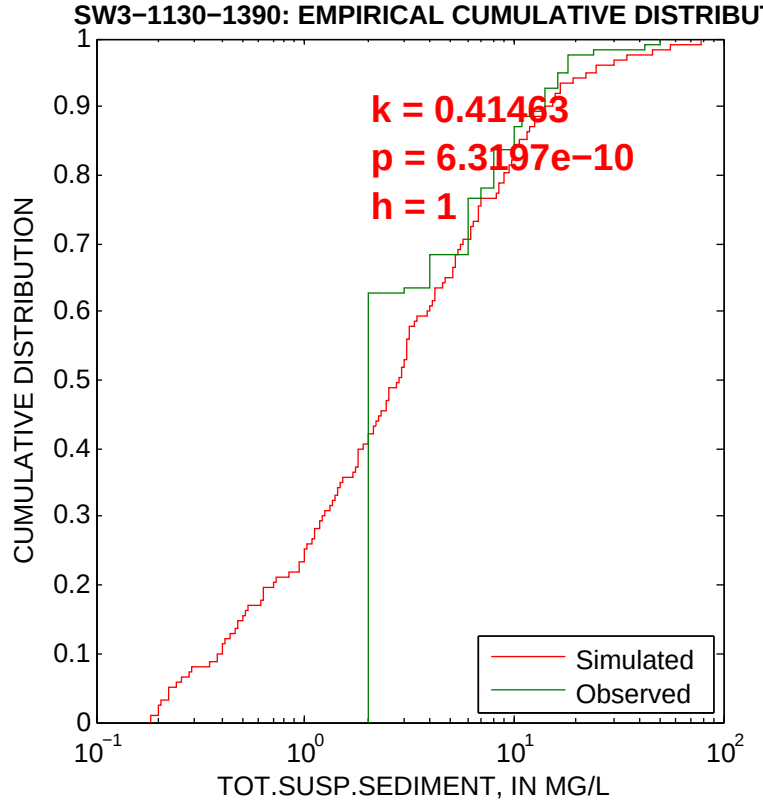












DATA SELECTION

scenario	file
P620171001WQ	TSSX.calib

plot: TSSX - total suspended ...

Dates: 1/1/1985 – 12/31/201

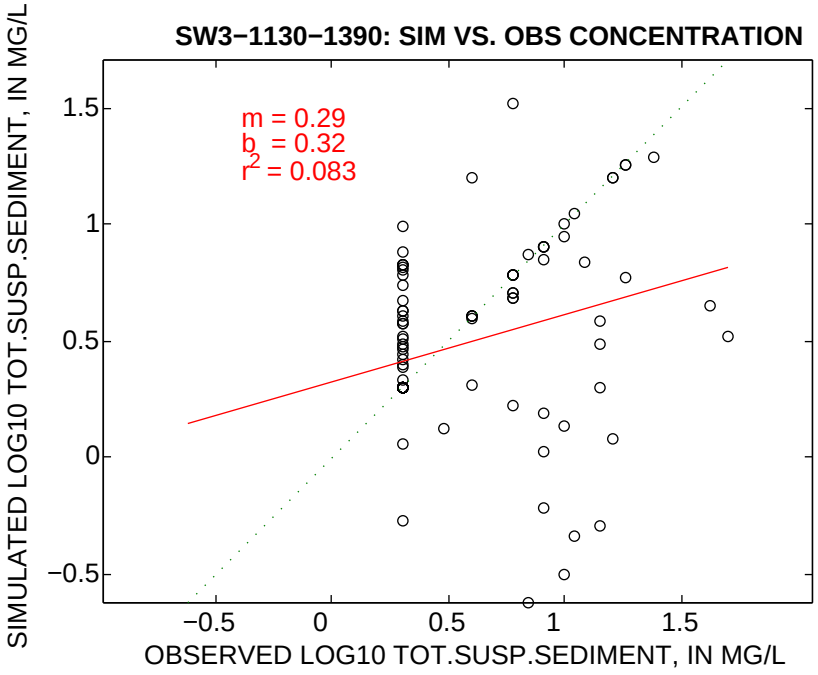
Drive	Directory	Observed
N/A	model	OBS20161101

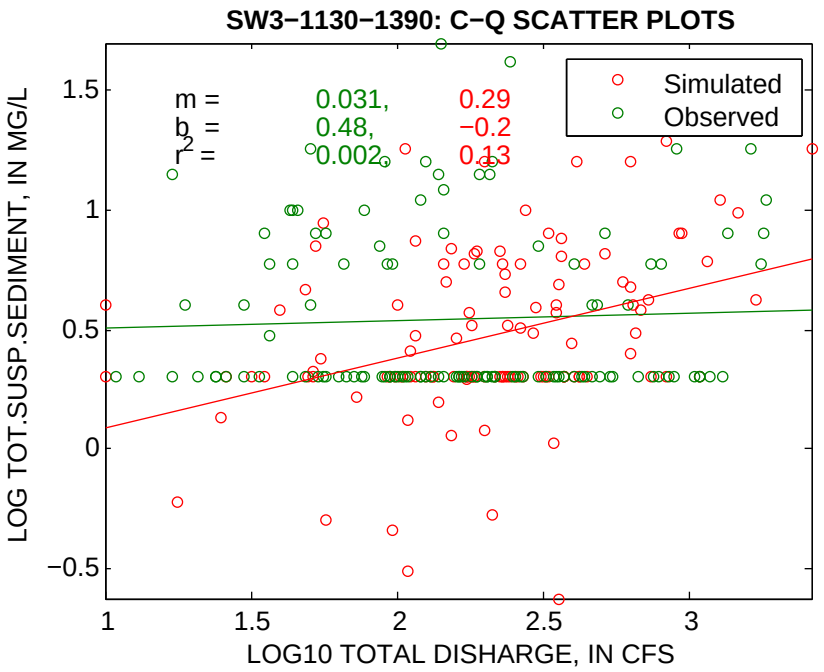
STATISTICS

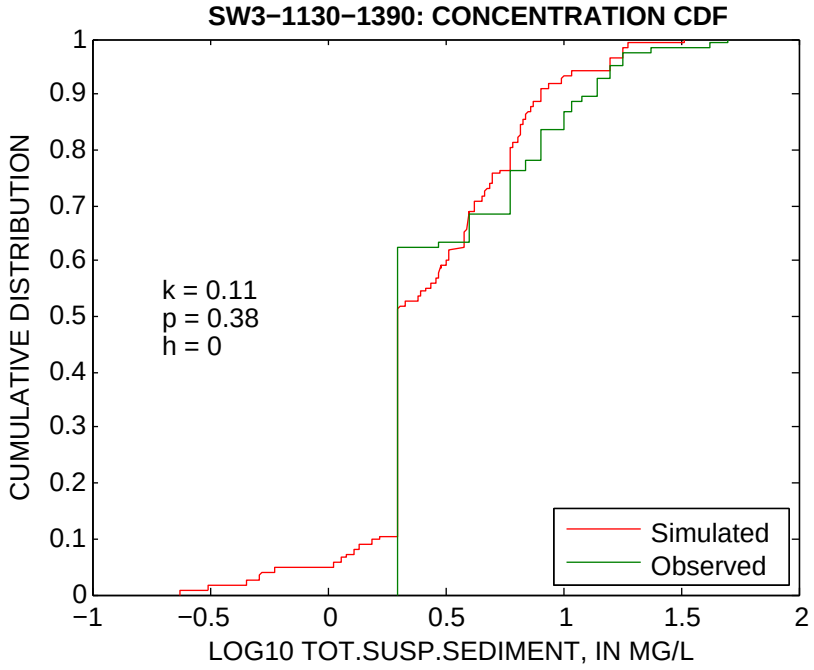
	n	123	123
		observe	simulate
min		2	0.18474
		0.30103	-0.733439
mean		5.35772	6.29171
		0.543815	0.41423
media		2	2.8521
		0.30103	0.455165
max		50	78.52
		1.69897	1.89498
varian		48.6743	114.64
		0.125317	0.35747
JB		0.001	0.001
		0.001154	0.368237
		ra	log
%		17.4326	-23.8288
err.va		152.663	0.437433
rel.std.err		3.13643	3.4906
mod.eff		-2.13643	-2.4906

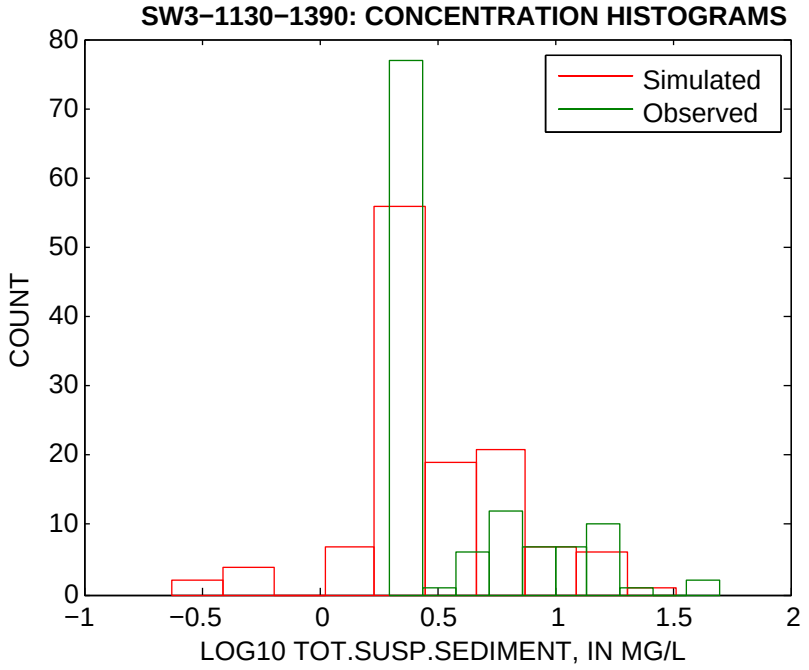
VERSION 2.1

ALL DATA
LOG10

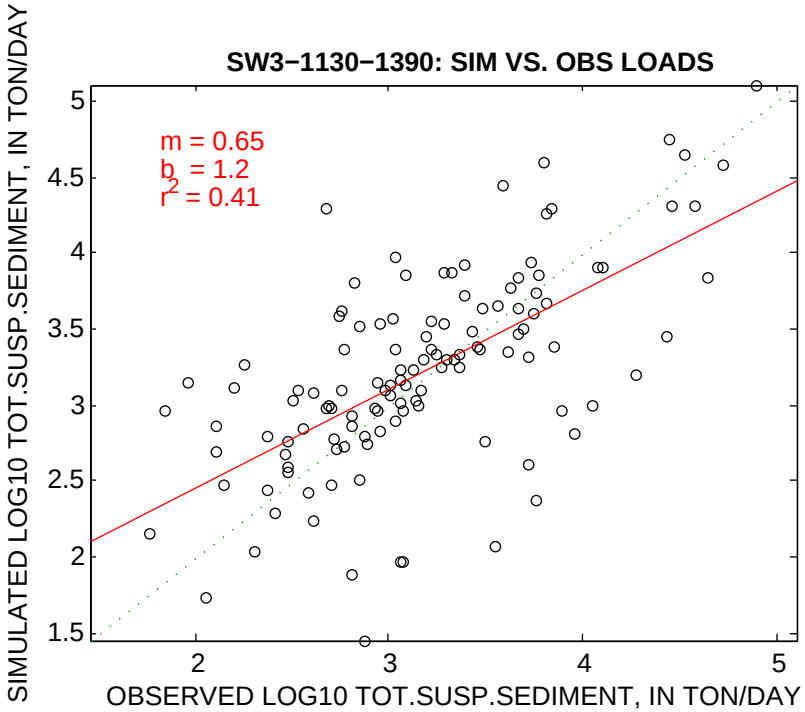


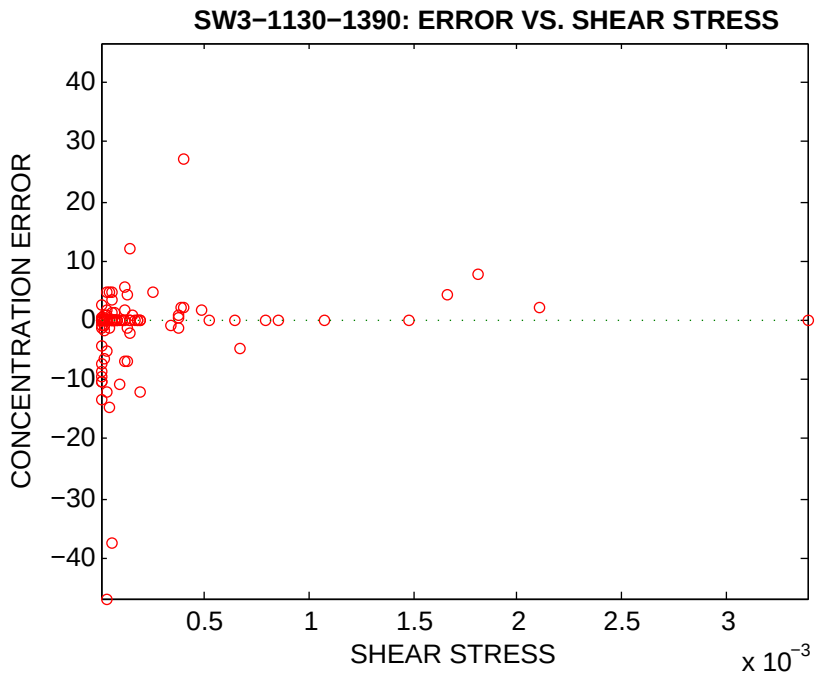


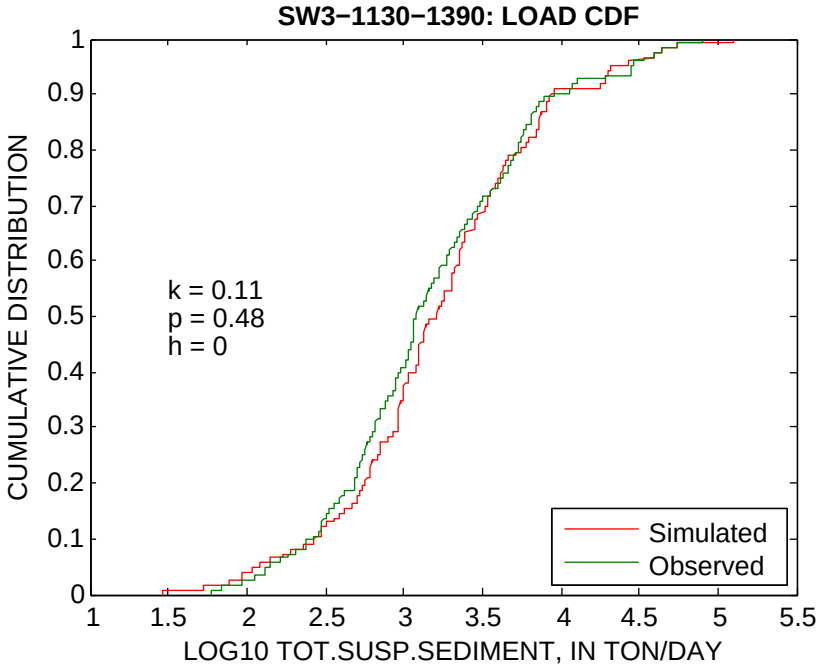


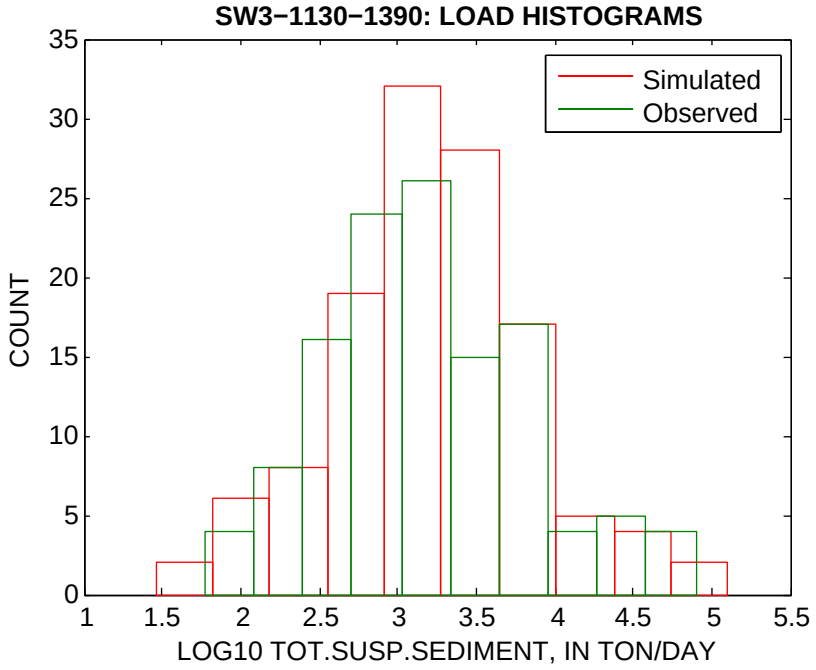


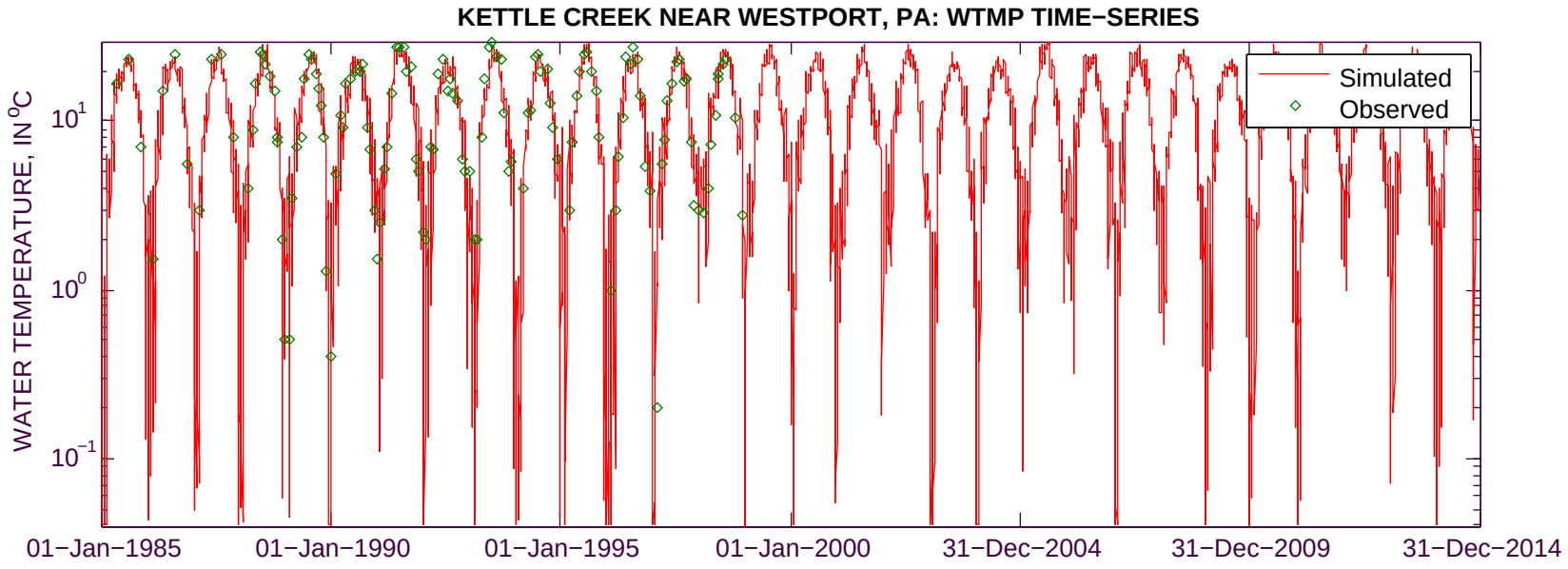
LOAD DATA
LOG10

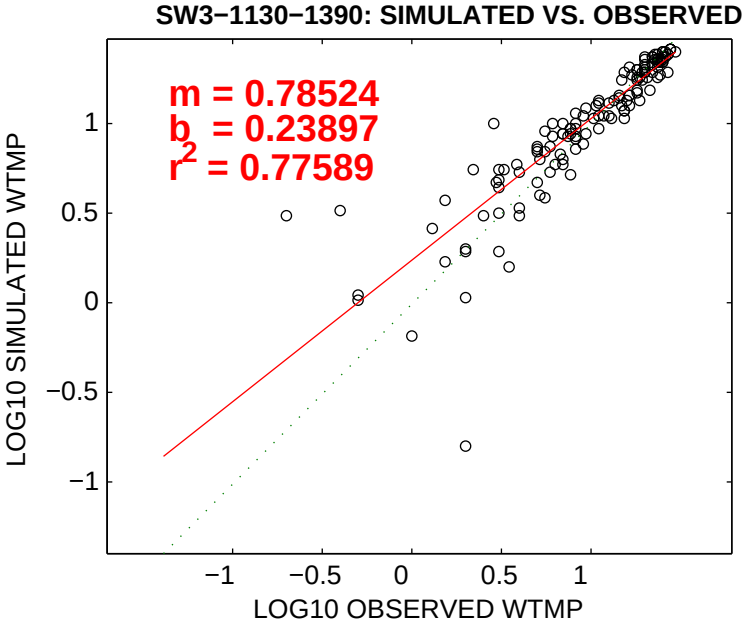


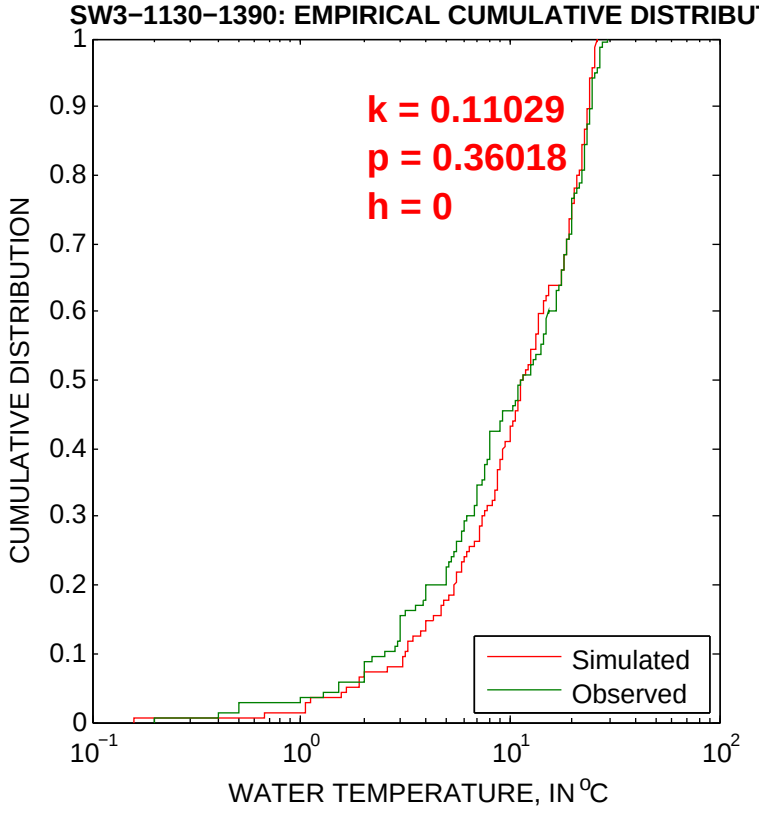












DATA SELECTION

scenario	file
P620171001WQ	WTMP.calib

plot: WTMP - water tempera...

Dates: 1/1/1985 – 12/31/201

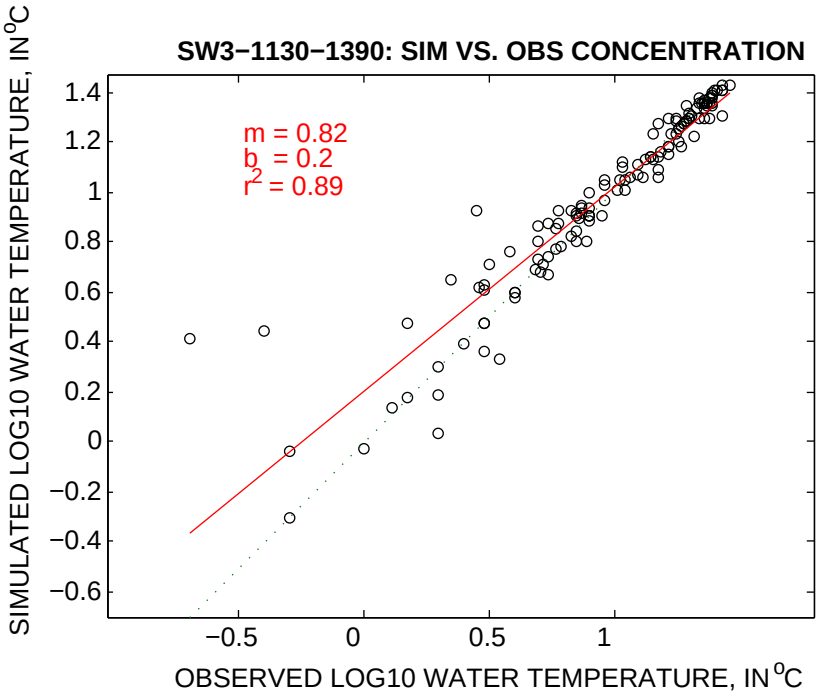
Drive	Directory	Observed
N/A	model	OBS20161101

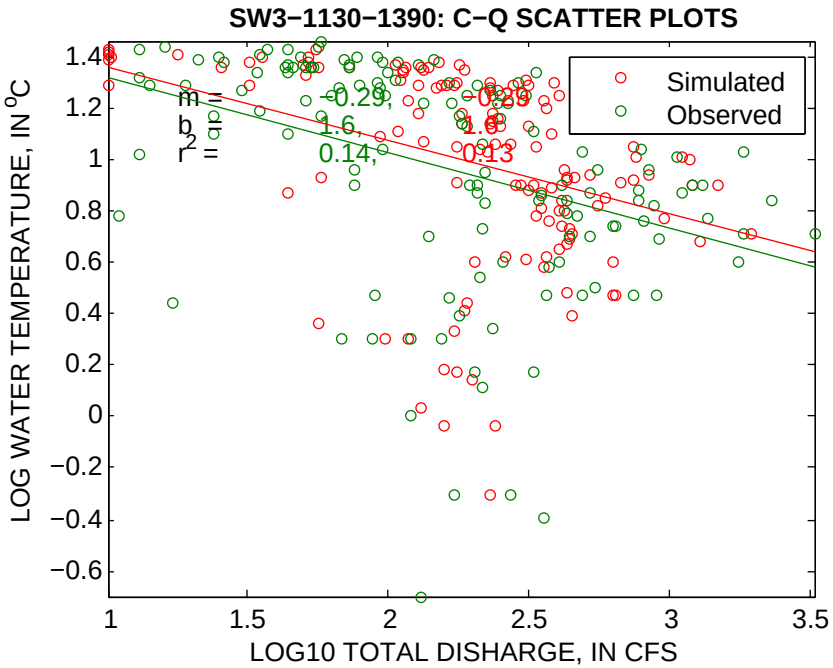
STATISTICS

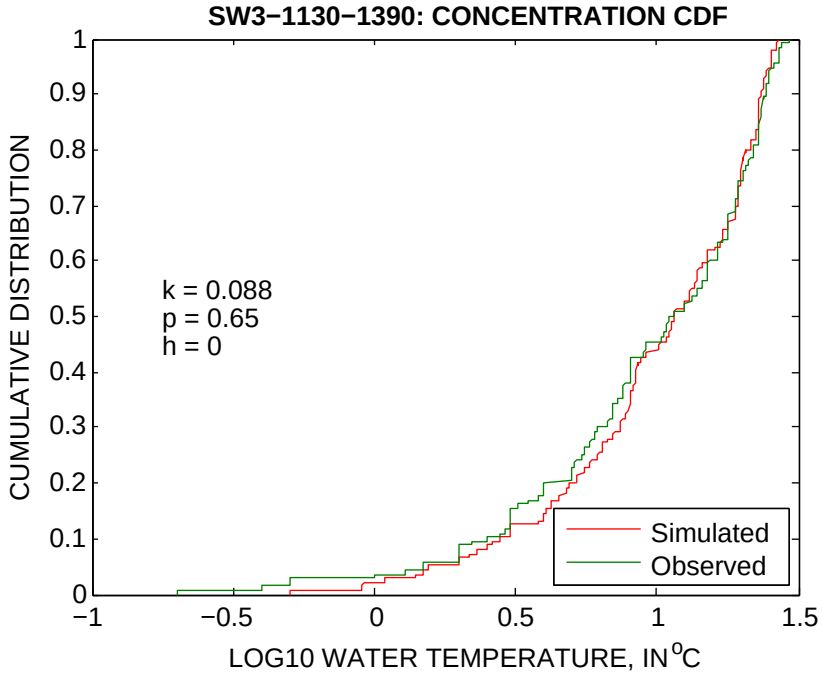
	n	observe	simulate
		136	136
min		0.2	0.1613
		-0.69897	-0.792366
mean		12.8022	12.8944
		0.960574	0.993252
media		11.3	11.556
		1.05301	1.06276
max		29.2	26.286
		1.46538	1.41972
varian		69.3084	57.8304
		0.183921	0.146161
JB		0.013309	0.017441
		0.001	0.001
		ra	log
%		0.719887	3.40196
err.va		5.35137	0.0423141
rel.std.err		0.077211	0.230067
mod.eff		0.922789	0.769933

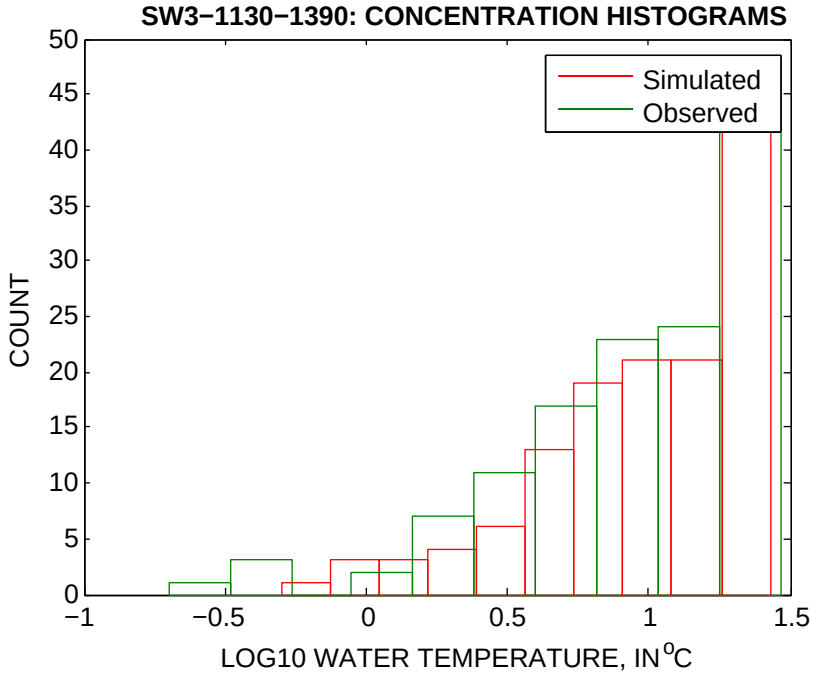
VERSION 2.1

ALL DATA
LOG10

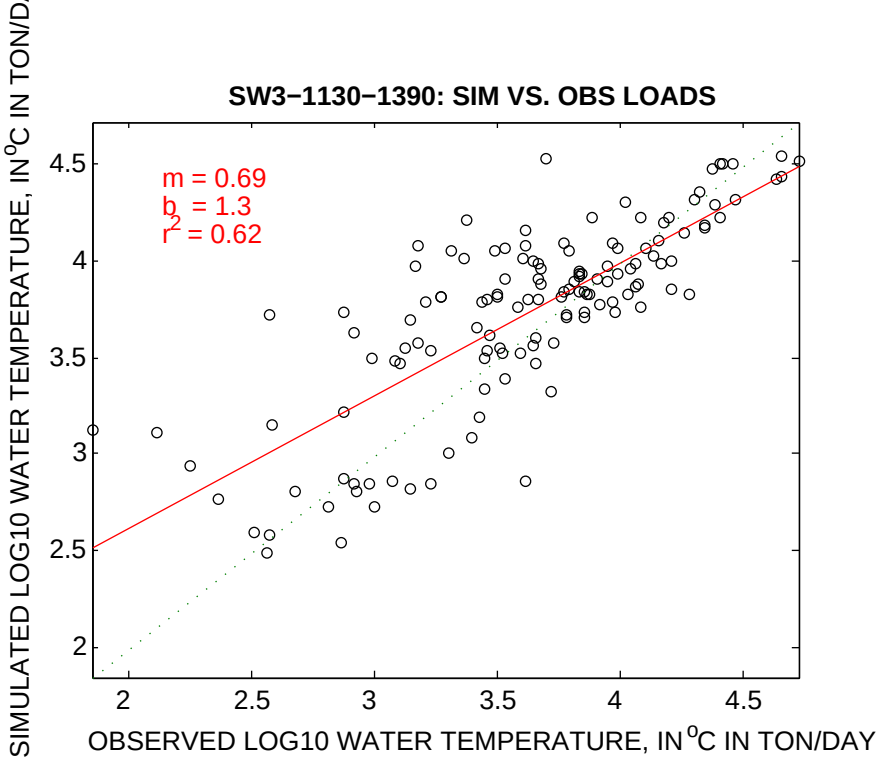


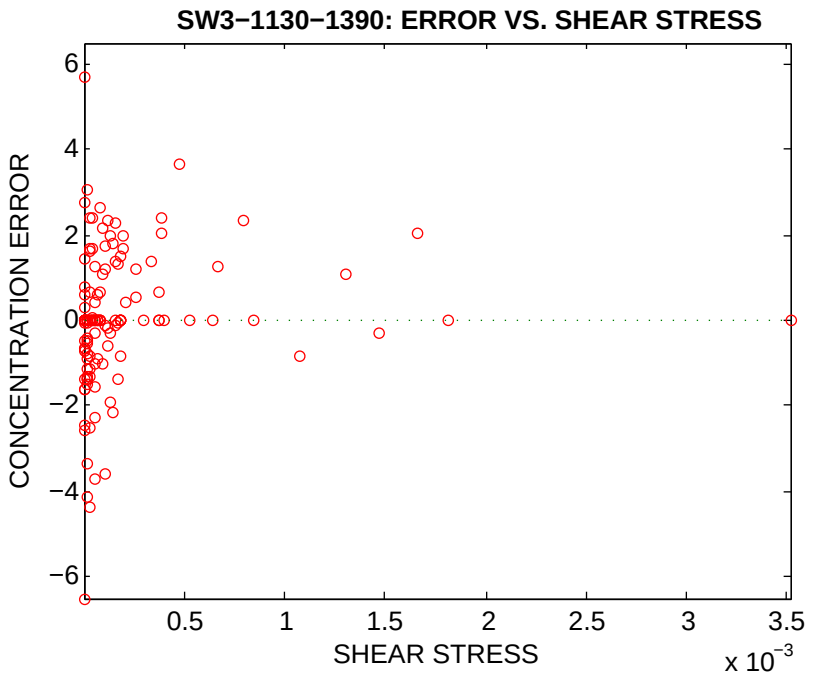


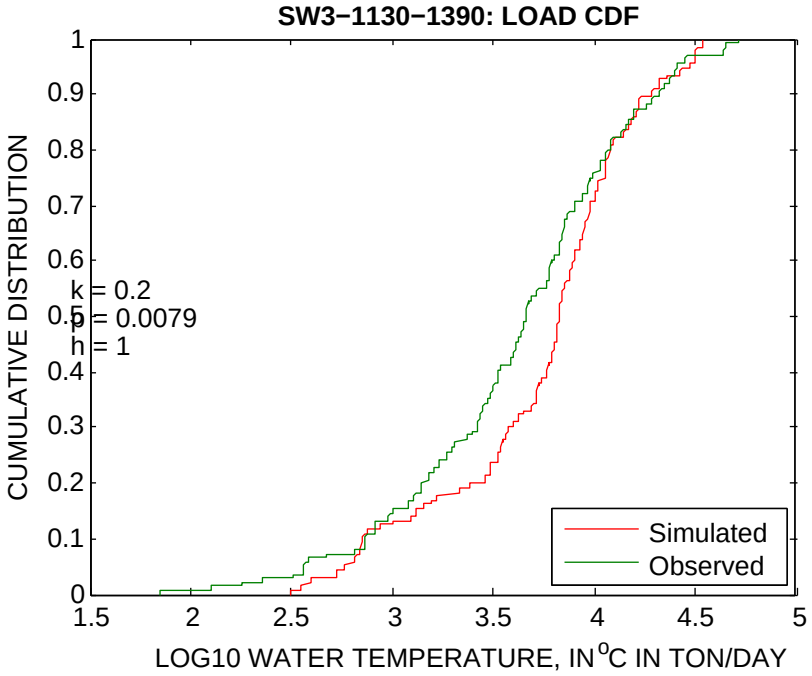


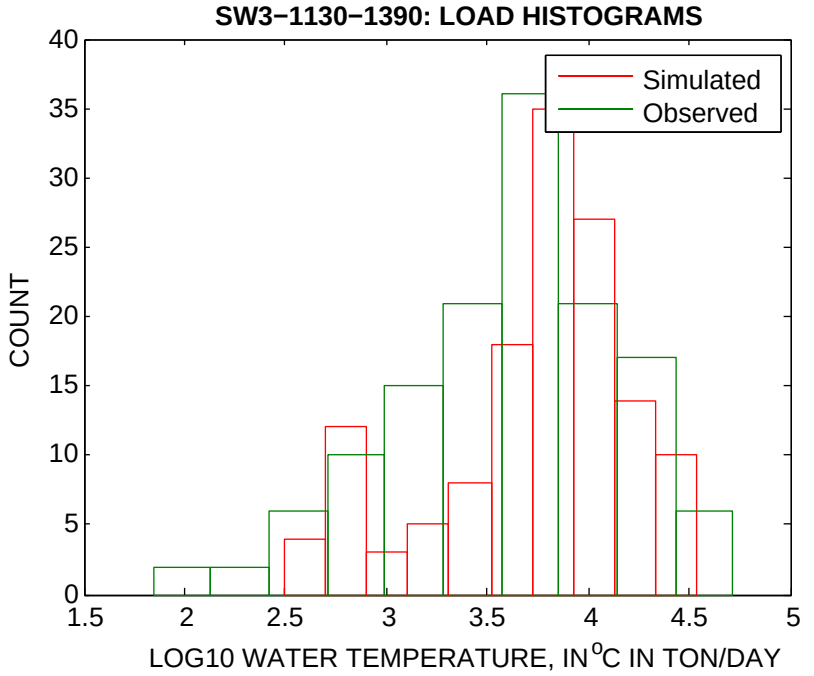


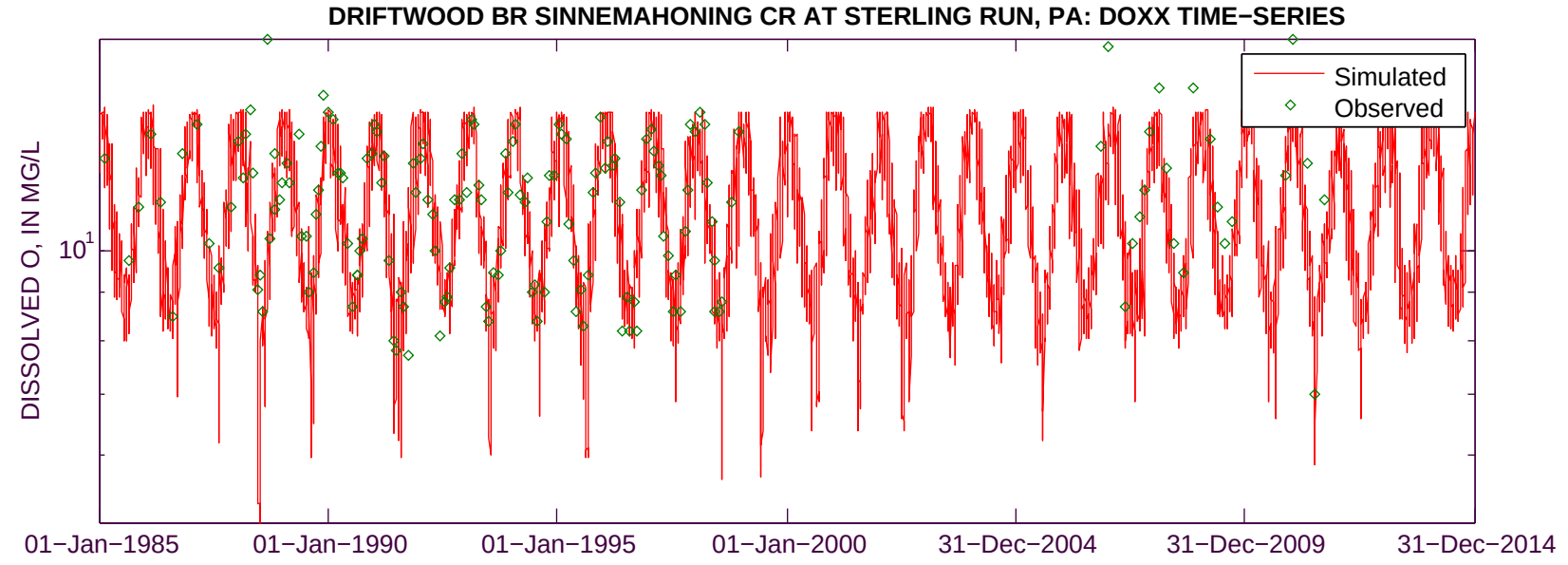
LOAD DATA
LOG10

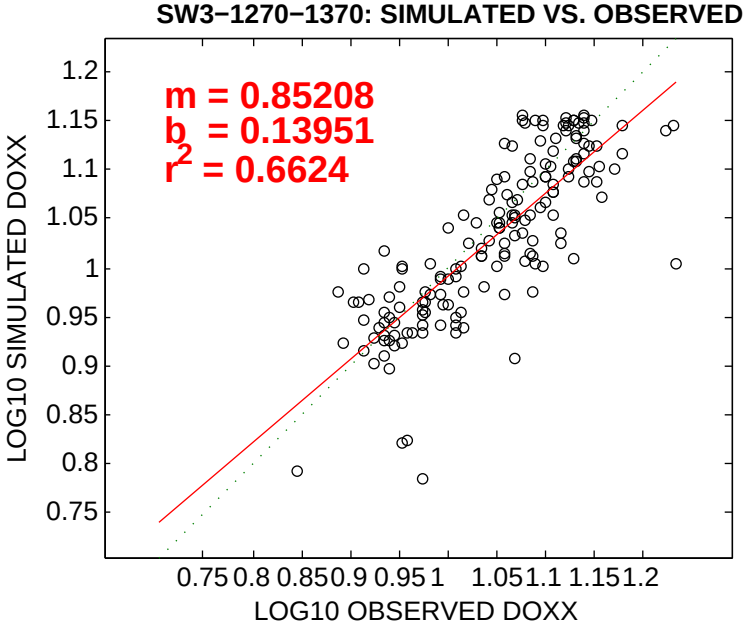


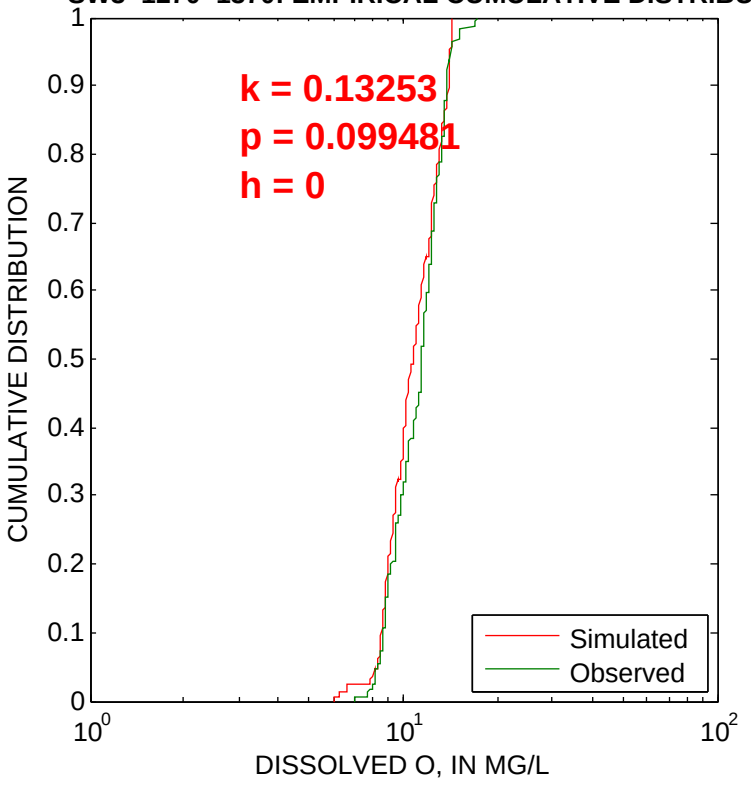












DATA SELECTION

scenario: P620171001WQ | file: DOXX.calib

plot: DOXX - dissolved oxygen

Dates: 1/1/1985 – 12/31/201

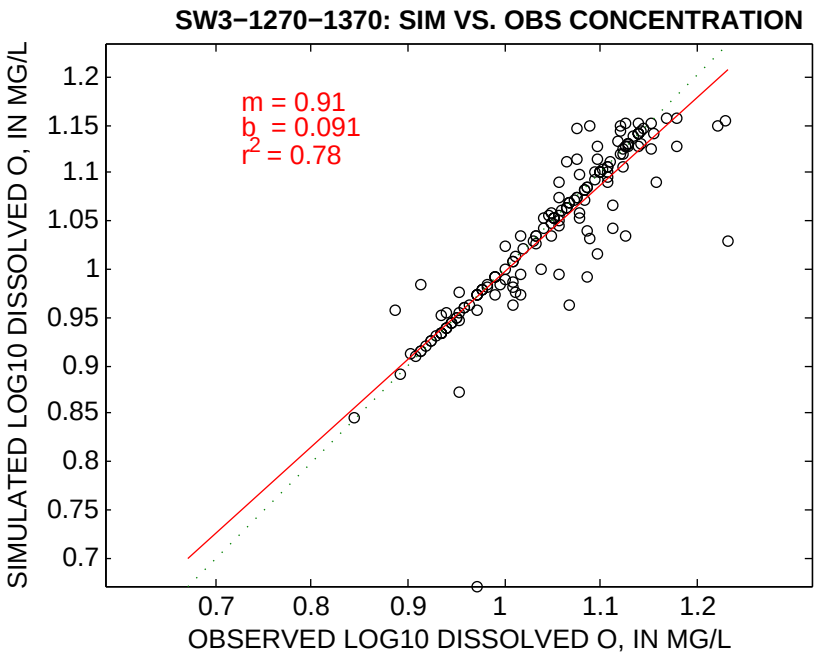
Drive: N/A | Directory: model | Observed: OBS20161101

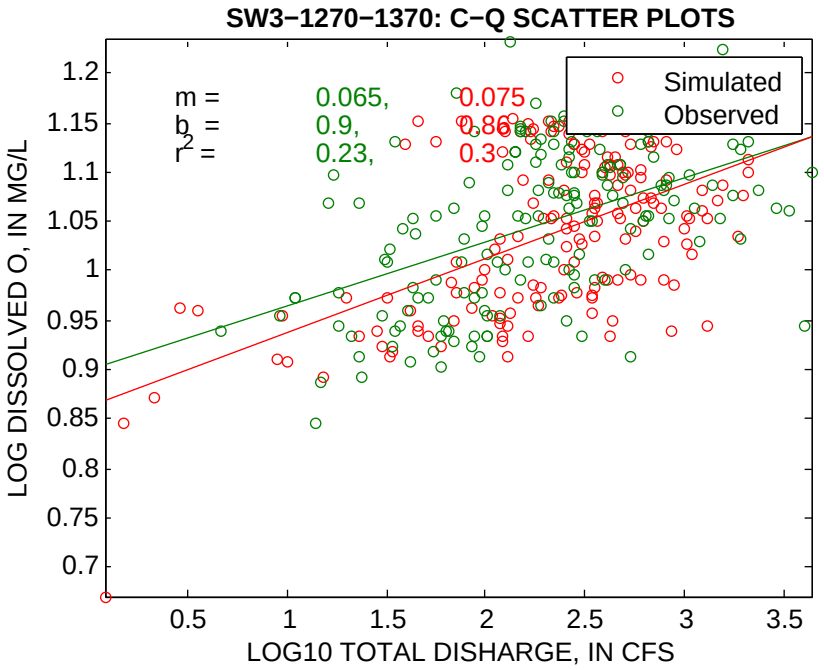
STATISTICS

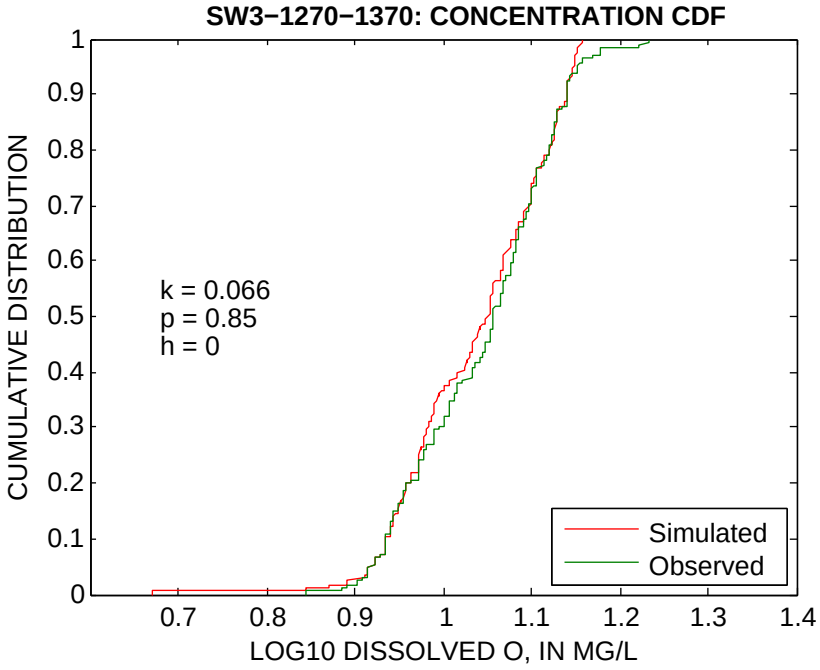
n	166	166
	observe	simulate
min	7	6.0687
	0.845098	0.783096
mean	11.3066	10.9315
	1.04626	1.03101
media	11.4	10.734
	1.0569	1.03076
max	17.1	14.288
	1.233	1.15497
varian	4.12923	4.10304
	0.00625537	0.0068564
JB	☑ 0.238847	0.042631
	☑ 0.084318	0.094788 ☑
	ra	log
%	-3.31811	-1.45782
err.va	1.74829	0.00268563
rel.std.err	0.423394	0.429333
mod.eff	0.576606	0.570667

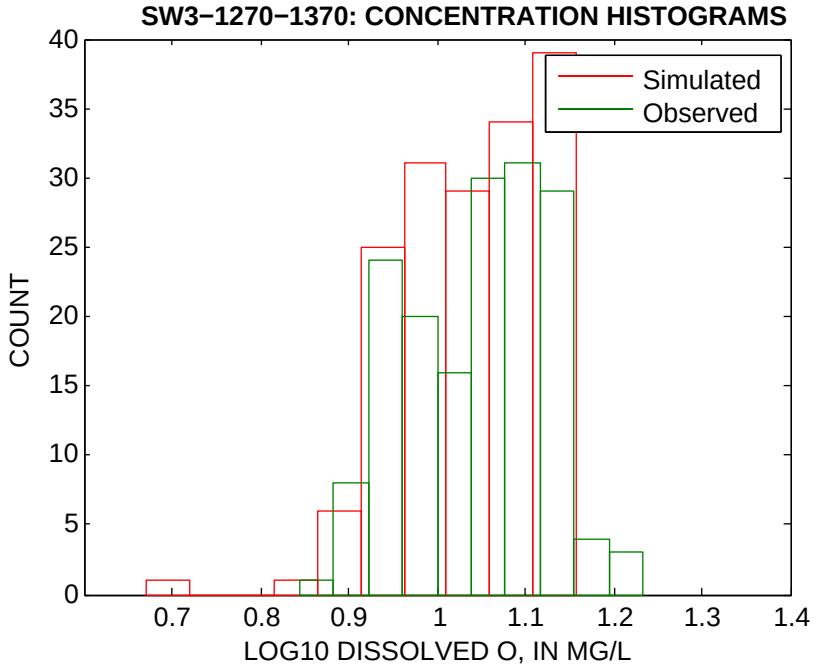
VERSION 2.1

ALL DATA
LOG10

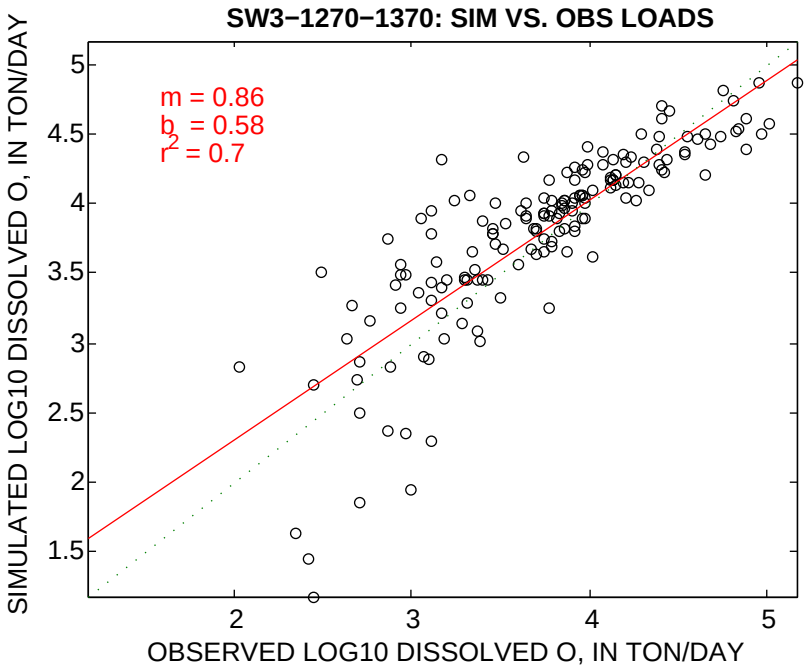


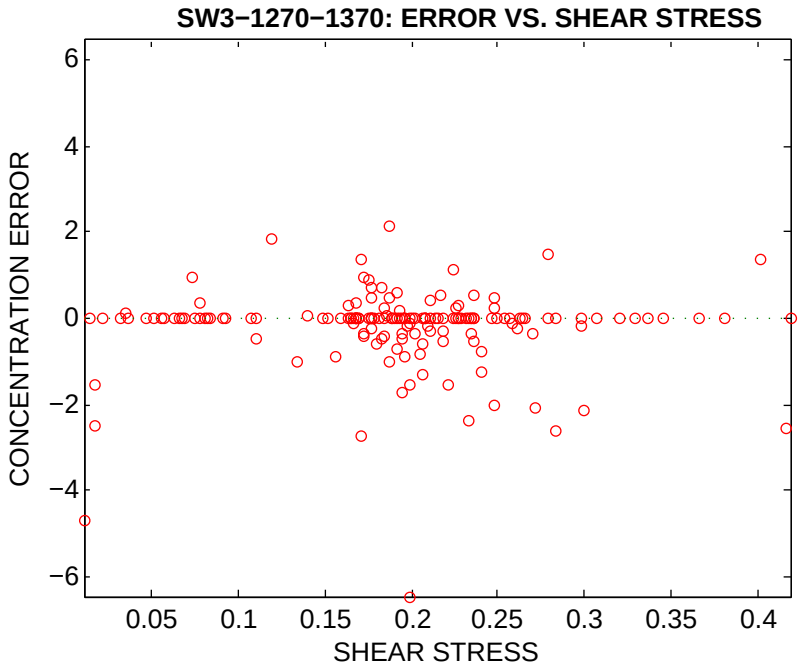


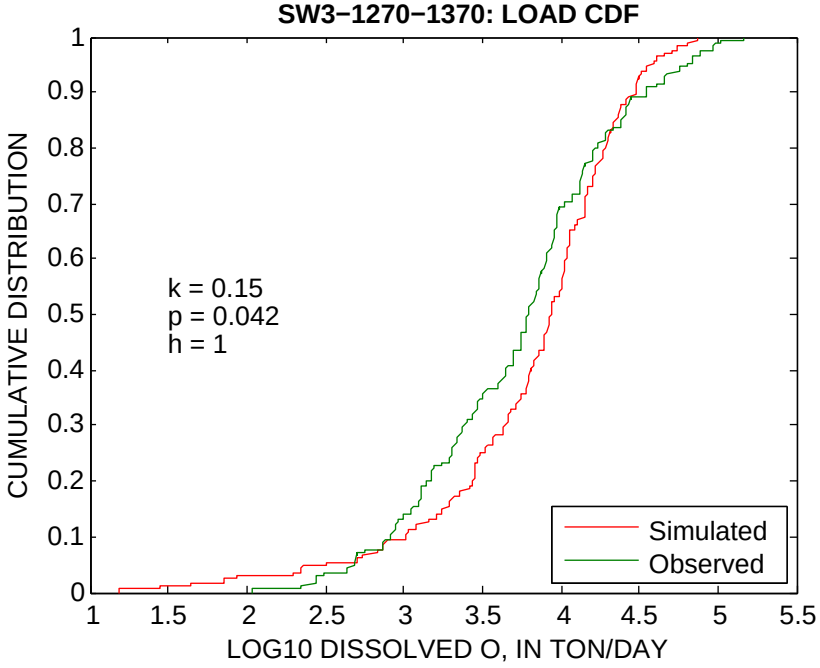


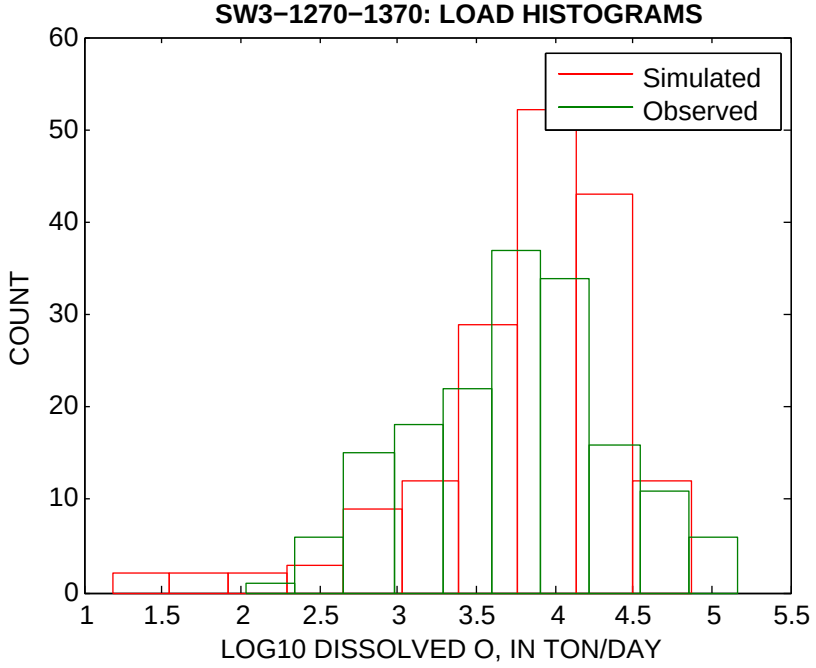


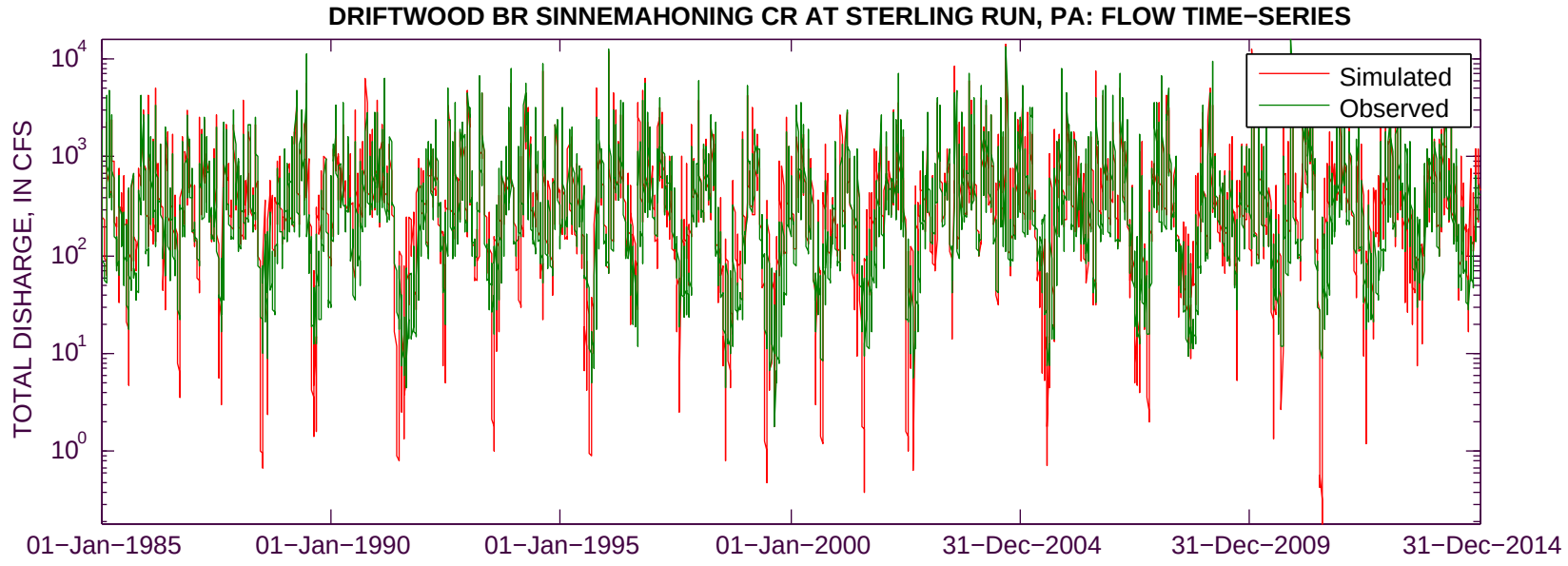
LOAD DATA
LOG10

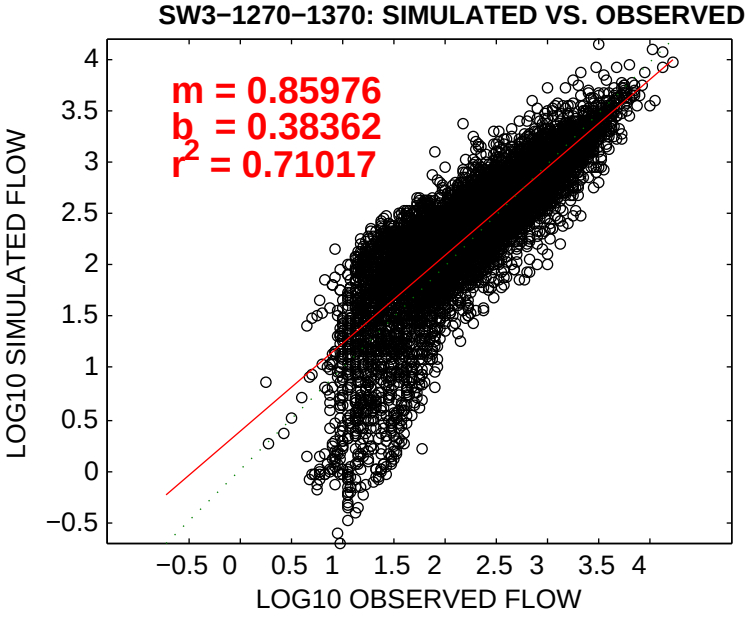


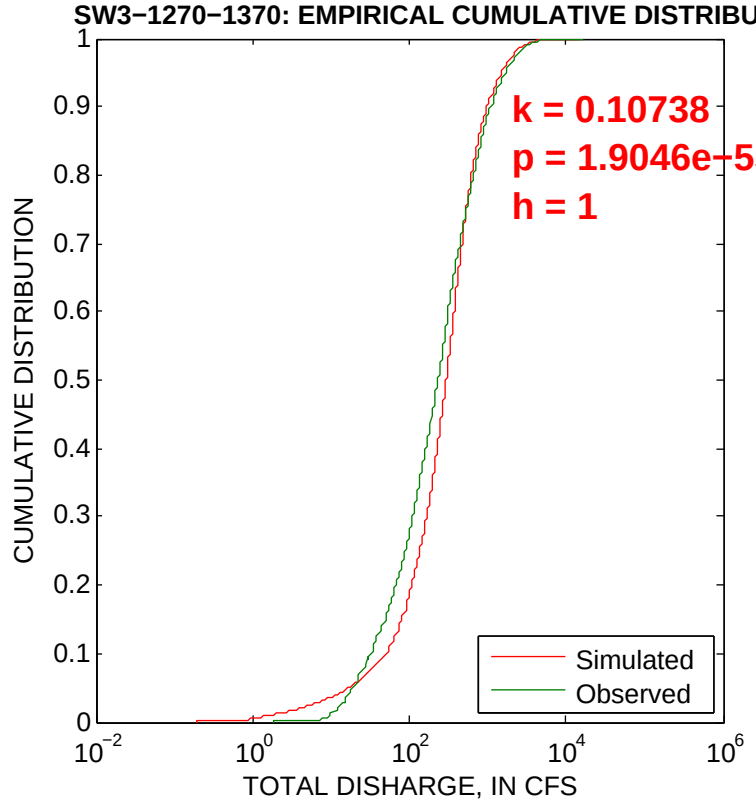












DATA SELECTION

scenario: P620171001WQ | file: FLOW.calib

plot: FLOW - total discharge

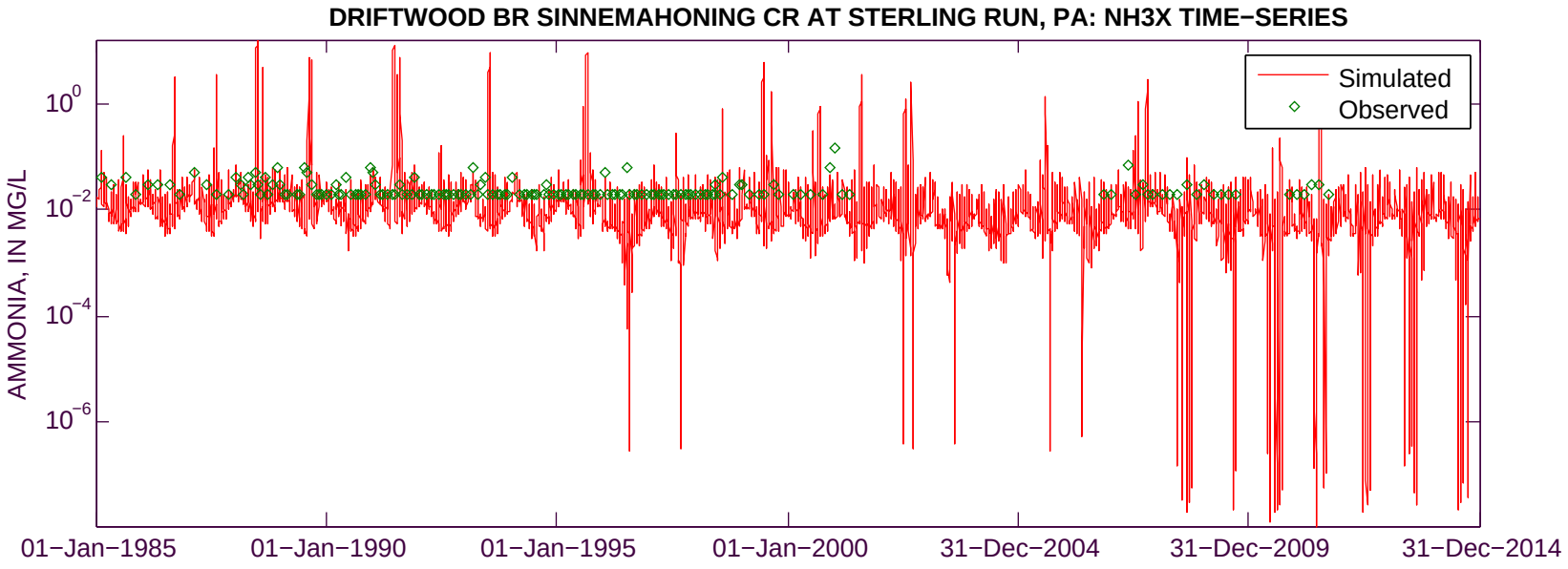
Dates: 1/1/1985 – 12/31/201

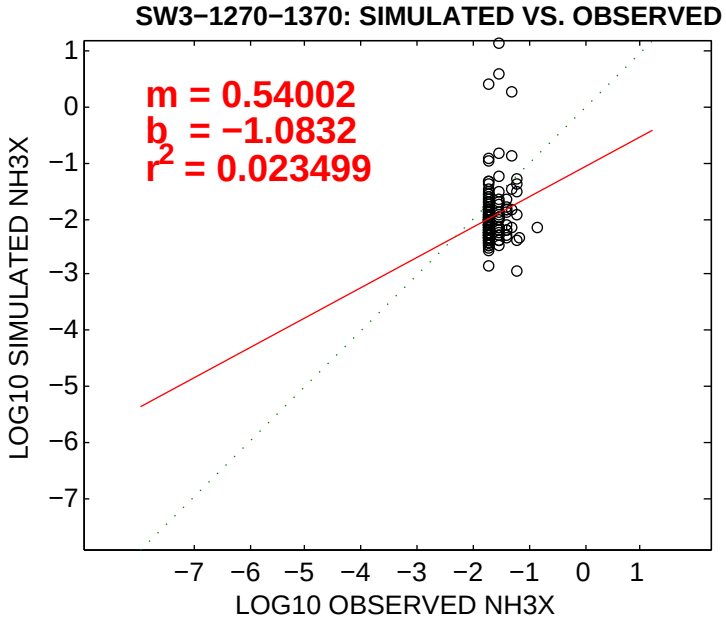
Drive: N/A | Directory: model | Observed: OBS20161101

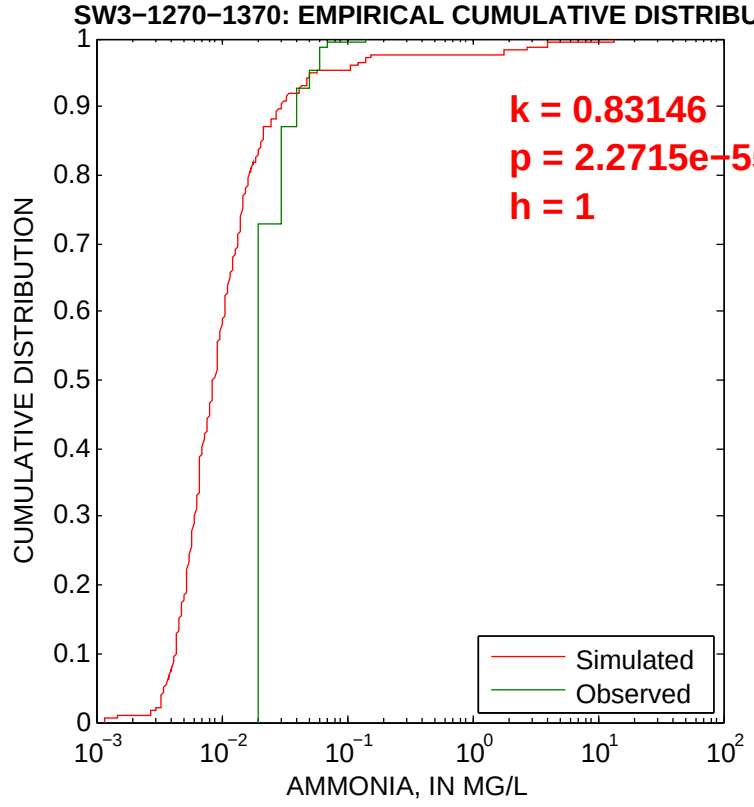
STATISTICS

		observe	simulate
n		10952	10952
min		1.8	0.19084
		0.255273	-0.719331
mean		462.851	466.496
		2.32458	2.38222
media		232	296.375
		2.36549	2.47184
max		16400	14074
		4.21484	4.14842
varian		531963	422237
		0.333533	0.347163
JB		0.001	0.001
		0.001	0.001
		ra	log
%		0.787658	2.47924
err.va		152237	0.110498
rel.std.err		0.286181	0.331297
mod.eff		0.713819	0.668703

VERSION 2.1







DATA SELECTION

scenario	file
P620171001WQ	NH3X.calib

plot: NH3X - ammonia

Dates: 1/1/1985 – 12/31/201

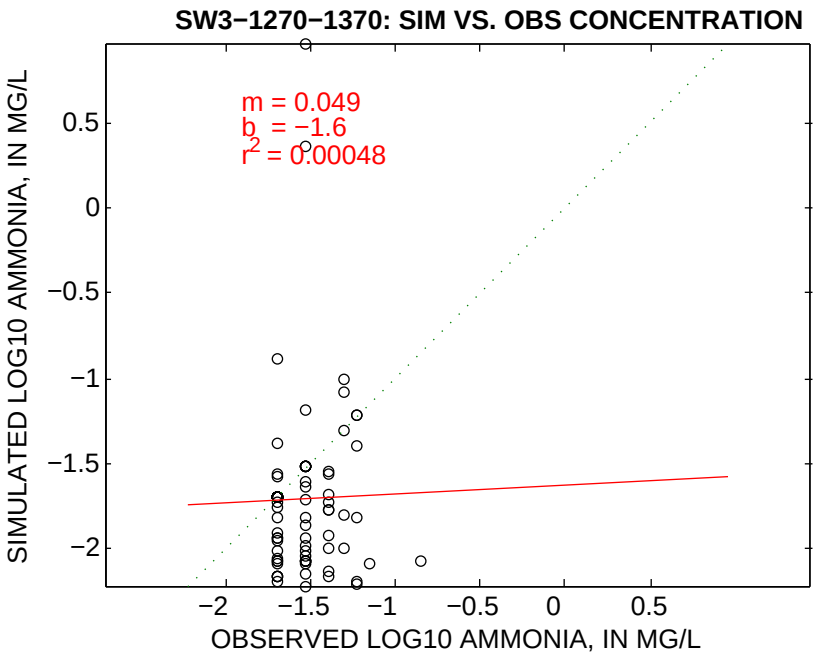
Drive	Directory	Observed
N/A	model	OBS20161101

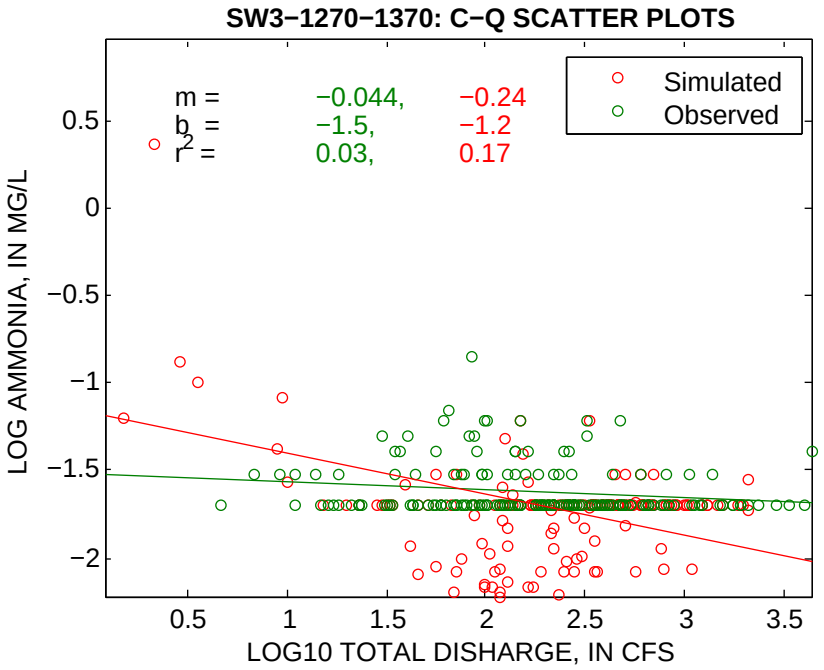
STATISTICS

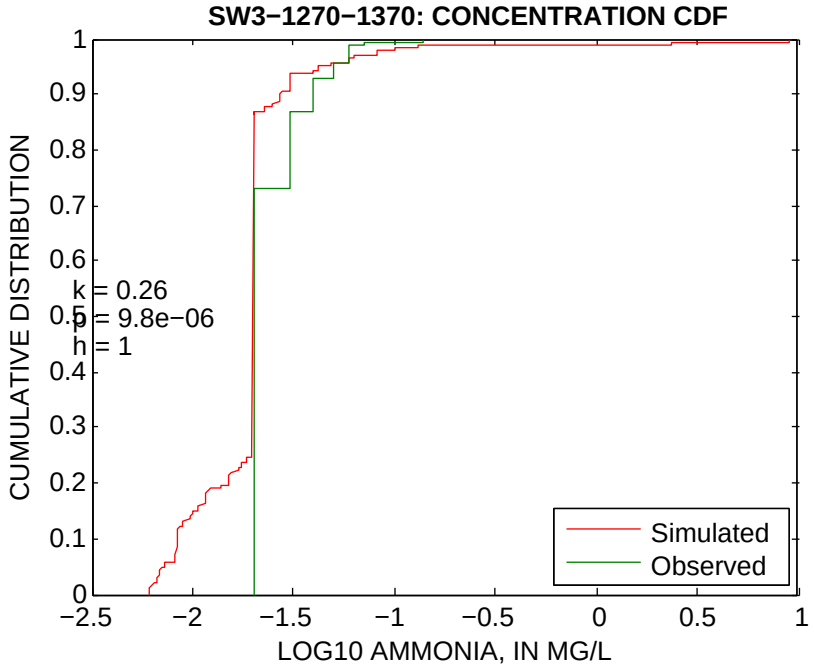
		observe	simulate
n		178	178
min		0.02	0.0011863
		-1.69897	-2.92581
mean		0.0256742	0.139024
		-1.62226	-1.9592
media		0.02	0.0088662
		-1.69897	-2.05238
max		0.14	13.661
		-0.853872	1.13548
varian		0.00017948	1.18965
		0.0214794	0.266561
JB		0.001	0.001
		0.001	0.001
		ra	log
%		441.492	20.77
err.va		1.2015	0.379014
rel.std.err		6694.1	17.6455
mod.eff		-6693.1	-16.6455

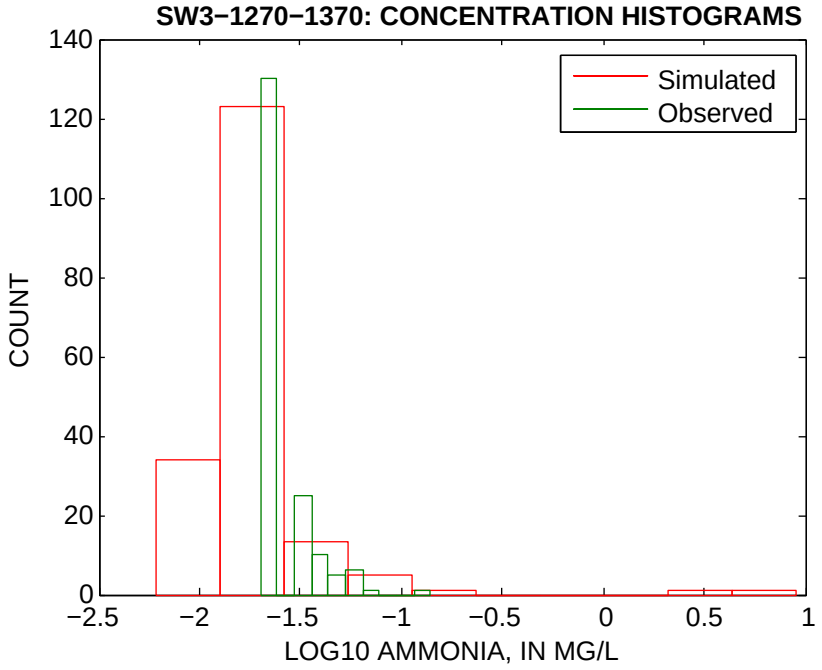
VERSION 2.1

ALL DATA
LOG10

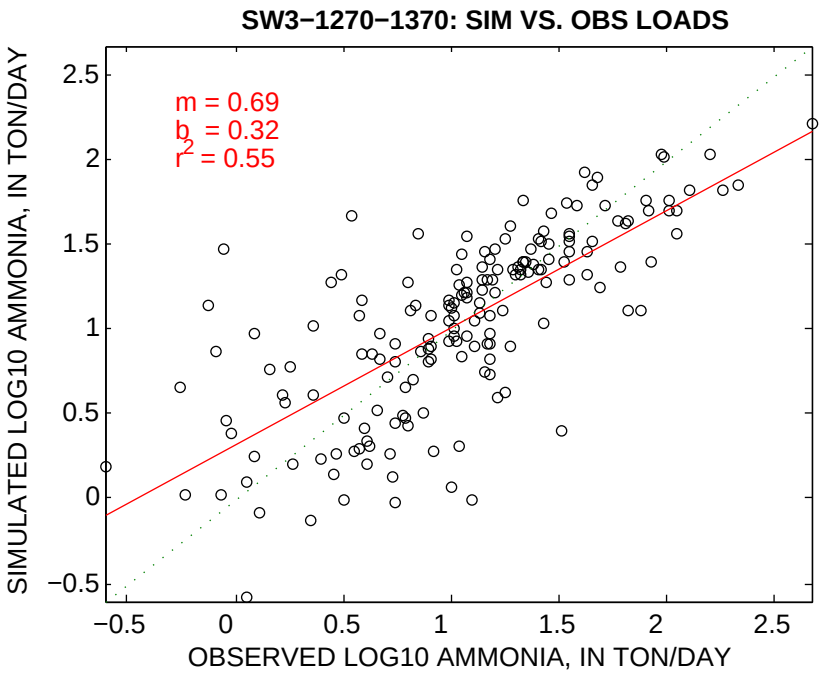


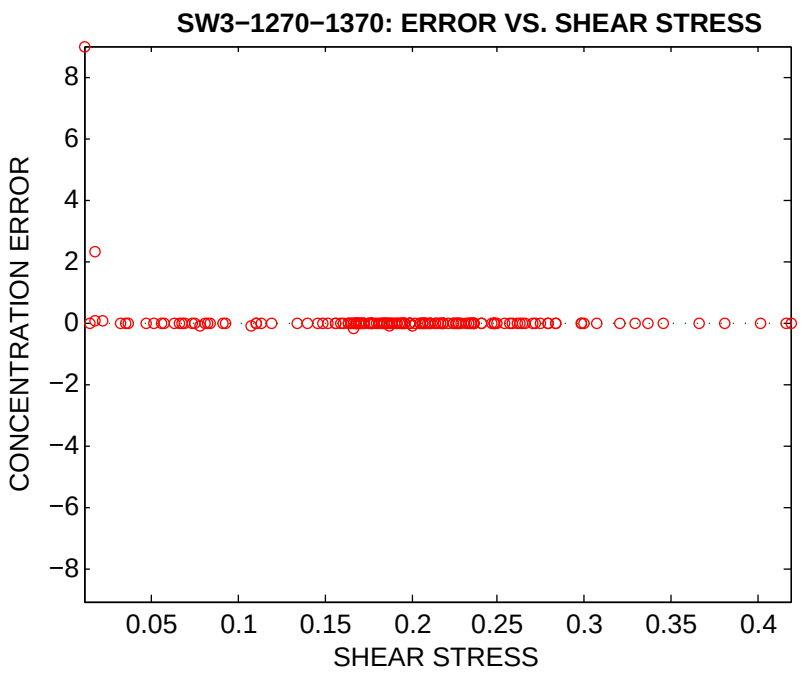


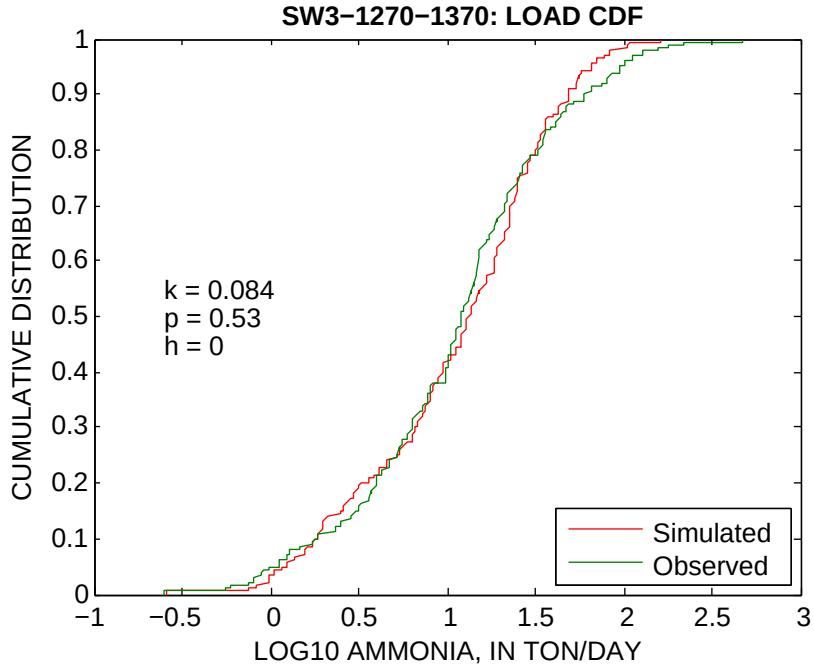


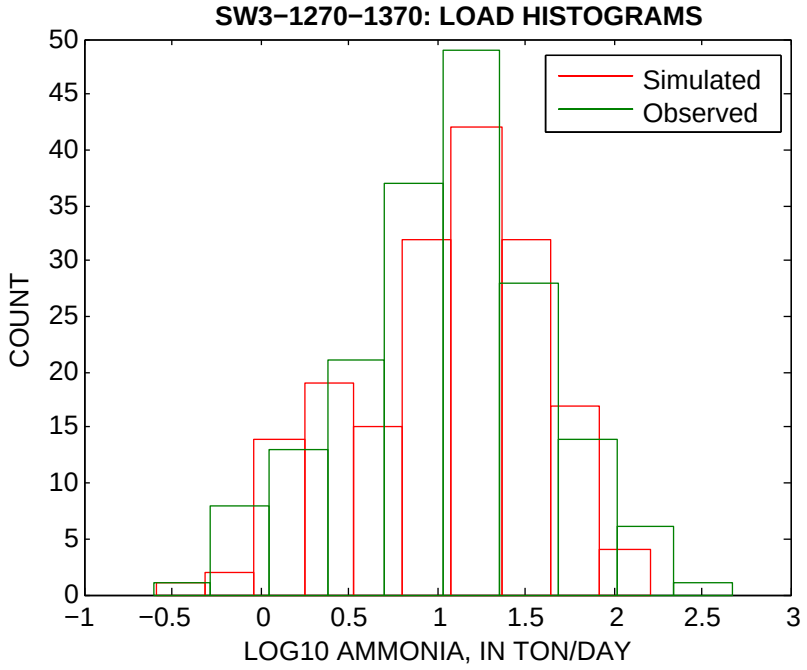


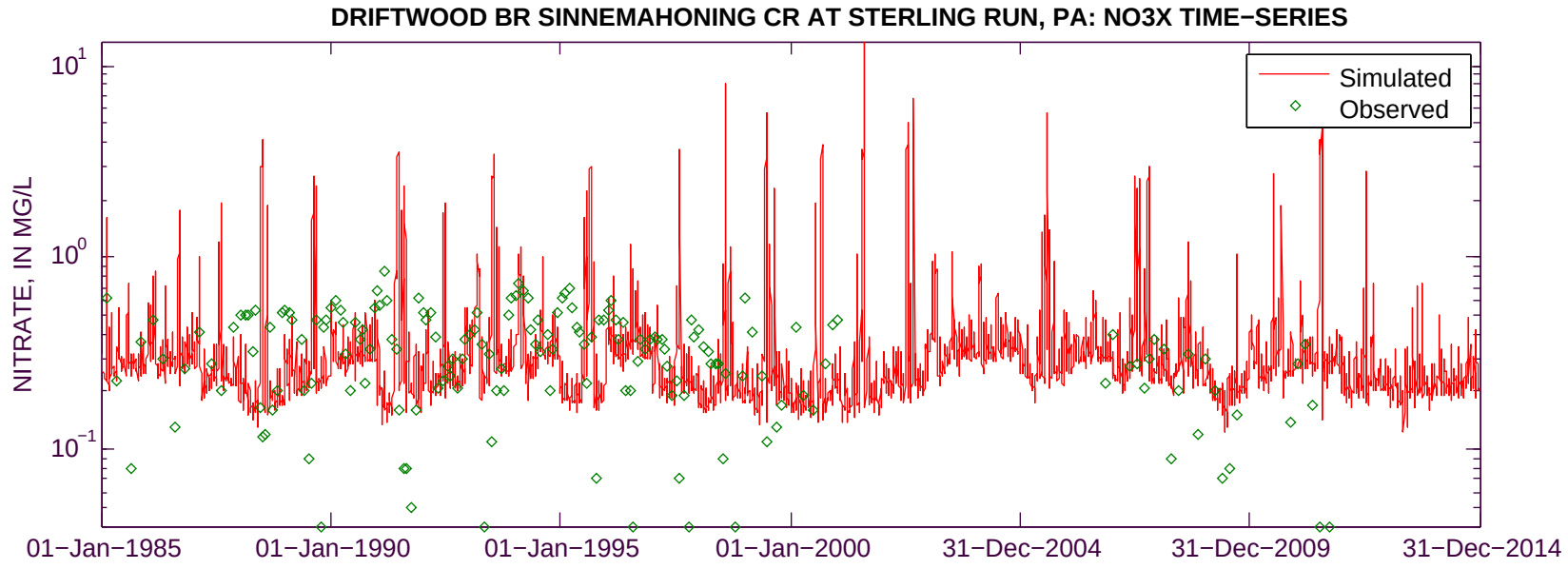
LOAD DATA
LOG10

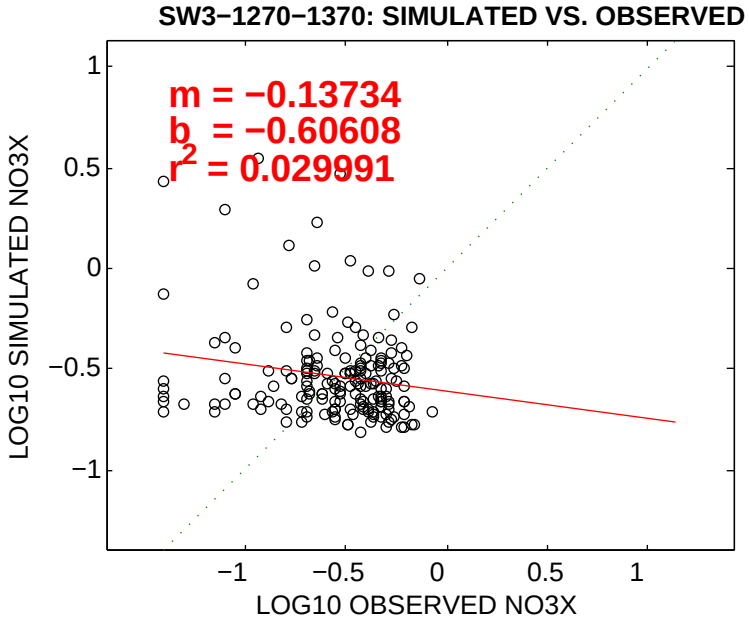


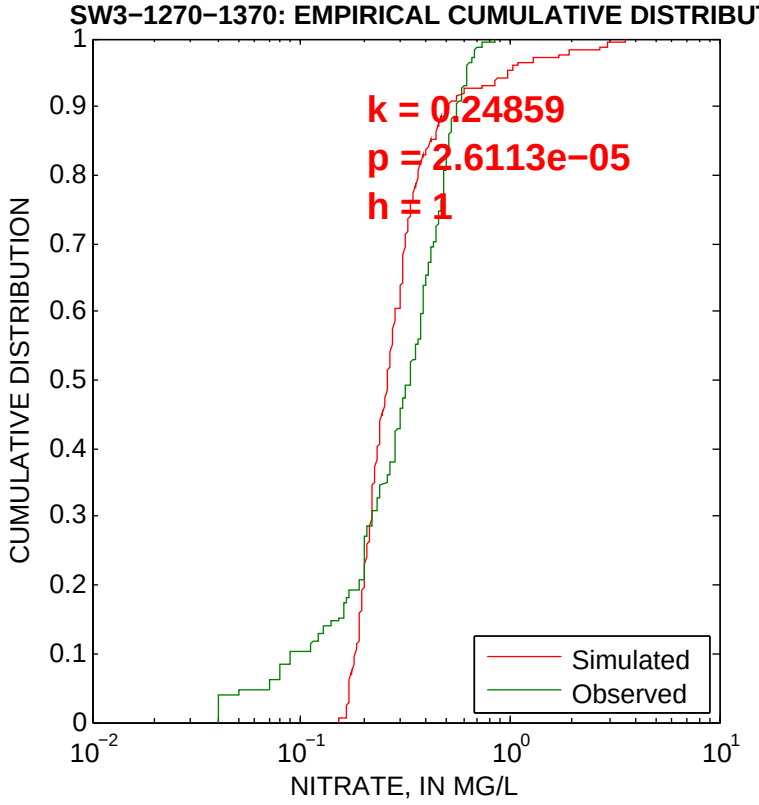












DATA SELECTION

scenario: P620171001WQ | file: NO3X.calib

plot: NO3X - nitrate

Dates: 1/1/1985 – 12/31/201

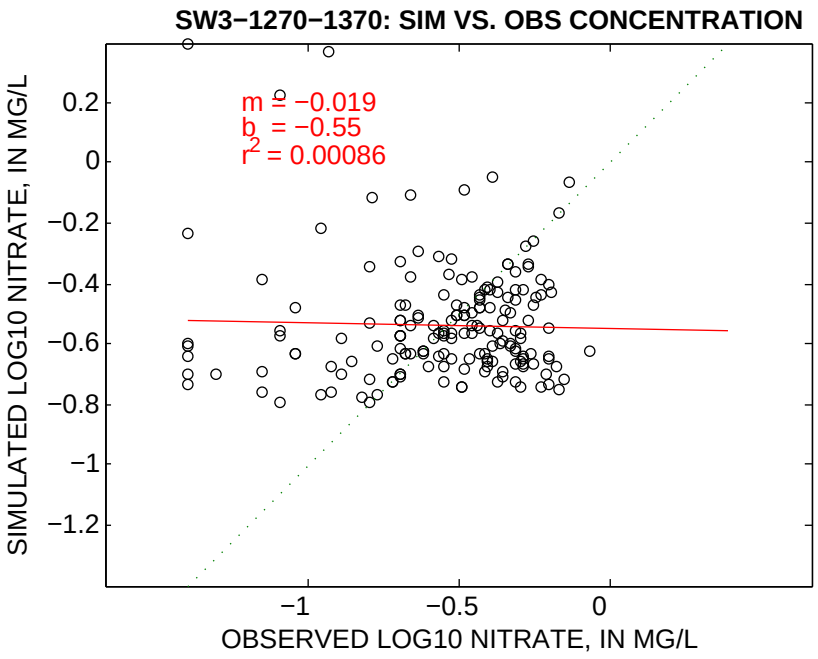
Drive: N/A | Directory: model | Observed: OBS20161101

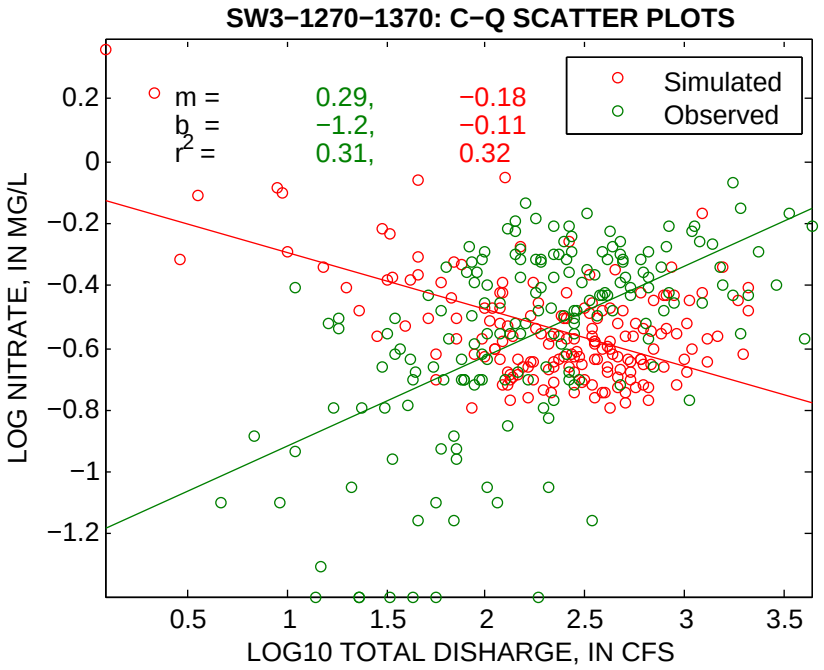
STATISTICS

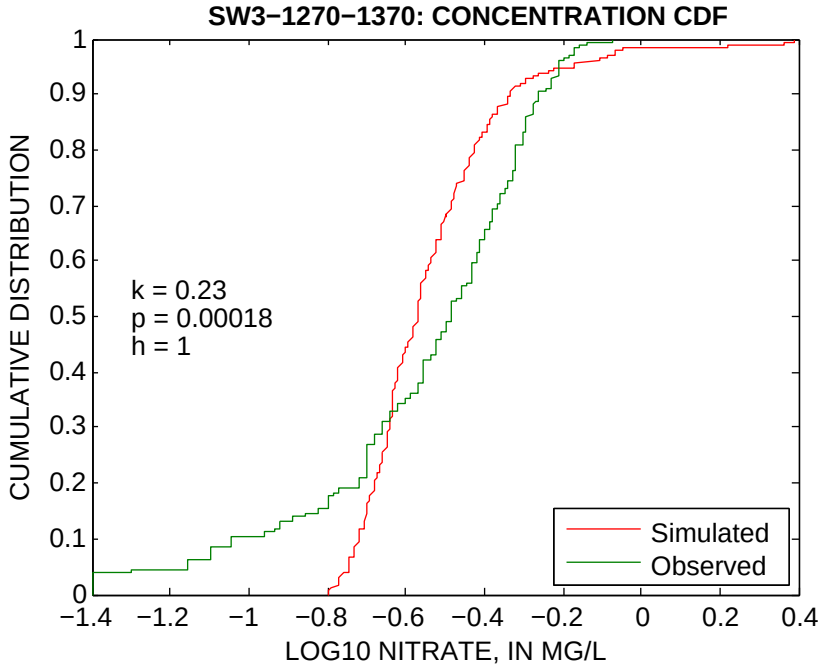
	n	177	177
		observe	simulate
min		0.04	0.15278
		-1.39794	-0.815933
mean		0.33435	0.370752
		-0.5551	-0.529844
media		0.33	0.25925
		-0.481486	-0.586281
max		0.85	3.5556
		-0.0705811	0.550913
varian		0.0293869	0.184388
		0.0886089	0.0557264
JB		0.11702	0.001
		0.001	0.001
		ra	log
%		10.8872	-4.54987
err.va		0.240885	0.169315
rel.std.err		8.19702	1.91082
mod.eff		-7.19702	-0.910816

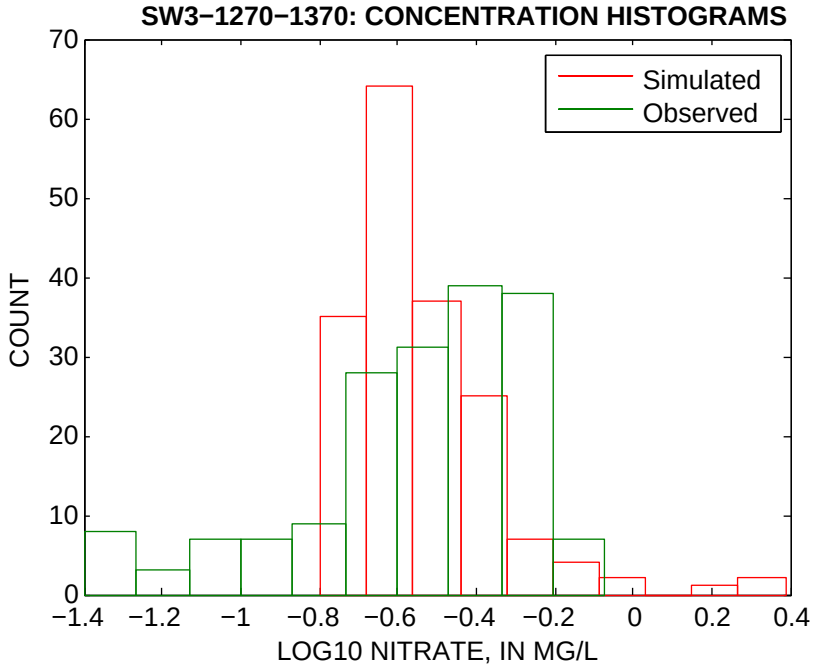
VERSION 2.1

ALL DATA
LOG10

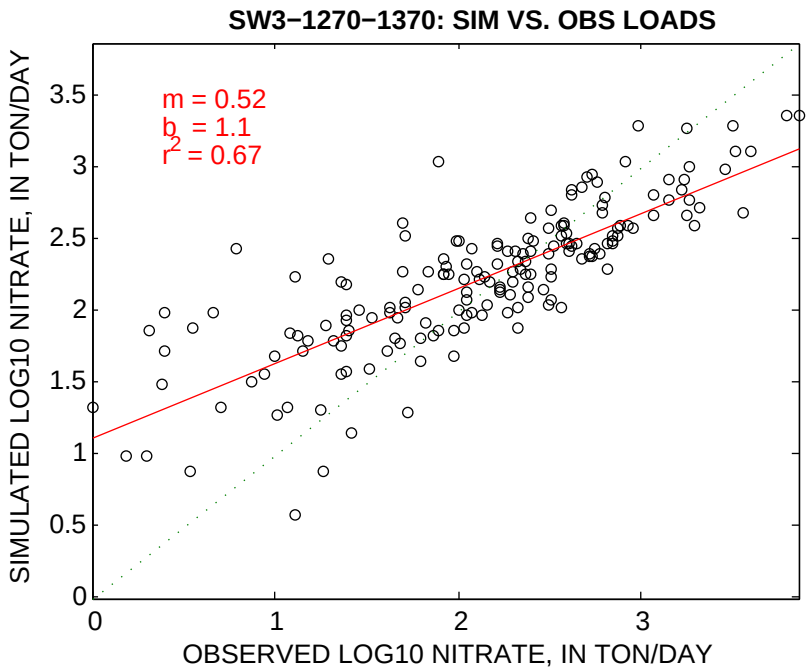


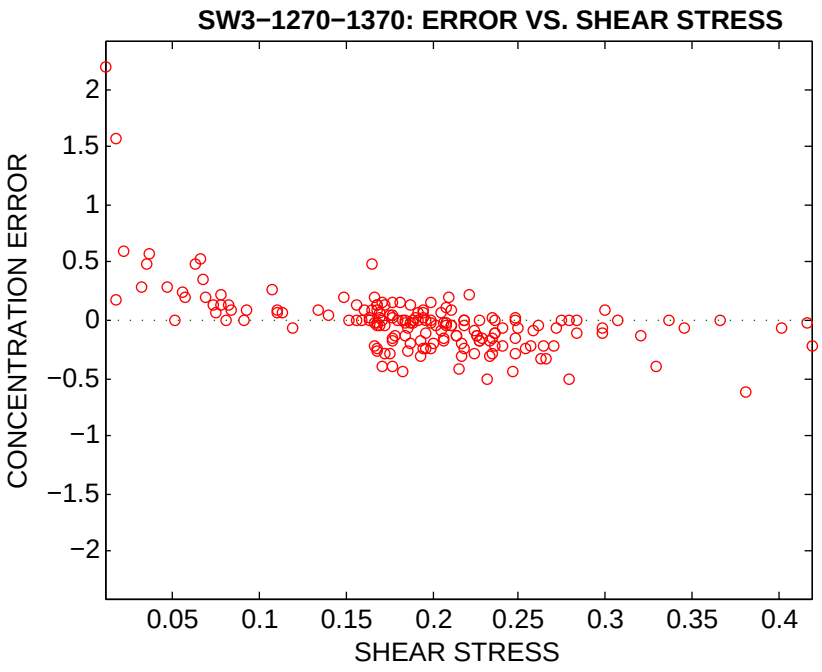


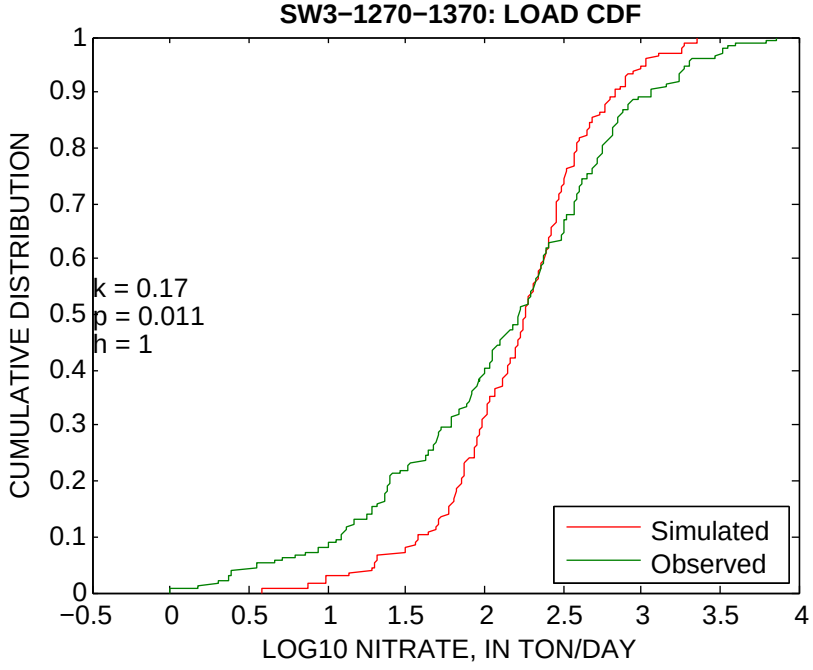


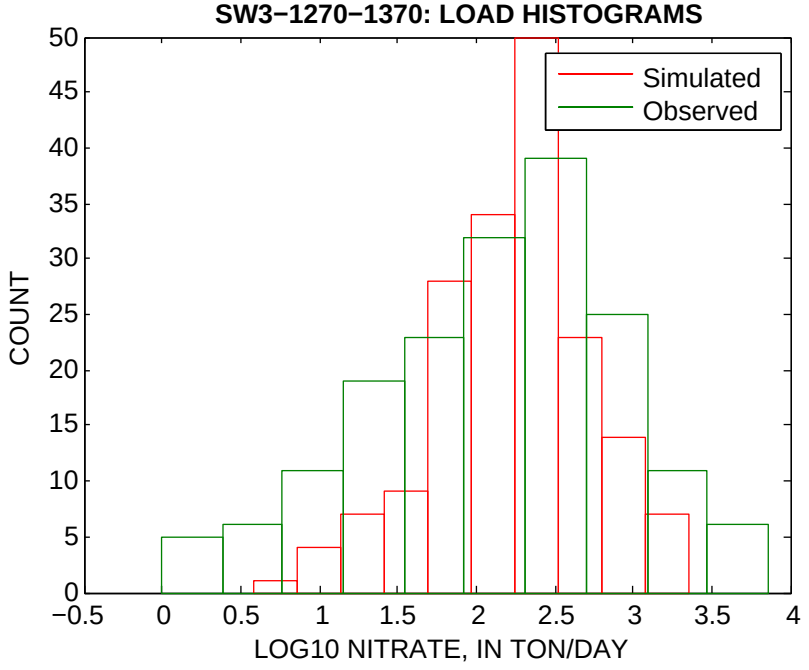


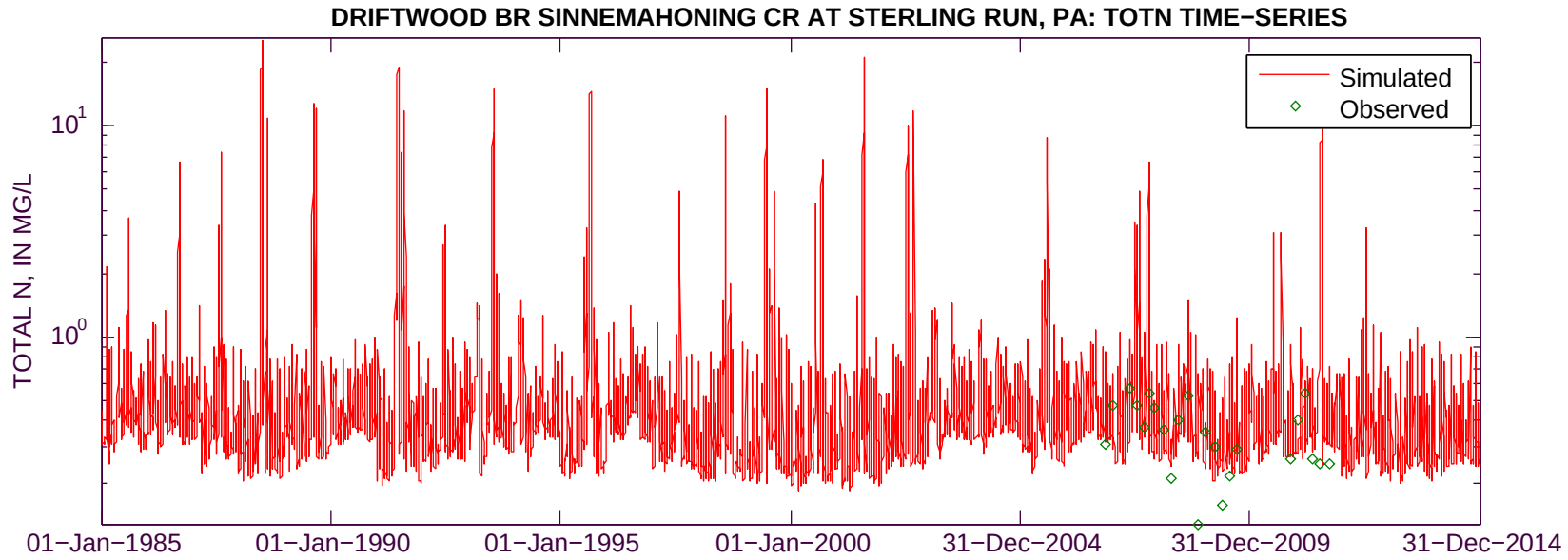
LOAD DATA
LOG10

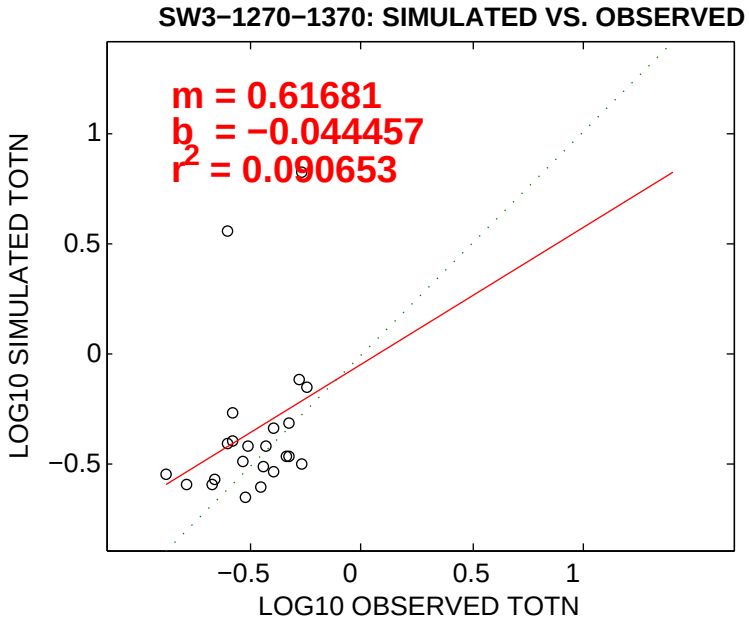


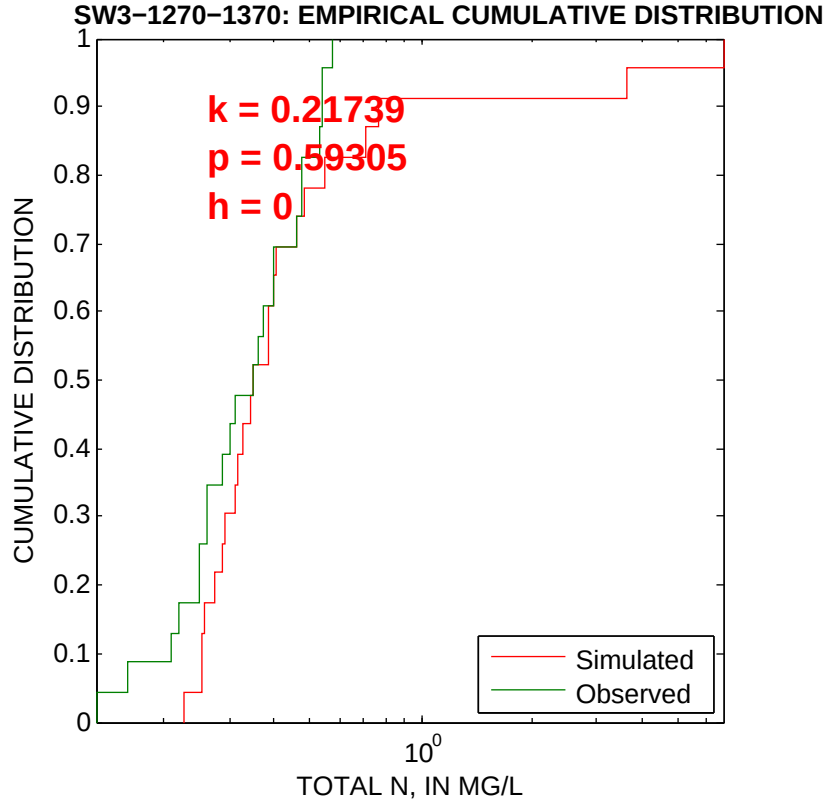












DATA SELECTION

scenario	file
P620171001WQ	TOTN.calib

plot: TOTN - total nitrogen

Dates 1/1/1985 12/31/201

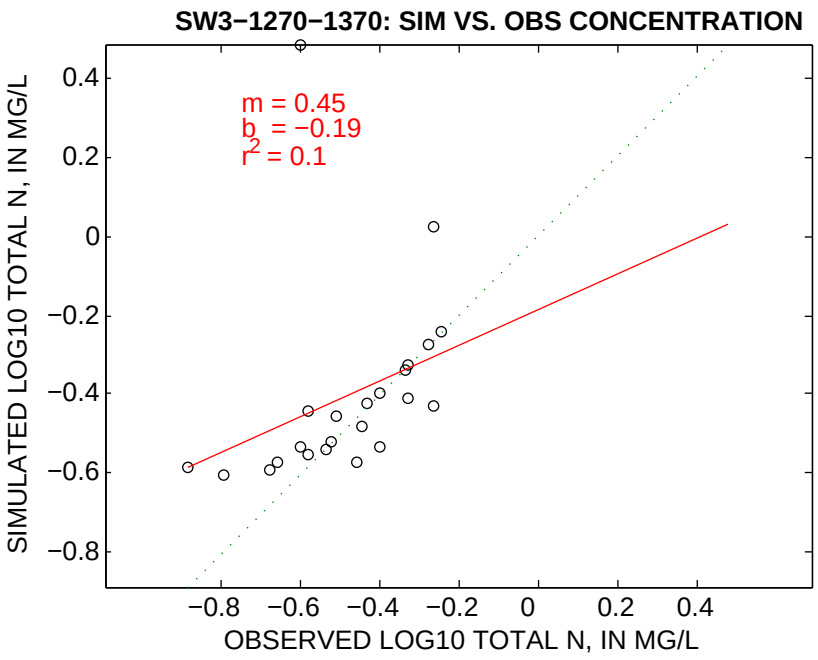
Drive	Directory	Observed
N/A	model	OBS20161101

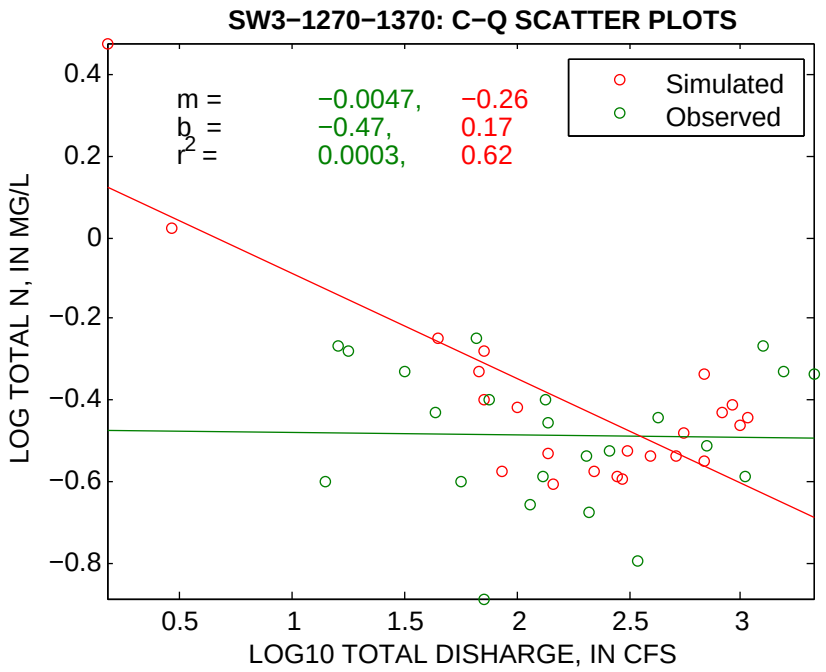
STATISTICS

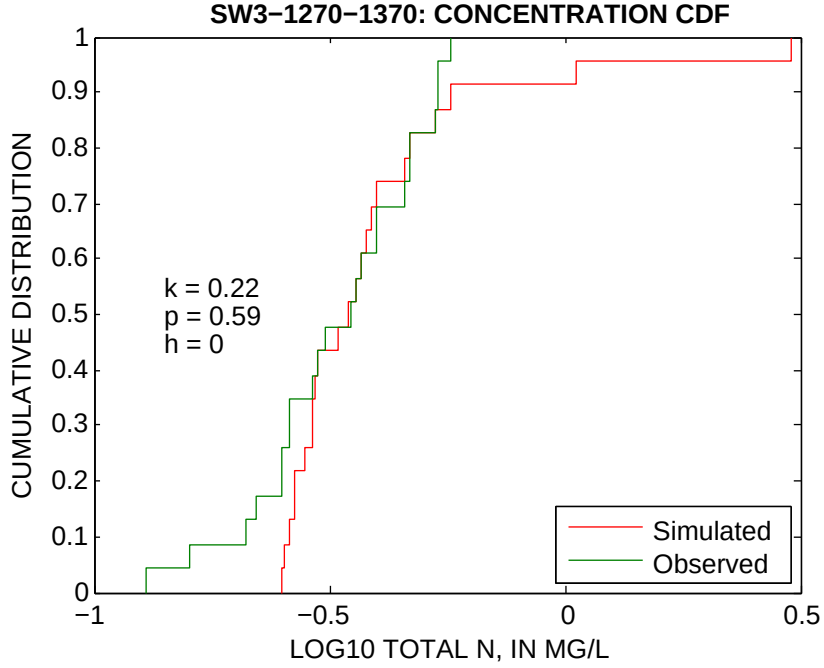
	n	23	23
		observe	simulate
min		0.13	0.2268
		-0.886057	-0.644357
mean		0.352174	0.796193
		-0.484174	-0.343101
media		0.35	0.34872
		-0.455932	-0.457523
max		0.57	6.6498
		-0.244125	0.822809
varian		0.0165542	2.10317
		0.0302123	0.126797
JB		0.362305	0.001
		0.363544	0.001
		ra	log
%		126.08	-29.1368
err.va		2.2306	0.140545
rel.std.err		134.746	4.6519
mod.eff		-133.746	-3.6519

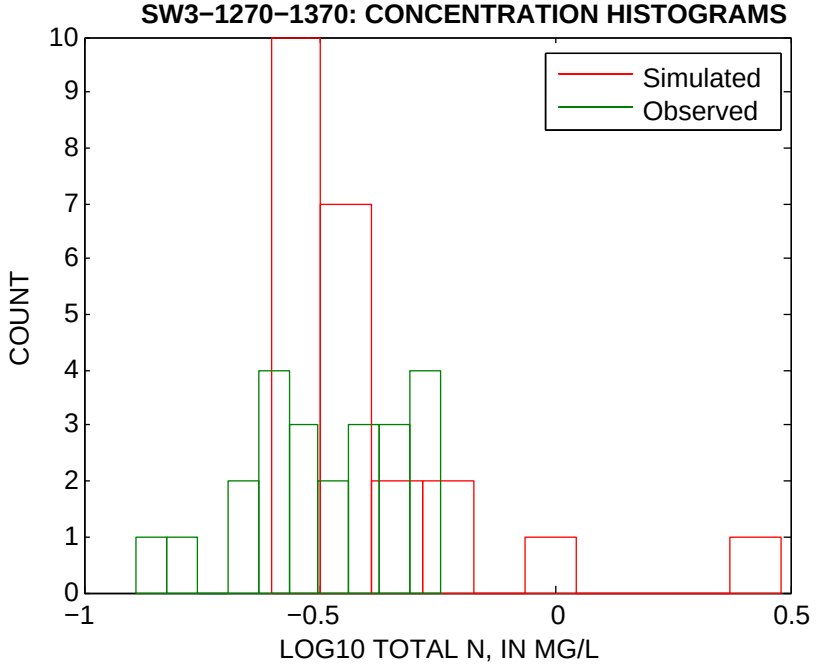
VERSION

ALL DATA
LOG10

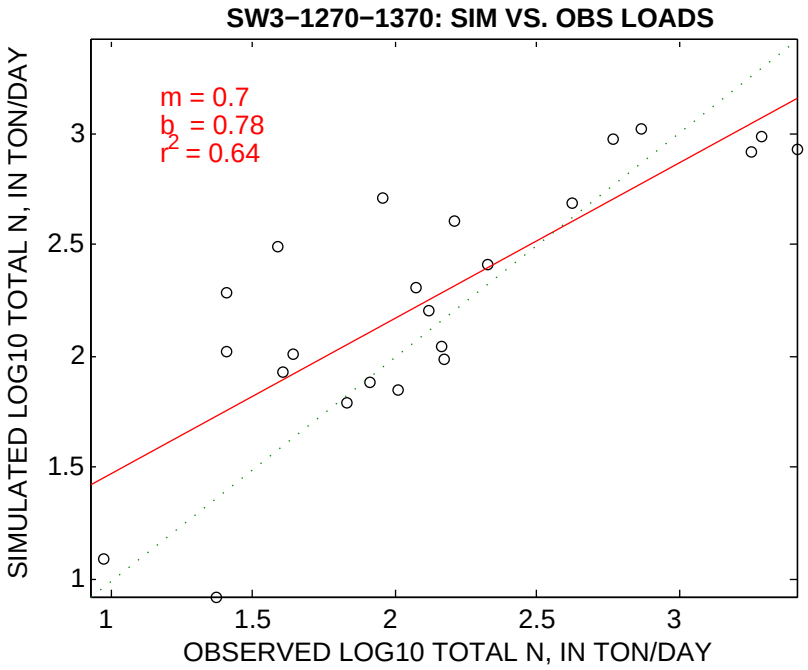


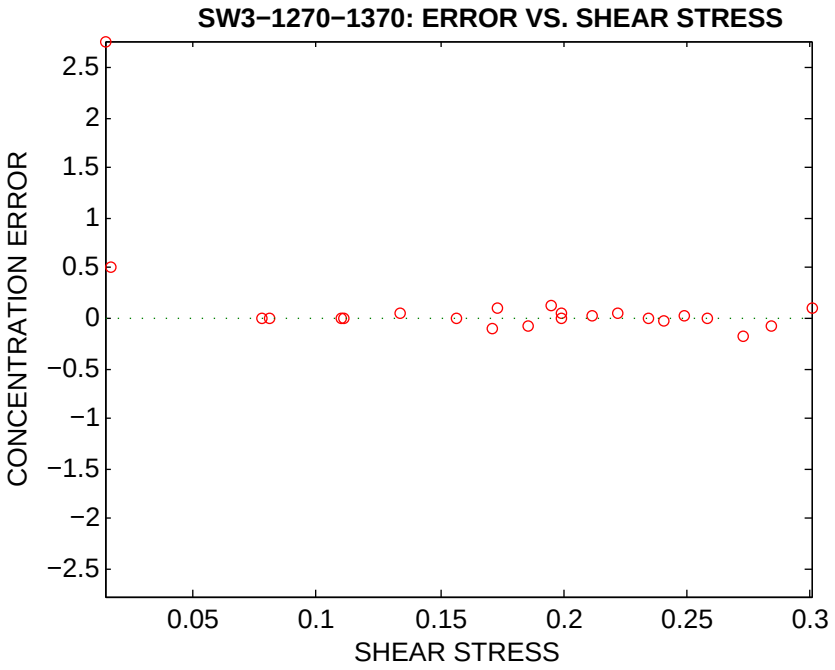


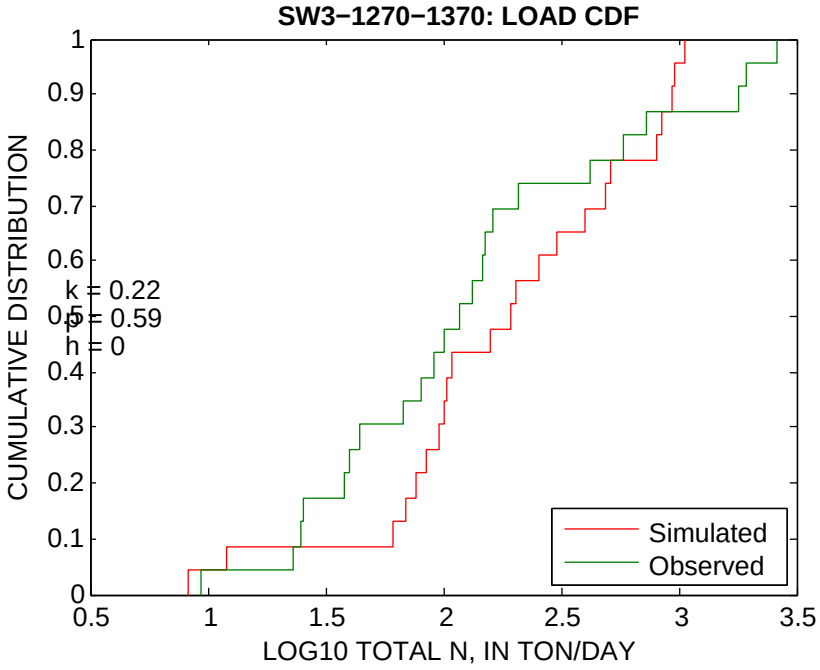


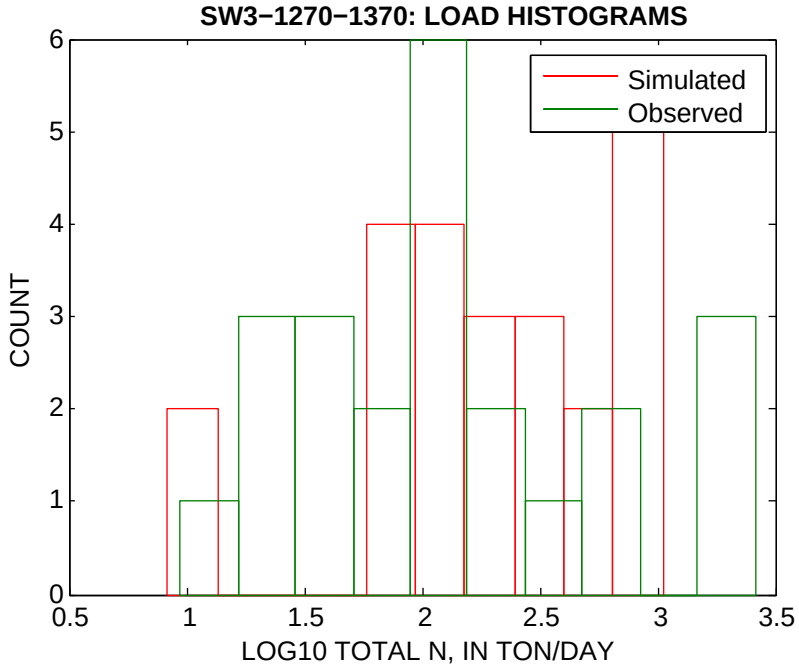


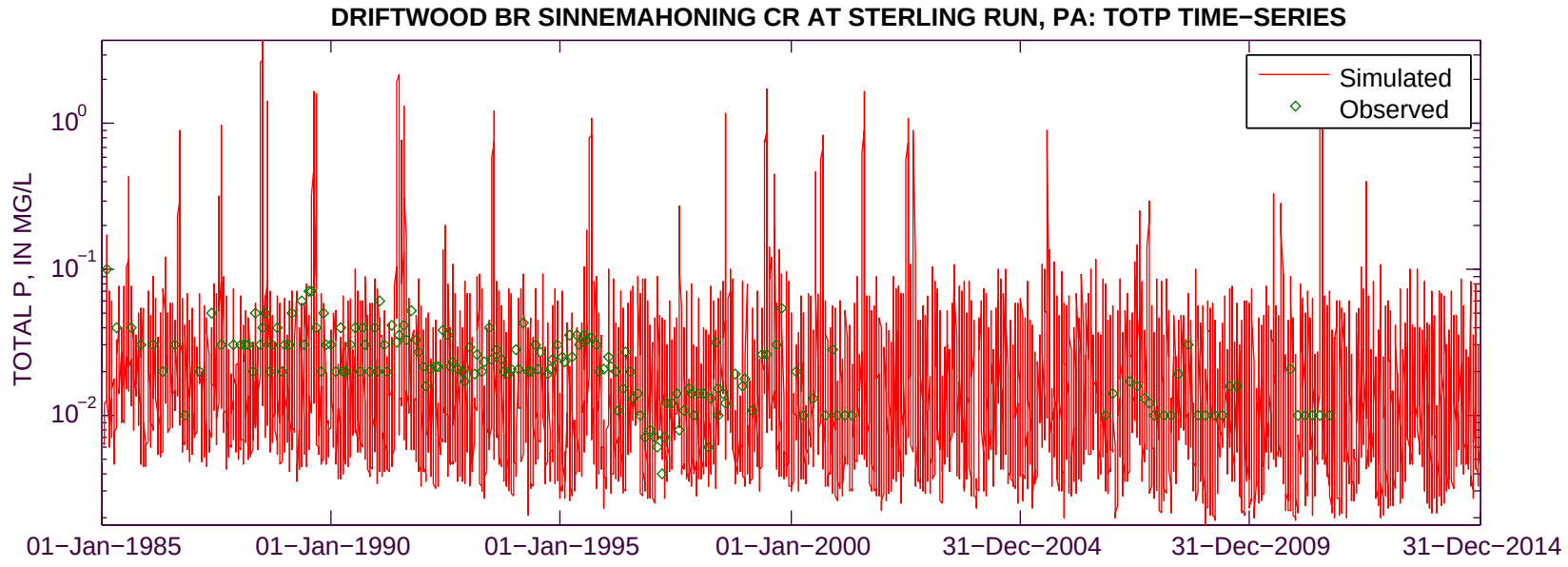
LOAD DATA
LOG10

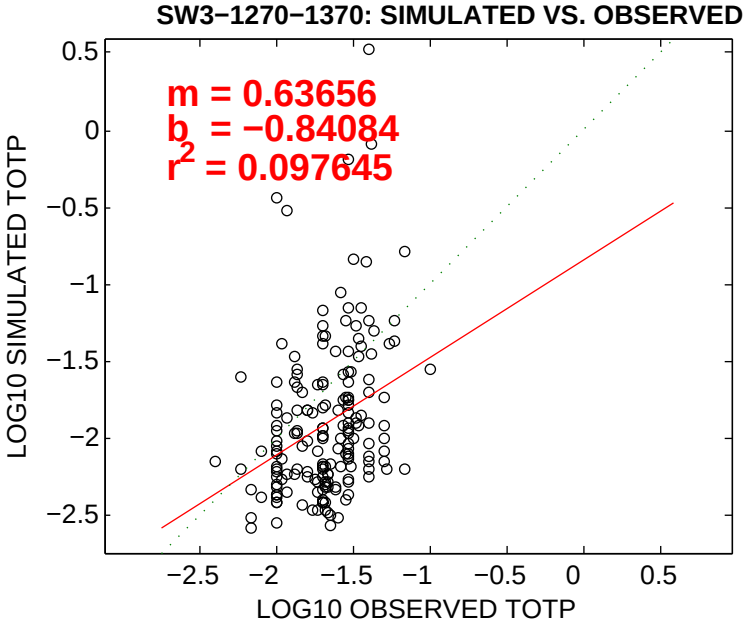


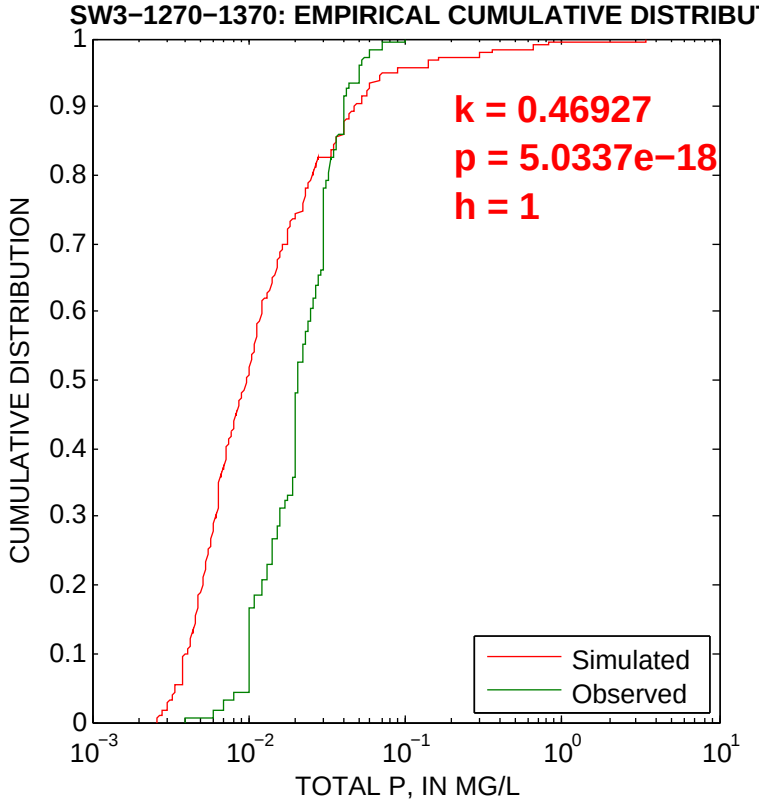












DATA SELECTION

scenario: P620171001WQ | file: TOTP.calib

plot: TOTP - total phosphorus

Dates: 1/1/1985 – 12/31/201

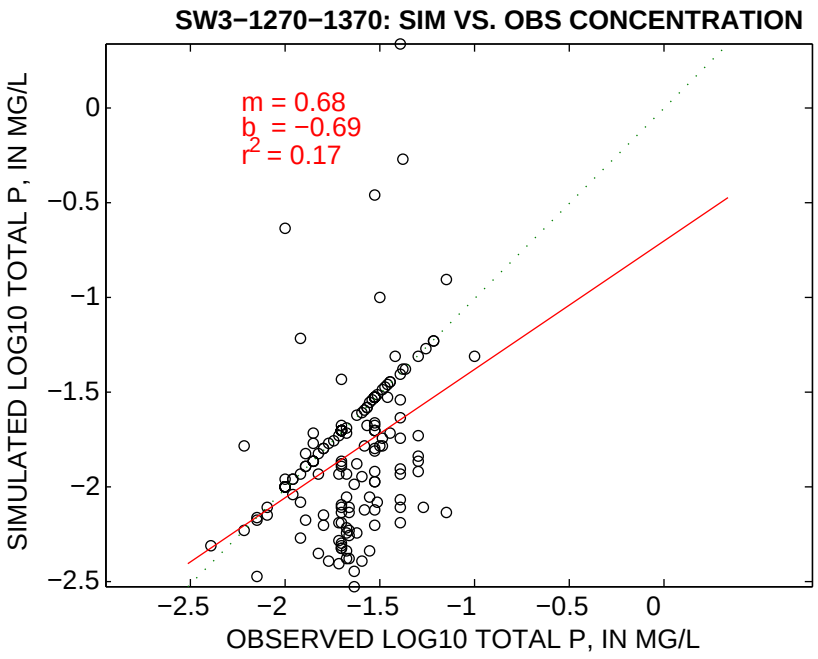
Drive: N/A | Directory: model | Observed: OBS20161101

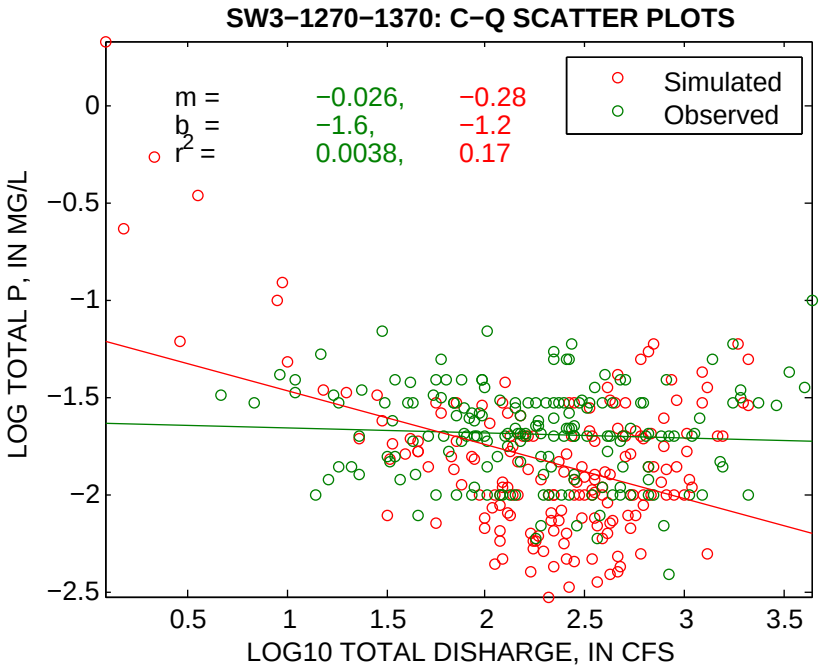
STATISTICS

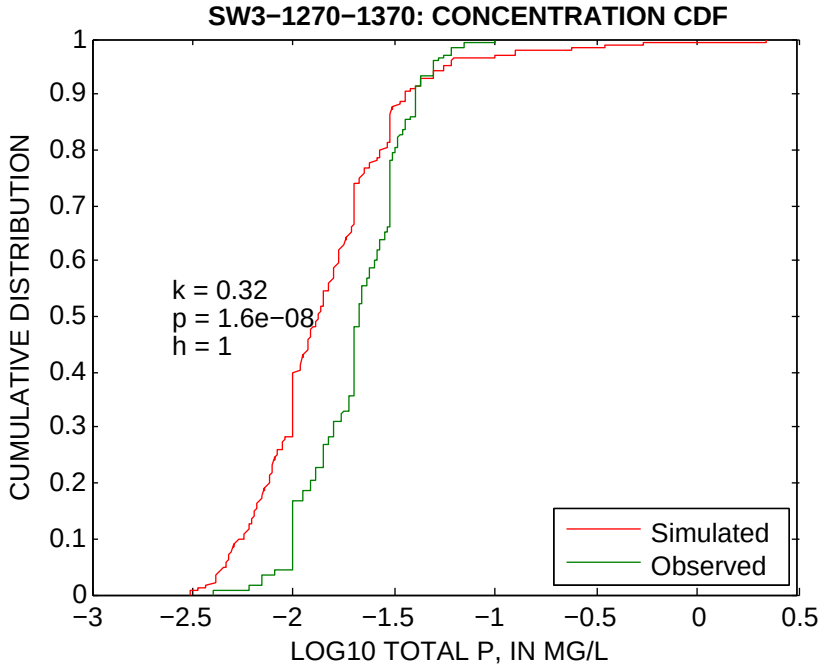
		observe	simulate
n		179	179
min		0.004	0.0026101
		-2.39794	-2.58334
mean		0.0243687	0.0478076
		-1.67724	-1.90851
media		0.021	0.0097444
		-1.67778	-2.01124
max		0.1	3.3832
		-1	0.529328
varian		0.00019071	0.0700615
		0.0578589	0.240103
JB		0.001	0.001
		0.5	0.001
		ra	log
%		96.1841	13.7883
err.va		0.0698916	0.278084
rel.std.err		366.467	4.80625
mod.eff		-365.467	-3.80625

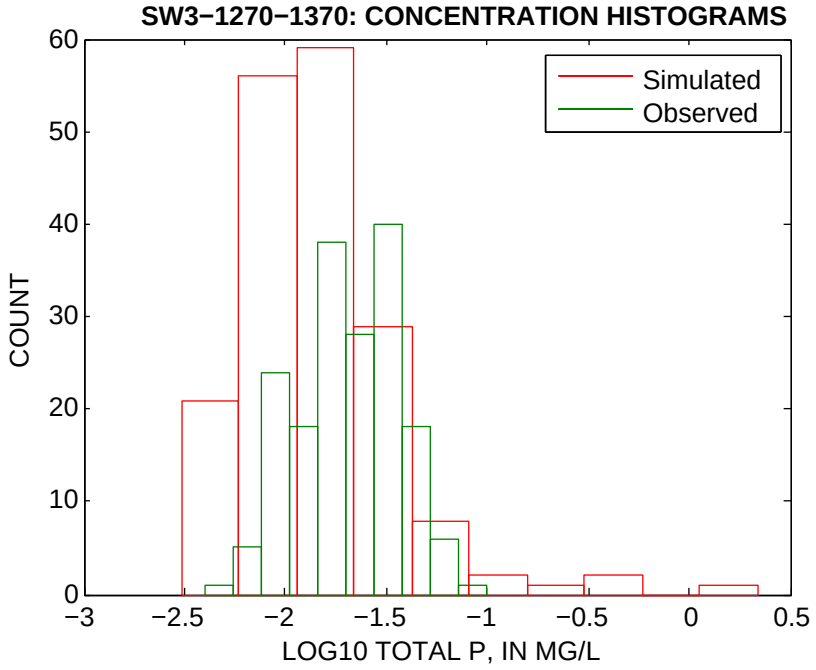
VERSION 2.1

ALL DATA
LOG10

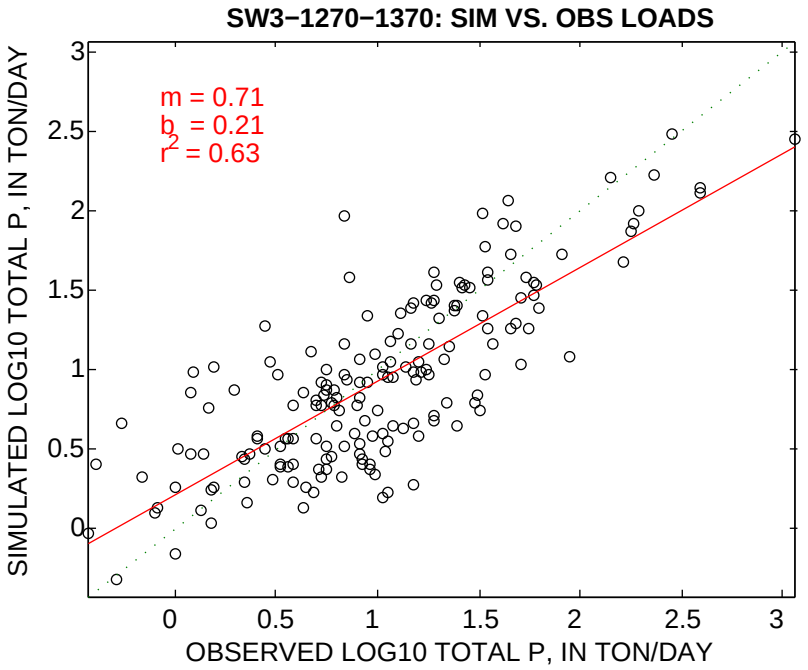


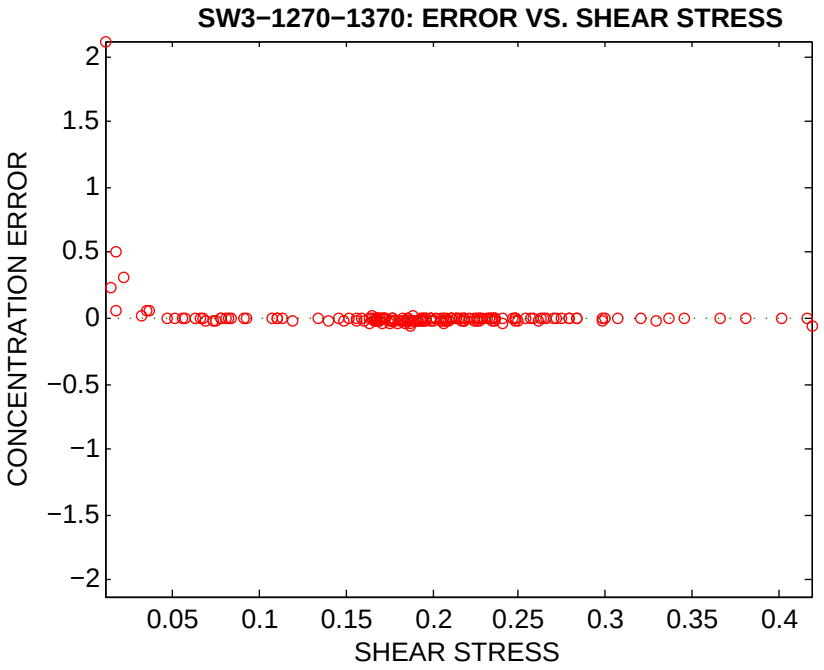


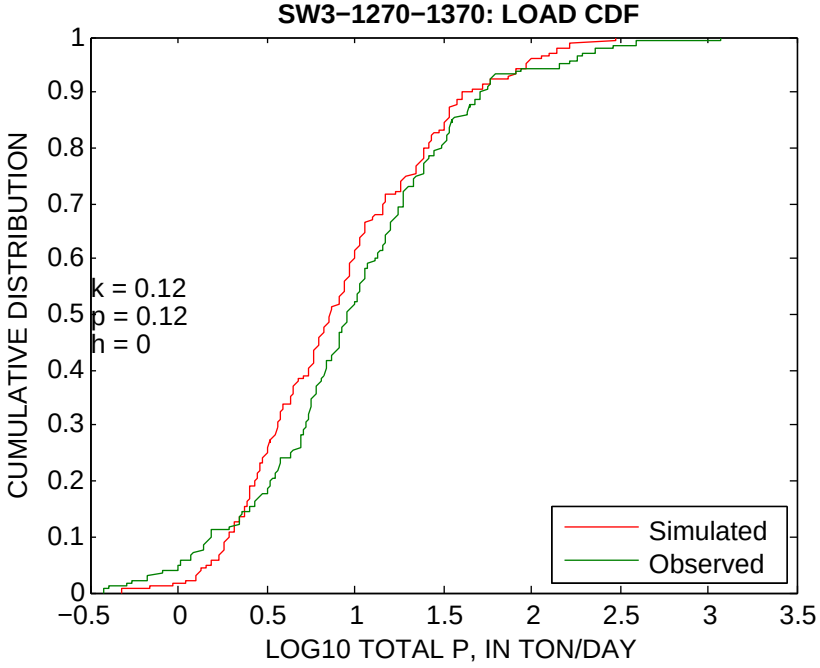


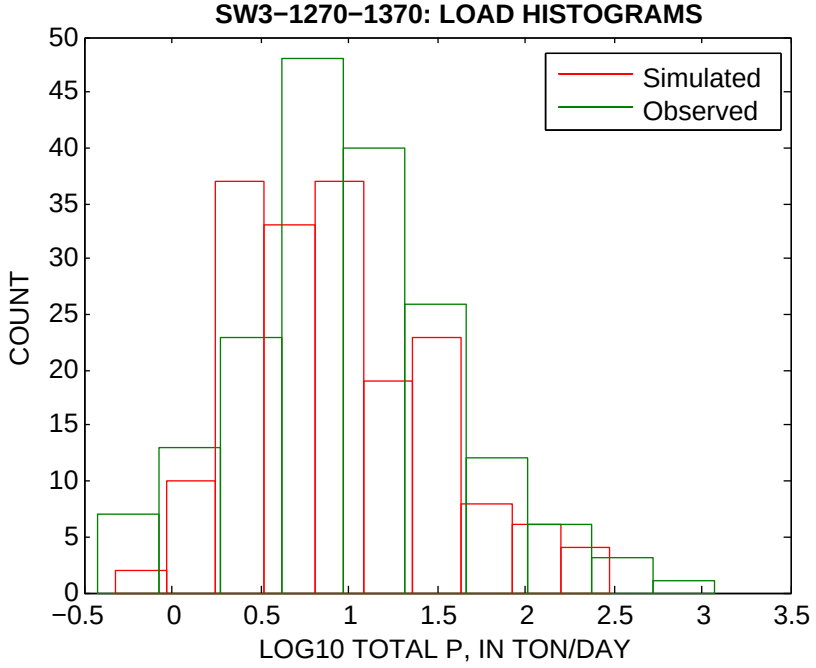


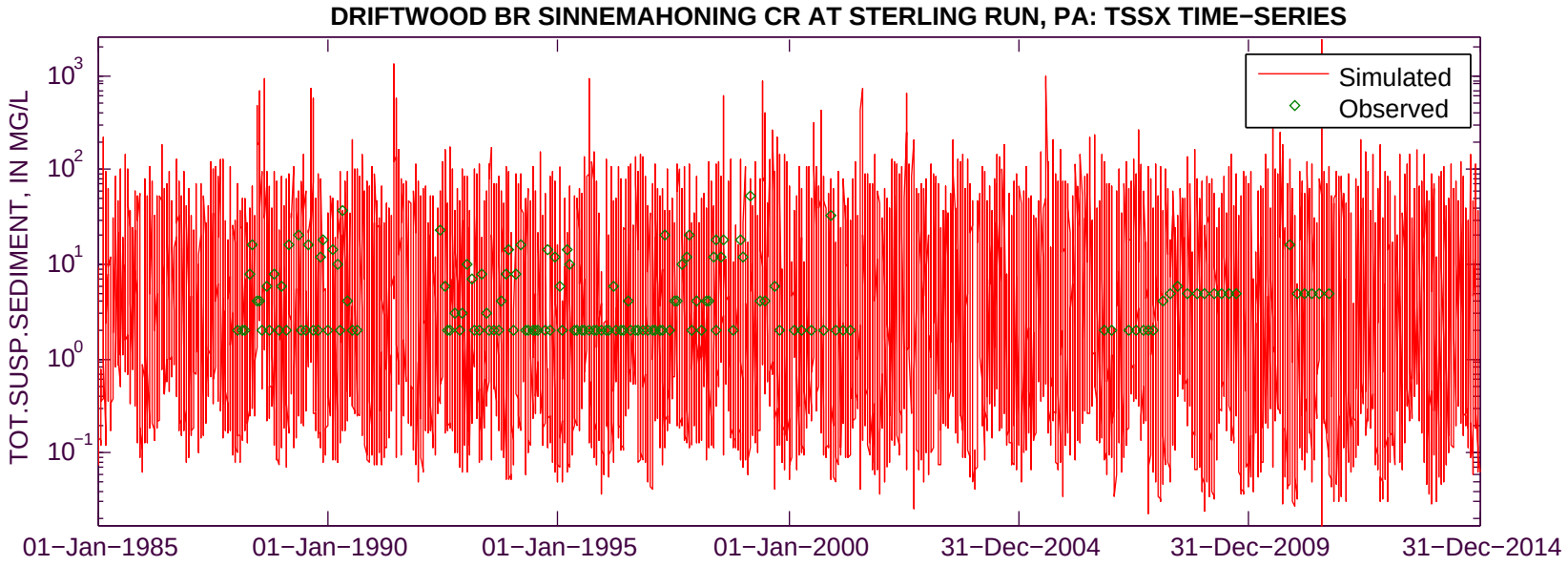
LOAD DATA
LOG10

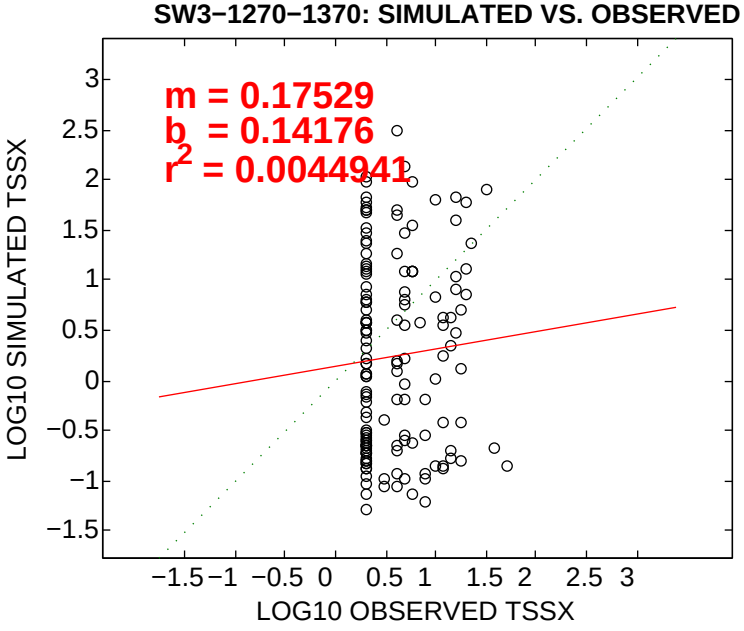


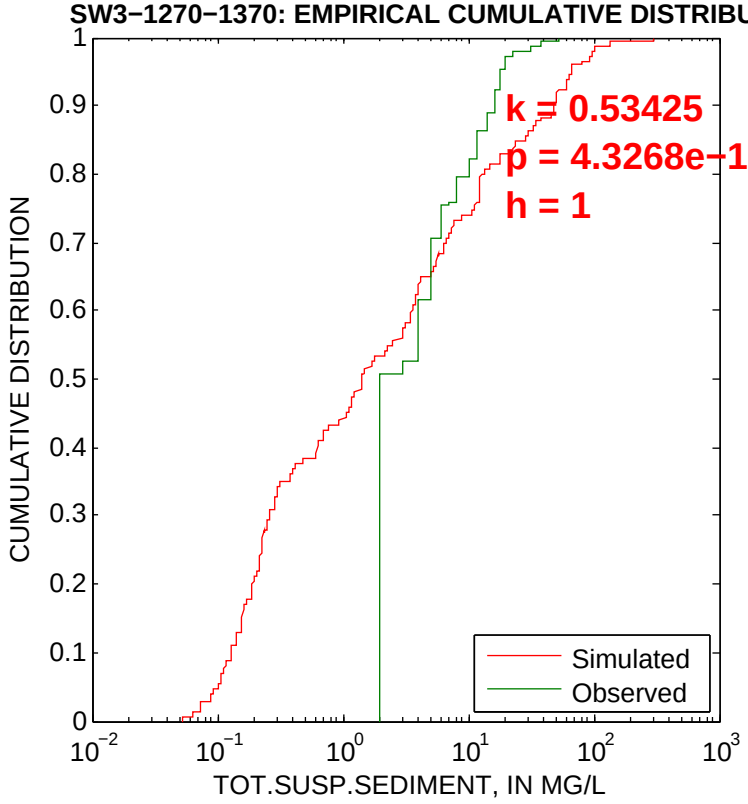












DATA SELECTION

scenario: P620171001WQ | file: TSSX.calib

plot: TSSX - total suspended ...

Dates: 1/1/1985 – 12/31/201

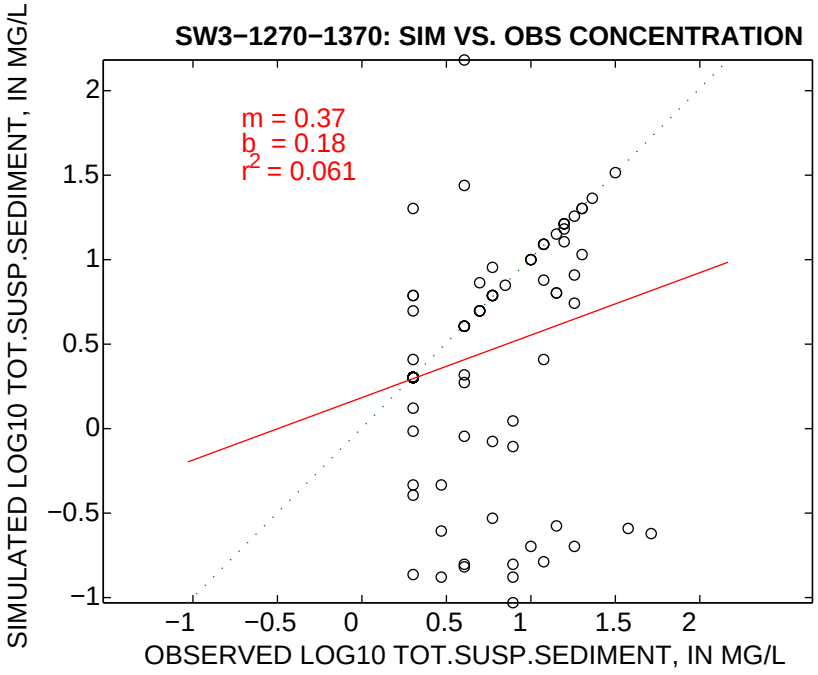
Drive: N/A | Directory: model | Observed: OBS20161101

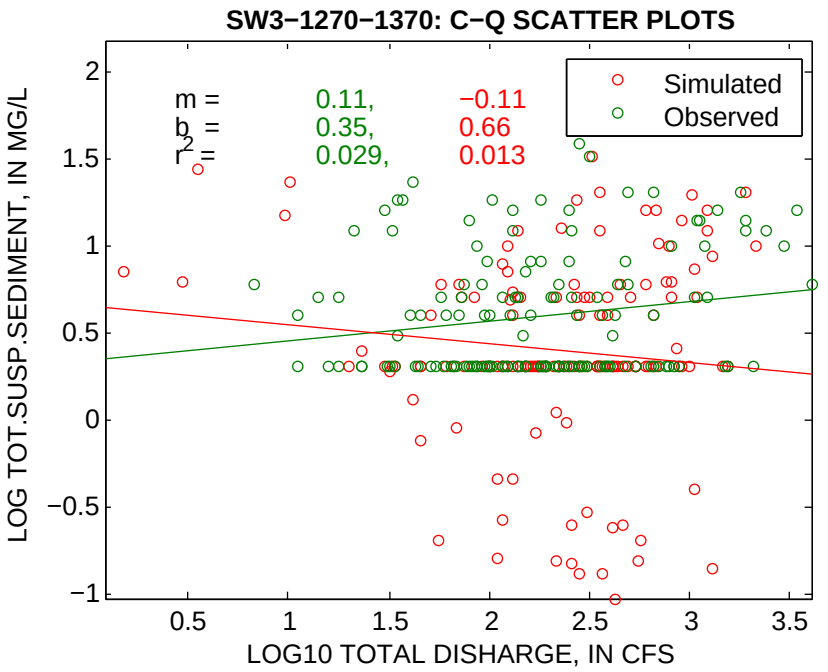
STATISTICS

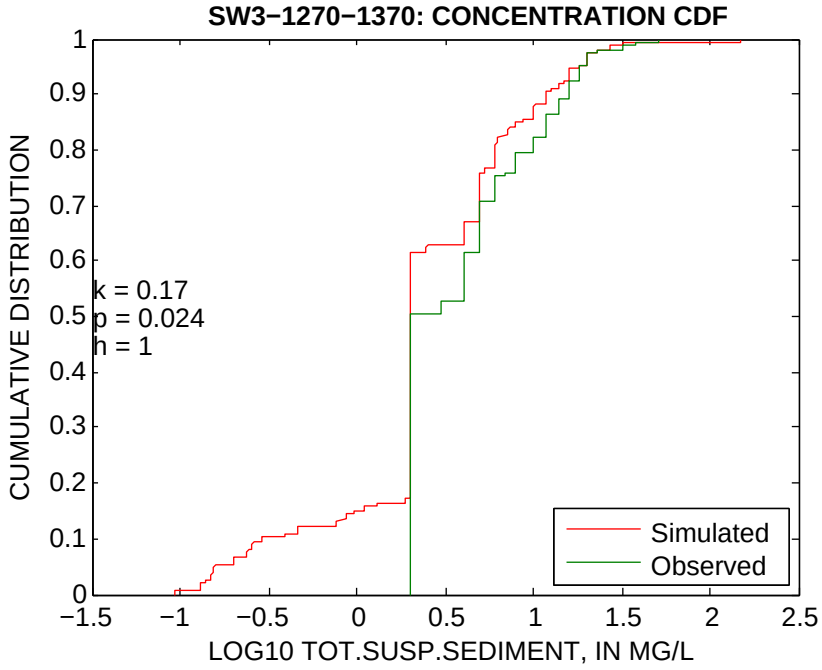
		observe	simulate
n		146	146
min		2	0.052215
		0.30103	-1.2822
mean		6.08219	13.8089
		0.59997	0.246922
media		2	1.44515
		0.30103	0.159908
max		52	299.93
		1.716	2.47702
varian		52.4208	1112.24
		0.133524	0.91287
JB		0.001	0.001
		0.002434	0.016956
		ra	log
%		127.039	-58.8443
err.va		1211.75	1.12509
rel.std.err		23.1157	8.42612
mod.eff		-22.1157	-7.42612

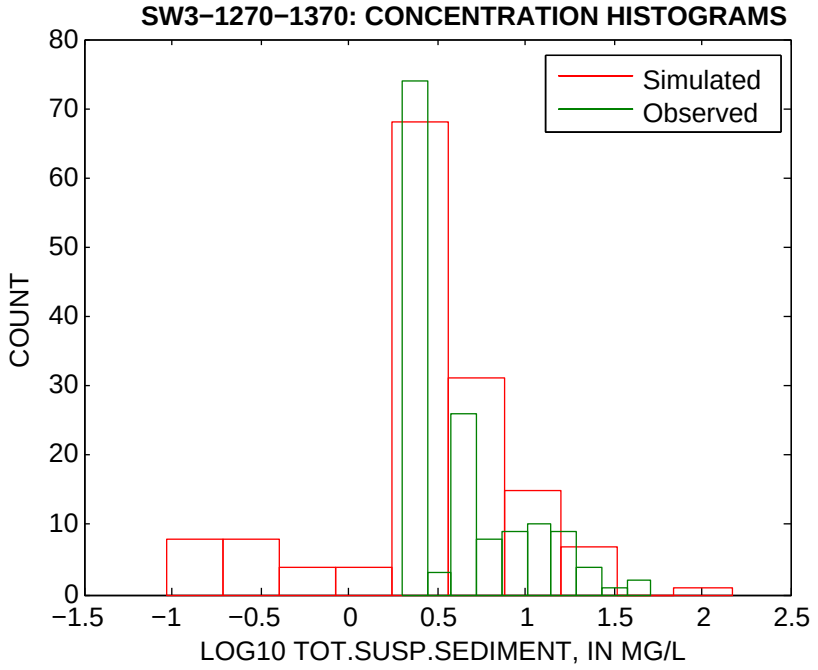
VERSION 2.1

ALL DATA
LOG10

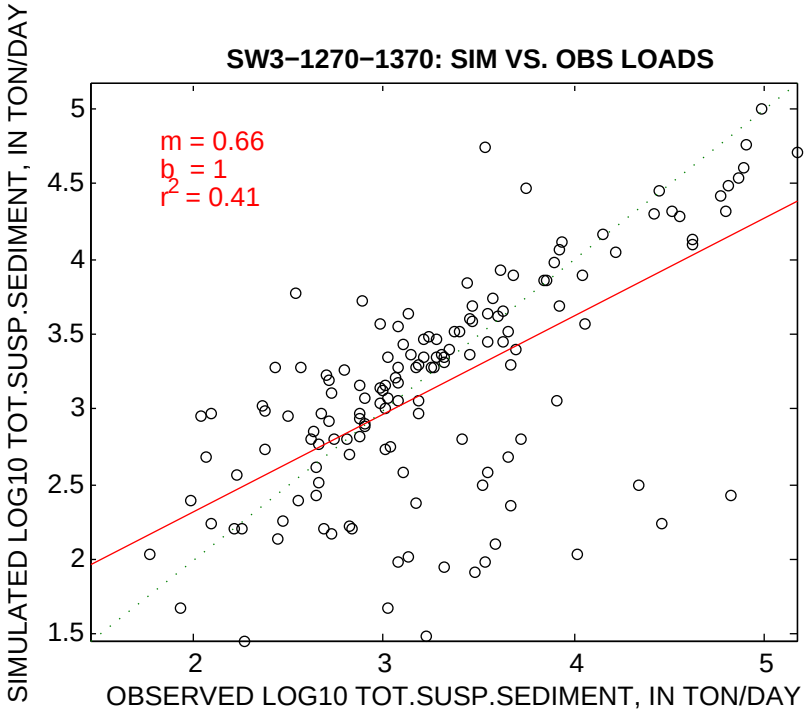


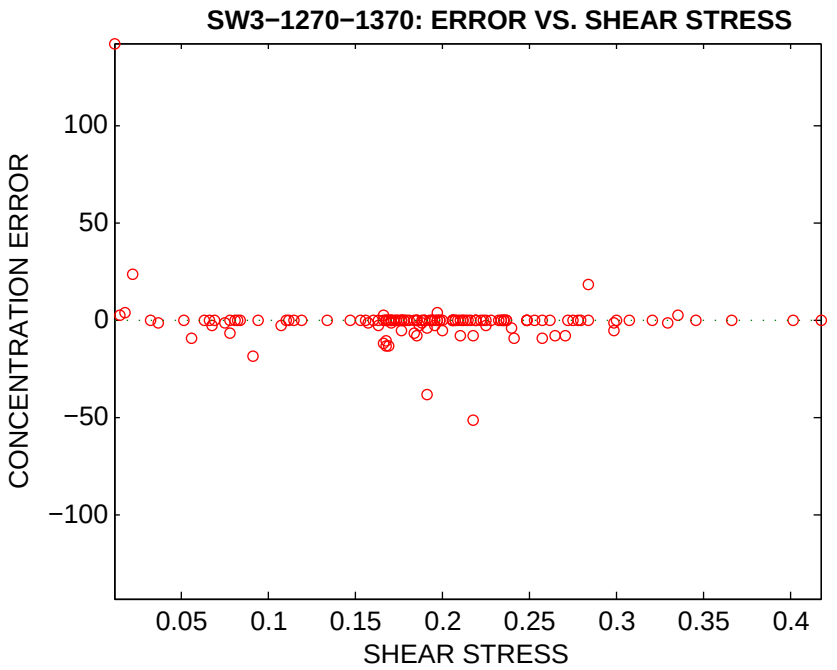


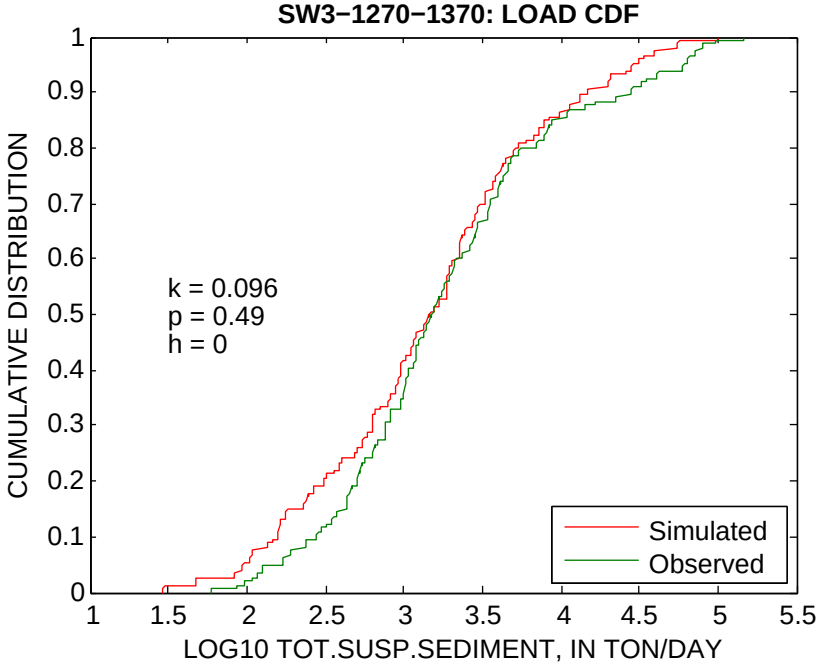


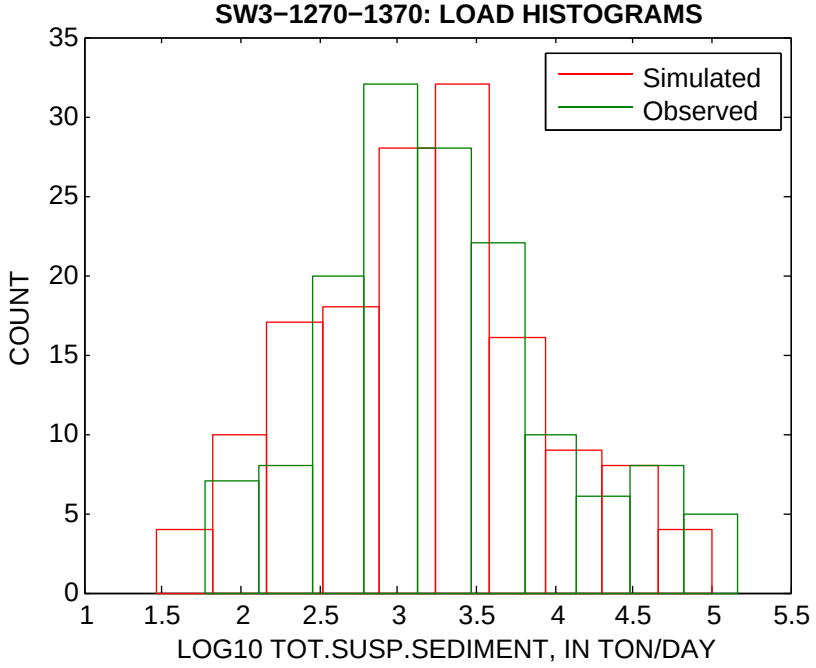


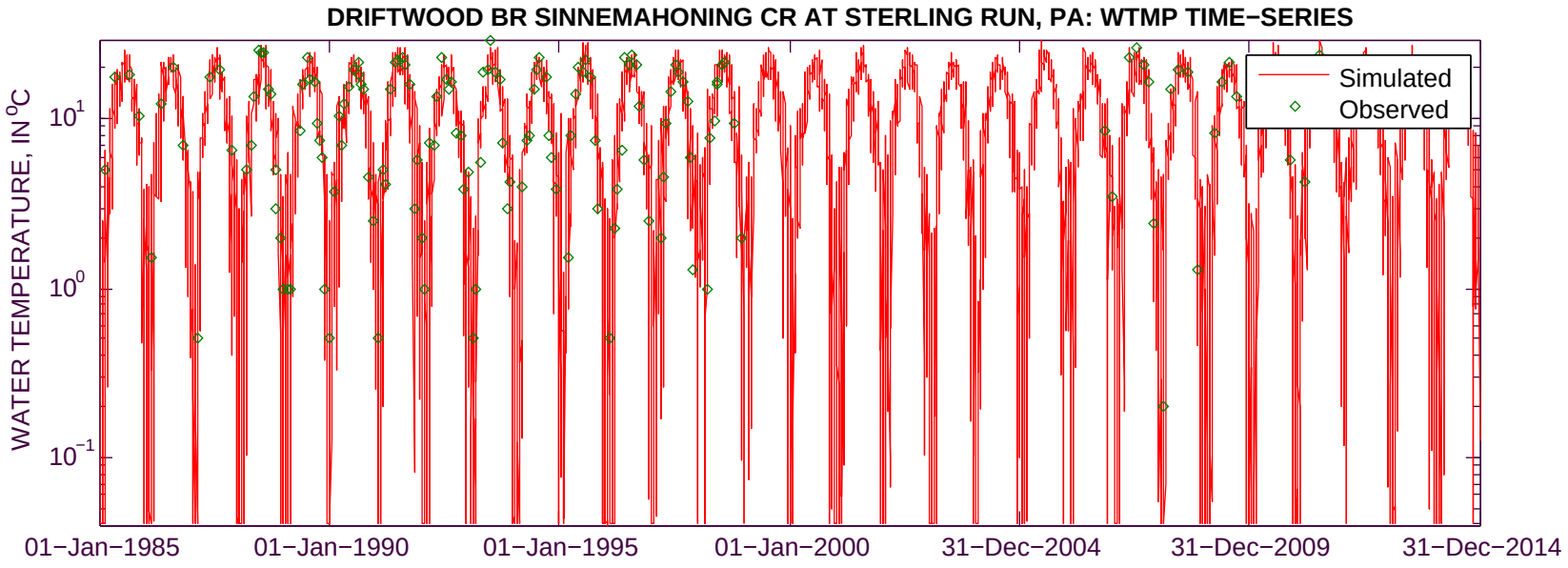
LOAD DATA
LOG10

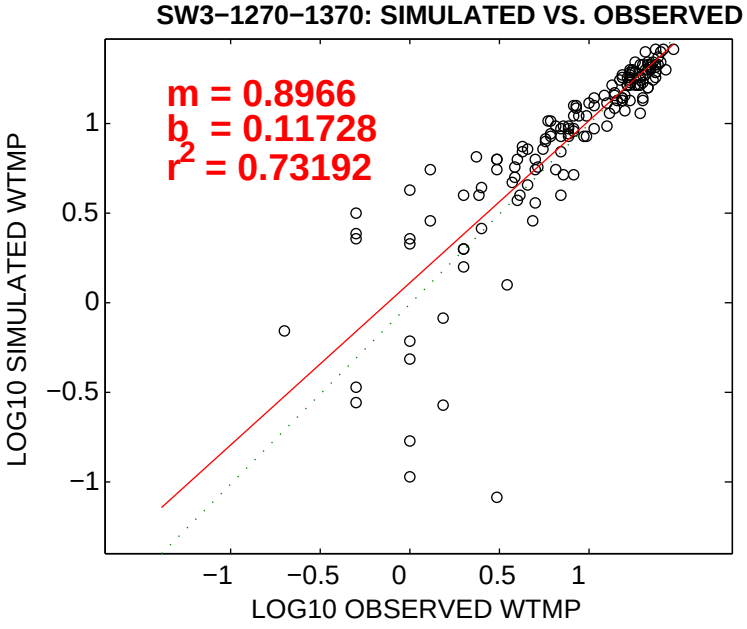


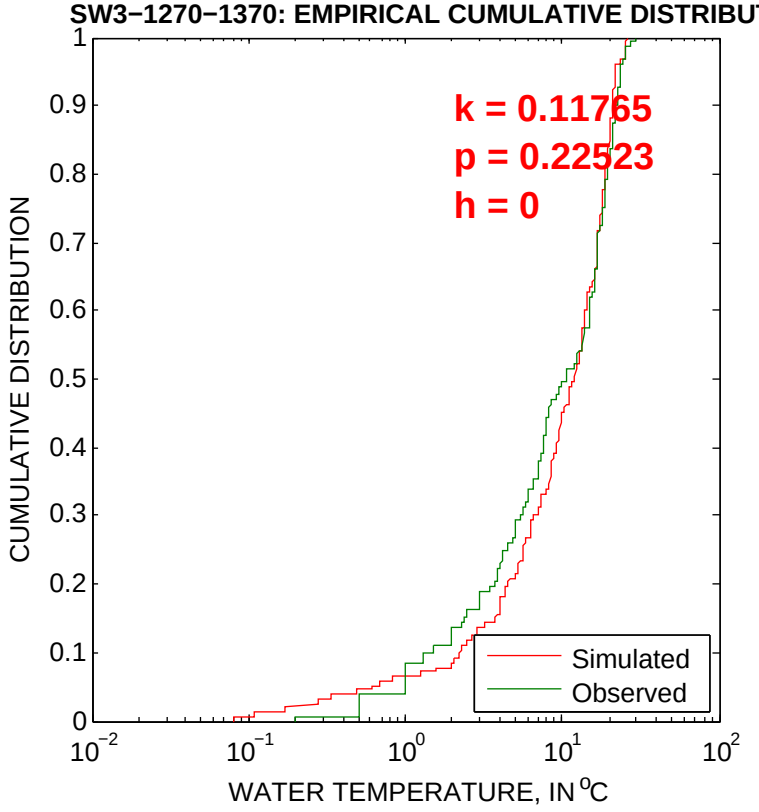












DATA SELECTION

scenario	file
P620171001WQ	WTMP.calib

plot: WTMP - water tempera...

Dates 1/1/1985 12/31/201

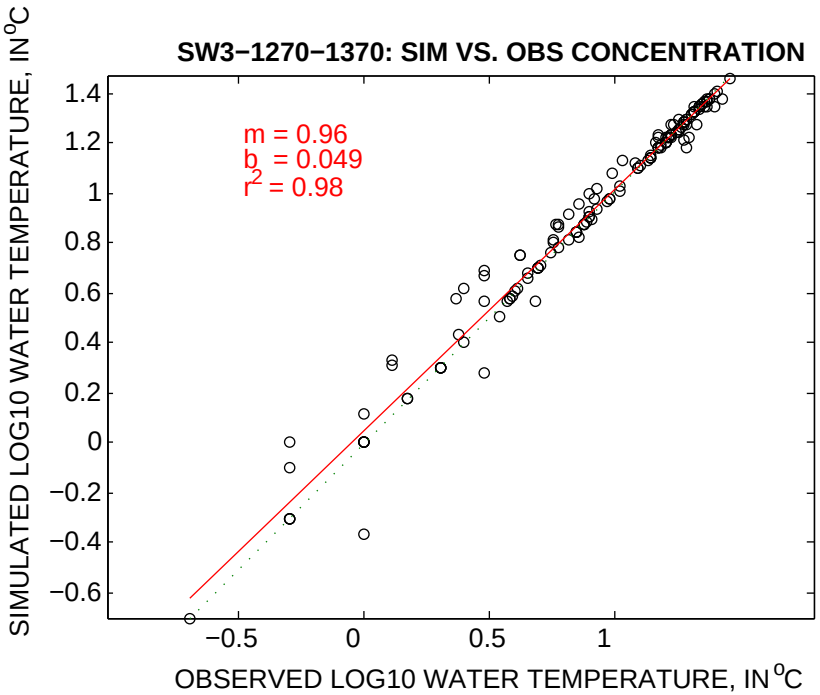
Drive	Directory	Observed
N/A	model	OBS20161101

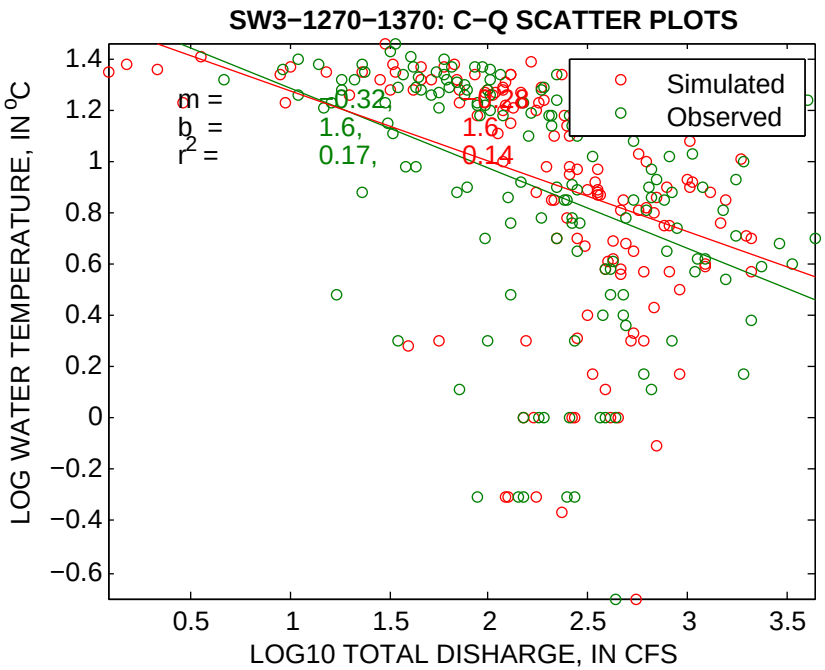
STATISTICS

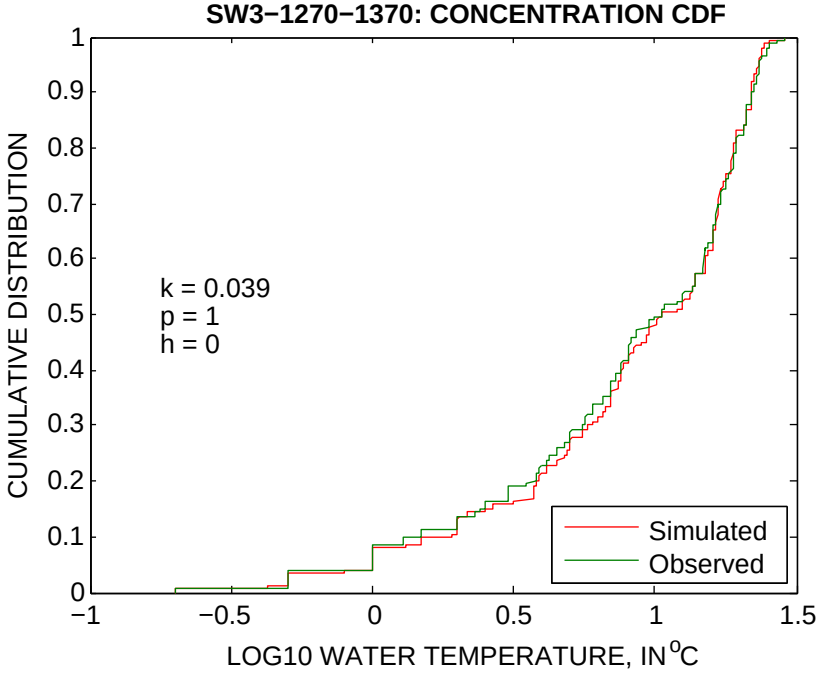
	n	observe	simulate
		153	153
min		0.2	0.081499
		-0.69897	-1.08885
mean		11.5386	11.8371
		0.892995	0.917949
media		10.5	12.017
		1.02119	1.0798
max		29	26.122
		1.4624	1.41701
varian		60.8411	50.3683
		0.215627	0.236834
JB		0.011900	0.024115
		0.001	0.001
		ra	log
%		2.58742	2.79434
err.va		6.44073	0.0664228
rel.std.err		0.105862	0.308045
mod.eff		0.894138	0.691955

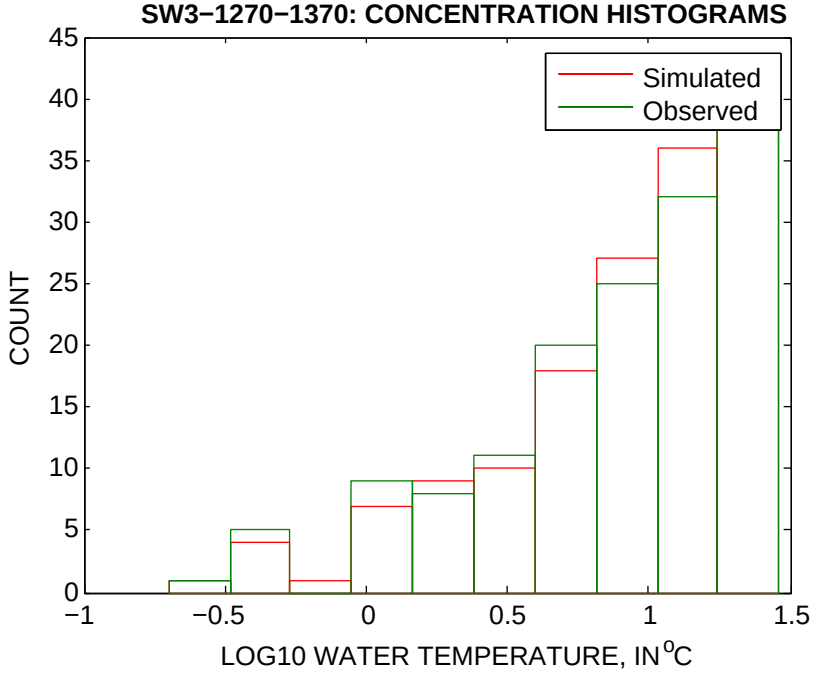
VERSION 2.1

ALL DATA
LOG10

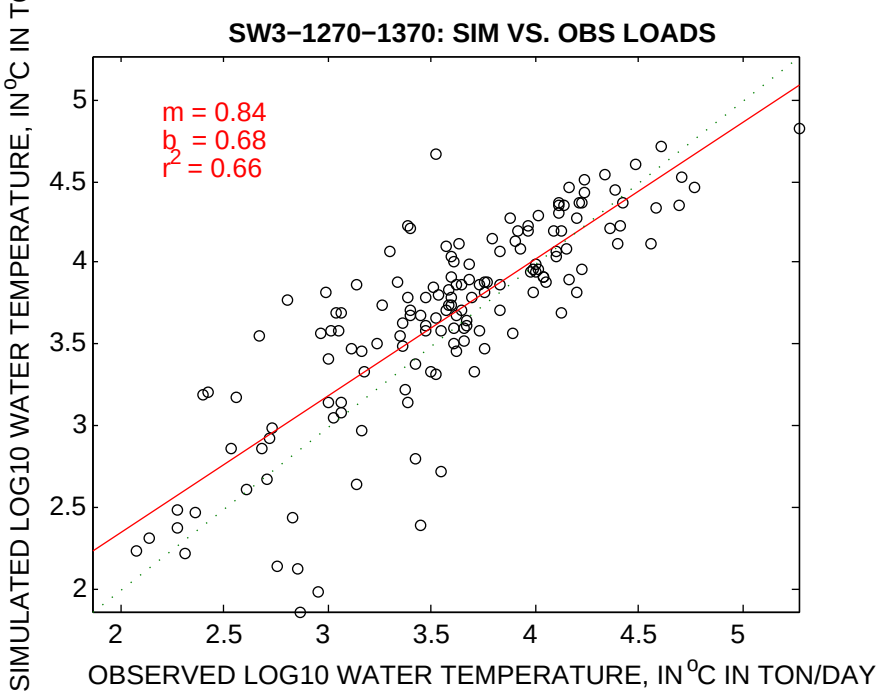


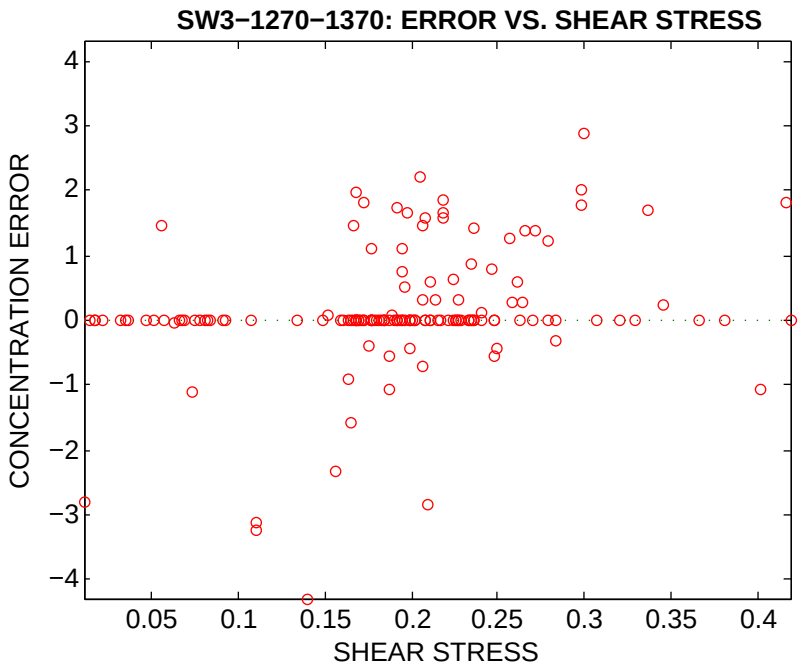


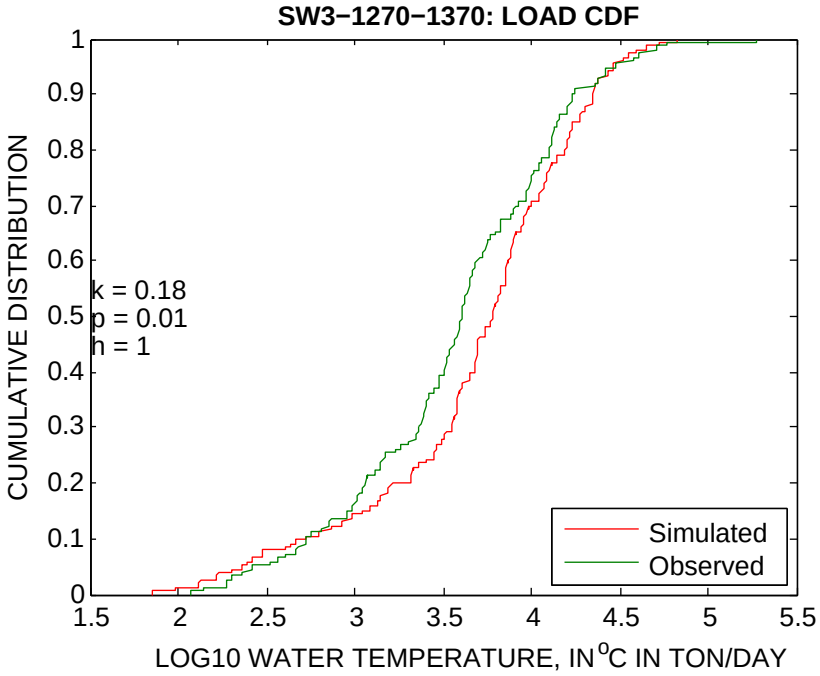


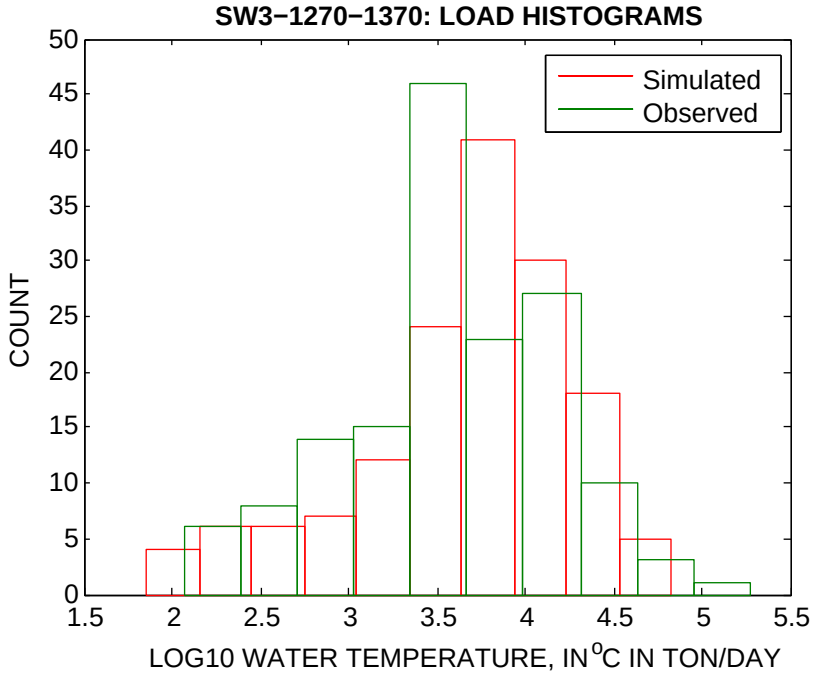


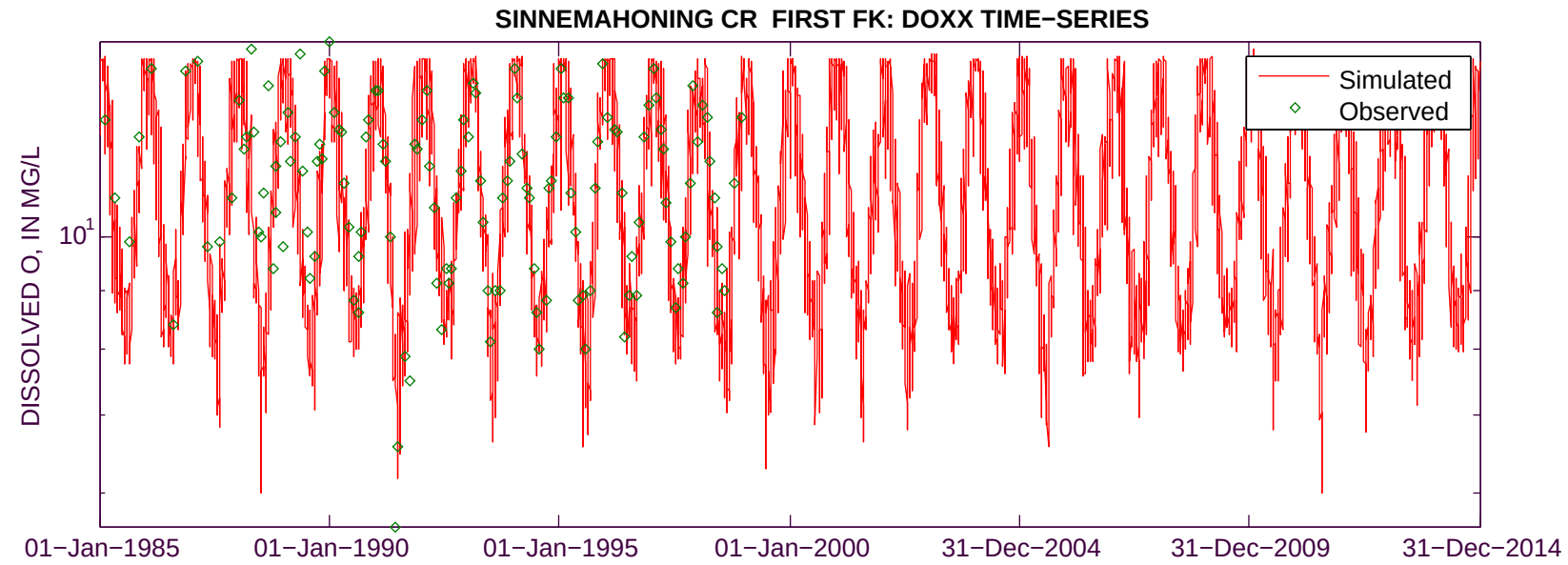
LOAD DATA
LOG10

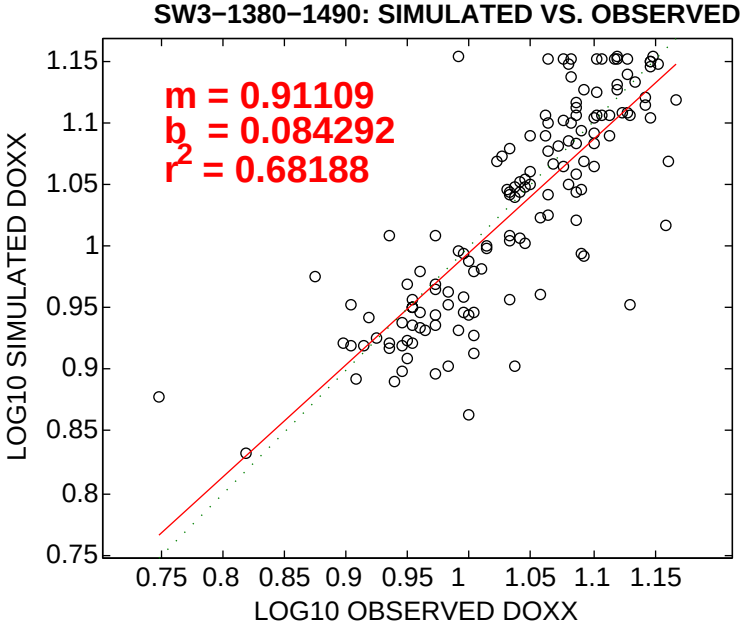


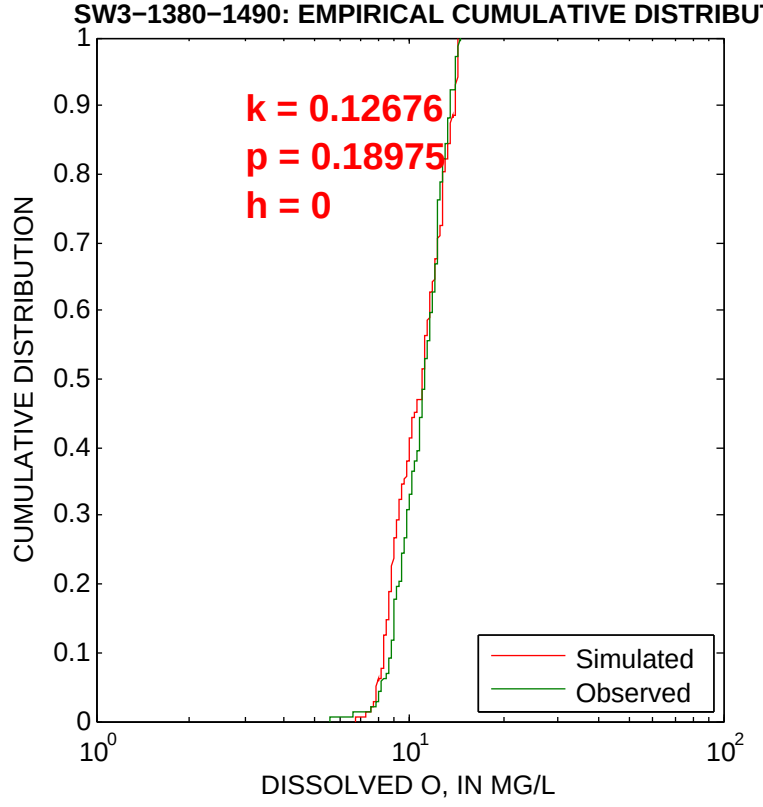












DATA SELECTION

scenario: P620171001WQ | file: DOXX.calib

plot: DOXX - dissolved oxygen

Dates: 1/1/1985 – 12/31/201

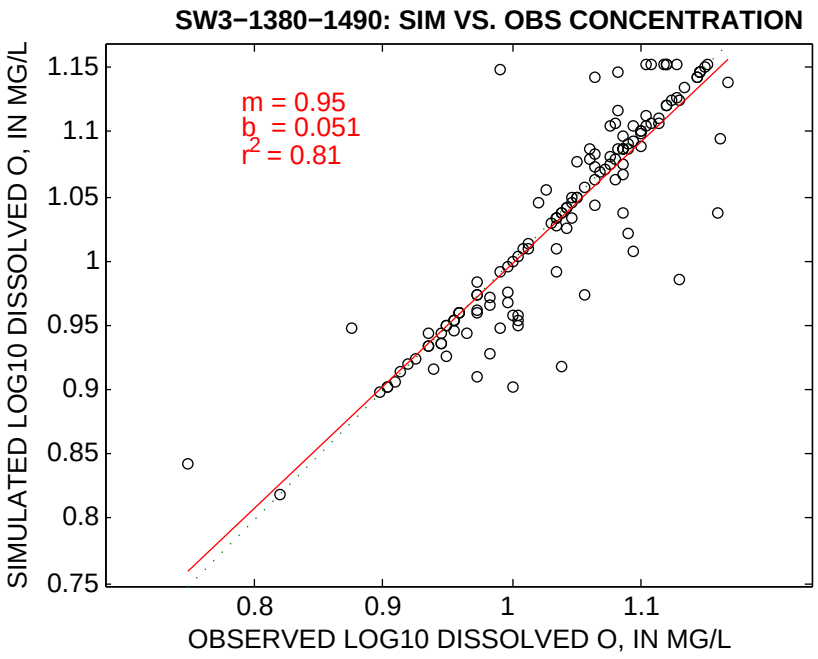
Drive: N/A | Directory: model | Observed: OBS20161101

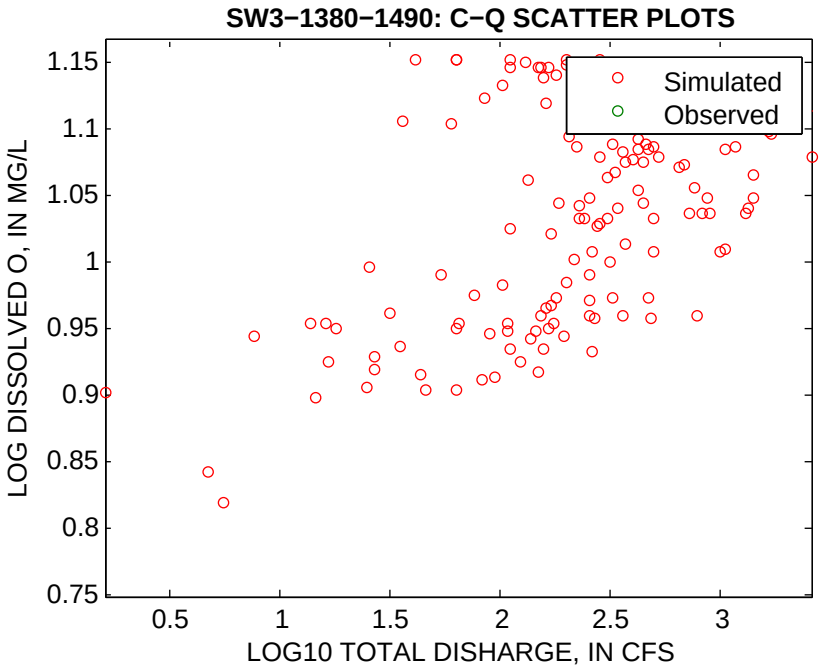
STATISTICS

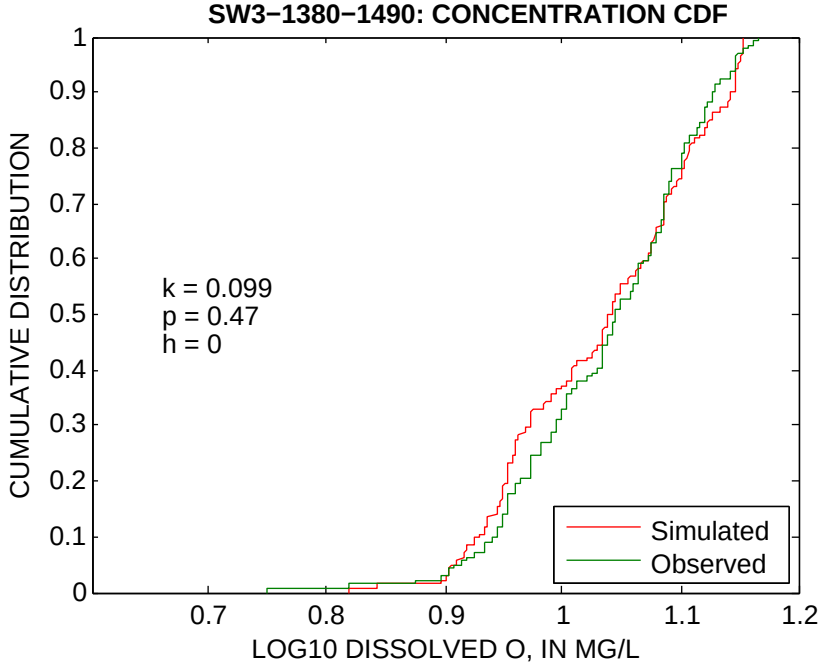
	n	142	142
		observe	simulate
min		5.6	6.7862
		0.748188	0.831627
mean		11.0634	10.9023
		1.03747	1.02952
media		11.1	11.065
		1.04532	1.04395
max		14.7	14.229
		1.16732	1.15317
varian		3.42886	4.30496
		0.00582149	0.00708681
JB		0.179492	0.017711
		0.014057	0.020187
		ra	log
%		-1.4561	-0.766145
err.va		1.44218	0.00236412
rel.std.err		0.420601	0.406101
mod.eff		0.579399	0.593899

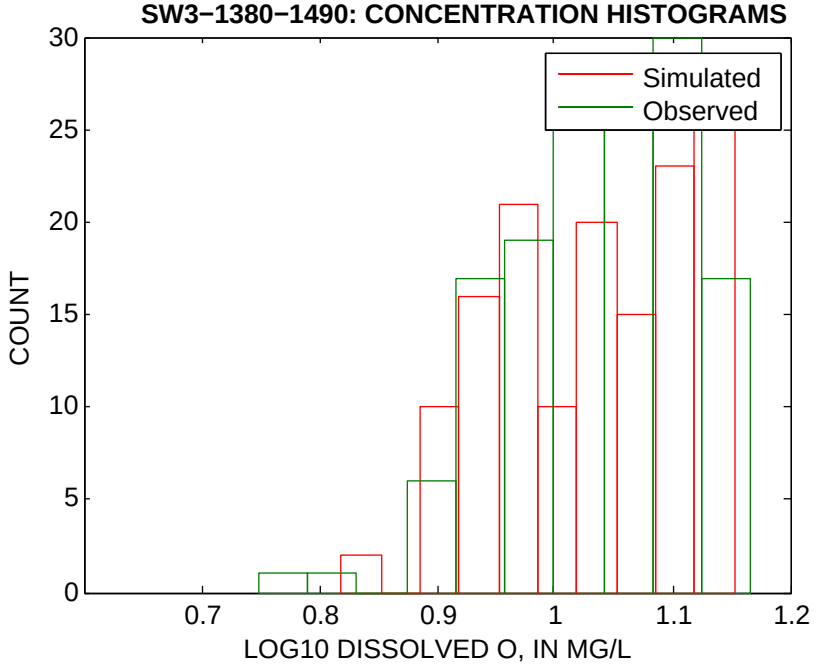
VERSION 2.1

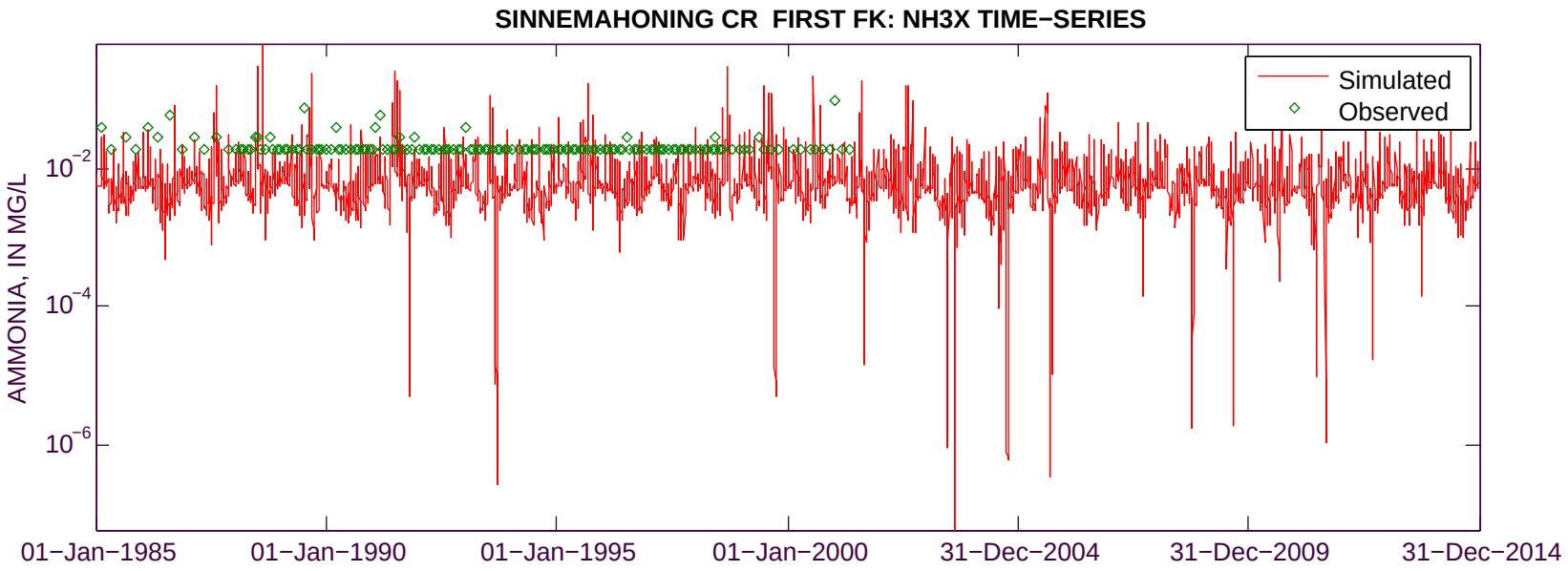
ALL DATA
LOG10

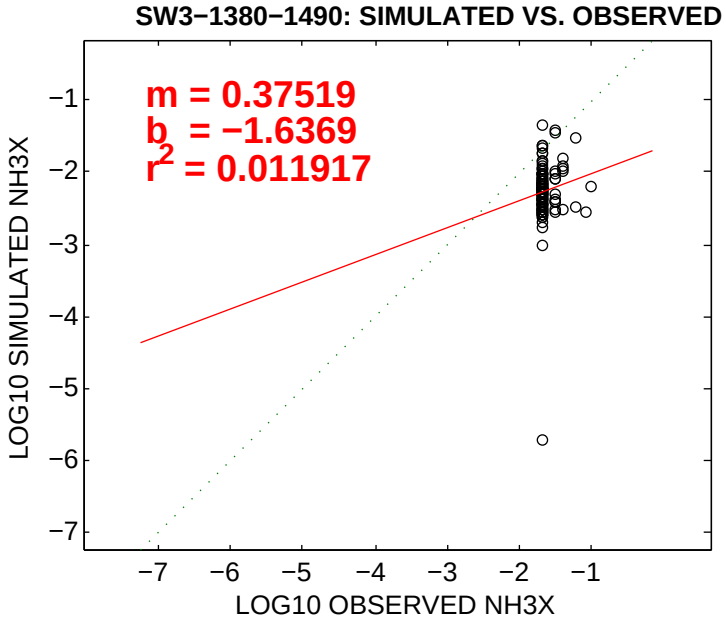


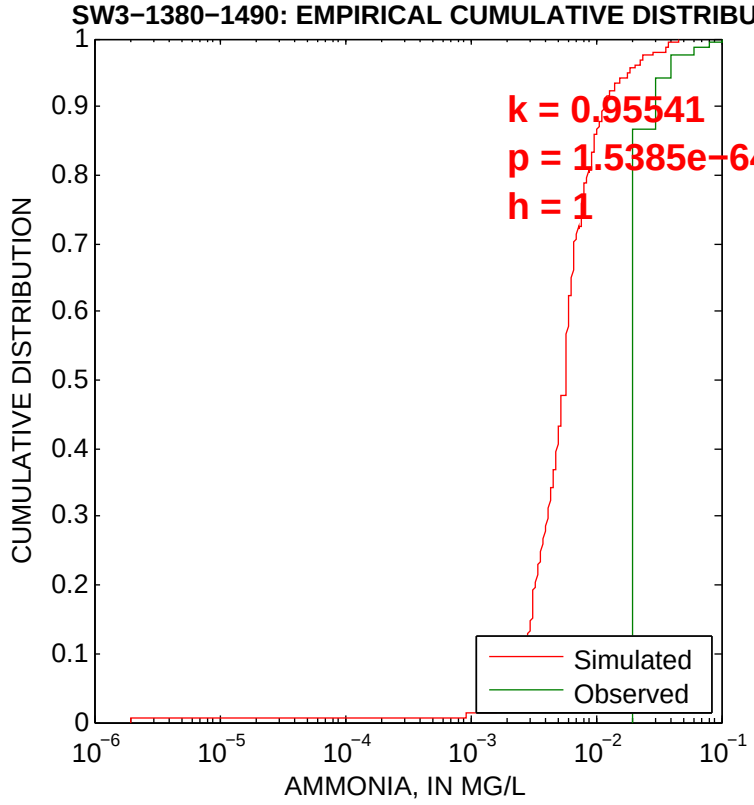












DATA SELECTION

scenario	file
P620171001WQ	NH3X.calib

plot: NH3X - ammonia

Dates: 1/1/1985 – 12/31/201

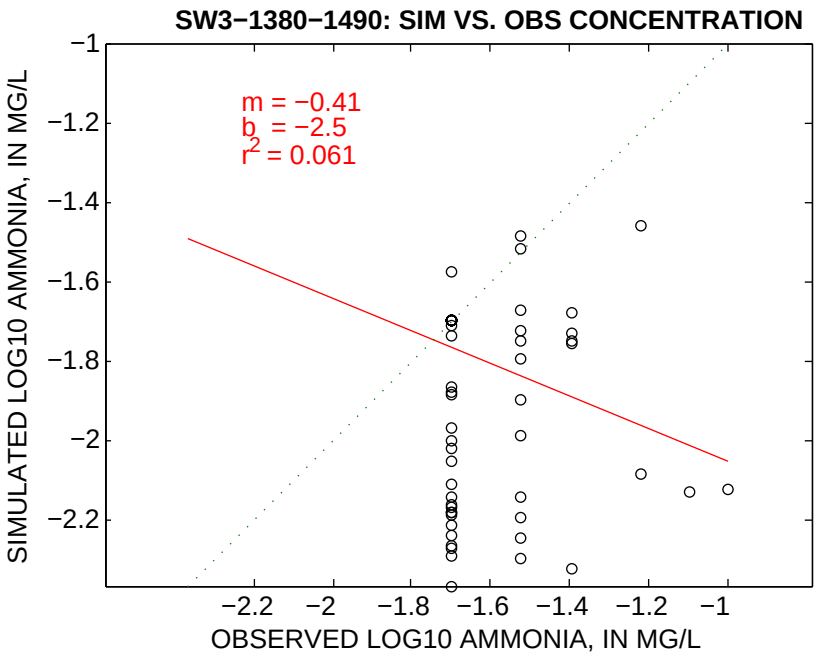
Drive	Directory	Observed
N/A	model	OBS20161101

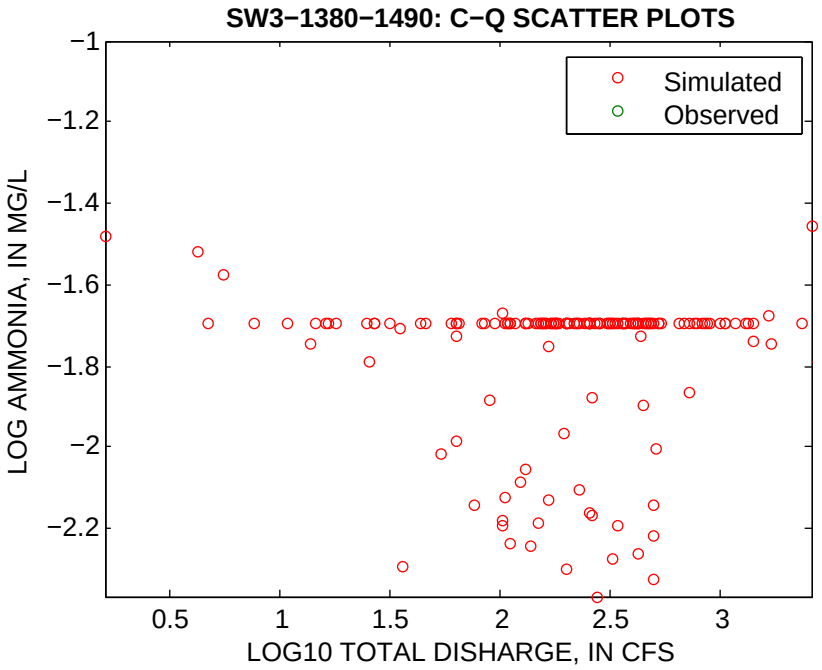
STATISTICS

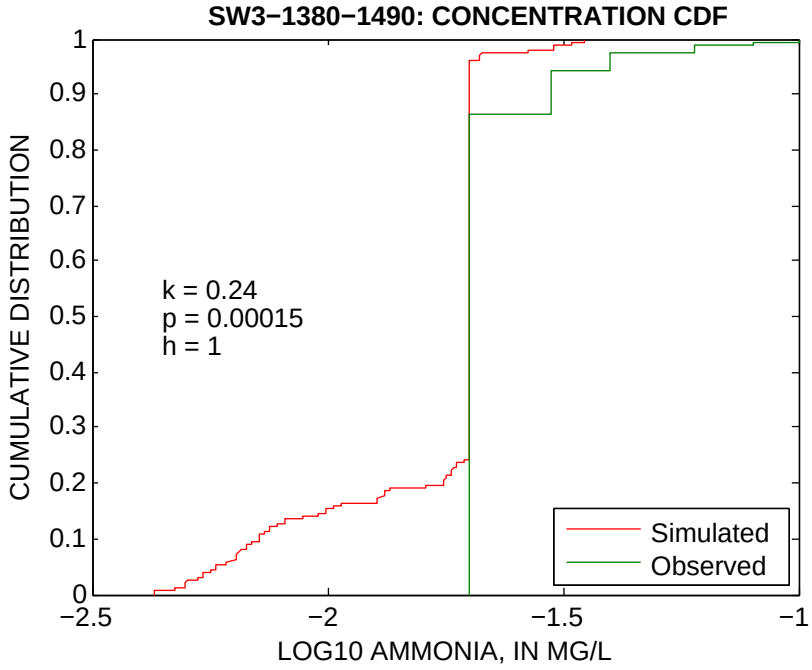
	observe	simulate
n	157	157
min	0.02 -1.69897	1.9863e-06 -5.70196
mean	0.0228025 -1.66156	0.00710363 -2.26027
media	0.02 -1.69897	0.0057664 -2.2391
max	0.1 -1	0.045837 -1.33878
varian	9.72236e-0 0.012255	3.913e-05 0.144769
JB	0.001 0.001	0.001 0.001
	ra	log
%	-68.8472	36.0334
err.va	0.00036860	0.508587
rel.std.err	3.79133	41.5003
mod.eff	-2.79133	-40.5003

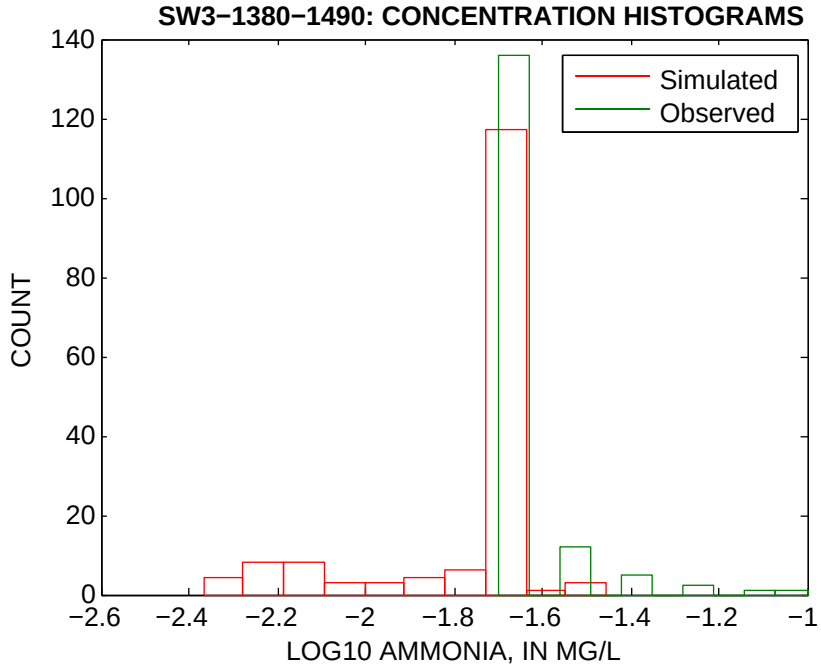
VERSION 2.1

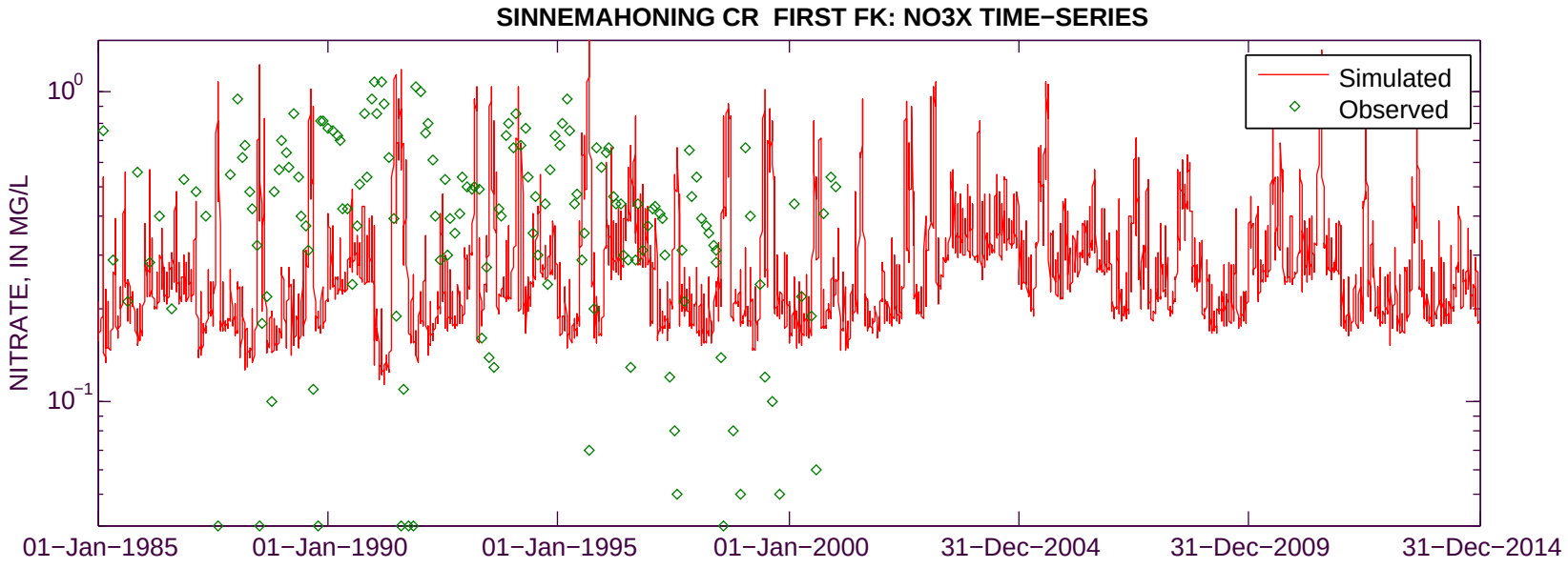
ALL DATA
LOG10

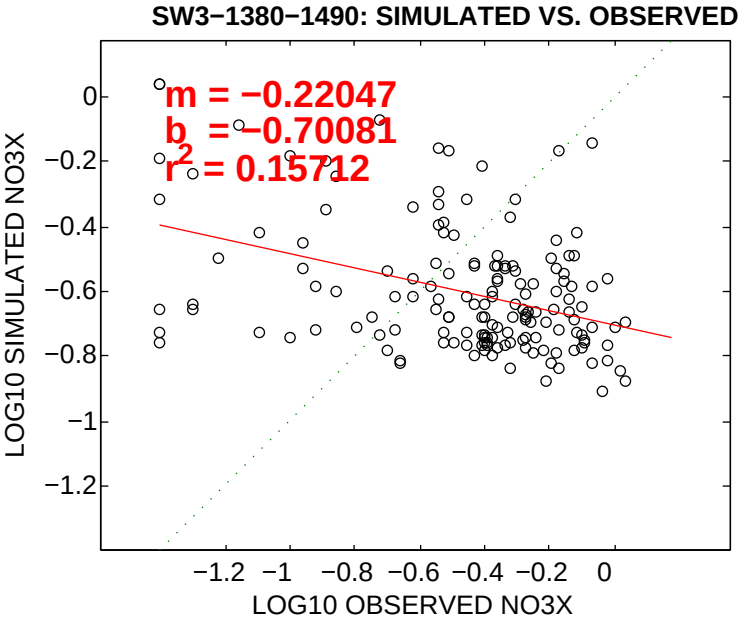


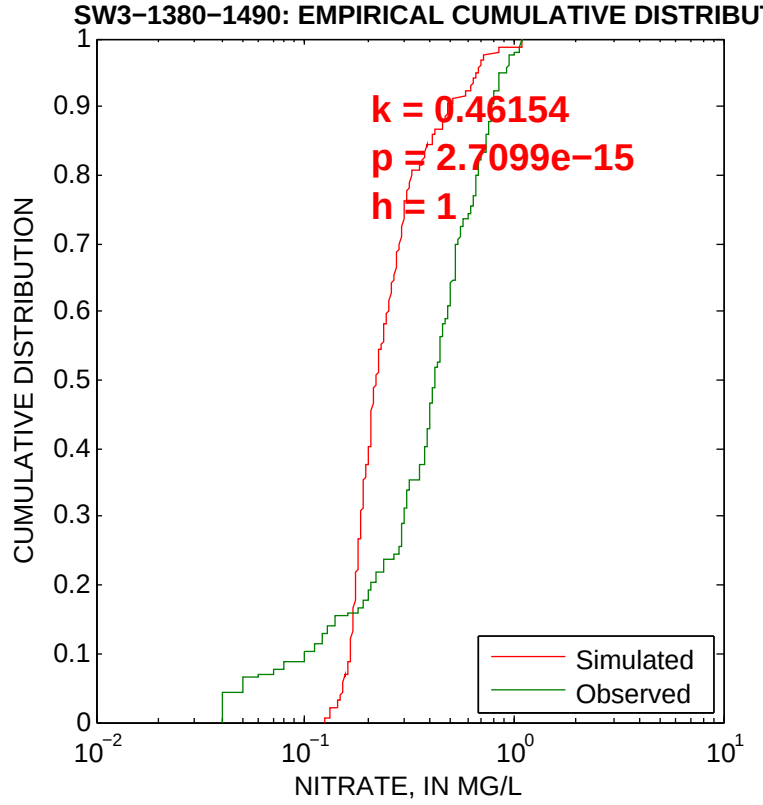












DATA SELECTION

scenario	file
P620171001WQ	NO3X.calib

plot: NO3X - nitrate

Dates: 1/1/1985 – 12/31/201

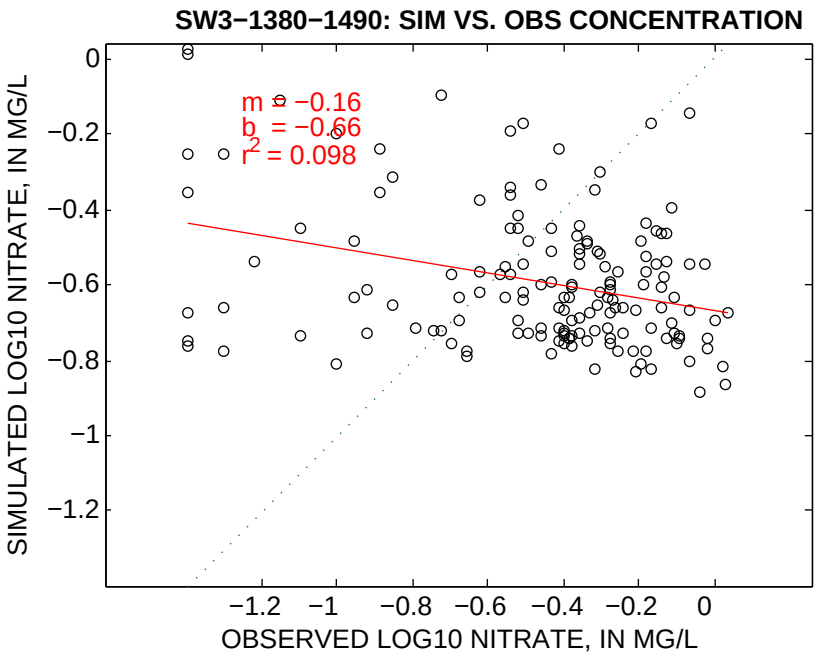
Drive	Directory	Observed
N/A	model	OBS20161101

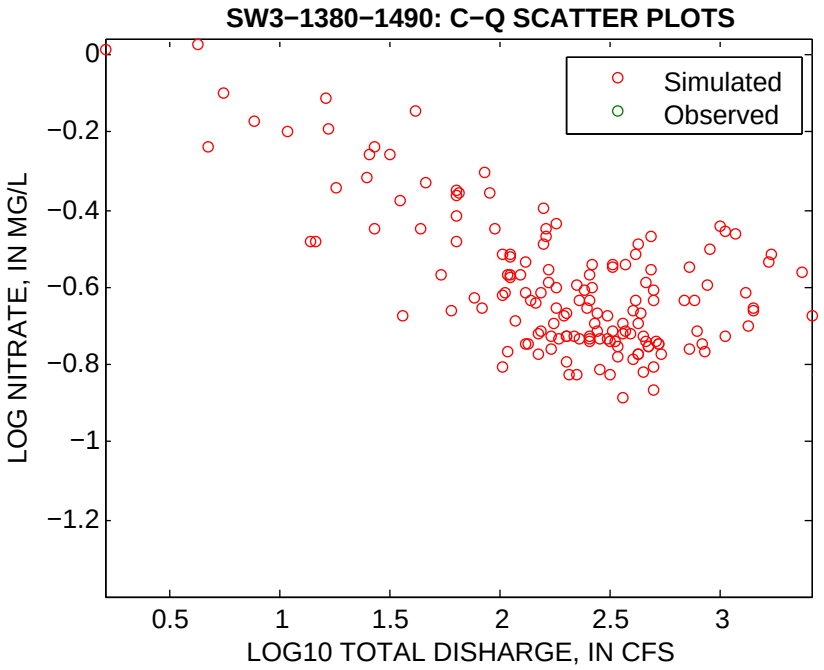
STATISTICS

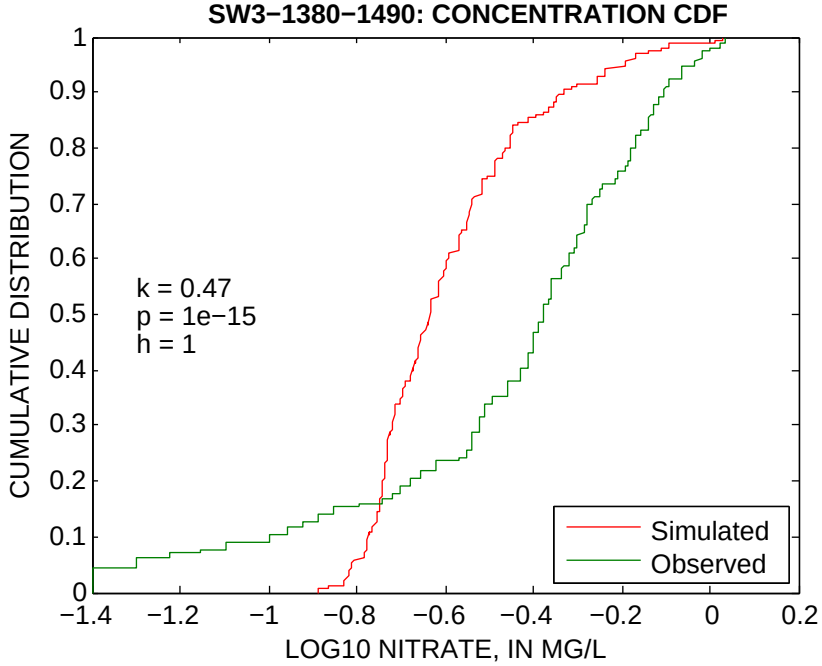
	n	observe	simulate
		156	156
min		0.04	0.12416
		-1.39794	-0.906018
mean		0.442949	0.28336
		-0.458302	-0.599772
media		0.42	0.220525
		-0.376751	-0.656546
max		1.09	1.0966
		0.0374265	0.0400482
varian		0.0641203	0.0292609
		0.1239	0.0383295
JB		0.064354	0.001
		0.001	0.001
		ra	log
%		-36.0287	30.8682
err.va		0.148711	0.237004
rel.std.err		2.31925	1.91286
mod.eff		-1.31925	-0.912861

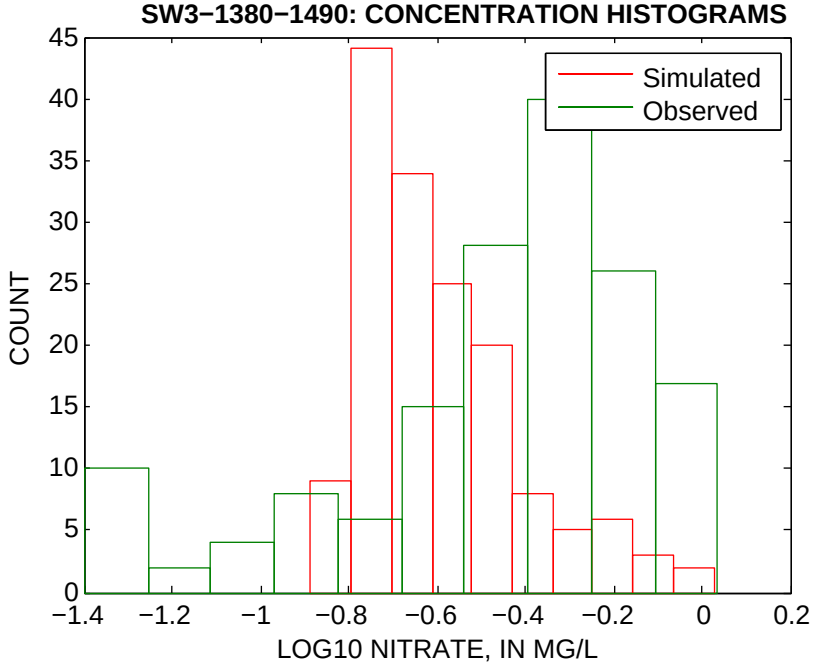
VERSION 2.1

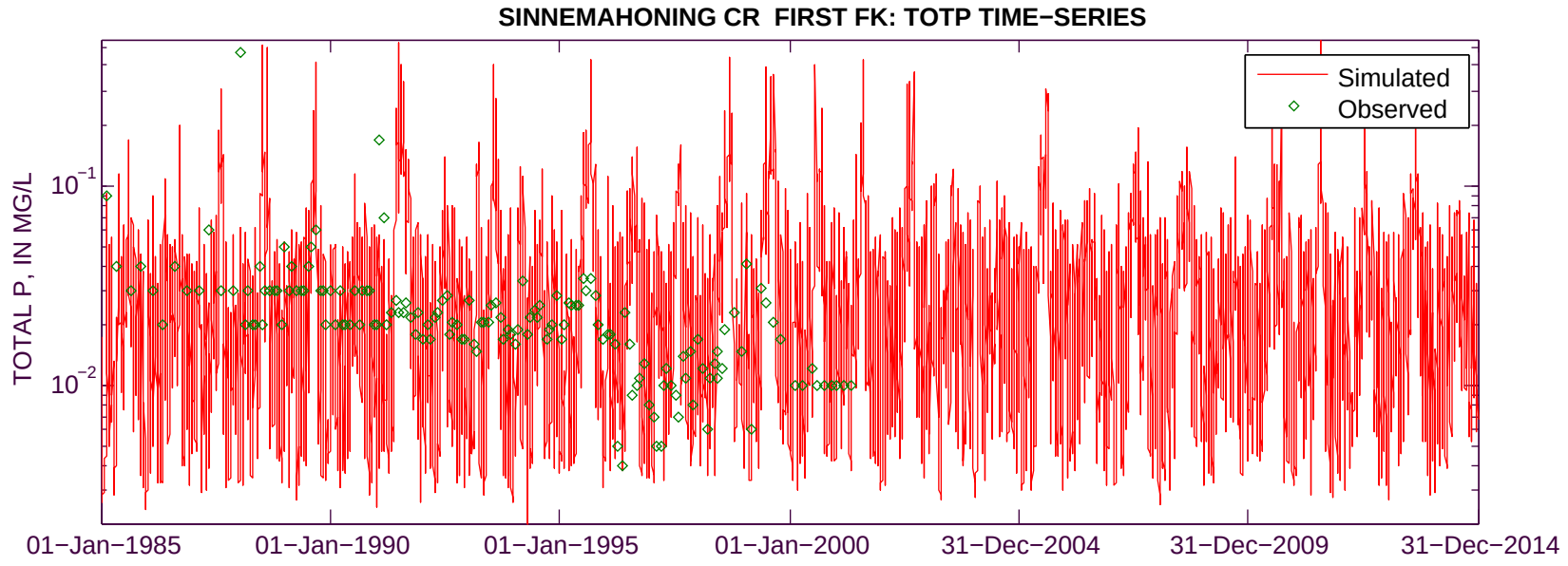
ALL DATA
LOG10

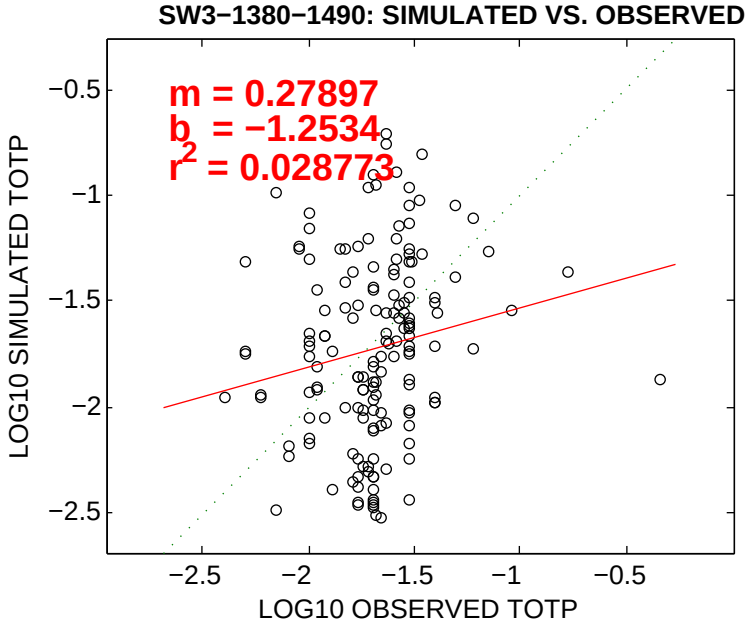


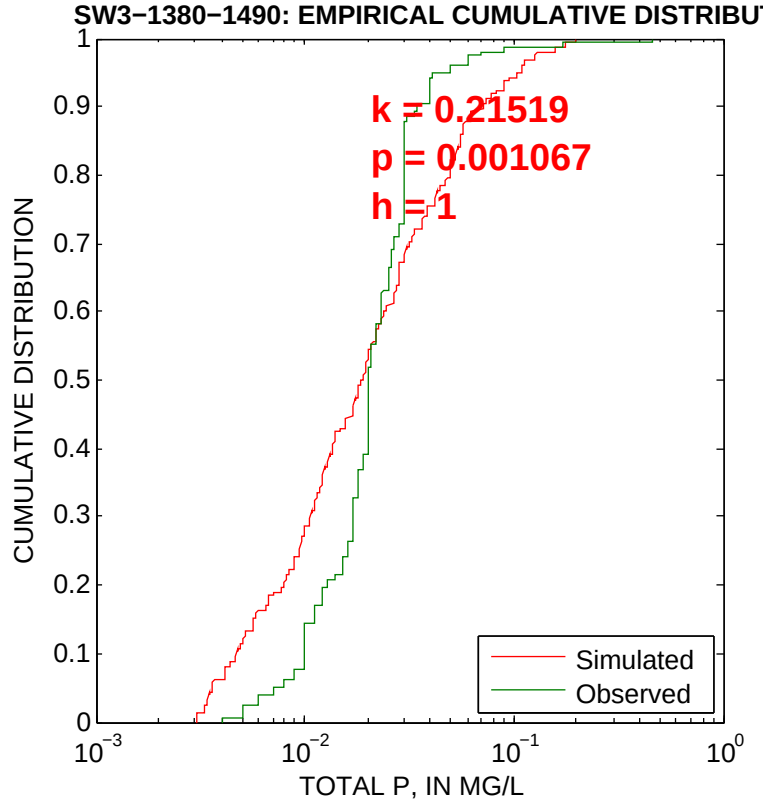












DATA SELECTION

scenario	file
P620171001WQ	TOTP.calib

plot: TOTP - total phosphorus

Dates: 1/1/1985 – 12/31/201

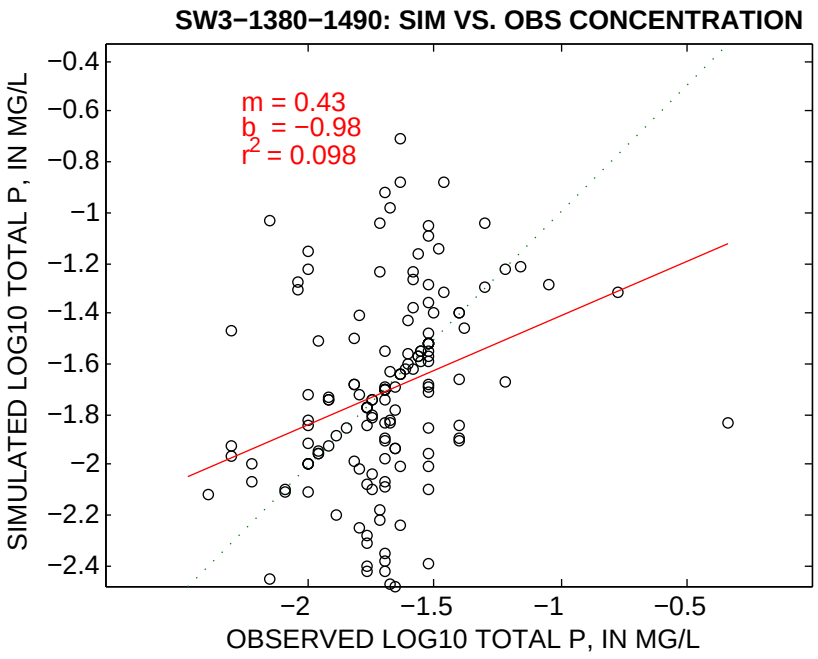
Drive	Directory	Observed
N/A	model	OBS20161101

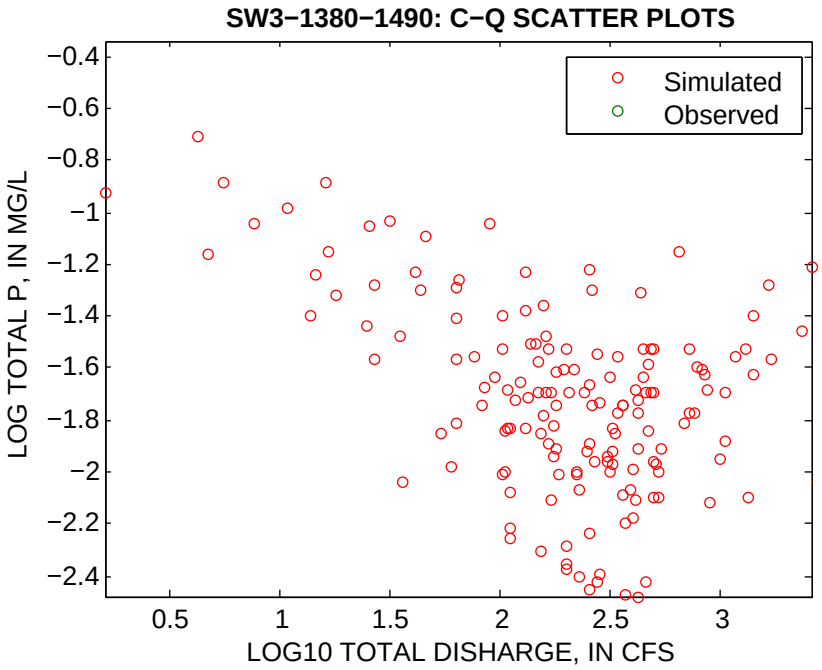
STATISTICS

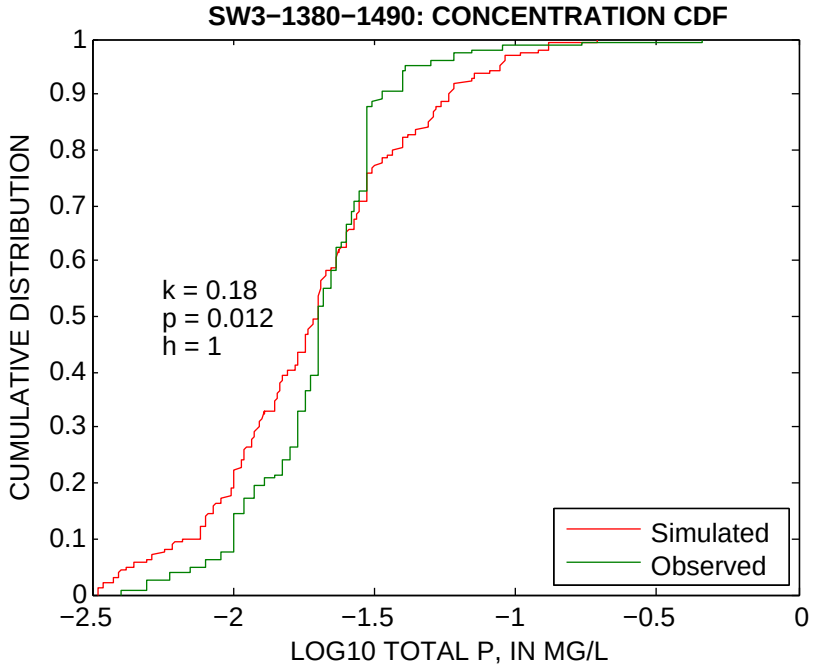
	n	158	158
		observe	simulate
min		0.004	0.0030157
		-2.39794	-2.52061
mean		0.0261772	0.0305824
		-1.69035	-1.72493
media		0.02	0.018753
		-1.69897	-1.72699
max		0.46	0.1985
		-0.337242	-0.702239
varian		0.00148658	0.00113735
		0.0691093	0.186926
JB		0.001	0.001
		0.001	0.124775
		ra	log
%		16.8284	2.04586
err.va		0.00258329	0.21868
rel.std.err		1.73774	3.16427
mod.eff		-0.737742	-2.16427

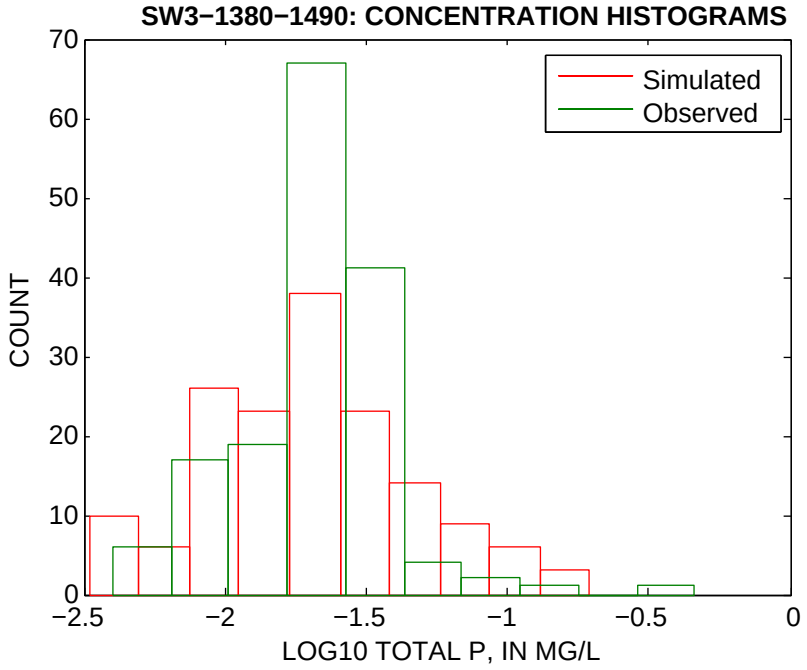
VERSION 2.1

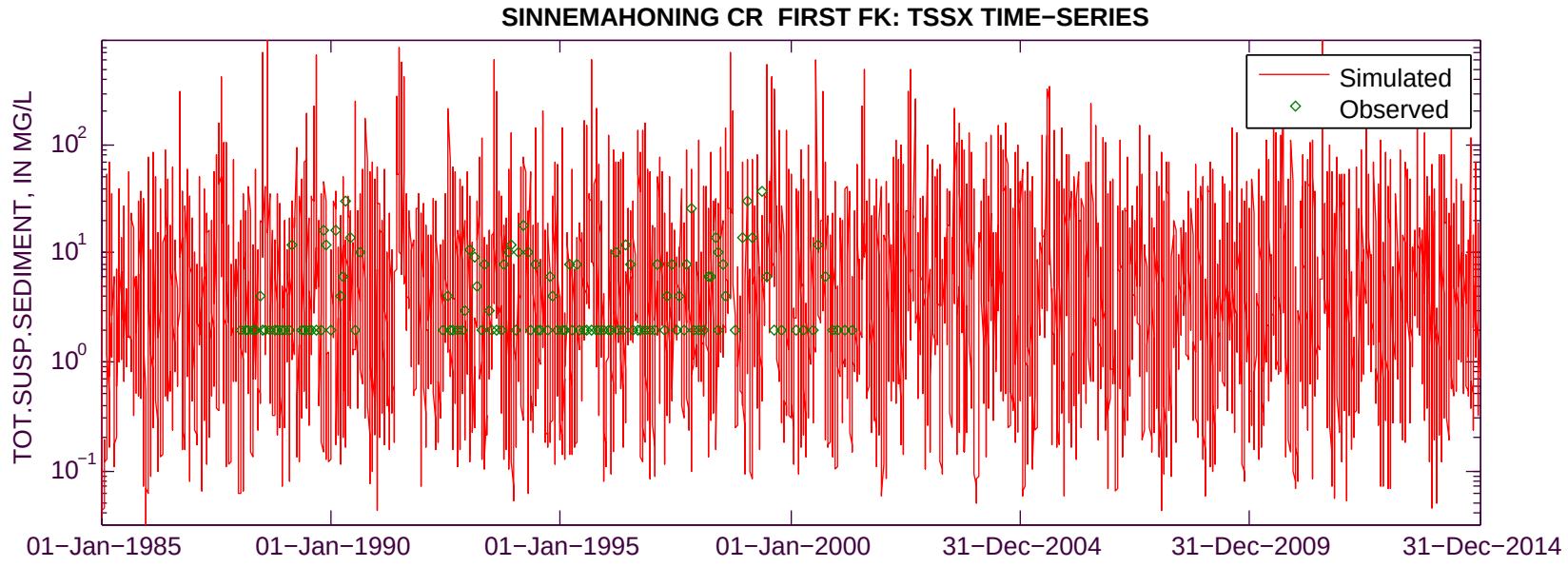
ALL DATA
LOG10

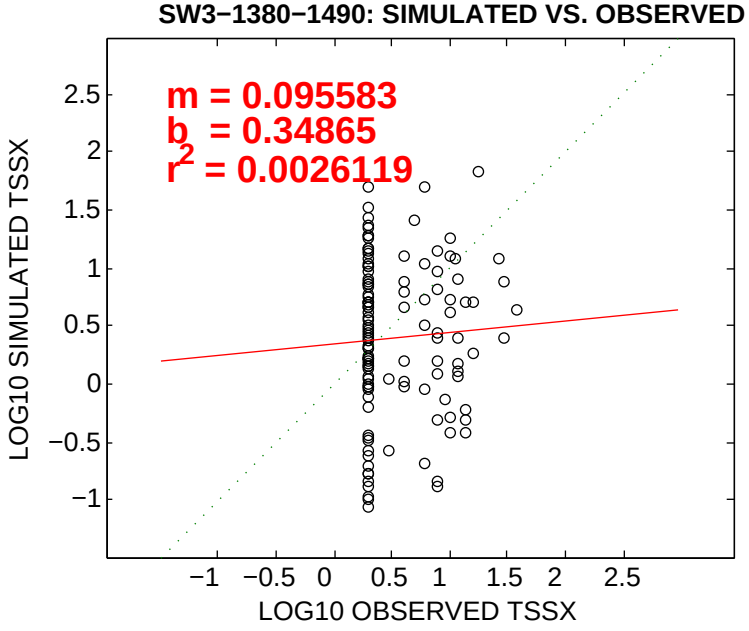


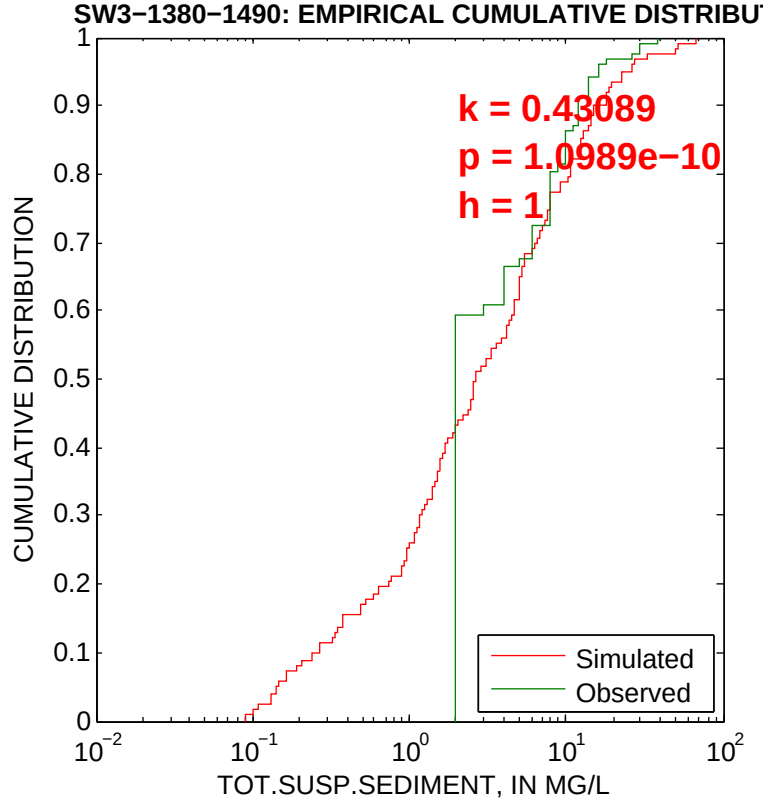












DATA SELECTION

scenario	file
P620171001WQ	TSSX.calib

plot: TSSX - total suspended ...

Dates: 1/1/1985 – 12/31/201

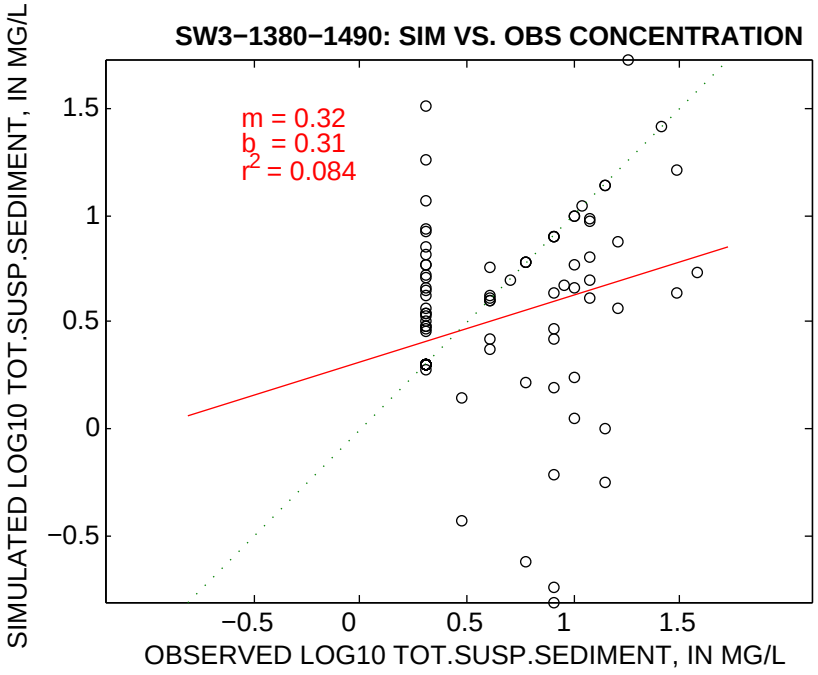
Drive	Directory	Observed
N/A	model	OBS20161101

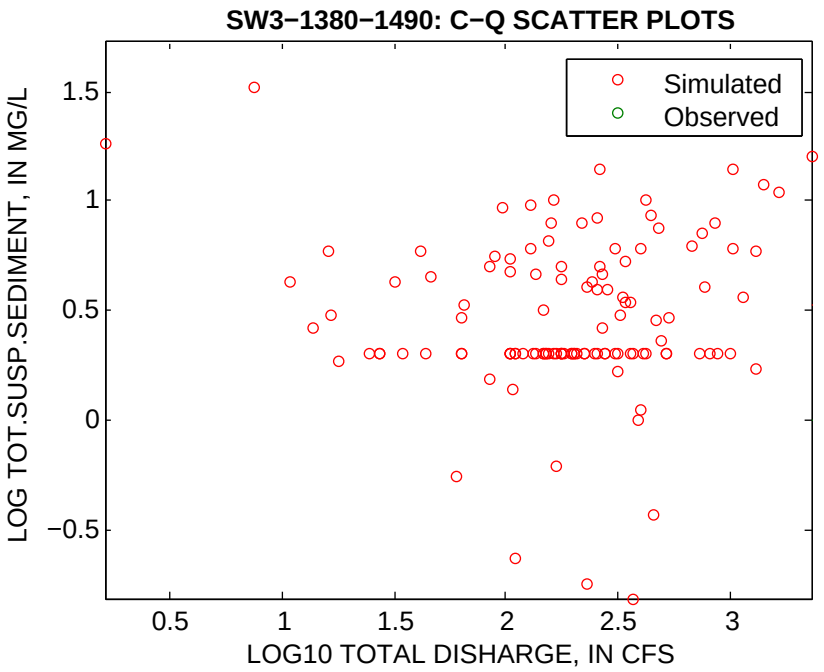
STATISTICS

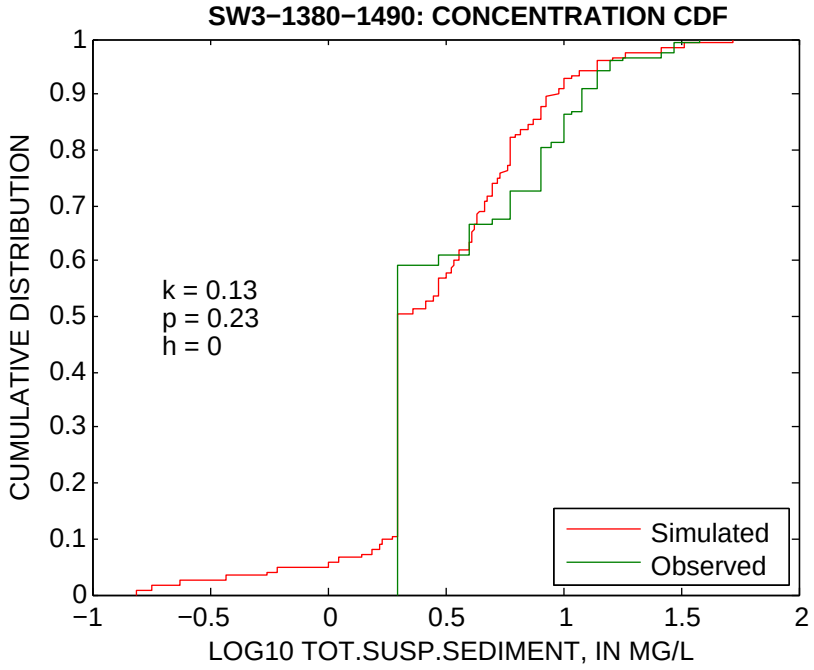
	n	123	123
		observe	simulate
min		2	0.088566
		0.30103	-1.05273
mean		5.45528	6.59007
		0.562042	0.402376
media		2	2.691
		0.30103	0.429914
max		38	68.128
		1.57978	1.83333
varian		38.5615	104.819
		0.126561	0.442702
JB		0.001	0.001
		0.002993	0.146854
		ra	log
%		20.8015	-28.4082
err.va		137.184	0.570771
rel.std.err		3.55755	4.50986
mod.eff		-2.55755	-3.50986

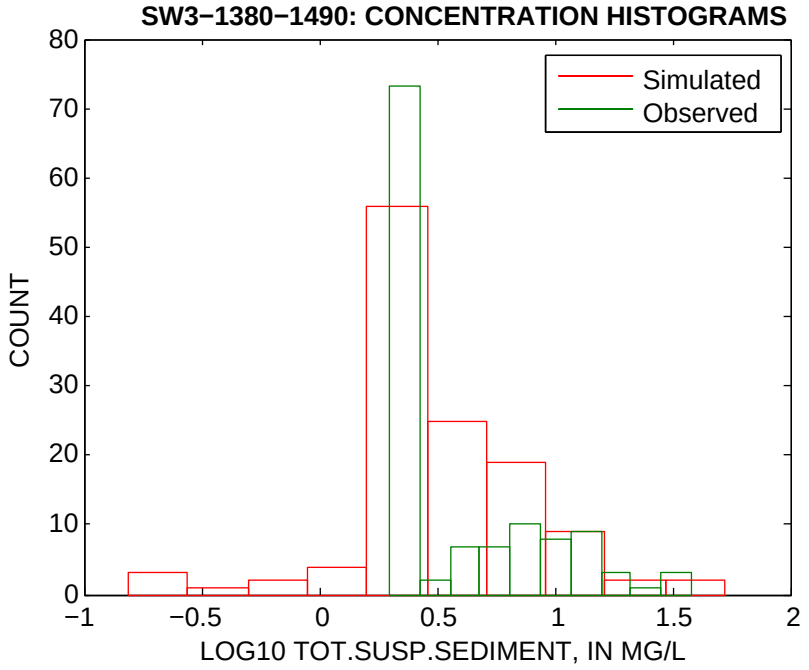
VERSION 2.1

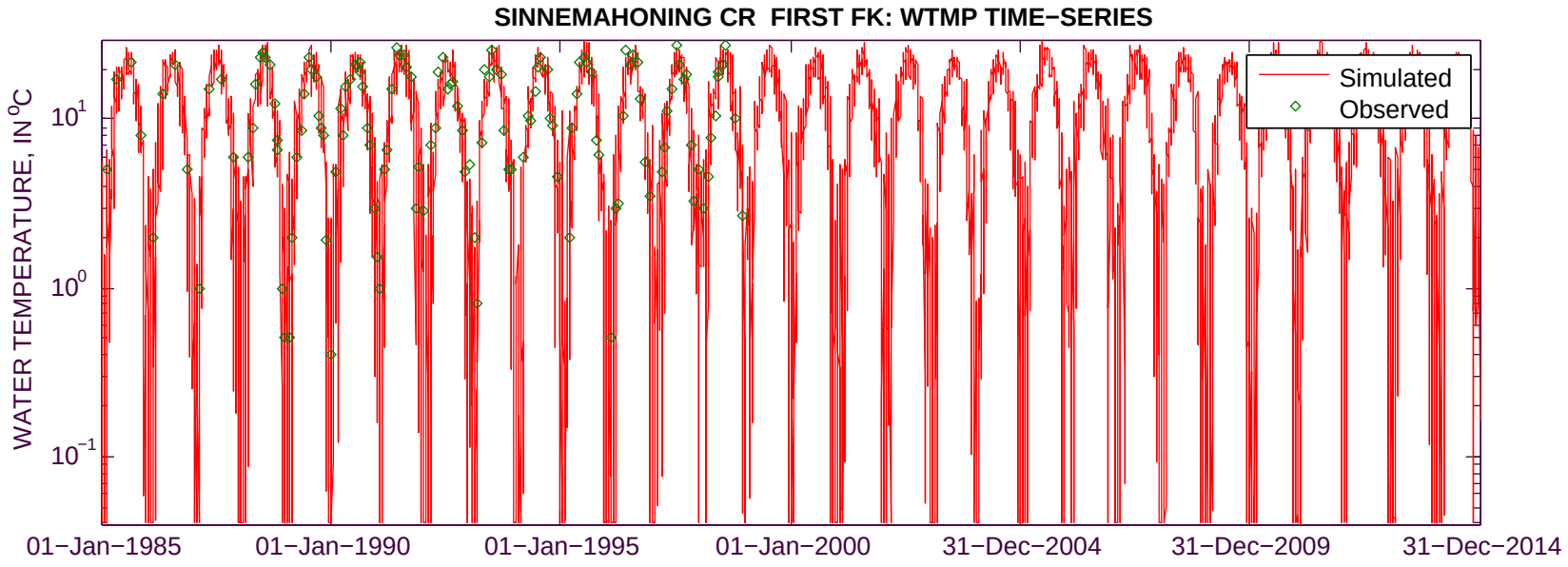
ALL DATA
LOG10

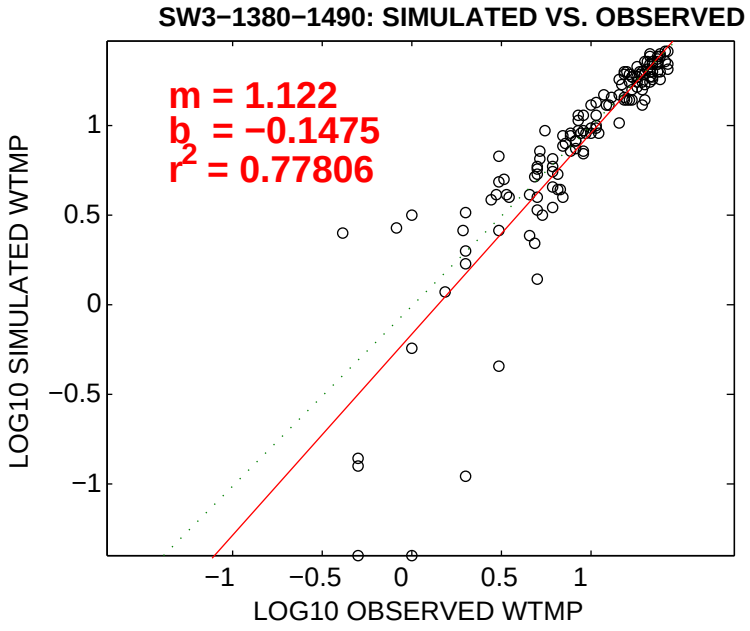


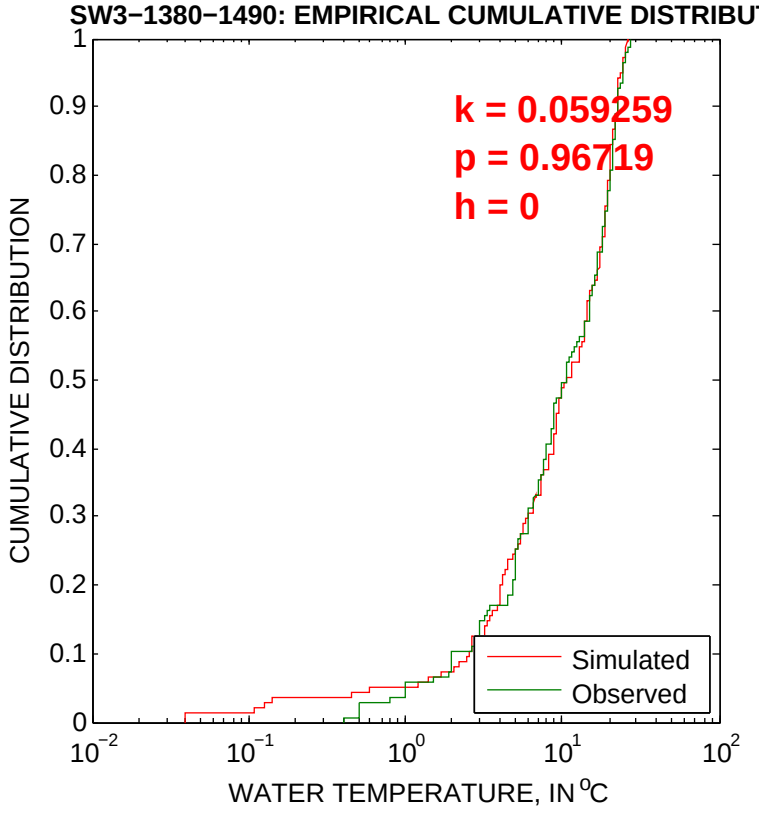












DATA SELECTION

scenario	file
P620171001WQ	WTMP.calib

plot: WTMP - water tempera...

Dates: 1/1/1985 – 12/31/201

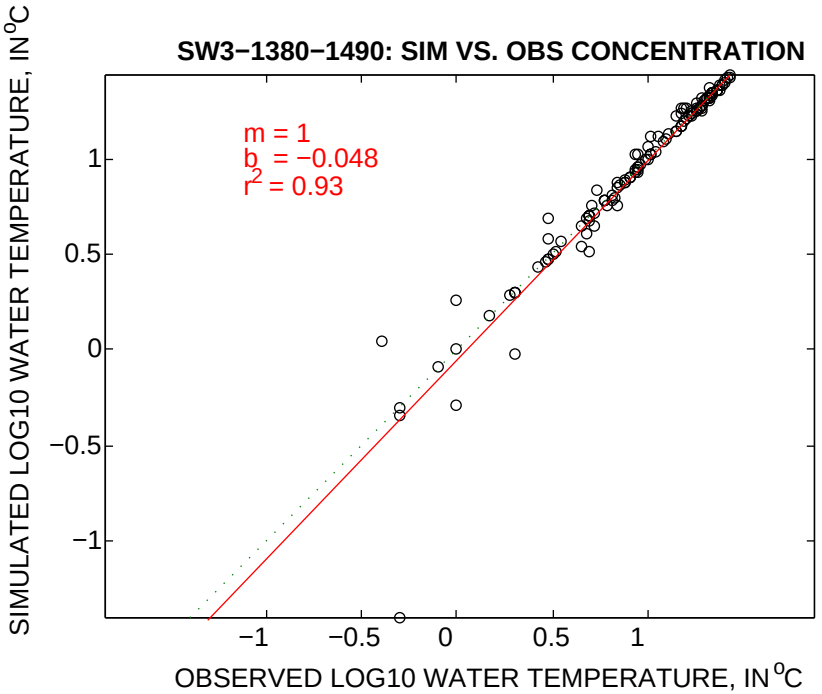
Drive	Directory	Observed
N/A	model	OBS20161101

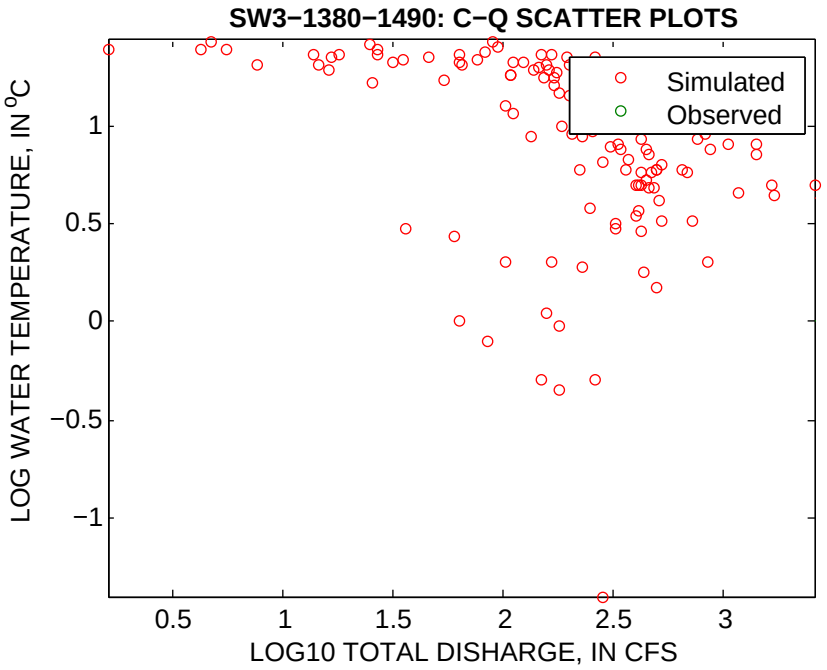
STATISTICS

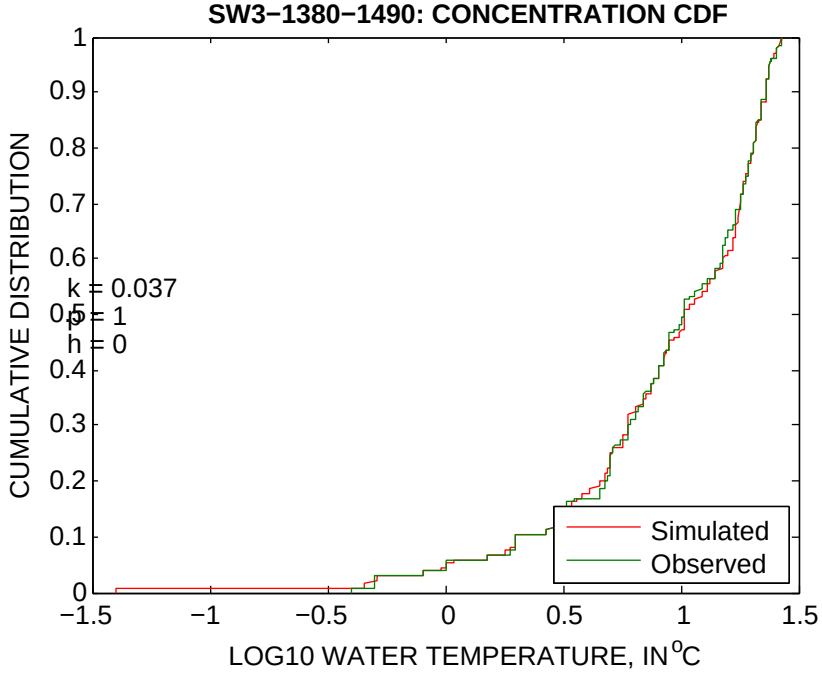
	n	135	135
		observe	simulate
min		0.4	0.04004
		-0.39794	-1.39751
mean		12.0215	11.9849
		0.938034	0.904995
media		10.5	10.854
		1.02119	1.03559
max		27	26.296
		1.43136	1.41989
varian		59.8538	58.0325
		0.175388	0.283786
JB		0.015102	0.017026
		0.001	0.001
		ra	log
%		-0.304517	-3.52217
err.va		5.10231	0.0666949
rel.std.err		0.0852463	0.380271
mod.eff		0.914754	0.619729

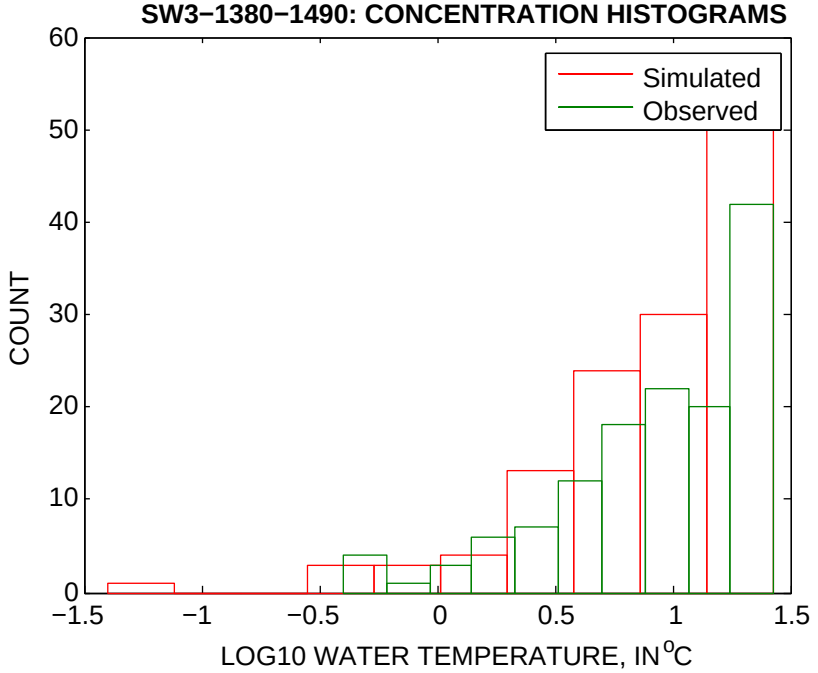
VERSION 2.1

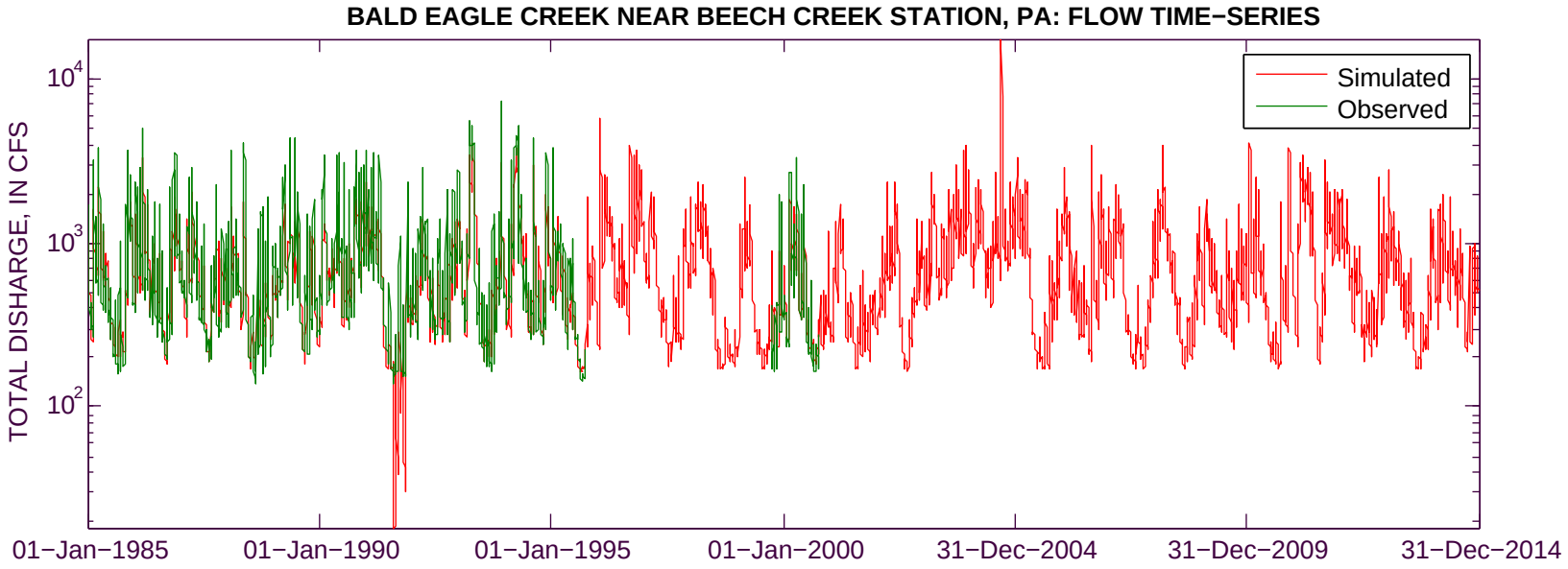
ALL DATA
LOG10

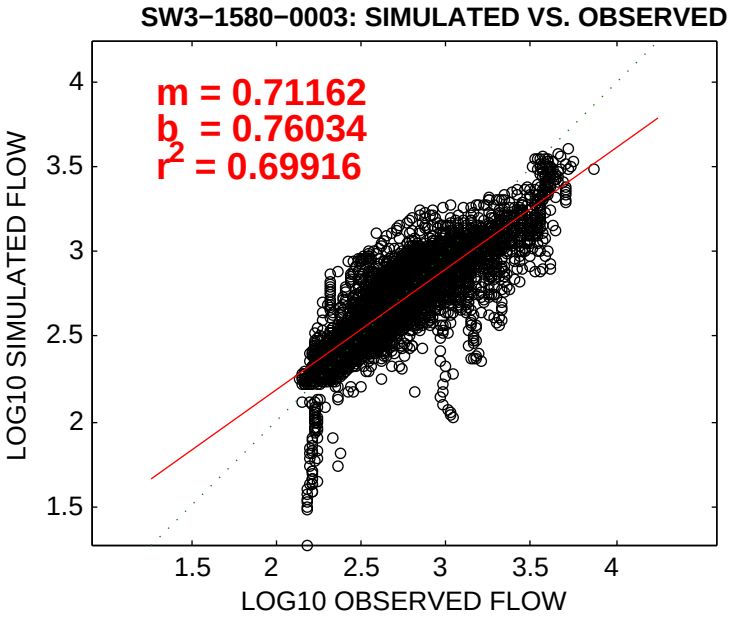


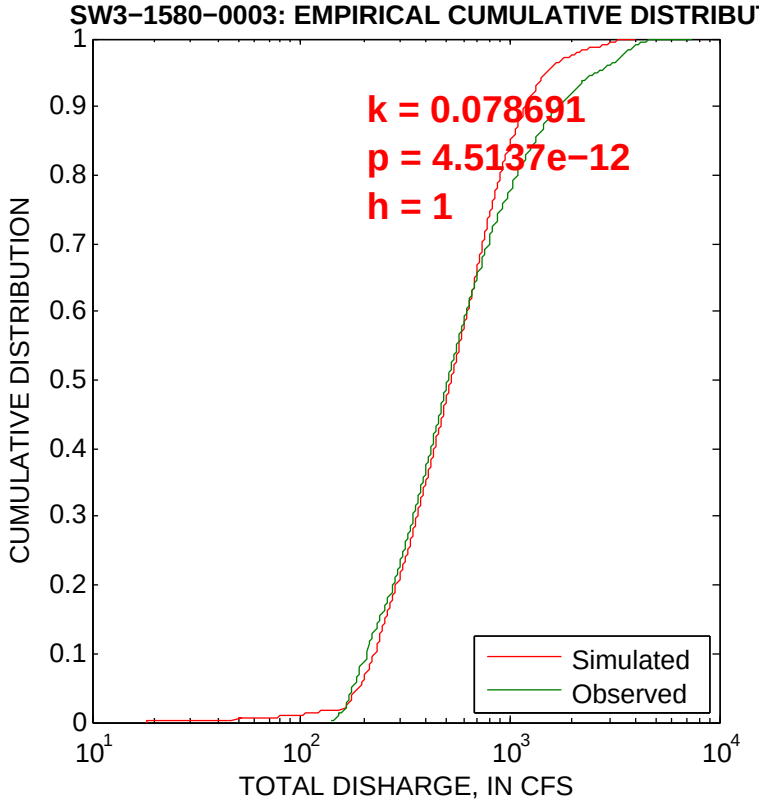












DATA SELECTION

scenario	file
P620171001WQ	FLOW.calib

plot: FLOW - total discharge

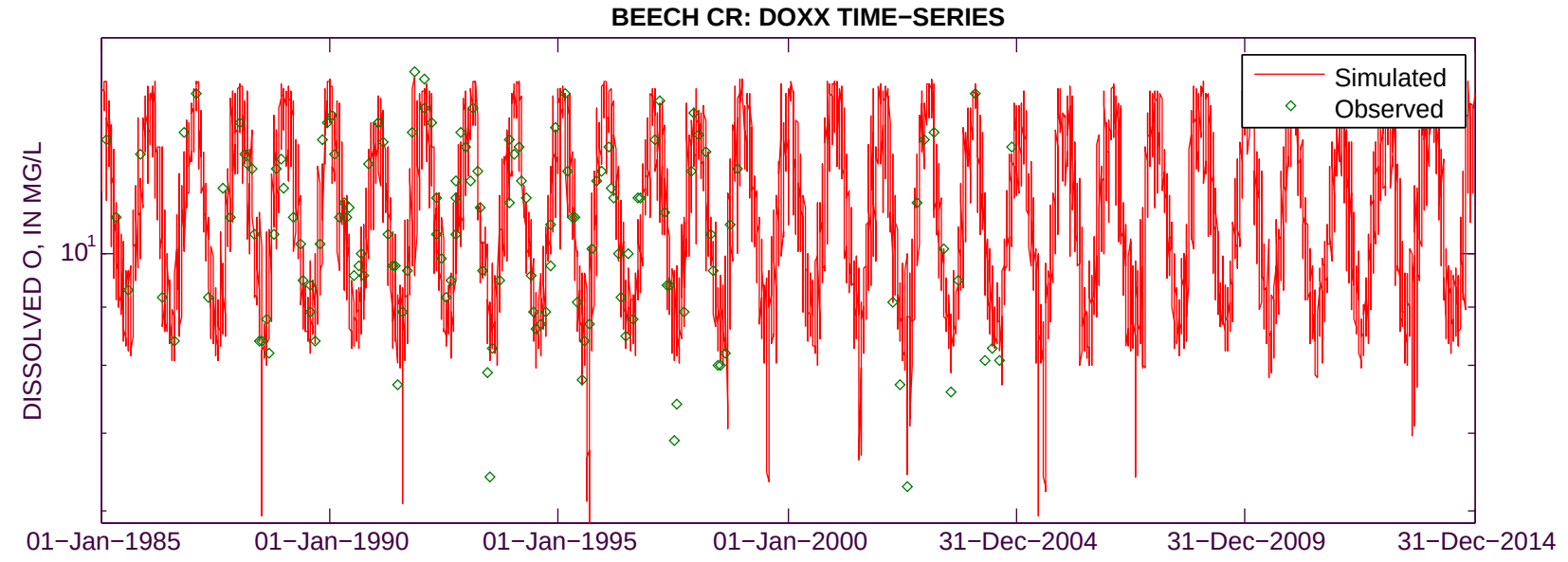
Dates: 1/1/1985 – 12/31/201

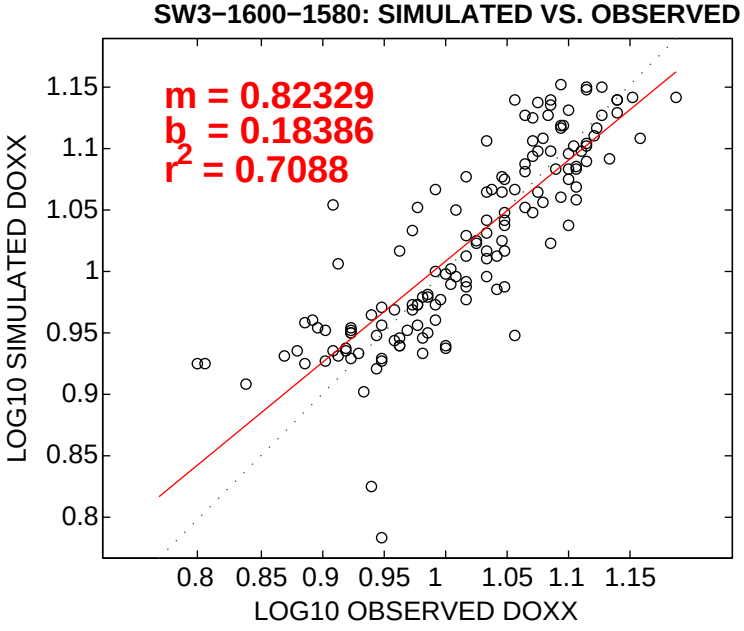
Drive	Directory	Observed
N/A	model	OBS20161101

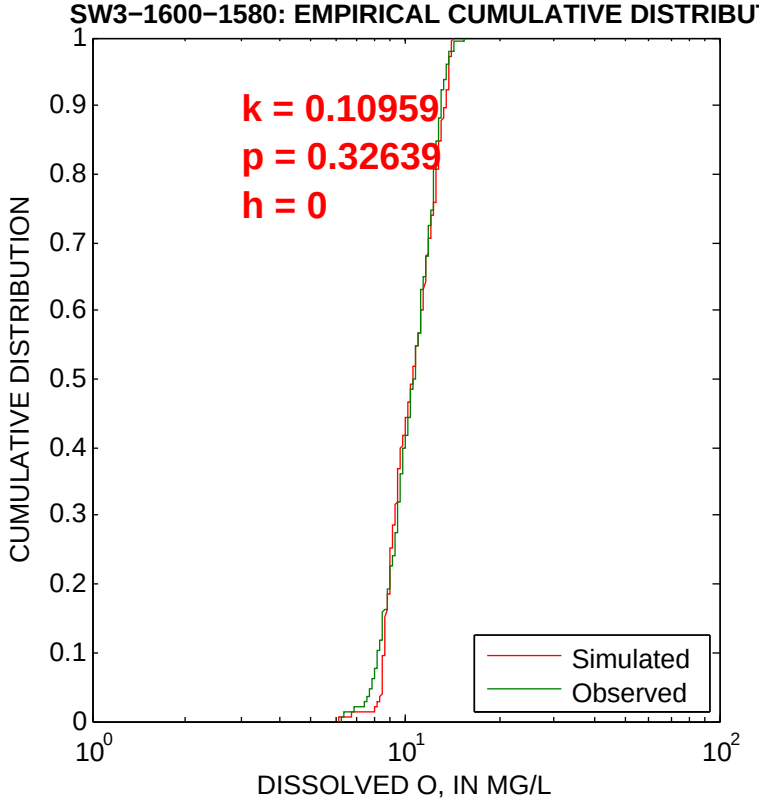
STATISTICS

	n	observe	simulate
		4308	4308
min		137	18.435
		2.13672	1.26564
mean		795.011	650.333
		2.7481	2.71594
media		506	525.01
		2.70415	2.72017
max		7420	4030.6
		3.8704	3.60537
varian		667892	237621
		0.118156	0.08558
JB		0.001	0.001
		0.001	0.001
		ra	log
%		-18.1983	-1.1703
err.va		258367	0.0366069
rel.std.err		0.386839	0.309819
mod.eff		0.613161	0.690181

VERSION 2.1







DATA SELECTION

scenario: P620171001WQ | file: DOXX.calib

plot: DOXX - dissolved oxygen

Dates: 1/1/1985 – 12/31/201

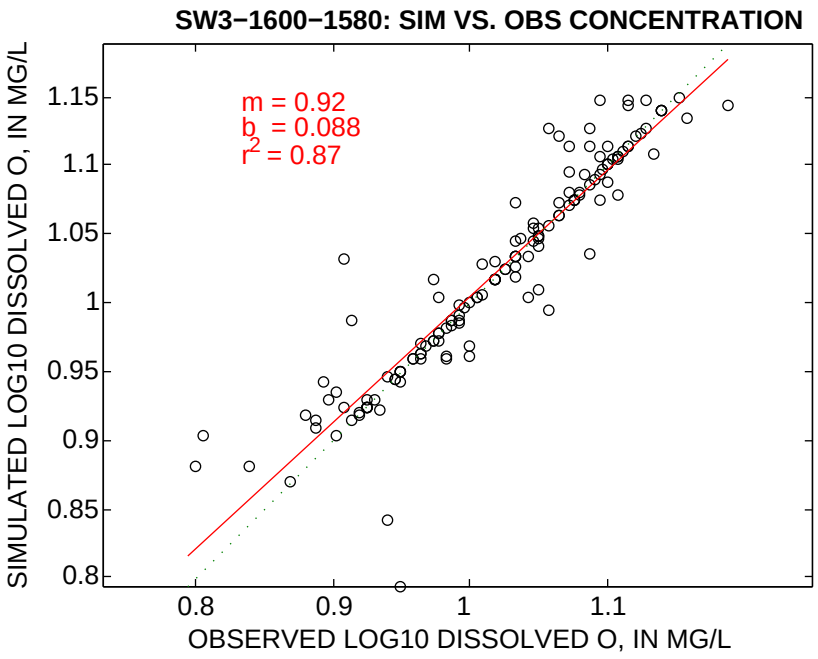
Drive: N/A | Directory: model | Observed: OBS20161101

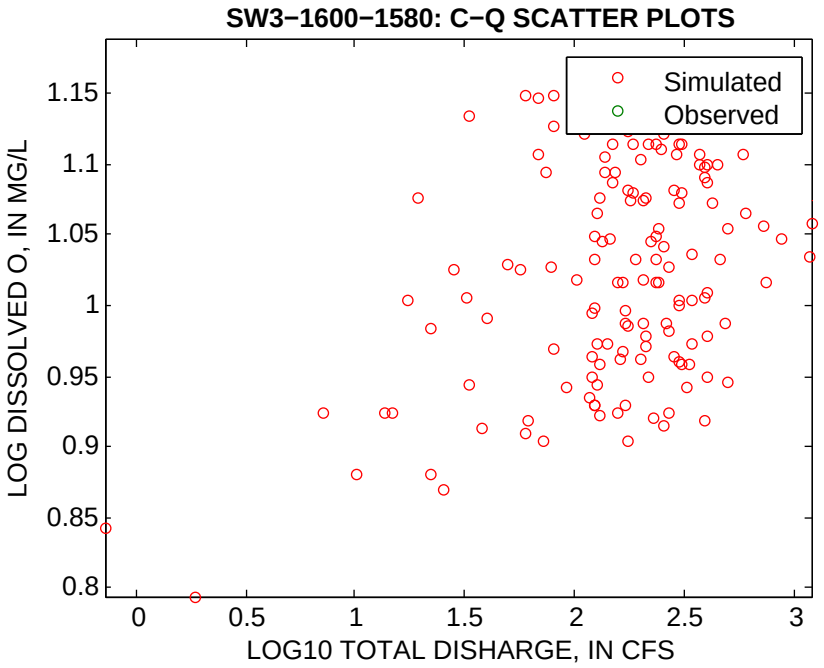
STATISTICS

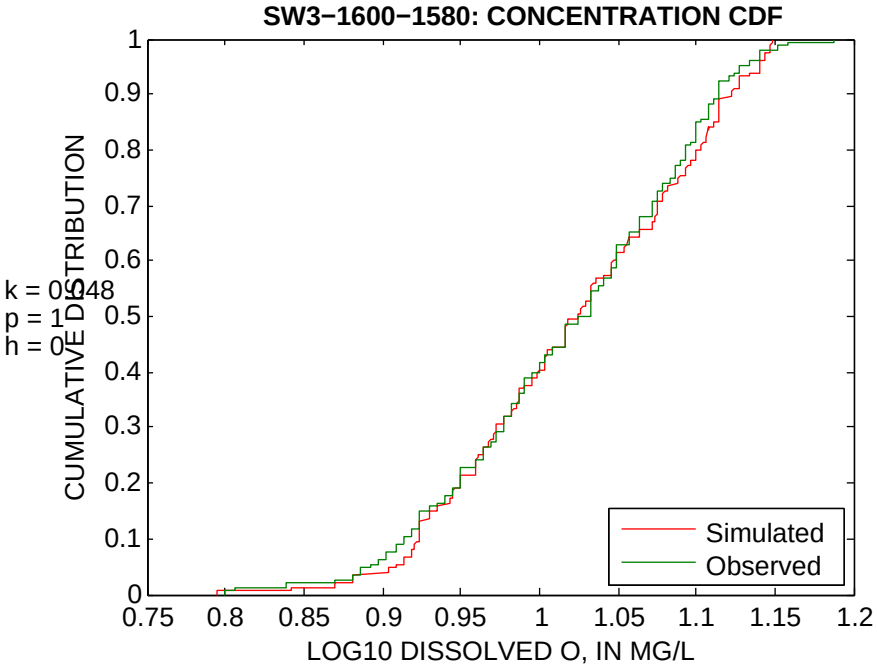
		observe	simulate
n		146	146
min		6.3	6.0834
		0.799341	0.784146
mean		10.6171	10.704
		1.01921	1.02297
media		10.7	10.5265
		1.02936	1.02228
max		15.4	14.162
		1.18752	1.15112
varian		3.43191	3.4517
		0.00607641	0.00581079
JB	☑	0.16148	0.032757
	☑	0.089982	0.146438
		ra	log
%		0.818173	0.368509
err.va		0.985116	0.00189605
rel.std.err		0.287046	0.312035
mod.eff		0.712954	0.687965

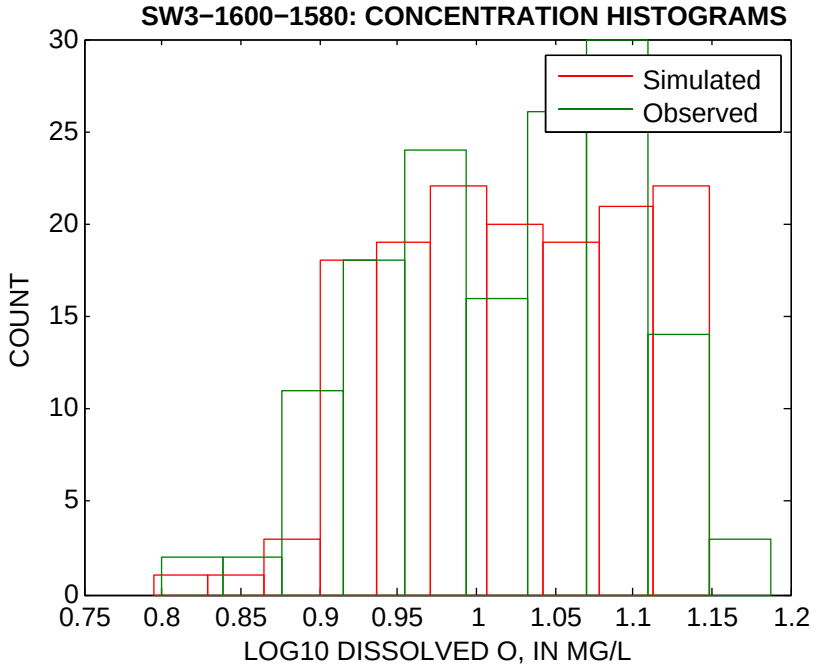
VERSION 2.1

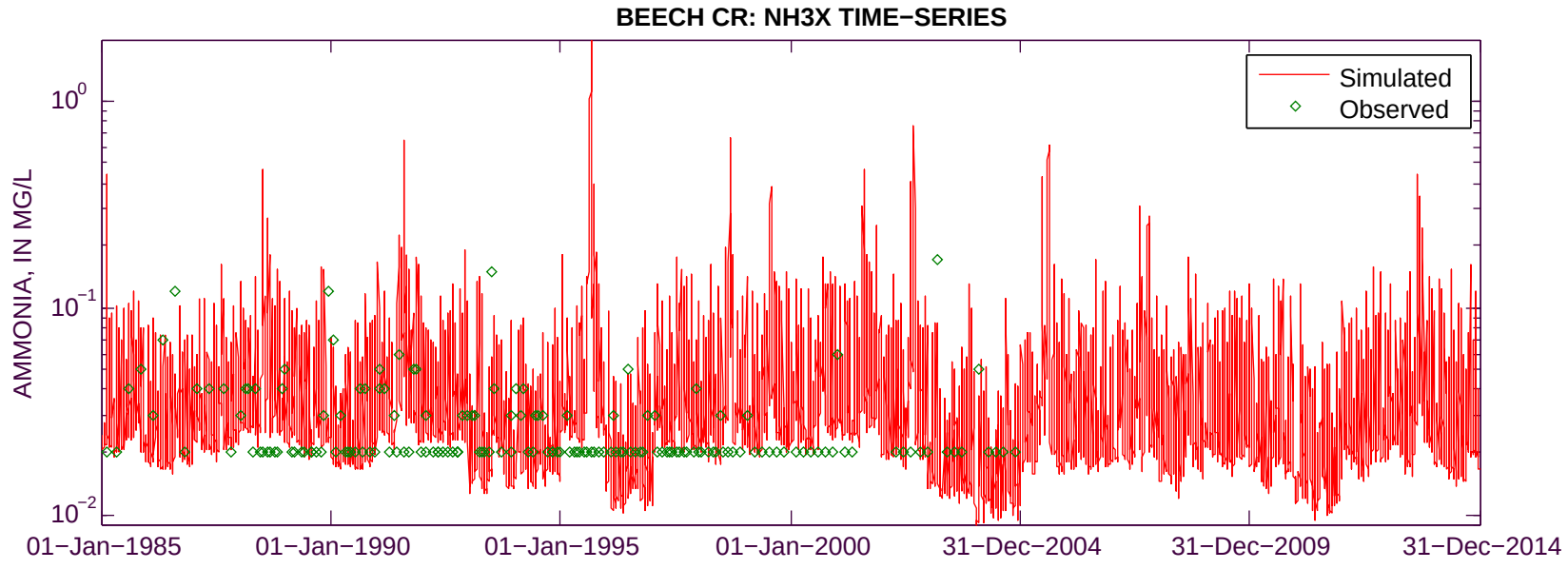
ALL DATA
LOG10

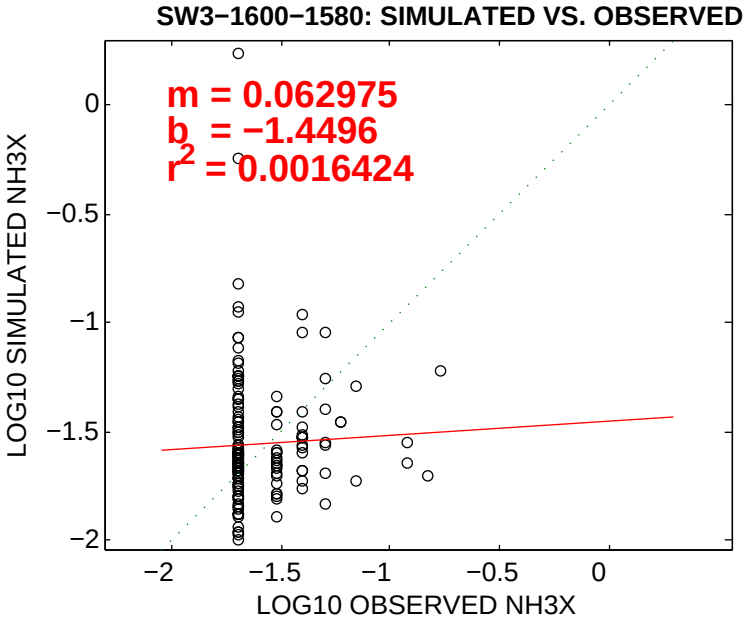


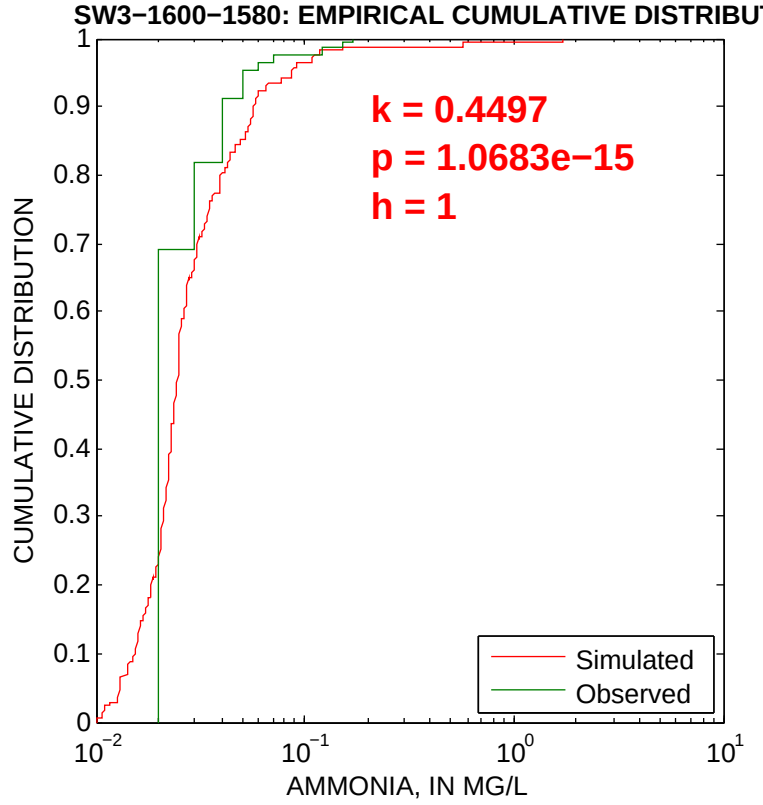












DATA SELECTION

scenario	file
P620171001WQ	NH3X.calib

plot: NH3X - ammonia

Dates: 1/1/1985 – 12/31/201

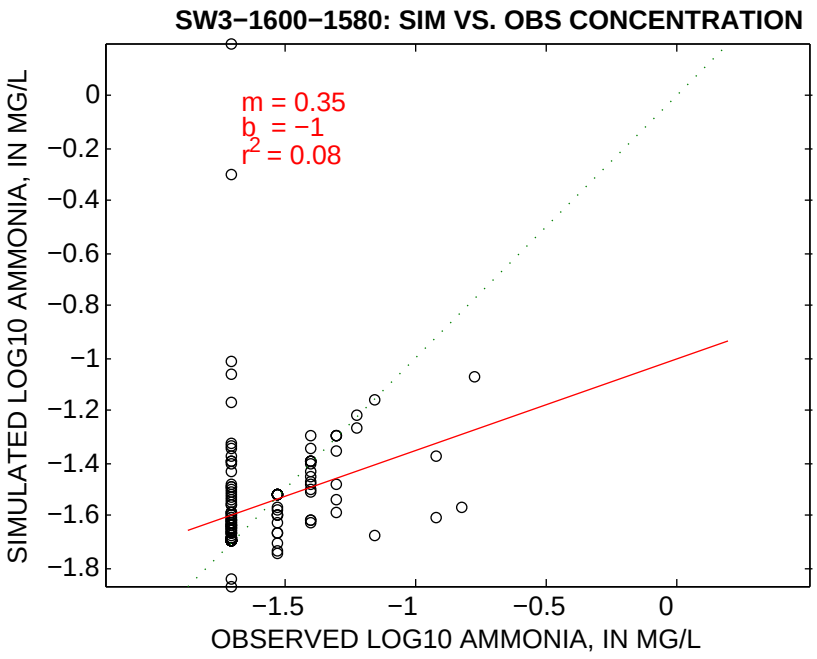
Drive	Directory	Observed
N/A	model	OBS20161101

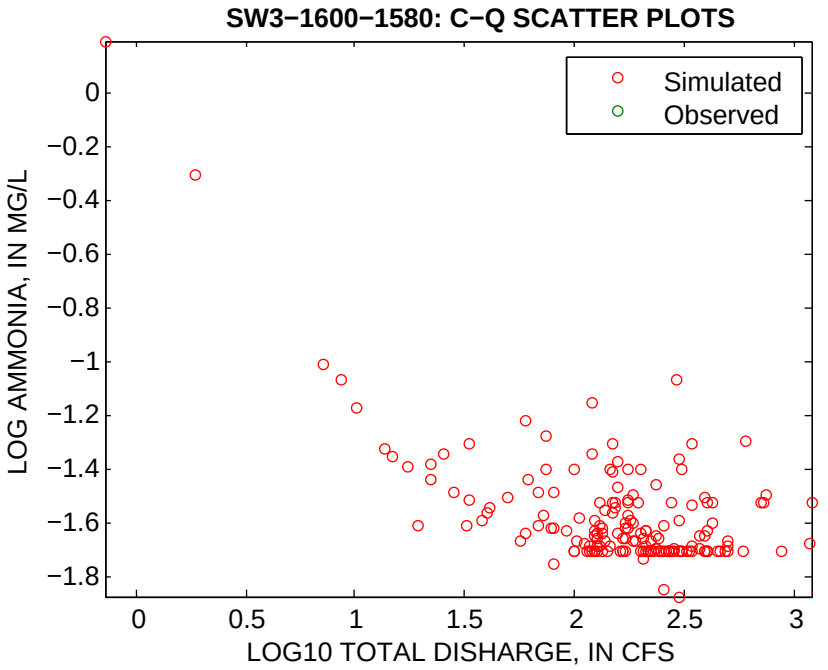
STATISTICS

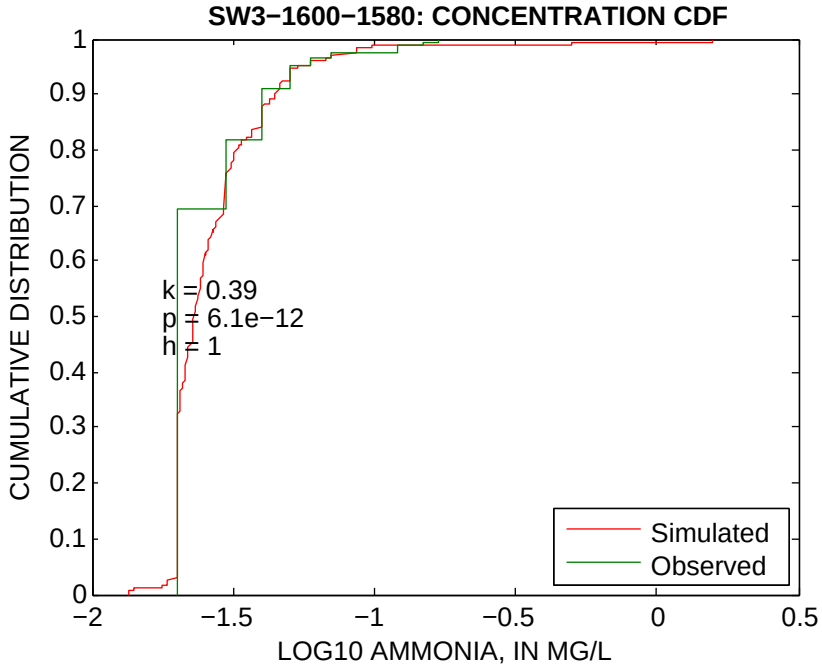
		observe	simulate
n		169	169
min		0.02	0.010196
		-1.69897	-1.99157
mean		0.028284	0.0446502
		-1.60013	-1.55038
media		0.02	0.024665
		-1.69897	-1.60792
max		0.17	1.7315
		-0.769551	0.238422
varian		0.00042144	0.0192252
		0.0324203	0.0782862
JB		0.001	0.001
		0.001	0.001
		ra	log
%		57.8637	-3.10933
err.va		0.020088	0.109113
rel.std.err		47.6649	3.36559
mod.eff		-46.6649	-2.36559

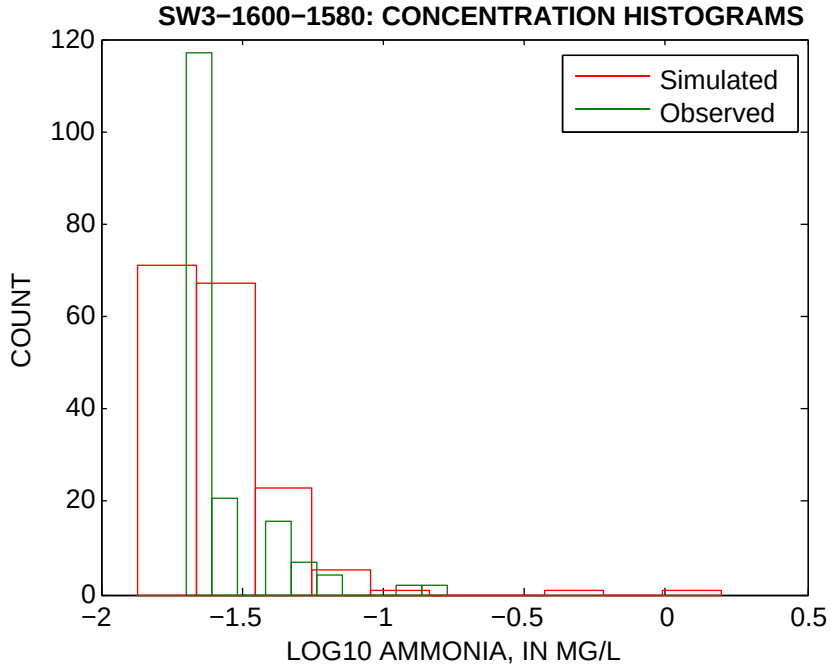
VERSION 2.1

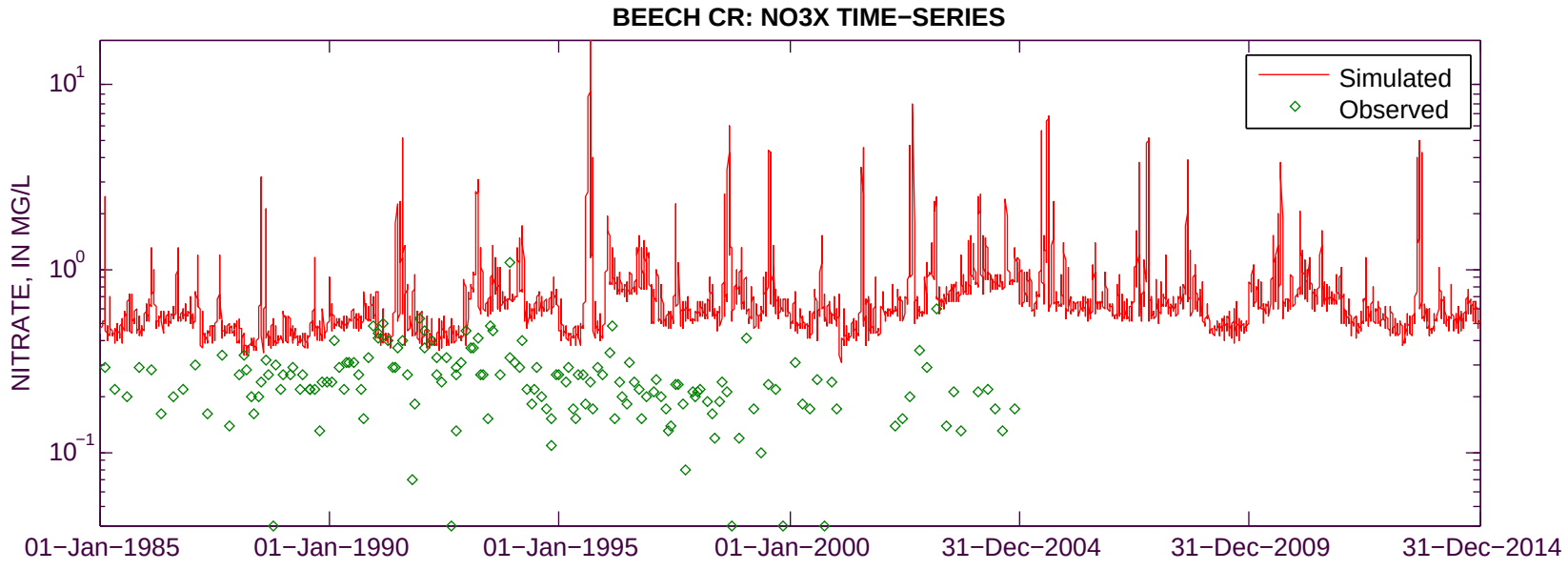
ALL DATA
LOG10

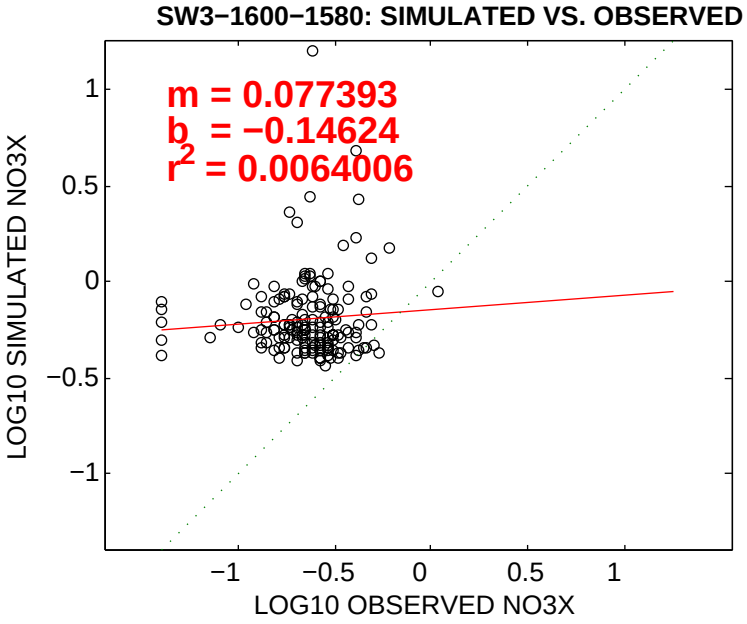


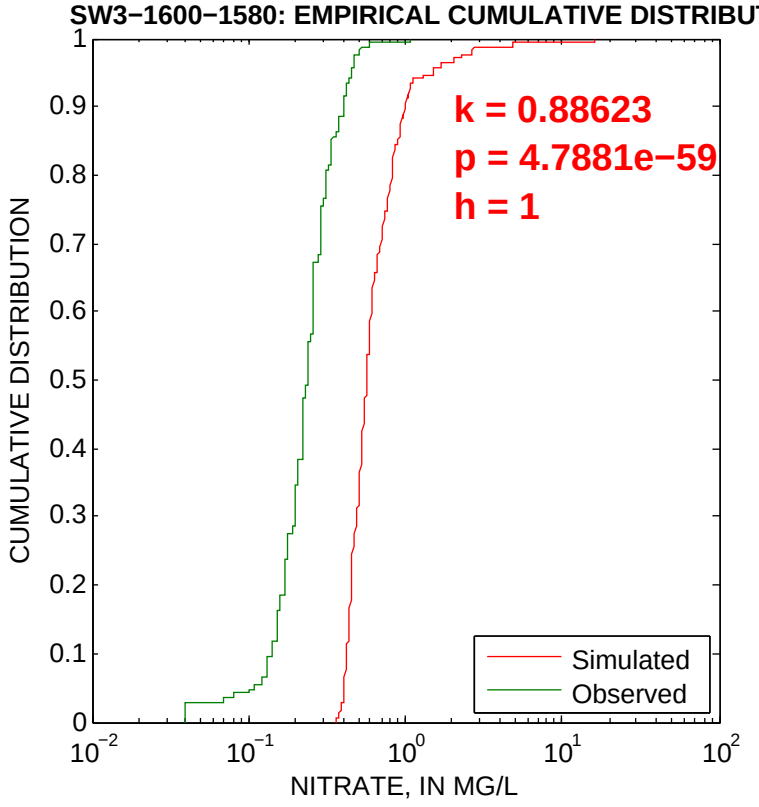












DATA SELECTION

scenario	file
P620171001WQ	NO3X.calib

plot: NO3X - nitrate

Dates 1/1/1985 12/31/201

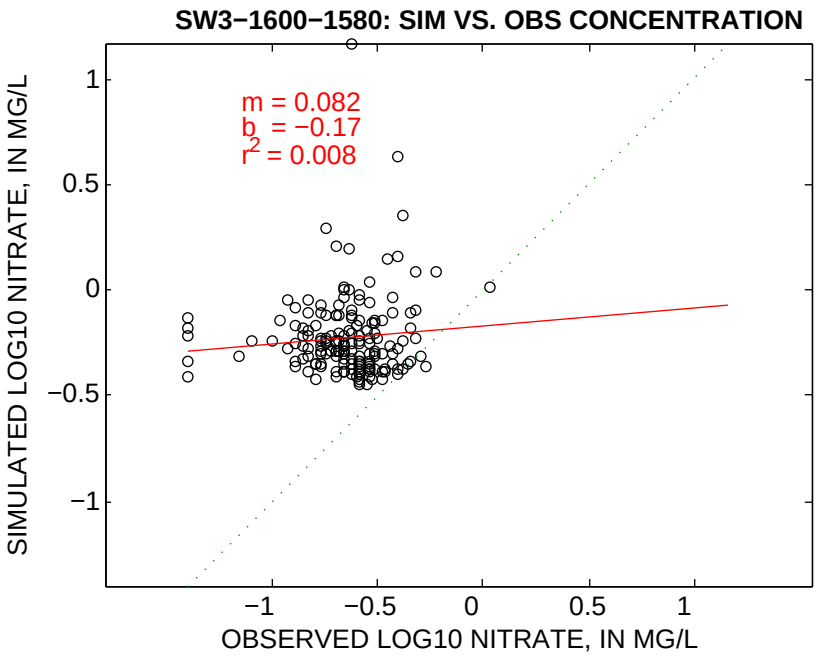
Drive	Directory	Observed
N/A	model	OBS20161101

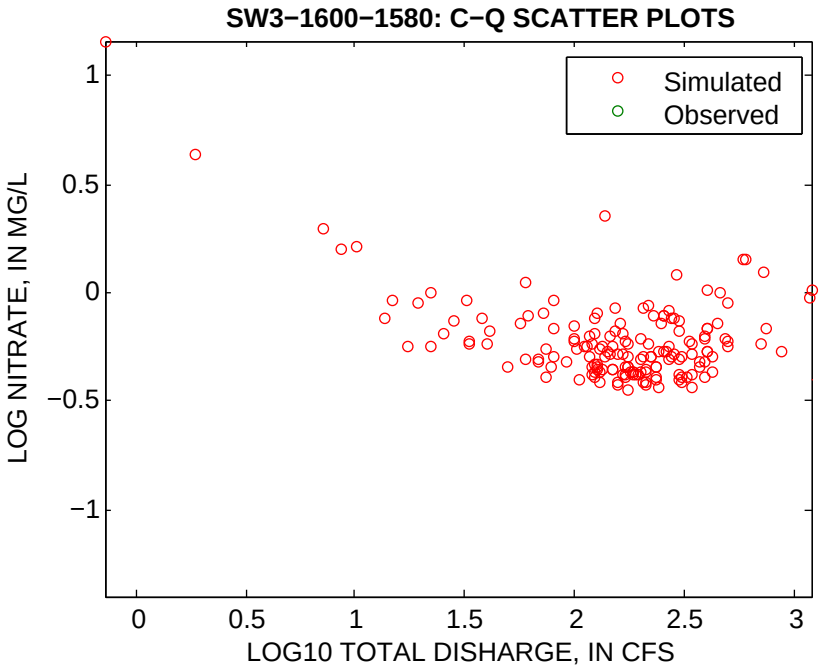
STATISTICS

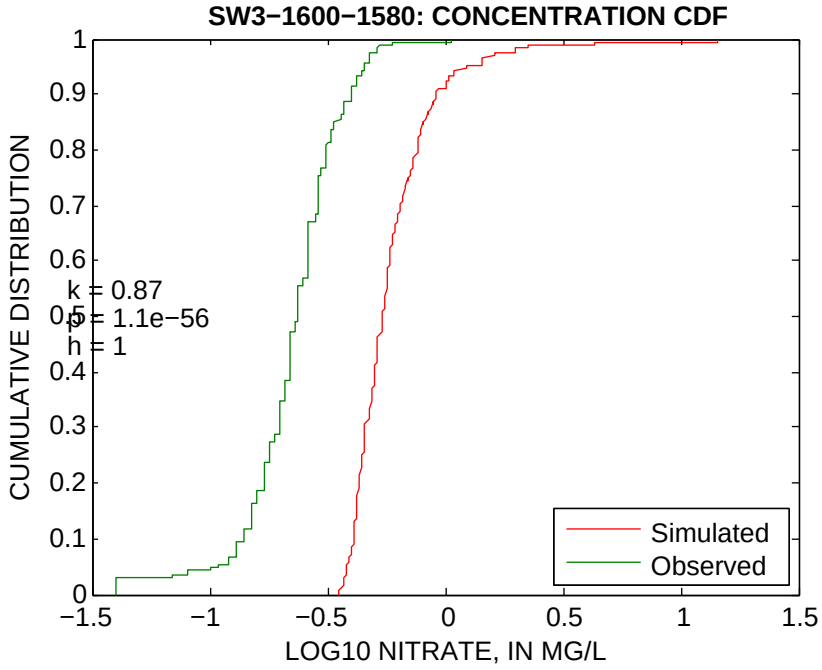
	n	167	167
		observe	simulate
min		0.04	0.3624
		-1.39794	-0.440812
mean		0.251796	0.78907
		-0.64569	-0.196215
media		0.24	0.56436
		-0.619789	-0.248444
max		1.07	16.033
		0.0293838	1.20501
varian		0.0142835	1.64209
		0.0460467	0.0430902
JB		0.001	0.001
		0.001	0.001
		ra	log
%		213.376	-69.6115
err.va		1.93179	0.285254
rel.std.err		135.246	6.19489
mod.eff		-134.246	-5.19489

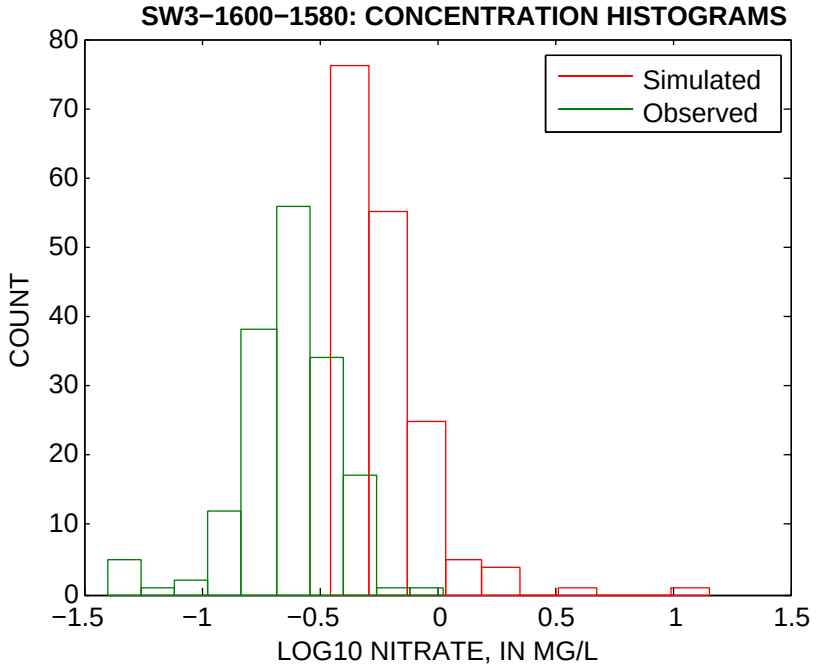
VERSION 2.1

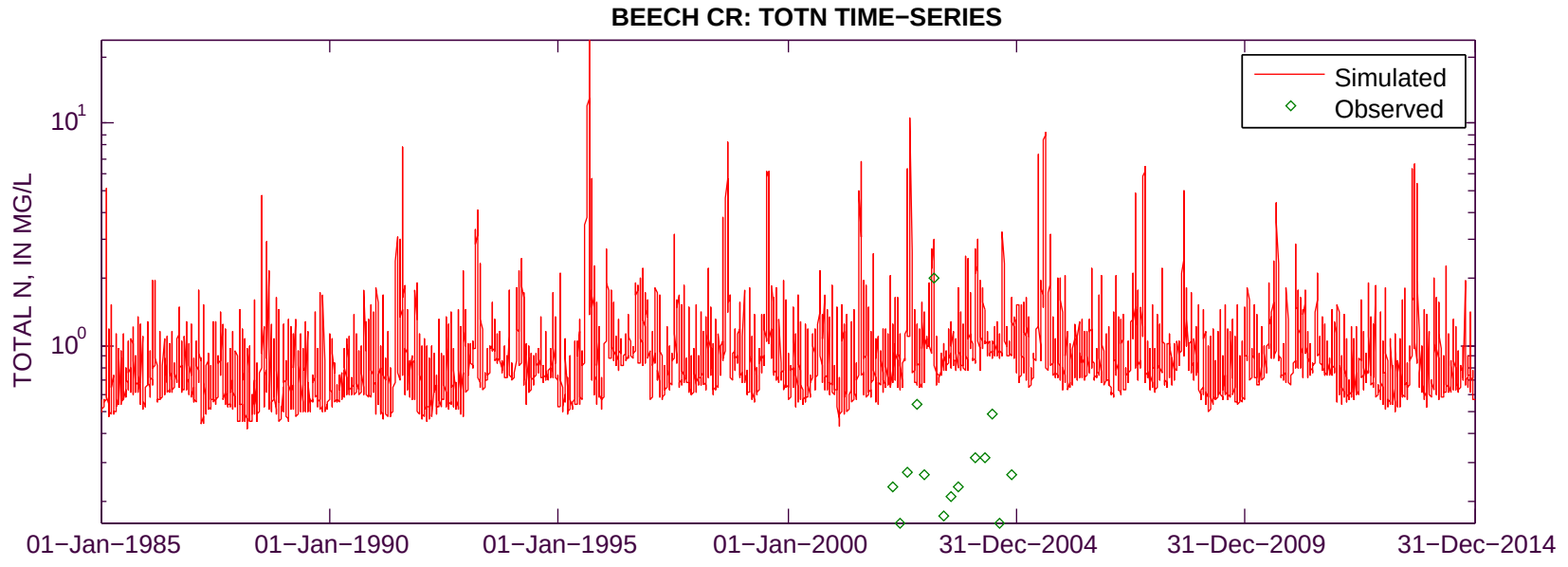
ALL DATA
LOG10

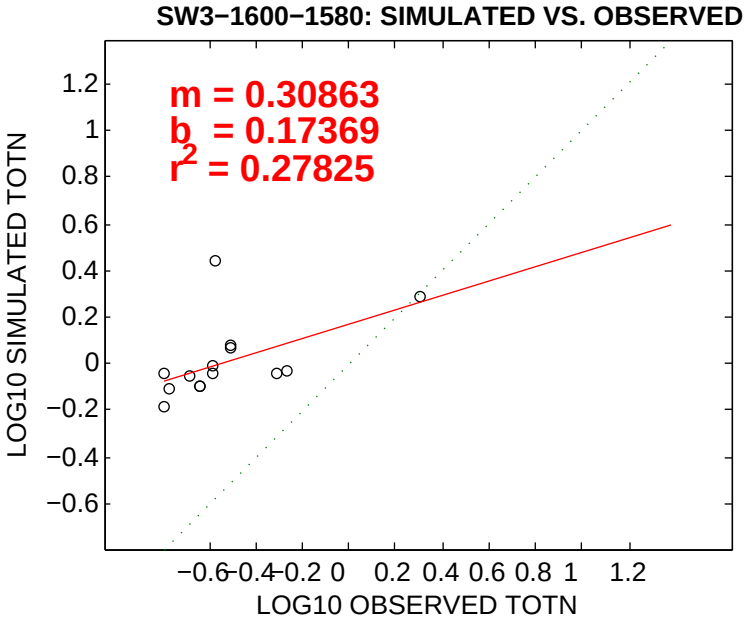


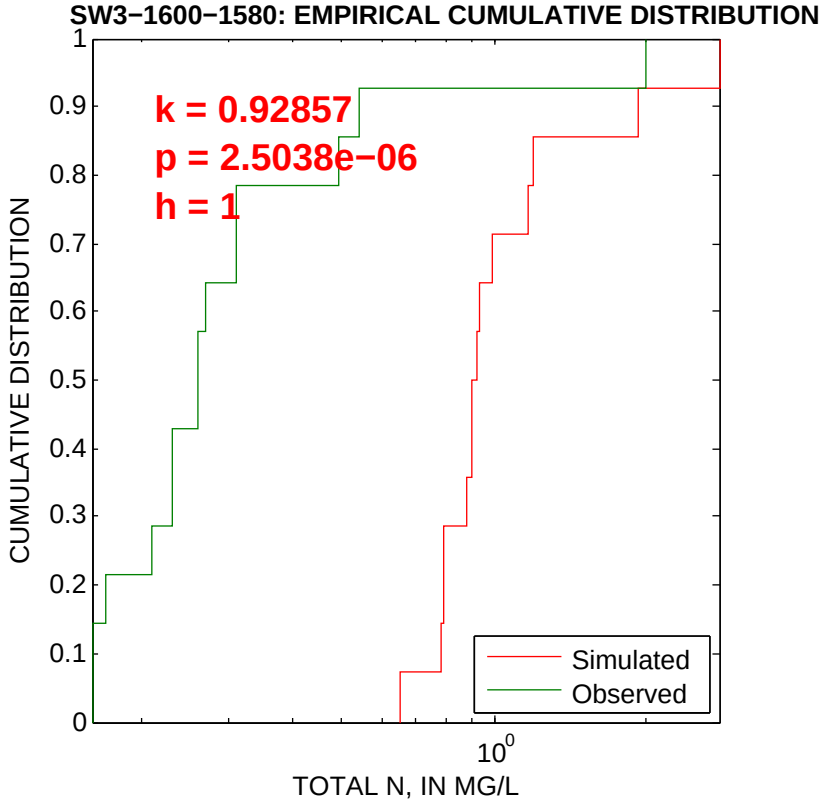












DATA SELECTION

scenario	file
P620171001WQ	TOTN.calib

plot: TOTN - total nitrogen

Dates: 1/1/1985 – 12/31/201

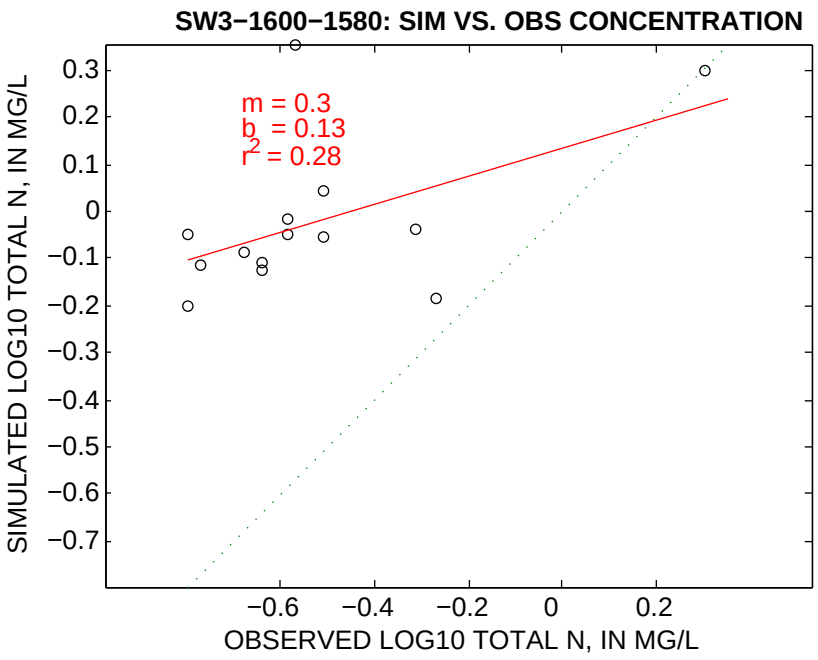
Drive	Directory	Observed
N/A	model	OBS20161101

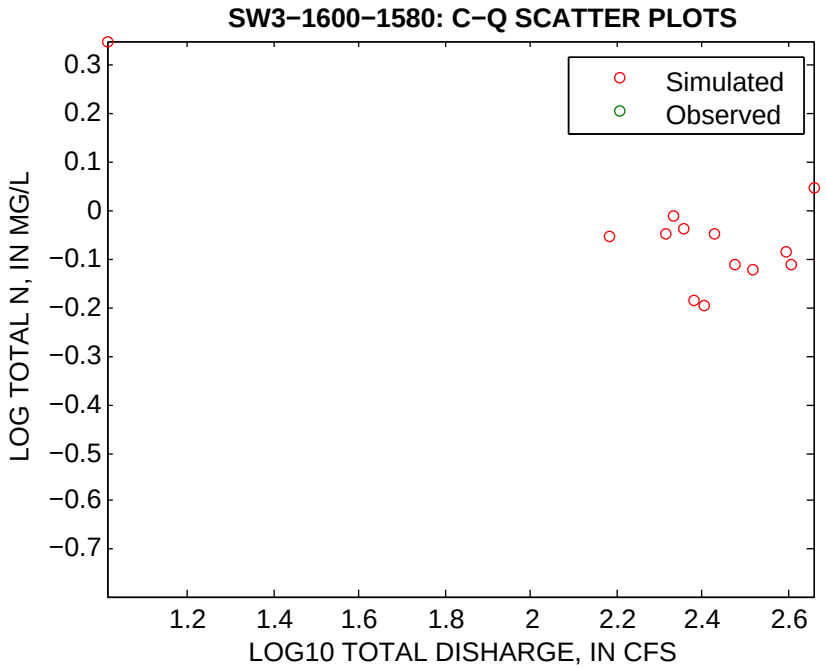
STATISTICS

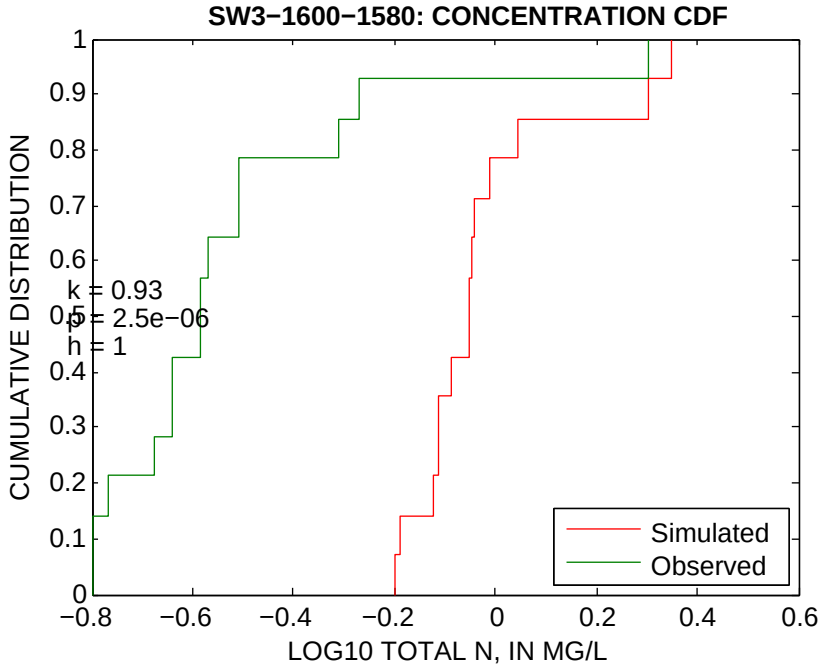
	n	14	14
		observe	simulate
min		0.16	0.65011
		-0.79588	-0.187013
mean		0.4	1.11551
		-0.524856	0.0117069
media		0.26	0.913345
		-0.585027	-0.0393787
max		2	2.7747
		0.30103	0.443216
varian		0.224769	0.323005
		0.0815456	0.0279142
JB		0.001	0.001168
		0.002792	0.013877
		ra	log
%		178.877	-102.231
err.va		0.871608	0.369171
rel.std.err		3.87779	4.52718
mod.eff		-2.87779	-3.52718

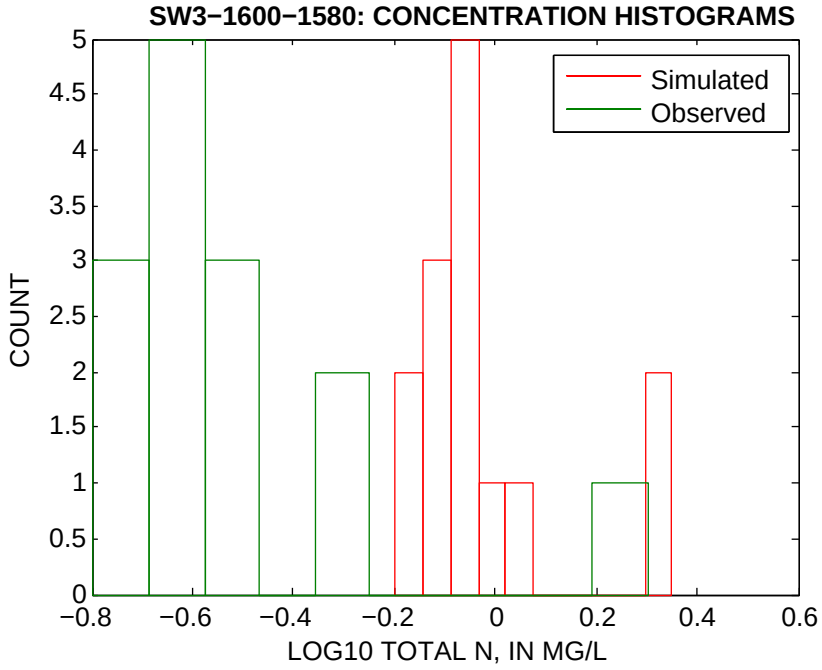
VERSION 2.1

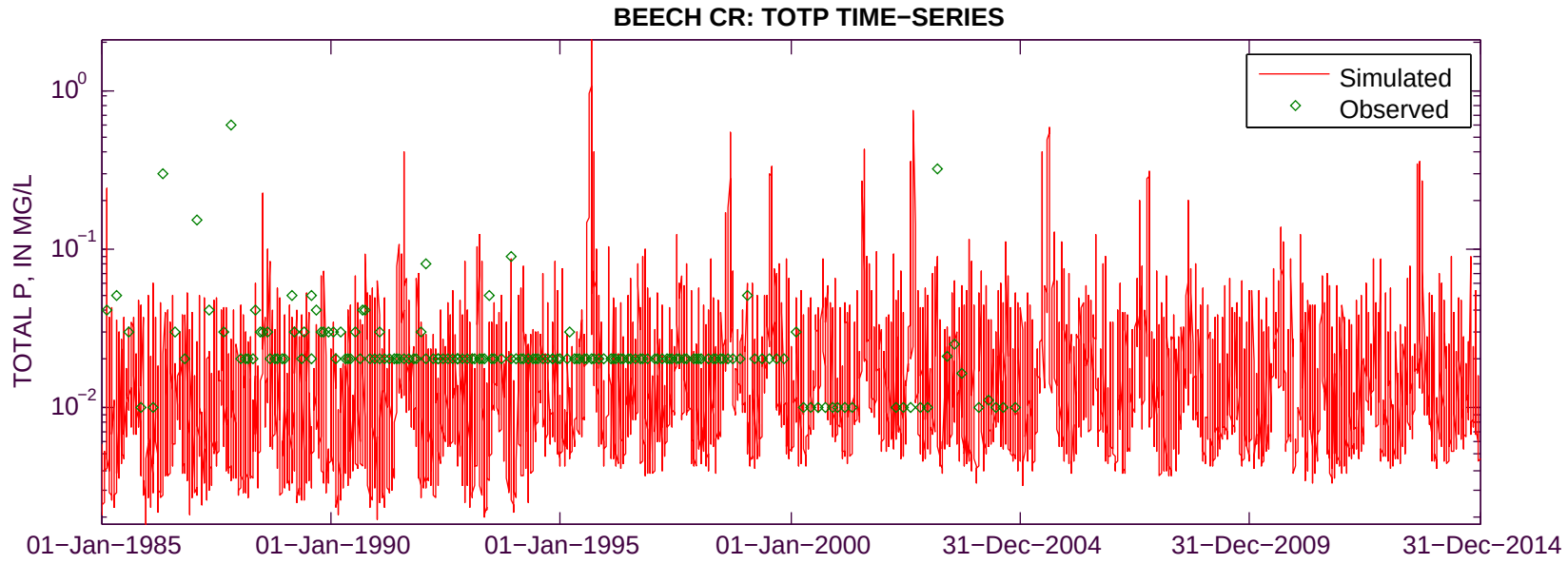
ALL DATA
LOG10

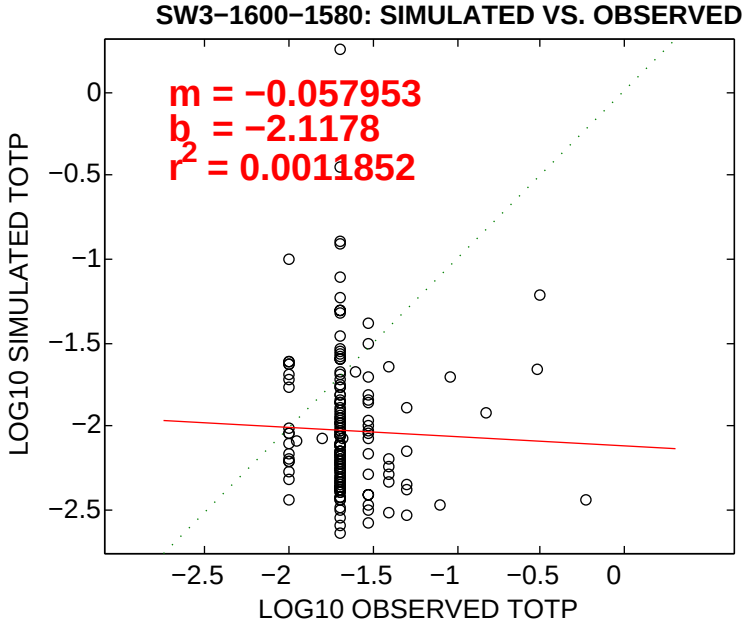


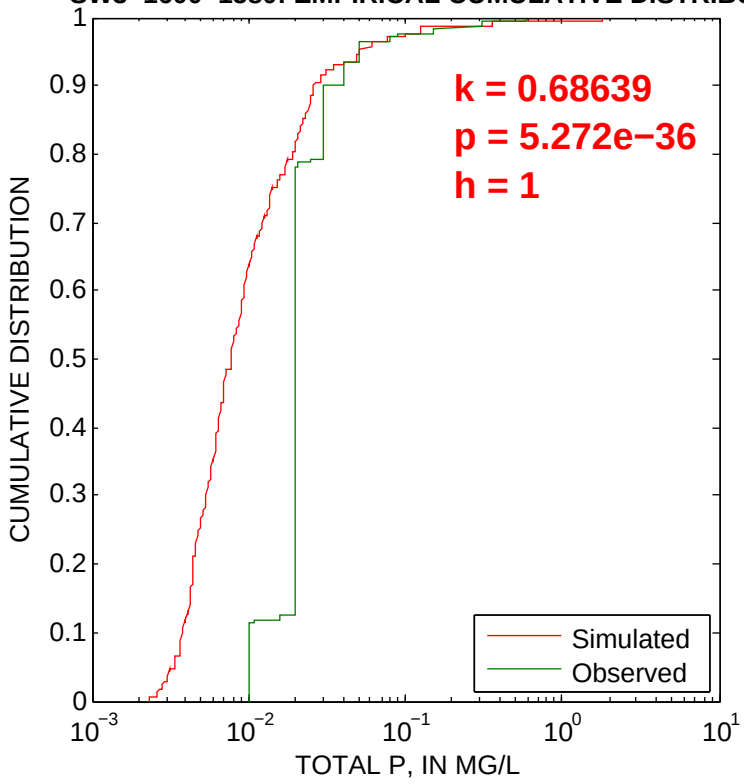












DATA SELECTION

scenario	file
P620171001WQ	TOTP.calib

plot: TOTP - total phosphorus

Dates: 1/1/1985 – 12/31/201

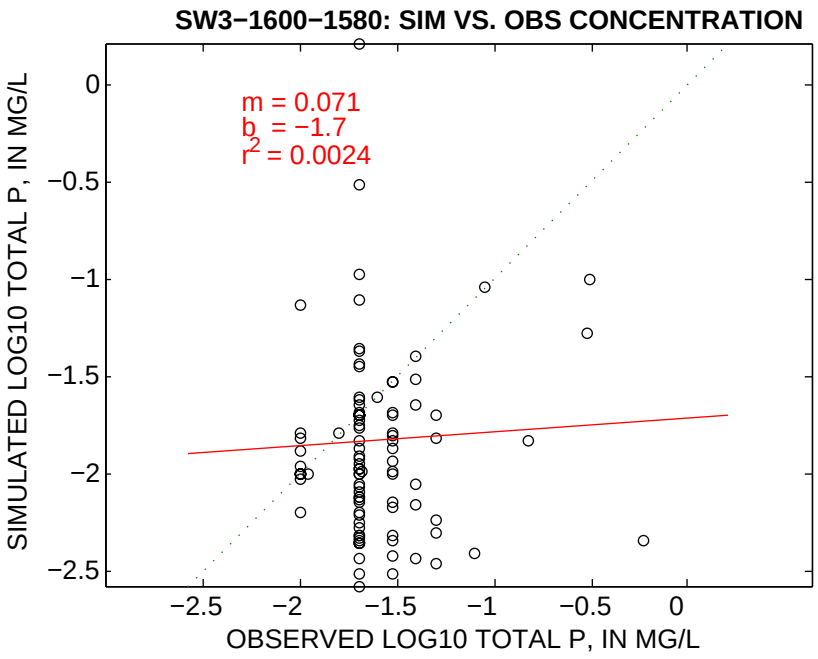
Drive	Directory	Observed
N/A	model	OBS20161101

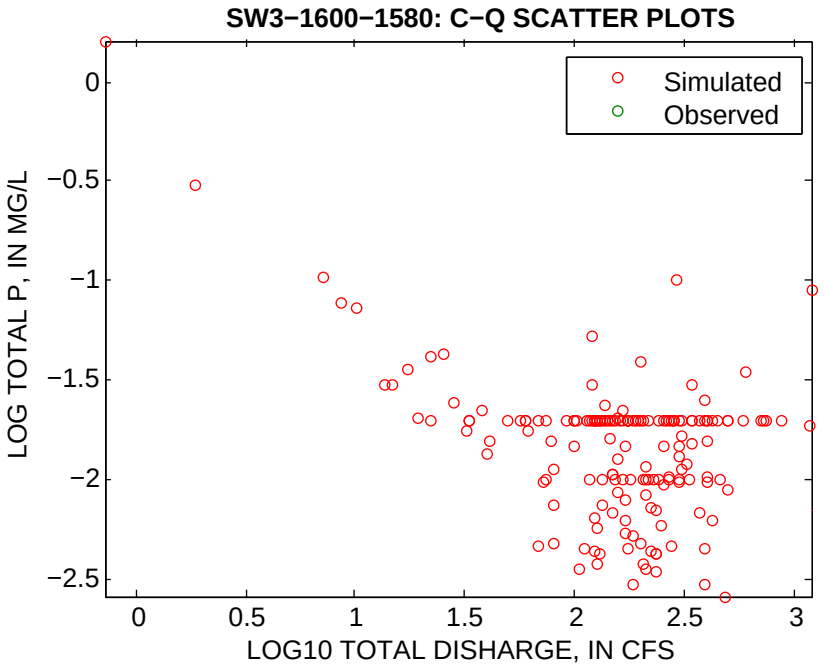
STATISTICS

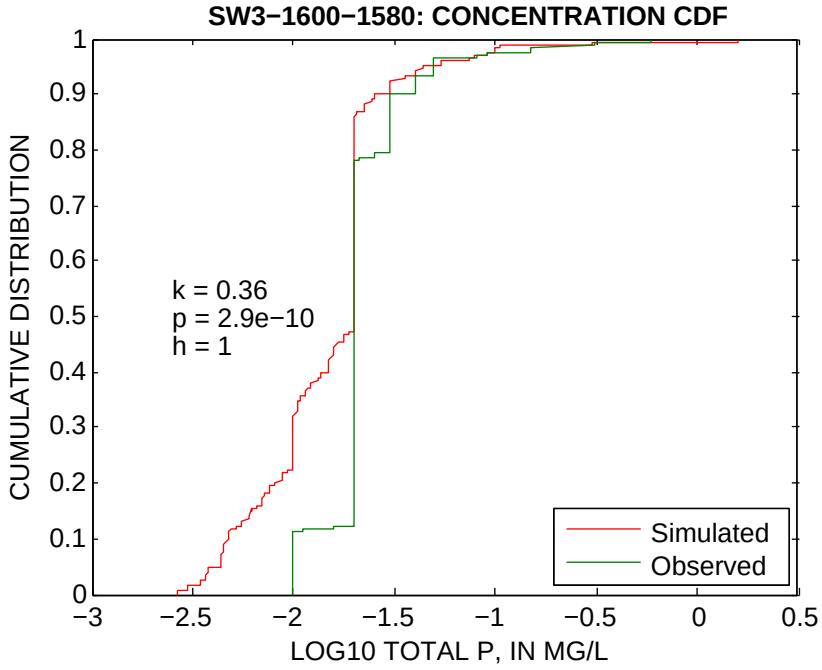
	n	169	169
		observe	simulate
min		0.01	0.0023349
		-2	-2.63173
mean		0.0298047	0.0261591
		-1.65767	-2.02172
media		0.02	0.0076789
		-1.69897	-2.1147
max		0.59	1.7882
		-0.229148	0.252416
varian		0.00303341	0.0196088
		0.0591811	0.167702
JB		0.001	0.001
		0.001	0.001
		ra	log
%		-12.2318	21.9614
err.va		0.0228163	0.367063
rel.std.err		7.52166	6.20236
mod.eff		-6.52166	-5.20236

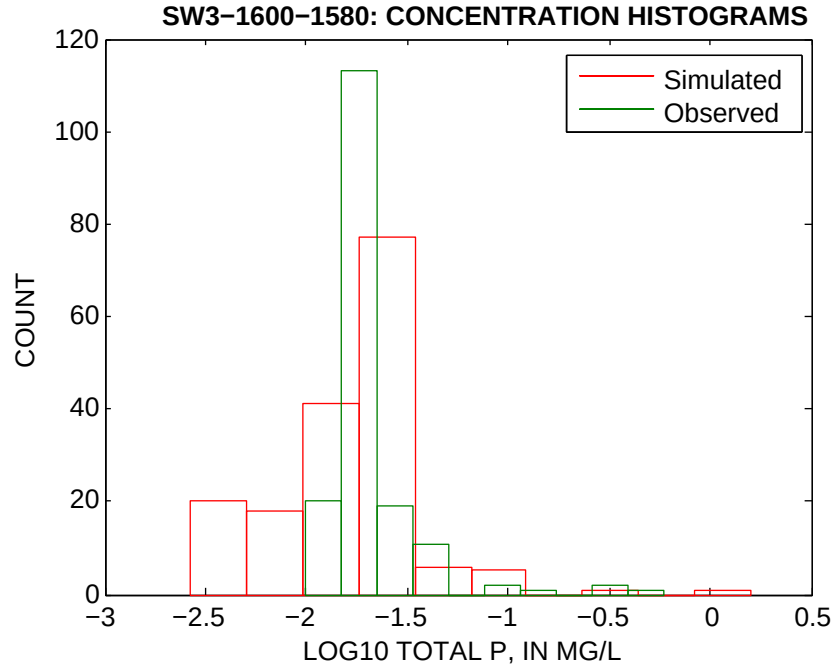
VERSION 2.1

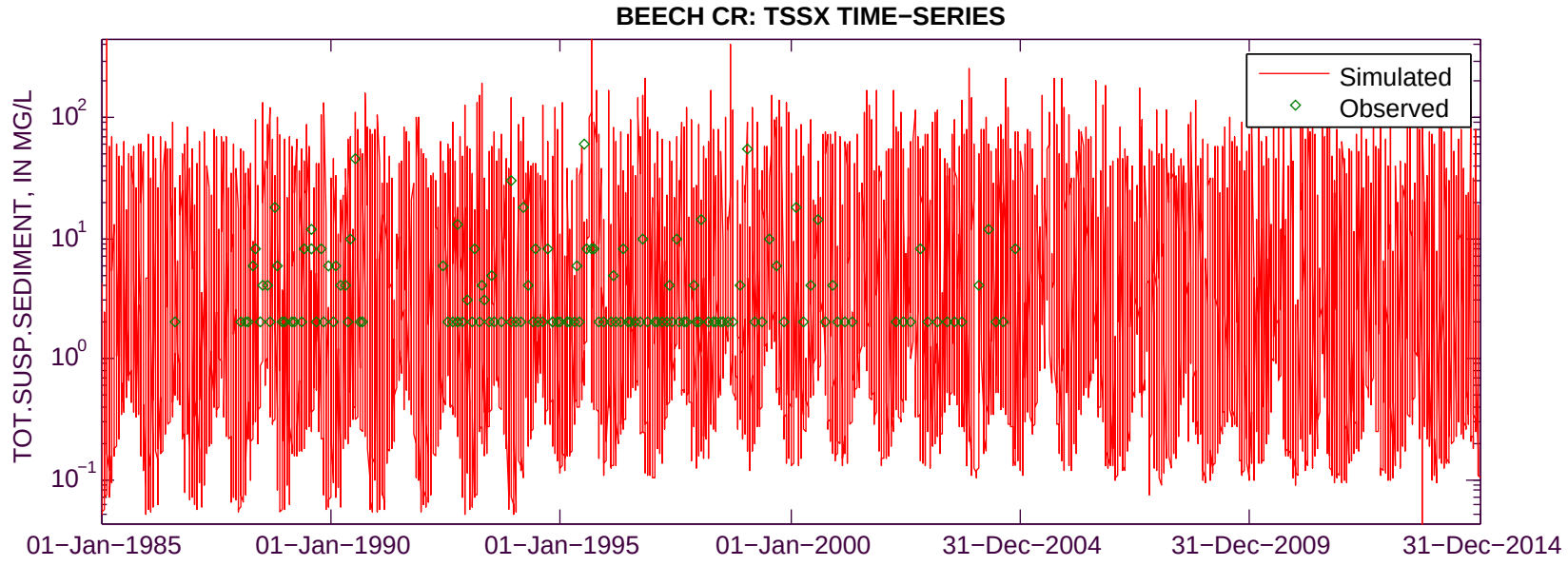
ALL DATA
LOG10

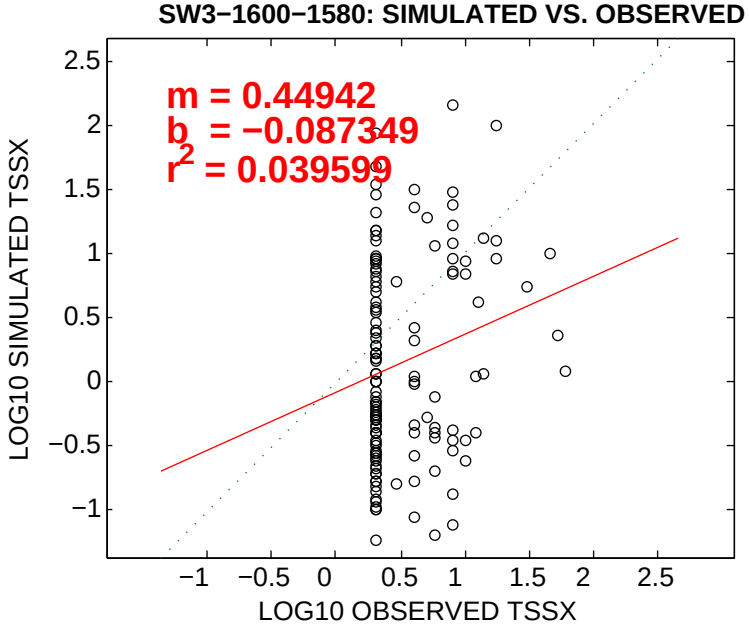


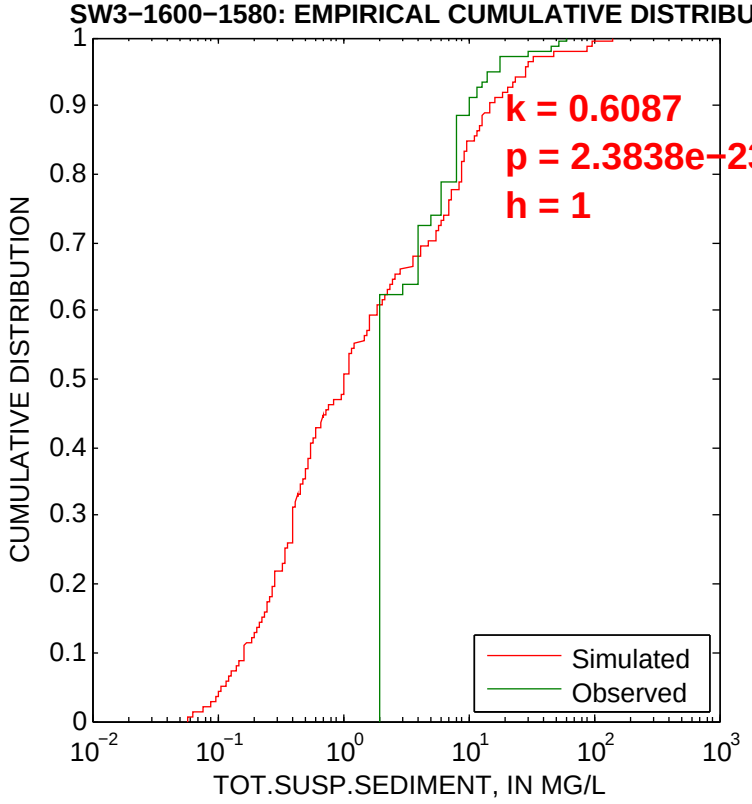












DATA SELECTION

scenario	file
P620171001WQ	TSSX.calib

plot: TSSX - total suspended ...

Dates: 1/1/1985 – 12/31/201

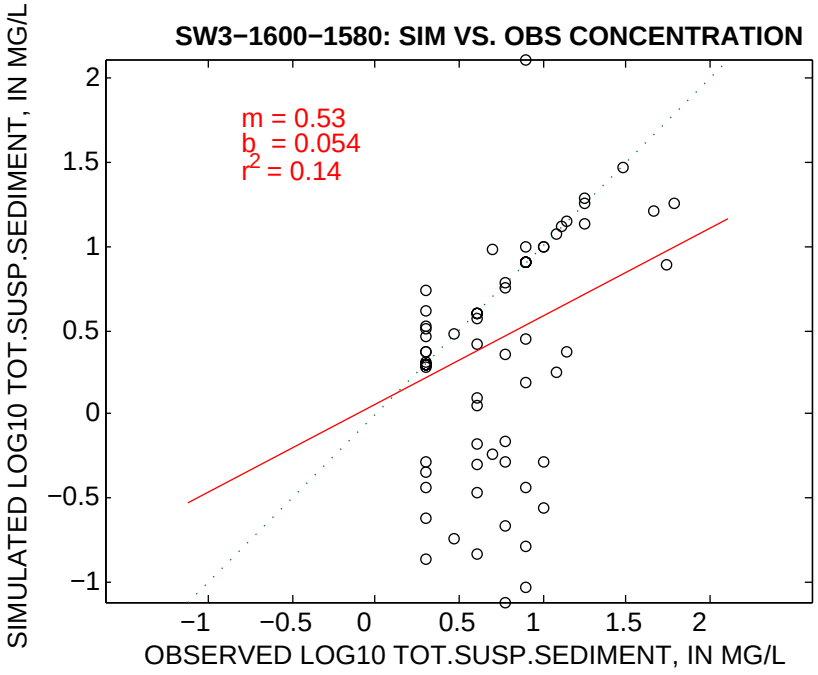
Drive	Directory	Observed
N/A	model	OBS20161101

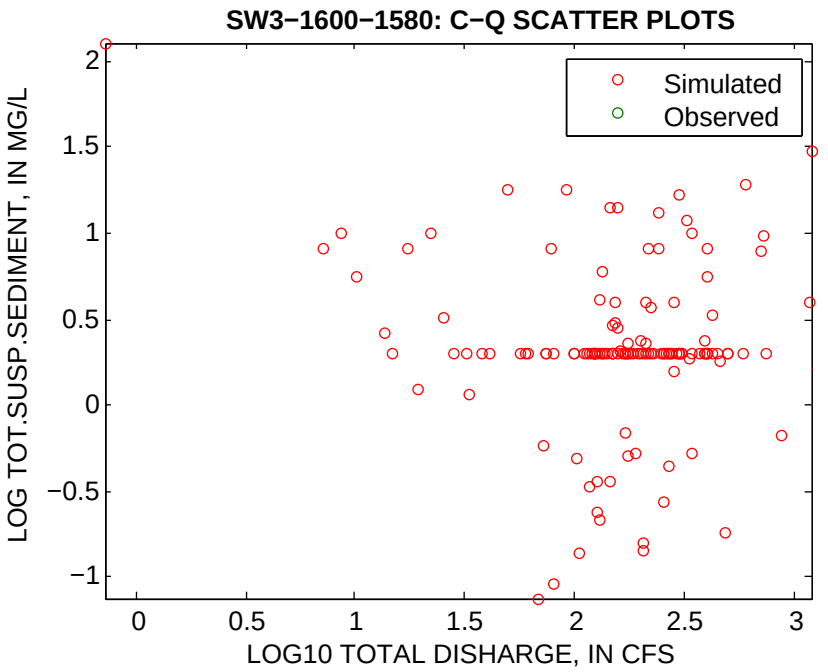
STATISTICS

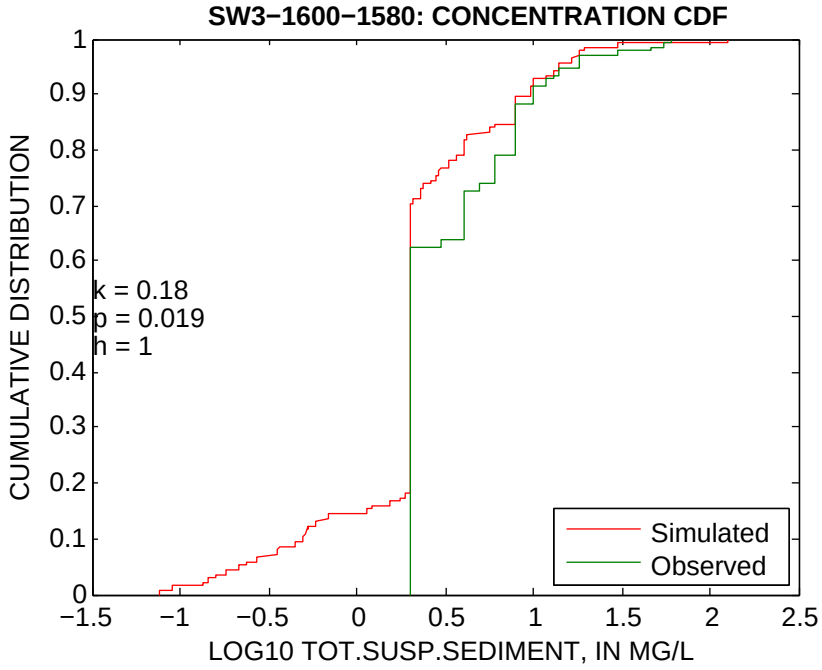
	n	138	138
		observe	simulate
min		2	0.058514
		0.30103	-1.23274
mean		5.2971	6.89582
		0.52633	0.149195
media		2	1.01825
		0.30103	0.00785316
max		60	141.93
		1.77815	2.15207
varian		69.8454	306.249
		0.118404	0.60394
JB		0.001	0.001
		0.001	0.034492
		ra	log
%		30.1809	-71.6538
err.va		354.335	0.759187
rel.std.err		5.07314	6.41182
mod.eff		-4.07314	-5.41182

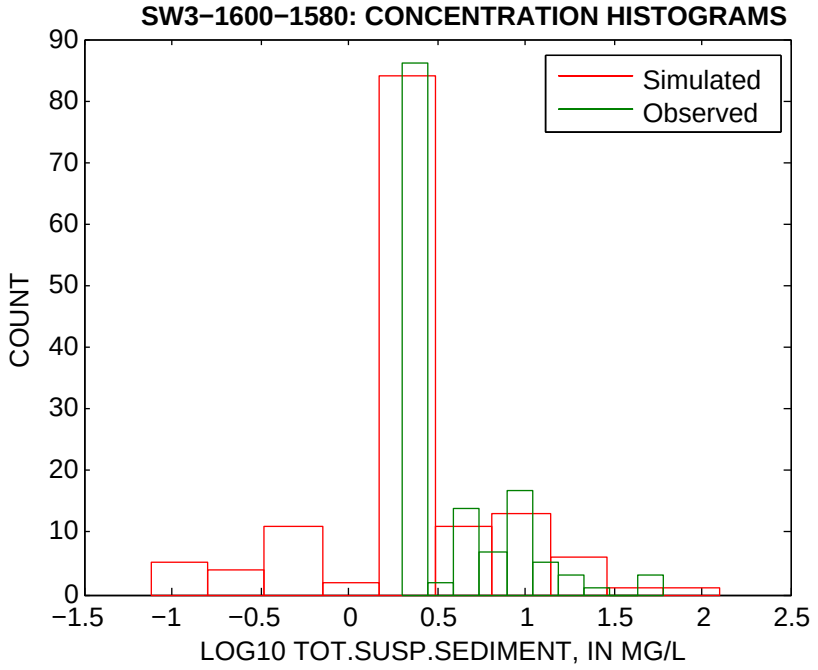
VERSION

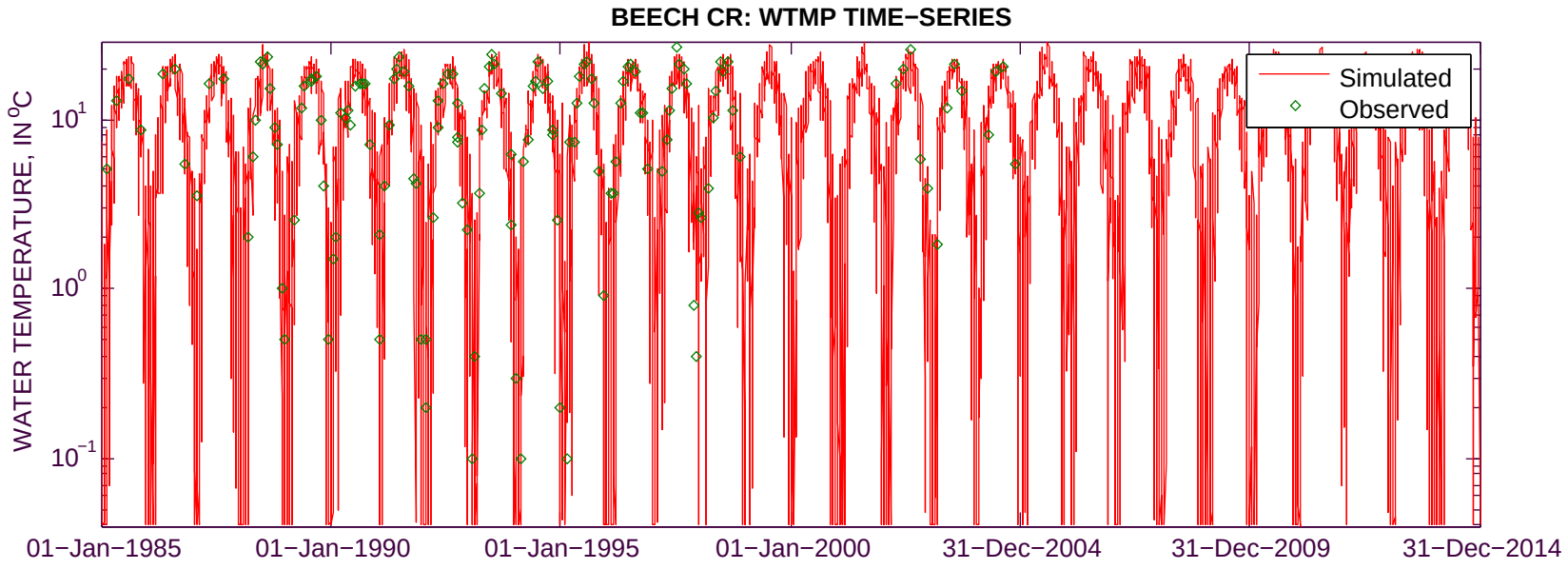
ALL DATA
LOG10

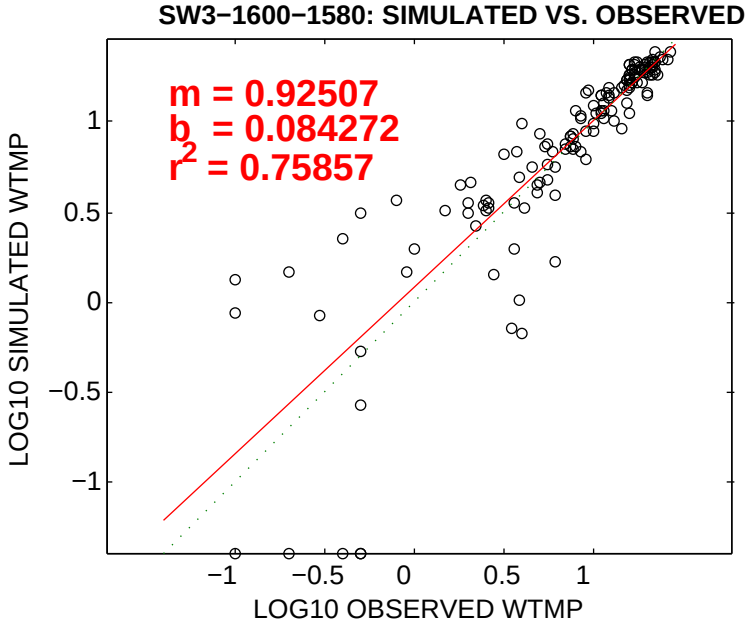


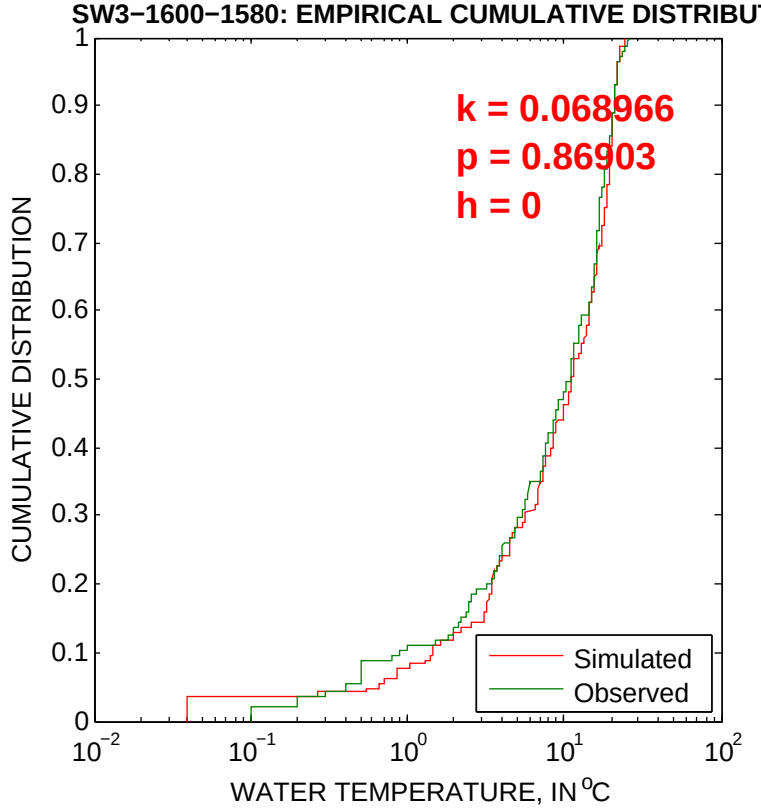












DATA SELECTION

scenario	file
P620171001WQ	WTMP.calib

plot: WTMP - water tempera...

Dates: 1/1/1985 – 12/31/201

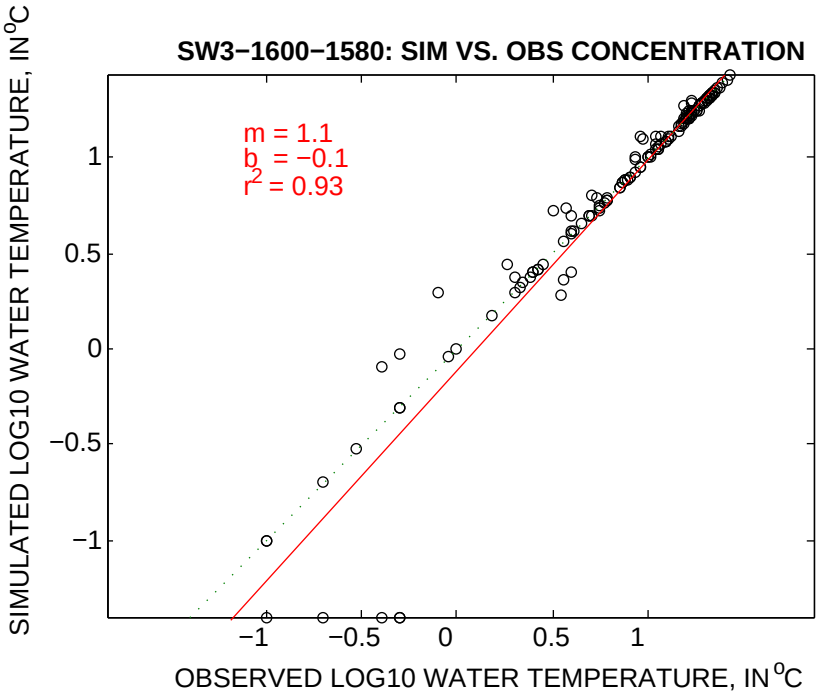
Drive	Directory	Observed
N/A	model	OBS20161101

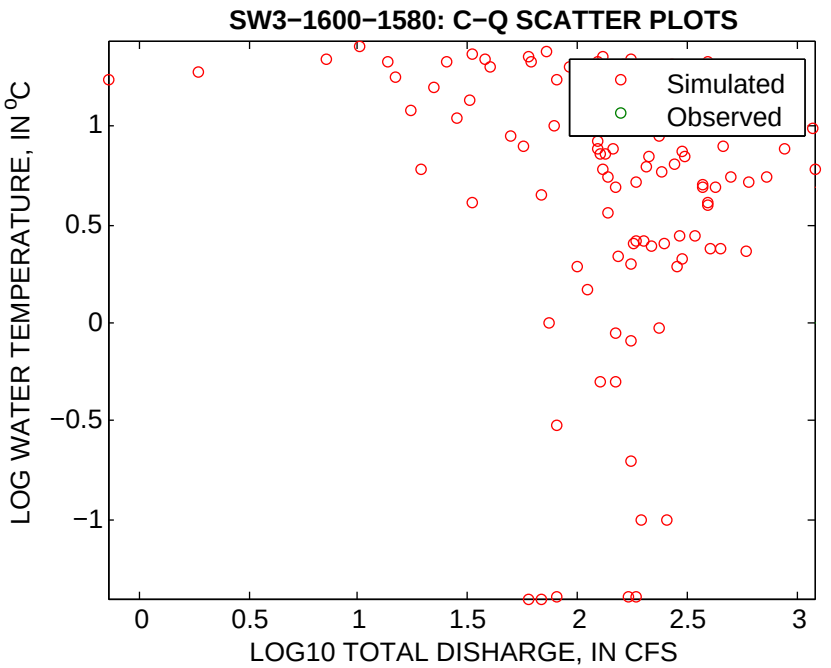
STATISTICS

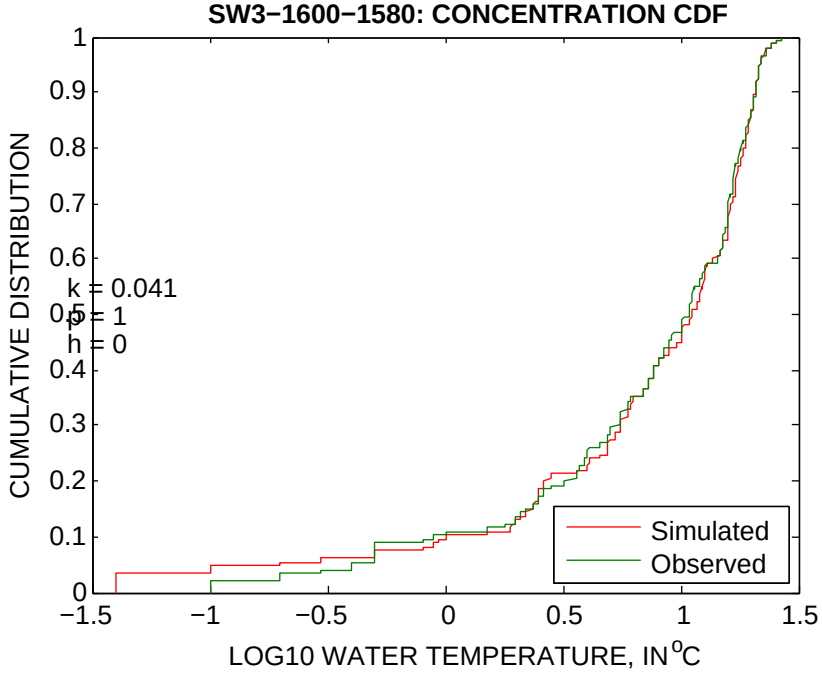
	n	145	145
		observe	simulate
min		0.1	0.040028
		-1	-1.39764
mean		10.9007	11.3853
		0.834249	0.856011
media		10.9	11.279
		1.03743	1.05227
max		26.6	24.377
		1.42488	1.38698
varian		53.6013	53.158
		0.308415	0.347928
JB		0.016935	0.011709
		0.001	0.001
		ra	log
%		4.44531	2.60854
err.va		4.98462	0.0862082
rel.std.err		0.0929943	0.27952
mod.eff		0.907006	0.72048

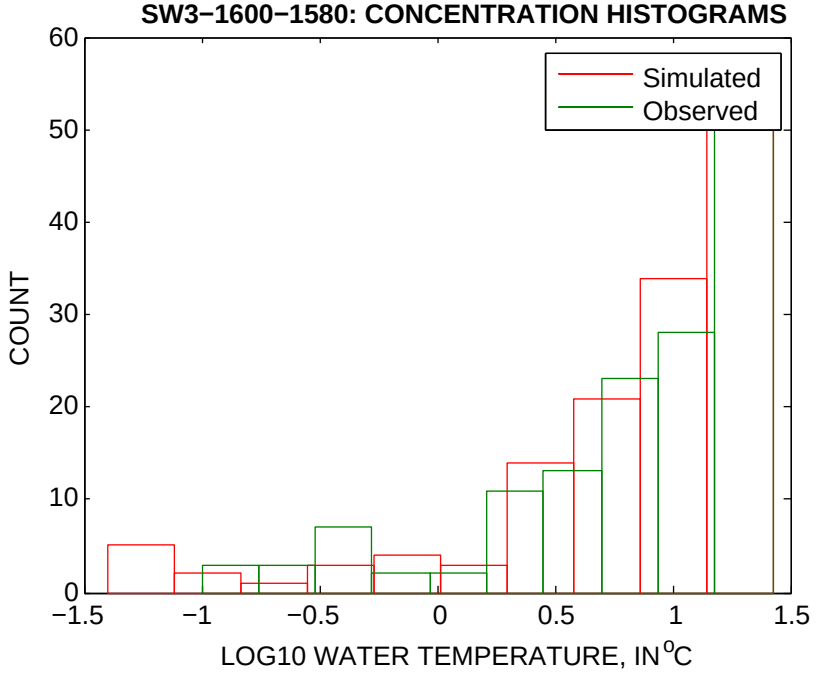
VERSION

ALL DATA
LOG10

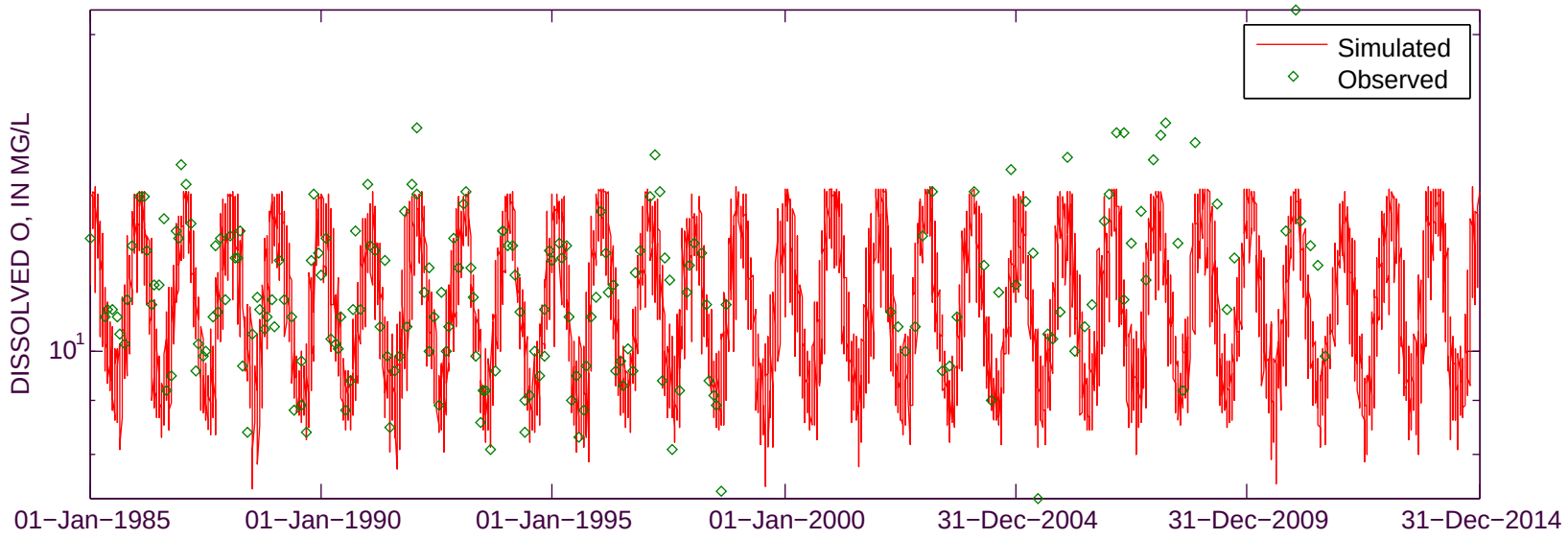




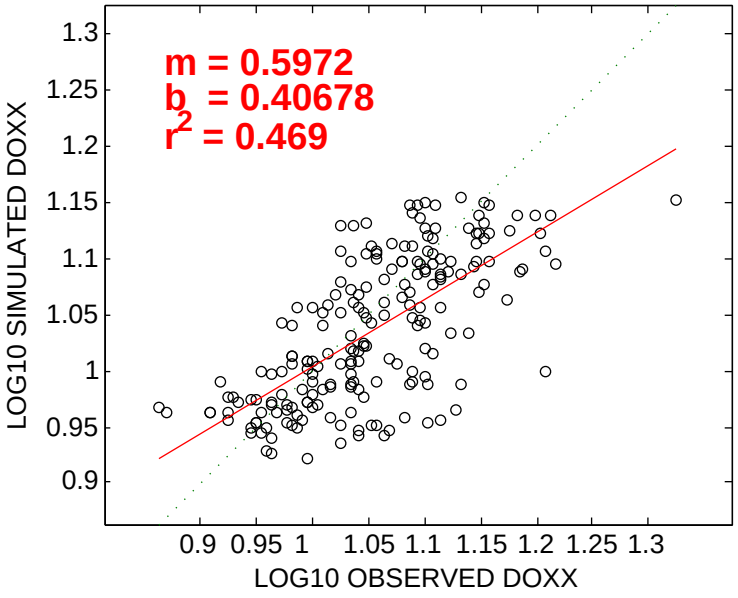




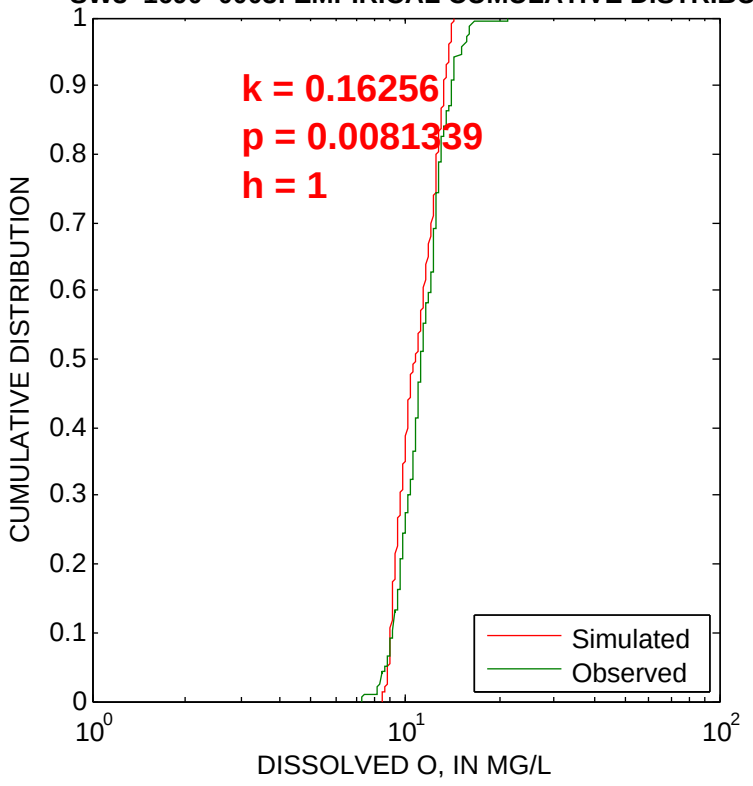
BALD EAGLE CREEK BL SPRING CREEK AT MILESBURG, PA: DOXX TIME-SERIES



SW3-1690-0003: SIMULATED VS. OBSERVED



SW3-1690-0003: EMPIRICAL CUMULATIVE DISTRIBUTION



DATA SELECTION

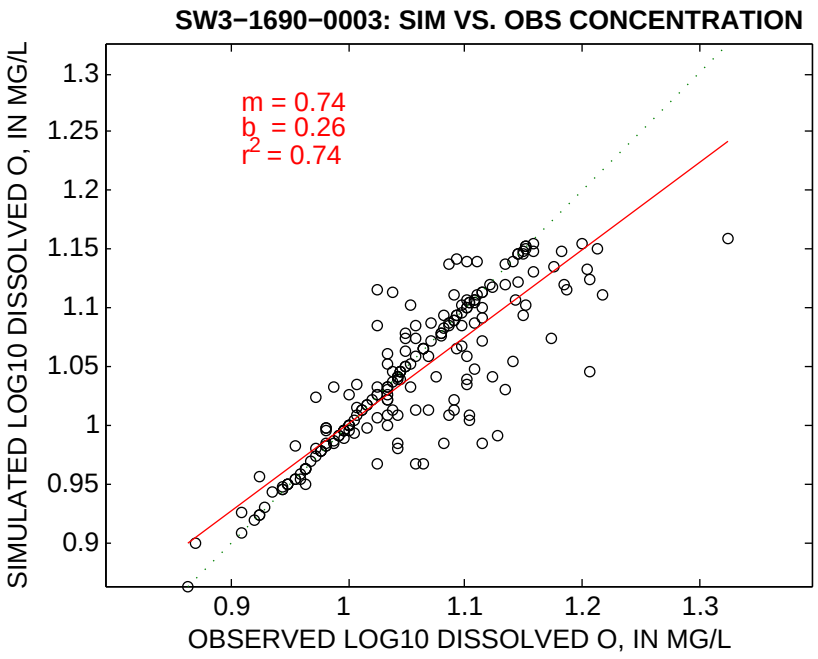
scenario: P620171001WQ
file: DOXX.calib
plot: DOXX - dissolved oxygen
Dates: 1/1/1985 12/31/201
Drive: N/A
Directory: model
Observed: OBS20161101

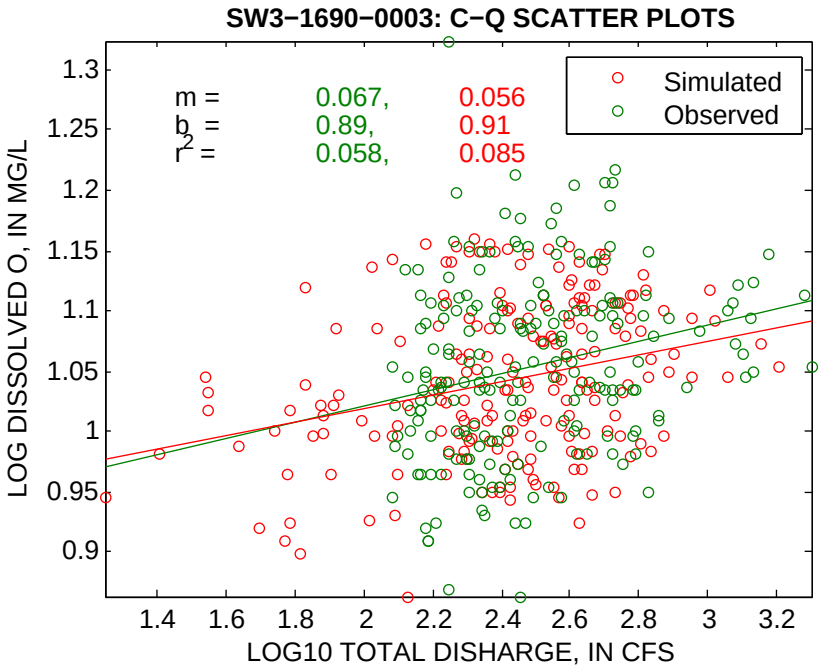
STATISTICS

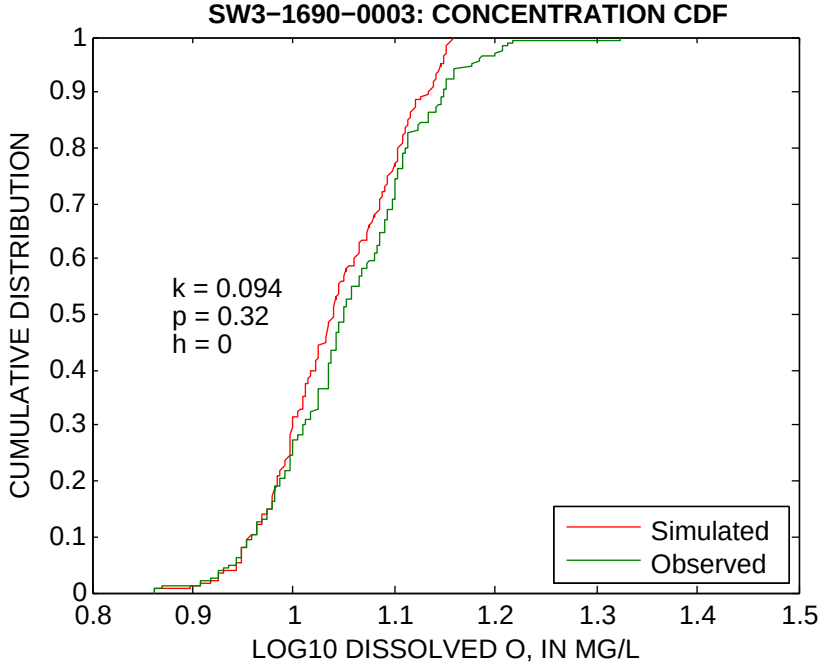
		observe	simulate
n		203	203
min		7.3	8.3681
		0.863323	0.922627
mean		11.4901	10.9904
		1.05394	1.03619
media		11.2	10.772
		1.04922	1.0323
max		21.1	14.248
		1.32428	1.15375
varian		4.05782	2.7218
		0.00551416	0.00419315
JB		0.001	0.005402
	☑	0.472908	0.005757
		ra	log
%		-4.34946	-1.68403
err.va		2.54536	0.0034378
rel.std.err		0.627271	0.623449
mod.eff		0.372729	0.376551

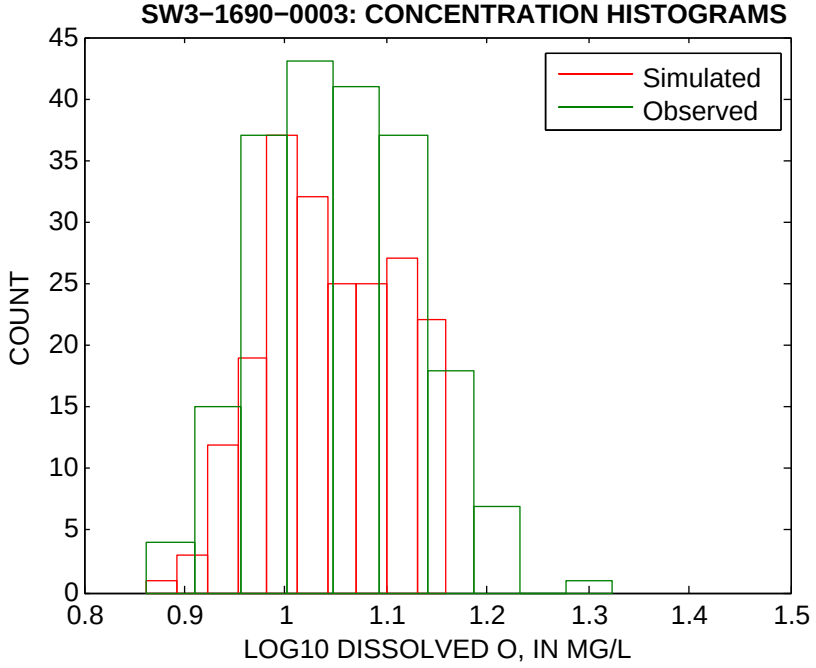
VERSION 2.1

ALL DATA
LOG10

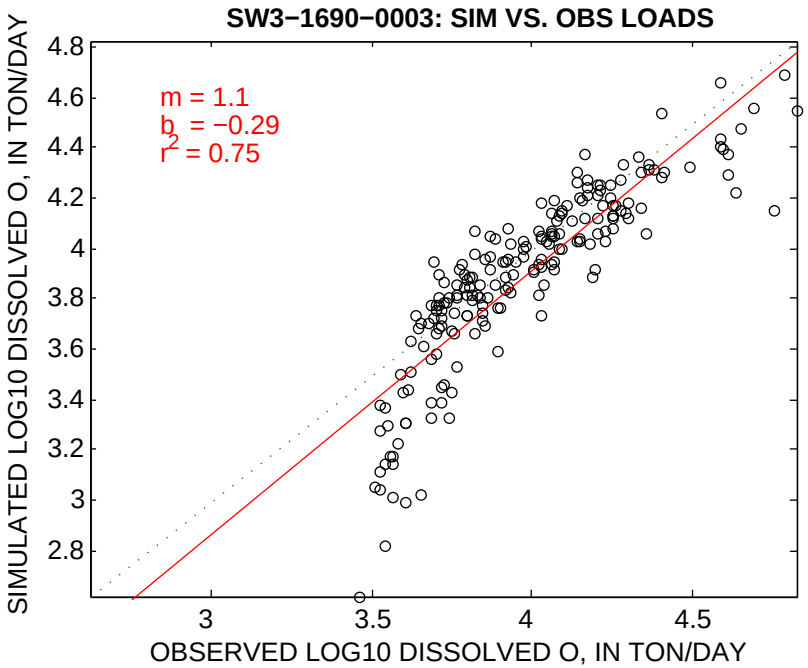




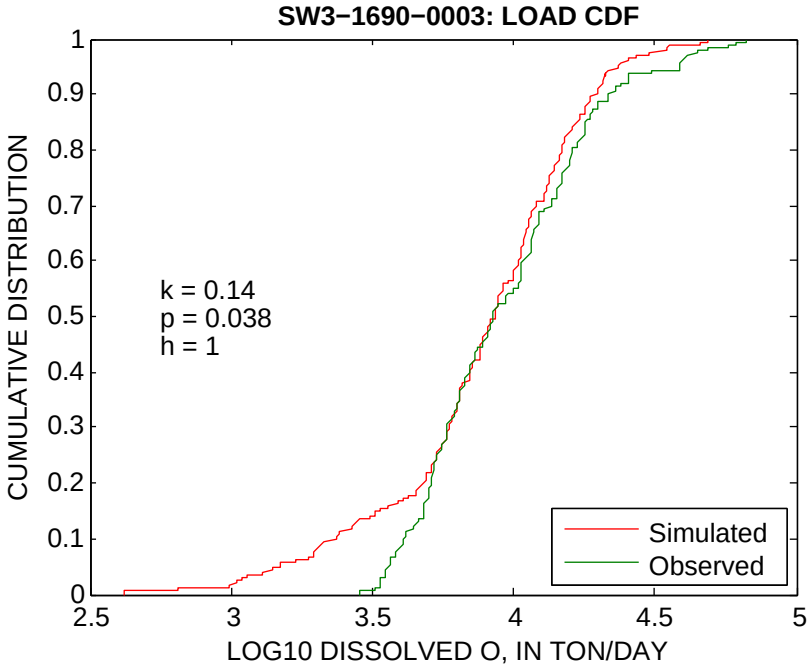


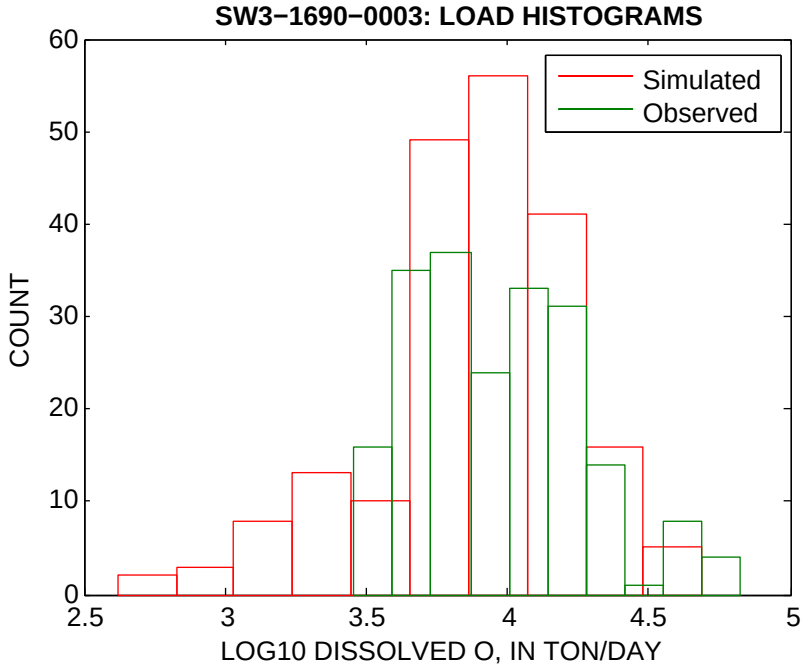


LOAD DATA
LOG10

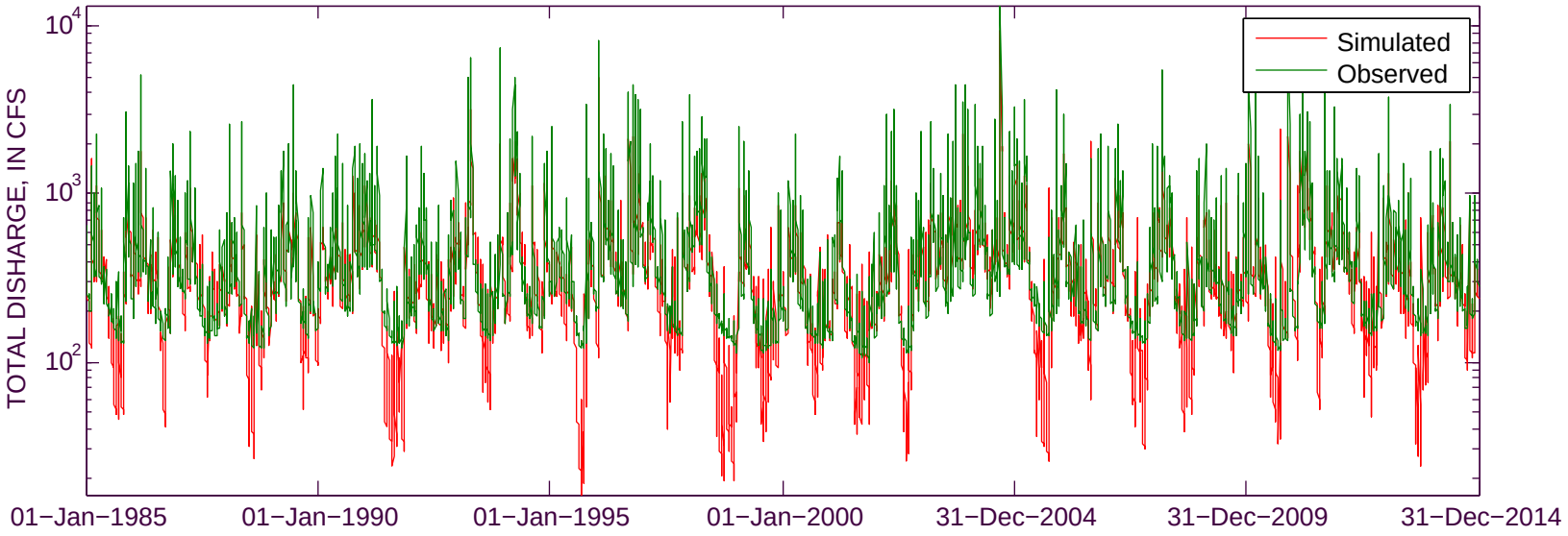




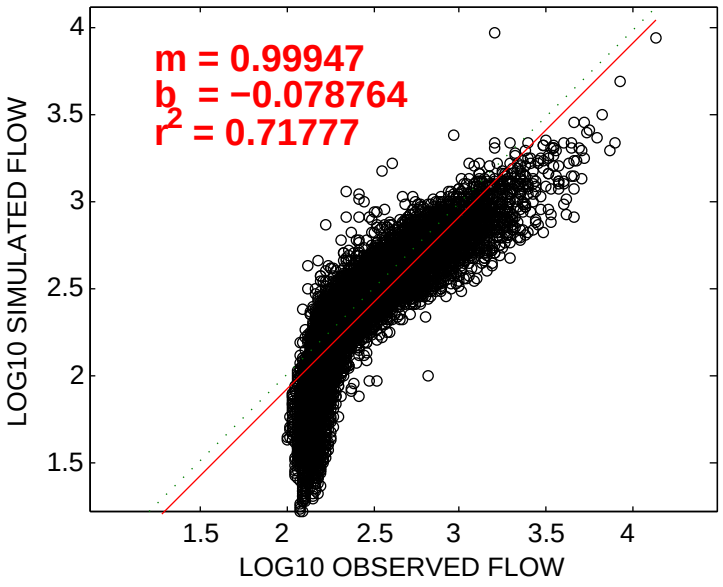




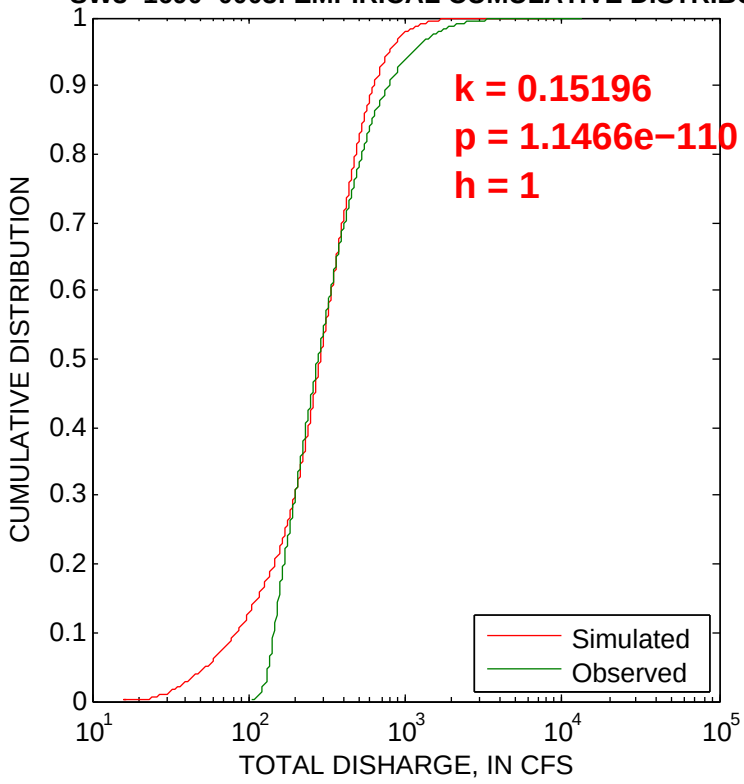
BALD EAGLE CREEK BL SPRING CREEK AT MILESBURG, PA: FLOW TIME-SERIES



SW3-1690-0003: SIMULATED VS. OBSERVED



SW3-1690-0003: EMPIRICAL CUMULATIVE DISTRIBUTION



DATA SELECTION

scenario	file
P620171001WQ	FLOW.calib

plot: FLOW - total discharge

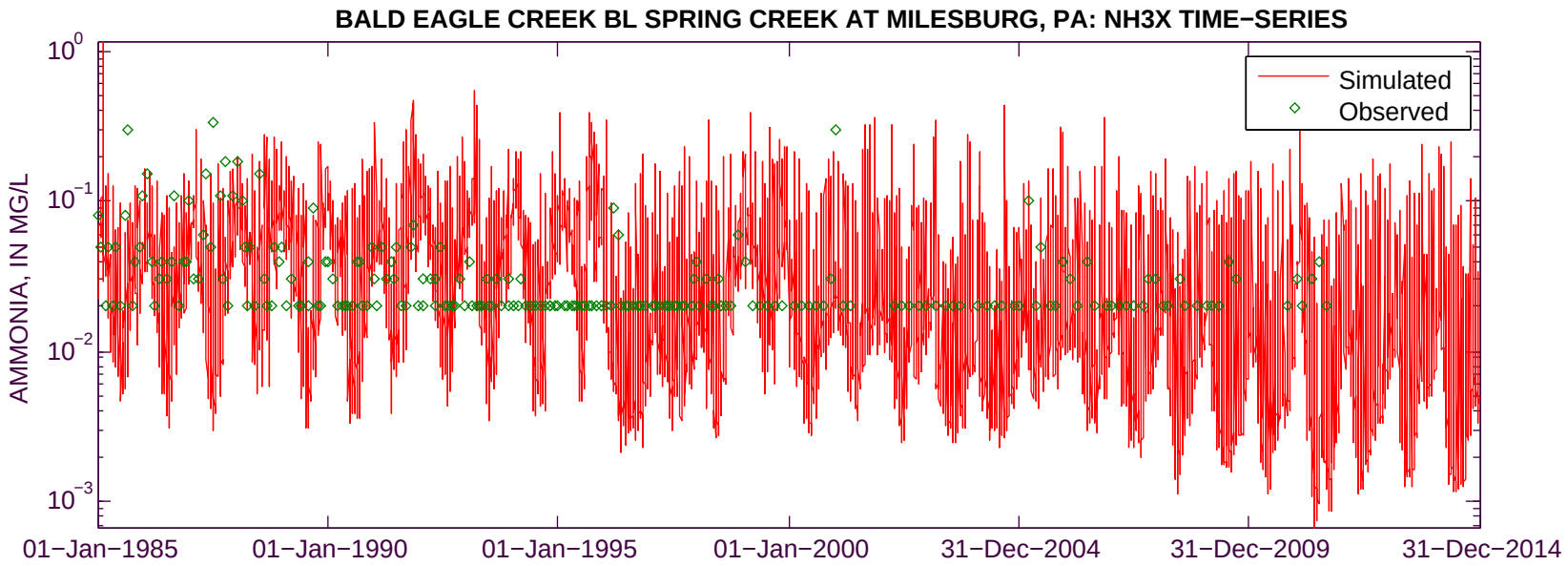
Dates: 1/1/1985 – 12/31/201

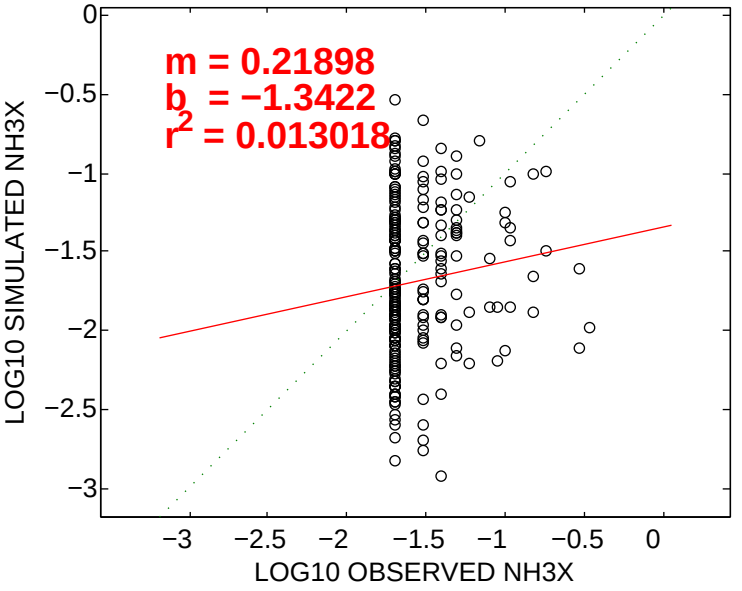
Drive	Directory	Observed
N/A	model	OBS20161101

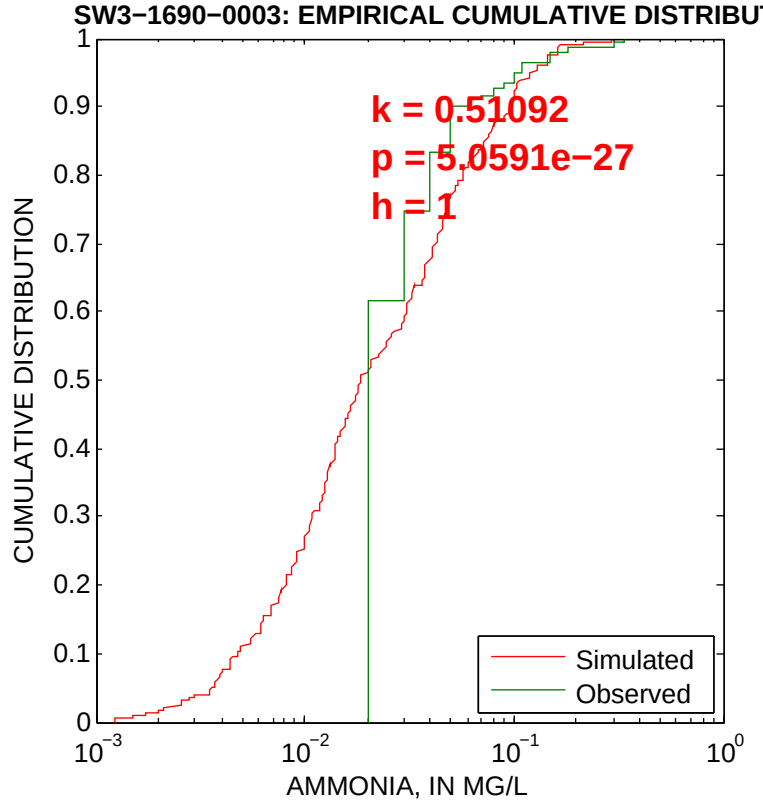
STATISTICS

	n	observe	simulate
		10957	10957
min		100	16.247
		2	1.21077
mean		413.136	342.262
		2.49436	2.41427
media		279	287.41
		2.4456	2.4585
max		13400	9271.4
		4.1271	3.96715
varian		213931	82305.5
		0.0852145	0.118595
JB		0.001	0.001
		0.001	0.001
		ra	log
%		-17.1553	-3.21085
err.va		84395.1	0.0398859
rel.std.err		0.394497	0.468064
mod.eff		0.605503	0.531936

VERSION 2.1







DATA SELECTION

scenario	file
P620171001WQ	NH3X.calib

plot: NH3X - ammonia

Dates 1/1/1985 12/31/201

Drive Directory: N/A

model

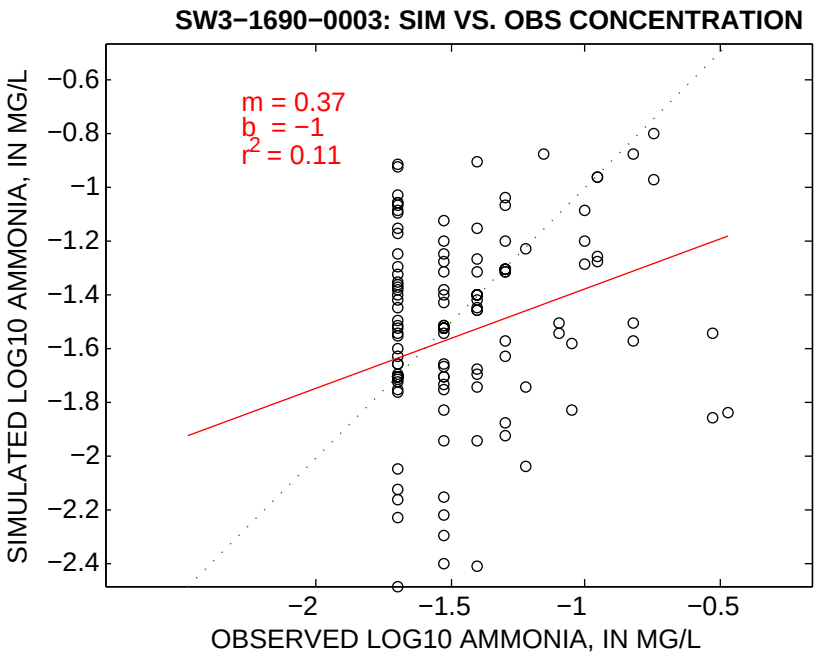
Observed: OBS20161101

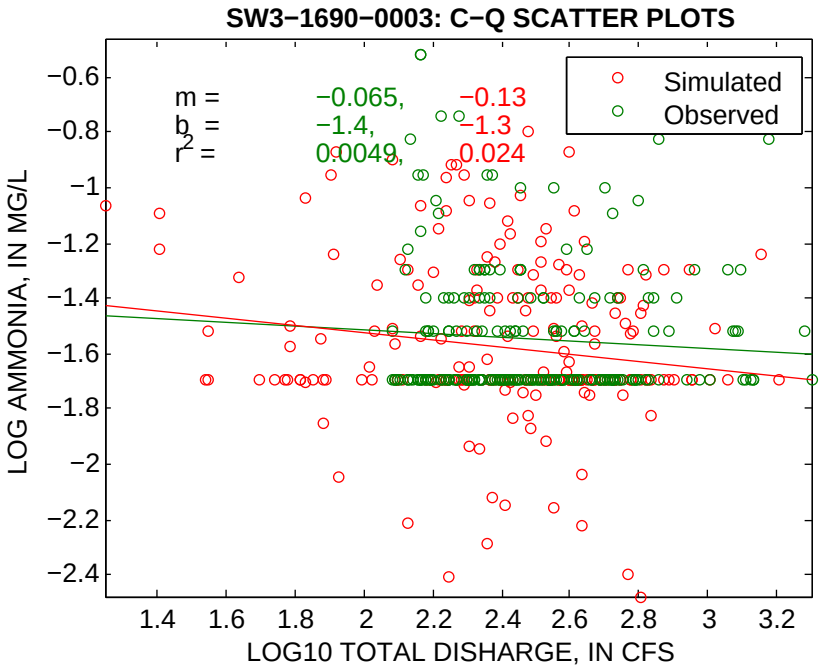
STATISTICS

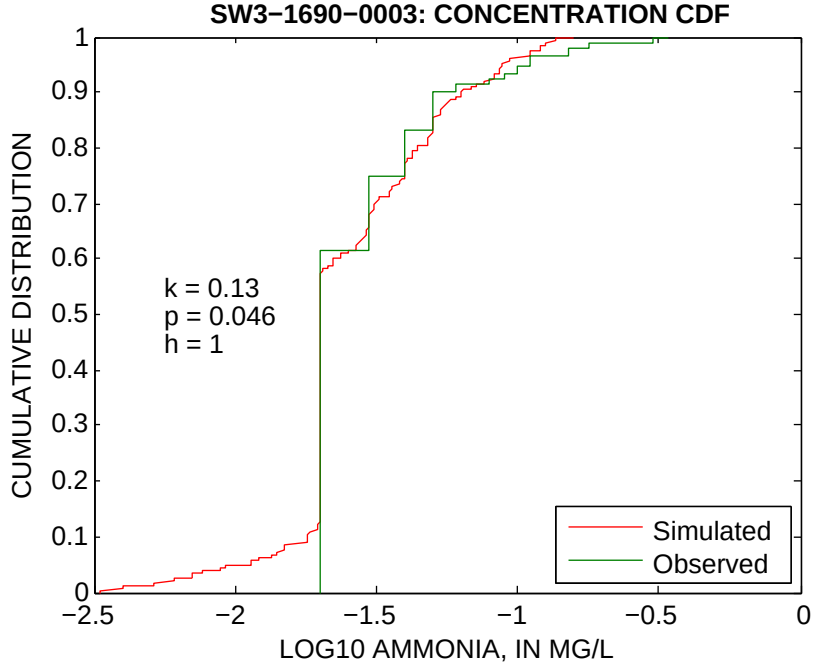
	observe	simulate
n	229	229
min	0.02 -1.69897	0.0012244 -2.91208
mean	0.0364629 -1.54642	0.0368011 -1.68082
media	0.02 -1.69897	0.01845 -1.734
max	0.34 -0.468521	0.29301 -0.533118
varian	0.00175191 0.0631724	0.00175829 0.232699
JB	0.001 0.001	0.001 0.113414
	ra	log
%	0.927435	8.69103
err.va	0.00349158	0.286347
rel.std.err	1.99302	4.53279
mod.eff	-0.993018	-3.53279

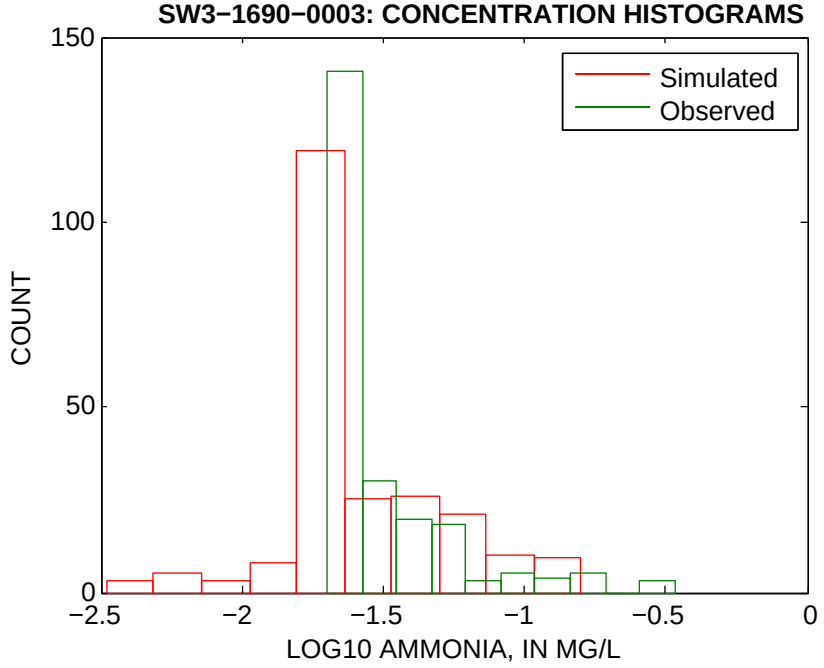
VERSION 2.1

ALL DATA
LOG10

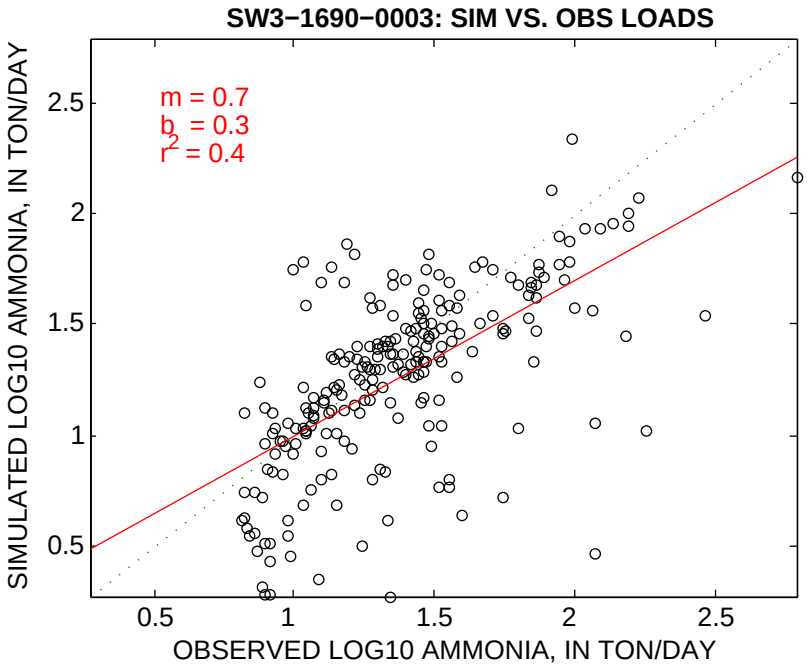


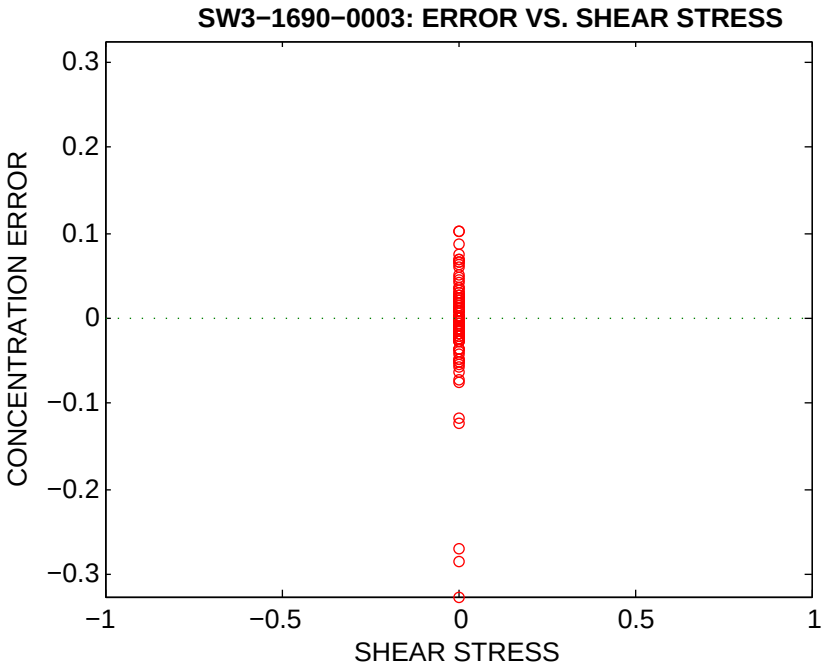


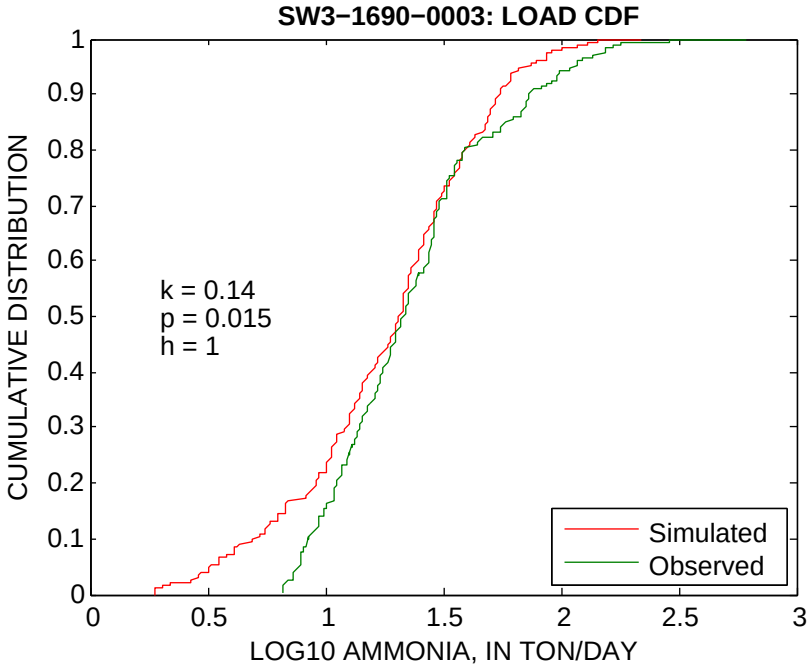


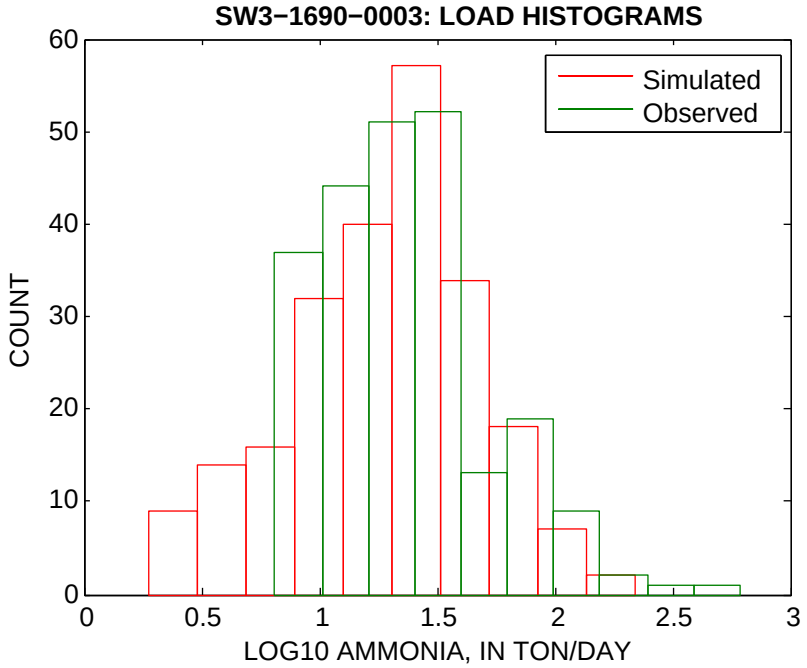


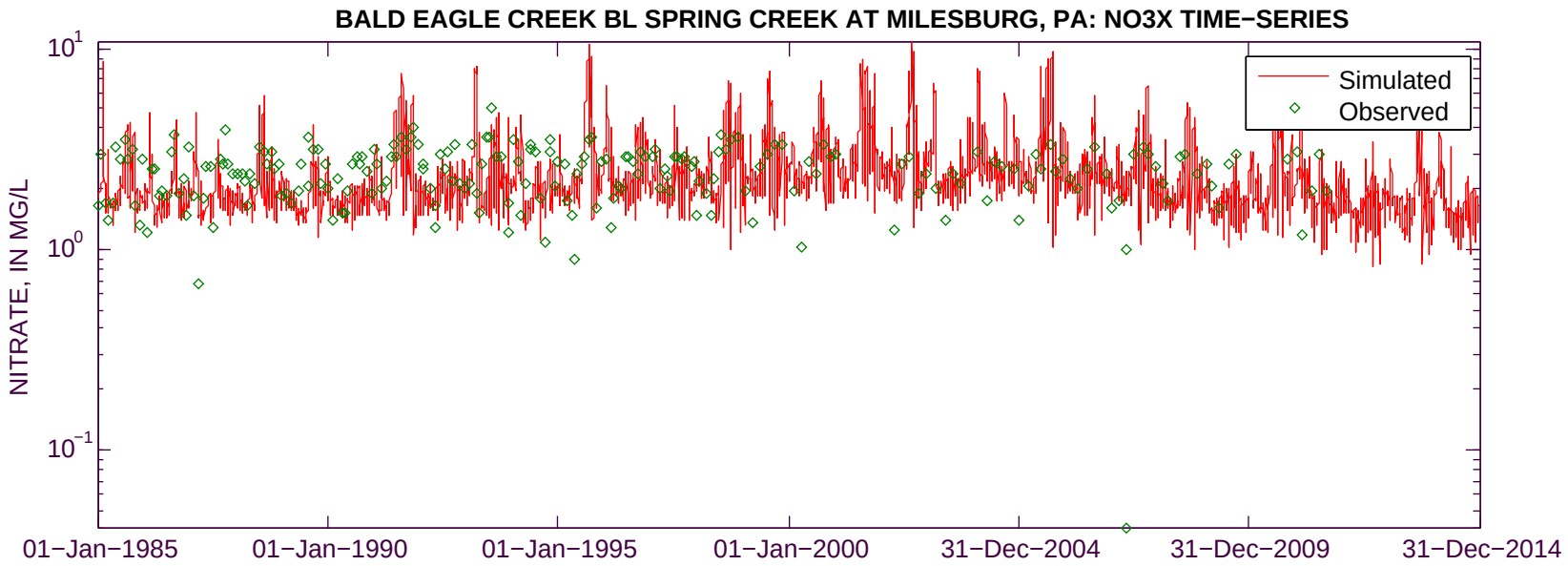
LOAD DATA
LOG10

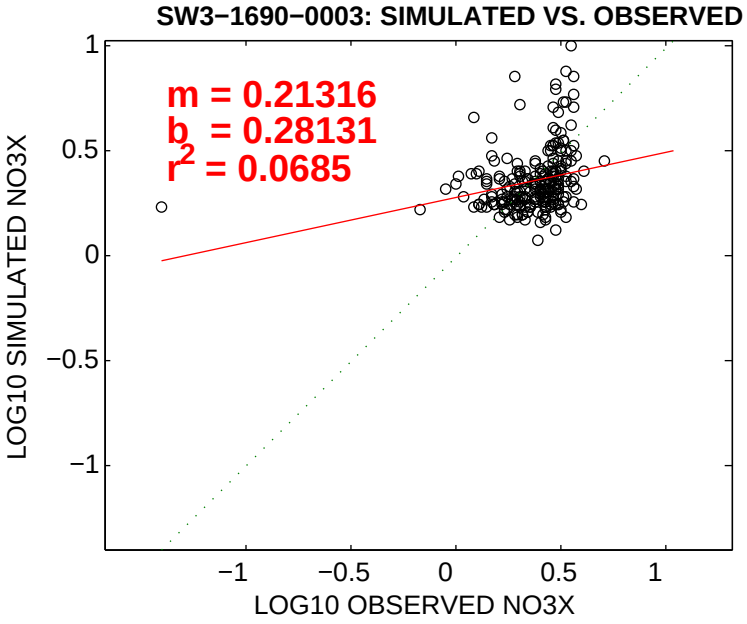


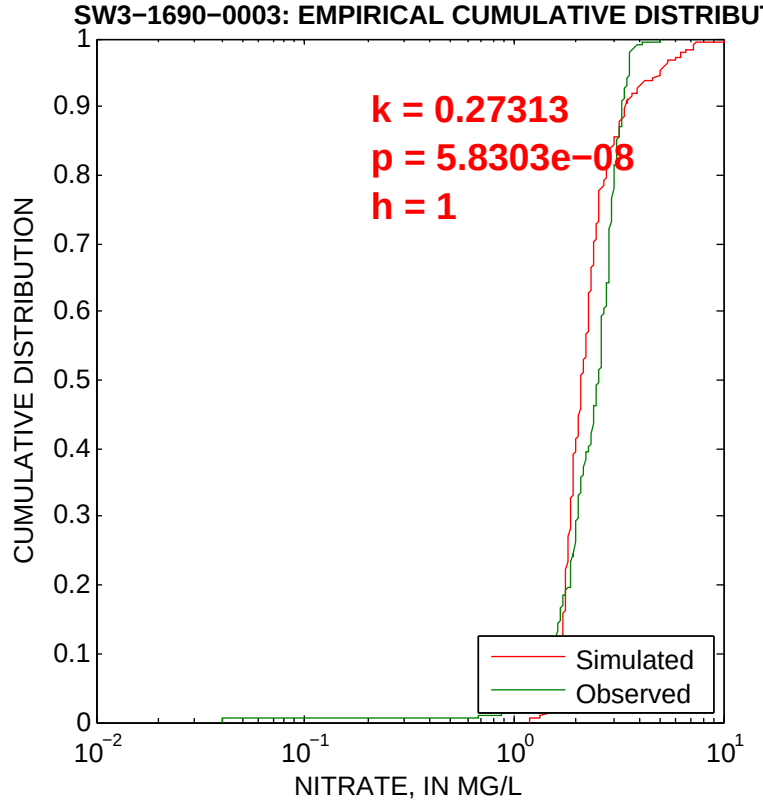












DATA SELECTION

scenario	file
P620171001WQ	NO3X.calib

plot: NO3X - nitrate

Dates: 1/1/1985 – 12/31/201

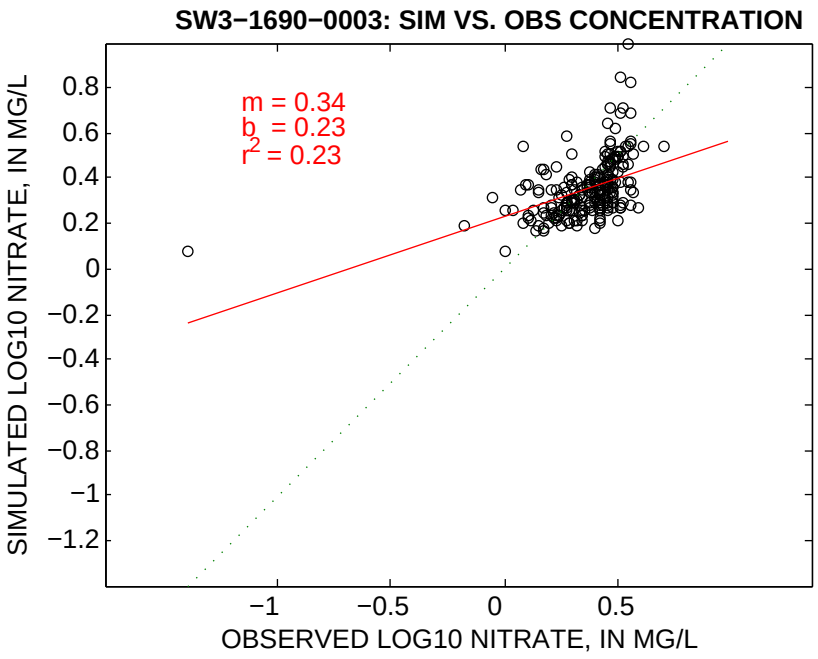
Drive	Directory	Observed
N/A	model	OBS20161101

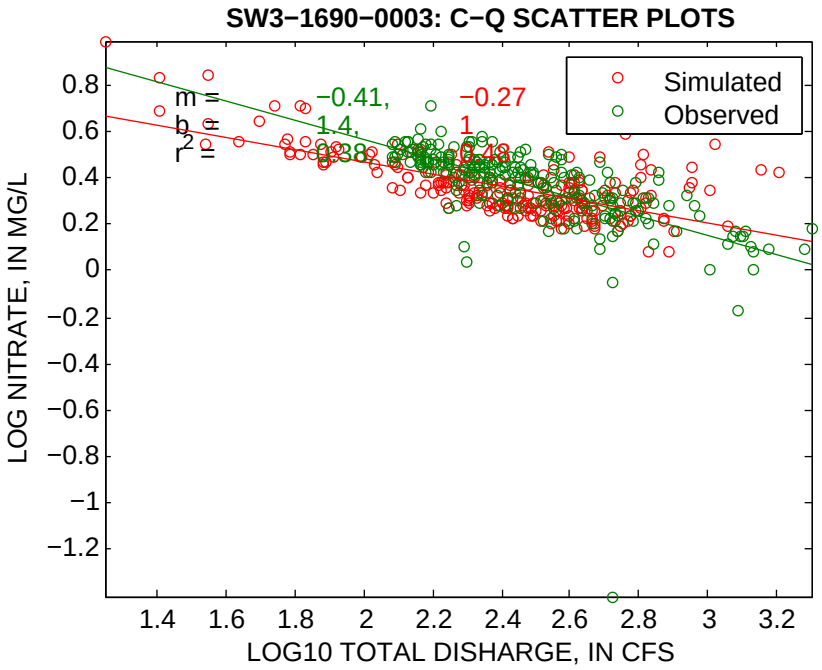
STATISTICS

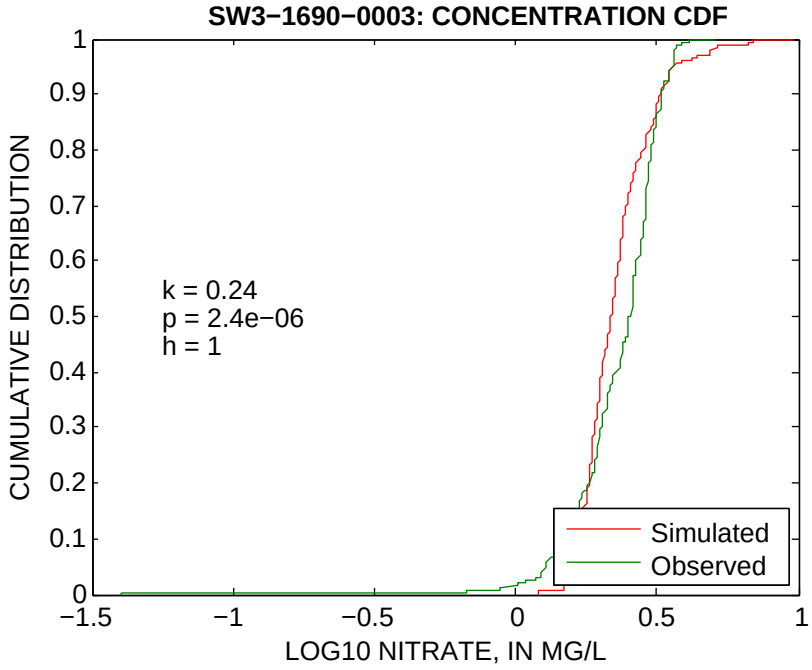
	n	227	227
		observe	simulate
min		0.04	1.1931
		-1.39794	0.0766768
mean		2.4522	2.44838
		0.363733	0.35884
media		2.53	2.1138
		0.403121	0.325064
max		5.07	10.027
		0.705008	1.00117
varian		0.517212	1.3208
		0.0326219	0.0216394
JB		0.5	0.001
		0.001	0.001
		ra	log
%		-0.155699	-1.34506
err.va		1.32011	0.0403777
rel.std.err		2.55236	1.23775
mod.eff		-1.55236	-0.237748

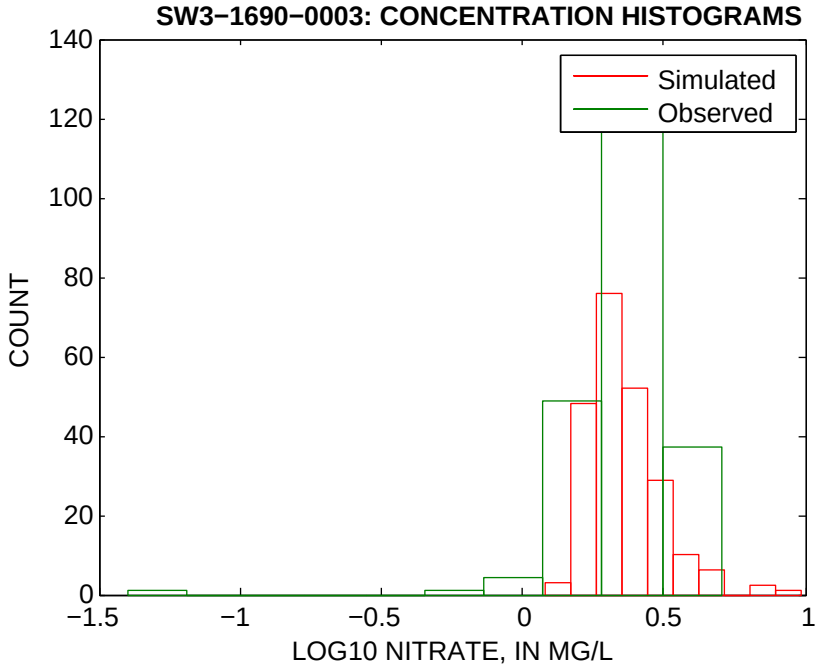
VERSION 2.1

ALL DATA
LOG10

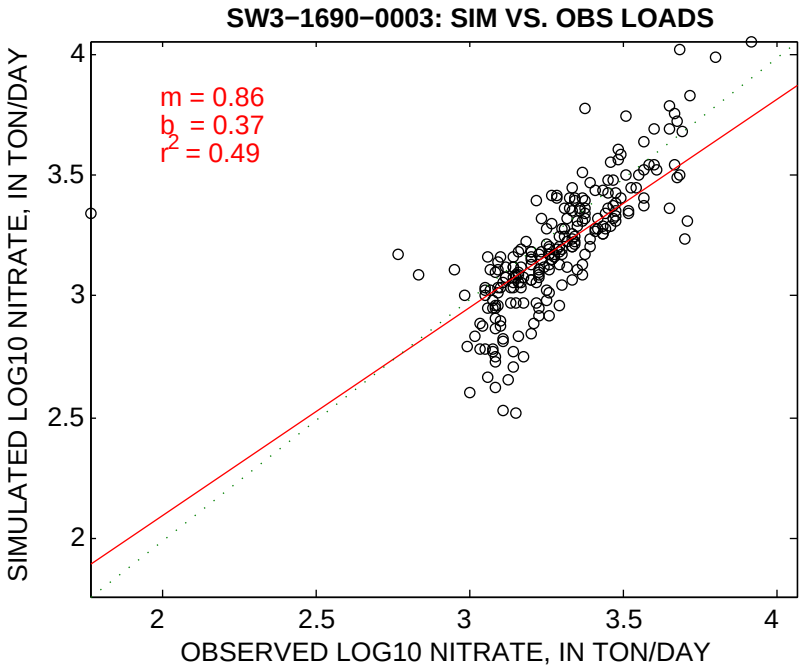




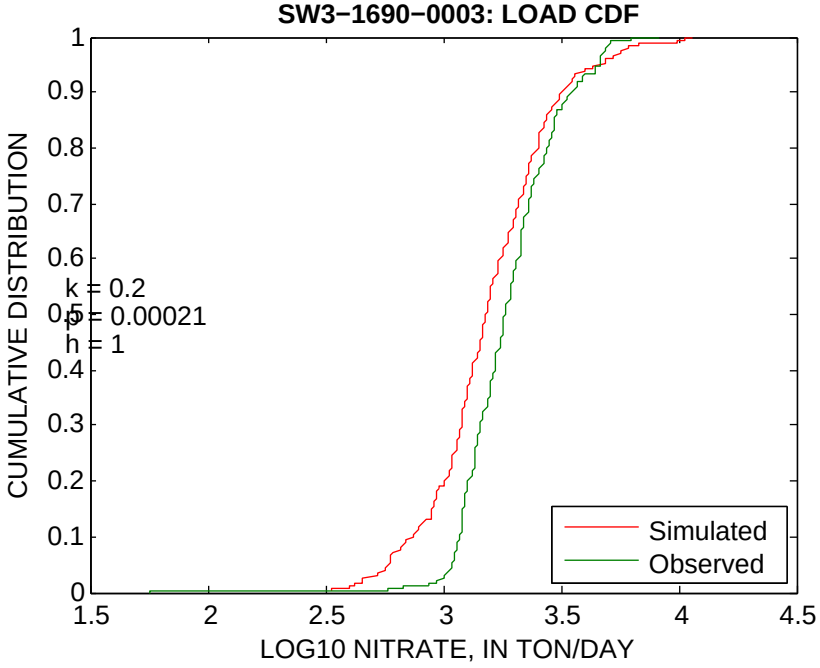


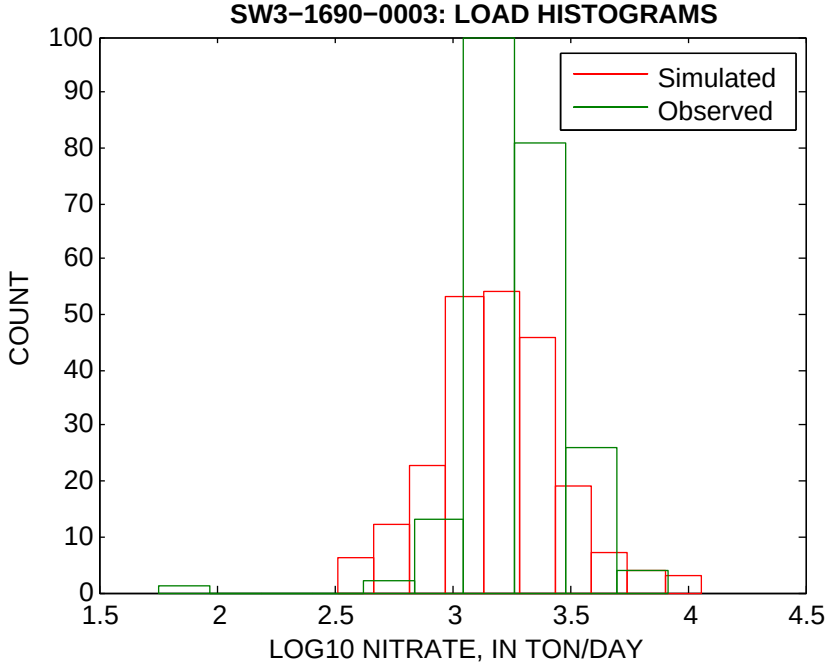


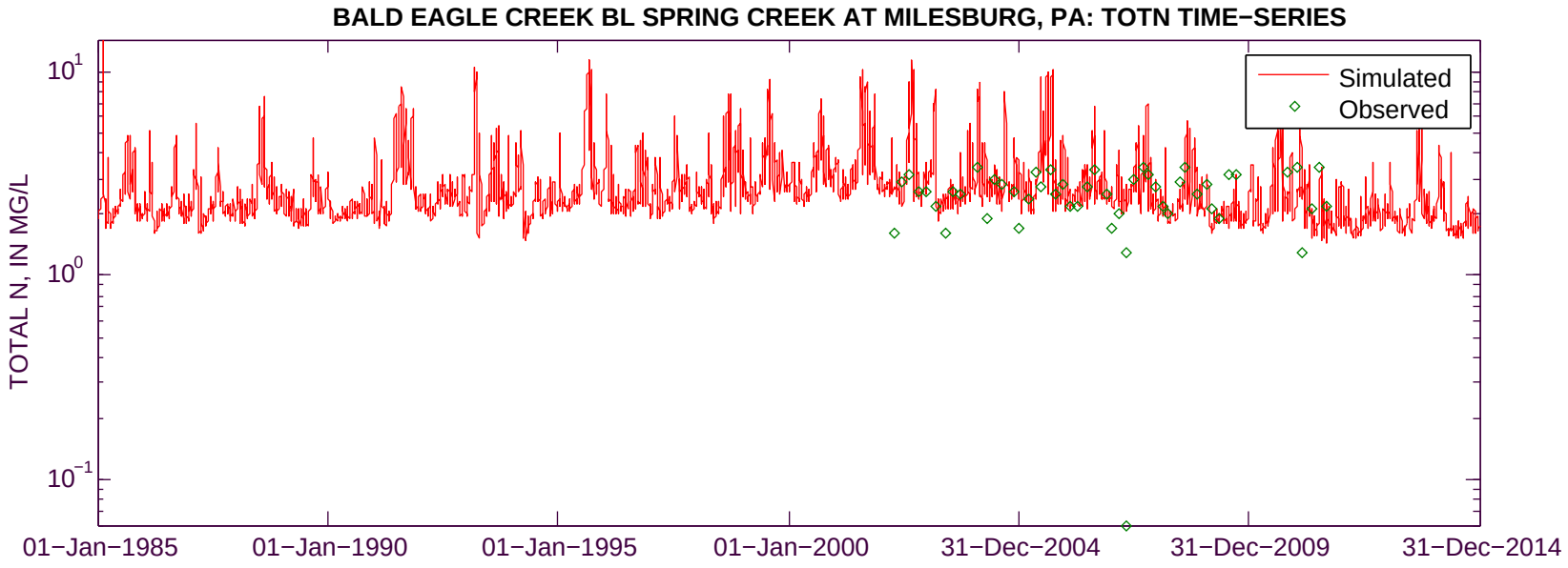
LOAD DATA
LOG10

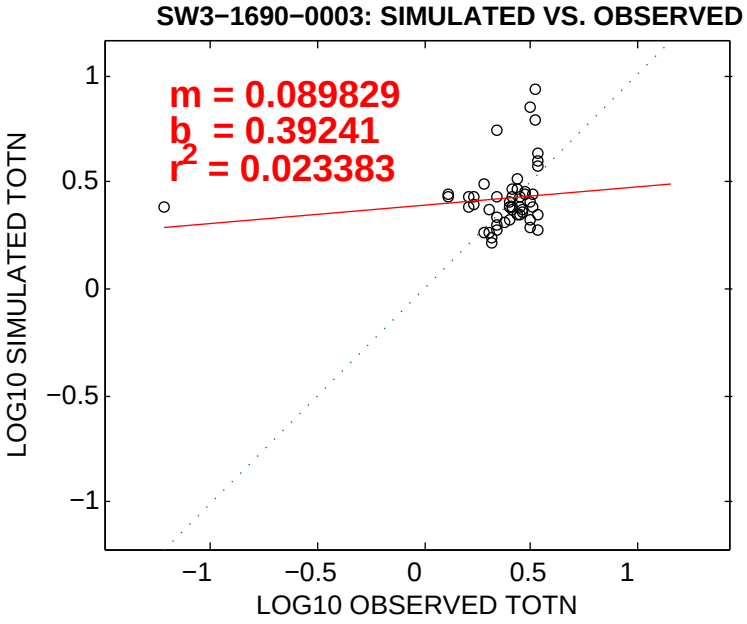


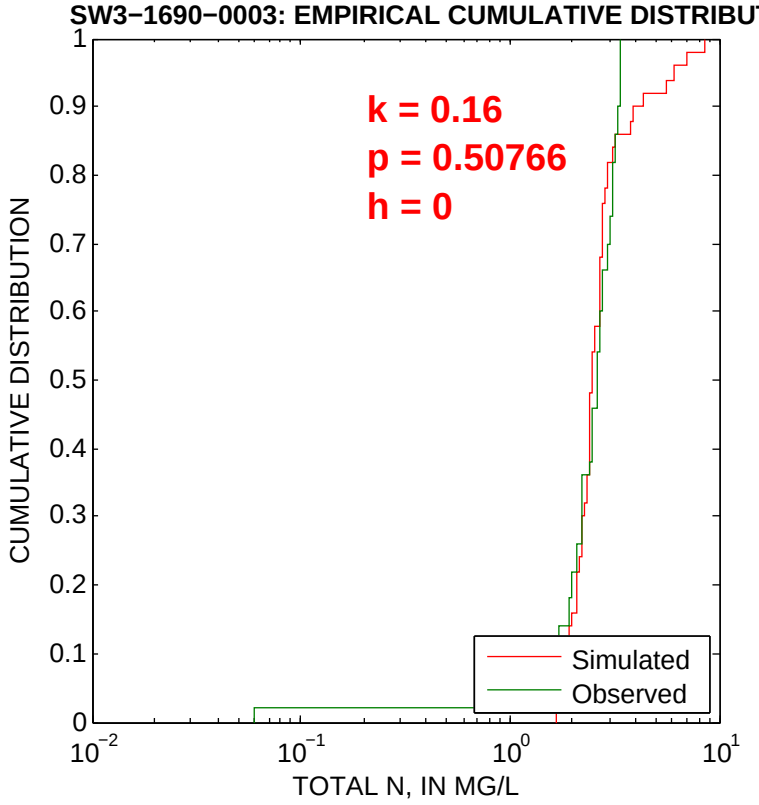












DATA SELECTION

scenario	file
P620171001WQ	TOTN.calib

plot: TOTN - total nitrogen

Dates: 1/1/1985 – 12/31/201

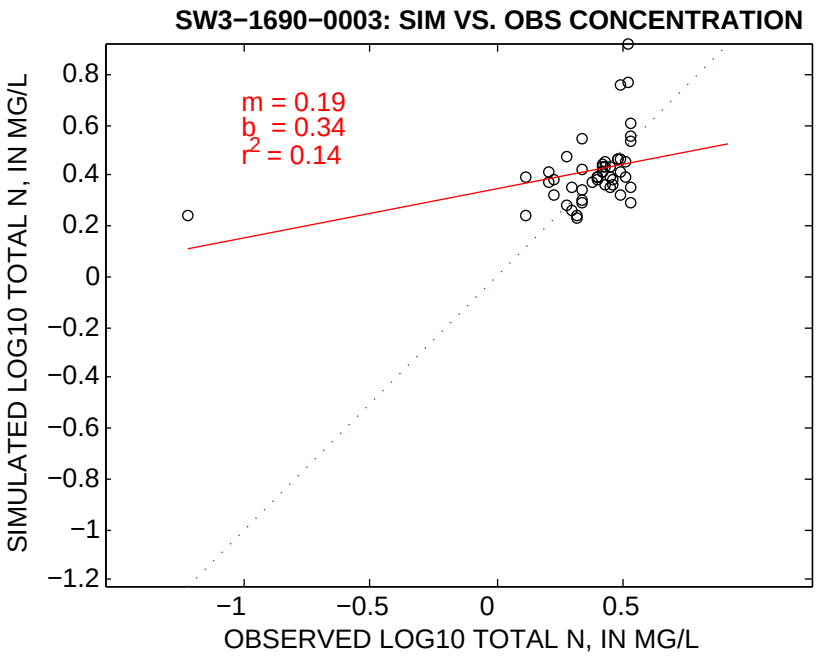
Drive	Directory	Observed
N/A	model	OBS20161101

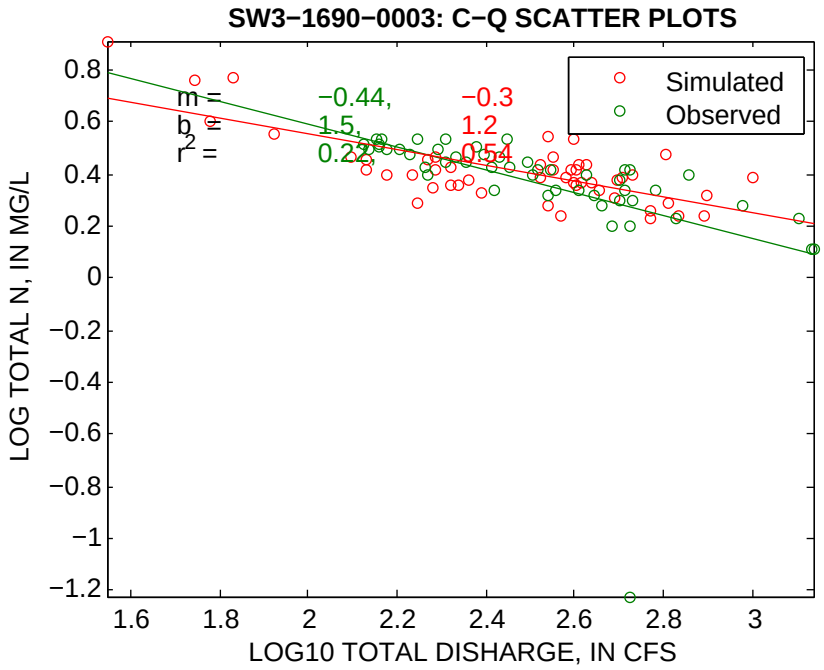
STATISTICS

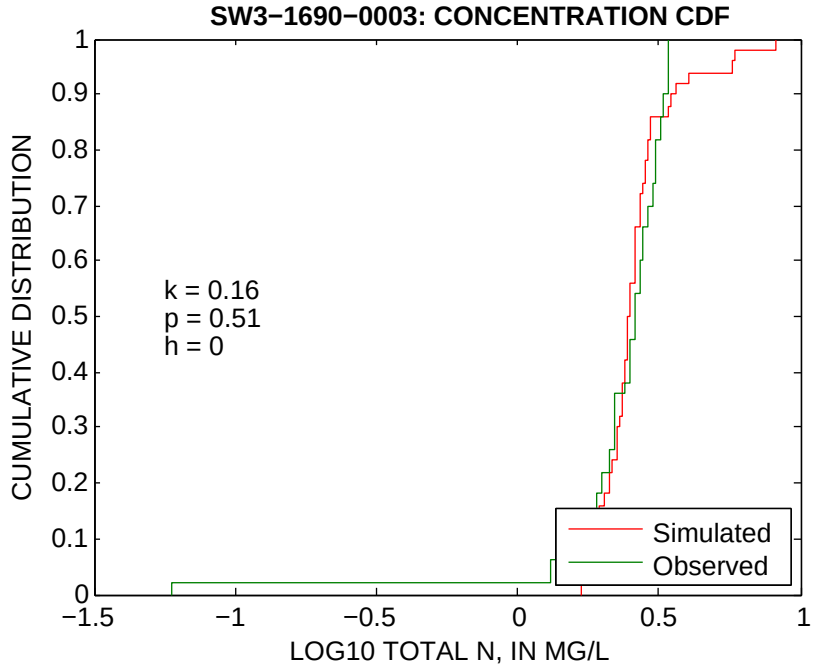
	n	50	50
		observe	simulate
min		0.06	1.6632
		-1.22185	0.220944
mean		2.5152	2.85367
		0.364159	0.425119
media		2.6	2.4449
		0.414973	0.388261
max		3.4	8.5084
		0.531479	0.929848
varian		0.463715	1.78744
		0.0641297	0.0221305
JB		0.006975	0.001
		0.001	0.001
		ra	log
%		13.4571	16.7401
err.va		1.82231	0.0785308
rel.std.err		3.92981	1.22456
mod.eff		-2.92981	-0.224562

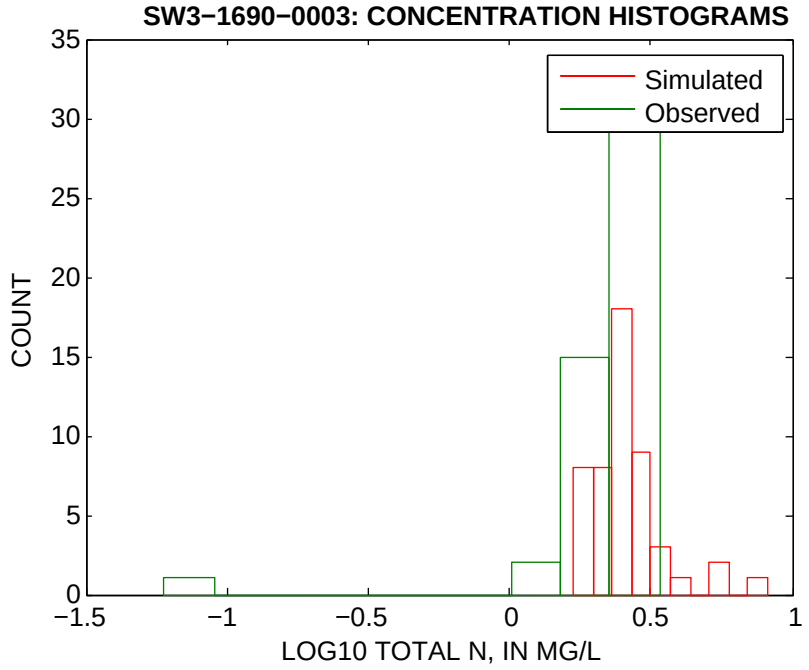
VERSION

ALL DATA
LOG10

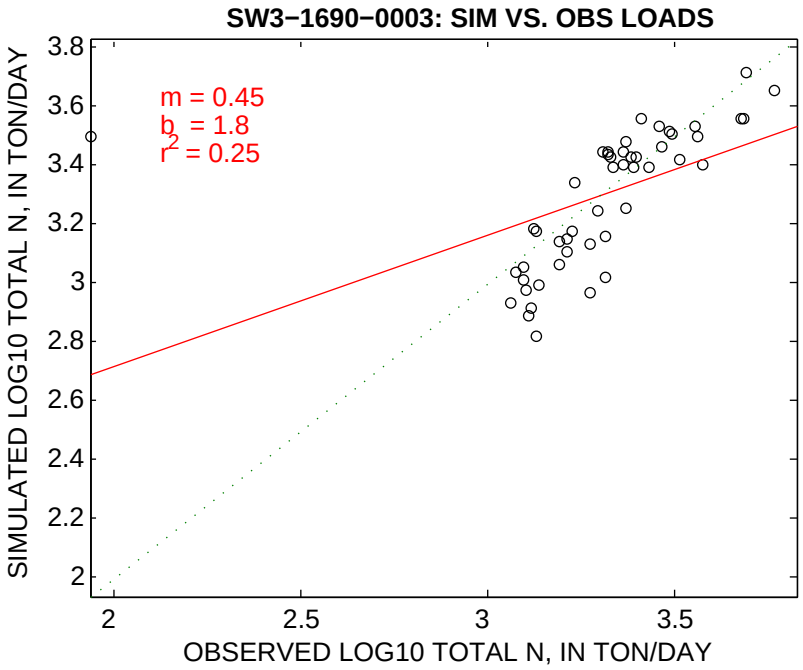




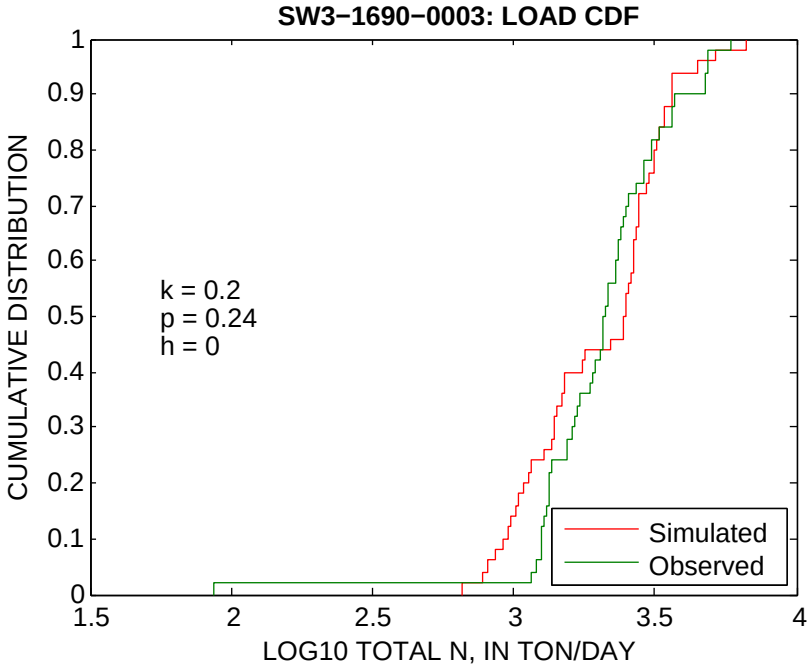


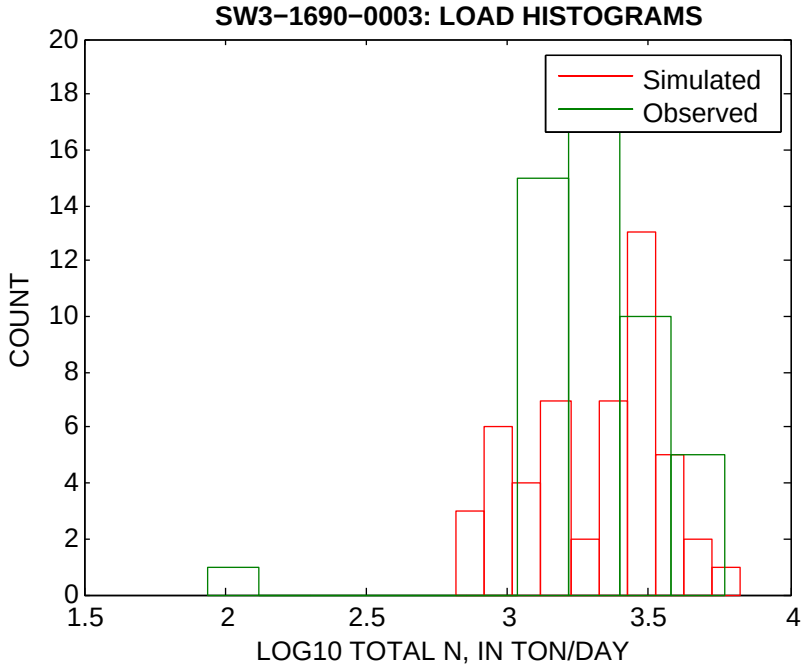


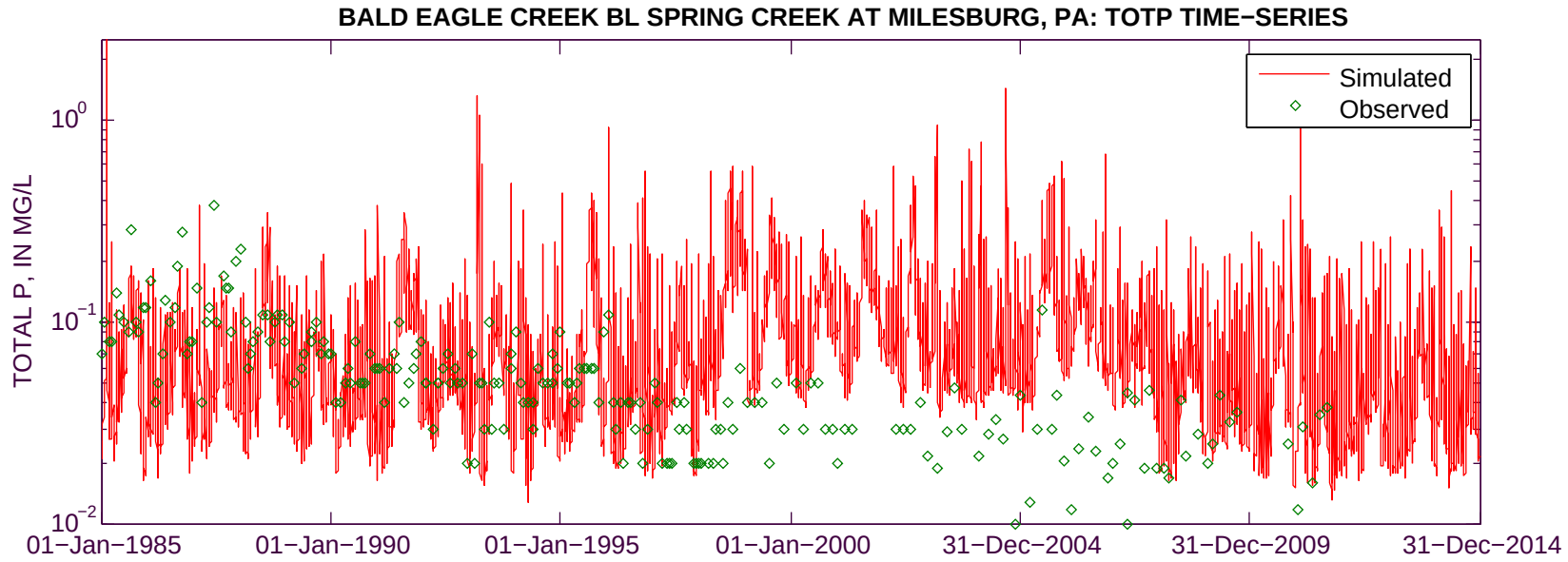
LOAD DATA
LOG10

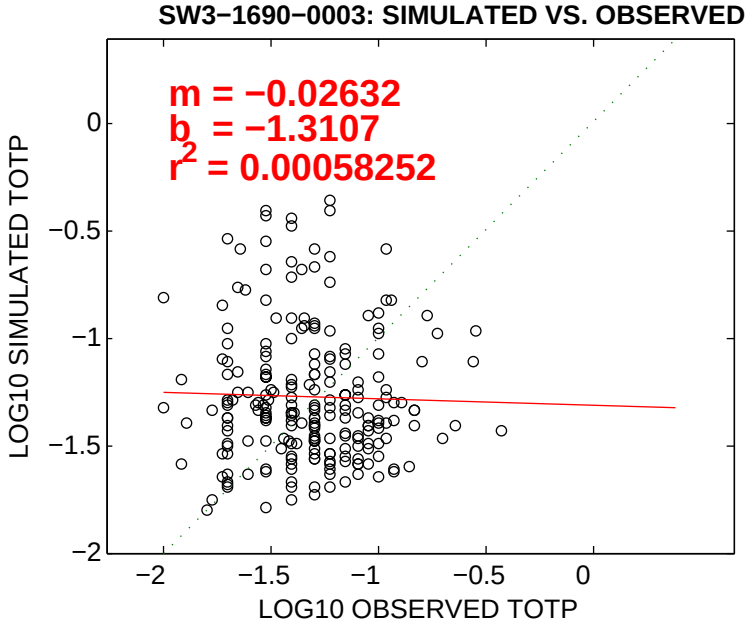


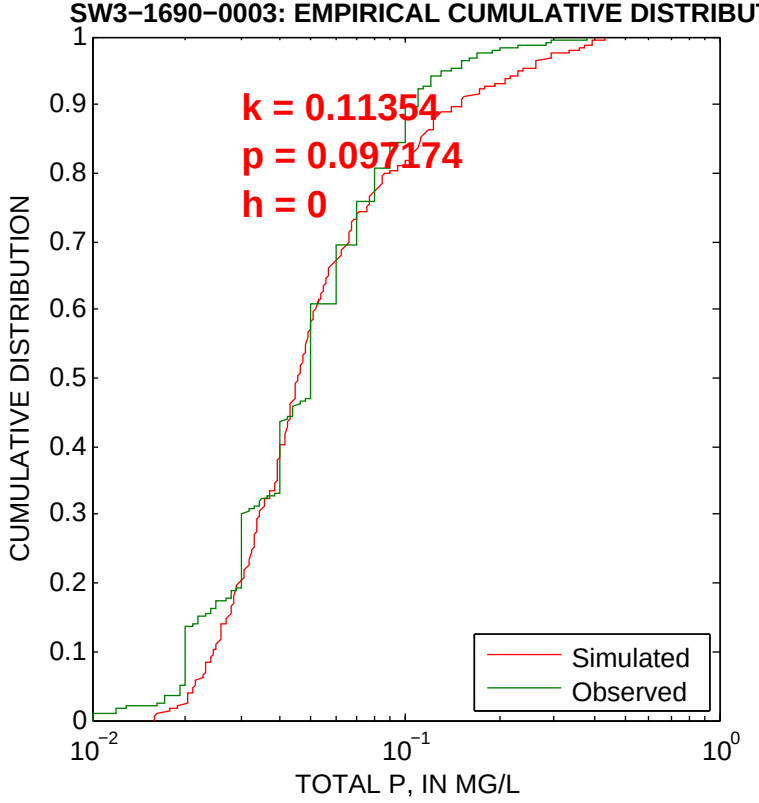












DATA SELECTION

scenario: P620171001WQ | file: TOTP.calib

plot: TOTP - total phosphorus

Dates: 1/1/1985 – 12/31/201

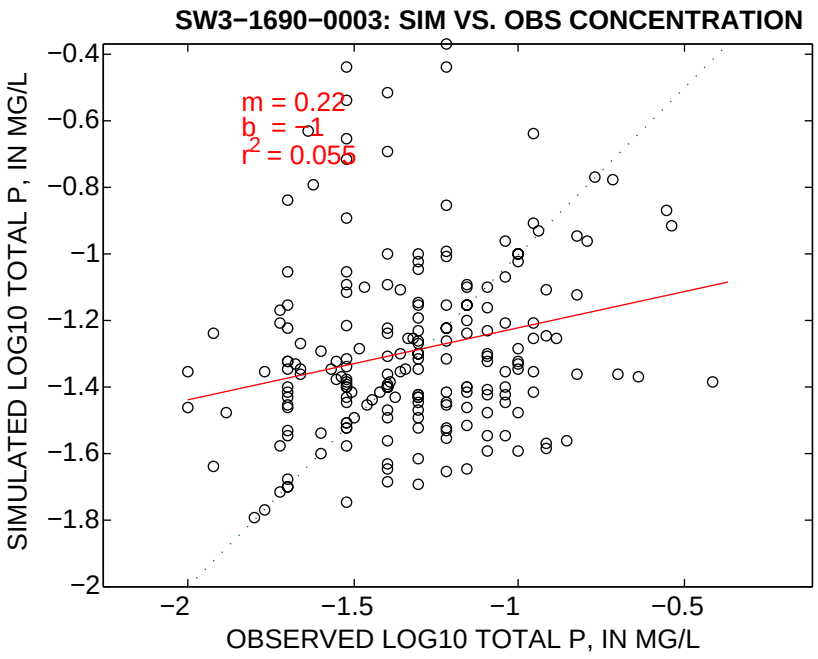
Drive: N/A | Directory: model | Observed: OBS20161101

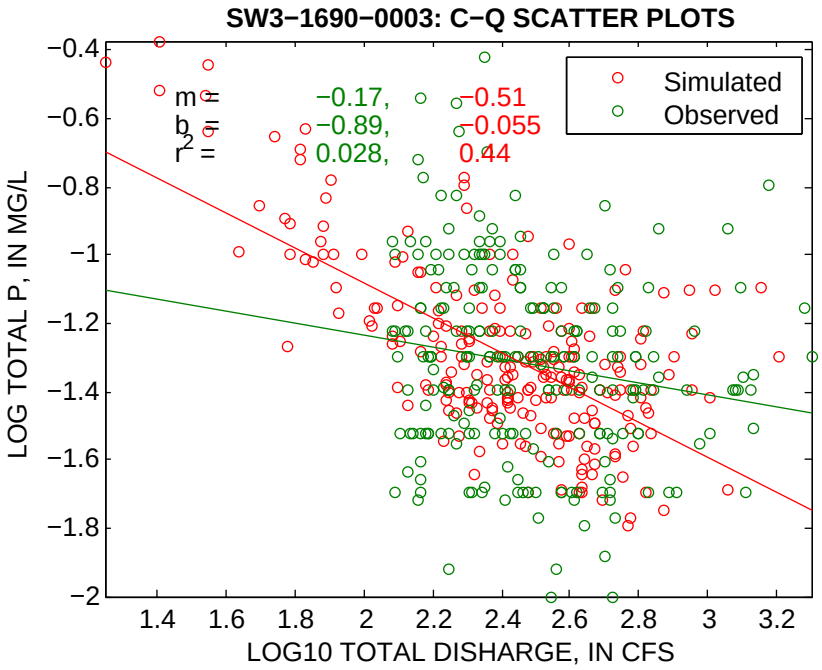
STATISTICS

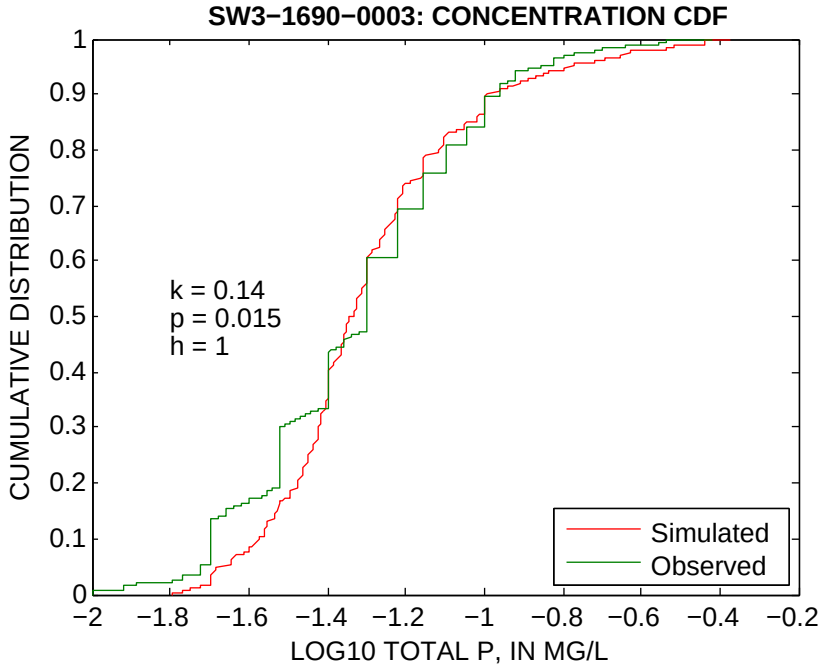
		observe	simulate
n		229	229
min		0.01	0.01598
		-2	-1.79642
mean		0.059655	0.0715928
		-1.31937	-1.27598
media		0.05	0.045701
		-1.30103	-1.34007
max		0.38	0.43711
		-0.420216	-0.359409
varian		0.00221135	0.00532563
		0.0786316	0.093514
JB		0.001	0.001
	☑	0.277409	0.001
		ra	log
%		20.0114	-3.28879
err.va		0.00807367	0.178176
rel.std.err		3.65101	2.26596
mod.eff		-2.65101	-1.26596

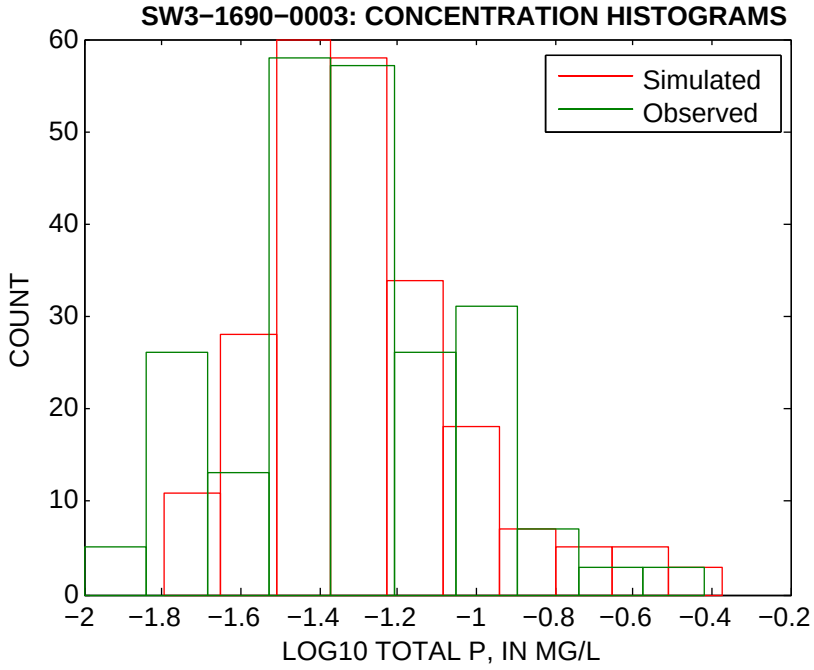
VERSION 2.1

ALL DATA
LOG10

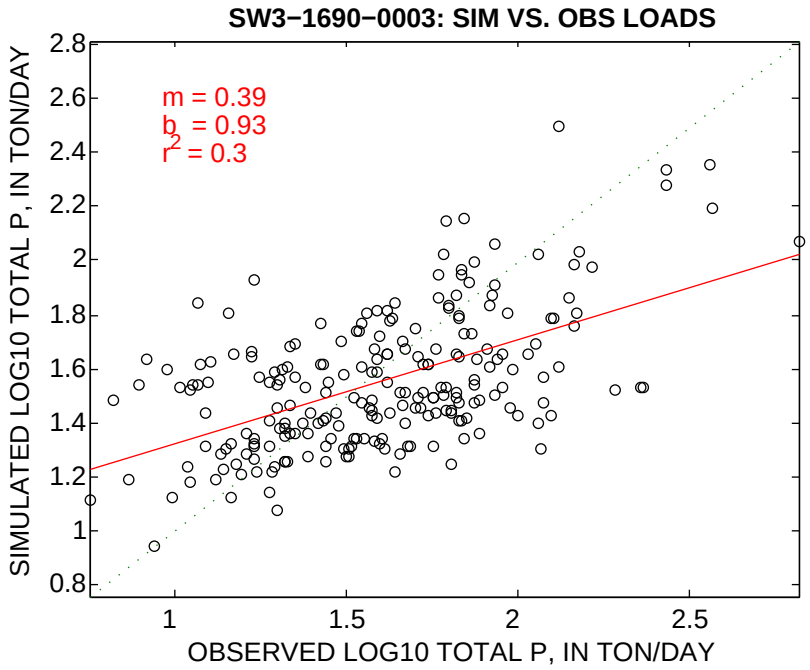




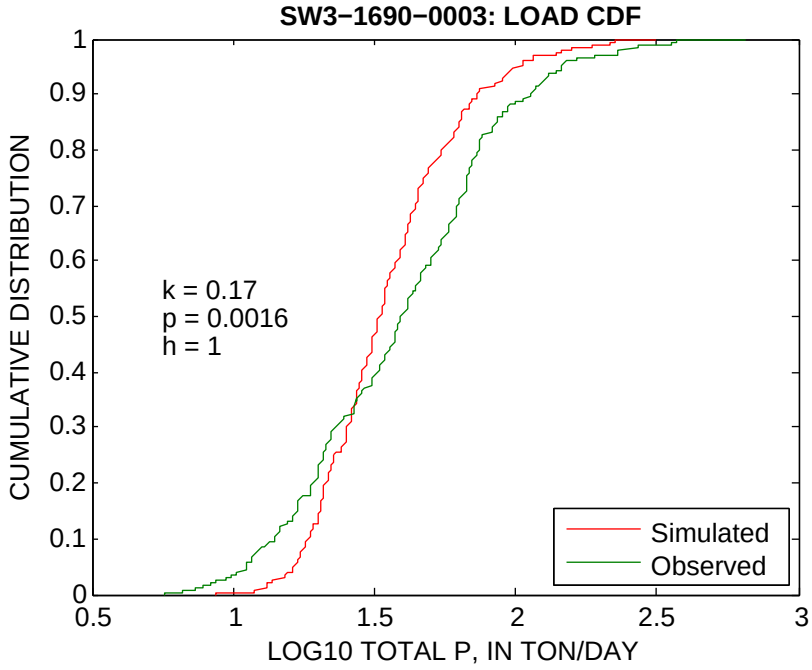


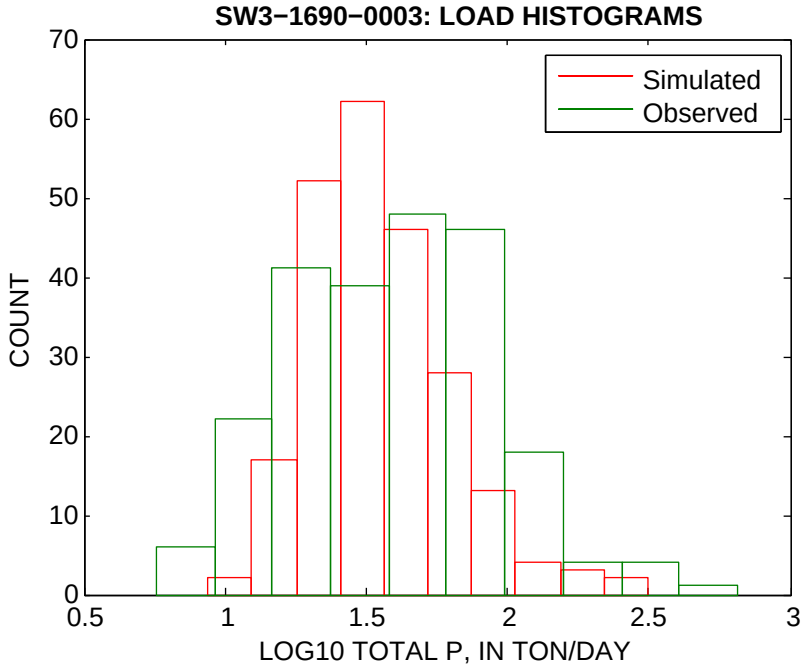


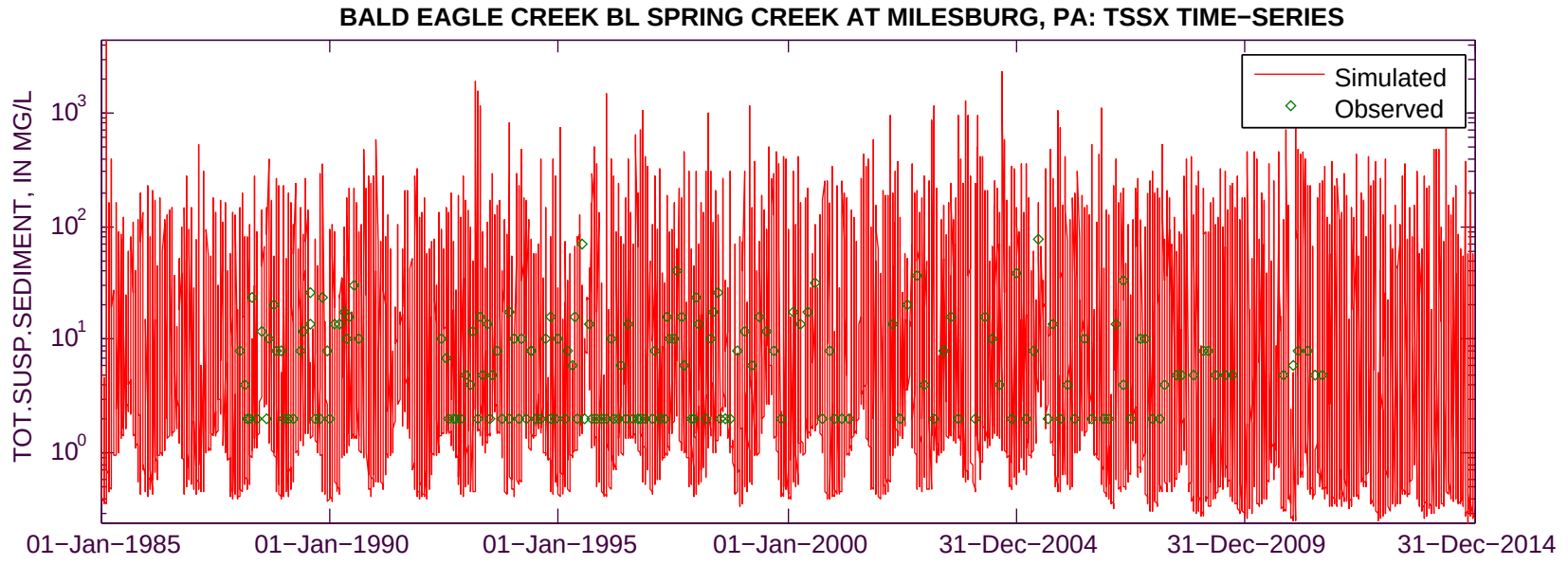
LOAD DATA
LOG10

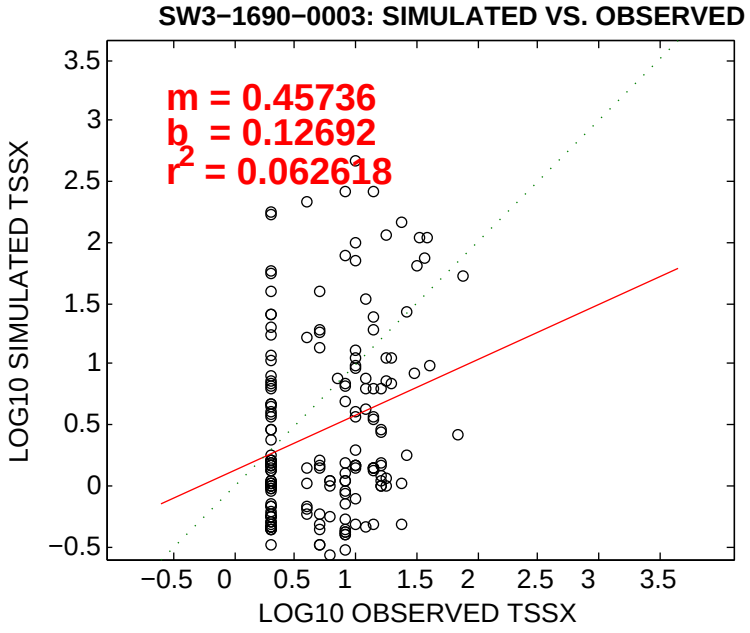


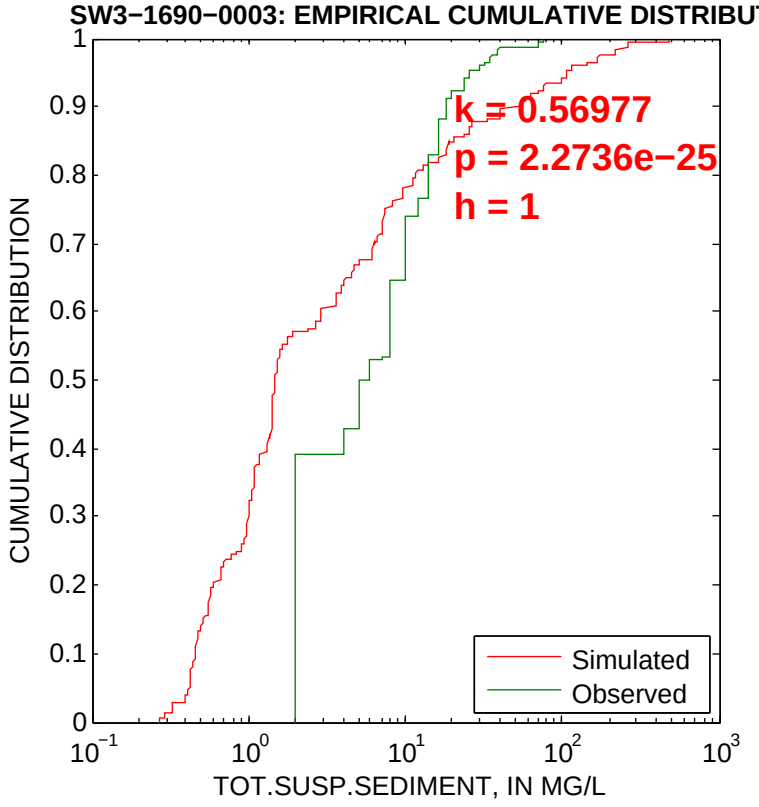












DATA SELECTION

scenario	file
P620171001WQ	TSSX.calib

plot: TSSX - total suspended ...

Dates 1/1/1985 12/31/201

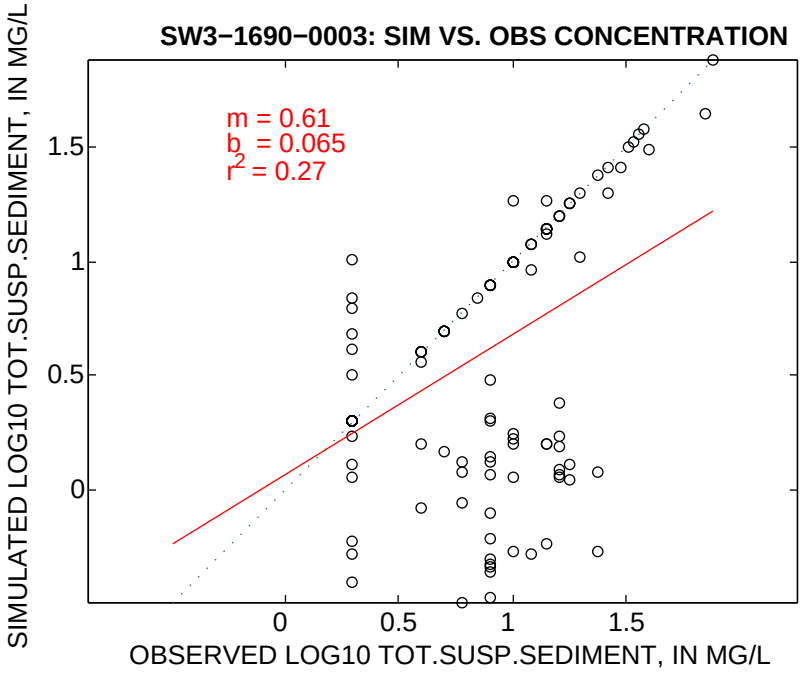
Drive	Directory	Observed
N/A	model	OBS20161101

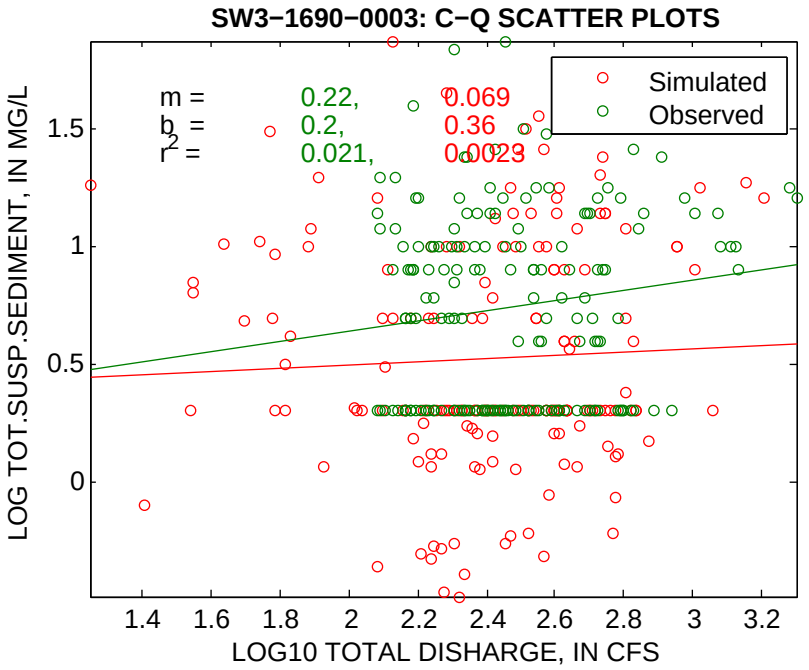
STATISTICS

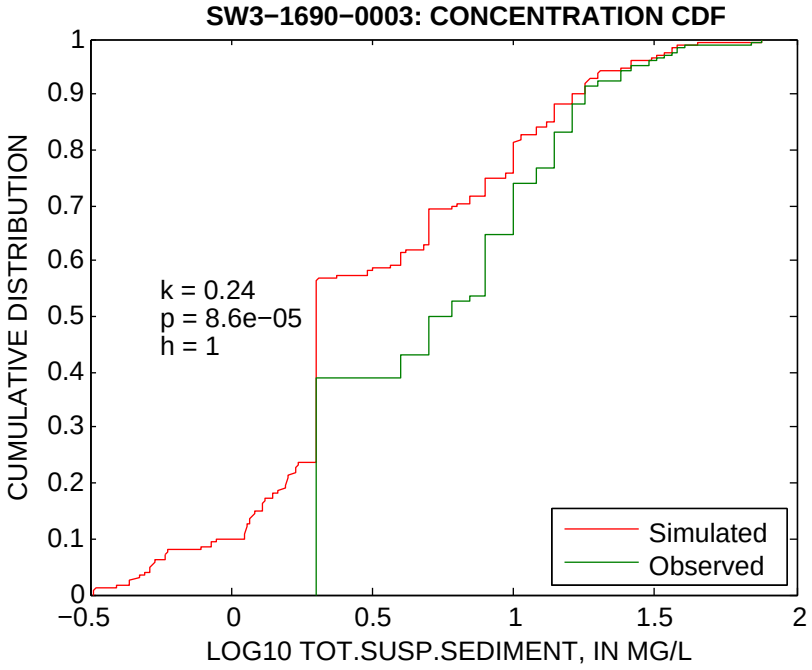
	n	172	172
		observe	simulate
min		2	0.27118
		0.30103	-0.566742
mean		8.94767	19.1108
		0.746121	0.46817
media		5.5	1.4801
		0.738561	0.170289
max		76	476.2
		1.88081	2.67779
varian		109.535	3005.73
		0.172406	0.575945
JB		0.001	0.001
		0.015405	0.001567
		ra	log
%		113.584	-37.2529
err.va		3062.57	0.668355
rel.std.err		27.9597	3.87663
mod.eff		-26.9597	-2.87663

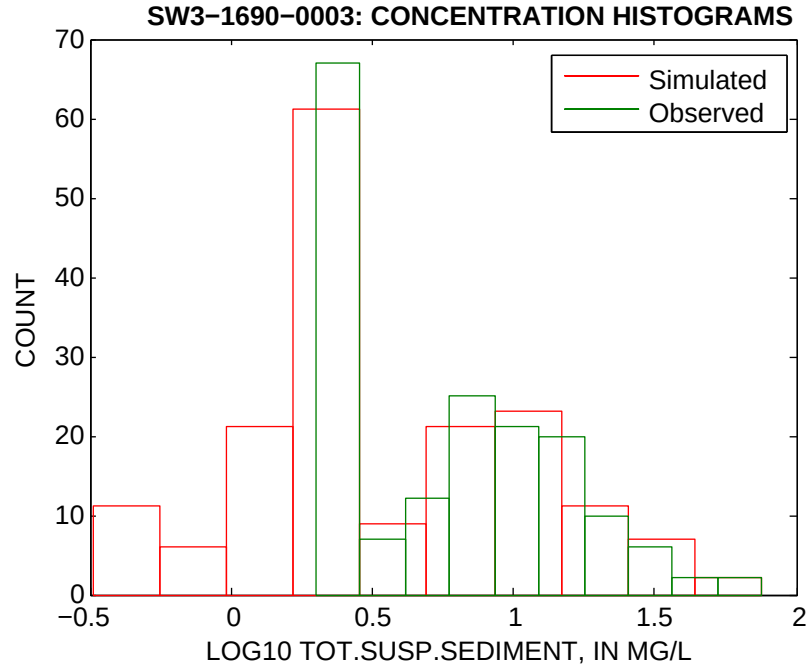
VERSION 2.1

ALL DATA
LOG10

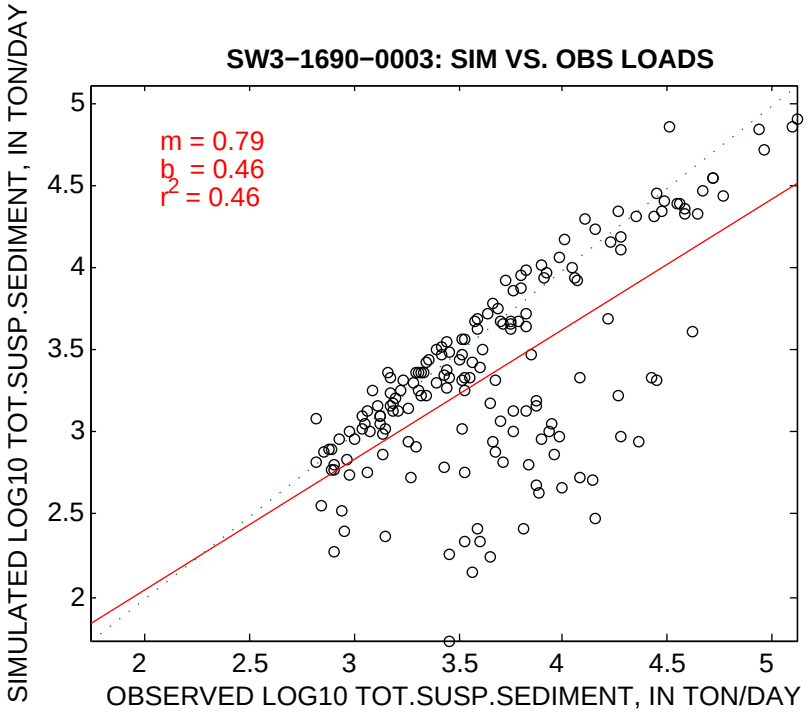




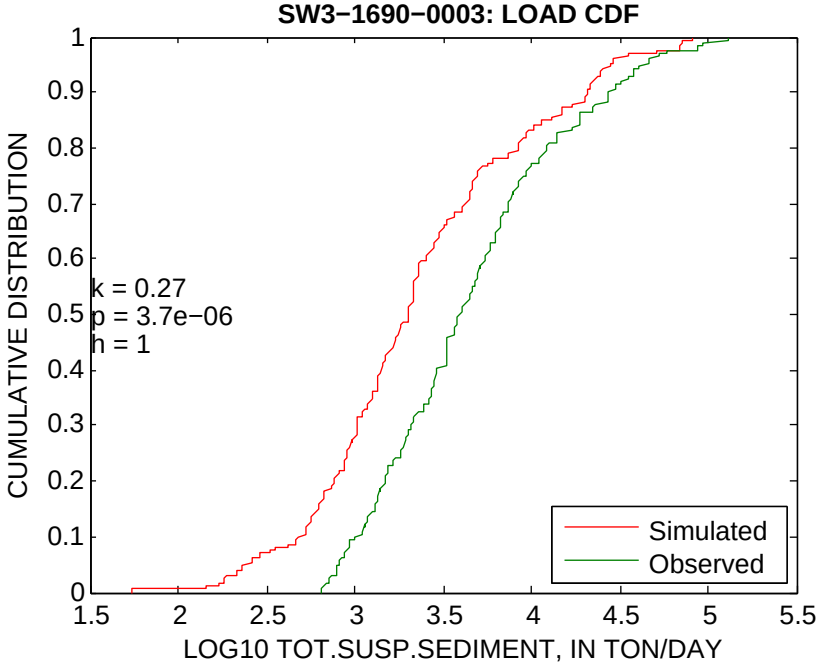


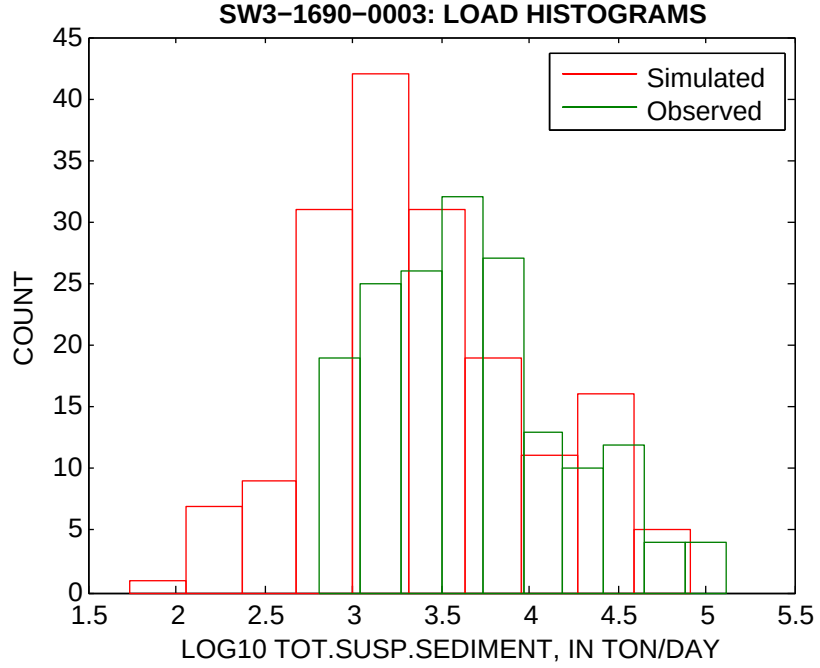


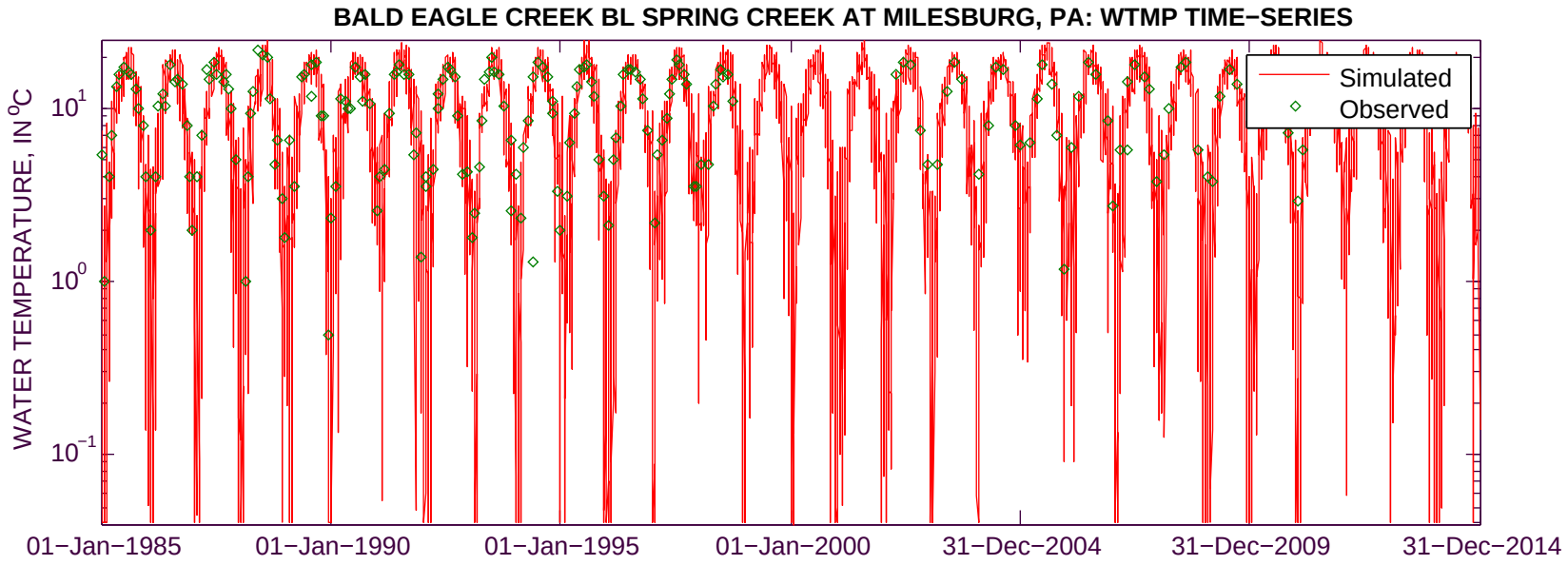
LOAD DATA
LOG10

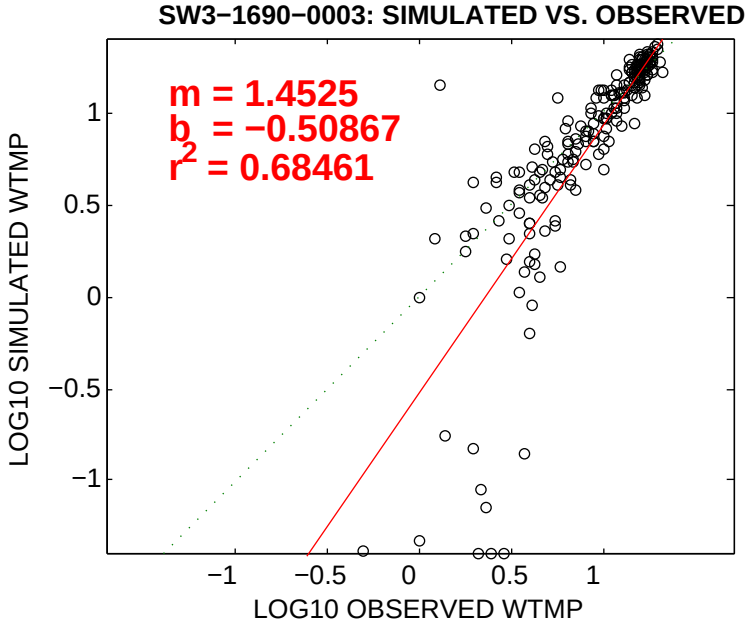


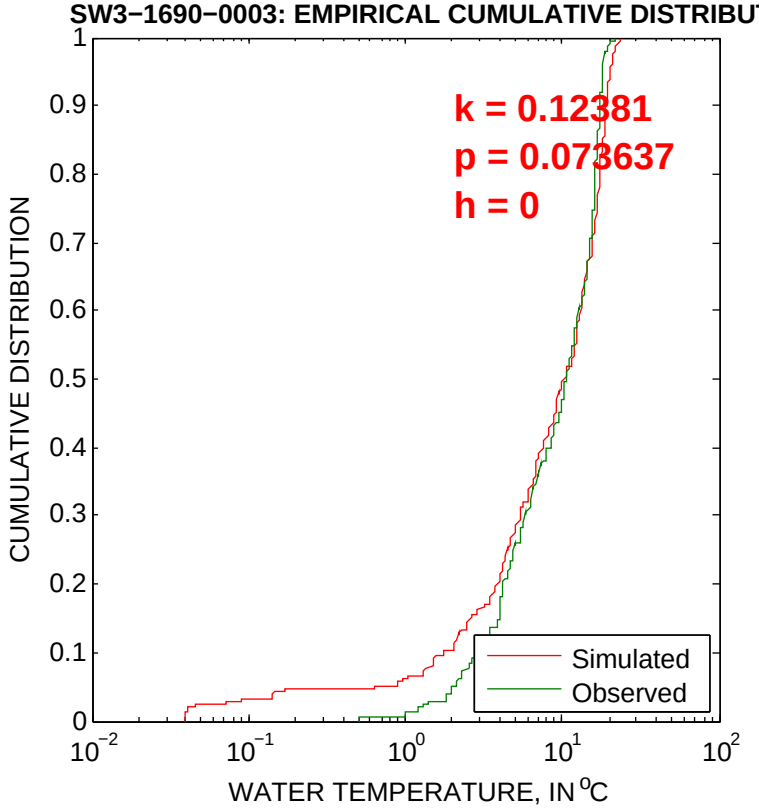












DATA SELECTION

scenario	file
P620171001WQ	WTMP.calib

plot: WTMP - water tempera...

Dates: 1/1/1985 – 12/31/201

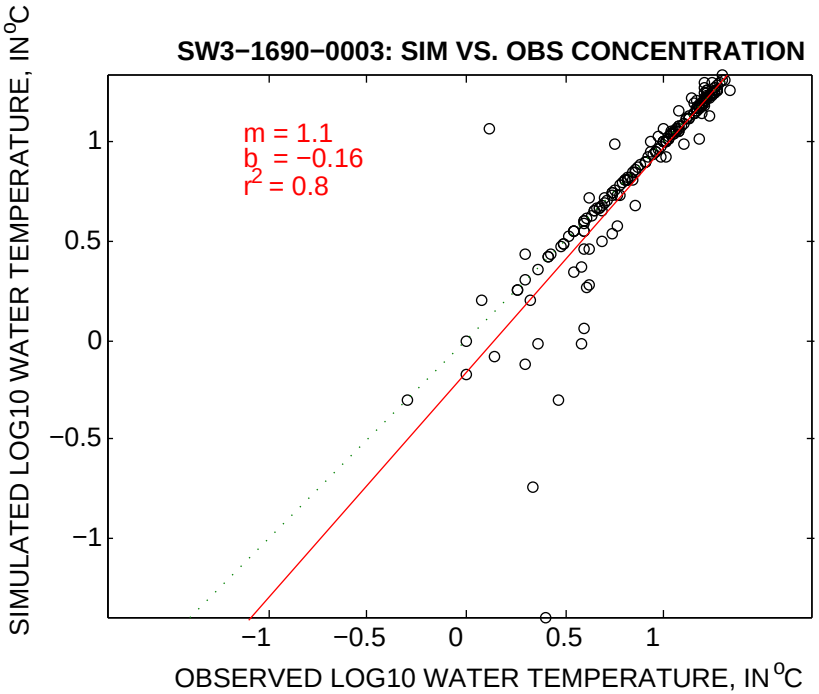
Drive	Directory	Observed
N/A	model	OBS20161101

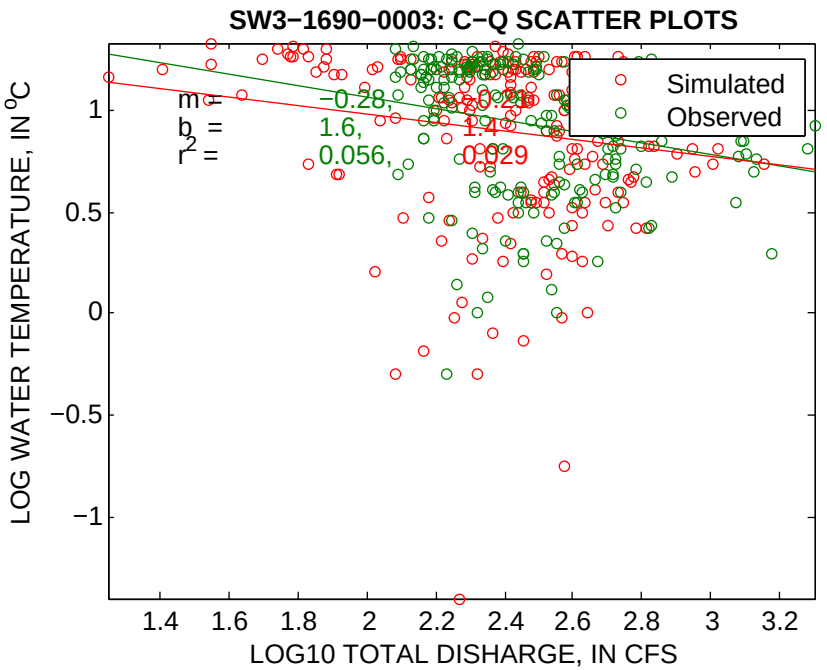
STATISTICS

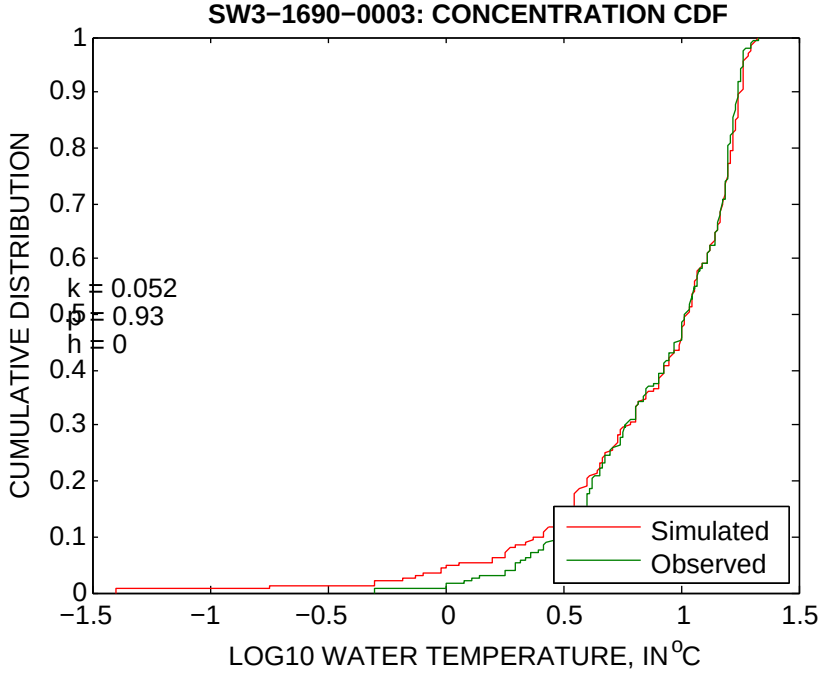
	n	210	210
		observe	simulate
min		0.5	0.040014
		-0.30103	-1.39779
mean		10.4476	10.5323
		0.92684	0.837557
media		10.5	10.334
		1.02119	1.01417
max		21.5	23.683
		1.33244	1.37444
varian		31.6023	43.4051
		0.10308	0.317656
JB		0.004257	0.005531
		0.001	0.001
		ra	log
%		0.810949	-9.6331
err.va		5.54718	0.1293
rel.std.err		0.175531	1.25436
mod.eff		0.824469	-0.254362

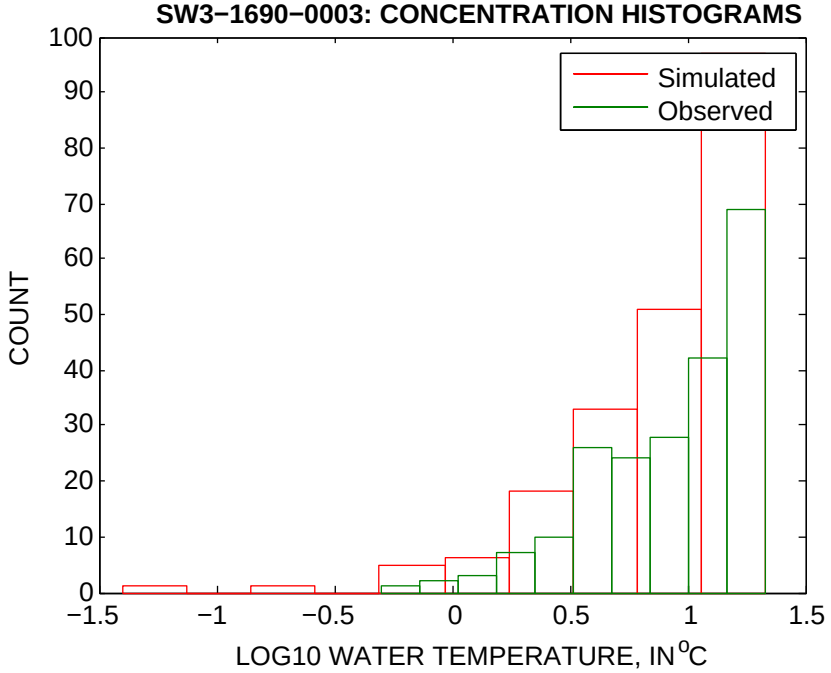
VERSION 2.1

ALL DATA
LOG10

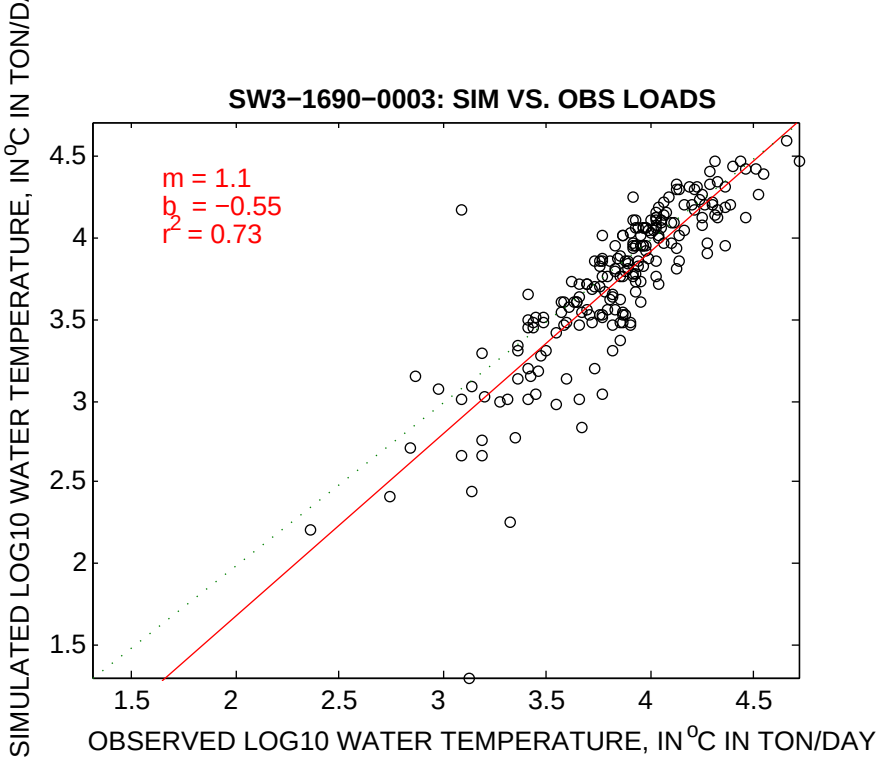




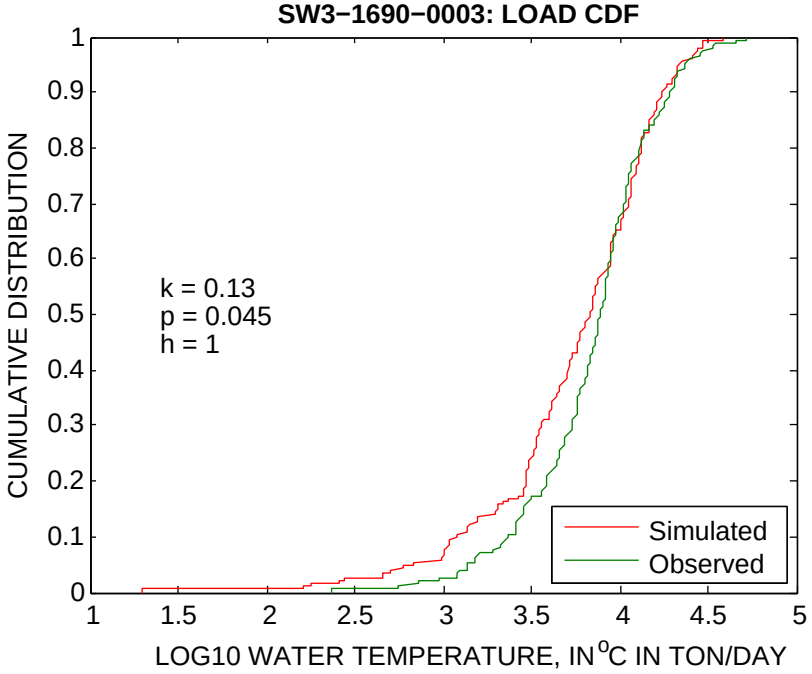


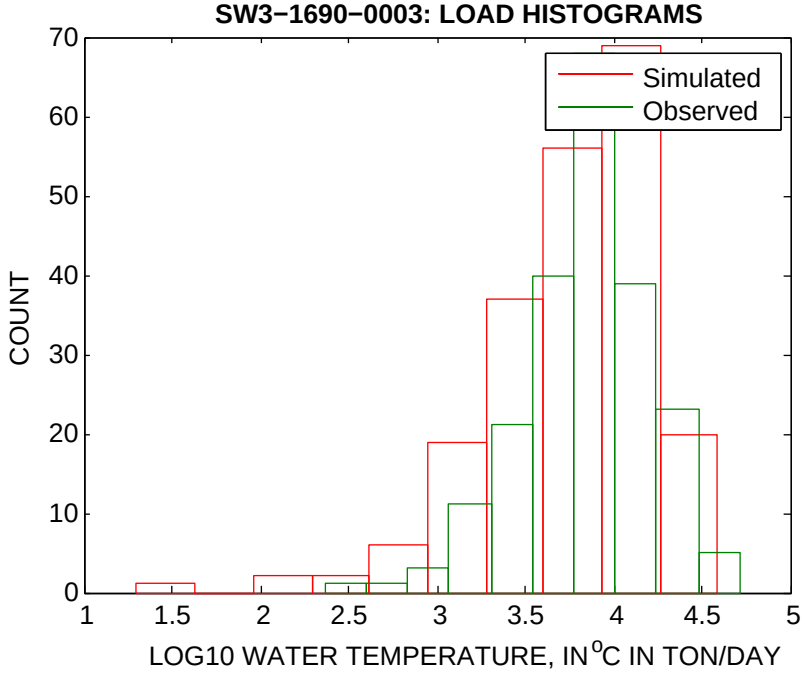


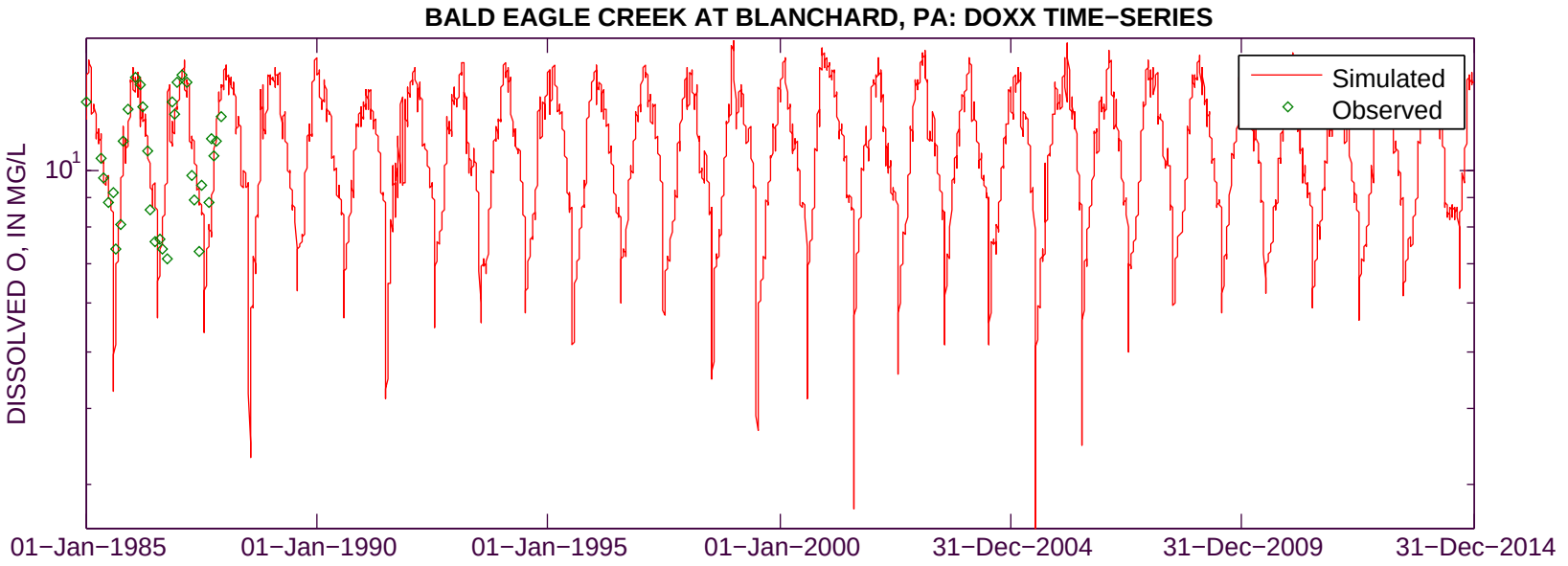
LOAD DATA
LOG10

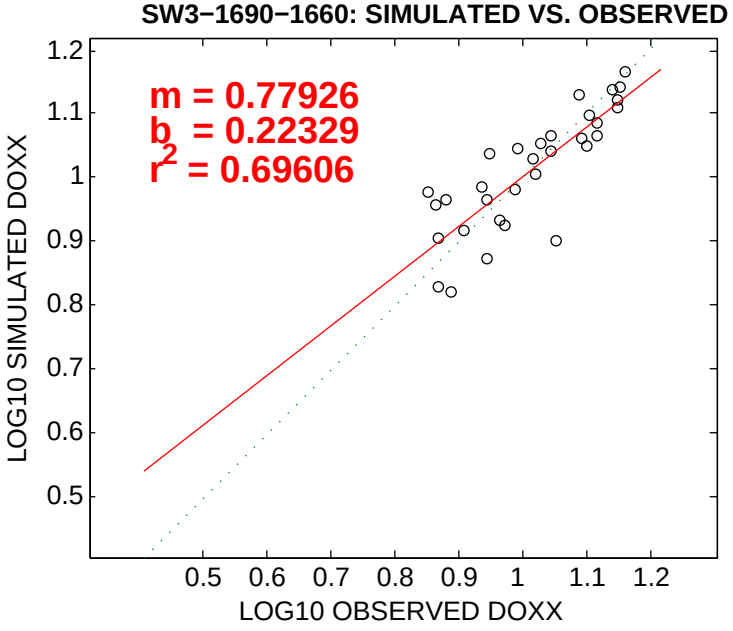


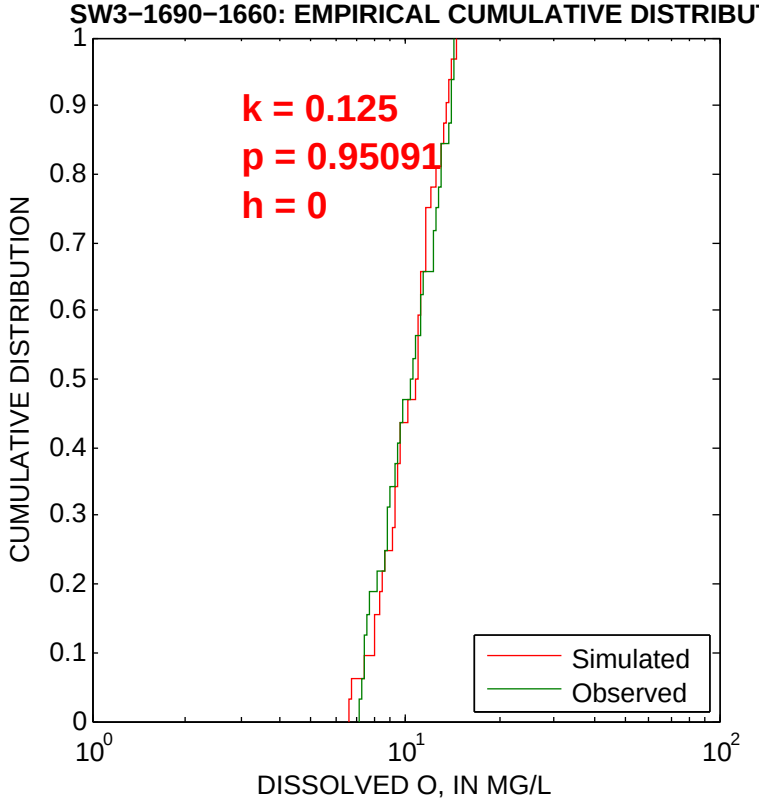












DATA SELECTION

scenario	file
P620171001WQ	DOXX.calib

plot: DOXX - dissolved oxygen

Dates: 1/1/1985 – 12/31/201

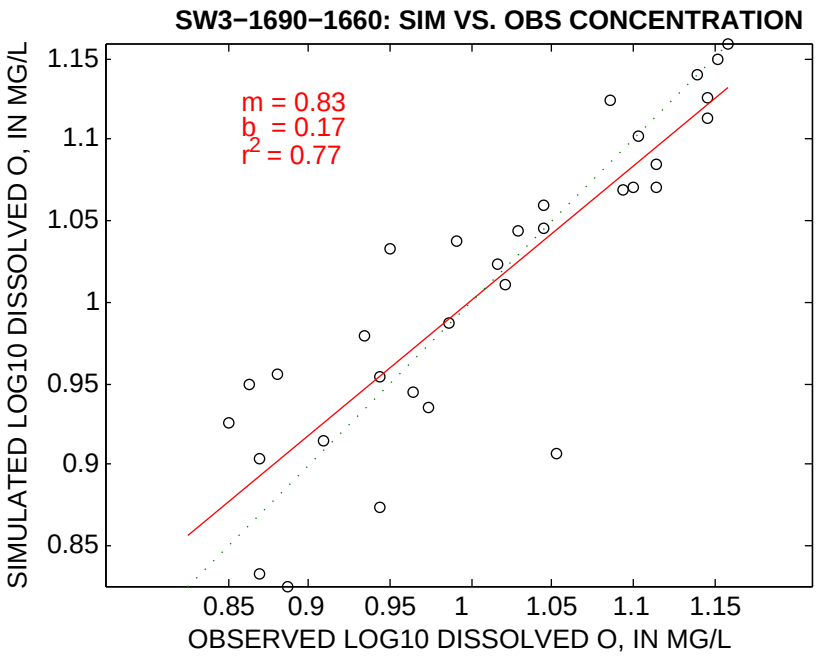
Drive	Directory	Observed
N/A	model	OBS20161101

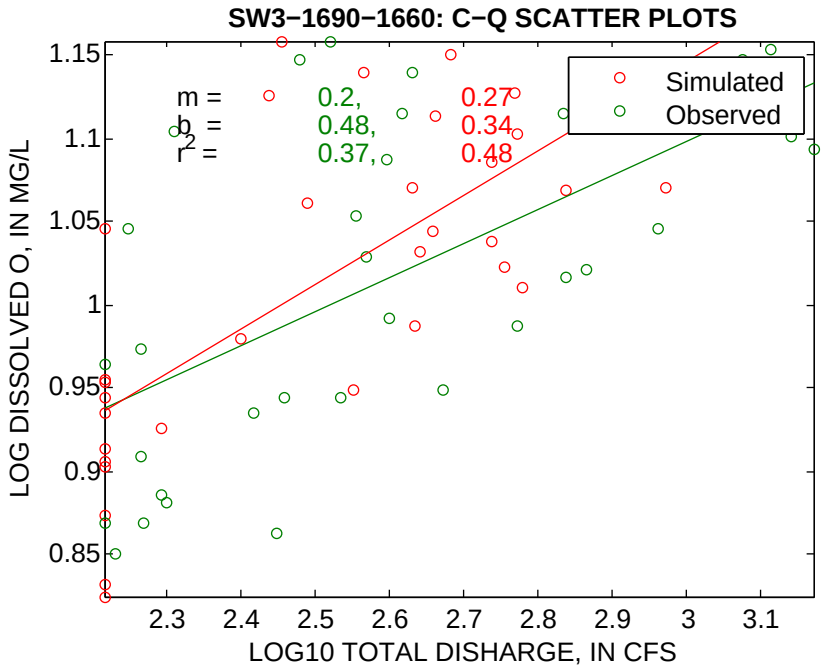
STATISTICS

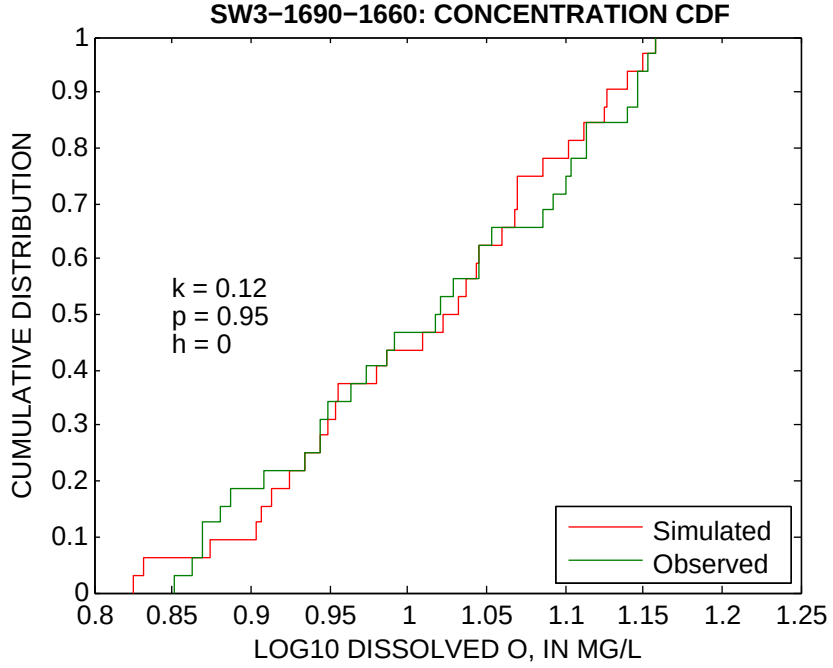
	n	32	32
		observe	simulate
min		7.1	6.6392
		0.851258	0.822116
mean		10.5375	10.4993
		1.01196	1.01187
media		10.45	10.7935
		1.01911	1.03314
max		14.4	14.598
		1.15836	1.16429
varian		5.5779	4.68587
		0.00978294	0.00853462
JB		0.134867	0.433132
		0.144543	0.376304
		ra	log
%		-0.362396	-0.0086401
err.va		1.42156	0.00307067
rel.std.err		0.254856	0.31388
mod.eff		0.745144	0.68612

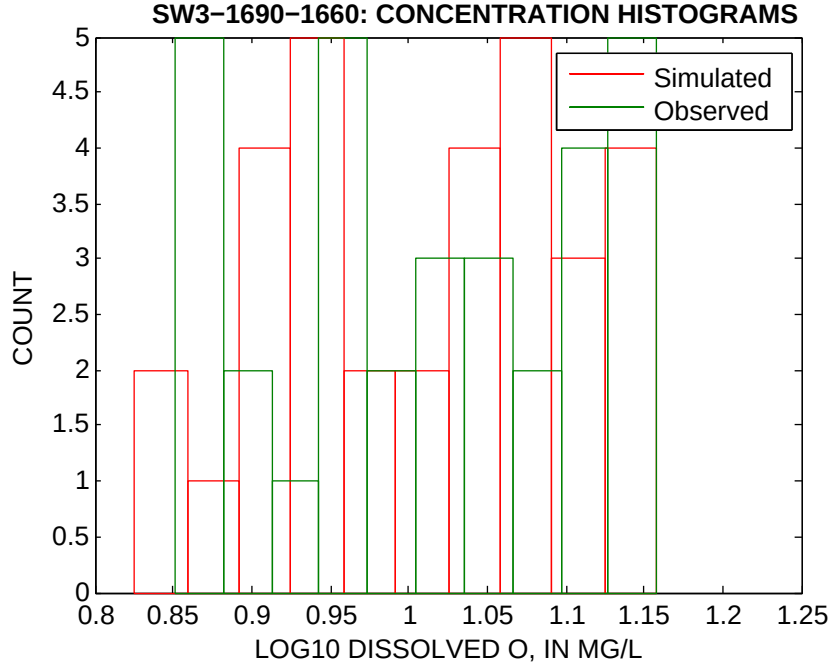
VERSION 2.1

ALL DATA
LOG10

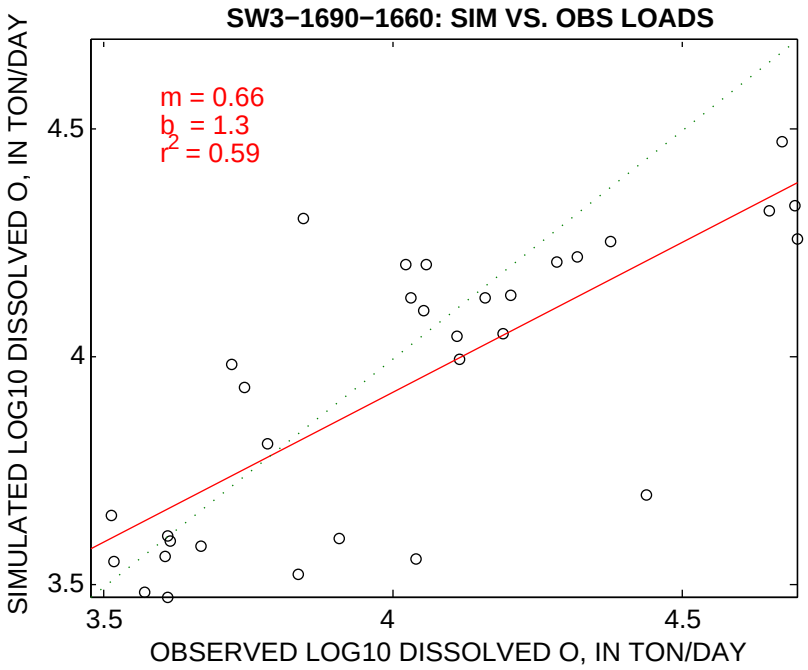


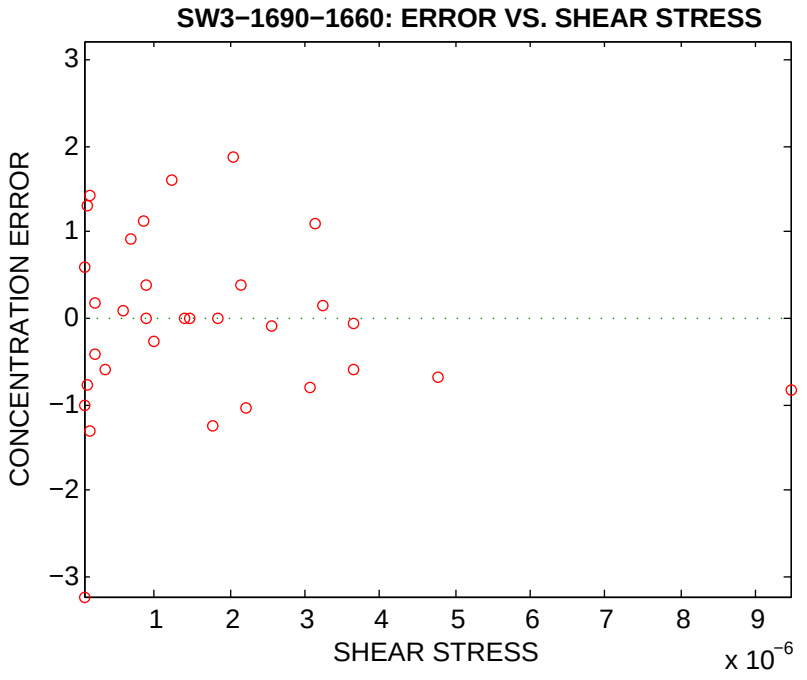


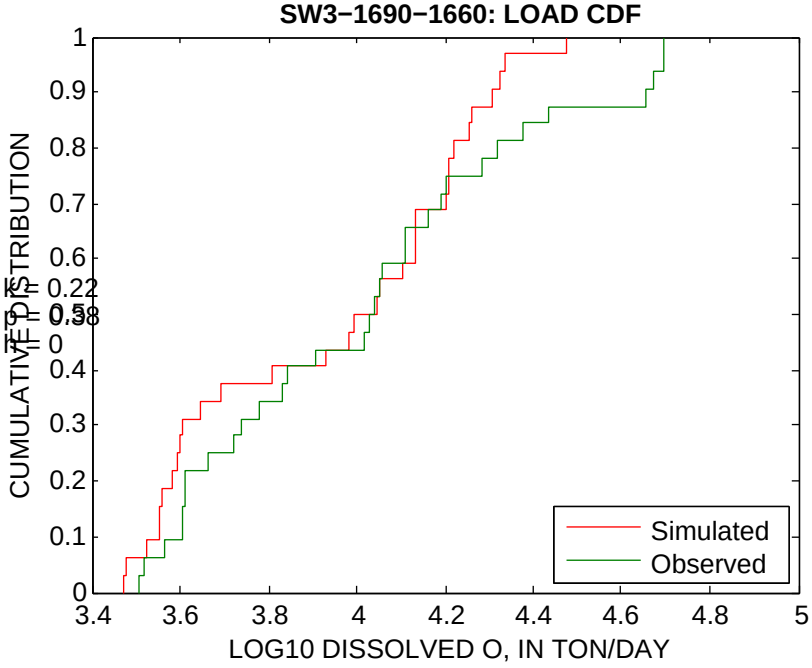


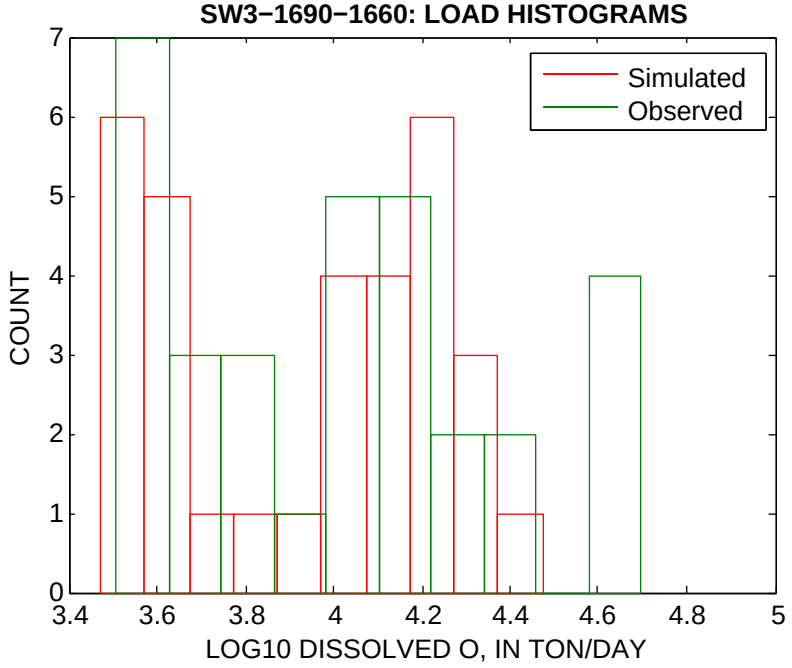


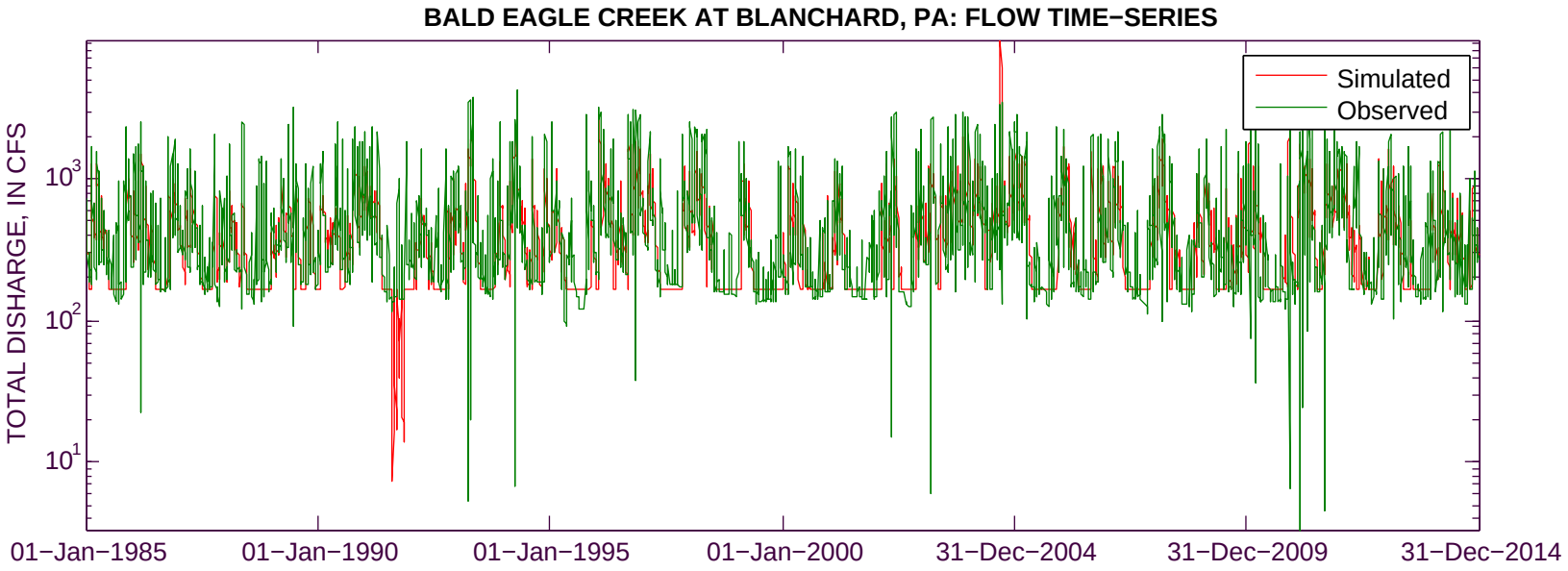
LOAD DATA
LOG10

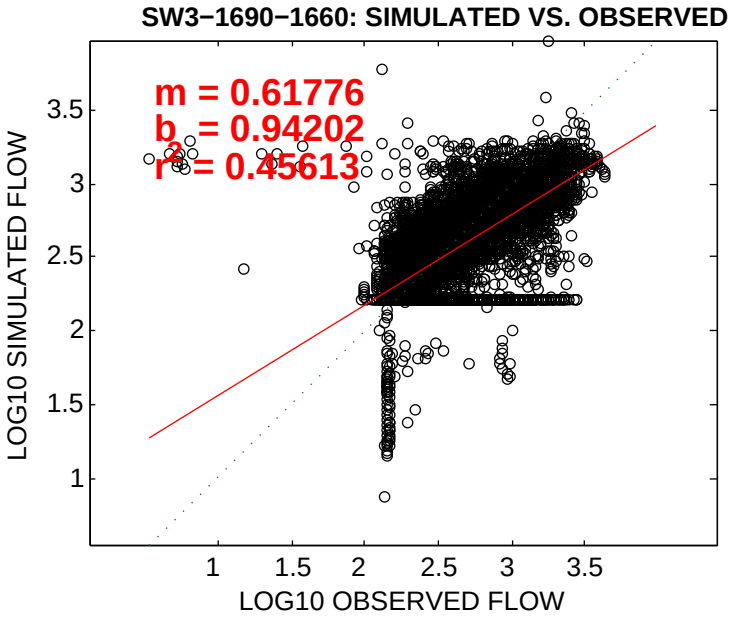


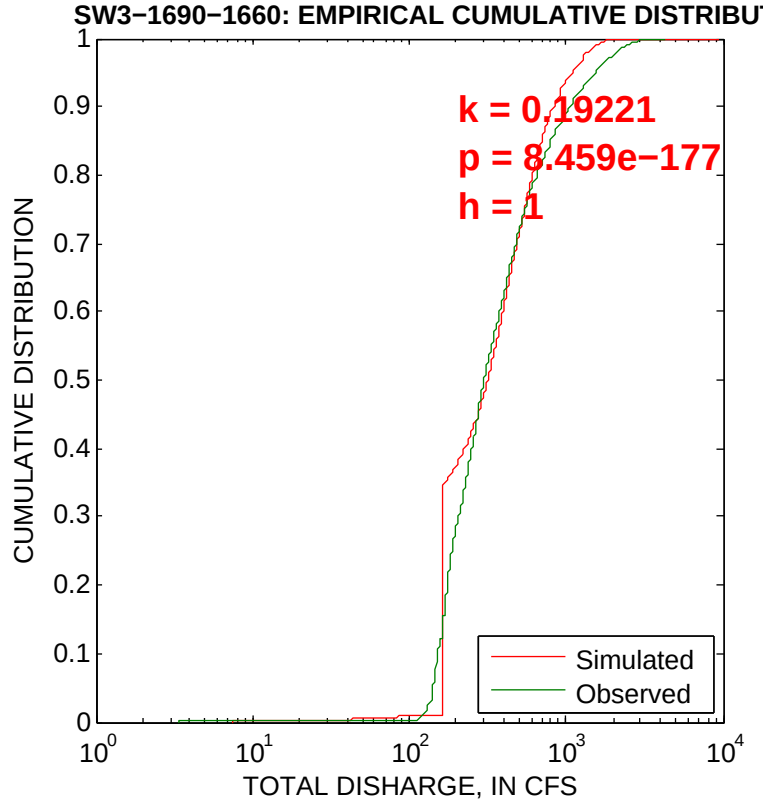












DATA SELECTION

scenario: P620171001WQ | file: FLOW.calib

plot: FLOW - total discharge

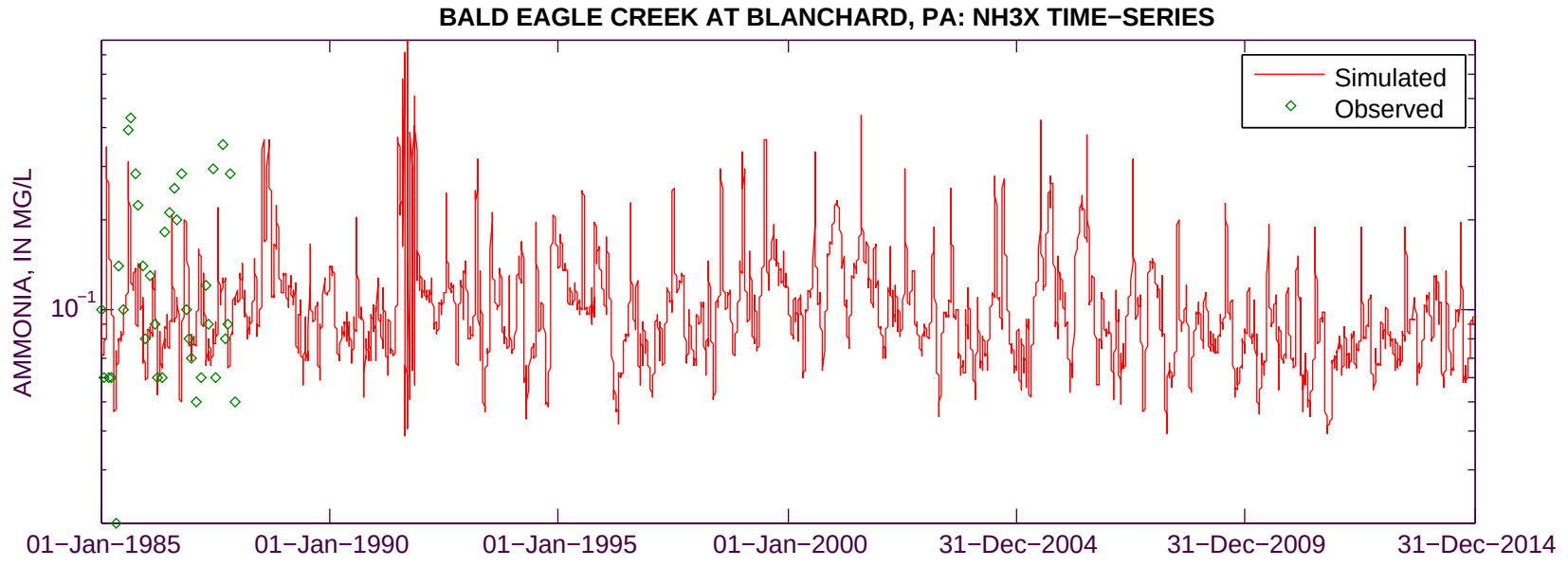
Dates: 1/1/1985 | 12/31/201

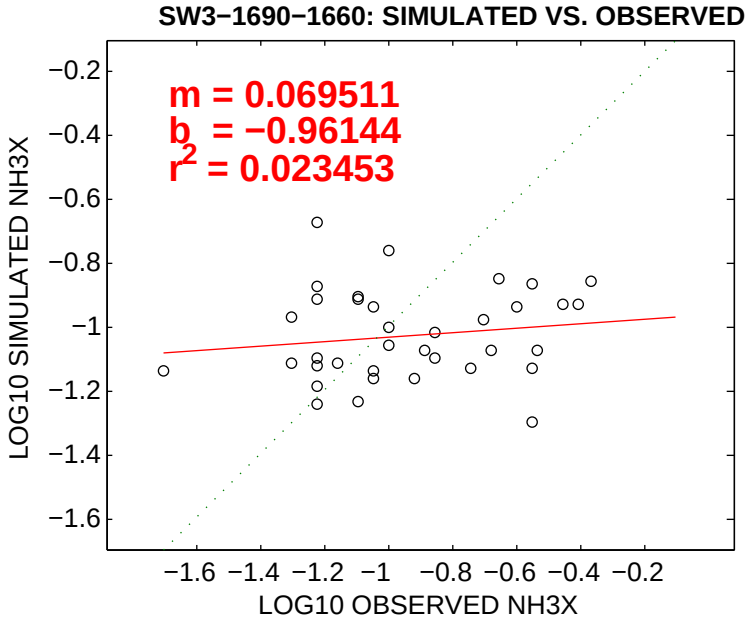
Drive: N/A | Directory: model | Observed: OBS20161101

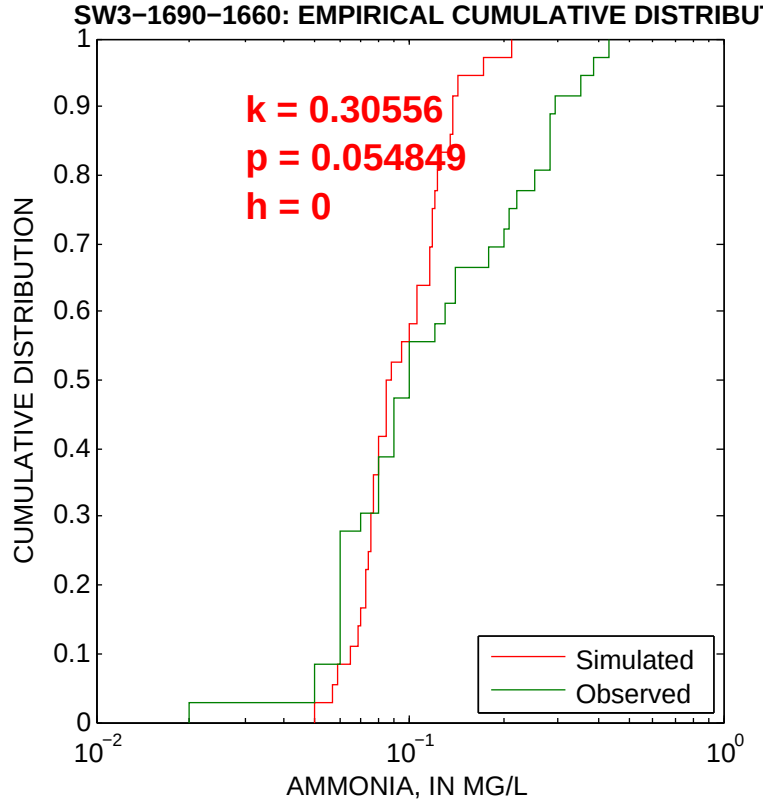
STATISTICS

		observe	simulate
n		10957	10957
min		3.4	7.4309
		0.531479	0.871041
mean		484.569	418.33
		2.54391	2.51353
media		302	316.83
		2.48001	2.50083
max		4290	9552.6
		3.63246	3.98012
varian		241840	116470
		0.107218	0.089703
JB		0.001	0.001
		0.001	0.001
		ra	log
%		-13.6697	-1.19409
err.va		149837	0.0653749
rel.std.err		0.619572	0.609741
mod.eff		0.380428	0.390259

VERSION 2.1







DATA SELECTION

scenario	file
P620171001WQ	NH3X.calib

plot: NH3X - ammonia

Dates: 1/1/1985 – 12/31/201

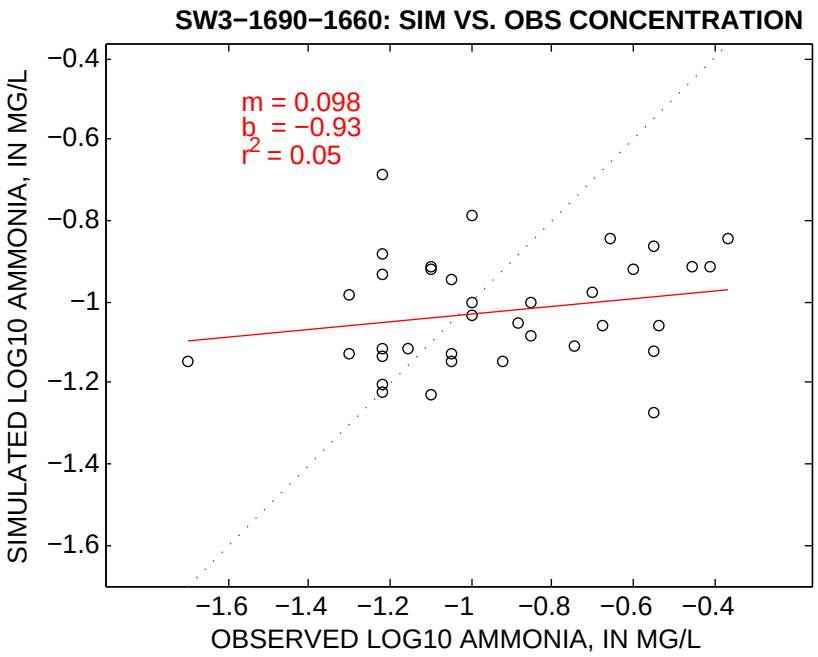
Drive	Directory	Observed
N/A	model	OBS20161101

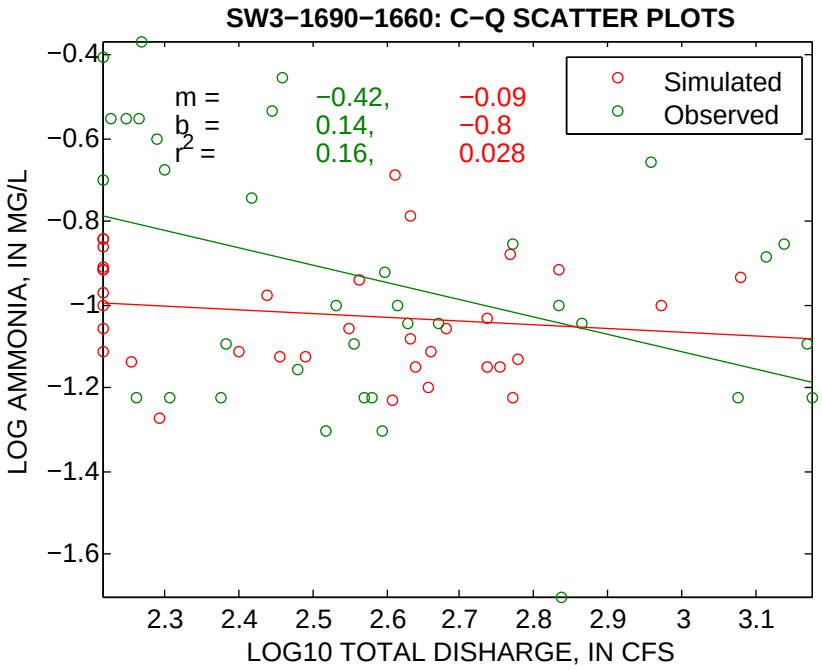
STATISTICS

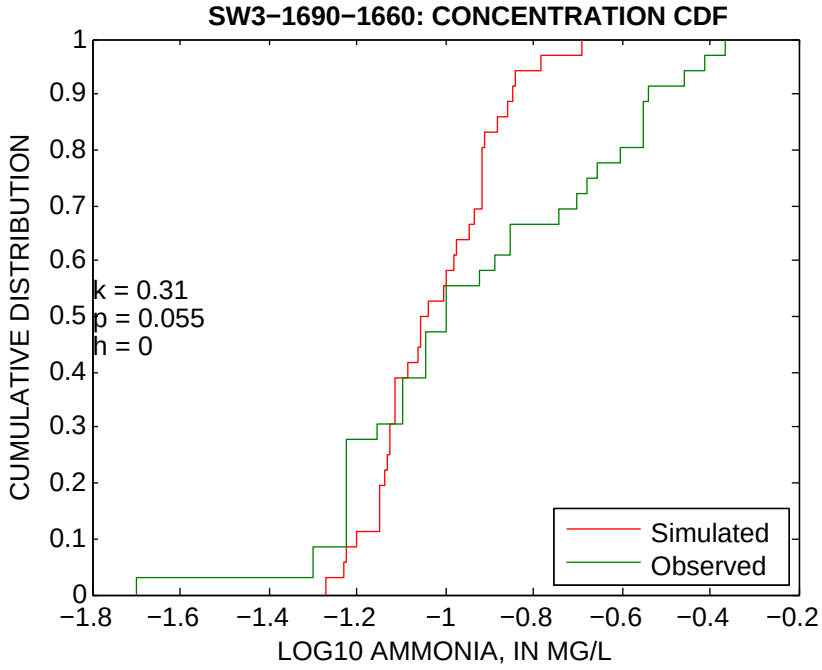
	n	36	36
		observe	simulate
min		0.02	0.050271
		-1.69897	-1.29868
mean		0.1475	0.0991777
		-0.937782	-1.02663
media		0.1	0.086358
		-1	-1.06379
max		0.43	0.21129
		-0.366532	-0.675121
varian		0.0114993	0.00118501
		0.0968827	0.0199604
JB		0.025771	0.011212
		0.5	0.5
		ra	log
%		-32.7609	9.47413
err.va		0.0140546	0.111493
rel.std.err		1.22222	1.15081
mod.eff		-0.222218	-0.150808

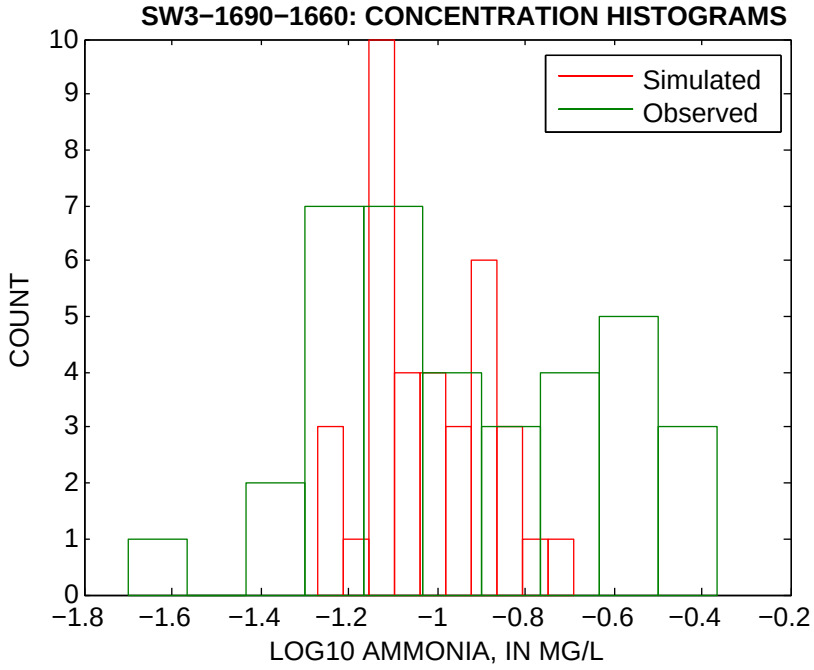
VERSION

ALL DATA
LOG10

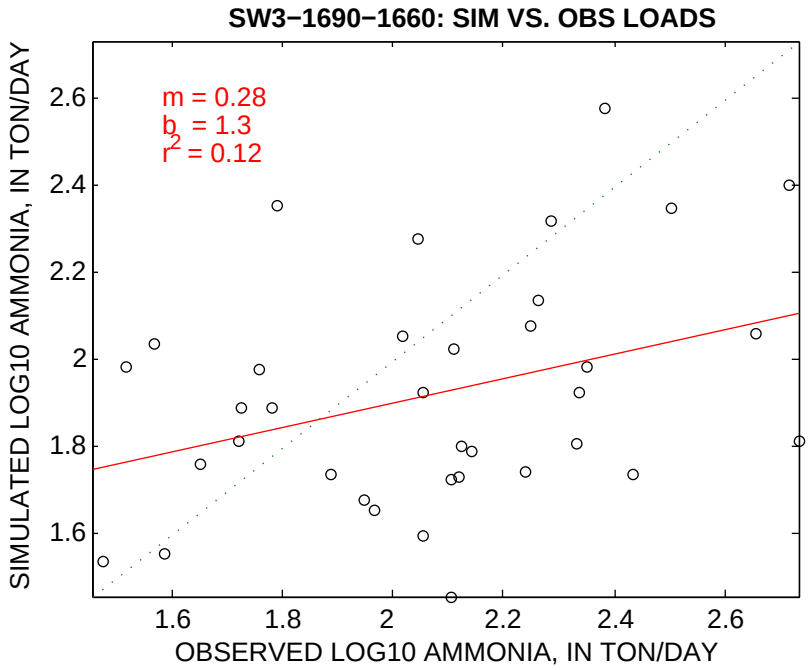


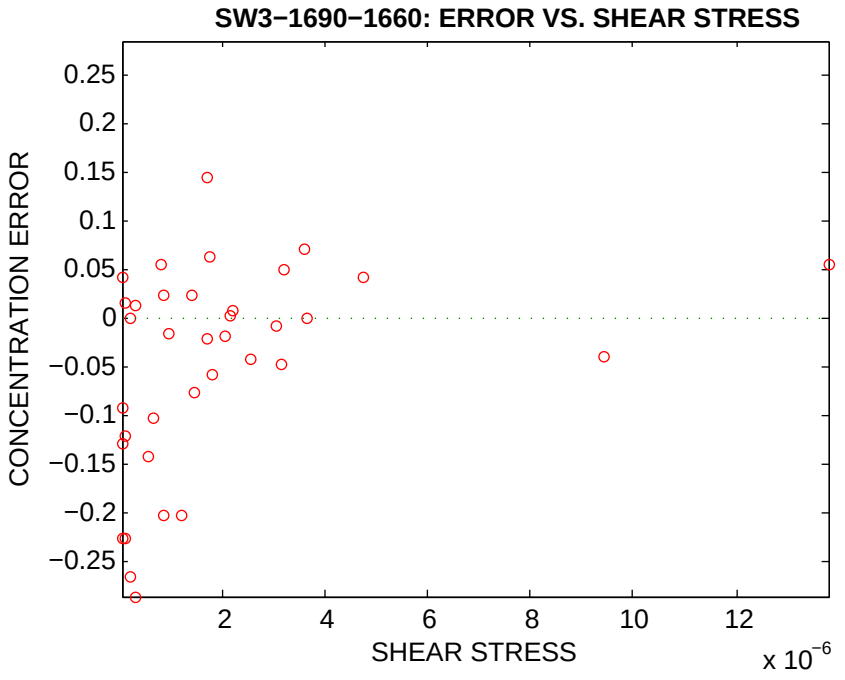


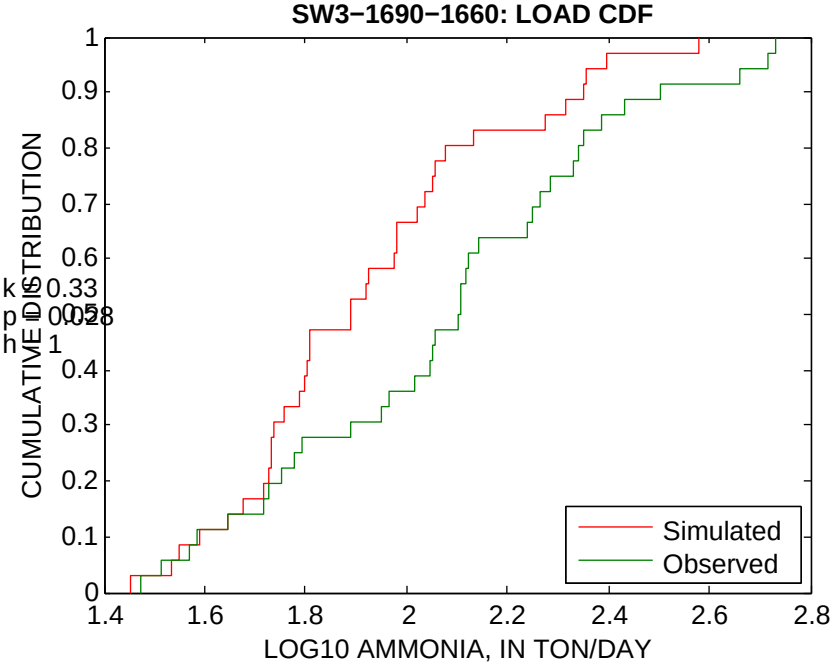




LOAD DATA
LOG10







k 0.33
p 0.05
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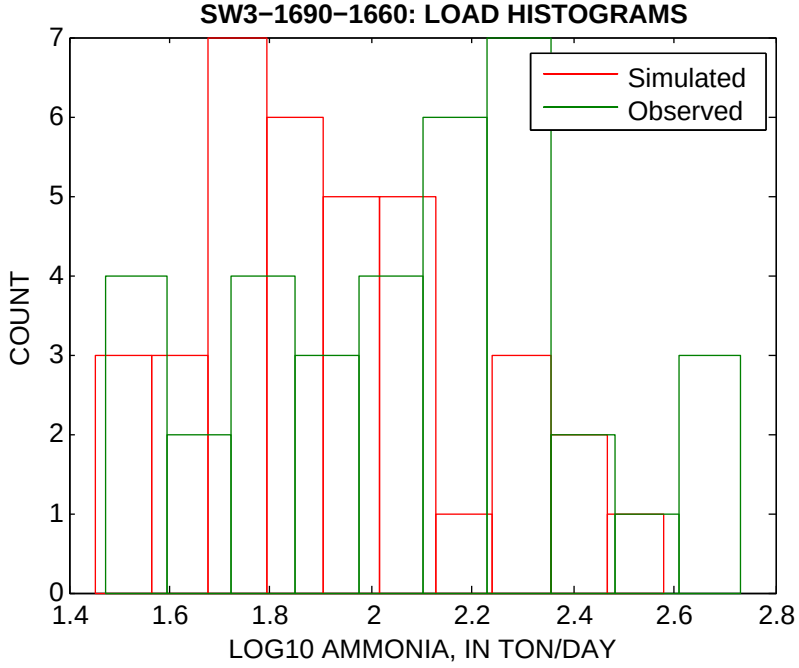
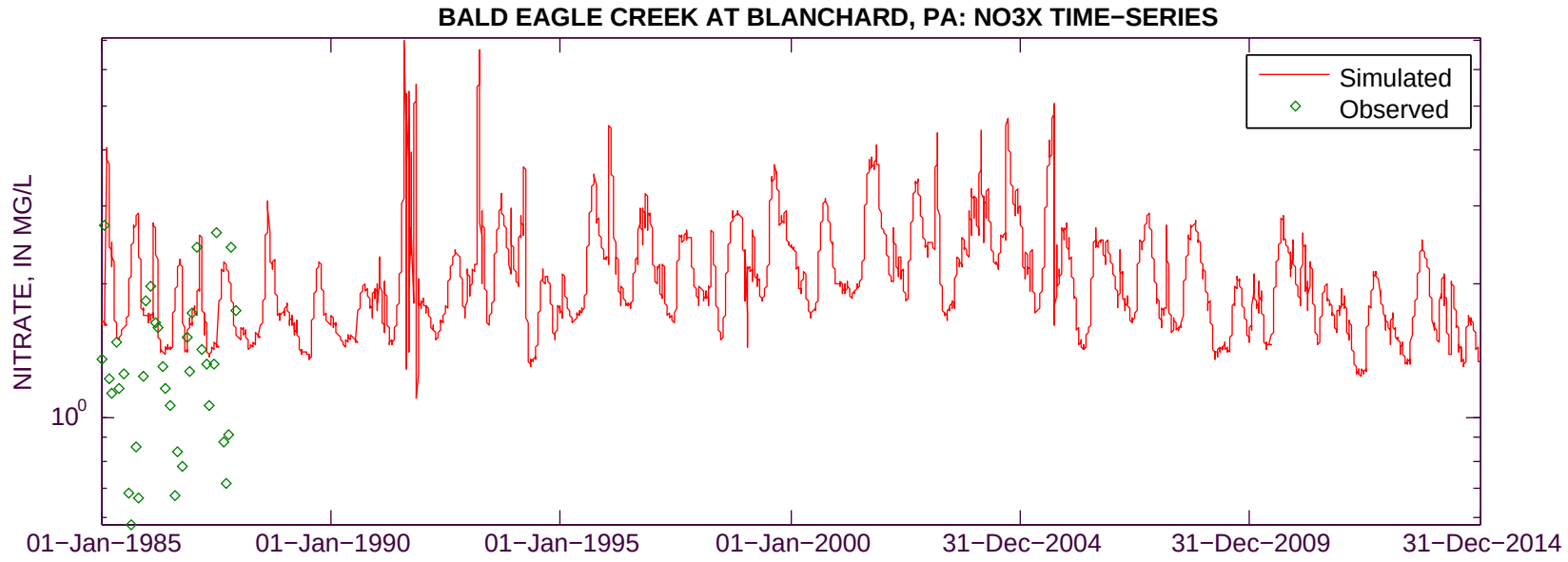
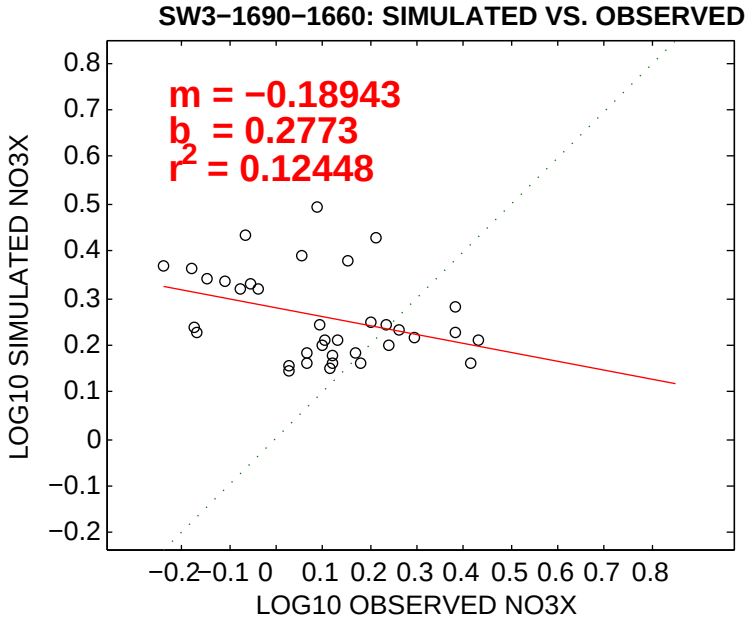
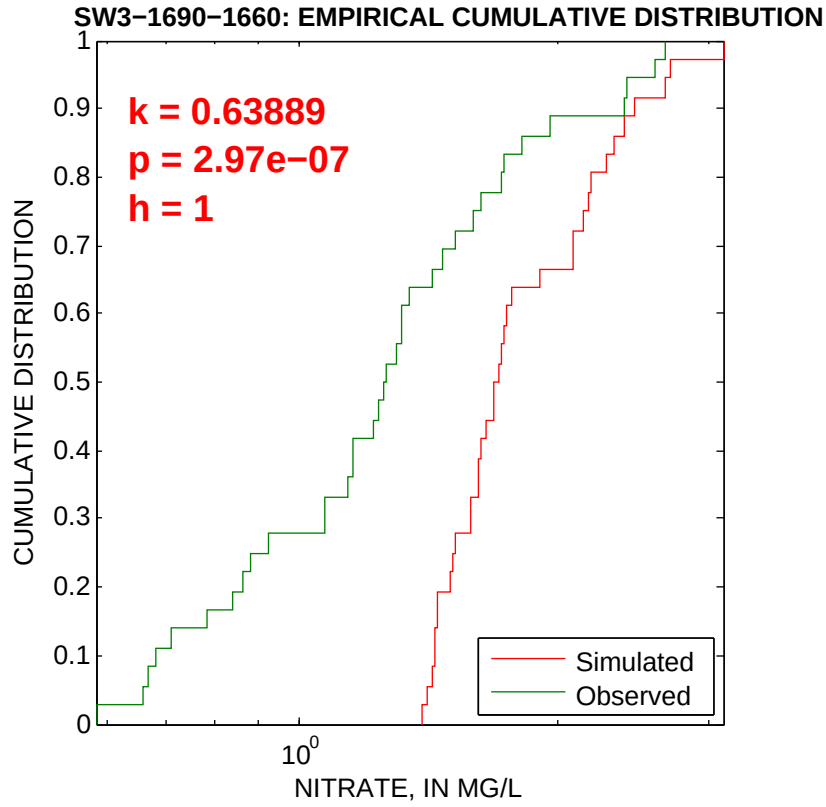








DATA SELECTION

scenario	file
P620171001WQ	NO3X.calib

plot: NO3X - nitrate

Dates 1/1/1985 12/31/201

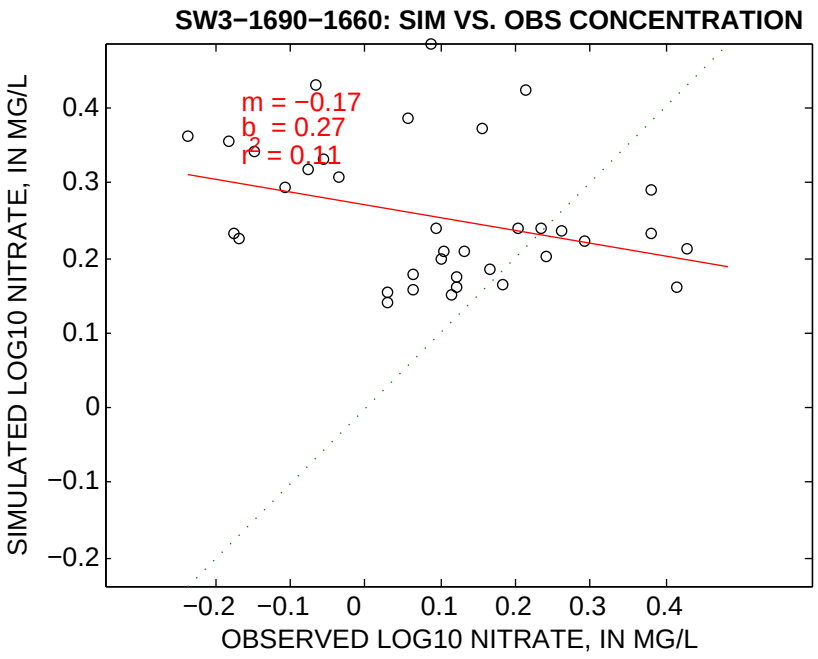
Drive	Directory	Observed
N/A	model	OBS20161101

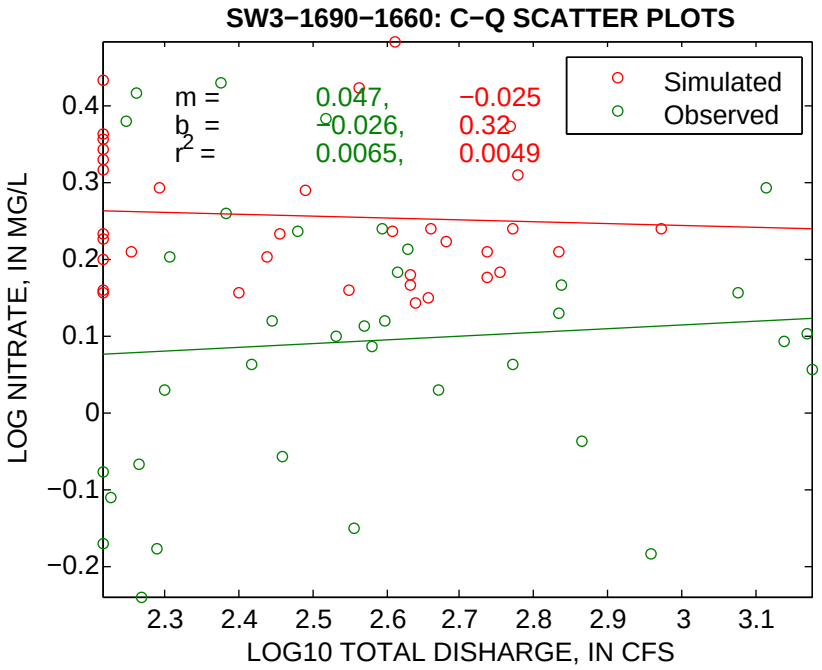
STATISTICS

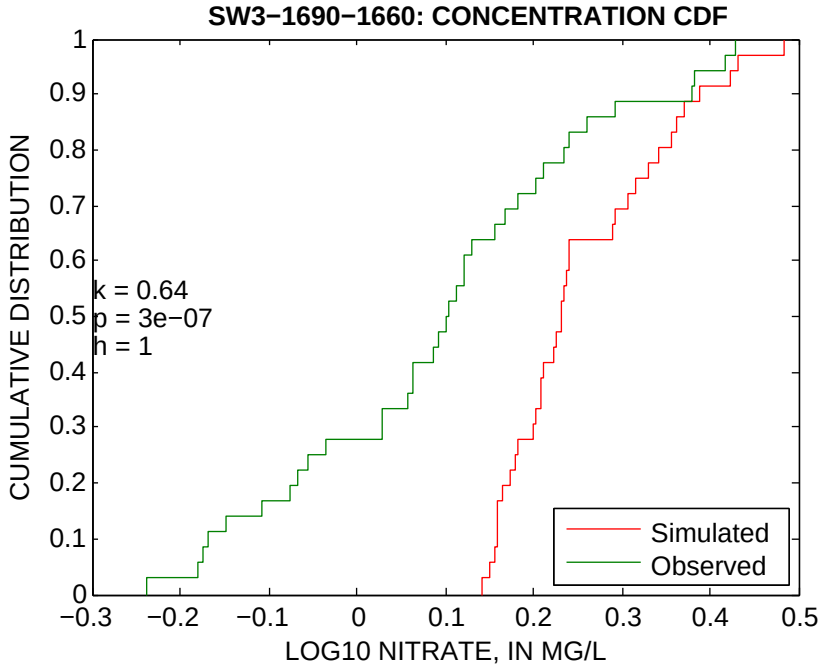
	n	36	36
		observe	simulate
min		0.58	1.3901
		-0.236572	0.143046
mean		1.34583	1.86041
		0.0950594	0.259291
media		1.265	1.70015
		0.102087	0.230481
max		2.68	3.1258
		0.428135	0.494961
varian		0.302751	0.188291
		0.0304207	0.00876938
JB		0.051698	0.022786
		0.5	0.069460
		ra	log
%		38.2349	172.768
err.va		0.911302	0.0784582
rel.std.err		3.01007	2.57911
mod.eff		-2.01007	-1.57911

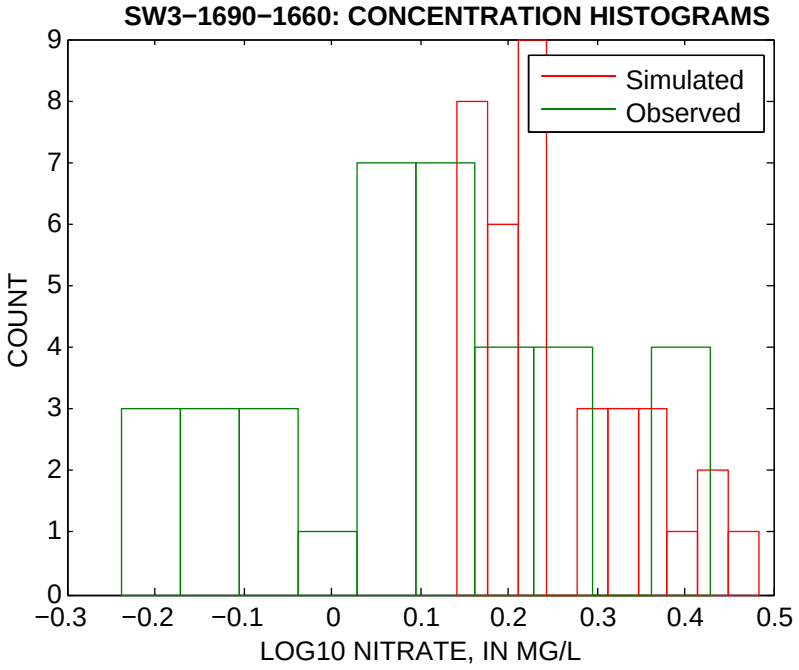
VERSION

ALL DATA
LOG10

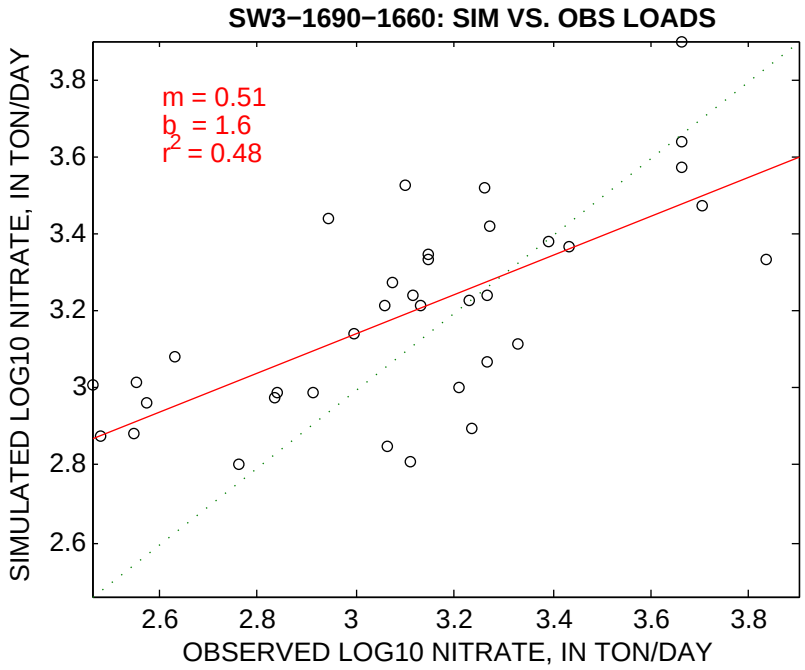


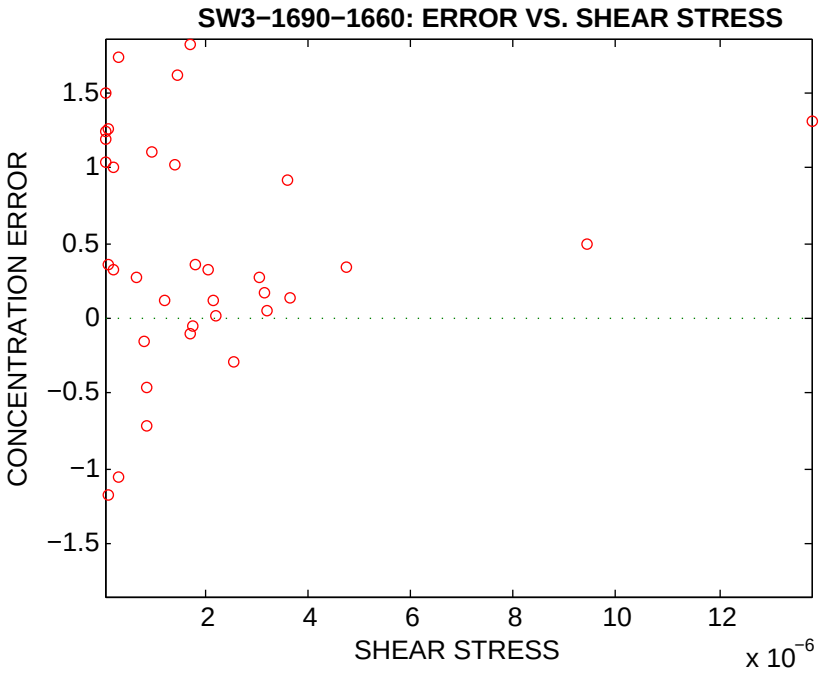


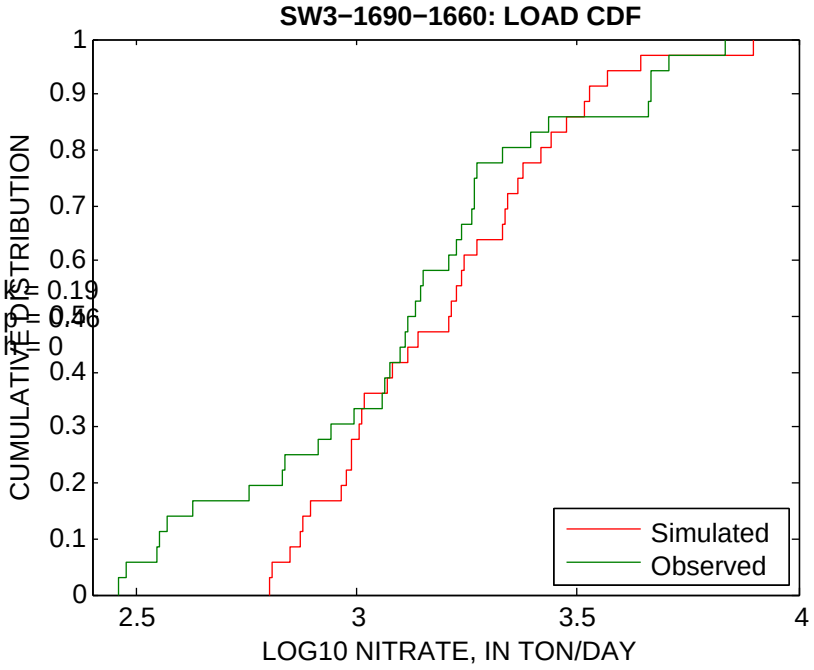


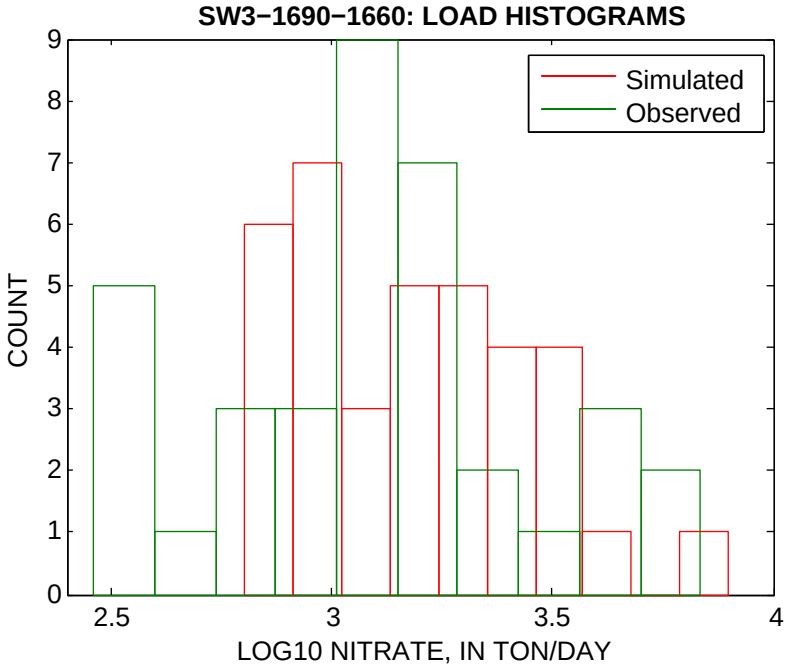


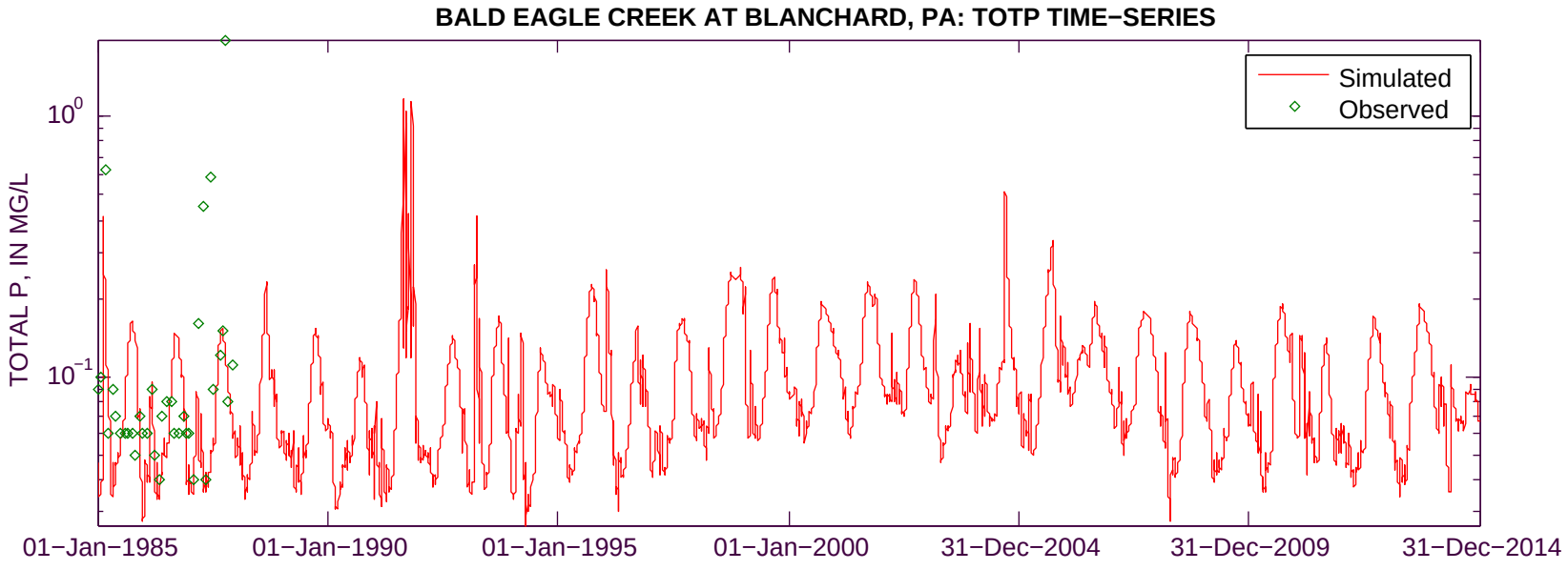
LOAD DATA
LOG10

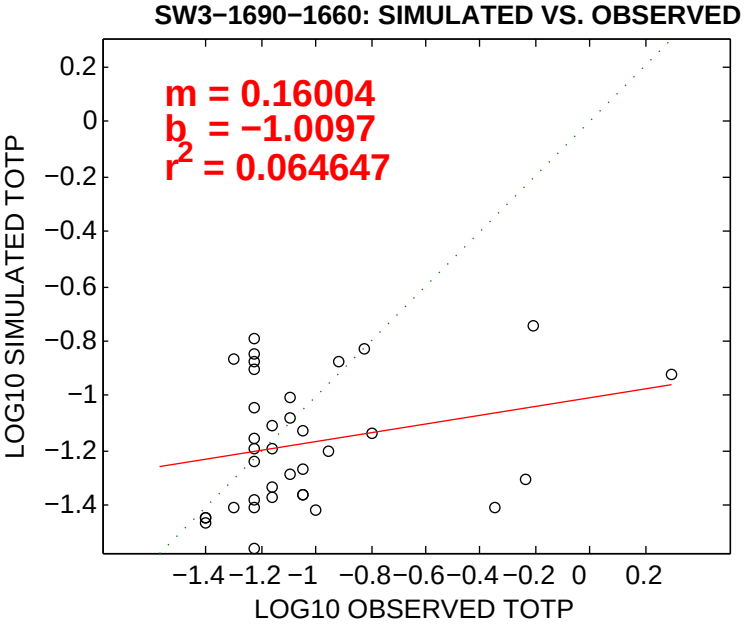


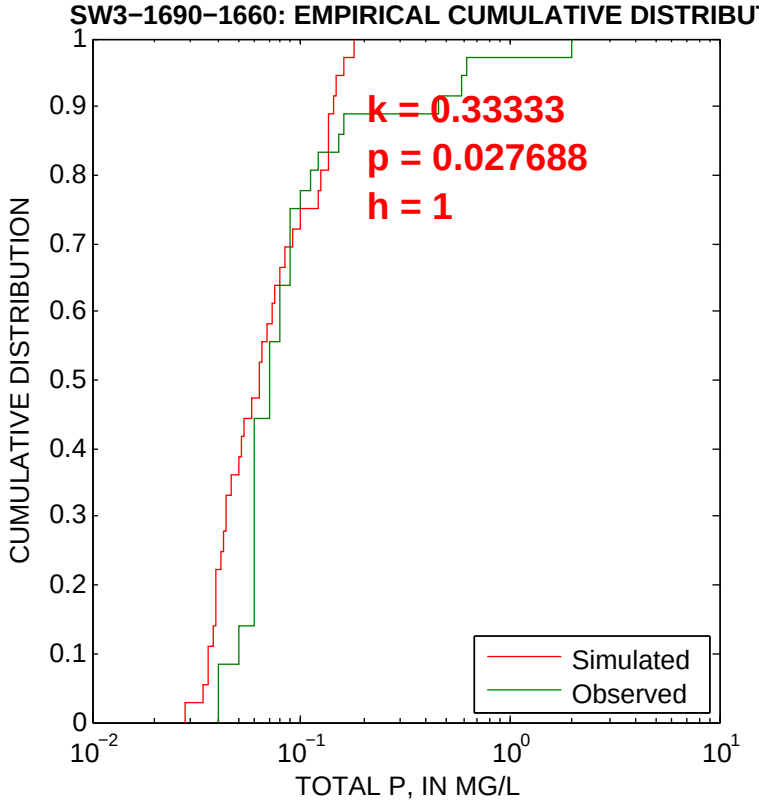












DATA SELECTION

scenario	file
P620171001WQ	TOTP.calib

plot: TOTP - total phosphorus

Dates: 1/1/1985 – 12/31/201

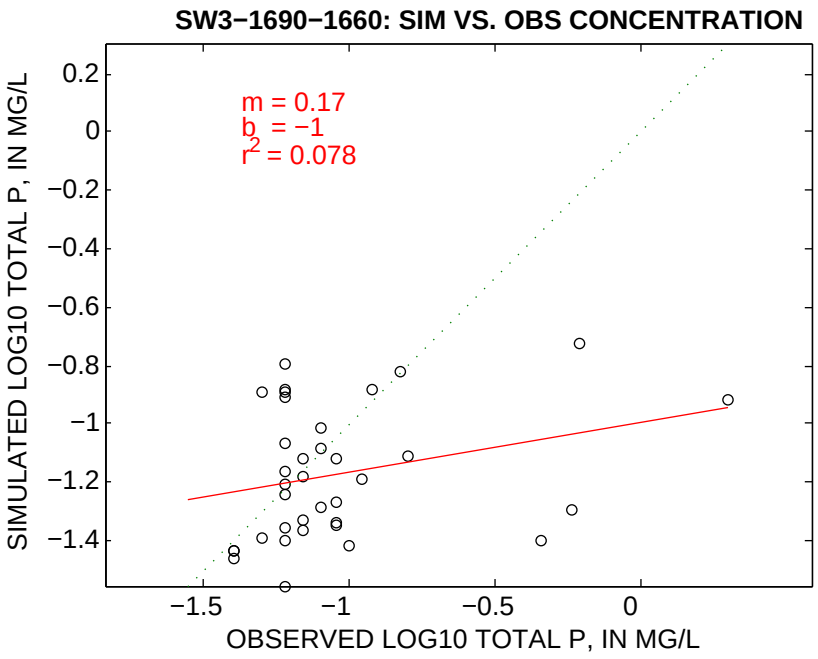
Drive	Directory	Observed
N/A	model	OBS20161101

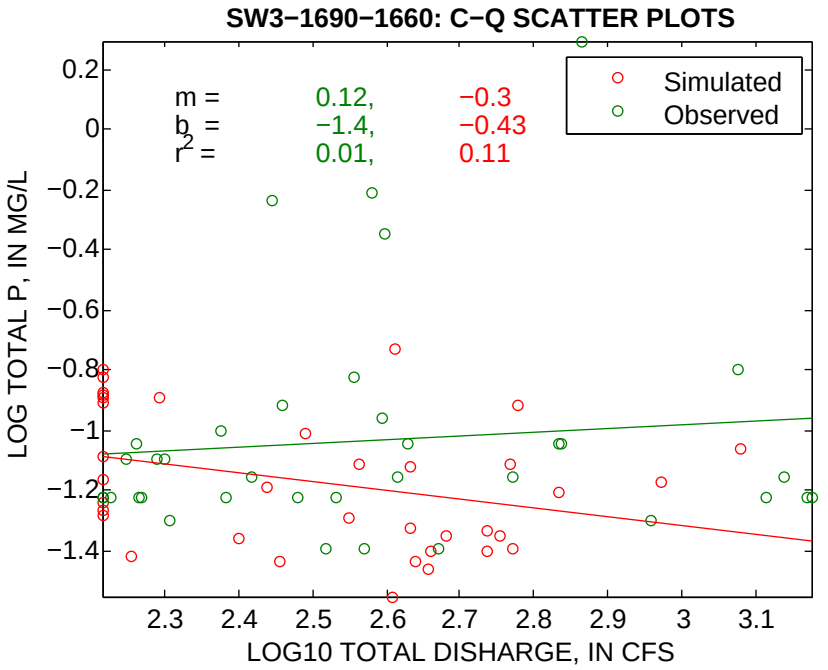
STATISTICS

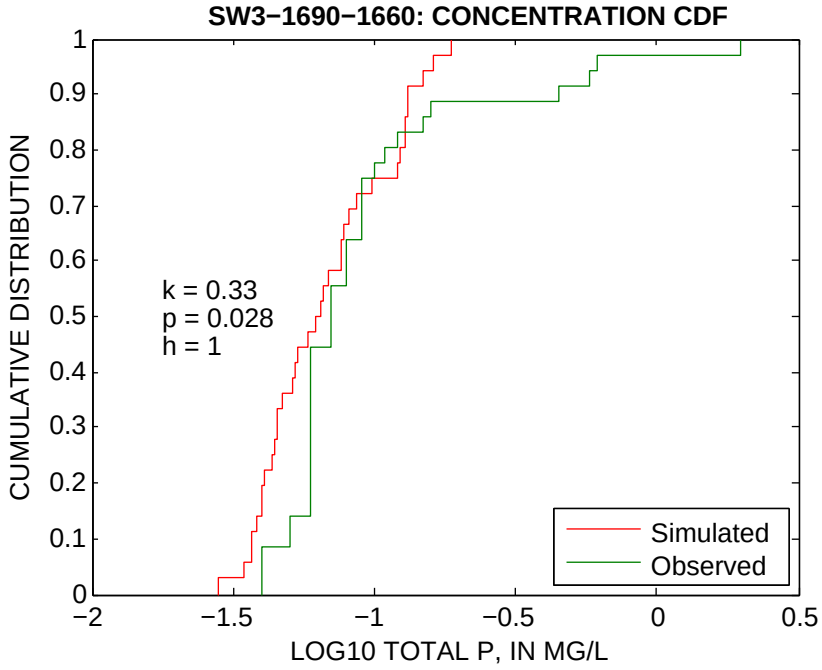
n	36	36
	observe	simulate
min	0.04	0.027915
	-1.39794	-1.55416
mean	0.1675	0.0767834
	-1.03675	-1.17567
media	0.07	0.063513
	-1.1549	-1.19714
max	1.98	0.17867
	0.296665	-0.747948
varian	0.115396	0.00182329
	0.133742	0.052988
JB	0.001	0.04506
	0.001	0.115868
	ra	log
%	-54.1592	13.3989
err.va	0.118948	0.163771
rel.std.err	1.03078	1.22452
mod.eff	-0.0307797	-0.224523

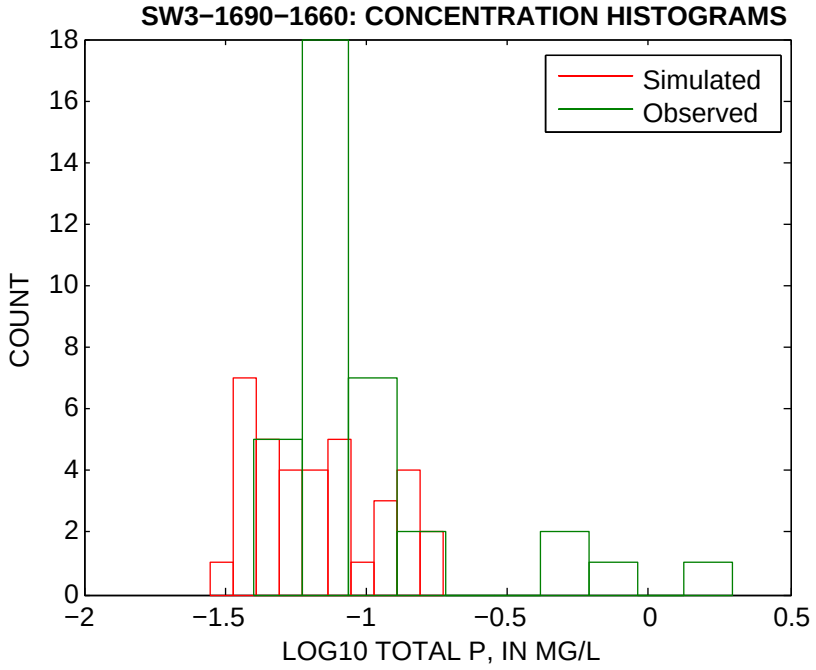
VERSION 2.1

ALL DATA
LOG10

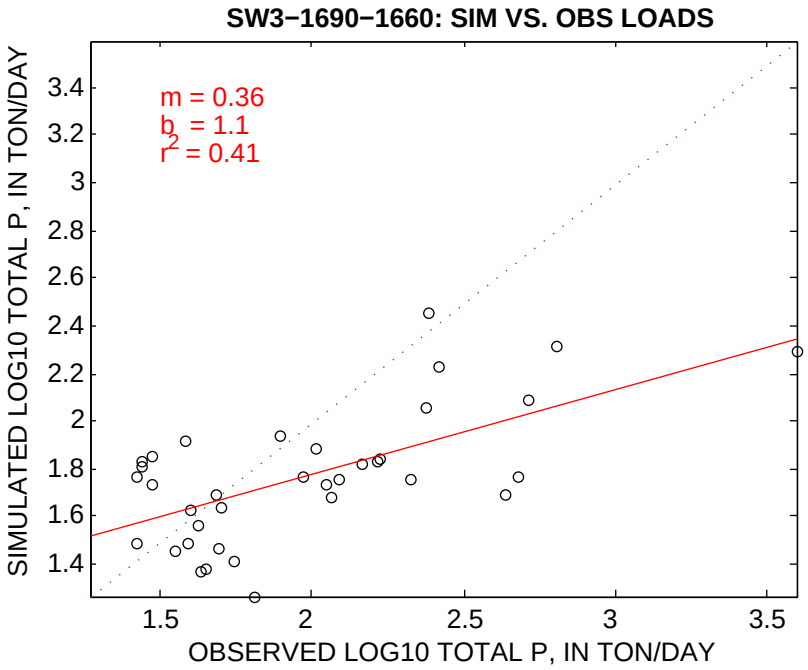


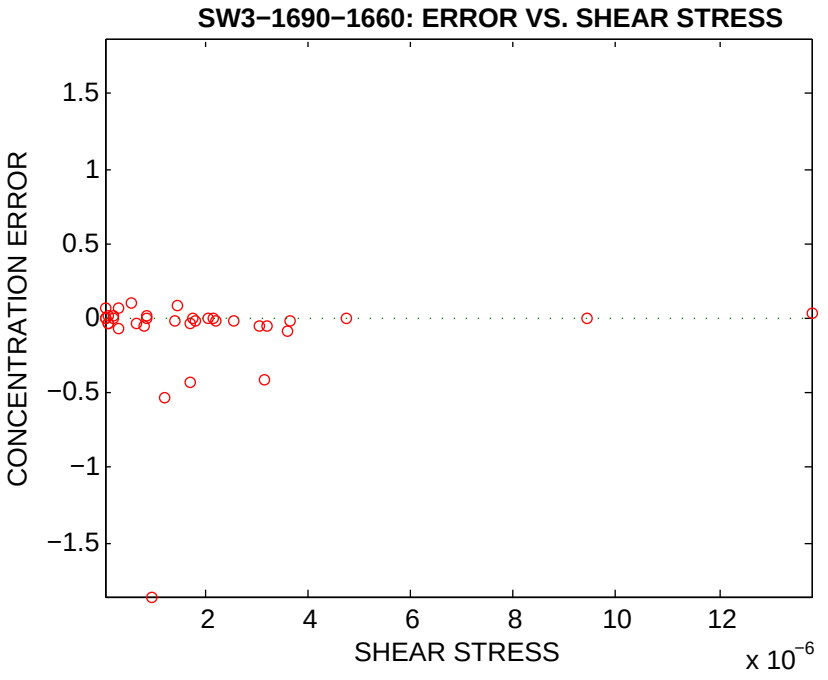


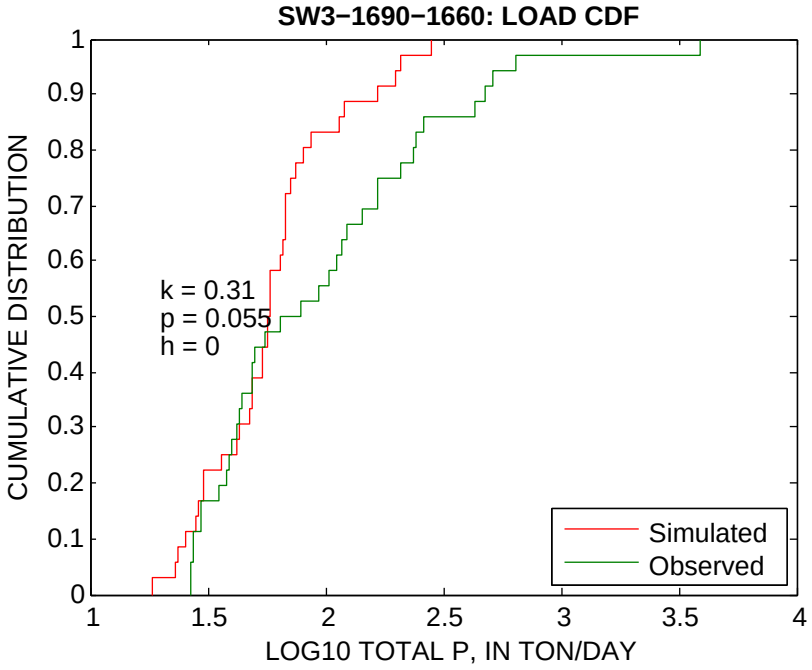


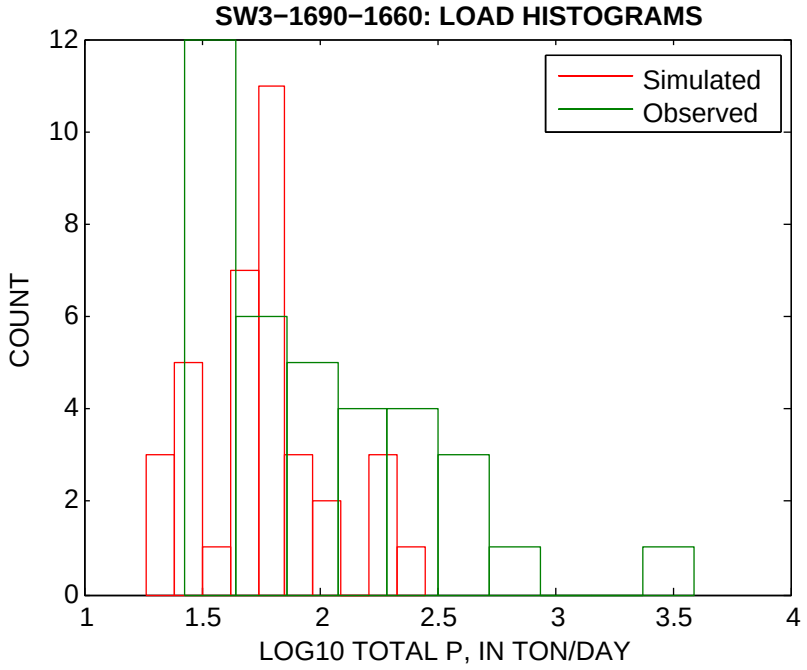


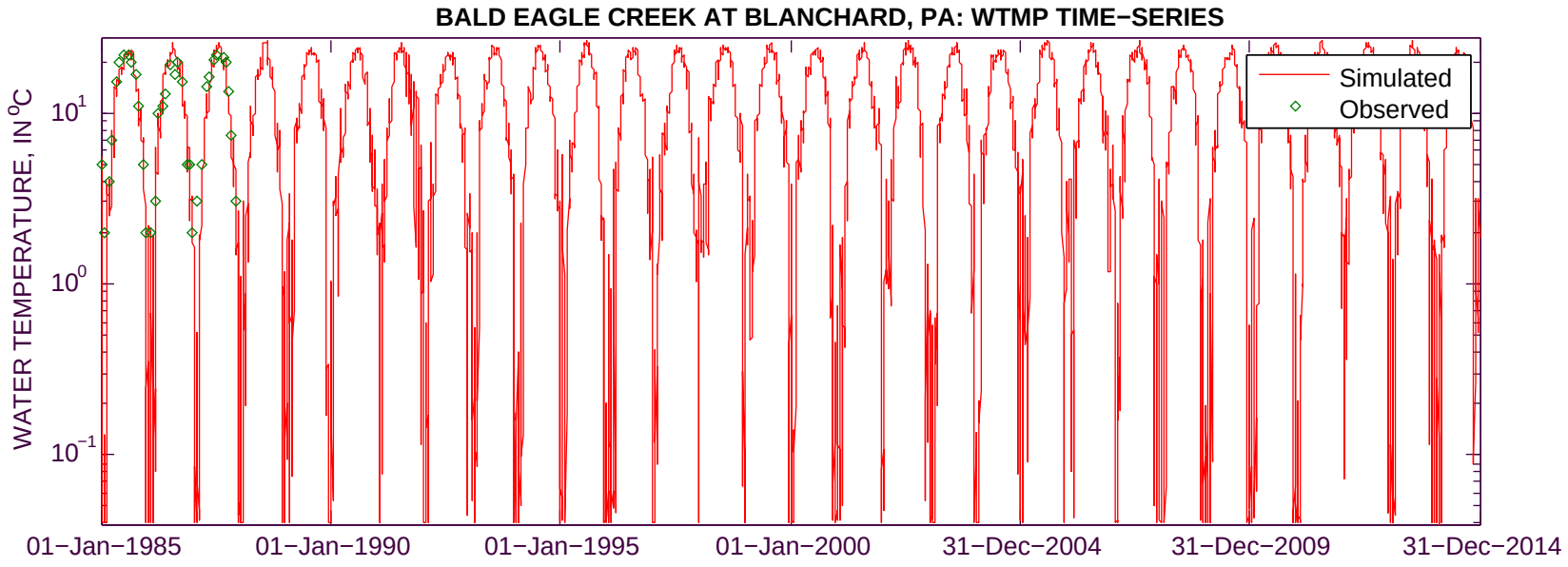
LOAD DATA
LOG10

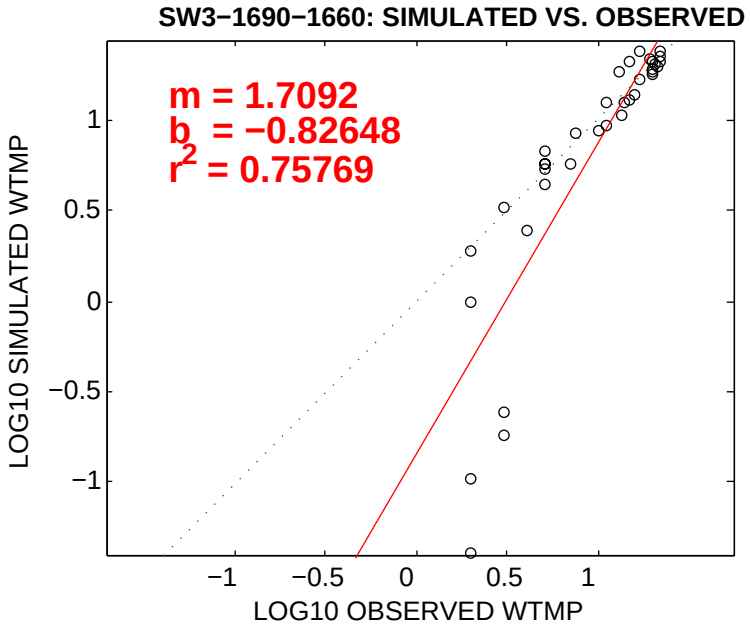


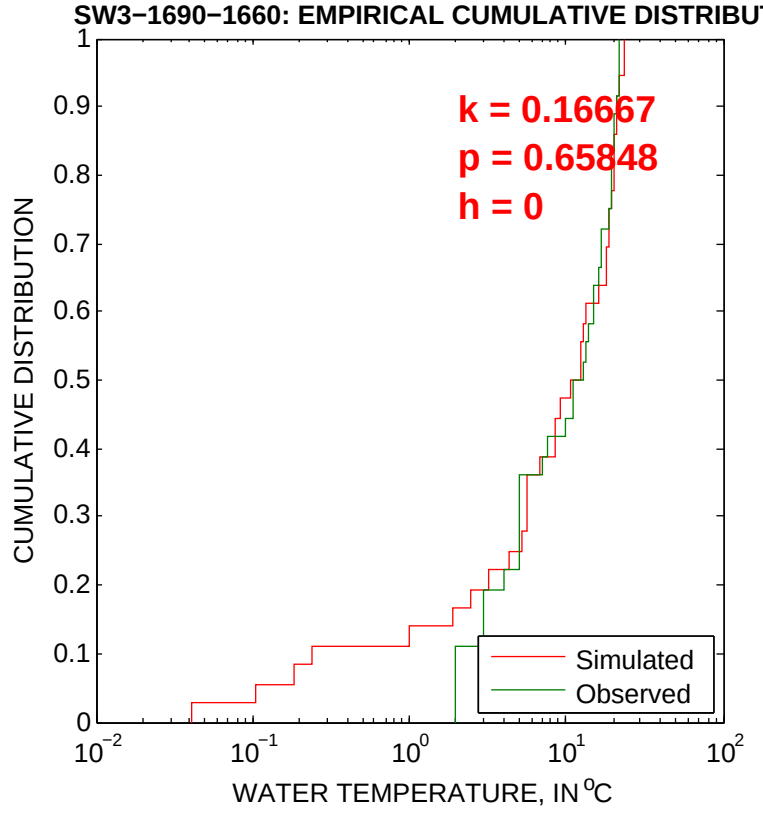












DATA SELECTION

scenario	file
P620171001WQ	WTMP.calib

plot: WTMP - water tempera...

Dates: 1/1/1985 – 12/31/201

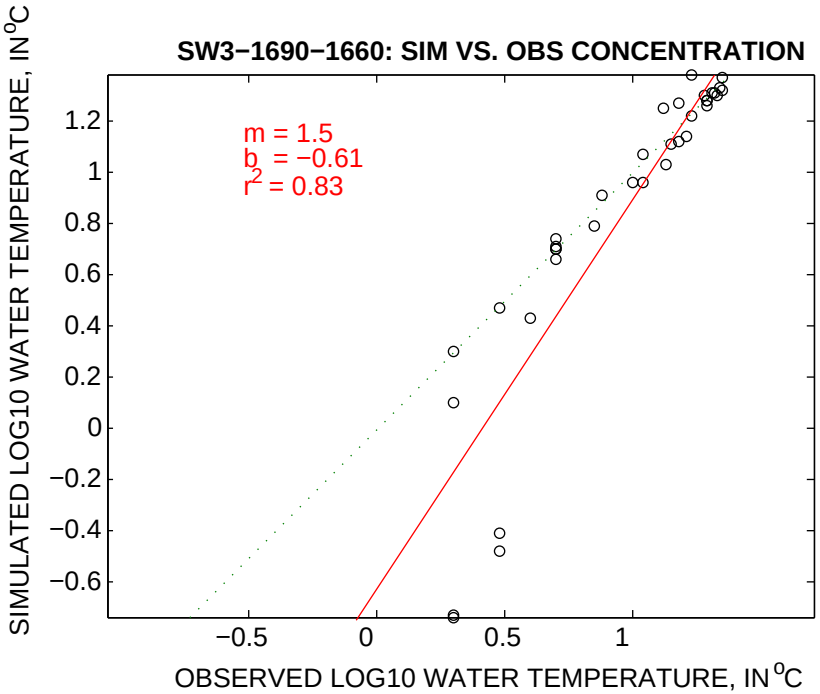
Drive	Directory	Observed
N/A	model	OBS20161101

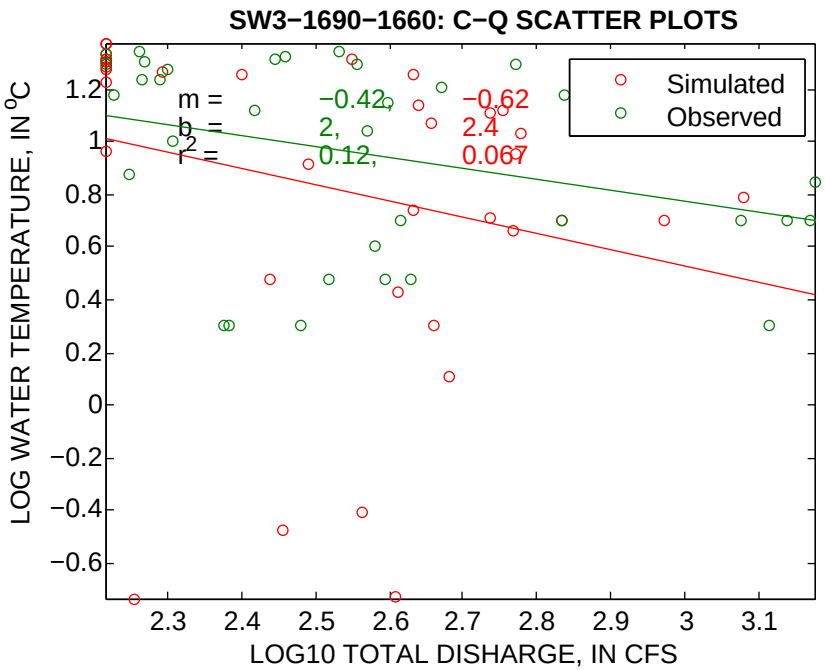
STATISTICS

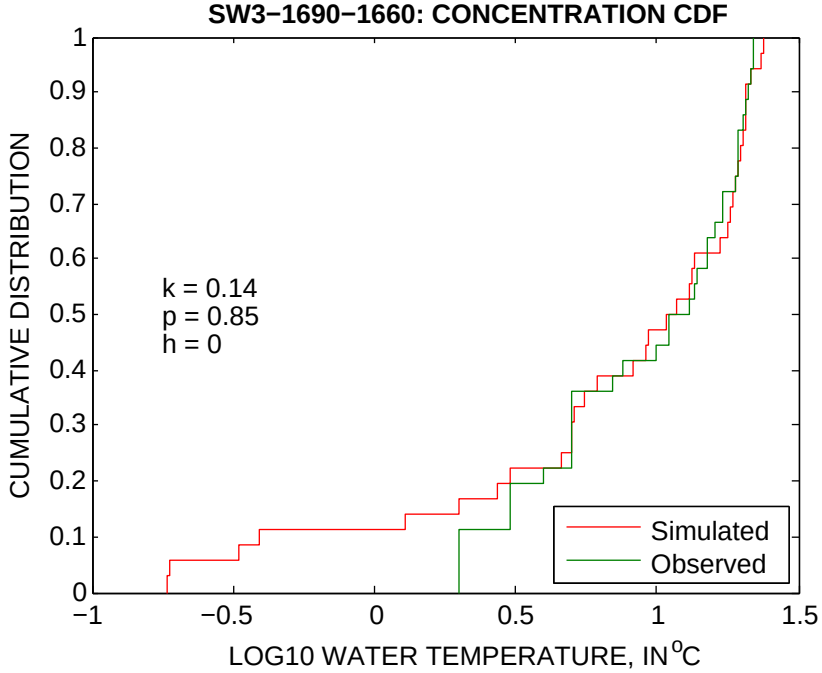
	n	36	36
		observe	simulate
min		2	0.041331
		0.30103	-1.38372
mean		11.5972	11.4799
		0.945669	0.789815
media		12	11.4005
		1.07767	1.05557
max		22	23.964
		1.34242	1.37956
varian		51.826	63.8288
		0.130017	0.501268
JB		0.072931	0.089424
		0.067683	0.002282
		ra	log
%		-1.01177	-16.4808
err.va		5.3814	0.211831
rel.std.err		0.103836	1.62926
mod.eff		0.896164	-0.629256

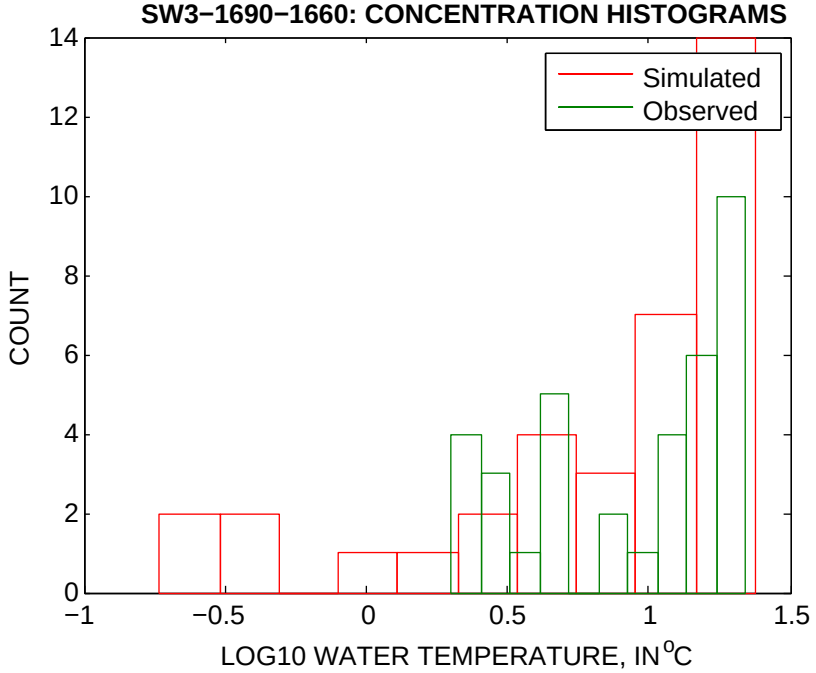
VERSION 2.1

ALL DATA
LOG10

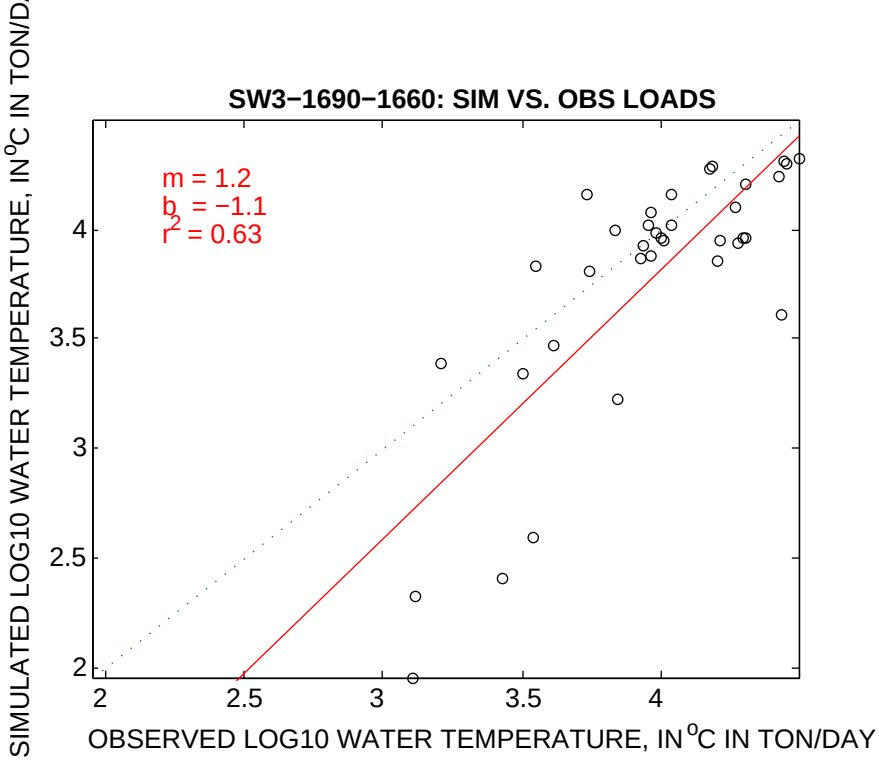


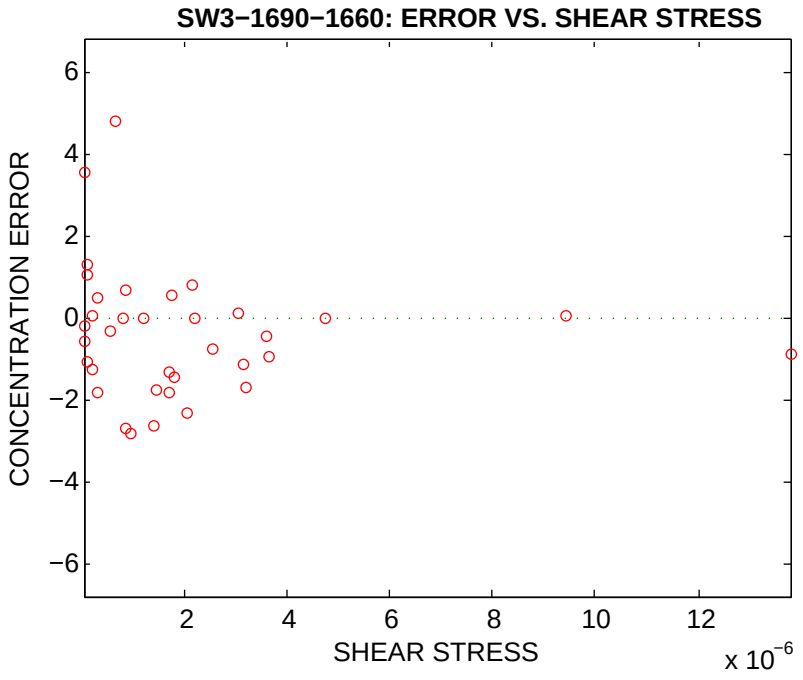


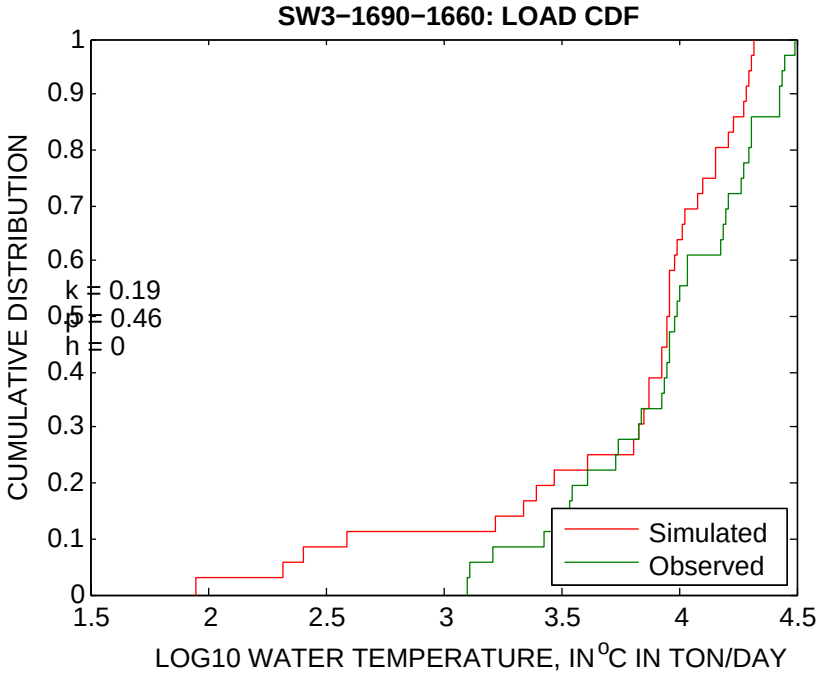


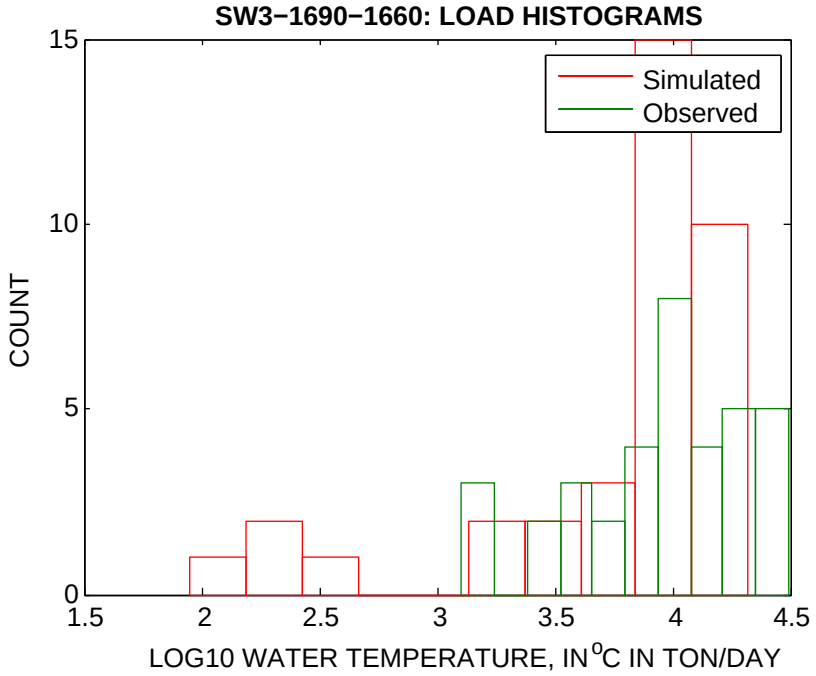


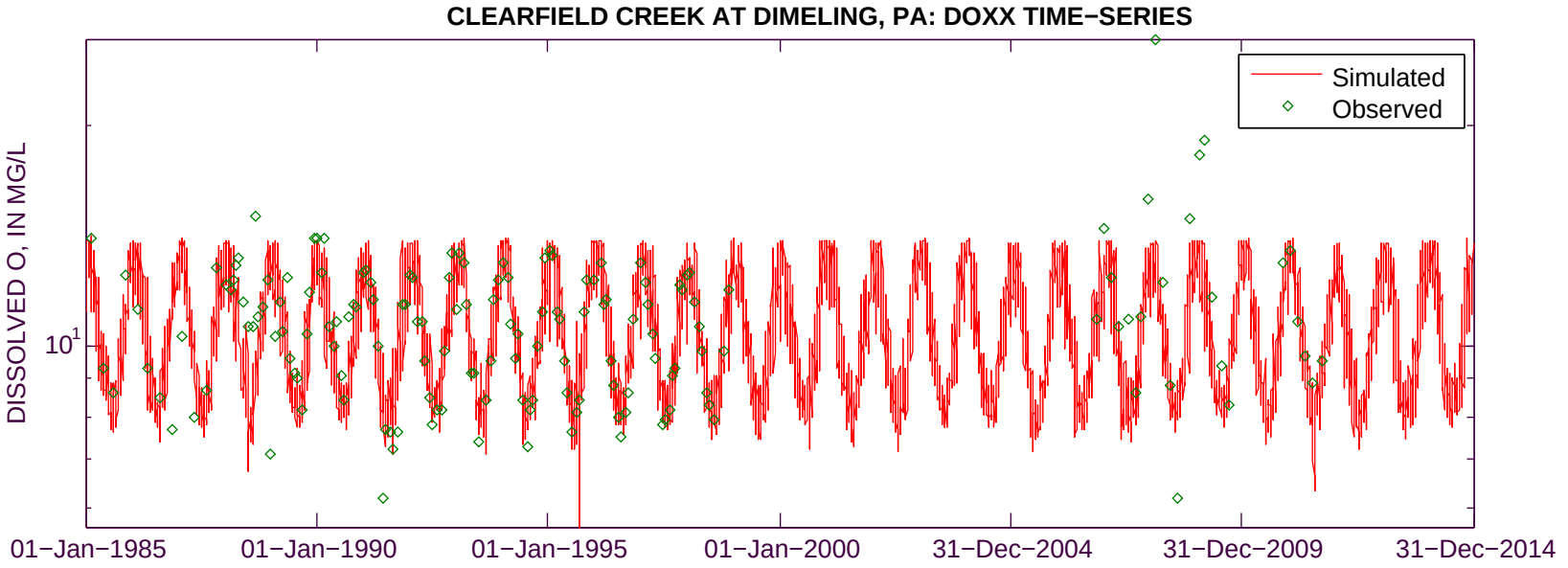
LOAD DATA
LOG10

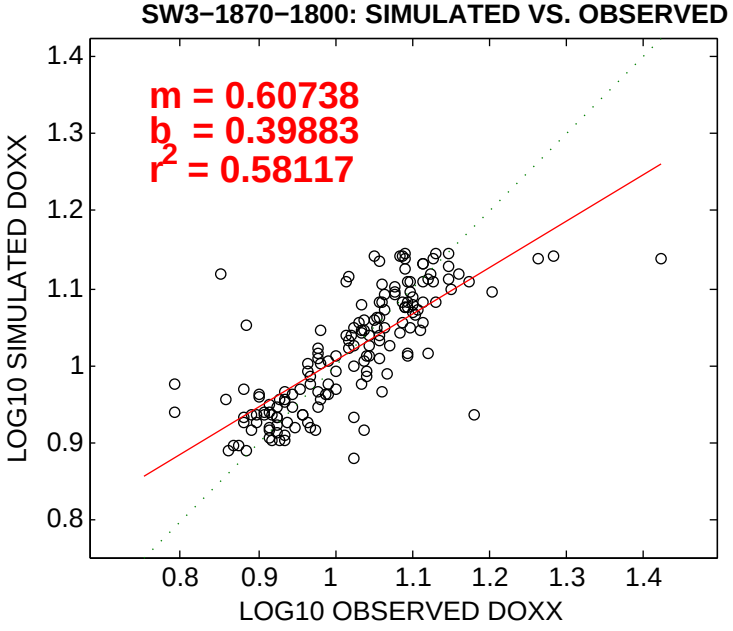


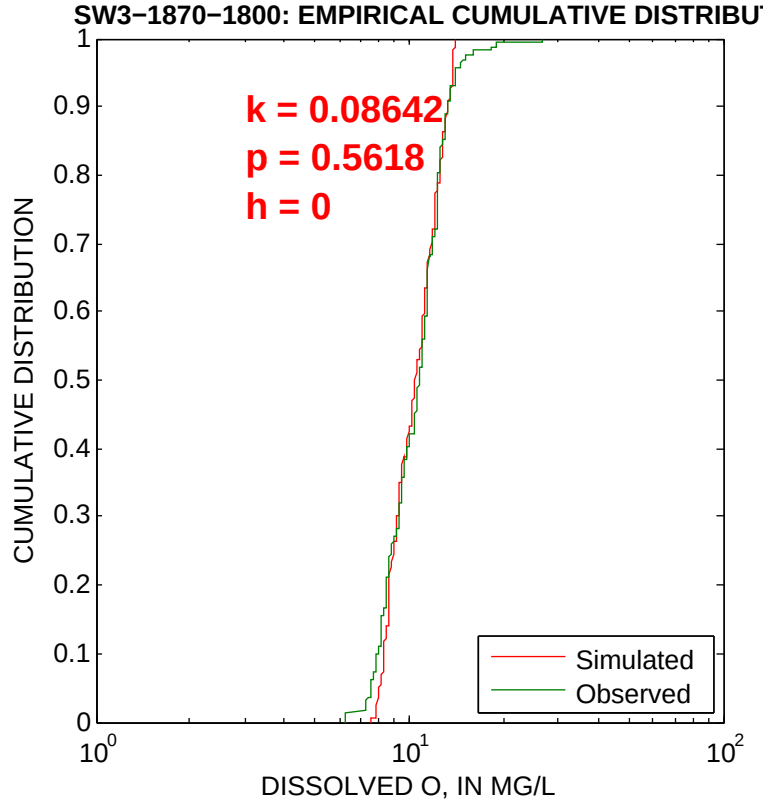












DATA SELECTION

scenario	file
P620171001WQ	DOXX.calib

plot: DOXX - dissolved oxygen

Dates: 1/1/1985 – 12/31/201

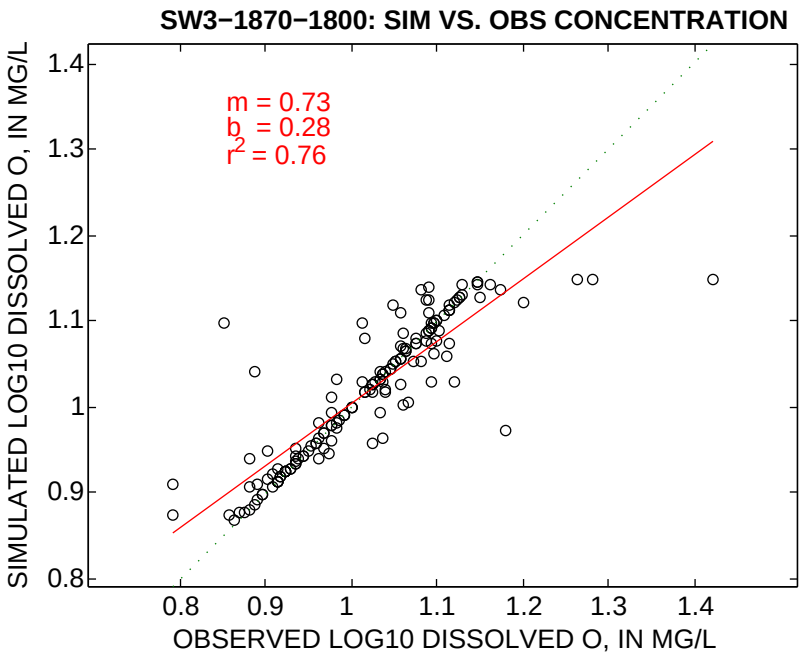
Drive	Directory	Observed
N/A	model	OBS20161101

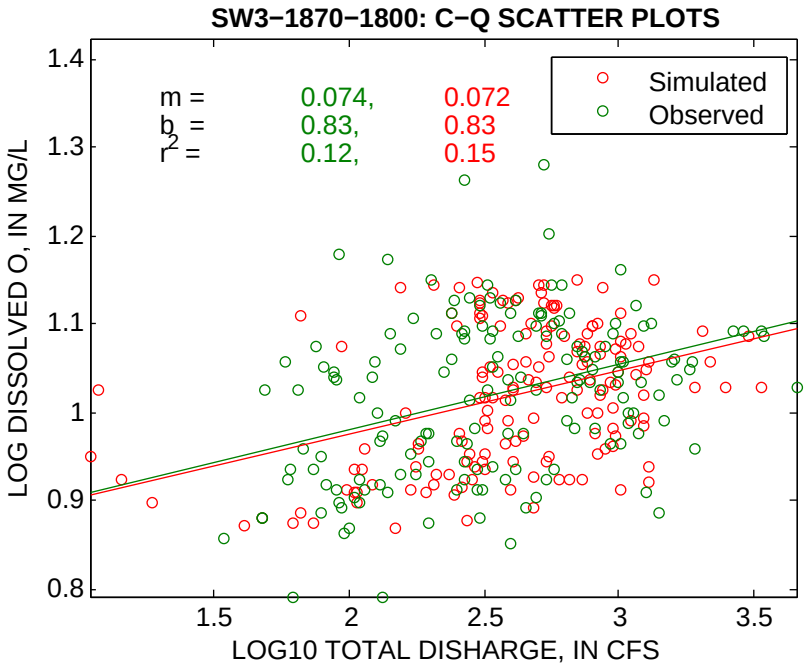
STATISTICS

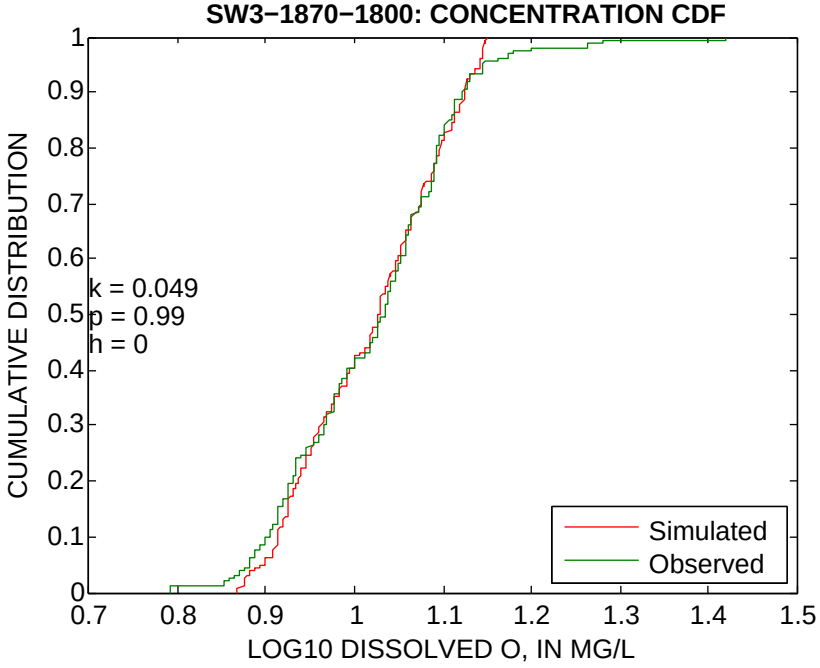
	n	observe	simulate
		162	162
min		6.2	7.5616
		0.792392	0.878614
mean		10.7457	10.5985
		1.02069	1.01878
media		10.8	10.451
		1.03342	1.01915
max		26.4	13.946
		1.4216	1.14445
varian		6.34063	3.36299
		0.0089139	0.00565825
JB		0.001	0.013648
		0.007190	0.014456
		ra	log
%		-1.36969	-0.187563
err.va		3.02148	0.00374762
rel.std.err		0.476526	0.420425
mod.eff		0.523474	0.579575

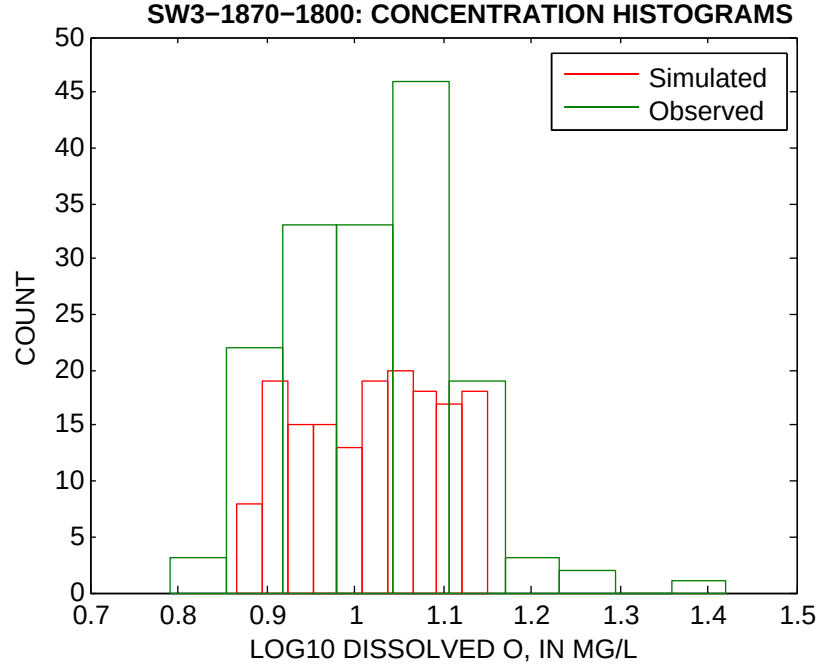
VERSION 2.1

ALL DATA
LOG10

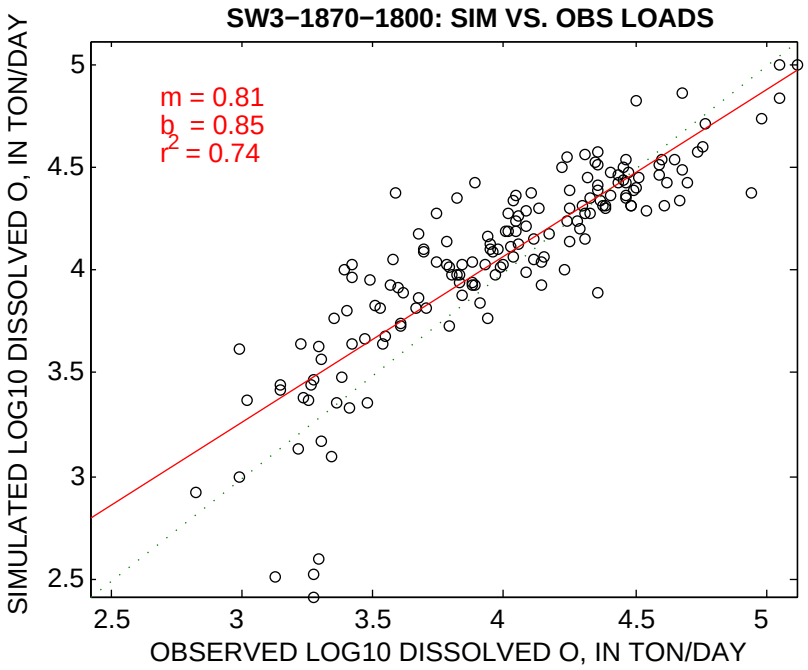


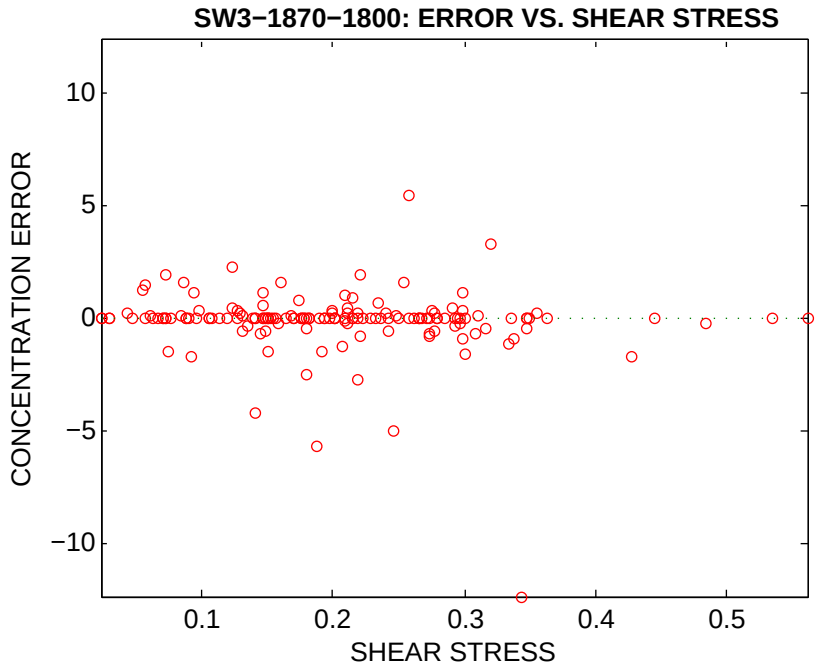


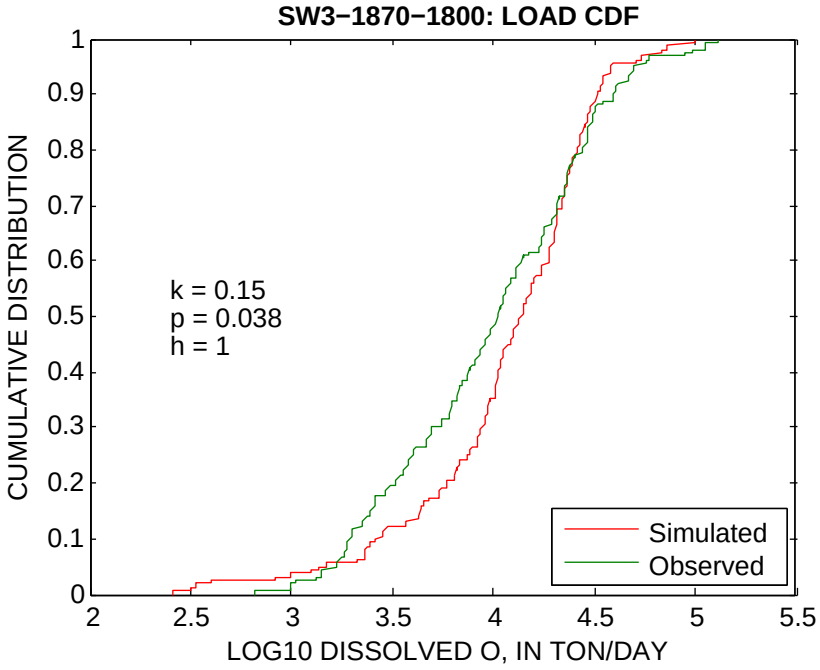


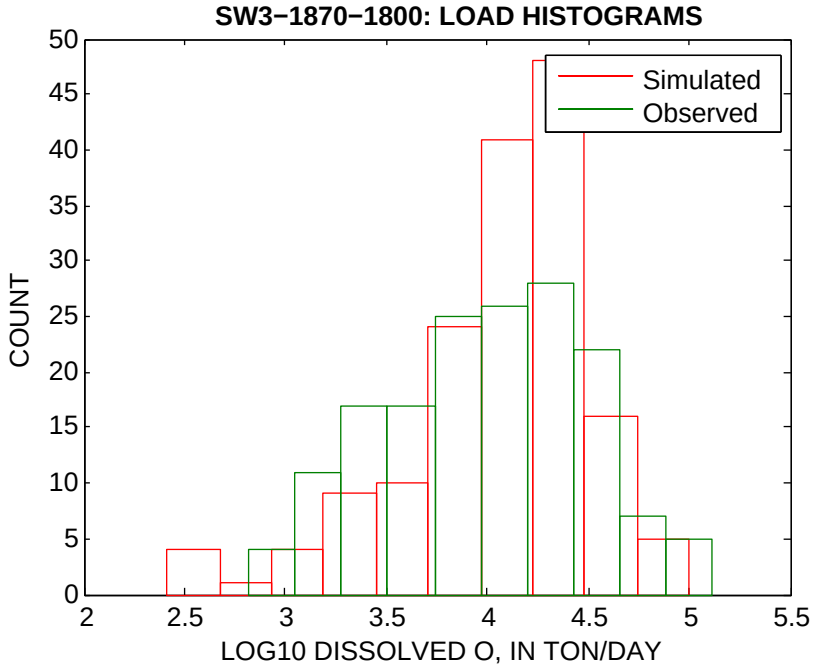


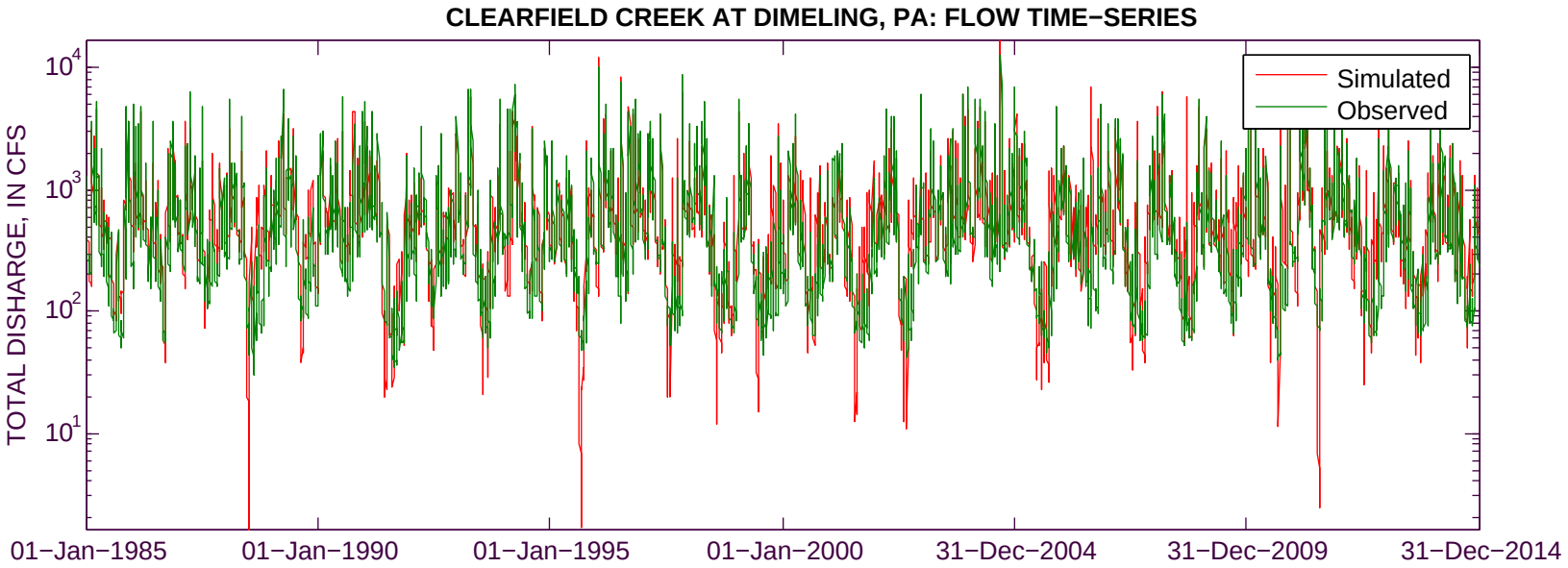
LOAD DATA
LOG10











DATA SELECTION

scenario	file
P620171001WQ	FLOW.calib

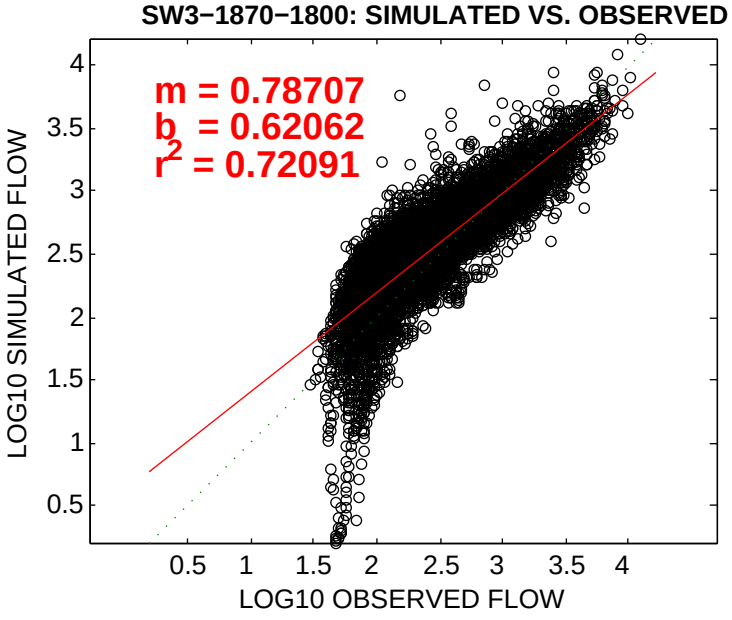
plot: FLOW - total discharge

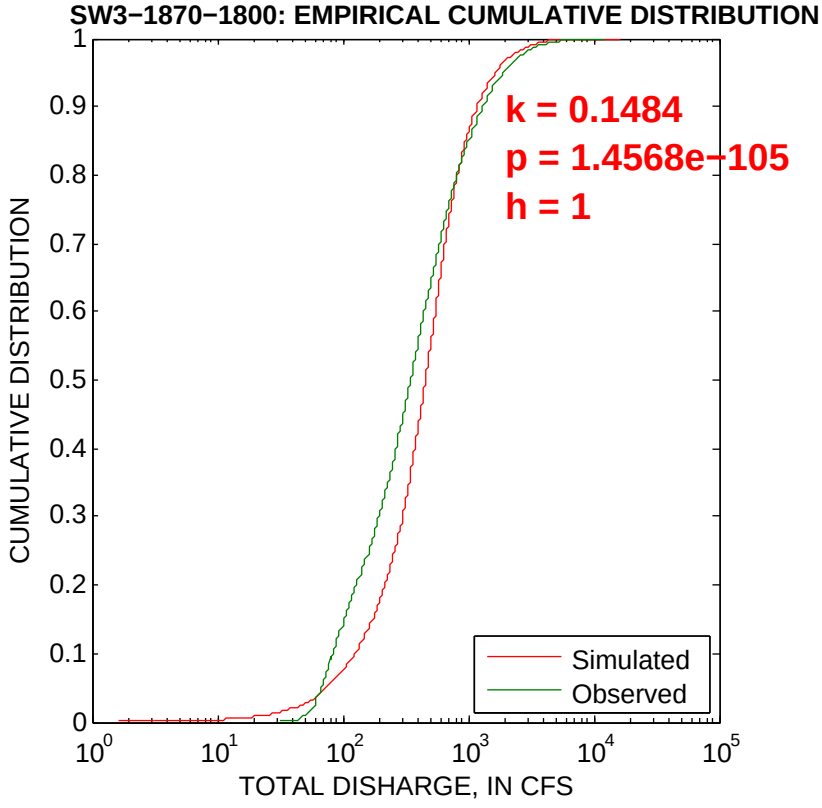
Dates: 1/1/1985 – 12/31/201

Drive	Directory	Observed
N/A	model	OBS20161101

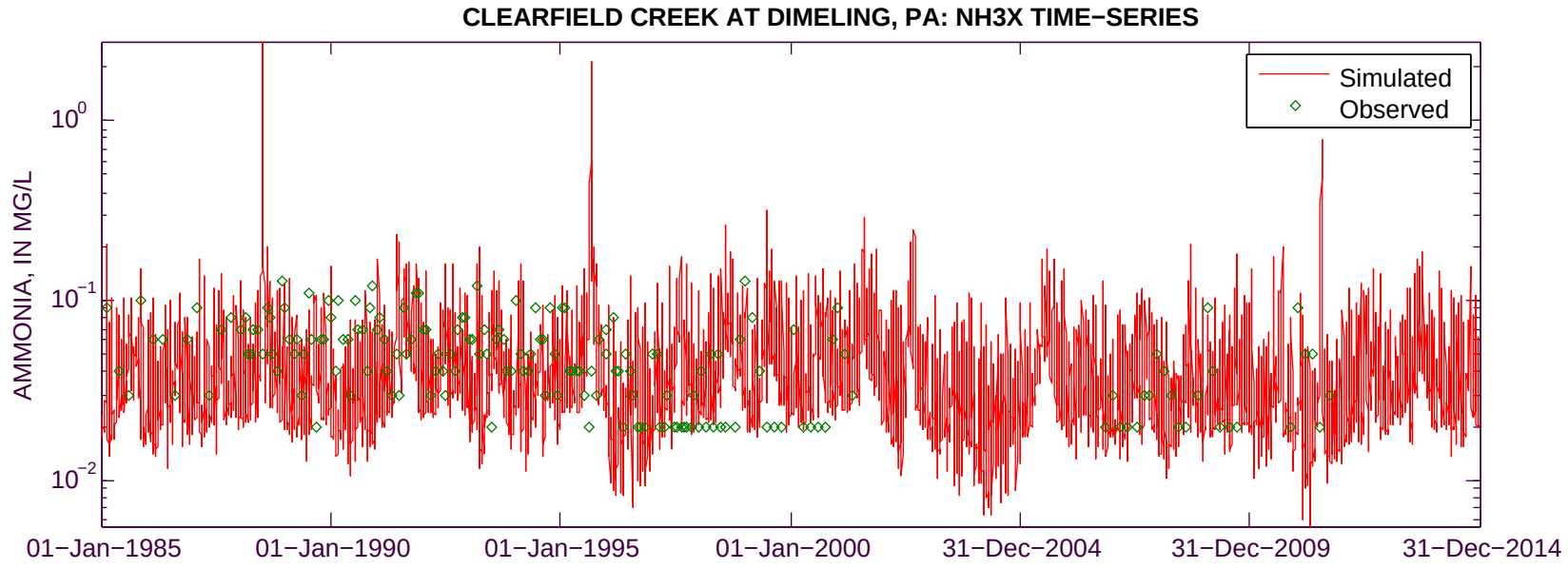
STATISTICS

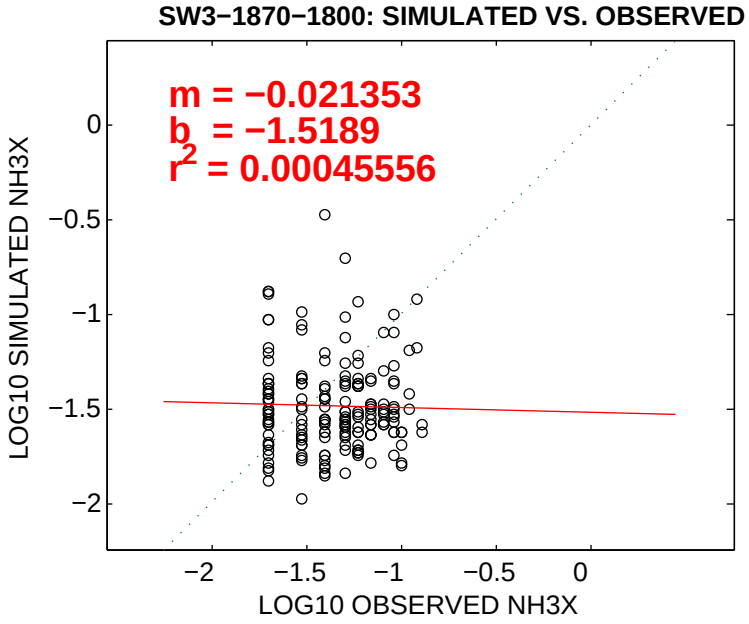
n	10957	10957
	observe	simulate
min	30	1.5637
	1.47712	0.194153
mean	589.08	612.263
	2.5387	2.61874
media	350	458.87
	2.54407	2.66169
max	12600	16422
	4.10037	4.21543
varian	593777	422801
	0.196892	0.169189
JB	0.001	0.001
	0.001	0.001
	ra	log
%	3.93535	3.15296
err.va	166434	0.0625545
rel.std.err	0.280297	0.317711
mod.eff	0.719703	0.682289

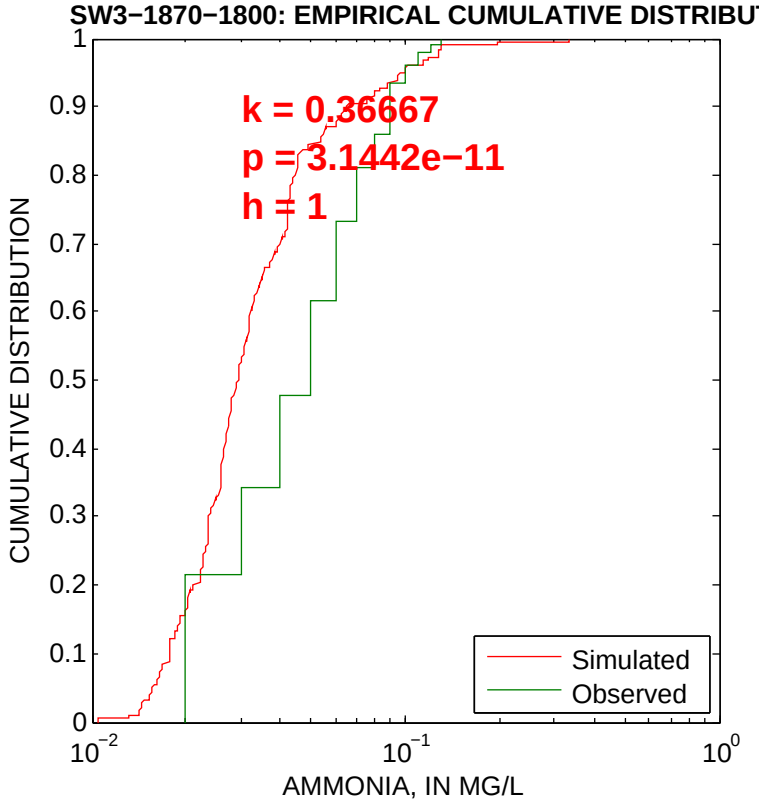




VERSION







DATA SELECTION

scenario	file
P620171001WQ	NH3X.calib

plot: NH3X - ammonia

Dates: 1/1/1985 – 12/31/201

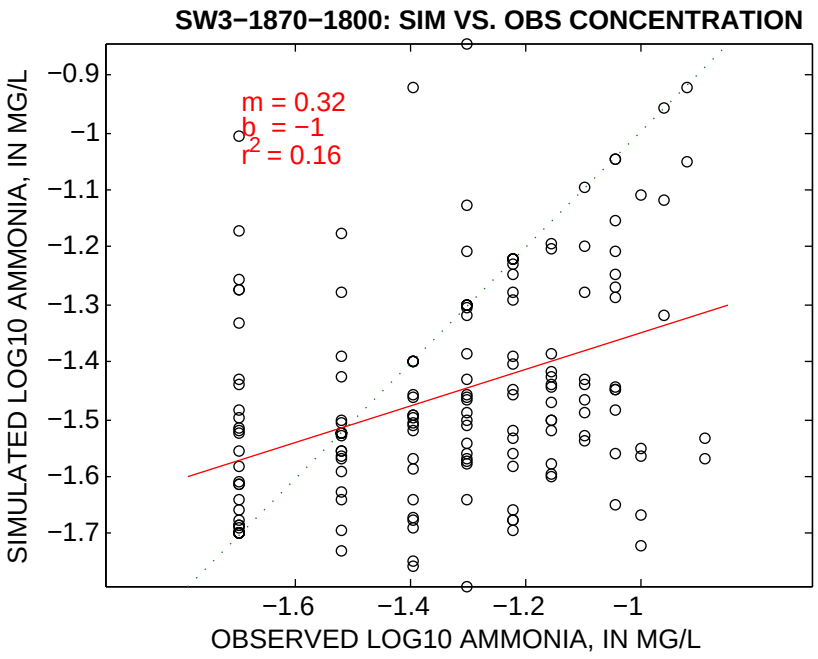
Drive	Directory	Observed
N/A	model	OBS20161101

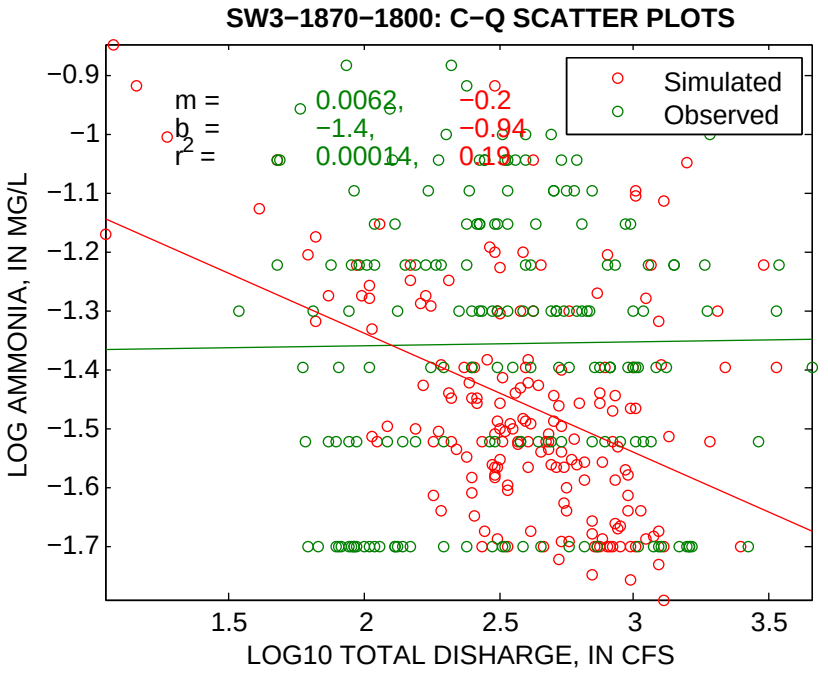
STATISTICS

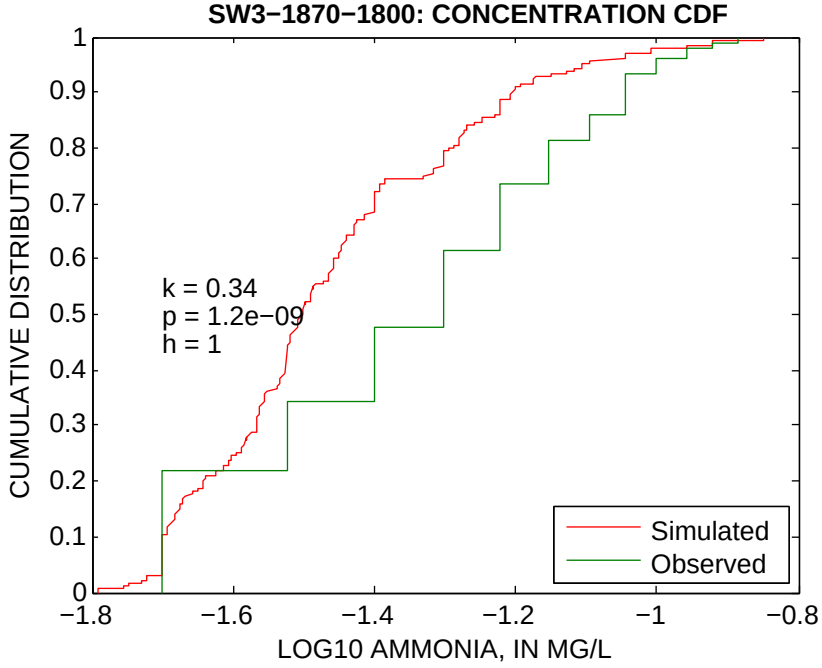
	n	180	180
		observe	simulate
min		0.02	0.010532
		-1.69897	-1.97749
mean		0.0507778	0.0389856
		-1.35637	-1.48994
media		0.05	0.029443
		-1.30103	-1.53102
max		0.13	0.33155
		-0.886057	-0.479451
varian		0.00072117	0.00115633
		0.0562746	0.0563251
JB		0.003922	0.001
		0.018302	0.001
		ra	log
%		-23.2232	9.84788
err.va		0.00207215	0.132945
rel.std.err		2.87327	2.36243
mod.eff		-1.87327	-1.36243

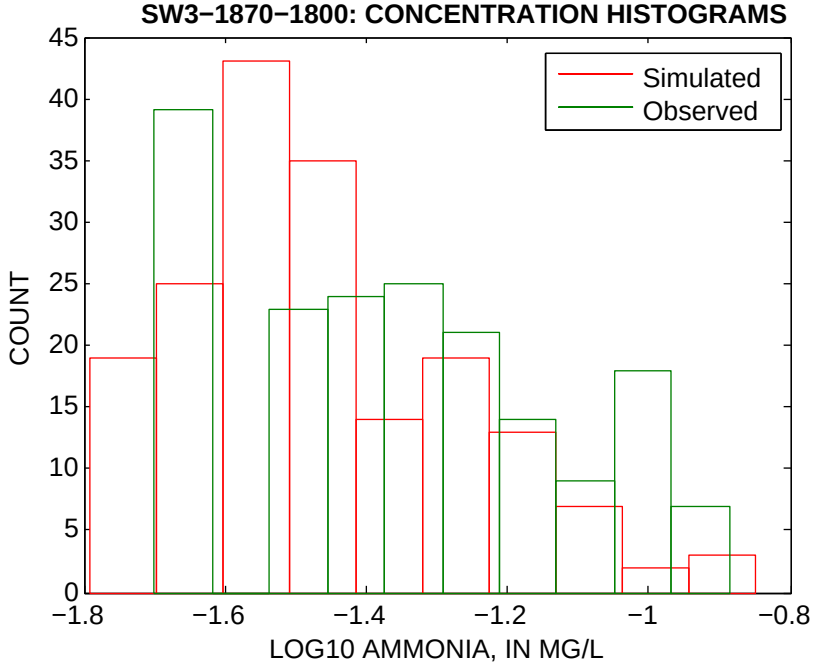
VERSION

ALL DATA
LOG10

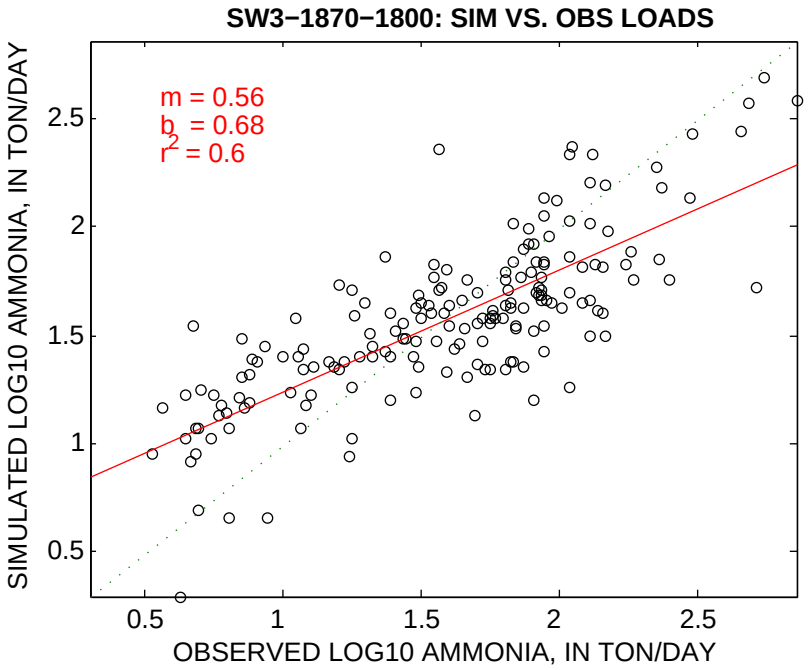


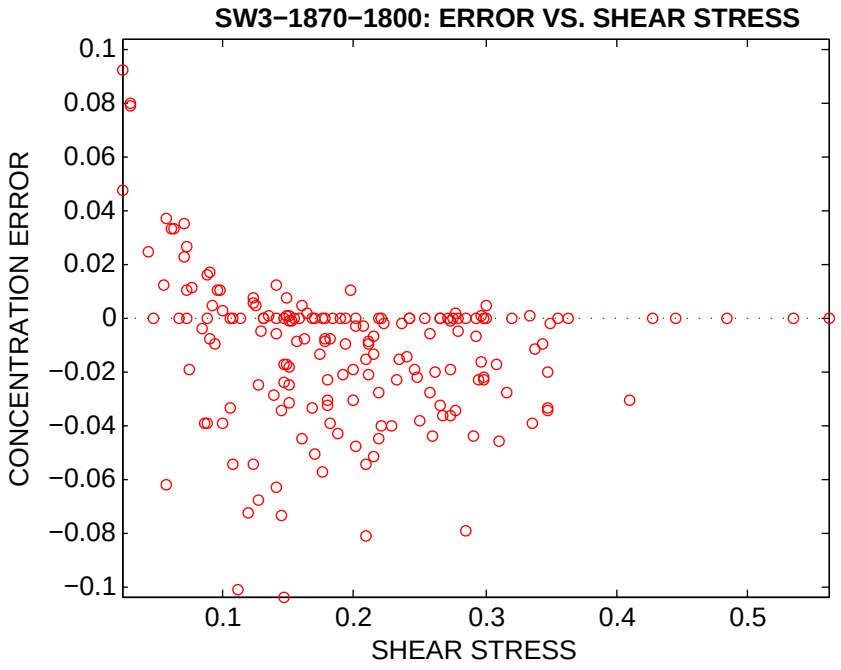


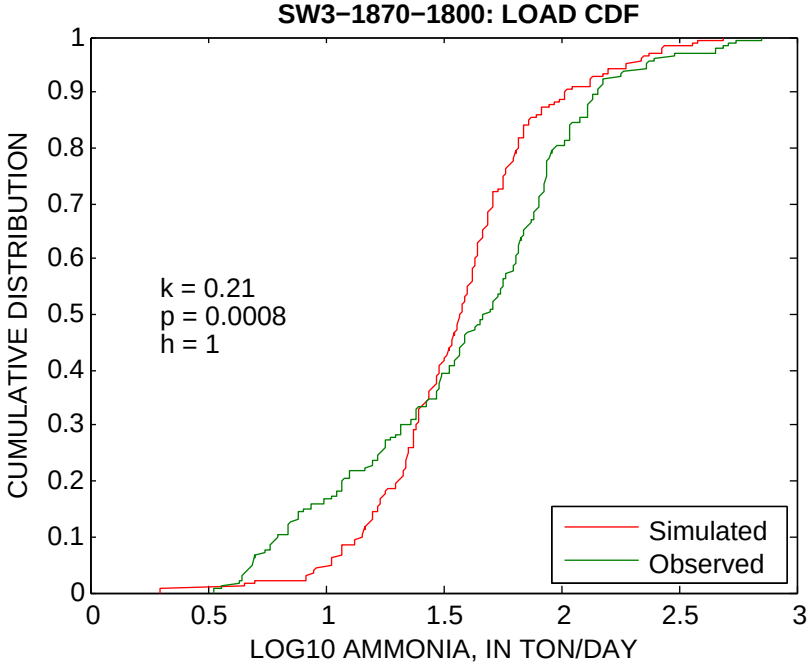


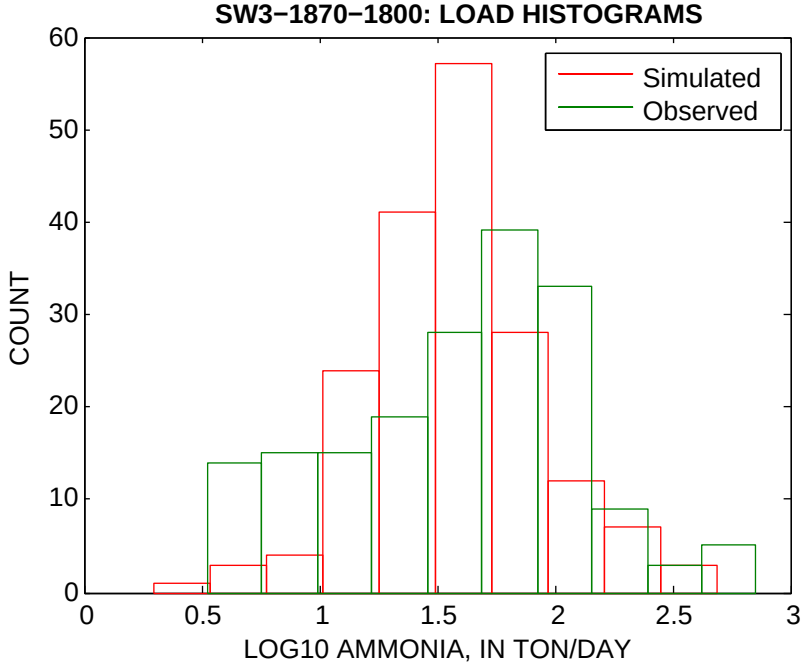


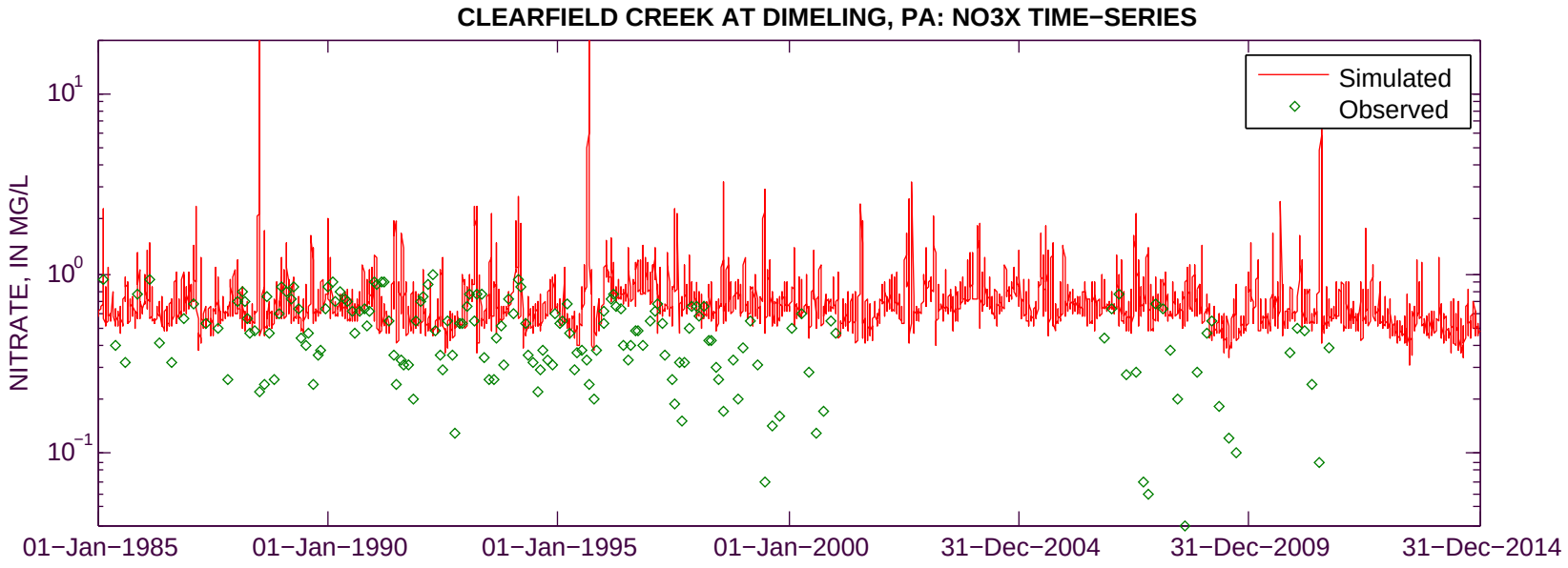
LOAD DATA
LOG10

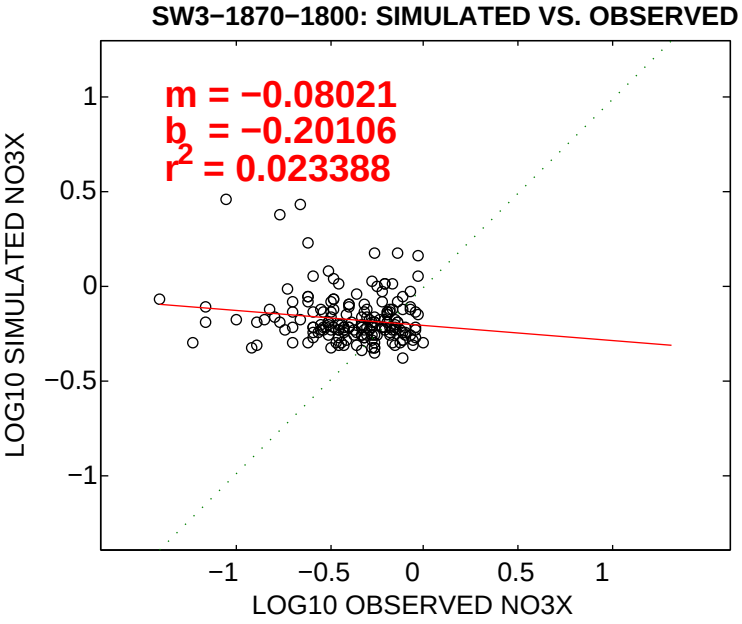


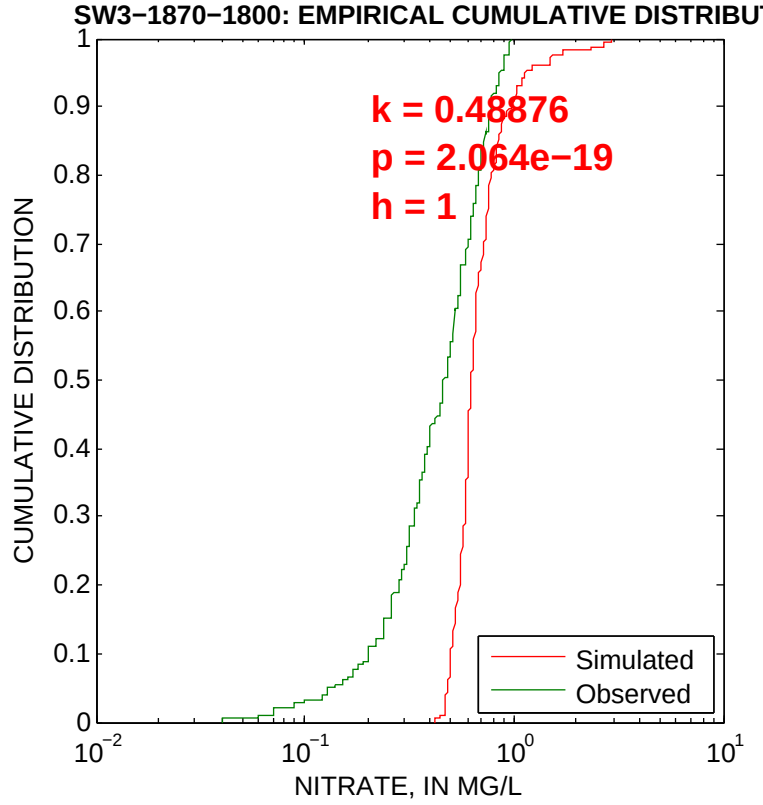












DATA SELECTION

scenario: P620171001WQ | file: NO3X.calib

plot: NO3X - nitrate

Dates: 1/1/1985 – 12/31/201

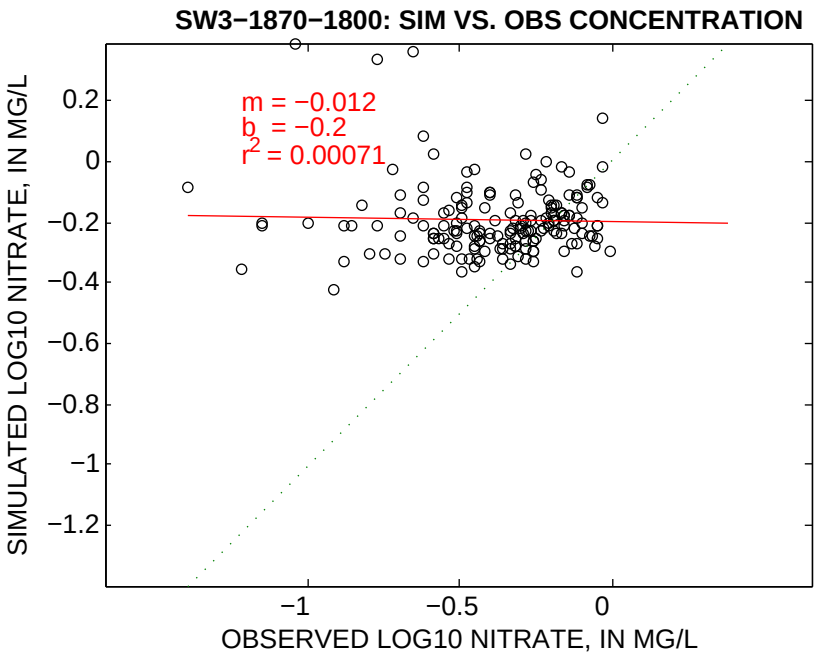
Drive: N/A | Directory: model | Observed: OBS20161101

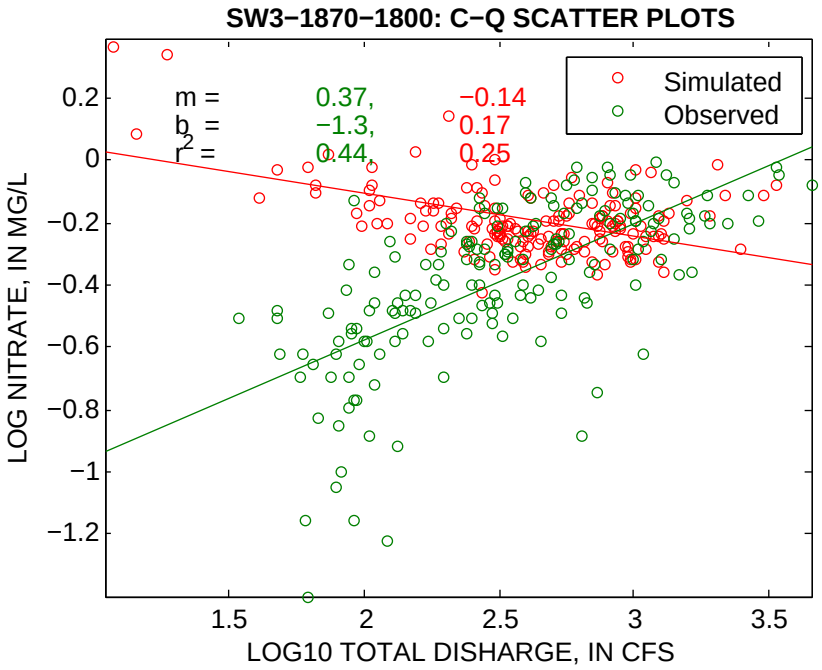
STATISTICS

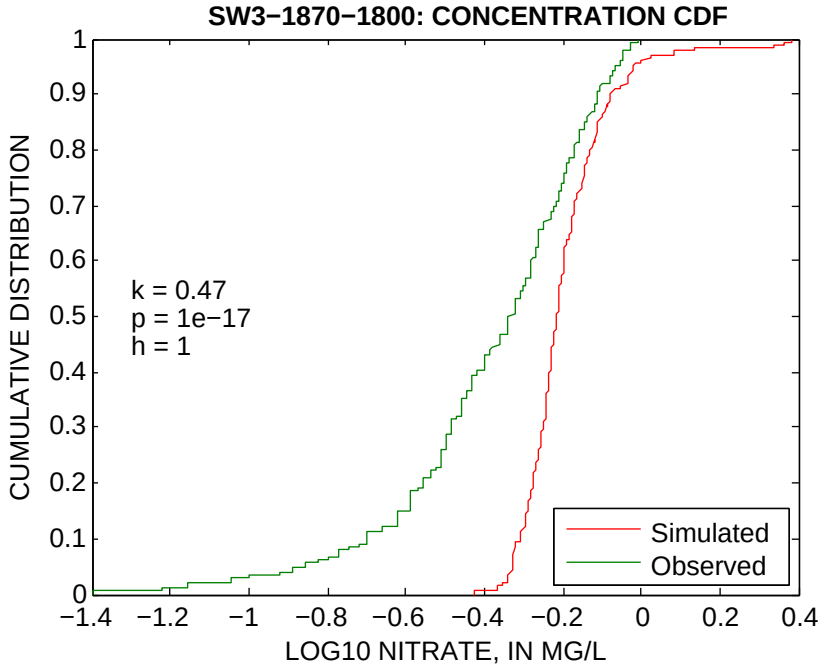
		observe	simulate
n		178	178
min		0.04	0.42375
		-1.39794	-0.37289
mean		0.47691	0.715591
		-0.380906	-0.170505
media		0.465	0.62317
		-0.332572	-0.205403
max		0.99	2.8922
		-0.0043648	0.461228
varian		0.0483073	0.105241
		0.0634561	0.0174552
JB		0.057373	0.001
		0.001	0.001
		ra	log
%		50.0473	-55.2369
err.va		0.230624	0.135609
rel.std.err		4.7741	2.13706
mod.eff		-3.7741	-1.13706

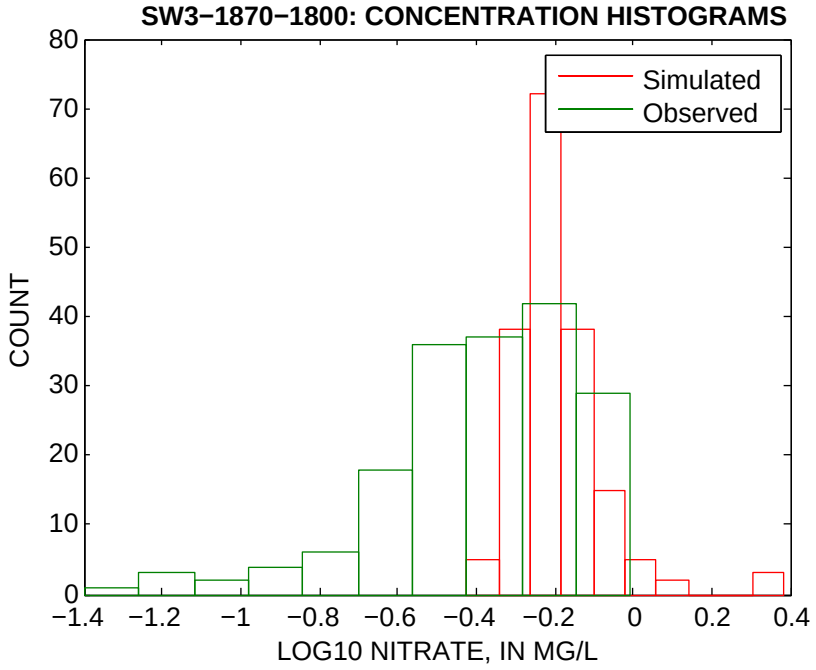
VERSION 2.1

ALL DATA
LOG10

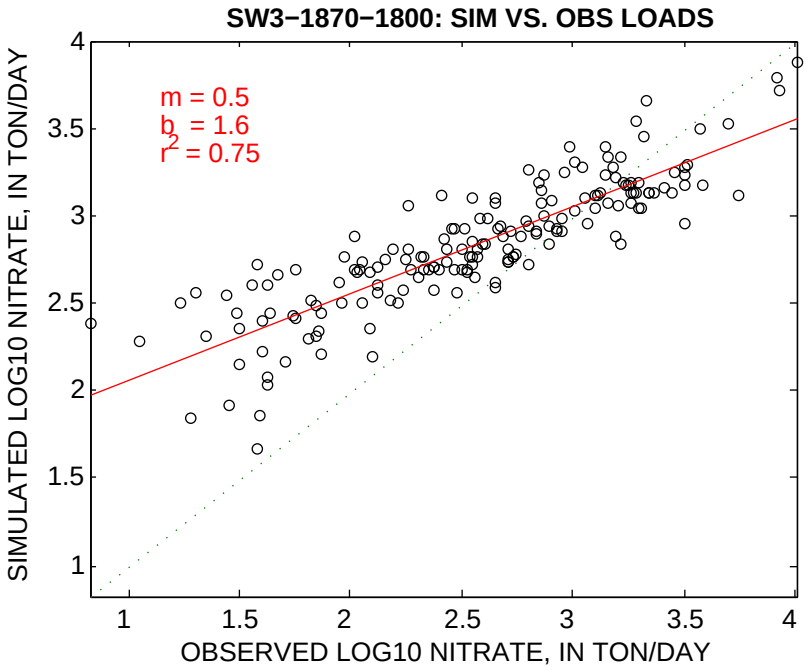


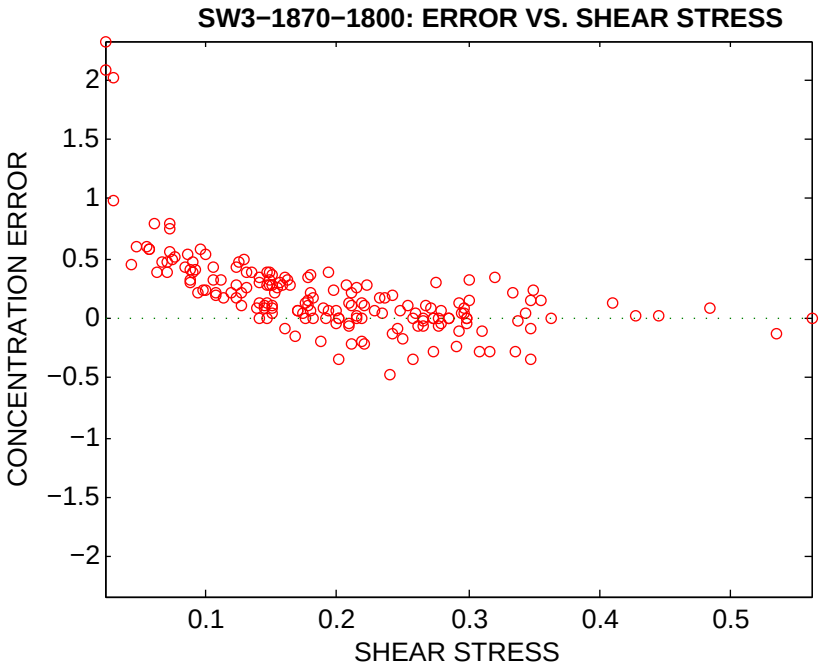


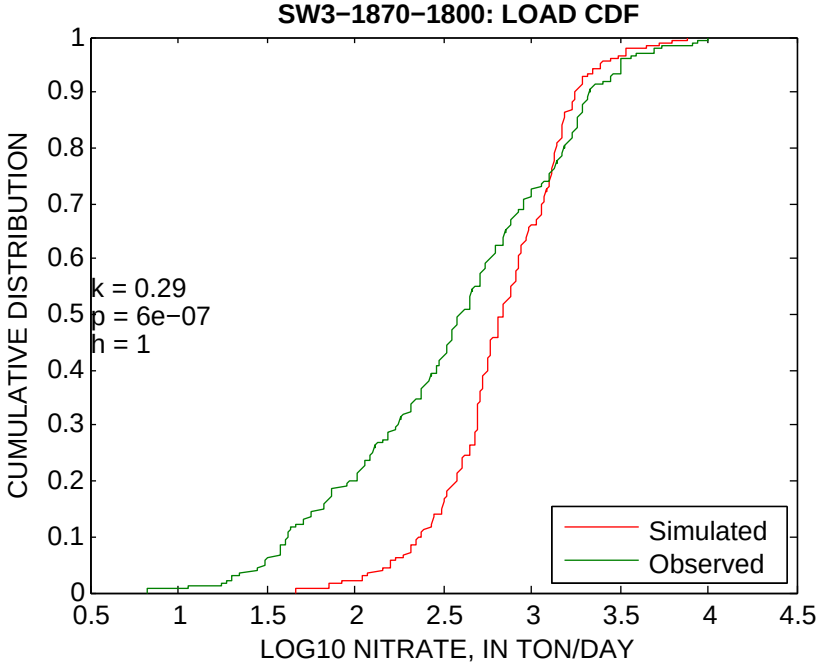


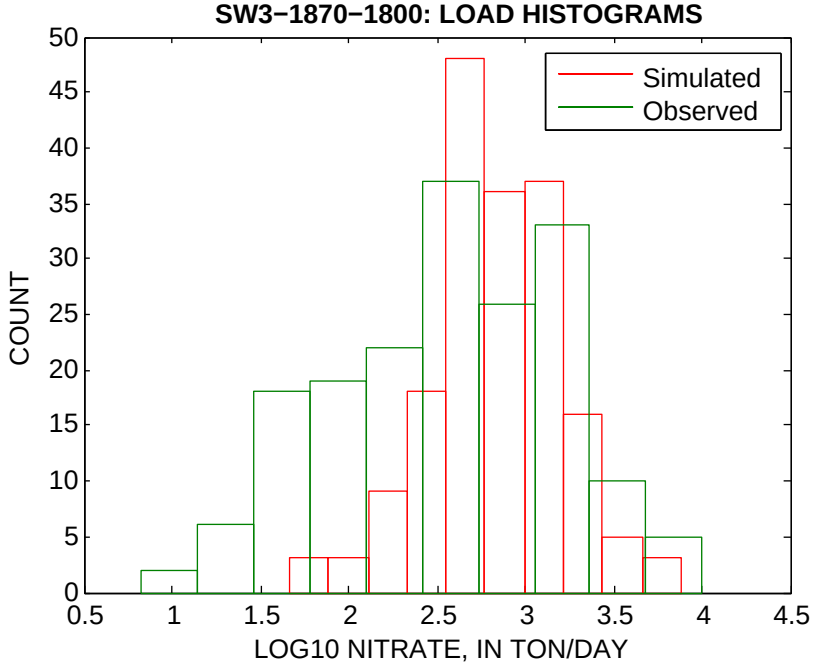


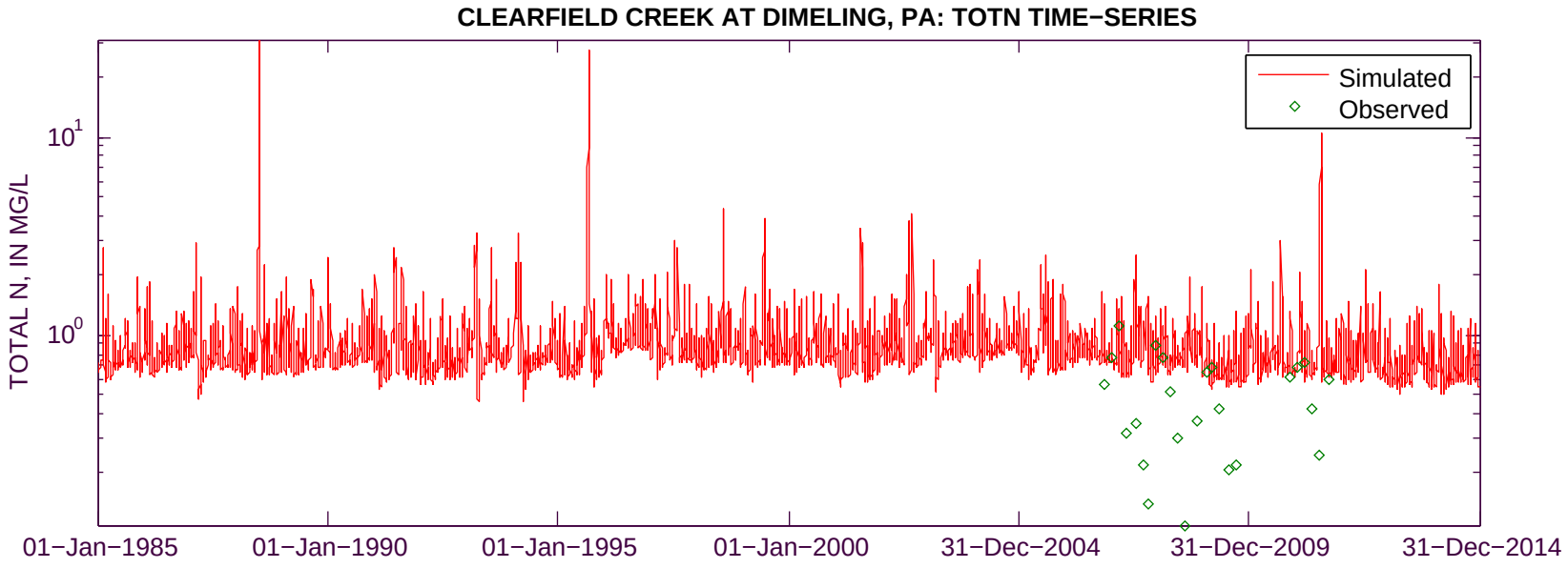
LOAD DATA
LOG10

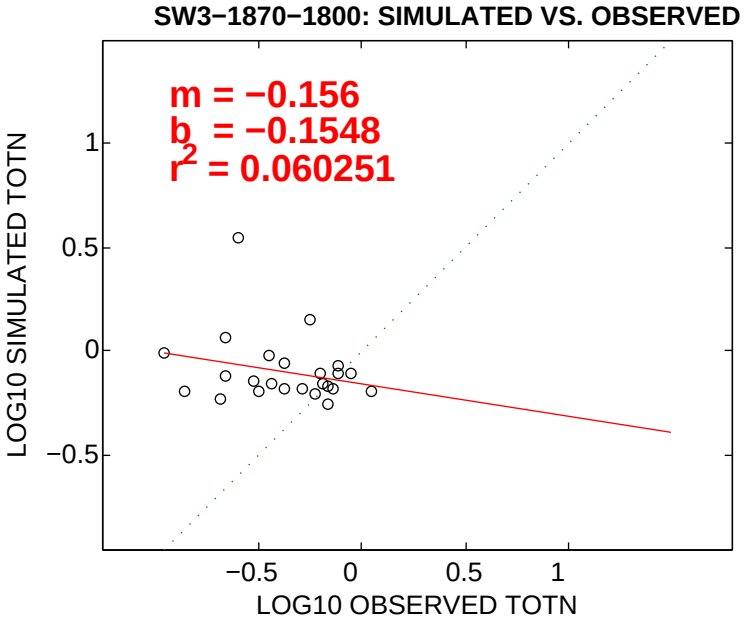


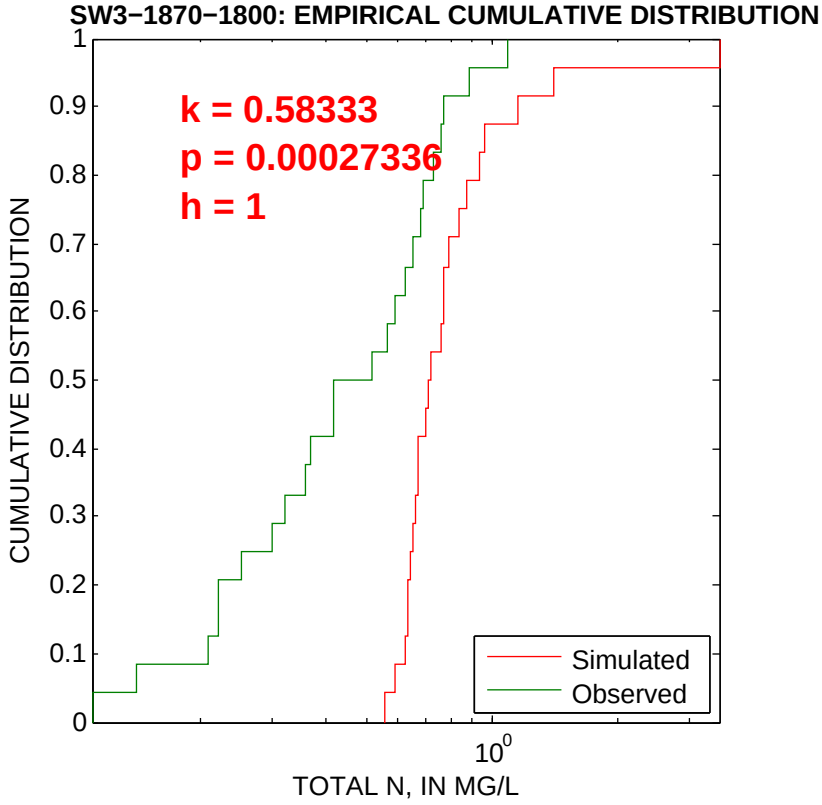












DATA SELECTION

scenario	file
P620171001WQ	TOTN.calib

plot: TOTN - total nitrogen

Dates: 1/1/1985 – 12/31/201

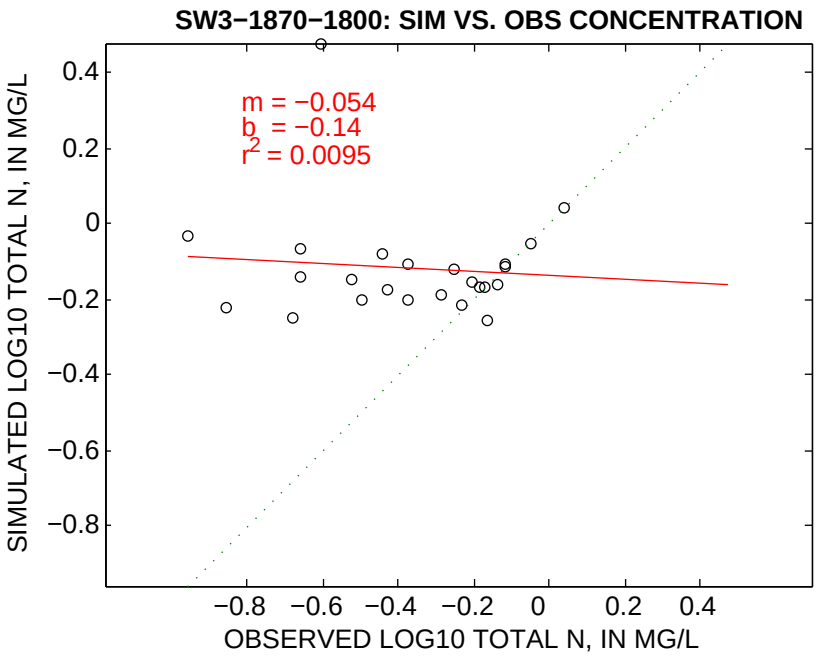
Drive	Directory	Observed
N/A	model	OBS20161101

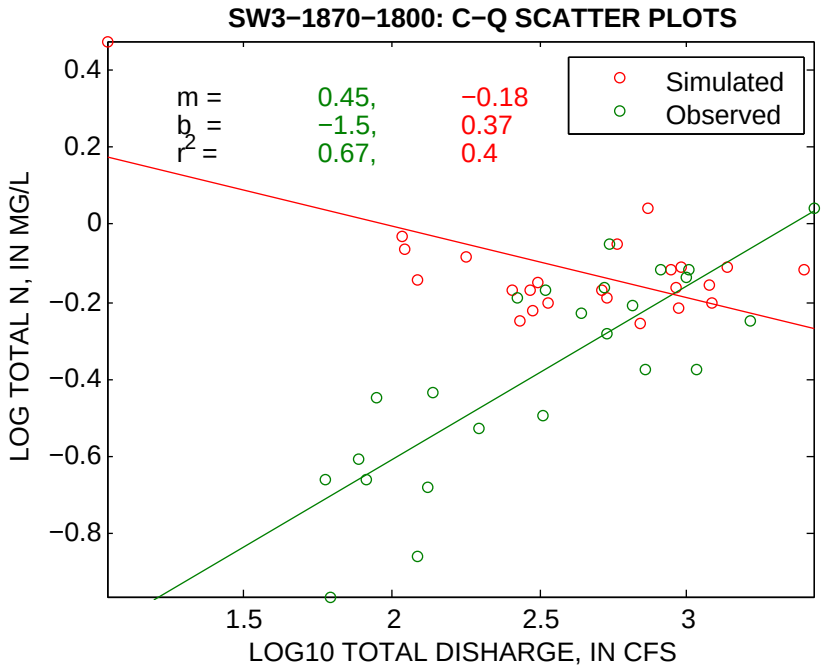
STATISTICS

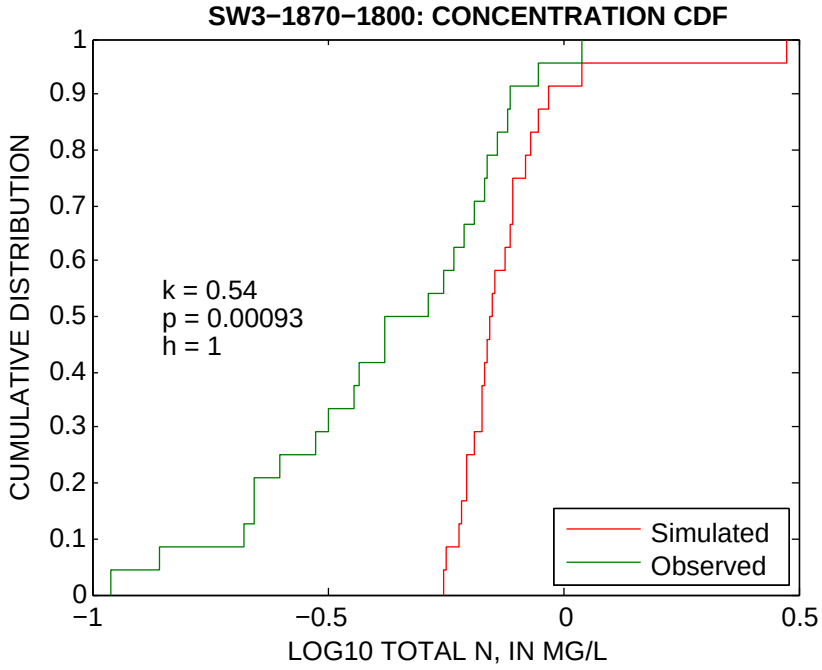
	n	24	24
		observe	simulate
min		0.11	0.5522
		-0.958607	-0.257904
mean		0.495833	0.884658
		-0.371712	-0.0968142
media		0.47	0.711255
		-0.330374	-0.148002
max		1.1	3.5134
		0.0413927	0.545728
varian		0.0664949	0.351841
		0.0688197	0.0277966
JB		☑ 0.474695	0.001
		☑ 0.241775	0.001
		ra	log
%		78.4185	-73.9545
err.va		0.651235	0.196942
rel.std.err		9.79376	2.86171
mod.eff		-8.79376	-1.86171

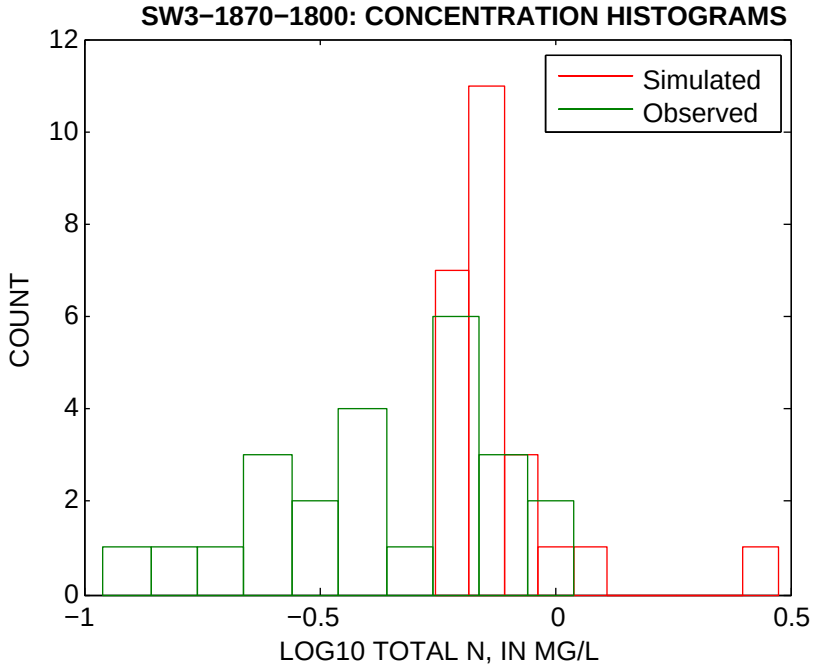
VERSION

ALL DATA
LOG10

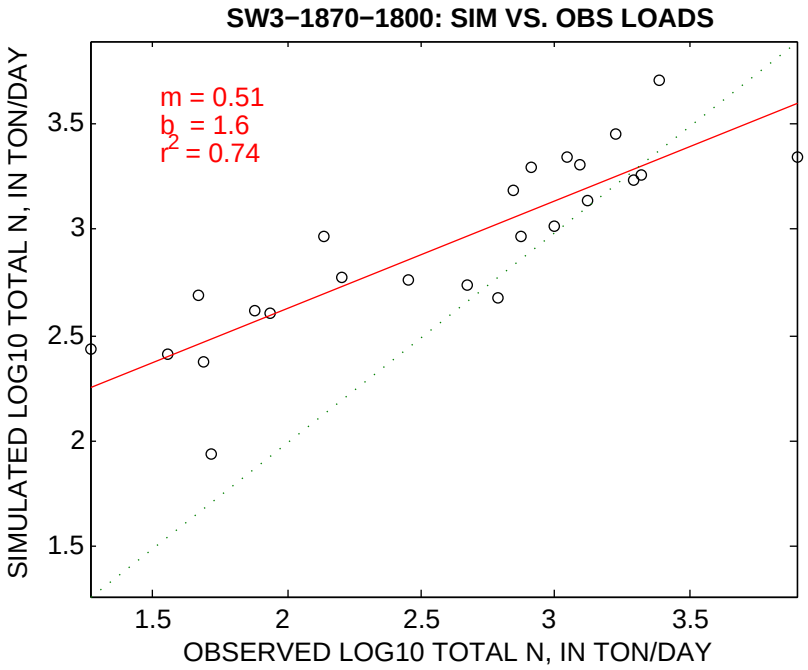


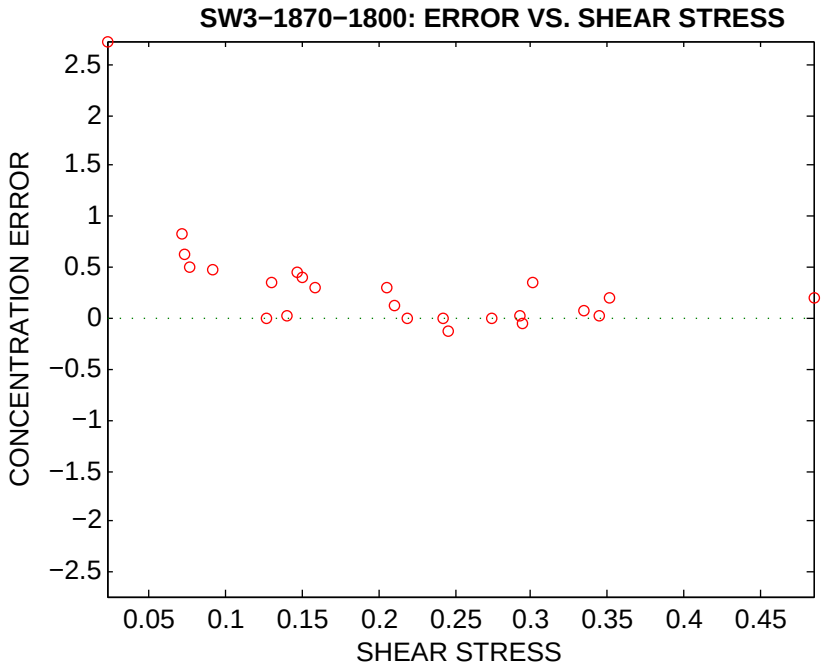


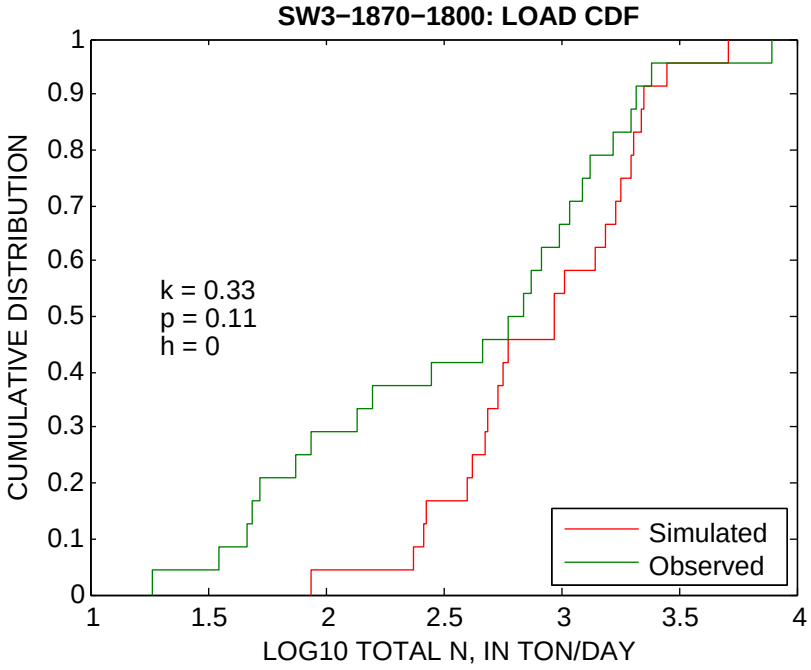


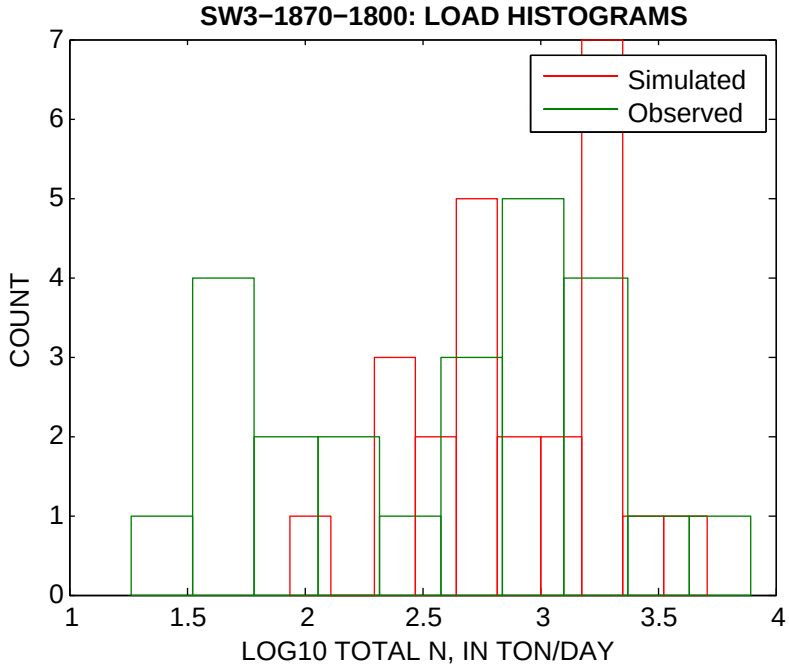


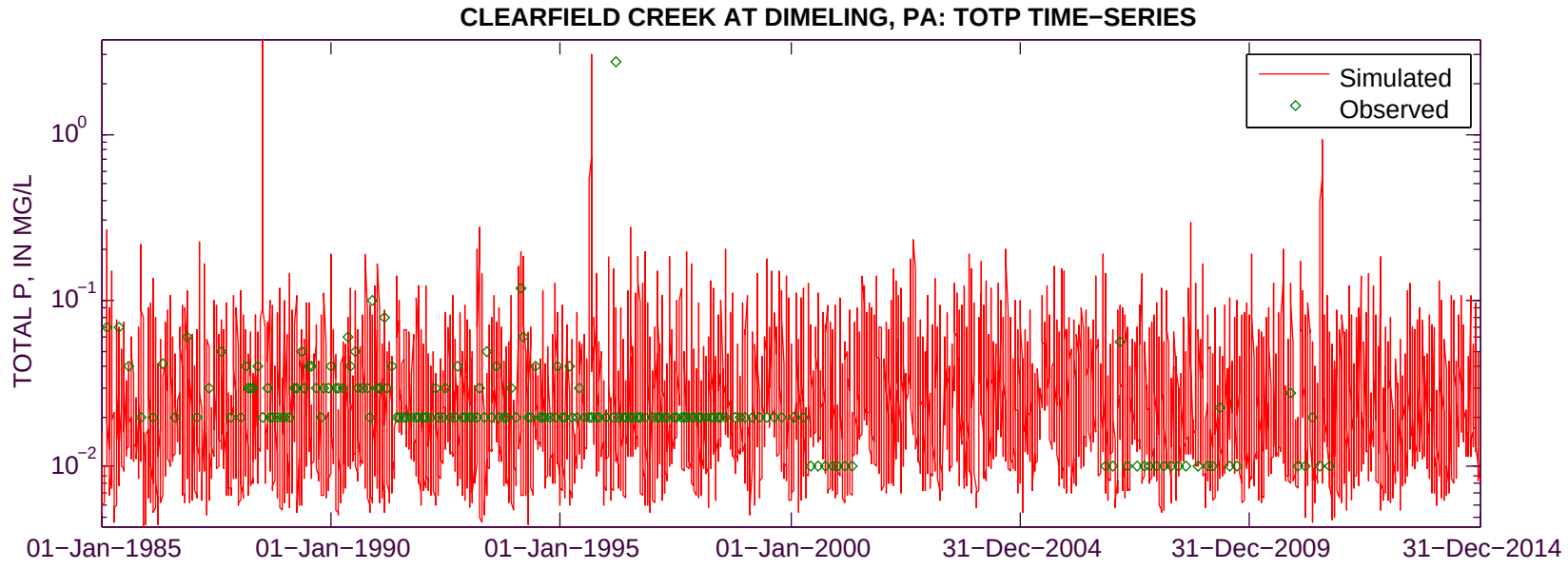
LOAD DATA
LOG10

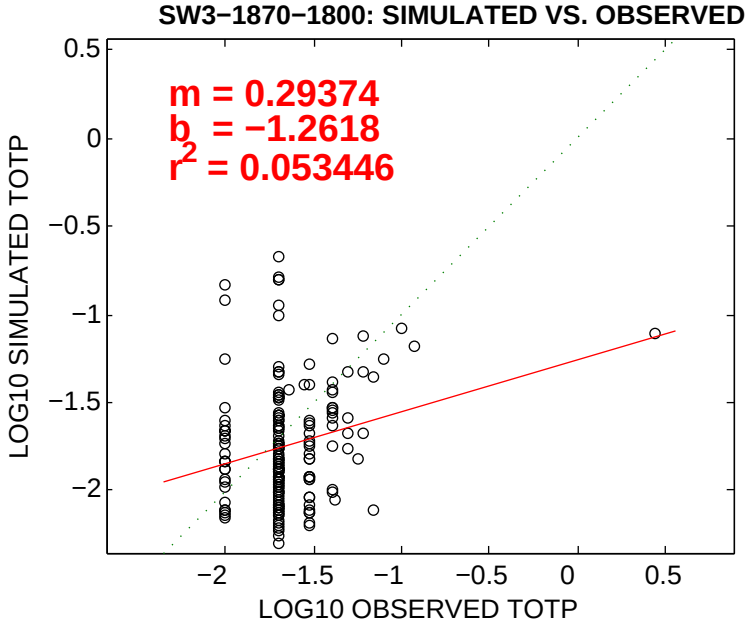


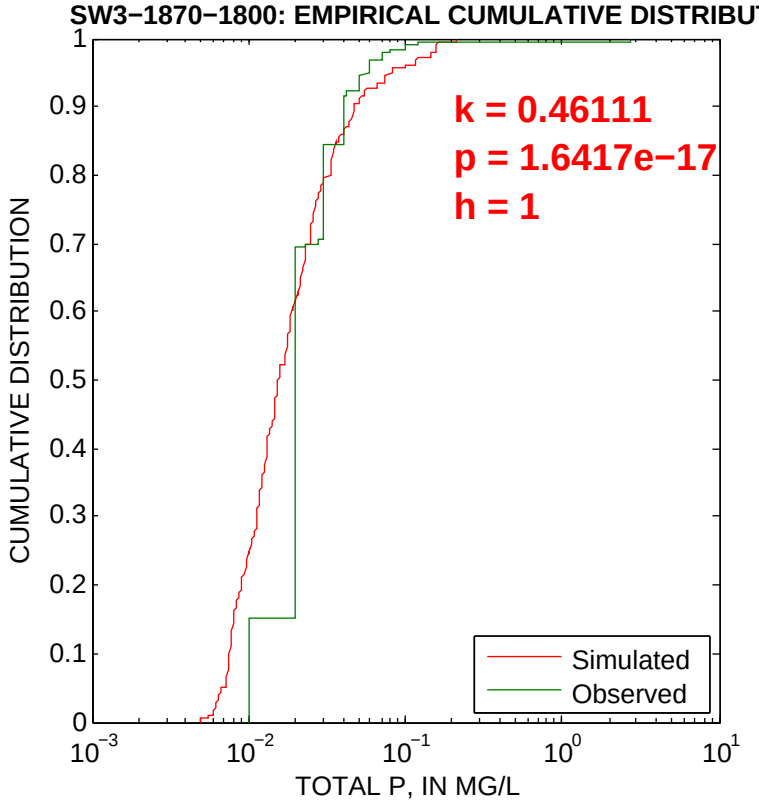












DATA SELECTION

scenario: P620171001WQ | file: TOTP.calib

plot: TOTP - total phosphorus

Dates: 1/1/1985 – 12/31/201

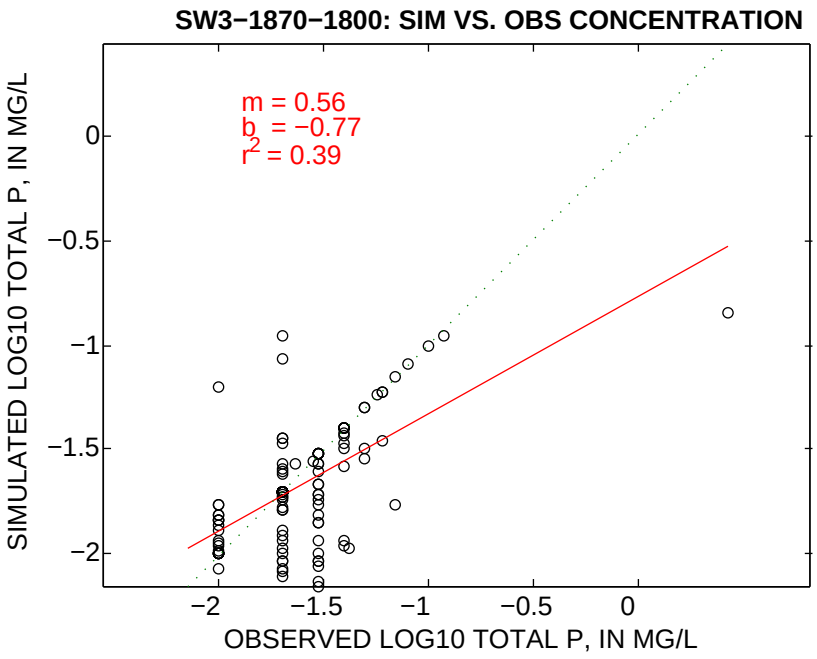
Drive: N/A | Directory: model | Observed: OBS20161101

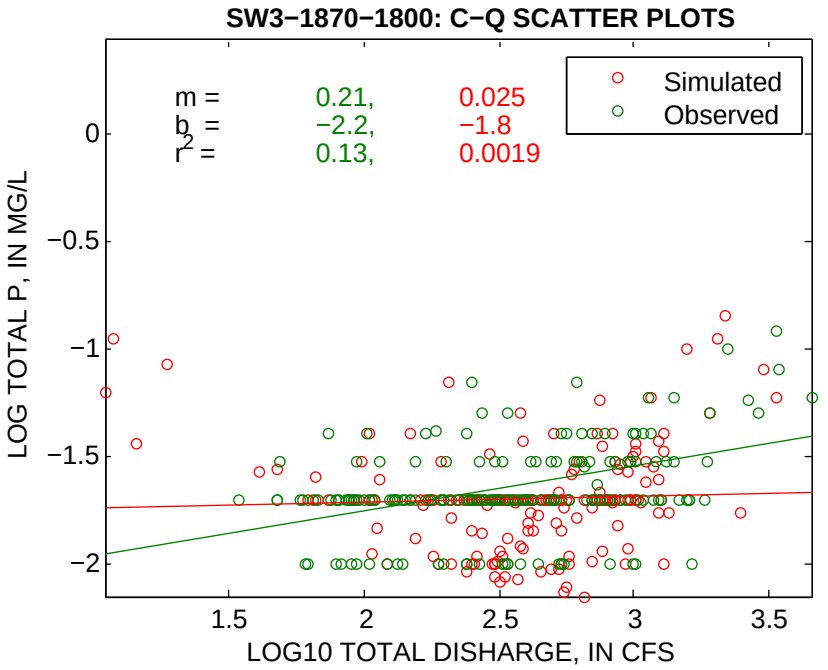
STATISTICS

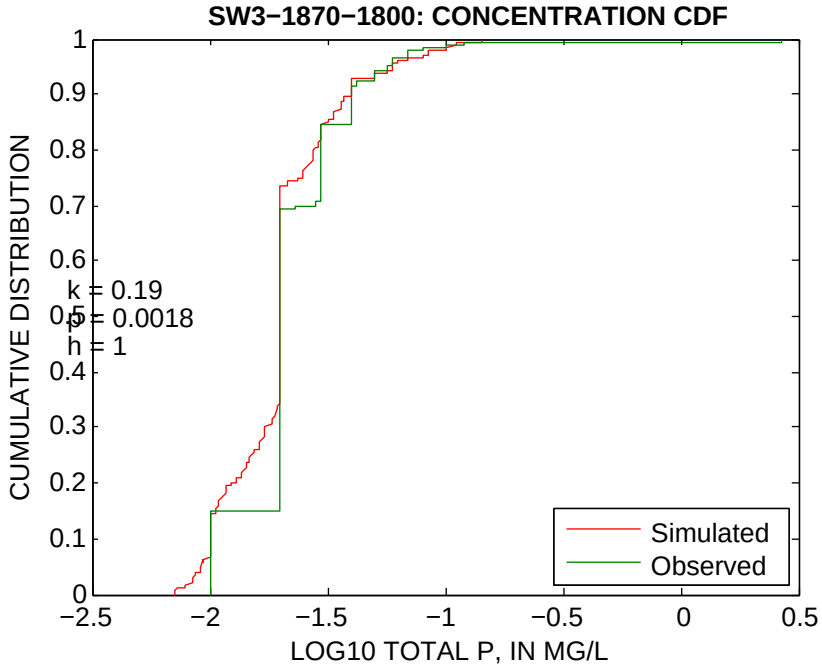
	n	180	180
		observe	simulate
min		0.01	0.0049594
		-2	-2.30457
mean		0.0399444	0.0257753
		-1.64622	-1.7454
media		0.02	0.015477
		-1.69897	-1.81034
max		2.72	0.21396
		0.434569	-0.669667
varian		0.0405817	0.00094712
		0.0678866	0.109594
JB		0.001	0.001
		0.001	0.001
		ra	log
%		-35.4721	6.02494
err.va		0.0400182	0.147492
rel.std.err		0.986113	2.17262
mod.eff		0.0138867	-1.17262

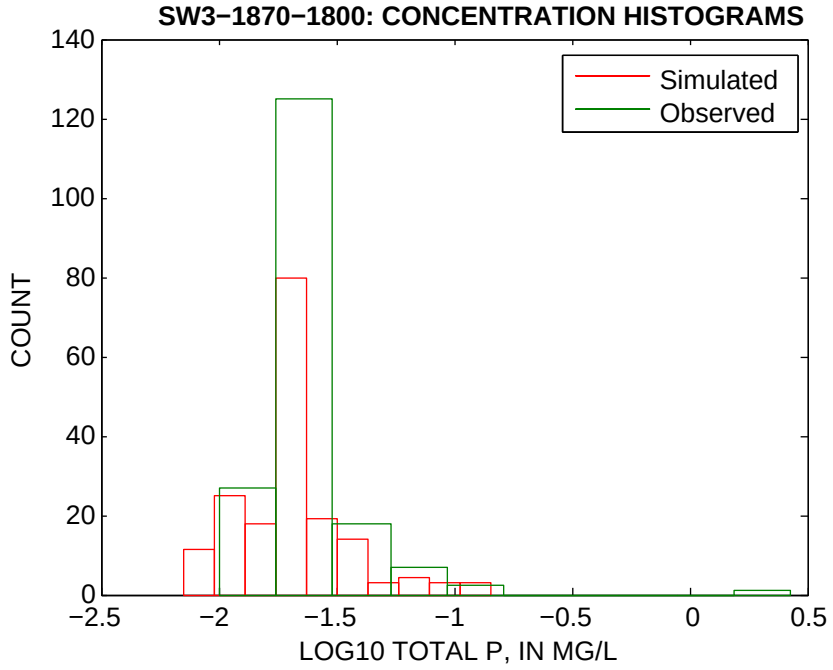
VERSION 2.1

ALL DATA
LOG10

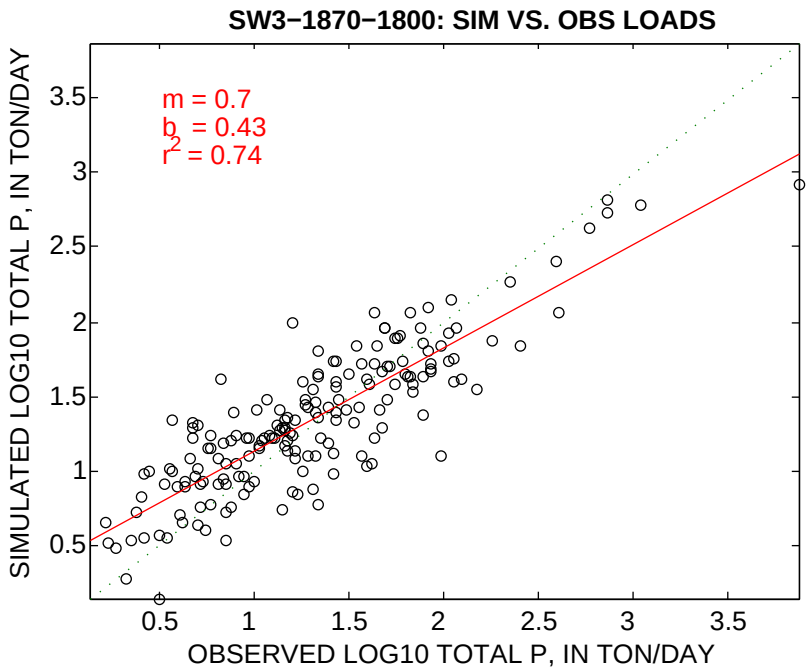


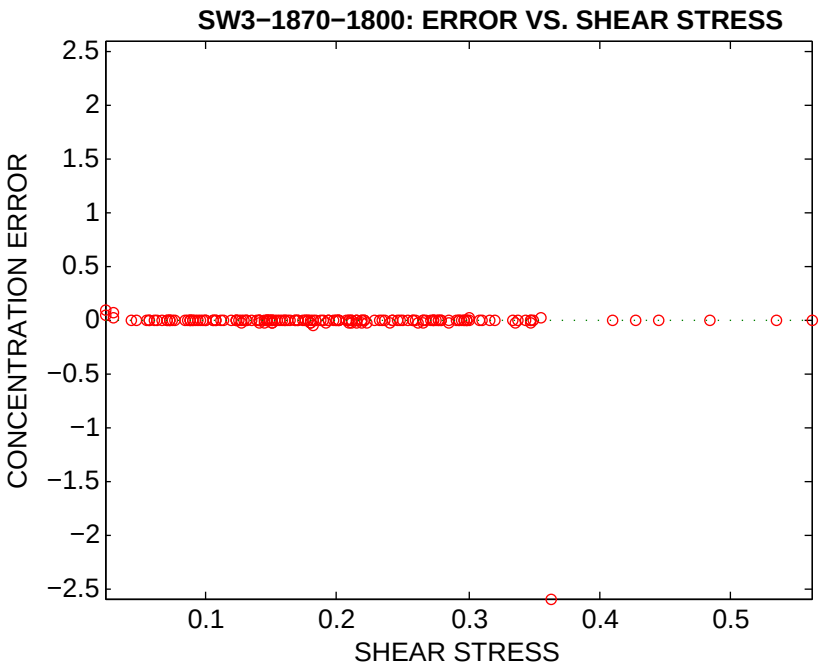


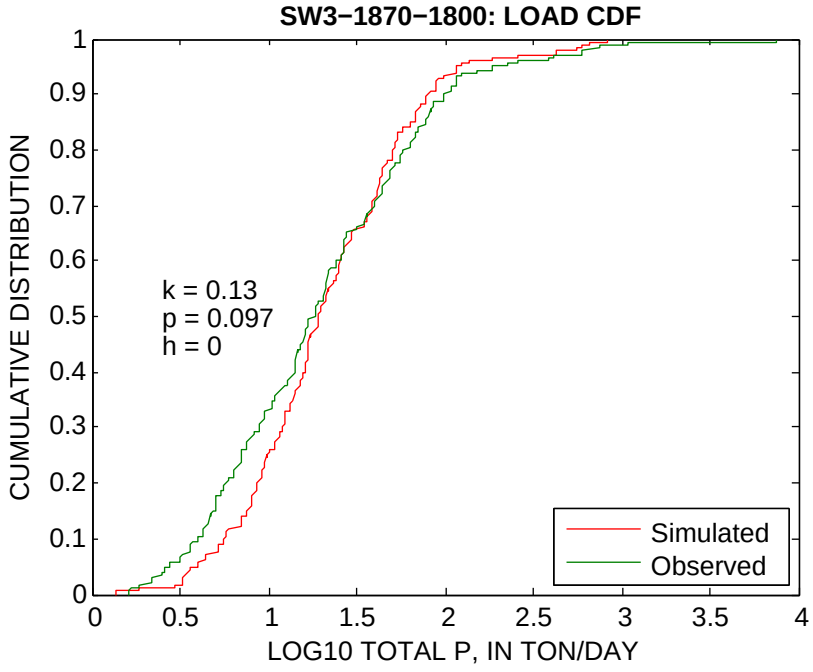


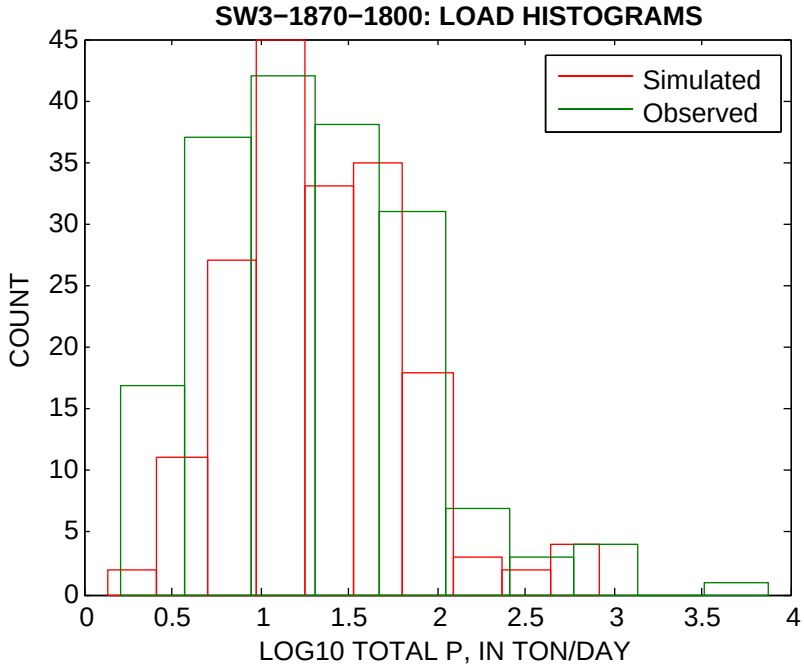


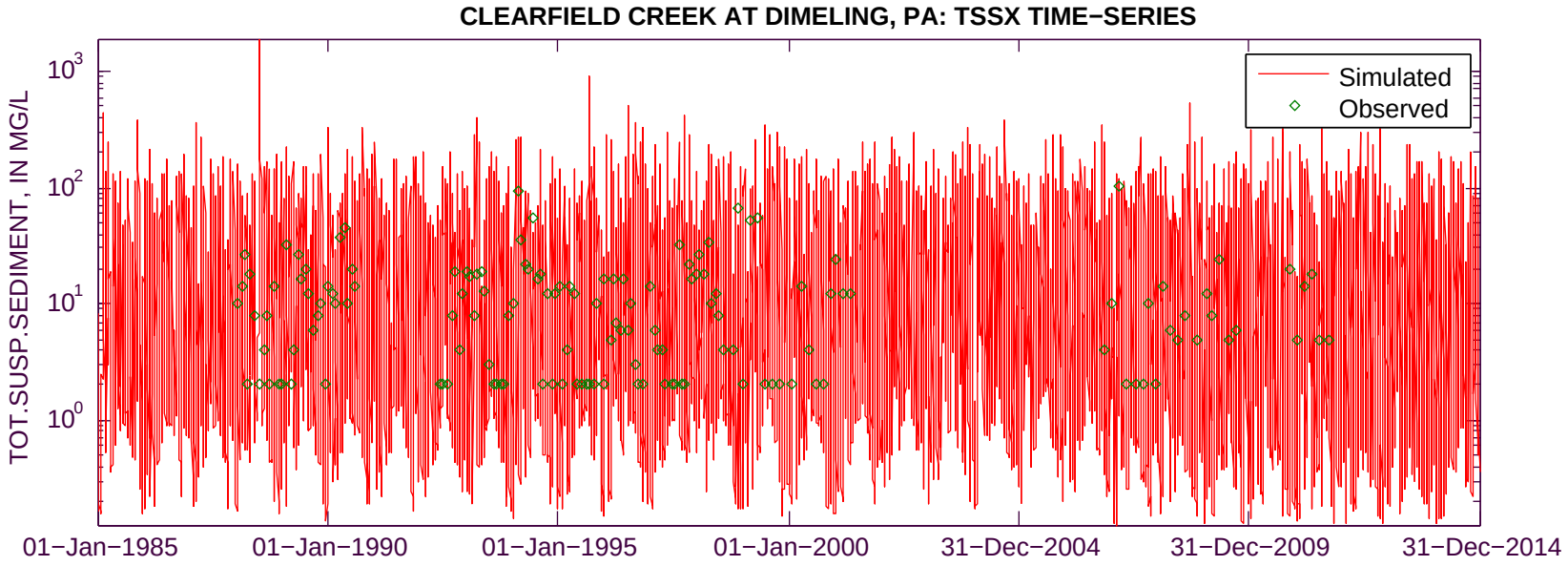
LOAD DATA
LOG10

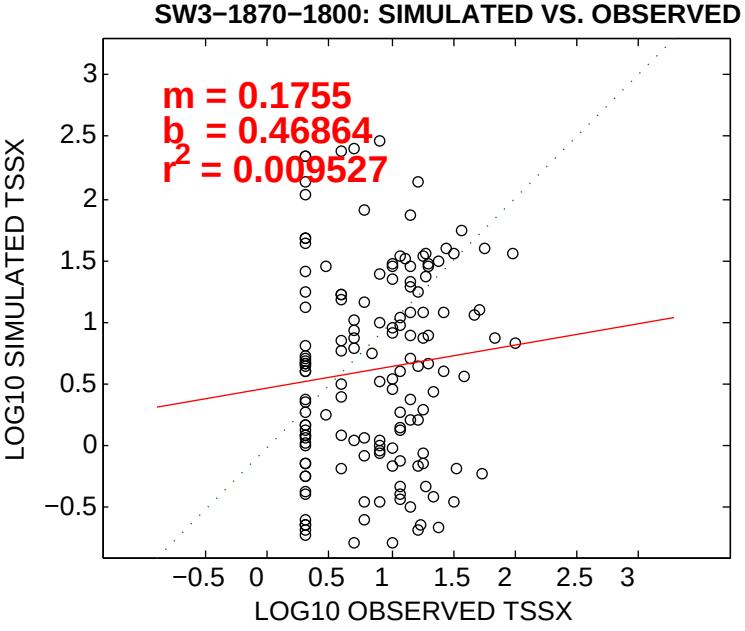


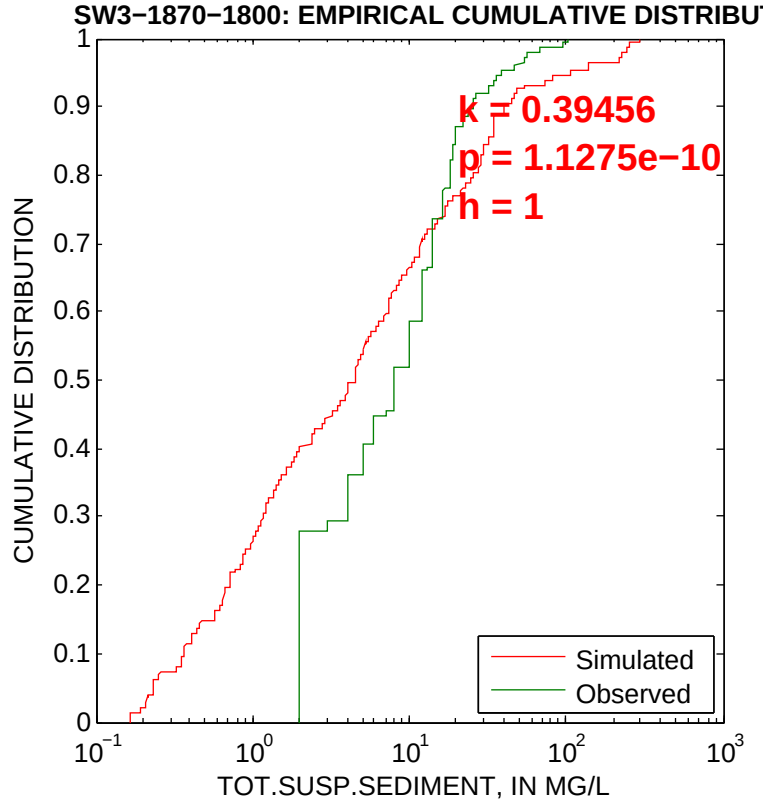












DATA SELECTION

scenario	file
P620171001WQ	TSSX.calib

plot: TSSX - total suspended ...

Dates: 1/1/1985 – 12/31/201

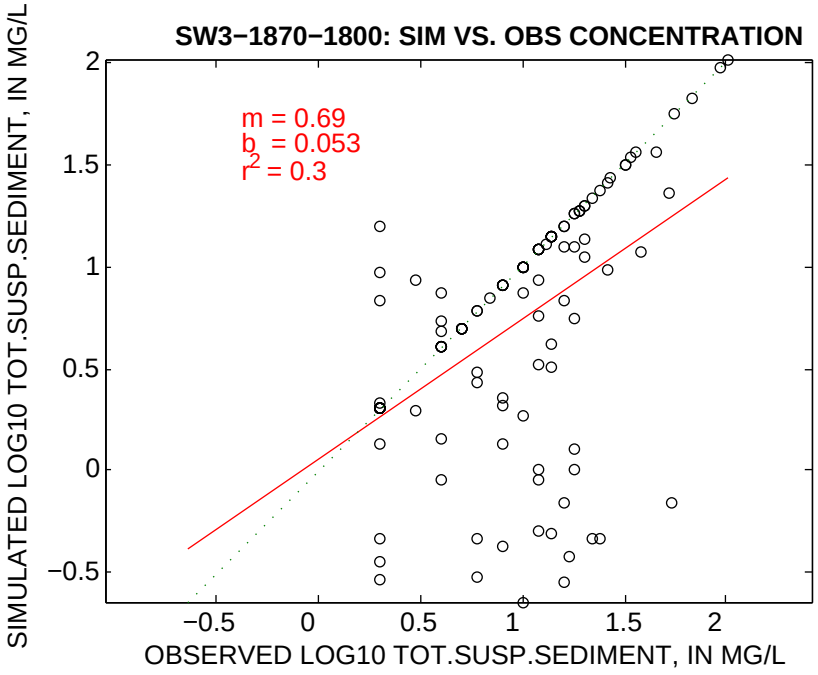
Drive	Directory	Observed
N/A	model	OBS20161101

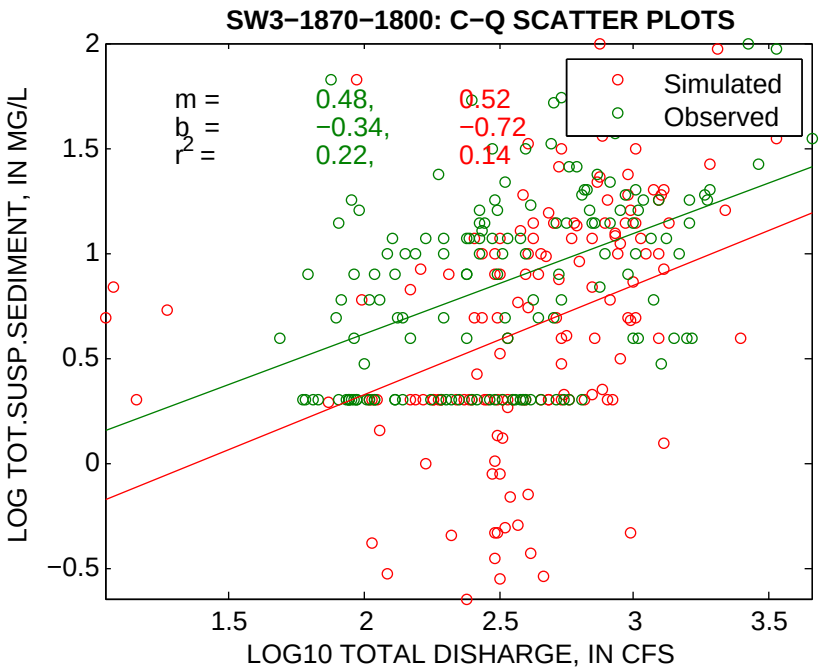
STATISTICS

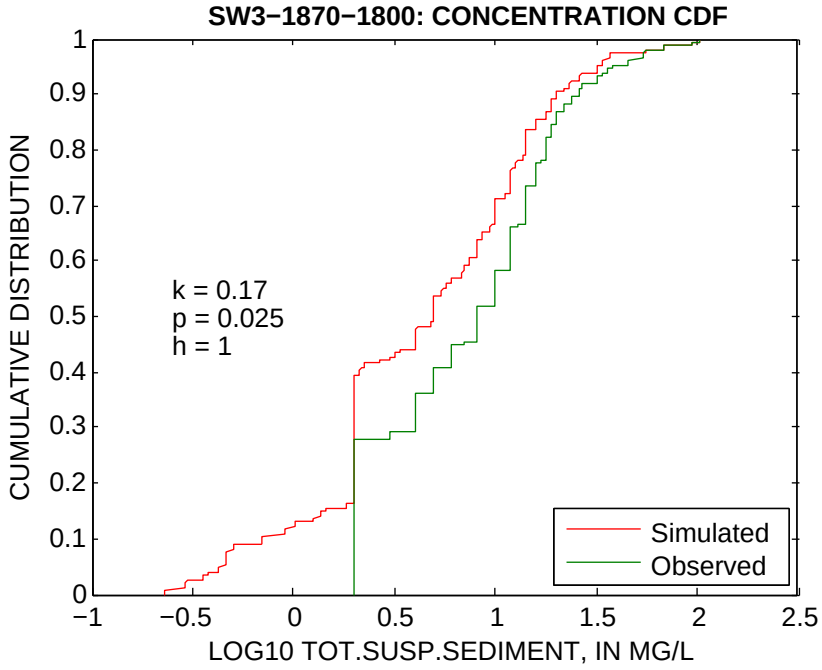
	observe	simulate
n	147	147
min	2 0.30103	0.16495 -0.782648
mean	12.4898 0.866552	20.7314 0.620716
media	8 0.90309	4.5187 0.655014
max	102 2.0086	290.41 2.46301
varian	236.115 0.201128	2334.51 0.650212
JB	0.001 0.052963	0.001 0.071830
	ra	log
%	65.9863	-28.3694
err.va	2716.2	0.841594
rel.std.err	11.5037	4.18437
mod.eff	-10.5037	-3.18437

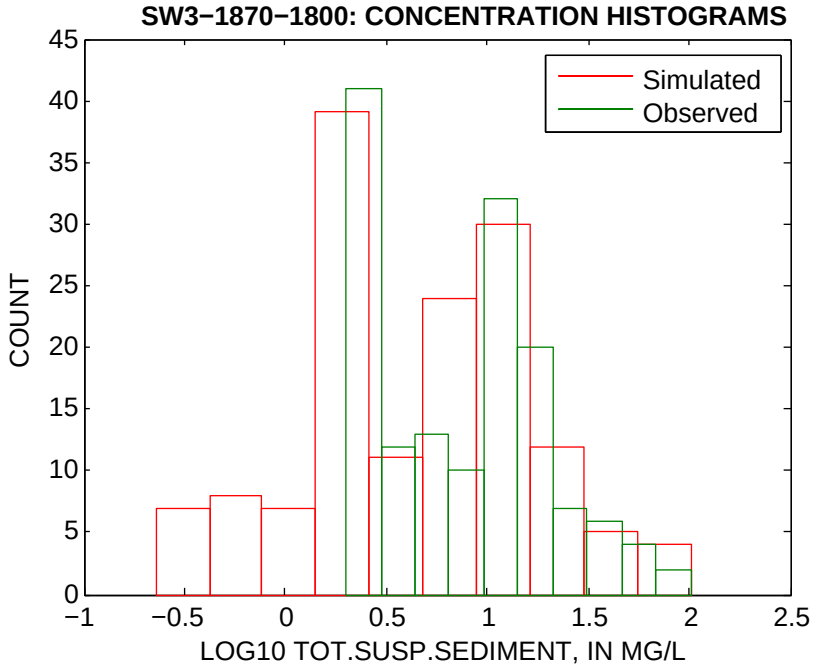
VERSION 2.1

ALL DATA
LOG10

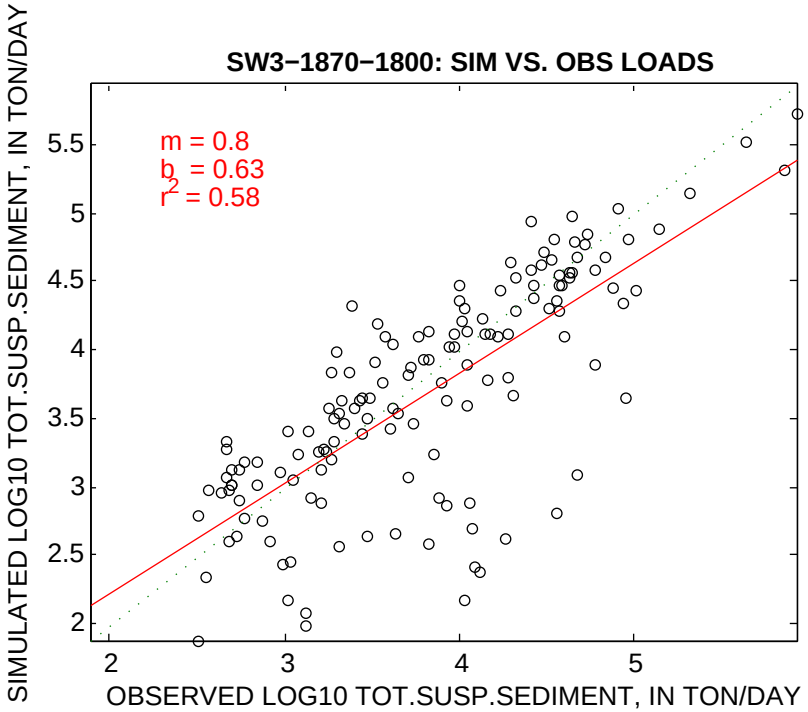


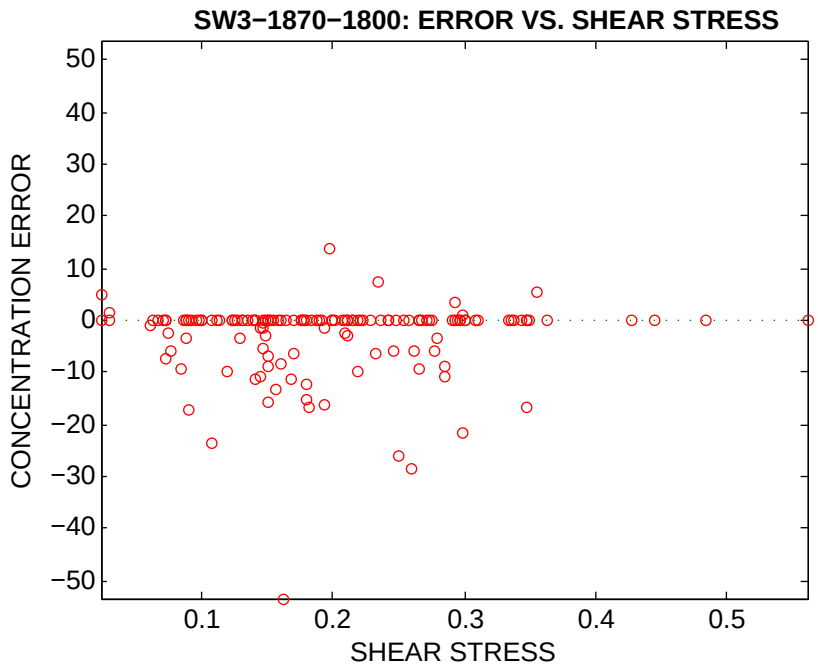


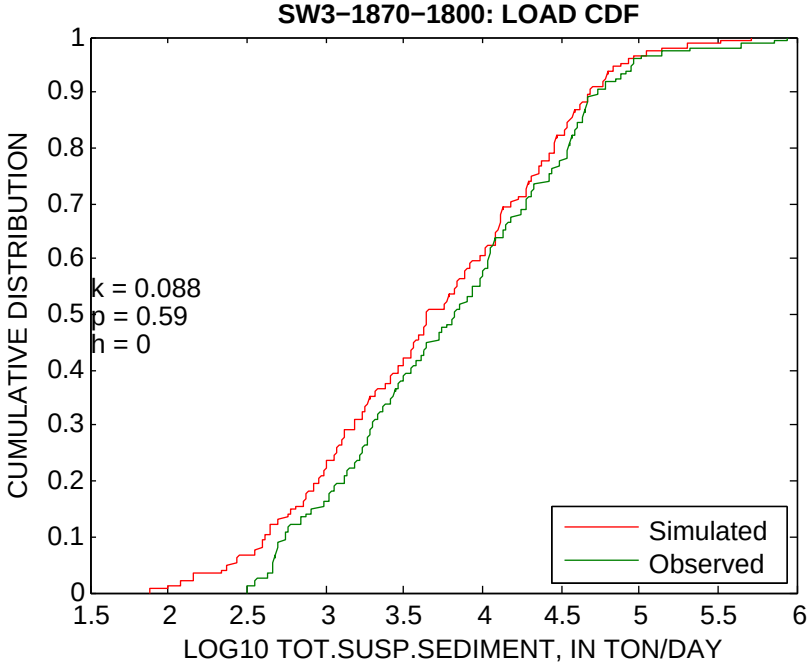


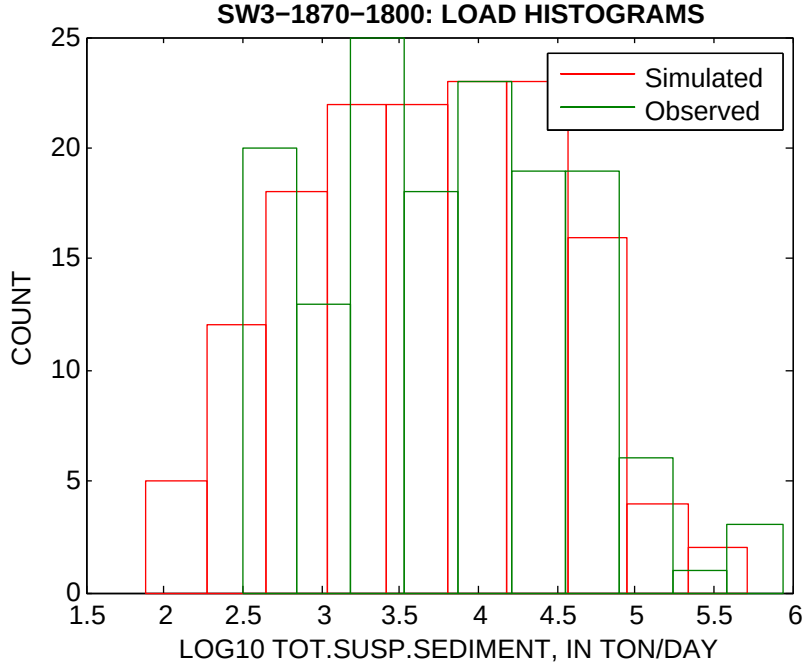


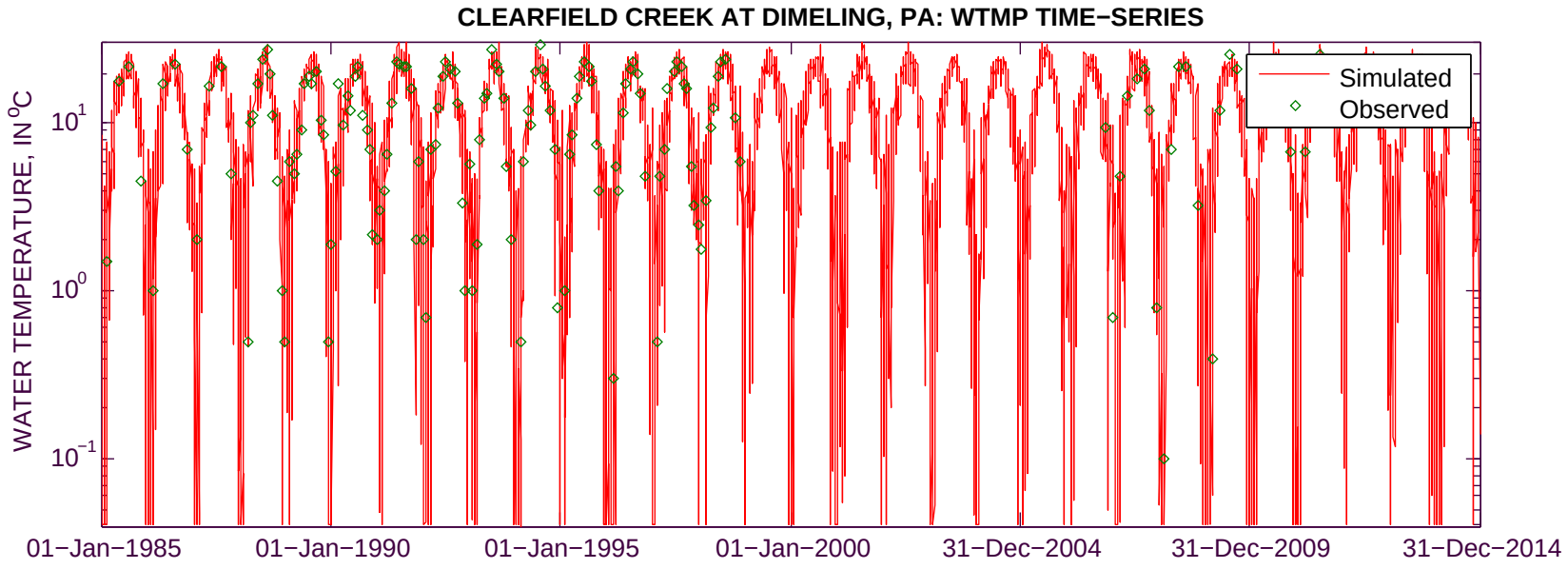
LOAD DATA
LOG10

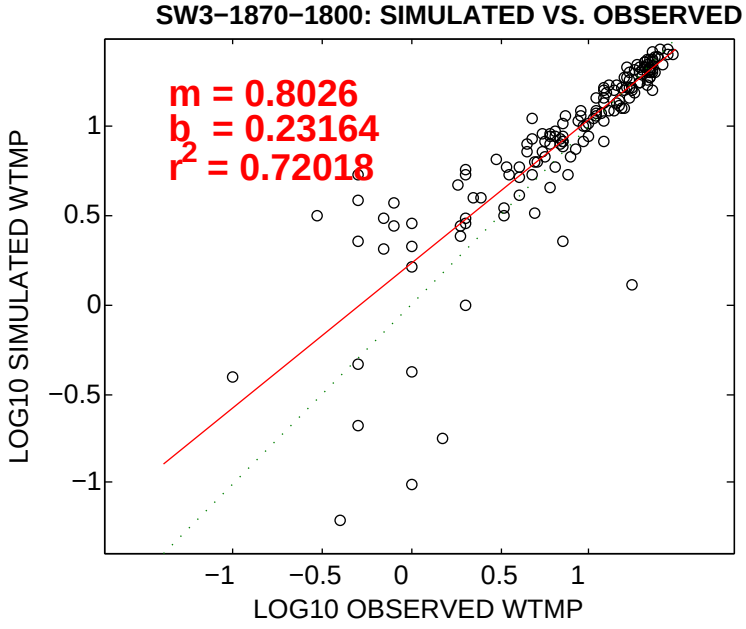


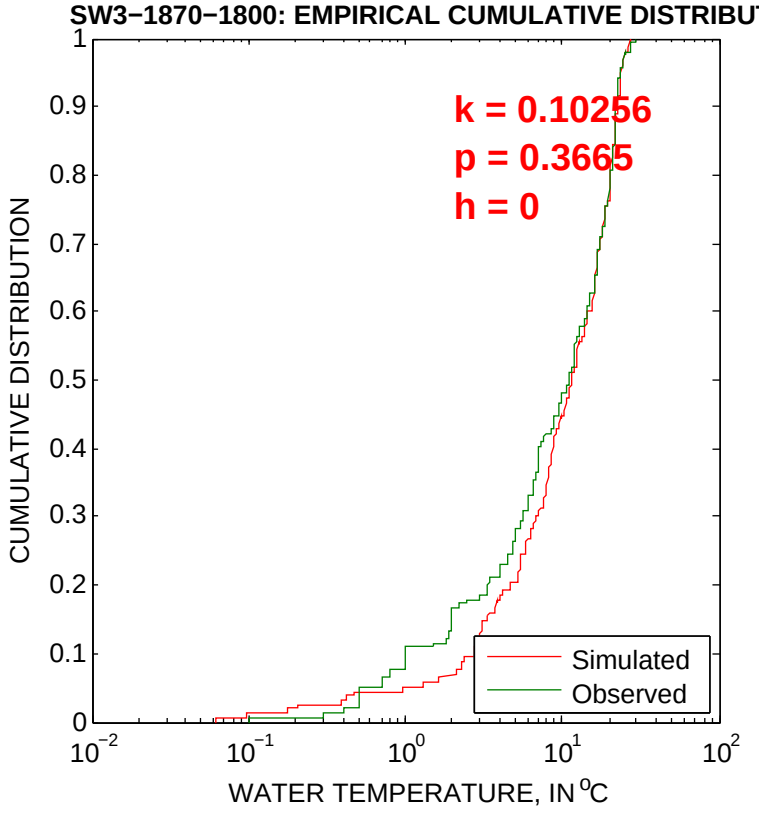












DATA SELECTION

scenario	file
P620171001WQ	WTMP.calib

plot: WTMP - water tempera...

Dates 1/1/1985 12/31/201

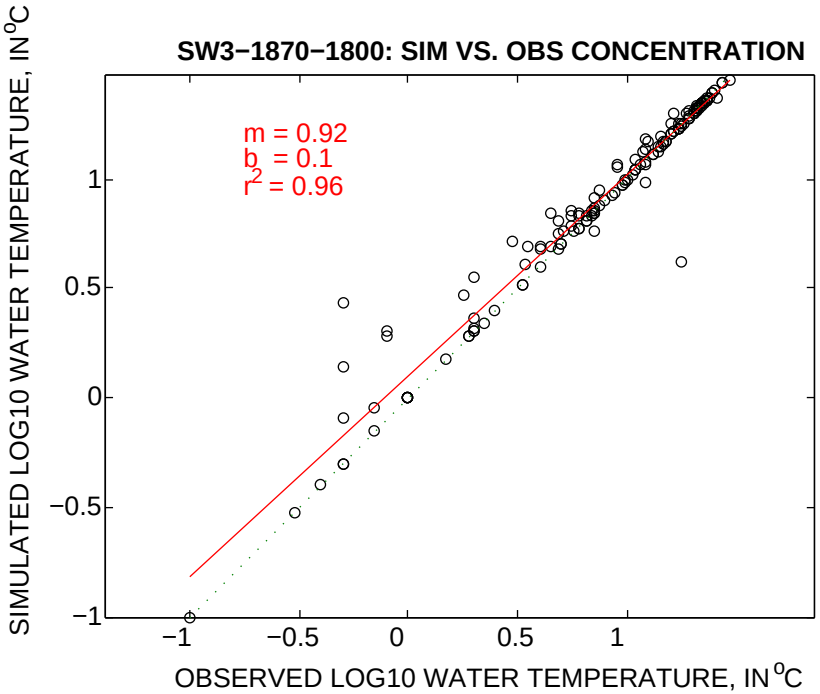
Drive	Directory	Observed
N/A	model	OBS20161101

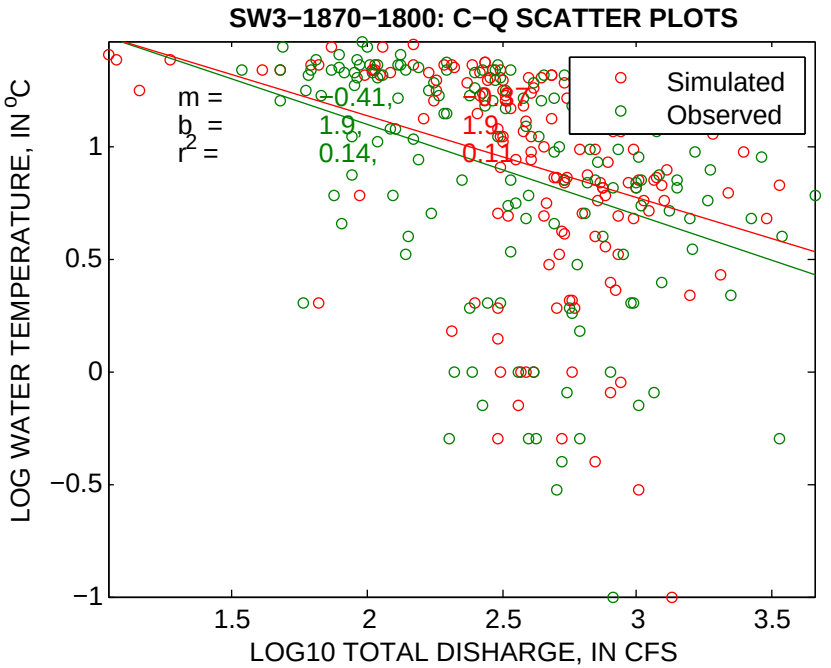
STATISTICS

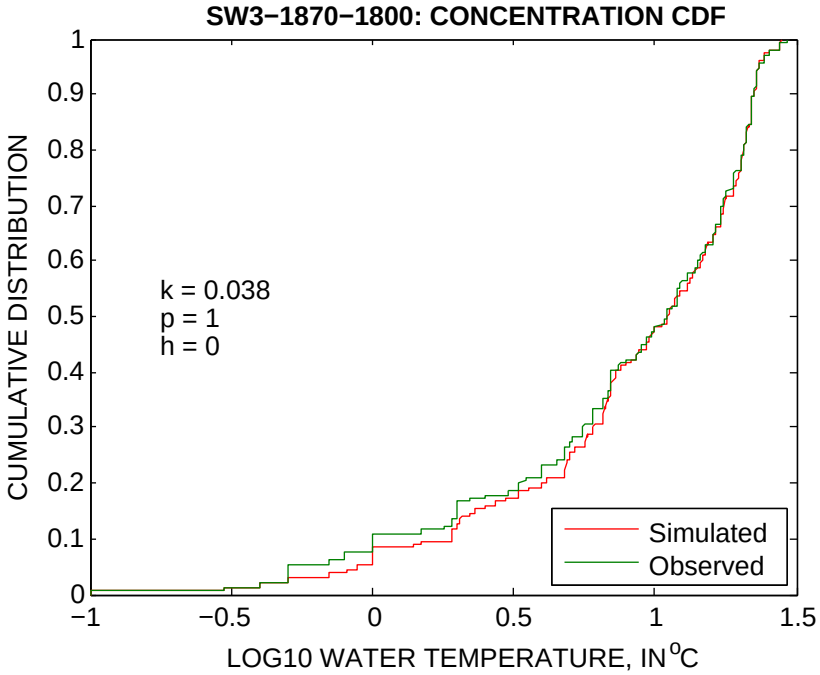
	observe	simulate
n	156	156
min	0.1	0.061379
	-1	-1.21198
mean	11.6872	12.3016
	0.879532	0.937552
media	11	11.6675
	1.04139	1.06698
max	29.5	27.386
	1.46982	1.43753
varian	64.7322	57.168
	0.254887	0.227986
JB	0.011822	0.015971
	0.001	0.001
	ra	log
%	5.25751	6.59677
err.va	7.04199	0.0771144
rel.std.err	0.108787	0.302543
mod.eff	0.891213	0.697457

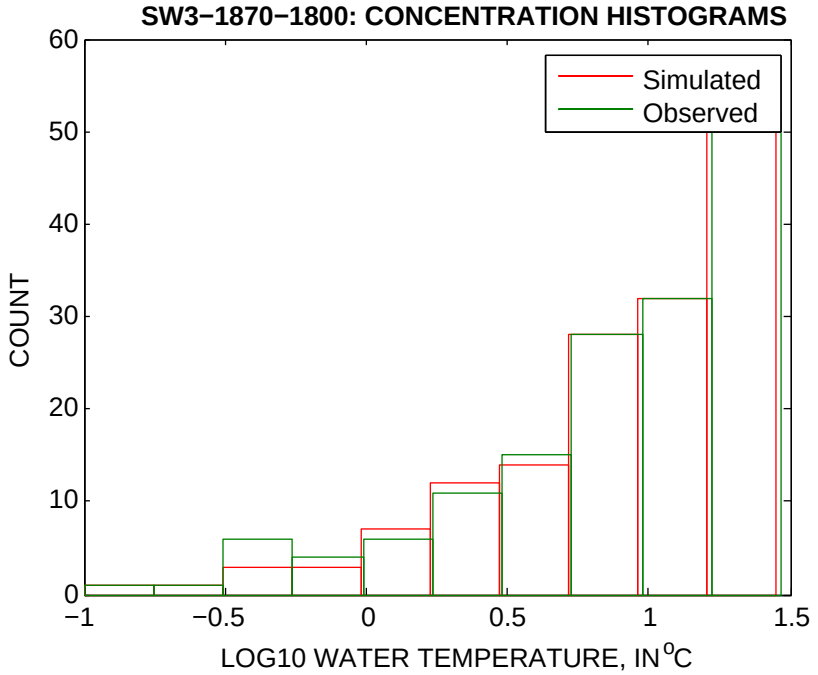
VERSION 2.1

ALL DATA
LOG10

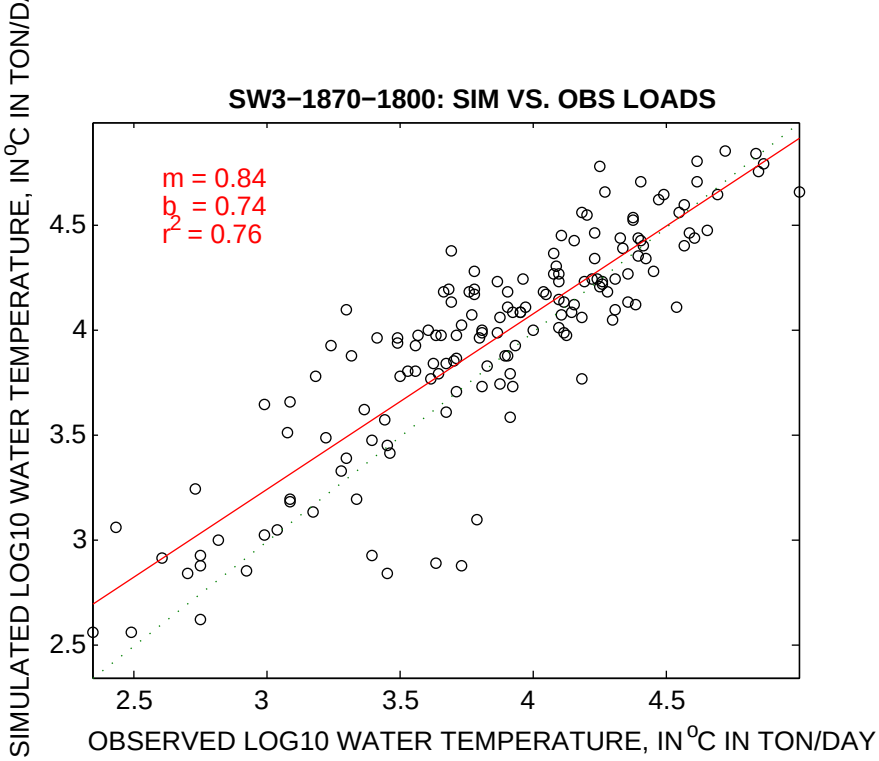


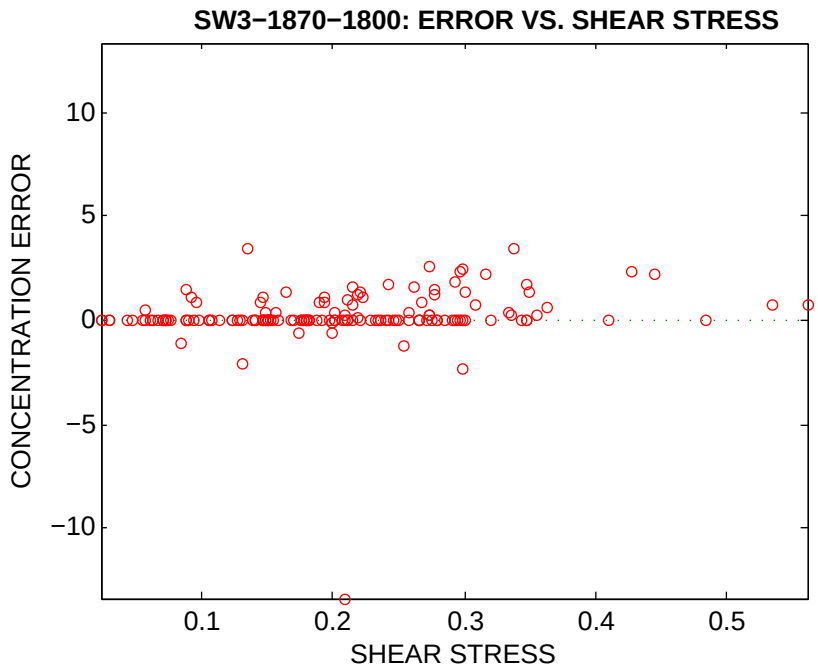


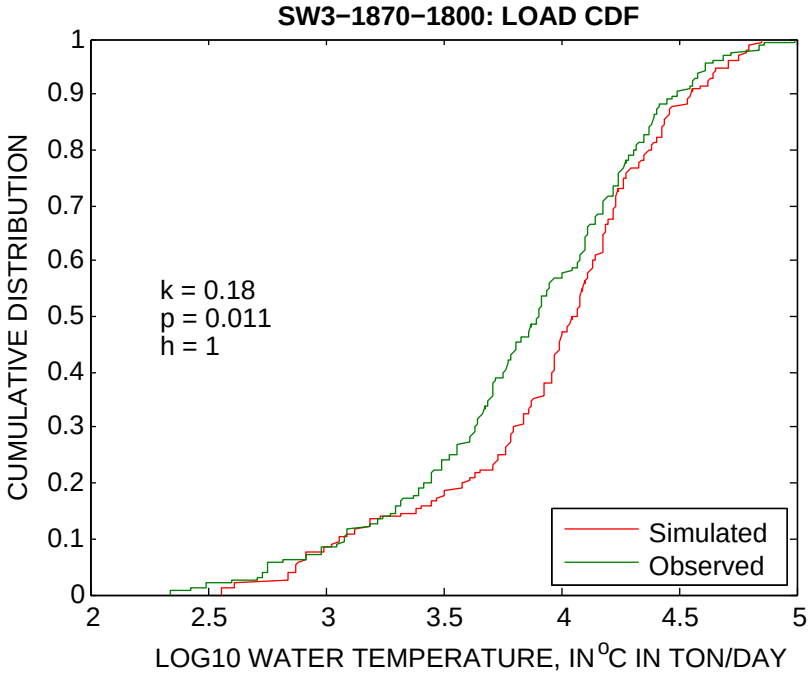


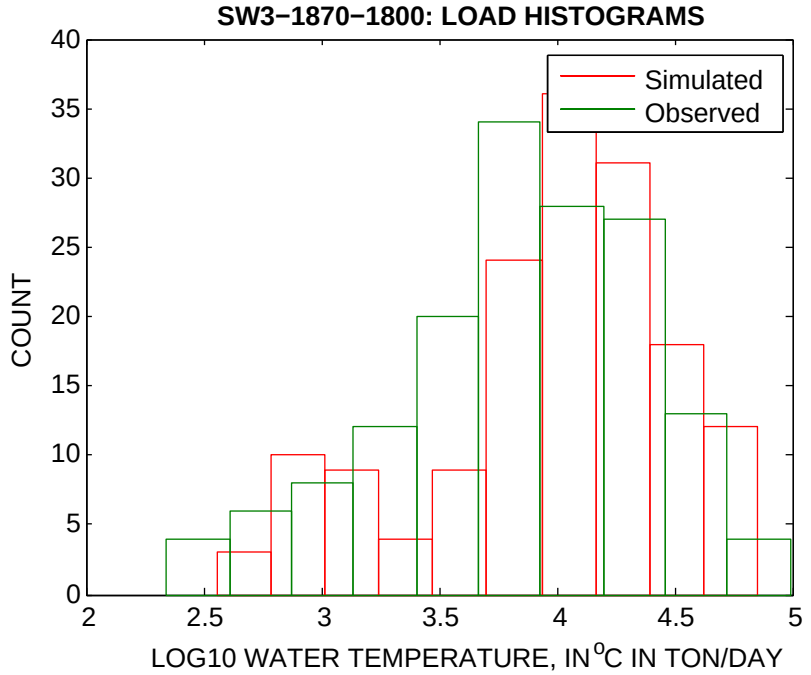


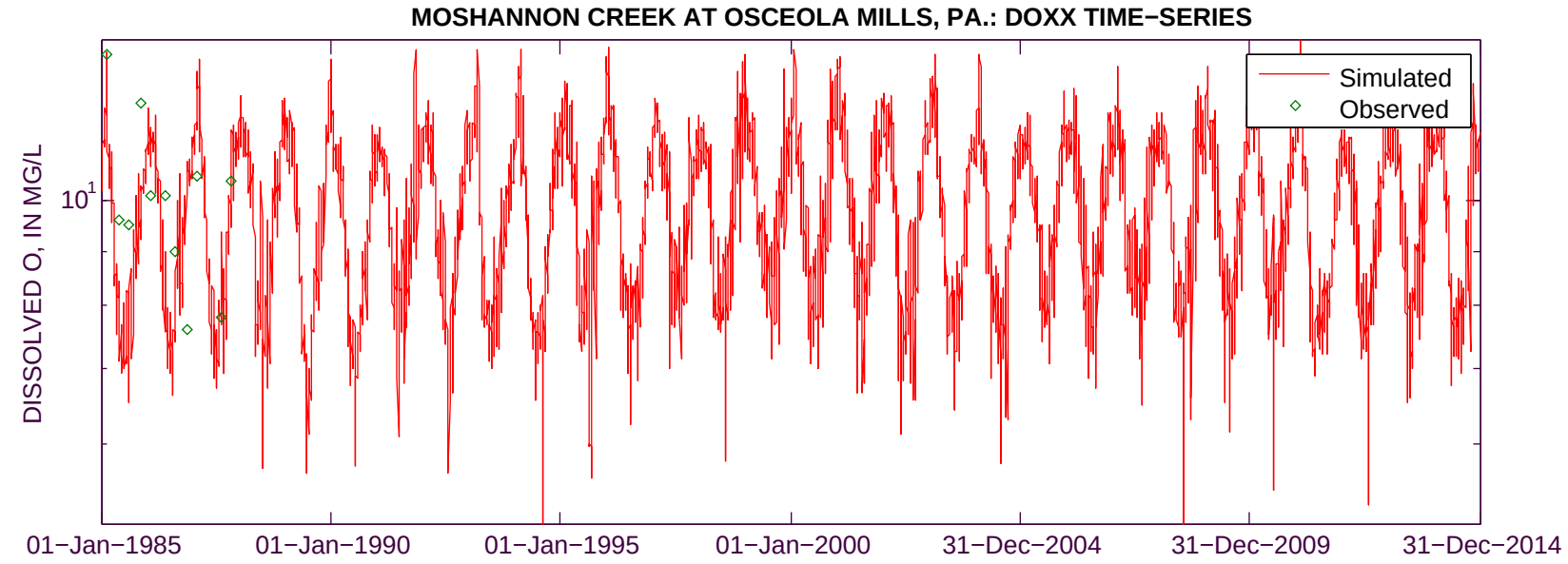
LOAD DATA
LOG10

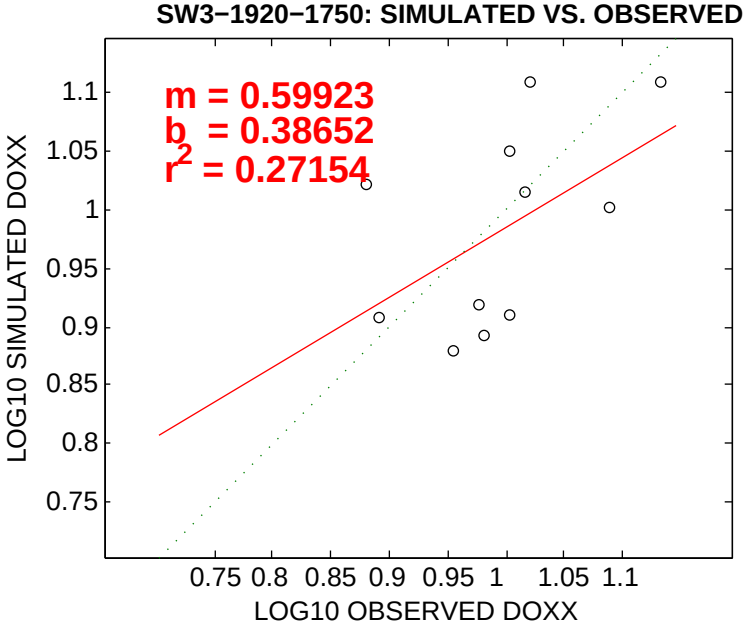


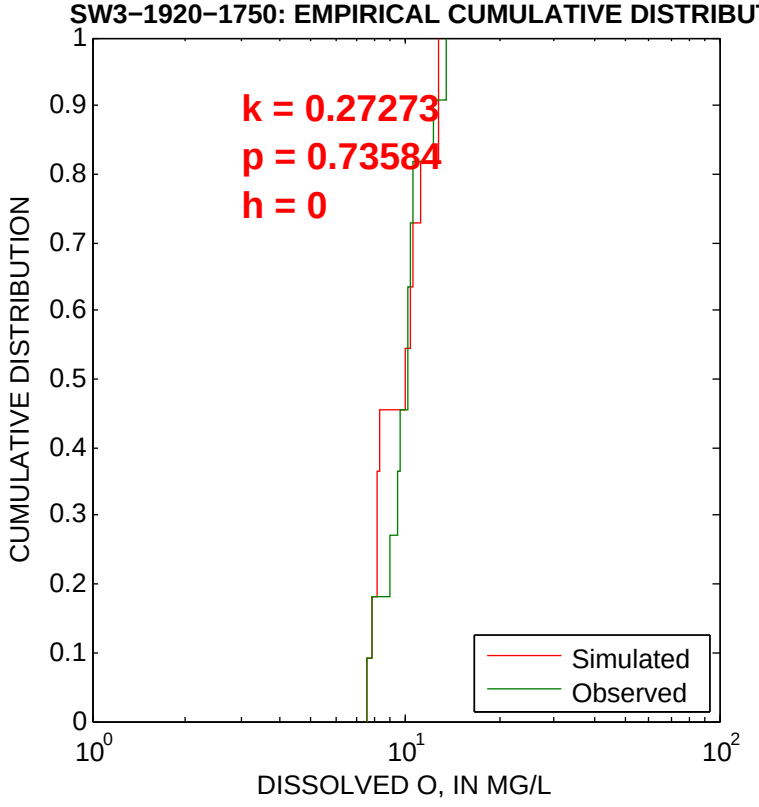












DATA SELECTION

scenario	file
P620171001WQ	DOXX.calib

plot: DOXX - dissolved oxygen

Dates 1/1/1985 12/31/201

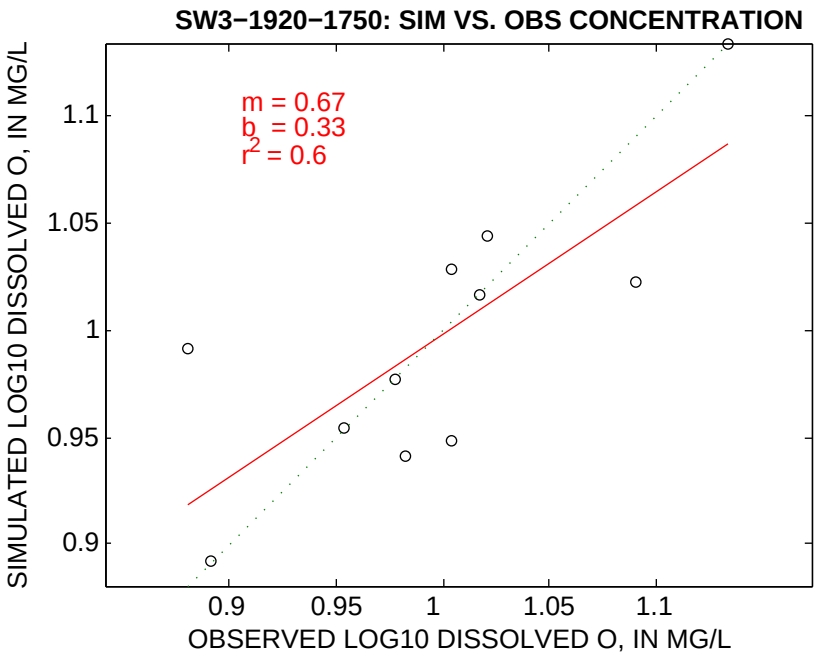
Drive	Directory	Observed
N/A	model	OBS20161101

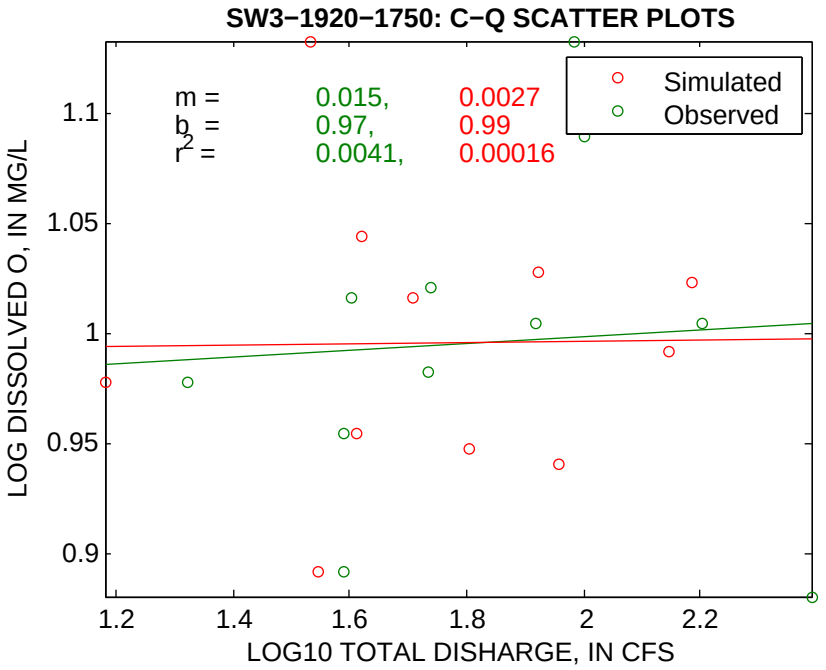
STATISTICS

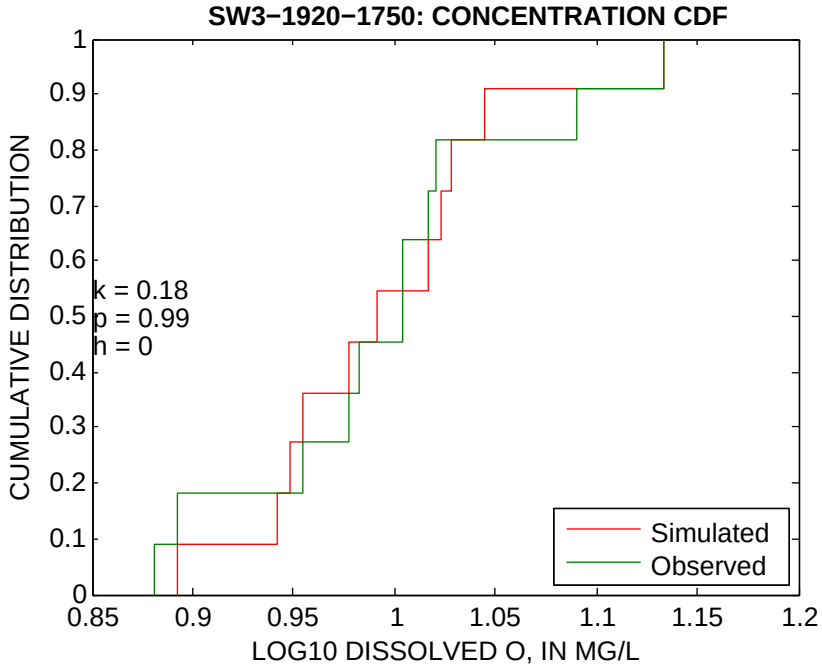
	n	11	11
		observe	simulate
min		7.6	7.5686
		0.880814	0.879016
mean		10.0455	9.79851
		0.996132	0.983426
media		10.1	10.041
		1.00432	1.00178
max		13.6	12.864
		1.13354	1.10938
varian		3.06673	3.84706
		0.00552808	0.00731016
JB		0.5	0.308094
		0.5	0.30229
		ra	log
%		-2.45828	-1.27557
err.va		3.14592	0.0063907
rel.std.err		1.02582	1.15604
mod.eff		-0.0258228	-0.156044

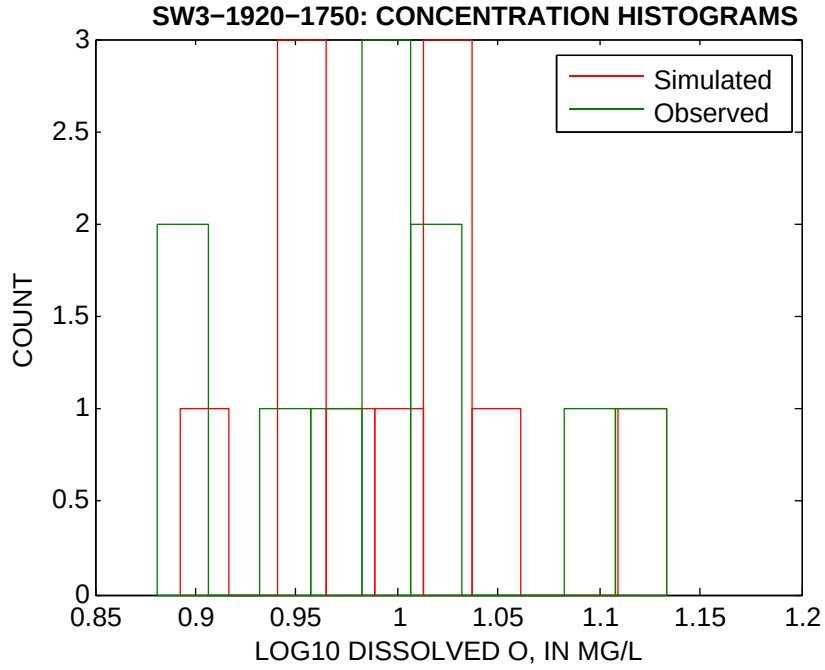
VERSION 2.1

ALL DATA
LOG10

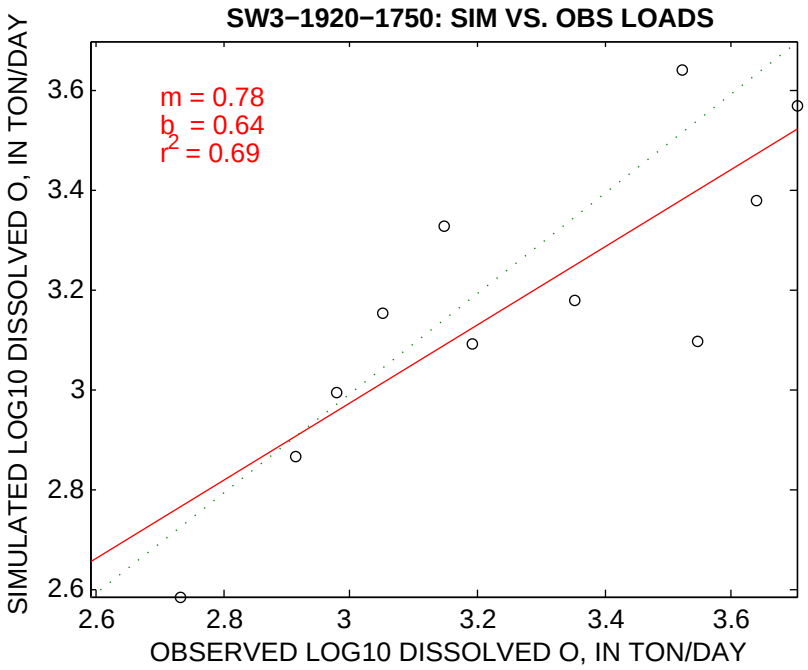




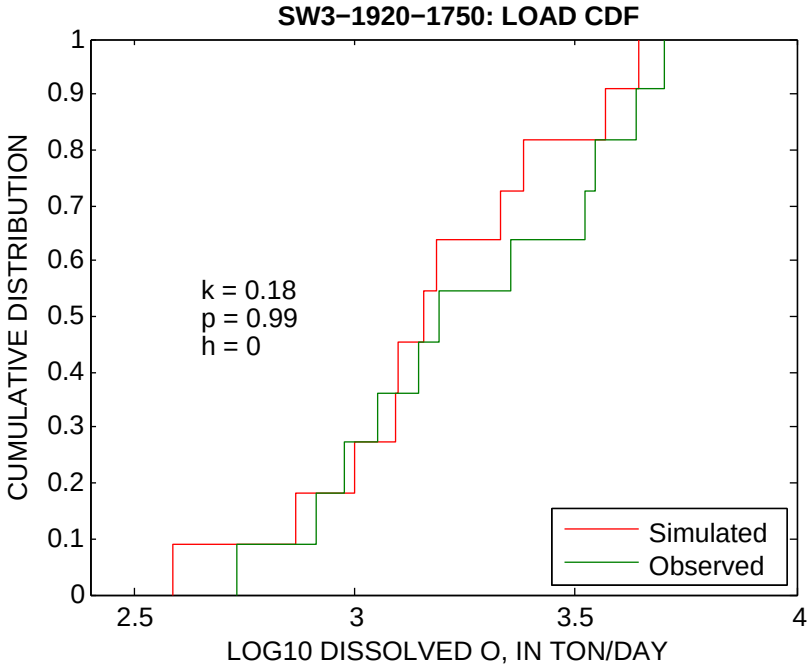


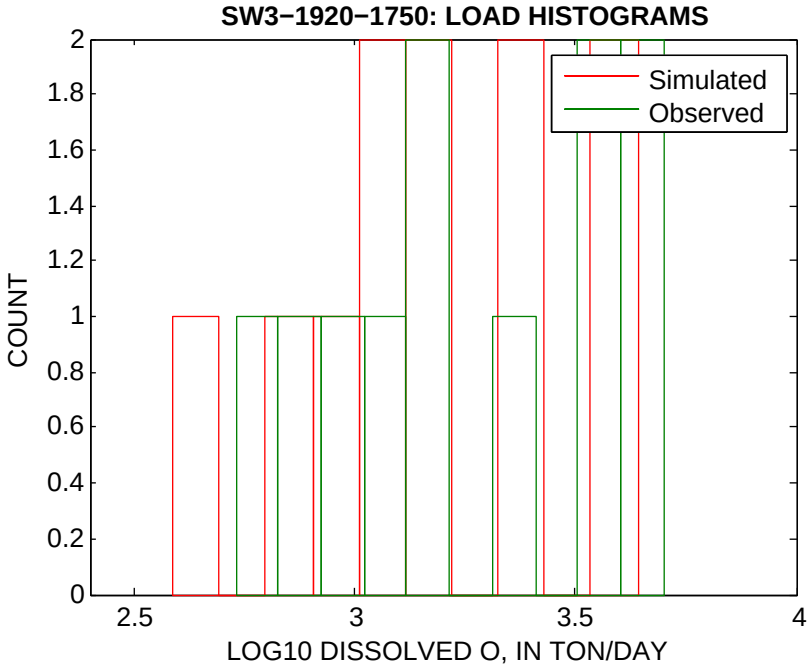


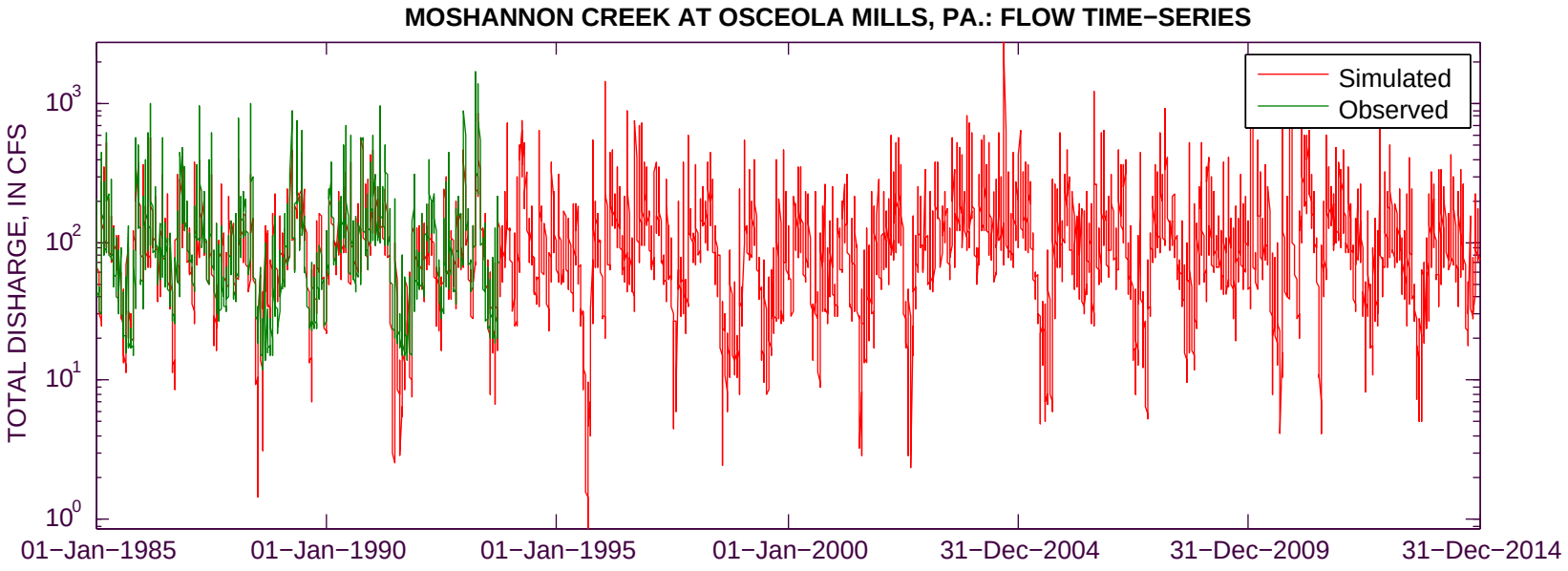
LOAD DATA
LOG10

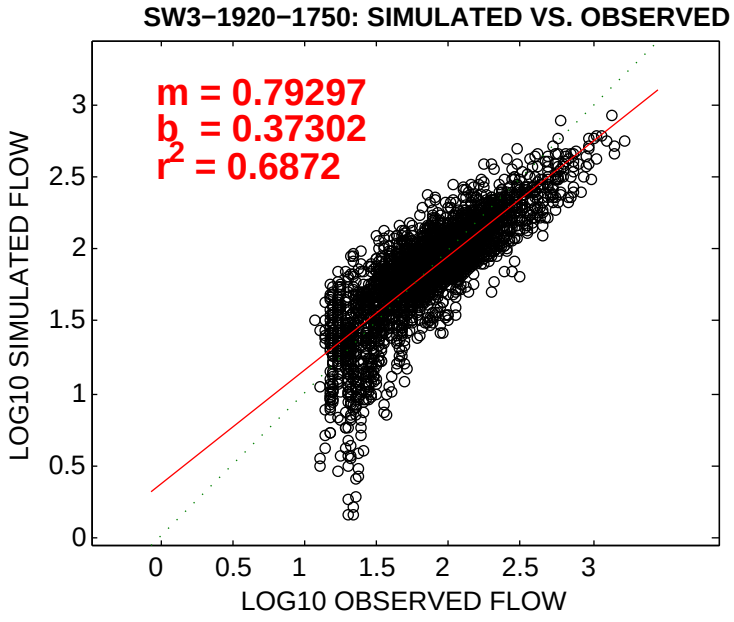


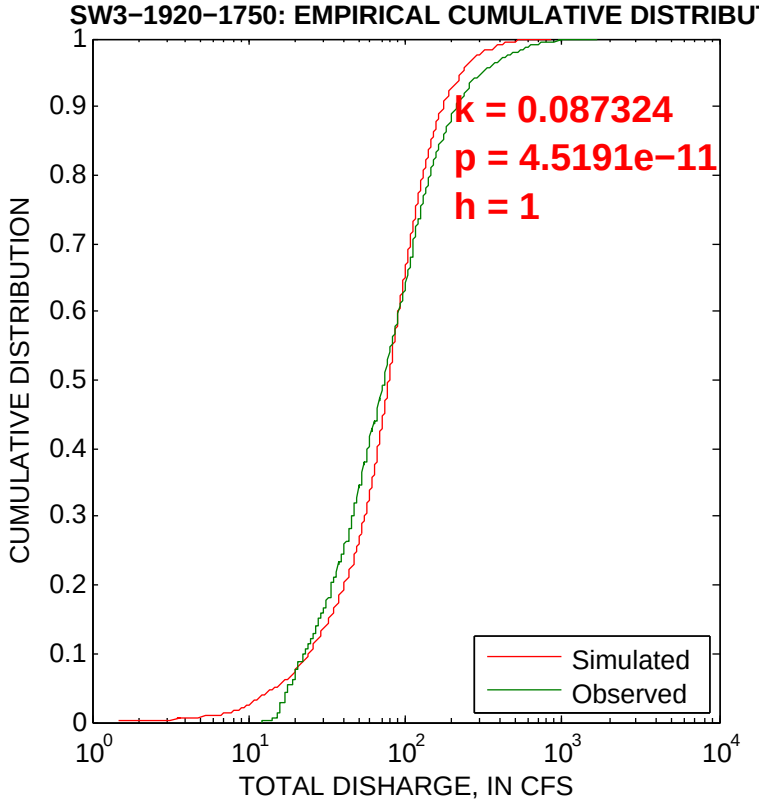












DATA SELECTION

scenario	file
P620171001WQ	FLOW.calib

plot: FLOW - total discharge

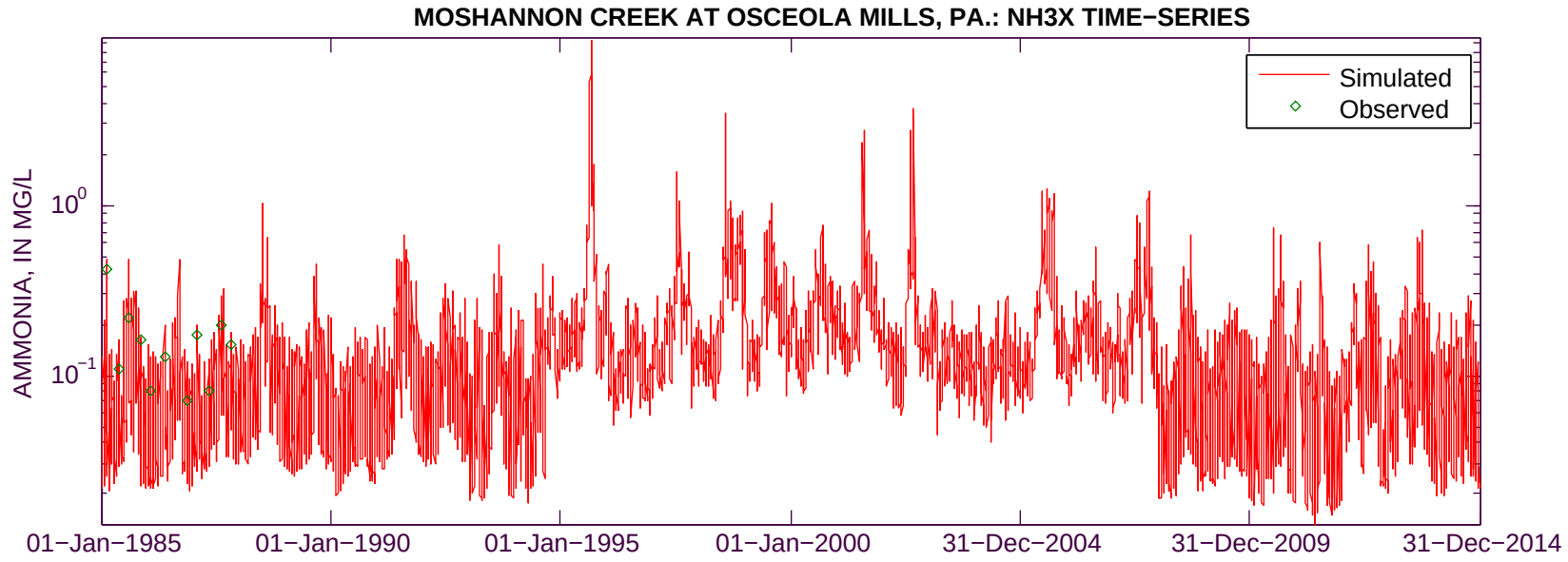
Dates: 1/1/1985 – 12/31/201

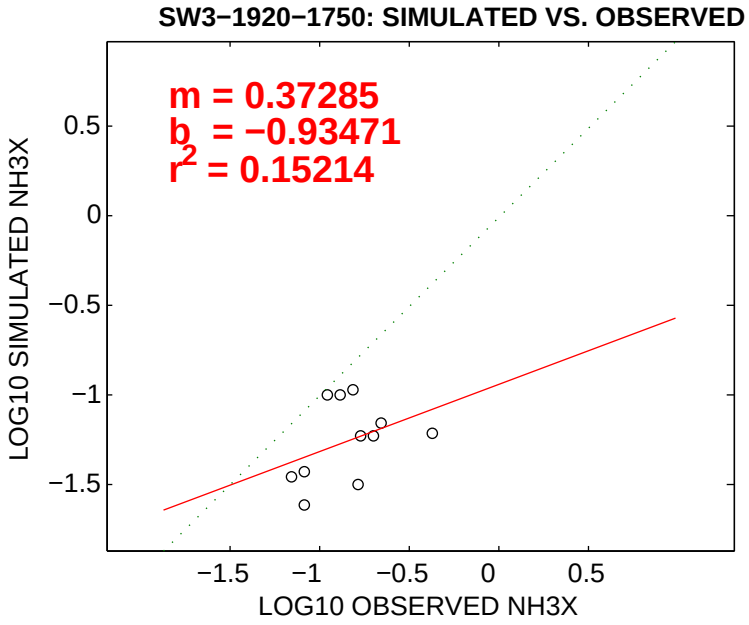
Drive	Directory	Observed
N/A	model	OBS20161101

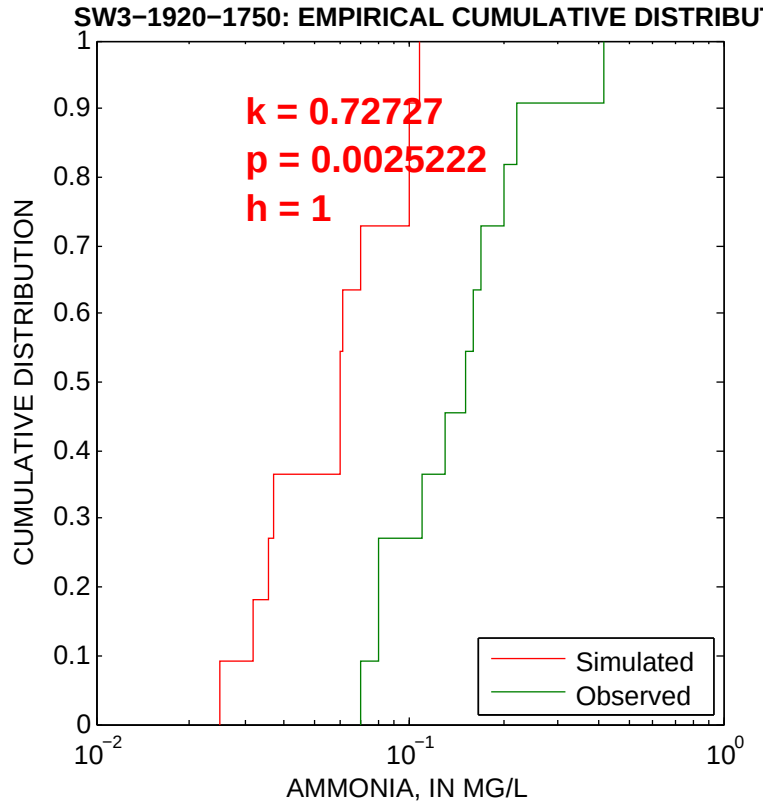
STATISTICS

	observe	simulate
n	3195	3195
min	12	1.4379
	1.07918	0.157729
mean	108.57	94.6184
	1.86585	1.85258
media	74	78.702
	1.86923	1.89599
max	1670	845.1
	3.22272	2.92691
varian	16236.5	5731.25
	0.136848	0.125218
JB	0.001	0.001
	0.001	0.001
	ra	log
%	-12.85	-0.711135
err.va	5857.64	0.04521
rel.std.err	0.36077	0.330367
mod.eff	0.63923	0.669633

VERSION 2.1







DATA SELECTION

scenario	file
P620171001WQ	NH3X.calib

plot: NH3X - ammonia

Dates: 1/1/1985 – 12/31/201

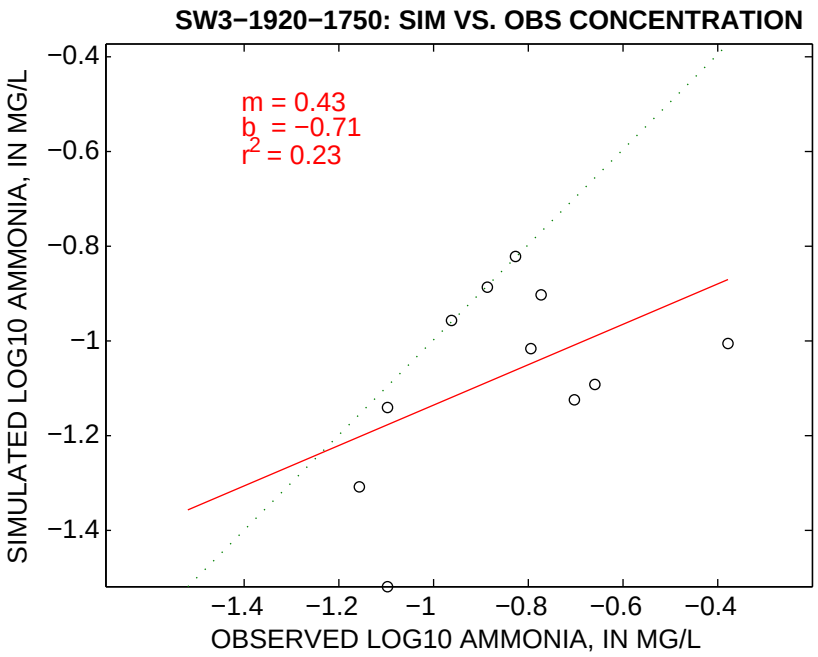
Drive	Directory	Observed
N/A	model	OBS20161101

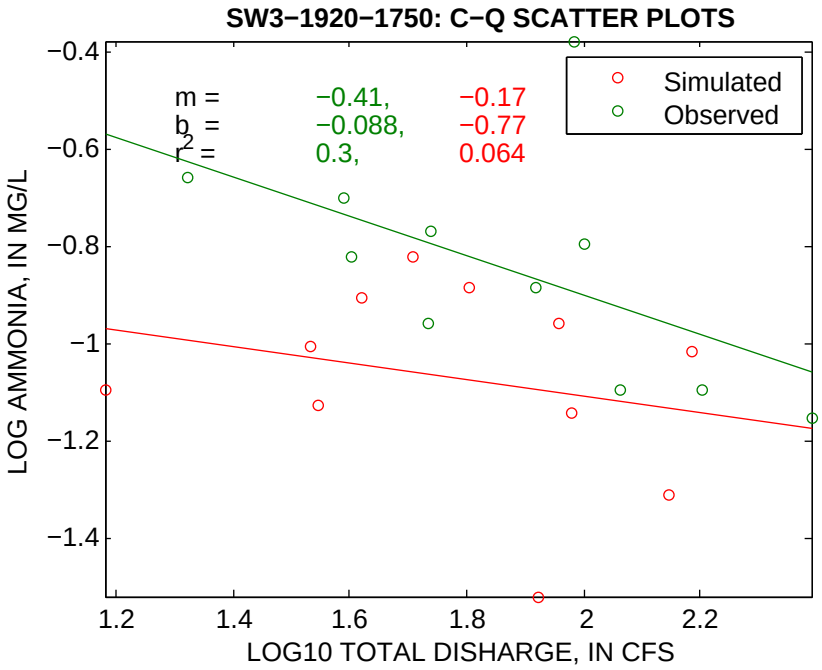
STATISTICS

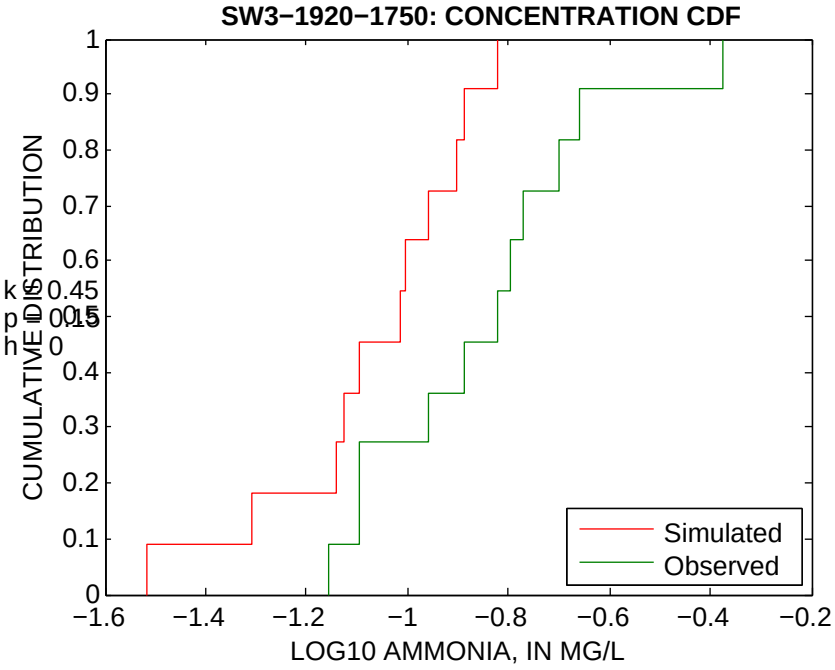
	n	11	11
		observe	simulate
min		0.07	0.024809
		-1.1549	-1.60539
mean		0.162727	0.0626545
		-0.846911	-1.25048
media		0.15	0.060084
		-0.823909	-1.22124
max		0.42	0.10795
		-0.376751	-0.966777
varian		0.00972182	0.00086875
		0.0521768	0.0476743
JB		0.006515	0.355359
		0.5	0.472425
		ra	log
%		-61.4972	47.6521
err.va		0.0207793	0.2401
rel.std.err		2.13739	4.60165
mod.eff		-1.13739	-3.60165

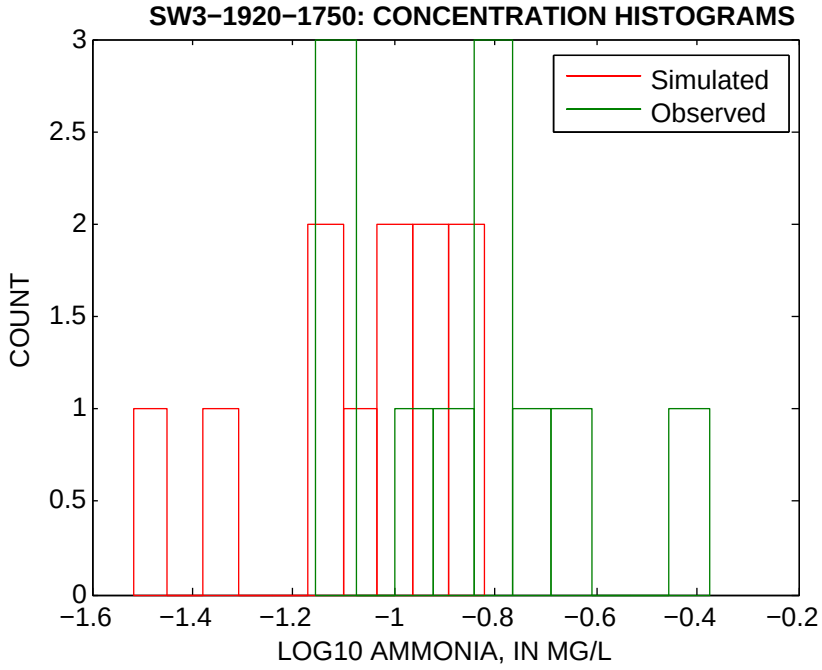
VERSION 2.1

ALL DATA
LOG10

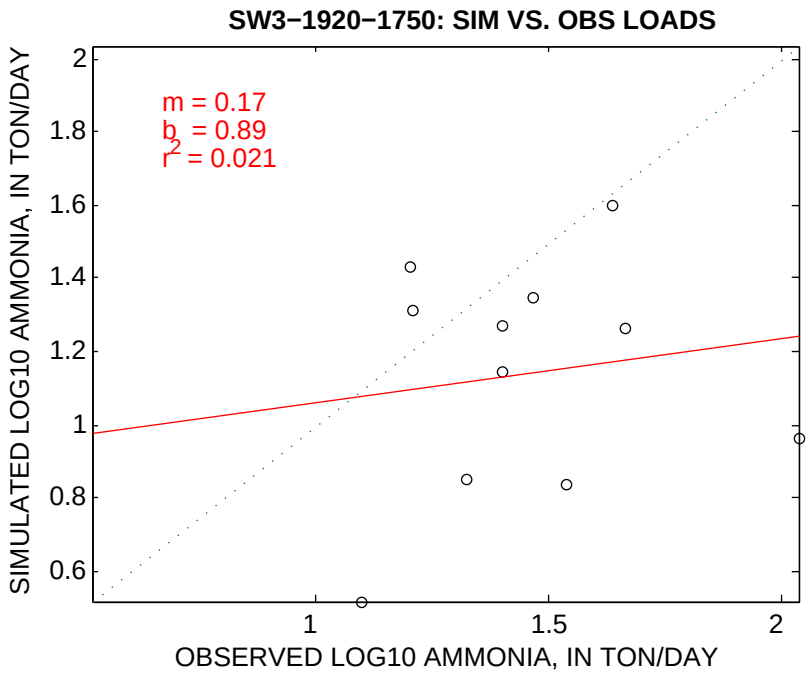


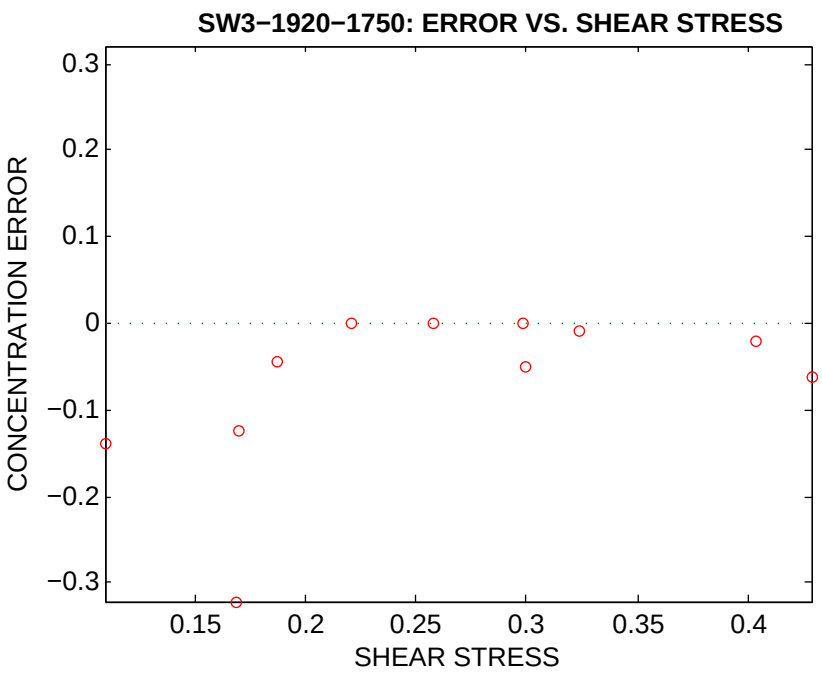


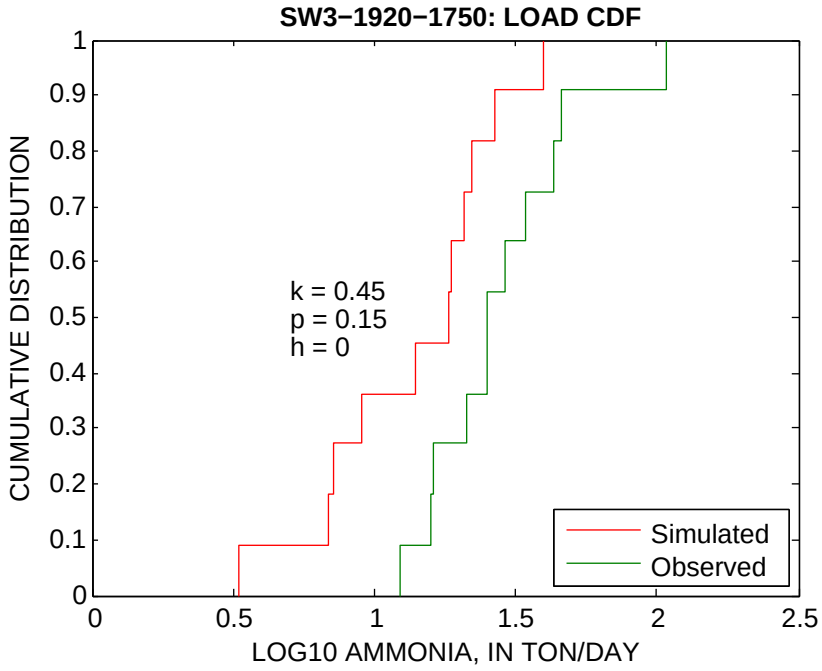


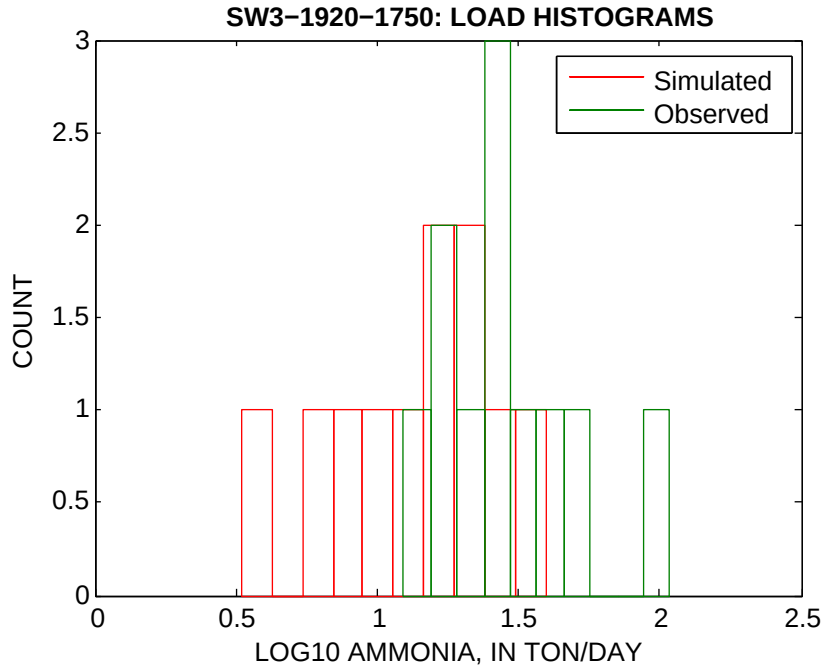


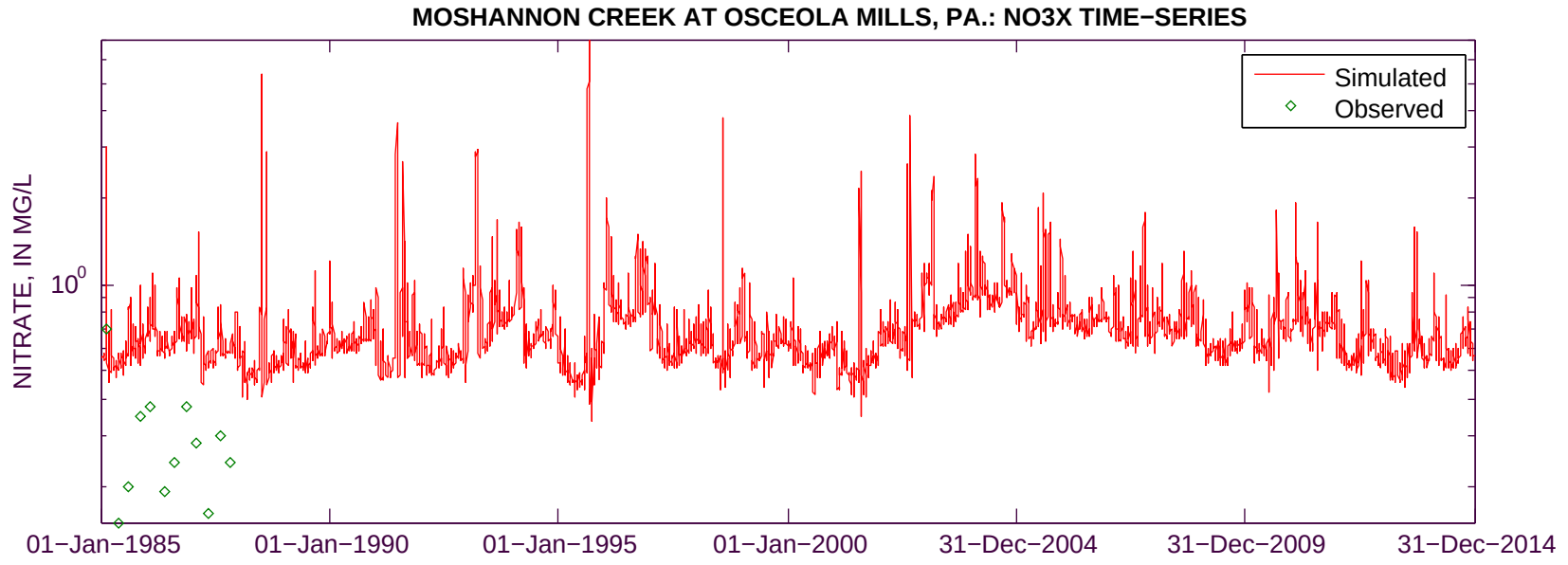
LOAD DATA
LOG10

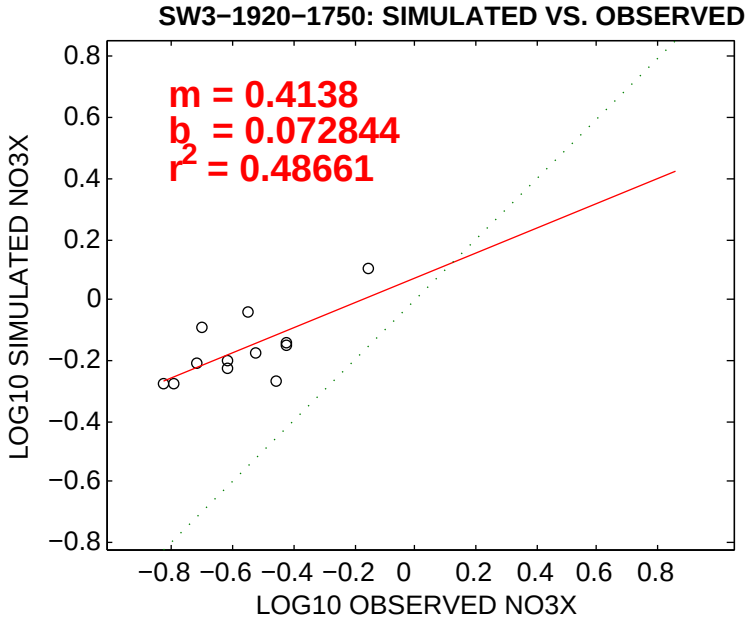


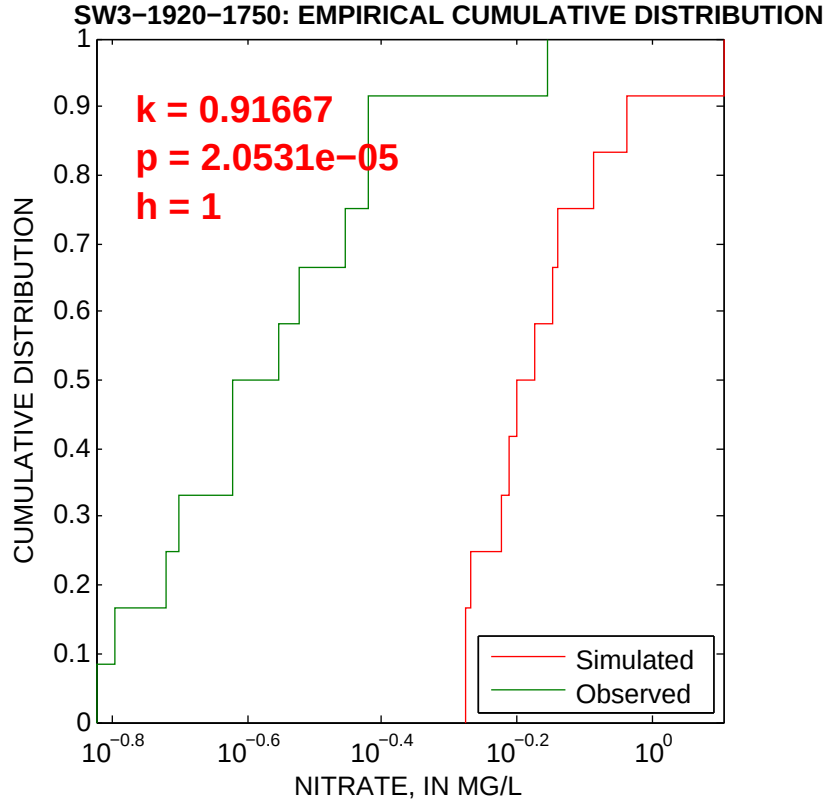












DATA SELECTION

scenario	file
P620171001WQ	NO3X.calib

plot: NO3X - nitrate

Dates: 1/1/1985 – 12/31/201

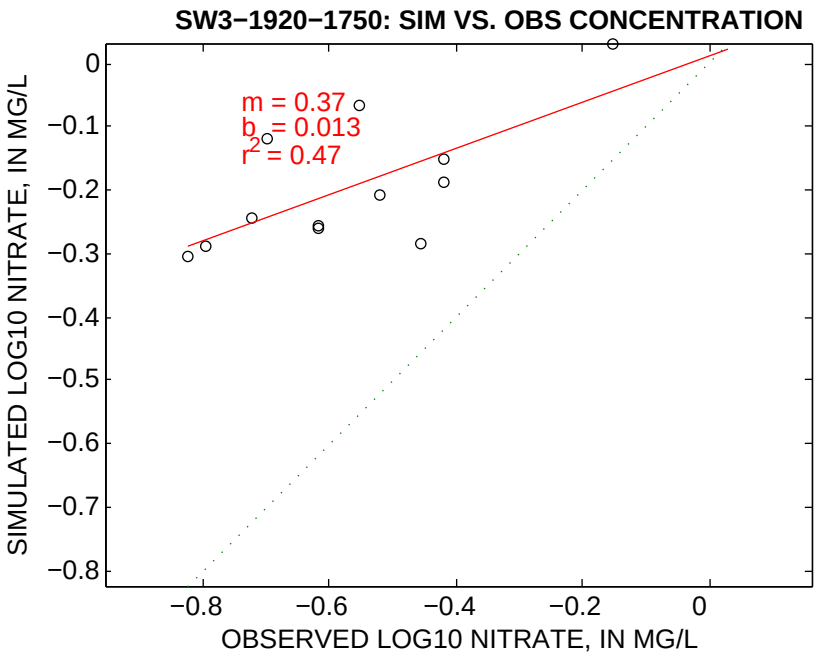
Drive	Directory	Observed
N/A	model	OBS20161101

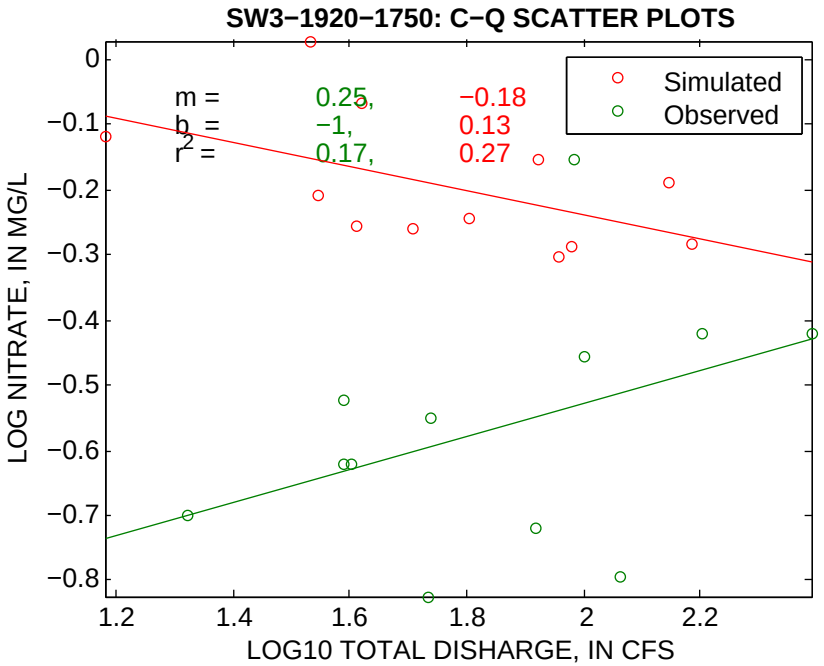
STATISTICS

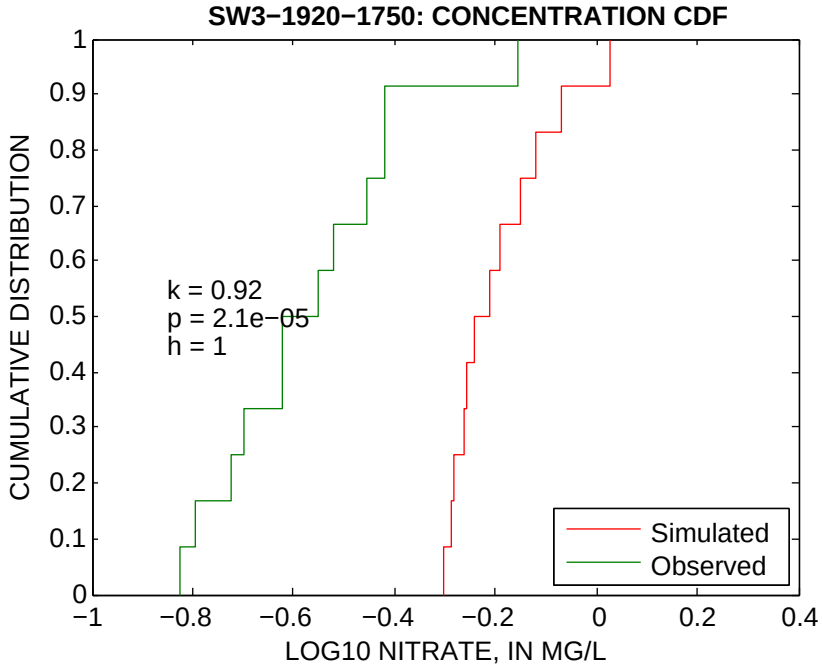
	n	12	12
		observe	simulate
min		0.15	0.53069
		-0.823909	-0.275159
mean		0.2975	0.712258
		-0.567214	-0.16187
media		0.26	0.649045
		-0.586315	-0.187896
max		0.7	1.2719
		-0.154902	0.104453
varian		0.0224568	0.0450186
		0.035688	0.0125582
JB		0.006515	0.008262
		0.5	0.054457
		ra	log
%		139.415	-71.4623
err.va		0.204822	0.197952
rel.std.err		9.12069	5.54673
mod.eff		-8.12069	-4.54673

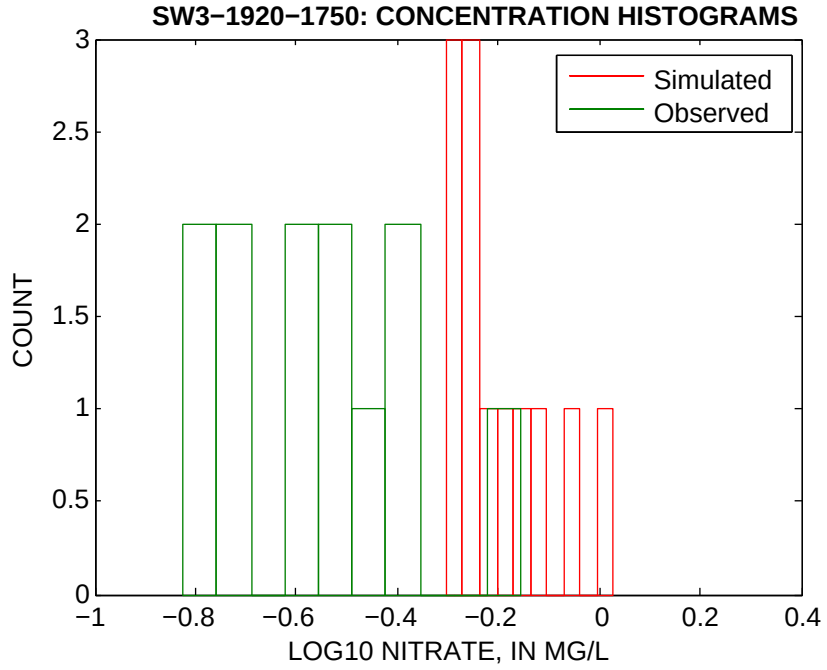
VERSION

ALL DATA
LOG10

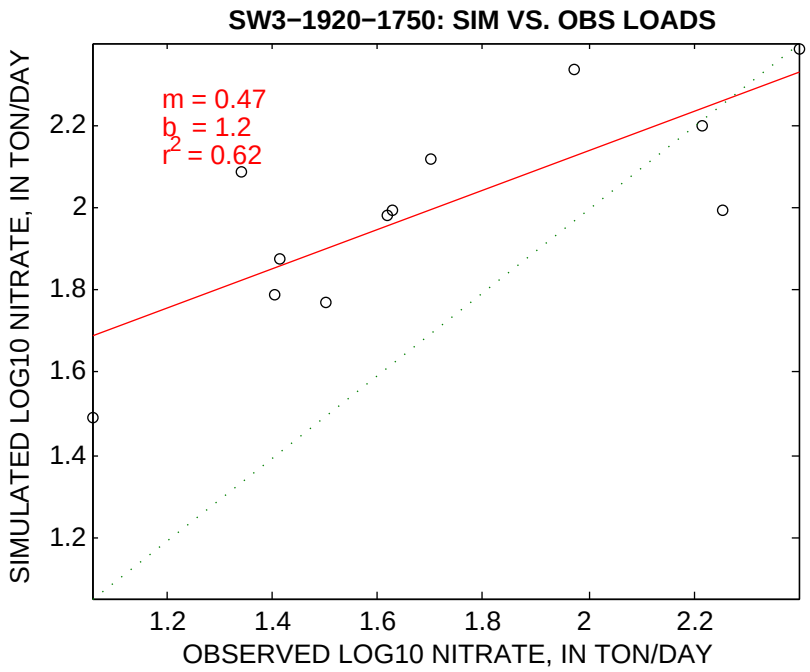


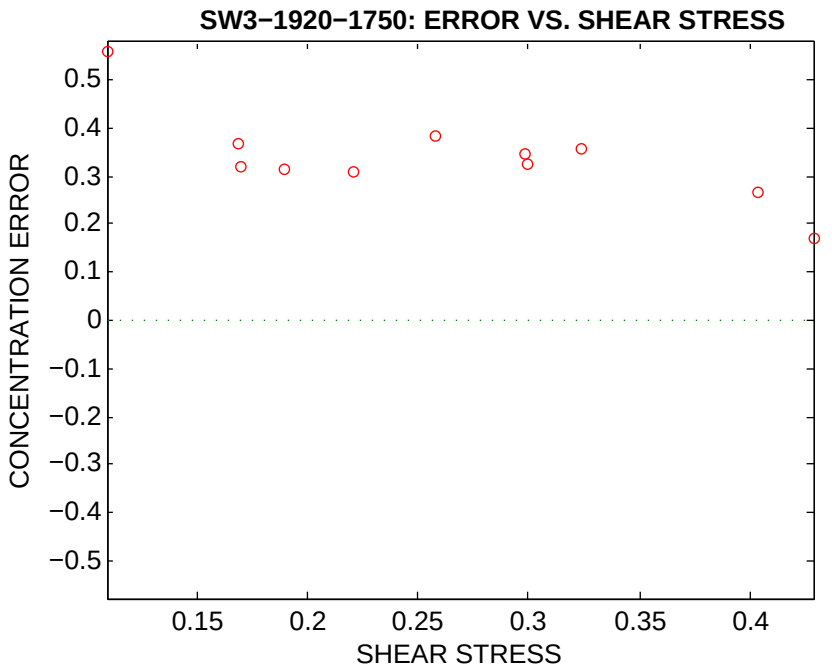


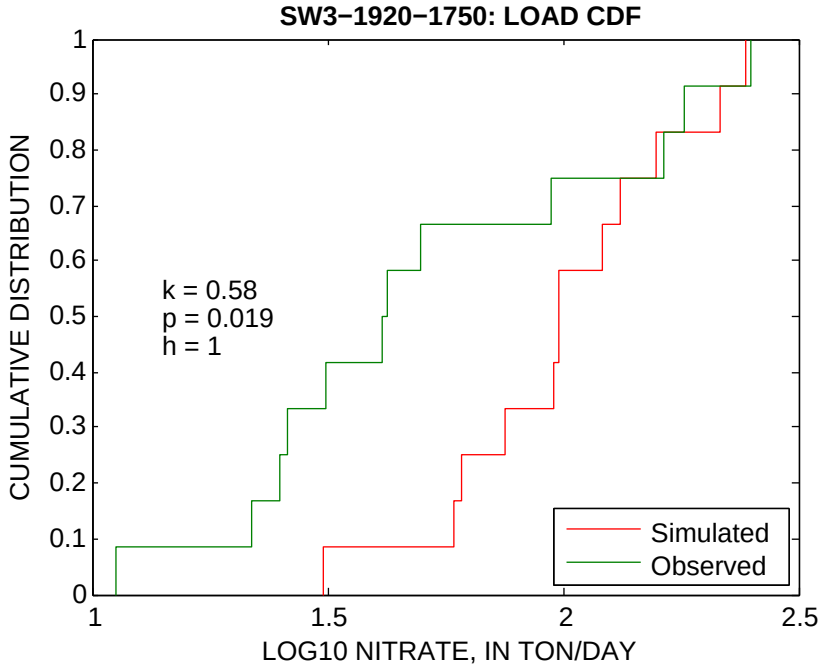


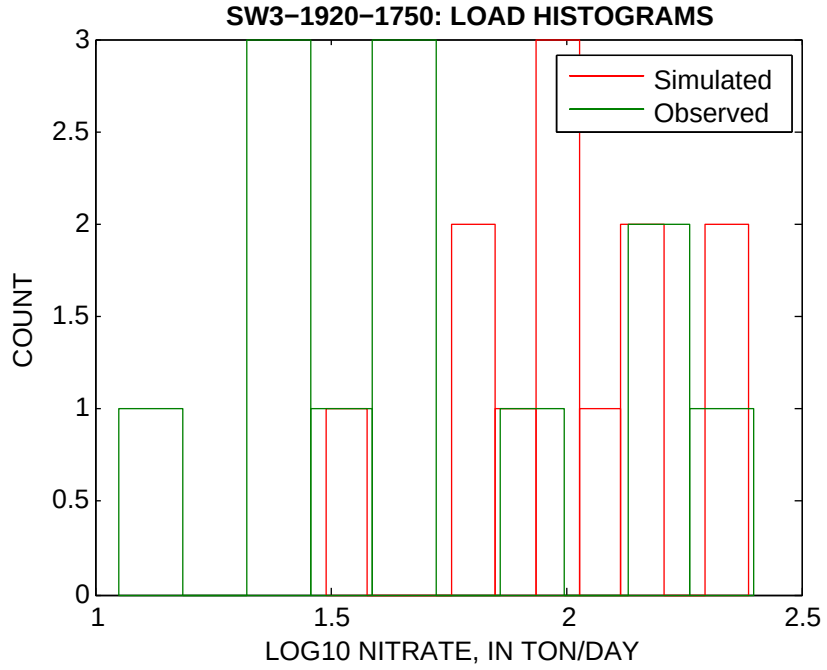


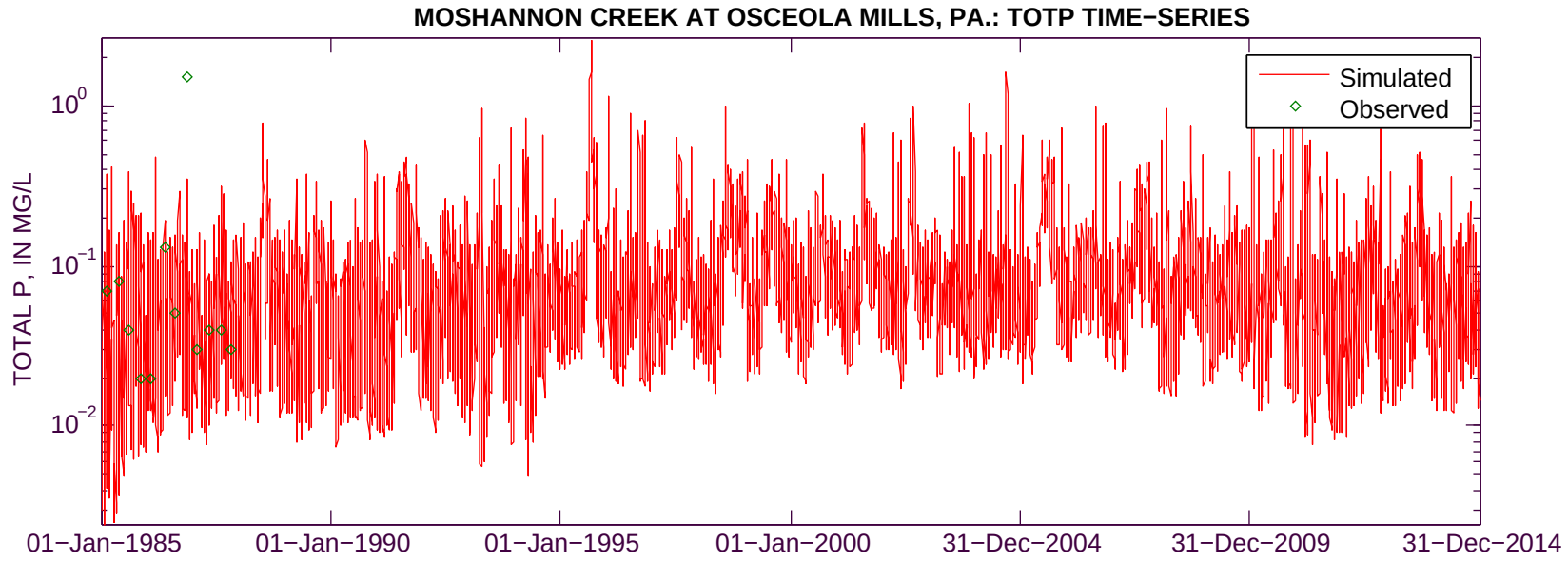
LOAD DATA
LOG10

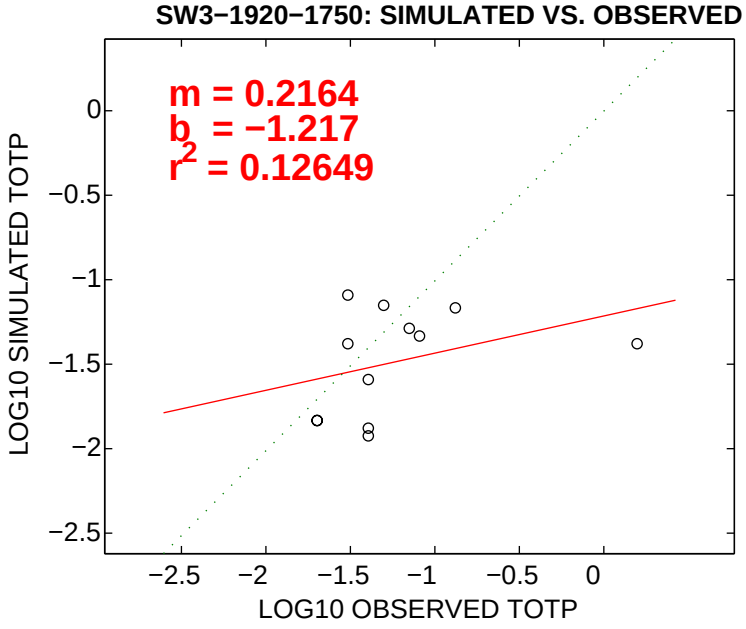


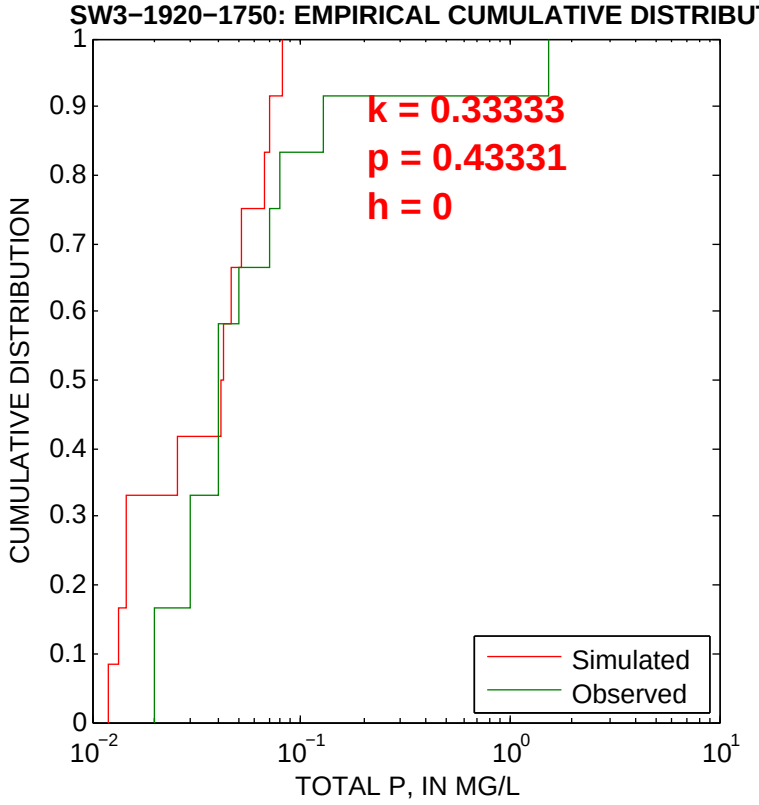












DATA SELECTION

scenario	file
P620171001WQ	TOTP.calib

plot: TOTP - total phosphorus

Dates: 1/1/1985 – 12/31/201

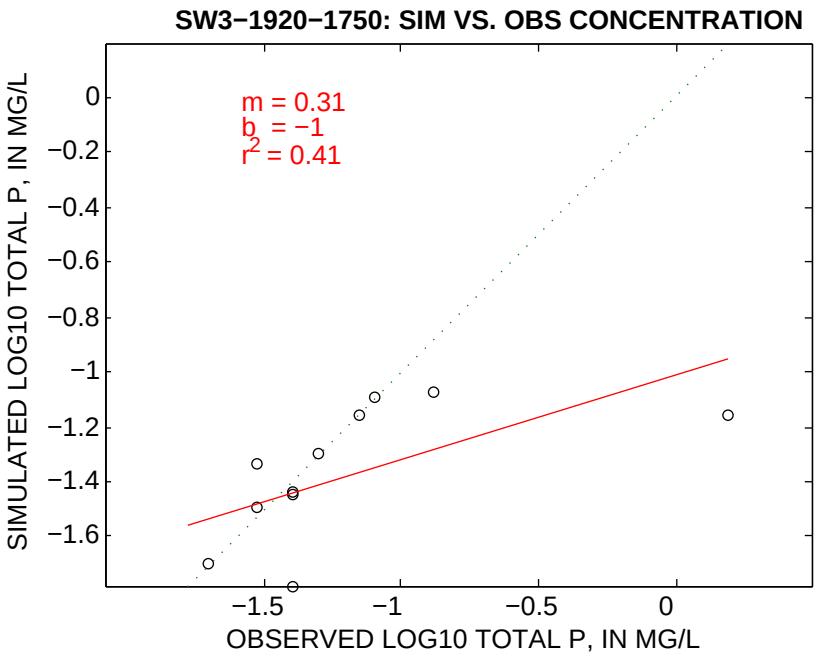
Drive	Directory	Observed
N/A	model	OBS20161101

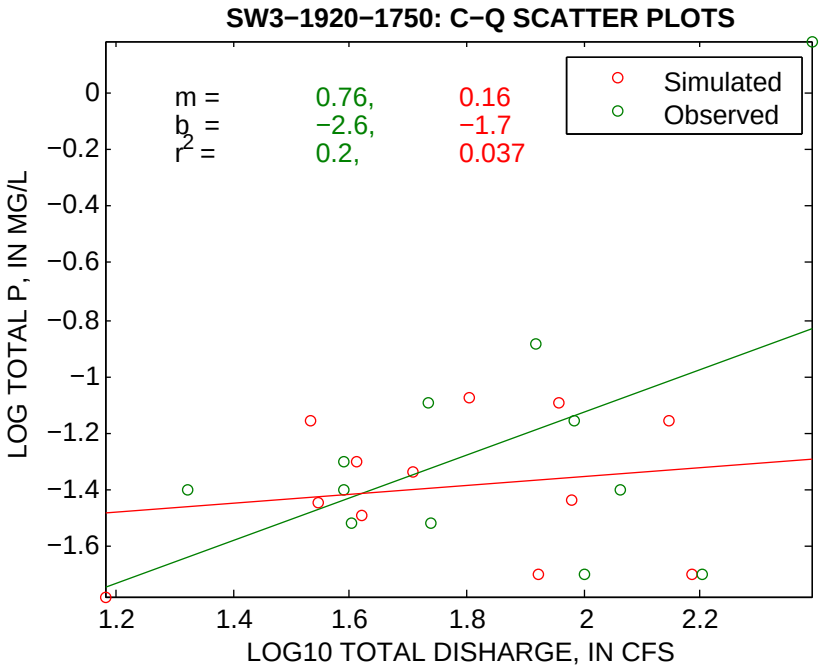
STATISTICS

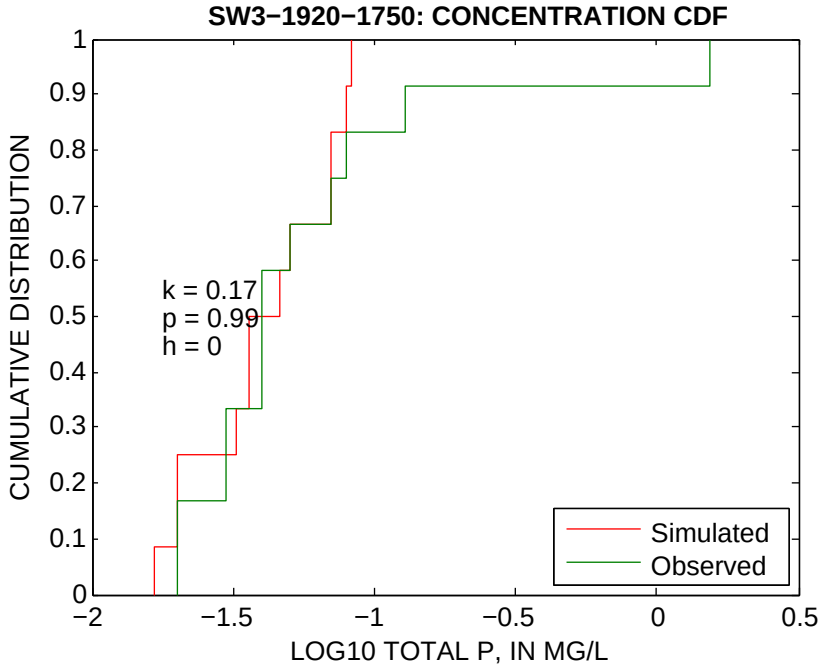
	n	12	12
		observe	simulate
min		0.02	0.011995
		-1.69897	-1.921
mean		0.174167	0.0402888
		-1.24074	-1.4855
media		0.04	0.042195
		-1.39794	-1.37474
max		1.54	0.081239
		0.187521	-1.09024
varian		0.185972	0.00060071
		0.259155	0.0959404
JB		0.001	0.362149
		0.001592	0.190107
		ra	log
% err.va		-76.8677	19.7271
rel.std.err		1.10135	1.18959
mod.eff		-0.101349	-0.189592

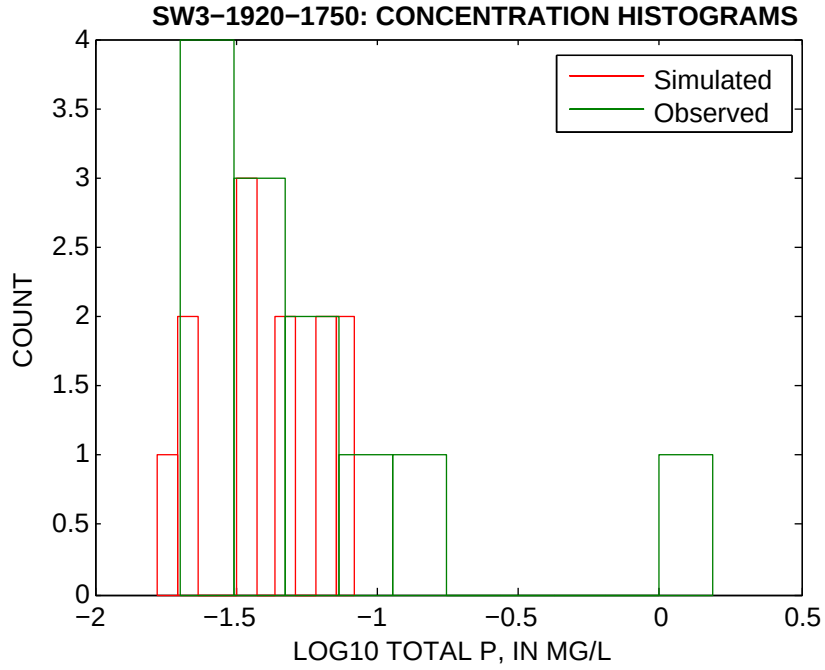
VERSION

ALL DATA
LOG10

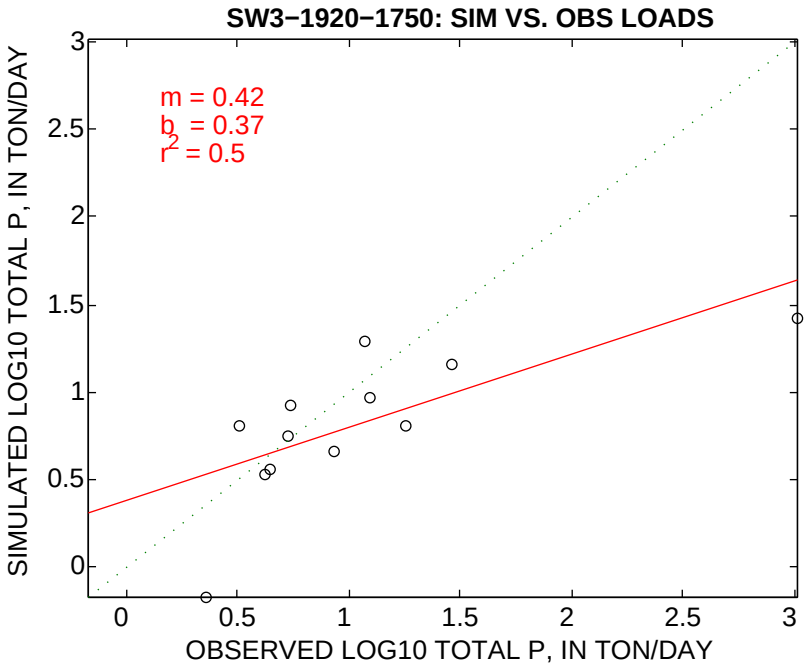




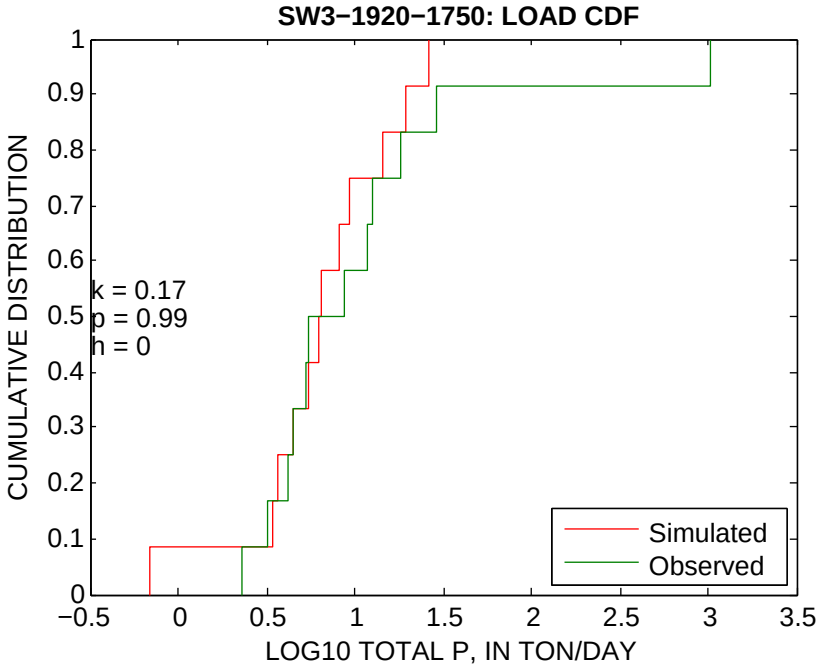


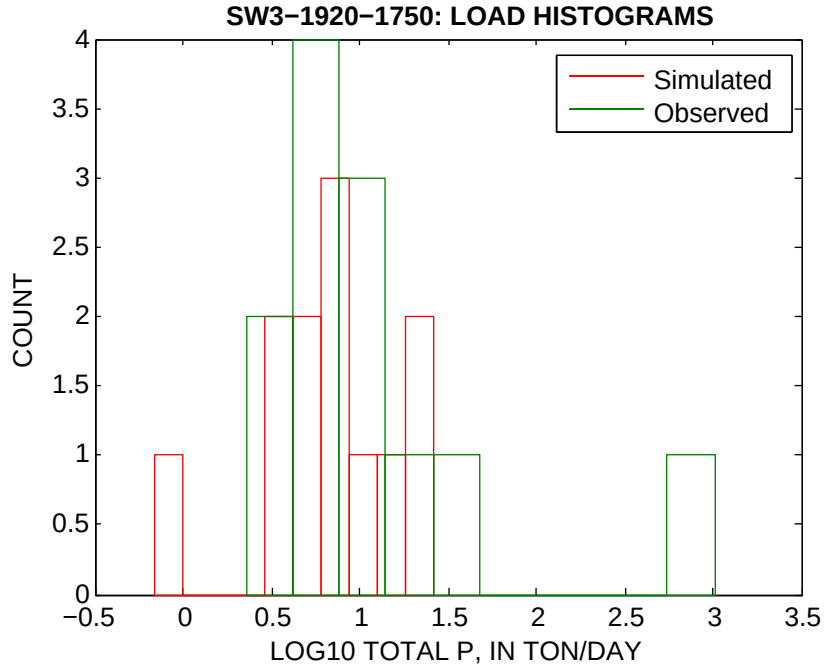


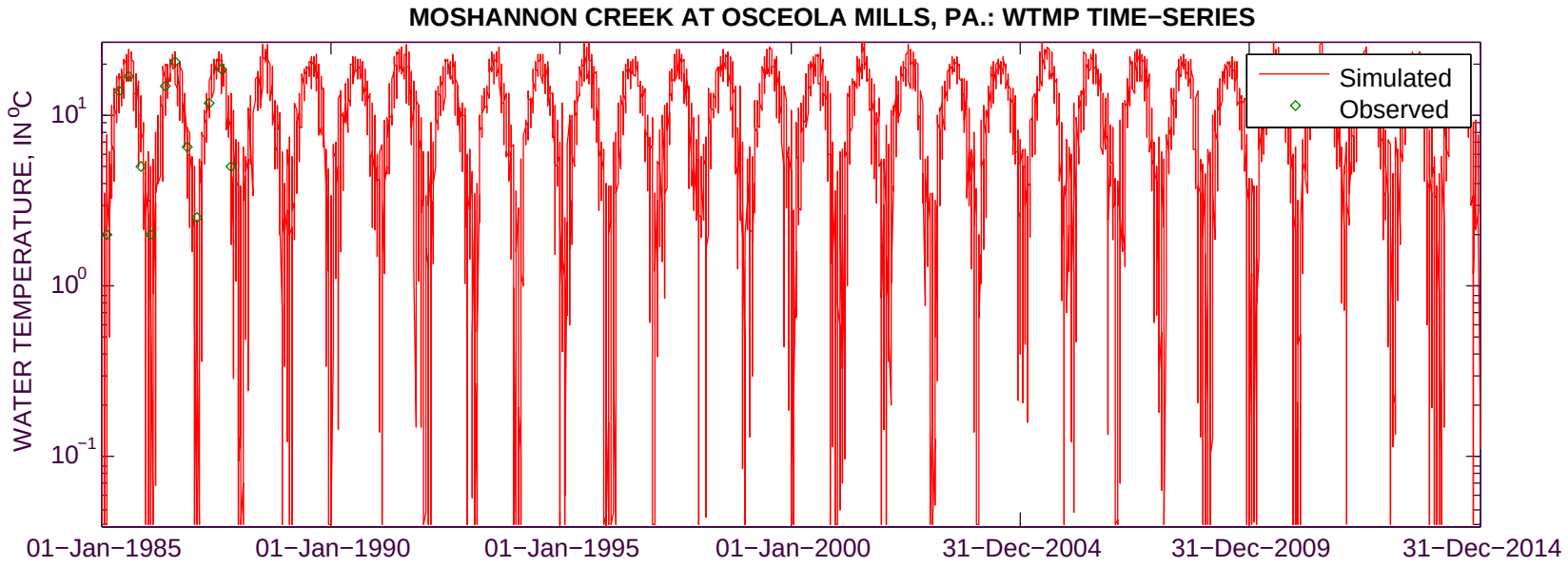
LOAD DATA
LOG10

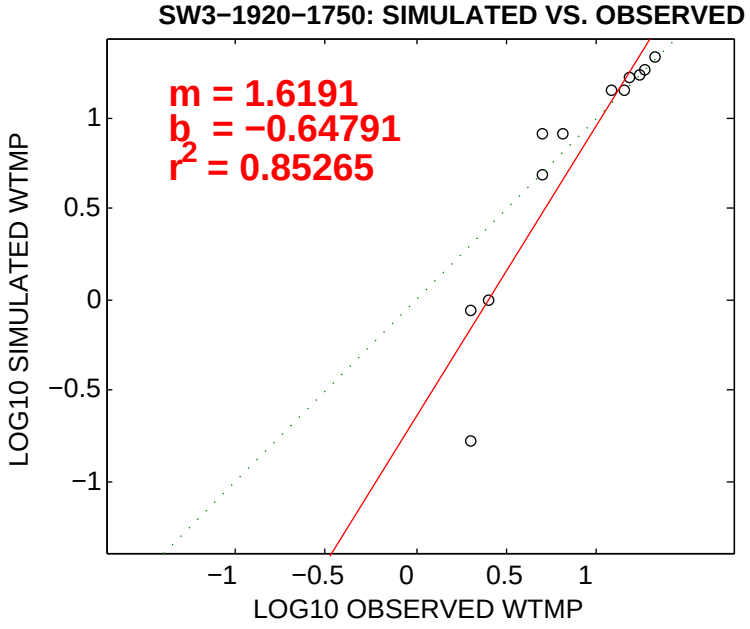


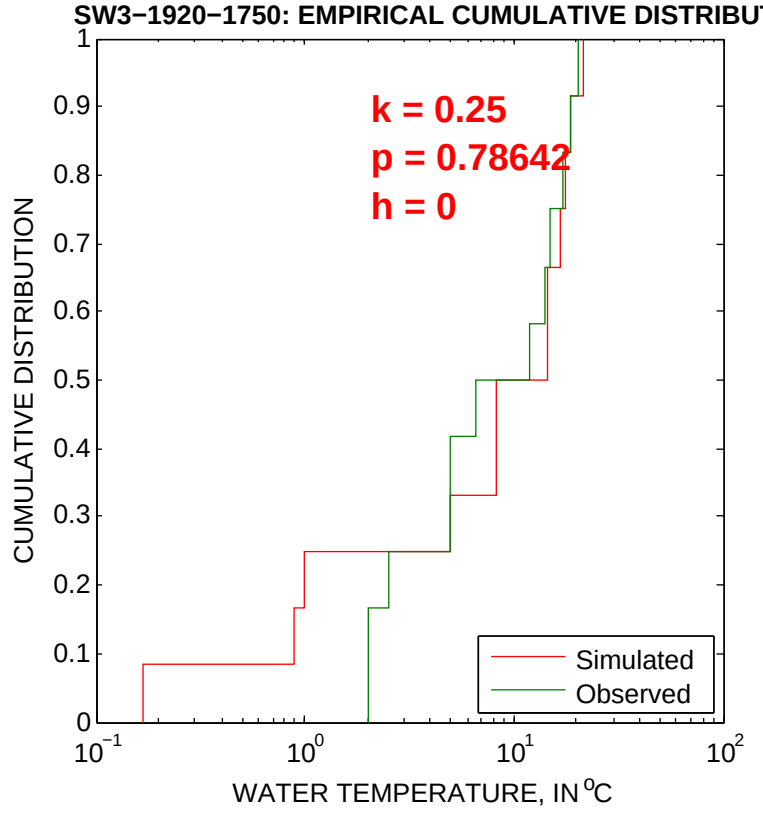












DATA SELECTION

scenario	file
P620171001WQ	WTMP.calib

plot: WTMP - water tempera...

Dates 1/1/1985 12/31/201

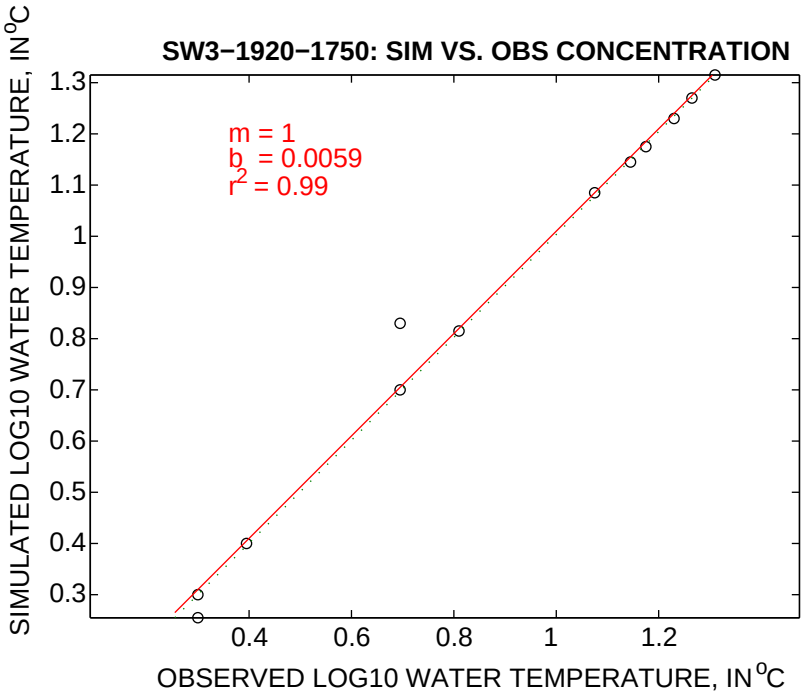
Drive	Directory	Observed
N/A	model	OBS20161101

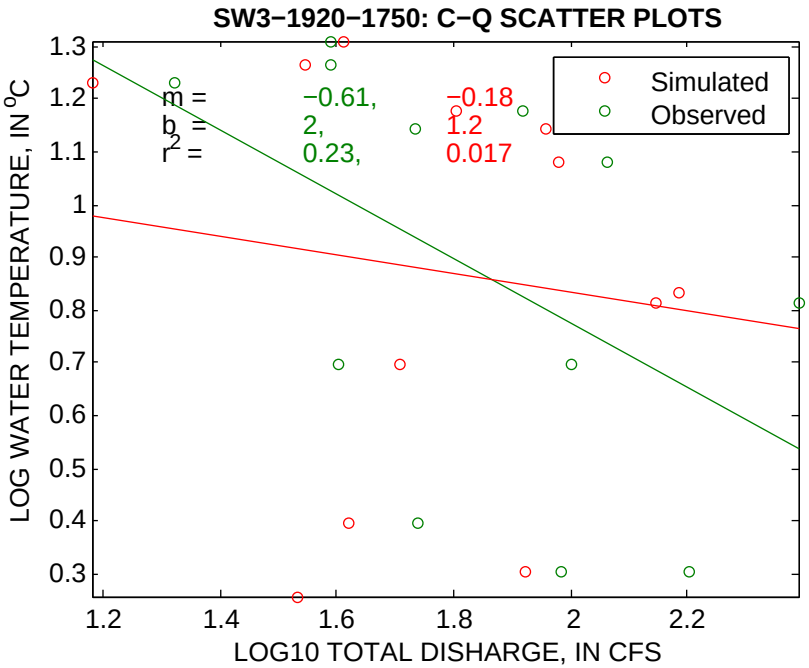
STATISTICS

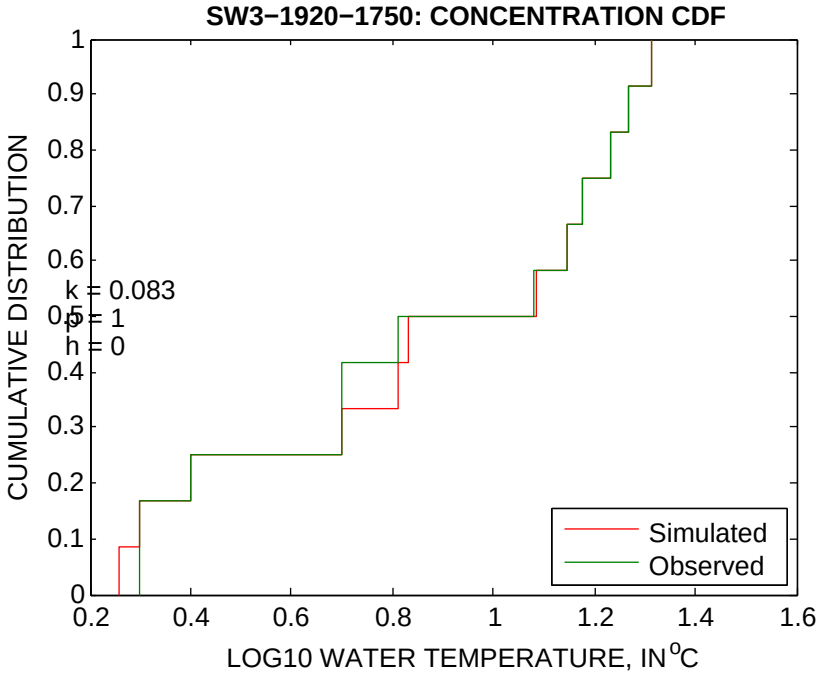
	n	12	12
		observe	simulate
min		2	0.16886
		0.30103	-0.772473
mean		10	10.5922
		0.868469	0.758232
media		9.25	11.3945
		0.946047	1.04072
max		20.5	21.752
		1.31175	1.3375
varian		47.5455	58.2884
		0.148049	0.455183
JB		0.201968	0.284715
		0.199279	0.049723
		ra	log
%		5.9219	-12.6933
err.va		2.92692	0.137076
rel.std.err		.0615605	0.925882
mod.eff		0.93844	0.0741177

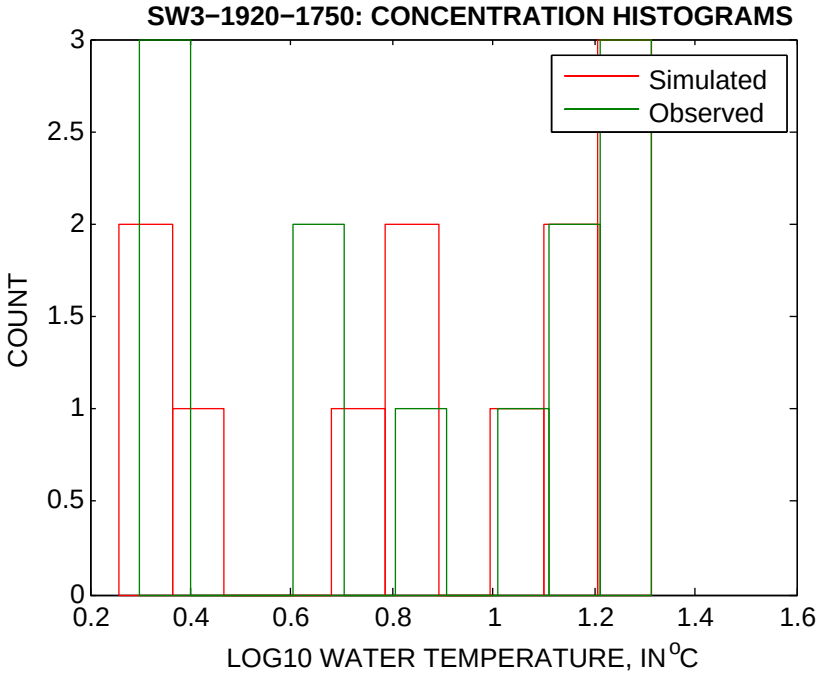
VERSION 2.1

ALL DATA
LOG10

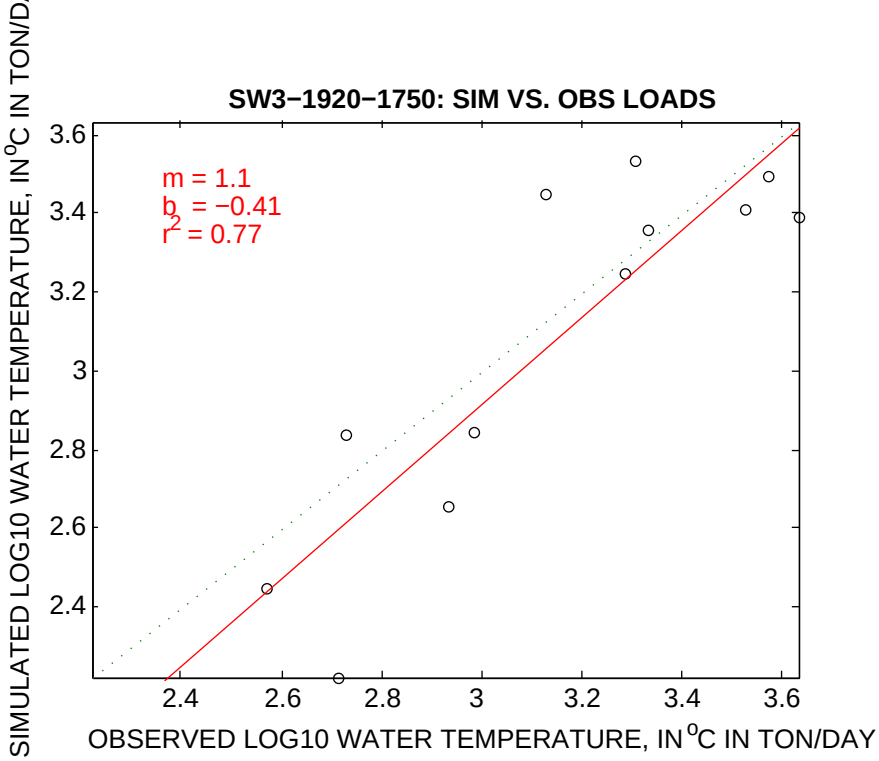


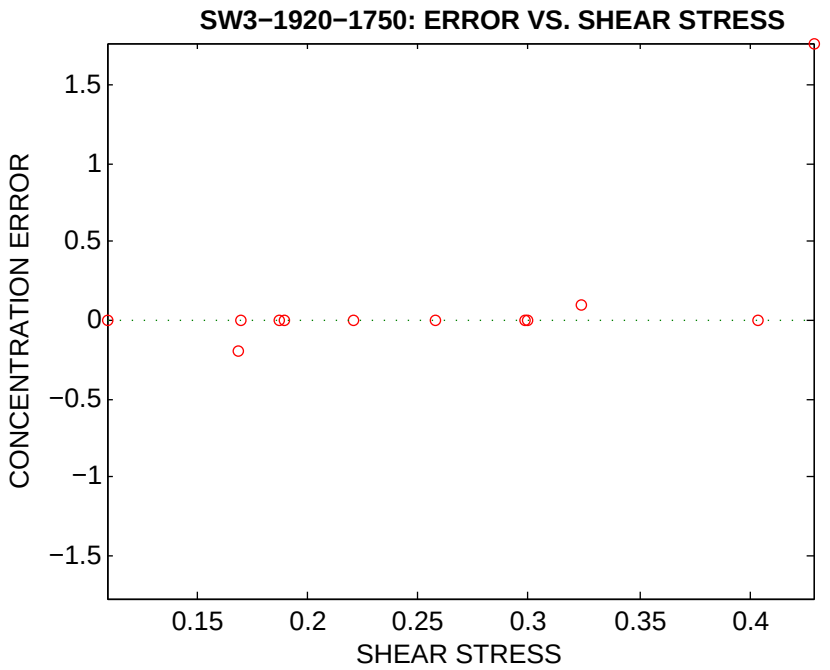


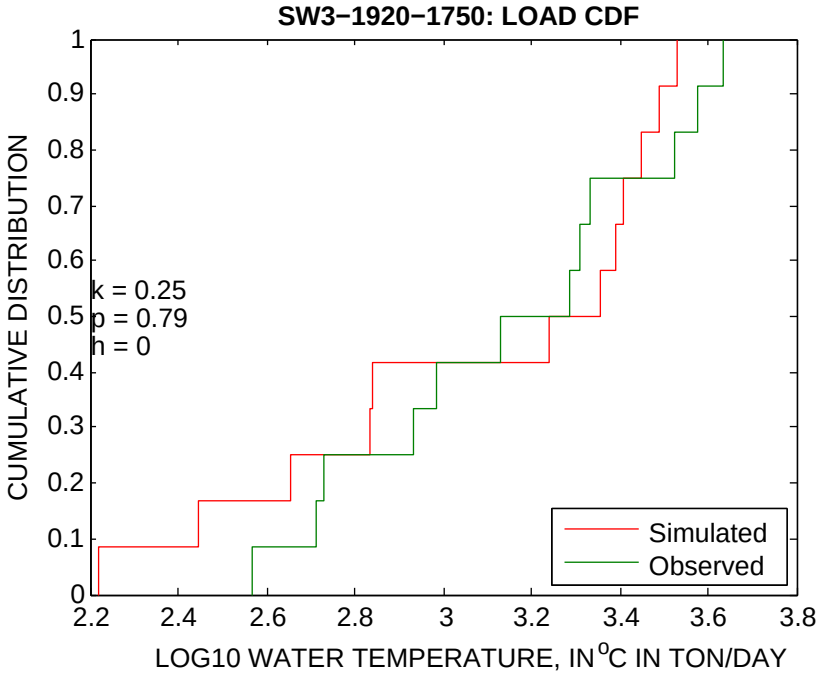


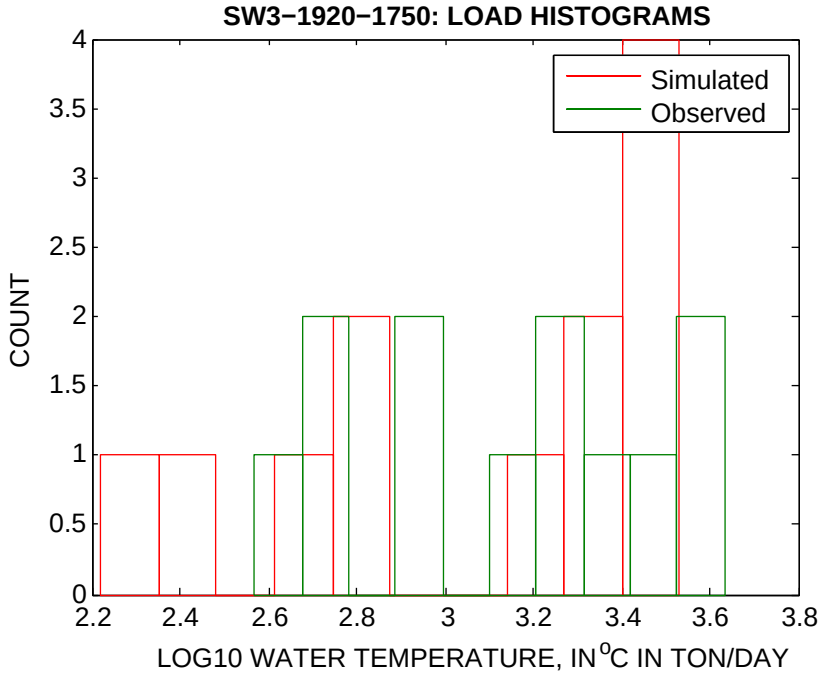


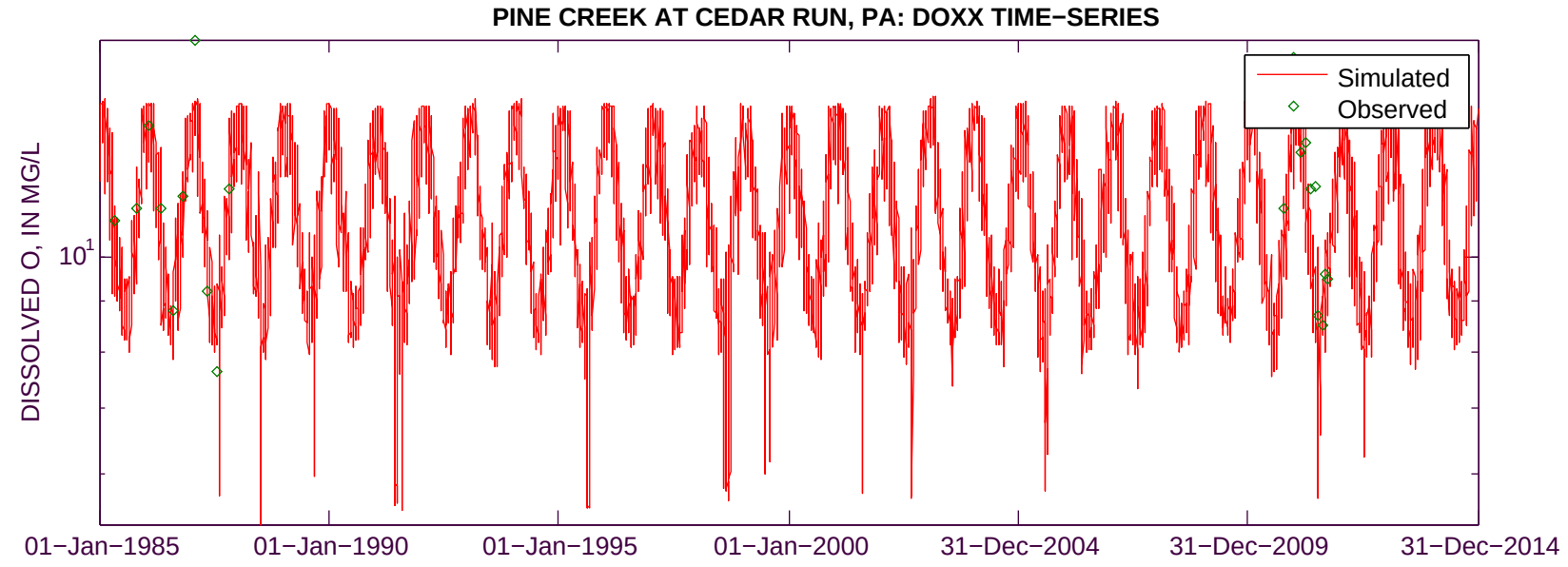
LOAD DATA
LOG10

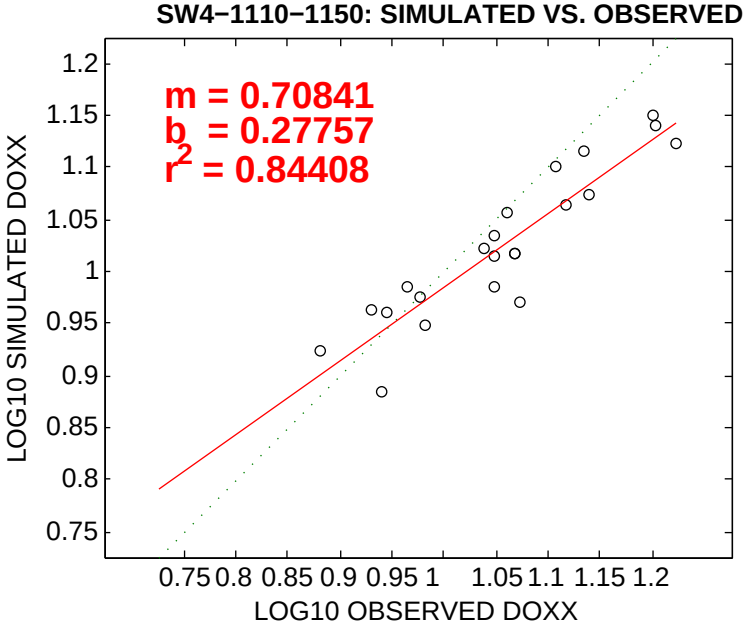


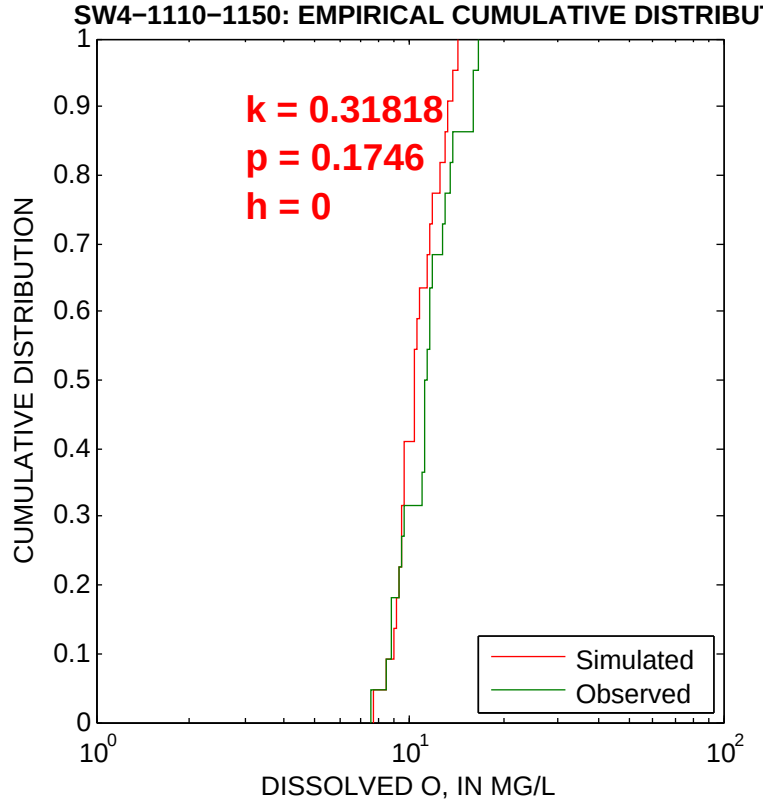












DATA SELECTION

scenario: P620171001WQ | file: DOXX.calib

plot: DOXX - dissolved oxygen

Dates: 1/1/1985 – 12/31/201

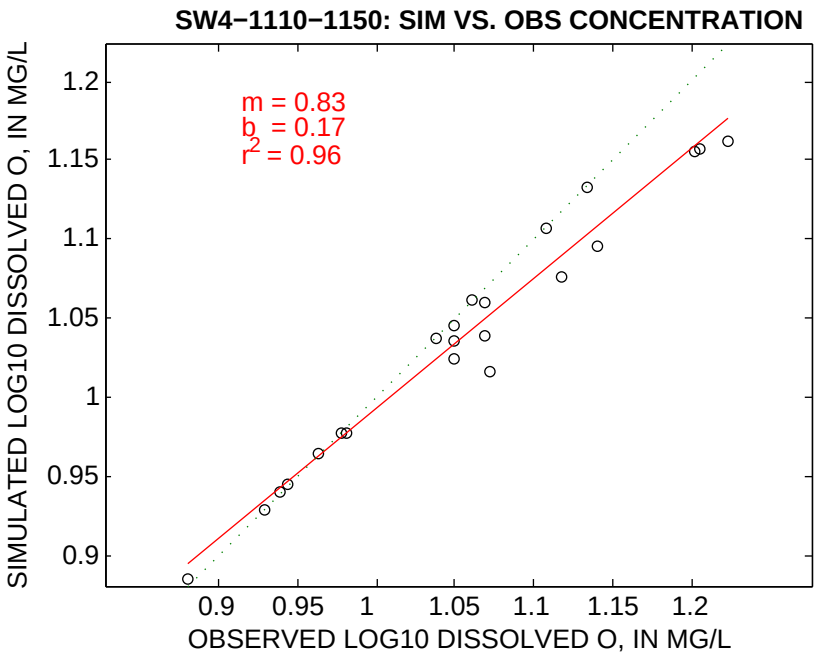
Drive: N/A | Directory: model | Observed: OBS20161101

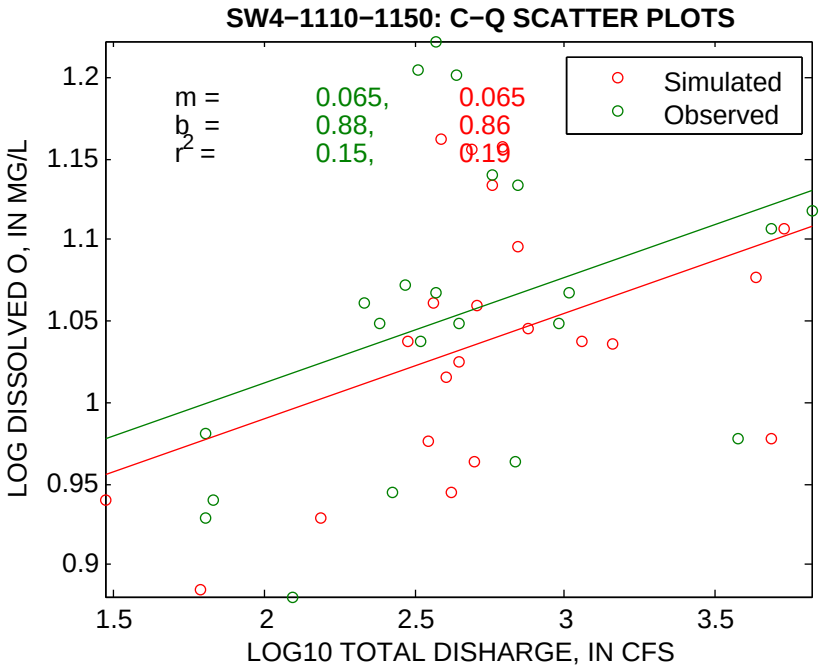
STATISTICS

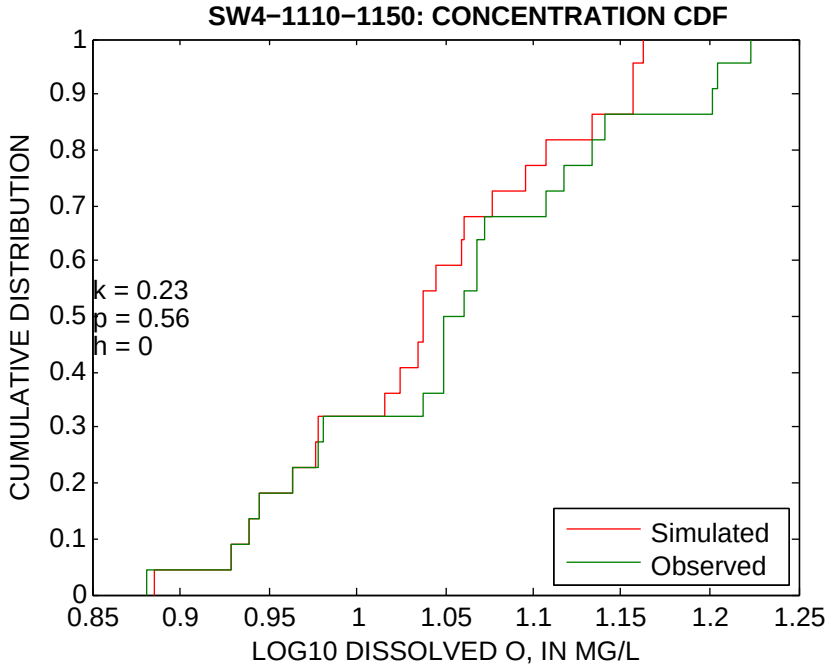
	n	22	22
		observe	simulate
min		7.6	7.6809
		0.880814	0.885412
mean		11.5897	10.7222
		1.05441	1.02452
media		11.35	10.4005
		1.05496	1.01705
max		16.7	14.162
		1.22272	1.15112
varian		6.36036	3.25253
		0.00877448	0.00521679
JB		0.402195	0.33987
		0.5	0.5
		ra	log
%		-7.48462	-2.83453
err.va		1.95784	0.00249524
rel.std.err		0.307819	0.284375
mod.eff		0.692181	0.715625

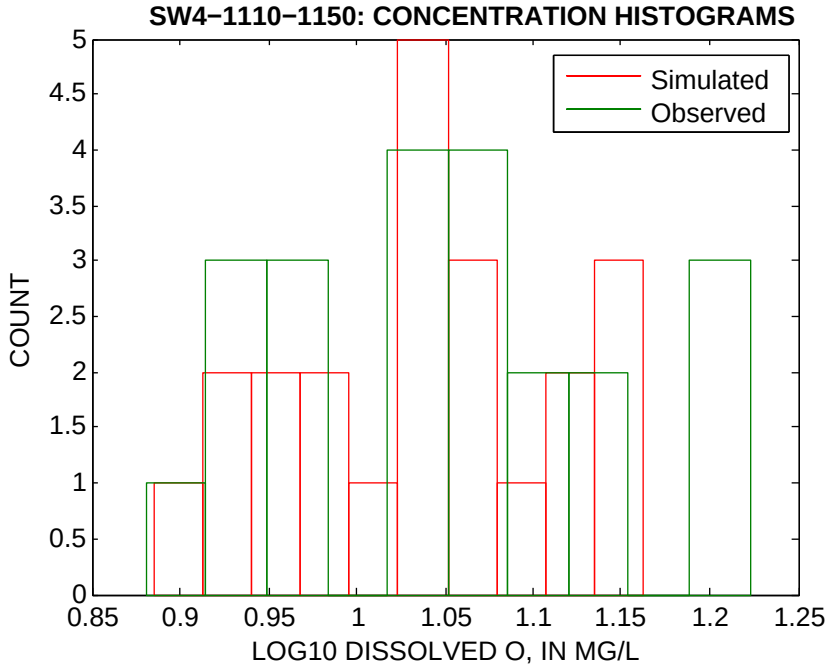
VERSION 2.1

ALL DATA
LOG10

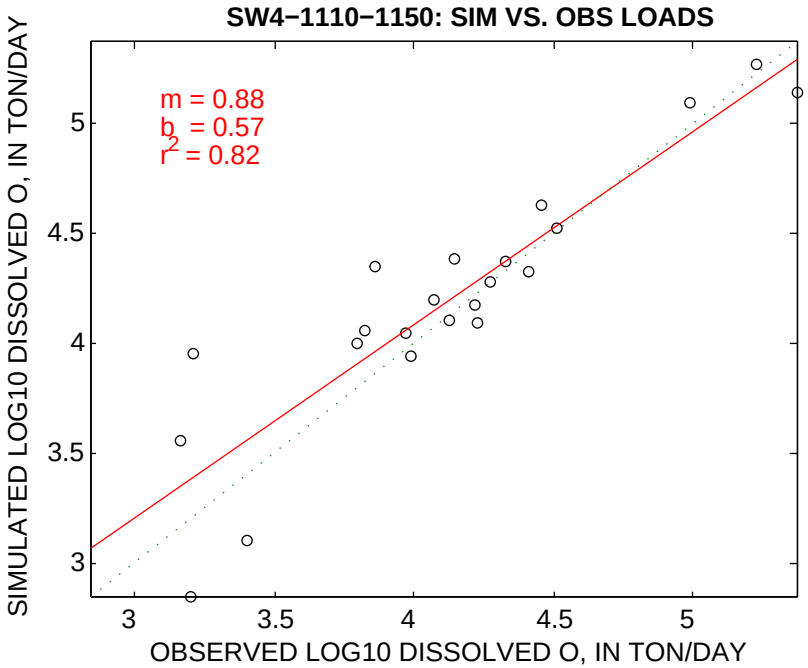


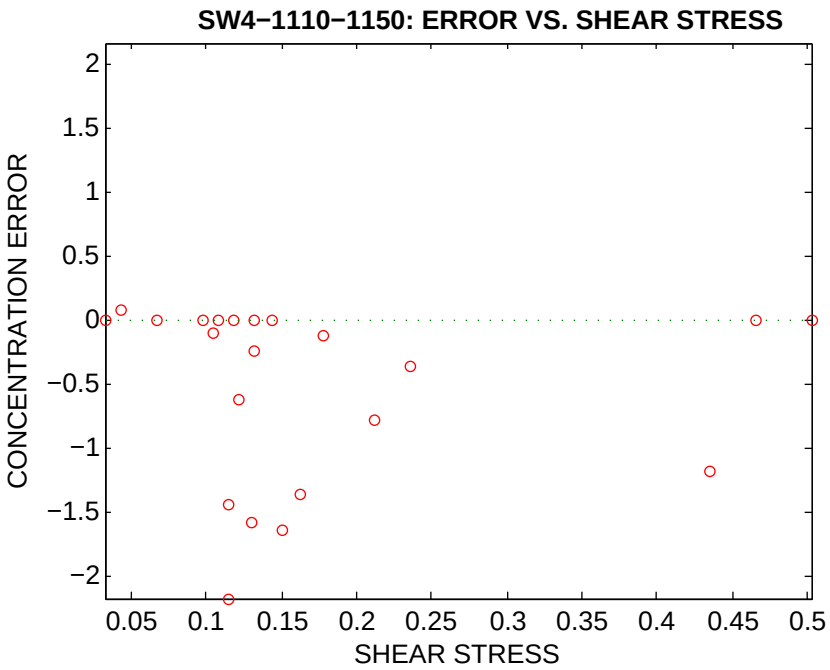


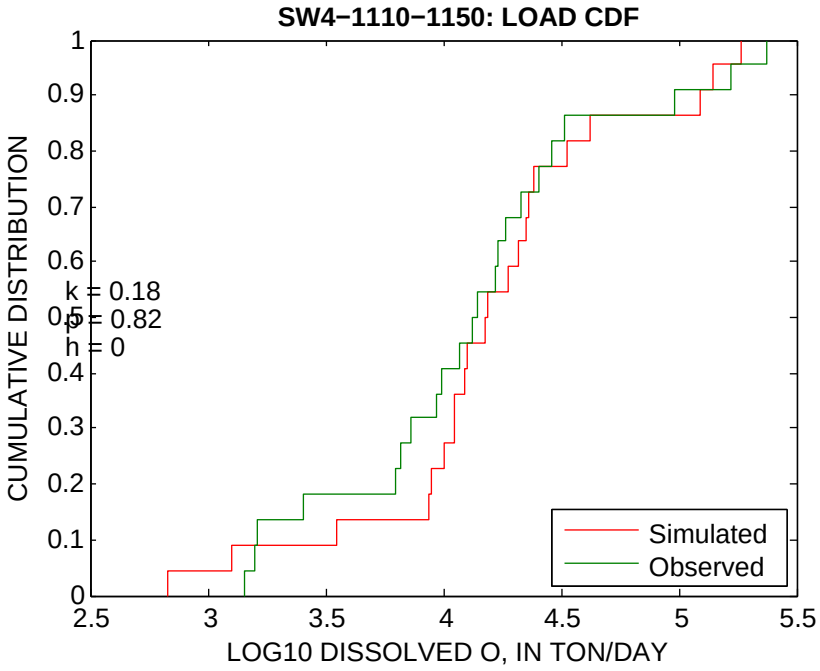


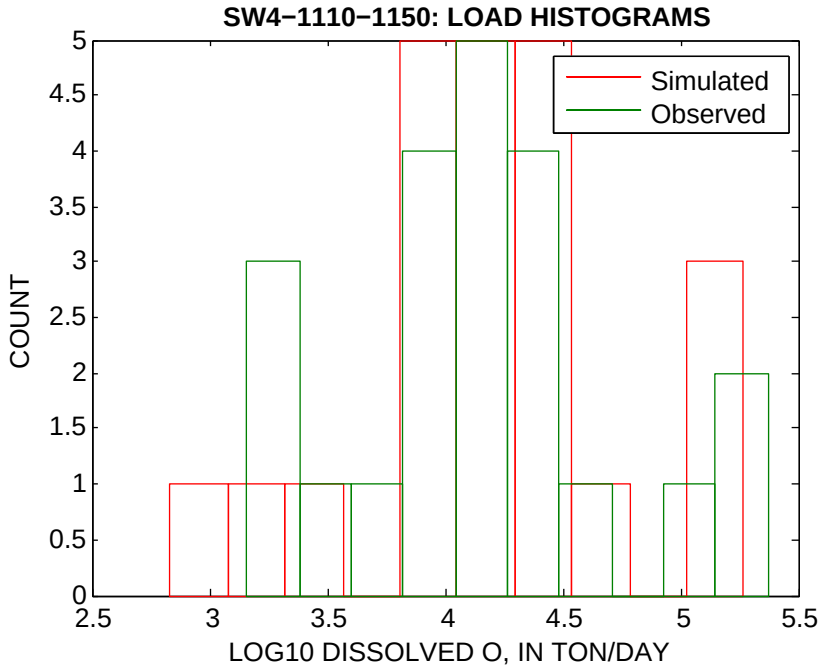


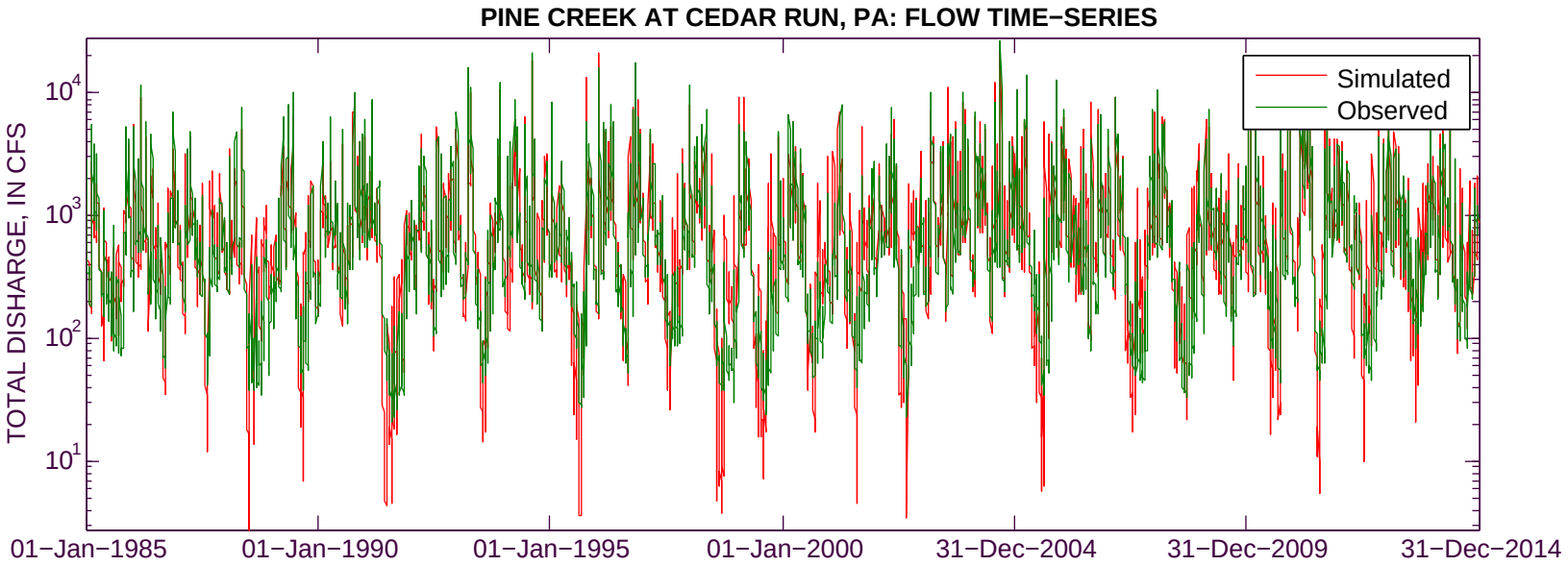
LOAD DATA
LOG10

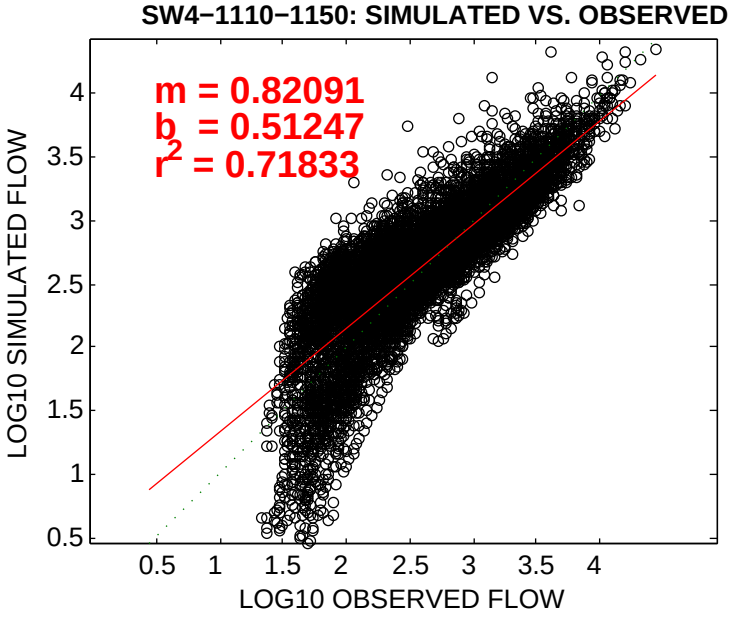


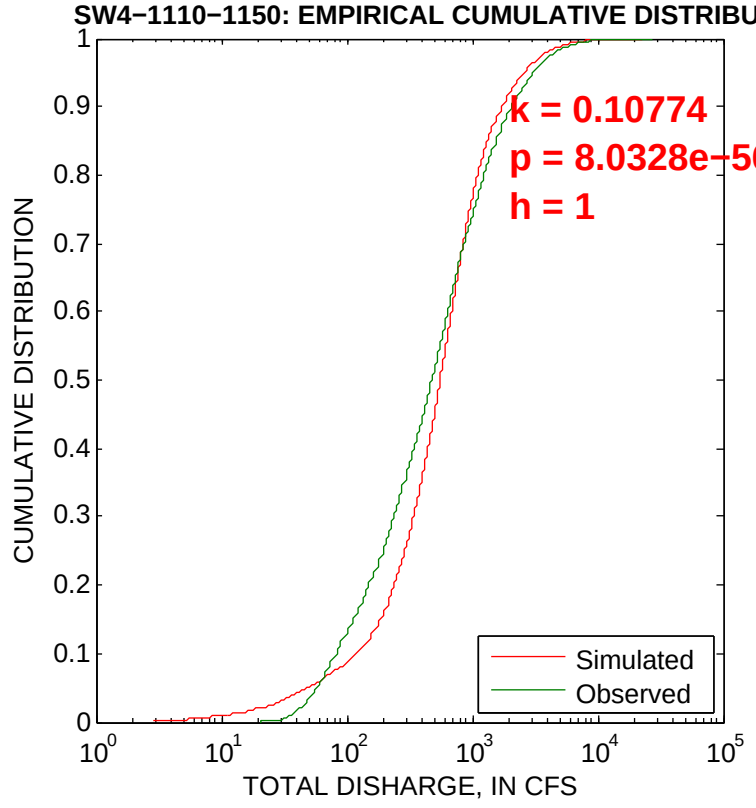












DATA SELECTION

scenario: P620171001WQ | file: FLOW.calib

plot: FLOW - total discharge

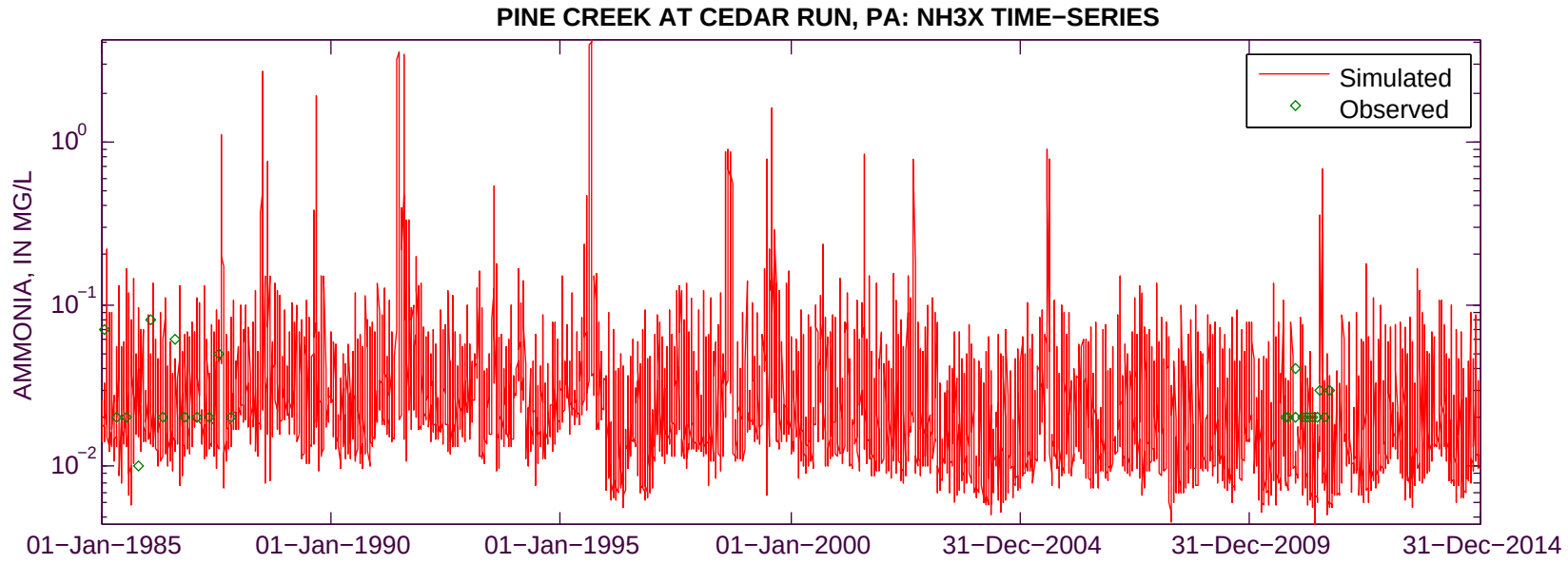
Dates: 1/1/1985 – 12/31/201

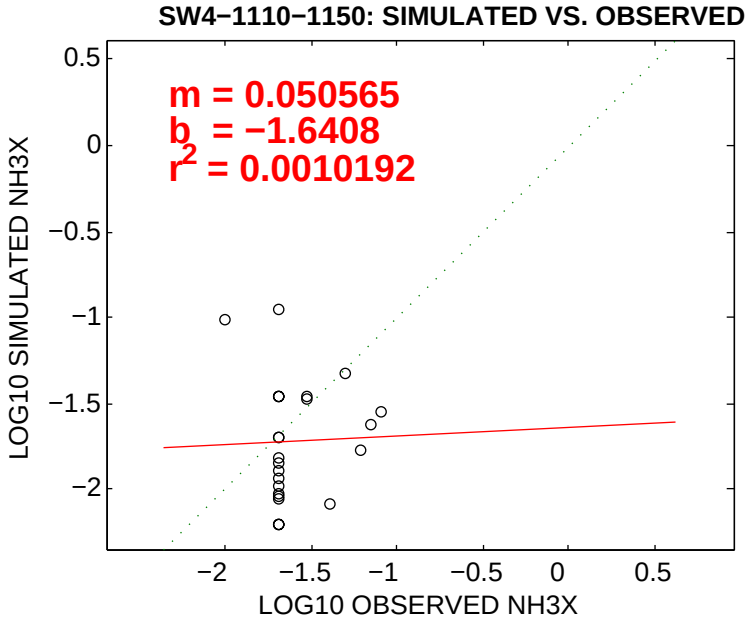
Drive: N/A | Directory: model | Observed: OBS20161101

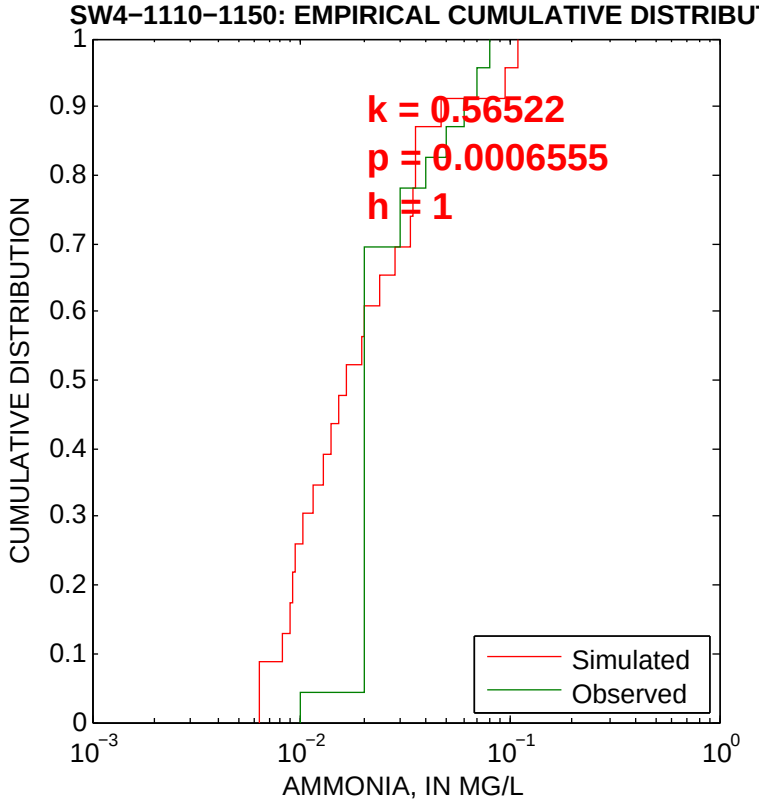
STATISTICS

		observe	simulate
n		10952	10952
min		21	2.7775
		1.32222	0.443654
mean		888.442	851.177
		2.65294	2.6903
media		480	558.98
		2.68124	2.7474
max		27500	22330
		4.43933	4.34889
varian		1.73414e+0	1.34201e+
		0.270391	0.253665
JB		0.001	0.001
		0.001	0.001
		ra	log
%		-4.19439	1.40843
err.va		470751	0.0815177
rel.std.err		0.271461	0.301481
mod.eff		0.728539	0.698519

VERSION 2.1







DATA SELECTION

scenario	file
P620171001WQ	NH3X.calib

plot: NH3X - ammonia

Dates: 1/1/1985 – 12/31/201

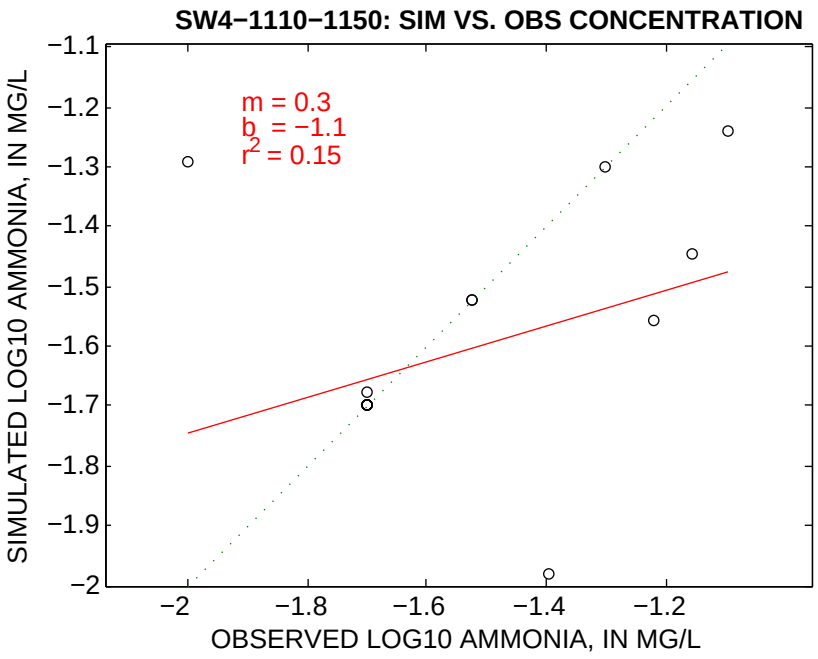
Drive	Directory	Observed
N/A	model	OBS20161101

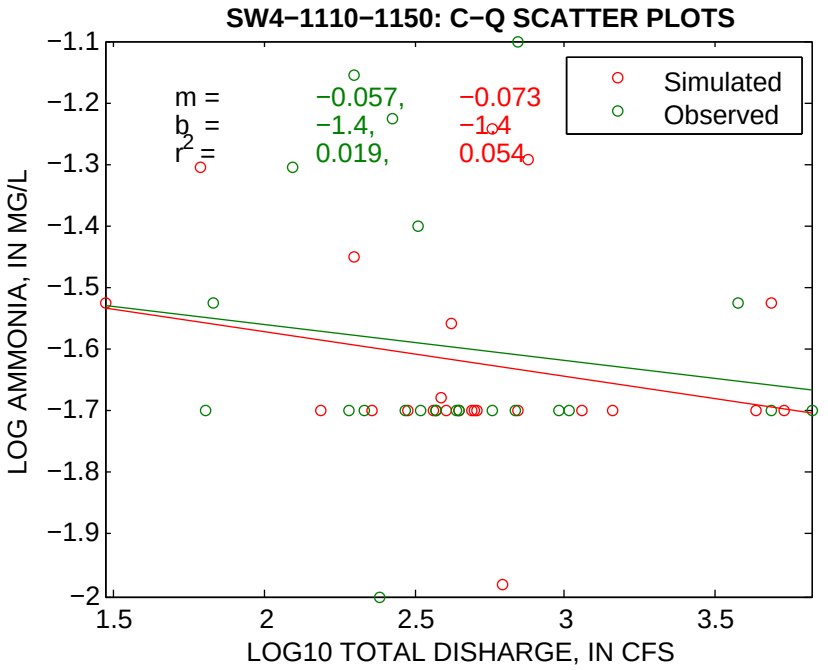
STATISTICS

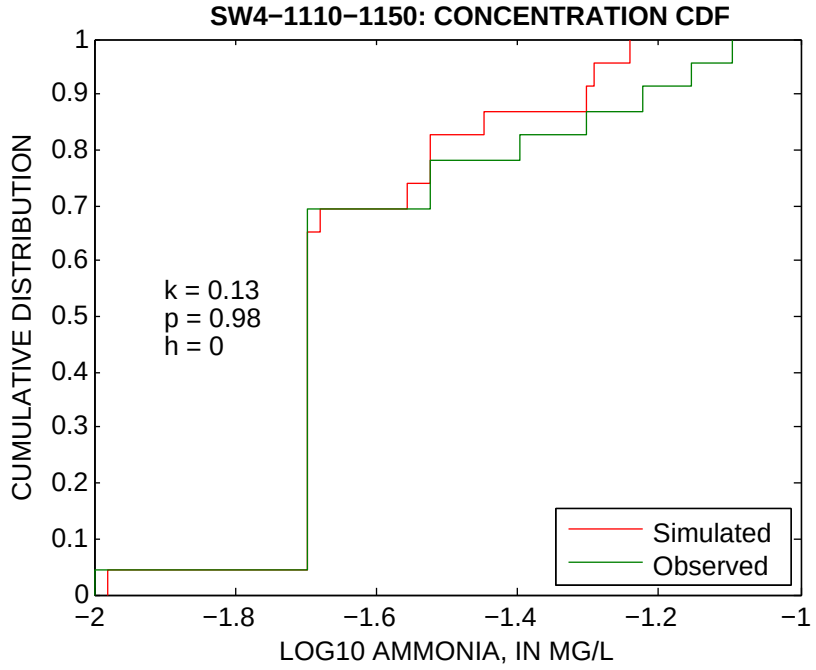
	n	23	23
		observe	simulate
min		0.01 -2	0.0062641 -2.20314
mean		0.0291304 -1.59578	0.0265963 -1.72146
media		0.02 -1.69897	0.016739 -1.77627
max		0.08 -1.09691	0.10939 -0.961022
varian		0.00033557 0.0474015	0.00070873 0.118917
JB		0.006194 0.057827	0.001 0.252198
		ra	log
%		-8.69918	7.87559
err.va		0.00111861	0.178038
rel.std.err		3.33342	3.75595
mod.eff		-2.33342	-2.75595

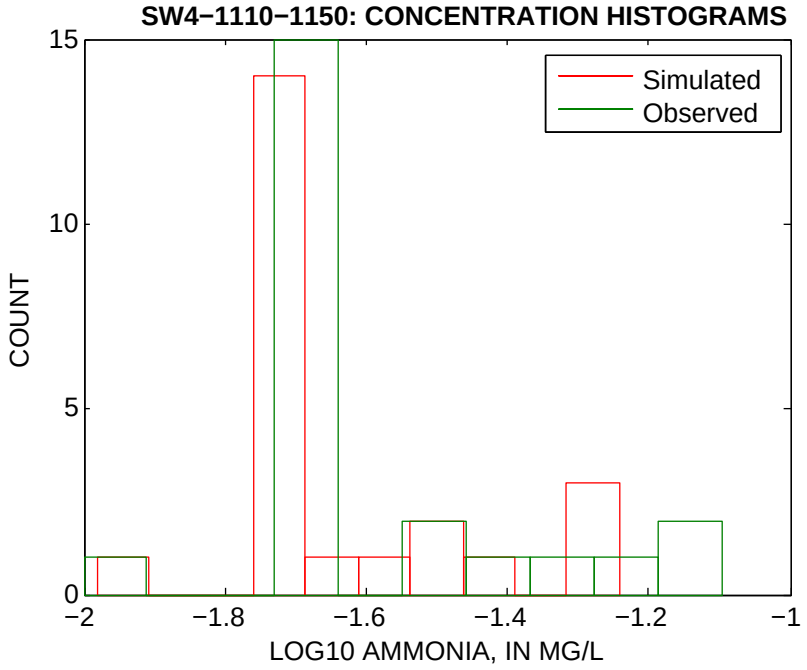
VERSION 2.1

ALL DATA
LOG10

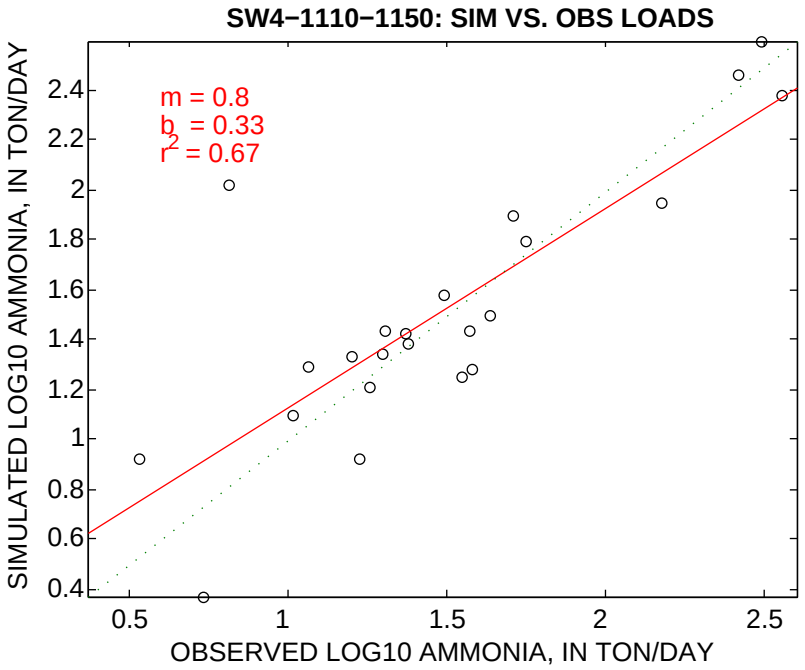


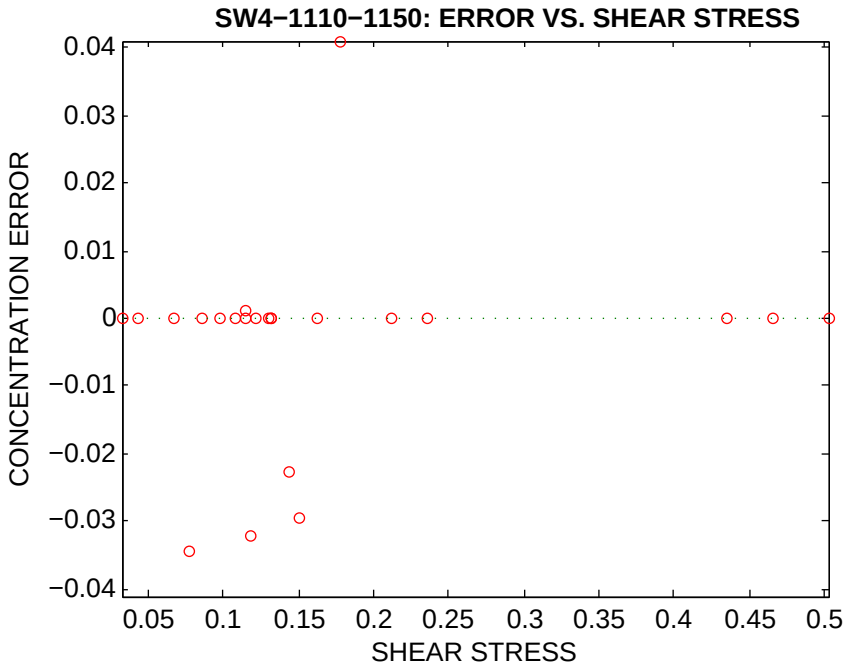


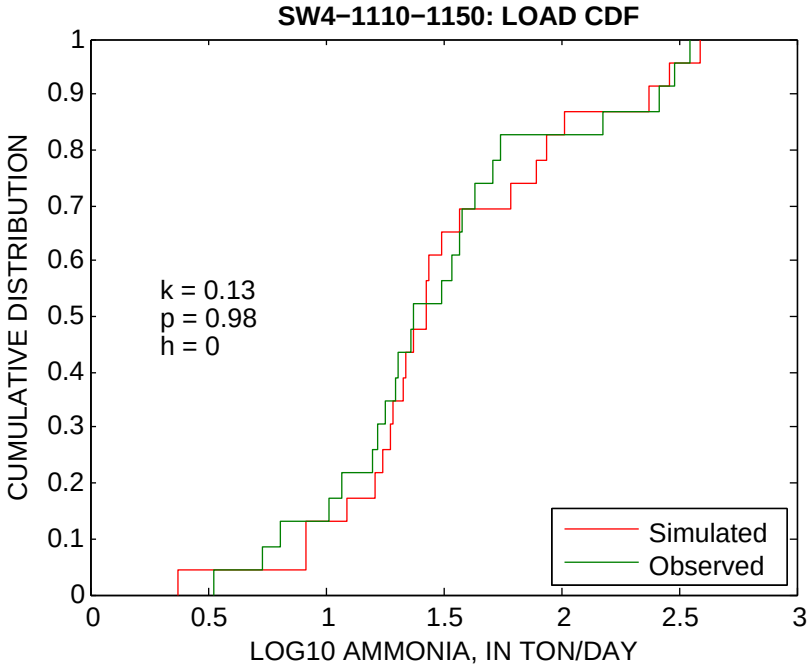


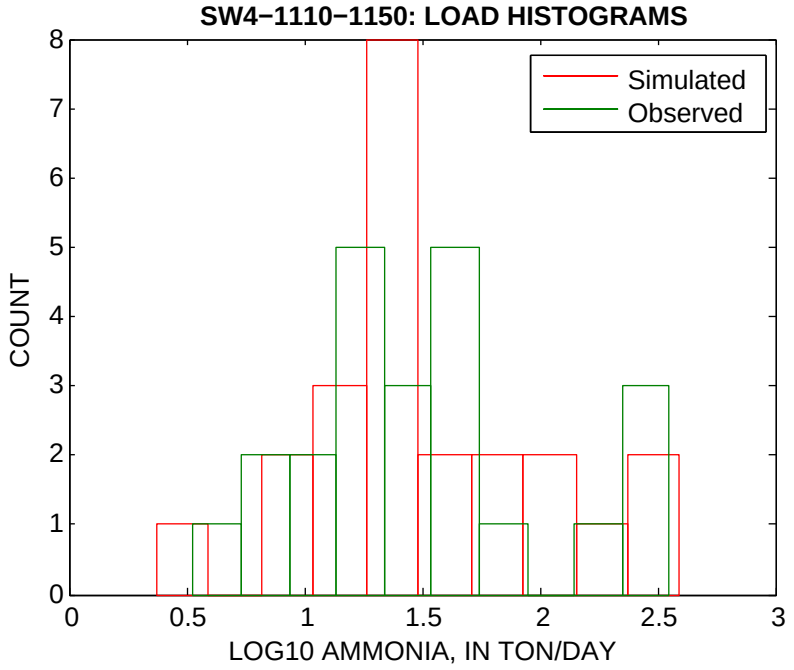


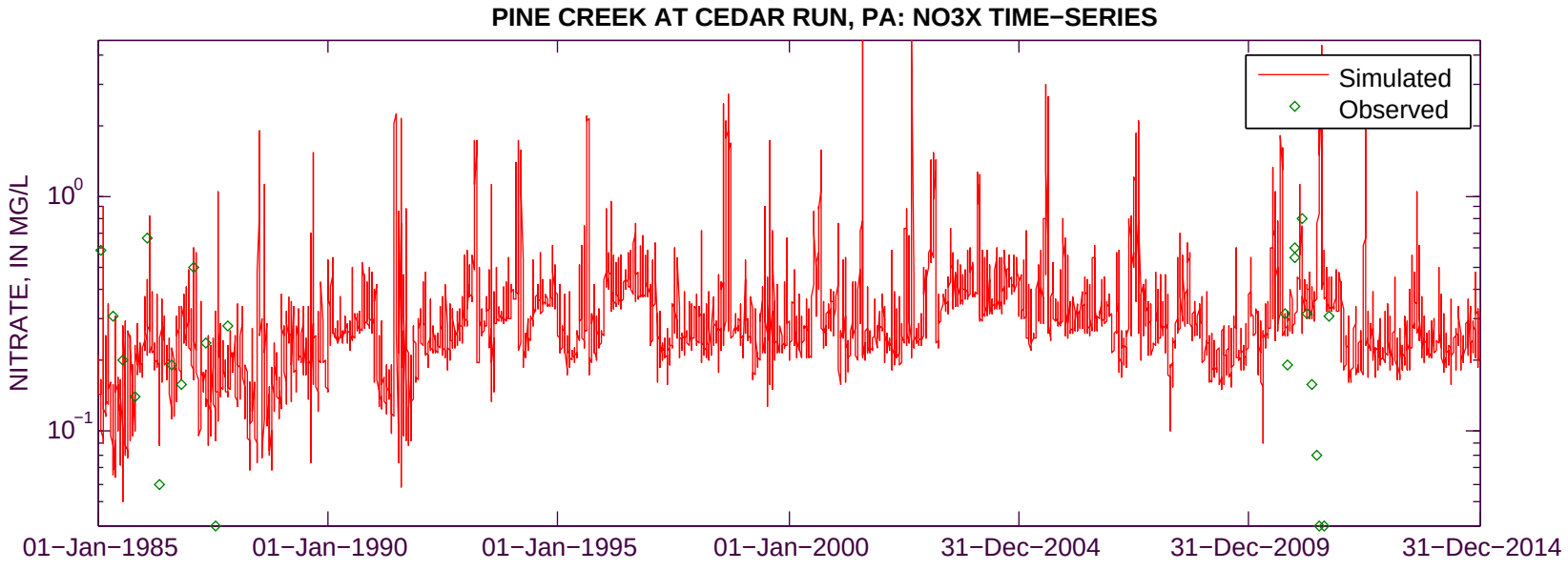
LOAD DATA
LOG10

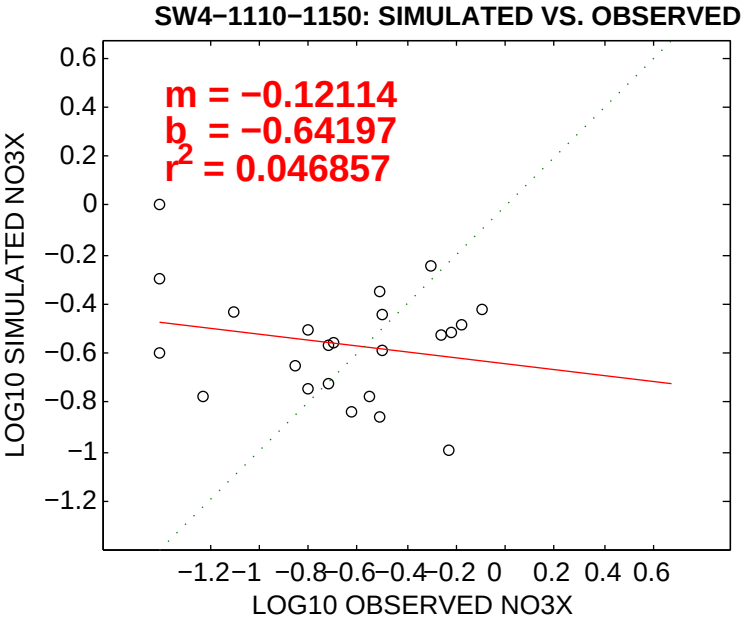


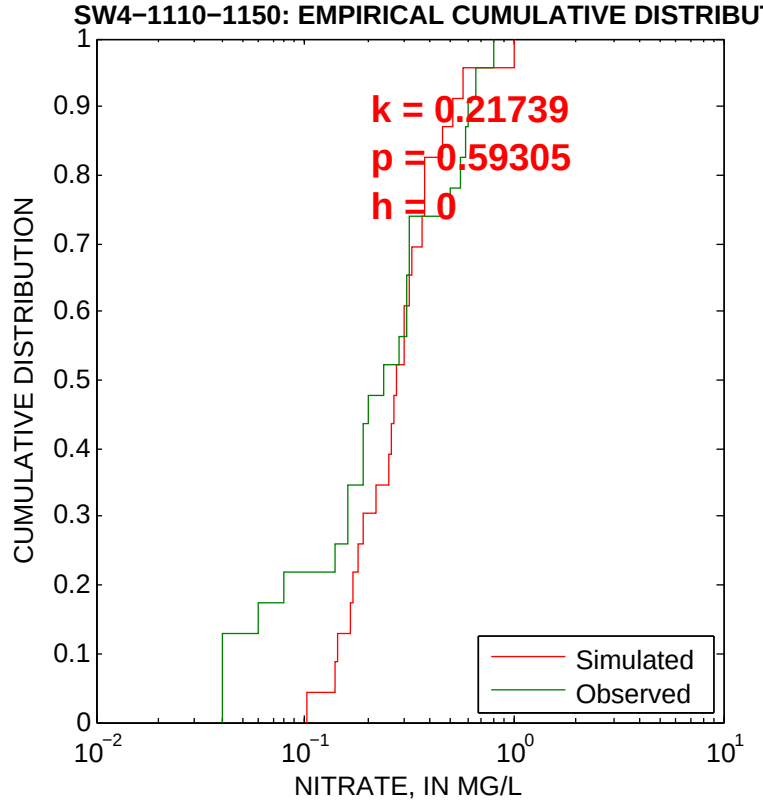












DATA SELECTION

scenario	file
P620171001WQ	NO3X.calib

plot: NO3X - nitrate

Dates: 1/1/1985 – 12/31/201

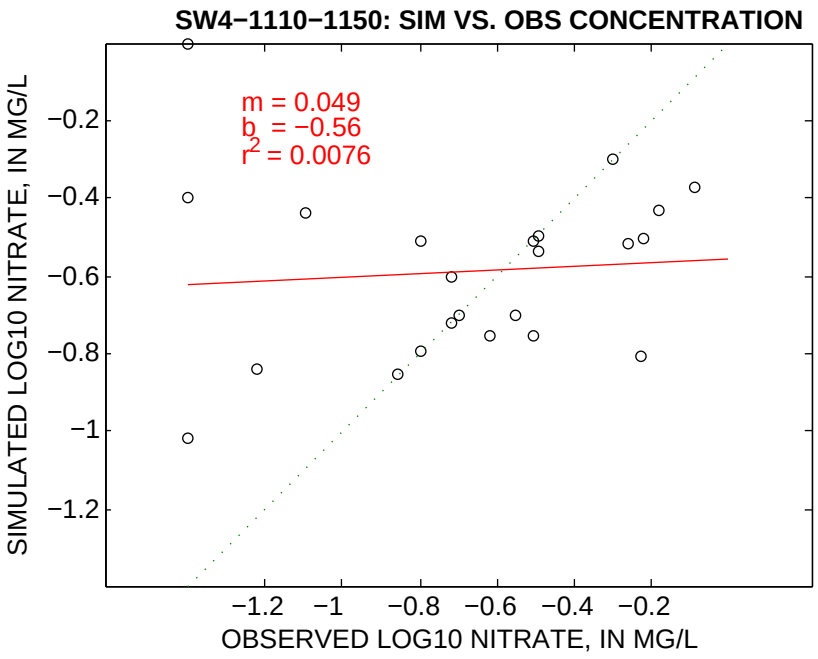
Drive	Directory	Observed
N/A	model	OBS20161101

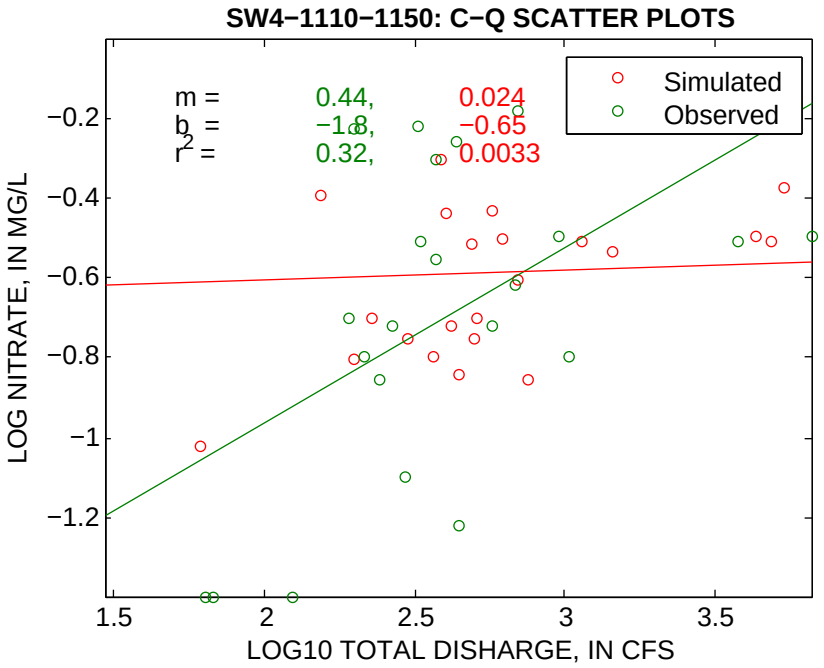
STATISTICS

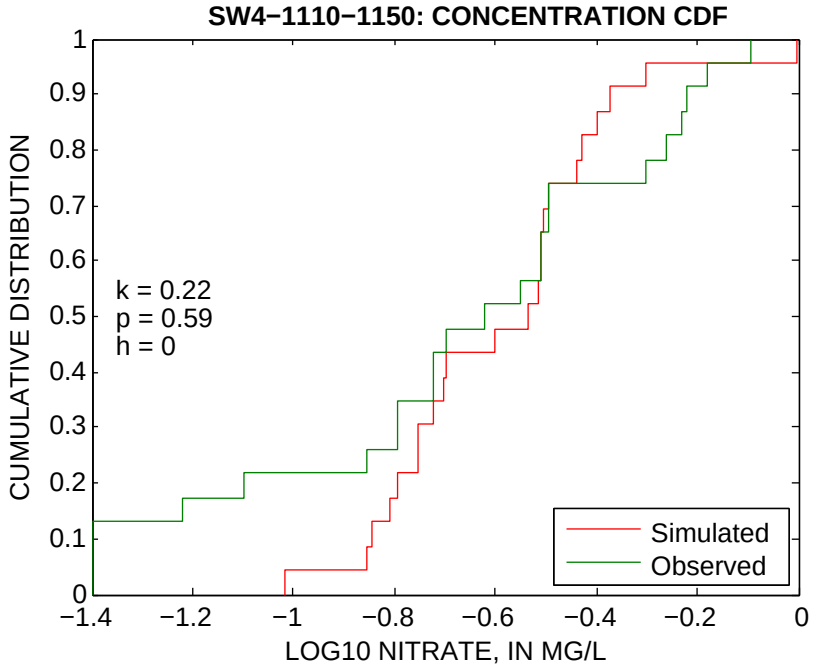
	n	23	23
		observe	simulate
min		0.04	0.10259
		-1.39794	-0.988895
mean		0.295217	0.315757
		-0.676649	-0.559997
media		0.24	0.27736
		-0.619789	-0.556956
max		0.81	1.0144
		-0.091515	0.00620924
varian		0.0490261	0.0372825
		0.161398	0.0505499
JB		0.103053	0.001
		0.236017	0.5
		ra	log
%		6.95729	-17.2396
err.va		0.0963537	0.265279
rel.std.err		1.96536	1.64363
mod.eff		-0.965356	-0.64363

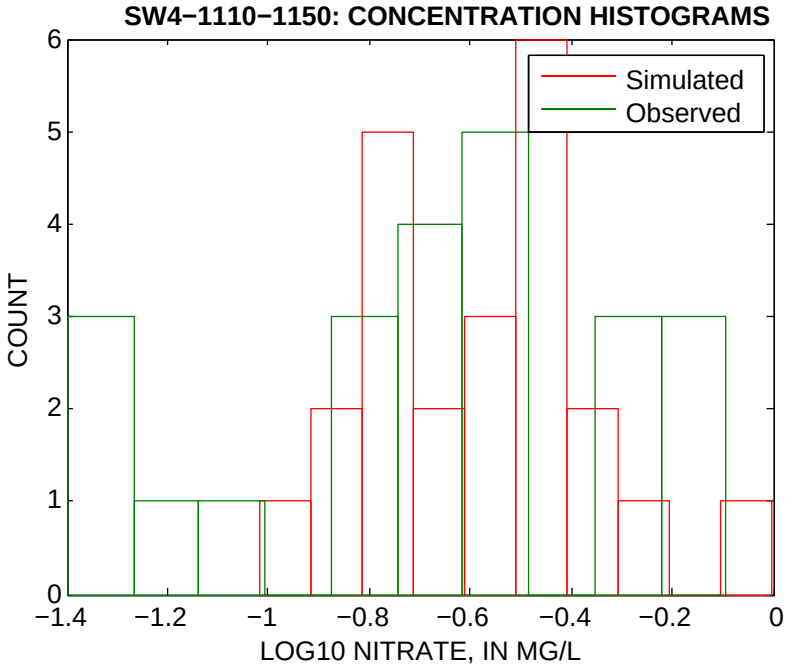
VERSION

ALL DATA
LOG10

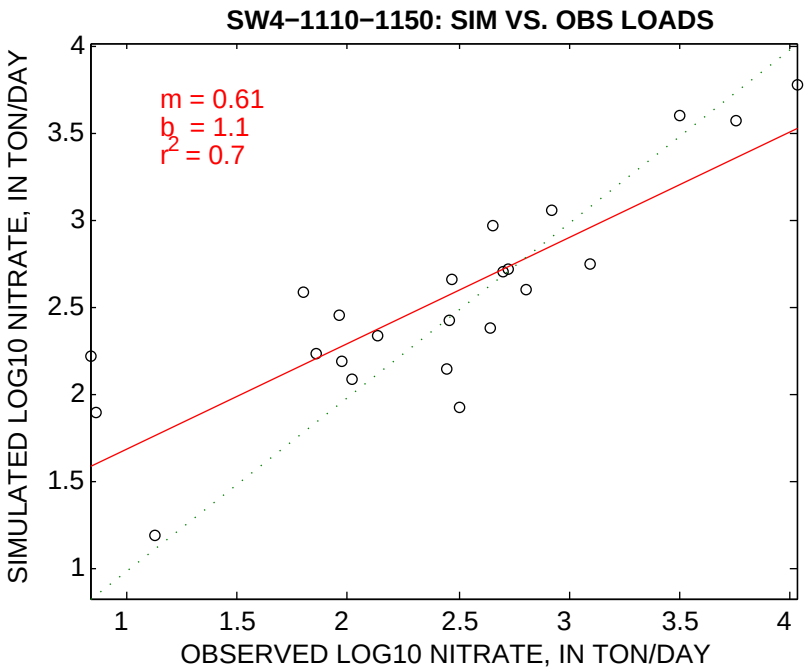


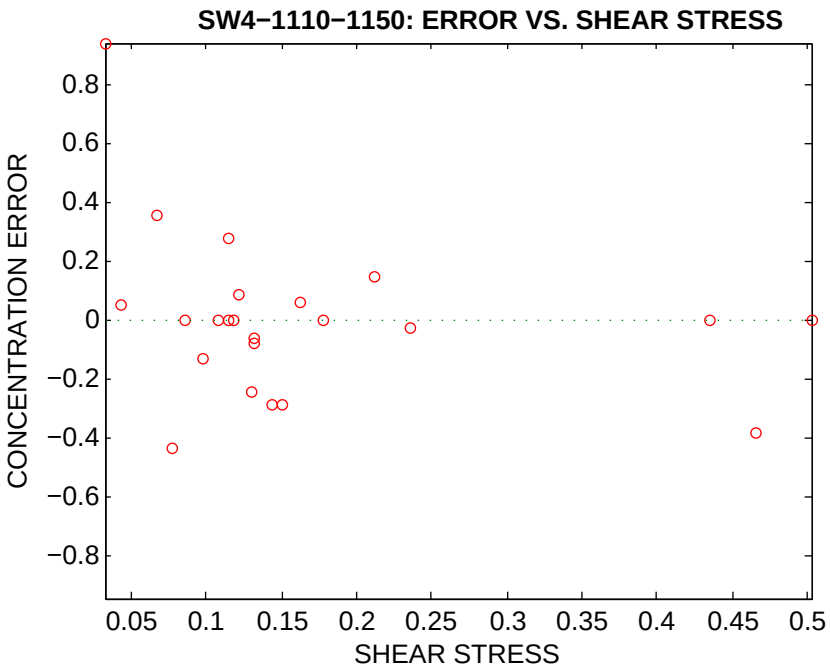


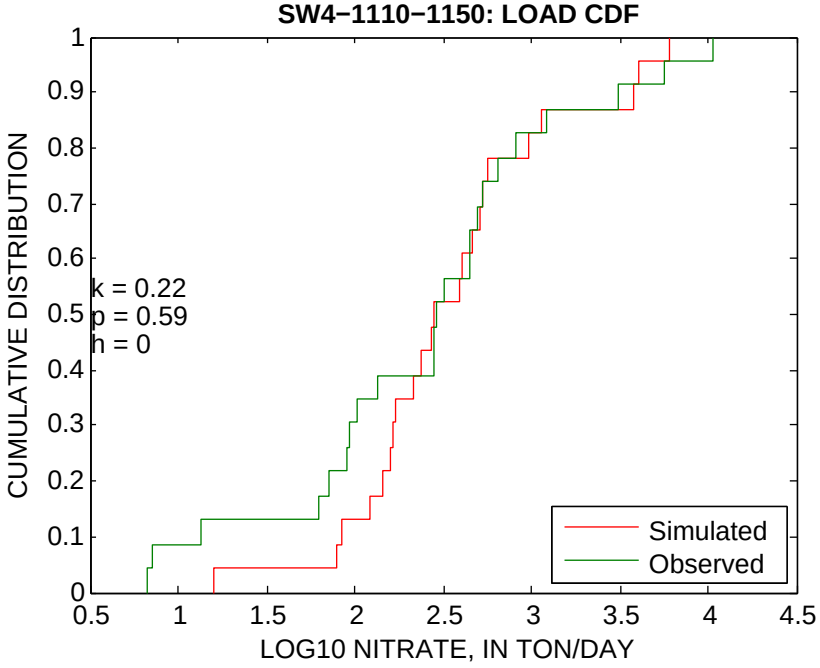


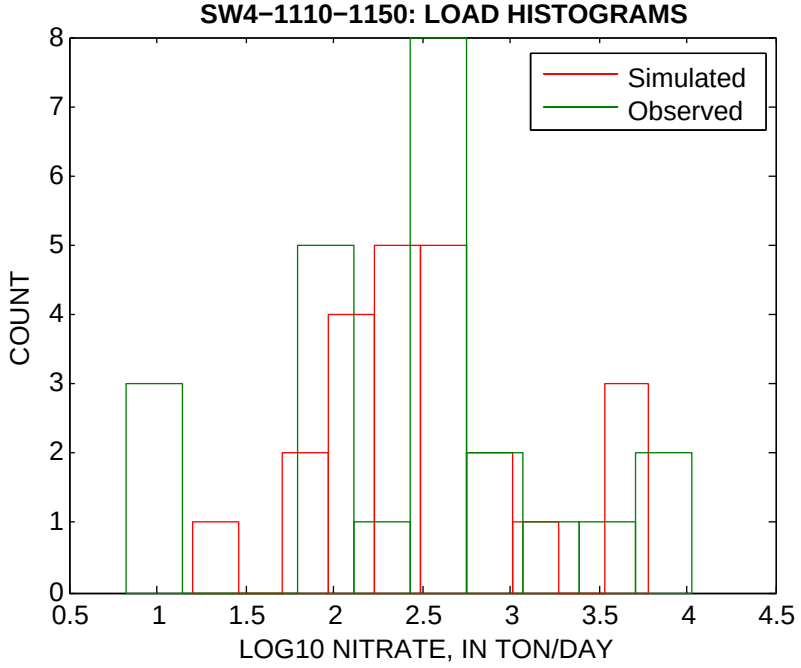


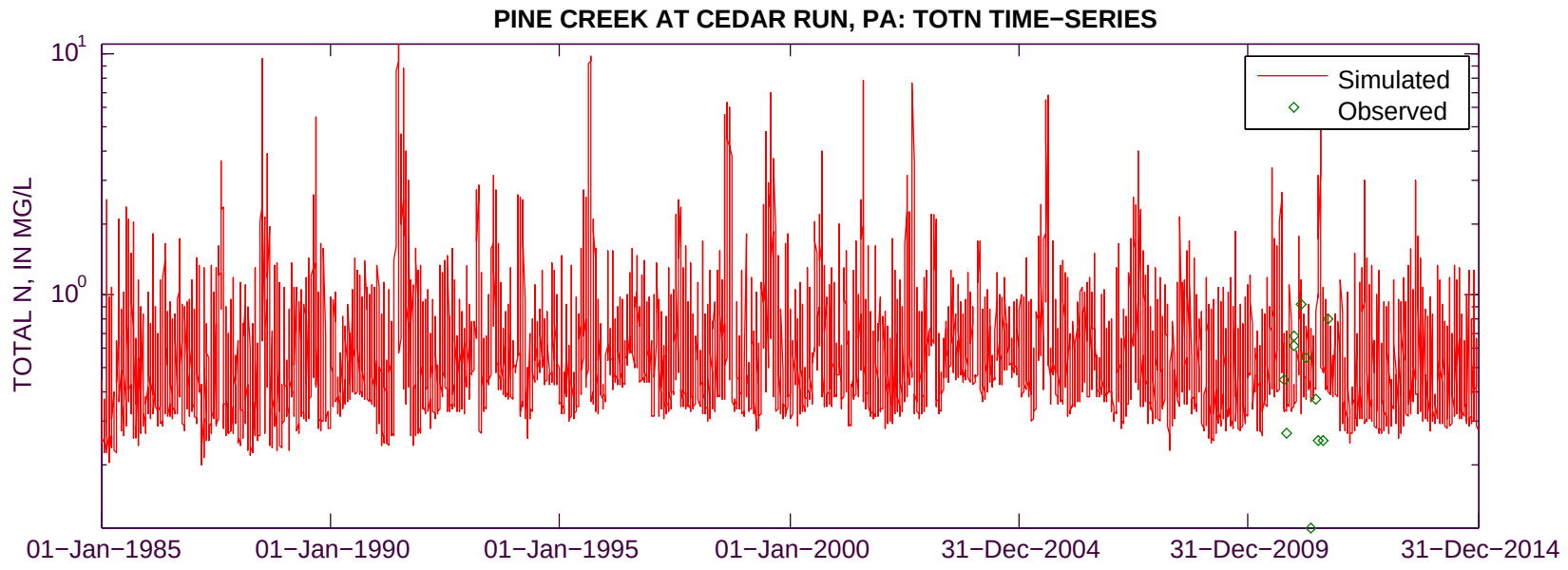
LOAD DATA
LOG10

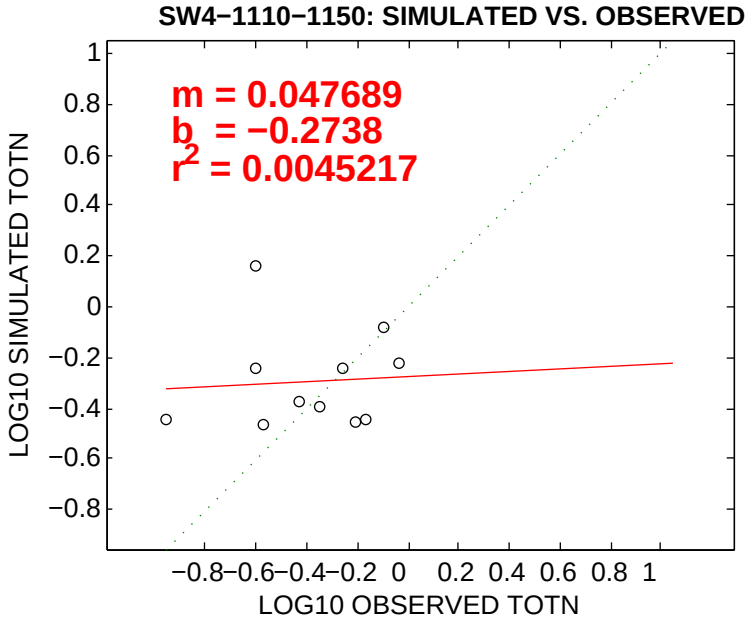


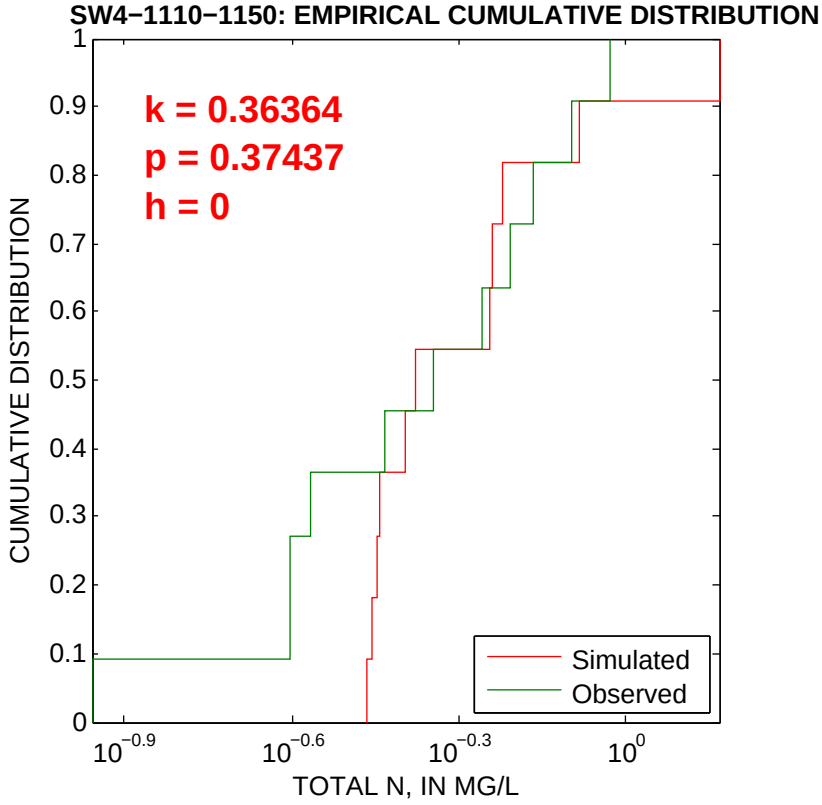












DATA SELECTION

scenario	file
P620171001WQ	TOTN.calib

plot: TOTN - total nitrogen

Dates: 1/1/1985 – 12/31/201

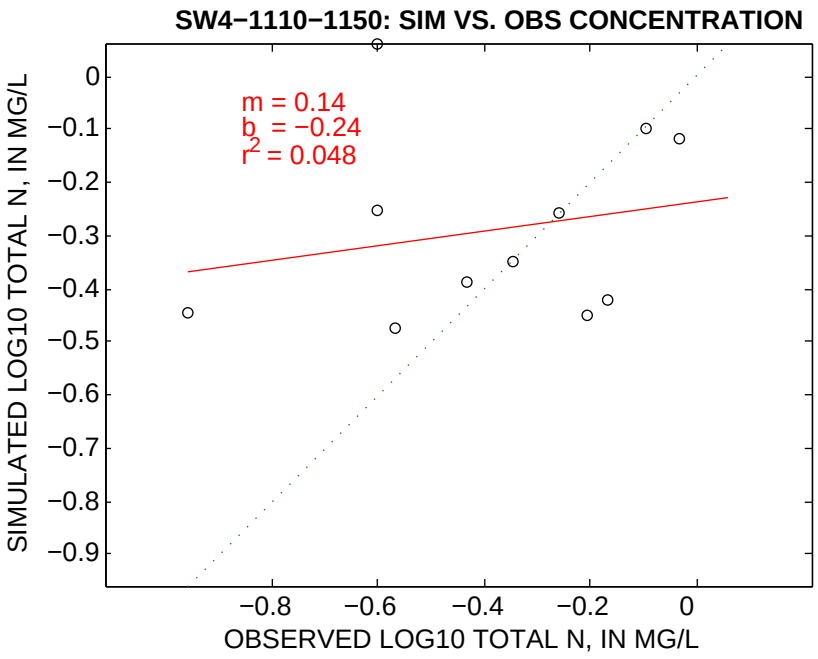
Drive	Directory	Observed
N/A	model	OBS20161101

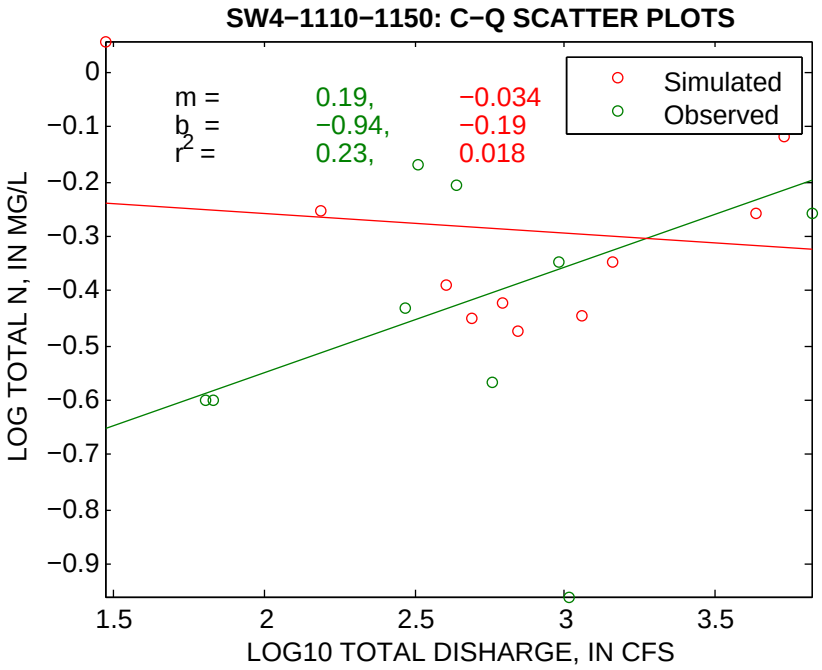
STATISTICS

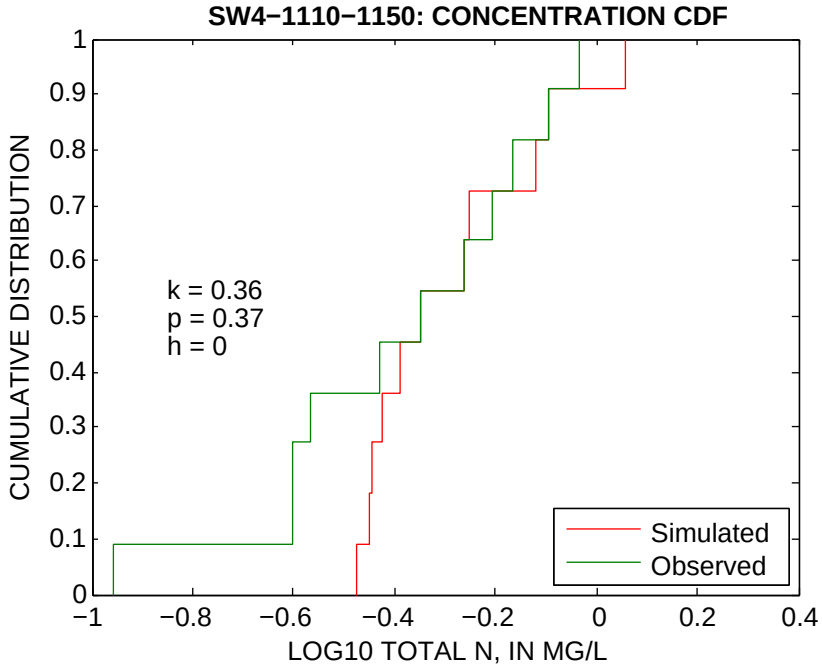
	n	11	11
		observe	simulate
min		0.11	0.34293
		-0.958607	-0.464795
mean		0.48	0.568732
		-0.388465	-0.292327
media		0.45	0.41776
		-0.346787	-0.379073
max		0.93	1.463
		-0.0315171	0.165244
varian		0.06692	0.110273
		0.0762936	0.0383724
JB		0.5	0.002019
		0.479215	0.045523
		ra	log
%		18.4858	-24.7483
err.va		0.193504	0.117556
rel.std.err		2.89157	1.54084
mod.eff		-1.89157	-0.540839

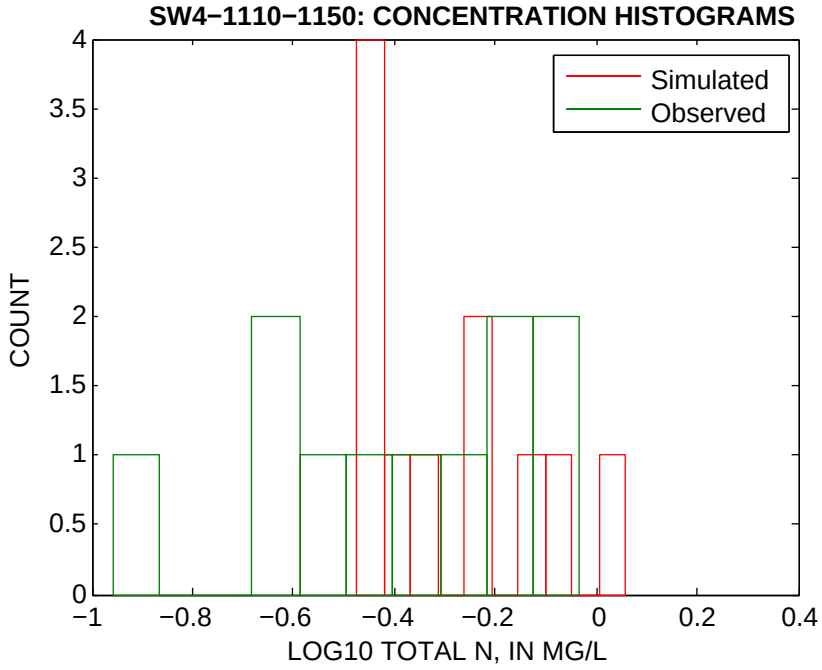
VERSION 2.1

ALL DATA
LOG10

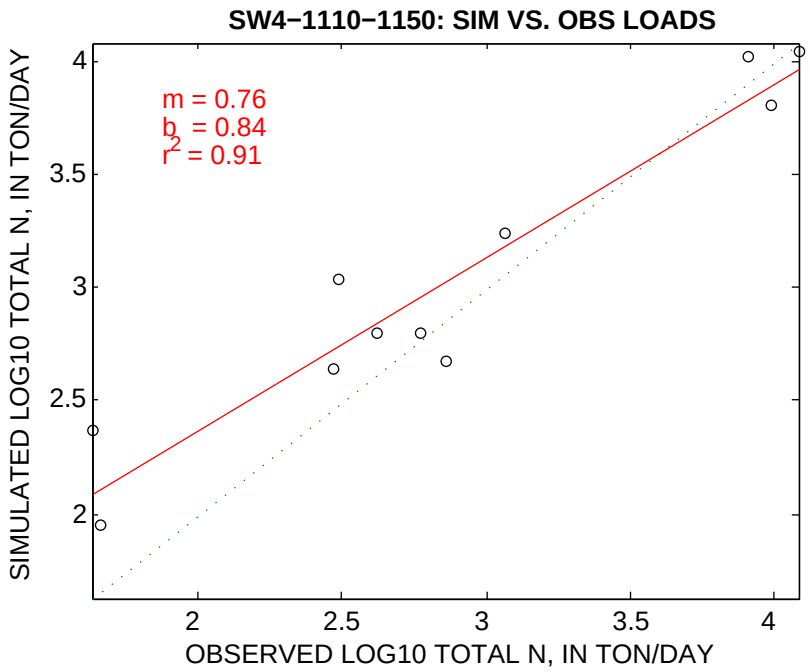


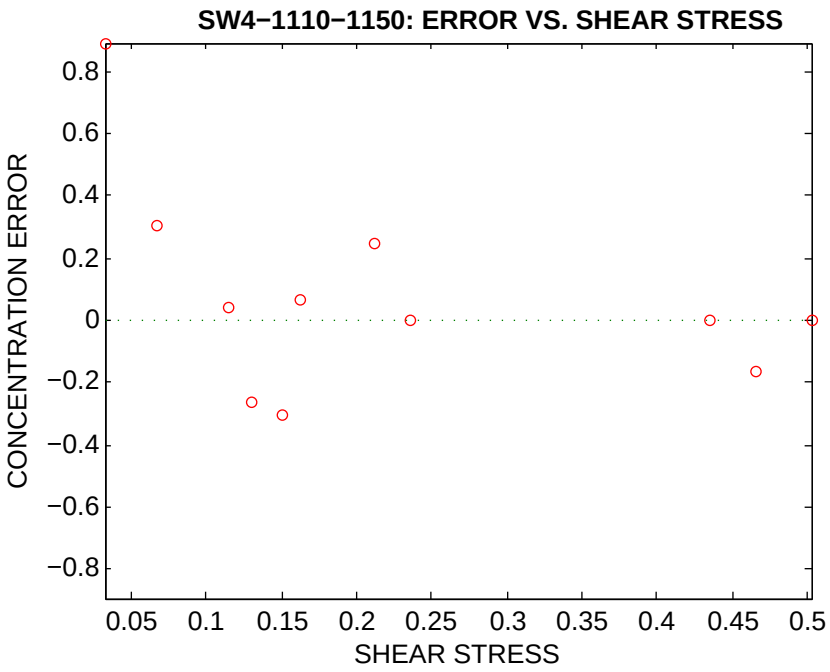


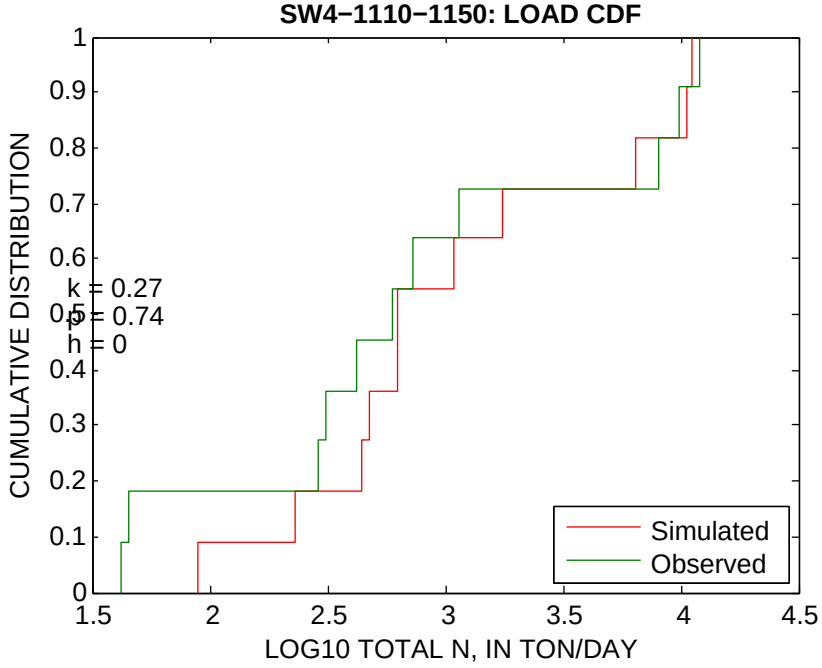


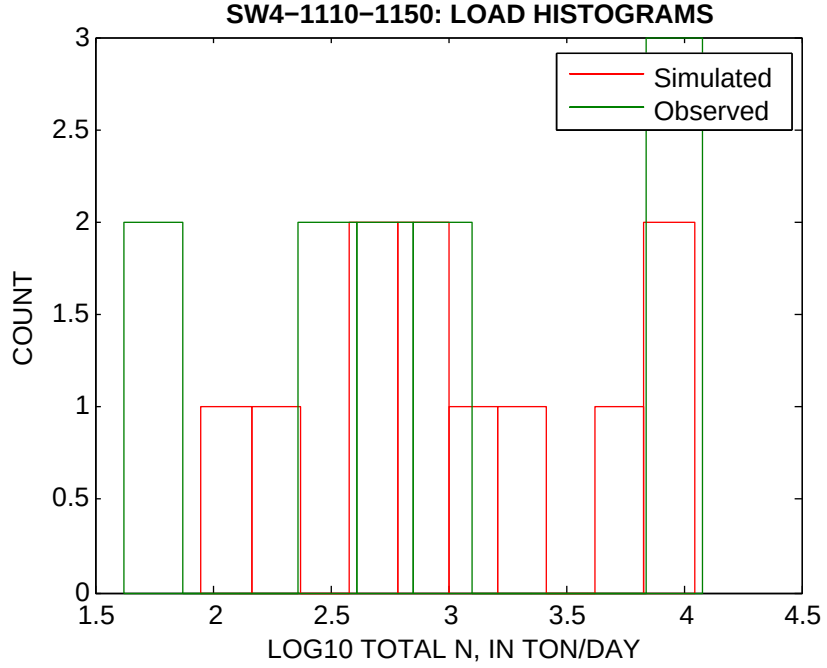


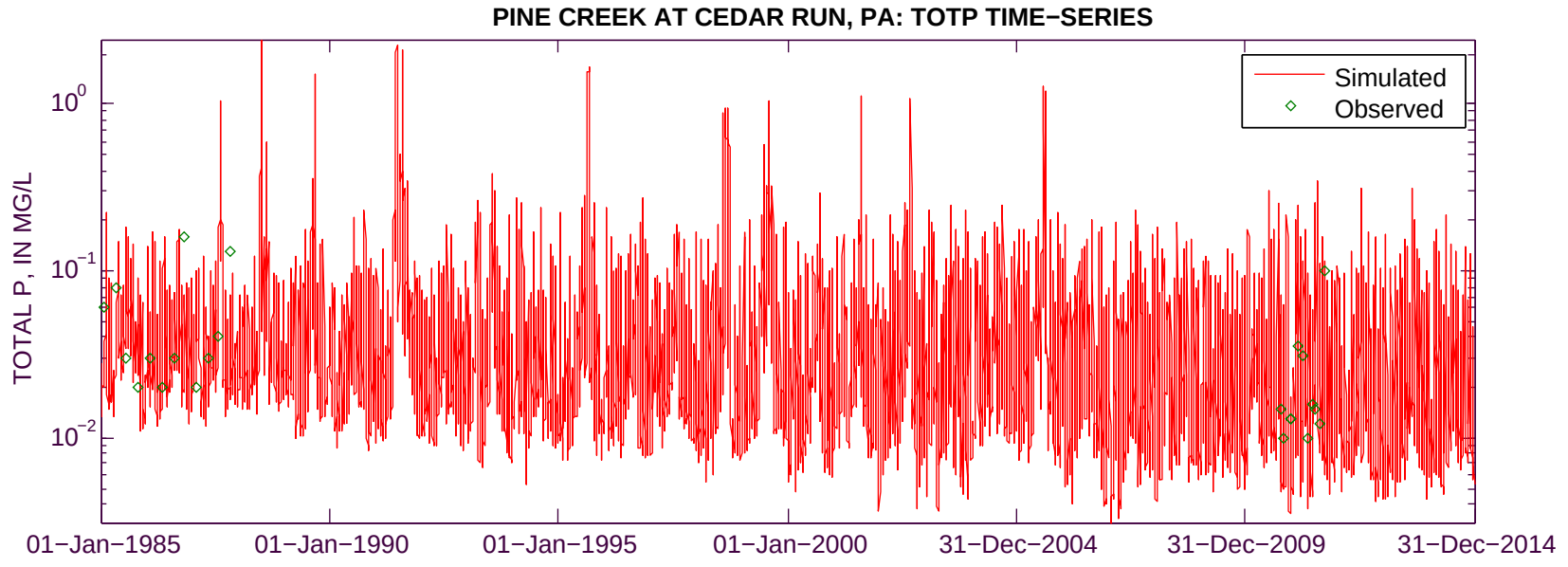
LOAD DATA
LOG10

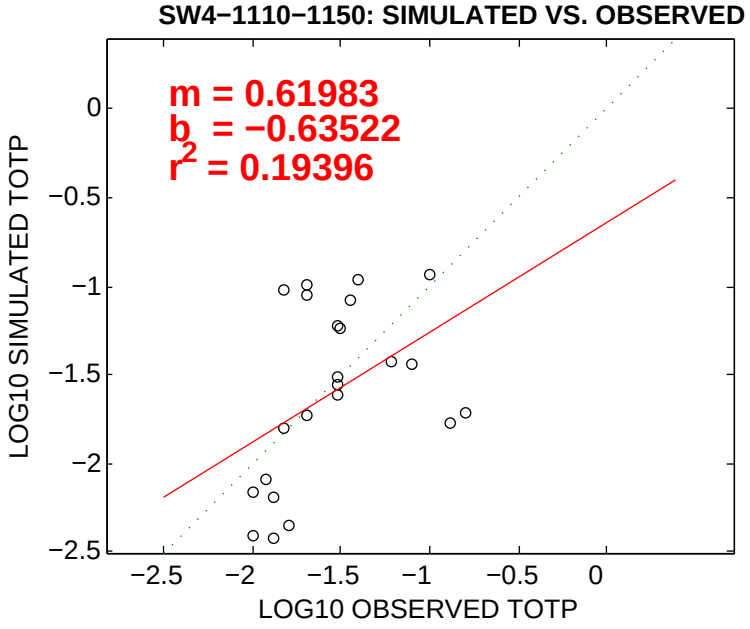


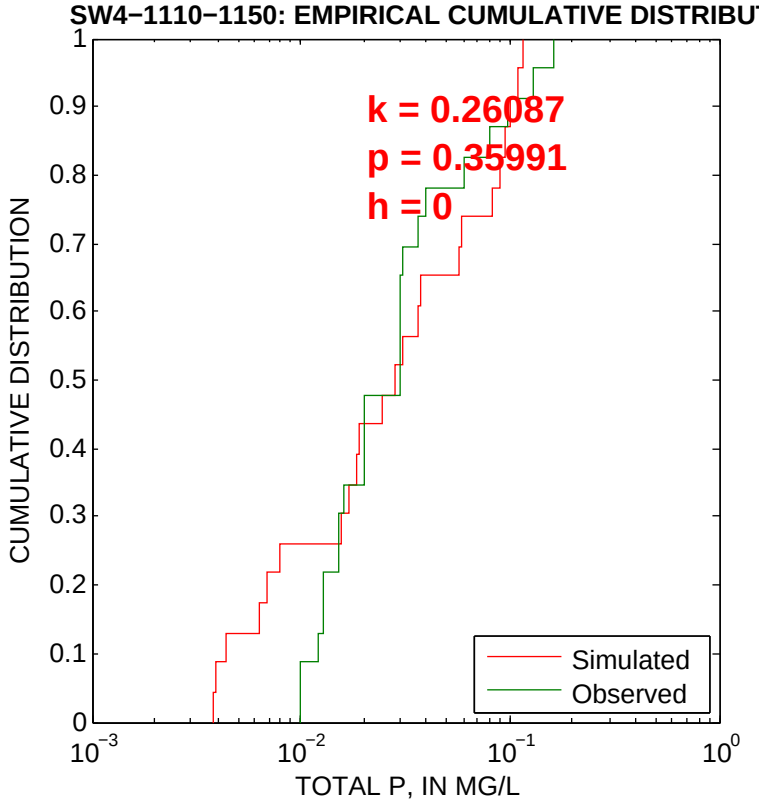












DATA SELECTION

scenario	file
P620171001WQ	TOTP.calib

plot: TOTP - total phosphorus

Dates: 1/1/1985 – 12/31/201

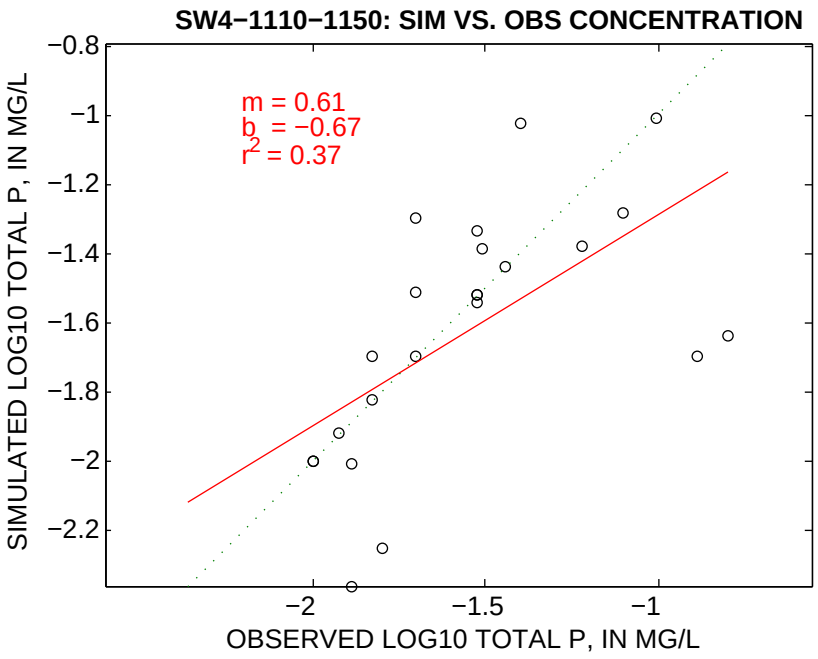
Drive	Directory	Observed
N/A	model	OBS20161101

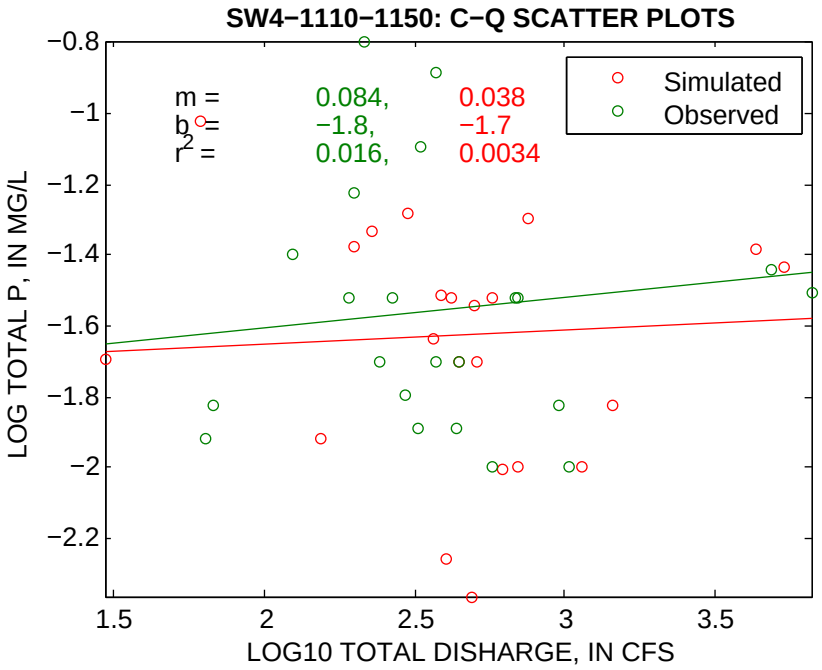
STATISTICS

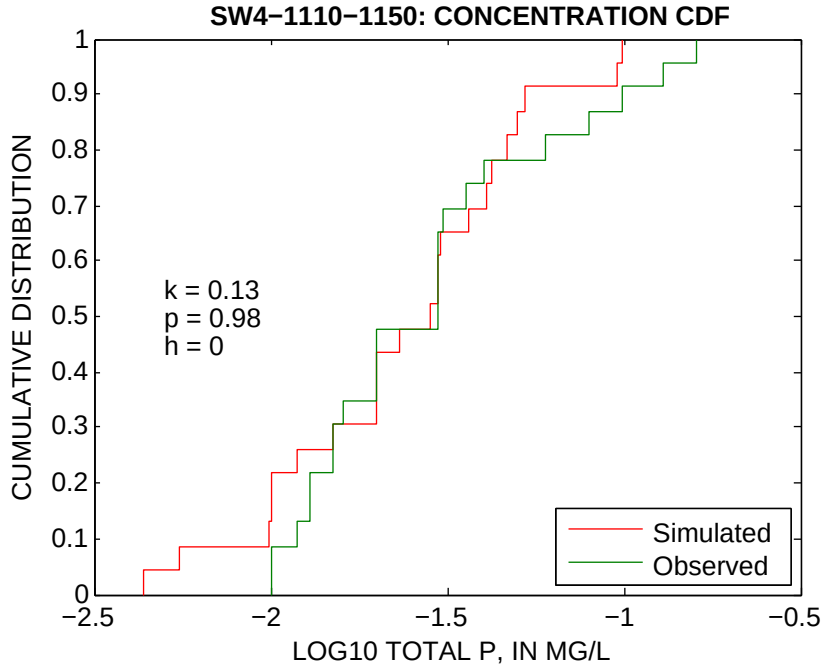
	n	23	23
		observe	simulate
min		0.01	0.0037918
		-2	-2.42115
mean		0.04	0.0421381
		-1.55132	-1.59679
media		0.03	0.027939
		-1.52288	-1.55379
max		0.16	0.11545
		-0.79588	-0.937606
varian		0.00161573	0.00143671
		0.122941	0.243517
JB		0.003047	0.078806
		0.129516	0.221321
		ra	log
%		5.34537	2.93068
err.va		0.00281242	0.216213
rel.std.err		1.74065	1.75867
mod.eff		-0.74065	-0.758671

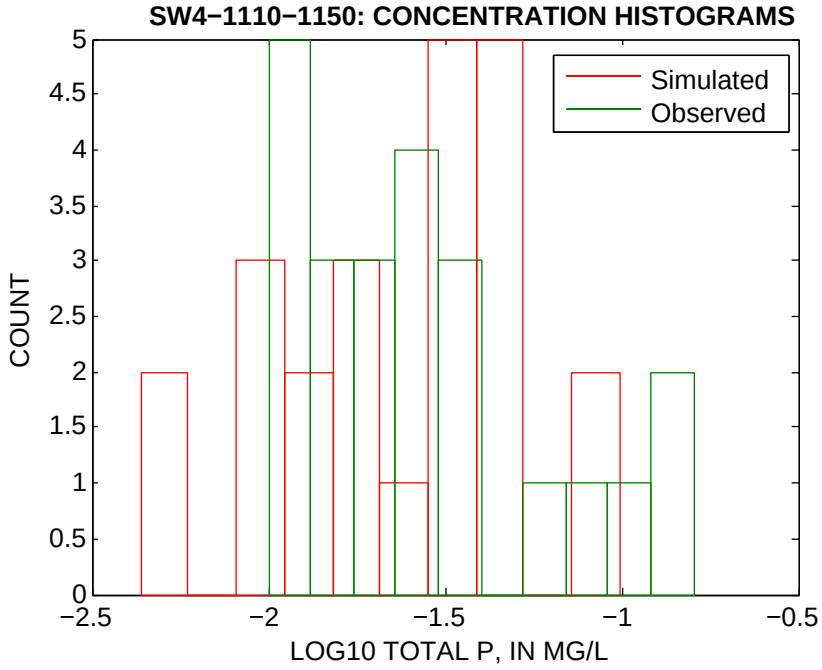
VERSION 2.1

ALL DATA
LOG10

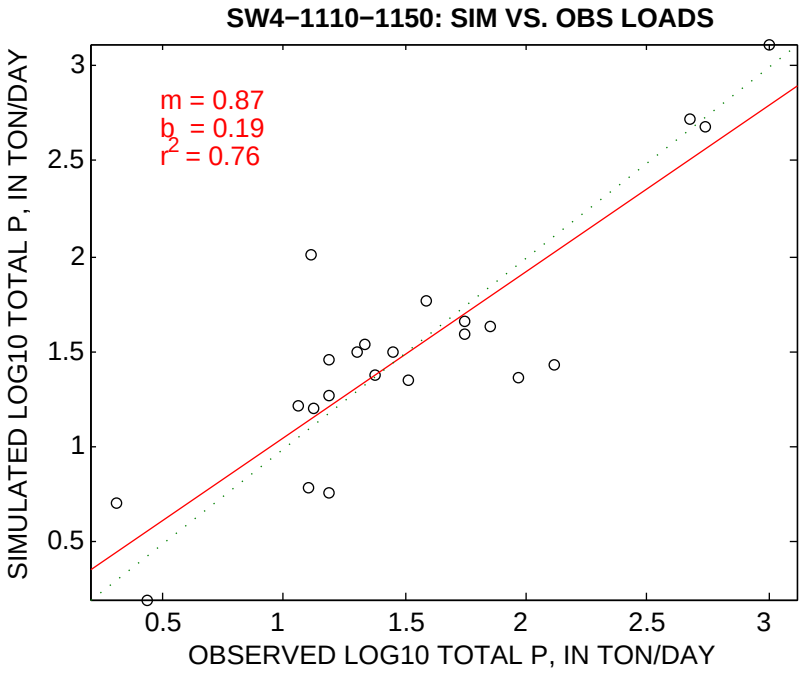


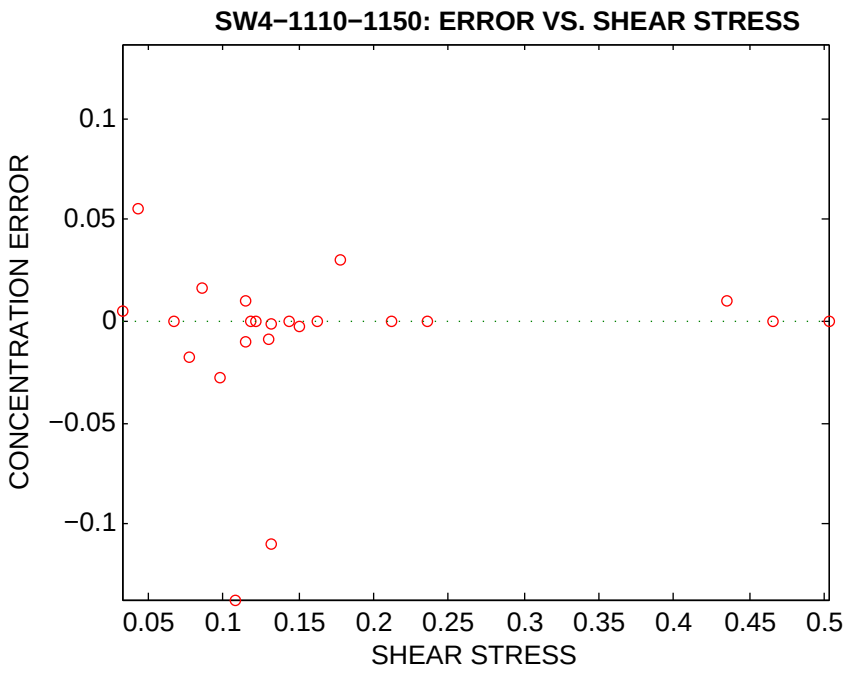


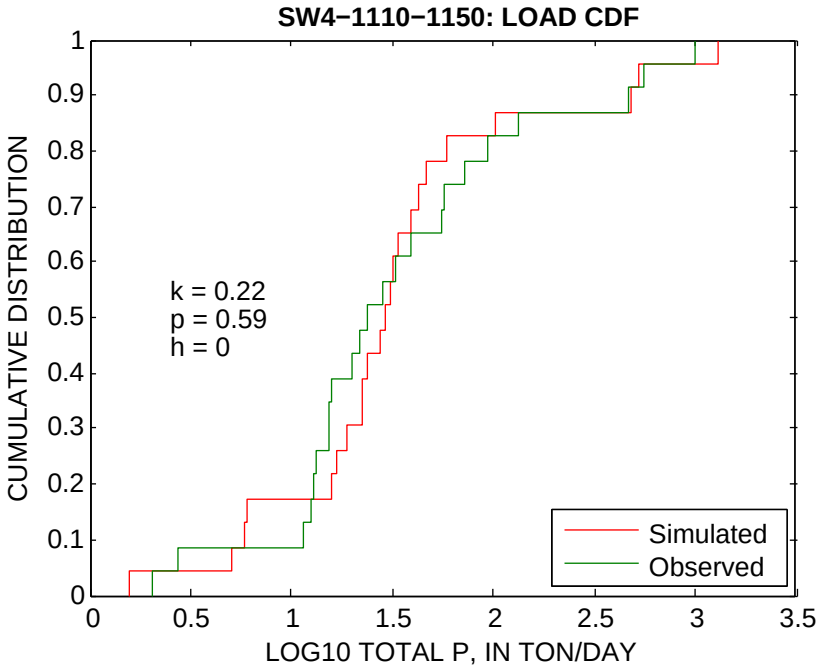


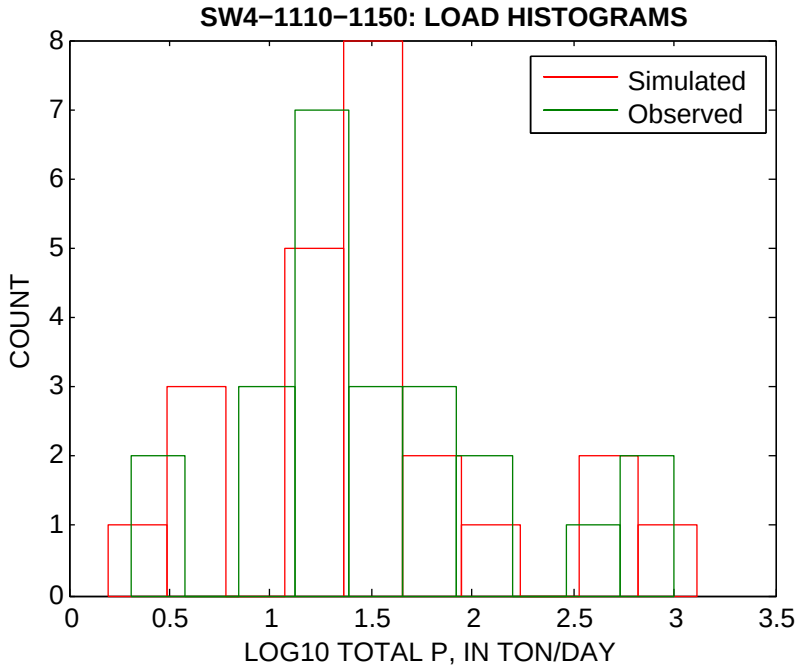


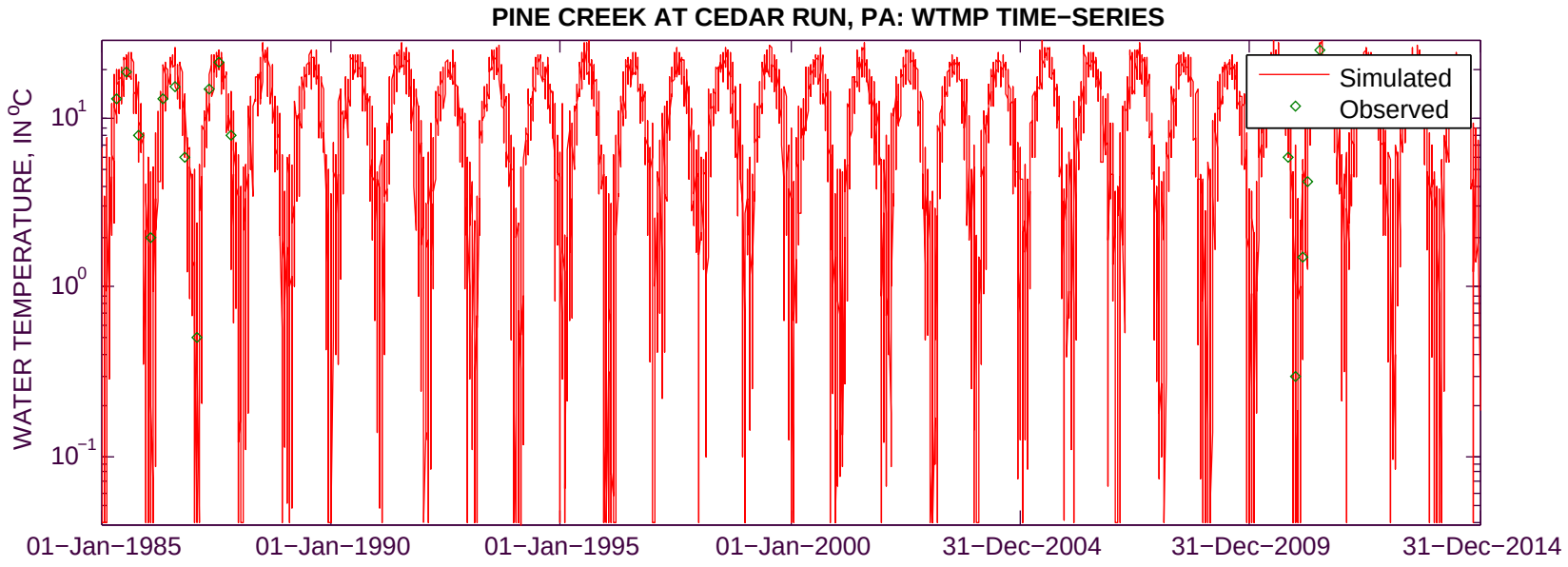
LOAD DATA
LOG10

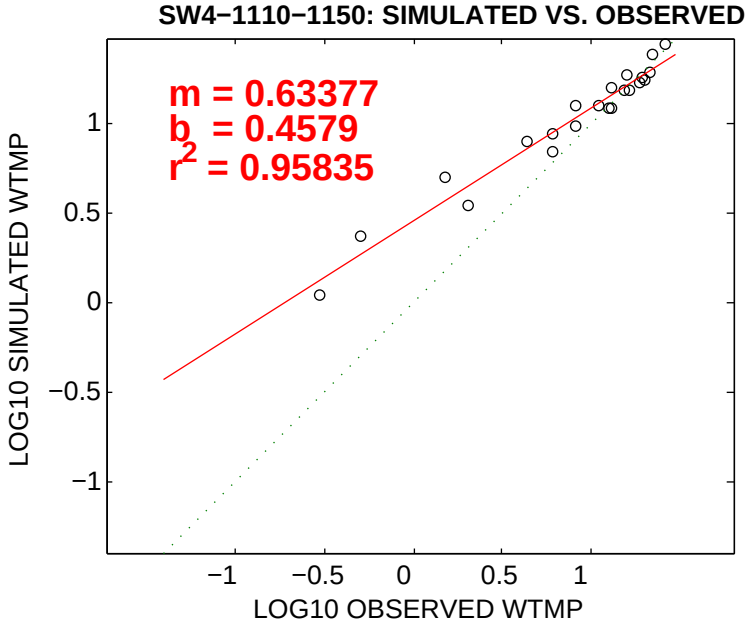


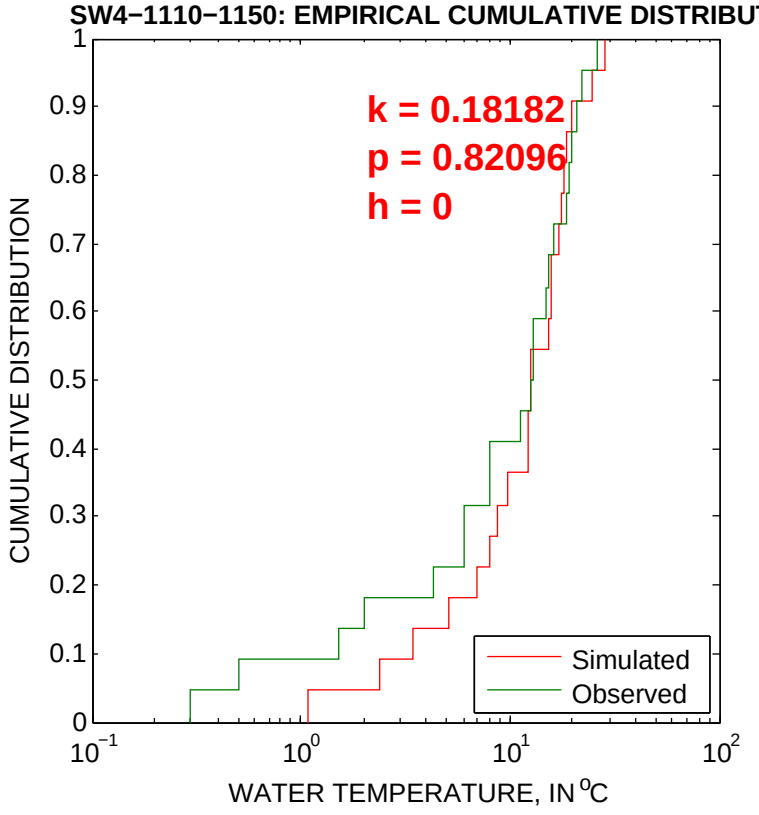












DATA SELECTION

scenario	file
P620171001WQ	WTMP.calib

plot: WTMP - water tempera...

Dates: 1/1/1985 – 12/31/201

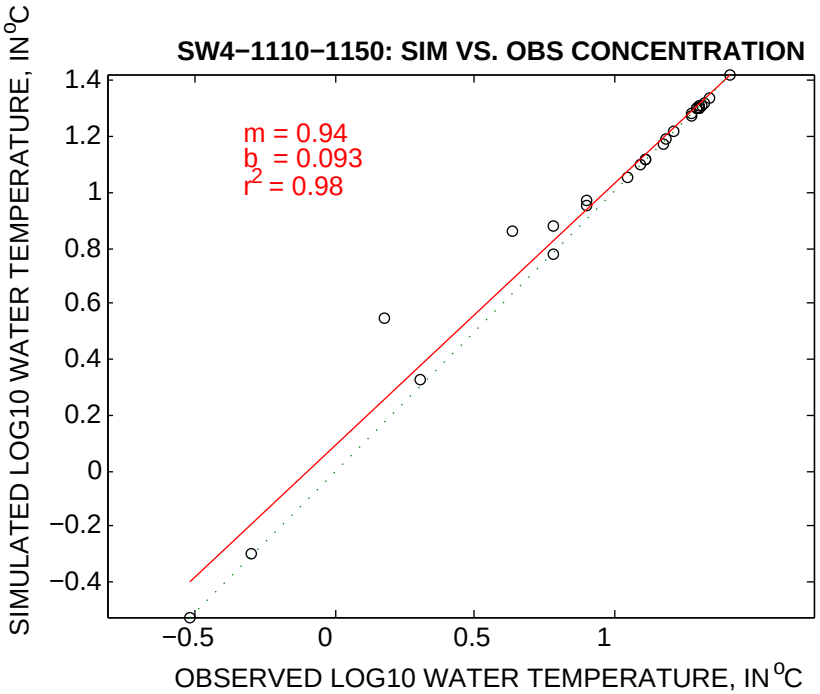
Drive	Directory	Observed
N/A	model	OBS20161101

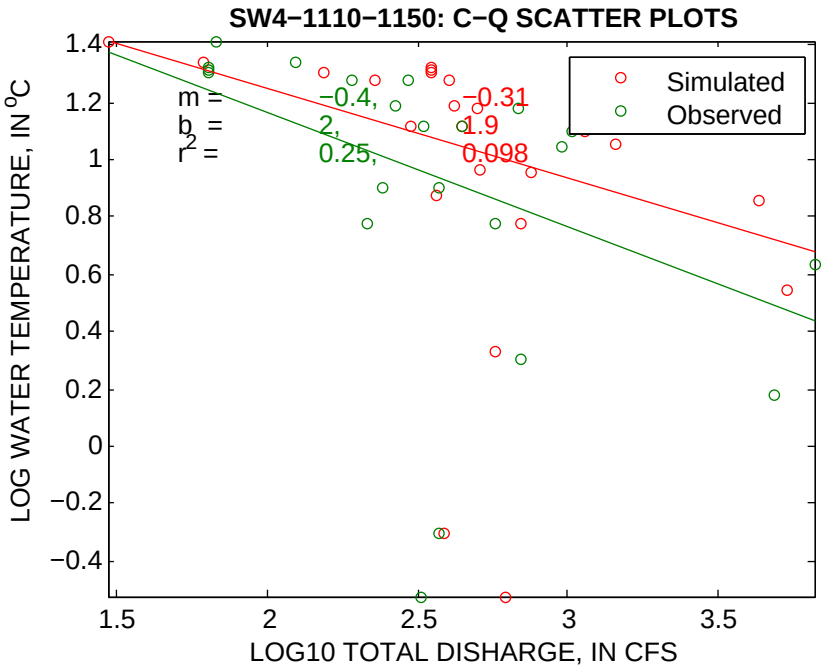
STATISTICS

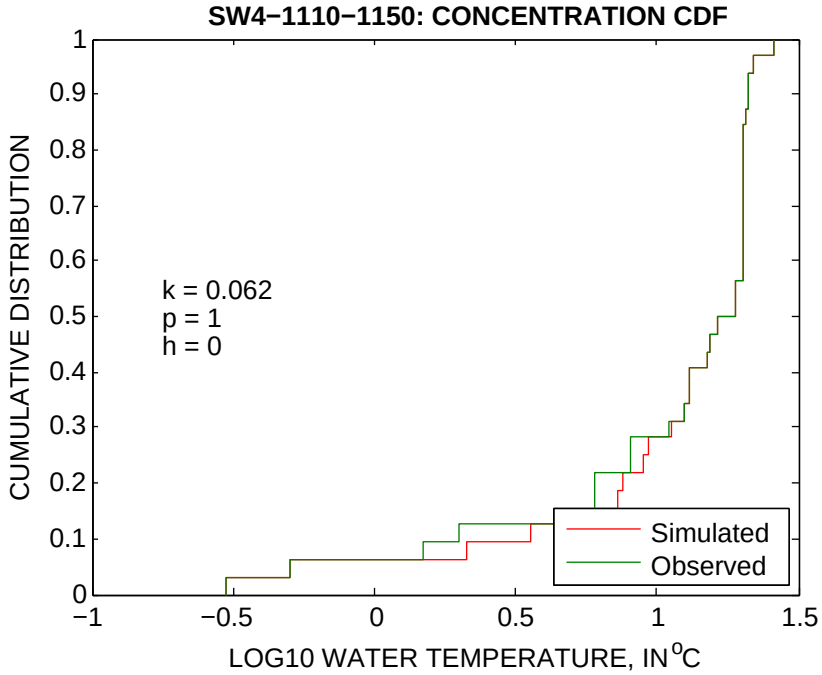
	n	22	22
		observe	simulate
min		0.3	1.0951
		-0.522879	0.0394538
mean		11.8136	13.0257
		0.887895	1.02062
media		12.75	12.6335
		1.10543	1.10151
max		26.1	28.128
		1.41664	1.44914
varian		58.2308	49.0645
		0.282949	0.118588
JB		0.388644	0.5
		0.013494	0.013812
		ra	log
%		10.2602	14.948
err.va		5.20618	0.0613438
rel.std.err		0.894061	0.216802
mod.eff		0.910594	0.783198

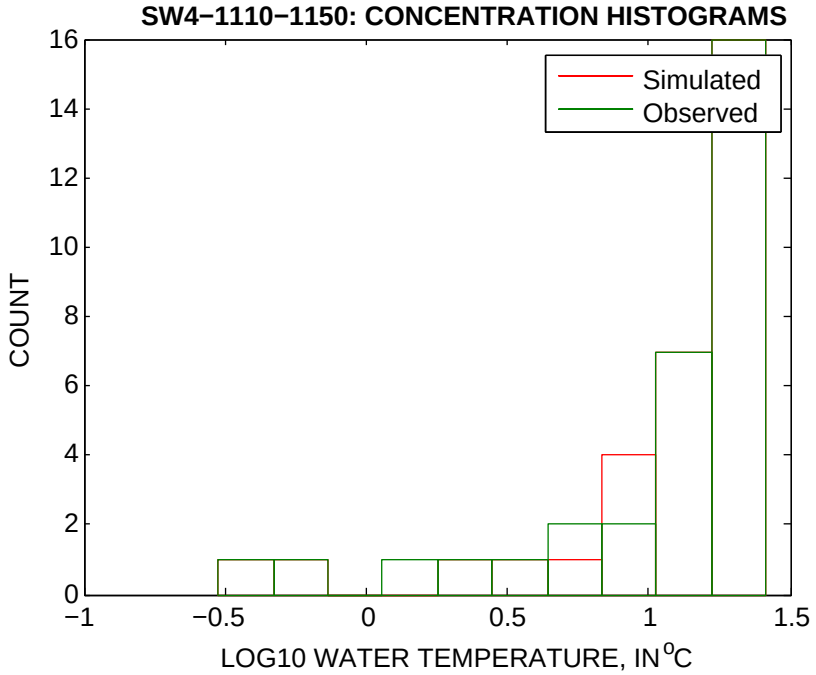
VERSION 2.1

ALL DATA
LOG10

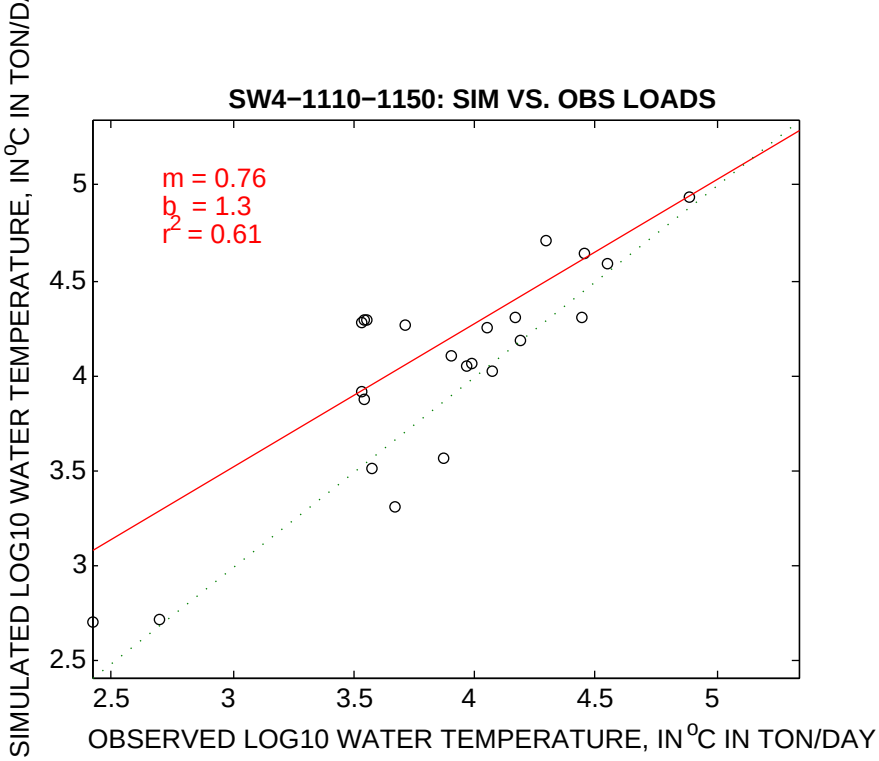


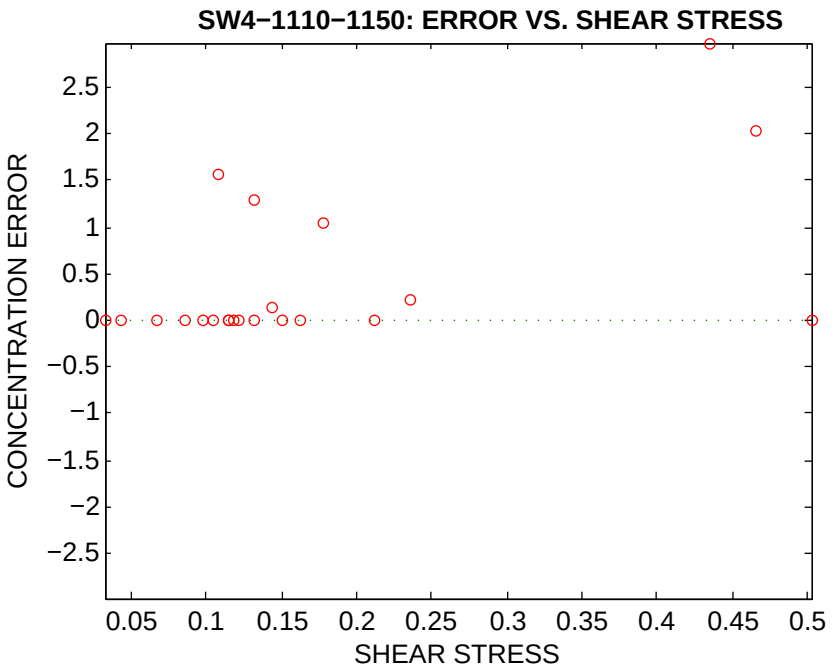


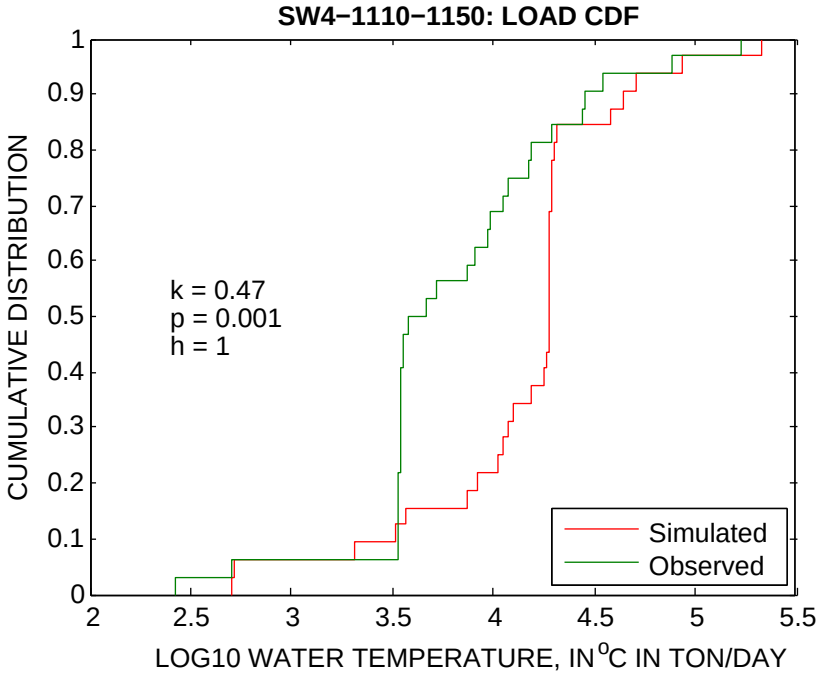


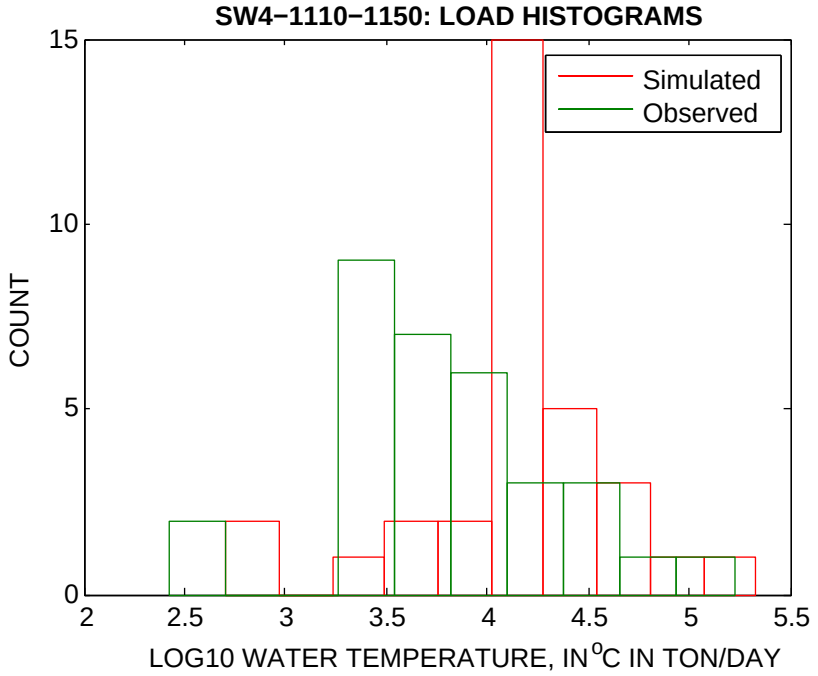


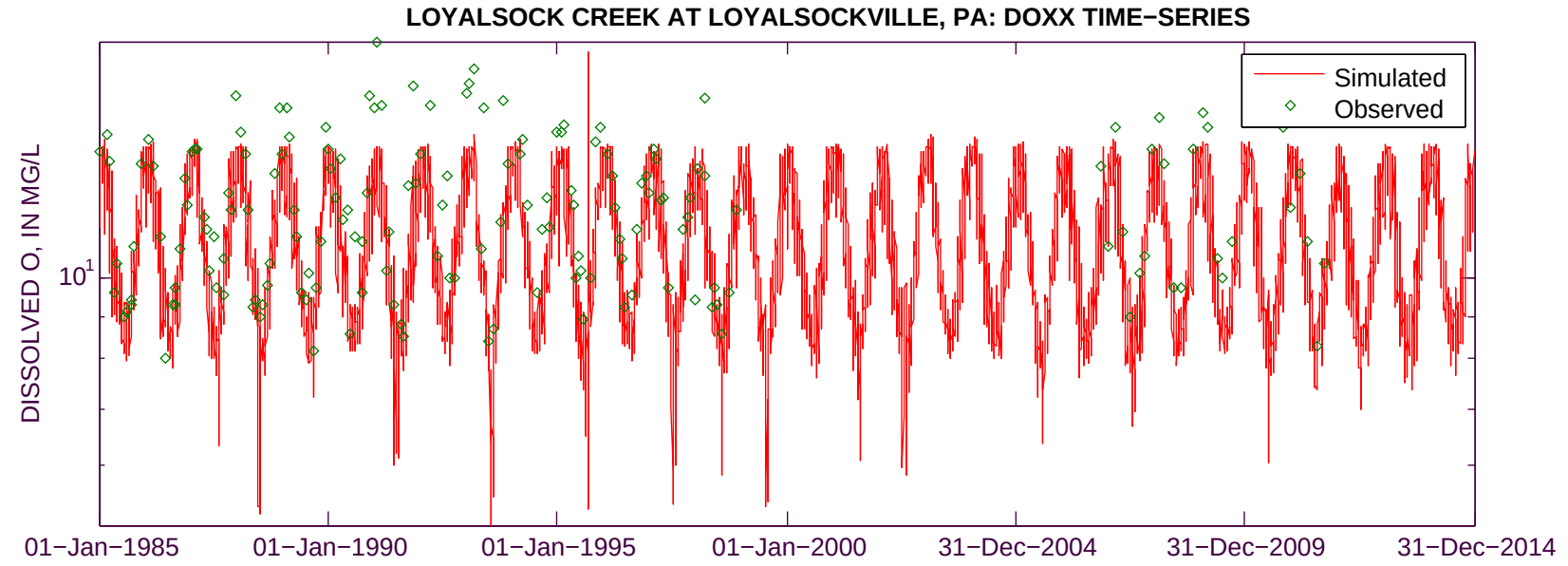
LOAD DATA
LOG10

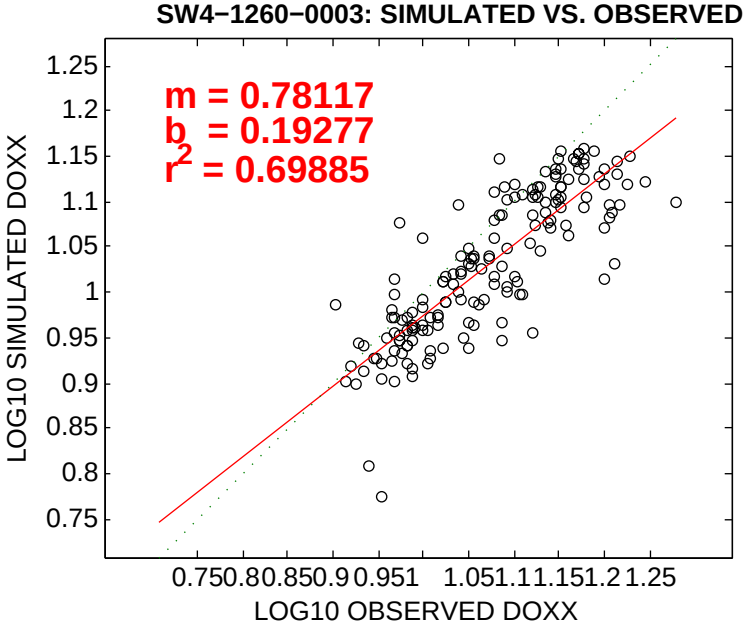


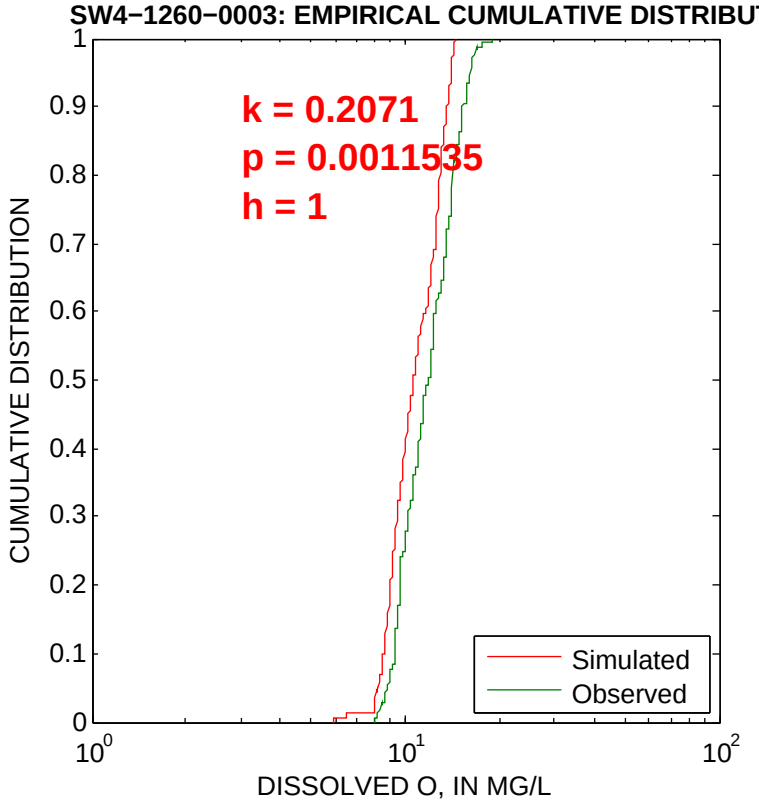












DATA SELECTION

scenario	file
P620171001WQ	DOXX.calib

plot: DOXX - dissolved oxygen

Dates: 1/1/1985 – 12/31/201

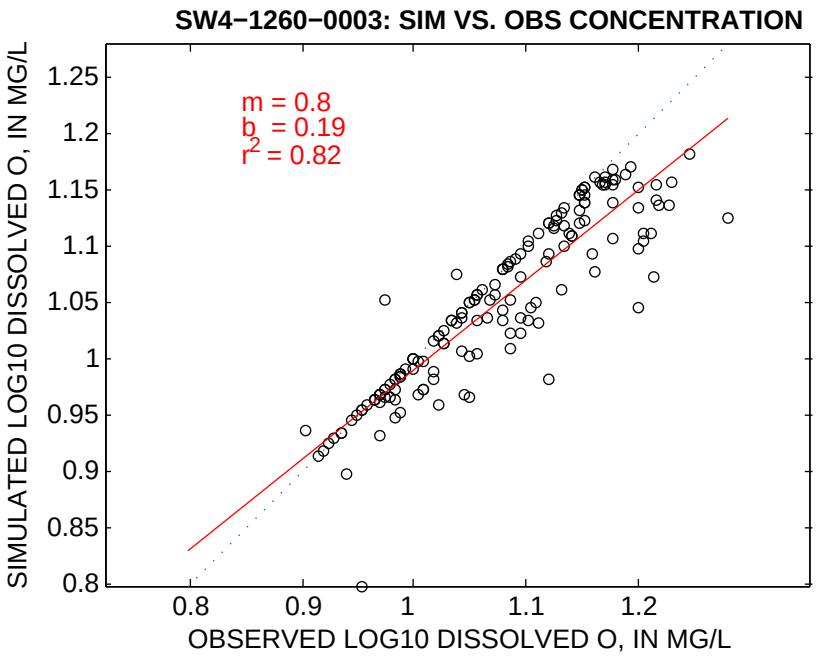
Drive	Directory	Observed
N/A	model	OBS20161101

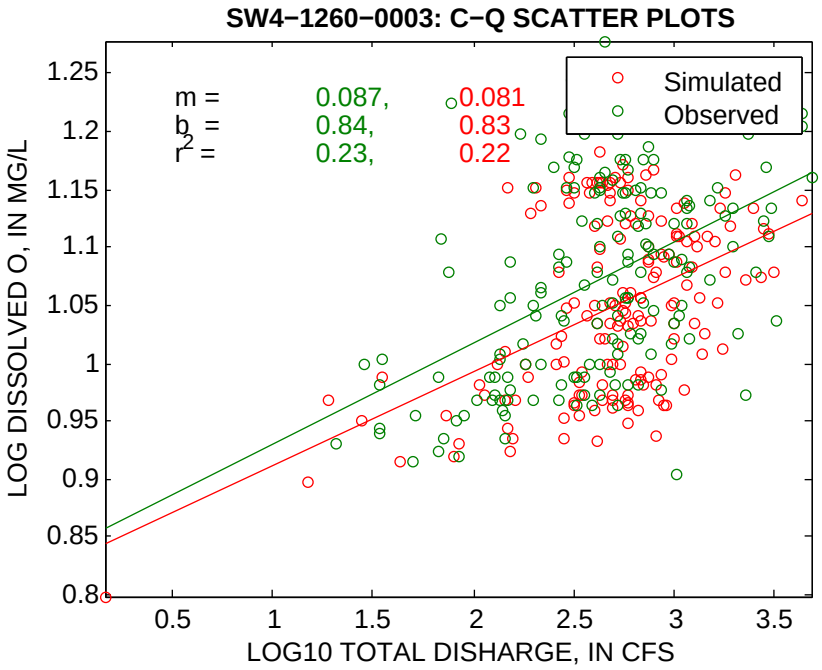
STATISTICS

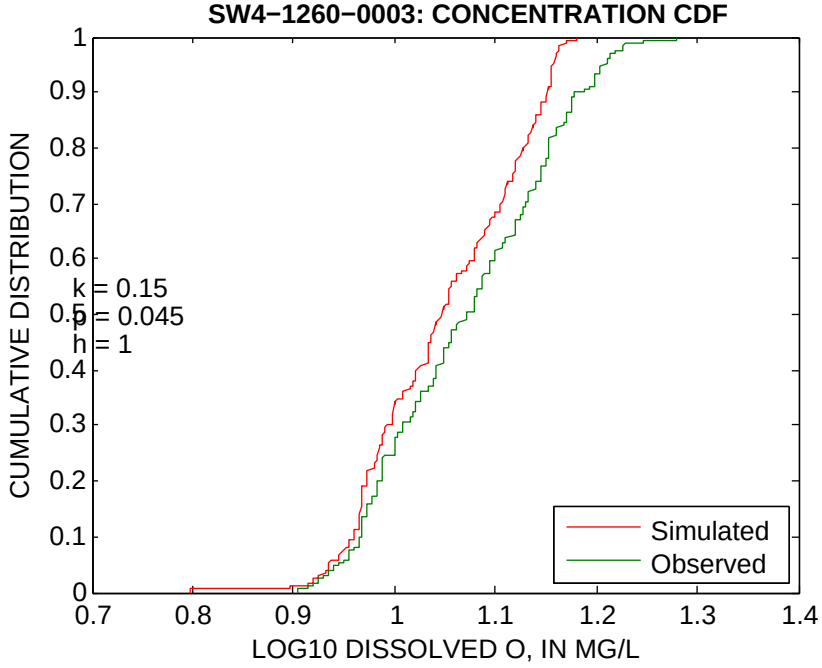
	n	observe	simulate
		169	169
min		8	5.955
		0.90309	0.774882
mean		12.0313	10.8971
		1.07194	1.03013
media		11.8	10.622
		1.07188	1.02621
max		19	14.429
		1.27875	1.15924
varian		5.68169	3.85434
		0.00729725	0.00637185
JB		0.024755	0.021088
		0.029522	0.076128
		ra	log
%		-9.42725	-3.90019
err.va		3.10001	0.00402664
rel.std.err		0.545614	0.551802
mod.eff		0.454386	0.448198

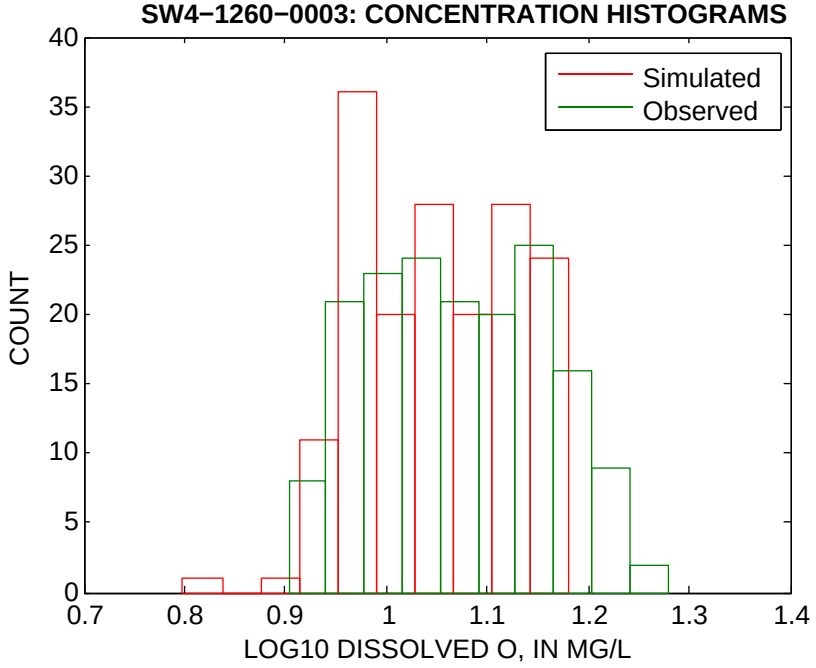
VERSION

ALL DATA
LOG10

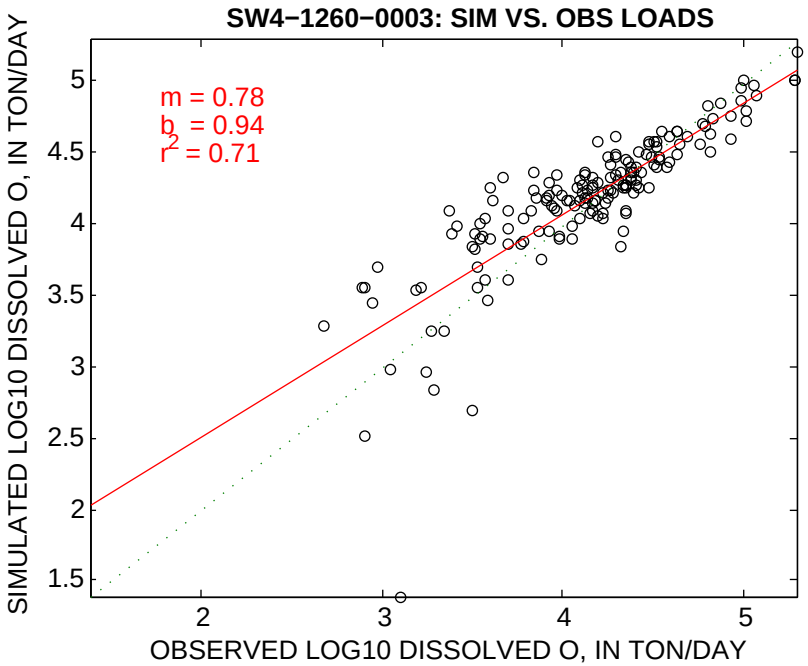




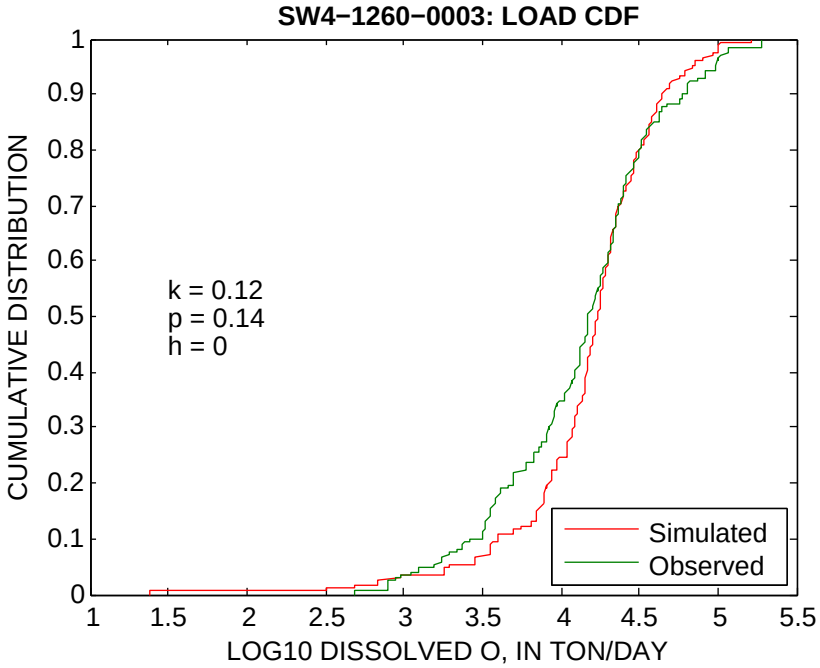


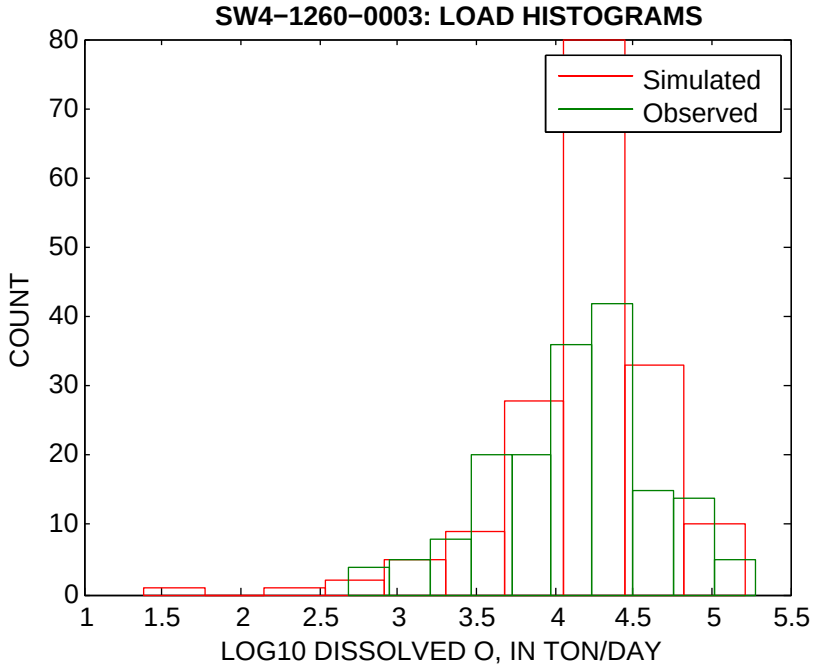


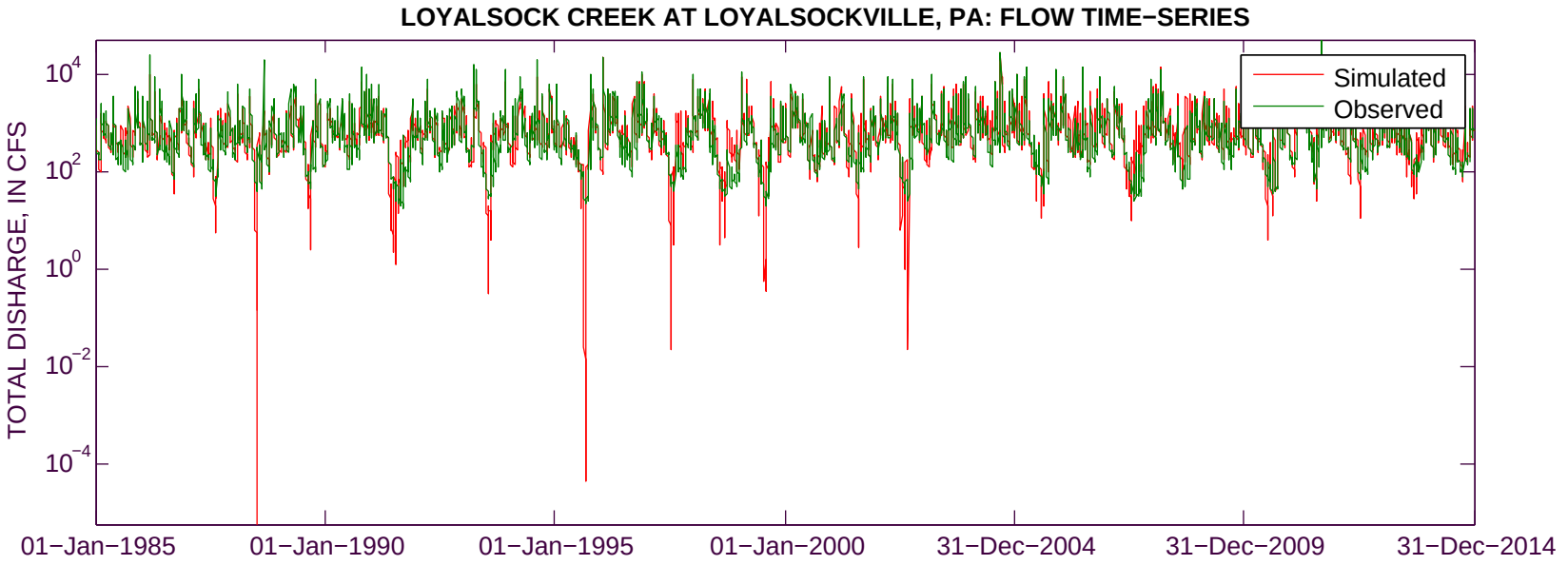
LOAD DATA
LOG10

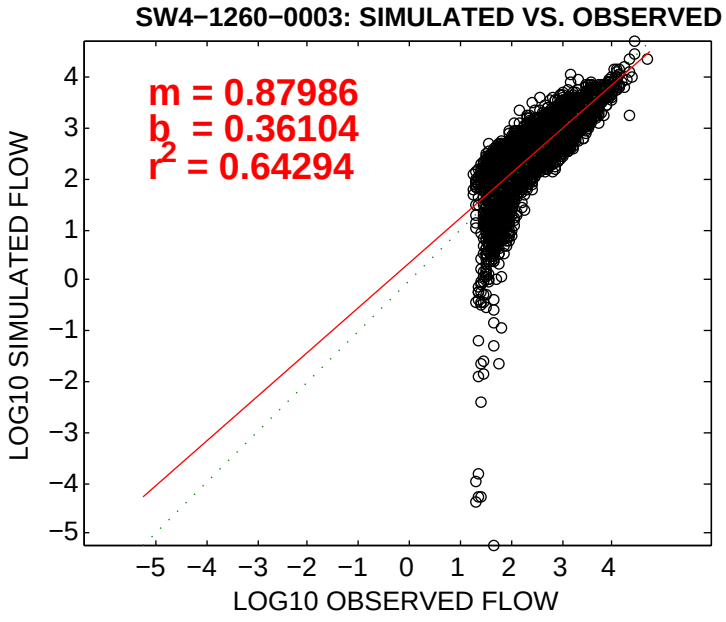


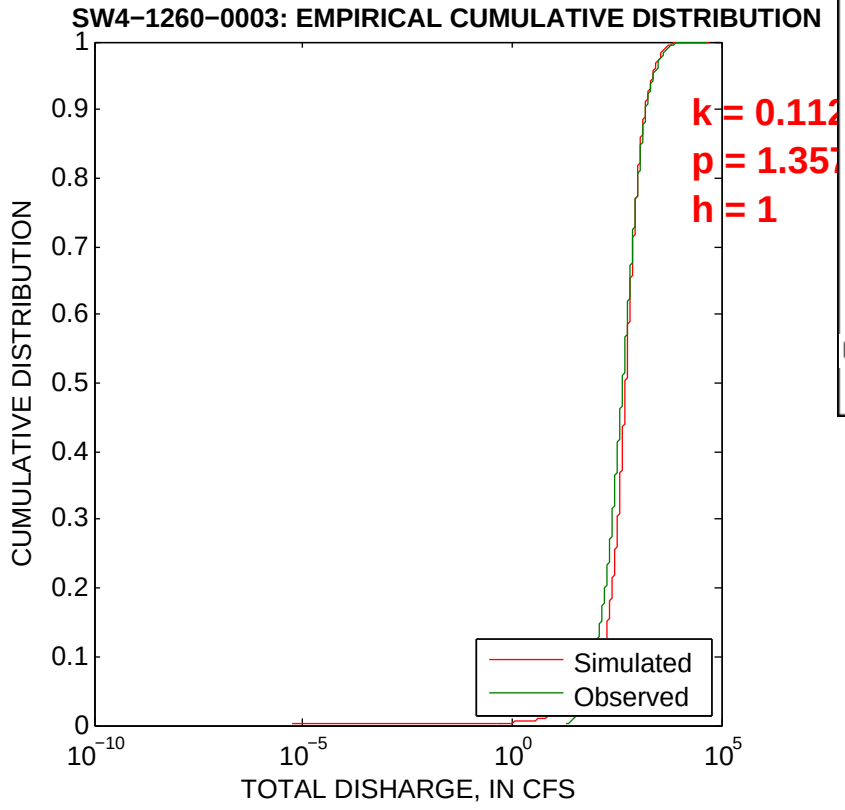












DATA SELECTION

scenario	file
P620171001WQ	FLOW.calib

plot: FLOW - total discharge

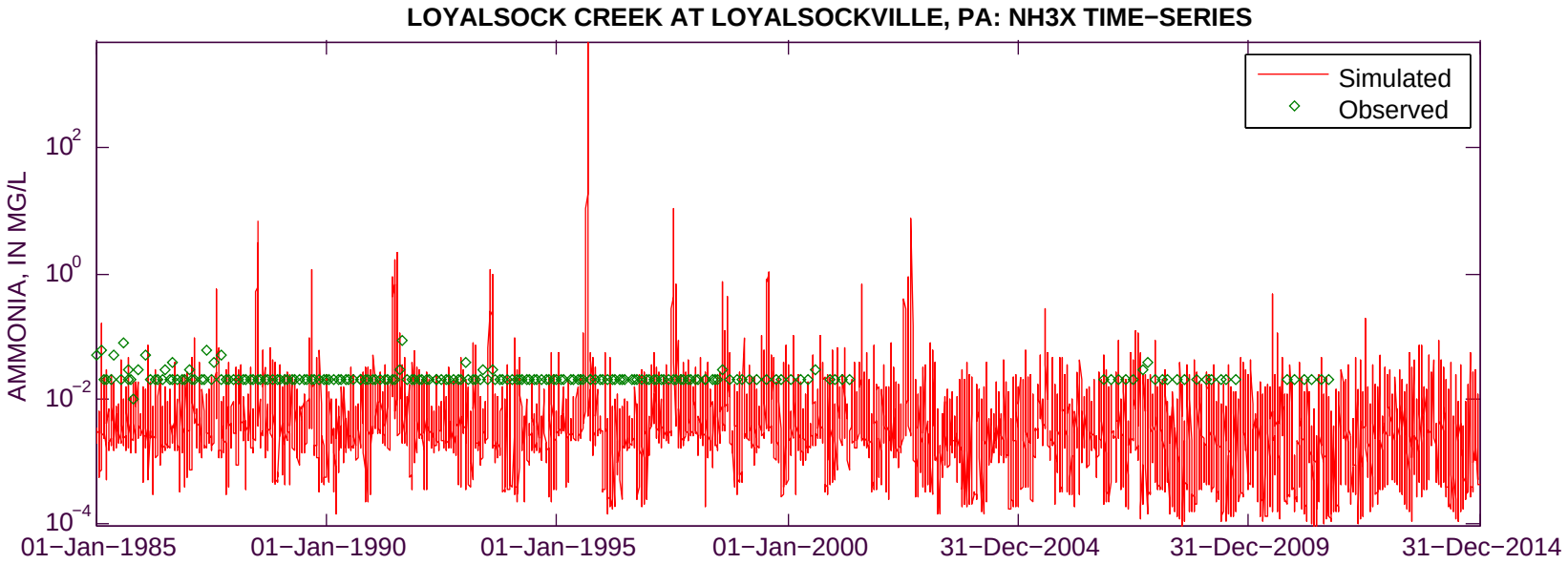
Dates: 1/1/1985 – 12/31/201

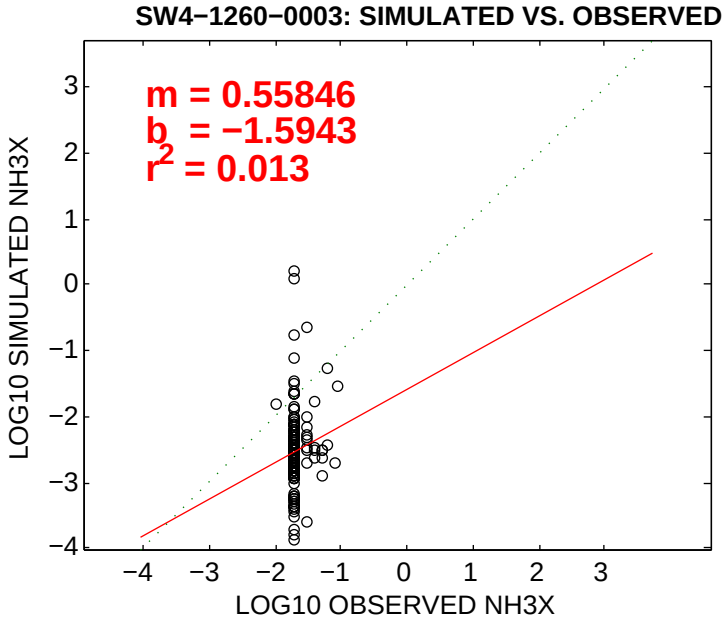
Drive	Directory	Observed
N/A	model	OBS20161101

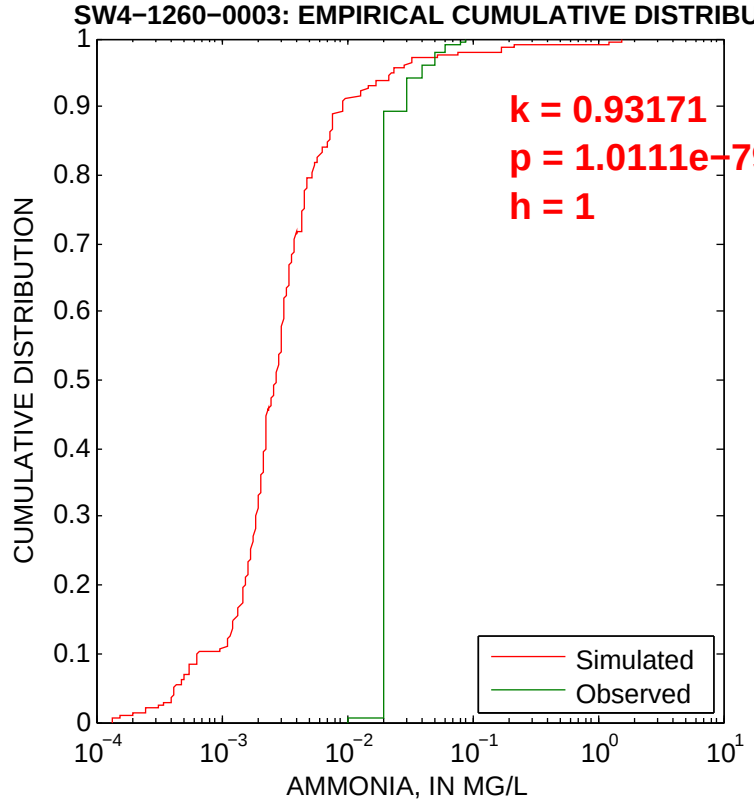
STATISTICS

		observe	simulate
n		10956	10952
min		18	0
		1.25527	-5.24857
mean		790.702	799.843
		2.63308	2.67778
media		456.5	537.06
		2.65992	2.73022
max		49000	53571
		4.6902	4.72893
varian		1.78324e+0	1.33743e+
		0.23355	0.281209
JB		0.001	0.001
		0.001	0.001
		ra	log
%		1.15606	1.69739
err.va		495863	0.105776
rel.std.err		0.278068	0.452905
mod.eff		0.721932	0.547095

VERSION 2.1







DATA SELECTION

scenario	file
P620171001WQ	NH3X.calib

plot: NH3X - ammonia

Dates: 1/1/1985 – 12/31/201

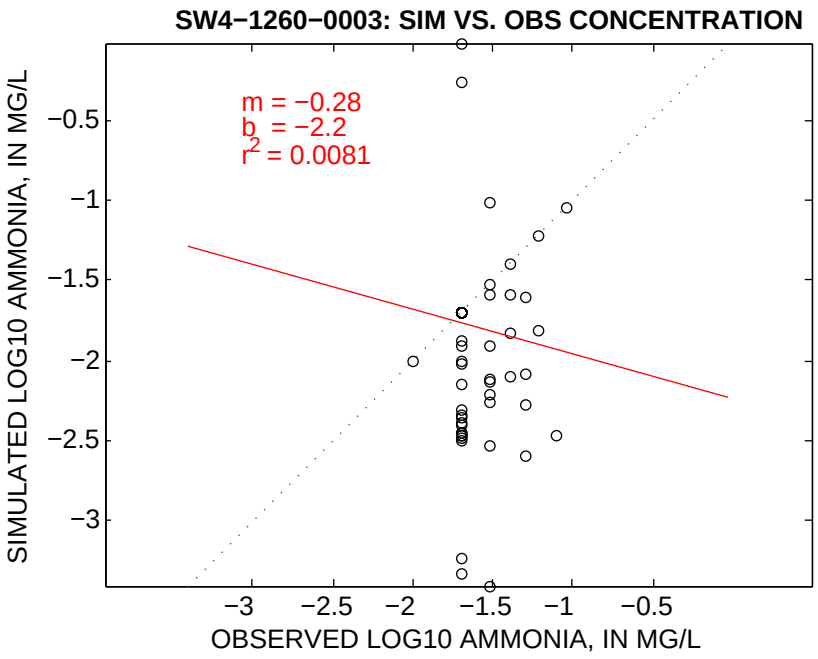
Drive	Directory	Observed
N/A	model	OBS20161101

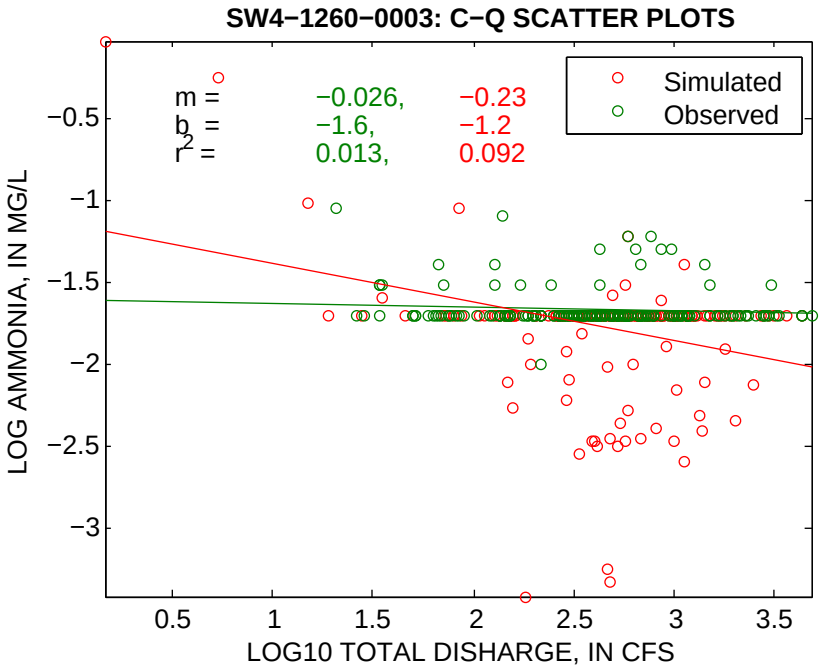
STATISTICS

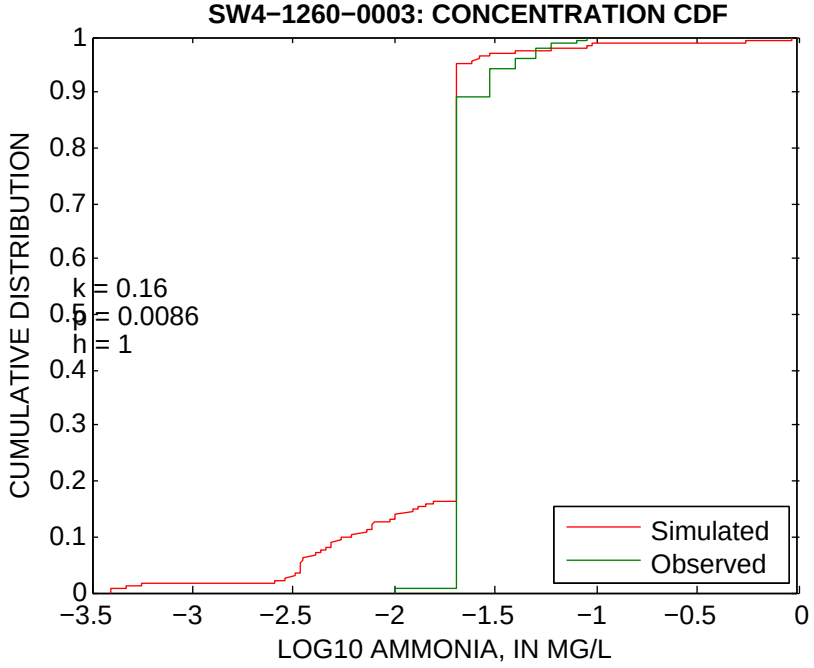
	n	205	205
		observe	simulate
min		0.01	0.00013427
		-2	-3.87202
mean		0.022439	0.0204173
		-1.66743	-2.52553
media		0.02	0.0027475
		-1.69897	-2.56106
max		0.09	1.5924
		-1.04576	0.202052
varian		8.22573e-0	0.0203022
		0.0119468	0.286615
JB		0.001	0.001
		0.001	0.001
		ra	log
%		-9.00987	51.4622
err.va		0.0204141	1.02516
rel.std.err		248.173	85.81
mod.eff		-247.173	-84.81

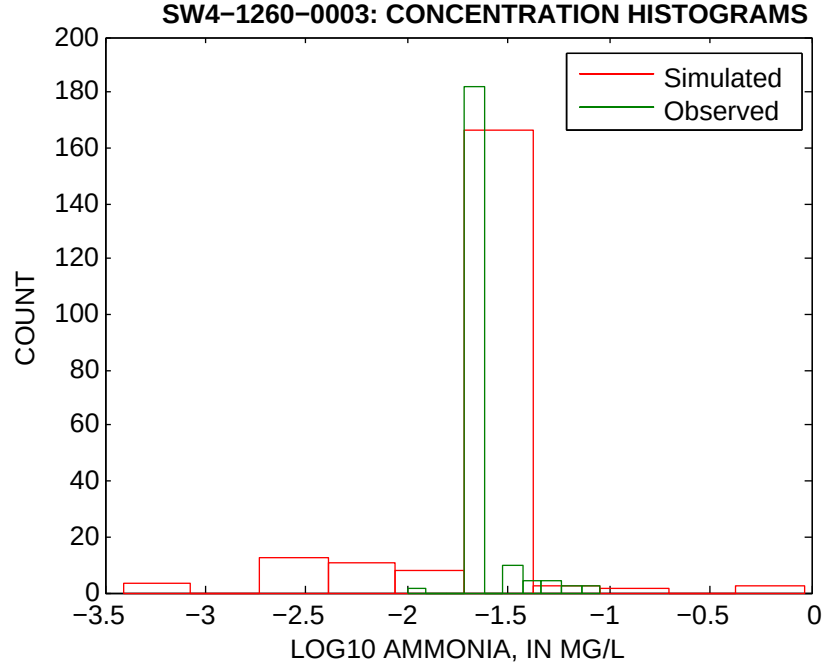
VERSION 2.1

ALL DATA
LOG10

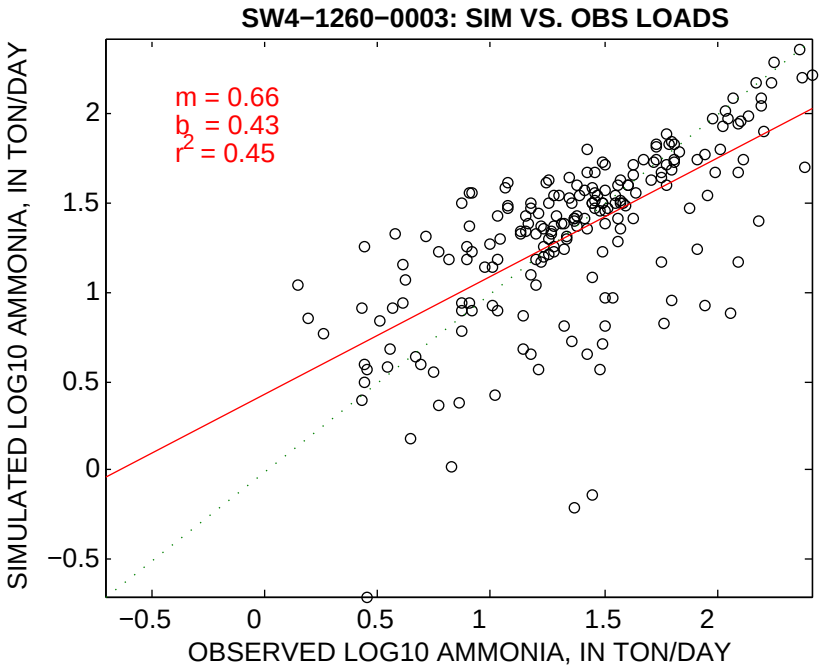


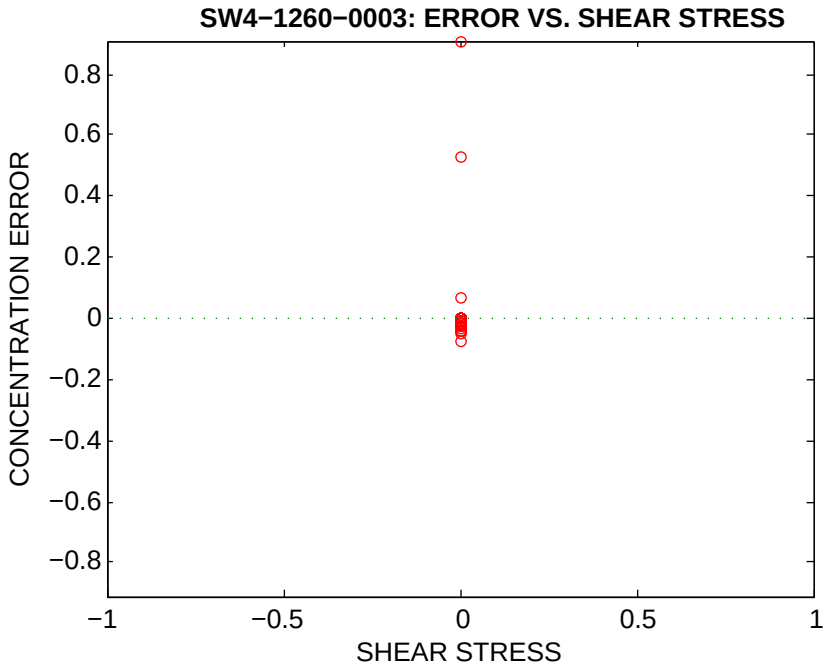


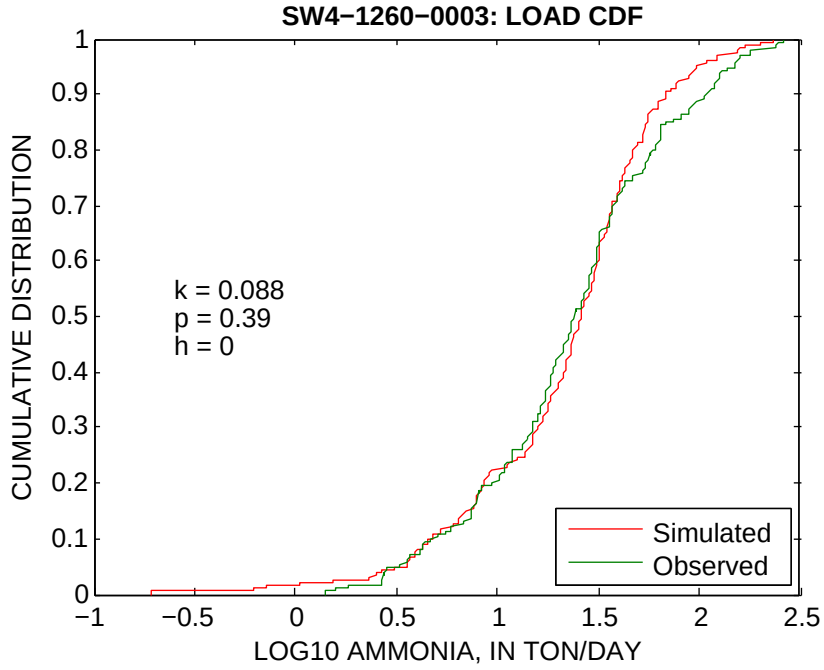


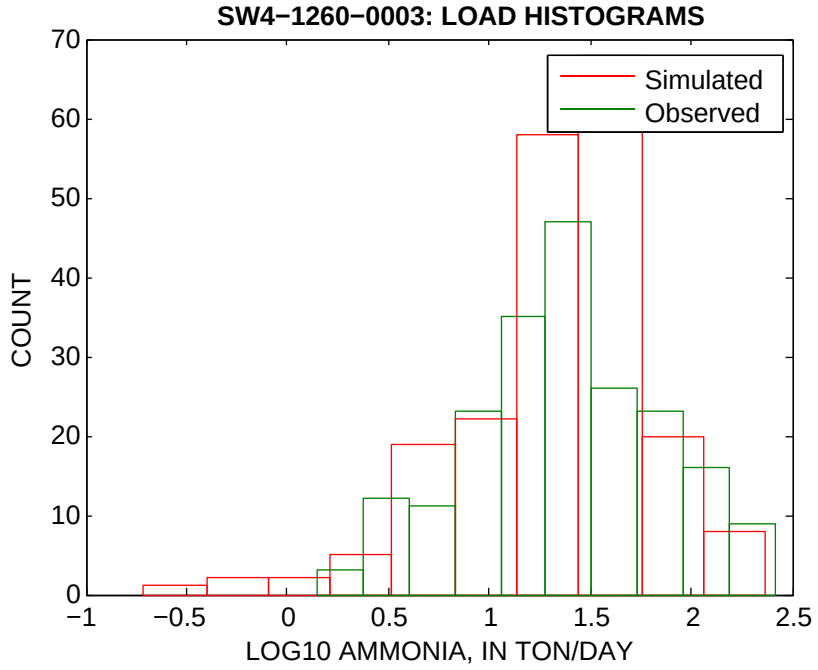


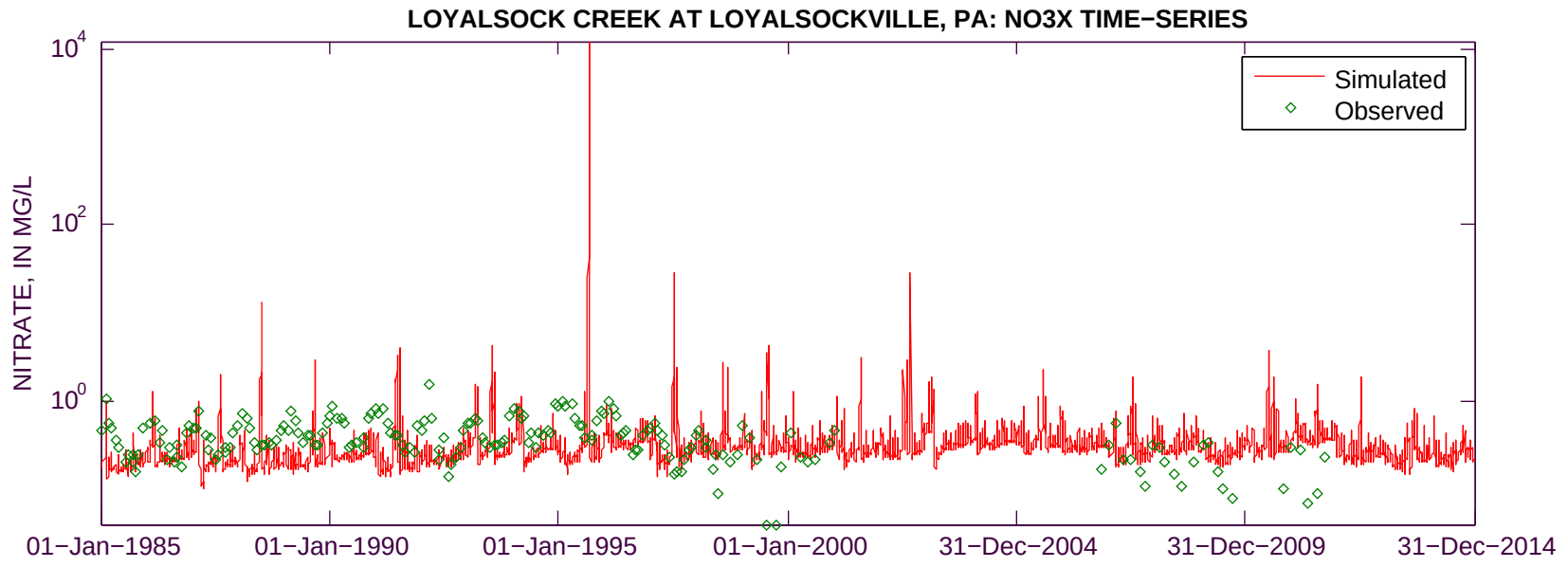
LOAD DATA
LOG10

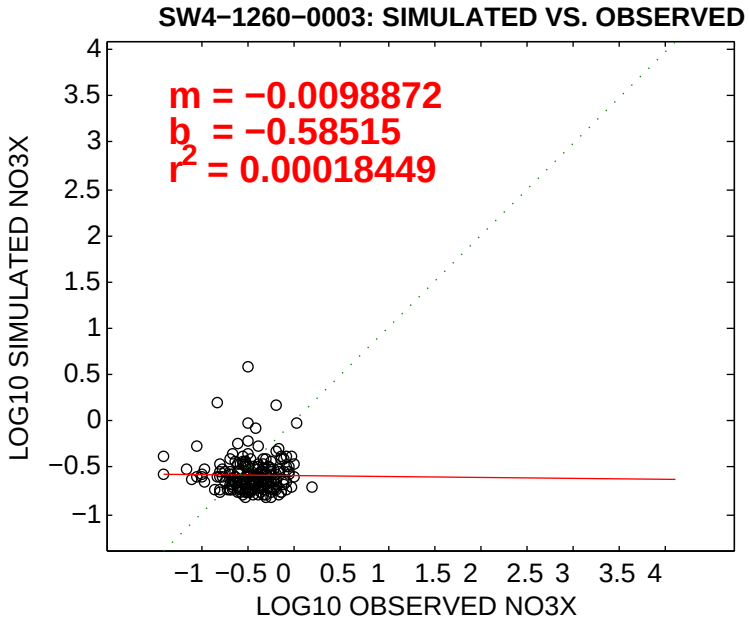


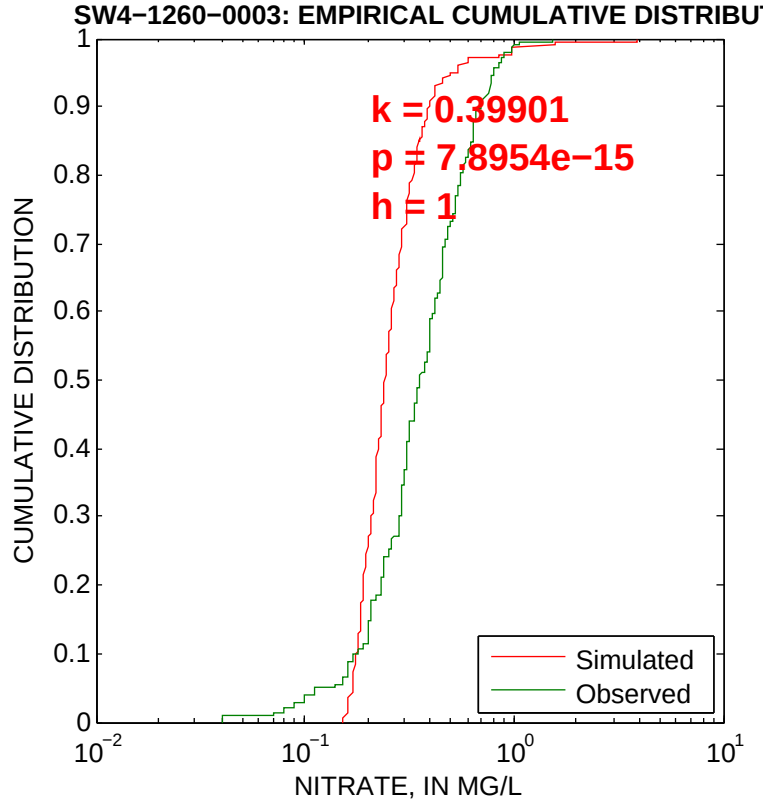












DATA SELECTION

scenario: P620171001WQ | file: NO3X.calib

plot: NO3X - nitrate

Dates: 1/1/1985 – 12/31/201

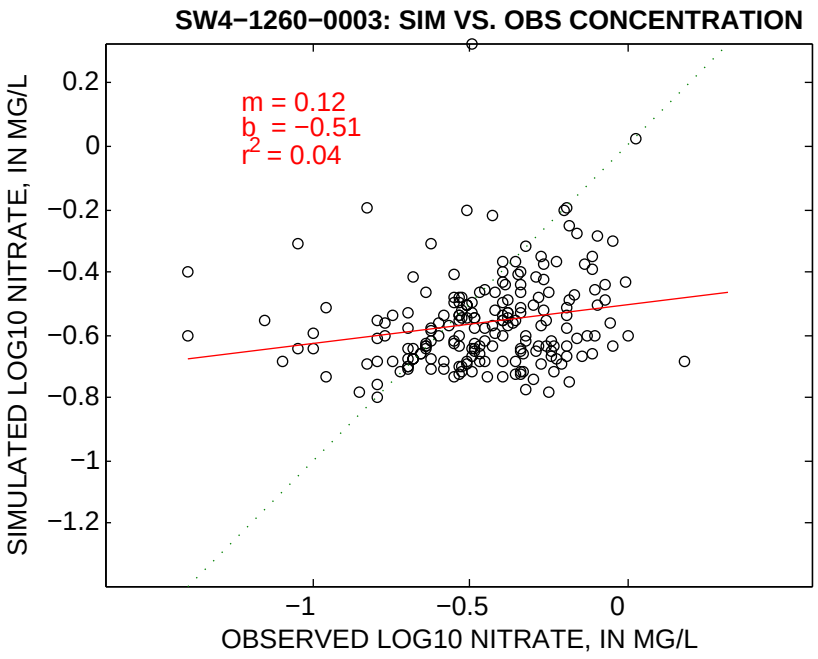
Drive: N/A | Directory: model | Observed: OBS20161101

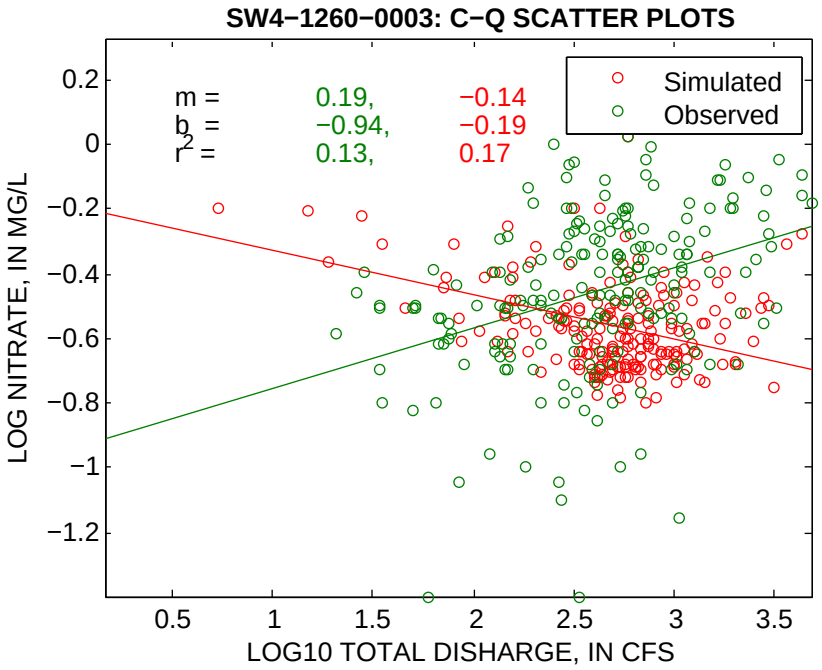
STATISTICS

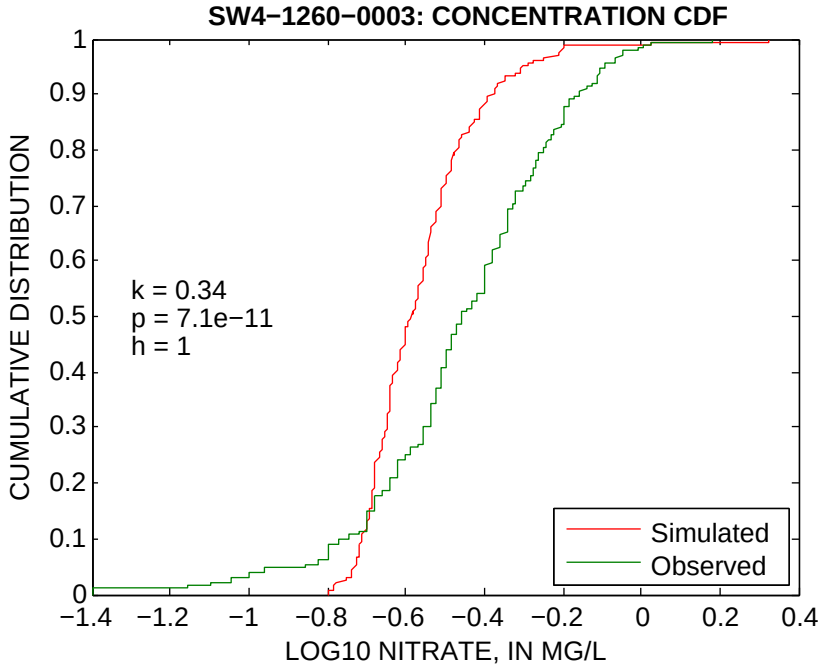
n	203	203
	observe	simulate
min	0.04	0.15171
	-1.39794	-0.818986
mean	0.405616	0.301526
	-0.456009	-0.580641
media	0.35	0.24409
	-0.455932	-0.61245
max	1.53	3.8949
	0.184691	0.590496
varian	0.0475614	0.0939197
	0.0624847	0.0331099
JB	0.001	0.001
	0.001	0.001
	ra	log
%	-25.6621	27.331
err.va	0.151602	0.11244
rel.std.err	3.1875	1.79948
mod.eff	-2.1875	-0.799483

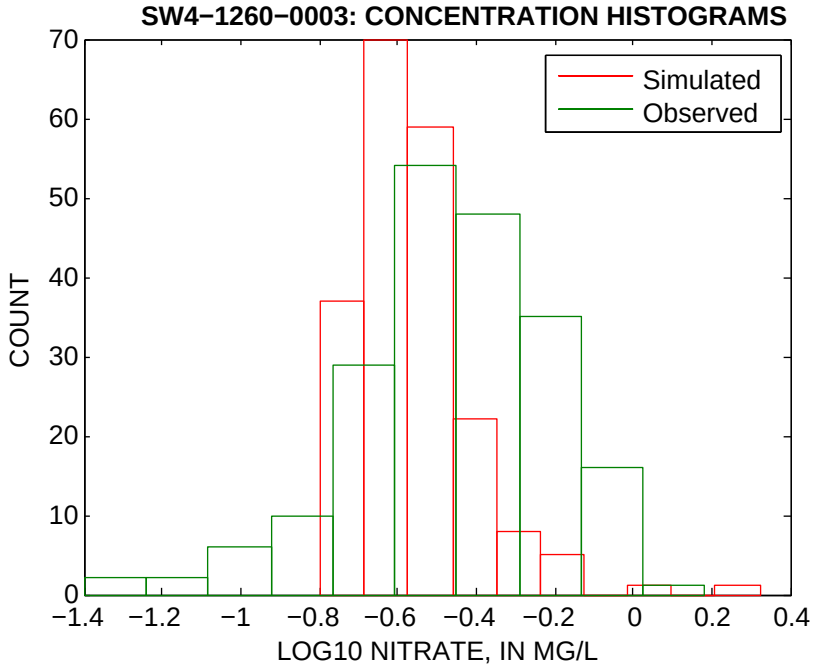
VERSION 2.1

ALL DATA
LOG10

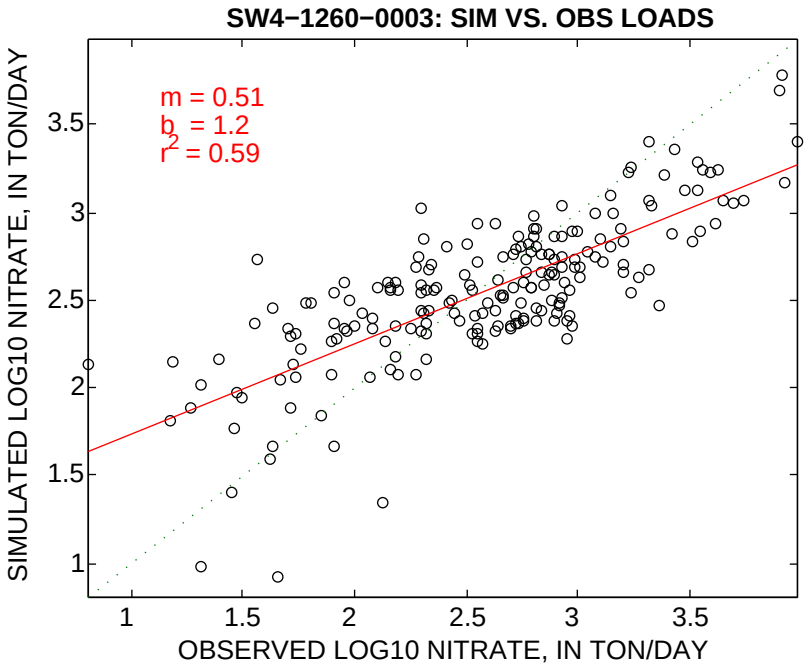


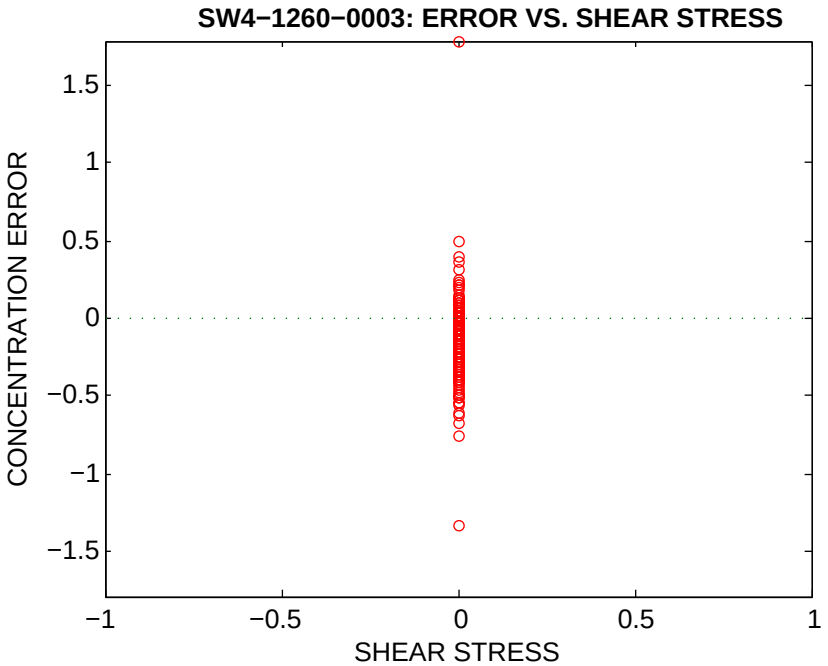


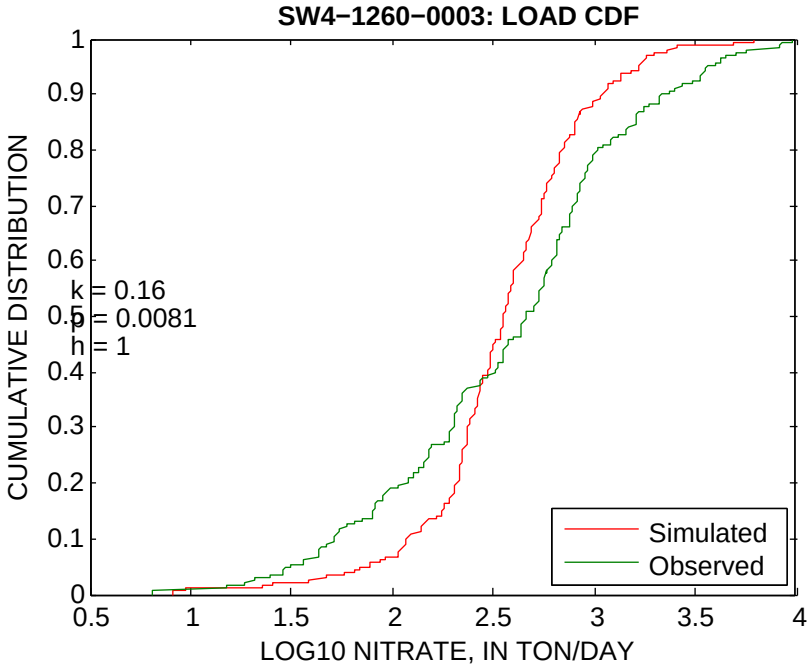


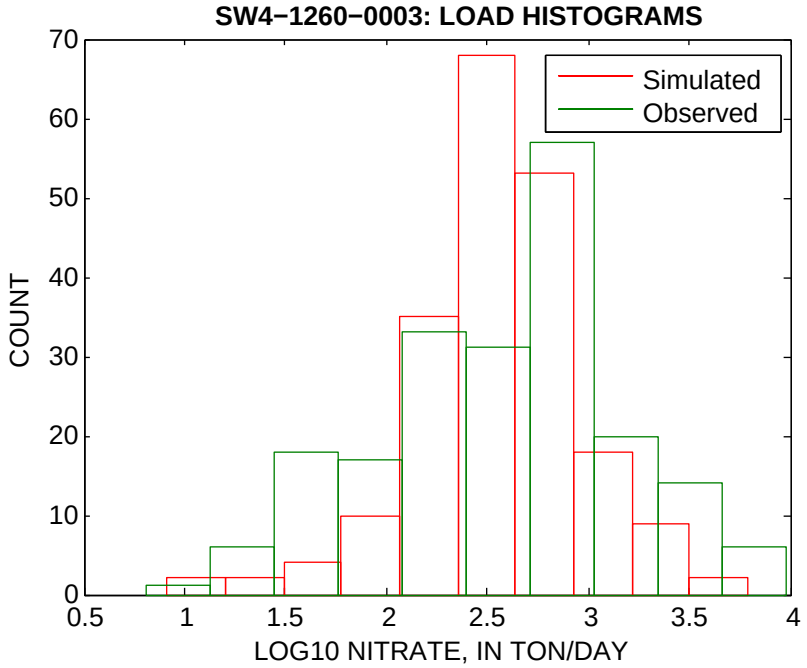


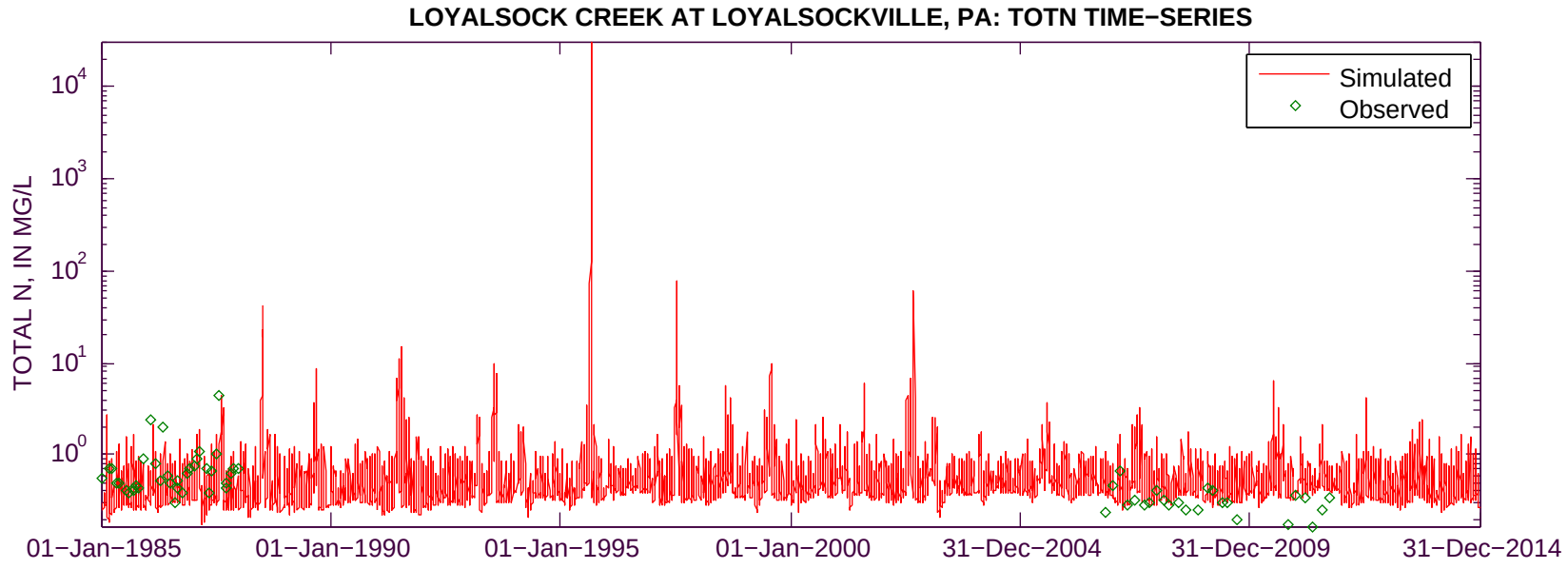
LOAD DATA
LOG10

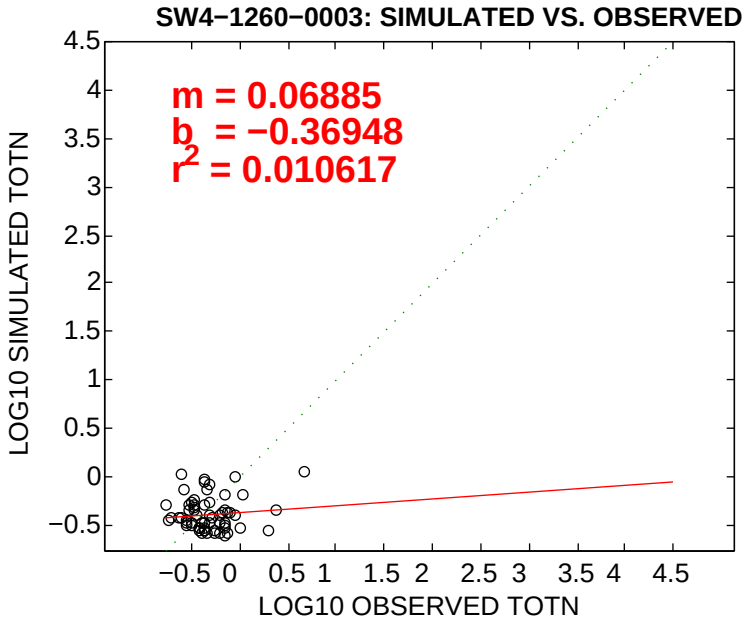


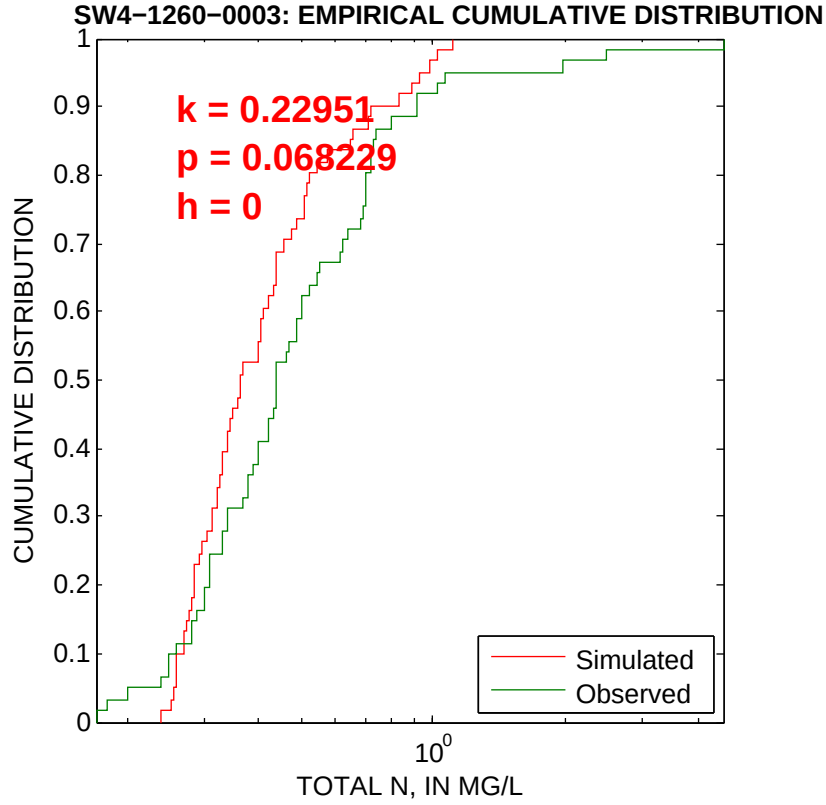












DATA SELECTION

scenario: P620171001WQ | file: TOTN.calib

plot: TOTN - total nitrogen

Dates: 1/1/1985 – 12/31/201

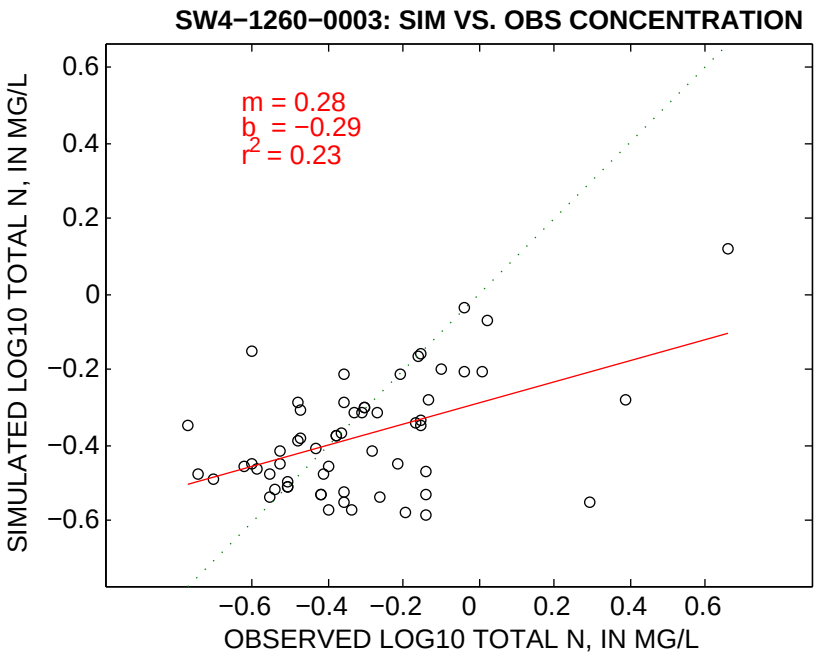
Drive | Directory: N/A | model | Observed: OBS20161101

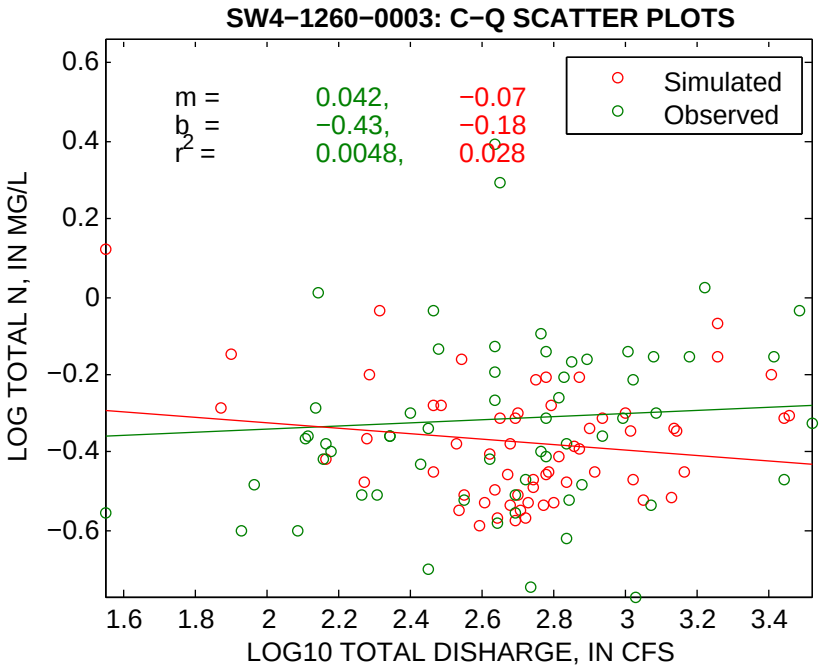
STATISTICS

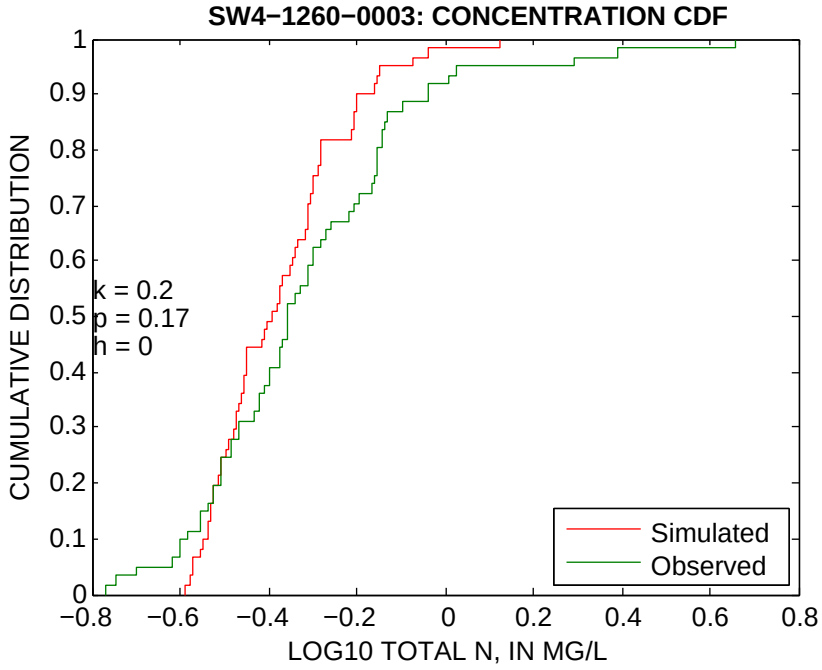
n	61	61
	observe	simulate
min	0.17	0.24076
	-0.769551	-0.618416
mean	0.608033	0.442405
	-0.314983	-0.391169
media	0.44	0.36394
	-0.356547	-0.43897
max	4.56	1.106
	0.658965	0.0437551
varian	0.405339	0.0433017
	0.0656571	0.0293153
JB	0.001	0.001
	0.001	0.021573
	ra	log
%	-27.2399	24.1872
err.va	0.393743	0.0918325
rel.std.err	0.971391	1.39867
mod.eff	0.028609	-0.398667

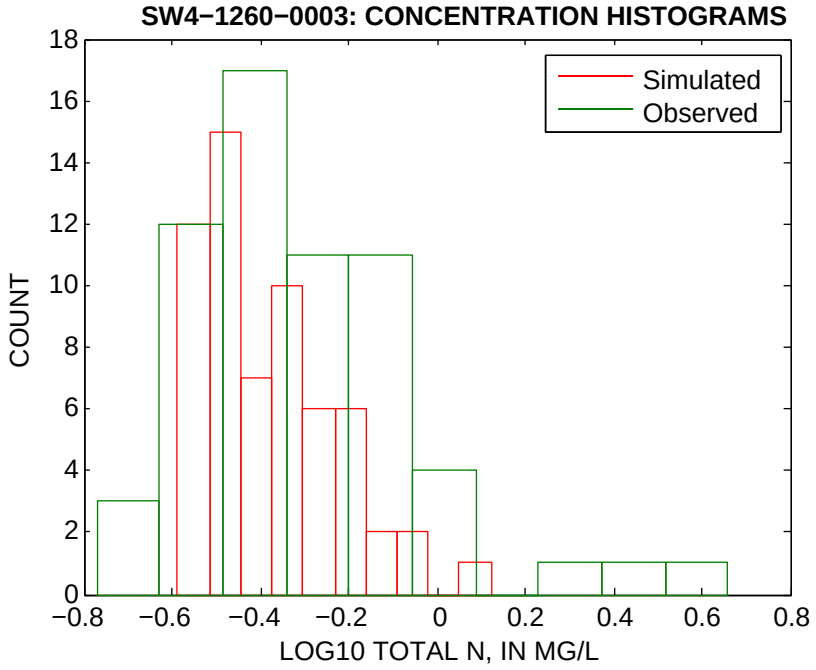
VERSION 2.1

ALL DATA
LOG10

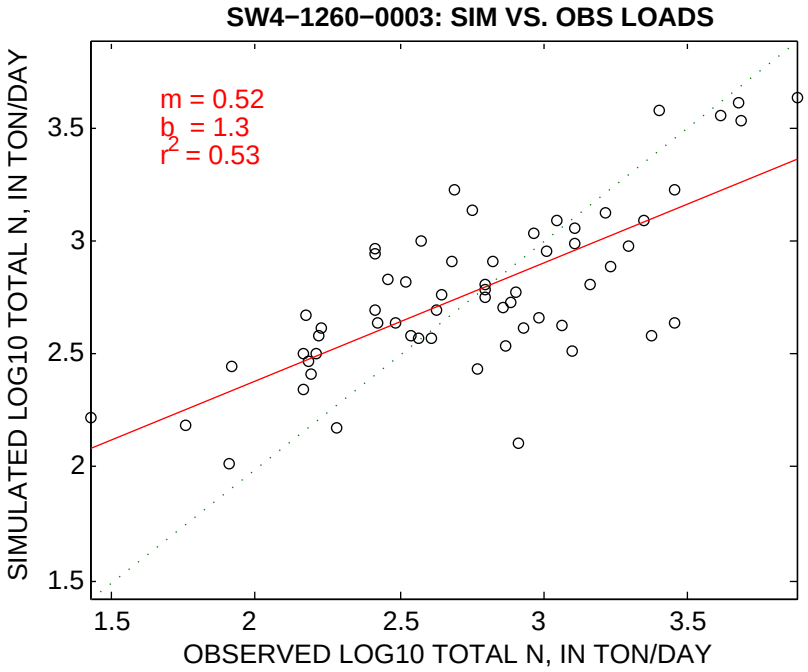




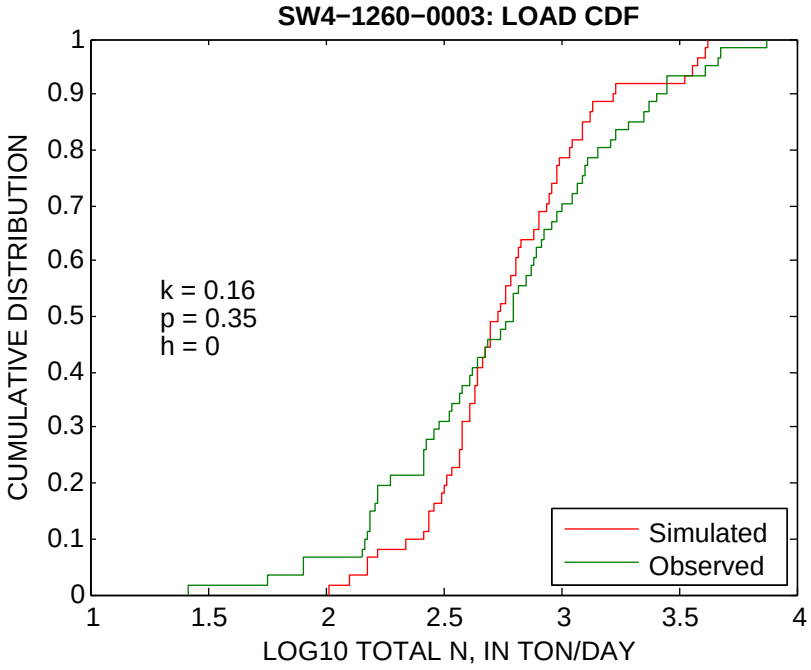


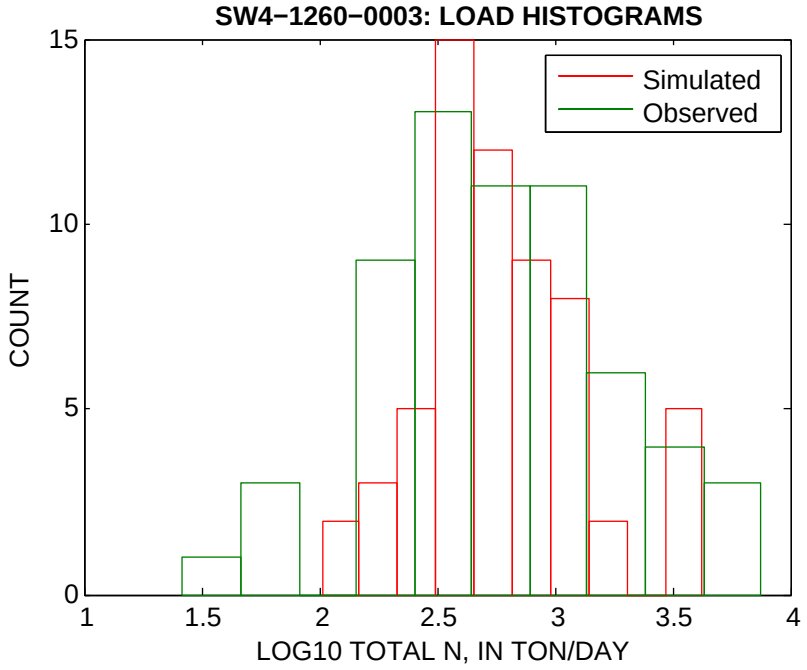


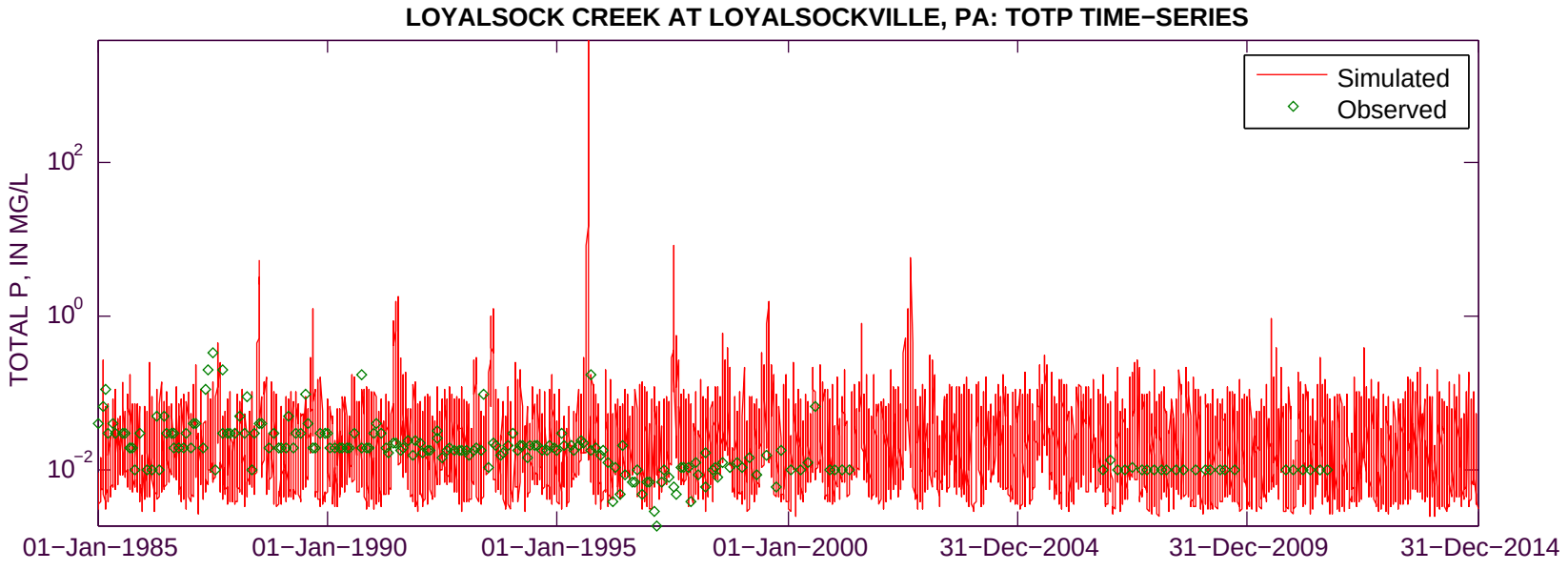
LOAD DATA
LOG10

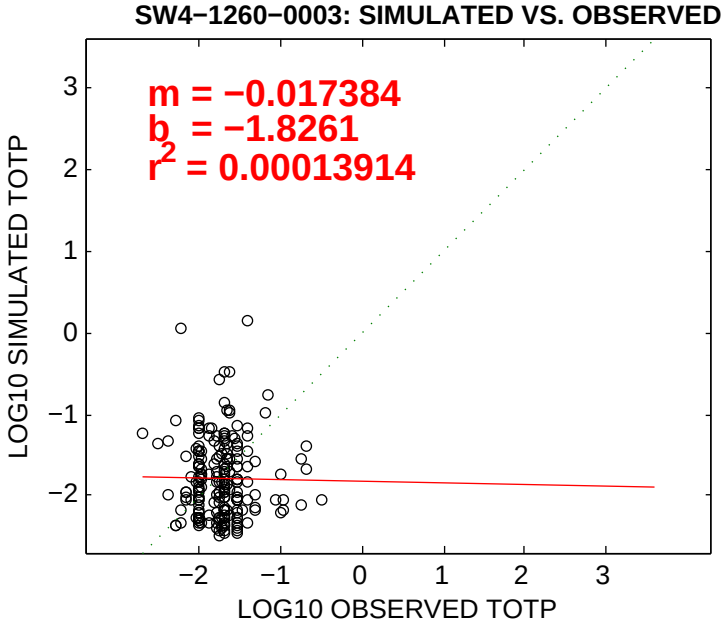


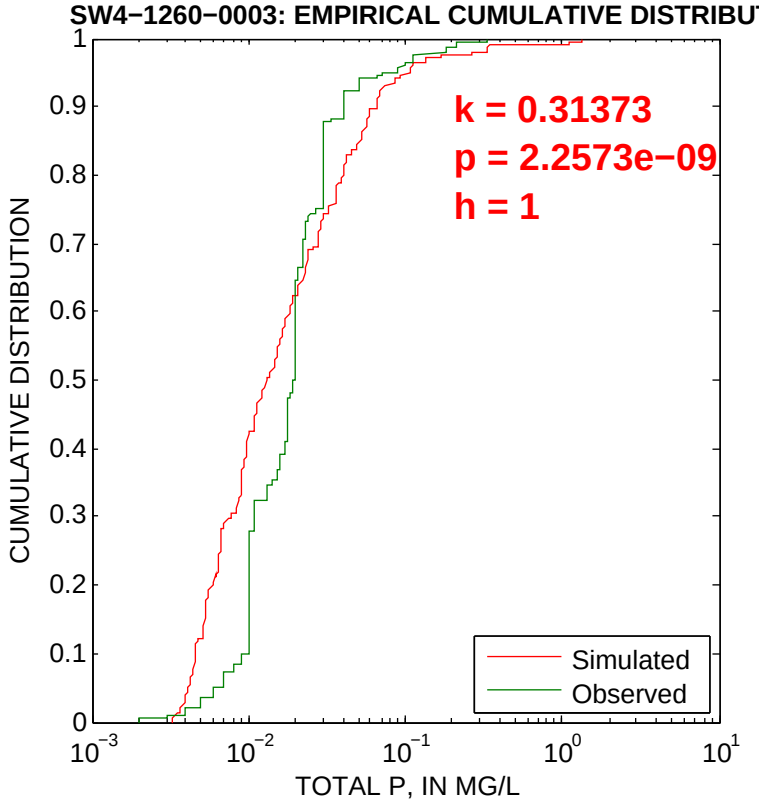












DATA SELECTION

scenario	file
P620171001WQ	TOTP.calib

plot: TOTP - total phosphorus

Dates: 1/1/1985 – 12/31/201

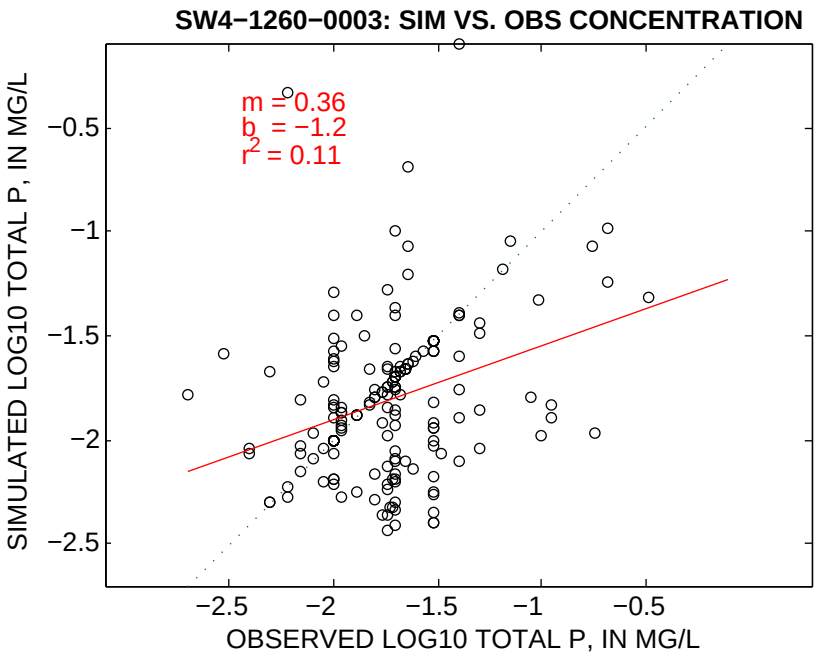
Drive	Directory	Observed
N/A	model	OBS20161101

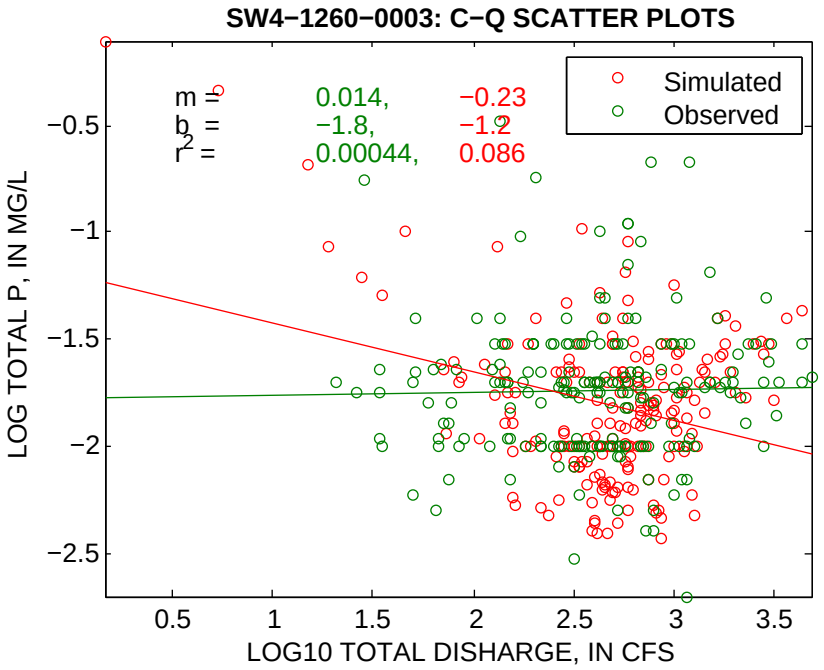
STATISTICS

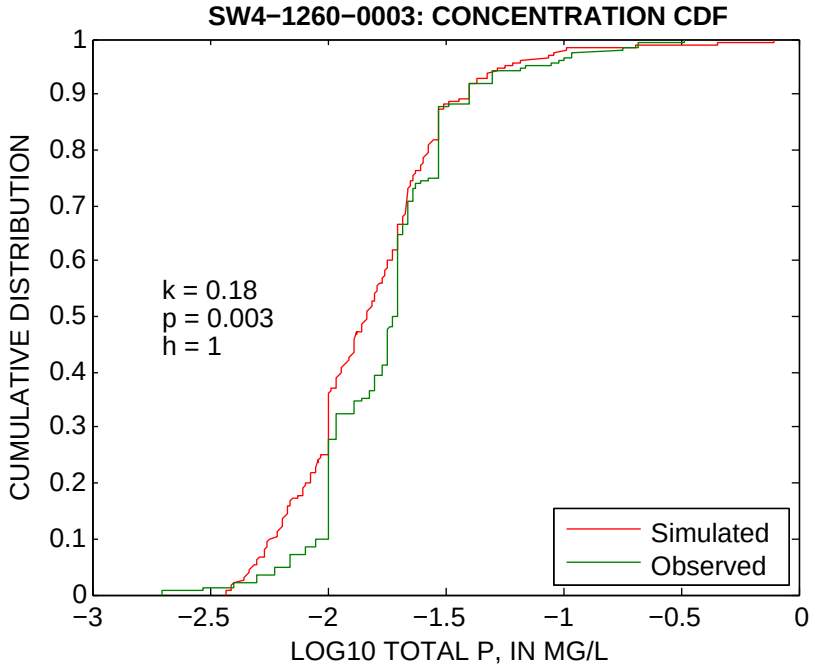
	n	204	204
		observe	simulate
min		0.002	0.0032784
		-2.69897	-2.48434
mean		0.026223	0.0396506
		-1.73573	-1.7959
media		0.0195	0.0132915
		-1.71011	-1.87644
max		0.33	1.3623
		-0.481486	0.134273
varian		0.00131364	0.0165066
		0.103471	0.224733
JB		0.001	0.001
		0.001	0.001
		ra	log
%		51.2051	3.46674
err.va		0.0180816	0.33544
rel.std.err		13.7645	3.24186
mod.eff		-12.7645	-2.24186

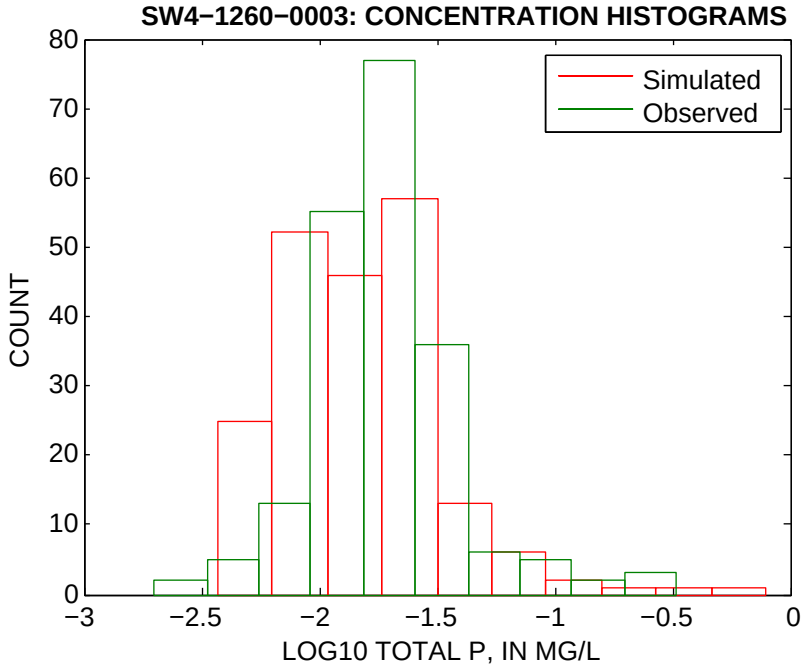
VERSION 2.1

ALL DATA
LOG10

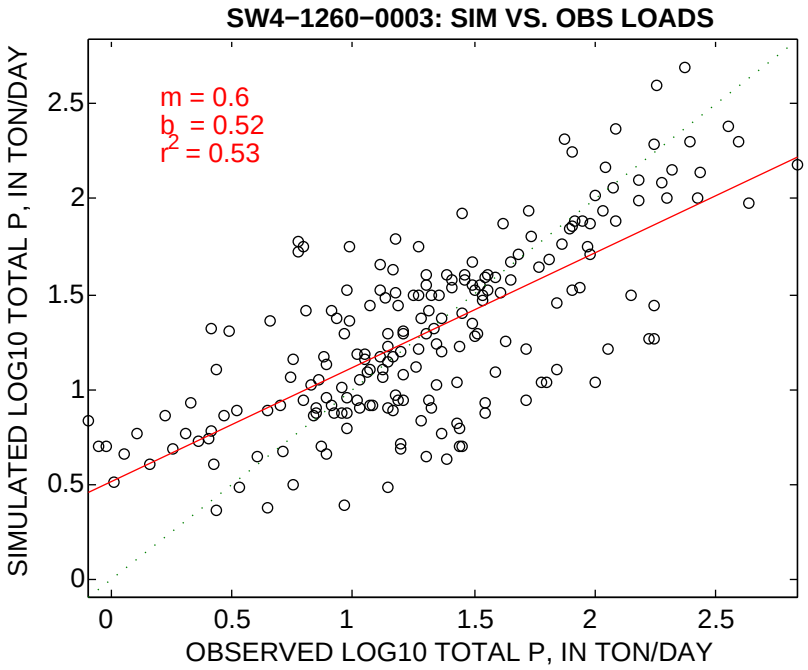


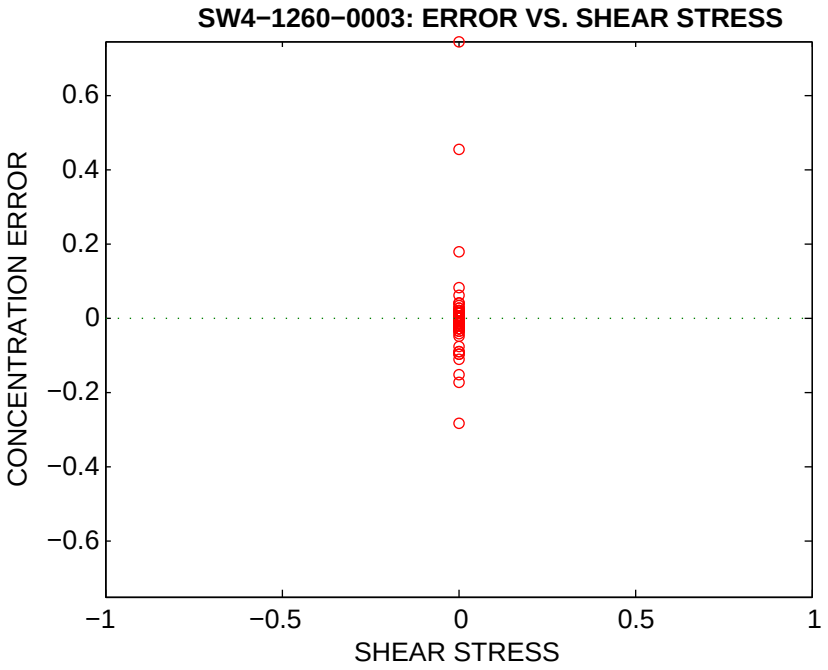


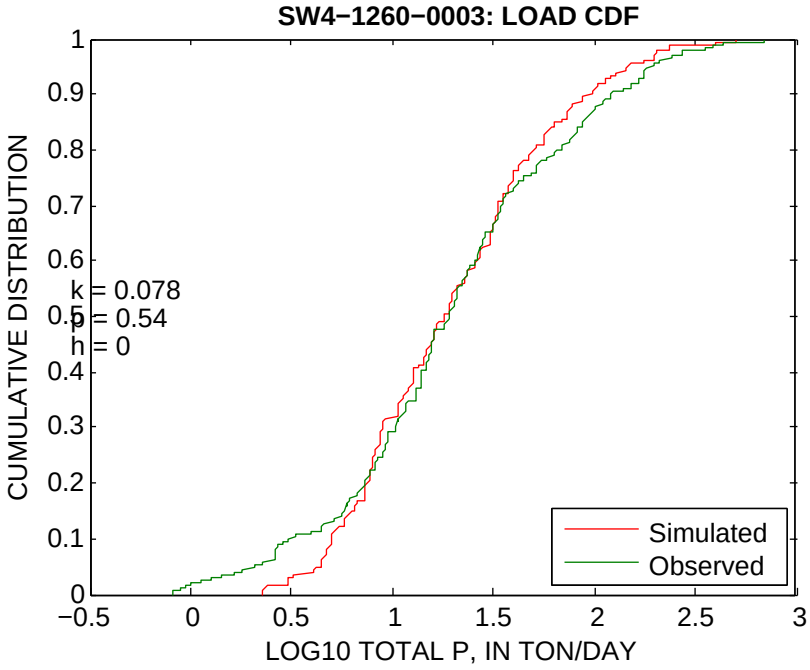


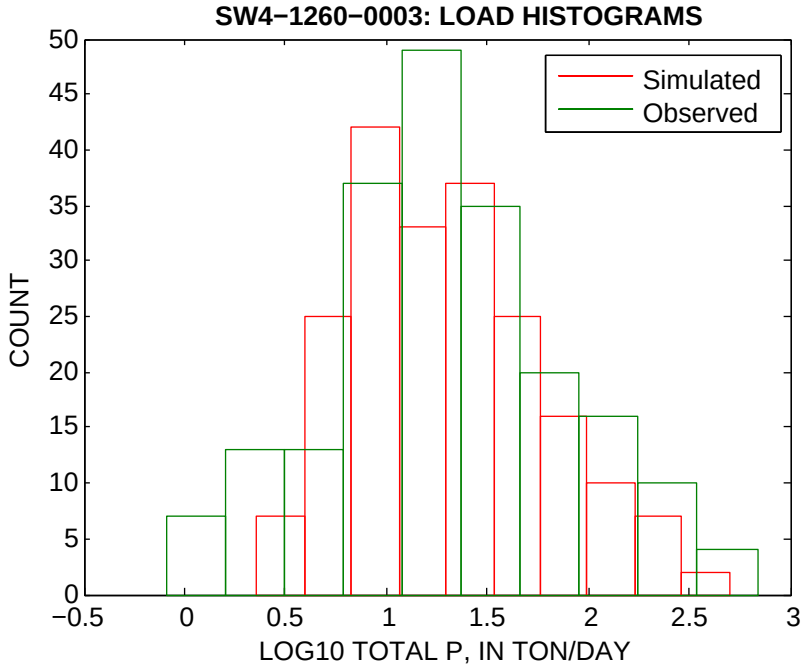


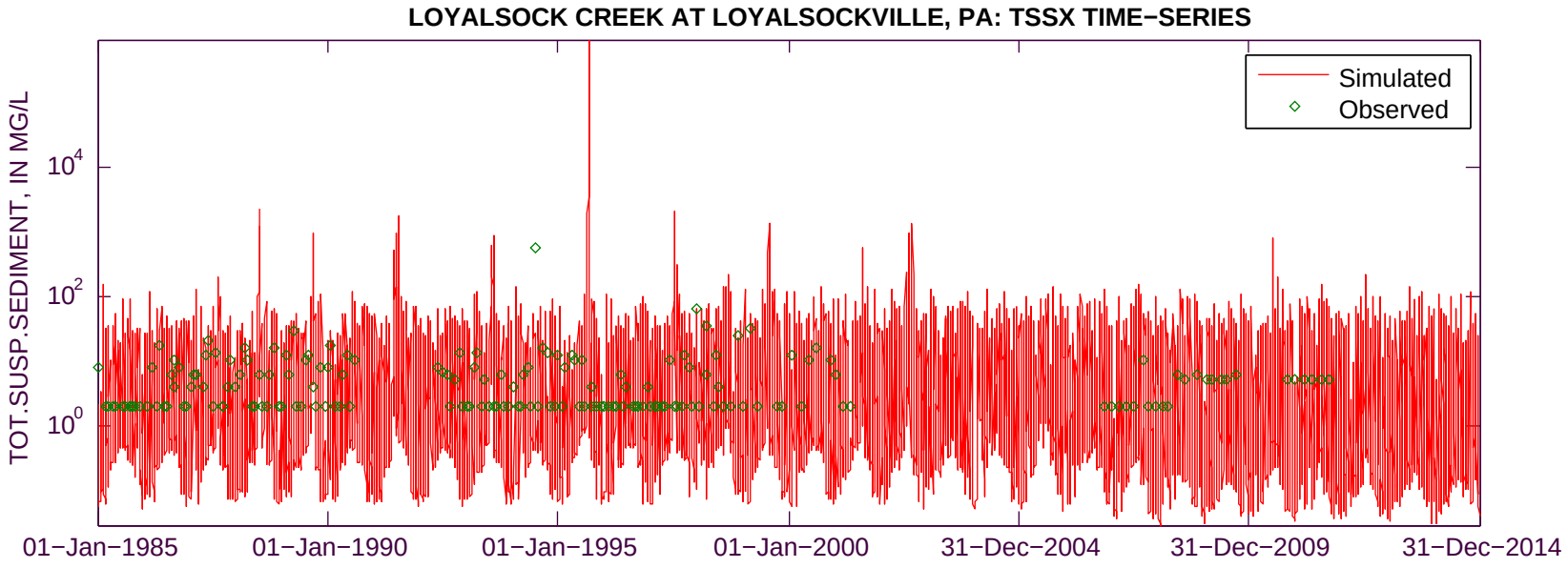
LOAD DATA
LOG10

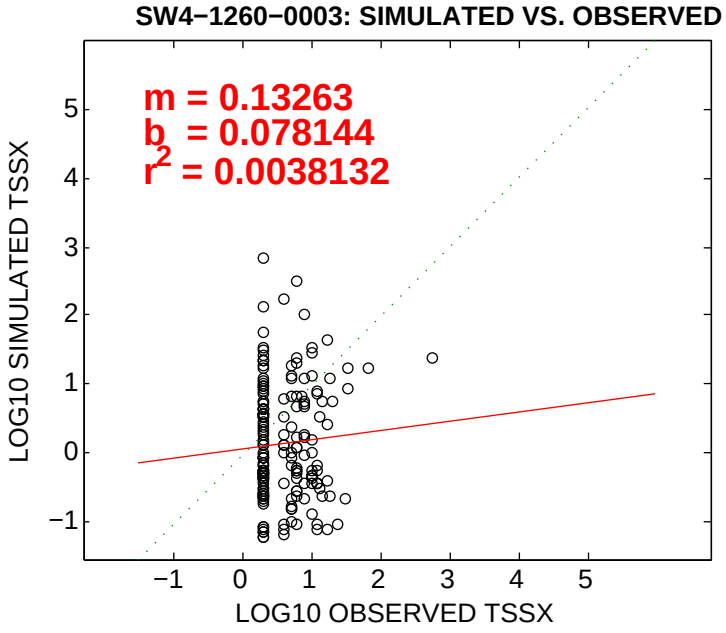


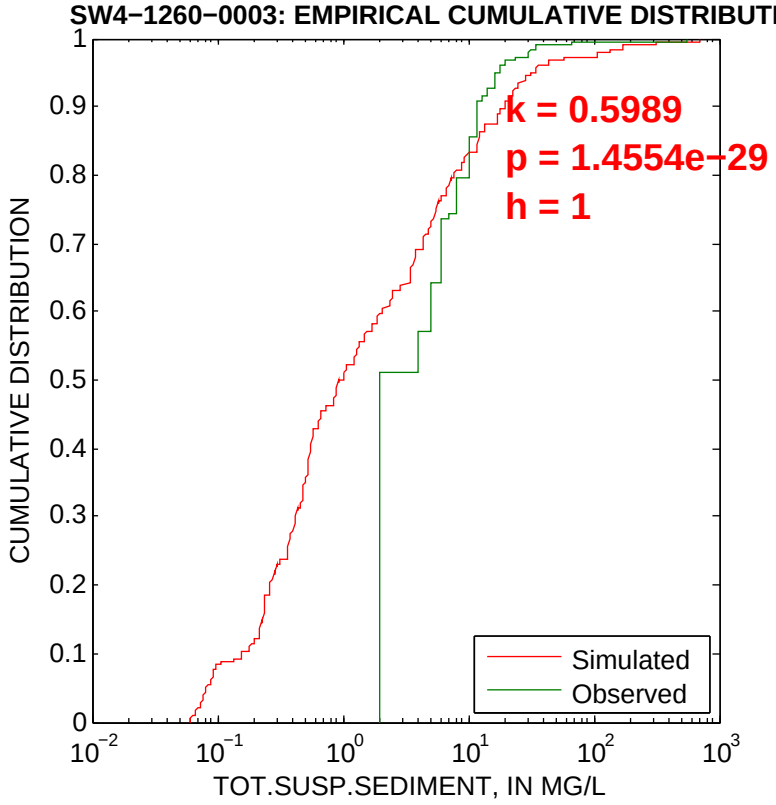












DATA SELECTION

scenario	file
P620171001WQ	TSSX.calib

plot: TSSX - total suspended ...

Dates: 1/1/1985 – 12/31/201

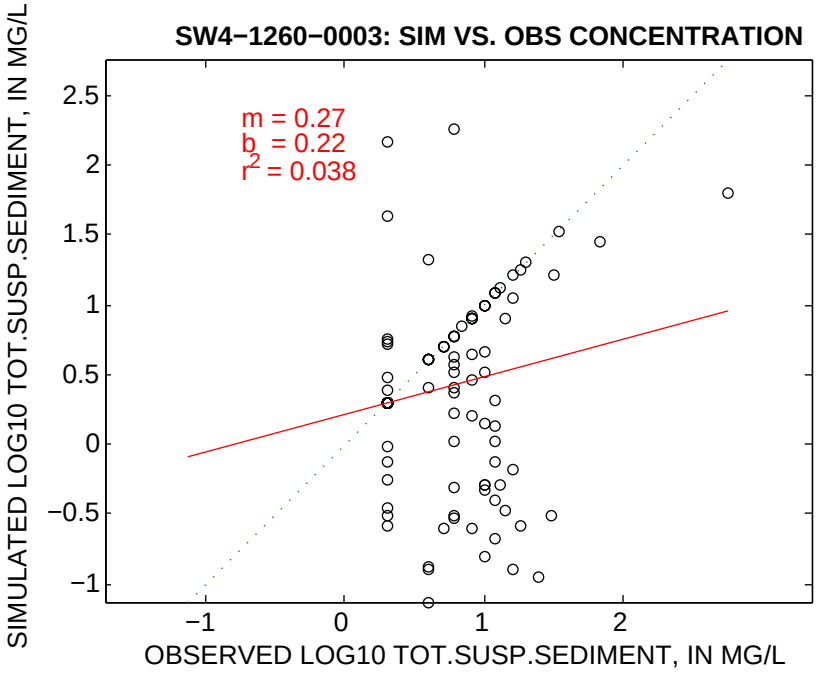
Drive	Directory	Observed
N/A	model	OBS20161101

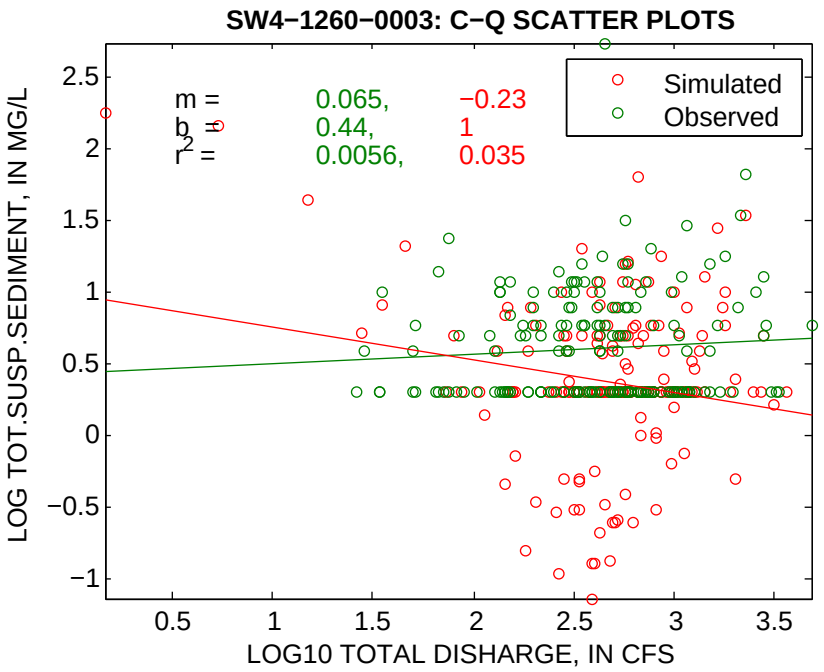
STATISTICS

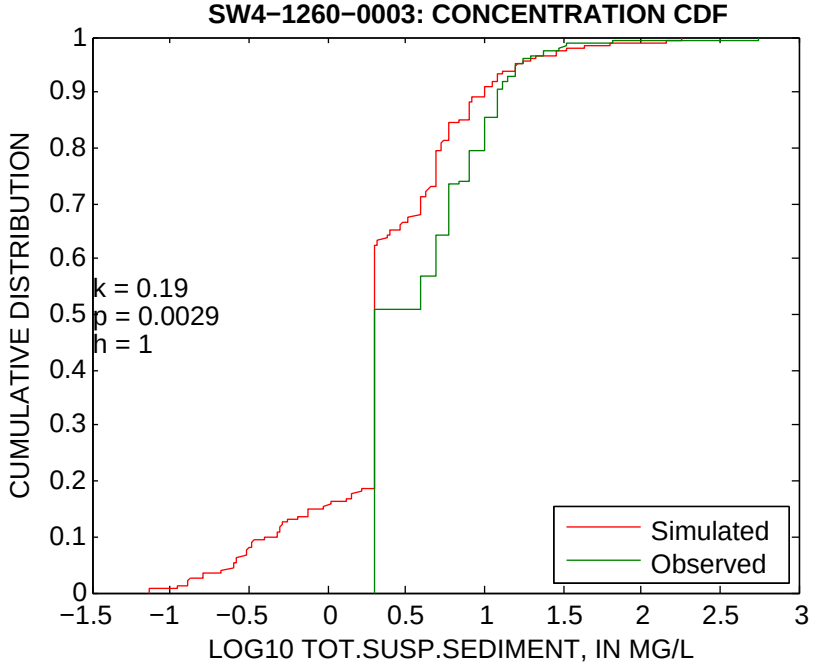
	n	observe	simulate
		182	182
min		2	0.062495
		0.30103	-1.20415
mean		8.87912	12.6029
		0.610591	0.159128
media		2	0.98025
		0.30103	-0.0088189
max		554	705.08
		2.74351	2.84824
varian		1701.39	3562.33
		0.148321	0.684237
JB		0.001	0.001
		0.001	0.018344
		ra	log
%		41.9389	-73.9387
err.va		5229.13	0.998159
rel.std.err		3.07345	6.72971
mod.eff		-2.07345	-5.72971

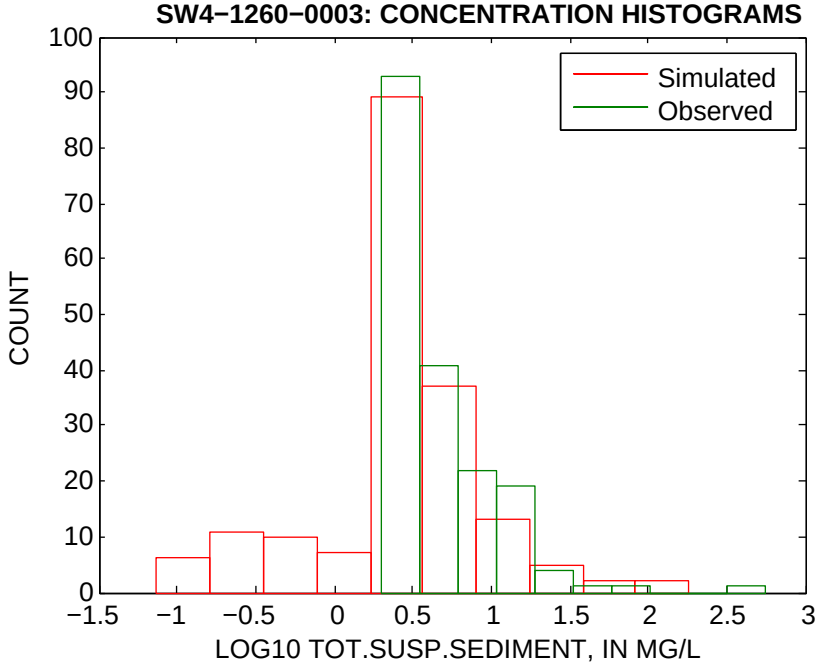
VERSION 2.1

ALL DATA
LOG10

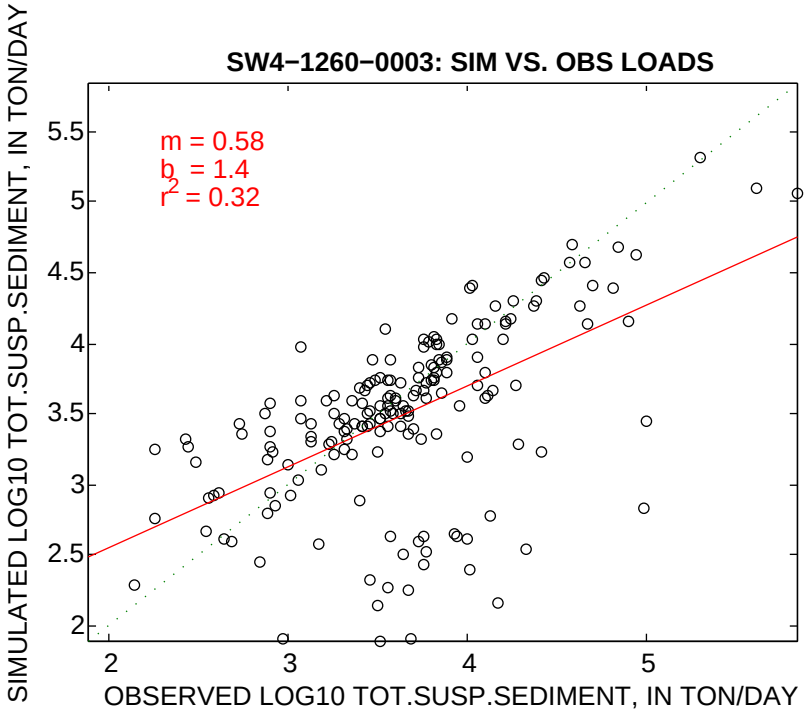


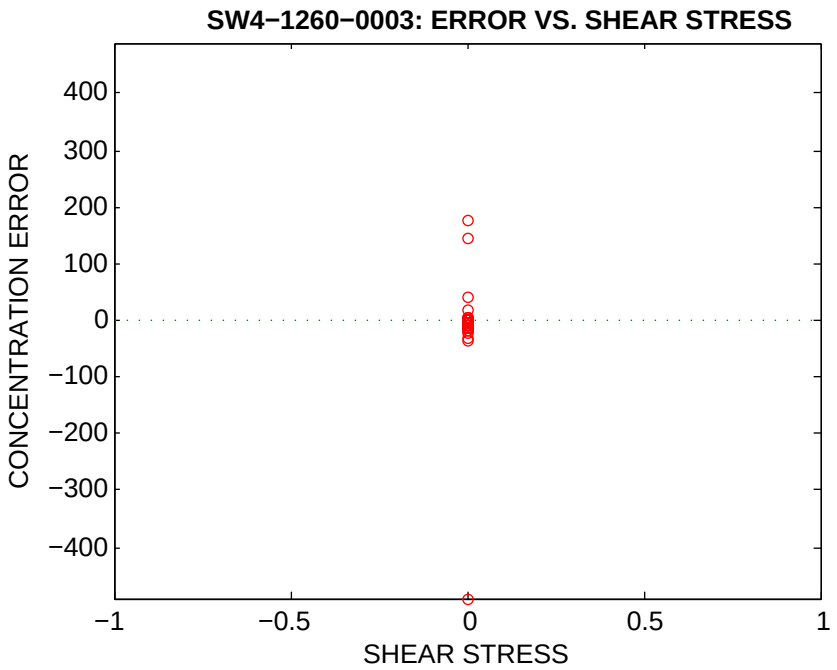


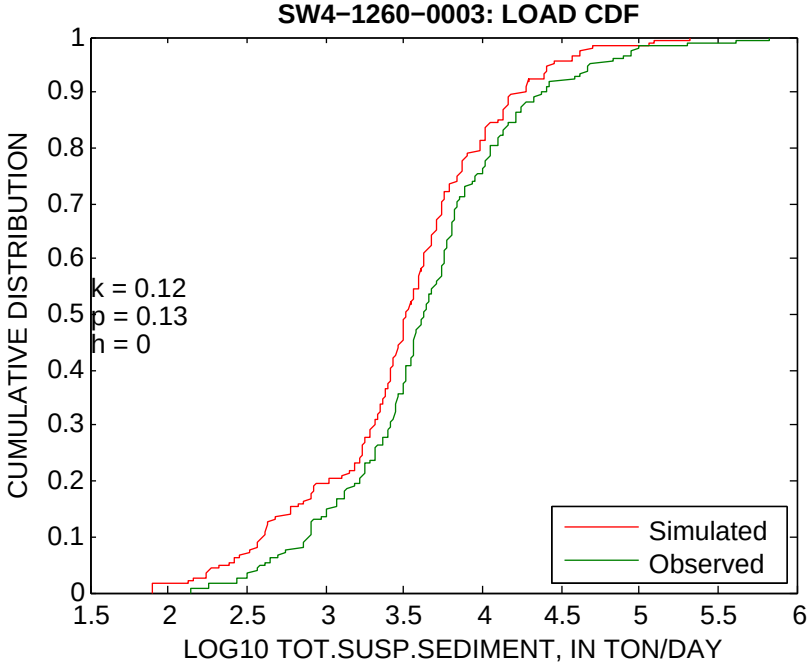


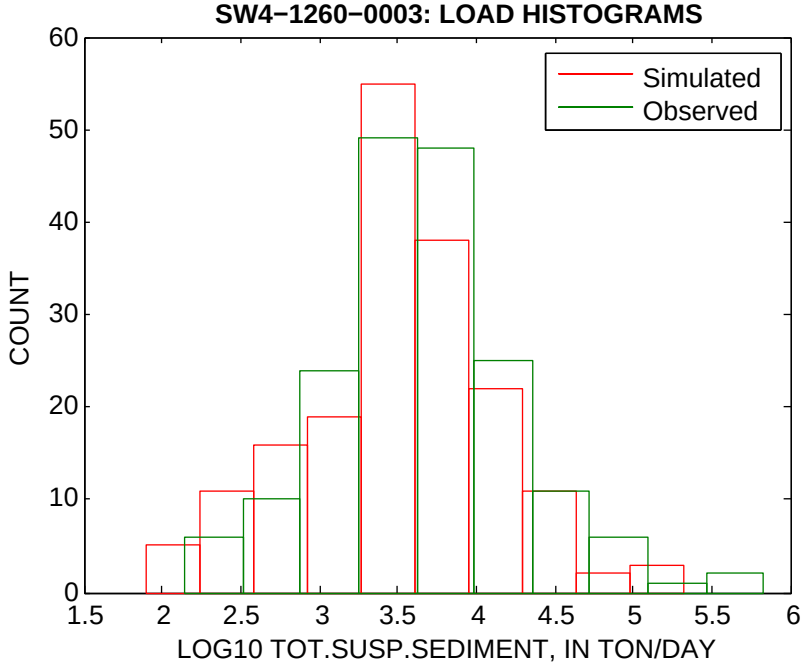


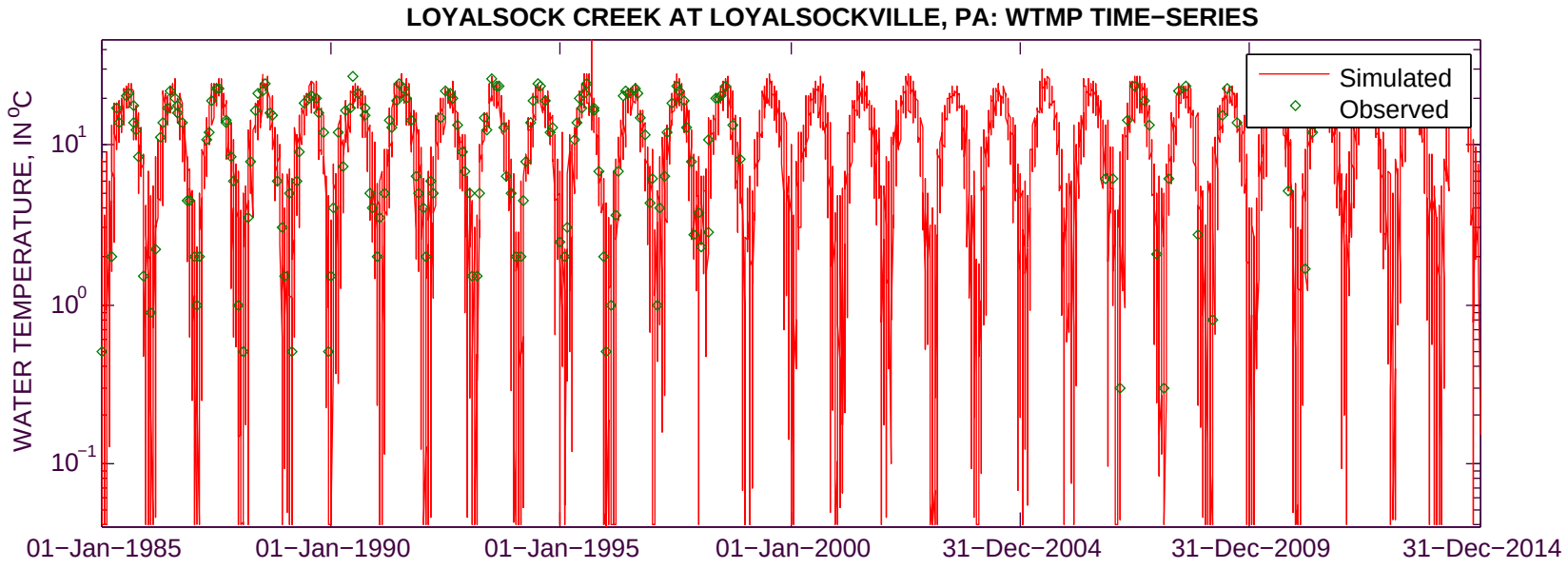
LOAD DATA
LOG10

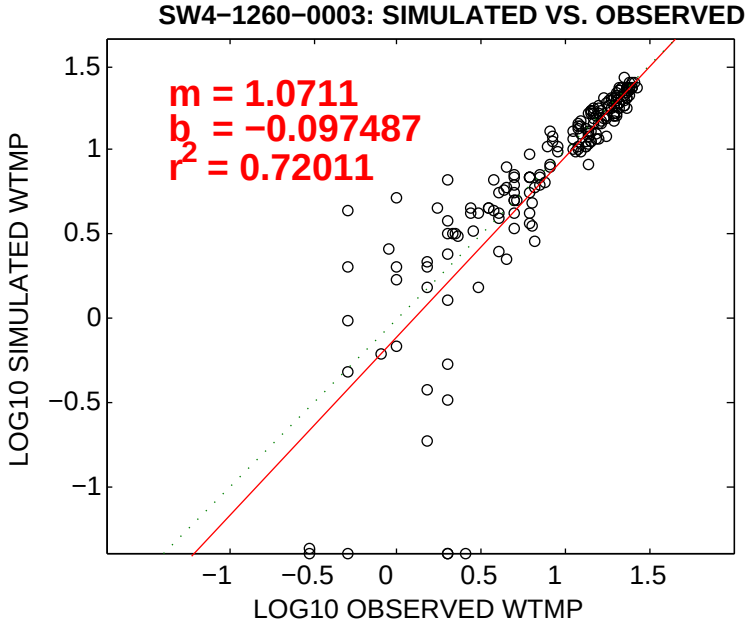


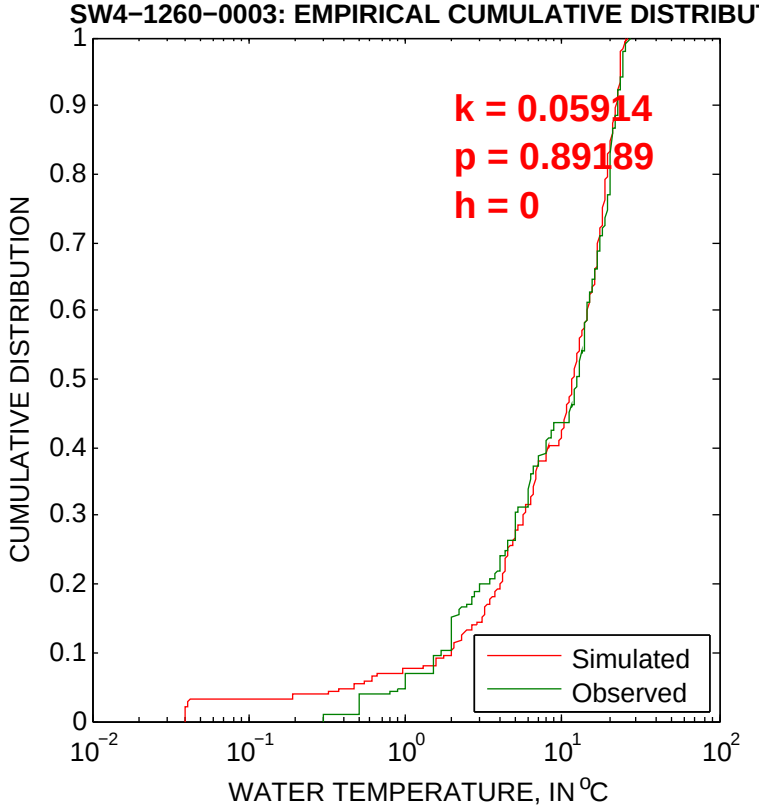












DATA SELECTION

scenario	file
P620171001WQ	WTMP.calib

plot: WTMP - water tempera...

Dates: 1/1/1985 – 12/31/201

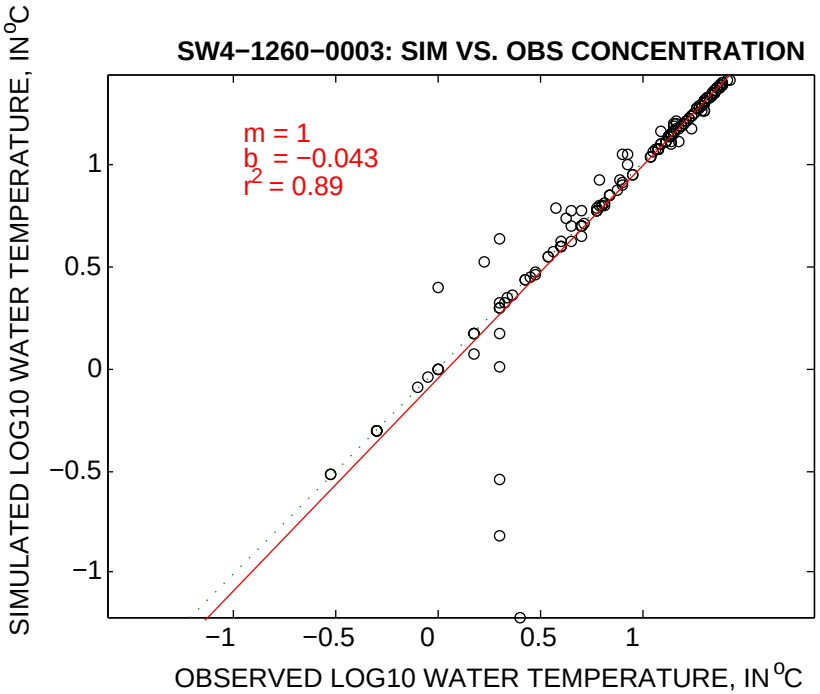
Drive	Directory	Observed
N/A	model	OBS20161101

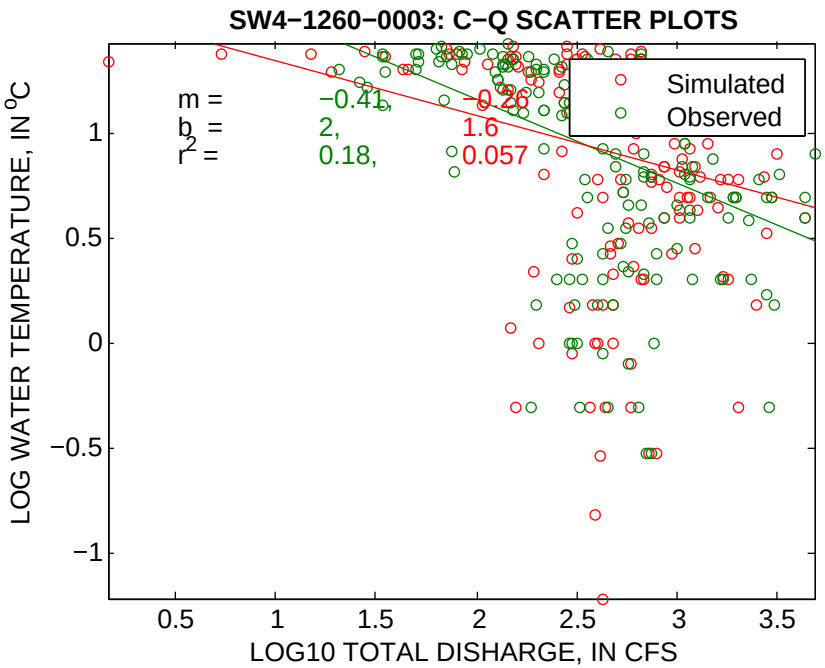
STATISTICS

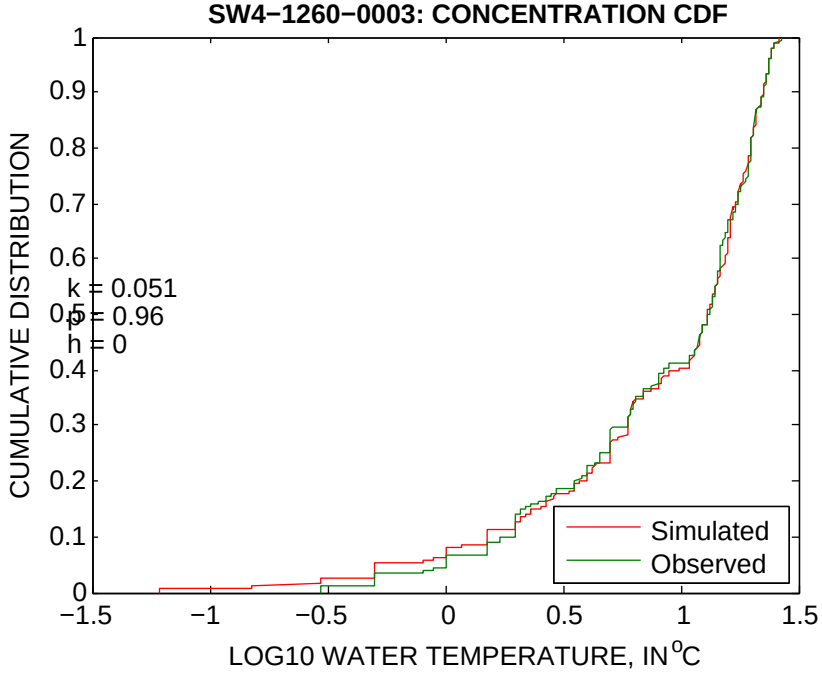
	n	observe	simulate
		186	186
min		0.3	0.040042
		-0.522879	-1.39748
mean		11.8726	11.7627
		0.905378	0.872277
media		12.5	11.682
		1.09691	1.06749
max		27	26.714
		1.43136	1.42674
varian		62.0495	57.1915
		0.216121	0.344326
JB		0.006022	0.008640
		0.001	0.001
		ra	log
%		-0.925236	-3.65601
err.va		4.43336	0.0985678
rel.std.err		0.0714488	0.456078
mod.eff		0.928551	0.543922

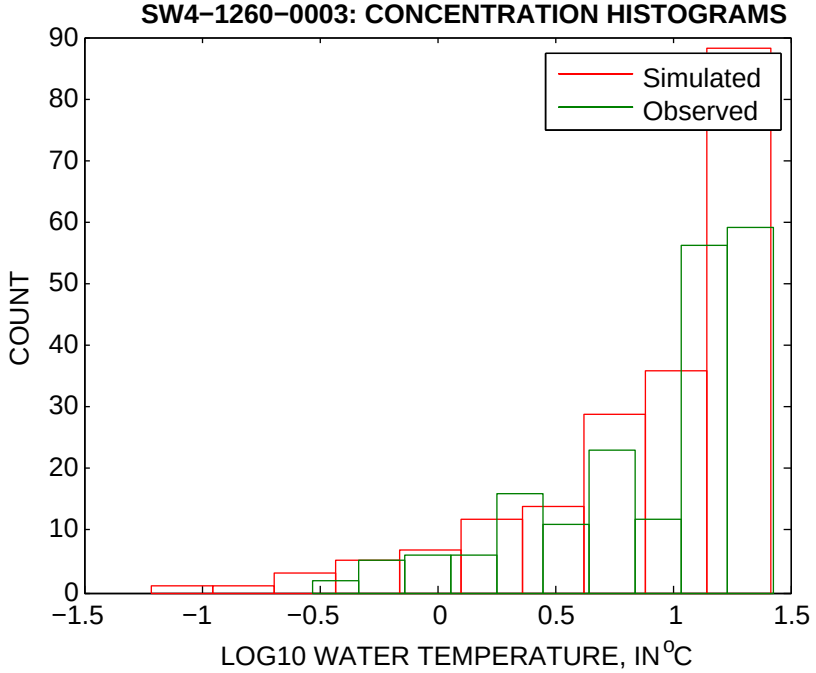
VERSION 2.1

ALL DATA
LOG10

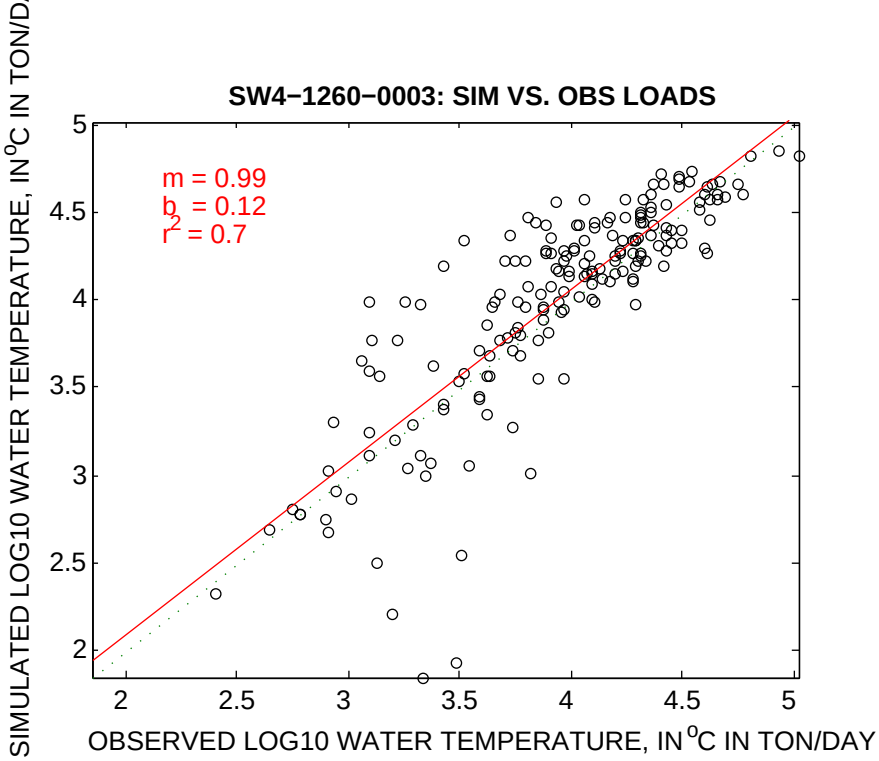




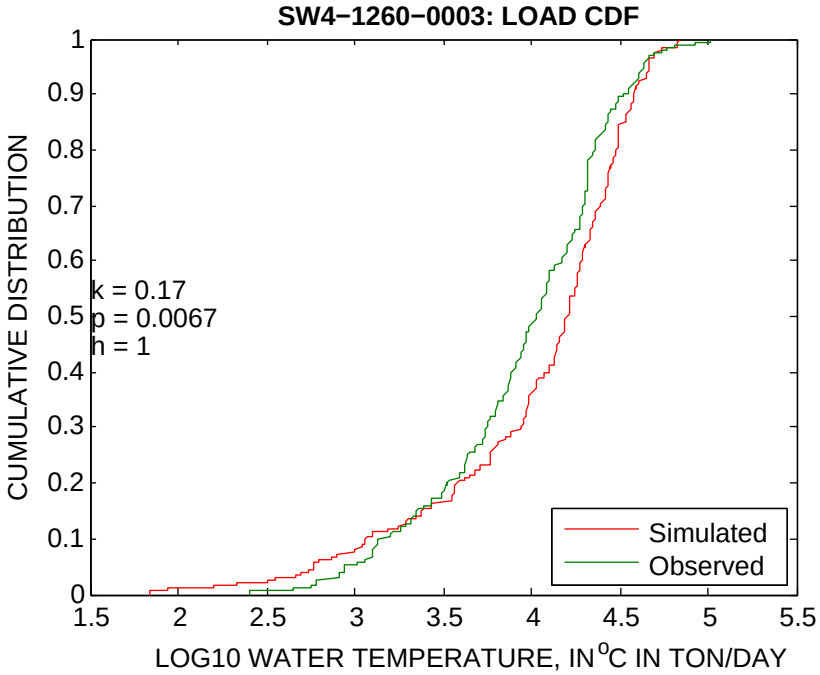


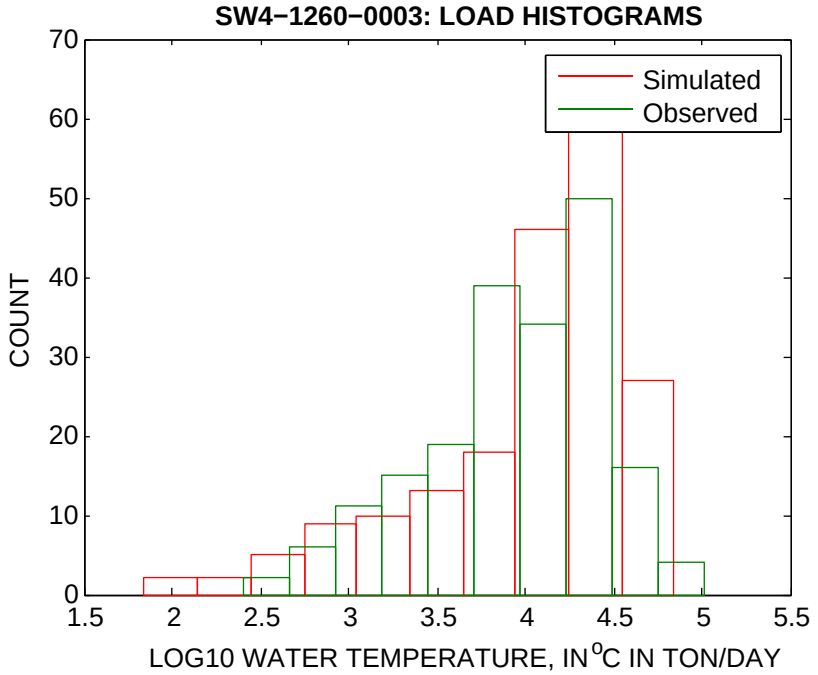


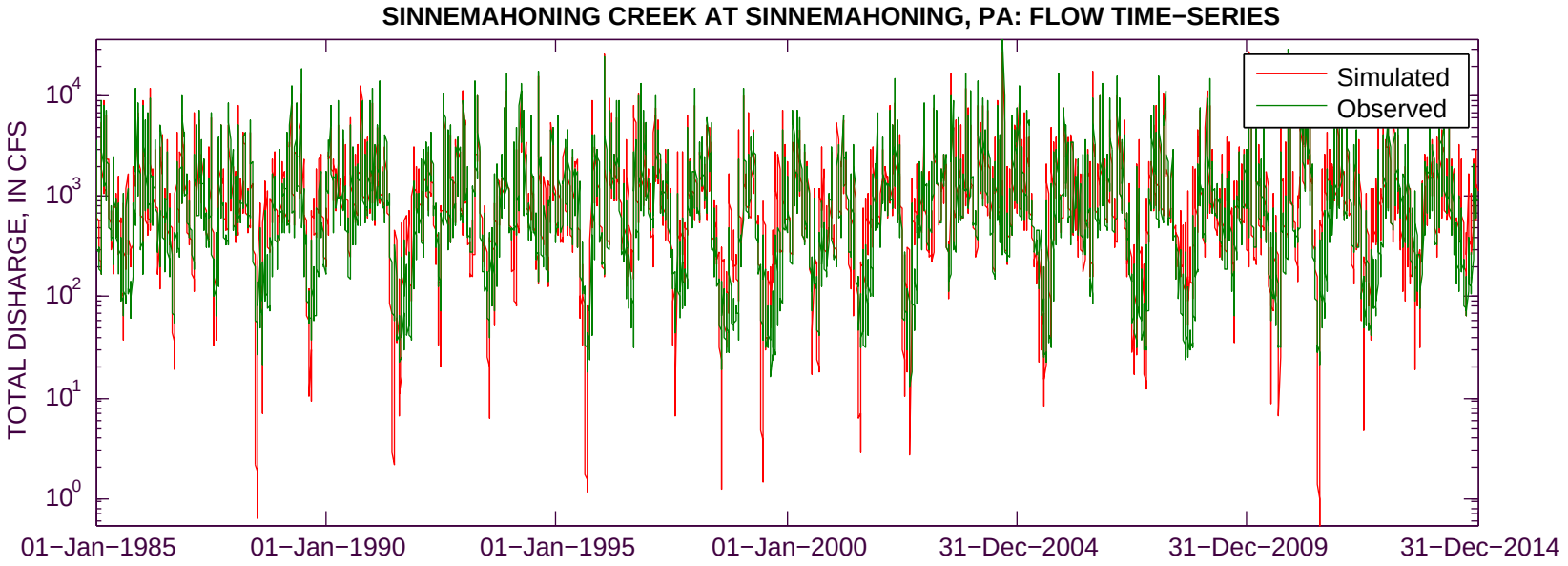
LOAD DATA
LOG10

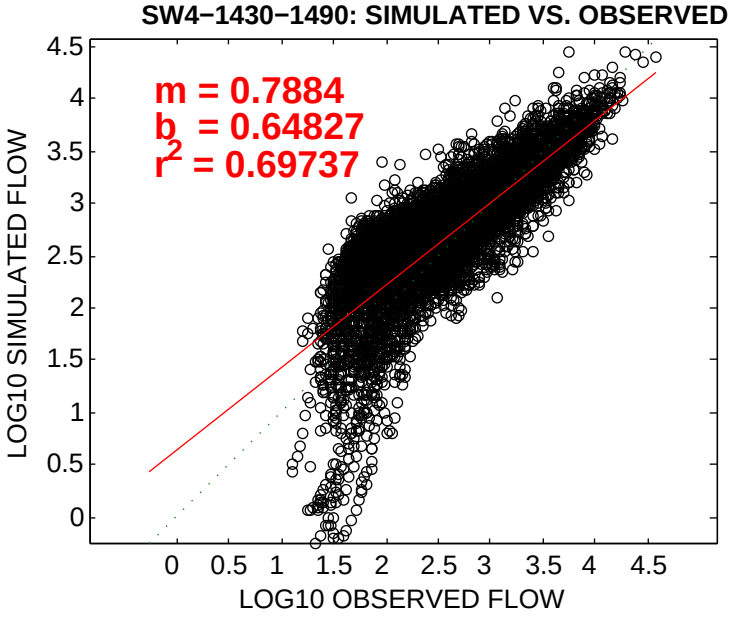


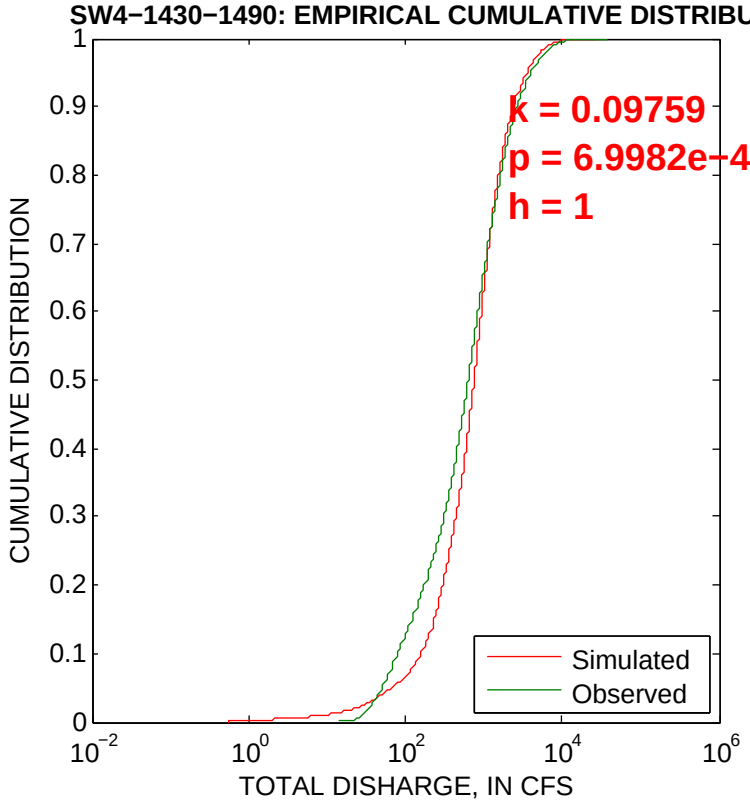












DATA SELECTION

scenario: P620171001WQ | file: FLOW.calib

plot: FLOW - total discharge

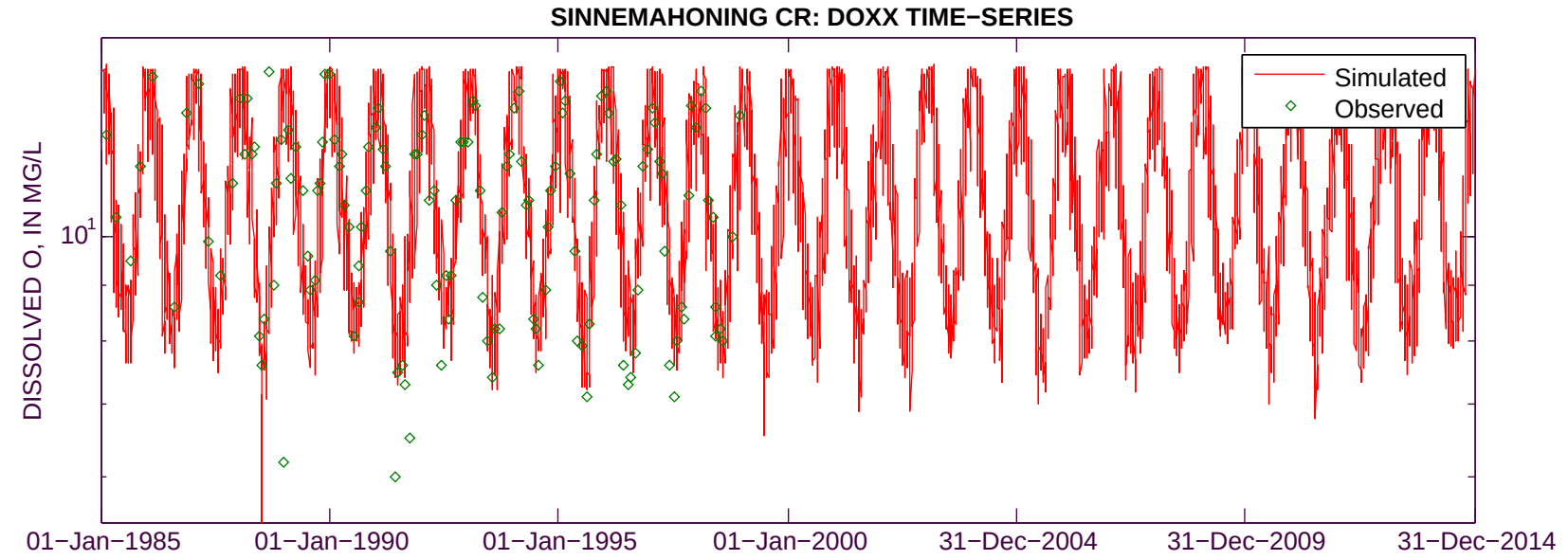
Dates: 1/1/1985 – 12/31/201

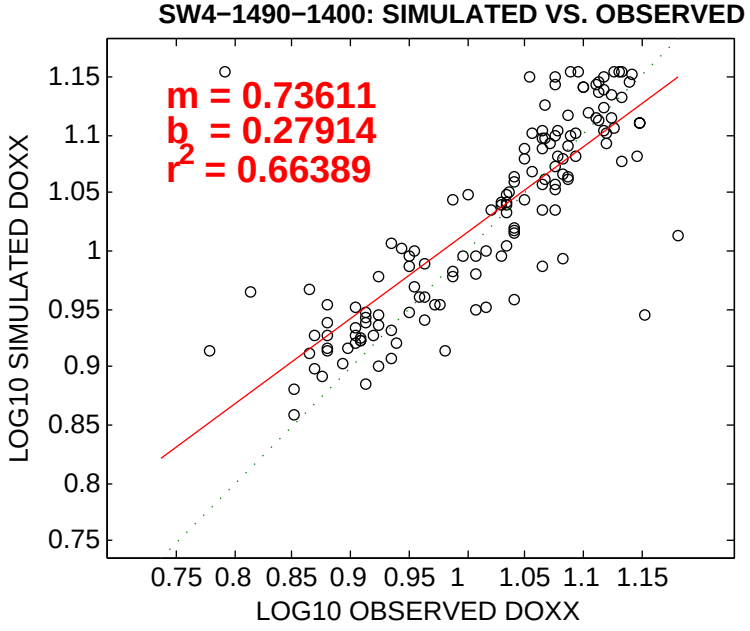
Drive: N/A | Directory: model | Observed: OBS20161101

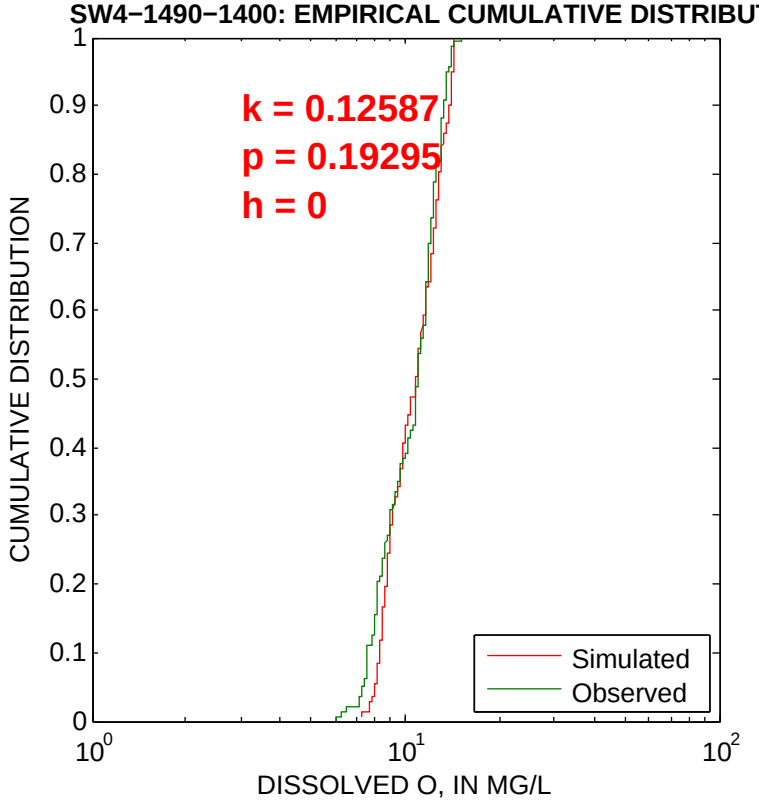
STATISTICS

	observe	simulate
n	10954	10954
min	13	0.5431
	1.11394	-0.26512
mean	1154.65	1146.36
	2.74401	2.81165
media	640	756.4
	2.80618	2.87875
max	38000	28316
	4.57978	4.45203
varian	2.84014e+0	2.18584e+
	0.319043	0.284367
JB	0.001	0.001
	0.001	0.001
	ra	log
%	-0.717678	2.46505
err.va	741395	0.104918
rel.std.err	0.261042	0.328852
mod.eff	0.738958	0.671148

VERSION 2.1







DATA SELECTION

scenario: P620171001WQ | file: DOXX.calib

plot: DOXX - dissolved oxygen

Dates: 1/1/1985 – 12/31/201

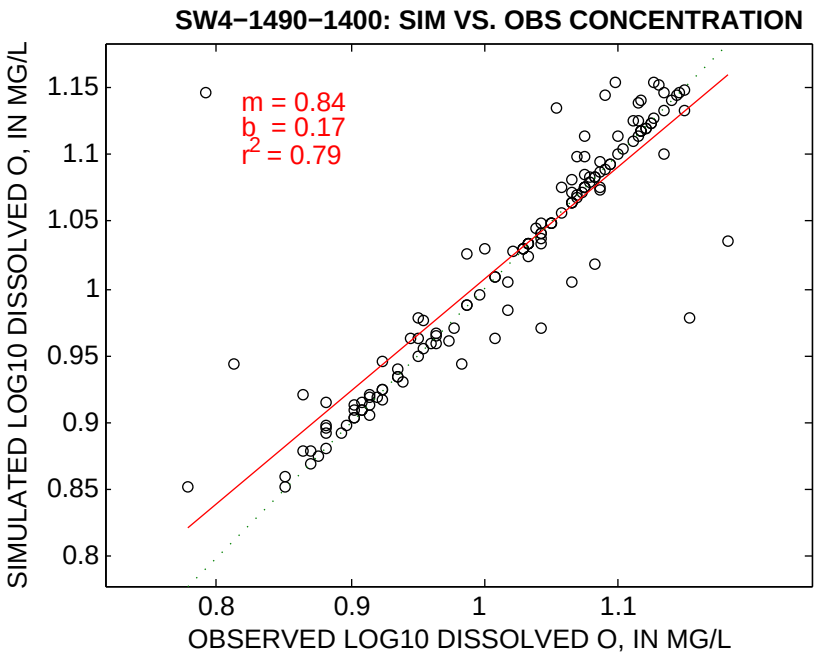
Drive: N/A | Directory: model | Observed: OBS20161101

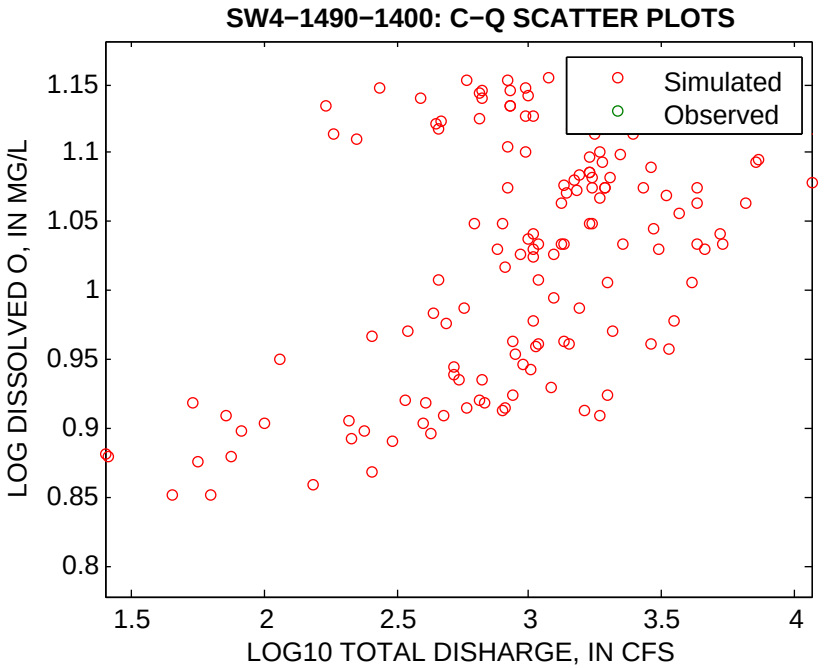
STATISTICS

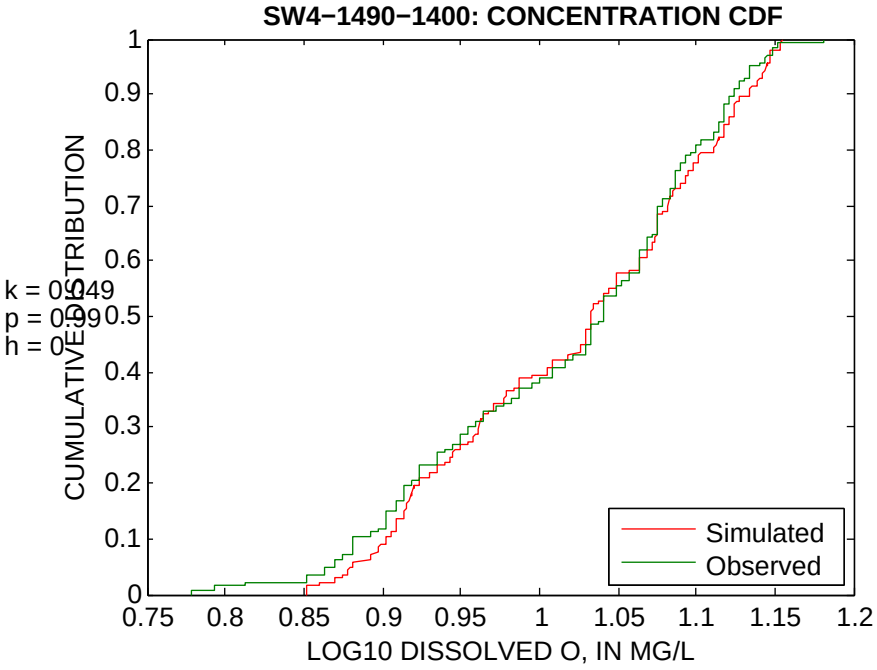
n	143	142
	observe	simulate
min	6	0
	0.778151	0.858495
mean	10.6028	10.7769
	1.01711	1.02784
media	11	10.863
	1.04139	1.0373
max	15.2	14.284
	1.18184	1.15485
varian	4.53633	4.9429
	0.0083195	0.00679031
JB	0.030352	0.001
	0.020173	0.016400
	ra	log
%	1.64248	1.05545
err.va	2.08701	0.00297772
rel.std.err	0.460065	0.35792
mod.eff	0.539935	0.64208

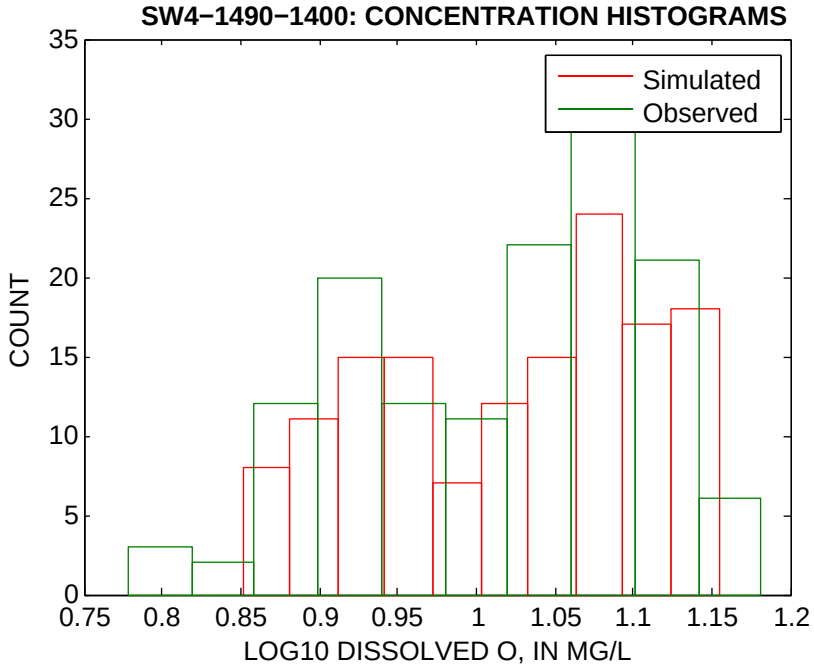
VERSION 2.1

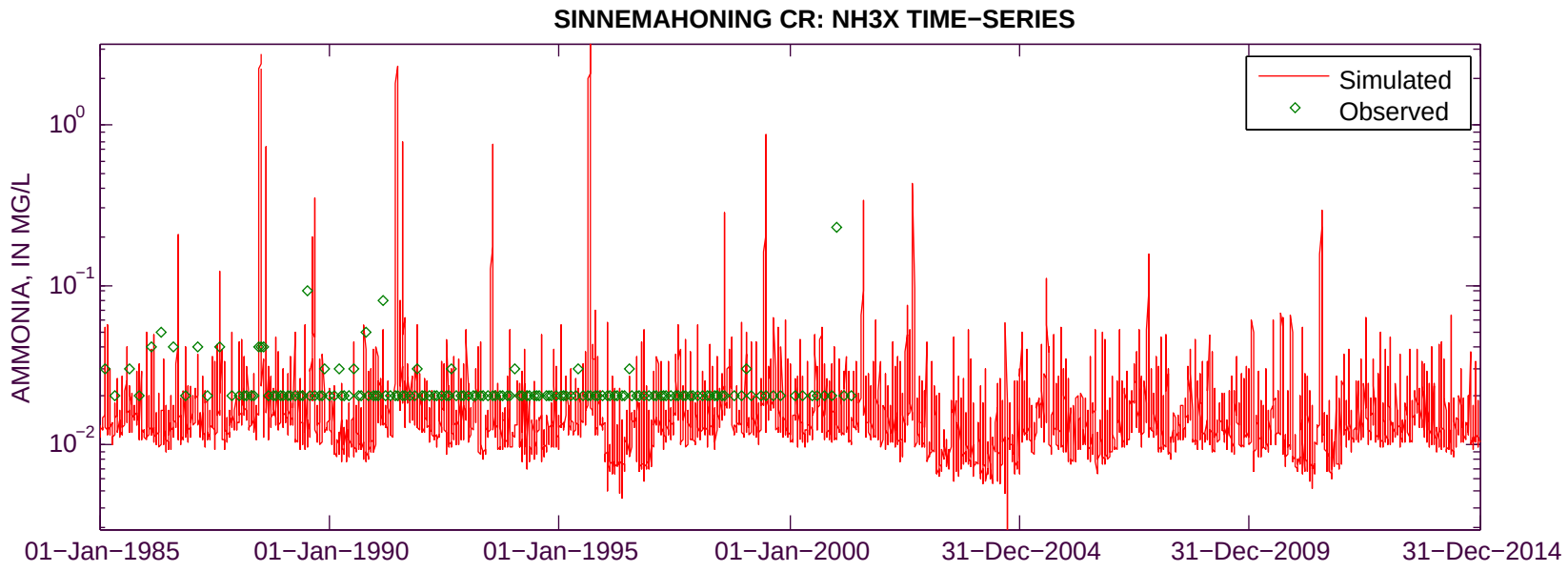
ALL DATA
LOG10

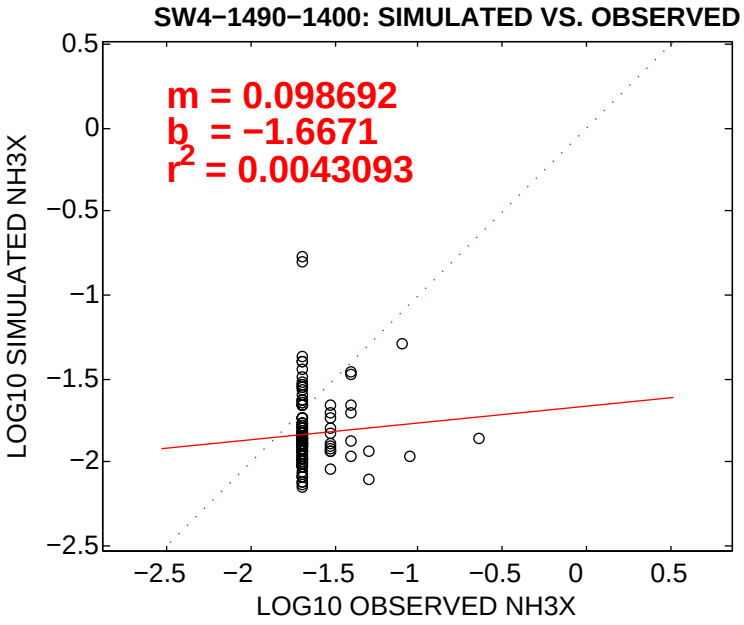


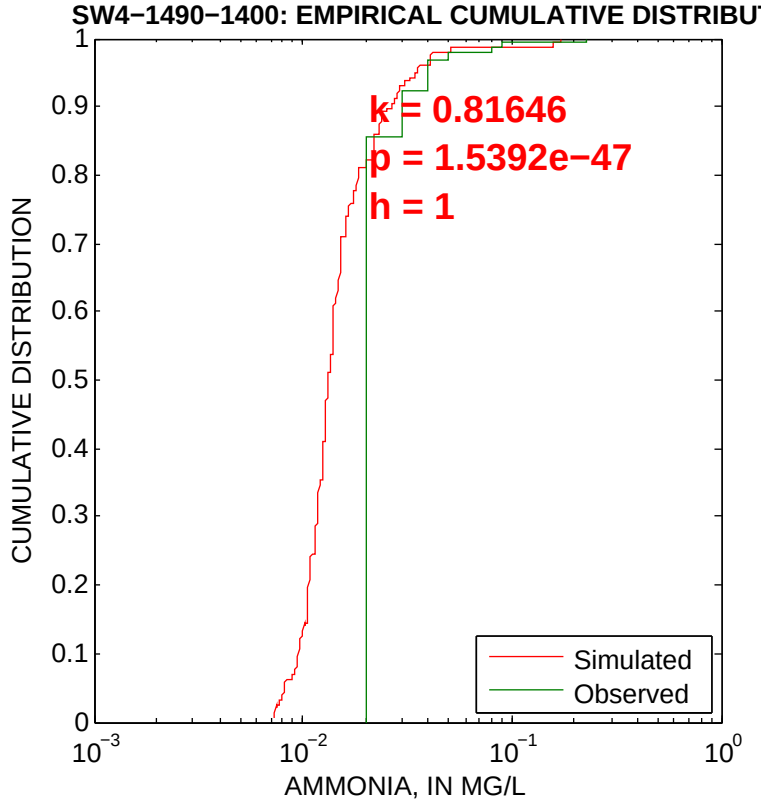












DATA SELECTION

scenario	file
P620171001WQ	NH3X.calib

plot: NH3X - ammonia

Dates: 1/1/1985 – 12/31/201

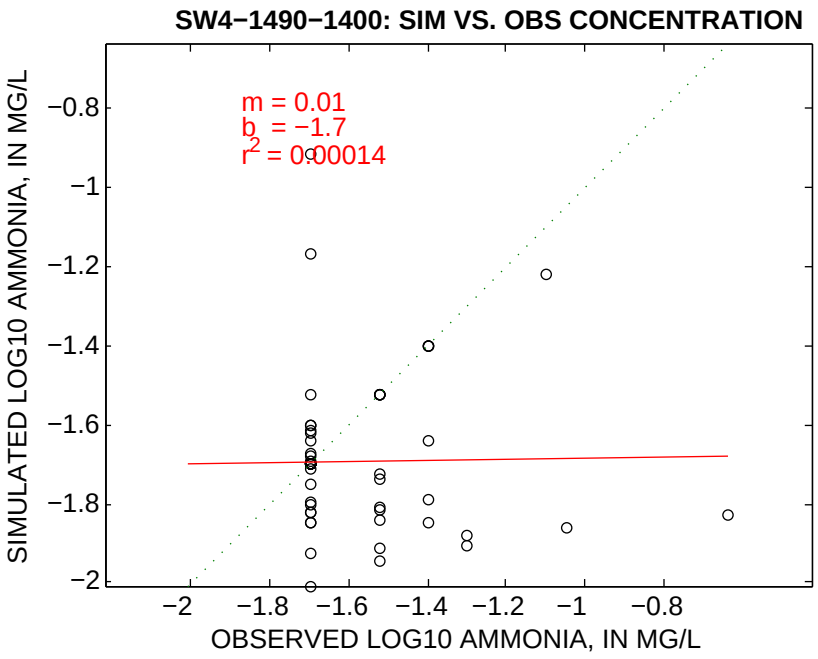
Drive	Directory	Observed
N/A	model	OBS20161101

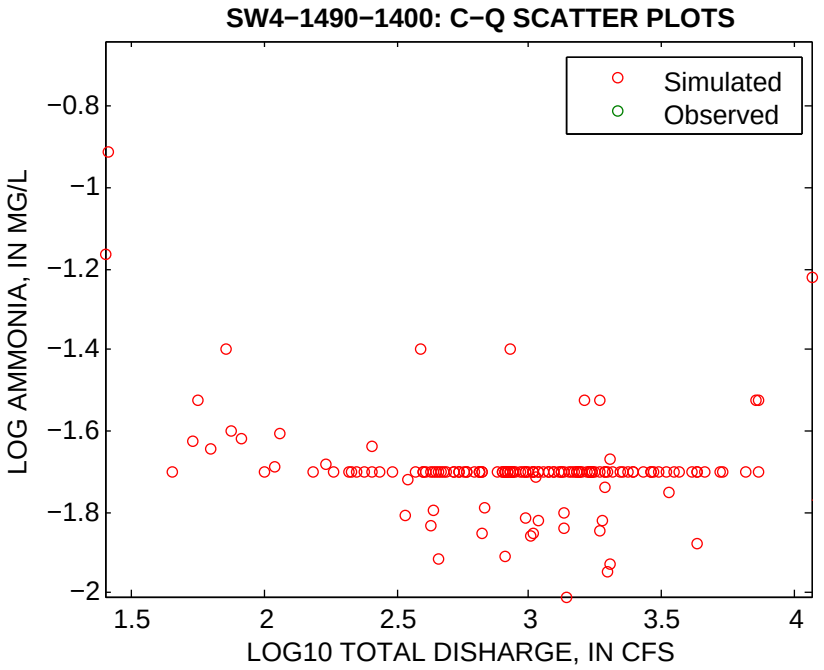
STATISTICS

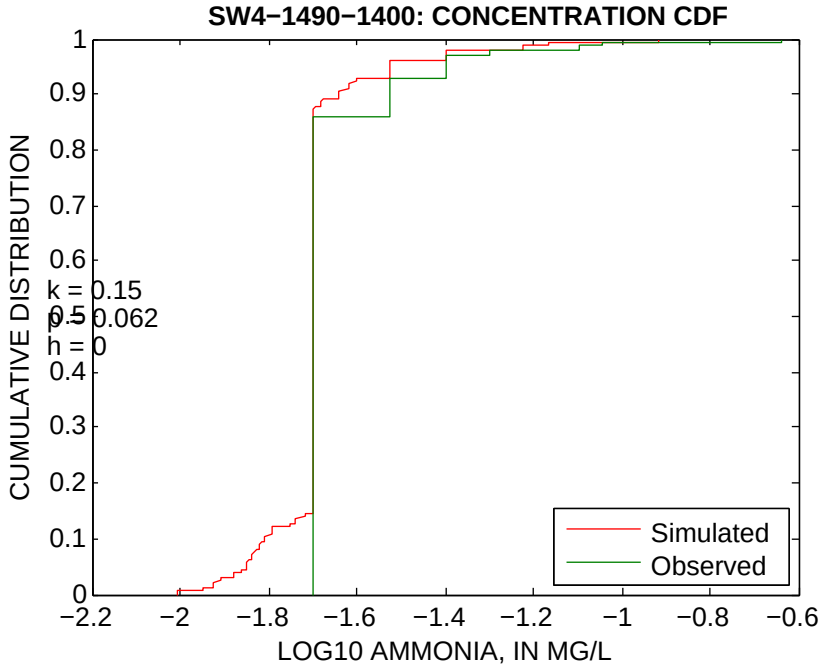
	n	observe	simulate
		158	157
min		0.02	0
		-1.69897	-2.14265
mean		0.0241139	0.0173073
		-1.65531	-1.8305
media		0.02	0.0132545
		-1.69897	-1.87664
max		0.23	0.17091
		-0.638272	-0.767233
varian		0.00035430	0.00033287
		0.0180542	0.0408072
JB		0.001	0.001
		0.001	0.001
		ra	log
%		-28.2268	10.5838
err.va		0.00072921	0.0861874
rel.std.err		2.05816	4.77382
mod.eff		-1.05816	-3.77382

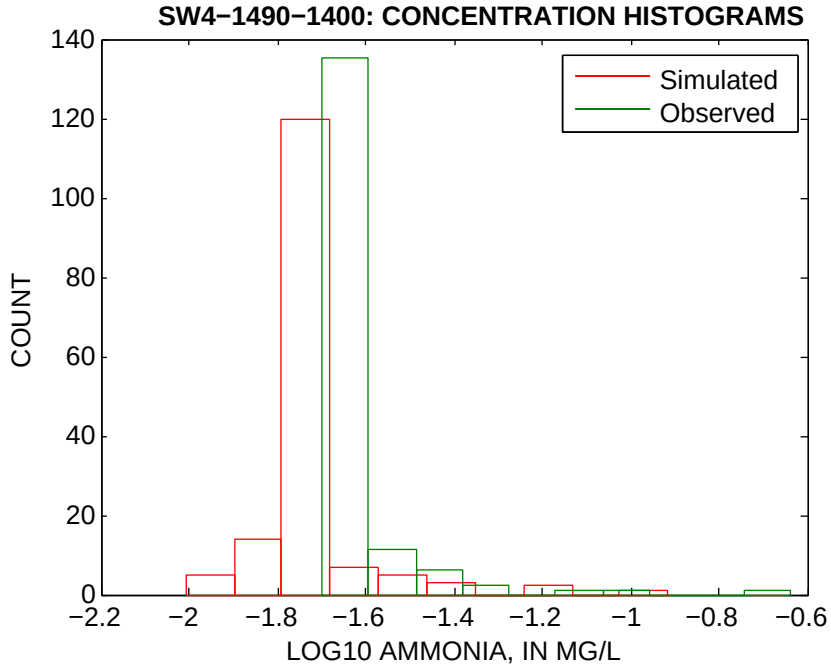
VERSION

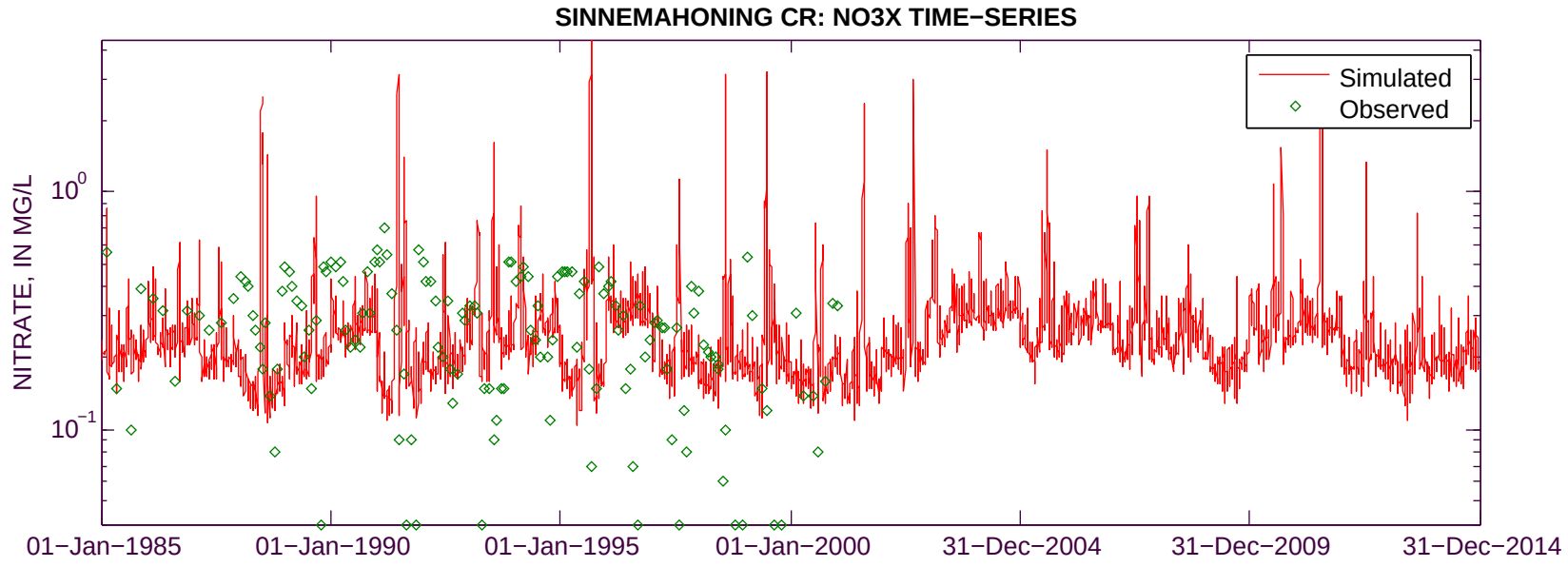
ALL DATA
LOG10

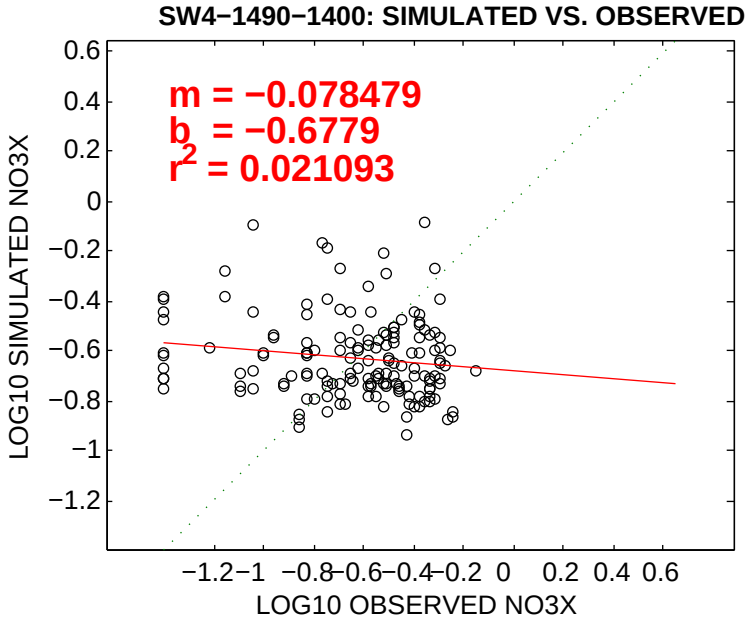


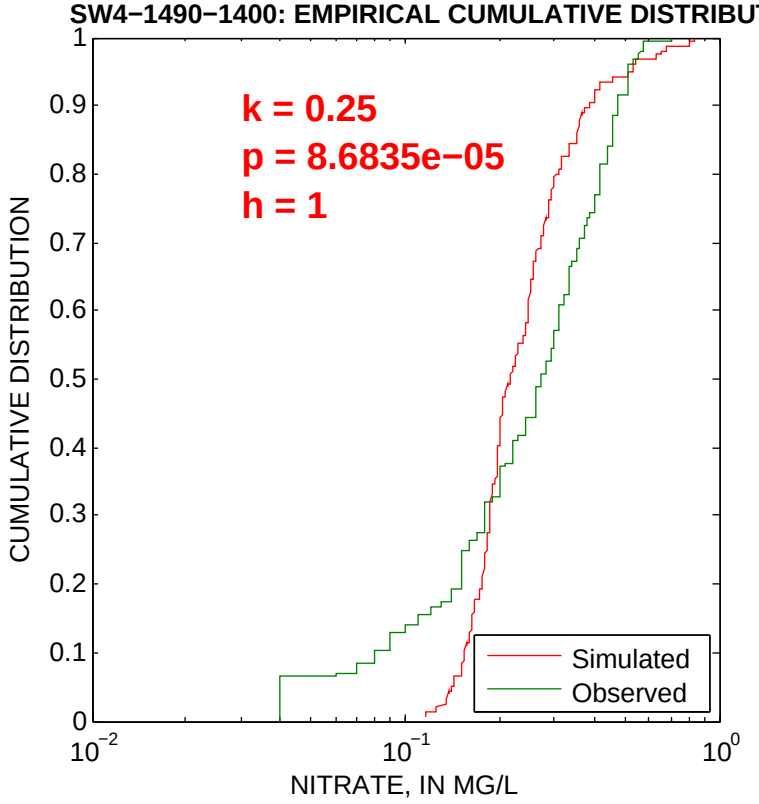












DATA SELECTION

scenario	file
P620171001WQ	NO3X.calib

plot: NO3X - nitrate

Dates: 1/1/1985 – 12/31/201

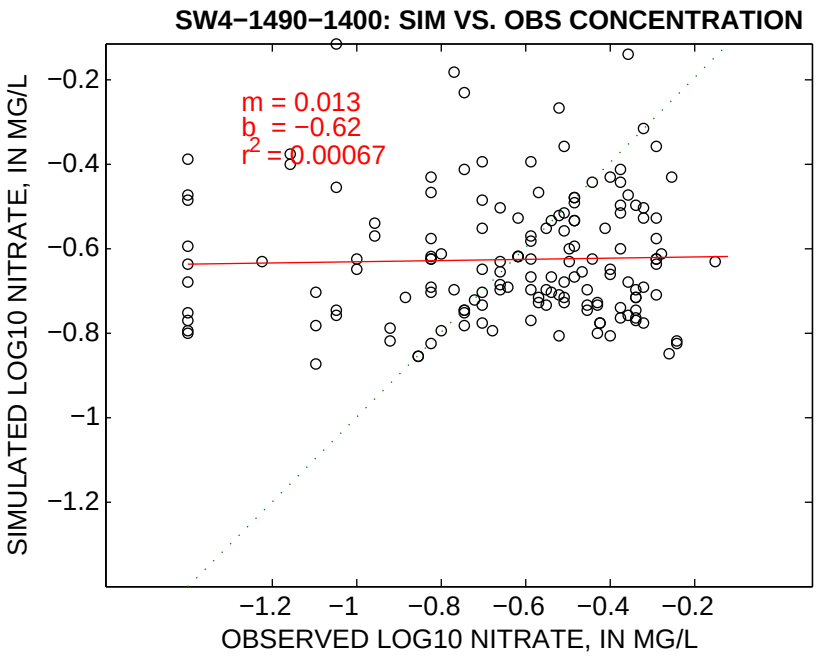
Drive	Directory	Observed
N/A	model	OBS20161101

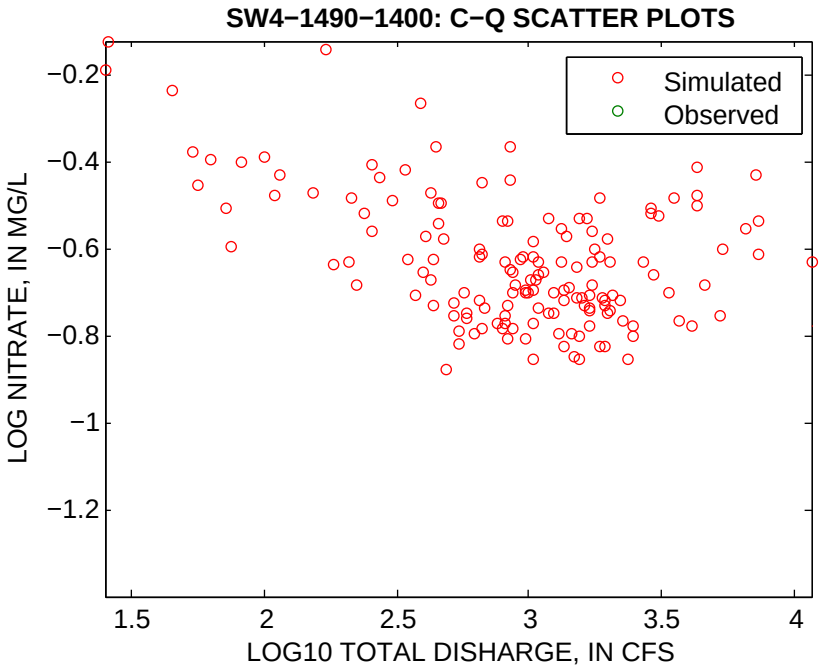
STATISTICS

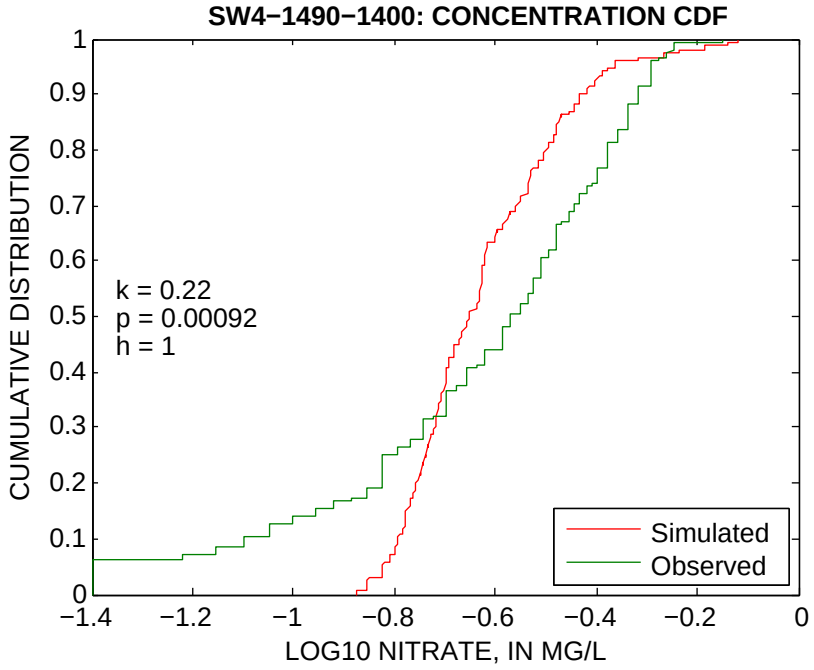
	n	156	155
		observe	**simulate**
min		0.04	0
		-1.39794	-0.931406
mean		0.278654	0.253668
		-0.637601	-0.627864
media		0.27	0.215305
		-0.568636	-0.666795
max		0.71	0.83452
		-0.148742	-0.0785633
varian		0.0217511	0.0149729
		0.0921125	0.0268956
JB		0.068731	0.001
		0.001263	0.001
		ra	log
%		-8.96667	-1.52702
err.va		0.0413857	0.133561
rel.std.err		1.9027	1.44998
mod.eff		-0.902697	-0.44998

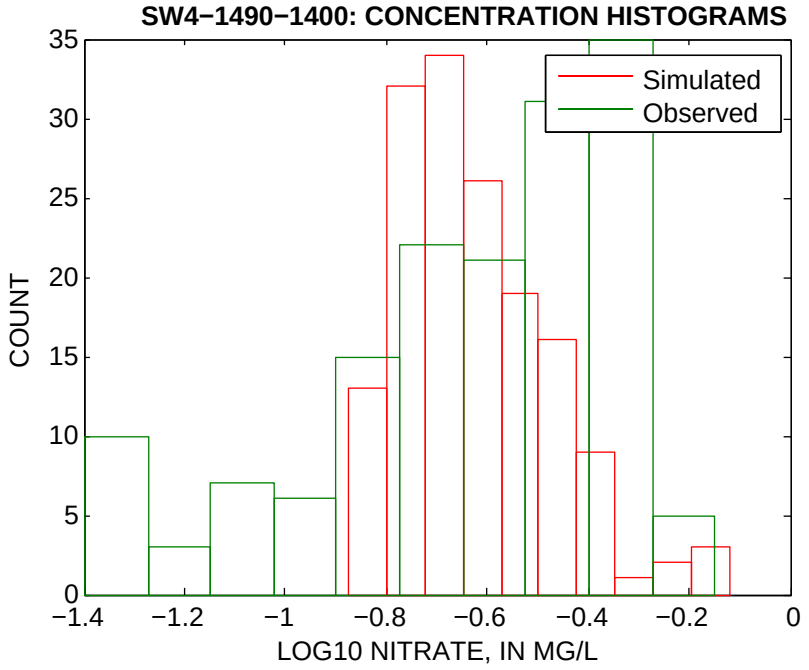
VERSION 2.1

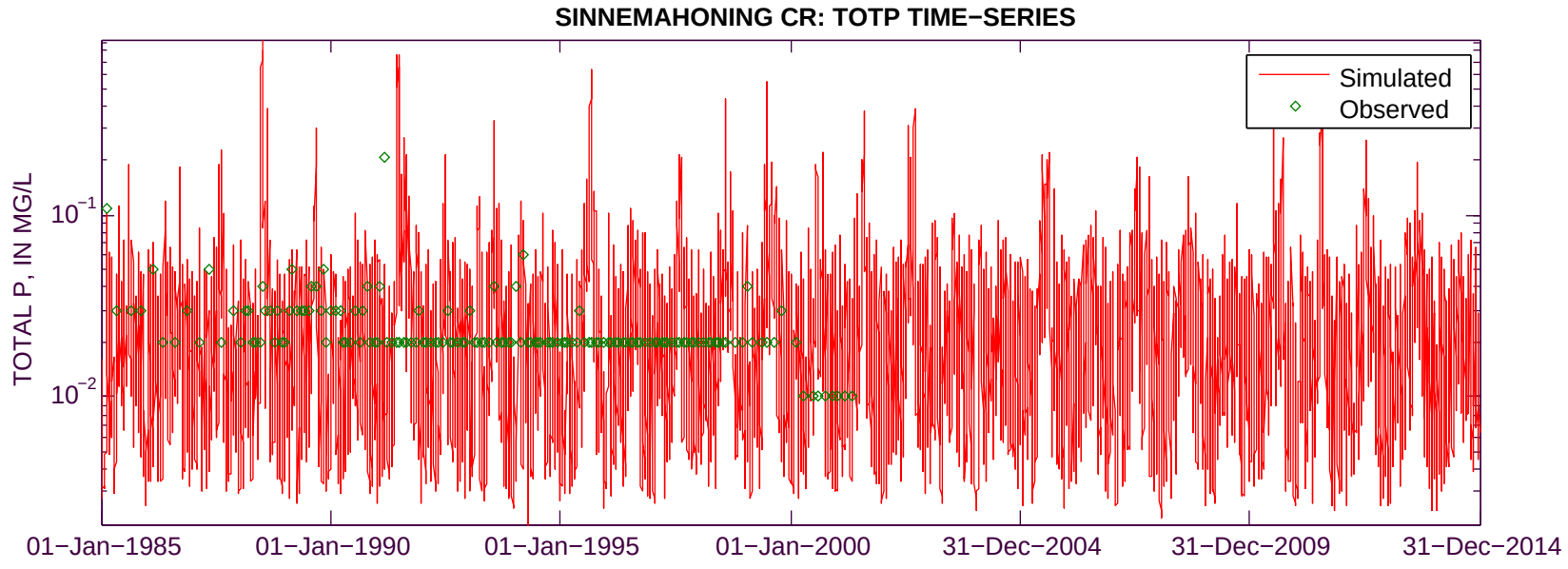
ALL DATA
LOG10

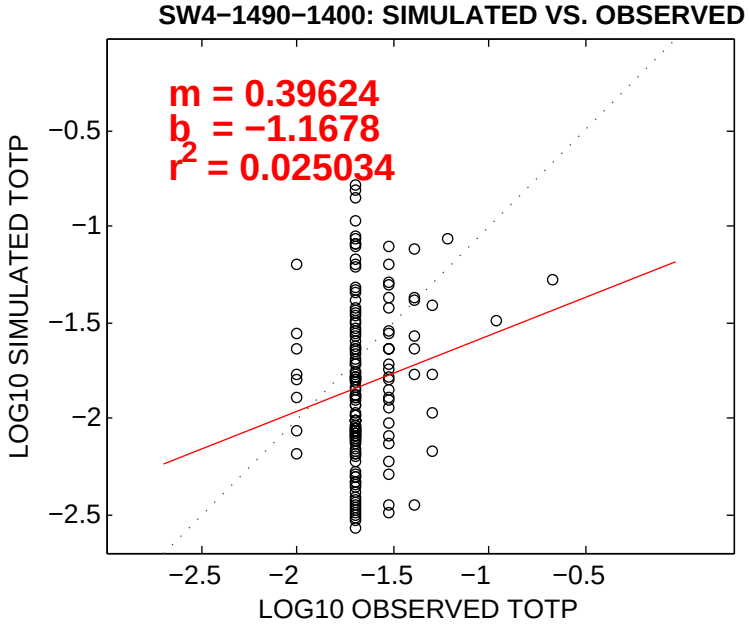


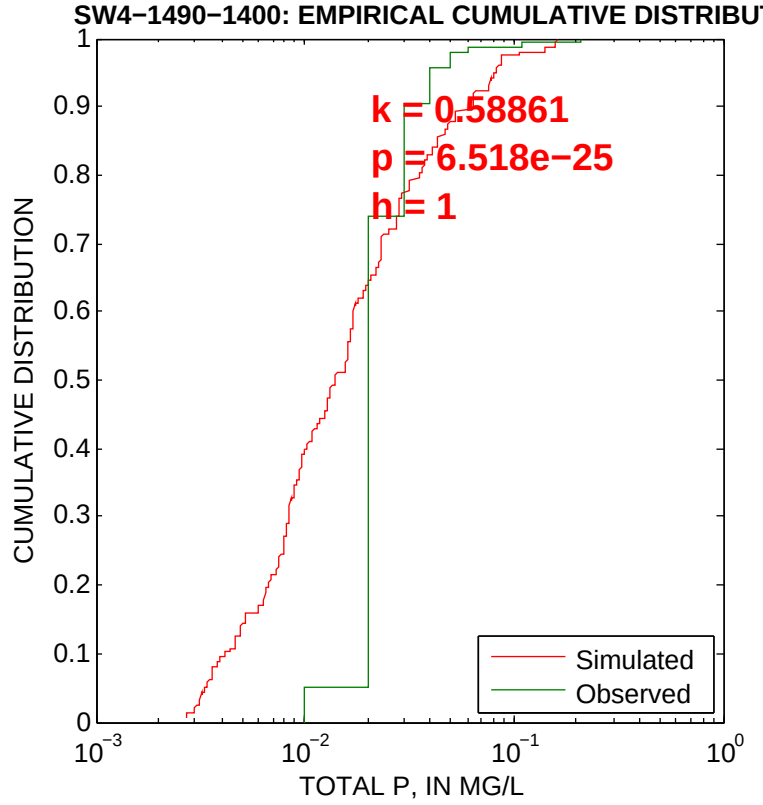












DATA SELECTION

scenario: P620171001WQ | file: TOTP.calib

plot: TOTP - total phosphorus

Dates: 1/1/1985 – 12/31/201

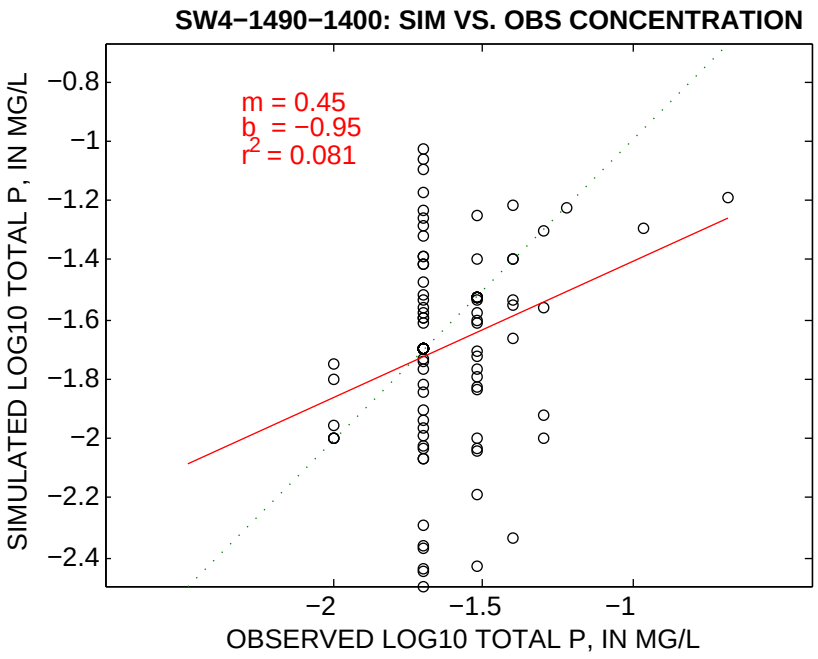
Drive: N/A | Directory: model | Observed: OBS20161101

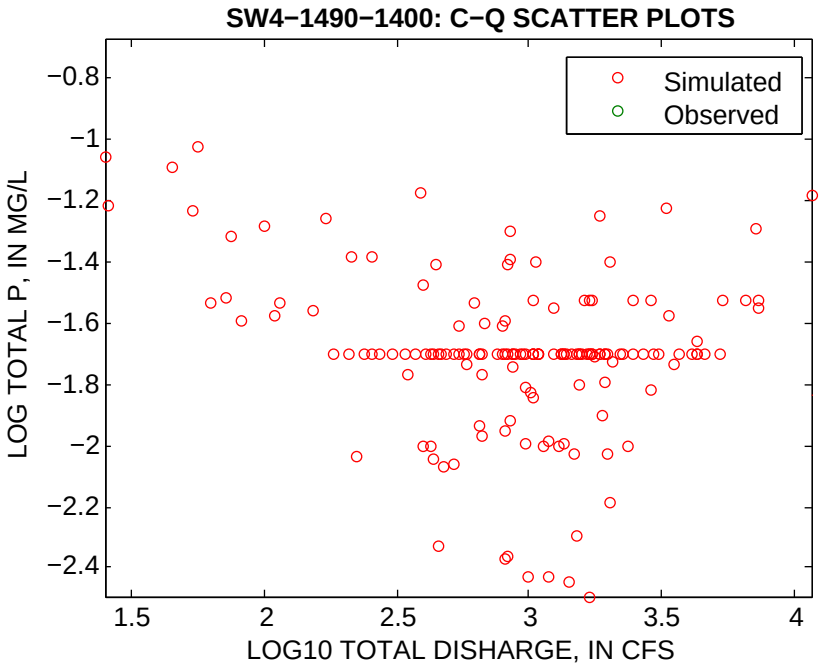
STATISTICS

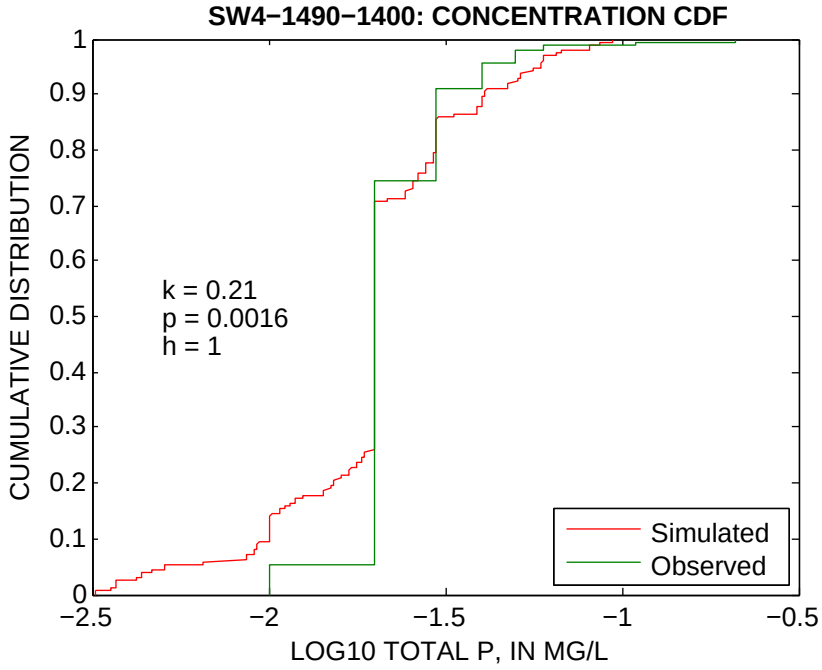
	observe	simulate
n	158	157
min	0.01 -2	0 -2.57046
mean	0.0249367 -1.64733	0.0240065 -1.82051
media	0.02 -1.69897	0.014023 -1.8513
max	0.21 -0.677781	0.16242 -0.78936
varian	0.00033216 0.0269156	0.00077260 0.168811
JB	0.001 0.001	0.001 0.072268
	ra	log
%	-3.7304	10.5128
err.va	0.00099325	0.204581
rel.std.err	2.99029	7.60082
mod.eff	-1.99029	-6.60082

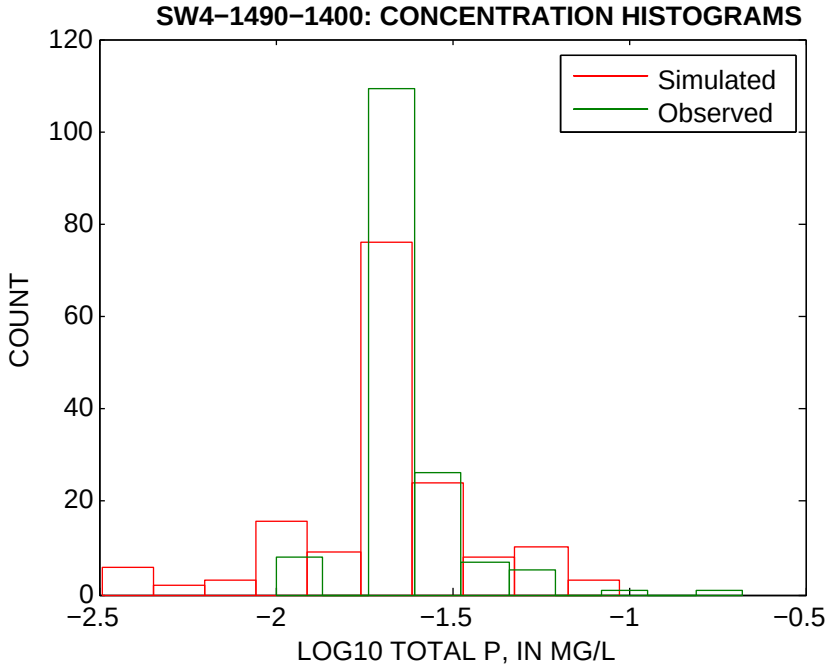
VERSION 2.1

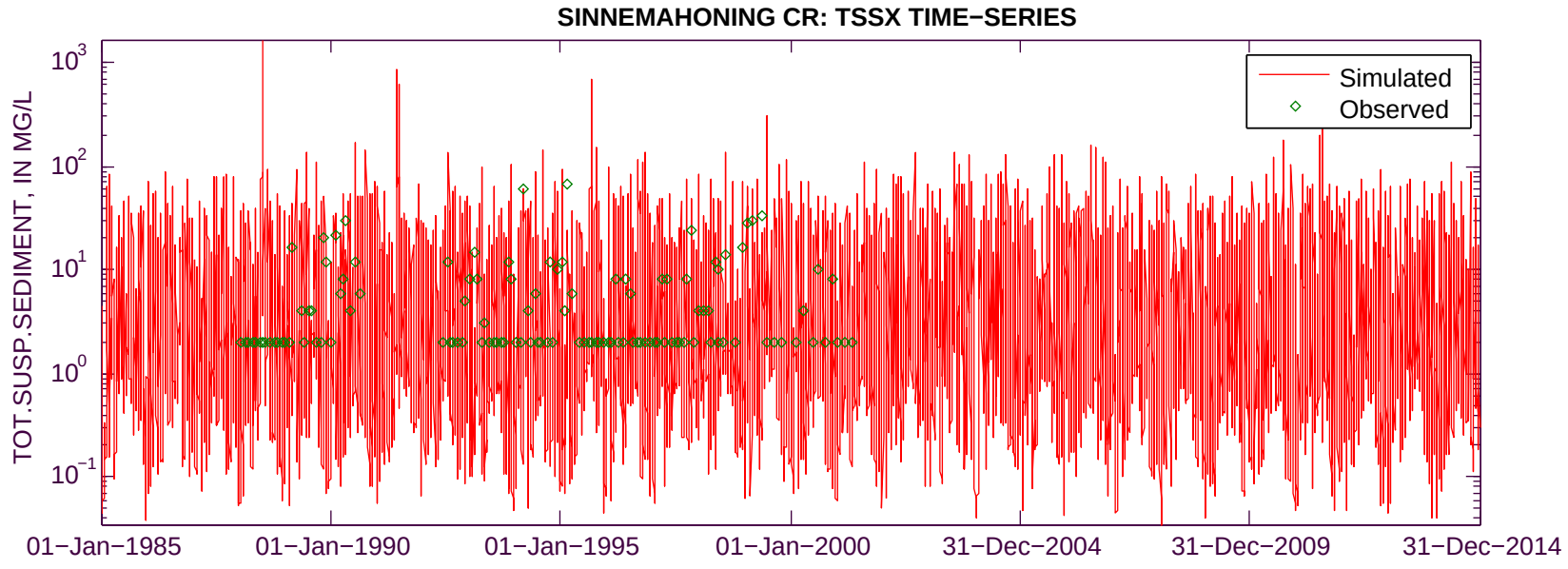
ALL DATA
LOG10

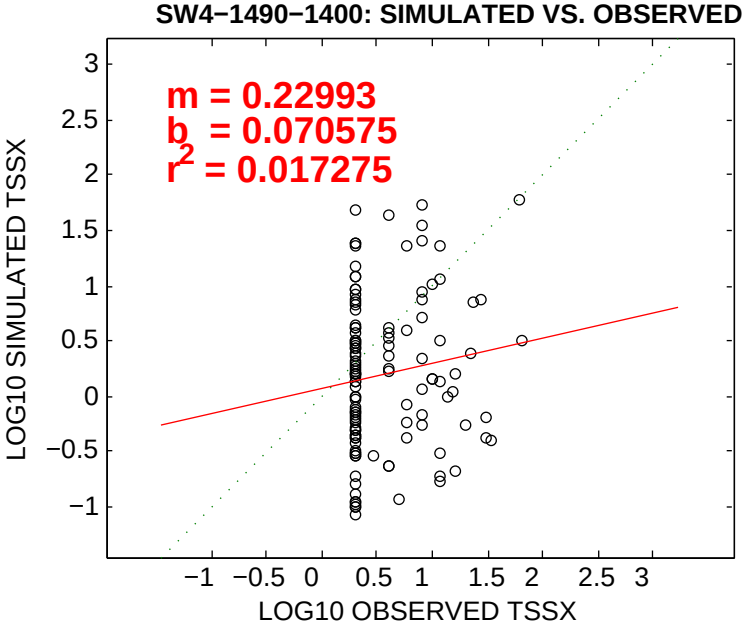


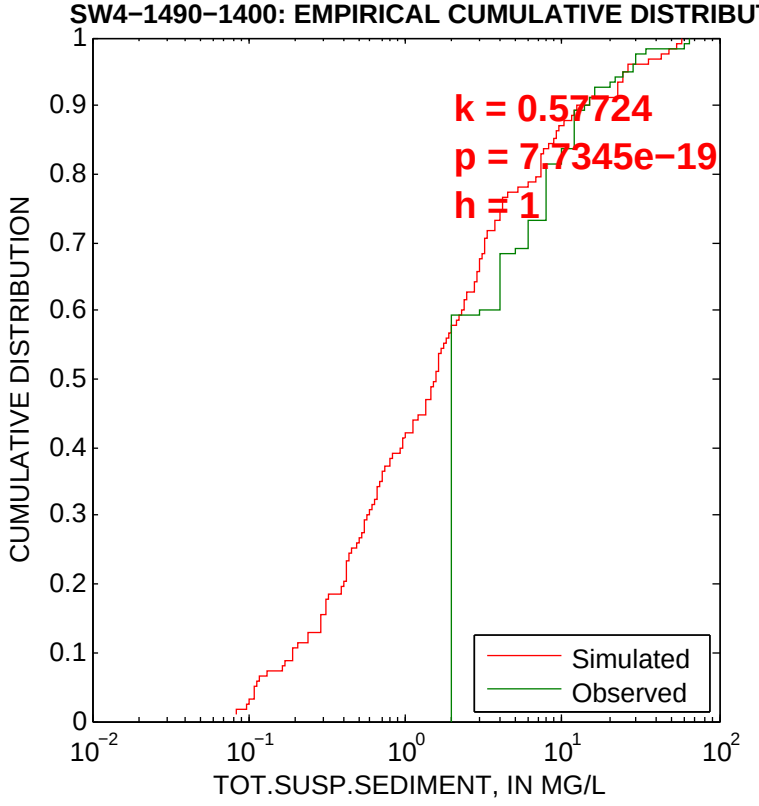












DATA SELECTION

scenario: P620171001WQ | file: TSSX.calib

plot: TSSX - total suspended ...

Dates: 1/1/1985 – 12/31/201

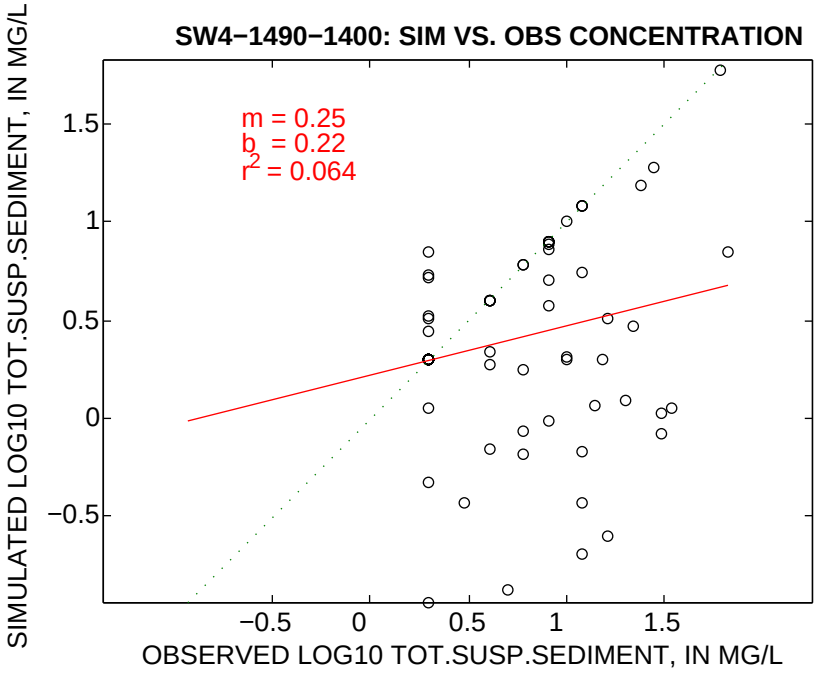
Drive: N/A | Directory: model | Observed: OBS20161101

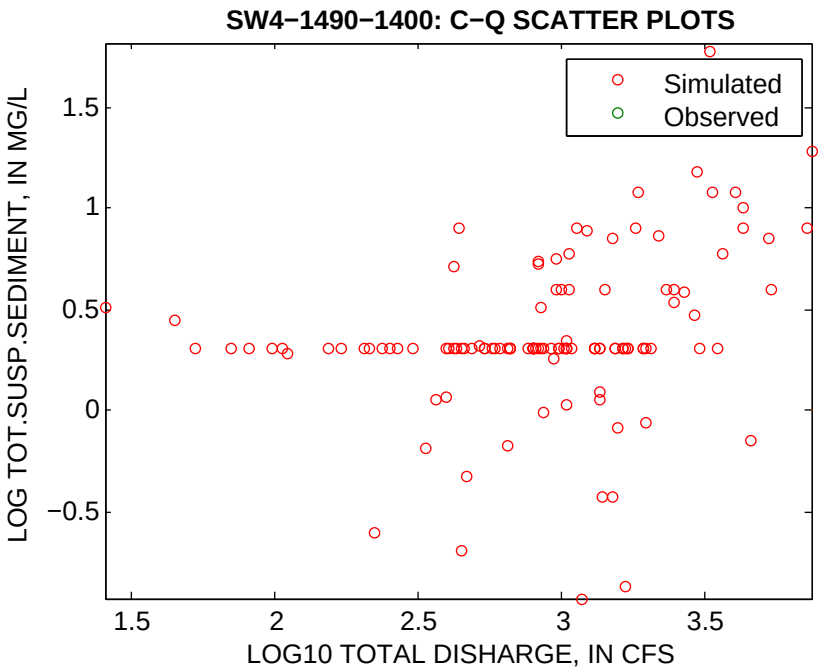
STATISTICS

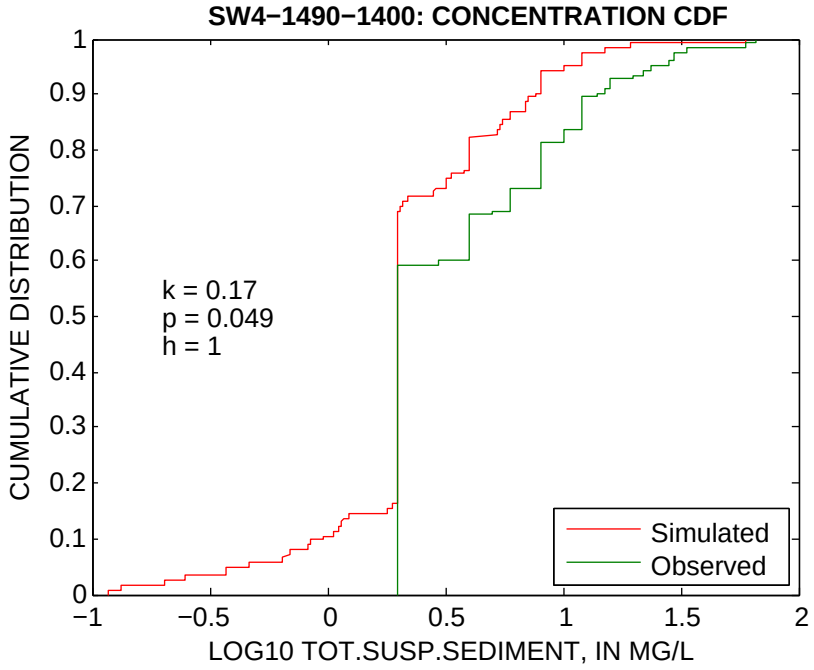
		observe	simulate
n		123	122
min		2	0
		0.30103	-1.0741
mean		6.44715	5.37458
		0.578947	0.203692
media		2	1.5628
		0.30103	0.195385
max		66	58.829
		1.81954	1.76959
varian		95.0033	109.802
		0.153569	0.46996
JB		0.001	0.001
		0.001007	0.162699
		ra	log
%		-16.6364	-64.8168
err.va		160.544	0.694889
rel.std.err		1.68987	4.52493
mod.eff		-0.689873	-3.52493

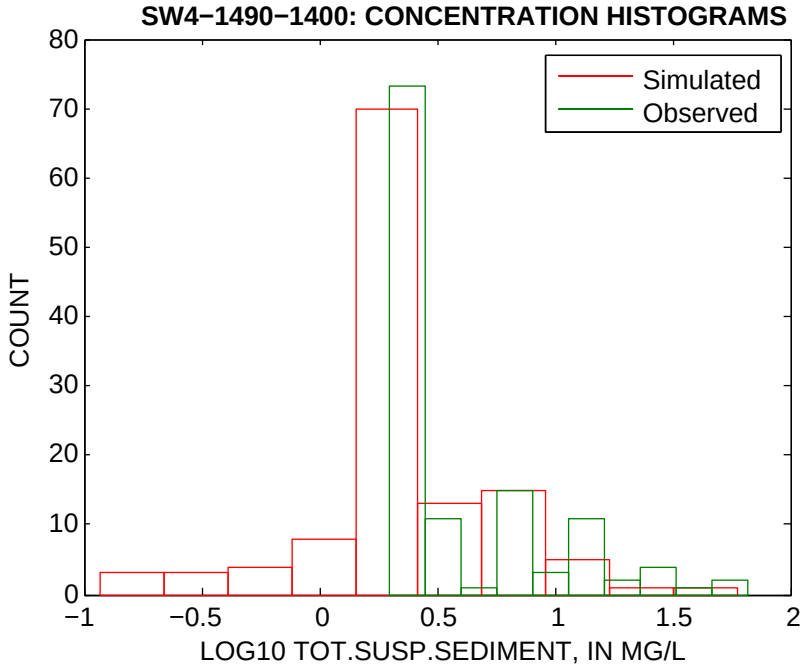
VERSION 2.1

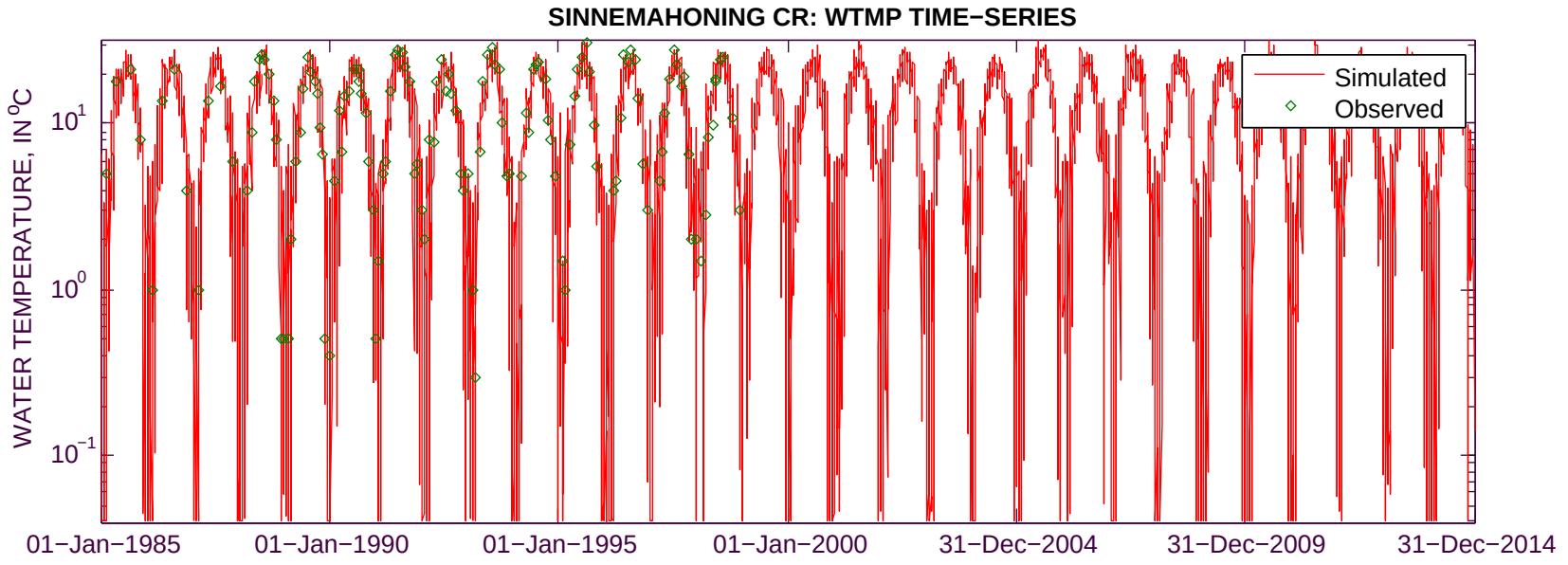
ALL DATA
LOG10

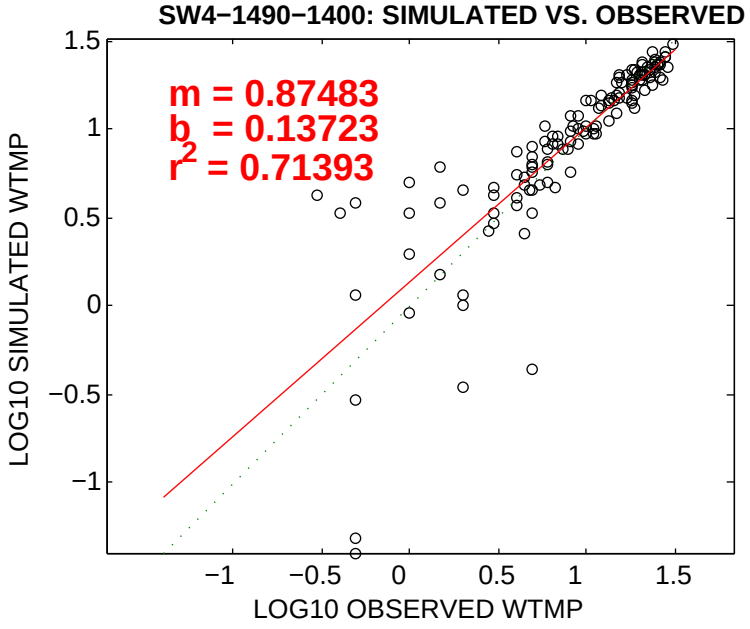


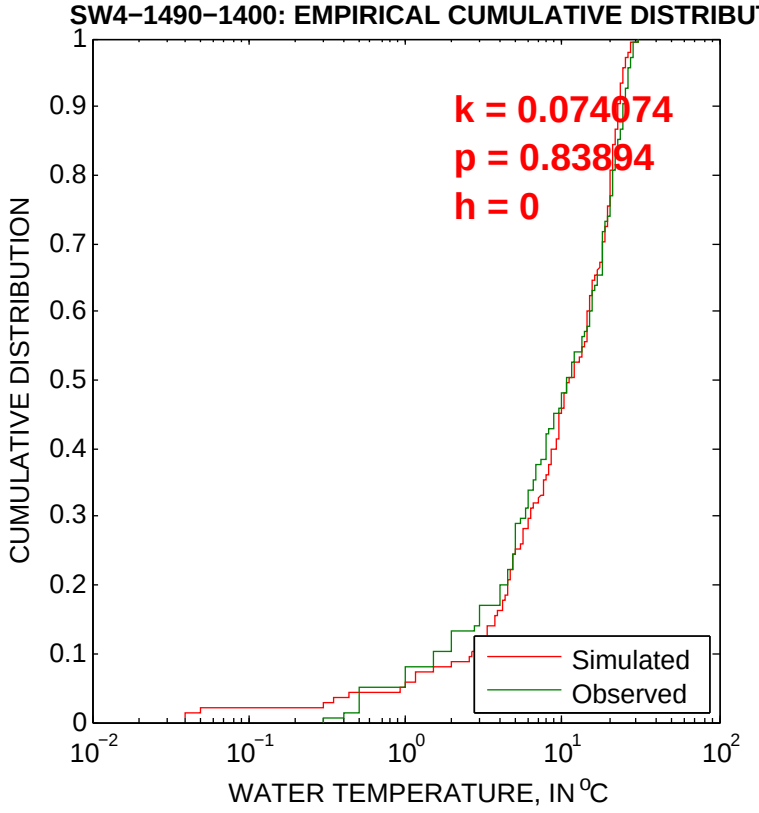












DATA SELECTION

scenario	file
P620171001WQ	WTMP.calib

plot: WTMP - water tempera...

Dates 1/1/1985 12/31/201

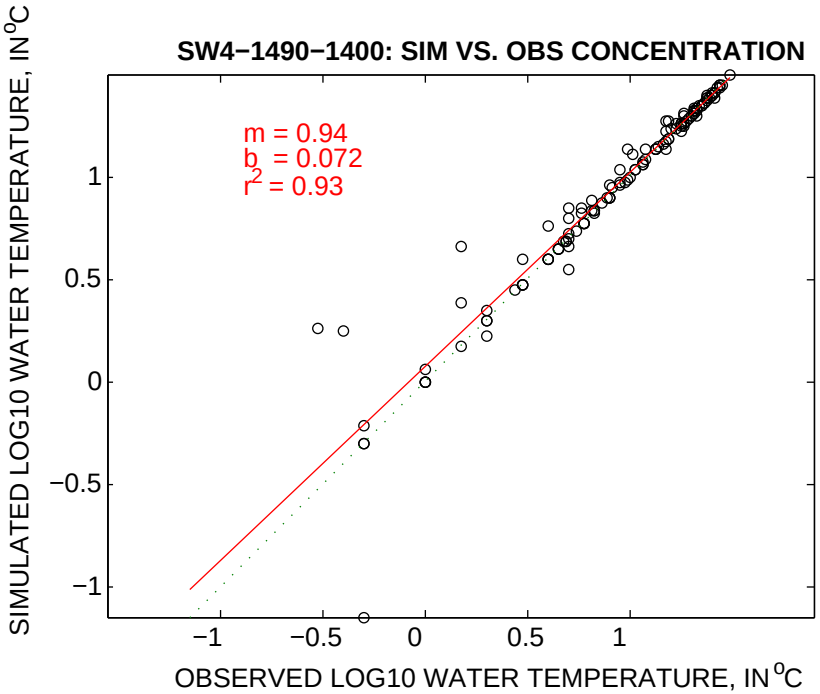
Drive	Directory	Observed
N/A	model	OBS20161101

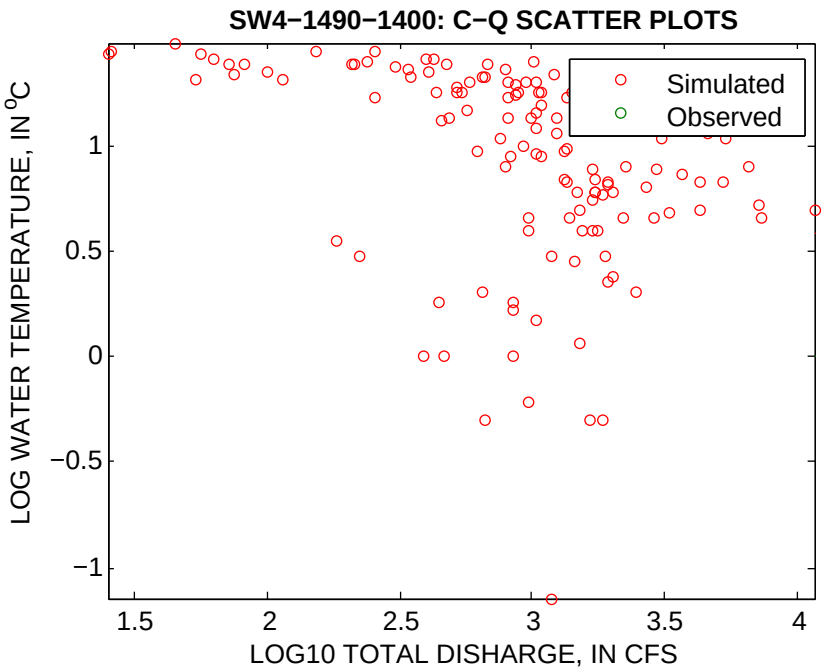
STATISTICS

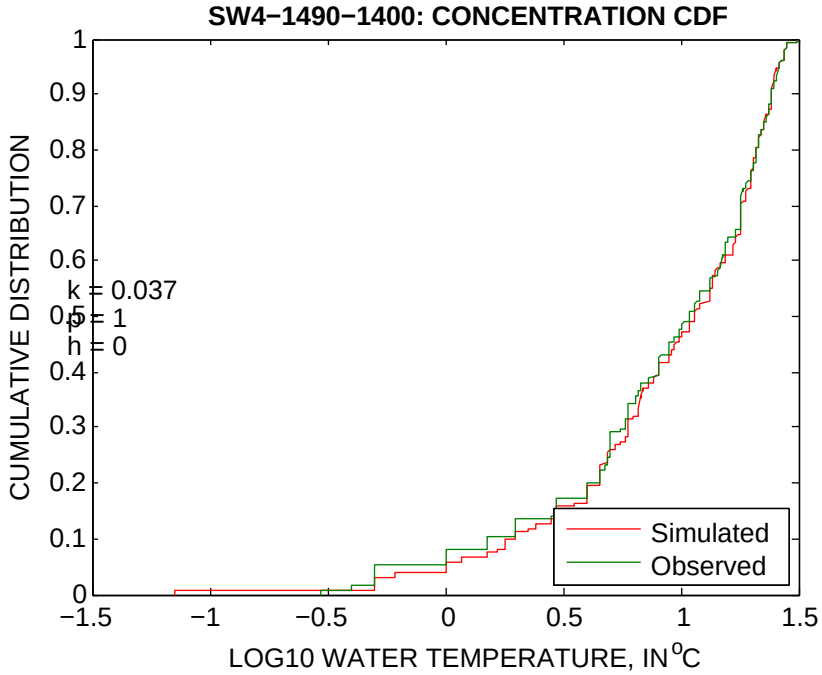
	n	observe	simulate
		135	134
min		0.3	0
		-0.522879	-1.39741
mean		12.4326	12.3905
		0.916998	0.939446
media		10.8	11.067
		1.03342	1.0586
max		31	30.398
		1.49136	1.48285
varian		73.6197	61.8057
		0.224429	0.240586
JB		0.015499	0.022379
		0.001	0.001
		ra	log
%		-0.338739	2.44801
err.va		11.0847	0.0728475
rel.std.err		0.150567	0.324591
mod.eff		0.849433	0.675409

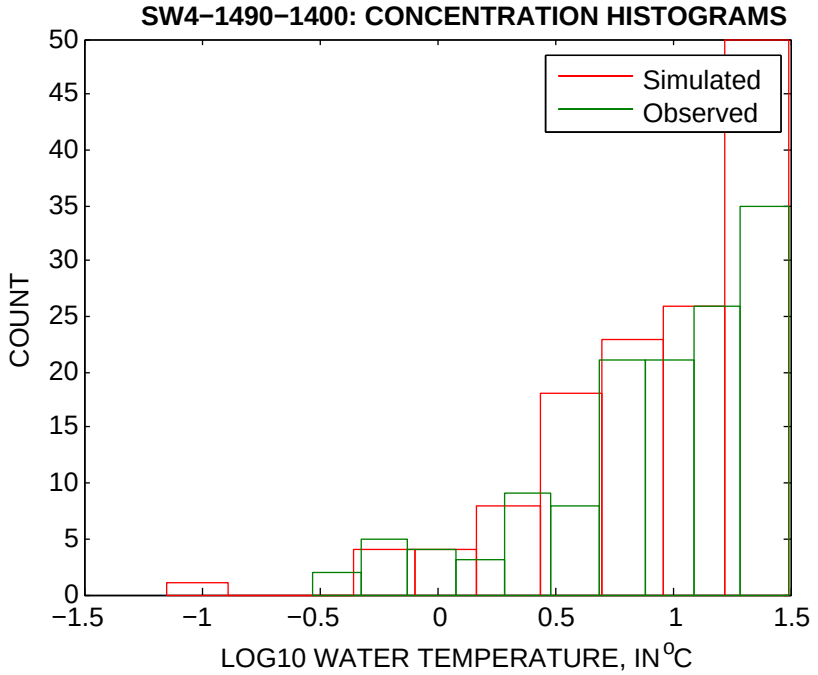
VERSION 3.1

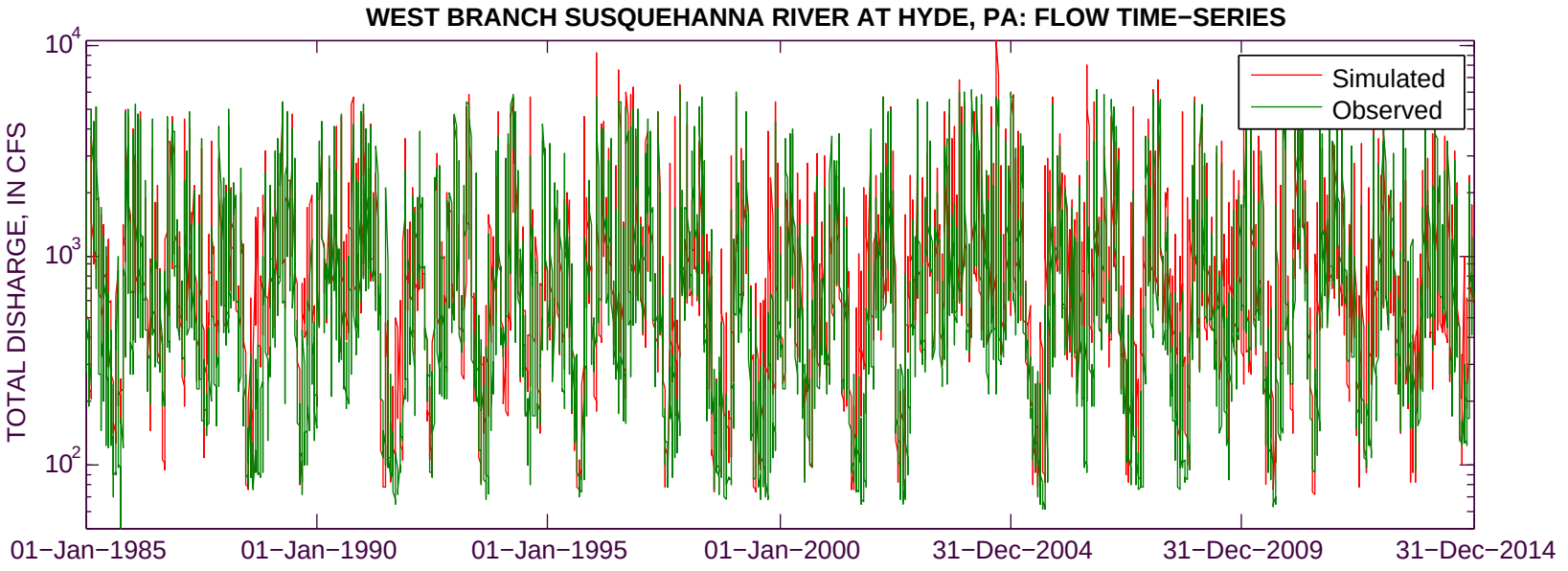
ALL DATA
LOG10

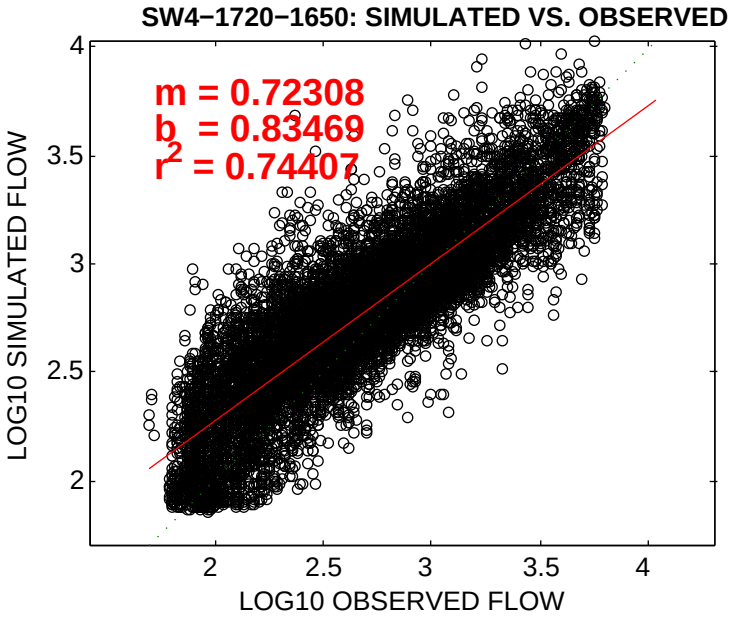


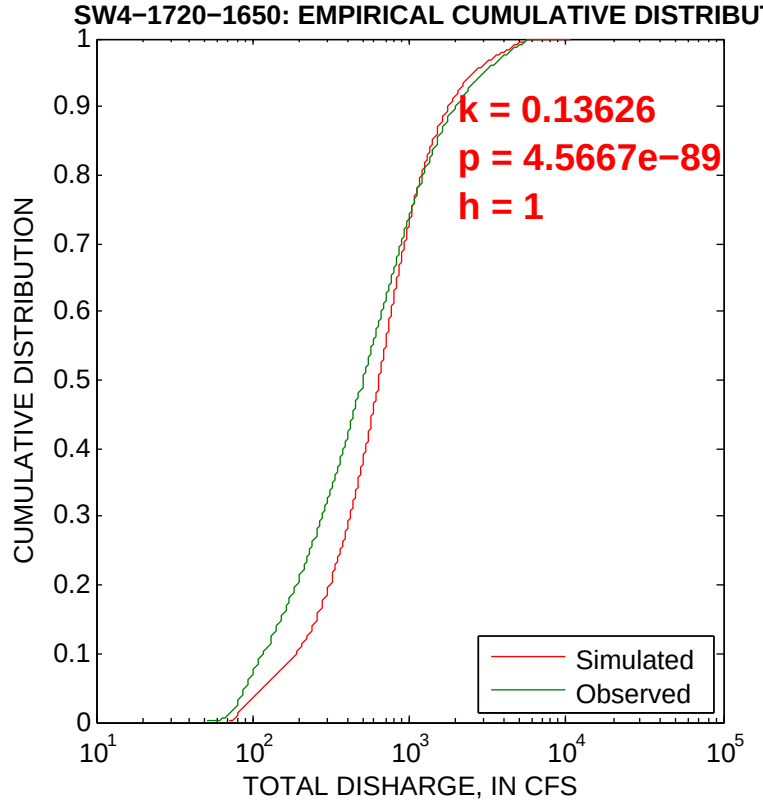












DATA SELECTION

scenario: P620171001WQ | file: FLOW.calib

plot: FLOW - total discharge

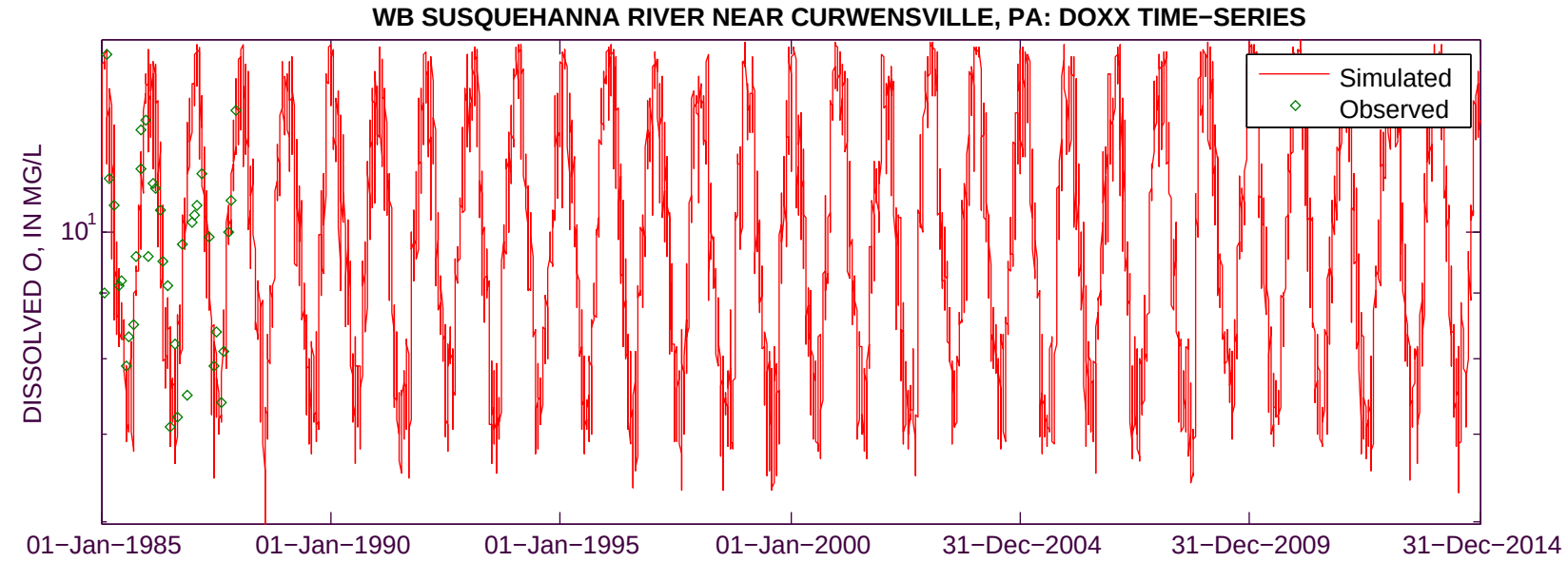
Dates: 1/1/1985 – 12/31/201

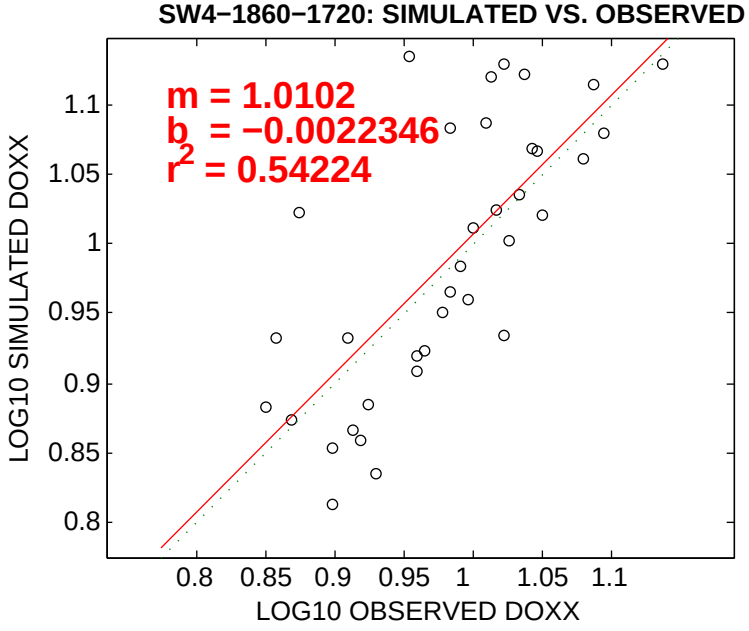
Drive: N/A | Directory: model | Observed: OBS20161101

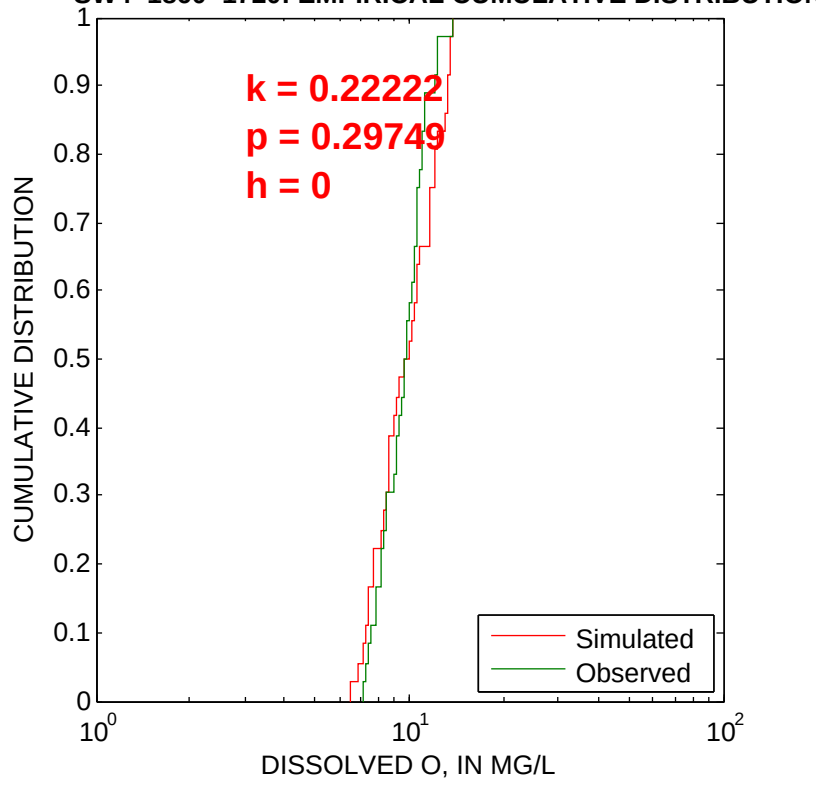
STATISTICS

		observe	simulate
n		10957	10957
min		50	72.315
		1.69897	1.85923
mean		854.896	890.335
		2.70189	2.78837
media		507	641.21
		2.70501	2.807
max		6180	10754
		3.79099	4.03157
varian		1.00033e+0	822182
		0.203892	0.143271
JB		0.001	0.001
		0.001	0.001
		ra	log
%		4.14543	3.201
err.va		368308	0.059783
rel.std.err		0.368188	0.293209
mod.eff		0.631812	0.706791

VERSION 2.1







DATA SELECTION

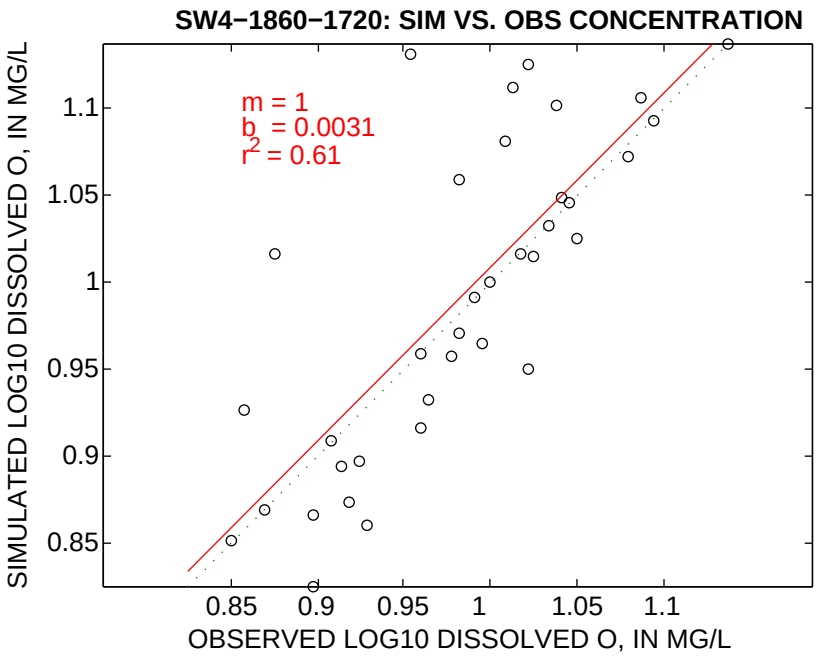
scenario: P620171001WQ
file: DOXX.calib
plot: DOXX - dissolved oxygen
Dates: 1/1/1985 12/31/201
Drive: N/A
Directory: model
Observed: OBS20161101

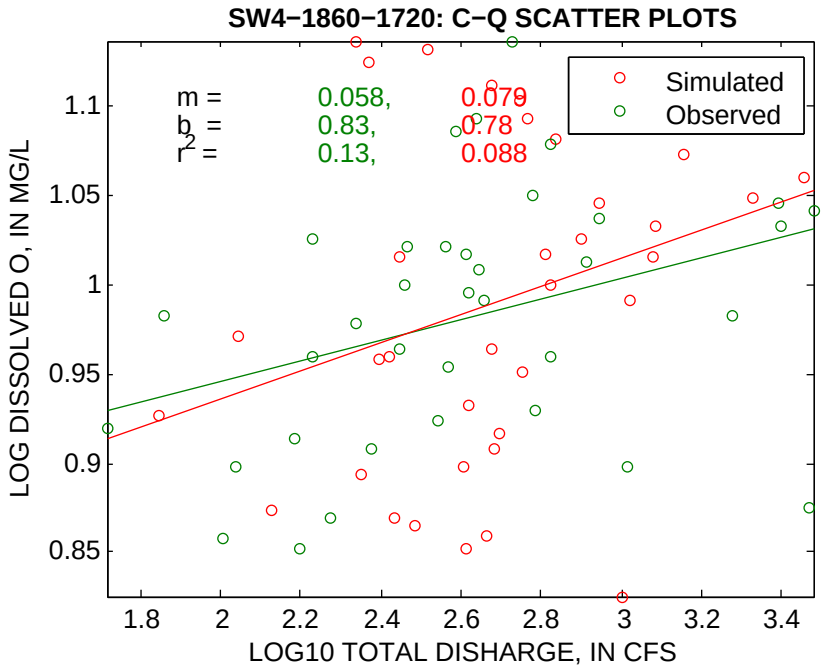
STATISTICS

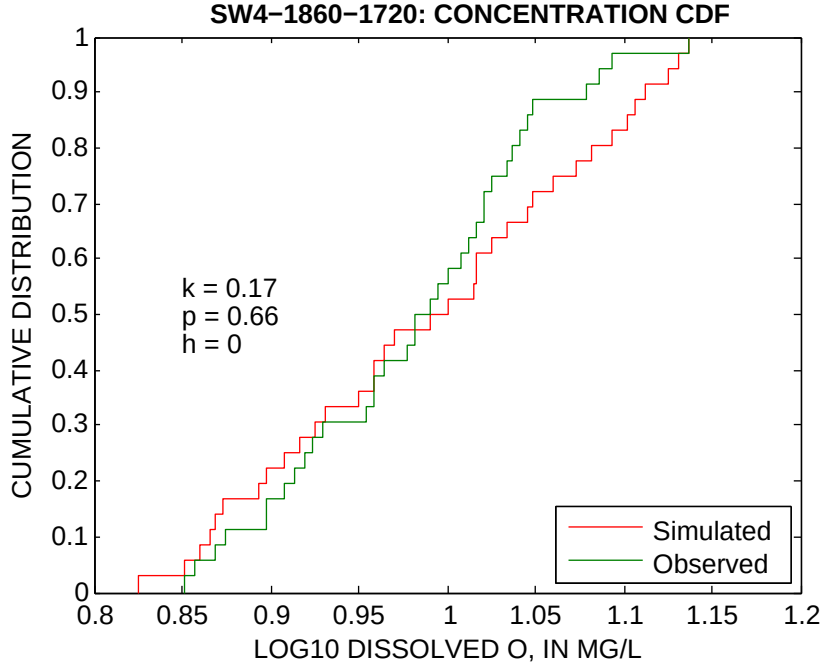
	n	36	36
		observe	simulate
min		7.1	6.4837
		0.851258	0.811823
mean		9.69722	9.98326
		0.98103	0.988767
media		9.7	9.85755
		0.986749	0.993668
max		13.7	13.646
		1.13672	1.13501
varian		2.50713	4.88869
		0.00503326	0.00947194
JB	✓	0.5	0.124715 ✓
	✓	0.5	0.147483 ✓
		ra	log
%		2.94967	0.788721
err.va		2.39568	0.00439793
rel.std.err		0.955545	0.873773
mod.eff		0.0444546	0.126227

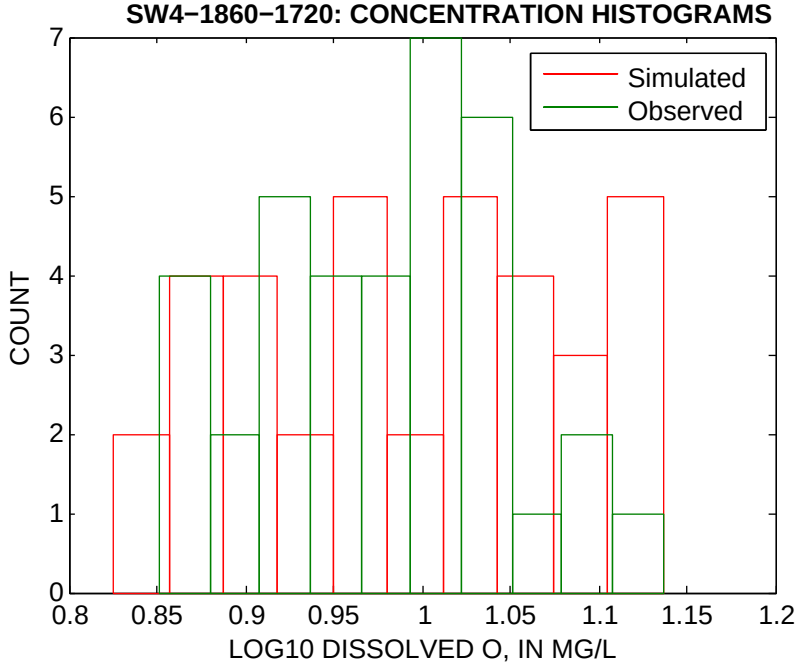
VERSION 2.1

ALL DATA
LOG10

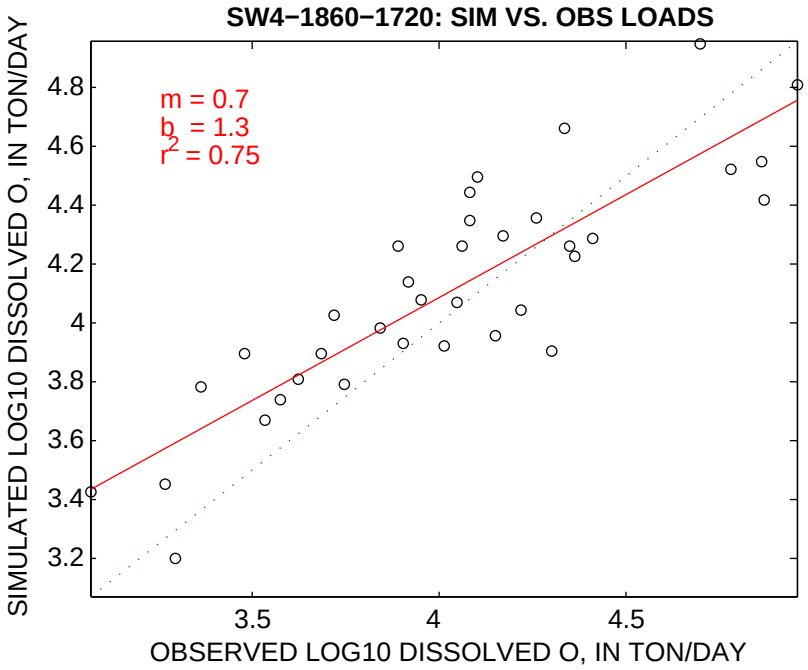


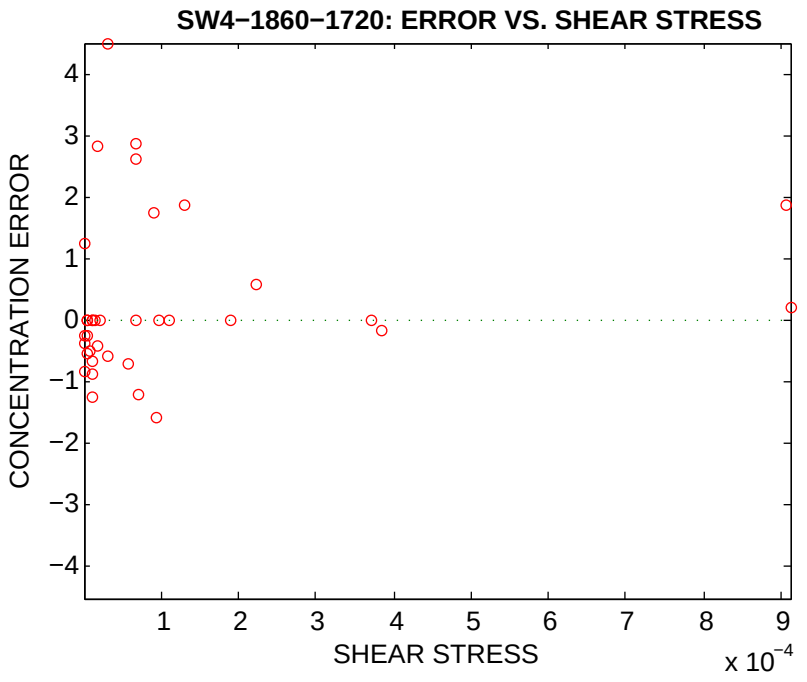


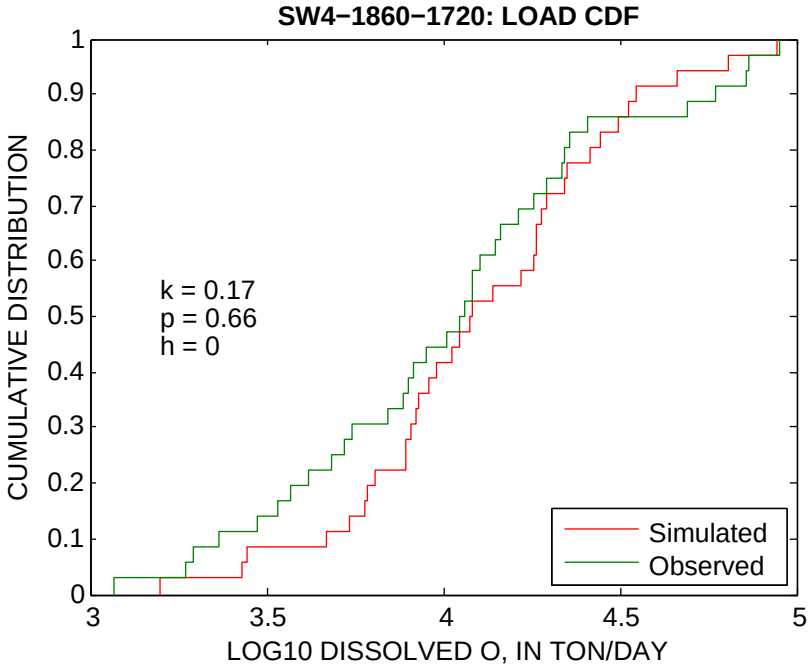


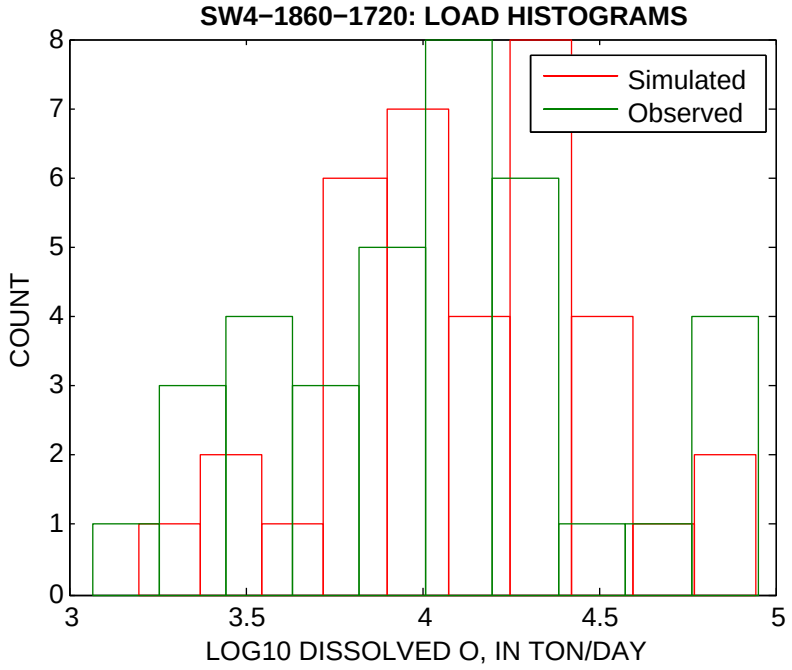


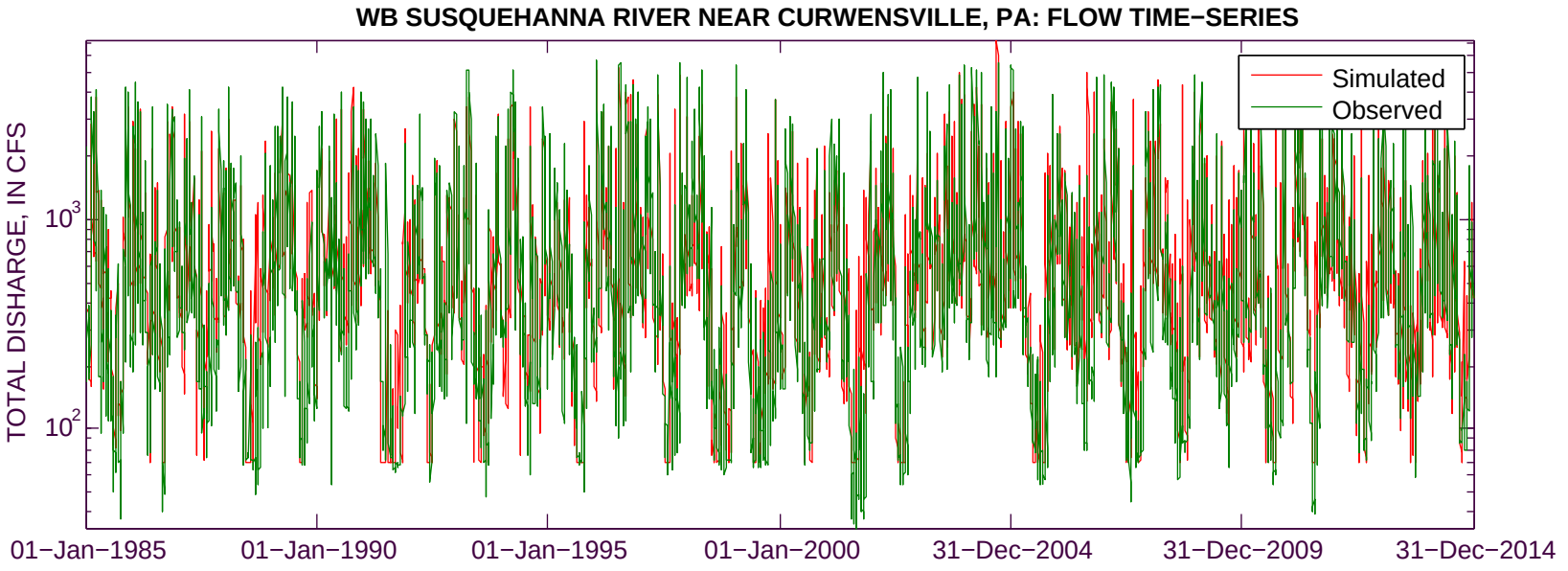
LOAD DATA
LOG10

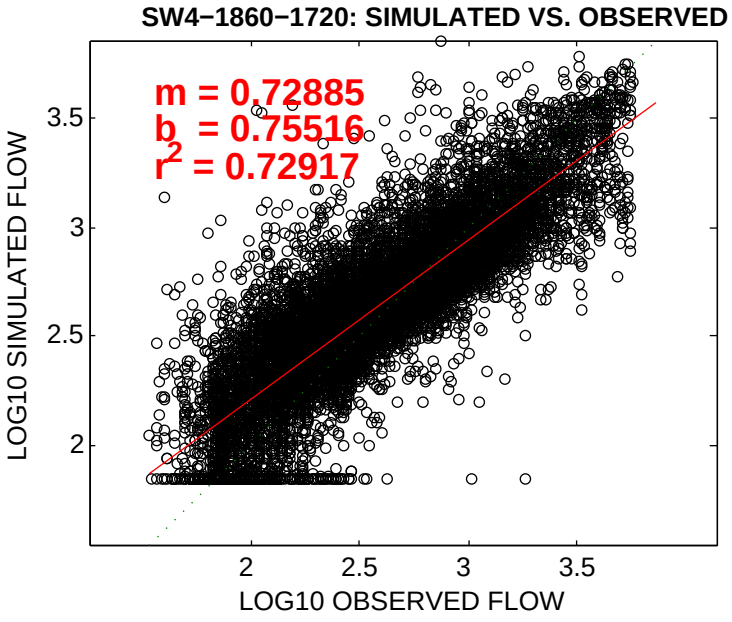


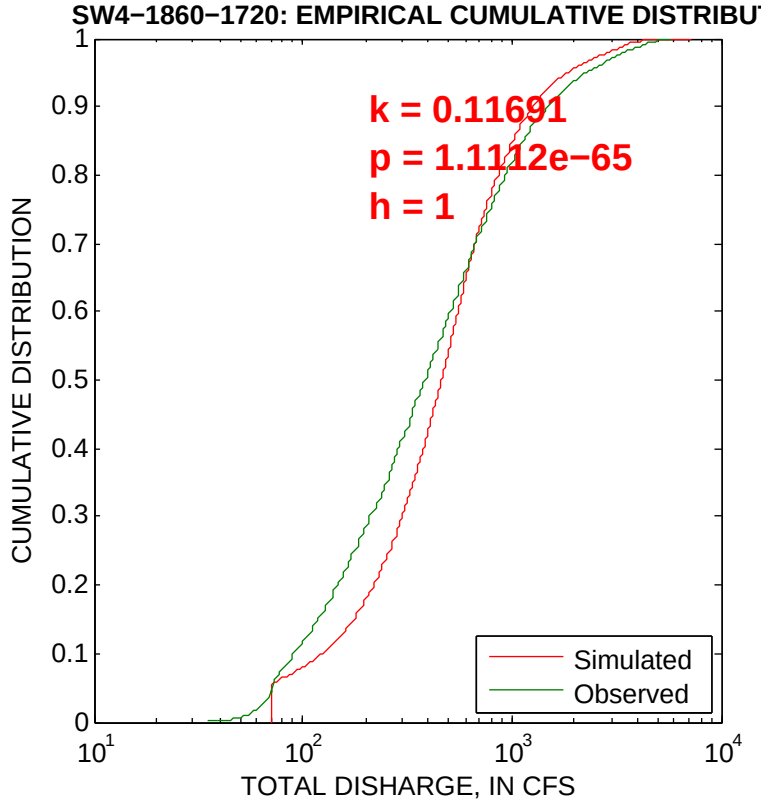












DATA SELECTION

scenario: P620171001WQ | file: FLOW.calib

plot: FLOW - total discharge

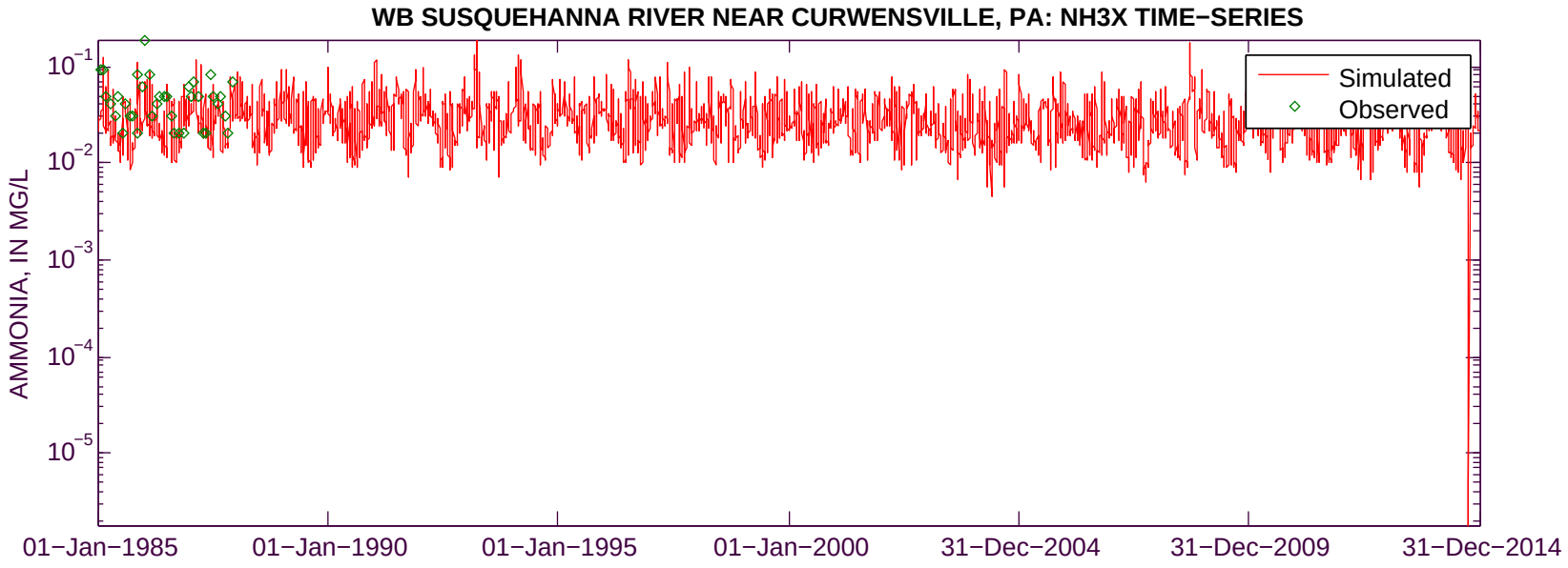
Dates: 1/1/1985 – 12/31/201

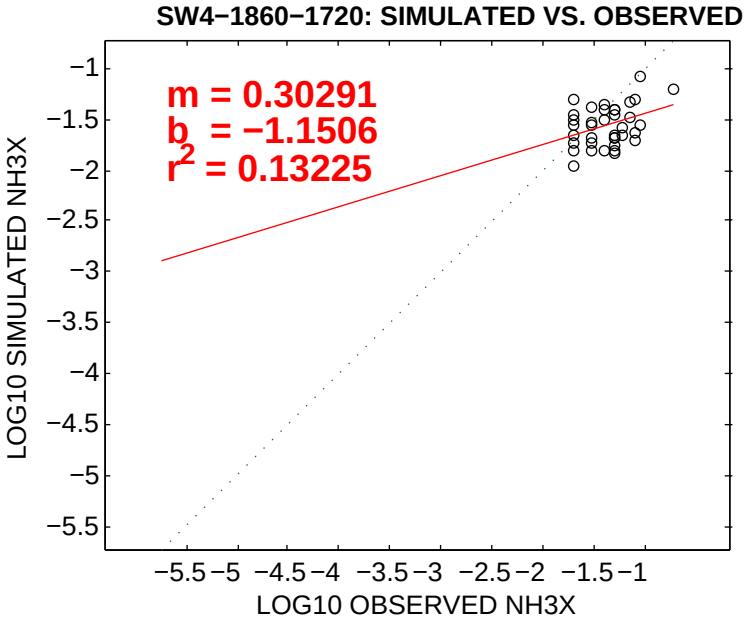
Drive: N/A | Directory: model | Observed: OBS20161101

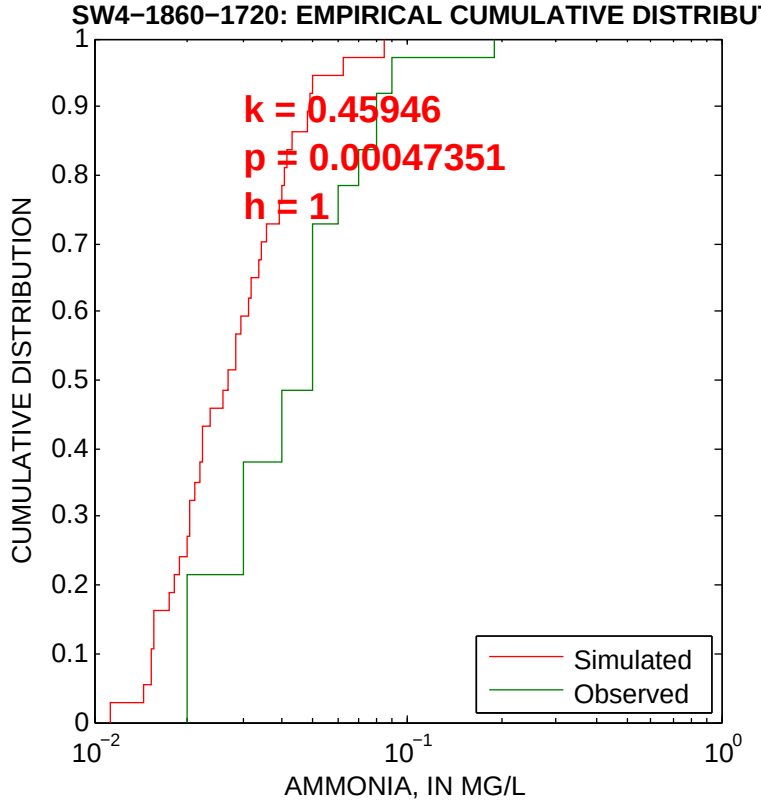
STATISTICS

n	10957	10957
	observe	simulate
min	34	70
	1.53148	1.8451
mean	659.005	637.204
	2.58515	2.63934
media	385	463.74
	2.58546	2.66627
max	5730	7219.3
	3.75815	3.8585
varian	653242	426433
	0.202497	0.147525
JB	0.001	0.001
	0.001	0.001
	ra	log
%	-3.30817	2.09605
err.va	257217	0.0577794
rel.std.err	0.393755	0.285335
mod.eff	0.606245	0.714665

VERSION 2.1







DATA SELECTION

scenario: P620171001WQ | file: NH3X.calib

plot: NH3X - ammonia

Dates: 1/1/1985 – 12/31/201

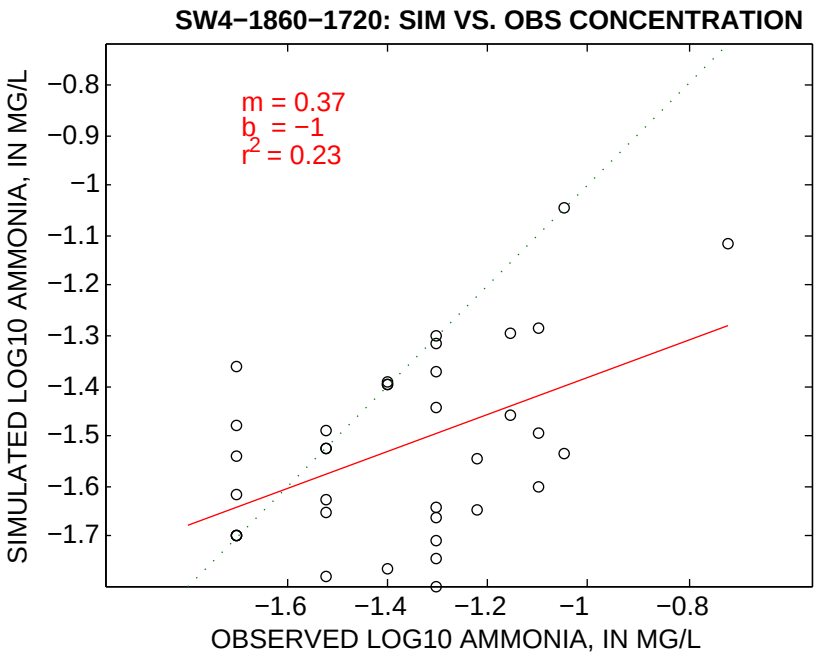
Drive: N/A | Directory: model | Observed: OBS20161101

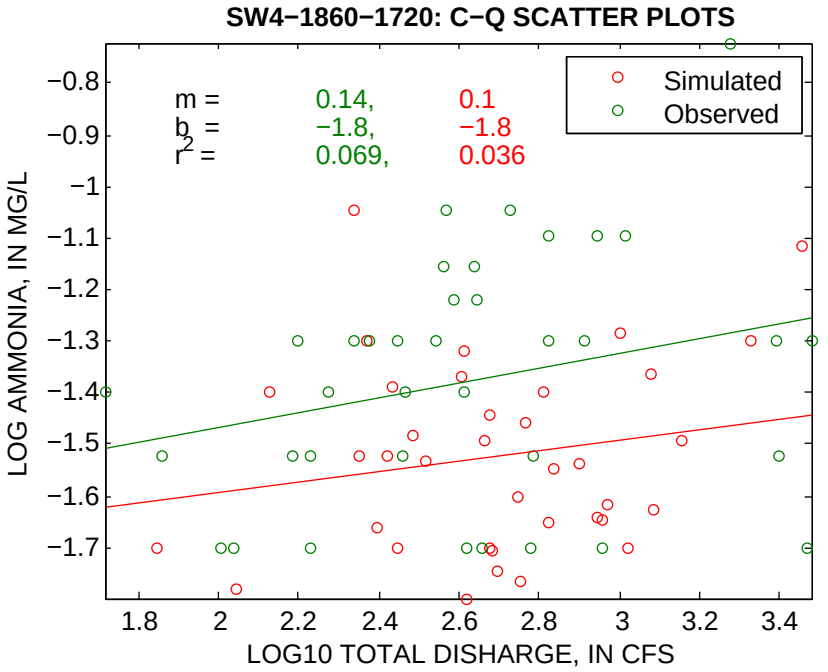
STATISTICS

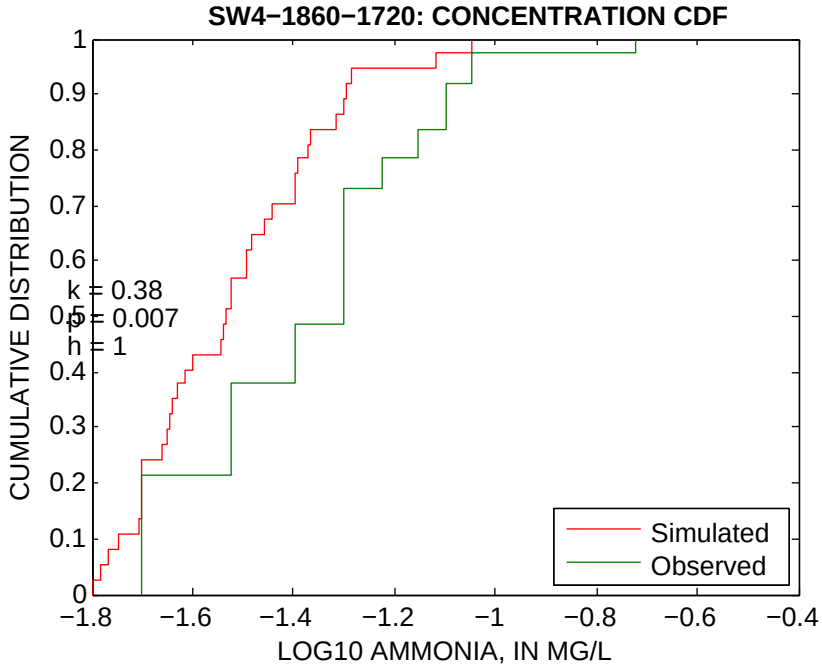
	n	37	37
		observe	simulate
min		0.02	0.011282
		-1.69897	-1.94761
mean		0.0491892	0.0301051
		-1.37533	-1.56719
media		0.05	0.027033
		-1.30103	-1.56811
max		0.19	0.084608
		-0.721246	-1.07259
varian		0.00101321	0.00022874
		0.0567278	0.0393582
JB		0.001	0.001594
		0.5	0.5
		ra	log
%		-38.7973	13.9505
err.va		0.00115374	0.0995544
rel.std.err		1.13869	1.75495
mod.eff		-0.13869	-0.754949

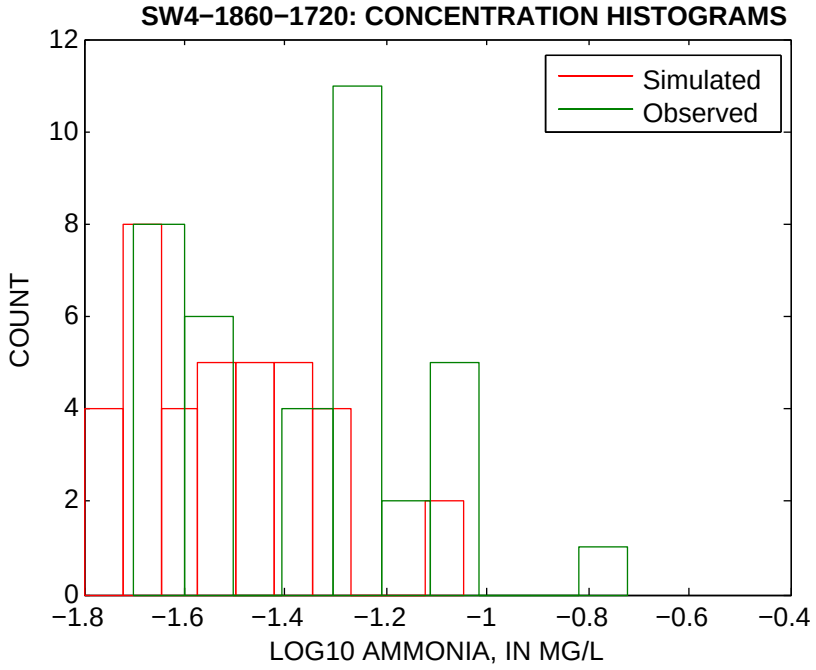
VERSION 2.1

ALL DATA
LOG10

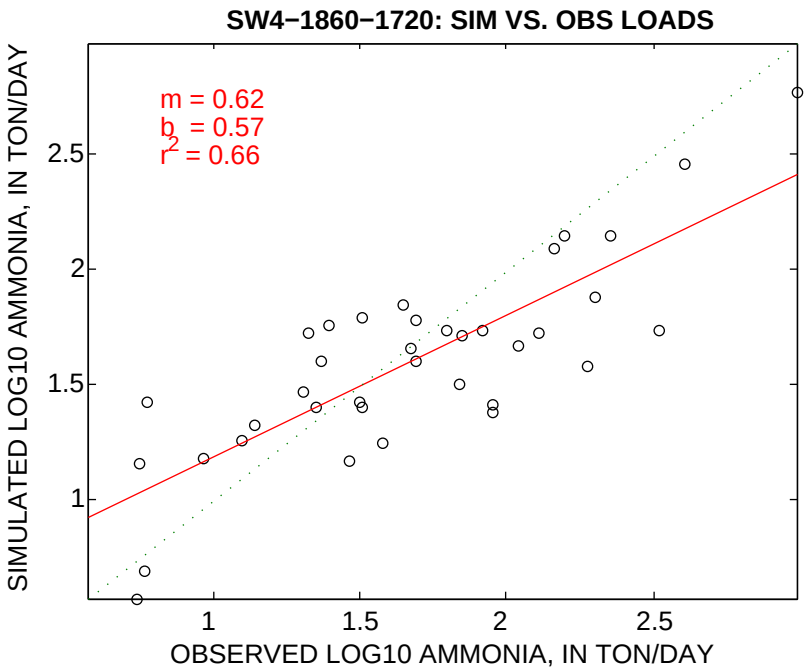


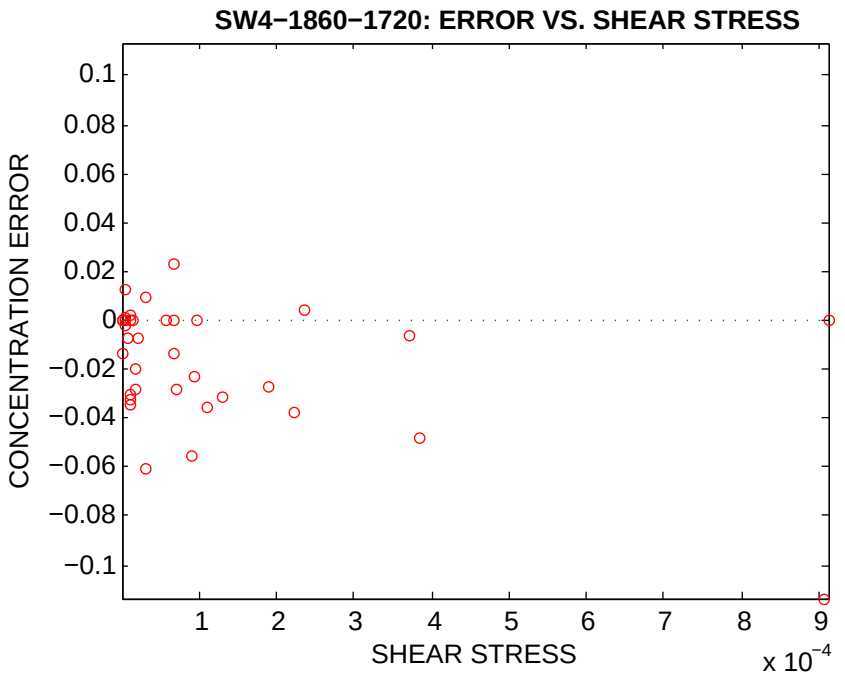


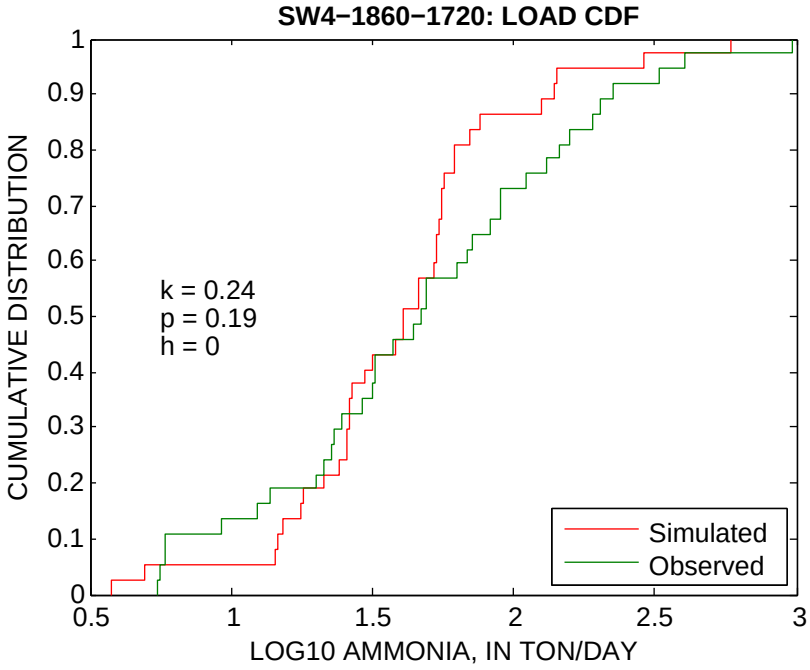


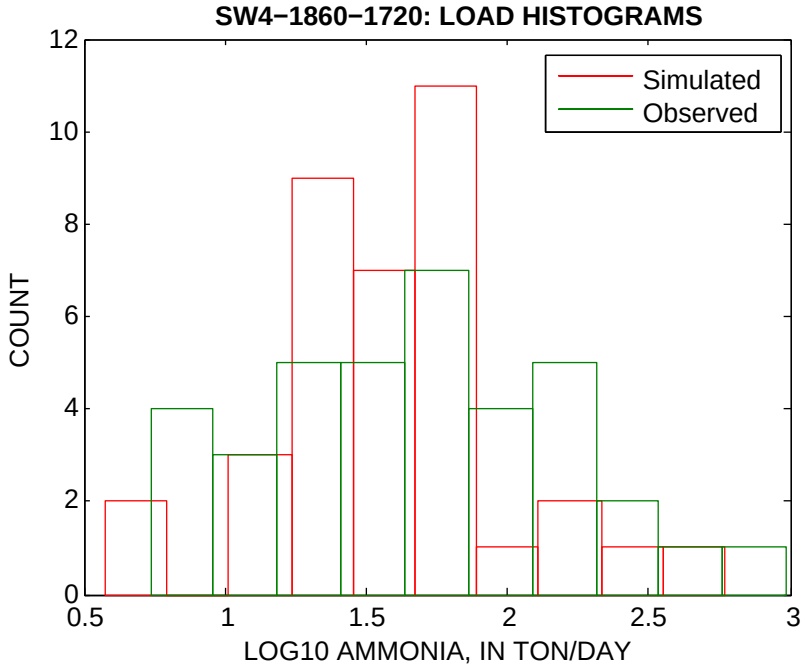


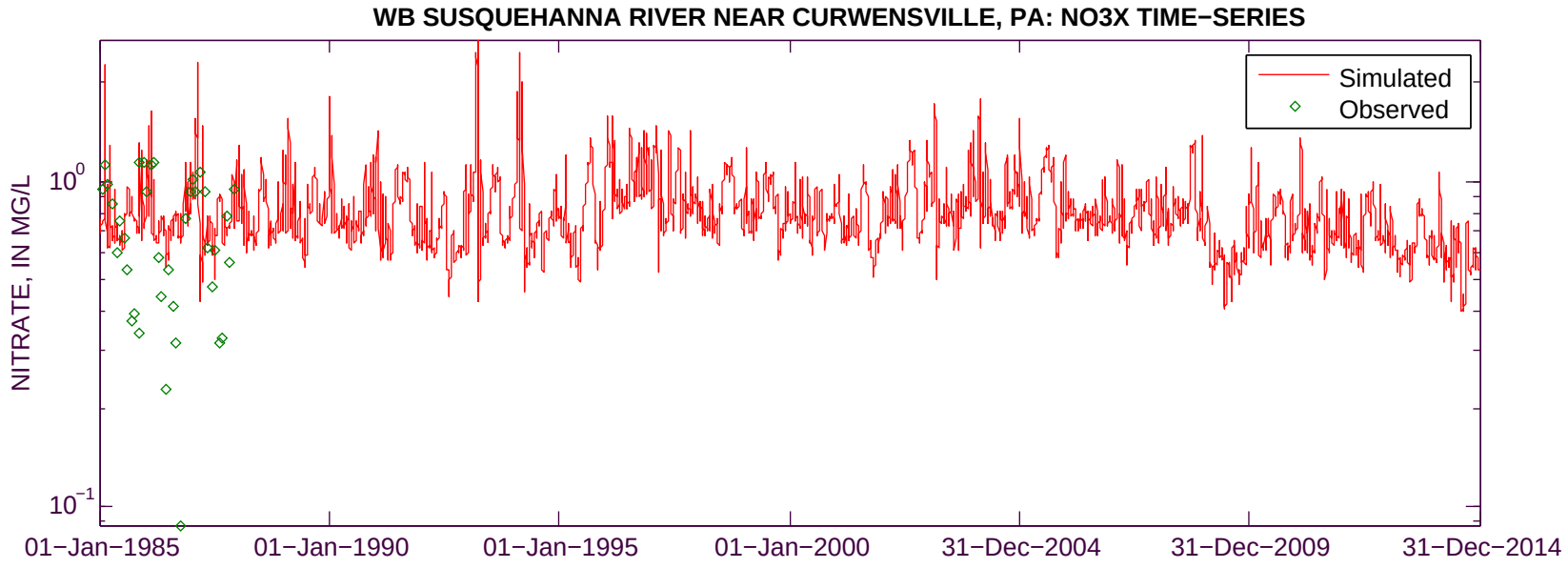
LOAD DATA
LOG10

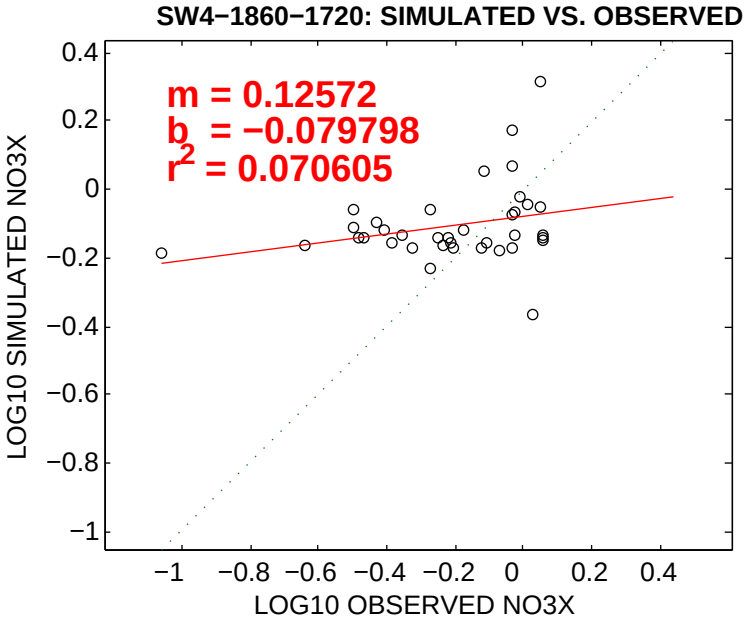


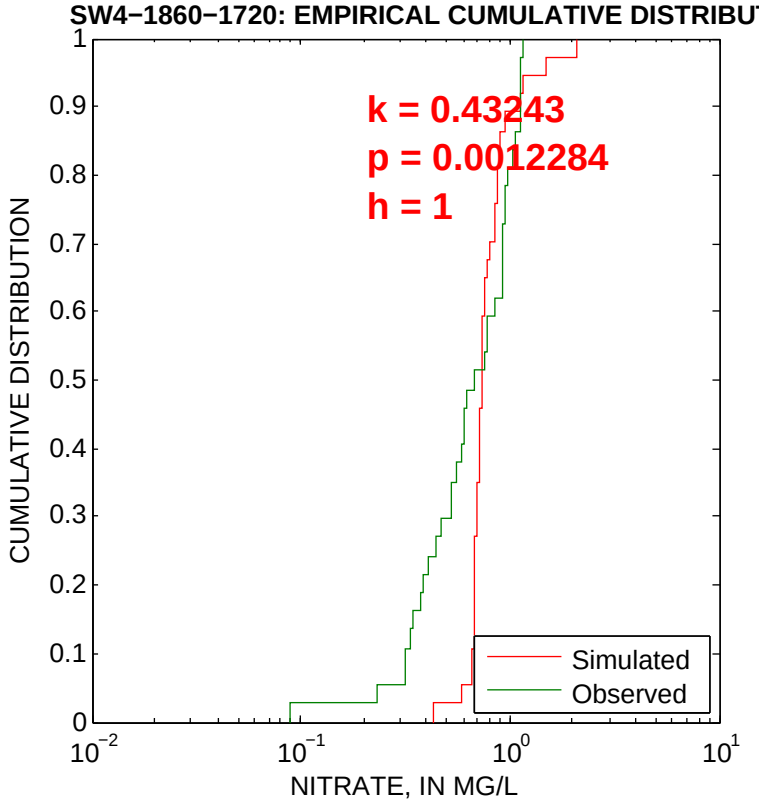












DATA SELECTION

scenario: P620171001WQ | file: NO3X.calib

plot: NO3X - nitrate

Dates: 1/1/1985 – 12/31/201

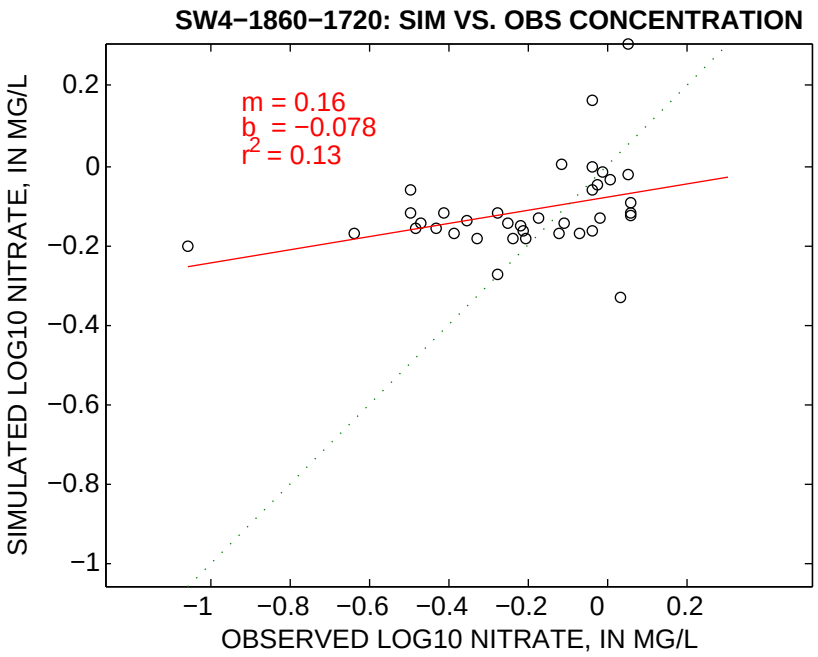
Drive: N/A | Directory: model | Observed: OBS20161101

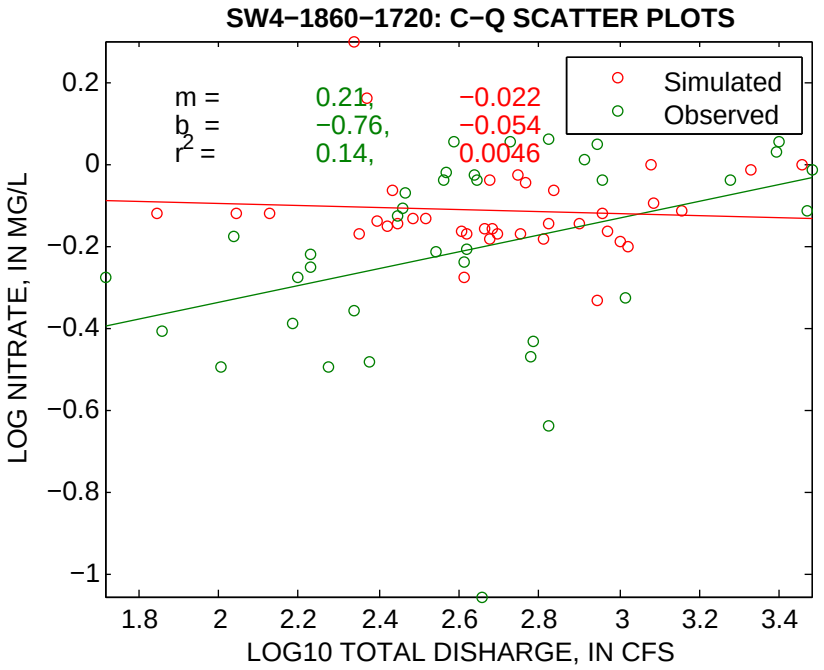
STATISTICS

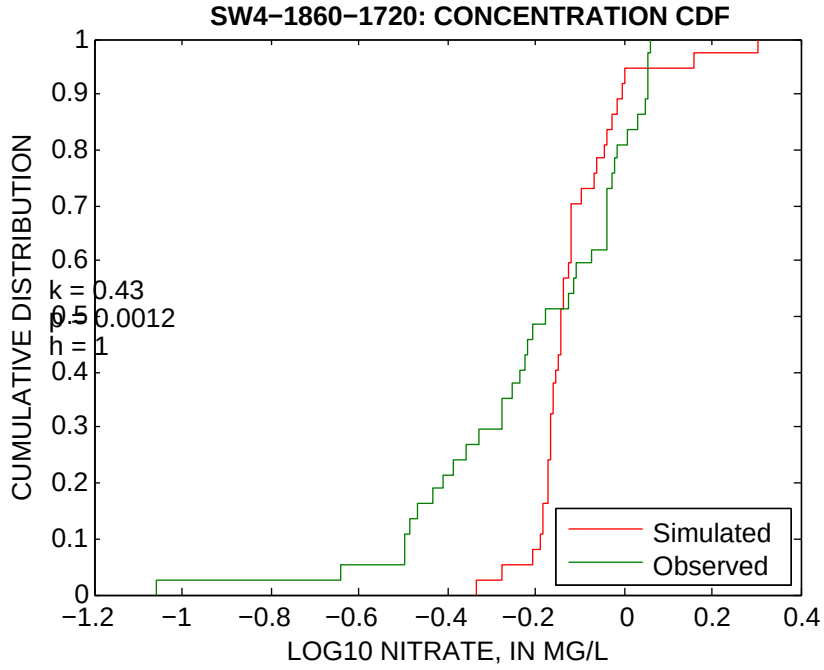
		observe	simulate
n		37	37
min		0.088	0.42924
		-1.05552	-0.3673
mean		0.699135	0.814811
		-0.208464	-0.106006
media		0.67	0.72813
		-0.173925	-0.137791
max		1.15	2.0778
		0.0606978	0.317604
varian		0.0914088	0.0777625
		0.0583645	0.0130649
JB		0.17168	0.001
		0.004563	0.001
		ra	log
%		16.5456	-49.1489
err.va		0.128836	0.0675436
rel.std.err		1.40945	1.15727
mod.eff		-0.409447	-0.157273

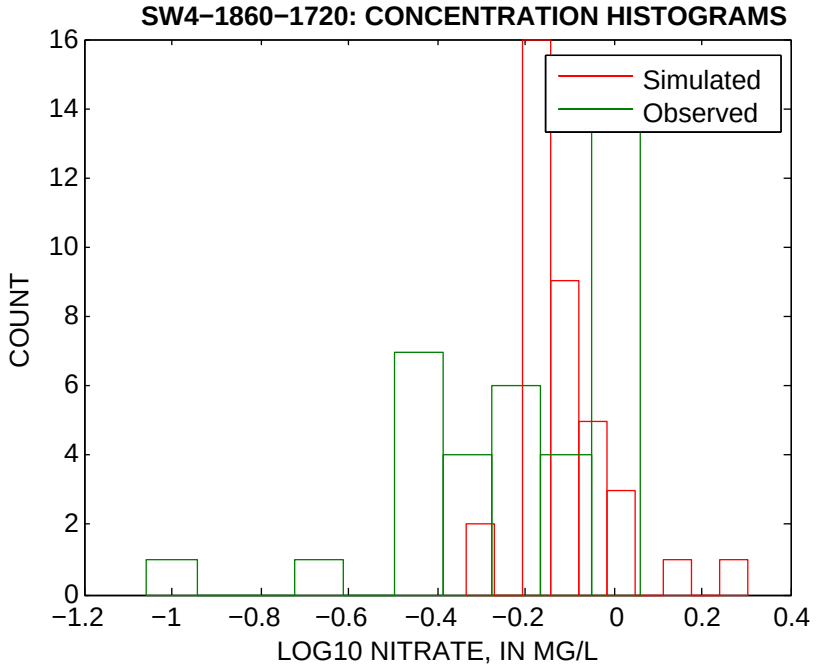
VERSION 2.1

ALL DATA
LOG10

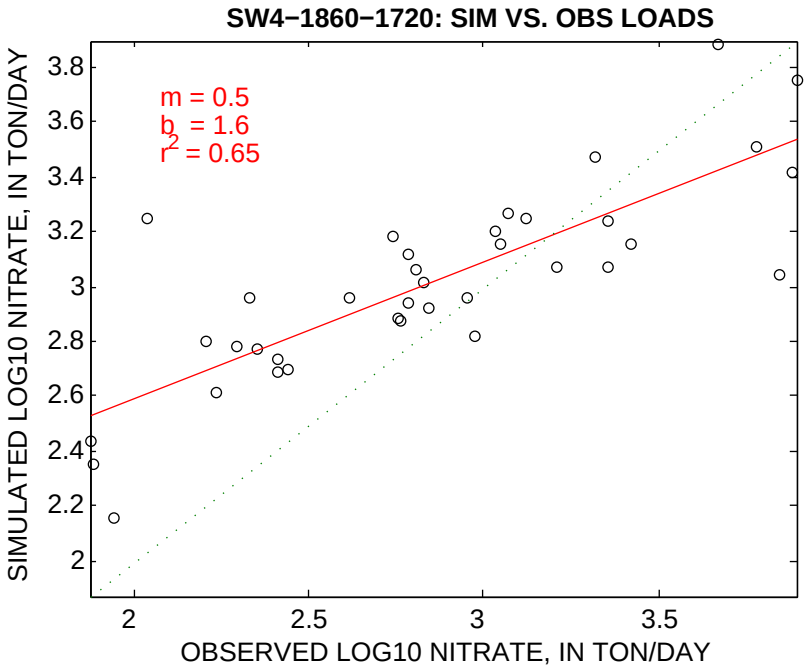


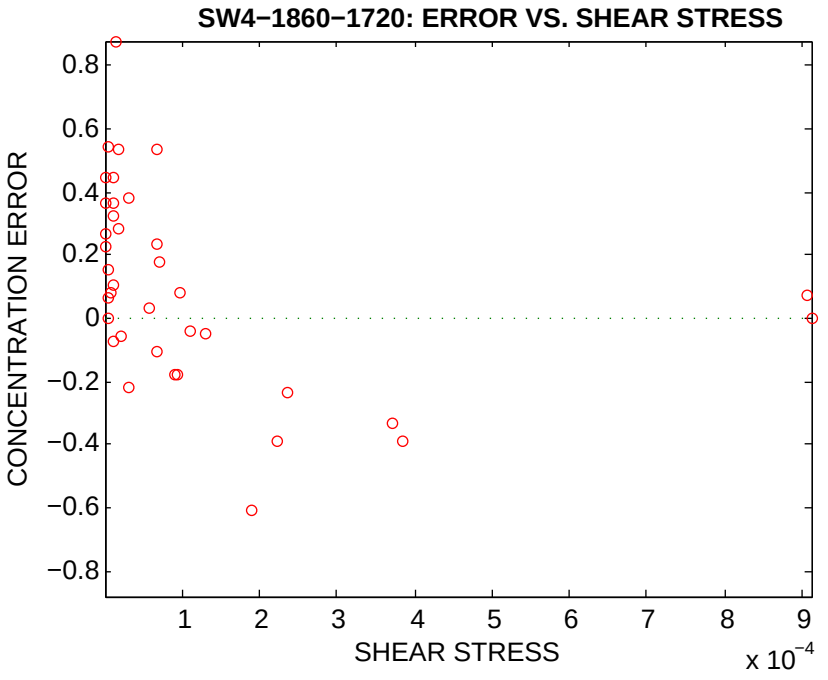


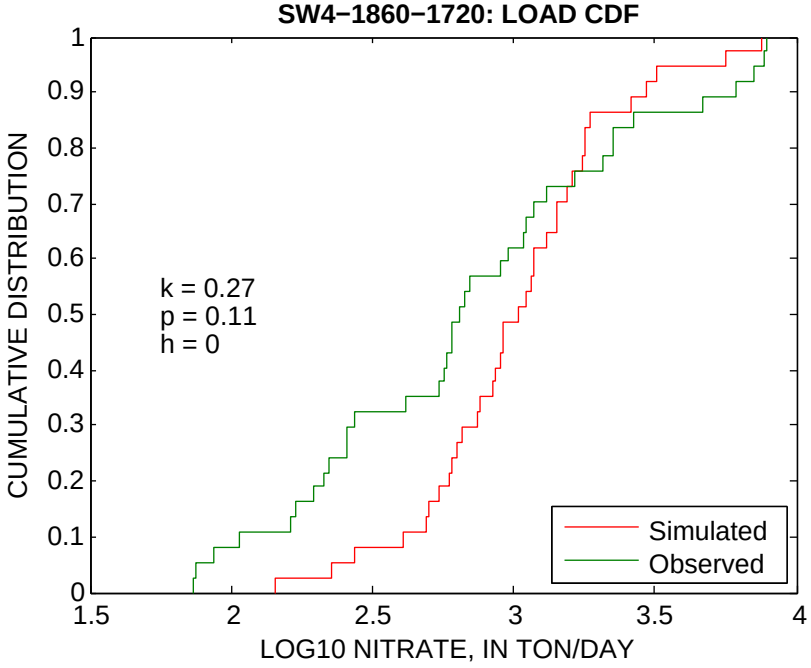


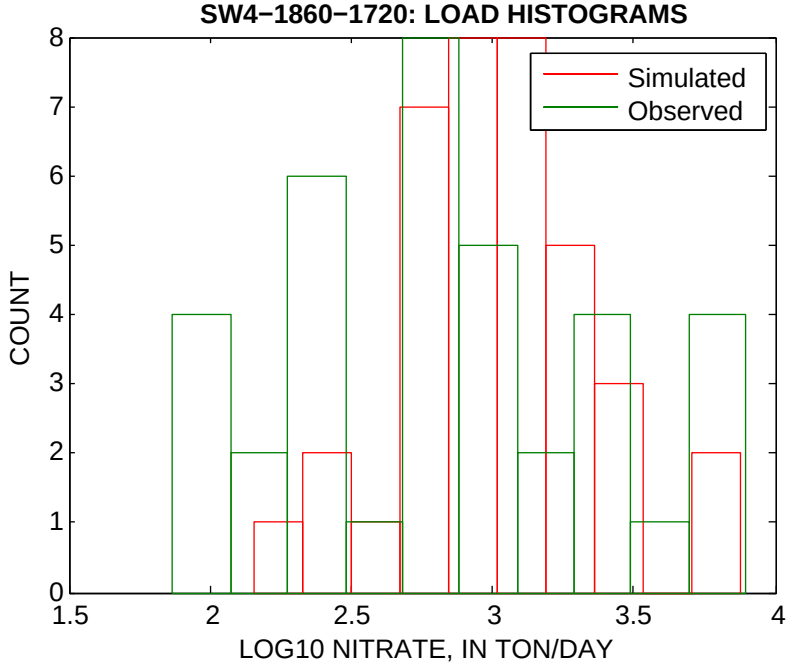


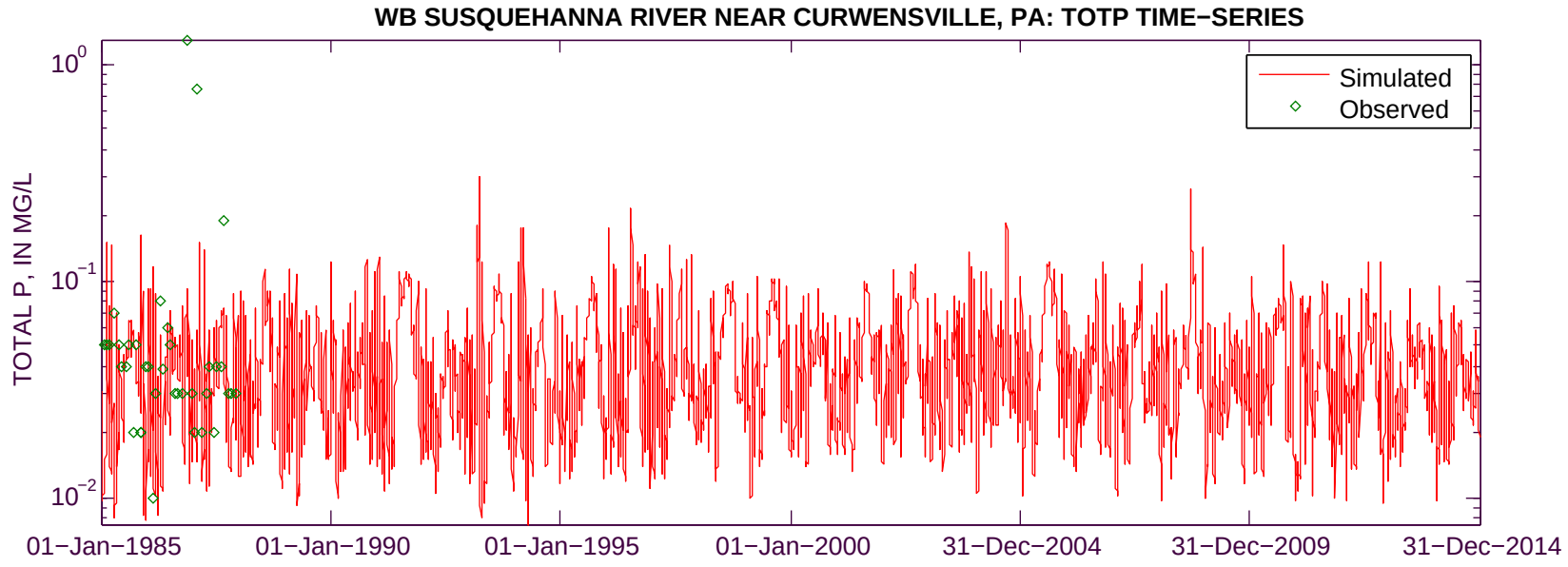
LOAD DATA
LOG10

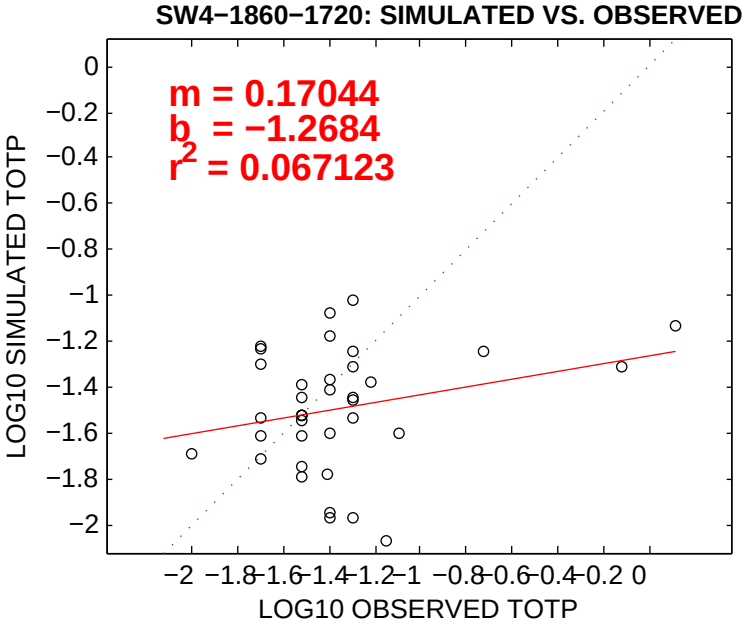


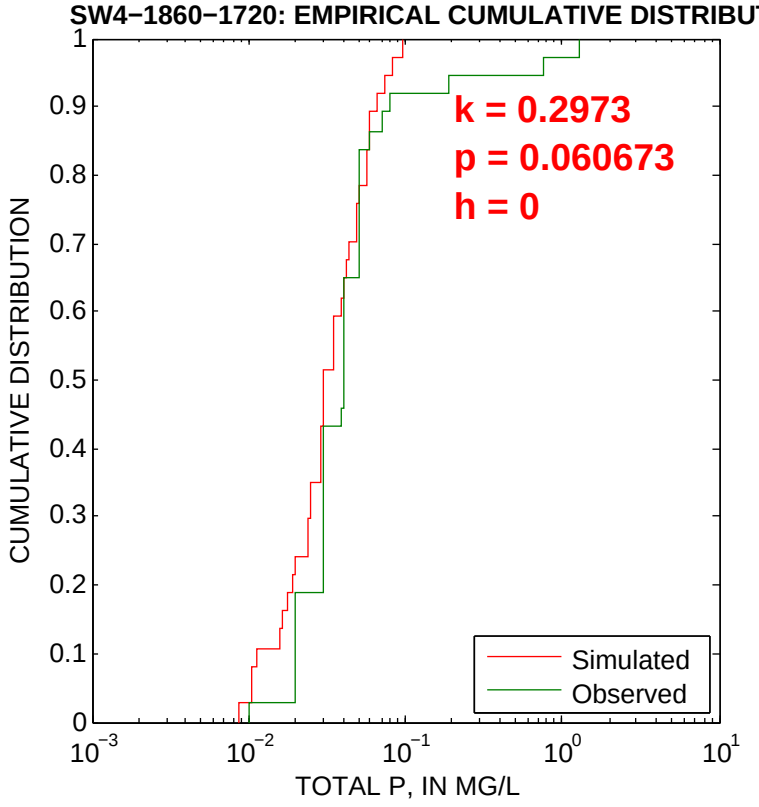












DATA SELECTION

scenario: P620171001WQ | file: TOTP.calib

plot: TOTP - total phosphorus

Dates: 1/1/1985 – 12/31/201

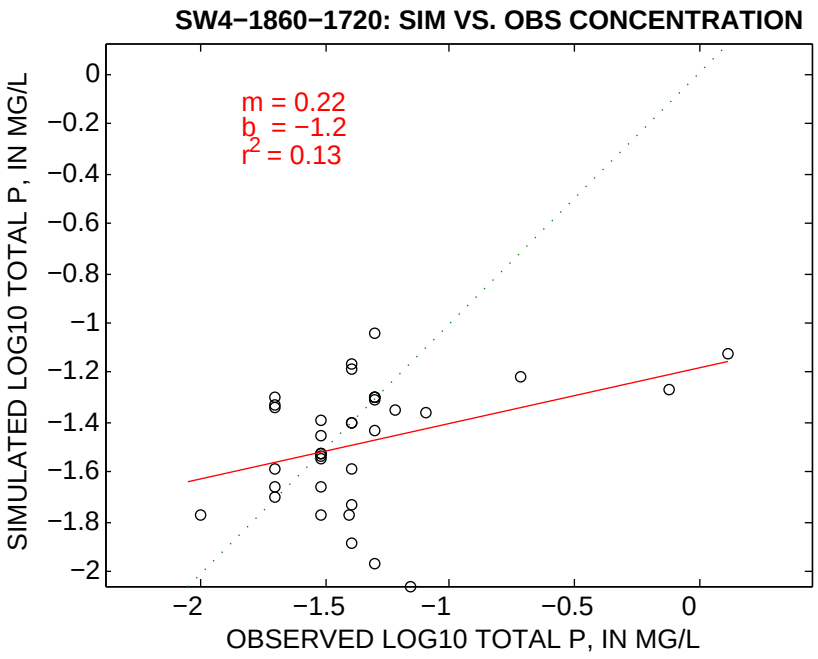
Drive: N/A | Directory: model | Observed: OBS20161101

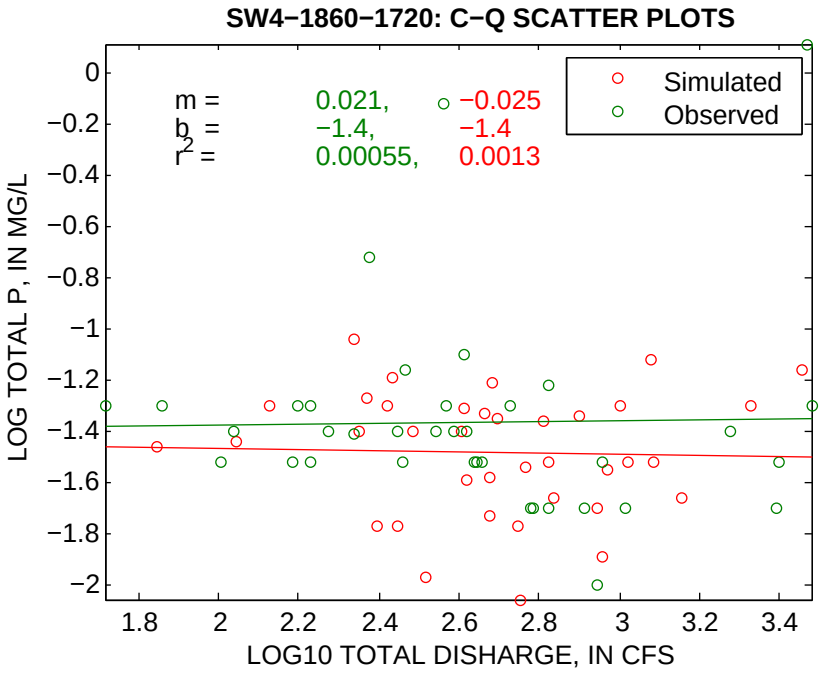
STATISTICS

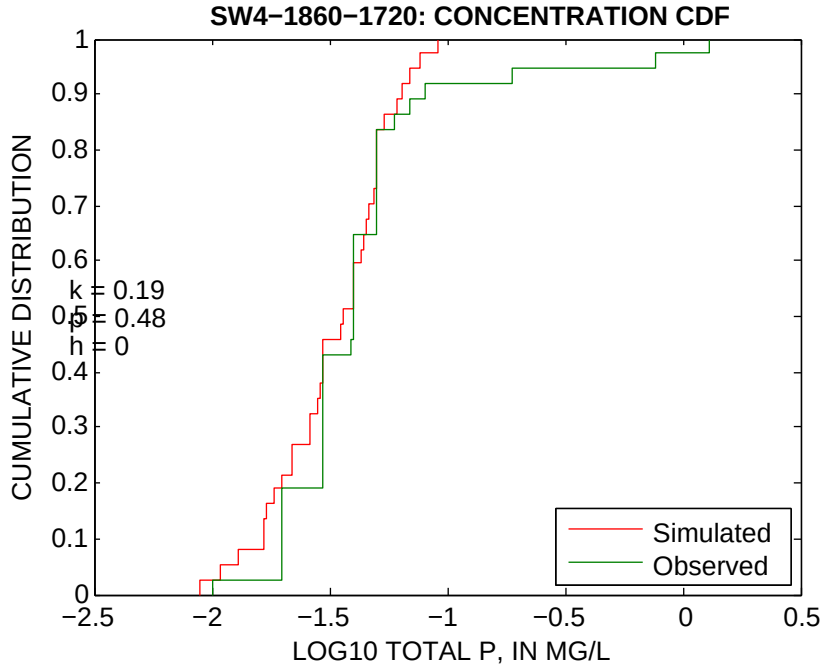
		observe	simulate
n		37	37
min		0.01	0.008563
		-2	-2.06737
mean		0.0953784	0.0371272
		-1.36221	-1.50057
media		0.04	0.03007
		-1.39794	-1.52187
max		1.3	0.096083
		0.113943	-1.01735
varian		0.0561897	0.00043768
		0.156247	0.0676174
JB		0.001	0.041347
		0.001	0.5
		ra	log
%		-61.0738	10.1571
err.va		0.0568831	0.19028
rel.std.err		1.01234	1.21781
mod.eff		-0.0123399	-0.217813

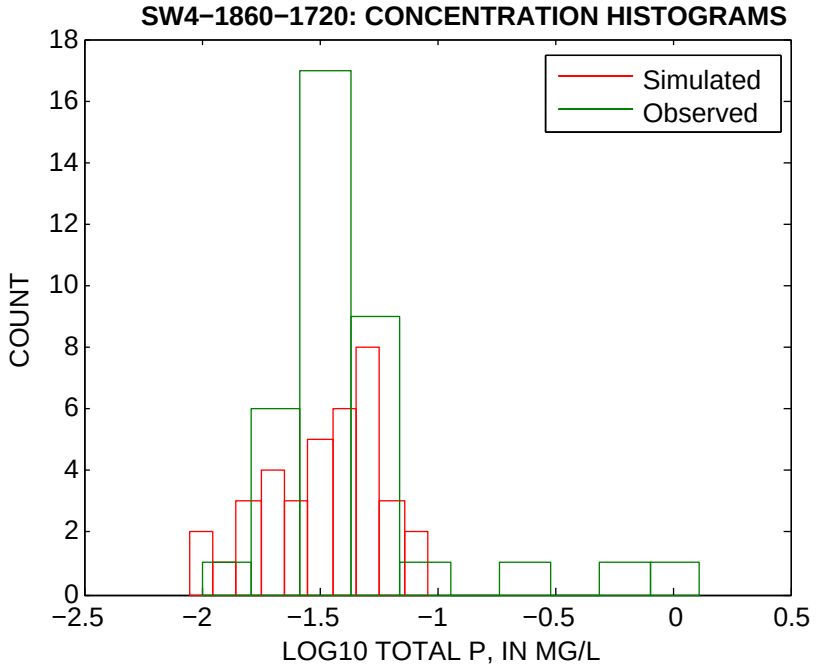
VERSION 2.1

ALL DATA
LOG10

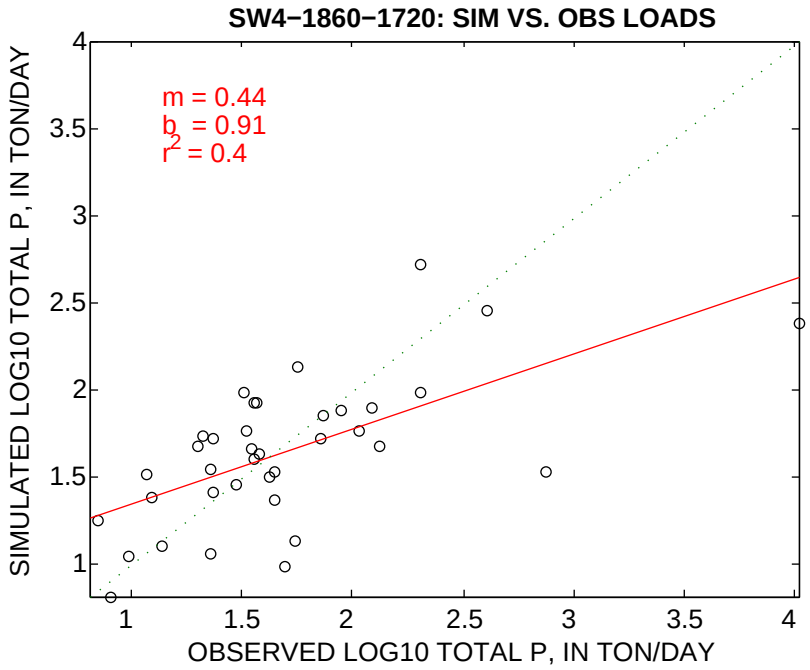


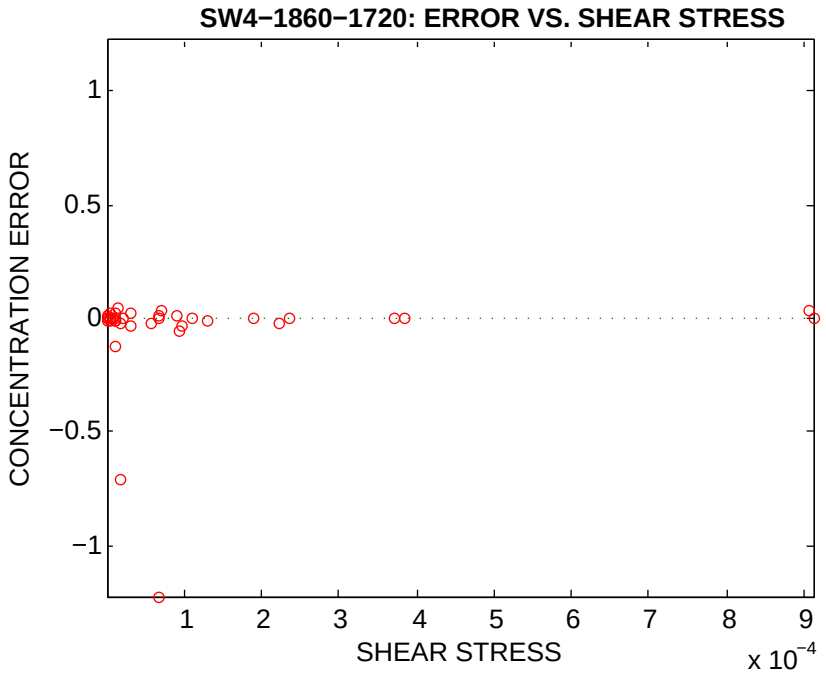


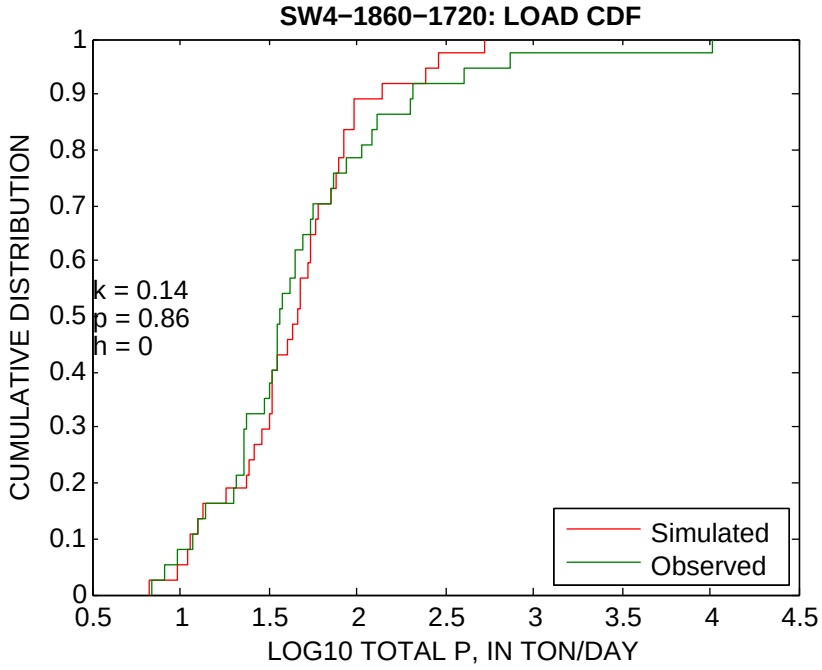


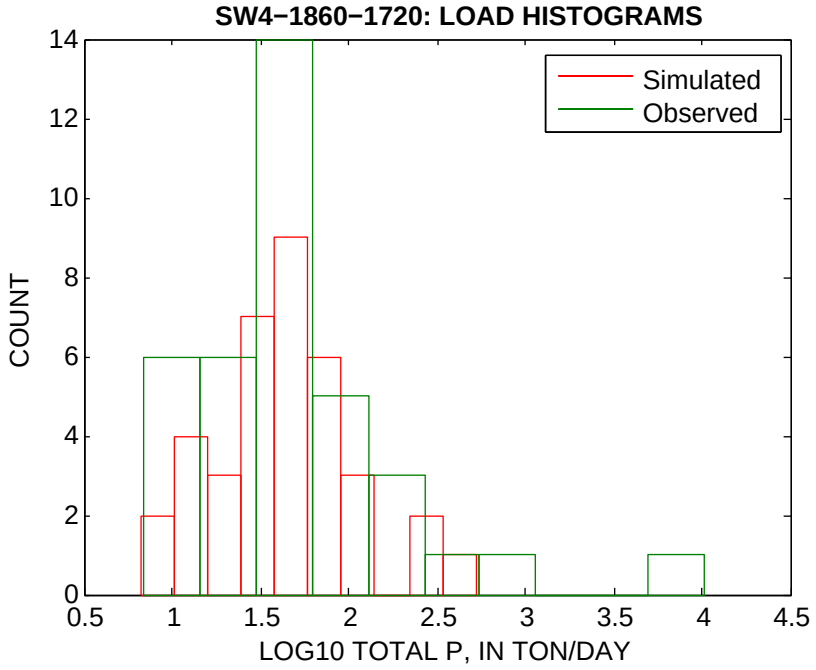


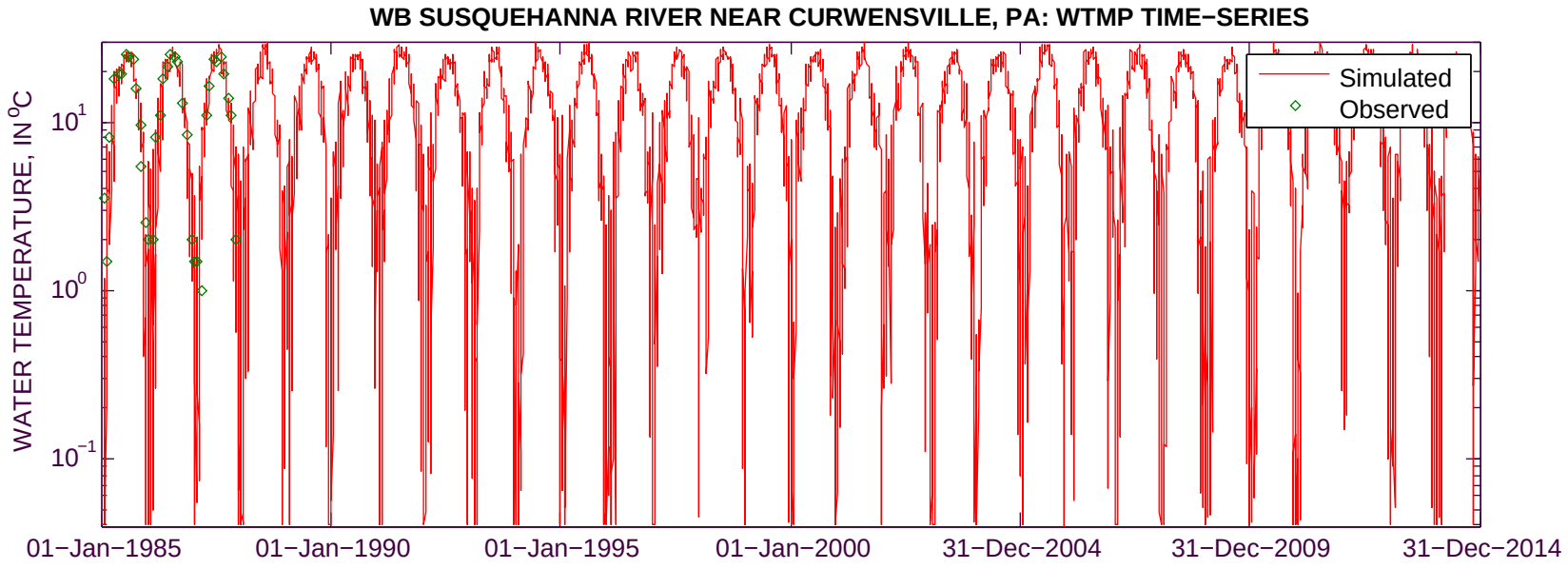
LOAD DATA
LOG10

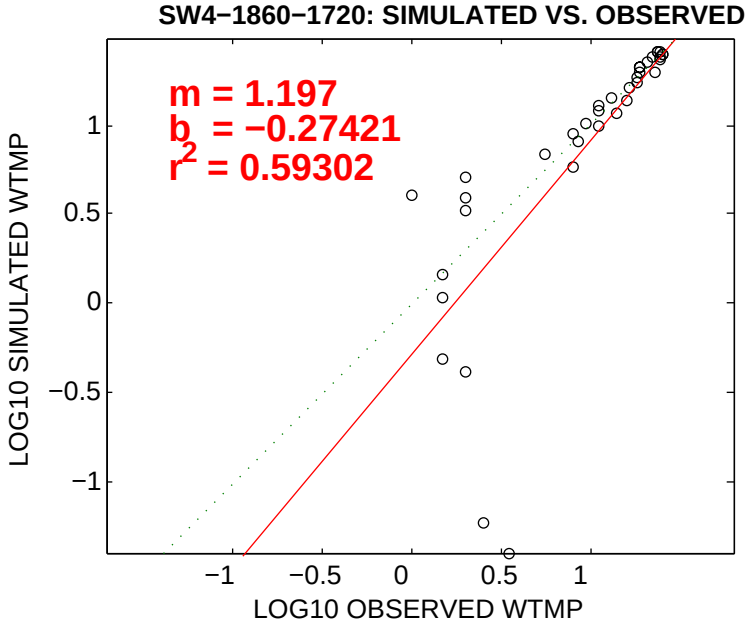


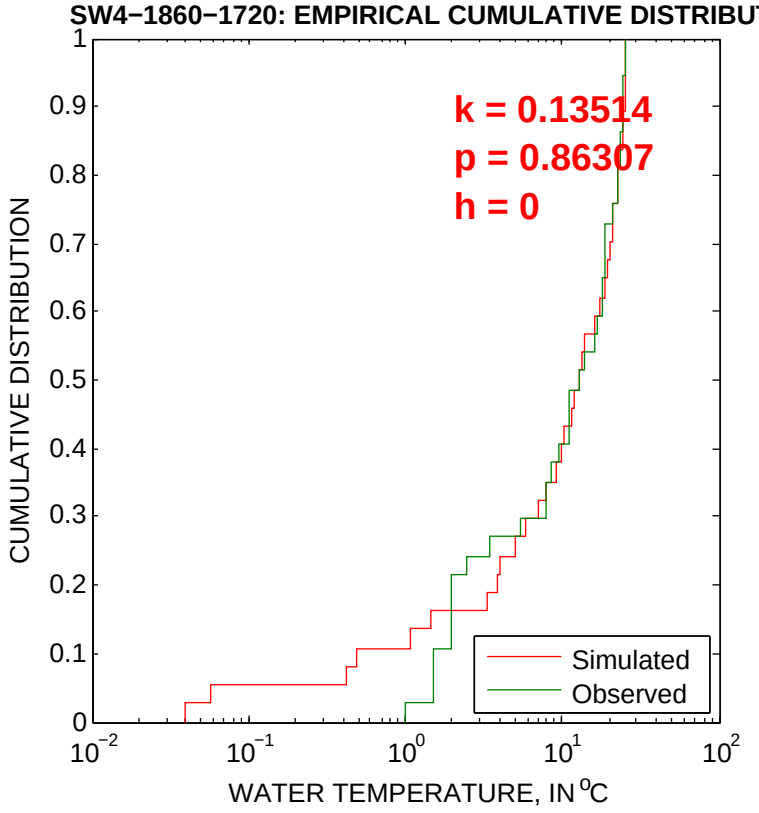












DATA SELECTION

scenario	file
P620171001WQ	WTMP.calib

plot: WTMP - water tempera...

Dates: 1/1/1985 12/31/201

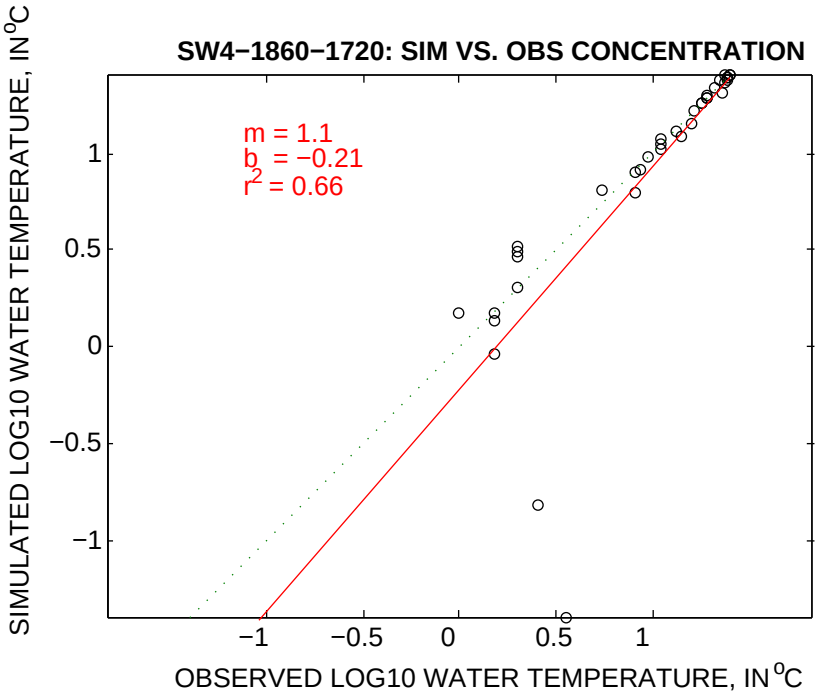
Drive	Directory	Observed
N/A	model	OBS20161101

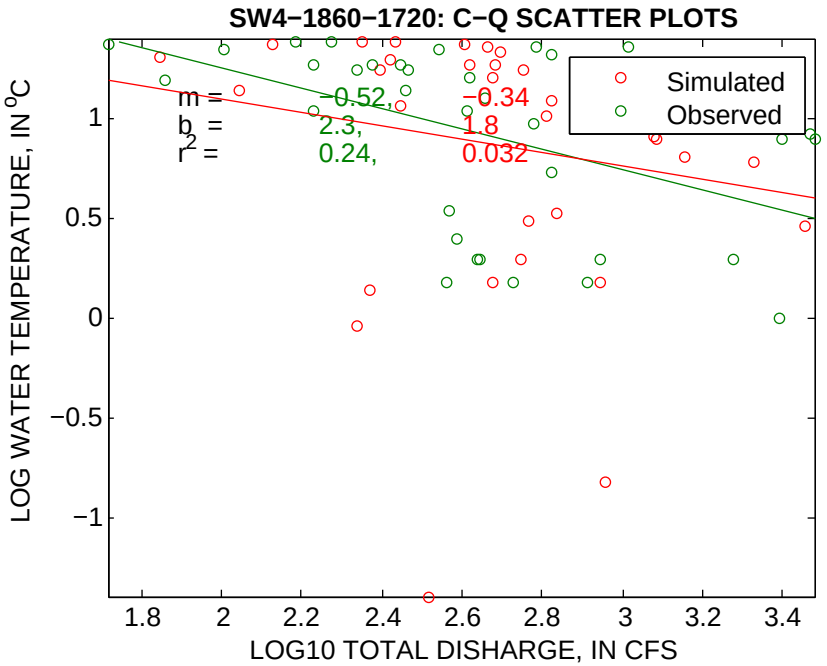
STATISTICS

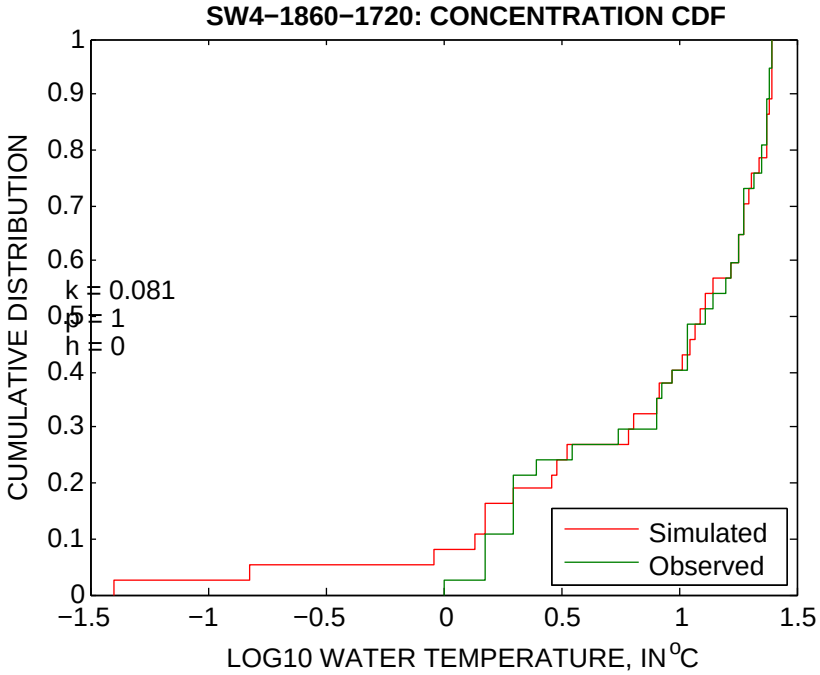
		observe	simulate
n		37	37
min		1	0.040034
		0	-1.39757
mean		12.9838	13.1785
		0.945999	0.858139
media		13	12.879
		1.11394	1.10988
max		25	25.729
		1.39794	1.41042
varian		74.8014	79.6456
		0.2063	0.498436
JB		0.079880	0.091107
		0.046031	0.001
		ra	log
%		1.49981	-9.28749
err.va		2.89713	0.218794
rel.std.err		0.0387309	1.06056
mod.eff		0.961269	-0.0605606

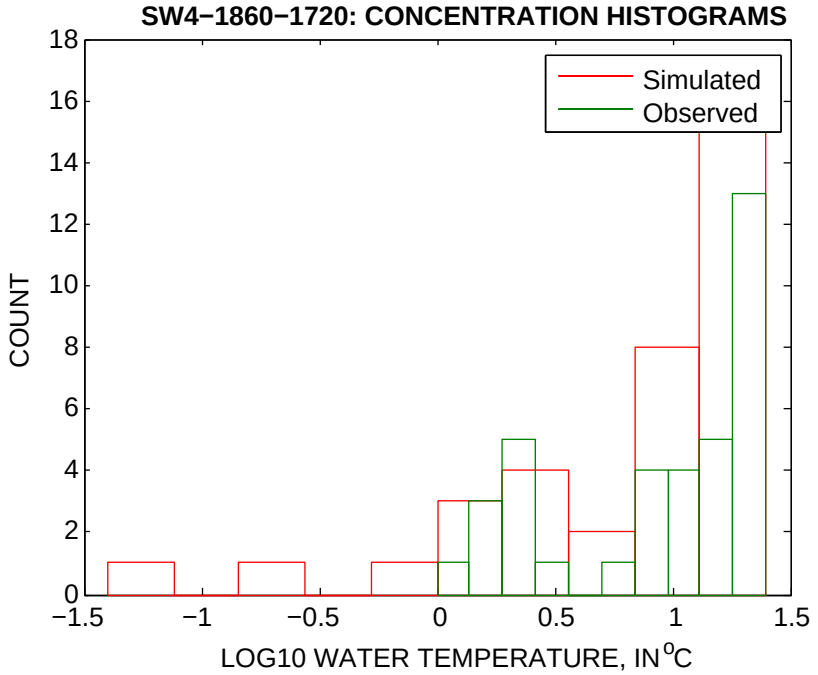
VERSION

ALL DATA
LOG10

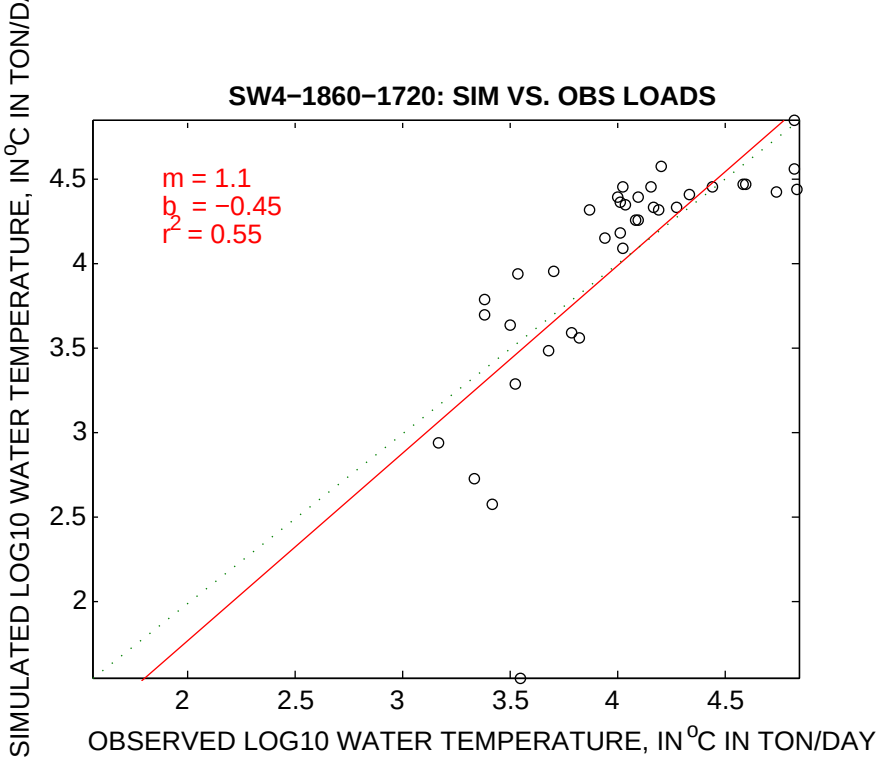


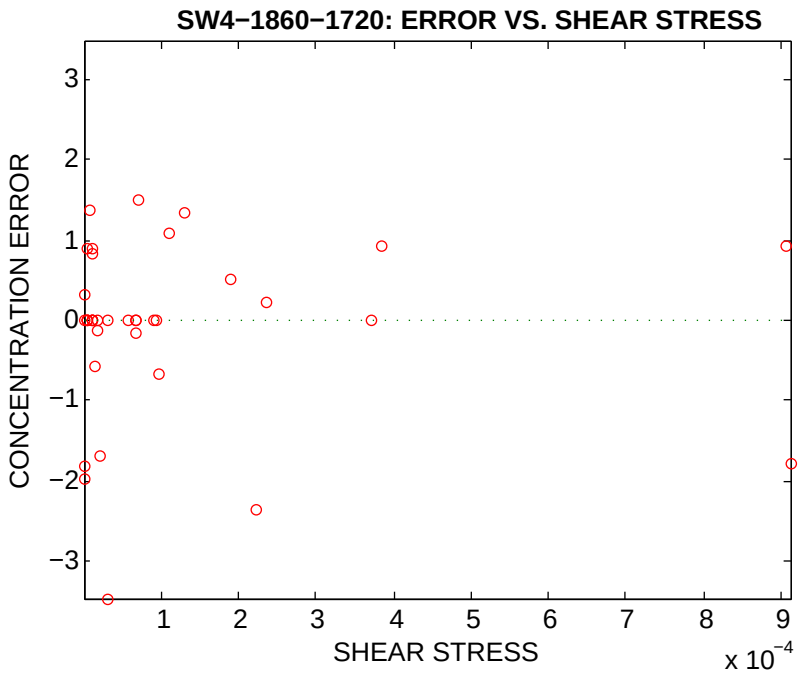


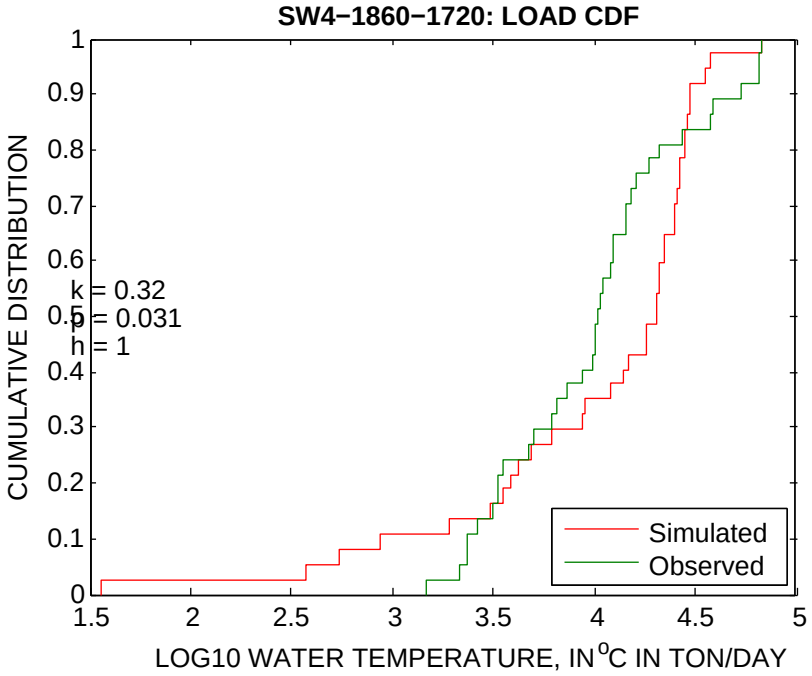


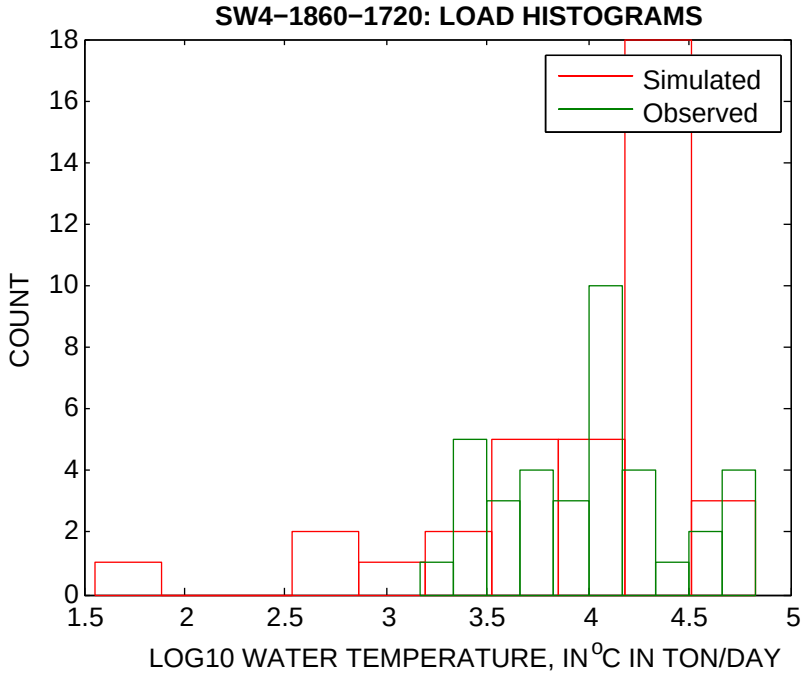


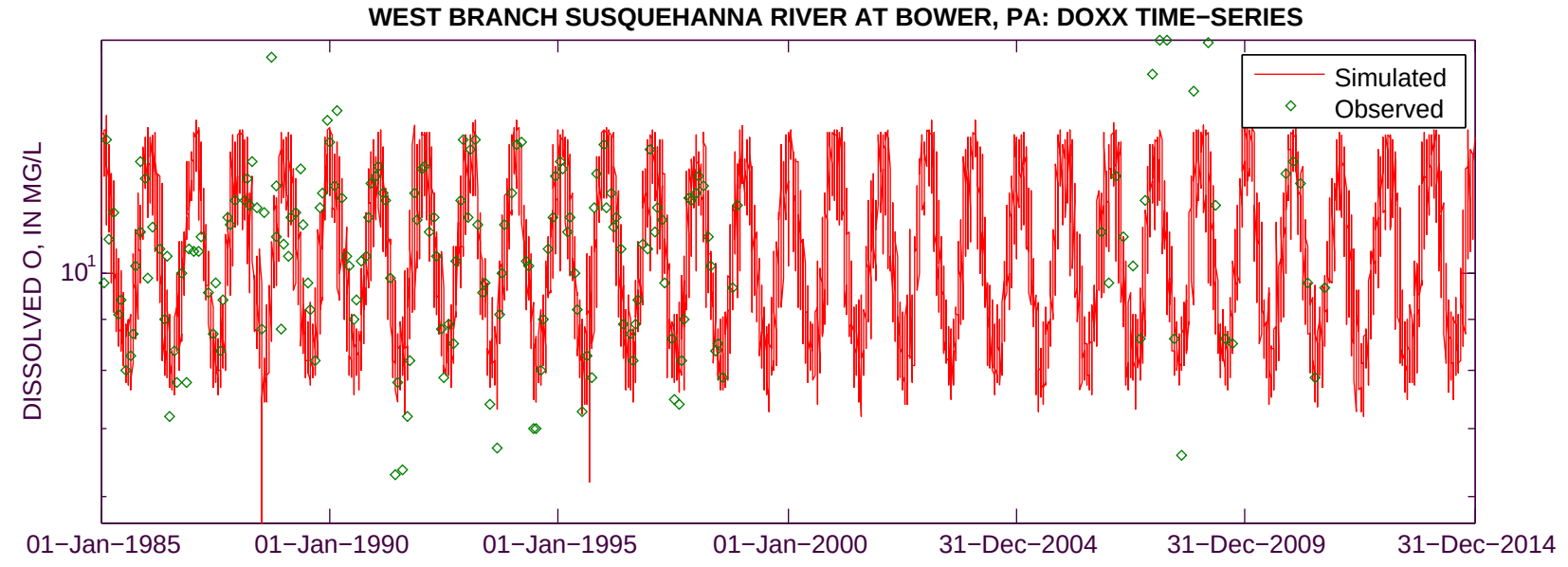
LOAD DATA
LOG10

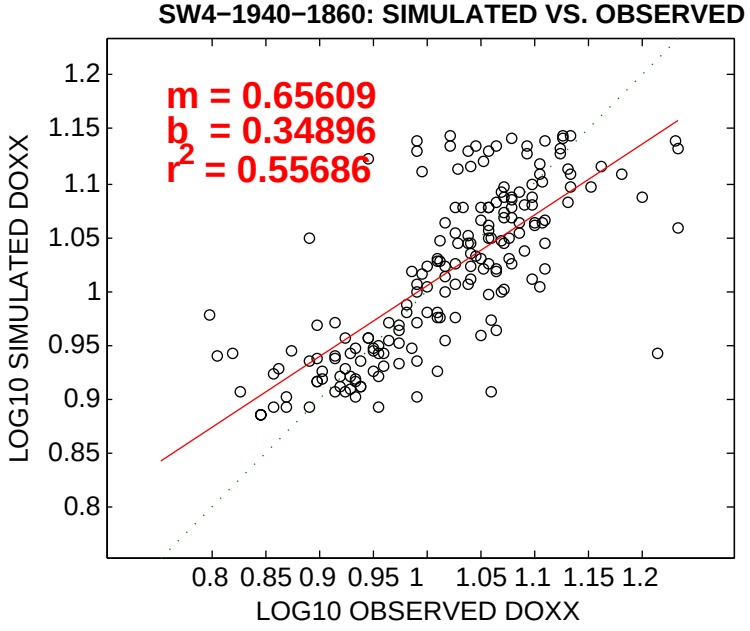


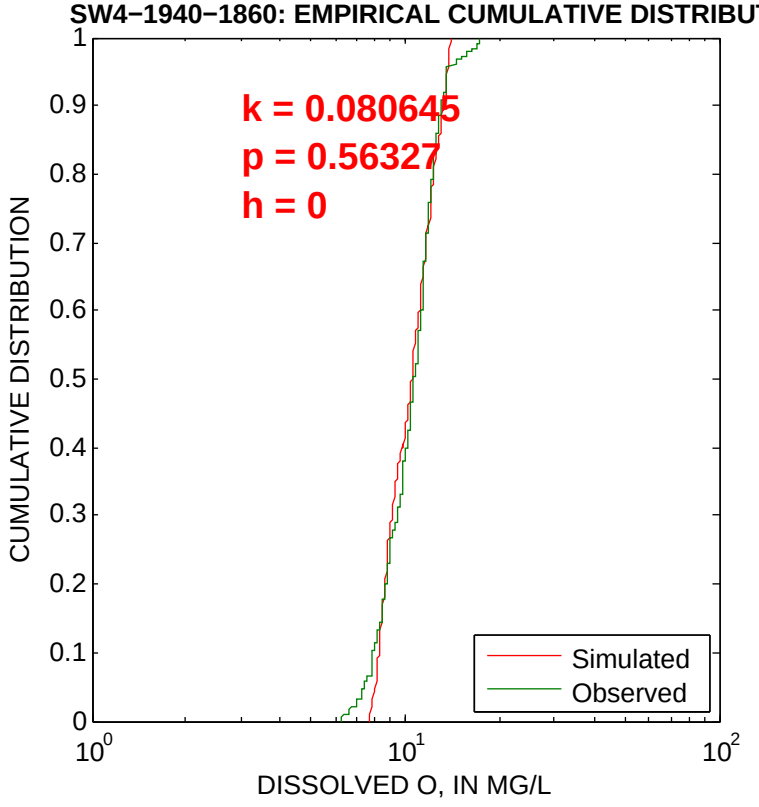












DATA SELECTION

scenario	file
P620171001WQ	DOXX.calib

plot: DOXX - dissolved oxygen

Dates: 1/1/1985 – 12/31/201

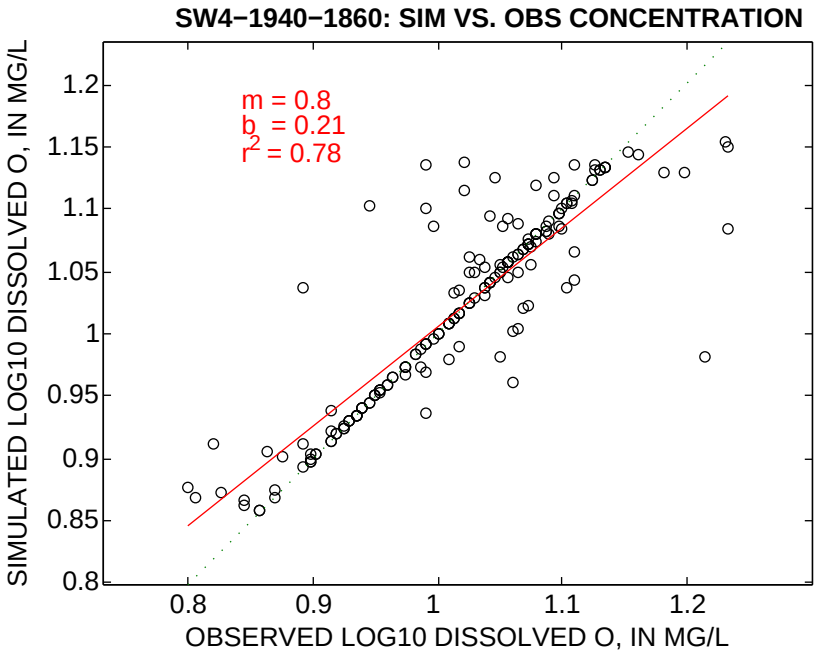
Drive	Directory	Observed
N/A	model	OBS20161101

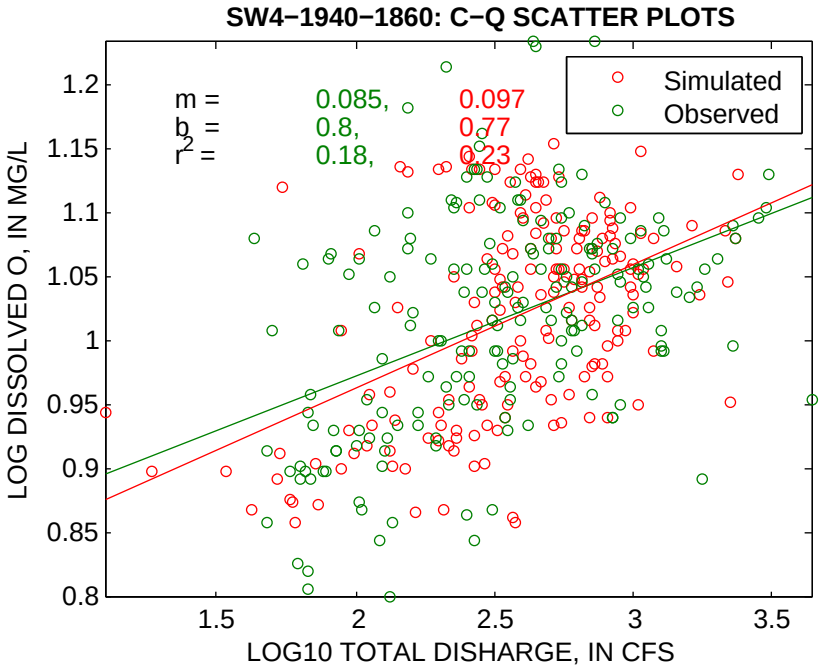
STATISTICS

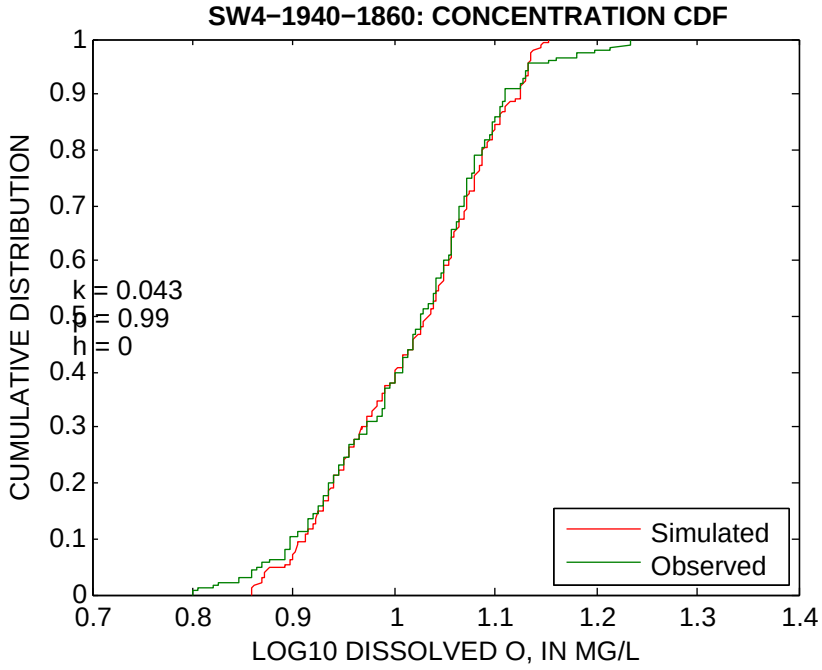
	observe	simulate
n	186	186
min	6.3	7.6738
	0.799341	0.88501
mean	10.6161	10.5468
	1.01759	1.01659
media	10.6	10.509
	1.02531	1.02156
max	17.1	13.932
	1.233	1.14401
varian	4.35714	3.35902
	0.00739081	0.00571314
JB	0.028714	0.010353
	0.5	0.010553
	ra	log
%	-0.653292	-0.0985318
err.va	2.24118	0.0034069
rel.std.err	0.514368	0.460965
mod.eff	0.485632	0.539035

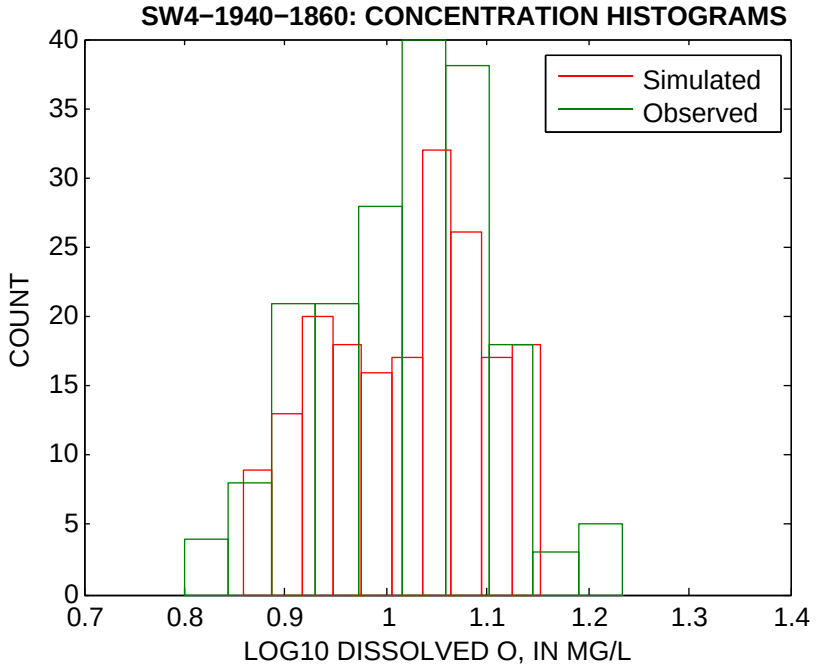
VERSION 2.1

ALL DATA
LOG10

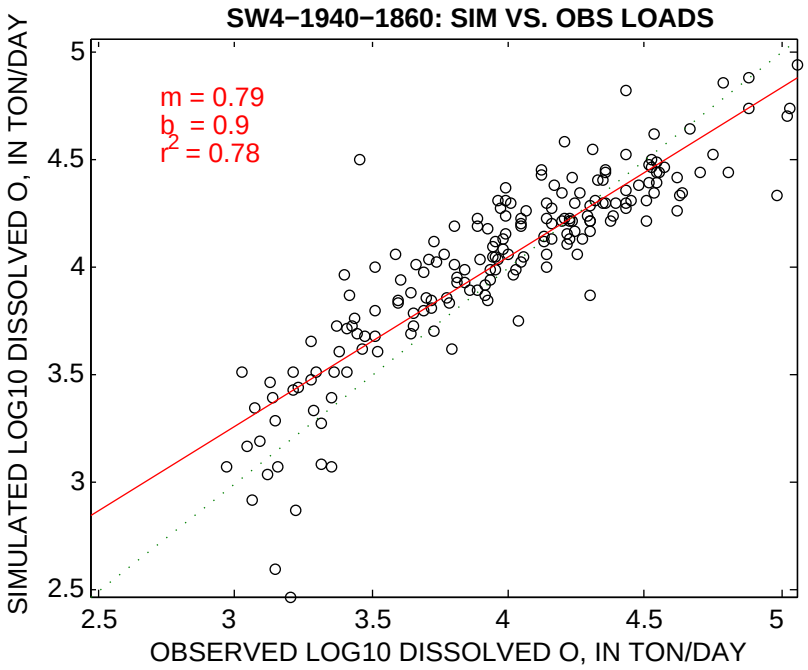


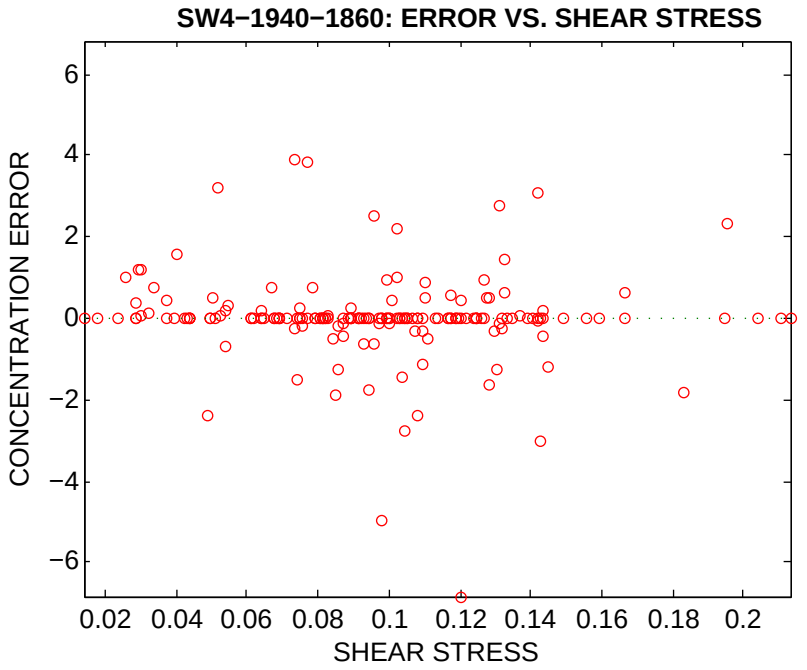


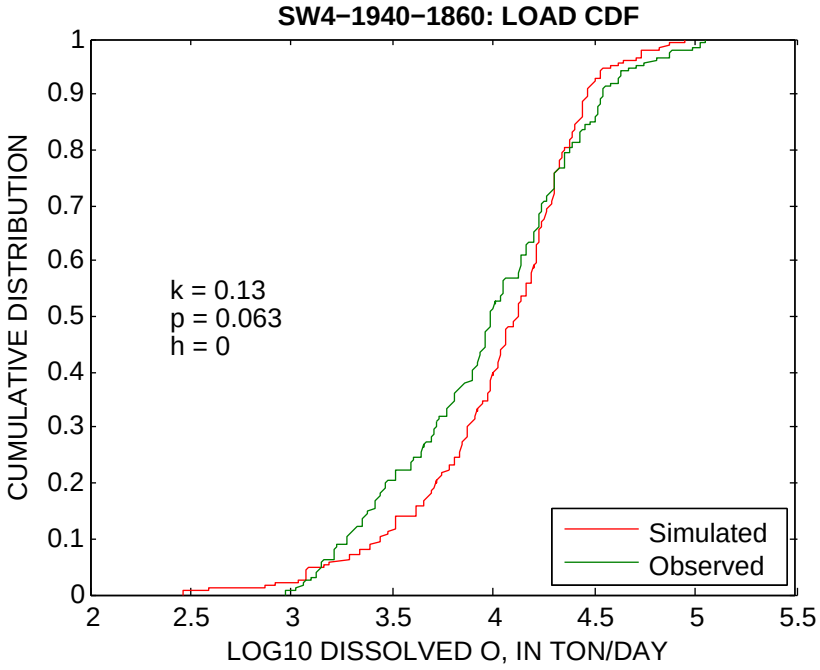


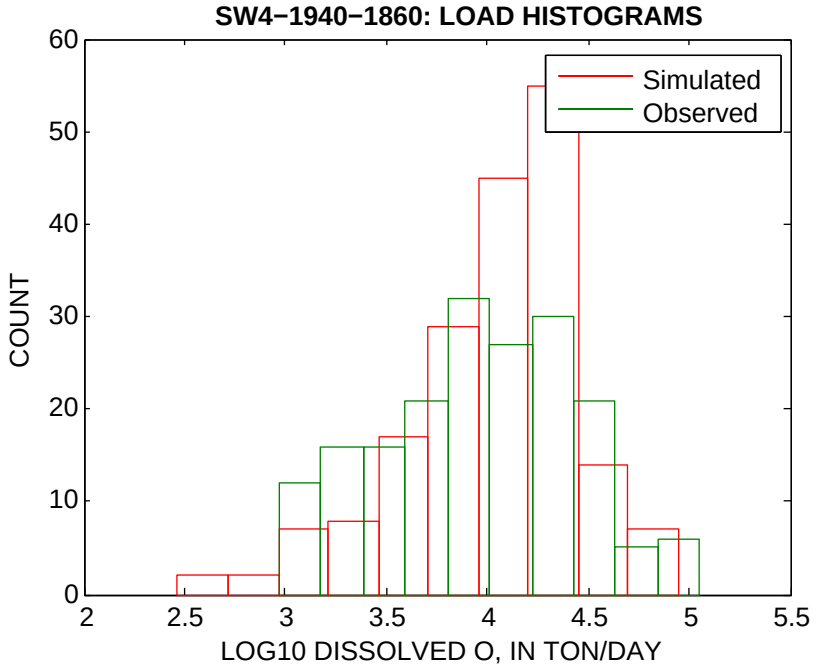


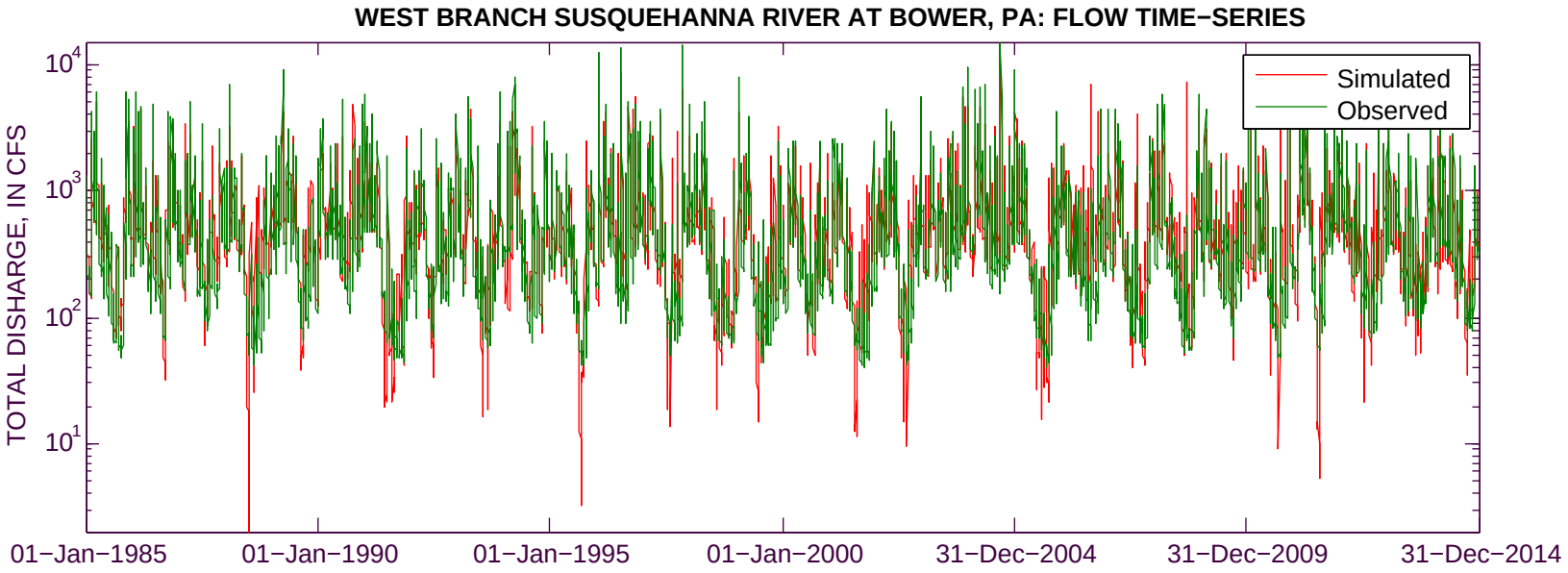
LOAD DATA
LOG10

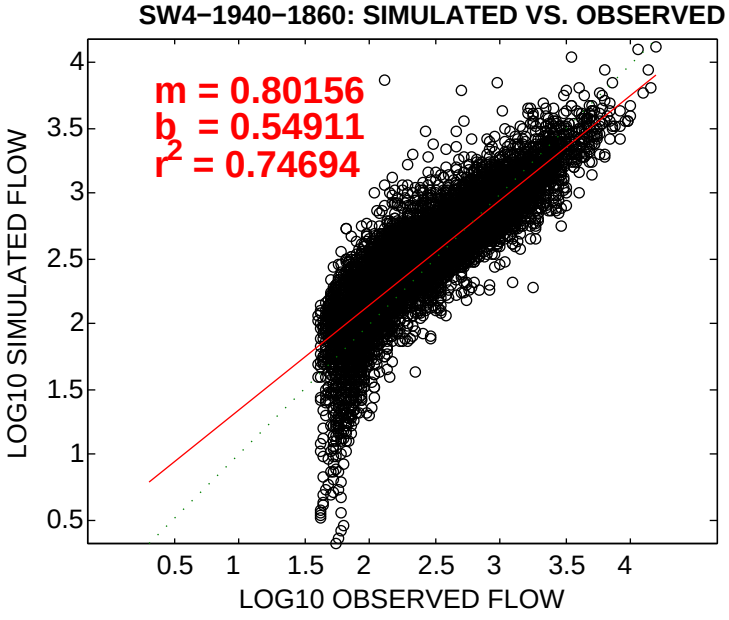


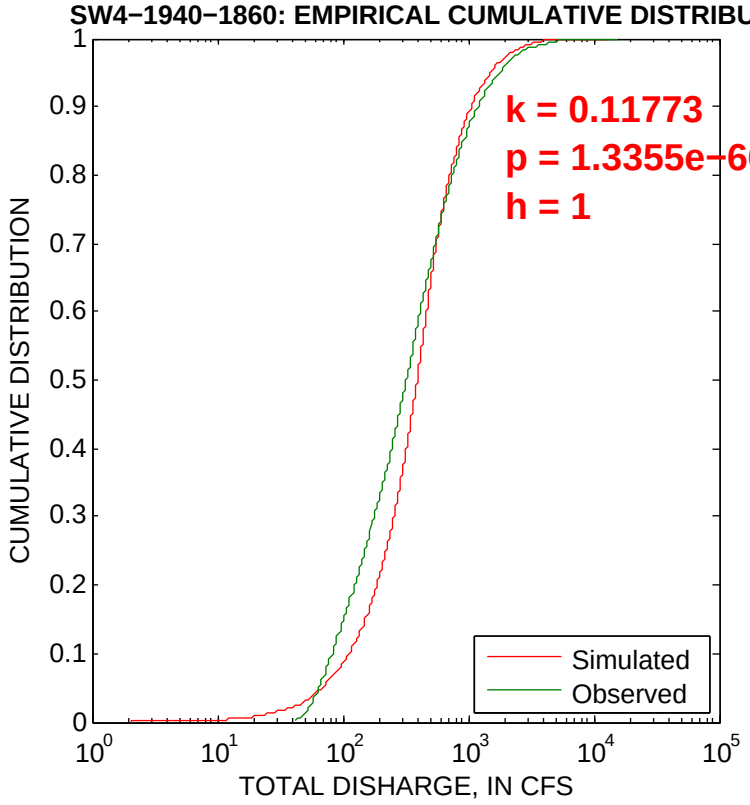












DATA SELECTION

scenario: P620171001WQ | file: FLOW.calib

plot: FLOW - total discharge

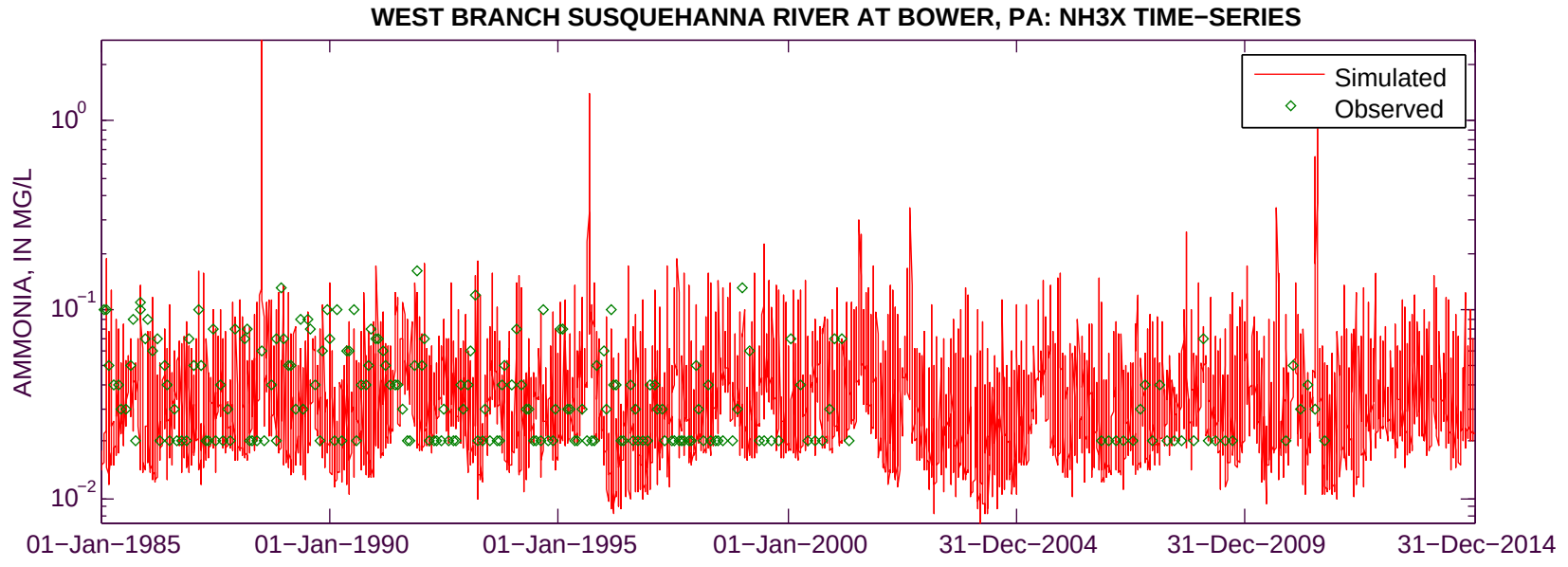
Dates: 1/1/1985 – 12/31/201

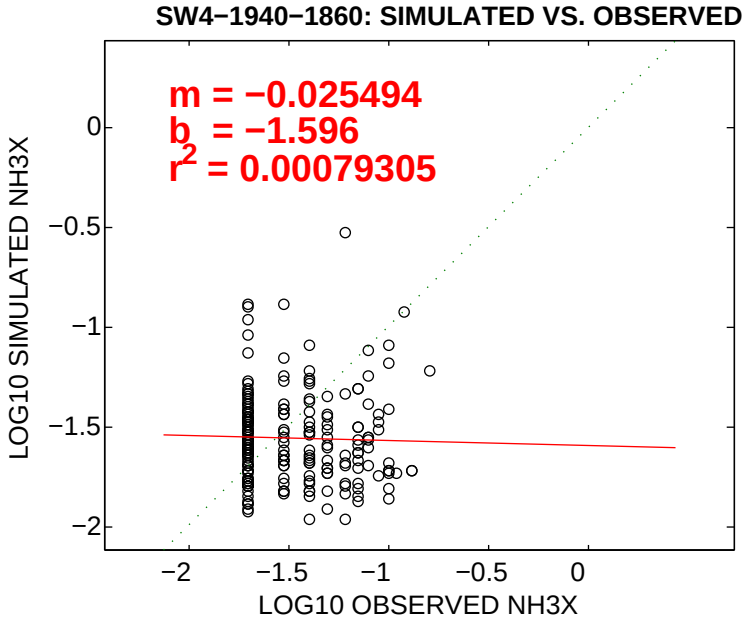
Drive: N/A | Directory: model | Observed: OBS20161101

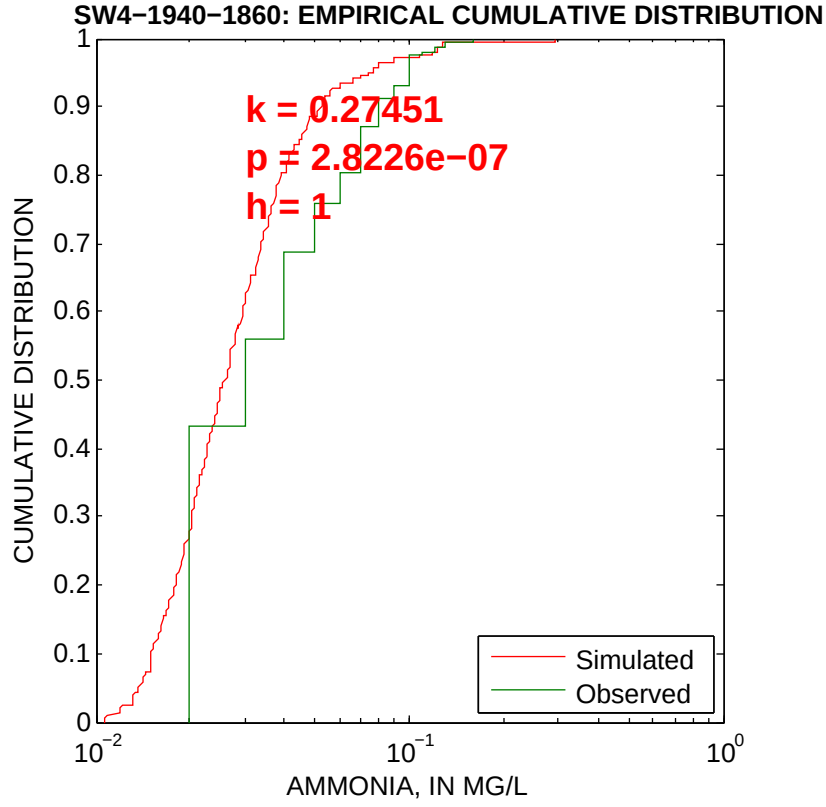
STATISTICS

		observe	simulate
n		10957	10957
min		40	2.0315
		1.60206	0.307817
mean		550.587	540.432
		2.50941	2.56056
media		324	395.05
		2.51055	2.59665
max		15300	13140
		4.18469	4.1186
varian		597341	364870
		0.191448	0.16468
JB		0.001	0.001
		0.001	0.001
		ra	log
%		-1.84451	2.03836
err.va		185270	0.0518288
rel.std.err		0.310157	0.270721
mod.eff		0.689843	0.729279

VERSION 2.1







DATA SELECTION

scenario	file
P620171001WQ	NH3X.calib

plot: NH3X - ammonia

Dates: 1/1/1985 – 12/31/201

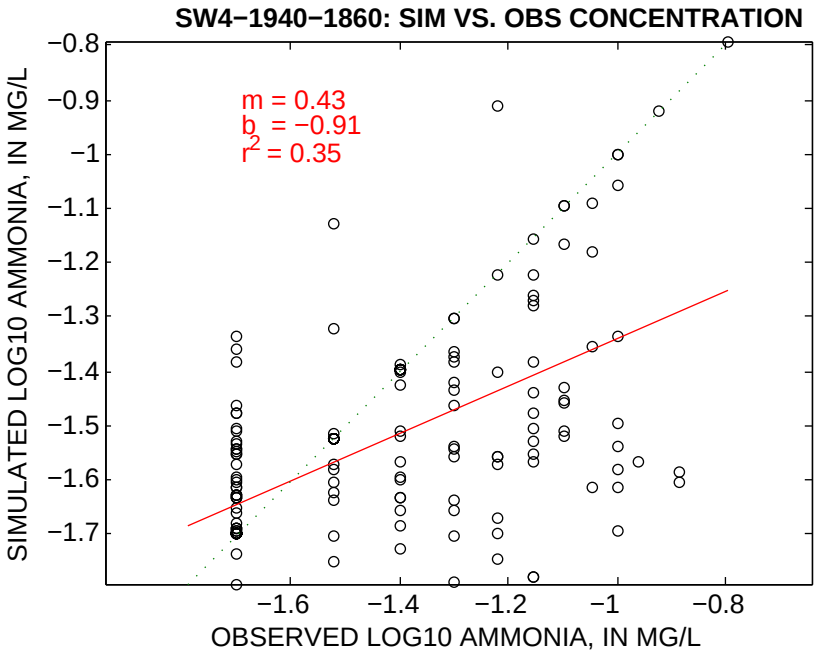
Drive	Directory	Observed
N/A	model	OBS20161101

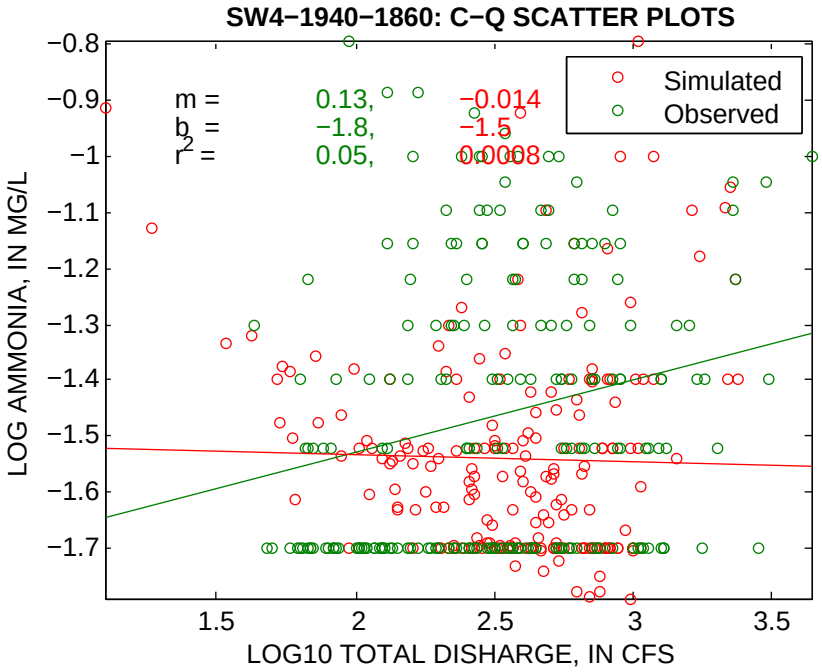
STATISTICS

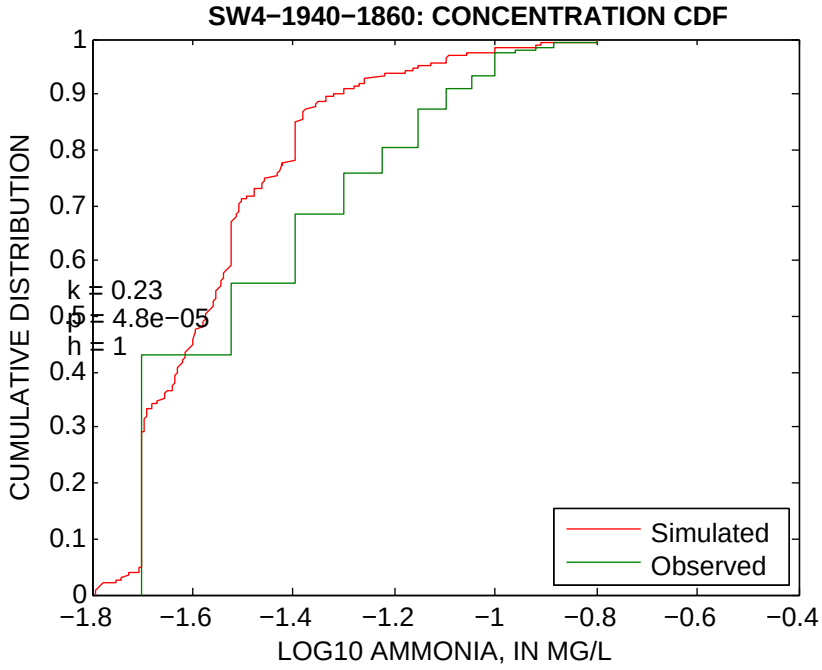
	n	observe	simulate
		204	204
min		0.02	0.010651
		-1.69897	-1.97261
mean		0.0411765	0.0326638
		-1.46342	-1.55865
media		0.03	0.0261455
		-1.52288	-1.58263
max		0.16	0.29432
		-0.79588	-0.53118
varian		0.00075033	0.00074281
		0.0625916	0.0512948
JB		0.001	0.001
		0.002561	0.001
		ra	log
%		-20.6737	6.50774
err.va		0.00149856	0.126192
rel.std.err		1.9972	2.01612
mod.eff		-0.997195	-1.01612

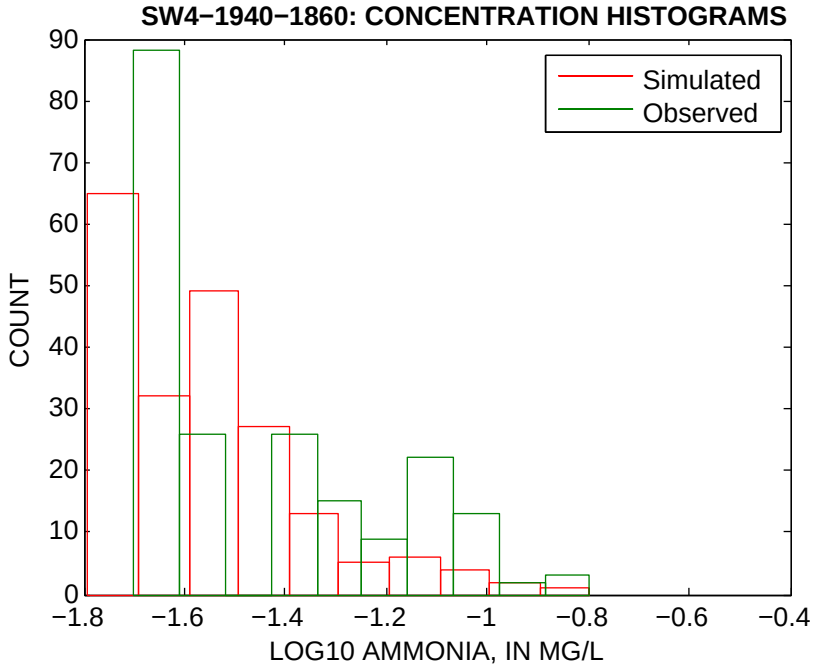
VERSION 2.1

ALL DATA
LOG10

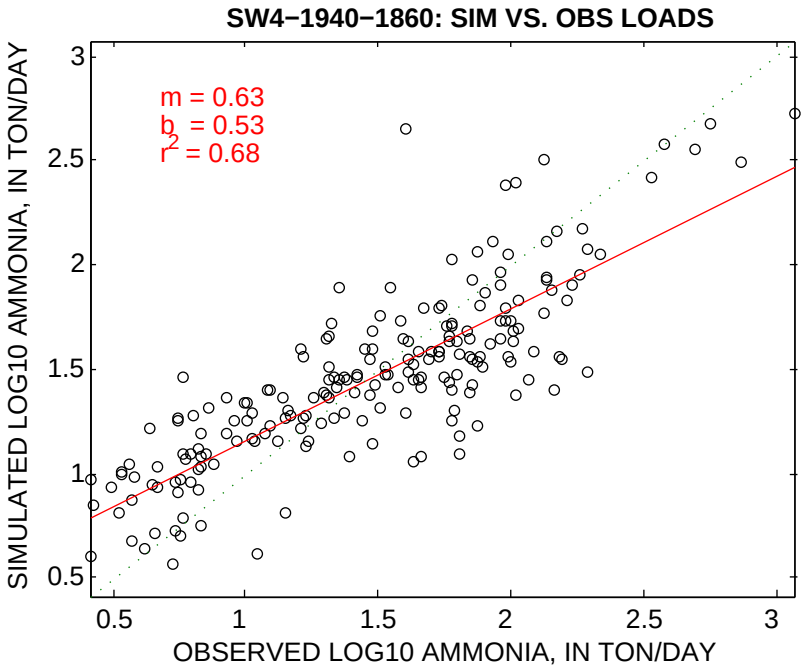


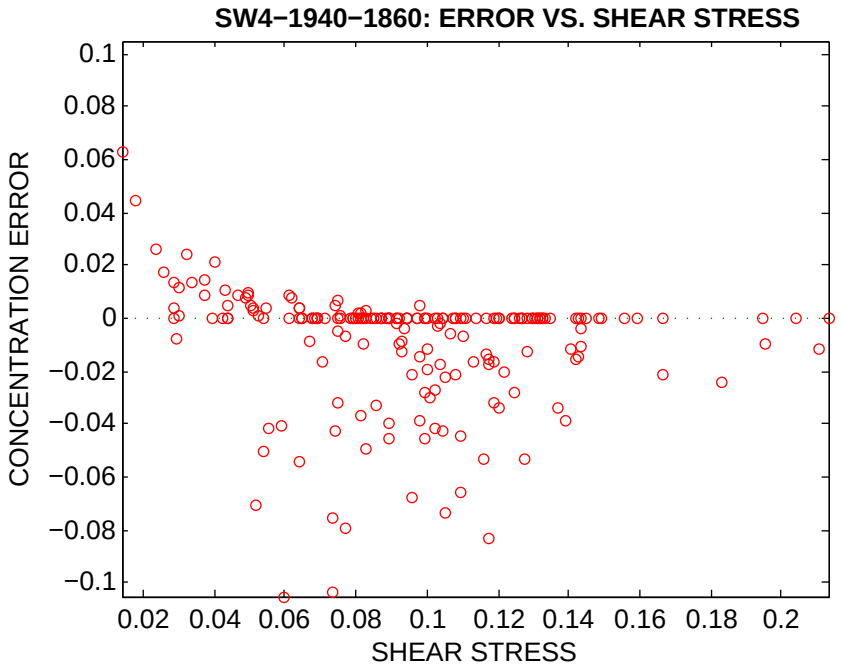


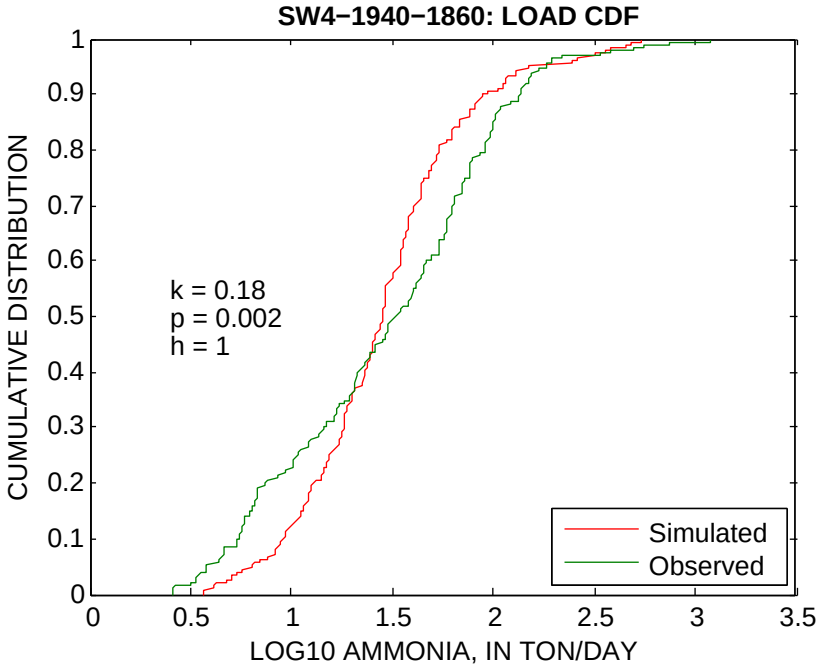


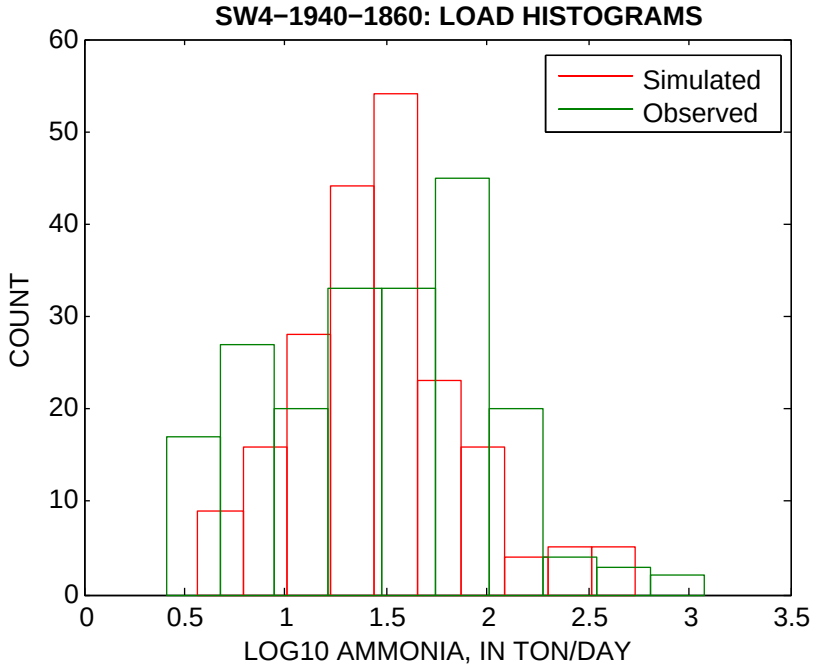


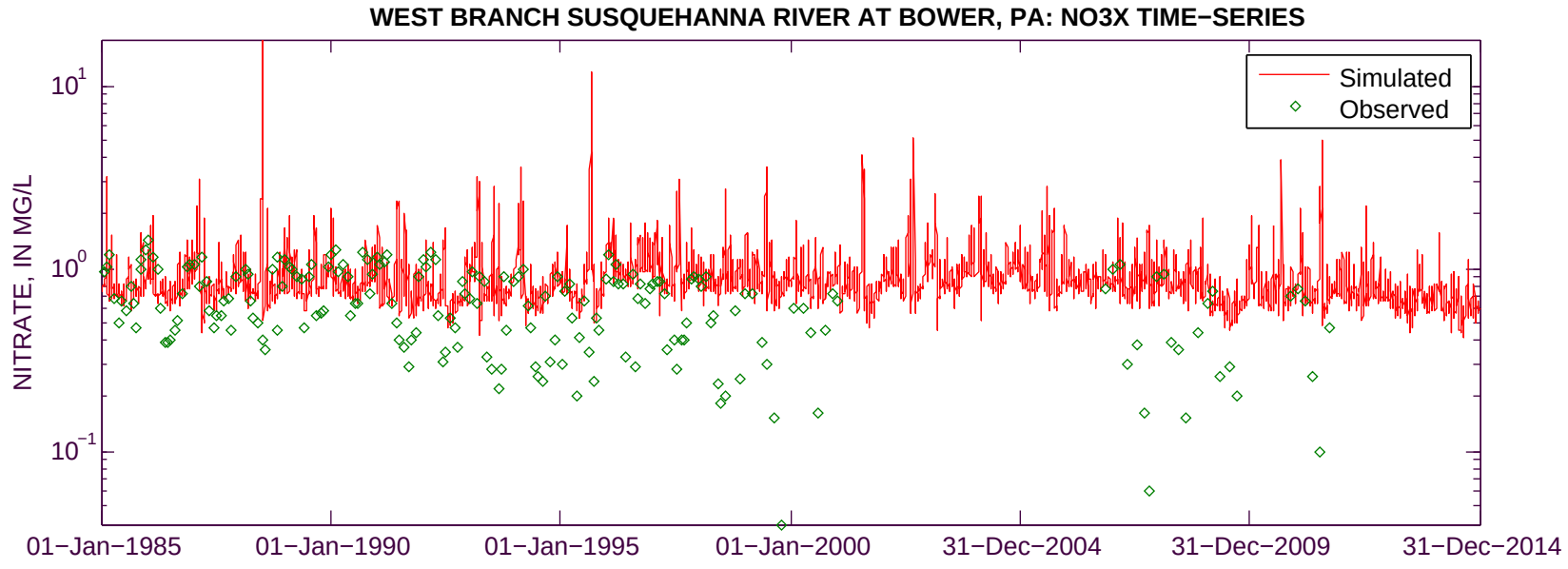
LOAD DATA
LOG10

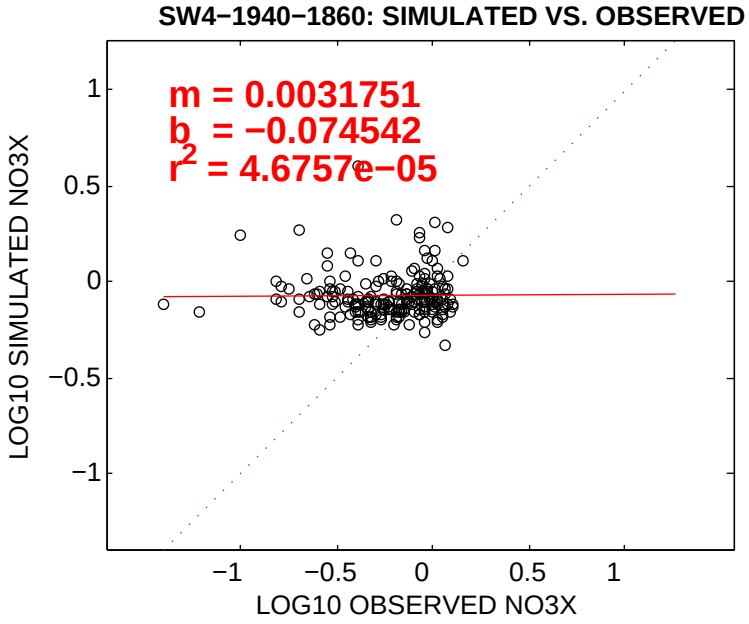


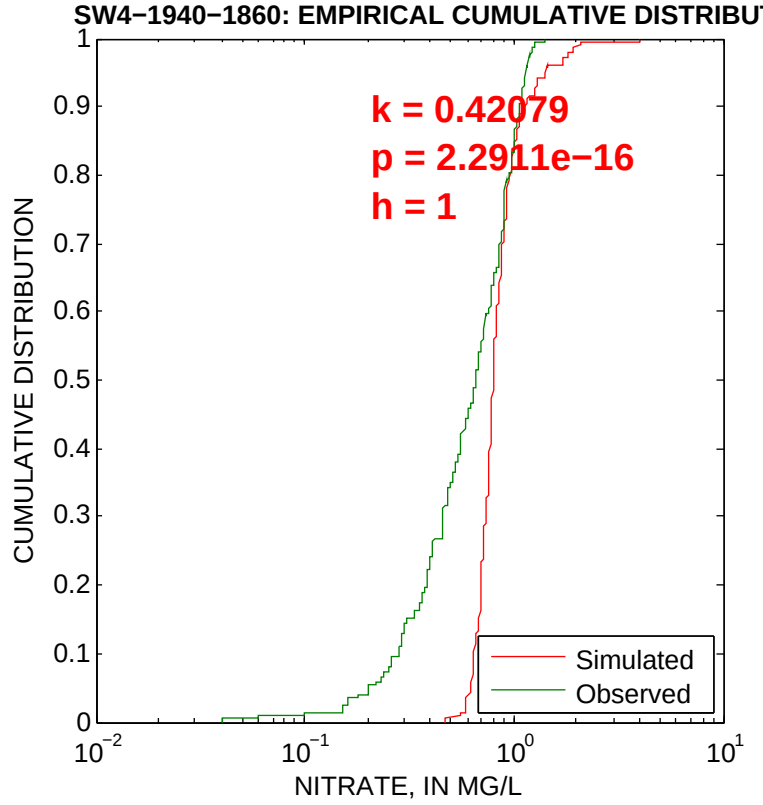












DATA SELECTION

scenario	file
P620171001WQ	NO3X.calib

plot: NO3X - nitrate

Dates: 1/1/1985 – 12/31/201

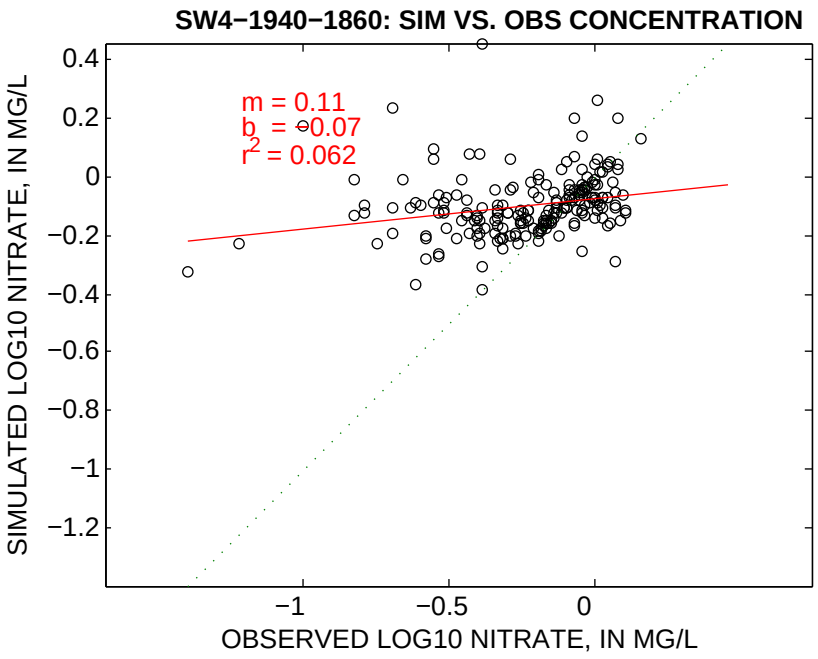
Drive	Directory	Observed
N/A	model	OBS20161101

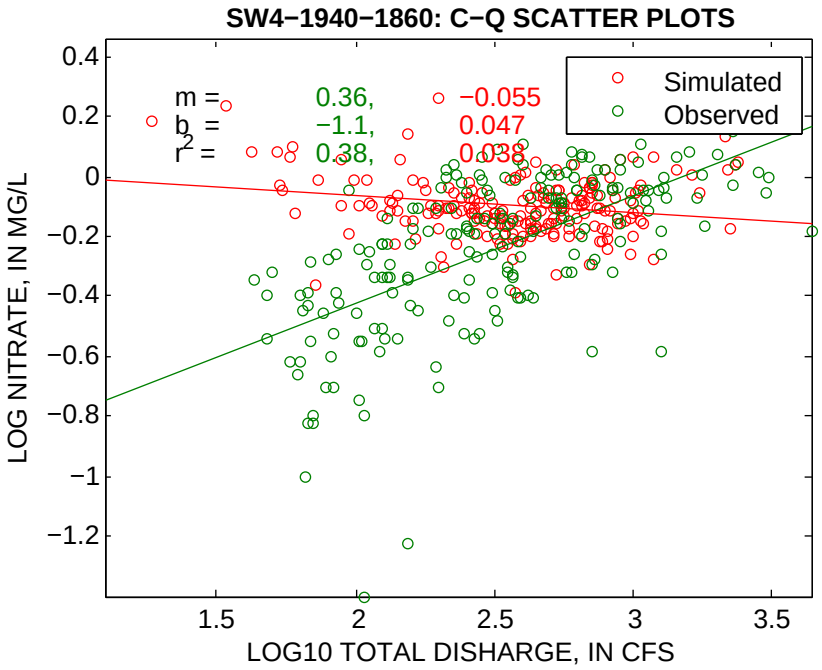
STATISTICS

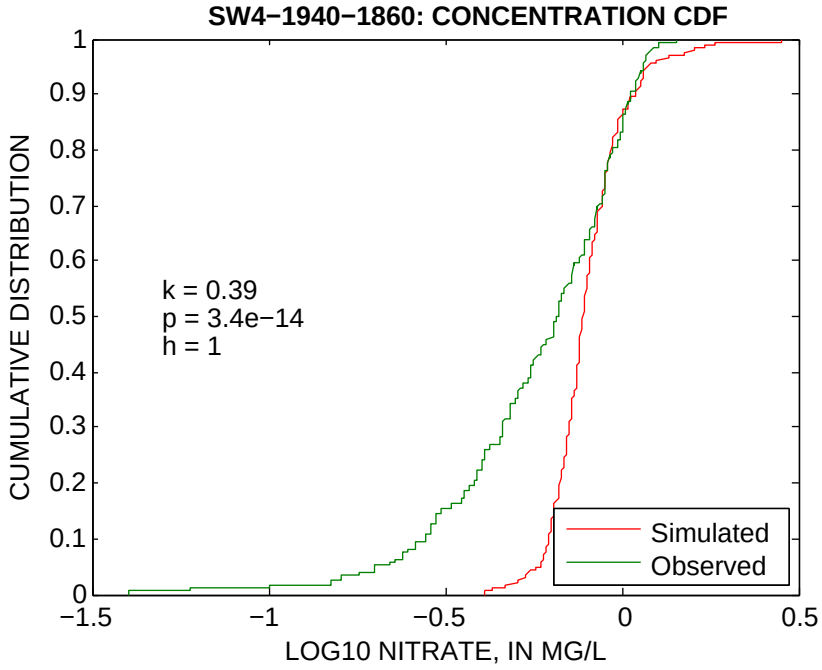
	n	202	202
		observe	simulate
min		0.04	0.46689
		-1.39794	-0.330785
mean		0.664059	0.878503
		-0.236405	-0.0752923
media		0.655	0.796865
		-0.183771	-0.0986153
max		1.42	4.0315
		0.152288	0.605467
varian		0.0910013	0.115763
		0.0630542	0.0135951
JB		0.029743	0.001
		0.001	0.001
		ra	log
%		32.2928	-68.1511
err.va		0.249248	0.102335
rel.std.err		2.73895	1.62297
mod.eff		-1.73895	-0.622973

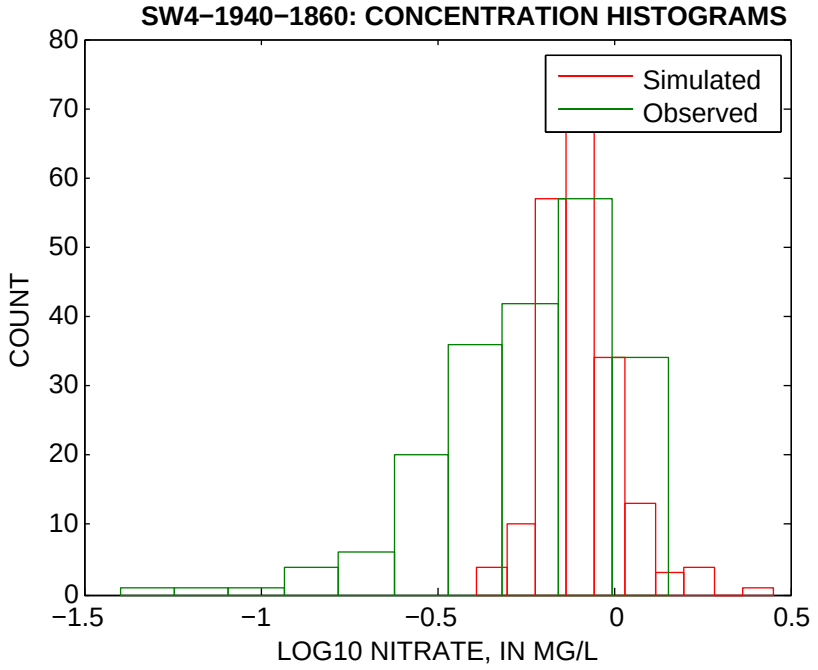
VERSION 2.1

ALL DATA
LOG10

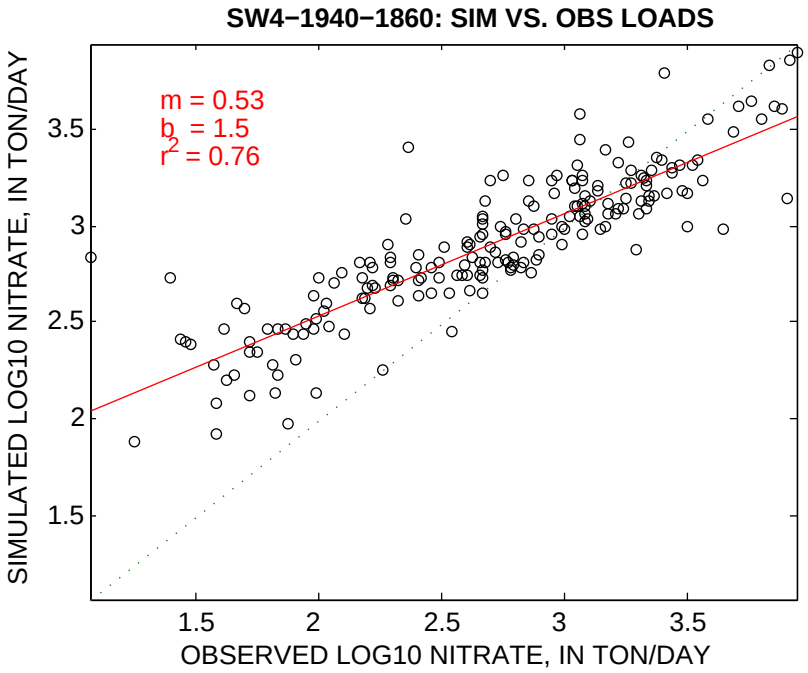


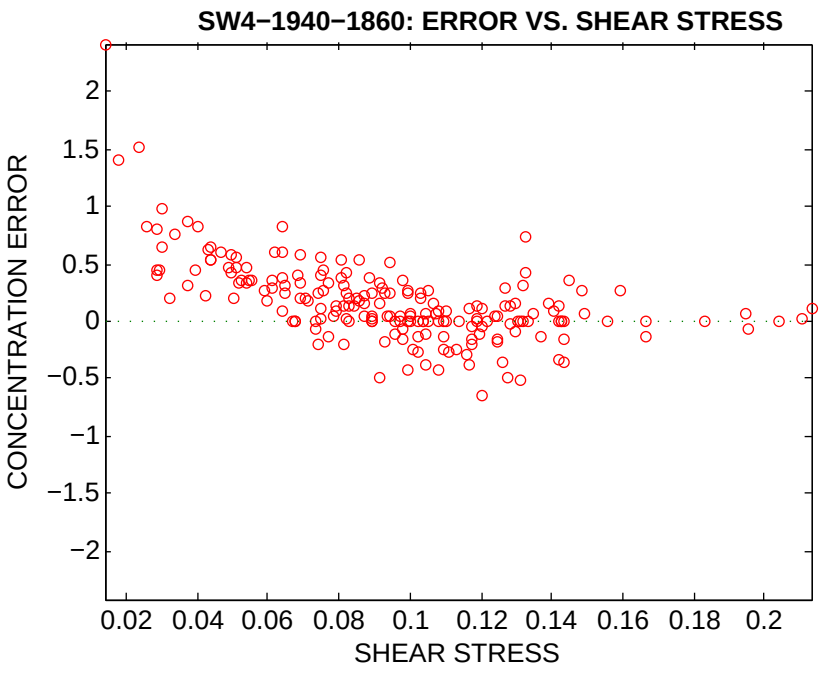


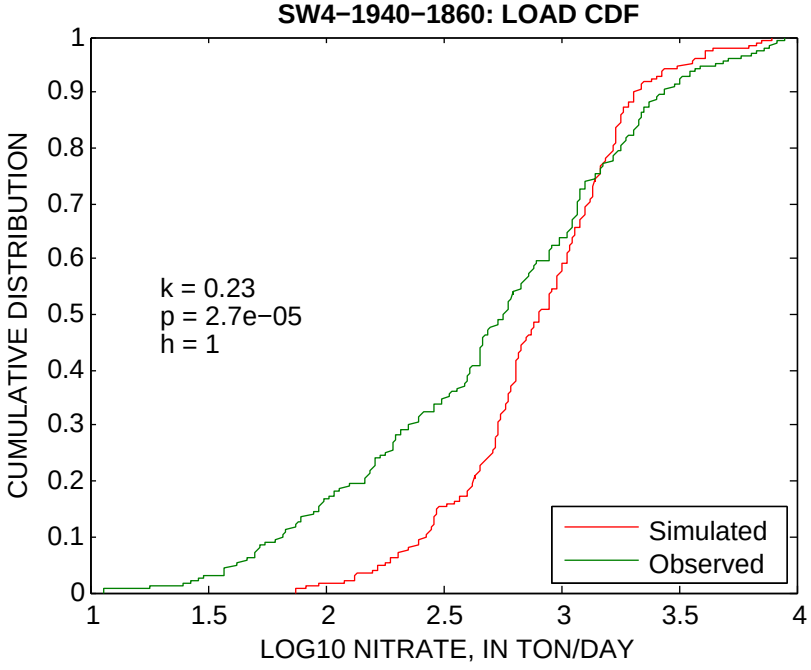


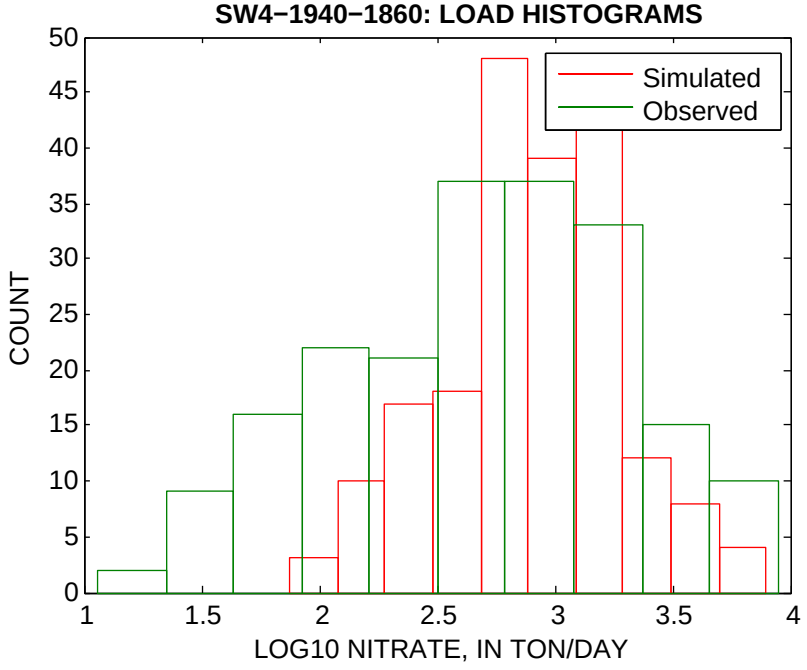


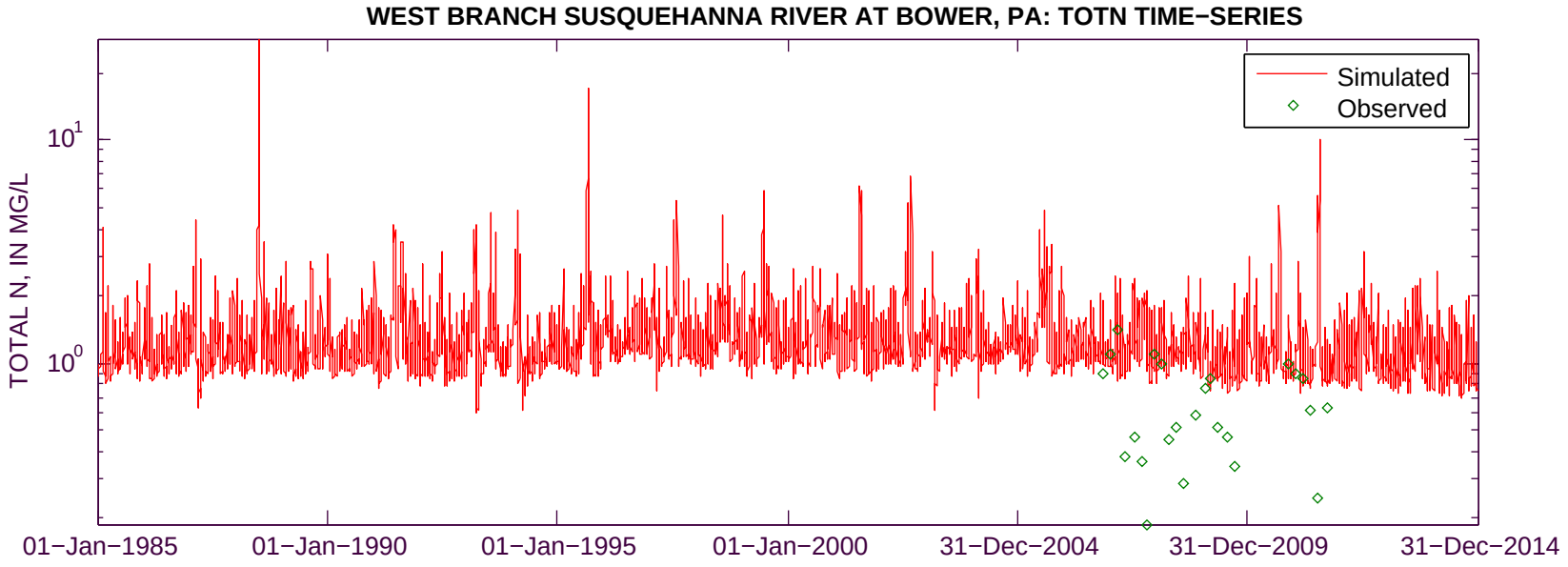
LOAD DATA
LOG10

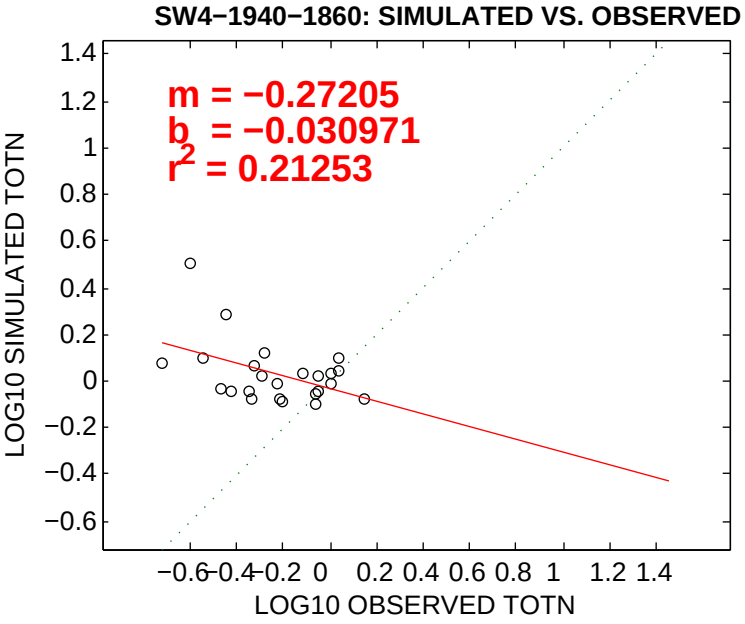


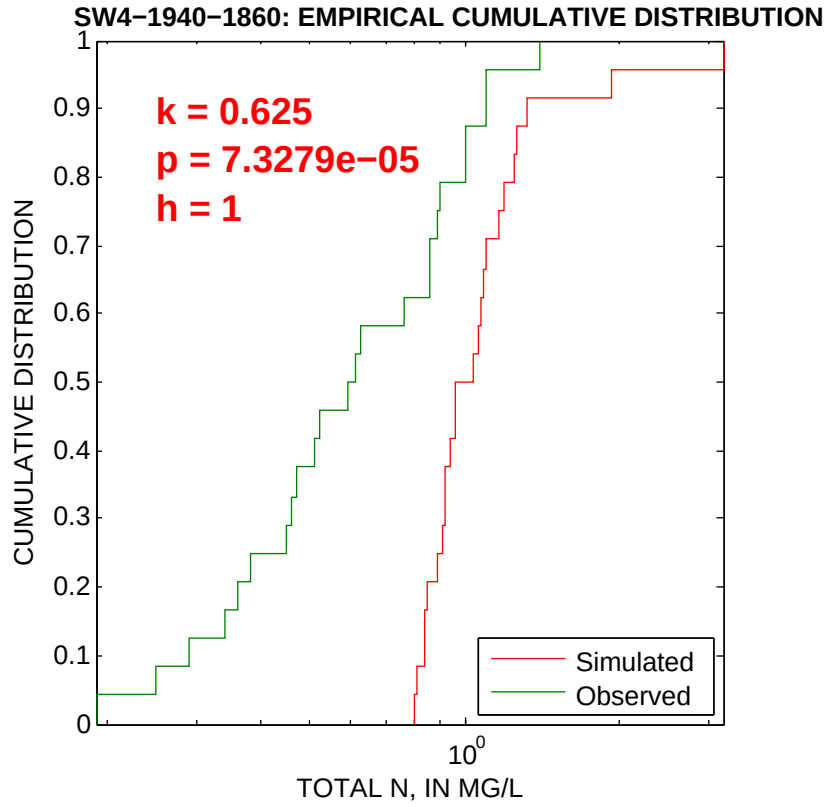












DATA SELECTION

scenario: P620171001WQ | file: TOTN.calib

plot: TOTN - total nitrogen

Dates: 1/1/1985 – 12/31/201

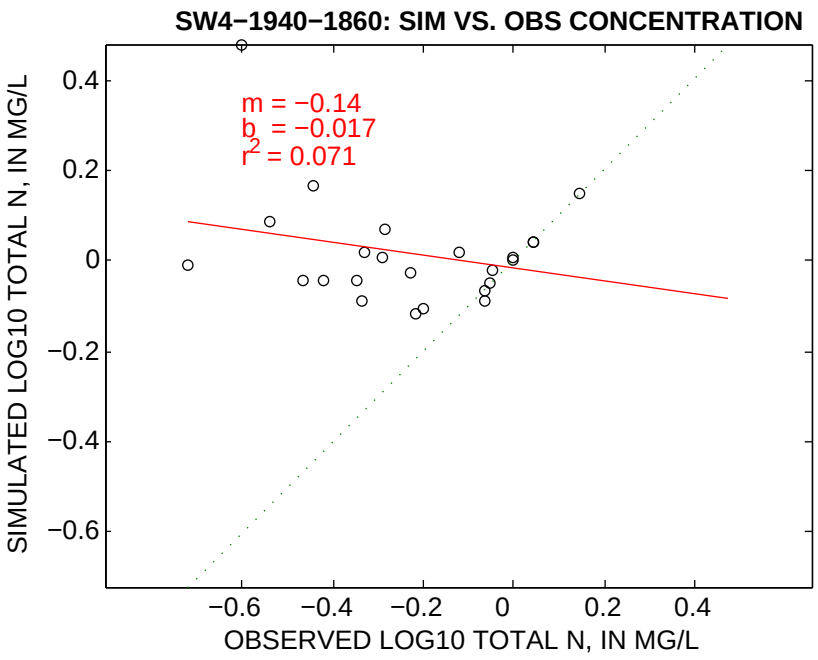
Drive | Directory: N/A | model | Observed: OBS20161101

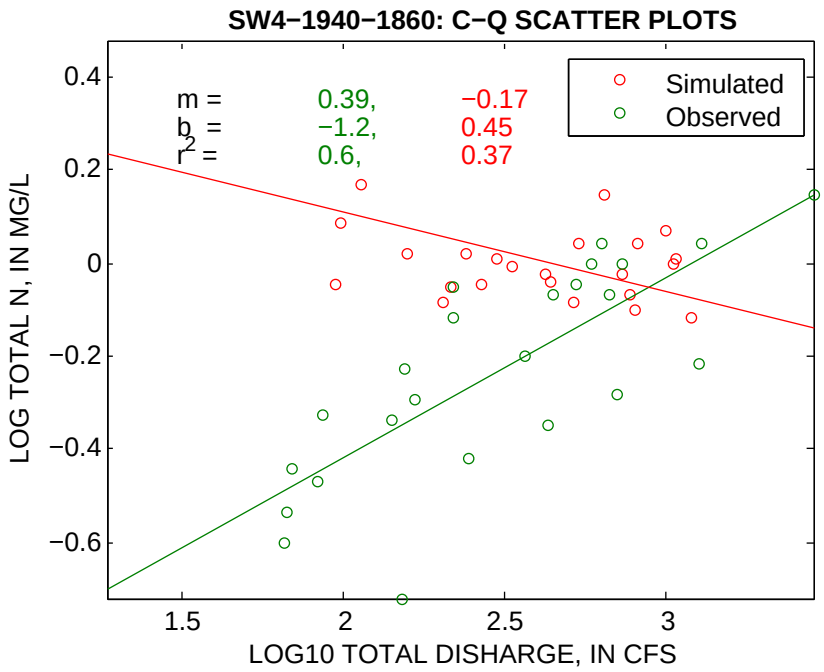
STATISTICS

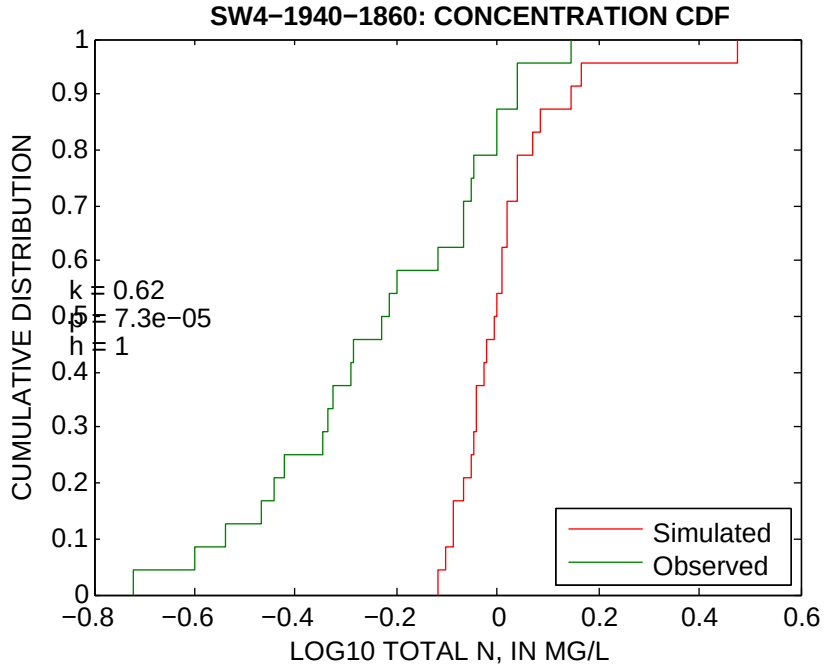
	n	24	24
		observe	simulate
min		0.19	0.79457
		-0.721246	-0.0998678
mean		0.663333	1.13928
		-0.230993	0.0318713
media		0.6	1.00361
		-0.221909	0.00123756
max		1.4	3.2045
		0.146128	0.50576
varian		0.101458	0.253861
		0.0514273	0.0179089
JB		☑ 0.316435	0.001
		☑ 0.455443	0.001
		ra	log
%		71.7508	-113.798
err.va		0.711391	0.16942
rel.std.err		7.01169	3.29435
mod.eff		-6.01169	-2.29435

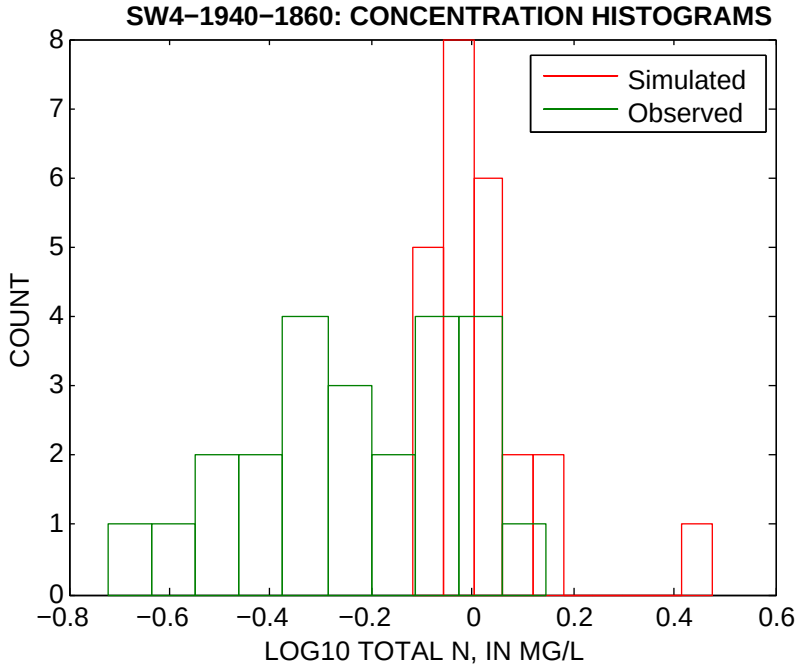
VERSION 3.1

ALL DATA
LOG10

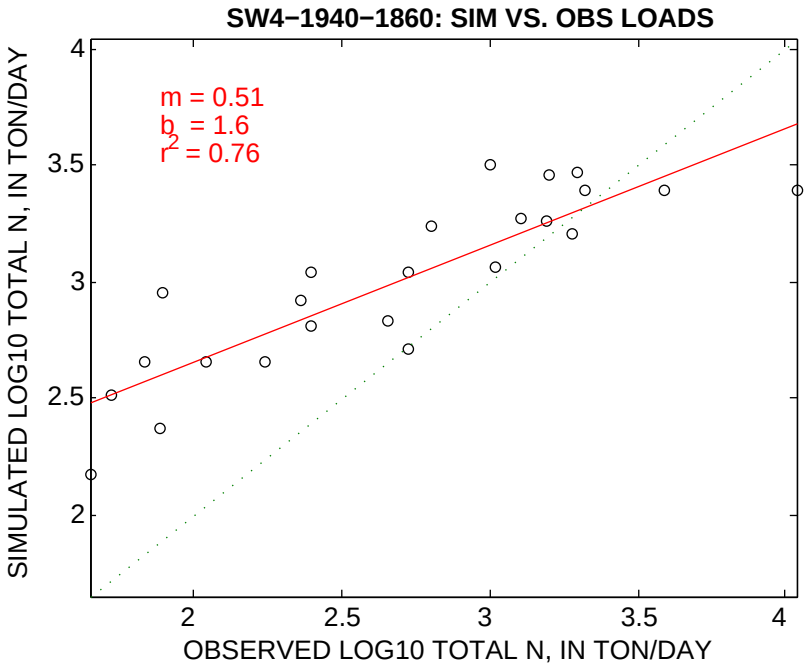


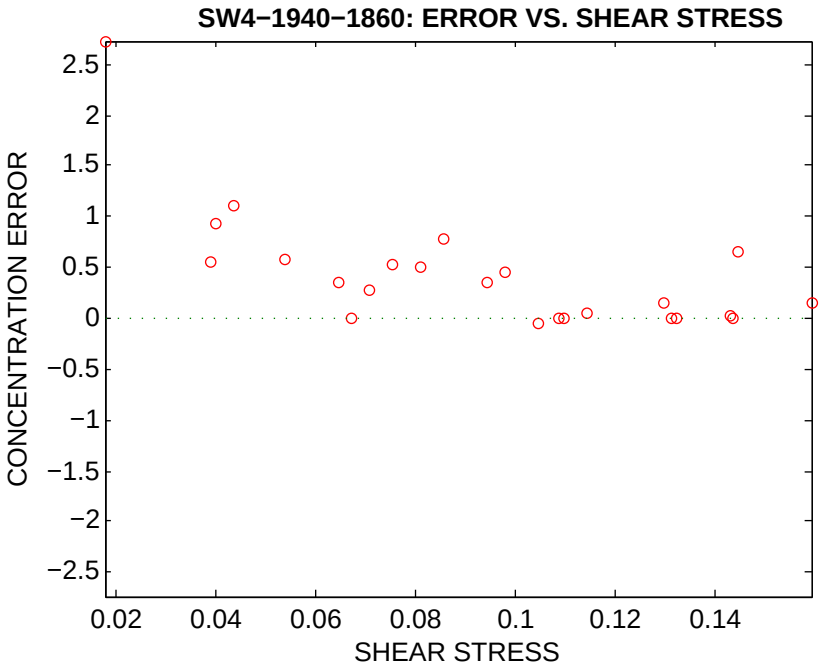


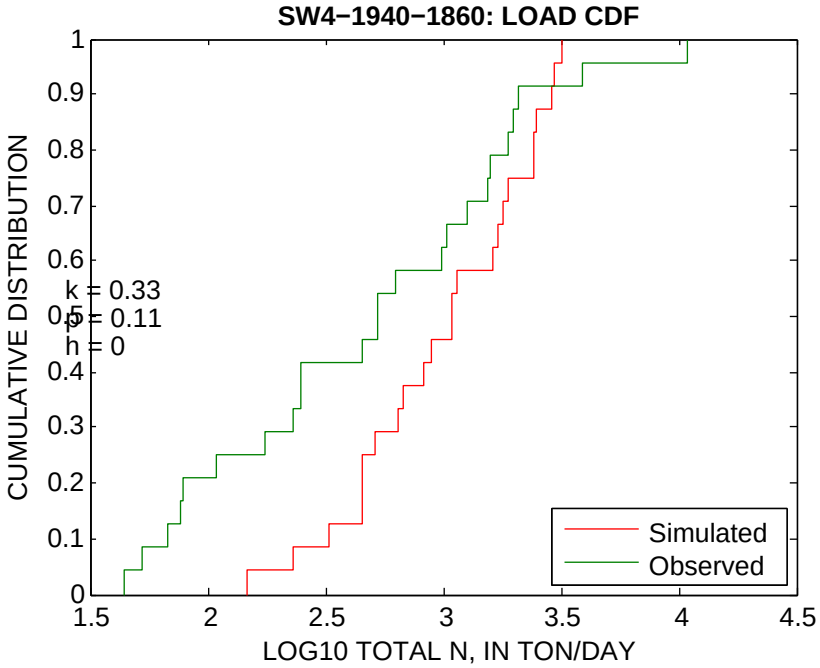


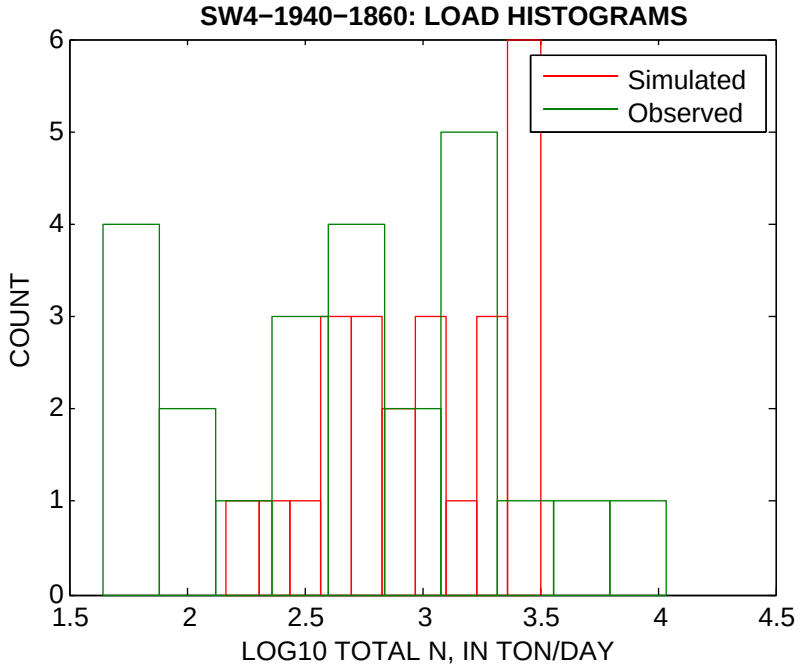


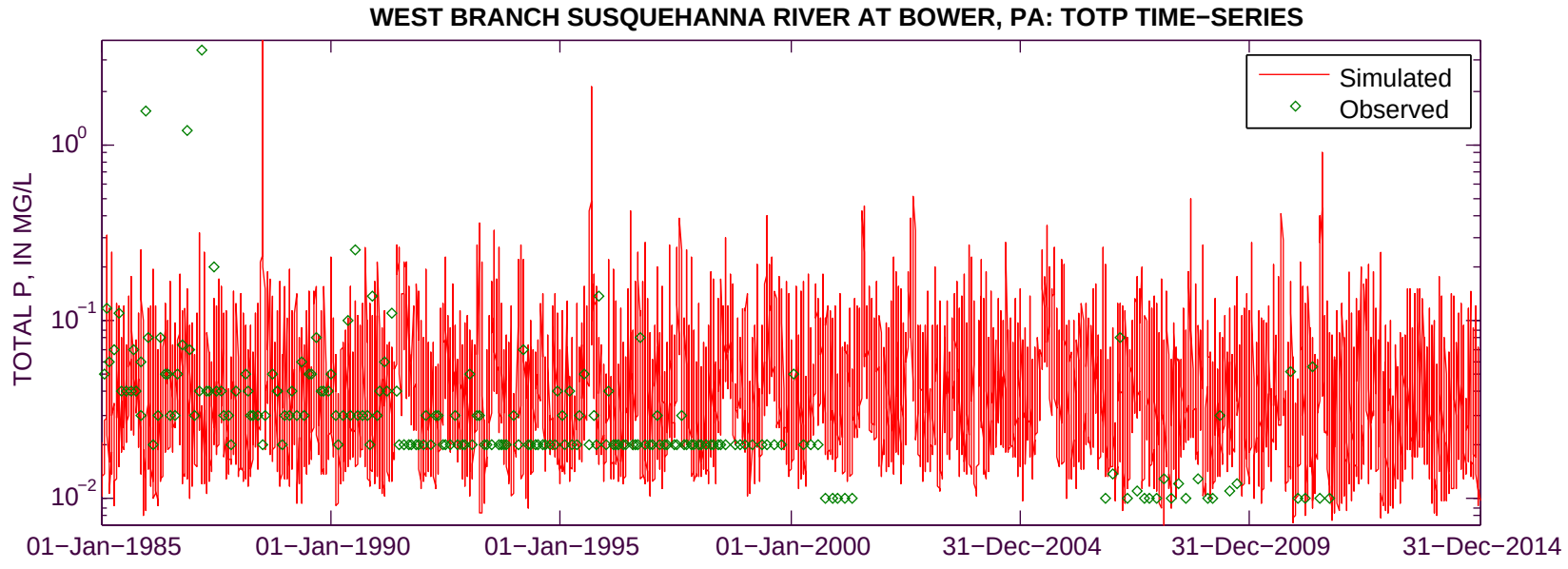
LOAD DATA
LOG10

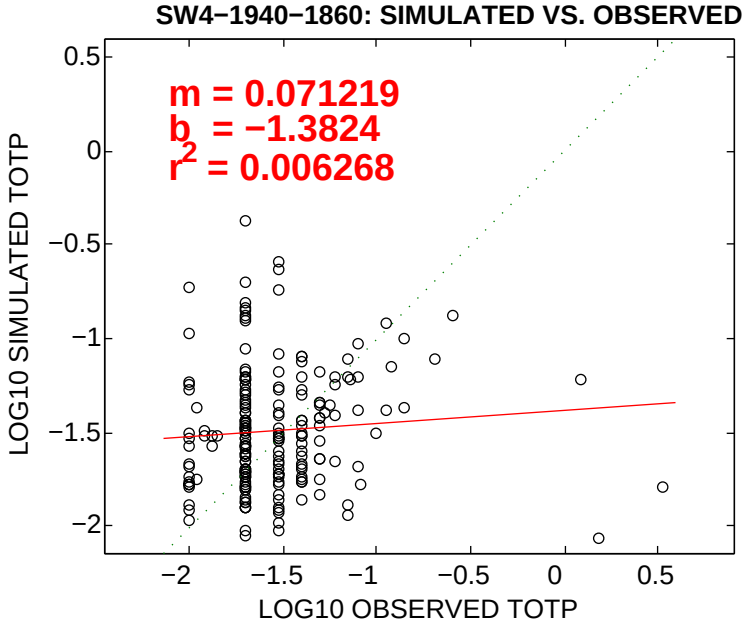


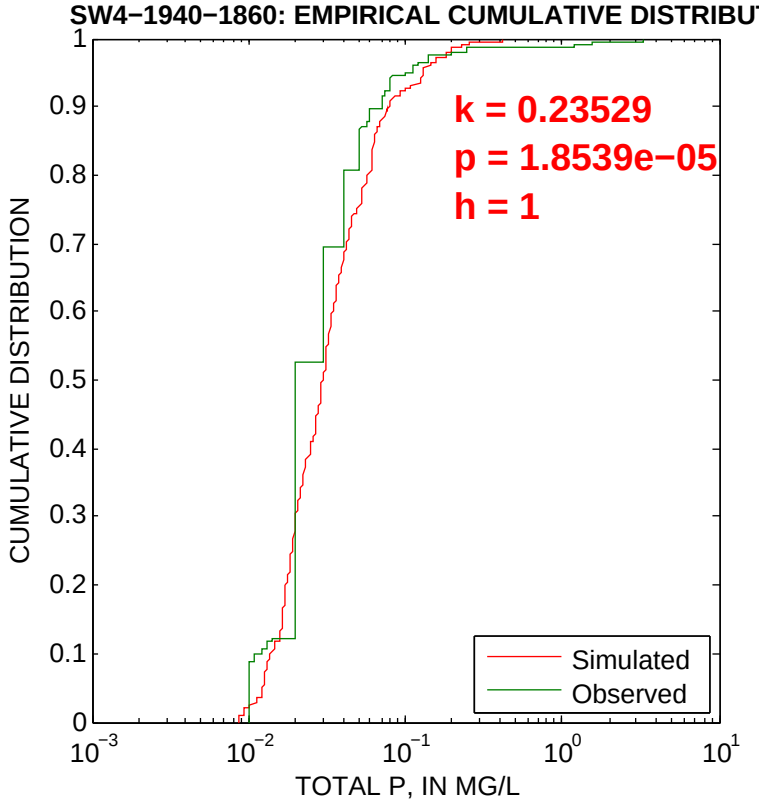












DATA SELECTION

scenario	file
P620171001WQ	TOTP.calib

plot: TOTP - total phosphorus

Dates: 1/1/1985 – 12/31/201

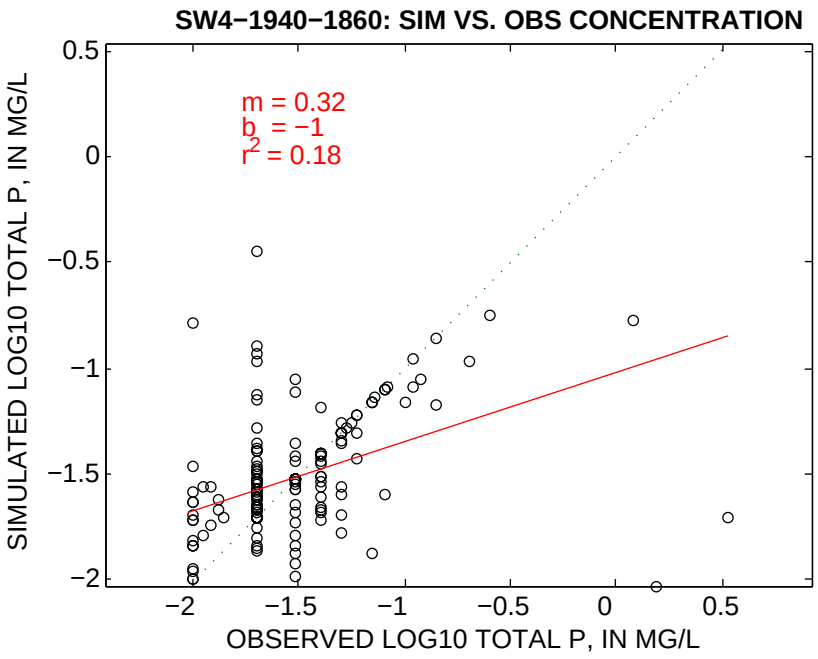
Drive	Directory	Observed
N/A	model	OBS20161101

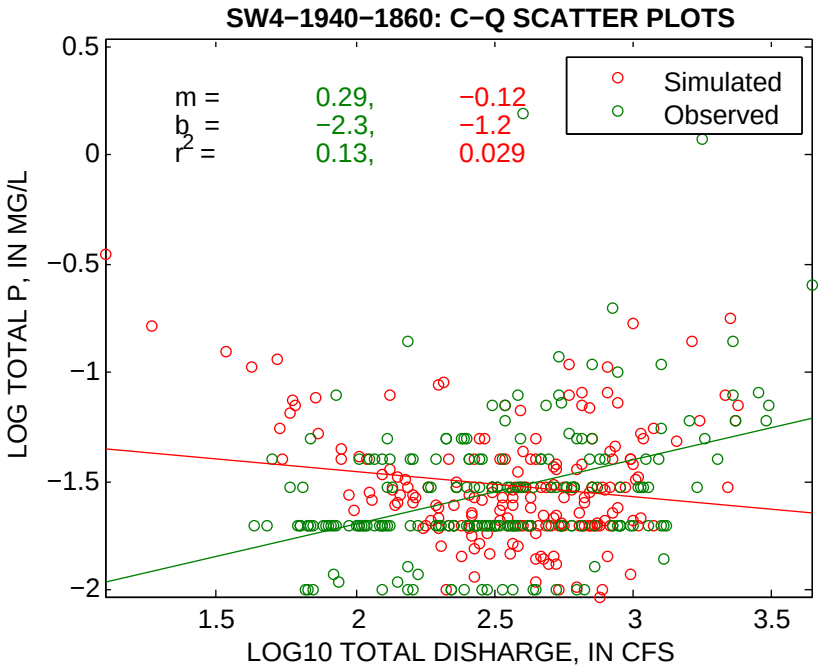
STATISTICS

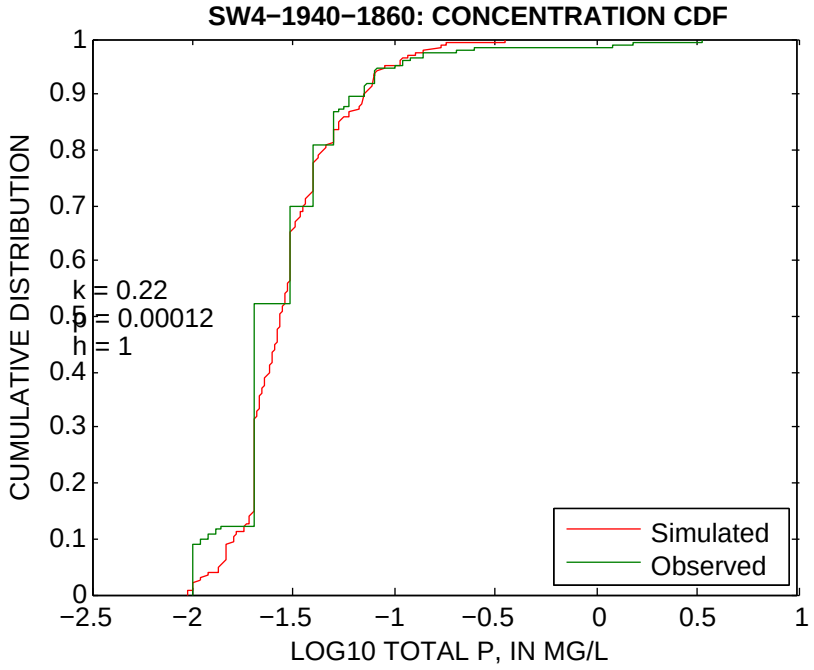
	observe	simulate
n	204	204
min	0.01 -2	0.0086781 -2.06158
mean	0.0629902 -1.54149	0.043618 -1.49218
media	0.02 -1.69897	0.029912 -1.52416
max	3.36 0.526339	0.42418 -0.37245
varian	0.0723825 0.118617	0.00221369 0.0959856
JB	0.001 0.001	0.001 0.001662
	ra	log
%	-30.7544	-3.19887
err.va	0.075838	0.20015
rel.std.err	1.04774	1.68737
mod.eff	-0.0477397	-0.68737

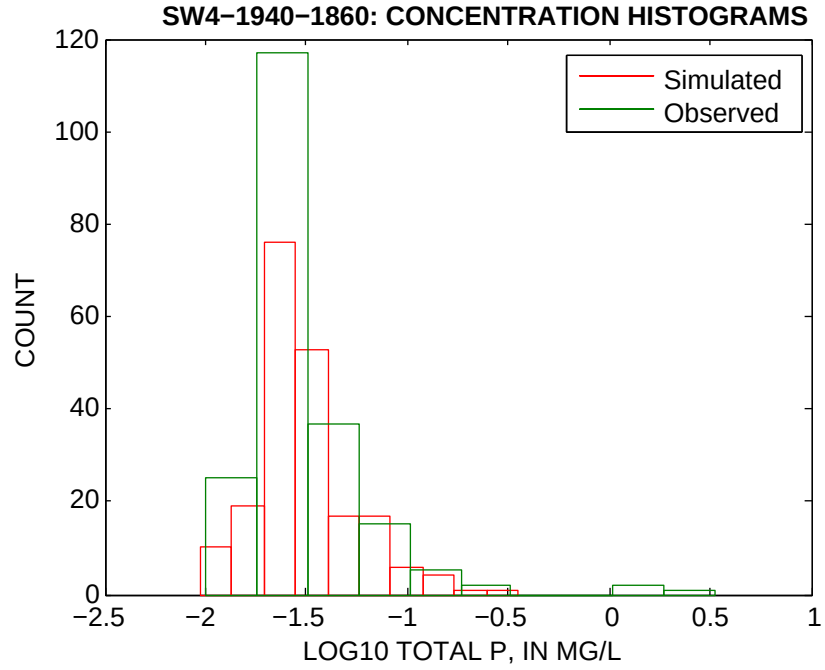
VERSION 2.1

ALL DATA
LOG10

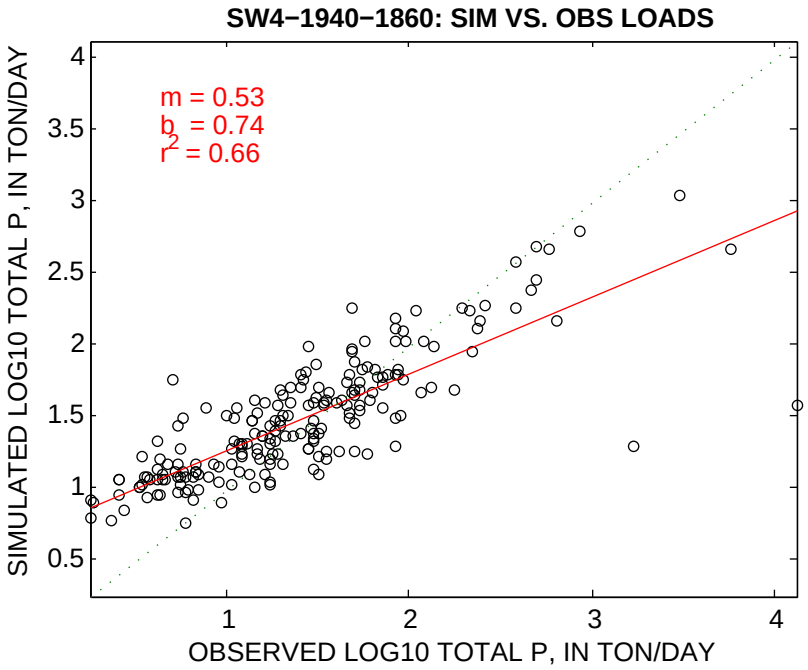


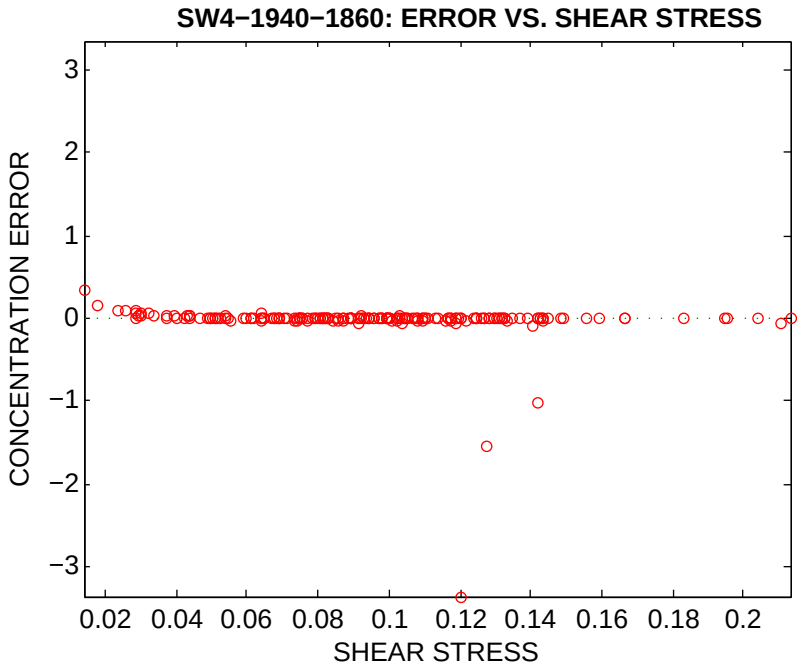


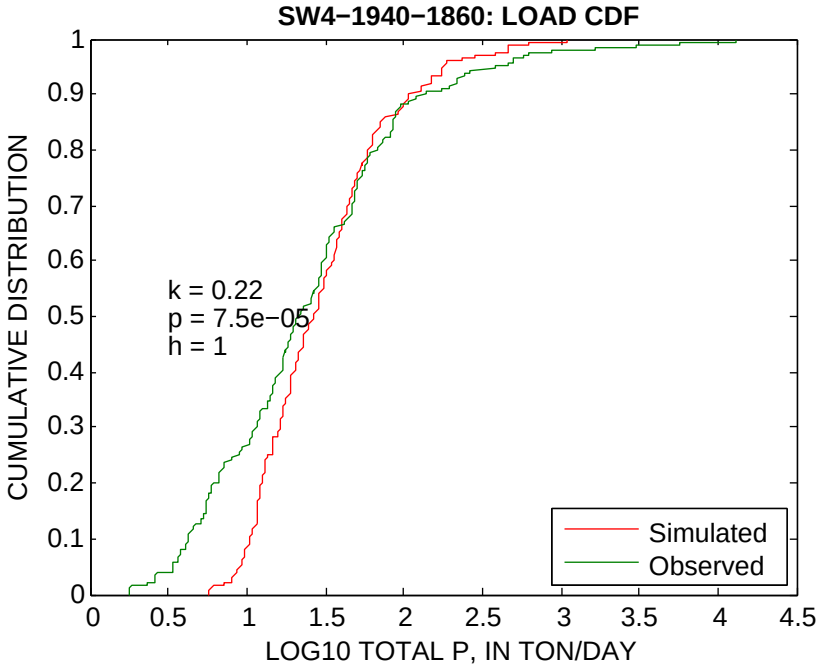


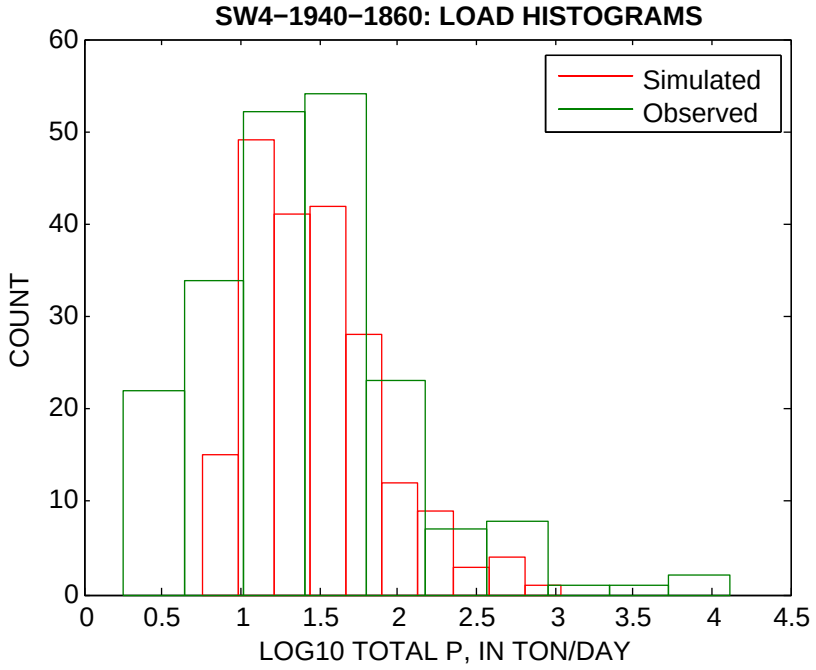


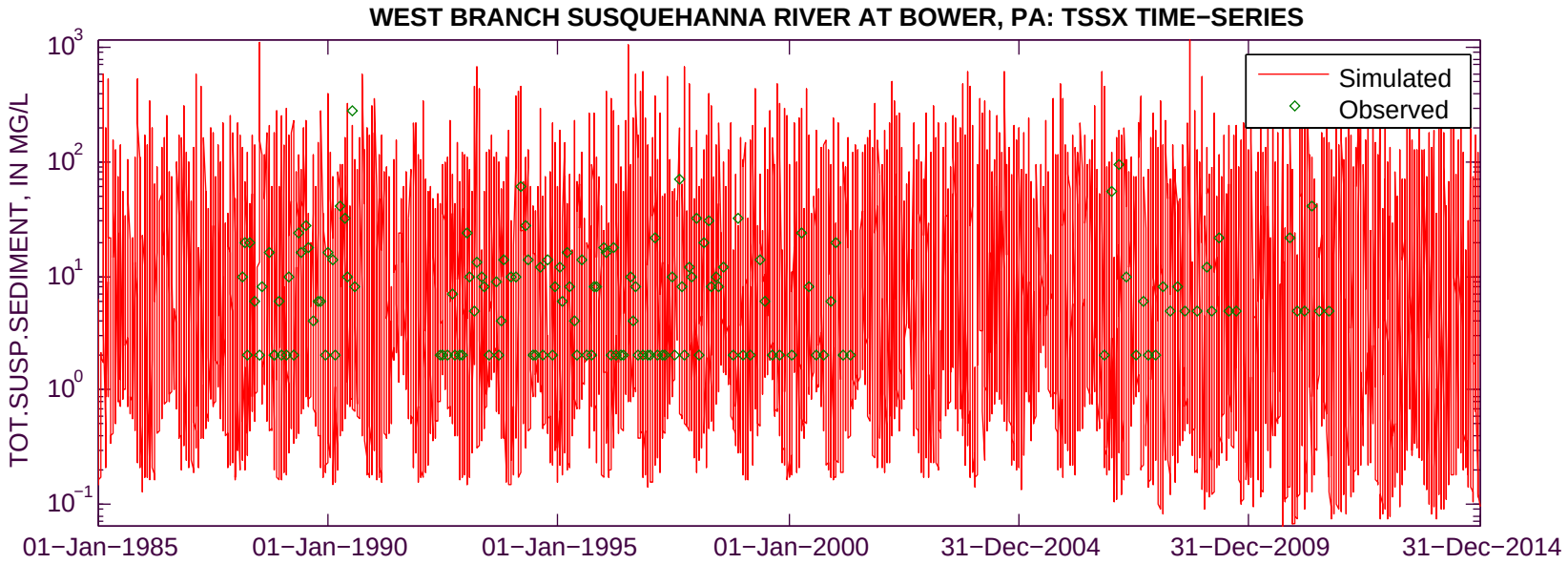
LOAD DATA
LOG10

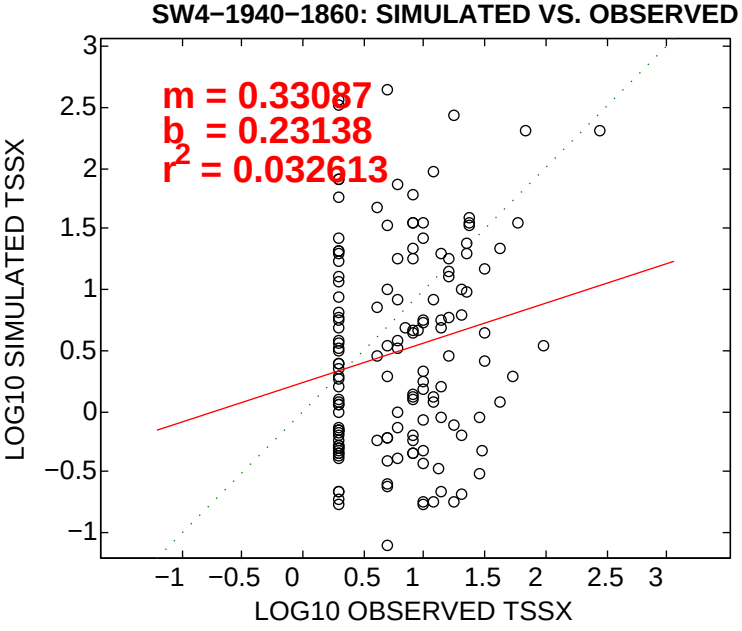


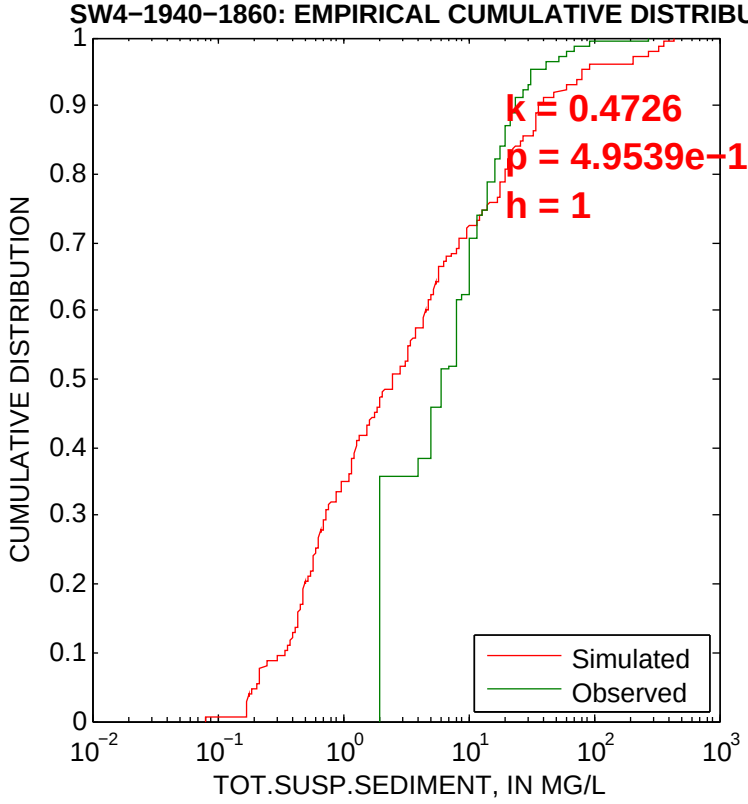












DATA SELECTION

scenario: P620171001WQ | file: TSSX.calib

plot: TSSX - total suspended ...

Dates: 1/1/1985 – 12/31/201

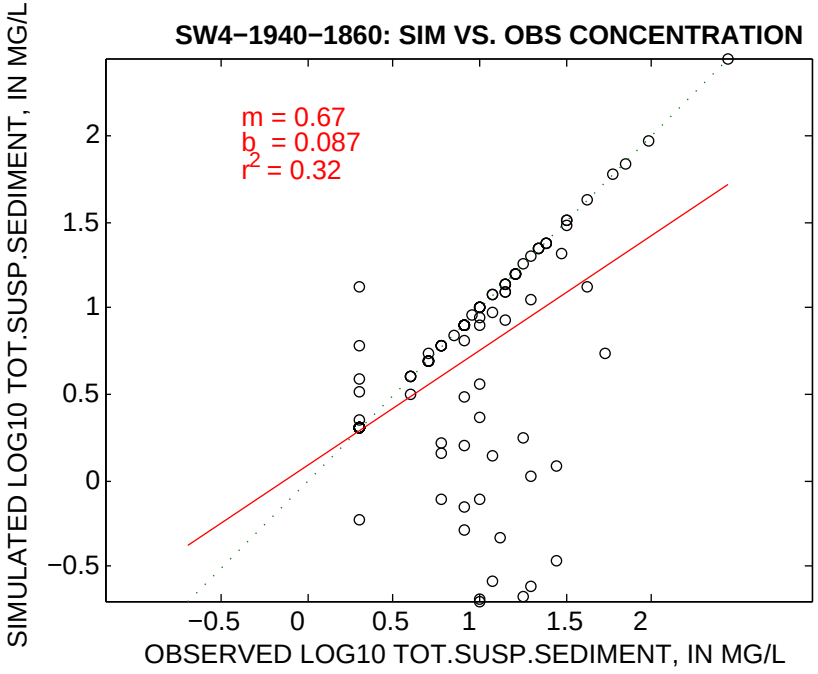
Drive: N/A | Directory: model | Observed: OBS20161101

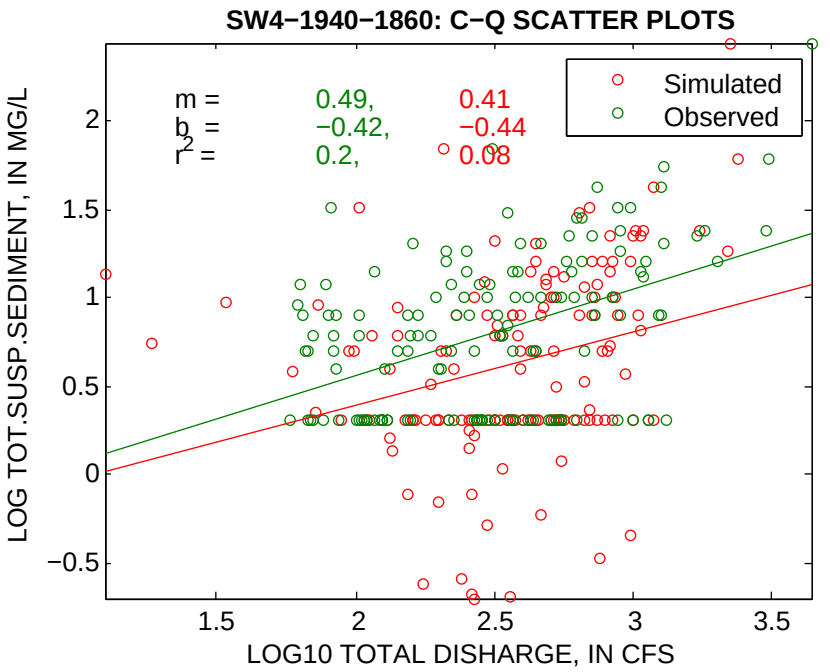
STATISTICS

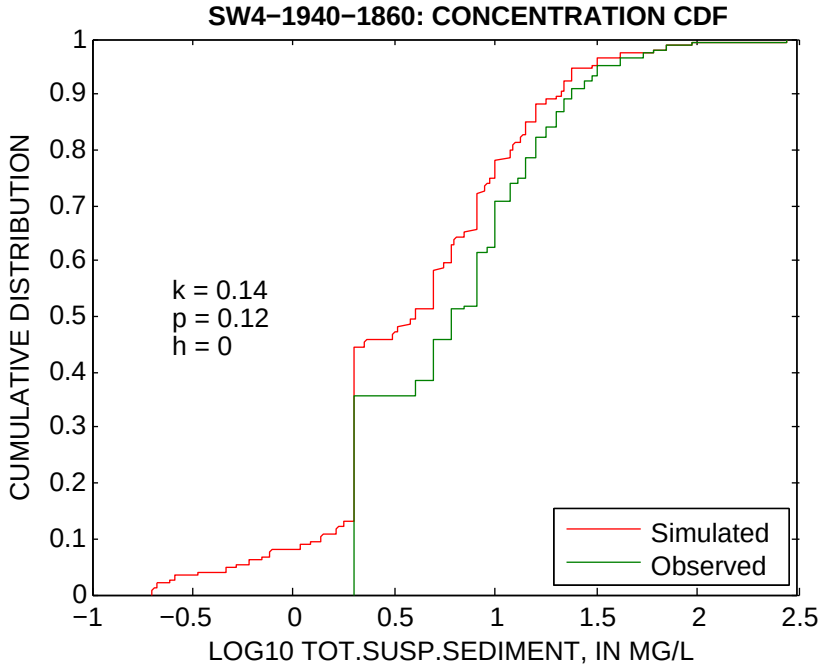
		observe	simulate
n		146	146
min		2	0.079416
		0.30103	-1.10009
mean		12.3288	21.9582
		0.800455	0.496228
media		6	2.51875
		0.778151	0.401183
max		276	449.83
		2.44091	2.65305
varian		658.36	4049.95
		0.210666	0.707152
JB		0.001	0.001
		0.023787	0.033146
		ra	log
%		78.1054	-38.0068
err.va		4029.75	0.871605
rel.std.err		6.12089	4.13738
mod.eff		-5.12089	-3.13738

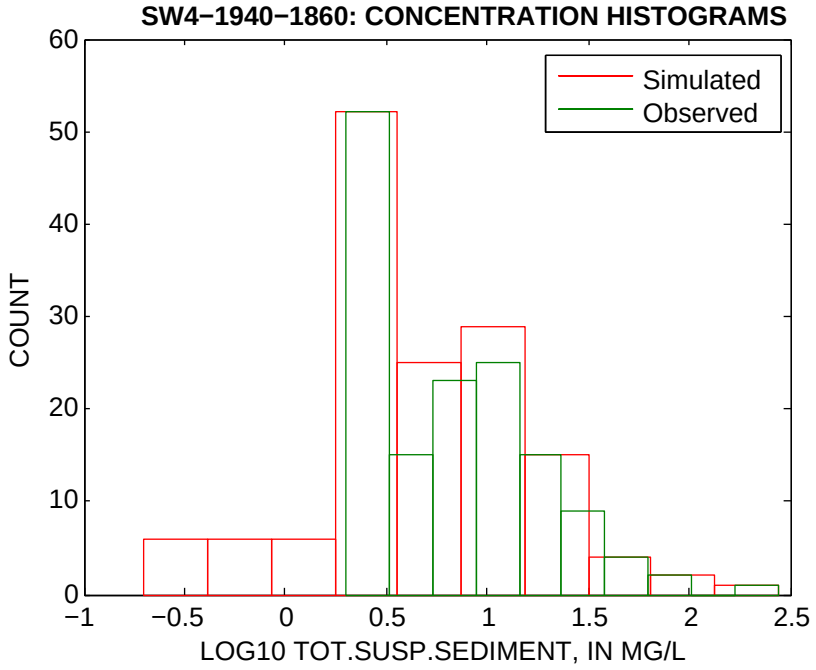
VERSION 2.1

ALL DATA
LOG10

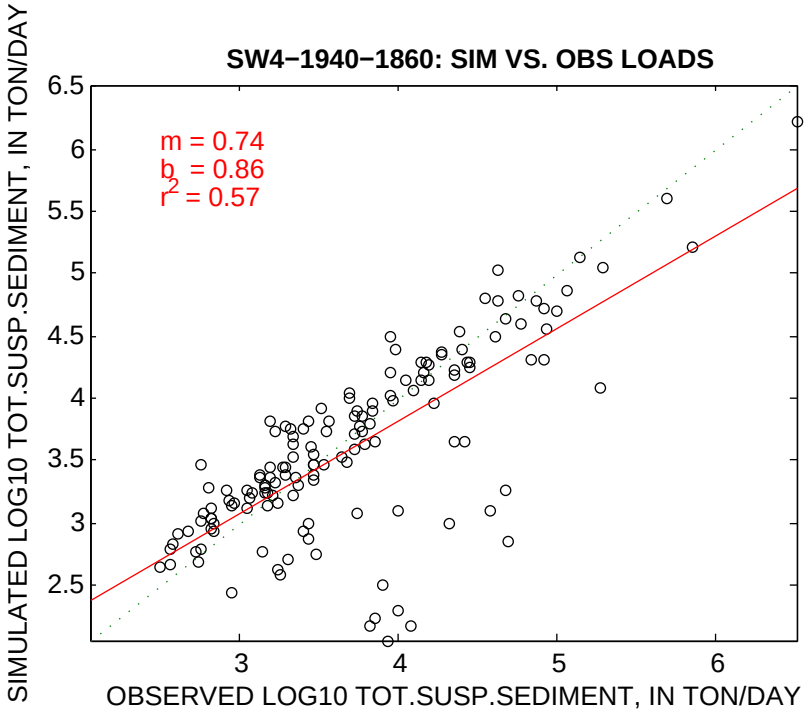


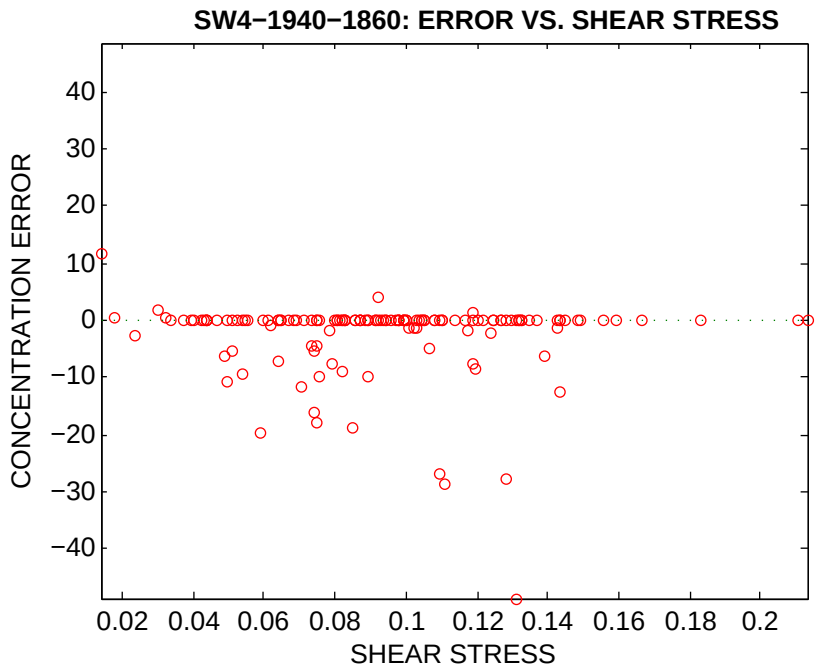


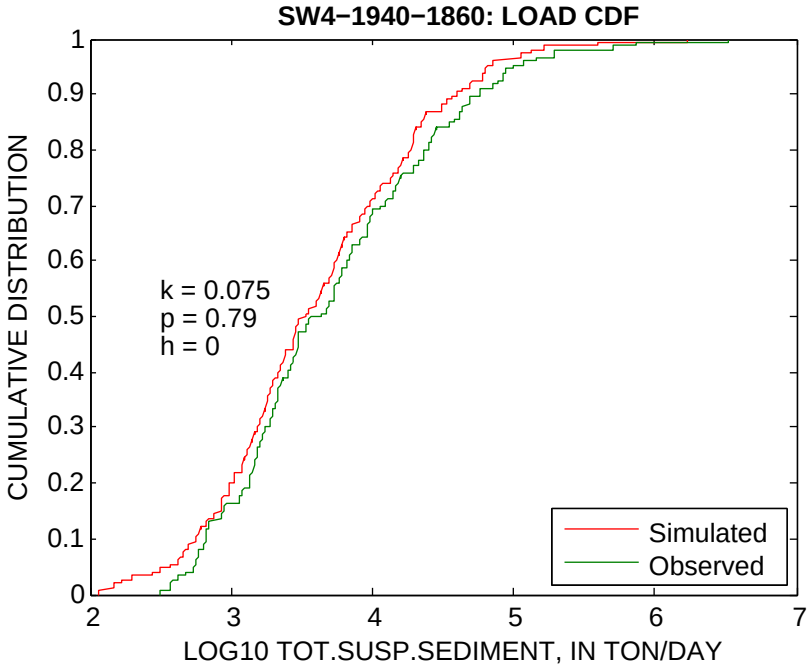


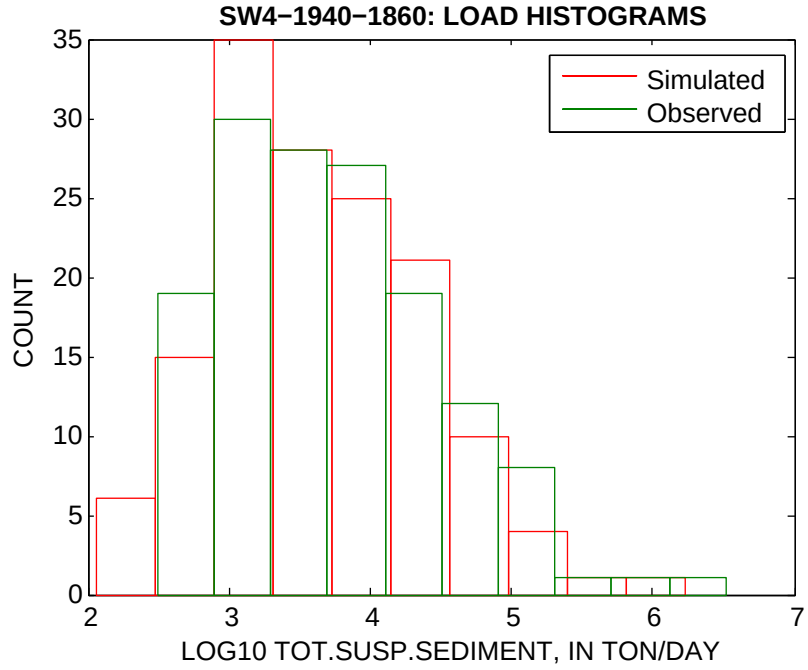


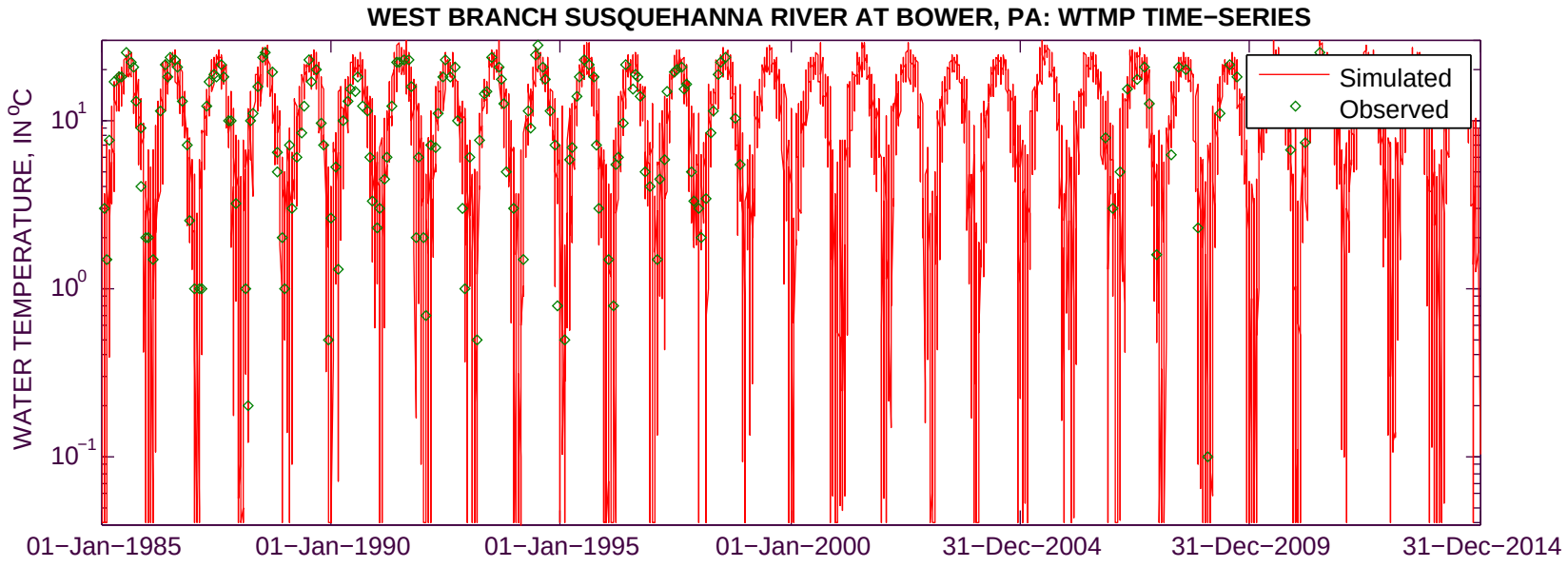
LOAD DATA
LOG10

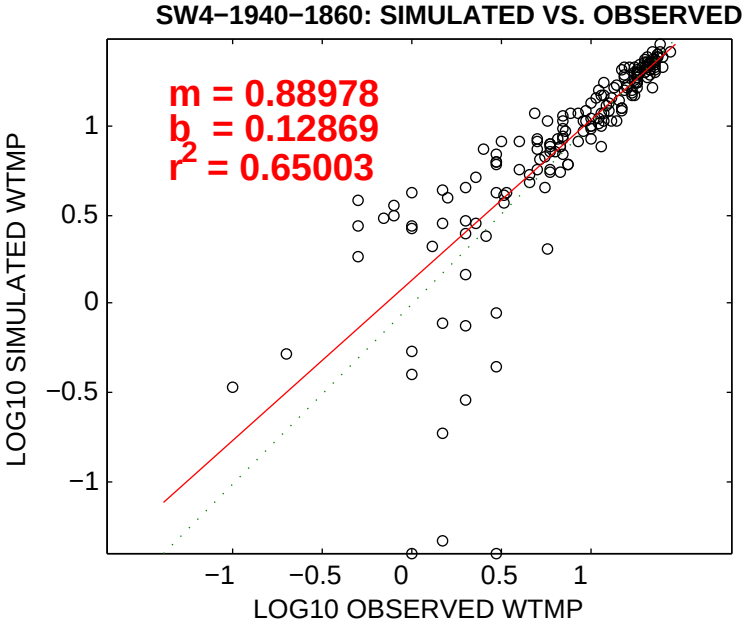


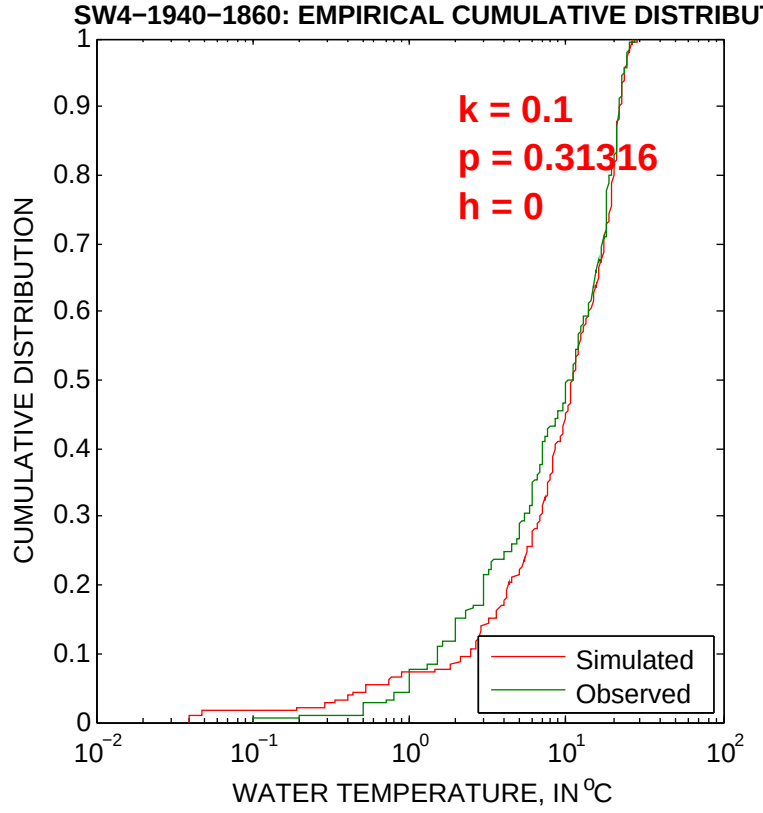












DATA SELECTION

scenario	file
P620171001WQ	WTMP.calib

plot: WTMP - water tempera...

Dates: 1/1/1985 – 12/31/201

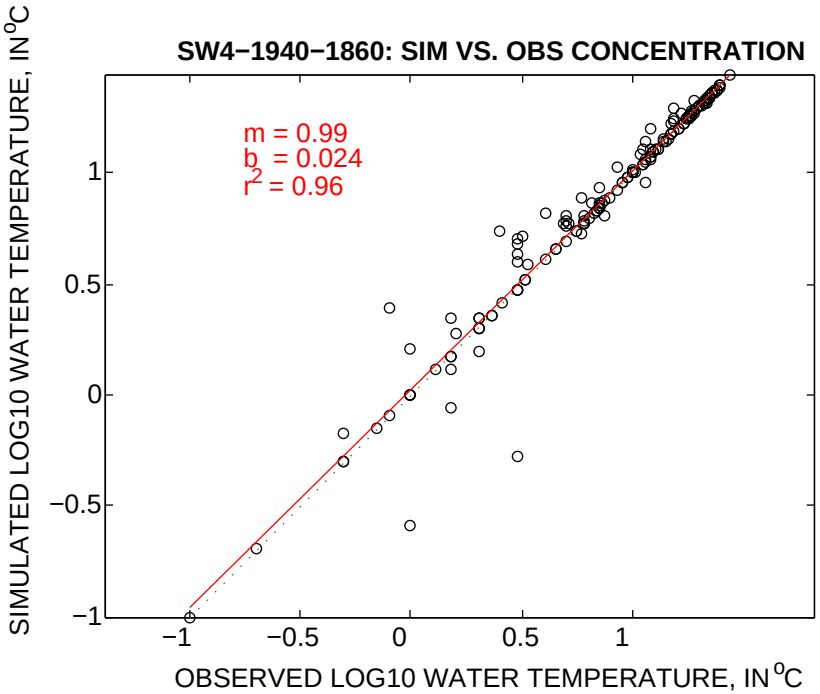
Drive	Directory	Observed
N/A	model	OBS20161101

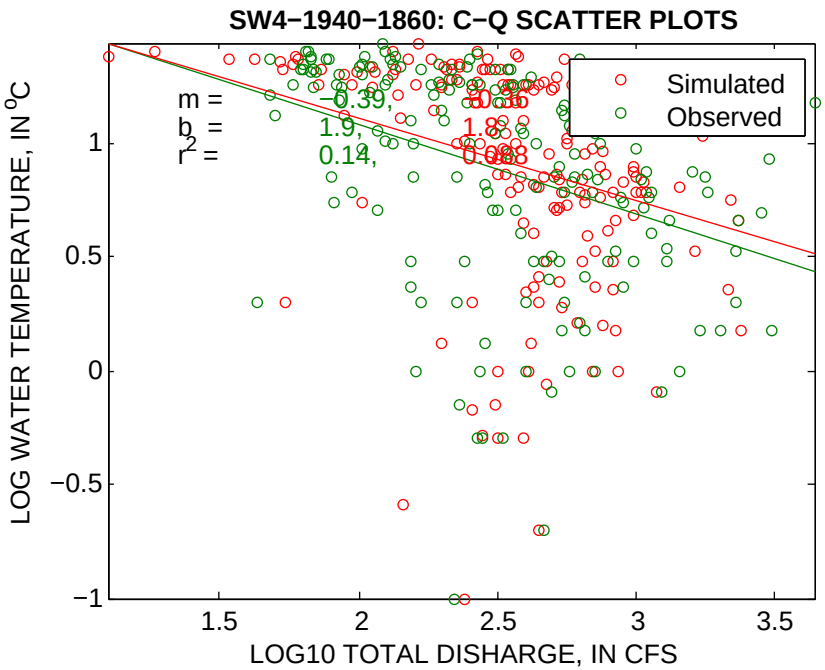
STATISTICS

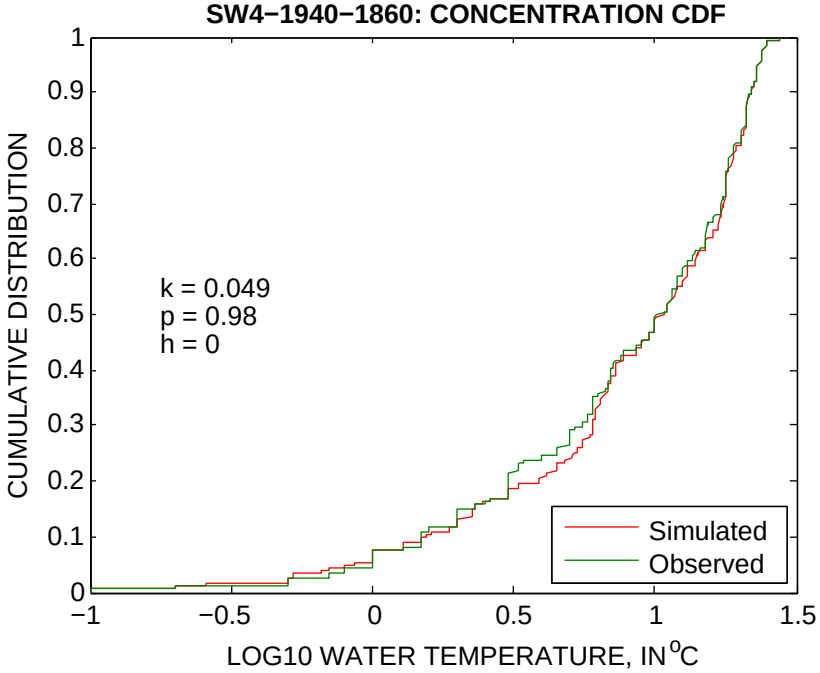
	n	180	180
		observe	simulate
min		0.1	0.040033
		-1	-1.39758
mean		11.2839	12.0309
		0.879476	0.911222
media		10.55	10.9495
		1.02301	1.03939
max		27.5	28.696
		1.43933	1.45782
varian		59.3842	56.4895
		0.222778	0.271332
JB		0.006864	0.012009
		0.001	0.001
		ra	log
%		6.62002	3.60971
err.va		5.22407	0.0986778
rel.std.err		0.0879707	0.442942
mod.eff		0.912029	0.557058

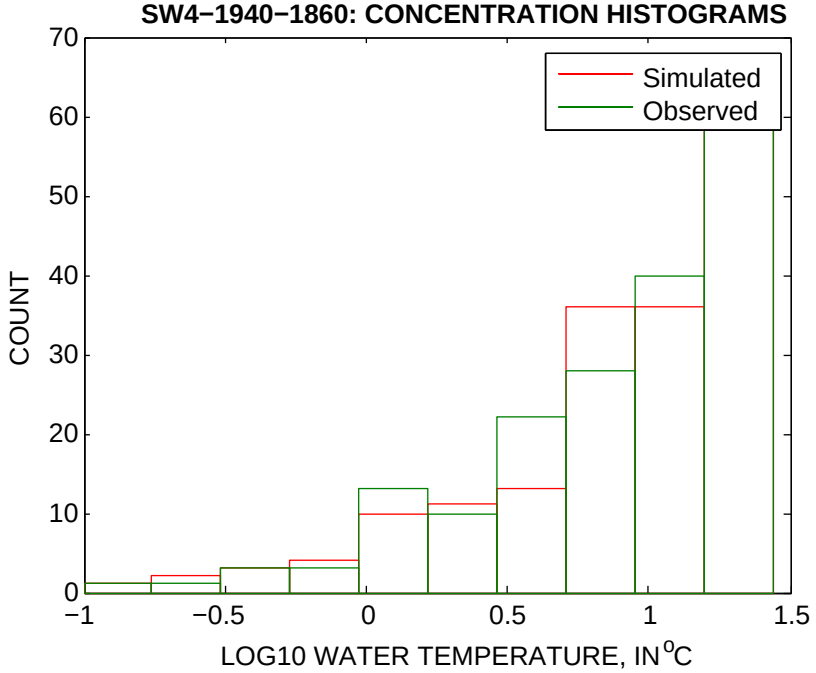
VERSION 2.1

ALL DATA
LOG10

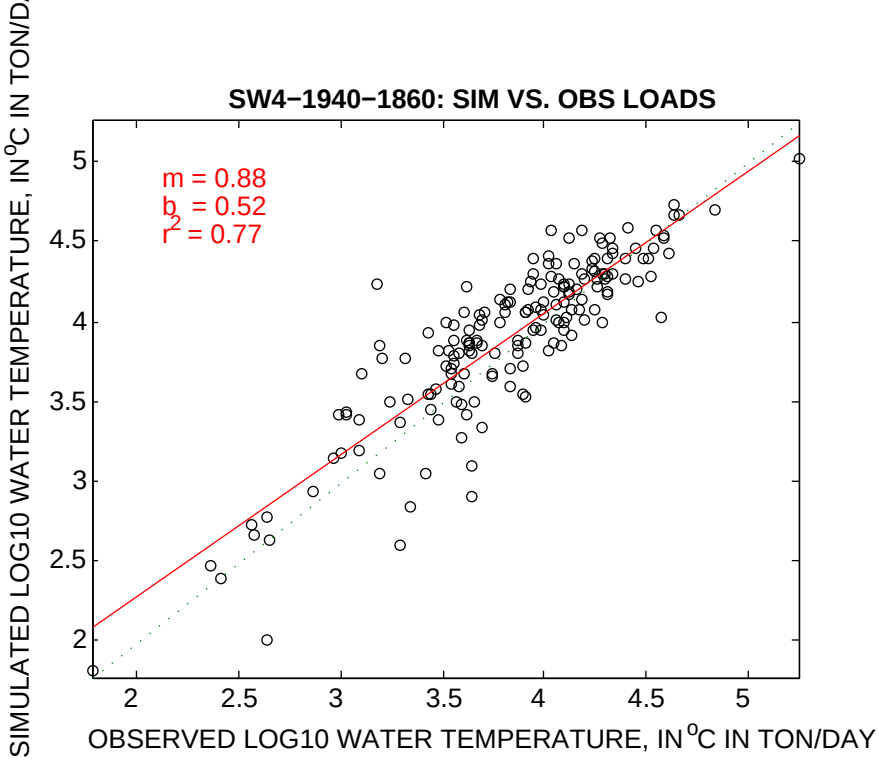


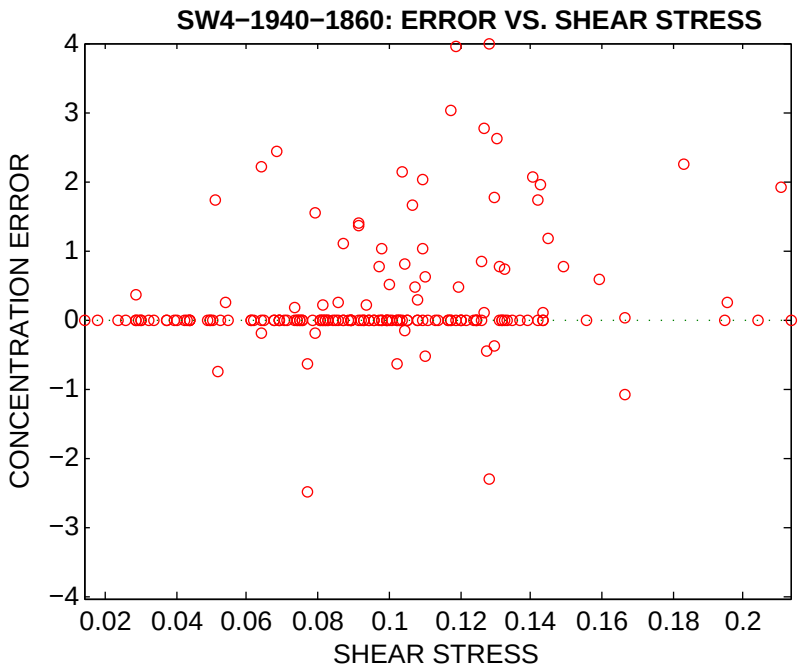


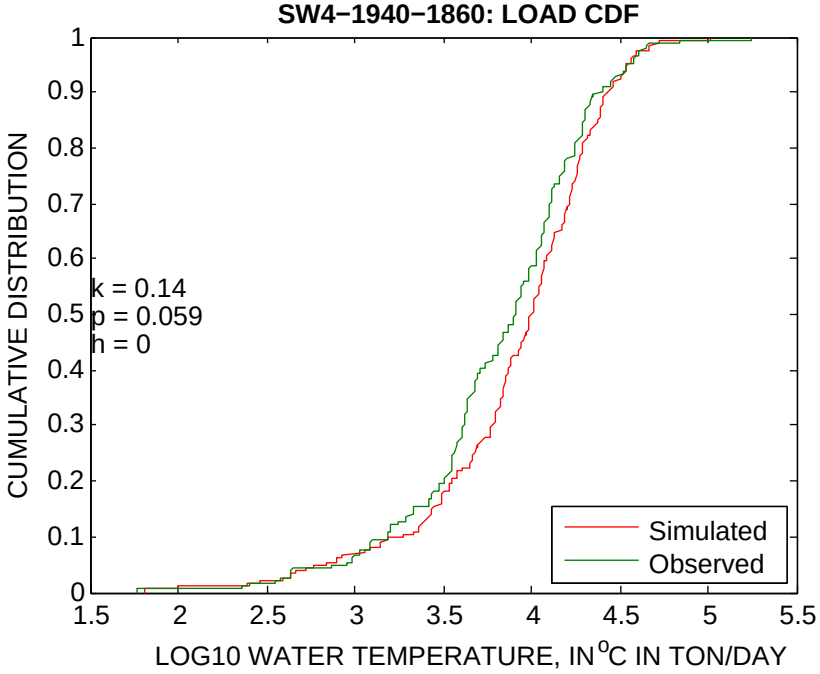


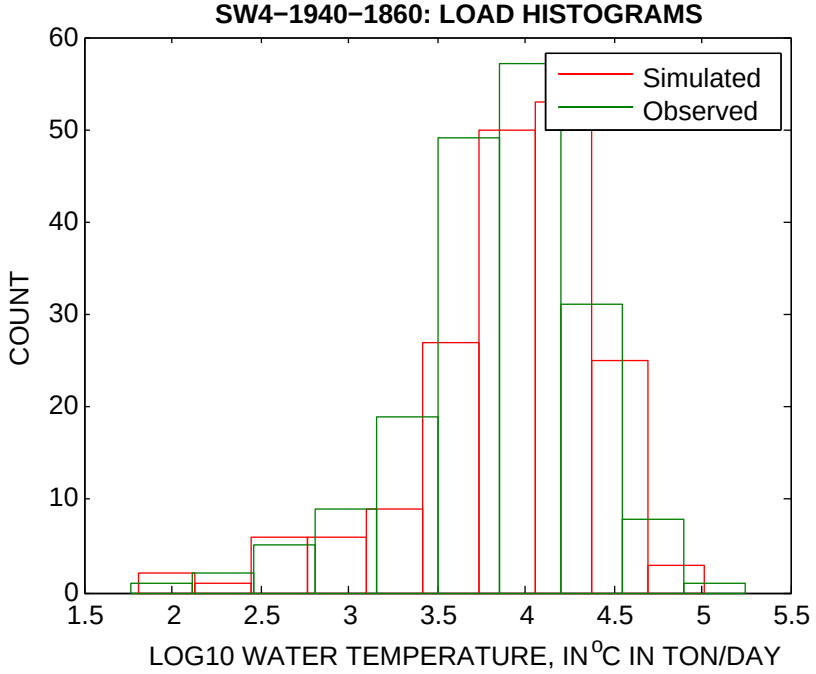


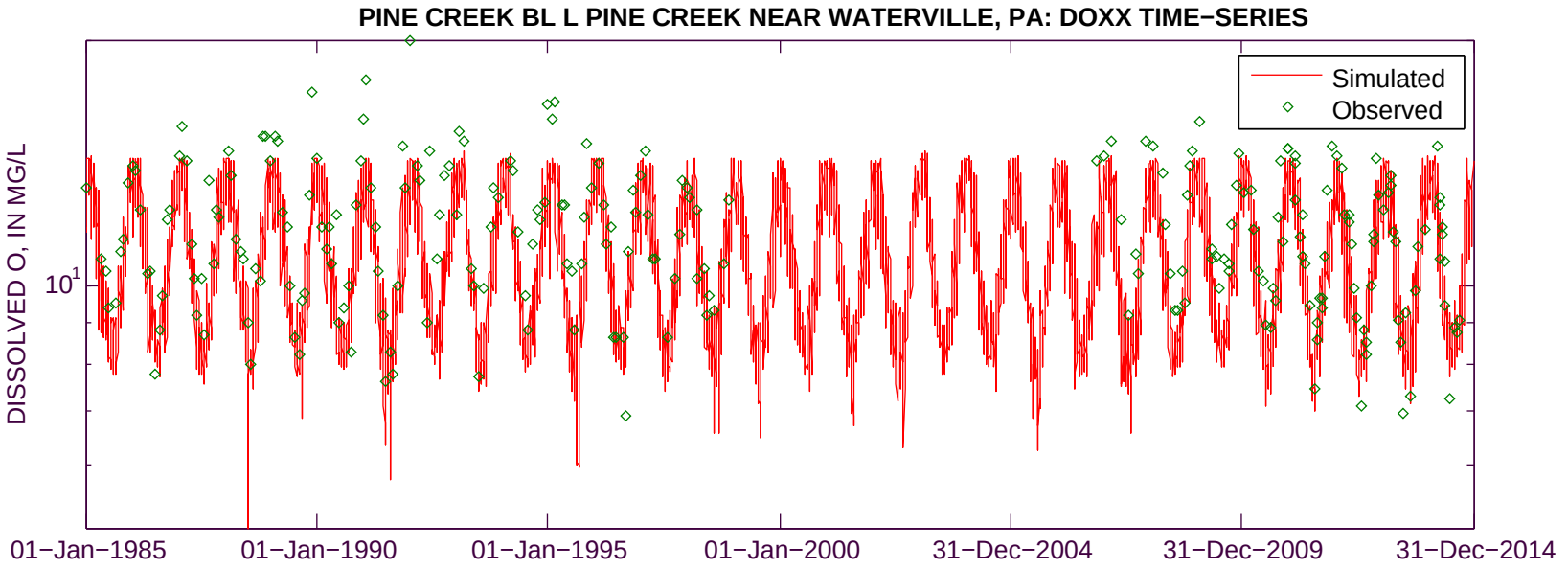
LOAD DATA
LOG10

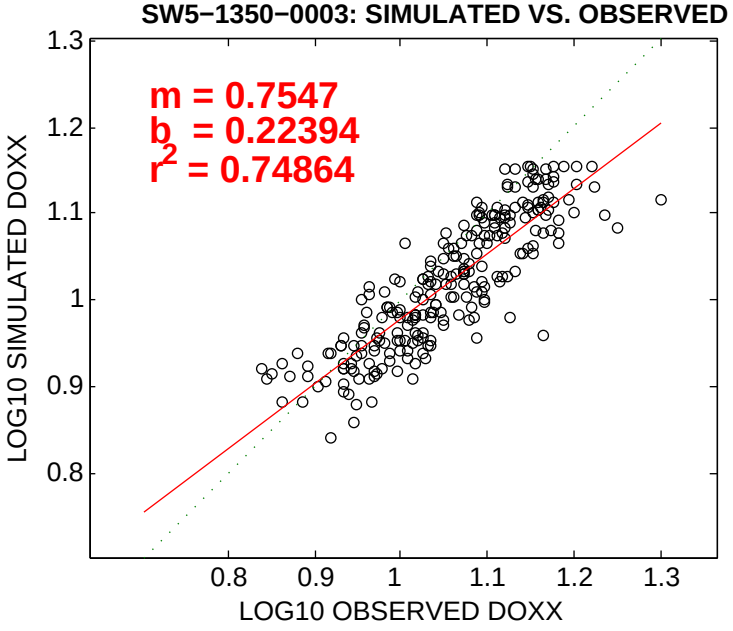


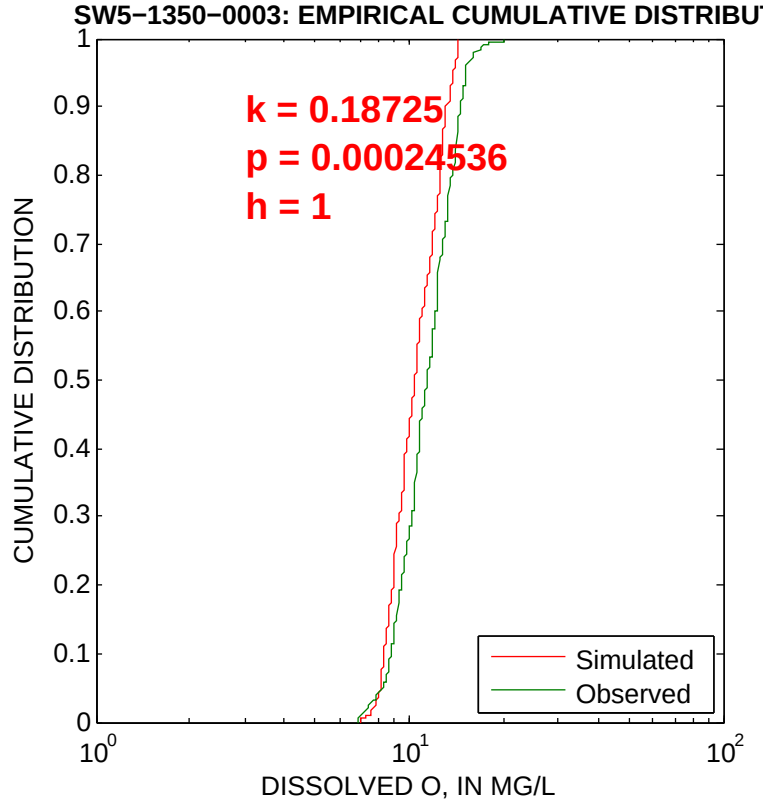












DATA SELECTION

scenario	file
P620171001WQ	DOXX.calib

plot: DOXX - dissolved oxygen

Dates: 1/1/1985 – 12/31/201

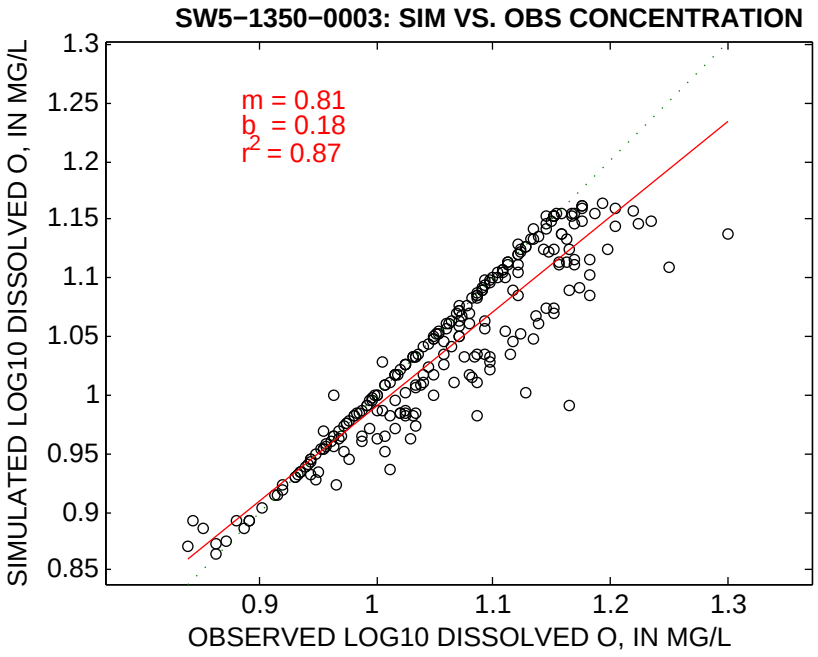
Drive	Directory	Observed
N/A	model	OBS20161101

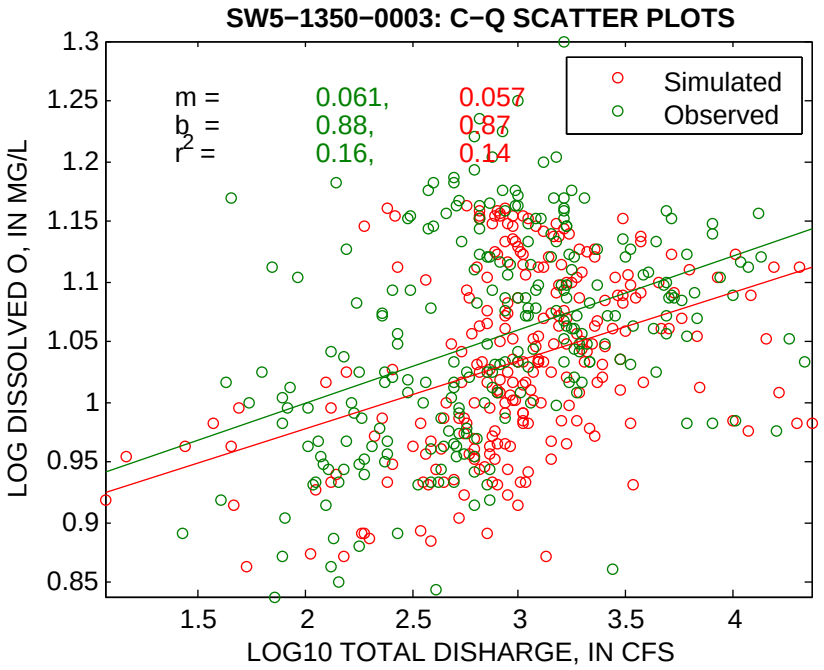
STATISTICS

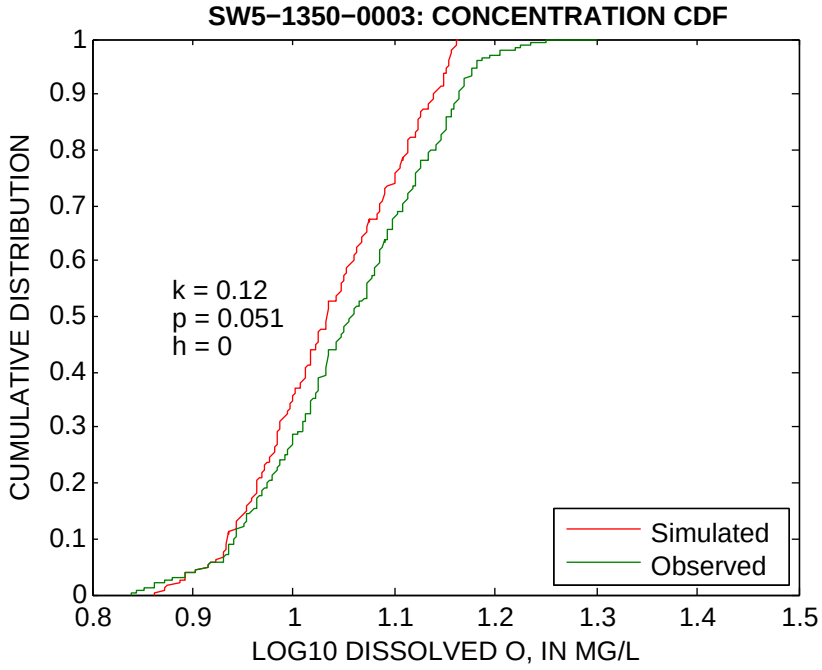
	n	observe	simulate
		251	251
min		6.9	6.947
		0.838849	0.841797
mean		11.5758	10.6341
		1.05501	1.02016
media		11.4	10.434
		1.0569	1.01845
max		20	14.261
		1.30103	1.15415
varian		5.26302	3.42065
		0.00751472	0.00571732
JB		☑ 0.059715	0.006624
		☑ 0.196875	0.010391
		ra	log
%		-8.13455	-3.30355
err.va		2.30408	0.00310888
rel.std.err		0.437786	0.413706
mod.eff		0.562214	0.586294

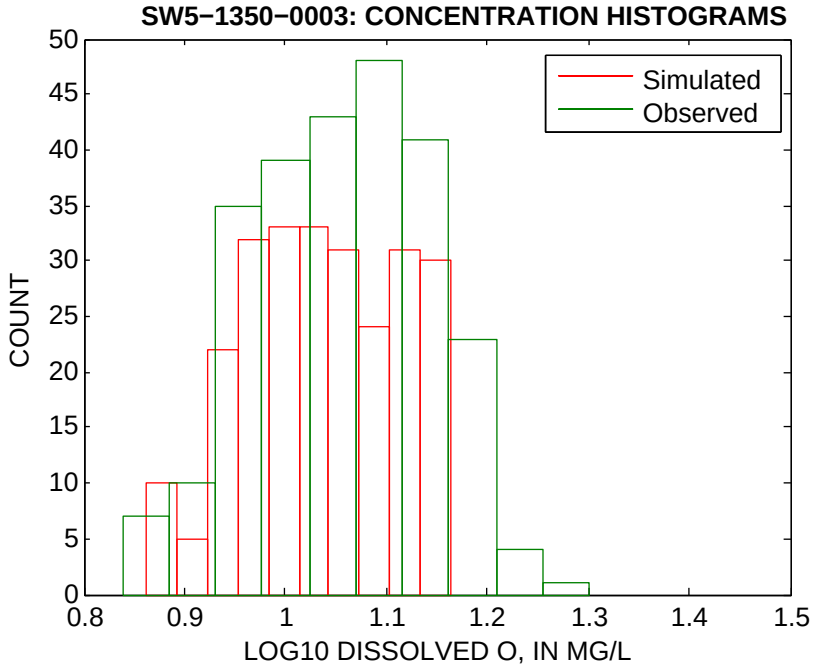
VERSION 2.1

ALL DATA
LOG10

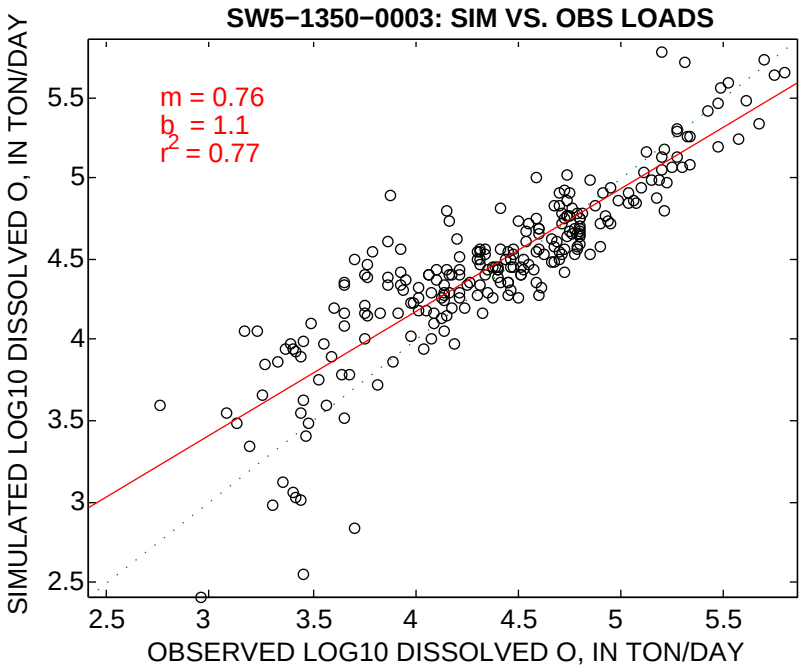




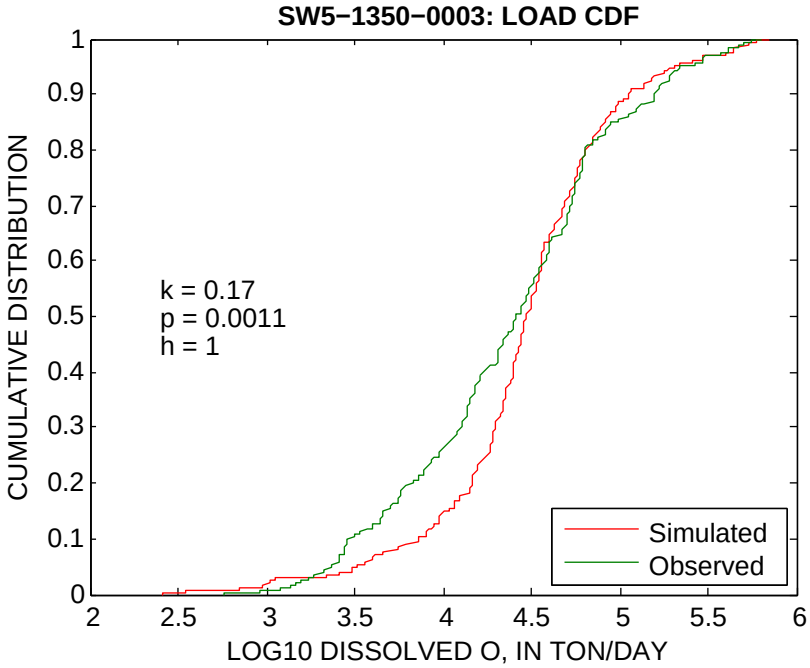


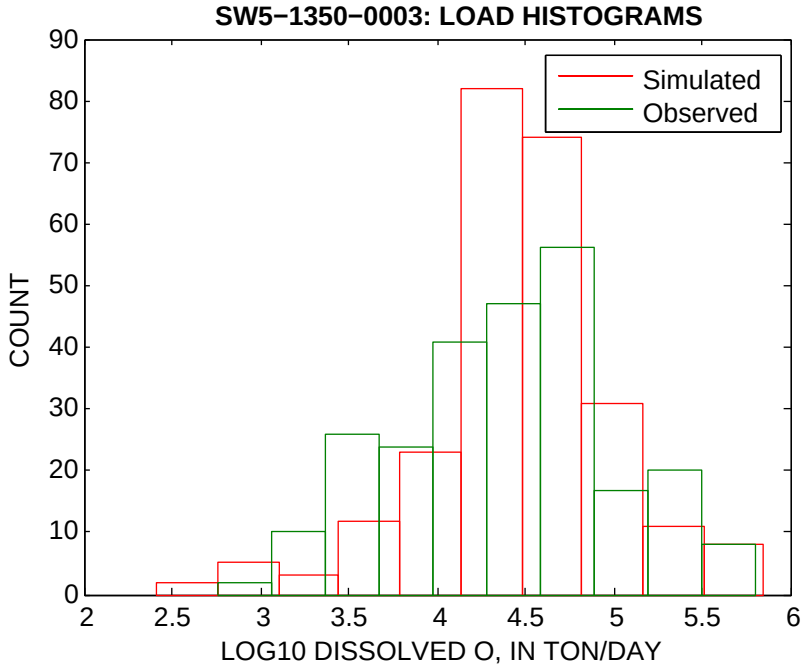


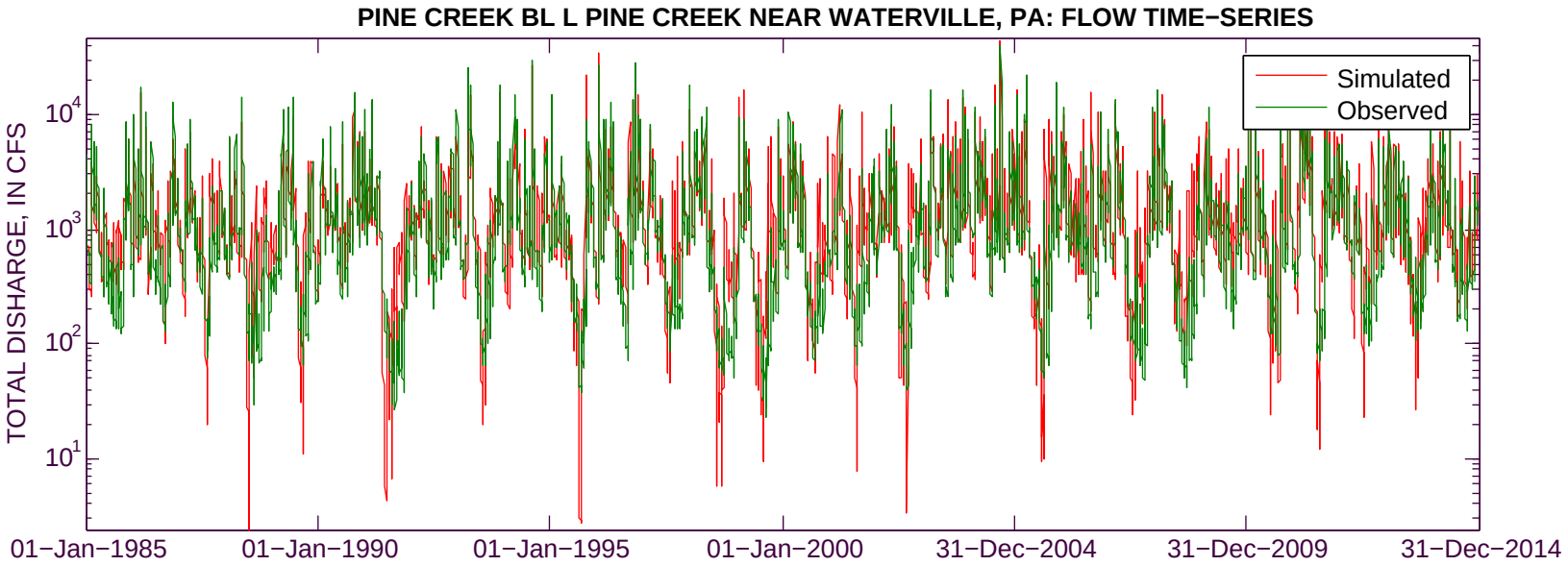
LOAD DATA
LOG10

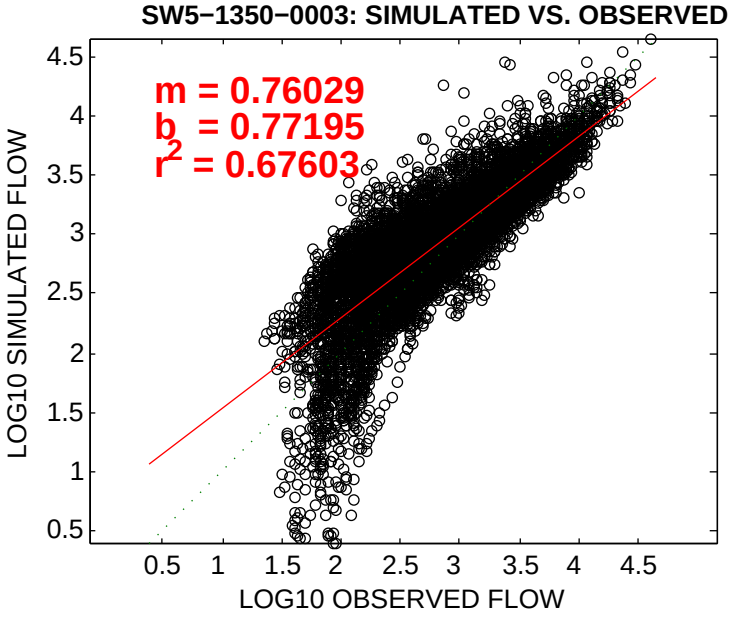


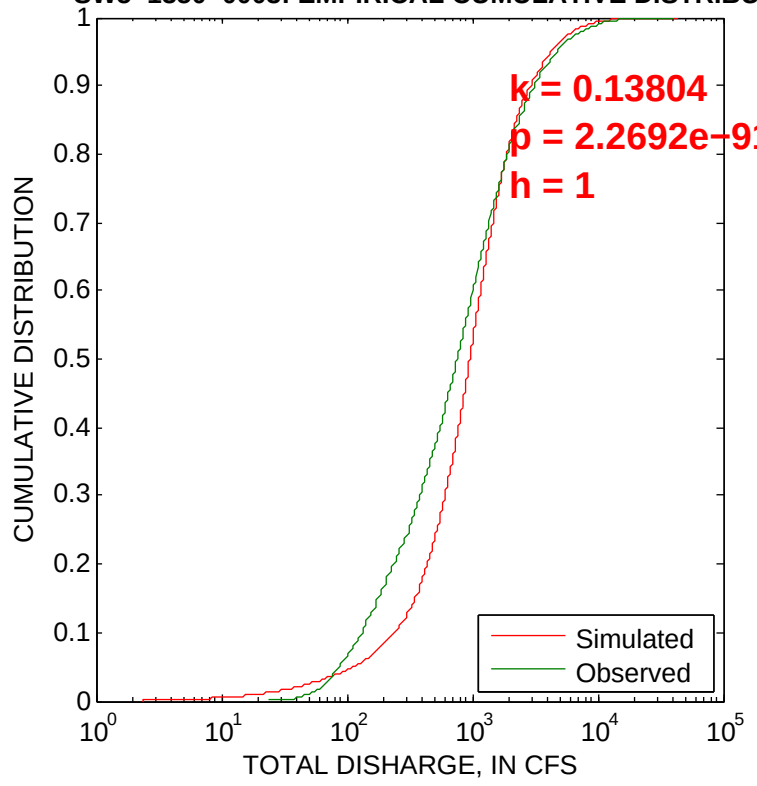












DATA SELECTION

scenario: P620171001WQ | file: FLOW.calib

plot: FLOW - total discharge

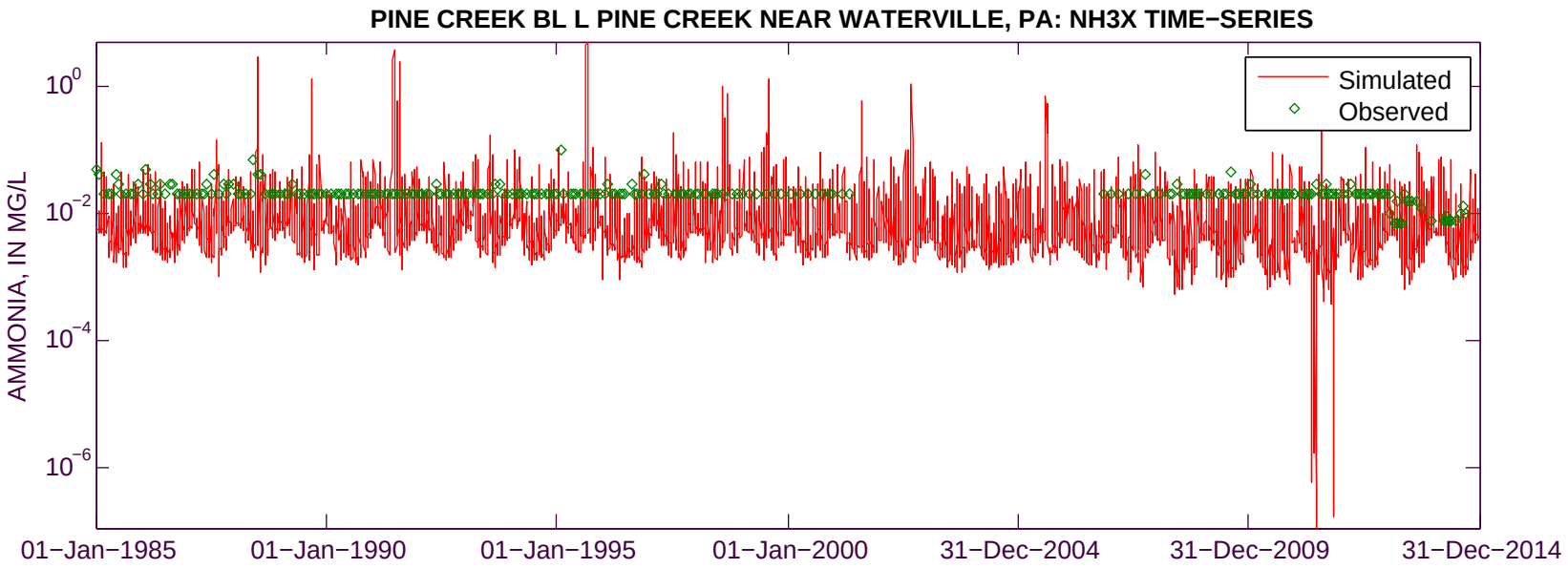
Dates: 1/1/1985 – 12/31/201

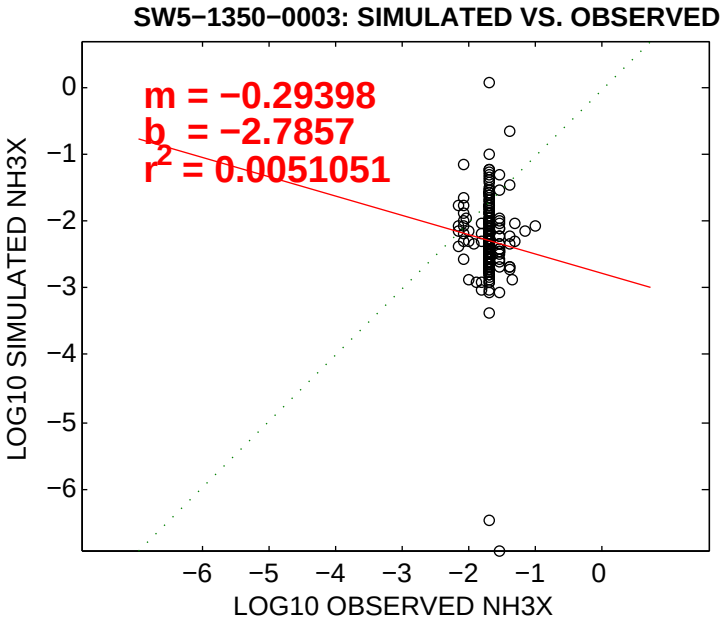
Drive | Directory | Observed: N/A | model | OBS20161101

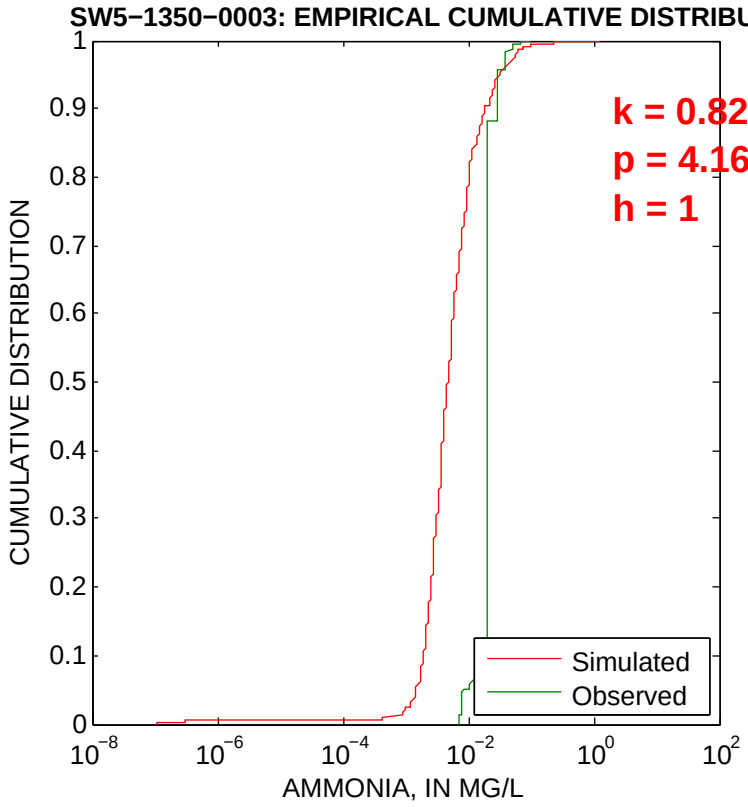
STATISTICS

n	10953	10953
	observe	simulate
min	23	2.4307
	1.36173	0.385731
mean	1391.69	1438.89
	2.84911	2.93809
media	765	963.36
	2.88366	2.98379
max	39700	44744
	4.59879	4.65073
varian	4.25081e+0	3.45077e+
	0.272073	0.232636
JB	0.001	0.001
	0.001	0.001
	ra	log
%	3.3913	3.1233
err.va	1.32834e+0	0.0989199
rel.std.err	0.31249	0.363579
mod.eff	0.68751	0.636421

VERSION 2.1







DATA SELECTION

scenario	file
P620171001WQ	NH3X.calib

plot: NH3X - ammonia

Dates: 1/1/1985 – 12/31/201

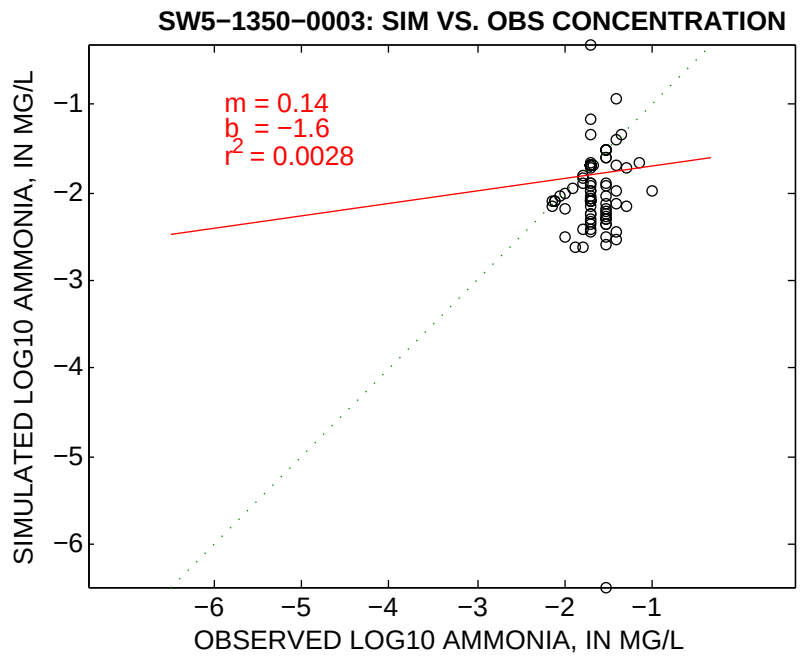
Drive	Directory	Observed
N/A	model	OBS20161101

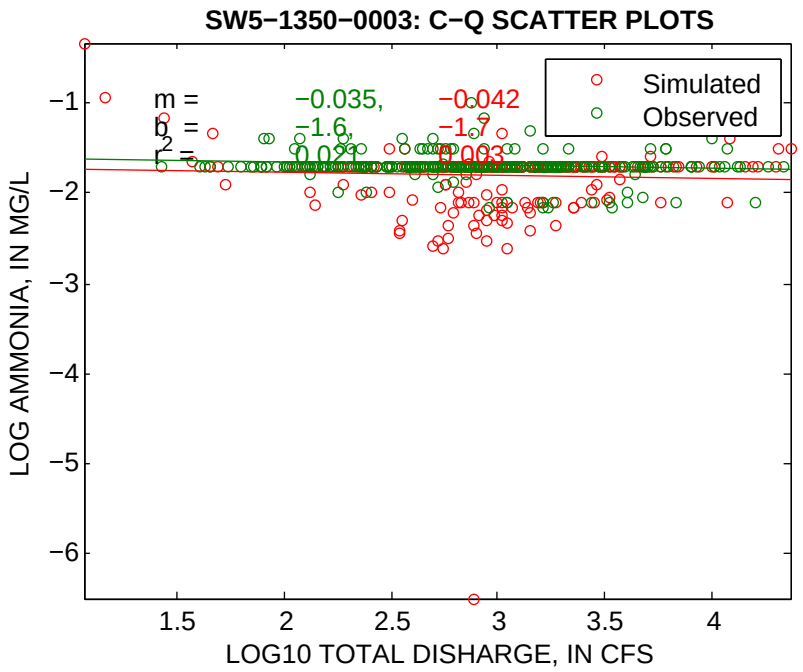
STATISTICS

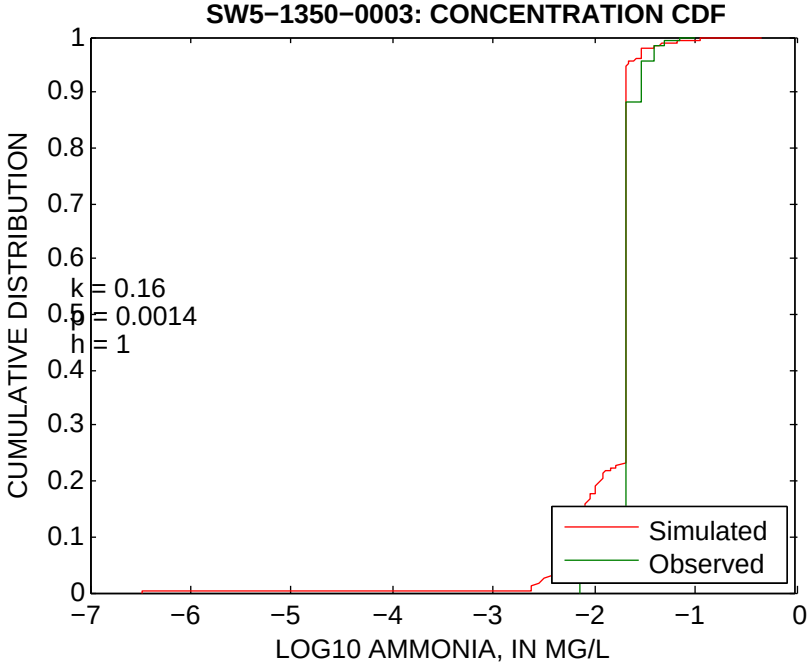
n	286	286
	observe	simulate
min	0.007	1.1154e-07
	-2.1549	-6.95257
mean	0.0211888	0.0138166
	-1.69602	-2.28713
media	0.02	0.00474905
	-1.69897	-2.3234
max	0.1	1.2943
	-1	0.112035
varian	6.49397e-0	0.00607843
	0.0186659	0.316001
JB	0.001	0.001
	0.001	0.001
	ra	log
%	-34.7928	34.8529
err.va	0.00618798	0.696279
rel.std.err	95.2882	37.3023
mod.eff	-94.2882	-36.3023

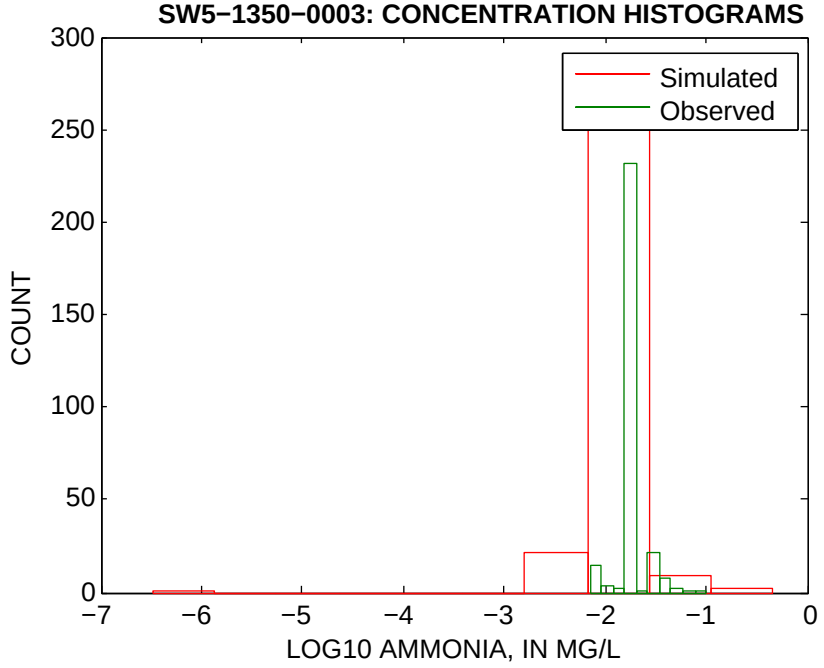
VERSION 2.1

ALL DATA
LOG10

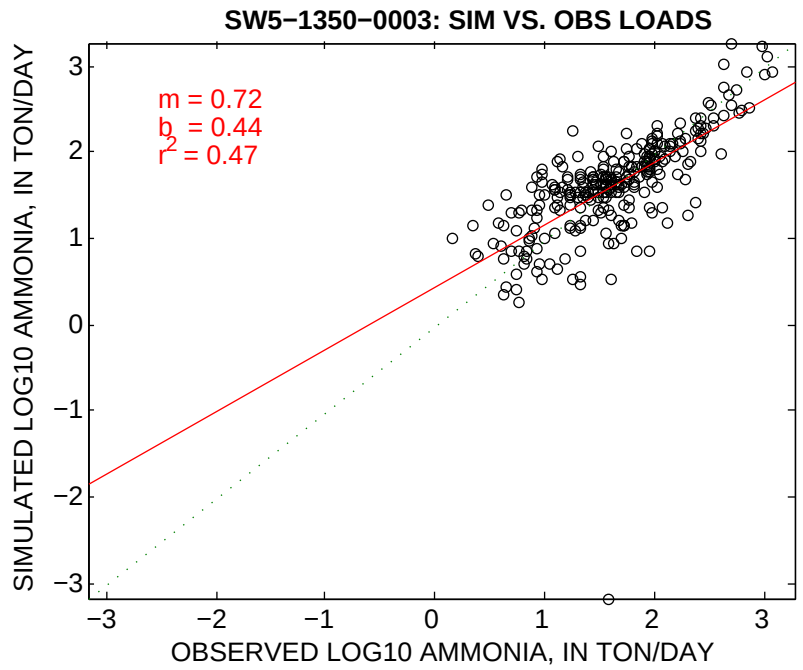


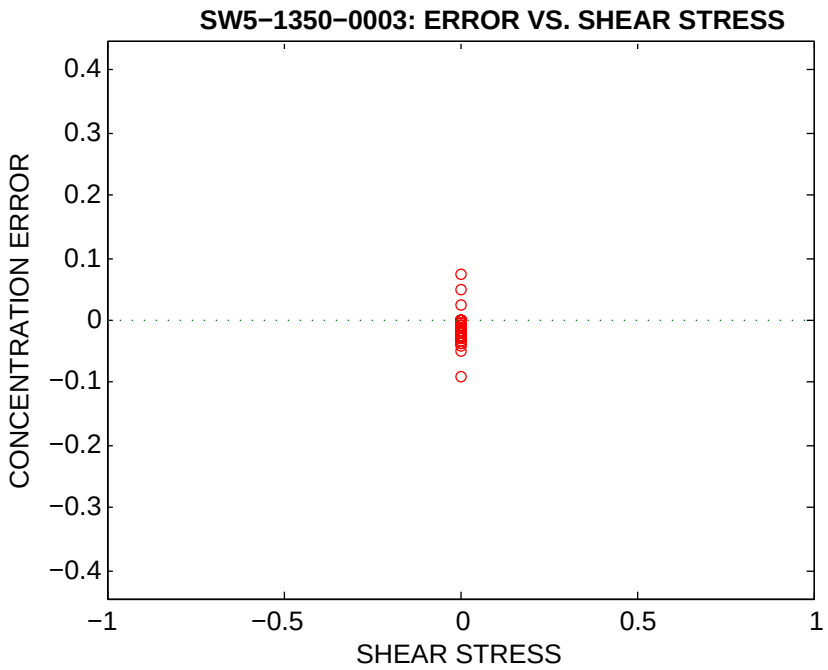


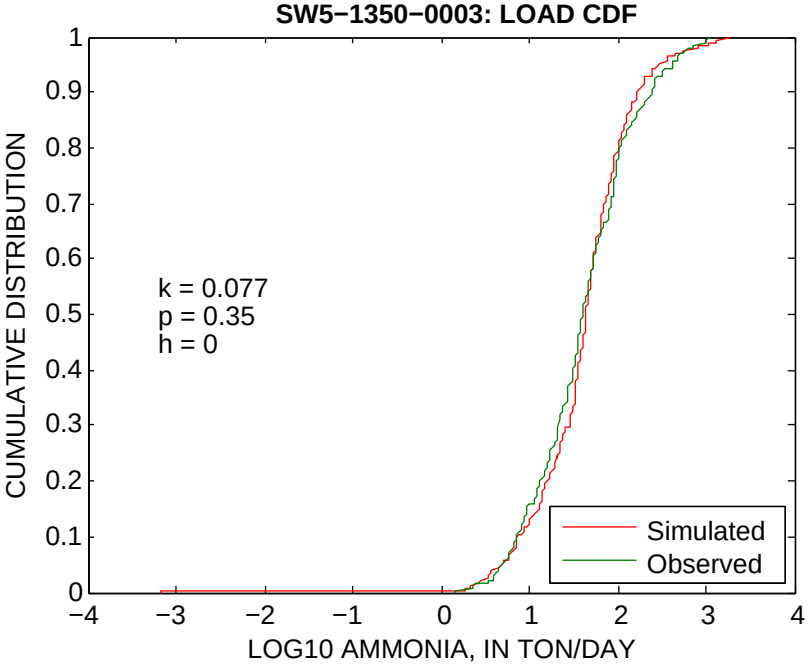


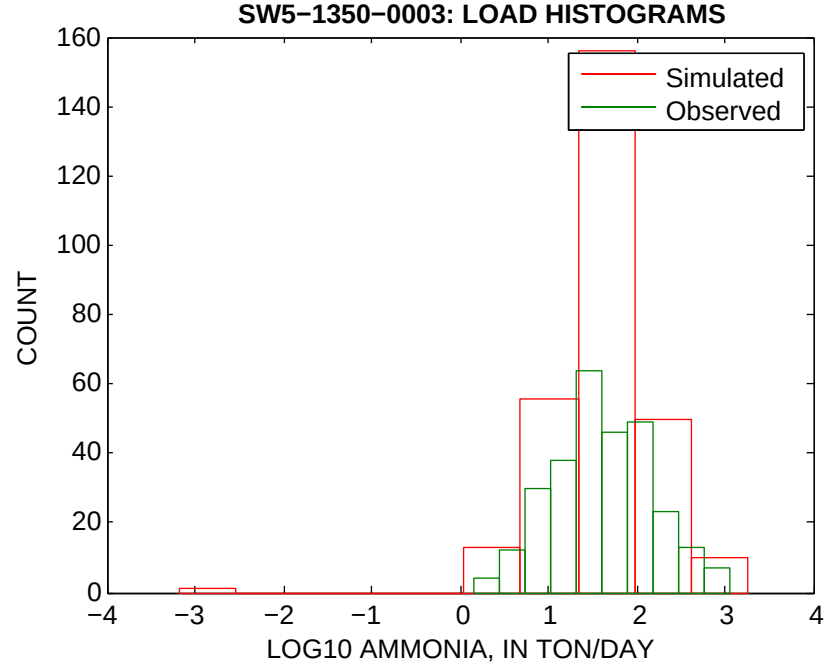


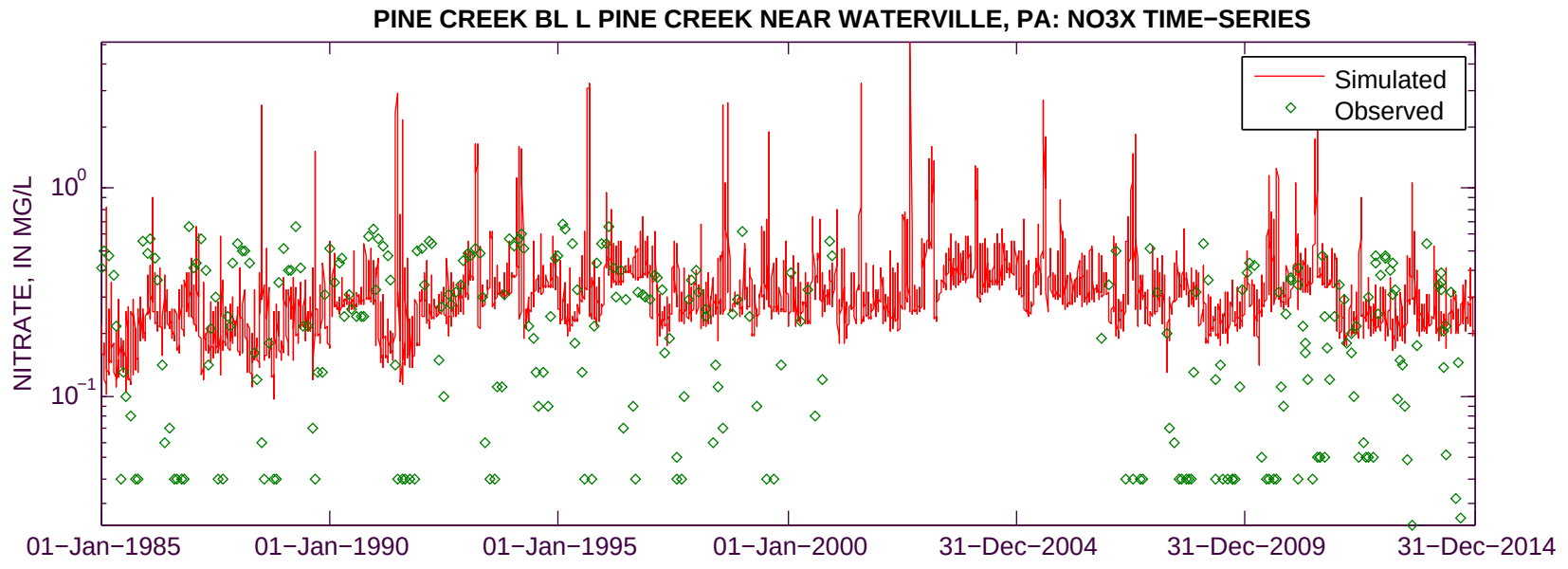
LOAD DATA
LOG10

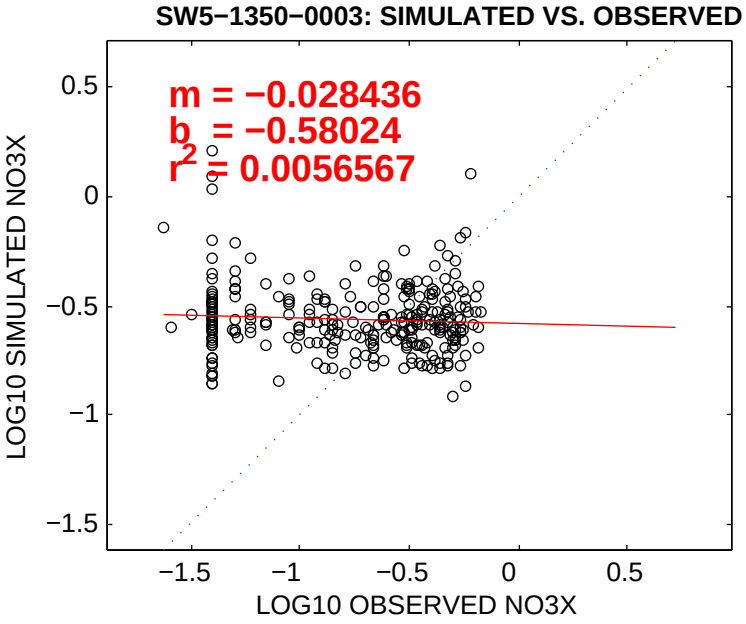


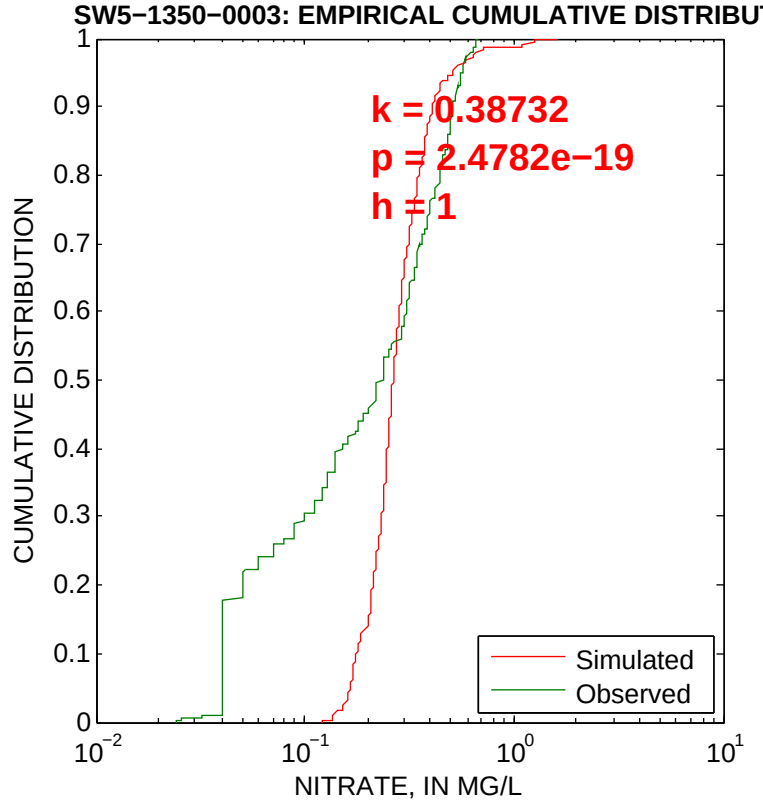












DATA SELECTION

scenario	file
P620171001WQ	NO3X.calib

plot: NO3X - nitrate

Dates: 1/1/1985 – 12/31/201

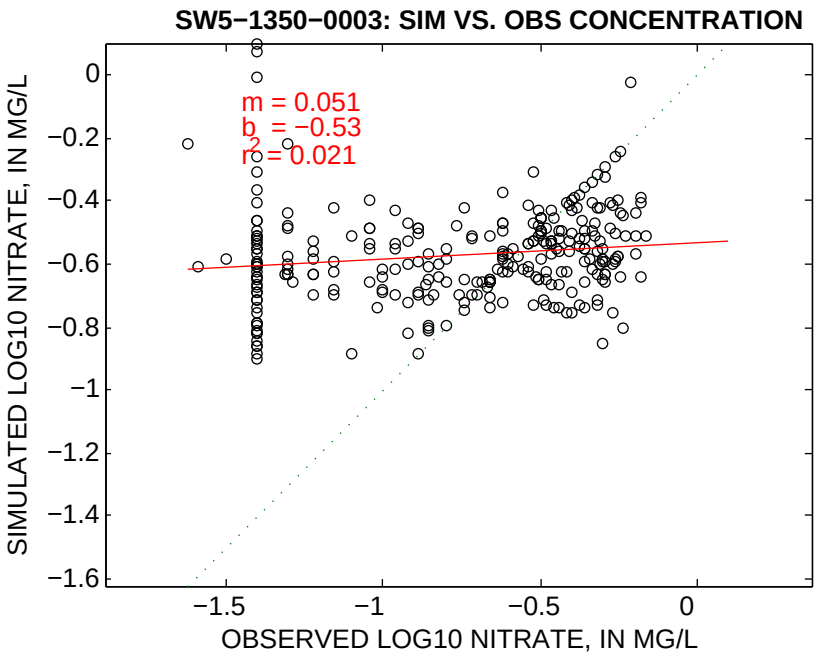
Drive	Directory	Observed
N/A	model	OBS20161101

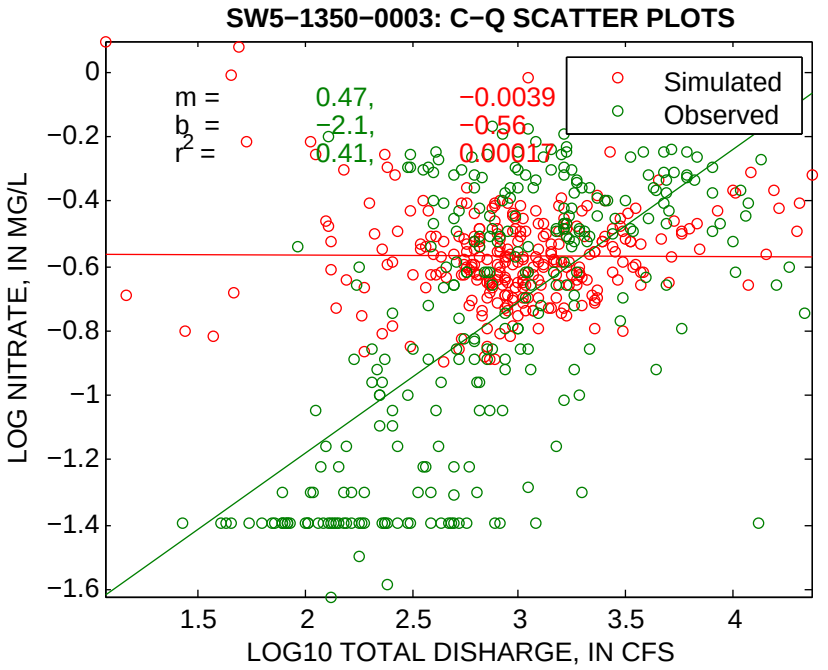
STATISTICS

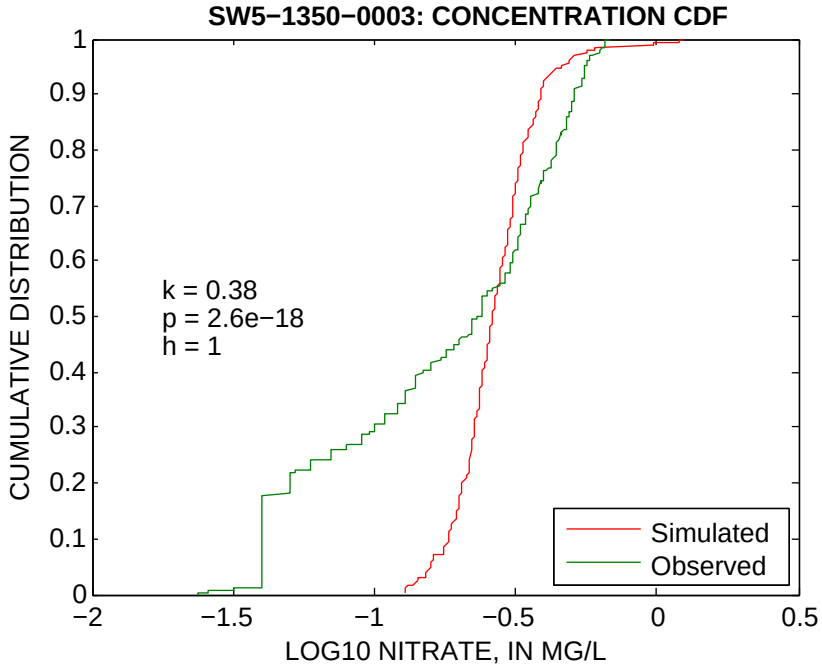
	n	observe	simulate
		284	284
min		0.024	0.12
		-1.61979	-0.920819
mean		0.252514	0.298686
		-0.758426	-0.558677
media		0.235	0.264925
		-0.62903	-0.576877
max		0.68	1.6103
		-0.167491	0.206907
varian		0.0333199	0.0243453
		0.172702	0.0246875
JB		0.001819	0.001
		0.001	0.001
		ra	log
%		18.2849	-26.3373
err.va		0.0617785	0.247252
rel.std.err		1.8541	1.43167
mod.eff		-0.854103	-0.43167

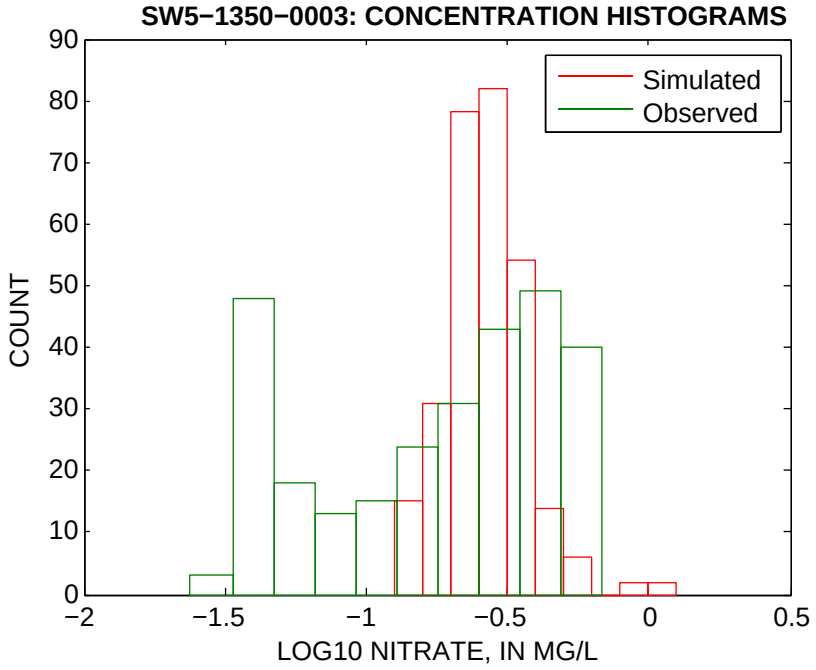
VERSION 2.1

ALL DATA
LOG10

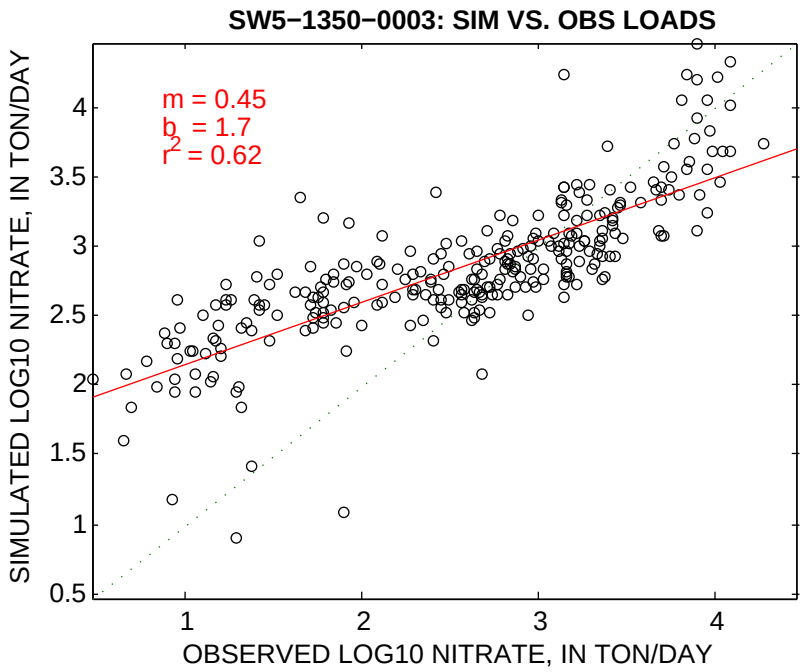




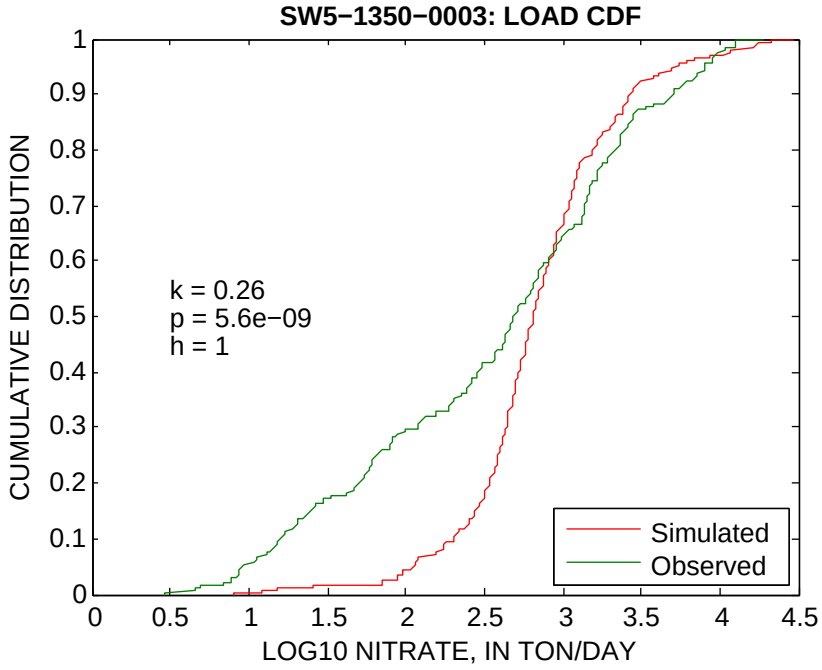


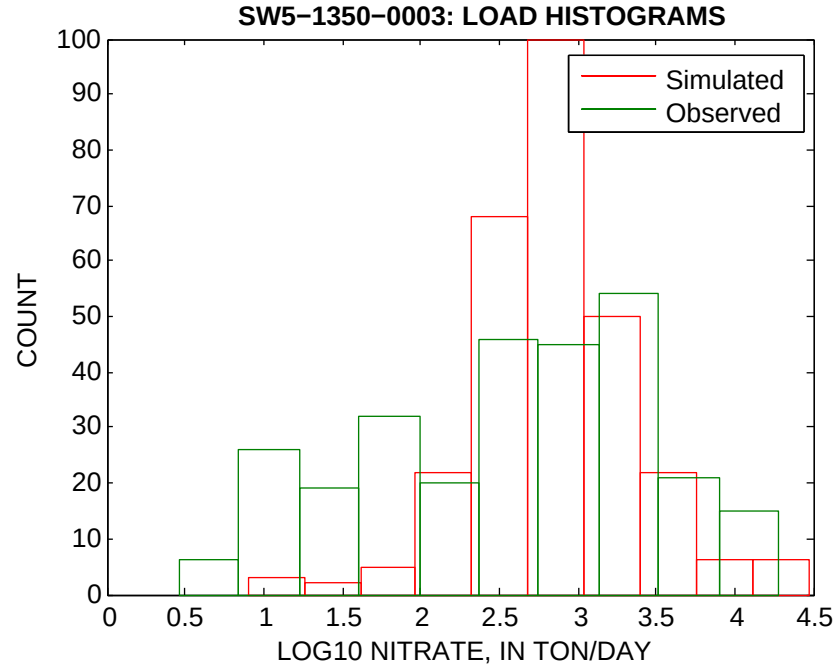


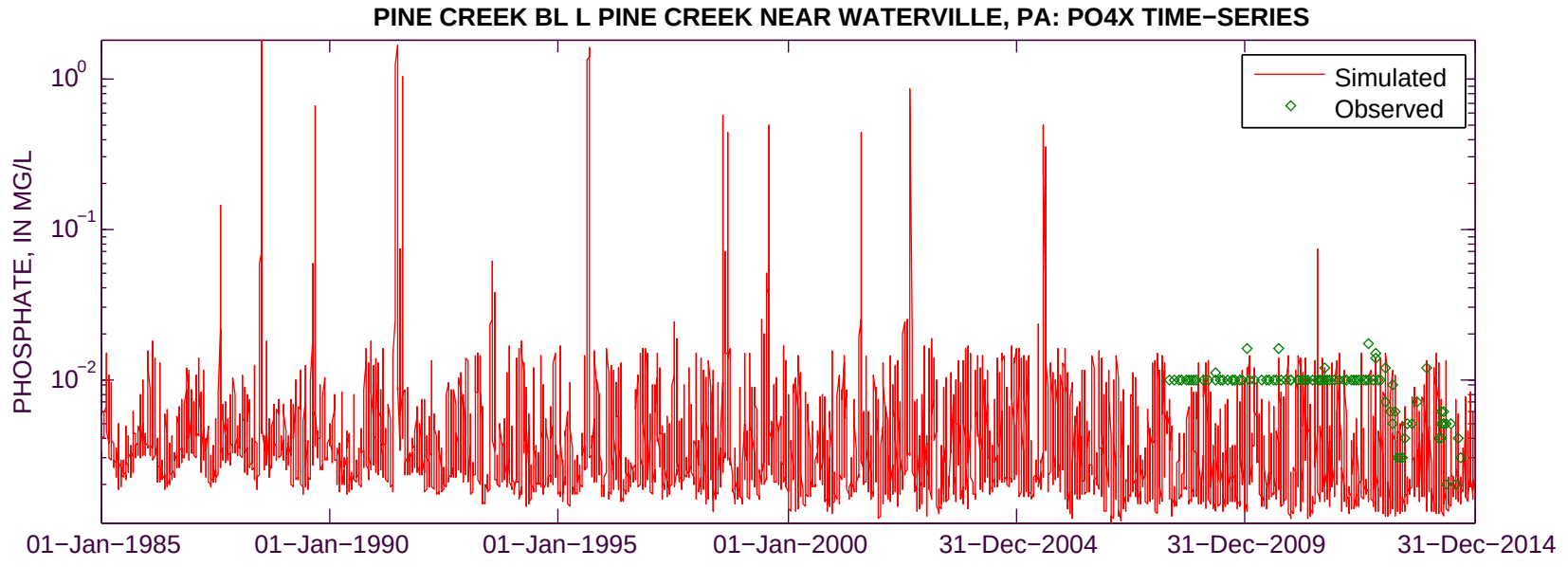
LOAD DATA
LOG10

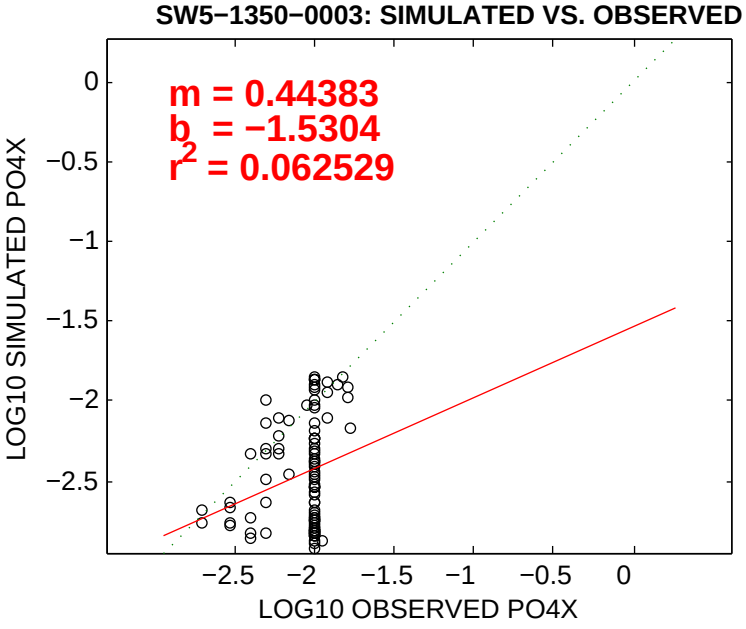


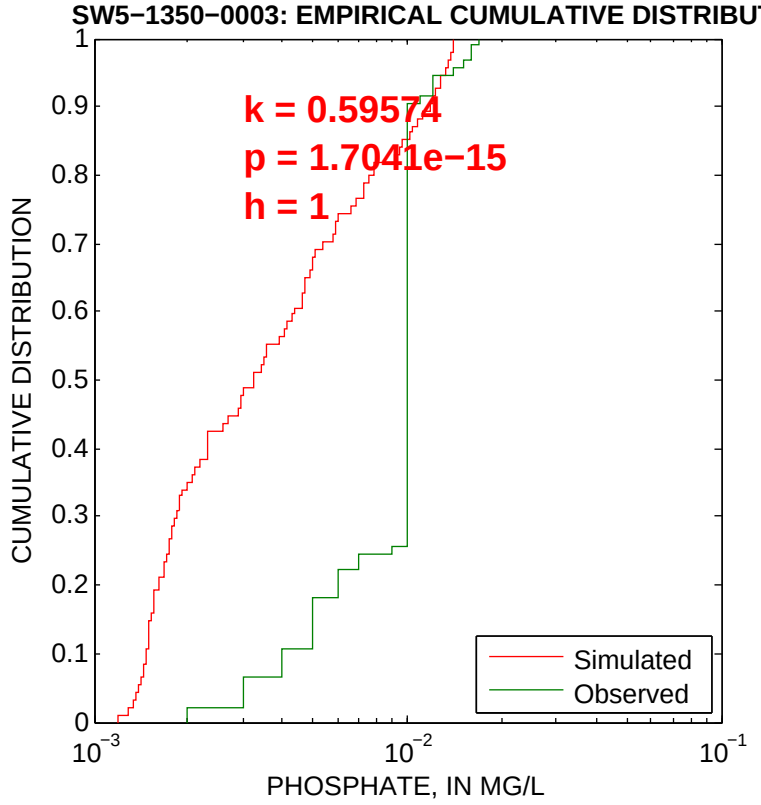












DATA SELECTION

scenario: P620171001WQ | file: PO4X.calib

plot: PO4X - phosphate

Dates: 1/1/1985 – 12/31/201

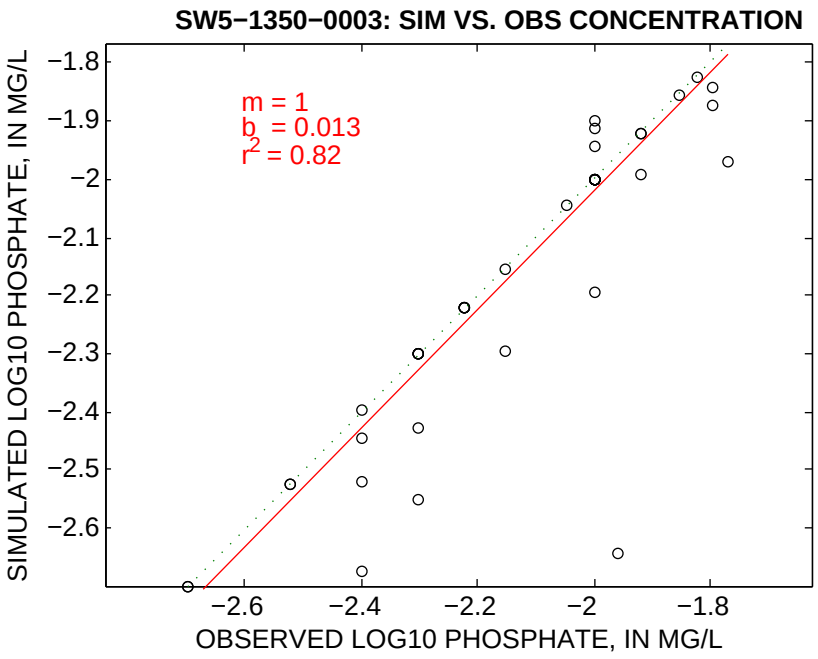
Drive: N/A | Directory: model | Observed: OBS20161101

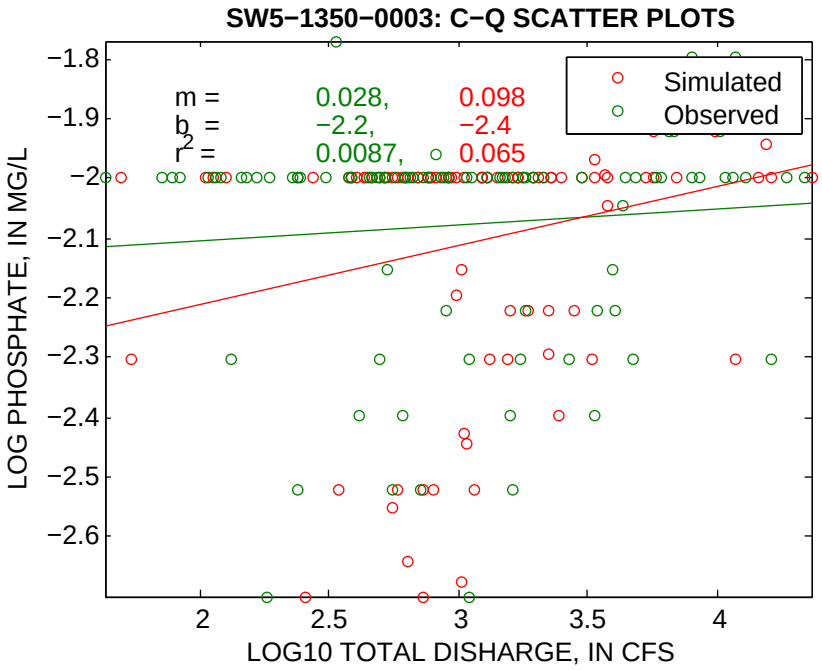
STATISTICS

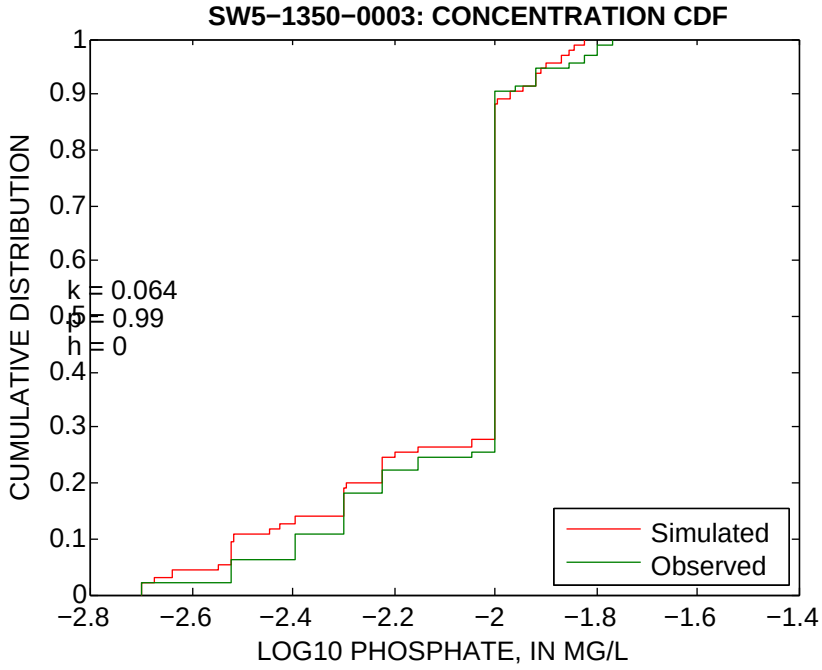
		observe	simulate
n		94	94
min		0.002	0.0011881
		-2.69897	-2.92515
mean		0.00903191	0.00474787
		-2.07651	-2.45204
media		0.01	0.00323935
		-2	-2.48955
max		0.017	0.014101
		-1.76955	-1.85075
varian		8.74091e-0	1.46114e-0
		0.0348878	0.109908
JB	☑	0.065066	0.003243
		0.001	0.026516
		ra	log
%		-47.4323	18.0849
err.va		3.4314e-05	0.256369
rel.std.err		3.92568	7.34839
mod.eff		-2.92568	-6.34839

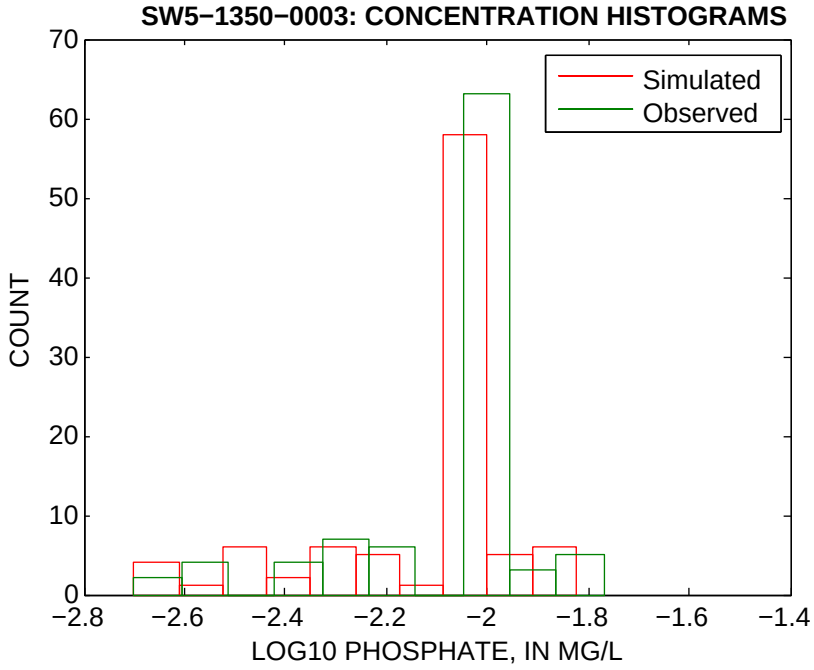
VERSION 2.1

ALL DATA
LOG10

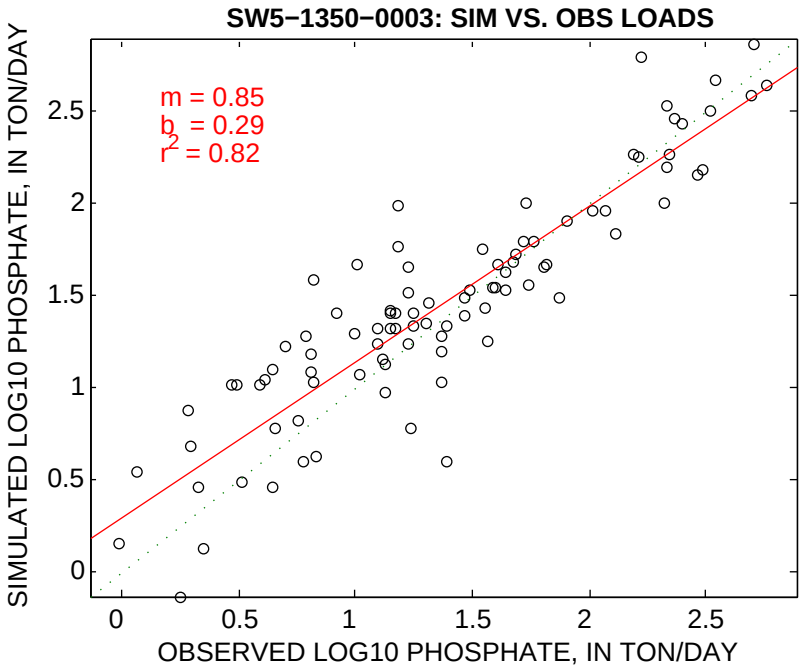




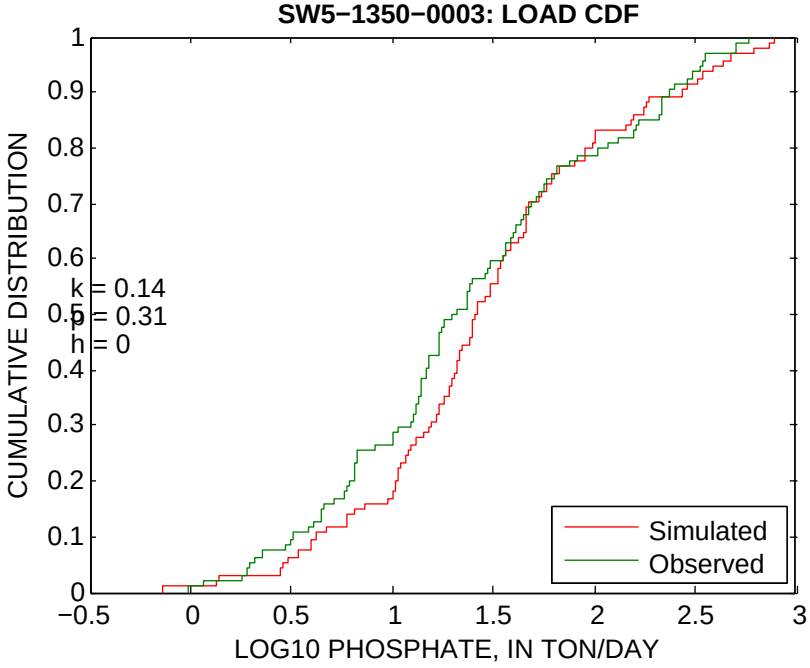


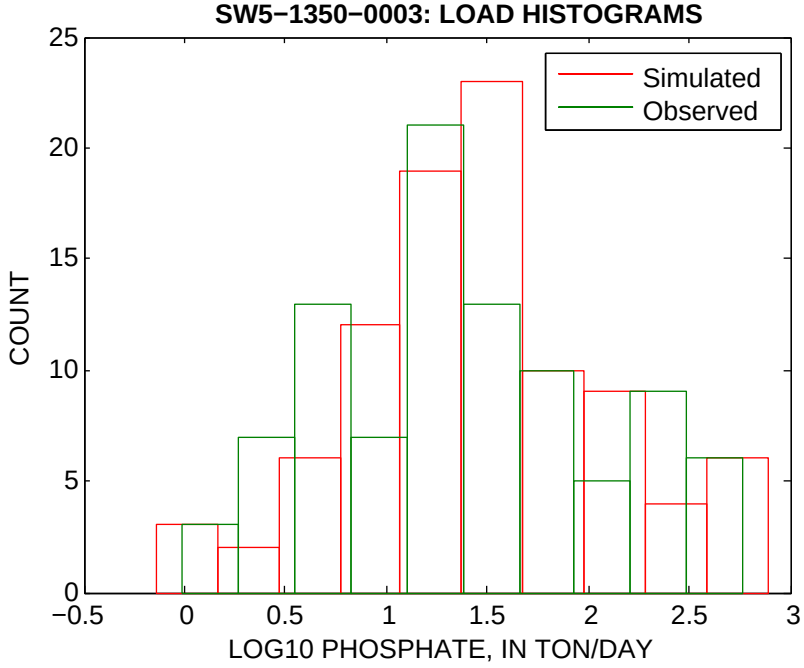


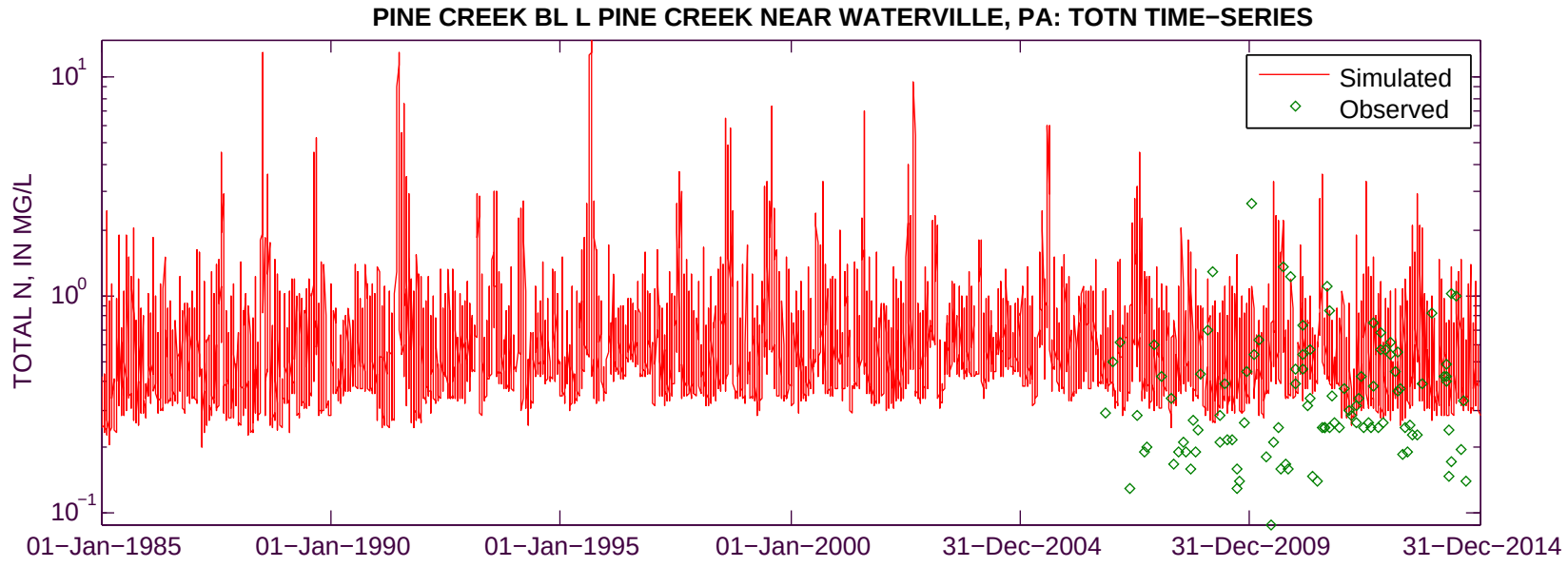
LOAD DATA
LOG10

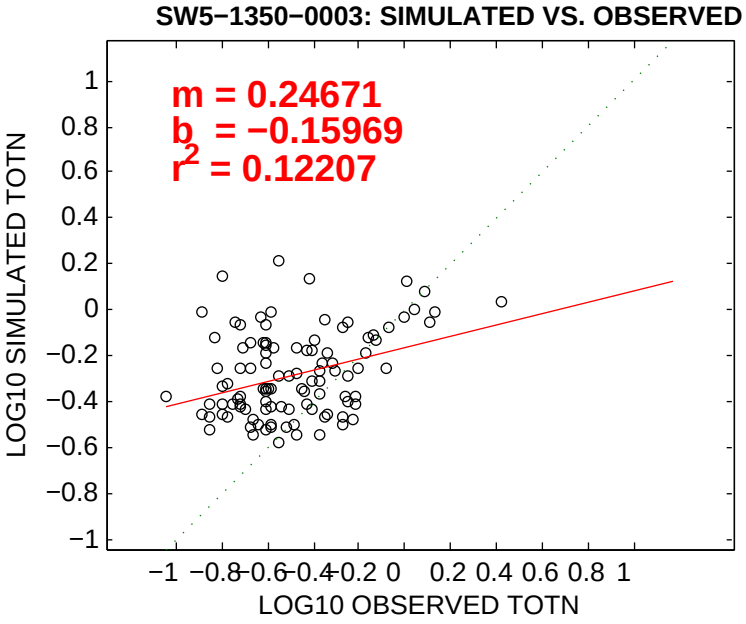


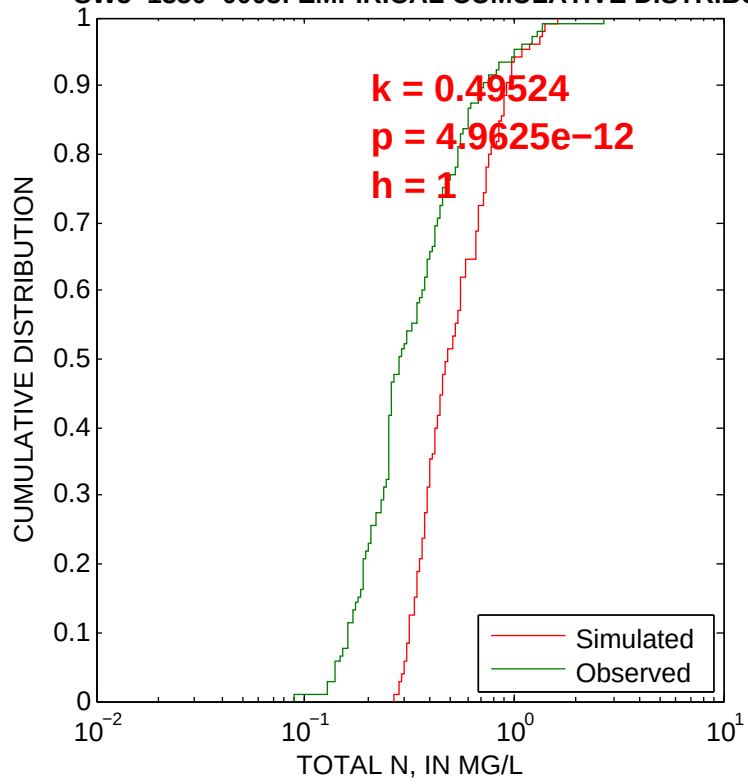












DATA SELECTION

scenario	file
P620171001WQ	TOTN.calib

plot: TOTN - total nitrogen

Dates: 1/1/1985 – 12/31/201

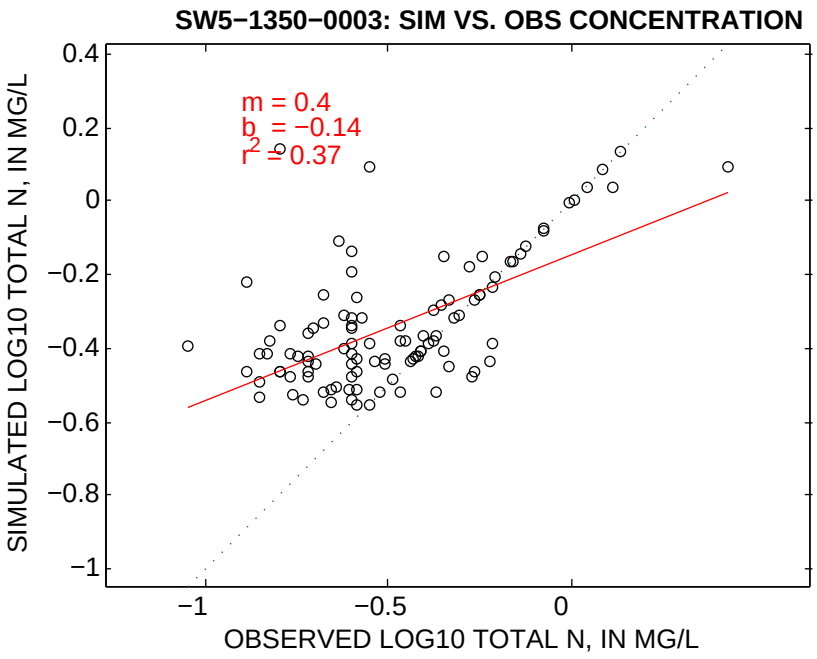
Drive	Directory	Observed
N/A	model	OBS20161101

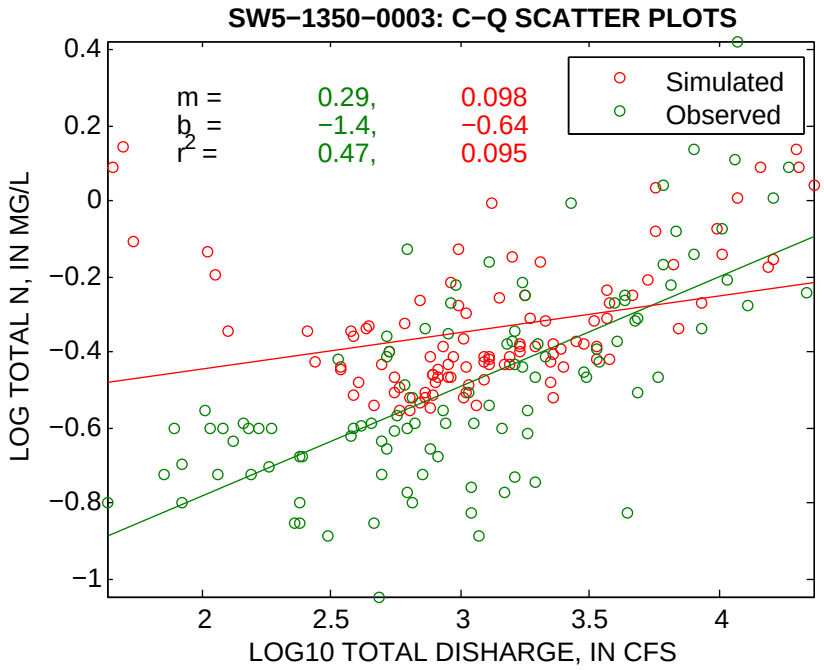
STATISTICS

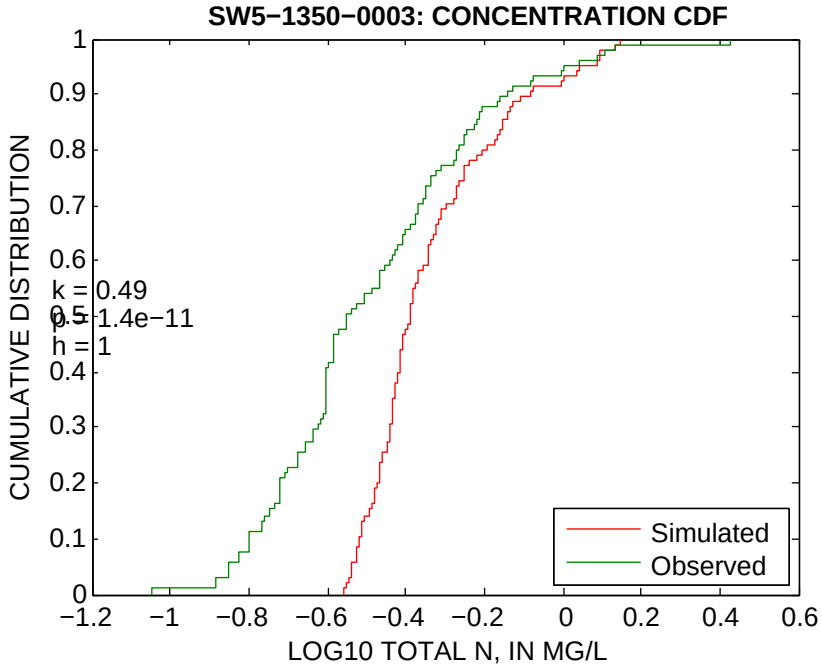
	n	105	105
		observe	simulate
min		0.09	0.26508
		-1.04576	-0.576623
mean		0.404076	0.578848
		-0.484497	-0.279222
media		0.28	0.48656
		-0.552842	-0.312864
max		2.66	1.6207
		0.424882	0.209703
varian		0.114686	0.0767462
		0.0691576	0.0344812
JB		0.001	0.001
		0.016844	0.039551
		ra	log
%		43.2523	-42.3686
err.va		0.147155	0.112059
rel.std.err		1.28311	1.62034
mod.eff		-0.283109	-0.620335

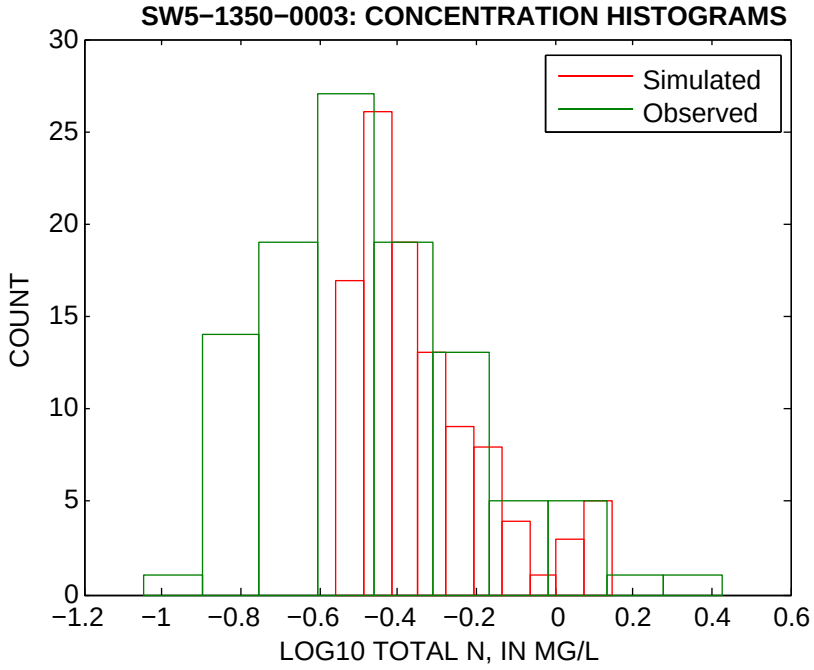
VERSION 2.1

ALL DATA
LOG10

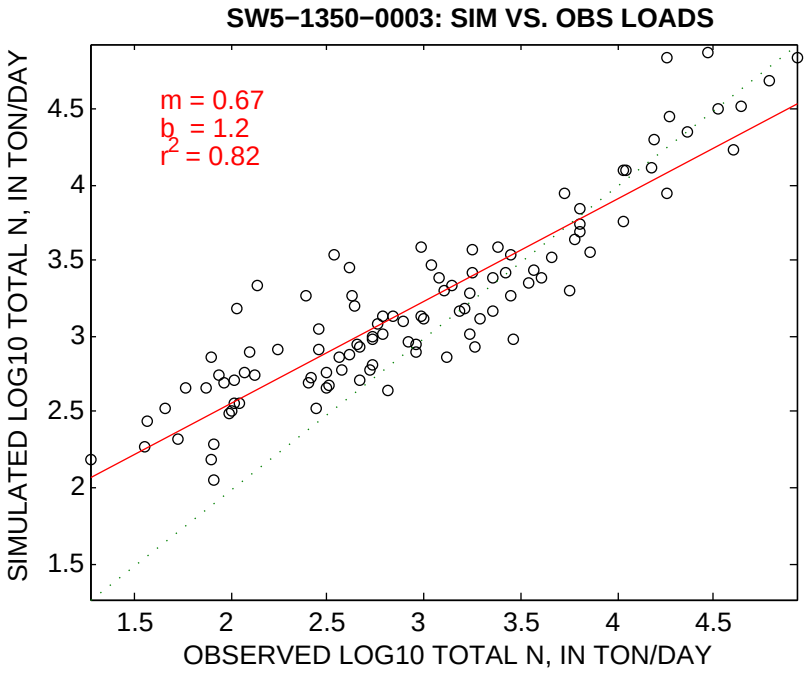


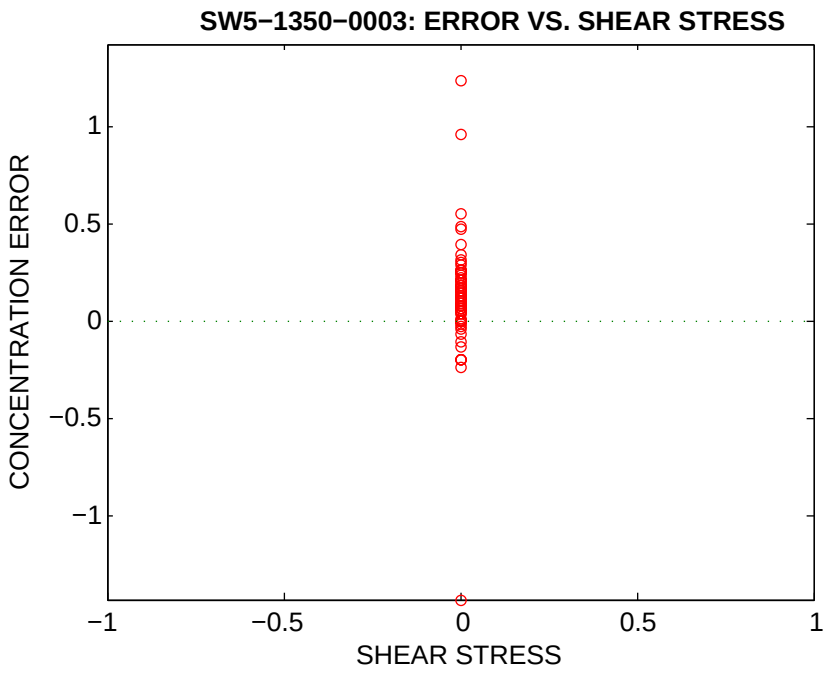


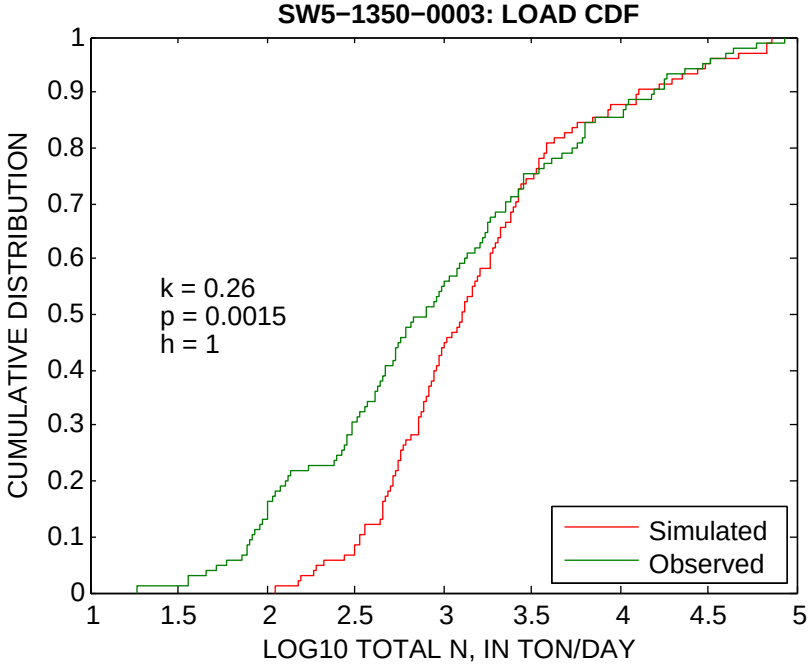


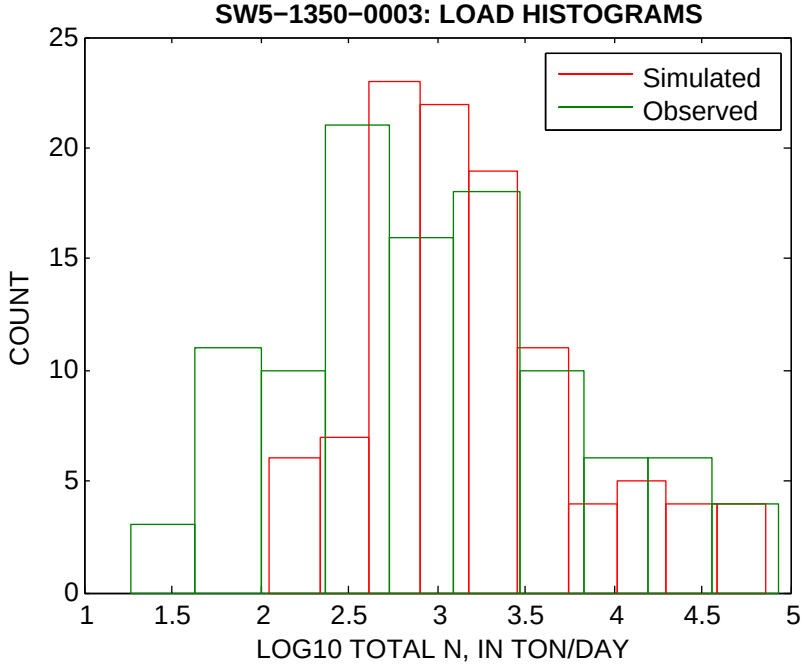


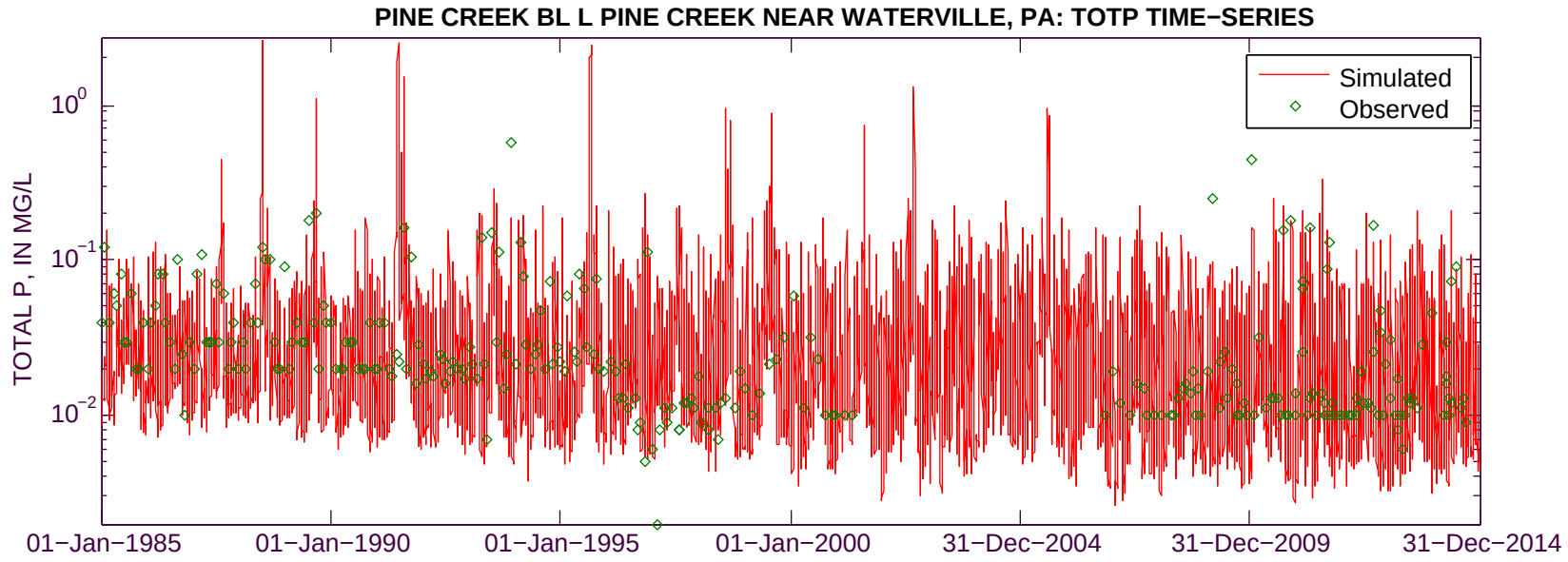
LOAD DATA
LOG10

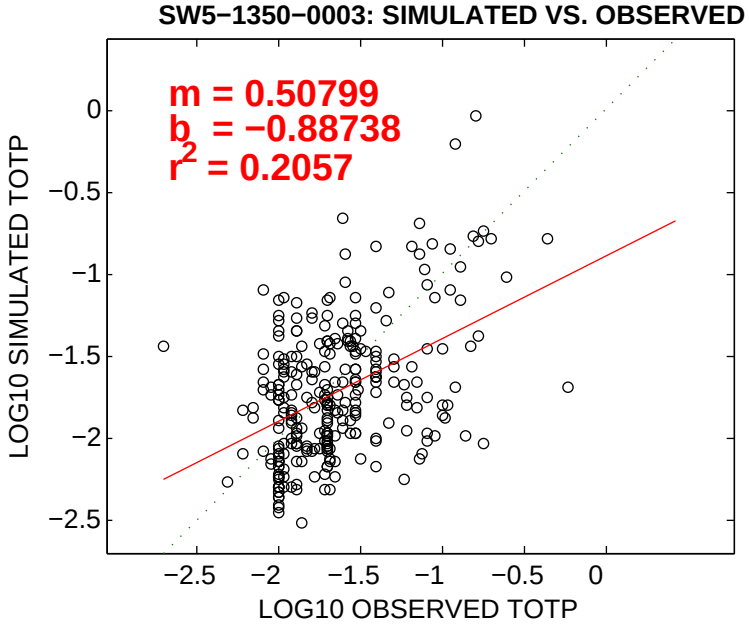


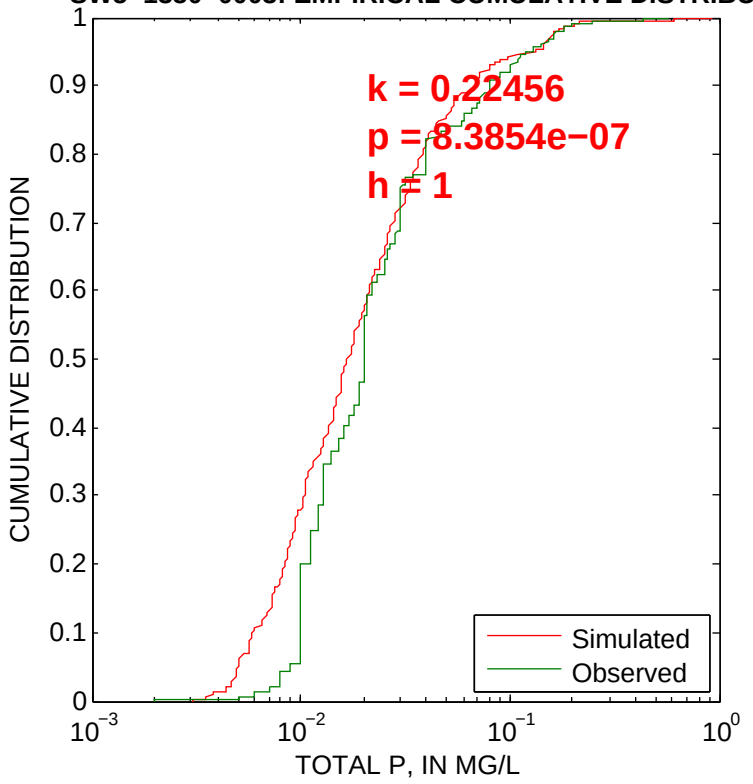












DATA SELECTION

scenario	file
P620171001WQ	TOTP.calib

plot: TOTP - total phosphorus

Dates: 1/1/1985 – 12/31/201

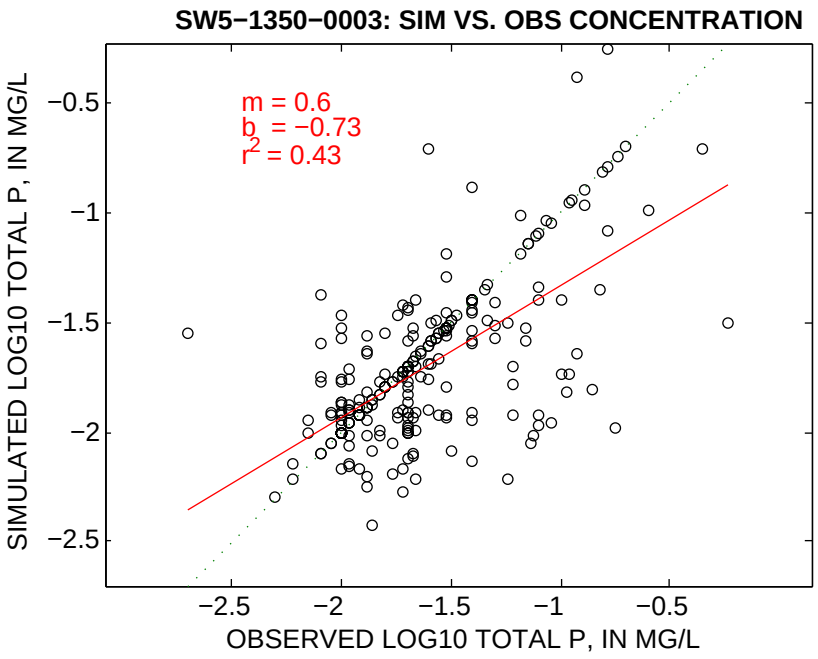
Drive	Directory	Observed
N/A	model	OBS20161101

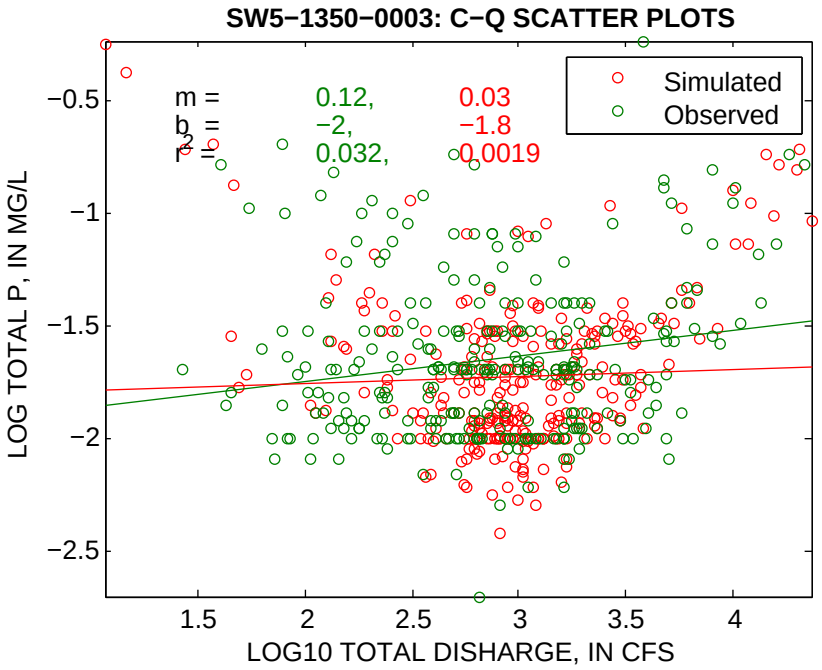
STATISTICS

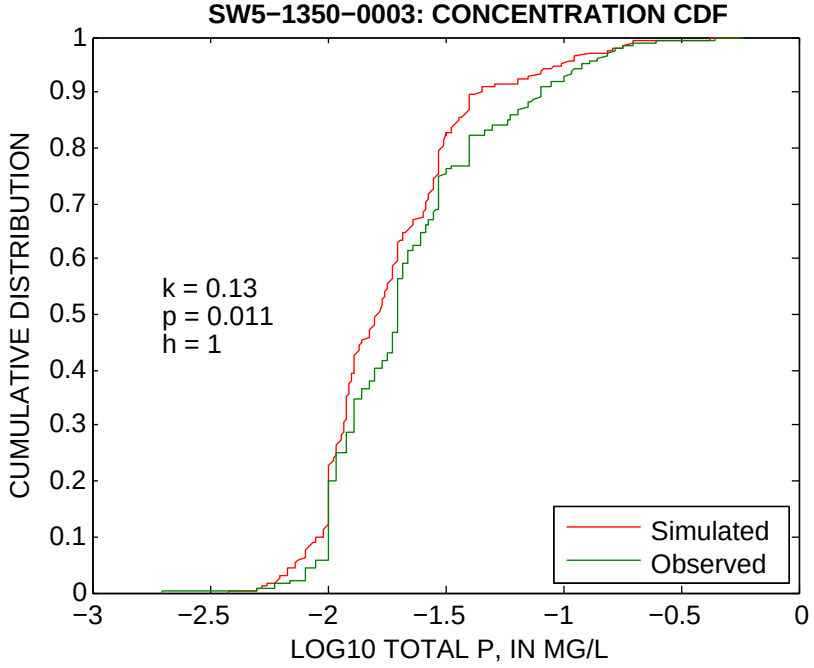
	n	285	285
		observe	simulate
min		0.002	0.003052
		-2.69897	-2.51542
mean		0.035814	0.034158
		-1.6469	-1.724
media		0.02	0.017027
		-1.69897	-1.76886
max		0.58	0.9319
		-0.236572	-0.0306307
varian		0.00298706	0.00528292
		0.134525	0.168764
JB		0.001	0.001
		0.001	0.001
		ra	log
%		-4.62398	4.68148
err.va		0.00560089	0.172579
rel.std.err		1.87505	1.28288
mod.eff		-0.875051	-0.282878

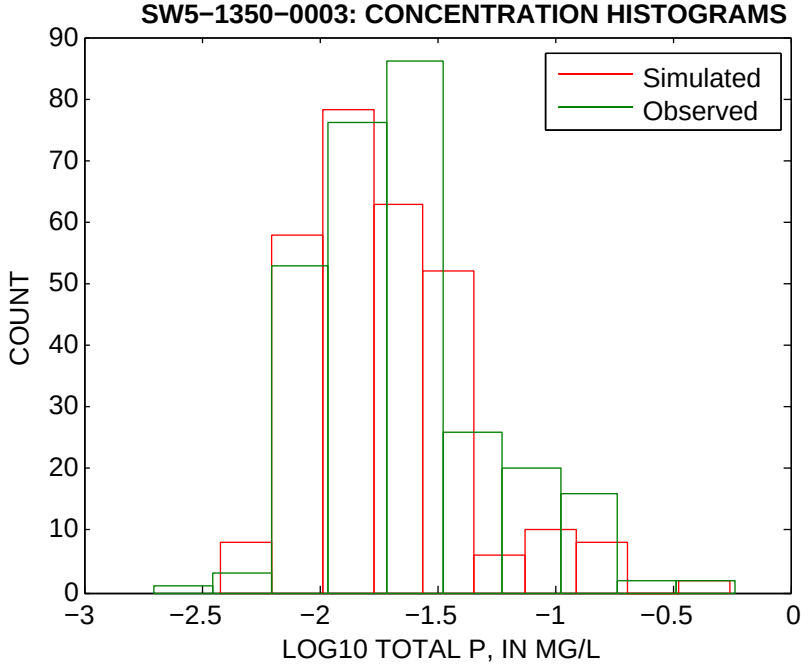
VERSION 2.1

ALL DATA
LOG10

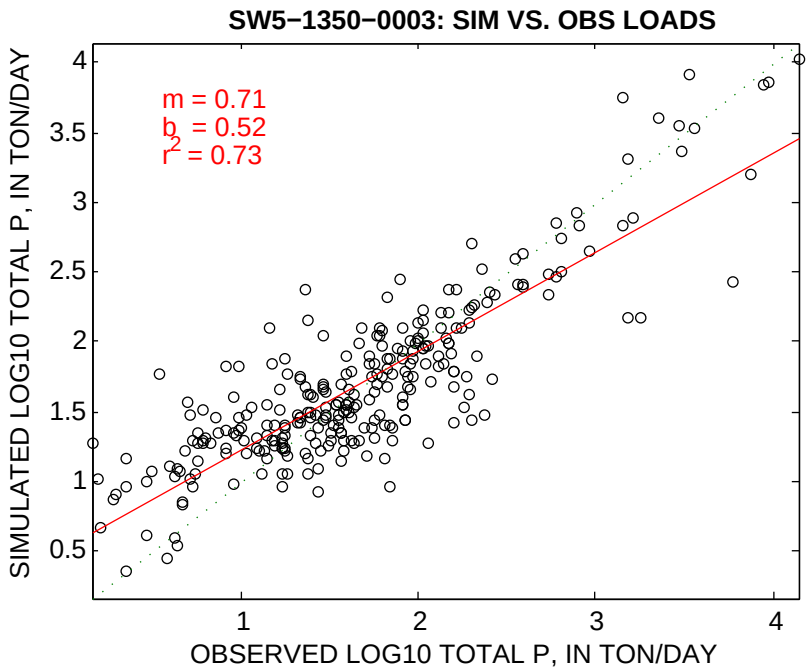




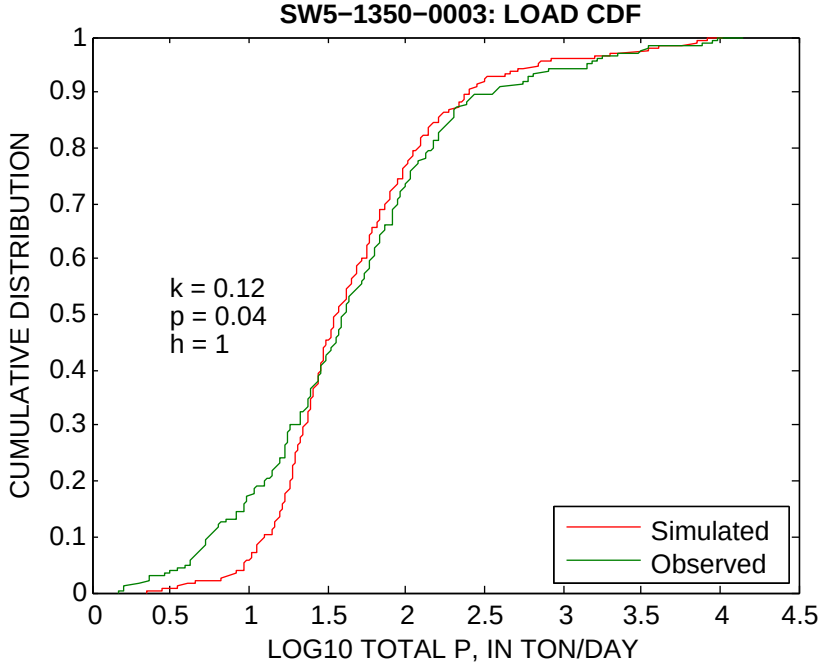


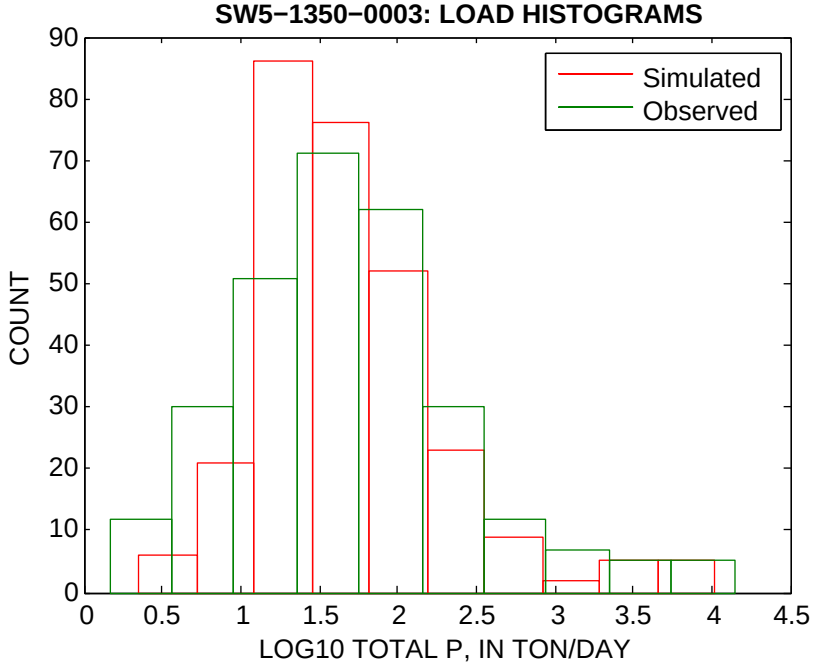


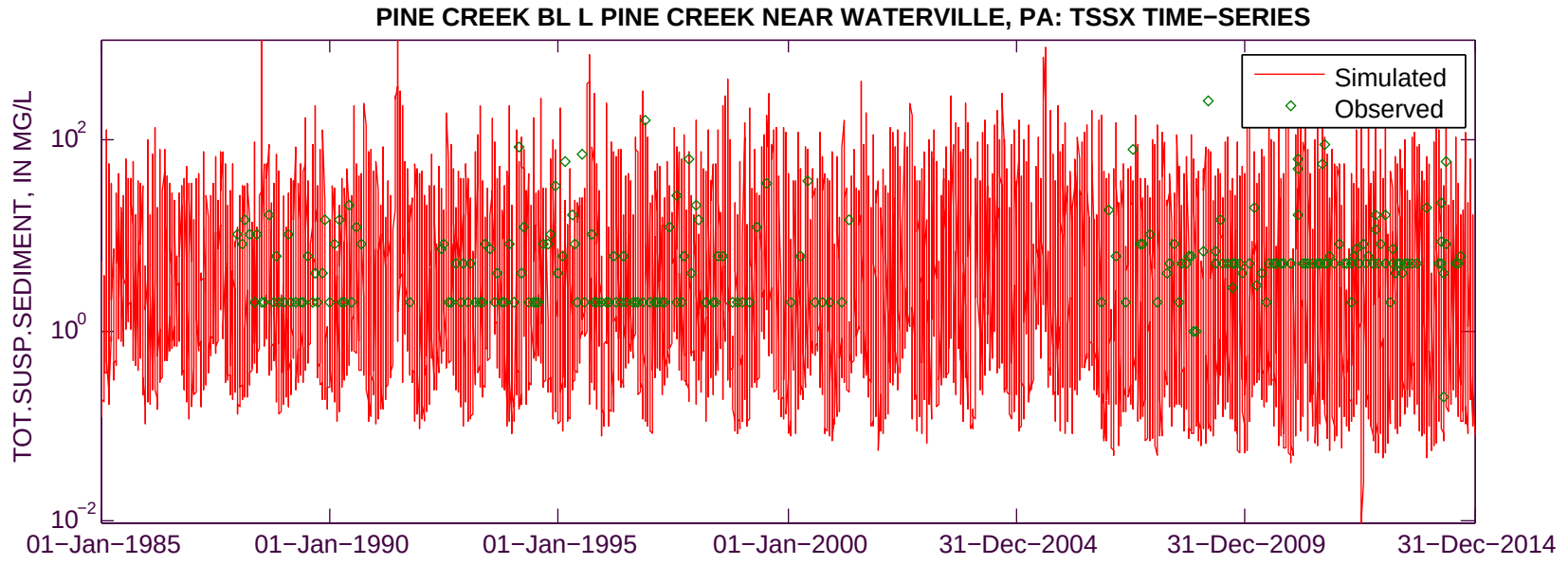
LOAD DATA
LOG10

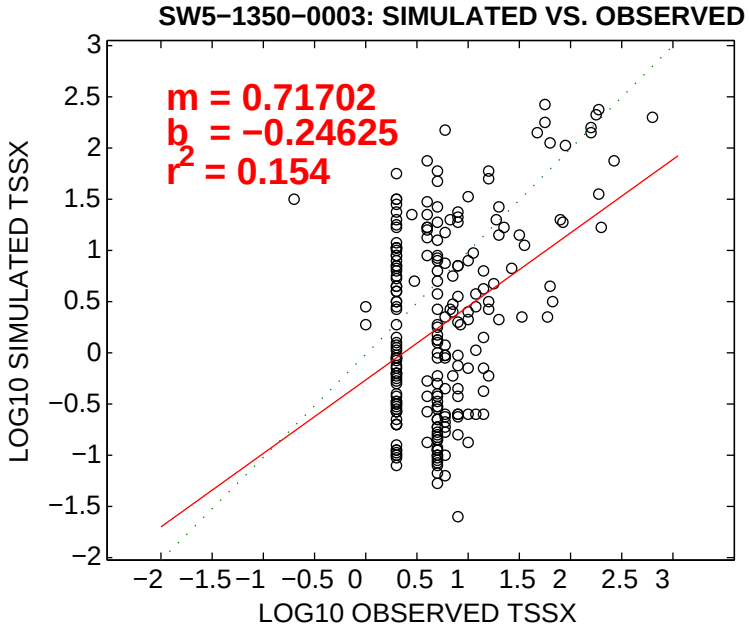


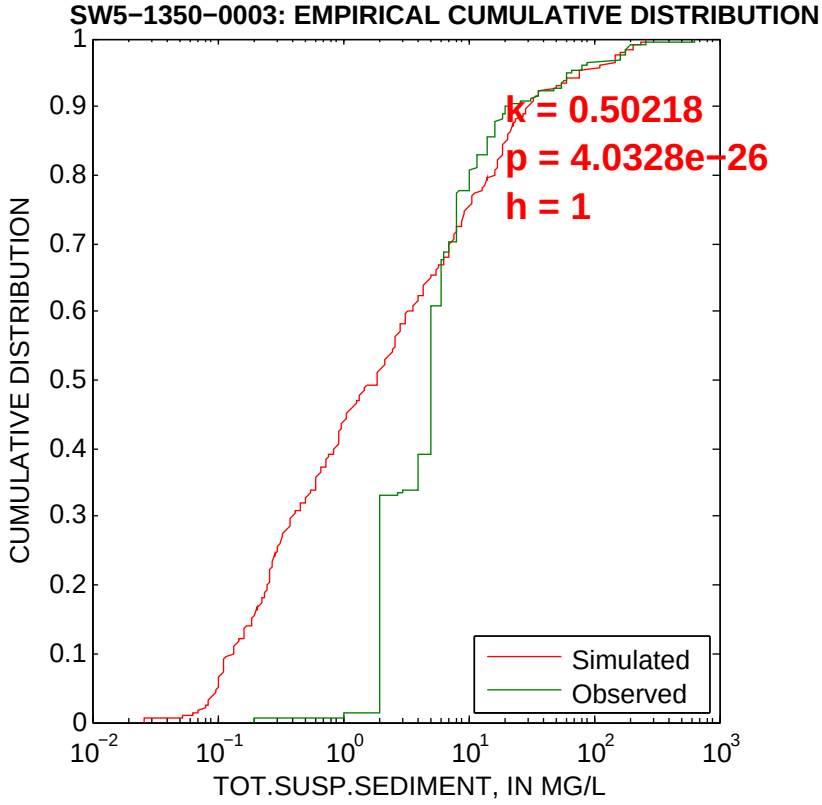












DATA SELECTION

scenario: P620171001WQ | file: TSSX.calib

plot: TSSX - total suspended ...

Dates: 1/1/1985 | 12/31/201

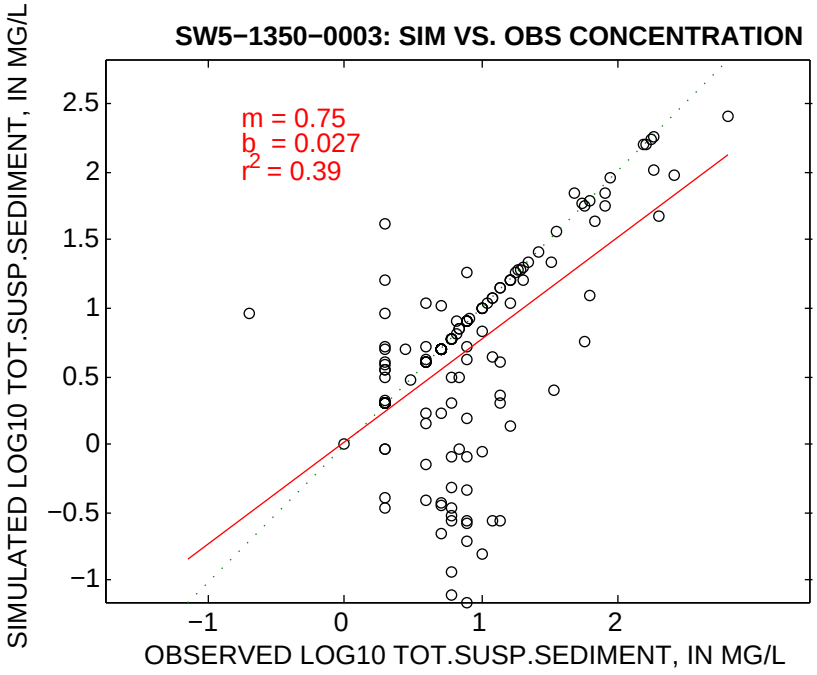
Drive | Directory | Observed: N/A | model | OBS20161101

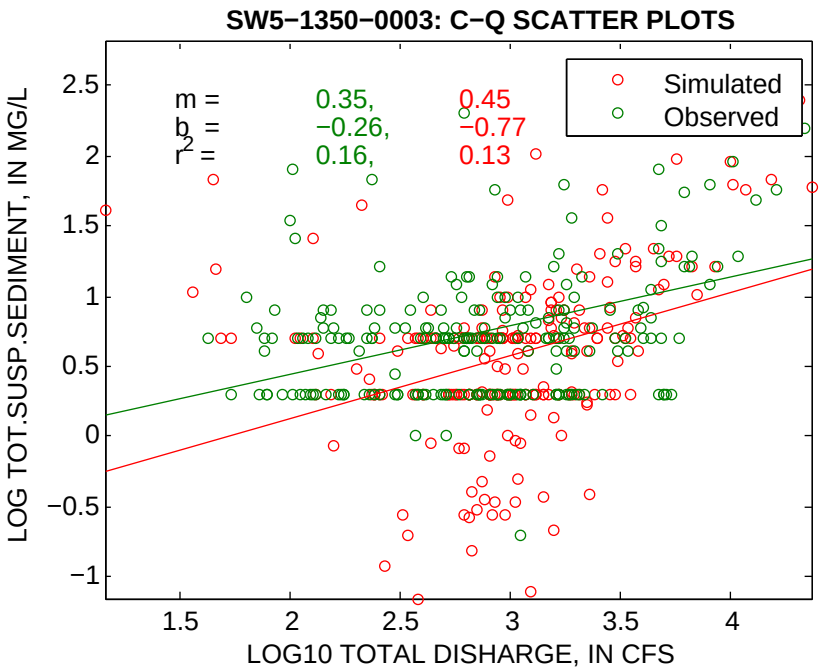
STATISTICS

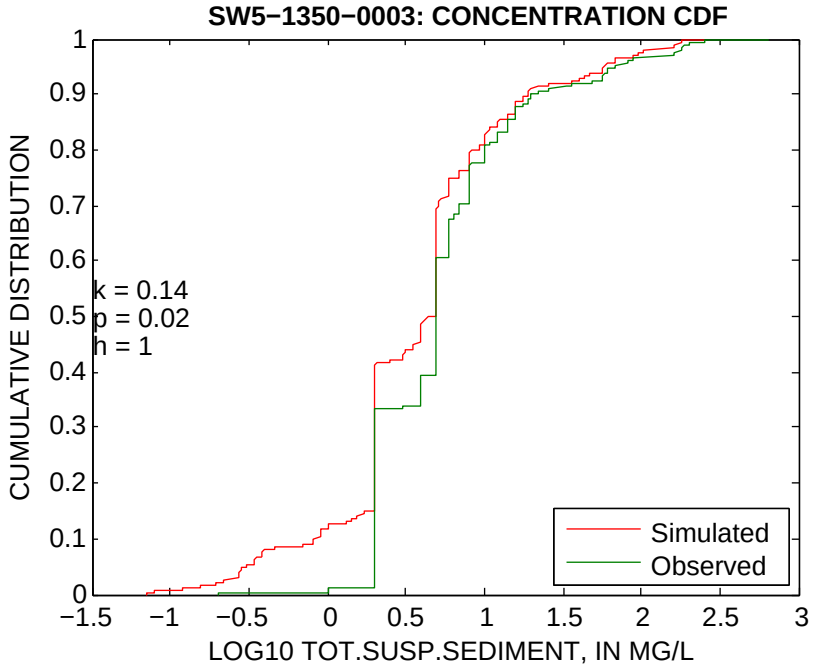
n	229	229
	observe	simulate
min	0.2	0.026254
	-0.69897	-1.5808
mean	16.981	15.1727
	0.75267	0.293429
media	5	1.9073
	0.69897	0.280419
max	644	265.06
	2.80889	2.42334
varian	2916.66	1561.22
	0.253427	0.846061
JB	0.001	0.001
	0.001	0.016343
	ra	log
%	-10.6493	-61.0149
err.va	1874.44	0.947889
rel.std.err	0.642665	3.74028
mod.eff	0.357335	-2.74028

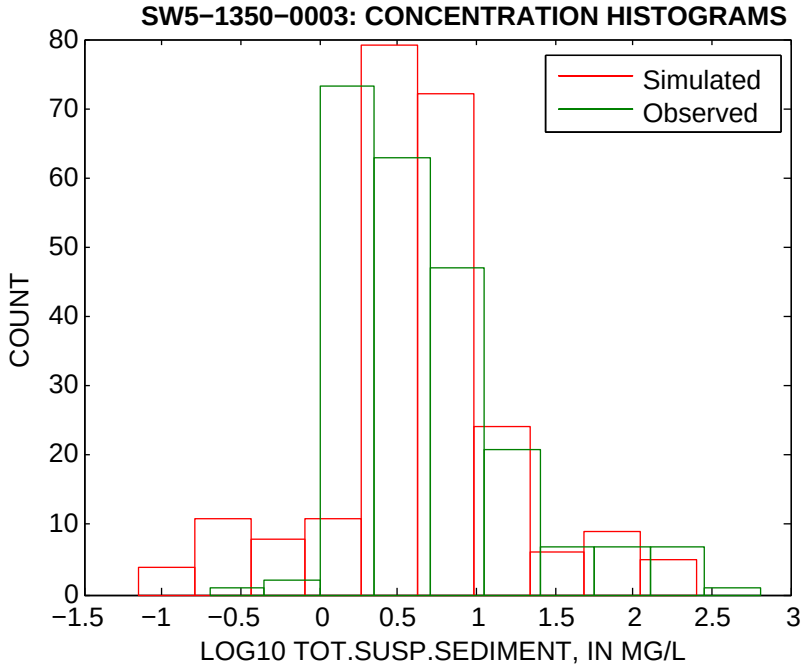
VERSION 2.1

ALL DATA
LOG10

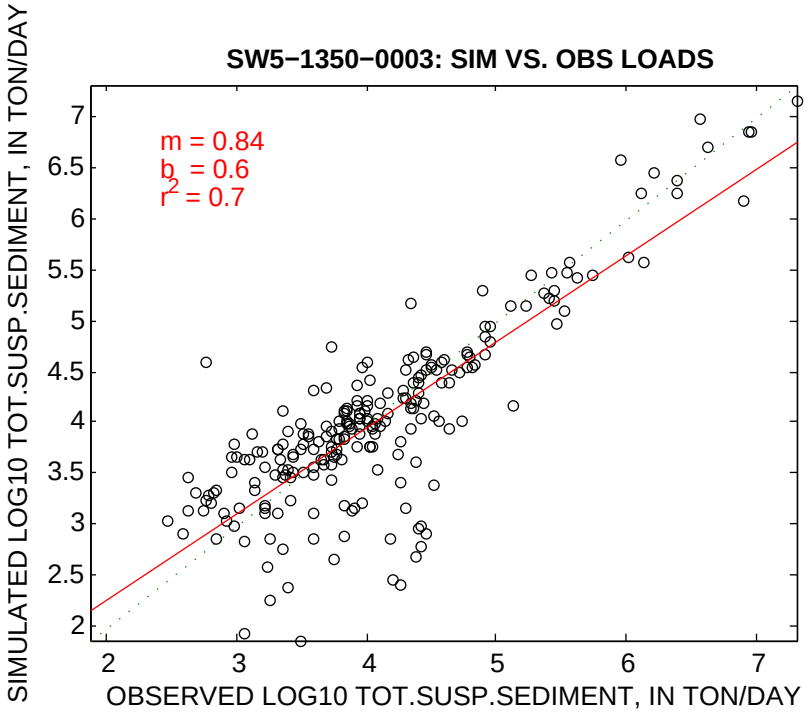


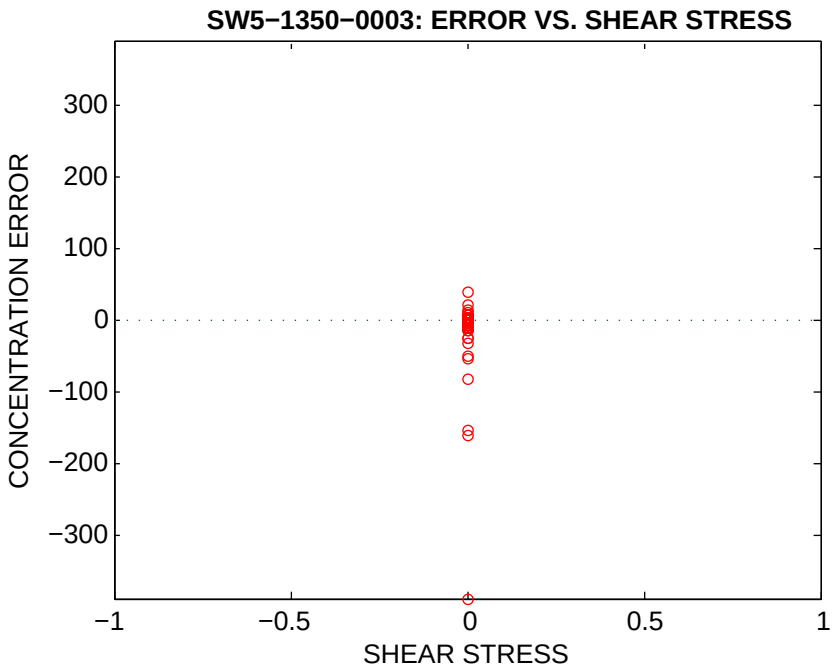


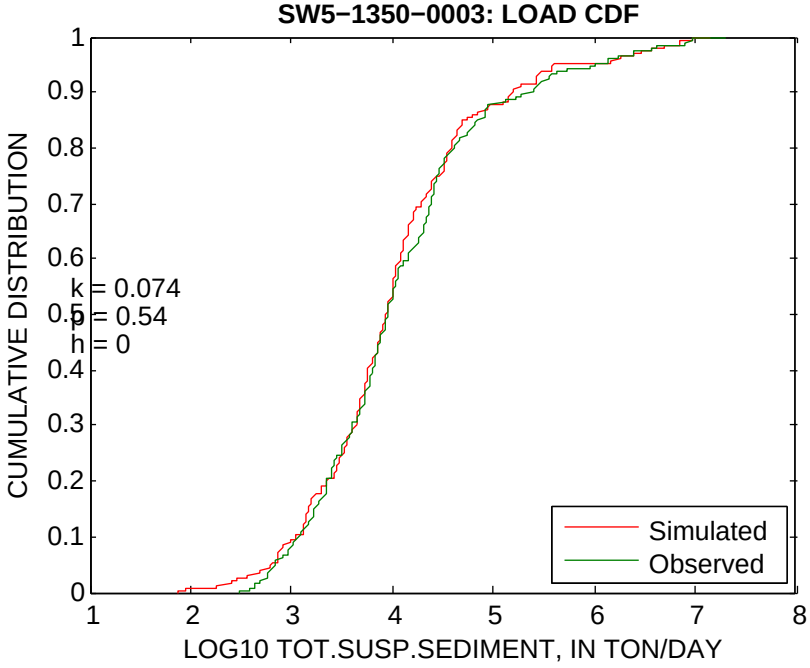


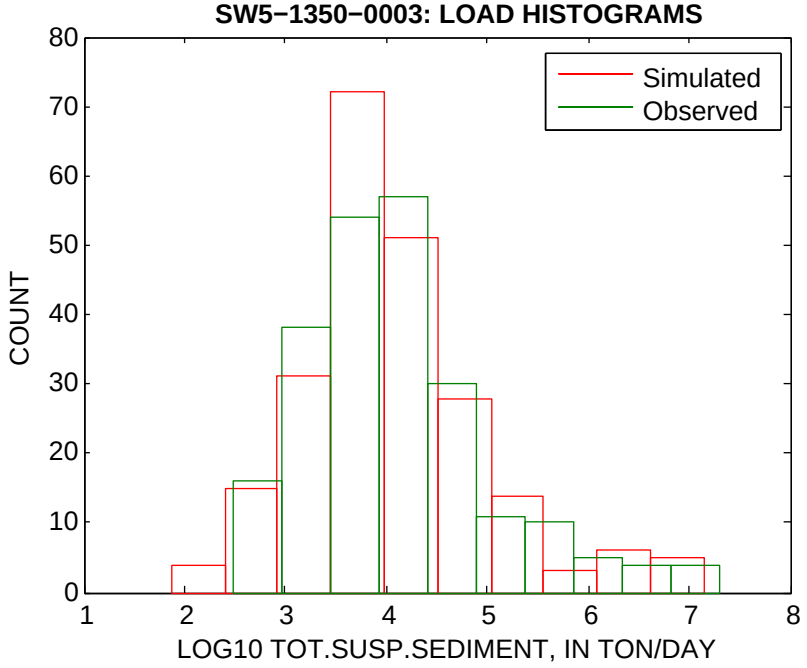


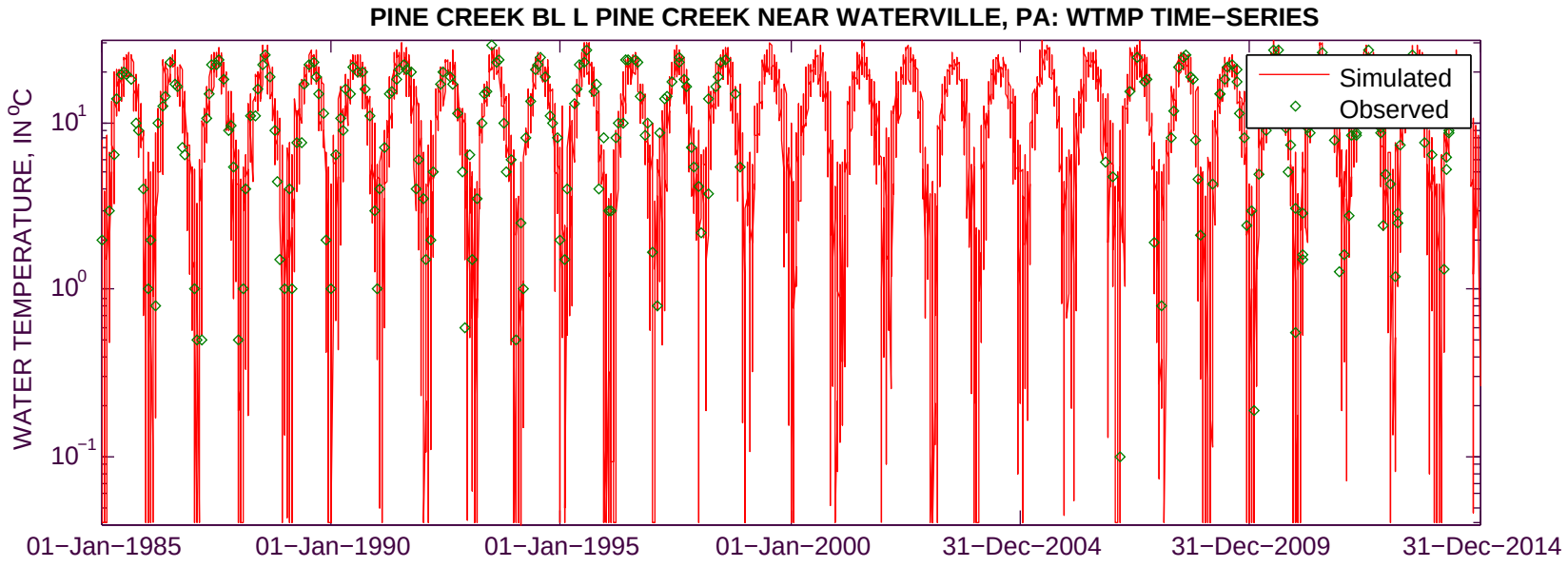
LOAD DATA
LOG10

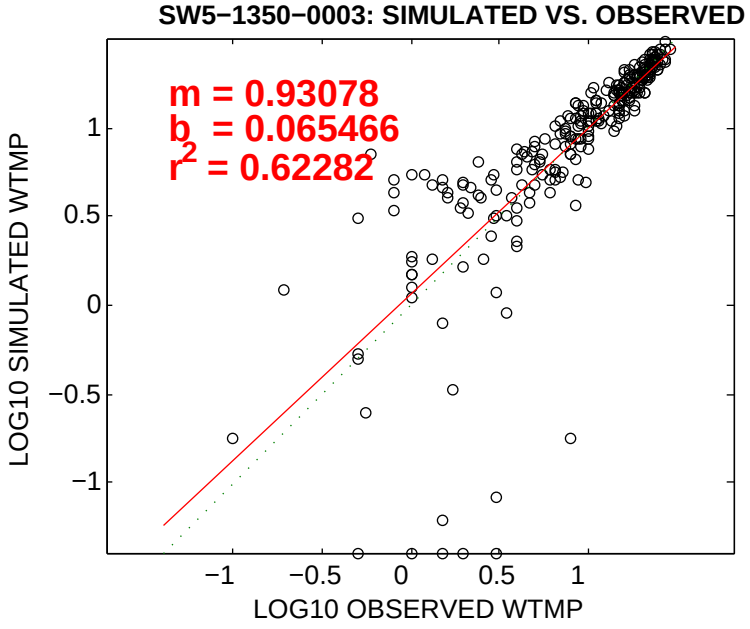


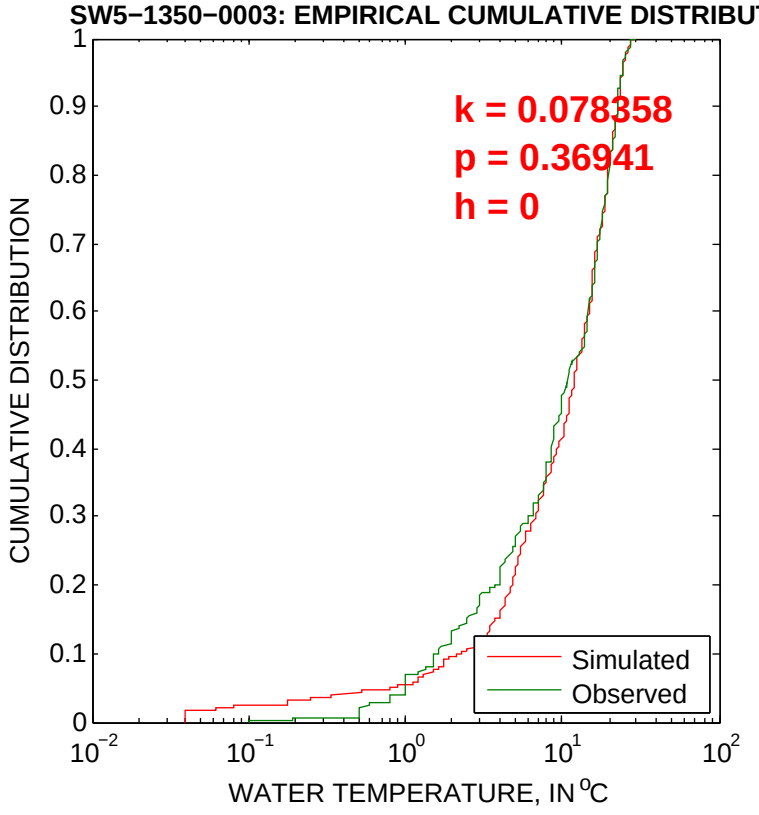












DATA SELECTION

scenario	file
P620171001WQ	WTMP.calib

plot: WTMP - water tempera...

Dates: 1/1/1985 – 12/31/201

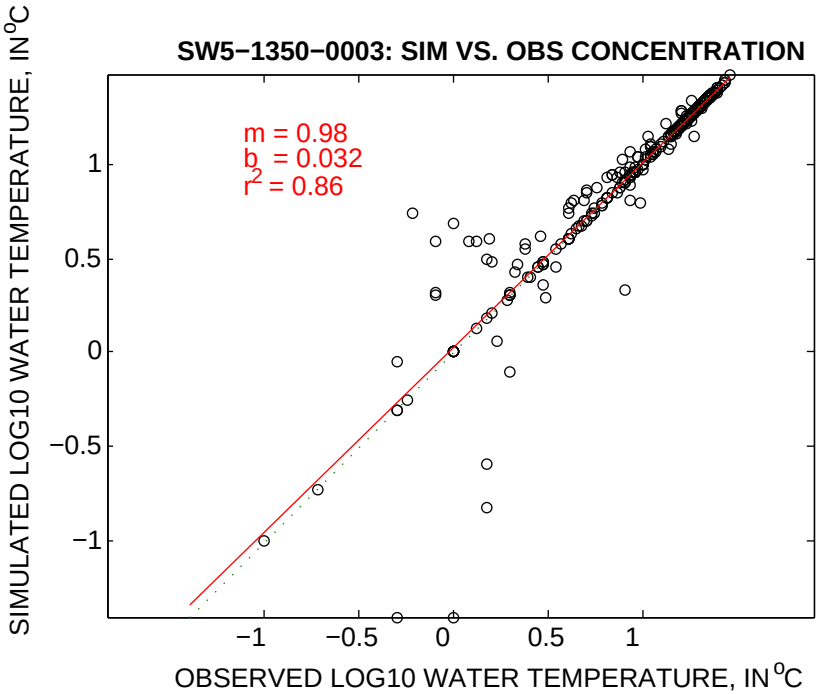
Drive	Directory	Observed
N/A	model	OBS20161101

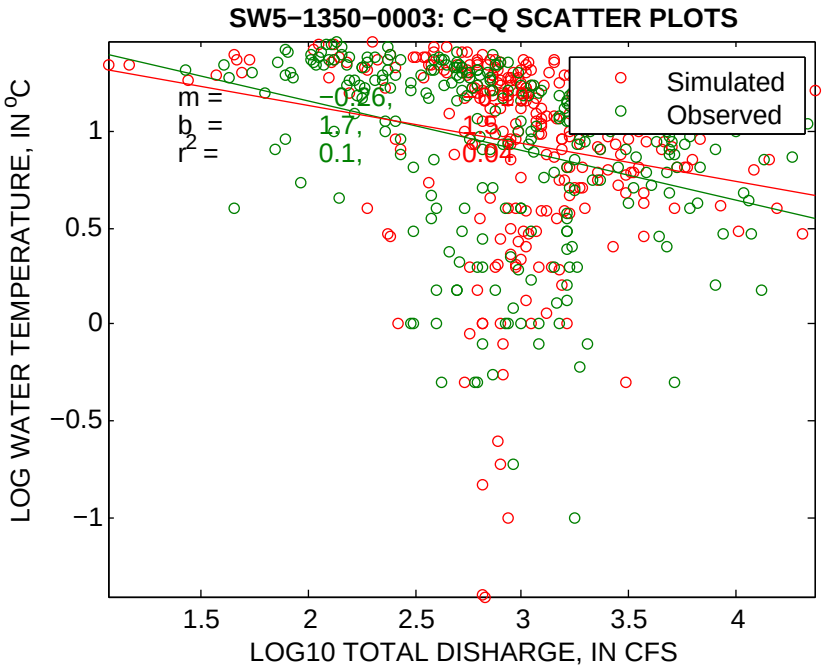
STATISTICS

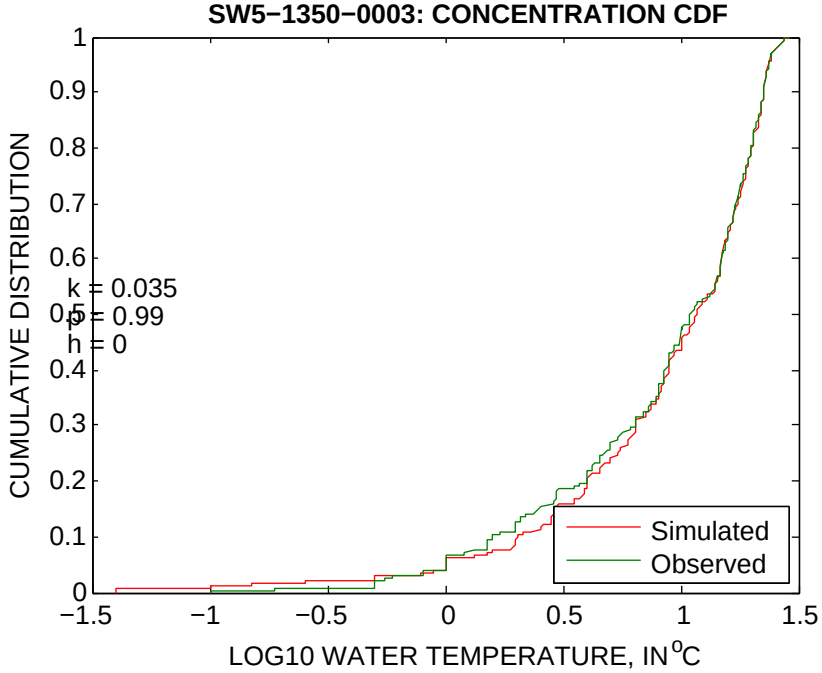
	n	observe	simulate
		268	268
min		0.1	0.039977
		-1	-1.39819
mean		11.9231	12.2615
		0.913701	0.915918
media		11	11.956
		1.04139	1.07759
max		29	29.994
		1.4624	1.47703
varian		60.948	57.1402
		0.21137	0.294014
JB		0.003146	0.006764
		0.001	0.001
		ra	log
%		2.83806	0.242648
err.va		5.73533	0.111913
rel.std.err		0.094102	0.529465
mod.eff		0.905898	0.470535

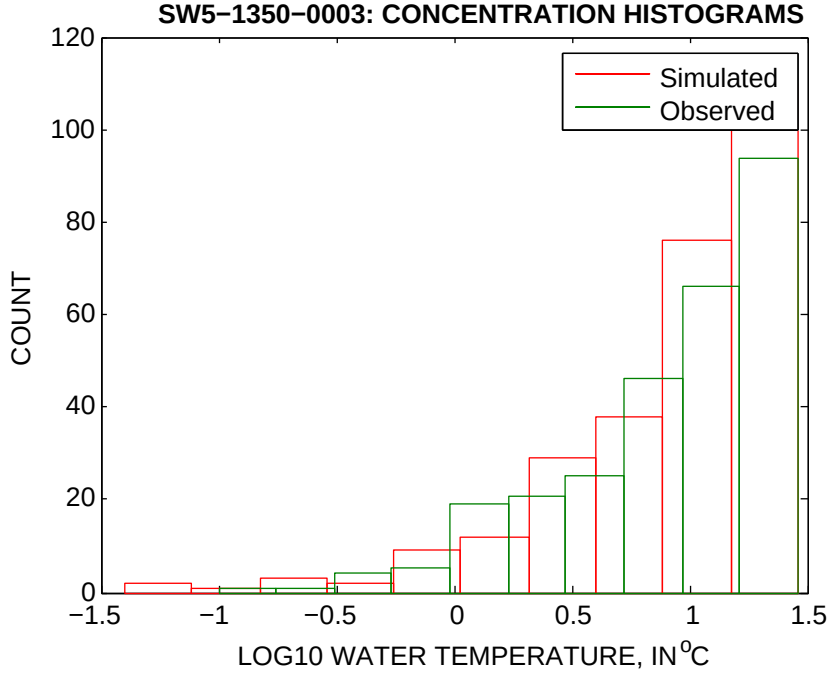
VERSION 2.1

ALL DATA
LOG10

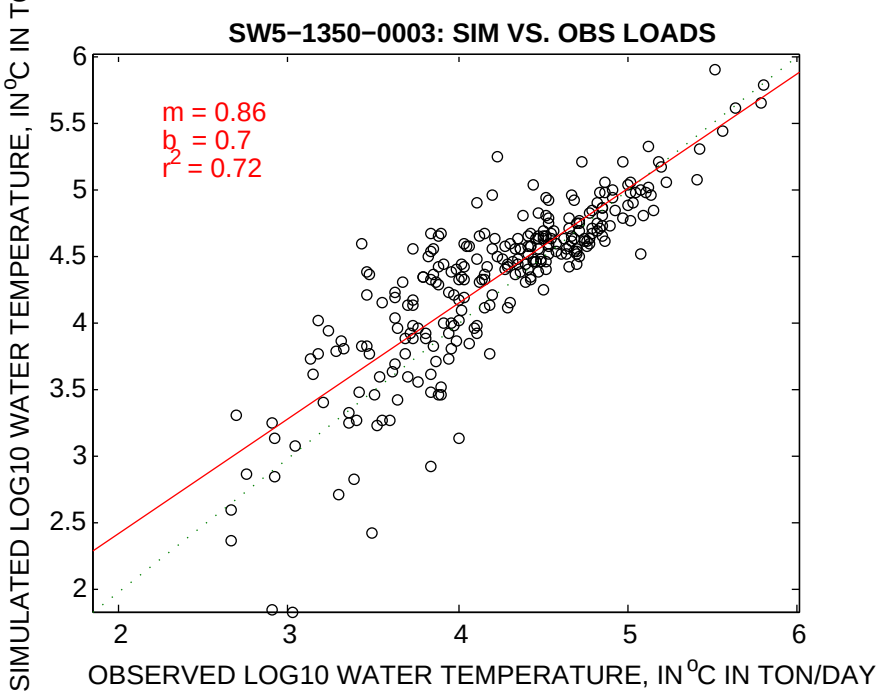




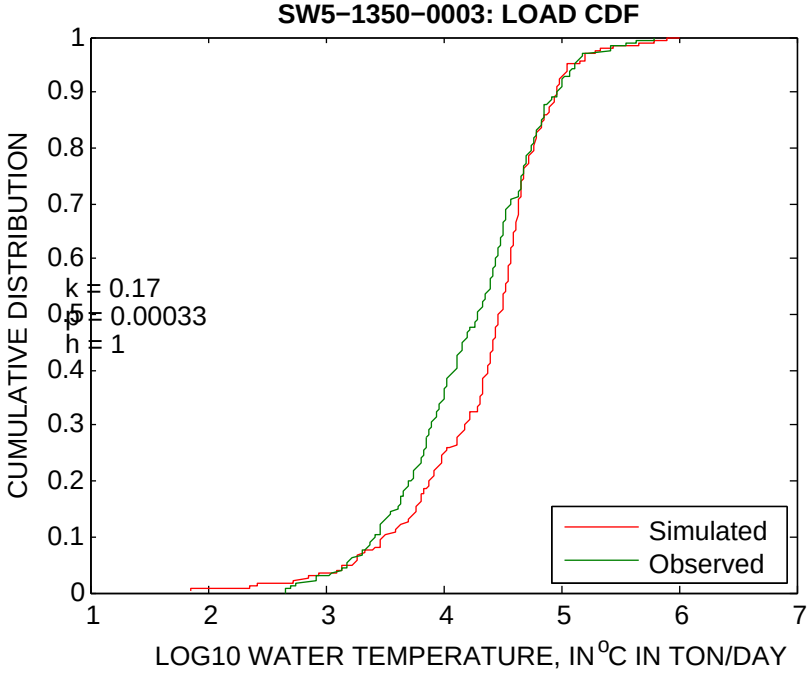


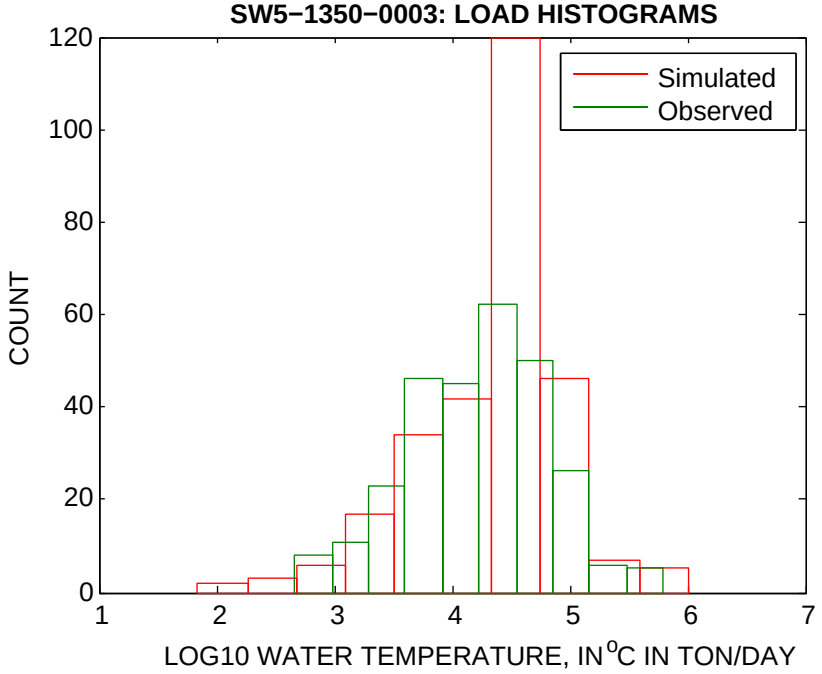


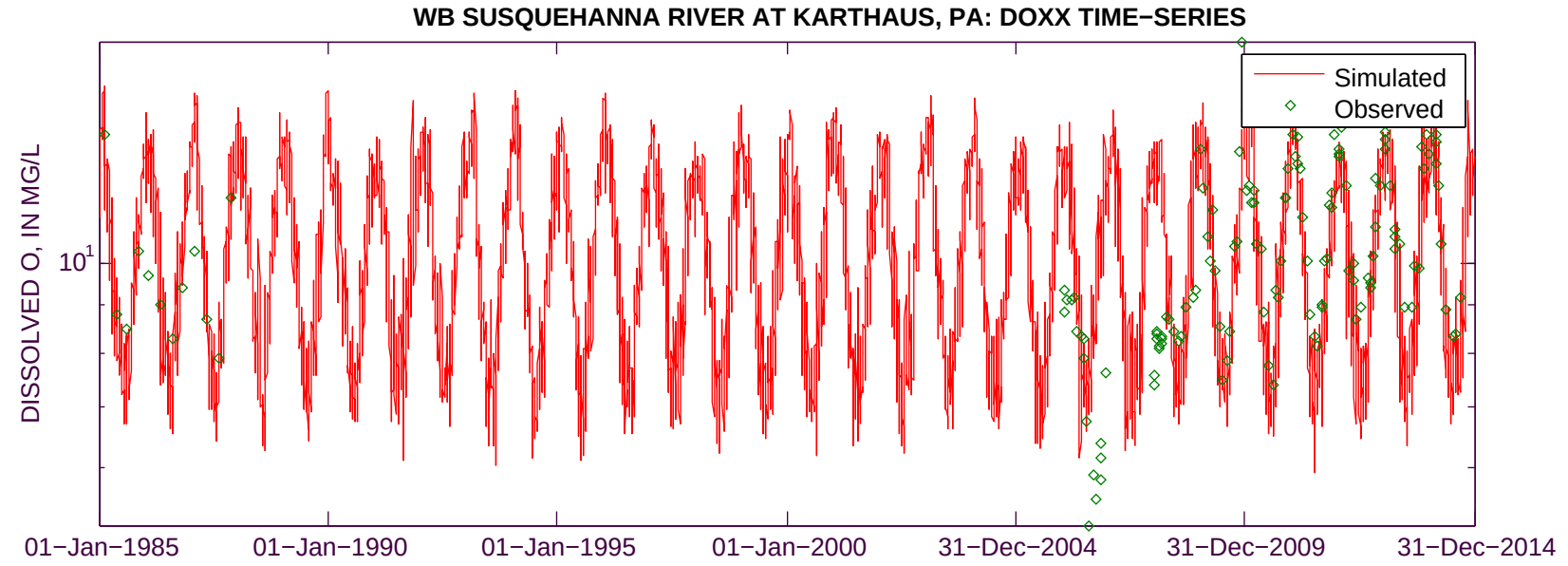
LOAD DATA
LOG10

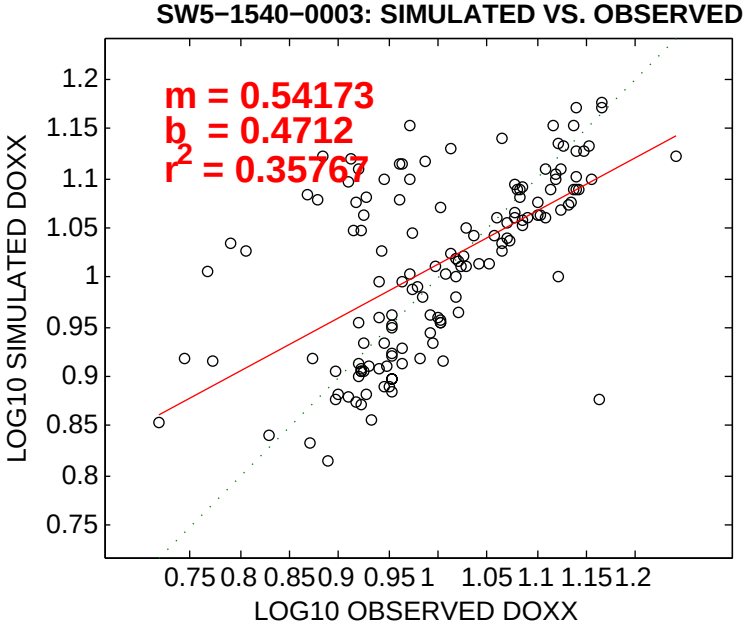


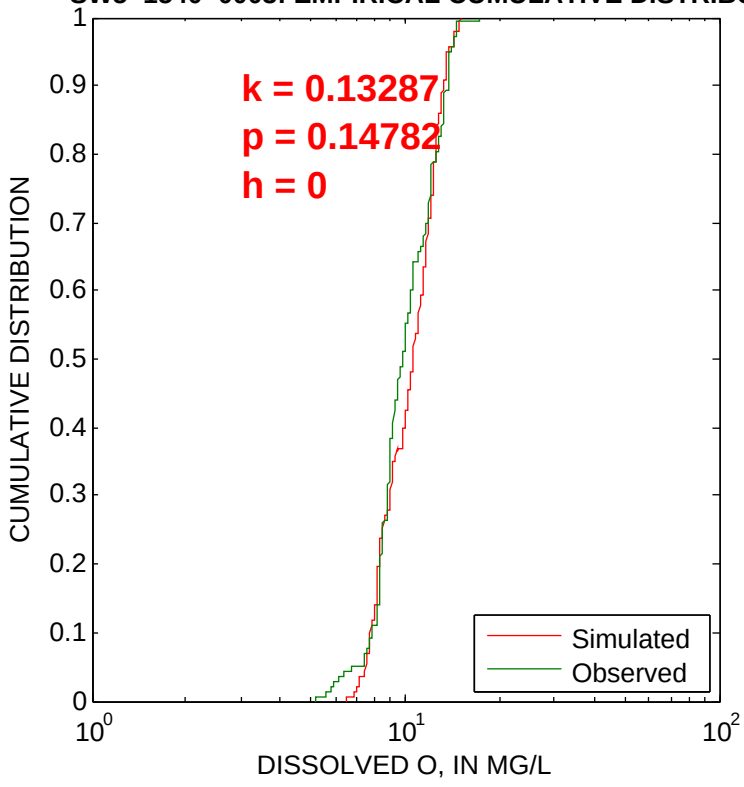












DATA SELECTION

scenario	file
P620171001WQ	DOXX.calib

plot: DOXX - dissolved oxygen

Dates: 1/1/1985 – 12/31/201

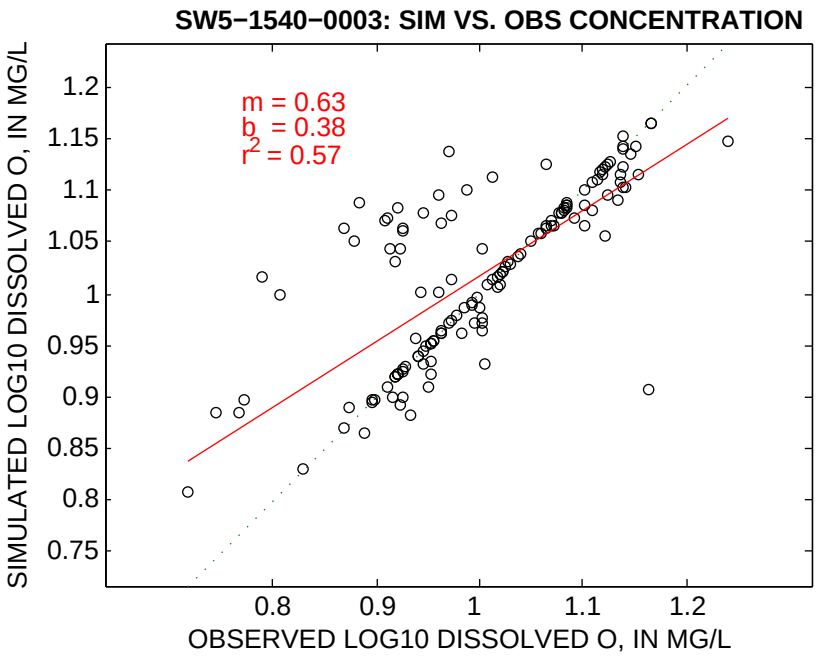
Drive	Directory	Observed
N/A	model	OBS20161101

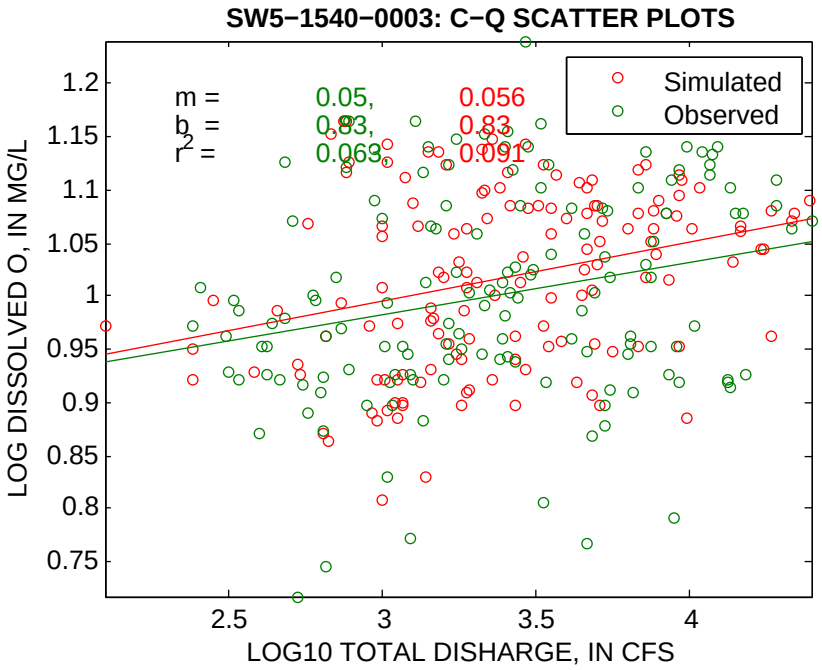
STATISTICS

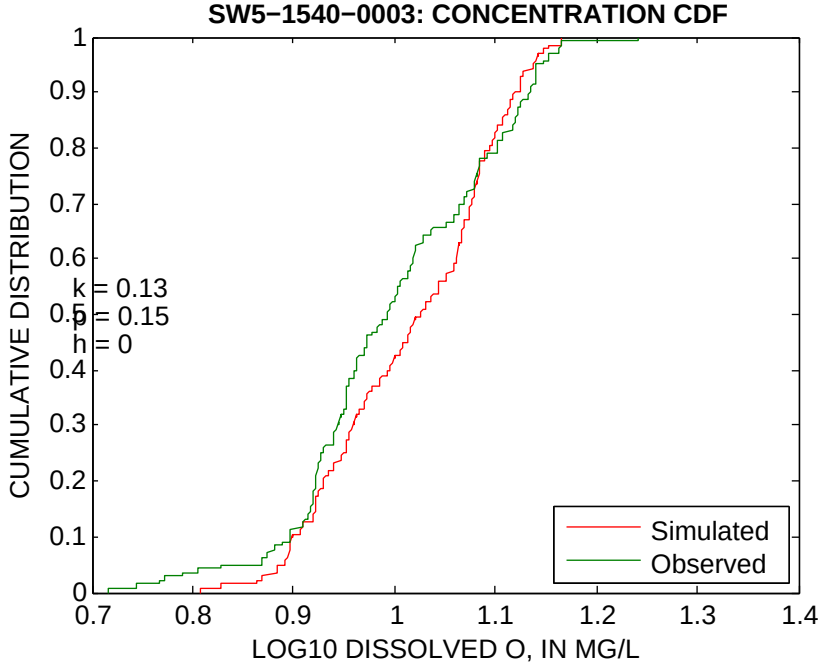
	n	143	143
		observe	simulate
min		5.22	6.5309
		0.717671	0.814973
mean		10.2607	10.5188
		1.00037	1.01314
media		9.83	10.61
		0.992554	1.02572
max		17.39	15.046
		1.2403	1.17742
varian		5.22258	4.39113
		0.00958813	0.00786722
JB		0.095058	0.036160
		0.5	0.025764
		ra	log
%		2.51506	1.27561
err.va		3.78421	0.00723094
rel.std.err		0.724587	0.754155
mod.eff		0.275413	0.245845

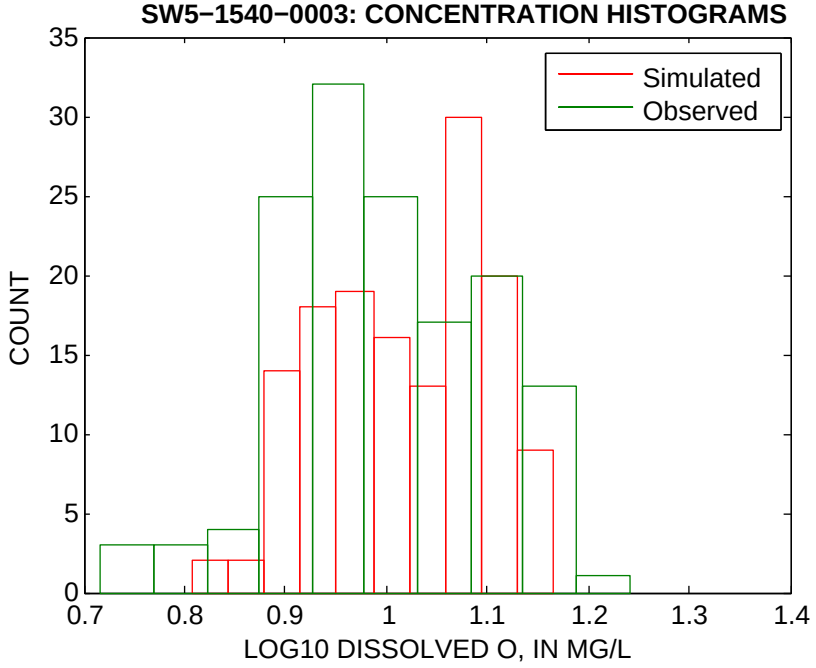
VERSION 2.1

ALL DATA
LOG10

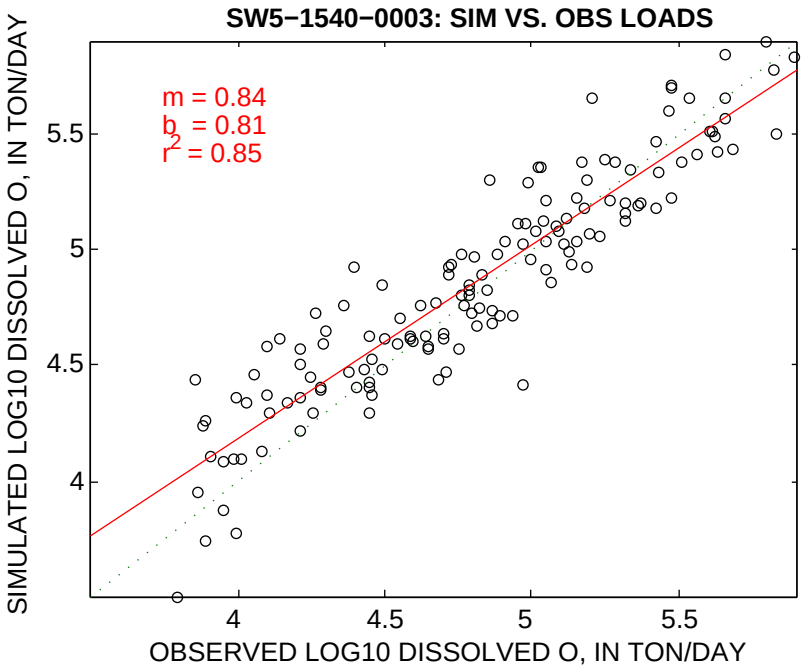




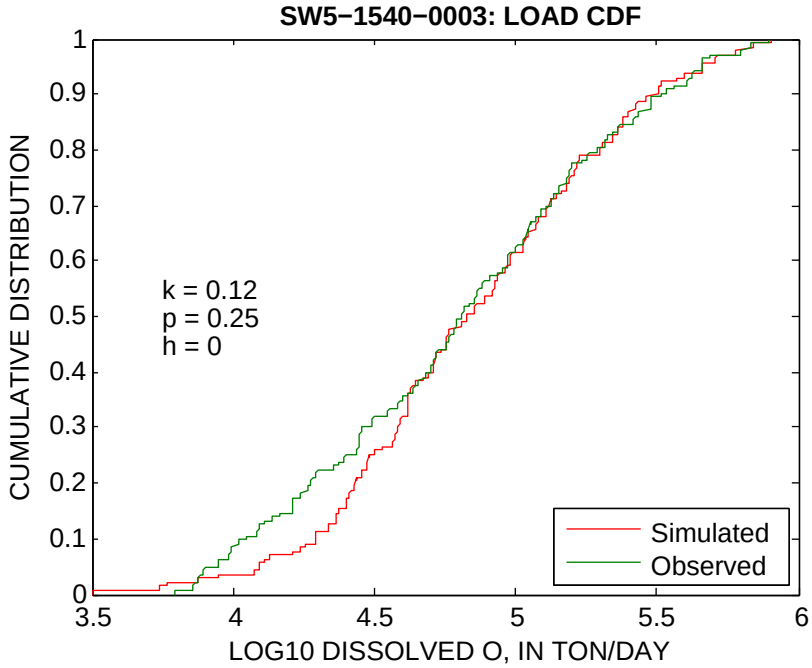


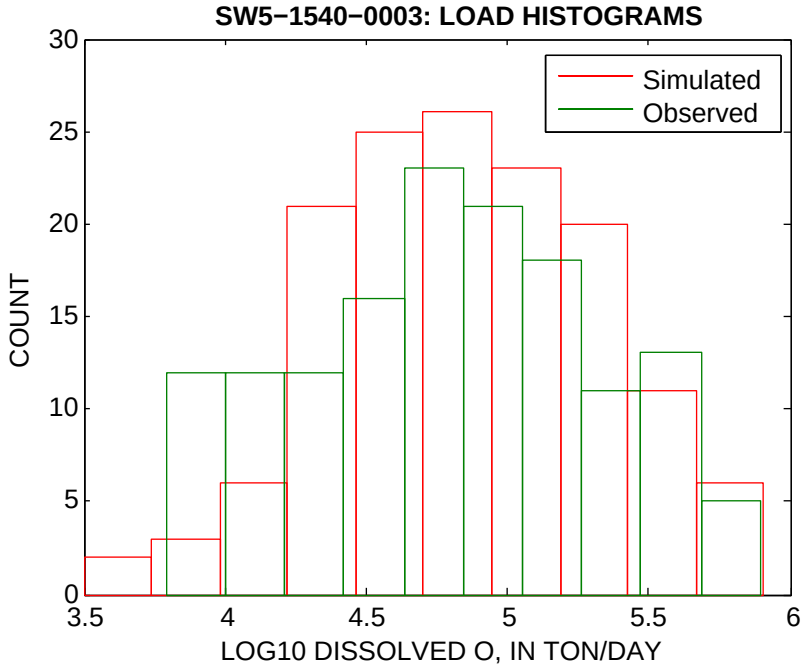


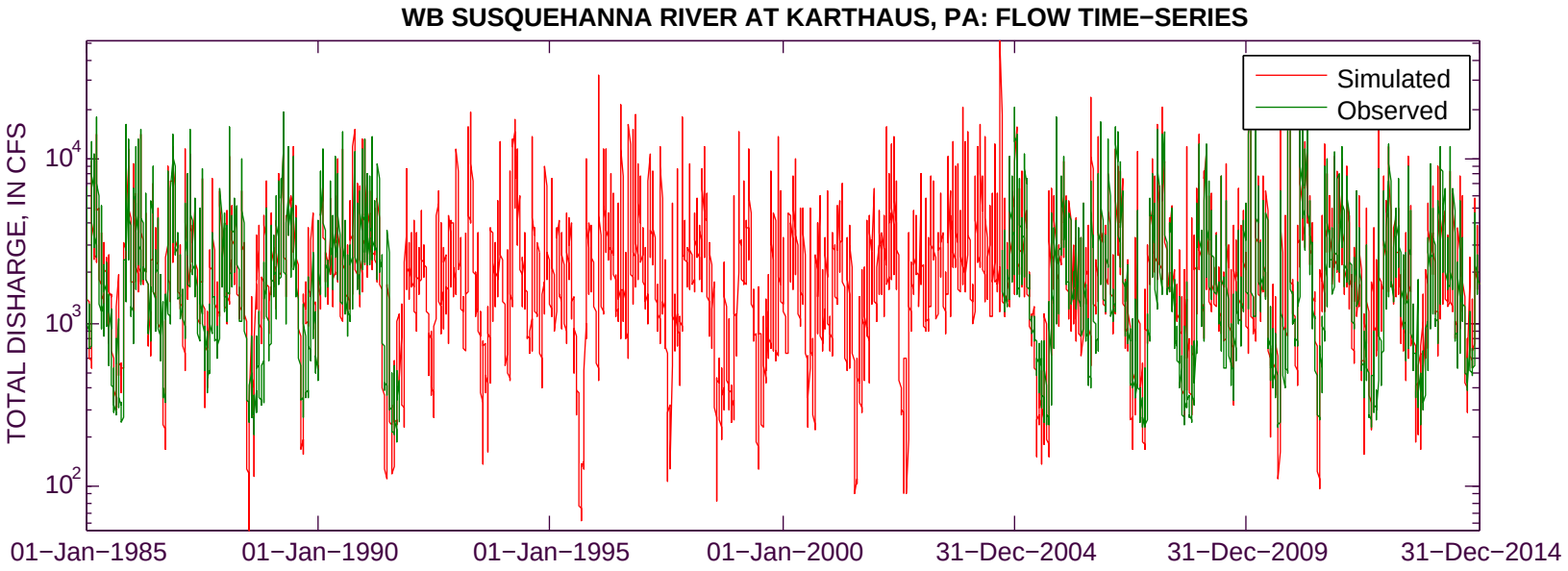
LOAD DATA
LOG10

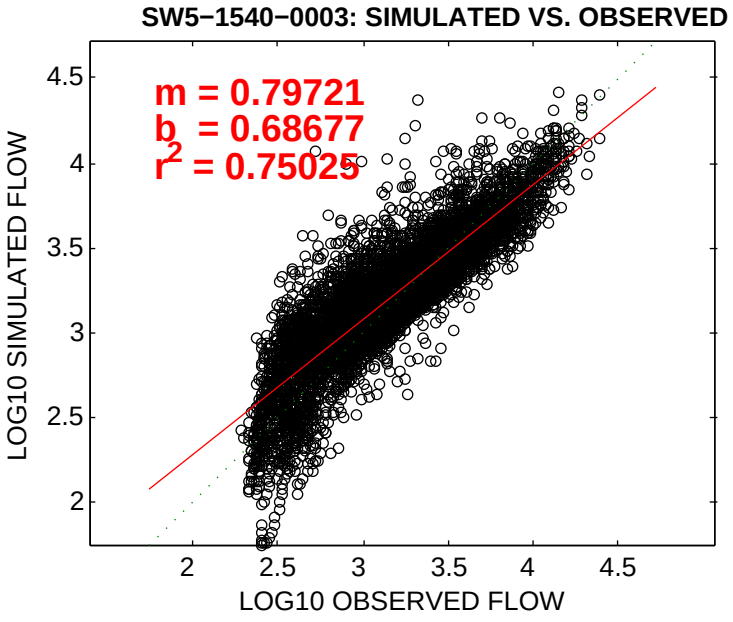


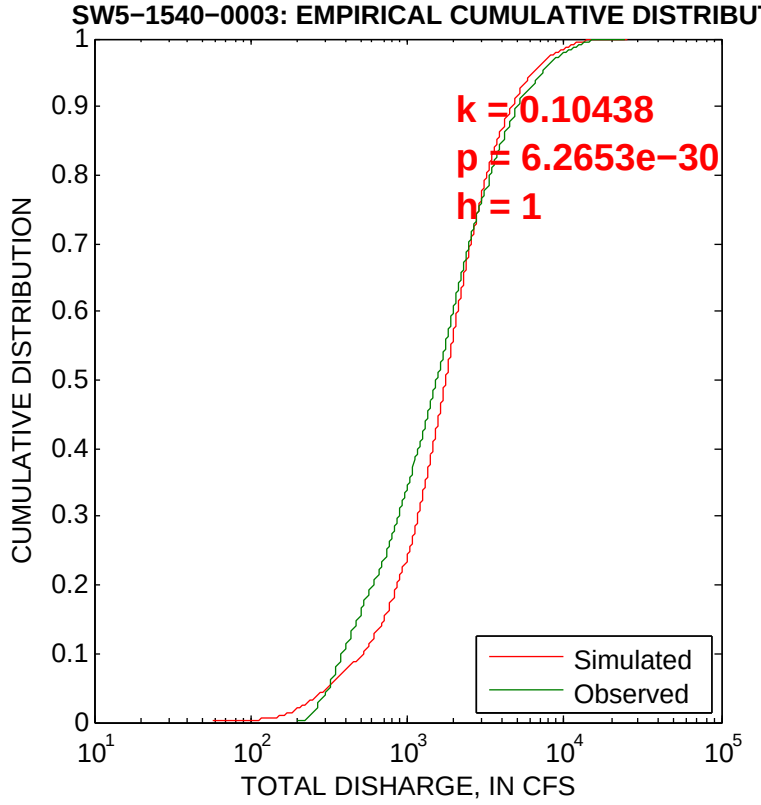












DATA SELECTION

scenario	file
P620171001WQ	FLOW.calib

plot: FLOW - total discharge

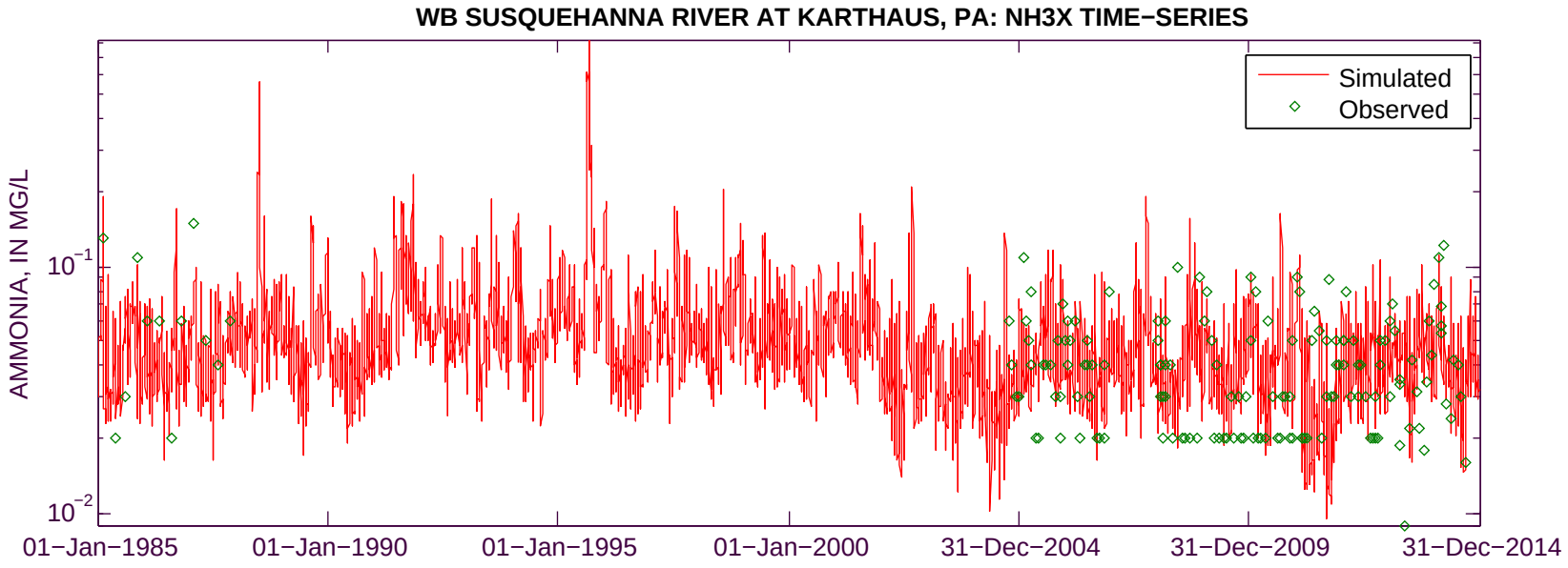
Dates: 1/1/1985 – 12/31/201

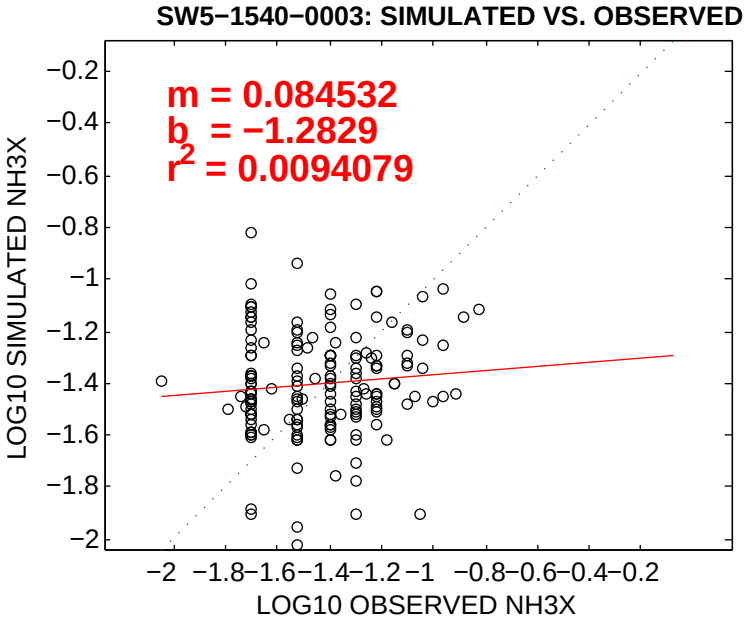
Drive	Directory	Observed
N/A	model	OBS20161101

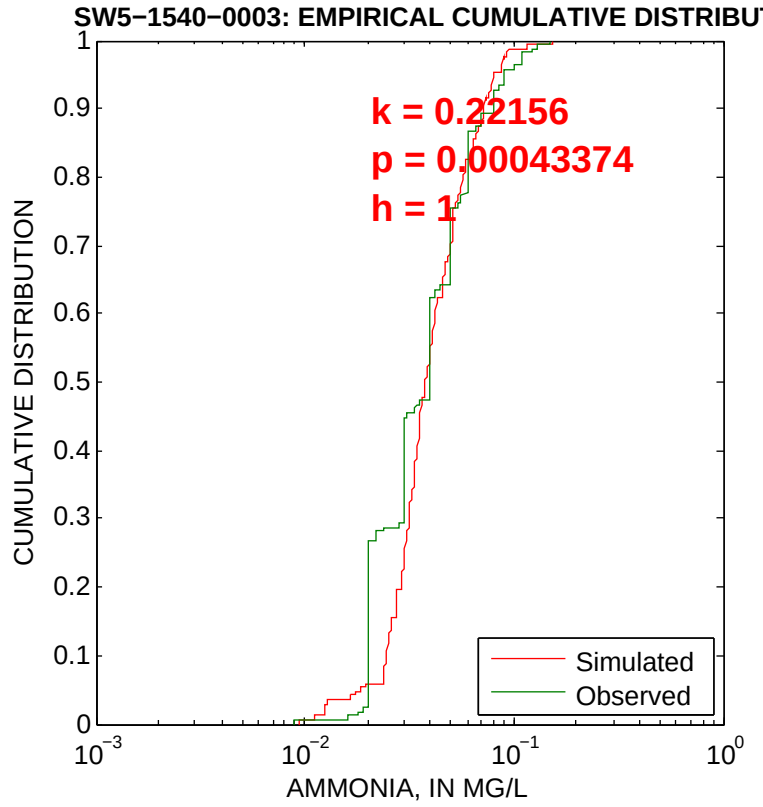
STATISTICS

	n	observe	simulate
		6208	6208
min		190	55.534
		2.27875	1.74456
mean		2315.75	2331.84
		3.17313	3.21641
media		1540	1763.25
		3.18752	3.24631
max		24800	25709
		4.39445	4.41009
varian		6.16105e+0	4.84627e+
		0.169556	0.143631
JB		0.001	0.001
		0.001	0.001
		ra	log
%		0.694826	1.36404
err.va		1.89731e+0	0.0447181
rel.std.err		0.307952	0.263737
mod.eff		0.692048	0.736263

VERSION 2.1







DATA SELECTION

scenario	file
P620171001WQ	NH3X.calib

plot: NH3X - ammonia

Dates 1/1/1985 12/31/201

Drive Directory Observed

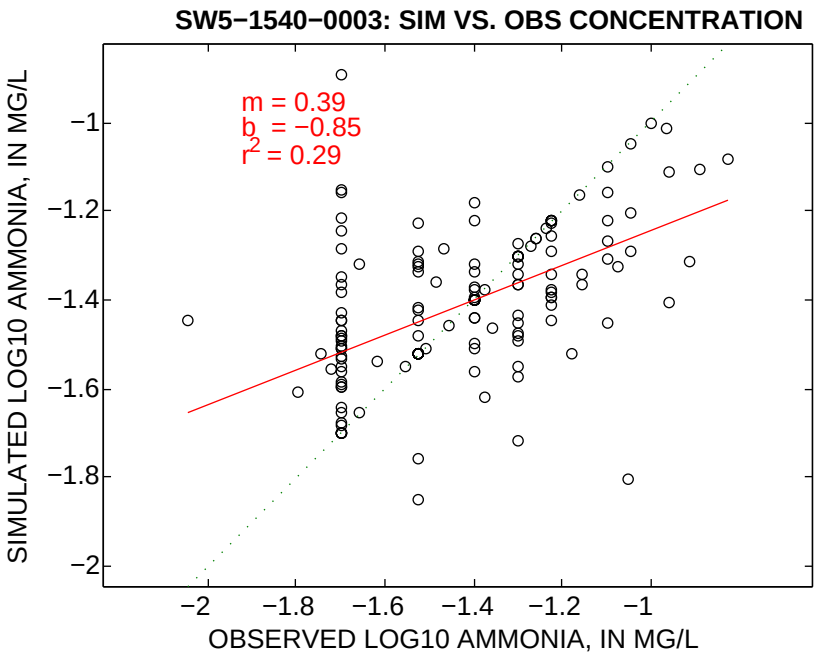
N/A model OBS20161101

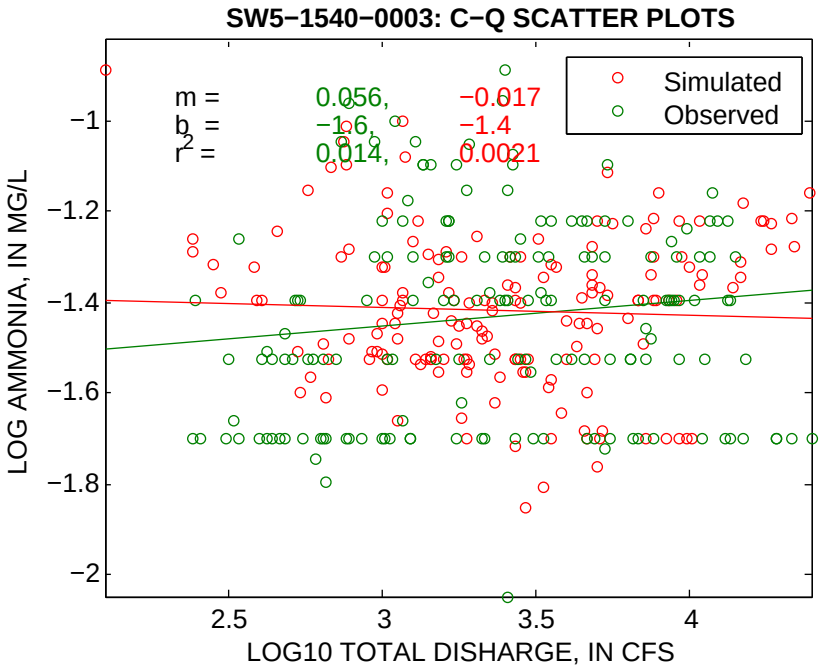
STATISTICS

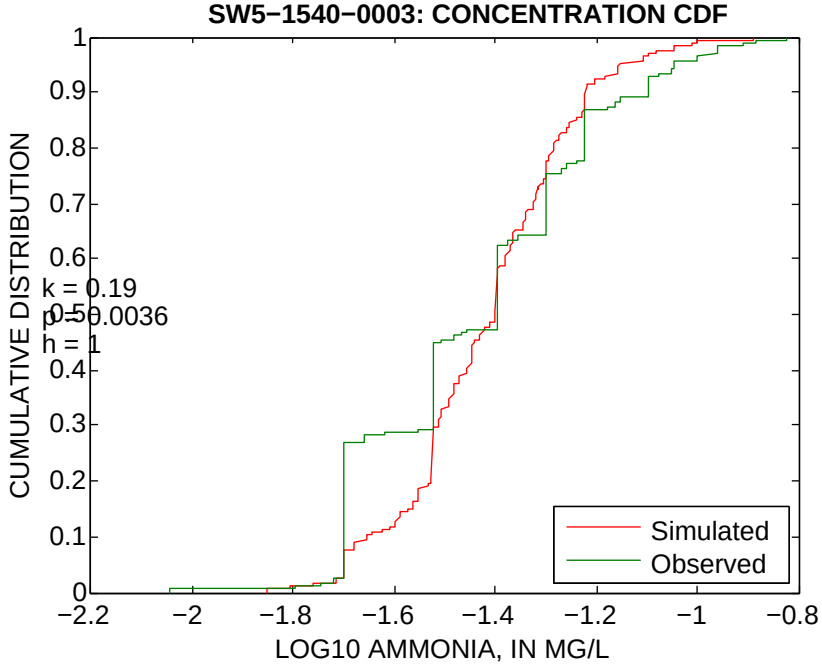
	n	observe	simulate
		167	167
min		0.009	0.009528
		-2.04576	-2.021
mean		0.0426437	0.043693
		-1.43165	-1.40395
media		0.04	0.037808
		-1.39794	-1.42242
max		0.15	0.15134
		-0.823909	-0.820046
varian		0.00060516	0.00043116
		0.0519521	0.0394595
JB		0.001	0.001
		0.108846	0.08453
		ra	log
%		2.46069	-1.93479
err.va		0.00090858	0.0834003
rel.std.err		1.50138	1.60533
mod.eff		-0.501377	-0.60533

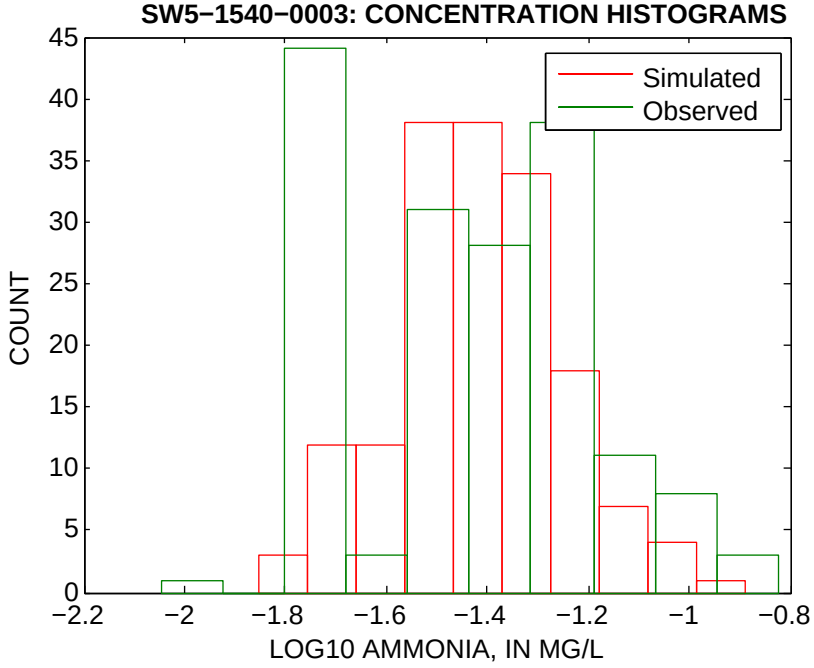
VERSION

ALL DATA
LOG10

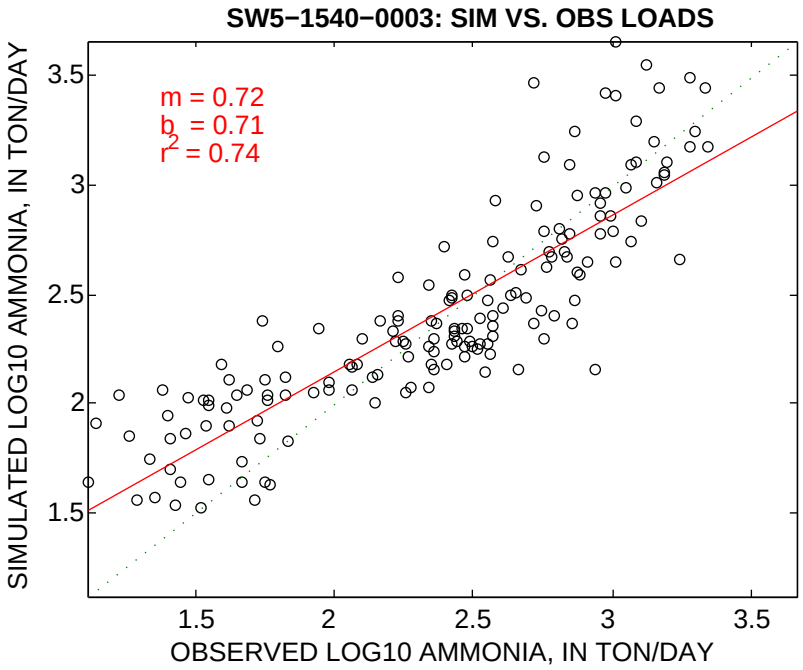




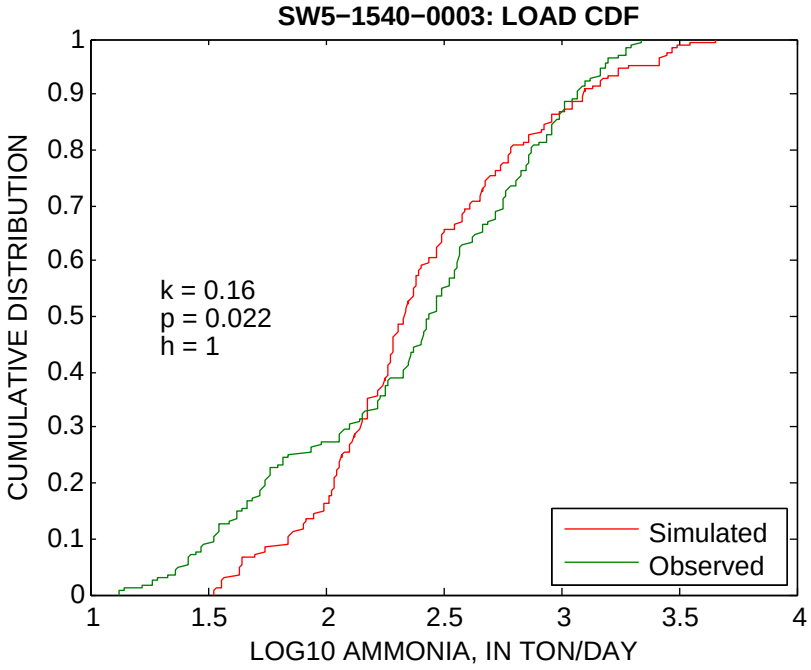


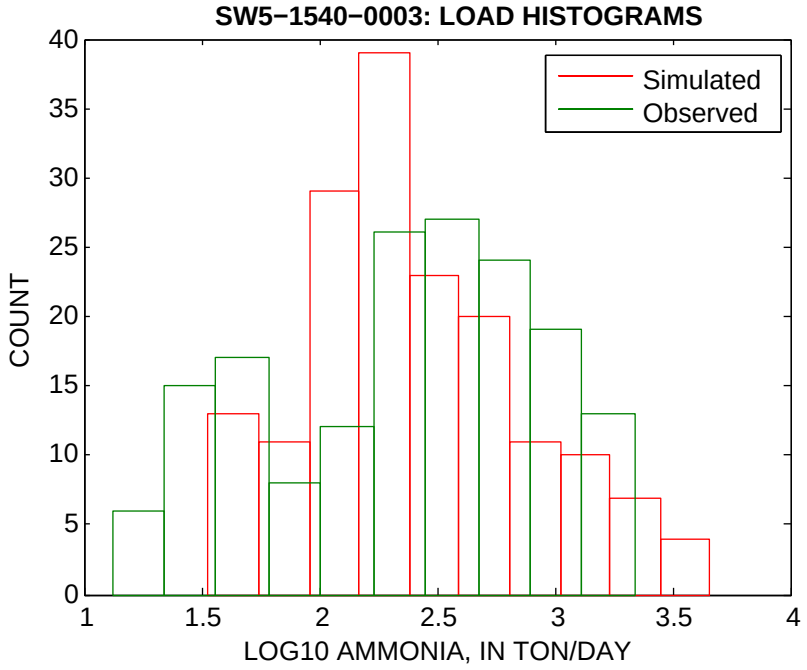


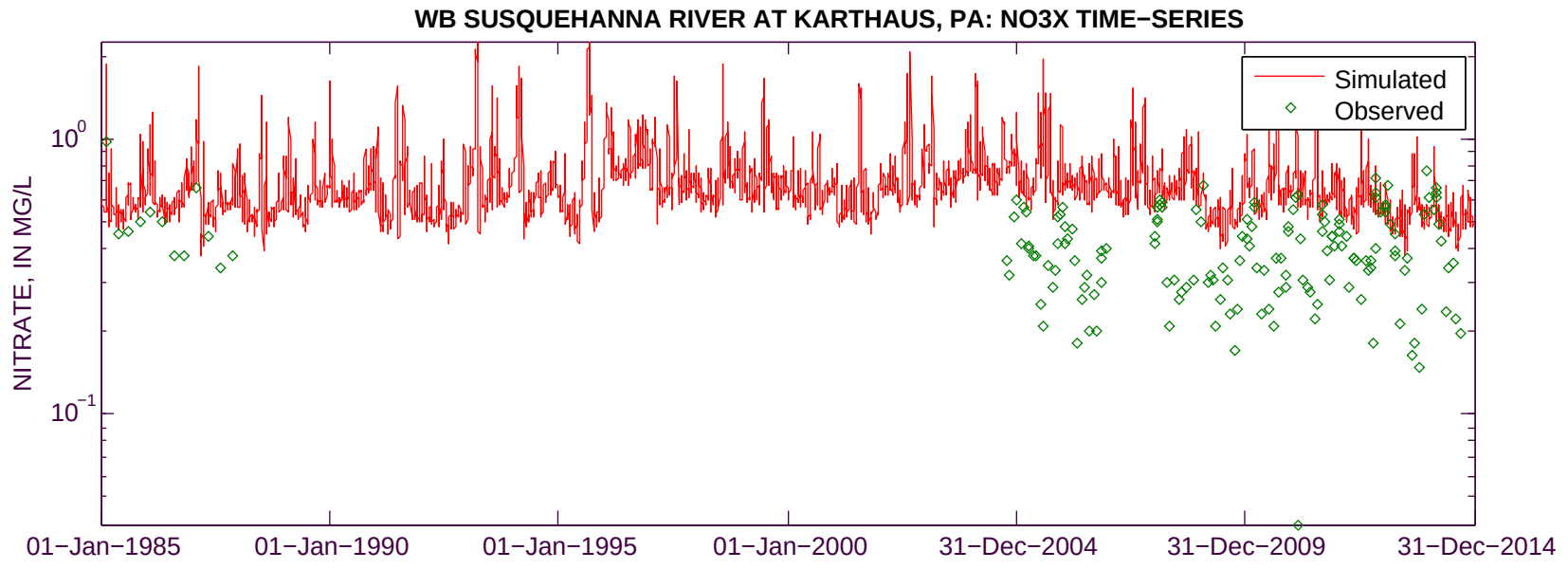
LOAD DATA
LOG10

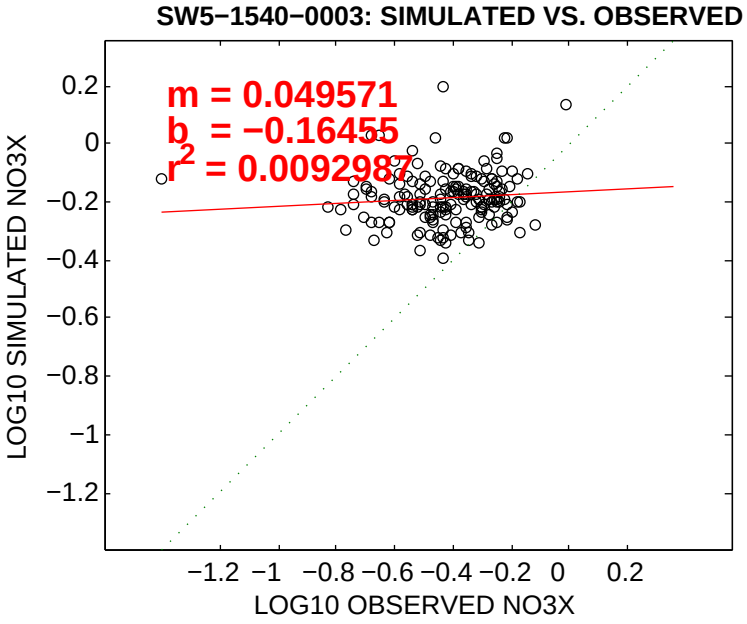


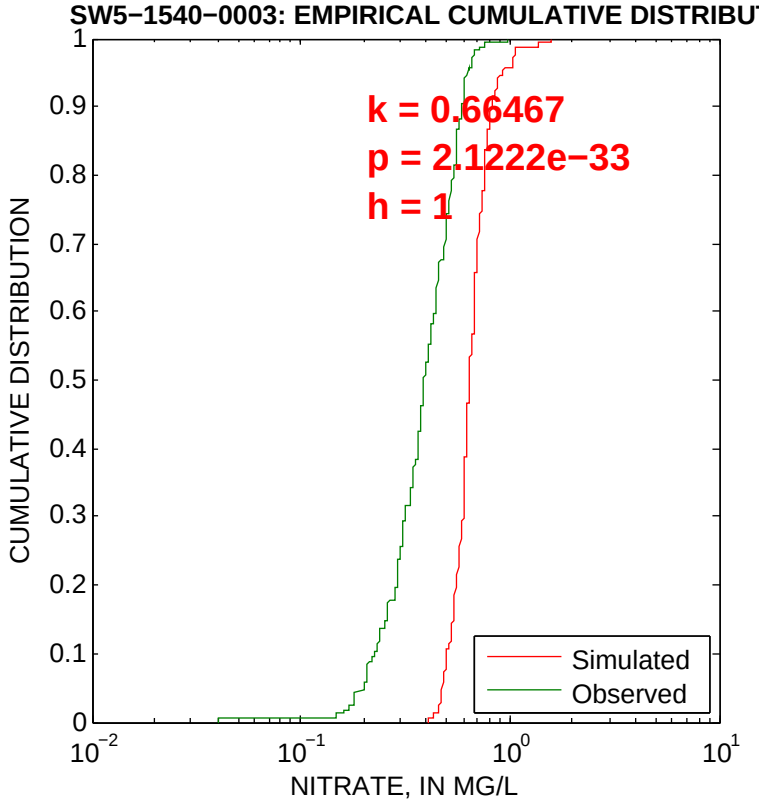












DATA SELECTION

scenario: P620171001WQ | file: NO3X.calib

plot: NO3X - nitrate

Dates: 1/1/1985 – 12/31/201

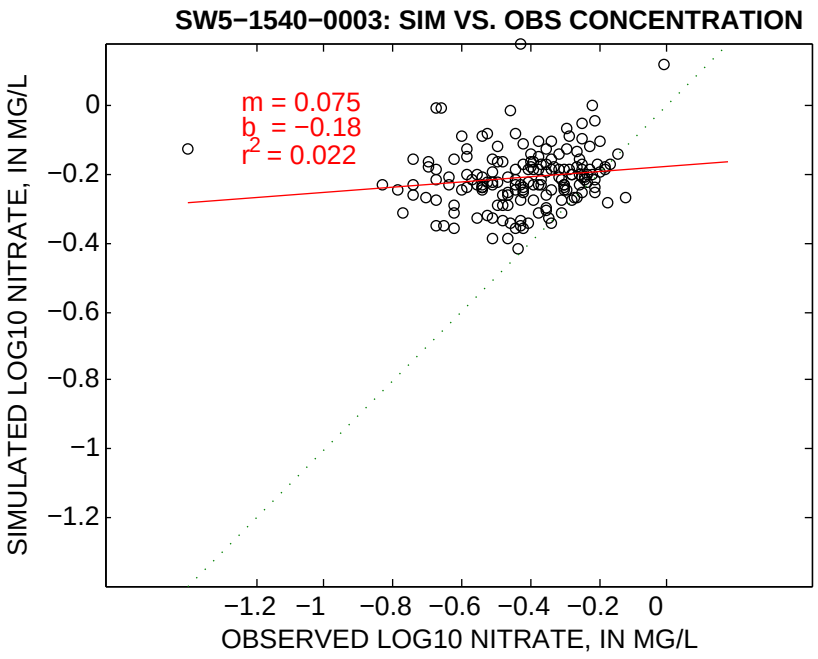
Drive: N/A | Directory: model | Observed: OBS20161101

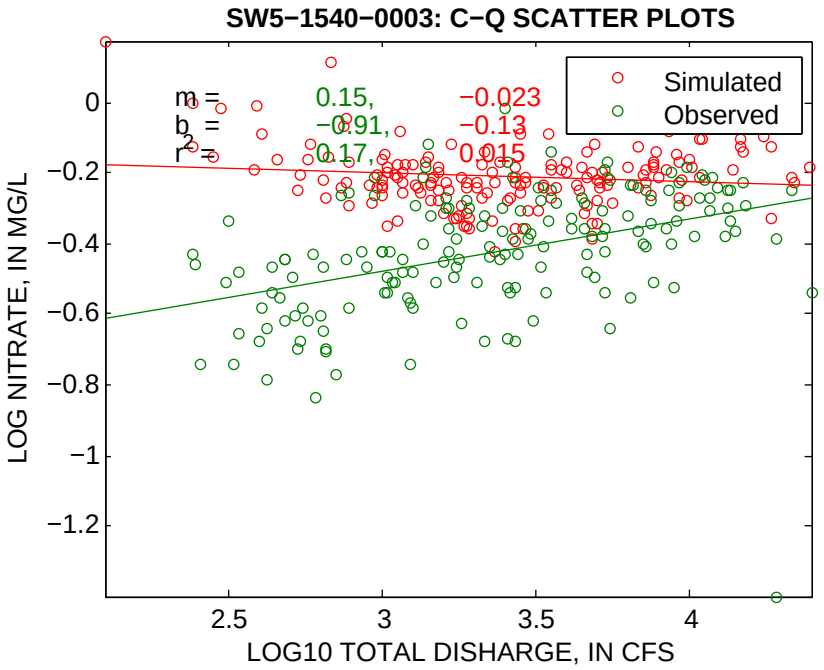
STATISTICS

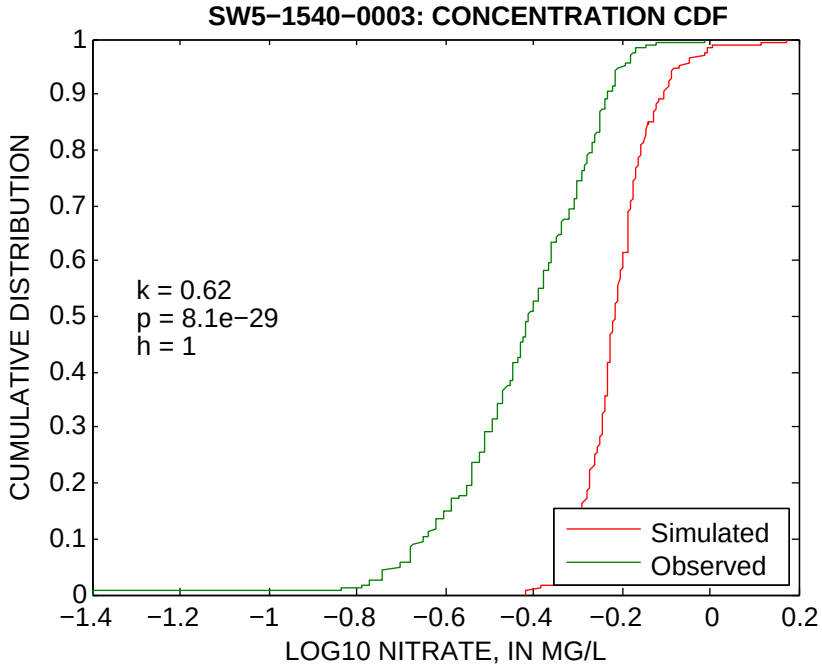
	n	observe	simulate
		167	167
min		0.04	0.40452
		-1.39794	-0.39306
mean		0.406132	0.66721
		-0.421712	-0.185451
media		0.39	0.6439
		-0.408935	-0.191182
max		0.97	1.5621
		-0.0132283	0.193709
varian		0.0205495	0.0238104
		0.0301613	0.00797052
JB		0.034171	0.001
		0.001	0.001
		ra	log
%		64.2841	-56.0242
err.va		0.105688	0.0912971
rel.std.err		5.14308	3.02696
mod.eff		-4.14308	-2.02696

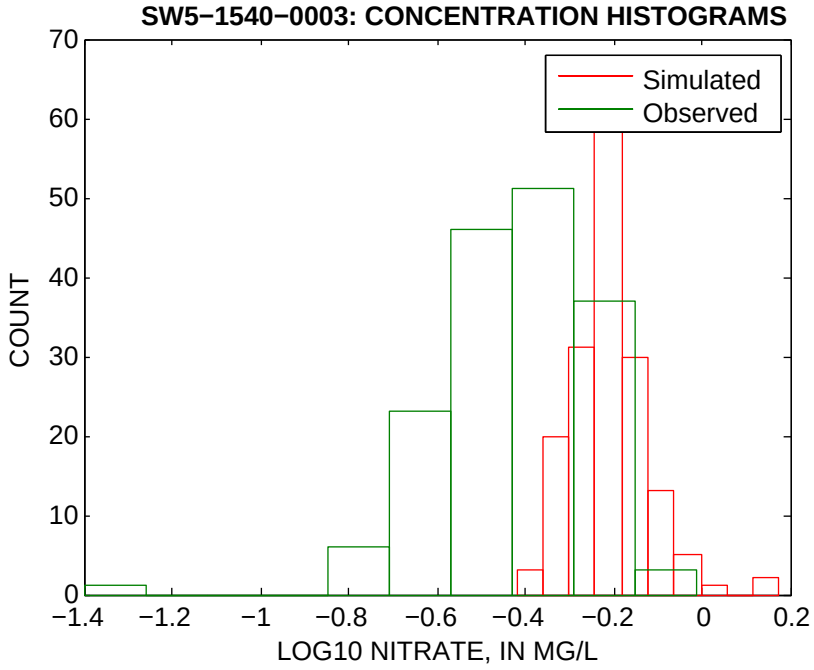
VERSION 2.1

ALL DATA
LOG10

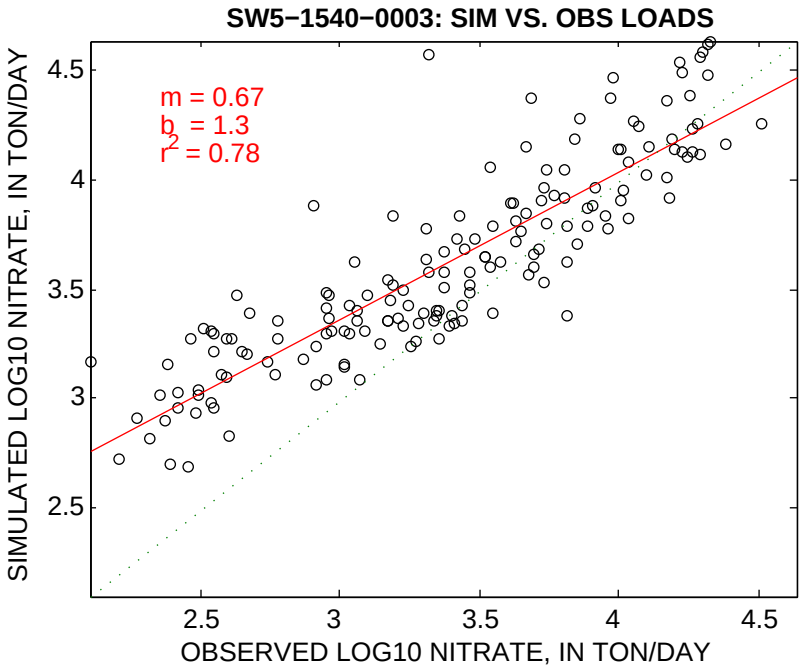




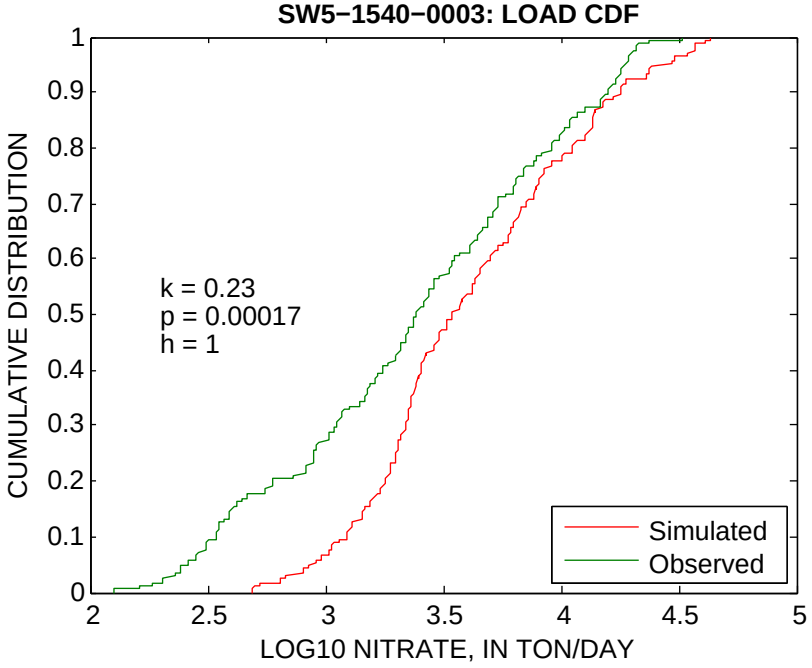


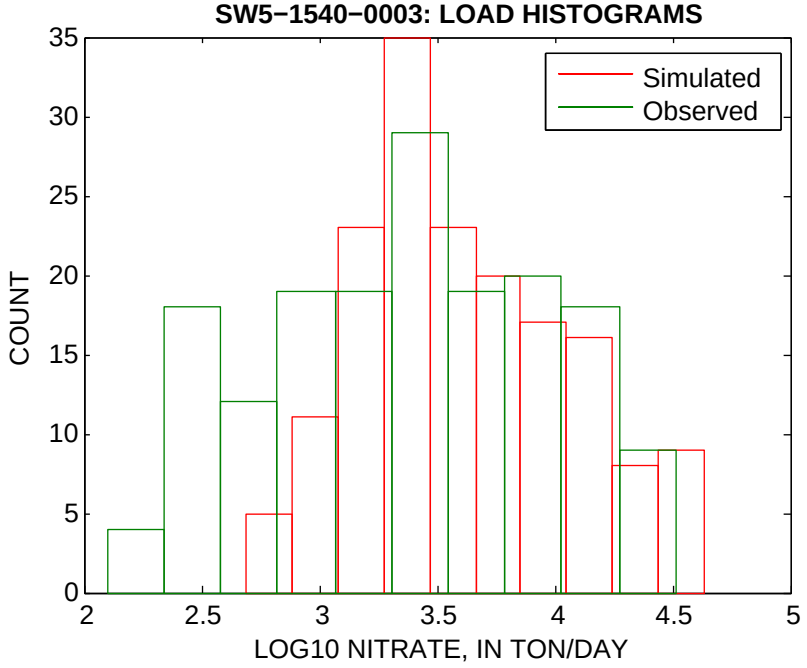


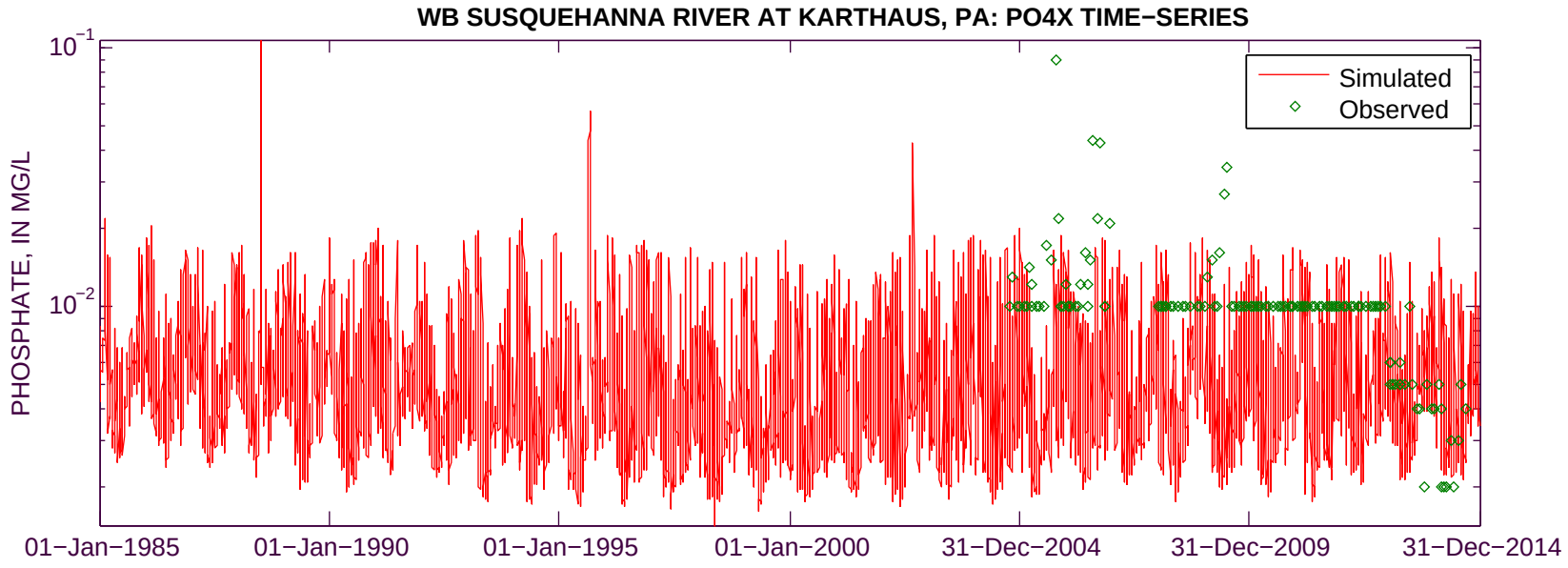
LOAD DATA
LOG10

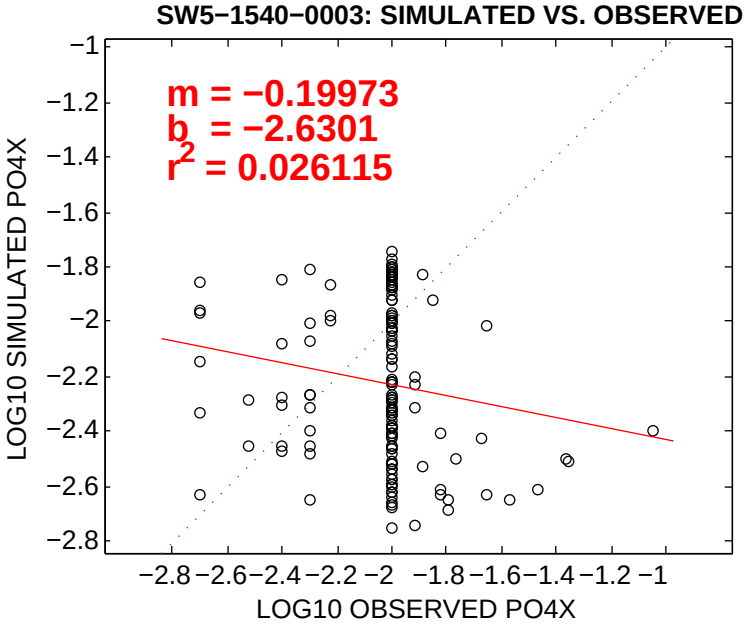


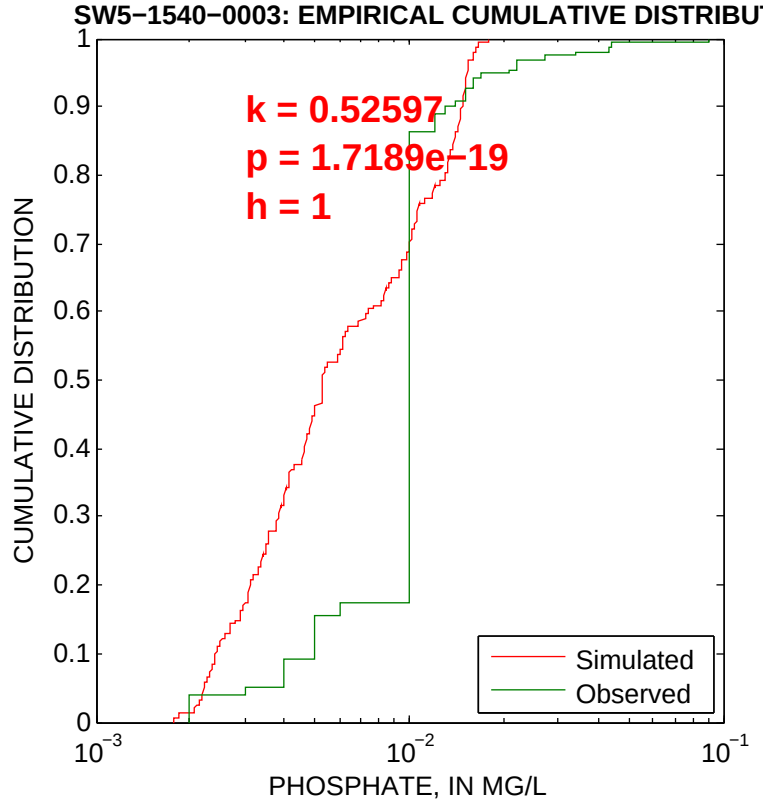












DATA SELECTION

scenario: P620171001WQ | file: PO4X.calib

plot: PO4X - phosphate

Dates: 1/1/1985 – 12/31/201

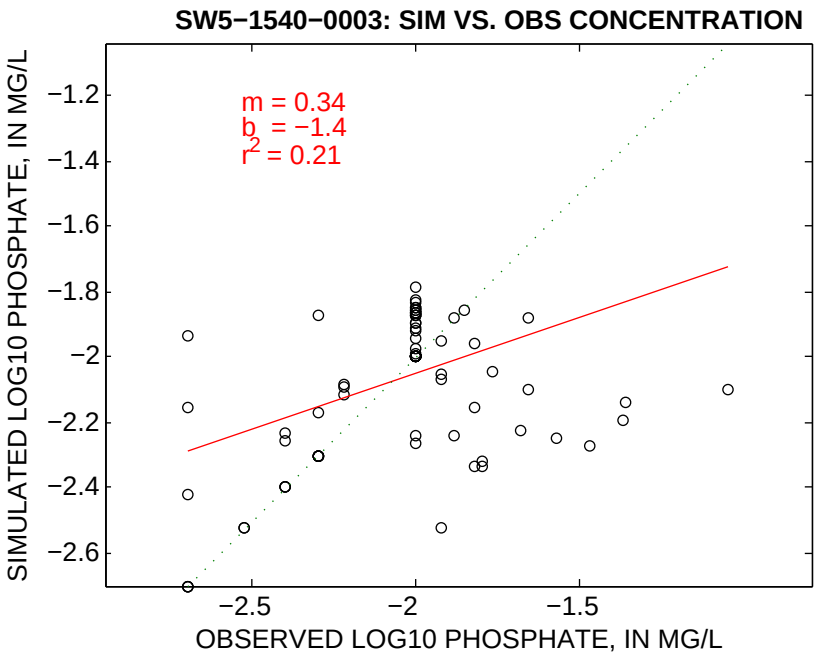
Drive: N/A | Directory: model | Observed: OBS20161101

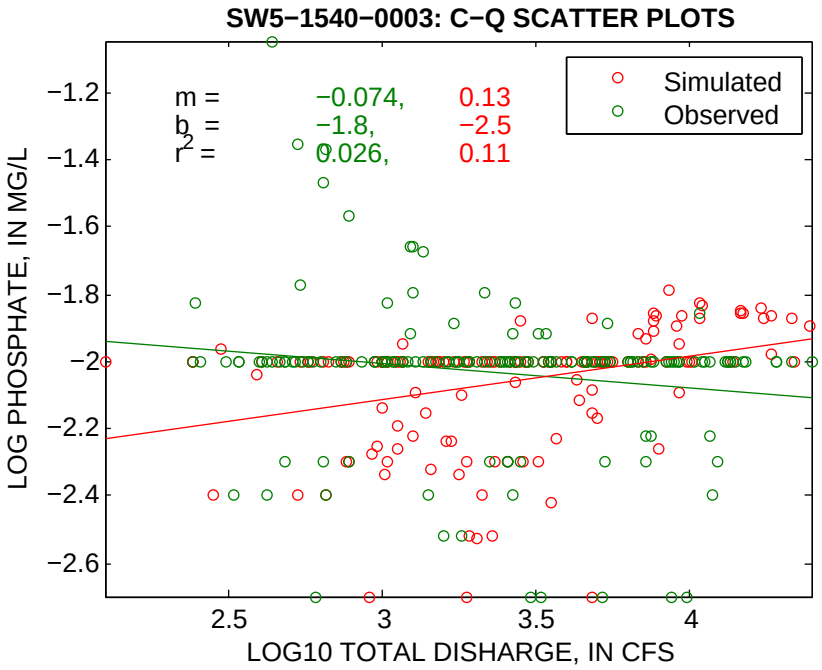
STATISTICS

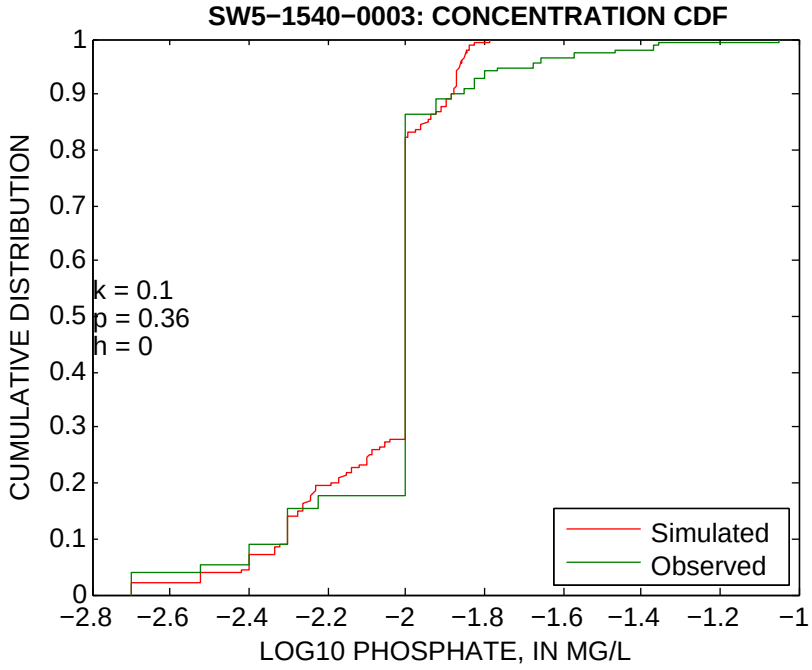
		observe	simulate
n		154	154
min		0.002	0.0017818
		-2.69897	-2.74914
mean		0.0107468	0.00734167
		-2.03405	-2.22384
media		0.01	0.0052804
		-2	-2.27733
max		0.09	0.018008
		-1.04576	-1.74453
varian		7.23864e-0	2.12555e-0
		0.0531907	0.081255
JB		0.001	0.004427
		0.001	0.012989
		ra	log
%		-31.6848	9.3304
err.va		0.0001177	0.191948
rel.std.err		1.62599	3.60867
mod.eff		-0.625992	-2.60867

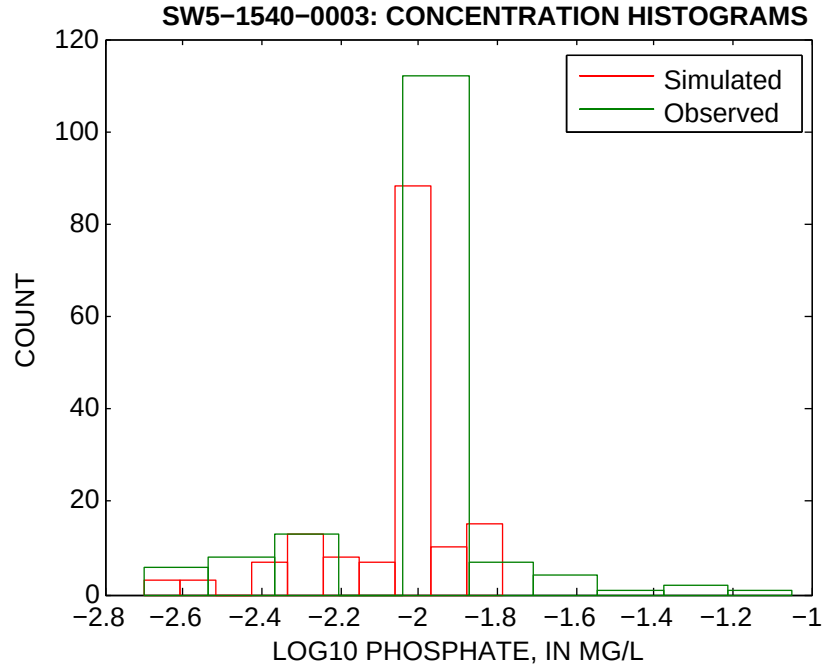
VERSION 2.1

ALL DATA
LOG10

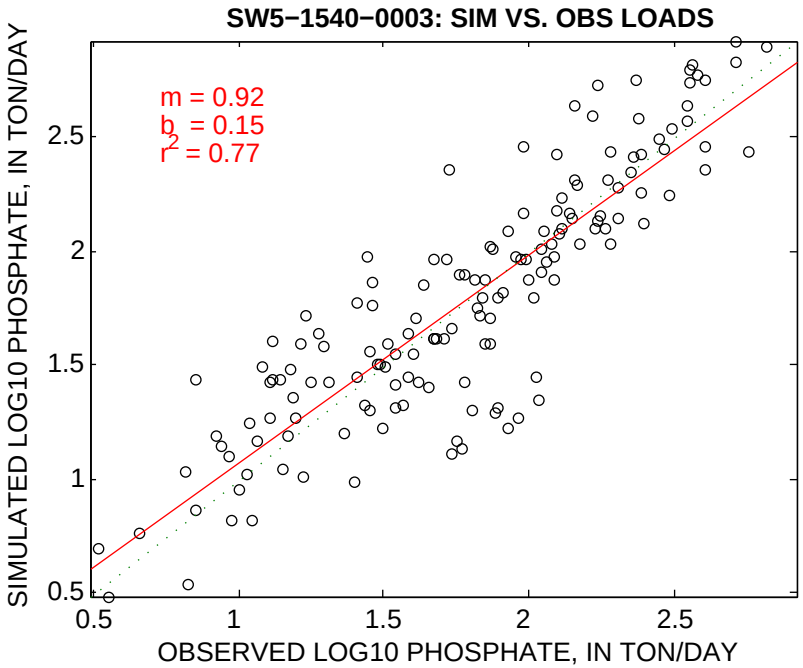




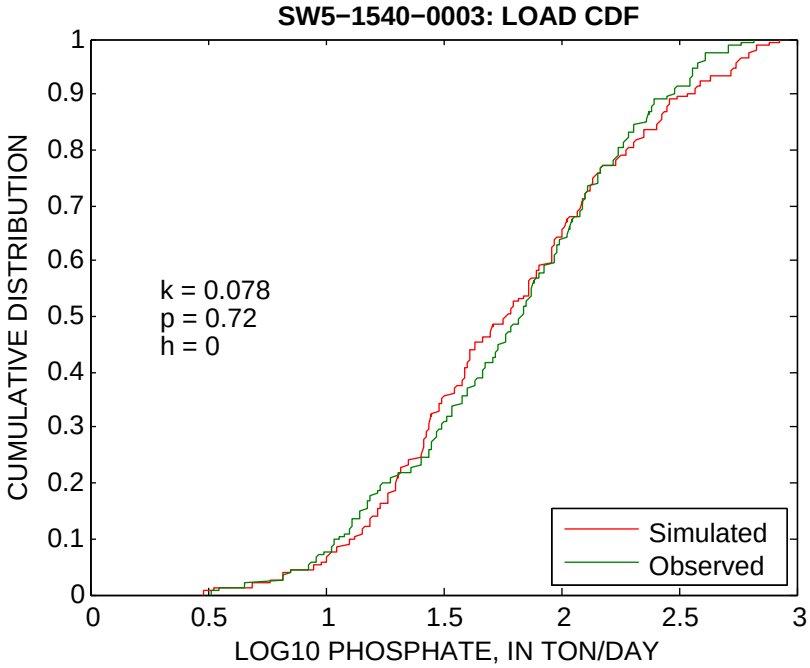


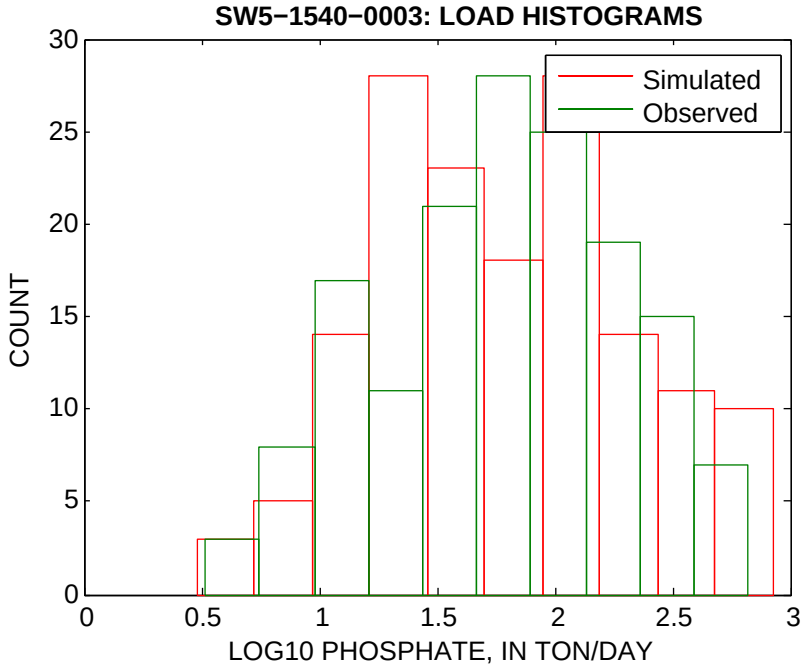


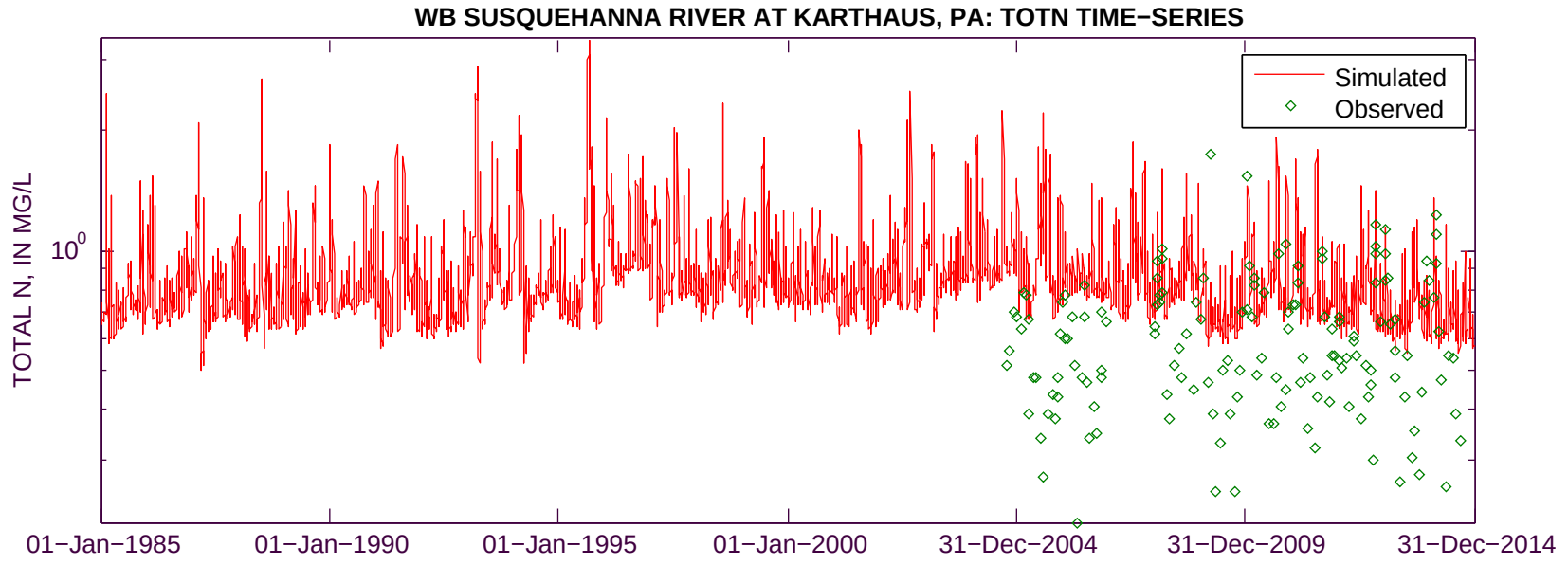
LOAD DATA
LOG10

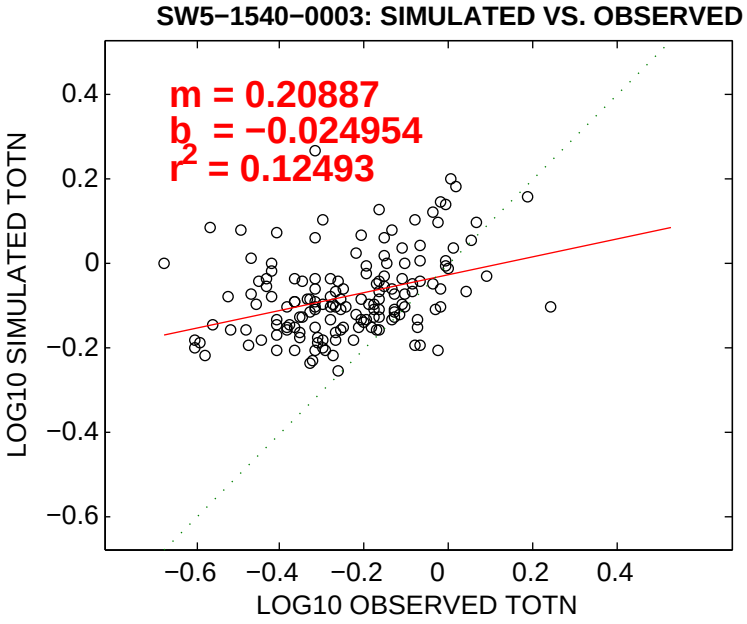


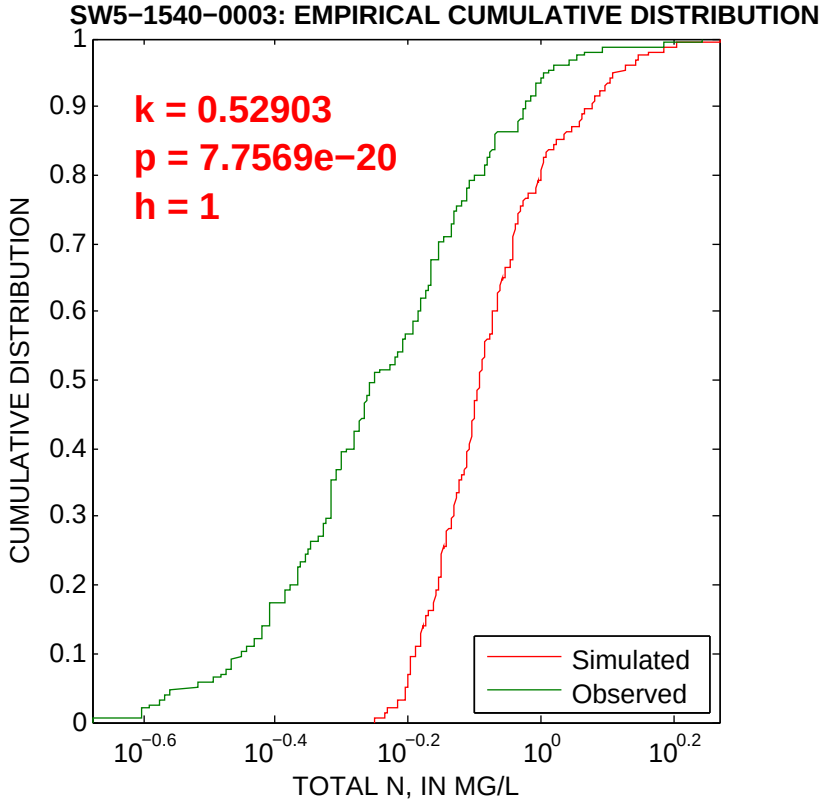












DATA SELECTION

scenario	file
P620171001WQ	TOTN.calib

plot: TOTN - total nitrogen

Dates: 1/1/1985 – 12/31/201

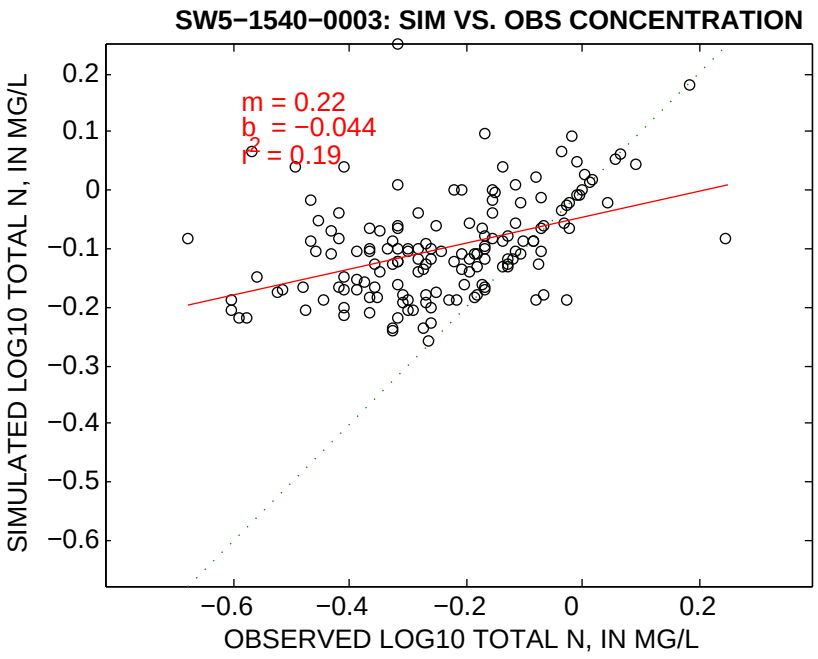
Drive	Directory	Observed
N/A	model	OBS20161101

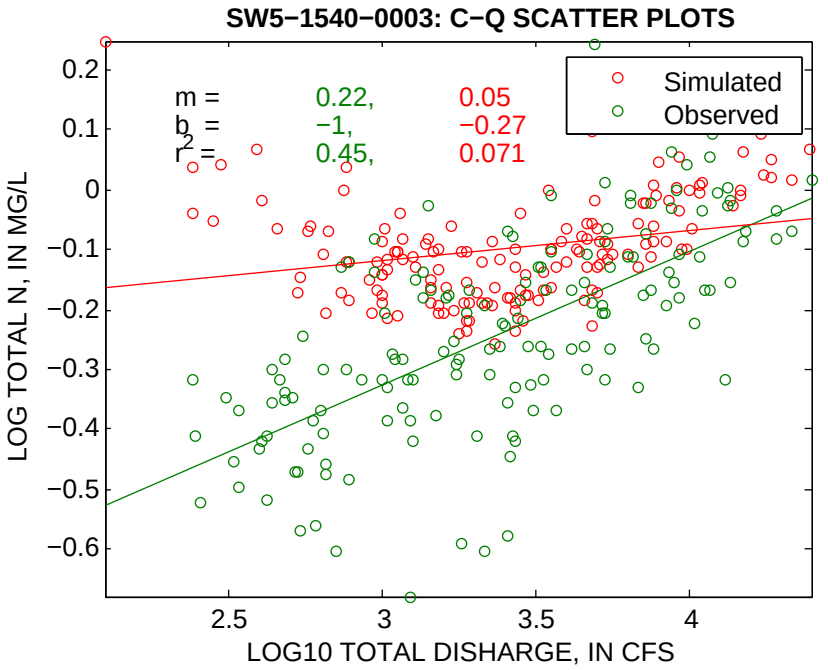
STATISTICS

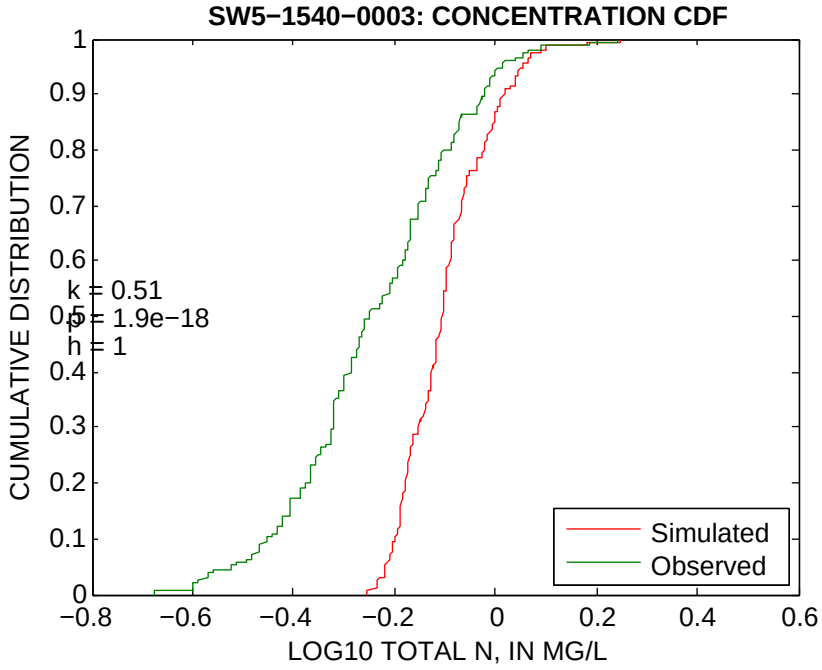
	n	155	155
		observe	simulate
min		0.21	0.56042
		-0.677781	-0.251486
mean		0.619187	0.864556
		-0.239885	-0.0750579
media		0.56	0.80677
		-0.251812	-0.0932503
max		1.75	1.8529
		0.243038	0.267852
varian		0.0602693	0.0479198
		0.0277909	0.00970442
JB		0.001	0.001
		0.5	0.002317
		ra	log
%		39.6276	-68.7108
err.va		0.128668	0.0532304
rel.std.err		2.13489	1.91539
mod.eff		-1.13489	-0.915391

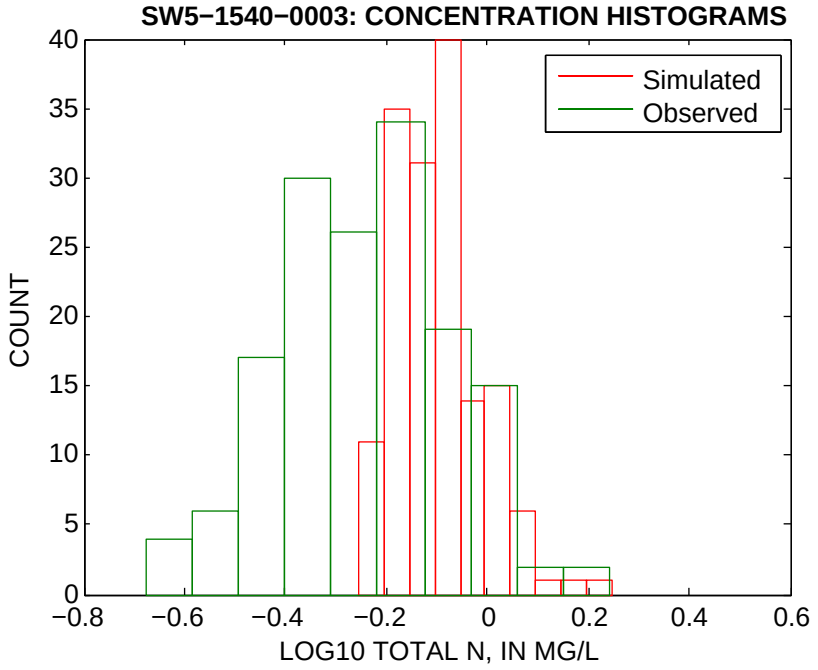
VERSION 2.1

ALL DATA
LOG10

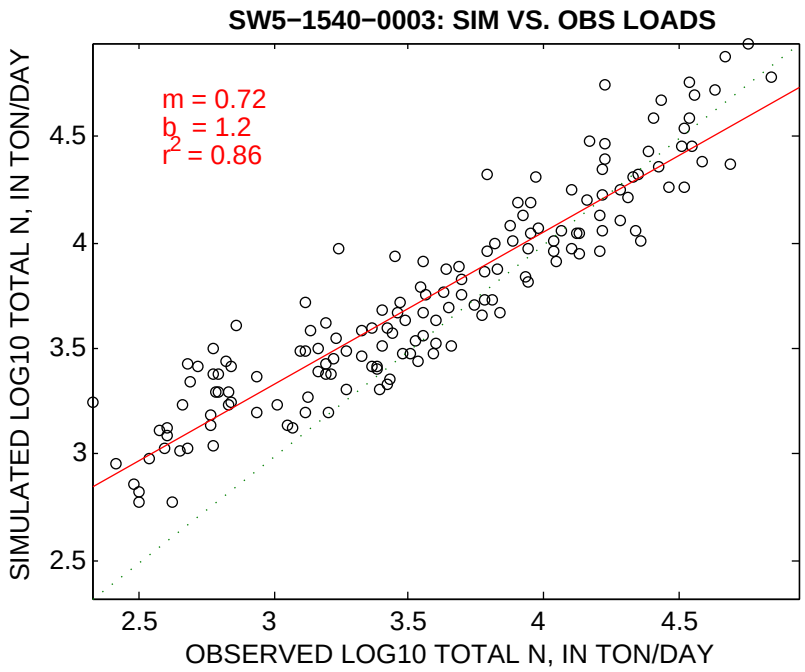


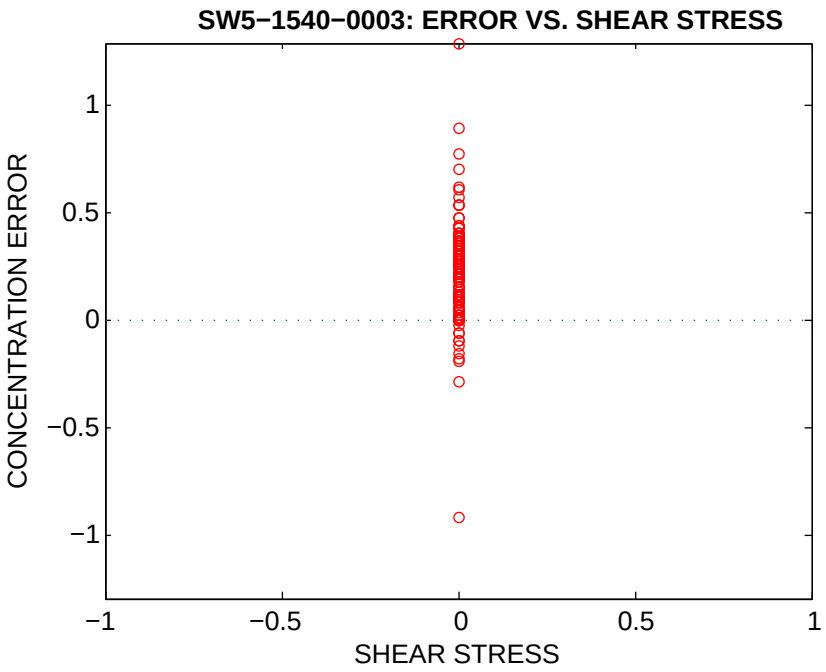


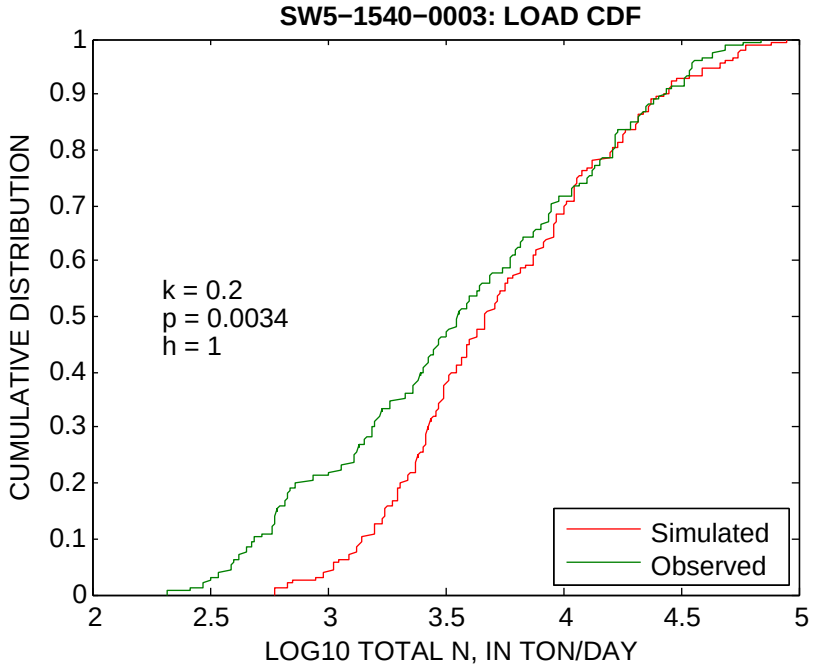


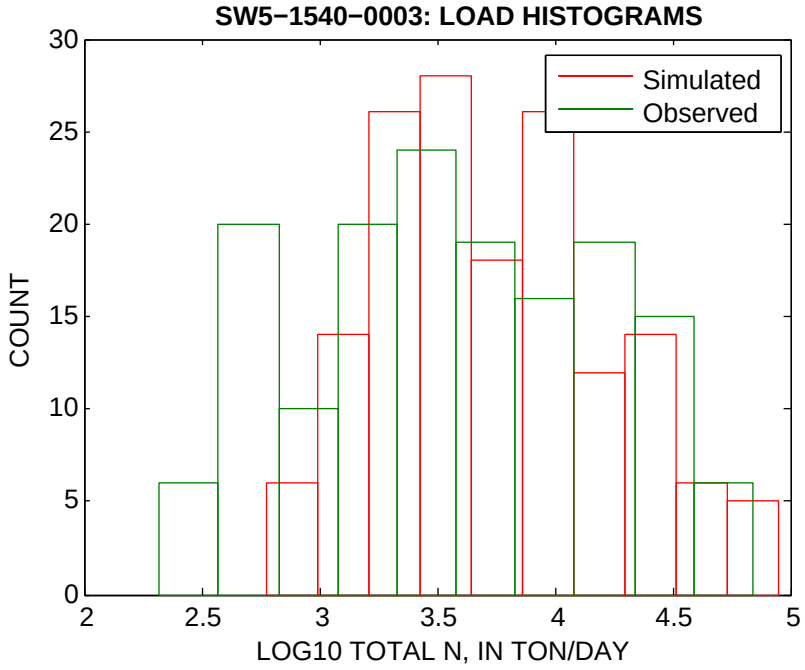


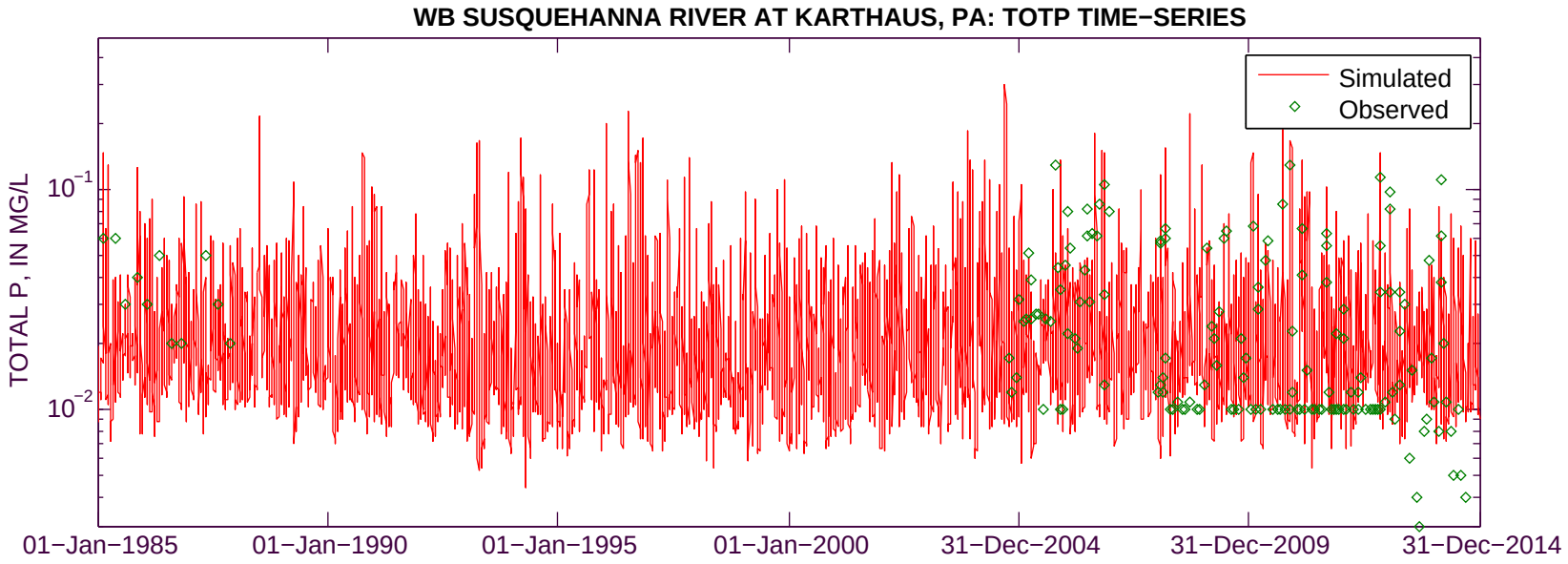
LOAD DATA
LOG10

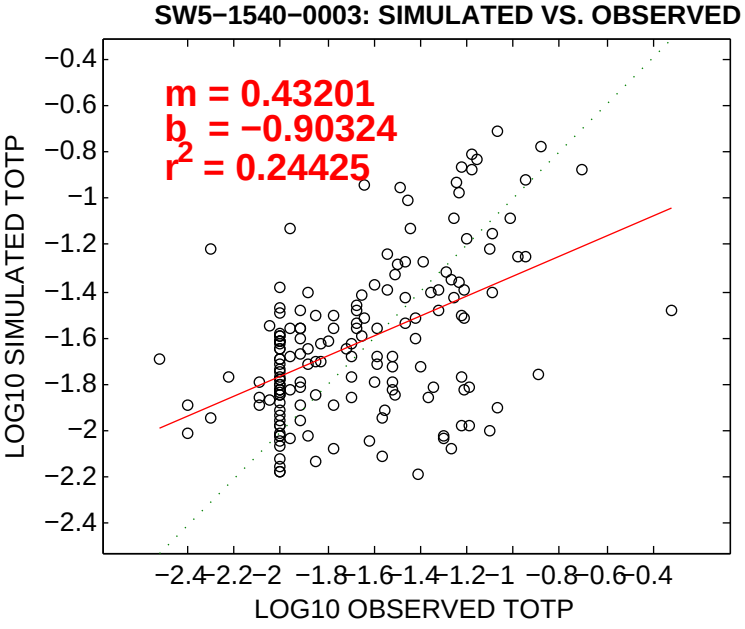


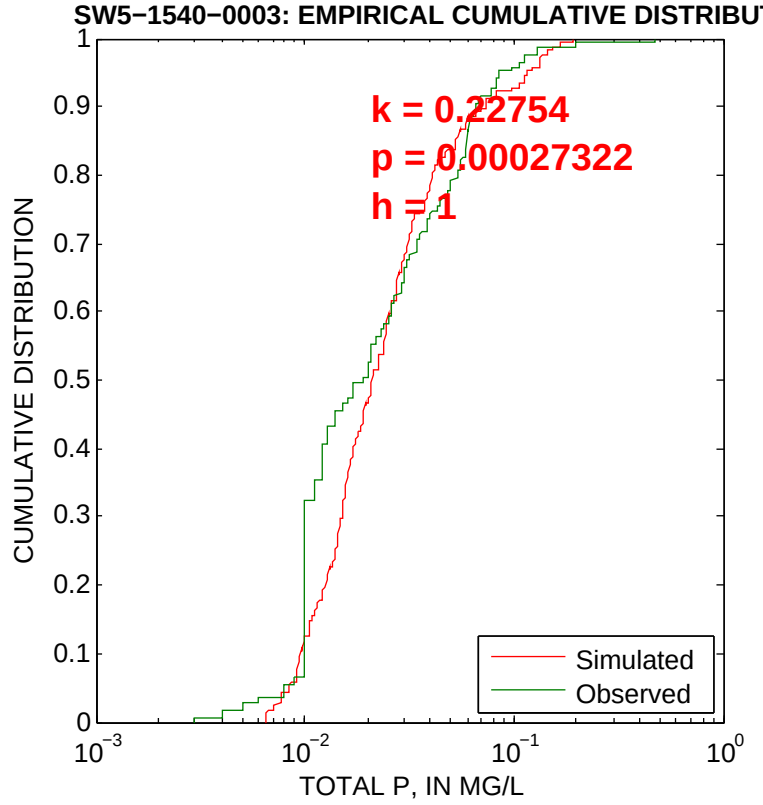












DATA SELECTION

scenario	file
P620171001WQ	TOTP.calib

plot: TOTP - total phosphorus

Dates: 1/1/1985 – 12/31/201

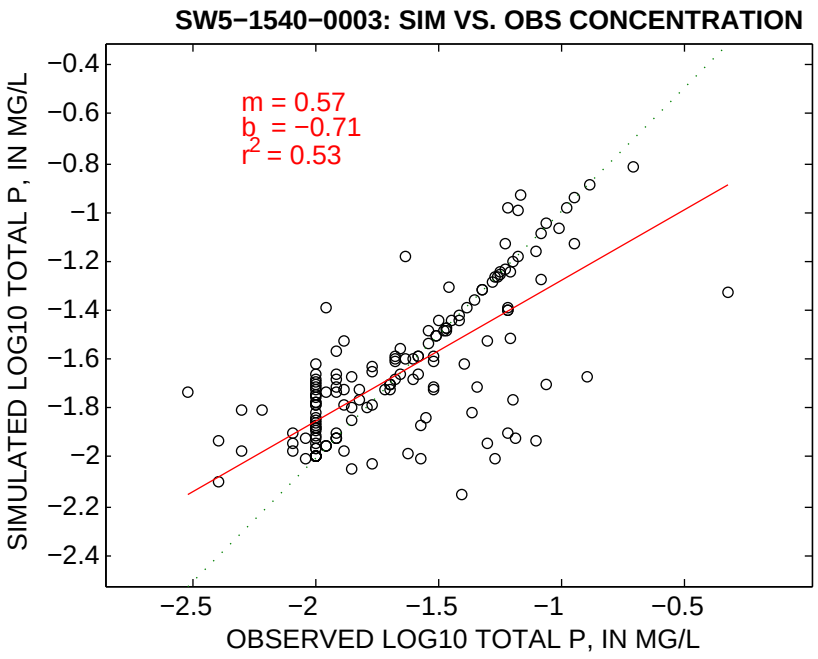
Drive	Directory	Observed
N/A	model	OBS20161101

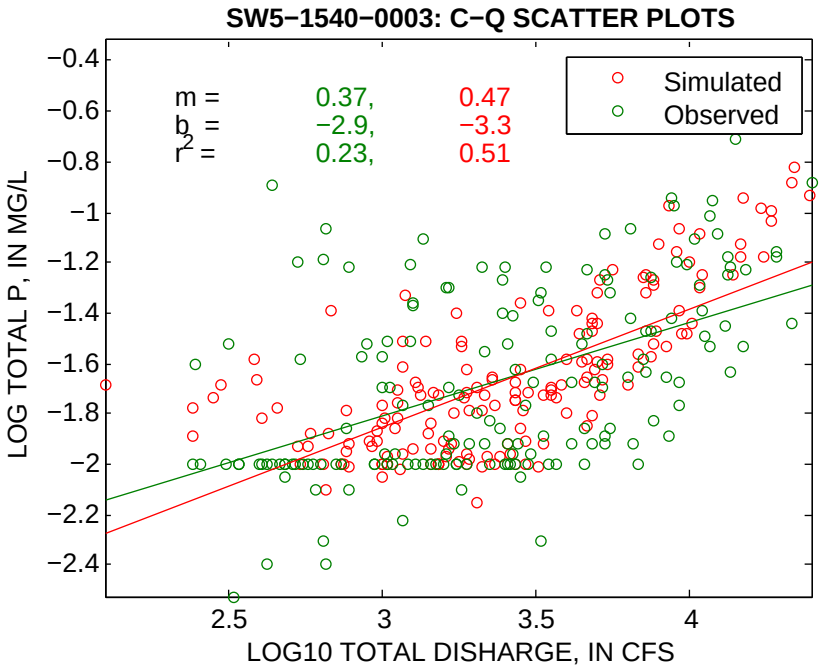
STATISTICS

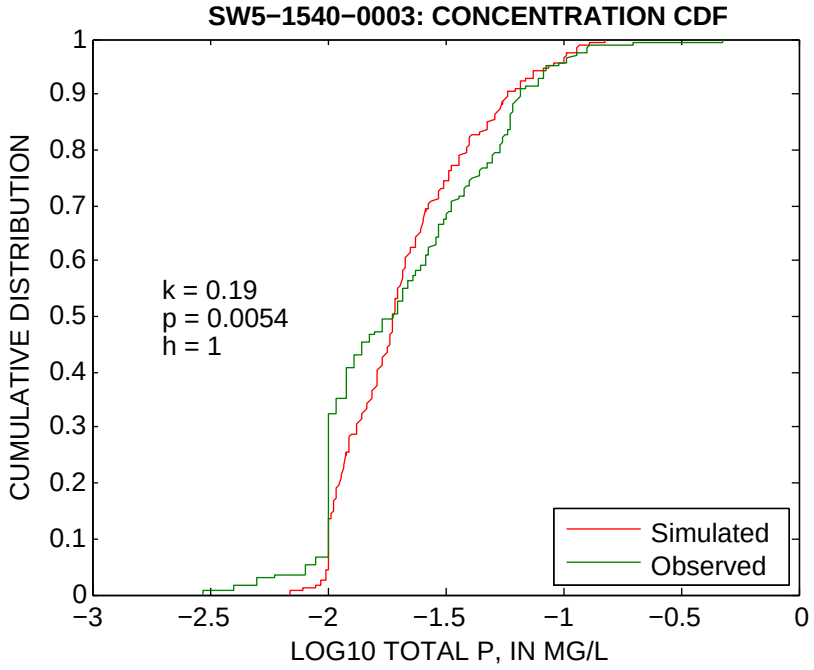
	n	167	167
		observe	simulate
min		0.003	0.0064806
		-2.52288	-2.18838
mean		0.033024	0.0331196
		-1.66964	-1.62454
media		0.019	0.021038
		-1.72125	-1.677
max		0.48	0.19337
		-0.318759	-0.713611
varian		0.00207193	0.00114185
		0.143005	0.10927
JB		0.001	0.001
		0.021203	0.007450
		ra	log
%		0.289574	-2.70123
err.va		0.00206962	0.130762
rel.std.err		0.998885	0.914383
mod.eff		0.00111452	0.0856172

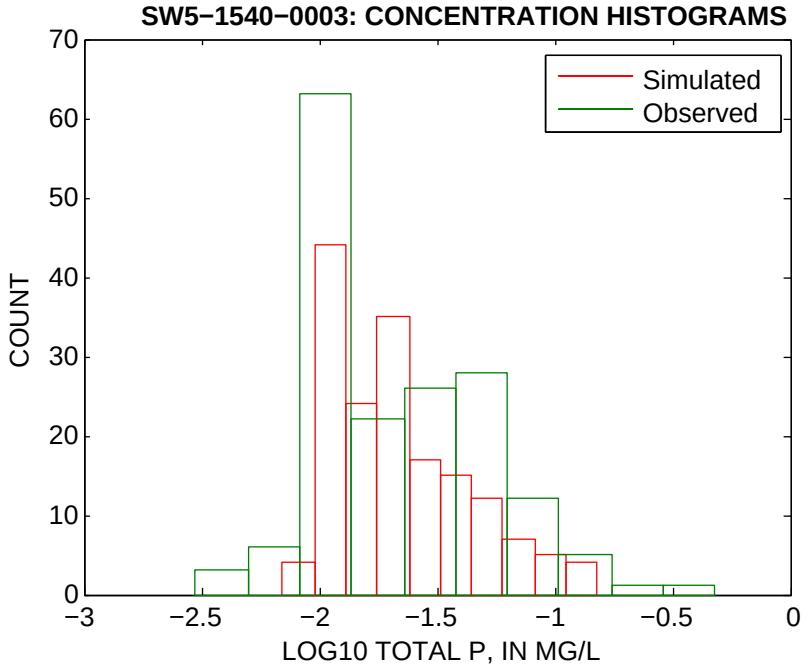
VERSION 2.1

ALL DATA
LOG10

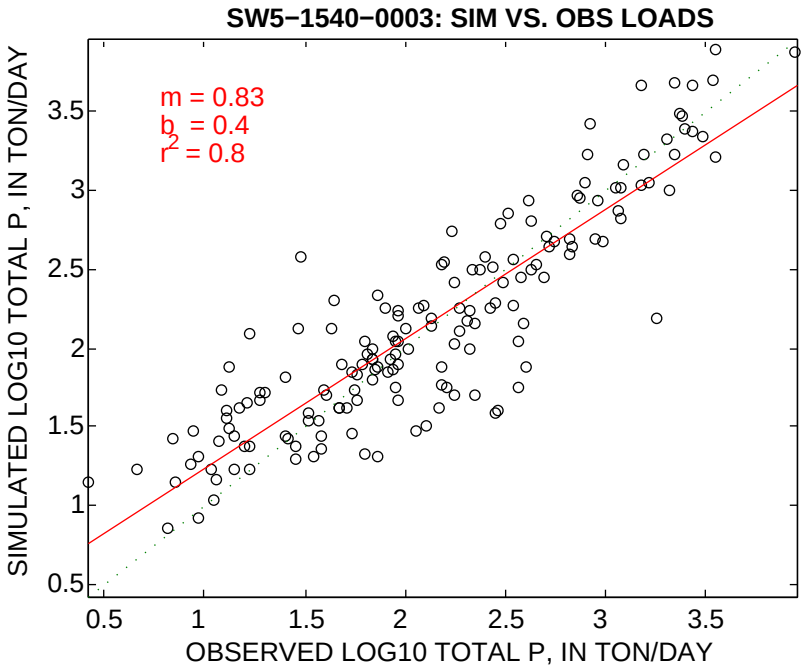


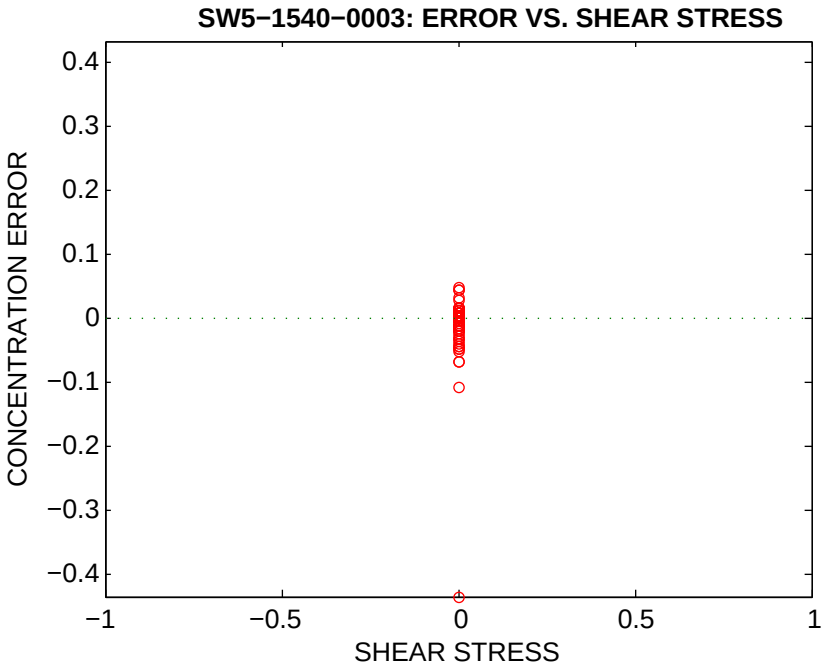


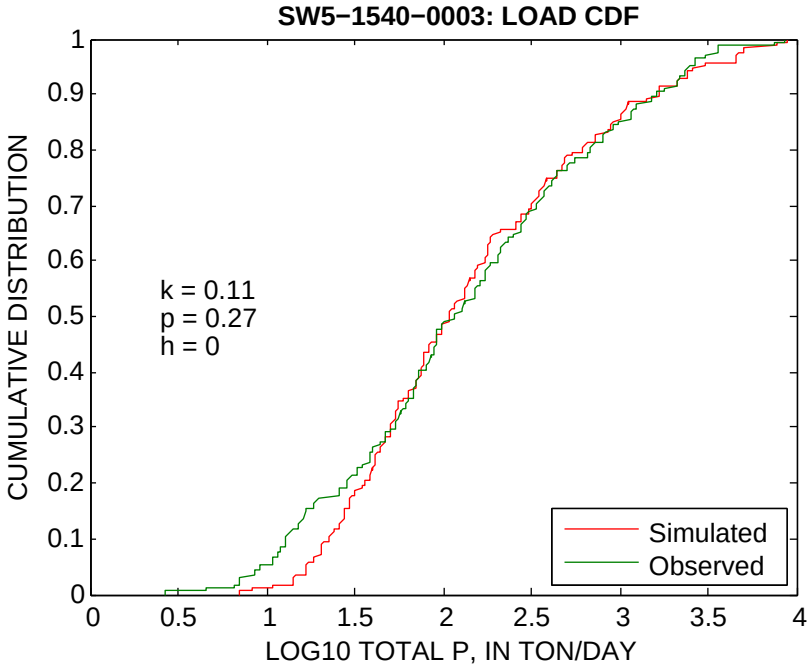


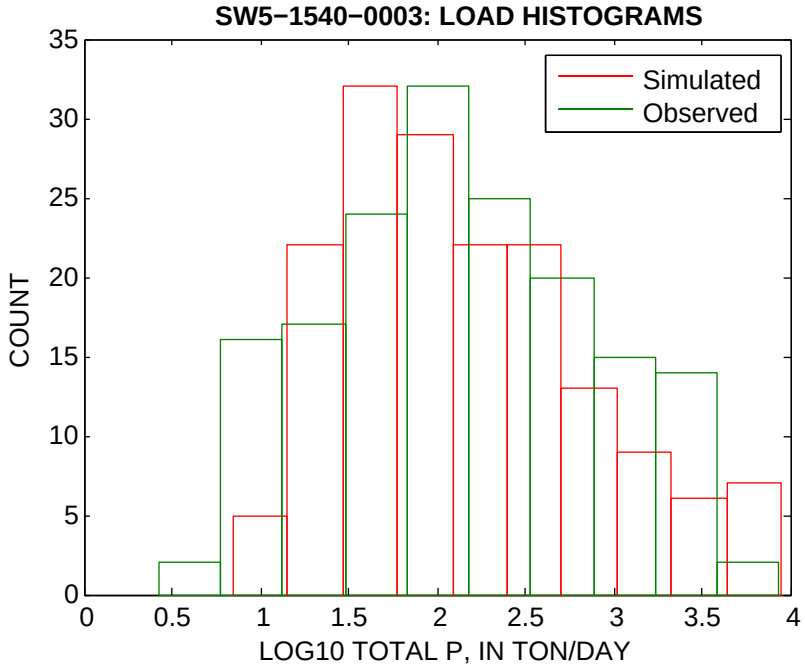


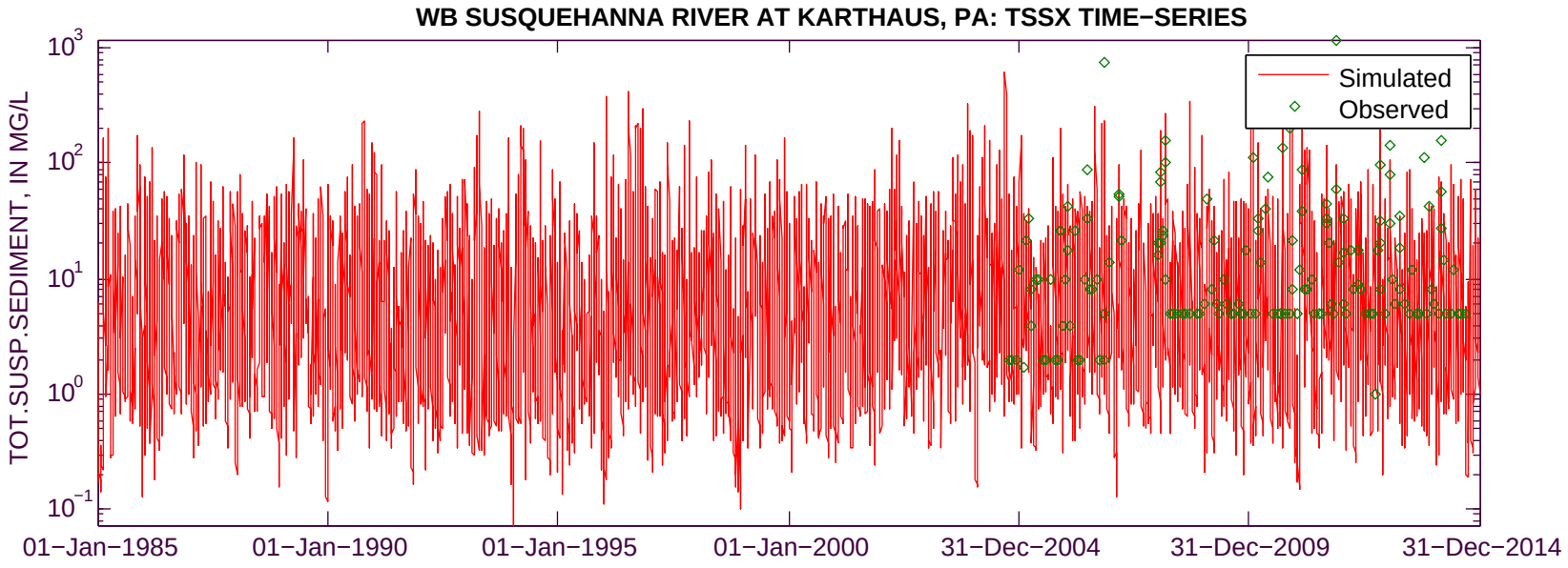
LOAD DATA
LOG10

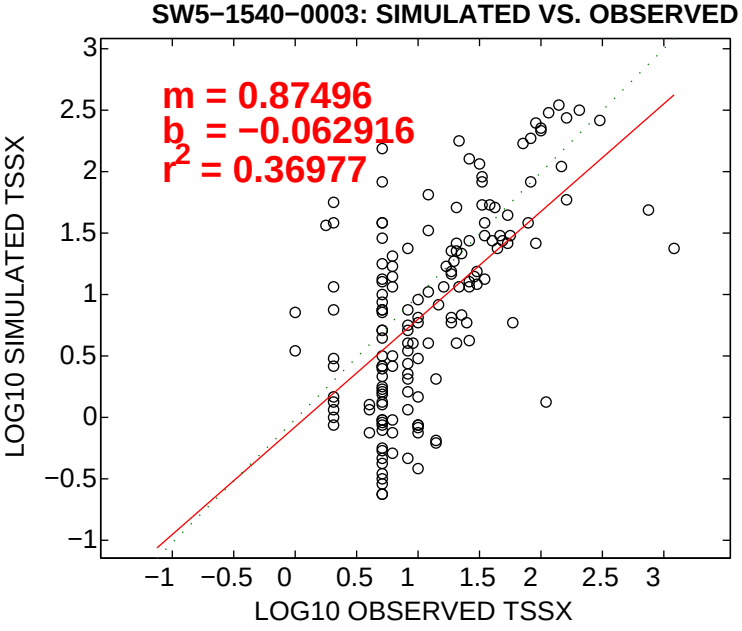


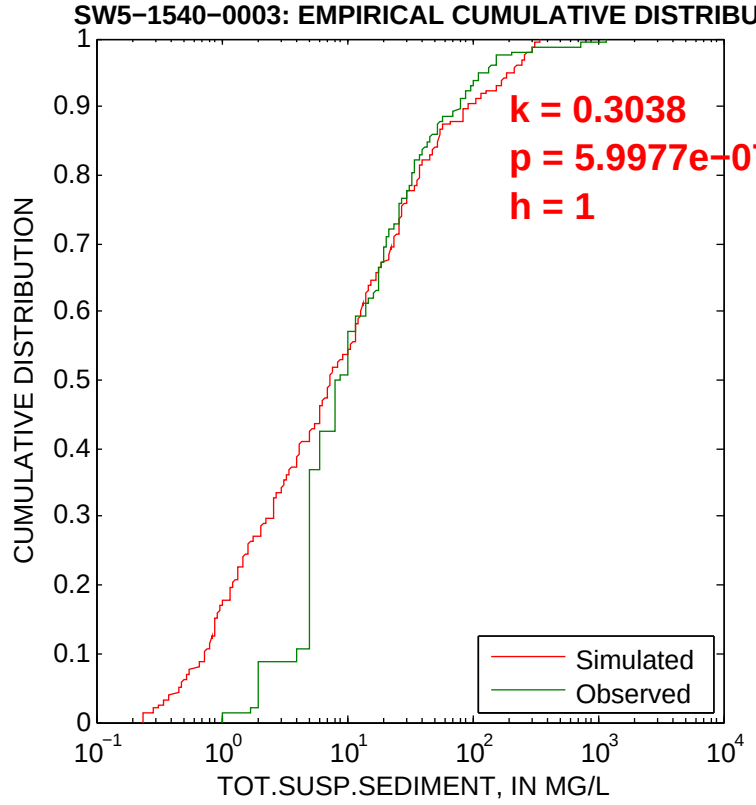












DATA SELECTION

scenario: P620171001WQ | file: TSSX.calib

plot: TSSX - total suspended ...

Dates: 1/1/1985 – 12/31/201

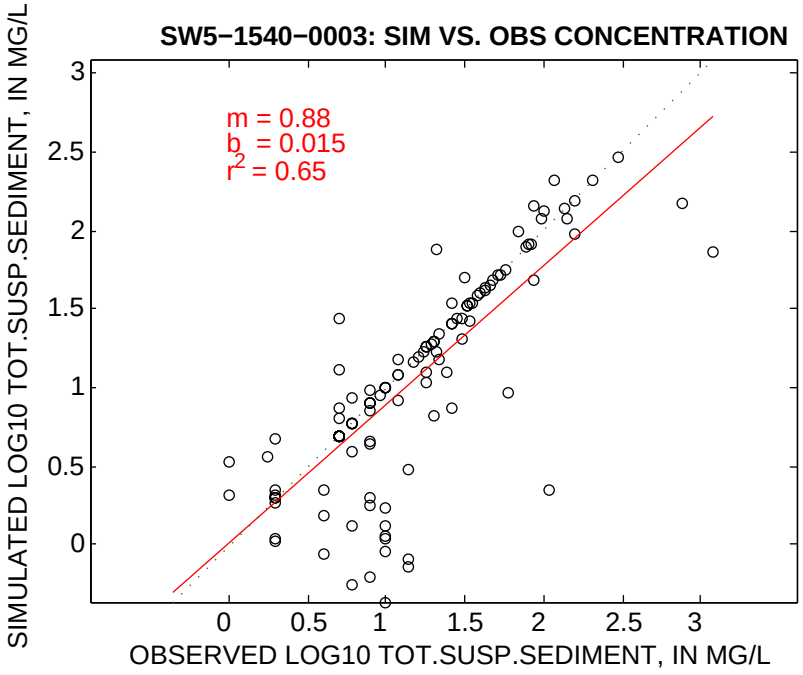
Drive: N/A | Directory: model | Observed: OBS20161101

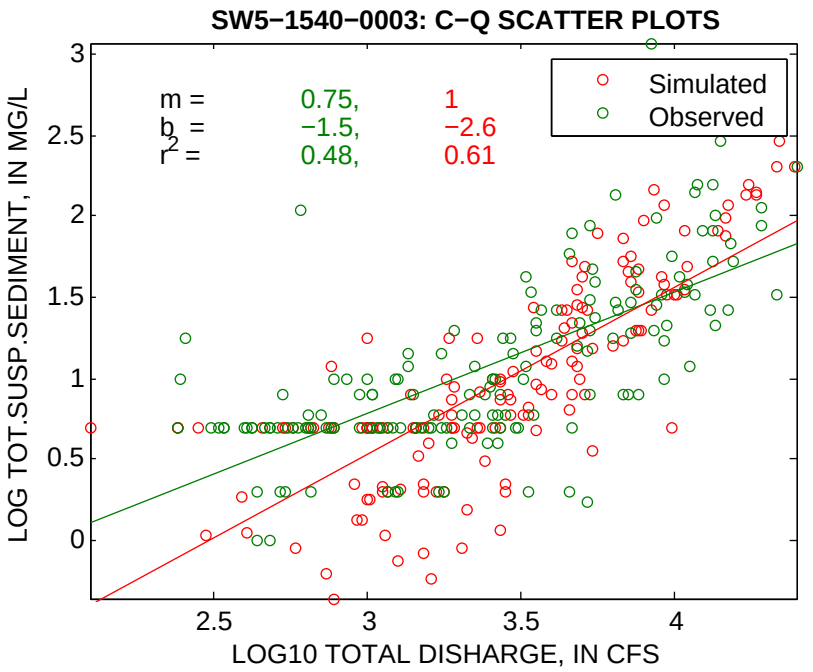
STATISTICS

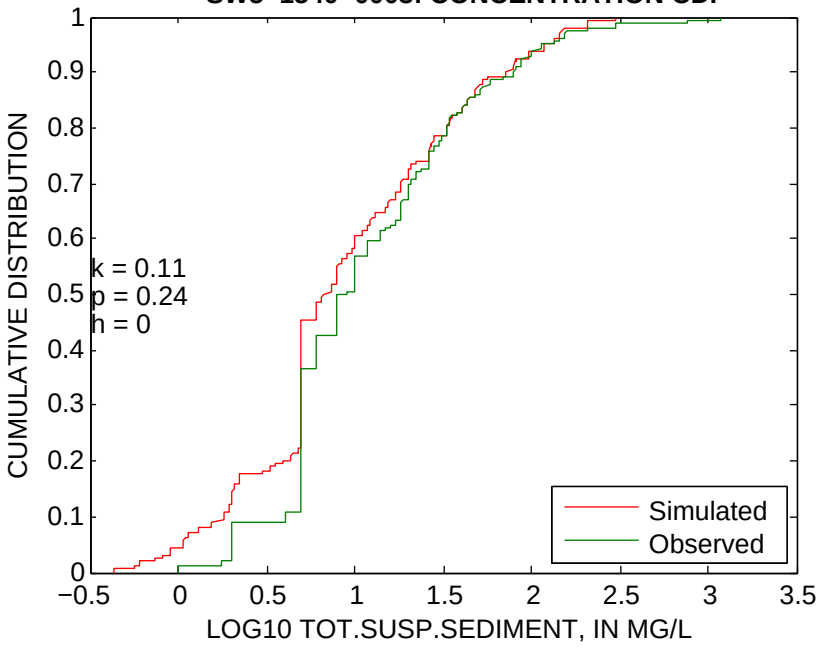
		observe	simulate
n		158	158
min		1	0.2417
		0	-0.616723
mean		36.8199	33.5458
		1.0853	0.886673
media		8.5	7.47755
		0.928666	0.873749
max		1191.5	347.92
		3.07609	2.54148
varian		13536	4321.29
		0.30243	0.626132
JB		0.001	0.001
		0.002182	0.064712
		ra	log
%		-8.89212	-18.3012
err.va		13842.9	0.439036
rel.std.err		1.02267	1.4517
mod.eff		-0.0226668	-0.451698

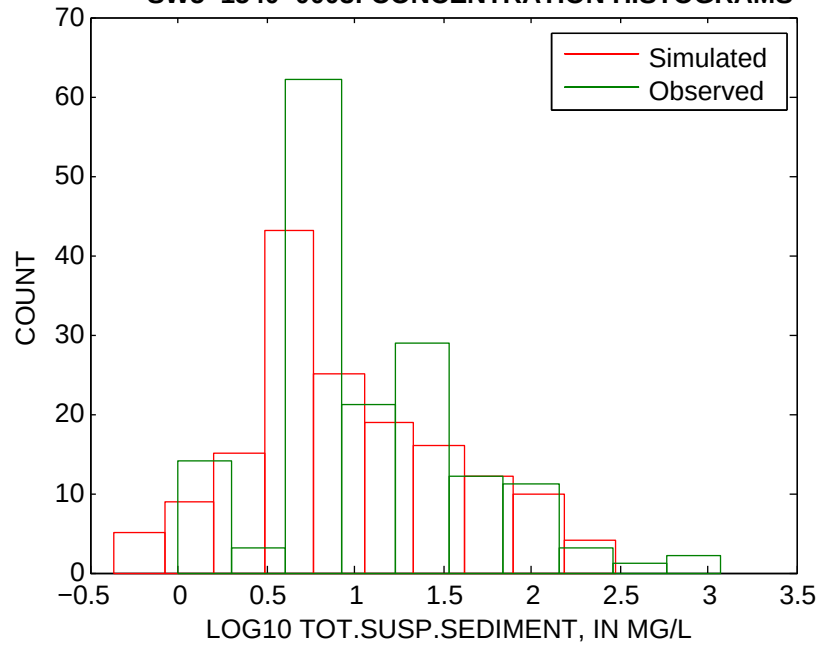
VERSION 2.1

ALL DATA
LOG10

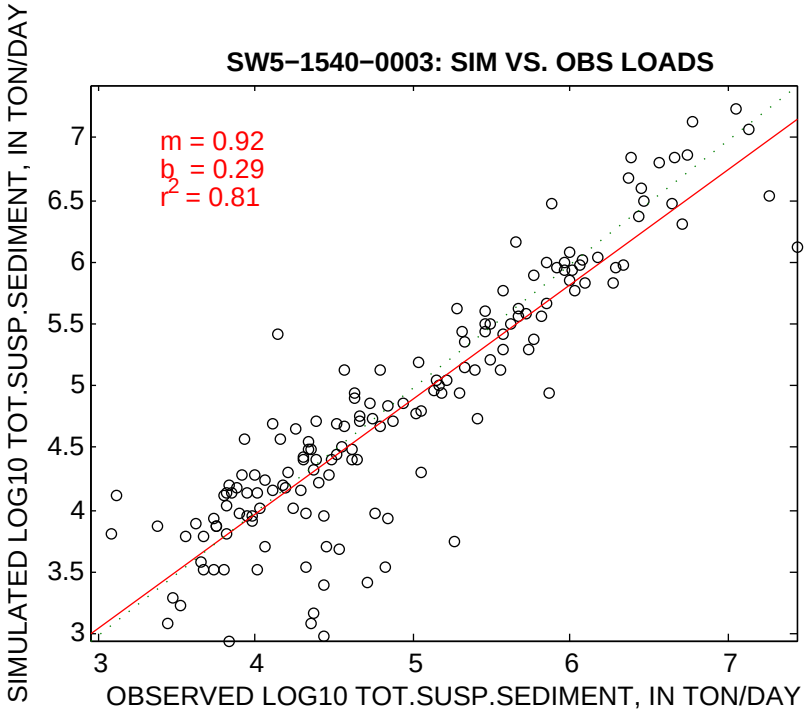


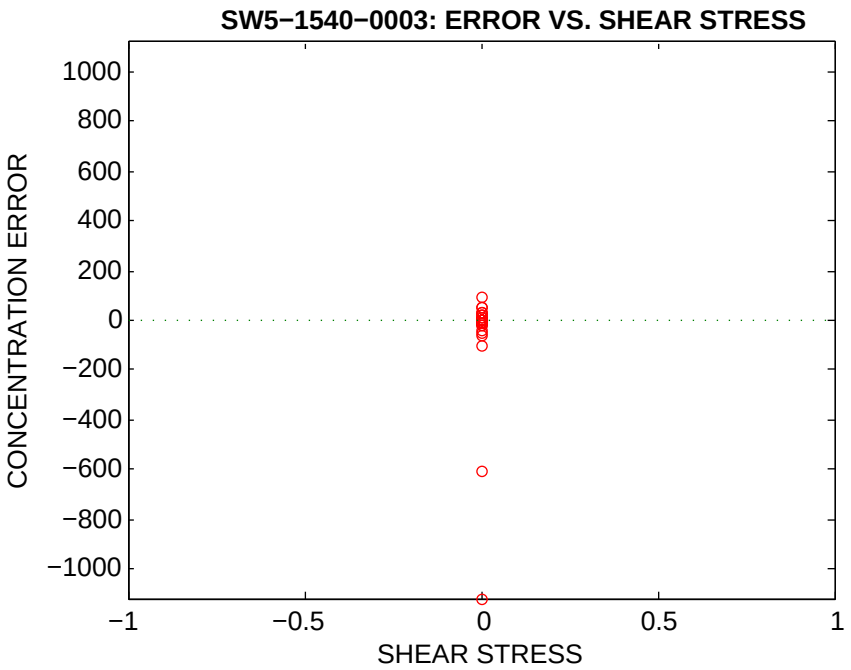


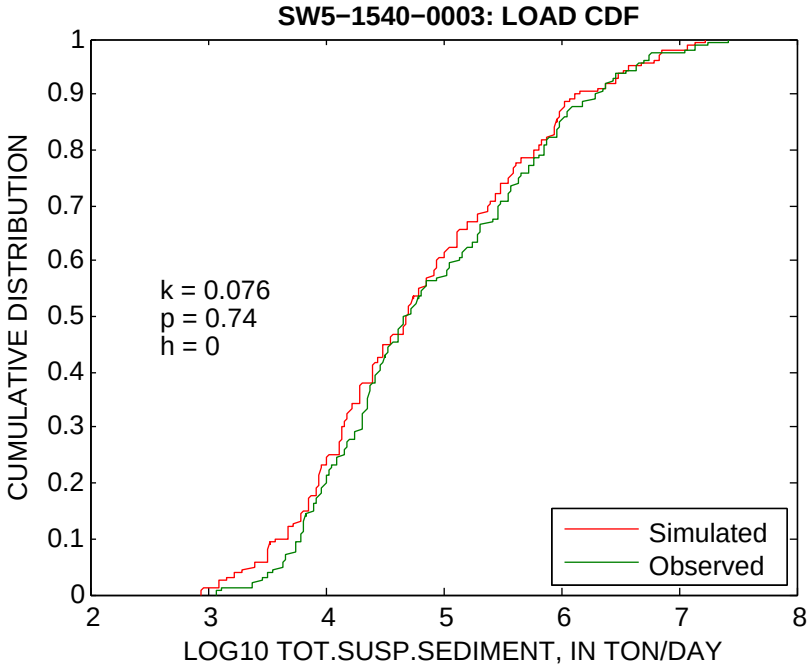


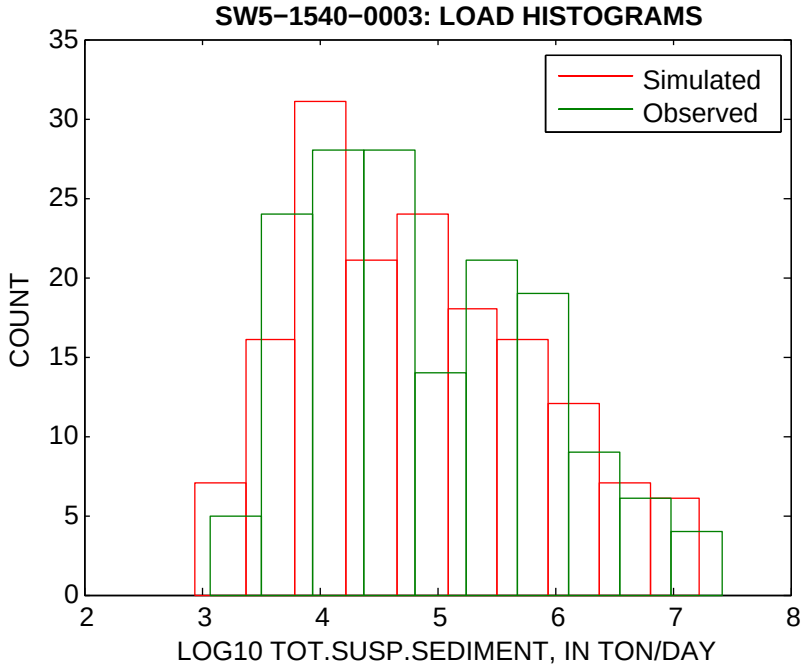


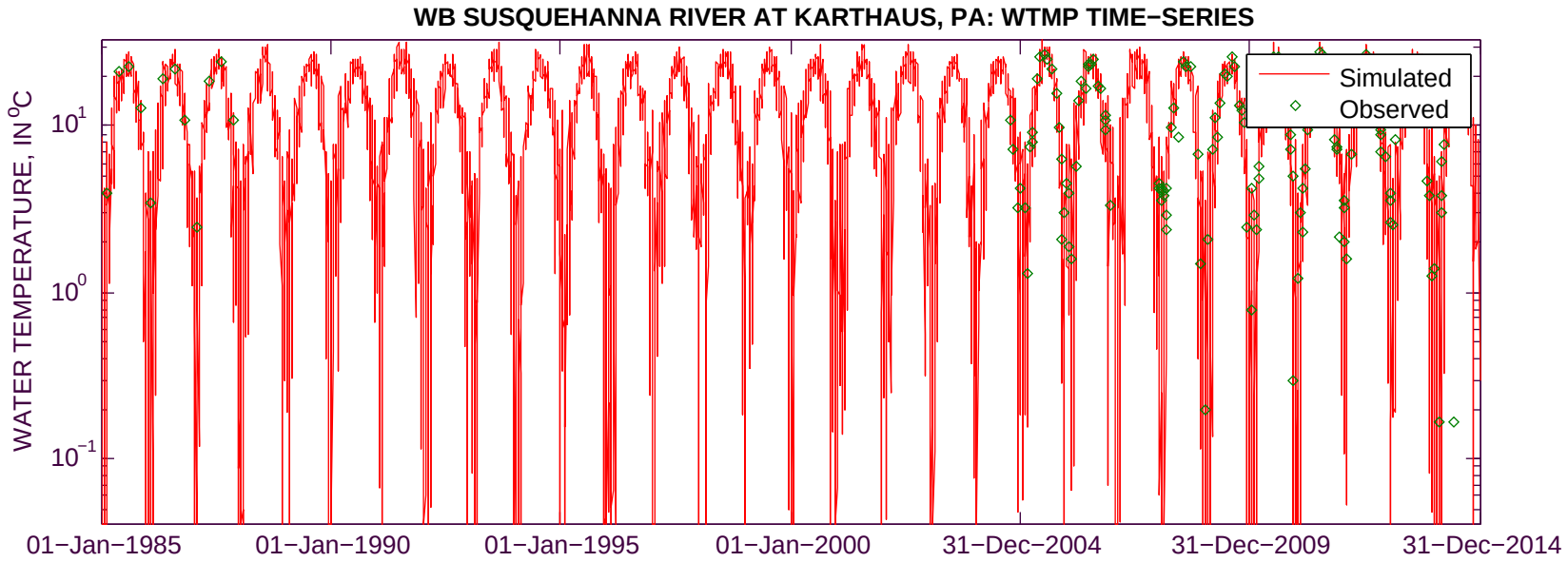
LOAD DATA
LOG10

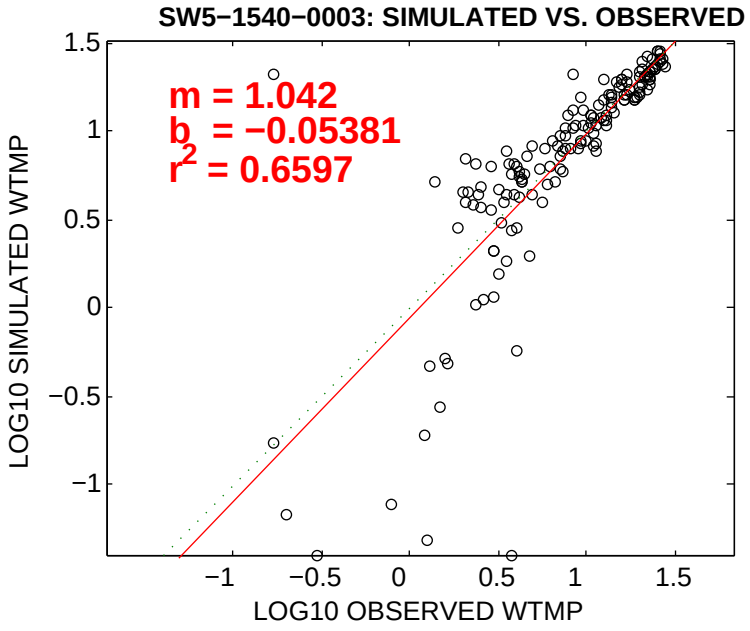


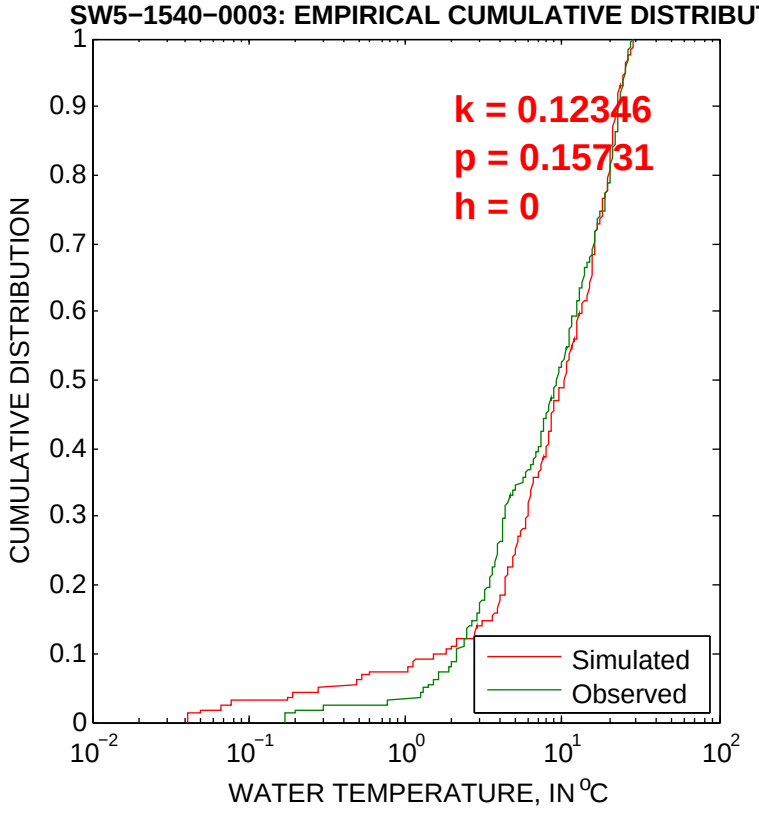












DATA SELECTION

scenario: P620171001WQ | file: WTMP.calib

plot: WTMP - water tempera...

Dates: 1/1/1985 – 12/31/201

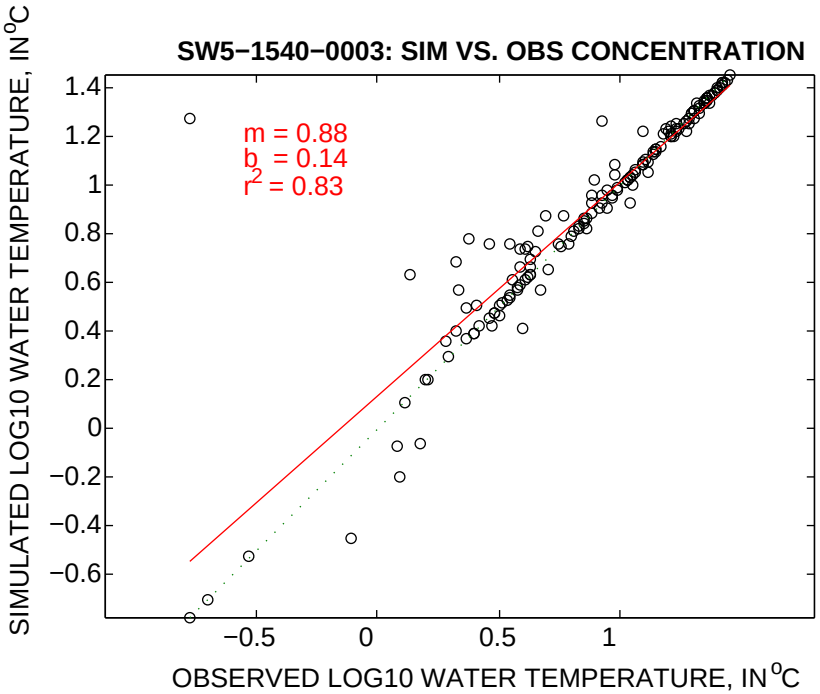
Drive: N/A | Directory: model | Observed: OBS20161101

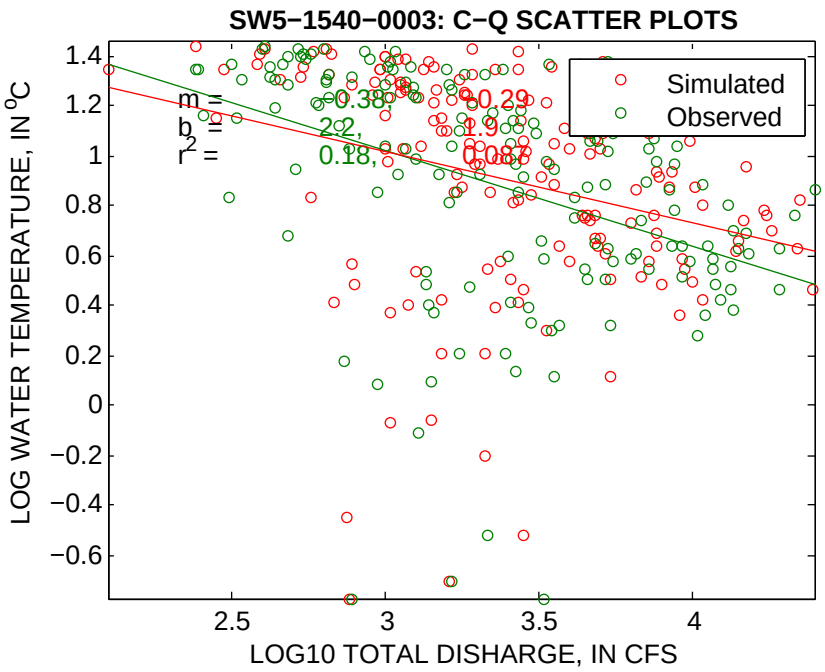
STATISTICS

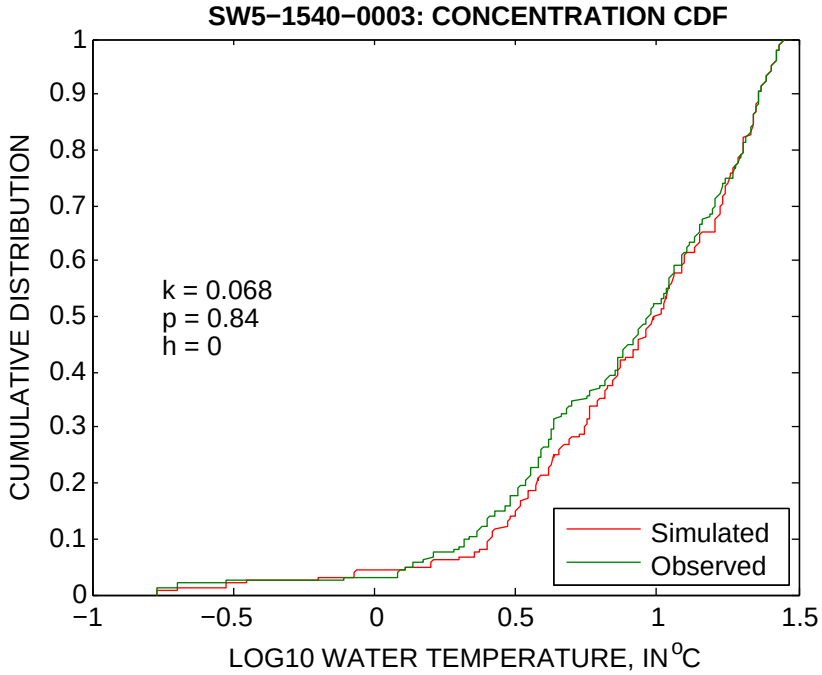
		observe	simulate
n		162	162
min		0.17	0.04022
		-0.769551	-1.39556
mean		11.1635	11.5942
		0.880811	0.863971
media		9.41	10.541
		0.973583	1.02287
max		28.36	28.773
		1.45271	1.45899
varian		65.2199	61.3553
		0.204083	0.335874
JB		0.007047	0.016531
		0.001	0.001
		ra	log
%		3.85783	-1.91178
err.va		9.23508	0.114943
rel.std.err		0.141599	0.563217
mod.eff		0.858401	0.436783

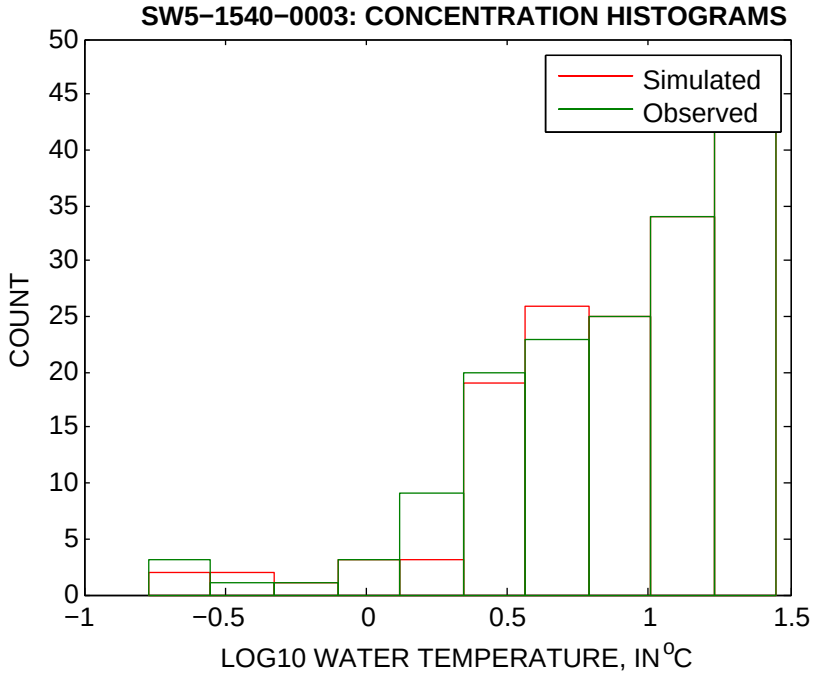
VERSION 2.1

ALL DATA
LOG10

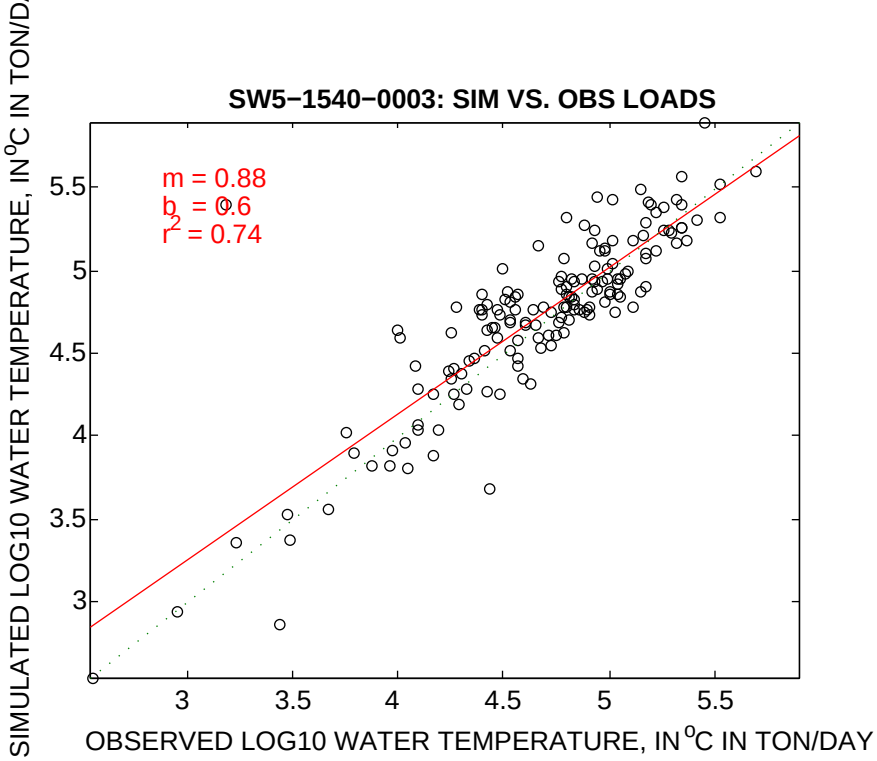




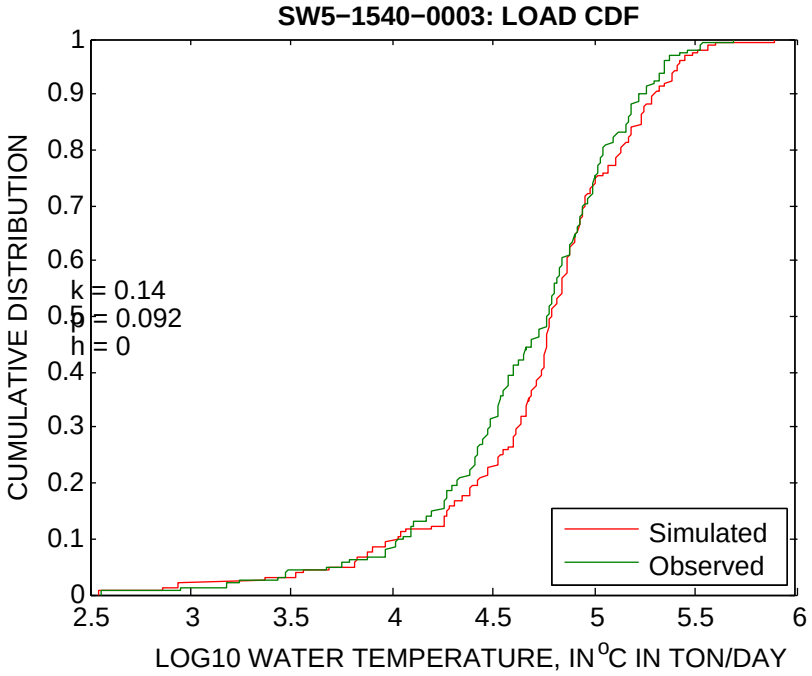


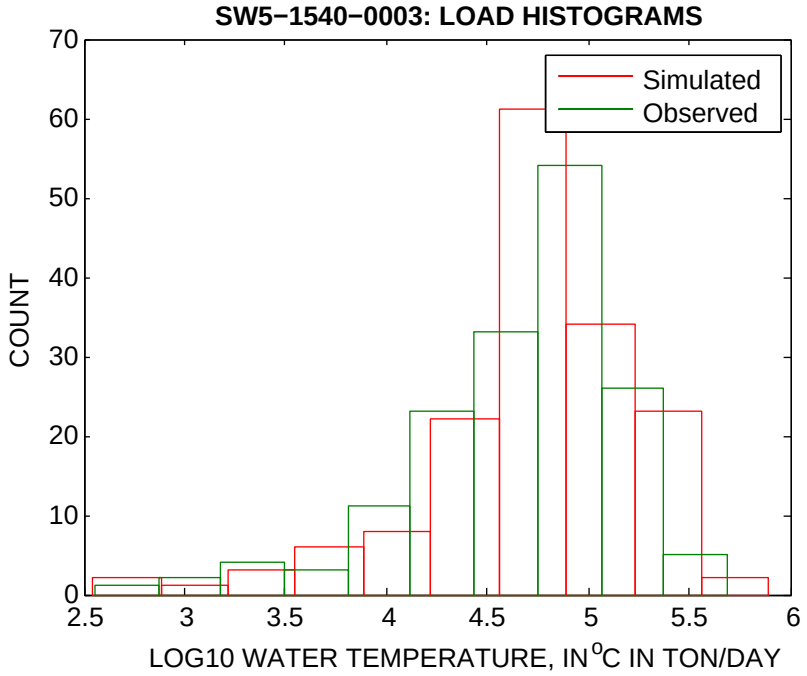


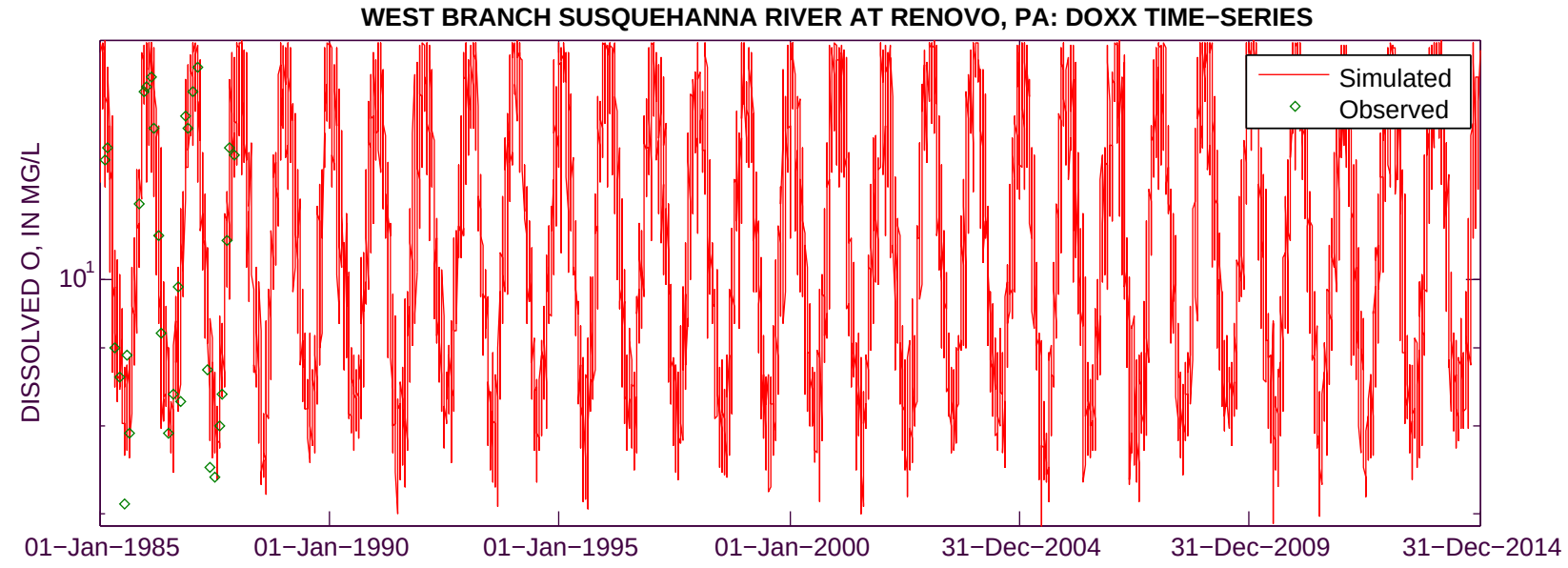
LOAD DATA
LOG10

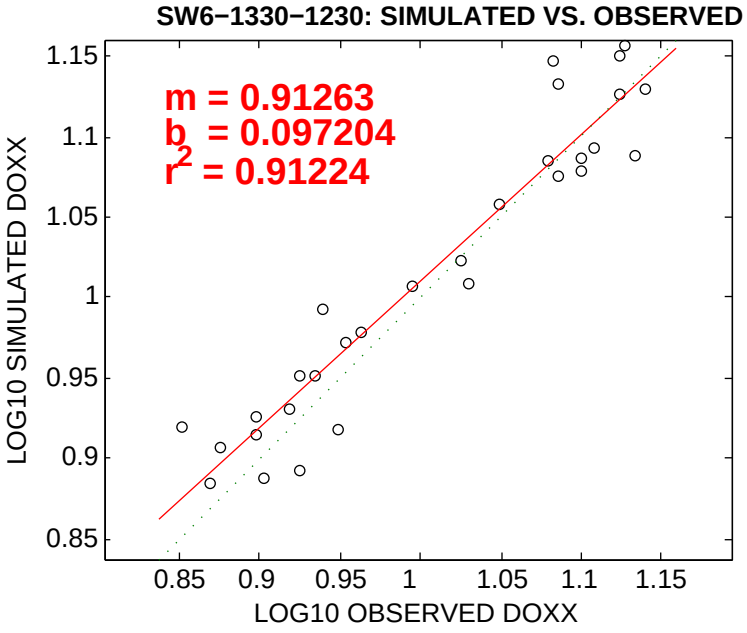


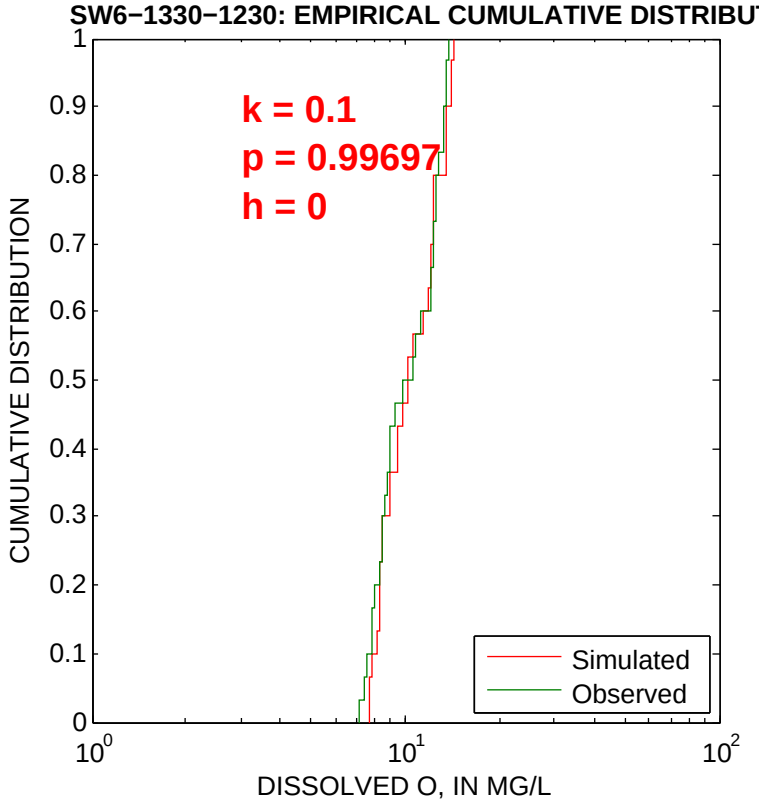












DATA SELECTION

scenario	file
P620171001WQ	DOXX.calib

plot: DOXX - dissolved oxygen

Dates: 1/1/1985 – 12/31/201

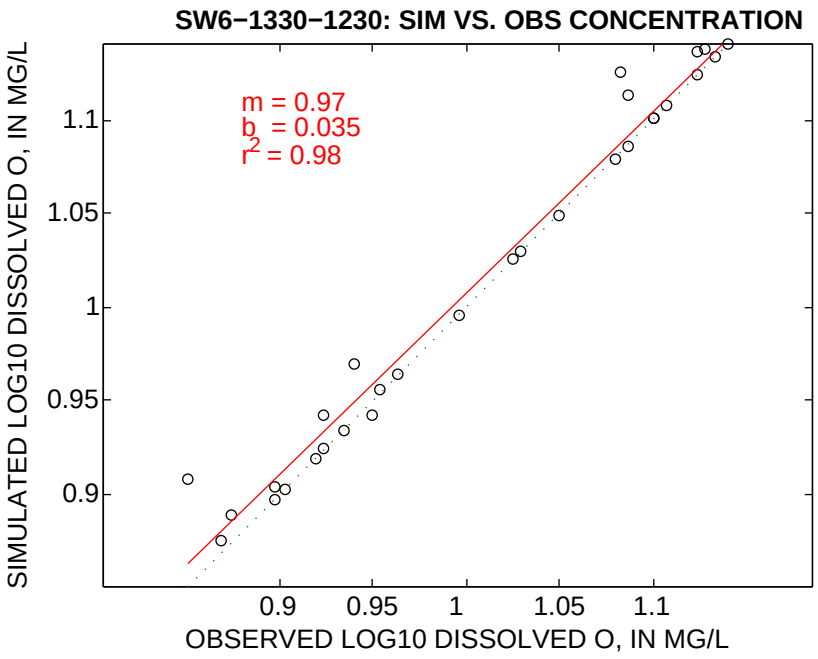
Drive	Directory	Observed
N/A	model	OBS20161101

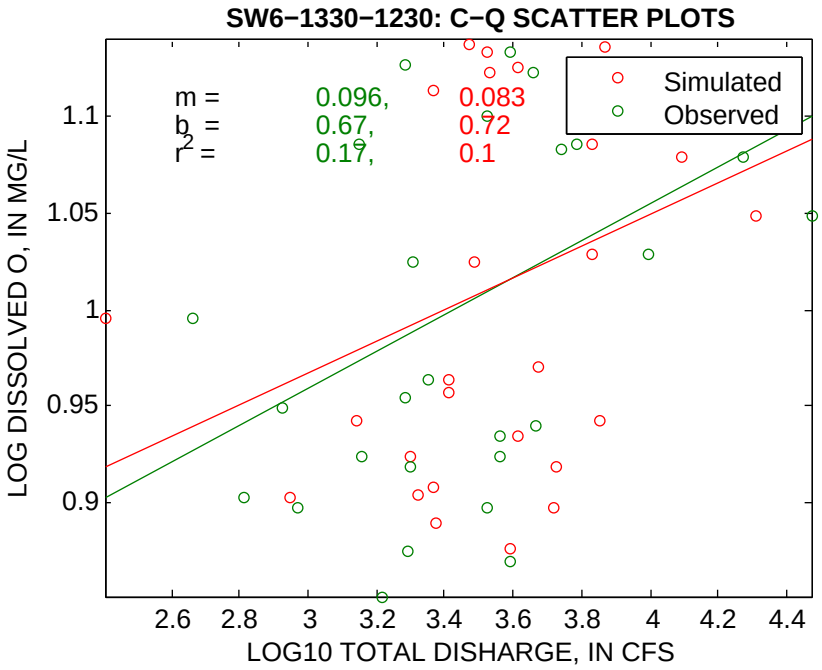
STATISTICS

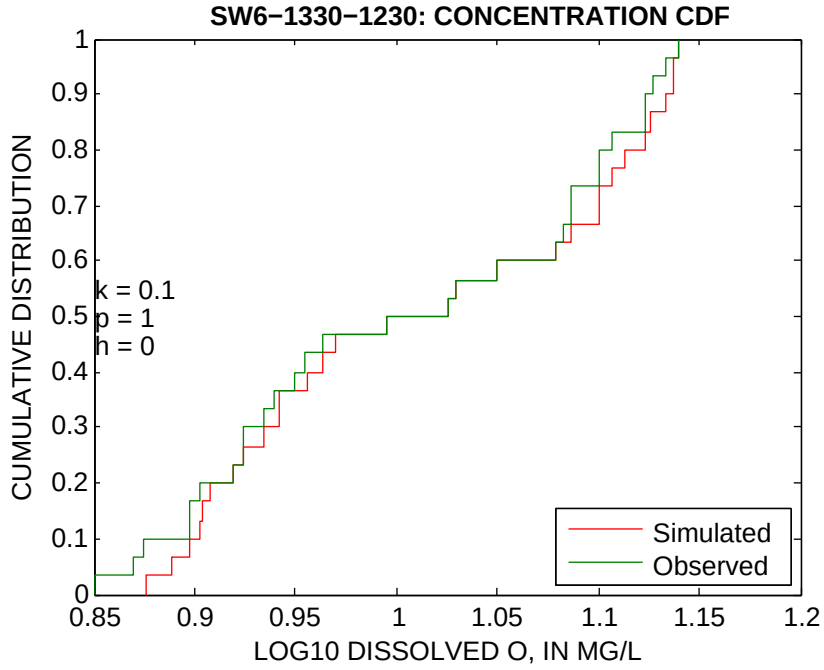
	n	observe	simulate
		30	30
min		7.1	7.6732
		0.851258	0.884977
mean		10.3867	10.5915
		1.00645	1.01572
media		10.25	10.1795
		1.01047	1.00773
max		13.8	14.315
		1.13988	1.15579
varian		5.06051	4.94268
		0.00909413	0.00830308
JB		0.085133	0.10714
		0.09121	0.108376
		ra	log
%		1.97182	0.921049
err.va		0.534296	0.00088697
rel.std.err		0.105582	0.0975328
mod.eff		0.894418	0.902467

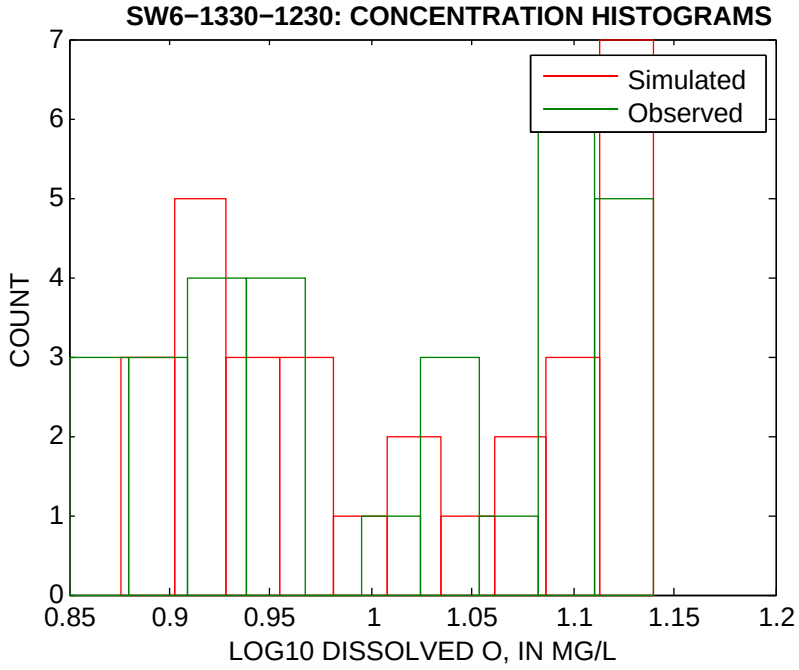
VERSION 2.1

ALL DATA
LOG10

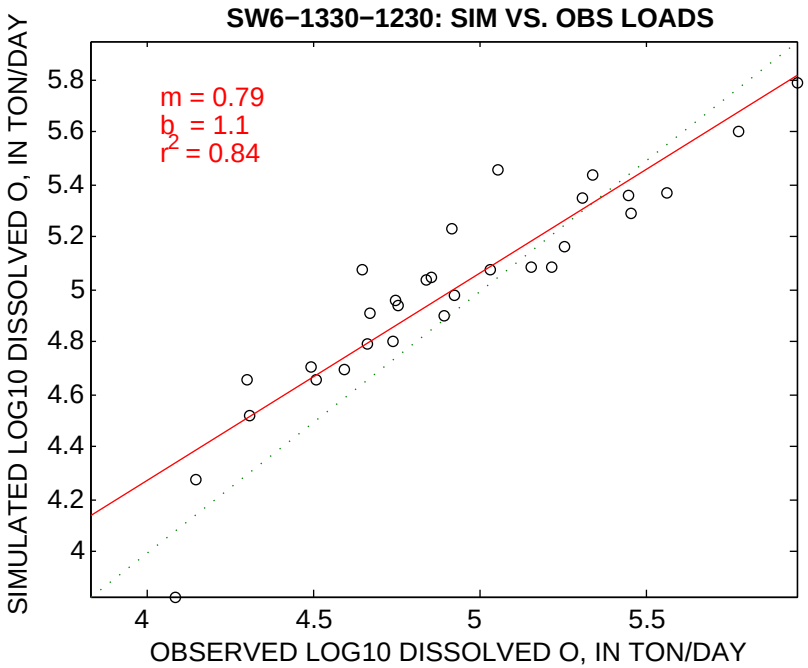


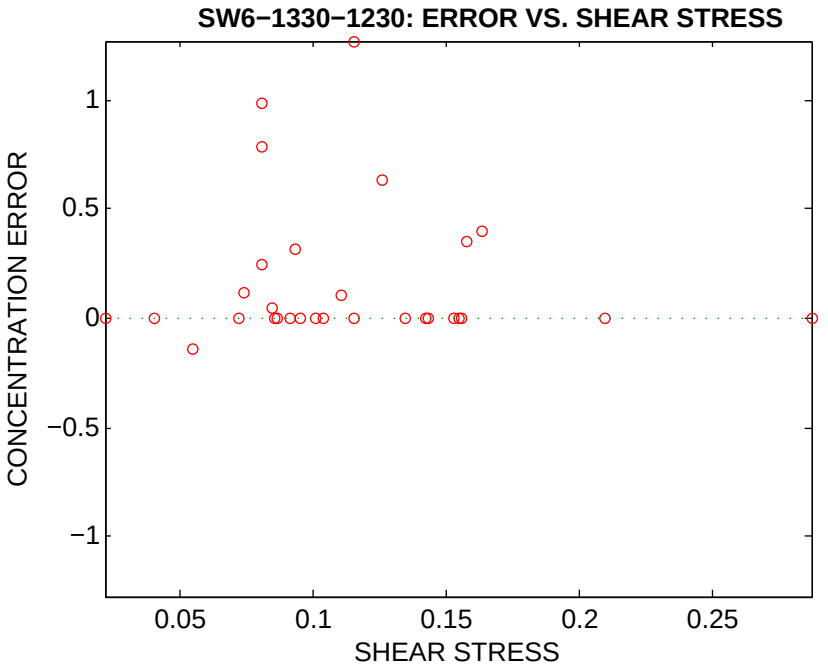


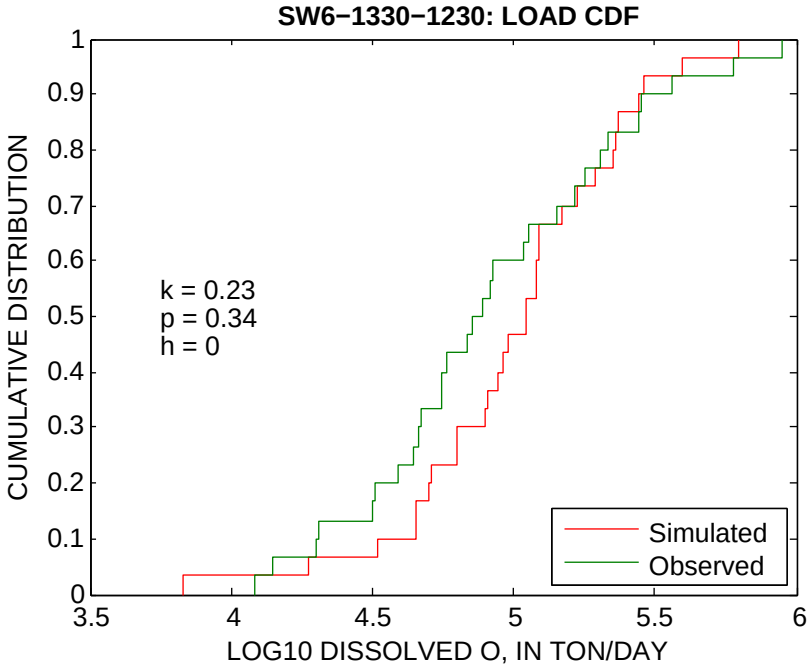


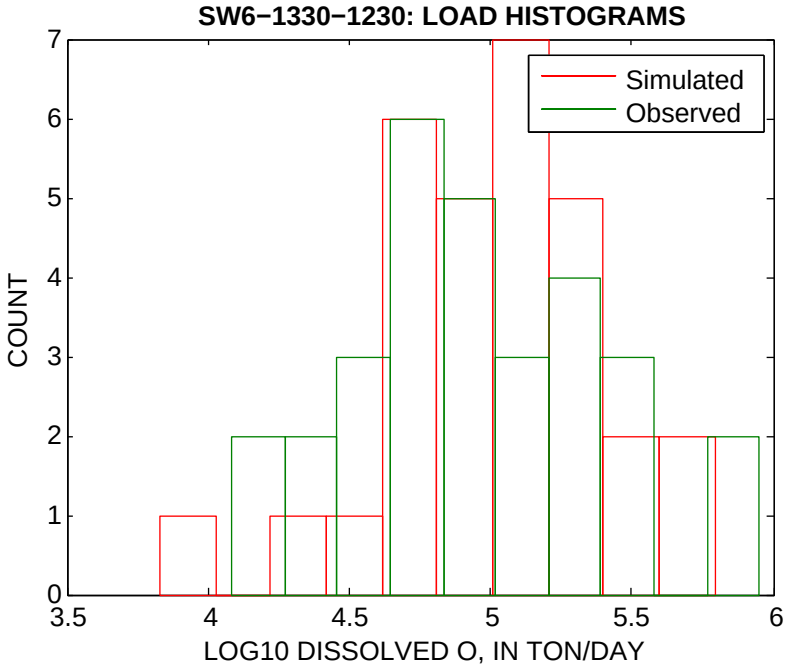


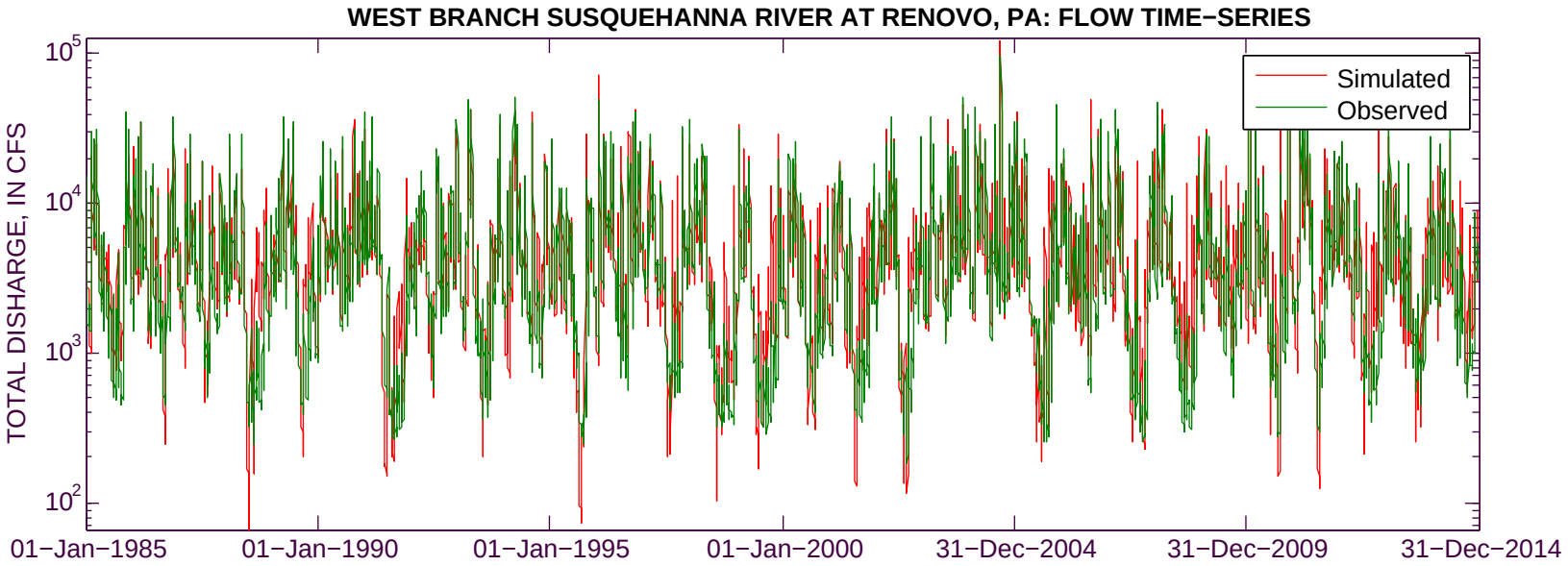
LOAD DATA
LOG10

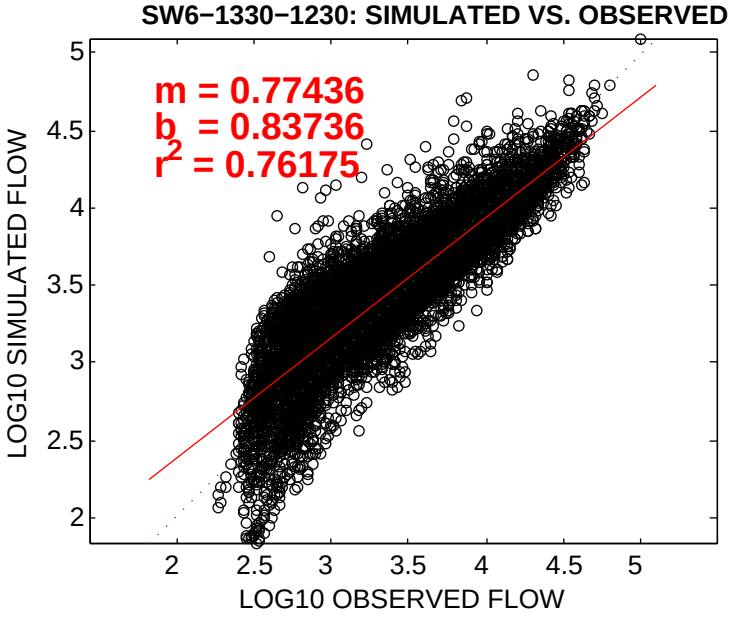


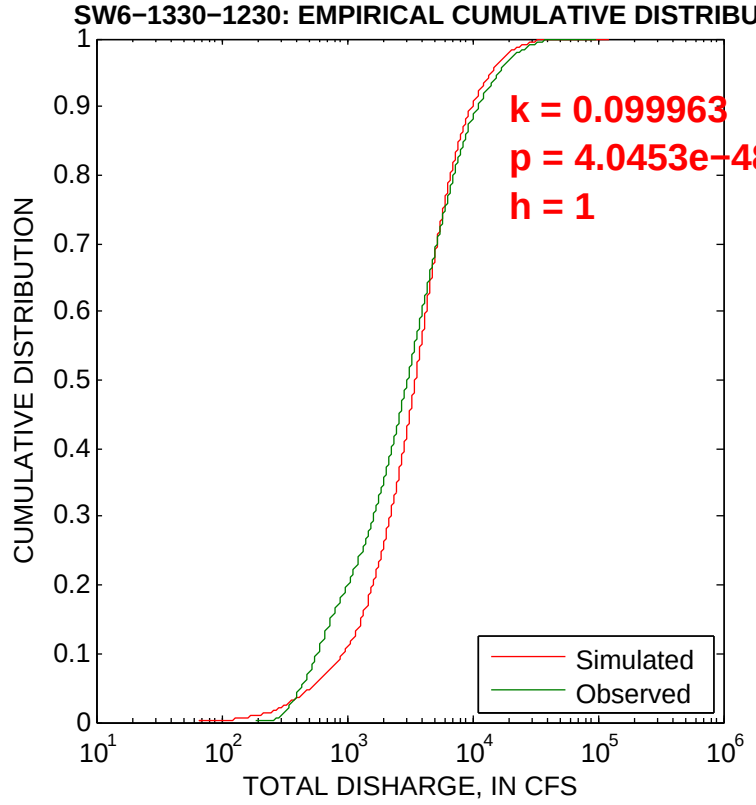












DATA SELECTION

scenario: P620171001WQ | file: FLOW.calib

plot: FLOW - total discharge

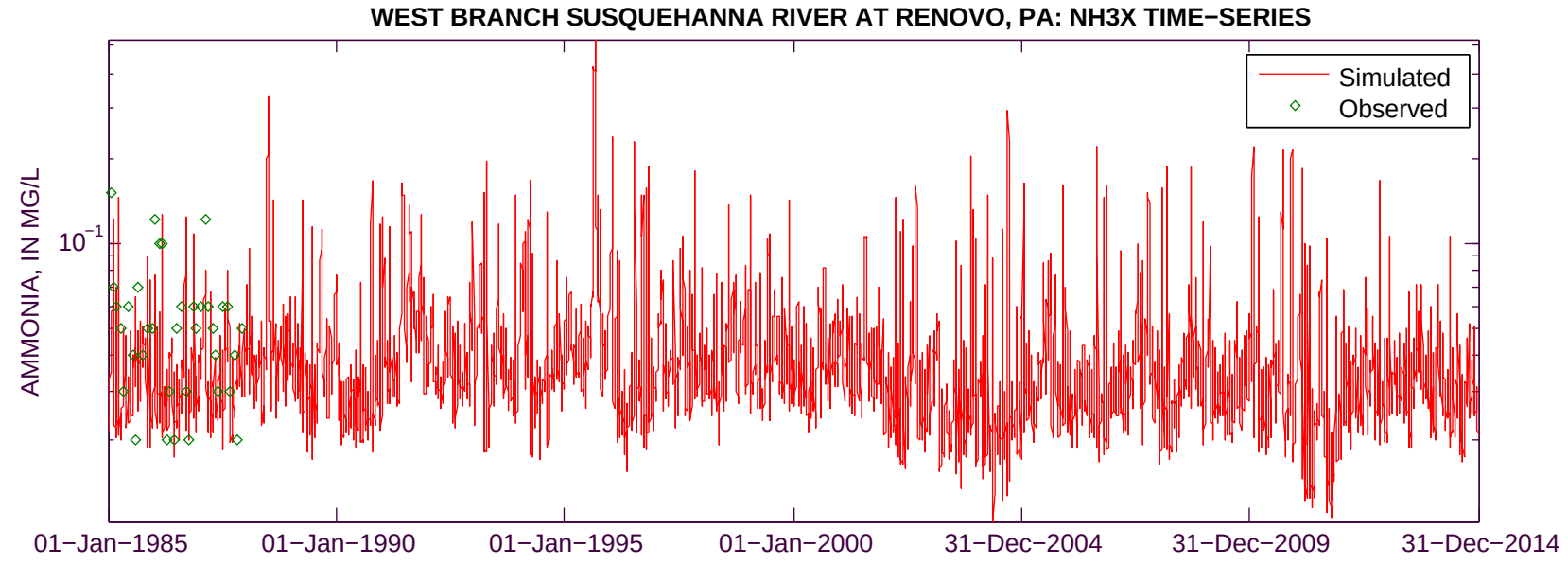
Dates: 1/1/1985 – 12/31/201

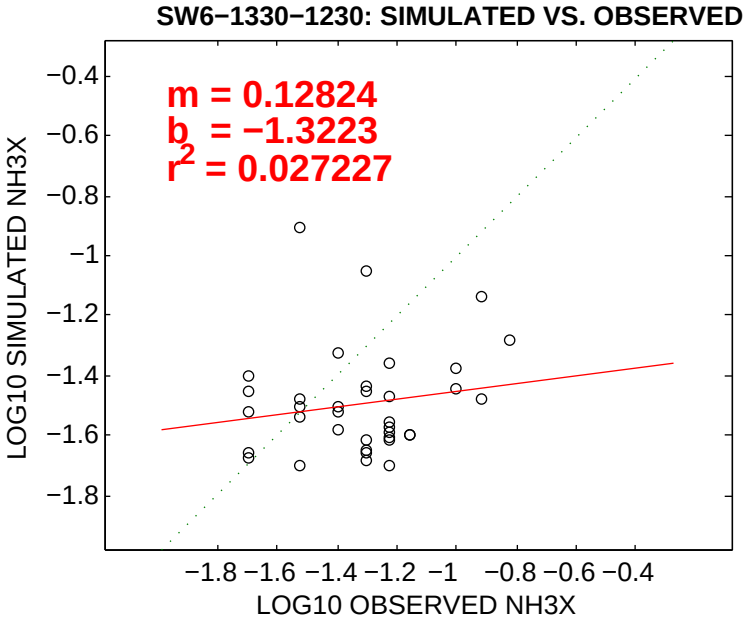
Drive: N/A | Directory: model | Observed: OBS20161101

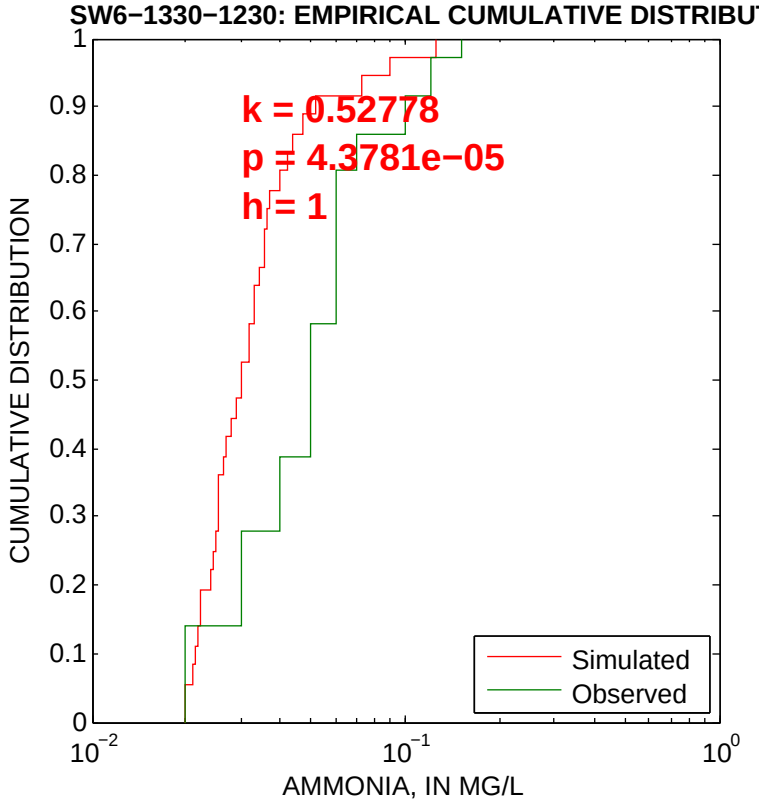
STATISTICS

		observe	simulate
n		10954	10954
min		184	66.644
		2.26482	1.82376
mean		4938.88	4915.98
		3.4538	3.51185
media		3090	3540.85
		3.48996	3.54911
max		99100	124820
		4.99607	5.09628
varian		3.52545e+0	2.73812e+
		0.223645	0.176049
JB		0.001	0.001
		0.001	0.001
		ra	log
%		-0.463622	1.68075
err.va		8.82488e+0	0.0567004
rel.std.err		0.250319	0.253529
mod.eff		0.749681	0.746471

VERSION 2.1







DATA SELECTION

scenario	file
P620171001WQ	NH3X.calib

plot: NH3X - ammonia

Dates: 1/1/1985 – 12/31/201

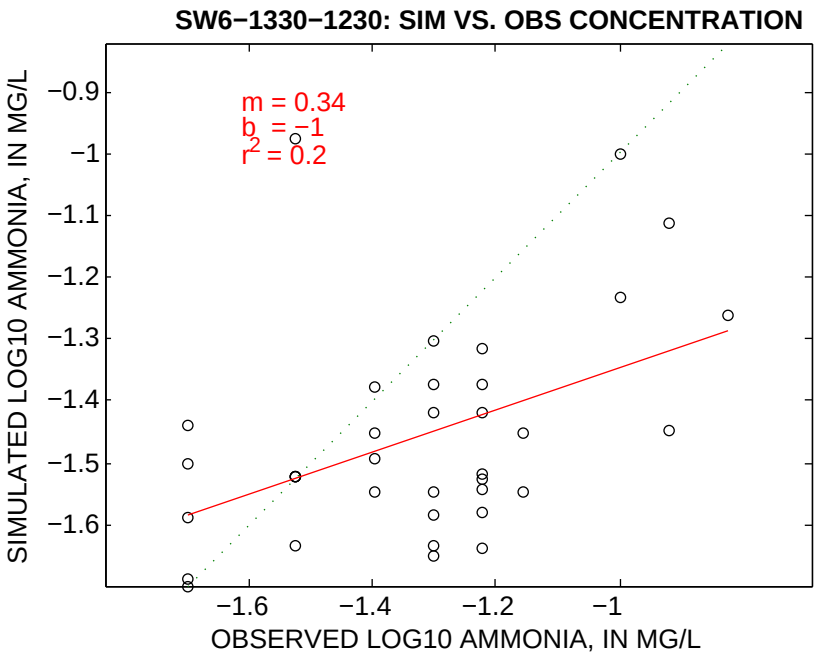
Drive: N/A | Directory: model | Observed: OBS20161101

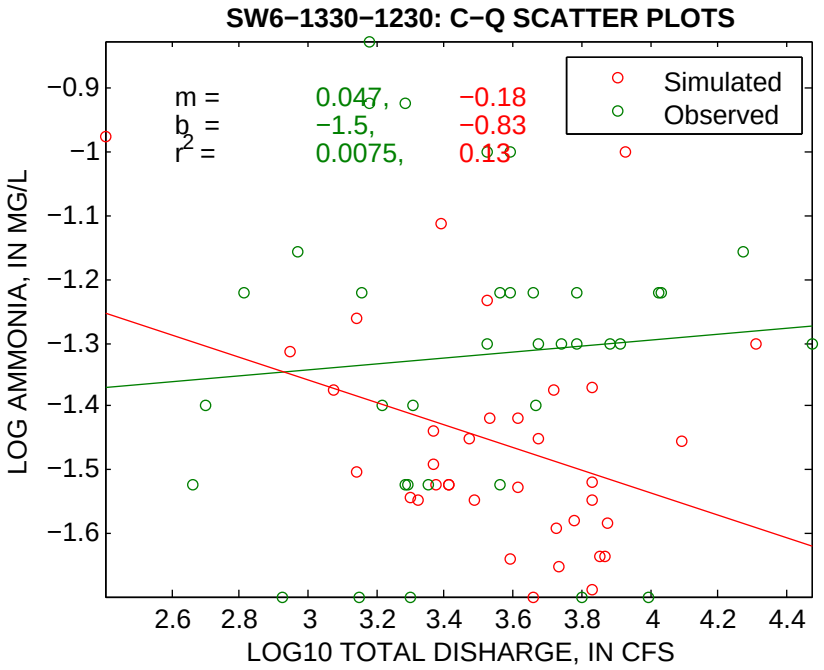
STATISTICS

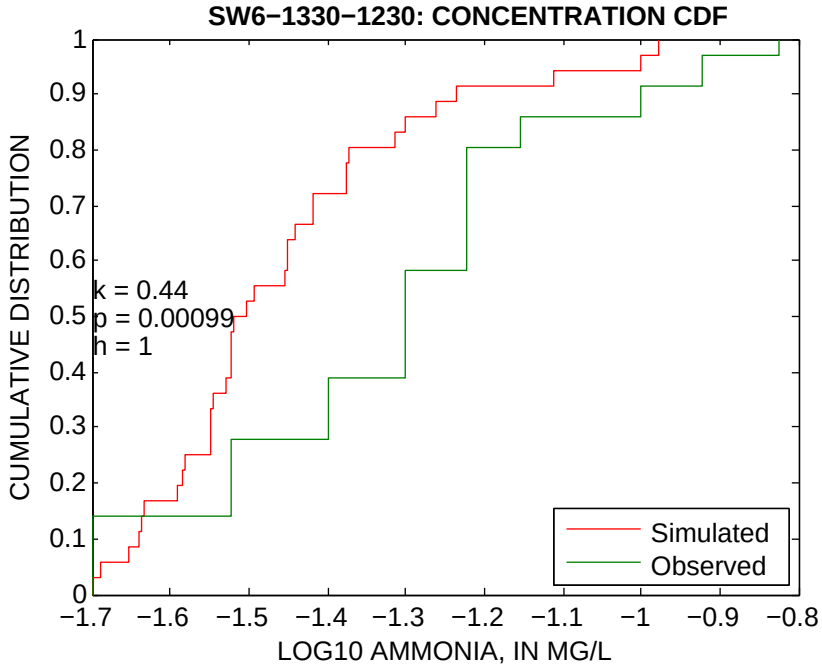
	n	36	36
		observe	simulate
min		0.02	0.019772
		-1.69897	-1.70395
mean		0.0547222	0.035672
		-1.32107	-1.49172
media		0.05	0.0299395
		-1.30103	-1.52376
max		0.15	0.12417
		-0.823909	-0.905983
varian		0.00092849	0.00043322
		0.05291	0.0319581
JB		0.006132	0.001
		0.5	0.002790
		ra	log
%		-34.8125	12.9181
err.va		0.00155316	0.101254
rel.std.err		1.67278	1.9137
mod.eff		-0.672775	-0.913697

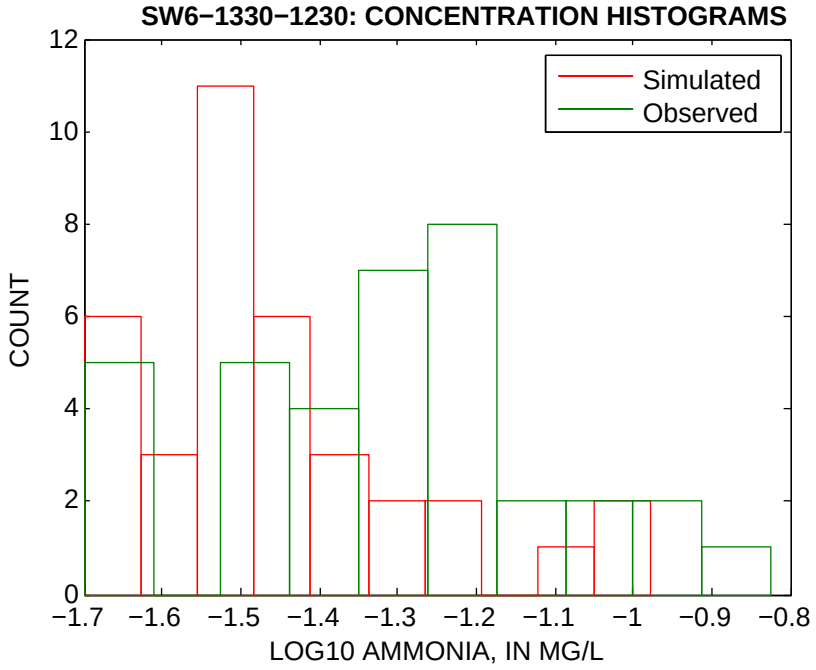
VERSION 2.1

ALL DATA
LOG10

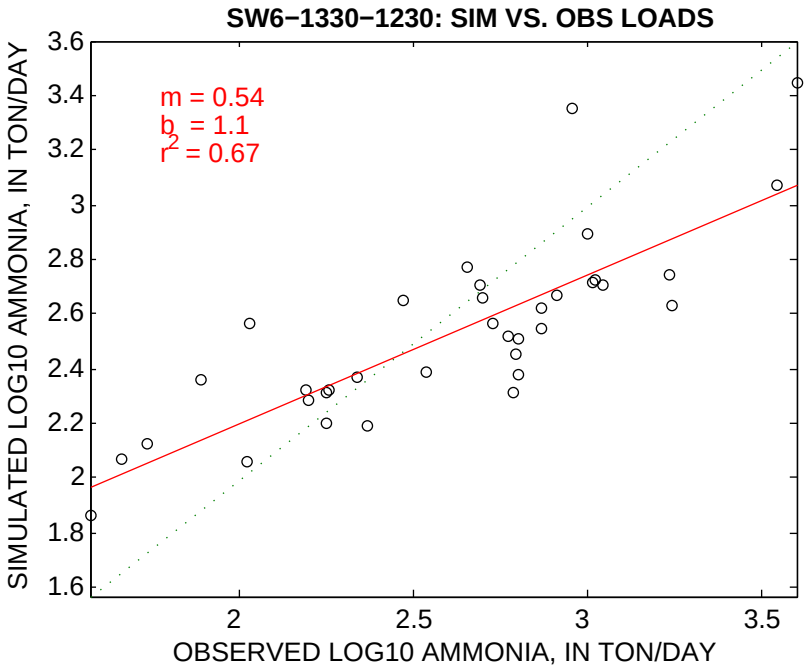


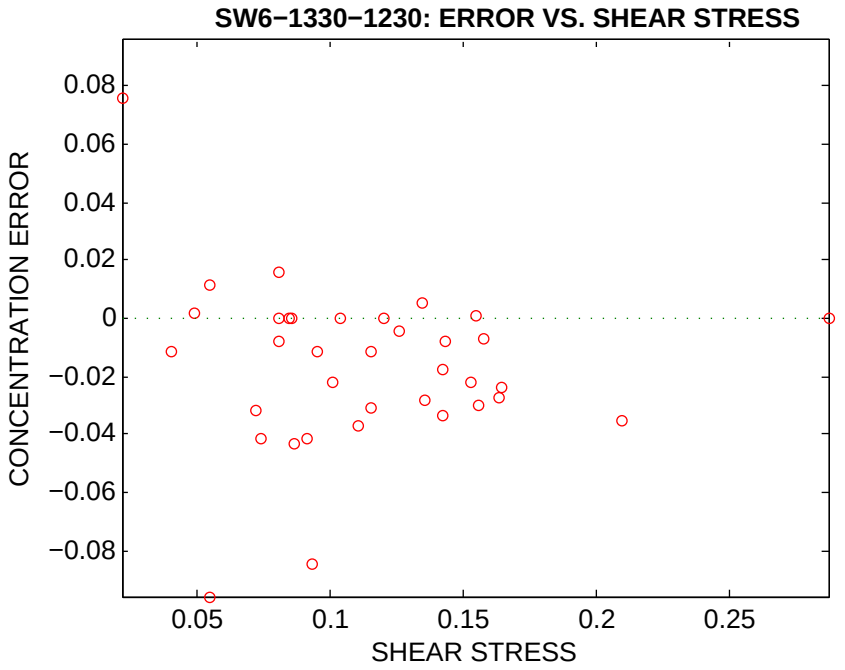


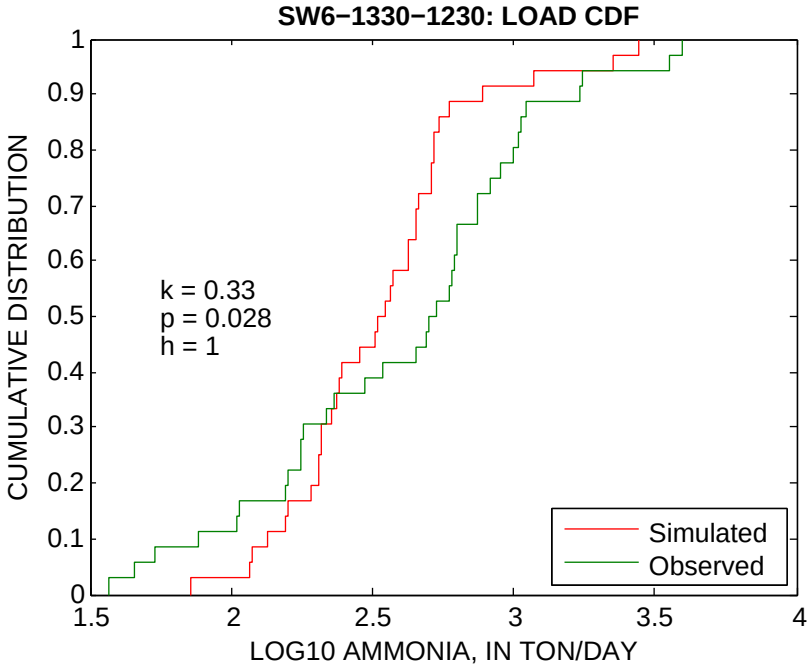


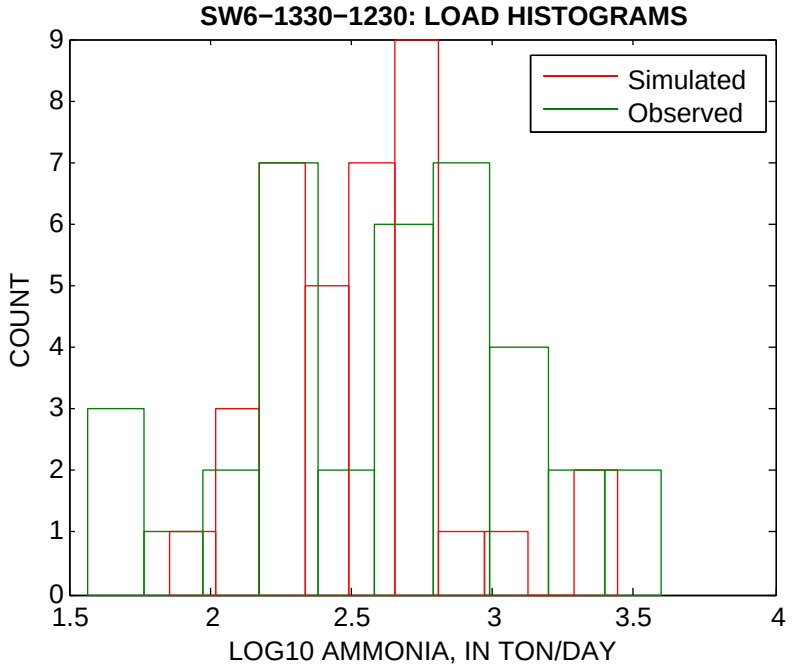


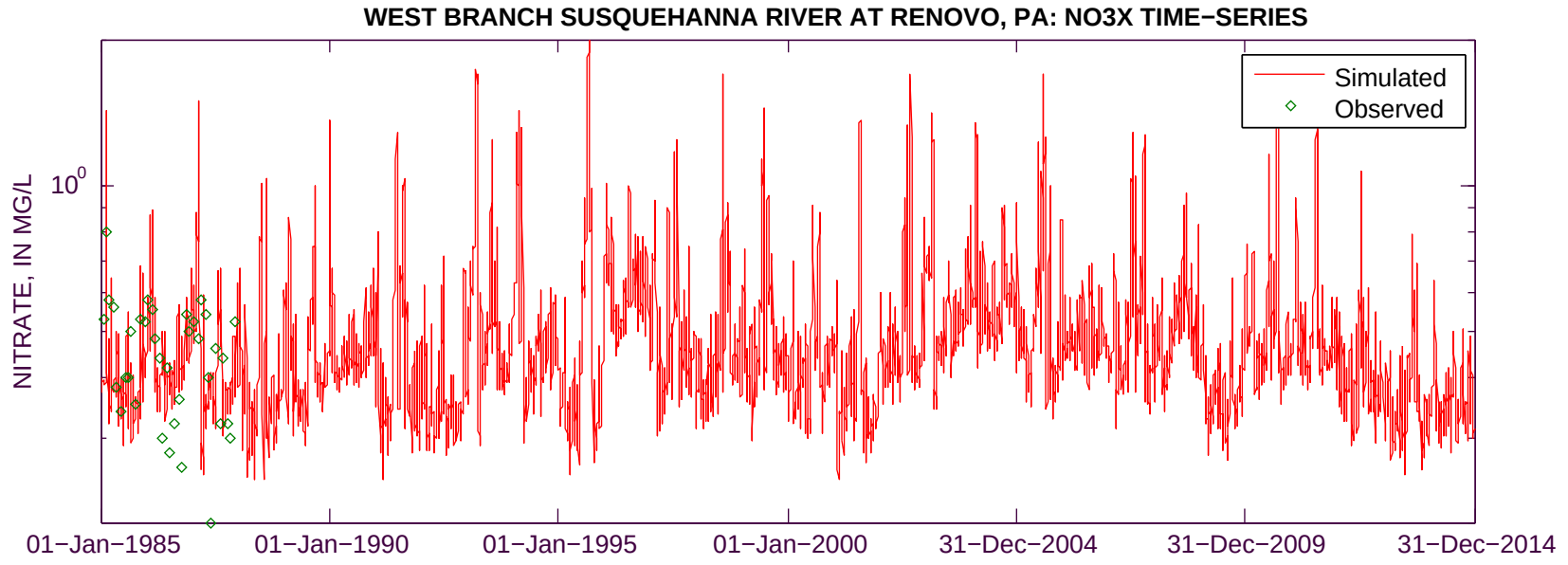
LOAD DATA
LOG10

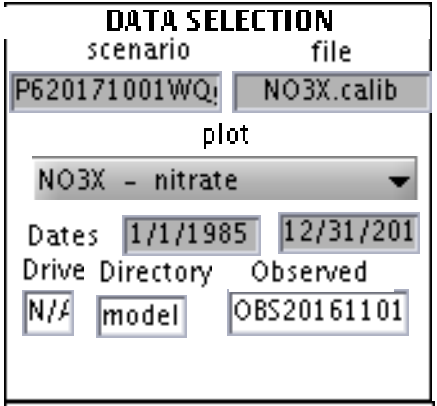


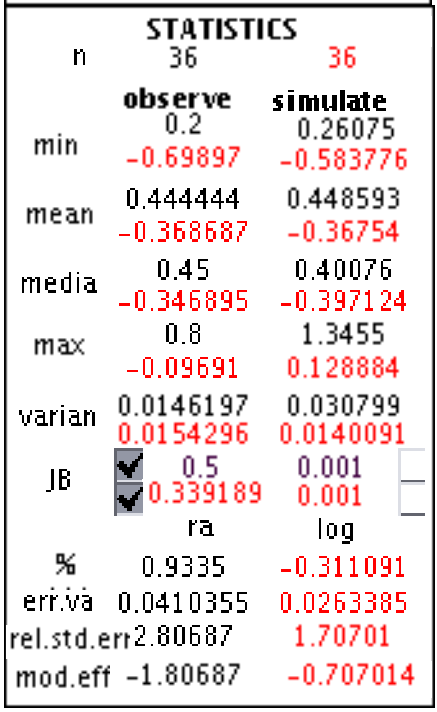


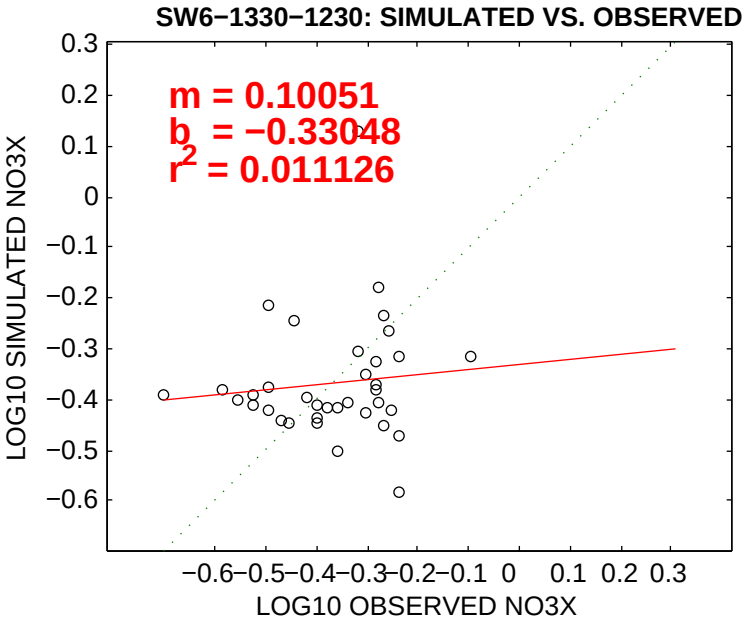


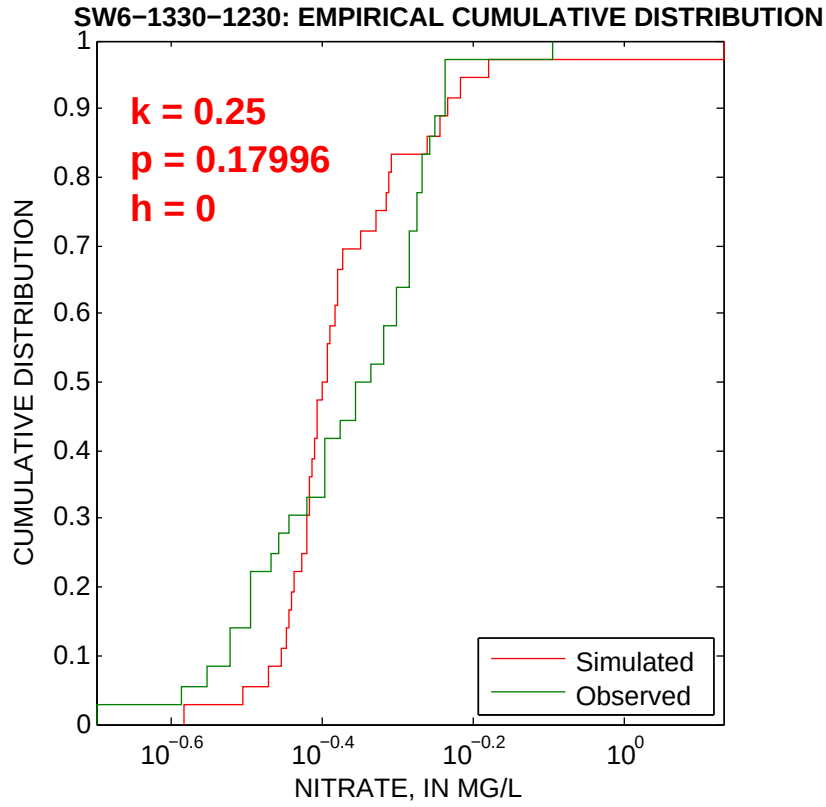



WEST BRANCH SUSQUEHANNA RIVER AT RENOVO, PA: NO3X TIME-SERIES
Simulated
Observed
NITRATE, IN MG/L
10^0
01-Jan-1985
01-Jan-1990
01-Jan-1995
01-Jan-2000
31-Dec-2004
31-Dec-2009
31-Dec-2014


DATA SELECTION
scenario
file
P620171001WQ
NO3X.calib
plot
NO3X - nitrate
Dates
1/1/1985
12/31/201
Drive
Directory
Observed
N/A
model
OBS20161101

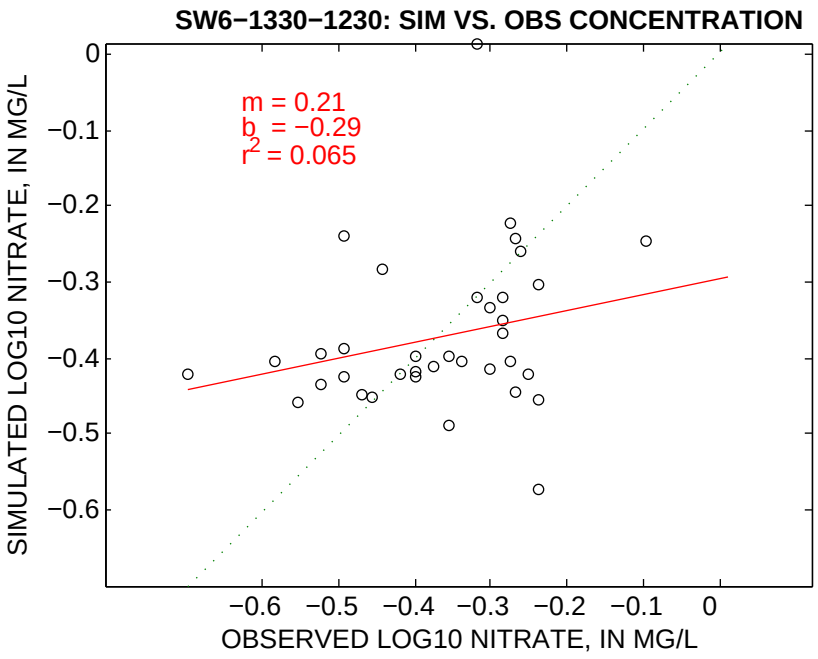

STATISTICS
n
36
36
observe
simulate
min
0.2
-0.69897
0.26075
-0.583776
mean
0.444444
-0.368687
0.448593
-0.36754
media
0.45
-0.346895
0.40076
-0.397124
max
0.8
-0.09691
1.3455
0.128884
varian
0.0146197
0.0154296
0.030799
0.0140091
JB
0.5
0.339189
0.001
0.001
ra
log
%
0.9335
-0.311091
err.va
0.0410355
0.0263385
rel.std.err
2.80687
1.70701
mod.eff
-1.80687
-0.707014

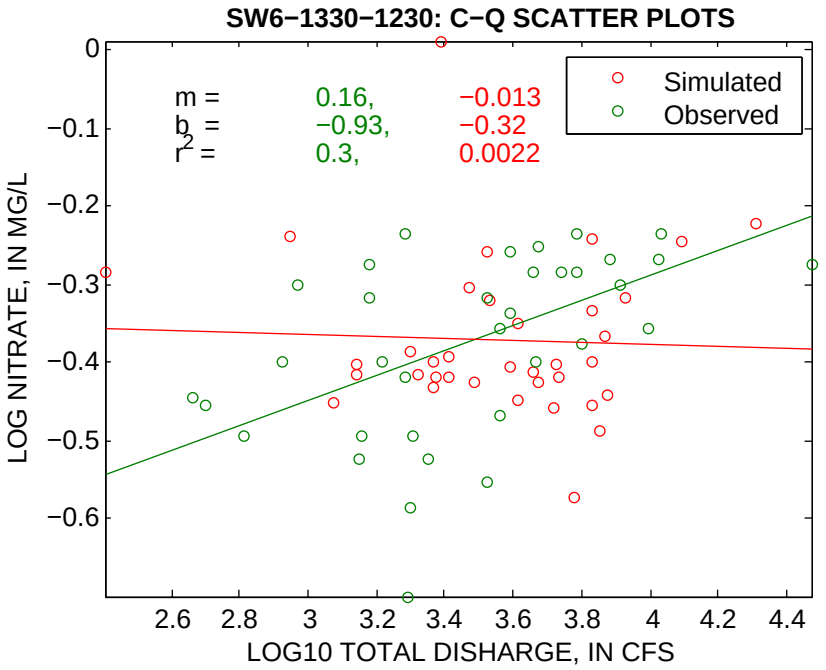

SW6-1330-1230: SIMULATED VS. OBSERVED
m = 0.10051
b = -0.33048
r^2 = 0.011126
LOG10 SIMULATED NO3X
LOG10 OBSERVED NO3X

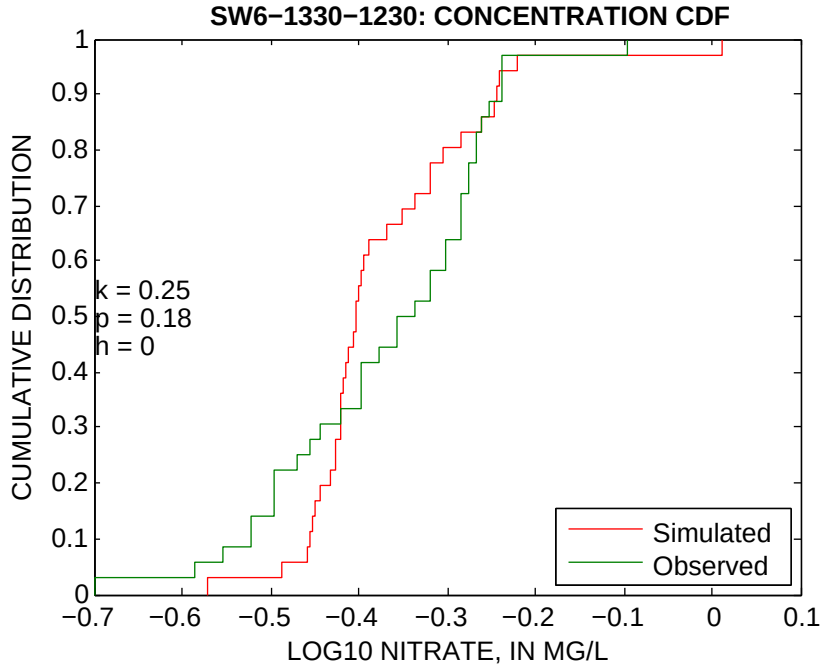

SW6-1330-1230: EMPIRICAL CUMULATIVE DISTRIBUTION
k = 0.25
p = 0.17996
h = 0
CUMULATIVE DISTRIBUTION
Simulated
Observed
NITRATE, IN MG/L

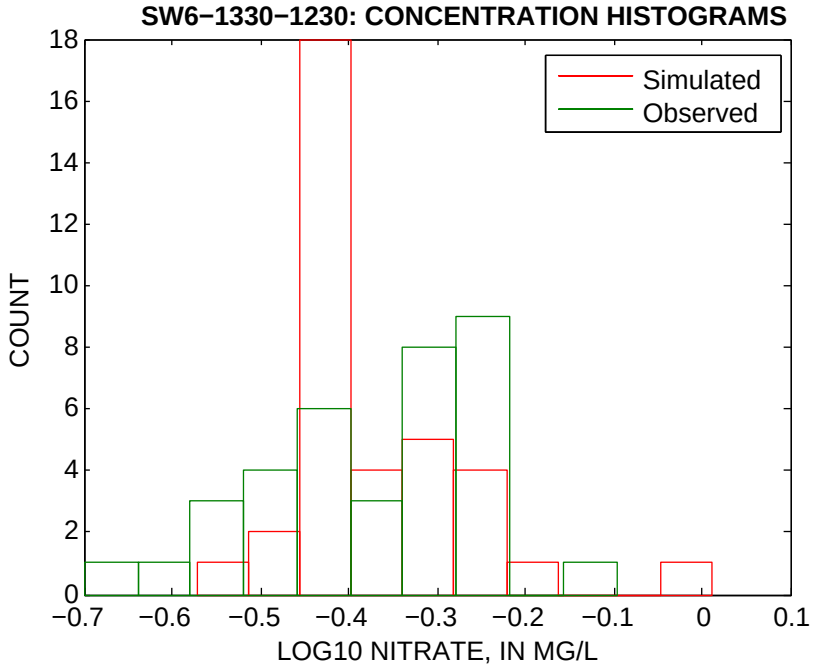
VERSION

ALL DATA
LOG10

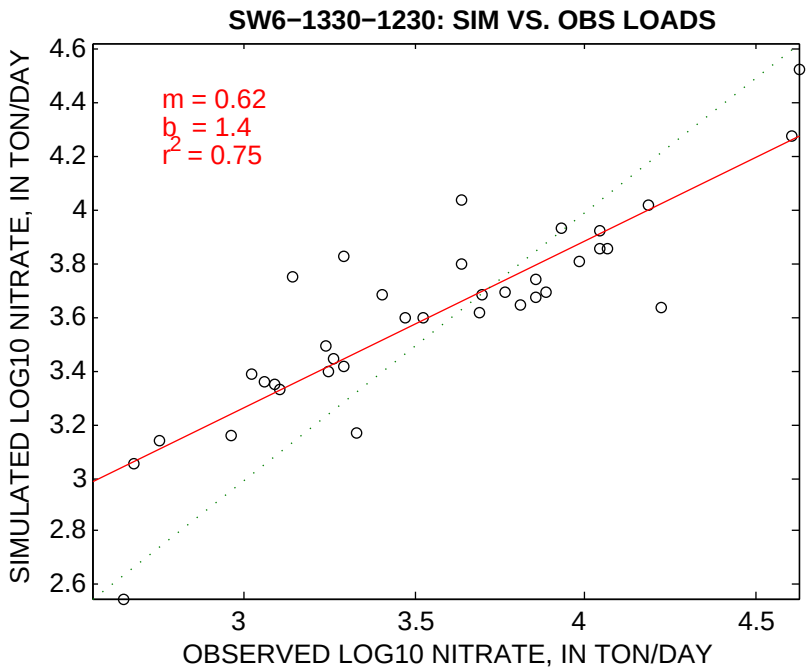


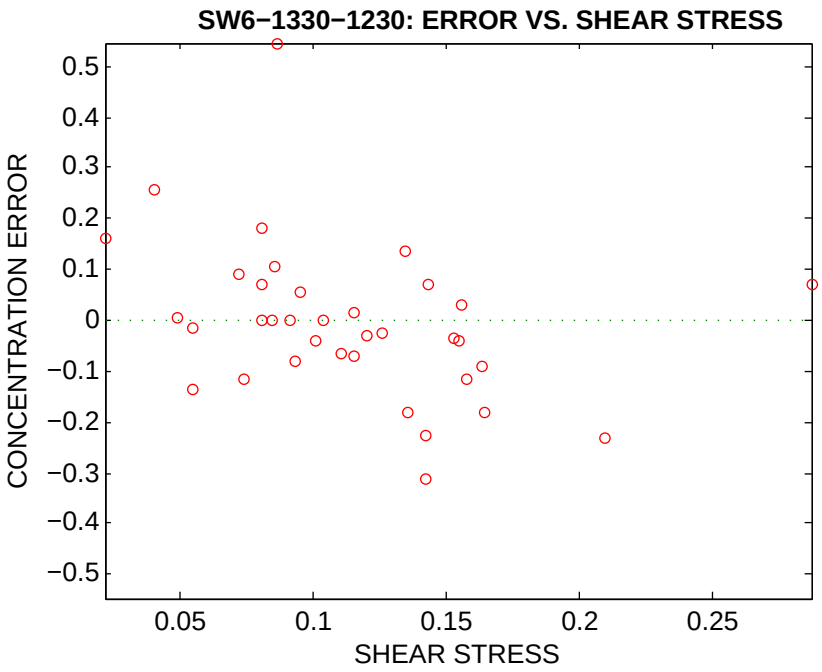


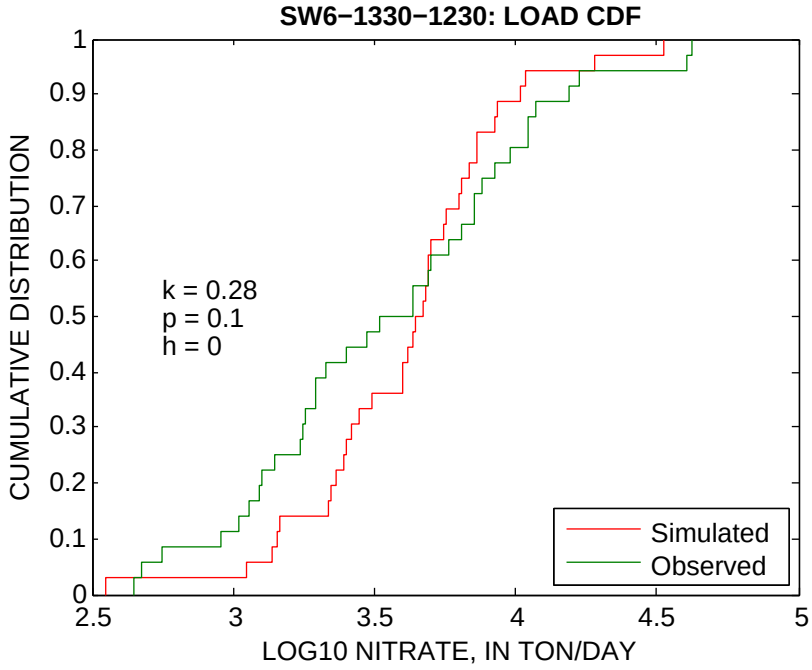


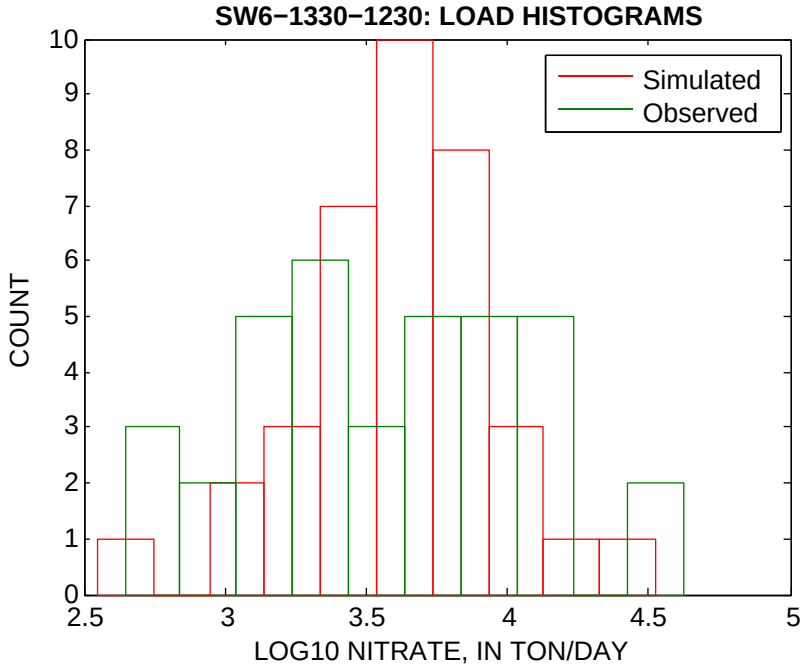


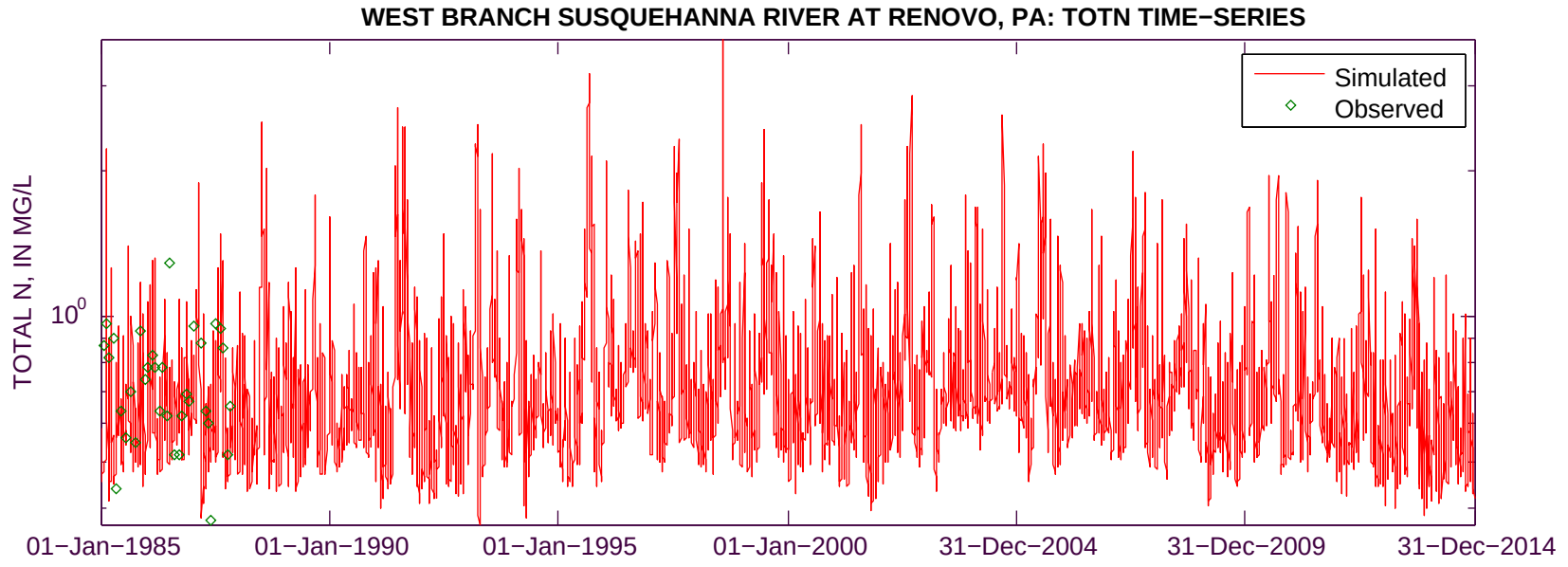
LOAD DATA
LOG10

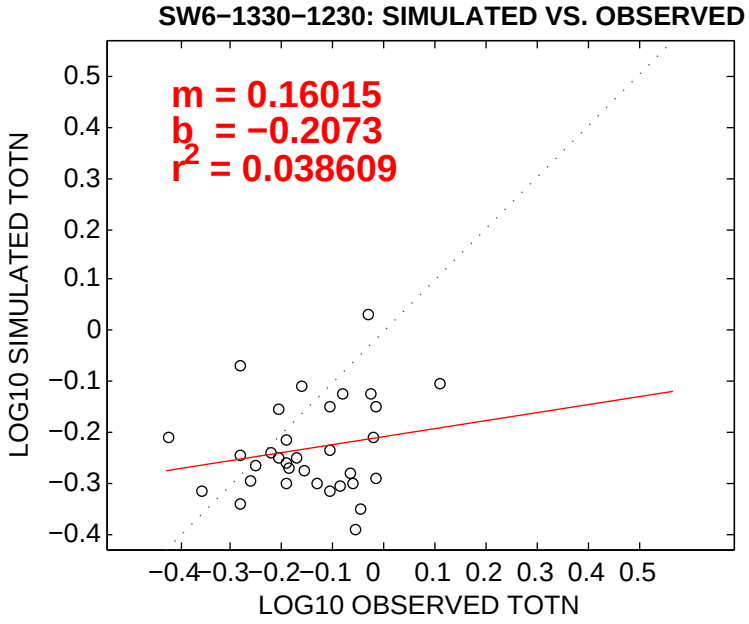


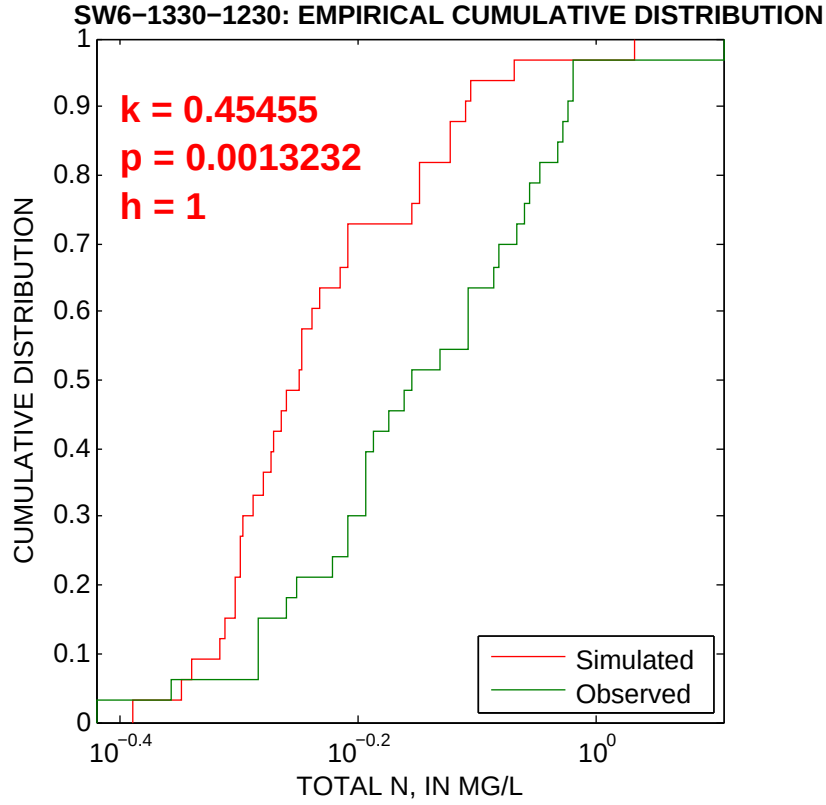












DATA SELECTION

scenario	file
P620171001WQ	TOTN.calib

plot: TOTN - total nitrogen

Dates: 1/1/1985 – 12/31/201

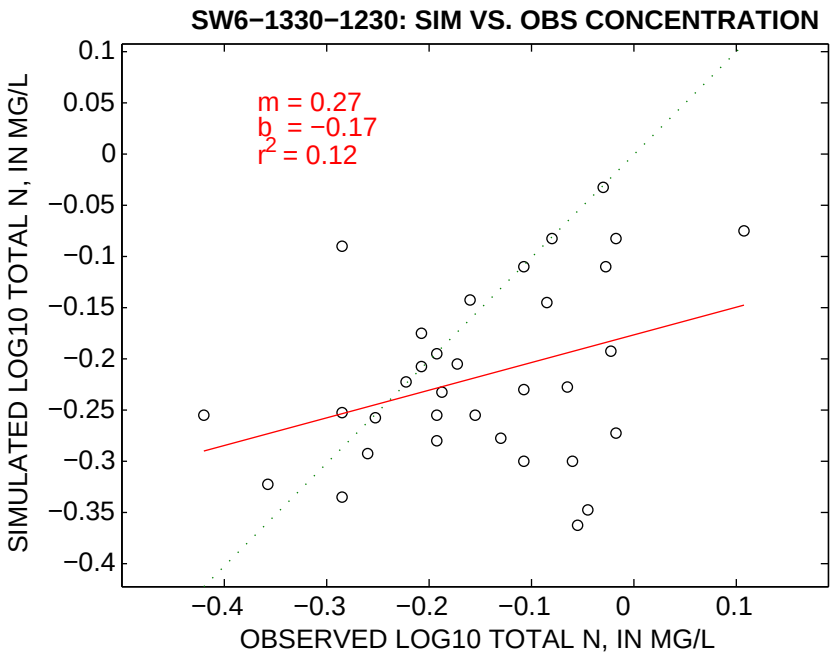
Drive	Directory	Observed
N/A	model	OBS20161101

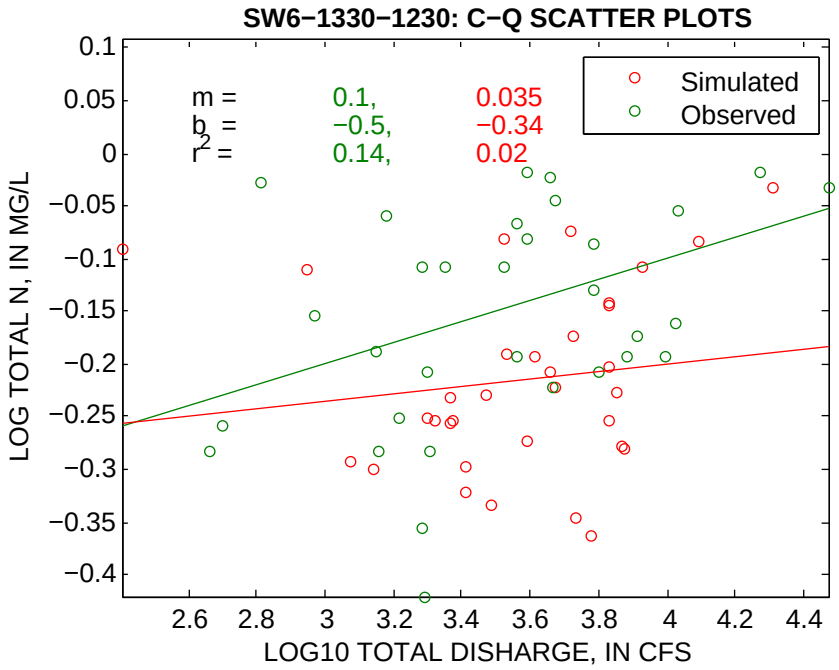
STATISTICS

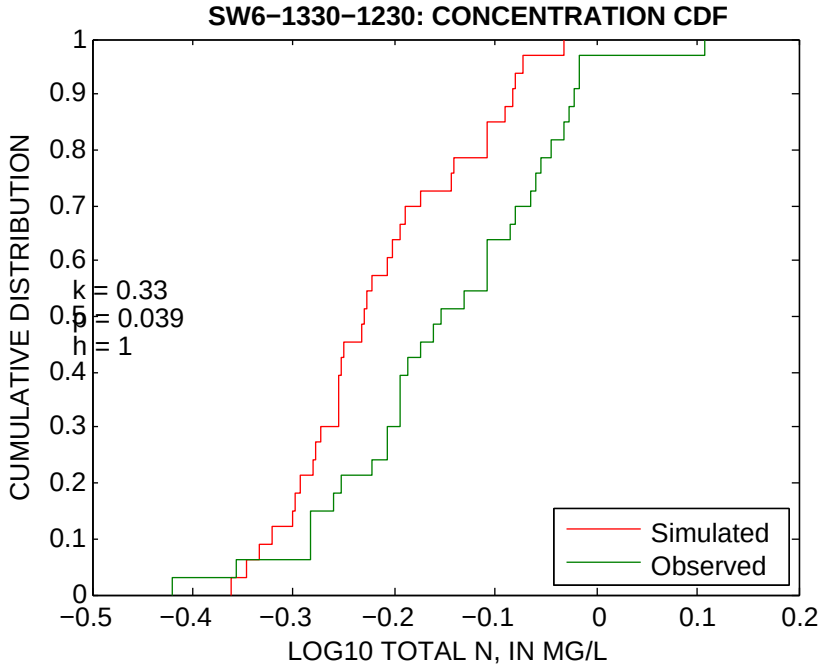
	n	observe	simulate
		33	33
min		0.38	0.40884
		-0.420216	-0.388447
mean		0.733939	0.601125
		-0.14829	-0.231051
media		0.7	0.56341
		-0.154902	-0.249175
max		1.28	1.0794
		0.10721	0.0331824
varian		0.0353746	0.0196748
		0.0127383	0.00846194
JB		0.236034	0.003757
		0.5	0.055724
		ra	log
%		-18.0961	55.8107
err.va		0.0598973	0.0241838
rel.std.err		1.69323	1.8985
mod.eff		-0.693227	-0.8985

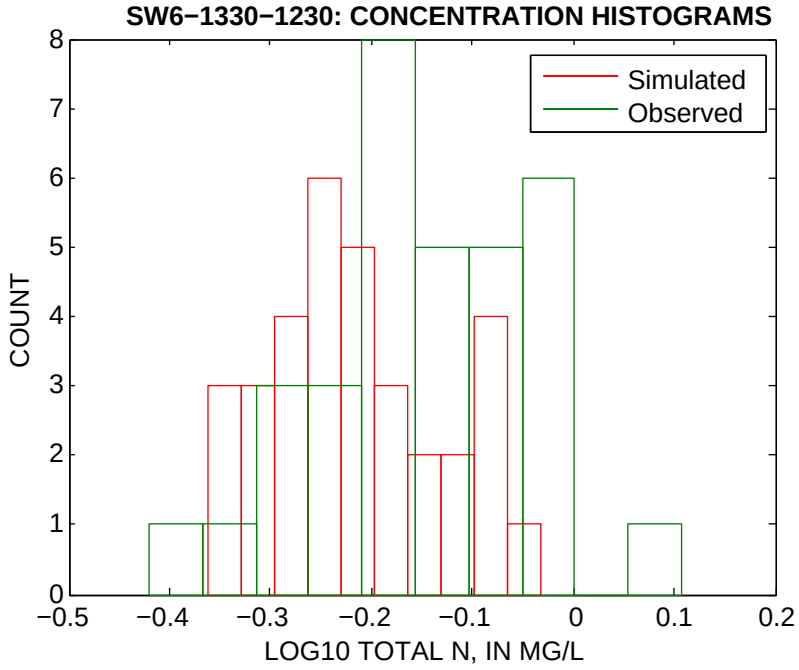
VERSION 2.1

ALL DATA
LOG10

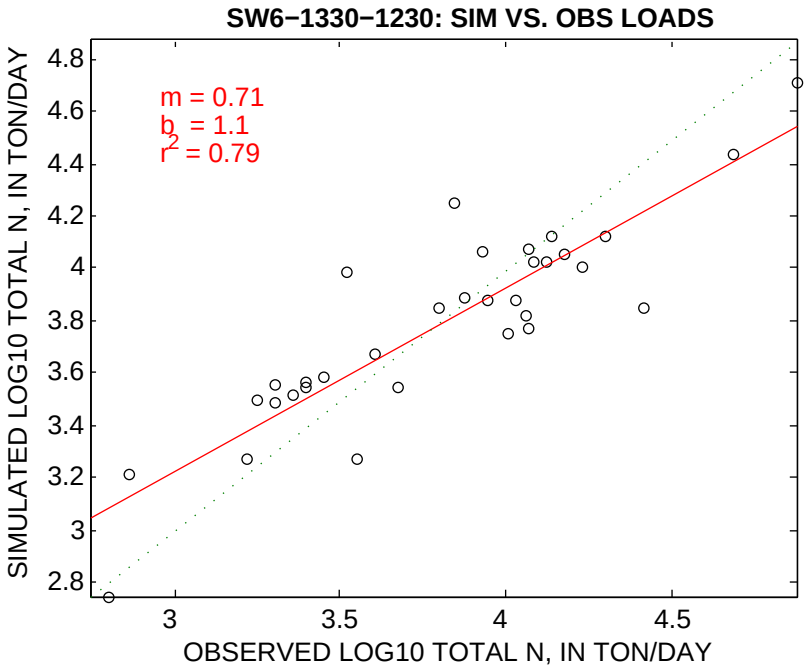


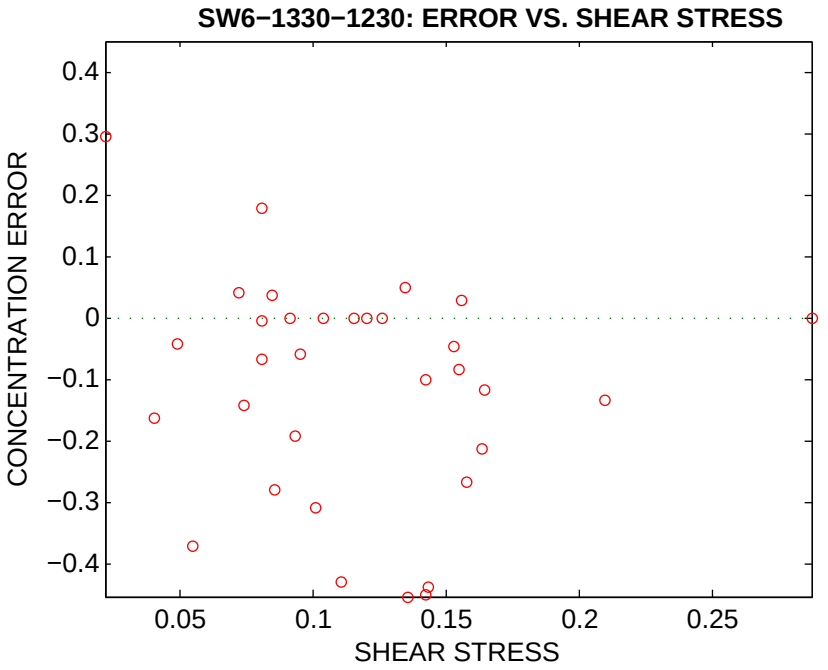


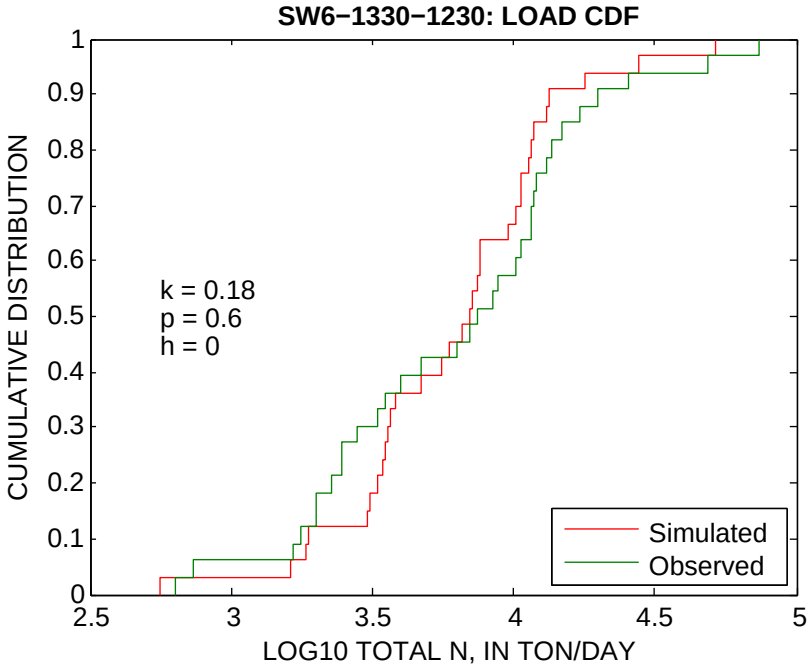


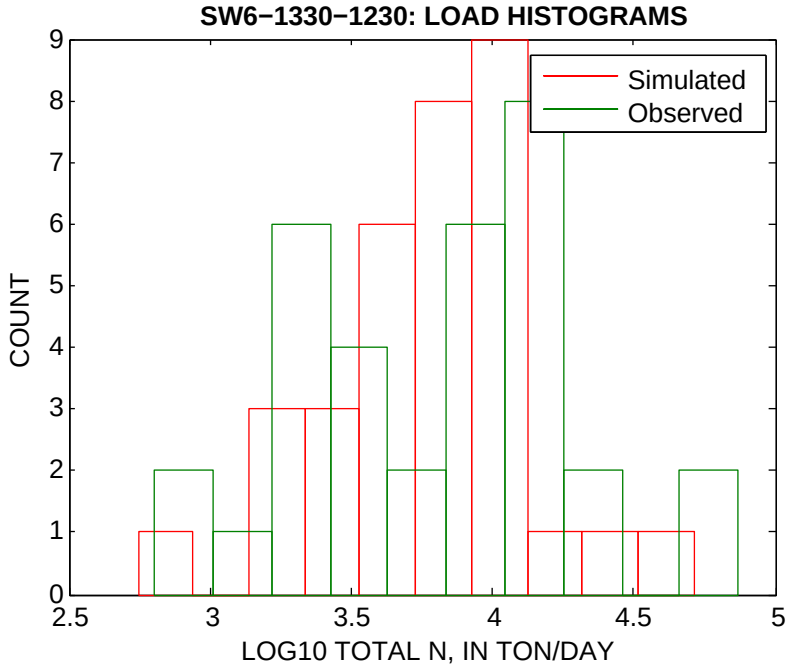


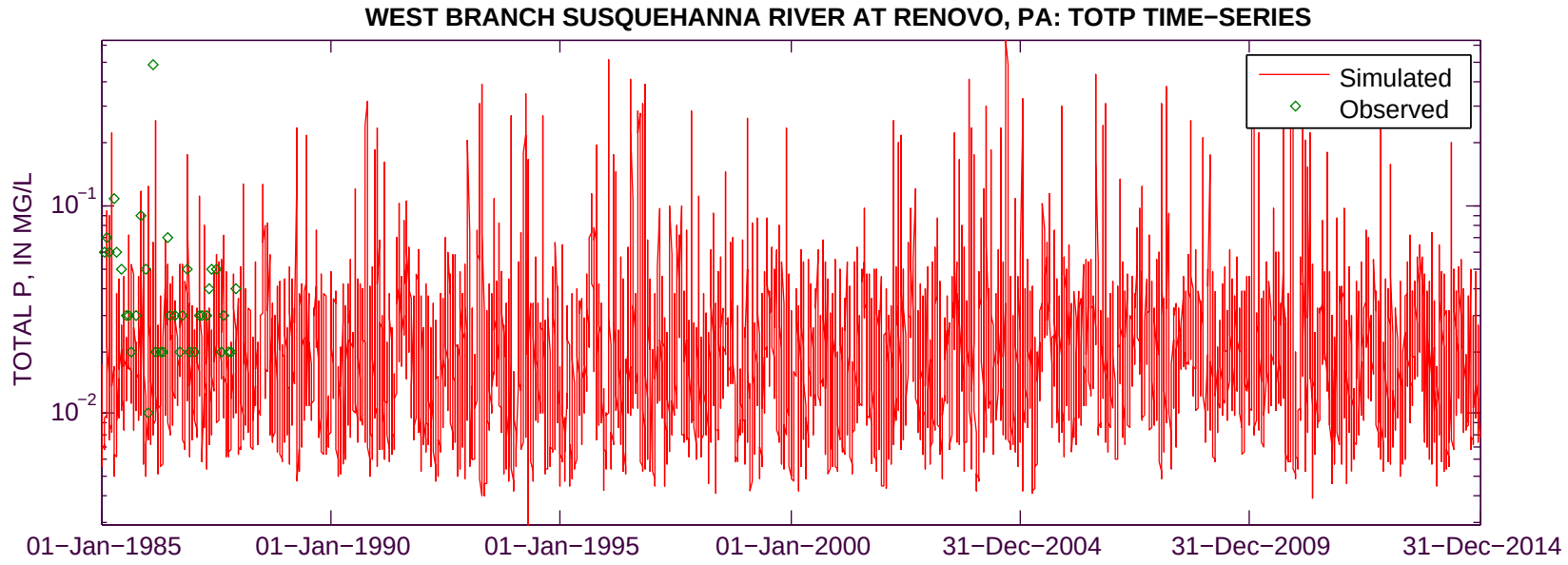
LOAD DATA
LOG10

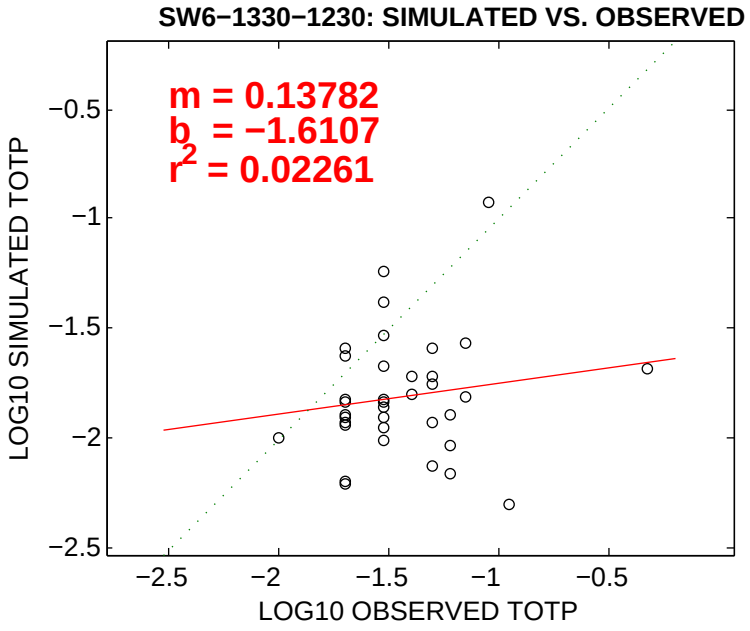


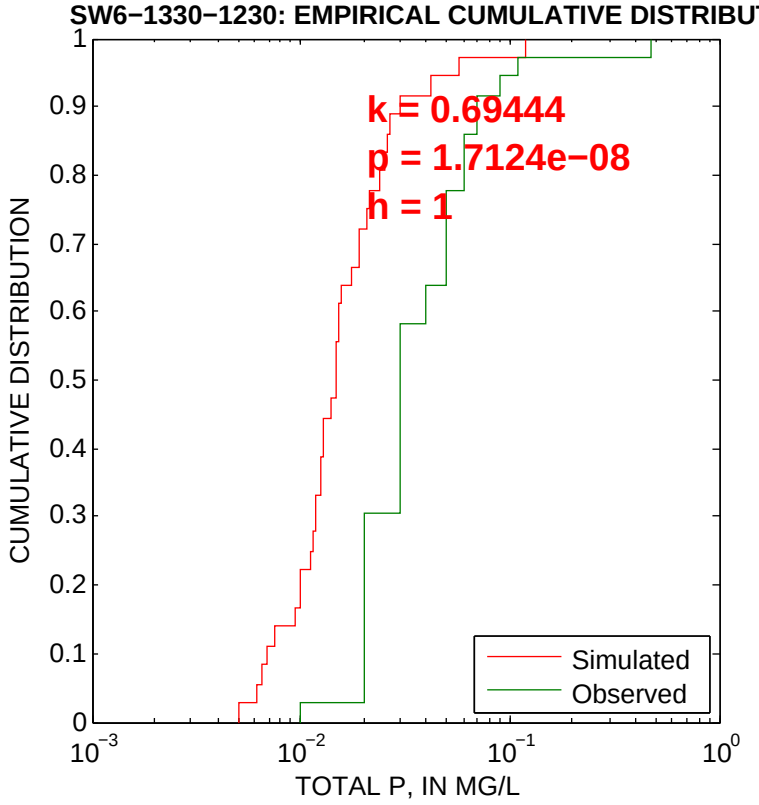












DATA SELECTION

scenario	file
P620171001WQ	TOTP.calib

plot: TOTP - total phosphorus

Dates: 1/1/1985 – 12/31/201

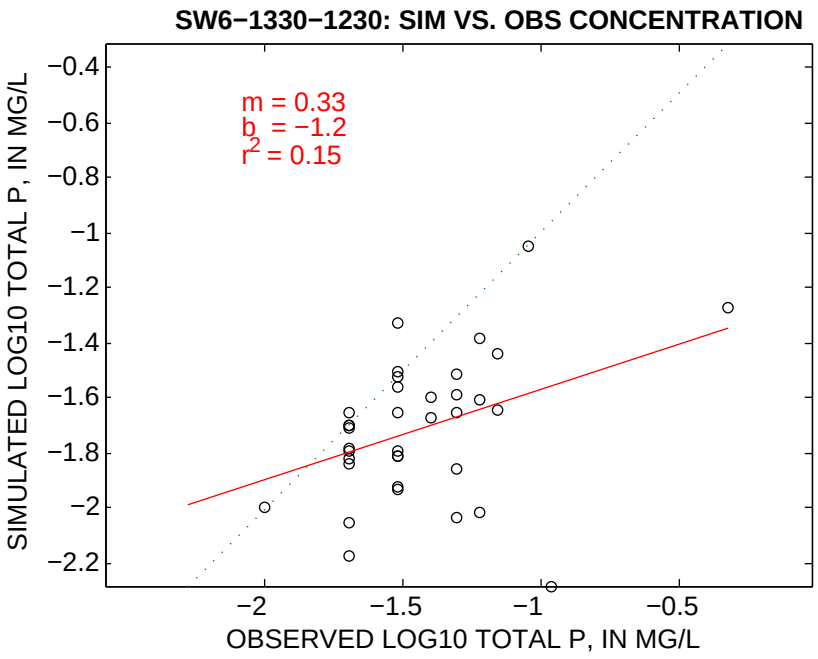
Drive	Directory	Observed
N/A	model	OBS20161101

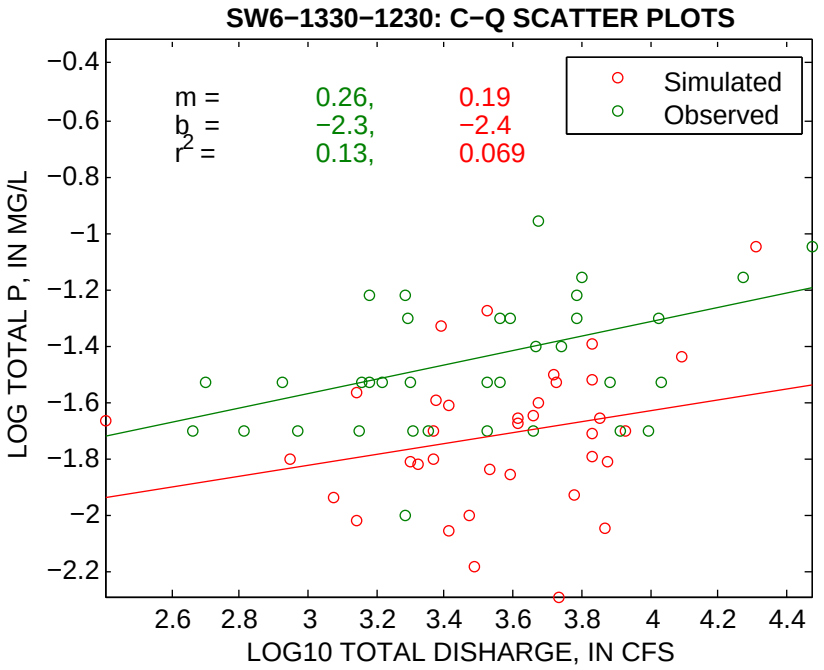
STATISTICS

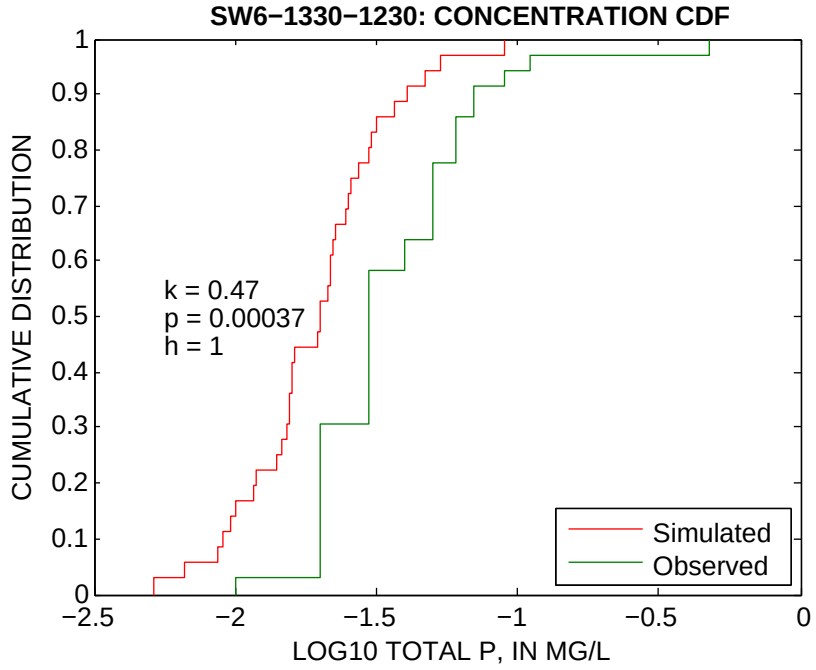
	n	36	36
		observe	simulate
min		0.01	0.0050195
		-2	-2.29934
mean		0.0511111	0.0197557
		-1.43939	-1.80907
media		0.03	0.014653
		-1.52288	-1.83408
max		0.48	0.11961
		-0.318759	-0.922233
varian		0.00588444	0.00039818
		0.0886489	0.0744725
JB		0.001	0.001
		0.001	0.012367
		ra	log
%		-61.3475	25.6835
err.va		0.00701181	0.279258
rel.std.err		1.19158	3.15016
mod.eff		-0.191583	-2.15016

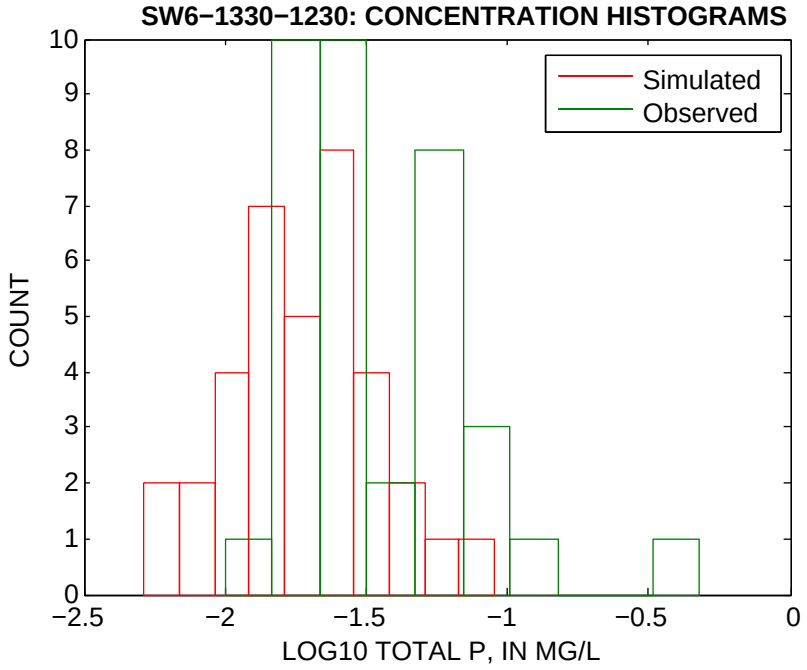
VERSION 2.1

ALL DATA
LOG10

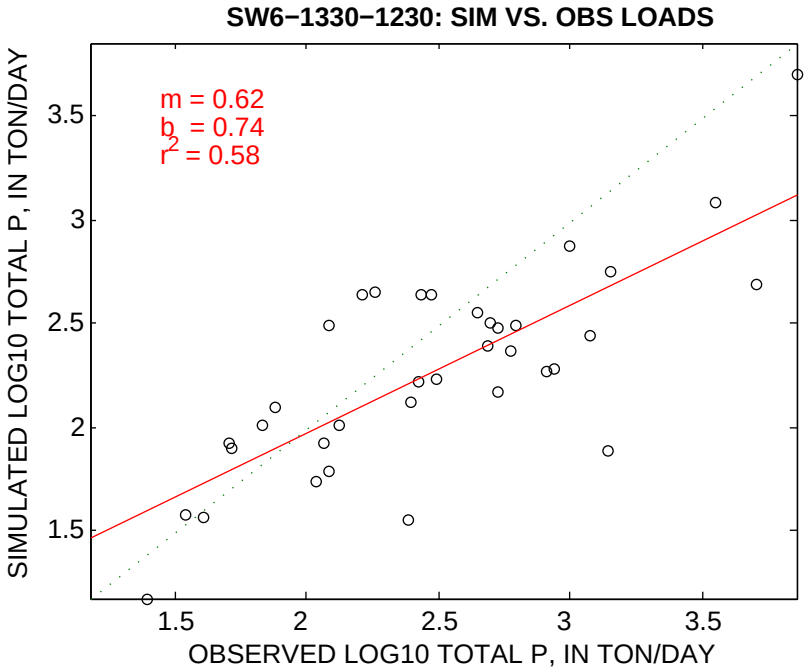


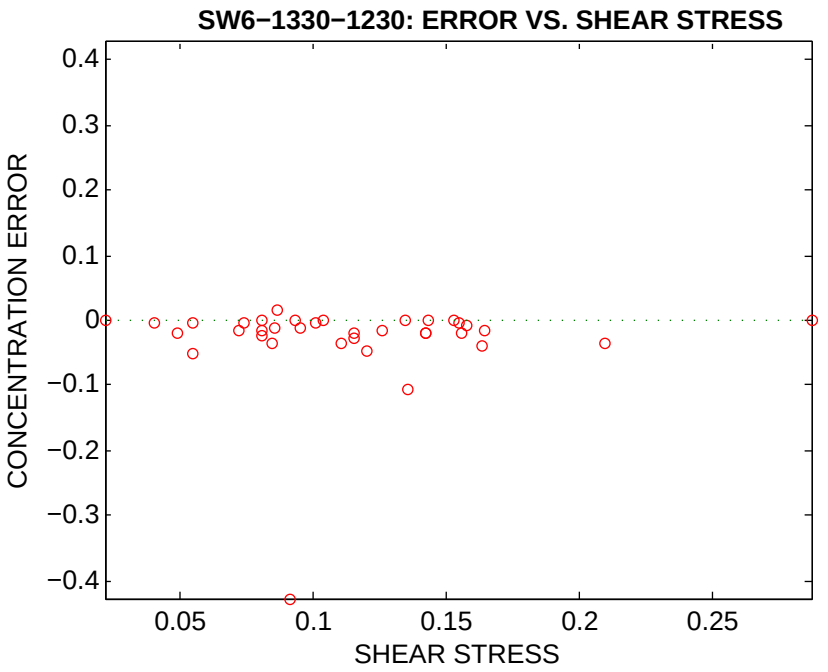


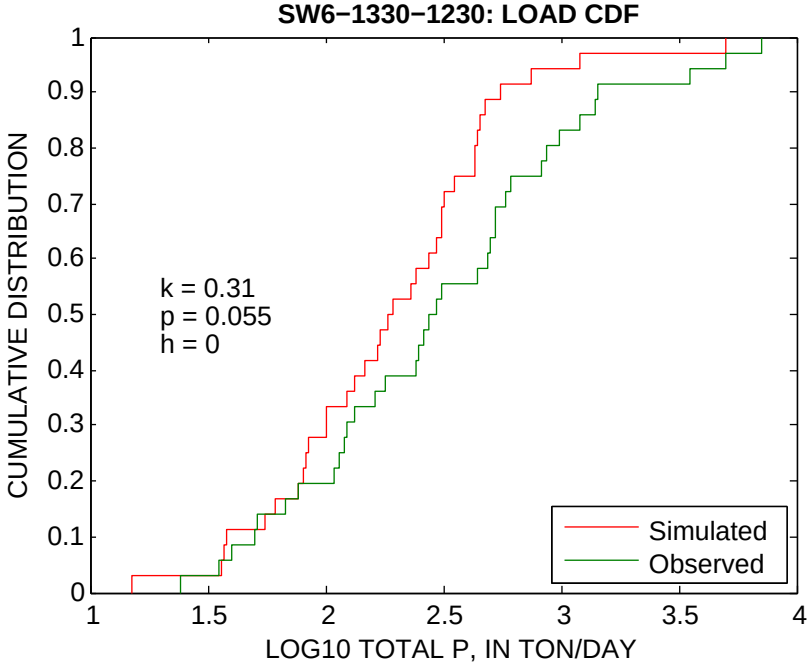


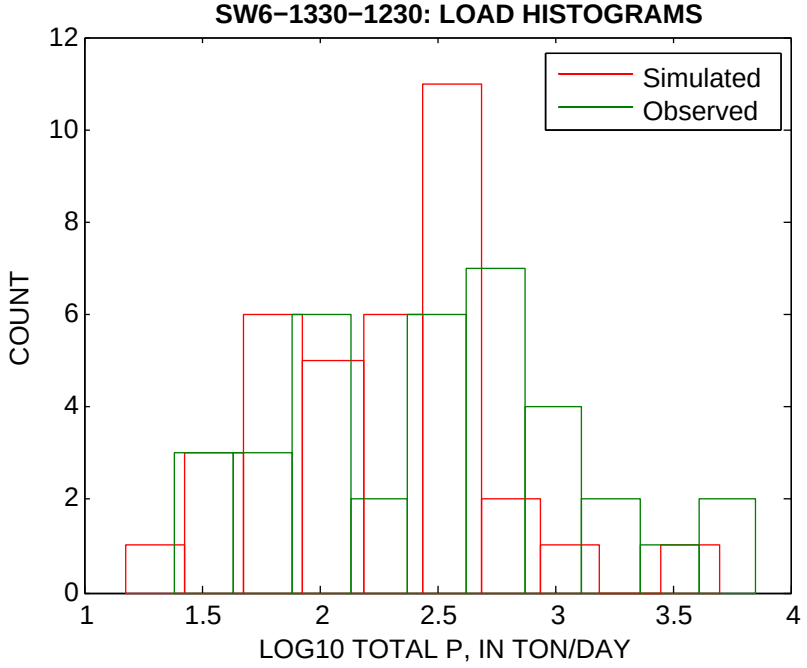


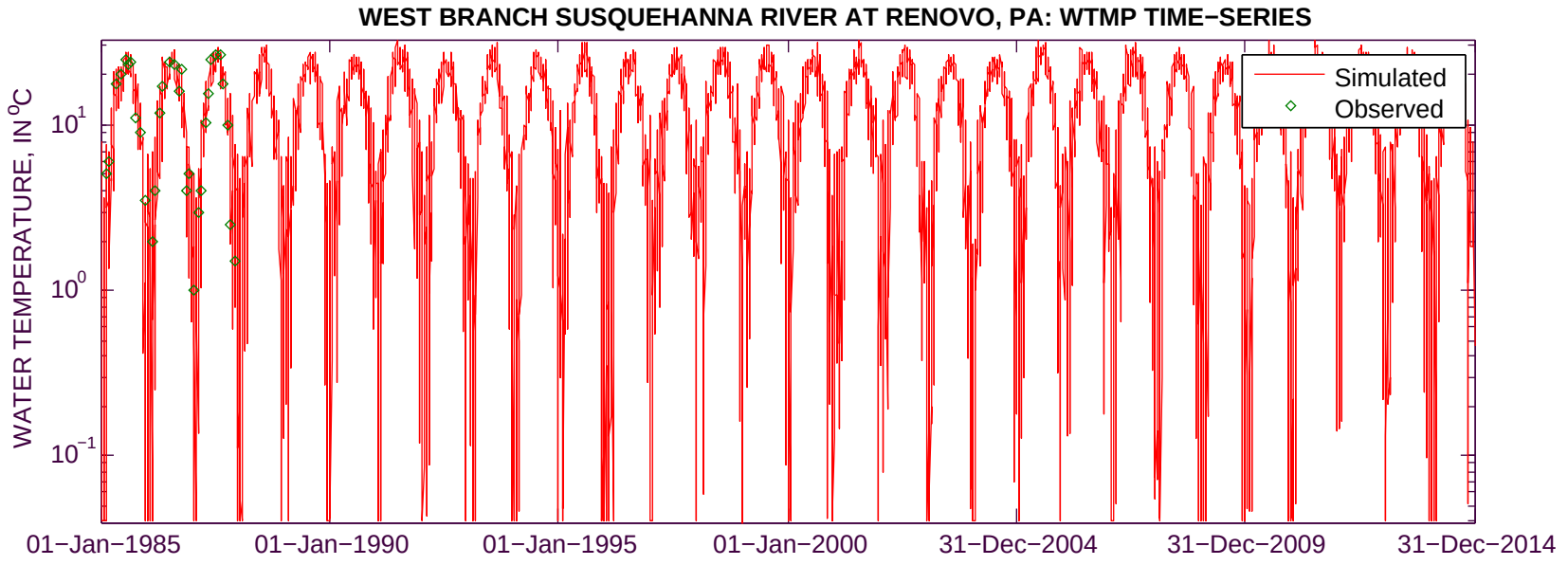
LOAD DATA
LOG10

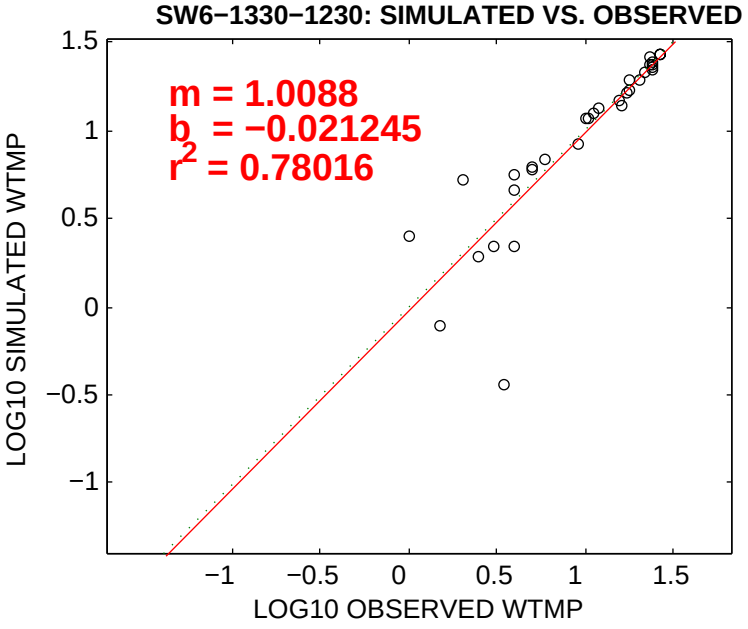


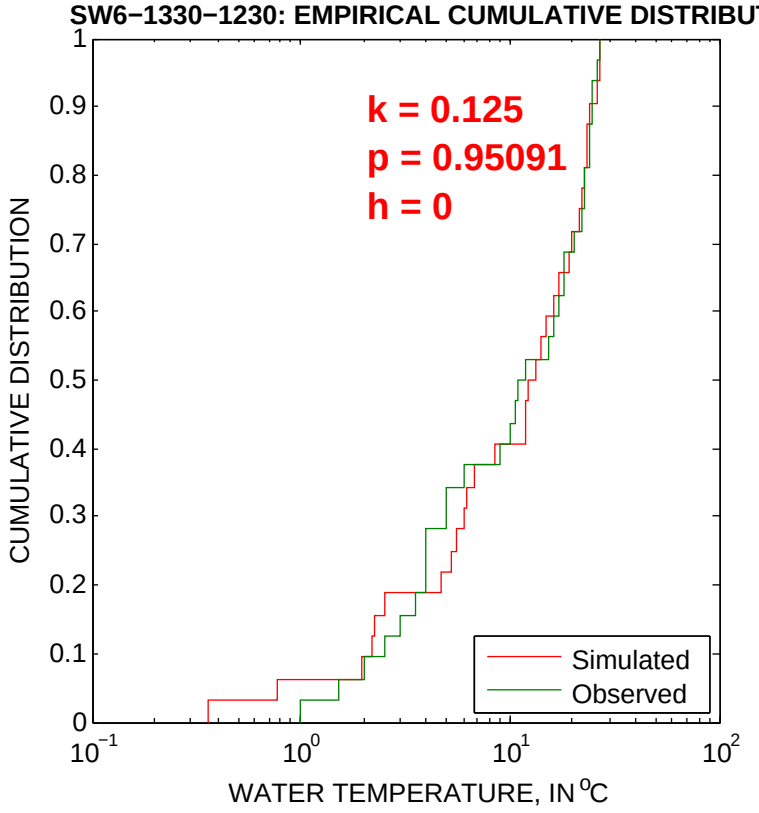












DATA SELECTION

scenario	file
P620171001WQ	WTMP.calib

plot: WTMP - water tempera...

Dates: 1/1/1985 – 12/31/201

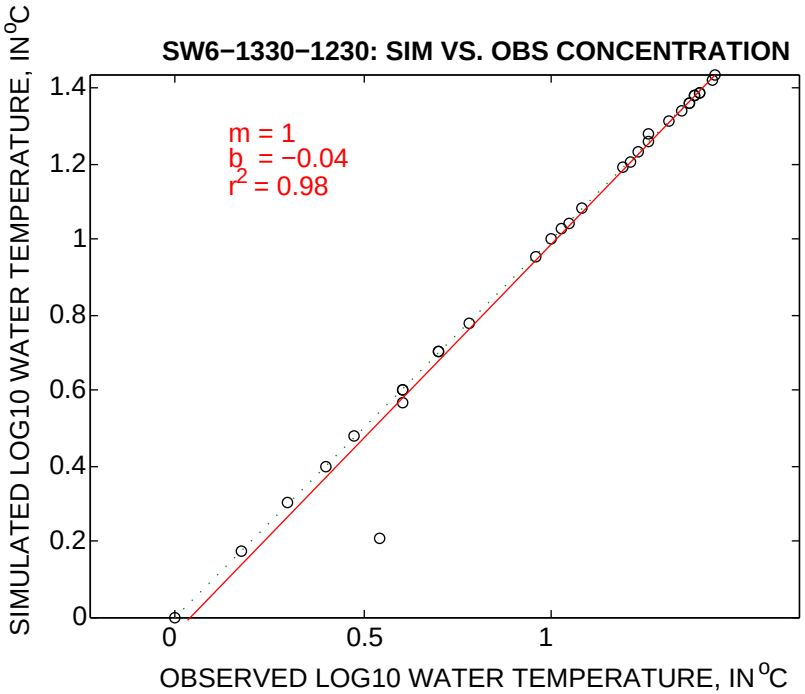
Drive: N/A | Directory: model | Observed: OBS20161101

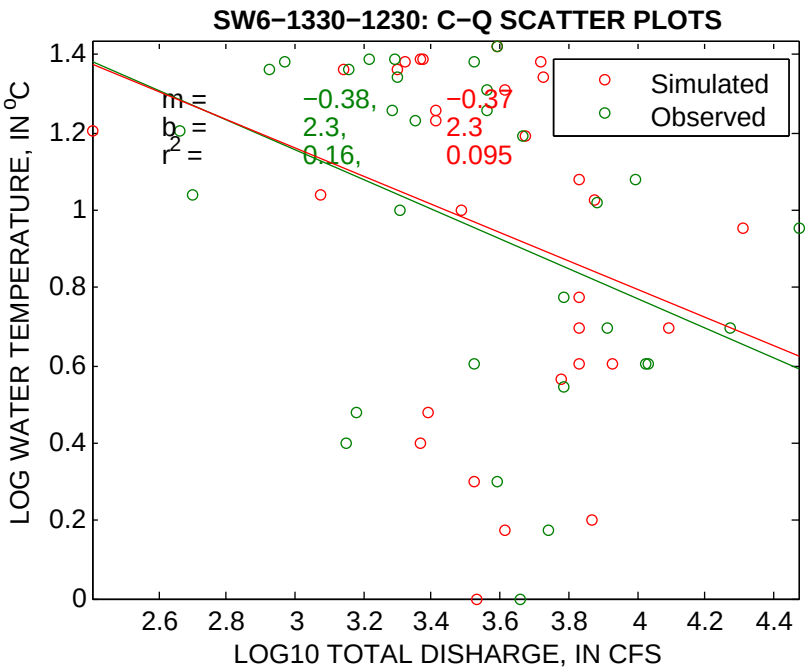
STATISTICS

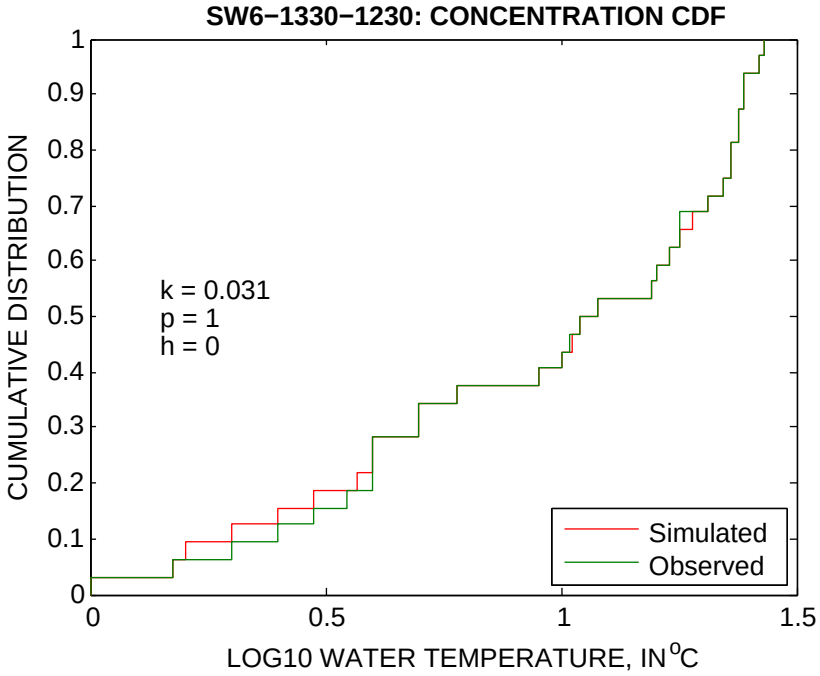
	n	32	32
		observe	simulate
min		1	0.36409
		0	-0.438791
mean		13.0469	13.2068
		0.96503	0.952317
media		11.5	12.8615
		1.06029	1.10902
max		27	27.274
		1.43136	1.43575
varian		79.2639	77.8957
		0.173637	0.226519
JB		0.083961	0.115577
		0.089156	0.016742
		ra	log
%		1.22594	-1.31744
err.va		2.31987	0.0499783
rel.std.err		0.292677	0.287832
mod.eff		0.970732	0.712168

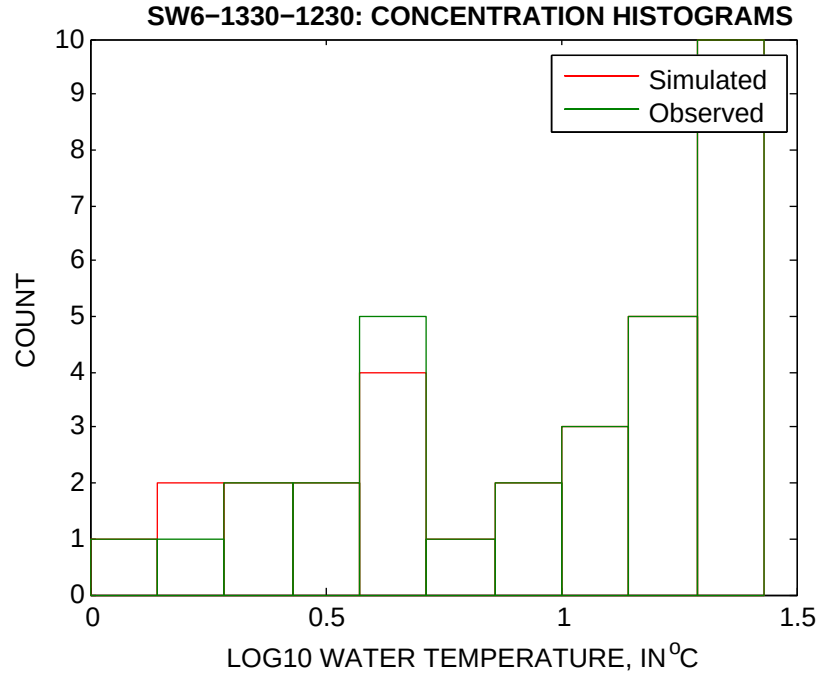
VERSION

ALL DATA
LOG10

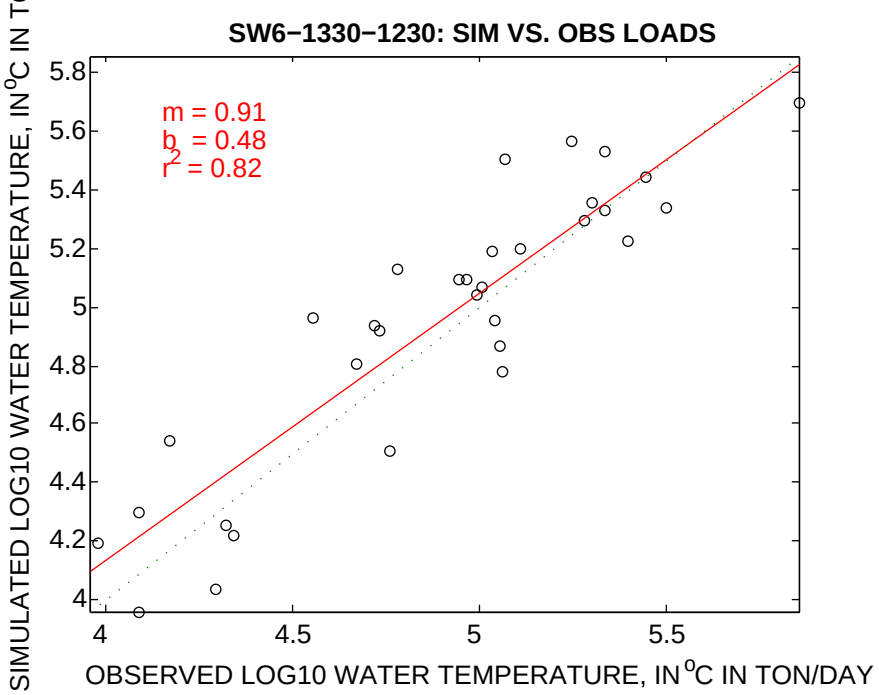


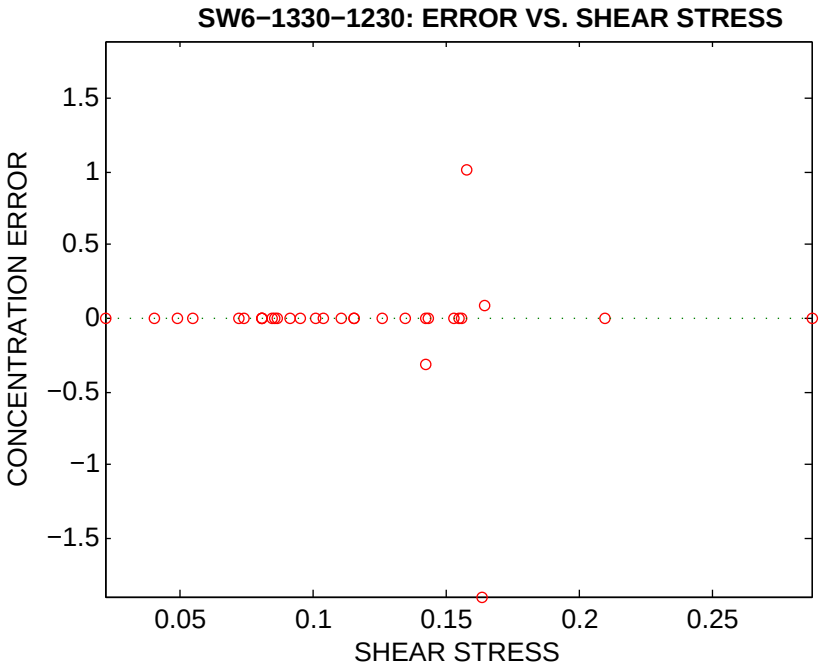


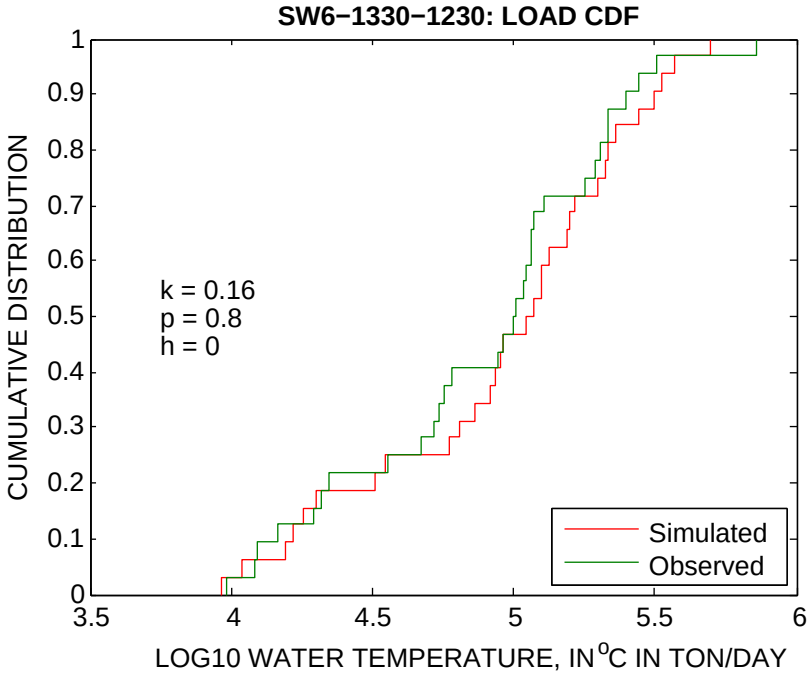


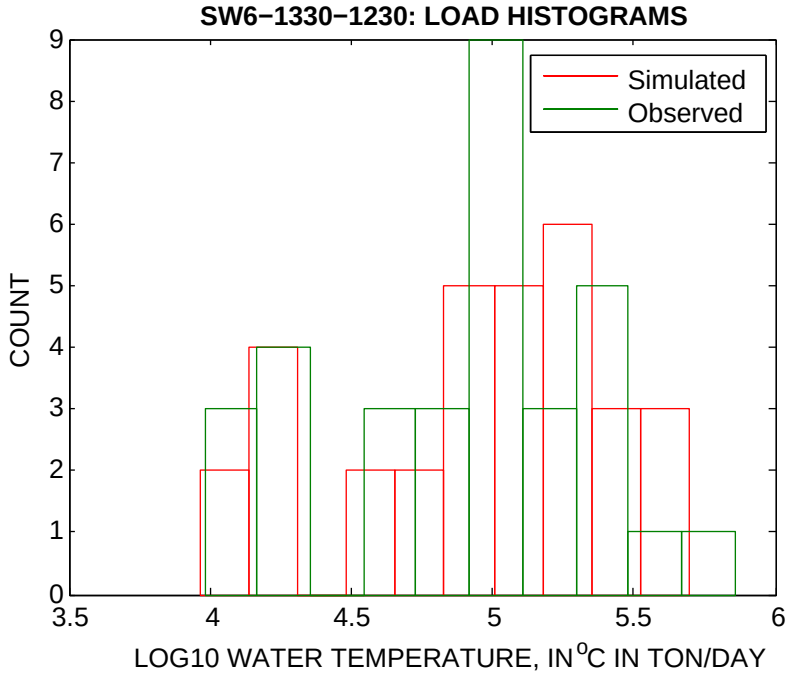


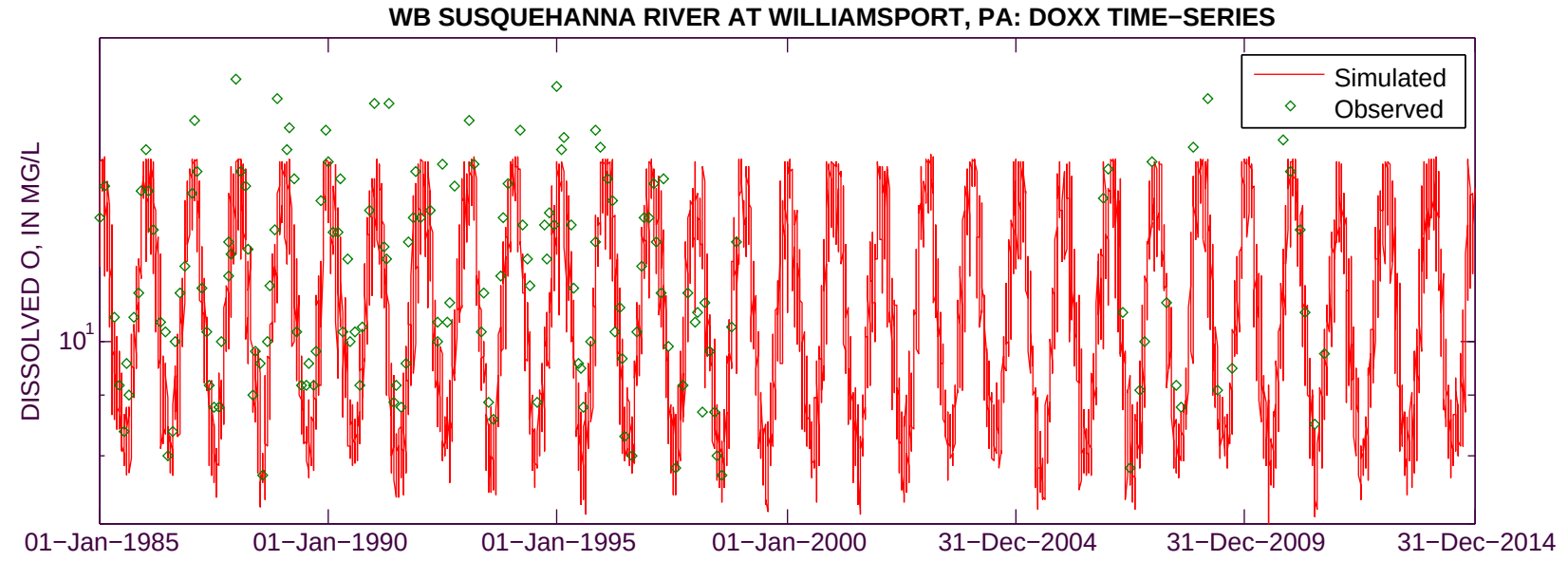
LOAD DATA
LOG10

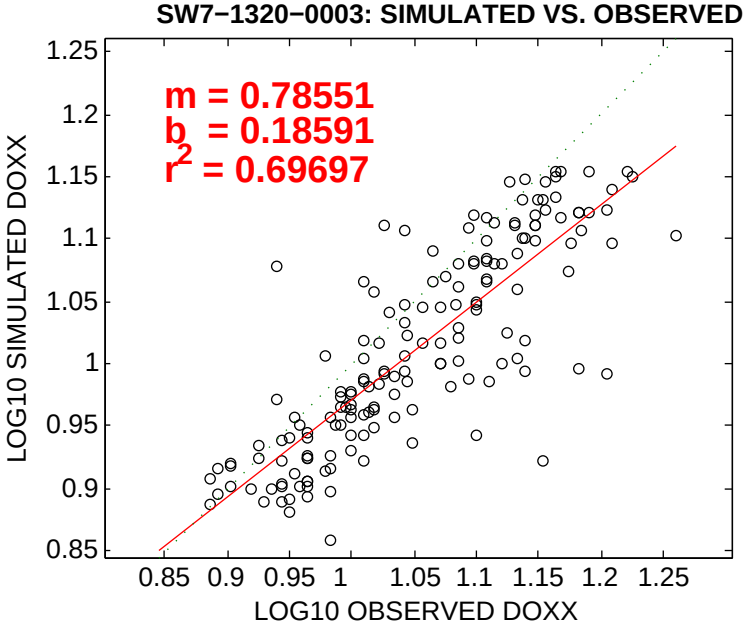


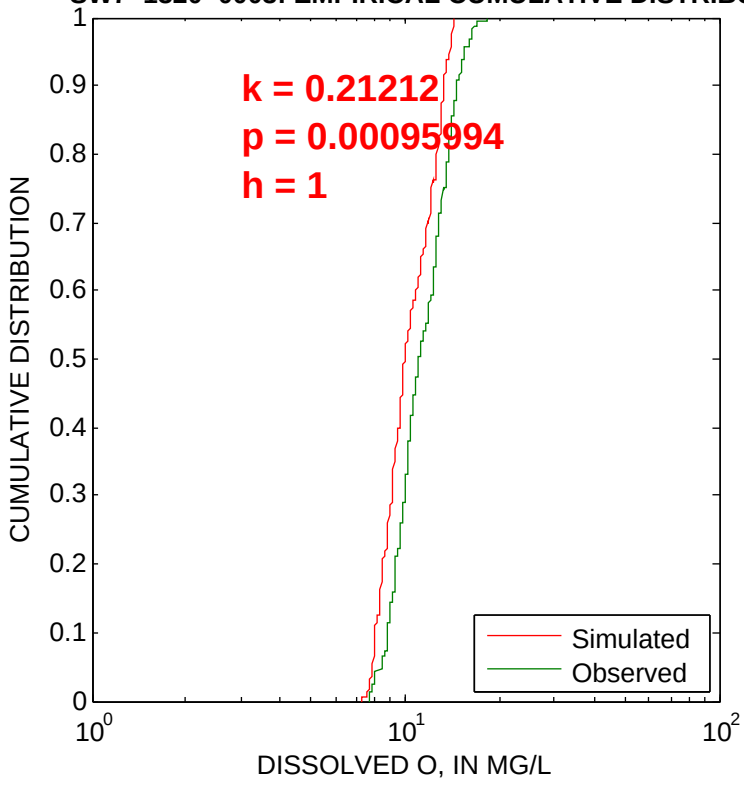












DATA SELECTION

scenario	file
P620171001WQ	DOXX.calib

plot: DOXX - dissolved oxygen

Dates: 1/1/1985 – 12/31/201

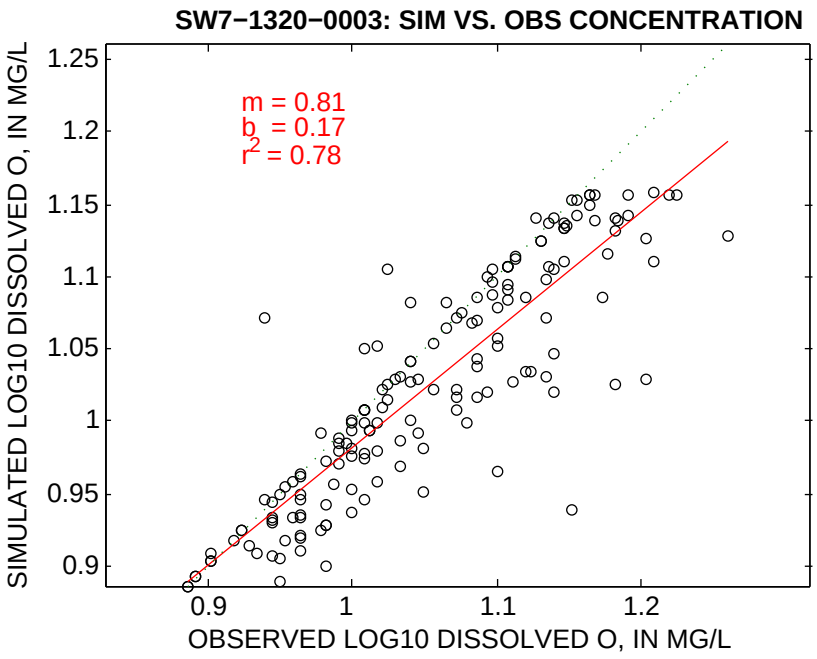
Drive	Directory	Observed
N/A	model	OBS20161101

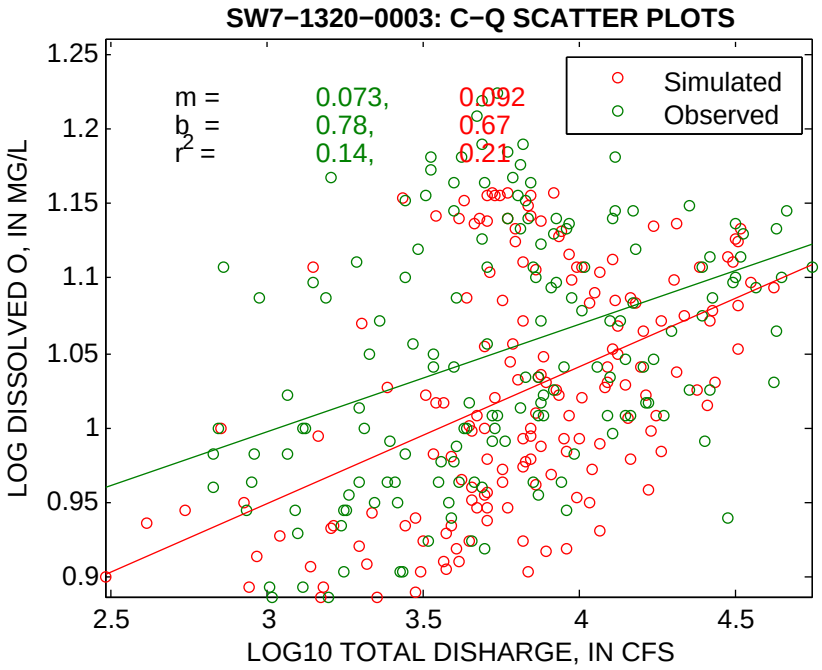
STATISTICS

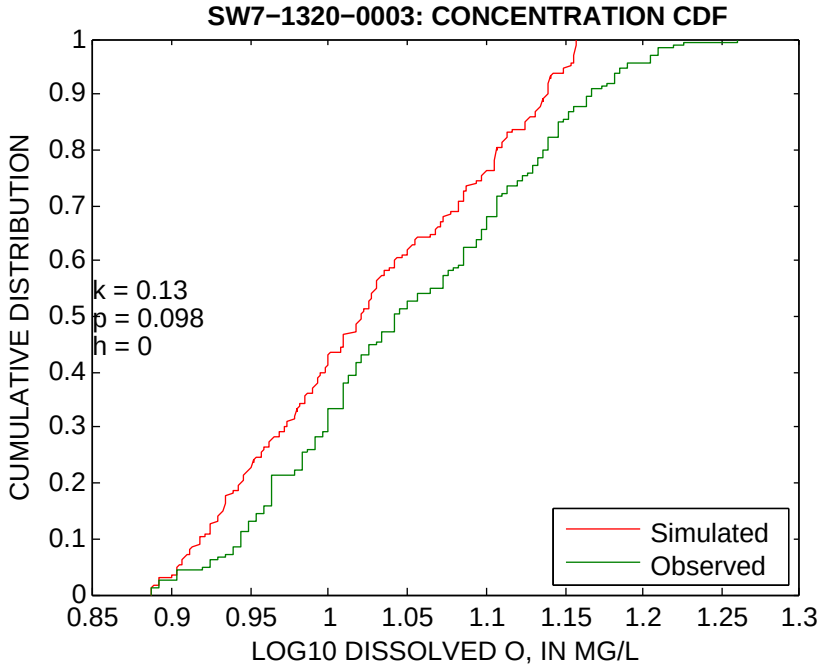
	n	observe	simulate
		165	165
min		7.7	7.2221
		0.886491	0.858663
mean		11.5127	10.4793
		1.05264	1.01276
media		11	9.9998
		1.04139	0.999991
max		18.2	14.295
		1.26007	1.15518
varian		5.32513	3.90044
		0.00743475	0.00658199
JB		0.025124	0.009516
		0.042633	0.012563
		ra	log
%		-8.97598	-3.78792
err.va		2.78838	0.00393614
rel.std.err		0.523627	0.529425
mod.eff		0.476373	0.470575

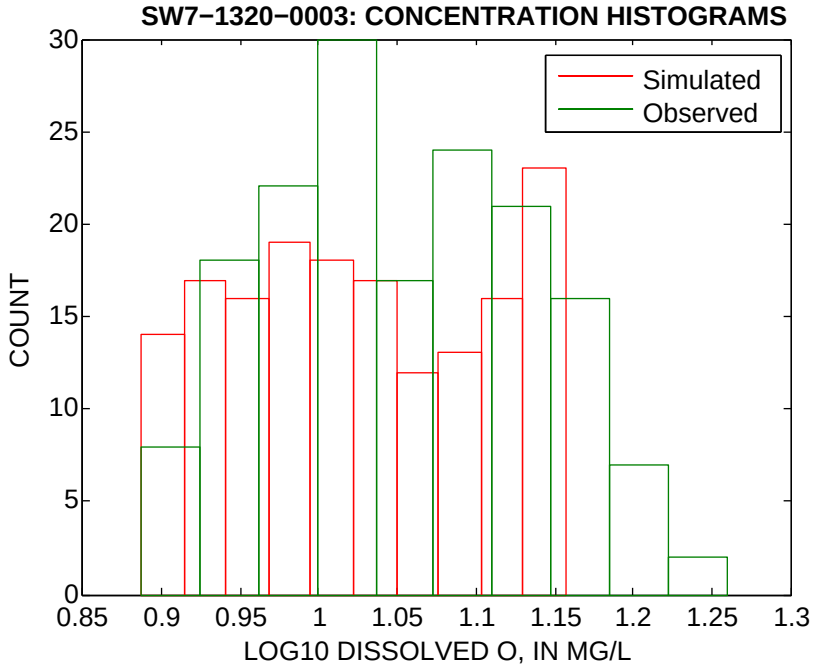
VERSION 2.1

ALL DATA
LOG10

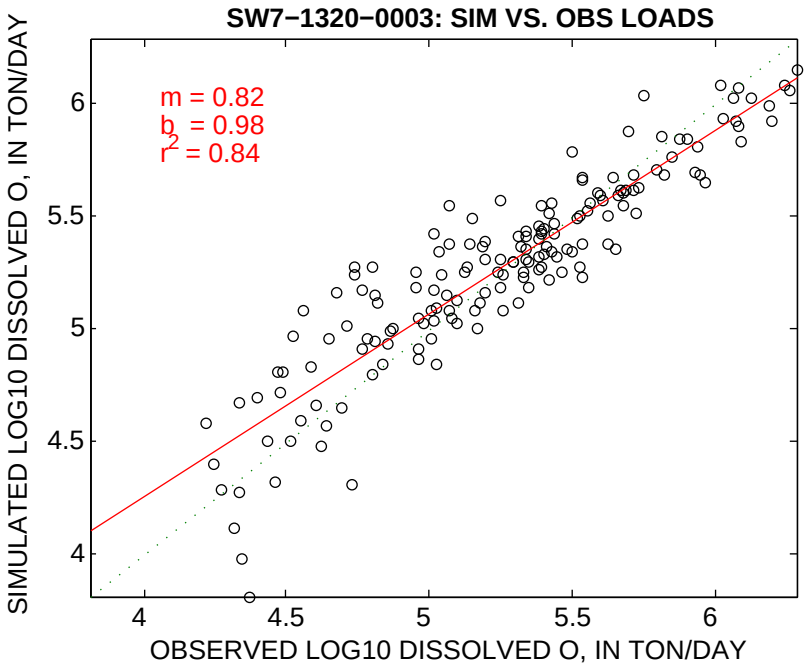


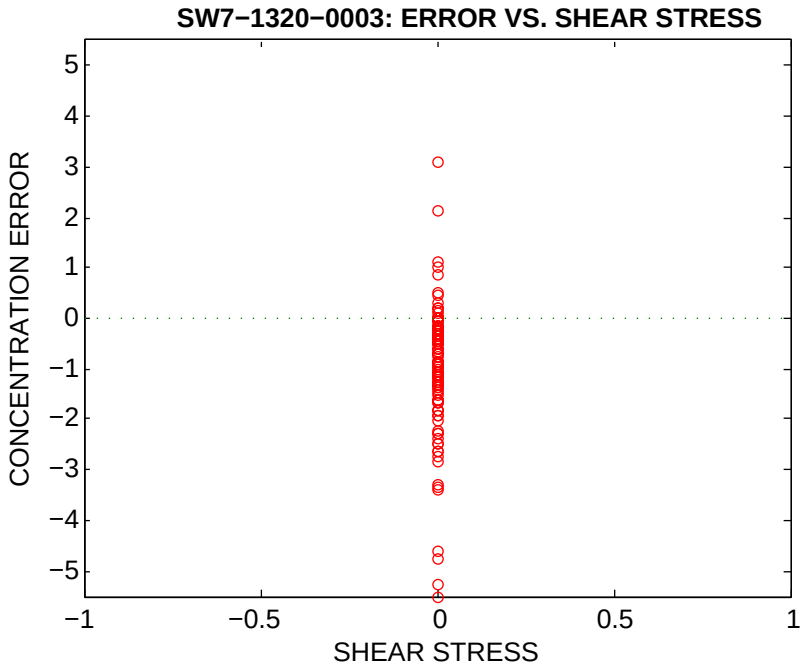


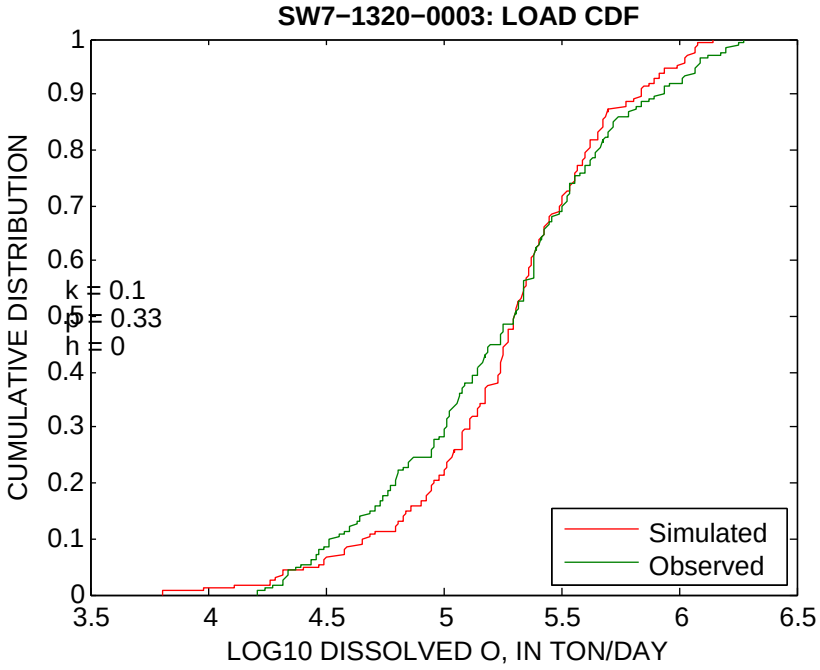


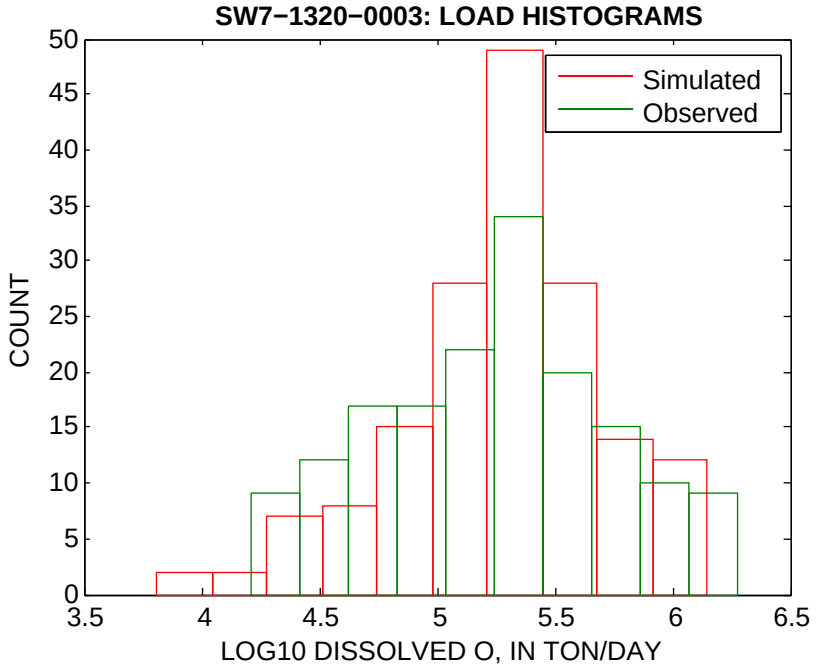


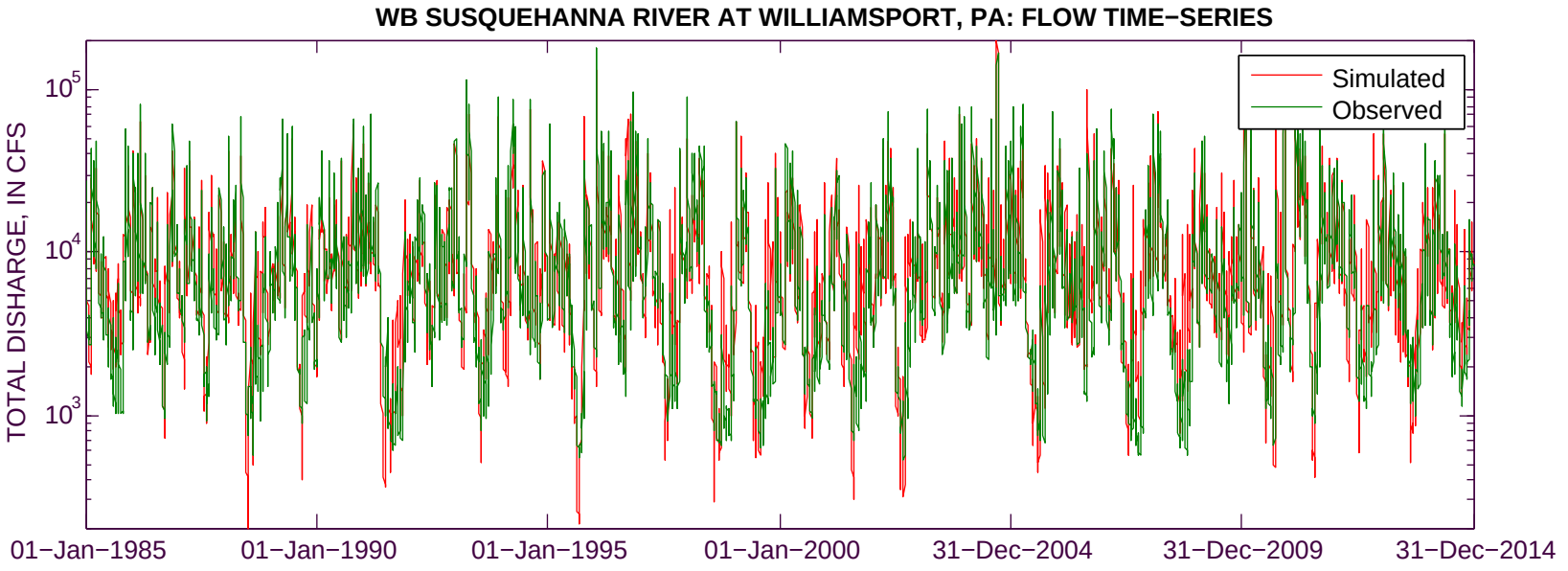
LOAD DATA
LOG10

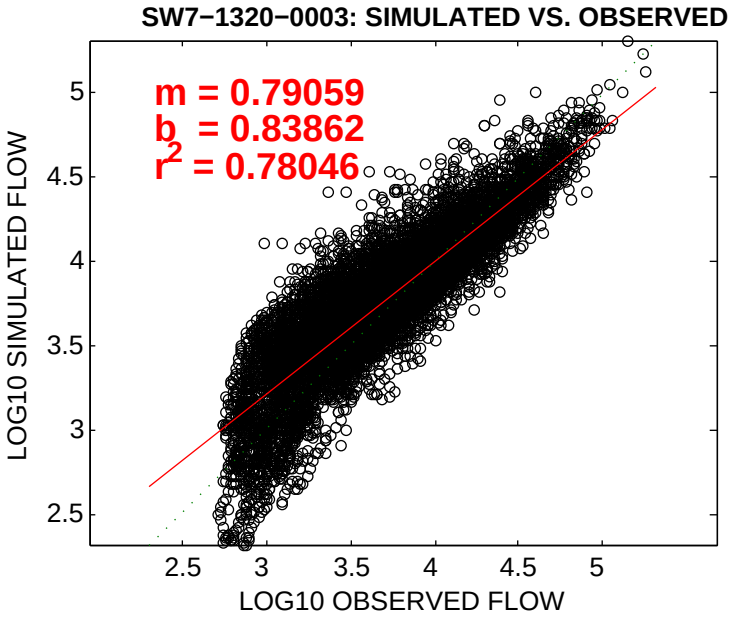


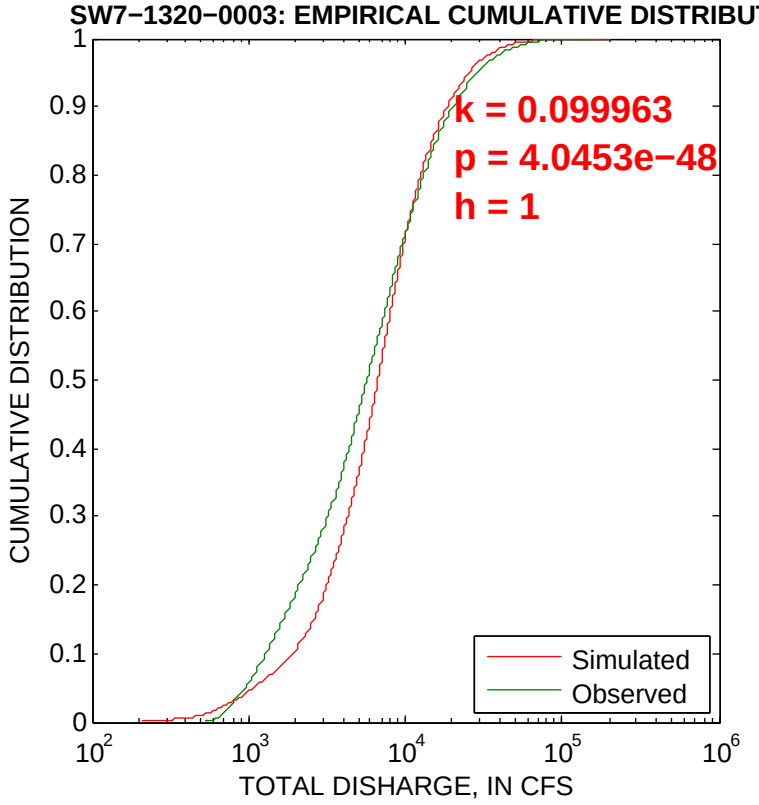












DATA SELECTION

scenario: P620171001WQ | file: FLOW.calib

plot: FLOW - total discharge

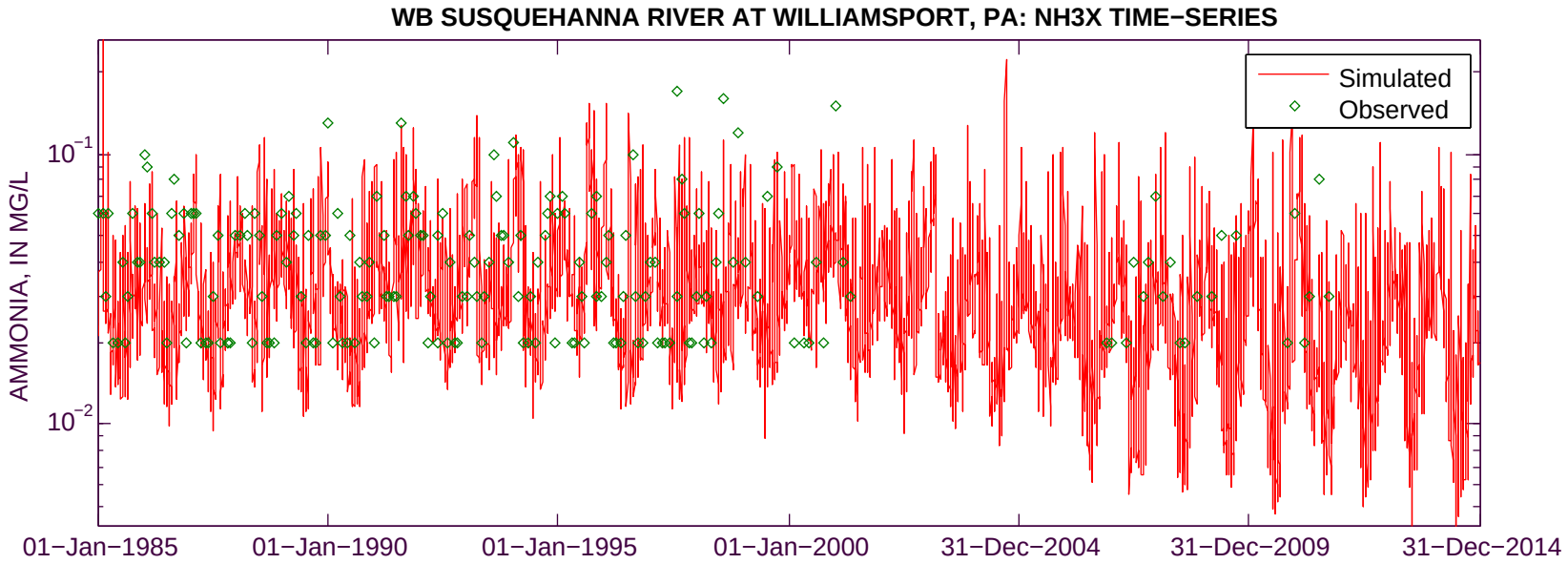
Dates: 1/1/1985 – 12/31/201

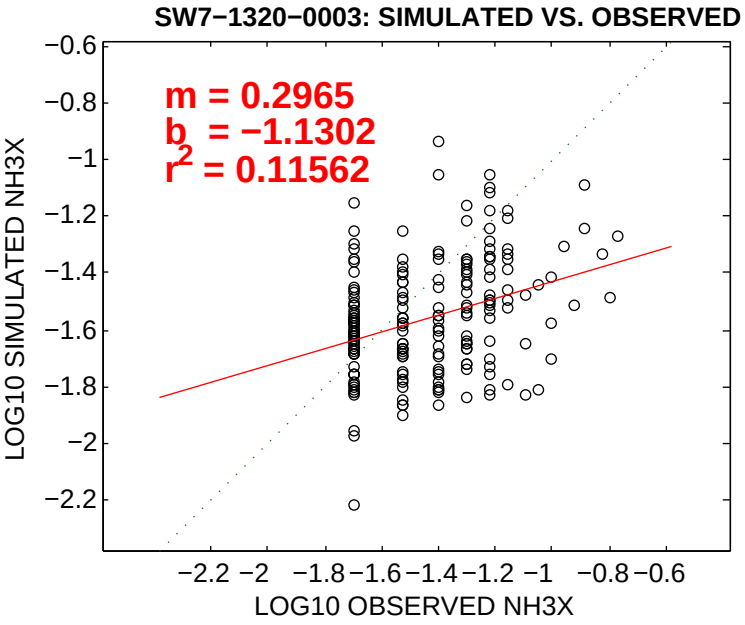
Drive: N/A | Directory: model | Observed: OBS20161101

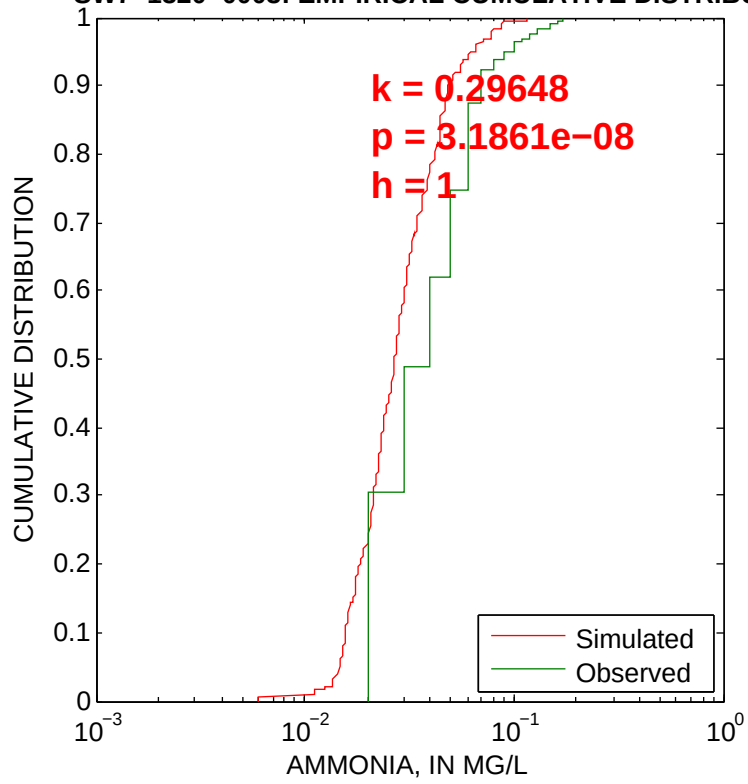
STATISTICS

		observe	simulate
n		10954	10954
min		531	204.19
		2.72509	2.31003
mean		9124.78	9144.83
		3.73859	3.79432
media		5700	6709.55
		3.75587	3.82669
max		180000	204450
		5.25527	5.31059
varian		1.21664e+0	8.95052e+
		0.198617	0.159063
JB		0.001	0.001
		0.001	0.001
		ra	log
%		0.219688	1.49063
err.va		2.56014e+0	0.0467359
rel.std.err		0.210427	0.235306
mod.eff		0.789573	0.764694

VERSION 2.1







DATA SELECTION

scenario	file
P620171001WQ	NH3X.calib

plot: NH3X - ammonia

Dates 1/1/1985 12/31/201

Drive Directory Observed

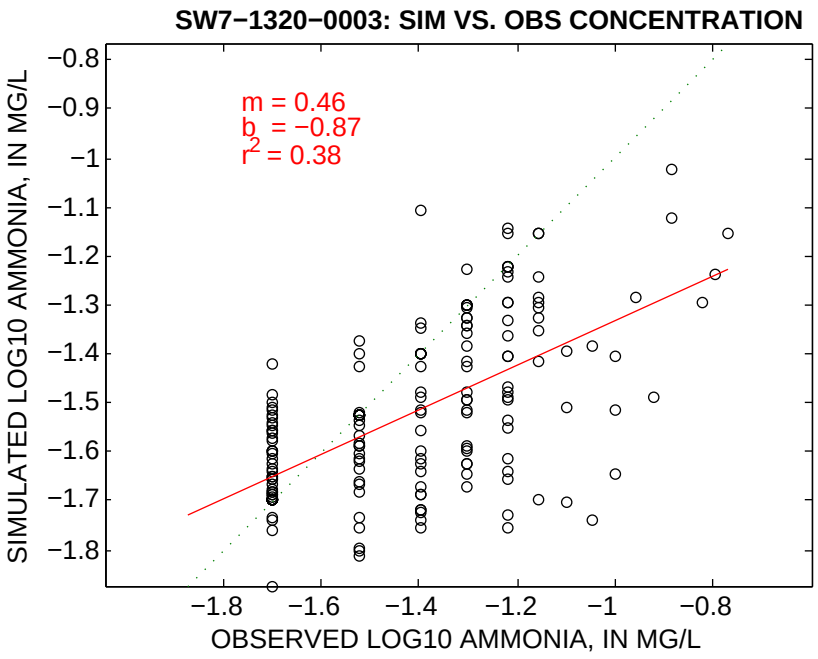
N/A model OBS20161101

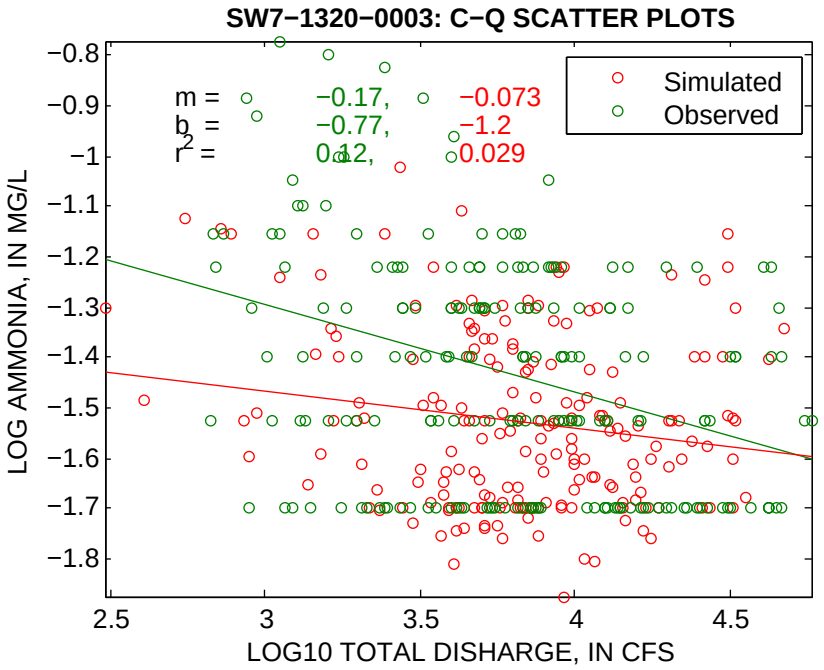
STATISTICS

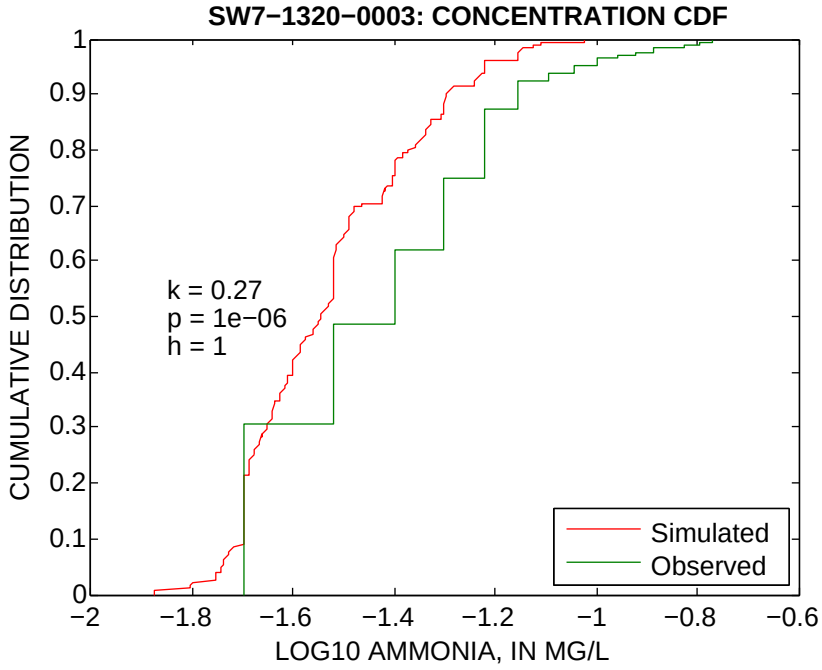
	n	199	199
		observe	simulate
min		0.02	0.0060513
		-1.69897	-2.21815
mean		0.0428643	0.0311262
		-1.43293	-1.55508
media		0.04	0.027044
		-1.39794	-1.56793
max		0.17	0.11608
		-0.769551	-0.935243
varian		0.00070438	0.00026285
		0.0529431	0.0402558
JB		0.001	0.001
		0.017570	0.161215
		ra	log
%		-27.3843	8.5246
err.va		0.0008293	0.0767999
rel.std.err		1.17735	1.45061
mod.eff		-0.177347	-0.450612

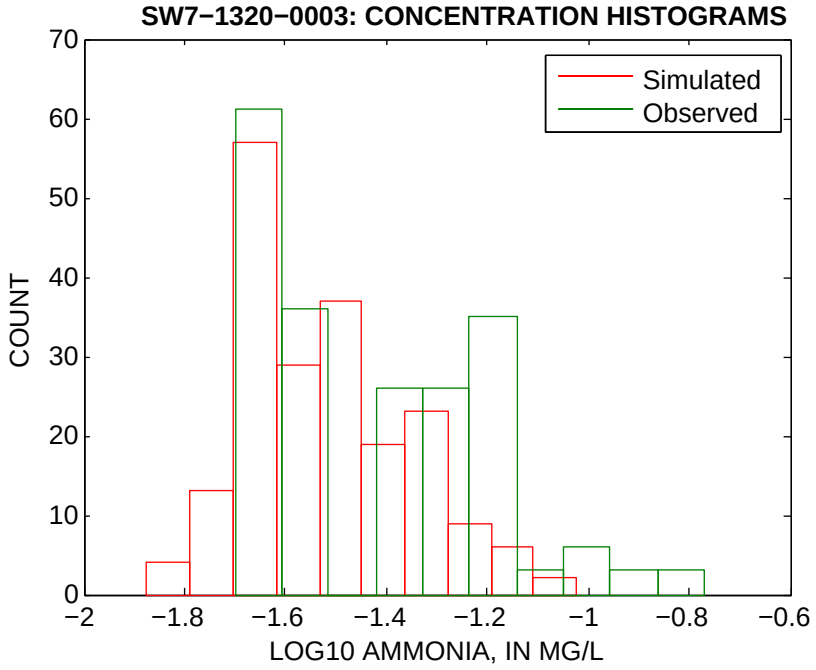
VERSION 2.1

ALL DATA
LOG10

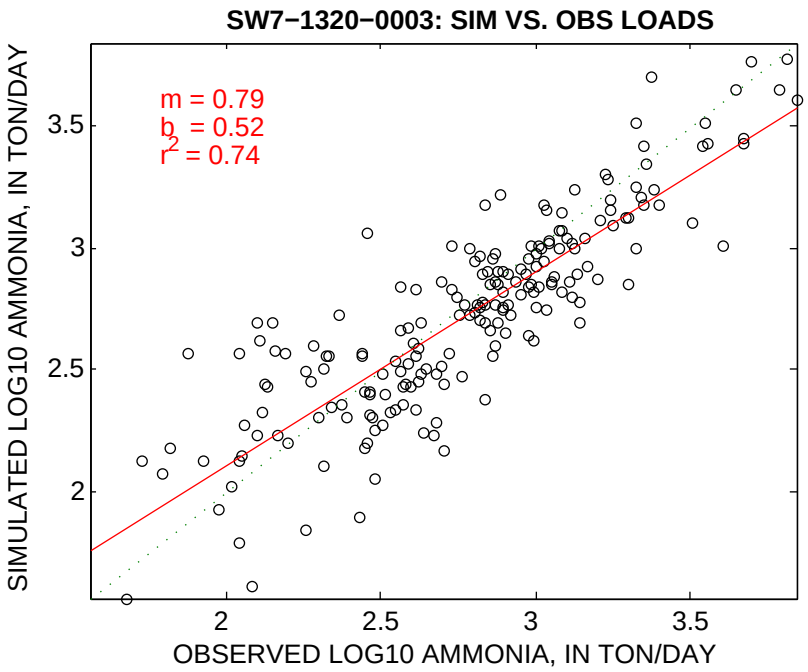


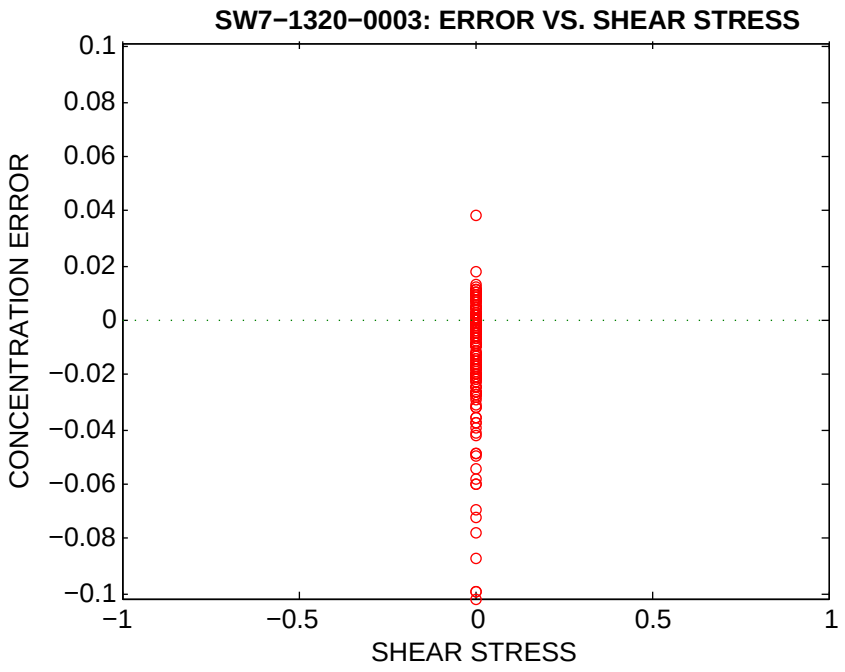


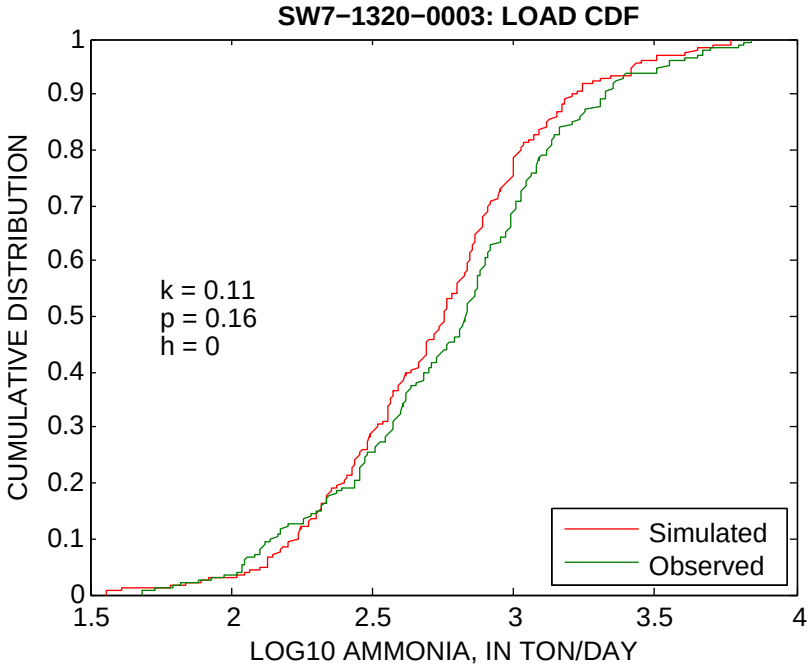


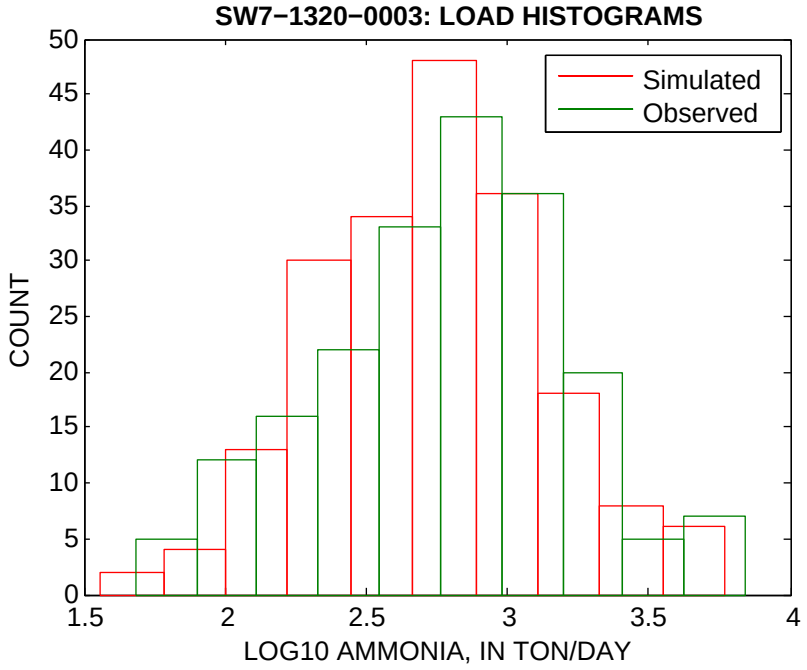


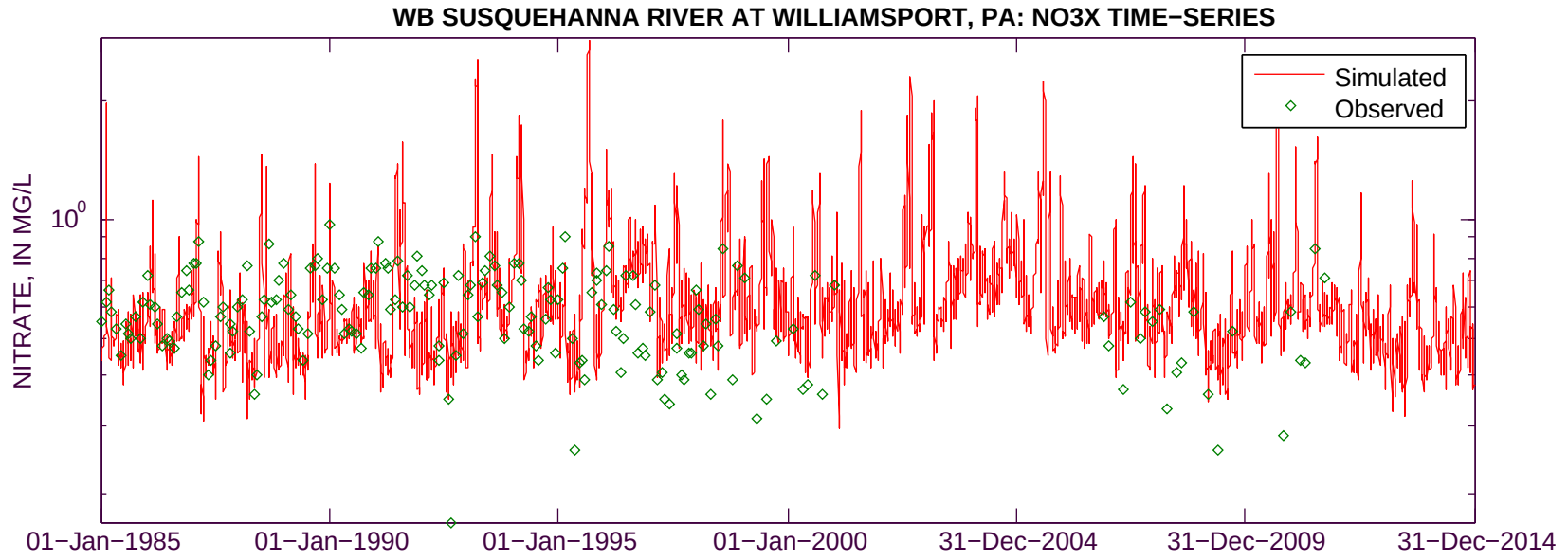
LOAD DATA
LOG10

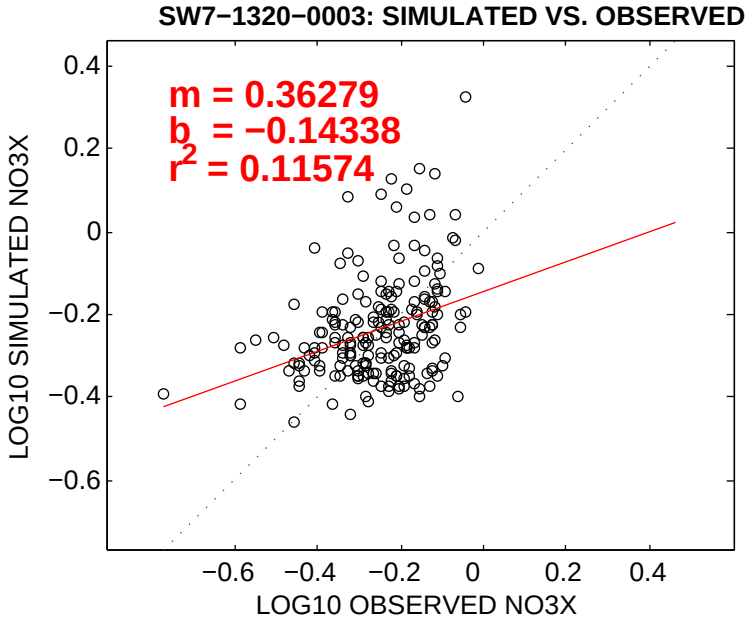


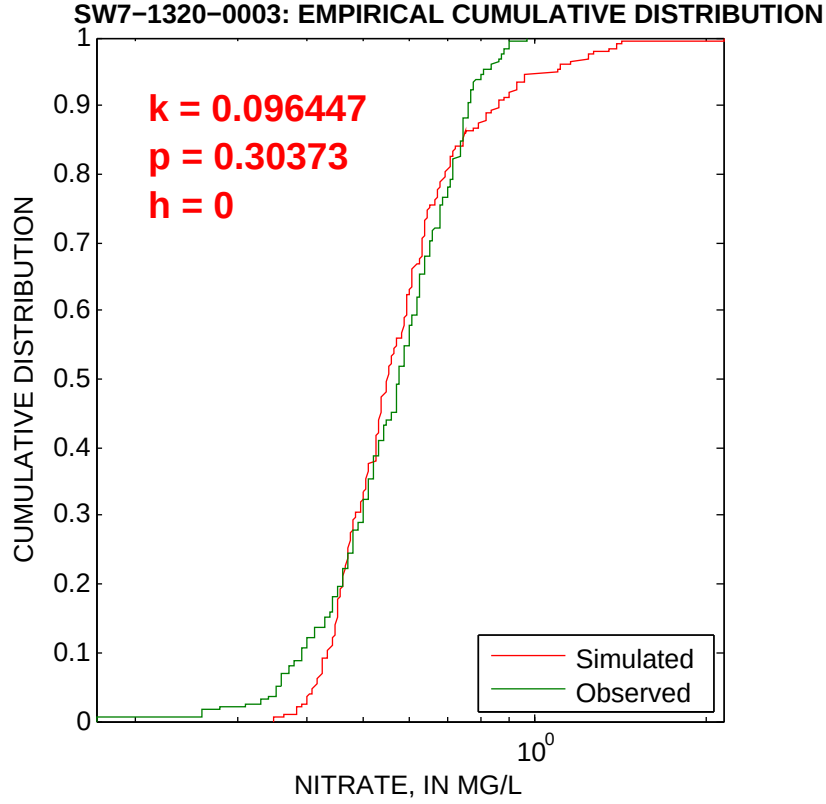












DATA SELECTION

scenario: P620171001WQ | file: NO3X.calib

plot: NO3X - nitrate

Dates: 1/1/1985 – 12/31/201

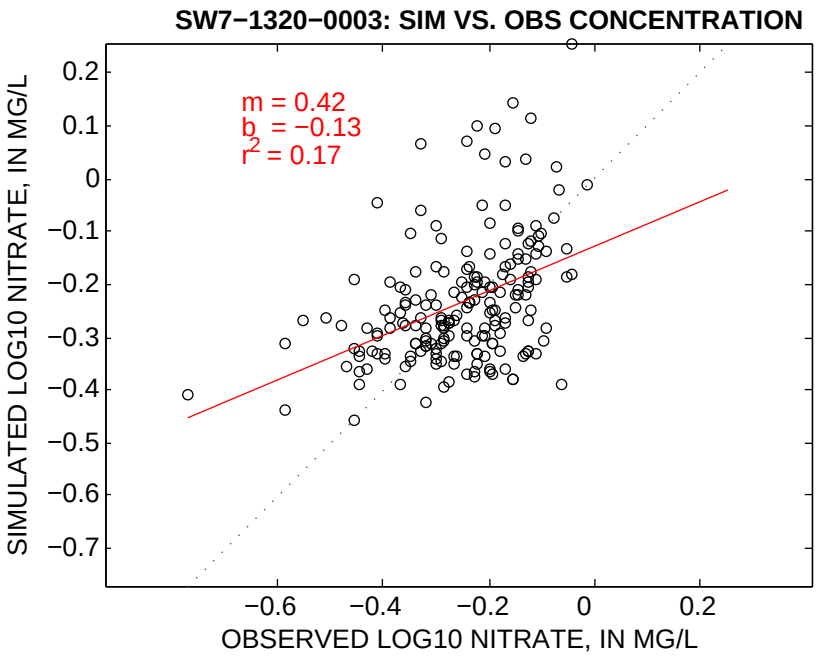
Drive | Directory | Observed: N/A | model | OBS20161101

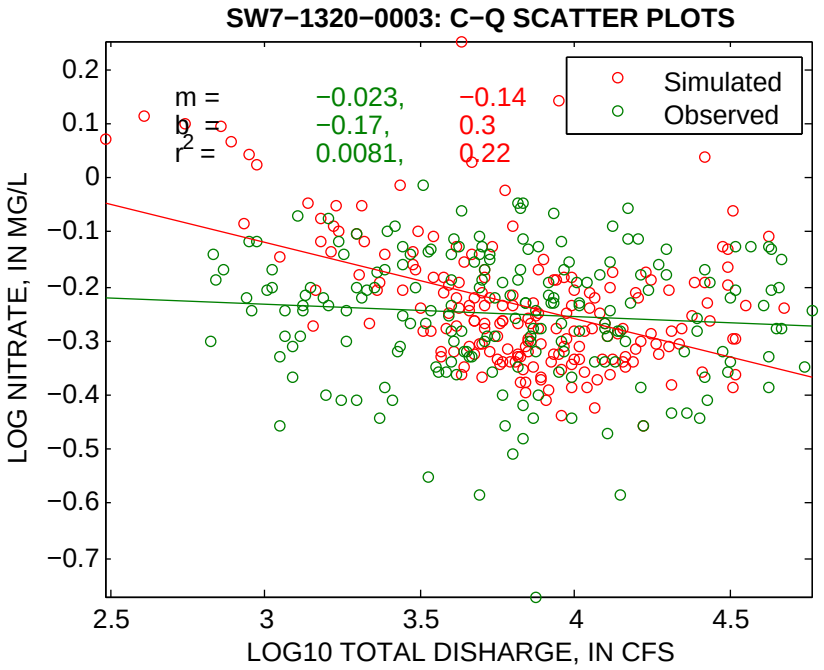
STATISTICS

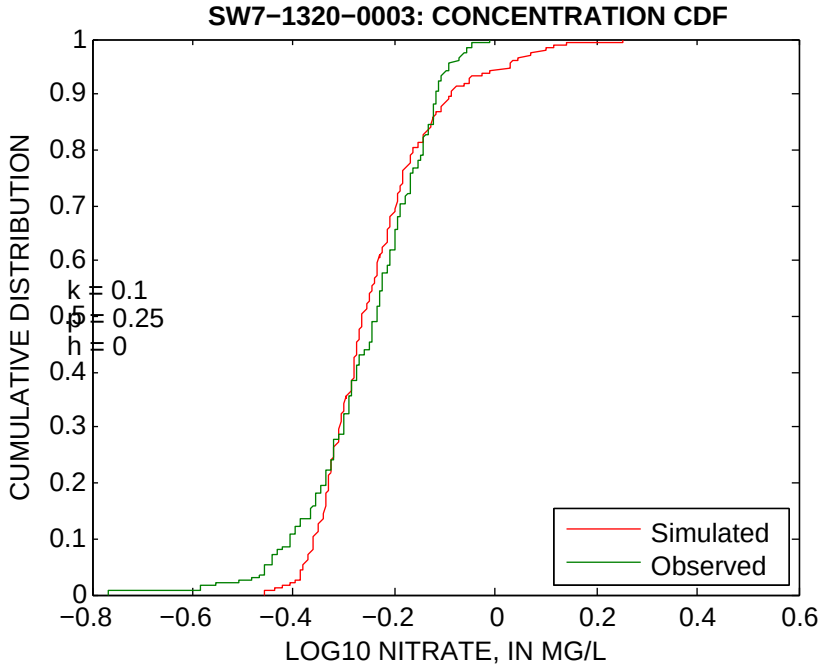
		observe	simulate
n		197	197
min		0.17	0.34666
		-0.769551	-0.460096
mean		0.579726	0.610758
		-0.251593	-0.234658
media		0.58	0.55118
		-0.236572	-0.258707
max		0.97	2.1285
		-0.0132283	0.328074
varian		0.0210746	0.0494723
		0.0138092	0.0157034
JB	☑	0.5	0.001
	☐	0.001	0.001
		ra	log
%		5.35293	-6.73105
err.va		0.0496039	0.0197812
rel.std.err		2.35373	1.43246
mod.eff		-1.35373	-0.432463

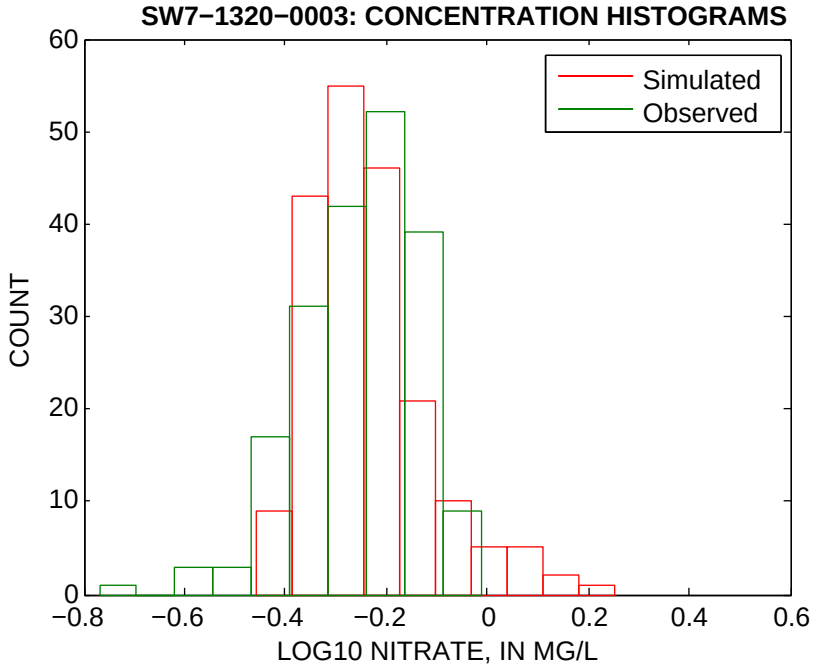
VERSION 2.1

ALL DATA
LOG10

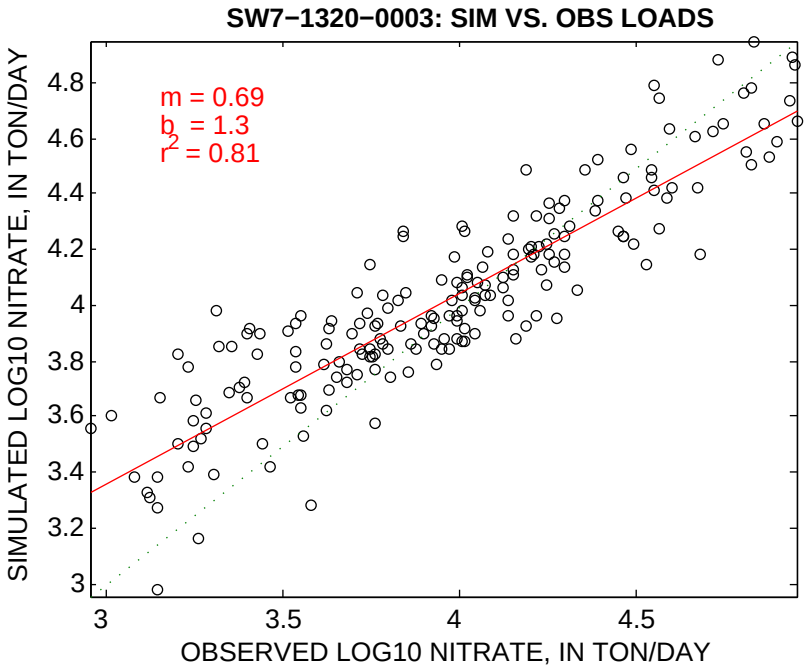




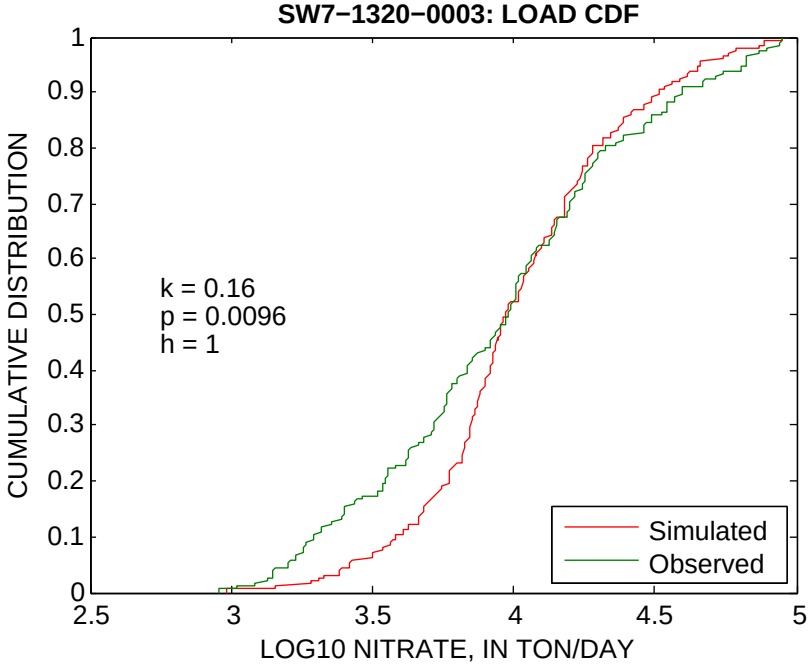


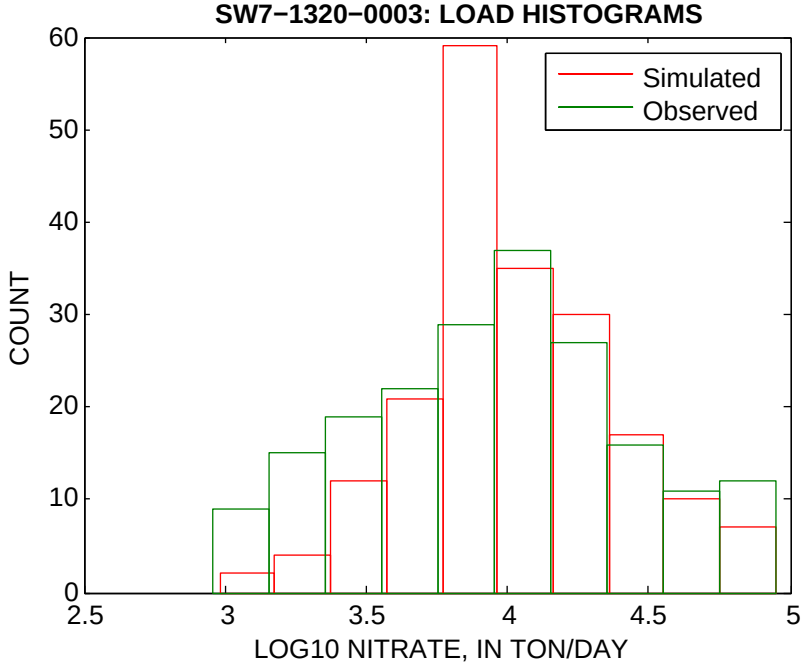


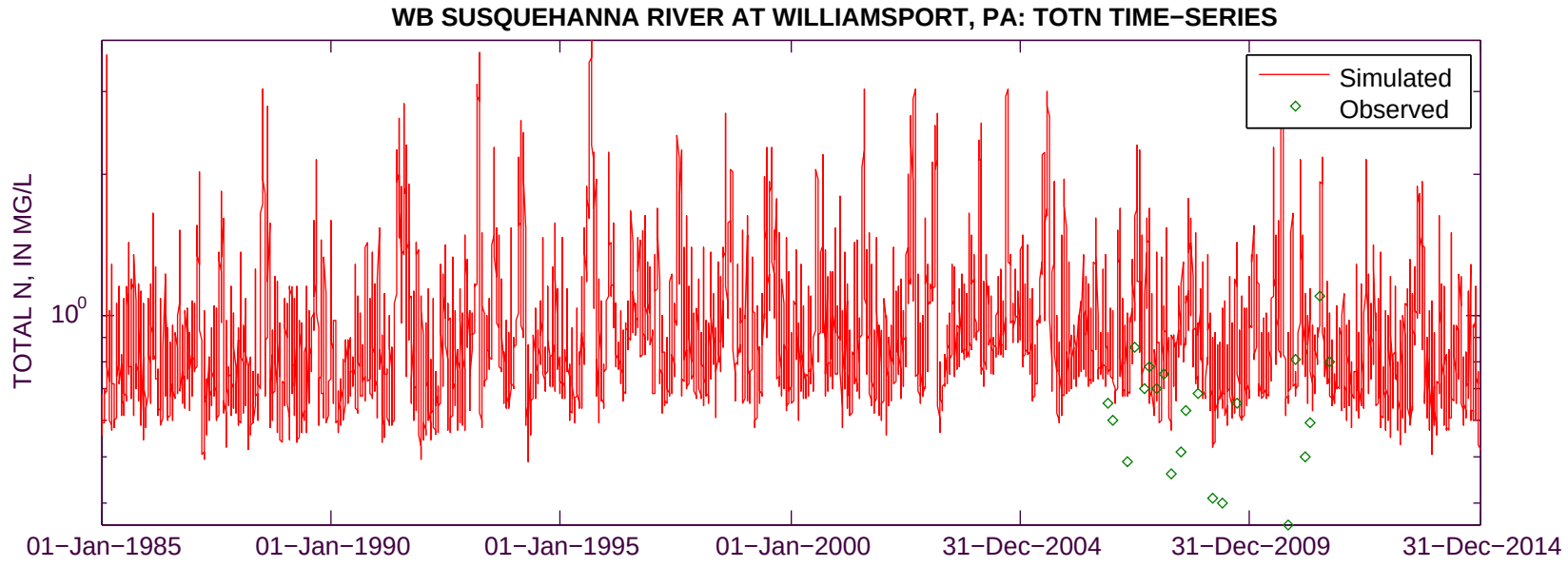
LOAD DATA
LOG10

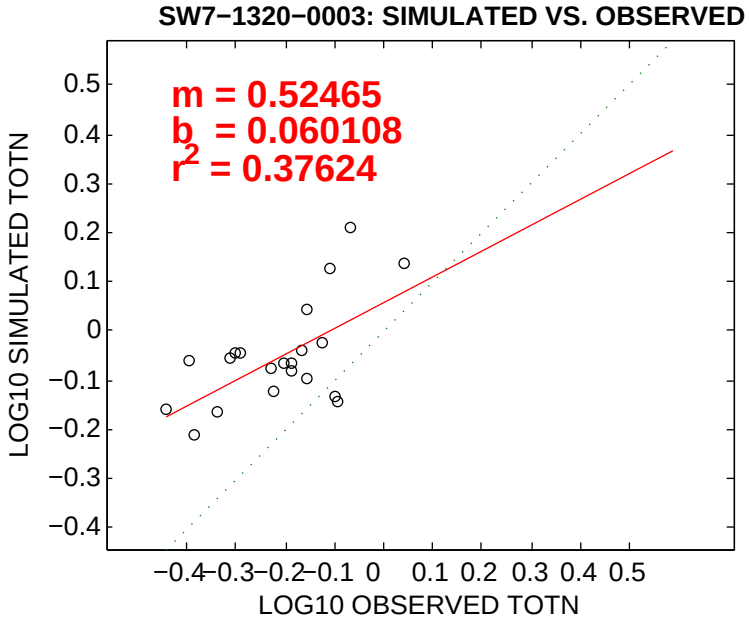


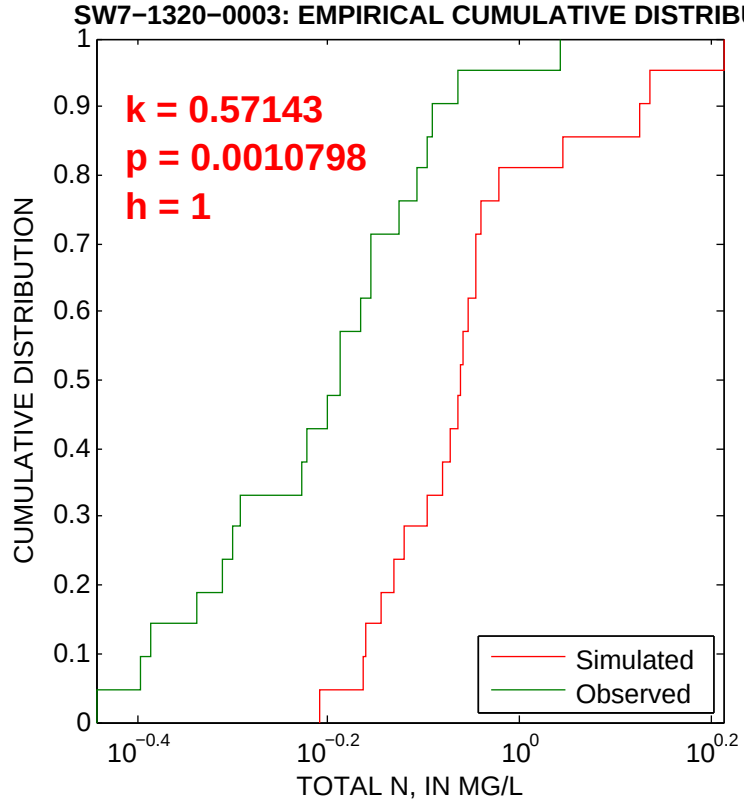












DATA SELECTION

scenario	file
P620171001WQ	TOTN.calib

plot: TOTN - total nitrogen

Dates: 1/1/1985 – 12/31/201

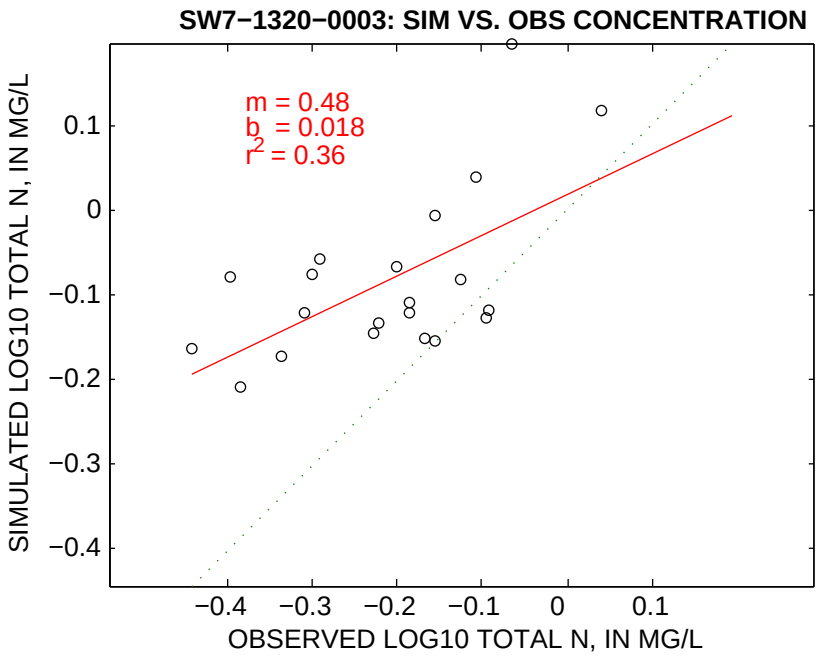
Drive	Directory	Observed
N/A	model	OBS20161101

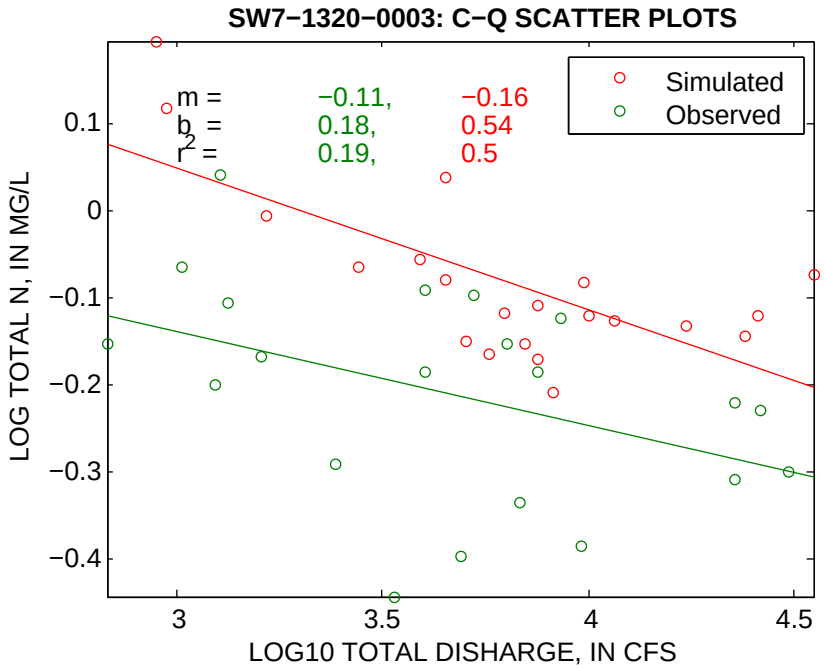
STATISTICS

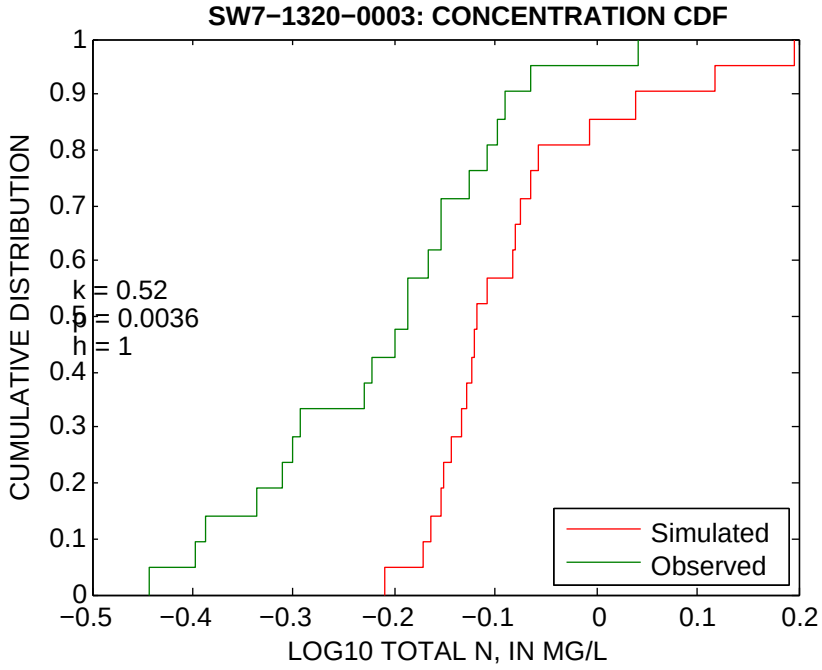
	n	21	21
		observe	simulate
min		0.36	0.61795
		-0.443697	-0.209047
mean		0.639524	0.917813
		-0.210374	-0.0502655
media		0.65	0.8655
		-0.187087	-0.0627329
max		1.1	1.6327
		0.0413927	0.212906
varian		0.0319848	0.0628649
		0.0150329	0.0109981
JB		0.383286	0.009090
		0.5	0.053359
		ra	log
%		43.5151	-76.1066
err.va		0.118869	0.0371735
rel.std.err		3.71642	2.4728
mod.eff		-2.71642	-1.4728

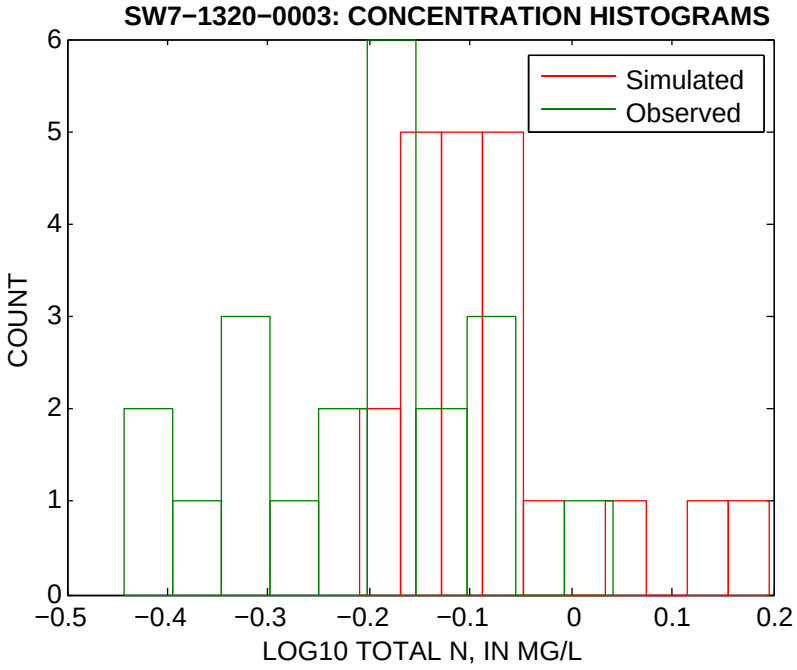
VERSION

ALL DATA
LOG10

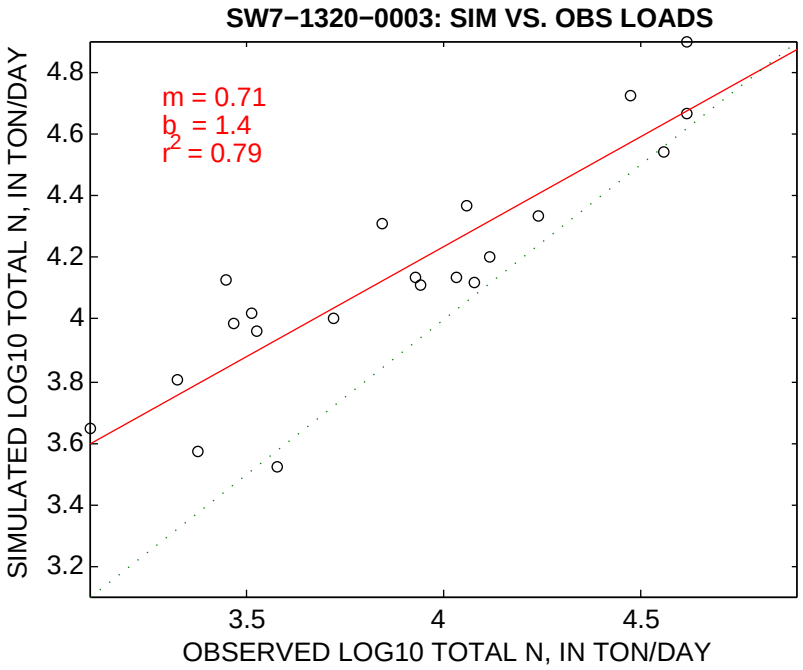




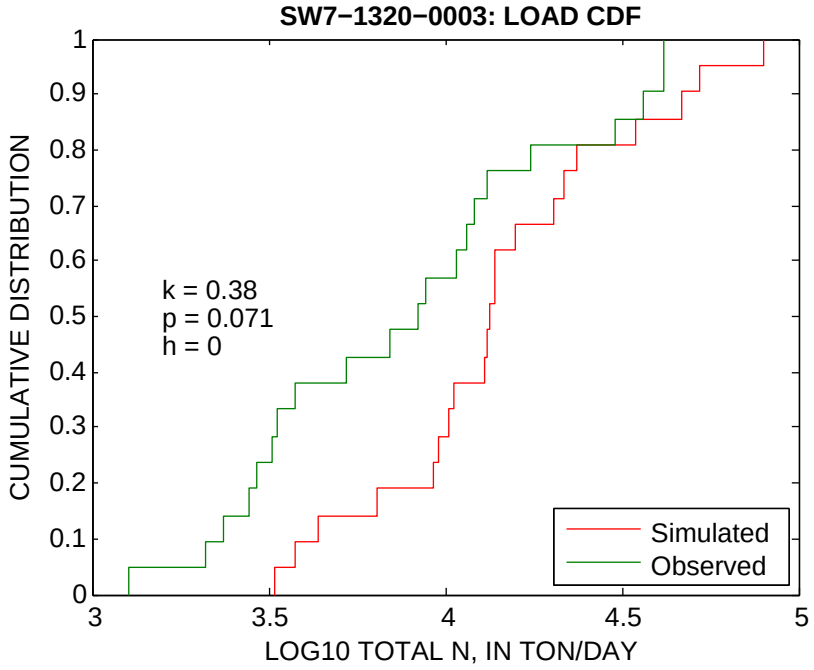


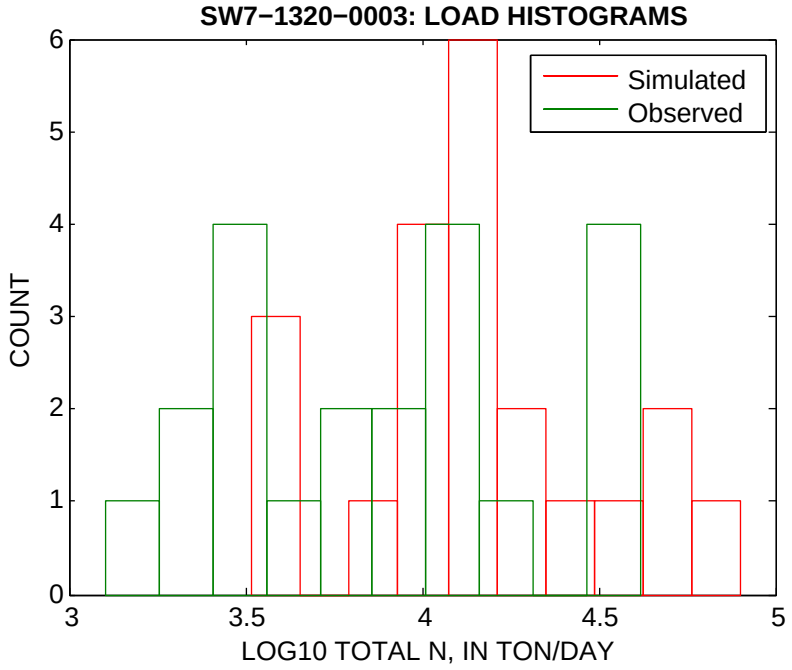


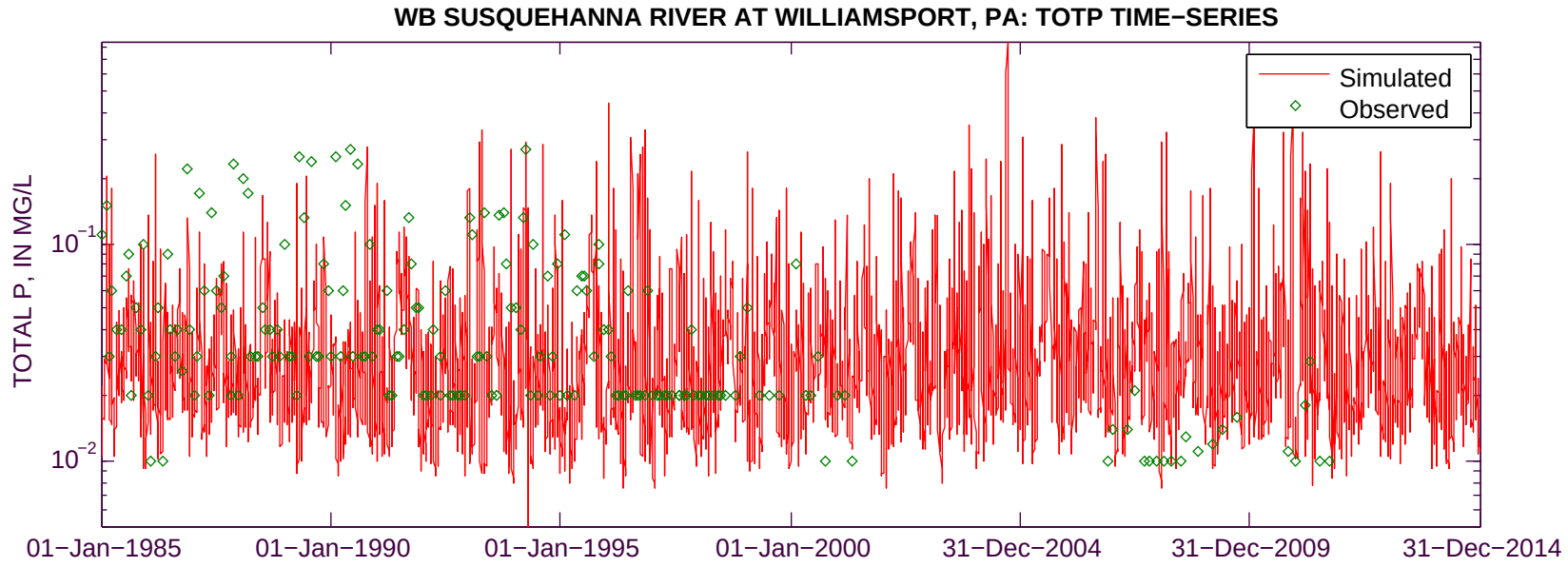
LOAD DATA
LOG10

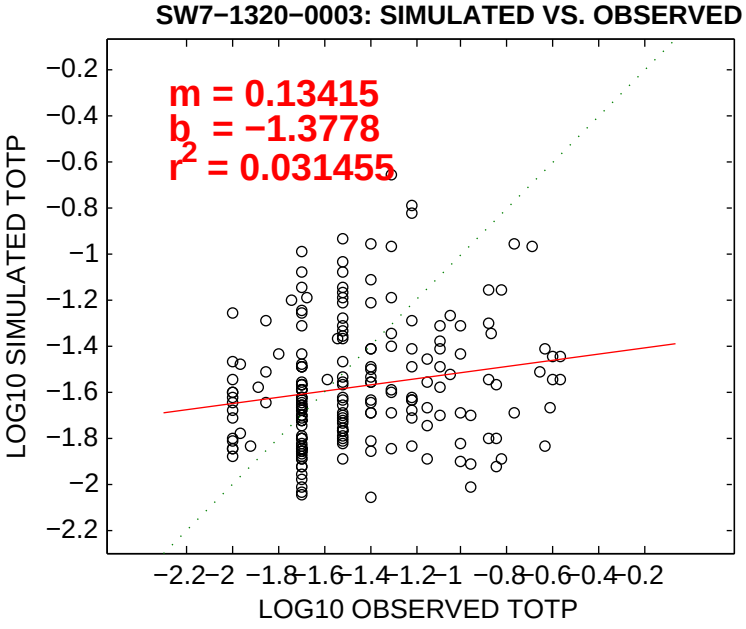


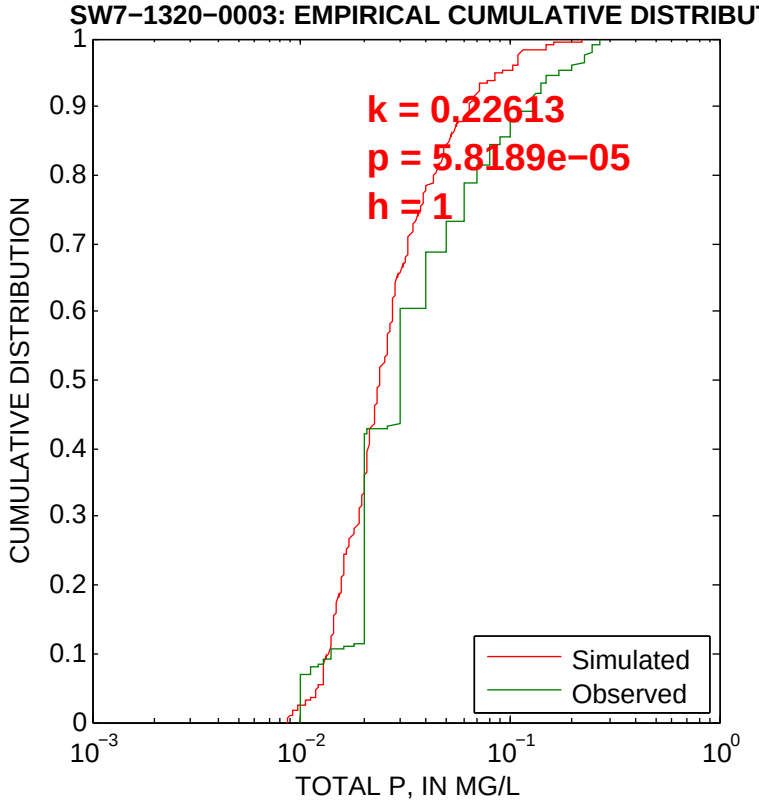












DATA SELECTION

scenario	file
P620171001WQ	TOTP.calib

plot: TOTP - total phosphorus

Dates: 1/1/1985 – 12/31/201

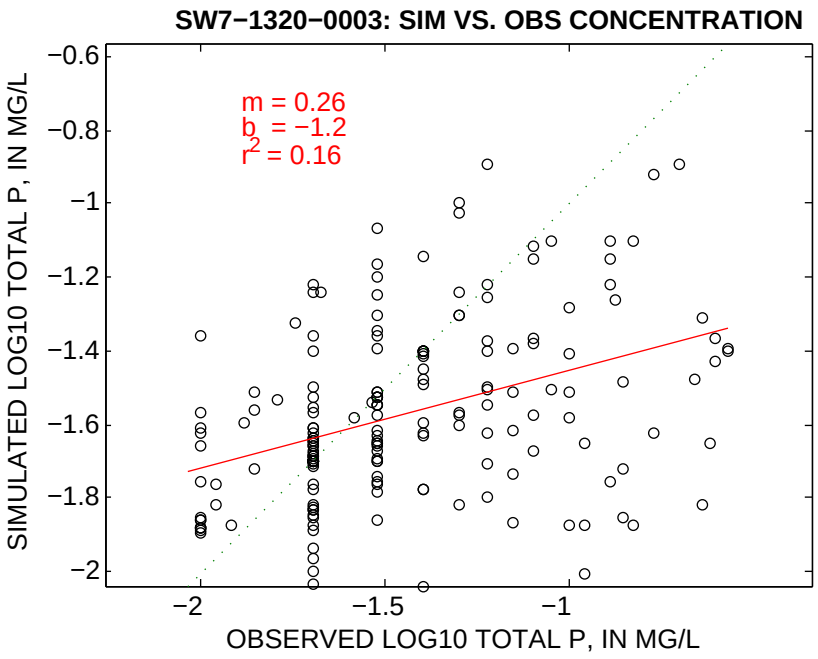
Drive	Directory	Observed
N/A	model	OBS20161101

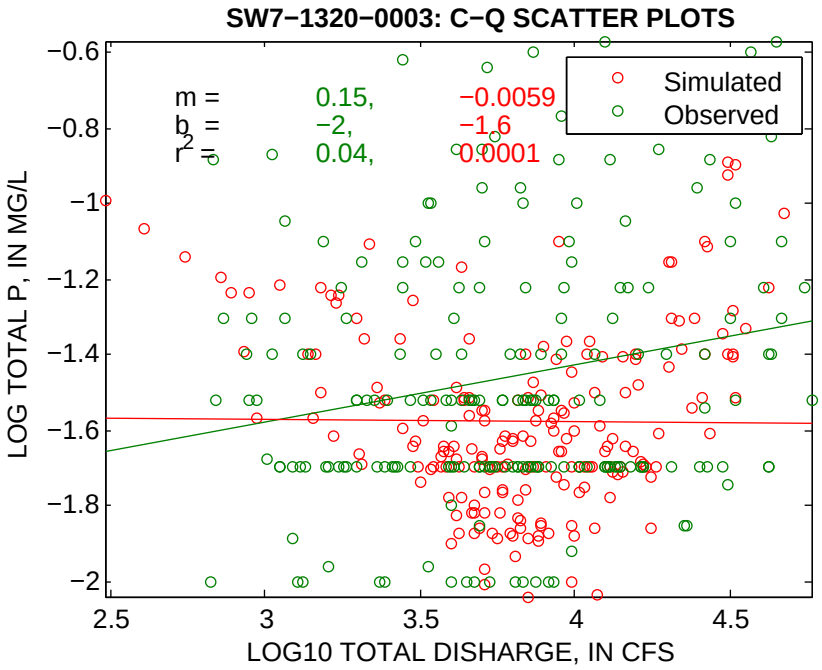
STATISTICS

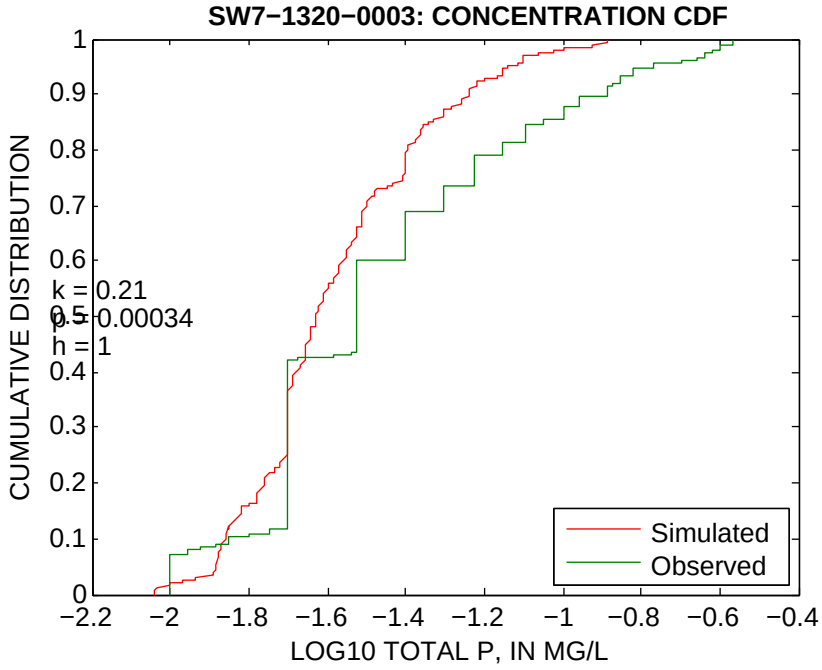
	n	199	199
		observe	simulate
min		0.01	0.0086785
		-2	-2.06156
mean		0.0505176	0.0332267
		-1.45988	-1.57365
media		0.03	0.02375
		-1.52288	-1.62434
max		0.27	0.21868
		-0.568636	-0.660191
varian		0.002908	0.00079227
		0.123799	0.0708329
JB		0.001	0.001
		0.004334	0.001531
		ra	log
%		-34.2274	7.79284
err.va		0.00370895	0.174424
rel.std.err		1.27543	1.40893
mod.eff		-0.275431	-0.408928

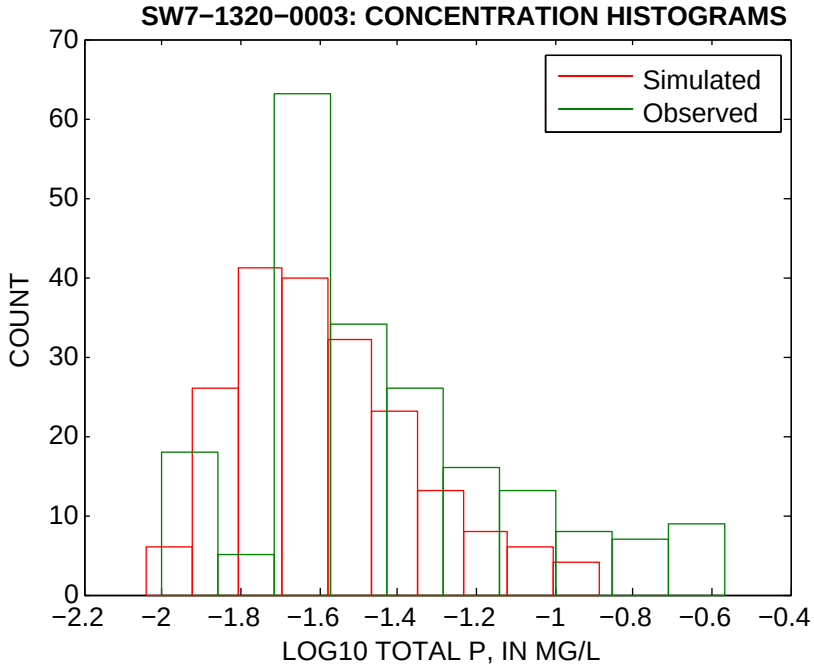
VERSION 2.1

ALL DATA
LOG10

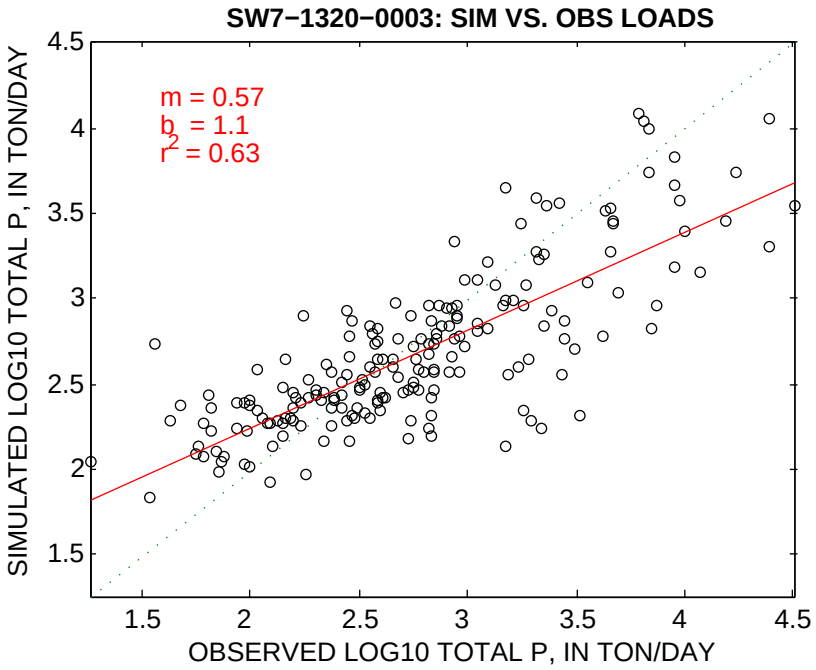


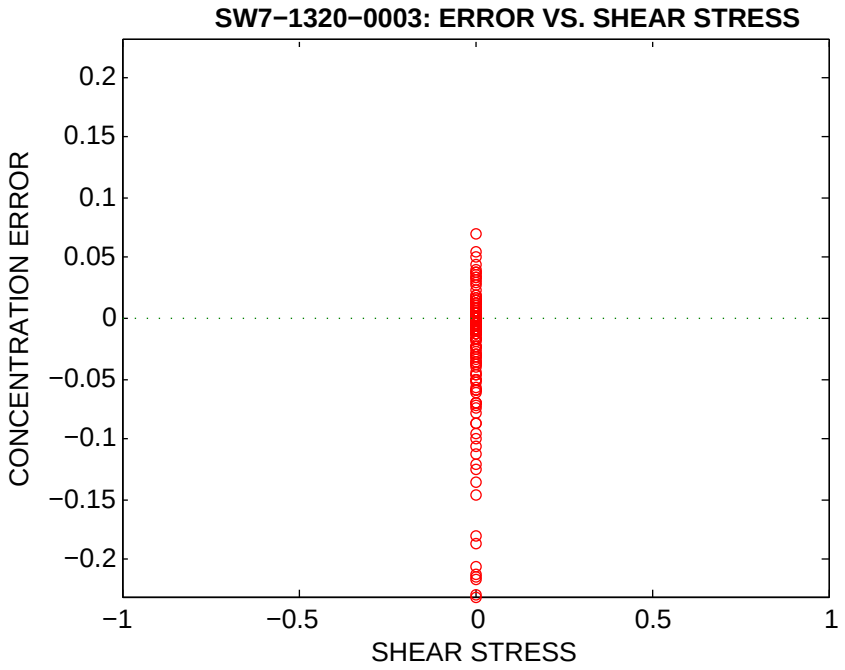


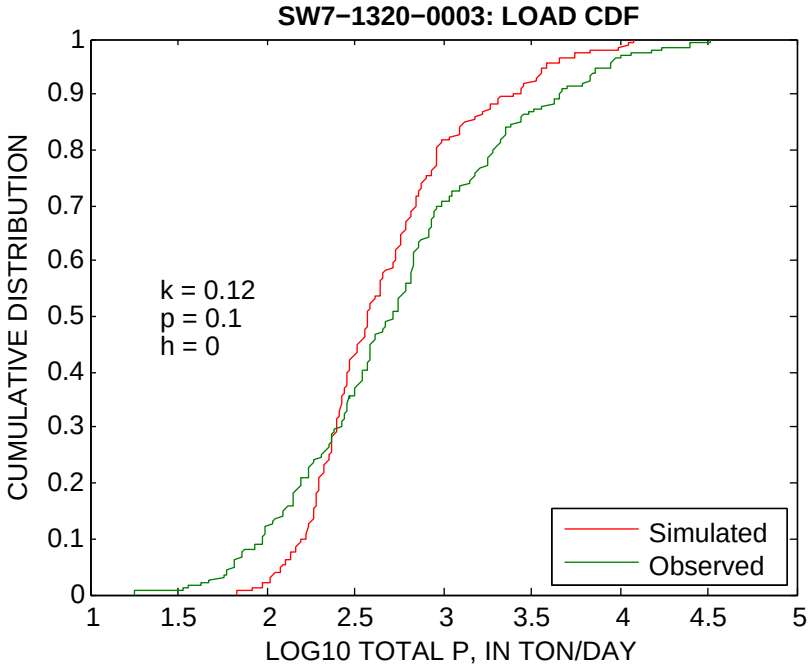


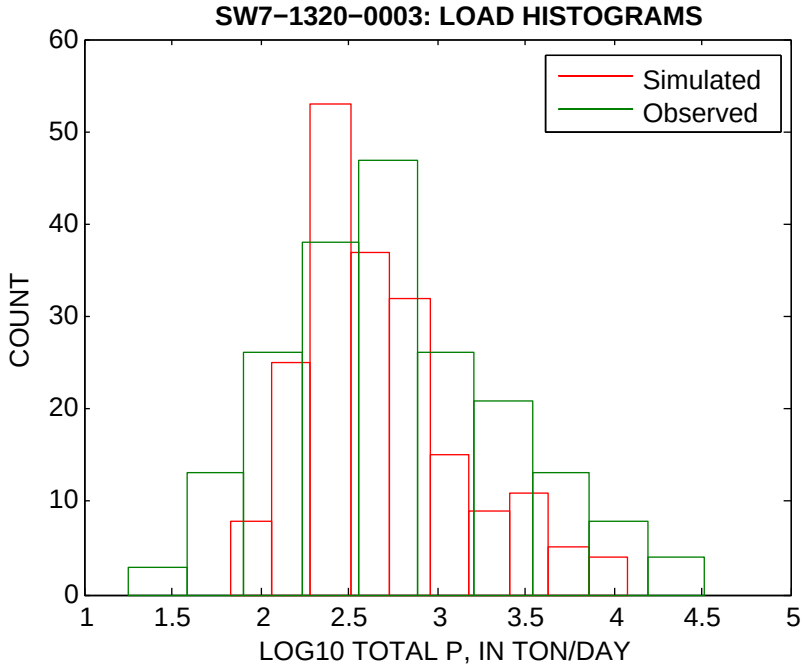


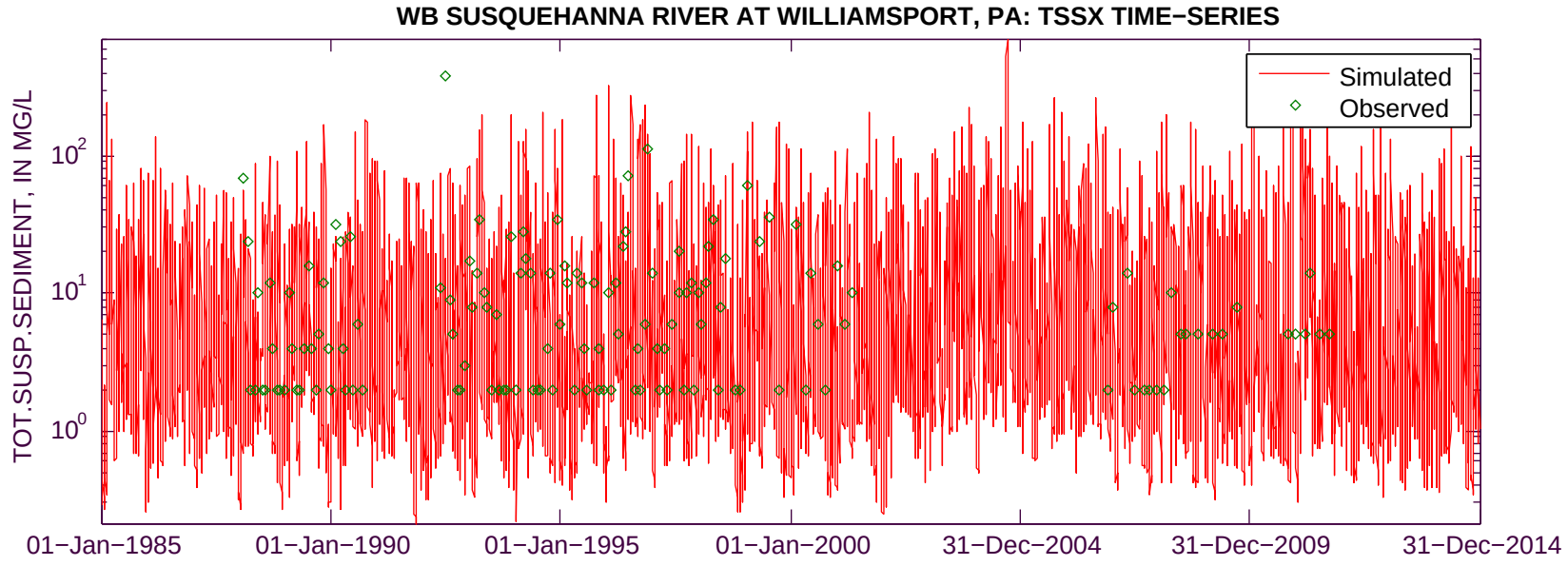
LOAD DATA
LOG10

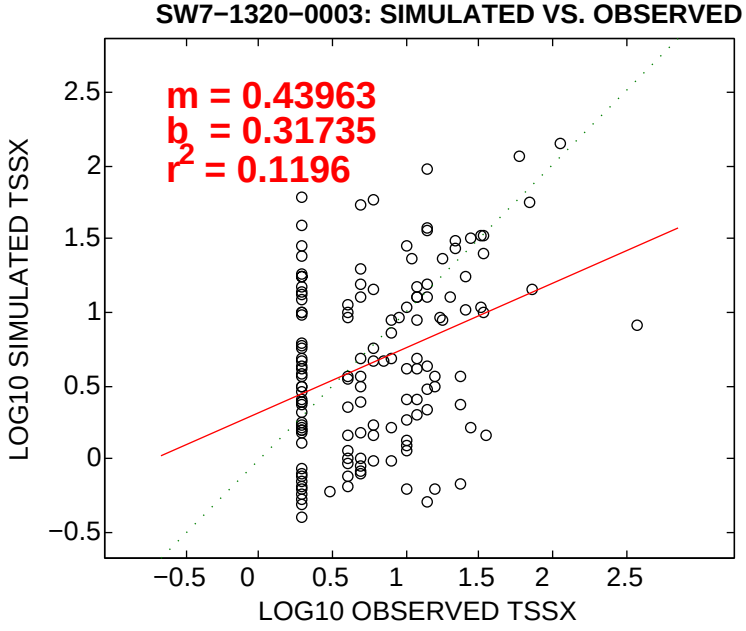


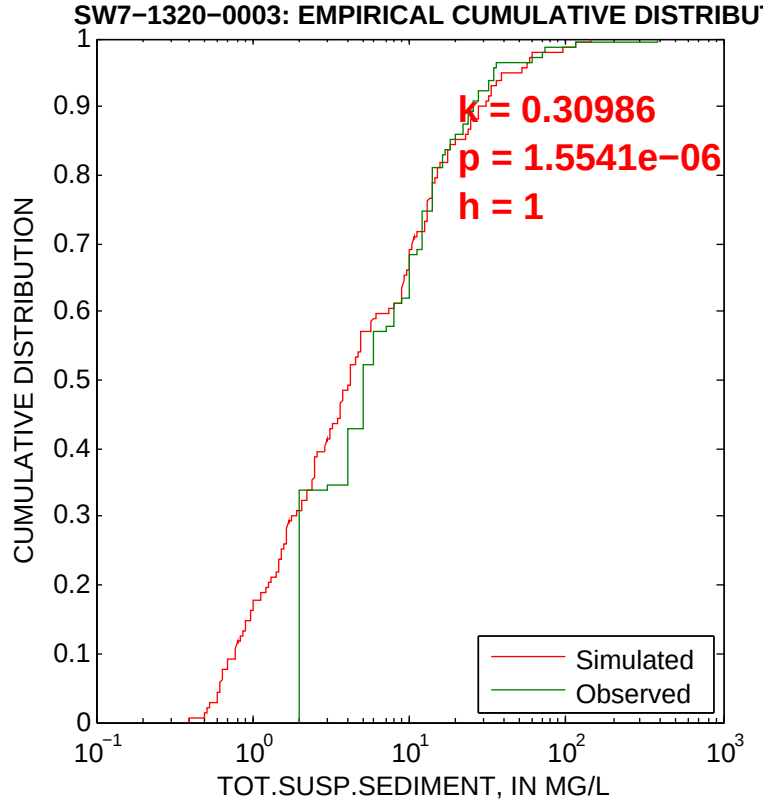












DATA SELECTION

scenario: P620171001WQ | file: TSSX.calib

plot: TSSX - total suspended ...

Dates: 1/1/1985 – 12/31/201

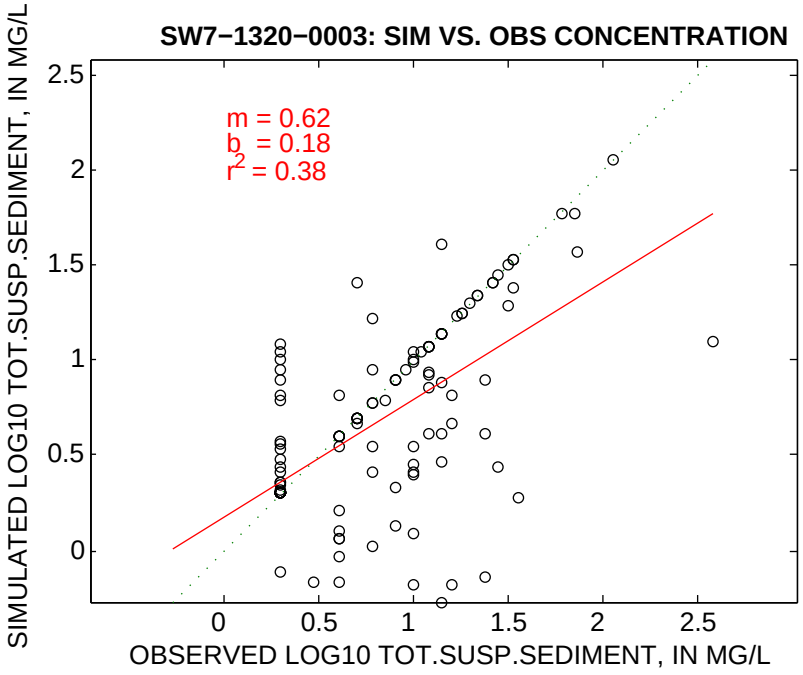
Drive | Directory: N/A | model | Observed: OBS20161101

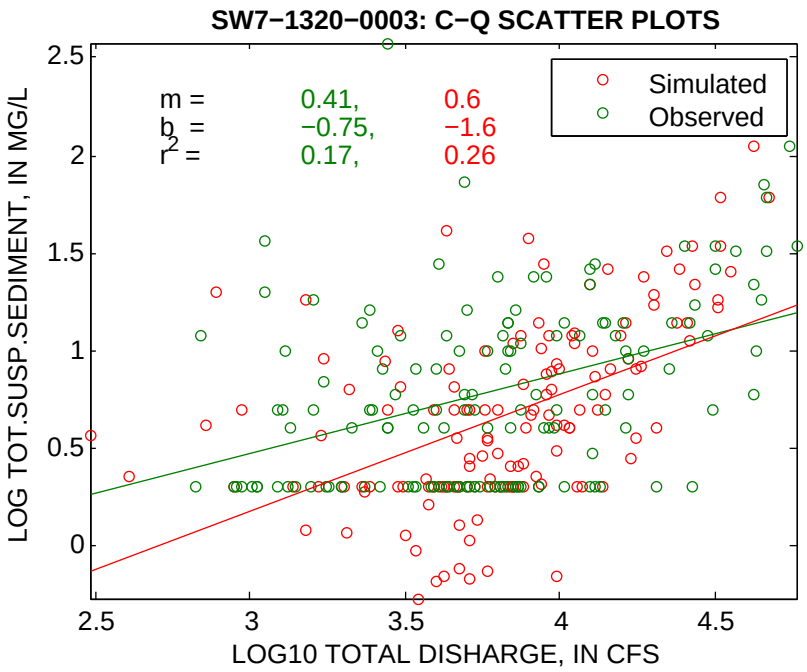
STATISTICS

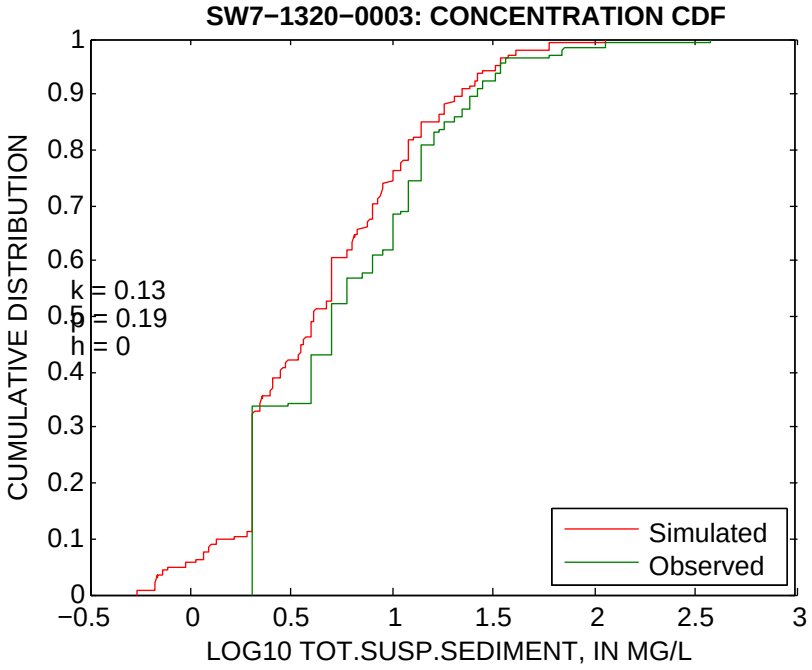
		observe	simulate
n		142	142
min		2	0.39569
		0.30103	-0.402645
mean		13.1972	11.573
		0.792023	0.665547
media		5	4.1702
		0.69897	0.620157
max		379	143.27
		2.57864	2.15616
varian		1172	397.878
		0.216004	0.349067
JB		0.001	0.001
		0.005837	0.067239
		ra	log
%		-12.3069	-15.9687
err.va		1231.17	0.391258
rel.std.err		1.05048	1.81134
mod.eff		-0.0504849	-0.811342

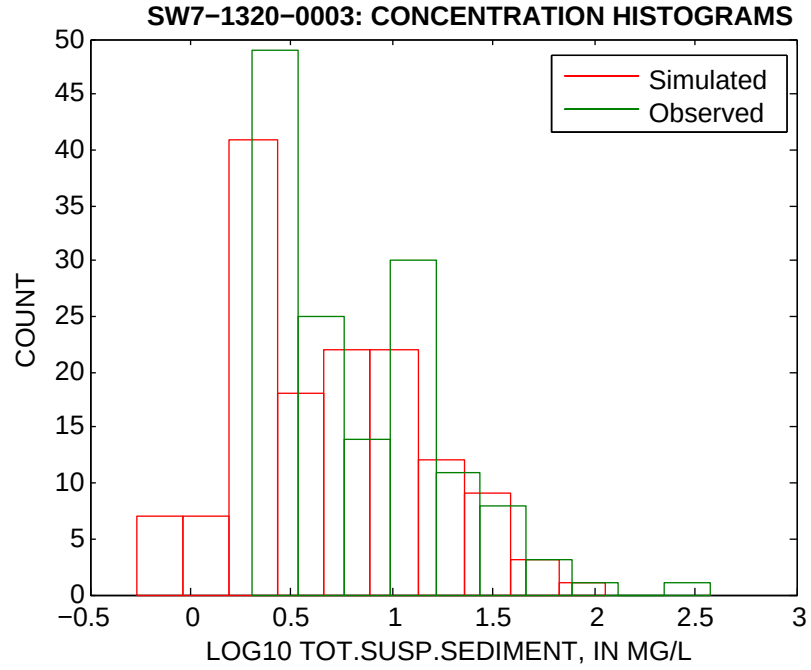
VERSION 2.1

ALL DATA
LOG10

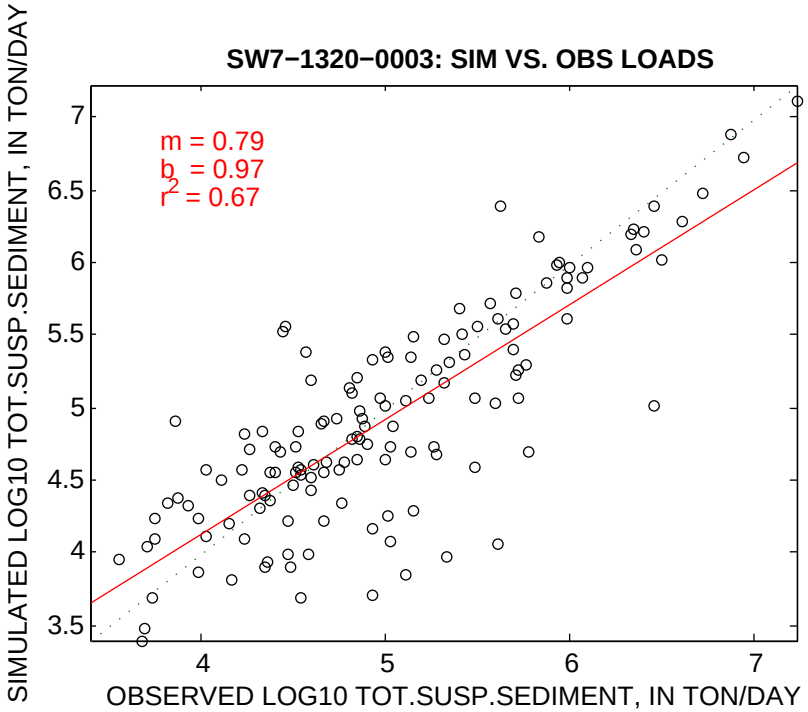


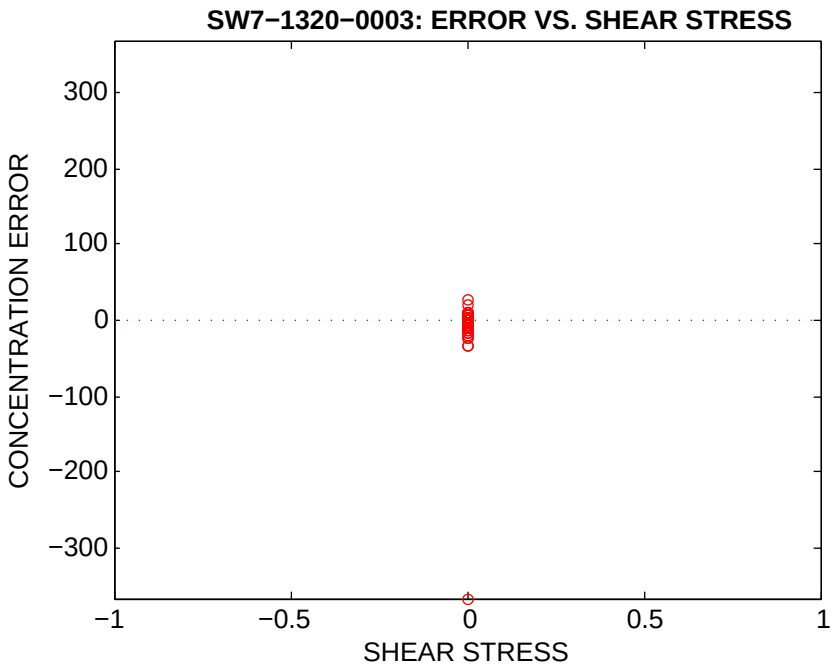


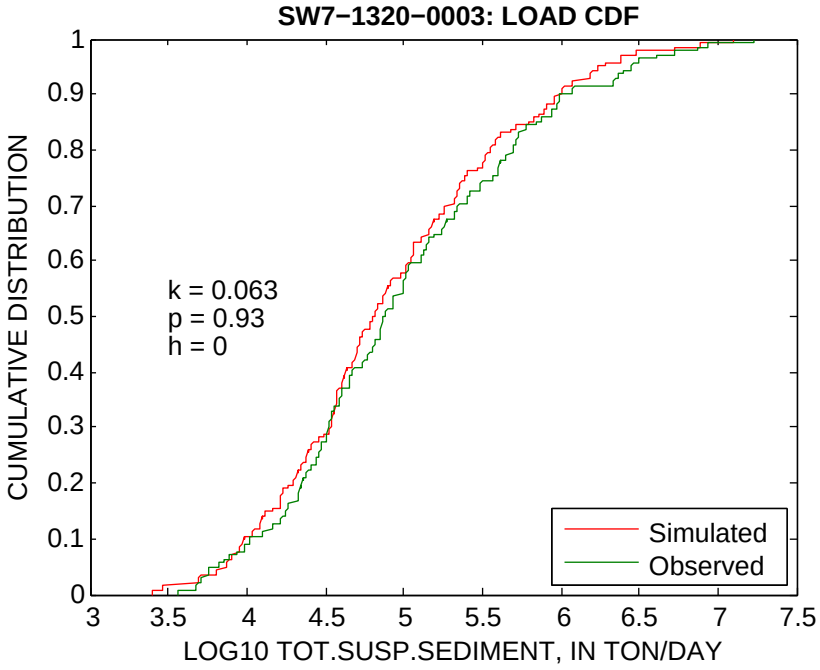


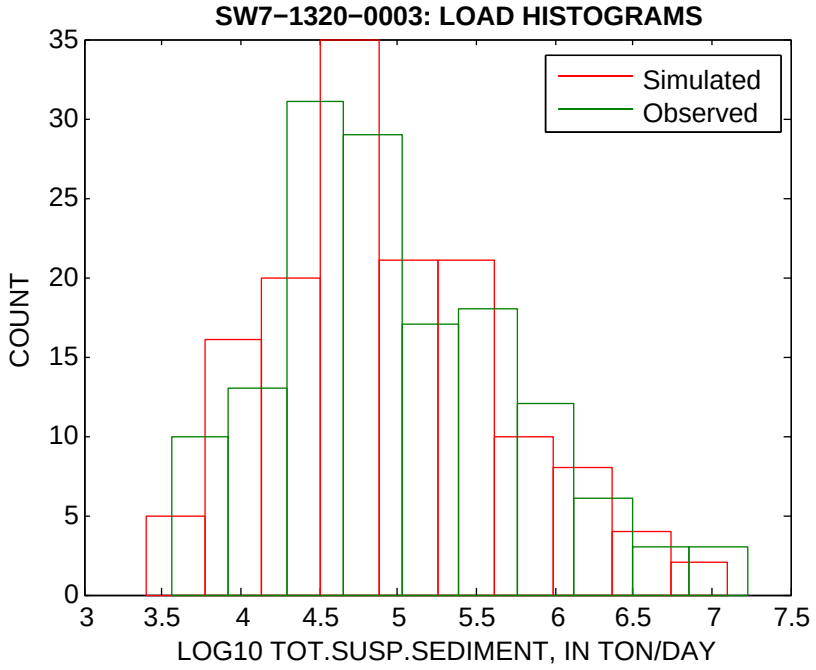


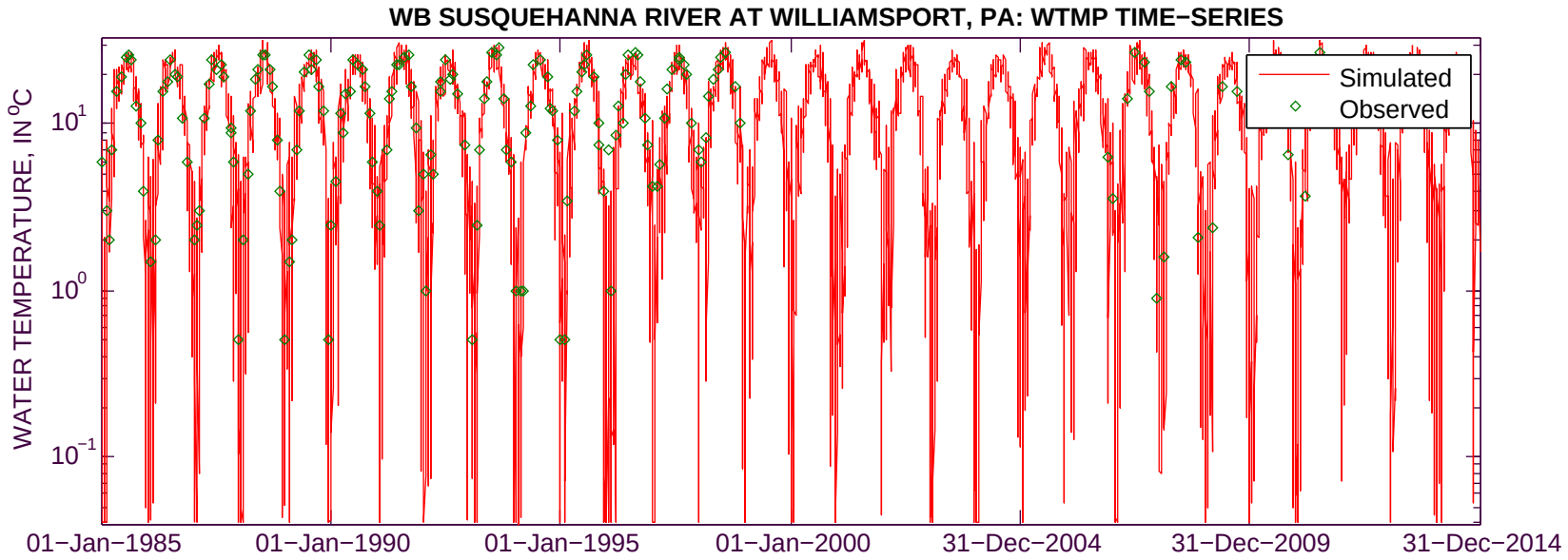
LOAD DATA
LOG10

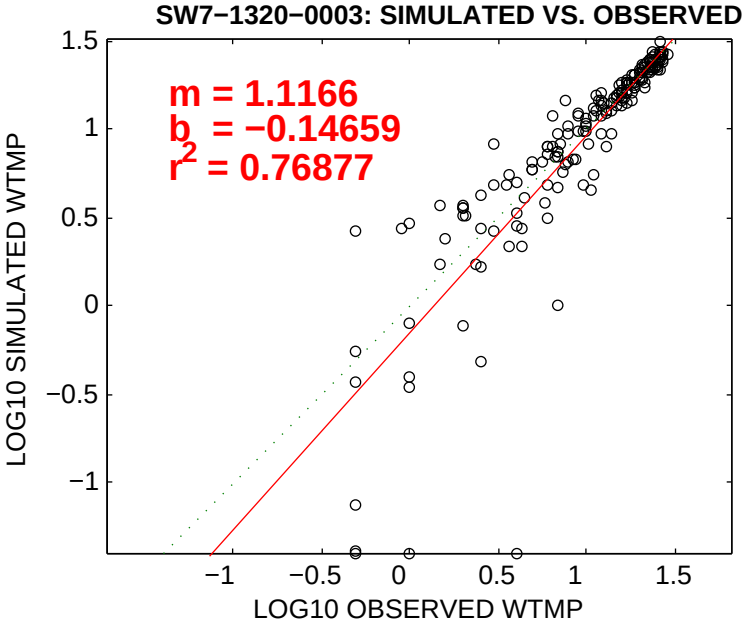


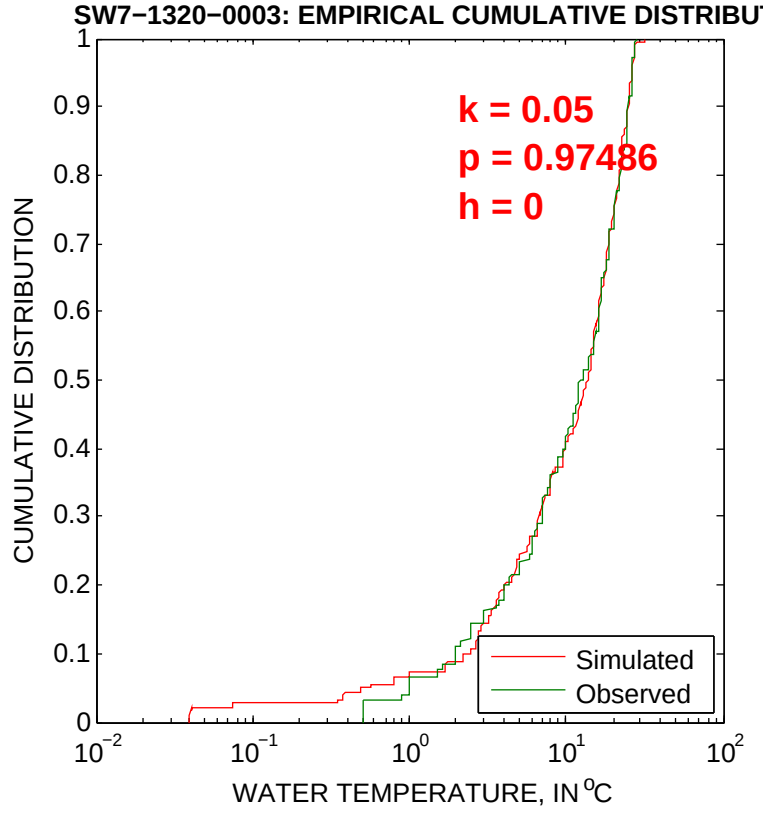












DATA SELECTION

scenario	file
P620171001WQ	WTMP.calib

plot: WTMP - water tempera...

Dates: 1/1/1985 – 12/31/201

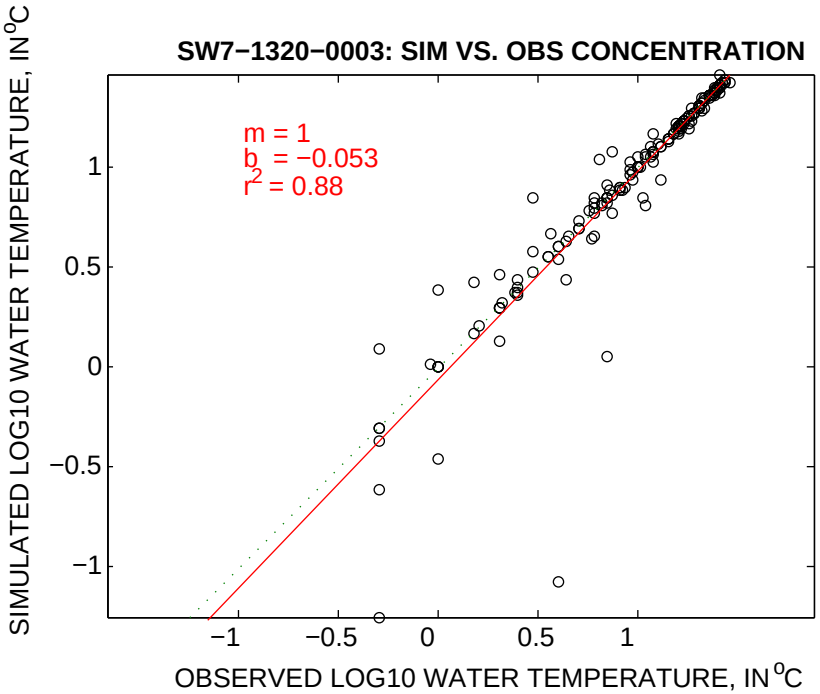
Drive	Directory	Observed
N/A	model	OBS20161101

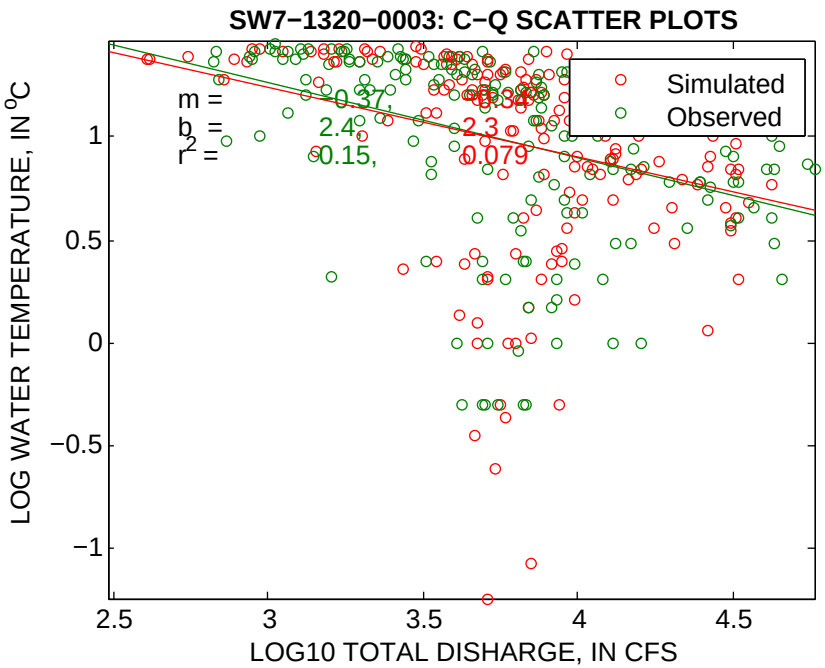
STATISTICS

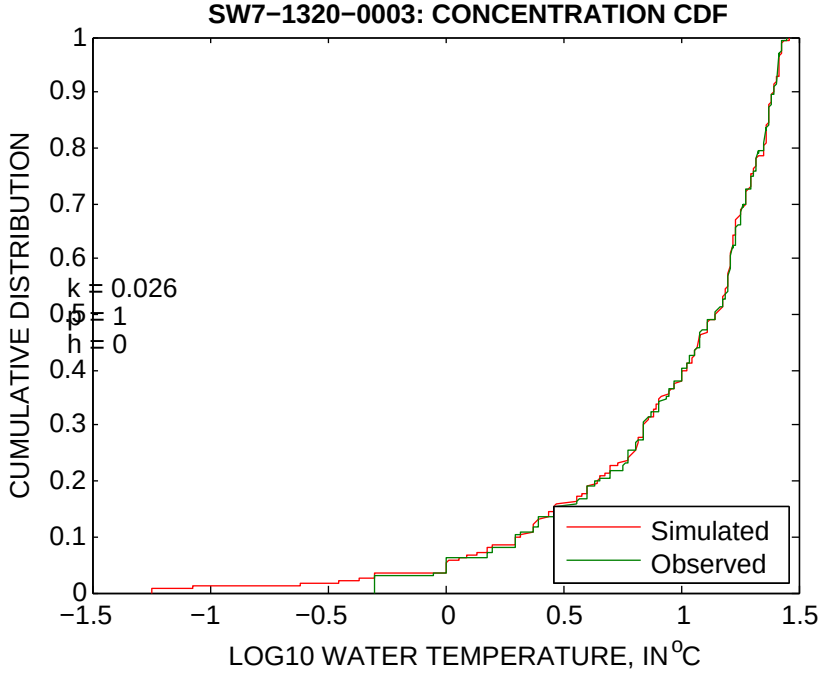
	n	180	180
		observe	simulate
min		0.5	0.040044
		-0.30103	-1.39746
mean		13.1872	13.2259
		0.966629	0.932713
media		12.75	13.7325
		1.10543	1.13774
max		28.5	31.784
		1.45484	1.50221
varian		70.4059	70.5124
		0.197326	0.320004
JB		0.008387	0.011556
		0.001	0.001
		ra	log
%		0.293502	-3.50863
err.va		4.36047	0.0778319
rel.std.err		0.0619333	0.394432
mod.eff		0.938067	0.605568

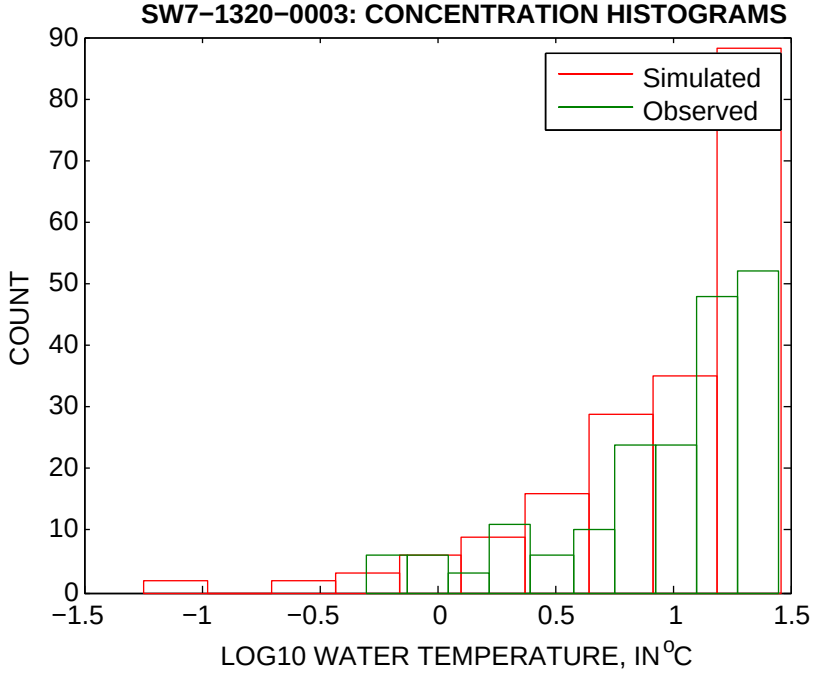
VERSION 2.1

ALL DATA
LOG10

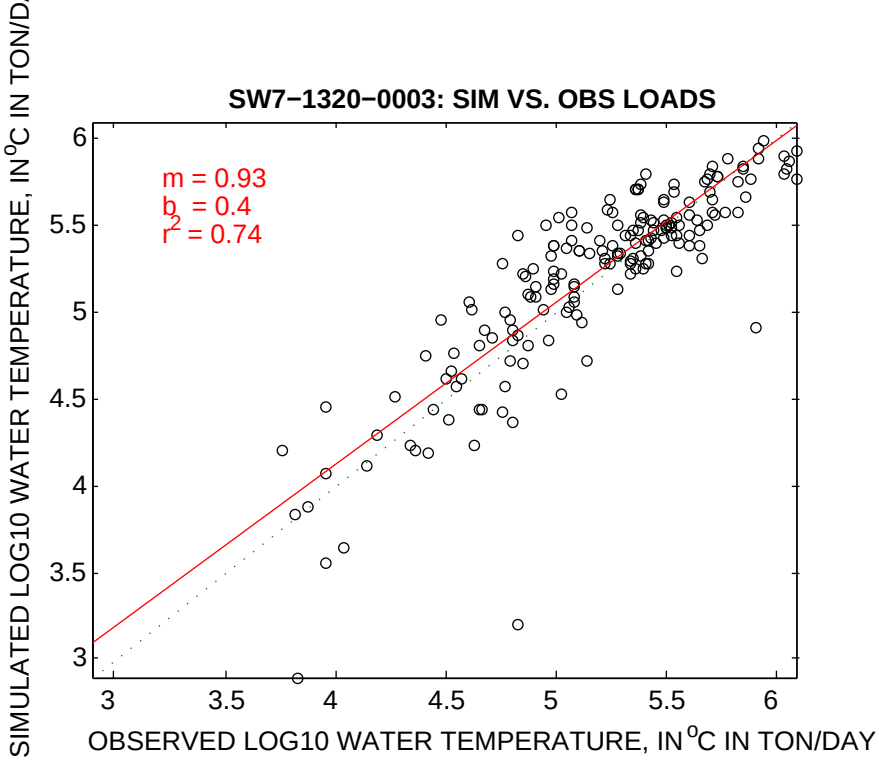




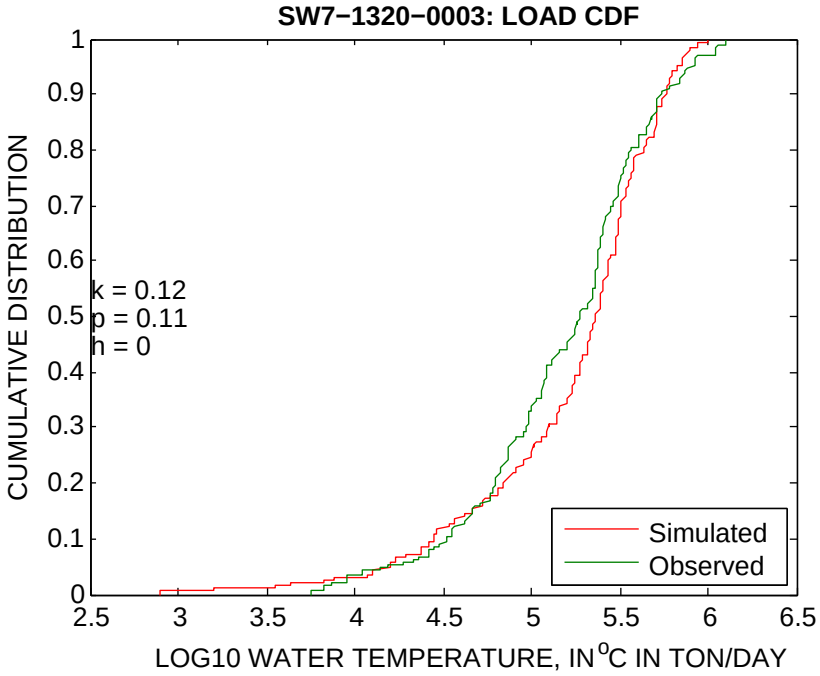


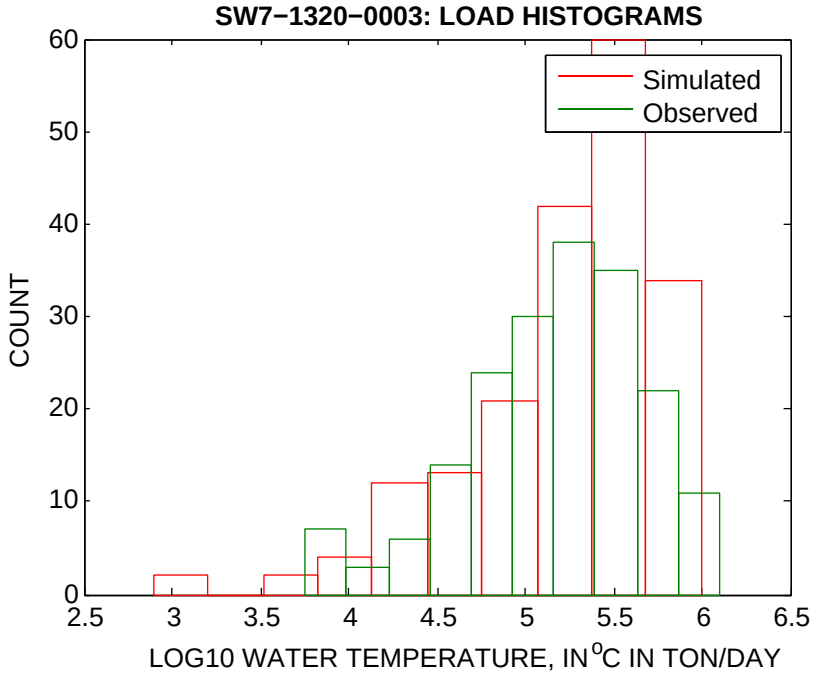


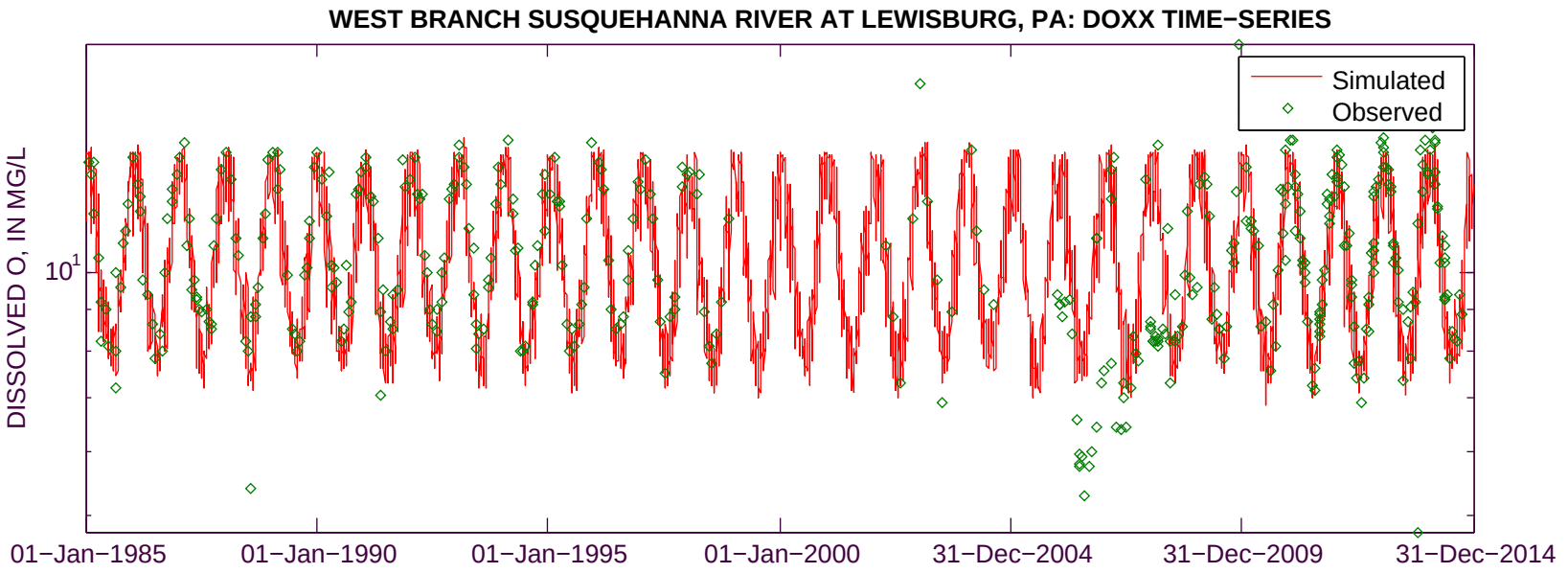
LOAD DATA
LOG10

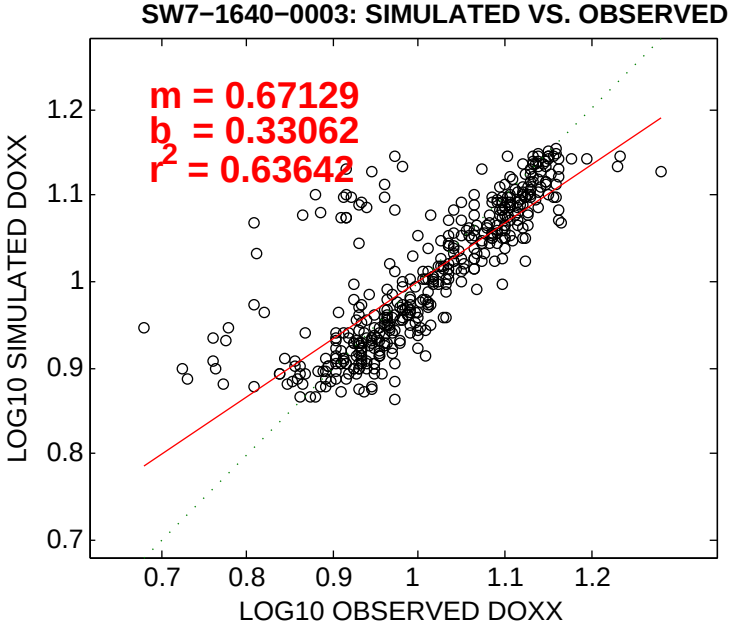


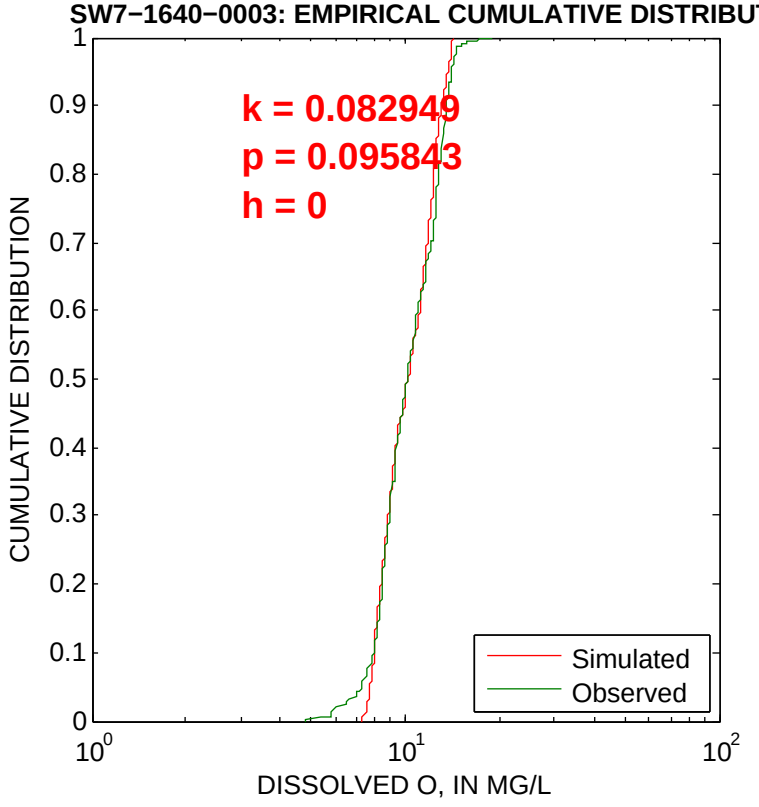












DATA SELECTION

scenario	file
P620171001WQ	DOXX.calib

plot: DOXX - dissolved oxygen

Dates 1/1/1985 12/31/201

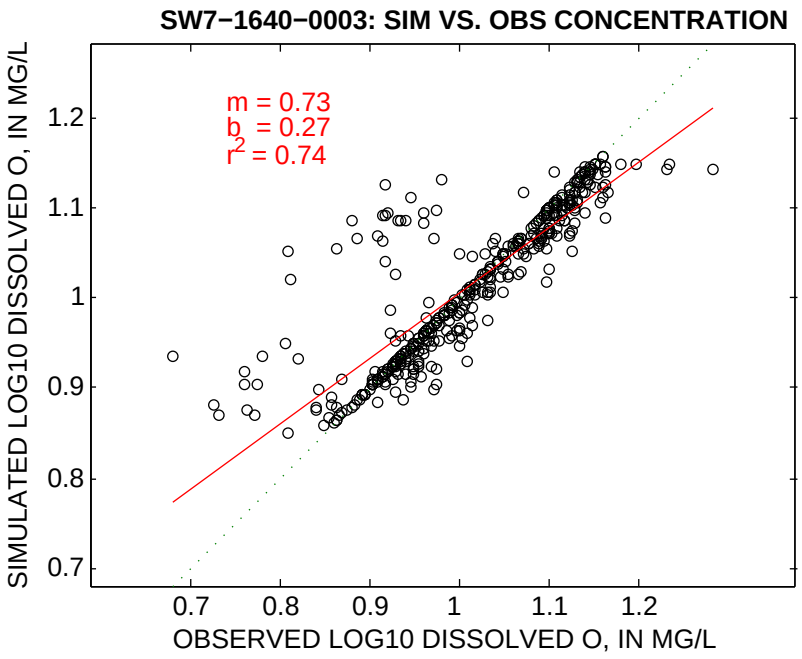
Drive	Directory	Observed
N/A	model	OBS20161101

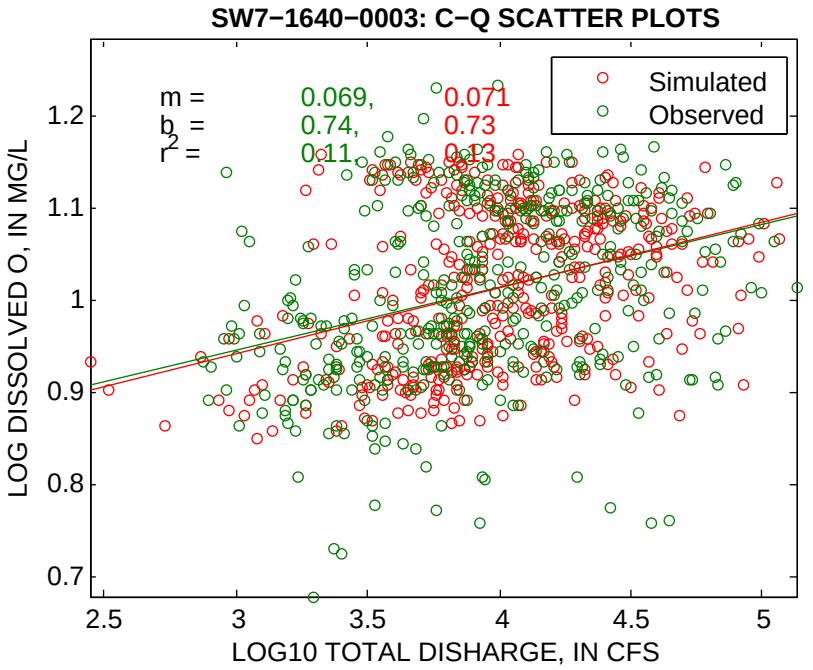
STATISTICS

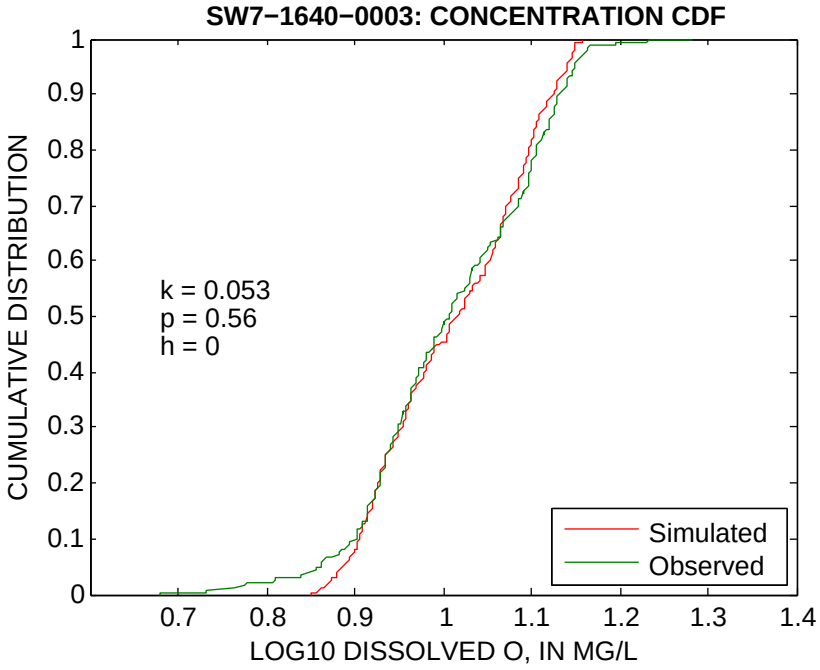
n	434	434
	observe	simulate
min	4.79	7.2903
	0.680336	0.862745
mean	10.4954	10.3879
	1.01033	1.00884
media	10.2	10.24
	1.0086	1.0103
max	19.12	14.311
	1.28149	1.15567
varian	5.30757	3.82151
	0.00947945	0.00671207
JB	0.020306	0.001
	0.051627	0.001
	ra	log
%	-1.02482	-0.147578
err.va	1.79513	0.0034669
rel.std.err	0.338221	0.365728
mod.eff	0.661779	0.634272

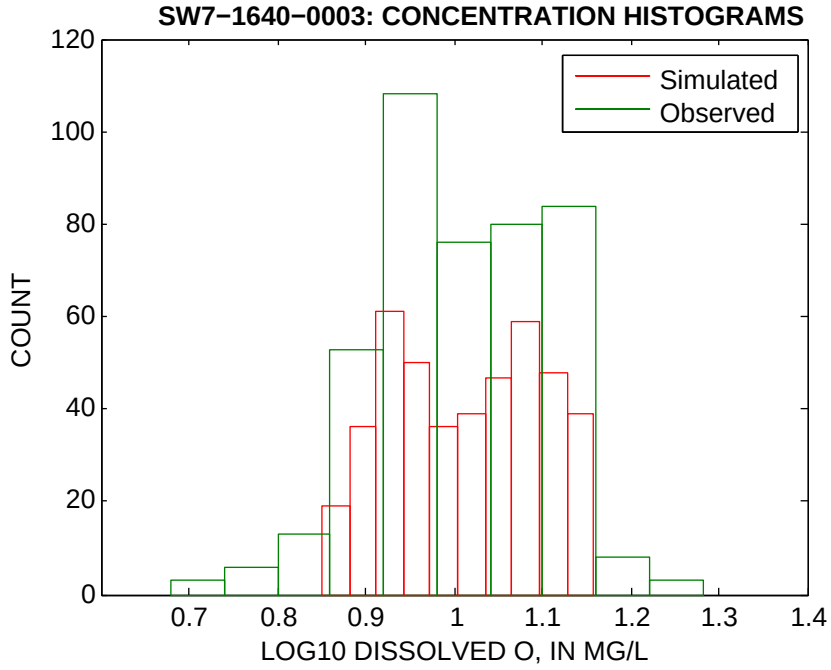
VERSION 2.1

ALL DATA
LOG10

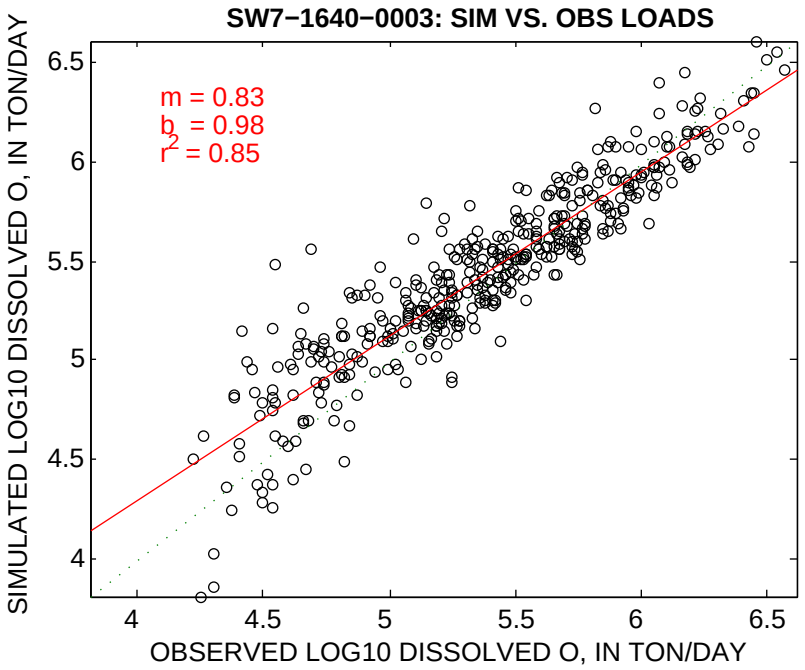




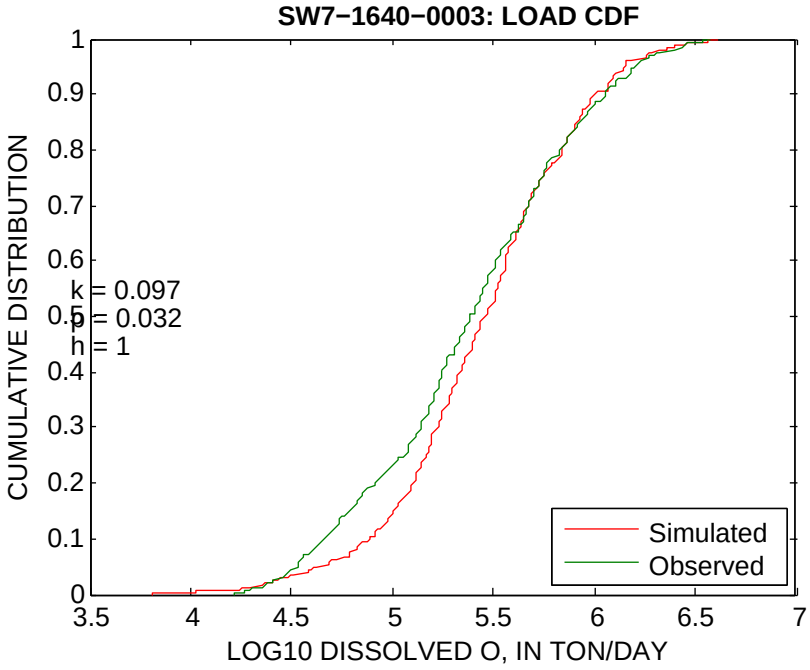


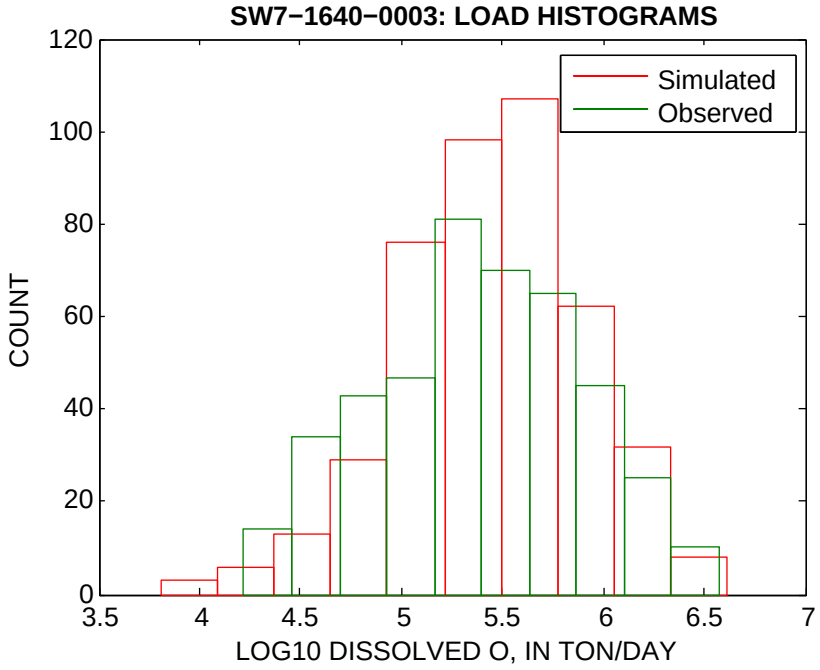


LOAD DATA
LOG10

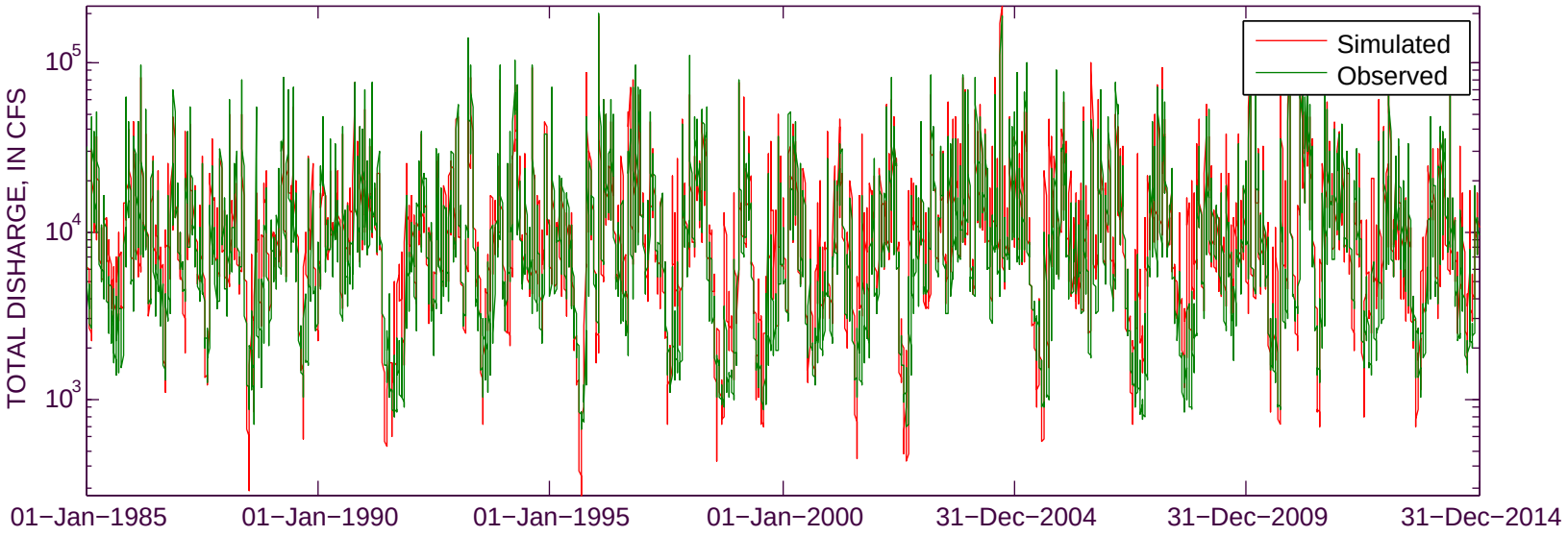




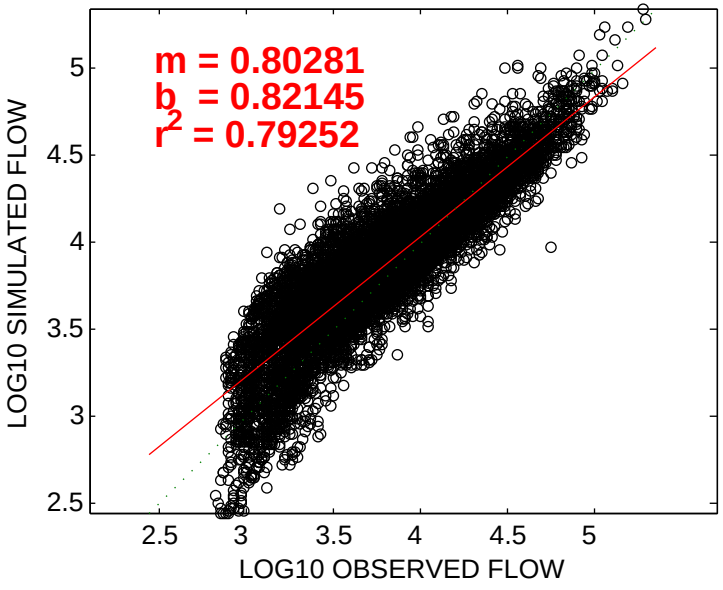




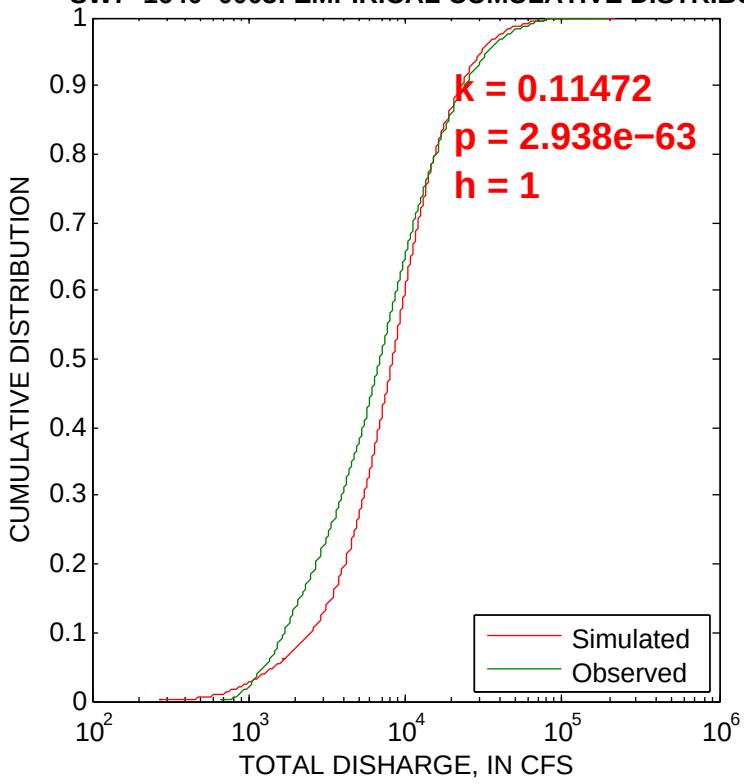
WEST BRANCH SUSQUEHANNA RIVER AT LEWISBURG, PA: FLOW TIME-SERIES



SW7-1640-0003: SIMULATED VS. OBSERVED



SW7-1640-0003: EMPIRICAL CUMULATIVE DISTRIBUTION



DATA SELECTION

scenario	file
P620171001WQ	FLOW.calib

plot: FLOW - total discharge

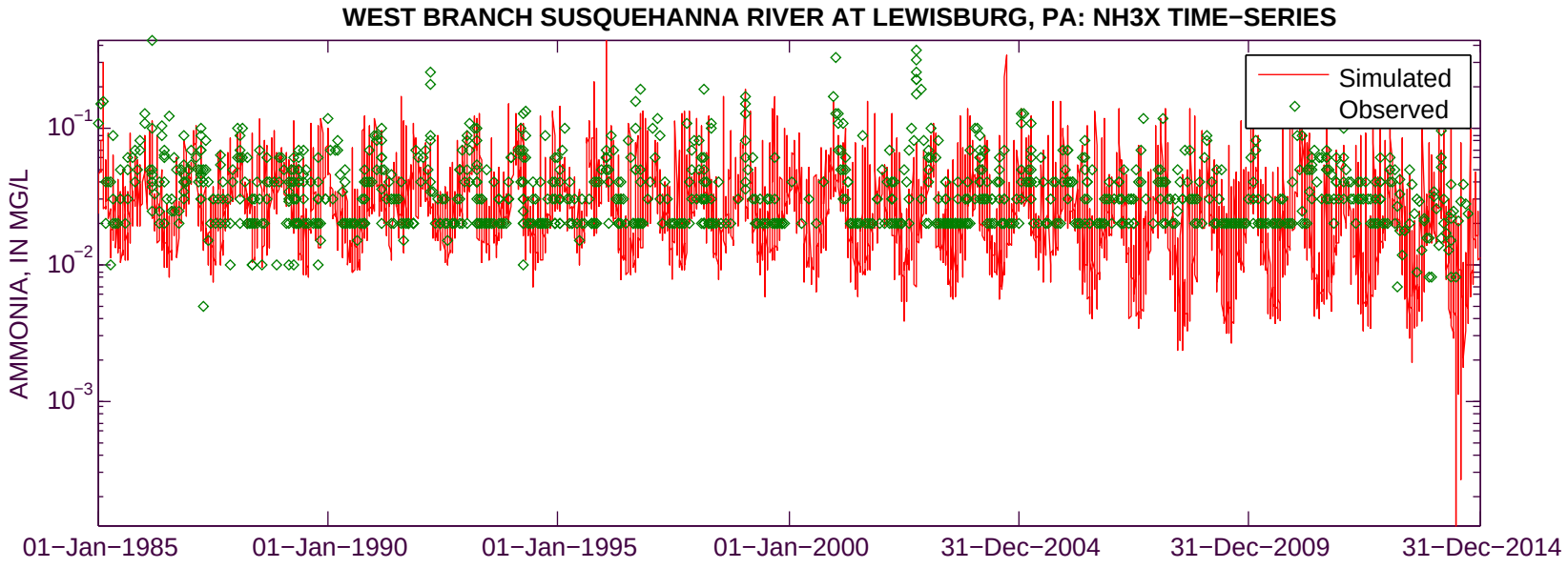
Dates: 1/1/1985 – 12/31/201

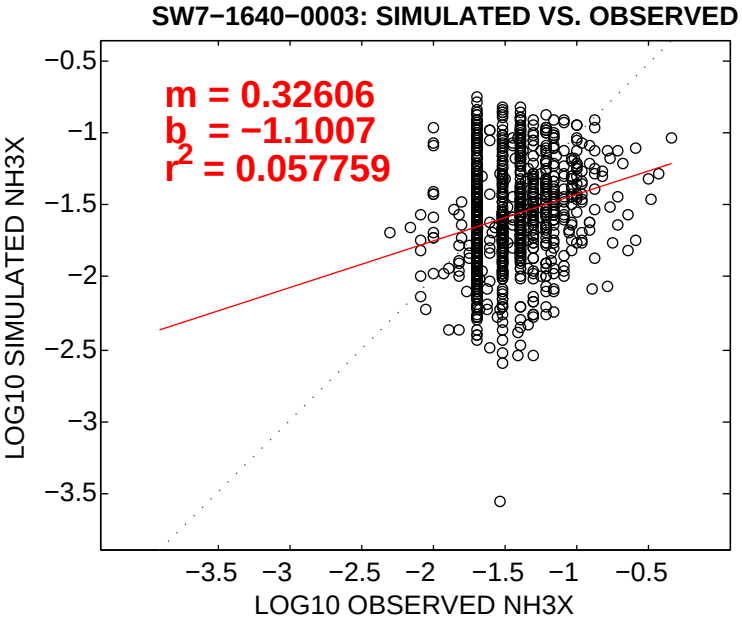
Drive	Directory	Observed
N/A	model	OBS20161101

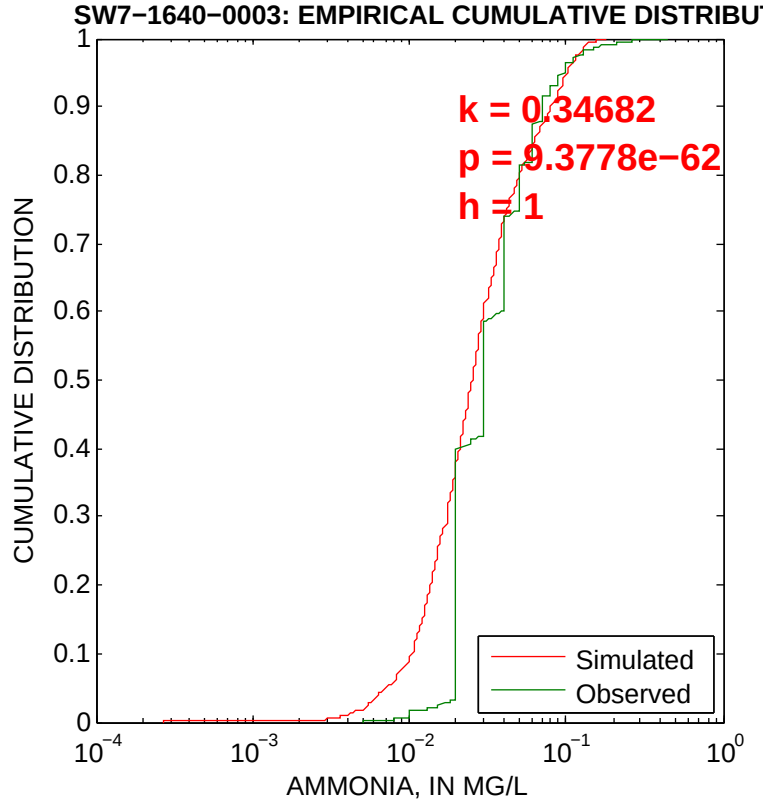
STATISTICS

		observe	simulate
n		10957	10957
min		668	274.13
		2.82478	2.43796
mean		10843.7	11291.1
		3.82607	3.89306
media		6920	8312.4
		3.84011	3.91973
max		195000	221800
		5.29003	5.34596
varian		1.62005e+0	1.32704e+
		0.184835	0.150315
JB		0.001	0.001
		0.001	0.001
		ra	log
%		4.1267	1.75087
err.va		3.22861e+0	0.0428628
rel.std.err		0.199291	0.231898
mod.eff		0.800709	0.768102

VERSION 2.1







DATA SELECTION

scenario	file
P620171001WQ	NH3X.calib

plot: NH3X - ammonia

Dates: 1/1/1985 – 12/31/201

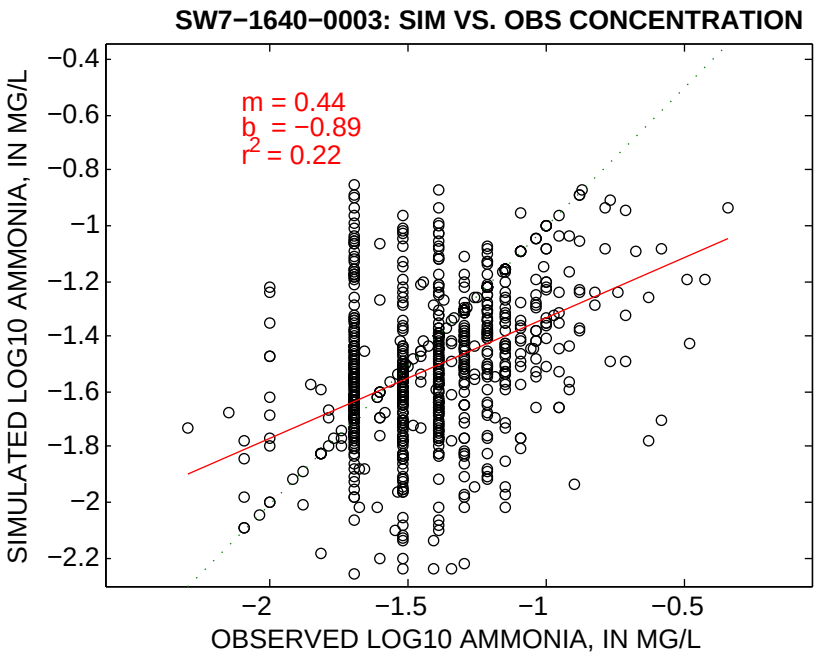
Drive	Directory	Observed
N/A	model	OBS20161101

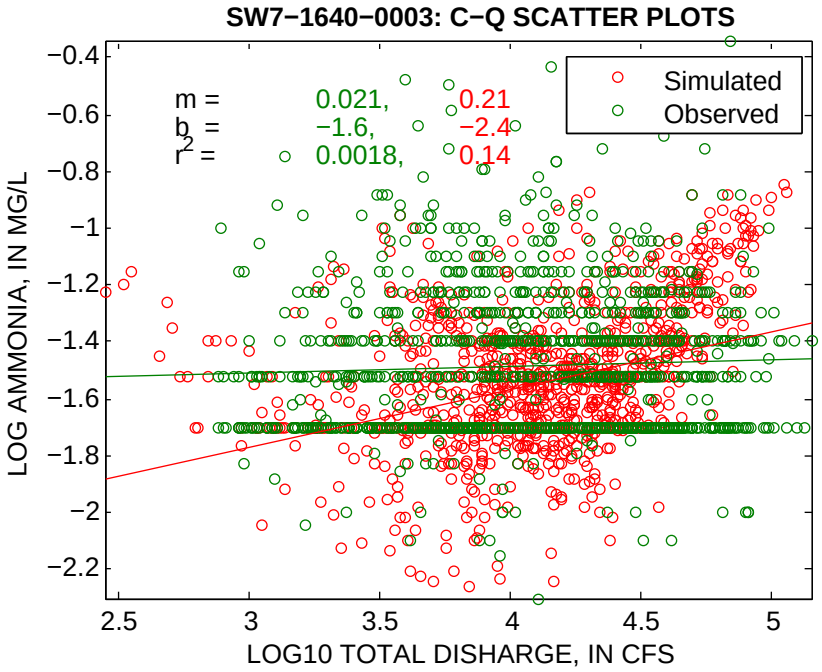
STATISTICS

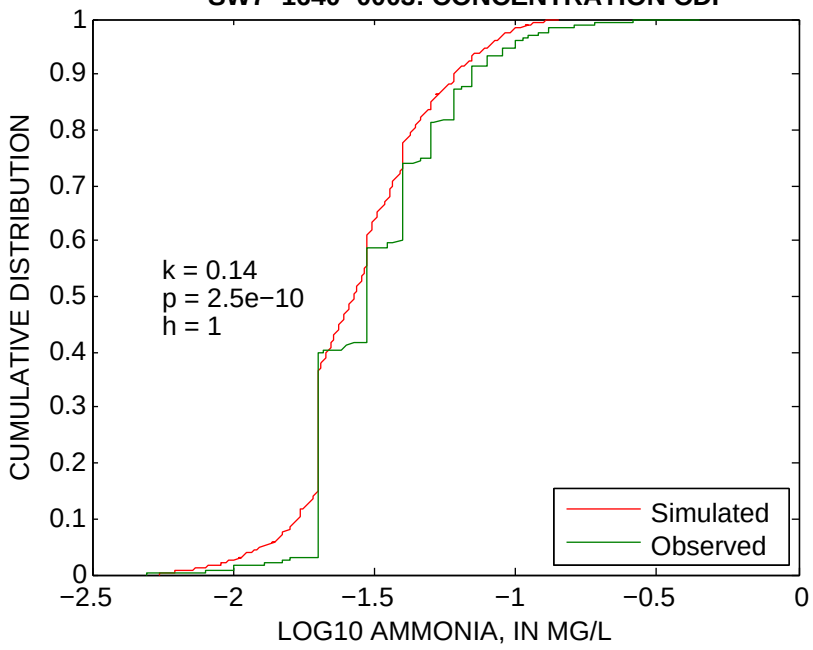
	observe	simulate
n	1162	1162
min	0.005 -2.30103	0.00026977 -3.56901
mean	0.0399275 -1.48595	0.0351471 -1.58518
media	0.03 -1.52288	0.025312 -1.59667
max	0.45 -0.346787	0.17885 -0.747511
varian	0.00121074 0.0634727	0.00087393 0.116835
JB	0.001 0.001	0.001 0.001
	ra	log
%	-11.9727	6.67811
err.va	0.00178518	0.148771
rel.std.err	1.47446	2.34386
mod.eff	-0.474459	-1.34386

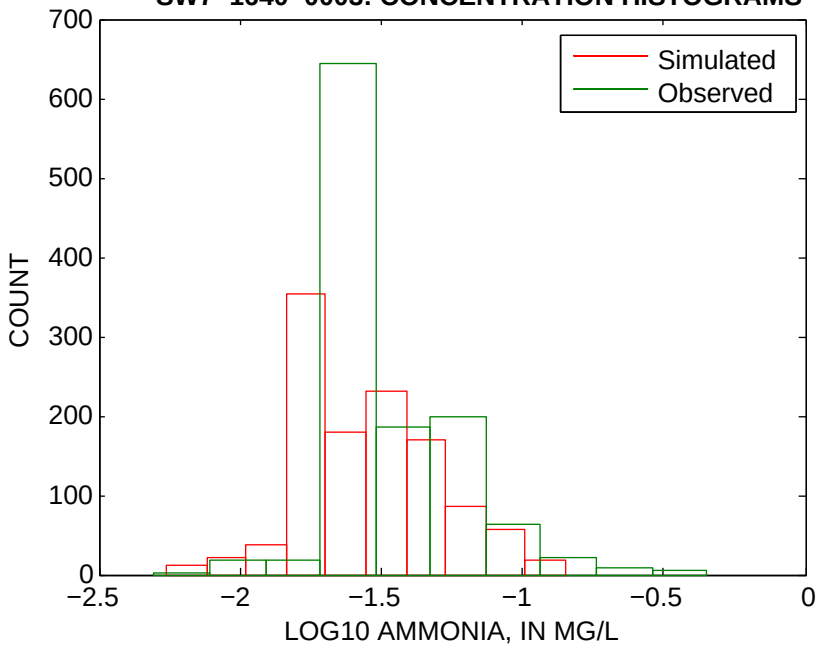
VERSION 2.1

ALL DATA
LOG10

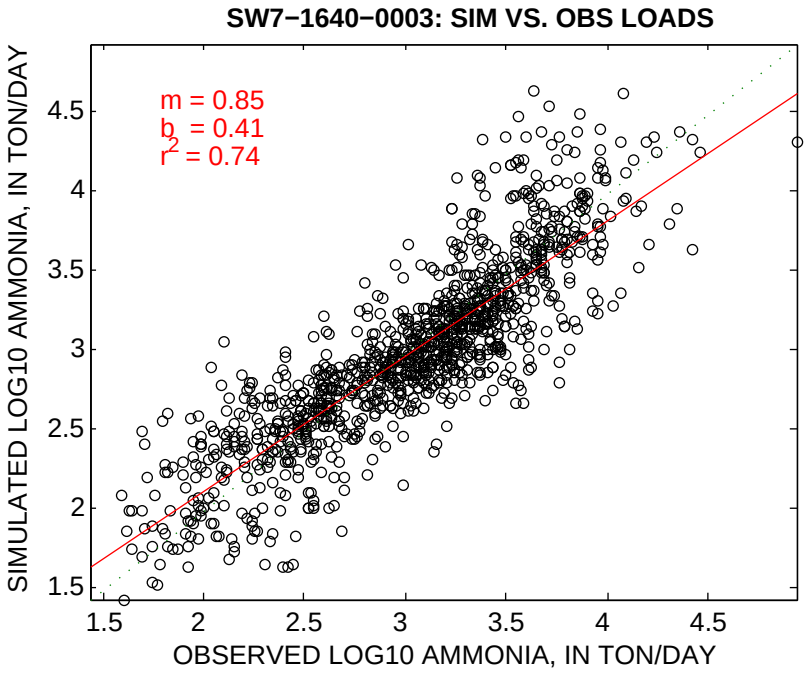




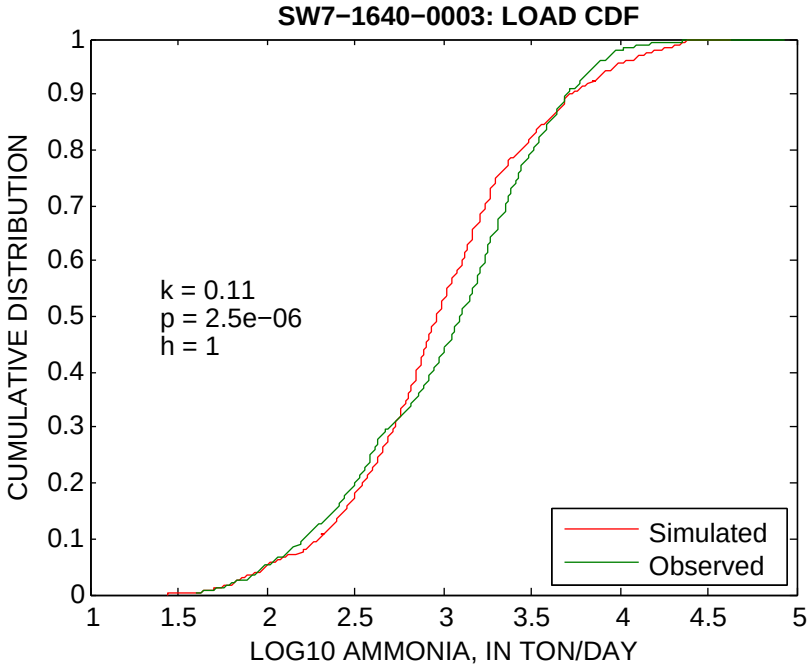


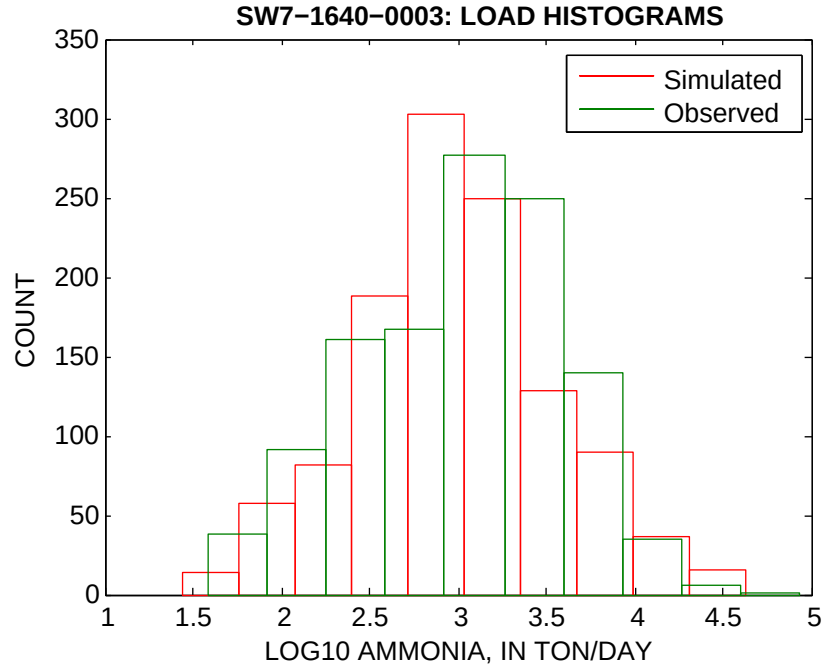


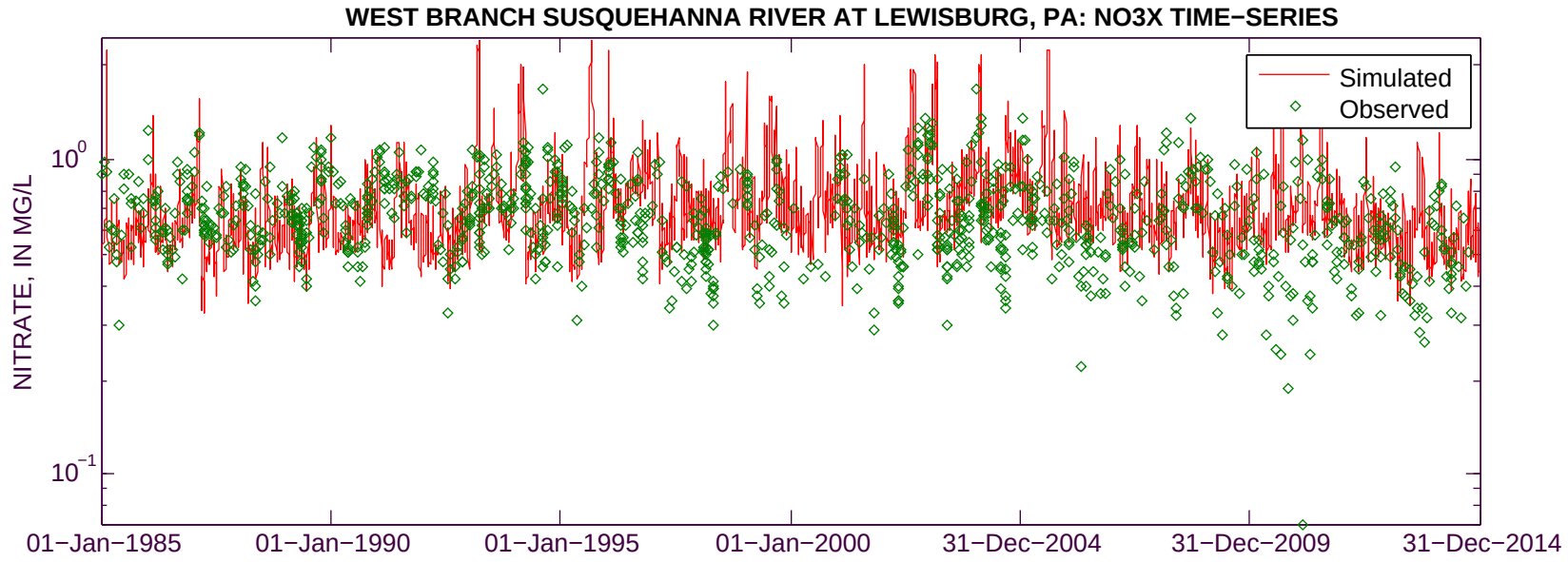
LOAD DATA
LOG10

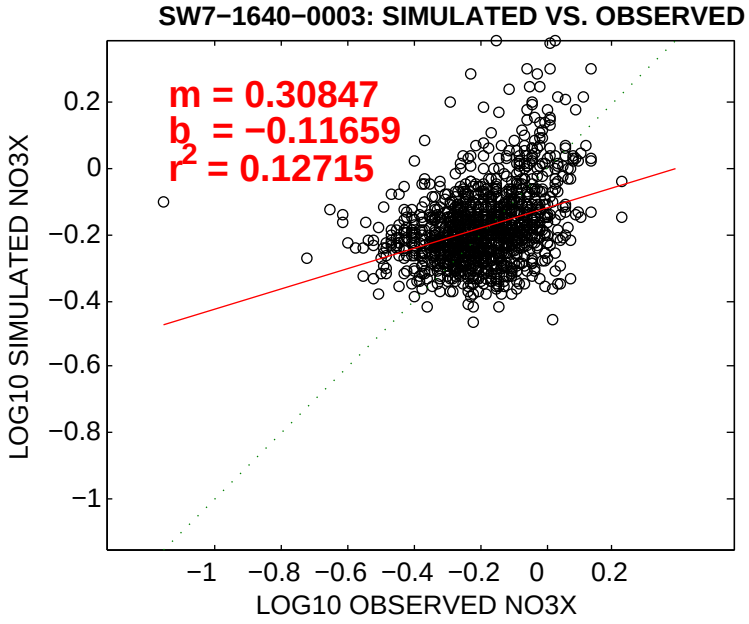


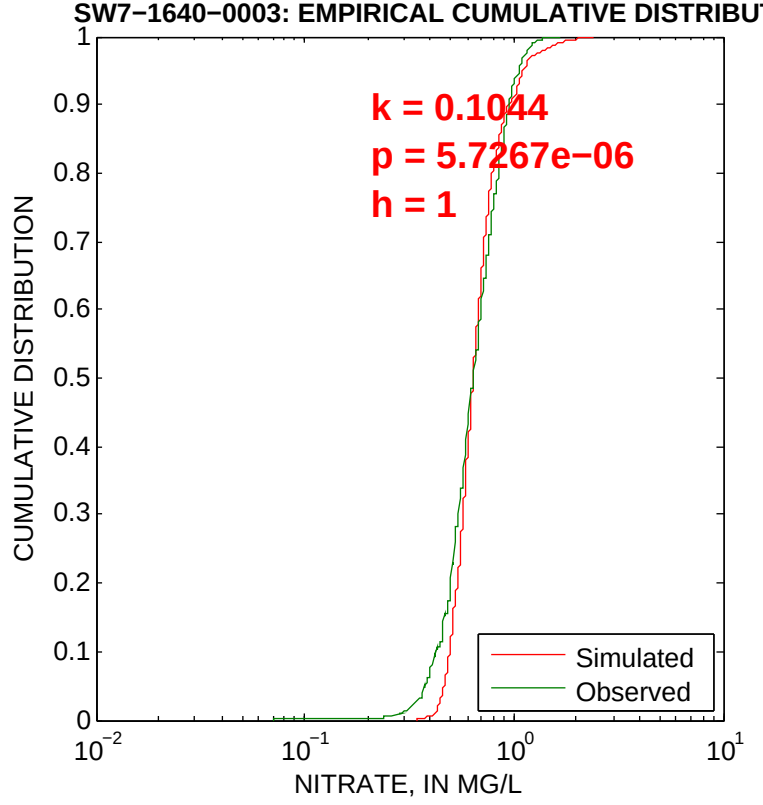












DATA SELECTION

scenario	file
P620171001WQ	NO3X.calib

plot: NO3X - nitrate

Dates: 1/1/1985 – 12/31/201

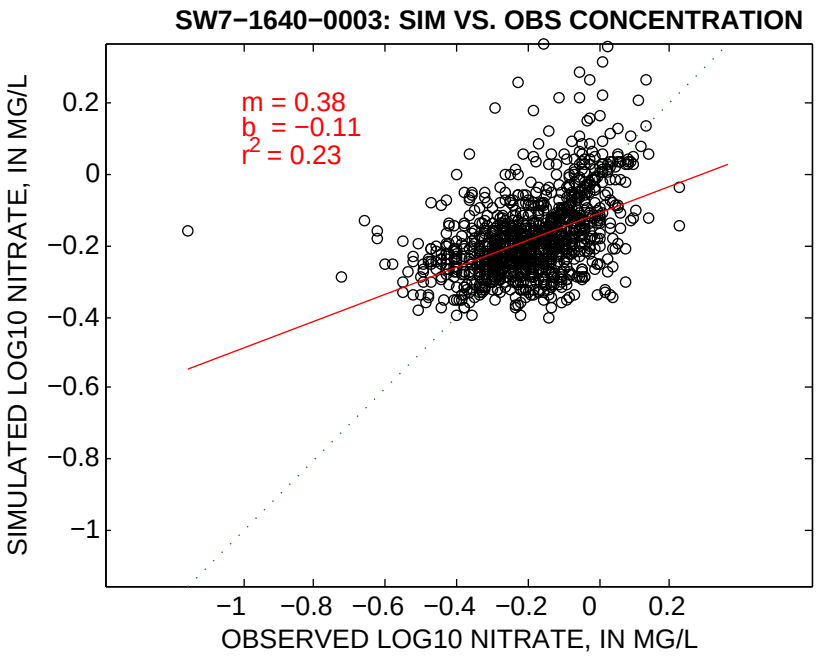
Drive	Directory	Observed
N/A	model	OBS20161101

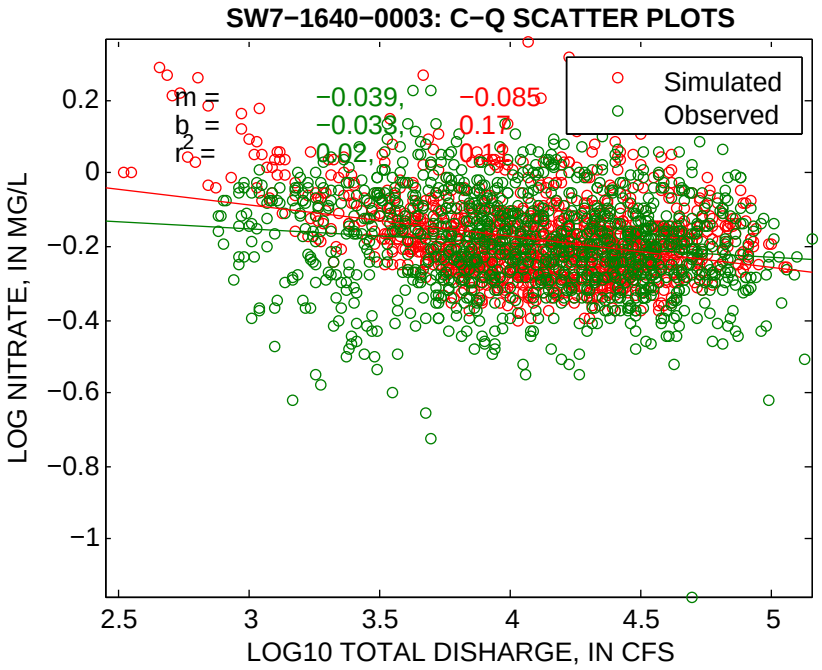
STATISTICS

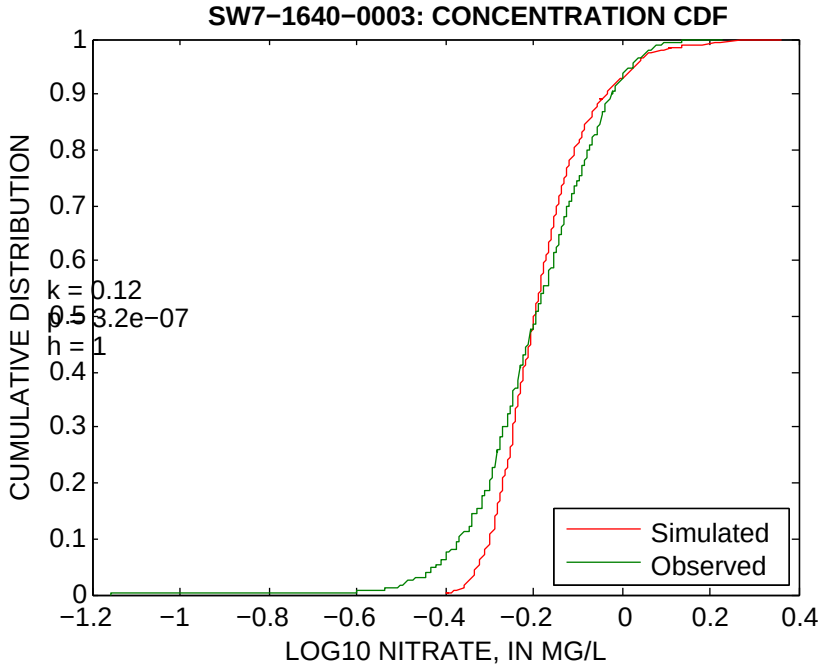
	n	1159	1159
		observe	simulate
min		0.07	0.34276
		-1.1549	-0.46501
mean		0.672244	0.69517
		-0.193575	-0.176307
media		0.64	0.64053
		-0.19382	-0.193461
max		1.69	2.433
		0.227887	0.386142
varian		0.0437154	0.0556476
		0.0190238	0.0142368
JB		0.001	0.001
		0.001	0.001
		ra	log
%		3.41041	-8.92046
err.va		0.0614133	0.0218224
rel.std.err		1.40484	1.14711
mod.eff		-0.404843	-0.147109

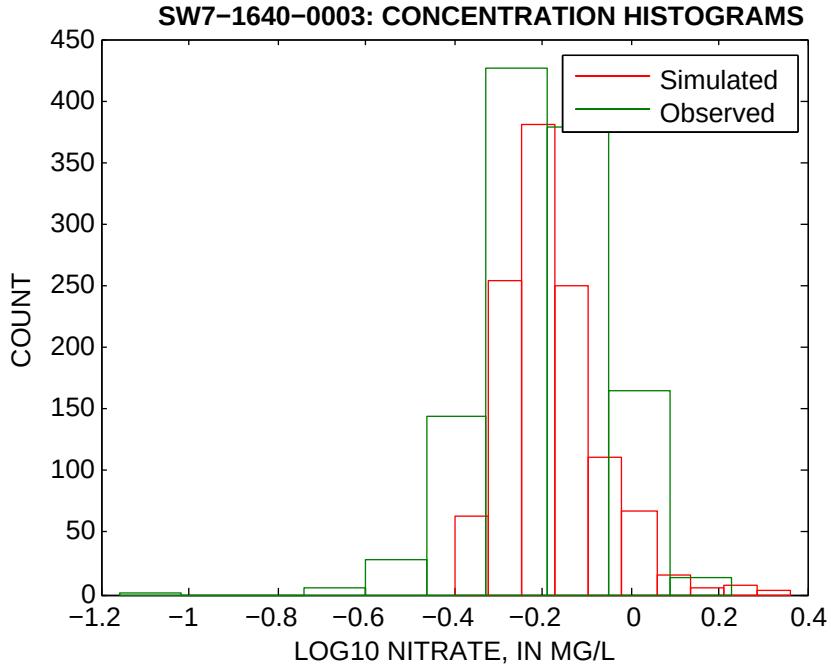
VERSION 2.1

ALL DATA
LOG10

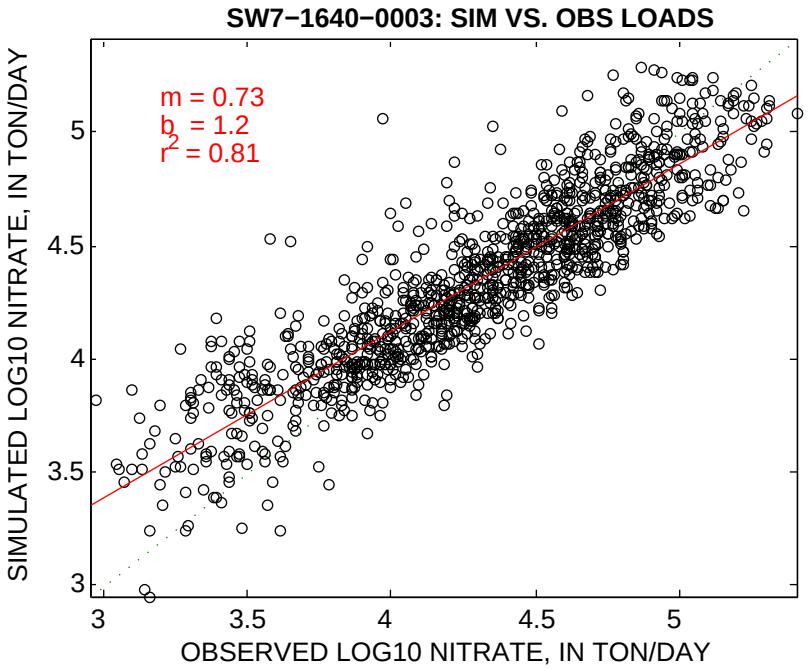


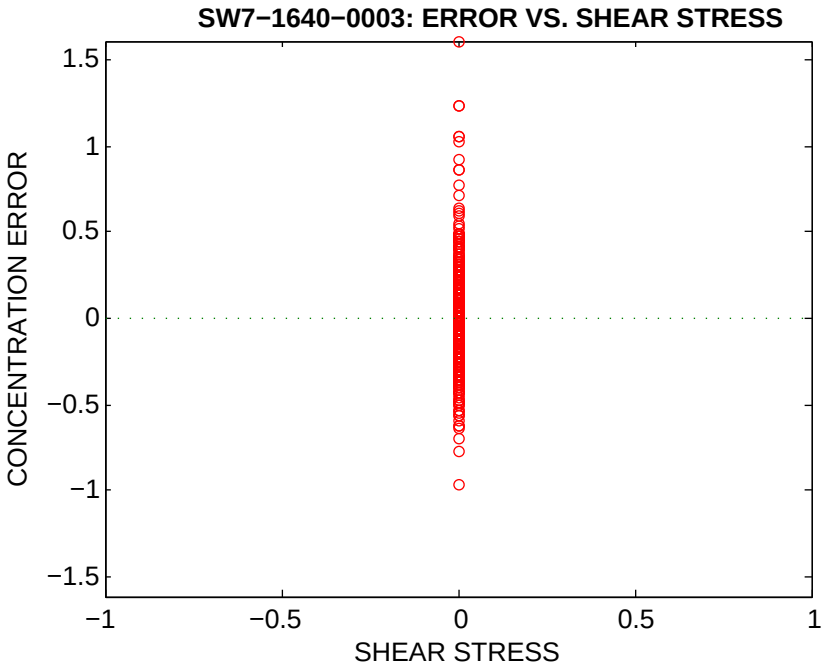


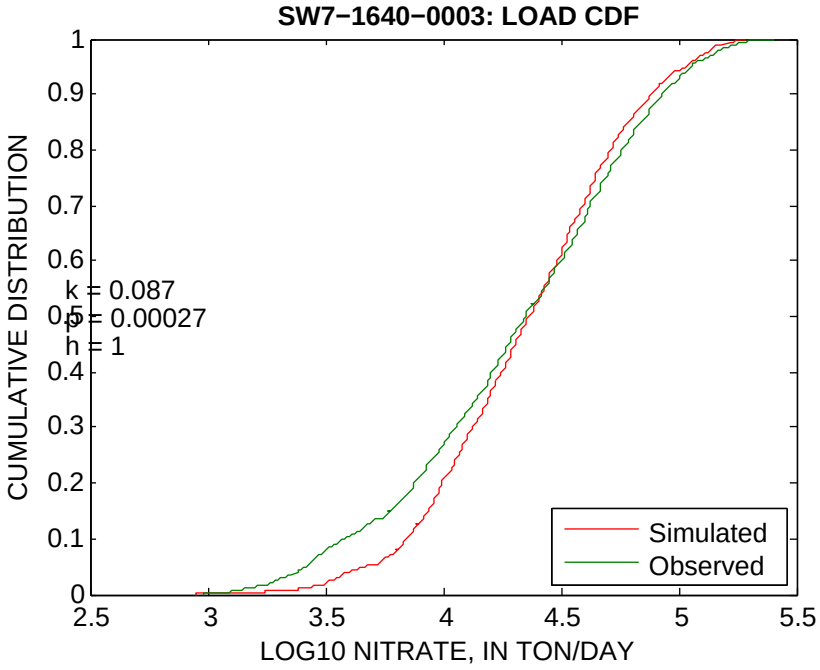


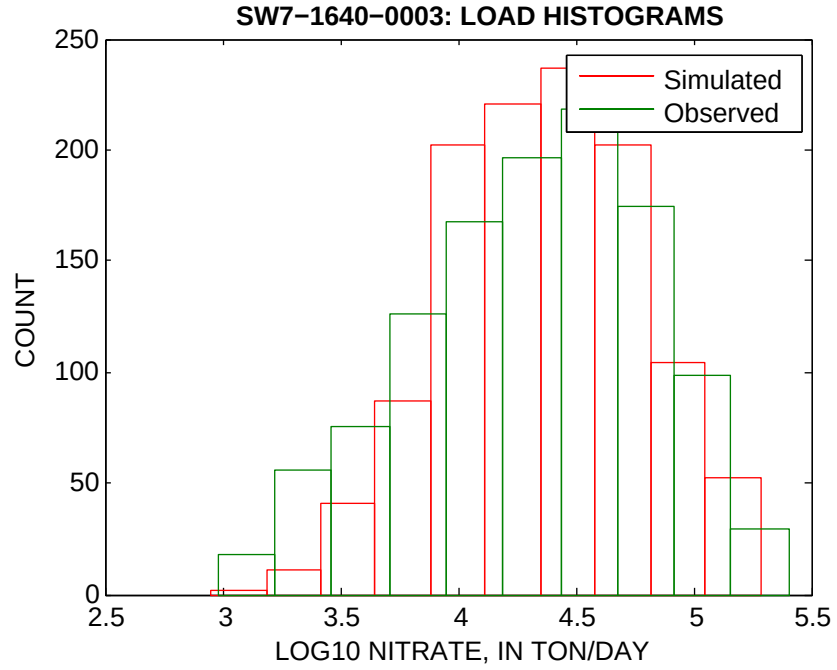


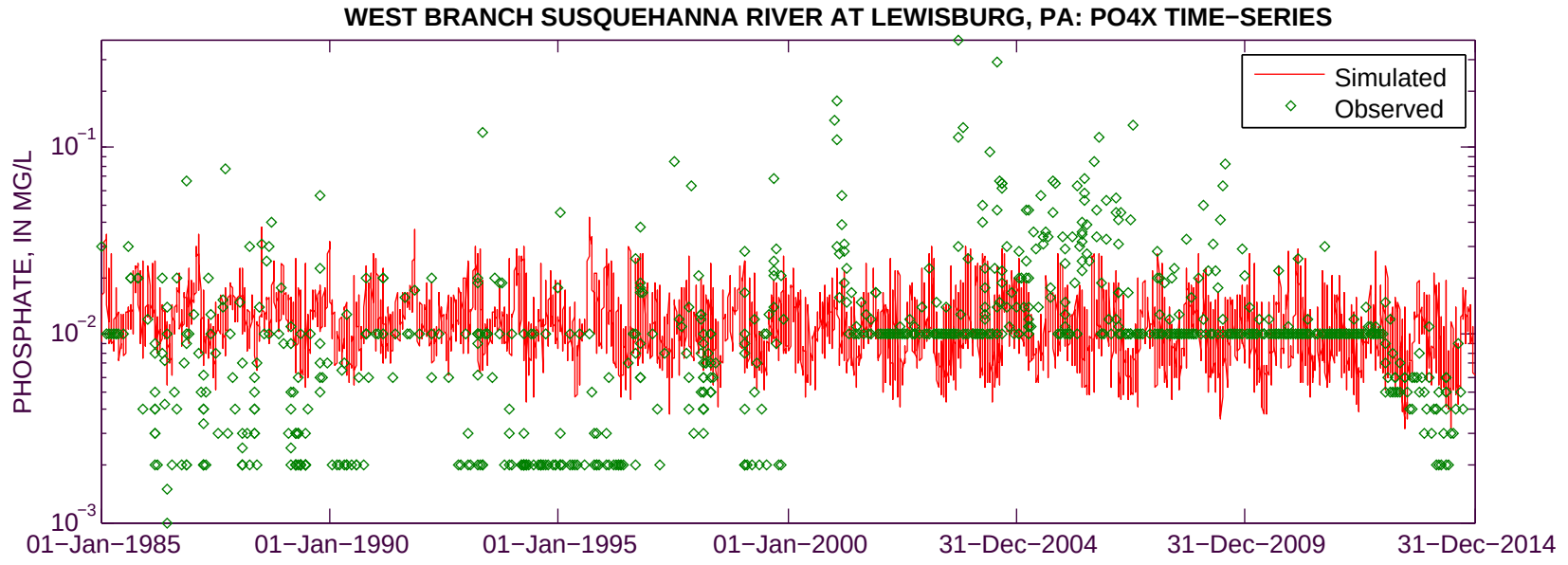
LOAD DATA
LOG10

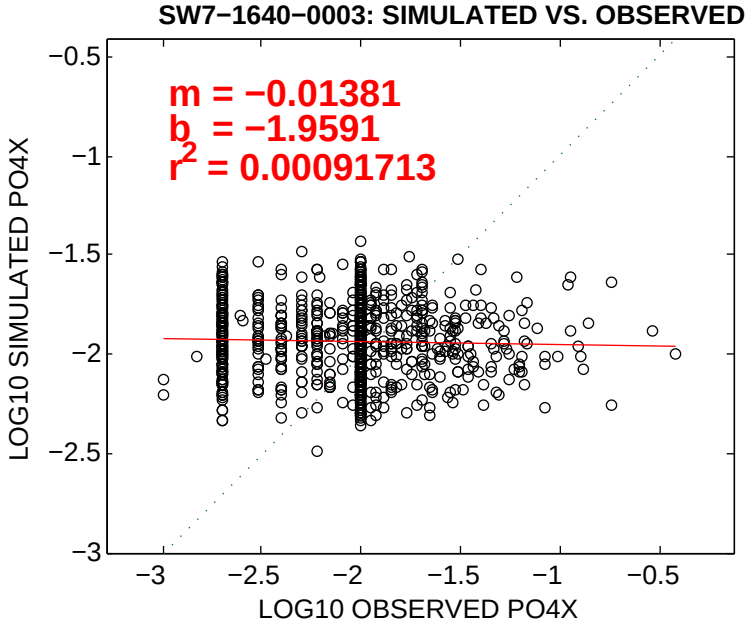


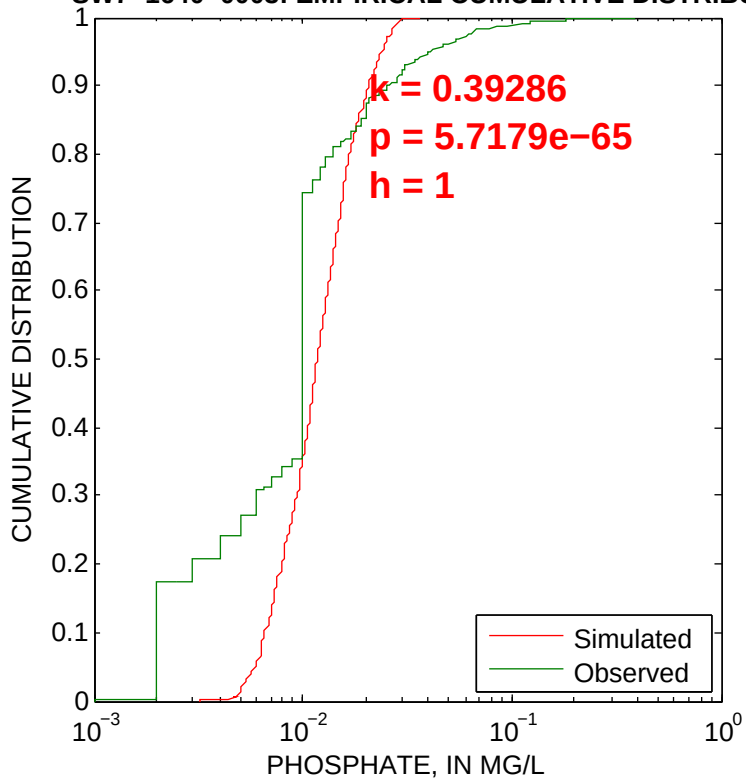












DATA SELECTION

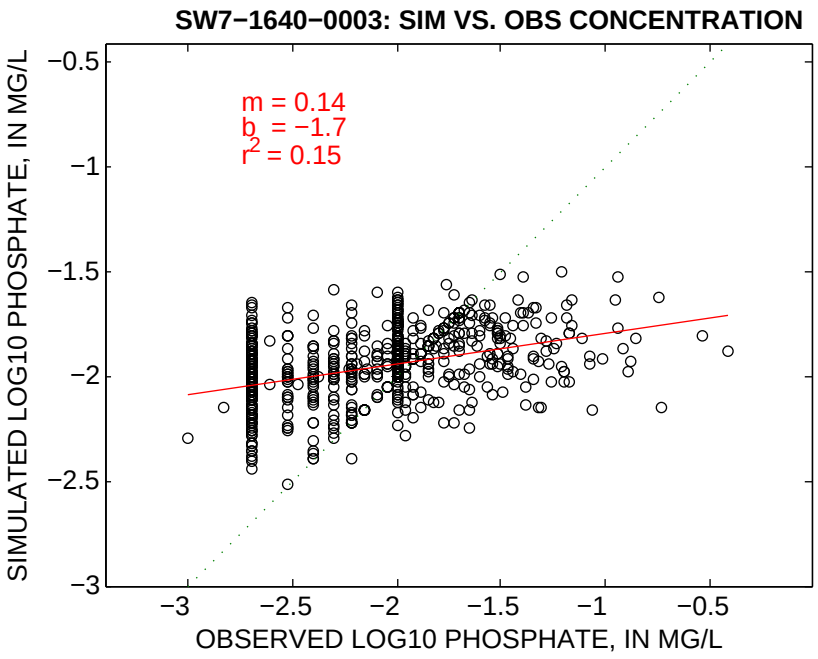
scenario: P620171001WQ
file: PO4X.calib
plot: PO4X - phosphate
Dates: 1/1/1985 12/31/201
Drive: N/A
Directory: model
Observed: OBS20161101

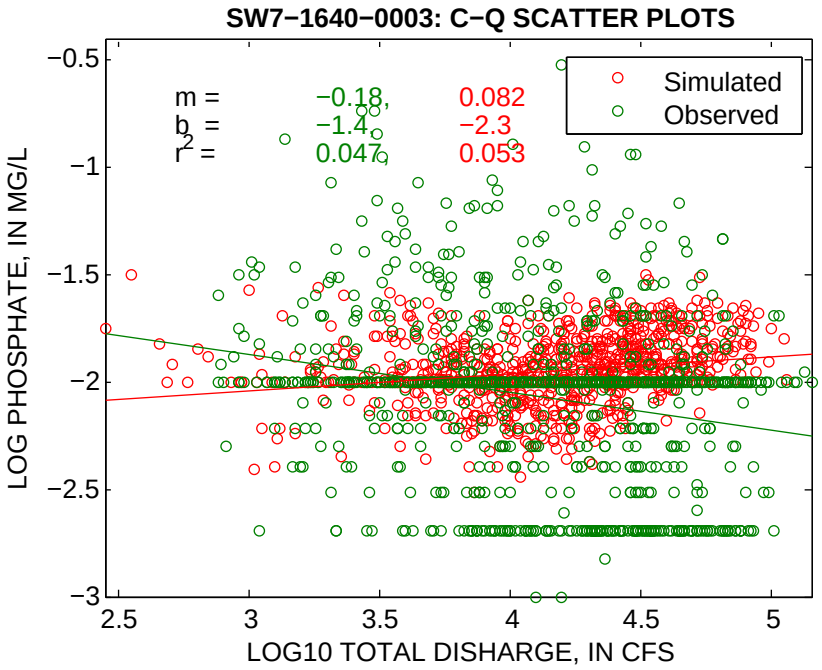
STATISTICS

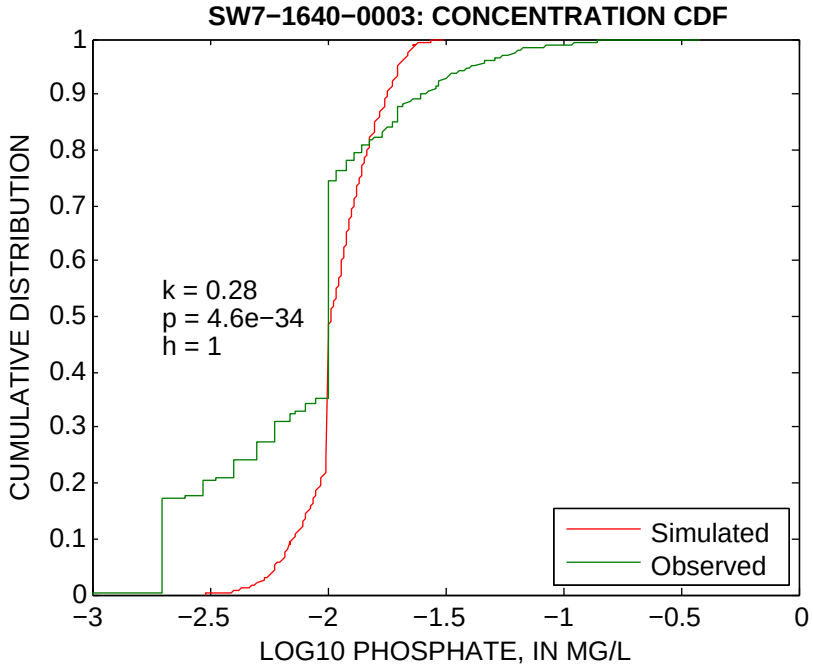
		observe	simulate
n		952	952
min		0.001	0.0032464
		-3	-2.4886
mean		0.0136495	0.0128169
		-2.07598	-1.93048
media		0.01	0.0116715
		-2	-1.93287
max		0.384	0.036551
		-0.415669	-1.4371
varian		0.00052398	3.01539e-0
		0.161251	0.0335313
JB		0.001	0.001
		0.001	0.007142
		ra	log
%		-6.10017	-7.00873
err.va		0.00056030	0.220428
rel.std.err		1.06932	1.36699
mod.eff		-0.0693234	-0.36699

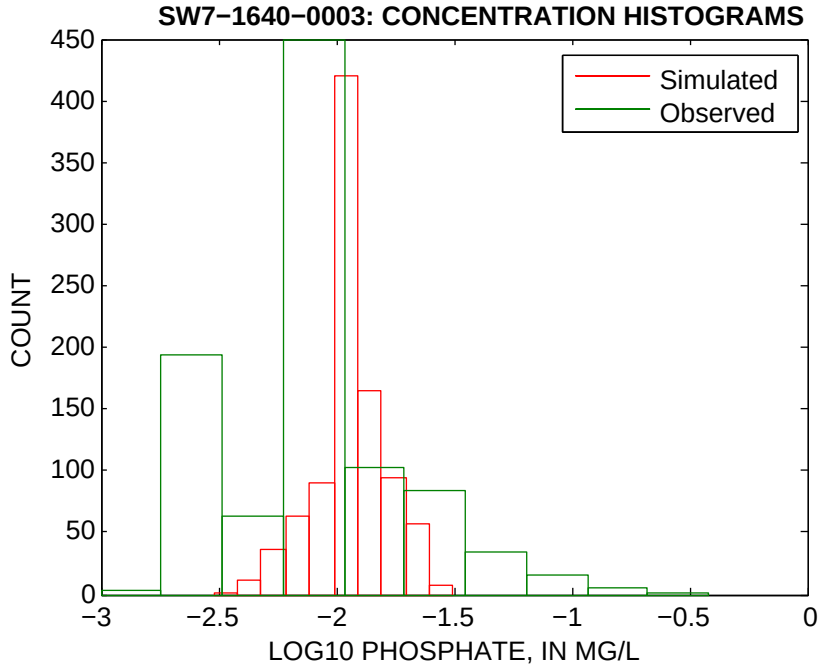
VERSION 2.1

ALL DATA
LOG10

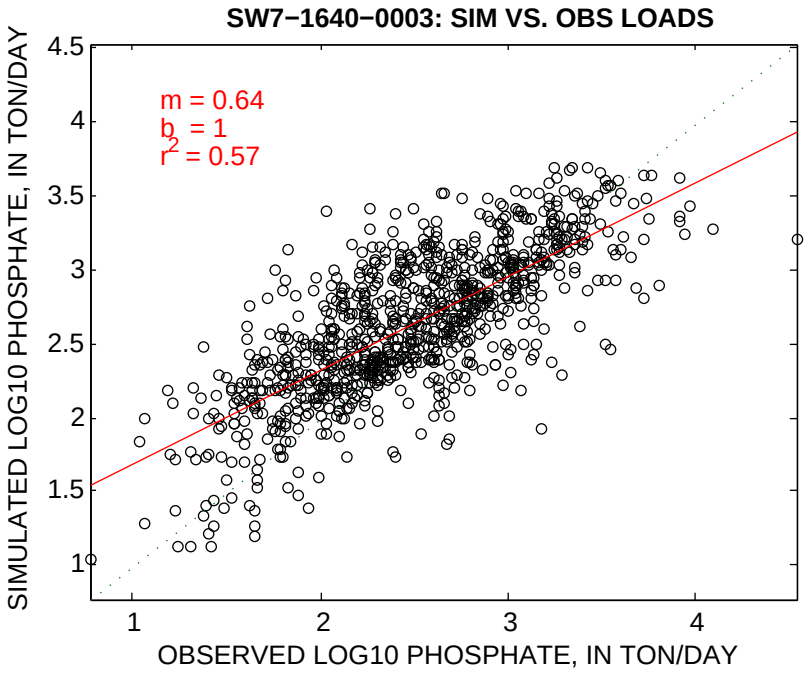


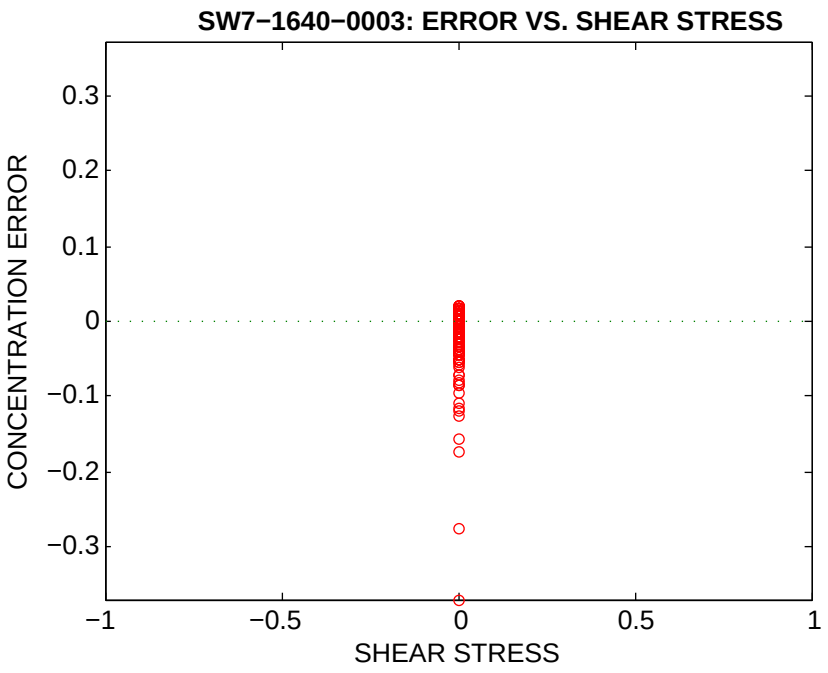


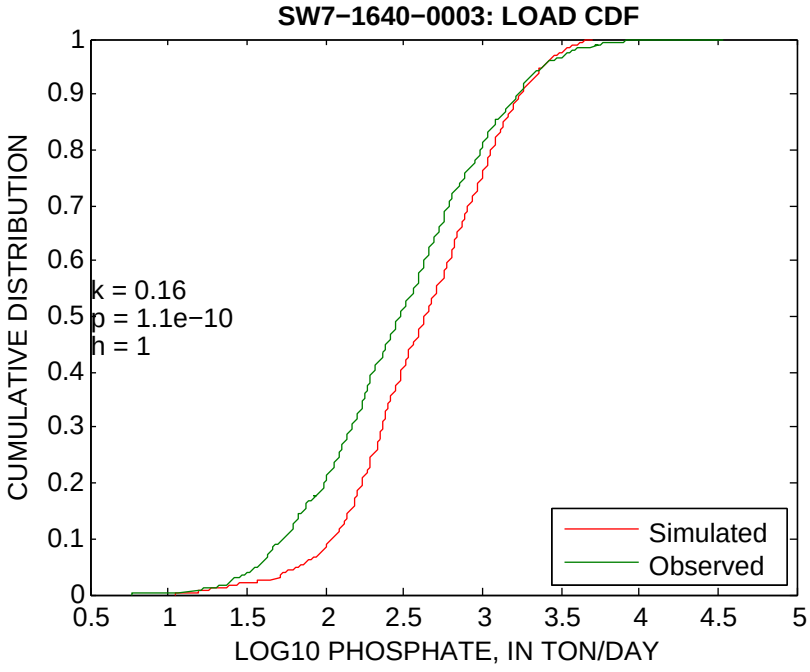


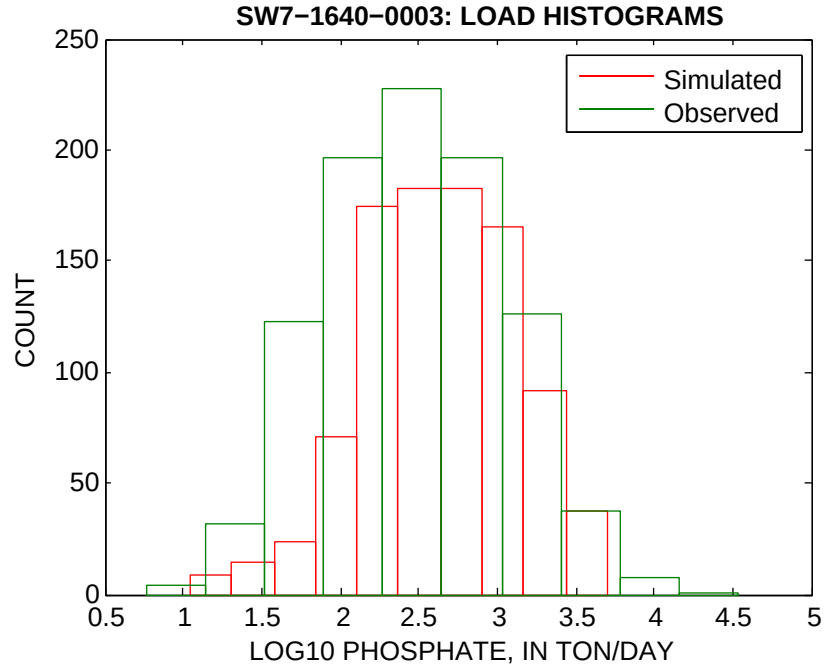


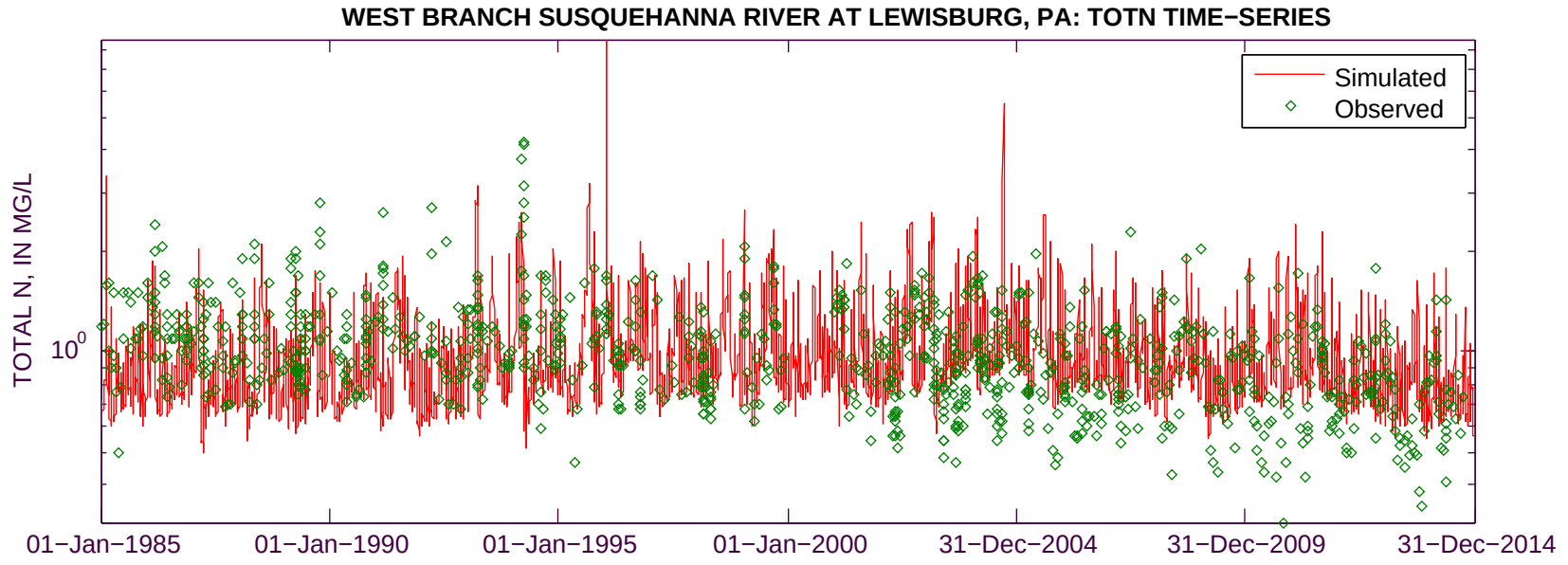
LOAD DATA
LOG10

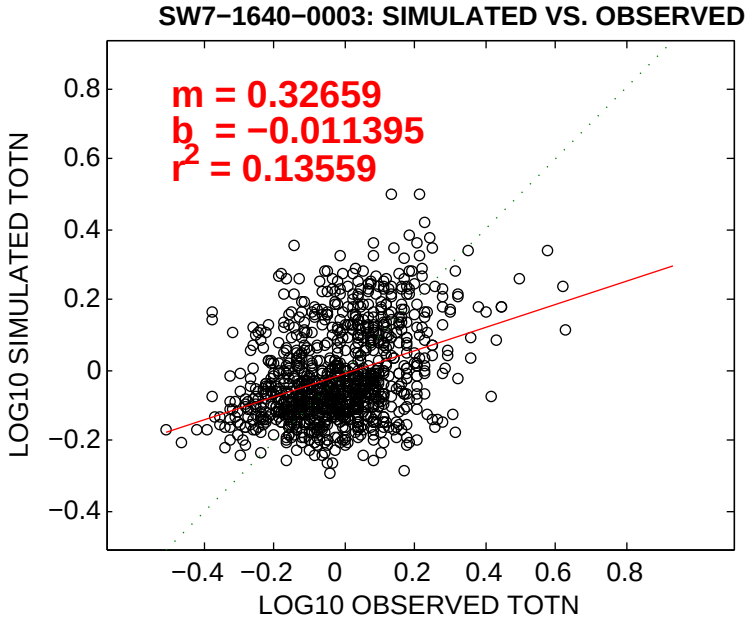


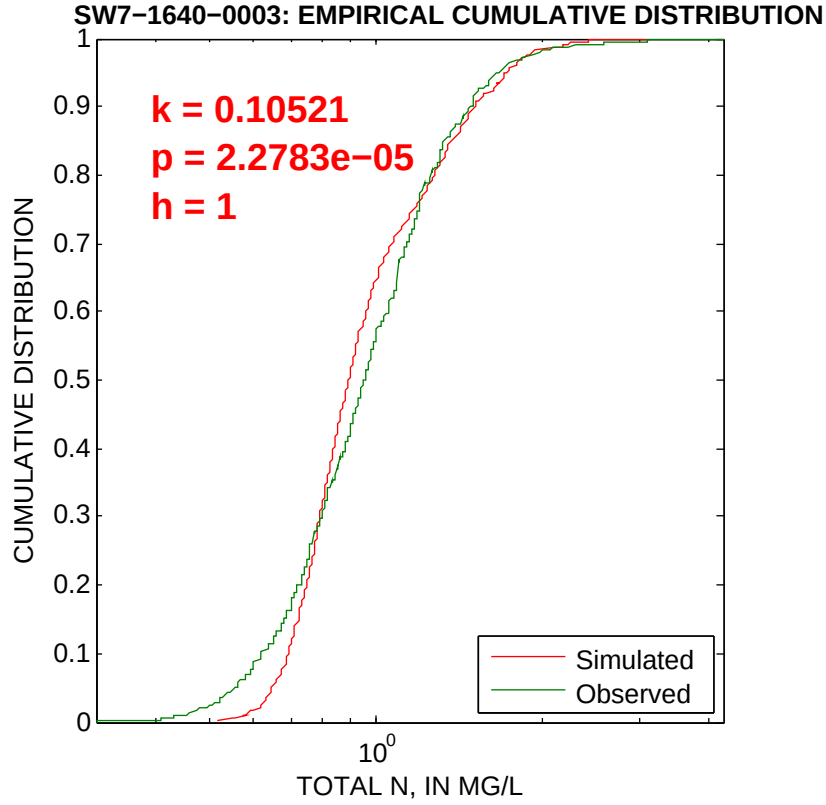












DATA SELECTION

scenario	file
P620171001WQ	TOTN.calib

plot: TOTN - total nitrogen

Dates: 1/1/1985 – 12/31/201

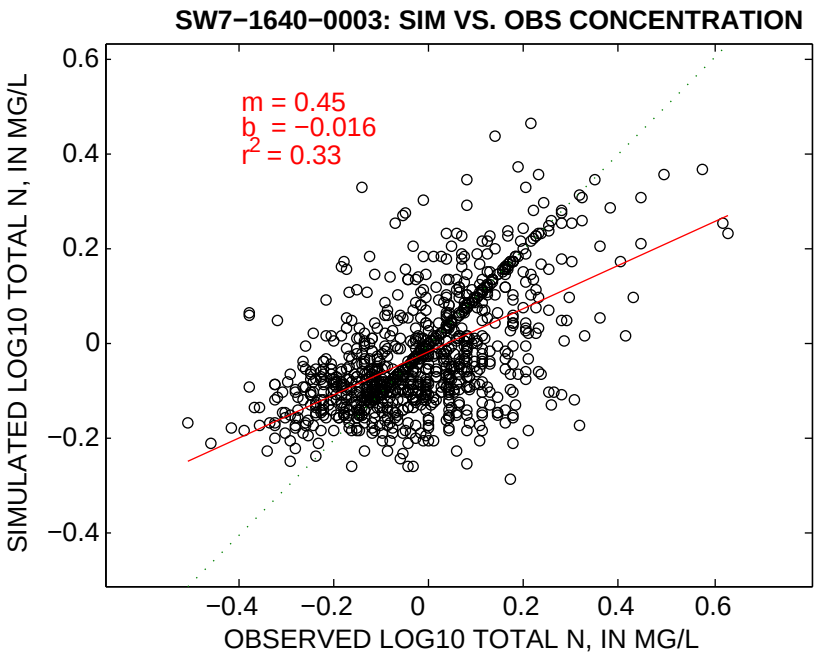
Drive	Directory	Observed
N/A	model	OBS20161101

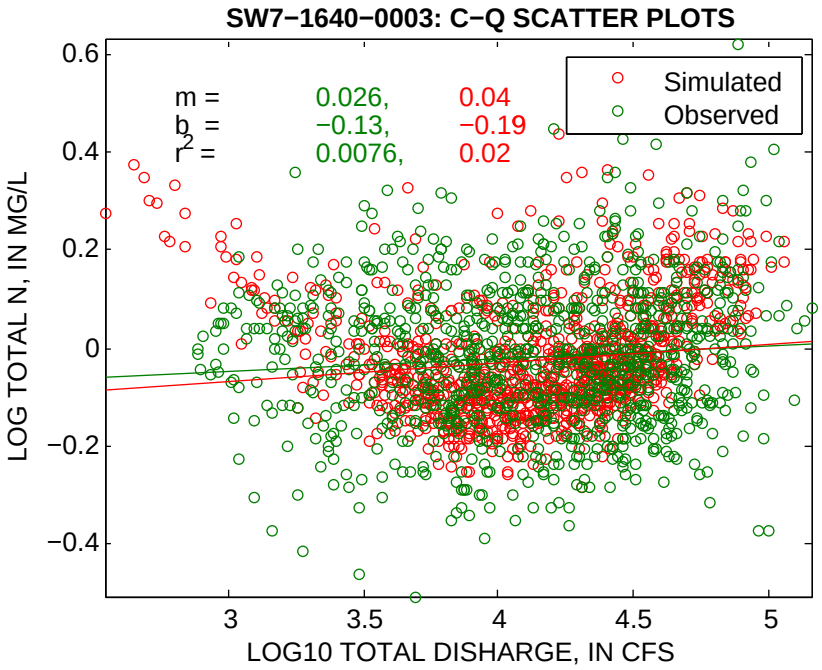
STATISTICS

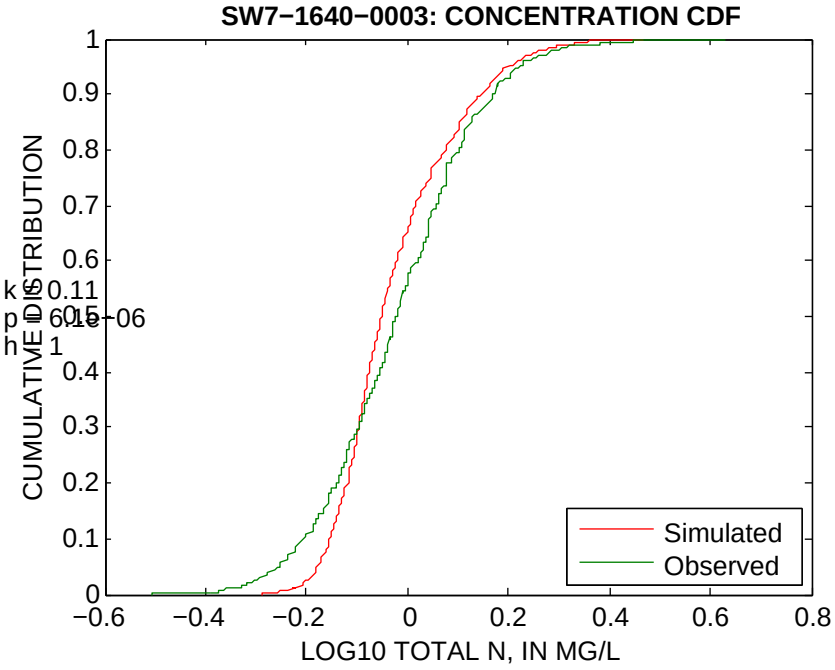
	n	observe	simulate
		1017	1017
min		0.31	0.5103
		-0.508638	-0.292174
mean		1.0209	1.01082
		-0.0177478	-0.0171913
media		0.96	0.89321
		-0.0177288	-0.0490464
max		4.26	3.1517
		0.62941	0.498545
varian		0.155375	0.125246
		0.0223092	0.0175502
JB		0.001	0.001
		0.001	0.001
		ra	log
%		-0.986894	-3.13549
err.va		0.176165	0.0252877
rel.std.err		1.1338	1.13351
mod.eff		-0.133802	-0.133512

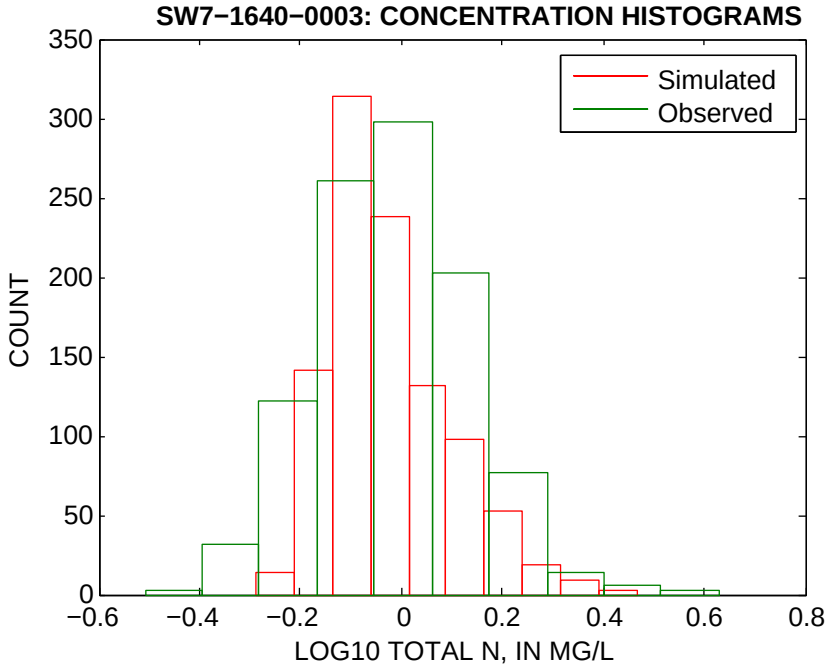
VERSION 2.1

ALL DATA
LOG10

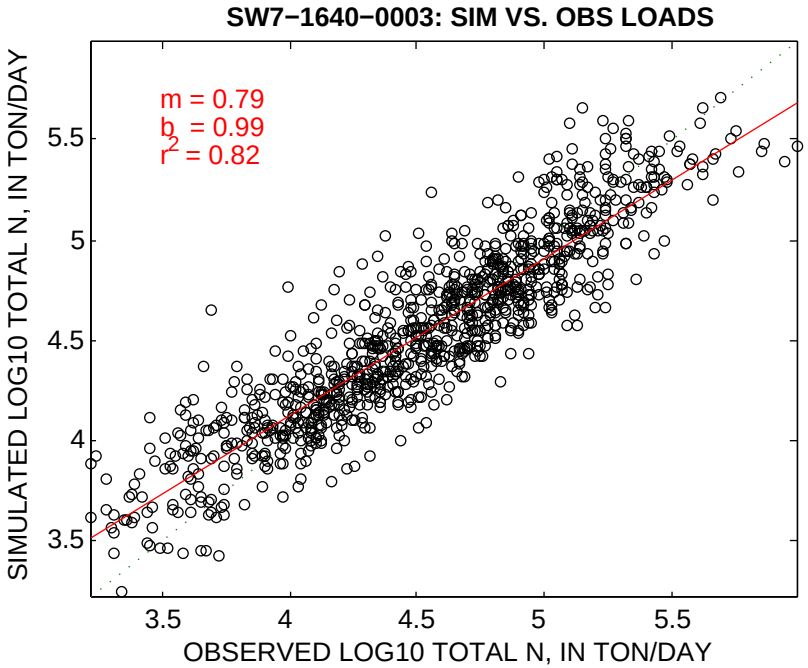


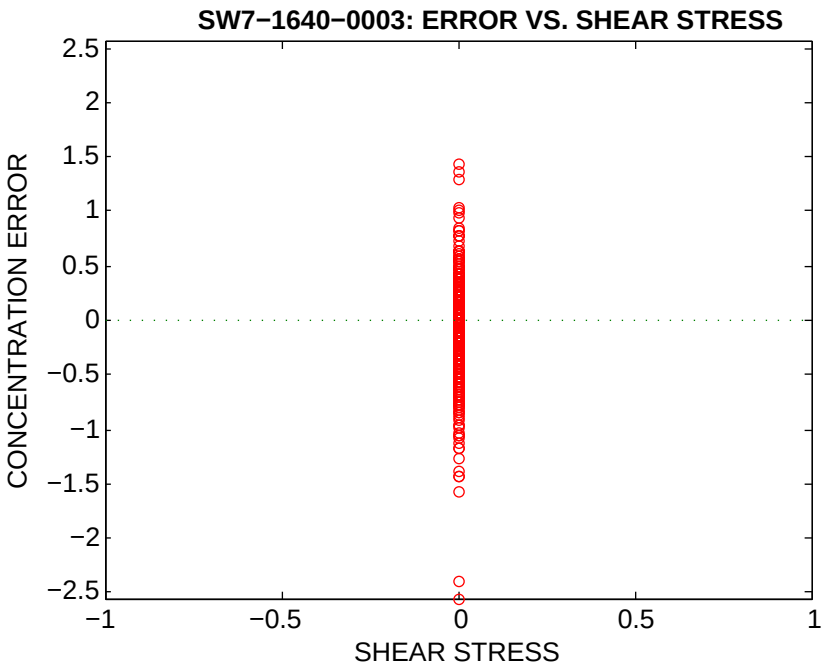


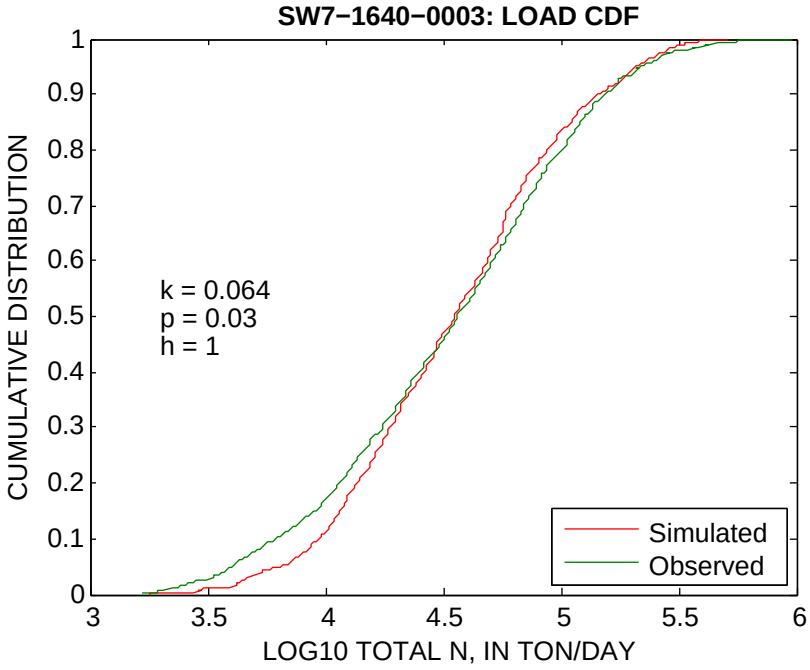


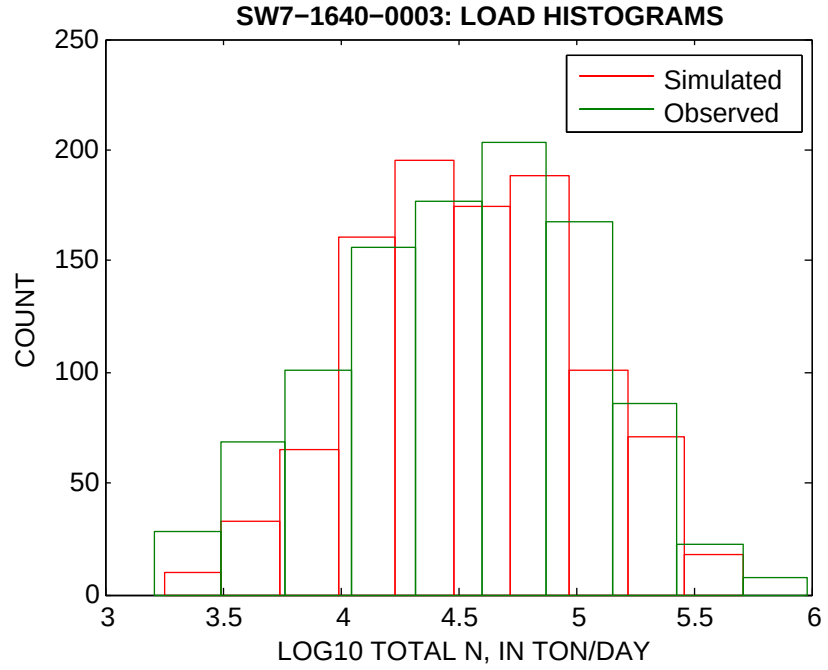


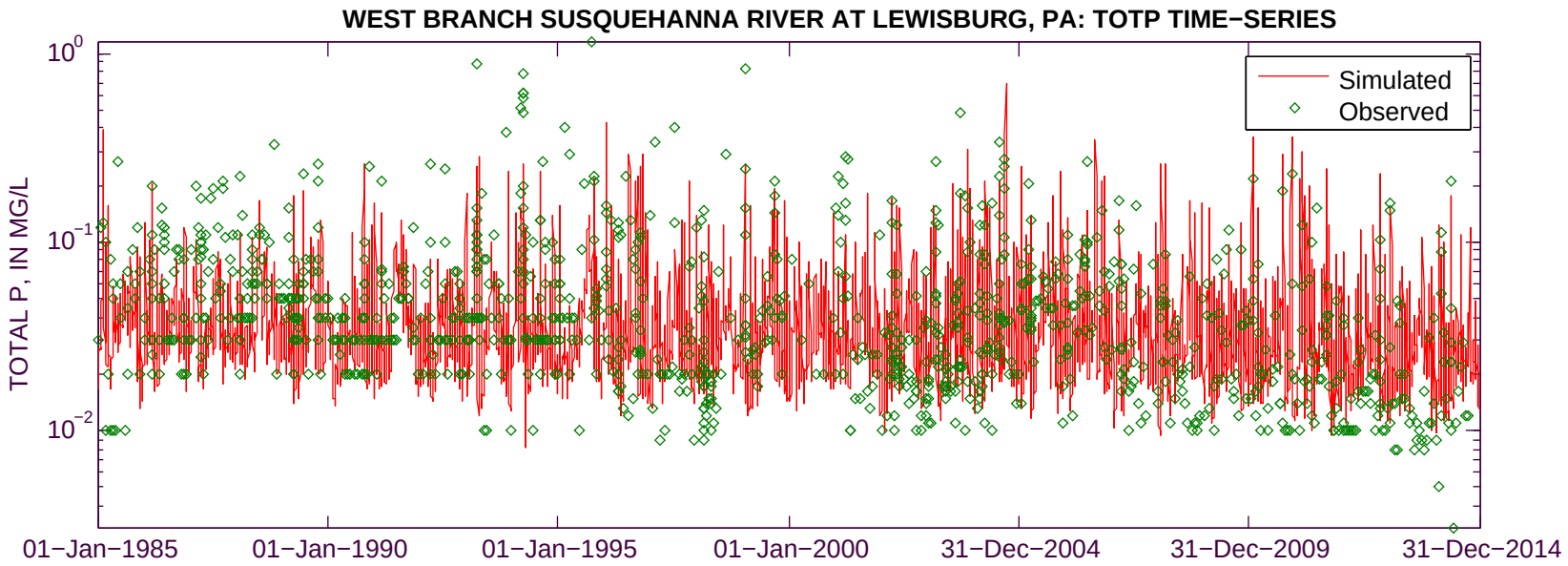
LOAD DATA
LOG10

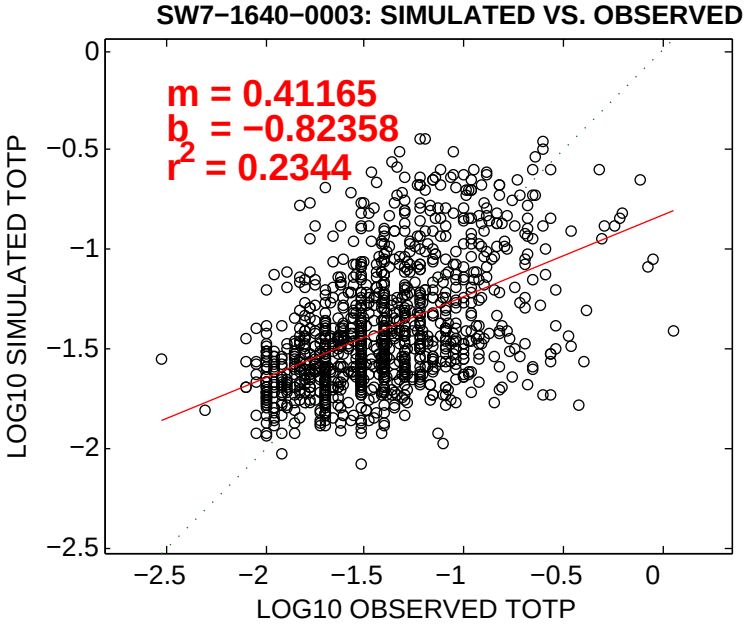


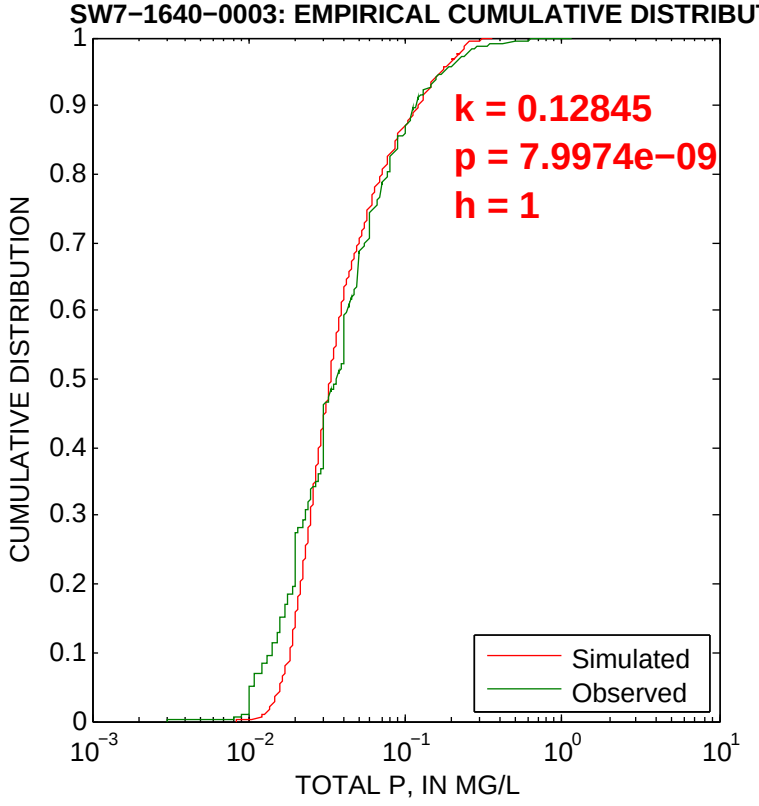












DATA SELECTION

scenario: P620171001WQ | file: TOTP.calib

plot: TOTP - total phosphorus

Dates: 1/1/1985 – 12/31/201

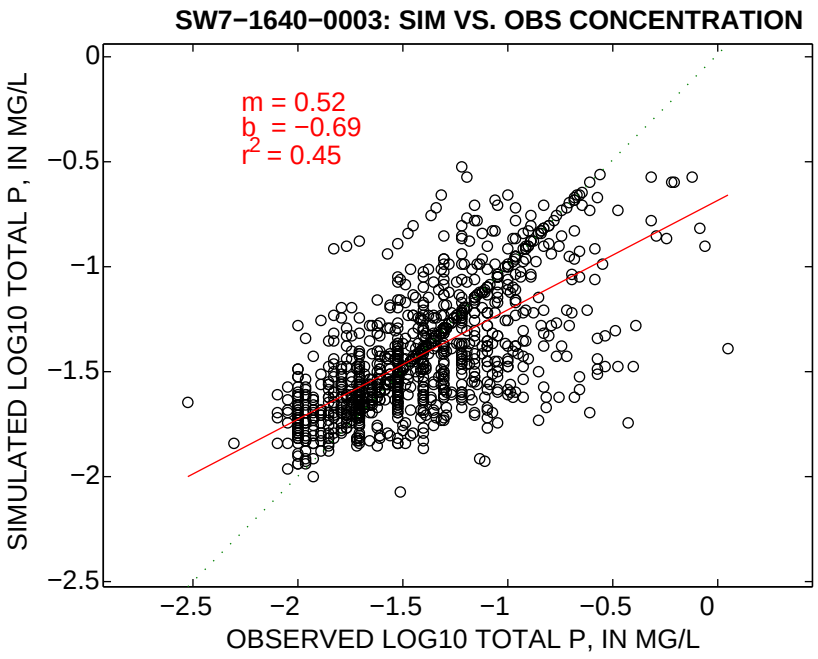
Drive: N/A | Directory: model | Observed: OBS20161101

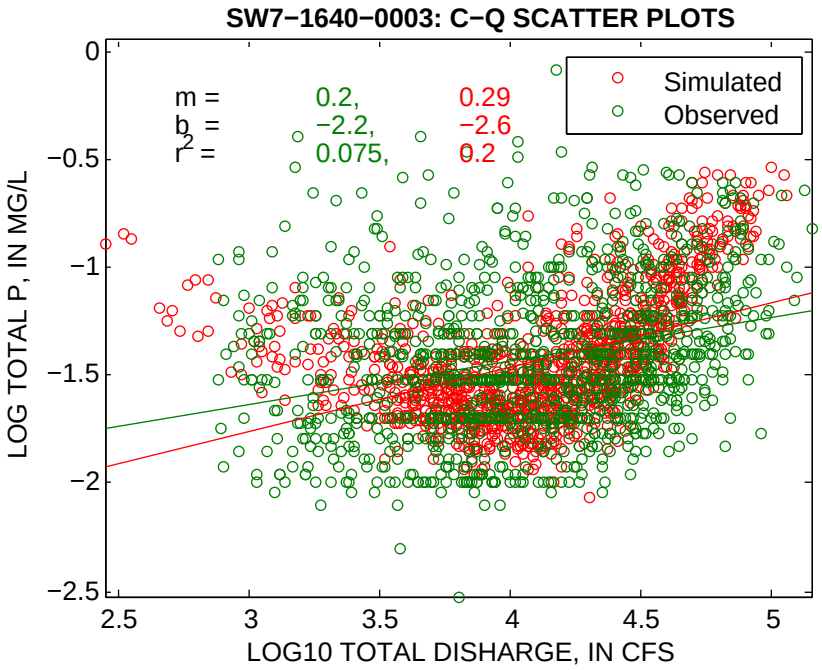
STATISTICS

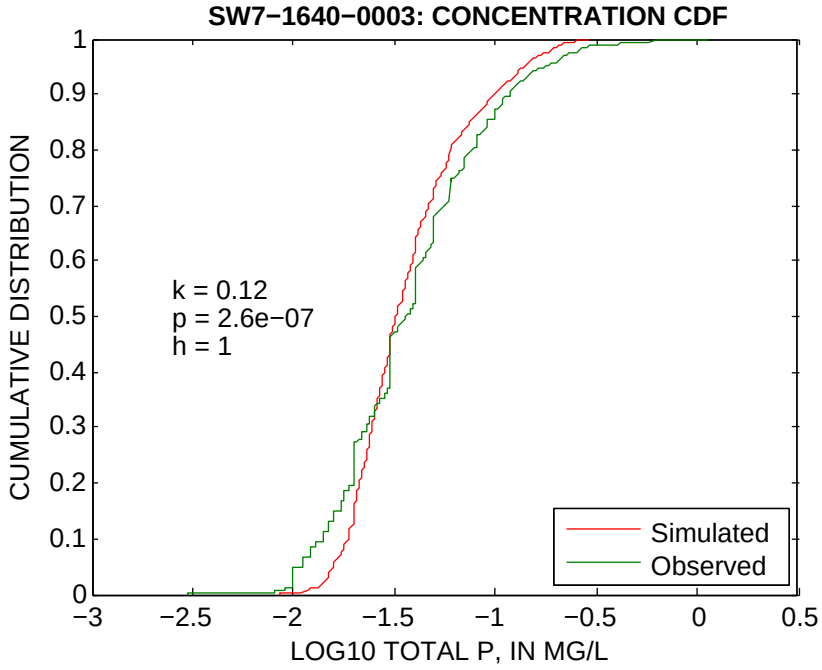
	observe	simulate
n	1160	1160
min	0.003	0.0082902
	-2.52288	-2.08143
mean	0.0585734	0.0531903
	-1.41473	-1.40595
media	0.036	0.0331905
	-1.4437	-1.47899
max	1.13	0.35947
	0.0530784	-0.444337
varian	0.00662011	0.00271138
	0.134076	0.096926
JB	0.001	0.001
	0.001	0.001
	ra	log
%	-9.19029	-0.620645
err.va	0.00664329	0.120695
rel.std.err	1.0035	0.9002
mod.eff	-0.0035001	0.0997998

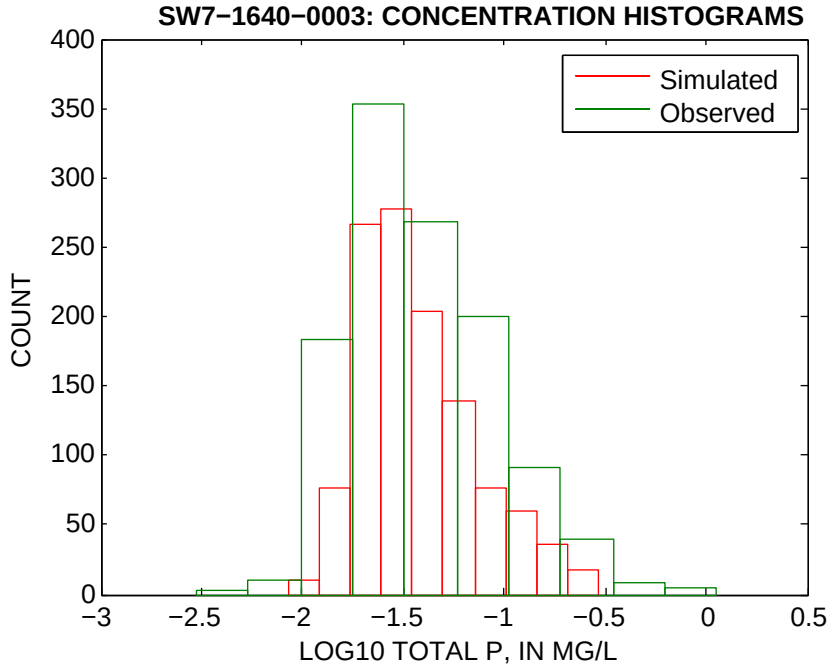
VERSION 2.1

ALL DATA
LOG10

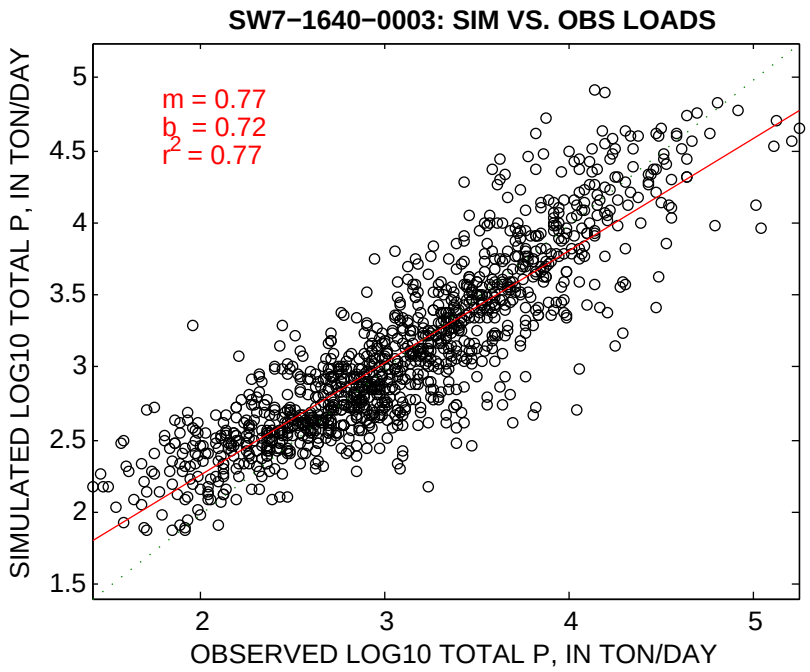


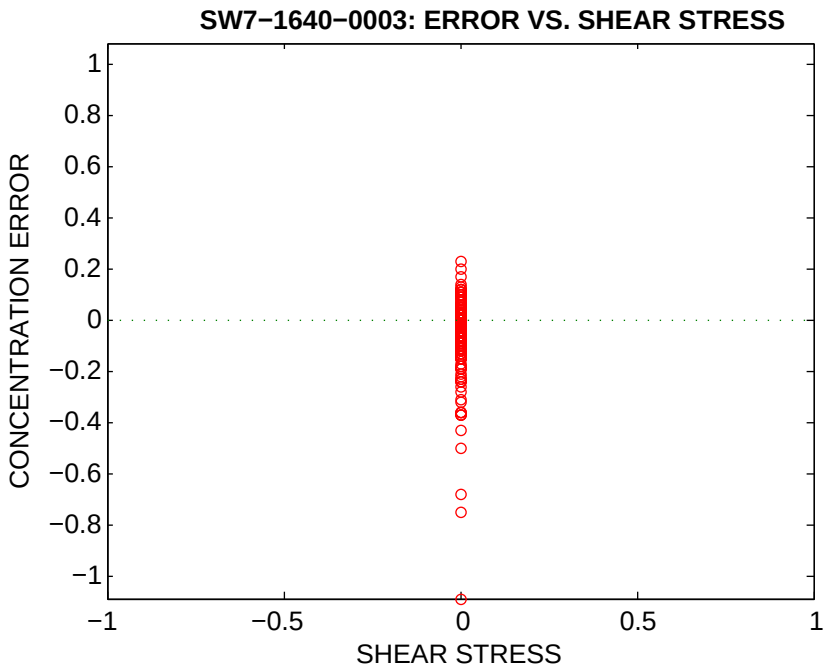


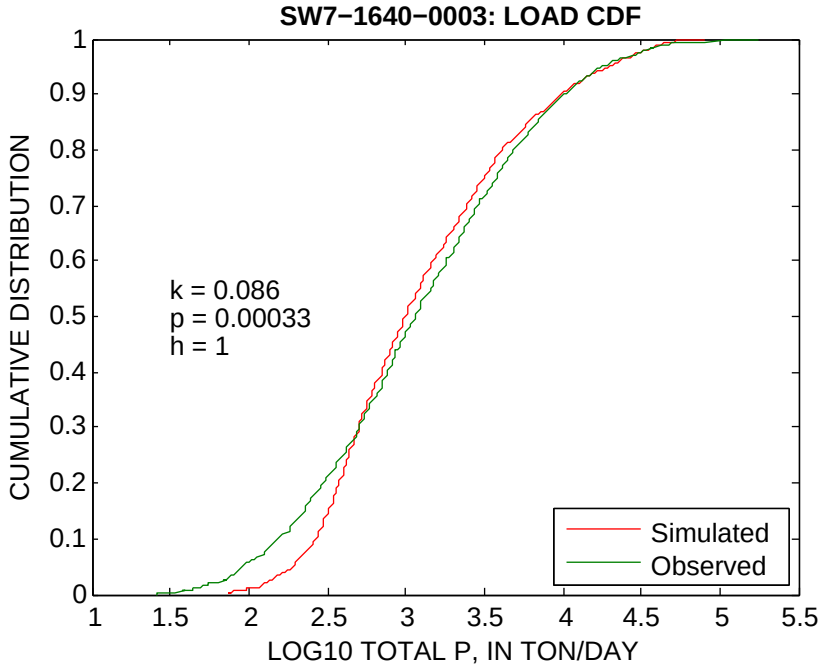


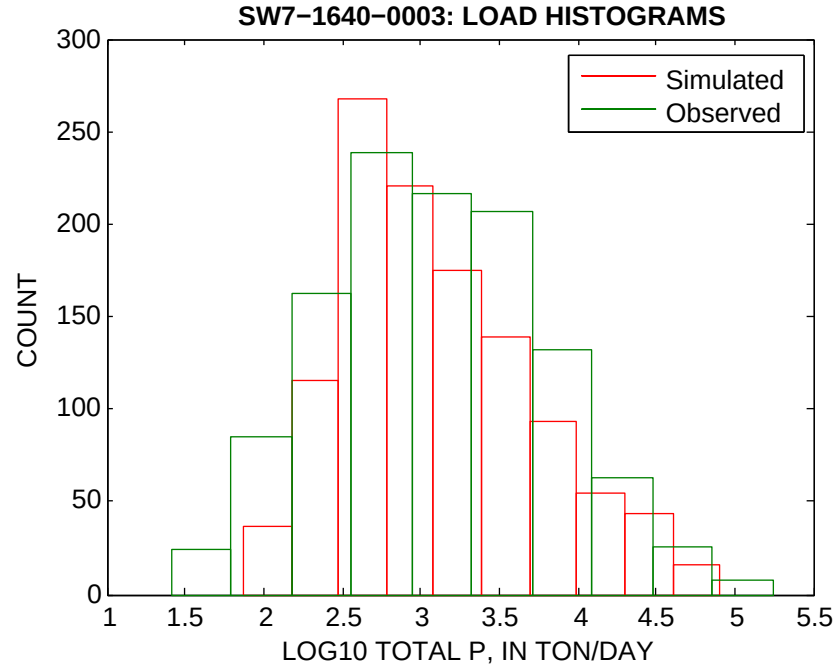


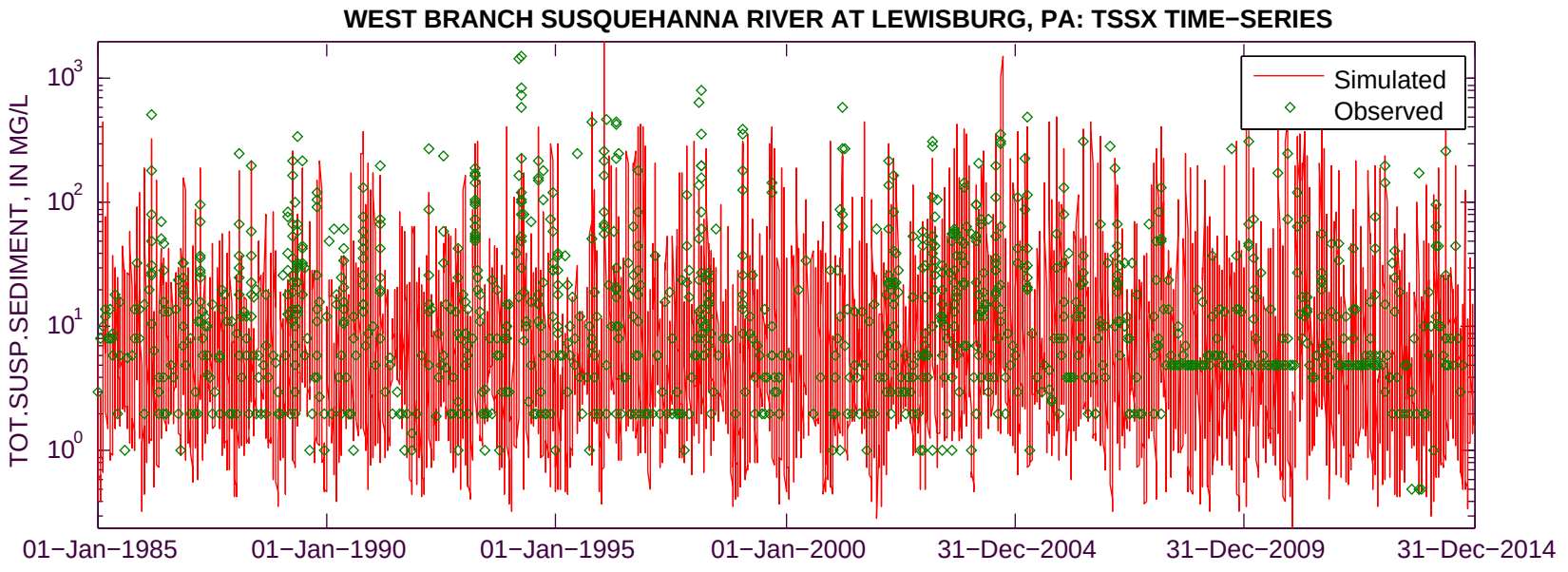
LOAD DATA
LOG10

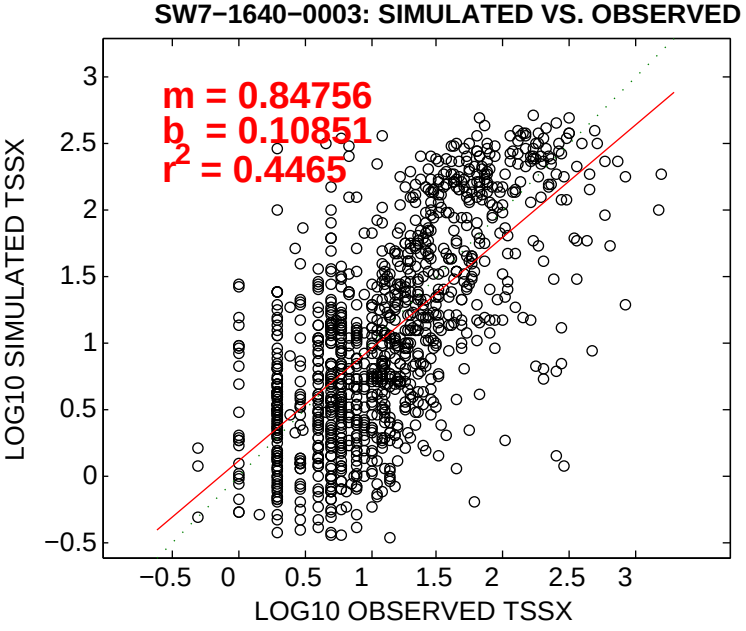


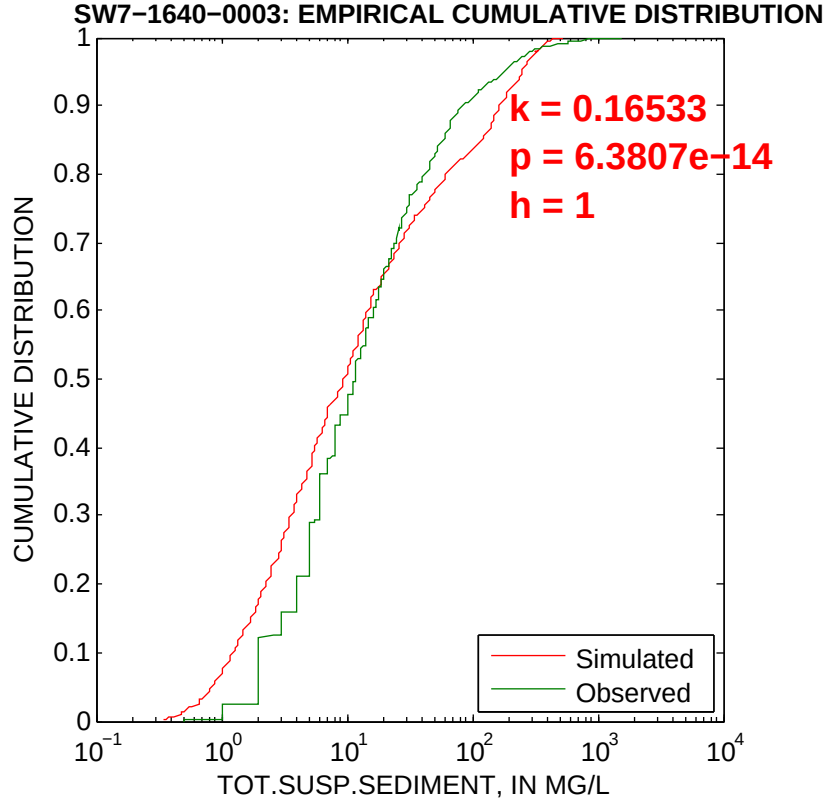












DATA SELECTION

scenario: P620171001WQ | file: TSSX.calib

plot: TSSX - total suspended ...

Dates: 1/1/1985 | 12/31/201

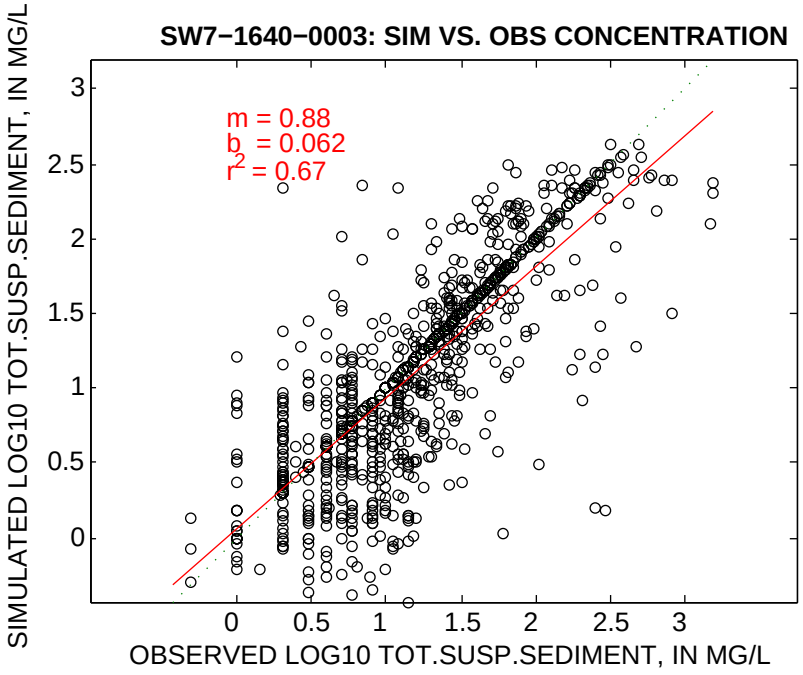
Drive: N/A | Directory: model | Observed: OBS20161101

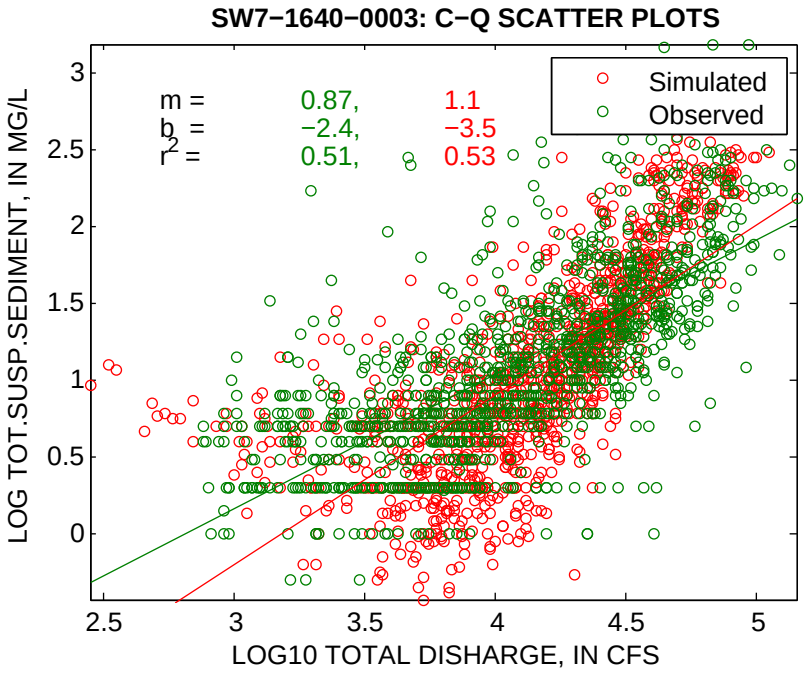
STATISTICS

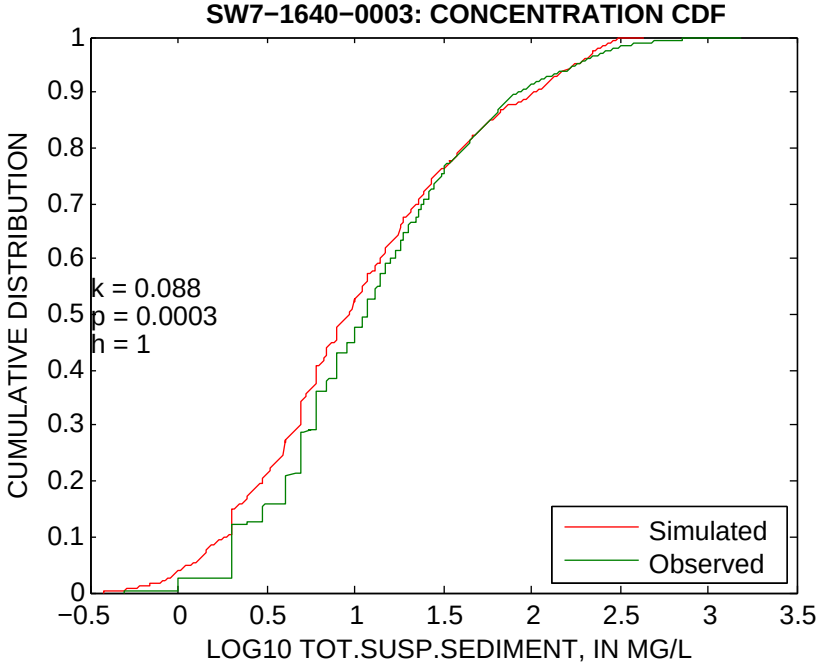
n	1125	1125
	observe	simulate
min	0.5	0.33687
	-0.30103	-0.472538
mean	41.0456	47.8918
	1.11855	1.05654
media	12	9.6636
	1.07918	0.985139
max	1531	531.65
	3.18498	2.72563
varian	12094.5	7375.24
	0.363941	0.585531
JB	0.001	0.001
	0.001	0.001
	ra	log
%	16.6795	-5.54339
err.va	12198.4	0.336399
rel.std.err	1.0086	0.924324
mod.eff	-0.0085964	0.0756764

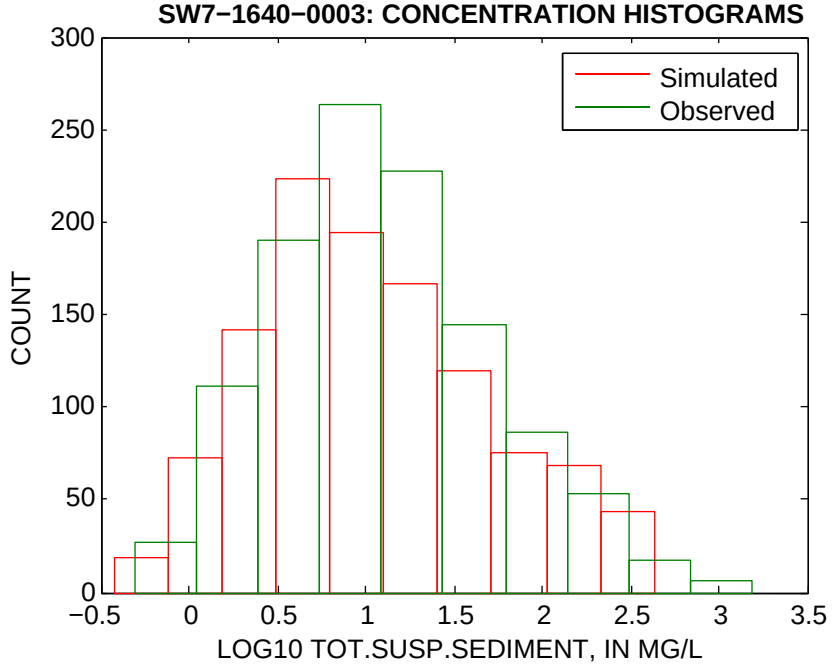
VERSION 2.1

ALL DATA
LOG10

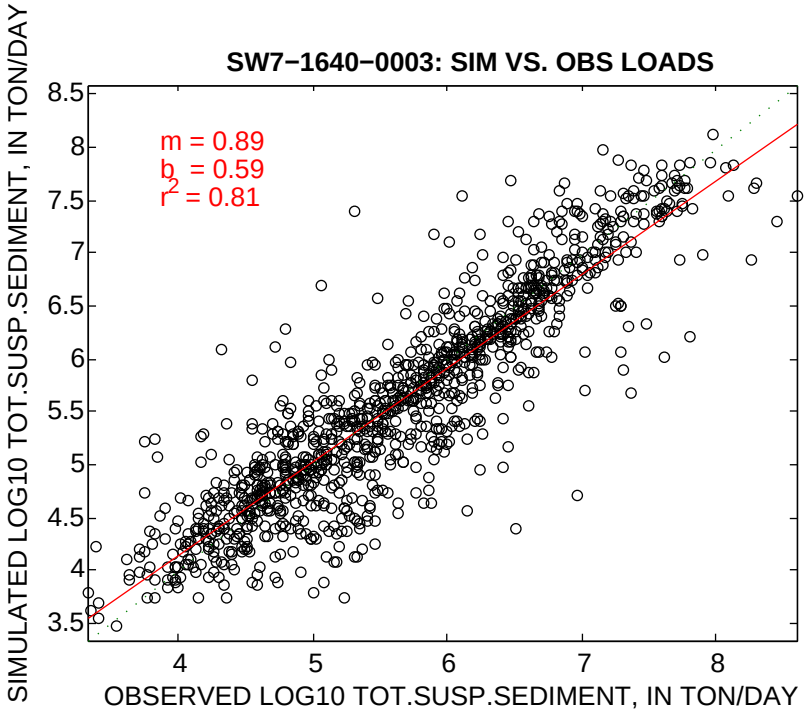




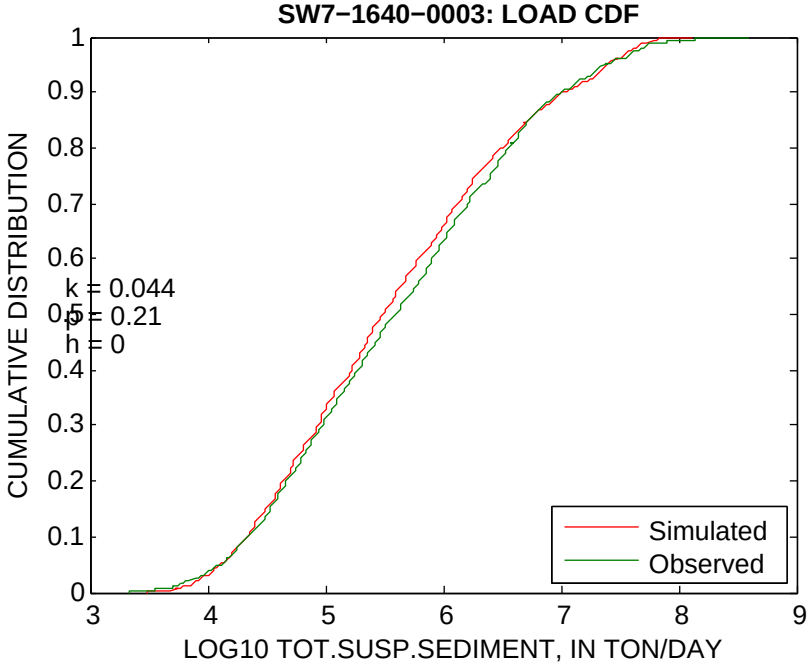


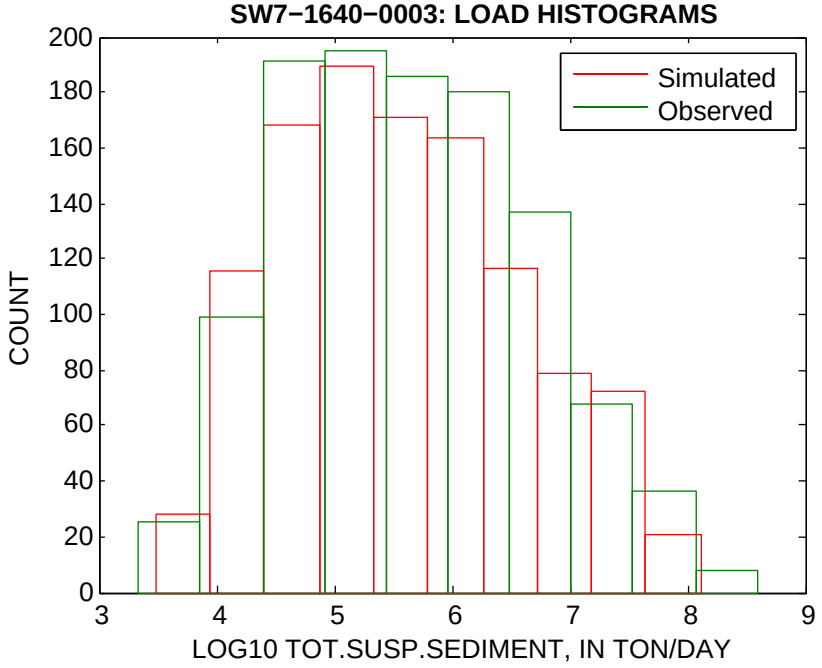


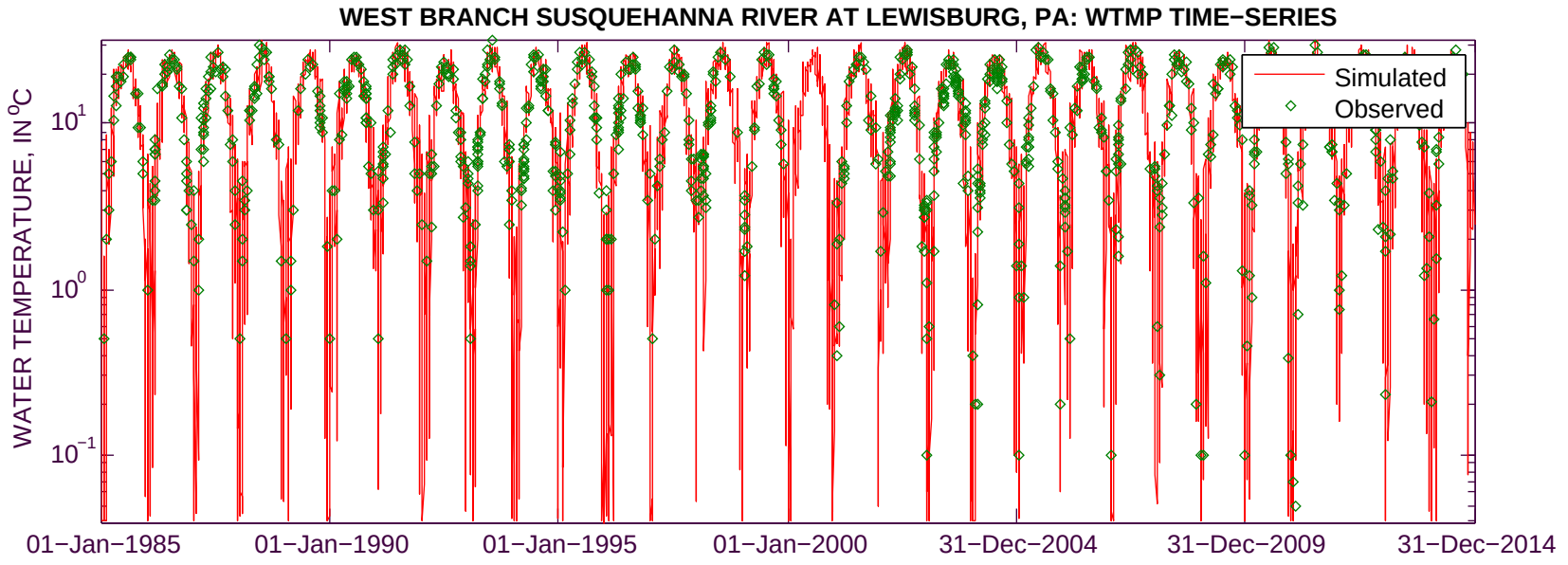
LOAD DATA
LOG10

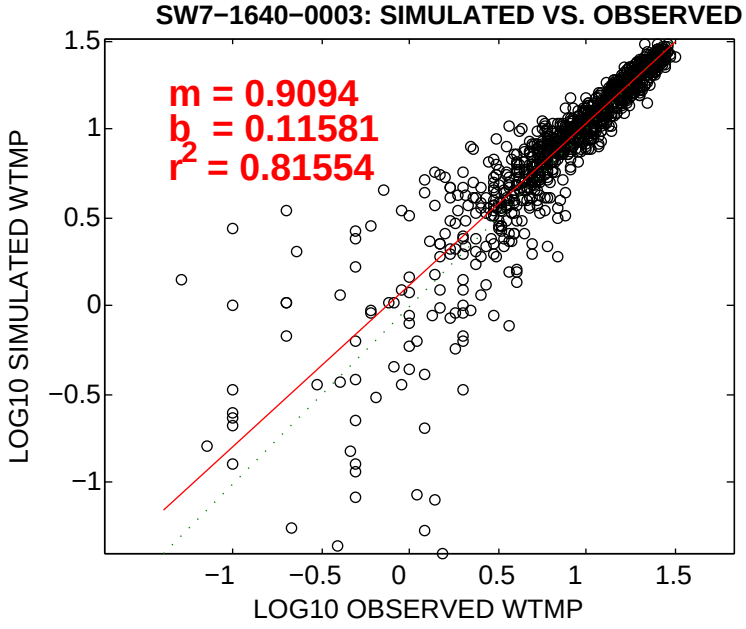


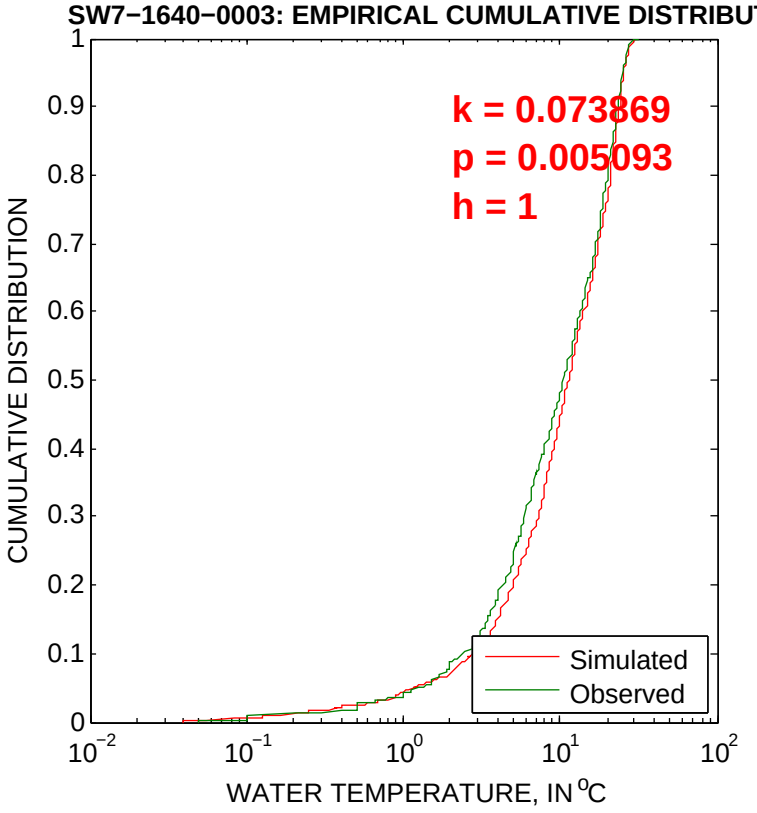












DATA SELECTION

scenario	file
P620171001WQ	WTMP.calib

plot: WTMP - water tempera...

Dates: 1/1/1985 – 12/31/201

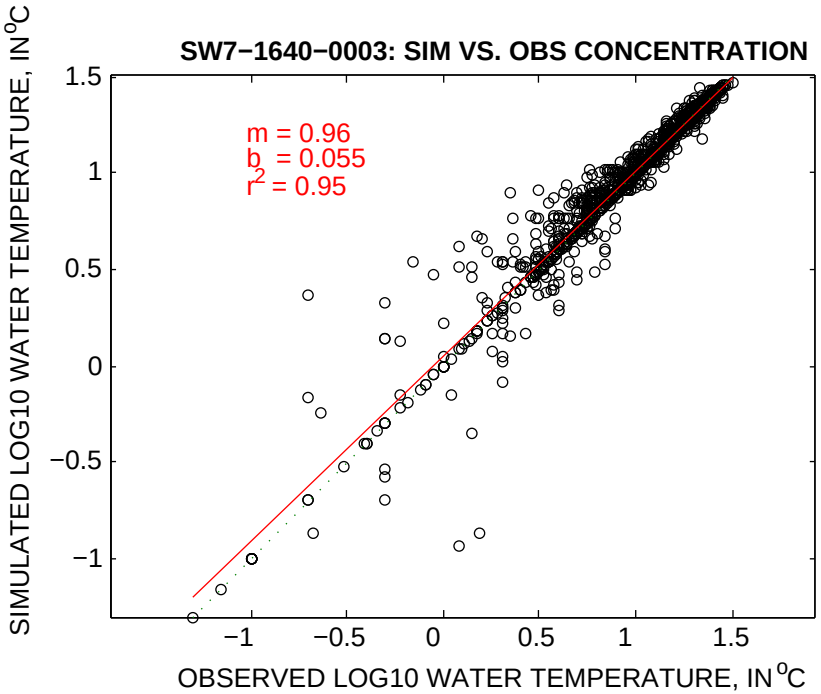
Drive	Directory	Observed
N/A	model	OBS20161101

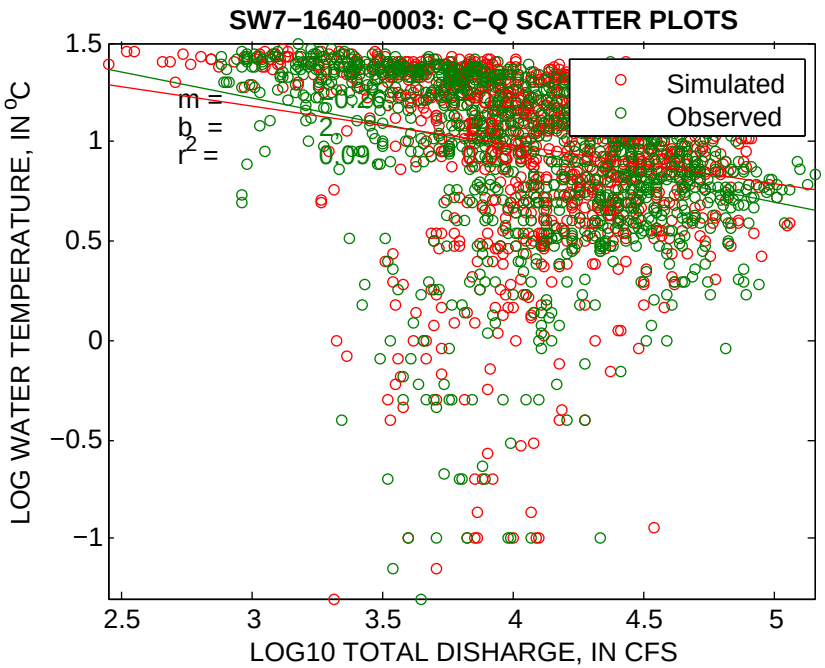
STATISTICS

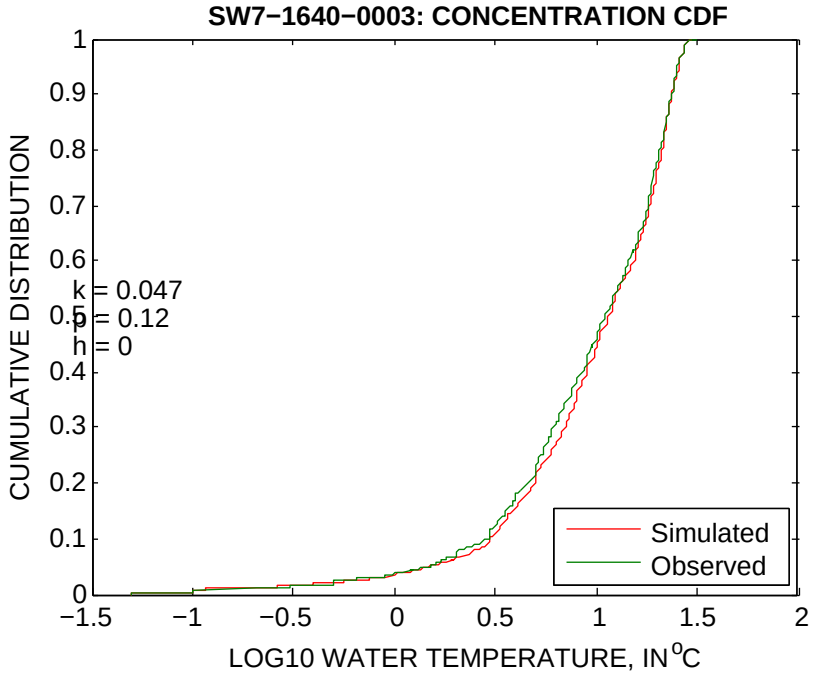
n	1083	1083
	observe	**simulate**
min	0.05	0.040164
	-1.30103	-1.39616
mean	11.9383	12.6178
	0.928177	0.959893
media	10.5	11.396
	1.02119	1.05675
max	31.9	30.539
	1.50379	1.48485
varian	61.3684	60.8966
	0.194727	0.197466
JB	0.001	0.001
	0.001	0.001
	ra	log
%	5.69156	3.41708
err.va	4.44317	0.0390293
rel.std.err	0.724016	0.20043
mod.eff	0.927598	0.79957

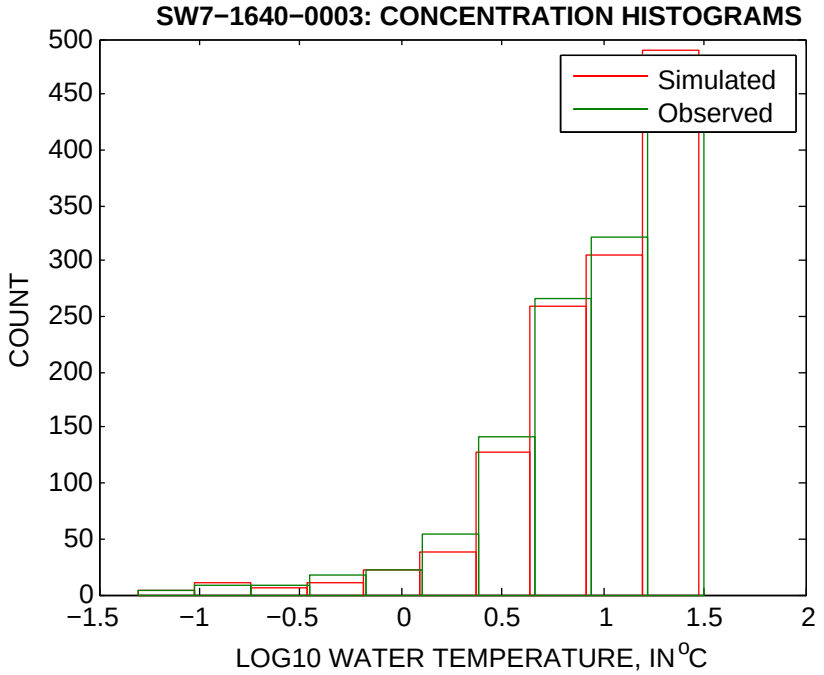
VERSION 2.1

ALL DATA
LOG10

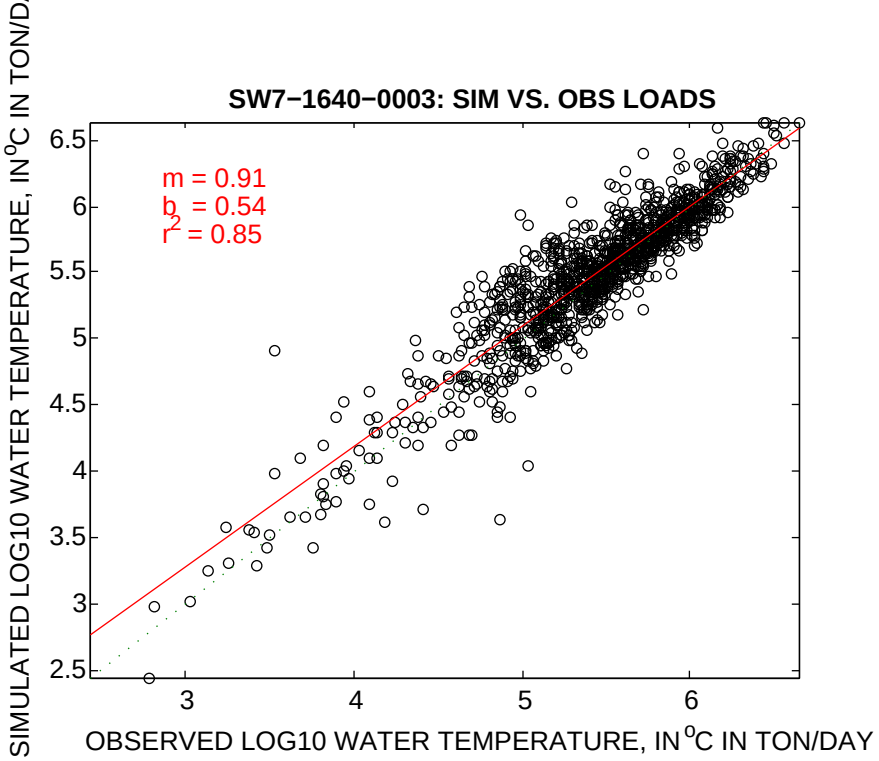




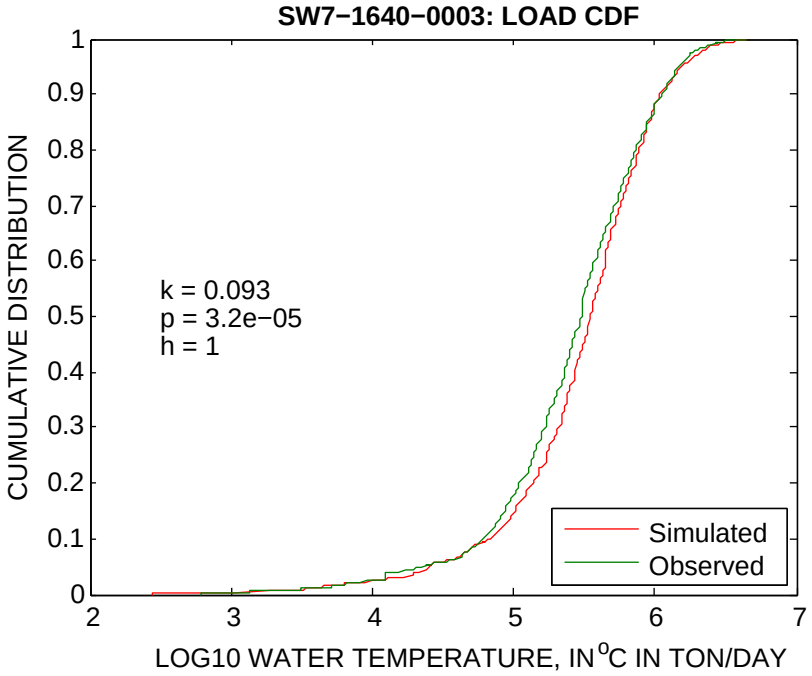


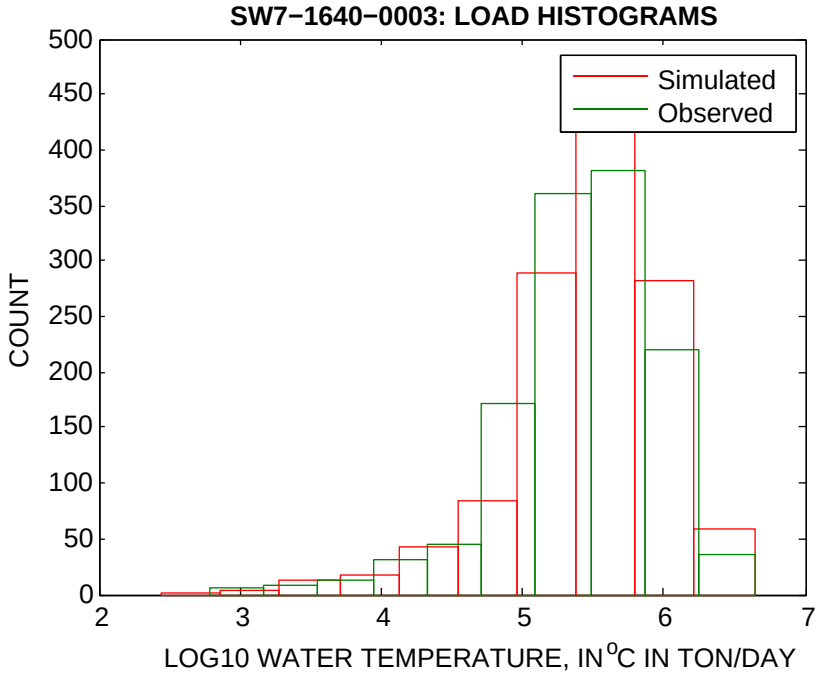


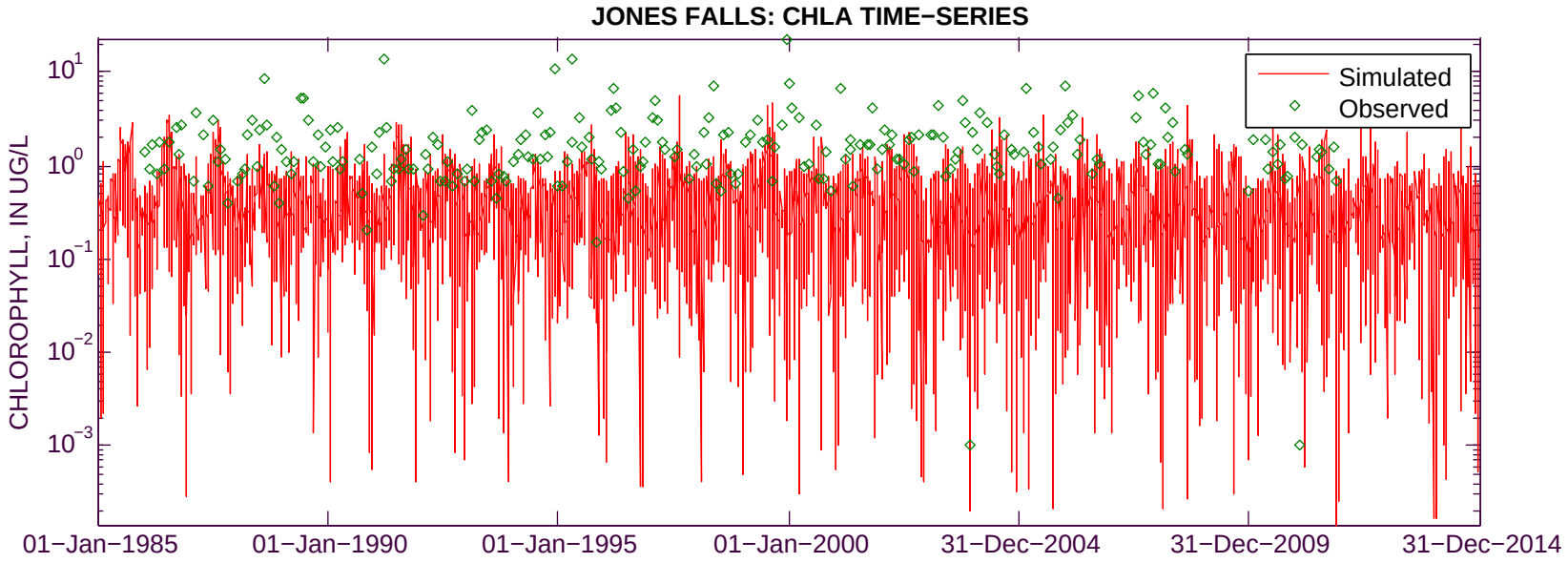
LOAD DATA
LOG10

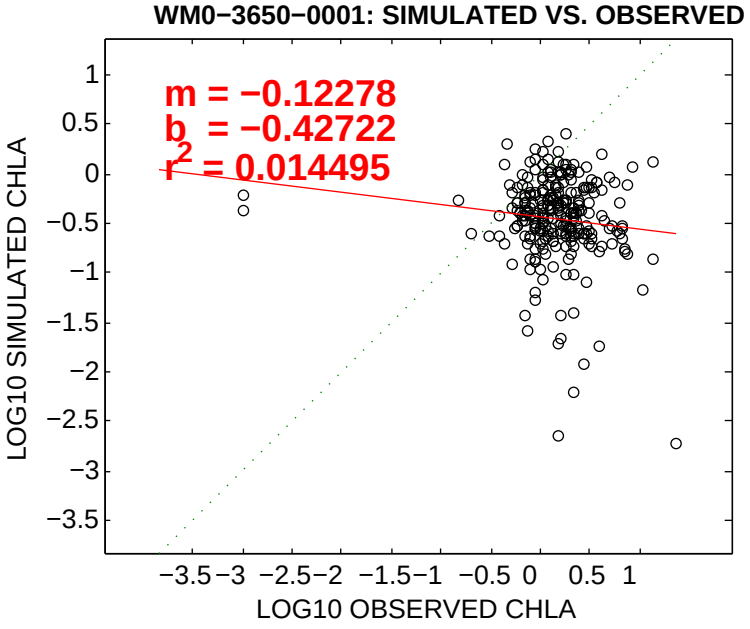


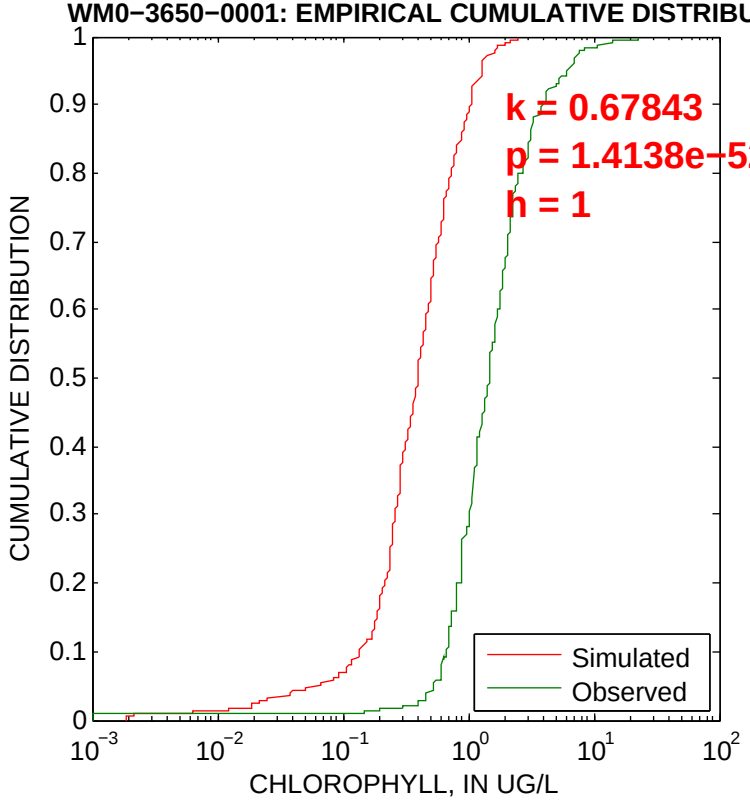












DATA SELECTION

scenario	file
P620171001WQ	CHLA.calib

plot: CHLA - chlorophyll A

Dates: 1/1/1985 – 12/31/201

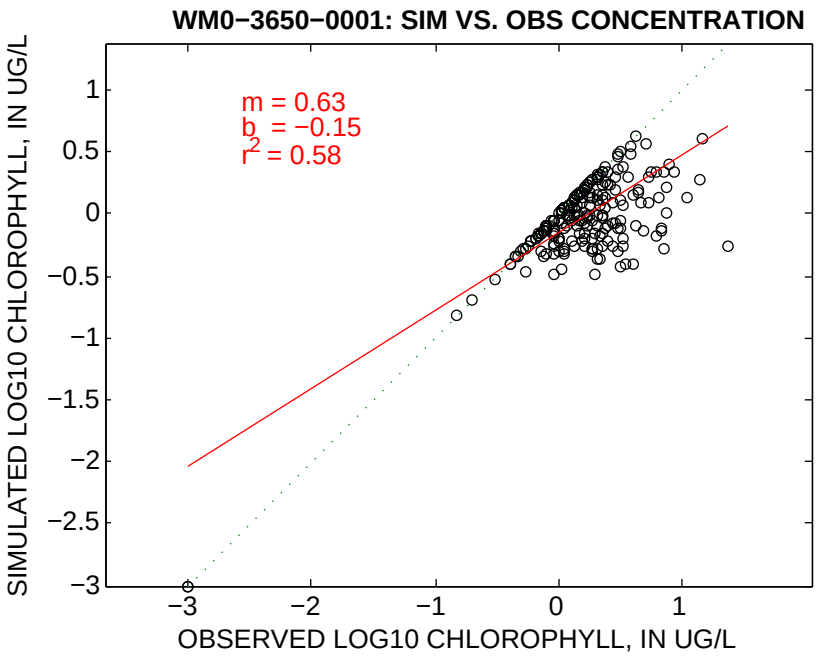
Drive	Directory	Observed
N/A	model	OBS20161101

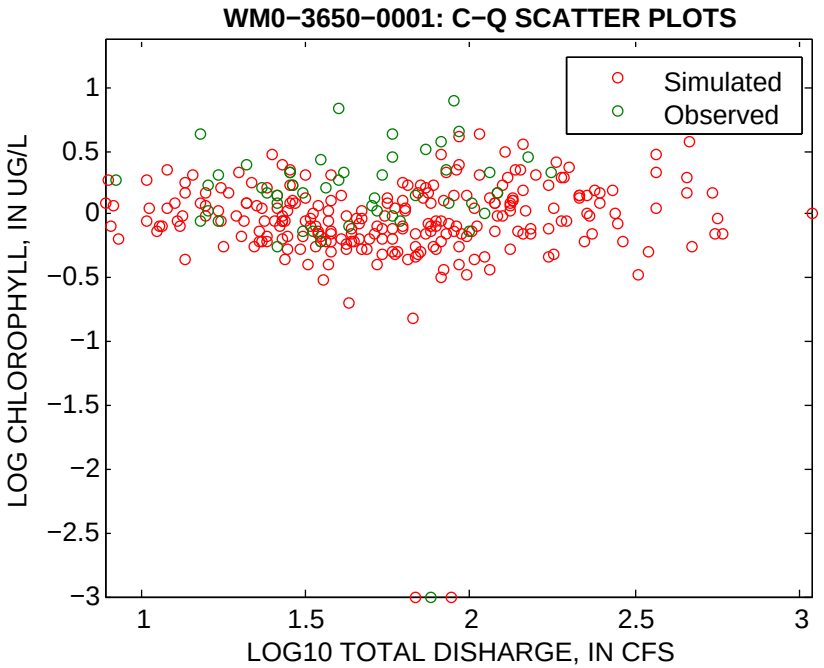
STATISTICS

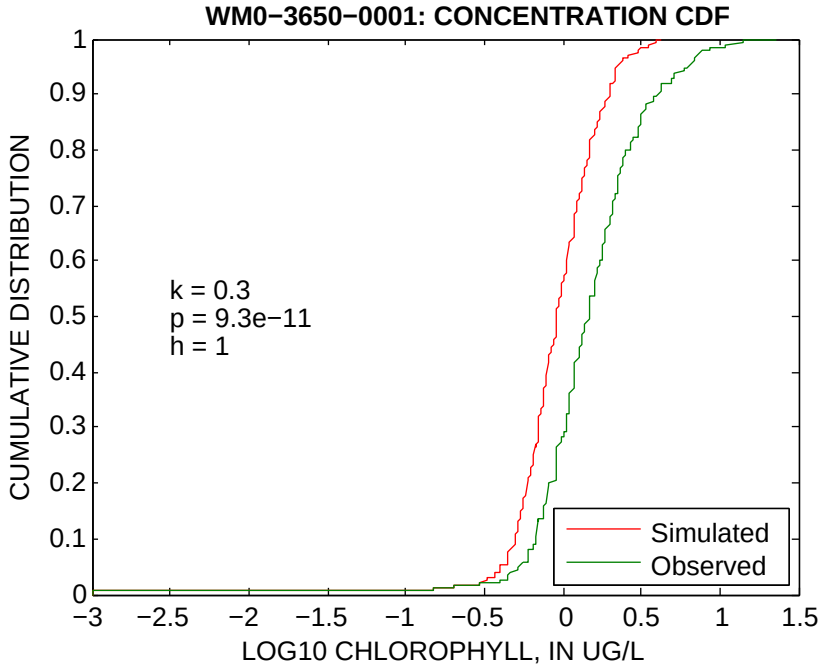
n	255	255
	observe	simulate
min	0.001	0.0018792
	-3	-2.72603
mean	2.09625	0.502214
	0.165309	-0.447515
media	1.495	0.39797
	0.174641	-0.40015
max	23.18	2.4829
	1.36511	0.394959
varian	5.43746	0.153546
	0.180414	0.187638
JB	0.001	0.001
	0.001	0.001
	ra	log
%	-76.0423	-370.715
err.va	8.27549	0.789386
rel.std.err	1.52194	4.37541
mod.eff	-0.521941	-3.37541

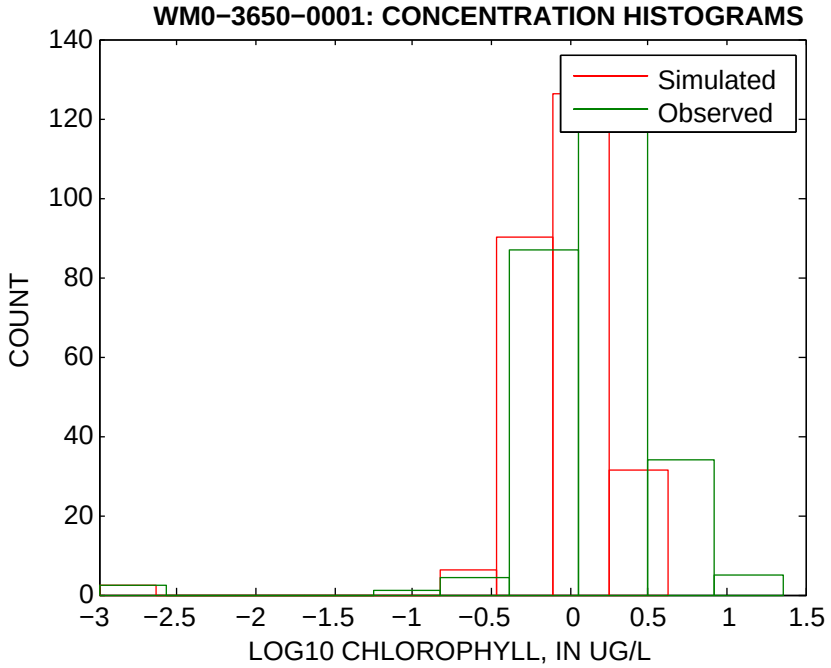
VERSION 2.1

ALL DATA
LOG10

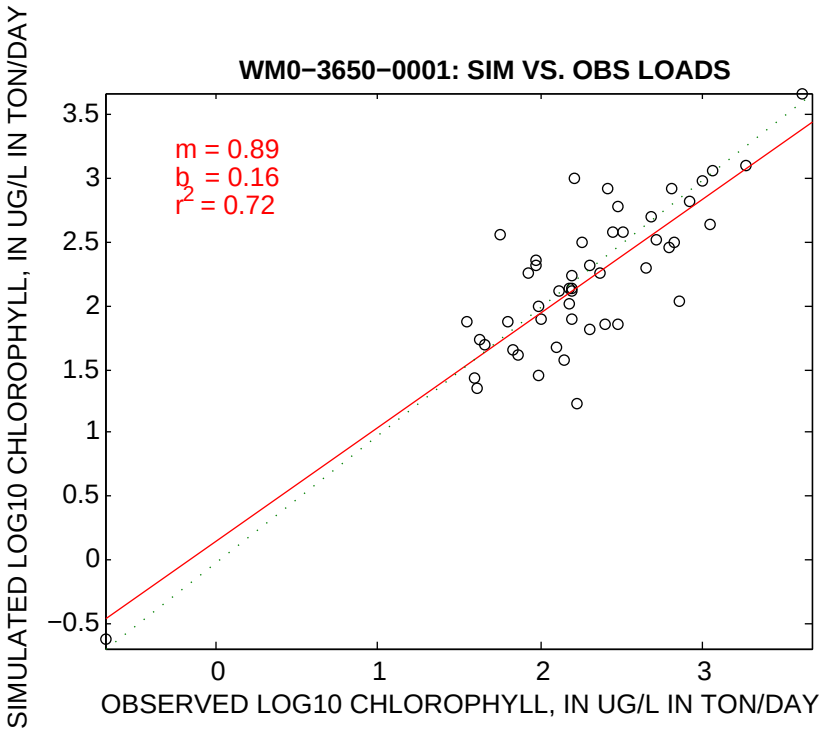


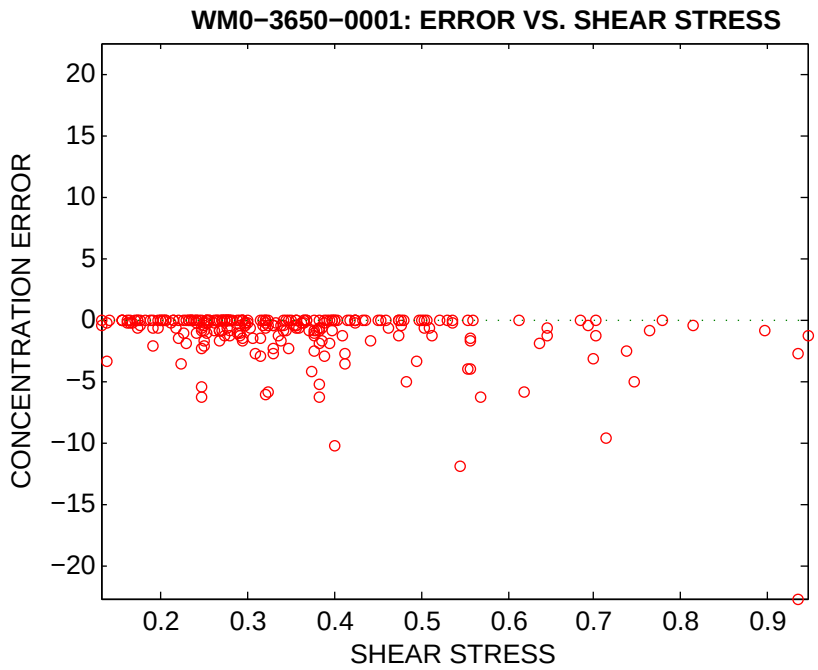


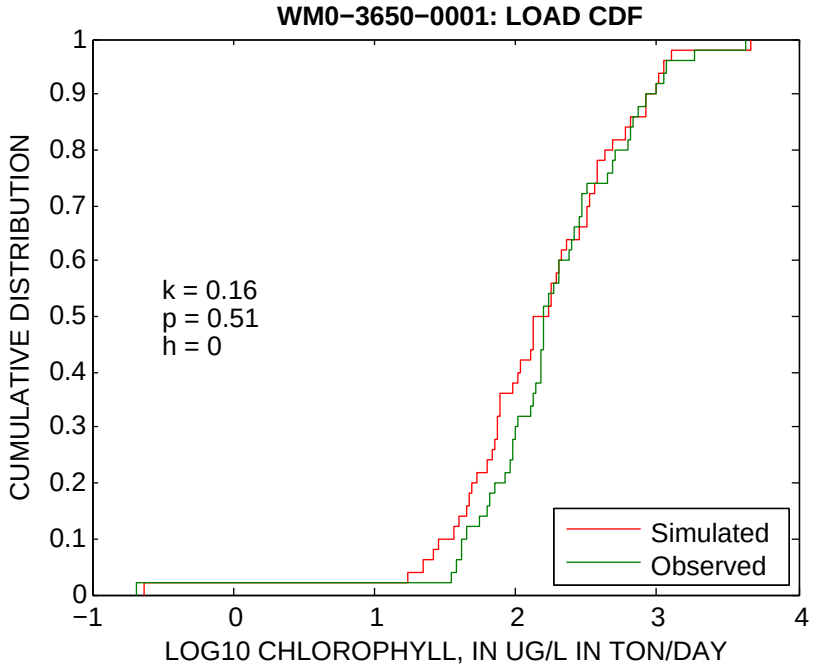


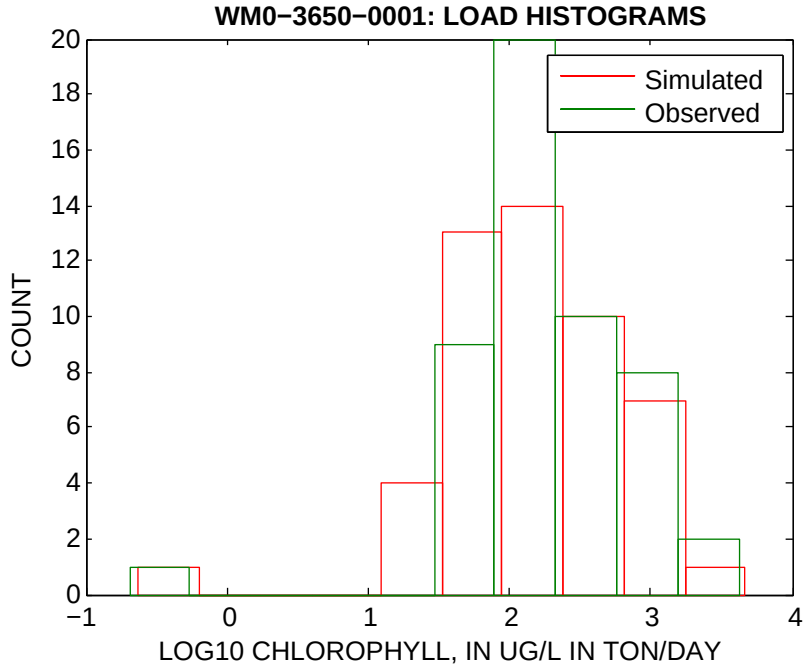


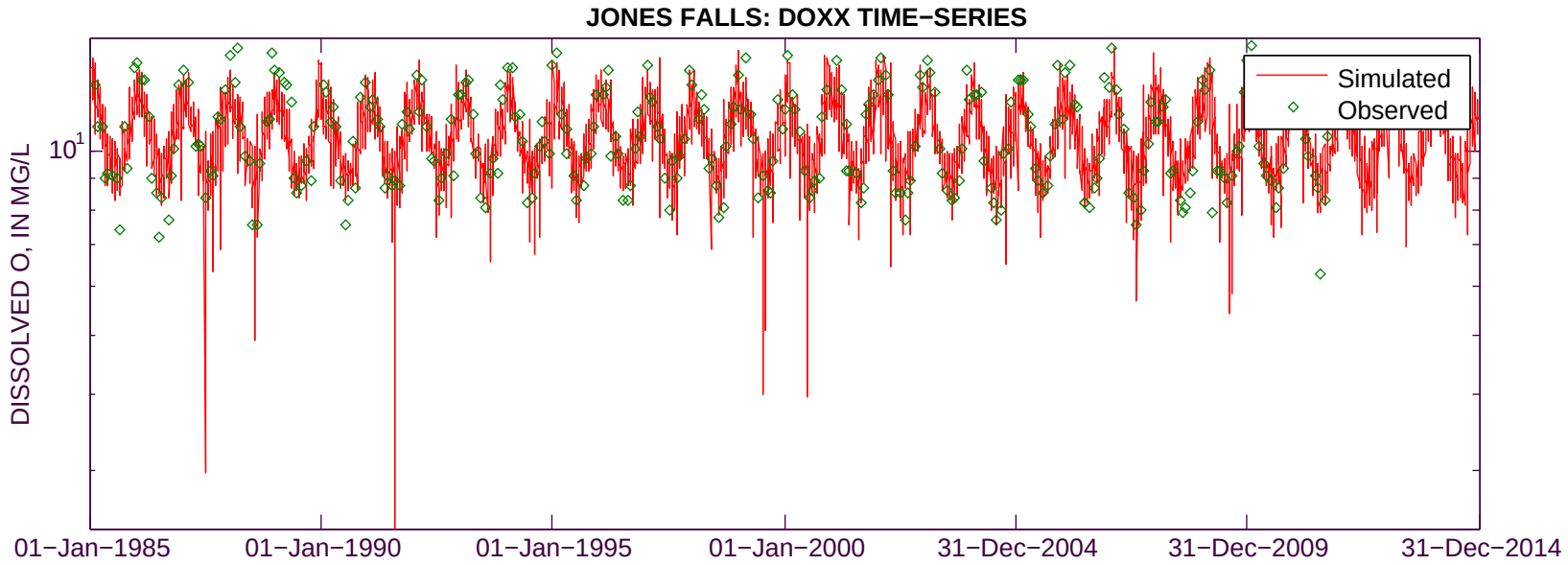
LOAD DATA
LOG10

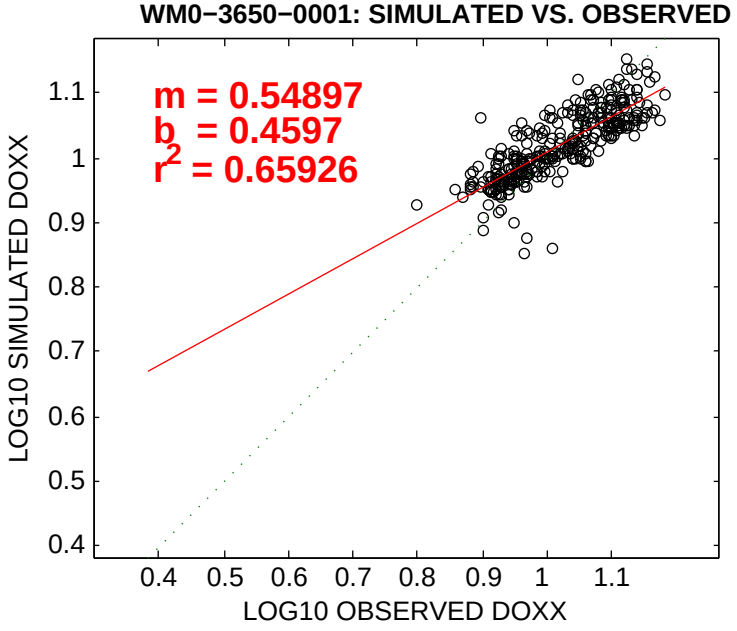


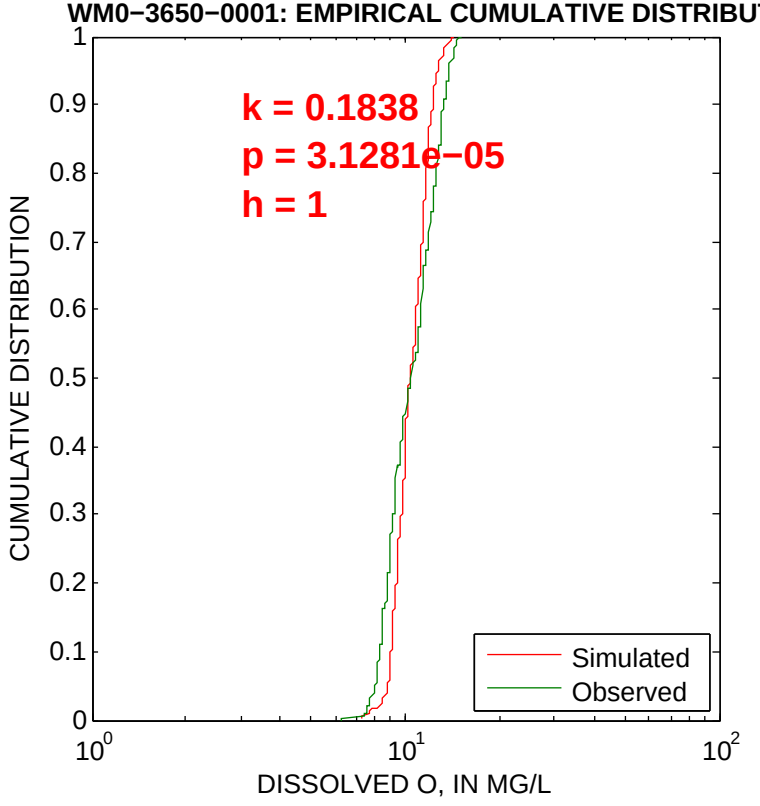












DATA SELECTION

scenario	file
P620171001WQ	DOXX.calib

plot: DOXX - dissolved oxygen

Dates: 1/1/1985 – 12/31/201

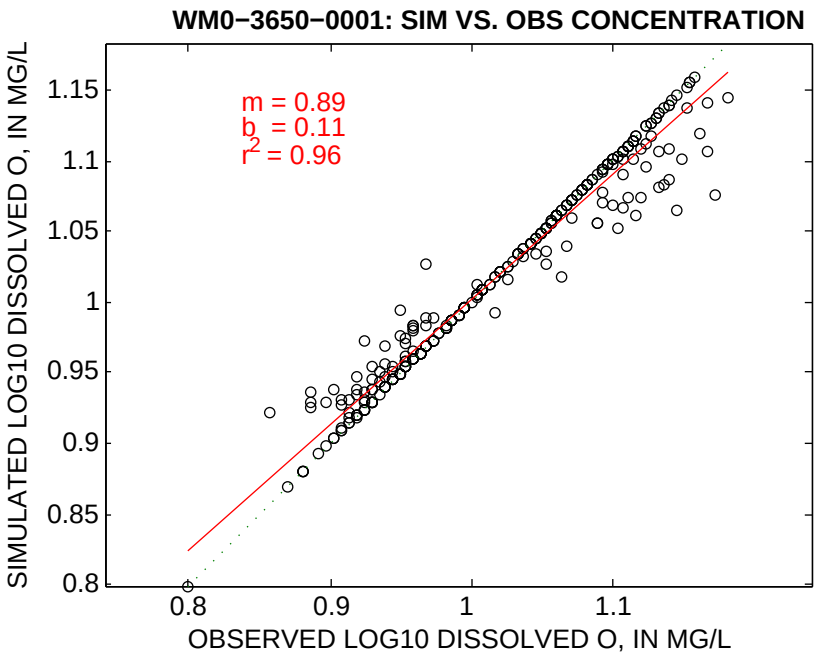
Drive	Directory	Observed
N/A	model	OBS20161101

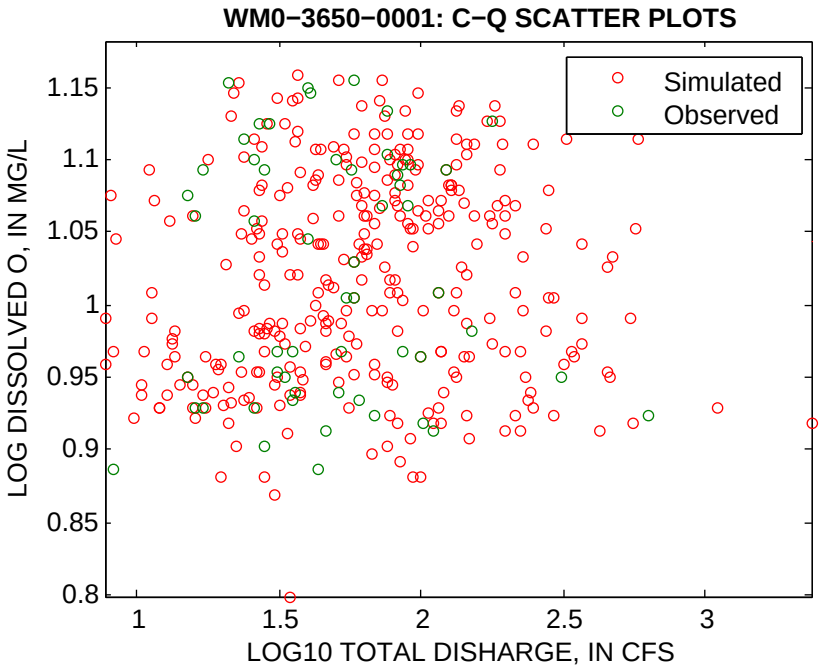
STATISTICS

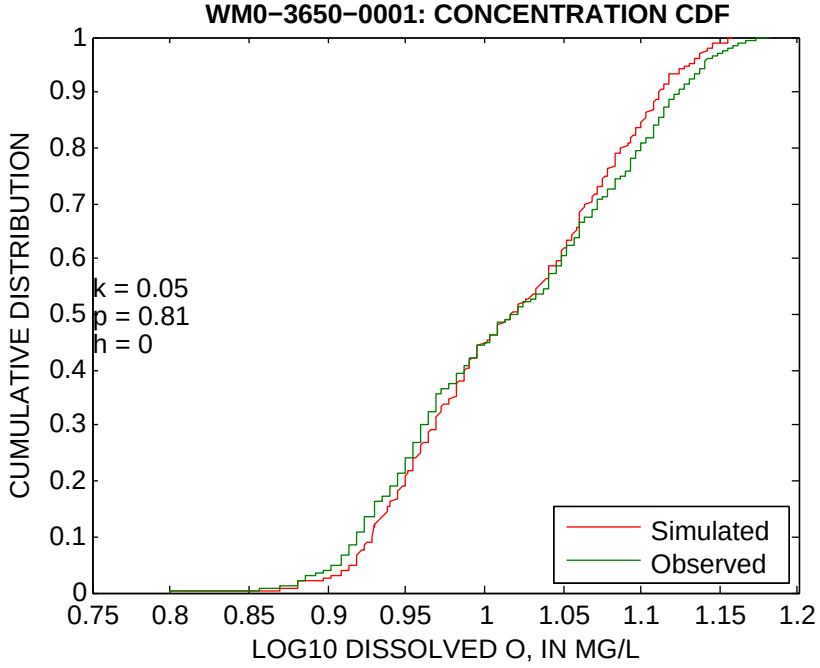
	n	observe	simulate
		321	321
min		6.3	7.0936
		0.799341	0.850867
mean		10.6294	10.5335
		1.01947	1.01936
media		10.4	10.358
		1.01703	1.01528
max		15.2	14.166
		1.18184	1.15125
varian		3.67299	1.6482
		0.00614976	0.00281124
JB		0.003002	0.087124
		0.005134	0.5
		ra	log
%		-0.902188	-0.011026
err.va		1.32843	0.00220894
rel.std.err		0.361674	0.359191
mod.eff		0.638326	0.640809

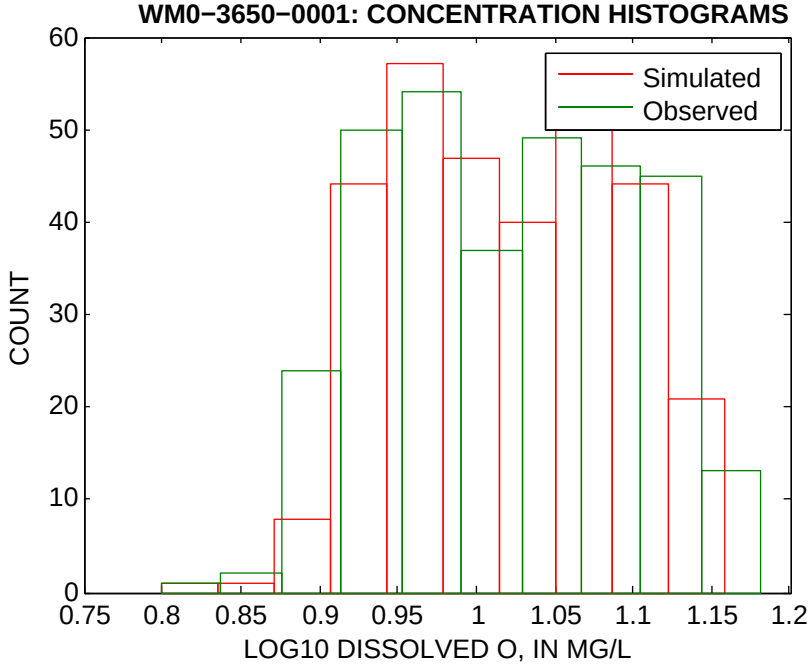
VERSION 2.1

ALL DATA
LOG10

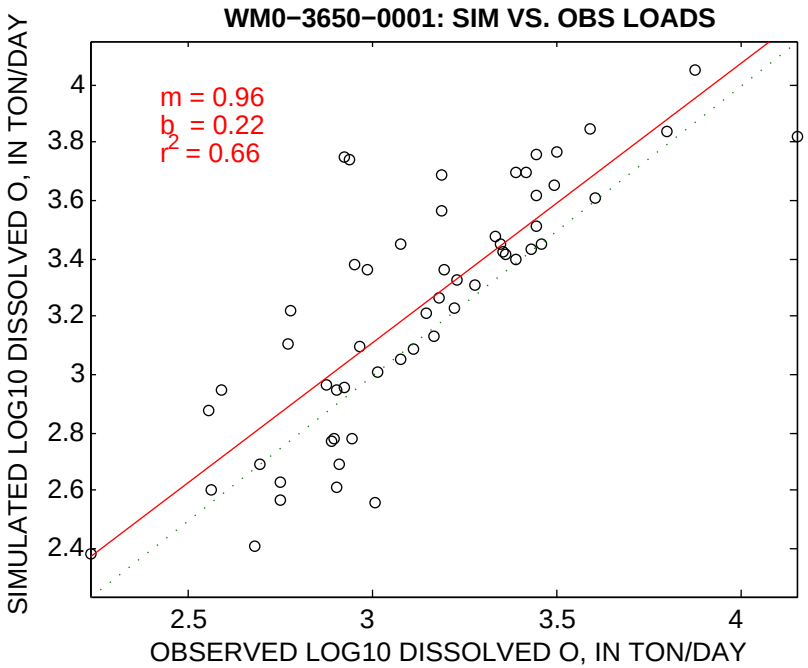


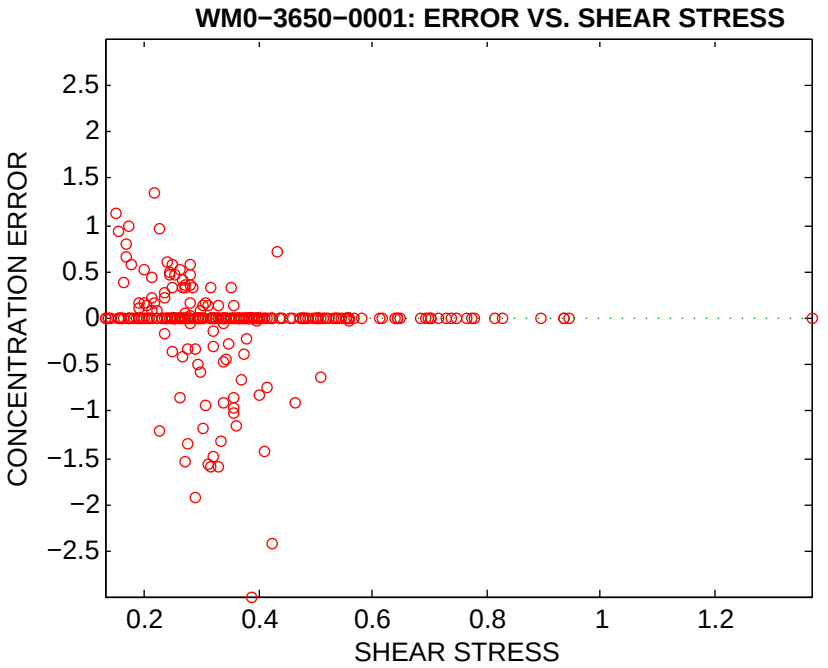


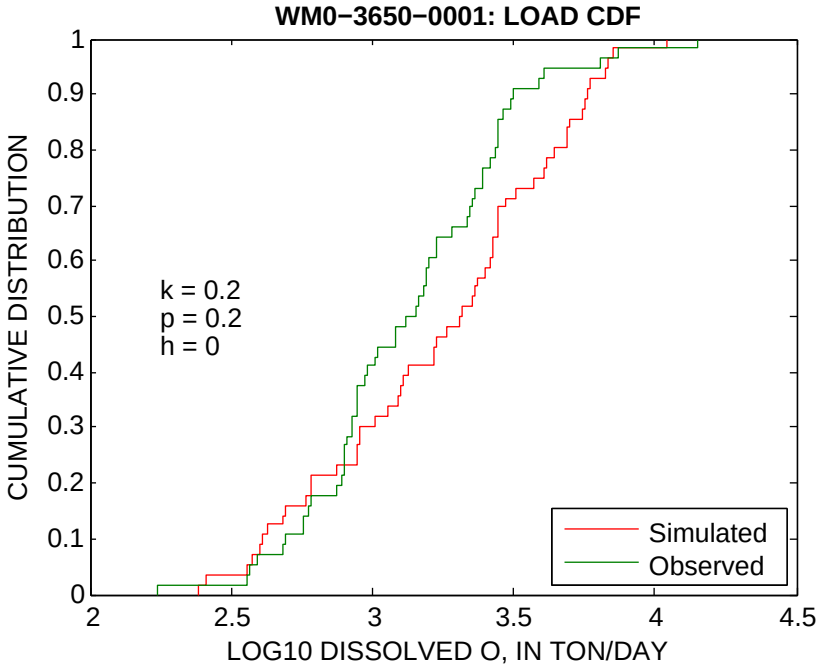


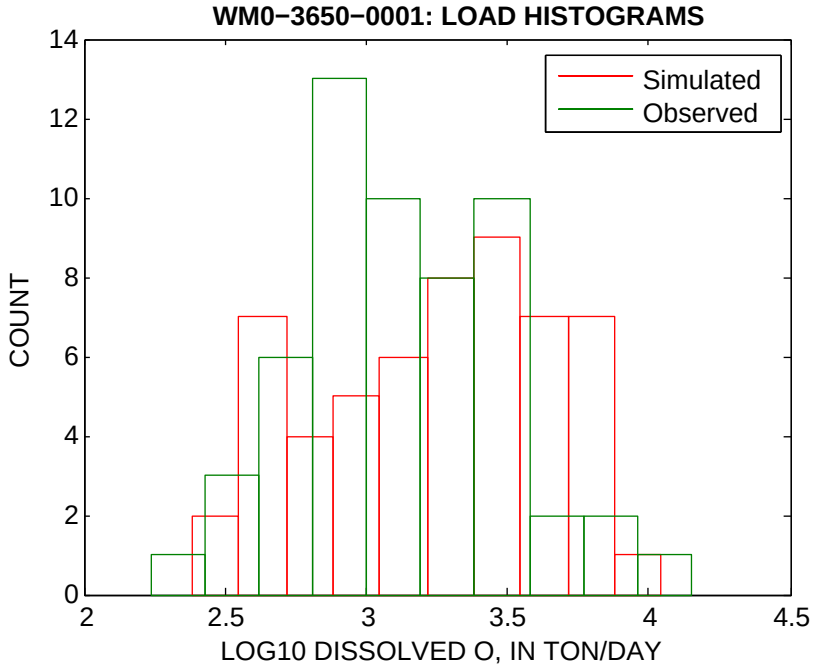


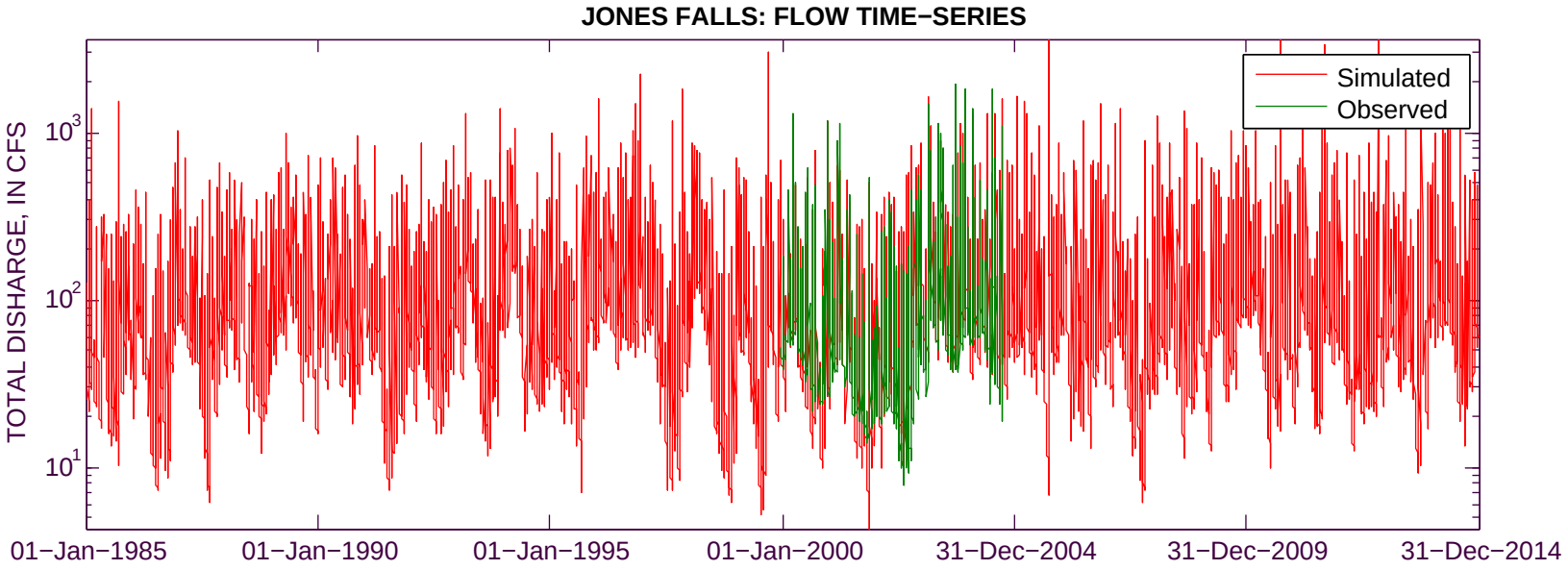
LOAD DATA
LOG10

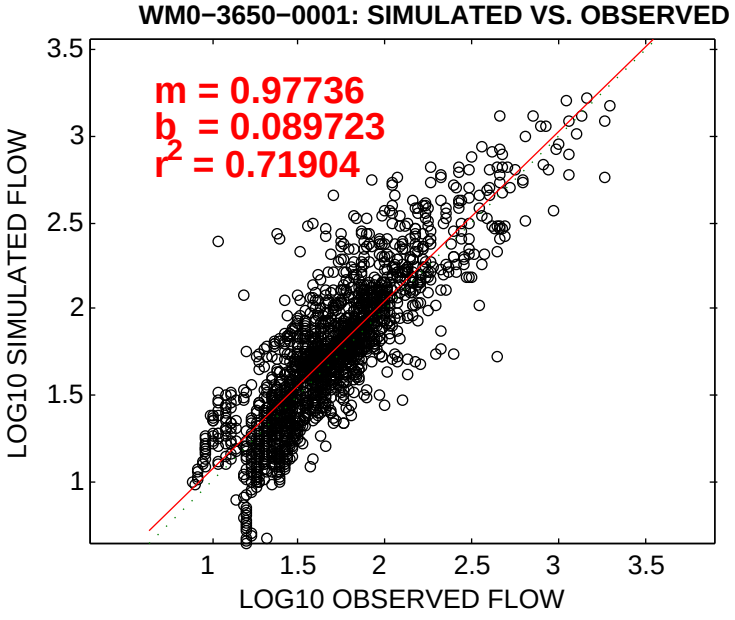


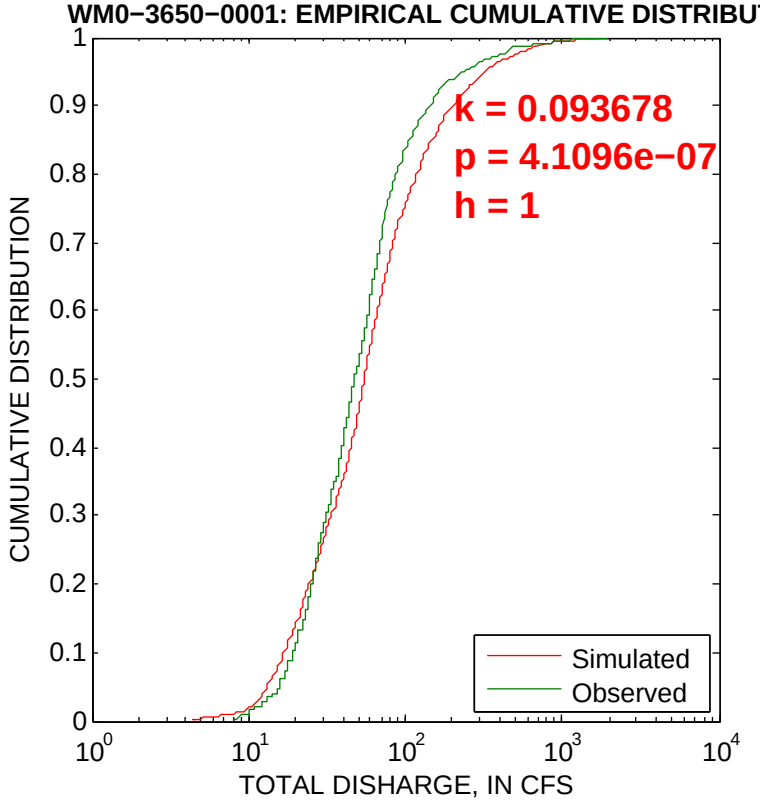












DATA SELECTION

scenario: P620171001WQ | file: FLOW.calib

plot: FLOW - total discharge

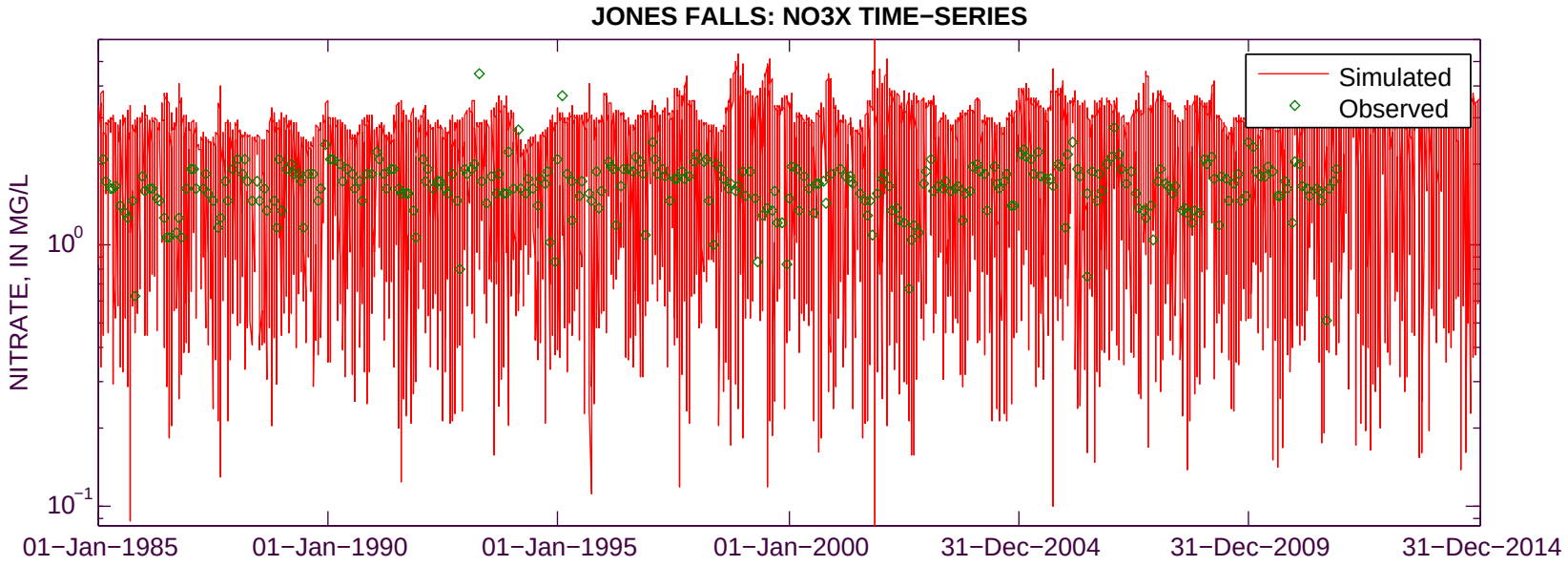
Dates: 1/1/1985 – 12/31/201

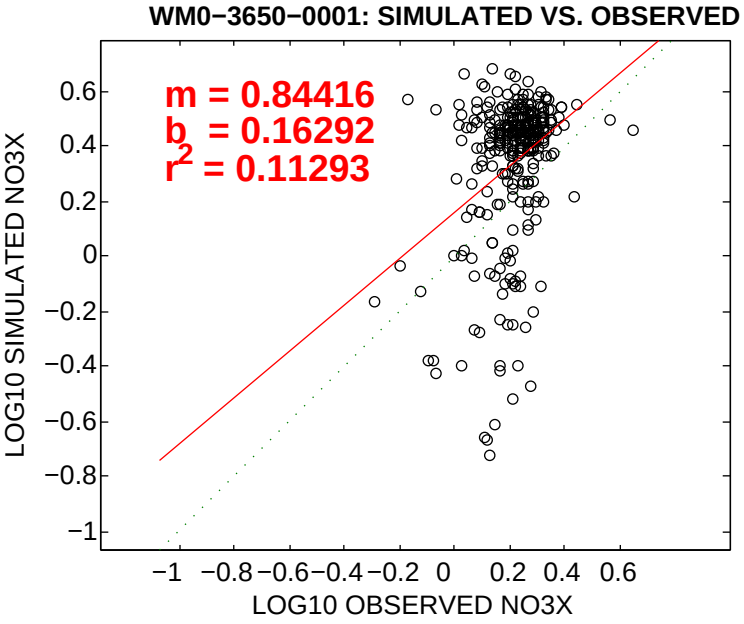
Drive: N/A | Directory: model | Observed: OBS20161101

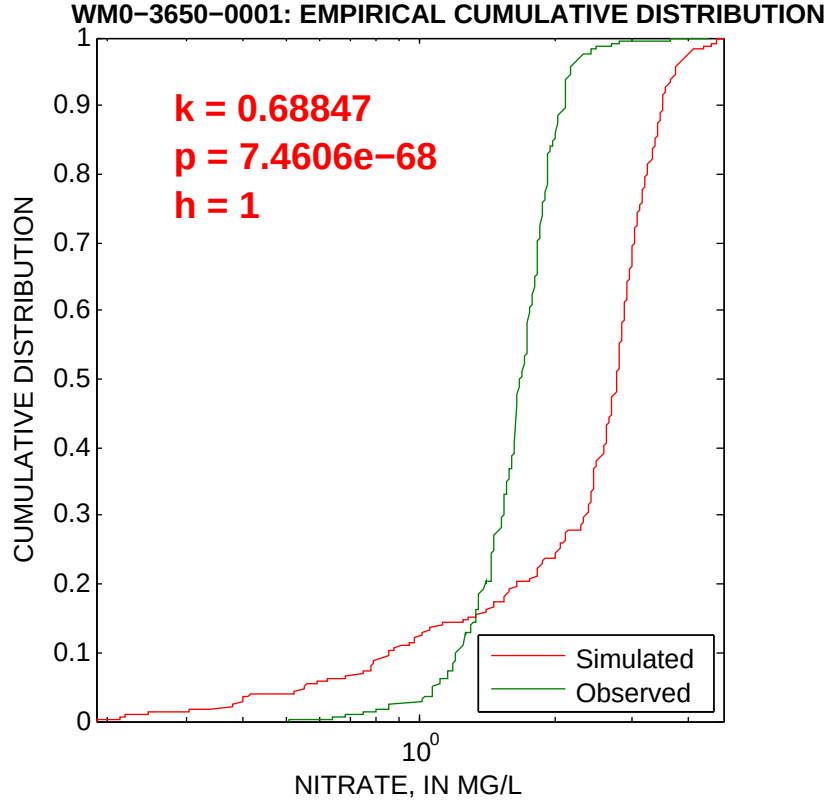
STATISTICS

		observe	simulate
n		1740	1740
min		7.8	4.3355
		0.892095	0.637039
mean		80.9911	97.5005
		1.70415	1.7553
media		47	54.9665
		1.6721	1.7401
max		1970	1657.8
		3.29447	3.21953
varian		20369.3	22473.4
		0.132917	0.176581
JB		0.001	0.001
		0.001	0.001
		ra	log
%		20.3842	3.00141
err.va		7595.38	0.0522988
rel.std.err		0.372884	0.393468
mod.eff		0.627116	0.606532

VERSION 2.1







DATA SELECTION

scenario: P620171001WQ | file: NO3X.calib

plot: NO3X - nitrate

Dates: 1/1/1985 – 12/31/201

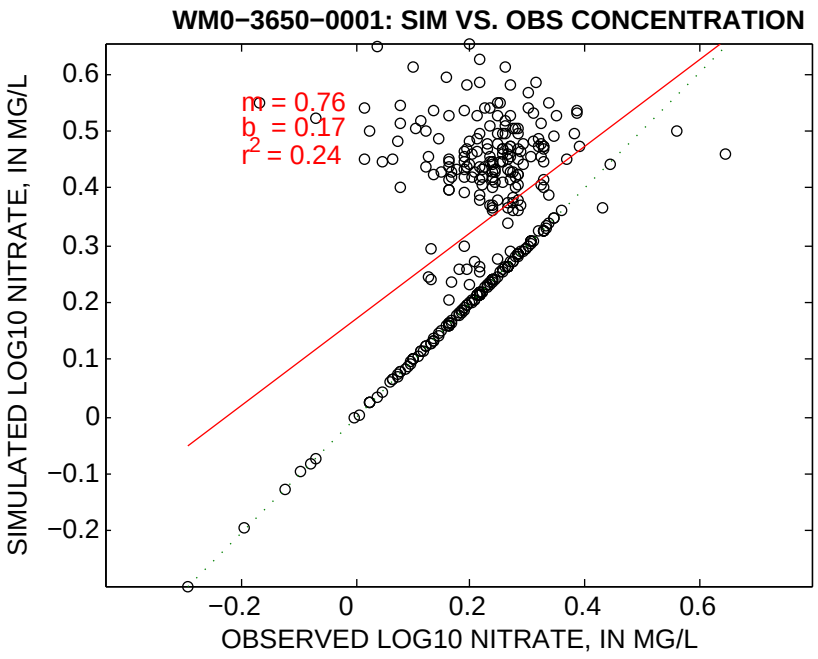
Drive: N/A | Directory: model | Observed: OBS20161101

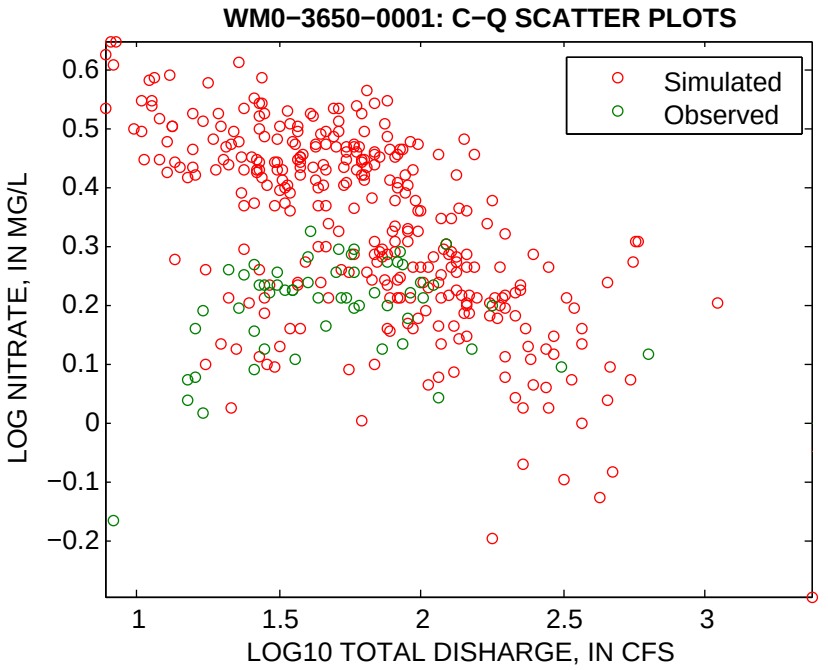
STATISTICS

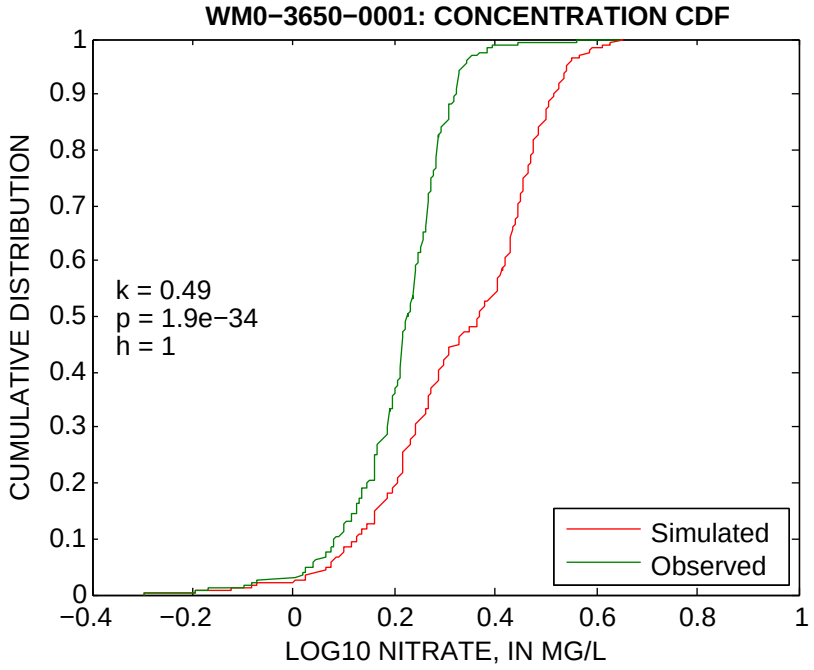
	n	observe	simulate
		321	321
min		0.508	0.1878
		-0.294136	-0.726304
mean		1.68226	2.50493
		0.214247	0.343779
media		1.69	2.7668
		0.227887	0.441978
max		4.44	4.769
		0.647383	0.678427
varian		0.15032	0.914803
		0.010697	0.0674985
JB		0.001	0.001
		0.001	0.001
		ra	log
%		48.9025	60.4589
err.va		1.53725	0.0769664
rel.std.err		10.2265	7.19511
mod.eff		-9.22648	-6.19511

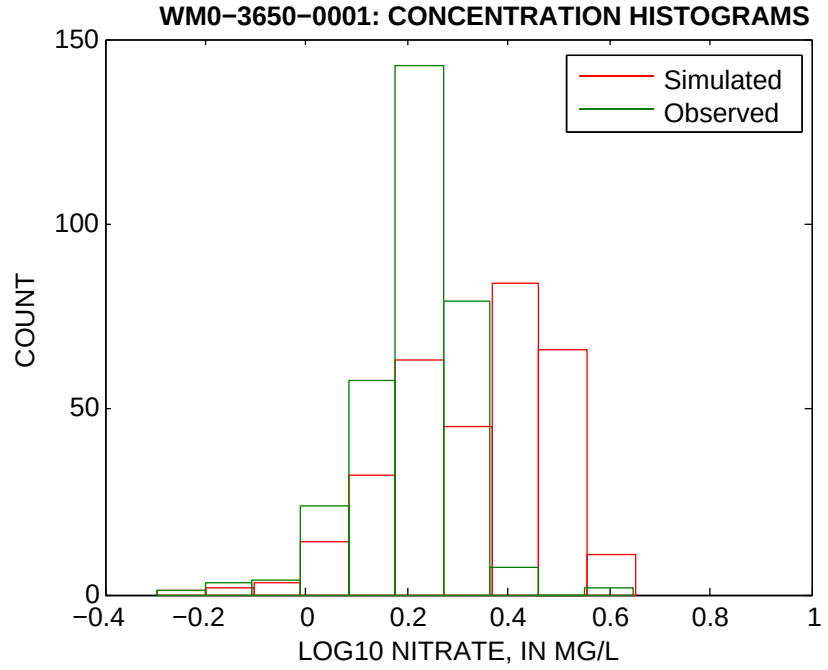
VERSION 2.1

ALL DATA
LOG10

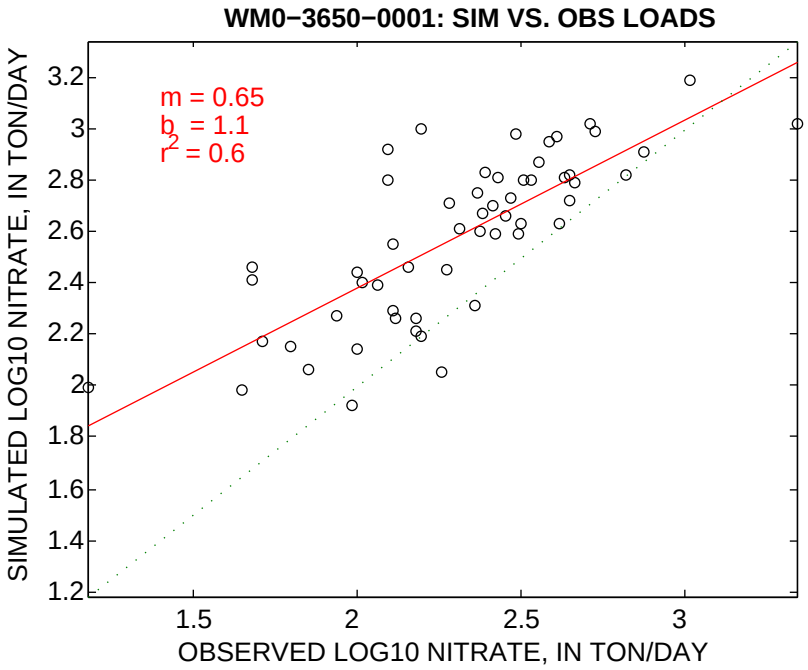


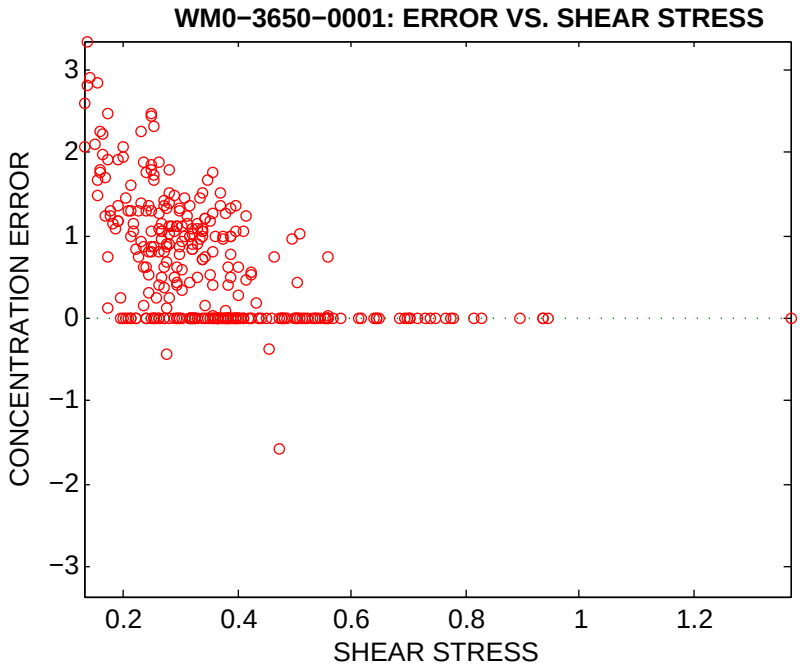


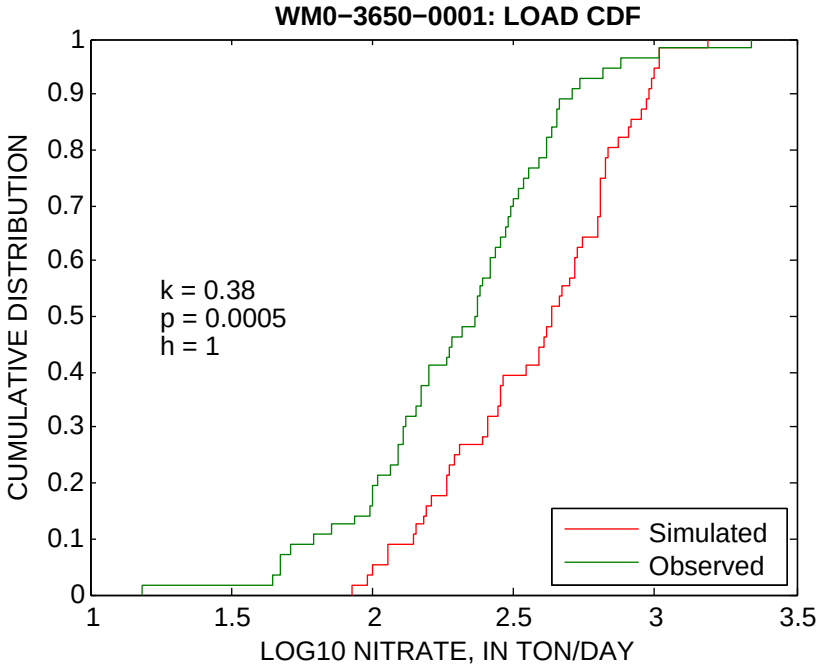


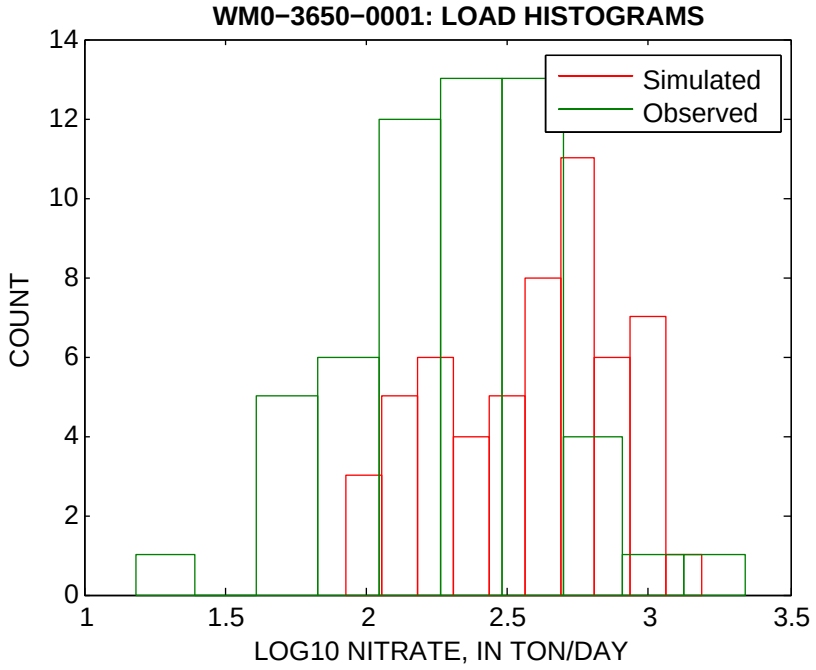


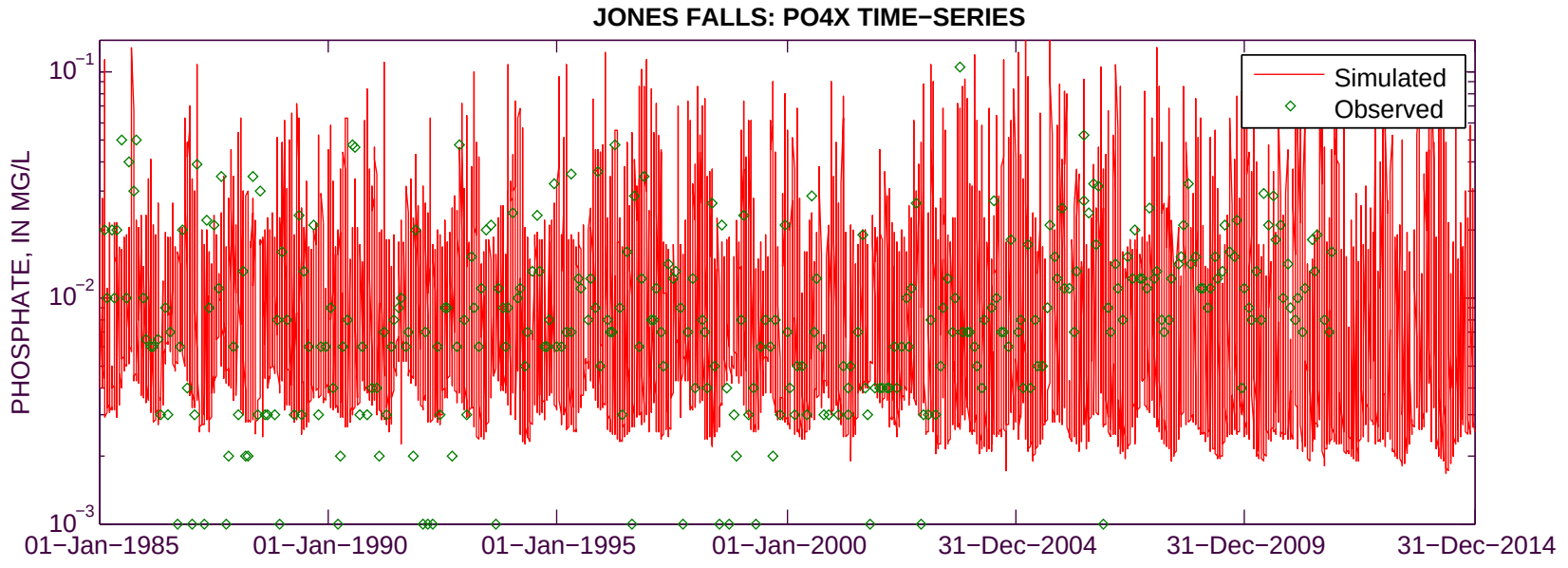
LOAD DATA
LOG10

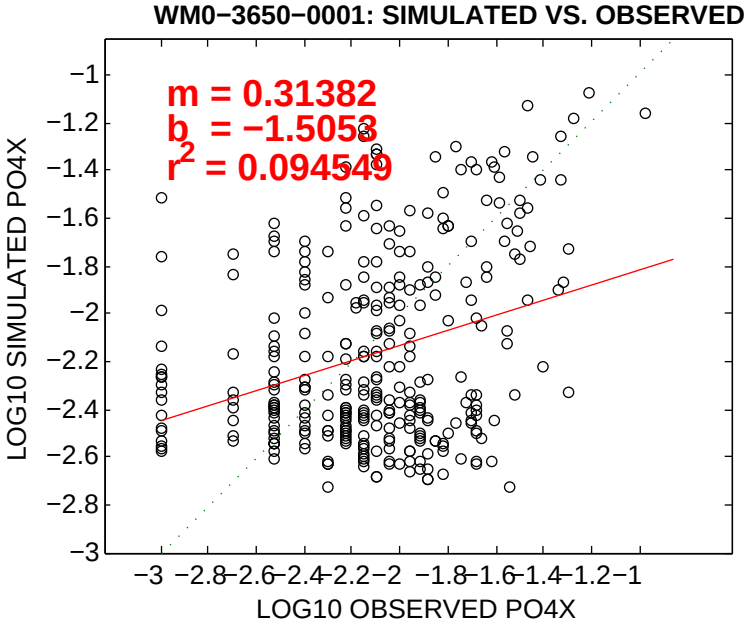


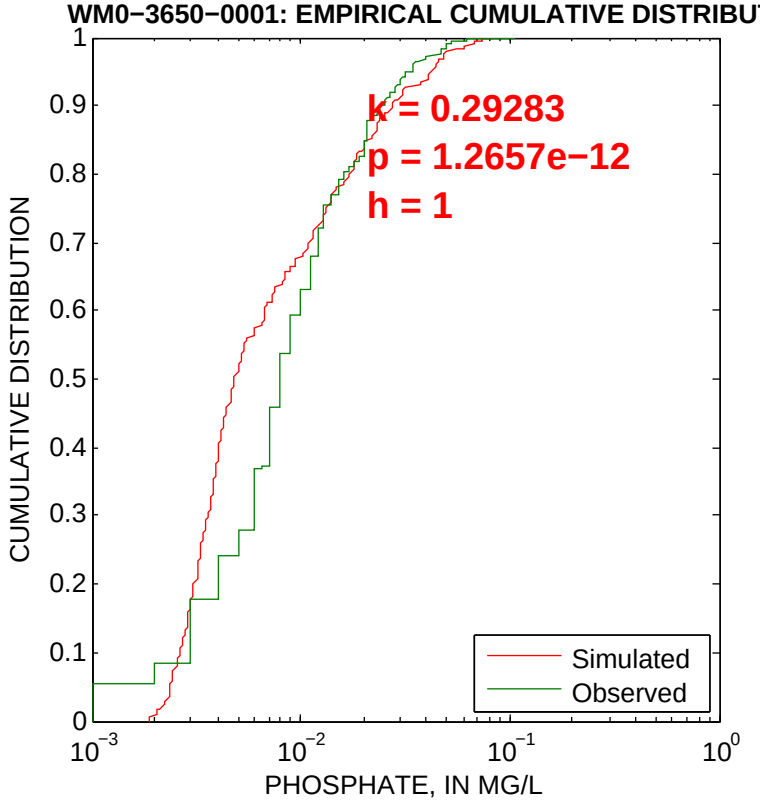












DATA SELECTION

scenario: P620171001WQ | file: PO4X.calib

plot: PO4X - phosphate

Dates: 1/1/1985 – 12/31/201

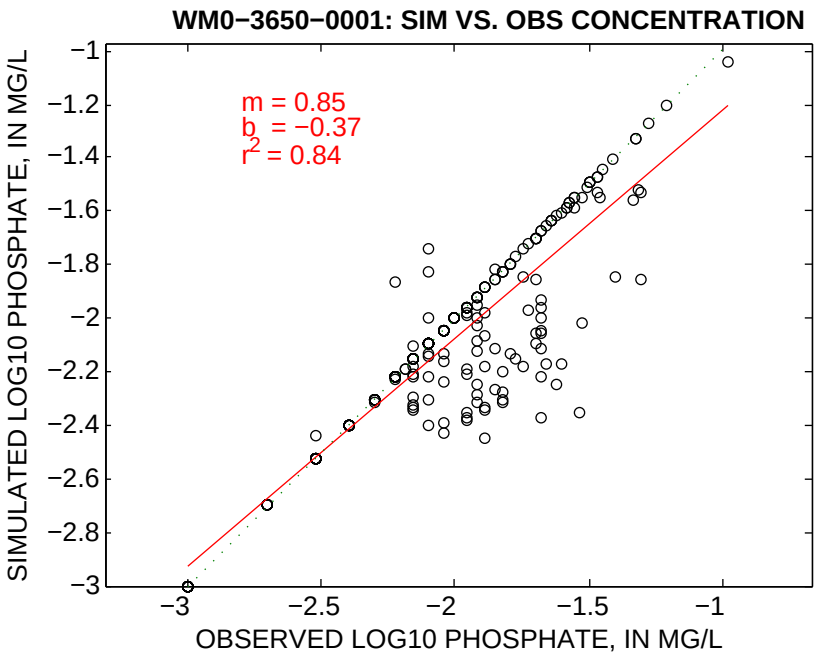
Drive: N/A | Directory: model | Observed: OBS20161101

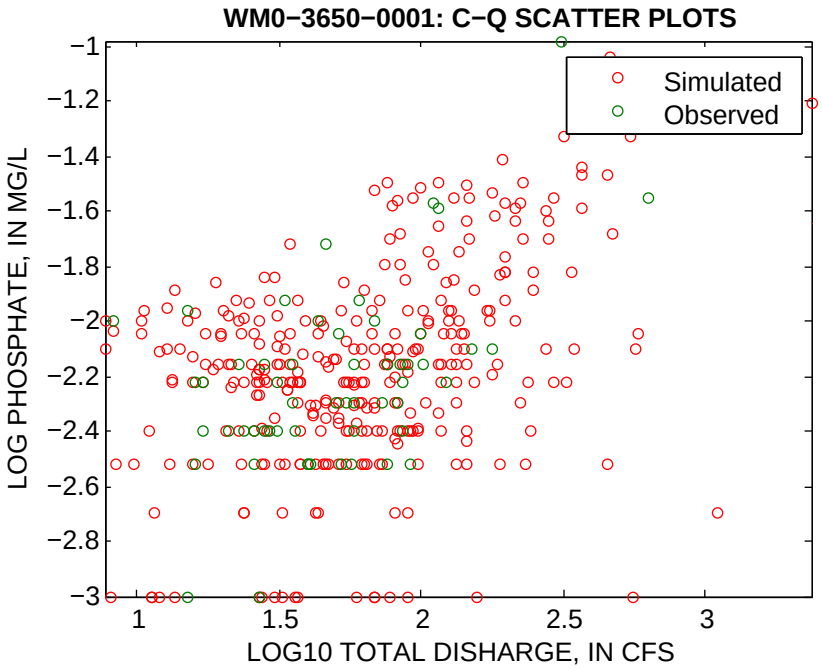
STATISTICS

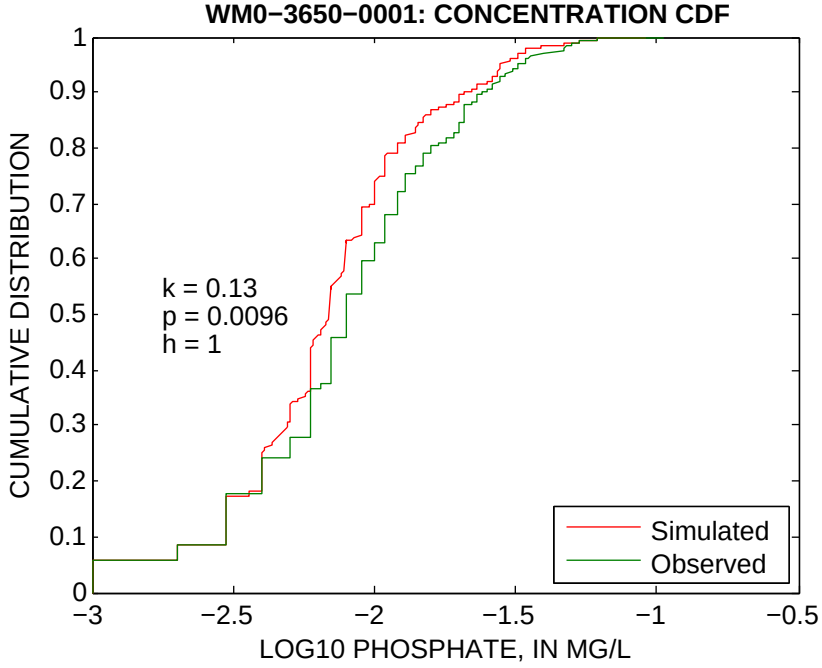
n	321	321
	observe	simulate
min	0.001 -3	0.0018701 -2.72814
mean	0.011486 -2.10251	0.0110754 -2.1651
media	0.008 -2.09691	0.0048155 -2.31736
max	0.105 -0.978811	0.083181 -1.07998
varian	0.00012933 0.150761	0.00017773 0.157038
JB	0.001 0.136444	0.001 0.001
	ra	log
%	-3.575	2.97672
err.va	0.00015632	0.217103
rel.std.err	1.20865	1.44005
mod.eff	-0.20865	-0.440048

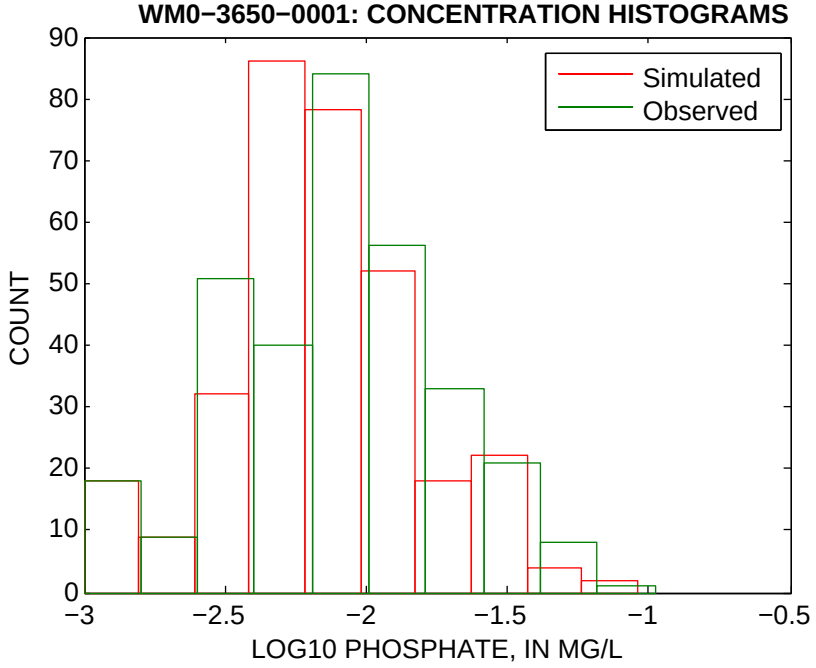
VERSION 2.1

ALL DATA
LOG10

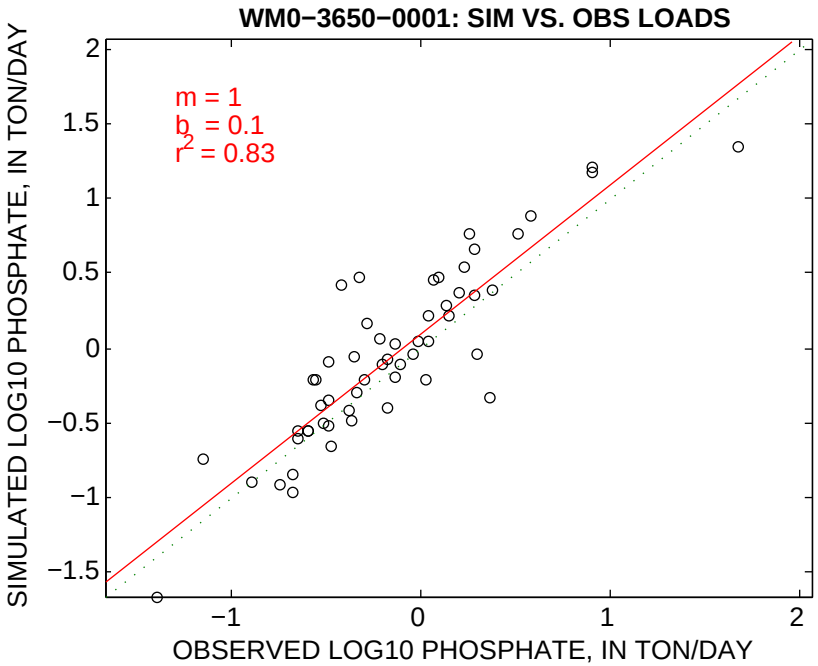


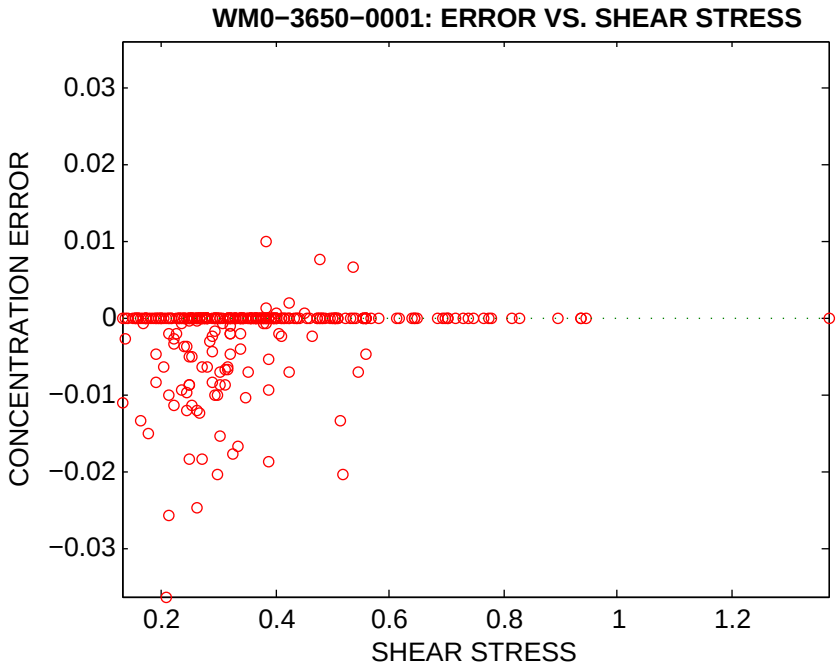


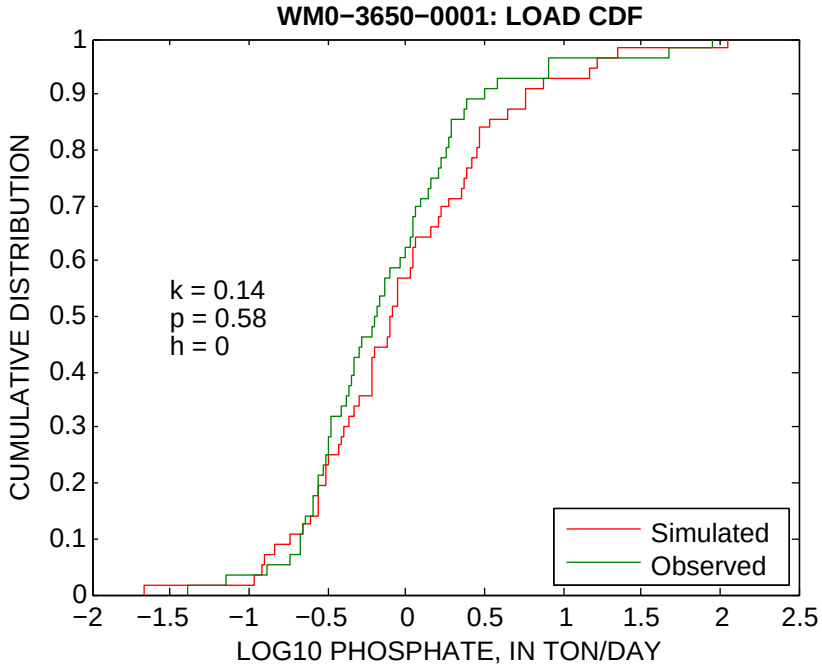


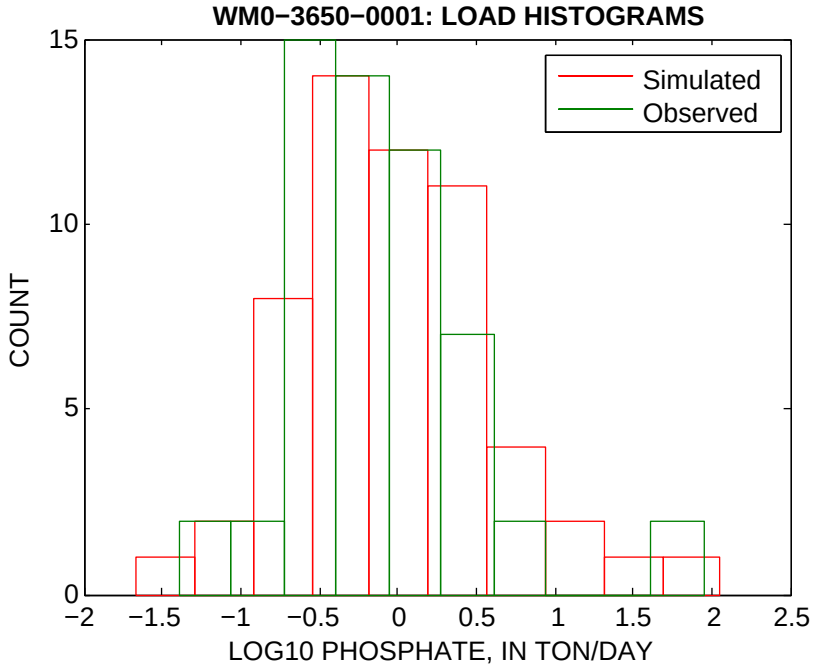


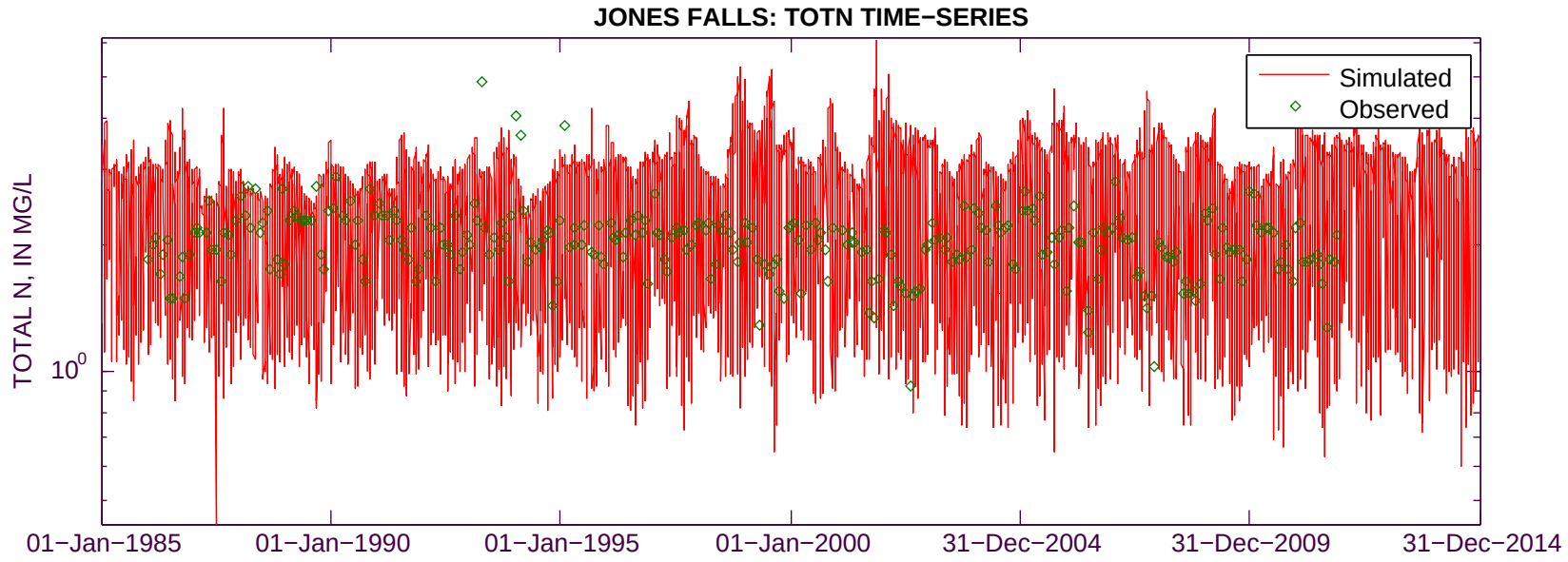
LOAD DATA
LOG10

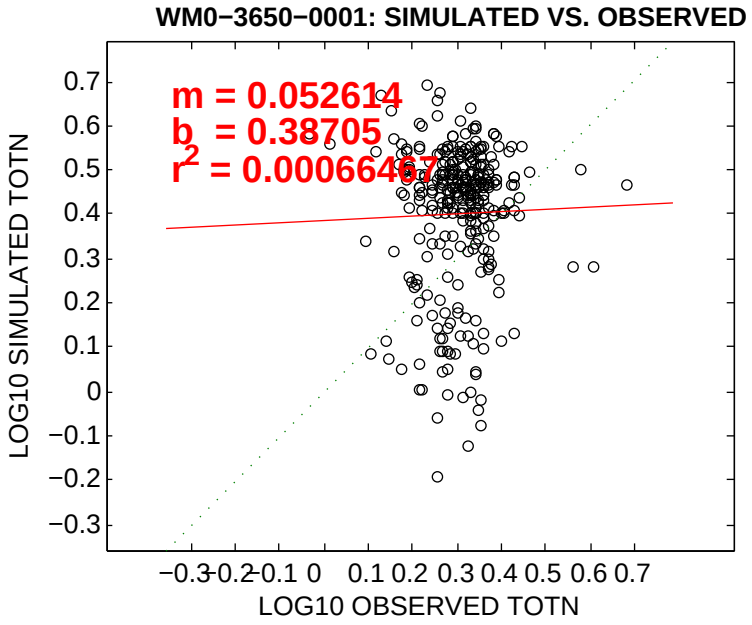


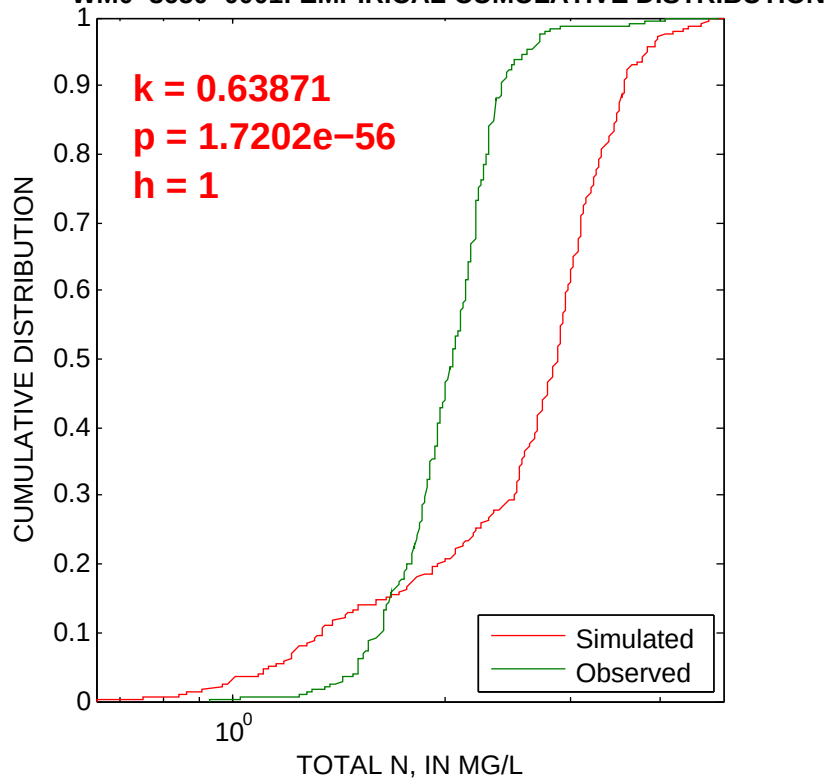












DATA SELECTION

scenario	file
P620171001WQ	TOTN.calib

plot: TOTN - total nitrogen

Dates: 1/1/1985 – 12/31/201

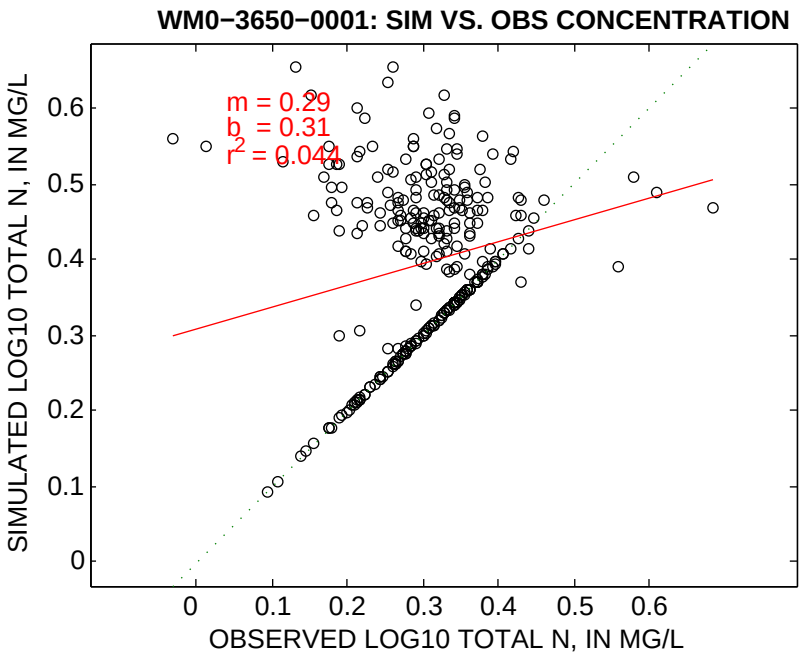
Drive	Directory	Observed
N/A	model	OBS20161101

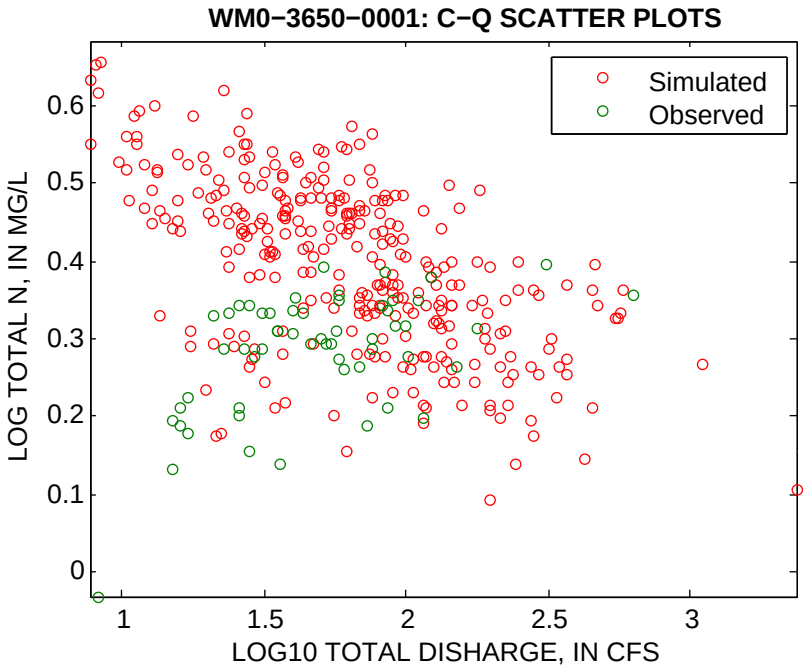
STATISTICS

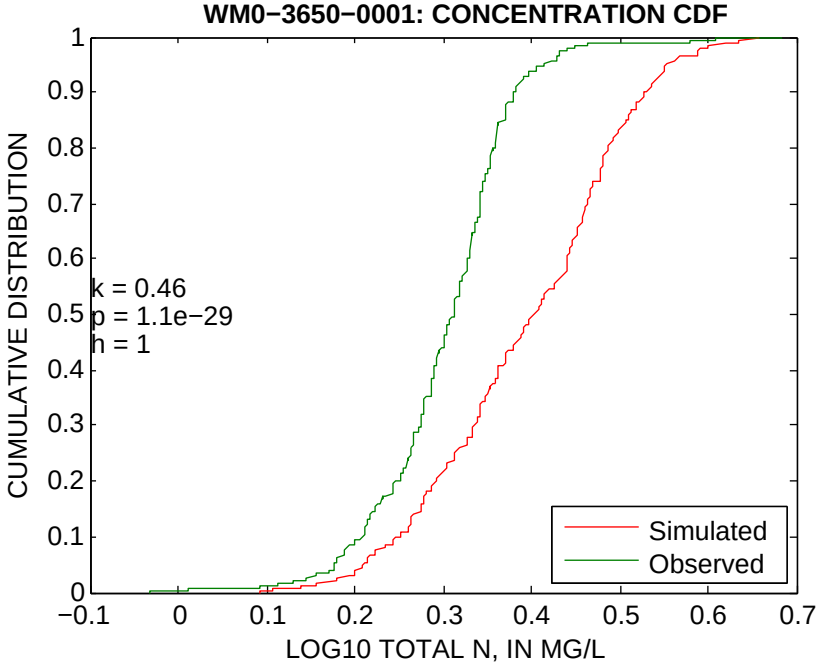
	n	310	310
		observe	simulate
min		0.93	0.64455
		-0.0315171	-0.190743
mean		2.04763	2.68482
		0.303918	0.403036
media		2.05	2.8687
		0.311754	0.457685
max		4.84	4.8976
		0.684845	0.689983
varian		0.155432	0.668383
		0.00629843	0.0262321
JB		0.001	0.015241
		0.001	0.001
		ra	log
% err.va		31.1186	32.6136
		1.23639	0.041724
rel.std.err		7.95451	6.62451
mod.eff		-6.95451	-5.62451

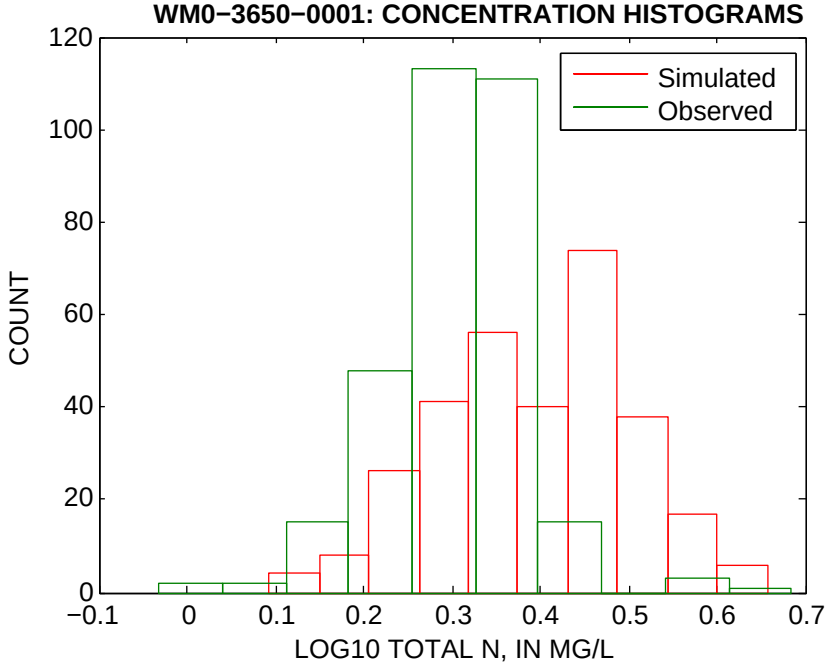
VERSION 2.1

ALL DATA
LOG10

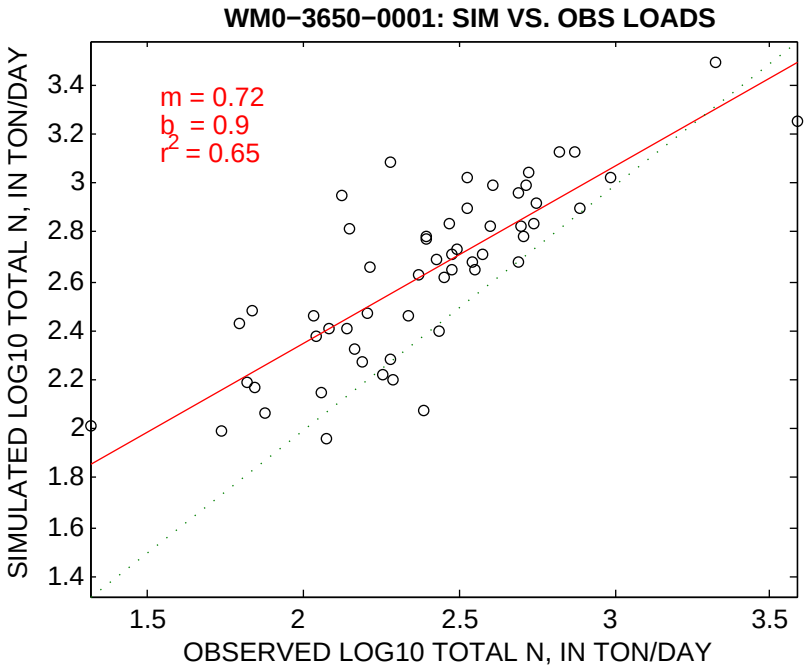


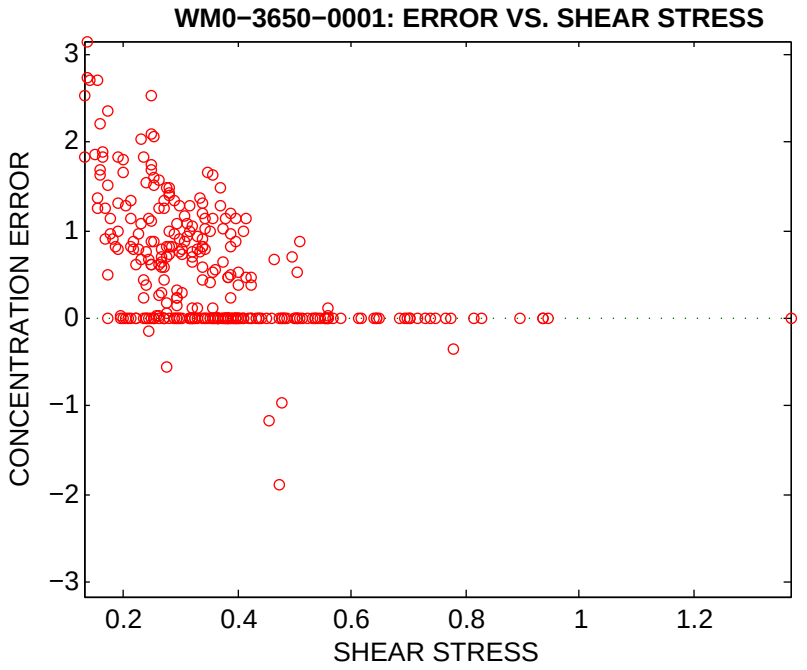


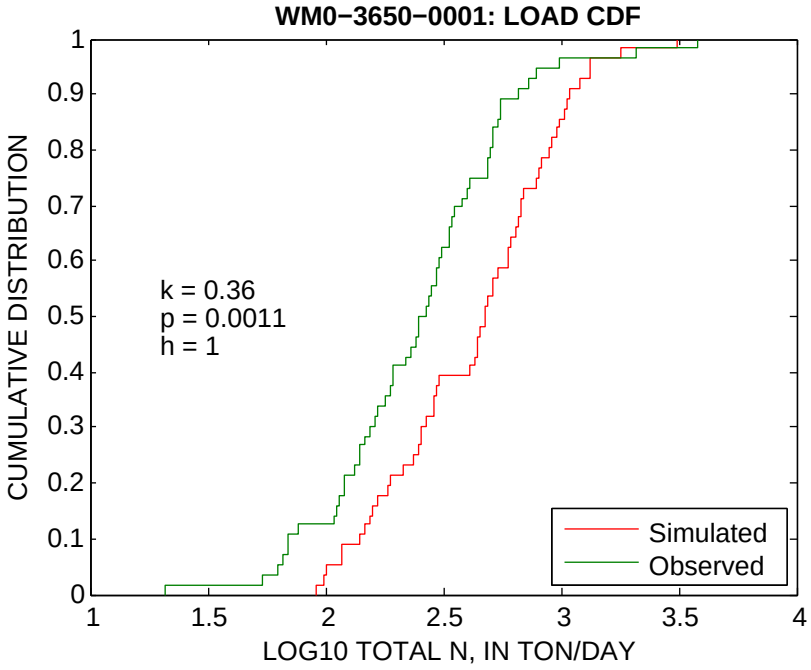


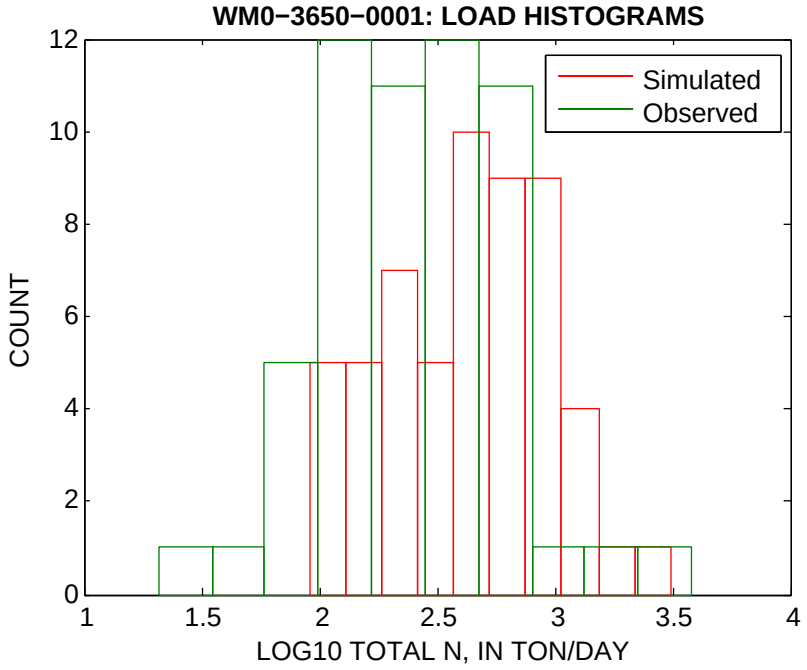


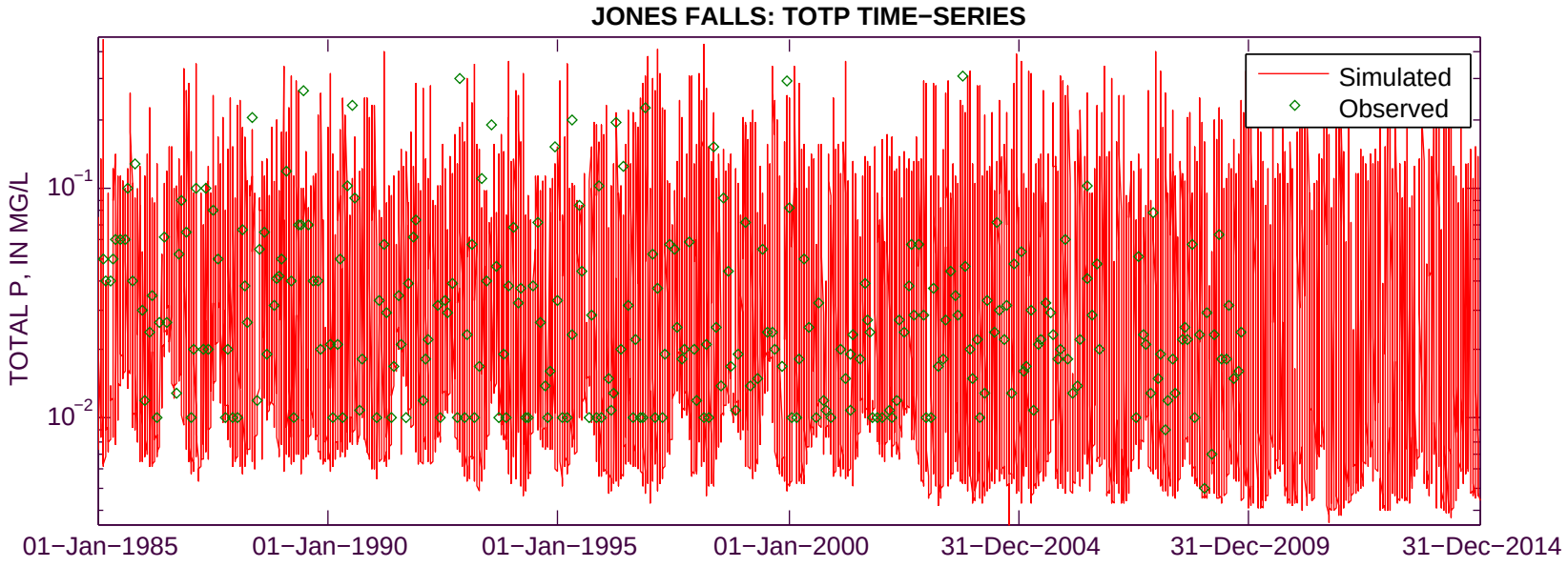
LOAD DATA
LOG10

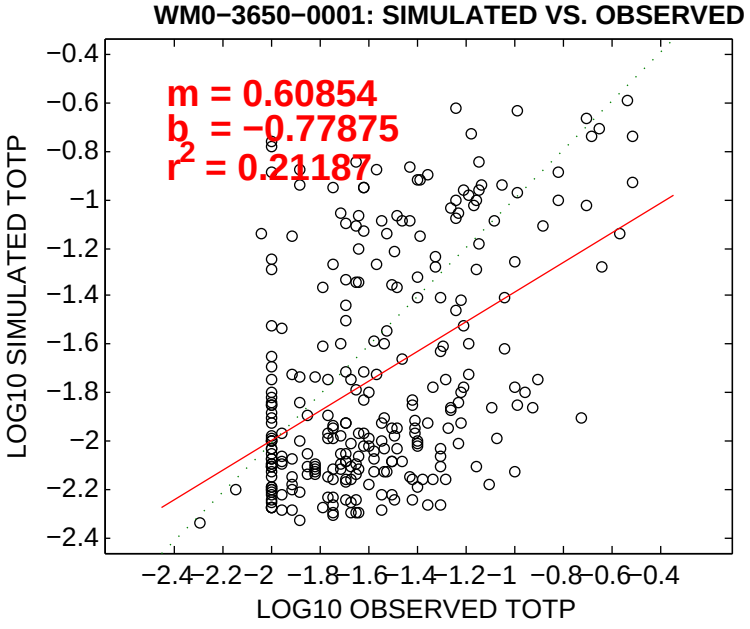


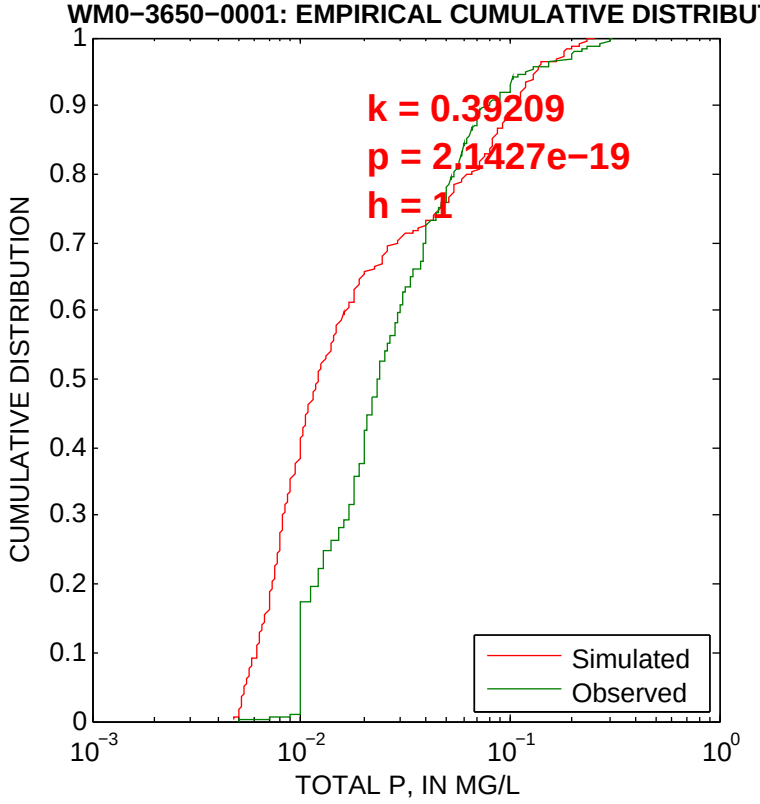












DATA SELECTION

scenario	file
P620171001WQ	TOTP.calib

plot: TOTP - total phosphorus

Dates: 1/1/1985 – 12/31/201

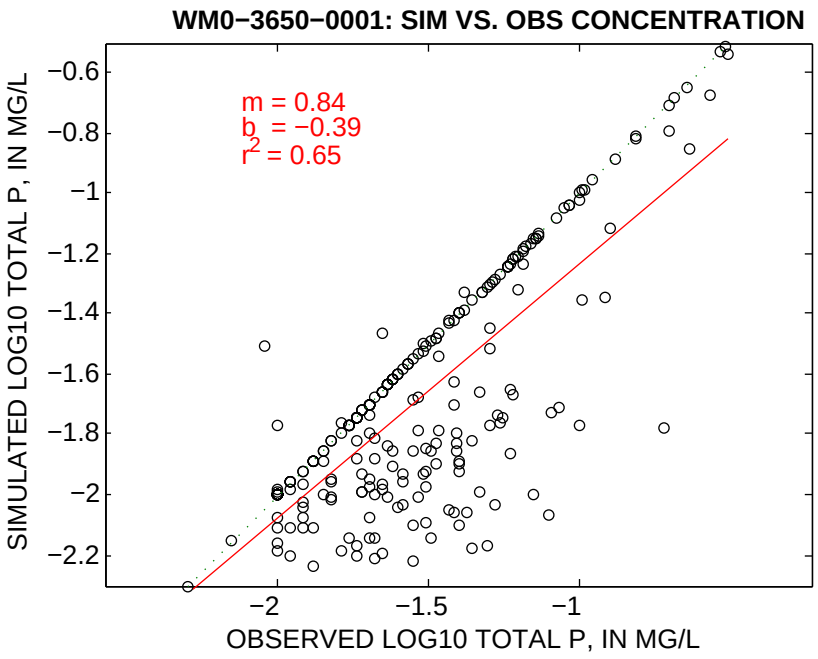
Drive	Directory	Observed
N/A	model	OBS20161101

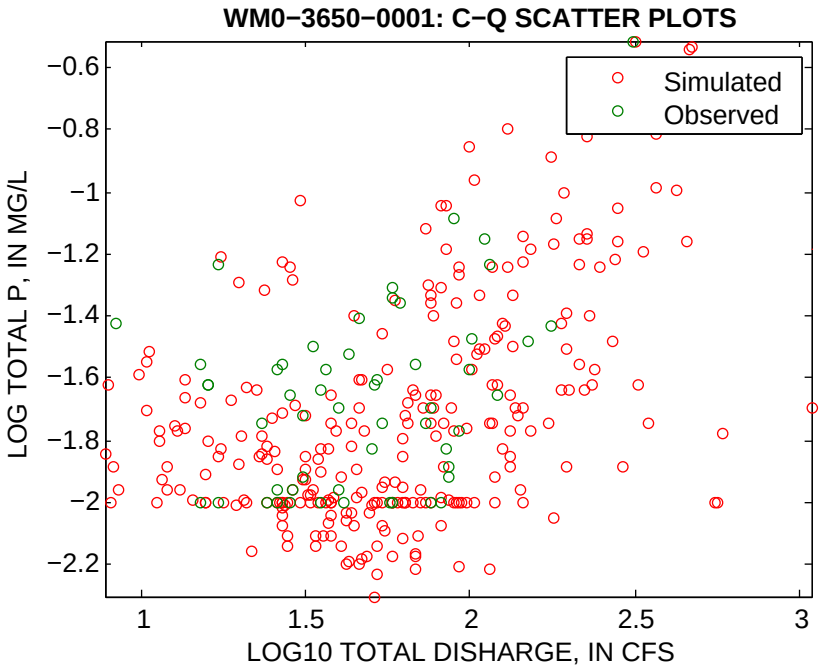
STATISTICS

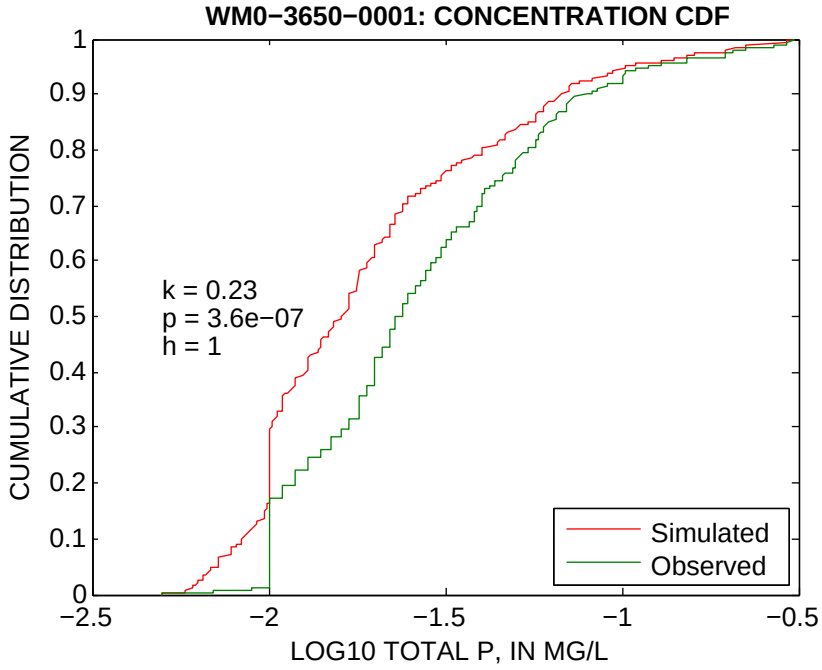
	n	278	278
		observe	simulate
min		0.005	0.0046193
		-2.30103	-2.33542
mean		0.0399892	0.0358105
		-1.57005	-1.73419
media		0.0235	0.012032
		-1.62903	-1.91966
max		0.308	0.25363
		-0.511449	-0.595799
varian		0.00227989	0.00226344
		0.126985	0.221951
JB		0.001	0.001
		0.001293	0.001
		ra	log
%		-10.4496	10.4544
err.va		0.00225314	0.221424
rel.std.err		0.988267	1.7437
mod.eff		0.0117332	-0.743703

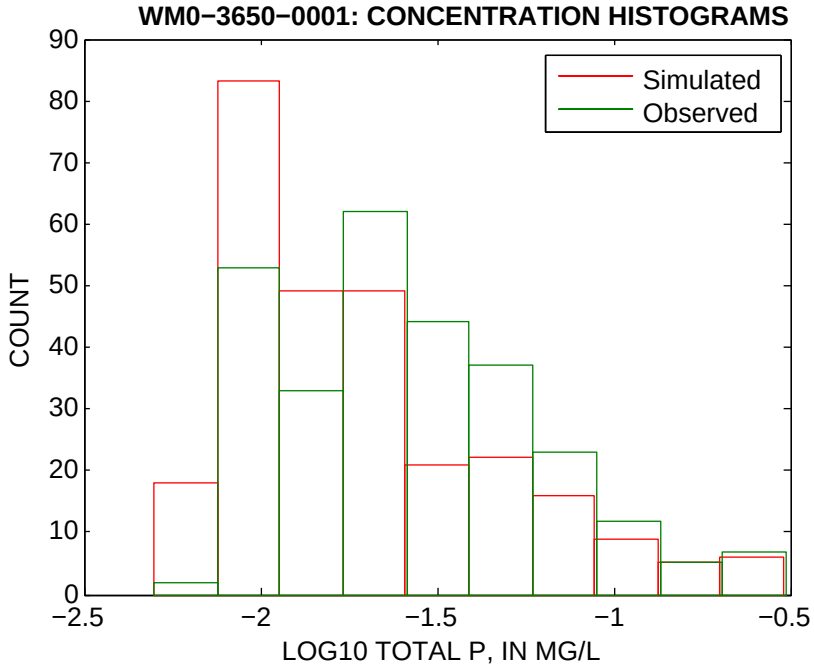
VERSION 2.1

ALL DATA
LOG10

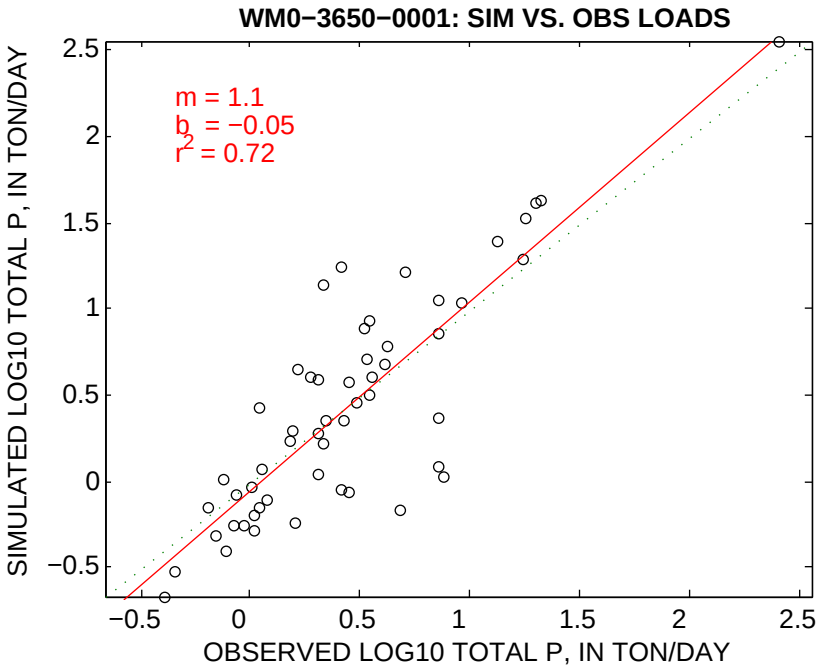


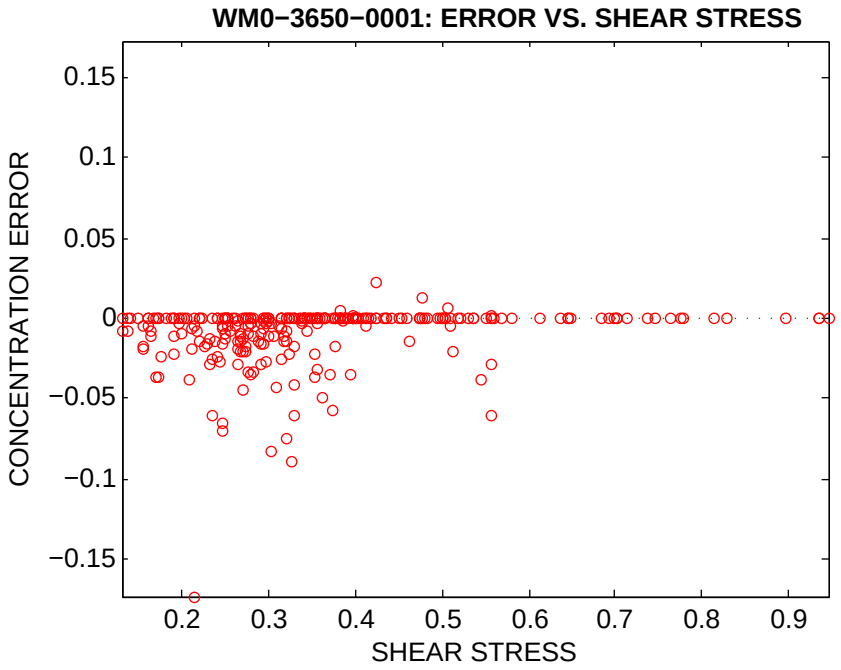


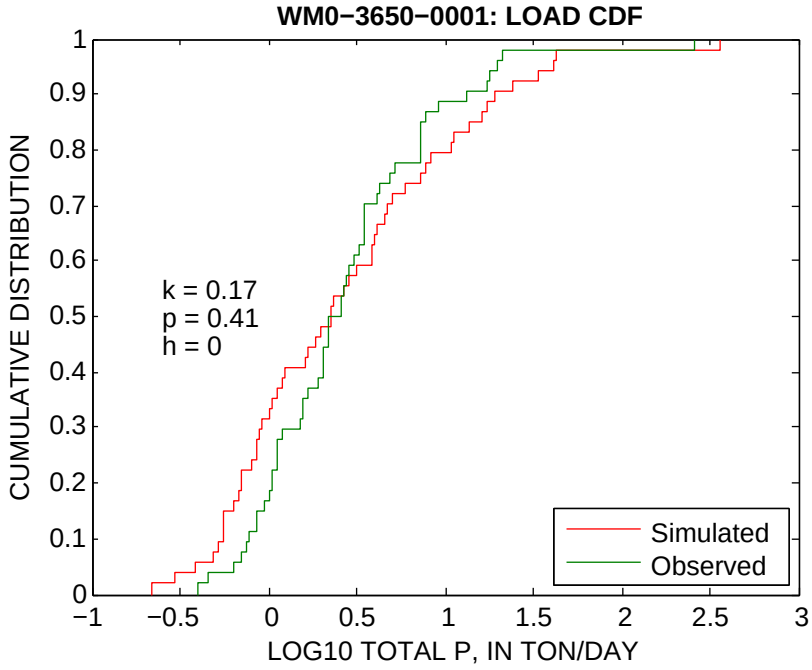


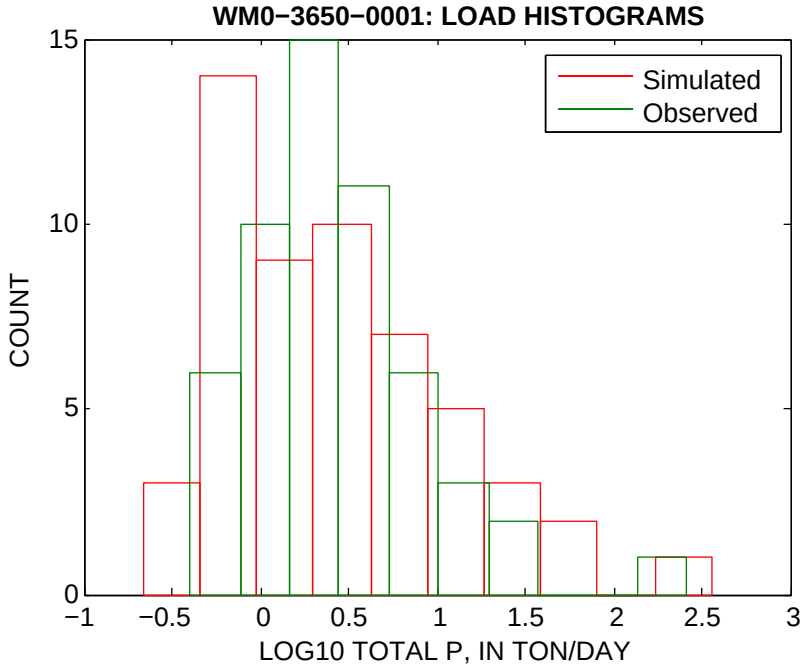


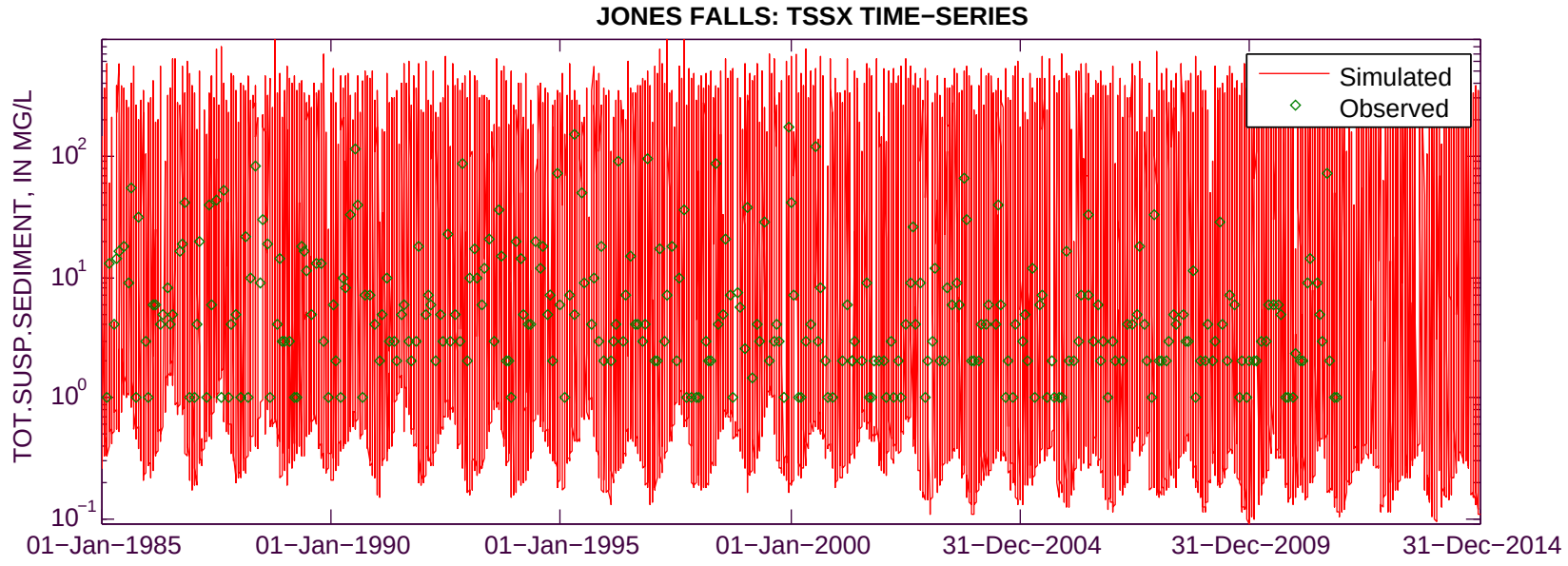
LOAD DATA
LOG10

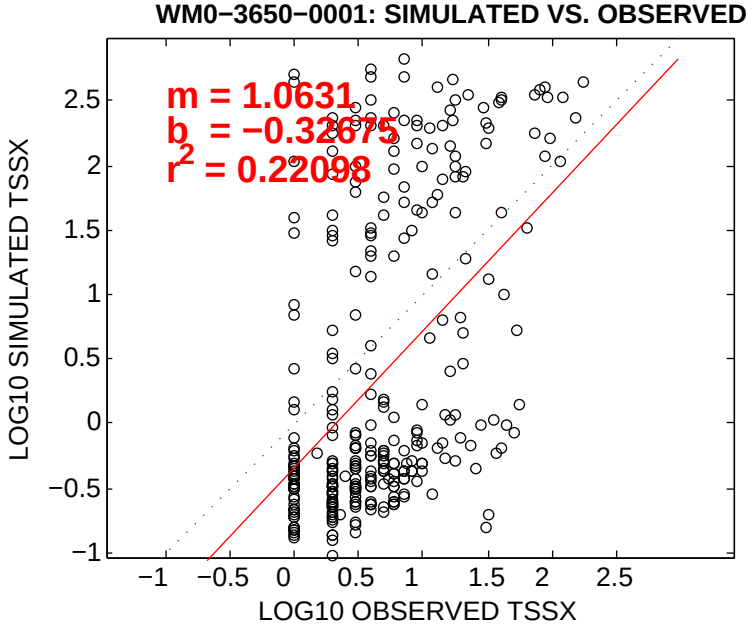


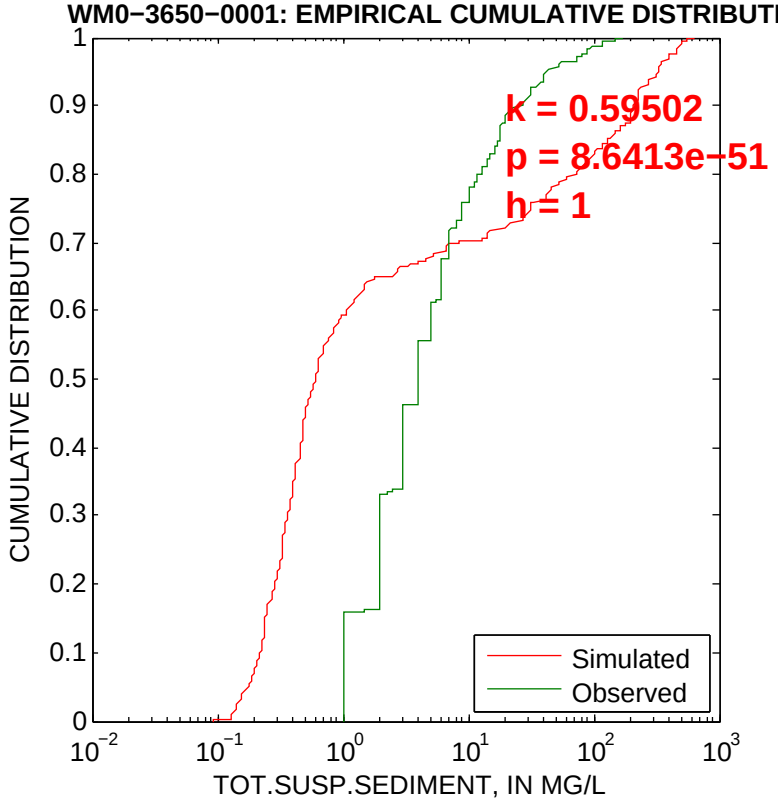












DATA SELECTION

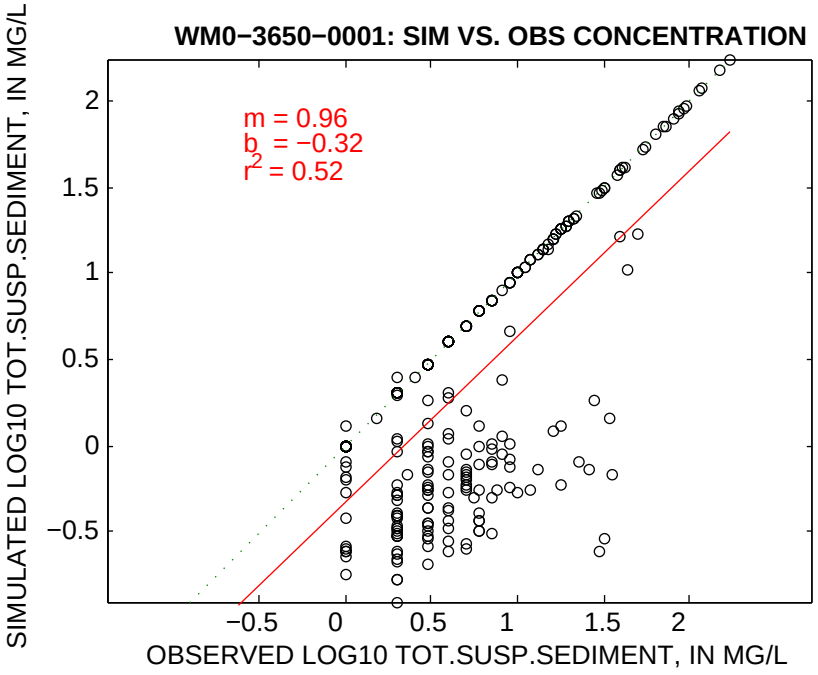
scenario: P620171001WQ
file: TSSX.calib
plot: TSSX - total suspended ...
Dates: 1/1/1985 12/31/201
Drive: N/A
Directory: model
Observed: OBS20161101

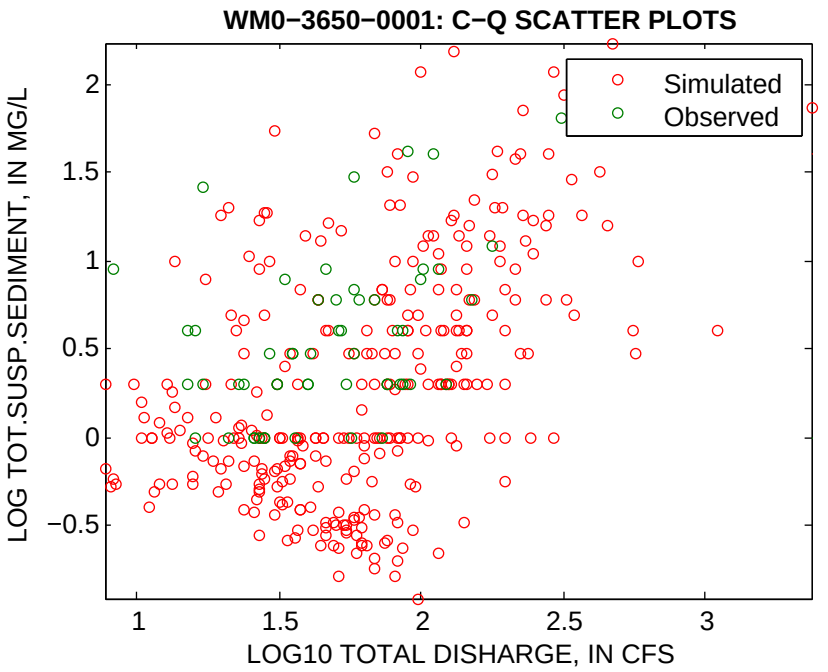
STATISTICS

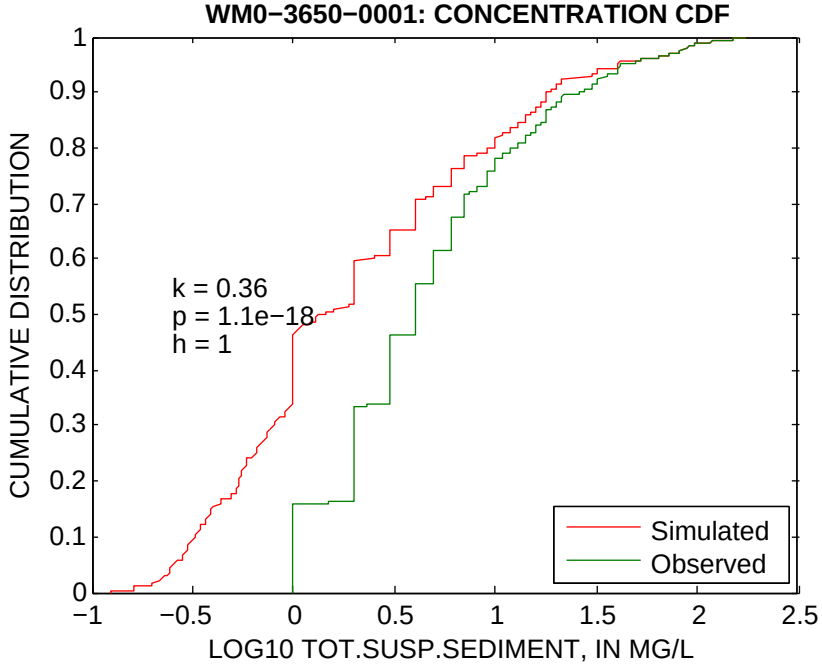
		observe	simulate
n		321	321
min		1	0.094383
		0	-1.02511
mean		10.9075	52.4371
		0.670471	0.386042
media		4	0.6096
		0.60206	-0.214955
max		173	653.94
		2.23805	2.81554
varian		444.269	12780.1
		0.260846	1.33412
JB		0.001	0.001
		0.001	0.001
		ra	log
%		380.745	-42.4222
err.va		13037.4	1.1215
rel.std.err		29.3458	4.29945
mod.eff		-28.3458	-3.29945

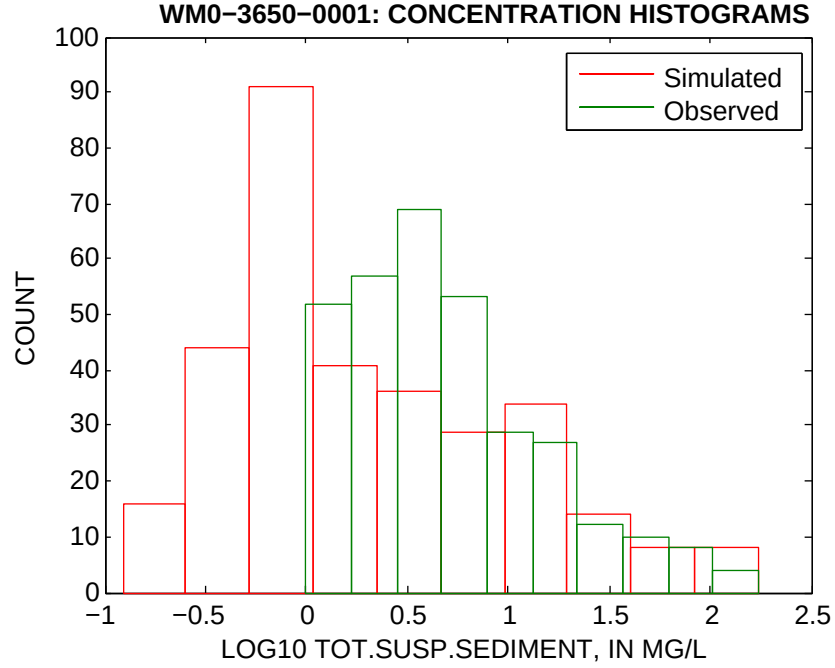
VERSION 2.1

ALL DATA
LOG10

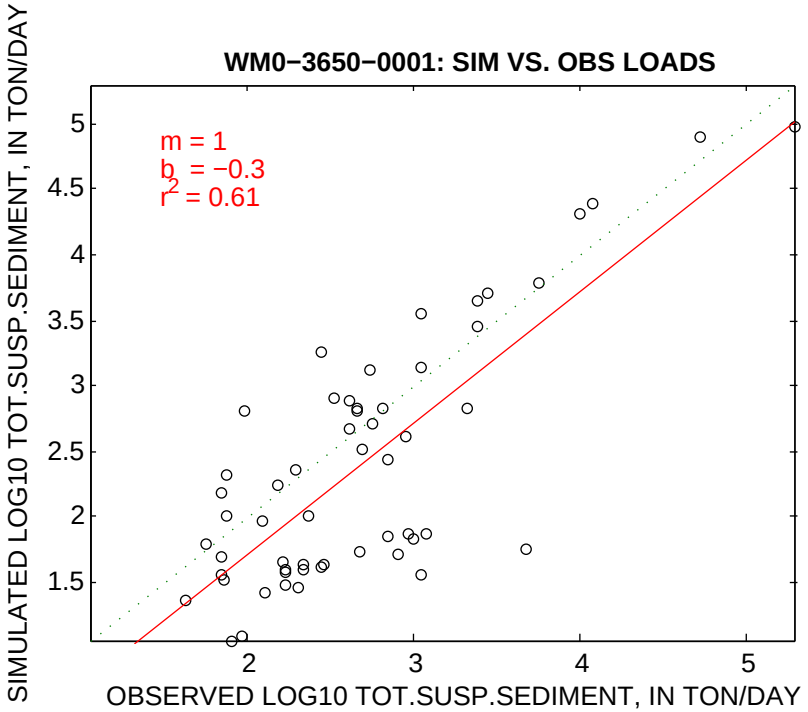


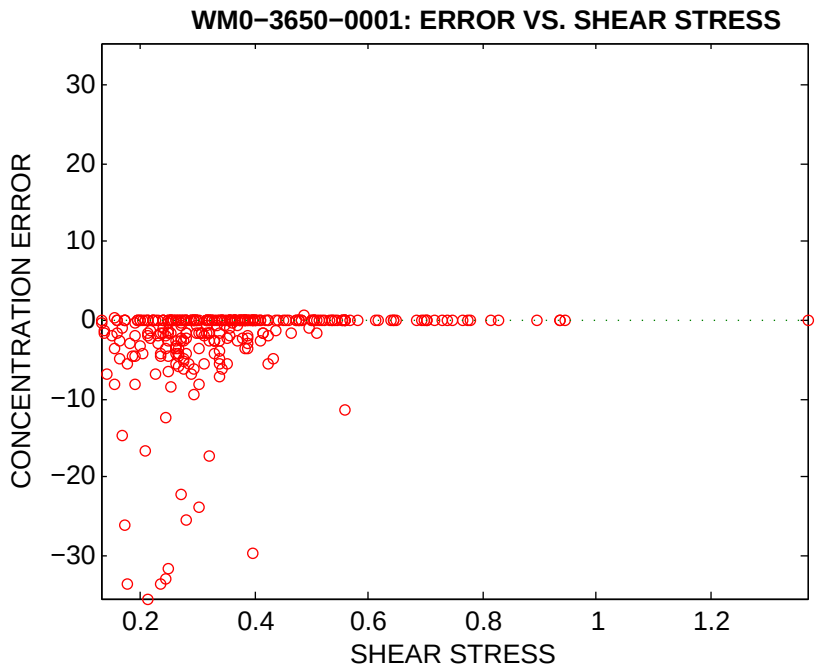


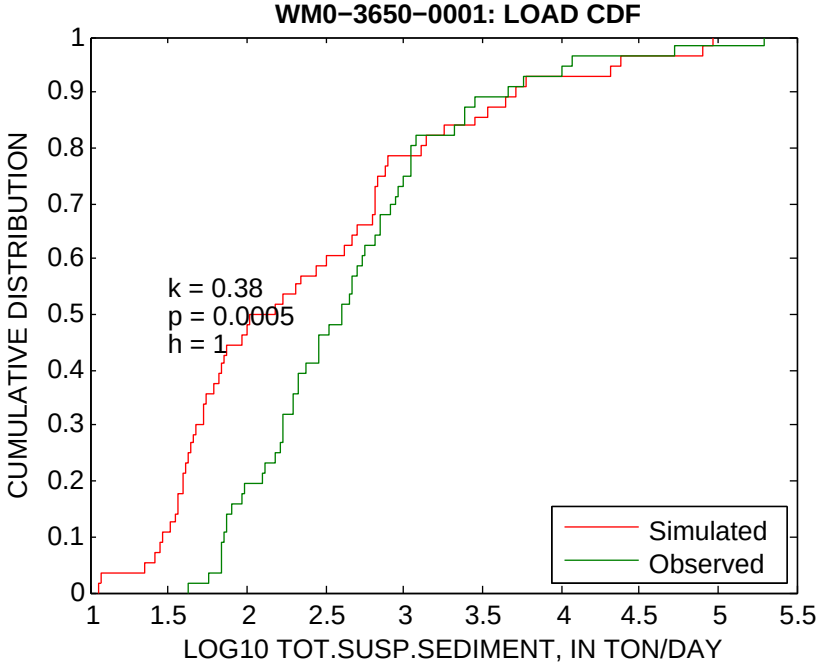


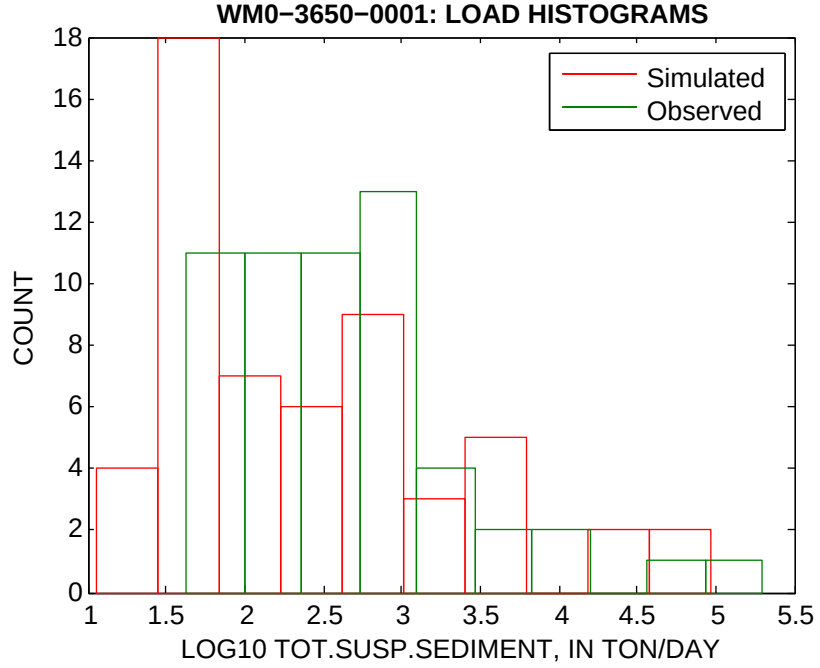


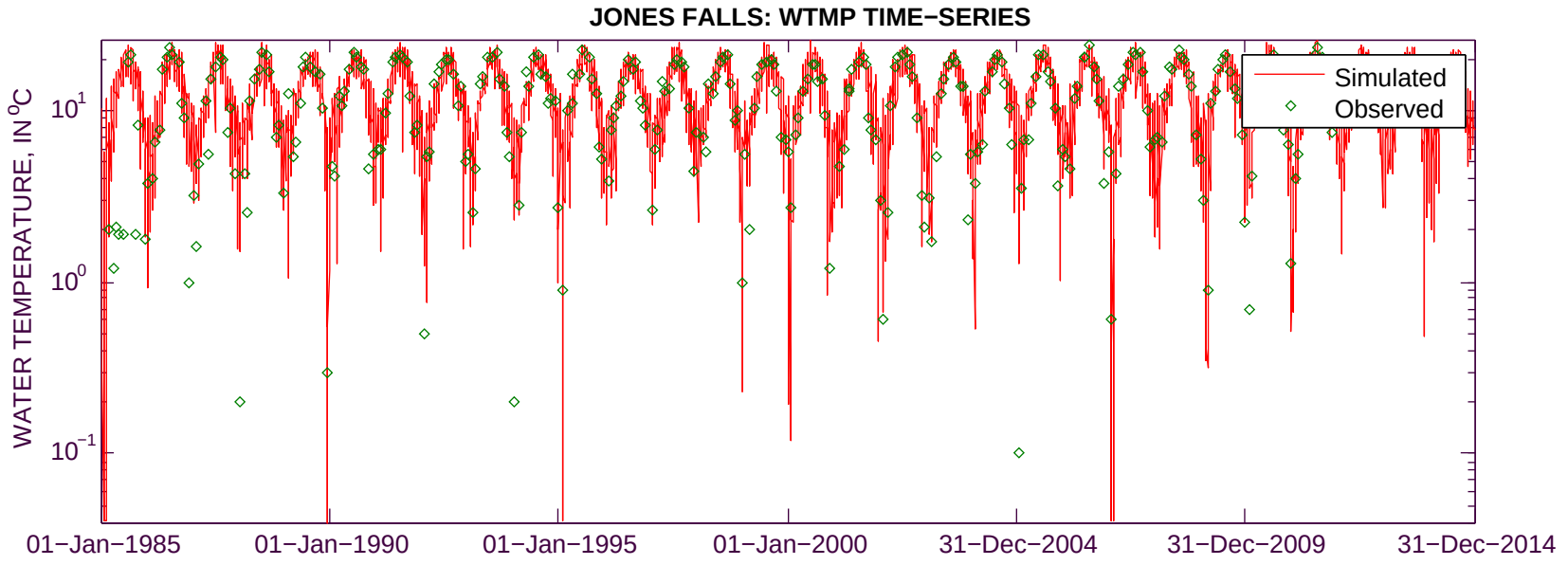
LOAD DATA
LOG10

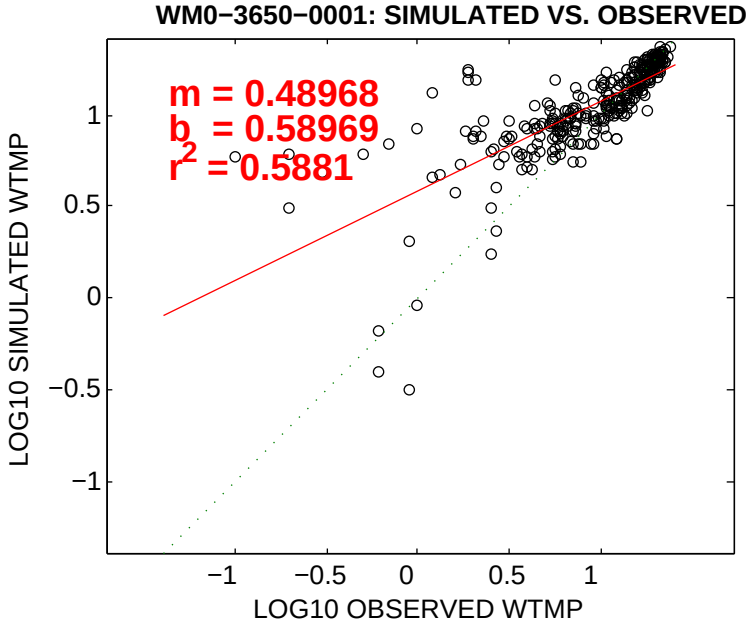


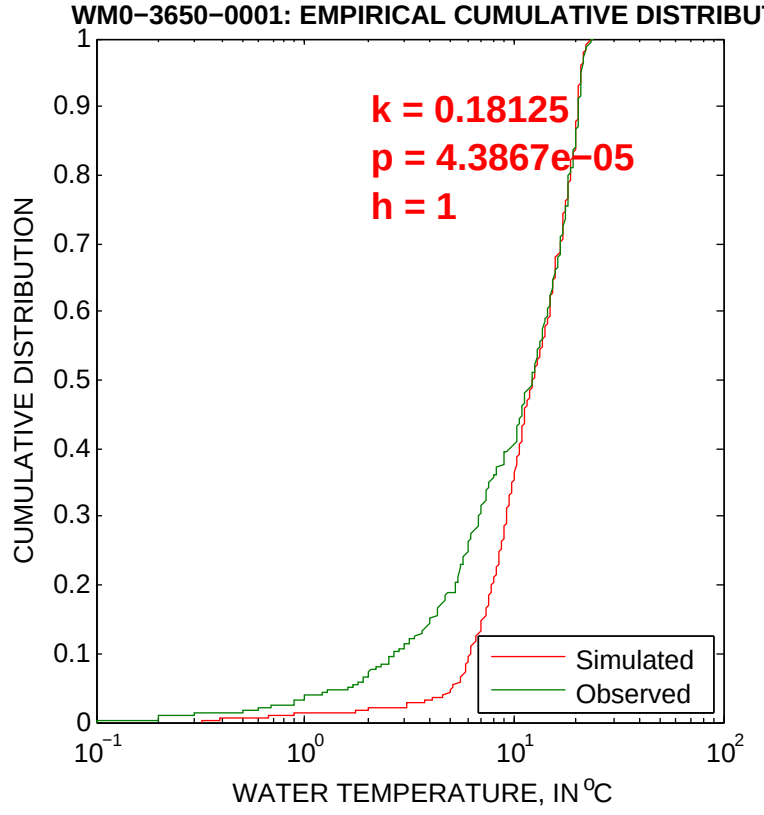












DATA SELECTION

scenario: P620171001WQ | file: WTMP.calib

plot: WTMP - water tempera...

Dates: 1/1/1985 – 12/31/201

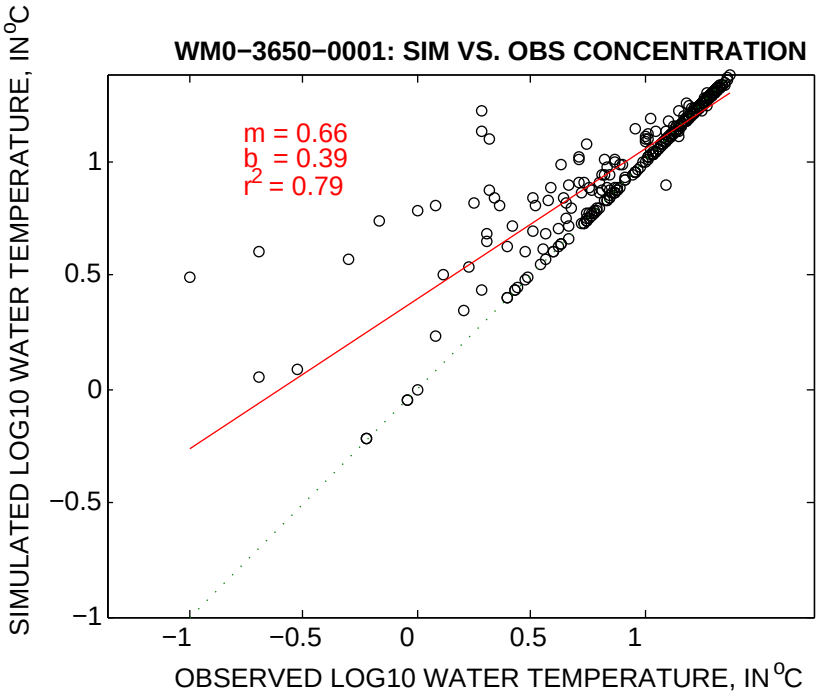
Drive: N/A | Directory: model | Observed: OBS20161101

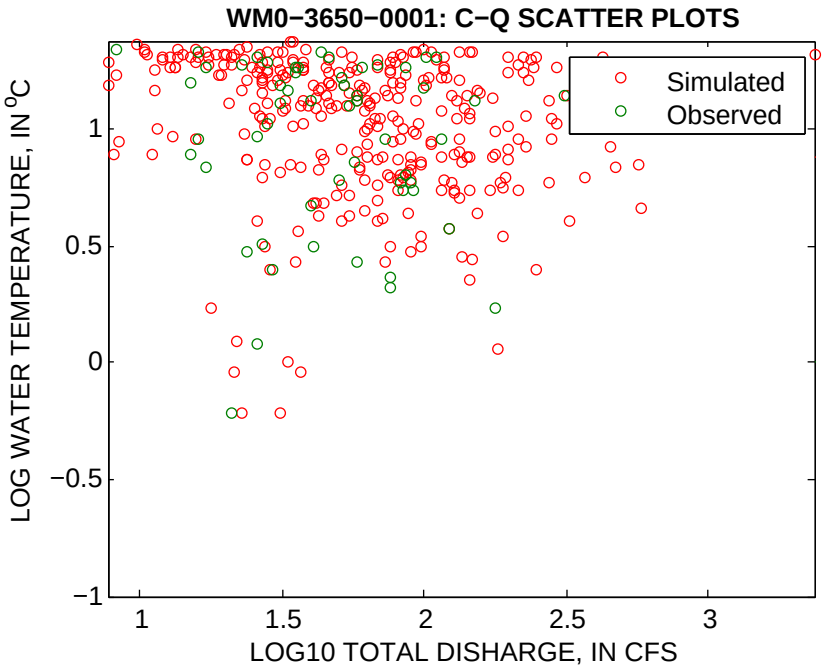
STATISTICS

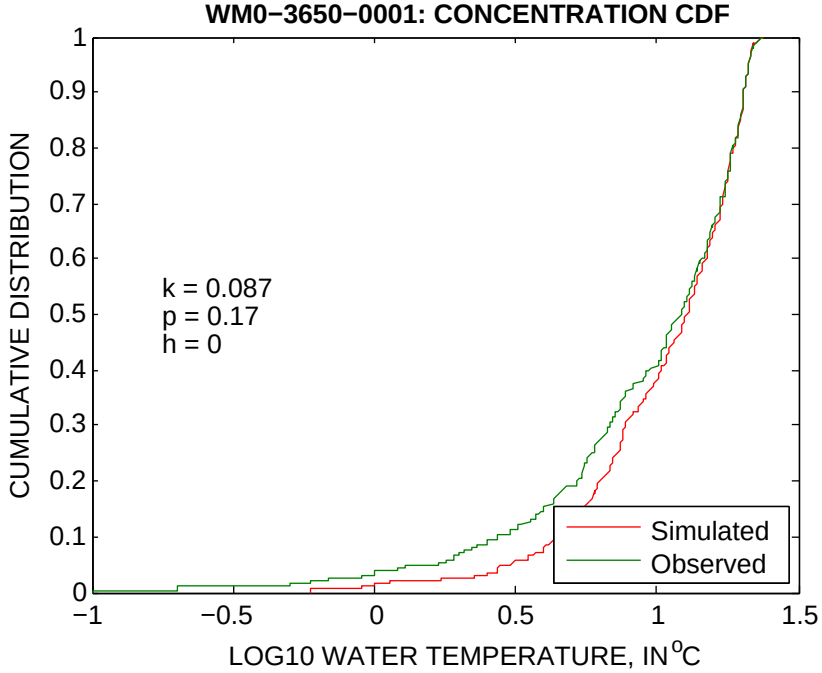
	n	observe	simulate
		320	320
min		0.1	0.31825
		-1	-0.497232
mean		11.8295	12.903
		0.956131	1.05789
media		12.2	12.4055
		1.08636	1.09361
max		23.8	23.797
		1.37658	1.37652
varian		43.1257	28.6175
		0.155347	0.0633389
JB		0.001371	0.007176
		0.001	0.001
		ra	log
%		9.07429	10.6429
err.va		10.7815	0.076933
rel.std.err		0.250001	0.495235
mod.eff		0.749999	0.504765

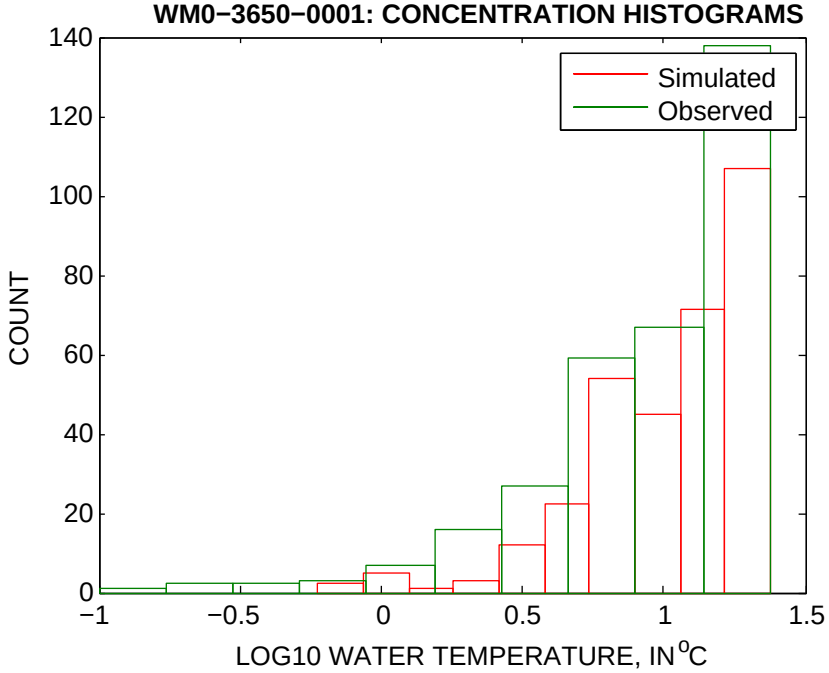
VERSION 2.1

ALL DATA
LOG10

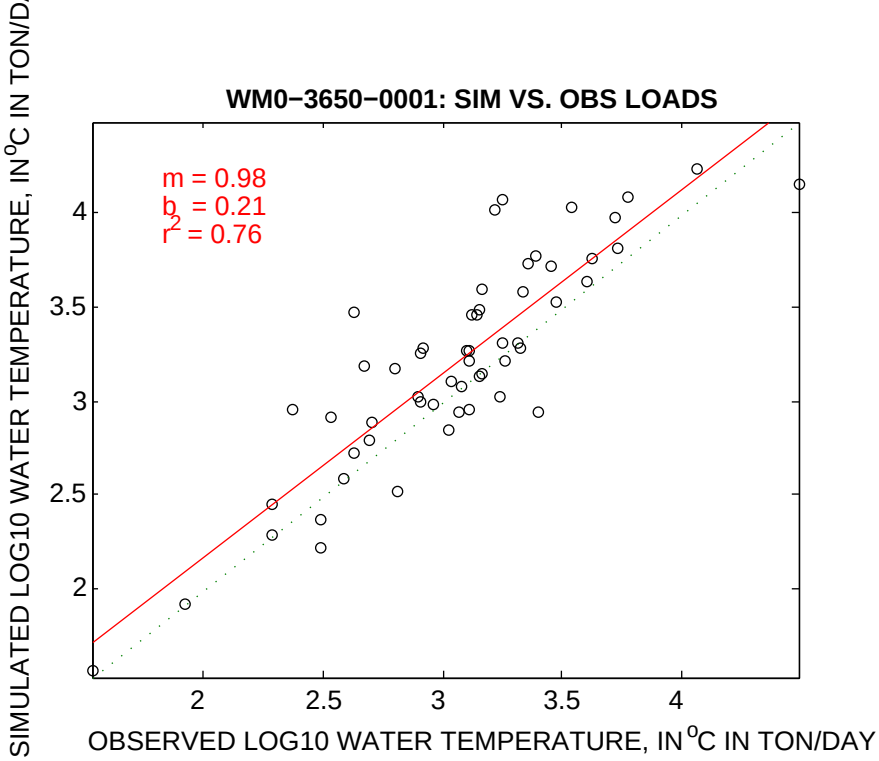


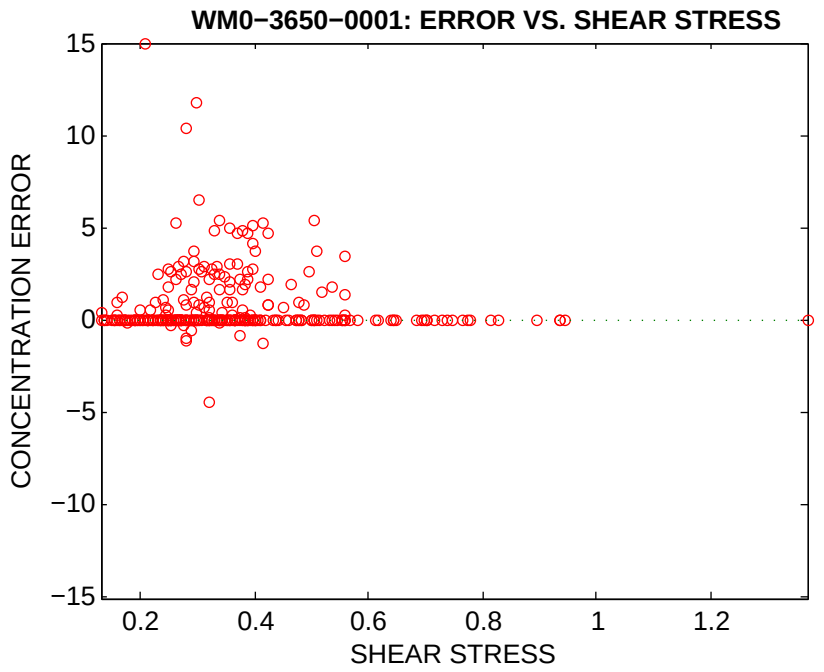


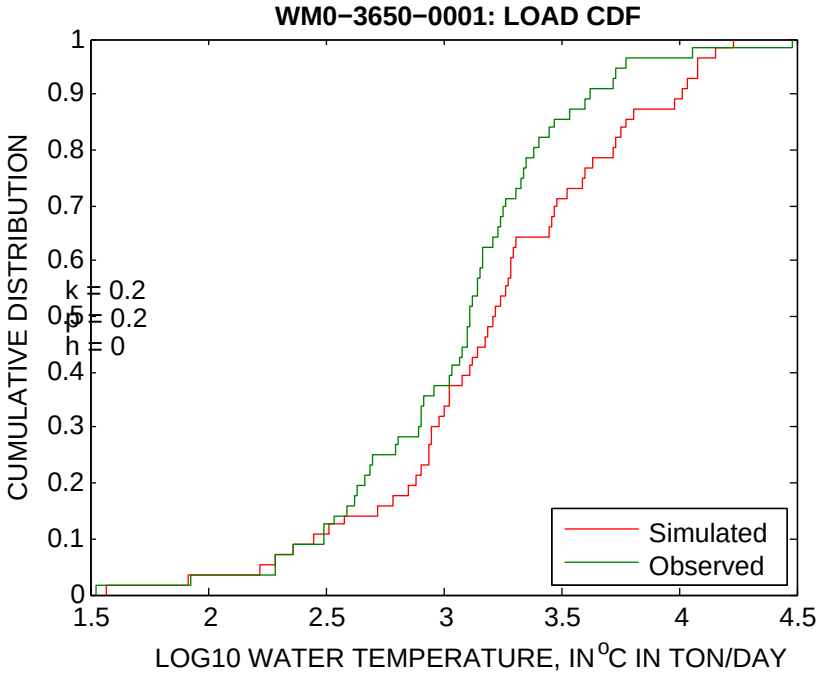


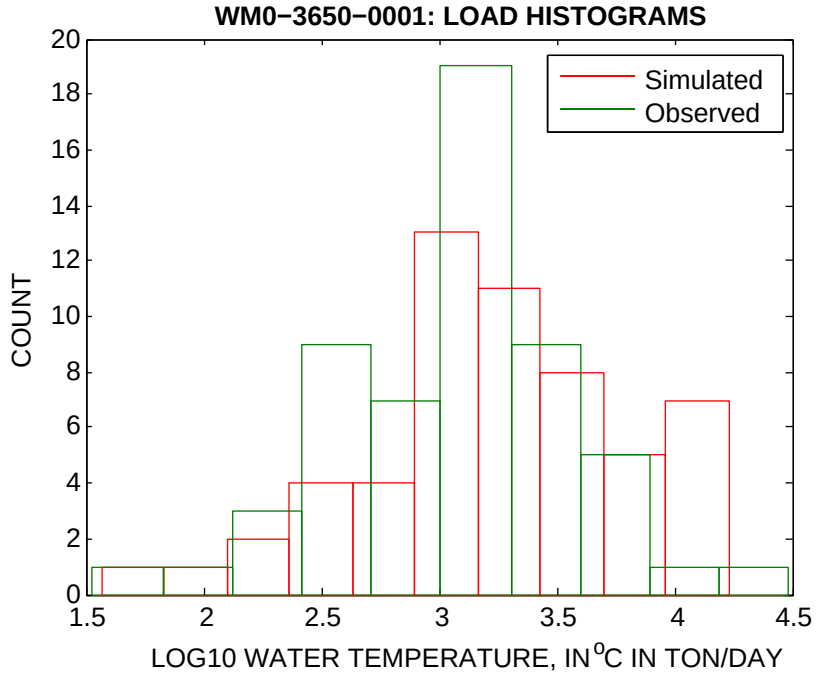


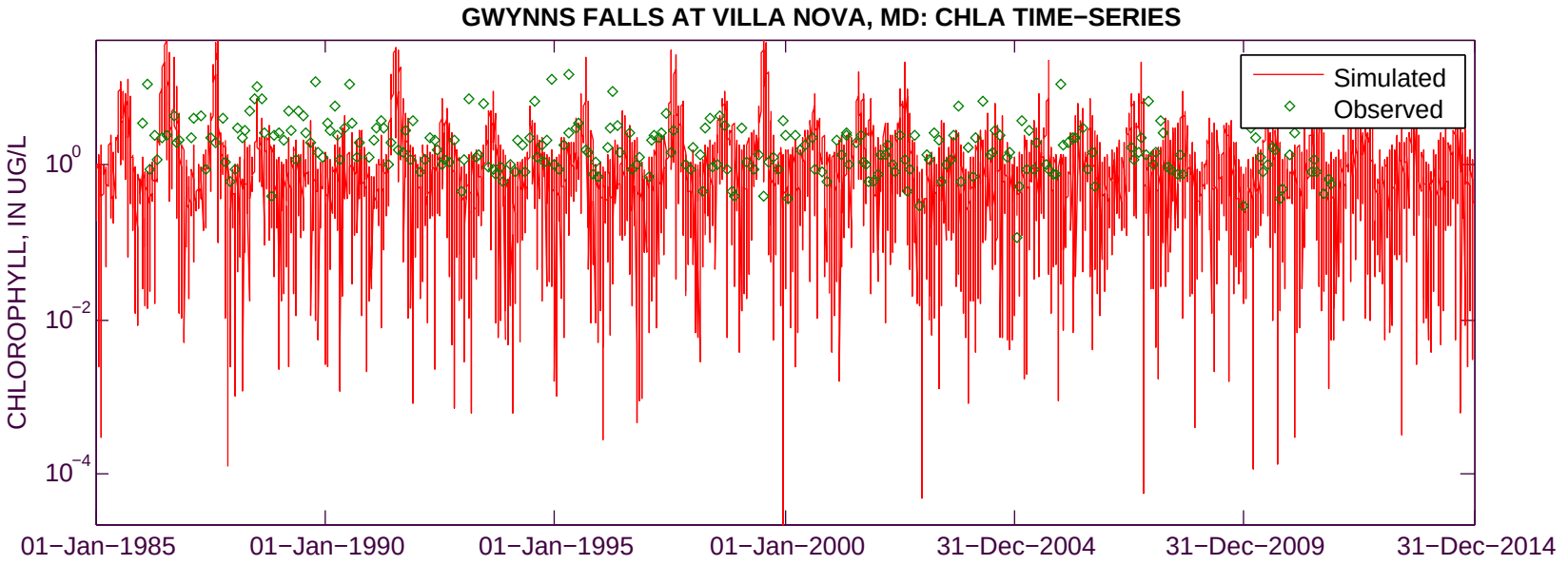
LOAD DATA
LOG10

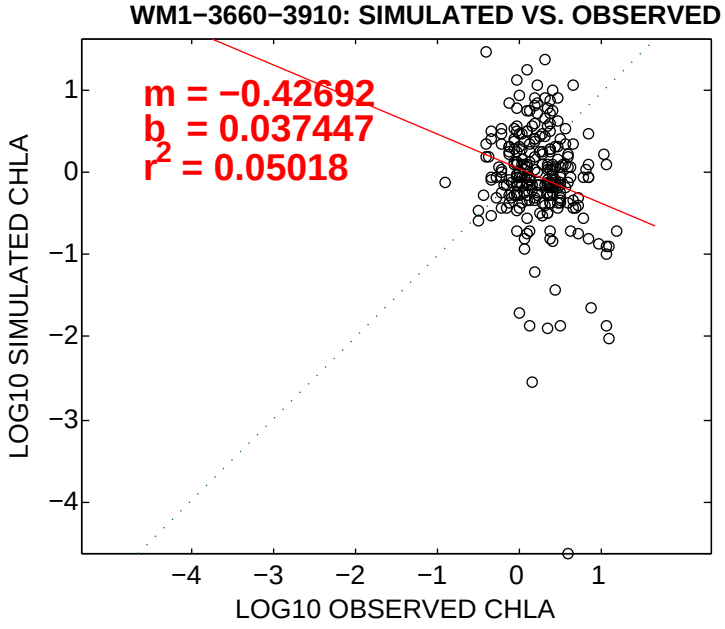


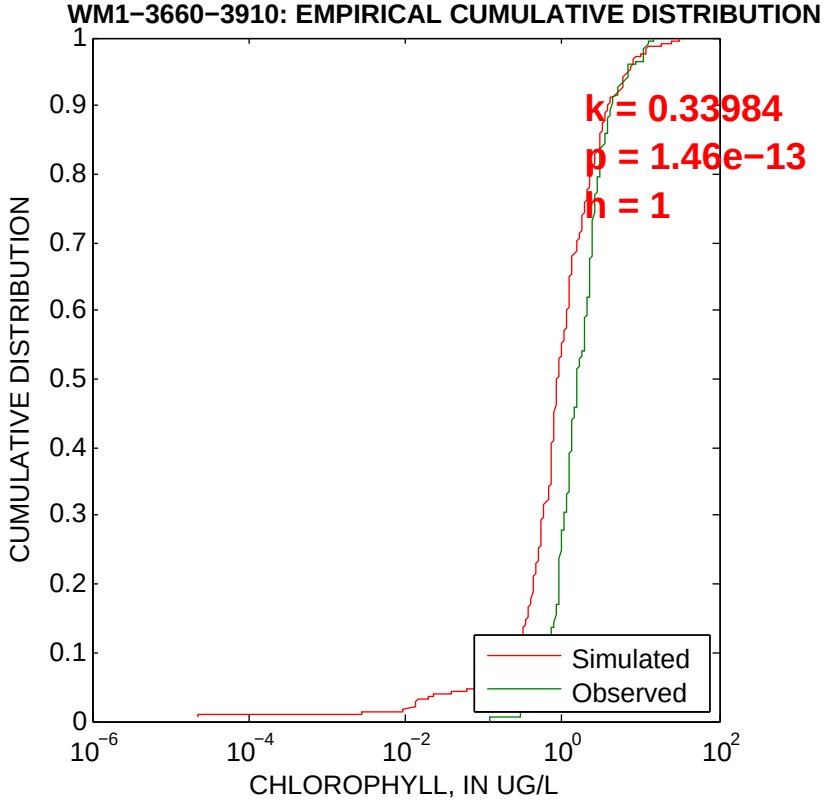












DATA SELECTION

scenario	file
P620171001WQ	CHLA.calib

plot: CHLA - chlorophyll A

Dates: 1/1/1985 – 12/31/201

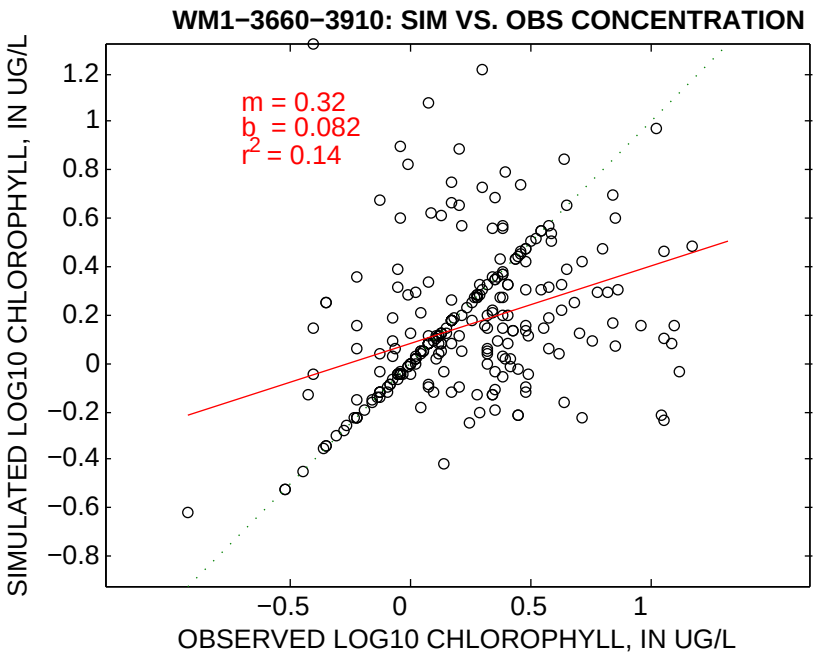
Drive	Directory	Observed
N/A	model	OBS20161101

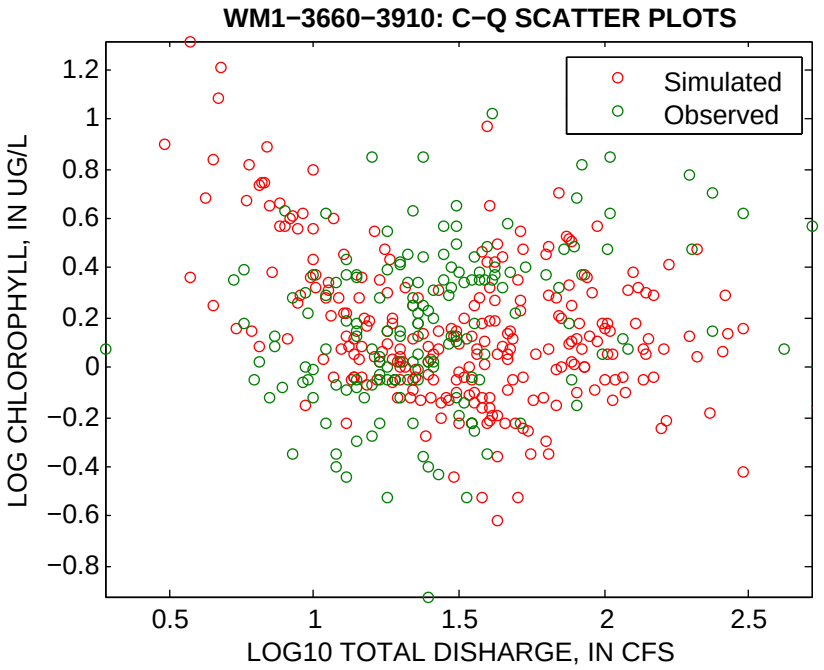
STATISTICS

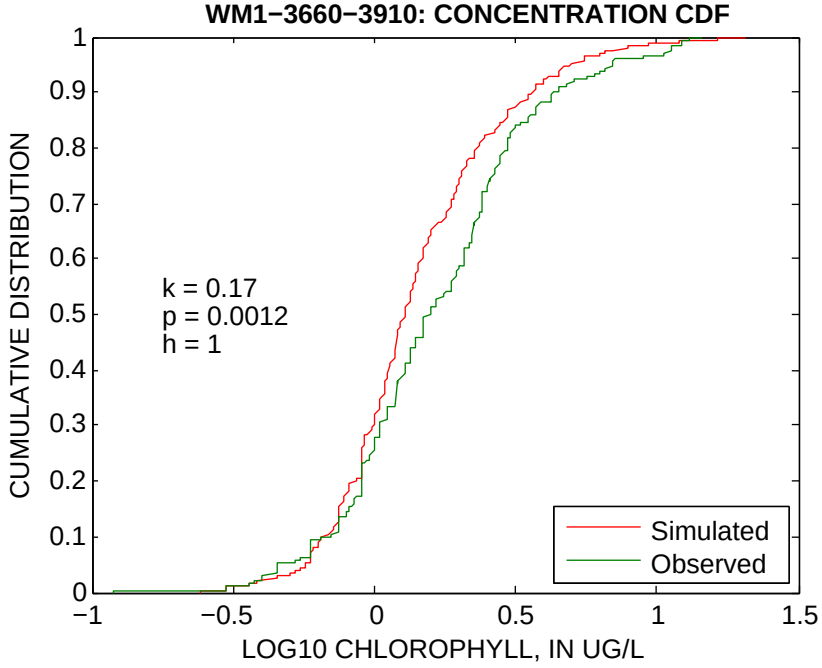
	n	256	255
		observe	simulate
min		0.12	0
		-0.920819	-4.64071
mean		2.31598	1.89368
		0.21927	-0.0561642
media		1.5645	0.878955
		0.187239	-0.0546348
max		14.58	30.22
		1.16376	1.48029
varian		5.44947	10.3814
		0.111935	0.406569
JB		0.001	0.001
		0.084970	0.001
		ra	log
% err.va		-18.234	-125.614
		17.9442	0.690241
rel.std.err		3.29284	6.16647
mod.eff		-2.29284	-5.16647

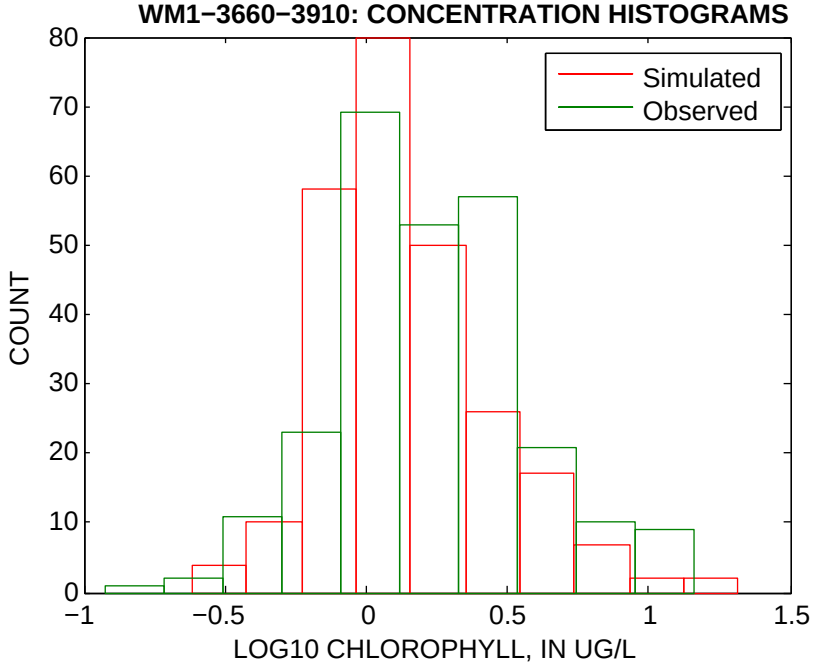
VERSION 2.1

ALL DATA
LOG10

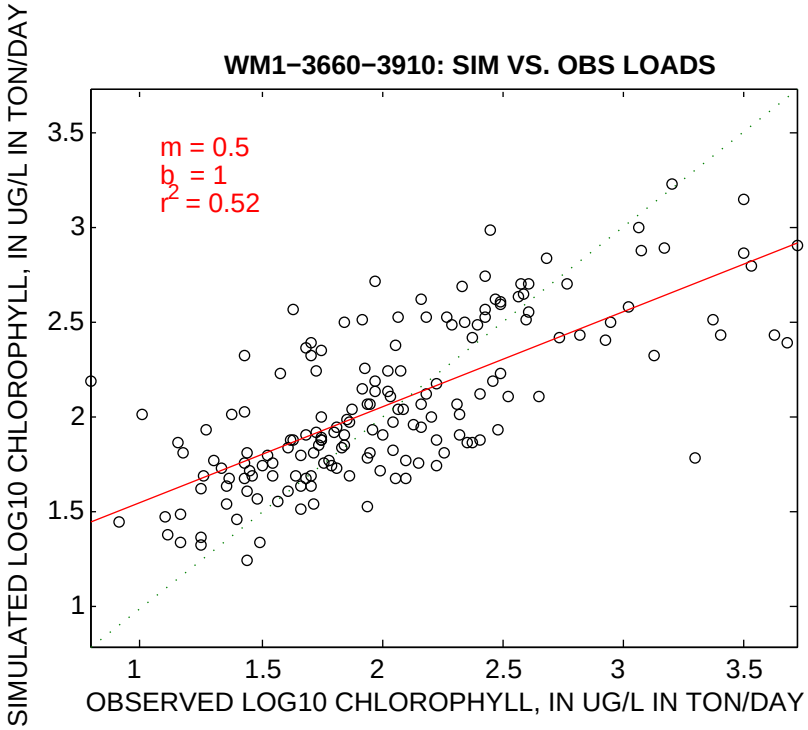


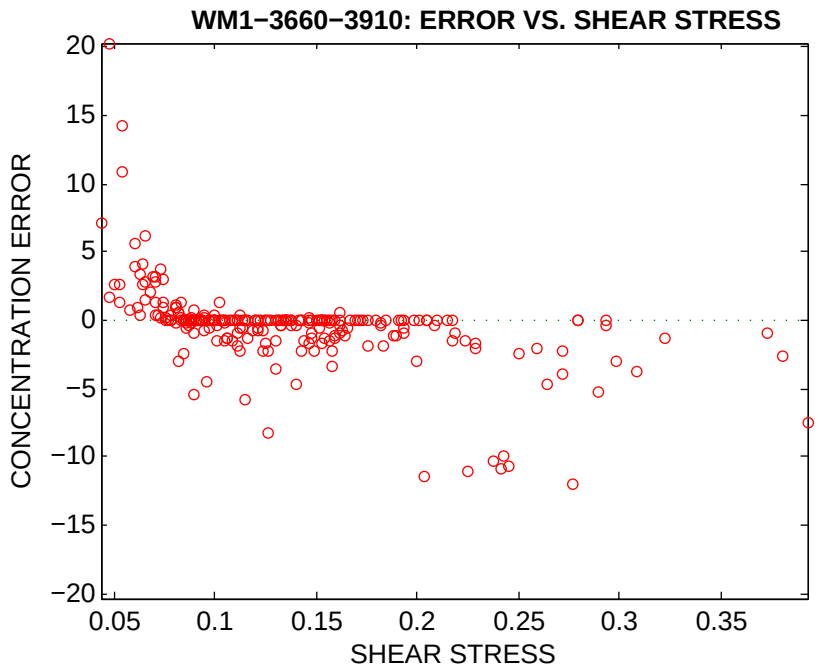


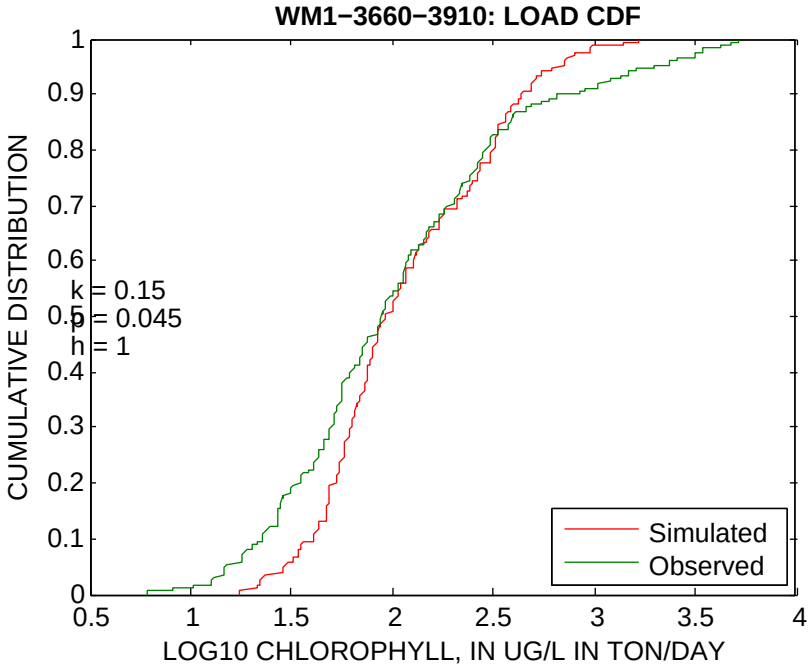


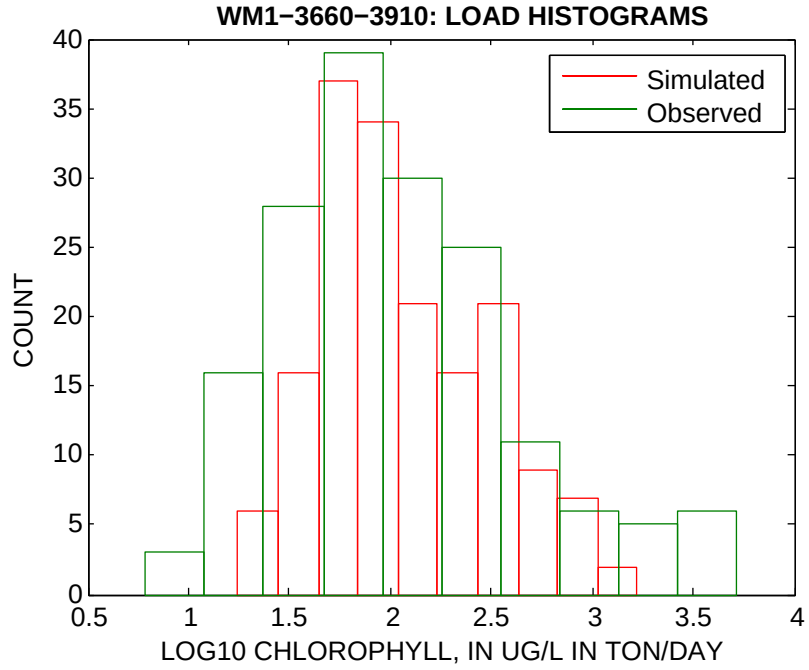


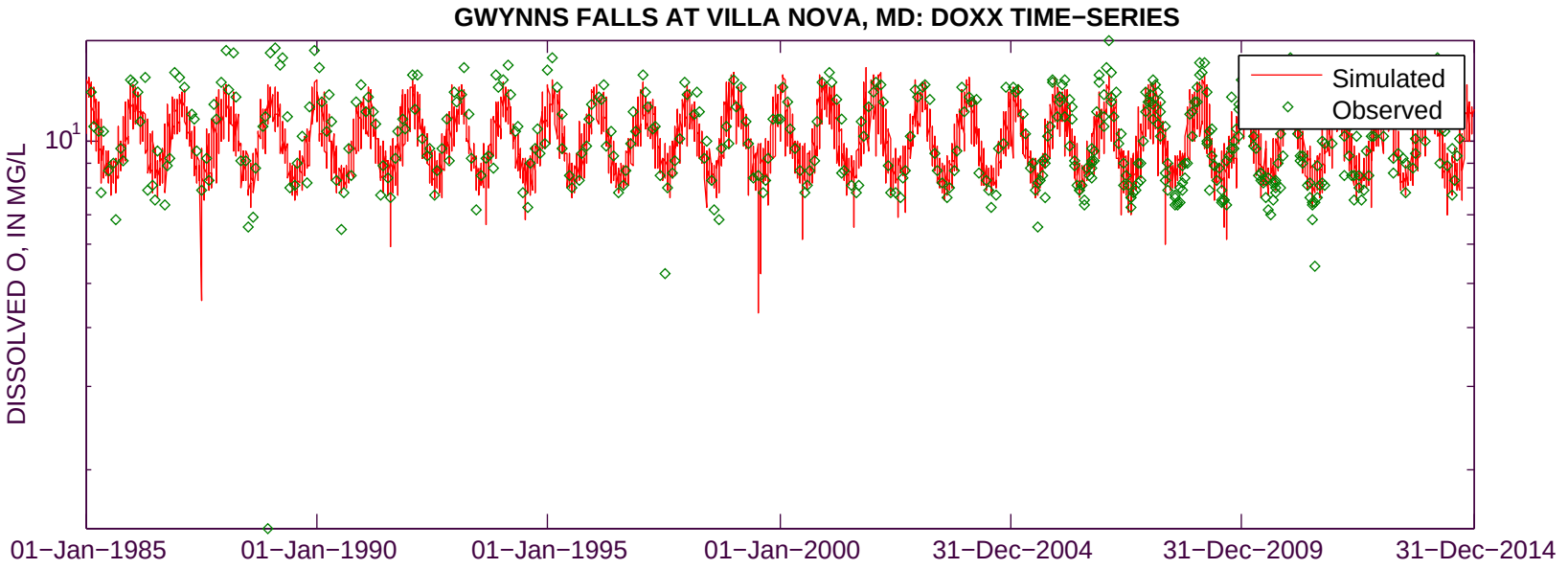
LOAD DATA
LOG10

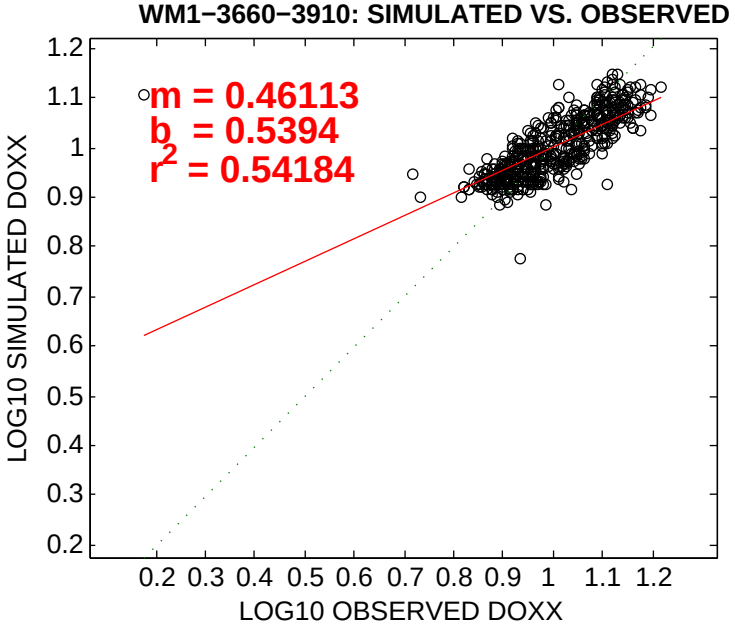


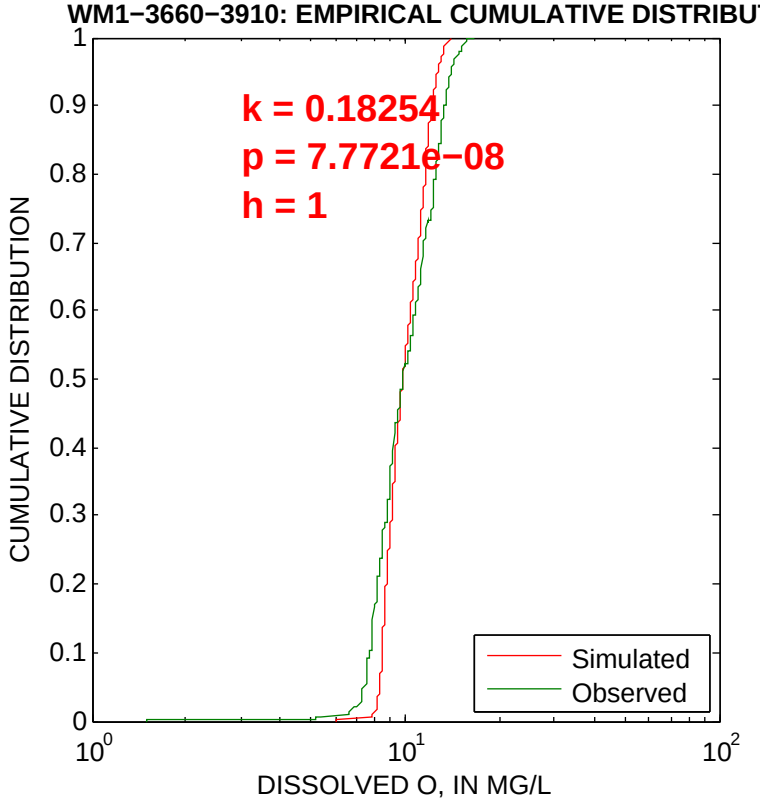












DATA SELECTION

scenario	file
P620171001WQ	DOXX.calib

plot: DOXX - dissolved oxygen

Dates: 1/1/1985 – 12/31/201

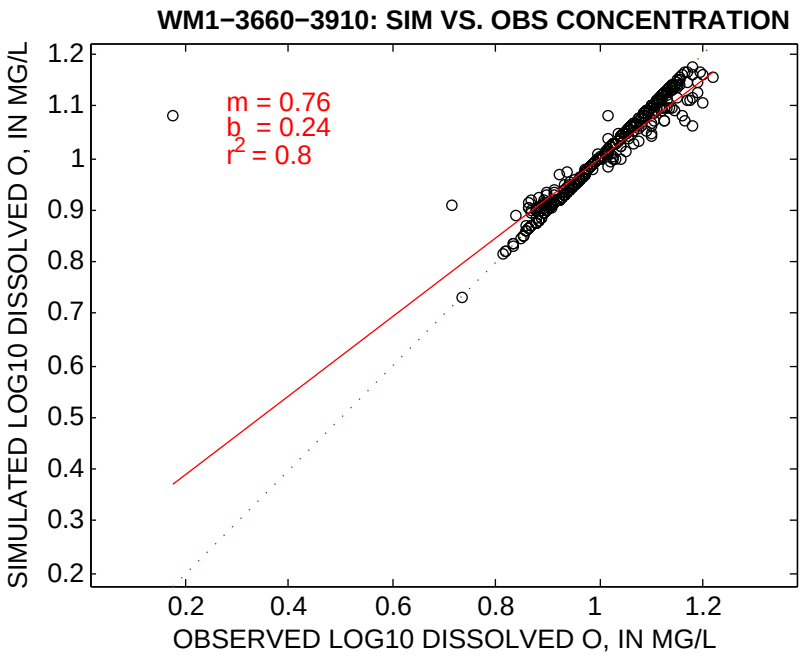
Drive	Directory	Observed
N/A	model	OBS20161101

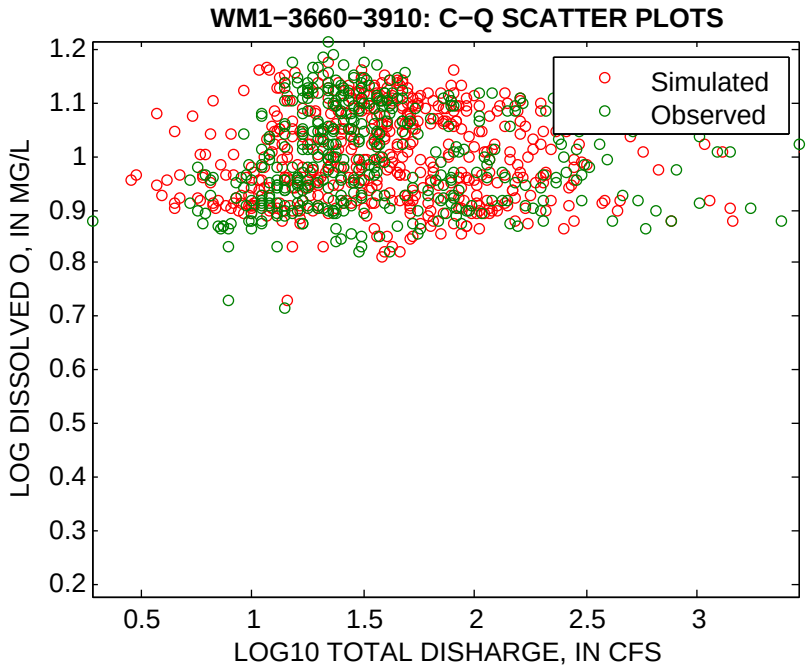
STATISTICS

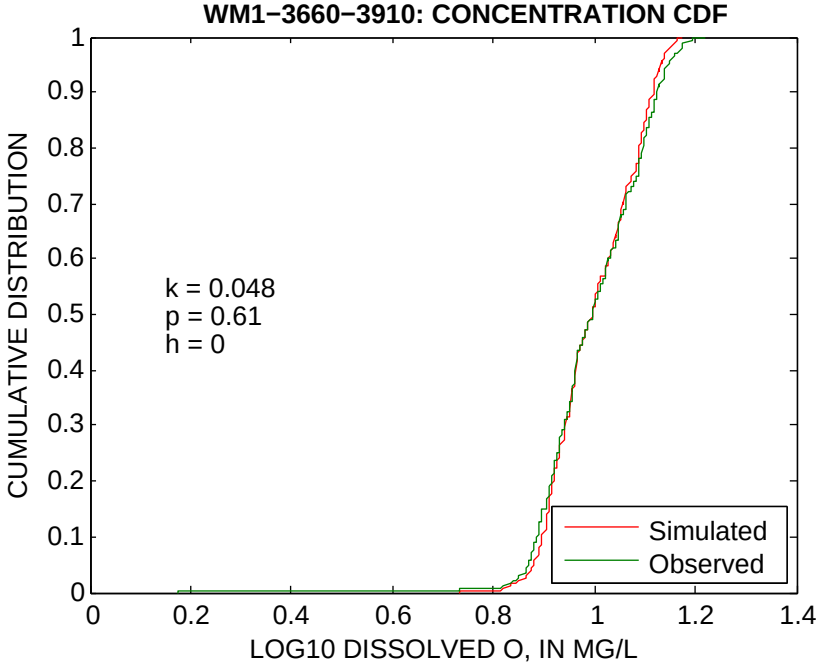
	n	504	504
		observe	simulate
min		1.5	6.0108
		0.176091	0.778932
mean		10.2674	10.1242
		1.0008	1.0009
media		9.9	9.8103
		0.995635	0.991682
max		16.5	14.098
		1.21748	1.14916
varian		4.95628	2.15596
		0.00982297	0.00385493
JB		0.010981	0.001
		0.001	0.002542
		ra	log
%		-1.39429	0.00960512
err.va		1.9042	0.00461861
rel.std.err		0.384199	0.470185
mod.eff		0.615801	0.529815

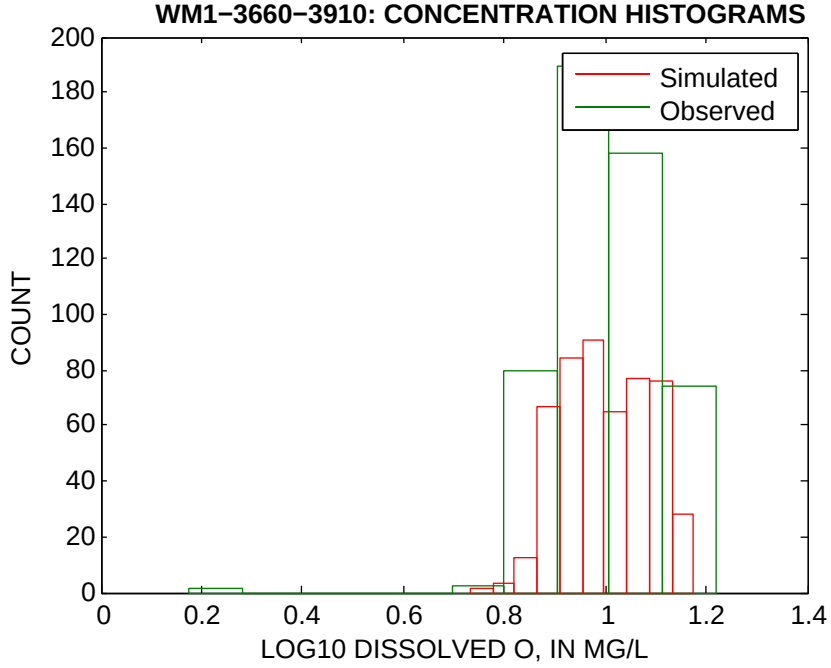
VERSION 2.1

ALL DATA
LOG10

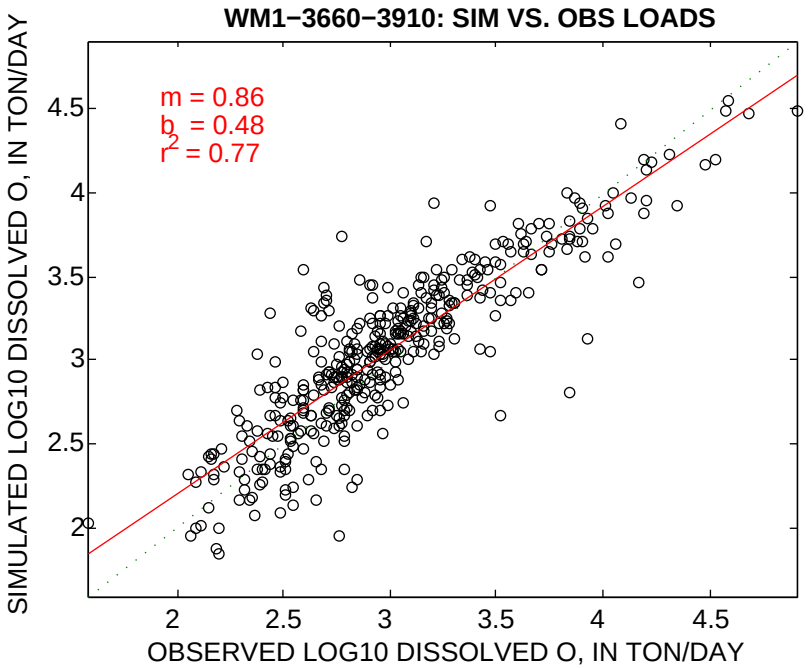


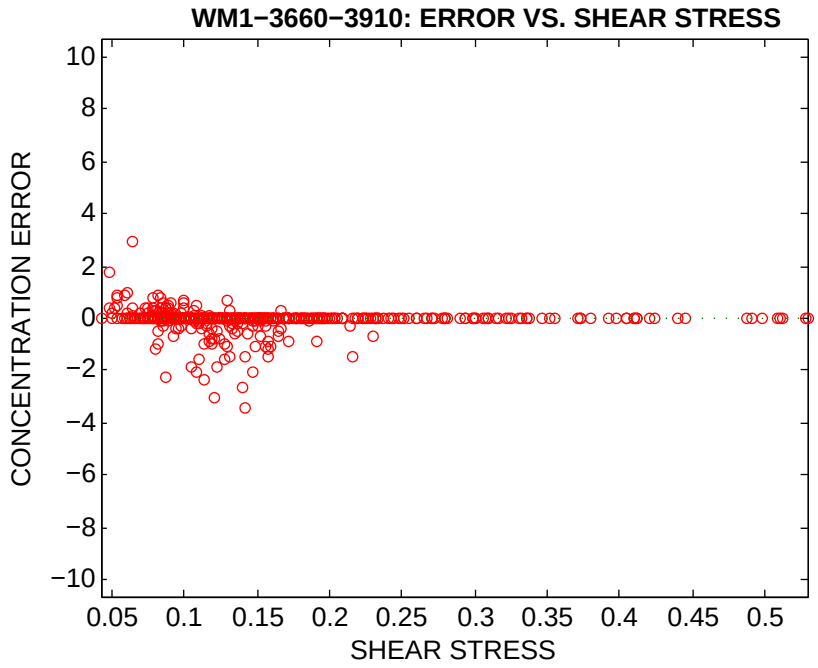


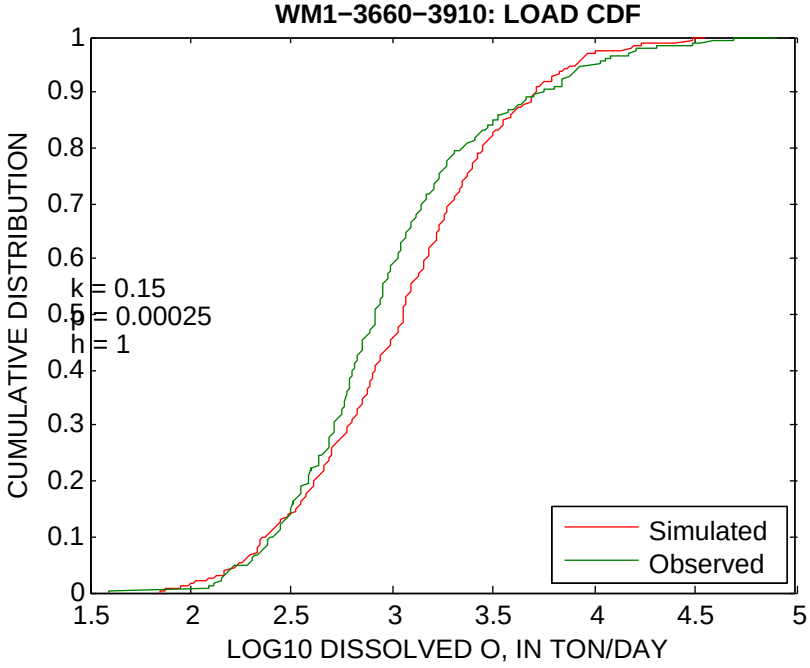


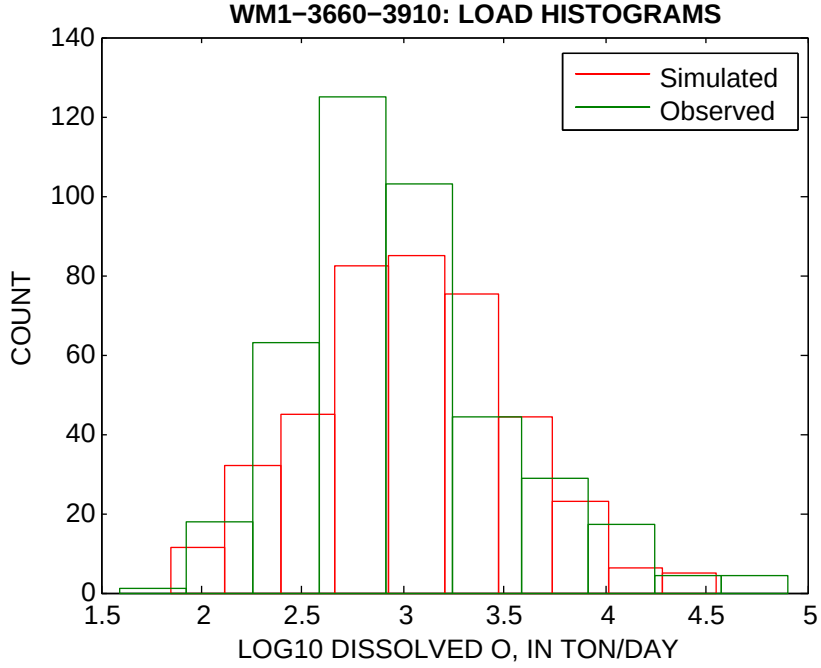


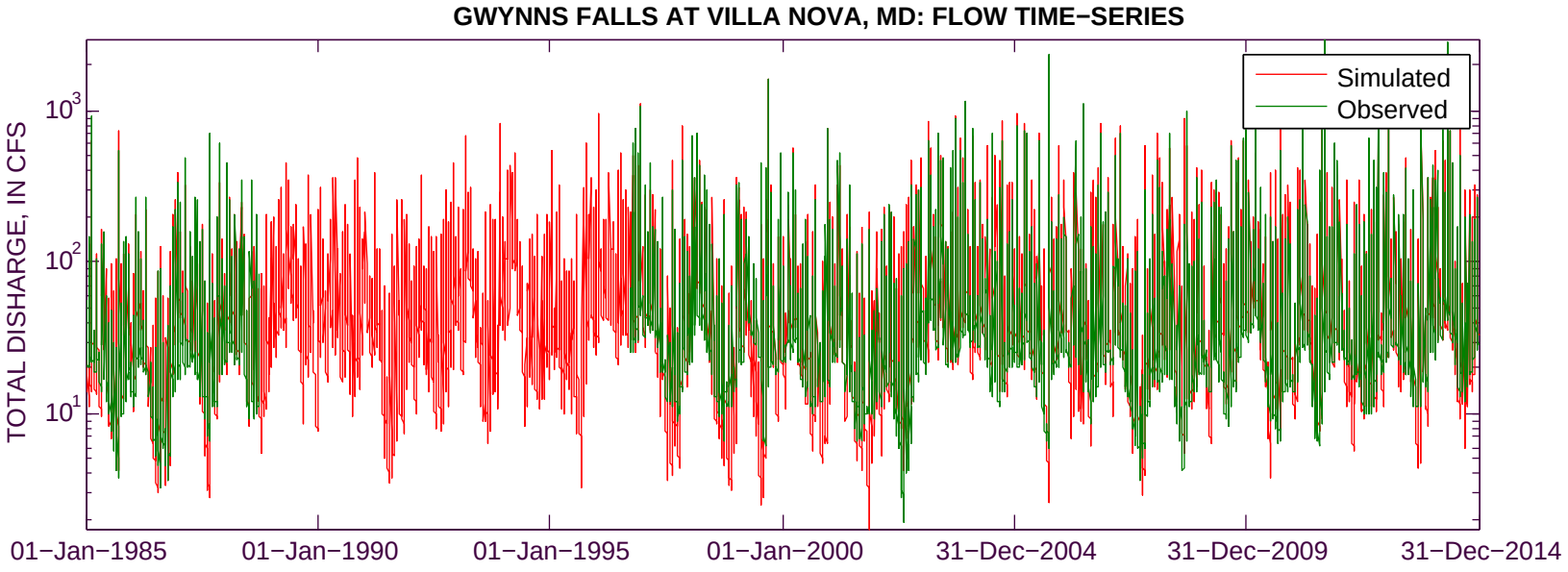
LOAD DATA
LOG10

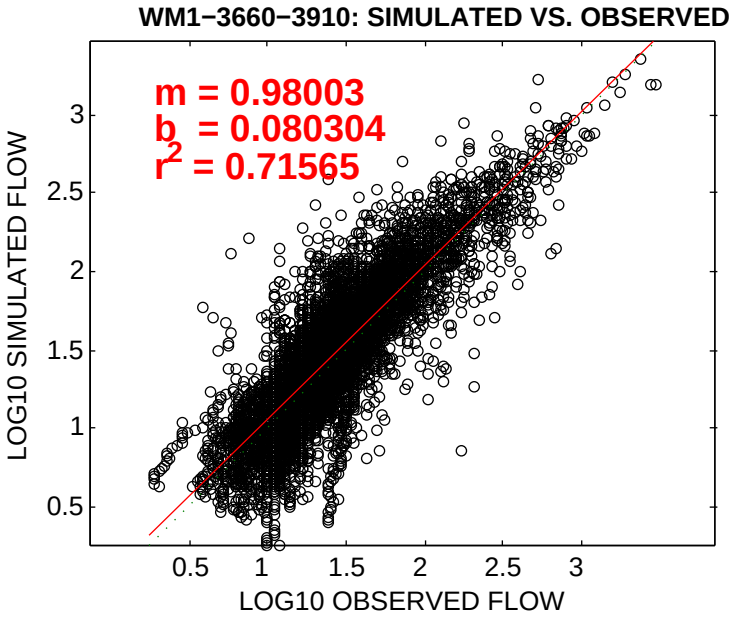


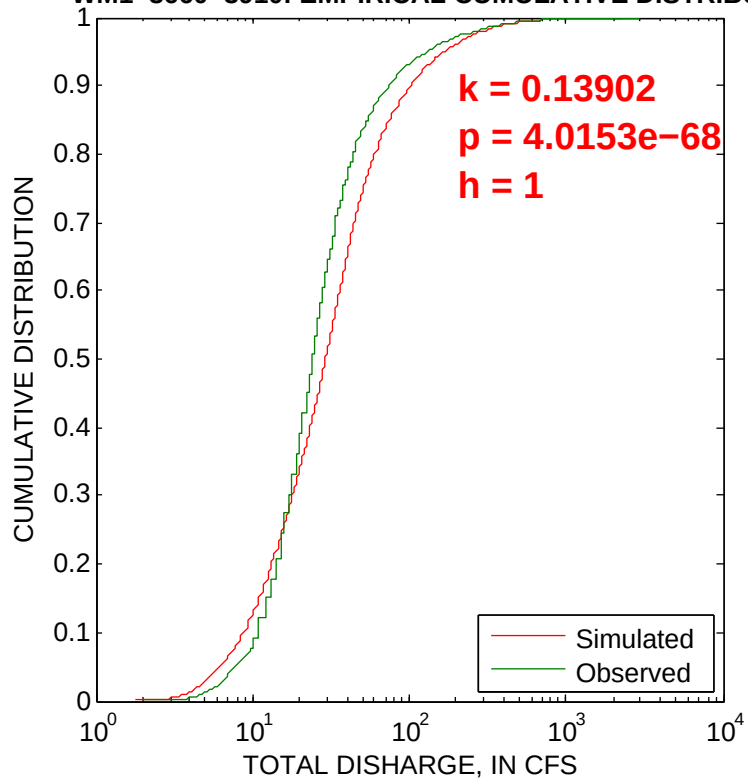












DATA SELECTION

scenario	file
P620171001WQ	FLOW.calib

plot: FLOW - total discharge

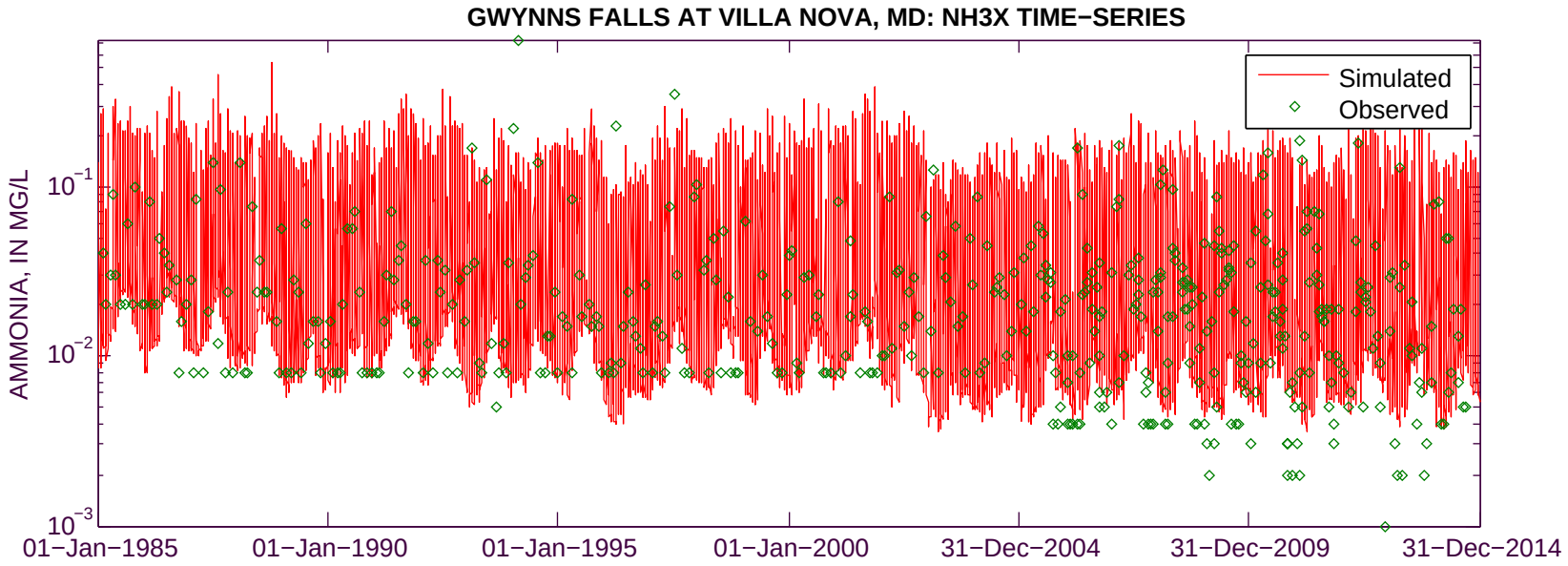
Dates: 1/1/1985 – 12/31/201

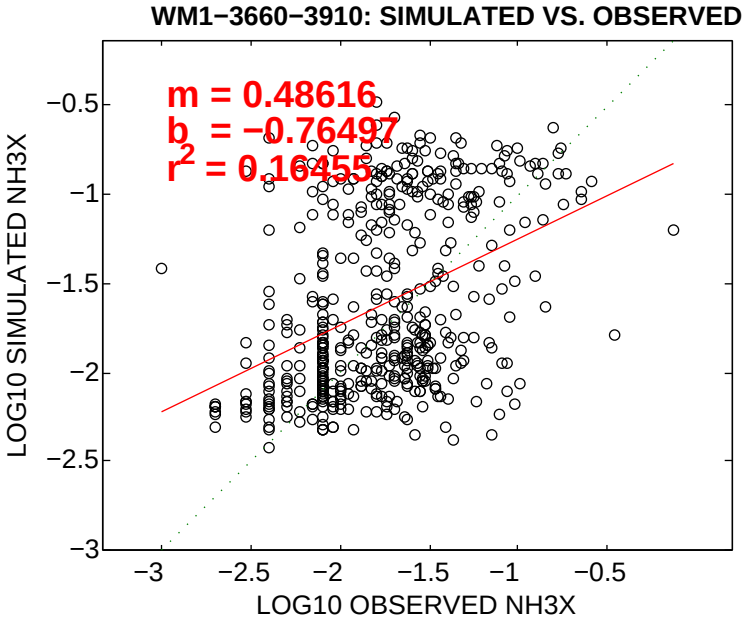
Drive	Directory	Observed
N/A	model	OBS20161101

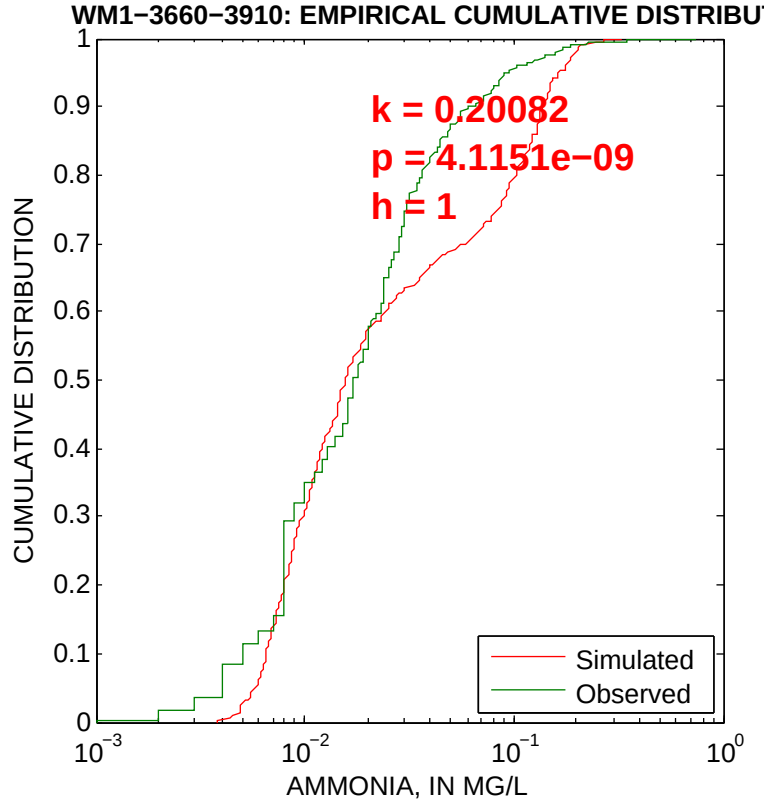
STATISTICS

	n	observe	simulate
		8035	8035
min		1.9	1.7543
		0.278754	0.244104
mean		44.1853	52.1869
		1.42241	1.4743
media		24	29.365
		1.38021	1.46783
max		2990	2229.3
		3.47567	3.34817
varian		9714.43	8765.81
		0.133858	0.179645
JB		0.001	0.001
		0.001	0.001
		ra	log
%		18.1091	3.64827
err.va		2467.82	0.0538279
rel.std.err		0.254036	0.402127
mod.eff		0.745964	0.597873

VERSION 2.1







DATA SELECTION

scenario	file
P620171001WQ	NH3X.calib

plot: NH3X - ammonia

Dates: 1/1/1985 – 12/31/201

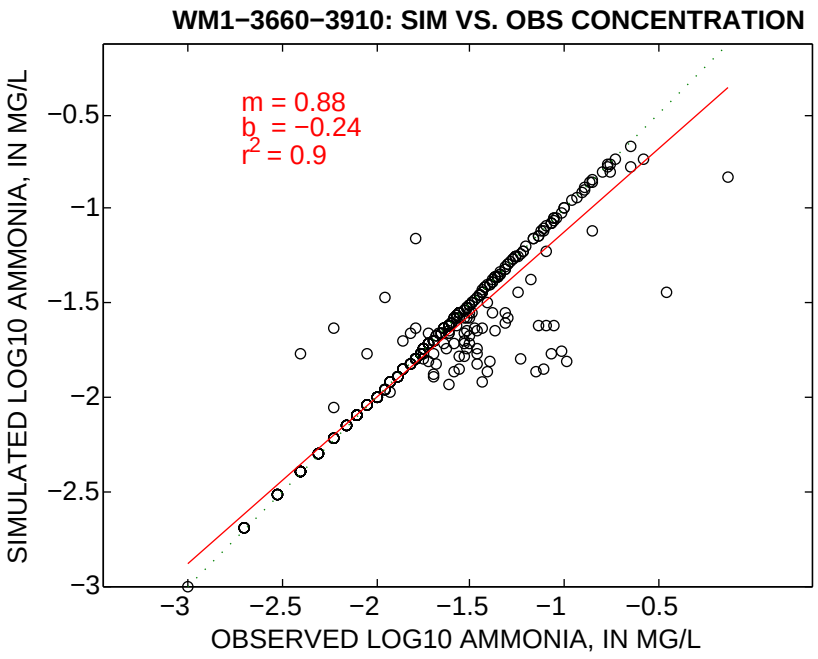
Drive	Directory	Observed
N/A	model	OBS20161101

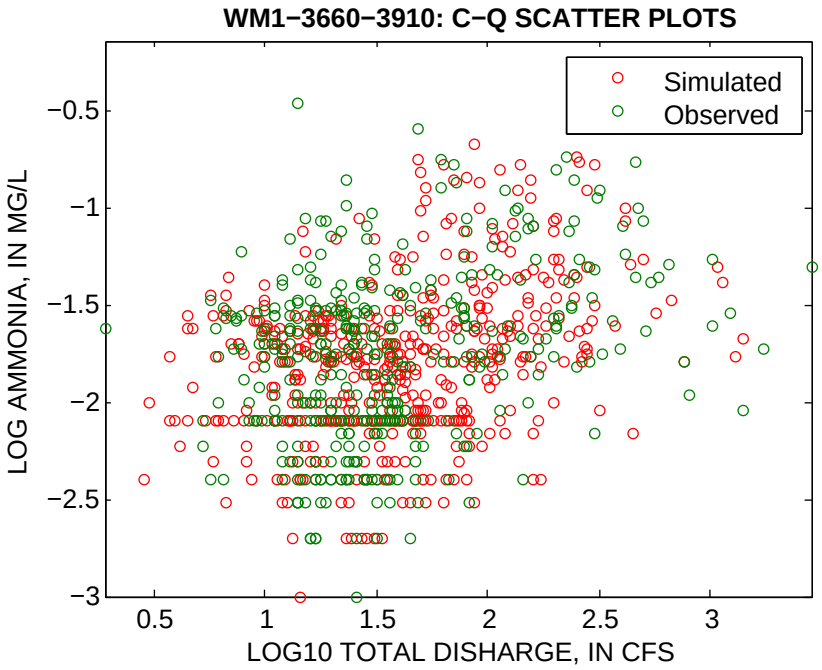
STATISTICS

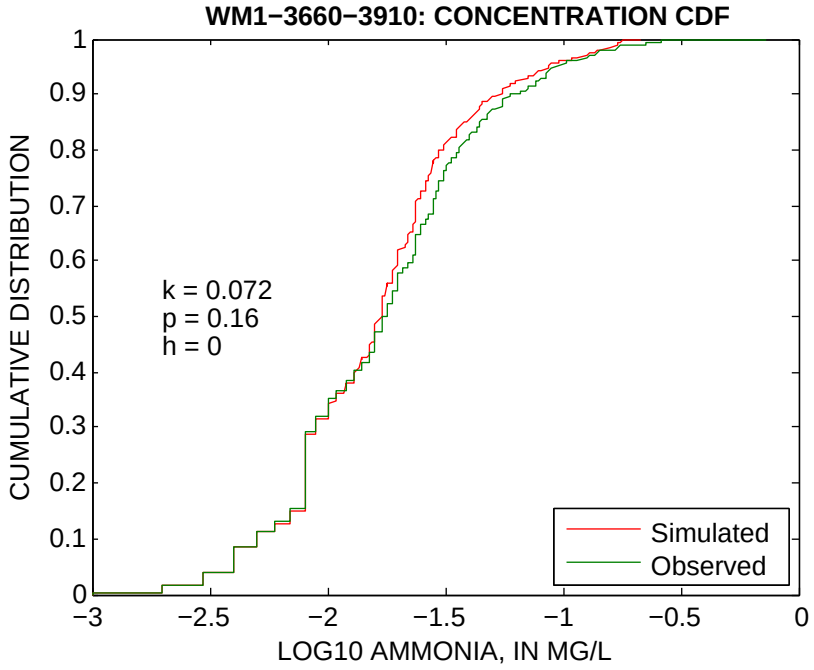
	n	observe	simulate
		488	488
min		0.001	0.0037845
		-3	-2.42199
mean		0.0297629	0.0481742
		-1.75999	-1.62061
media		0.017	0.015633
		-1.76955	-1.80596
max		0.737	0.32592
		-0.132533	-0.486889
varian		0.0023664	0.00331172
		0.182254	0.261784
JB		0.001	0.001
		0.021216	0.001
		ra	log
%		61.8601	-7.91921
err.va		0.00472867	0.286294
rel.std.err		1.99825	1.57085
mod.eff		-0.998255	-0.570852

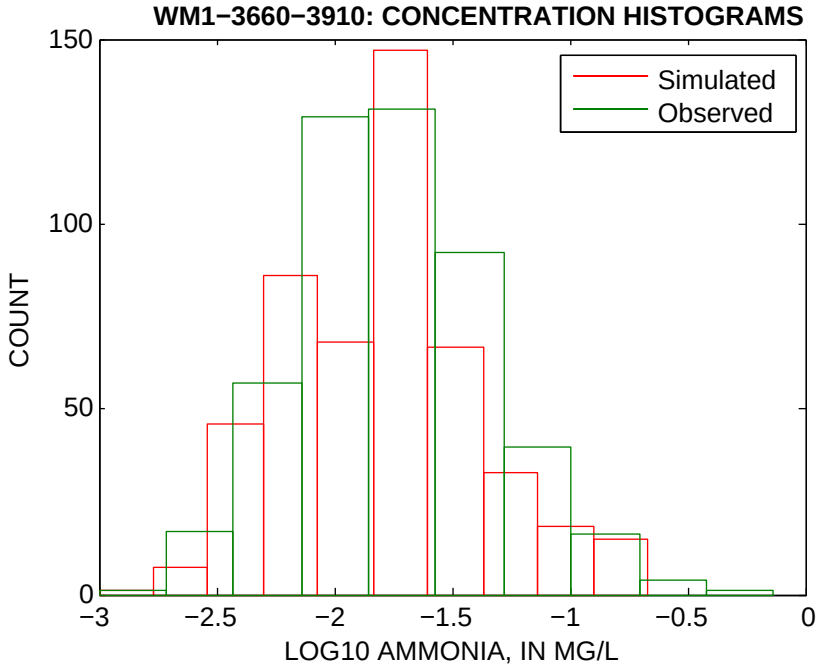
VERSION 2.1

ALL DATA
LOG10

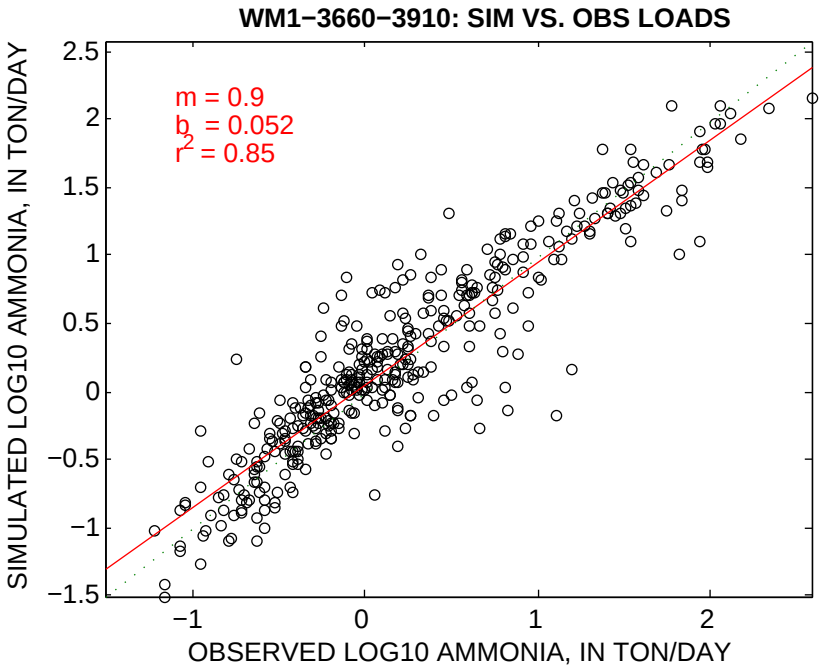


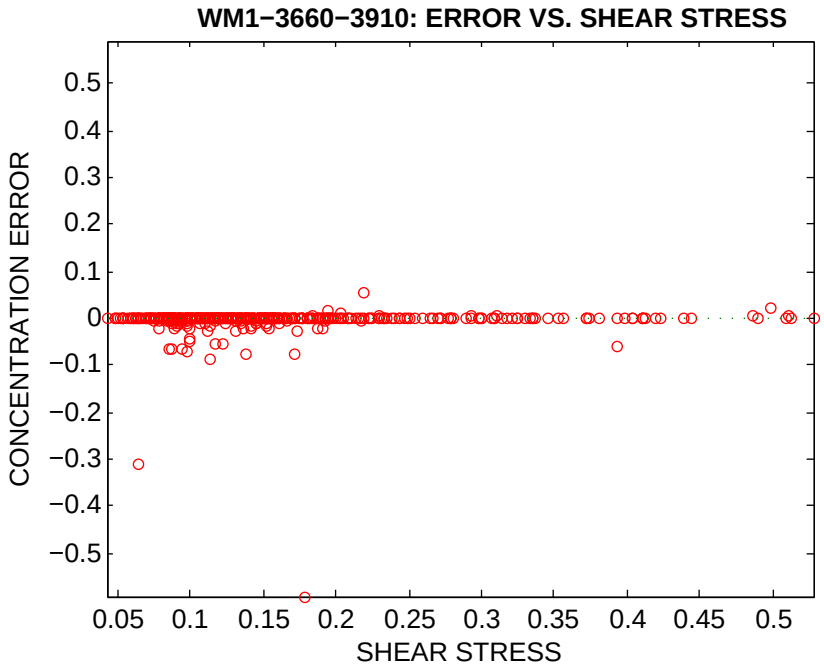


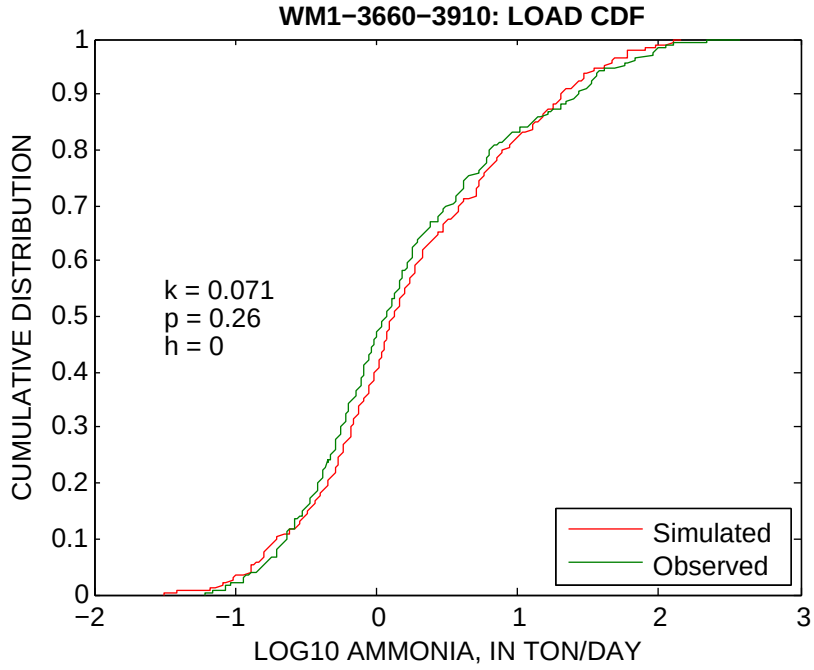


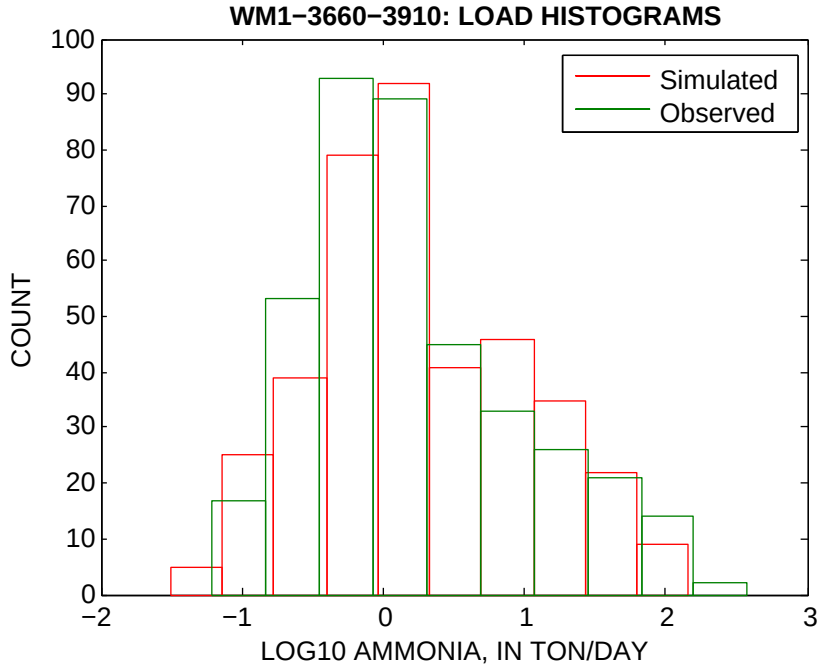


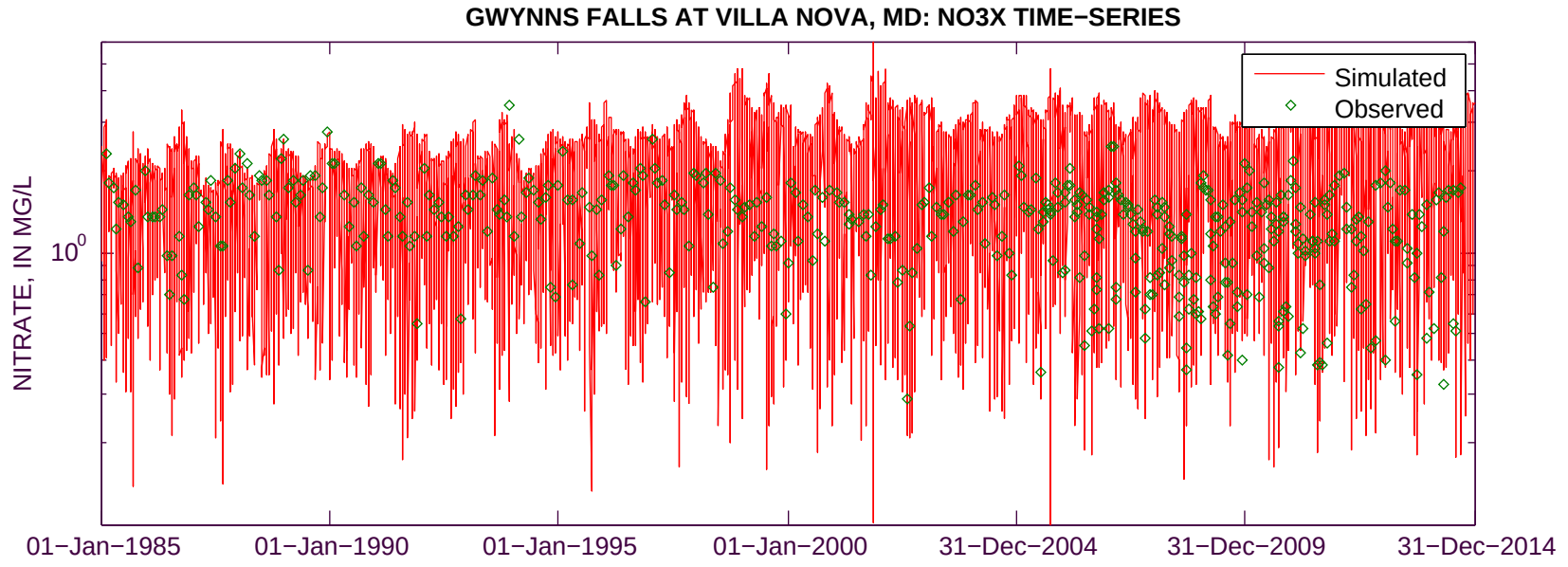
LOAD DATA
LOG10

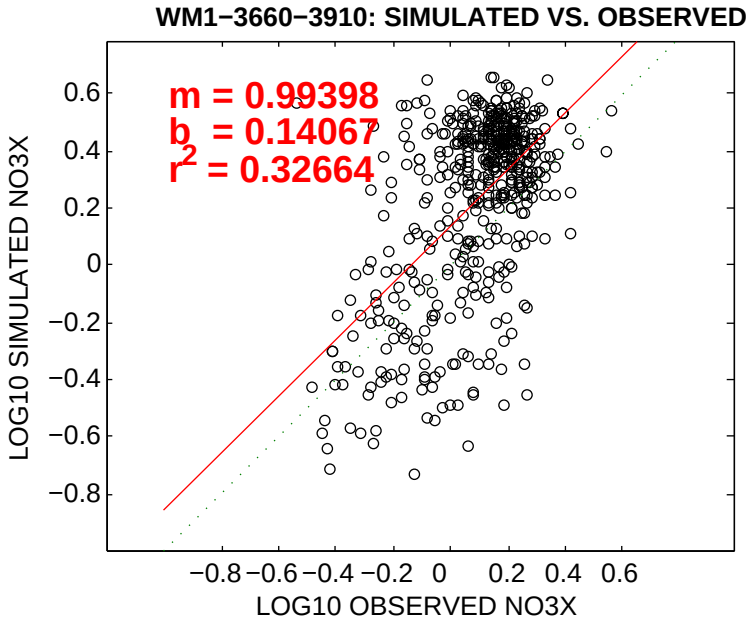


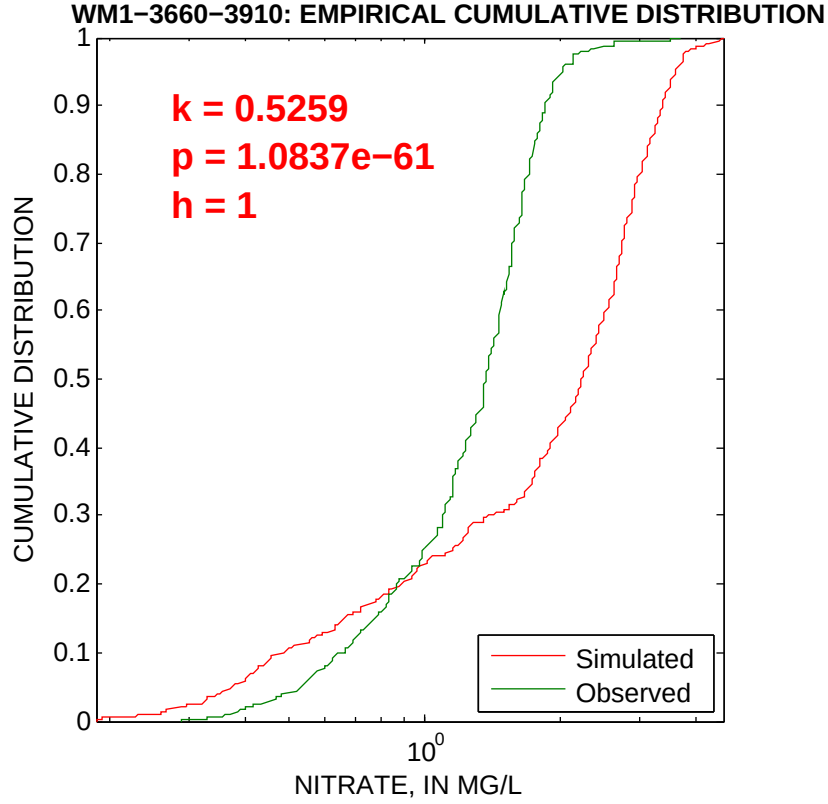












DATA SELECTION

scenario	file
P620171001WQ	NO3X.calib

plot: NO3X - nitrate

Dates: 1/1/1985 – 12/31/201

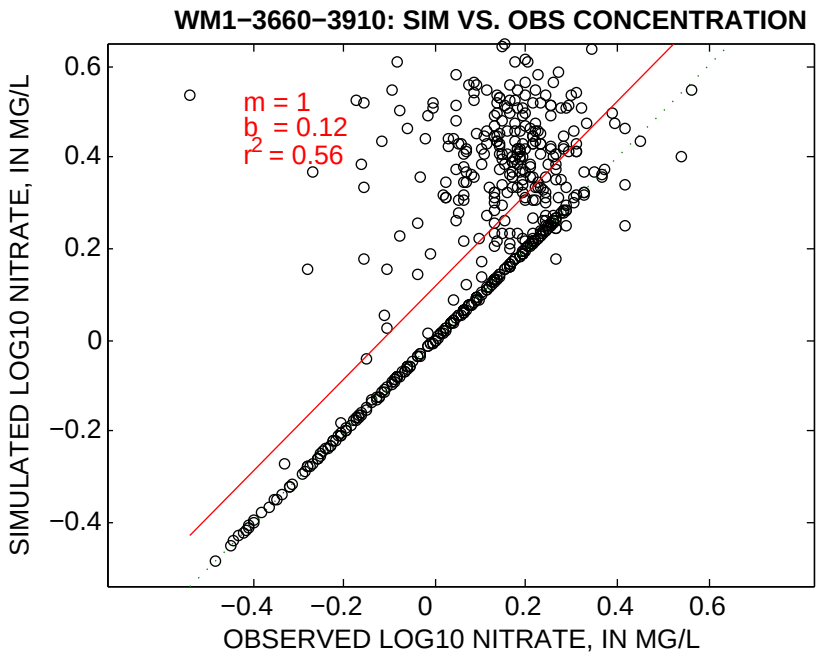
Drive	Directory	Observed
N/A	model	OBS20161101

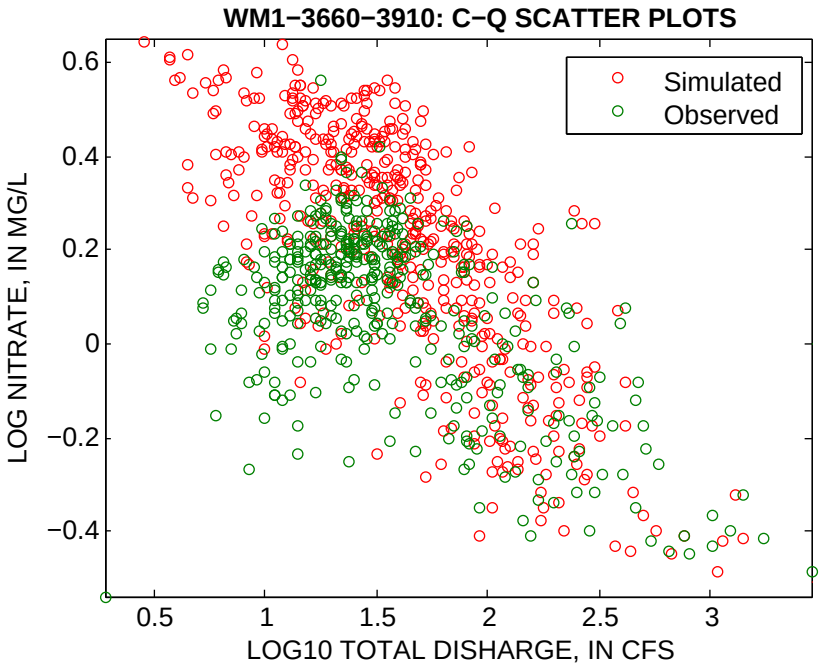
STATISTICS

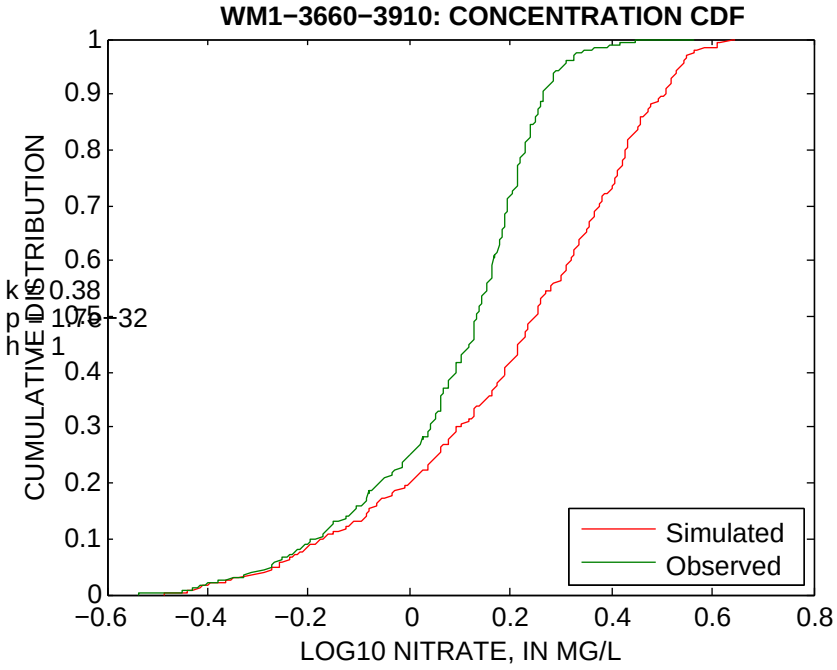
	n	502	502
		observe	simulate
min		0.29	0.18683
		-0.537602	-0.728553
mean		1.32388	2.06825
		0.0886956	0.228827
media		1.3625	2.2263
		0.134336	0.347583
max		3.665	4.5675
		0.564074	0.659679
varian		0.22769	1.09846
		0.0326415	0.0987301
JB		0.001	0.001005
		0.001	0.001
		ra	log
%		56.2269	157.991
err.va		1.42803	0.0861579
rel.std.err		6.2718	2.63952
mod.eff		-5.2718	-1.63952

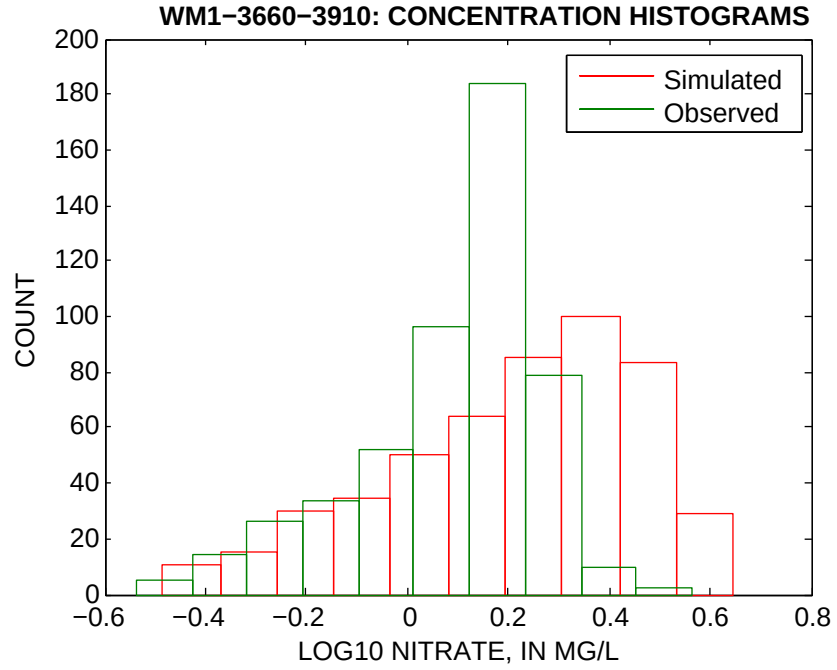
VERSION 2.1

ALL DATA
LOG10

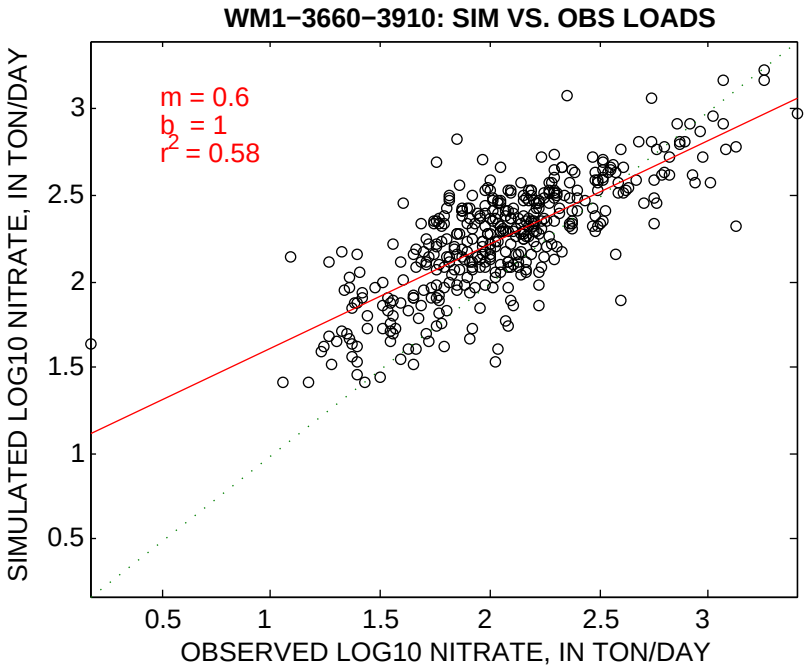


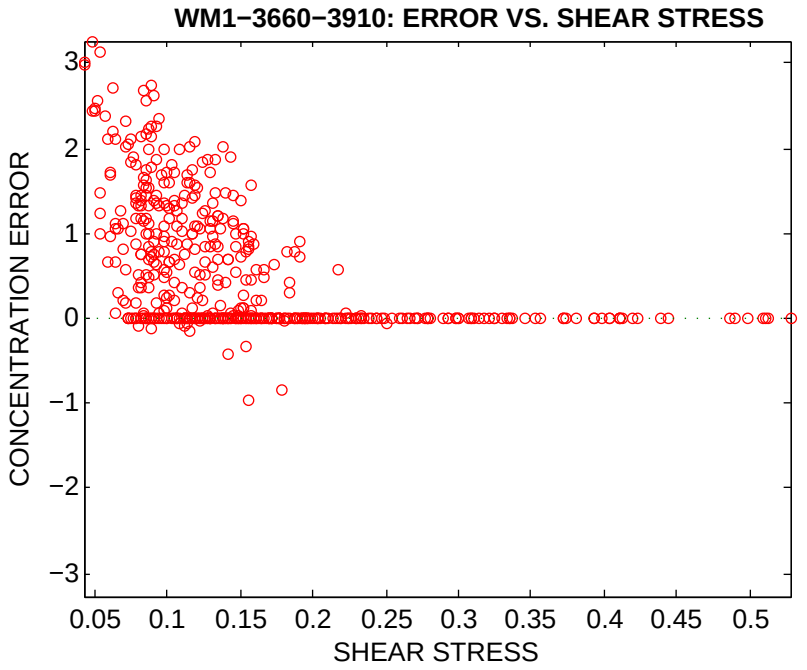


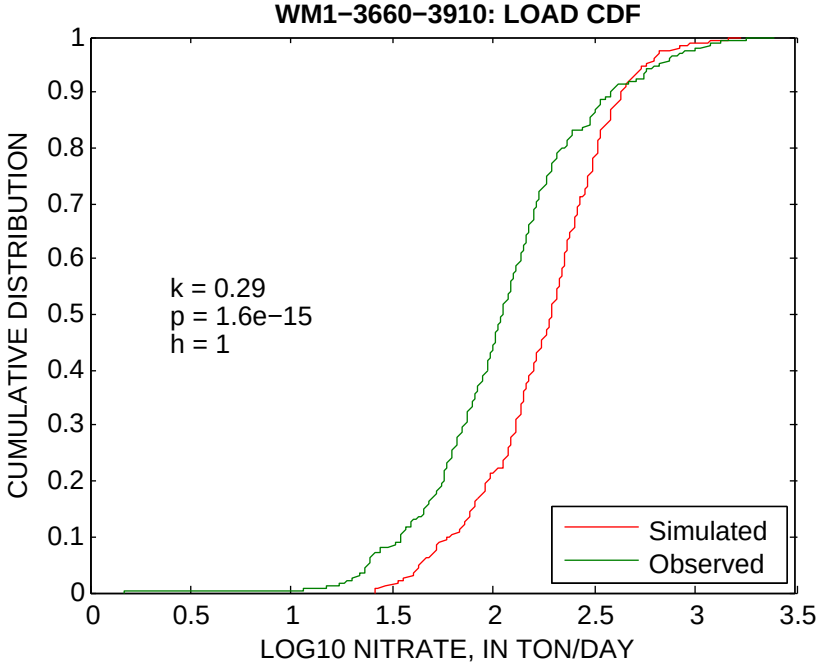


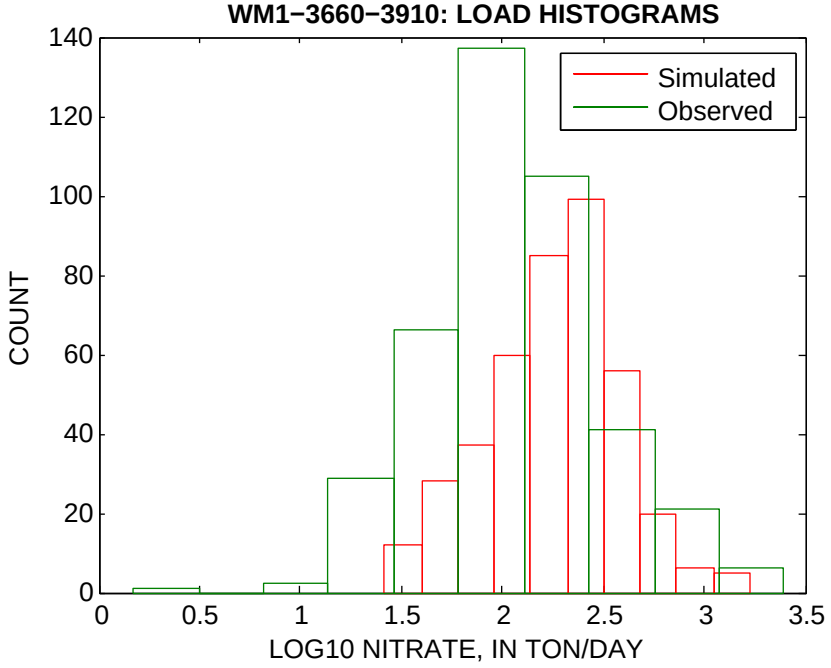


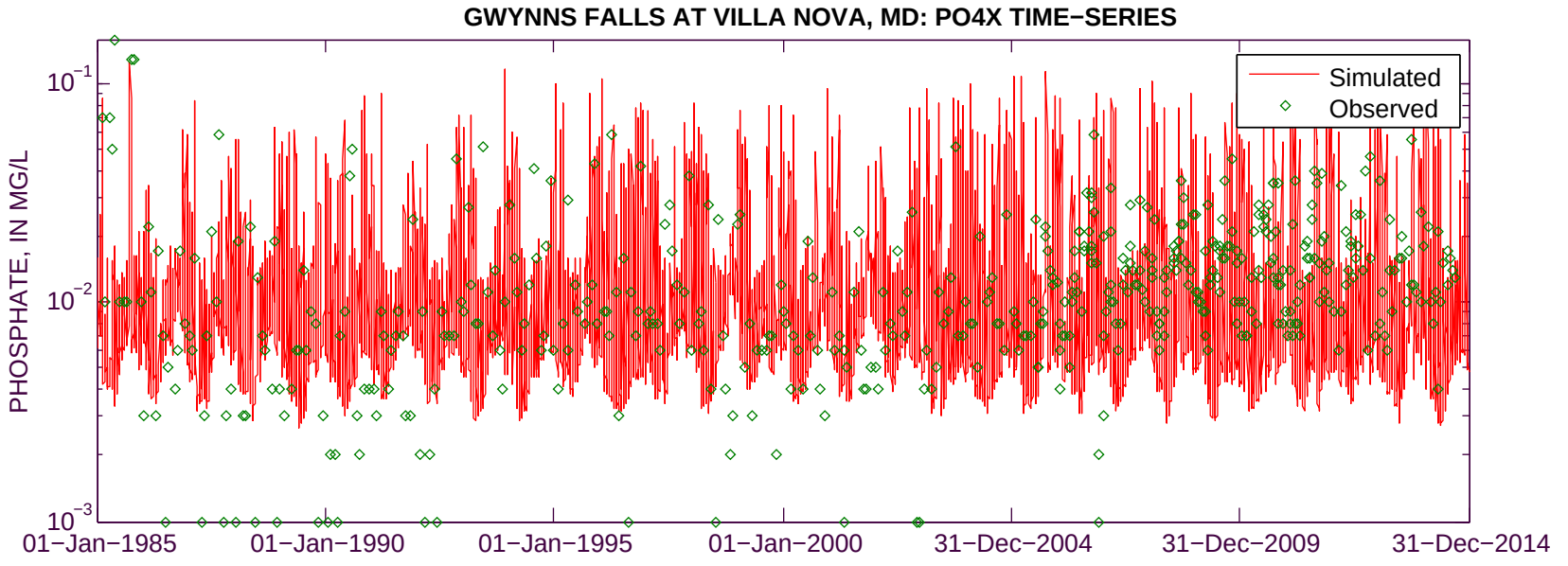
LOAD DATA
LOG10

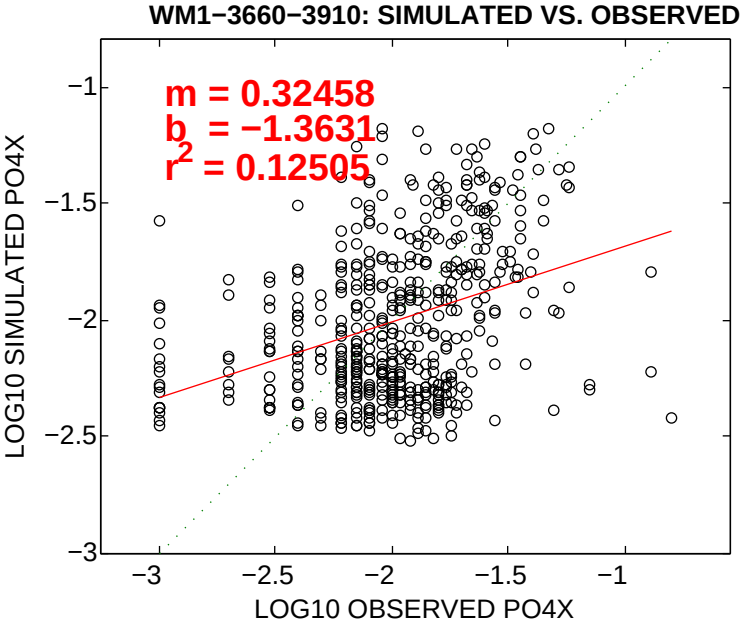


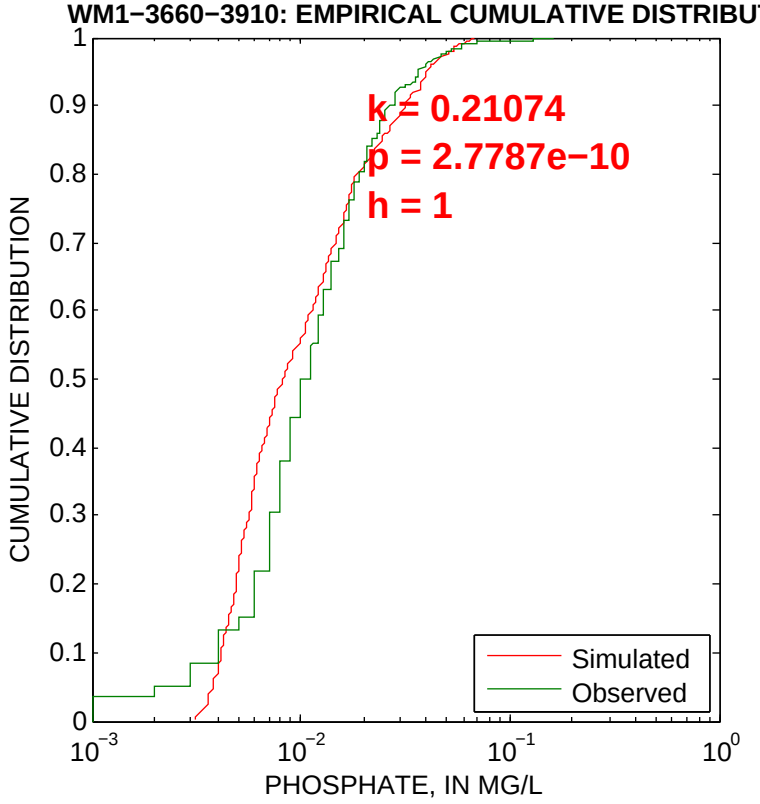












DATA SELECTION

scenario: P620171001WQ | file: PO4X.calib

plot: PO4X - phosphate

Dates: 1/1/1985 – 12/31/201

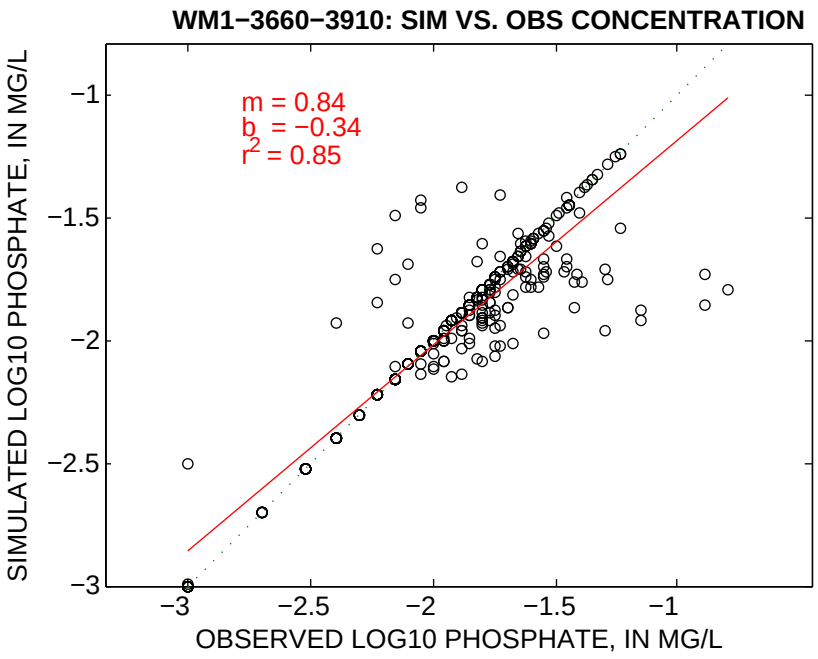
Drive: N/A | Directory: model | Observed: OBS20161101

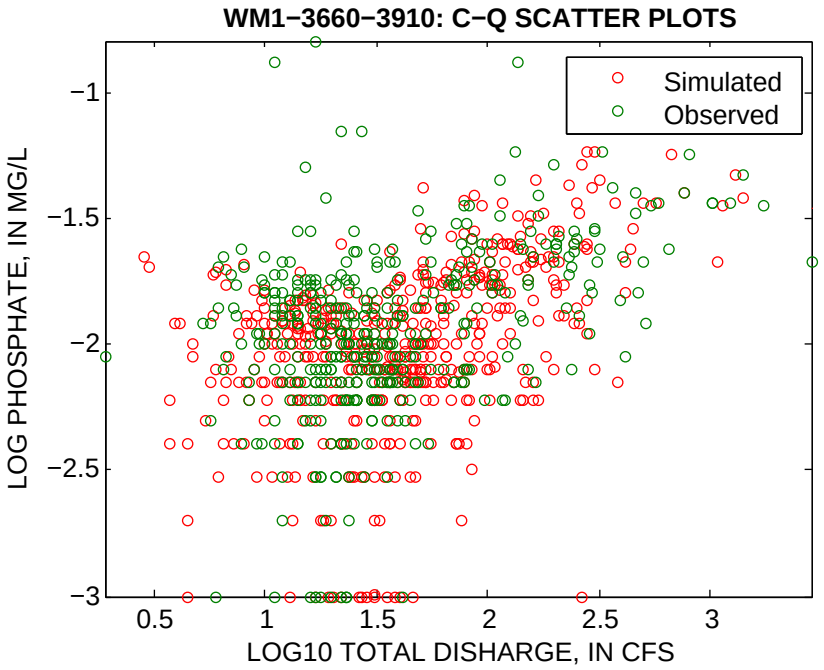
STATISTICS

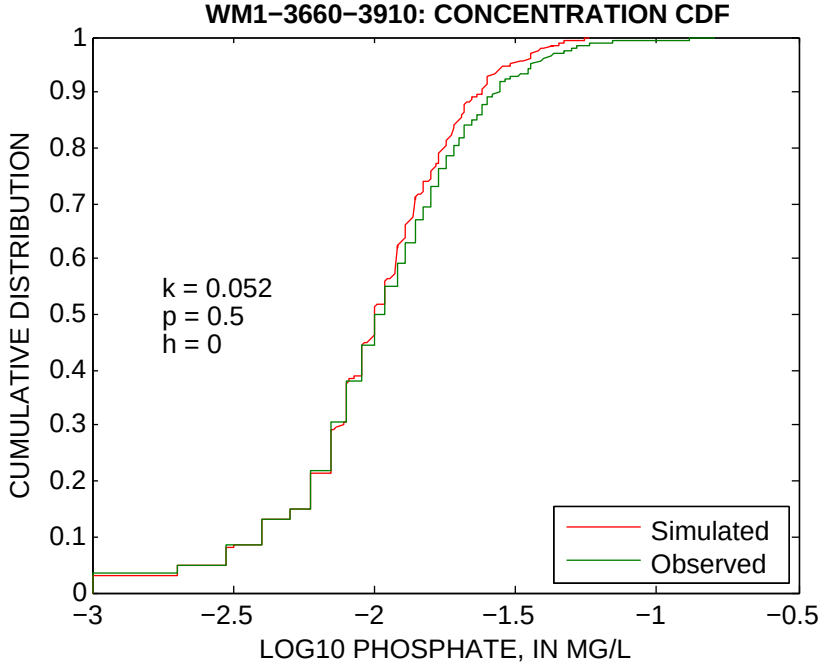
	n	observe	simulate
		503	503
min		0.001	0.0030372
		-3	-2.51753
mean		0.0142771	0.0134558
		-1.98516	-2.00745
media		0.01	0.0083113
		-2	-2.08033
max		0.16	0.066932
		-0.79588	-1.17437
varian		0.00020998	0.00015136
		0.127783	0.107649
JB		0.001	0.001
		0.001	0.001
		ra	log
%		-5.7526	1.12265
err.va		0.00026308	0.152979
rel.std.err		1.25287	1.19717
mod.eff		-0.252869	-0.197175

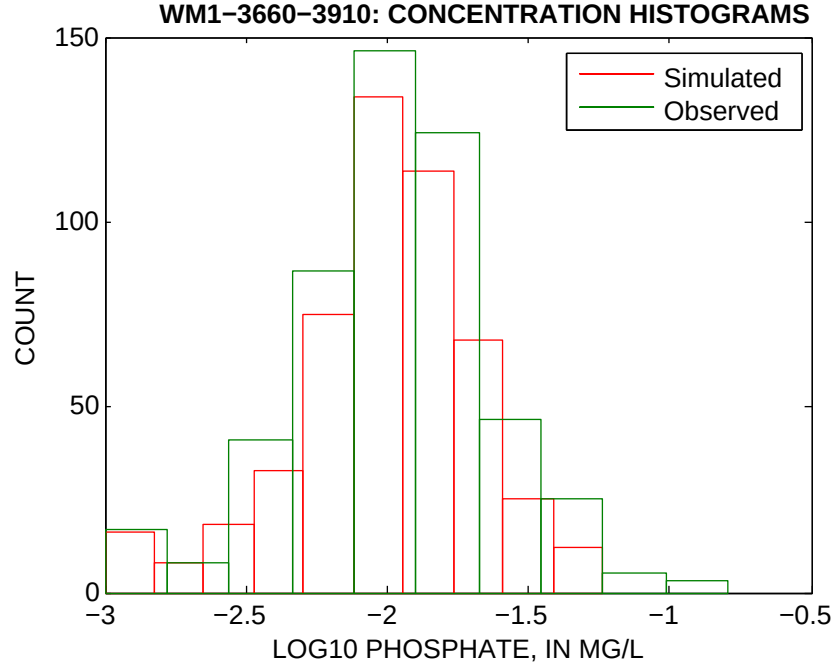
VERSION 2.1

ALL DATA
LOG10

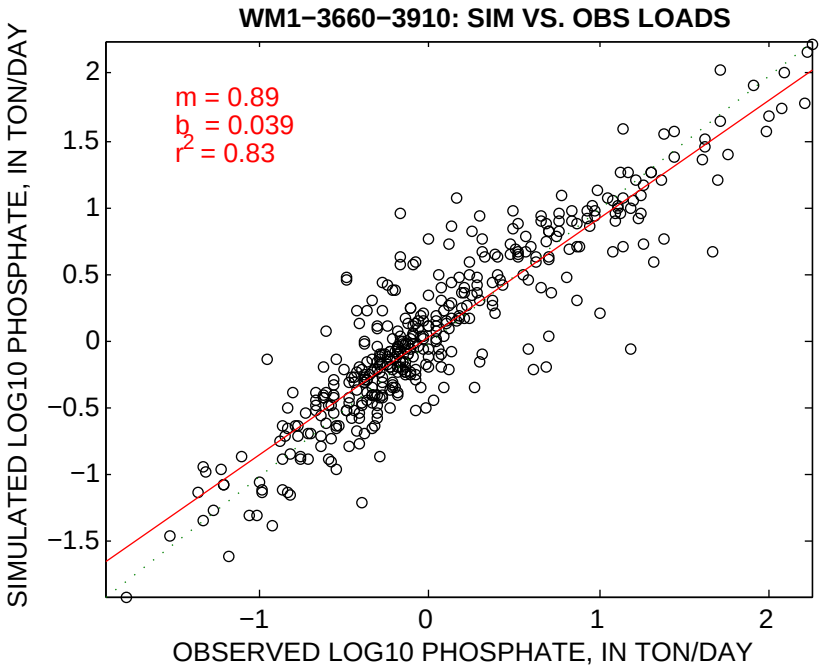


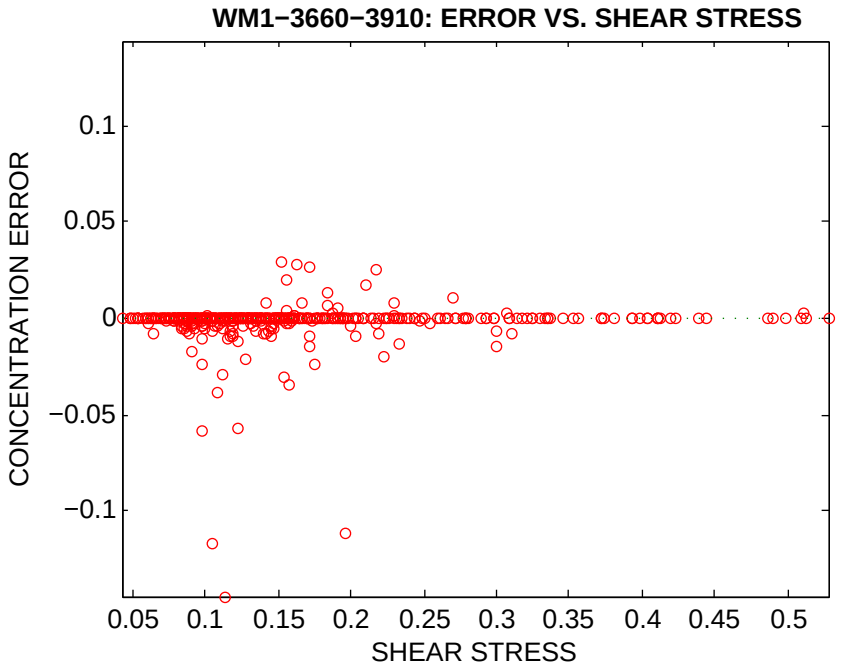


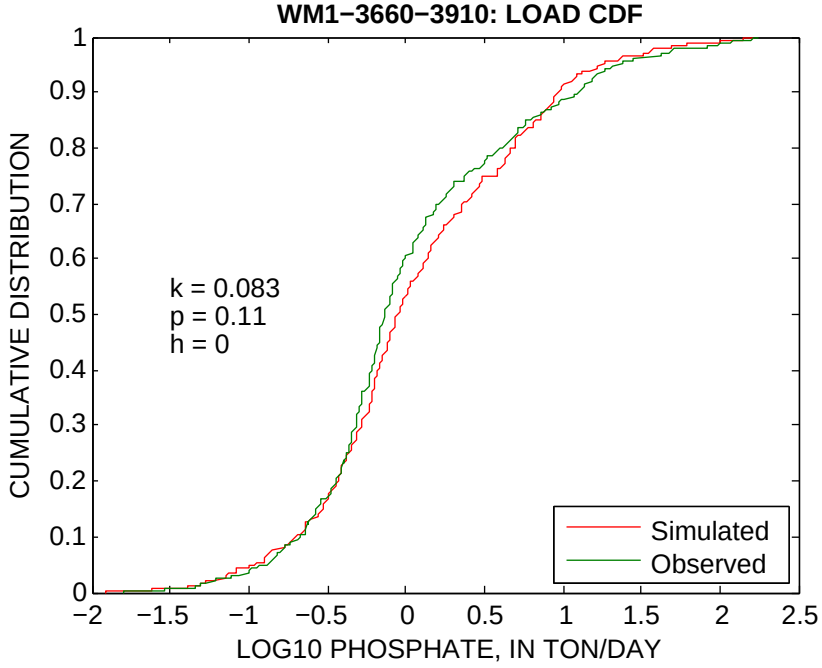


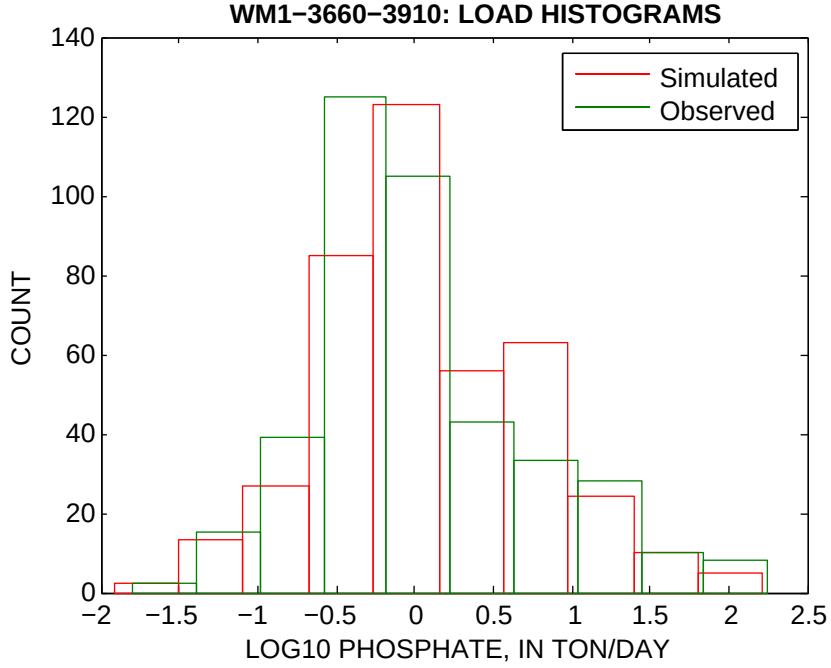


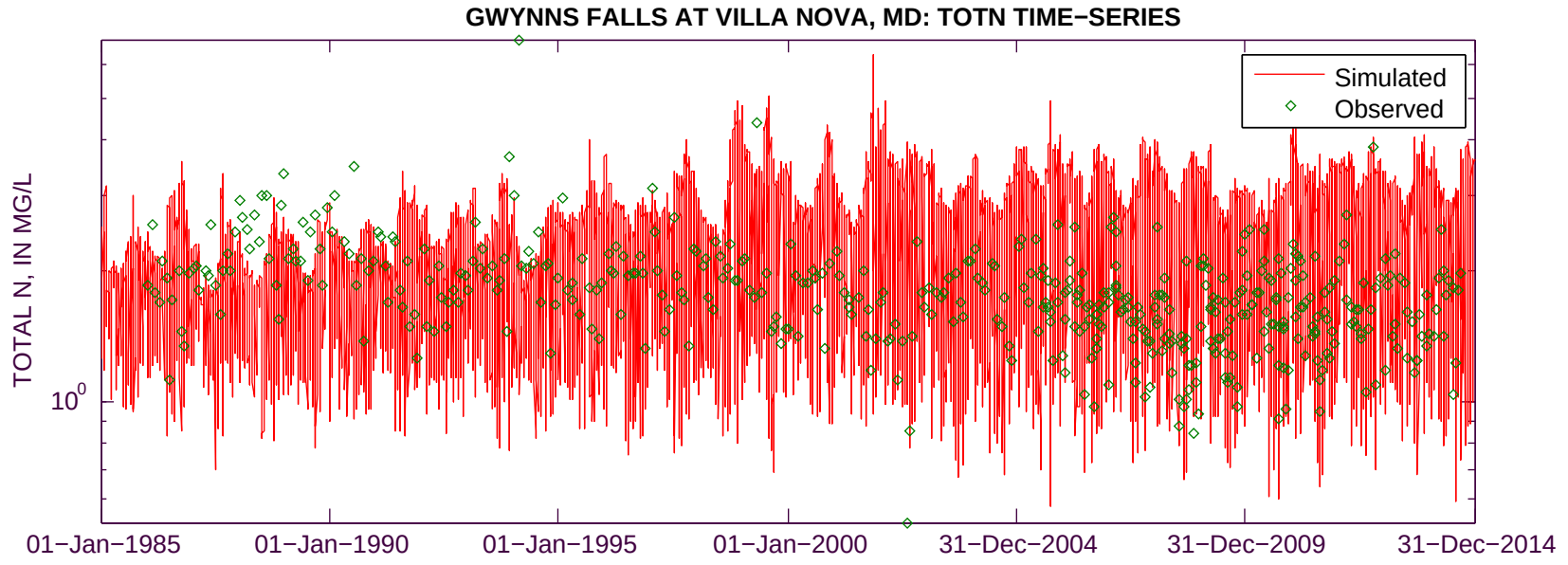
LOAD DATA
LOG10

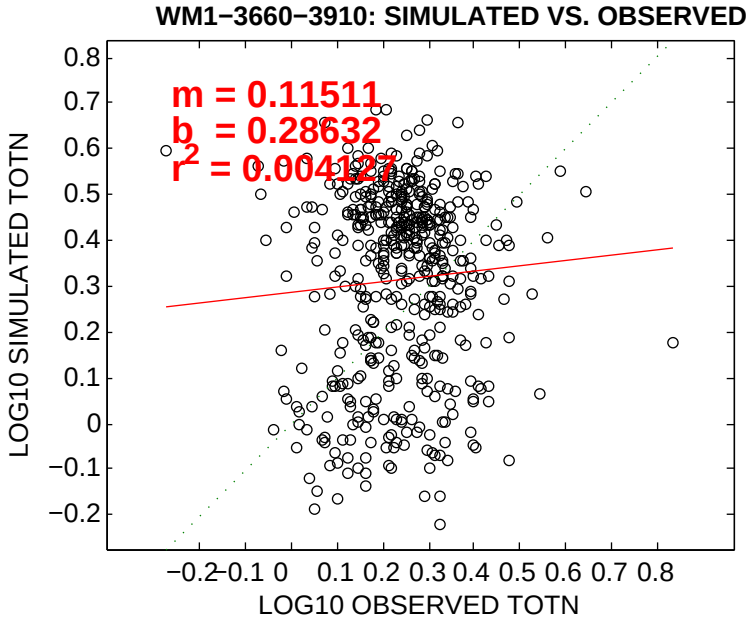


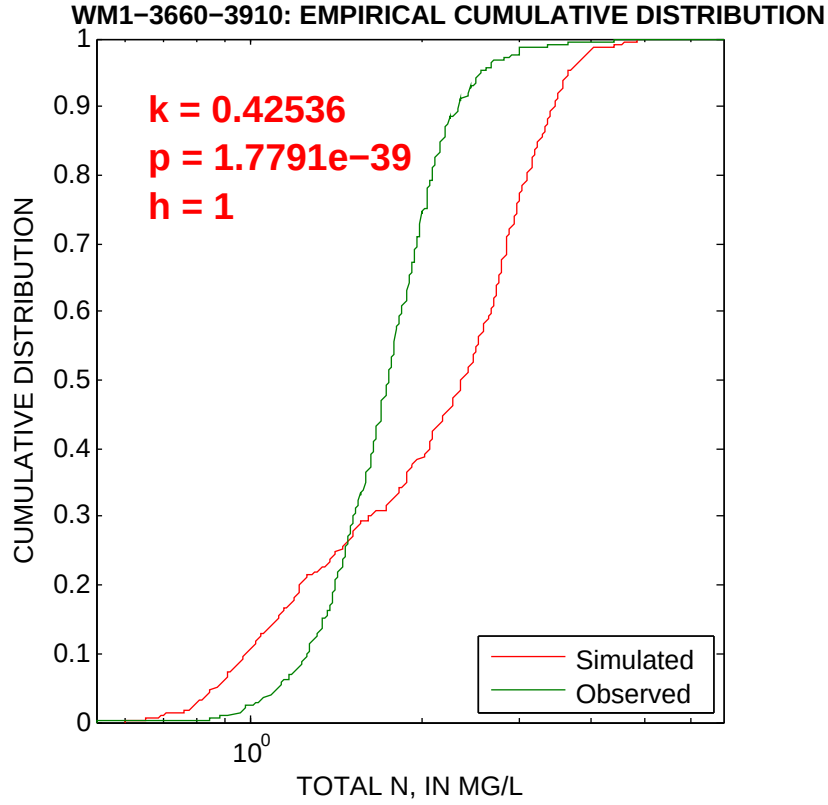












DATA SELECTION

scenario	file
P620171001WQ	TOTN.calib

plot: TOTN - total nitrogen

Dates: 1/1/1985 – 12/31/201

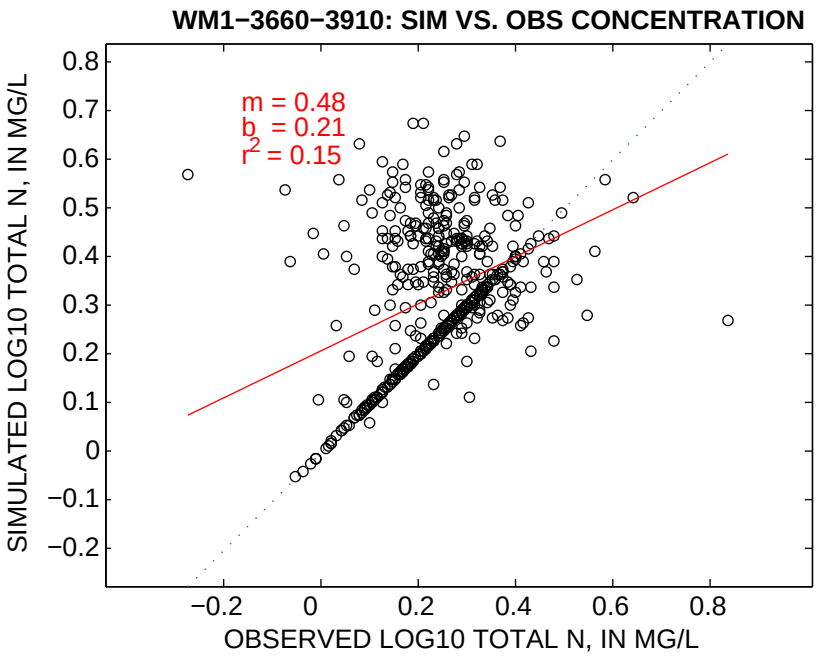
Drive	Directory	Observed
N/A	model	OBS20161101

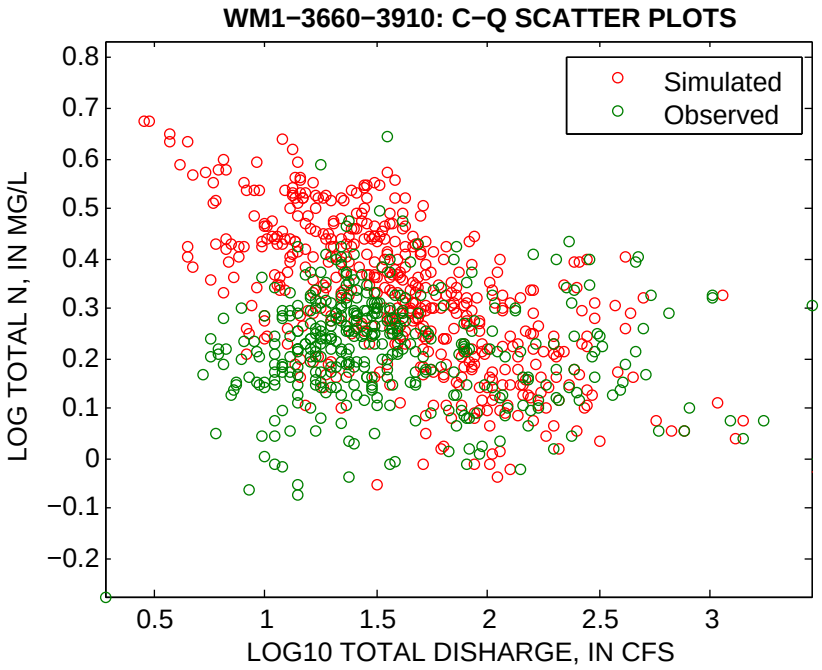
STATISTICS

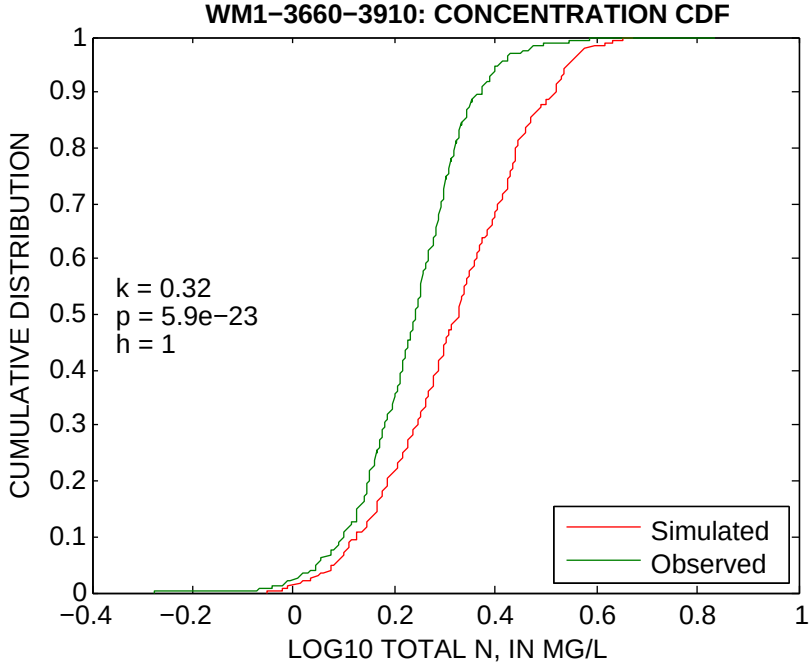
	observe	simulate
n	489	489
min	0.53 -0.275724	0.59943 -0.222262
mean	1.79069 0.237755	2.27282 0.313688
media	1.75 0.243038	2.3623 0.373335
max	6.85 0.835691	4.8314 0.684073
varian	0.264721 0.012961	0.852159 0.0416138
JB	0.001 0.001	0.004174 0.001
	ra	log
%	26.9245	31.9373
err.va	1.34455	0.0573684
rel.std.err	5.07912	4.42624
mod.eff	-4.07912	-3.42624

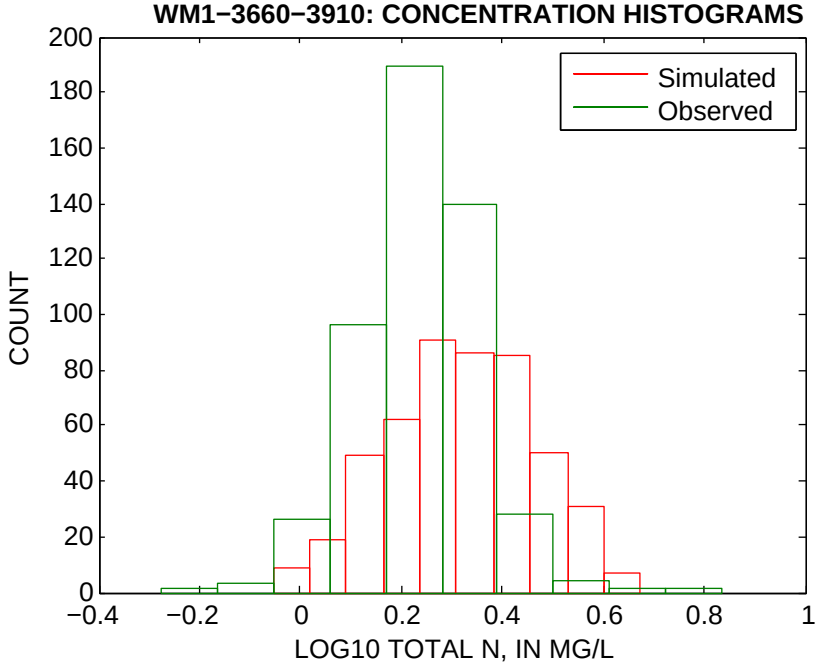
VERSION 2.1

ALL DATA
LOG10

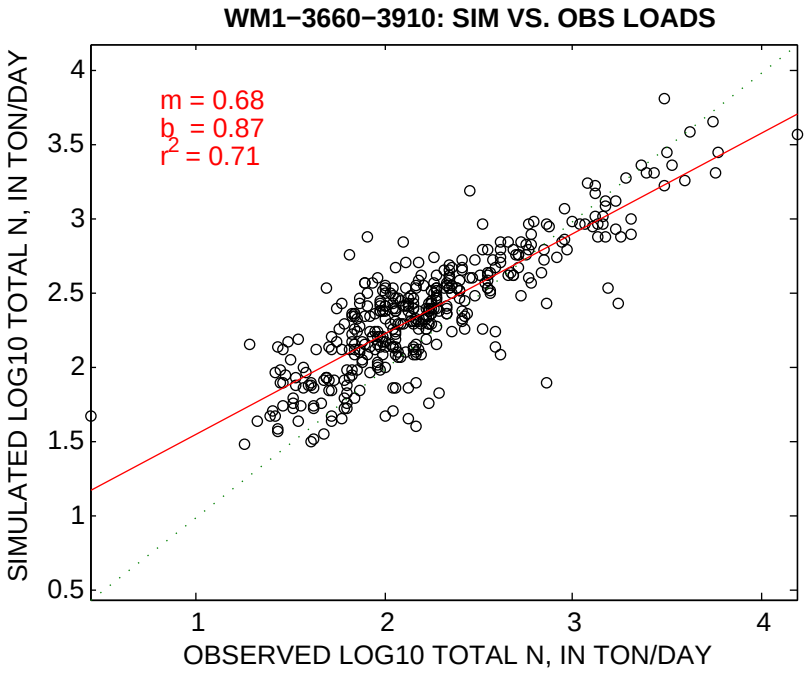


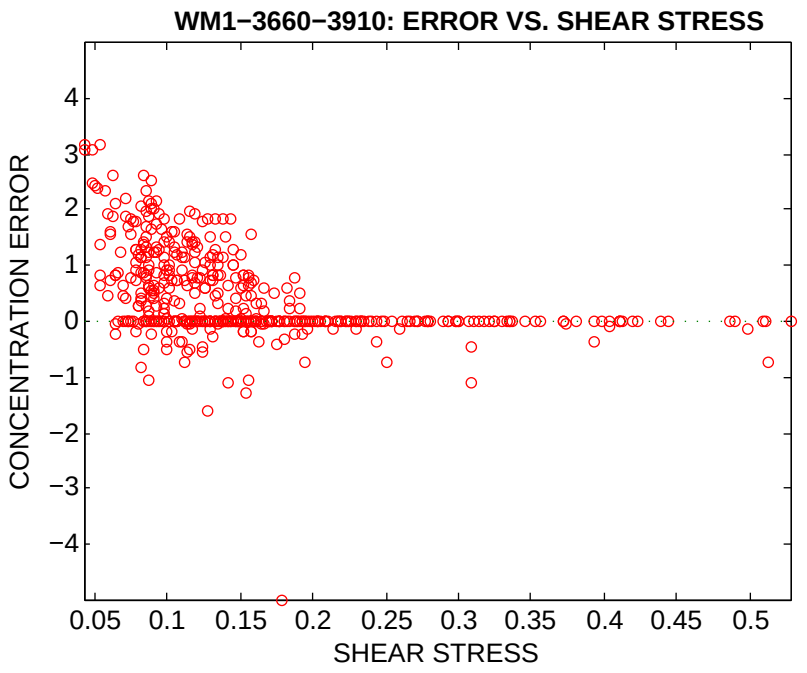


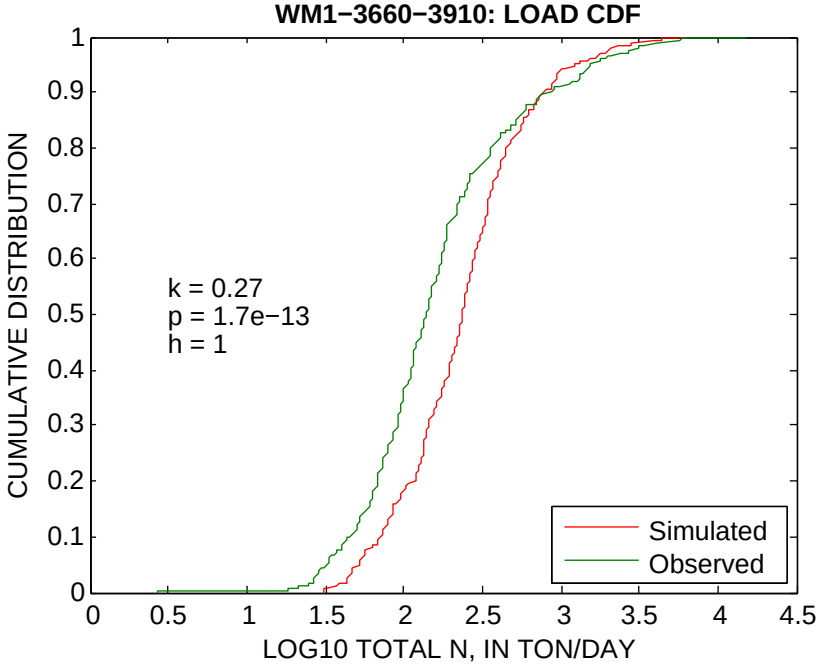


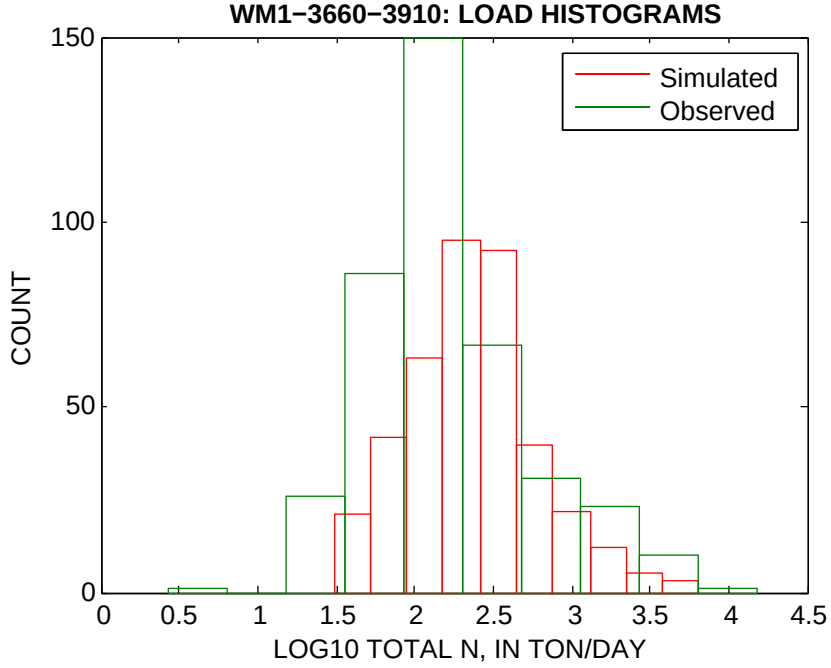


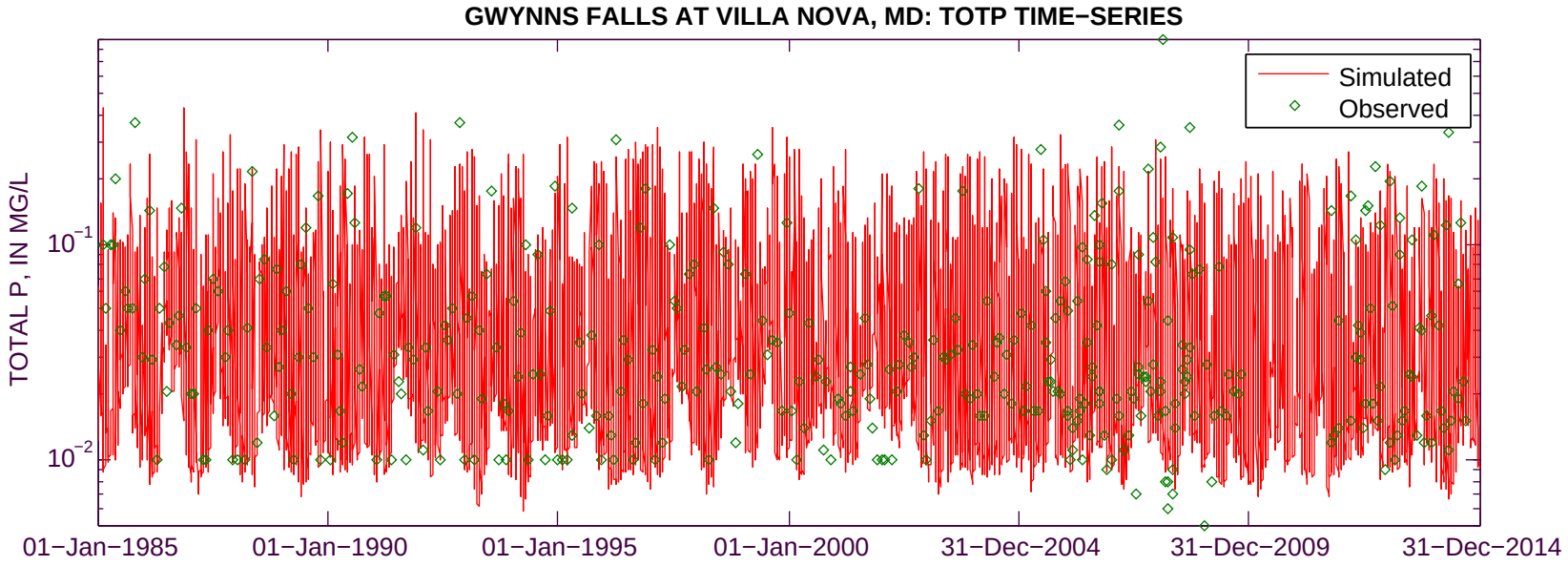
LOAD DATA
LOG10

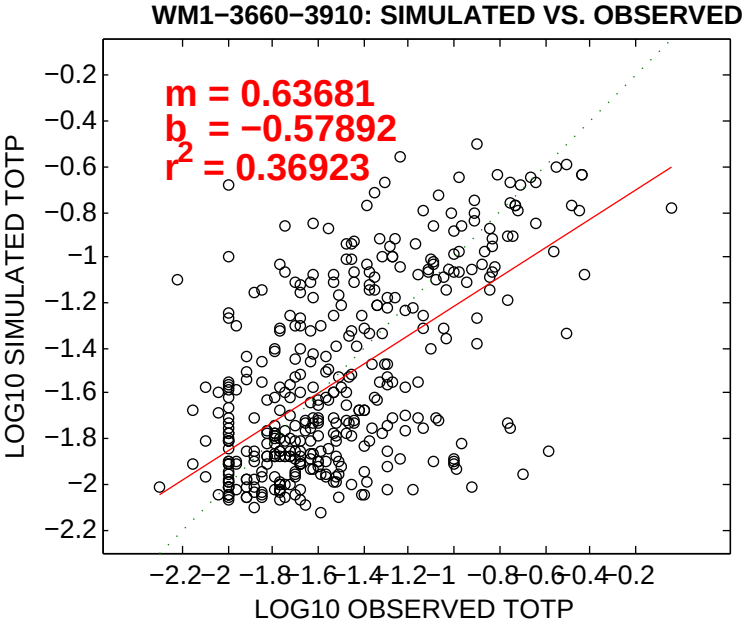


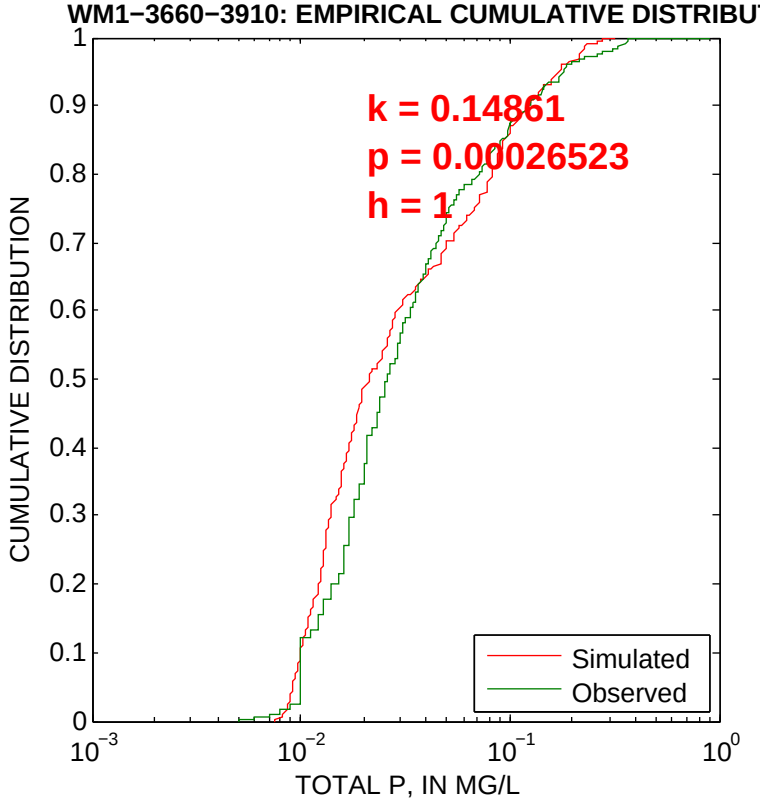












DATA SELECTION

scenario	file
P620171001WQ	TOTP.calib

plot: TOTP - total phosphorus

Dates: 1/1/1985 – 12/31/201

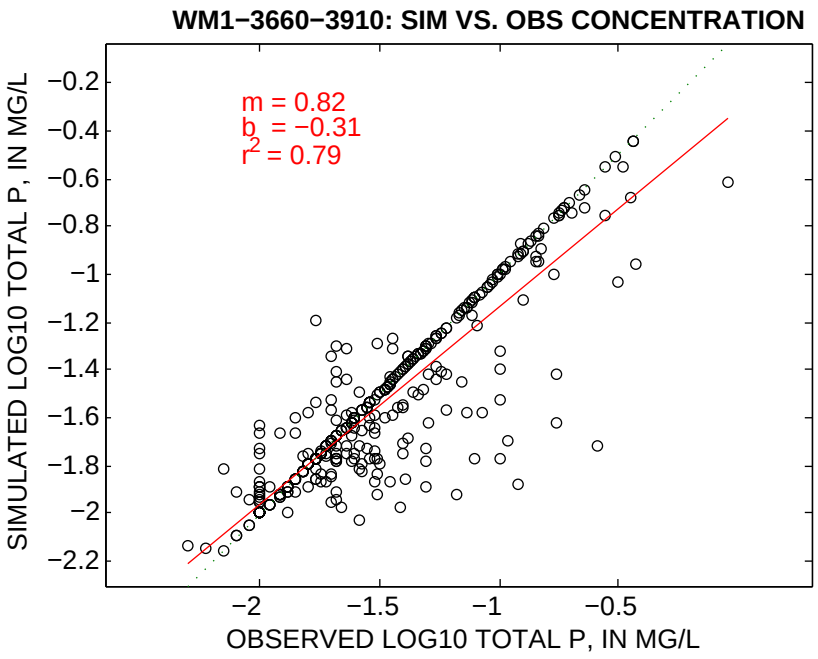
Drive	Directory	Observed
N/A	model	OBS20161101

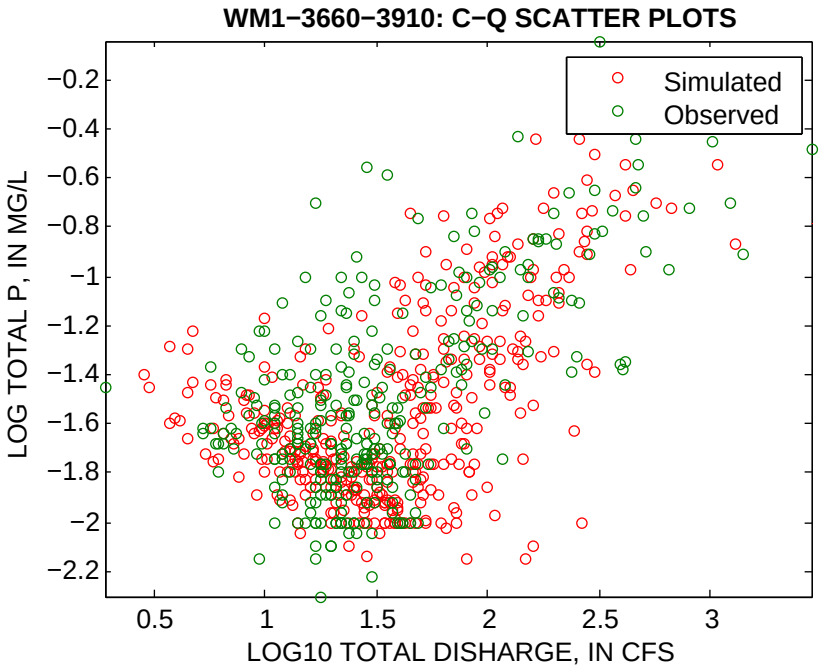
STATISTICS

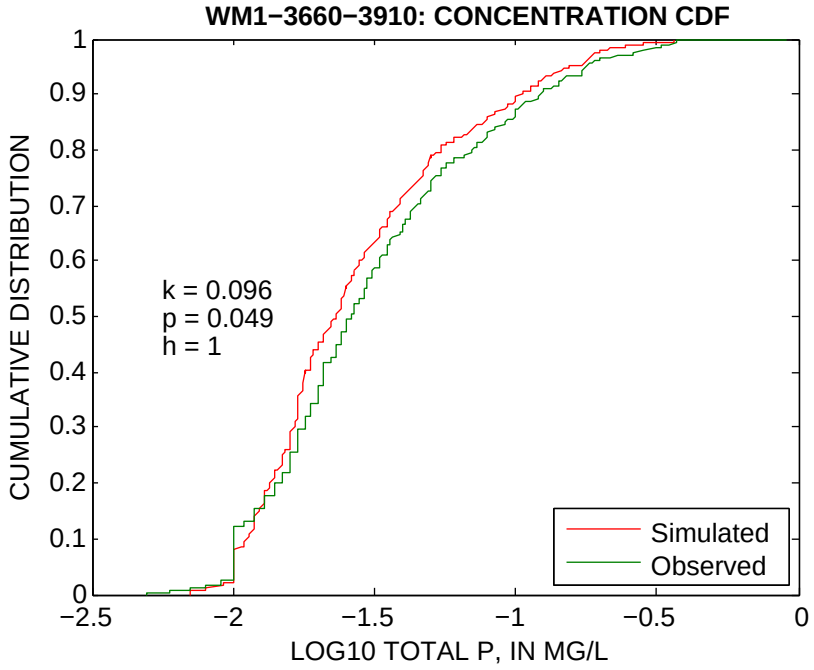
	n	397	397
		observe	simulate
min		0.005	0.0075215
		-2.30103	-2.1237
mean		0.0519676	0.0480832
		-1.50314	-1.53614
media		0.026	0.021169
		-1.58503	-1.6743
max		0.908	0.31672
		-0.0419142	-0.499325
varian		0.00565176	0.00300698
		0.158215	0.173769
JB		0.001	0.001
		0.001	0.001
		ra	log
%		-7.4747	2.19524
err.va		0.00400128	0.13157
rel.std.err		0.707971	0.831592
mod.eff		0.292029	0.168408

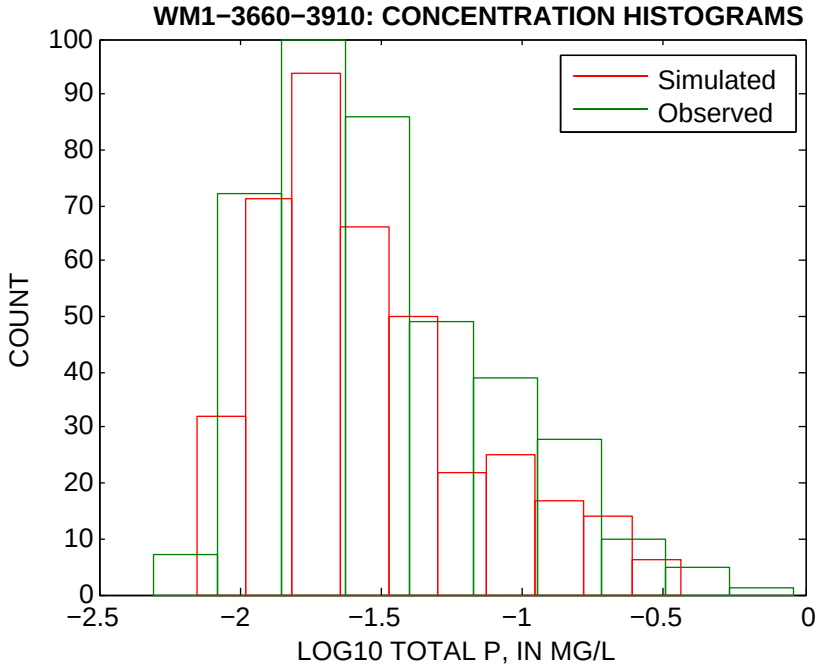
VERSION 2.1

ALL DATA
LOG10

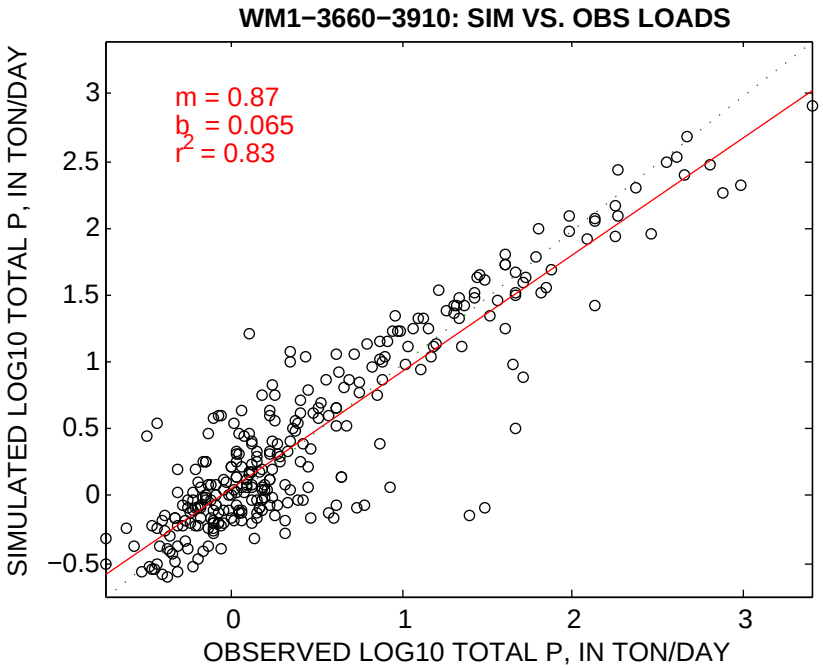


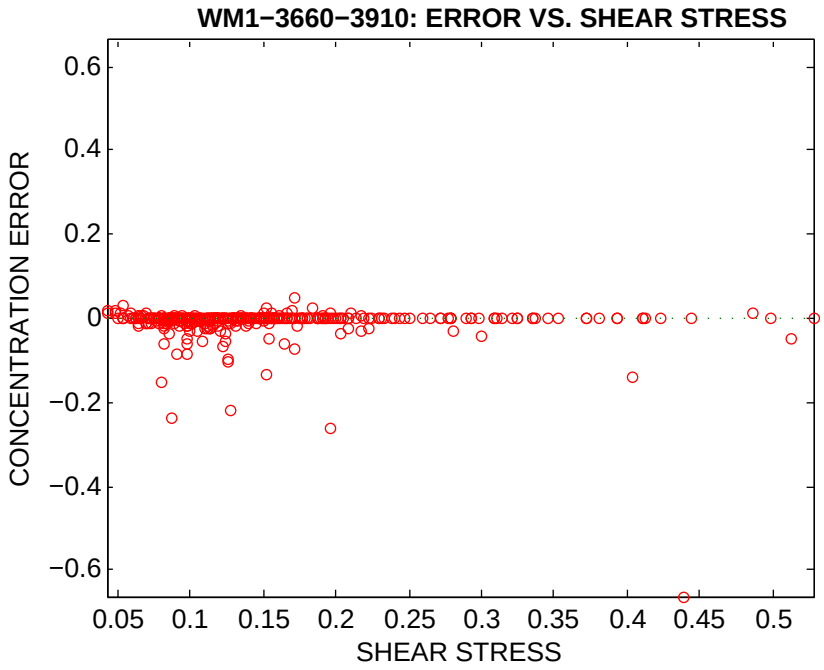


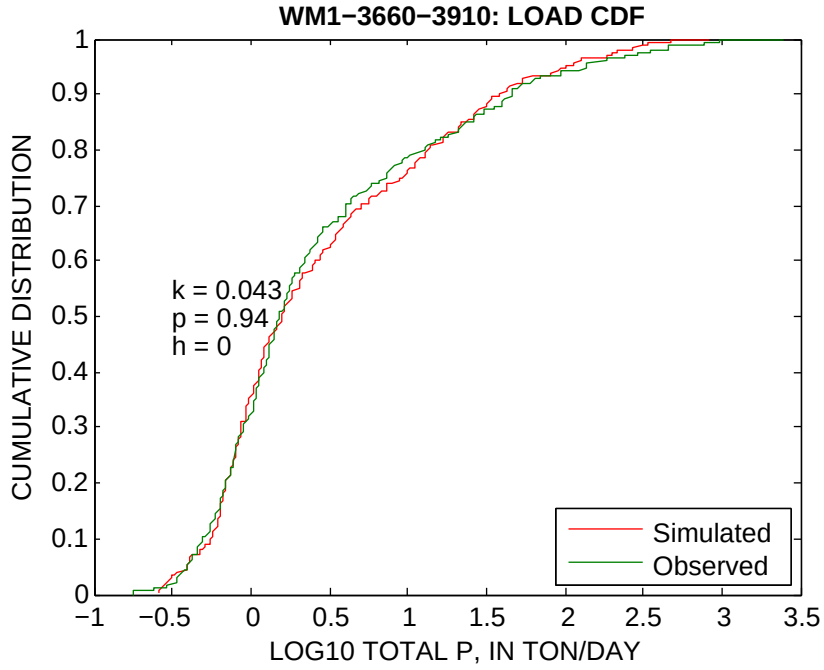


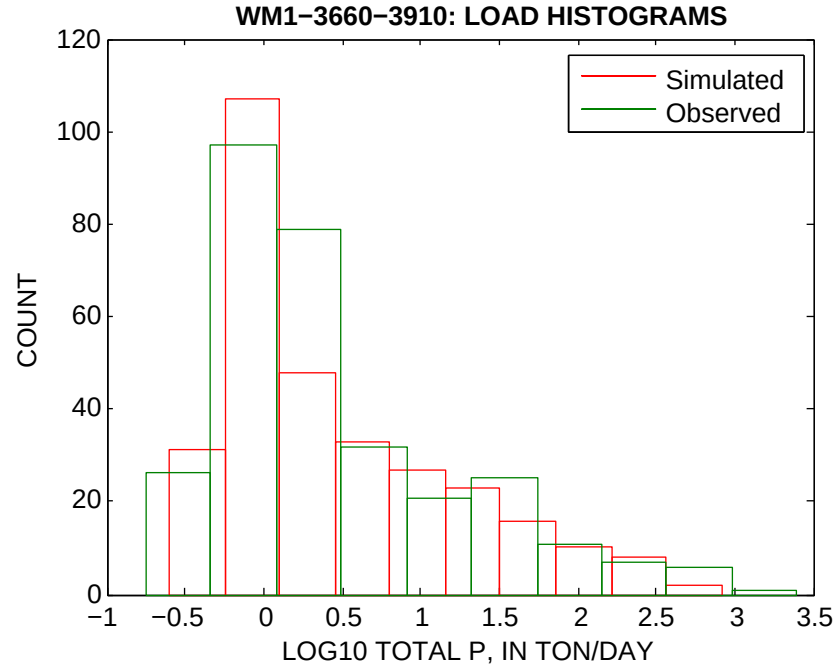


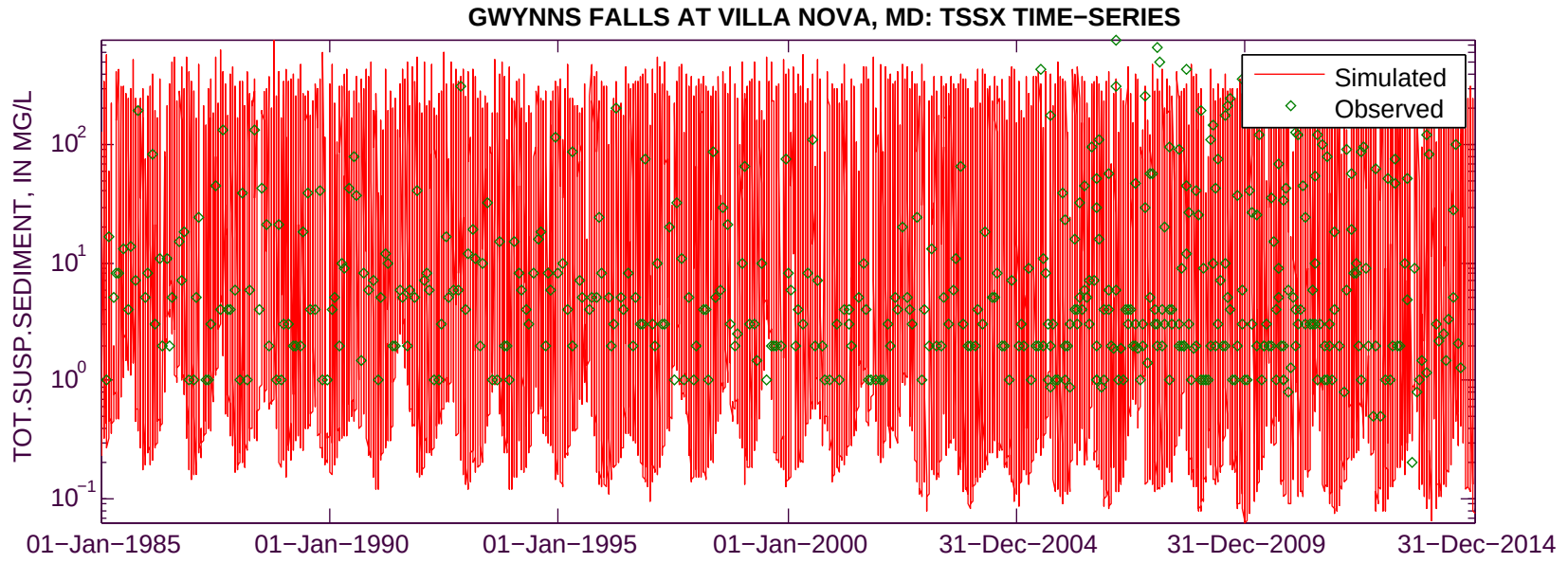
LOAD DATA
LOG10

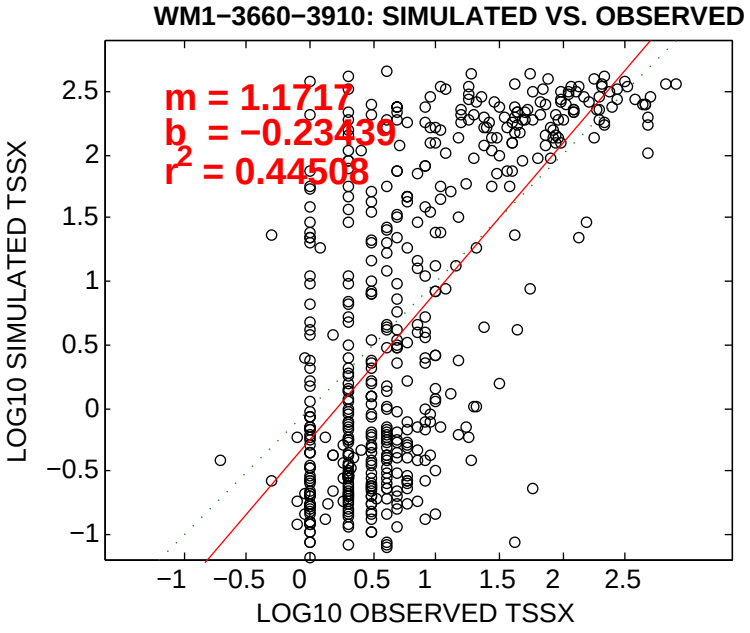


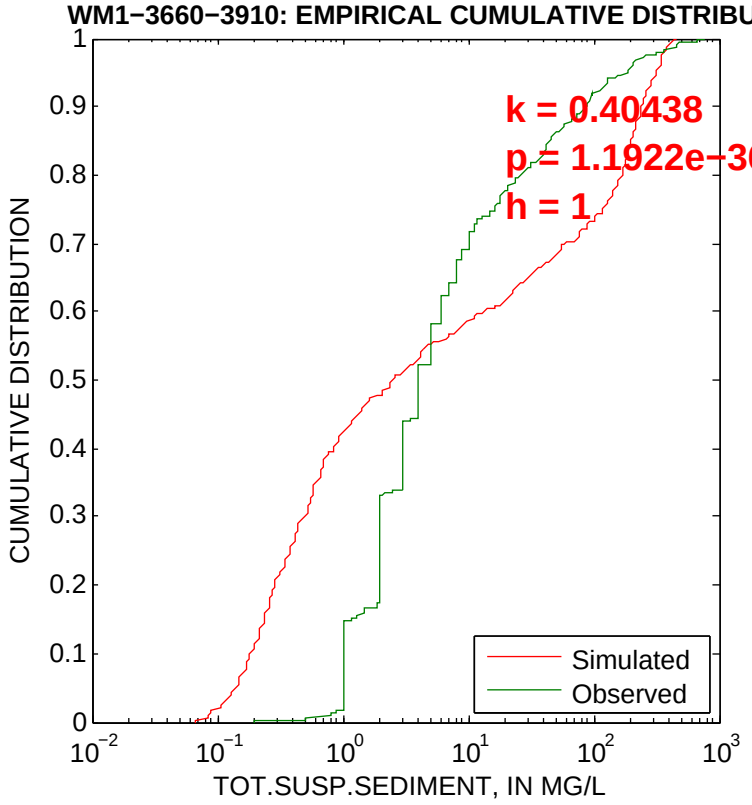












DATA SELECTION

scenario: P620171001WQ | file: TSSX.calib

plot: TSSX - total suspended ...

Dates: 1/1/1985 – 12/31/201

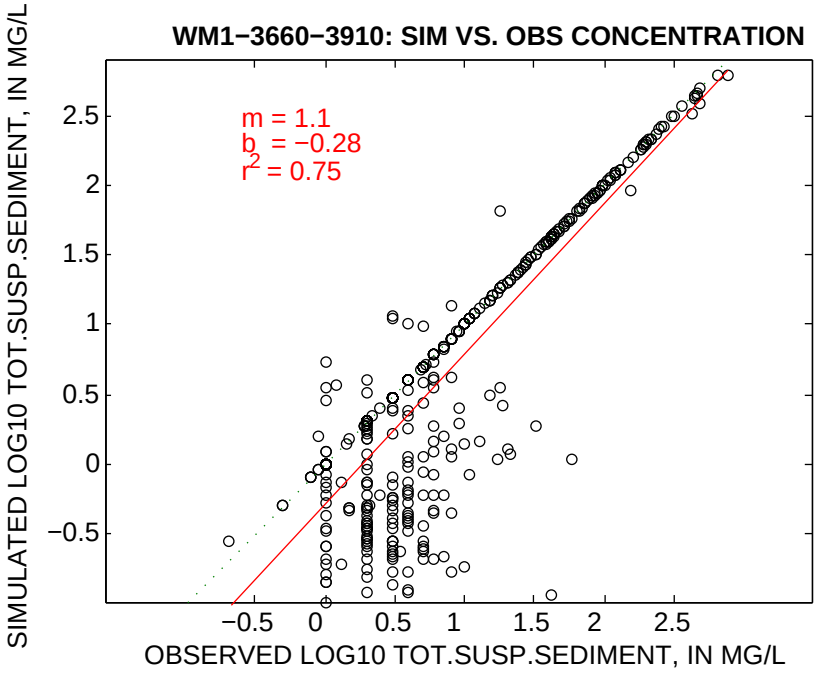
Drive | Directory: N/A | model | Observed: OBS20161101

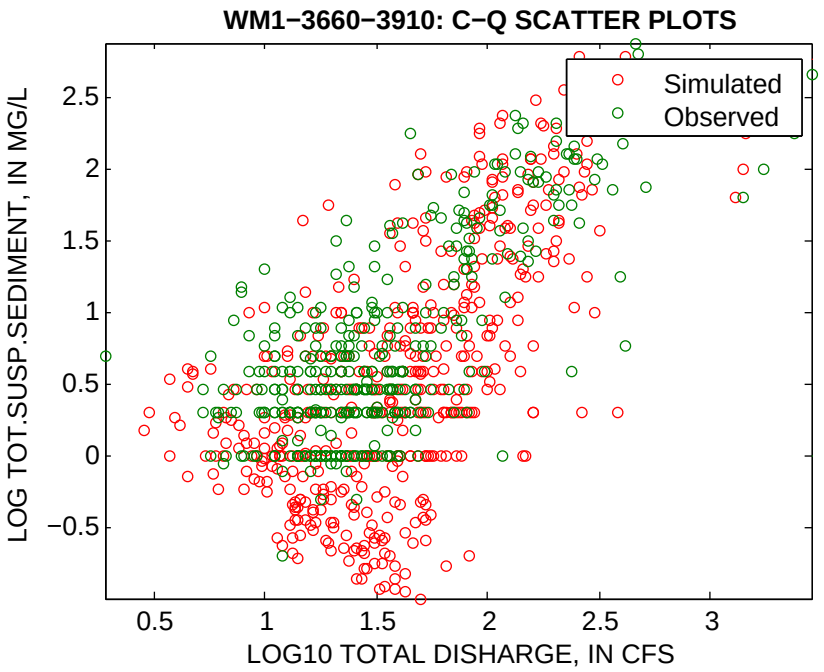
STATISTICS

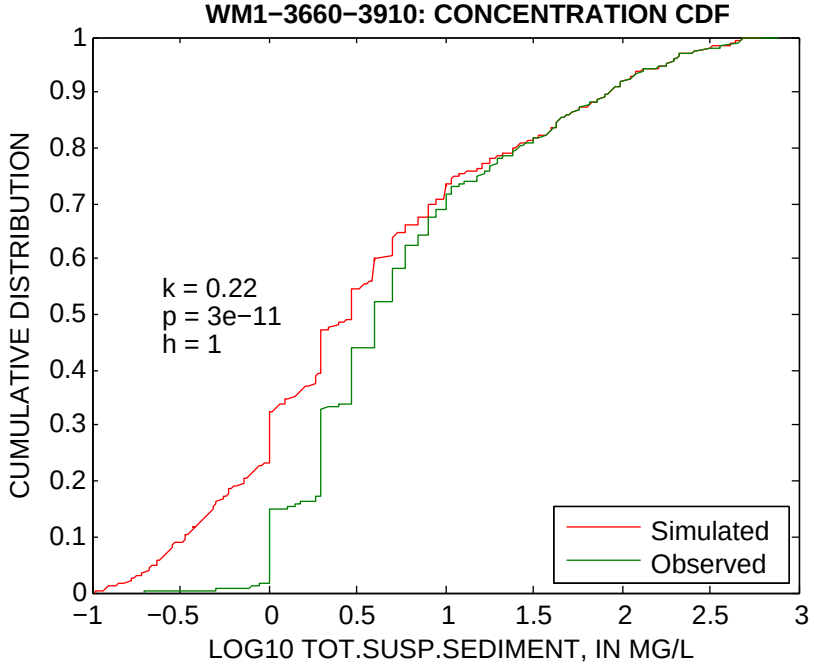
		observe	simulate
n		502	502
min		0.2	0.067054
		-0.69897	-1.17358
mean		31.8184	68.6006
		0.806493	0.710567
media		4	2.5266
		0.60206	0.402524
max		774	457.04
		2.88874	2.65995
varian		6979.83	11816
		0.489411	1.50959
JB		0.001	0.001
		0.001	0.001
		ra	log
%		115.6	-11.8943
err.va		10271	0.861345
rel.std.err		1.47153	1.75996
mod.eff		-0.471532	-0.759962

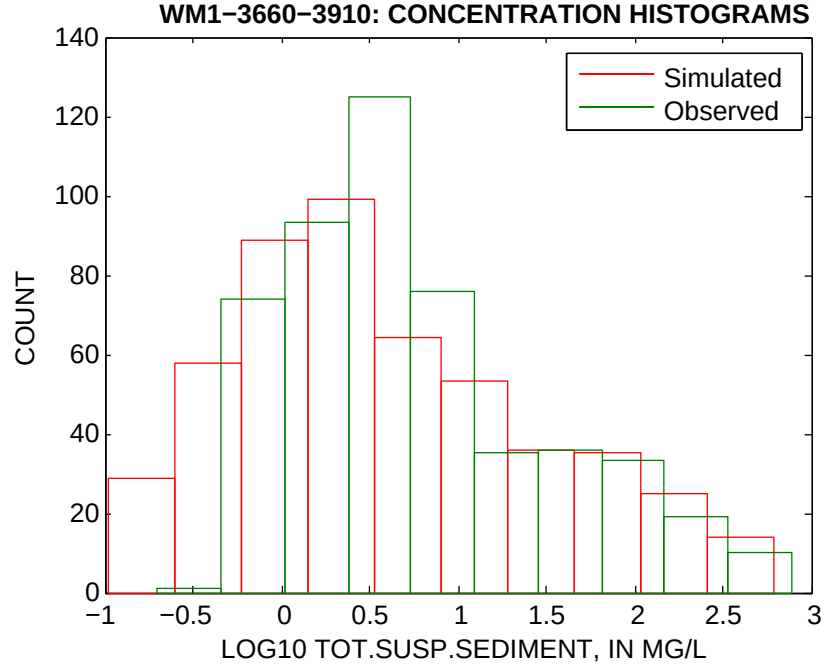
VERSION

ALL DATA
LOG10

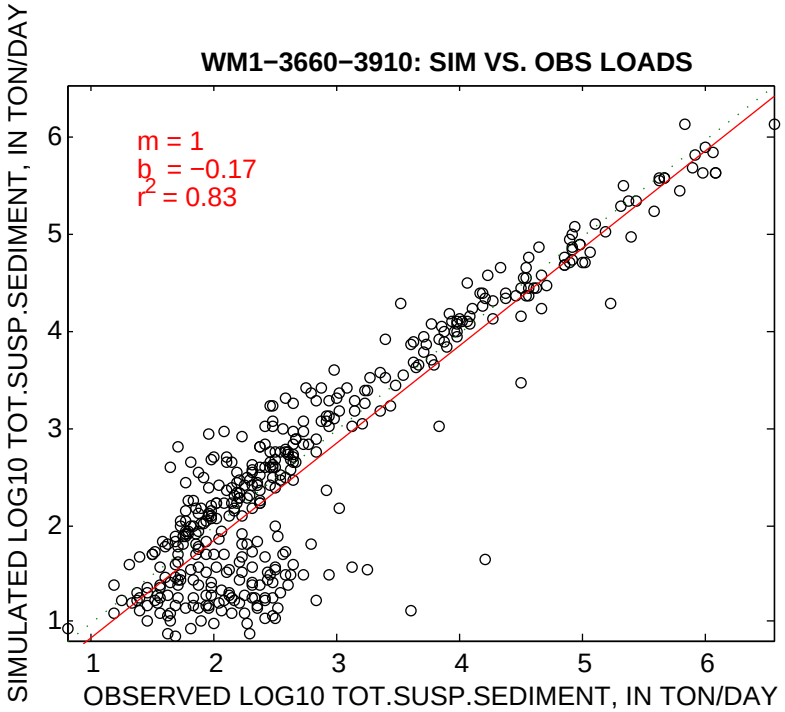


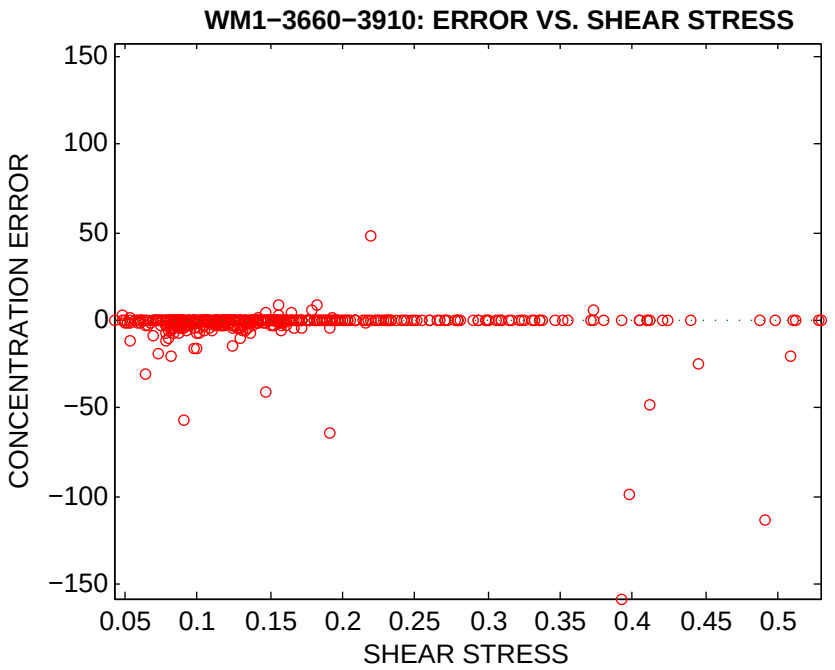


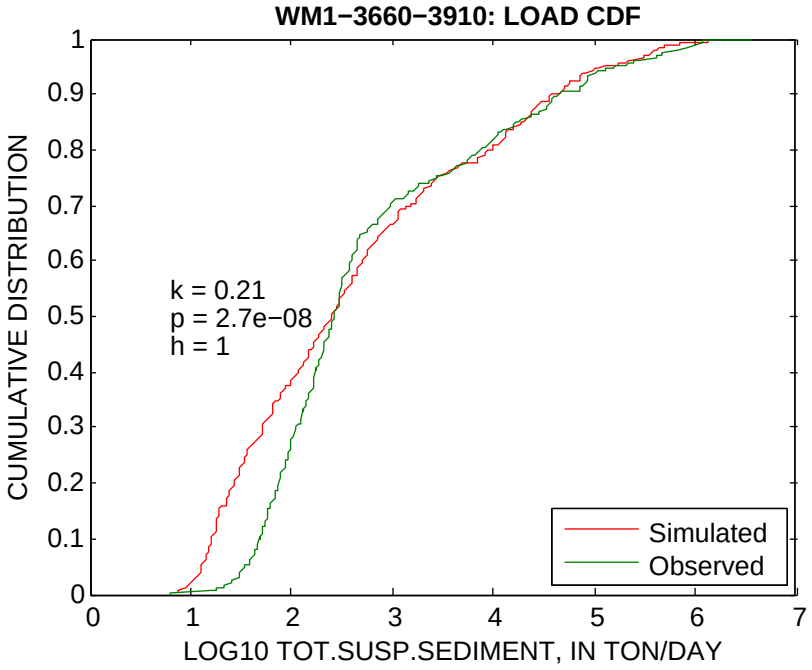


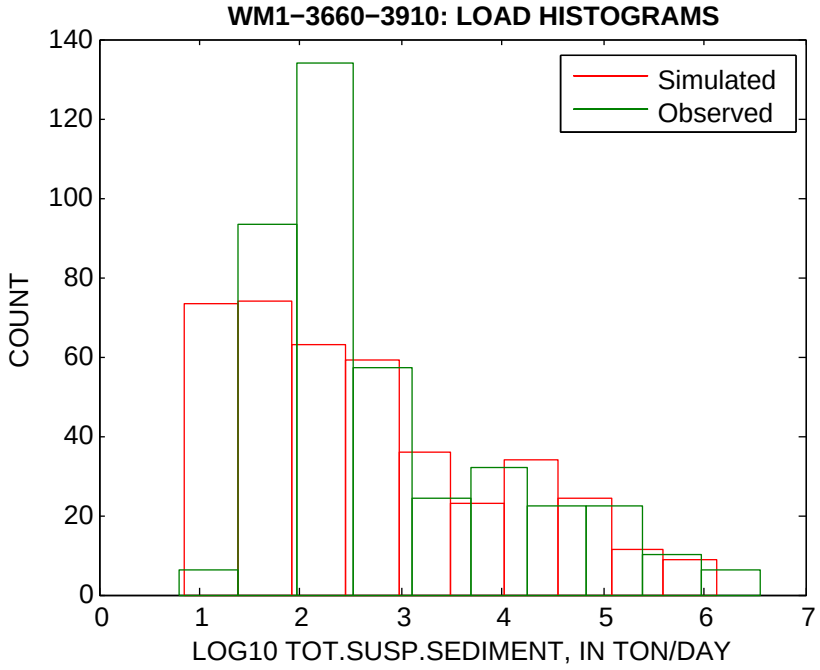


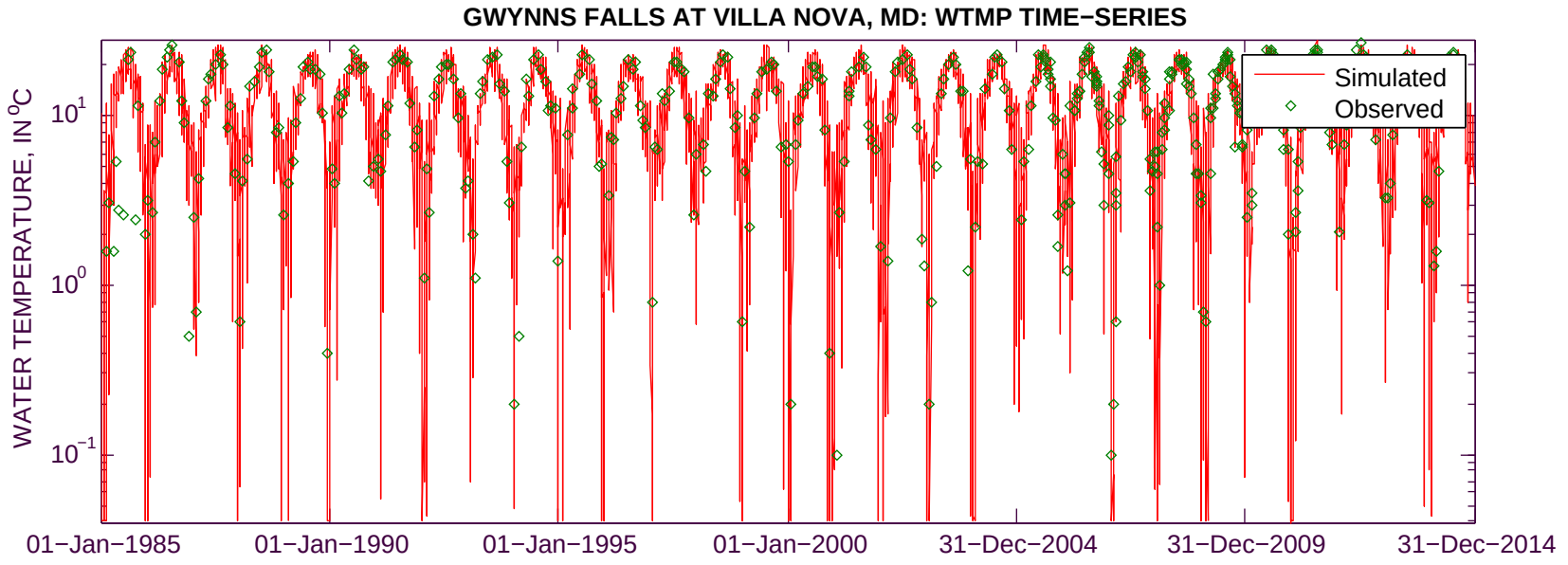
LOAD DATA
LOG10

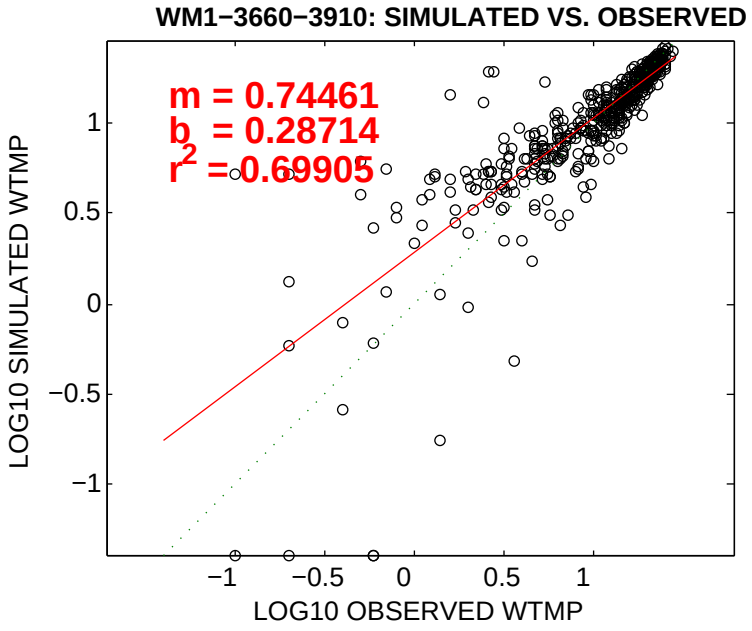


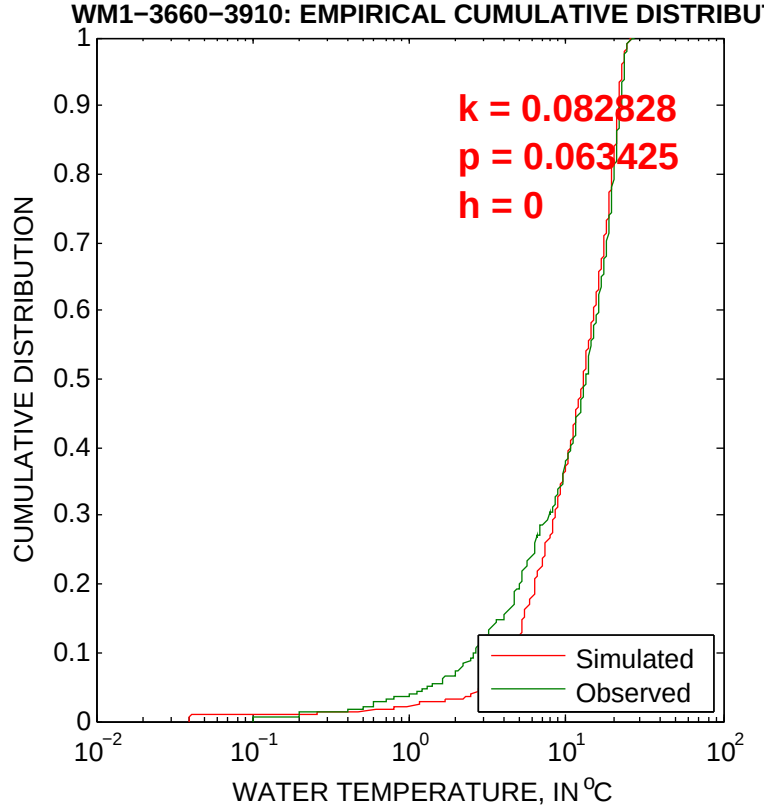












DATA SELECTION

scenario	file
P620171001WQ	WTMP.calib

plot: WTMP - water tempera...

Dates: 1/1/1985 – 12/31/201

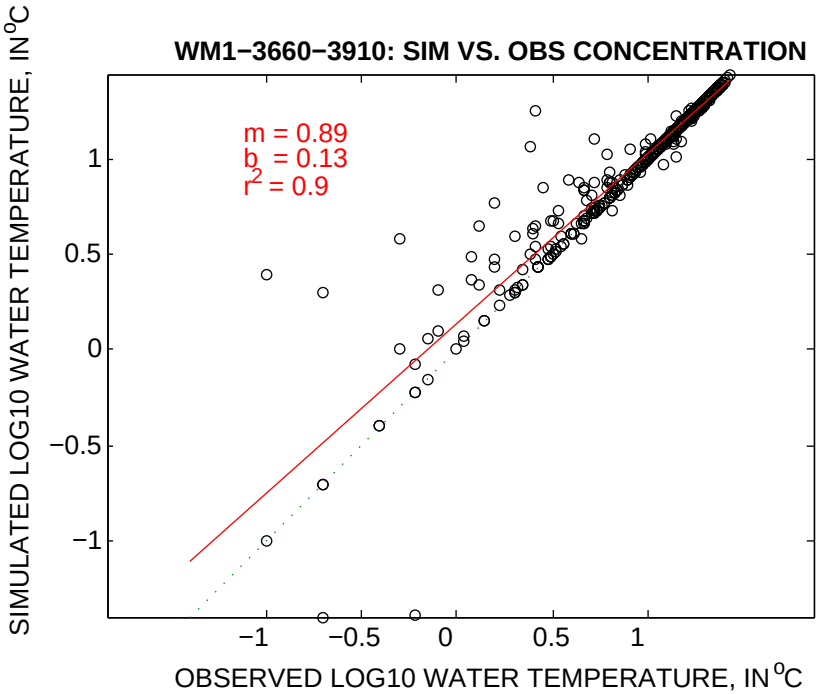
Drive	Directory	Observed
N/A	model	OBS20161101

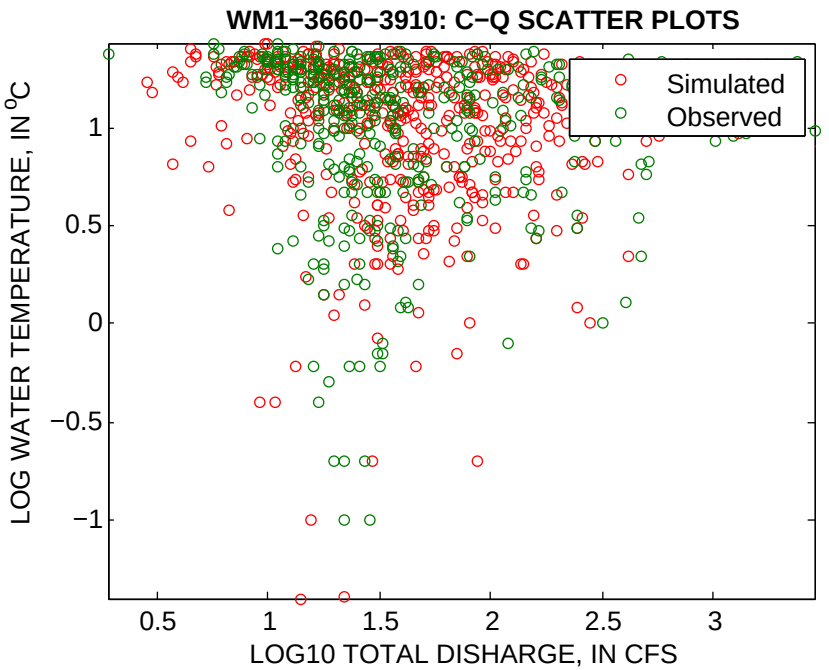
STATISTICS

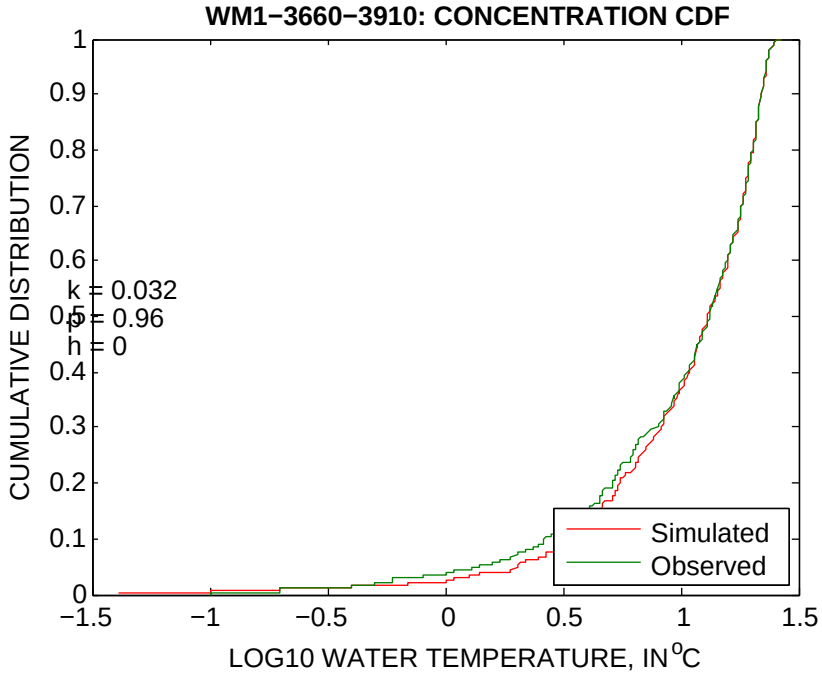
	observe	simulate
n	495	495
min	0.1	0.04002
	-1	-1.39772
mean	12.8692	12.9424
	0.981228	1.01777
media	13.5	12.862
	1.13033	1.10931
max	26.9	26.513
	1.42975	1.42346
varian	52.2319	42.0957
	0.177689	0.140932
JB	0.001	0.001
	0.001	0.001
	ra	log
%	0.568413	3.72452
err.va	6.98395	0.055341
rel.std.err	0.13371	0.311449
mod.eff	0.86629	0.688551

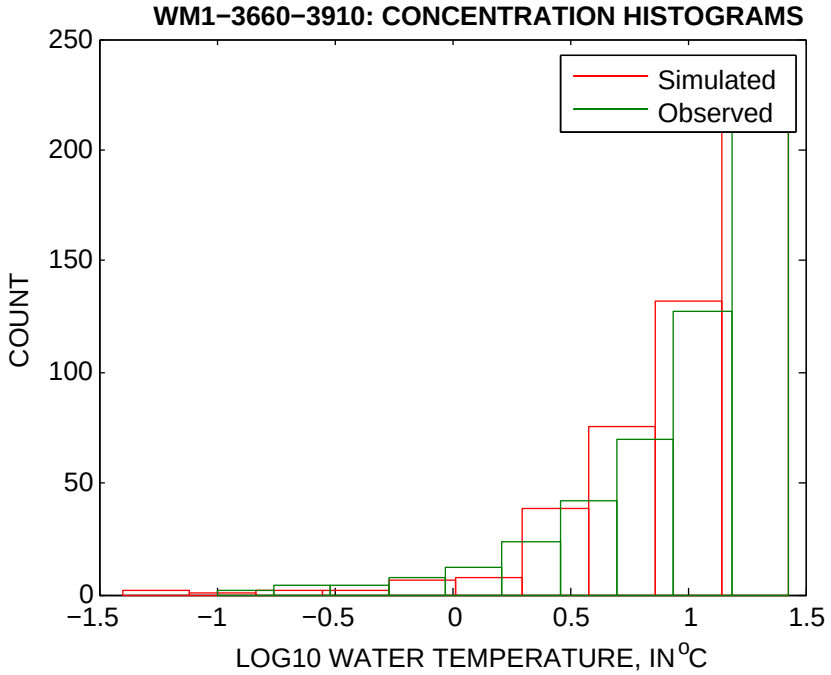
VERSION

ALL DATA
LOG10

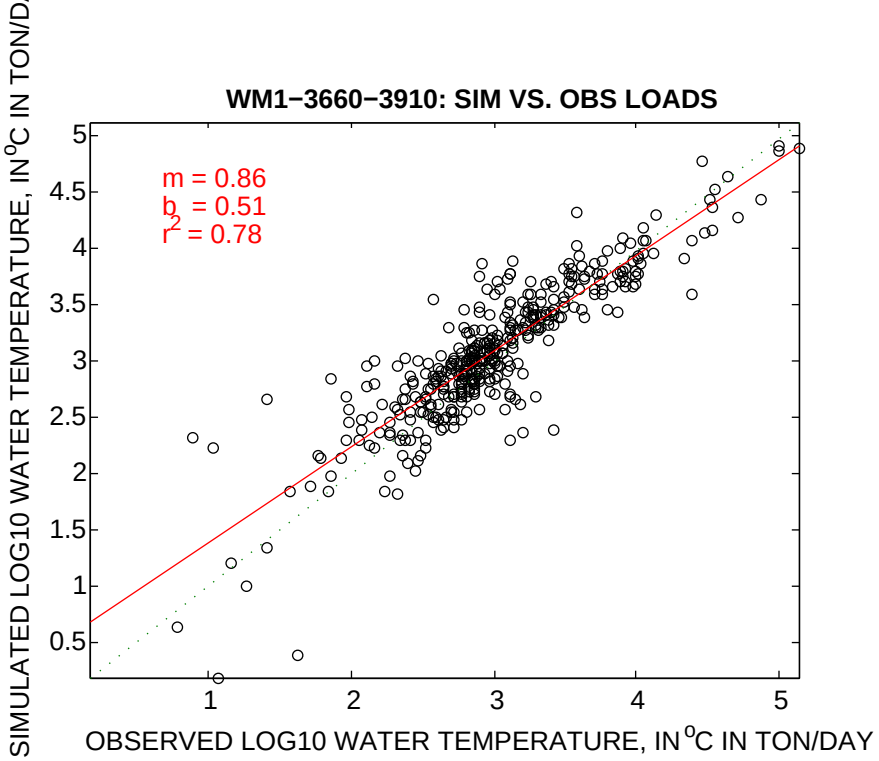


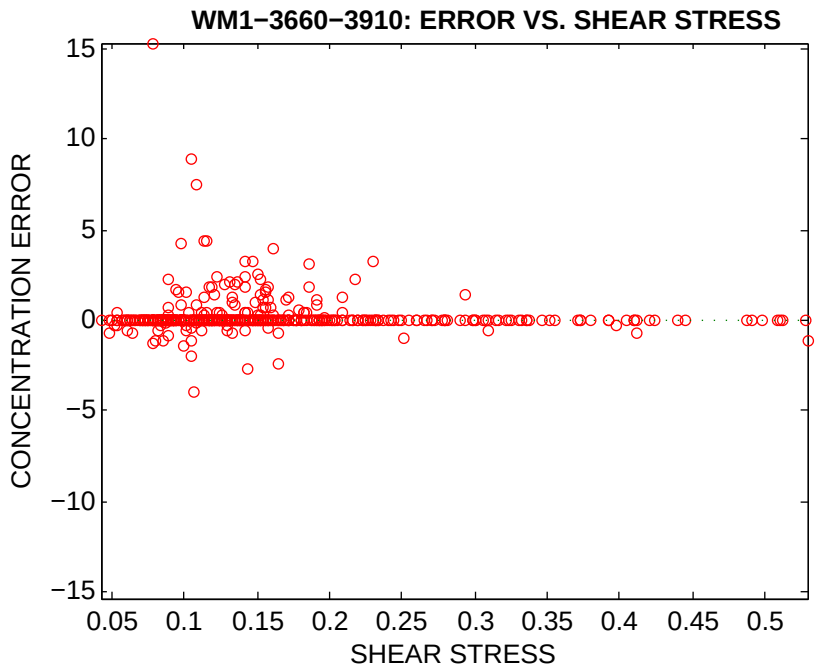


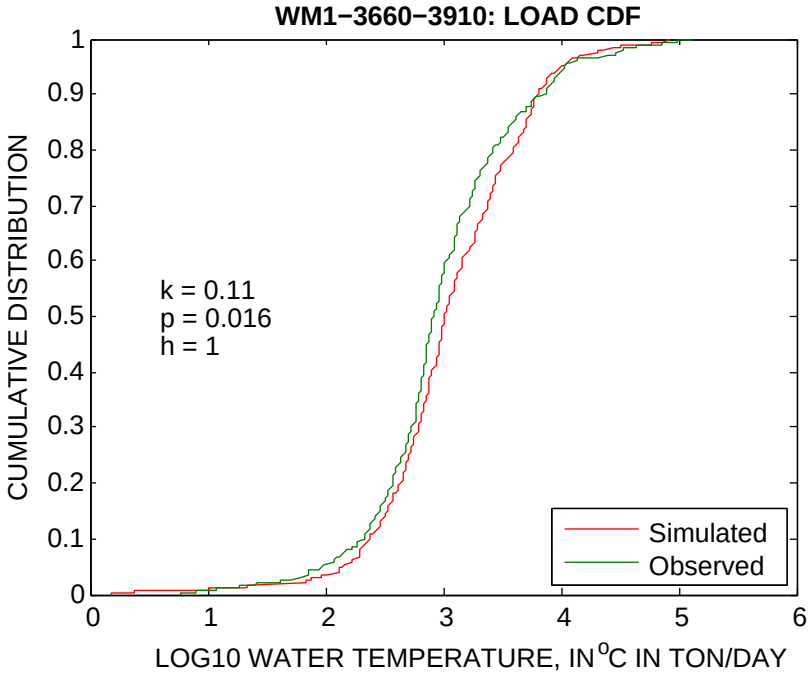


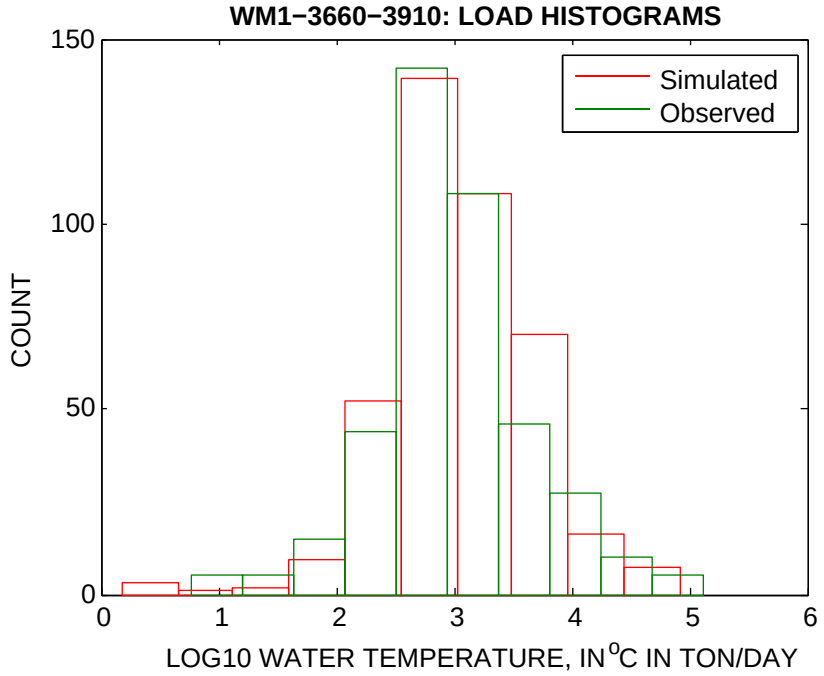


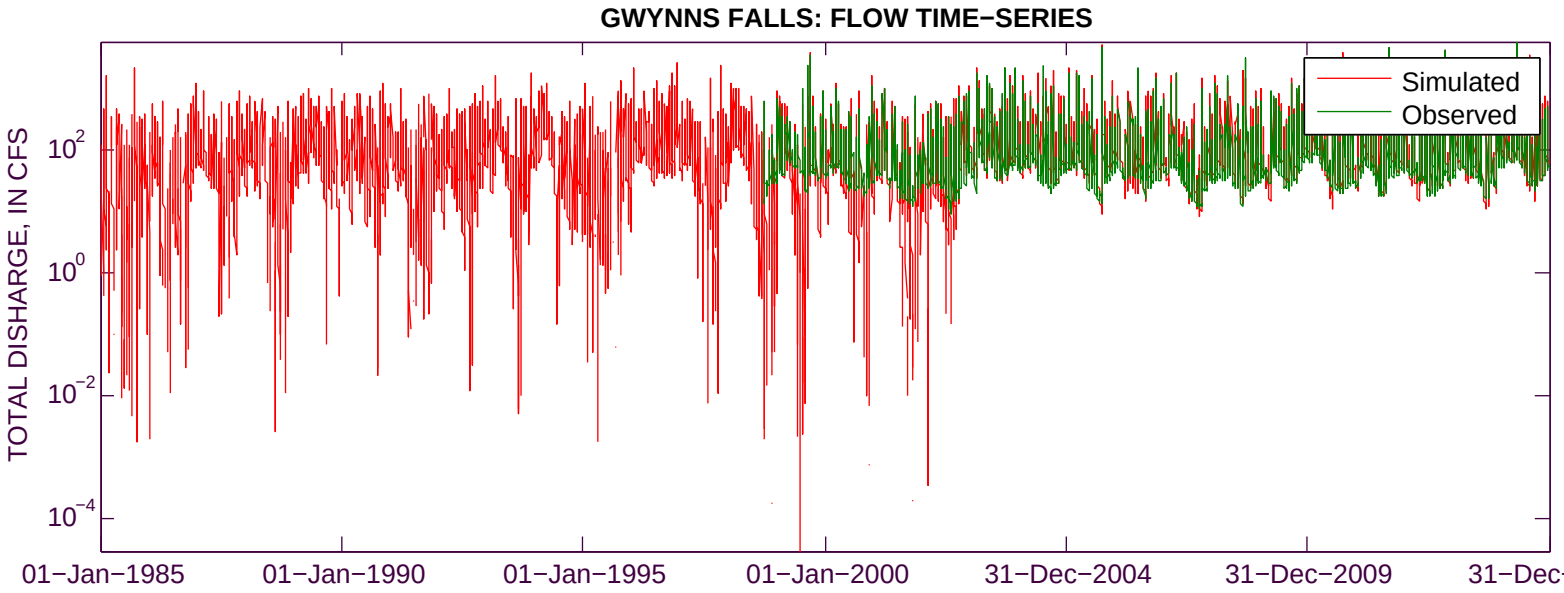
LOAD DATA
LOG10

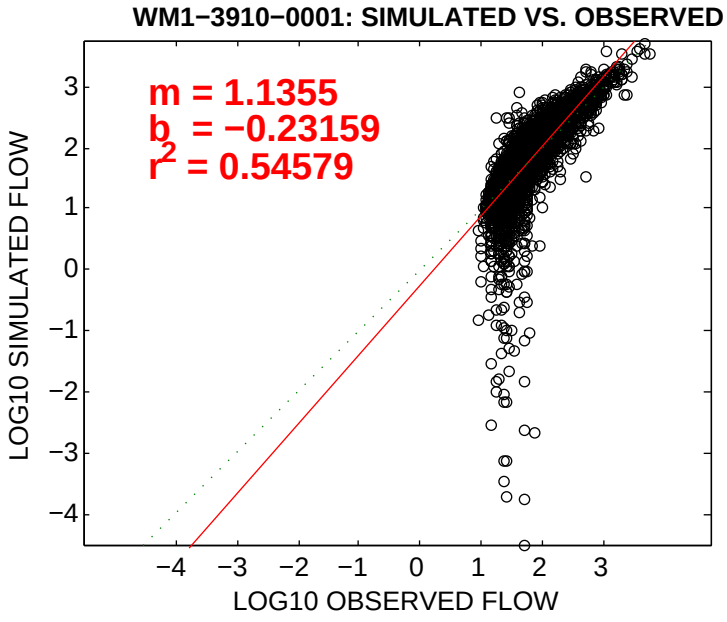


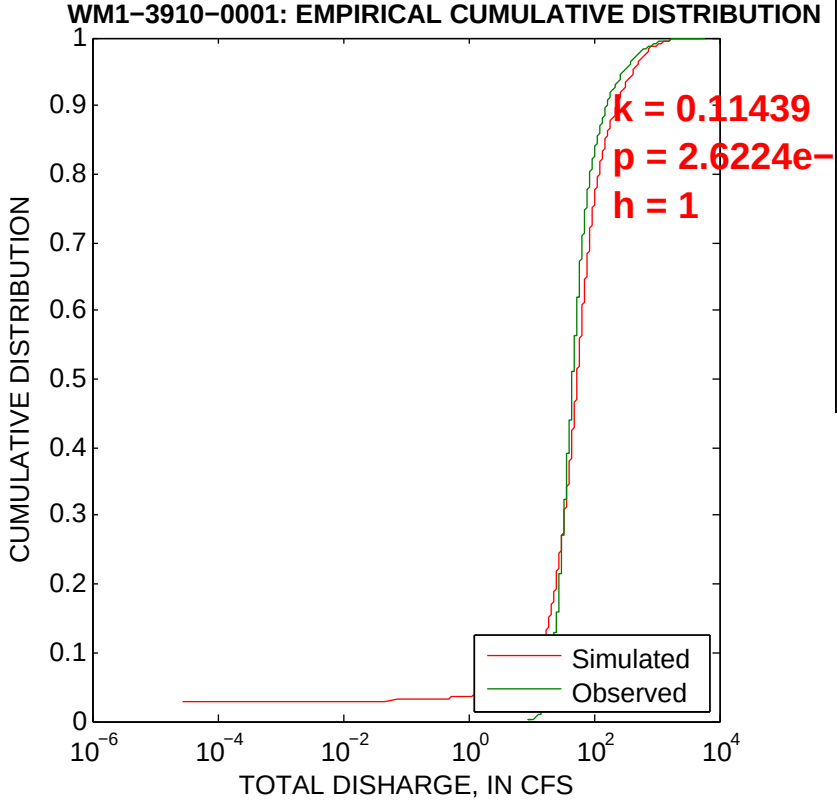












DATA SELECTION

scenario: P620171001WQ | file: FLOW.calib

plot: FLOW - total discharge

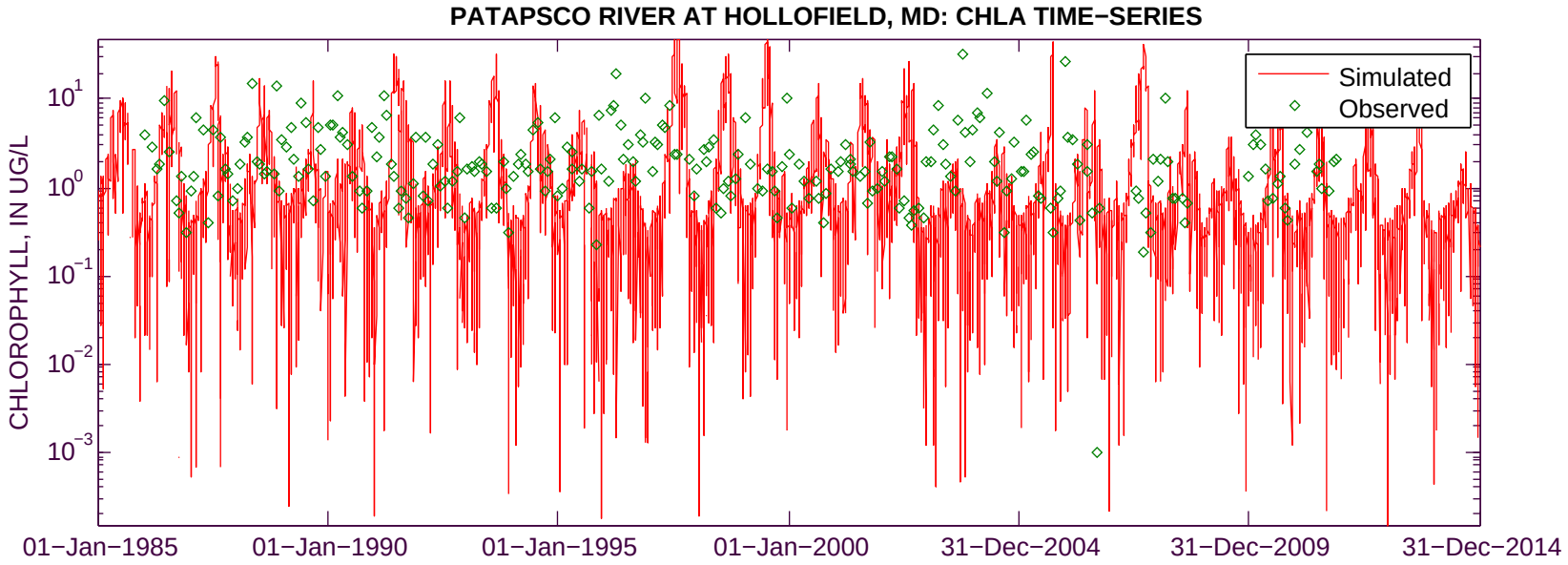
Dates: 1/1/1985 – 12/31/201

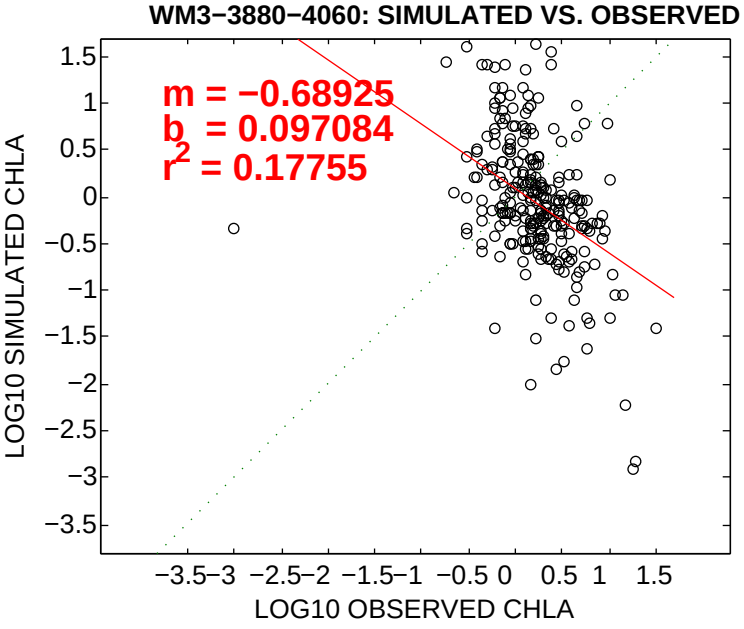
Drive: N/A | Directory: model | Observed: OBS20161101

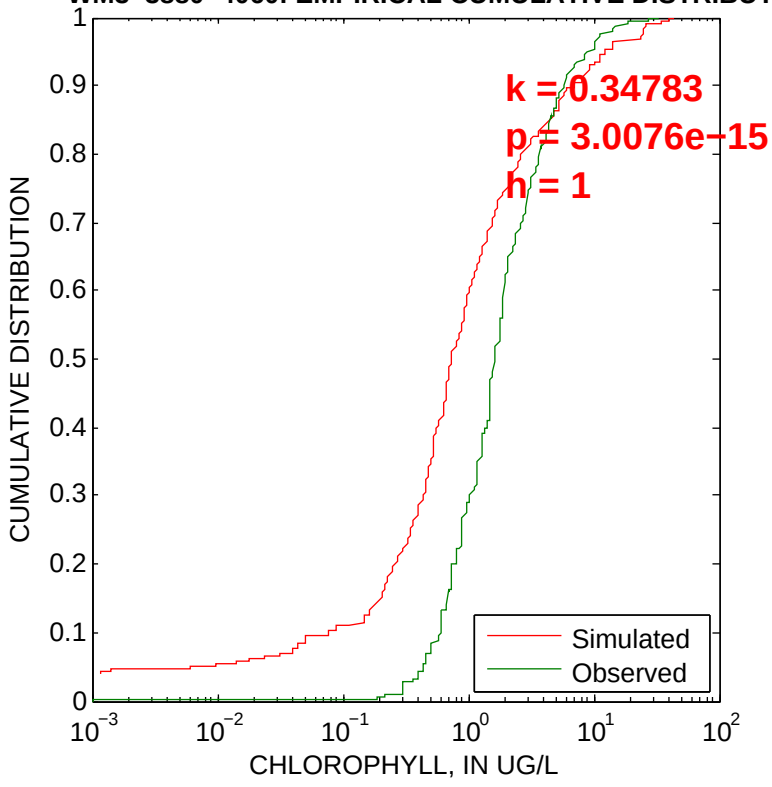
STATISTICS

	n	observe	simulate
		5936	5780
min		8.7	0
		0.939519	-4.53217
mean		95.6095	114.656
		1.74484	1.74965
media		47	55.228
		1.68124	1.7532
max		5740	4833.2
		3.75891	3.68423
varian		49671.1	54752.8
		0.136752	0.323053
JB		0.001	0.001
		0.001	0.001
		ra	log
%		19.9213	0.275907
err.va		11714.7	0.149268
rel.std.err		0.235845	1.09153
mod.eff		0.764155	-0.0915271

VERSION 2.1







DATA SELECTION

scenario	file
P620171001WQ	CHLA.calib

plot: CHLA - chlorophyll A

Dates: 1/1/1985 – 12/31/201

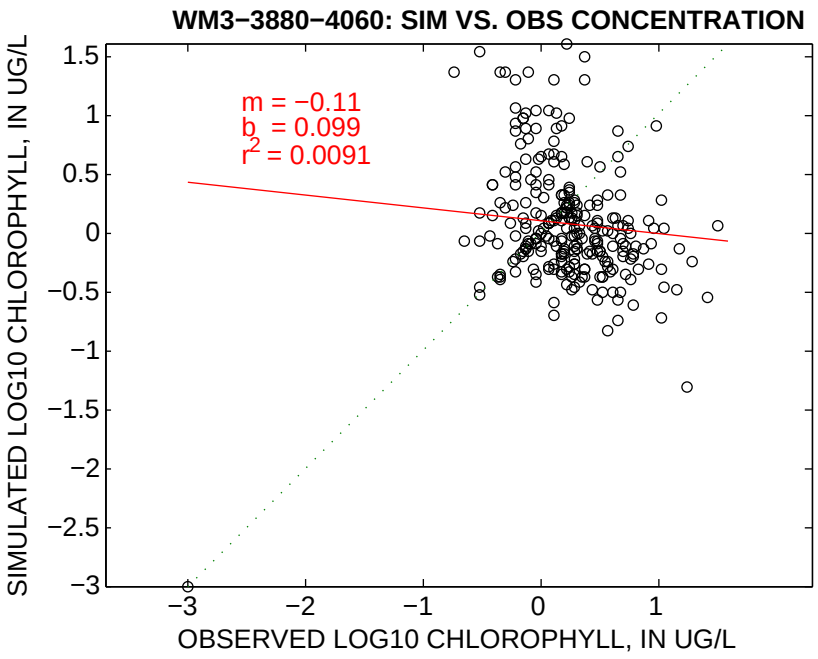
Drive	Directory	Observed
N/A	model	OBS20161101

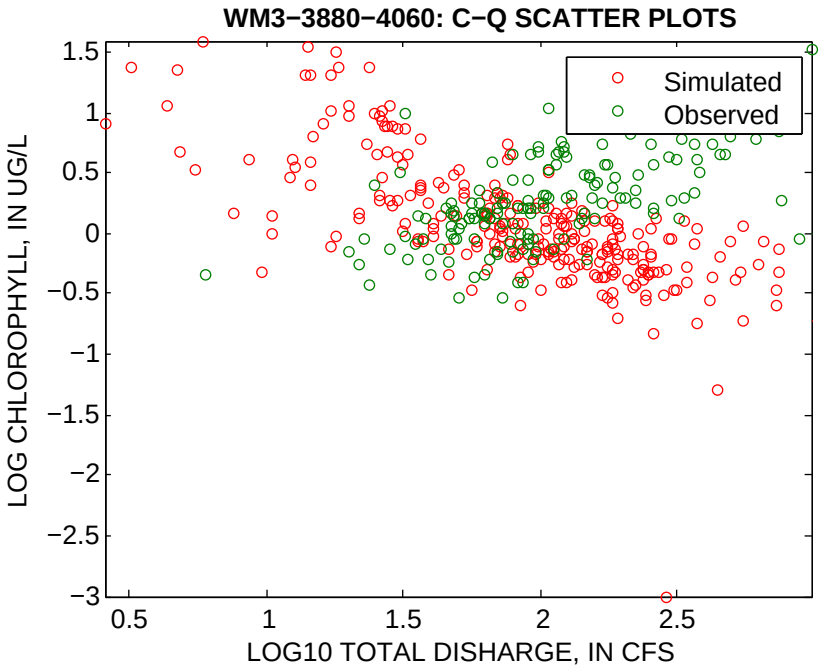
STATISTICS

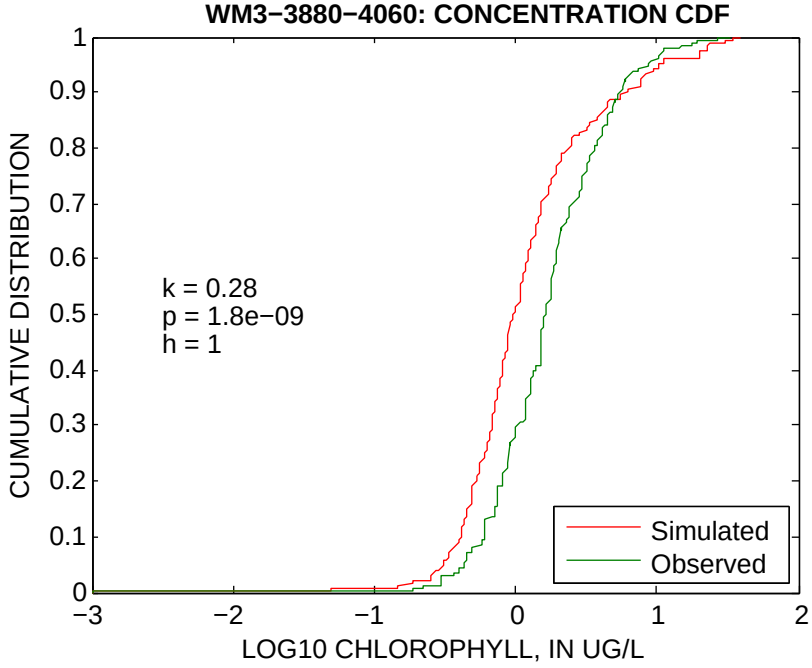
	n	276	265
		observe	simulate
min		0.001	0
		-3	-2.91909
mean		2.7807	2.77425
		0.219867	-0.0544584
media		1.64	0.72607
		0.209515	-0.0991524
max		32.89	43.808
		1.51706	1.64155
varian		13.4542	35.7305
		0.183849	0.491907
JB		0.001	0.001
		0.001	0.001
		ra	log
%		-0.231937	-124.769
err.va		56.6721	1.00473
rel.std.err		4.21222	5.46497
mod.eff		-3.21222	-4.46497

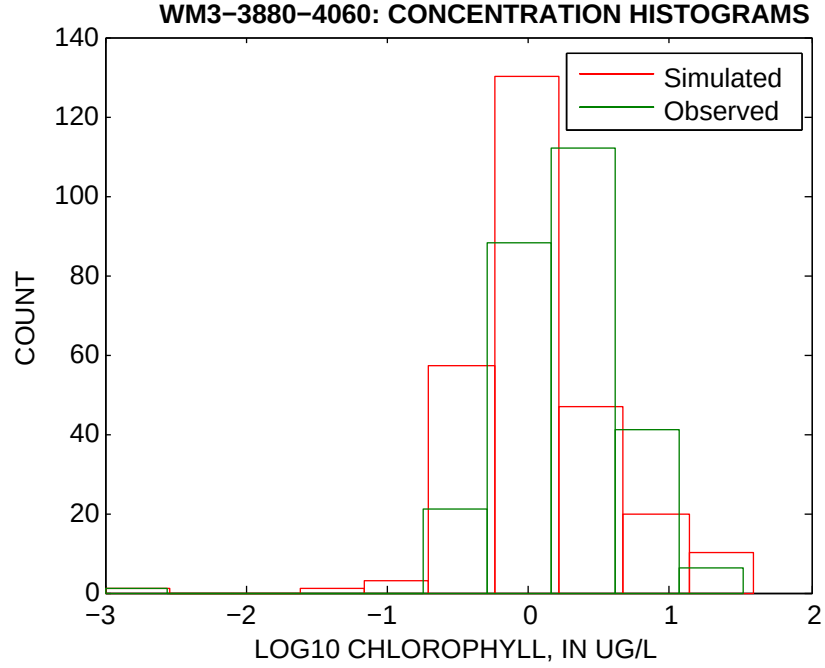
VERSION 3.1

ALL DATA
LOG10

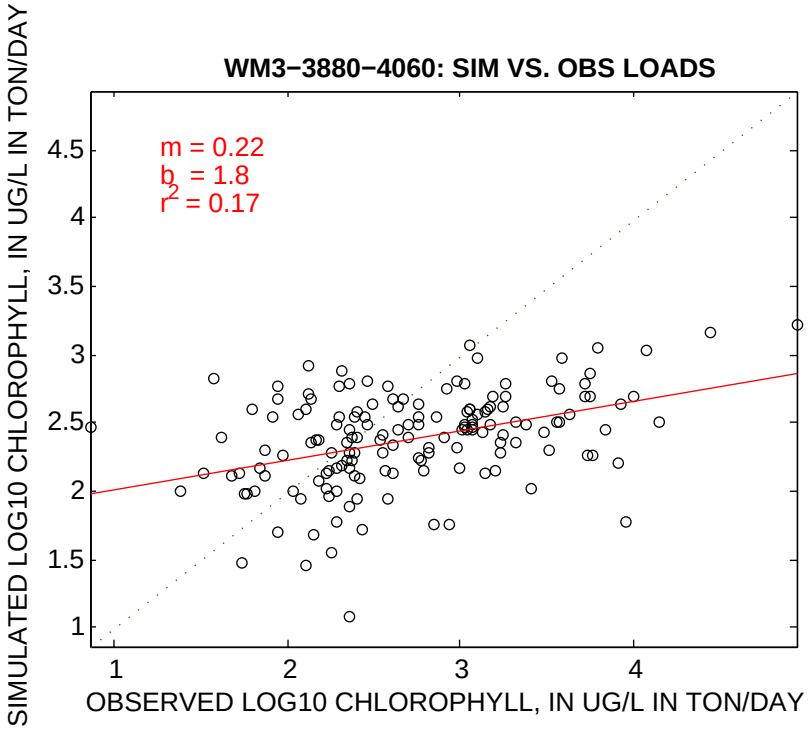


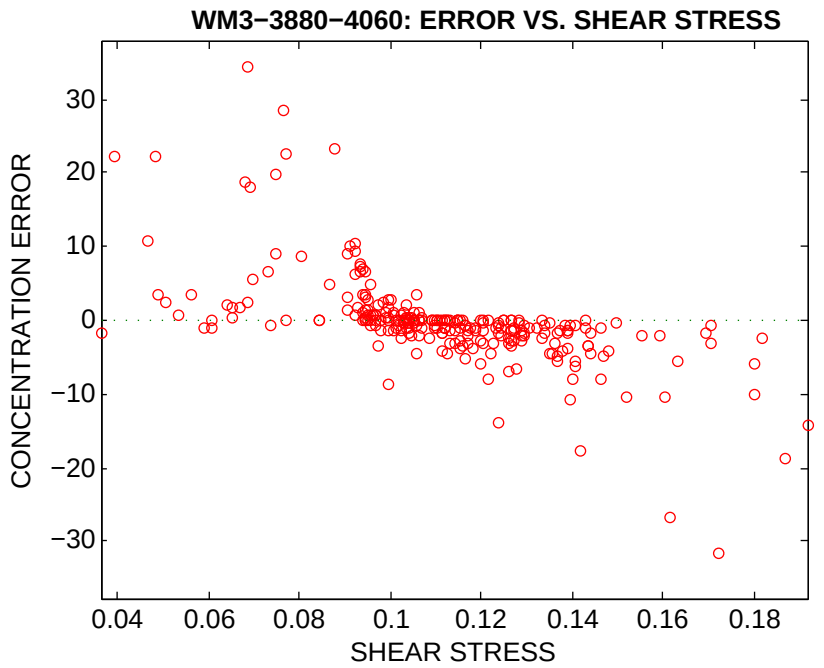


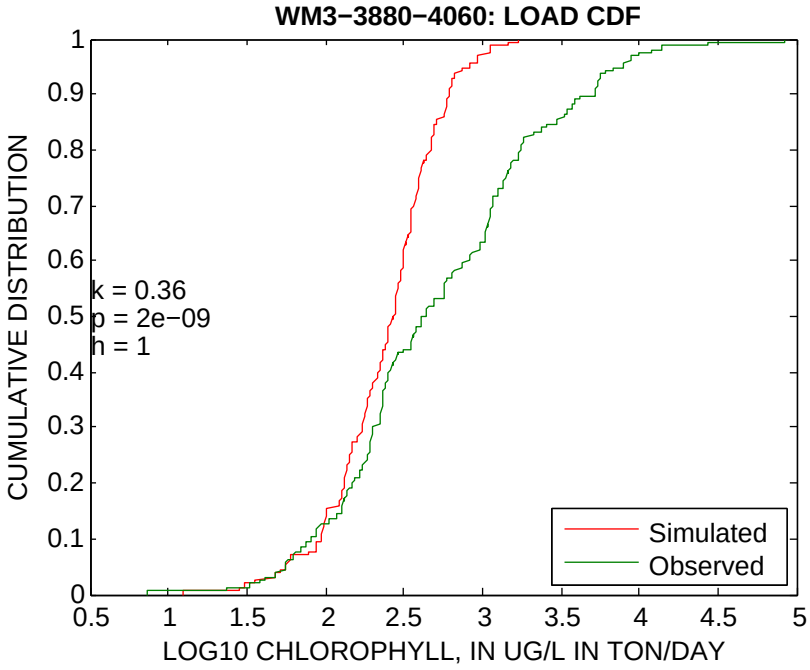


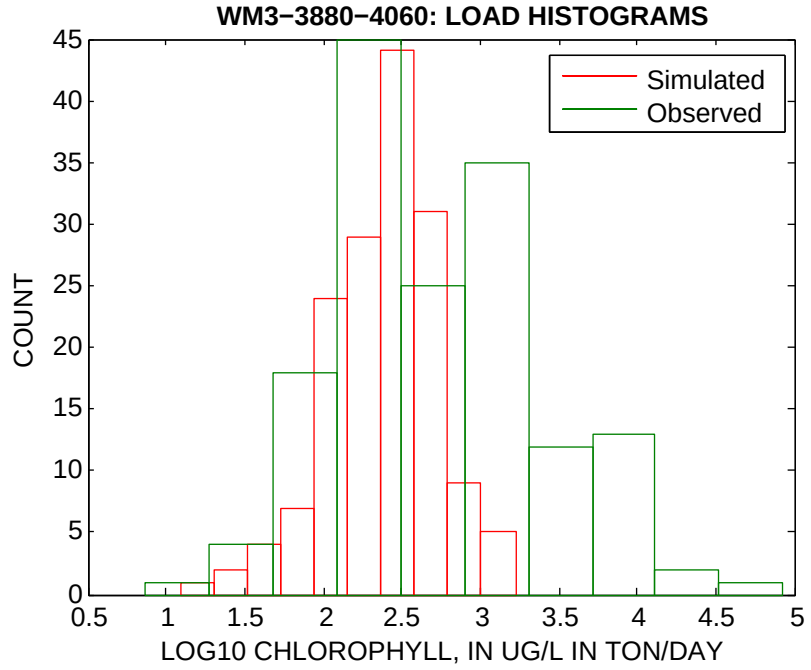


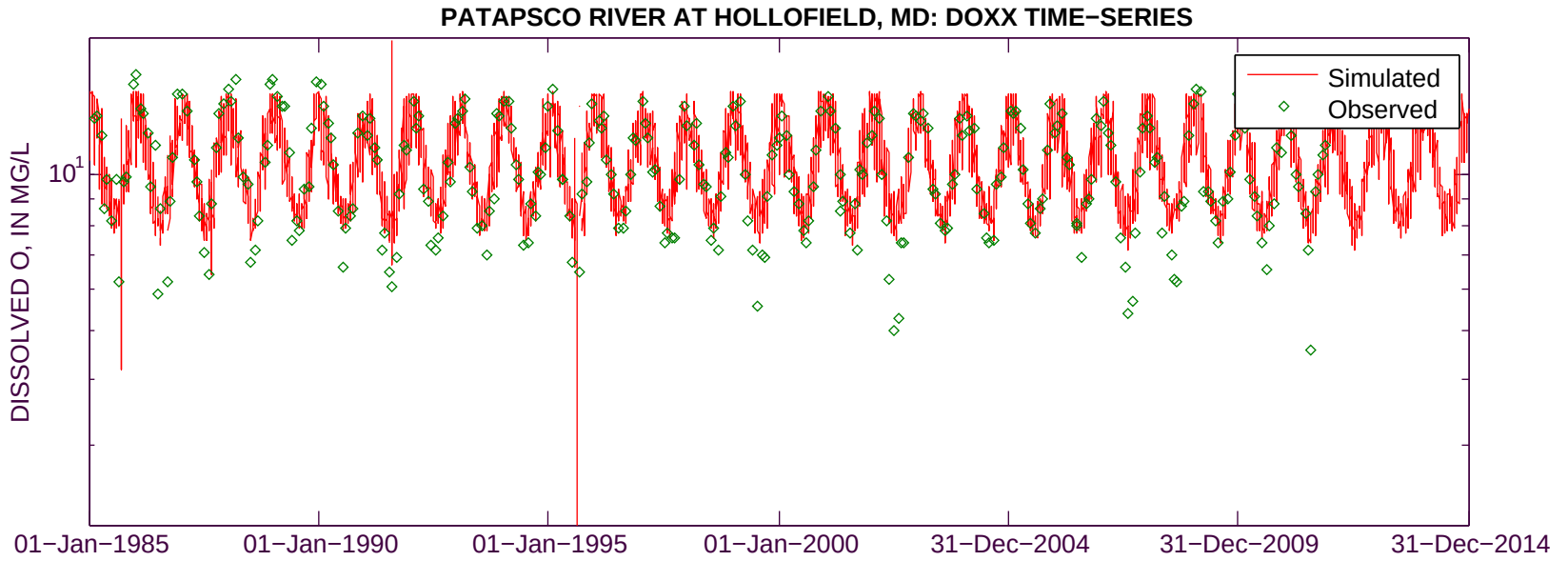
LOAD DATA
LOG10











DATA SELECTION

scenario	file
P620171001WQ	DOXX.calib

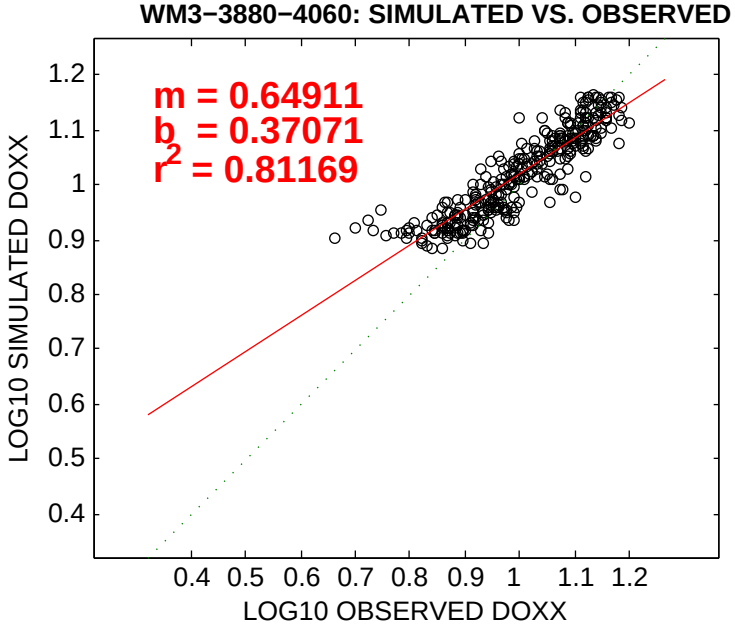
plot: DOXX - dissolved oxygen

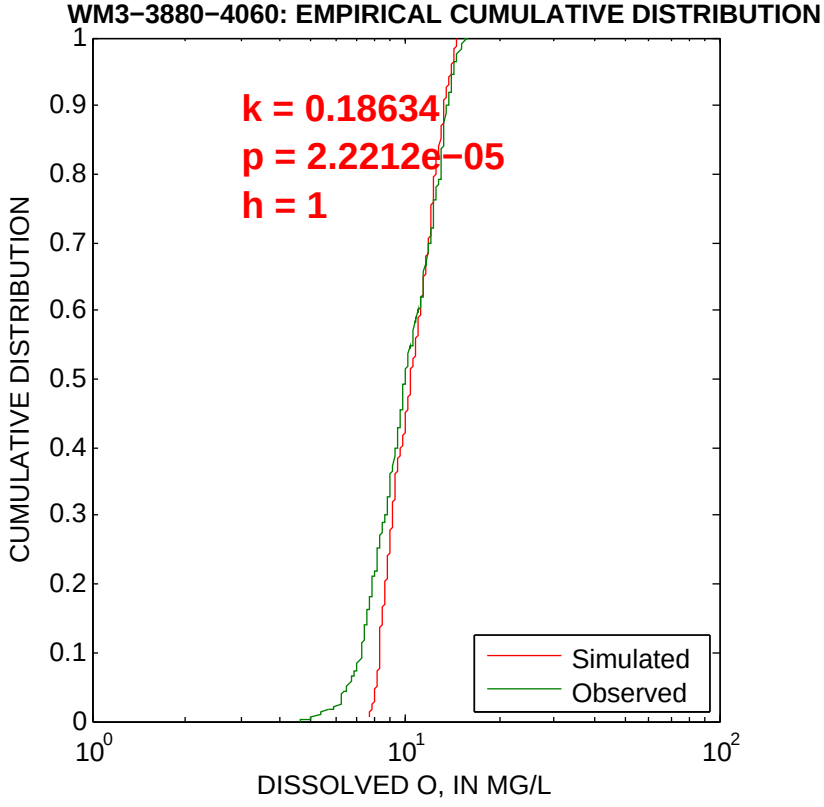
Dates: 1/1/1985 – 12/31/201

Drive	Directory	Observed
N/A	model	OBS20161101

STATISTICS

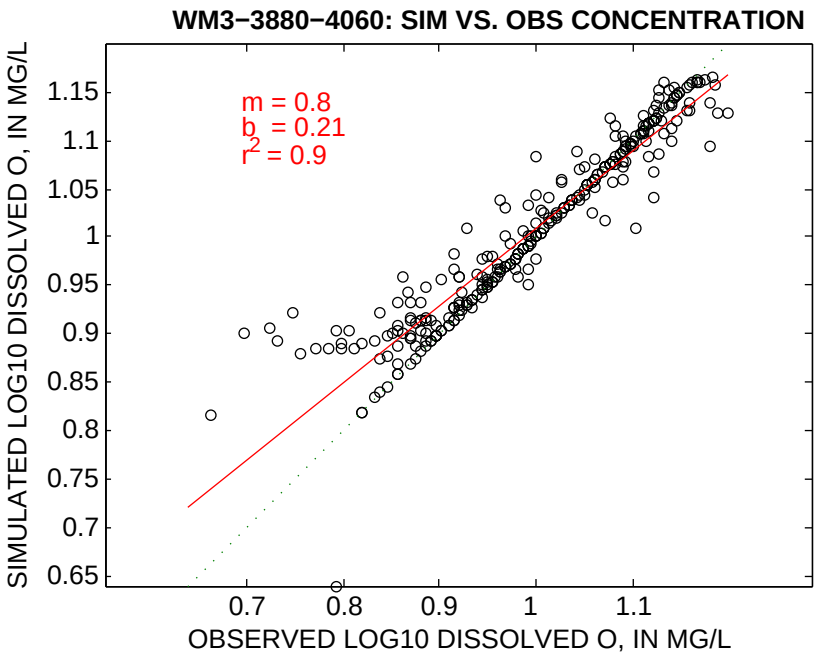
n	322	320
	observe	**simulate**
min	4.599	0
	0.662663	0.883491
mean	10.2862	10.5751
	1.00029	1.02001
media	10	10.365
	1	1.0168
max	15.8	14.627
	1.19866	1.16516
varian	6.15335	4.3606
	0.0116906	0.00606855
JB	0.007078	0.001
	0.013111	0.001756
	ra	log
%	2.80815	1.97149
err.va	1.51954	0.00297225
rel.std.err	0.246946	0.254242
mod.eff	0.753054	0.745758

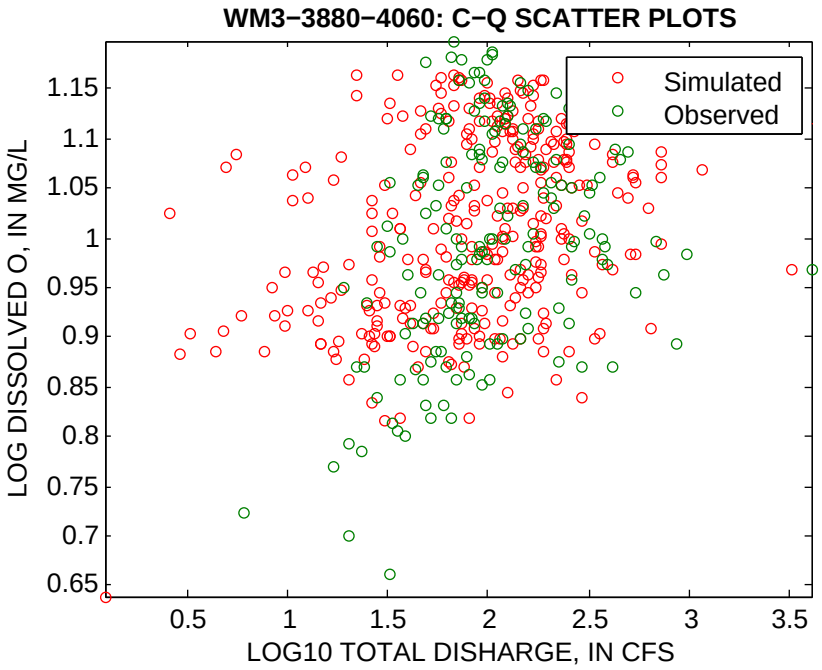


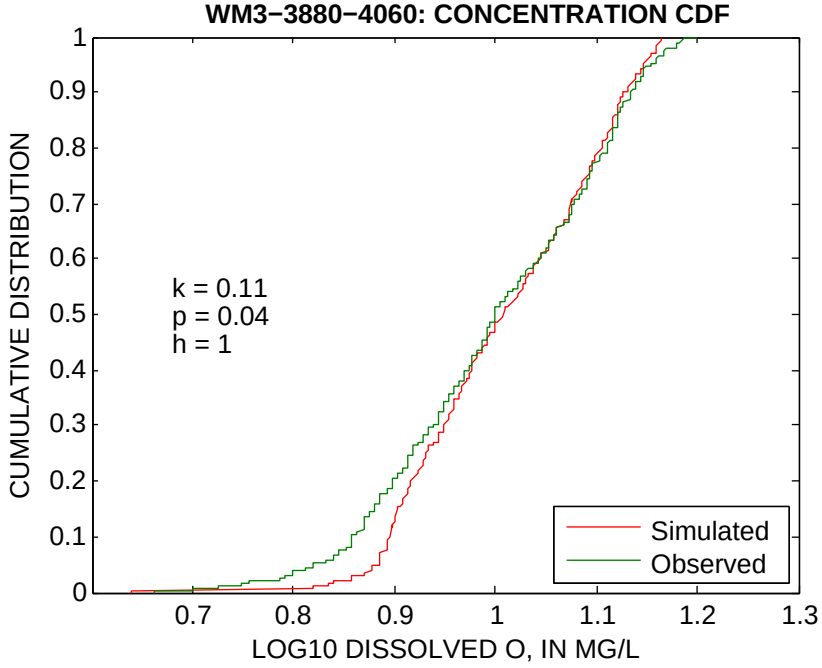


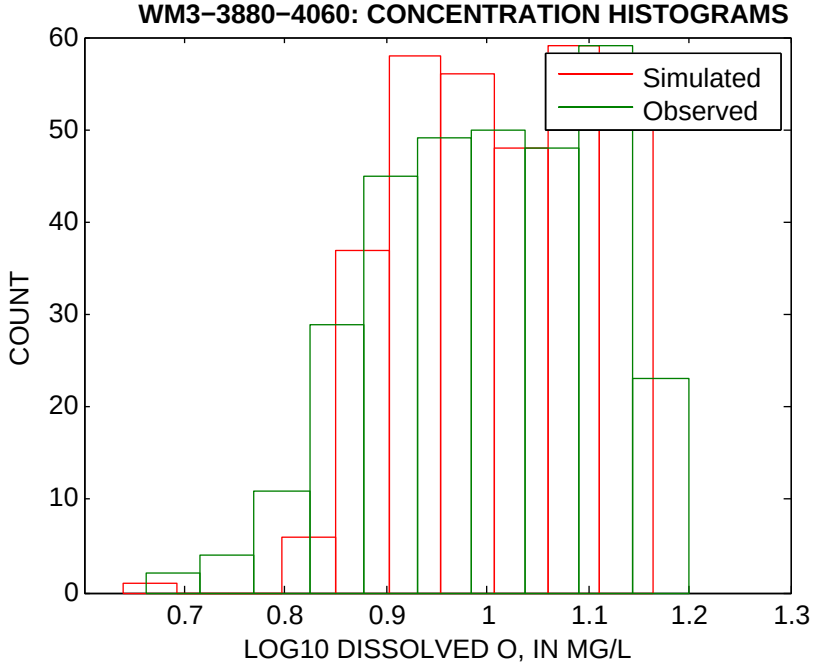
VERSION

ALL DATA
LOG10

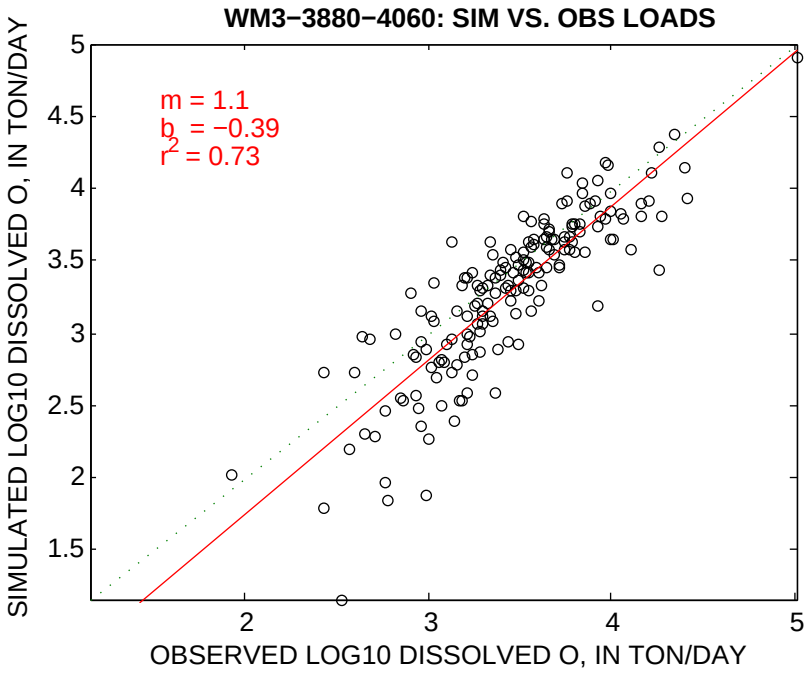


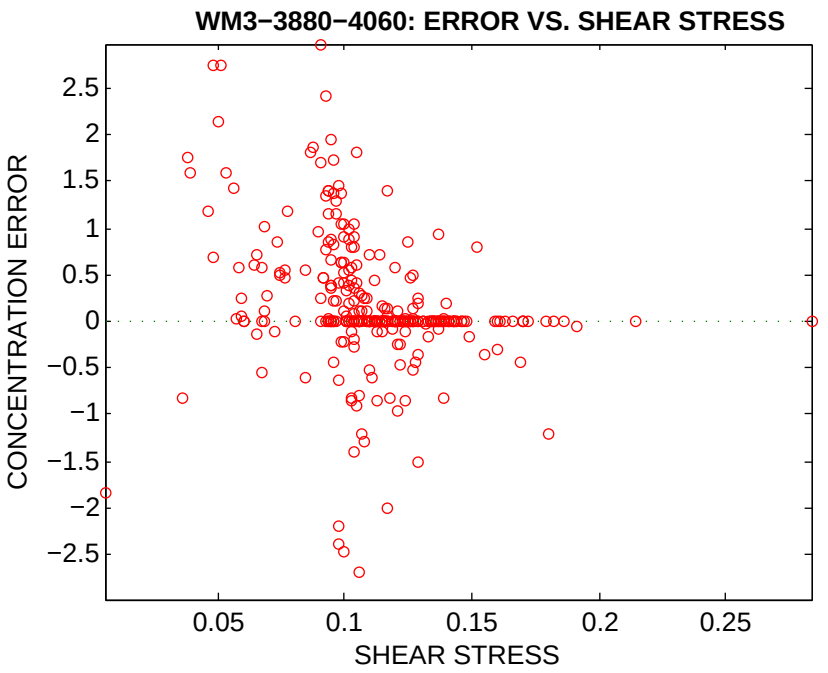


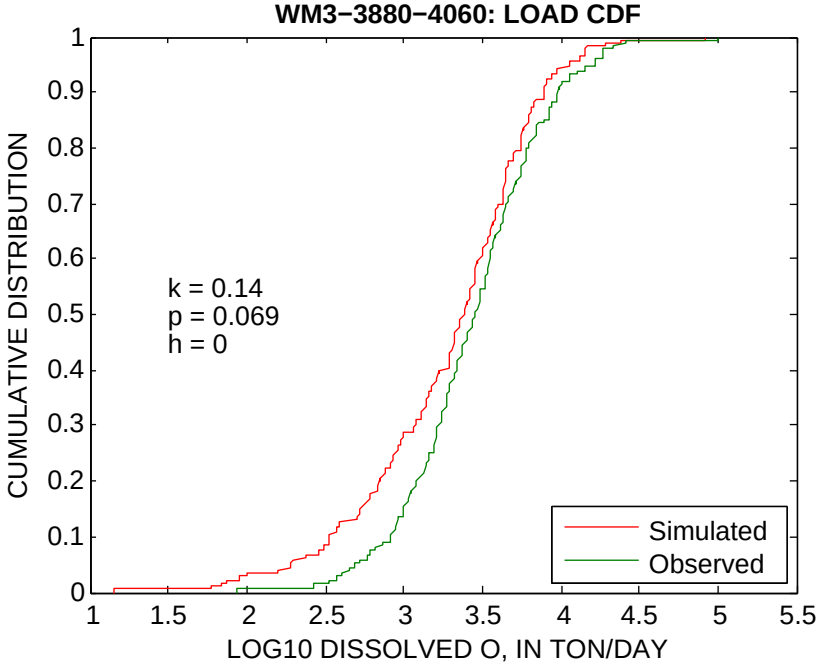


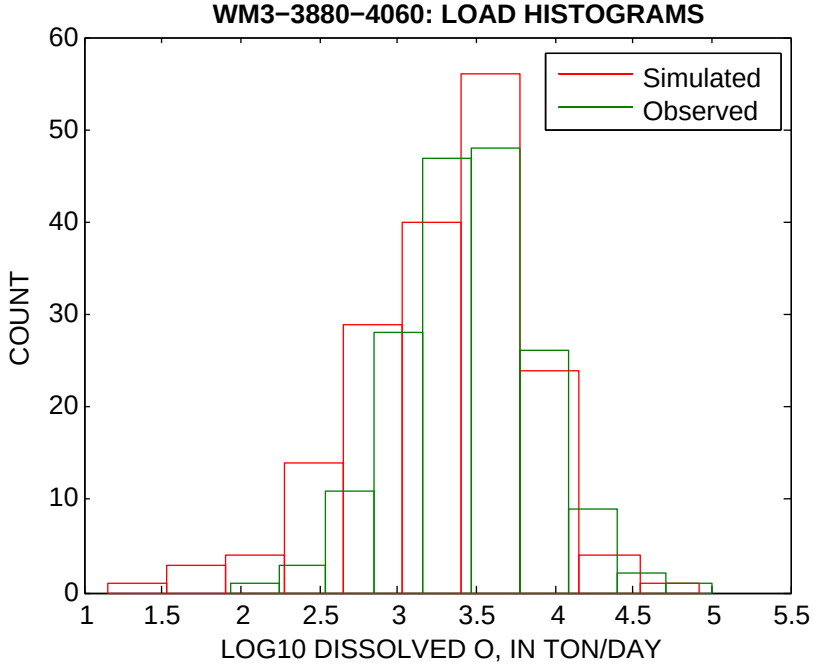


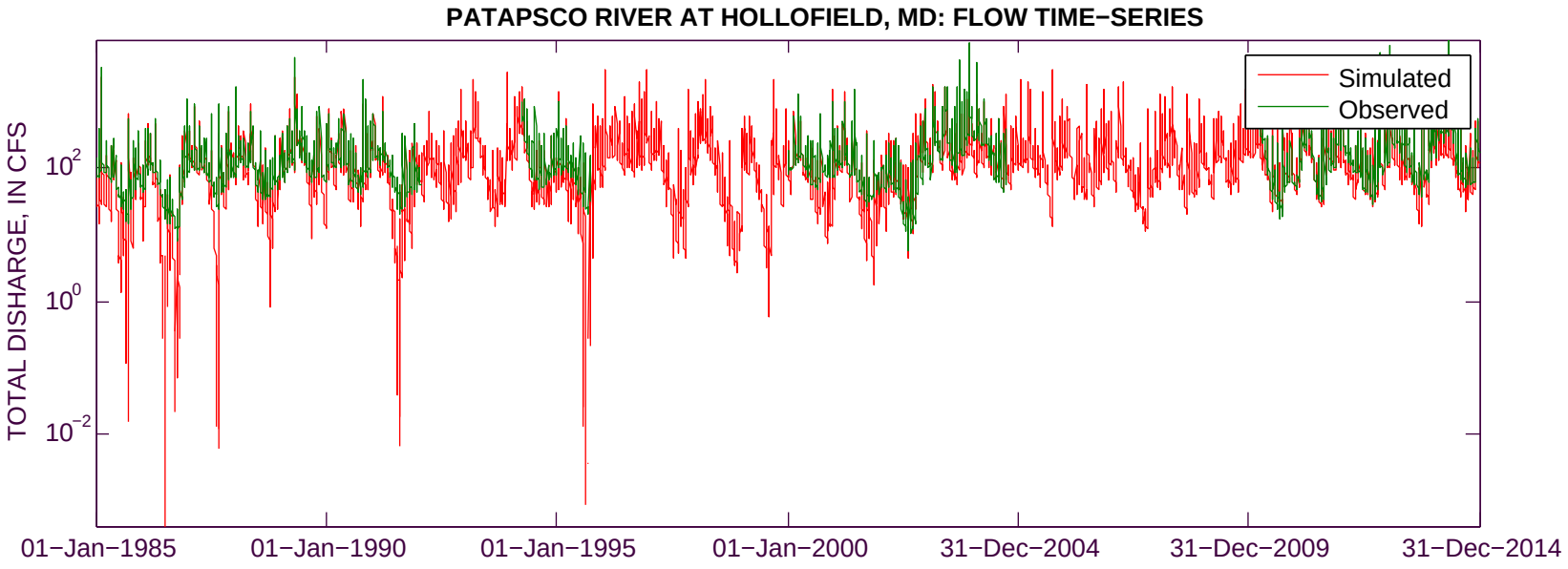
LOAD DATA
LOG10

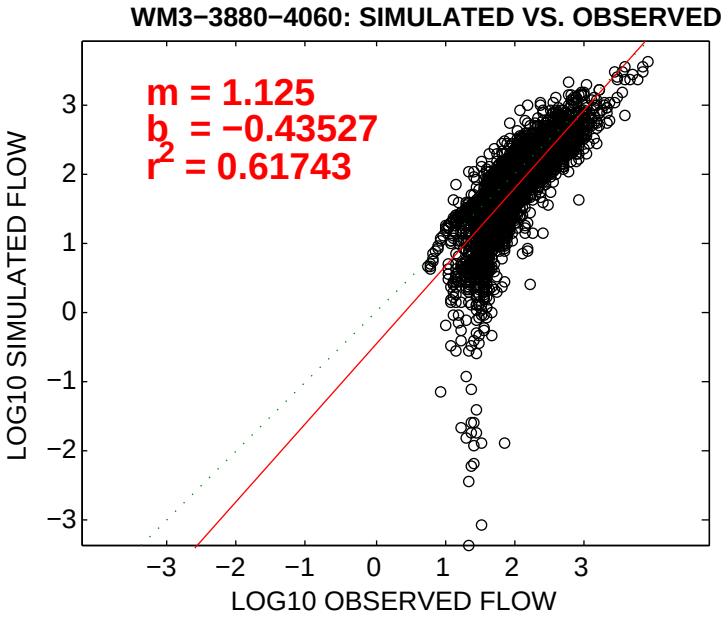


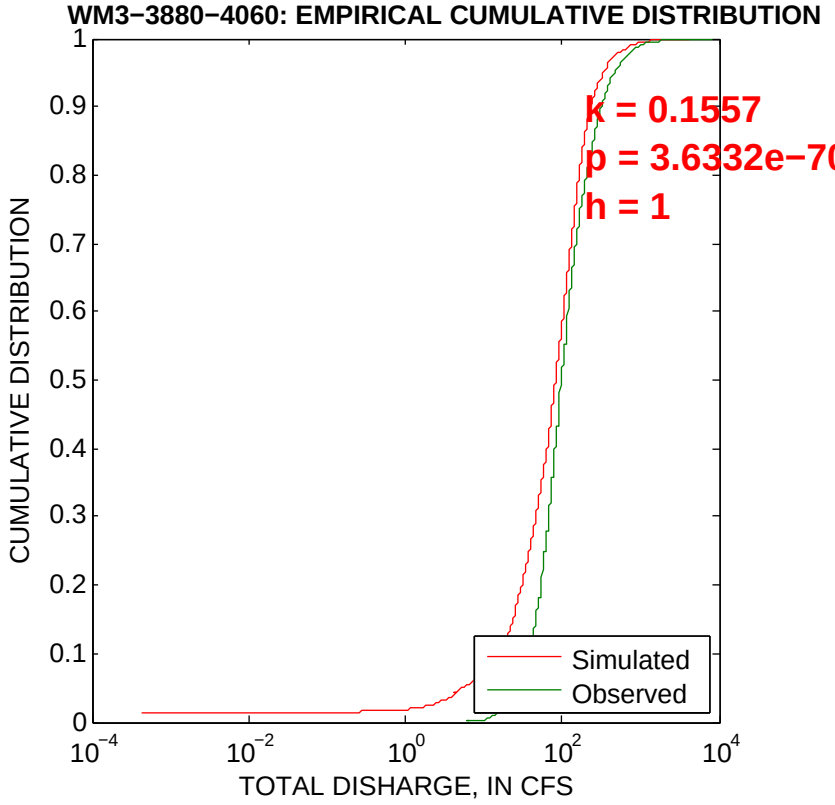












DATA SELECTION

scenario	file
P620171001WQ	FLOW.calib

plot: FLOW - total discharge

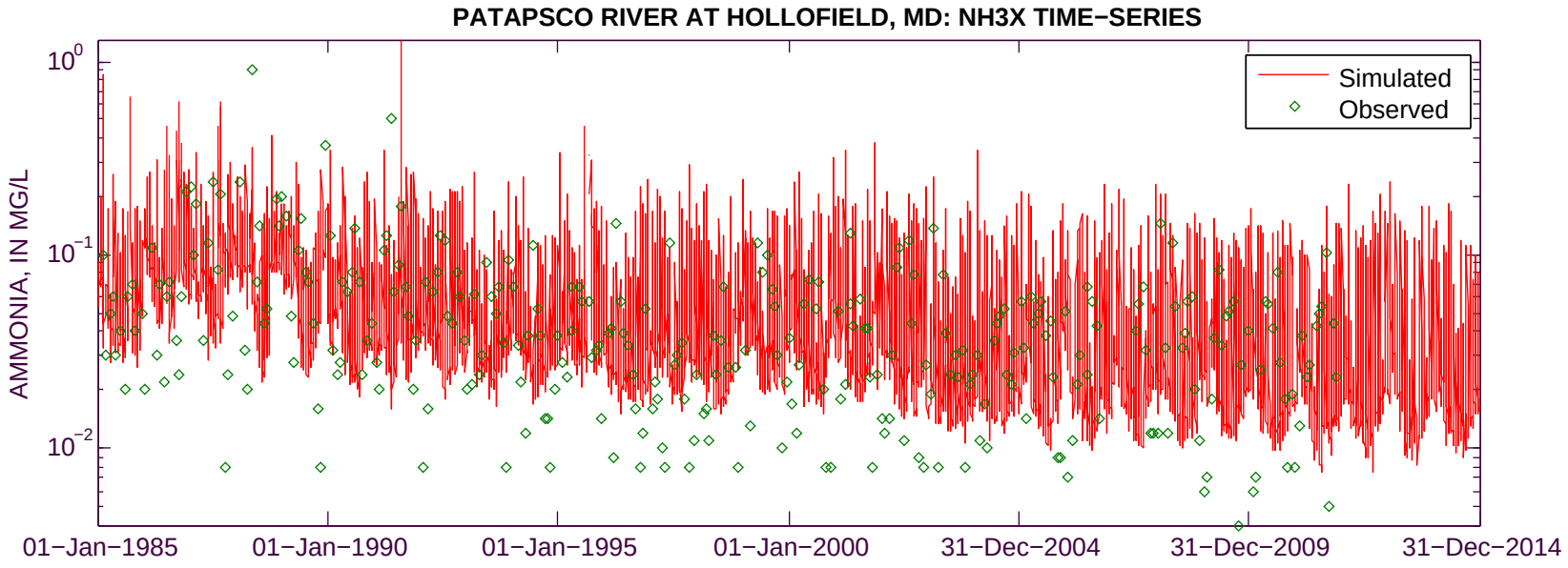
Dates: 1/1/1985 — 12/31/201

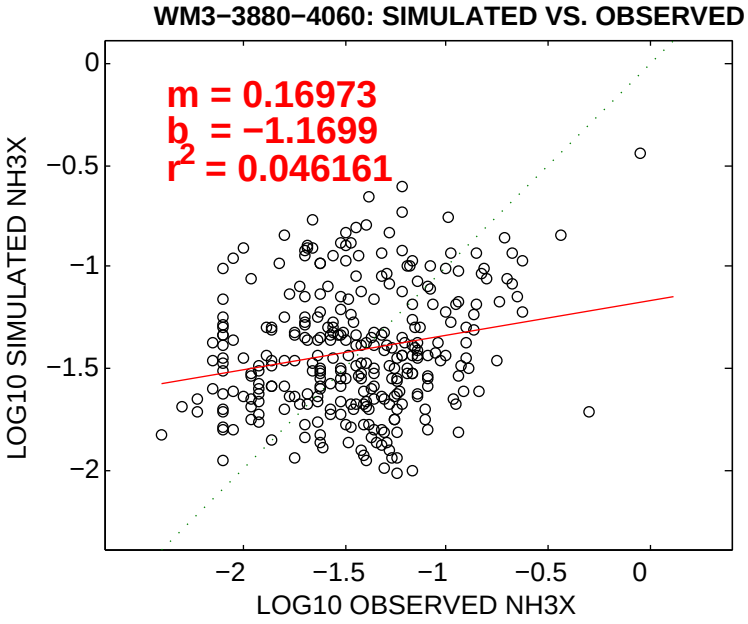
Drive	Directory	Observed
N/A	model	OBS20161101

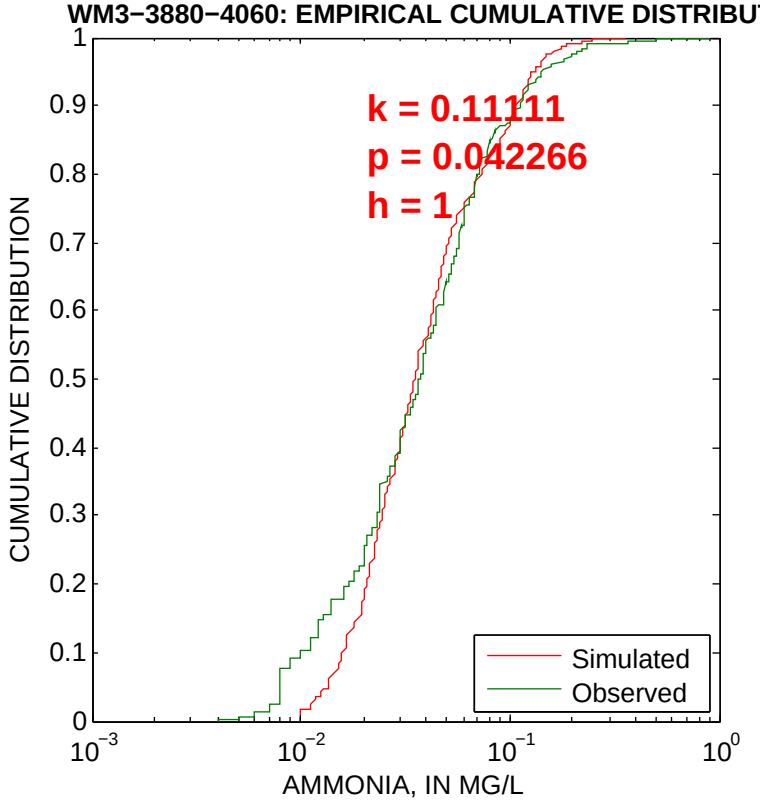
STATISTICS

	n	observe	simulate
		6596	6517
min		5.9	0
		0.770852	-3.37954
mean		165.218	122.942
		2.03014	1.8486
media		98	82.6755
		1.99564	1.92287
max		8570	4356.2
		3.93298	3.63911
varian		90339.3	35734.2
		0.137152	0.281131
JB		0.001	0.001
		0.001	0.001
		ra	log
%		-25.5878	-8.94206
err.va		31917.2	0.142656
rel.std.err		0.353304	1.04013
mod.eff		0.646696	-0.0401337

VERSION 2.1







DATA SELECTION

scenario: P620171001WQ | file: NH3X.calib

plot: NH3X - ammonia

Dates: 1/1/1985 | 12/31/201

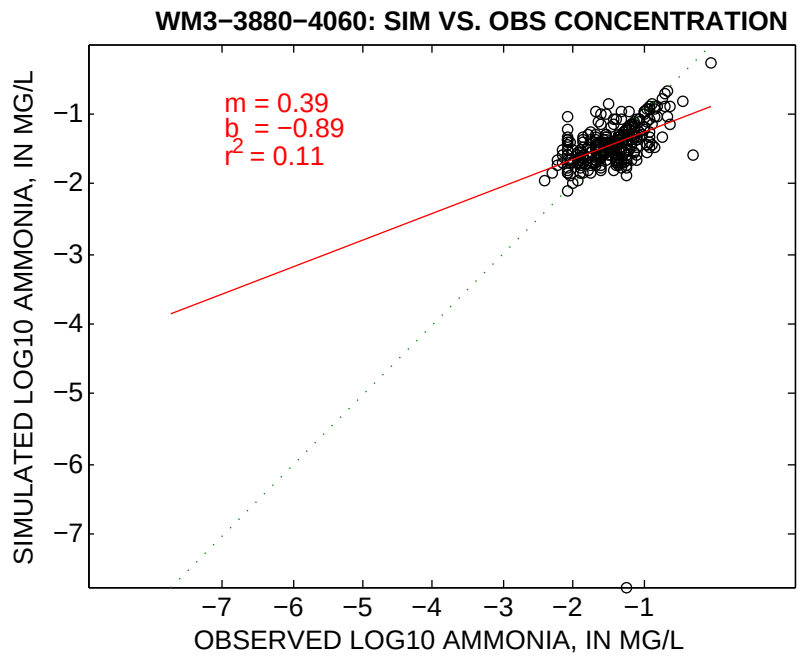
Drive | Directory | Observed: N/A | model | OBS20161101

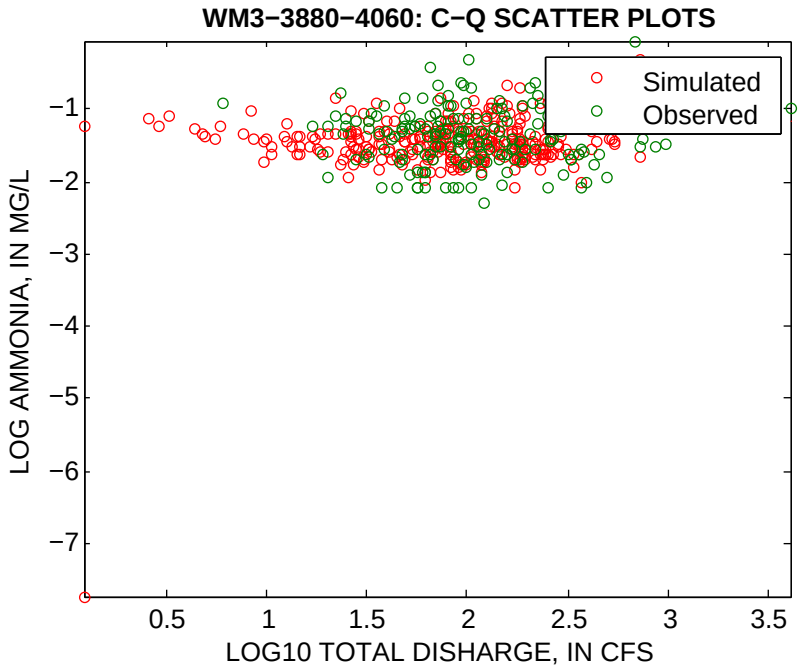
STATISTICS

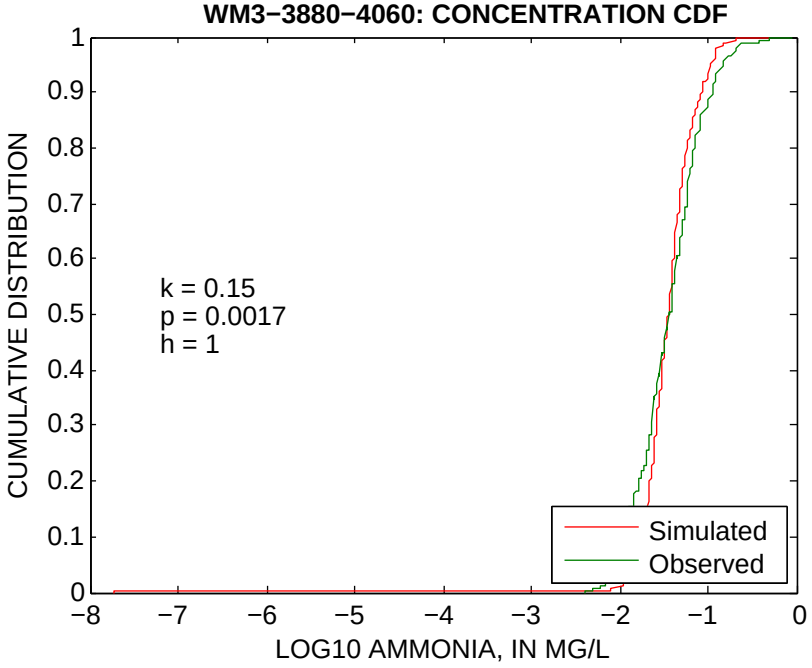
	n	observe	simulate
		306	304
min		0.004	0
		-2.39794	-2.01067
mean		0.0539183	0.0495949
		-1.44855	-1.41578
media		0.0365	0.0353715
		-1.43775	-1.44691
max		0.9	0.35997
		-0.0457575	-0.443734
varian		0.00516264	0.00181288
		0.14789	0.0922907
JB		0.001	0.001
		0.5	0.011414
		ra	log
%		-8.0184	-2.26258
err.va		0.00453013	0.191057
rel.std.err		0.877483	1.29189
mod.eff		0.122517	-0.291886

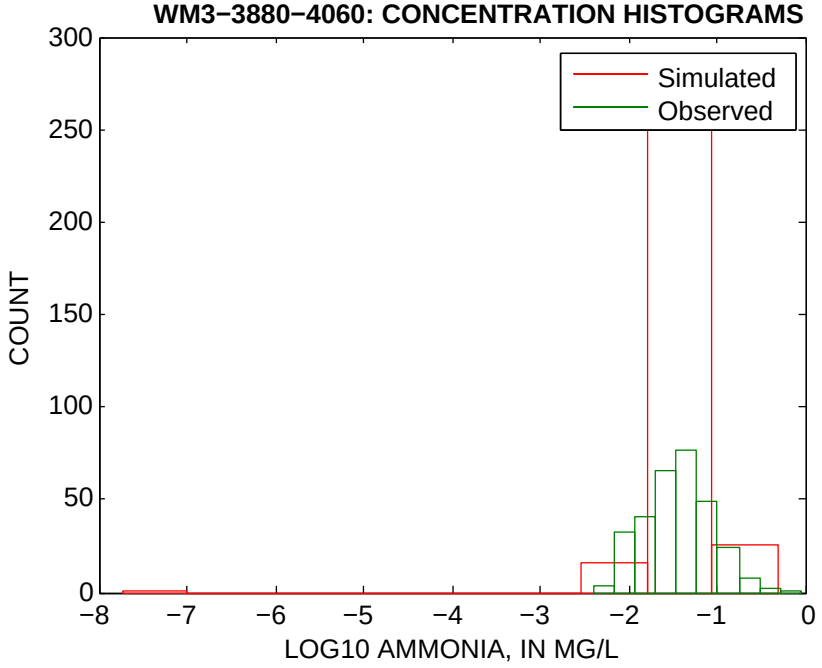
VERSION 3.1

ALL DATA
LOG10

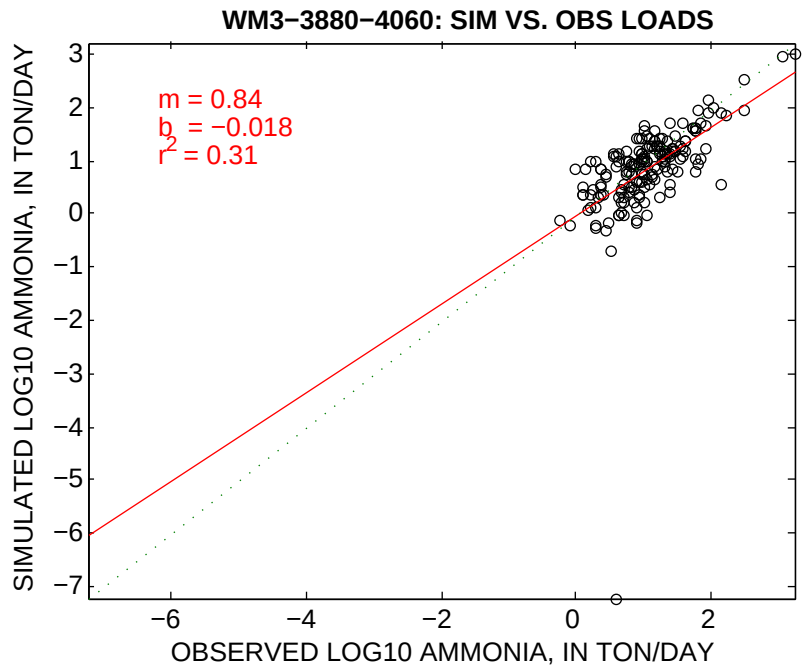


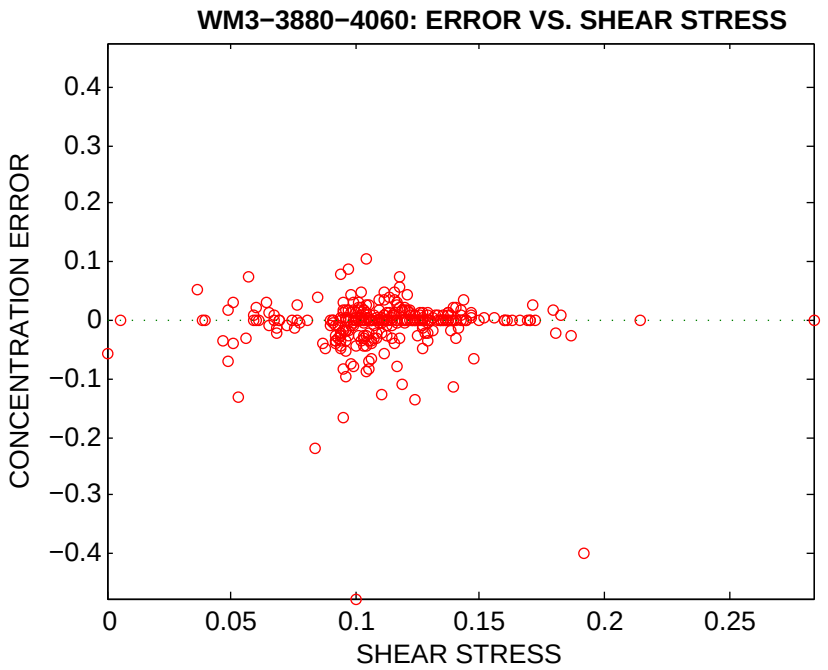


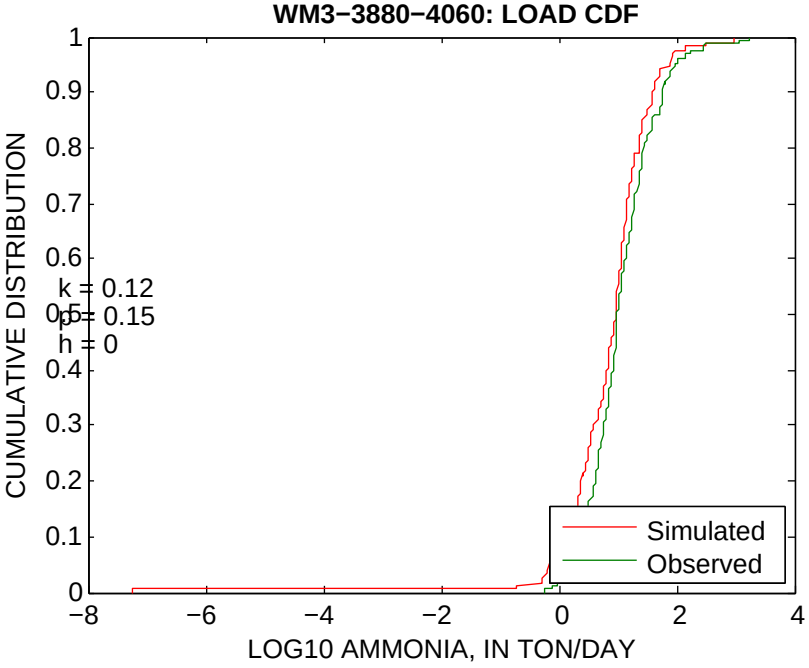


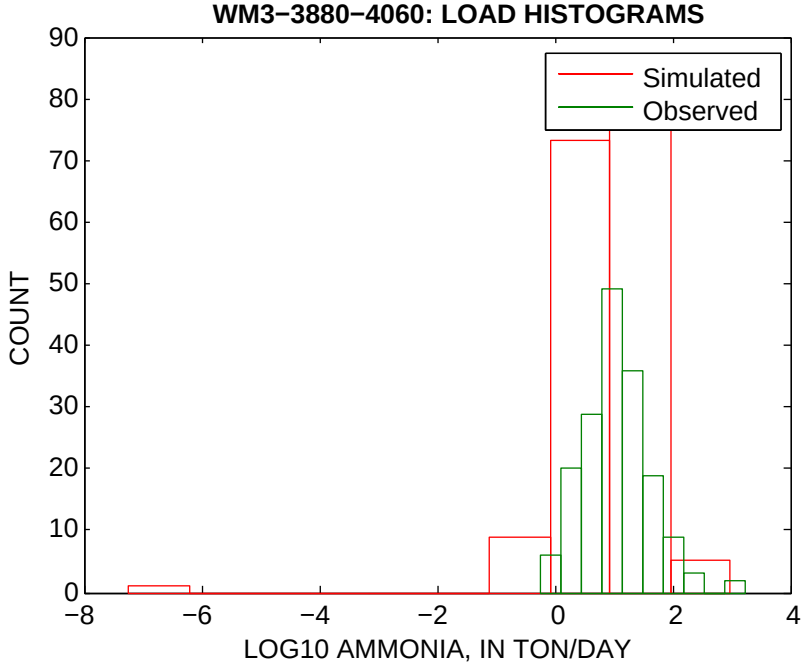


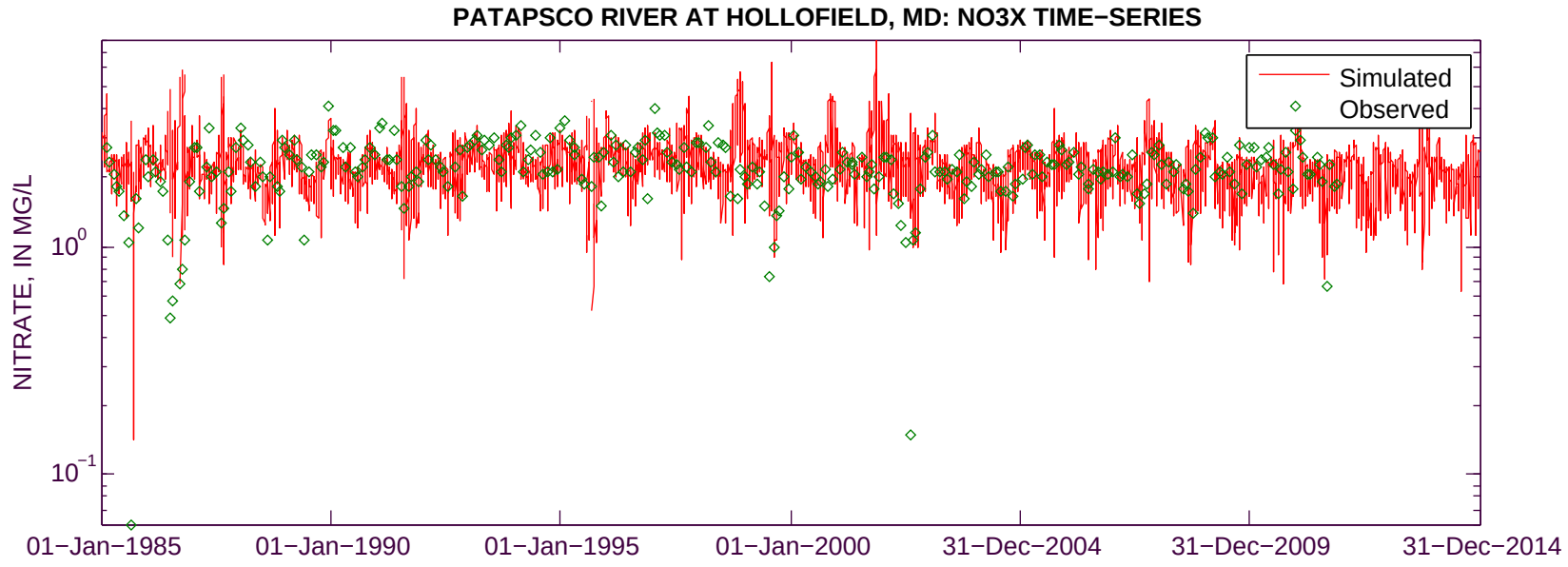
LOAD DATA
LOG10

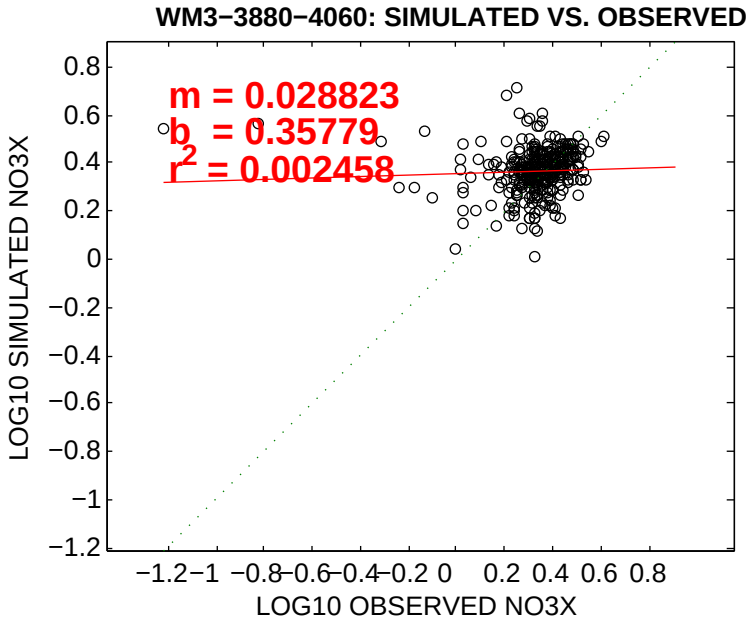


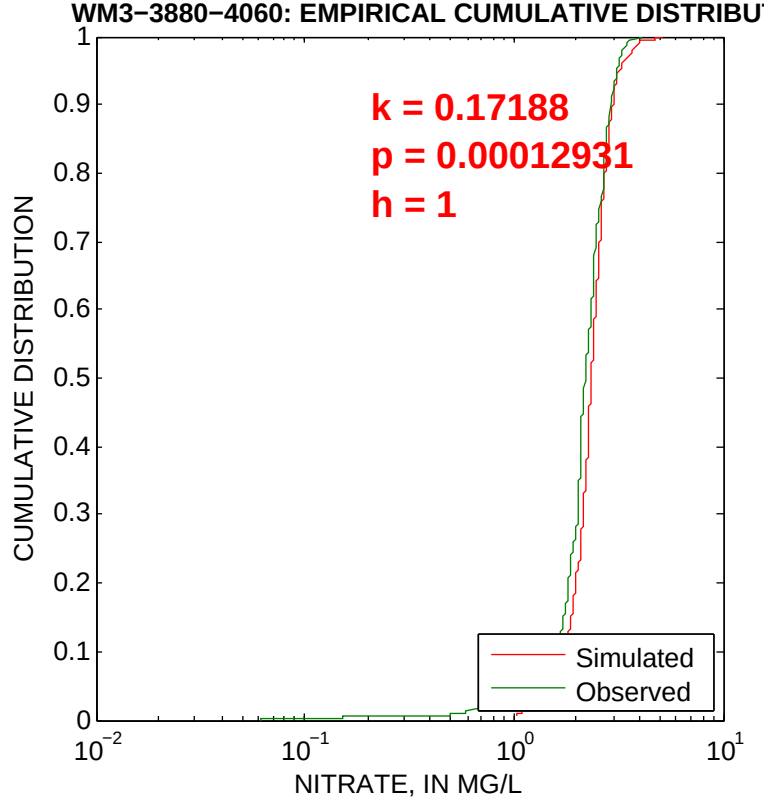












DATA SELECTION

scenario	file
P620171001WQ	NO3X.calib

plot: NO3X - nitrate

Dates: 1/1/1985 – 12/31/201

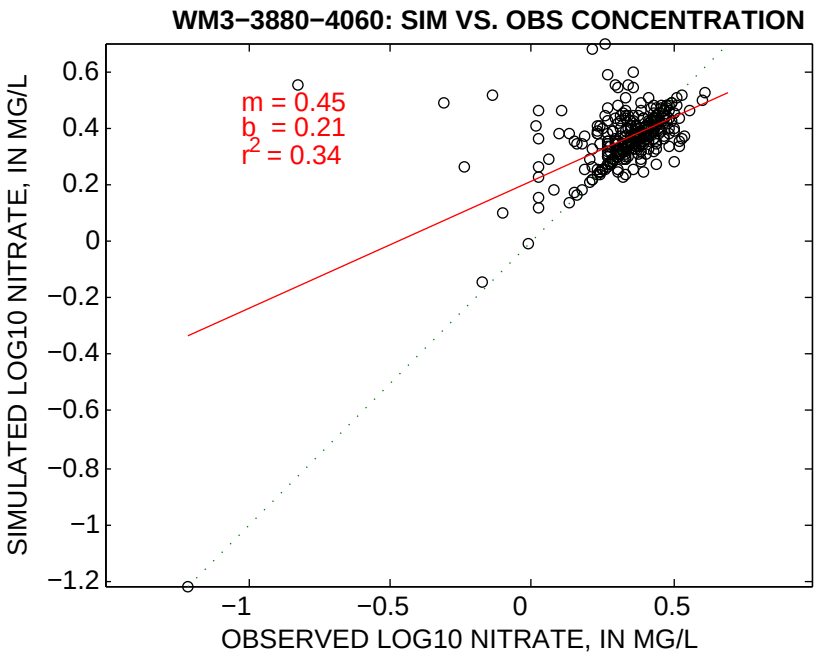
Drive	Directory	Observed
N/A	model	OBS20161101

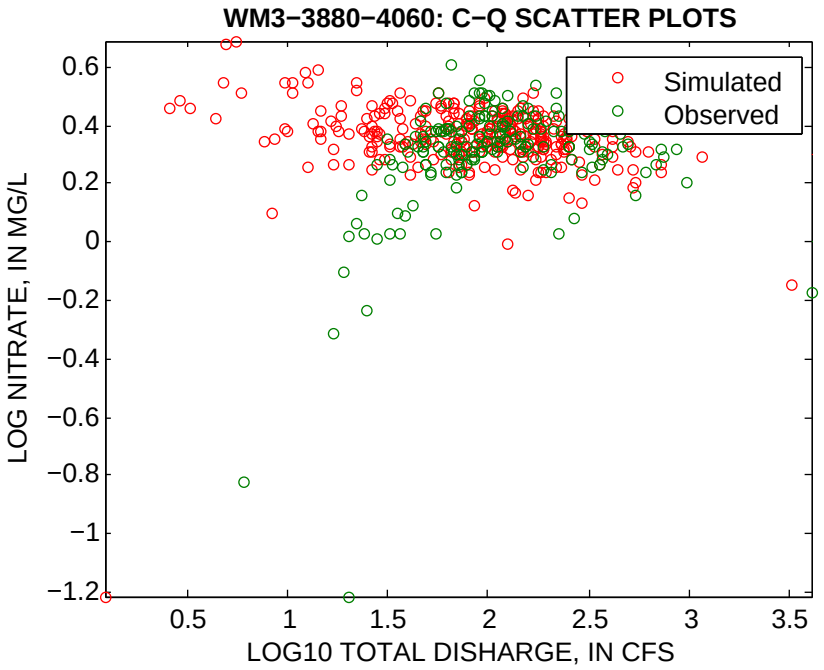
STATISTICS

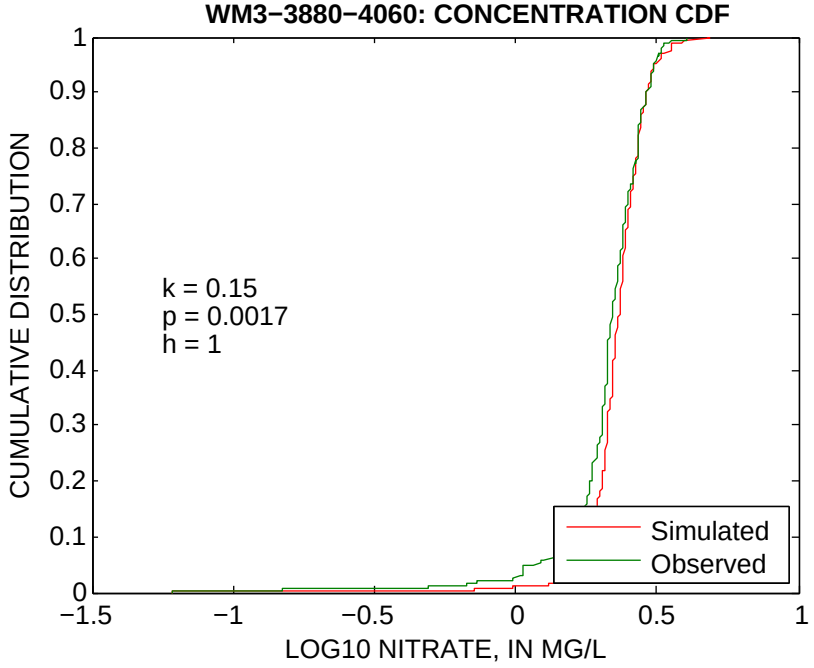
	n	320	318
		observe	simulate
min		0.061	0
		-1.21467	0.0140162
mean		2.22469	2.37049
		0.327183	0.367225
media		2.215	2.35565
		0.346353	0.372185
max		4.06	5.1765
		0.608526	0.714036
varian		0.331833	0.31217
		0.0269507	0.00910911
JB		0.001	0.001
		0.001	0.001
		ra	log
%		6.55385	12.2385
err.va		0.556191	0.0361146
rel.std.err		1.67612	1.34003
mod.eff		-0.676119	-0.340027

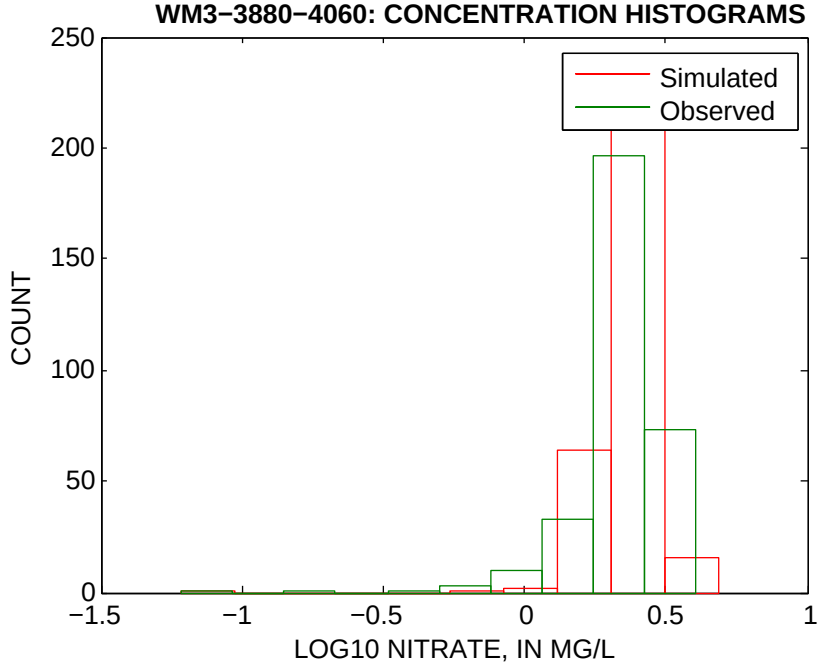
VERSION 2.1

ALL DATA
LOG10

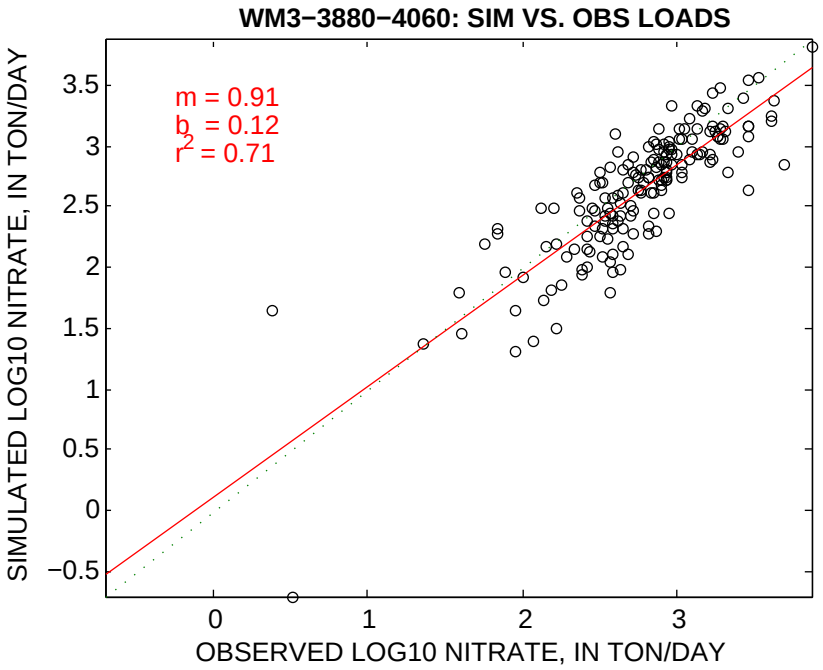


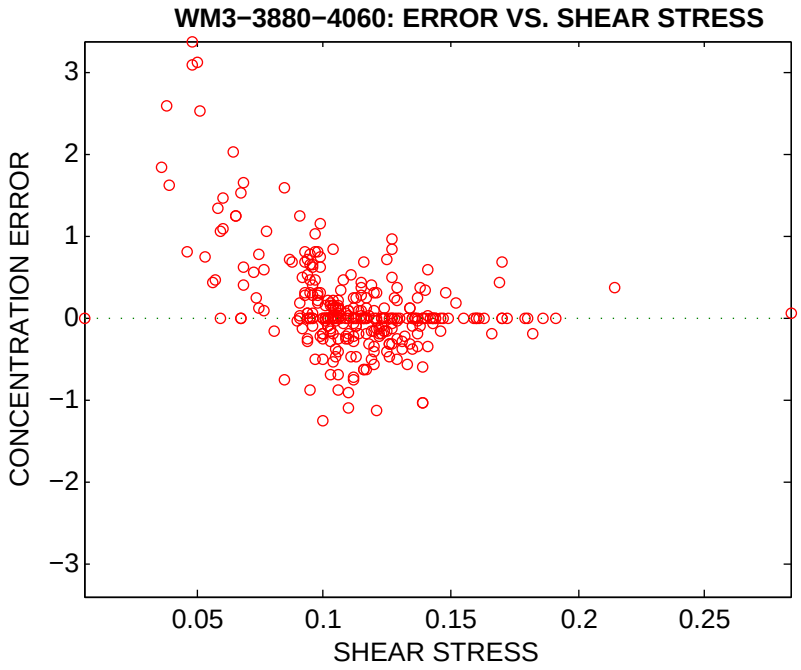


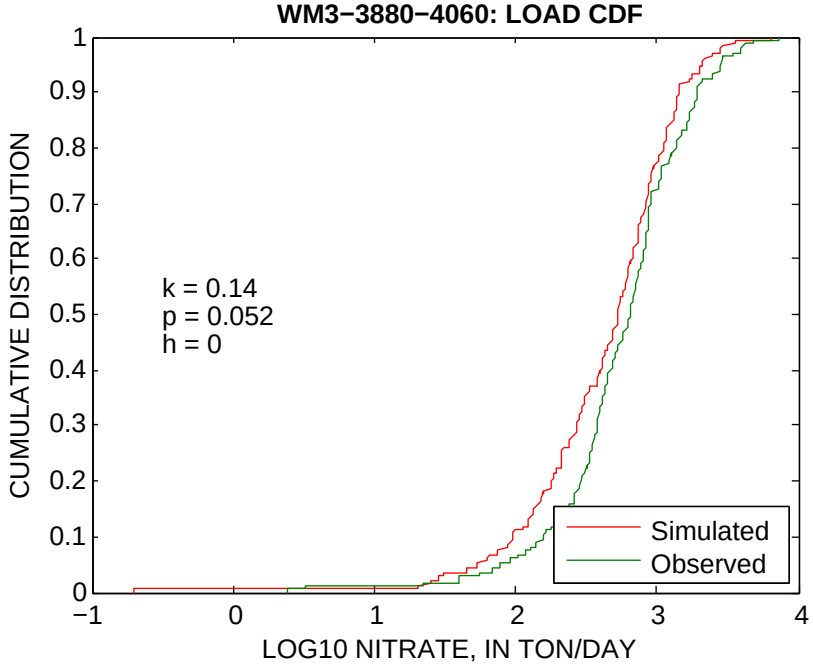


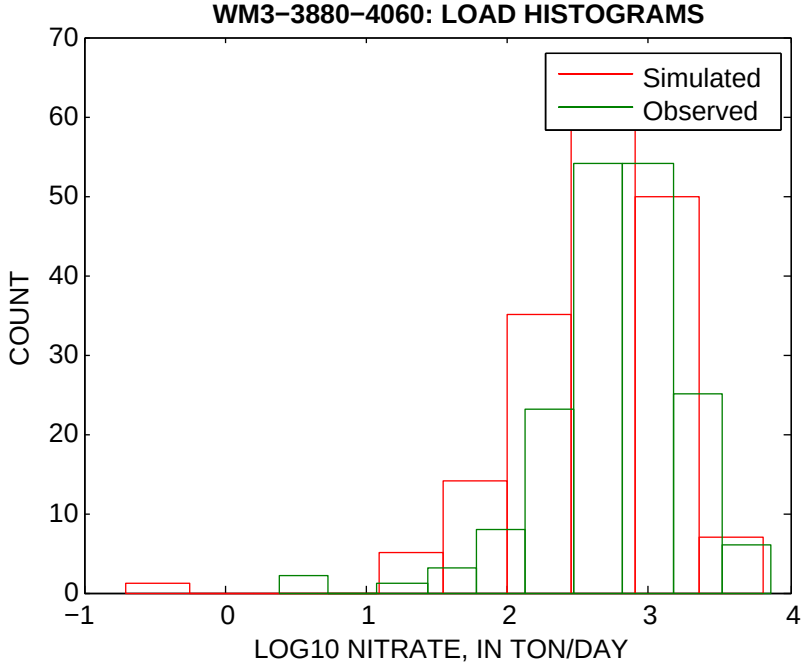


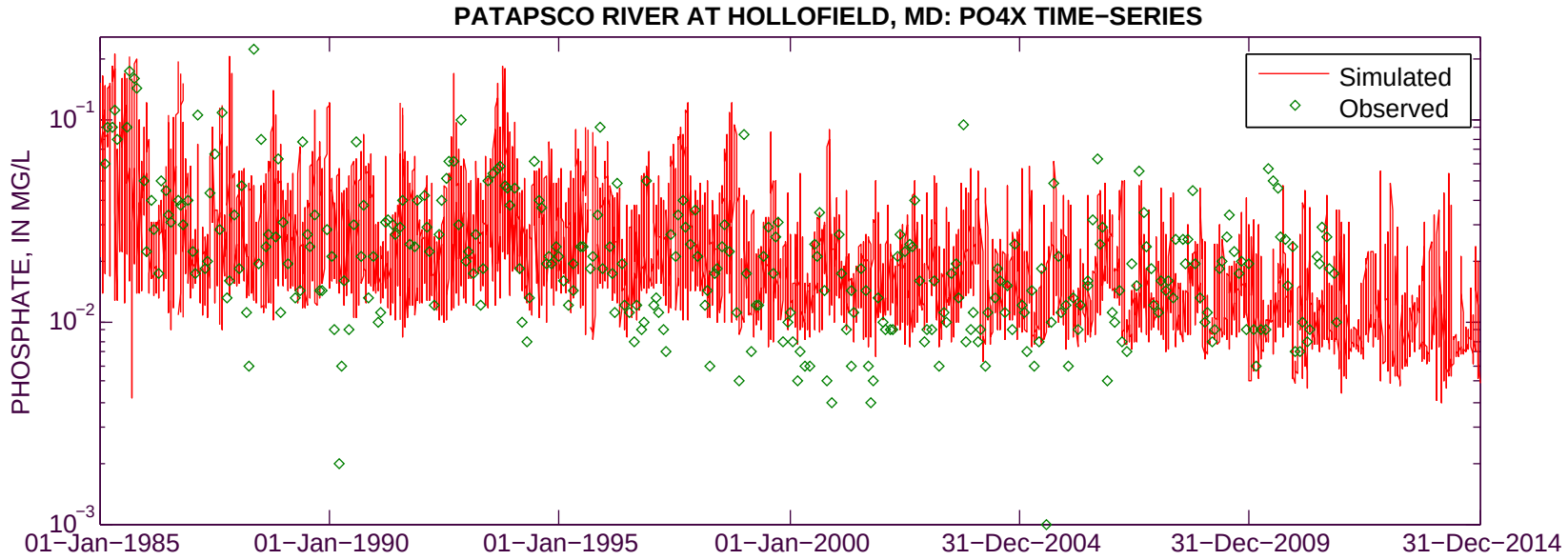
LOAD DATA
LOG10

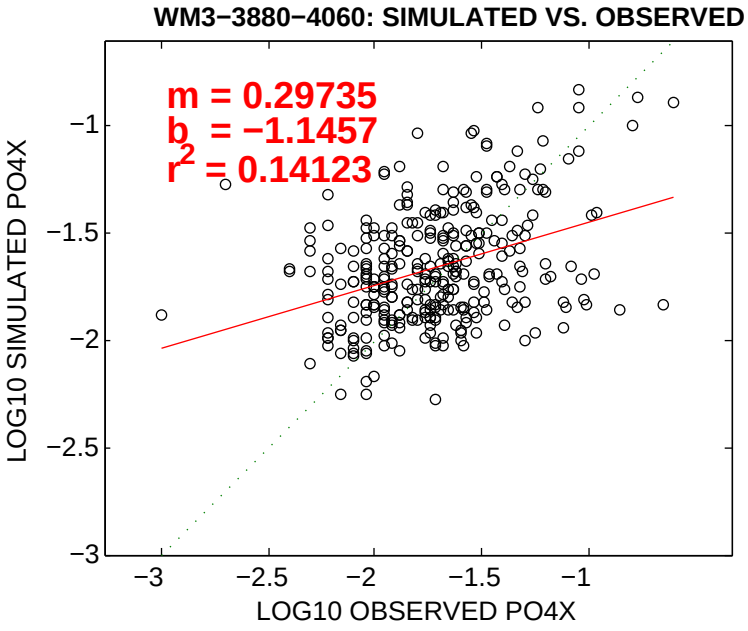


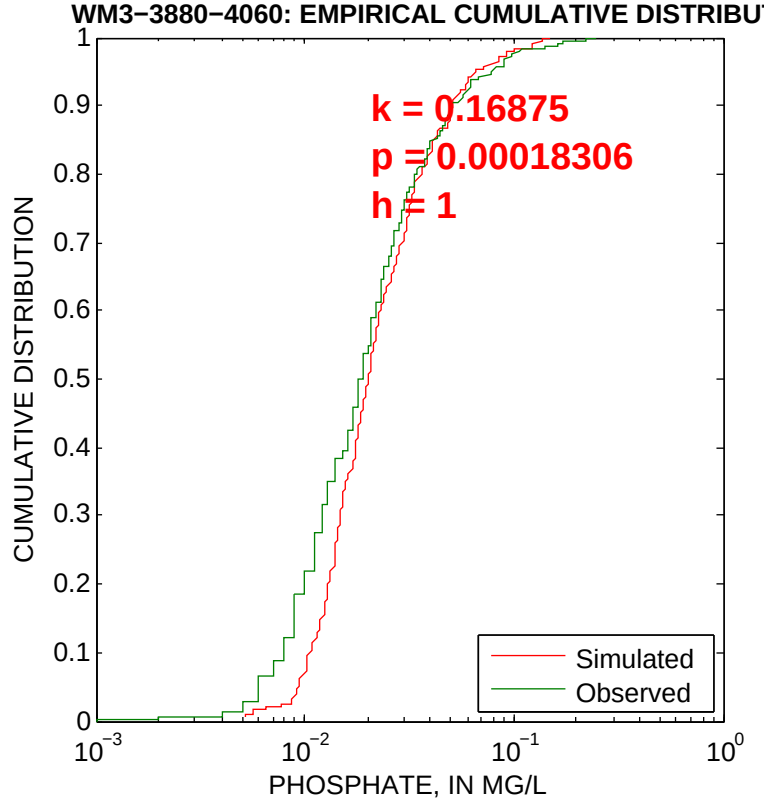












DATA SELECTION

scenario	file
P620171001WQ	PO4X.calib

plot: PO4X - phosphate

Dates: 1/1/1985 – 12/31/201

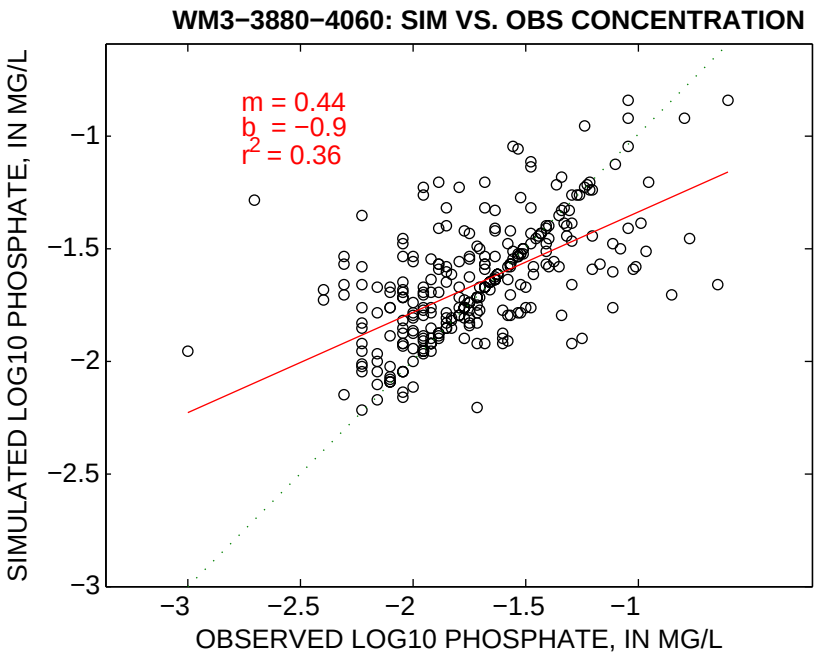
Drive	Directory	Observed
N/A	model	OBS20161101

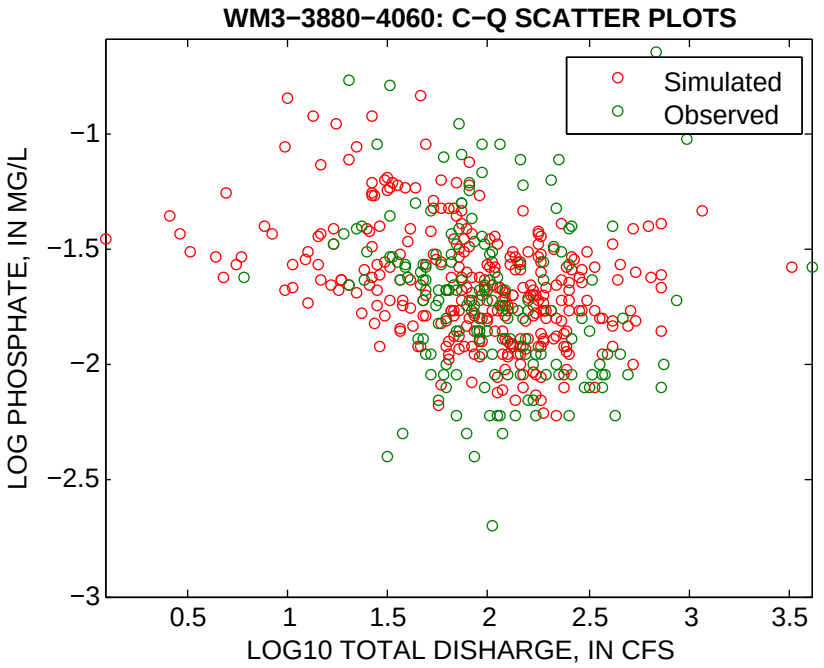
STATISTICS

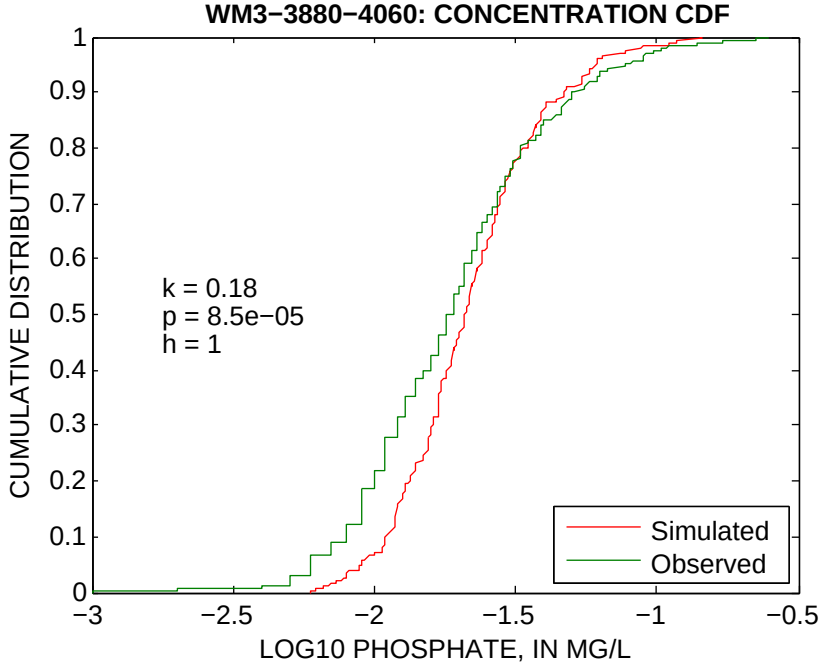
	n	observe	simulate
		320	318
min		0.001	0
		-3	-2.27801
mean		0.0266094	0.0270467
		-1.71953	-1.65697
media		0.0185	0.020126
		-1.73299	-1.69433
max		0.25	0.14956
		-0.60206	-0.825185
varian		0.00082460	0.00046979
		0.113797	0.0712404
JB		0.001	0.001
		0.006711	0.001988
		ra	log
%		1.64368	-3.63835
err.va		0.00072946	0.121289
rel.std.err		0.884625	1.06583
mod.eff		0.115375	-0.0658332

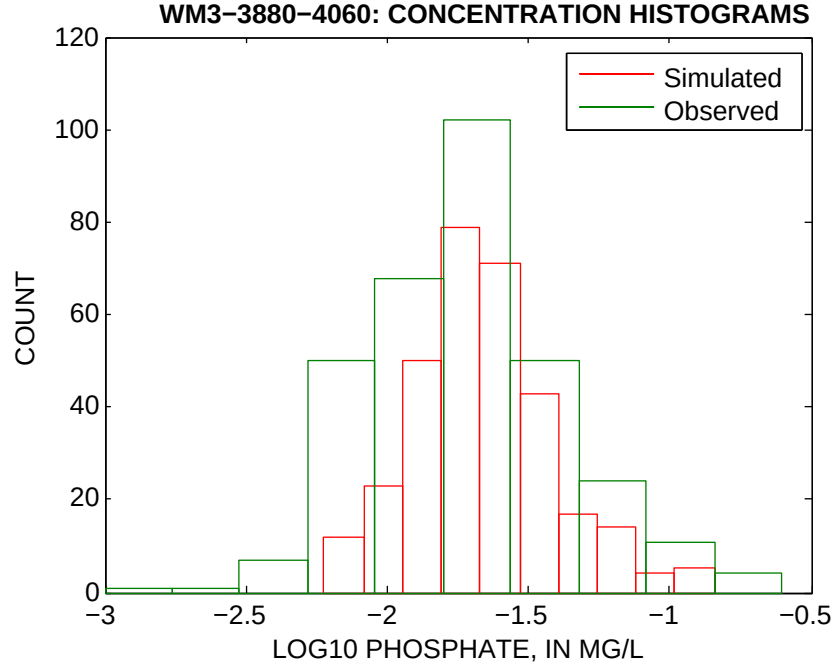
VERSION 3.1

ALL DATA
LOG10

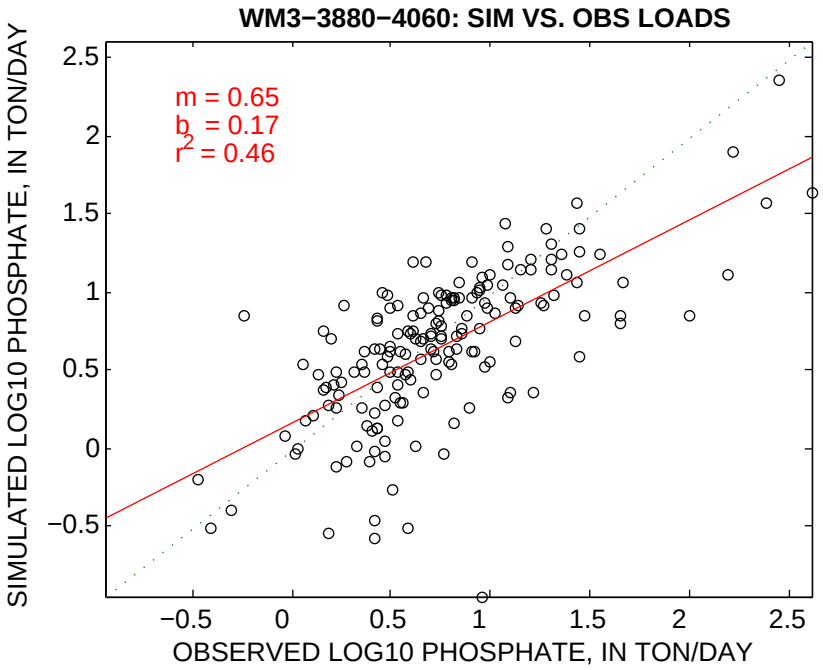


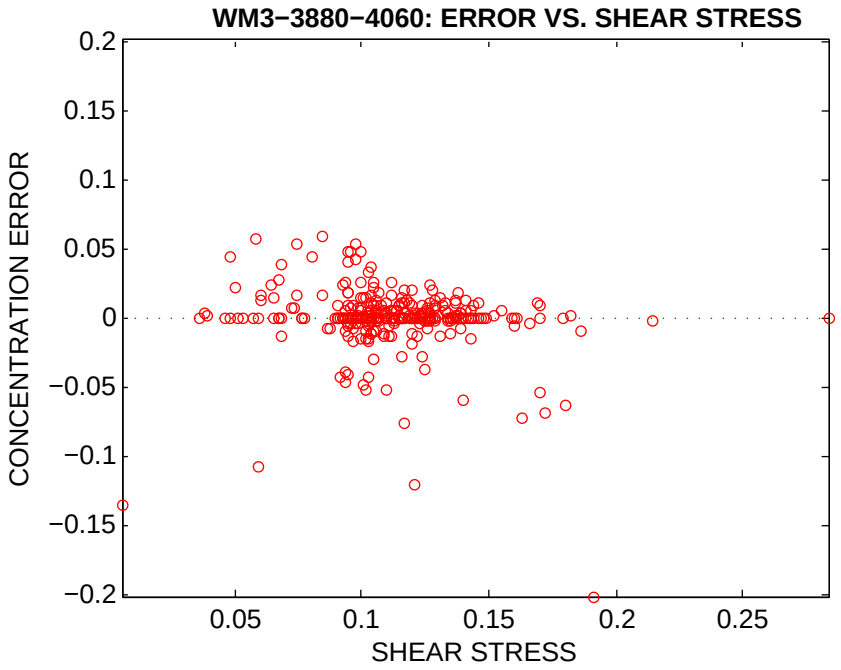


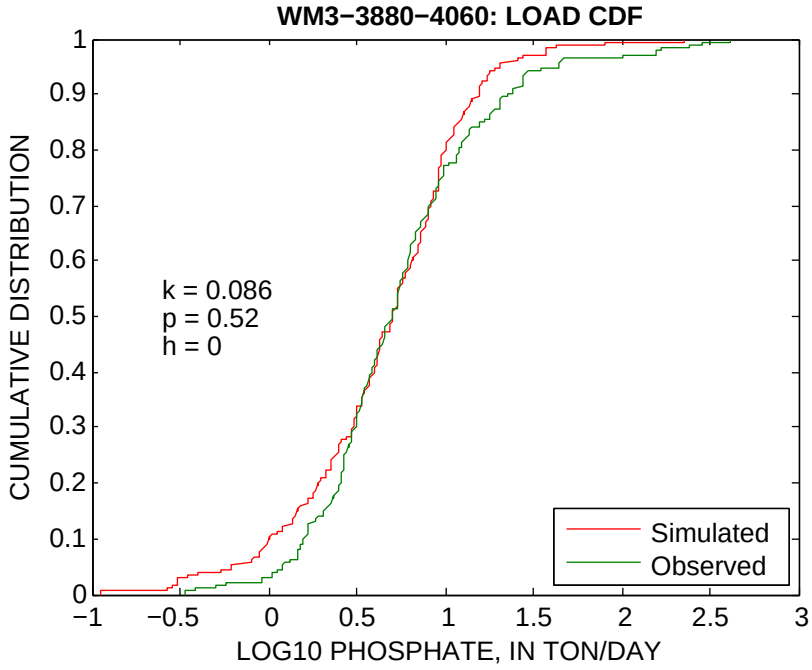


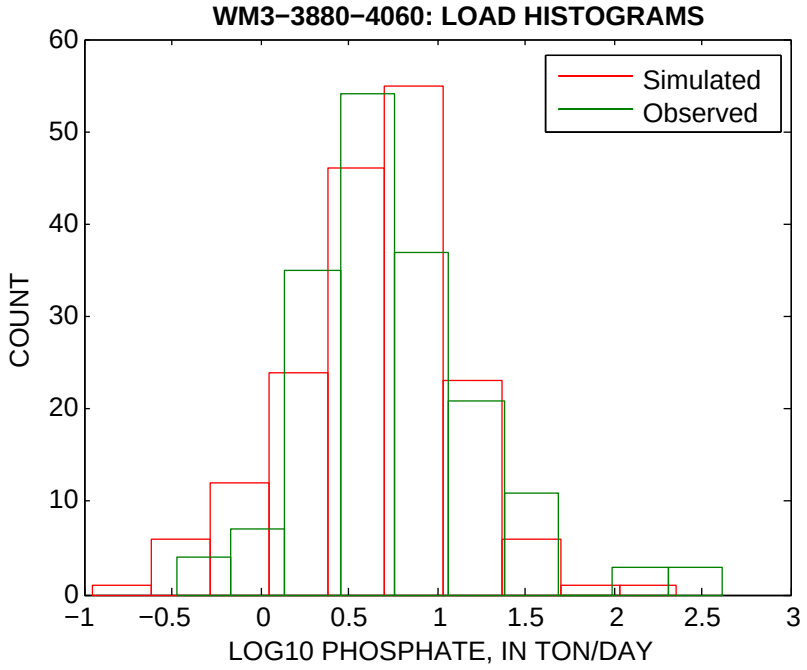


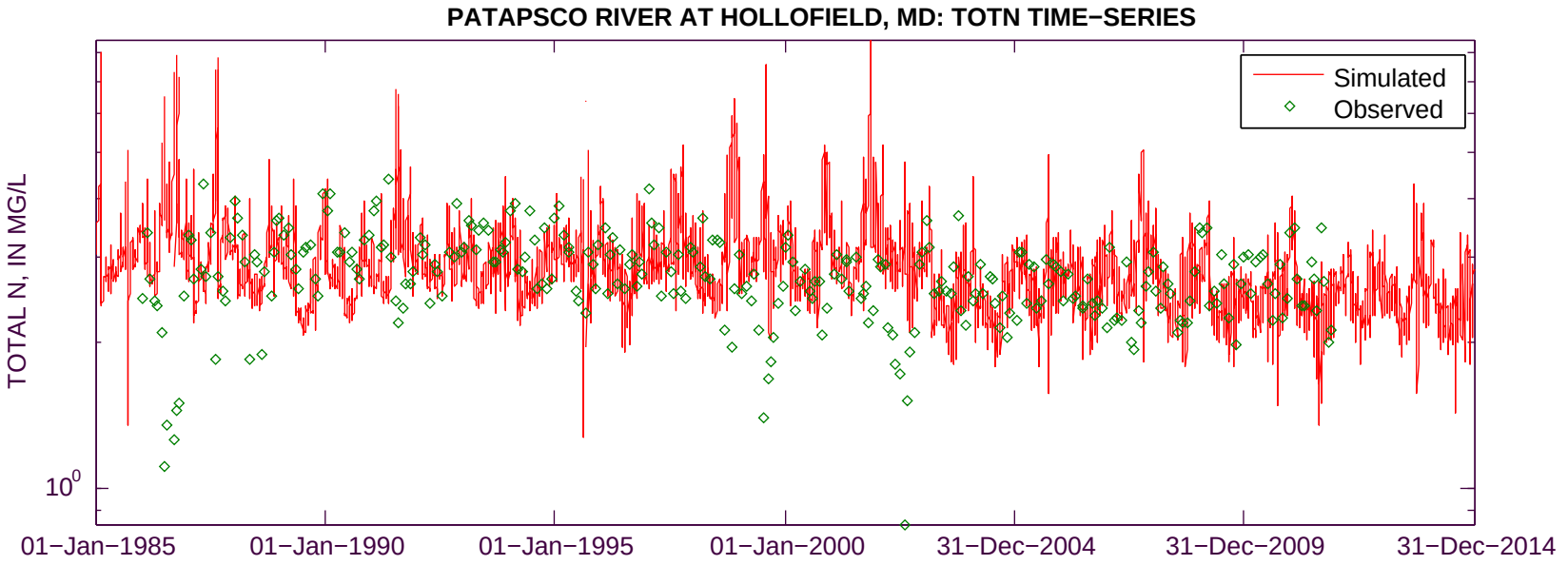
LOAD DATA
LOG10

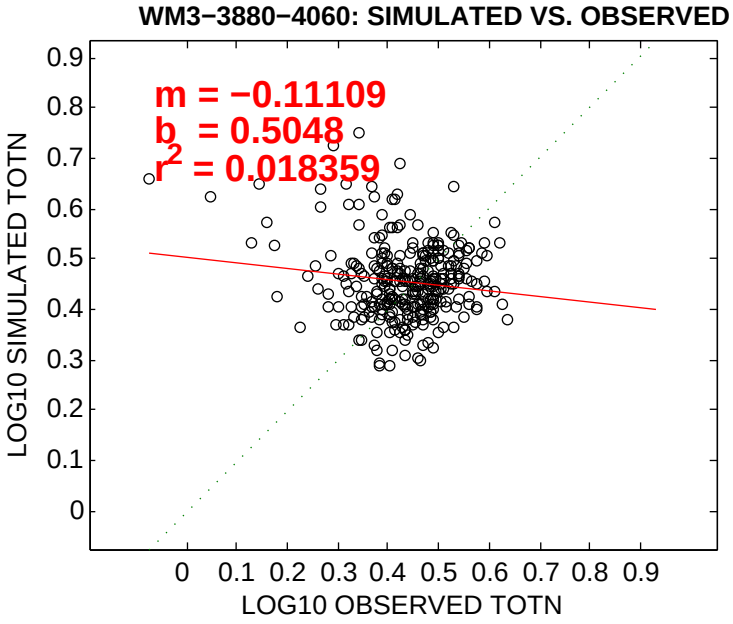


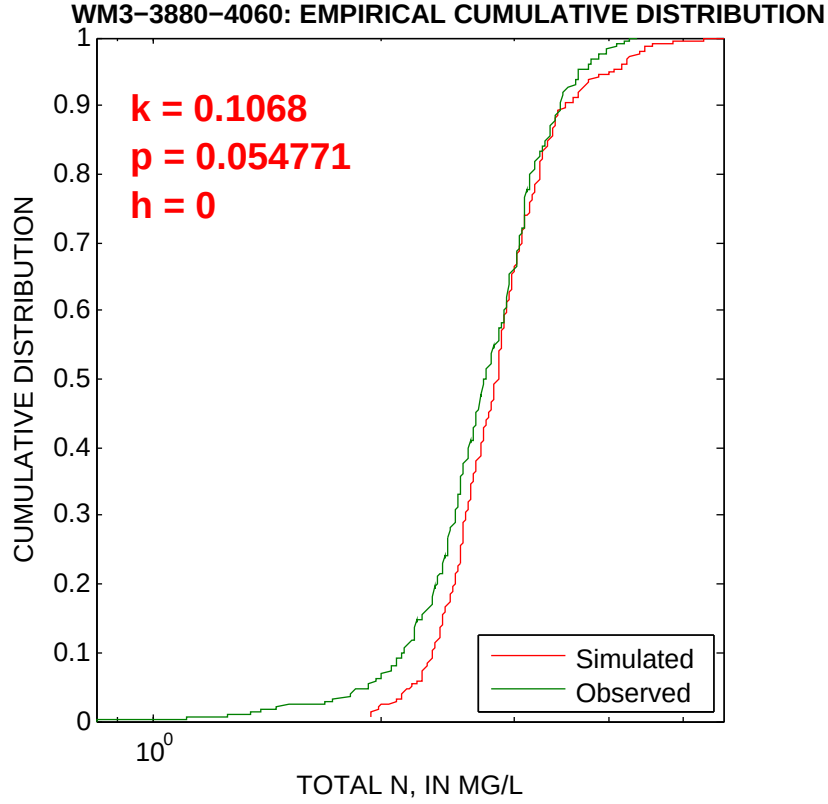












DATA SELECTION

scenario	file
P620171001WQ	TOTN.calib

plot: TOTN - total nitrogen

Dates: 1/1/1985 – 12/31/201

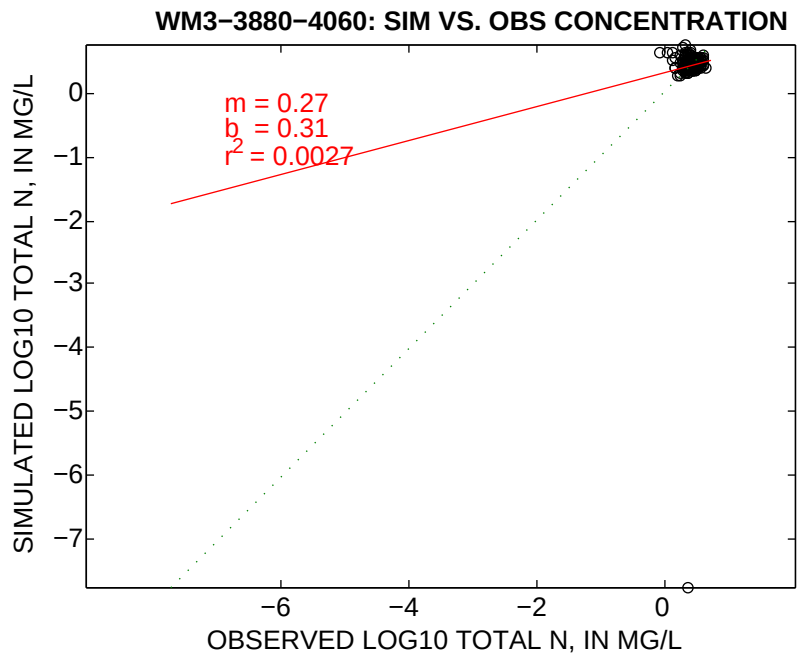
Drive	Directory	Observed
N/A	model	OBS20161101

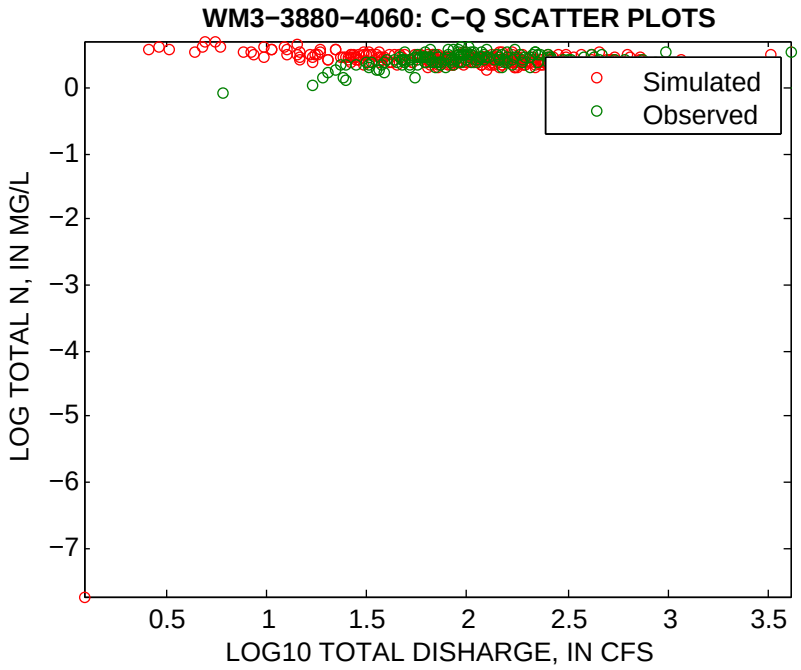
STATISTICS

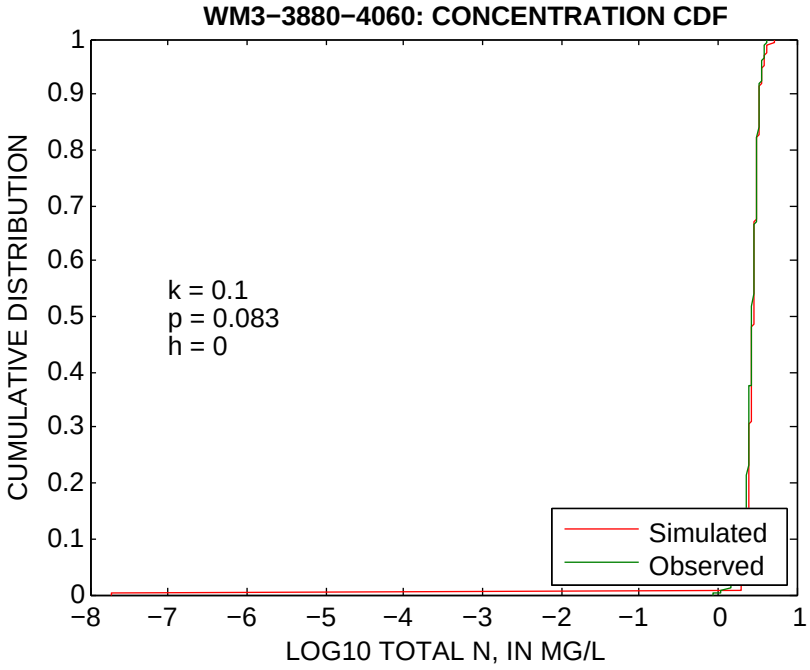
	n	observe	simulate
		309	307
min		0.84	0
		-0.0757207	0.287018
mean		2.76922	2.8871
		0.434415	0.456543
media		2.74	2.8367
		0.439333	0.45518
max		4.35	5.6483
		0.638489	0.751918
varian		0.296272	0.345222
		0.0083779	0.0056312
JB		0.033678	0.001
		0.001	0.001
		ra	log
%		4.25674	5.0938
err.va		0.688435	0.0163617
rel.std.err		2.32366	1.95296
mod.eff		-1.32366	-0.952959

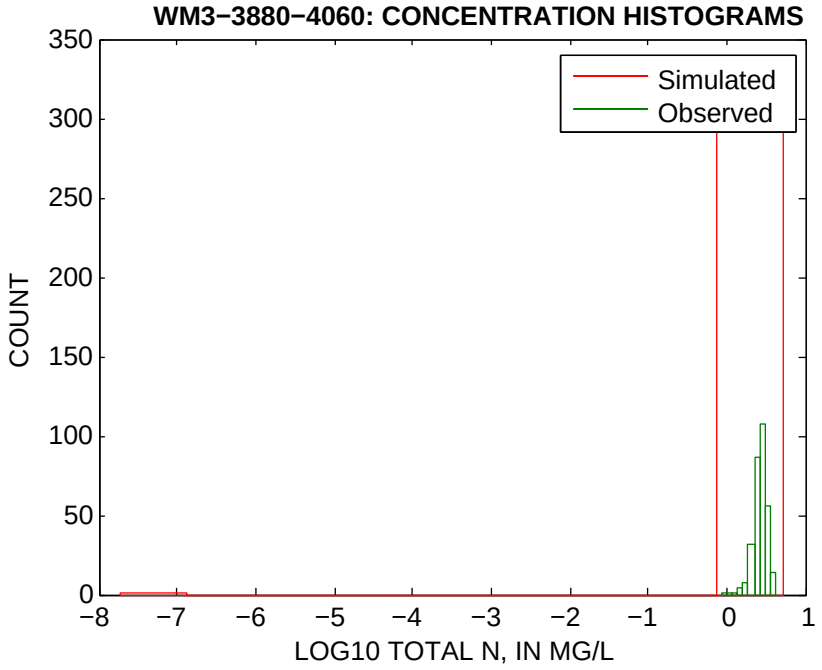
VERSION 2.1

ALL DATA
LOG10

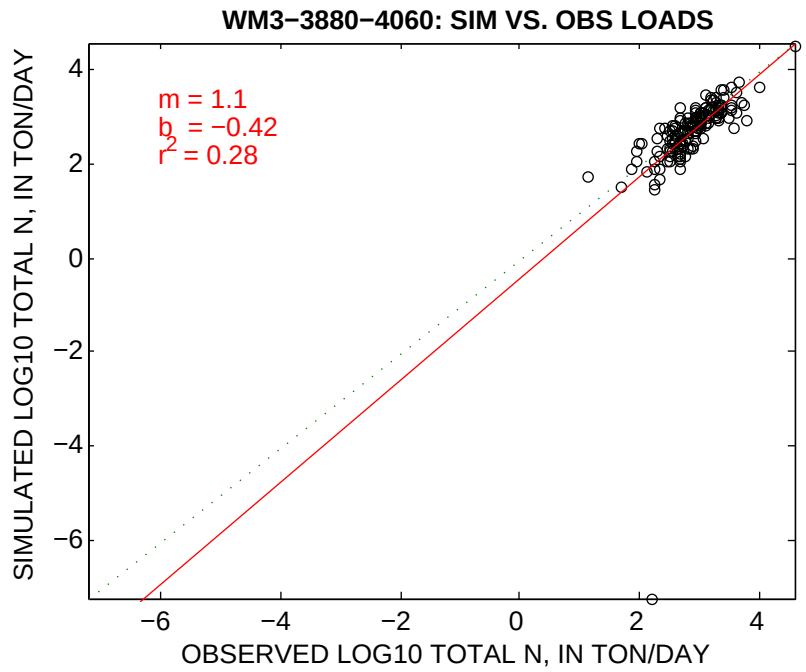


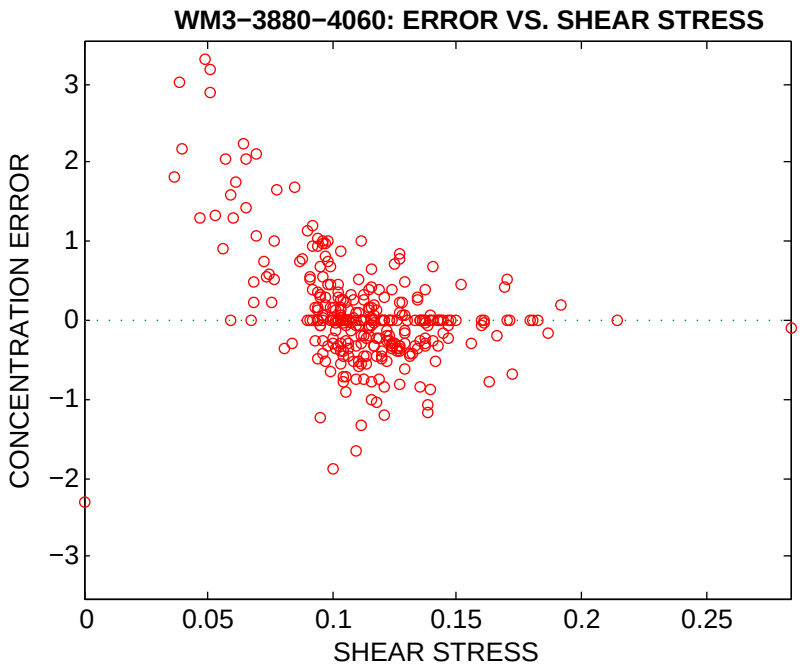


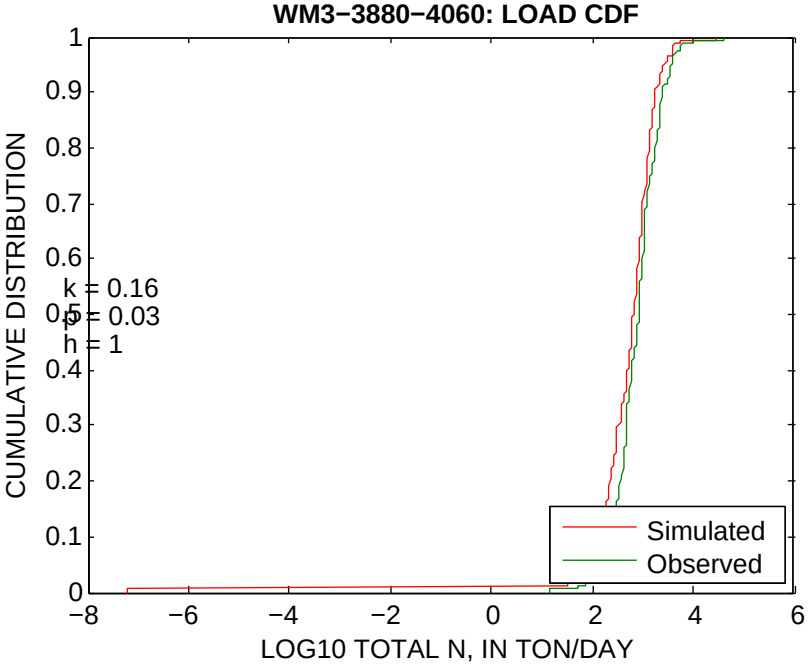


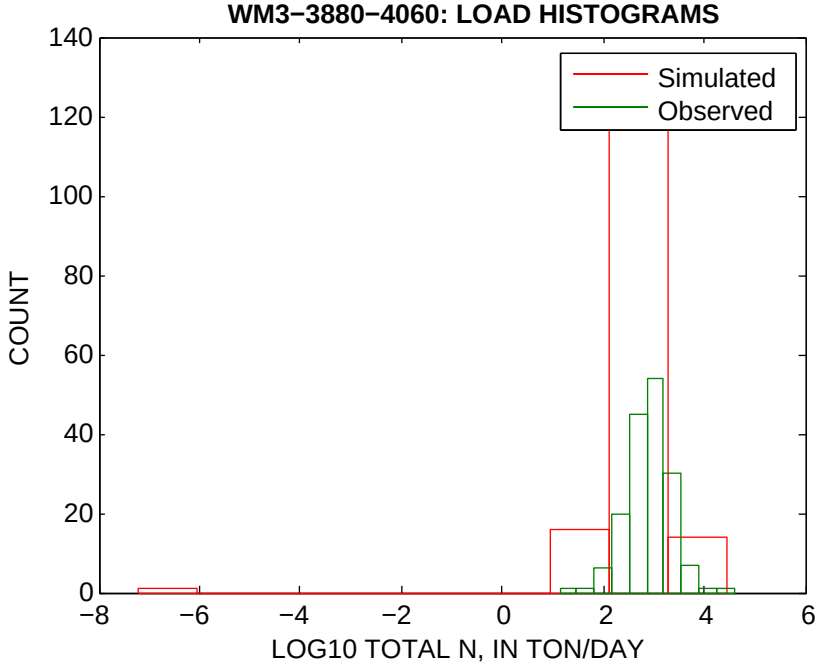


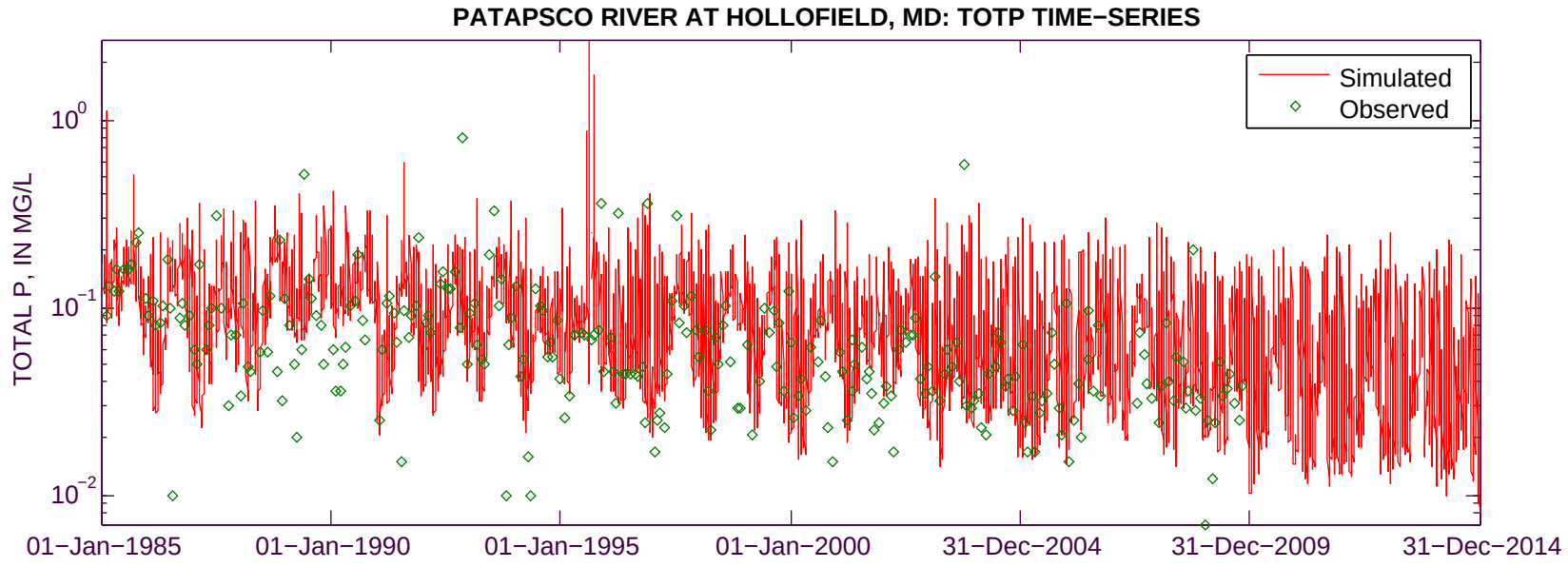
LOAD DATA
LOG10

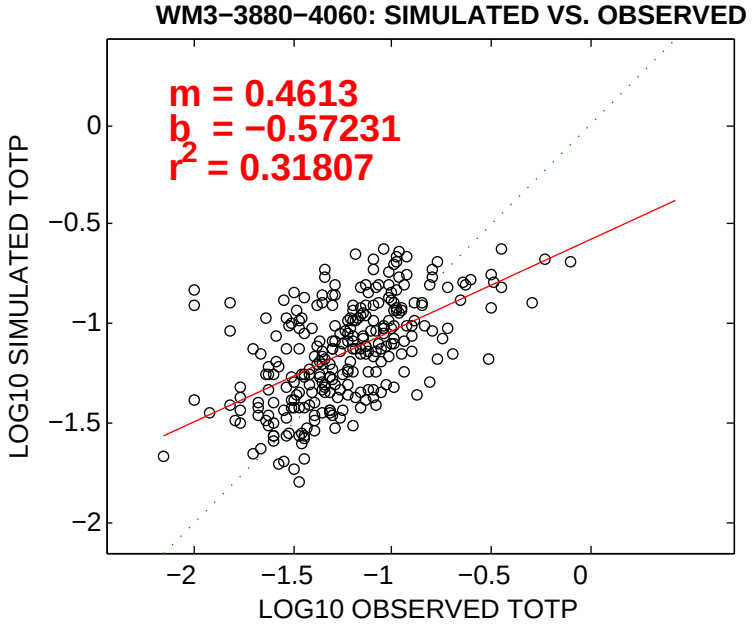


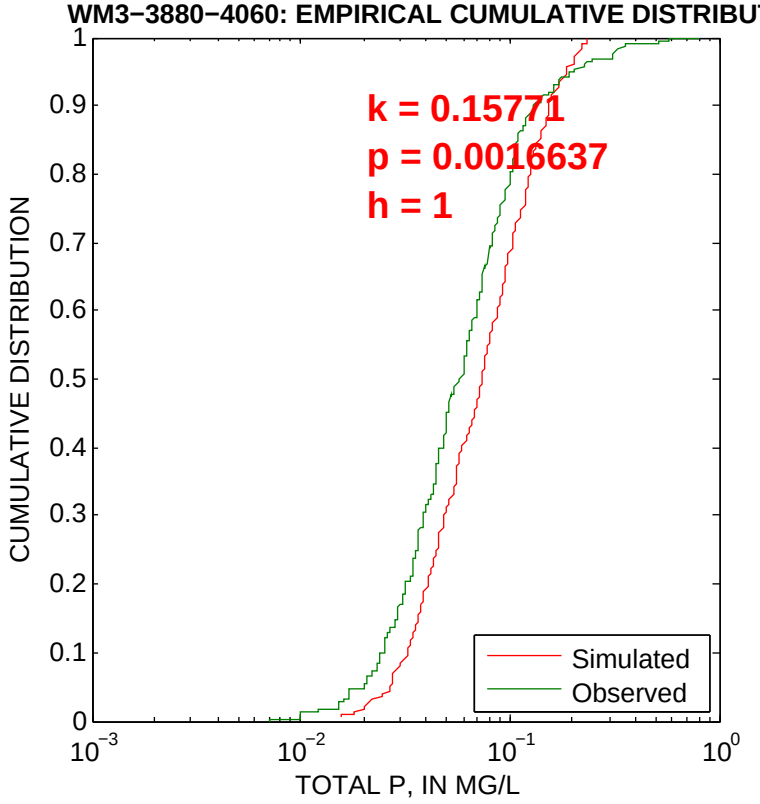












DATA SELECTION

scenario	file
P620171001WQ	TOTP.calib

plot: TOTP - total phosphorus

Dates: 1/1/1985 – 12/31/201

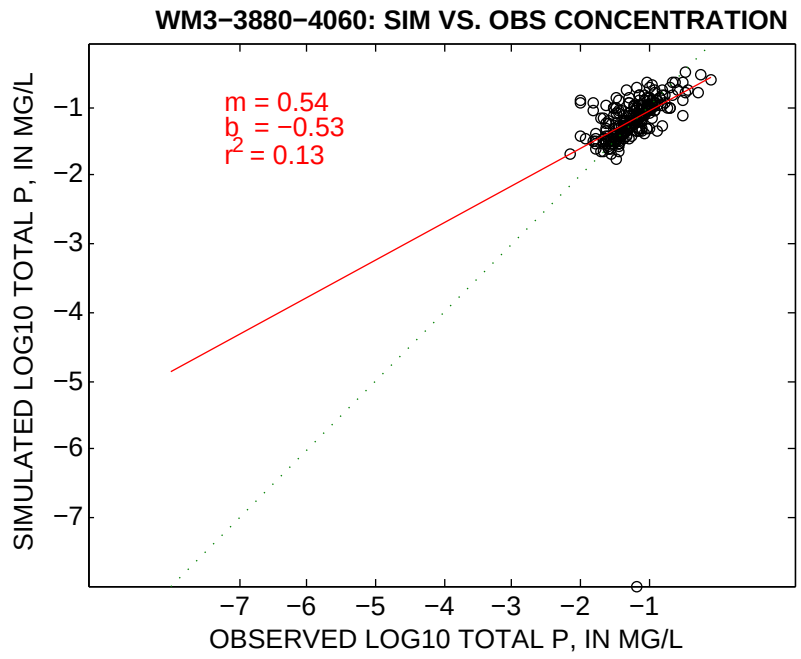
Drive	Directory	Observed
N/A	model	OBS20161101

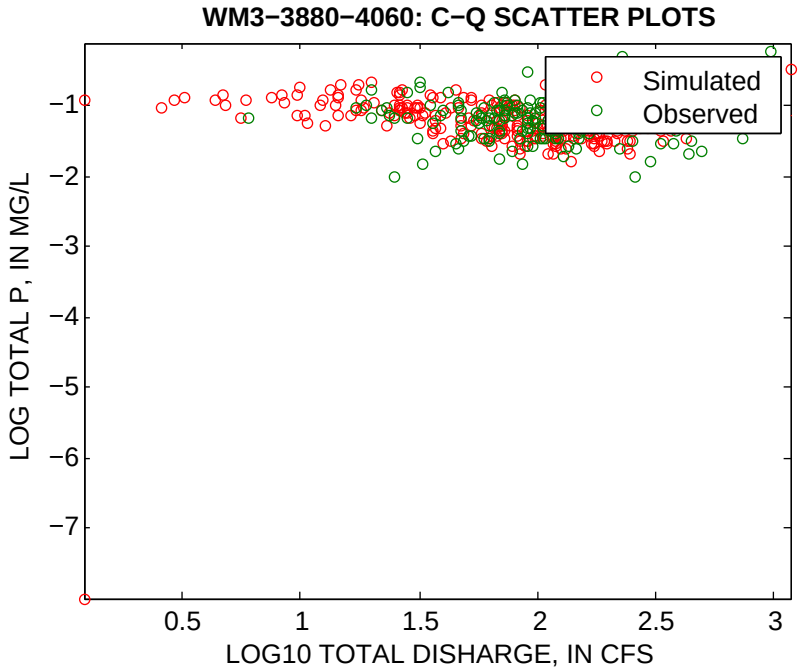
STATISTICS

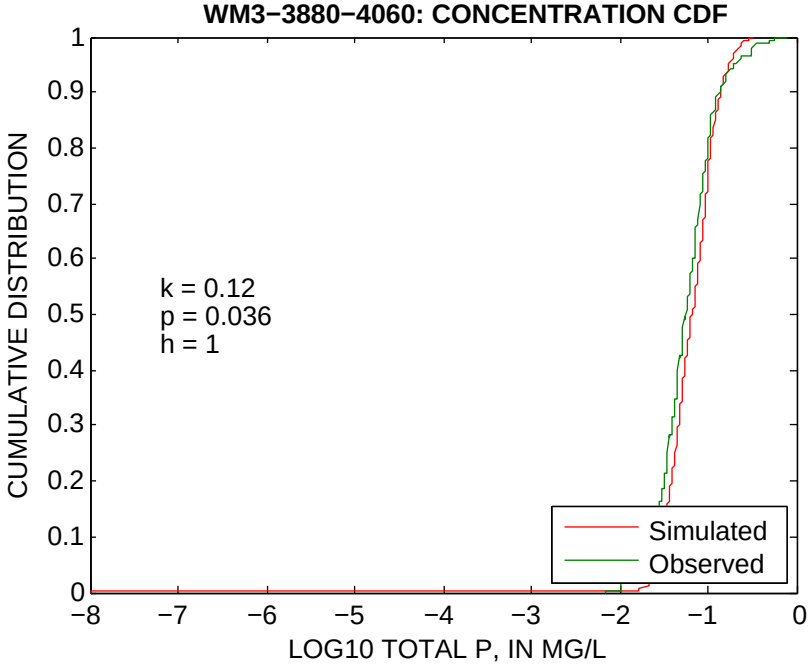
	n	279	277
		observe	simulate
min		0.007	0
		-2.1549	-1.80206
mean		0.0777742	0.0845784
		-1.23761	-1.14322
media		0.057	0.073963
		-1.24413	-1.1279
max		0.8	0.23627
		-0.09691	-0.626591
varian		0.00673741	0.0024981
		0.0999539	0.0668728
JB		0.001	0.001
		0.007454	0.035251
		ra	log
%		8.74869	-7.62683
err.va		0.00530799	0.0835511
rel.std.err		0.787838	0.835896
mod.eff		0.212162	0.164104

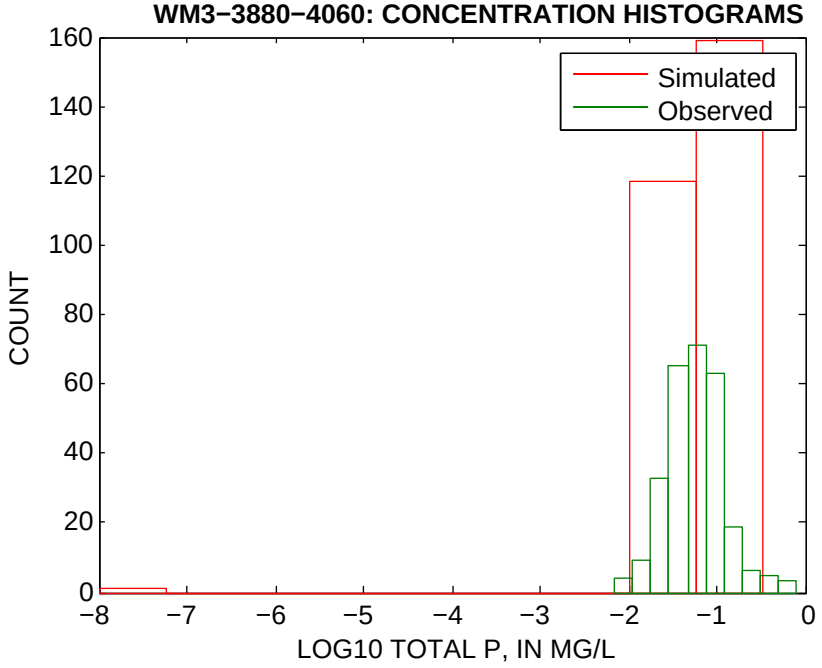
VERSION 2.1

ALL DATA
LOG10

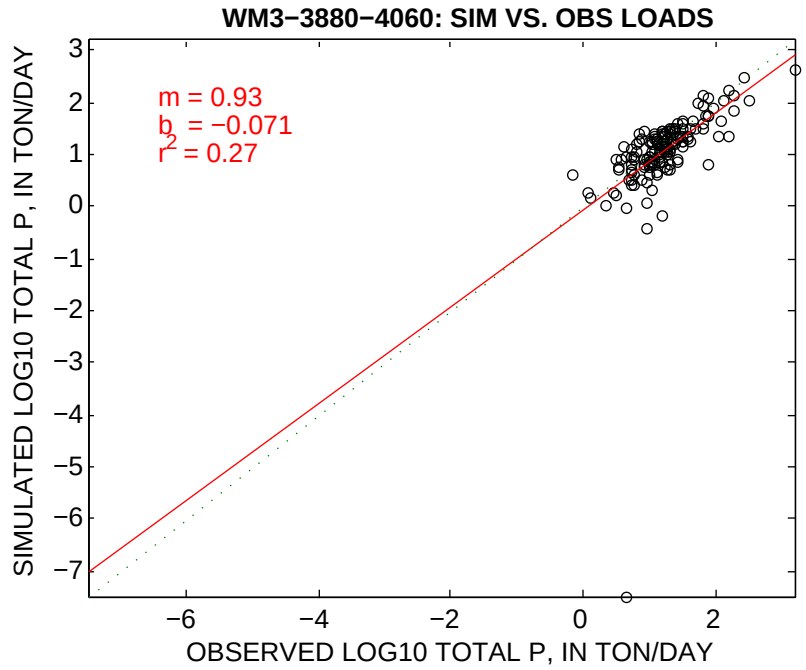


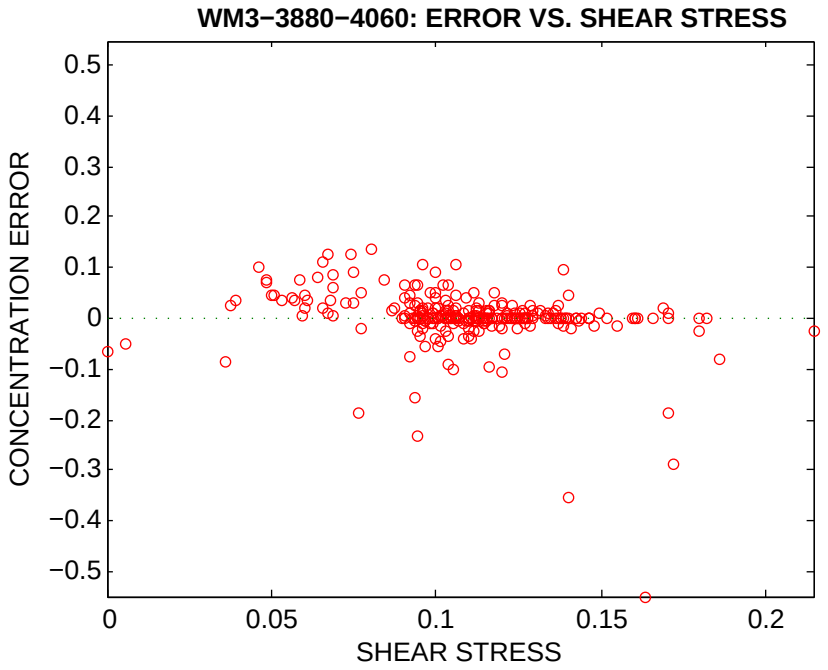


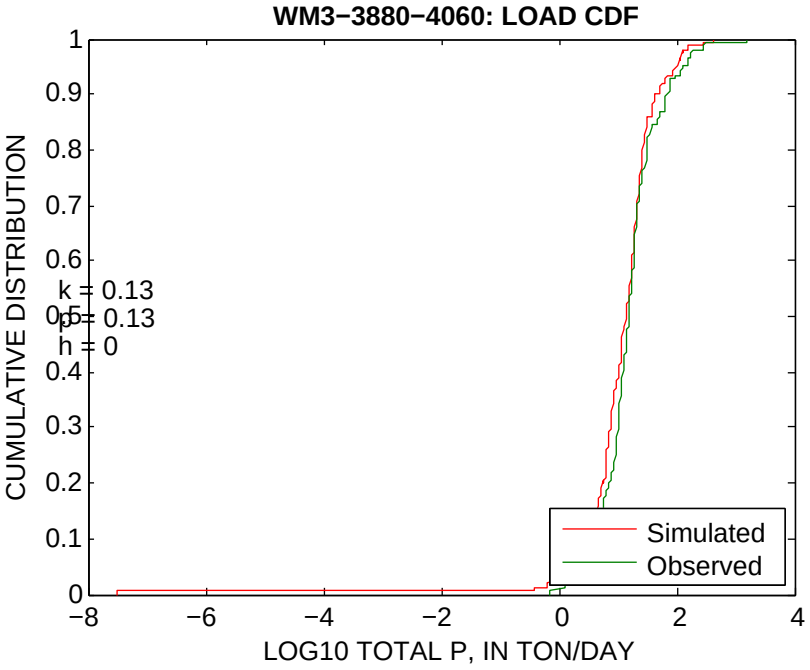


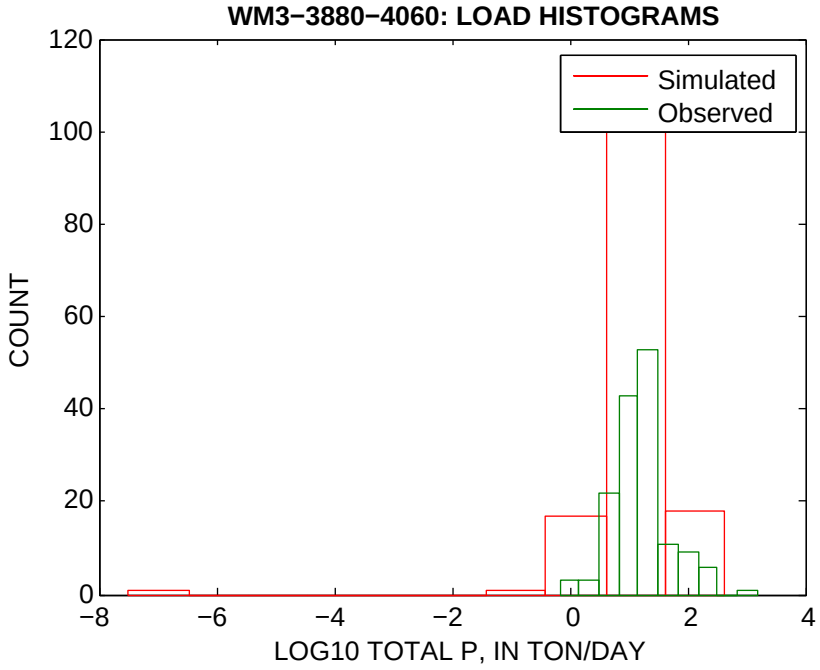


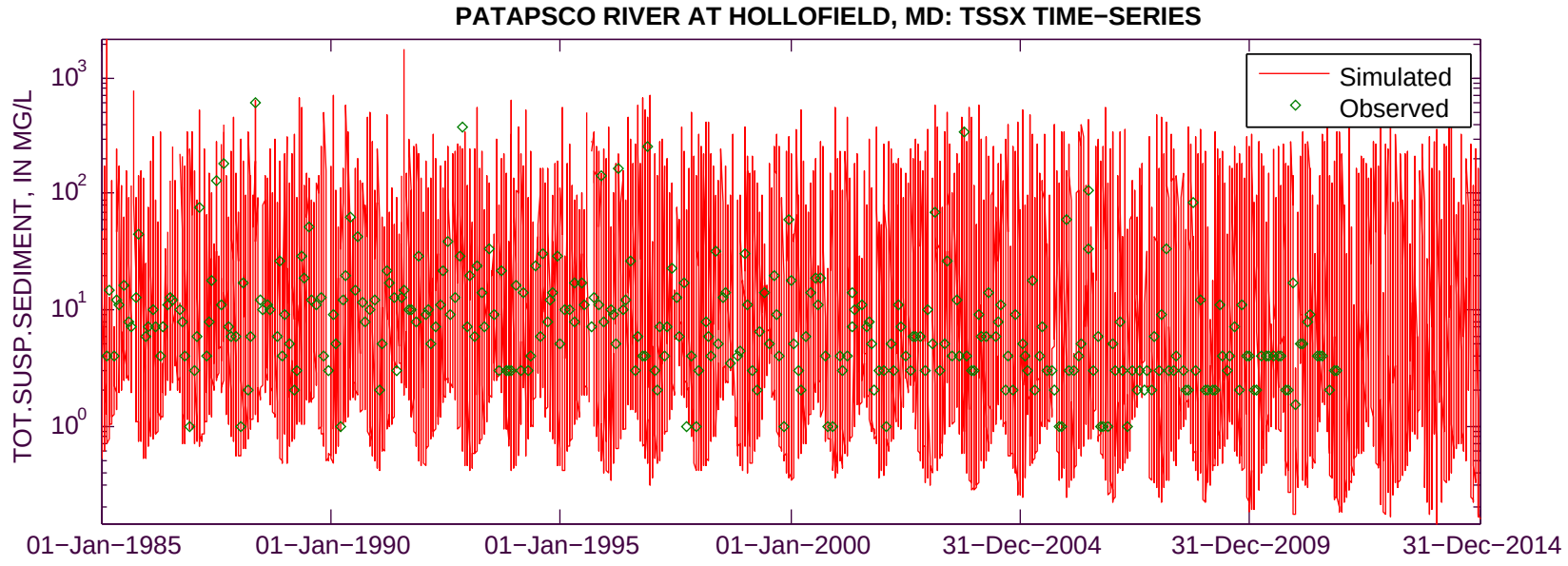
LOAD DATA
LOG10

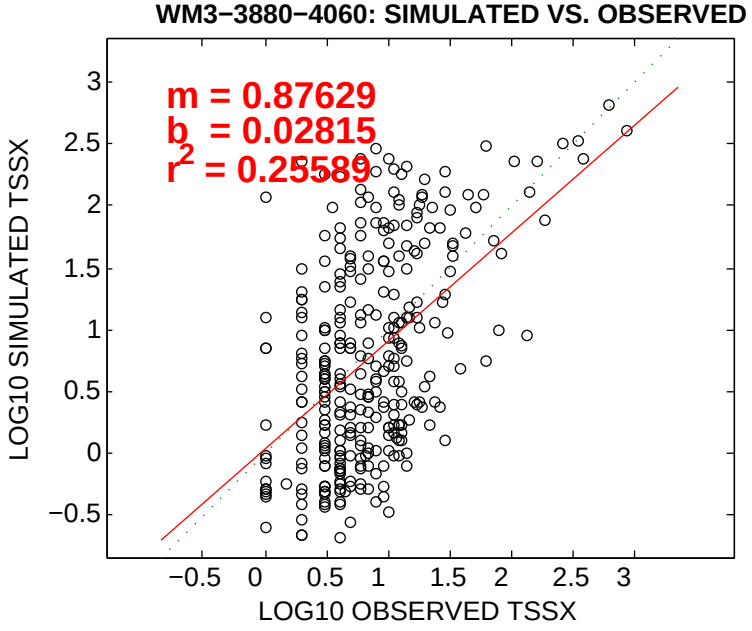


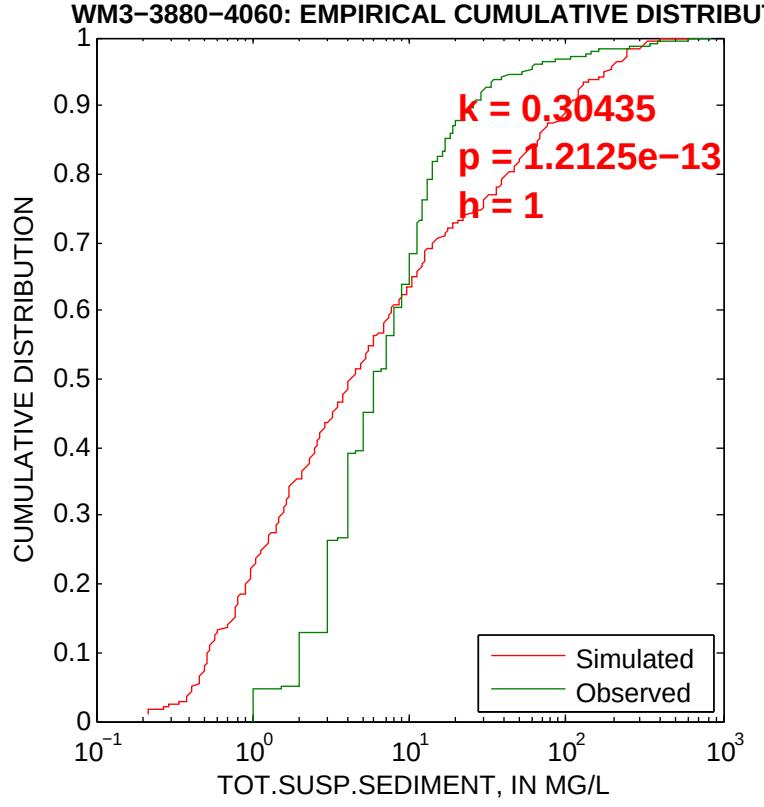












DATA SELECTION

scenario: P620171001WQ | file: TSSX.calib

plot: TSSX - total suspended ...

Dates: 1/1/1985 – 12/31/201

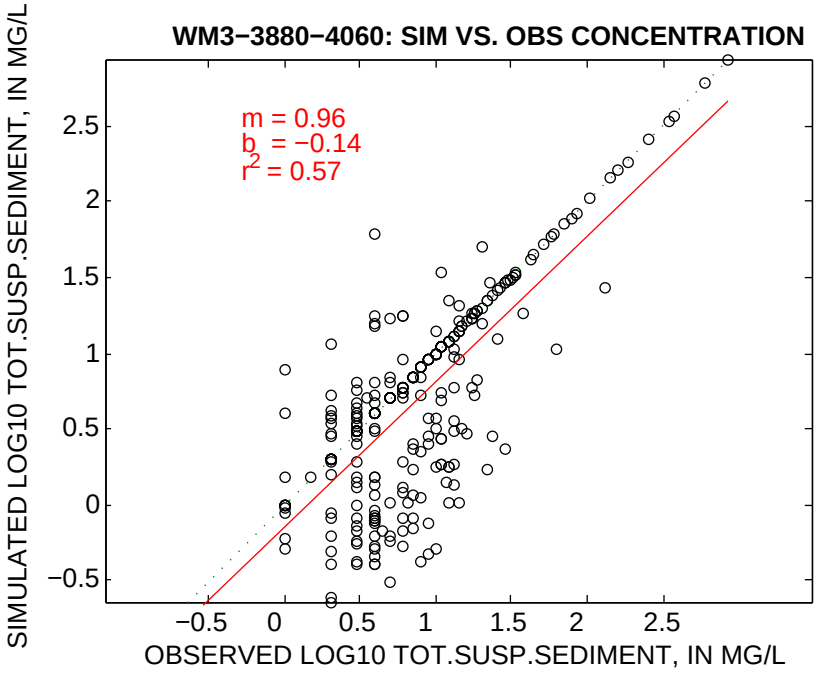
Drive: N/A | Directory: model | Observed: OBS20161101

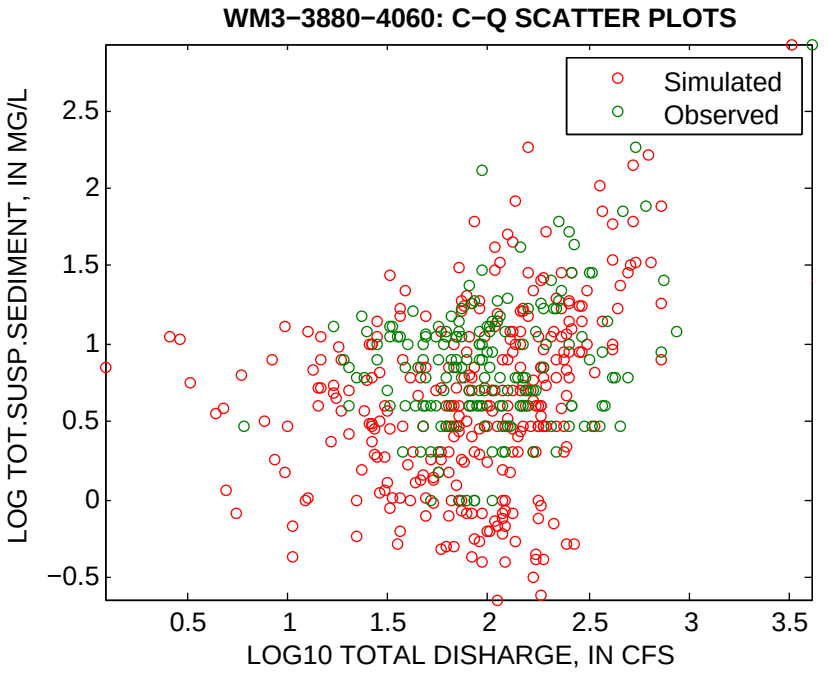
STATISTICS

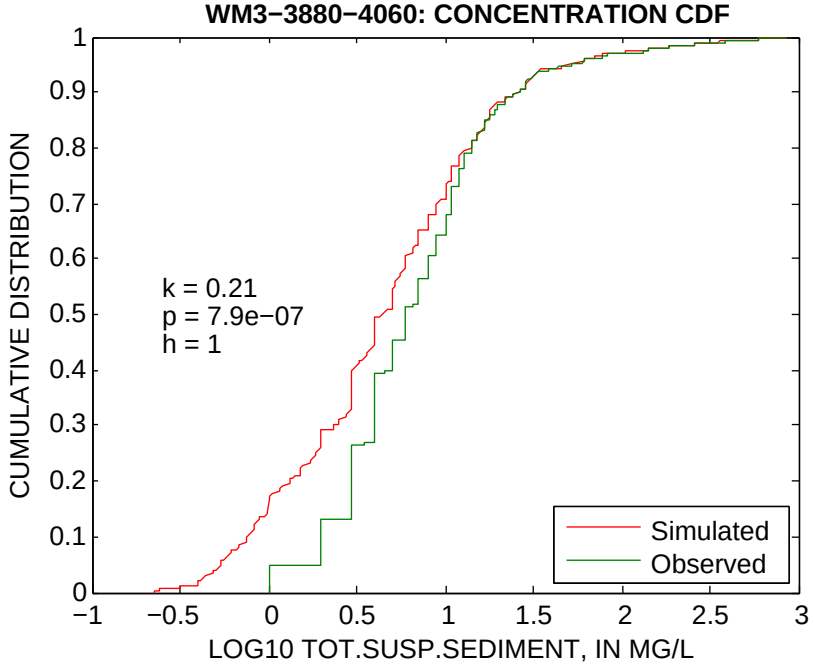
		observe	simulate
n		322	320
min		1	0
		0	-0.687611
mean		19.2283	32.9253
		0.847051	0.770408
media		6	4.2896
		0.778151	0.640715
max		852	650.6
		2.93044	2.81331
varian		4603.55	5049.51
		0.232162	0.696682
JB		0.001	0.001
		0.001	0.002362
		ra	log
%		71.2336	-9.04821
err.va		3363.34	0.527857
rel.std.err		0.730597	2.27365
mod.eff		0.269403	-1.27365

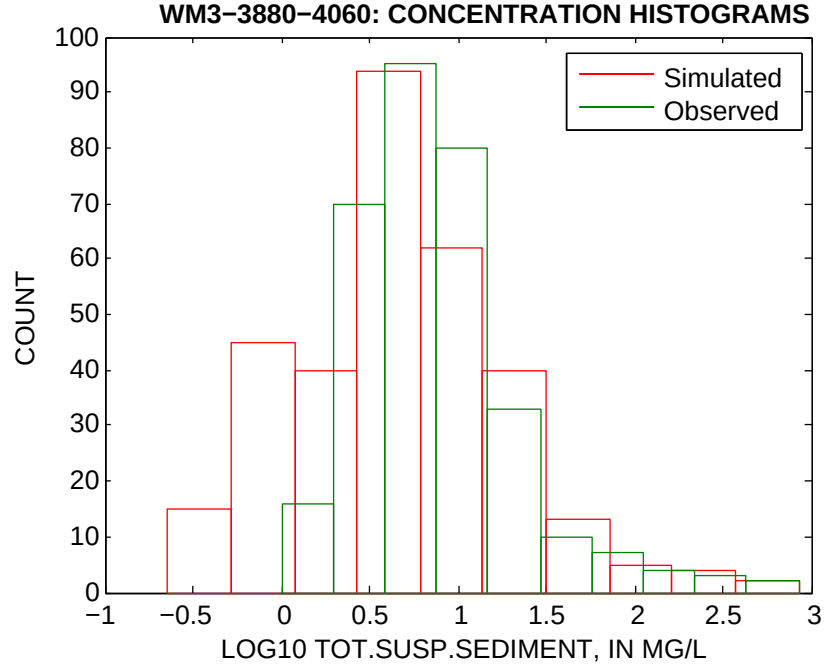
VERSION 2.1

ALL DATA
LOG10

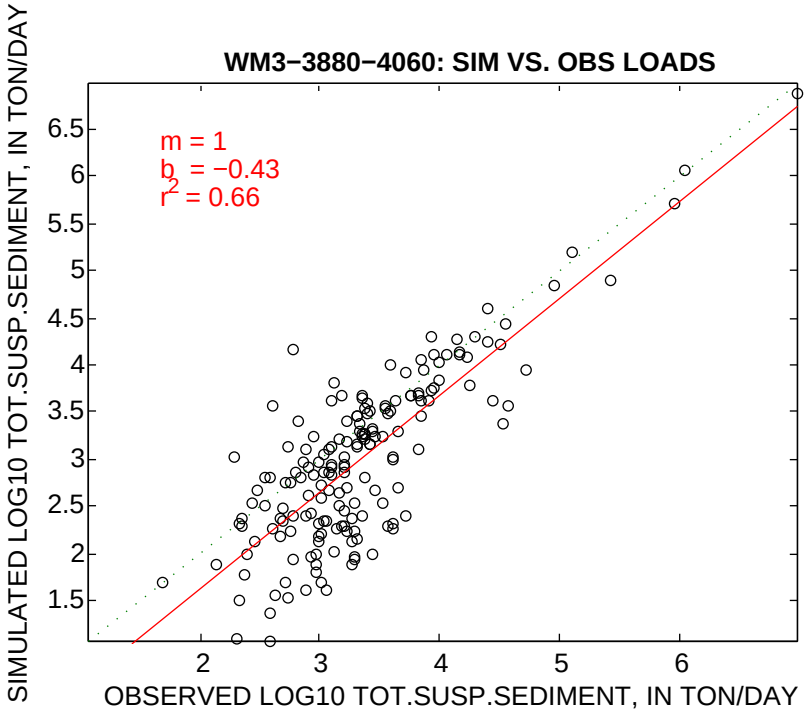


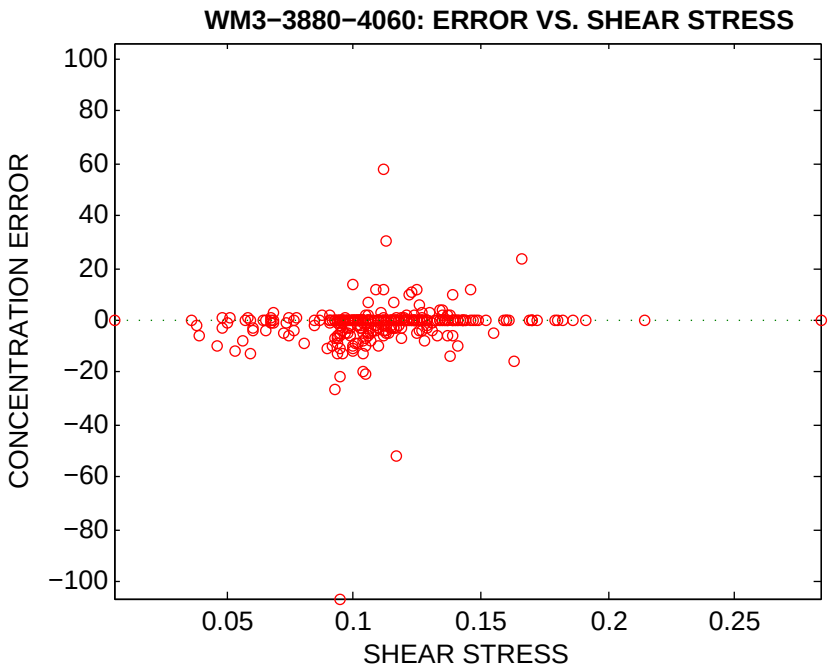


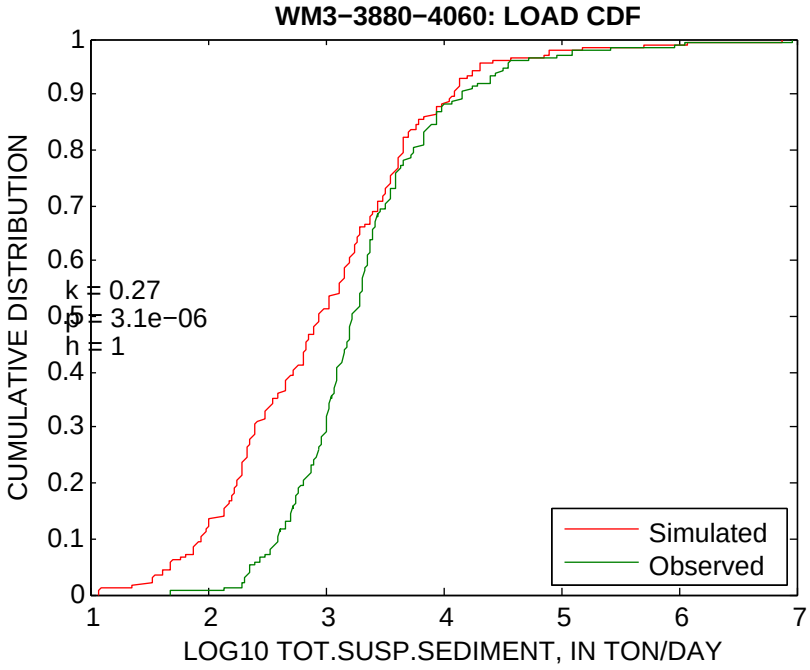


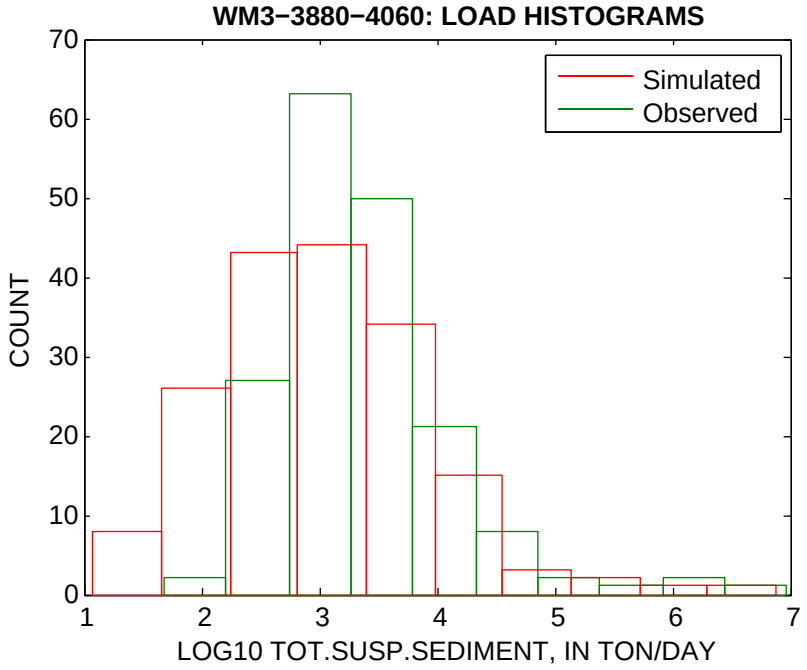


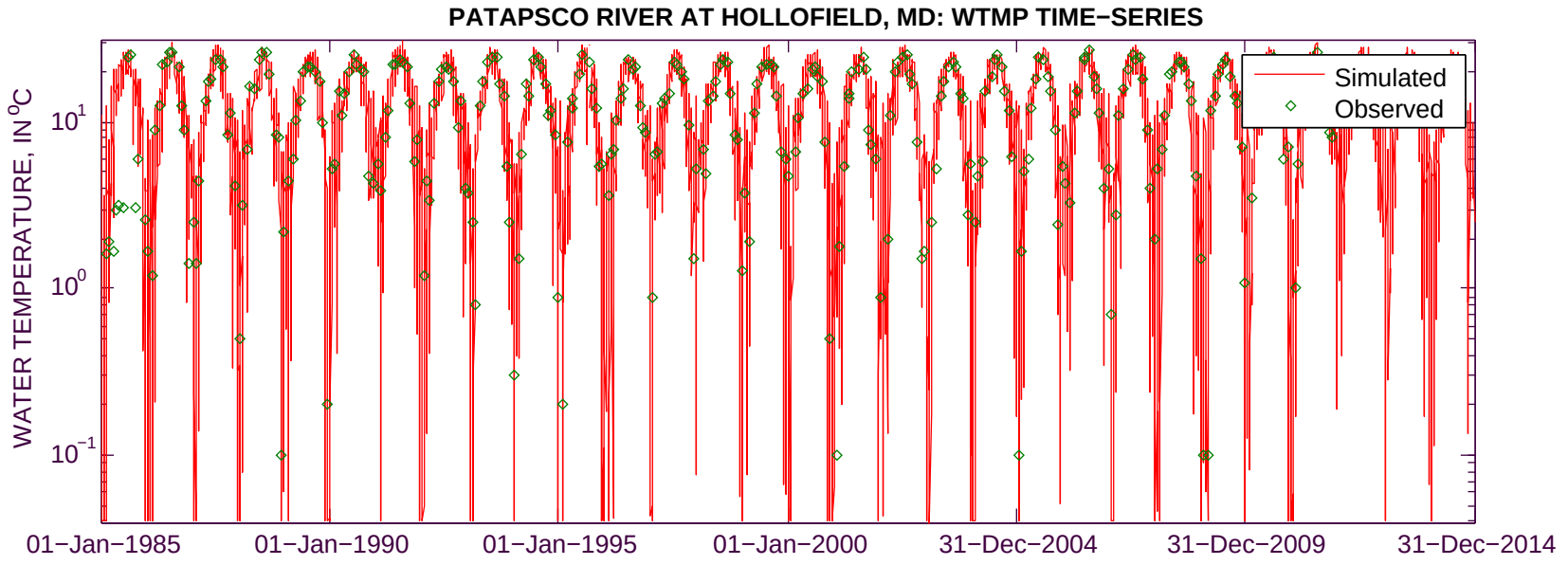
LOAD DATA
LOG10

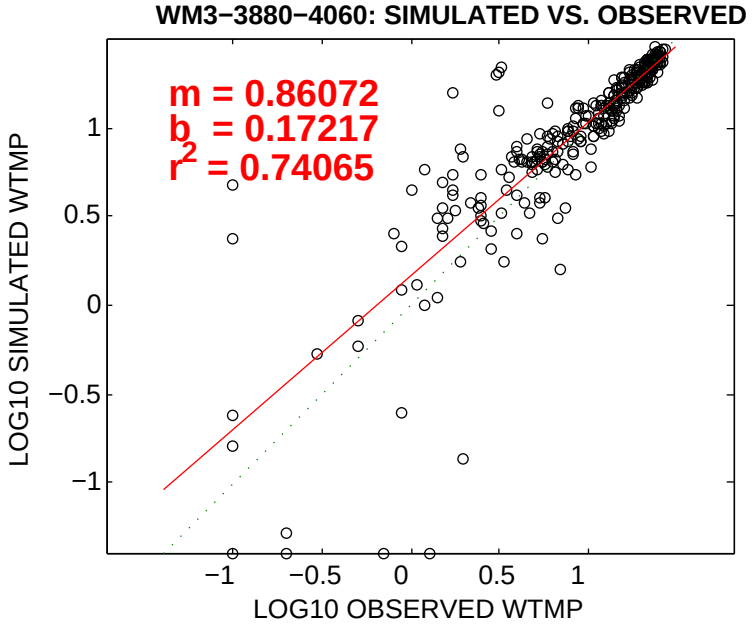


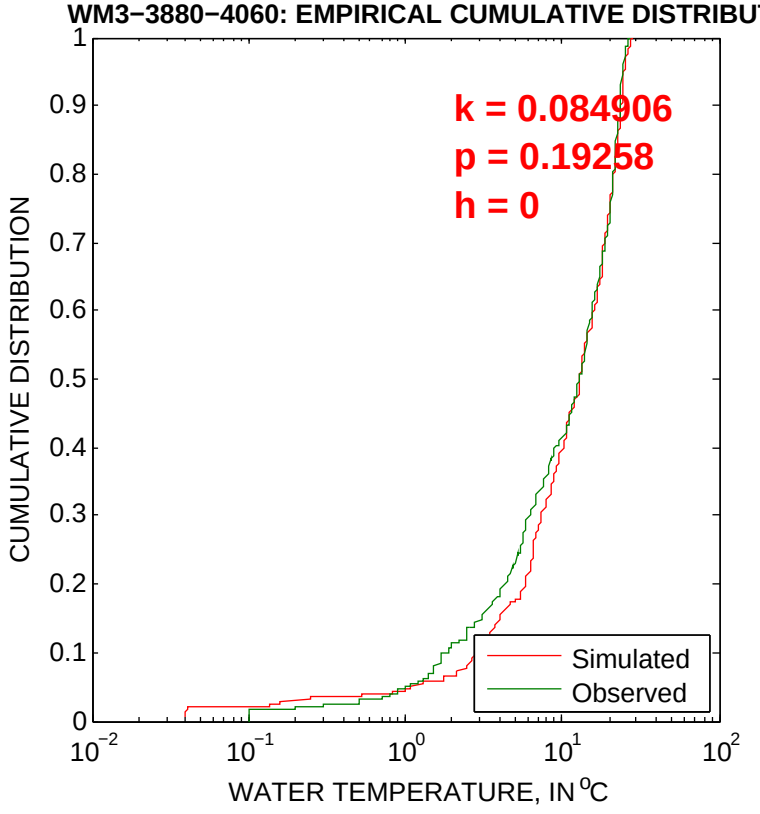












DATA SELECTION

scenario	file
P620171001WQ	WTMP.calib

plot: WTMP - water tempera...

Dates: 1/1/1985 – 12/31/201

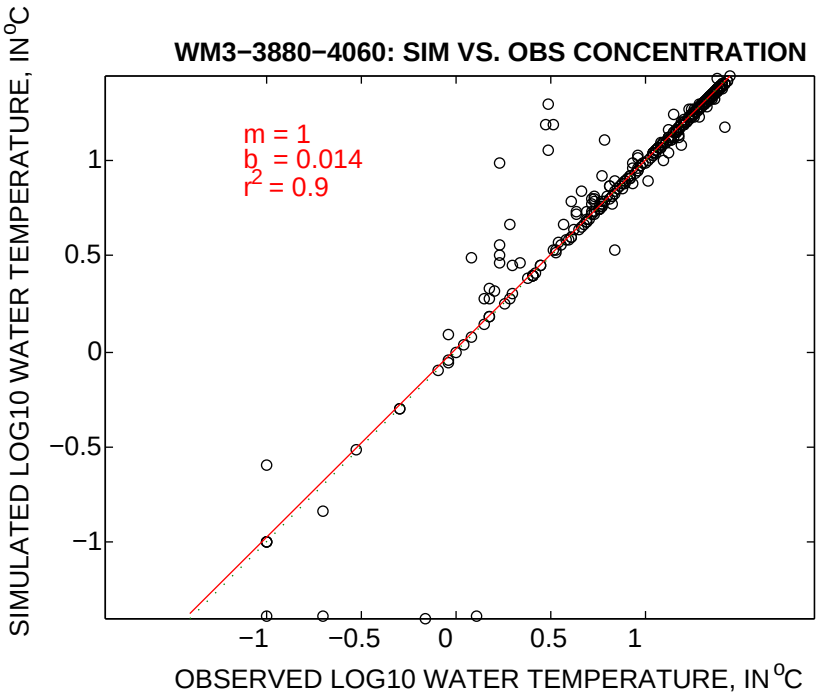
Drive	Directory	Observed
N/A	model	OBS20161101

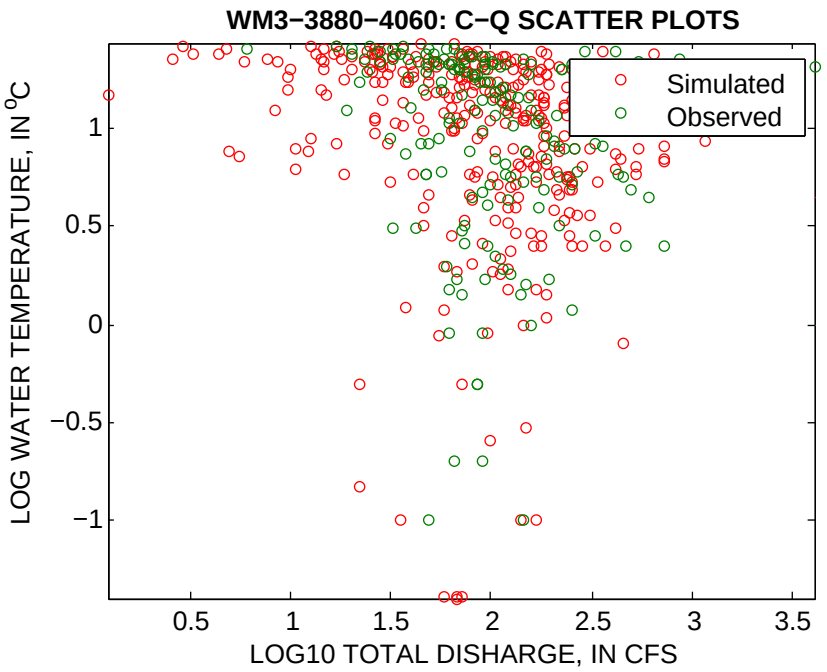
STATISTICS

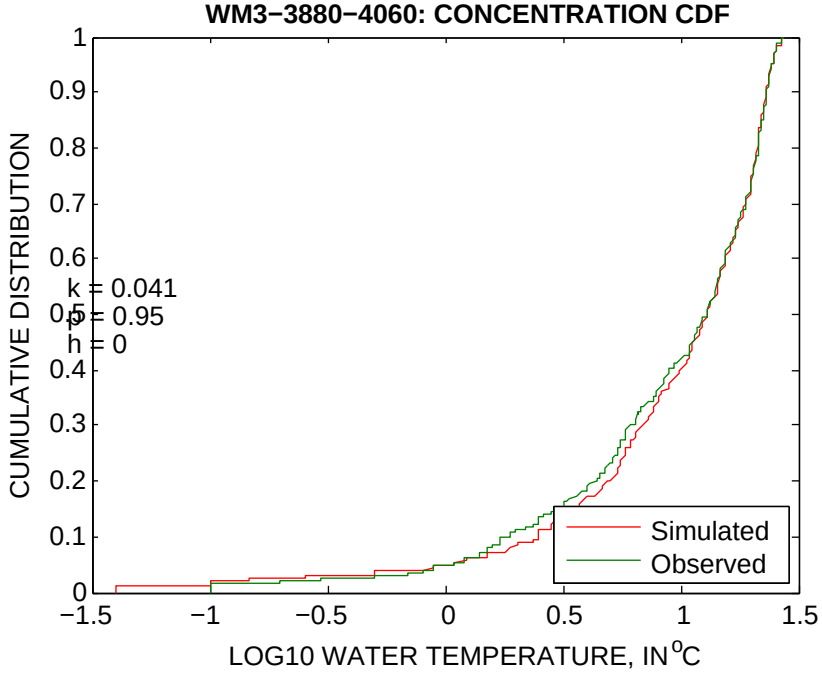
	n	observe	simulate
		318	316
min		0.1	0
		-1	-1.39767
mean		12.7386	13.2297
		0.938032	0.979553
media		13	13.0855
		1.11227	1.11749
max		27.5	28.288
		1.43933	1.4516
varian		64.2823	60.3611
		0.236942	0.237006
JB		0.001007	0.001993
		0.001	0.001
		ra	log
%		3.85578	4.42635
err.va		11.2799	0.067794
rel.std.err		0.175474	0.286121
mod.eff		0.824526	0.713879

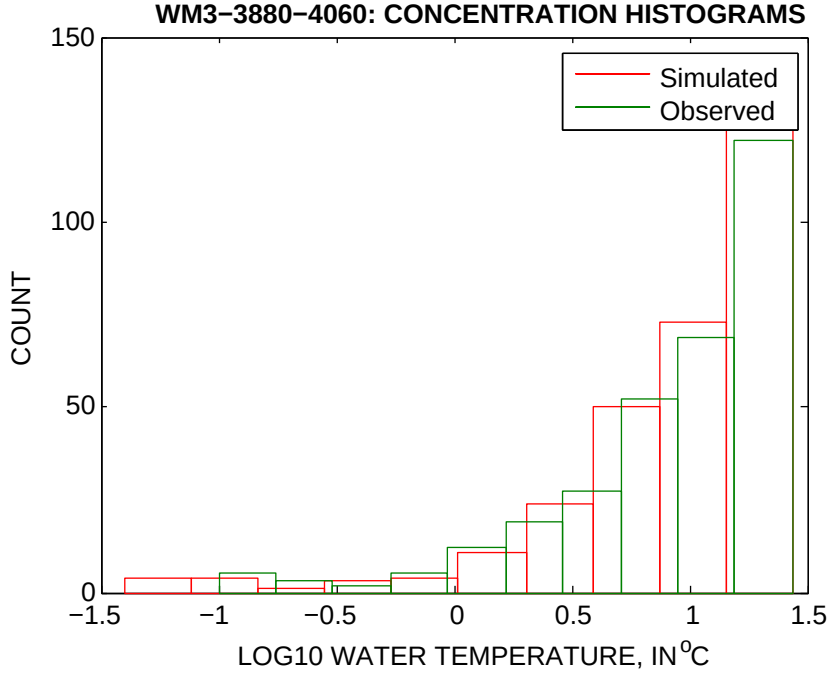
VERSION 2.1

ALL DATA
LOG10

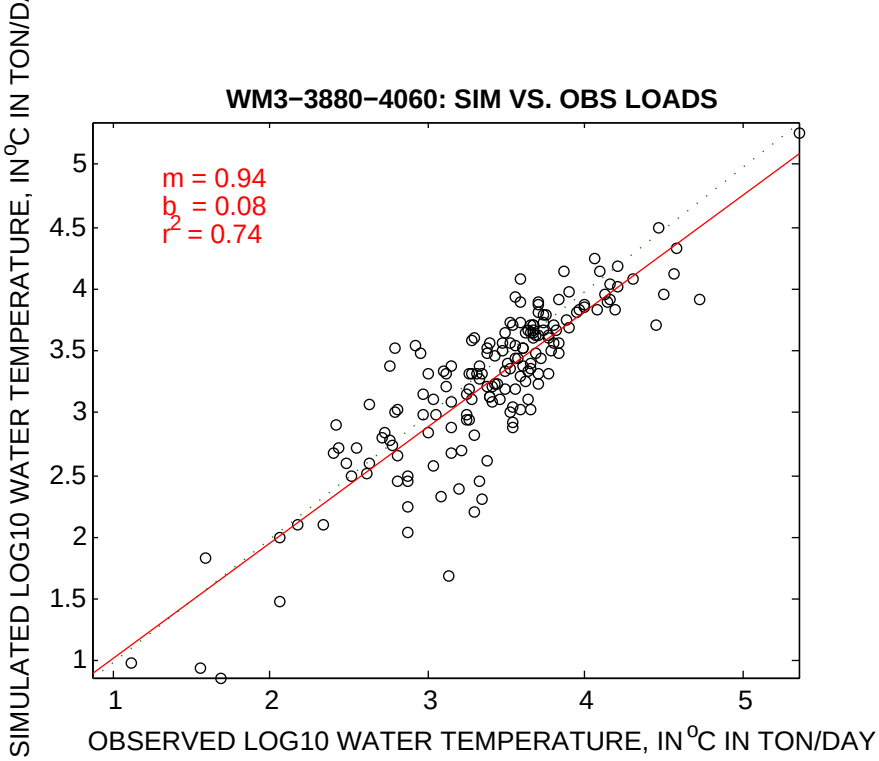


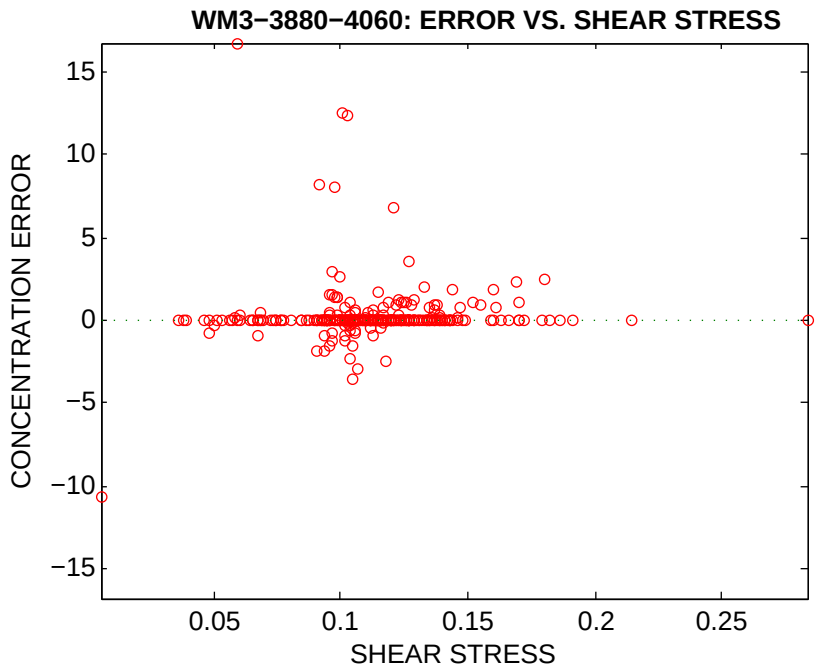


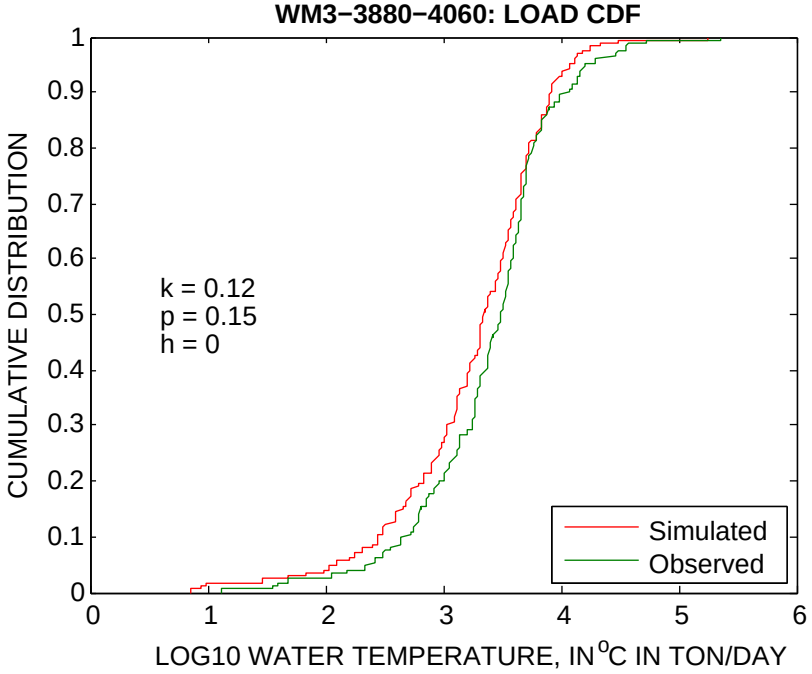


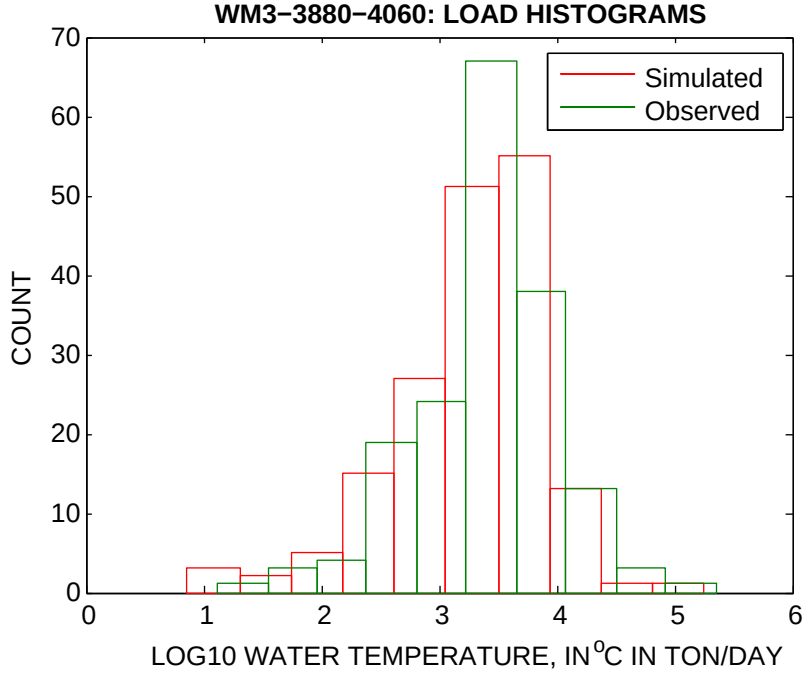


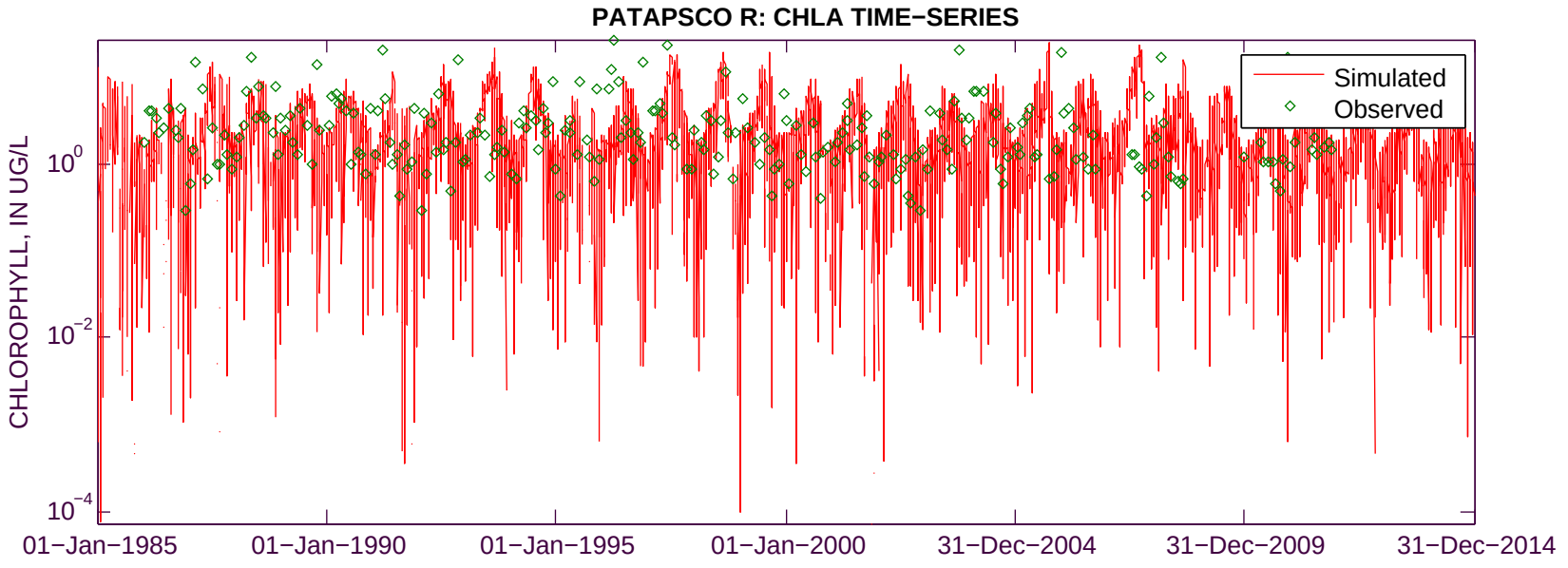
LOAD DATA
LOG10

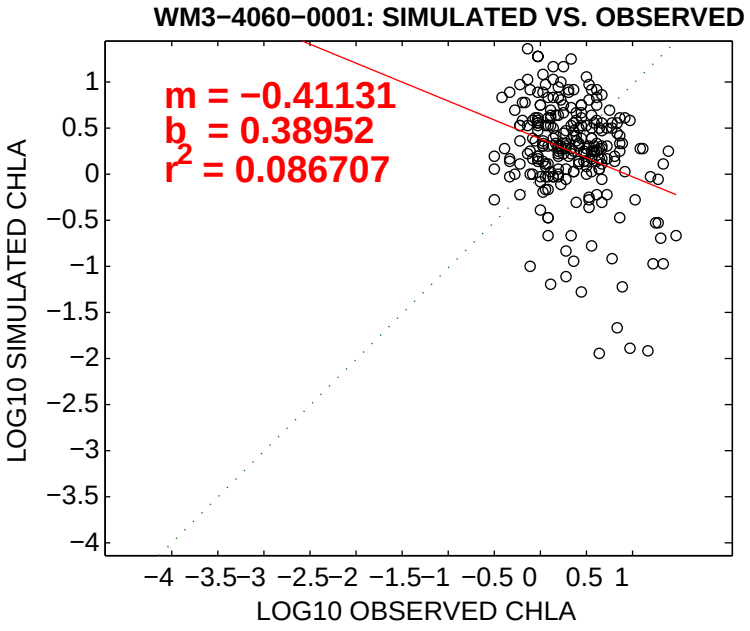


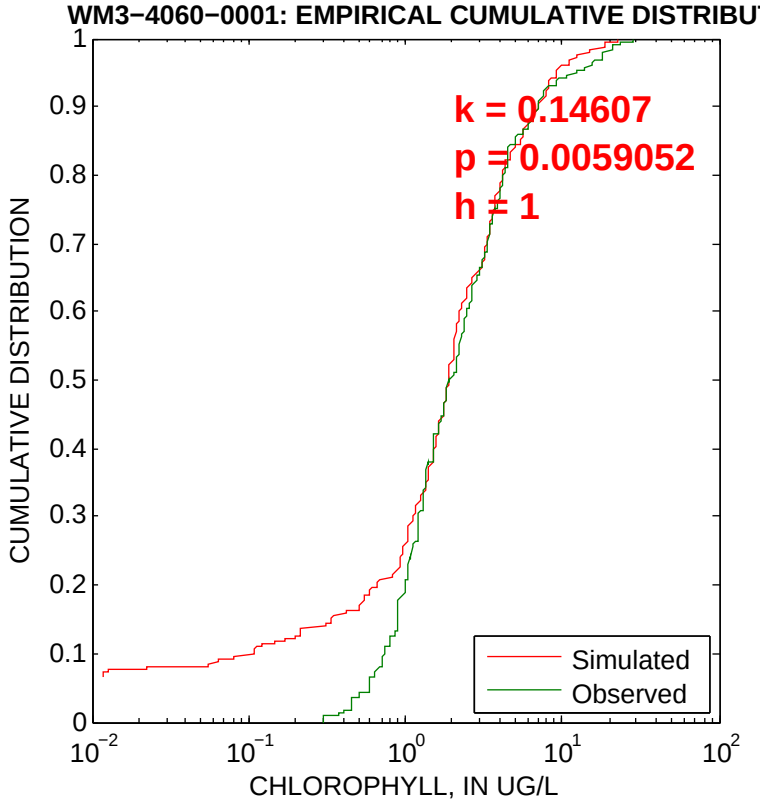












DATA SELECTION

scenario	file
P620171001WQ	CHLA.calib

plot: CHLA - chlorophyll A

Dates: 1/1/1985 – 12/31/201

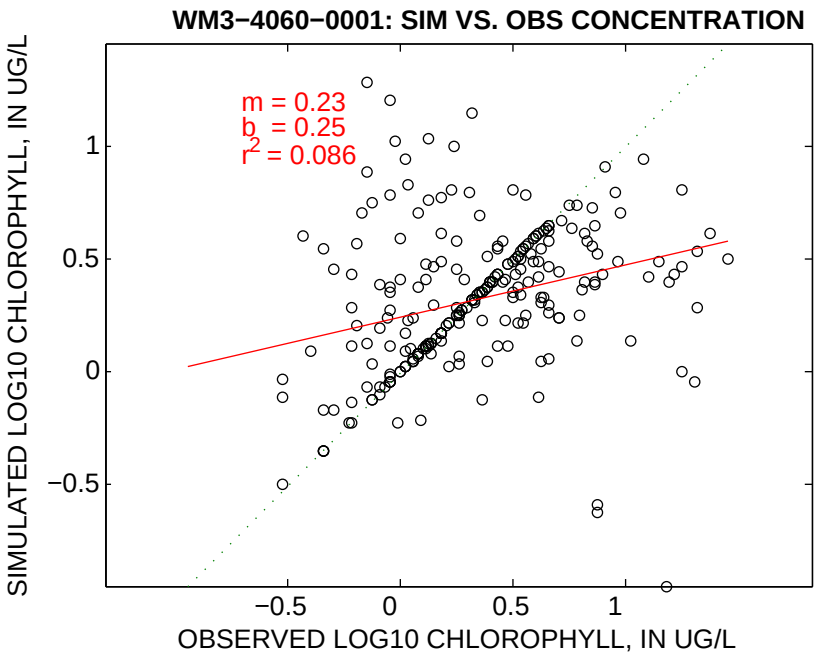
Drive	Directory	Observed
N/A	model	OBS20161101

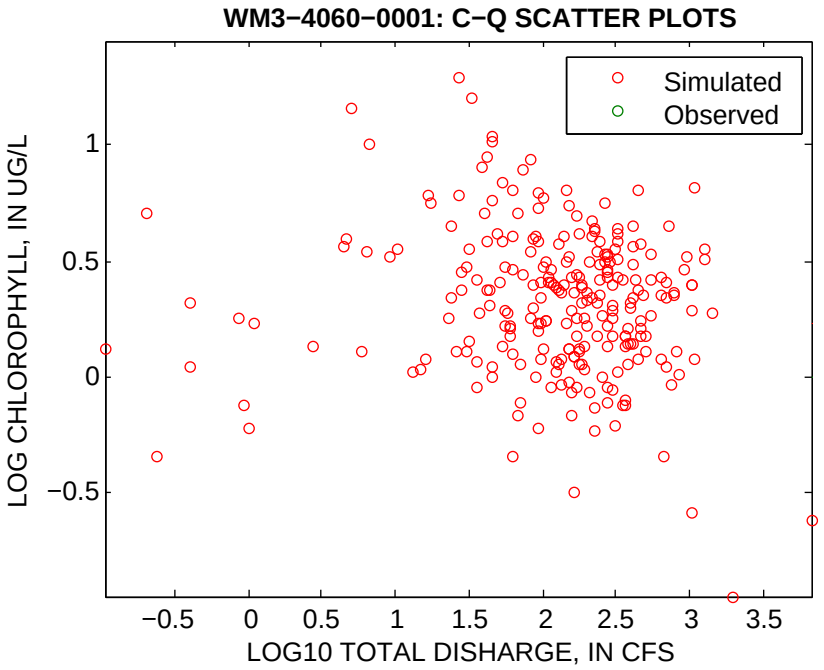
STATISTICS

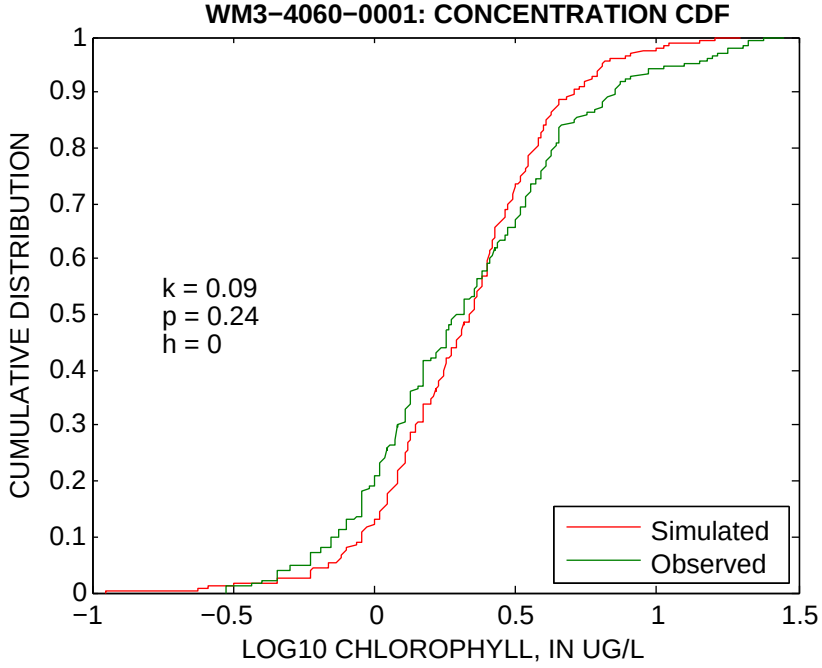
	observe	simulate
n	267	249
min	0.3 -0.522879	0 -1.93379
mean	3.31319 0.32699	2.91847 0.255027
media	1.92 0.287802	1.8721 0.303304
max	28.409 1.45346	22.997 1.36167
varian	16.8638 0.151706	11.4088 0.296003
JB	0.001 0.024137	0.001 0.001
	ra	log
%	-11.9135	-22.0077
err.va	34.114	0.577706
rel.std.err	2.02291	3.80806
mod.eff	-1.02291	-2.80806

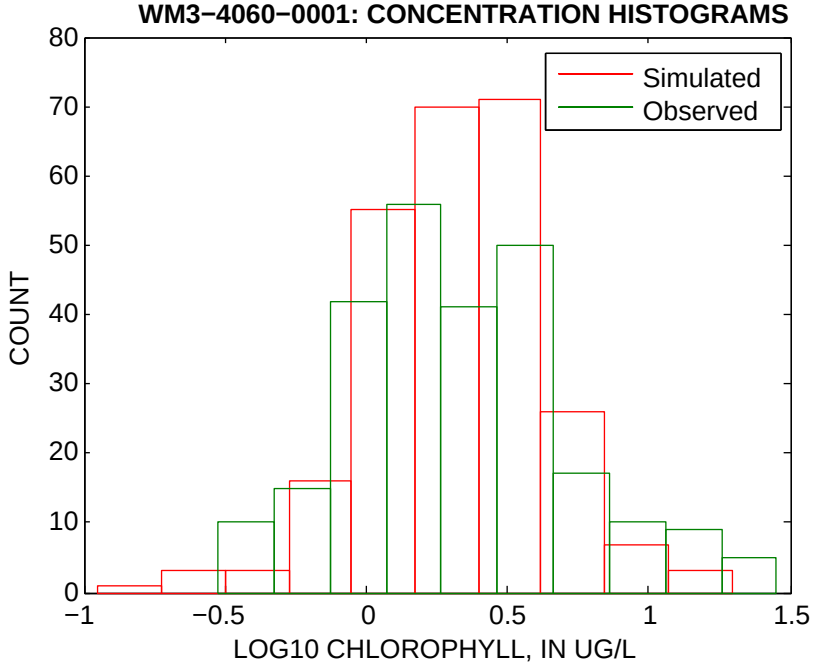
VERSION 3.1

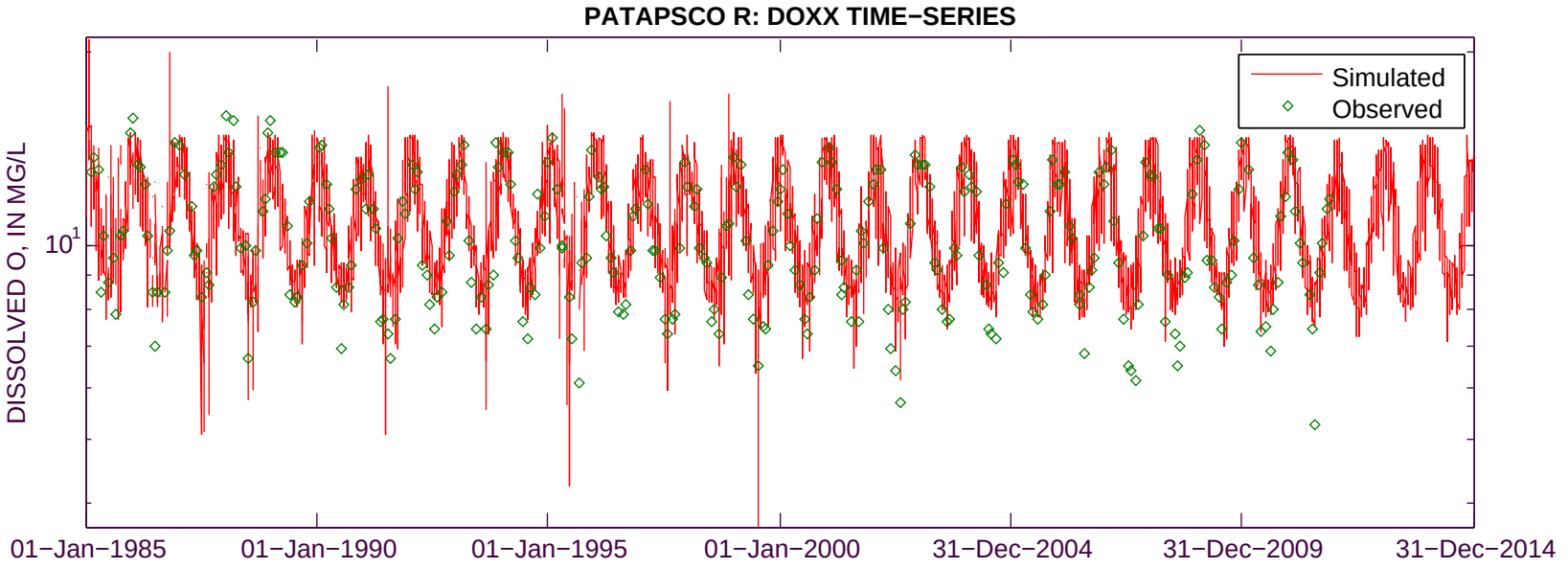
ALL DATA
LOG10

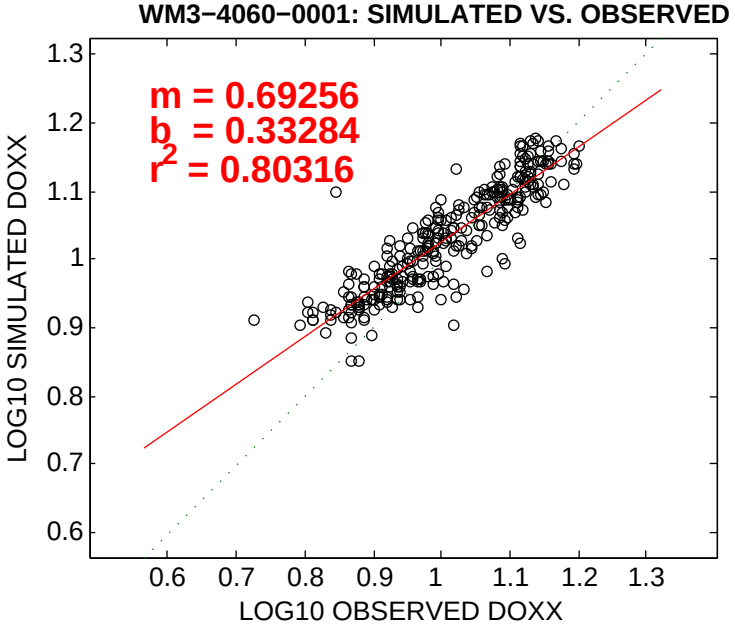


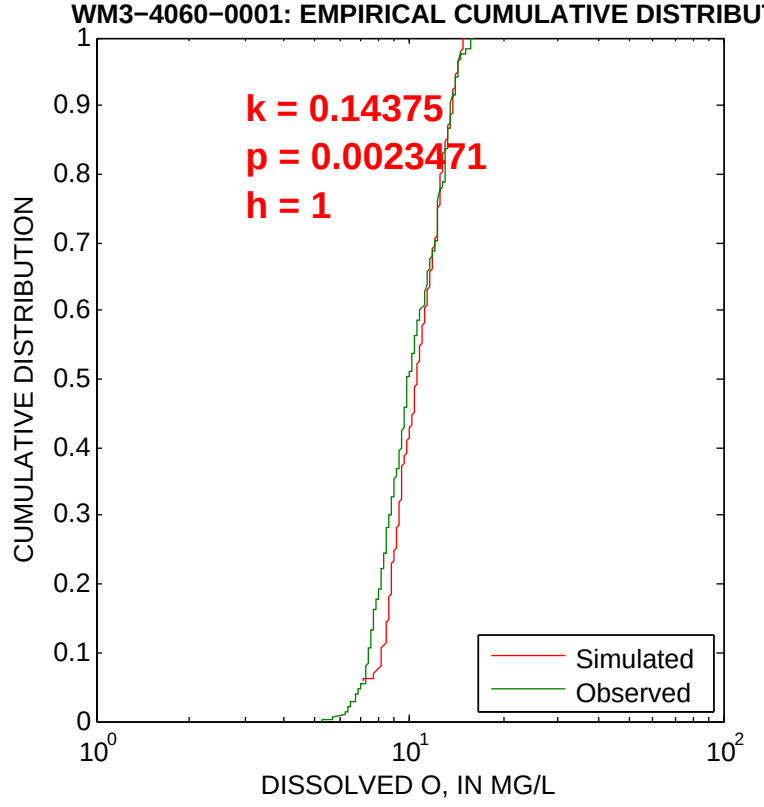












DATA SELECTION

scenario: P620171001WQ | file: DOXX.calib

plot: DOXX - dissolved oxygen

Dates: 1/1/1985 – 12/31/201

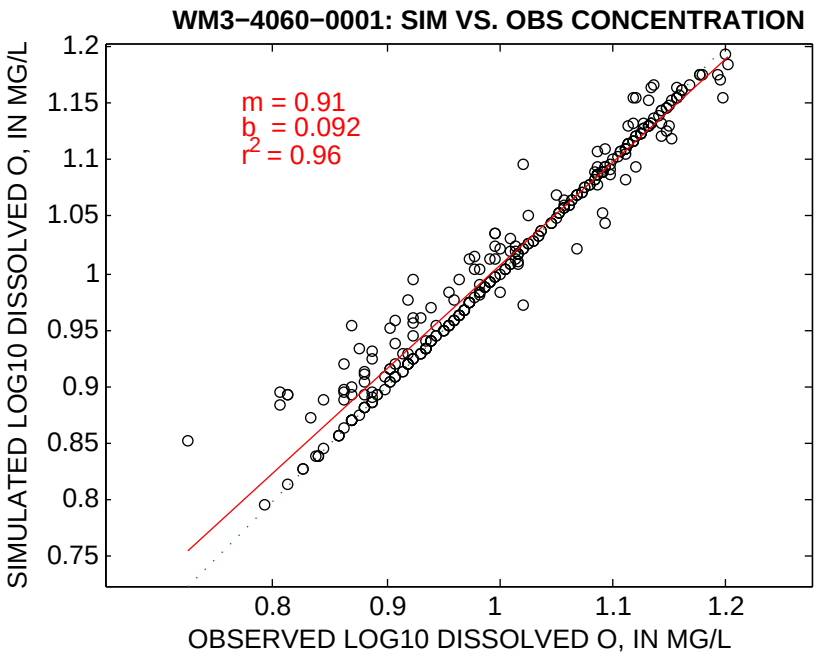
Drive | Directory: N/A | model | Observed: OBS20161101

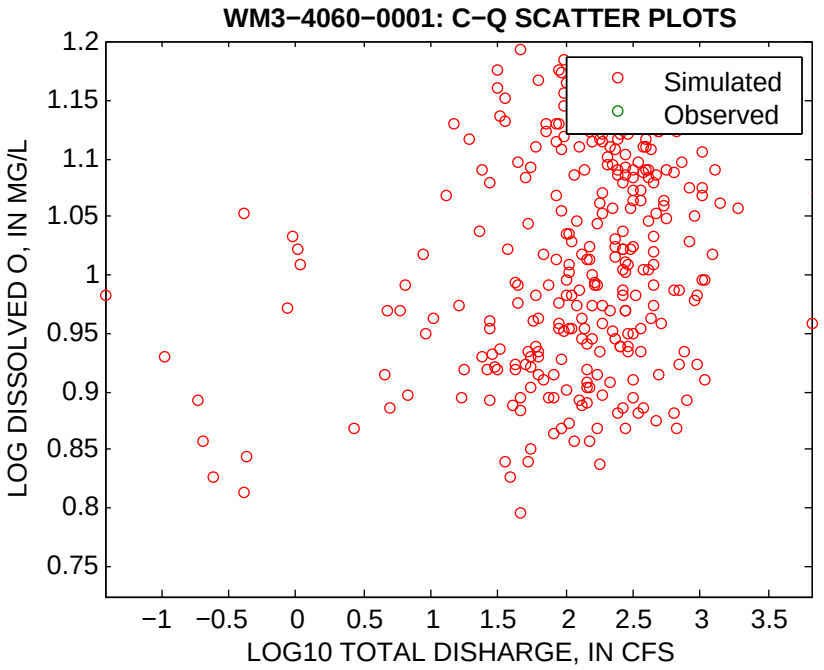
STATISTICS

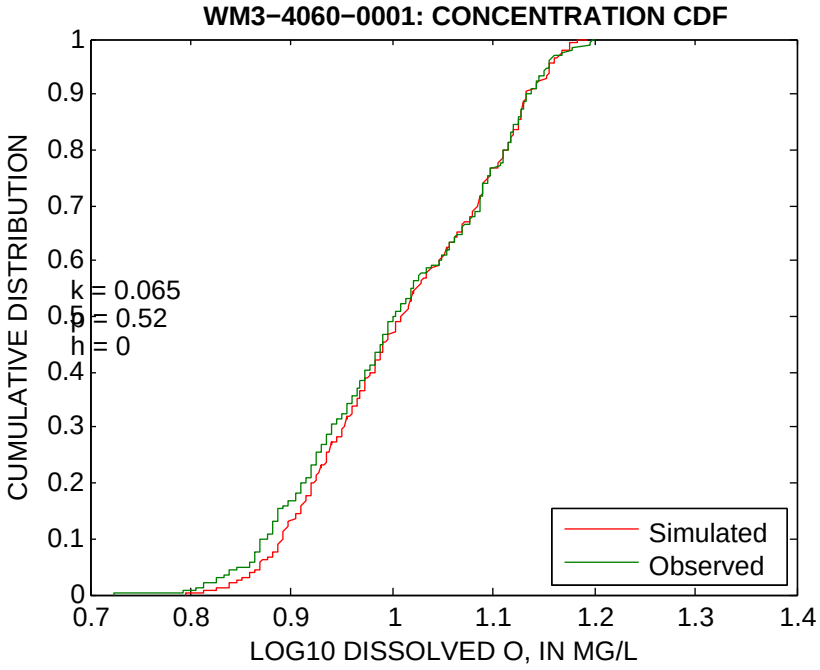
		observe	simulate
n		320	302
min		5.3	0
		0.724276	0.852419
mean		10.366	10.3113
		1.00893	1.03159
media		9.9	10.573
		1.00428	1.03026
max		15.9	14.999
		1.2014	1.17606
varian		5.6992	9.93163
		0.0100354	0.00599315
JB		0.003953	0.001
		0.008619	0.005121
		ra	log
%		-0.528044	2.24647
err.va		5.45189	0.00264364
rel.std.err		0.956605	0.263431
mod.eff		0.0433949	0.736569

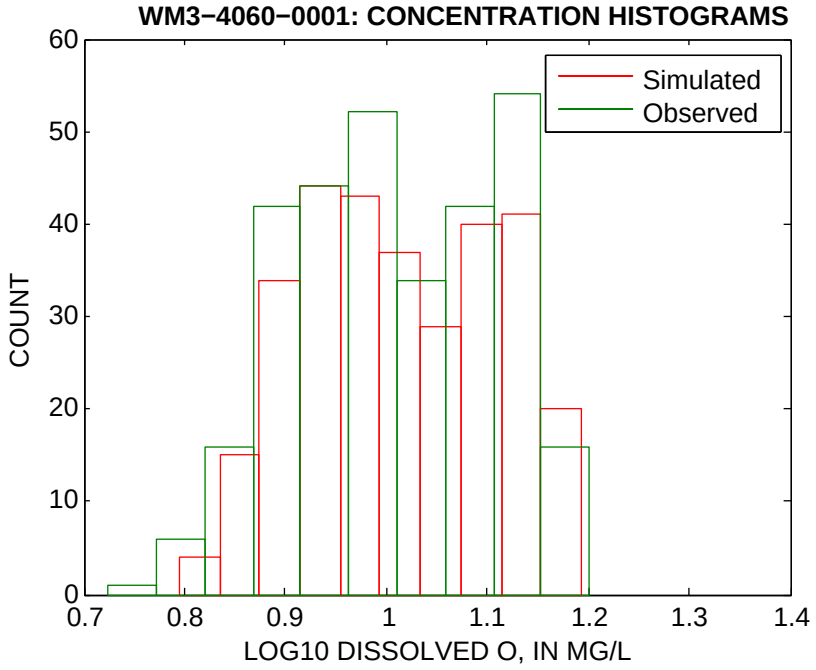
VERSION 2.1

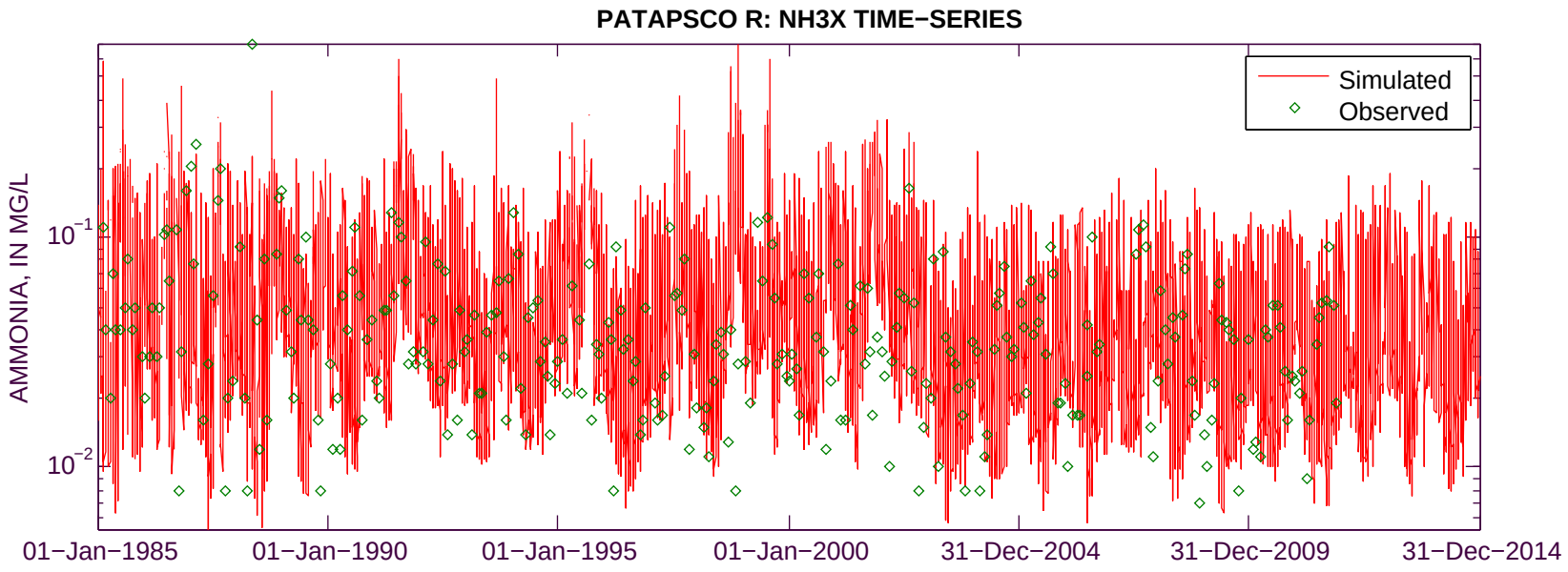
ALL DATA
LOG10

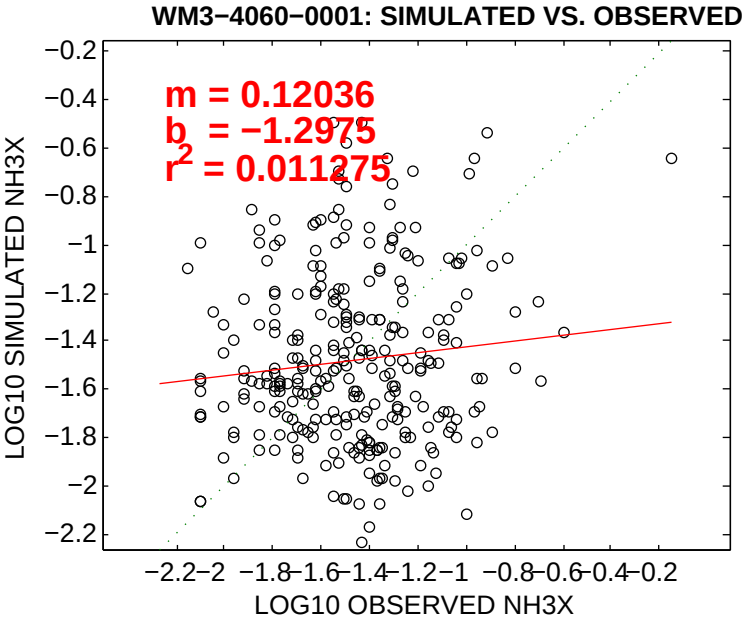


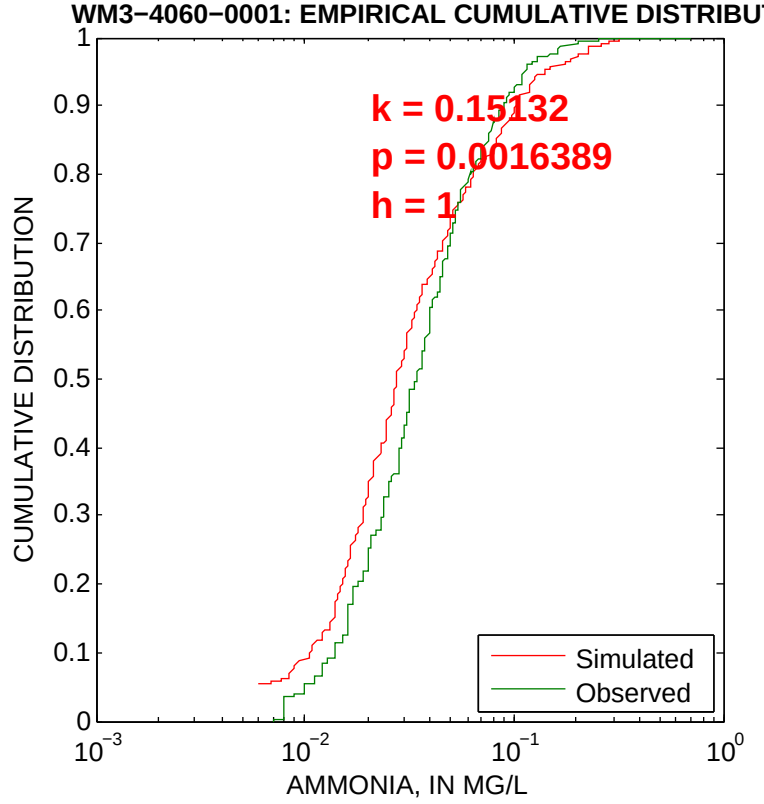












DATA SELECTION

scenario: P620171001WQ | file: NH3X.calib

plot: NH3X - ammonia

Dates: 1/1/1985 – 12/31/201

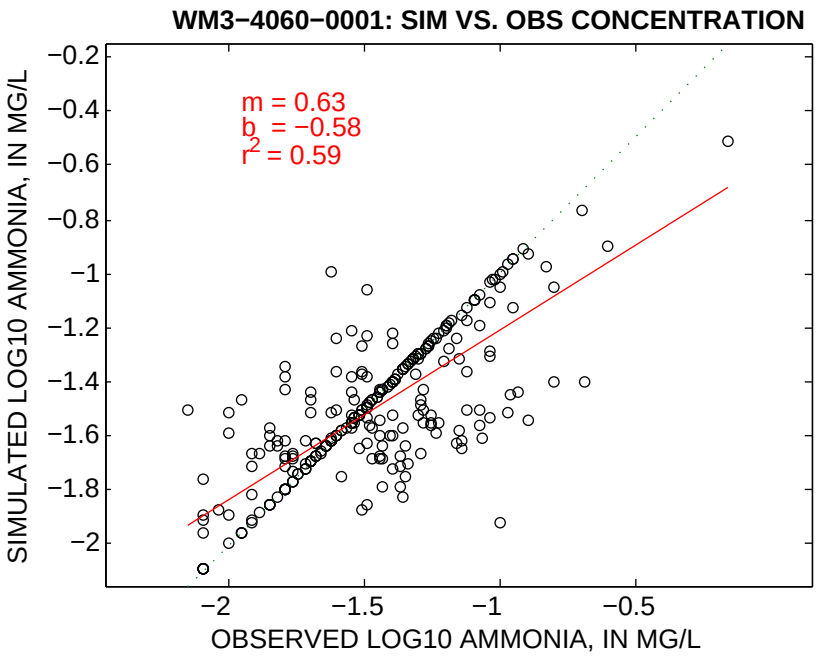
Drive: N/A | Directory: model | Observed: OBS20161101

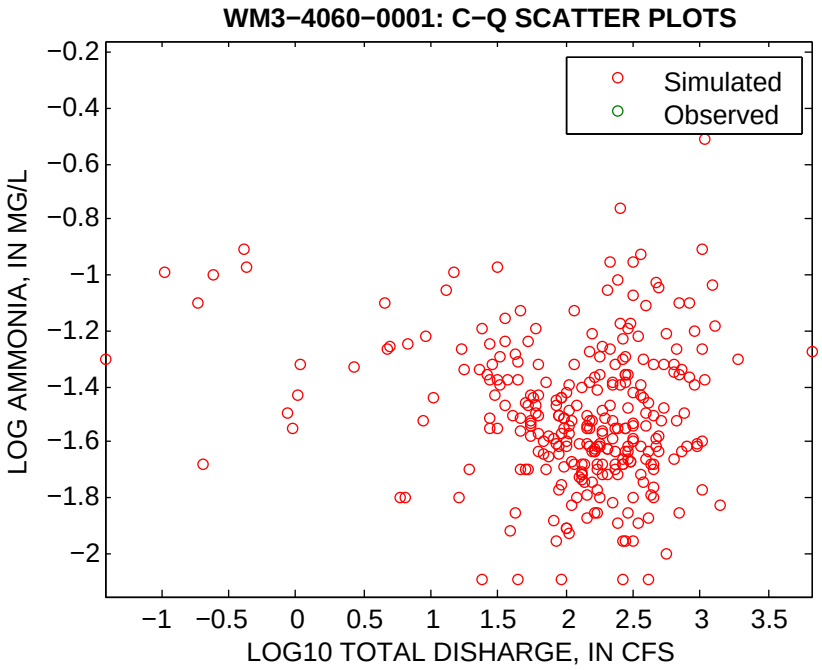
STATISTICS

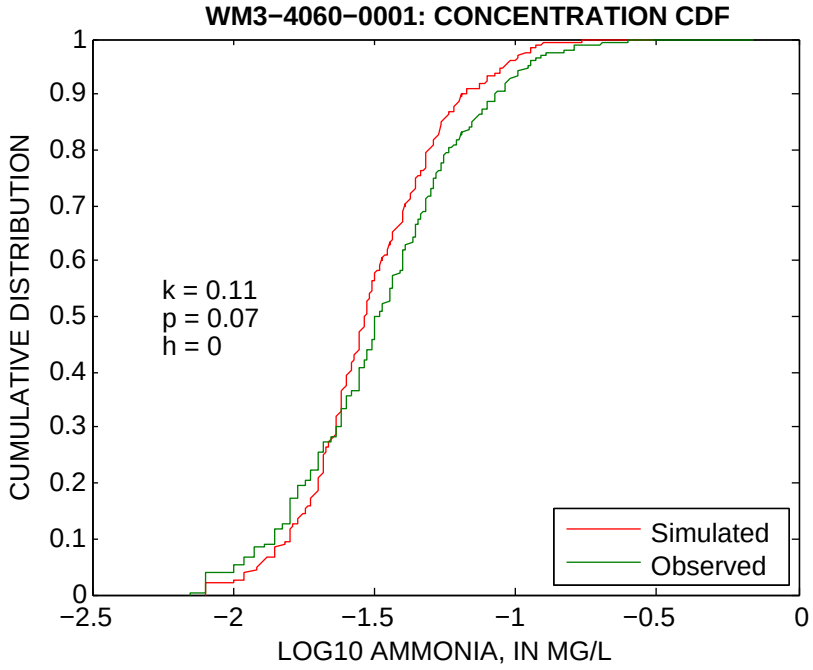
	n	observe	simulate
		304	288
min		0.007	0
		-2.1549	-2.22664
mean		0.046125	0.0457655
		-1.47175	-1.47466
media		0.034	0.027679
		-1.48149	-1.53348
max		0.7	0.32296
		-0.154902	-0.490851
varian		0.00263586	0.00259133
		0.0962499	0.123659
JB		0.001	0.001
		0.017420	0.005197
		ra	log
%		-0.779313	0.198032
err.va		0.00431409	0.196749
rel.std.err		1.63669	2.04415
mod.eff		-0.636693	-1.04415

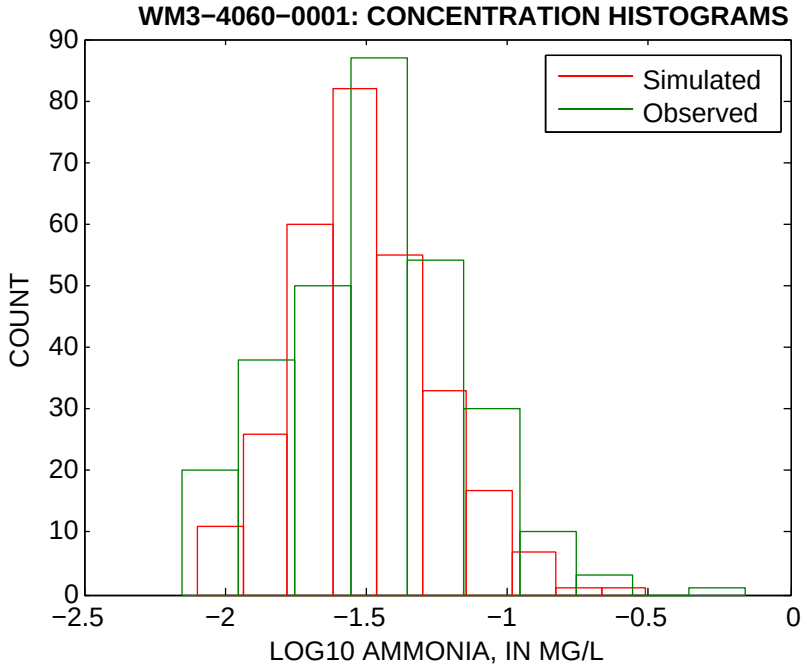
VERSION 2.1

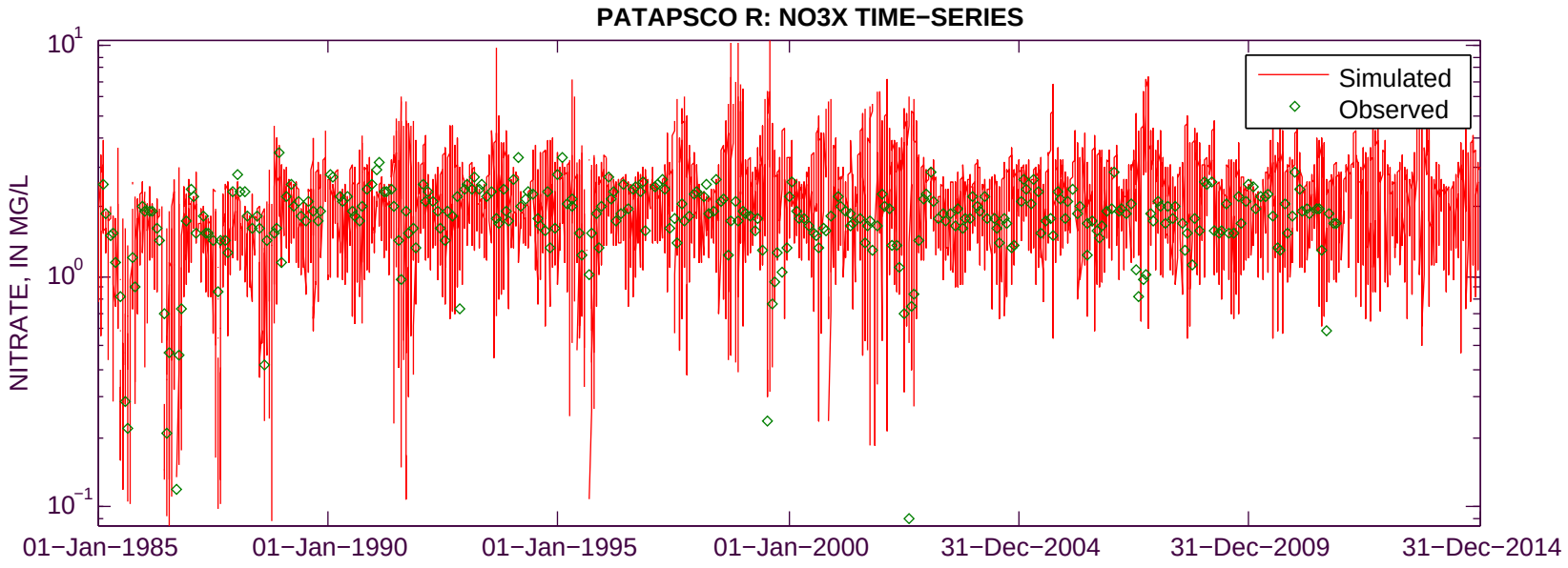
ALL DATA
LOG10

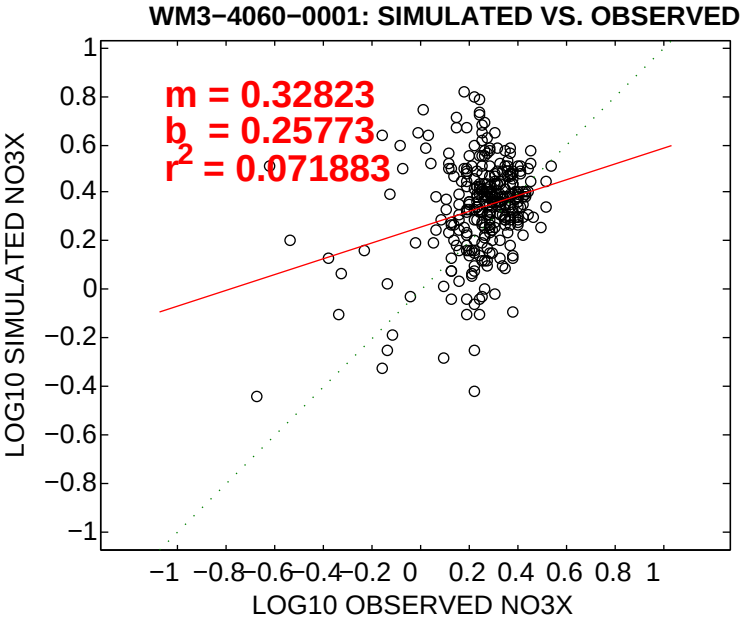


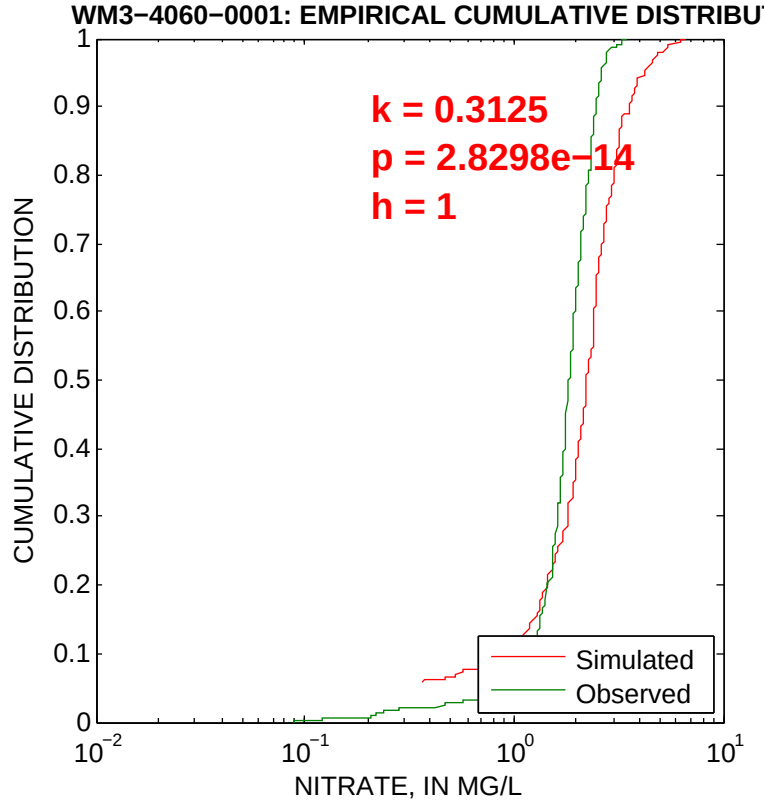












DATA SELECTION

scenario	file
P620171001WQ	NO3X.calib

plot: NO3X - nitrate

Dates: 1/1/1985 – 12/31/201

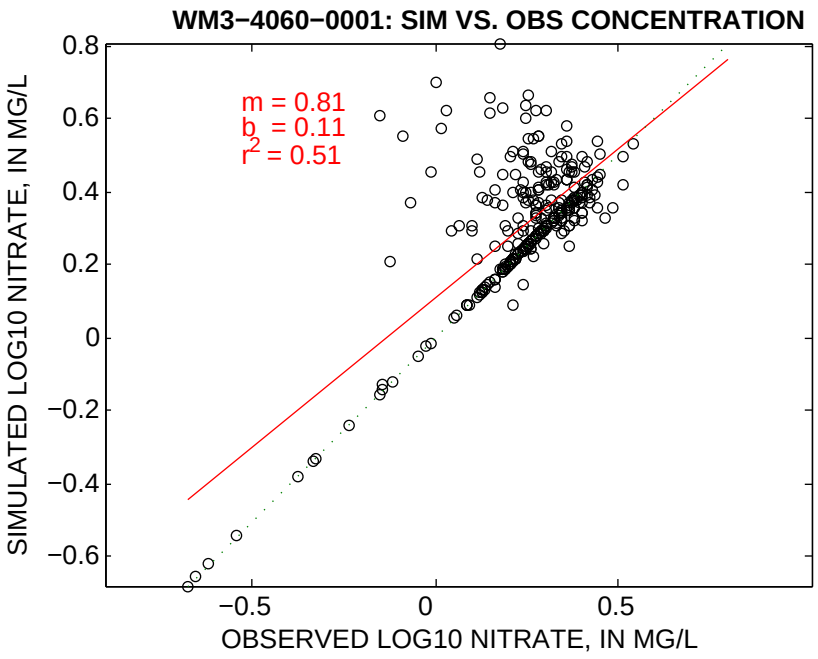
Drive	Directory	Observed
N/A	model	OBS20161101

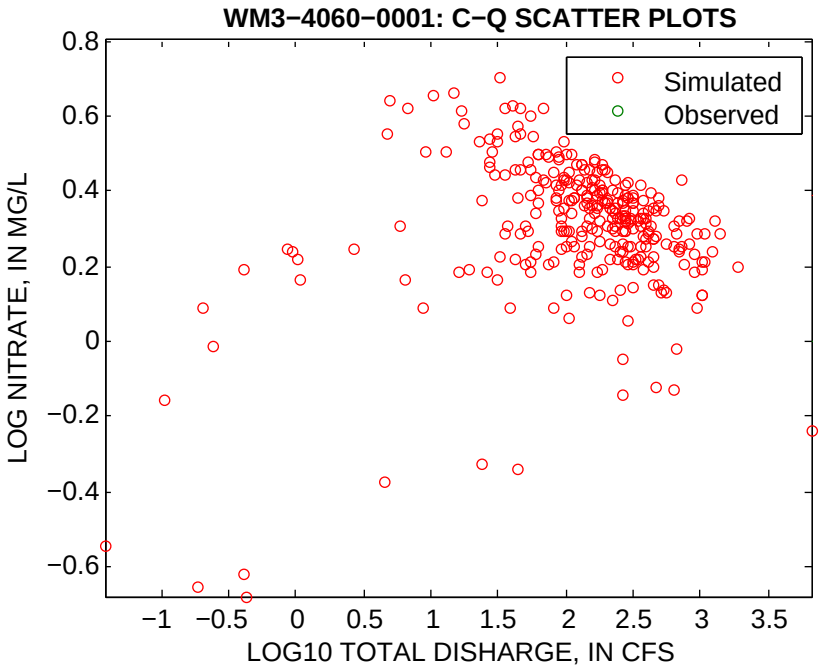
STATISTICS

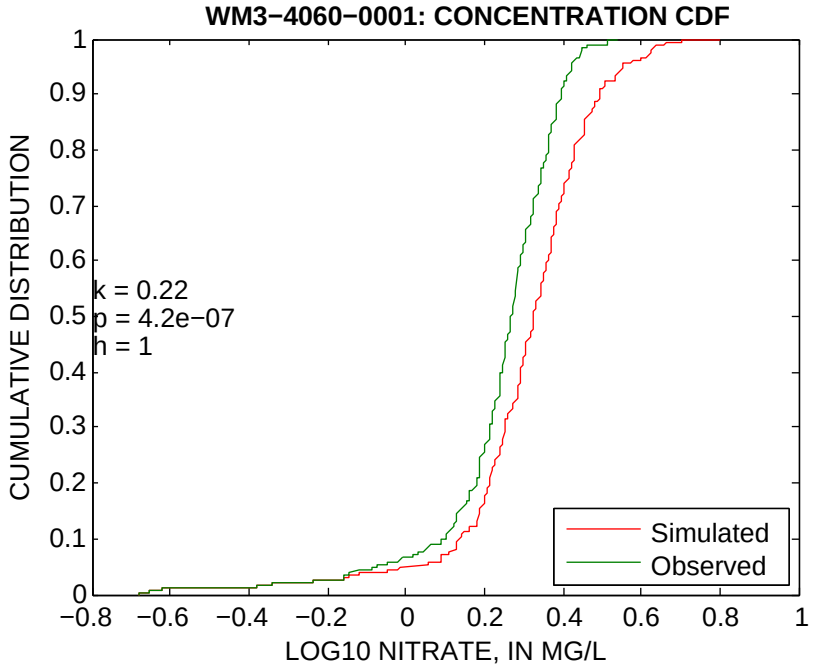
	n	observe	simulate
		320	302
min		0.09	0
		-0.677781	-0.441112
mean		1.83553	2.25968
		0.248028	0.339137
media		1.8475	2.2391
		0.272654	0.36379
max		3.48	6.5798
		0.541579	0.818213
varian		0.299517	1.25004
		0.0258766	0.0387836
JB		0.001	0.001
		0.001	0.001
		ra	log
%		23.1079	36.733
err.va		1.47967	0.0560013
rel.std.err		4.94017	2.16417
mod.eff		-3.94017	-1.16417

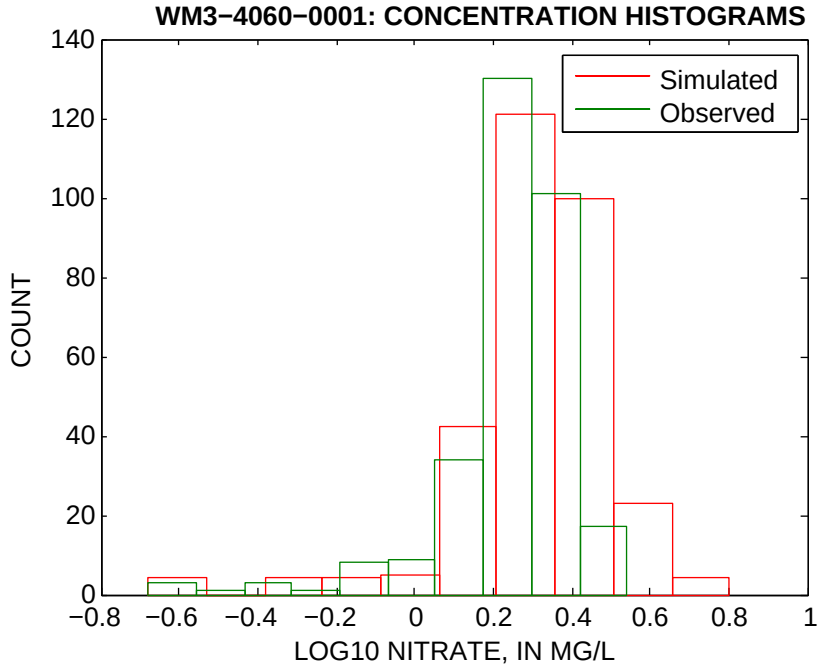
VERSION 2.1

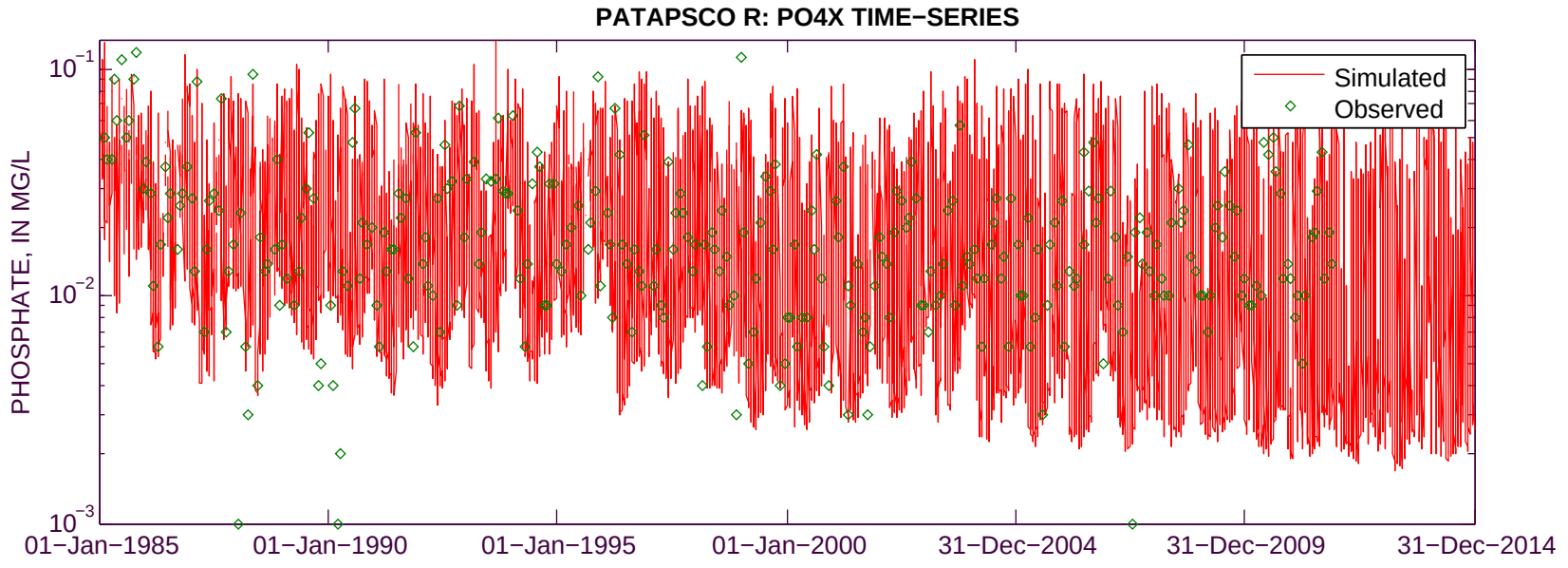
ALL DATA
LOG10

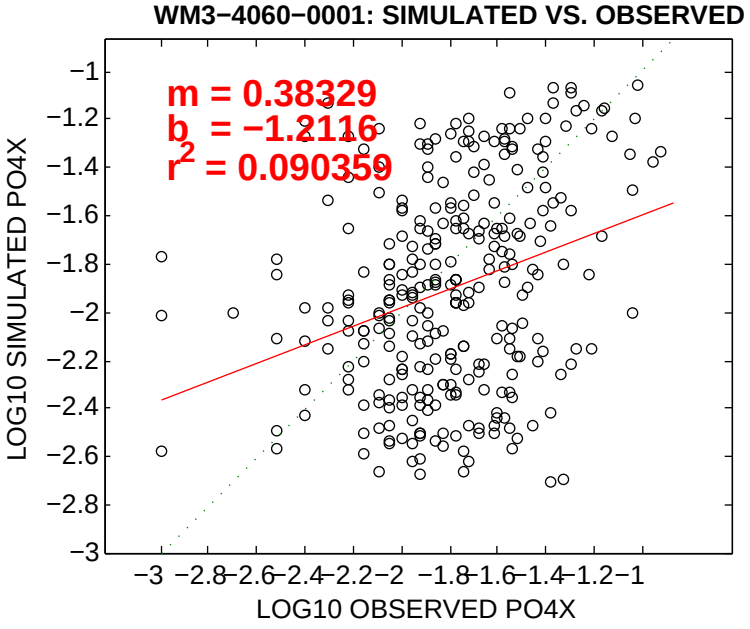


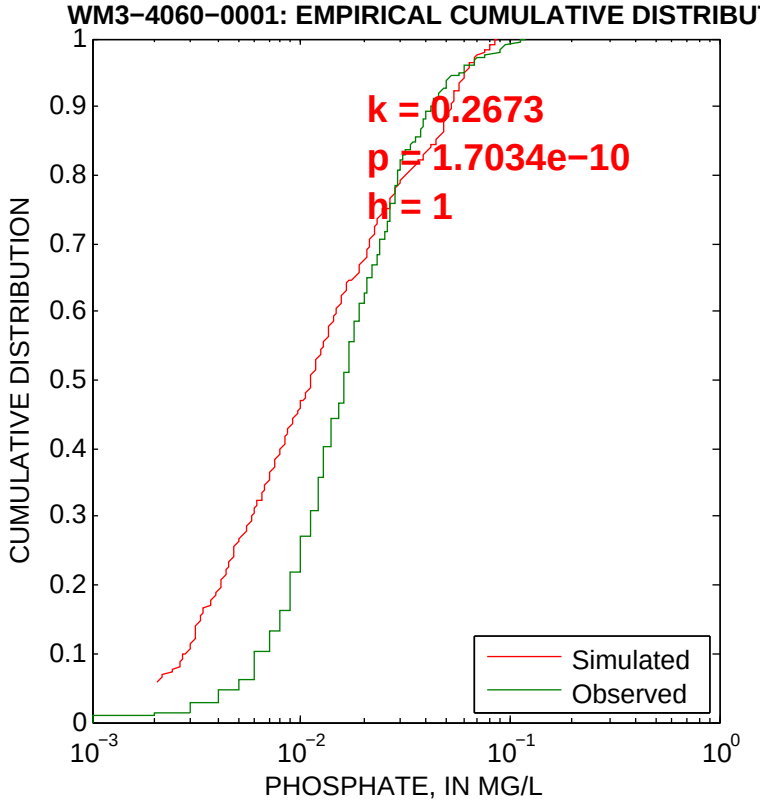












DATA SELECTION

scenario: P620171001WQ | file: PO4X.calib

plot: PO4X - phosphate

Dates: 1/1/1985 – 12/31/201

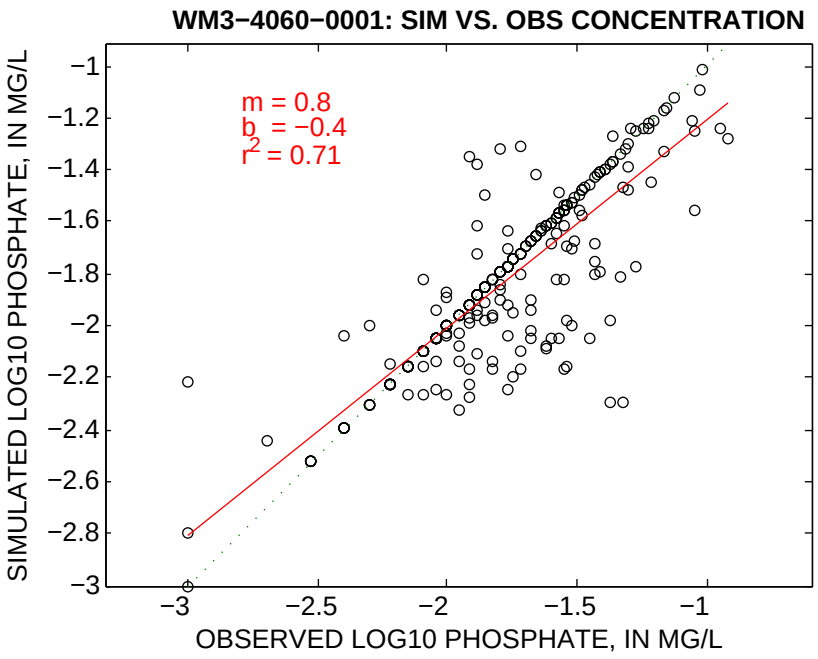
Drive | Directory | Observed: N/A | model | OBS20161101

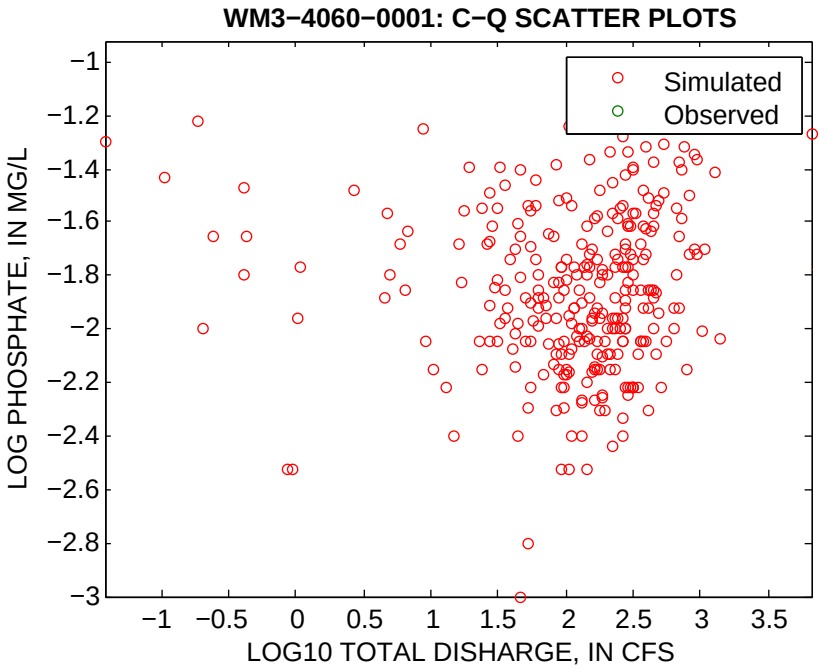
STATISTICS

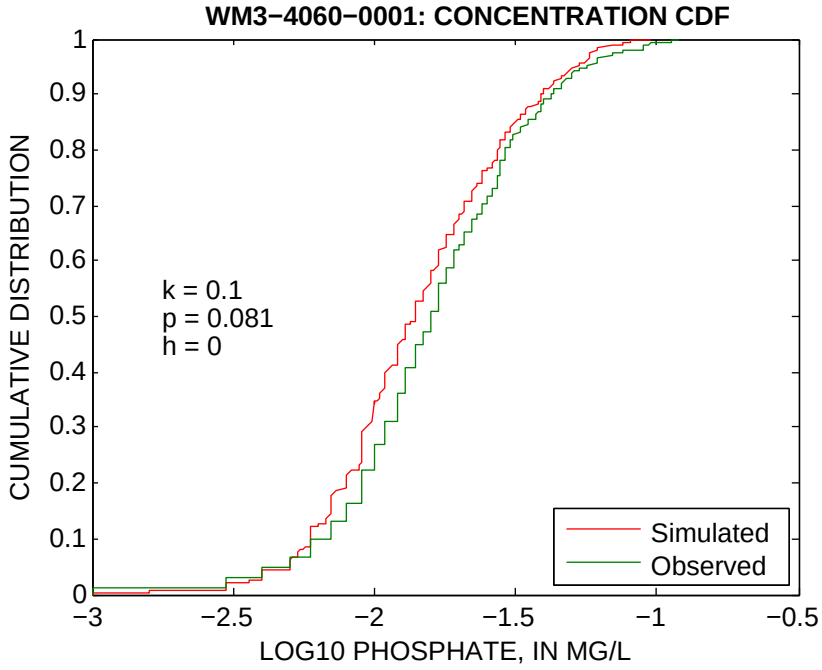
	n	observe	simulate
		318	301
min		0.001	0
		-3	-2.70516
mean		0.0216195	0.0190791
		-1.79373	-1.89912
media		0.016	0.011104
		-1.79588	-1.92548
max		0.12	0.086716
		-0.920819	-1.0619
varian		0.00034268	0.00039498
		0.113678	0.184826
JB		0.001	0.001
		0.003355	0.005840
		ra	log
%		-11.7506	5.87567
err.va		0.00047714	0.222505
rel.std.err		1.39237	1.95733
mod.eff		-0.392367	-0.957332

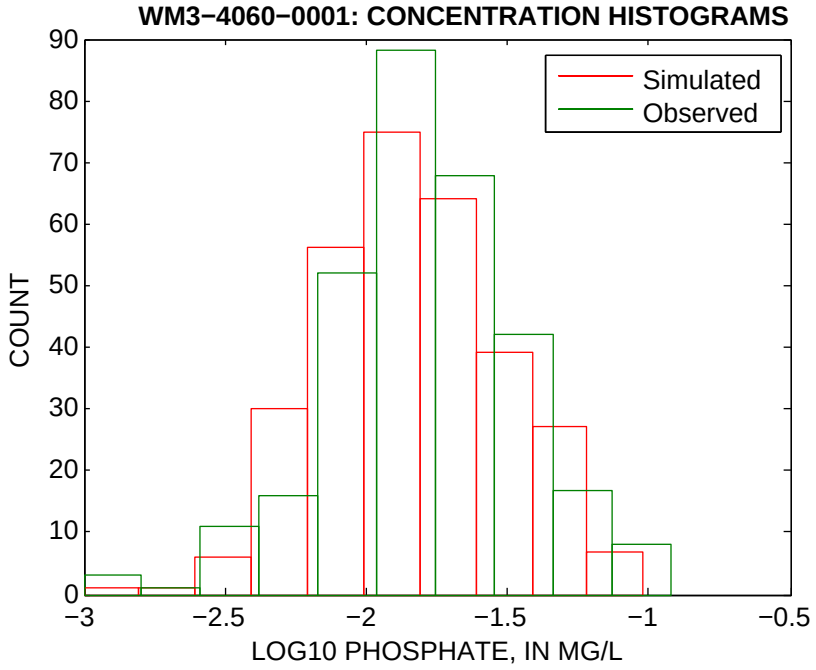
VERSION 2.1

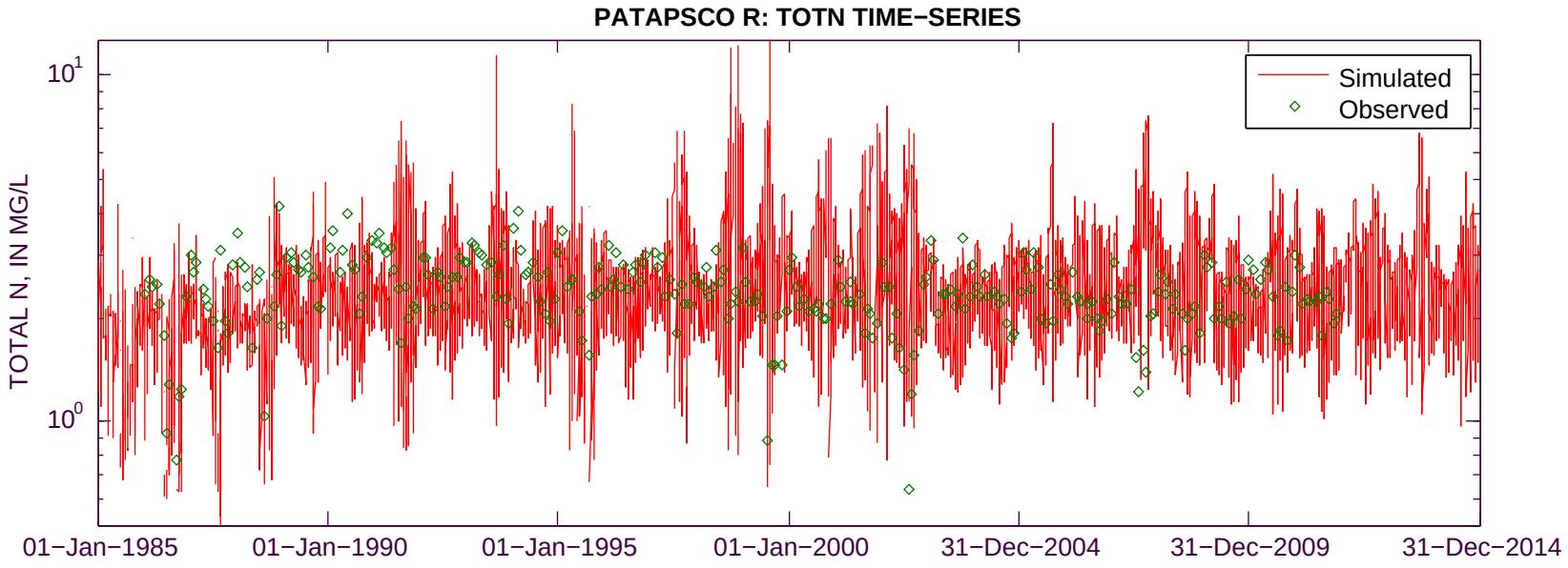
ALL DATA
LOG10

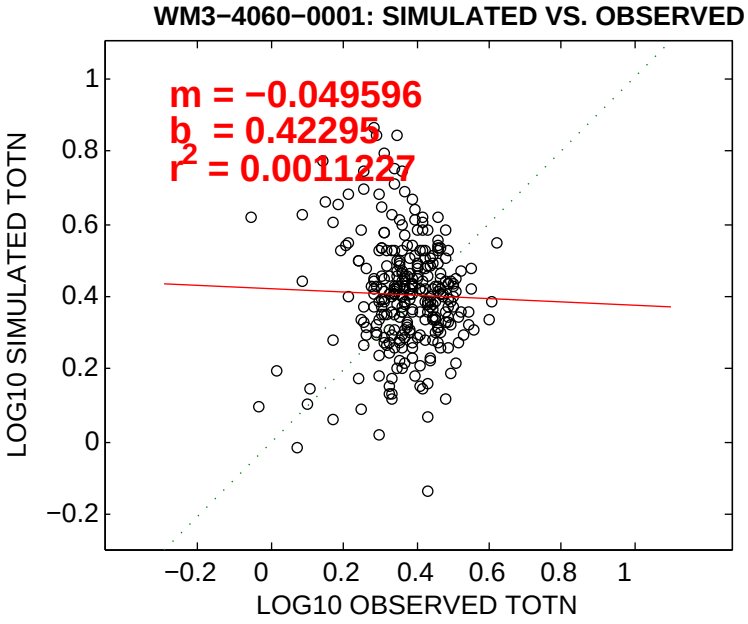


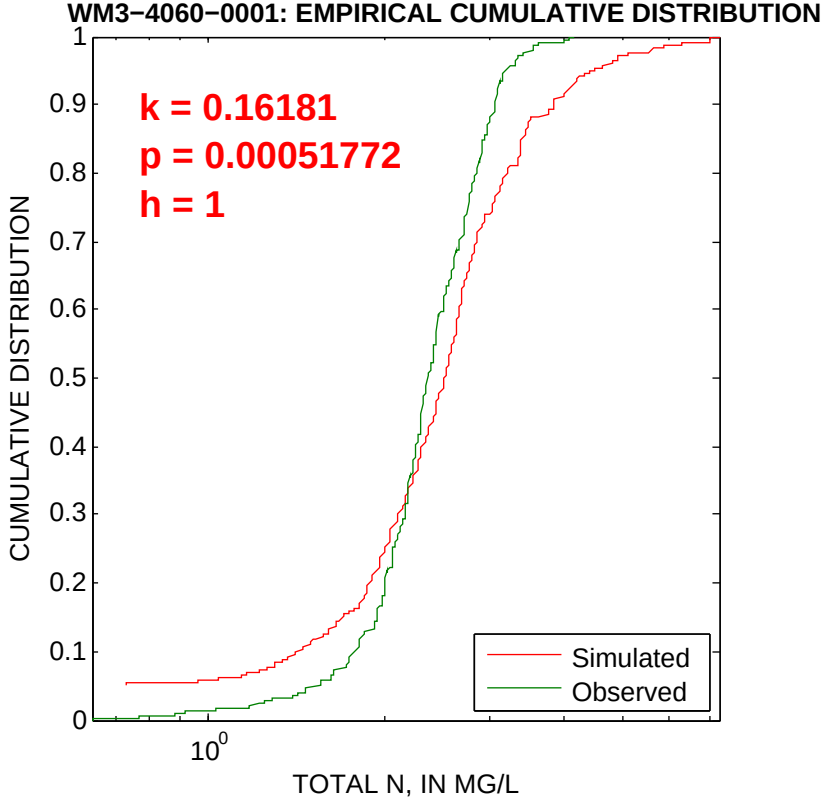












DATA SELECTION

scenario	file
P620171001WQ	TOTN.calib

plot: TOTN - total nitrogen

Dates: 1/1/1985 – 12/31/201

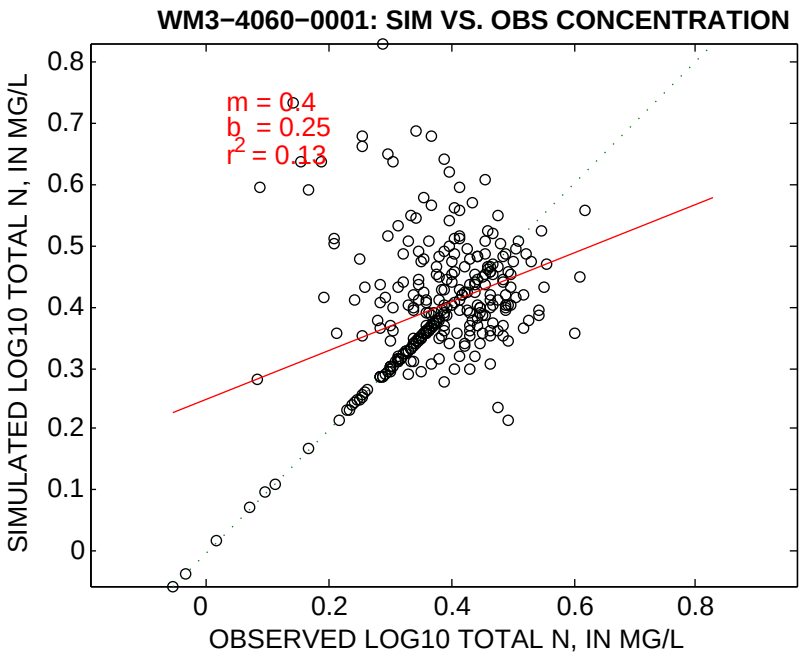
Drive	Directory	Observed
N/A	model	OBS20161101

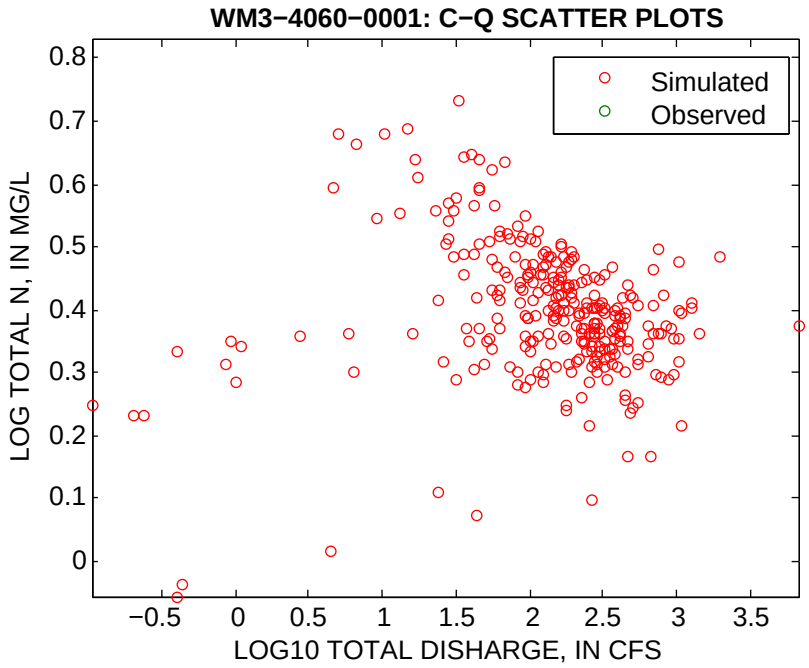
STATISTICS

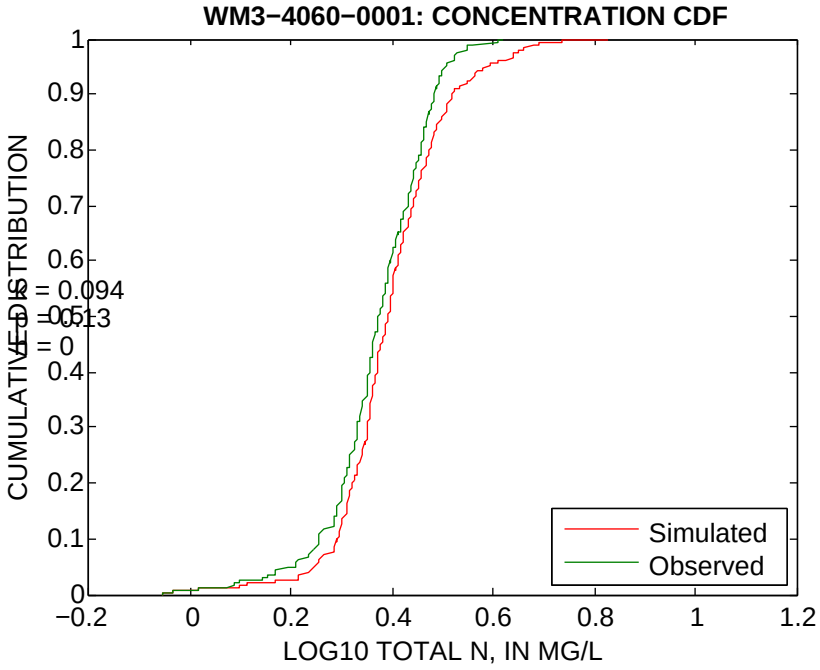
	n	309	293
		observe	simulate
min		0.64	0
		-0.0555173	-0.134831
mean		2.39064	2.5523
		0.372281	0.404483
media		2.35093	2.5167
		0.374748	0.406506
max		4.15	7.2611
		0.618048	0.861002
varian		0.282938	1.27357
		0.0100031	0.0219151
JB		0.013928	0.001
		0.001	0.006974
		ra	log
% err.va		6.76251	8.64977
		1.57592	0.0339509
rel.std.err		5.56985	3.39404
mod.eff		-4.56985	-2.39404

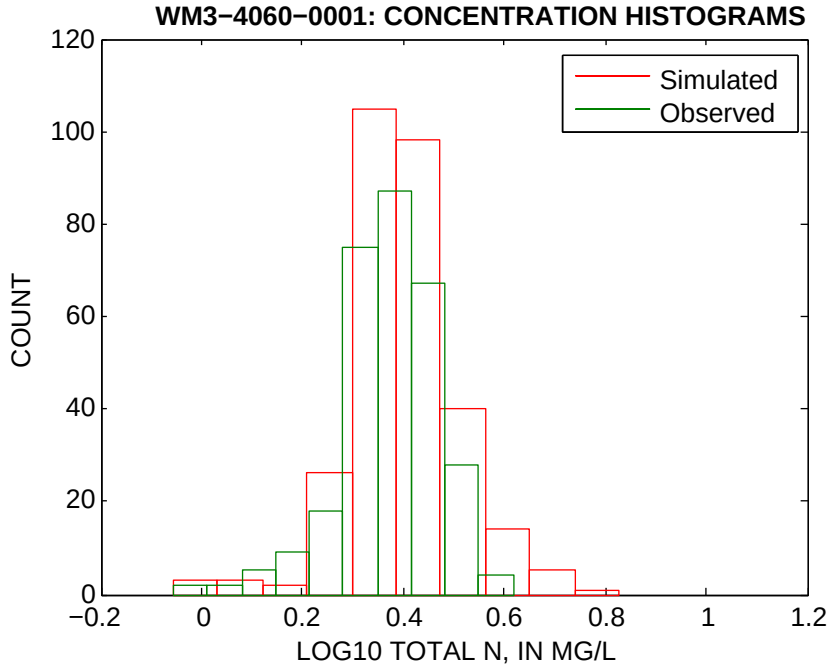
VERSION 2.1

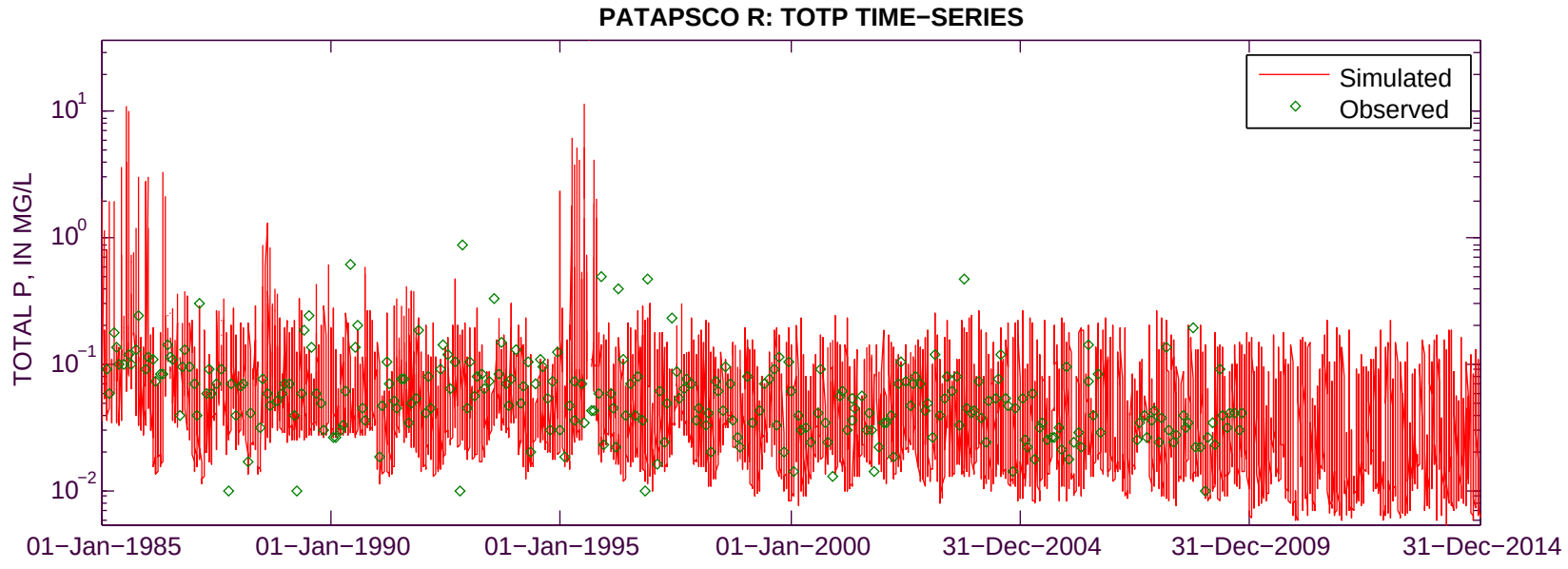
ALL DATA
LOG10

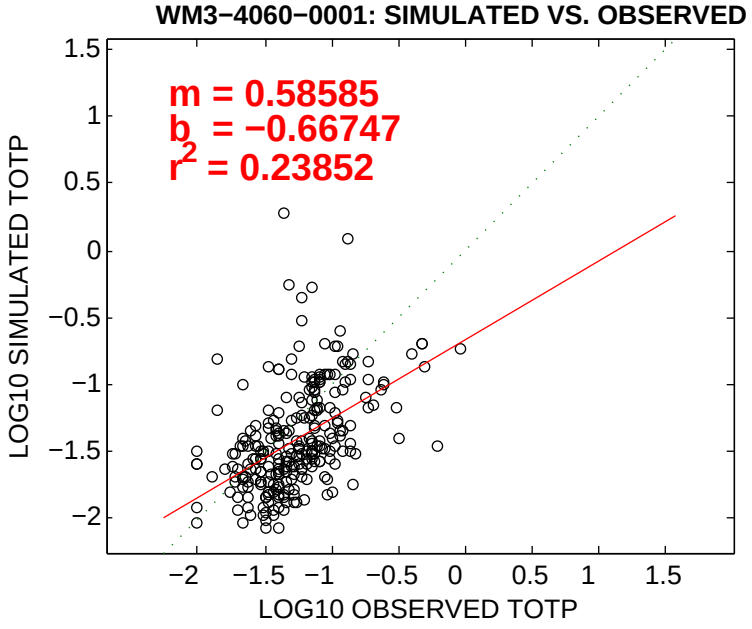


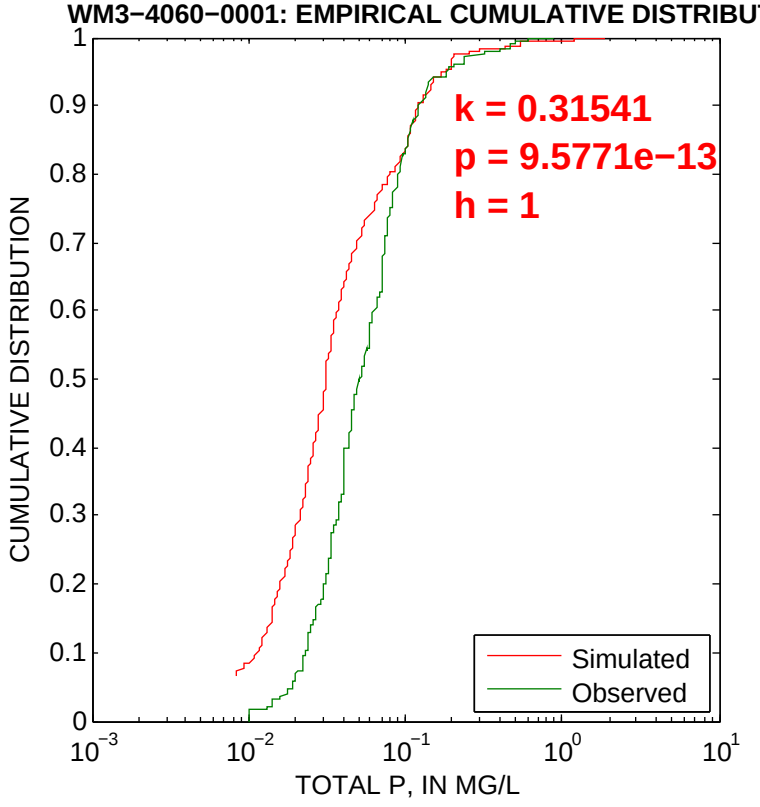












DATA SELECTION

scenario: P620171001WQ | file: TOTP.calib

plot: TOTP - total phosphorus

Dates: 1/1/1985 – 12/31/201

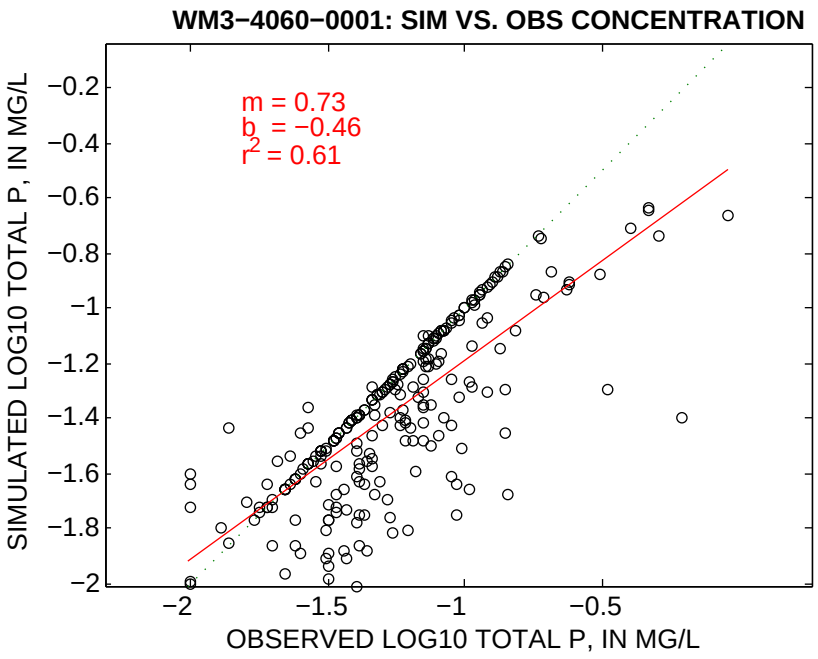
Drive: N/A | Directory: model | Observed: OBS20161101

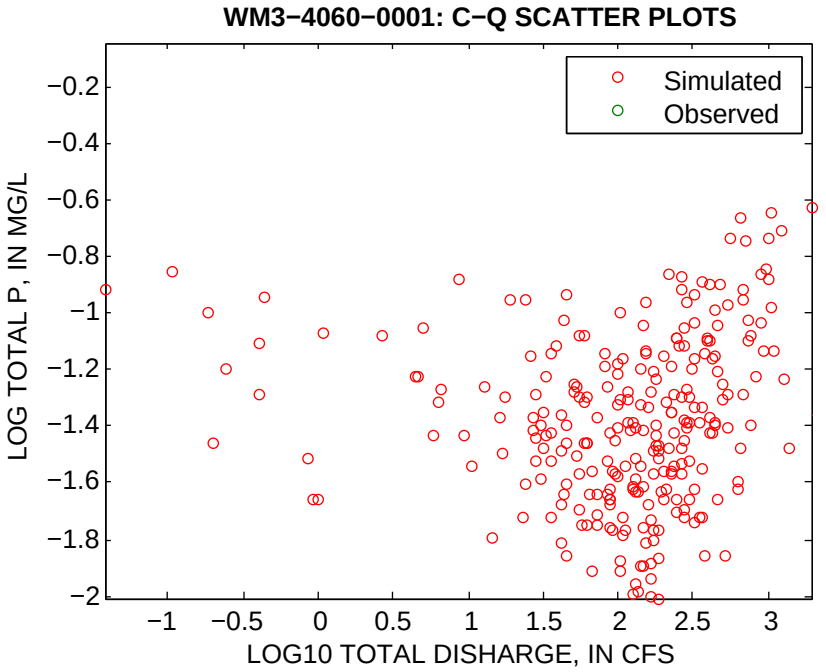
STATISTICS

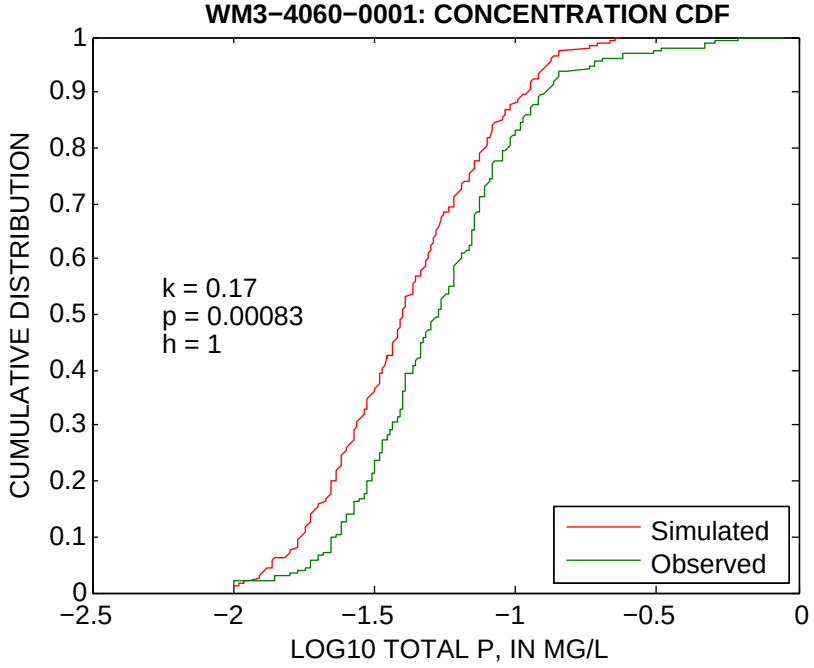
		observe	simulate
n		279	261
min		0.01	0
		-2	-2.07495
mean		0.0739964	0.0635743
		-1.26392	-1.40794
media		0.052	0.031142
		-1.27572	-1.49069
max		0.9	1.8682
		-0.0457575	0.271423
varian		0.00786312	0.0210207
		0.10323	0.148541
JB		0.001	0.001
		0.001	0.001
		ra	log
%		-14.0846	11.3947
err.va		0.0253333	0.151638
rel.std.err		3.22179	1.46893
mod.eff		-2.22179	-0.468933

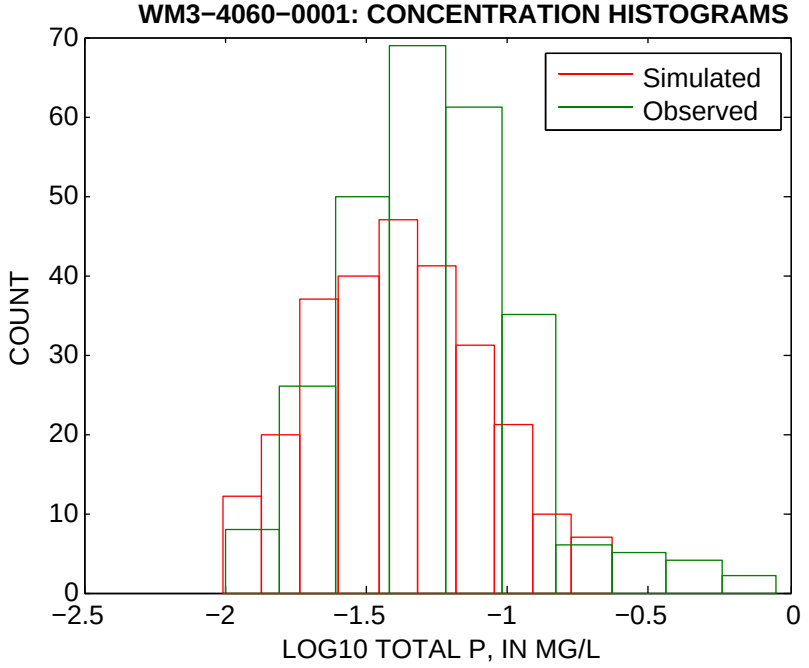
VERSION 2.1

ALL DATA
LOG10

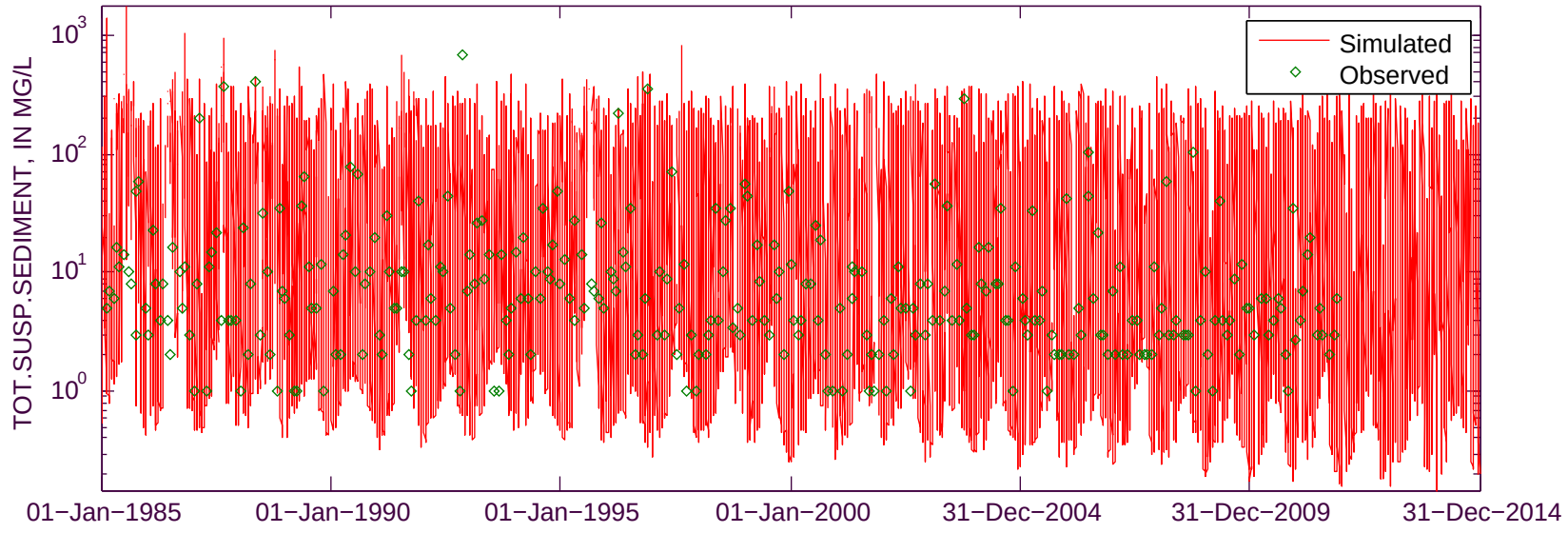




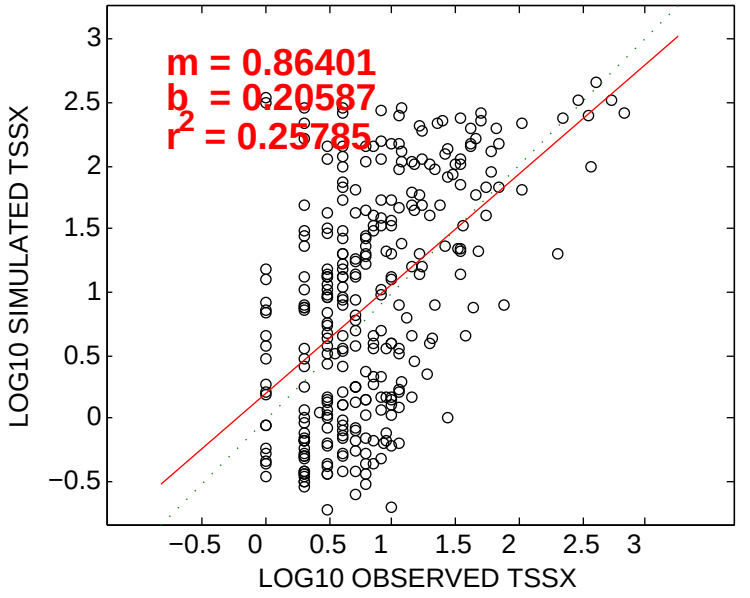




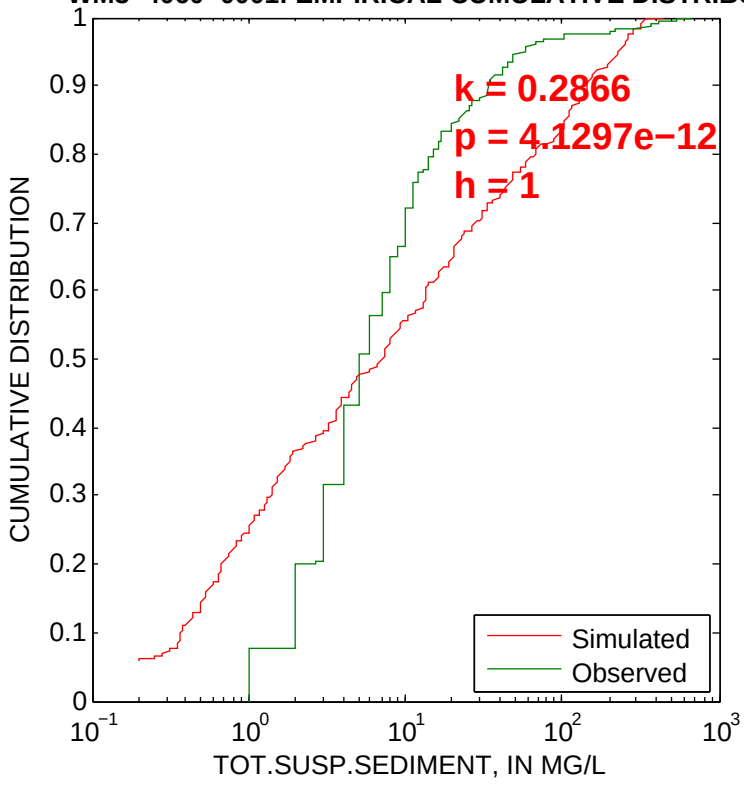
PATAPSCO R: TSSX TIME-SERIES



WM3-4060-0001: SIMULATED VS. OBSERVED



WM3-4060-0001: EMPIRICAL CUMULATIVE DISTRIBUTION



DATA SELECTION

scenario	file
P620171001WQ	TSSX.calib

plot: TSSX - total suspended ...

Dates: 1/1/1985 – 12/31/201

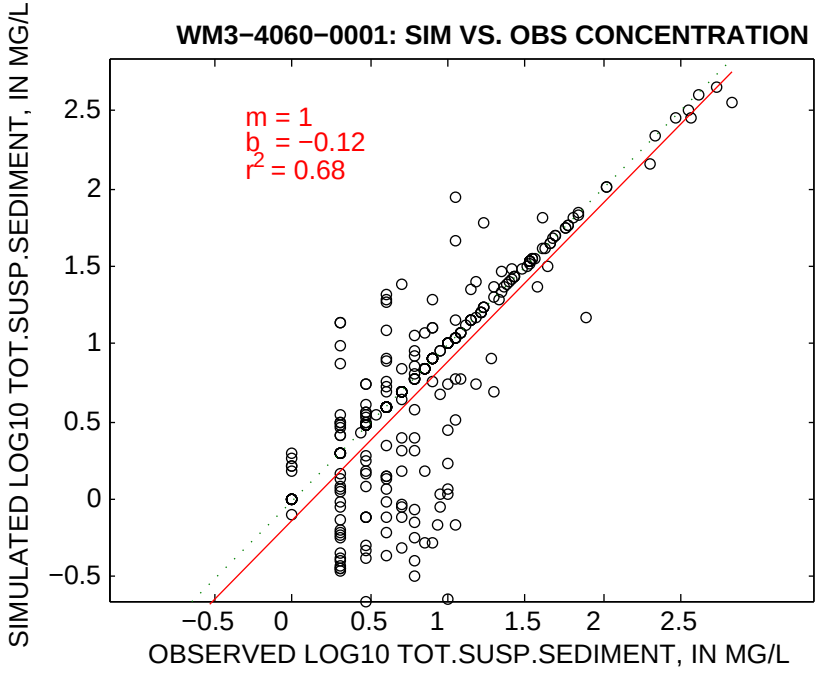
Drive	Directory	Observed
N/A	model	OBS20161101

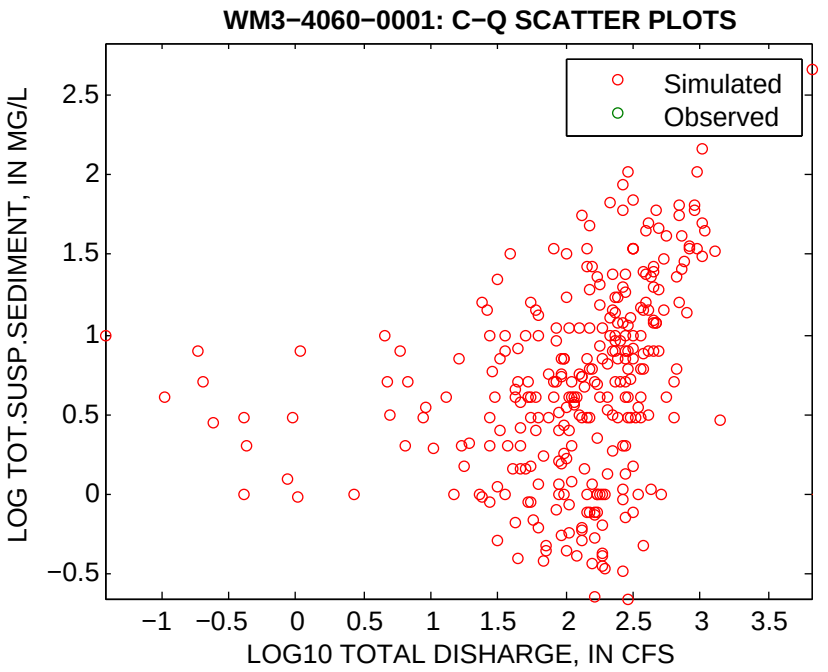
STATISTICS

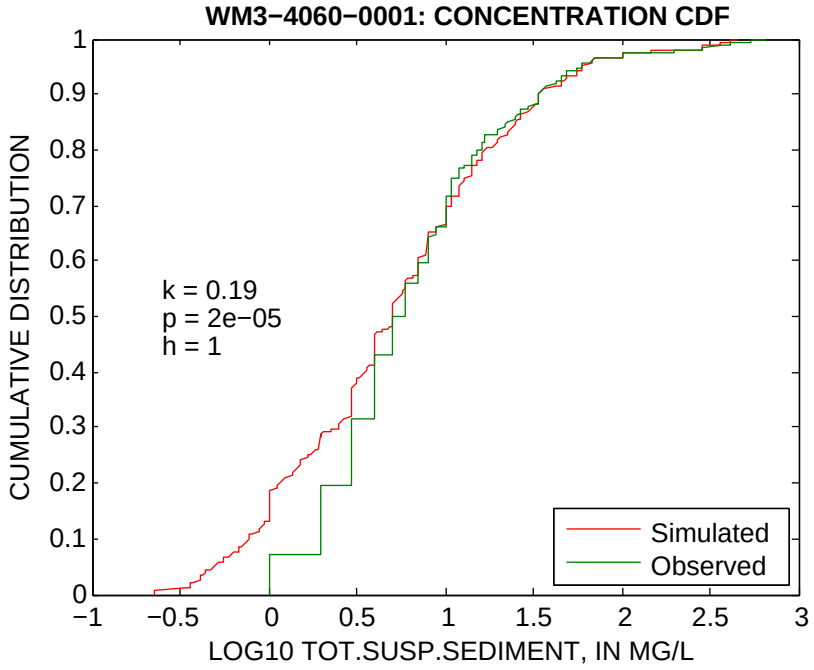
	n	321	303
		observe	simulate
min		1 0	0 -0.708254
mean		19.9991 0.830677	42.7577 0.923577
media		5 0.69897	7.2467 0.903367
max		670 2.82607	453.49 2.65657
varian		4099.27 0.283045	5753.71 0.819467
JB		0.001 0.001	0.001 0.002476
		ra	log
%		113.798	11.1837
err.va		5524.22	0.622065
rel.std.err		1.34761	2.19776
mod.eff		-0.34761	-1.19776

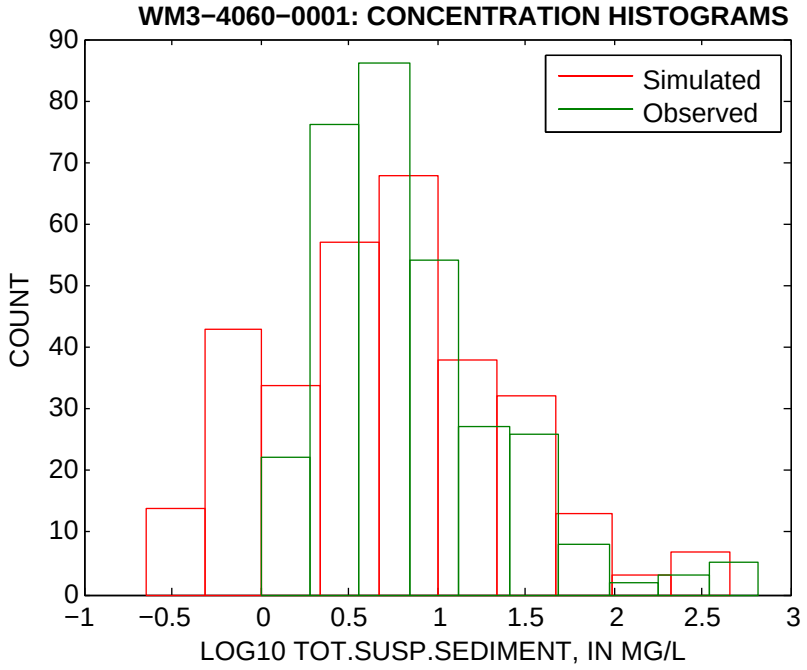
VERSION 2.1

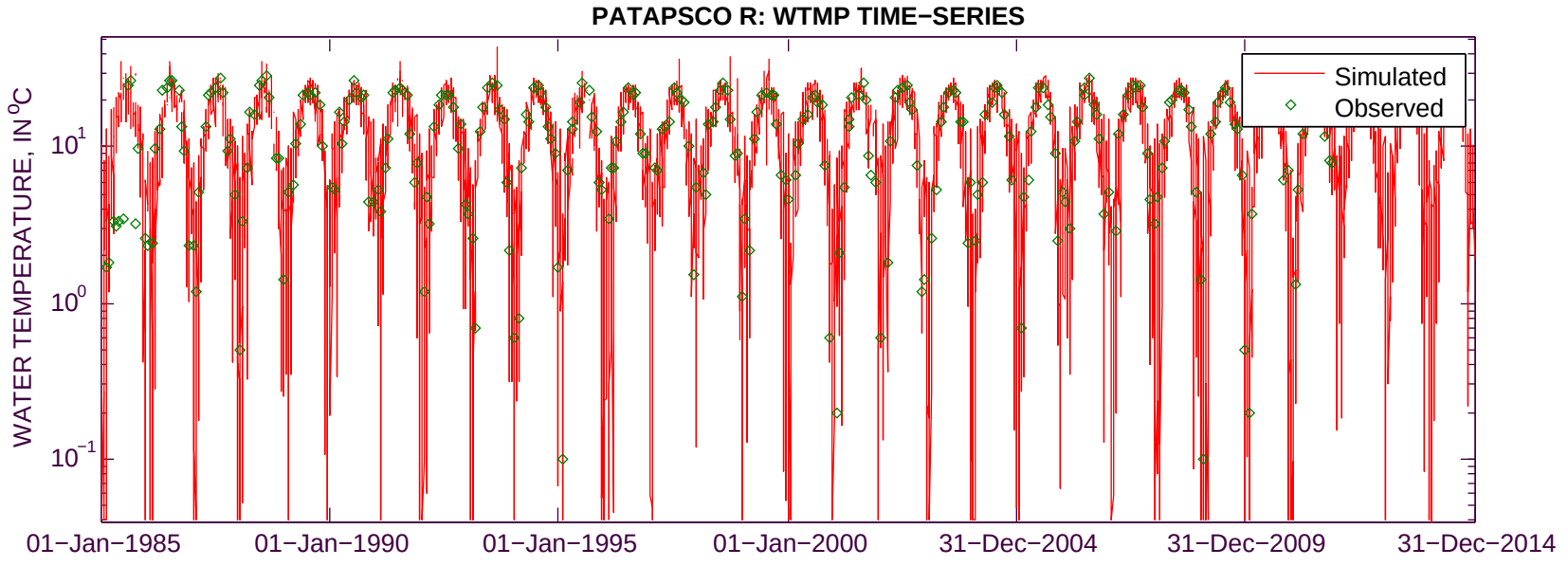
ALL DATA
LOG10











DATA SELECTION

scenario	file
P620171001WQ	WTMP.calib

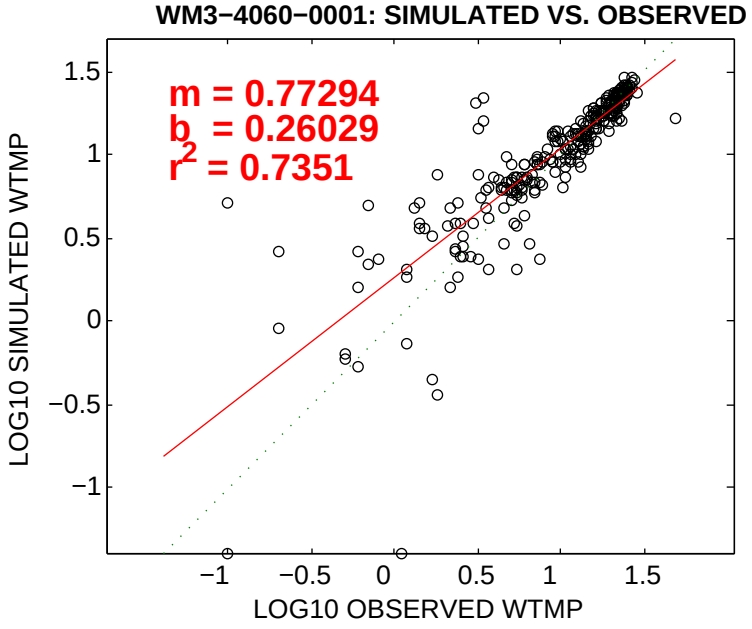
plot: WTMP - water tempera...

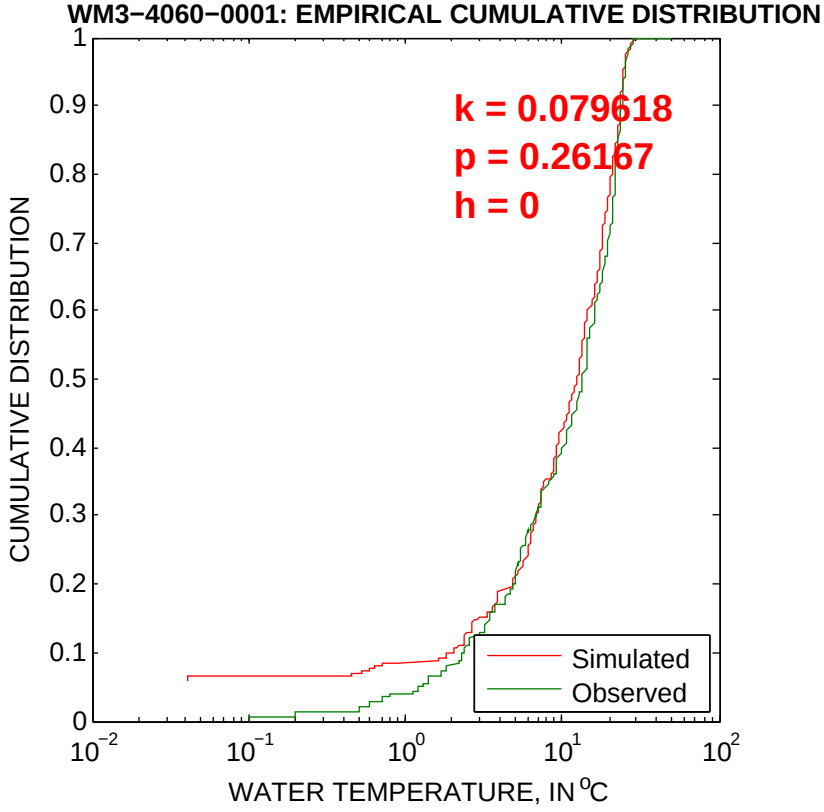
Dates: 1/1/1985 – 12/31/201

Drive	Directory	Observed
N/A	model	OBS20161101

STATISTICS

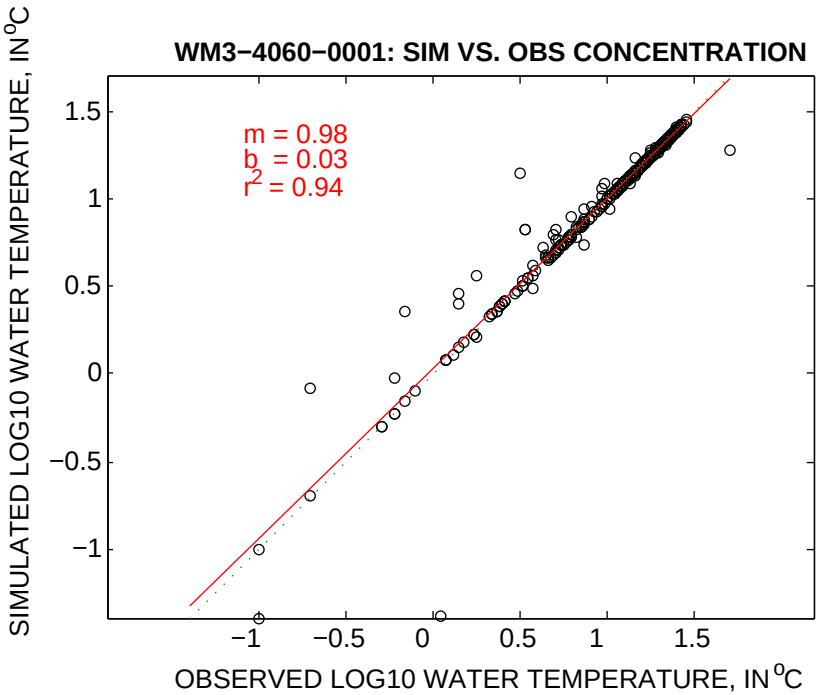
		observe	simulate
n		314	296
min		0.1	0
		-1	-1.39405
mean		13.3674	12.5481
		0.963809	1.00526
media		13.5	12.491
		1.12221	1.11638
max		50	29.324
		1.69897	1.46722
varian		69.7131	63.2328
		0.205126	0.166711
JB	☑	0.080808	0.002817
		0.001	0.001
		ra	log
%		-6.1287	4.30041
err.va		34.0365	0.0564611
rel.std.err		0.488237	0.275251
mod.eff		0.511763	0.724749

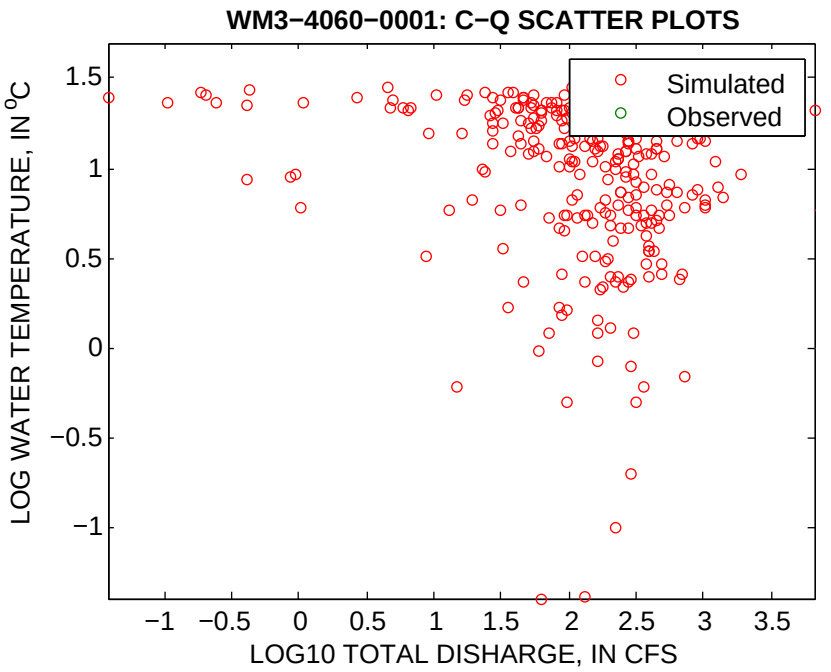


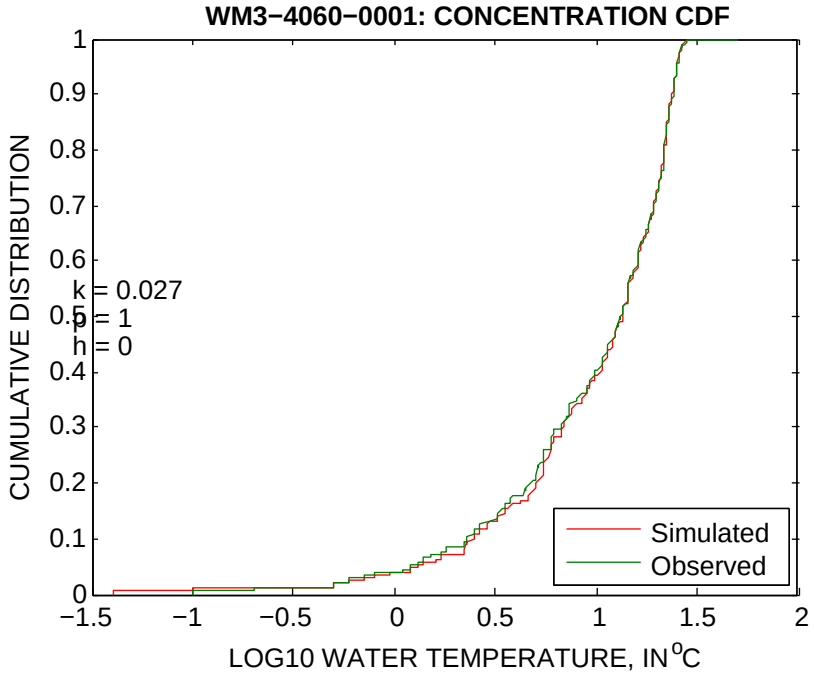


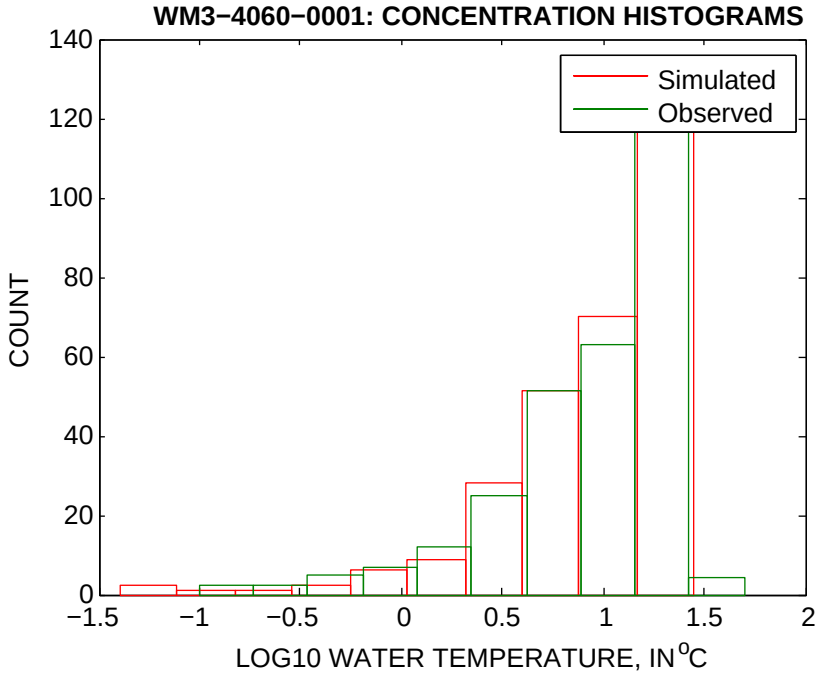
VERSION

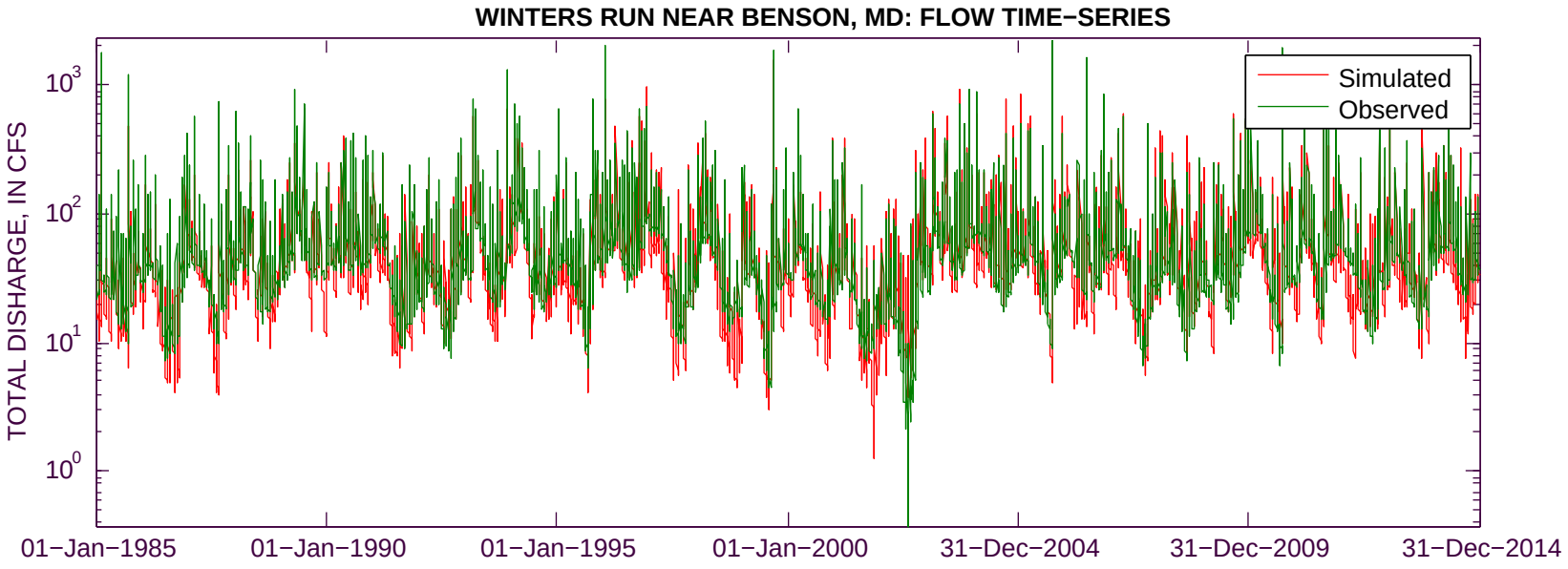
ALL DATA
LOG10

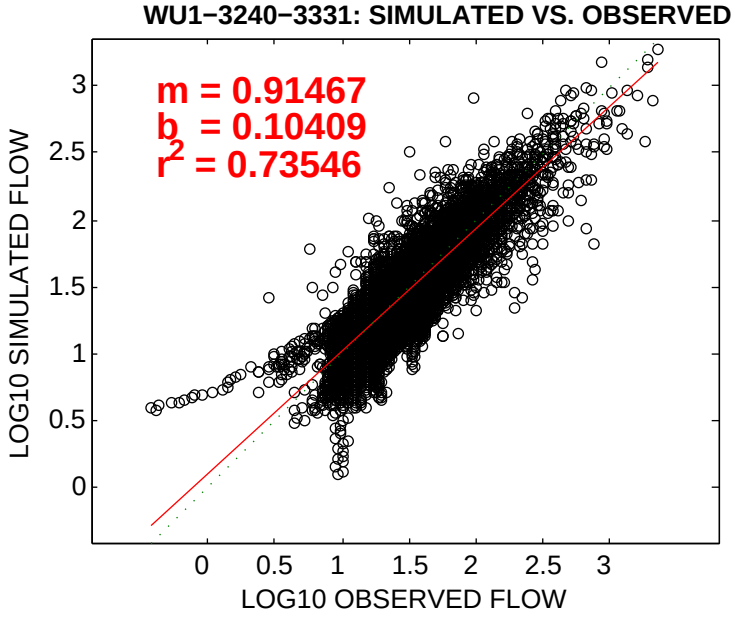


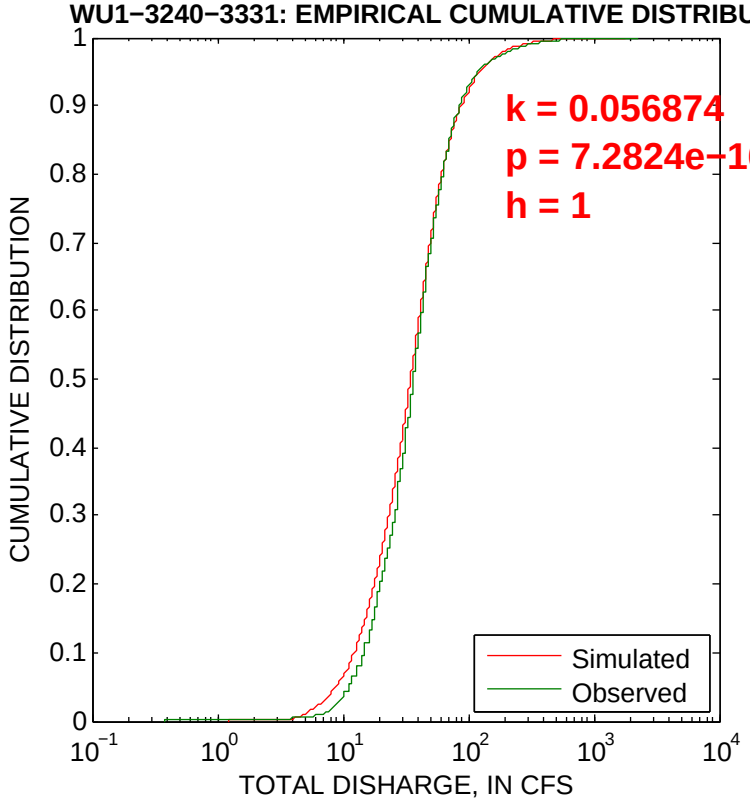












DATA SELECTION

scenario: P620171001WQ | file: _FLOW.calib

plot: FLOW - total discharge

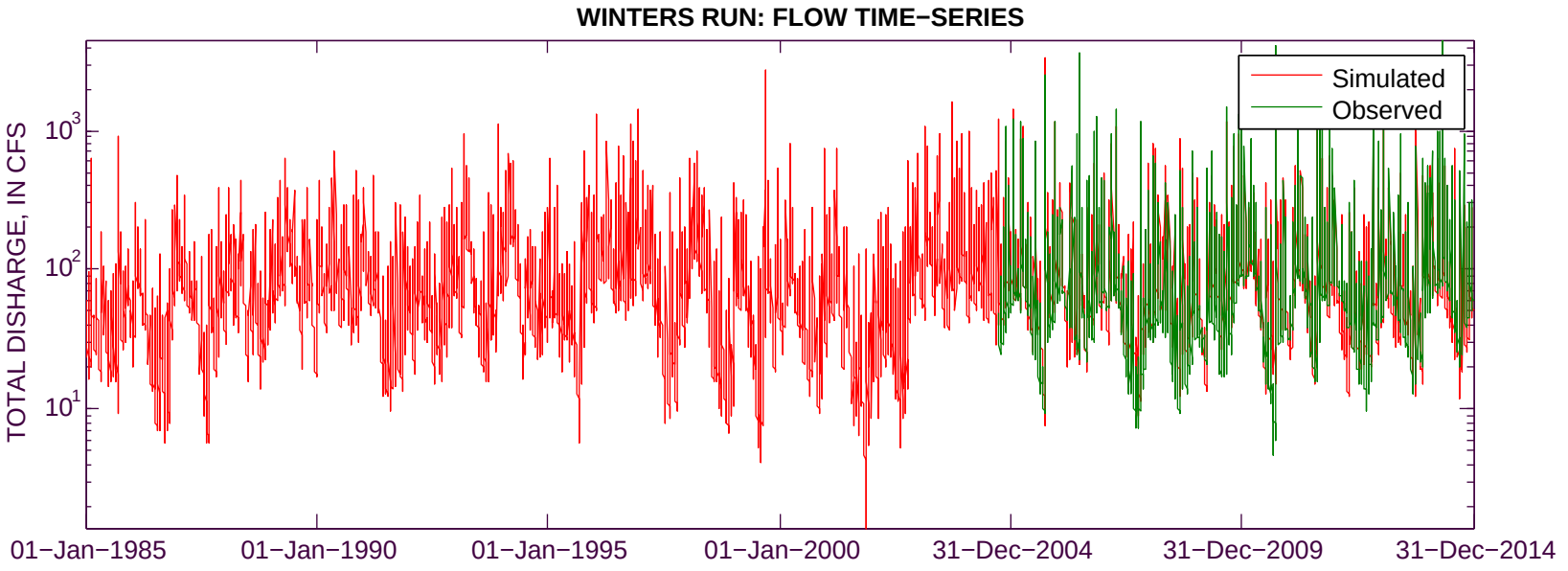
Dates: 1/1/1985 – 12/31/201

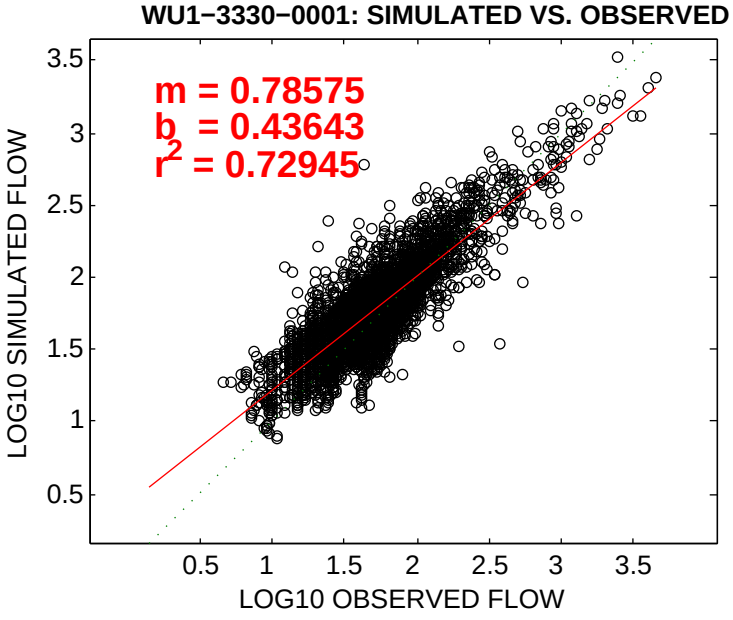
Drive: N/A | Directory: model | Observed: OBS20161101

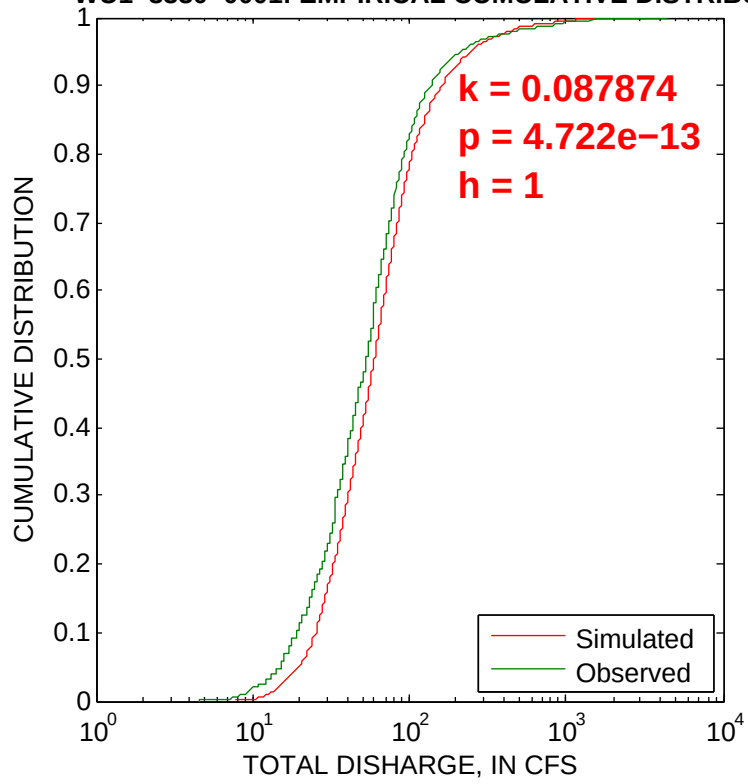
STATISTICS

		observe	simulate
n		10954	10954
min		0.38	1.2639
		-0.420216	0.101713
mean		51.4794	48.9628
		1.56411	1.53473
media		37	34.981
		1.5682	1.54383
max		2260	1837.4
		3.35411	3.2642
varian		6205.16	4247.09
		0.107661	0.122469
JB		0.001	0.001
		0.001	0.001
		ra	log
%		-4.88845	-1.87821
err.va		1865.21	0.0340455
rel.std.err		0.30059	0.31623
mod.eff		0.69941	0.68377

VERSION 2.1







DATA SELECTION

scenario: P620171001WQ | file: _FLOW.calib

plot: FLOW - total discharge

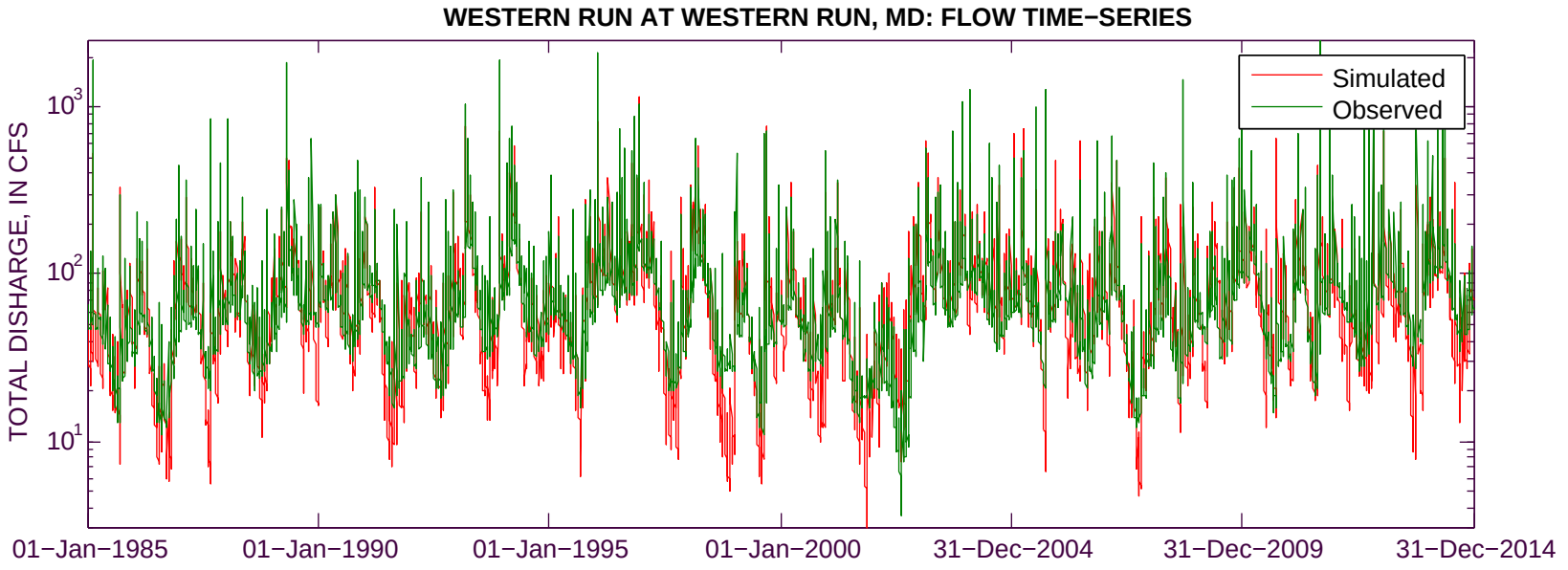
Dates: 1/1/1985 – 12/31/201

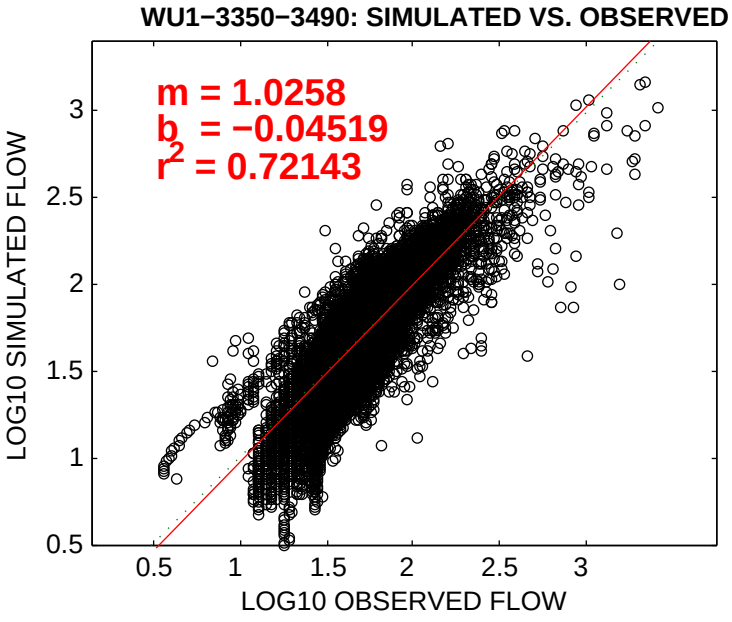
Drive: N/A | Directory: model | Observed: OBS20161101

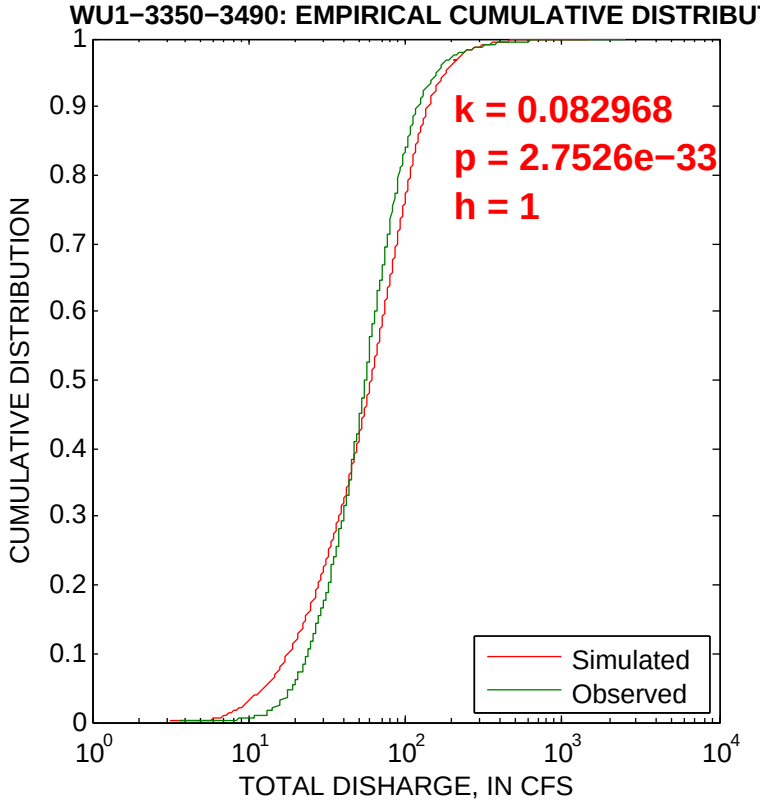
STATISTICS

		observe	simulate
n		3744	3744
min		4.6	7.5411
		0.662758	0.877435
mean		88.3993	92.0403
		1.72793	1.79414
media		53	59.9915
		1.72428	1.77809
max		4520	3337.8
		3.65514	3.52346
varian		39923.8	21532.4
		0.135021	0.11428
JB		0.001	0.001
		0.001	0.001
		ra	log
%		4.11884	3.83188
err.va		9883.61	0.0415017
rel.std.err		0.247562	0.307371
mod.eff		0.752438	0.692629

VERSION 2.1







DATA SELECTION

scenario: P620171001WQ | file: _FLOW.calib

plot: FLOW - total discharge

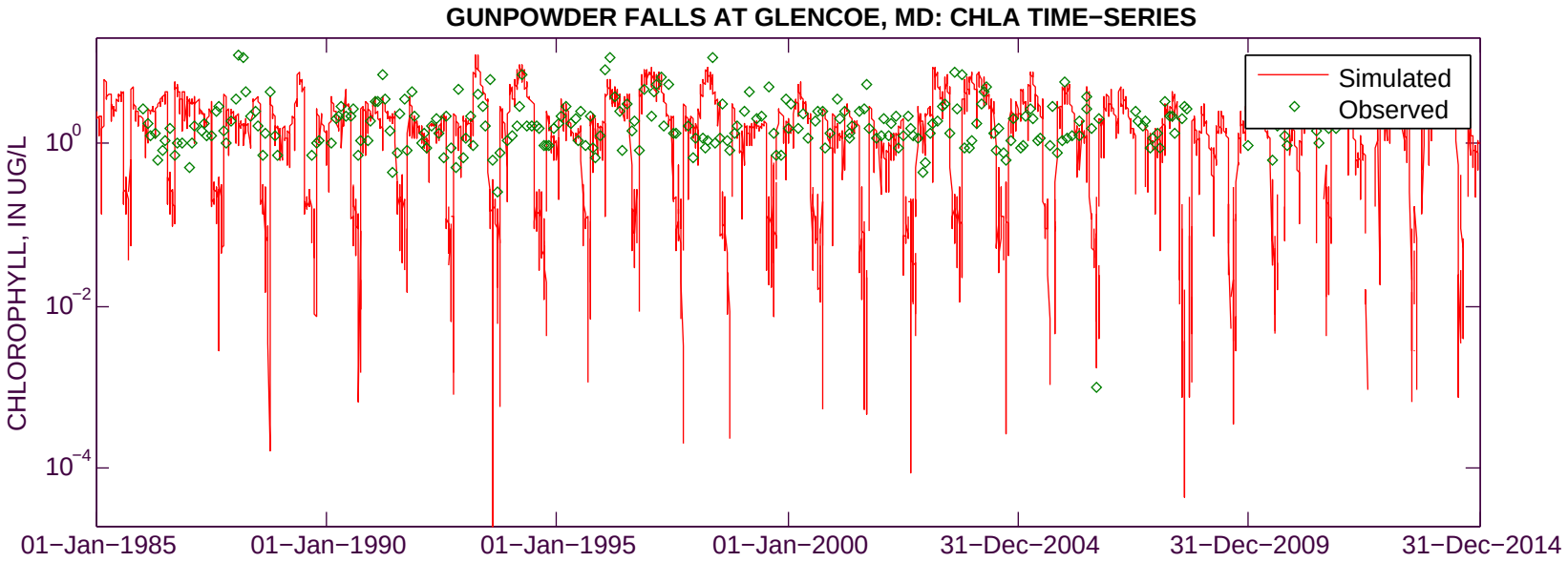
Dates: 1/1/1985 – 12/31/201

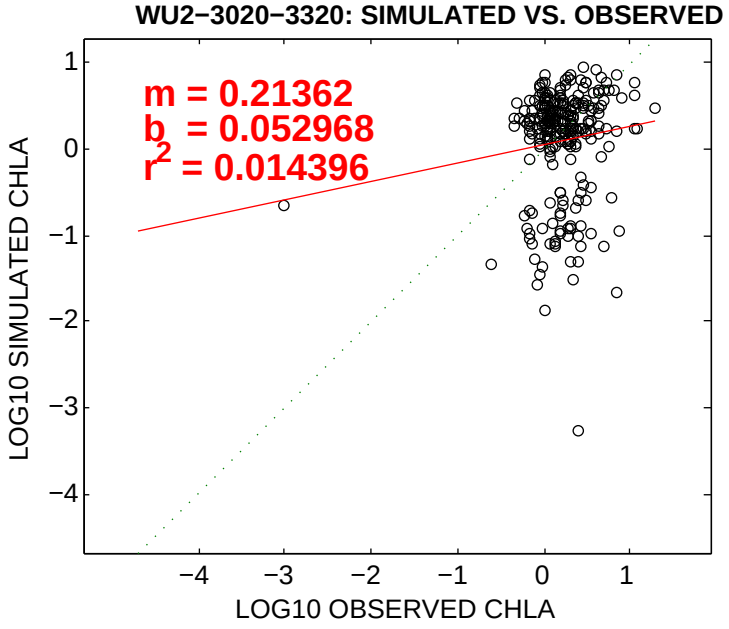
Drive: N/A | Directory: model | Observed: OBS20161101

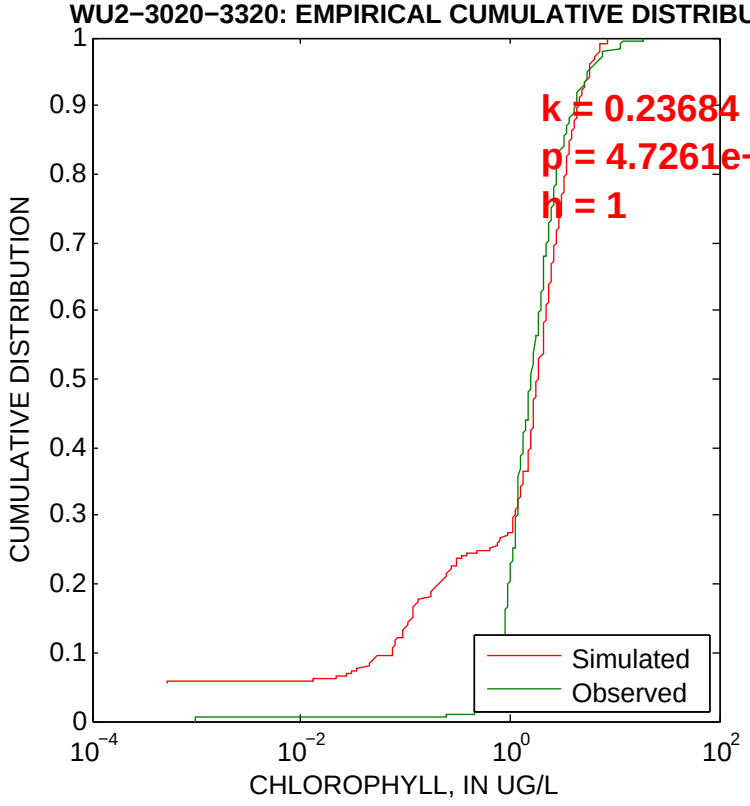
STATISTICS

		observe	simulate
n		10956	10956
min		3.6	3.0837
		0.556303	0.489072
mean		71.855	75.1736
		1.74296	1.74281
media		55	60.636
		1.74036	1.78273
max		2560	1451.4
		3.40824	3.16179
varian		8212.8	4809.03
		0.0849933	0.123979
JB		0.001	0.001
		0.001	0.001
		ra	log
%		4.61849	-0.0085435
err.va		3426.72	0.0345933
rel.std.err		0.417241	0.407013
mod.eff		0.582759	0.592987

VERSION 2.1







DATA SELECTION

scenario	file
P620171001WQ	CHLA.calib

plot: CHLA - chlorophyll A

Dates: 1/1/1985 – 12/31/201

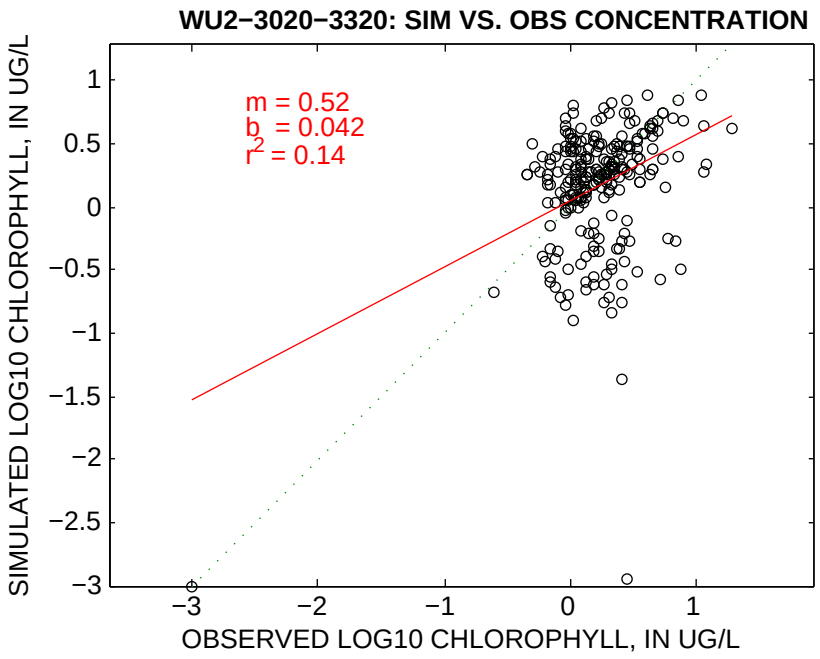
Drive	Directory	Observed
N/A	model	OBS20161101

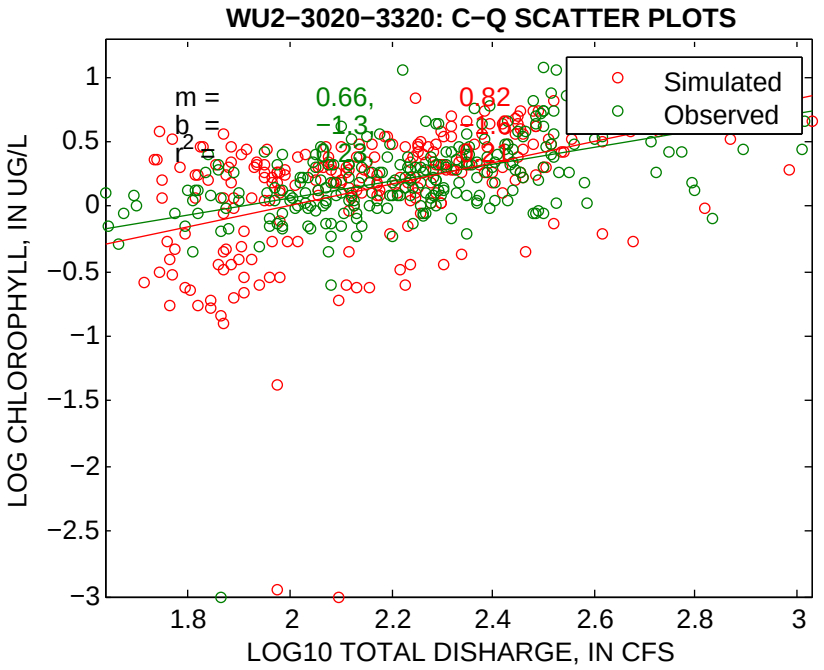
STATISTICS

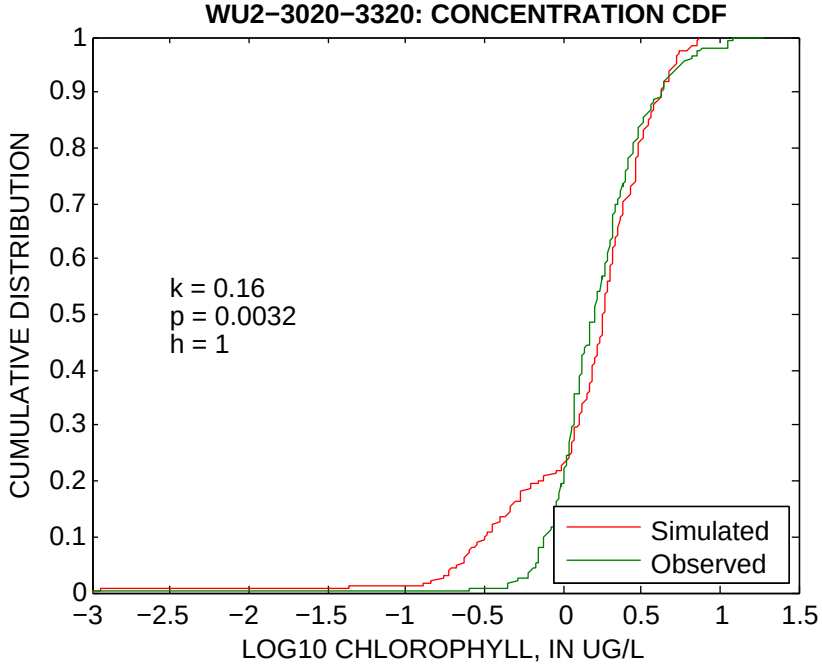
	n	266	252
		observe	simulate
min		0.001	0
		-3	-3.27021
mean		2.20154	2.12125
		0.220373	0.100044
media		1.5975	1.86465
		0.201397	0.284169
max		18.939	8.7569
		1.27736	0.94235
varian		4.25559	3.17801
		0.124846	0.395757
JB		0.001	0.001
		0.001	0.001
		ra	log
%		-3.6471	-54.6023
err.va		6.33933	0.481801
rel.std.err		1.48965	3.85916
mod.eff		-0.489649	-2.85916

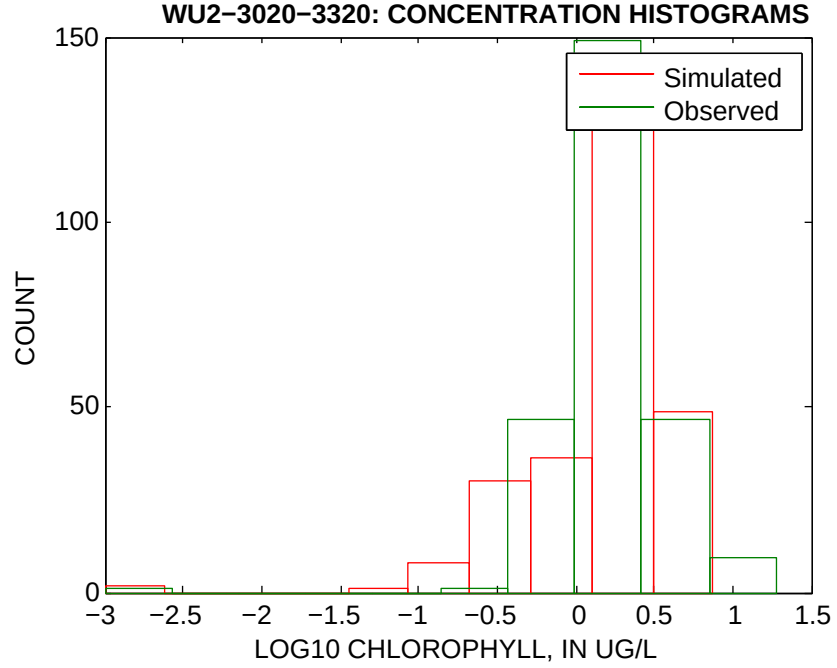
VERSION 2.1

ALL DATA
LOG10

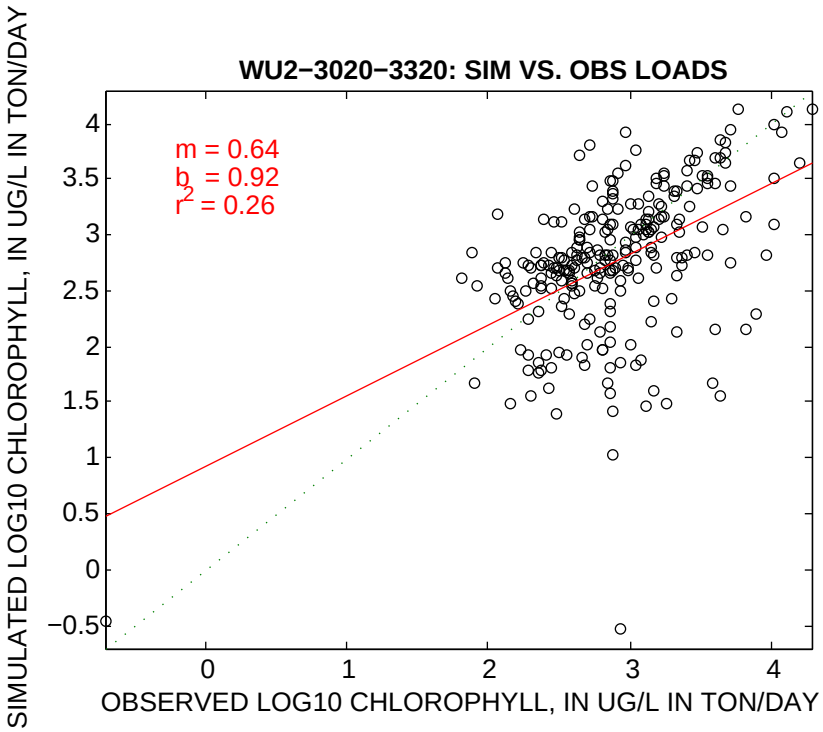


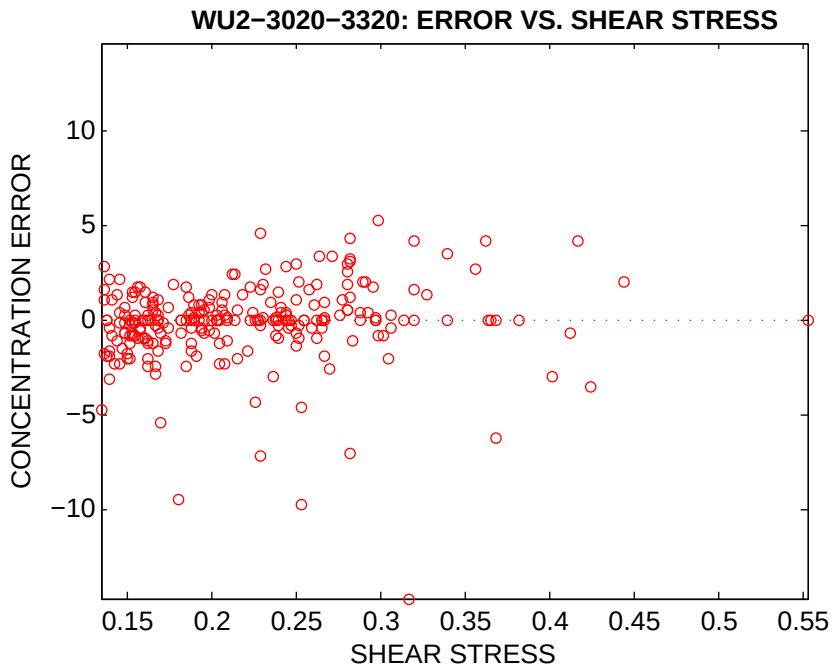


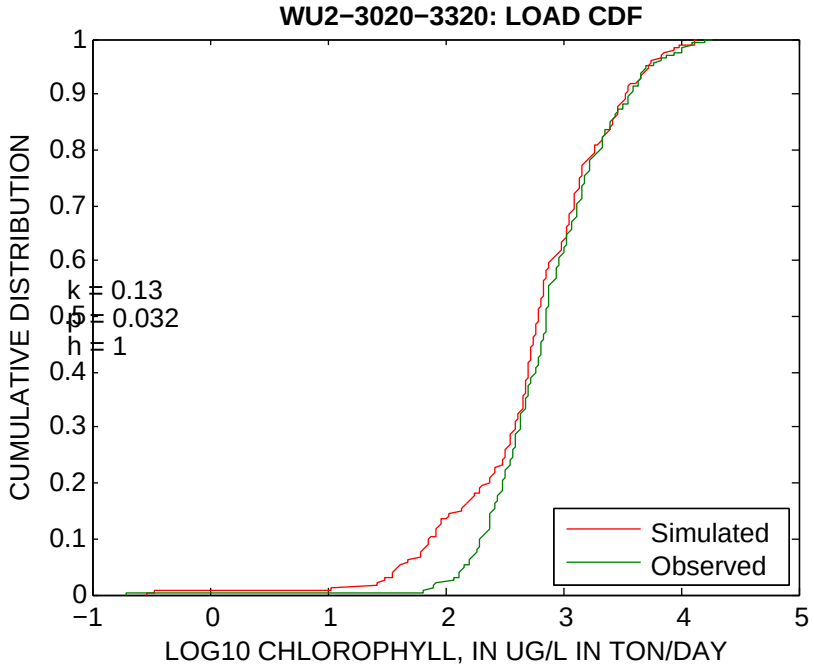


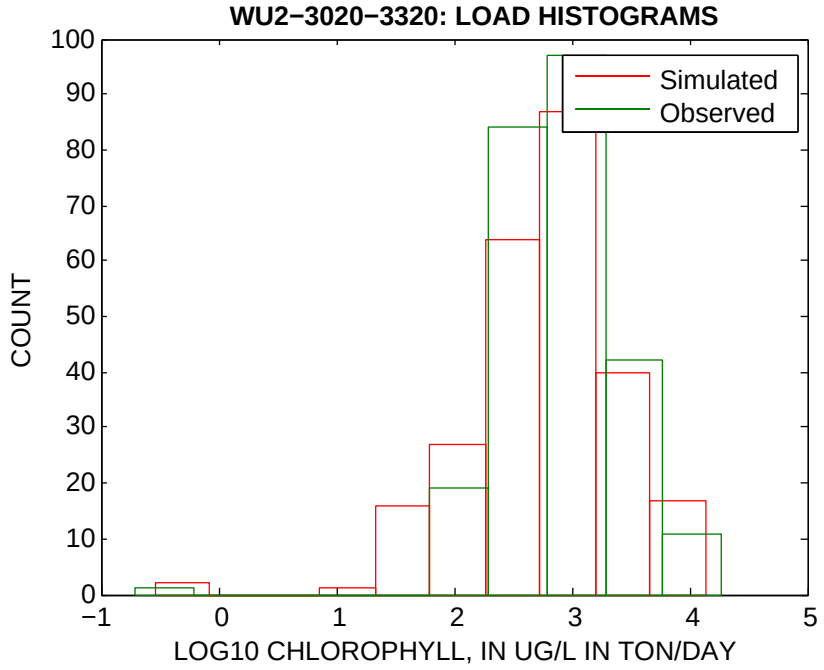


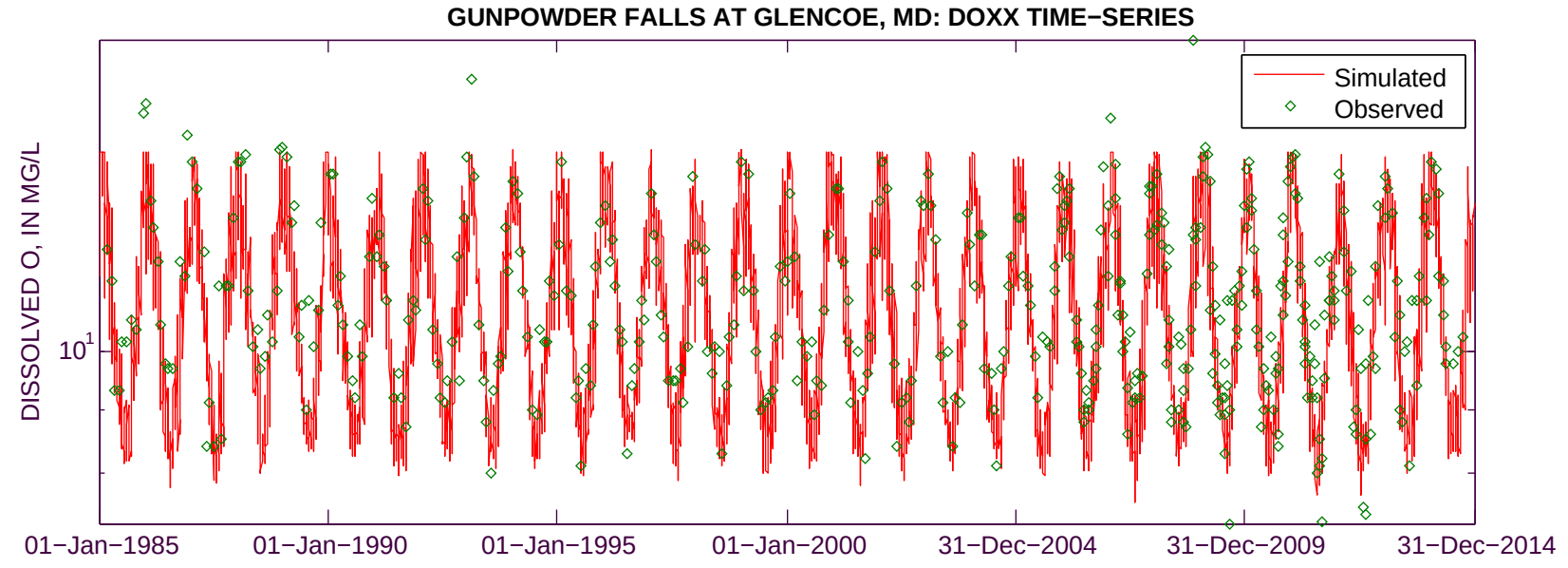
LOAD DATA
LOG10

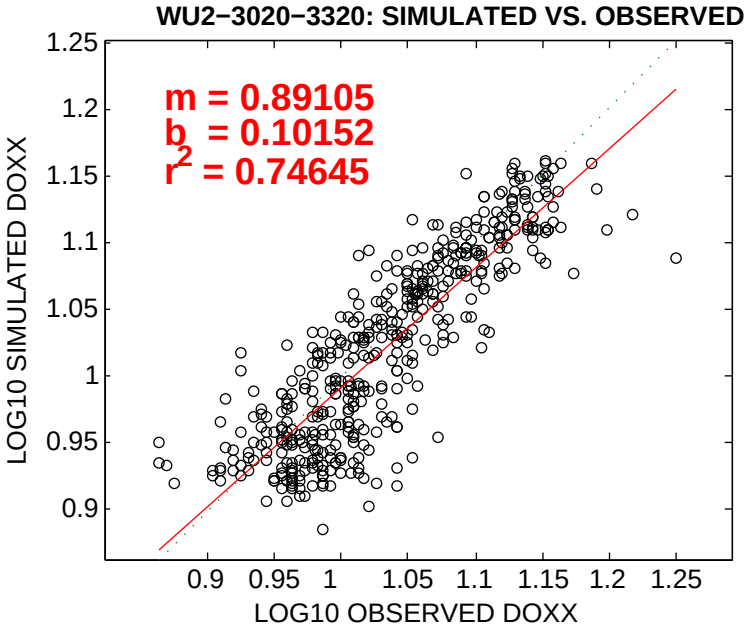


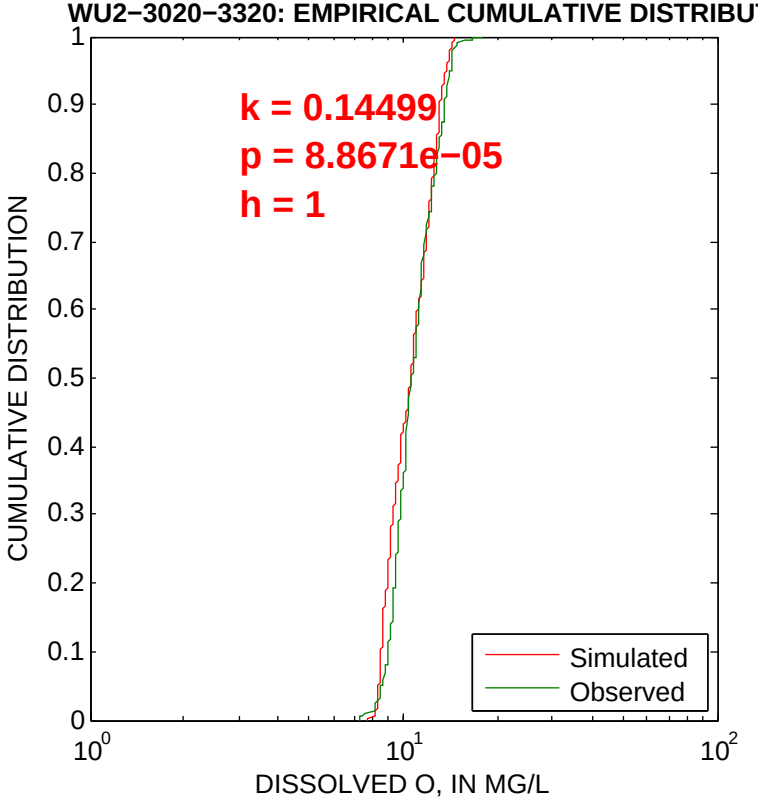












DATA SELECTION

scenario	file
P620171001WQ	DOXX.calib

plot: DOXX - dissolved oxygen

Dates: 1/1/1985 – 12/31/201

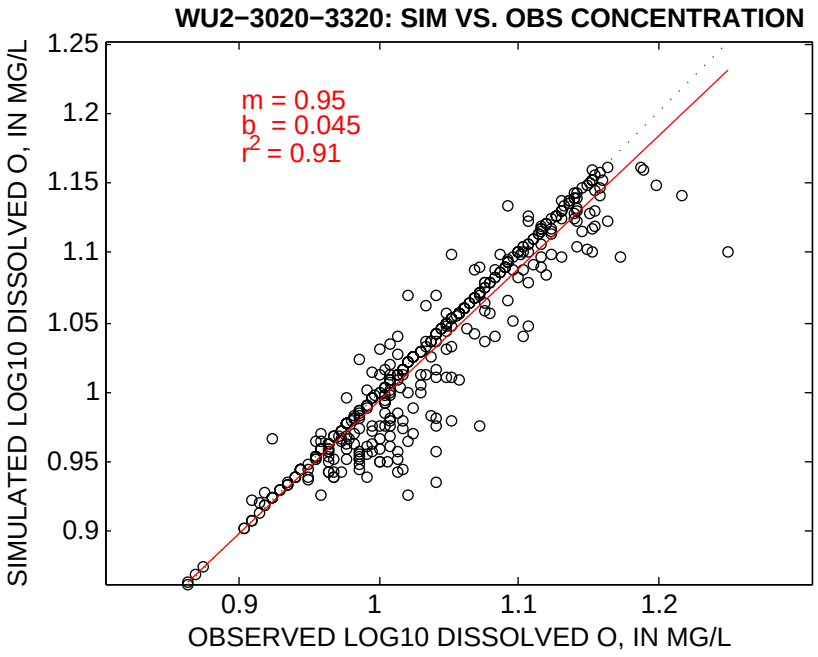
Drive	Directory	Observed
N/A	model	OBS20161101

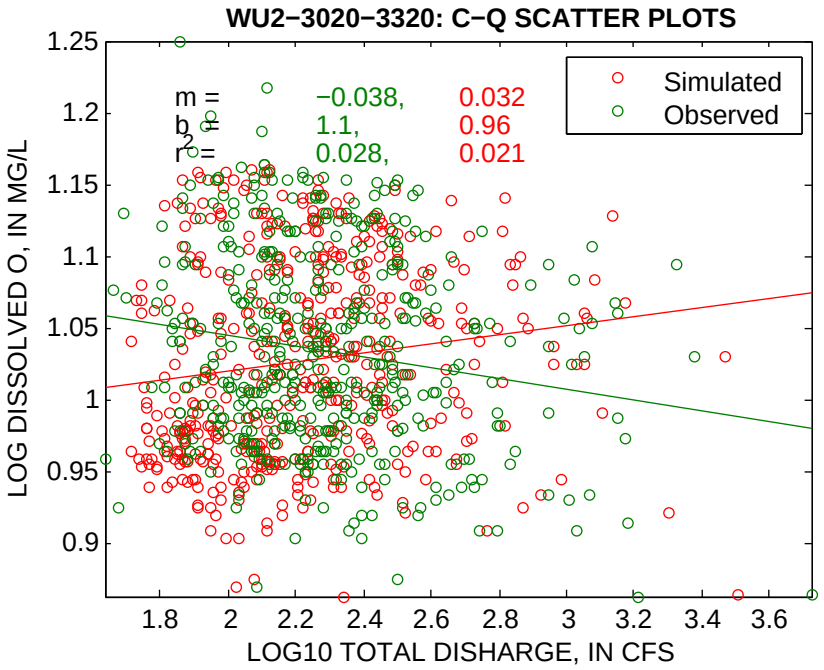
STATISTICS

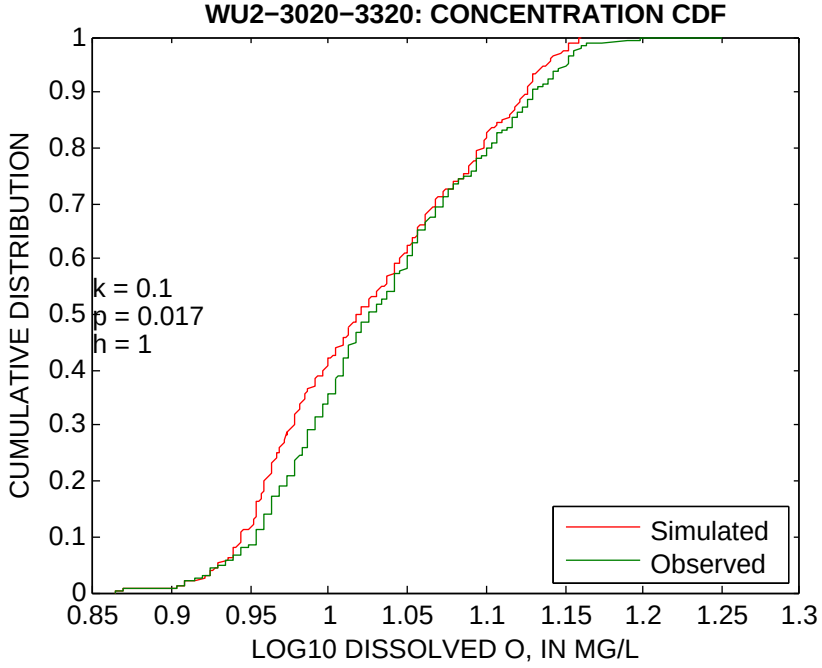
	n	observe	simulate
		469	469
min		7.297	7.6779
		0.863144	0.885242
mean		10.9681	10.6964
		1.03466	1.02346
media		10.6	10.603
		1.02531	1.02543
max		17.8	14.516
		1.25042	1.16185
varian		3.12012	3.07791
		0.00471367	0.00501379
JB		0.001	0.001
		0.014006	0.001
		ra	log
%		-2.47741	-1.08285
err.va		0.871152	0.00145299
rel.std.err		0.279205	0.308251
mod.eff		0.720795	0.691749

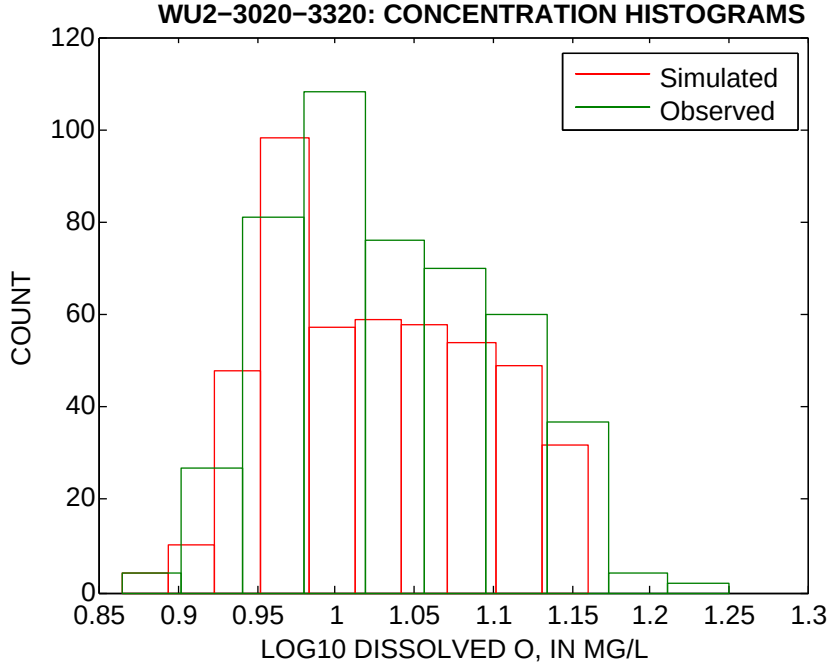
VERSION 2.1

ALL DATA
LOG10

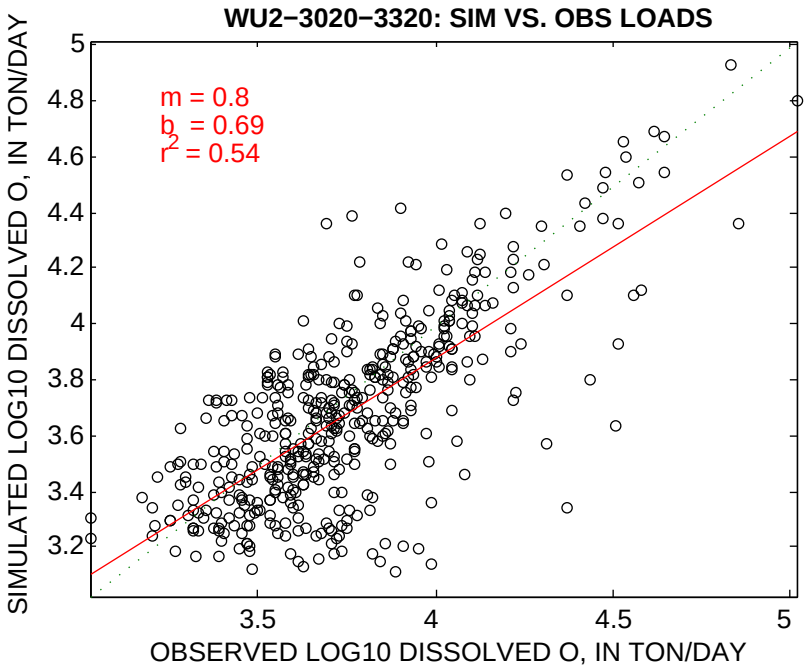


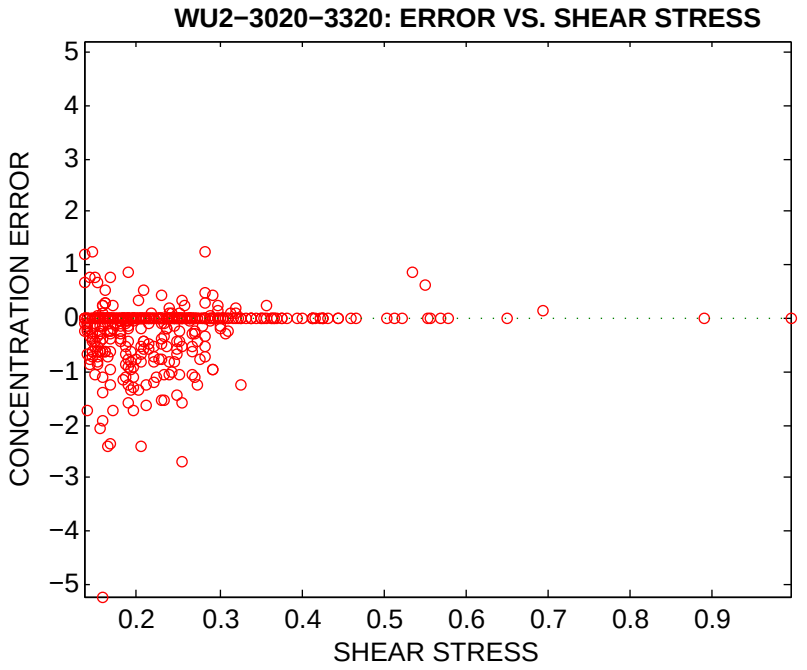


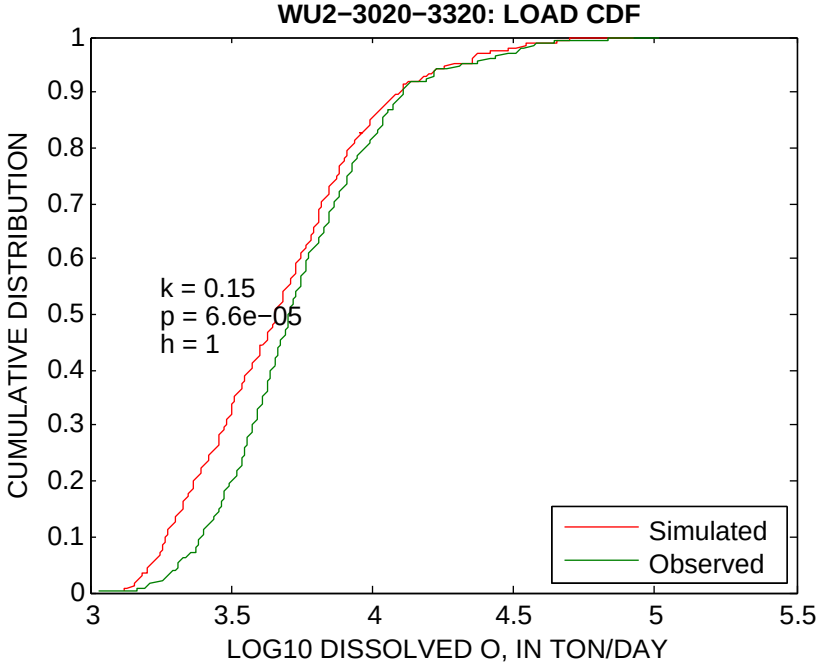


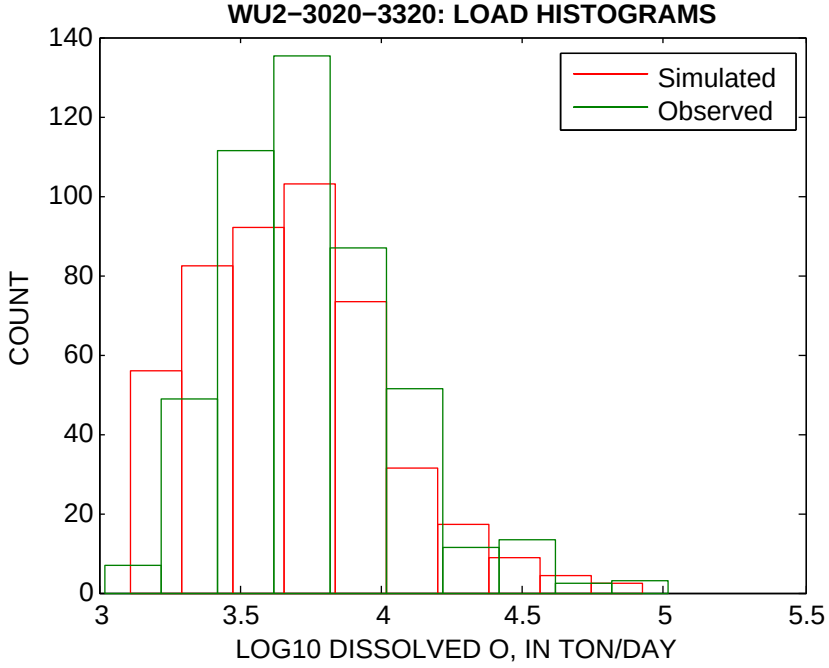


LOAD DATA
LOG10

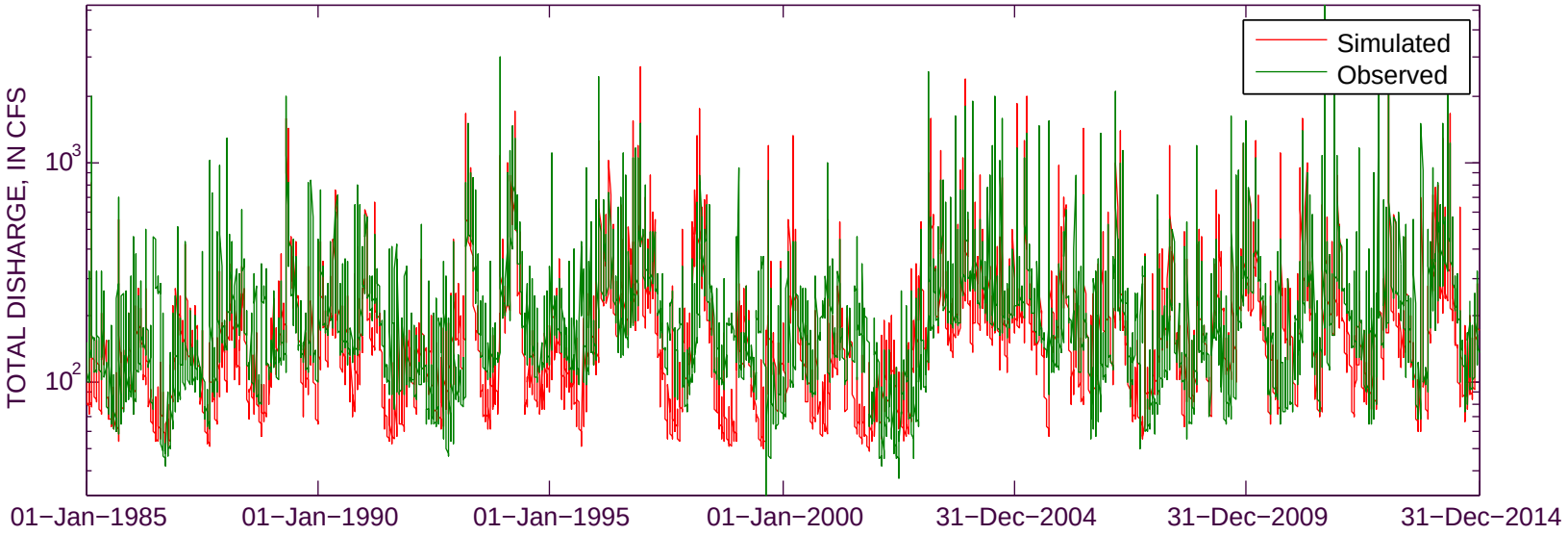




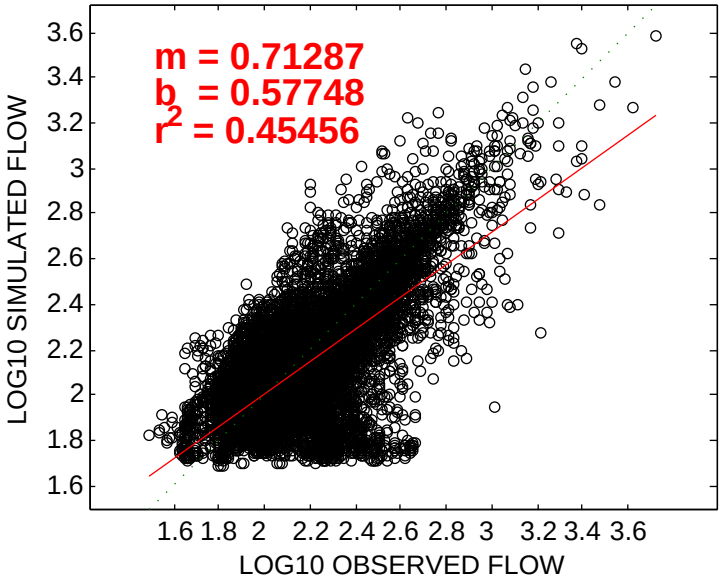




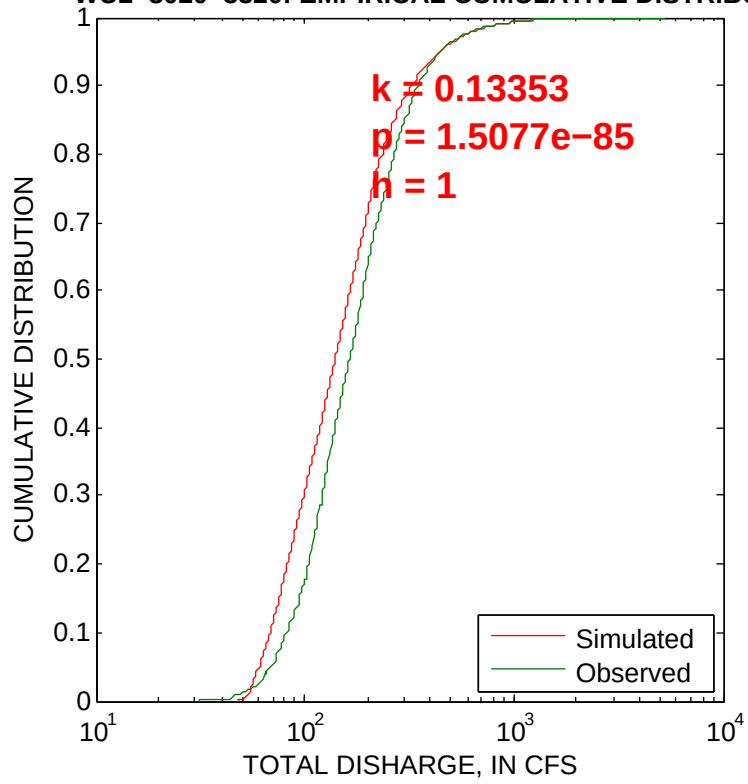
GUNPOWDER FALLS AT GLENCOE, MD: FLOW TIME-SERIES



WU2-3020-3320: SIMULATED VS. OBSERVED



WU2-3020-3320: EMPIRICAL CUMULATIVE DISTRIBUTION



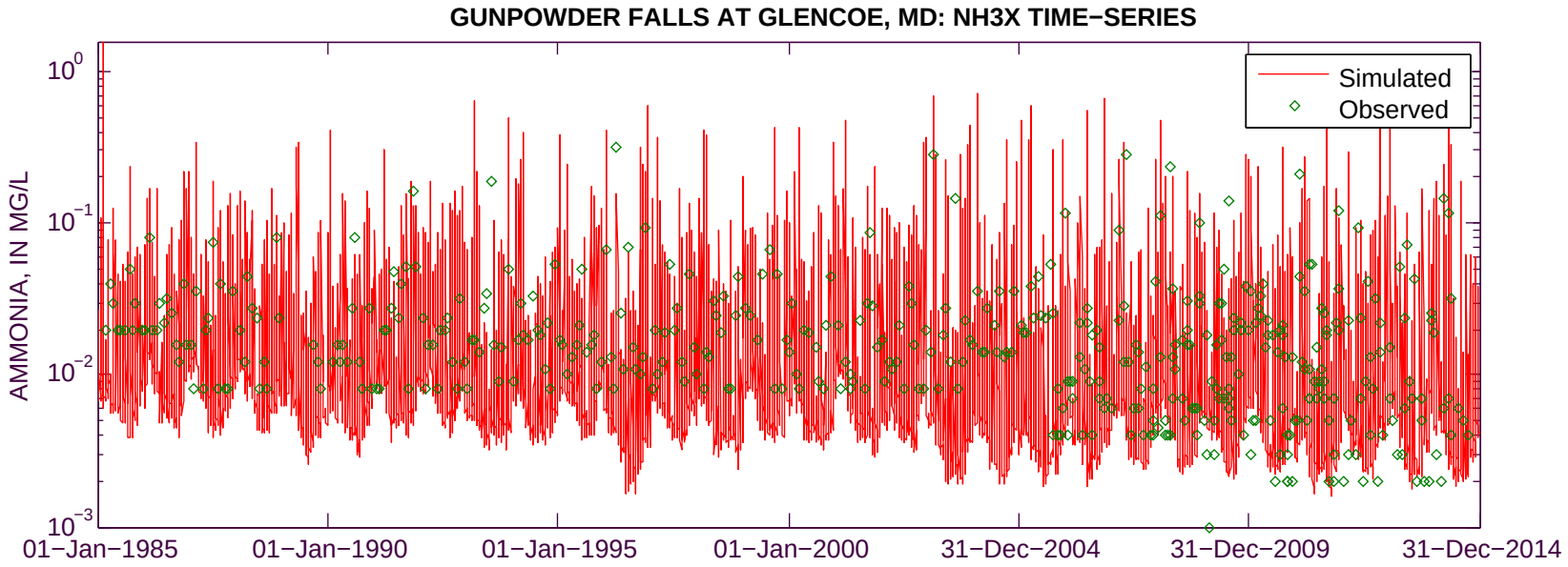
DATA SELECTION

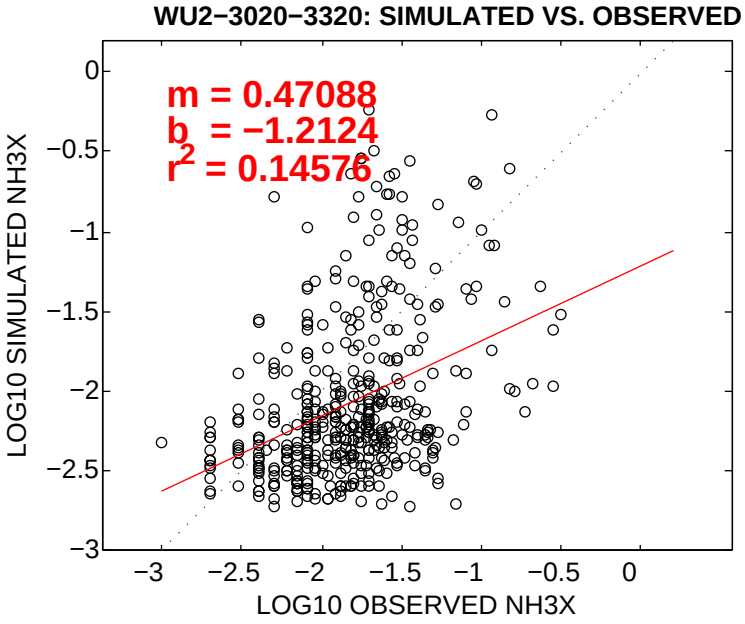
scenario: P620171001WQ
file: _FLOW.calib
plot: FLOW - total discharge
Dates: 1/1/1985 12/31/201
Drive: N/A
Directory: model
Observed: OBS20161101

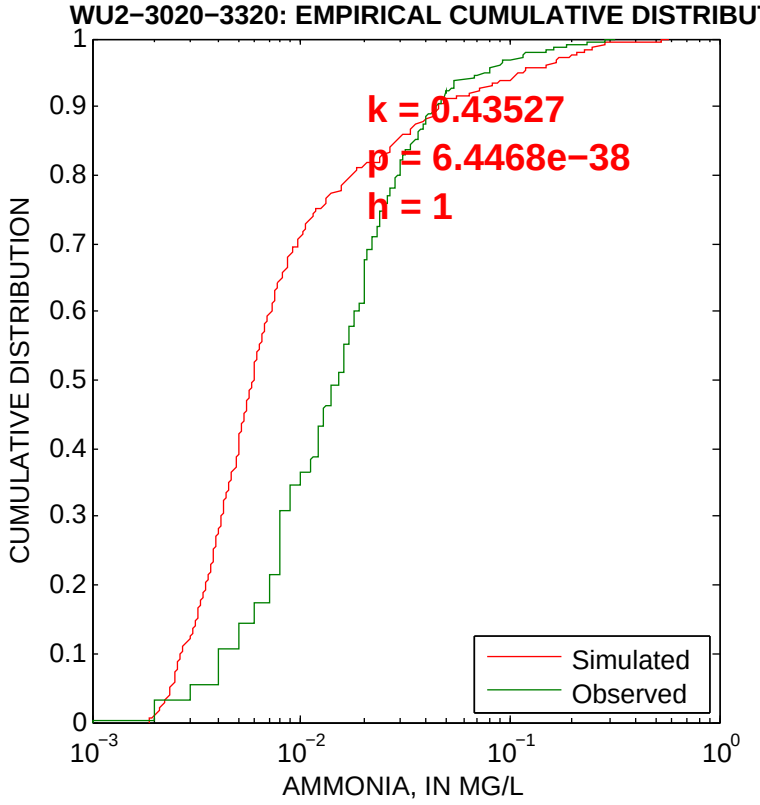
STATISTICS

n	10956	10956
	observe	simulate
min	31	48.281
	1.49136	1.68378
mean	205.513	183.559
	2.22808	2.1658
media	164	140.065
	2.21484	2.14633
max	5290	3866.2
	3.72346	3.58728
varian	32795.9	29813
	0.0647234	0.0723586
JB	0.001	0.001
	0.001	0.001
	ra	log
%	-10.6824	-2.795
err.va	14875.5	0.0486818
rel.std.err	0.453578	0.752152
mod.eff	0.546422	0.247848

VERSION 2.1







DATA SELECTION

scenario	file
P620171001WQ	NH3X.calib

plot: NH3X - ammonia

Dates: 1/1/1985 – 12/31/201

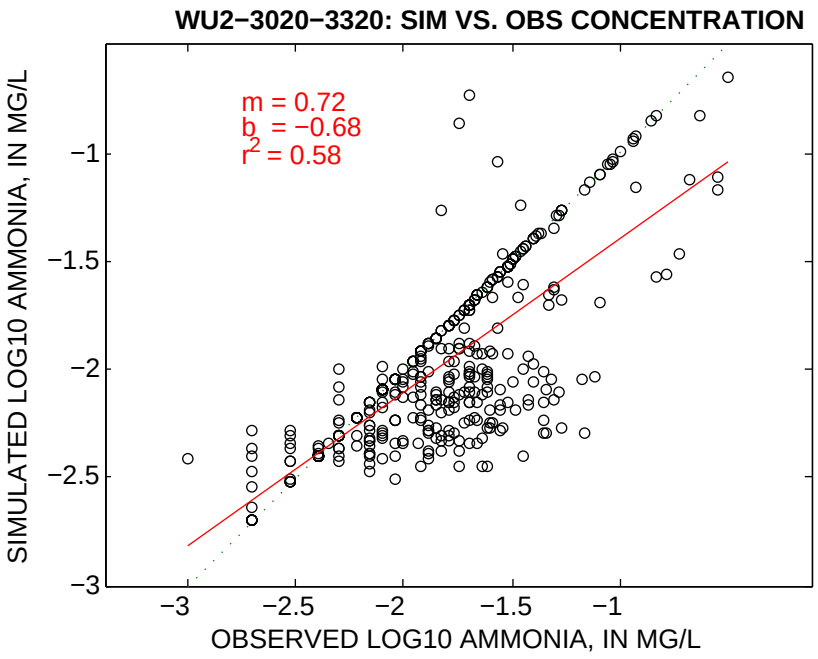
Drive	Directory	Observed
N/A	model	OBS20161101

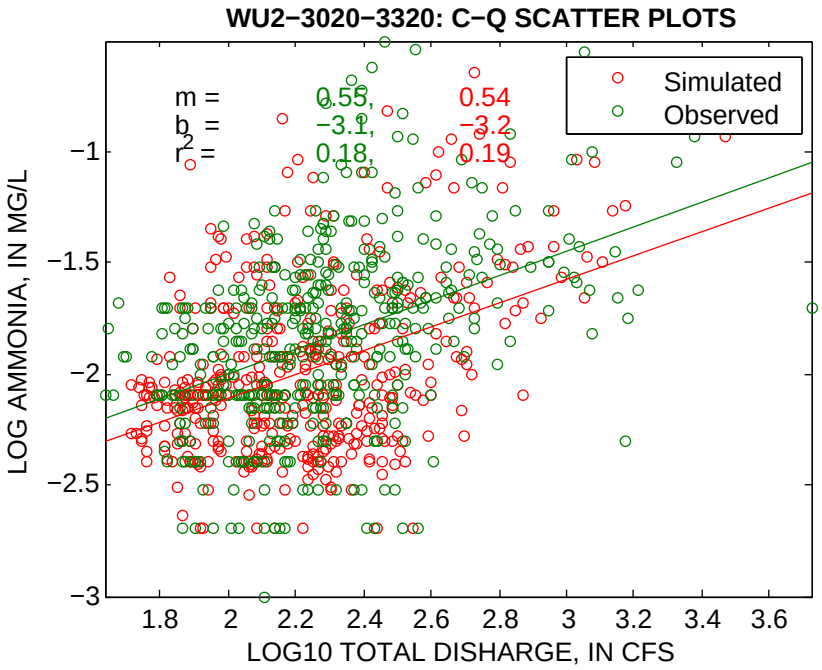
STATISTICS

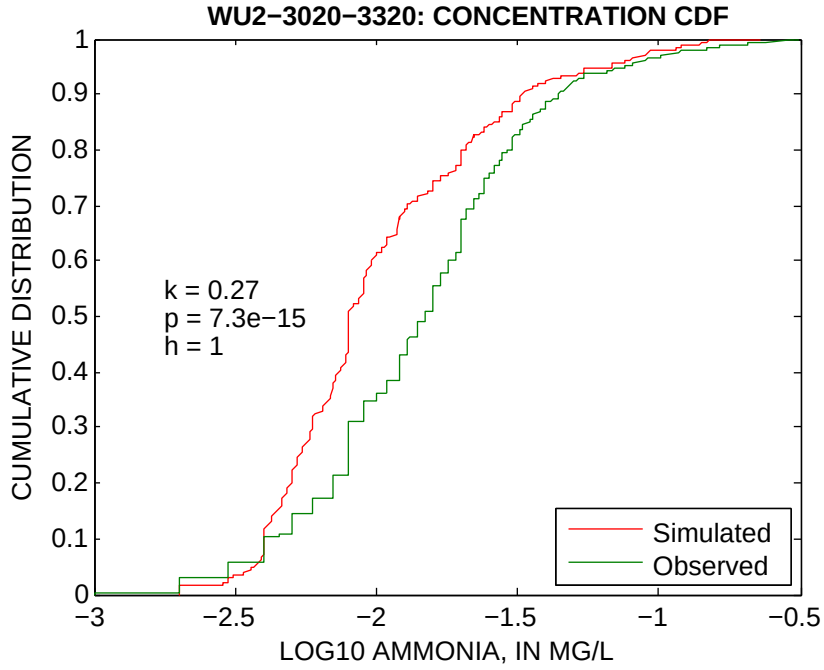
	n	448	448
		observe	simulate
min		0.001	0.0018848
		-3	-2.72473
mean		0.0237991	0.0230773
		-1.83774	-2.07776
media		0.015	0.00591865
		-1.82391	-2.22778
max		0.316	0.57962
		-0.500313	-0.236857
varian		0.00123487	0.00328049
		0.165597	0.2519
JB		0.001	0.001
		0.008560	0.001
		ra	log
%		-3.03279	13.0602
err.va		0.00376283	0.319279
rel.std.err		3.04715	1.92805
mod.eff		-2.04715	-0.928051

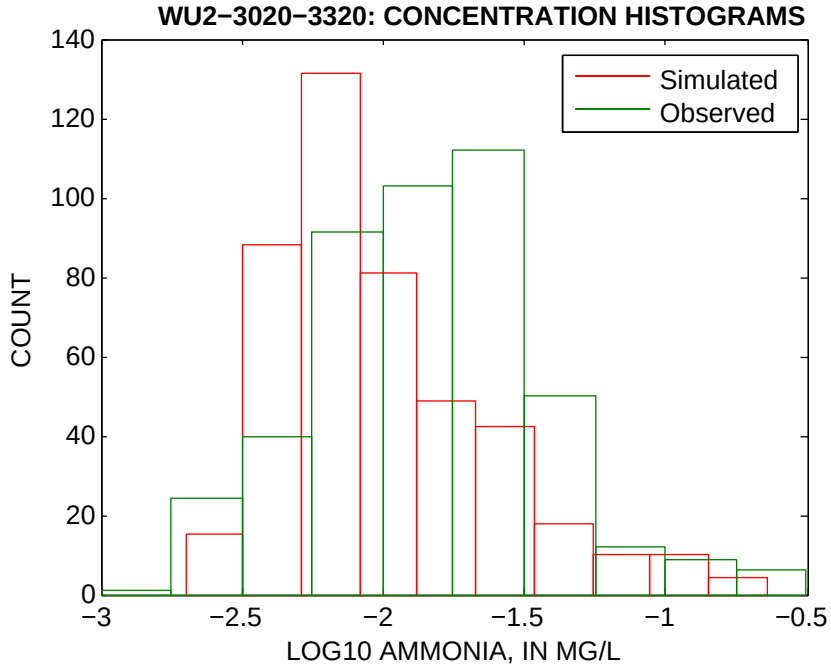
VERSION 2.1

ALL DATA
LOG10

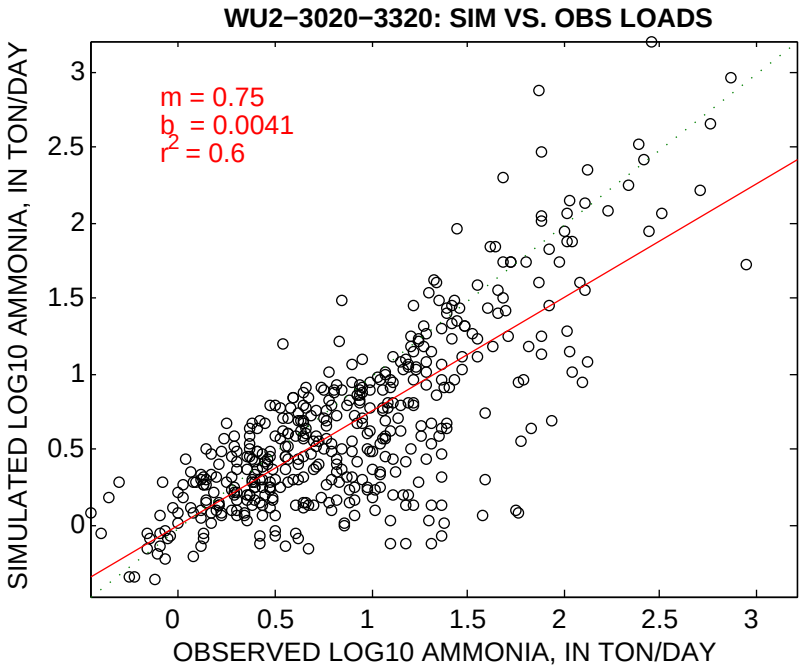


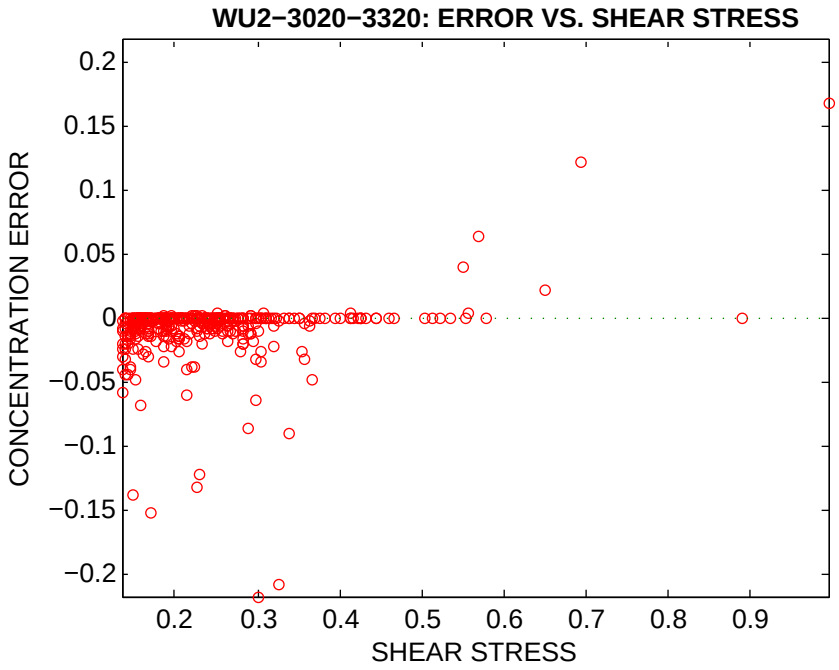


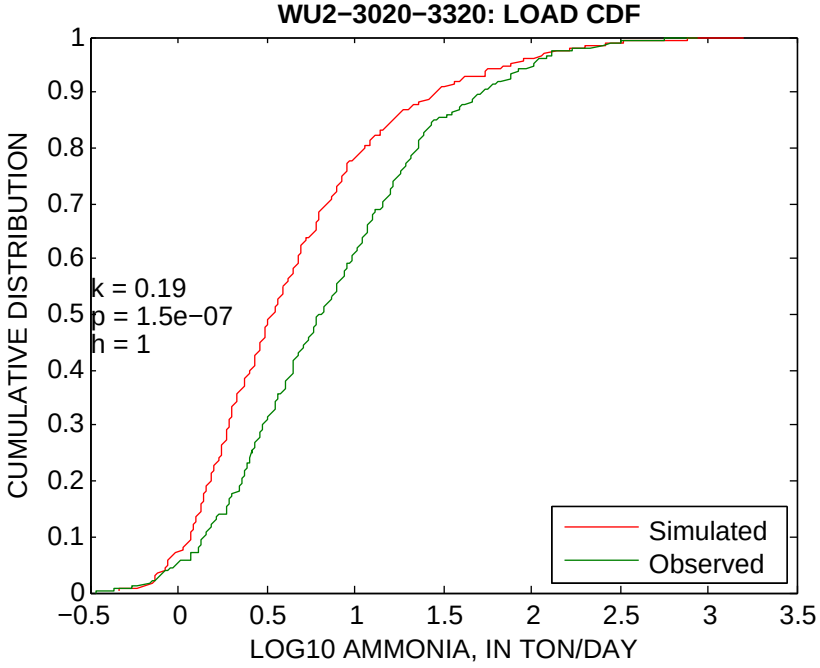


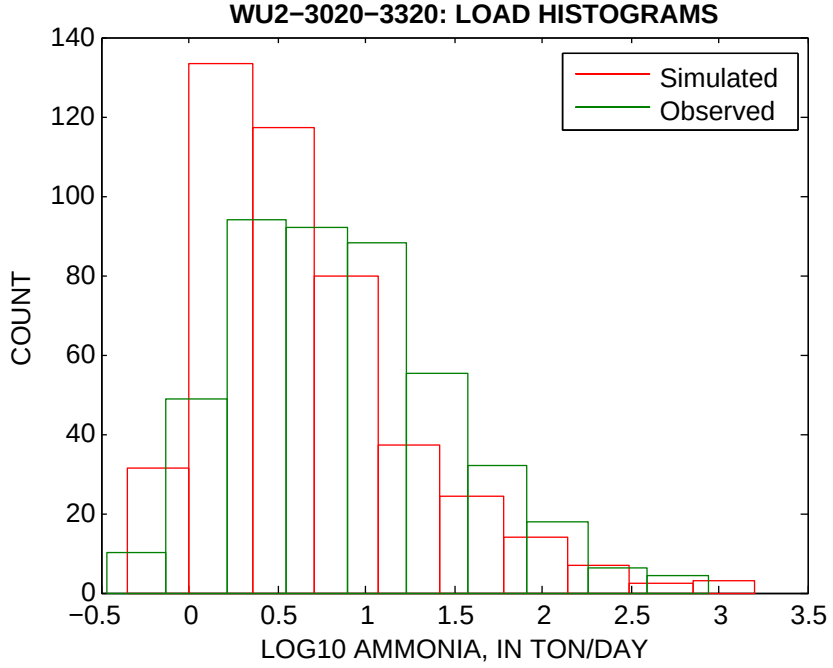


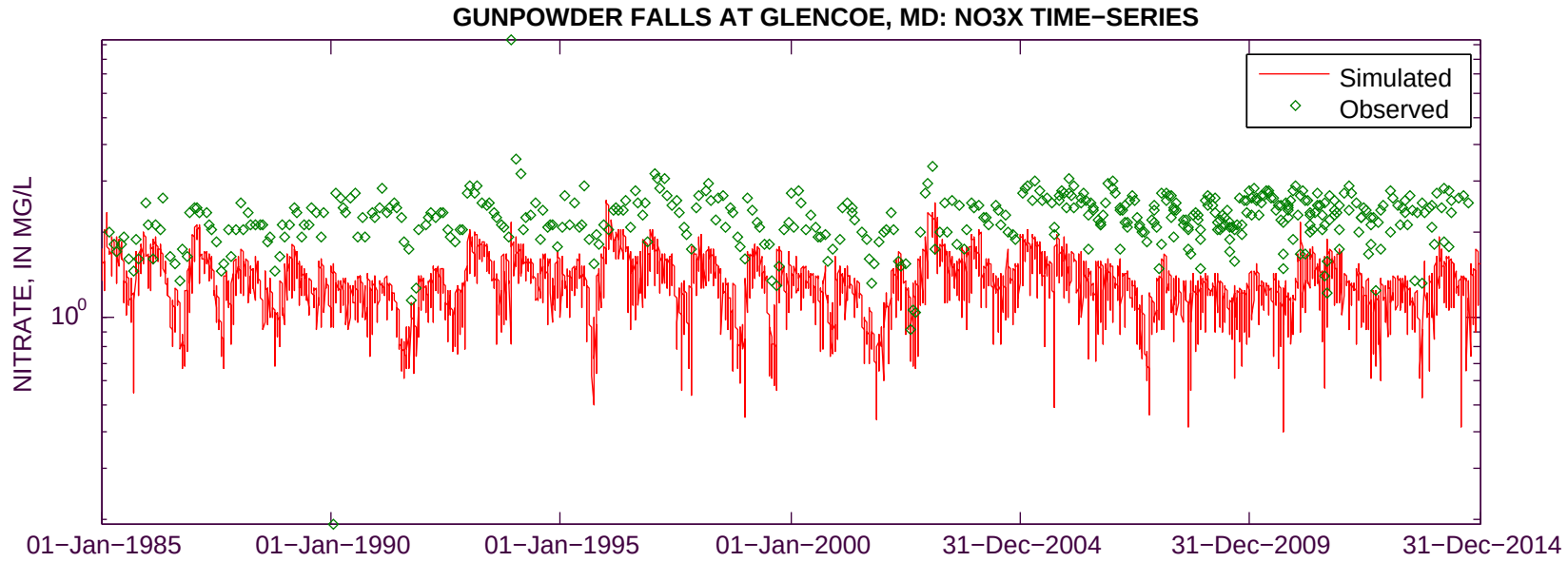
LOAD DATA
LOG10

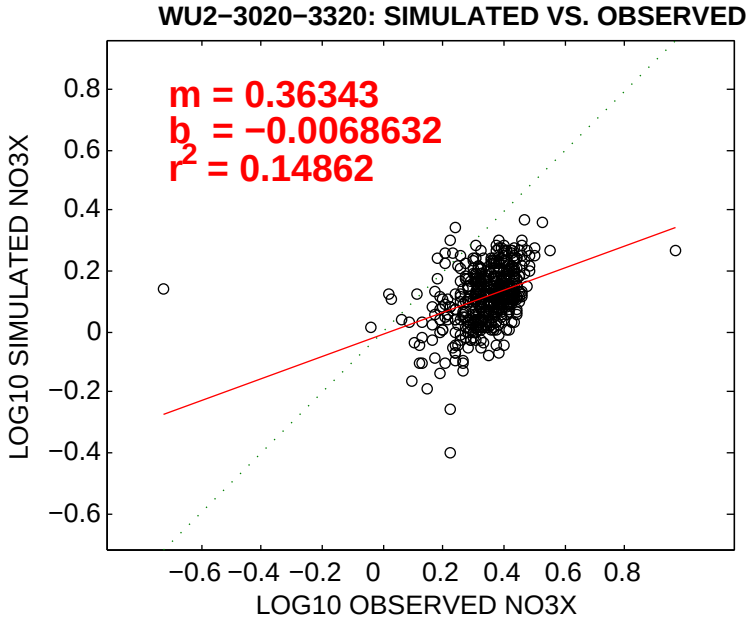


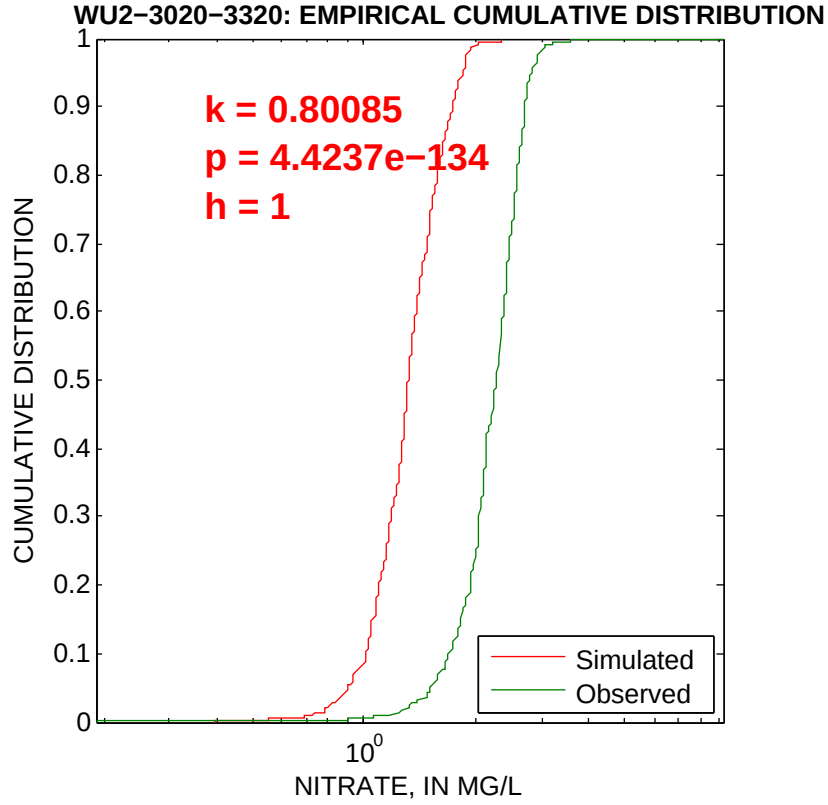












DATA SELECTION

scenario	file
P620171001WQ	NO3X.calib

plot: NO3X - nitrate

Dates: 1/1/1985 – 12/31/201

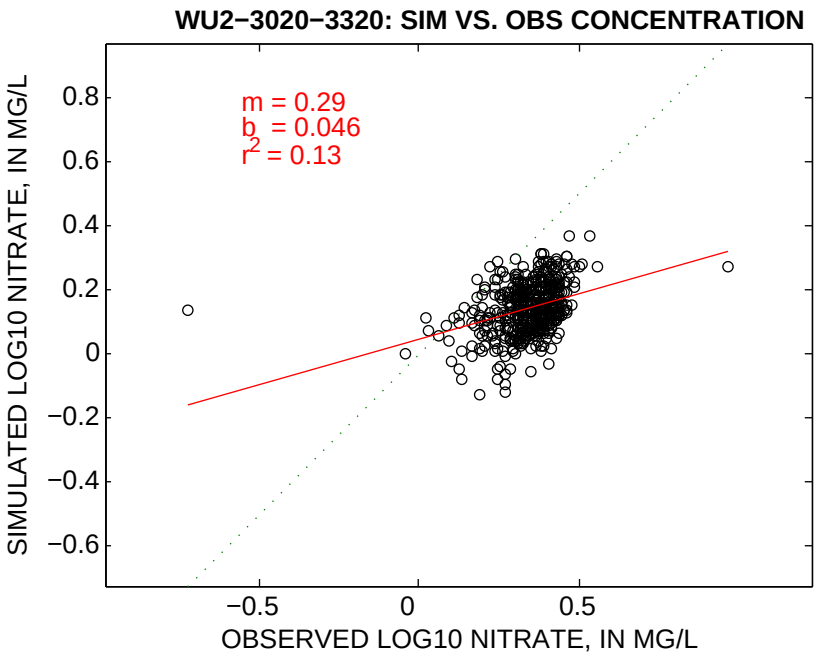
Drive	Directory	Observed
N/A	model	OBS20161101

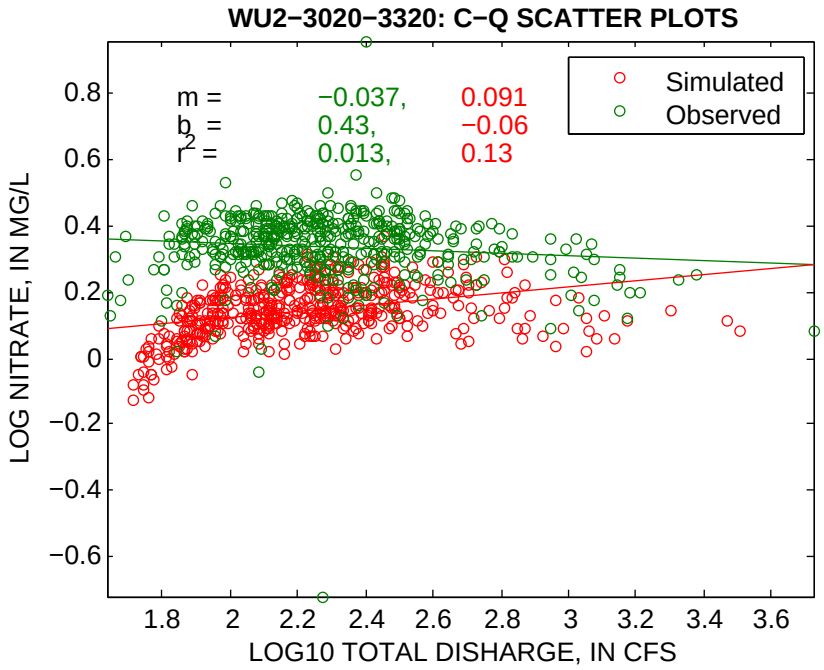
STATISTICS

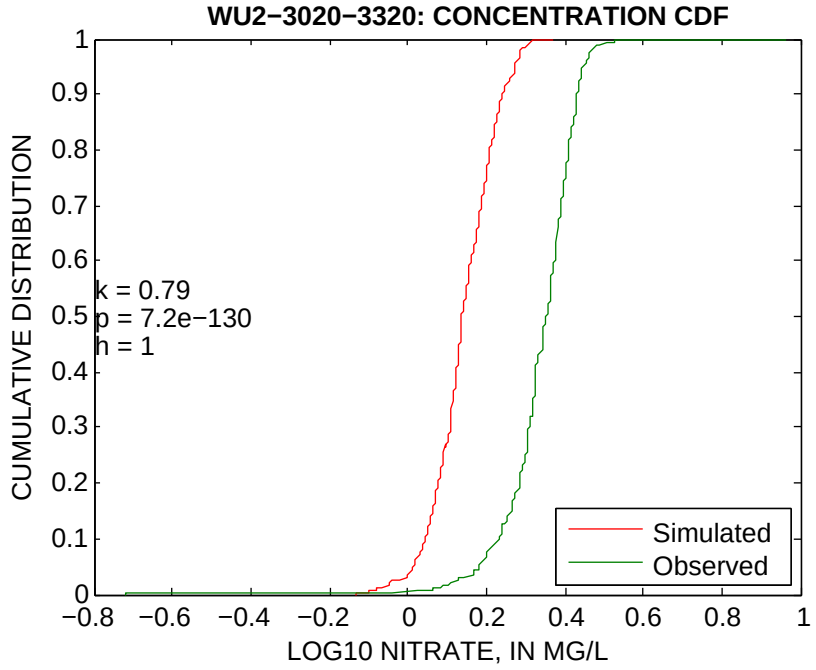
	n	472	472
		observe	simulate
min		0.19	0.39942
		-0.721246	-0.39857
mean		2.24401	1.33931
		0.340499	0.116886
media		2.2655	1.31535
		0.355162	0.11904
max		9.18	2.3258
		0.962843	0.366572
varian		0.269092	0.0793307
		0.0101884	0.00905465
JB		0.001	0.025866
		0.001	0.001
		ra	log
%		-40.316	-65.6722
err.va		1.05381	0.0619463
rel.std.err		3.91616	6.08011
mod.eff		-2.91616	-5.08011

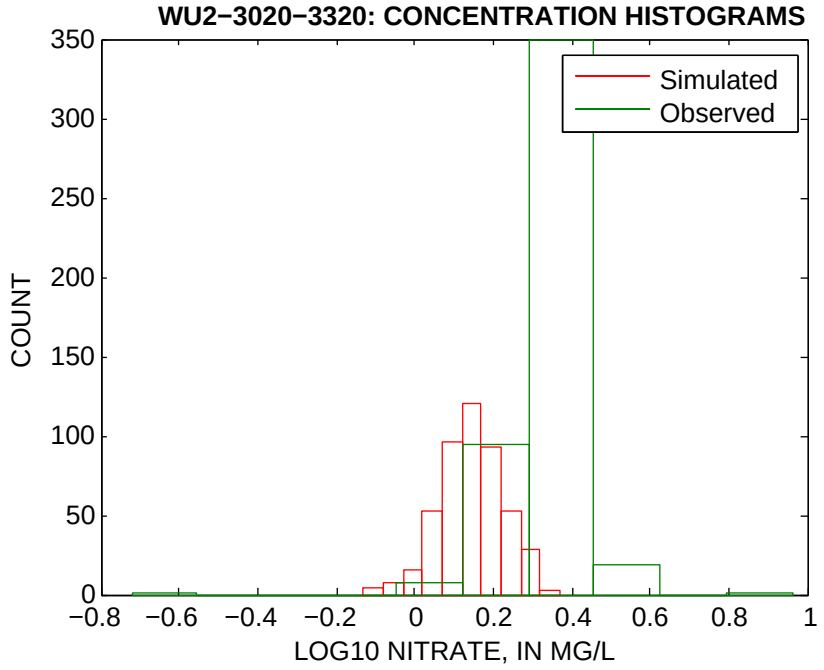
VERSION 2.1

ALL DATA
LOG10

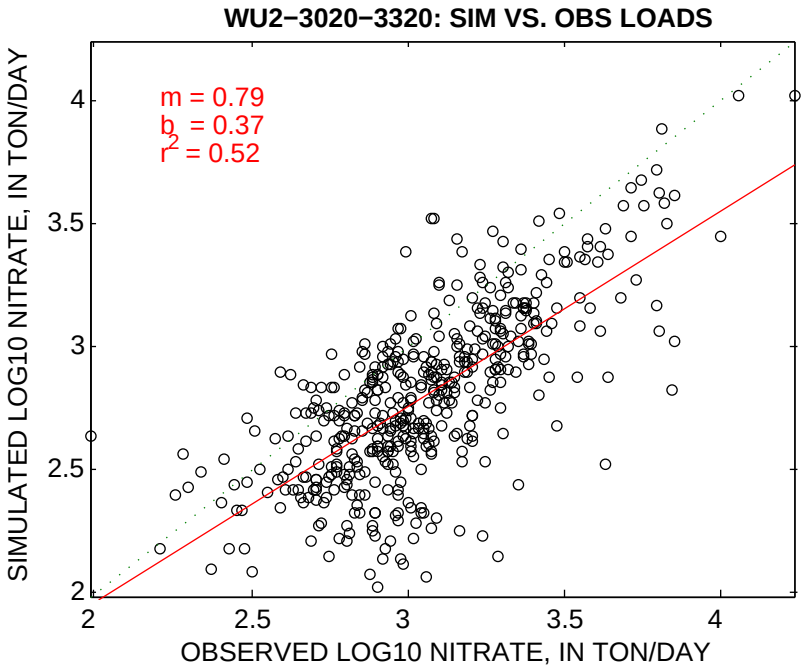


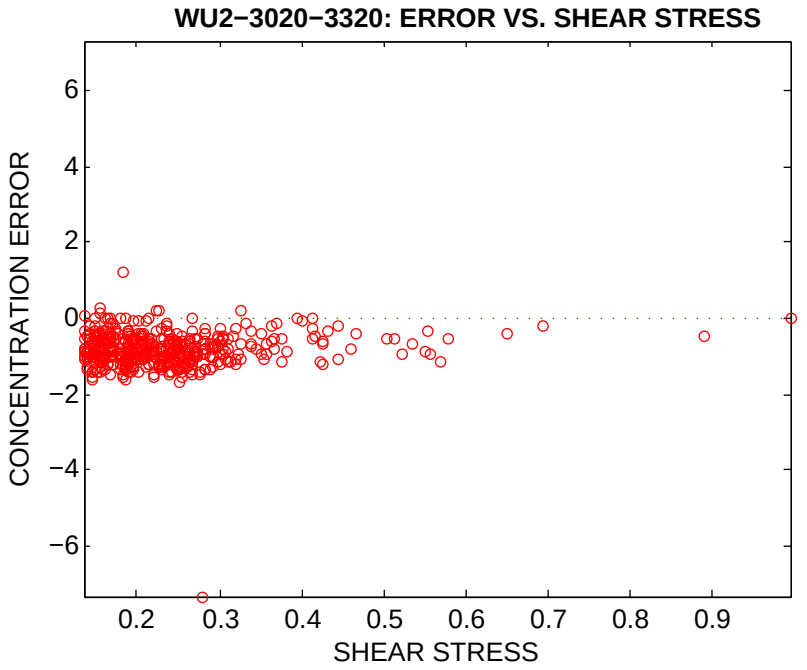


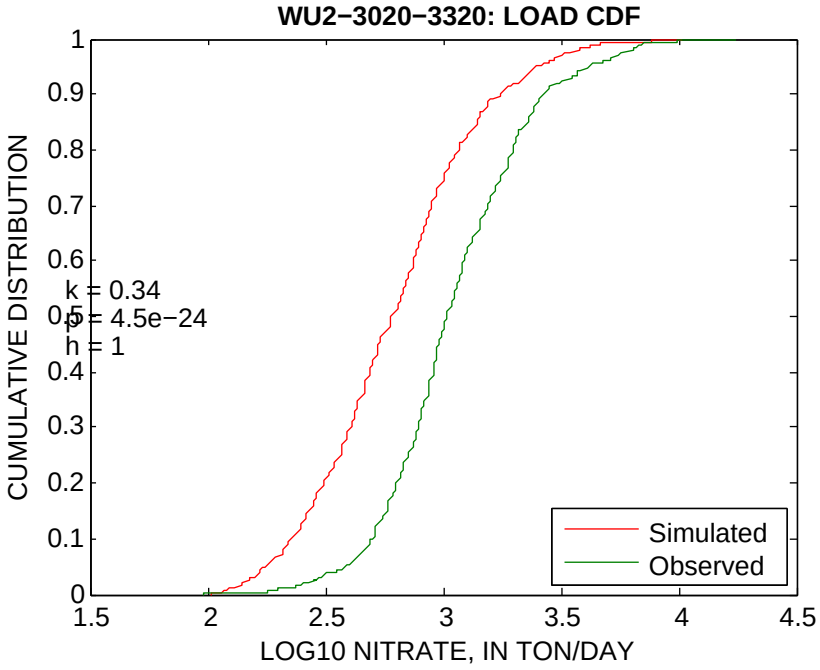


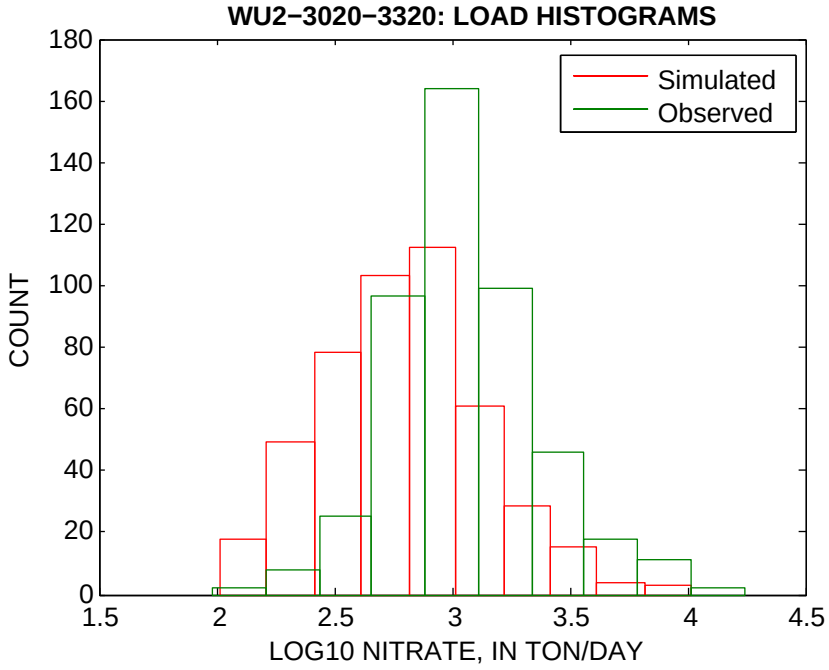


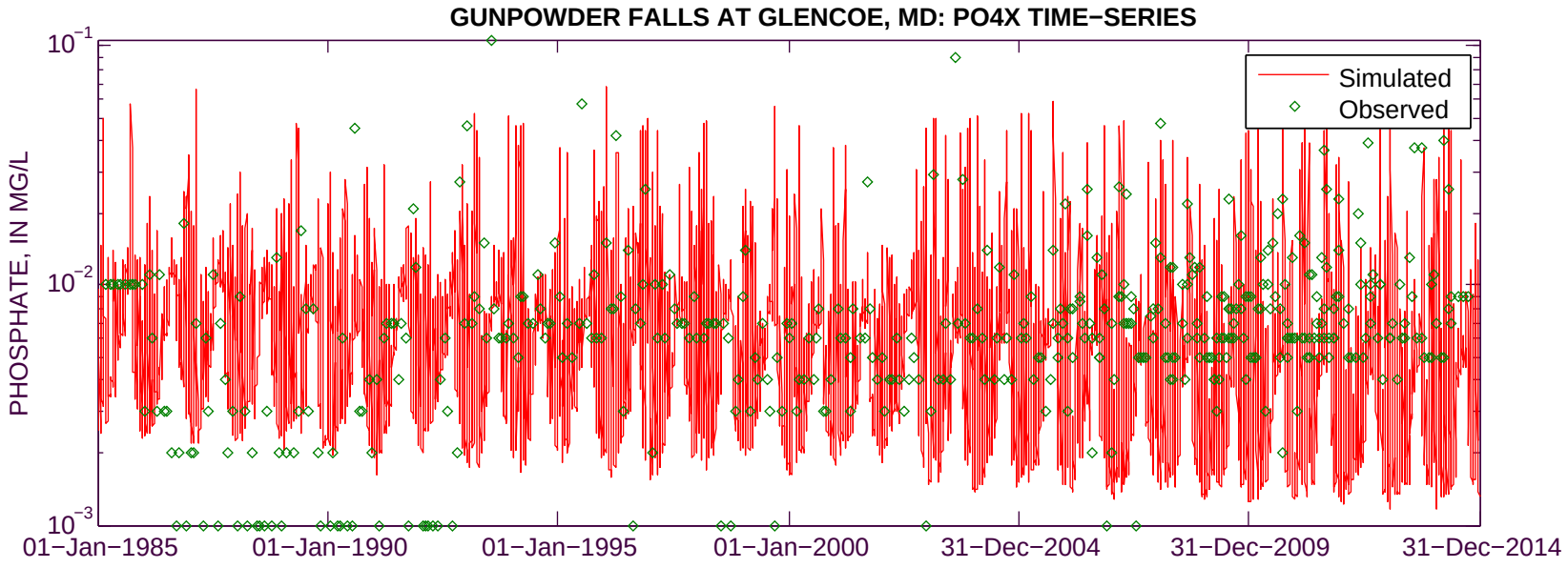
LOAD DATA
LOG10

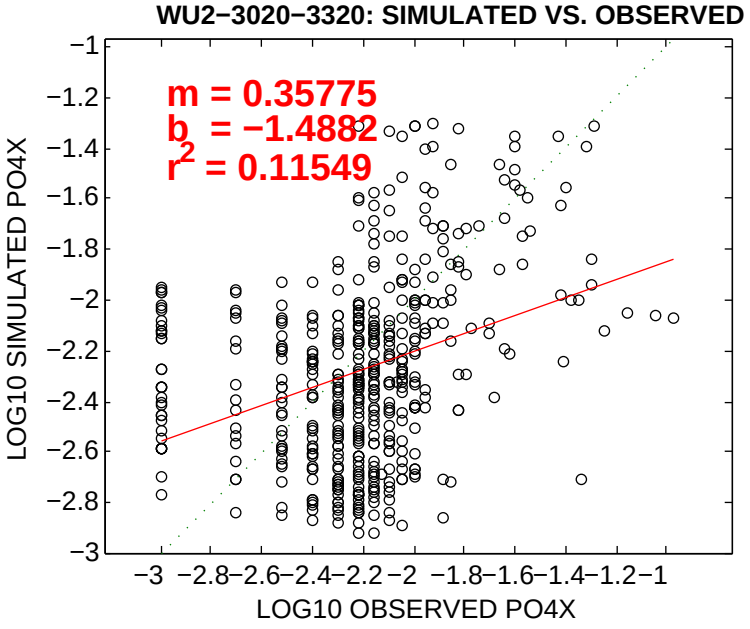


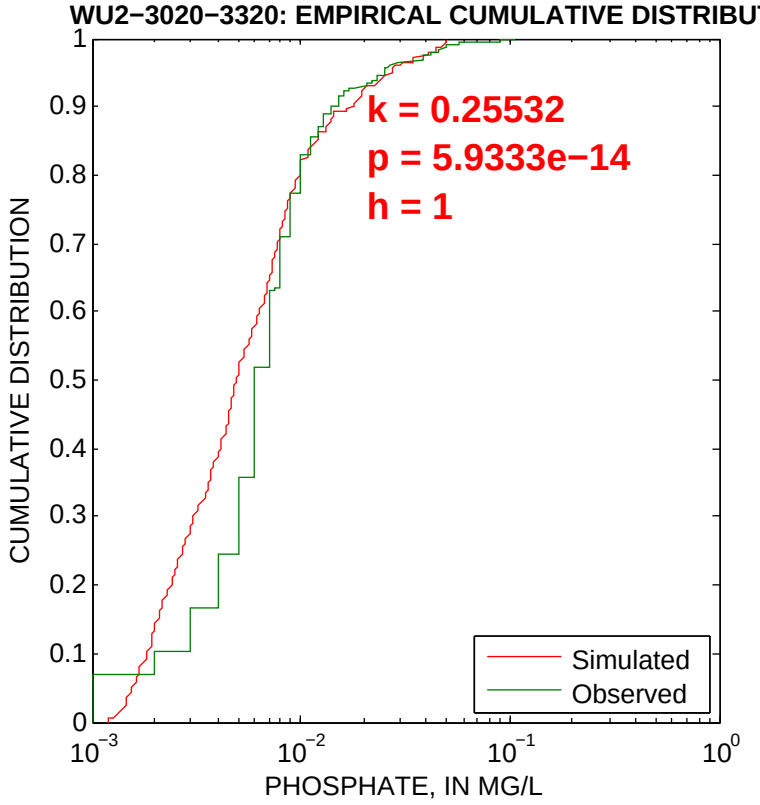












DATA SELECTION

scenario: P620171001WQ | file: PO4X.calib

plot: PO4X - phosphate

Dates: 1/1/1985 – 12/31/201

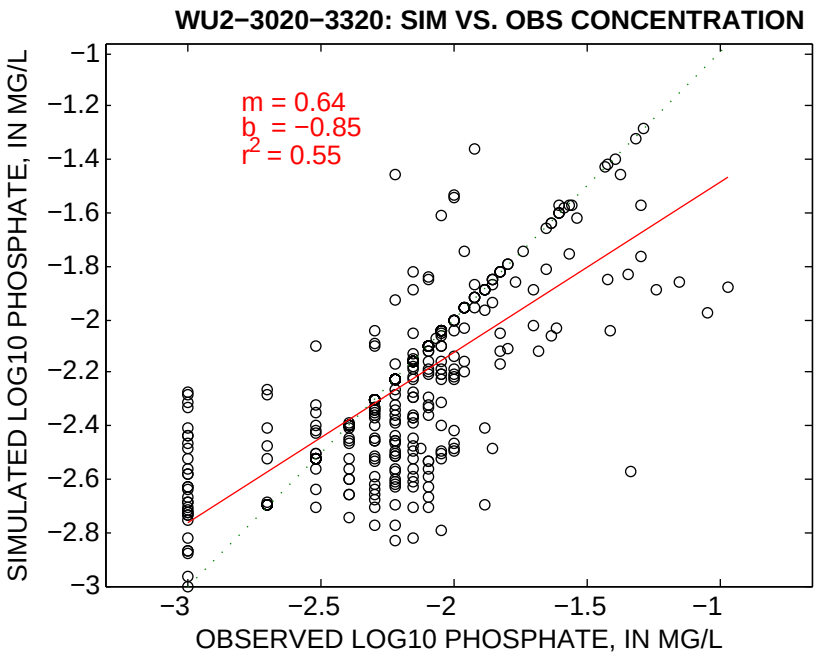
Drive: N/A | Directory: model | Observed: OBS20161101

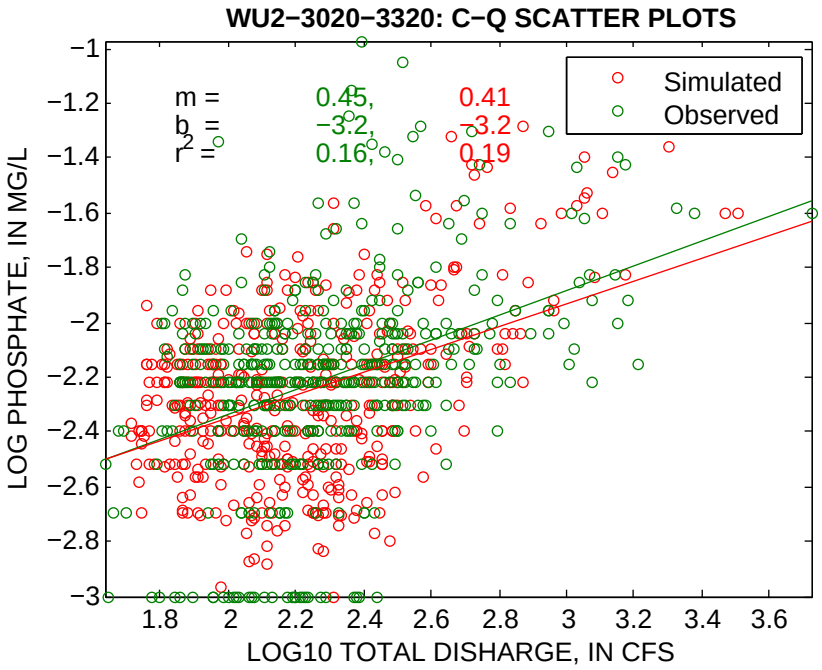
STATISTICS

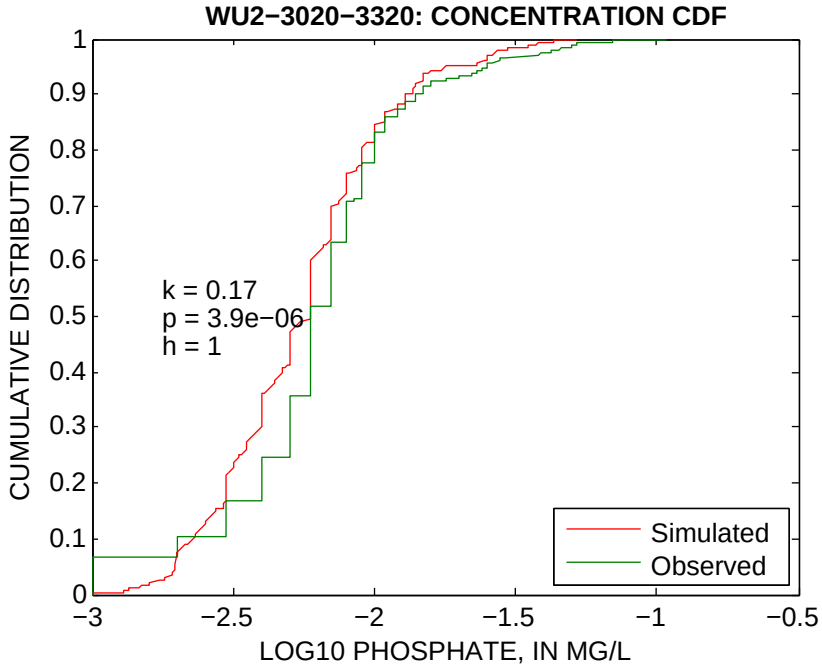
n	470	470
	observe	simulate
min	0.001	0.0011887
	-3	-2.92493
mean	0.00873403	0.00784127
	-2.20554	-2.27724
media	0.006	0.0049081
	-2.22185	-2.30909
max	0.107	0.049526
	-0.970616	-1.30517
varian	0.00010413	7.78862e-0
	0.119828	0.132787
JB	0.001	0.001
	0.001	0.001
	ra	log
%	-10.2216	3.2507
err.va	0.00012215	0.172029
rel.std.err	1.17307	1.43564
mod.eff	-0.173075	-0.435638

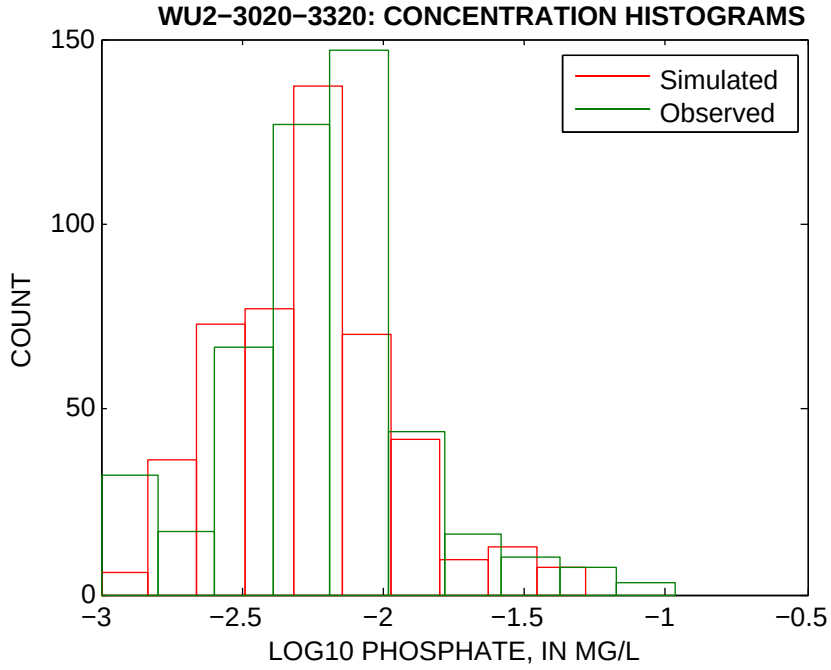
VERSION 2.1

ALL DATA
LOG10

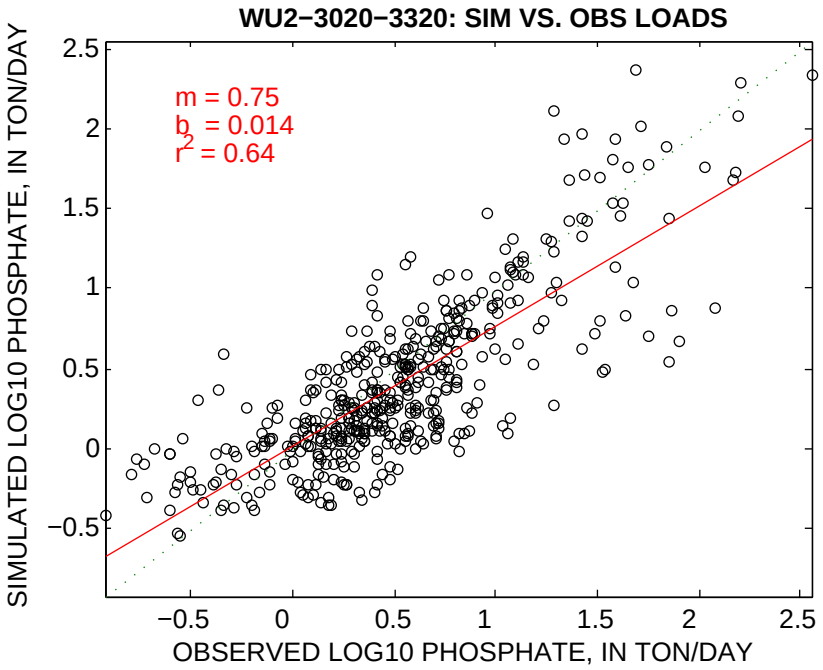


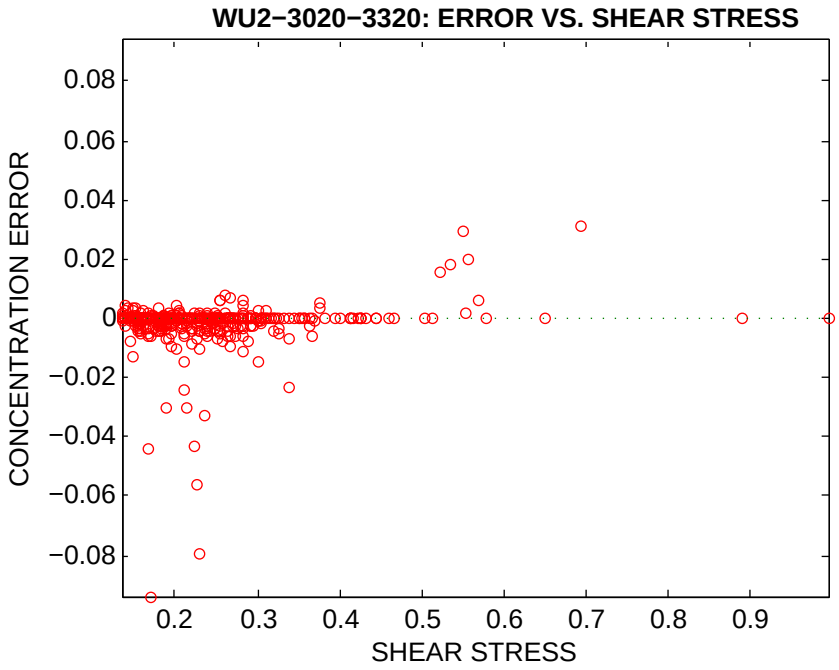


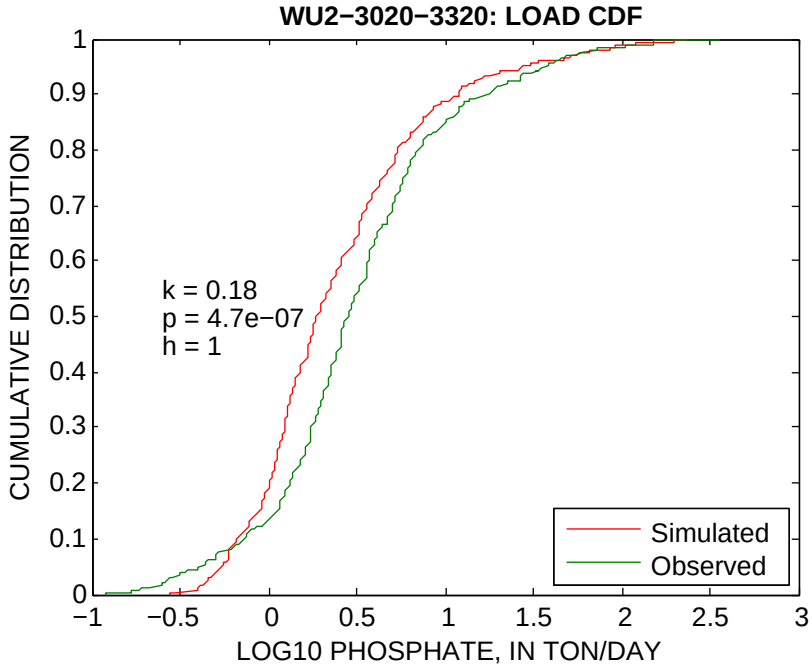


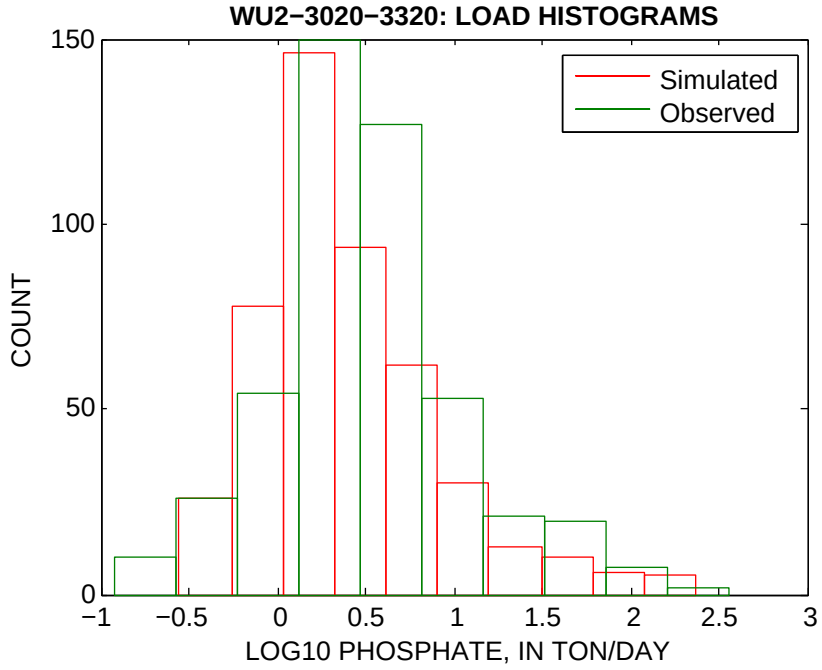


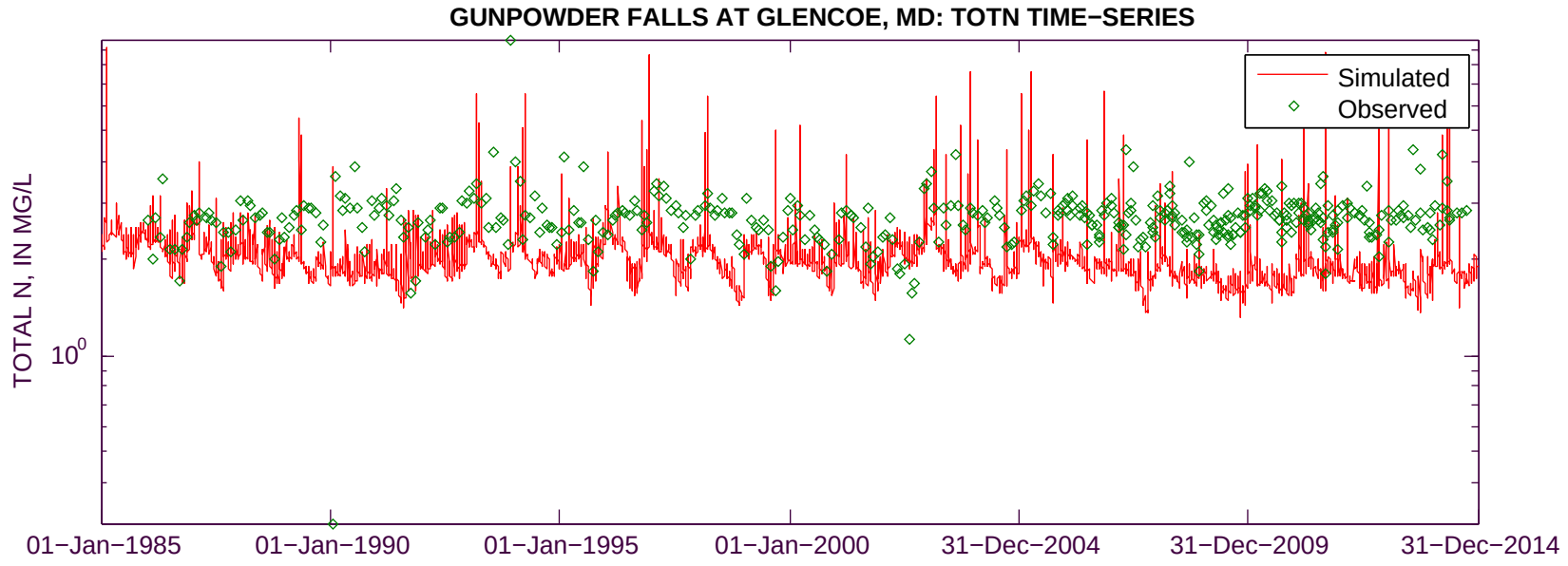
LOAD DATA
LOG10

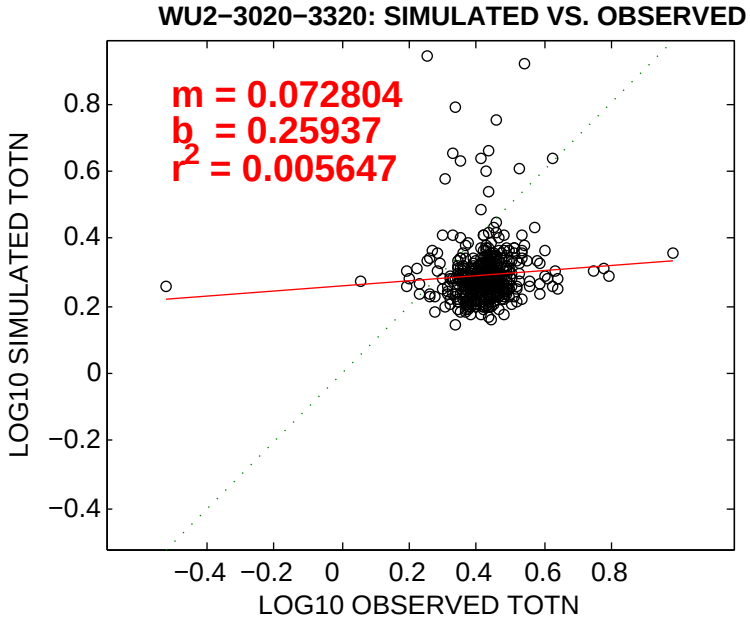


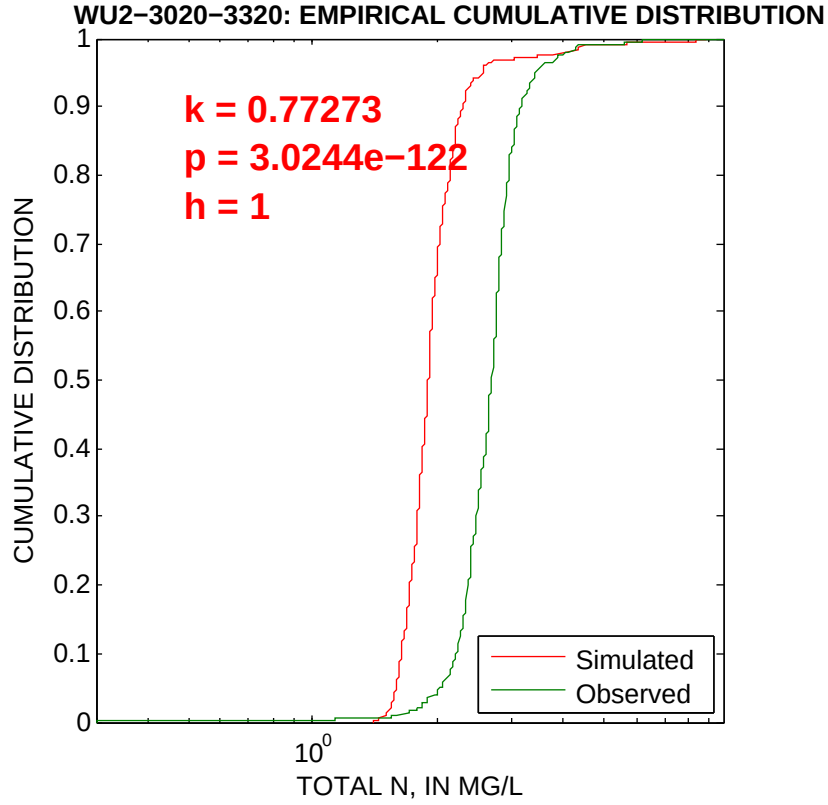












DATA SELECTION

scenario	file
P620171001WQ	TOTN.calib

plot: TOTN - total nitrogen

Dates: 1/1/1985 – 12/31/201

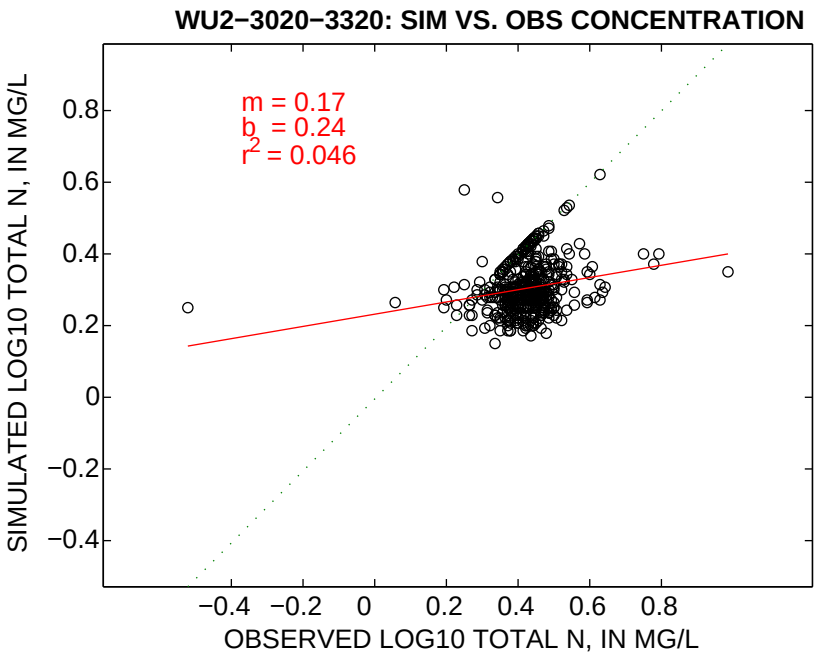
Drive	Directory	Observed
N/A	model	OBS20161101

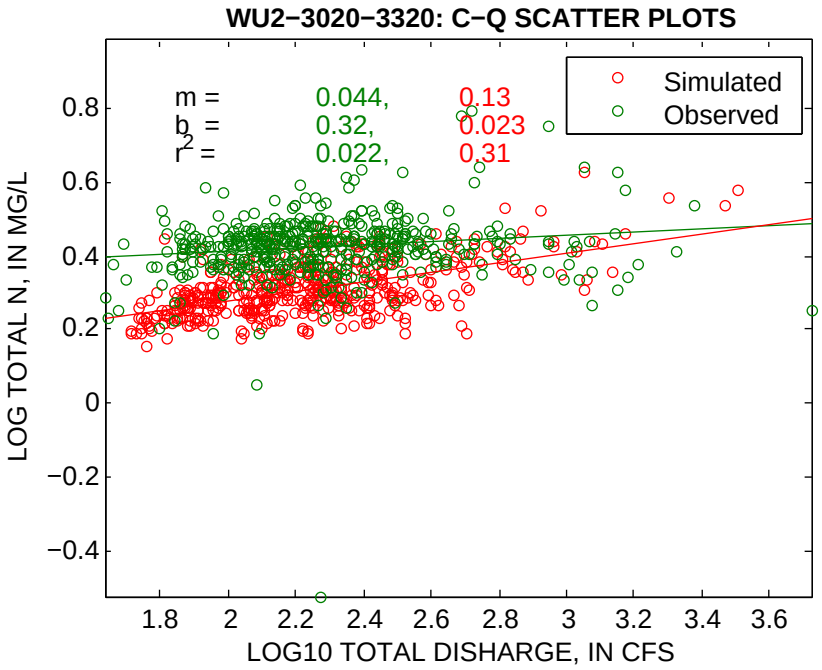
STATISTICS

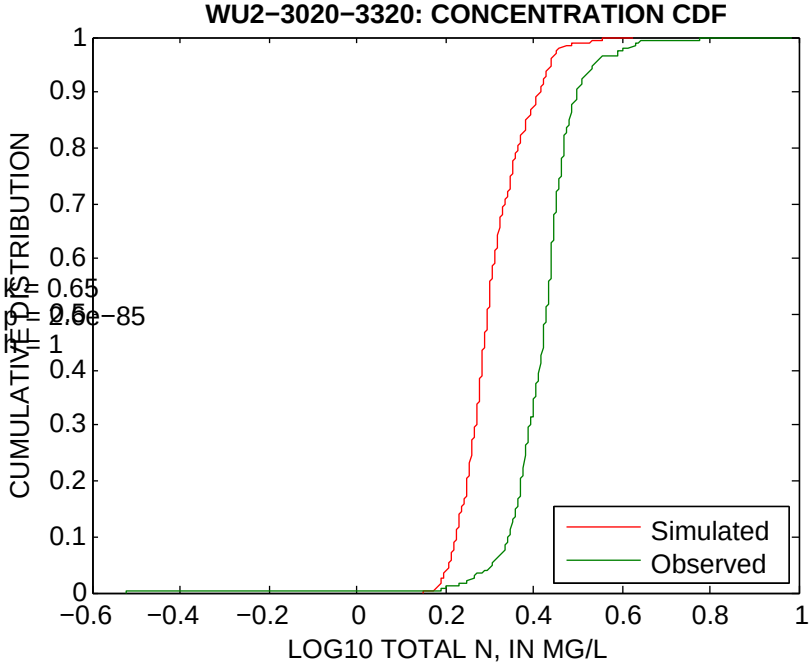
	observe	simulate
n	462	462
min	0.3	1.4012
	-0.522879	0.1465
mean	2.71284	2.00381
	0.424324	0.290259
media	2.694	1.89385
	0.430398	0.277346
max	9.67	8.7605
	0.985426	0.942529
varian	0.369313	0.407999
	0.00825916	0.00775223
JB	0.001	0.001
	0.001	0.001
	ra	log
%	-26.136	-31.595
err.va	1.24544	0.0328212
rel.std.err	3.3723	3.97392
mod.eff	-2.3723	-2.97392

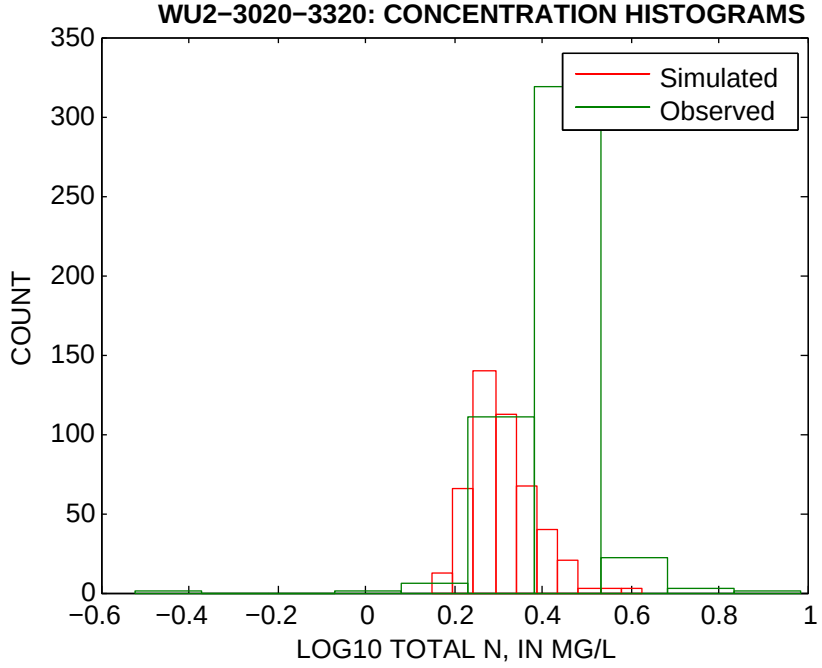
VERSION 2.1

ALL DATA
LOG10

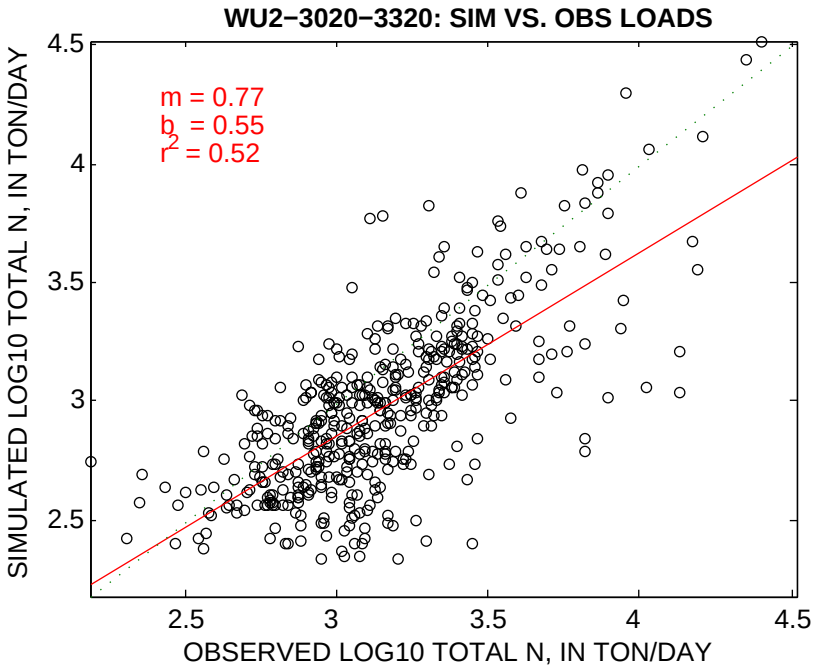


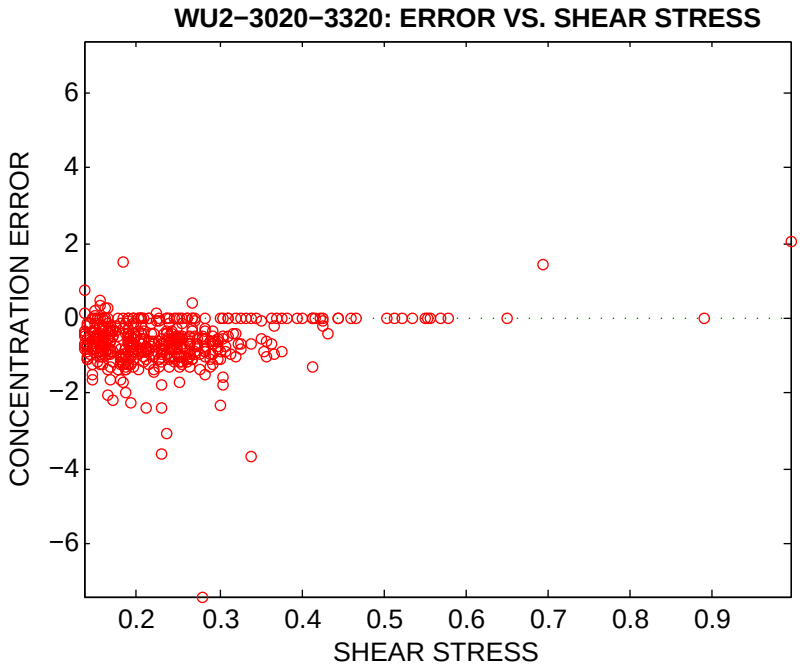


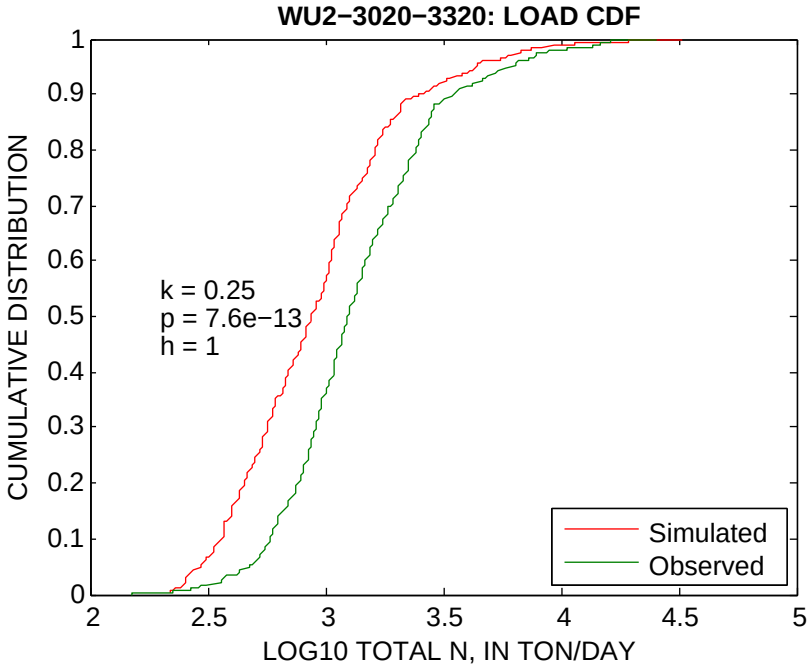


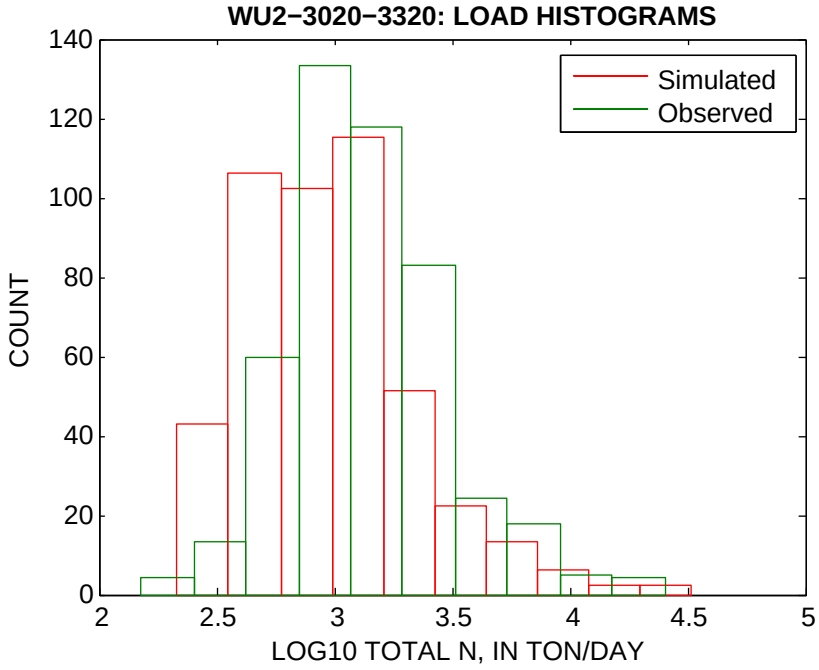


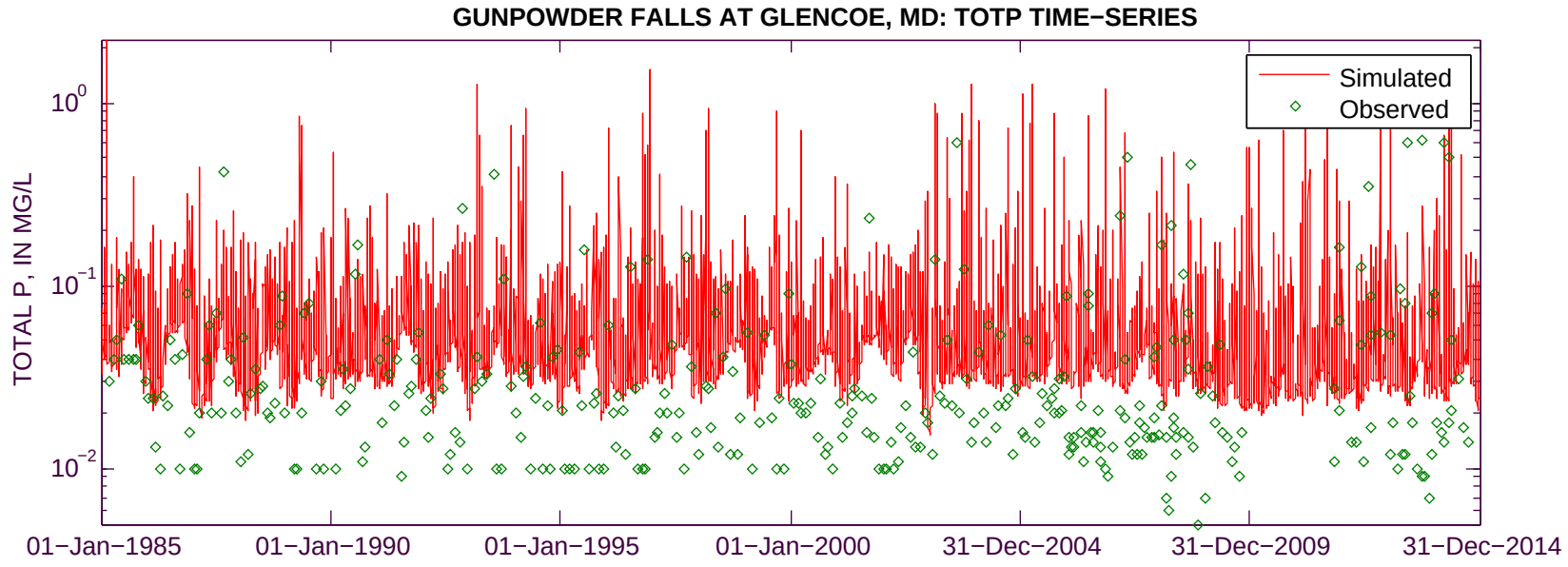
LOAD DATA
LOG10

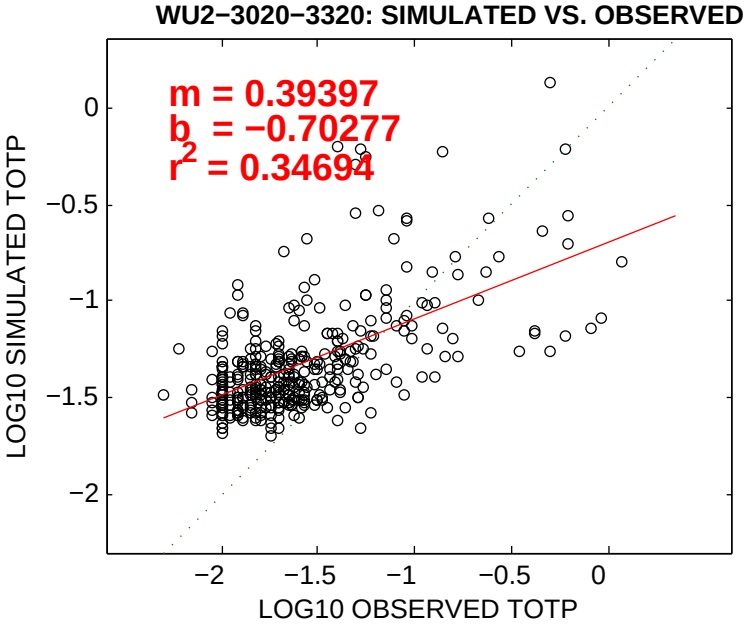


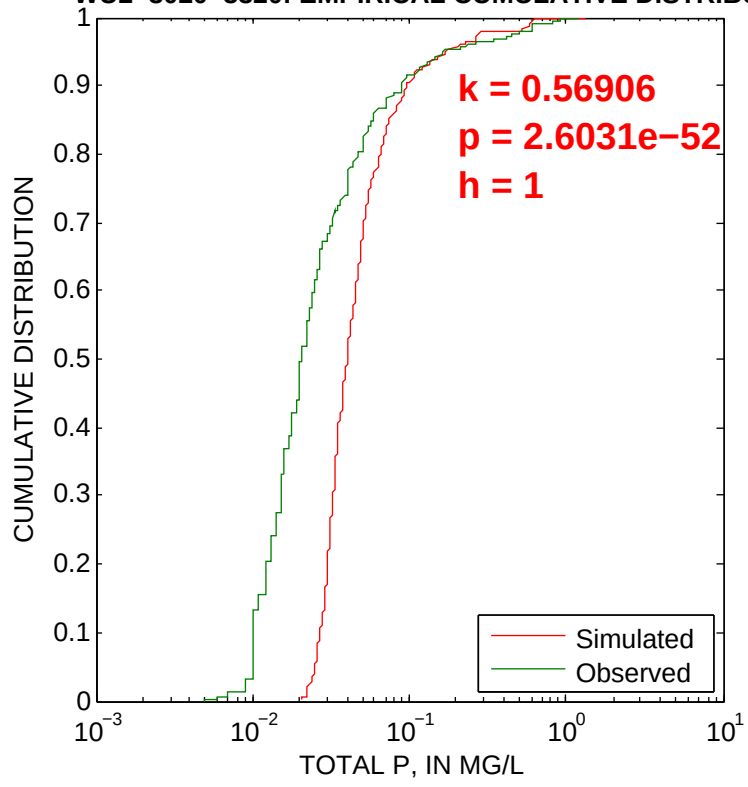












DATA SELECTION

scenario	file
P620171001WQ	TOTP.calib

plot: TOTP - total phosphorus

Dates: 1/1/1985 – 12/31/201

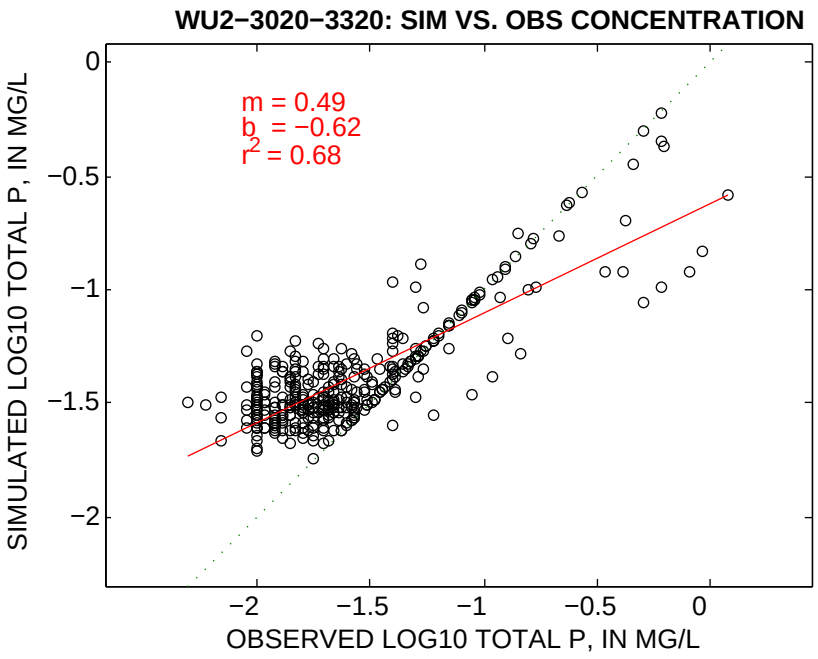
Drive	Directory	Observed
N/A	model	OBS20161101

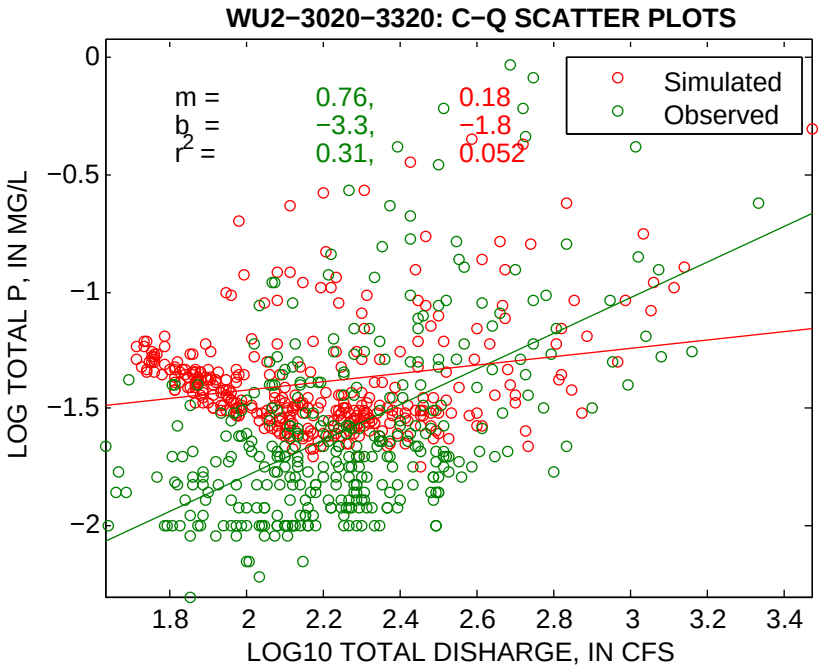
STATISTICS

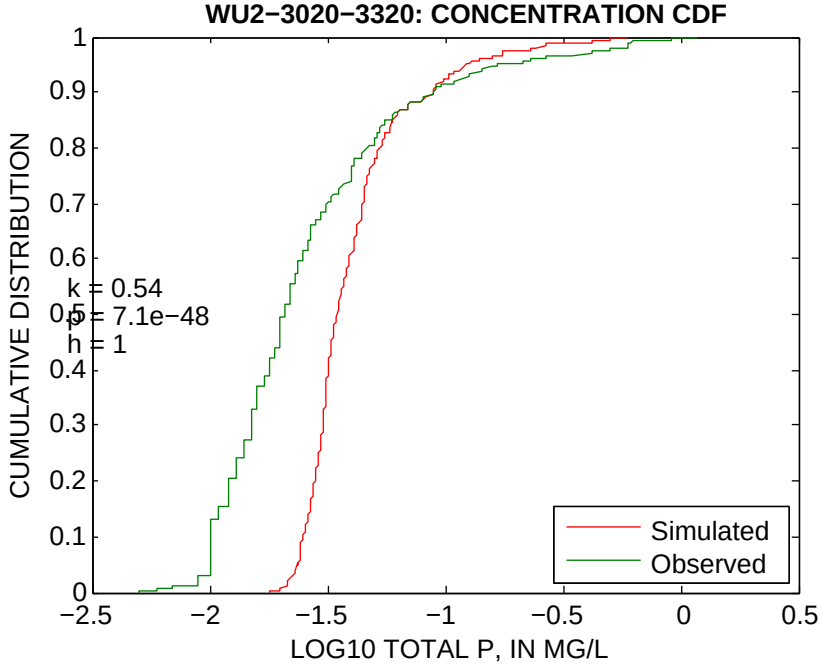
	n	362	362
		observe	simulate
min		0.005	0.019863
		-2.30103	-1.70196
mean		0.053536	0.0653981
		-1.5825	-1.32624
media		0.021	0.0402175
		-1.67778	-1.39559
max		1.188	1.3265
		0.0748164	0.122707
varian		0.0149583	0.0108385
		0.167849	0.0750923
JB		0.001	0.001
		0.001	0.001
		ra	log
%		22.1573	-16.1933
err.va		0.0167729	0.176535
rel.std.err		1.12131	1.05175
mod.eff		-0.121313	-0.0517494

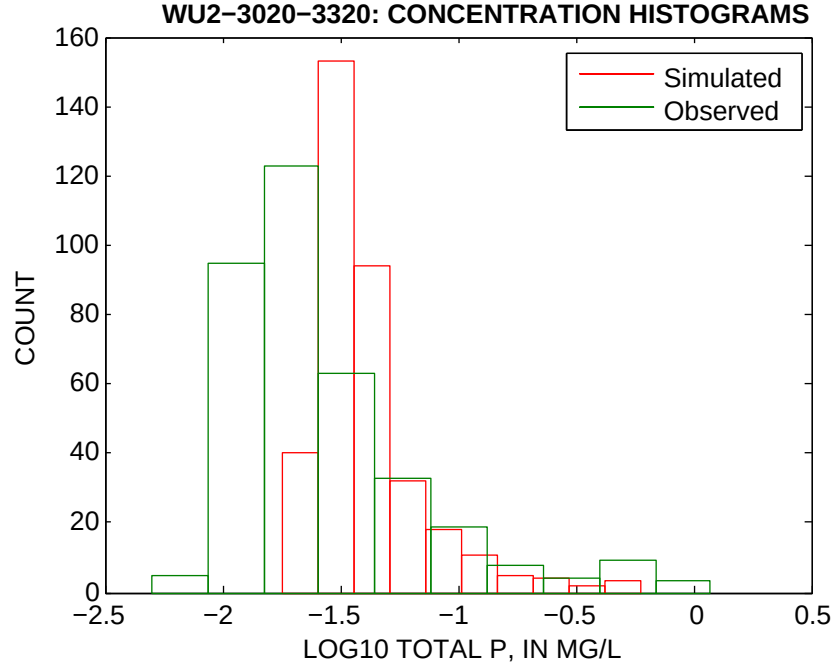
VERSION 2.1

ALL DATA
LOG10

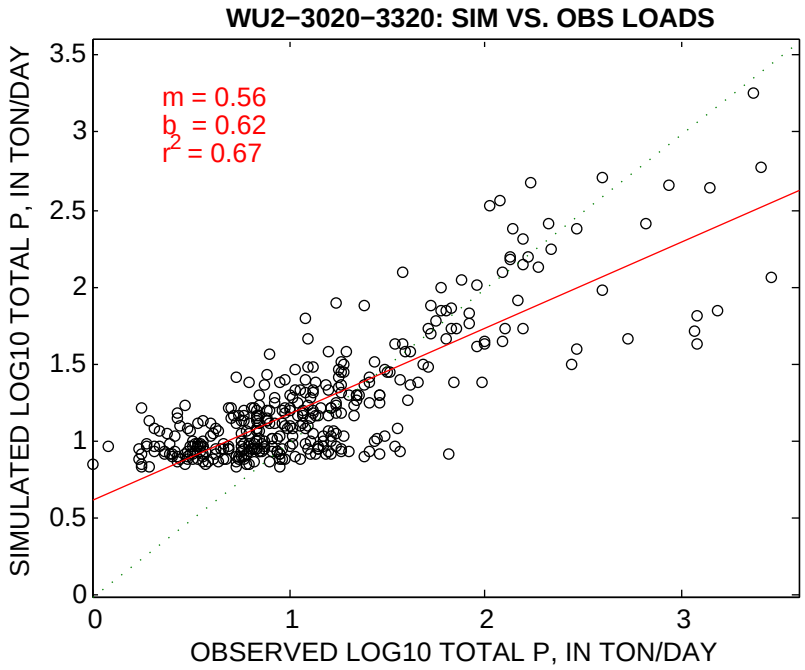


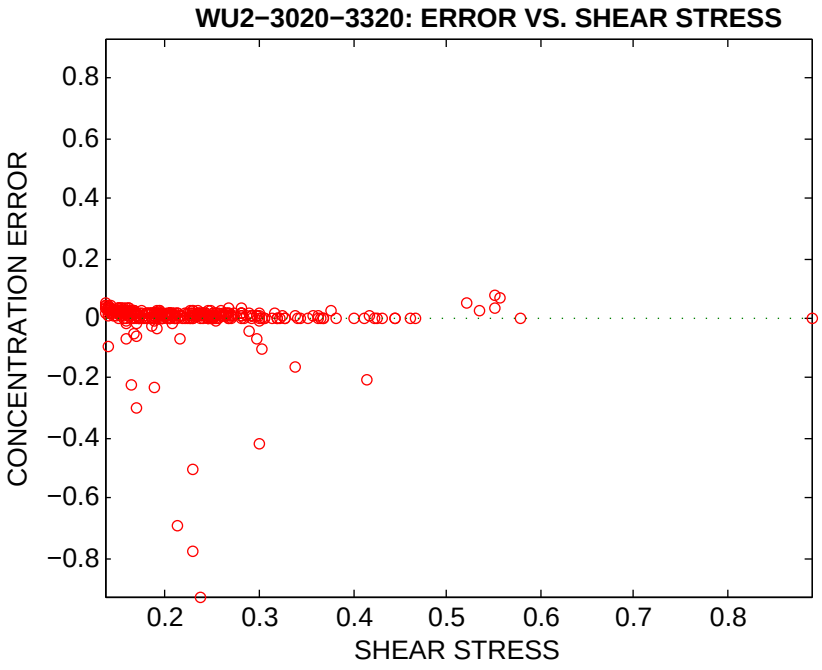


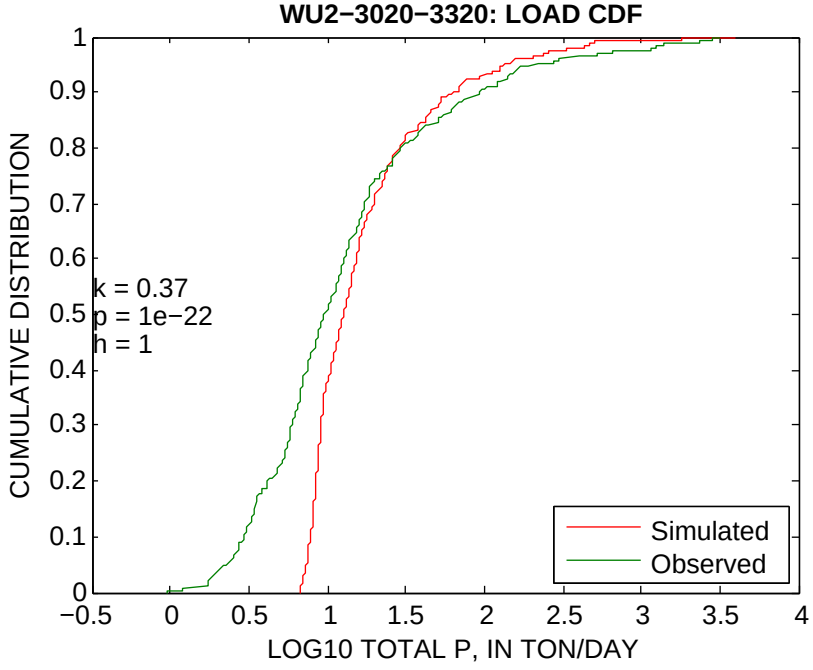


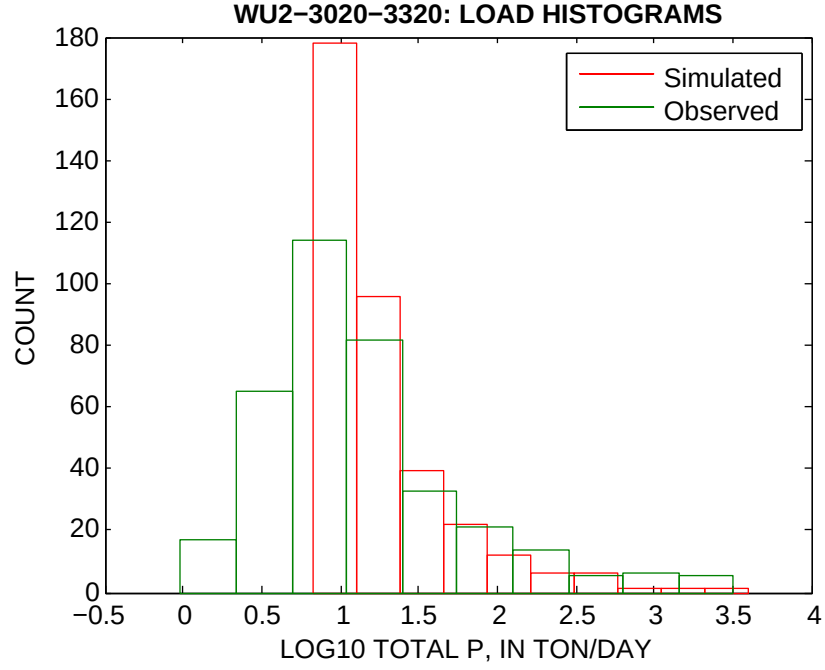


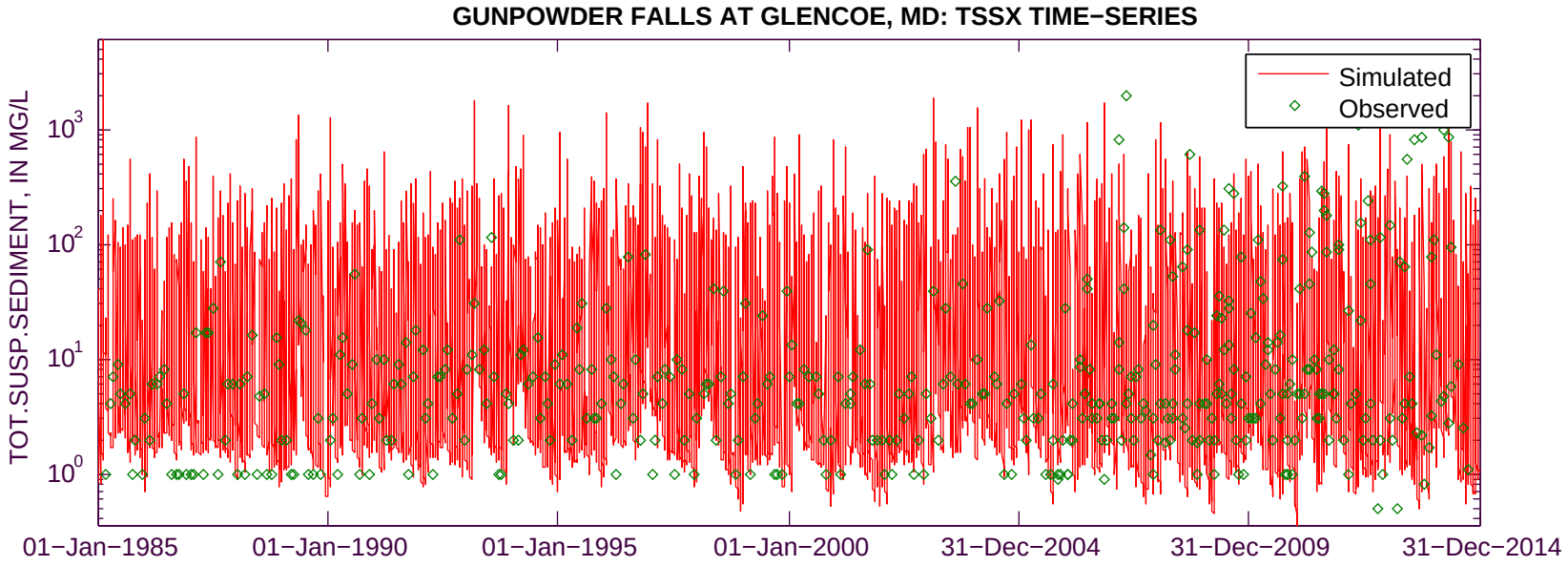
LOAD DATA
LOG10

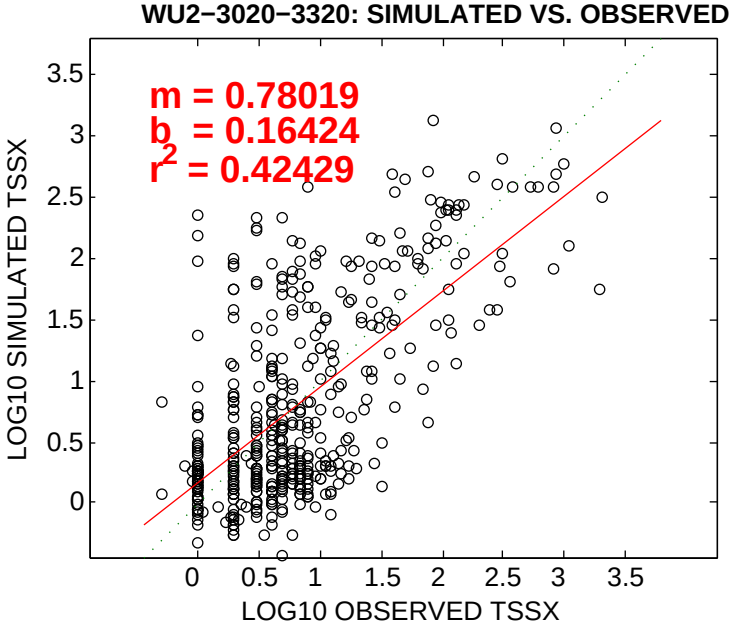


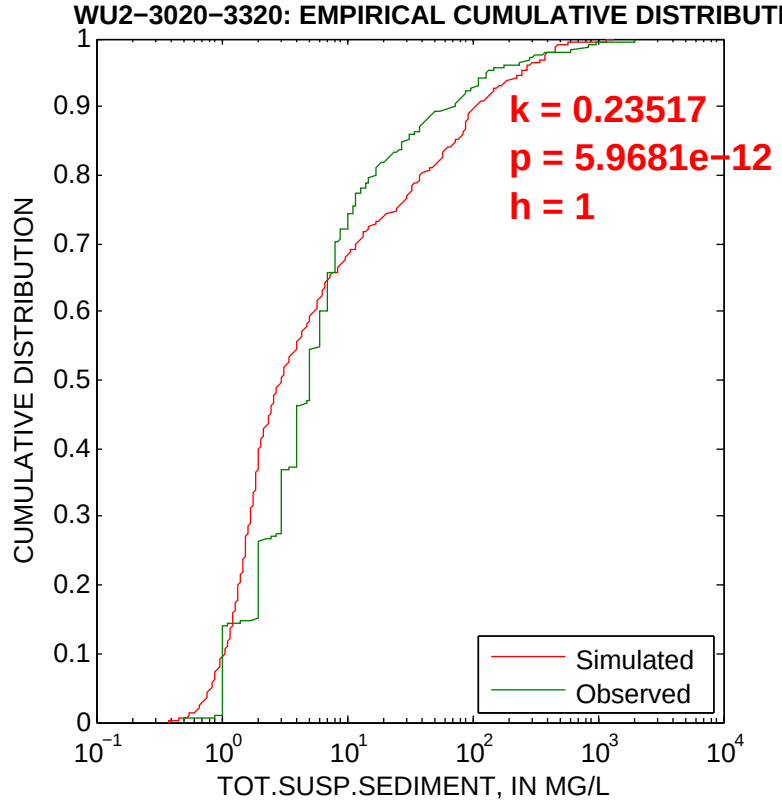












DATA SELECTION

scenario	file
P620171001WQ	TSSX.calib

plot: TSSX - total suspended ...

Dates 1/1/1985 12/31/201

Drive Directory Observed

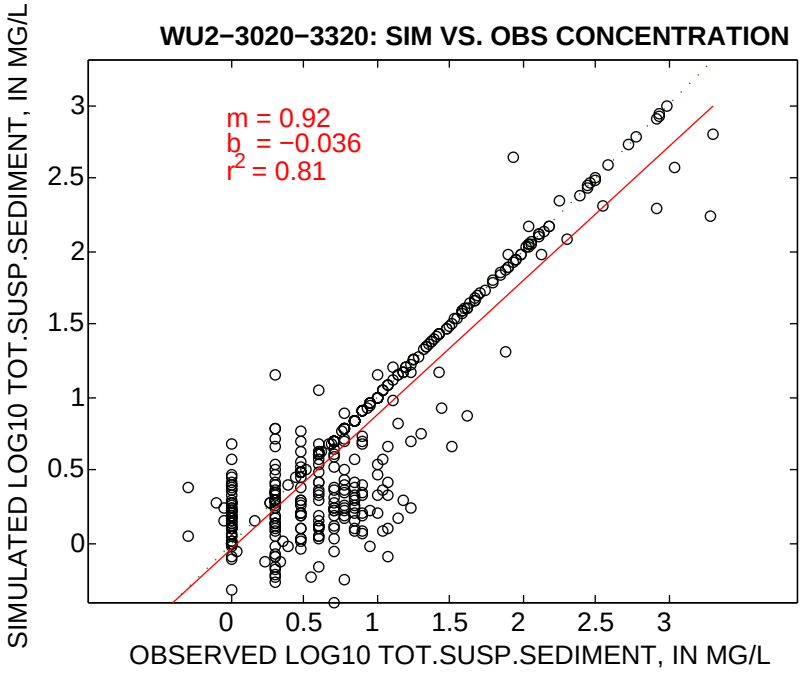
N/A model OBS20161101

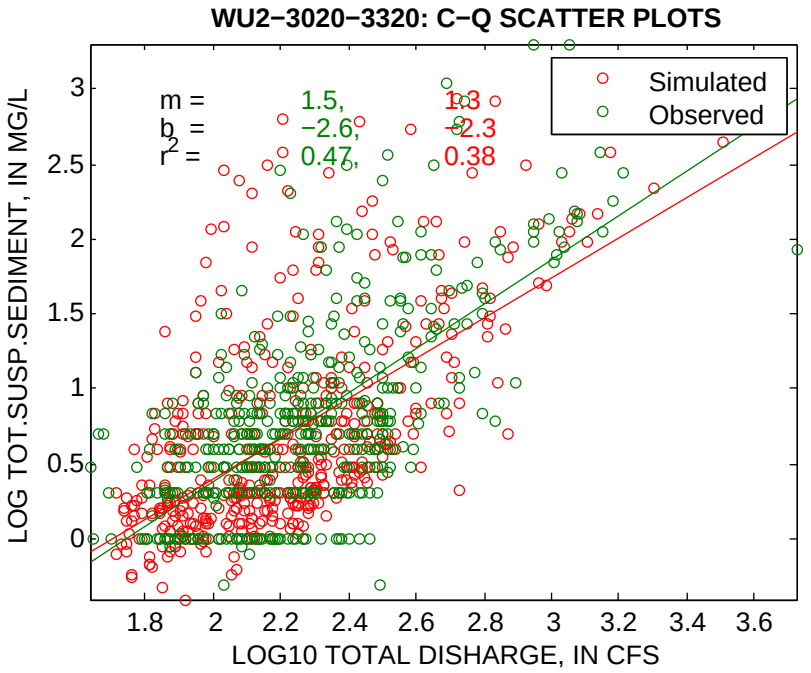
STATISTICS

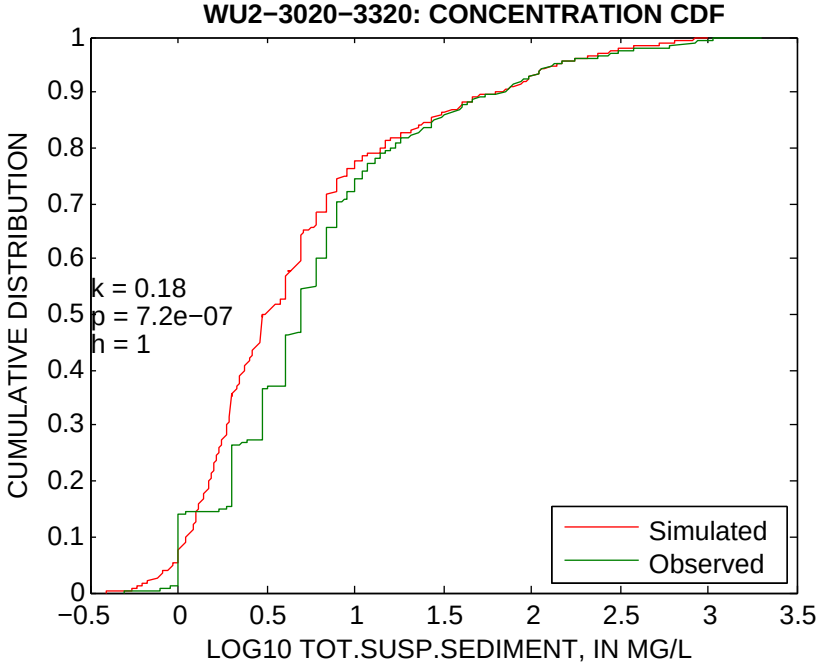
	n	observe	simulate
		472	472
min		0.5	0.37936
		-0.30103	-0.420948
mean		41.2915	43.417
		0.809744	0.796
media		5	2.9822
		0.69897	0.474531
max		2012	1363.6
		3.30363	3.13469
varian		29565.4	14726.4
		0.443039	0.635602
JB		0.001	0.001
		0.001	0.001
		ra	log
%		5.1474	-1.69737
err.va		26157.9	0.38752
rel.std.err		0.884748	0.874687
mod.eff		0.115252	0.125313

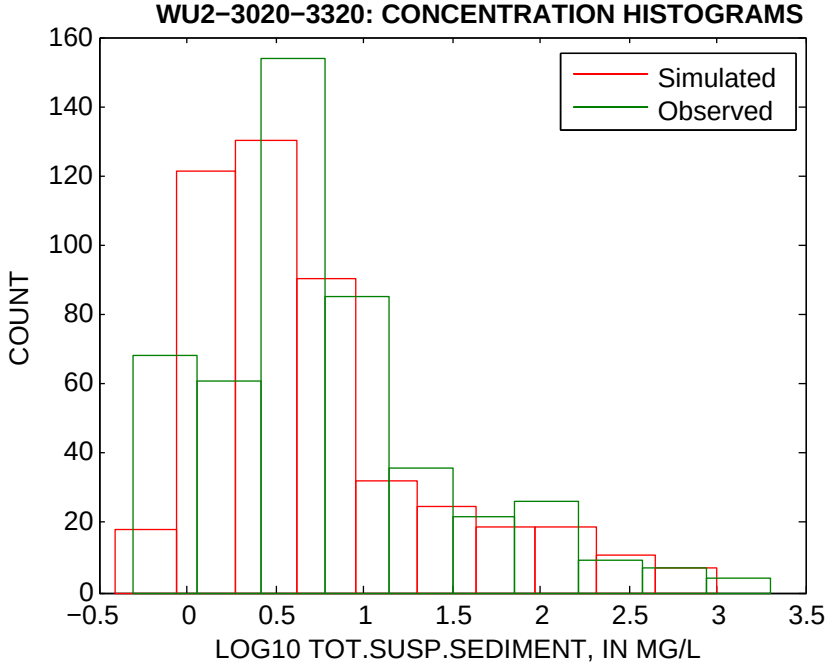
VERSION 2.1

ALL DATA
LOG10

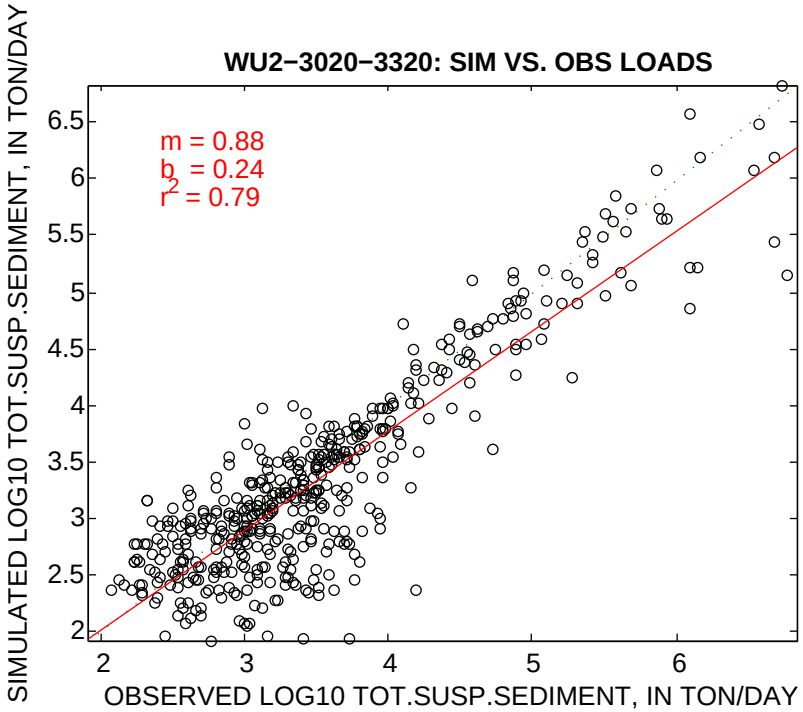


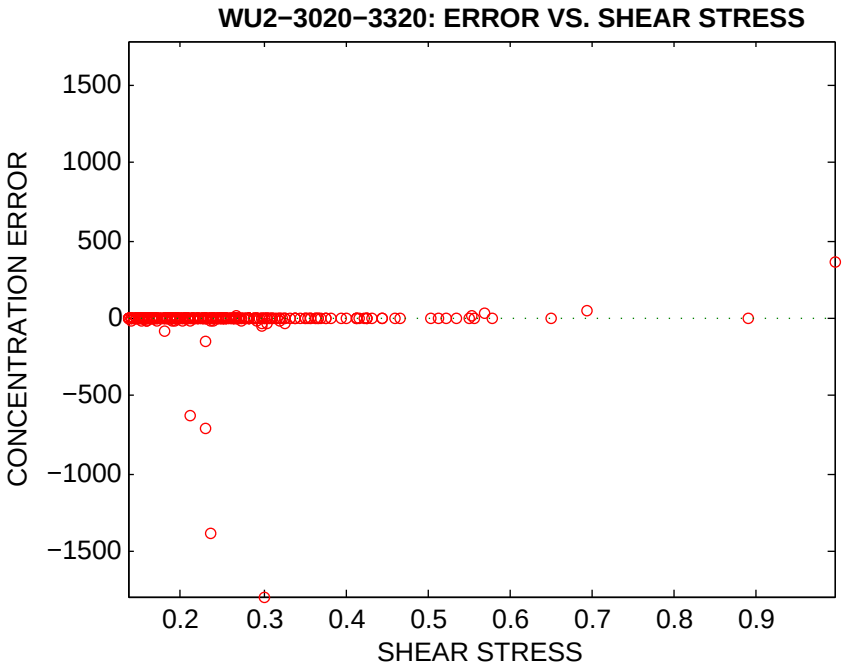


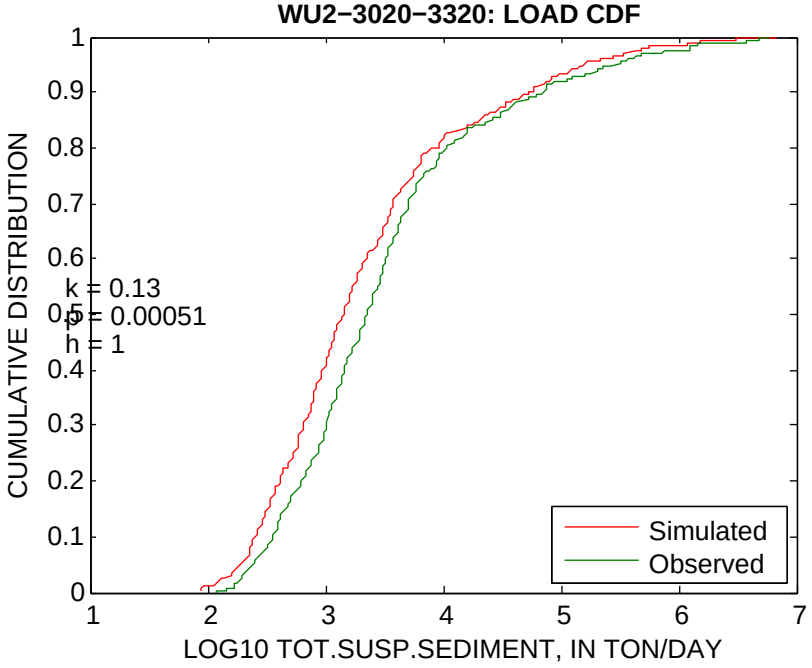


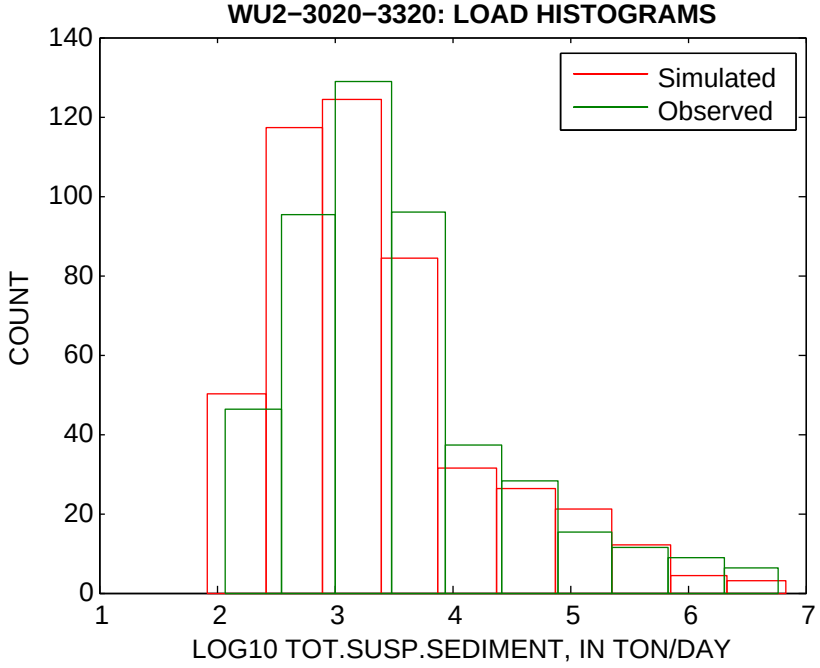


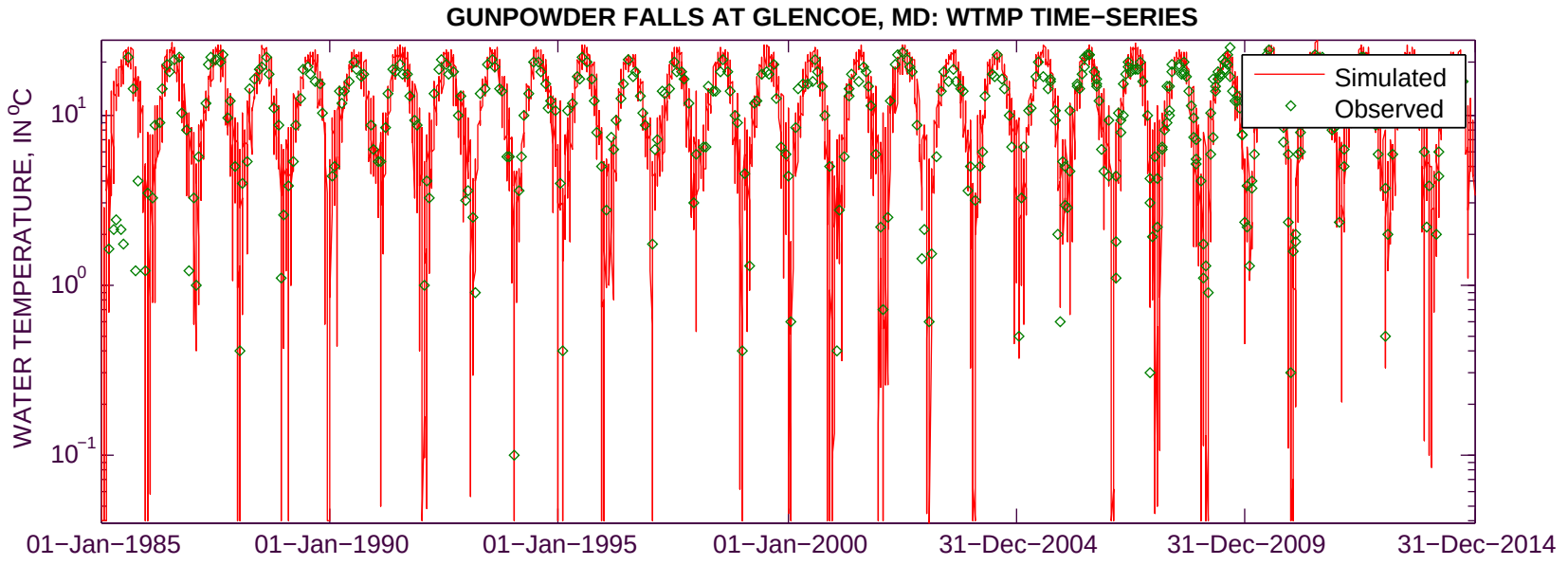
LOAD DATA
LOG10

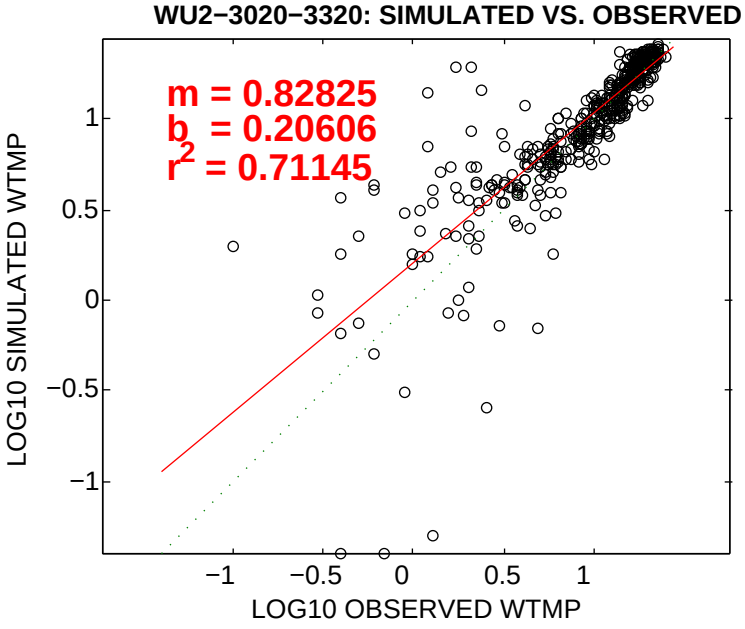


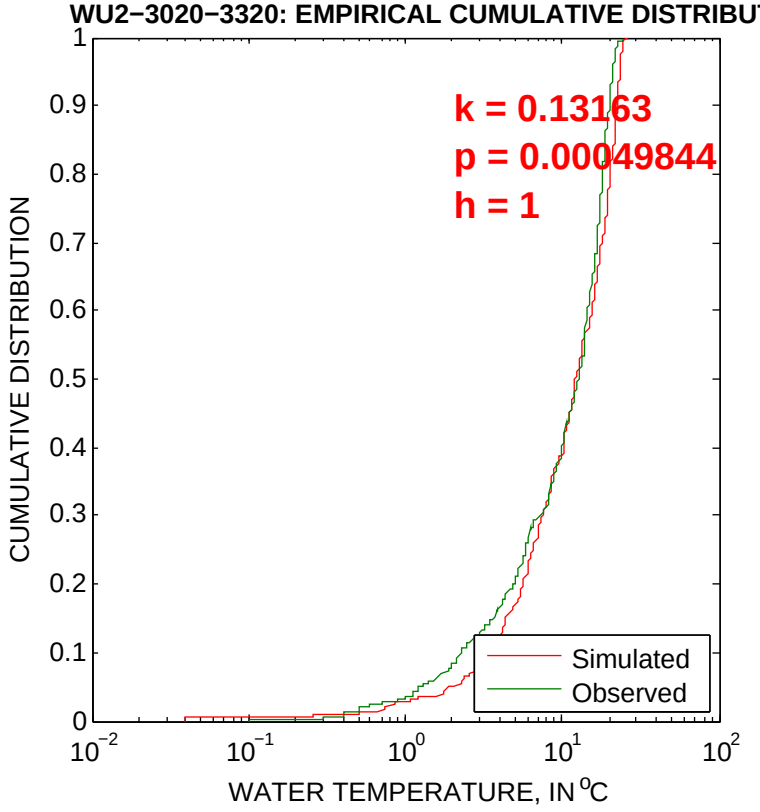












DATA SELECTION

scenario: P620171001WQ | file: WTMP.calib

plot: WTMP - water tempera...

Dates: 1/1/1985 | 12/31/201

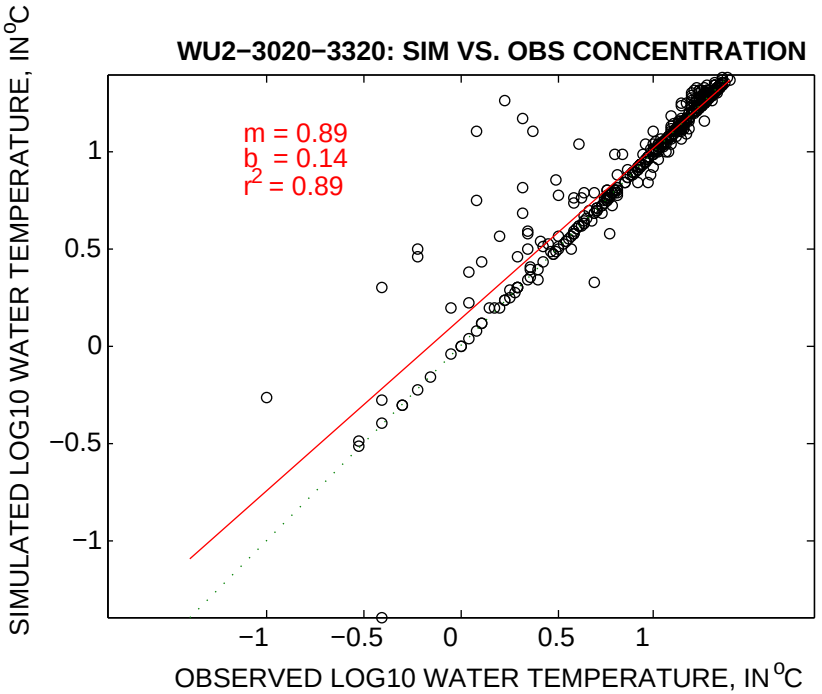
Drive: N/A | Directory: model | Observed: OBS20161101

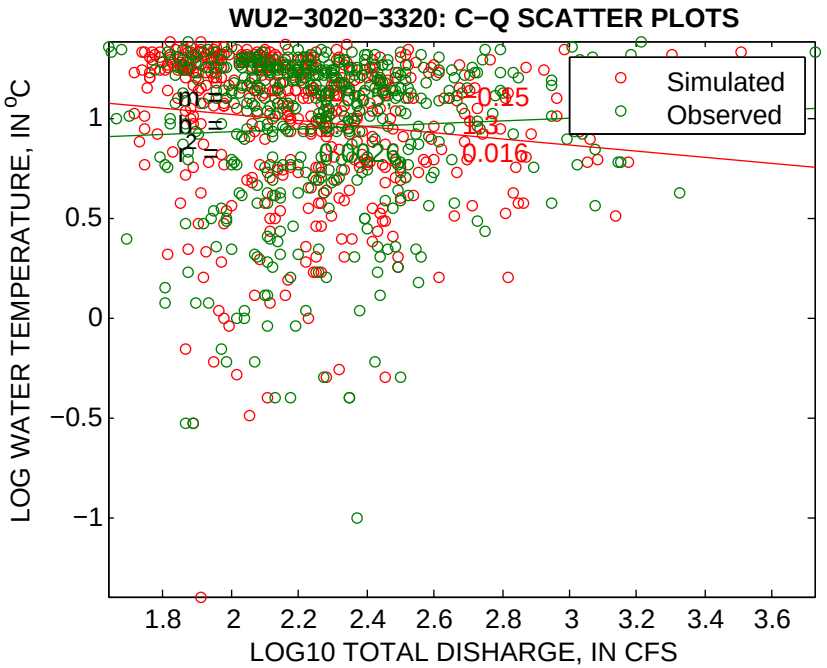
STATISTICS

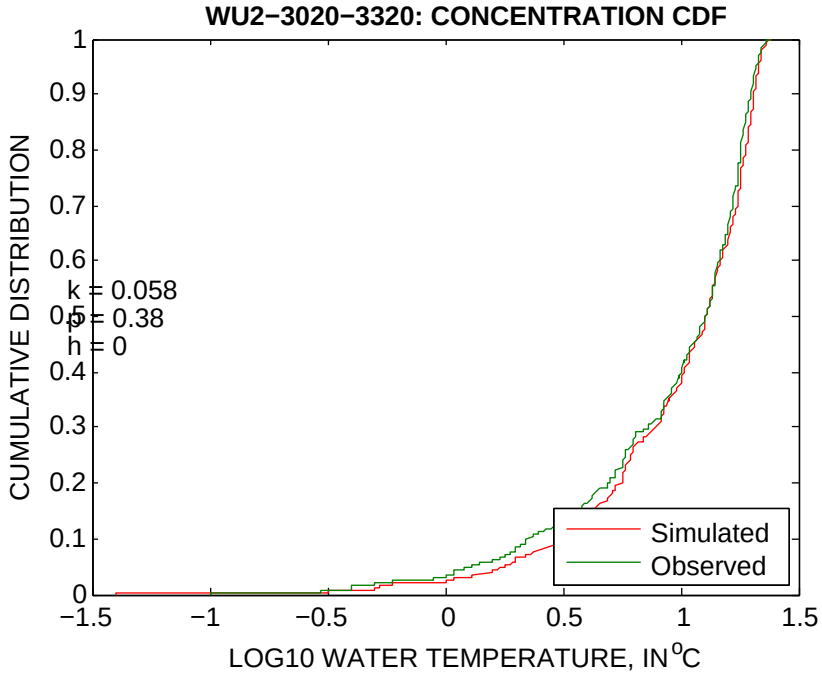
		observe	simulate
n		471	471
min		0.1	0.040012
		-1	-1.39781
mean		11.8209	12.7685
		0.952186	0.994714
media		12.7	12.111
		1.1038	1.08318
max		24.6	25.99
		1.39094	1.41481
varian		42.2084	49.5431
		0.159815	0.1541
JB		0.001	0.001
		0.001	0.001
		ra	log
%		8.01646	4.46629
err.va		7.78212	0.0509922
rel.std.err		0.184374	0.31907
mod.eff		0.815626	0.68093

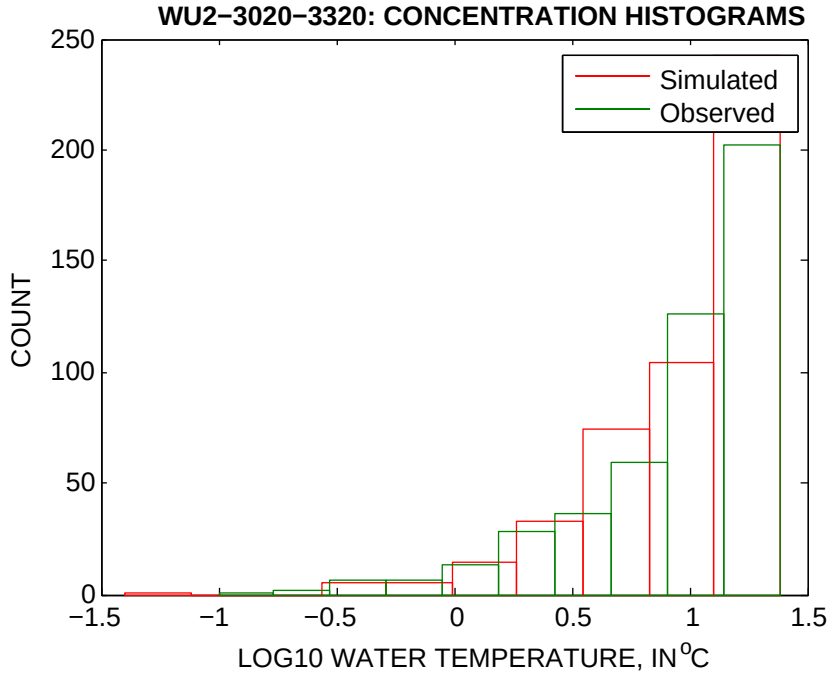
VERSION 2.1

ALL DATA
LOG10

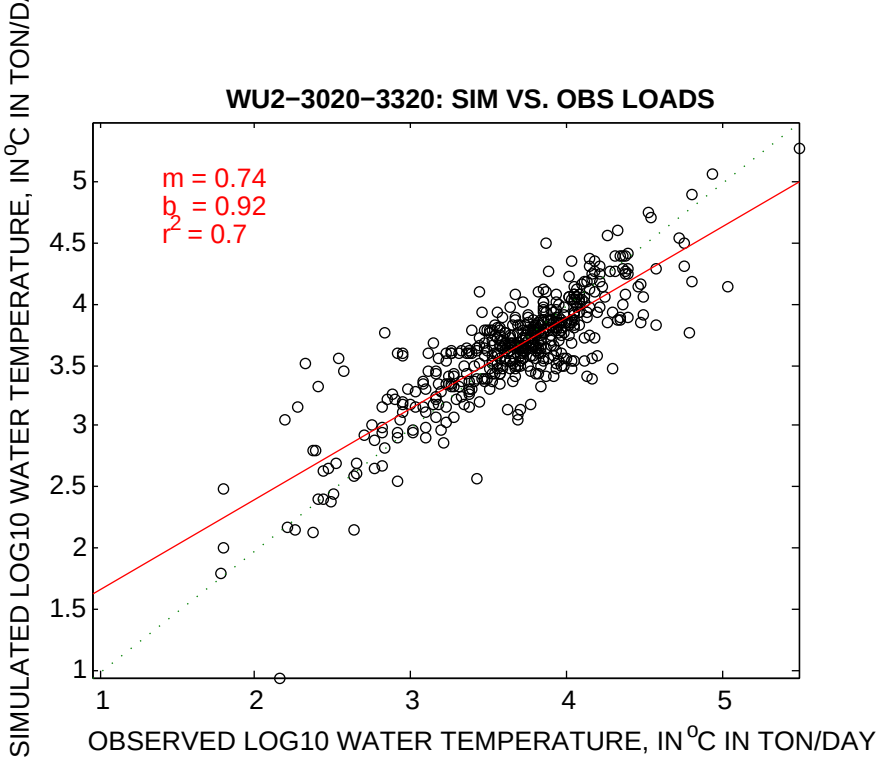


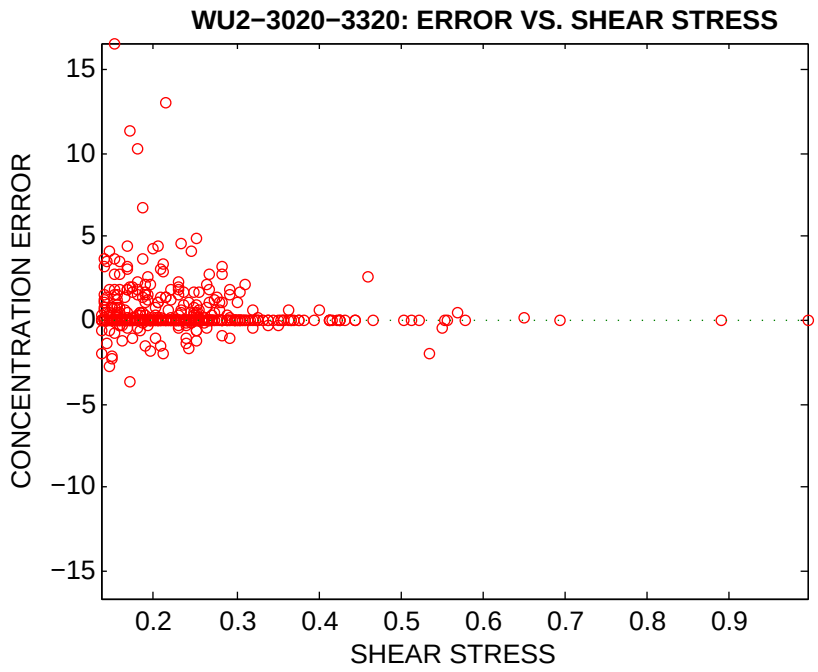


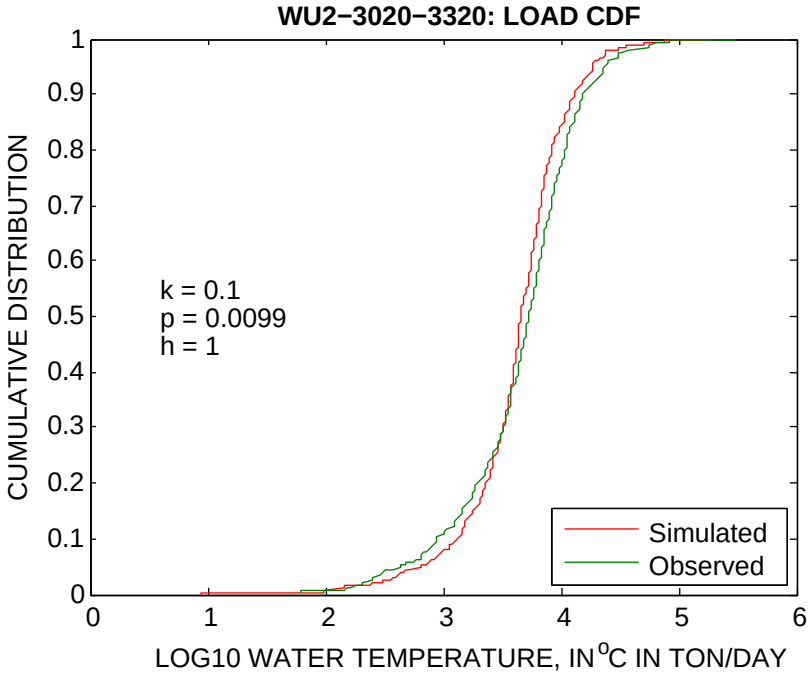


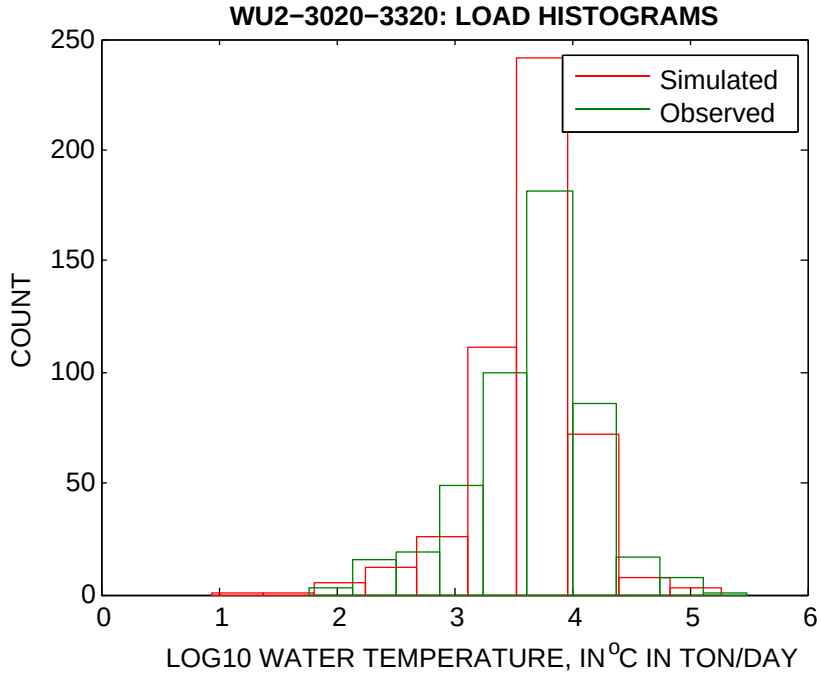


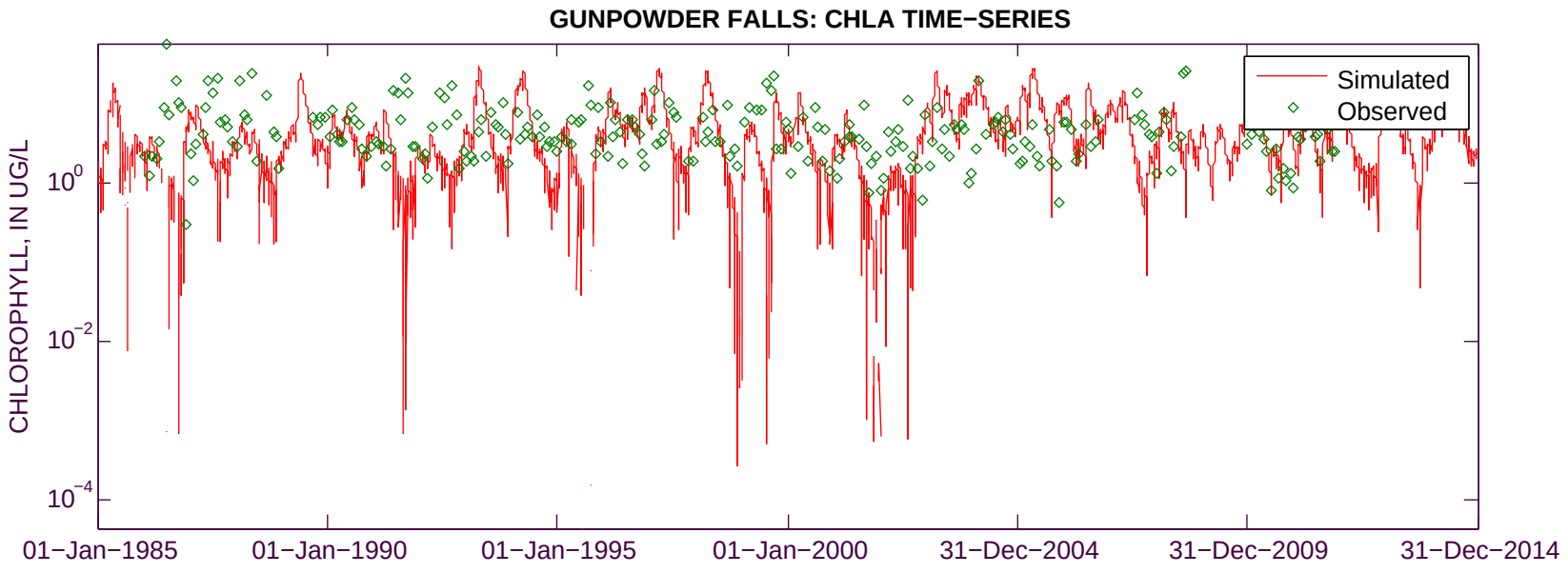
LOAD DATA
LOG10

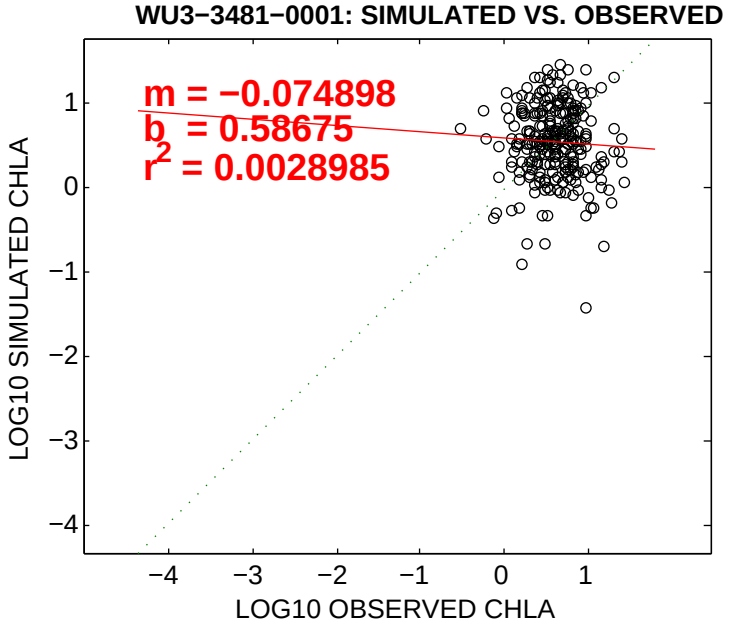


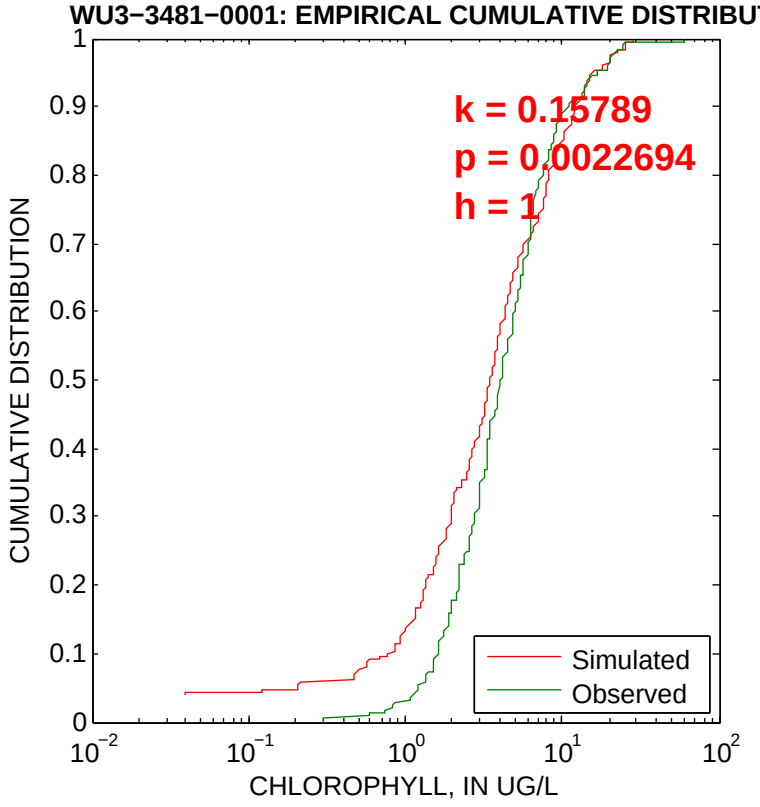












DATA SELECTION

scenario	file
P620171001WQ	CHLA.calib

plot: CHLA - chlorophyll A

Dates 1/1/1985 12/31/201

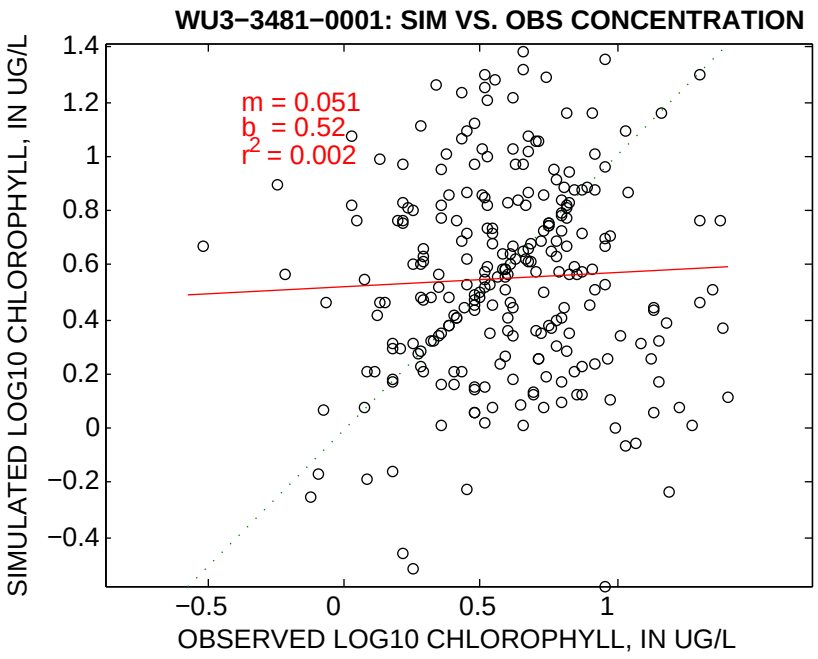
Drive	Directory	Observed
N/A	model	OBS20161101

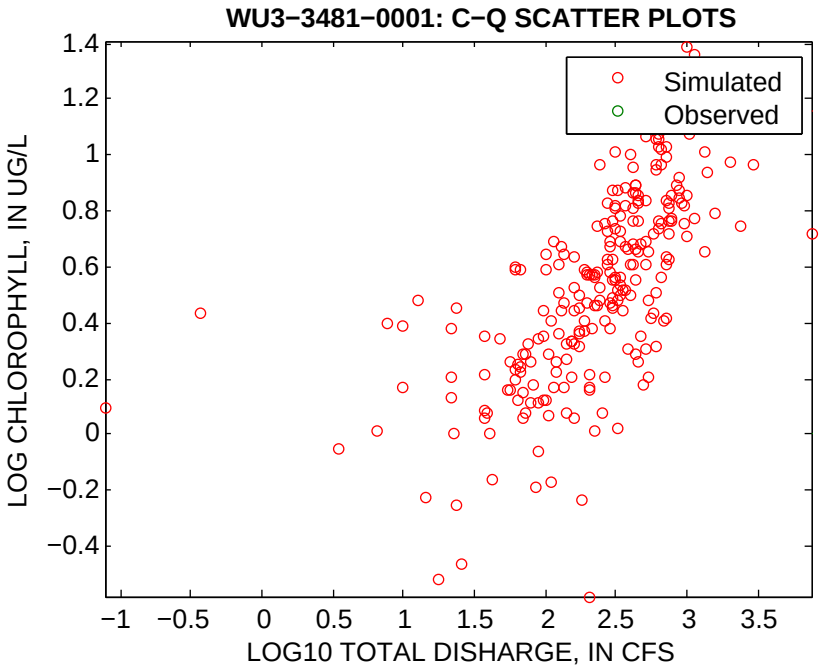
STATISTICS

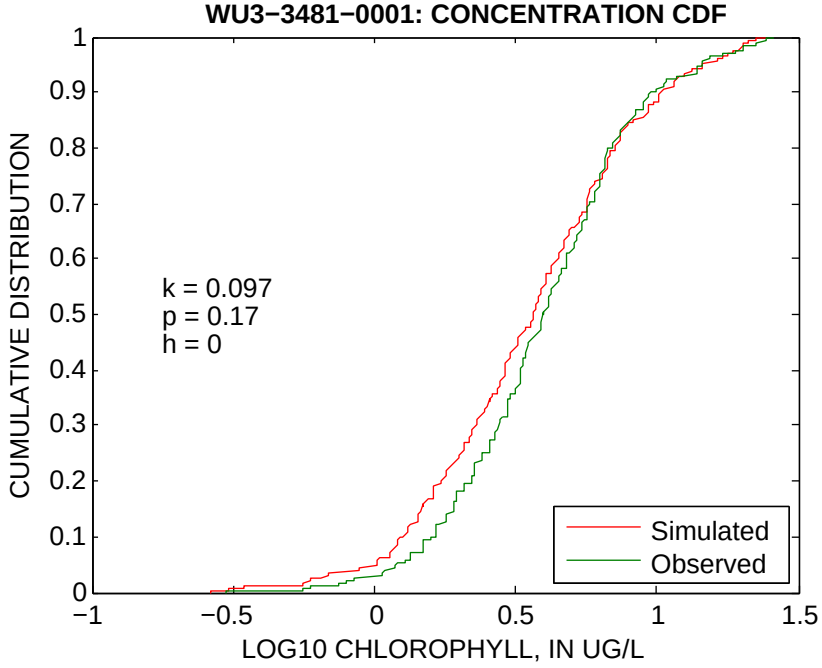
	observe	simulate
n	266	256
min	0.3 -0.522879	0 -1.40987
mean	5.65767 0.596876	5.23732 0.542044
media	4.08 0.600646	3.4817 0.561544
max	59.9 1.40939	28.585 1.45614
varian	32.7117 0.102528	27.7172 0.198431
JB	0.001 0.453224	0.001 0.001
	ra	log
%	-7.42975	-9.18636
err.va	68.3643	0.319336
rel.std.err	2.08991	3.11463
mod.eff	-1.08991	-2.11463

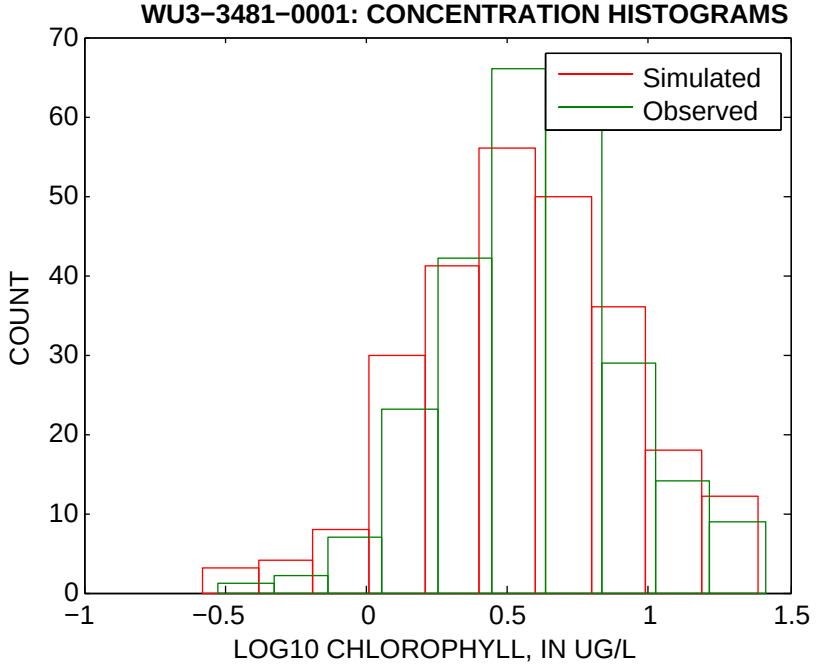
VERSION 2.1

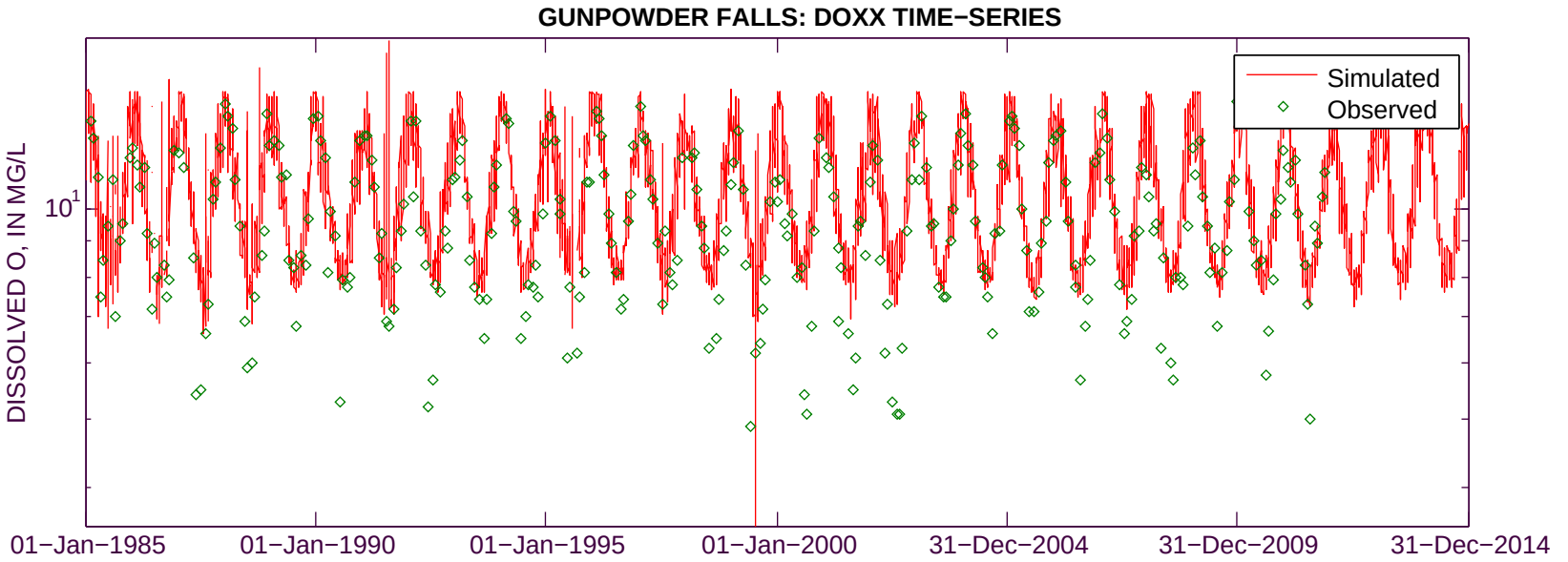
ALL DATA
LOG10

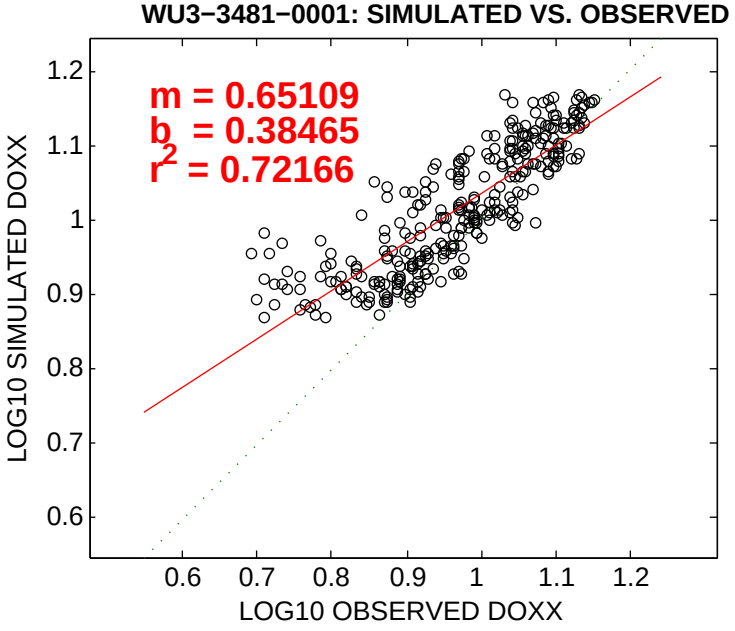


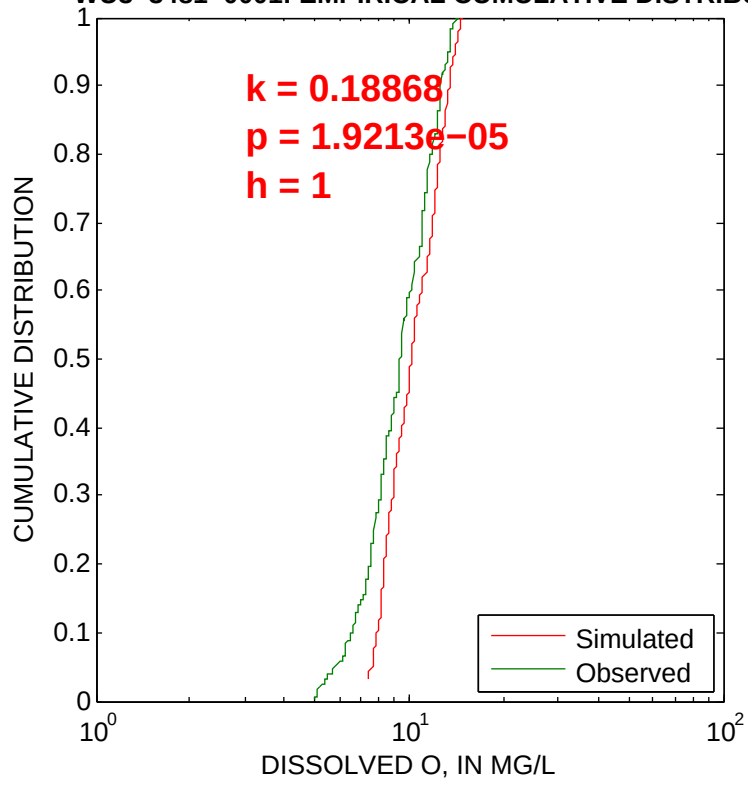












DATA SELECTION

scenario	file
P620171001WQ	DOXX.calib

plot: DOXX - dissolved oxygen

Dates: 1/1/1985 – 12/31/201

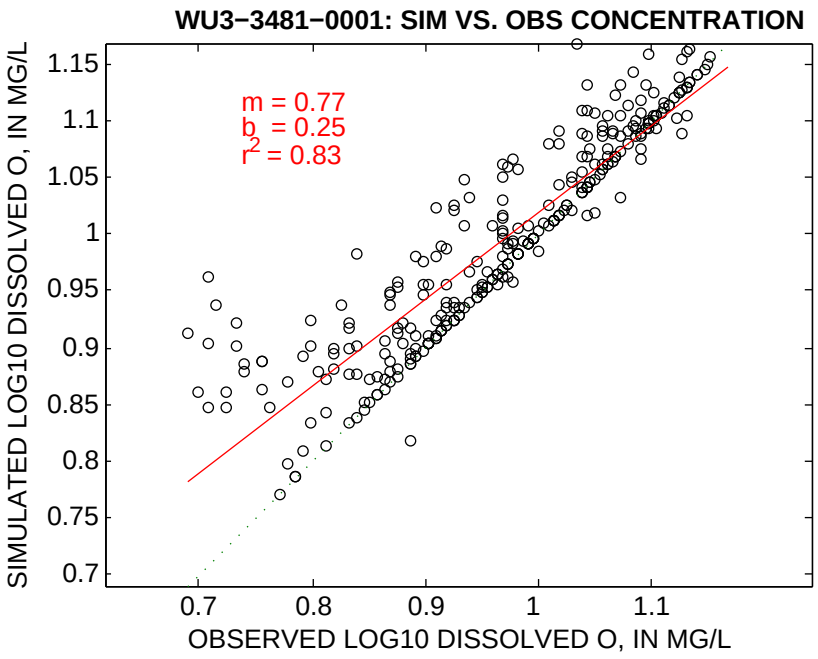
Drive	Directory	Observed
N/A	model	OBS20161101

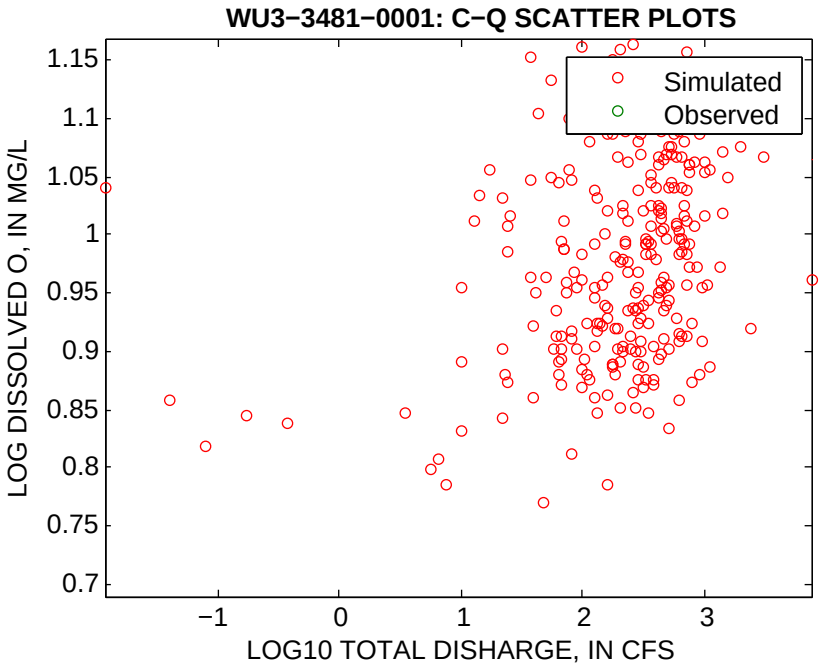
STATISTICS

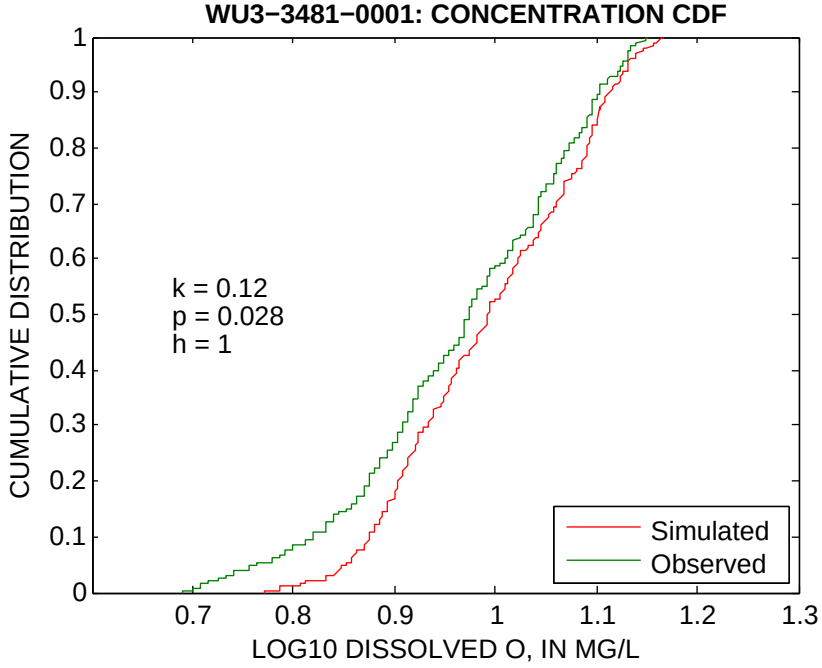
	n	observe	simulate
		318	308
min		4.9	0
		0.690196	0.868586
mean		9.525	10.2201
		0.968673	1.01534
media		9.349	10.144
		0.973128	1.01087
max		14.19	14.723
		1.15198	1.168
varian		5.21185	7.40065
		0.0118426	0.00695658
JB		0.009731	0.001
		0.007157	0.002011
		ra	log
%		7.2973	4.81775
err.va		3.99591	0.005563
rel.std.err		0.766697	0.469746
mod.eff		0.233303	0.530254

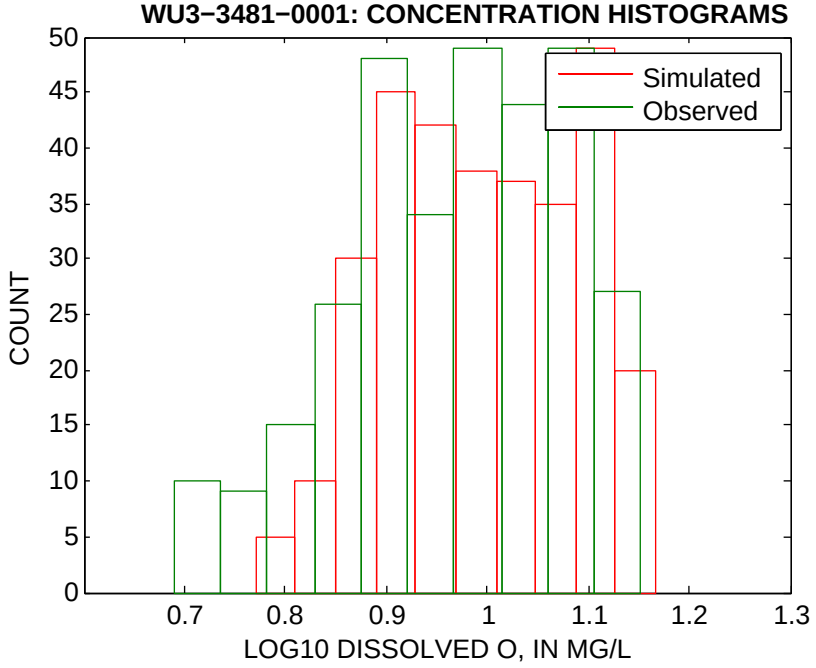
VERSION 2.1

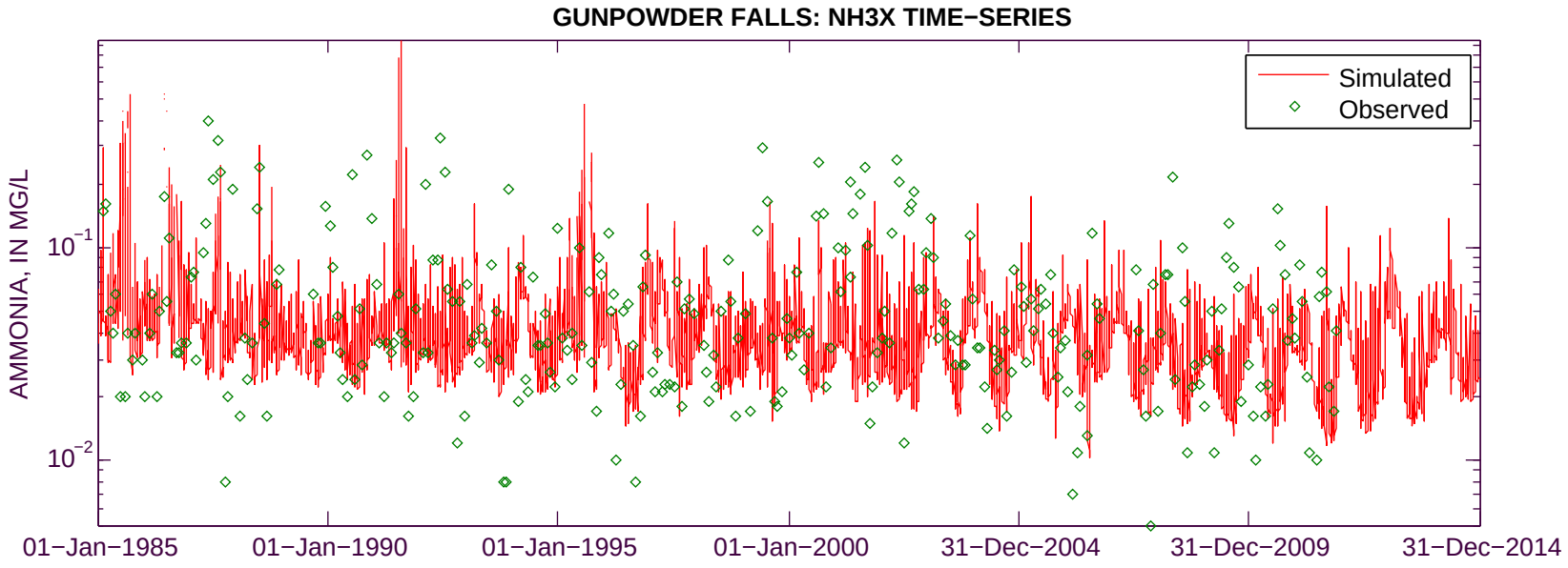
ALL DATA
LOG10

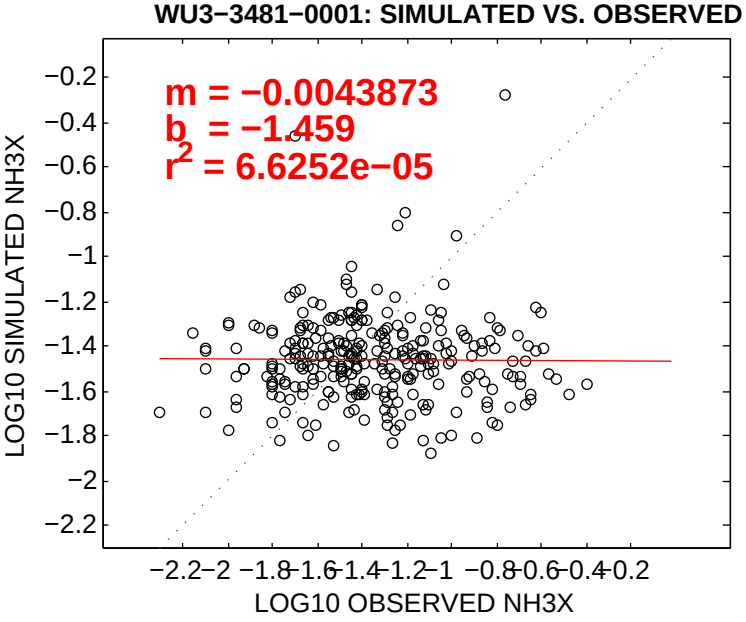


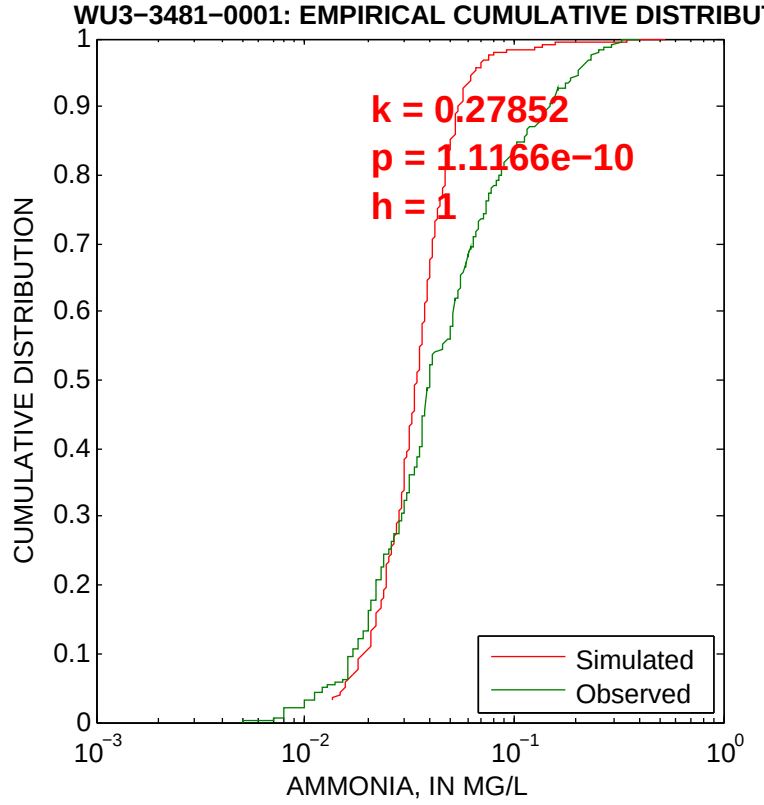












DATA SELECTION

scenario	file
P620171001WQ	NH3X.calib

plot: NH3X - ammonia

Dates: 1/1/1985 – 12/31/201

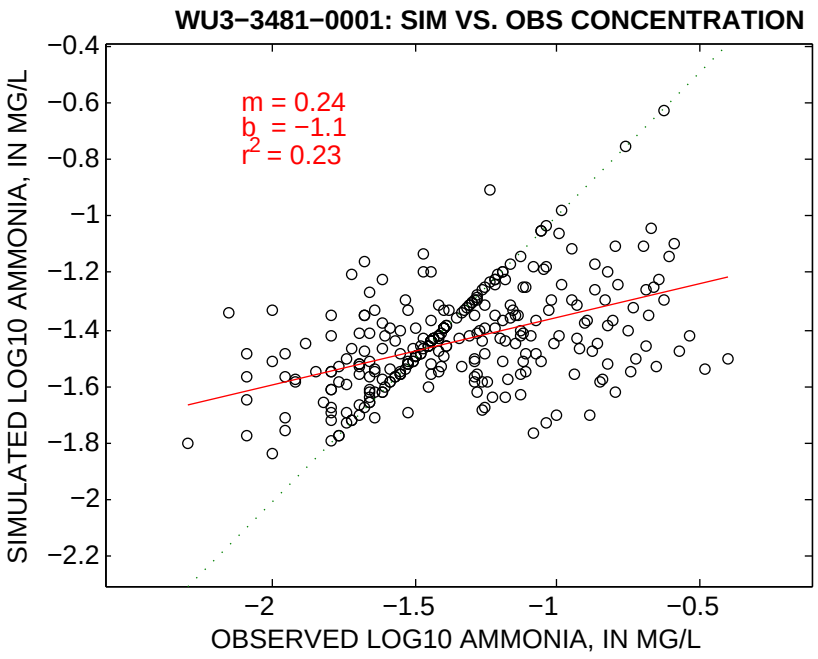
Drive: N/A | Directory: model | Observed: OBS20161101

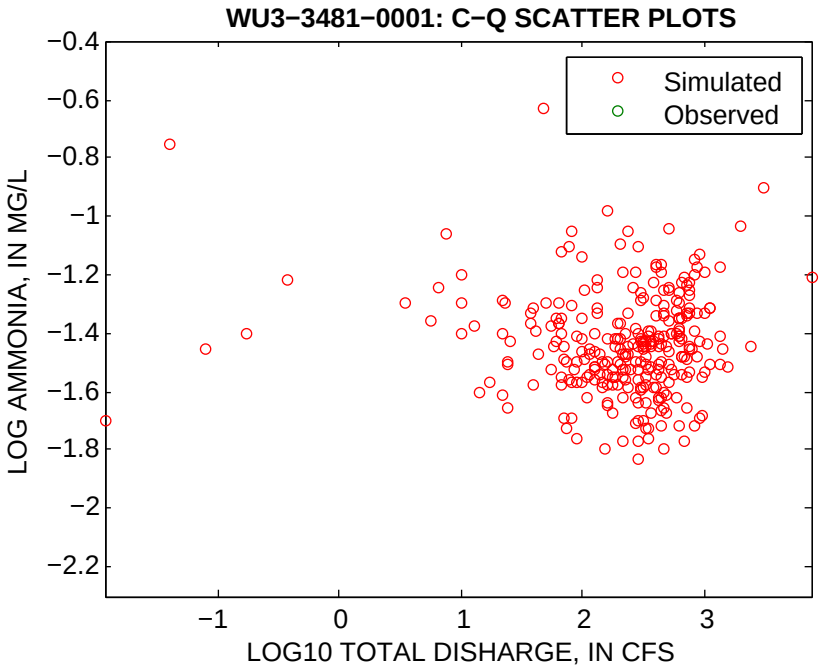
STATISTICS

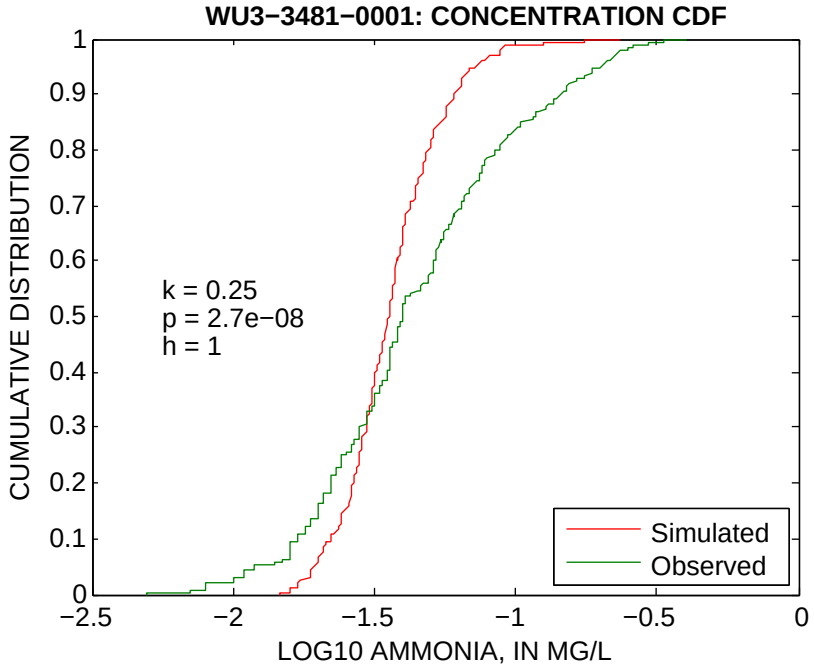
	n	observe	simulate
		298	288
min		0.005	0
		-2.30103	-1.87128
mean		0.0630537	0.0388833
		-1.35153	-1.45303
media		0.04	0.0344255
		-1.39794	-1.4529
max		0.4	0.52709
		-0.39794	-0.278115
varian		0.00376388	0.0014483
		0.125205	0.0363758
JB		0.001	0.001
		0.140426	0.001
		ra	log
%		-38.333	7.51001
err.va		0.00565061	0.173018
rel.std.err		1.50128	1.38187
mod.eff		-0.501275	-0.381874

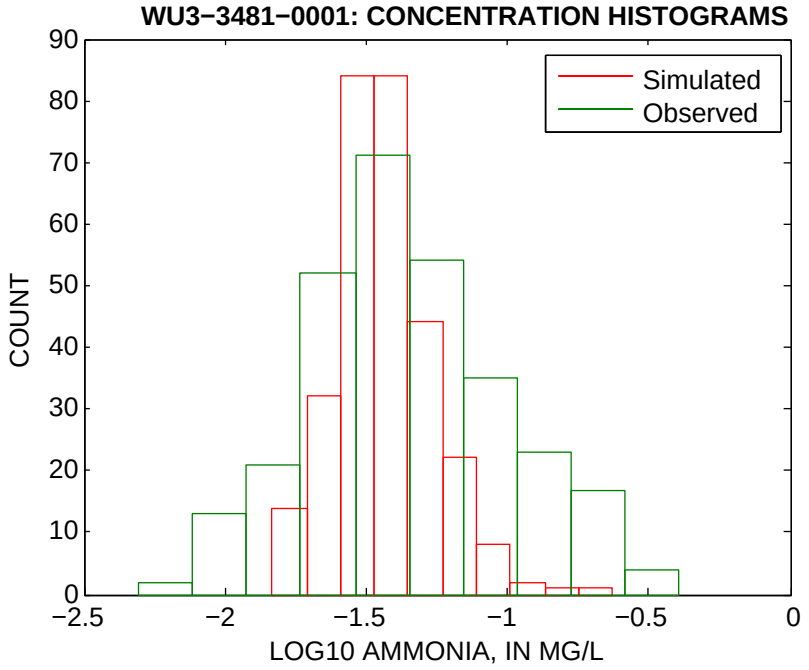
VERSION 2.1

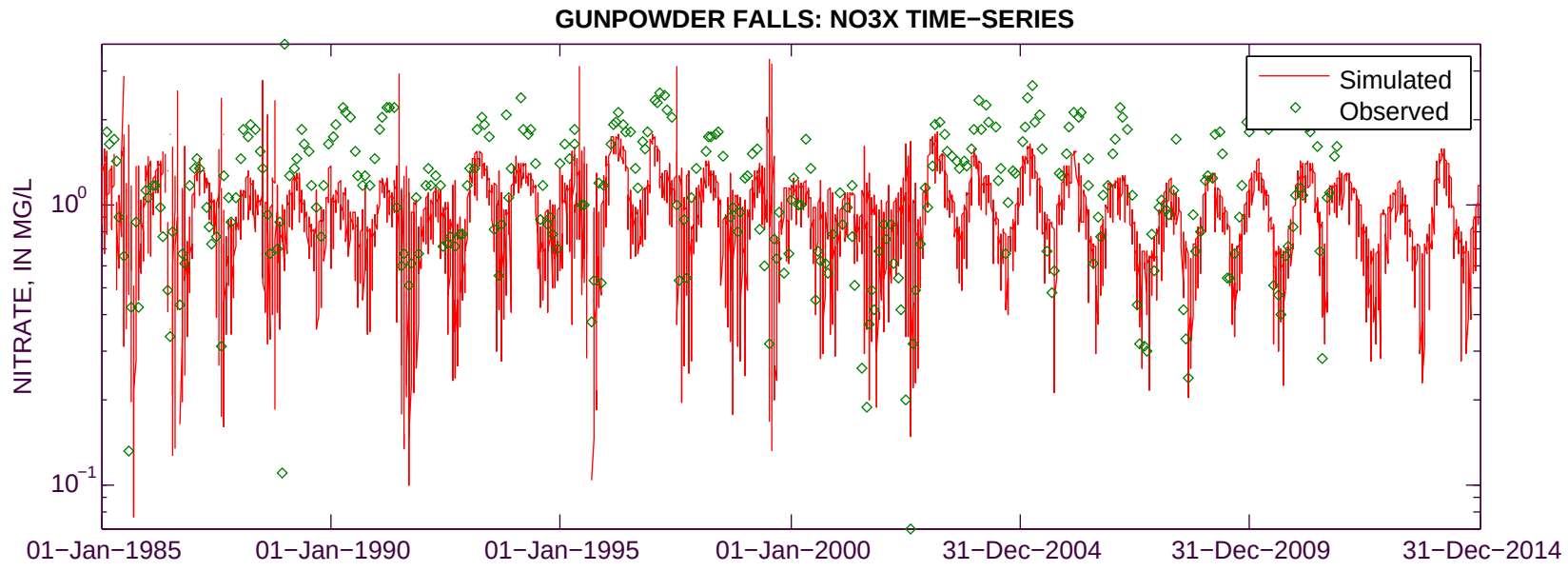
ALL DATA
LOG10

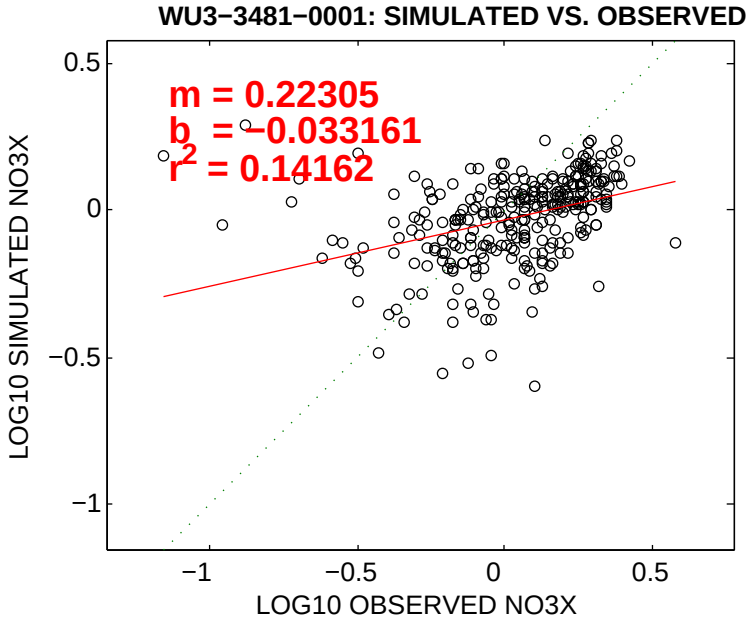


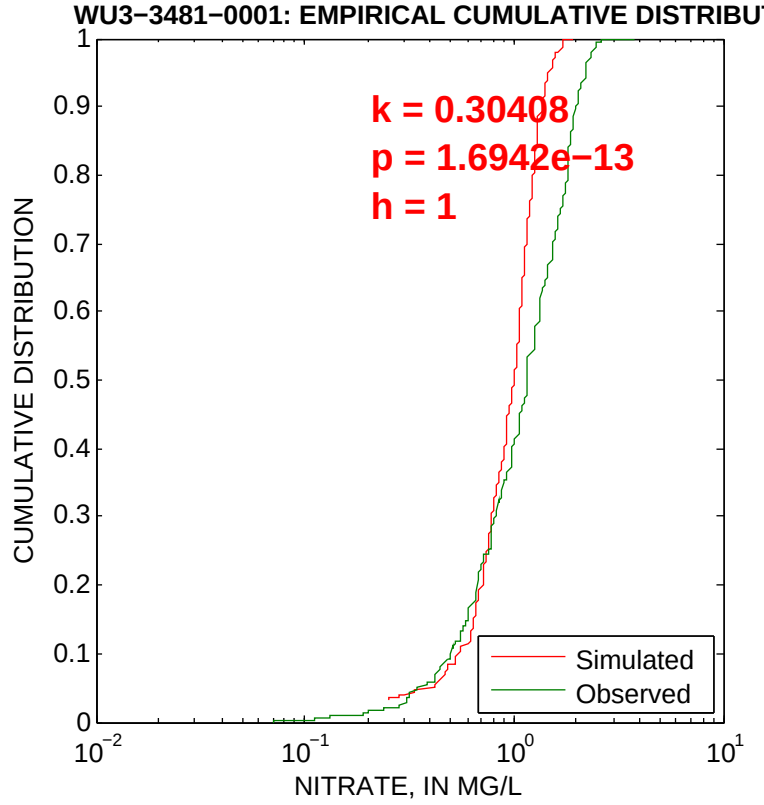












DATA SELECTION

scenario	file
P620171001WQ	NO3X.calib

plot: NO3X - nitrate

Dates: 1/1/1985 – 12/31/201

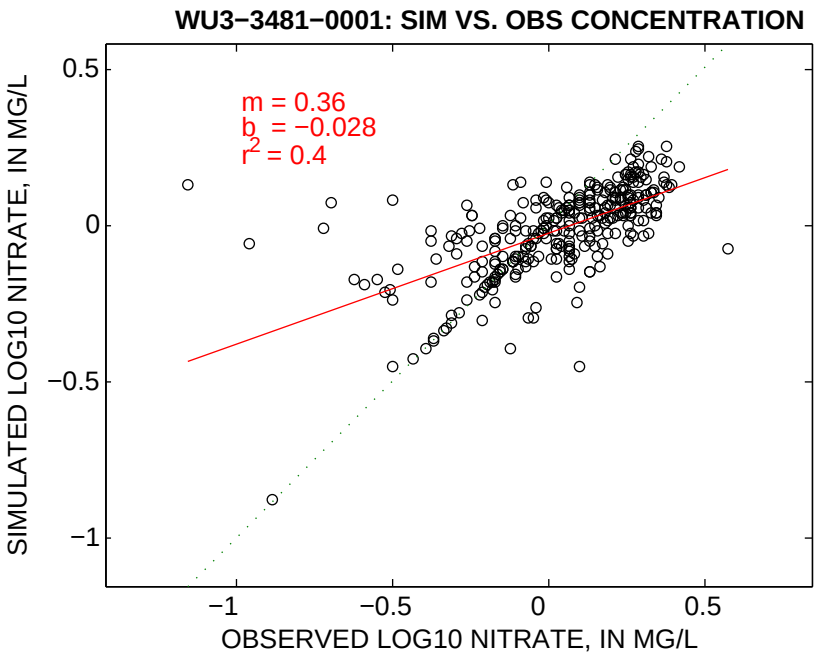
Drive	Directory	Observed
N/A	model	OBS20161101

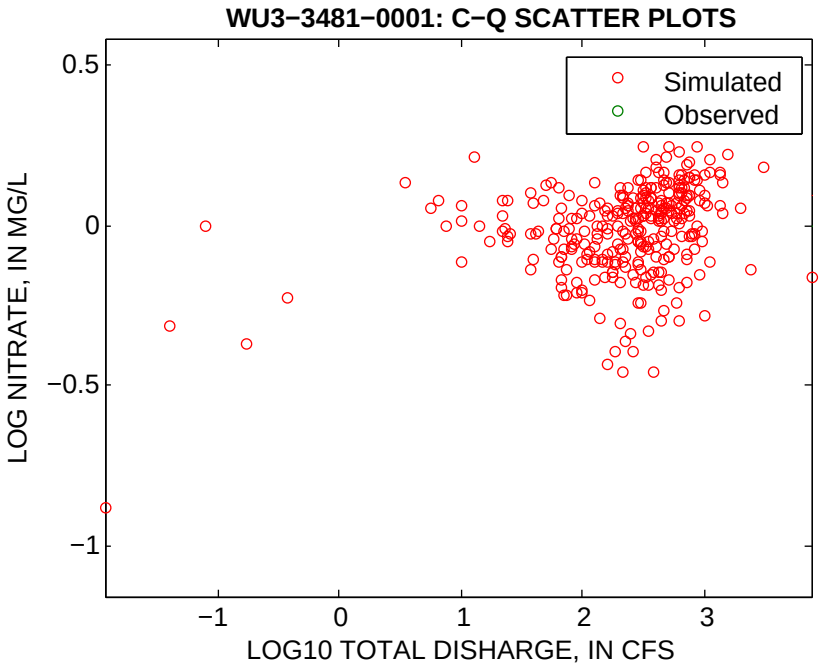
STATISTICS

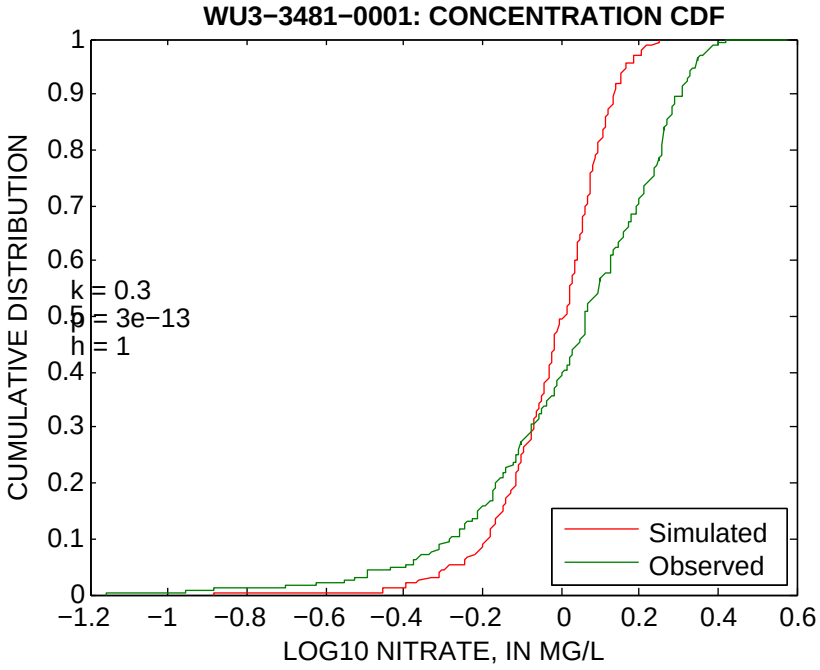
	n	319	309
		observe	simulate
min		0.07	0
		-1.1549	-0.597893
mean		1.21777	0.962575
		0.0345704	-0.0254503
media		1.16	1.0077
		0.064458	0.00842983
max		3.77	1.9452
		0.576341	0.288964
varian		0.343794	0.117677
		0.0621451	0.0218312
JB		0.012876	0.003873
		0.001	0.001
		ra	log
%		-20.956	-173.619
err.va		0.324409	0.059868
rel.std.err		0.943615	0.963358
mod.eff		0.056385	0.0366417

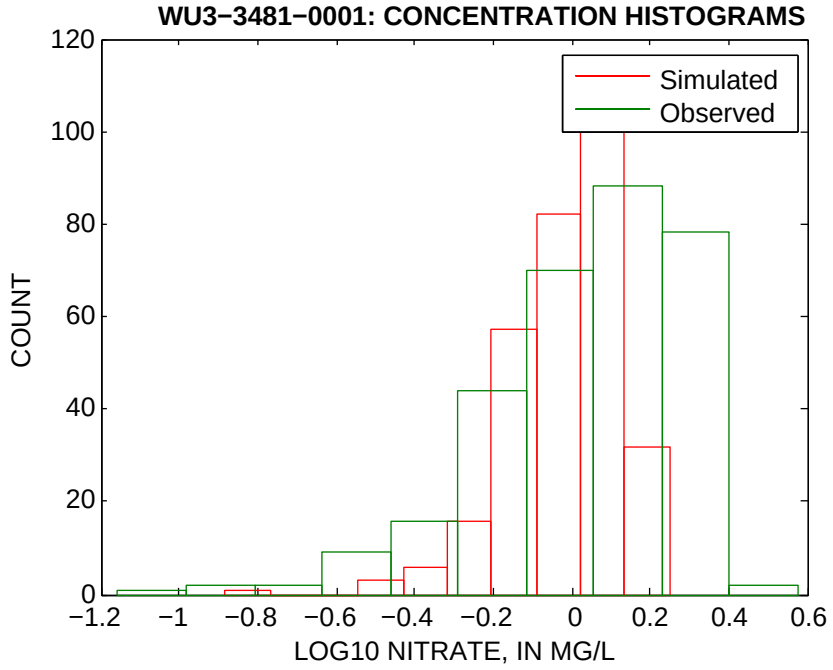
VERSION 2.1

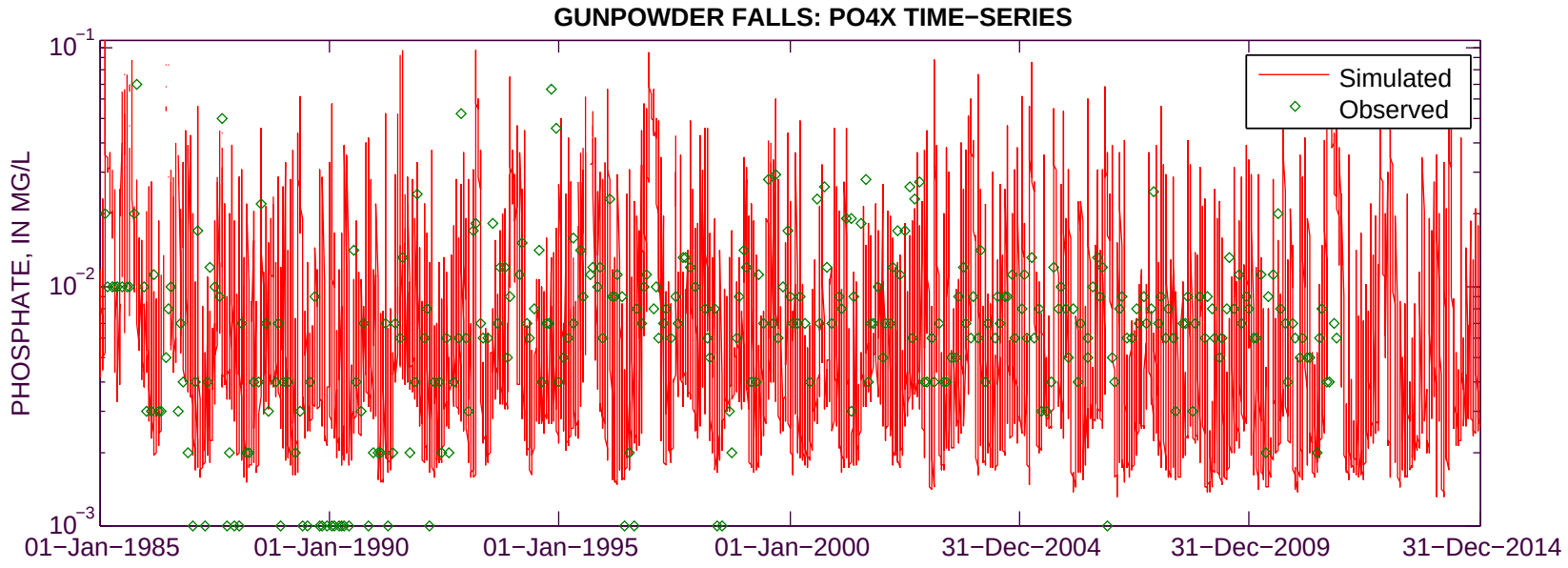
ALL DATA
LOG10

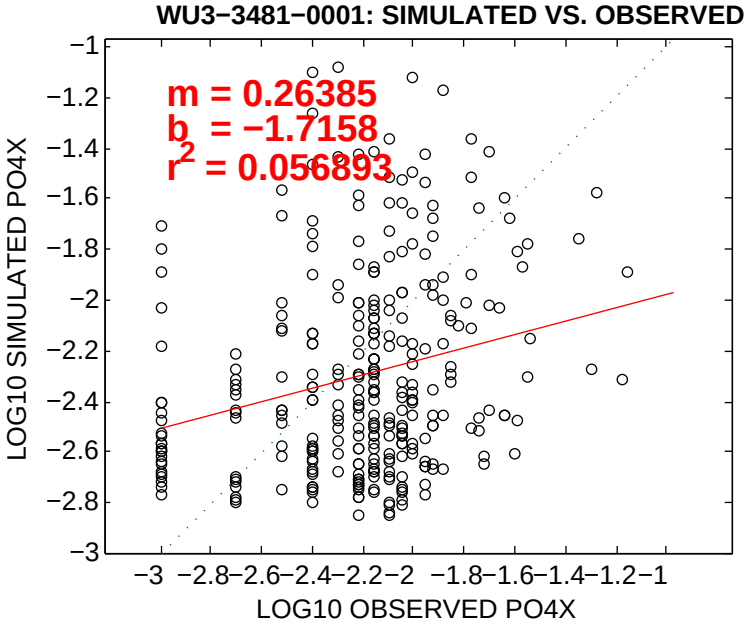


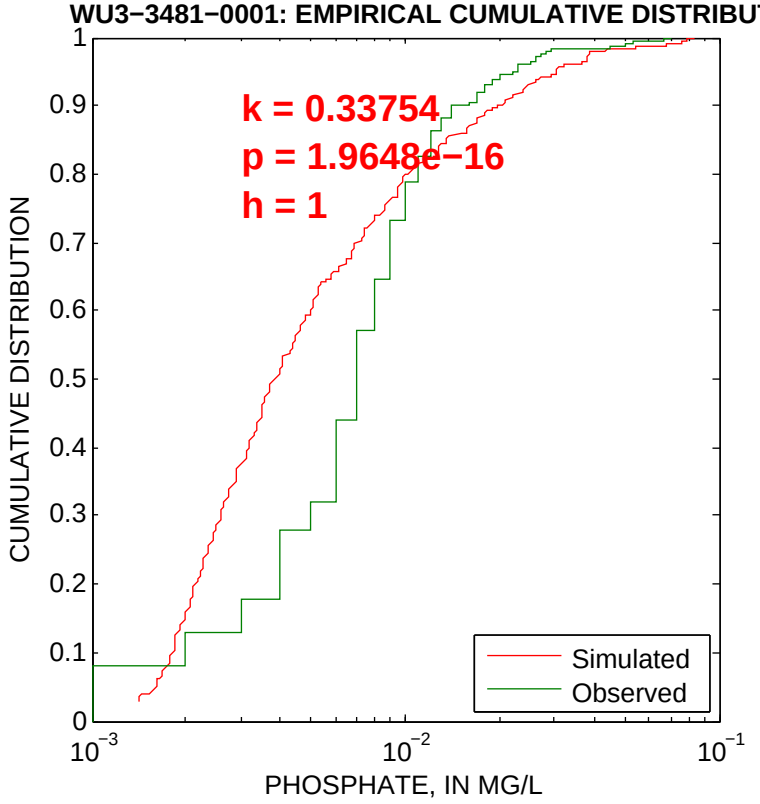












DATA SELECTION

scenario	file
P620171001WQ	PO4X.calib

plot: PO4X - phosphate

Dates: 1/1/1985 — 12/31/201

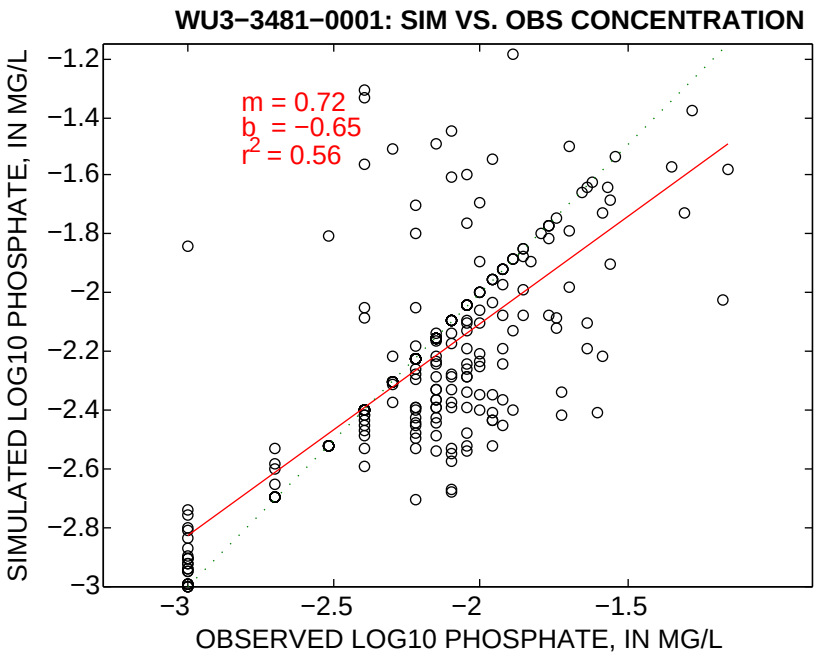
Drive	Directory	Observed
N/A	model	OBS20161101

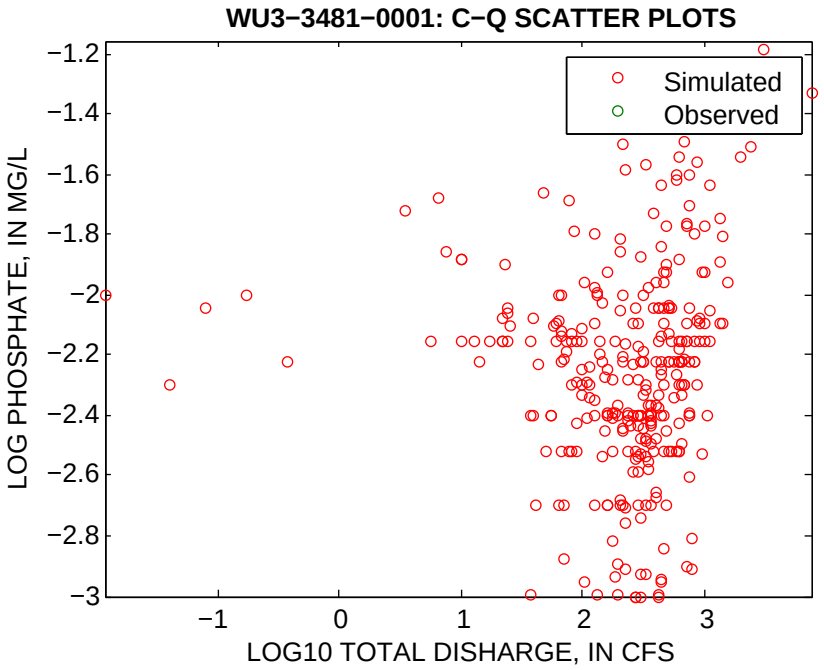
STATISTICS

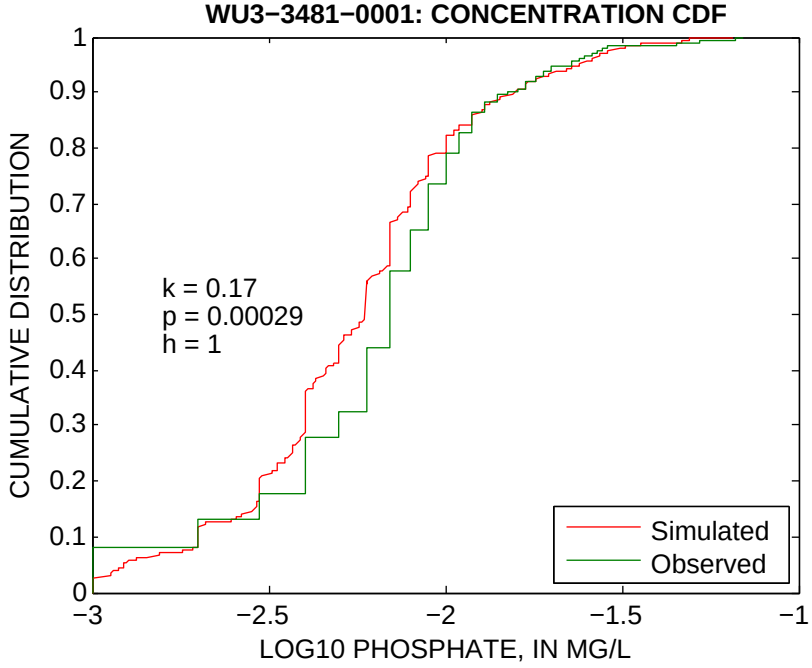
	n	317	308
		observe	simulate
min		0.001	0
		-3	-2.85134
mean		0.00855521	0.00813181
		-2.20535	-2.29765
media		0.007	0.0038569
		-2.1549	-2.39662
max		0.07	0.084328
		-1.1549	-1.07403
varian		6.733e-05	0.00013355
		0.127257	0.155714
JB		0.001	0.001
		0.006631	0.001
		ra	log
%		-4.94893	4.18542
err.va		0.00017783	0.224365
rel.std.err		2.64126	1.76309
mod.eff		-1.64126	-0.763091

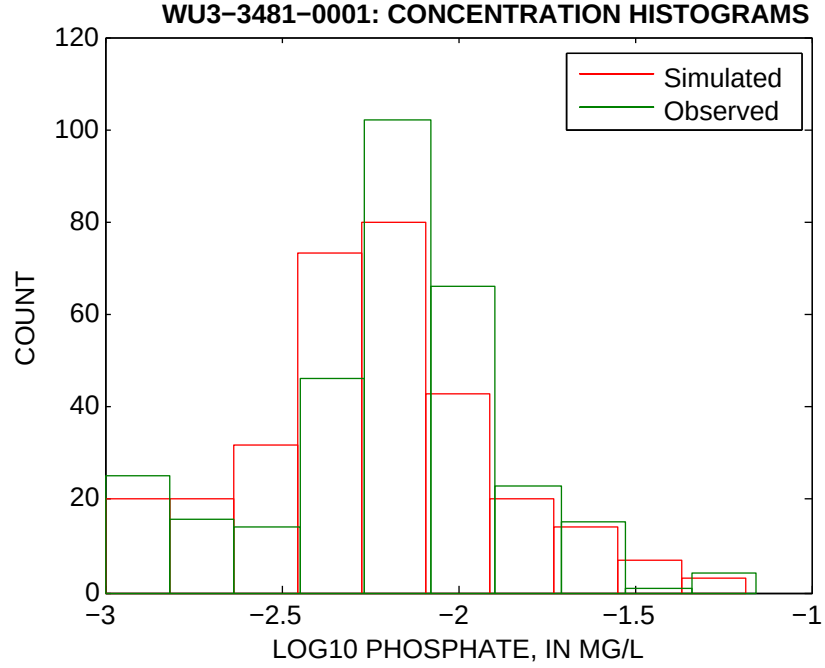
VERSION 2.1

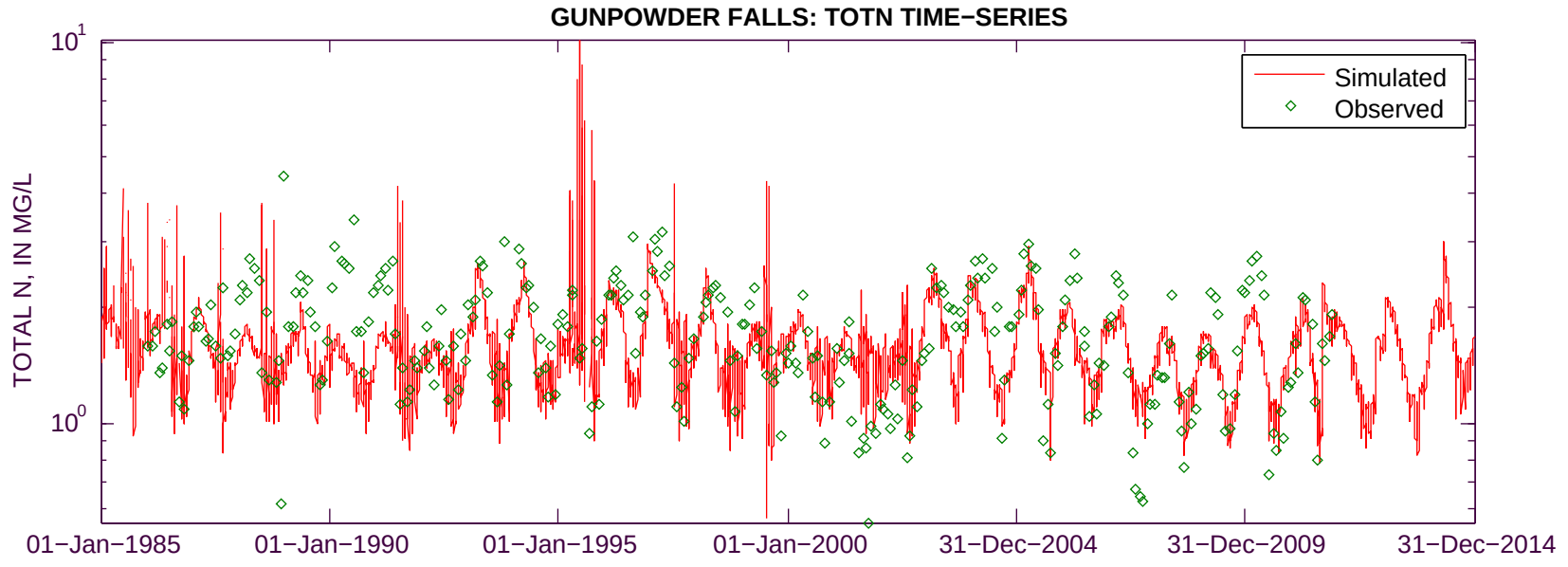
ALL DATA
LOG10

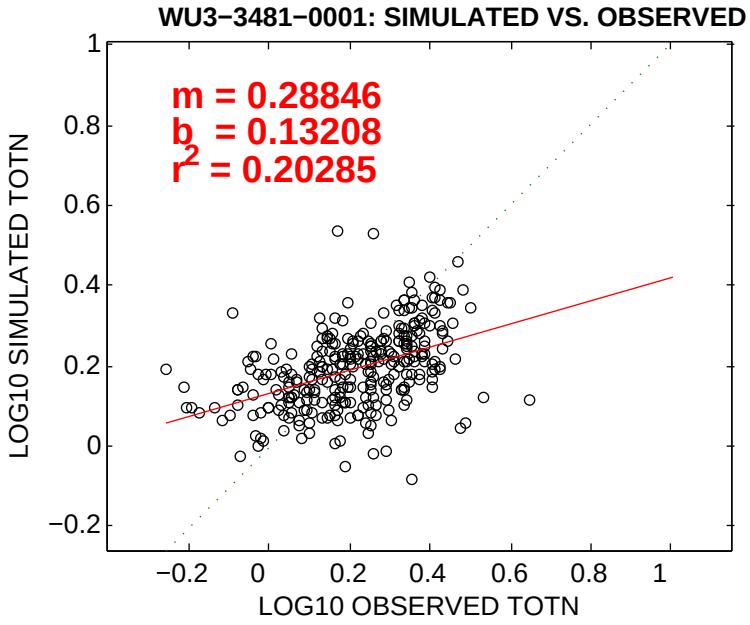


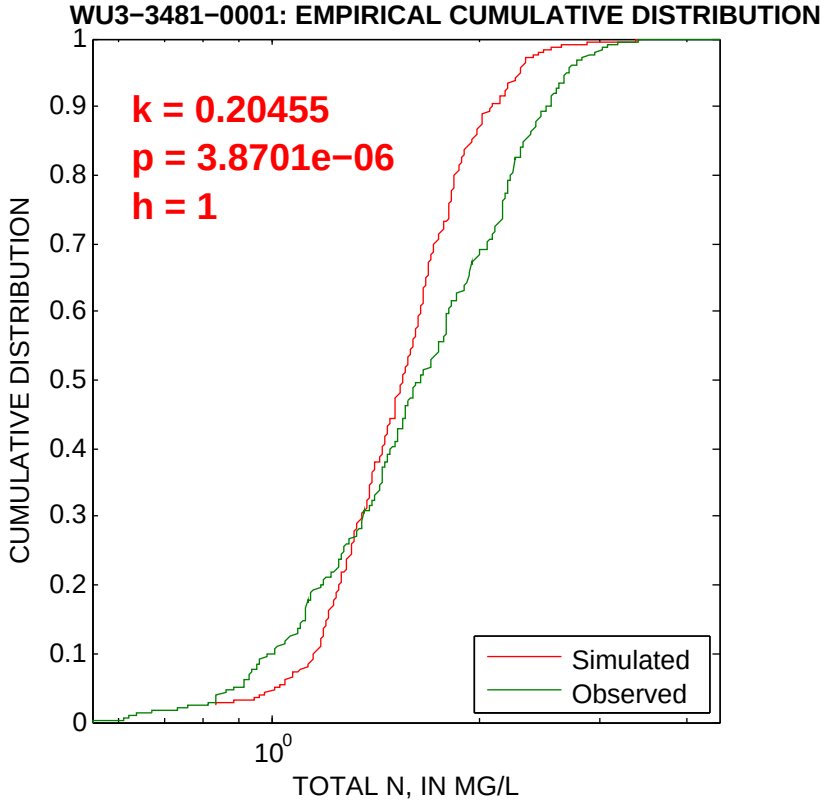












DATA SELECTION

scenario	file
P620171001WQ	TOTN.calib

plot: TOTN - total nitrogen

Dates: 1/1/1985 – 12/31/201

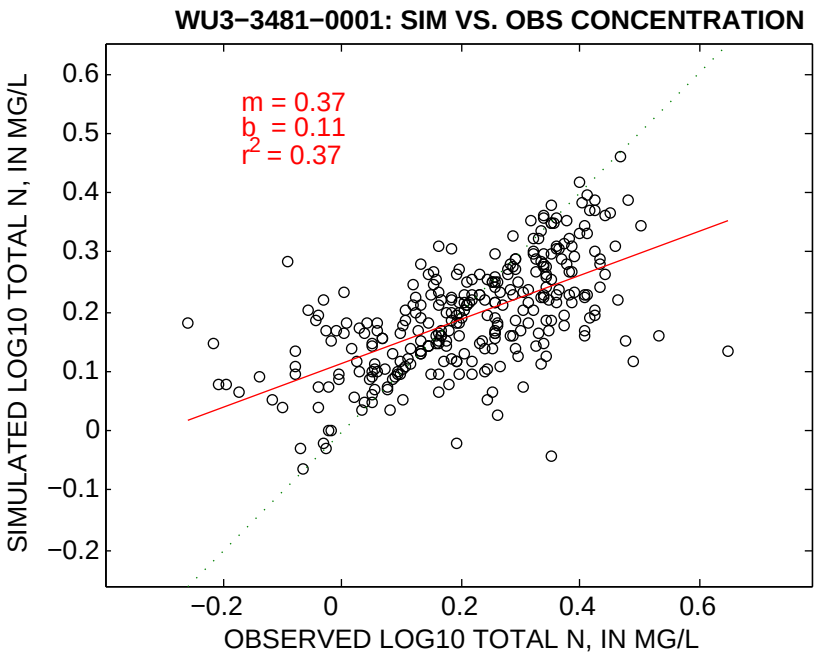
Drive	Directory	Observed
N/A	model	OBS20161101

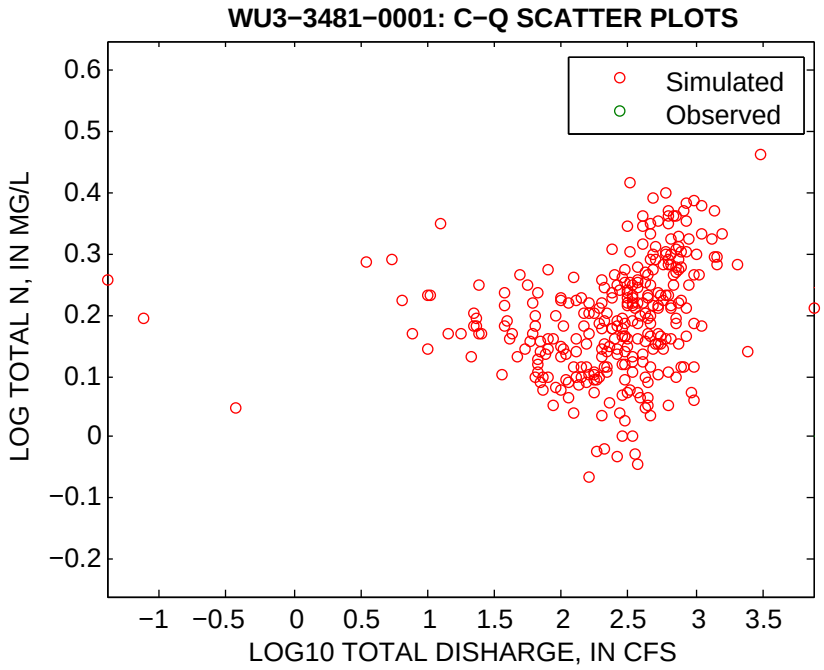
STATISTICS

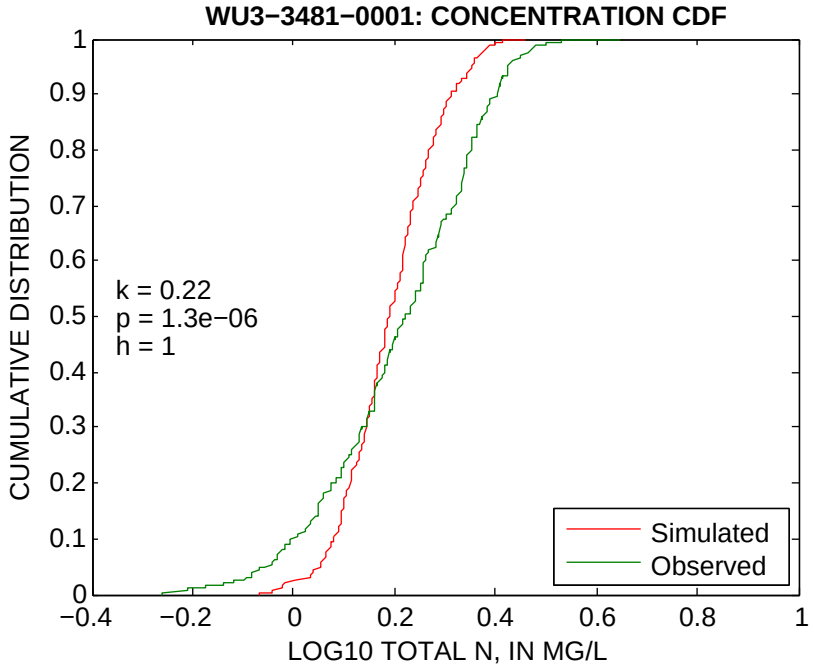
	n	observe	simulate
		308	300
min		0.55	0
		-0.259637	-0.0800751
mean		1.72147	1.56132
		0.213123	0.193554
media		1.645	1.5471
		0.220108	0.193431
max		4.45	3.4266
		0.64836	0.534863
varian		0.342962	0.20625
		0.0236888	0.00971755
JB		0.001343	0.001
		0.026488	0.124641
		ra	log
%		-9.30306	-9.18176
err.va		0.343979	0.0201238
rel.std.err		1.00296	0.849506
mod.eff		-0.0029632	0.150494

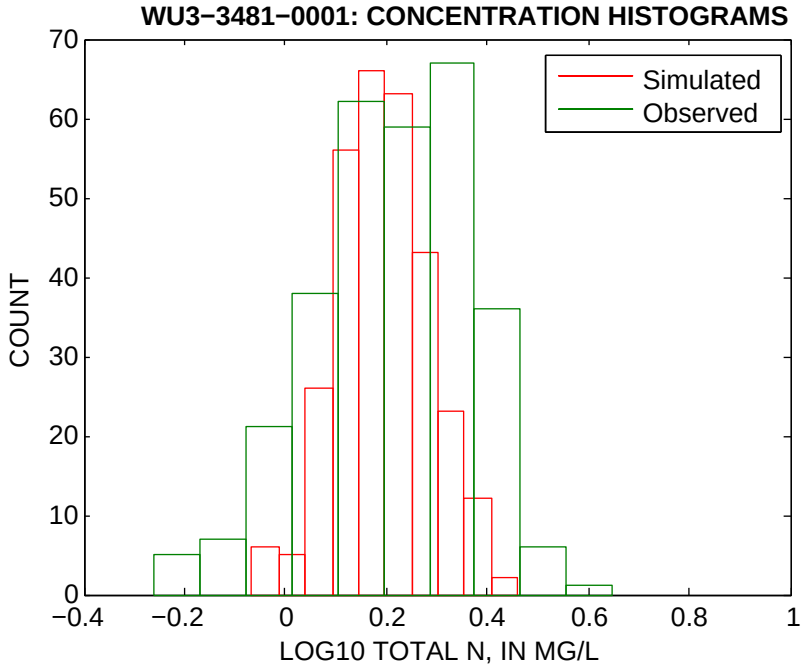
VERSION 2.1

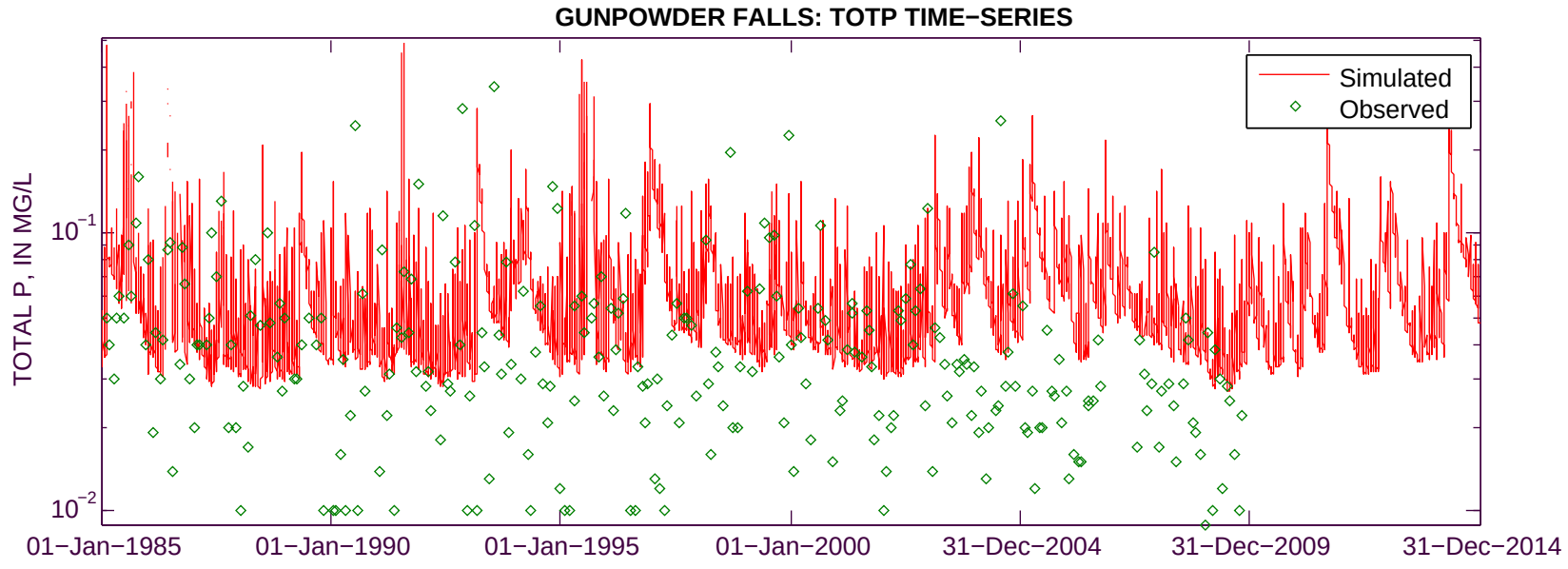
ALL DATA
LOG10

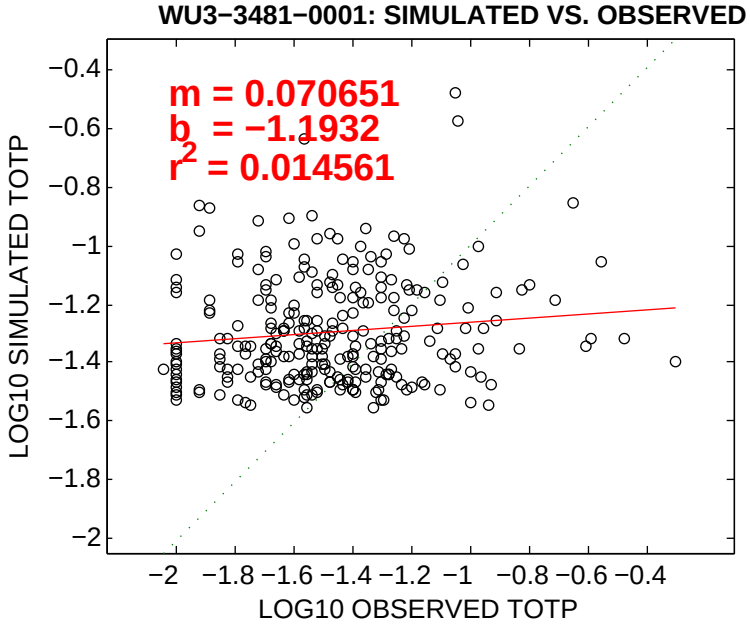


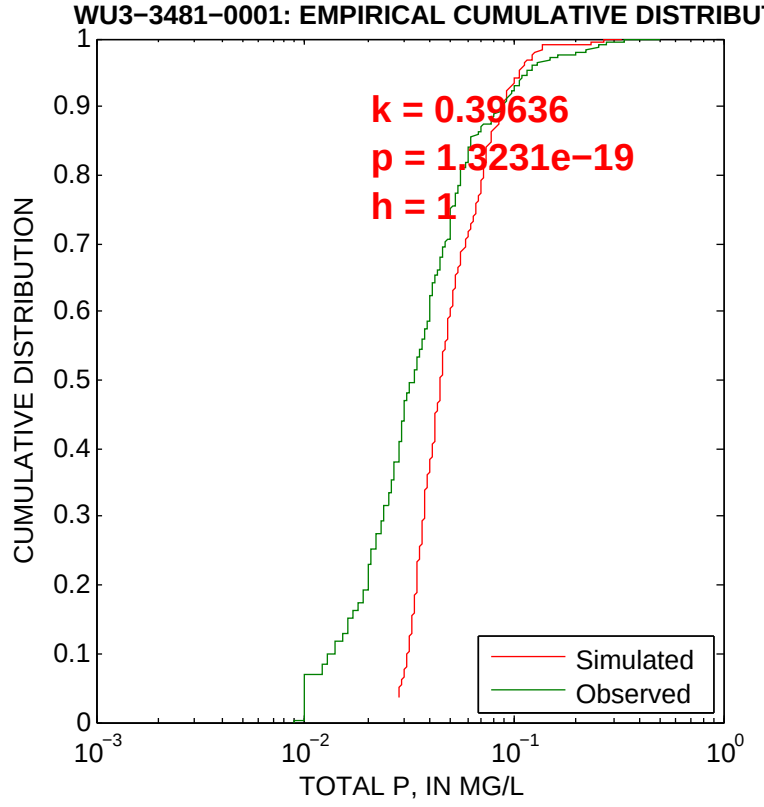












DATA SELECTION

scenario	file
P620171001WQ	TOTP.calib

plot: TOTP - total phosphorus

Dates: 1/1/1985 – 12/31/201

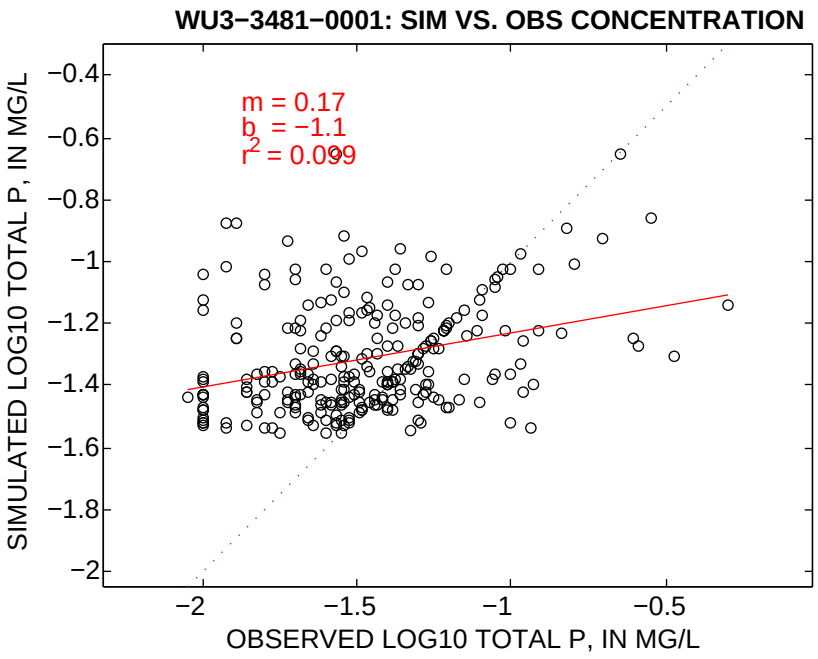
Drive	Directory	Observed
N/A	model	OBS20161101

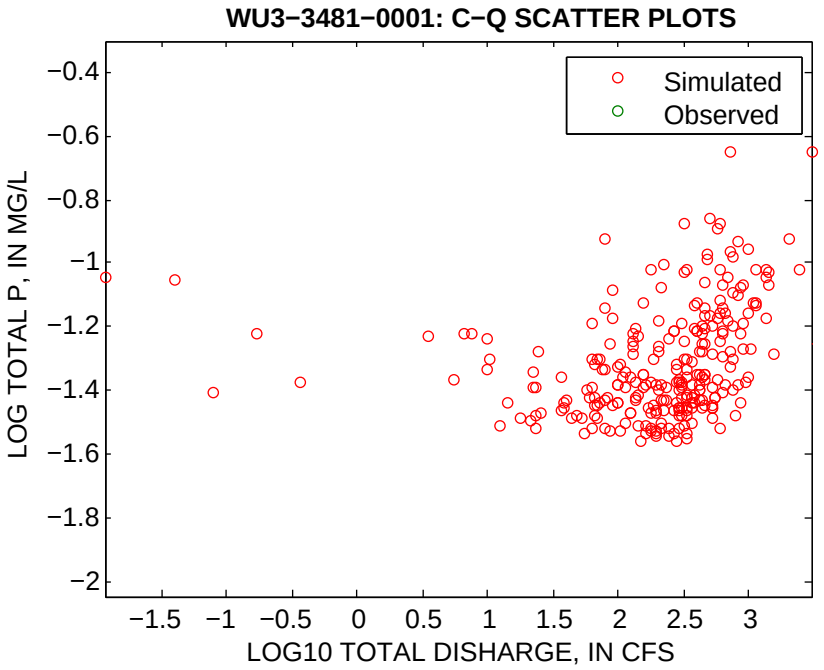
STATISTICS

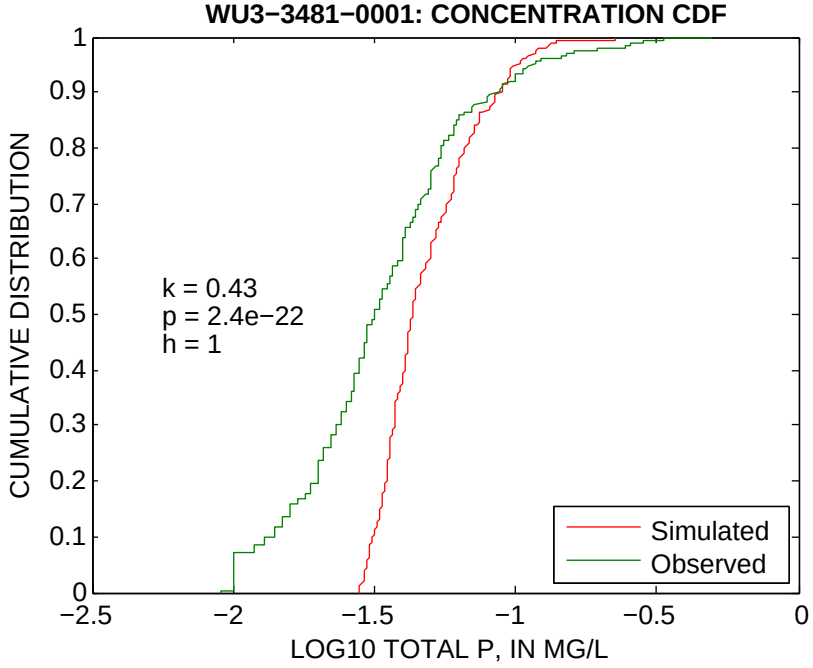
	n	275	265
		observe	simulate
min		0.009	0
		-2.04576	-1.55455
mean		0.0460364	0.0539728
		-1.47406	-1.29732
media		0.033	0.044756
		-1.49485	-1.33993
max		0.5	0.32914
		-0.30103	-0.482619
varian		0.00253163	0.00117767
		0.0974073	0.0333928
JB		0.001	0.001
		0.001295	0.001
		ra	log
%		17.2394	-11.99
err.va		0.00355424	0.148391
rel.std.err		1.40393	1.52341
mod.eff		-0.403934	-0.52341

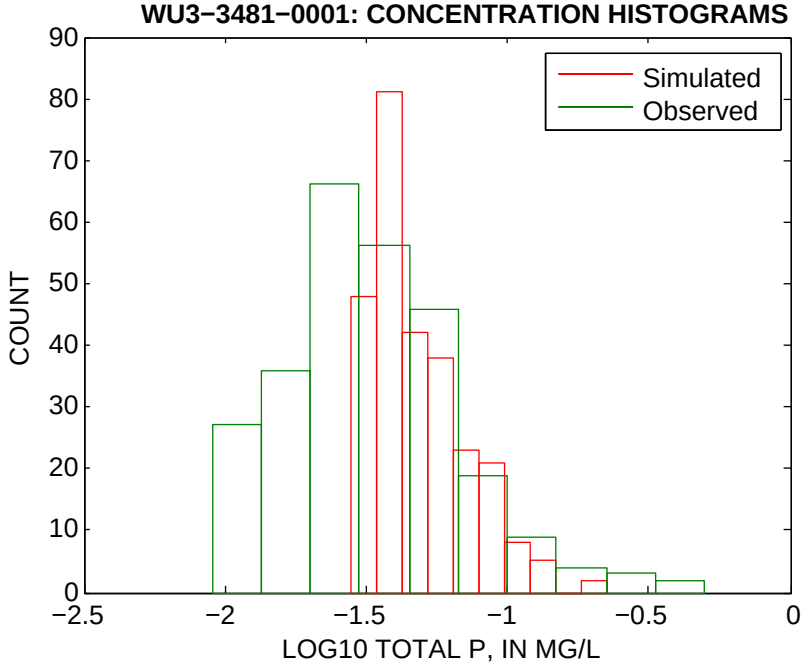
VERSION

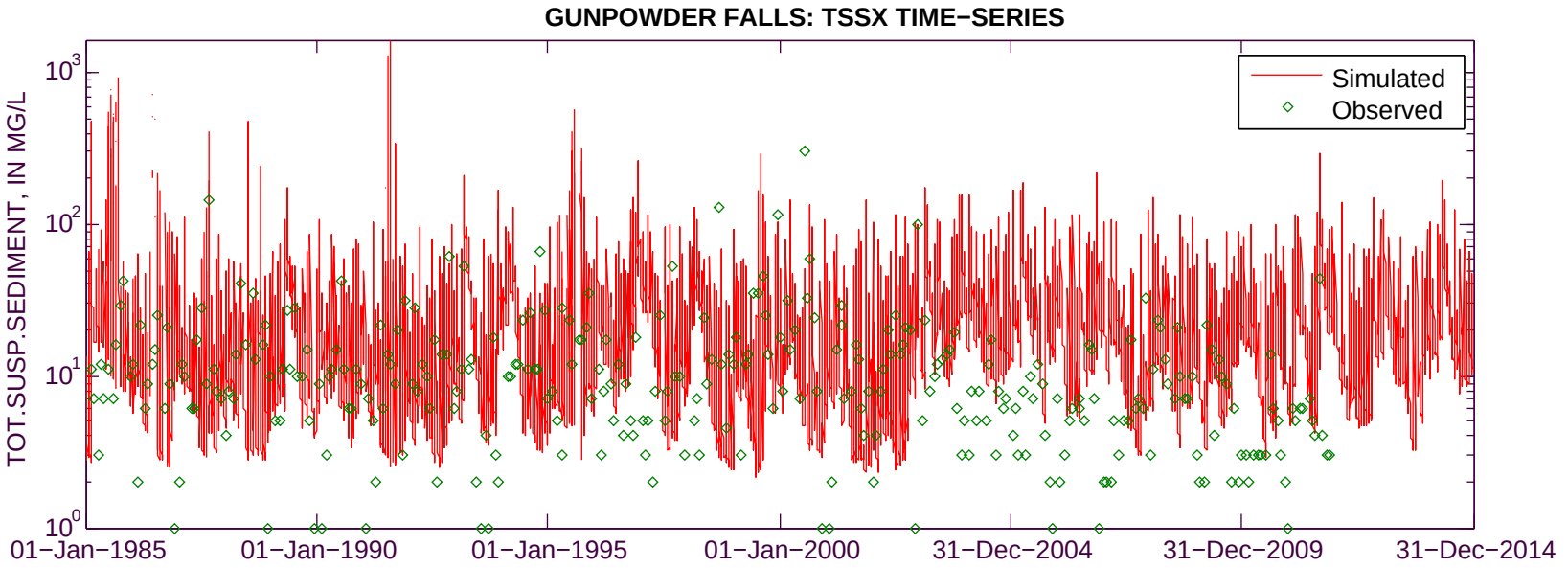
ALL DATA
LOG10

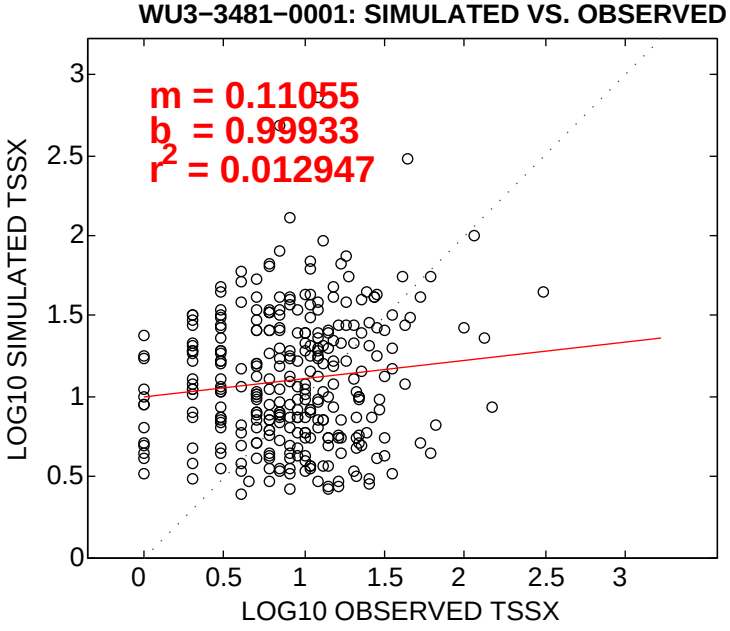


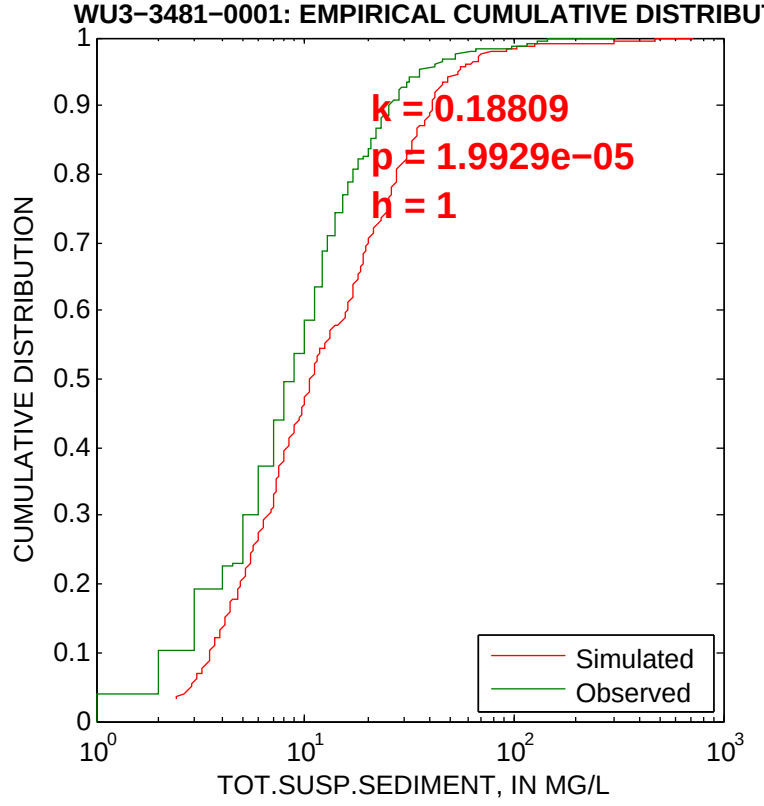












DATA SELECTION

scenario	file
P620171001WQ	TSSX.calib

plot: TSSX - total suspended ...

Dates: 1/1/1985 – 12/31/201

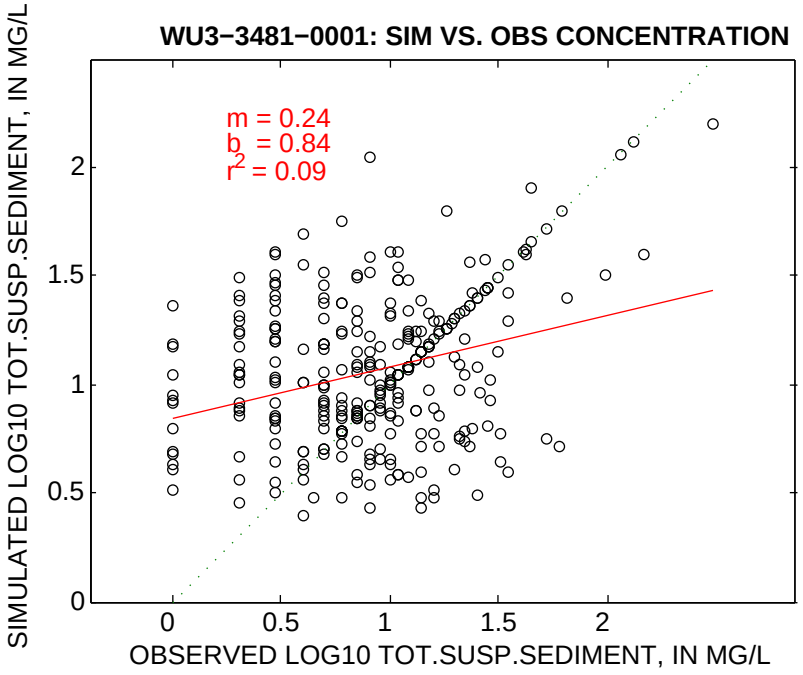
Drive	Directory	Observed
N/A	model	OBS20161101

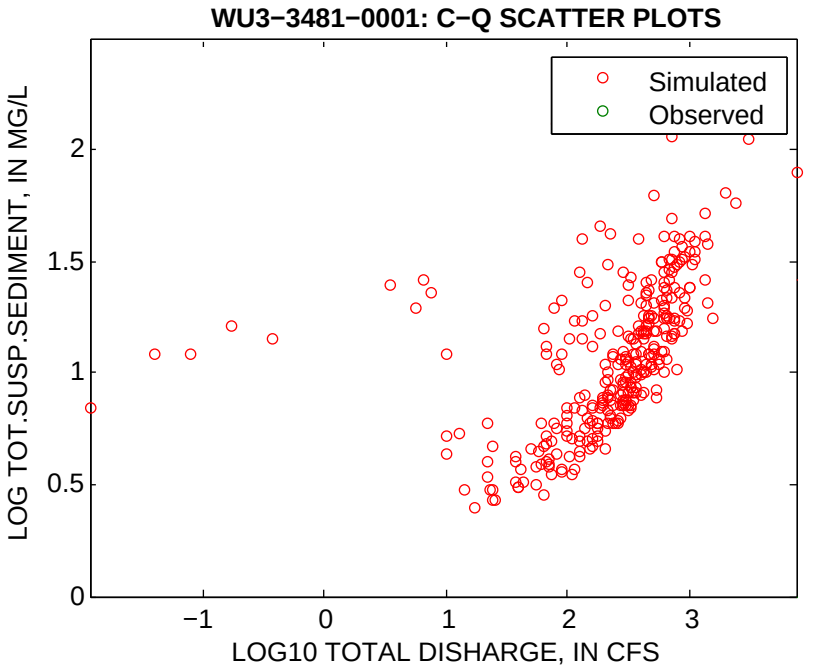
STATISTICS

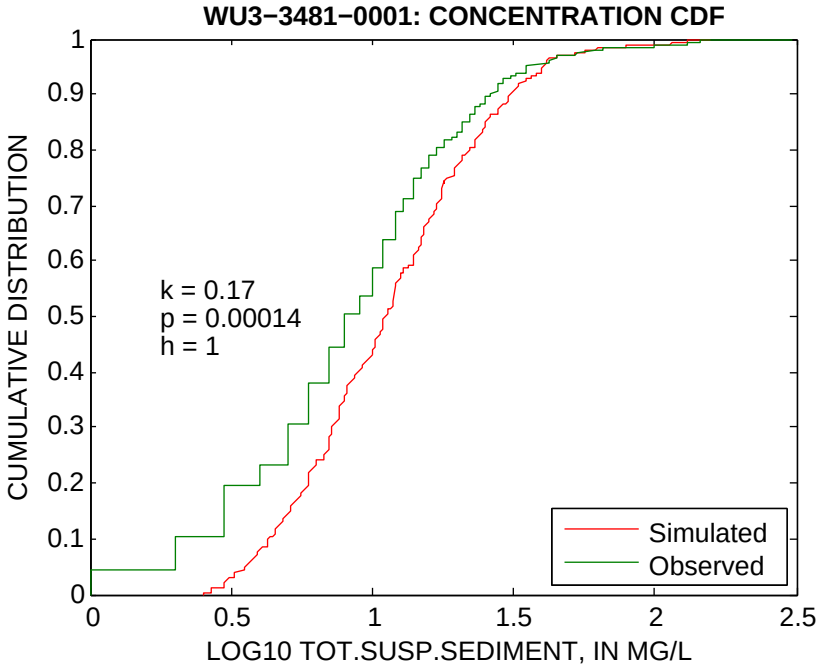
	n	319	309
		observe	simulate
min		1	0
		0	0.39127
mean		13.7947	21.8359
		0.917218	1.10072
media		9	10.676
		0.90309	1.04786
max		306	727.76
		2.48572	2.86199
varian		534.927	2788.98
		0.176018	0.166139
JB		0.001	0.001
		0.072489	0.001
		ra	log
%		58.292	20.0063
err.va		3228.94	0.337023
rel.std.err		6.03623	1.91471
mod.eff		-5.03623	-0.914706

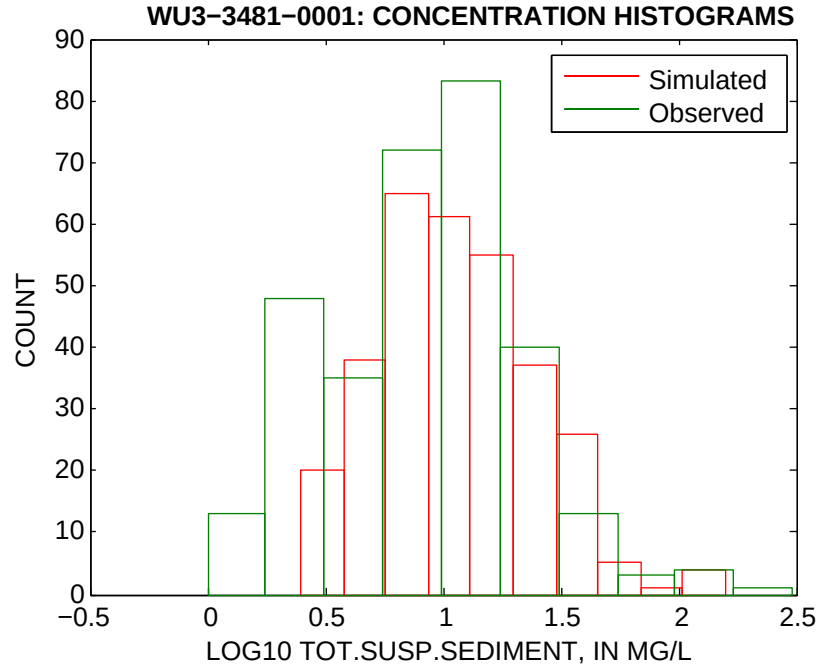
VERSION

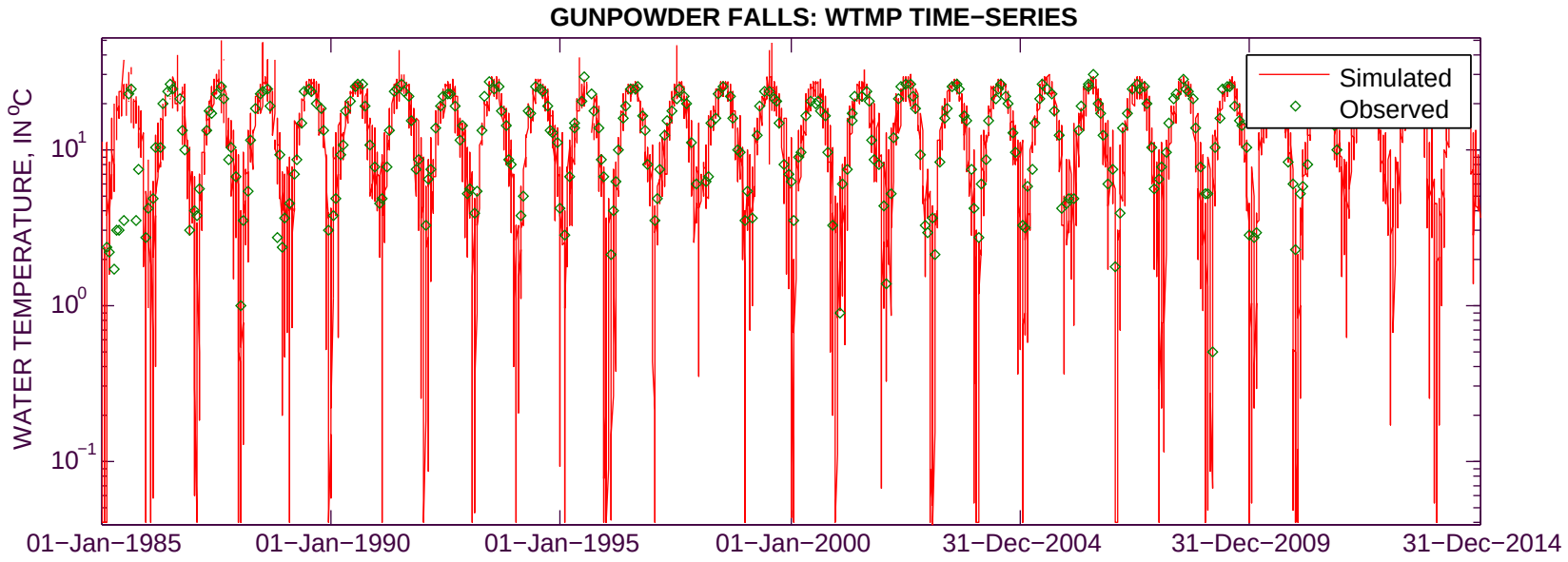
ALL DATA
LOG10

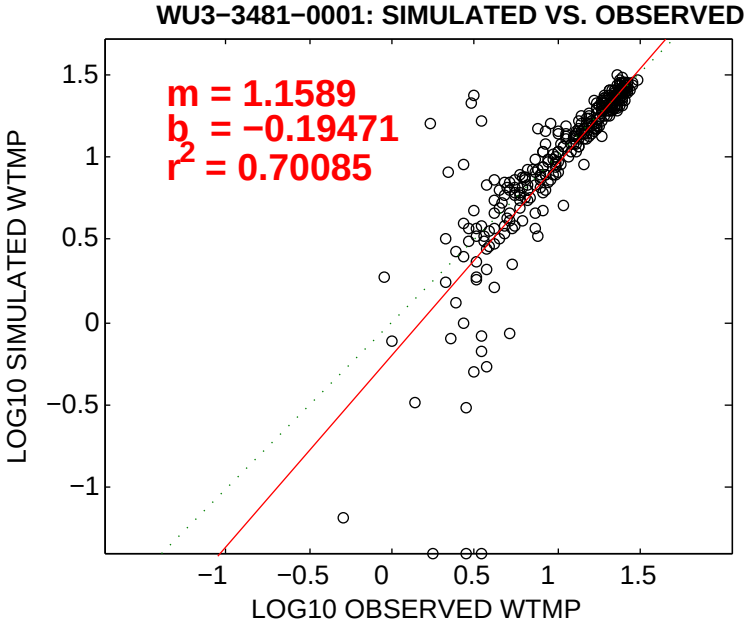


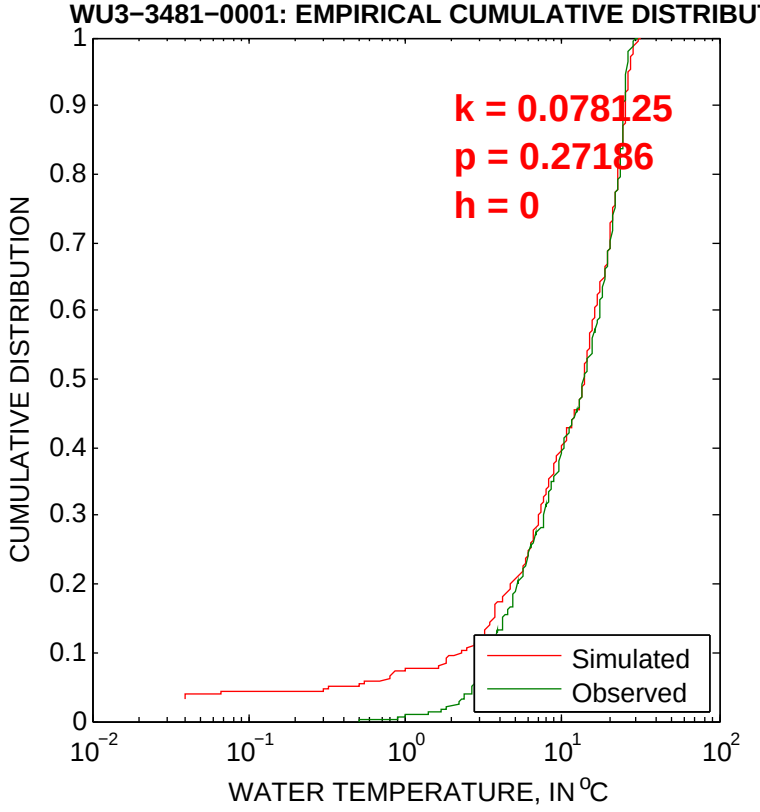












DATA SELECTION

scenario	file
P620171001WQ	WTMP.calib

plot: WTMP - water tempera...

Dates: 1/1/1985 – 12/31/201

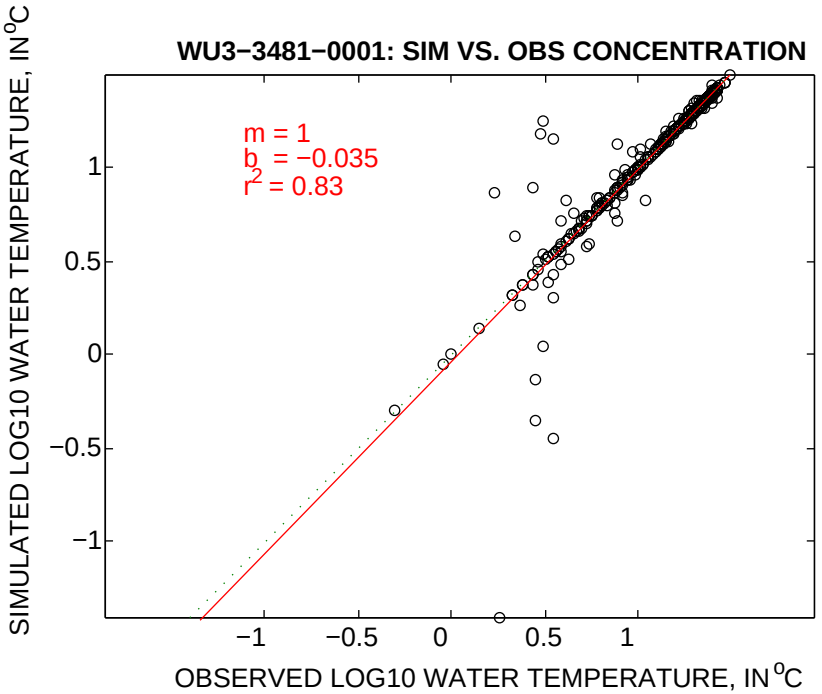
Drive	Directory	Observed
N/A	model	OBS20161101

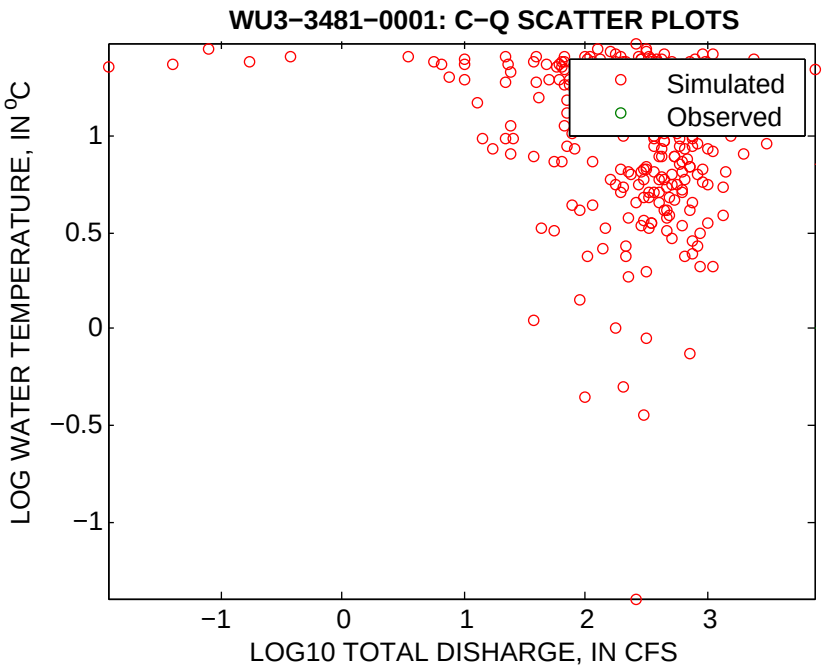
STATISTICS

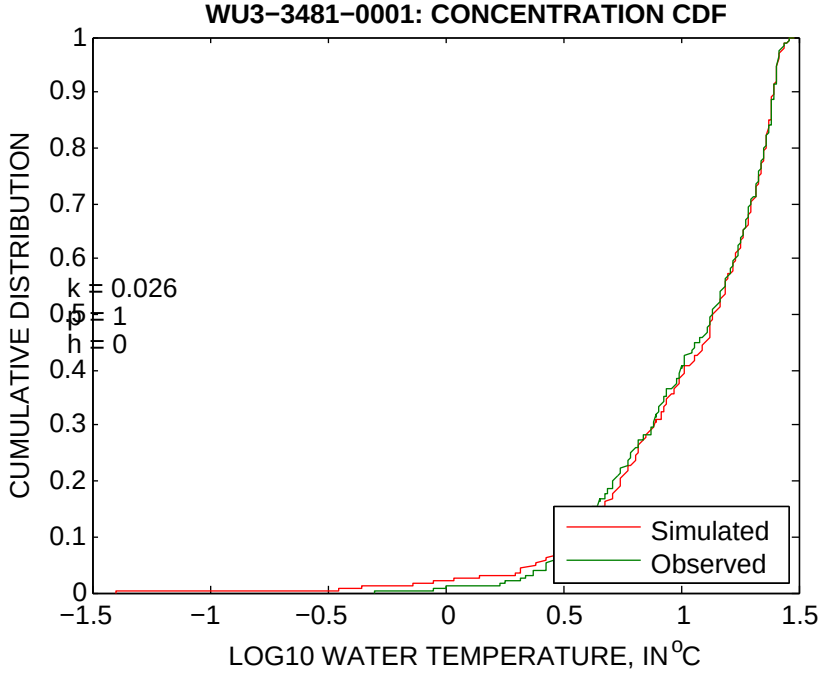
	n	320	310
		observe	**simulate**
min		0.5	0
		-0.30103	-1.39757
mean		14.077	13.6959
		1.03656	1.00659
media		13.85	13.799
		1.13032	1.14597
max		30.8	31.511
		1.48855	1.49846
varian		65.9246	74.5318
		0.114172	0.2188
JB		0.001	0.001664
		0.001	0.001
		ra	log
%		-2.7068	-2.89144
err.va		24.5311	0.069238
rel.std.err		0.372109	0.606438
mod.eff		0.627891	0.393562

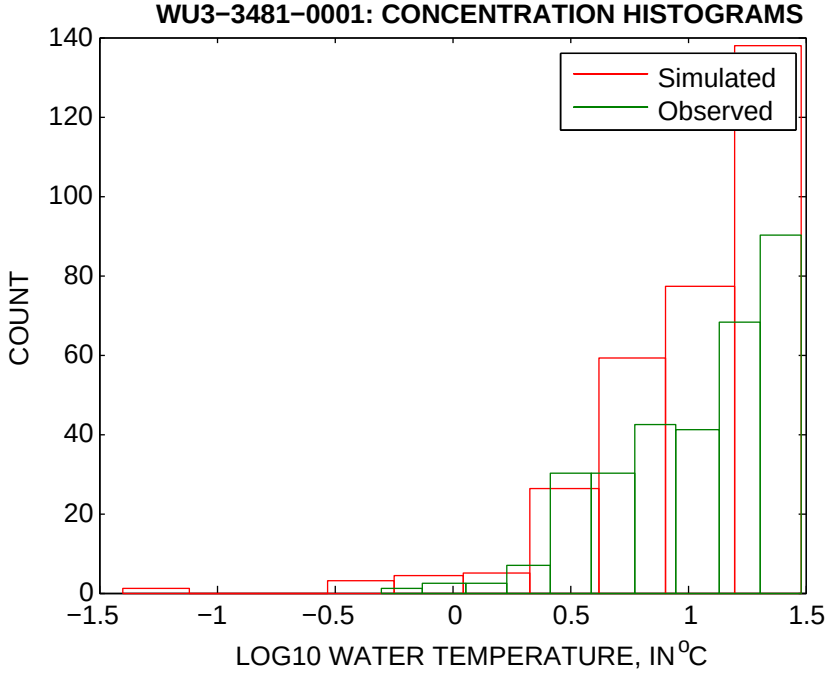
VERSION 2.1

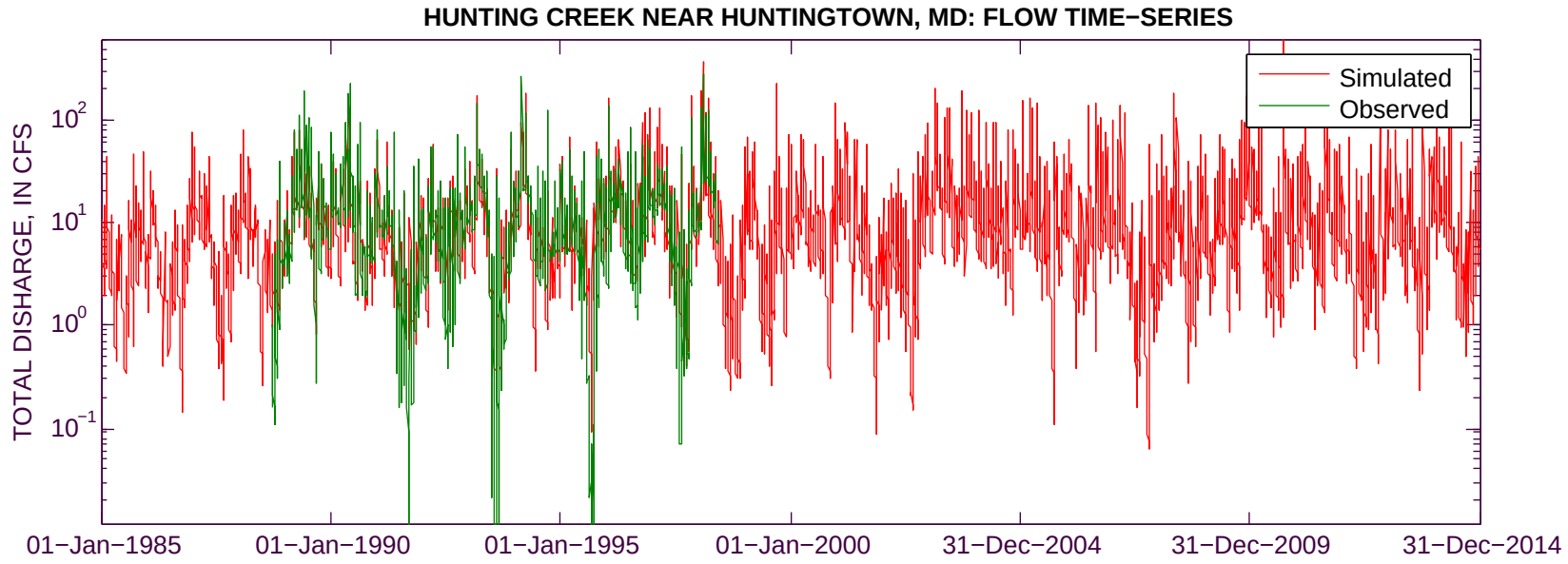
ALL DATA
LOG10

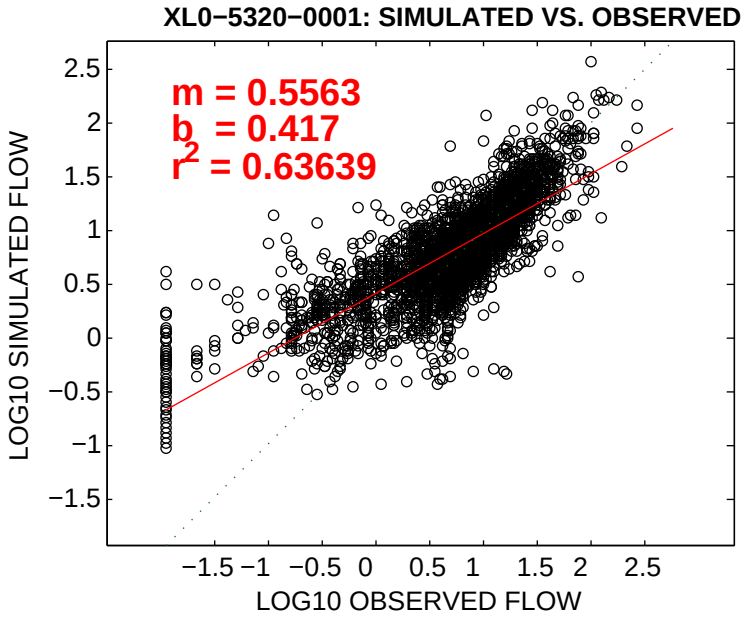


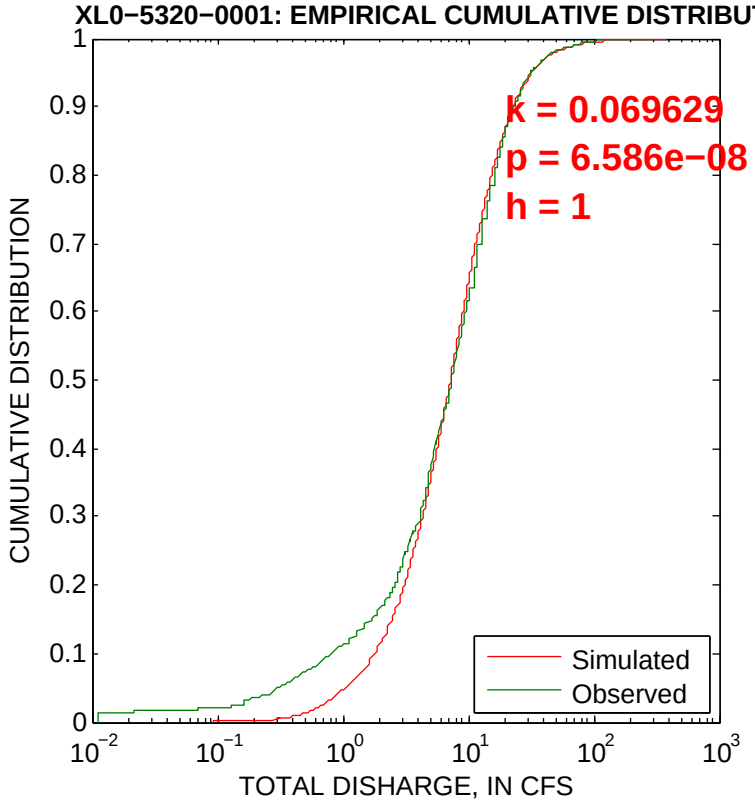












DATA SELECTION

scenario: P620171001WQ | file: _FLOW.calib

plot: FLOW - total discharge

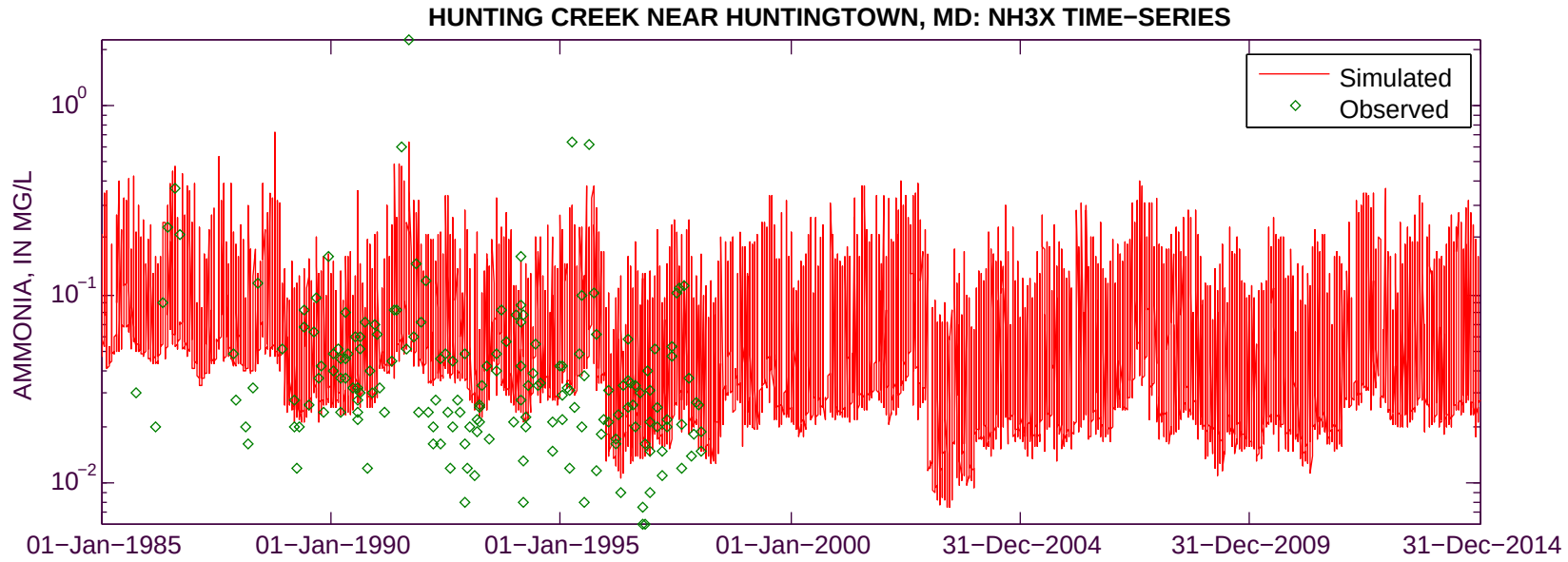
Dates: 1/1/1985 – 12/31/201

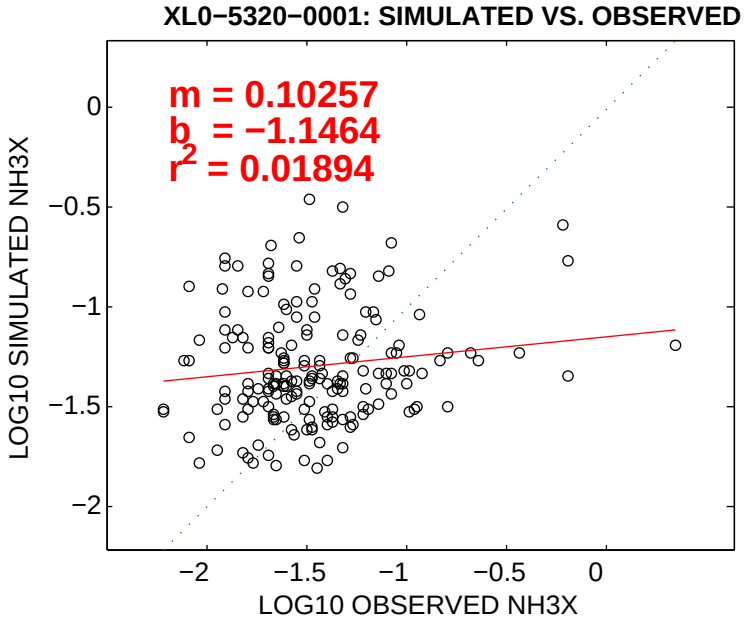
Drive: N/A | Directory: model | Observed: OBS20161101

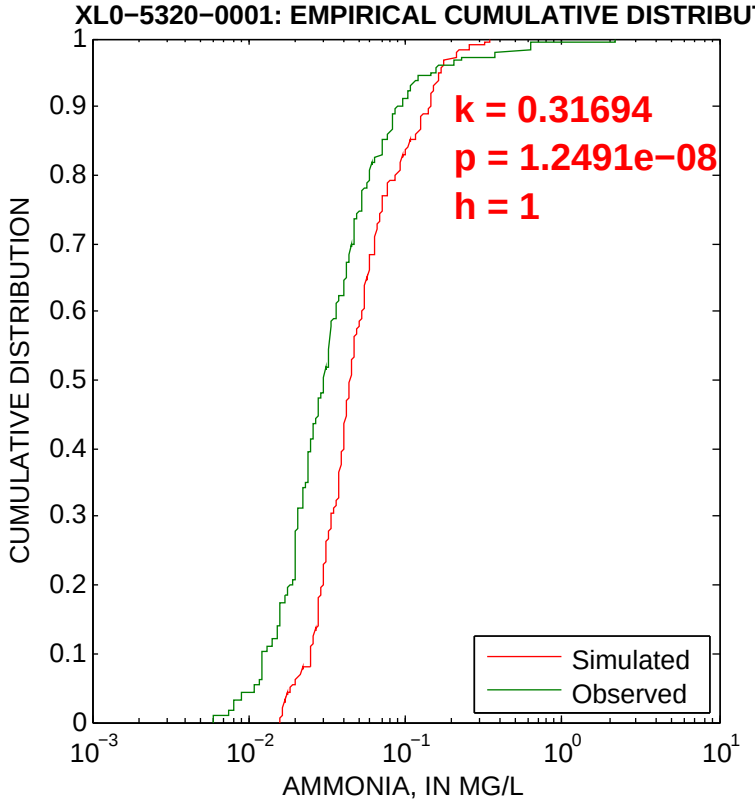
STATISTICS

	observe	simulate
n	3533	3533
min	0.0112581	0.092286
	-1.94853	-1.03486
mean	11.2694	11.3029
	0.748913	0.833619
media	7.41126	7.272
	0.869892	0.861654
max	281.011	374.92
	2.44872	2.57394
varian	243.636	254.855
	0.411682	0.200201
JB	0.001	0.001
	0.001	0.001
	ra	log
%	0.297593	11.3105
err.va	136.363	0.161019
rel.std.err	0.559702	0.391125
mod.eff	0.440298	0.608875

VERSION 2.1







DATA SELECTION

scenario	file
P620171001WQ	NH3X.calib

plot: NH3X - ammonia

Dates: 1/1/1985 – 12/31/201

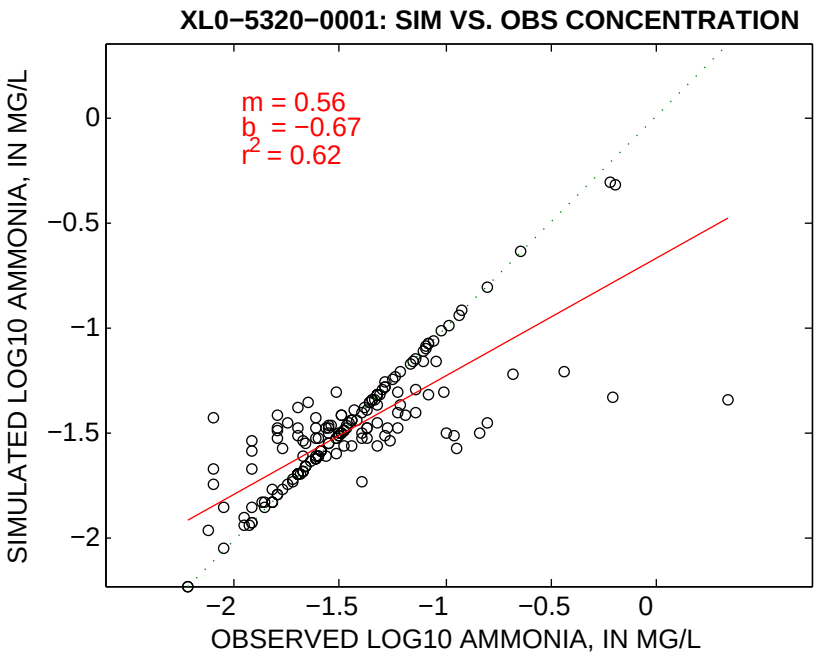
Drive	Directory	Observed
N/A	model	OBS20161101

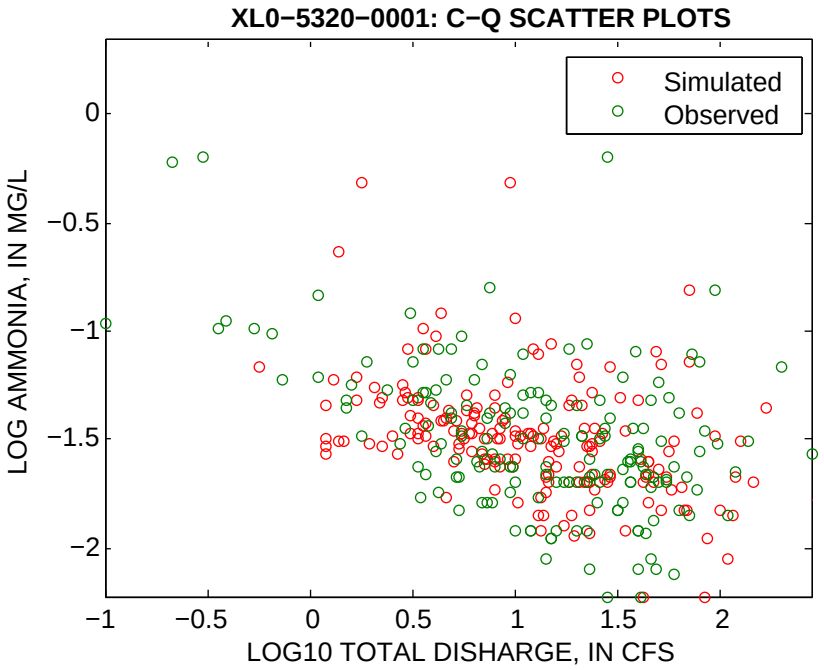
STATISTICS

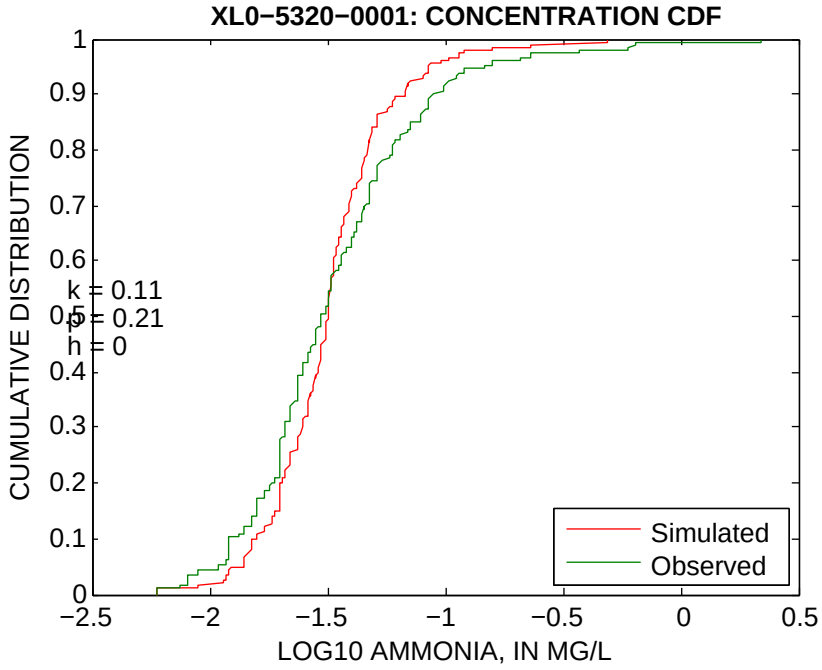
	n	183	183
		observe	simulate
min		0.006	0.015627
		-2.22185	-1.80612
mean		0.0636298	0.0639279
		-1.46939	-1.29708
media		0.03	0.044937
		-1.52288	-1.3474
max		2.2	0.3503
		0.342423	-0.45556
varian		0.0324563	0.00284776
		0.143205	0.079554
JB		0.001	0.001
		0.001	0.008787
		ra	log
%		0.468409	-11.7271
err.va		0.0335133	0.223237
rel.std.err		1.03257	1.55886
mod.eff		-0.032567	-0.558864

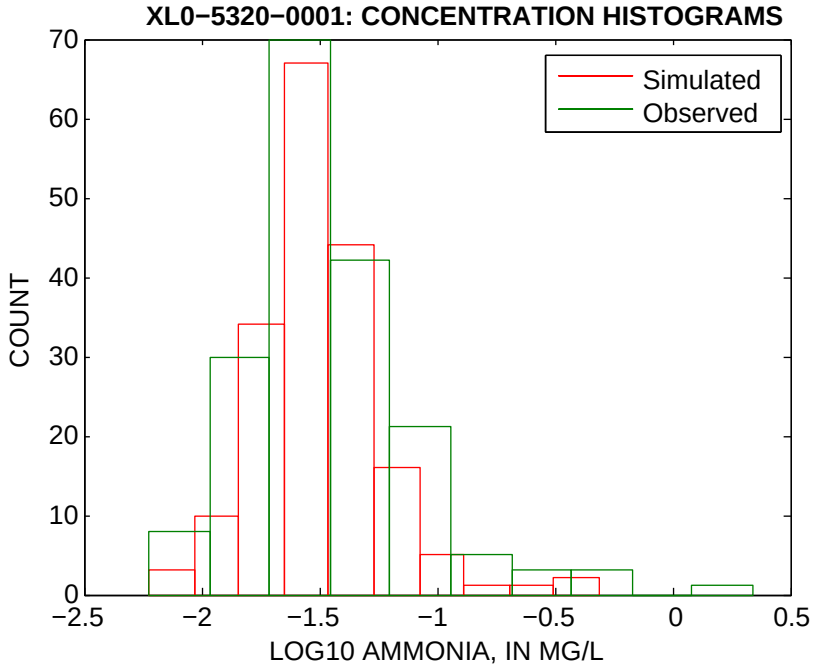
VERSION 2.1

ALL DATA
LOG10

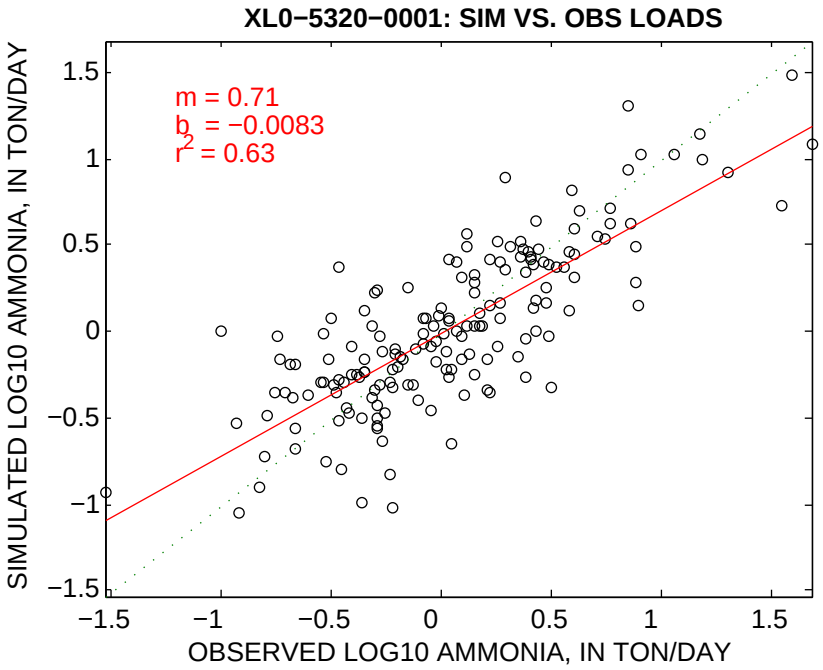


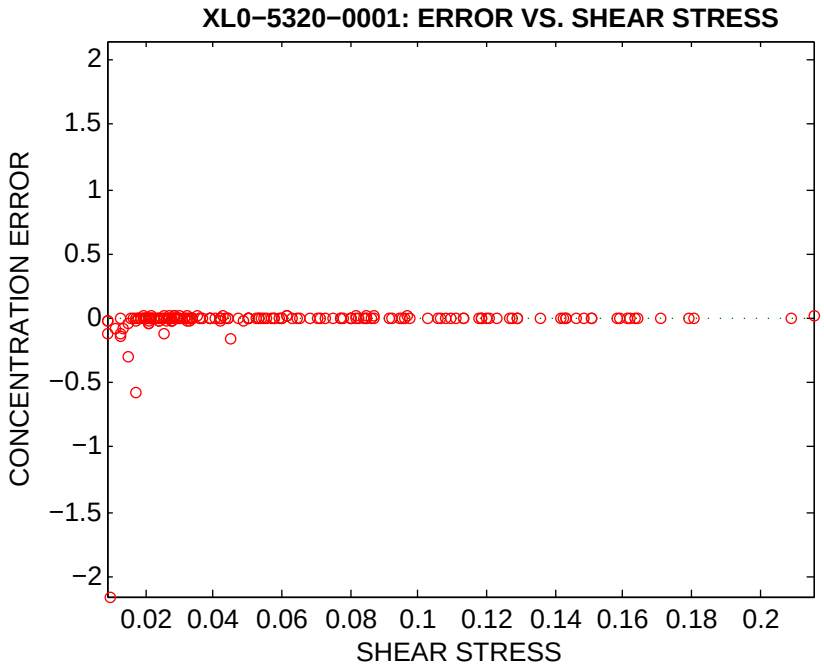


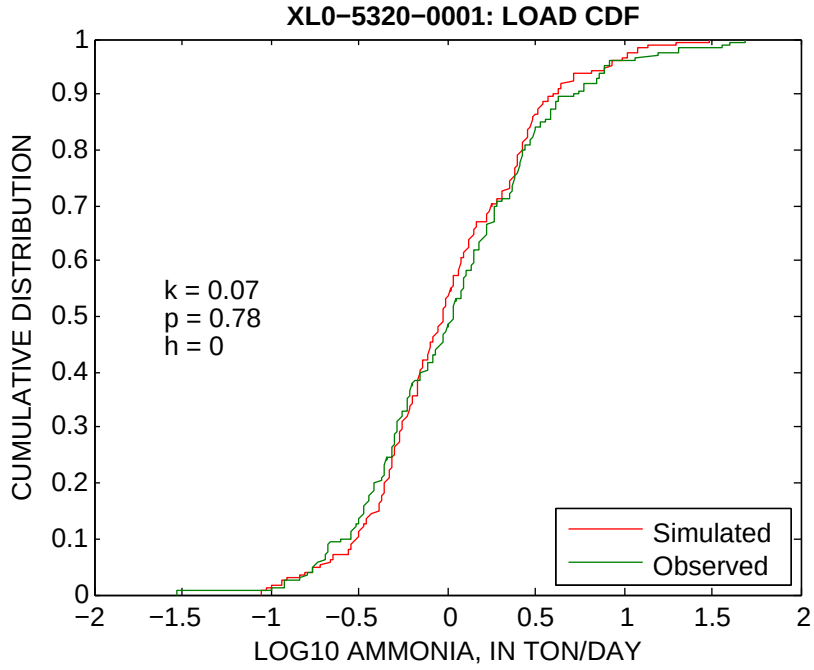


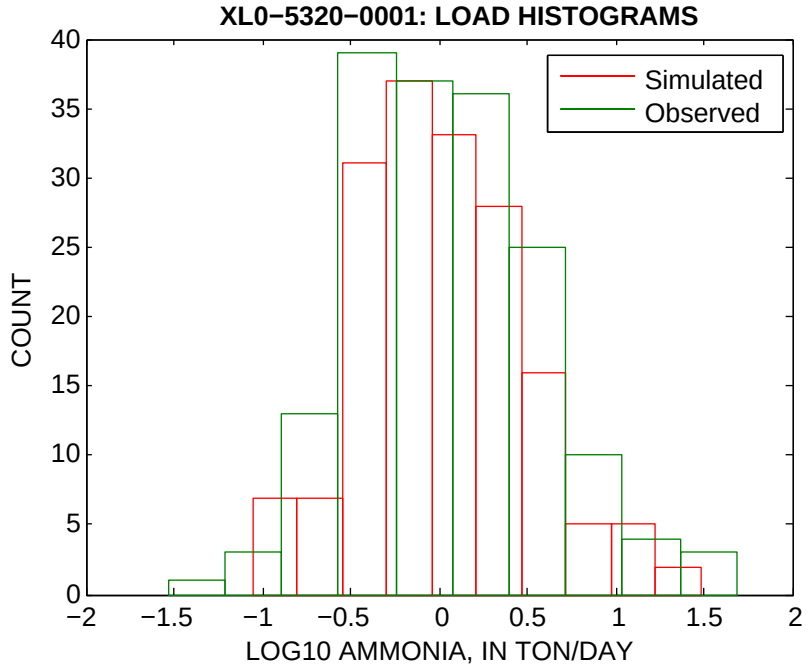


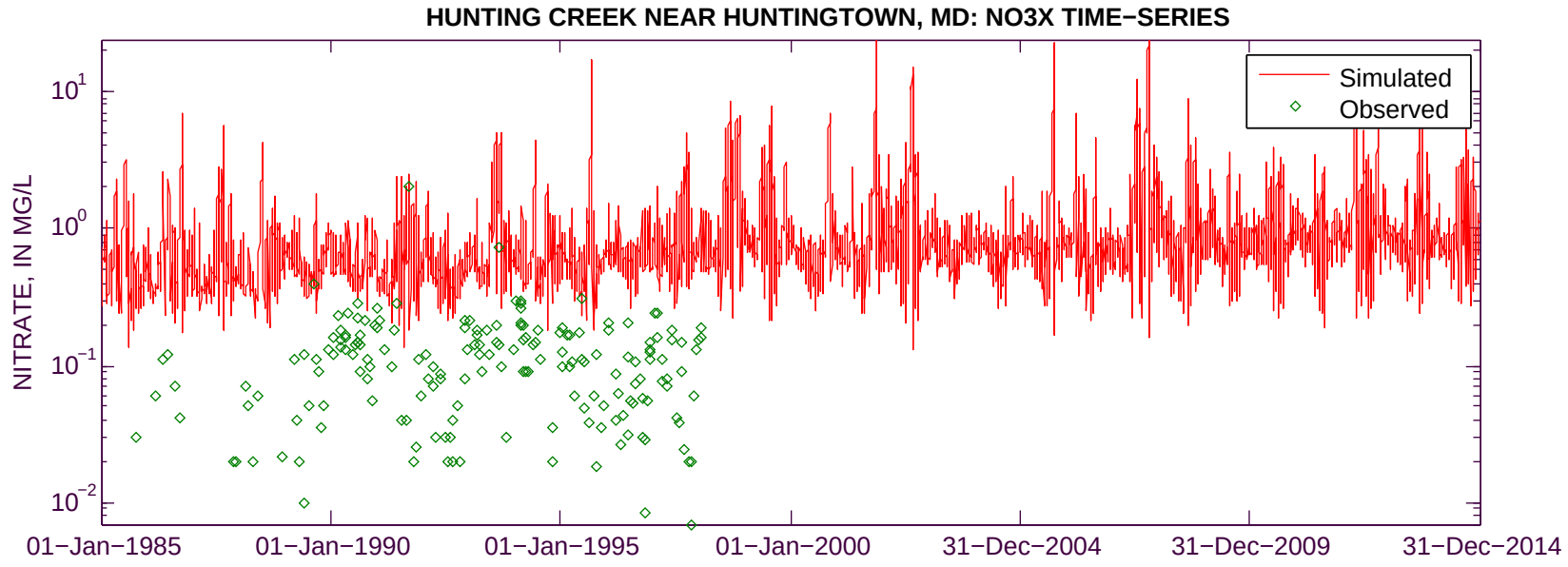
LOAD DATA
LOG10

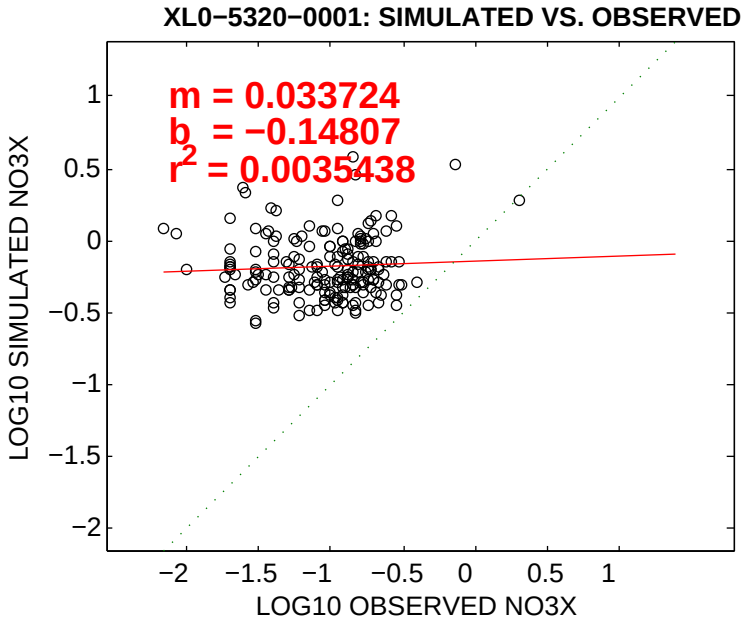


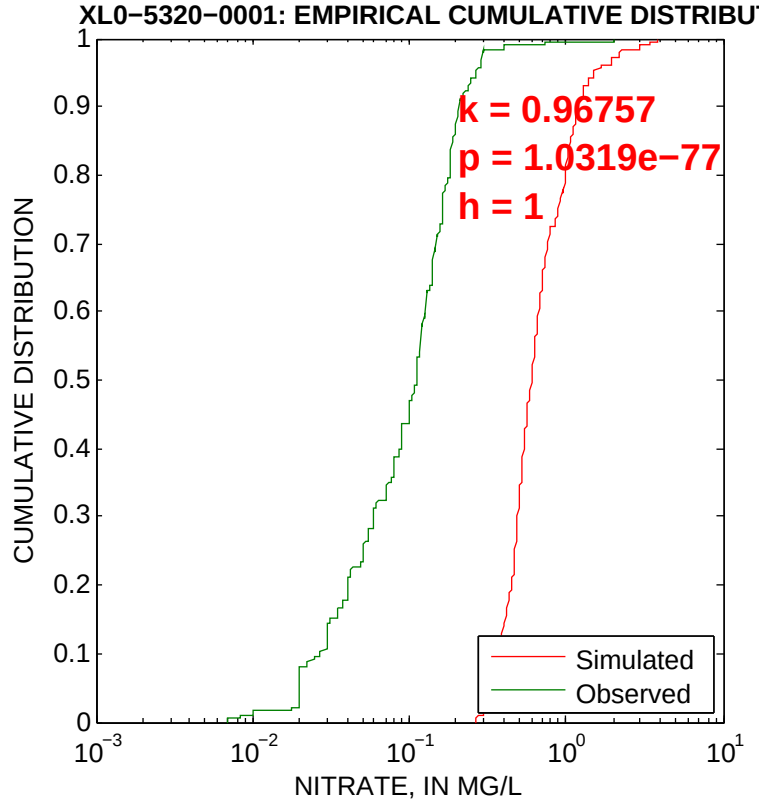












DATA SELECTION

scenario: P620171001WQ | file: NO3X.calib

plot: NO3X - nitrate

Dates: 1/1/1985 – 12/31/201

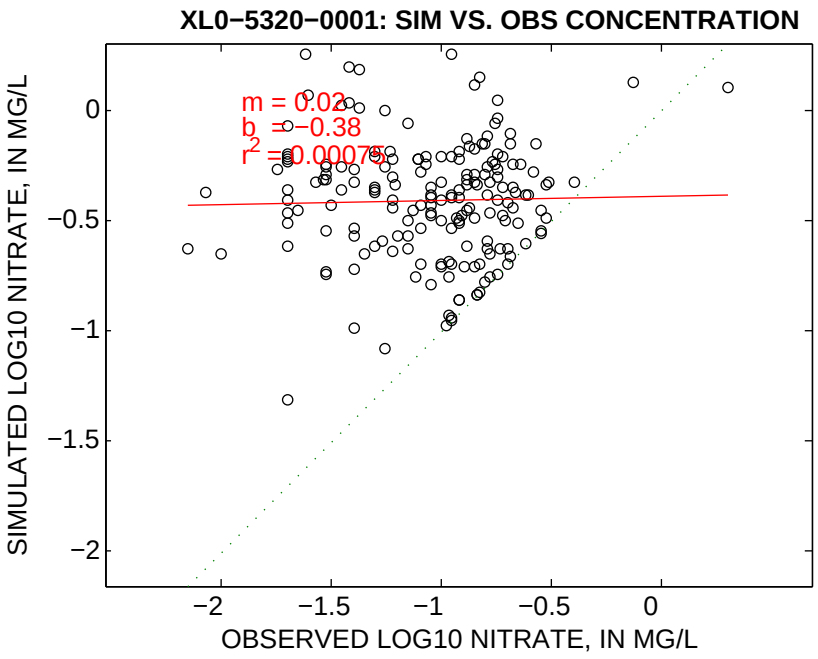
Drive: N/A | Directory: model | Observed: OBS20161101

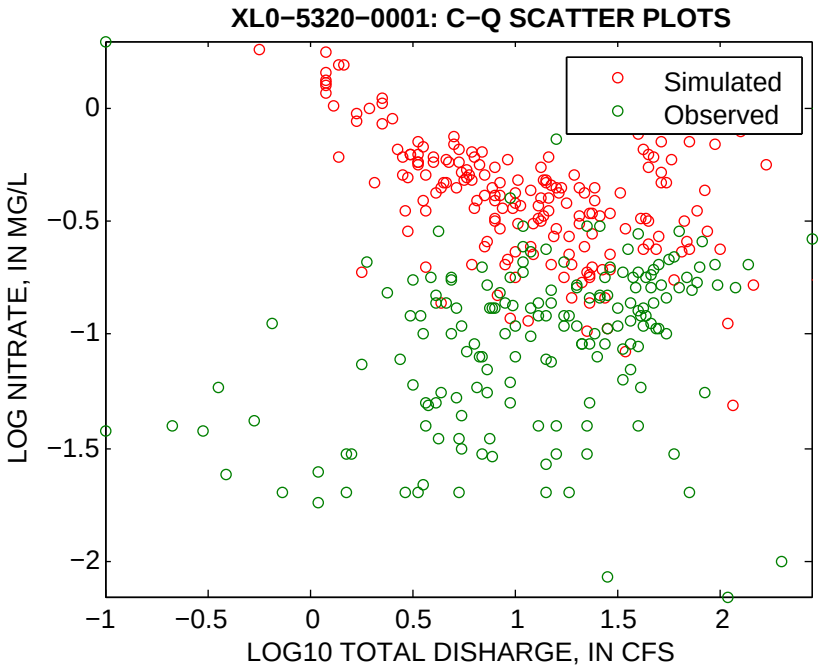
STATISTICS

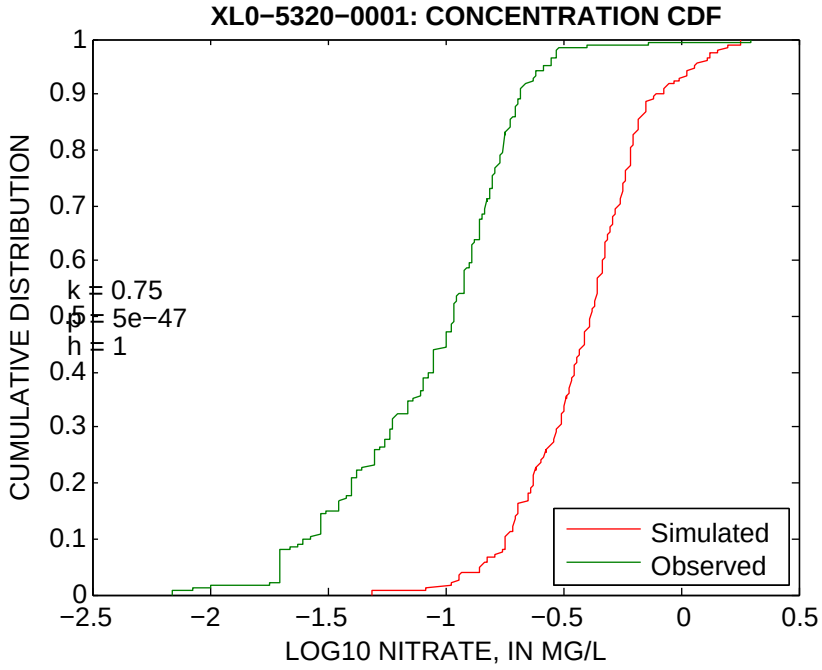
		observe	simulate
n		185	185
min		0.007	0.26783
		-2.1549	-0.572141
mean		0.126959	0.749733
		-1.04781	-0.183406
media		0.11	0.60281
		-0.958607	-0.21982
max		2	3.8302
		0.30103	0.583221
varian		0.0266286	0.242889
		0.135501	0.0434863
JB		0.001	0.001
		0.044158	0.001
		ra	log
%		490.533	-82.4962
err.va		0.617627	0.921099
rel.std.err		23.1941	6.79773
mod.eff		-22.1941	-5.79773

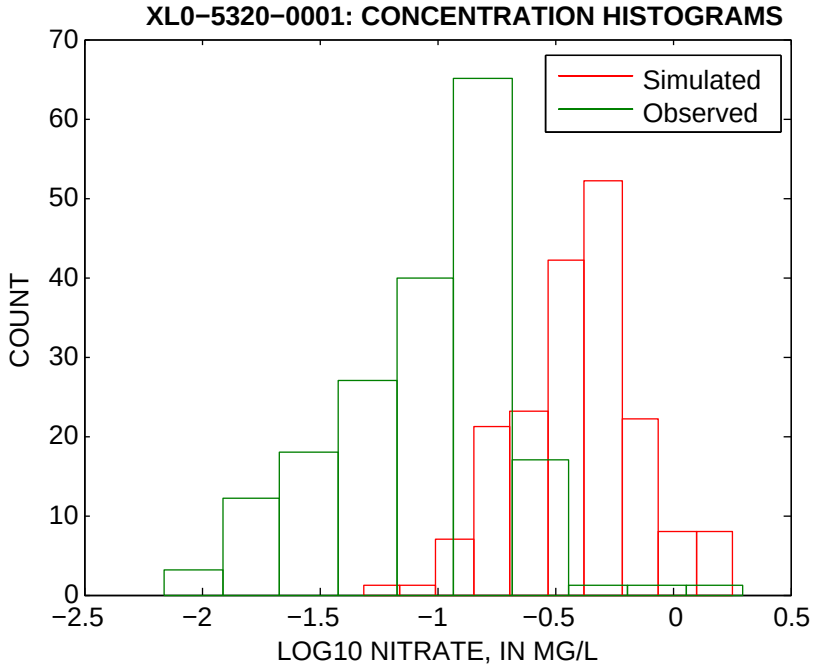
VERSION 2.1

ALL DATA
LOG10

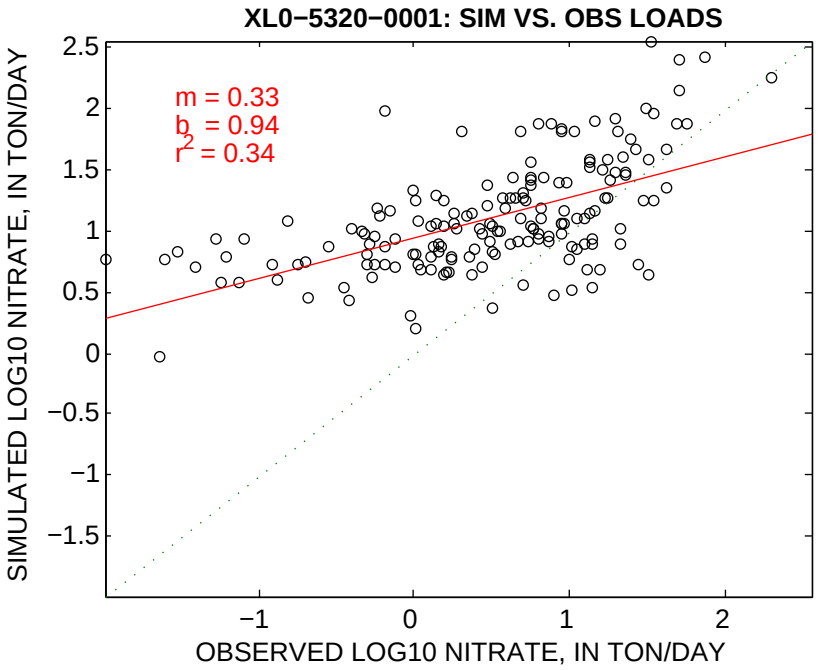


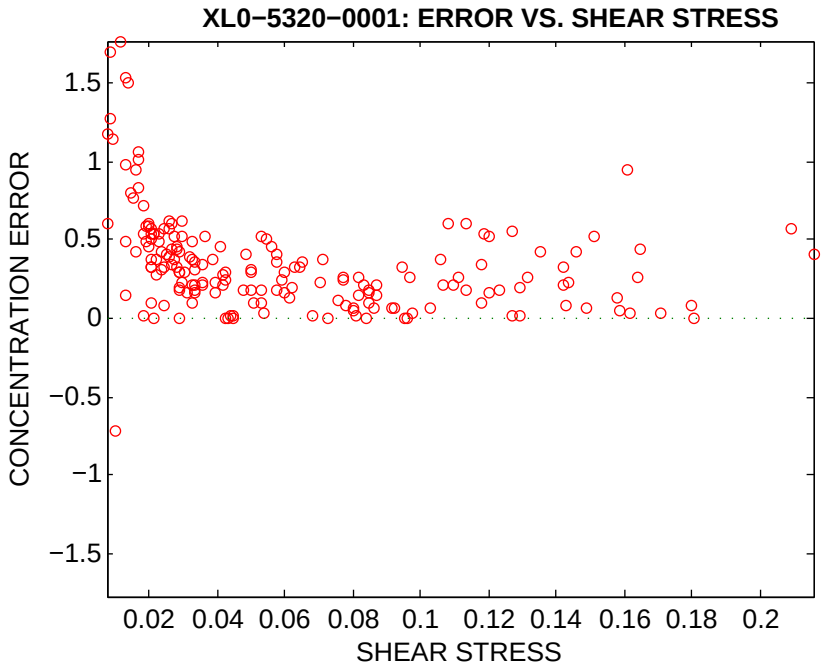


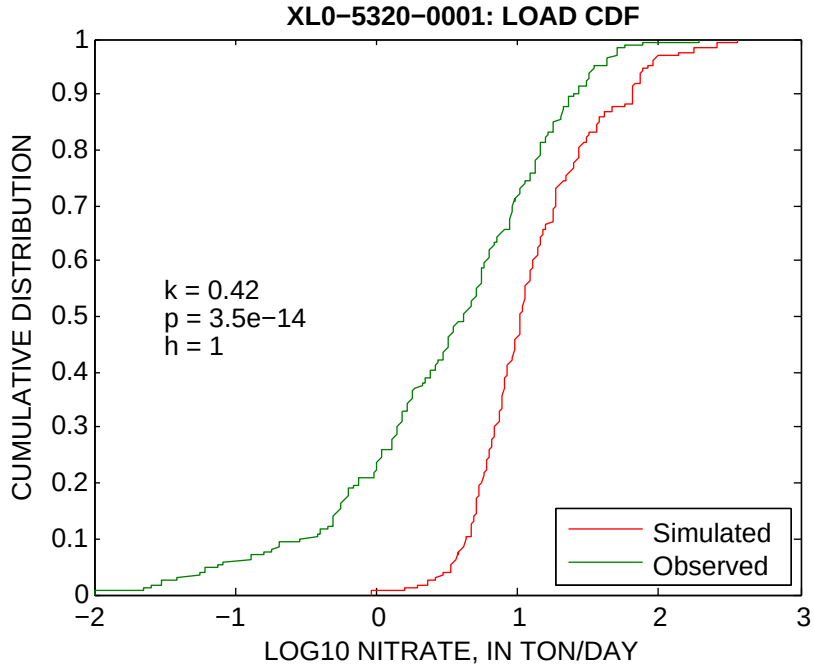


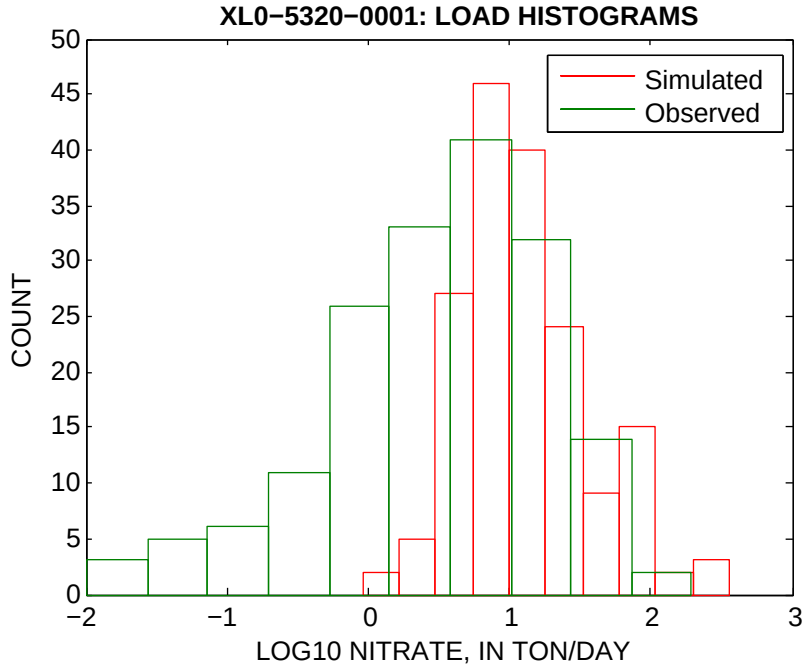


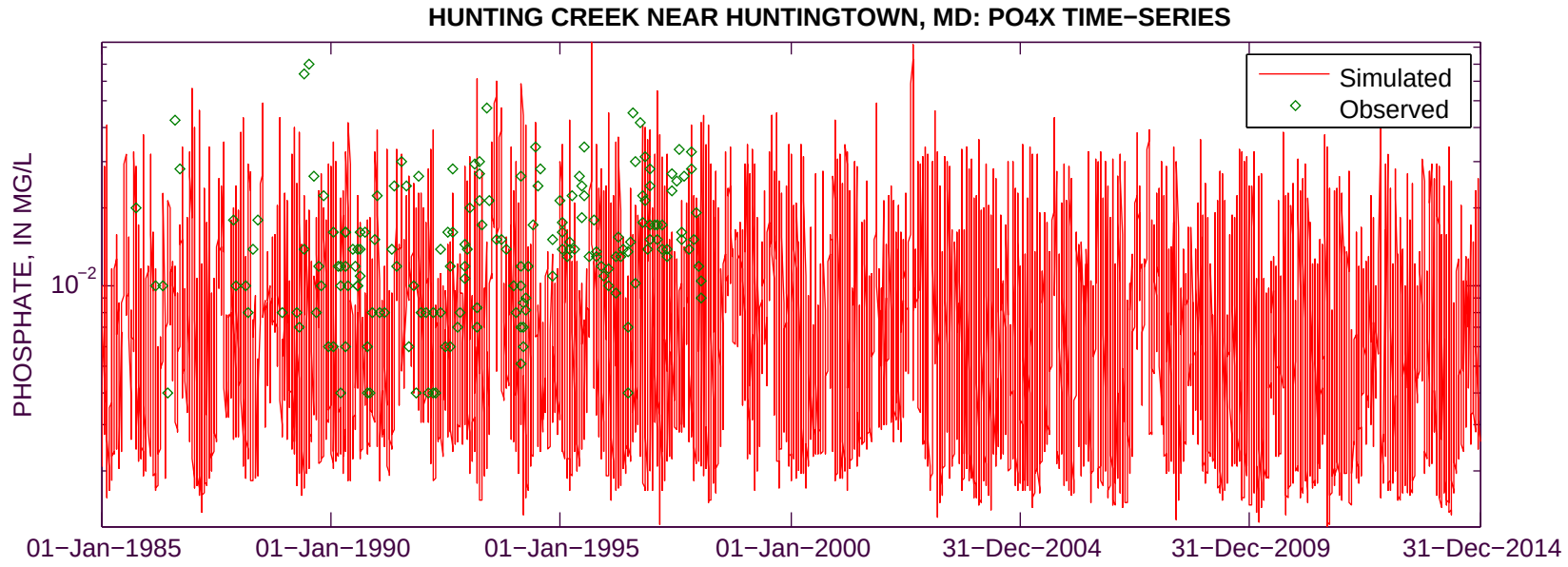
LOAD DATA
LOG10

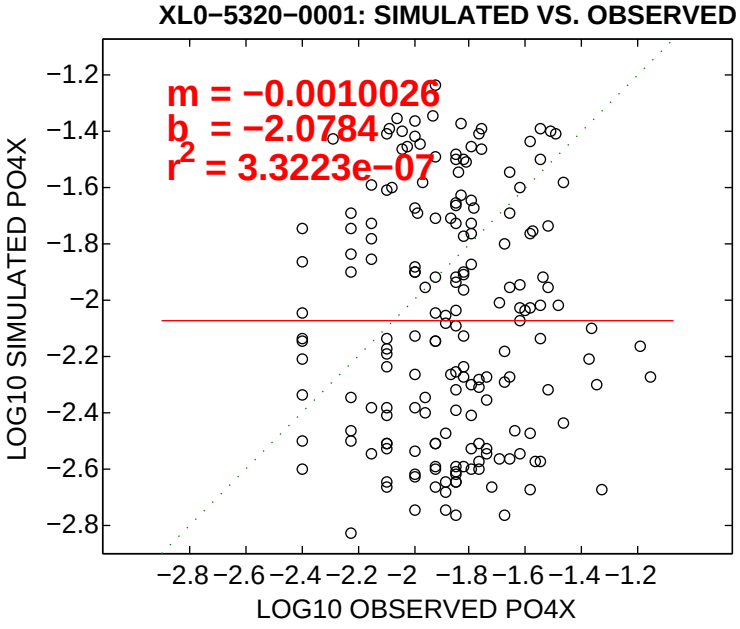


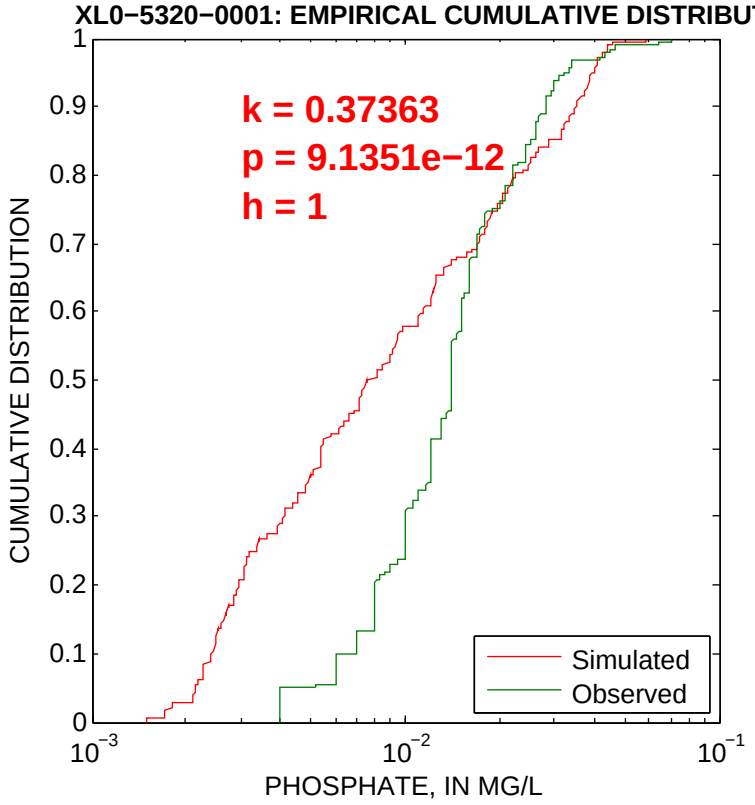












DATA SELECTION

scenario	file
P620171001WQ	PO4X.calib

plot: PO4X - phosphate

Dates: 1/1/1985 – 12/31/201

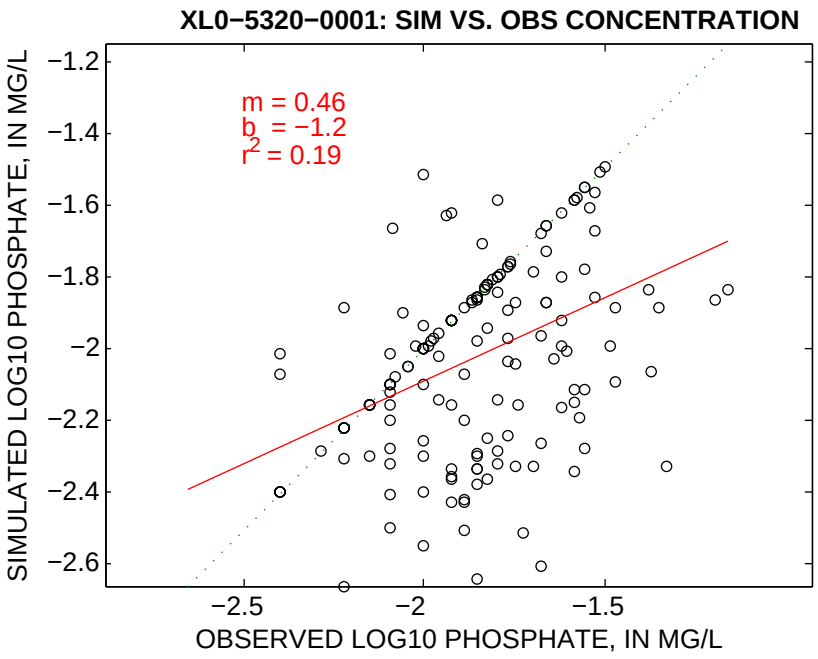
Drive	Directory	Observed
N/A	model	OBS20161101

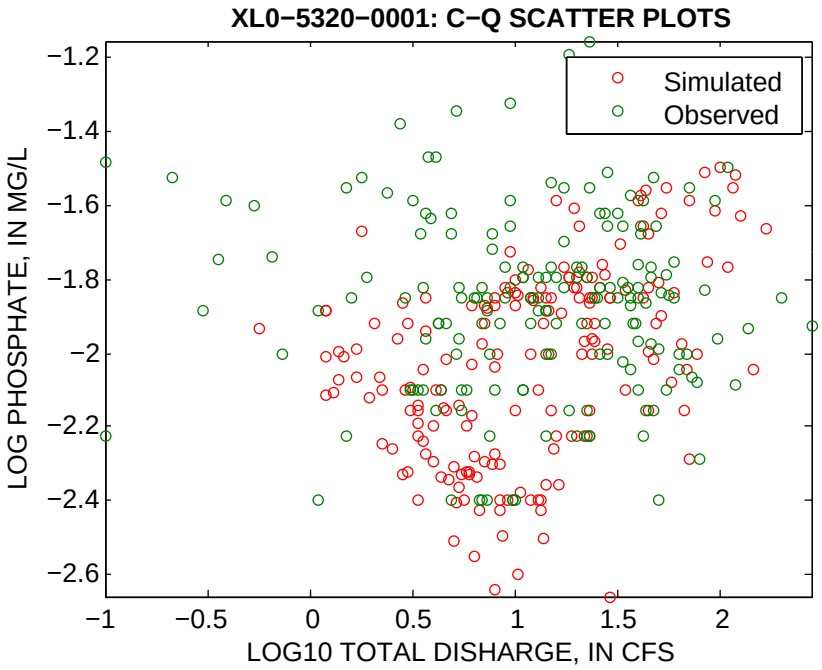
STATISTICS

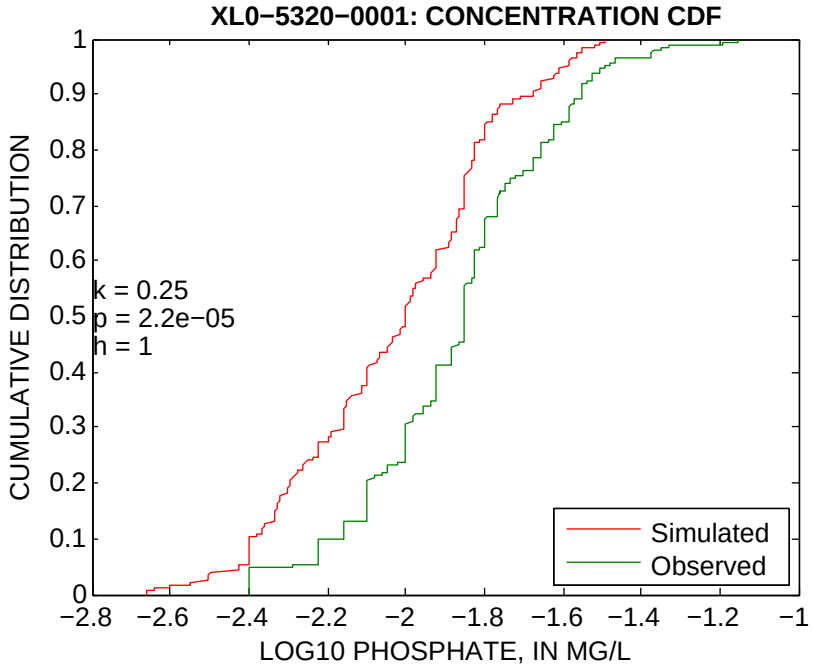
	observe	simulate
n	182	182
min	0.004 -2.39794	0.0014853 -2.82819
mean	0.0159185 -1.8669	0.0132222 -2.07654
media	0.014 -1.85387	0.0077494 -2.11093
max	0.07 -1.1549	0.058163 -1.23535
varian	9.77655e-0 0.0597881	0.00015754 0.180892
JB	0.001 0.5 ra	0.001 0.010022 log
%	-16.9381	11.2291
err.va	0.00027485	0.284991
rel.std.err	2.81132	4.76667
mod.eff	-1.81132	-3.76667

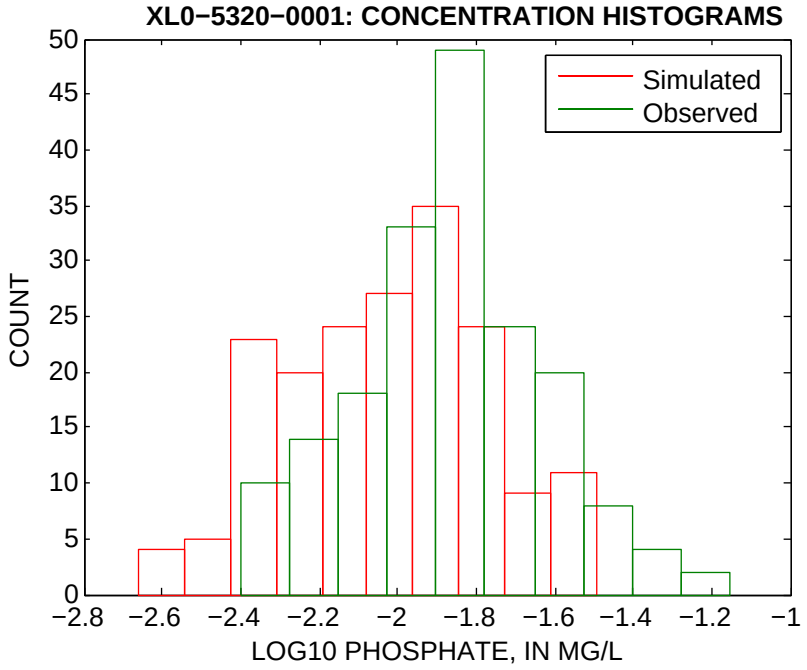
VERSION 2.1

ALL DATA
LOG10

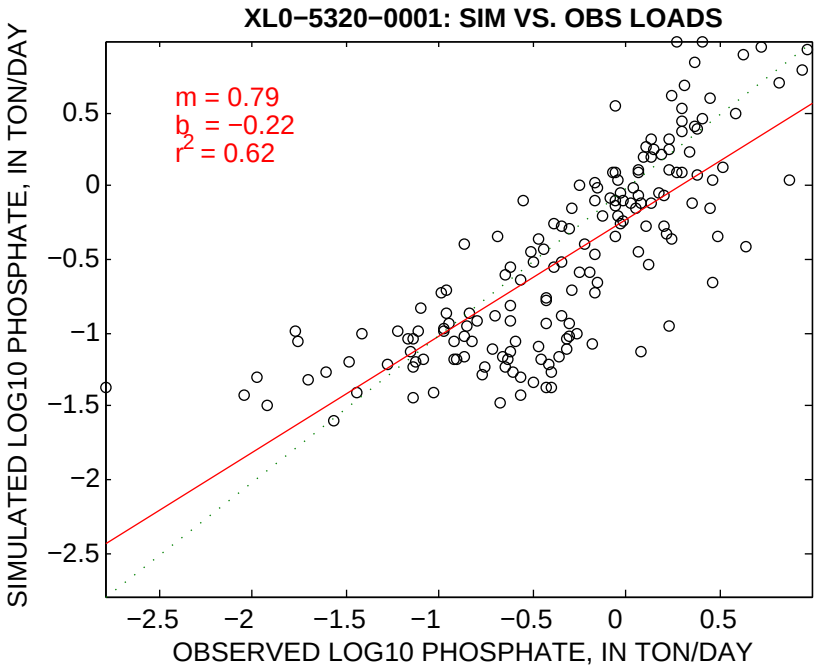


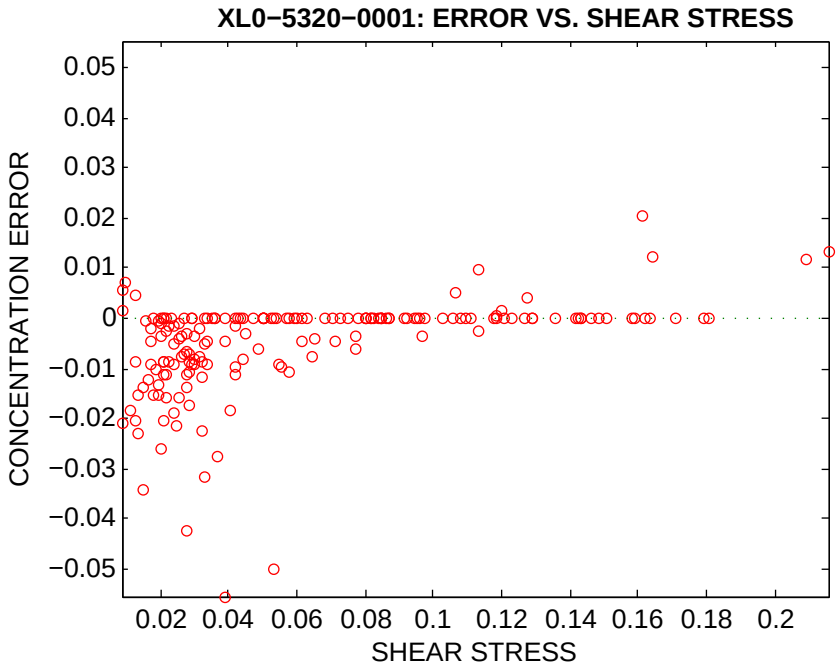


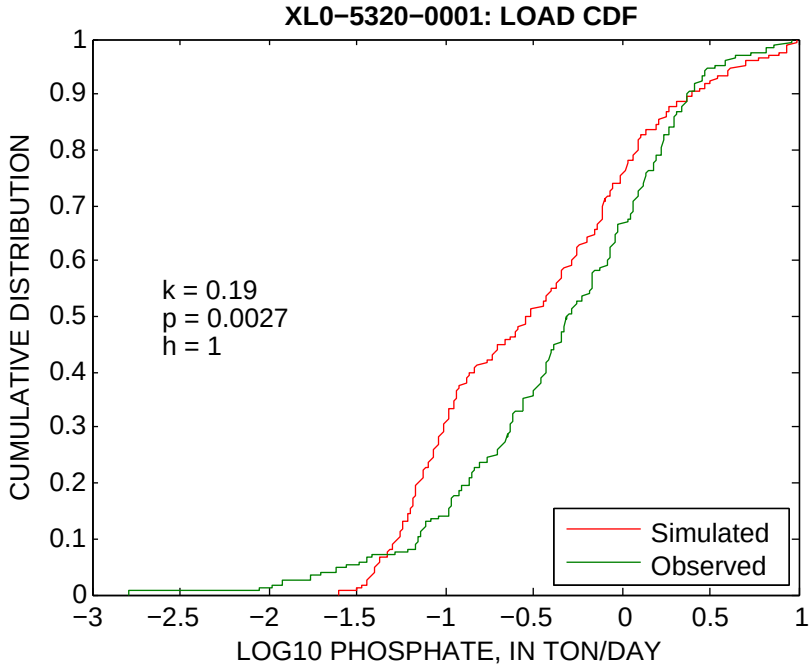


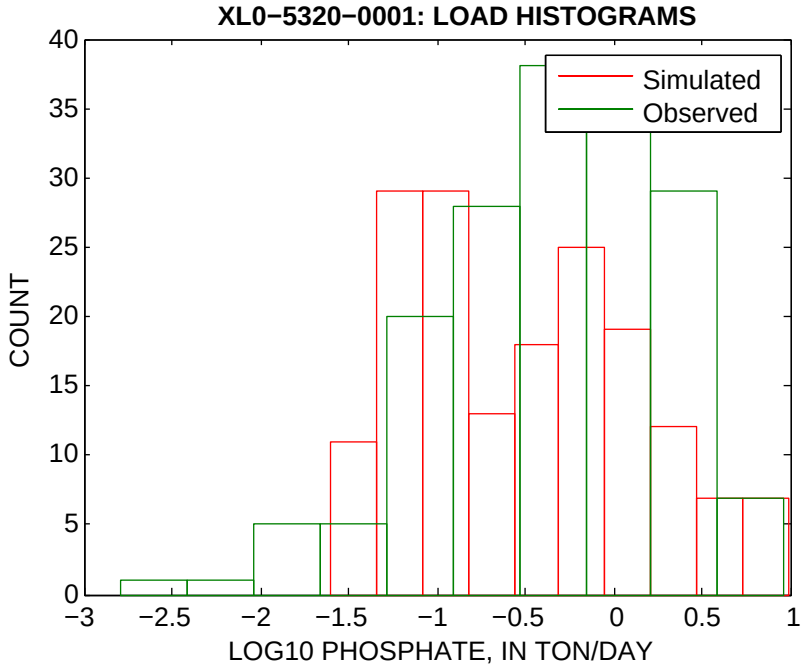


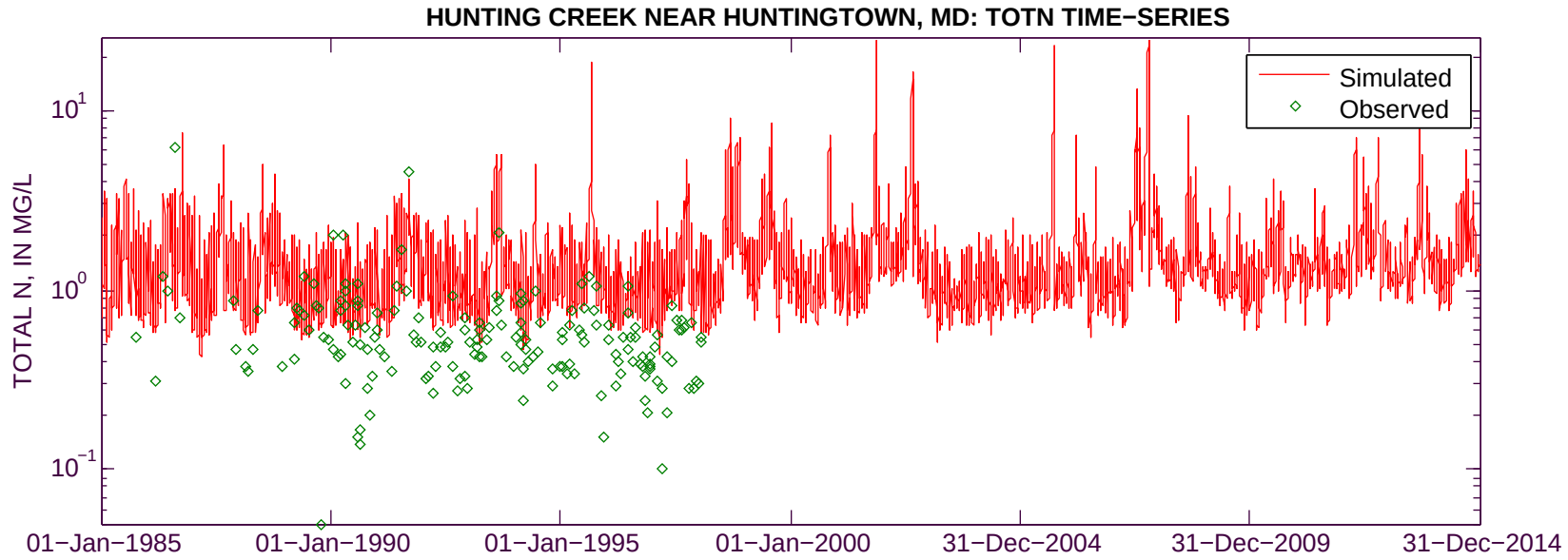
LOAD DATA
LOG10

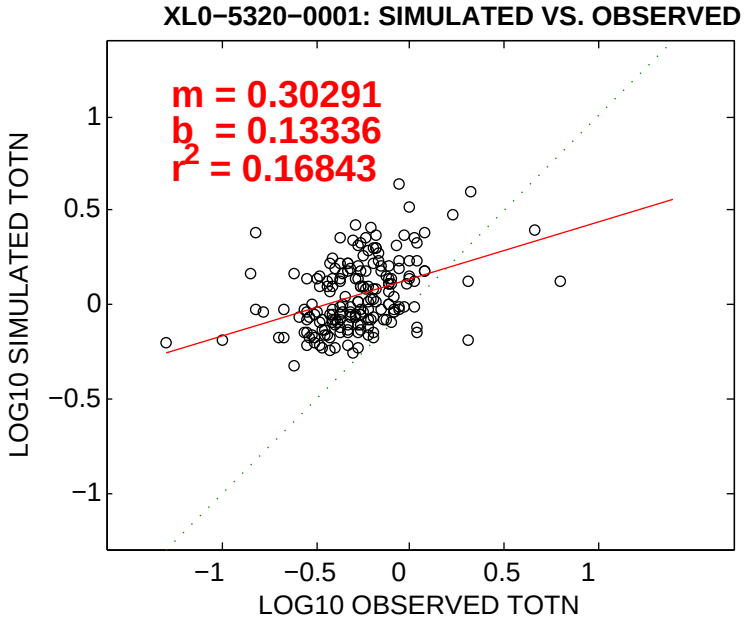


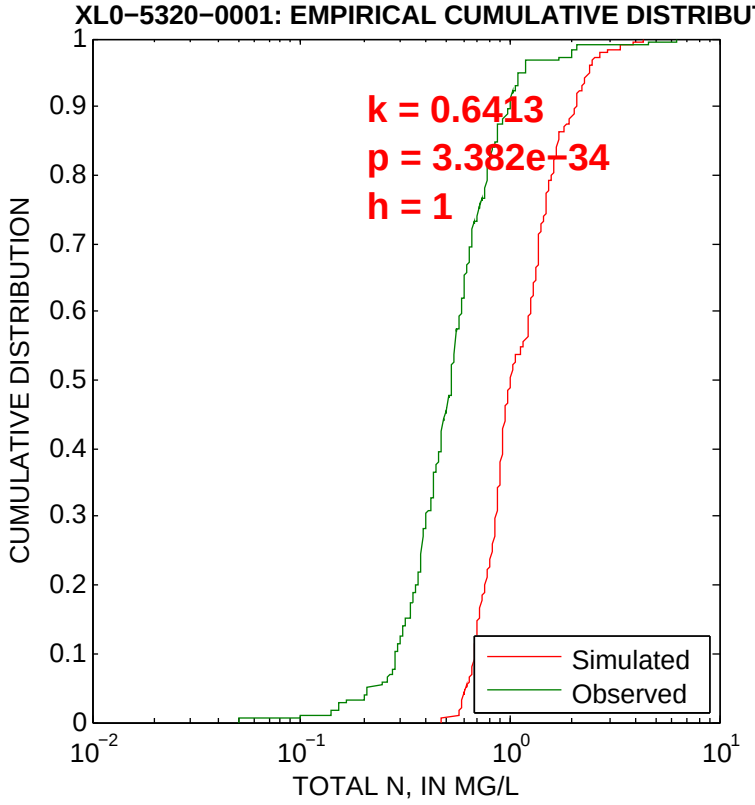












DATA SELECTION

scenario	file
P620171001WQ	TOTN.calib

plot: TOTN - total nitrogen

Dates: 1/1/1985 – 12/31/201

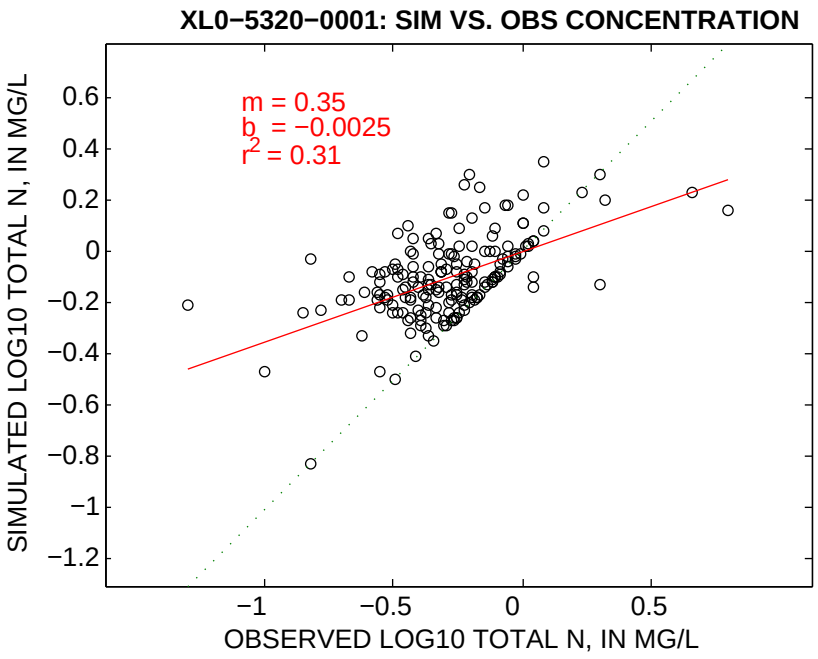
Drive	Directory	Observed
N/A	model	OBS20161101

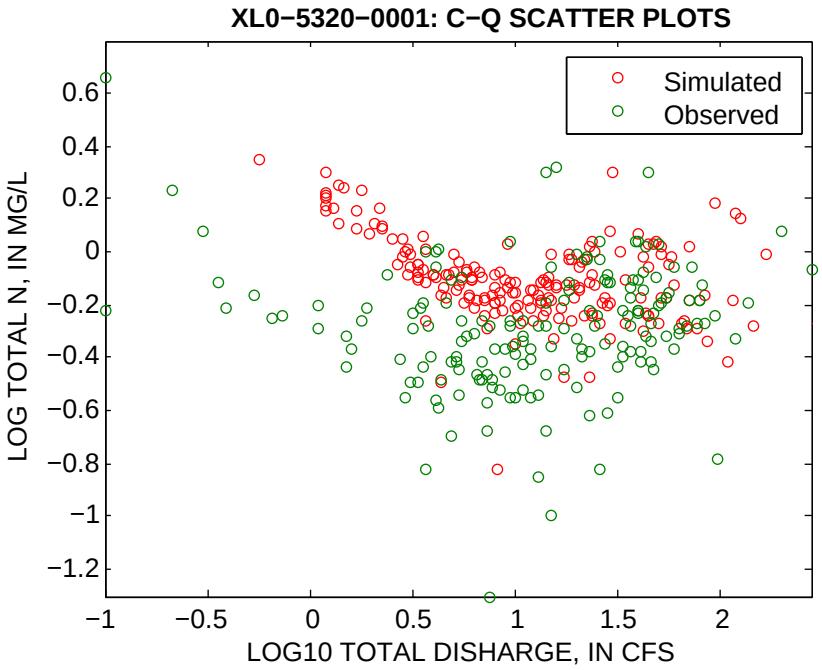
STATISTICS

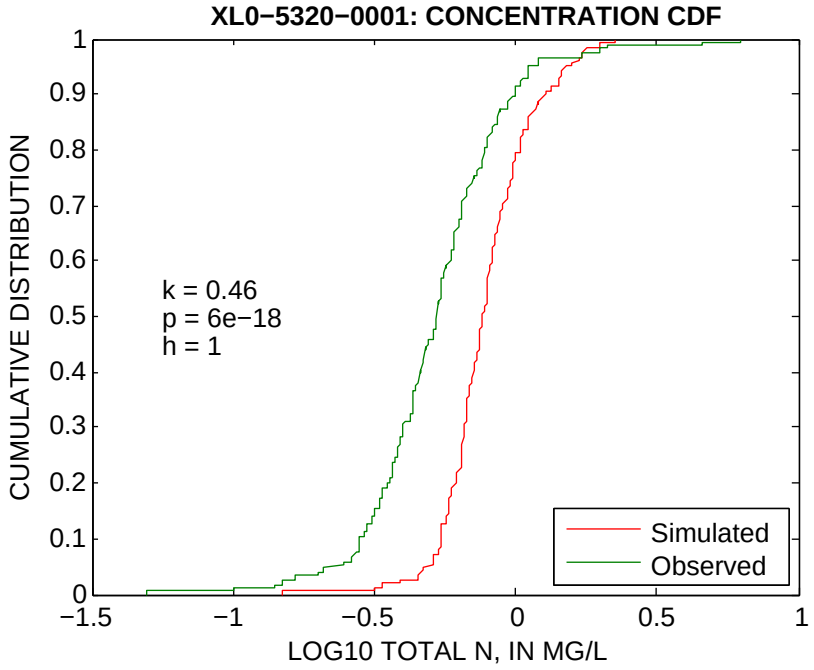
	observe	simulate
n	184	184
min	0.05	0.47194
	-1.30103	-0.326113
mean	0.634223	1.23088
	-0.280405	0.0484202
media	0.53	1.0114
	-0.275724	0.0049137
max	6.3	4.3577
	0.799341	0.639257
varian	0.362628	0.368756
	0.0620847	0.033822
JB	0.001	0.001
	0.001	0.014027
	ra	log
%	94.0765	-117.268
err.va	0.868634	0.167011
rel.std.err	2.39539	2.69006
mod.eff	-1.39539	-1.69006

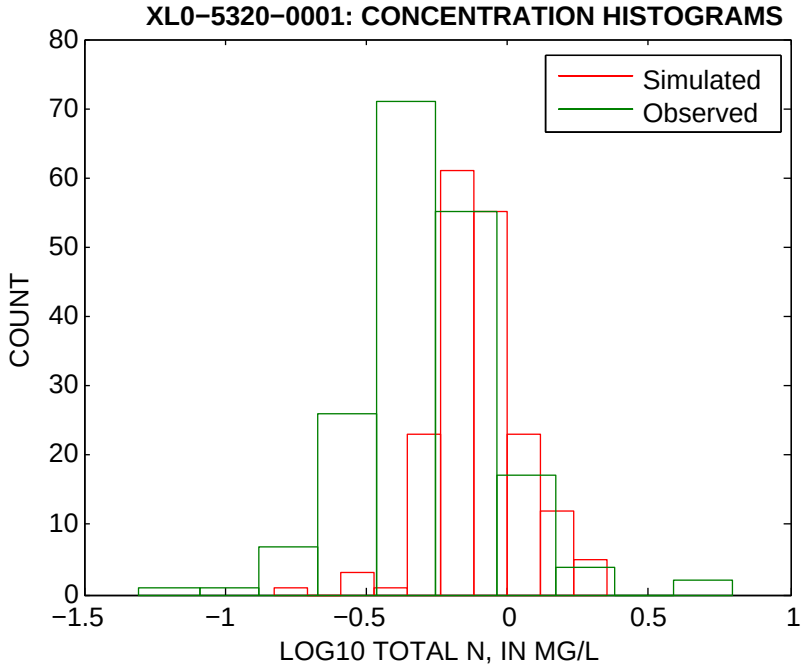
VERSION 2.1

ALL DATA
LOG10

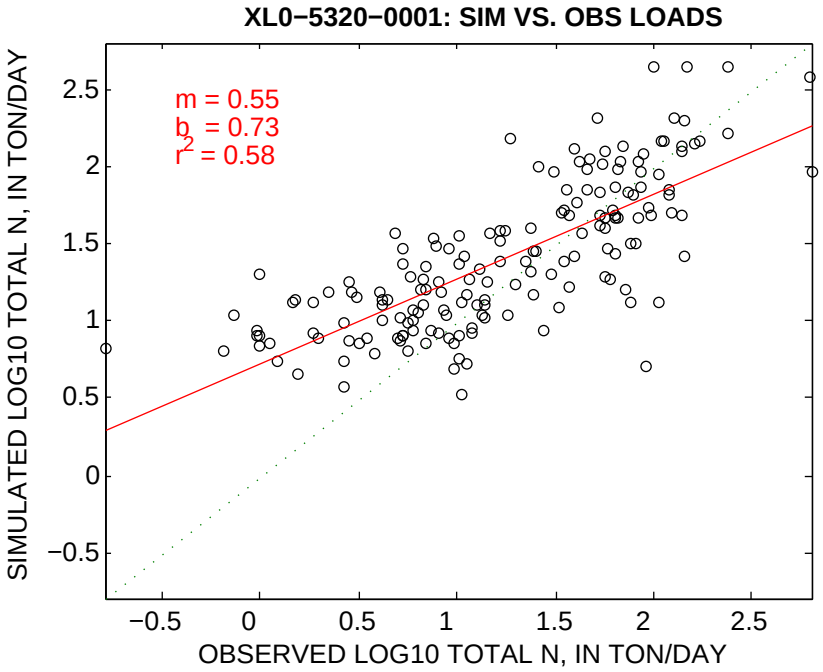


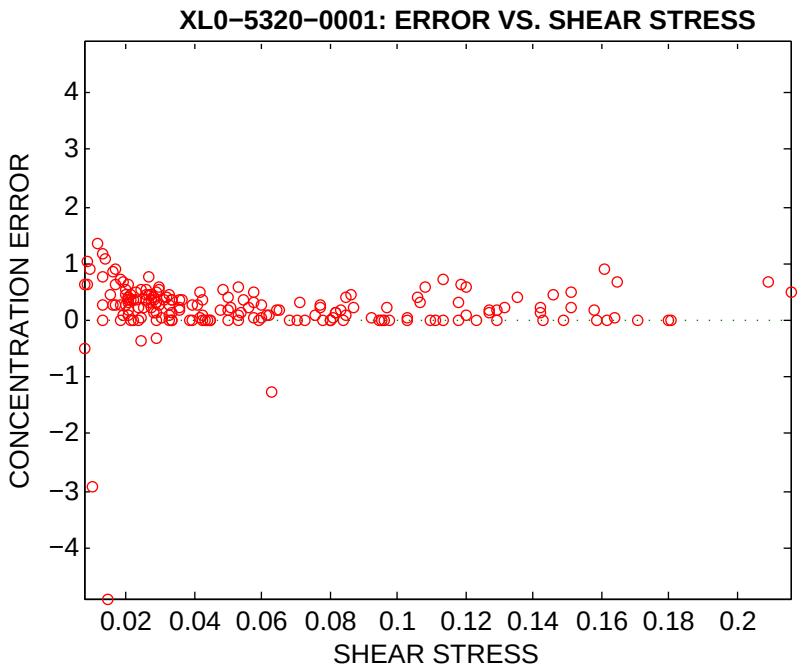


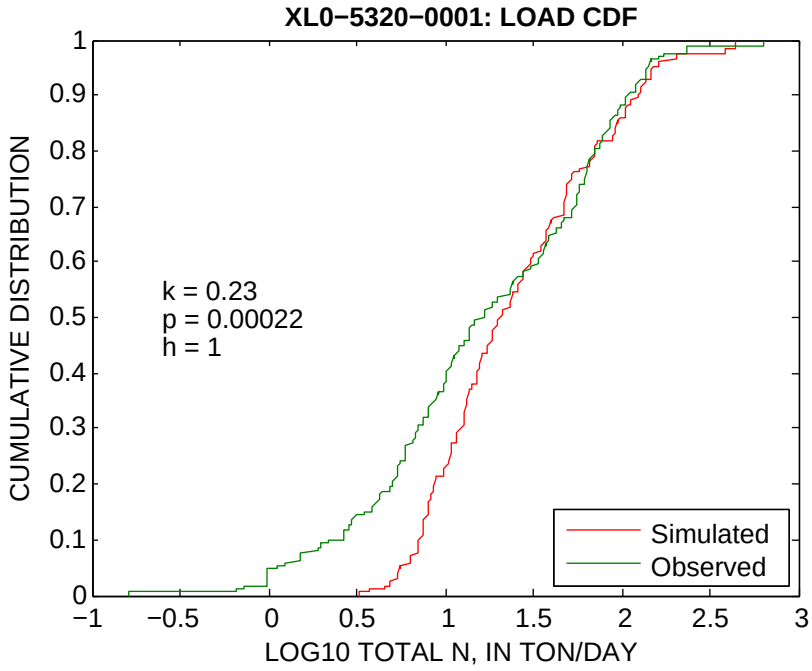


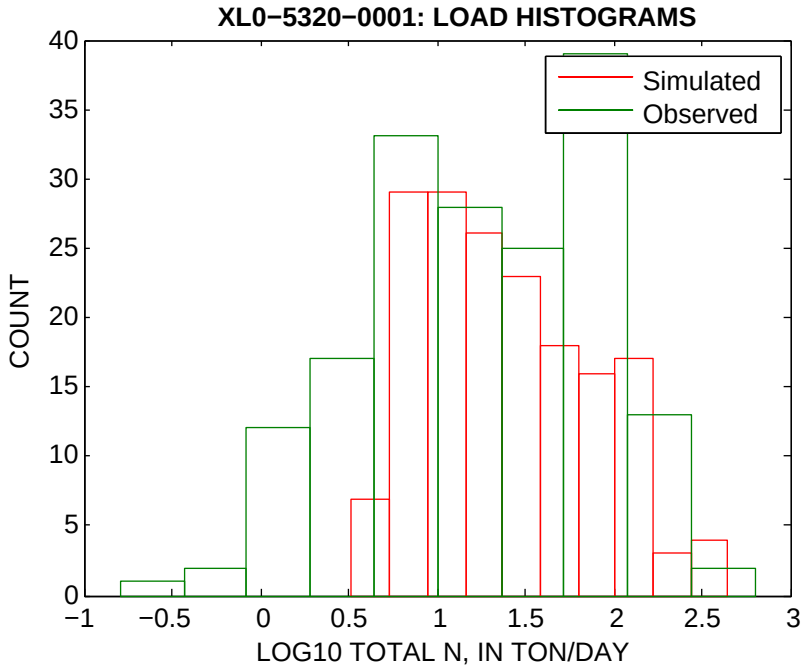


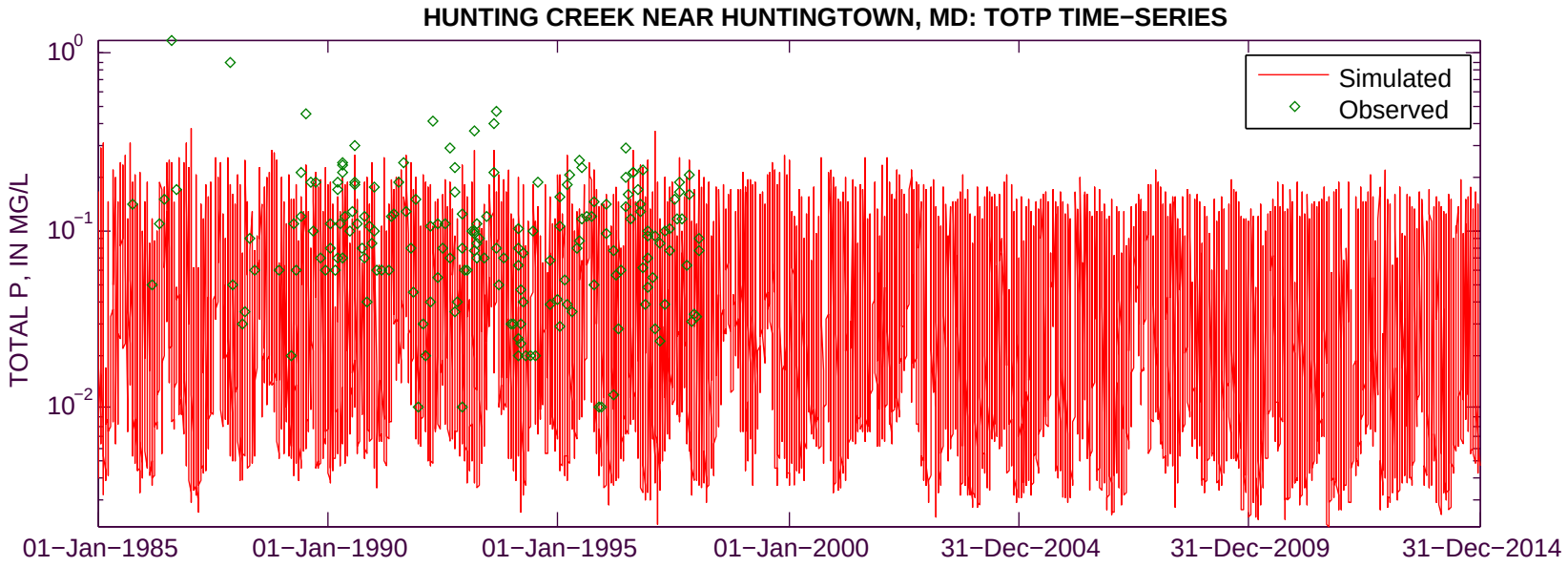
LOAD DATA
LOG10

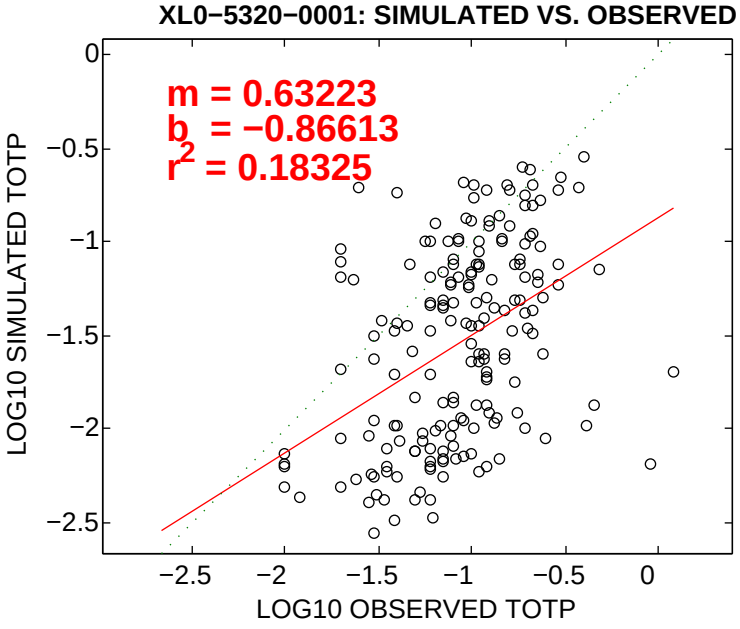


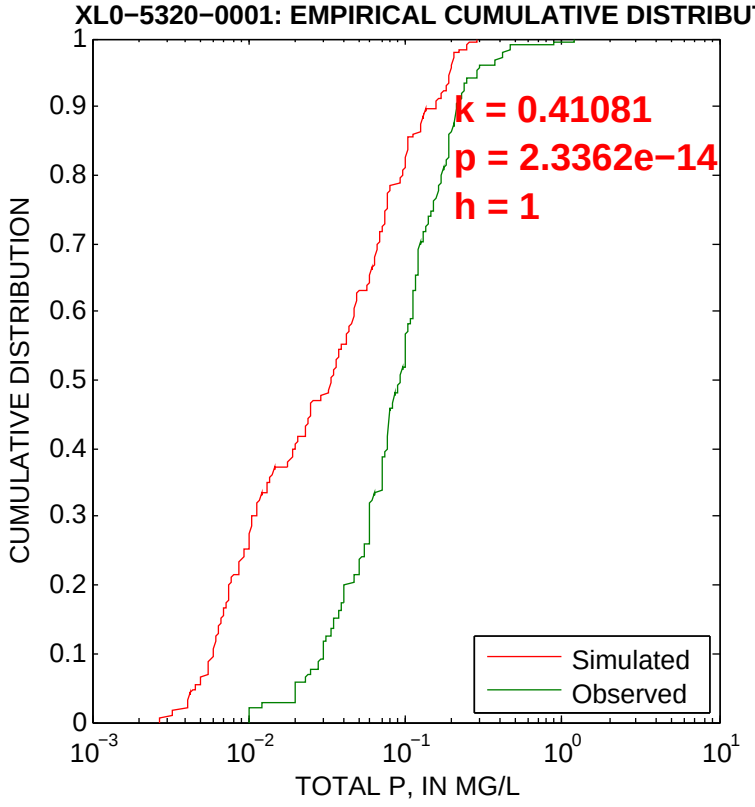












DATA SELECTION

scenario: P620171001WQ | file: TOTP.calib

plot: TOTP - total phosphorus

Dates: 1/1/1985 – 12/31/201

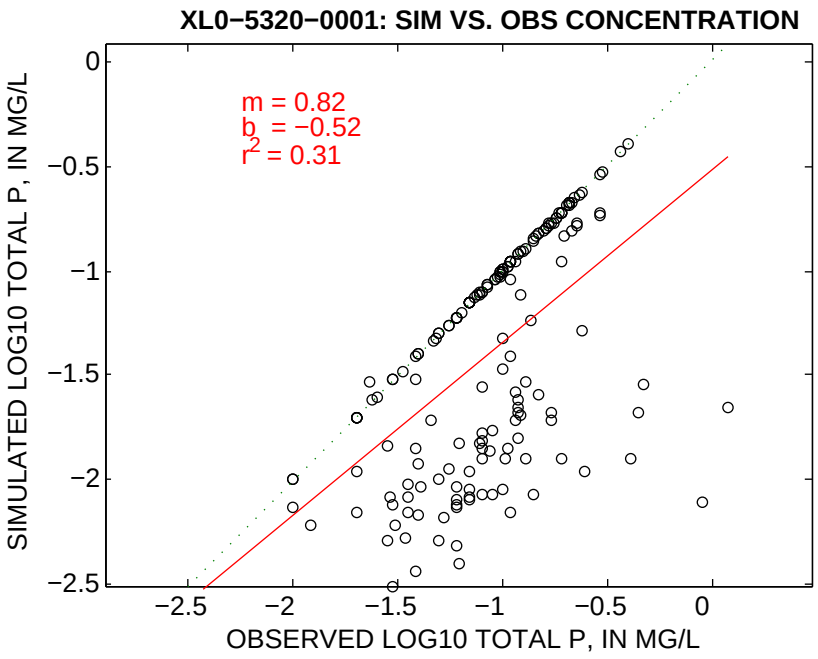
Drive: N/A | Directory: model | Observed: OBS20161101

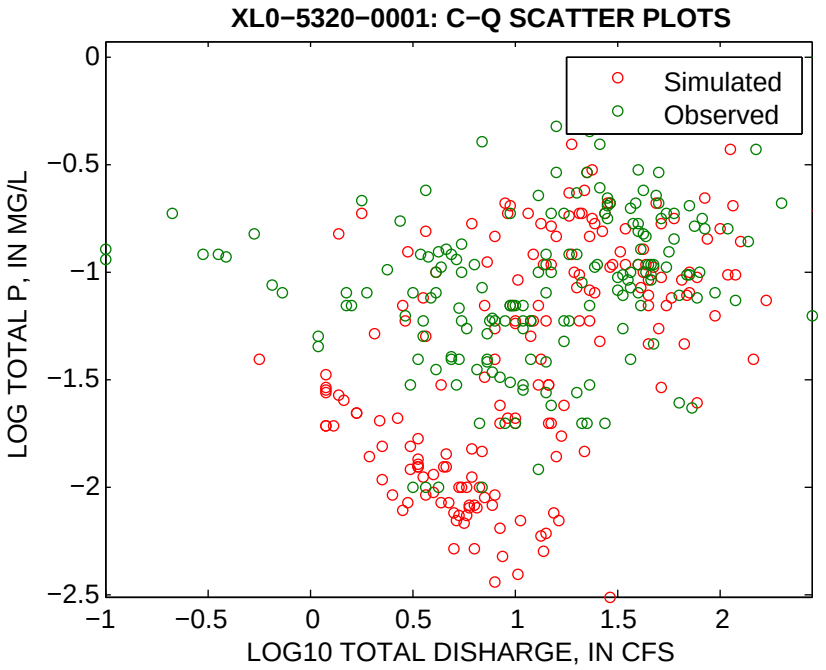
STATISTICS

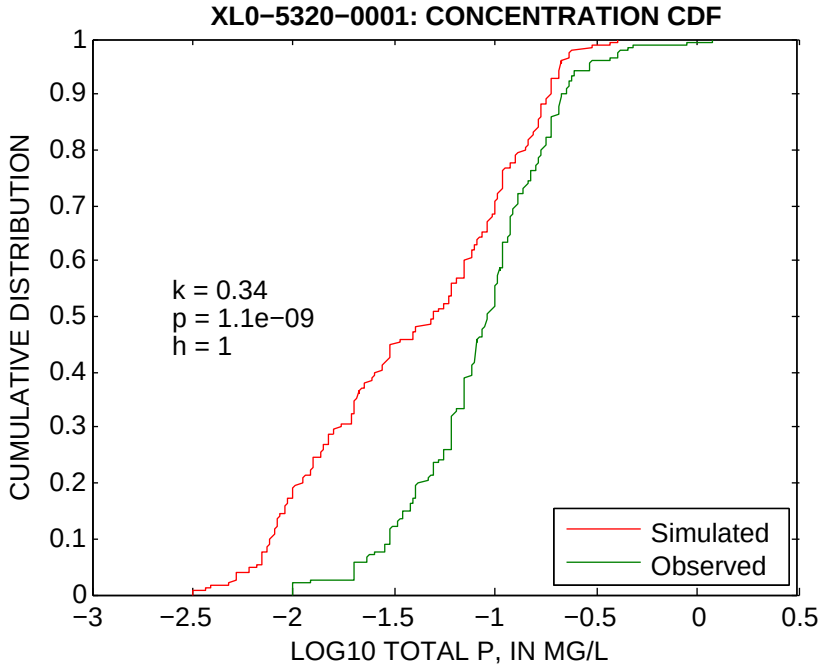
		observe	simulate
n		185	185
min		0.01	0.0027549
		-2	-2.55989
mean		0.120701	0.0550903
		-1.0636	-1.53856
media		0.092	0.033754
		-1.03621	-1.47167
max		1.2	0.28658
		0.0791812	-0.542754
varian		0.0166164	0.00363504
		0.127298	0.277673
JB		0.001	0.001
	☑	0.189182	0.011716
		ra	log
%		-54.358	44.6567
err.va		0.0213468	0.470828
rel.std.err		1.28468	3.69863
mod.eff		-0.284679	-2.69863

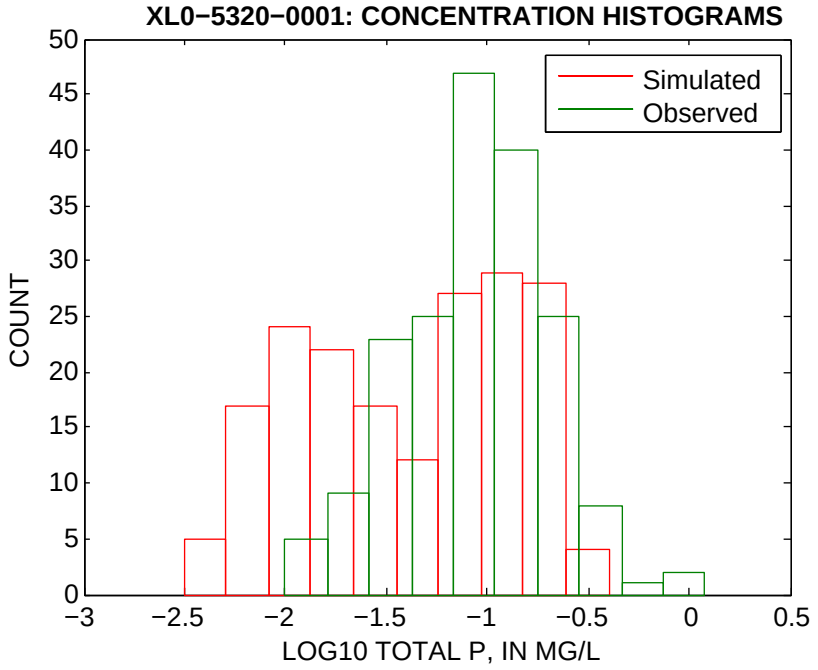
VERSION 2.1

ALL DATA
LOG10

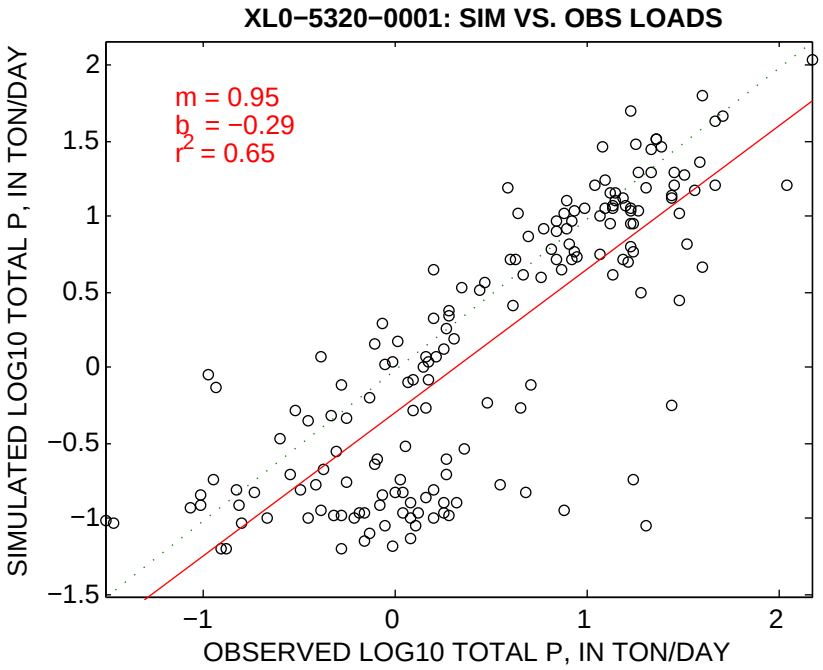




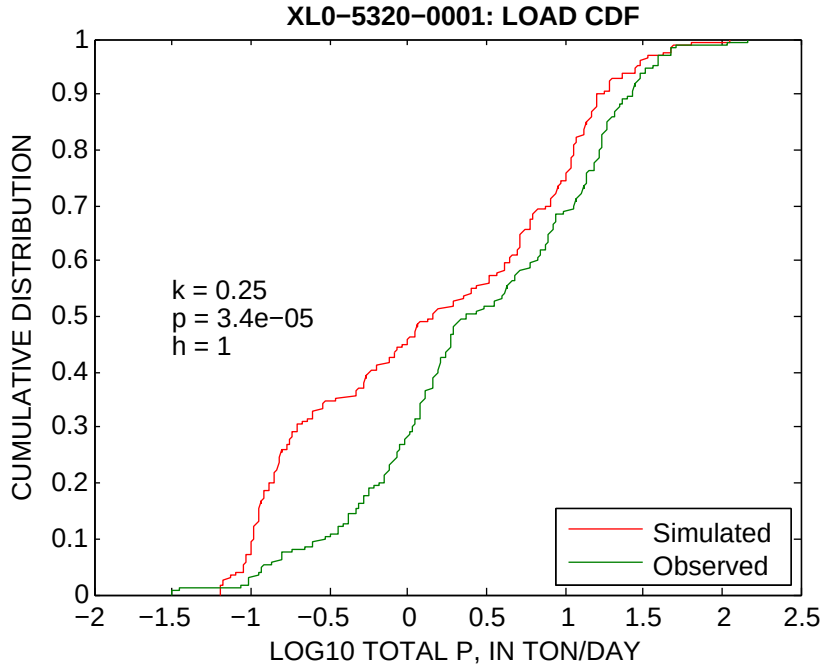


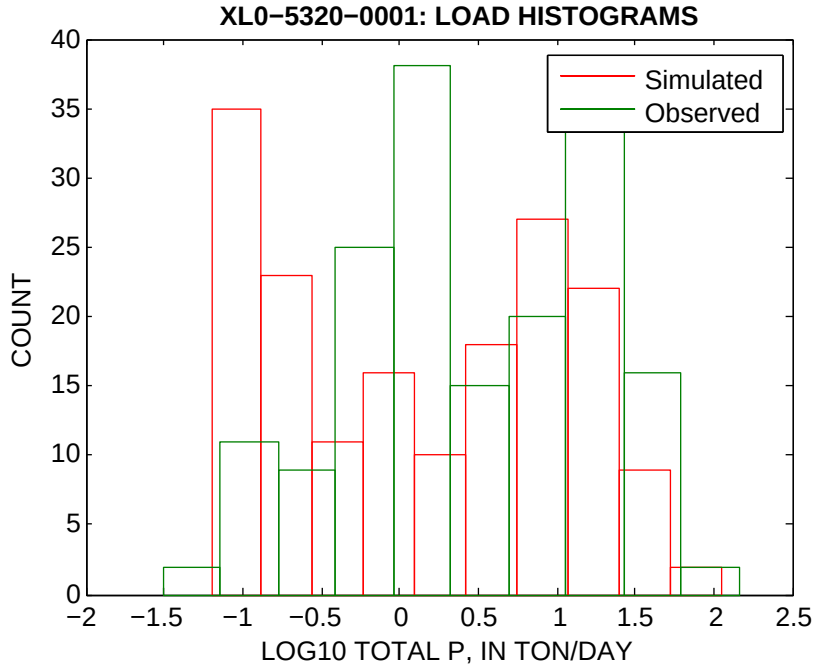


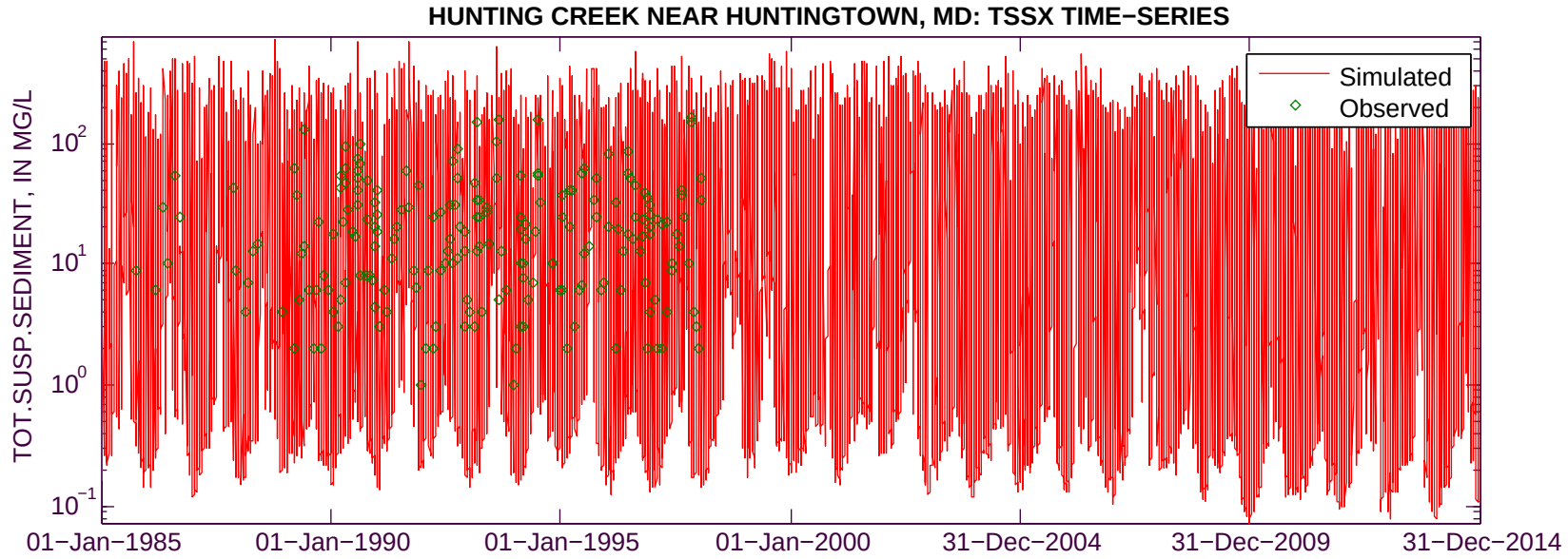
LOAD DATA
LOG10

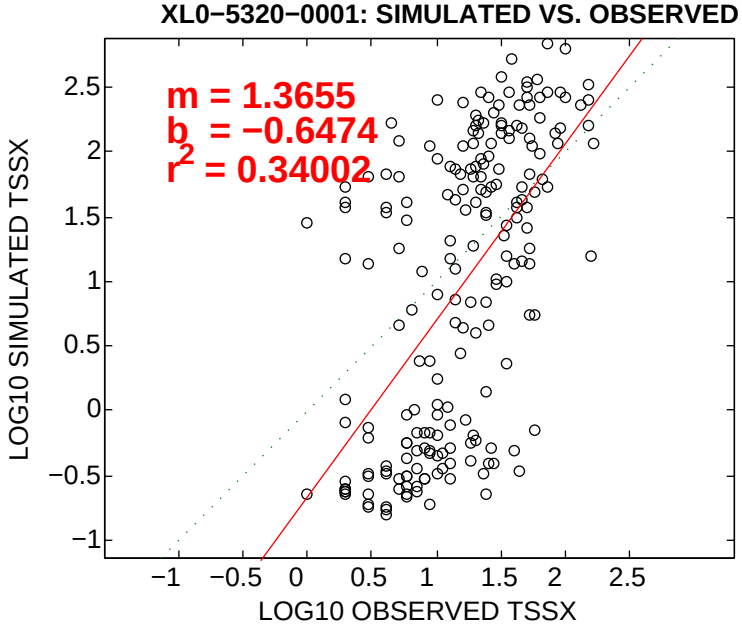


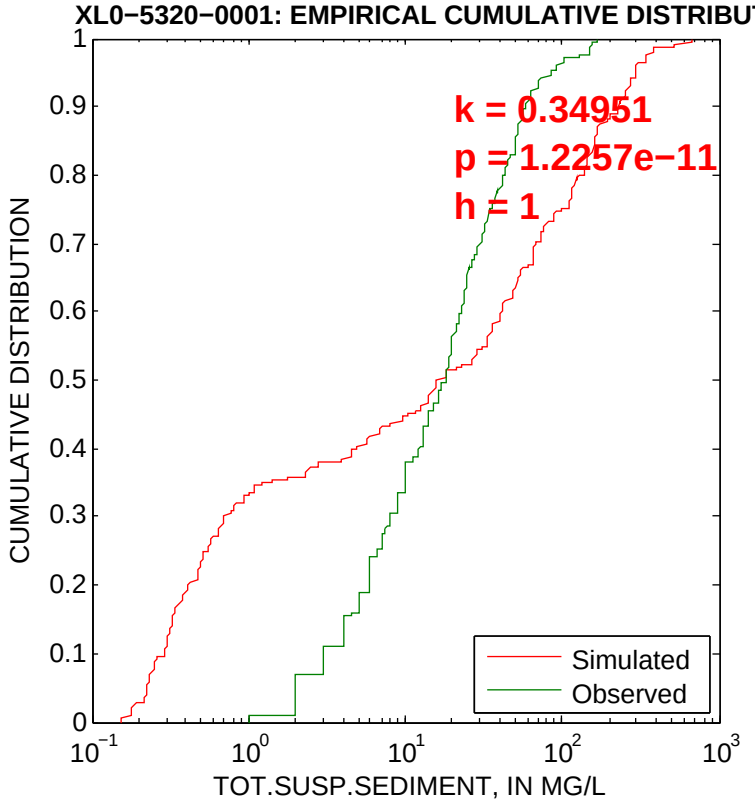












DATA SELECTION

scenario	file
P620171001WQ	TSSX.calib

plot: TSSX - total suspended ...

Dates 1/1/1985 12/31/201

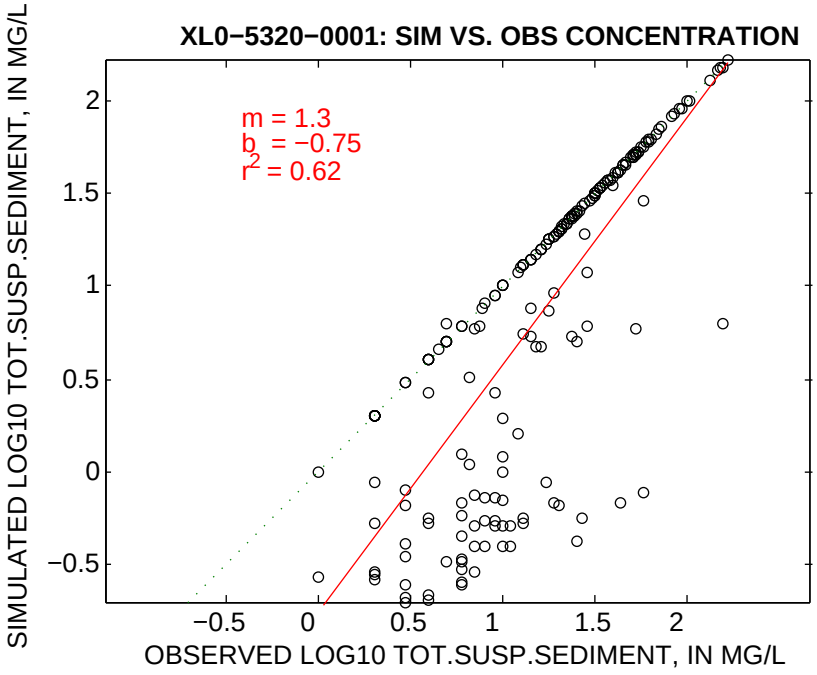
Drive	Directory	Observed
N/A	model	OBS20161101

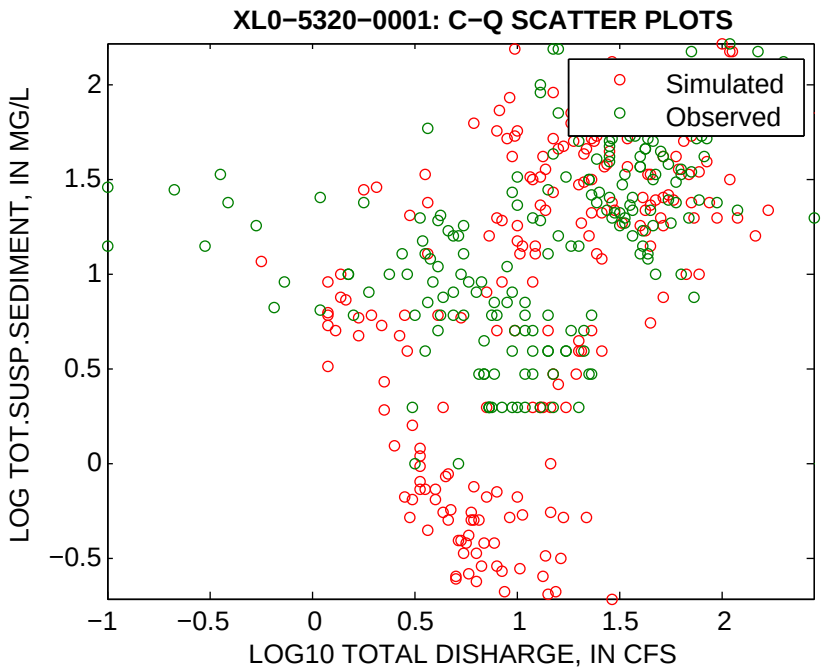
STATISTICS

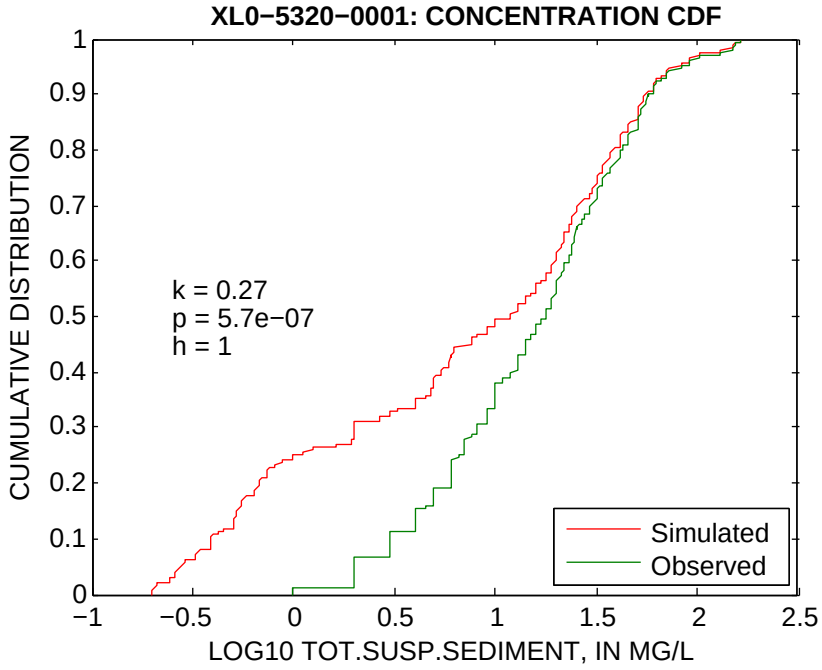
	n	206	206
		observe	simulate
min		1	0.15306
		0	-0.815138
mean		26.781	70.4169
		1.18732	0.973946
media		18	16.6935
		1.25527	1.22176
max		165.5	681.34
		2.2188	2.83336
varian		908.086	12361.8
		0.234109	1.28389
JB		0.001	0.001
		0.098744	0.002265
		ra	log
%		162.936	-17.9711
err.va		11814.8	0.924381
rel.std.err		13.0107	3.94851
mod.eff		-12.0107	-2.94851

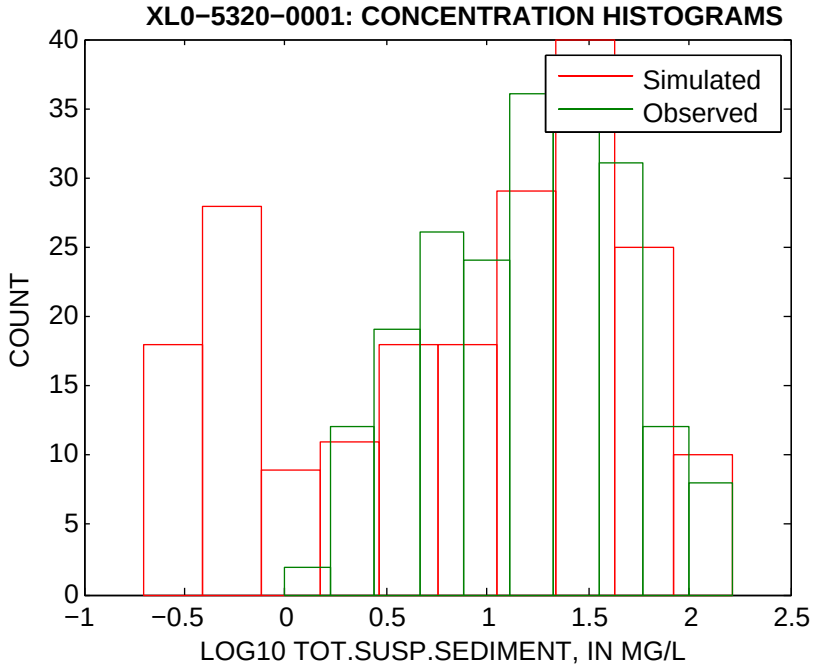
VERSION 2.1

ALL DATA
LOG10

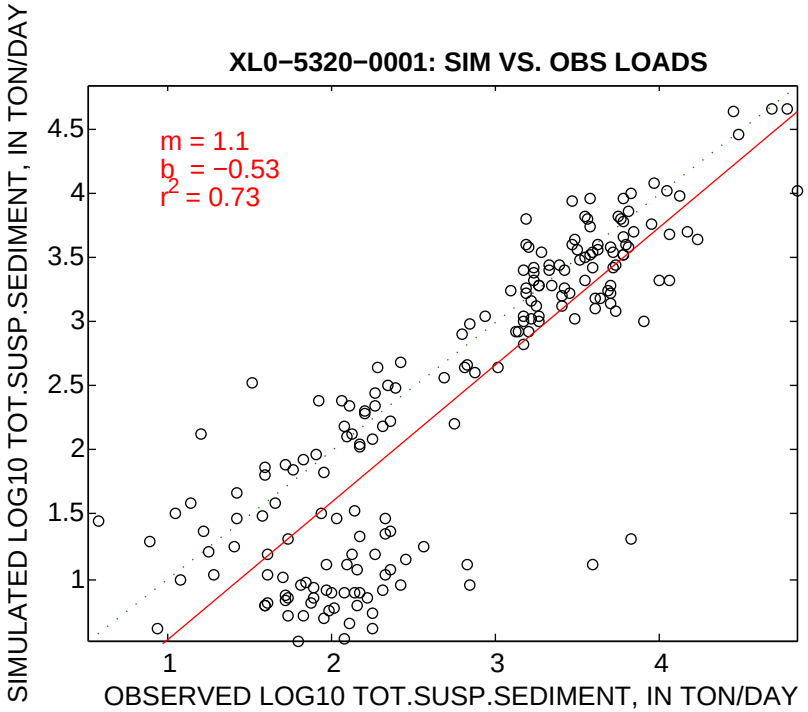


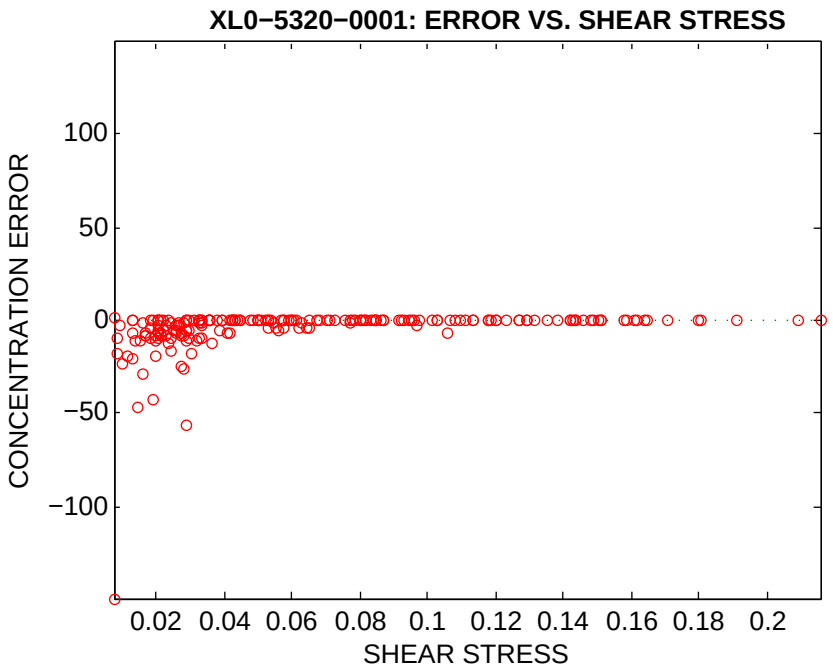


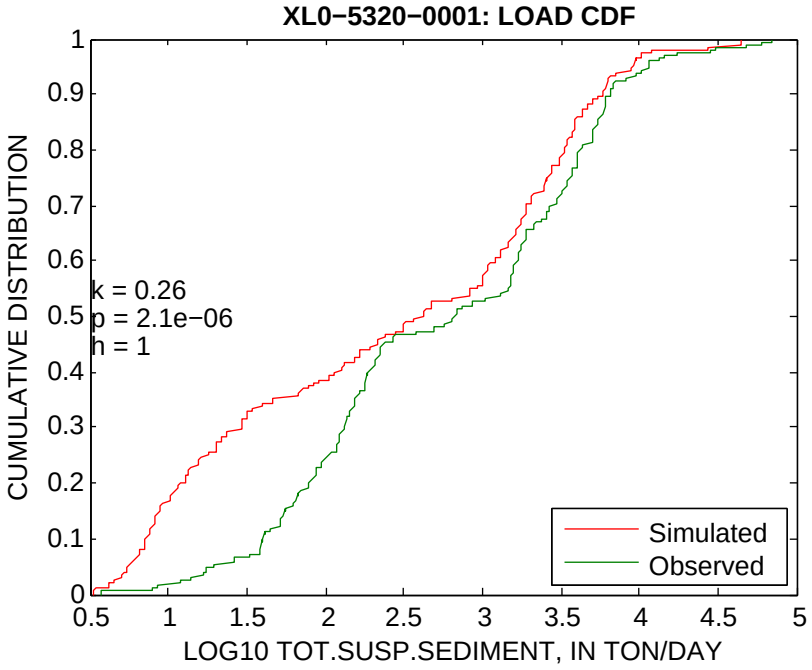


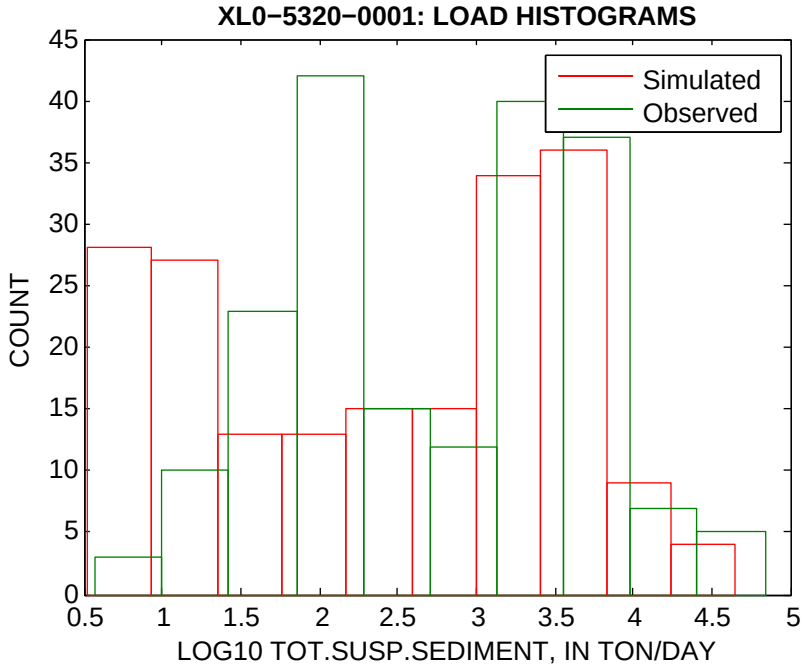


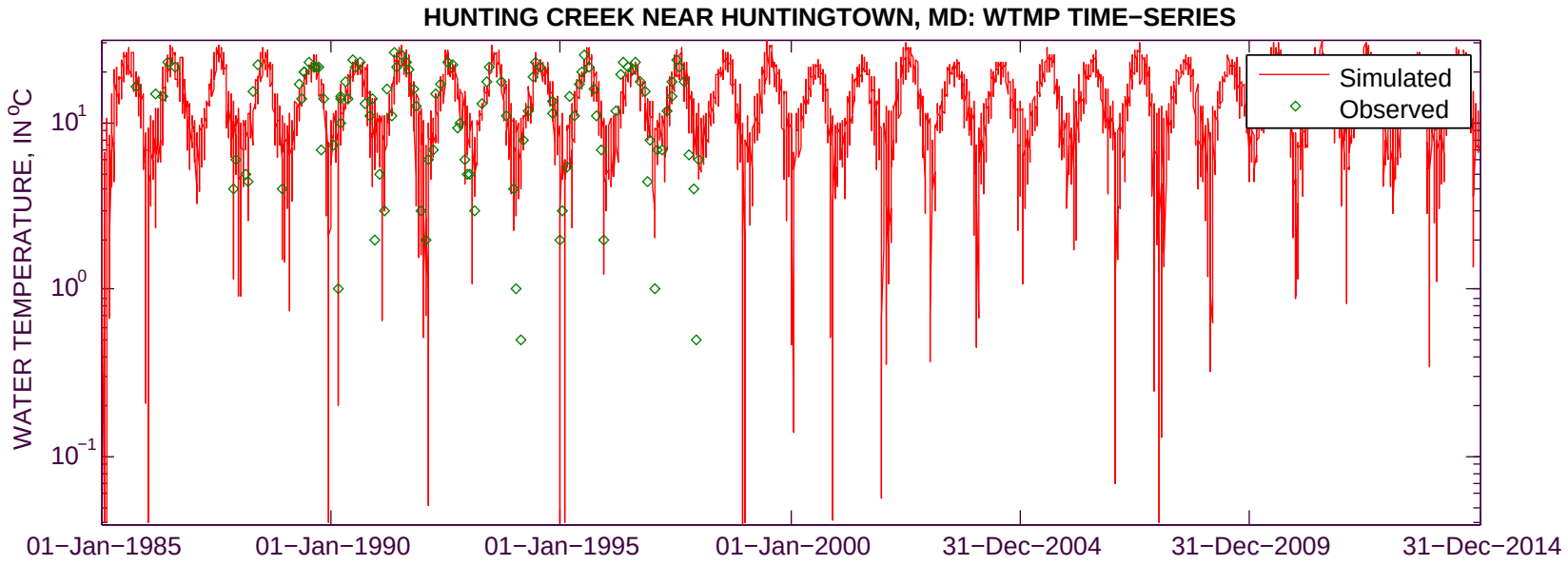
LOAD DATA
LOG10

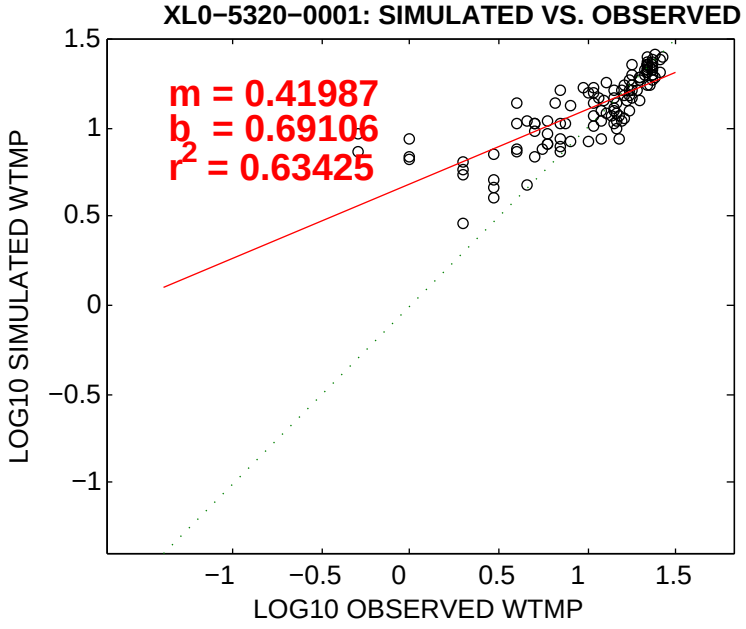


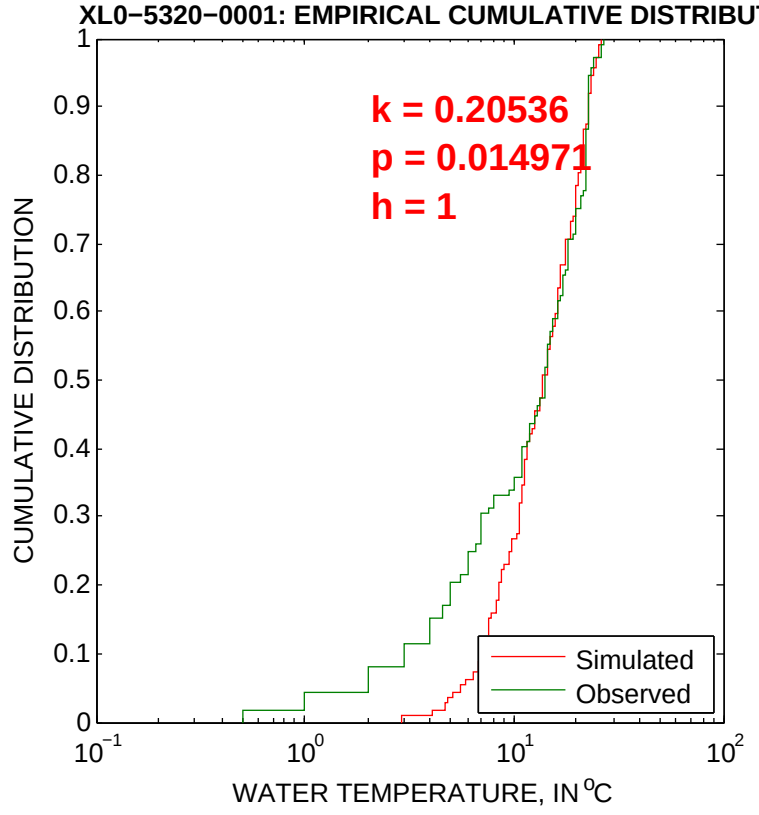












DATA SELECTION

scenario	file
P620171001WQ	WTMP.calib

plot: WTMP - water tempera...

Dates 1/1/1985 12/31/201

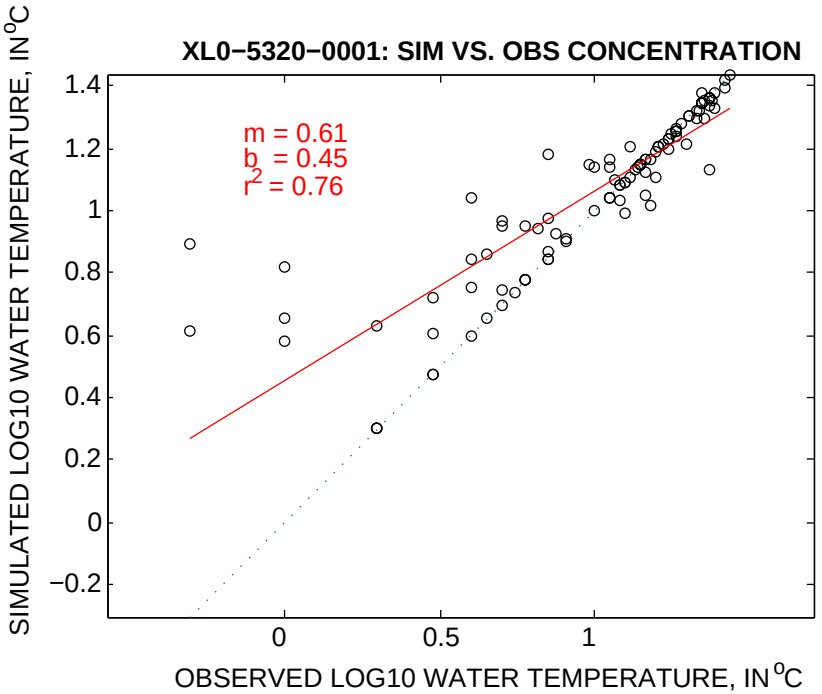
Drive	Directory	Observed
N/A	model	OBS20161101

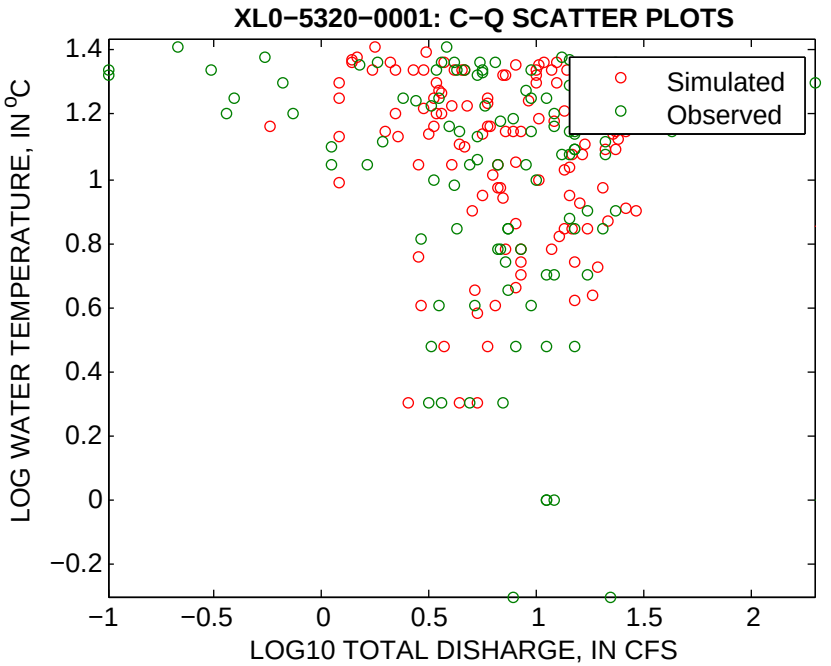
STATISTICS

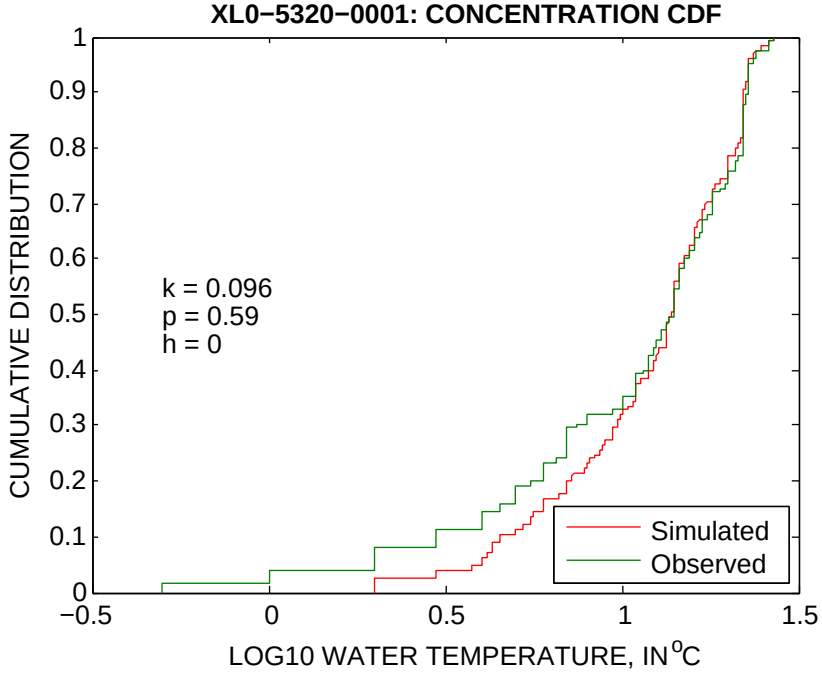
	n	observe	simulate
		112	112
min		0.5	2.8974
		-0.30103	0.462008
mean		13.3759	14.3664
		1.01059	1.11538
media		14	13.7565
		1.14613	1.1385
max		27	26.373
		1.43136	1.42116
varian		56.0134	34.5891
		0.146875	0.0408243
JB		0.028701	0.052107
		0.001	0.025642
		ra	log
%		7.40541	10.3691
err.va		13.4671	0.0754418
rel.std.err		0.240427	0.513646
mod.eff		0.759573	0.486354

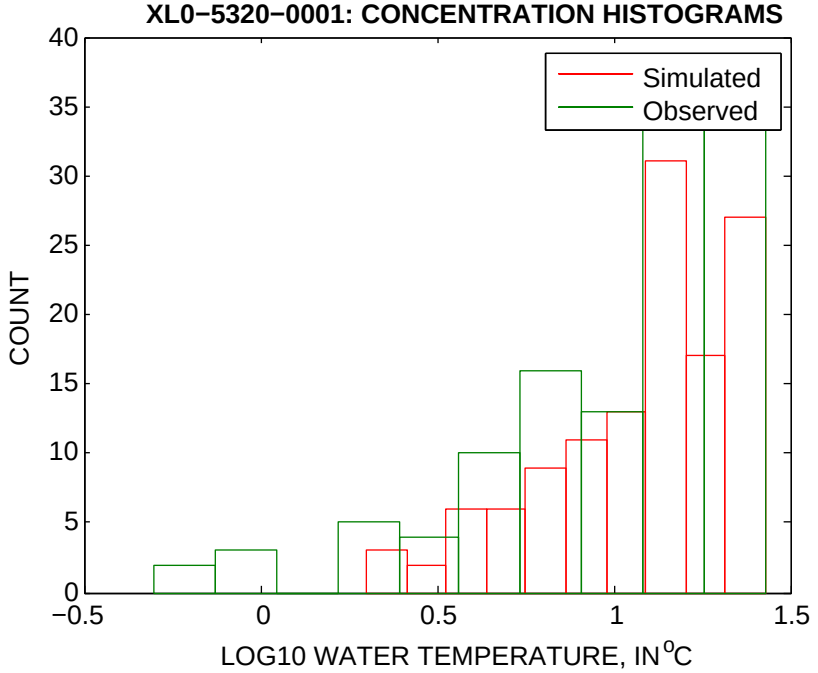
VERSION 2.1

ALL DATA
LOG10

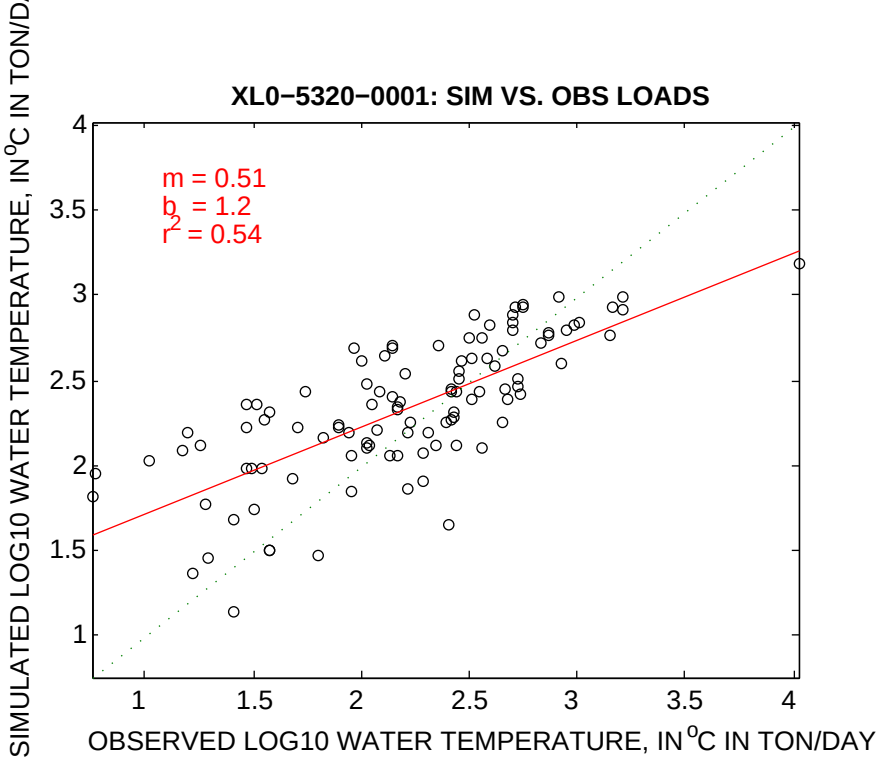


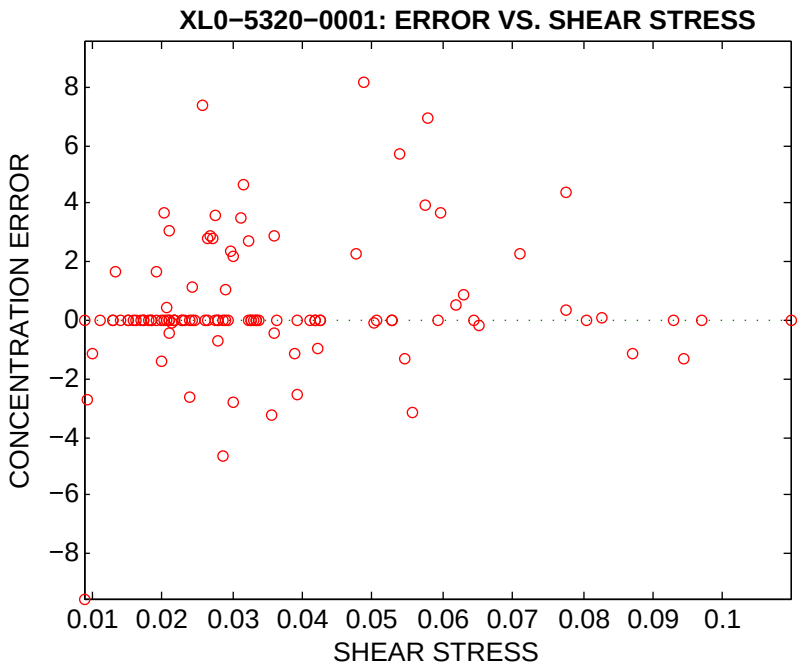


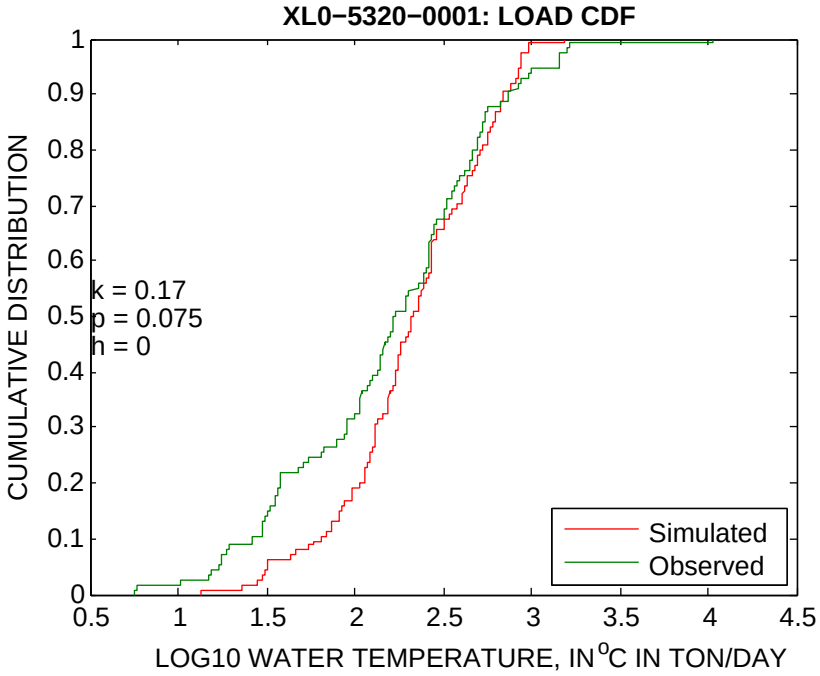


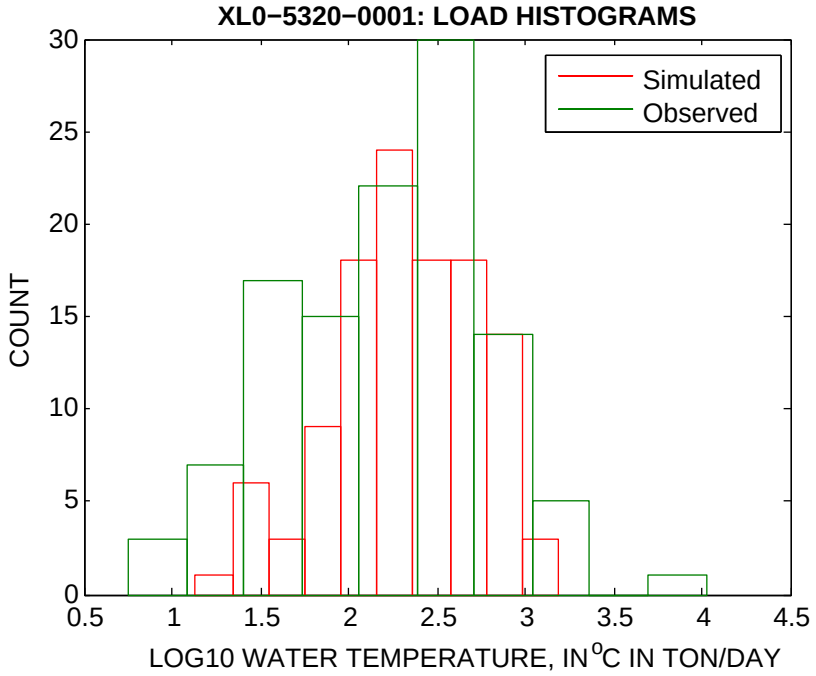


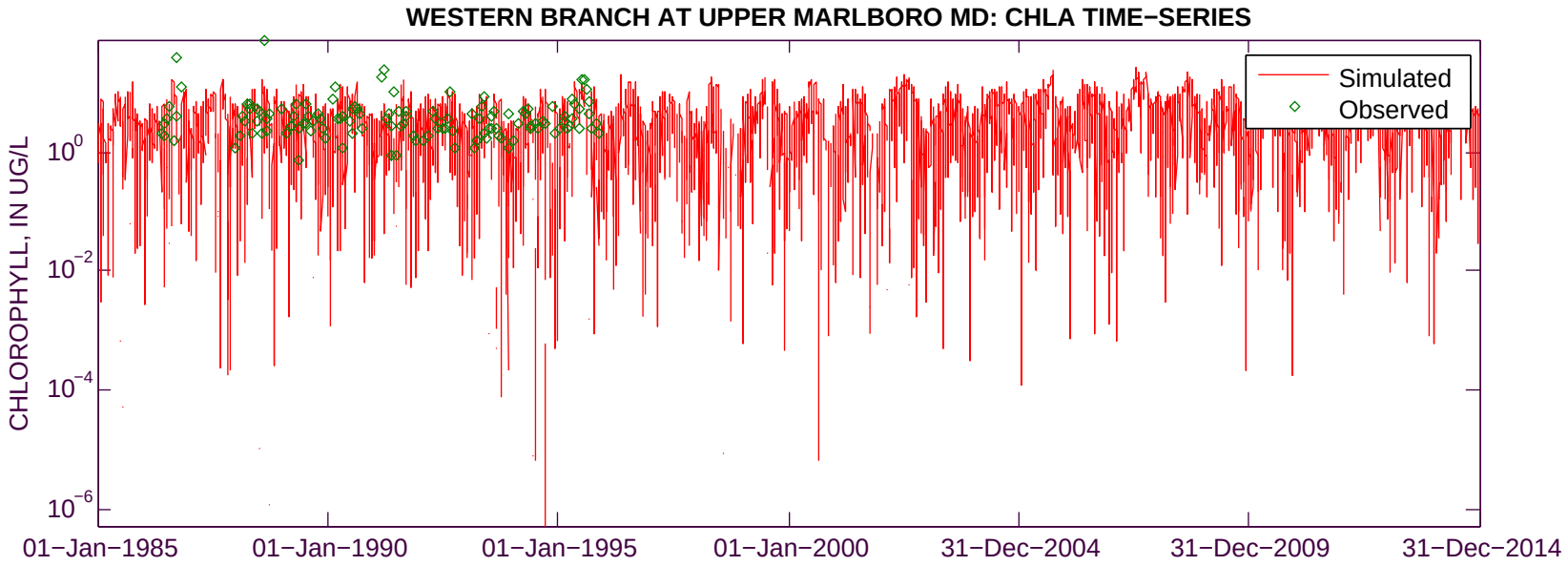
LOAD DATA
LOG10

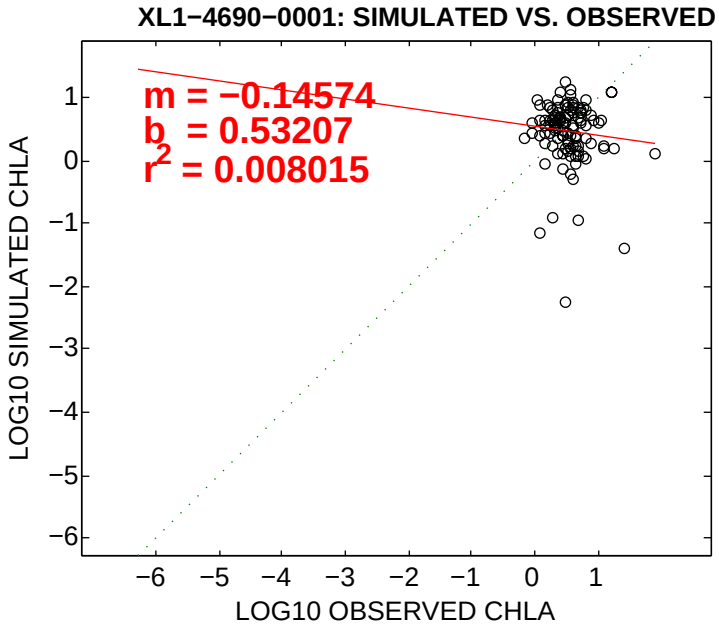


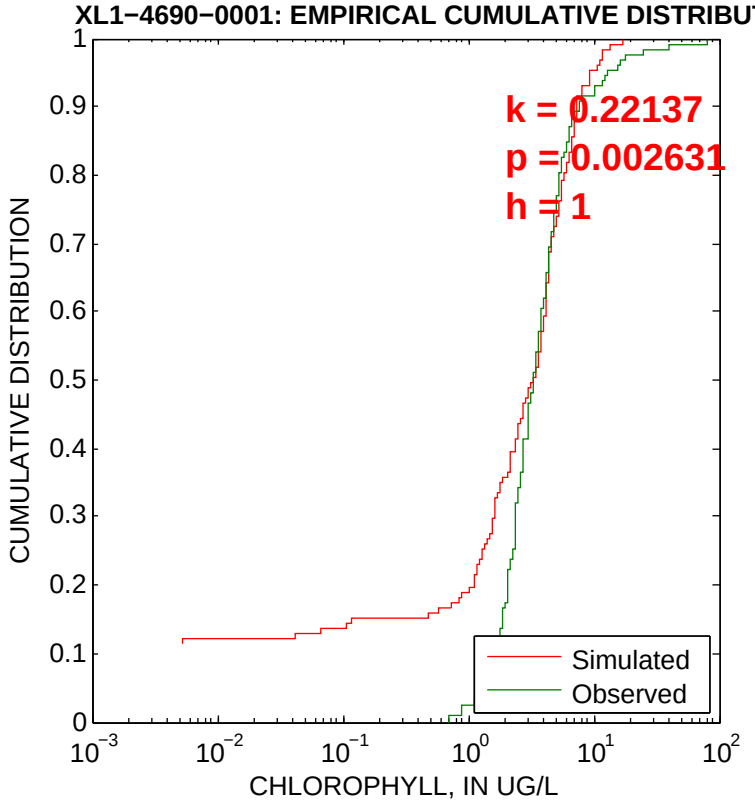












DATA SELECTION

scenario	file
P620171001WQ	CHLA.calib

plot: CHLA - chlorophyll A

Dates: 1/1/1985 – 12/31/201

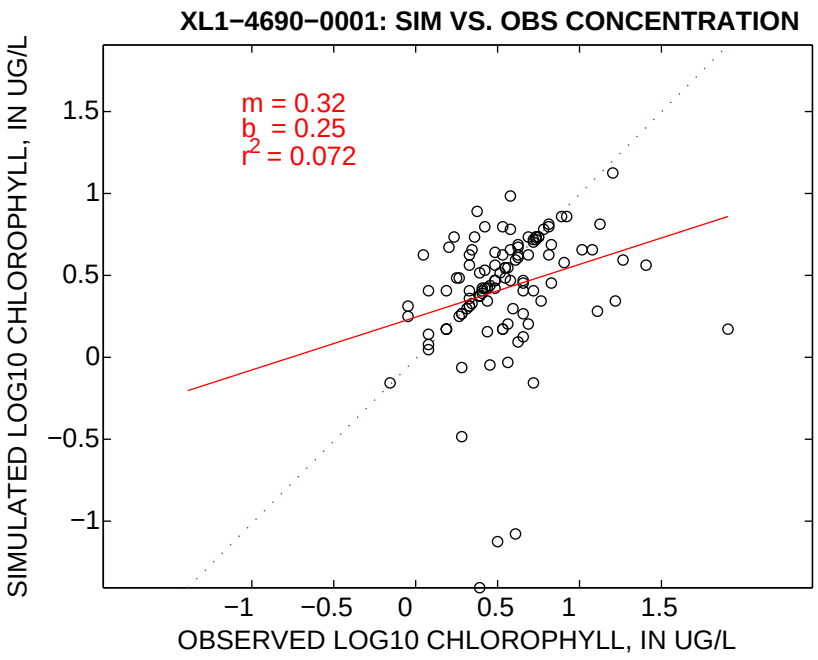
Drive	Directory	Observed
N/A	model	OBS20161101

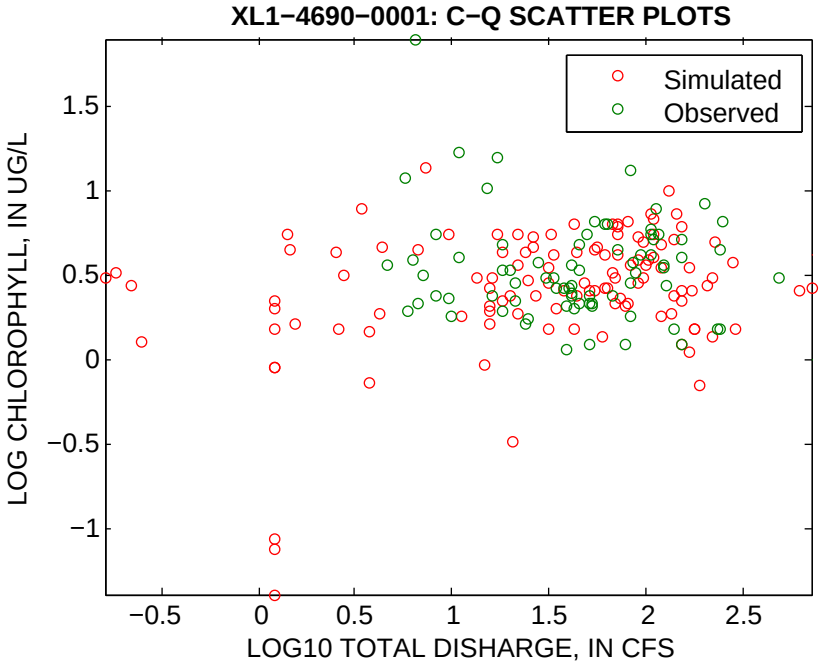
STATISTICS

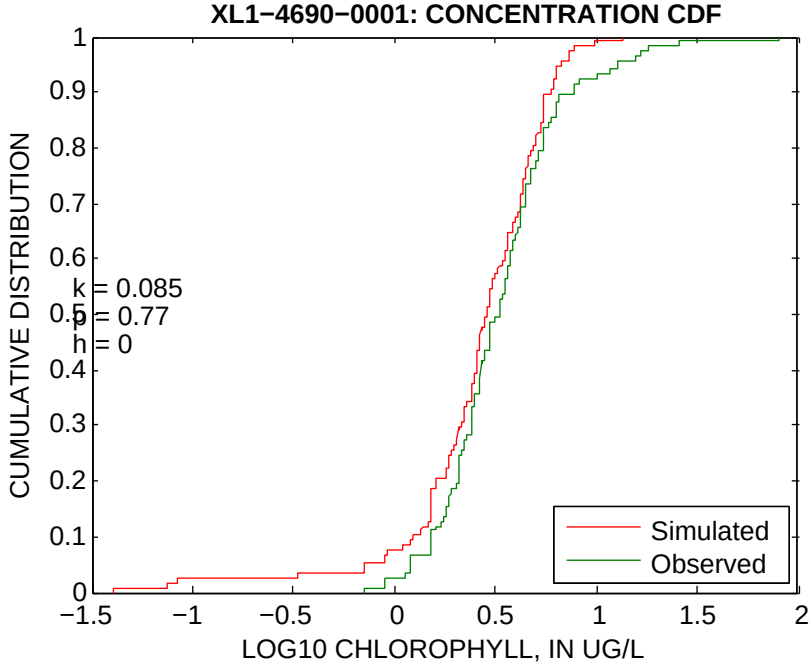
	n	131	116
		observe	simulate
min		0.7	0
		-0.154902	-2.27253
mean		5.06725	3.68308
		0.531556	0.454602
media		3.3	3.2866
		0.517855	0.584548
max		79.2	16.817
		1.89873	1.22575
varian		64.7427	9.9016
		0.0950948	0.252018
JB		0.001	0.001
		0.001	0.001
		ra	log
% err.va		-27.316	-14.4772
		81.4692	0.380805
rel.std.err		1.25835	4.00447
mod.eff		-0.258354	-3.00447

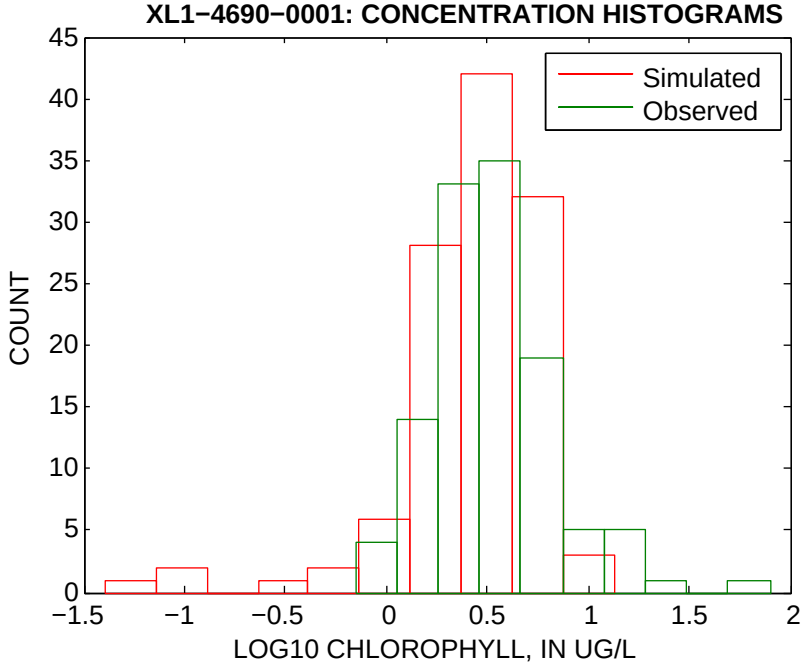
VERSION 2.1

ALL DATA
LOG10

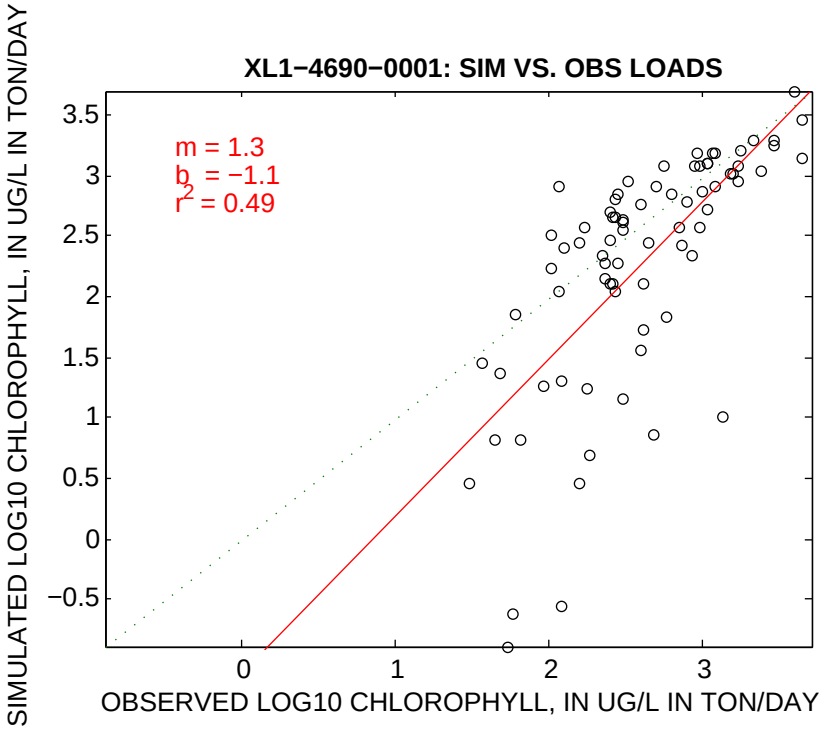


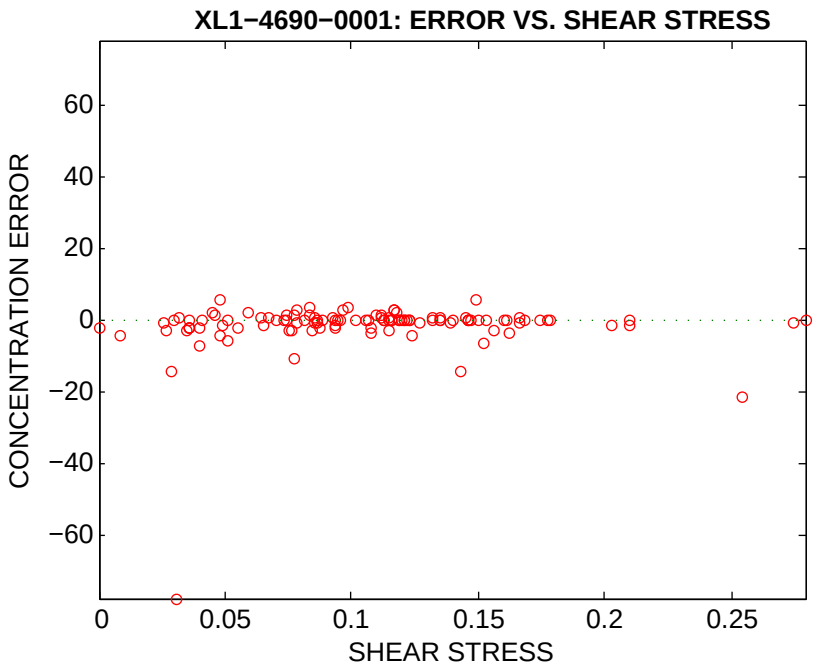


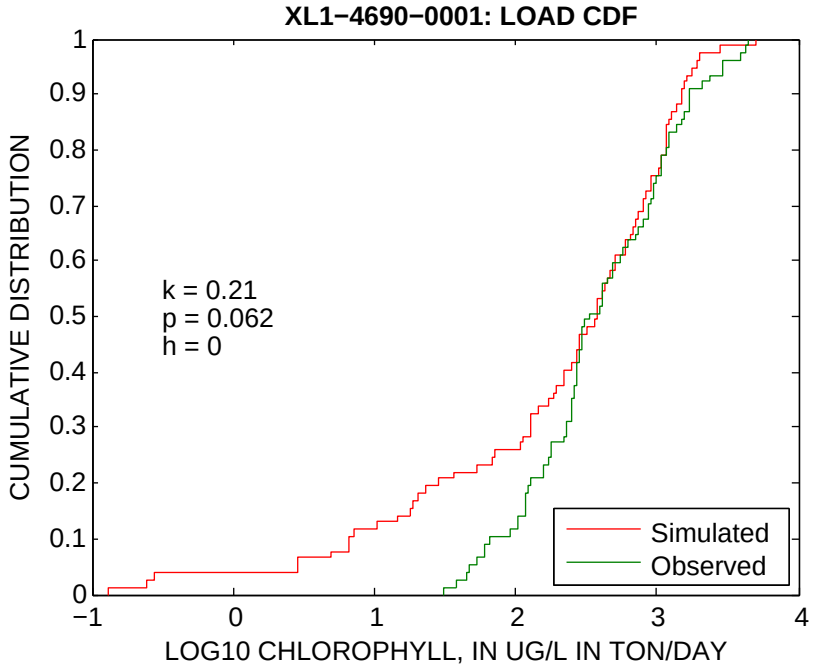


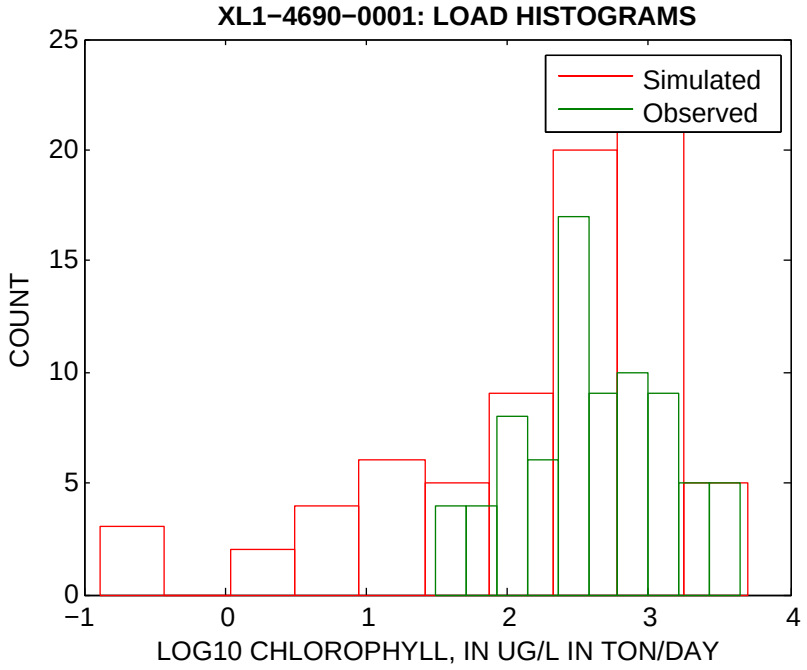


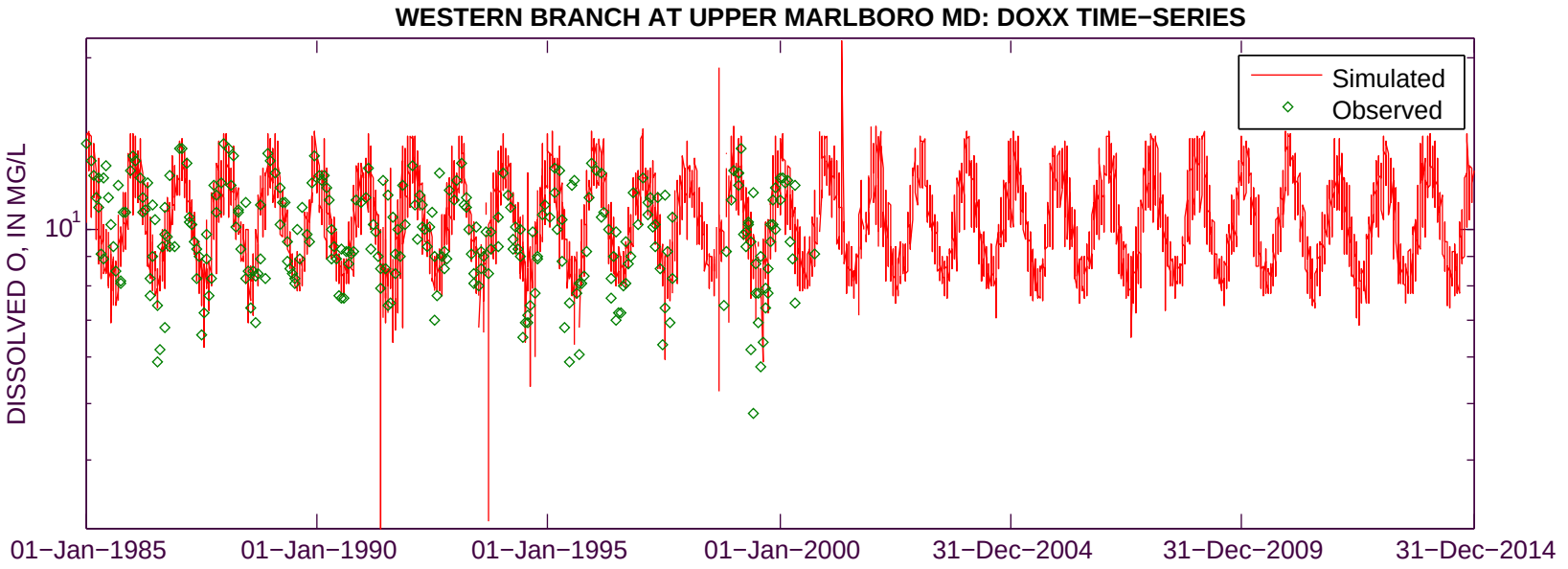
LOAD DATA
LOG10

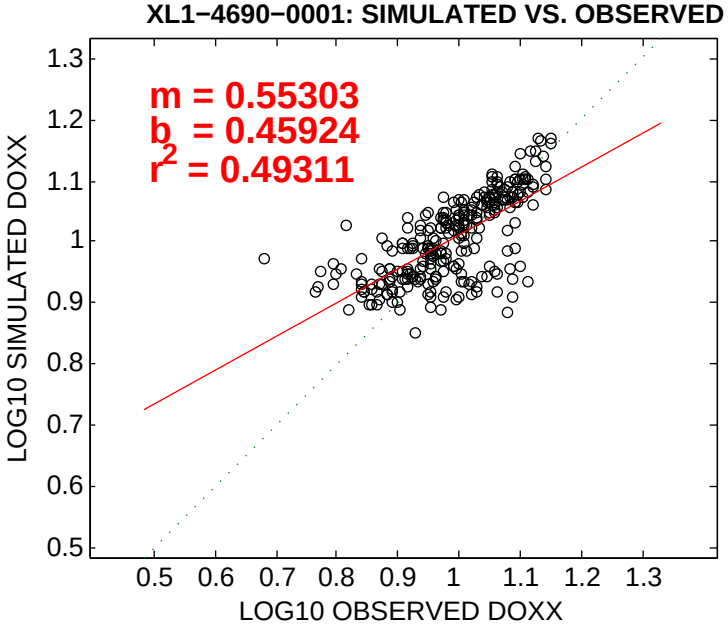


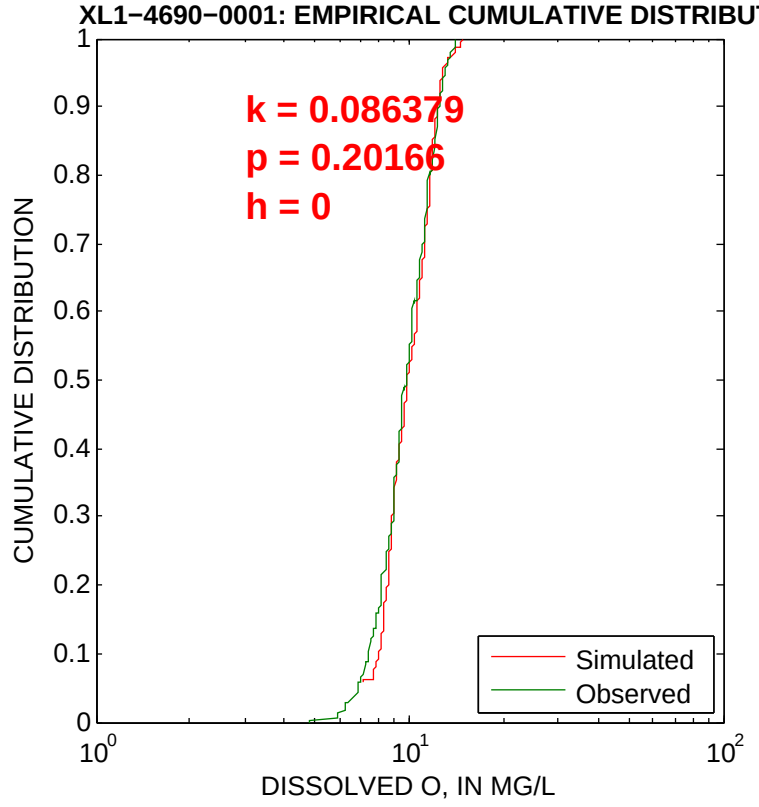












DATA SELECTION

scenario	file
P620171001WQ	DOXX.calib

plot: DOXX - dissolved oxygen

Dates: 1/1/1985 – 12/31/201

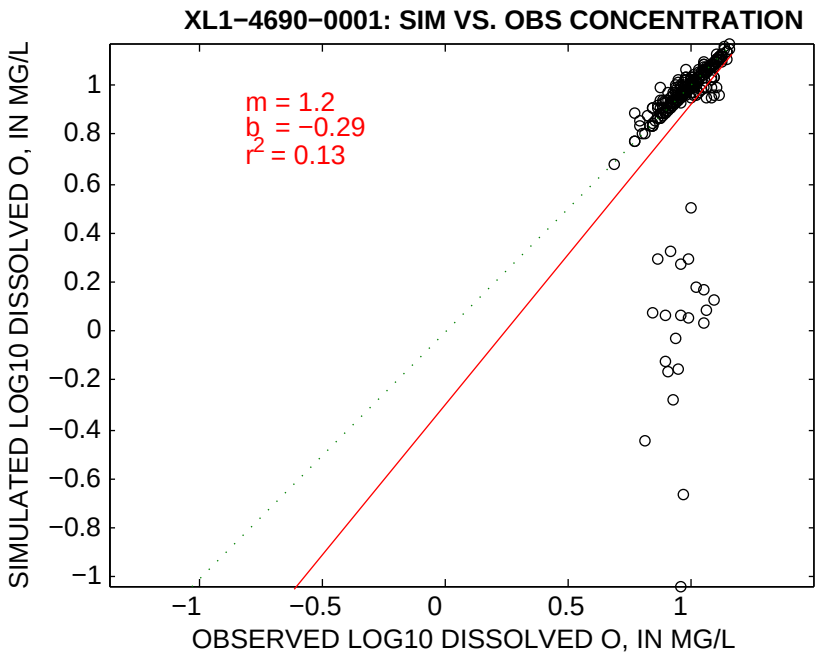
Drive	Directory	Observed
N/A	model	OBS20161101

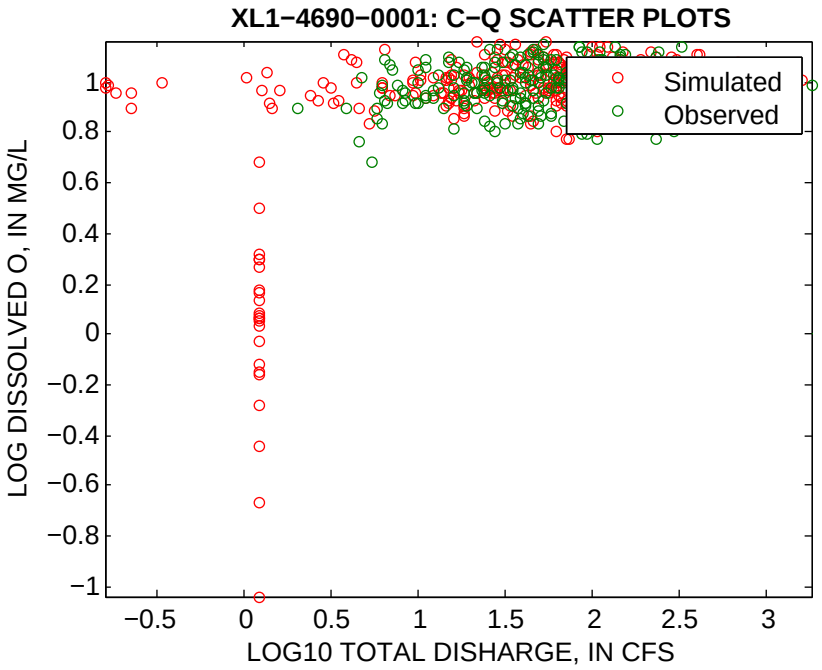
STATISTICS

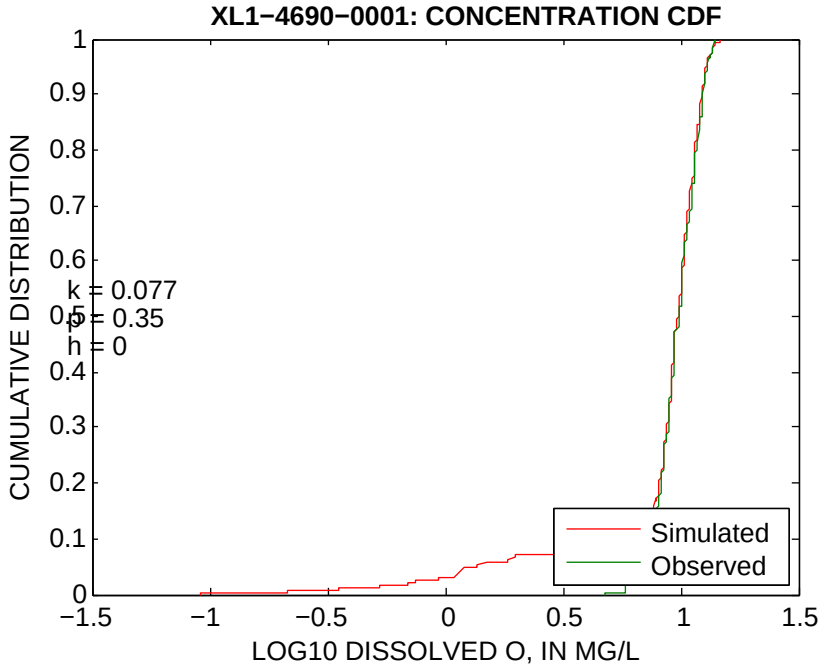
	n	301	283
		observe	**simulate**
min		4.8	0
		0.681241	0.850622
mean		9.89217	9.65664
		0.98916	1.00628
media		9.8	9.8632
		0.995635	1.00492
max		14.088	14.748
		1.14885	1.16873
varian		3.60994	8.43251
		0.00745188	0.0046218
JB		0.064577	0.001
		0.021488	0.012272
		ra	log
%		-2.38104	1.73024
err.va		6.85013	0.00412547
rel.std.err		1.89758	0.553614
mod.eff		-0.897575	0.446386

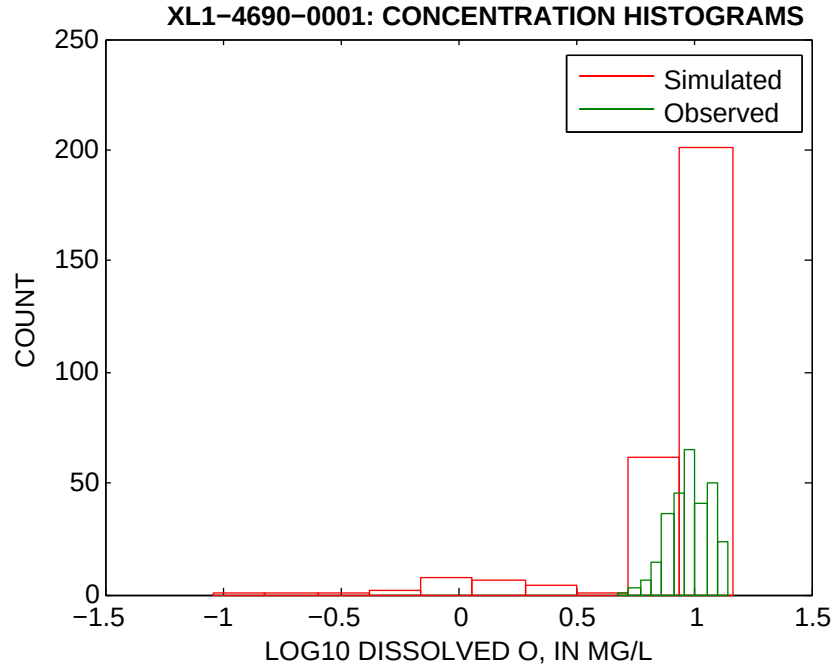
VERSION 2.1

ALL DATA
LOG10

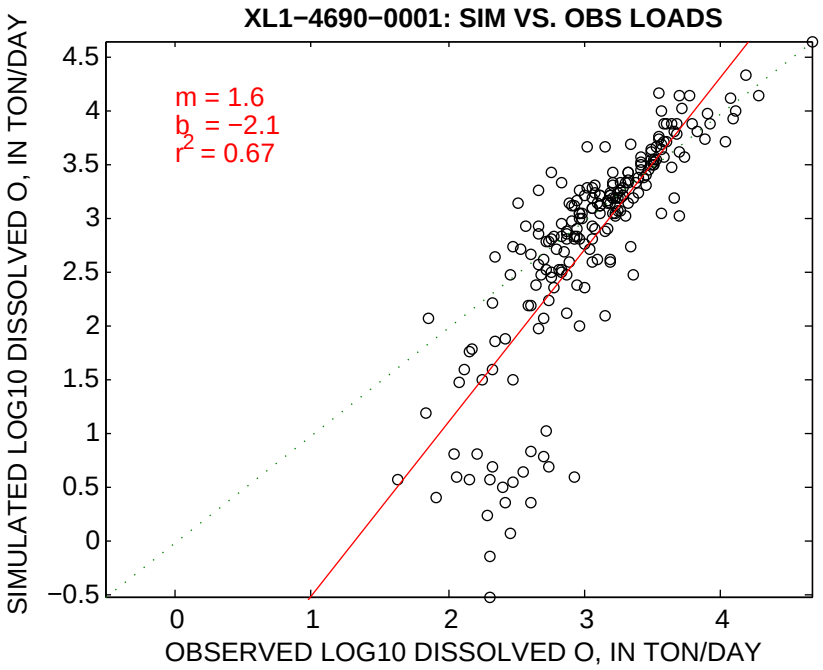


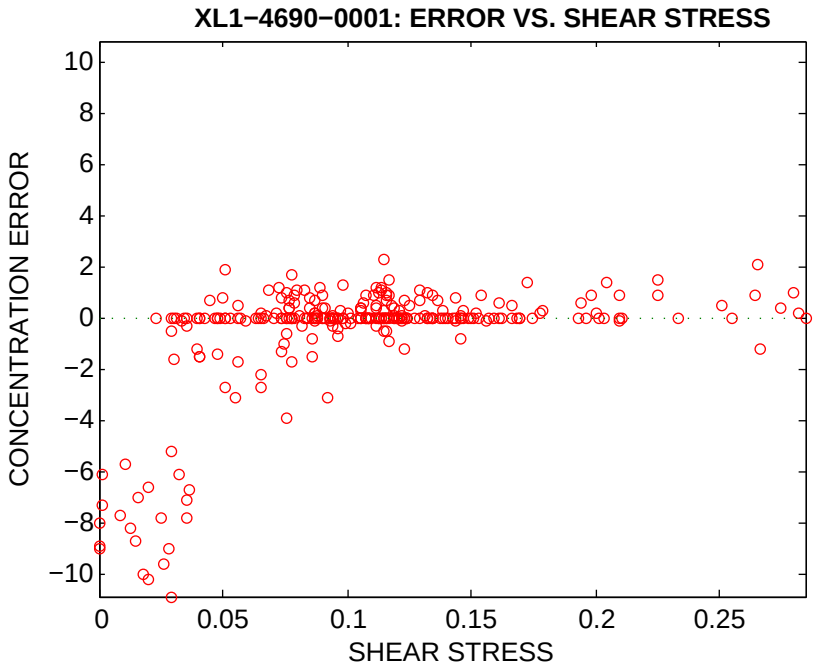


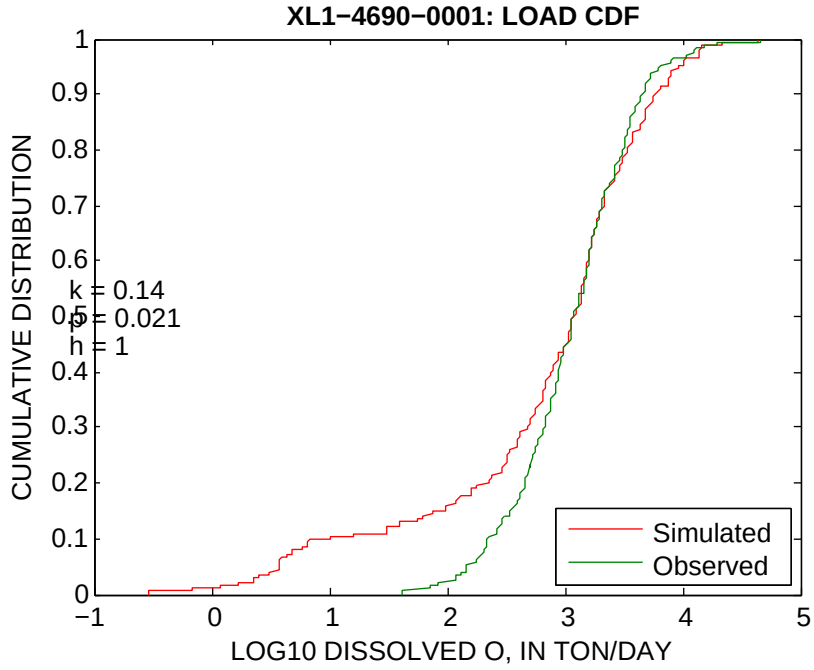


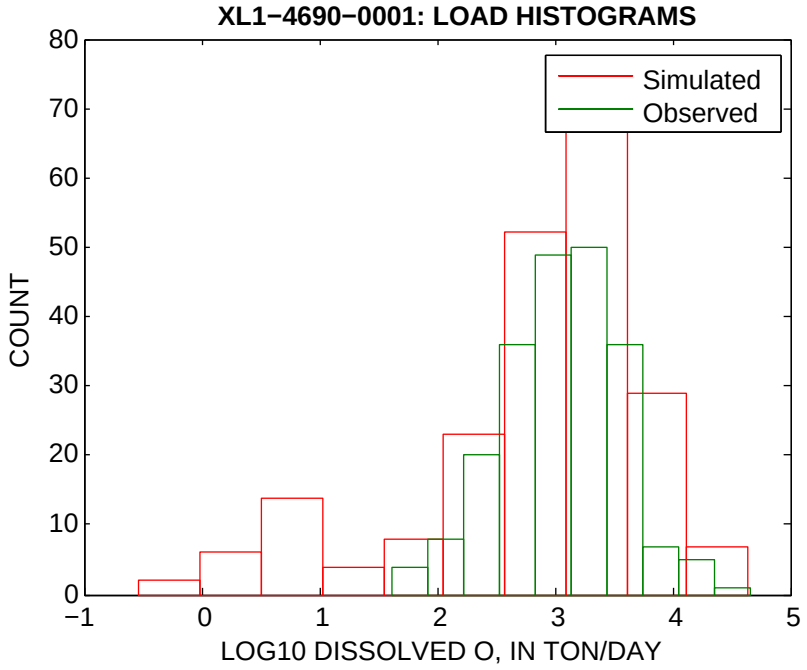


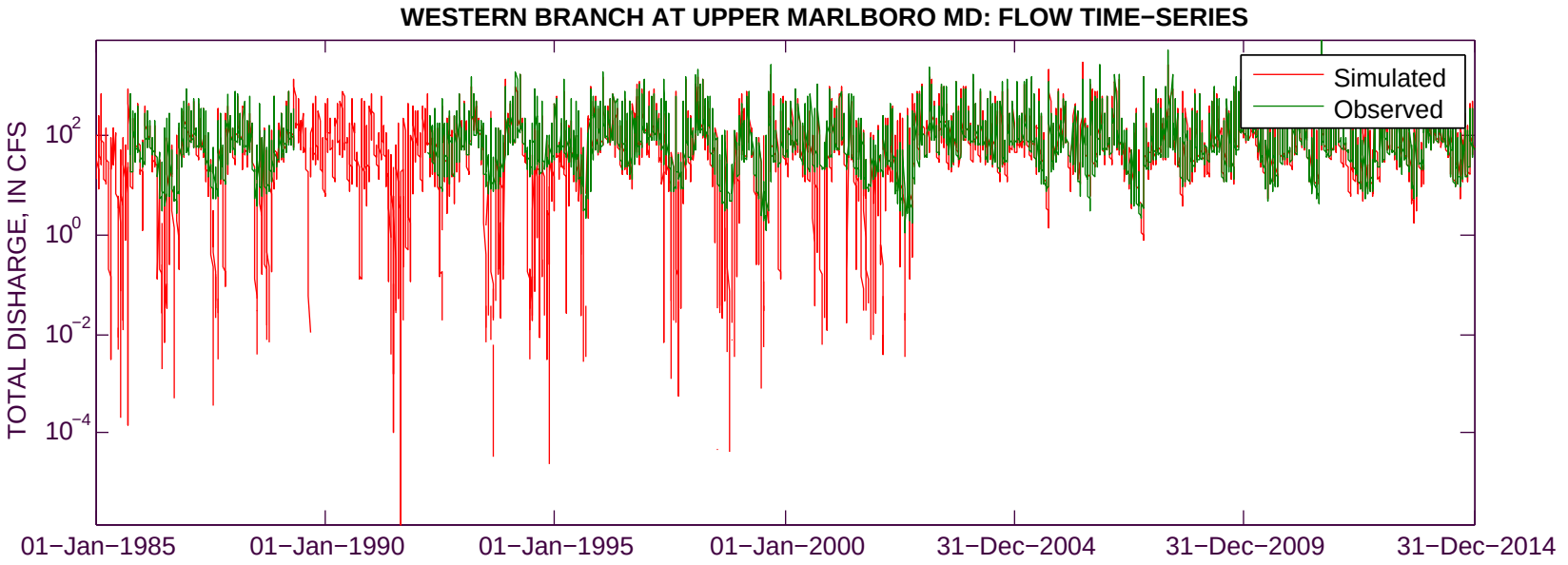
LOAD DATA
LOG10

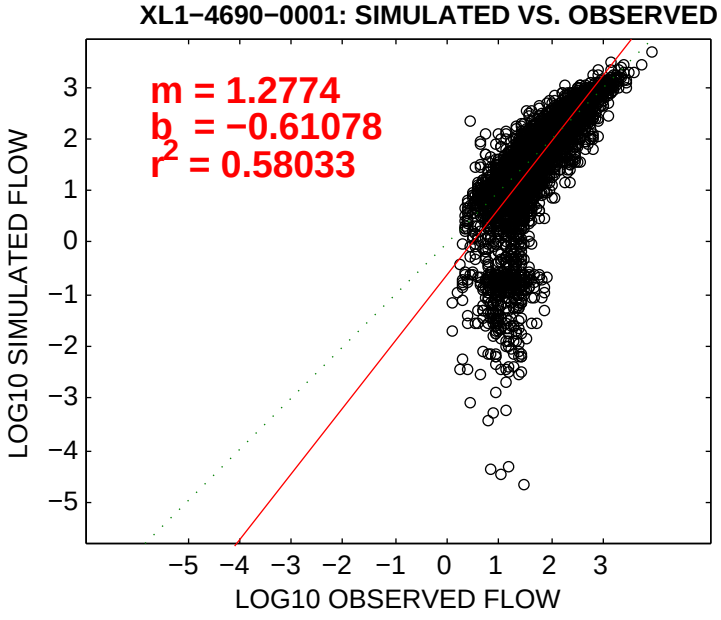


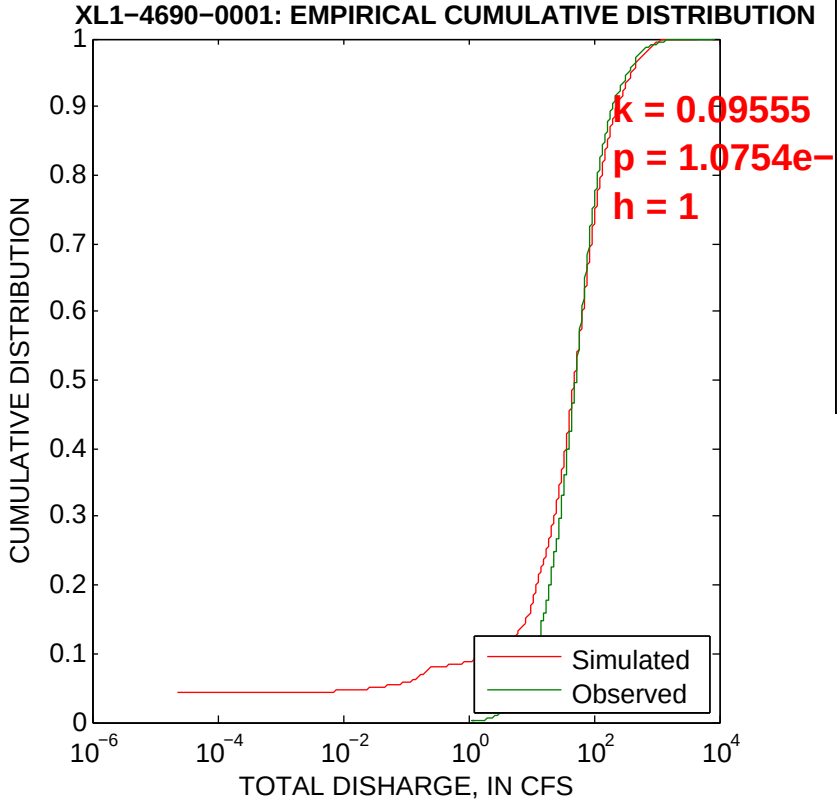












DATA SELECTION

scenario: P620171001WQ | file: _FLOW.calib

plot: FLOW - total discharge

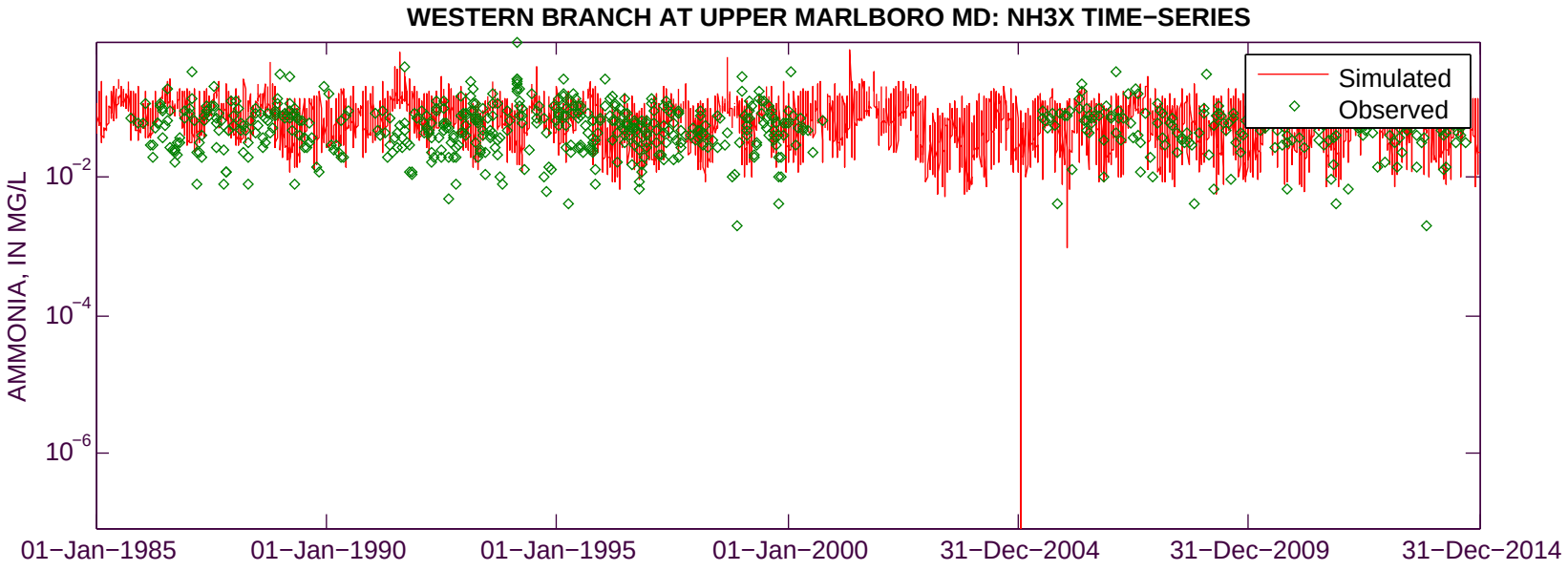
Dates: 1/1/1985 – 12/31/201

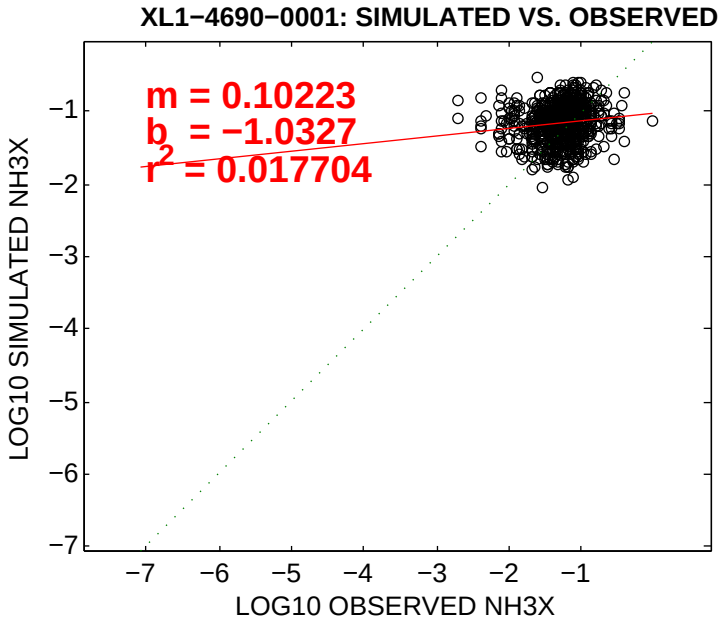
Drive: N/A | Directory: model | Observed: OBS20161101

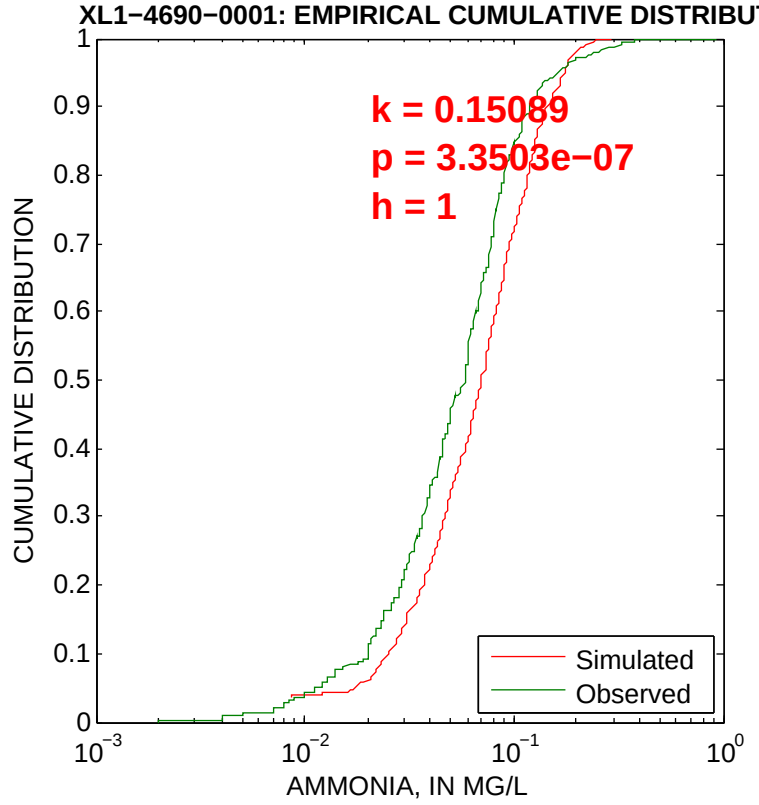
STATISTICS

	n	9618	9219
		observe	simulate
min		1.1	0
		0.113943	-4.63844
mean		102.202	105.239
		1.73753	1.6088
media		52	49.818
		1.74036	1.72614
max		8710	4539.8
		3.94002	3.65704
varian		44941	35056.1
		0.226679	0.637393
JB		0.001	0.001
		0.001	0.001
		ra	log
%		2.97141	-7.4093
err.va		11163.1	0.301516
rel.std.err		0.248395	1.33014
mod.eff		0.751605	-0.330144

VERSION 2.1







DATA SELECTION

scenario	file
P620171001WQ	NH3X.calib

plot: NH3X - ammonia

Dates: 1/1/1985 – 12/31/201

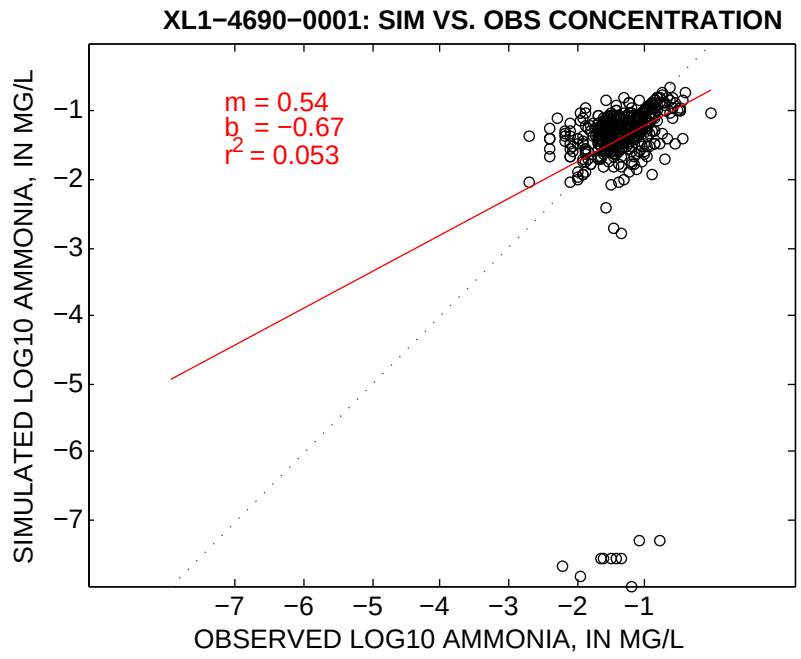
Drive	Directory	Observed
N/A	model	OBS20161101

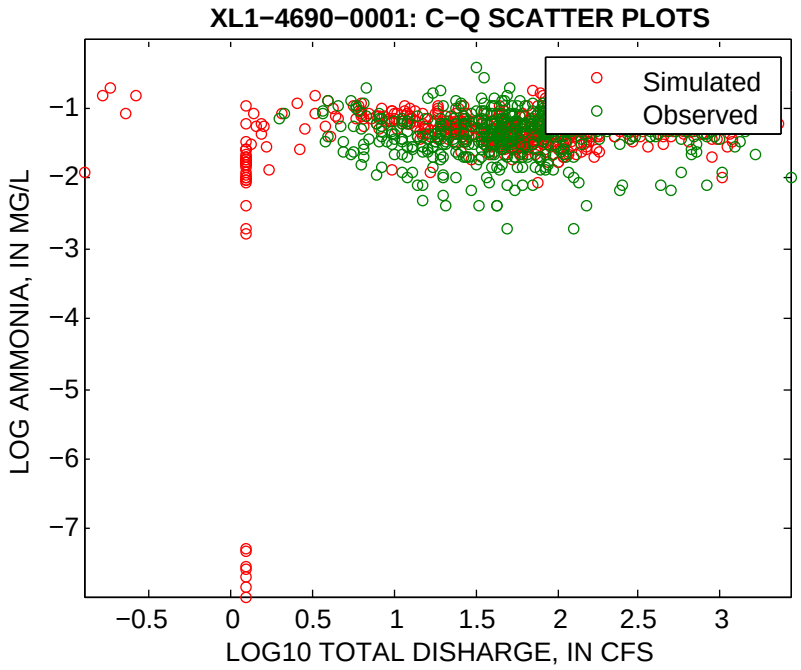
STATISTICS

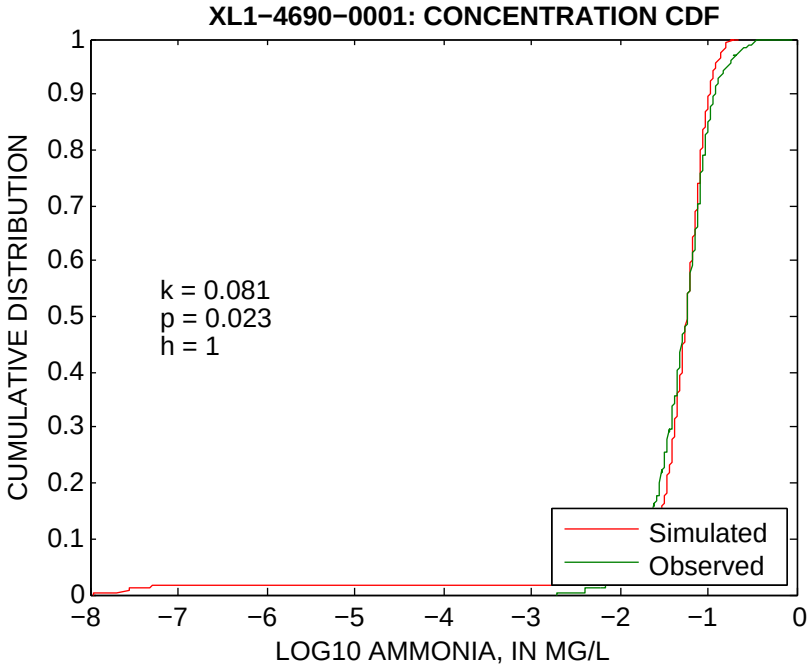
	n	676	651
		observe	**simulate**
min		0.002	0
		-2.69897	-2.06317
mean		0.0681019	0.078553
		-1.28561	-1.16415
media		0.058	0.069834
		-1.22915	-1.13796
max		0.9325	0.29551
		-0.0303512	-0.529428
varian		0.00396995	0.00241453
		0.119782	0.0707055
JB		0.001	0.001
		0.001	0.004662
		ra	log
%		15.3462	-9.44793
err.va		0.00572055	0.180774
rel.std.err		1.44096	1.50919
mod.eff		-0.440961	-0.509189

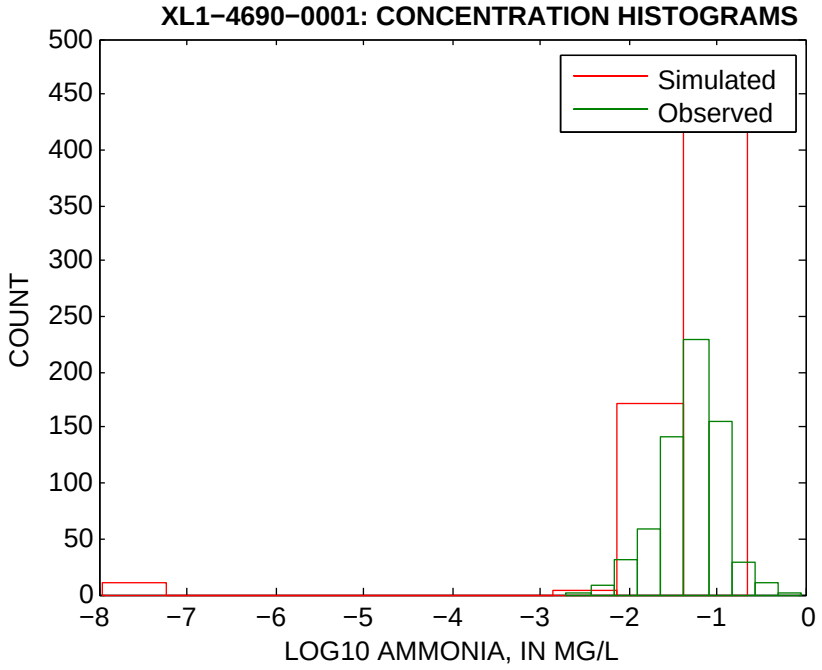
VERSION 2.1

ALL DATA
LOG10

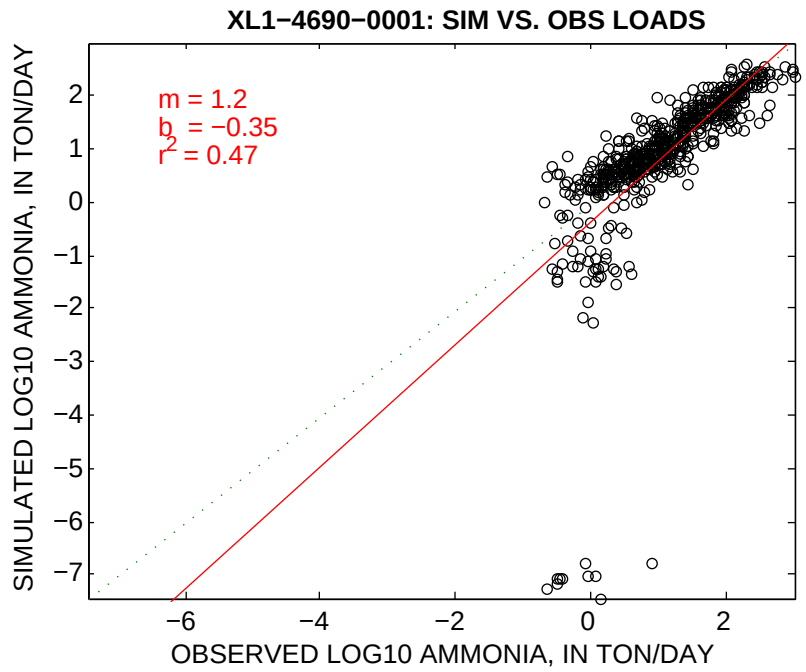


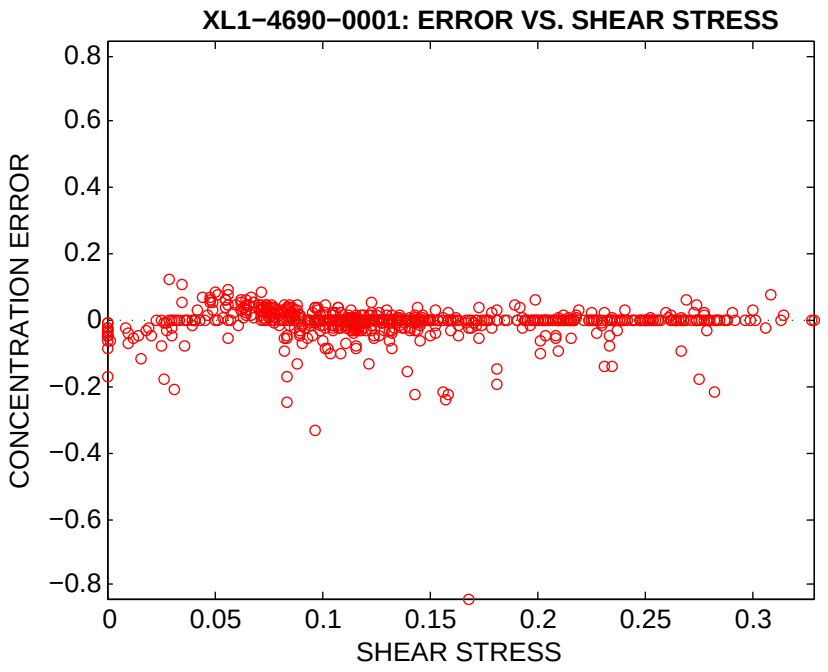


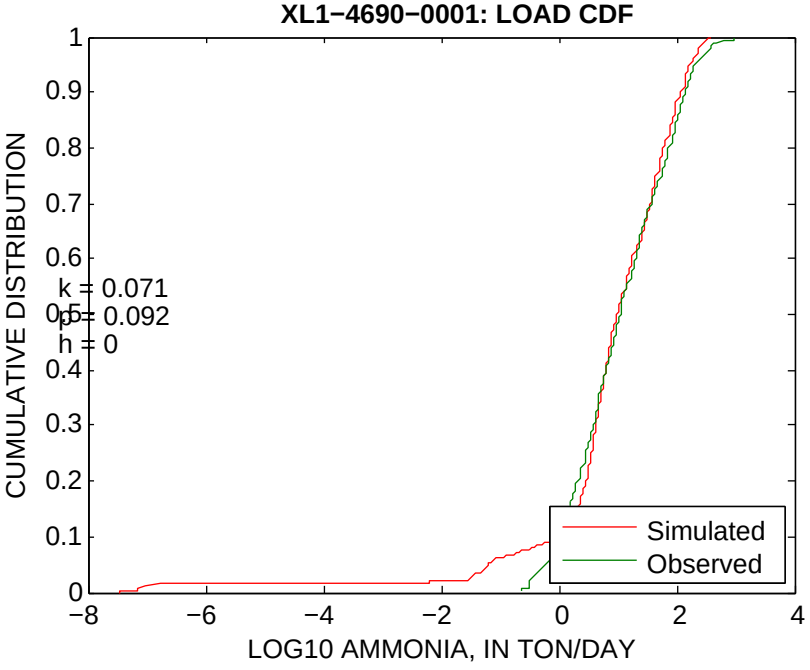


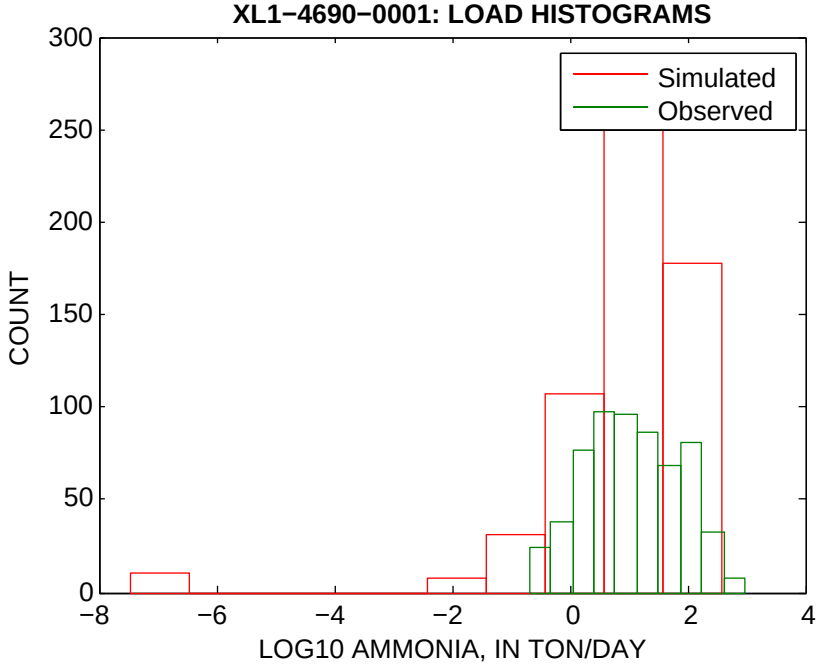


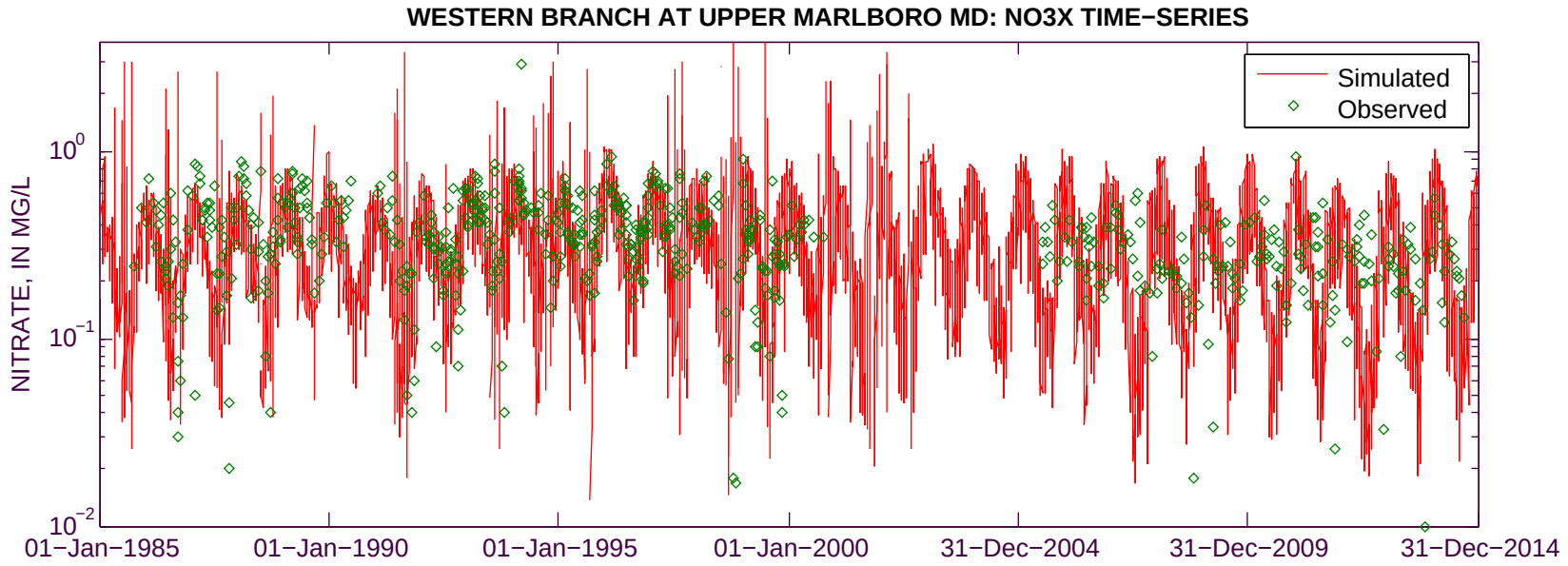
LOAD DATA
LOG10

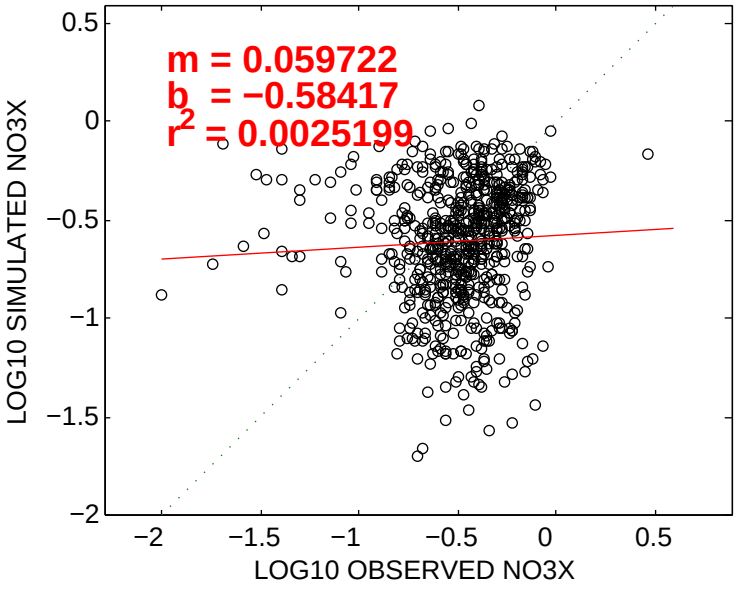


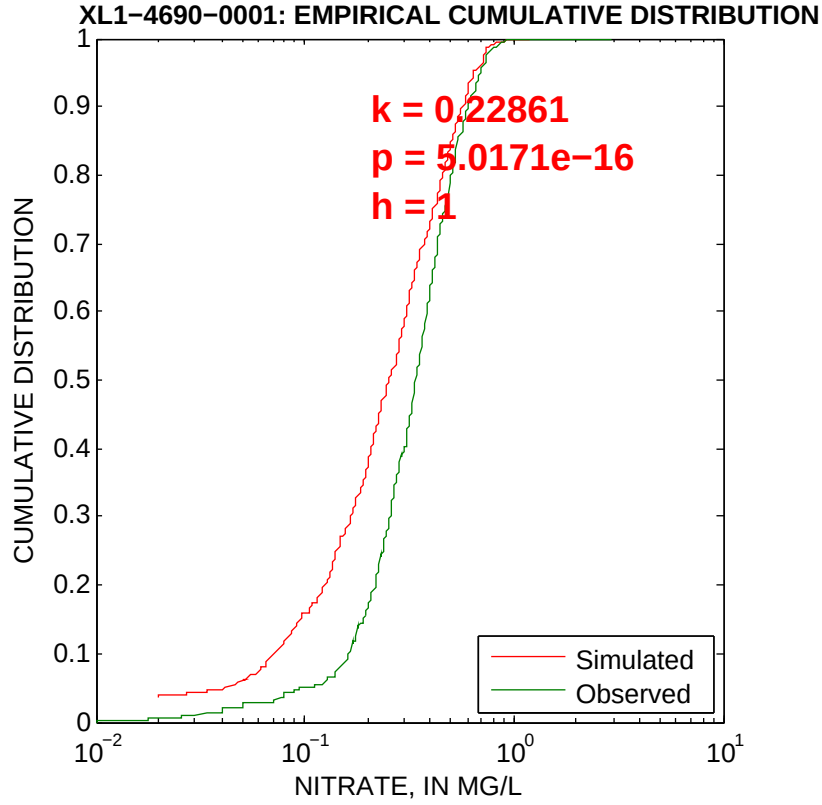












DATA SELECTION

scenario: P620171001WQ | file: NO3X.calib

plot: NO3X - nitrate

Dates: 1/1/1985 – 12/31/201

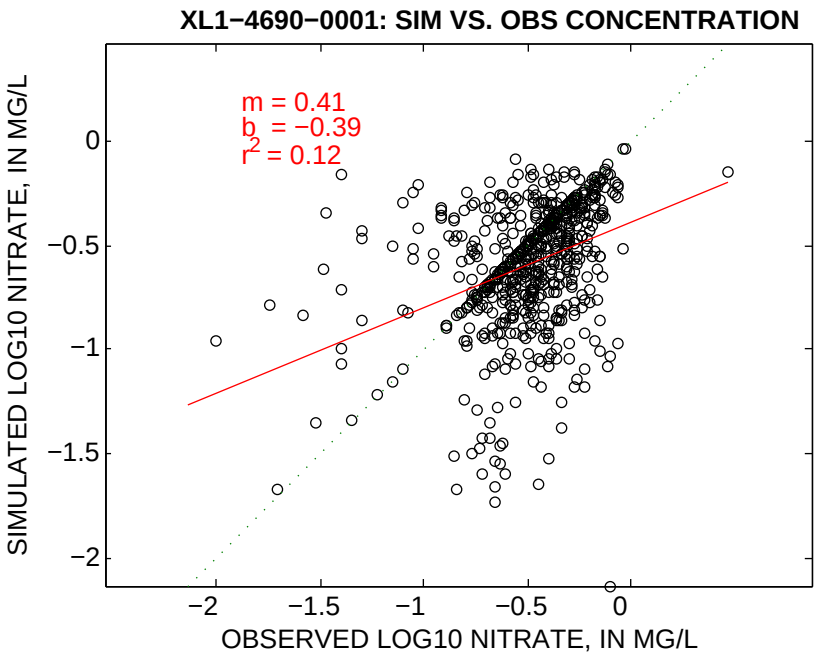
Drive | Directory | Observed: N/A | model | OBS20161101

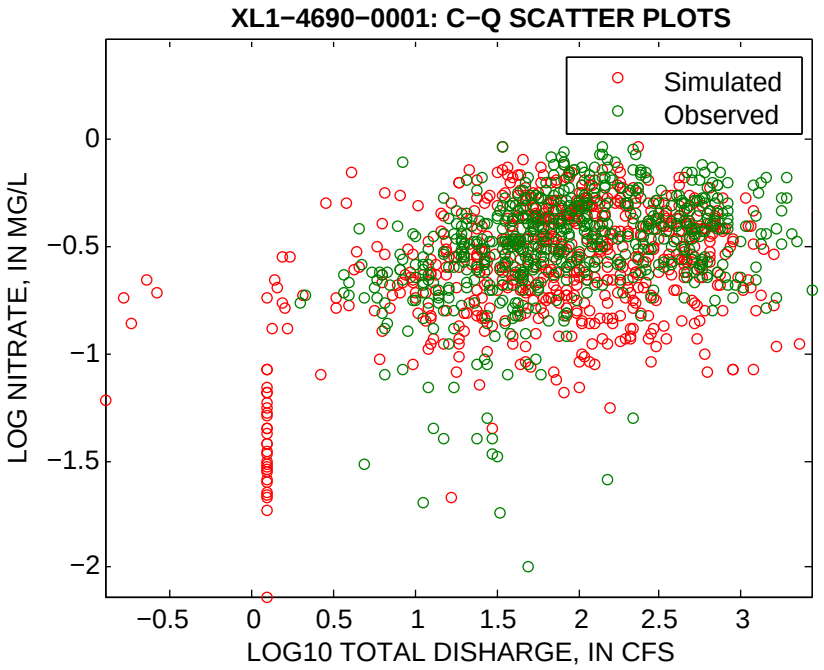
STATISTICS

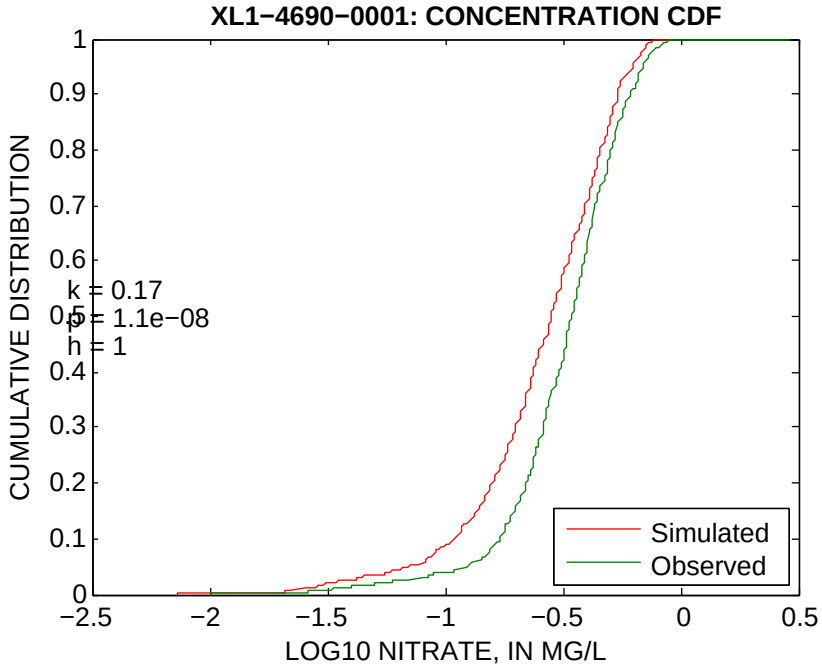
		observe	simulate
n		678	653
min		0.01	0
		-2	-1.70235
mean		0.365457	0.291868
		-0.493351	-0.613635
media		0.34	0.253285
		-0.462181	-0.568733
max		2.9	1.1838
		0.462398	0.0732783
varian		0.0399361	0.0372874
		0.0674864	0.09552
JB		0.001	0.001
		0.001	0.001
		ra	log
%		-20.136	24.381
err.va		0.0676735	0.169436
rel.std.err		1.69454	2.51067
mod.eff		-0.694544	-1.51067

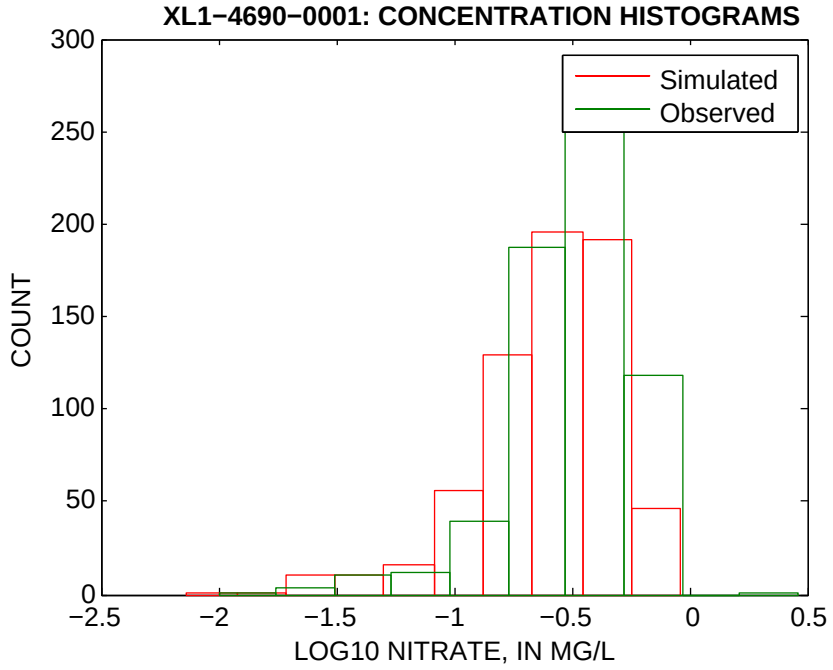
VERSION 2.1

ALL DATA
LOG10

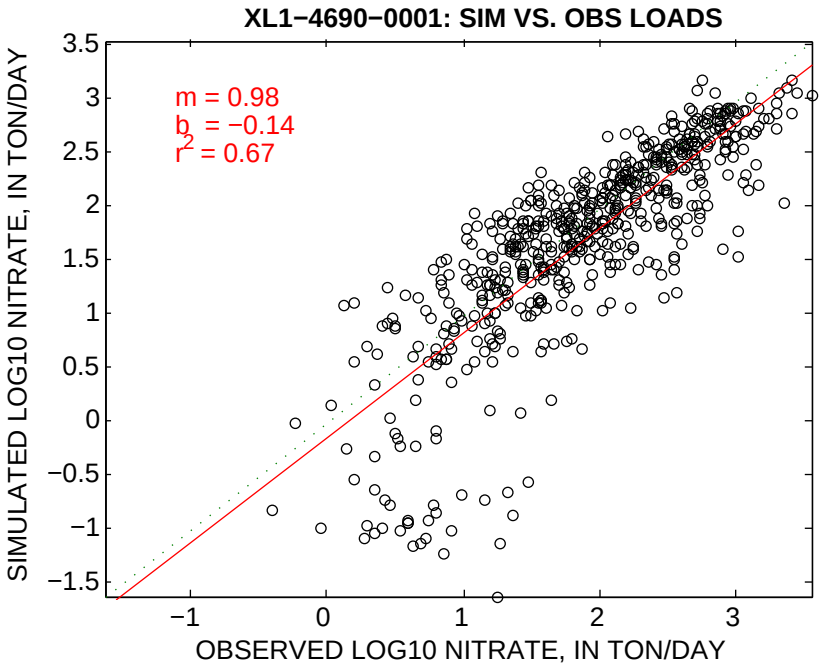


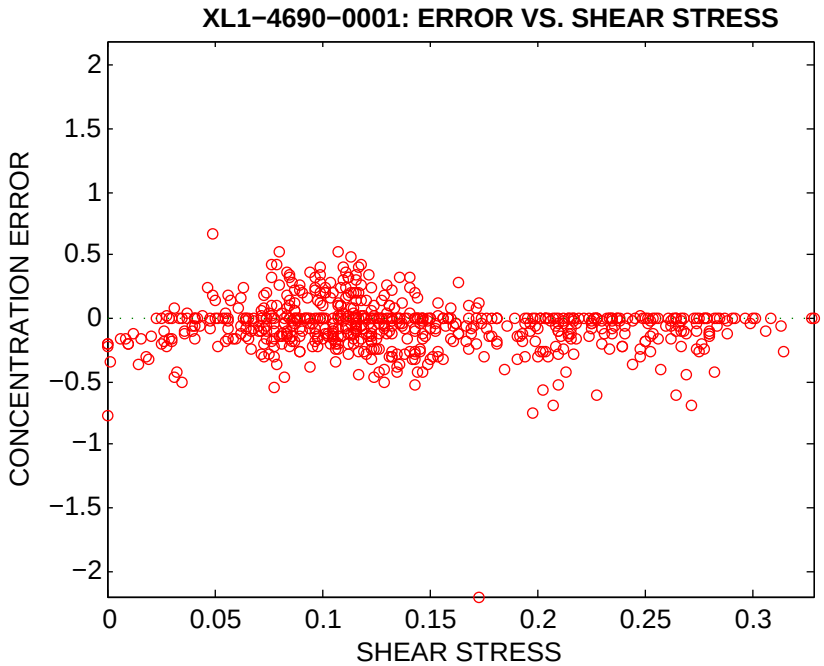


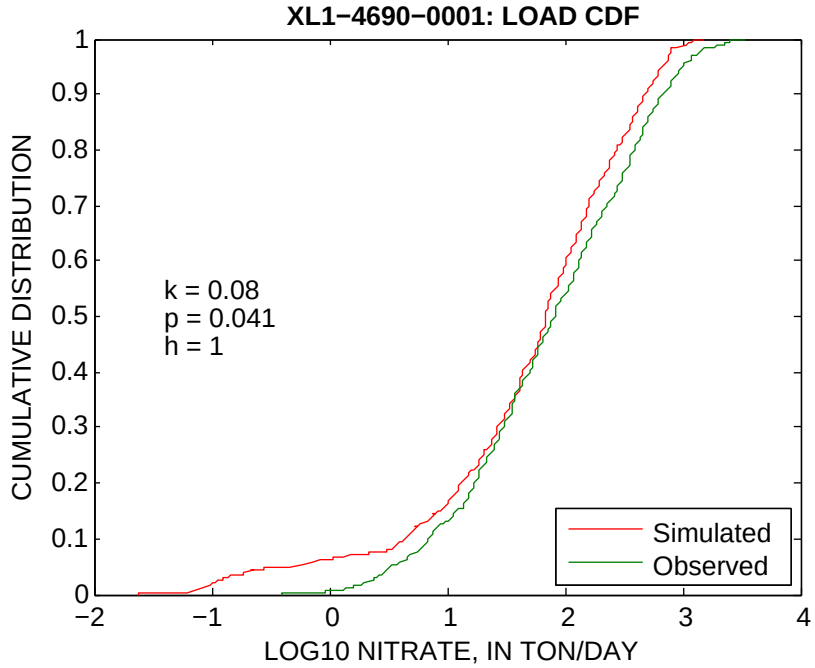


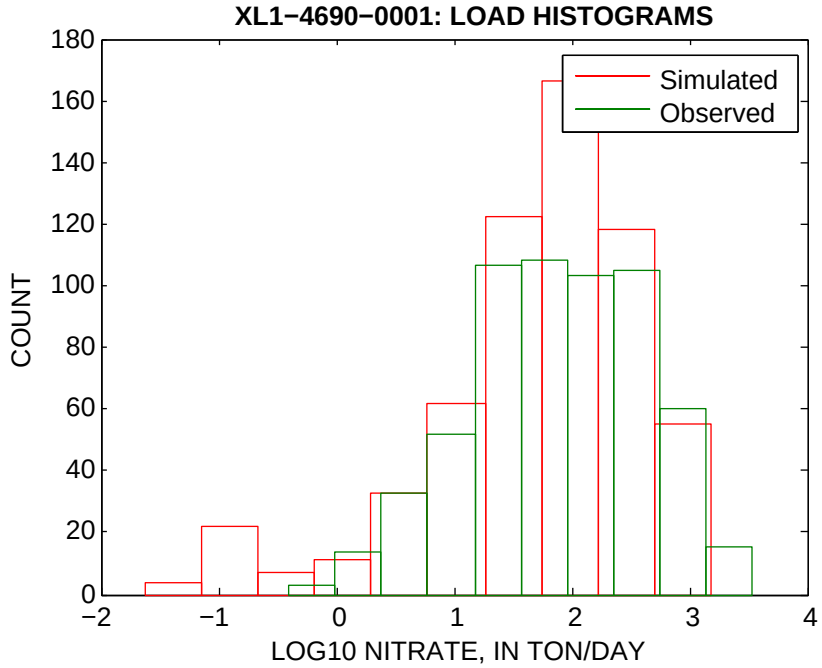


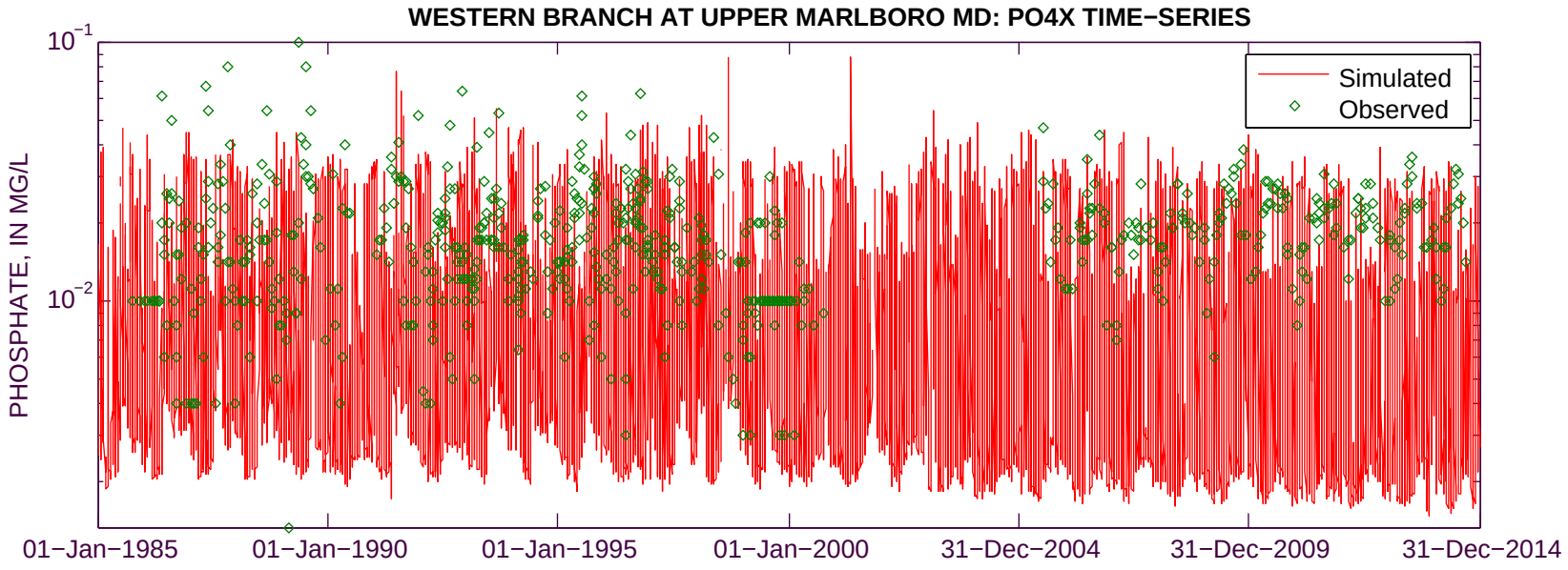
LOAD DATA
LOG10

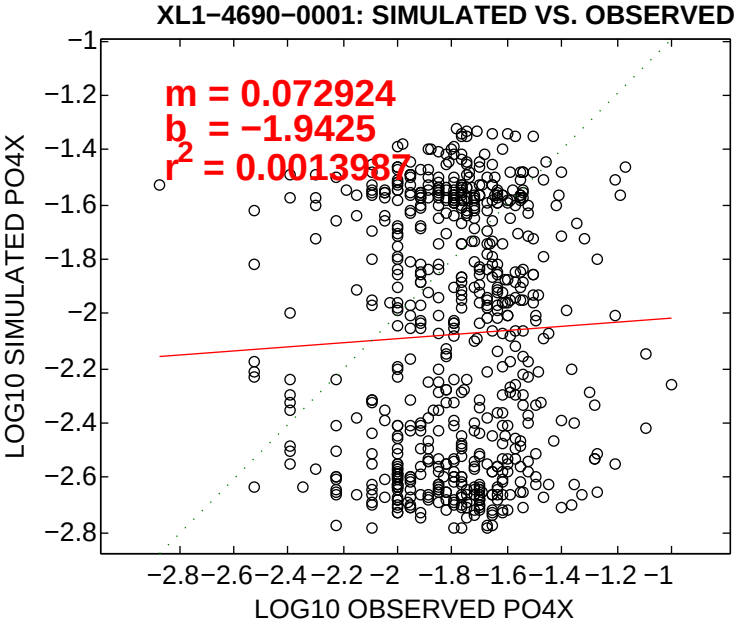


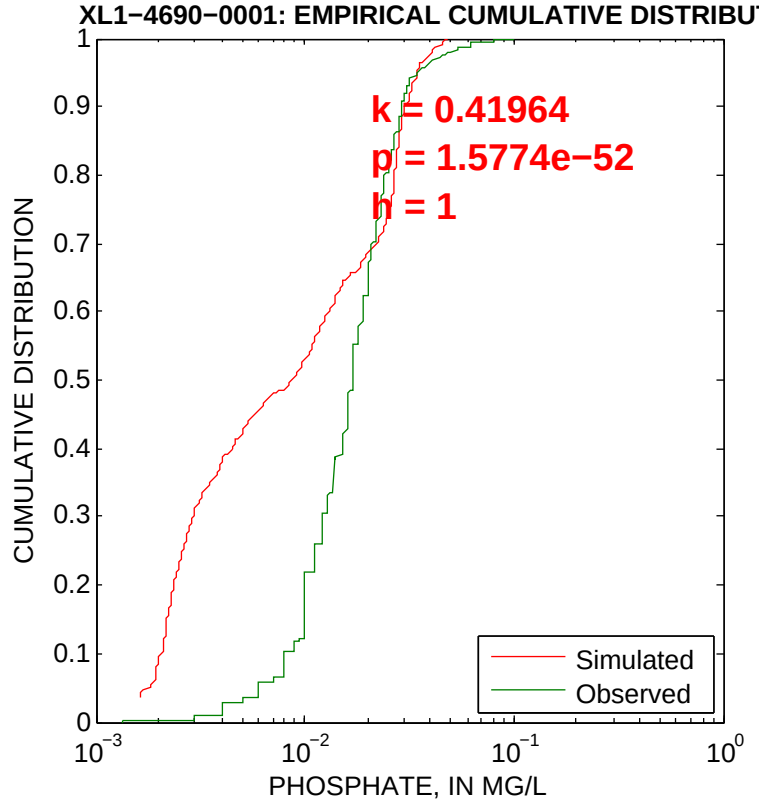












DATA SELECTION

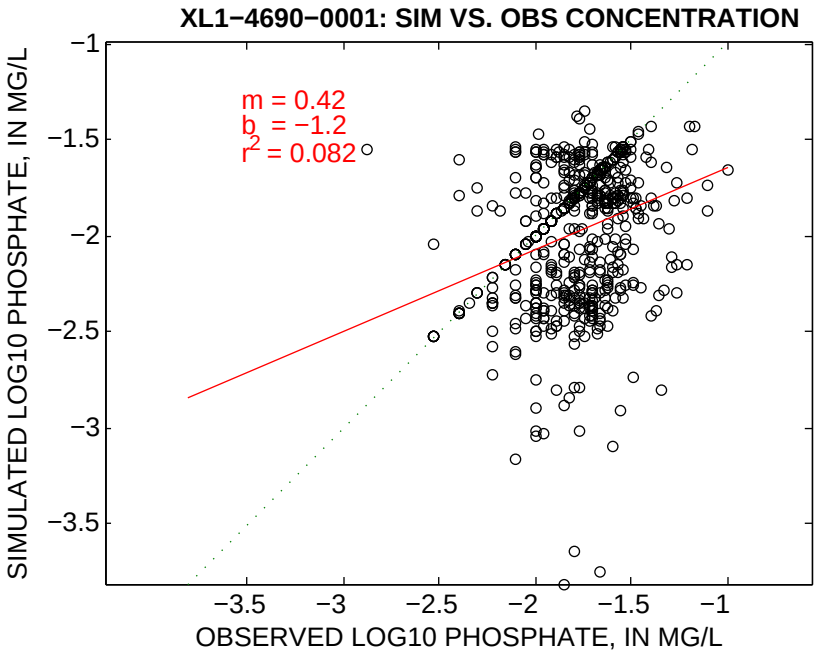
scenario: P620171001WQ
file: PO4X.calib
plot: PO4X - phosphate
Dates: 1/1/1985 12/31/201
Drive Directory: N/A
Observed: model OBS20161101

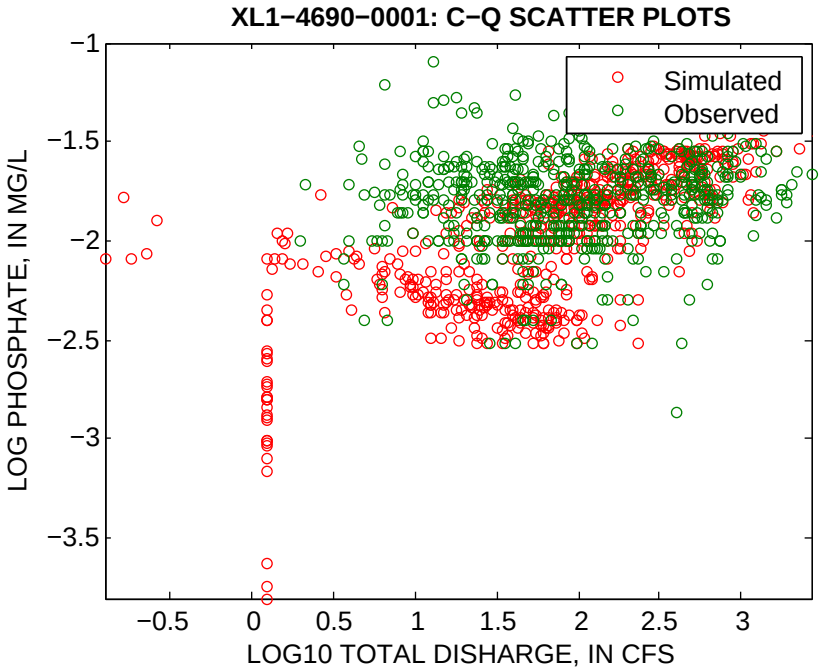
STATISTICS

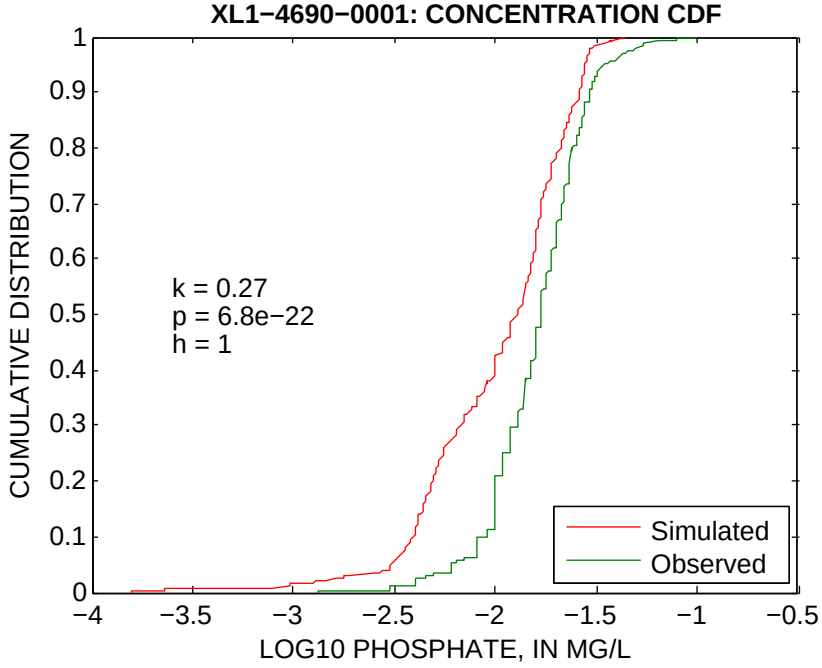
	n	672	647
		observe	simulate
min		0.00133333	0
		-2.87506	-2.78452
mean		0.018509	0.0133074
		-1.79081	-2.07313
media		0.017	0.008693
		-1.76955	-2.01756
max		0.101	0.04813
		-0.995679	-1.31758
varian		0.00011307	0.00014812
		0.0558555	0.212357
JB		0.001	0.001
		0.001	0.001
		ra	log
%		-28.1031	15.7653
err.va		0.00028920	0.339897
rel.std.err		2.55772	6.0853
mod.eff		-1.55772	-5.0853

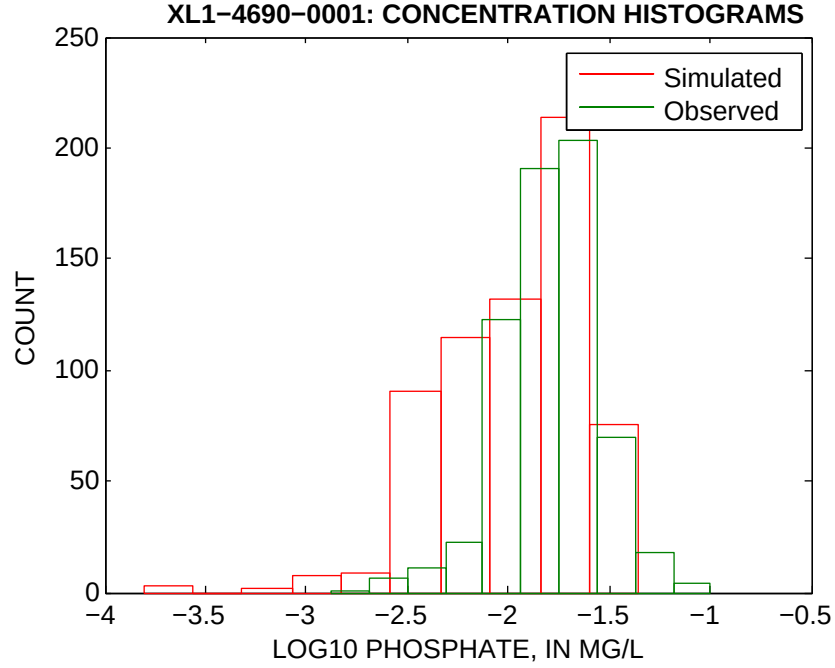
VERSION 2.1

ALL DATA
LOG10

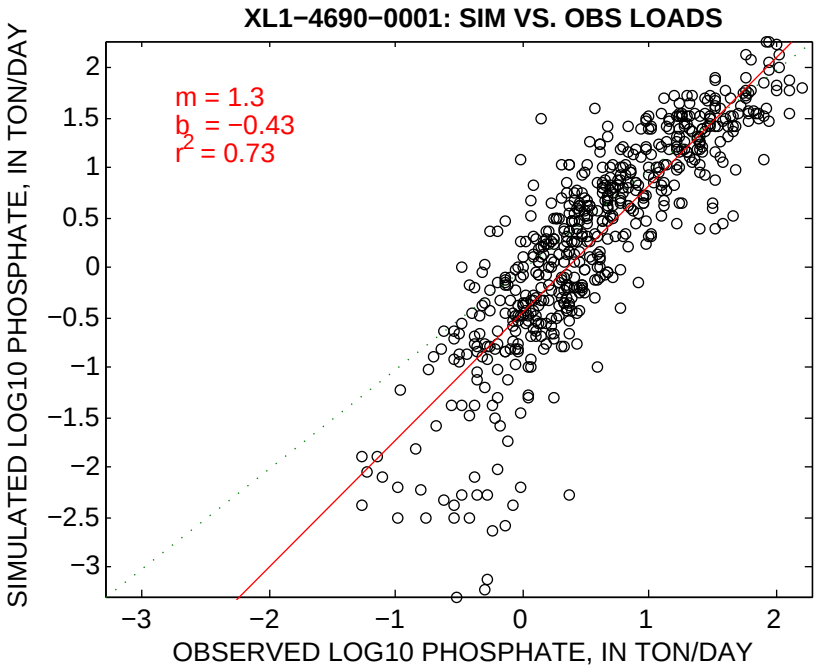


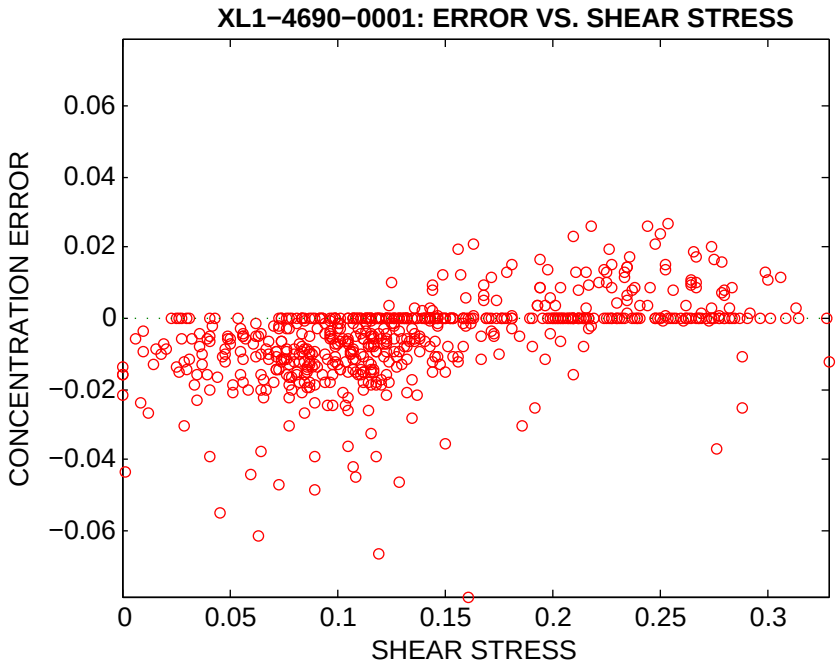


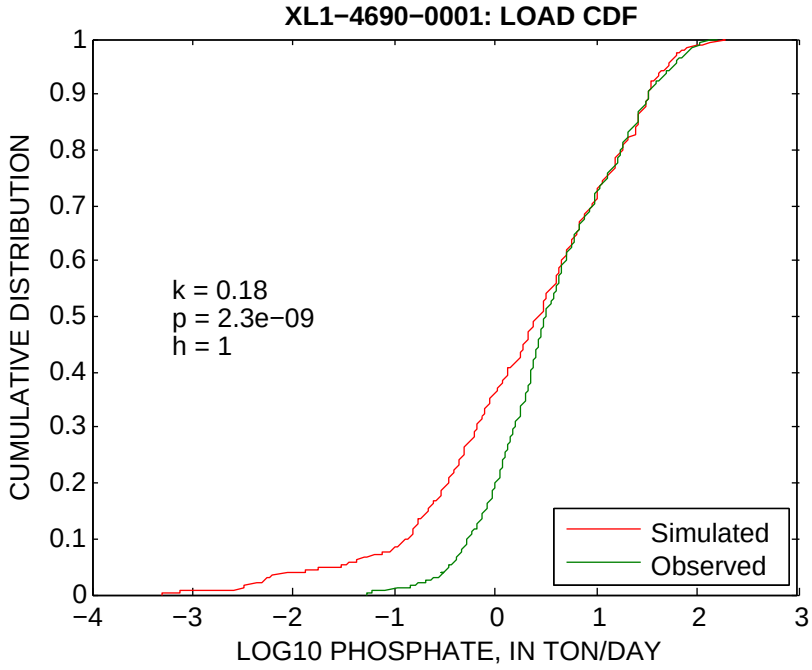


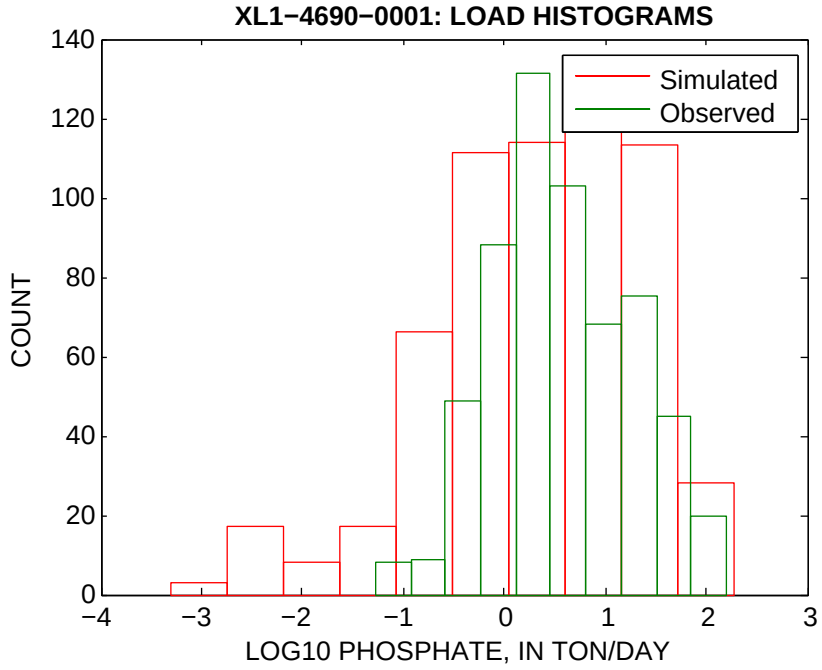


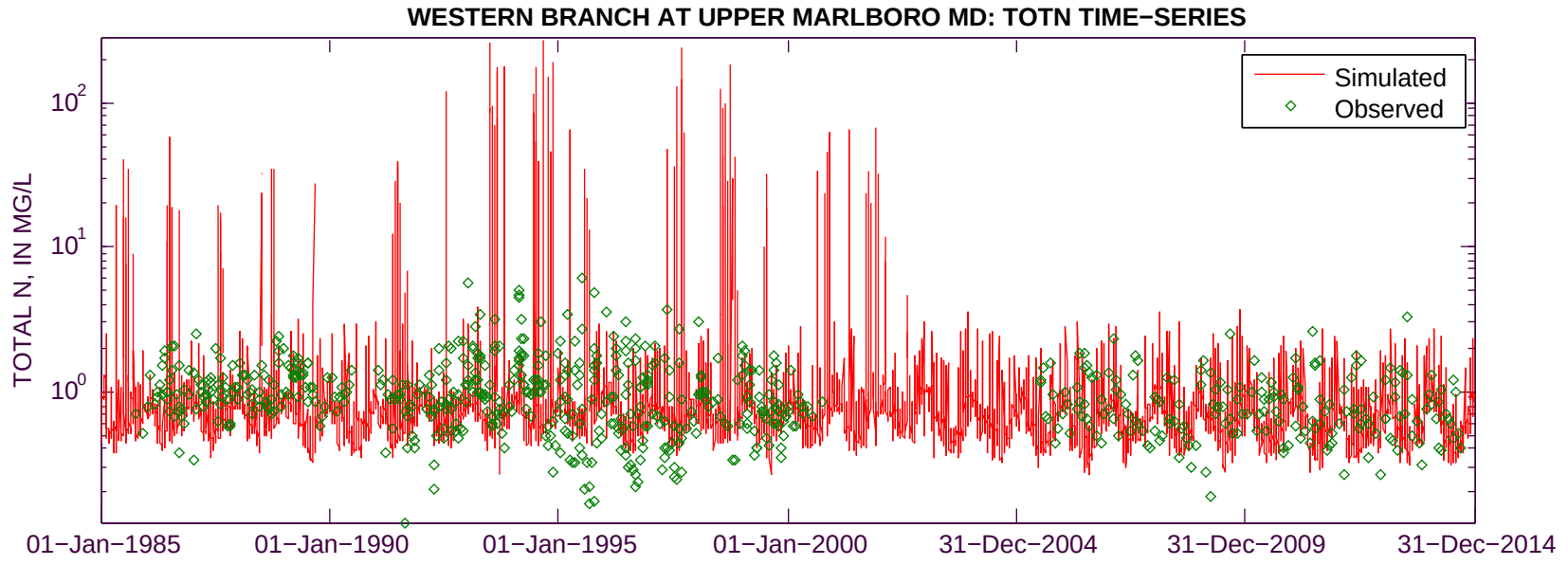
LOAD DATA
LOG10

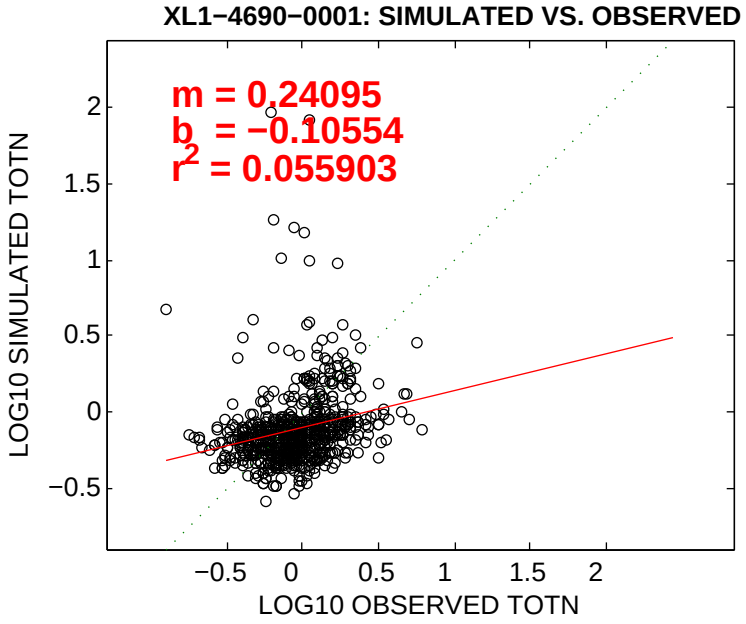


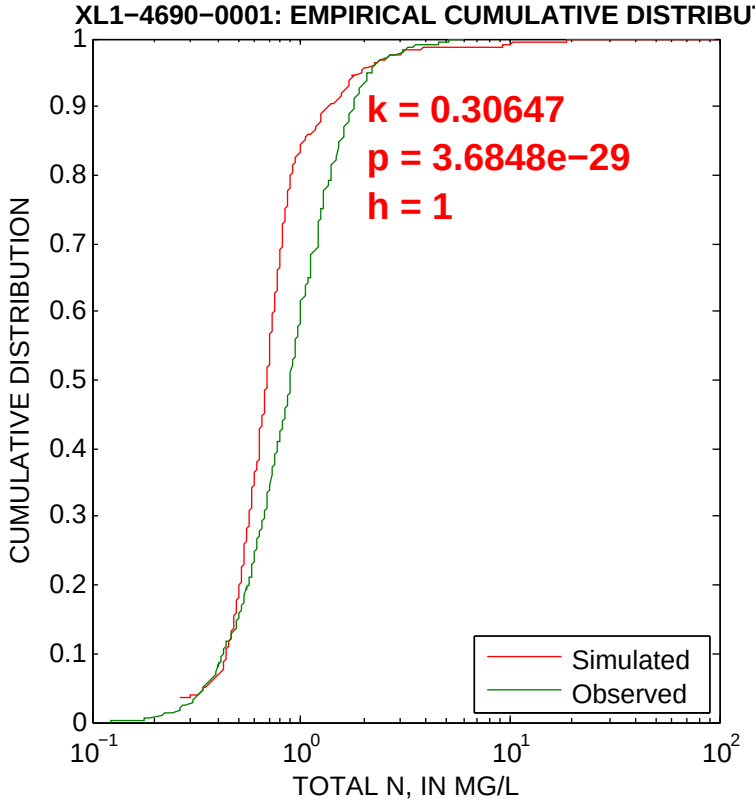












DATA SELECTION

scenario	file
P620171001WQ	TOTN.calib

plot: TOTN - total nitrogen

Dates: 1/1/1985 – 12/31/201

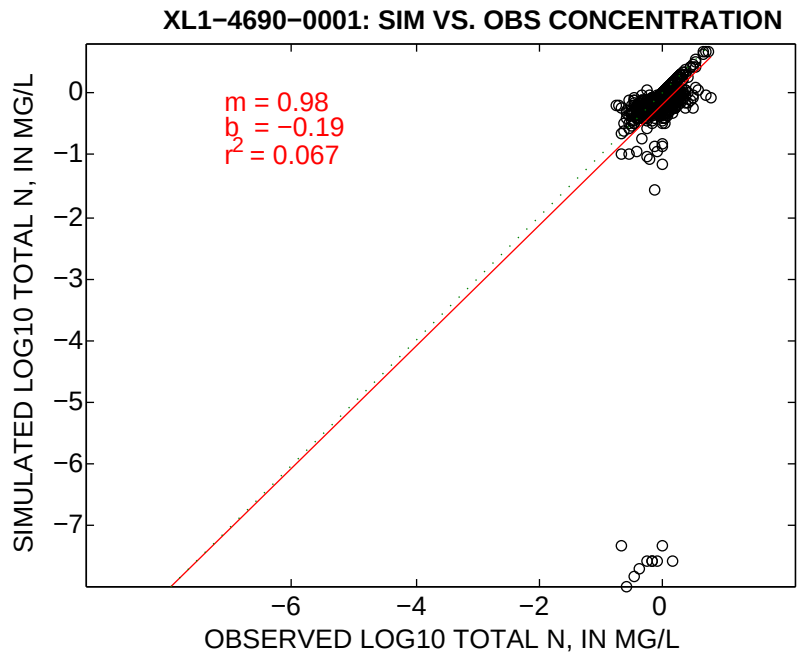
Drive	Directory	Observed
N/A	model	OBS20161101

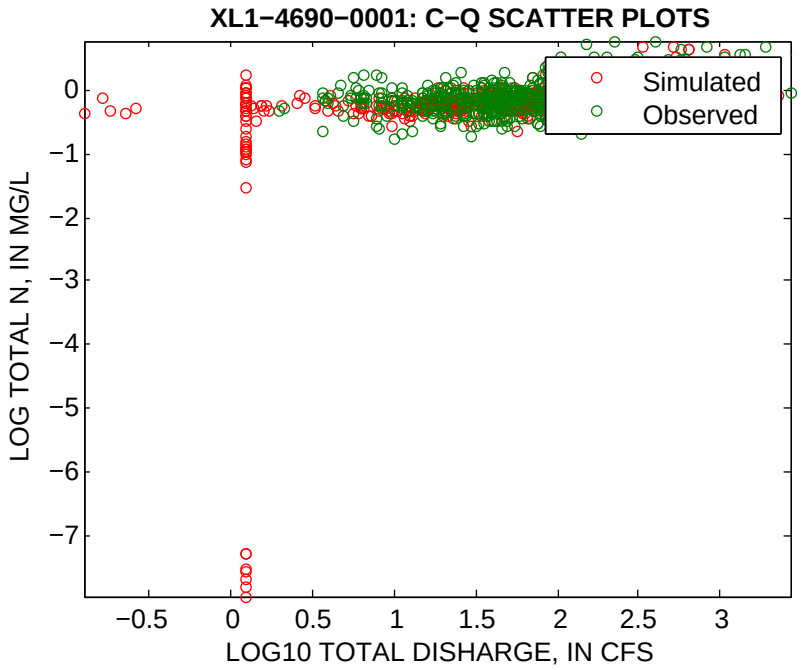
STATISTICS

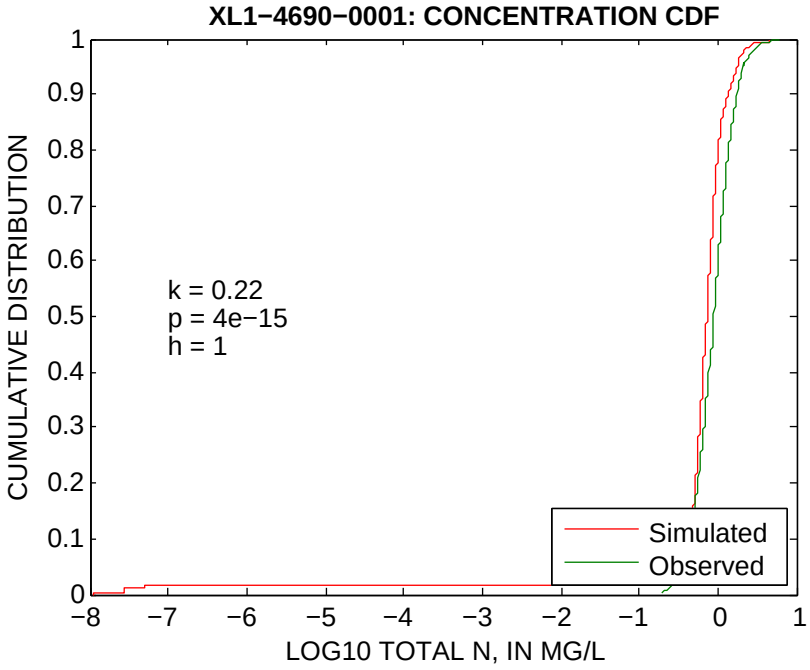
	n	observe	simulate
		695	670
min		0.125	0
		-0.90309	-0.581699
mean		1.039	1.15674
		-0.0471642	-0.116908
media		0.89	0.68721
		-0.0409586	-0.155825
max		6	95.651
		0.778151	1.98069
varian		0.458844	24.6342
		0.0590793	0.0613555
JB		0.001	0.001
		0.048350	0.001
		ra	log
% err.va		11.3321	147.874
		25.032	0.096836
rel.std.err		54.5546	1.63908
mod.eff		-53.5546	-0.639085

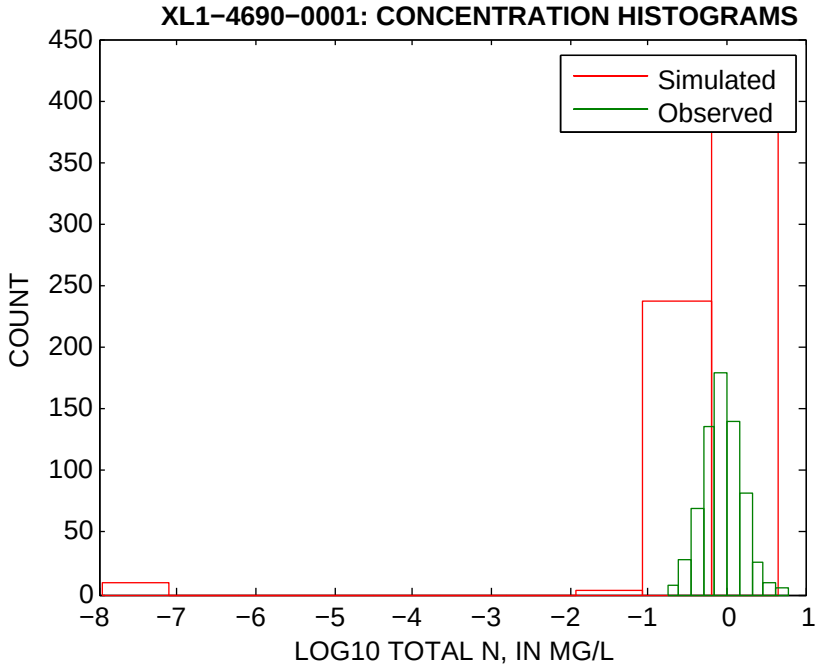
VERSION 2.1

ALL DATA
LOG10

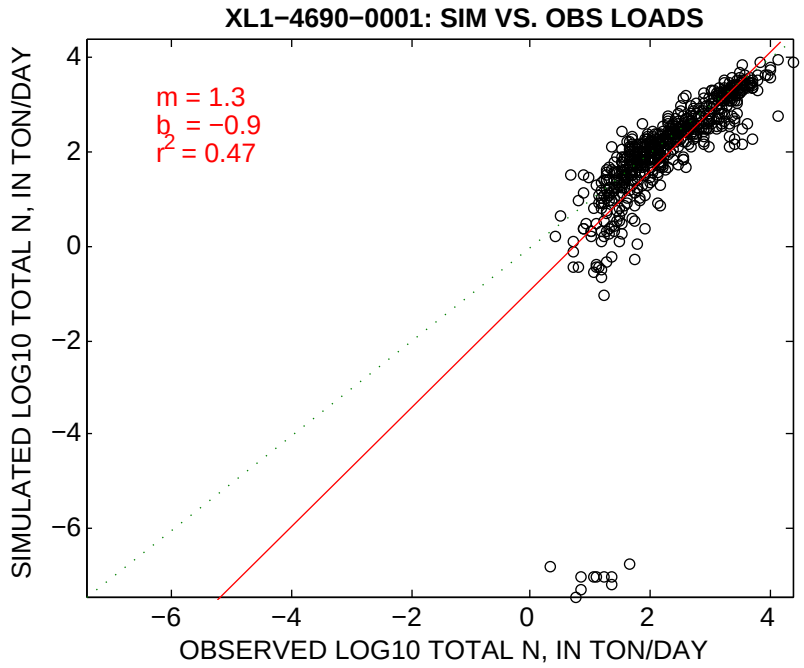


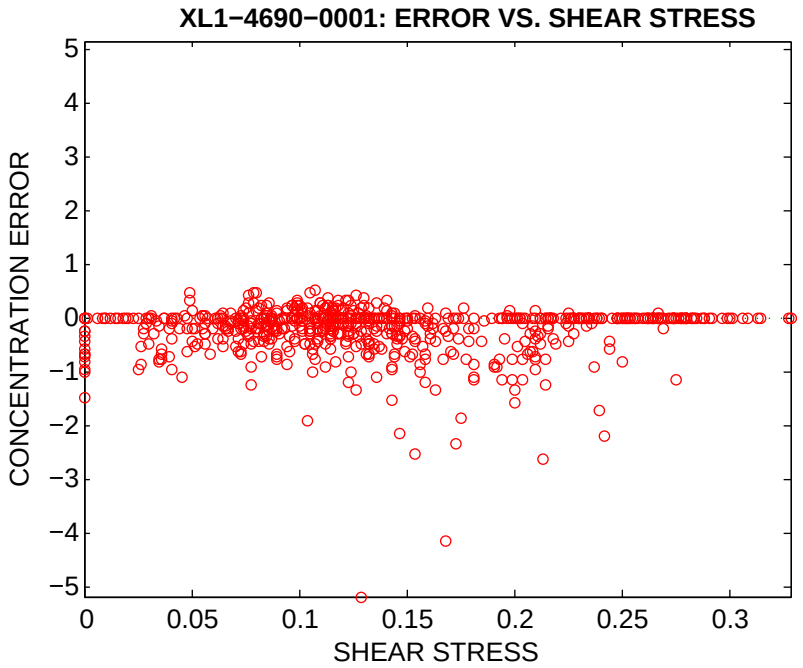


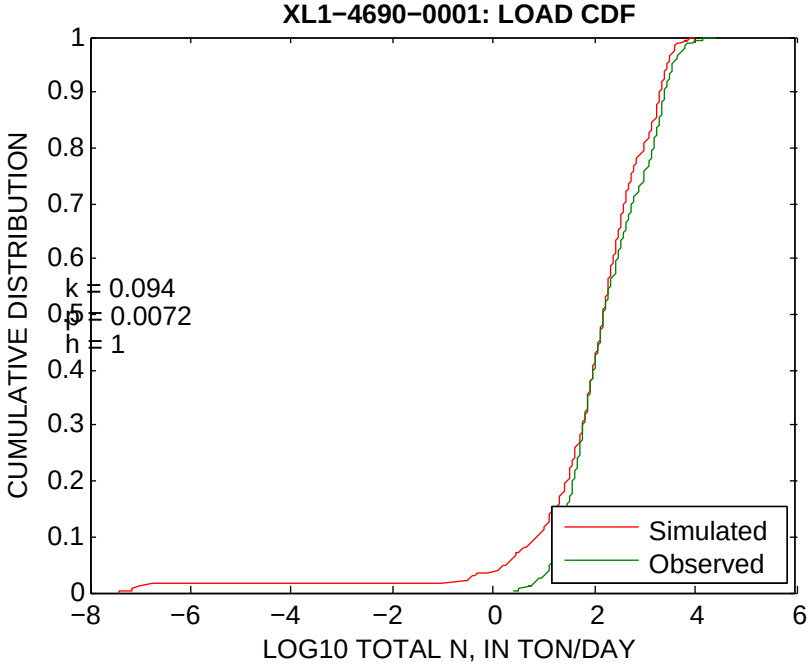


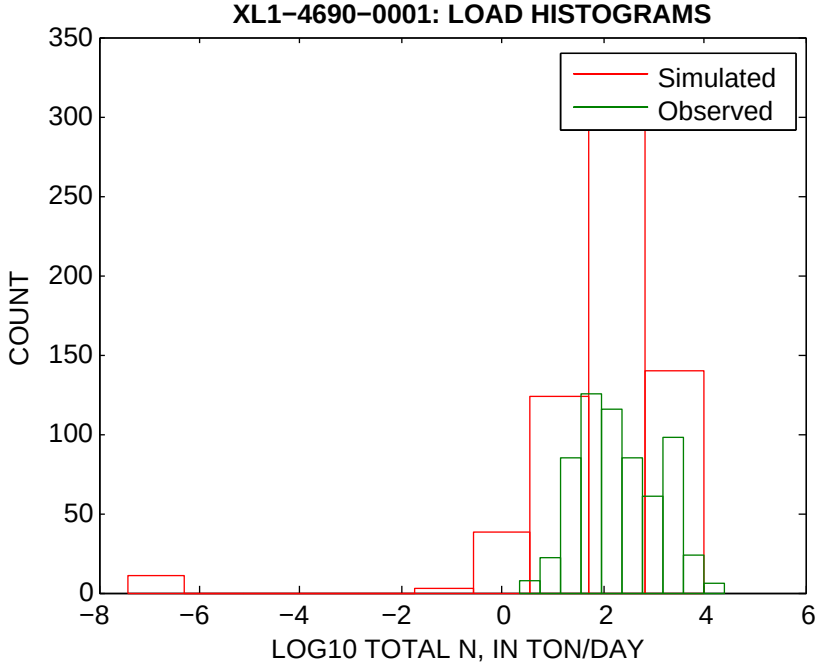


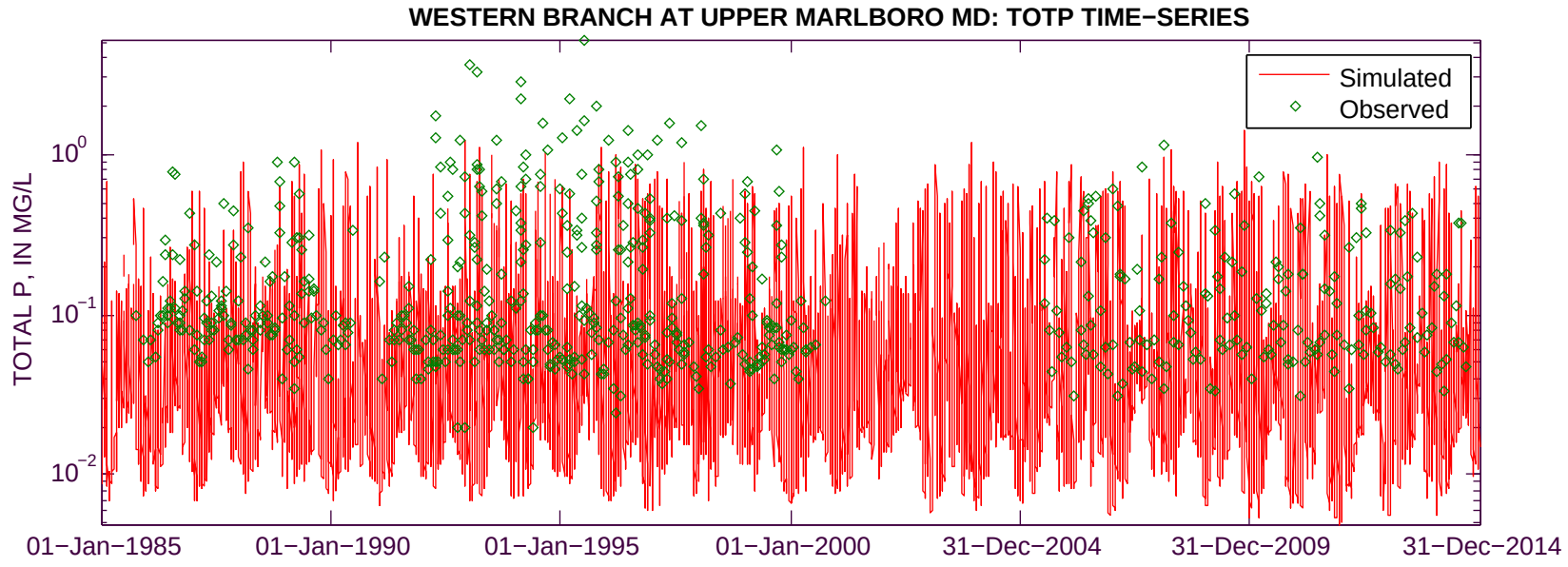
LOAD DATA
LOG10

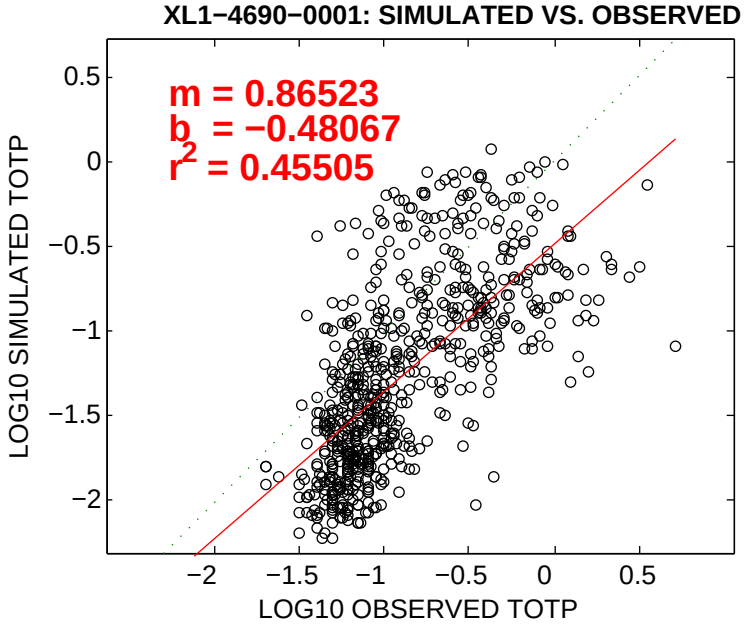


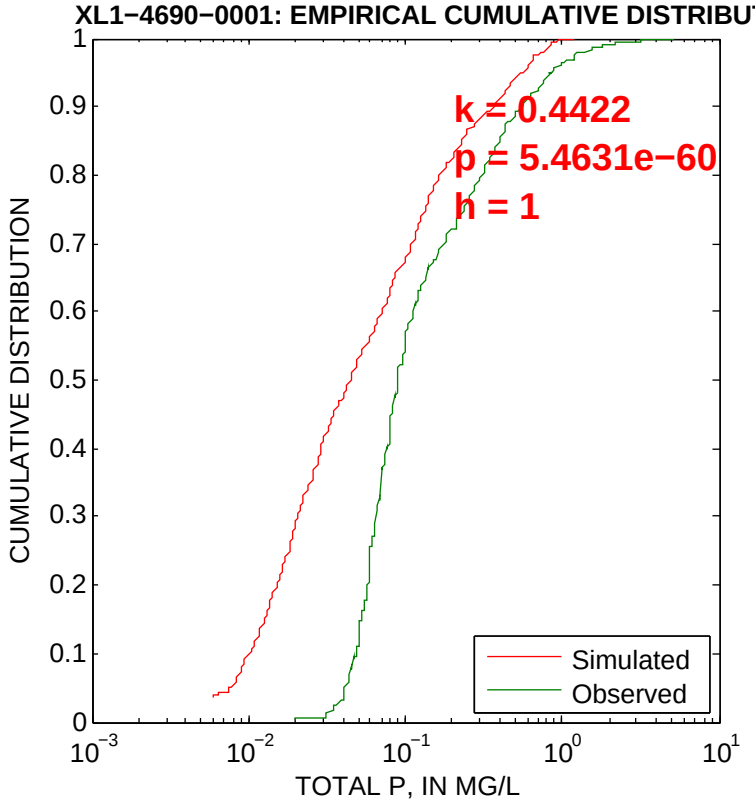












DATA SELECTION

scenario	file
P620171001WQ	TOTP.calib

plot: TOTP - total phosphorus

Dates: 1/1/1985 – 12/31/201

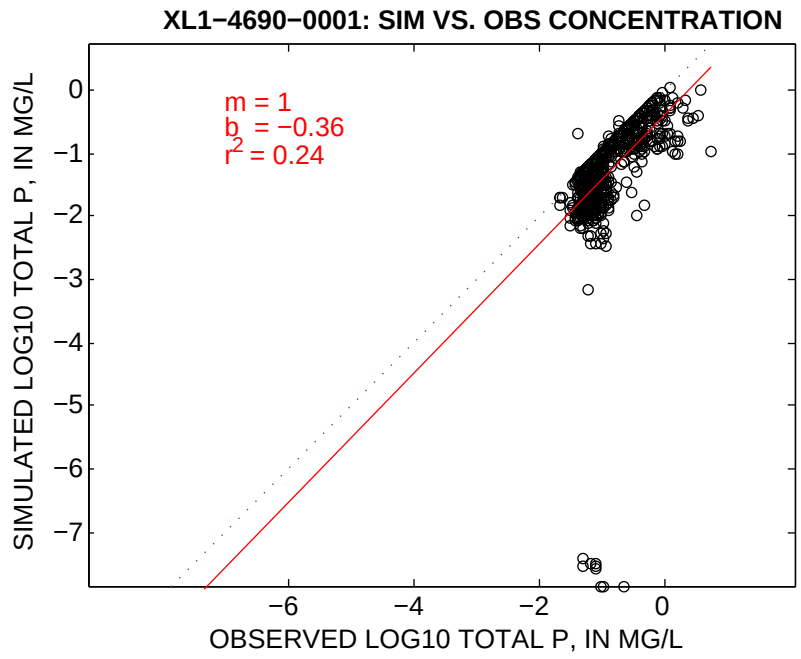
Drive	Directory	Observed
N/A	model	OBS20161101

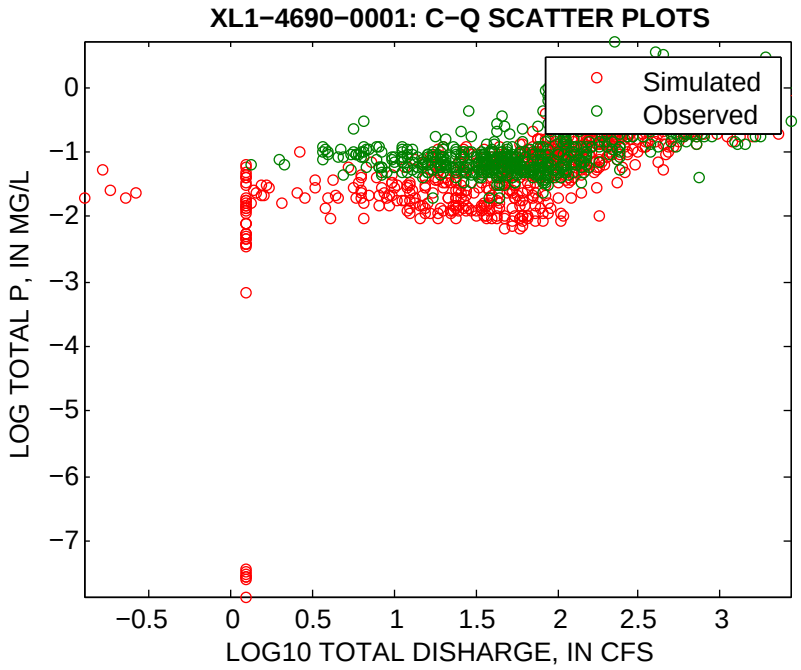
STATISTICS

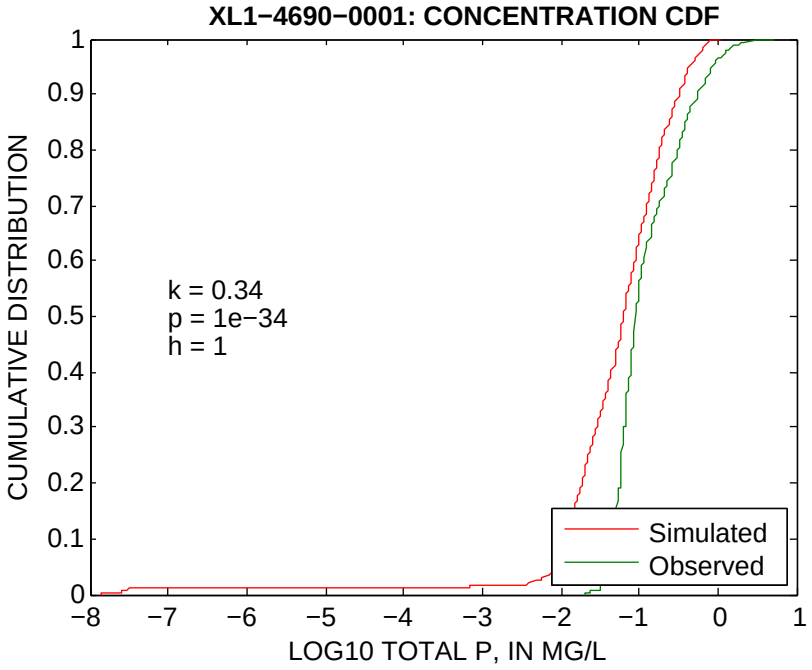
	n	observe	simulate
		692	666
min		0	0
		-1.69897	-2.22357
mean		0.232144	0.121304
		-0.893385	-1.25365
media		0.09	0.0440025
		-1.04576	-1.3199
max		5.2	1.204
		0.716003	0.0806265
varian		0.162649	0.0331488
		0.183272	0.301508
JB		0.001	0.001
		0.001	0.001
		ra	log
%		-47.7465	40.3261
err.va		0.160822	0.297623
rel.std.err		0.988766	1.62394
mod.eff		0.0112336	-0.623941

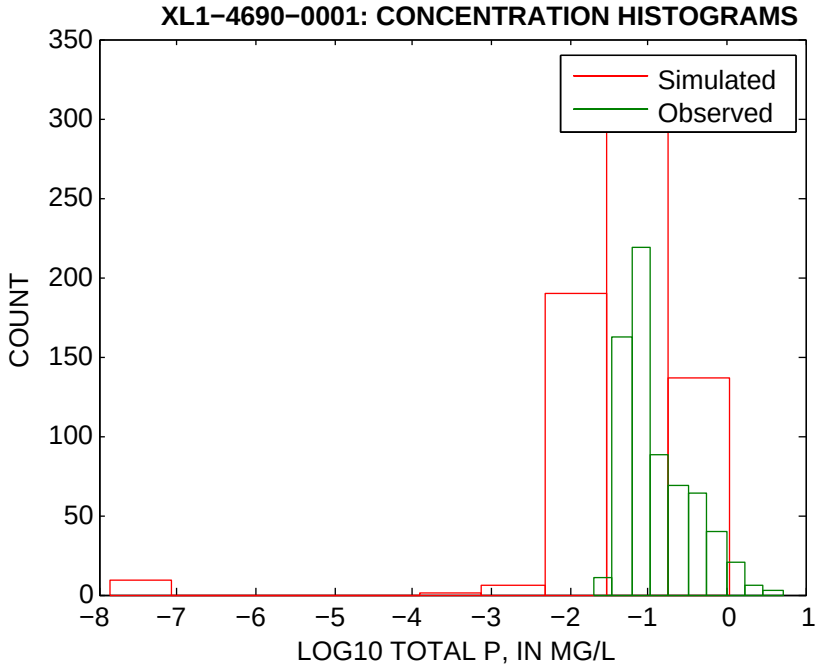
VERSION 2.1

ALL DATA
LOG10

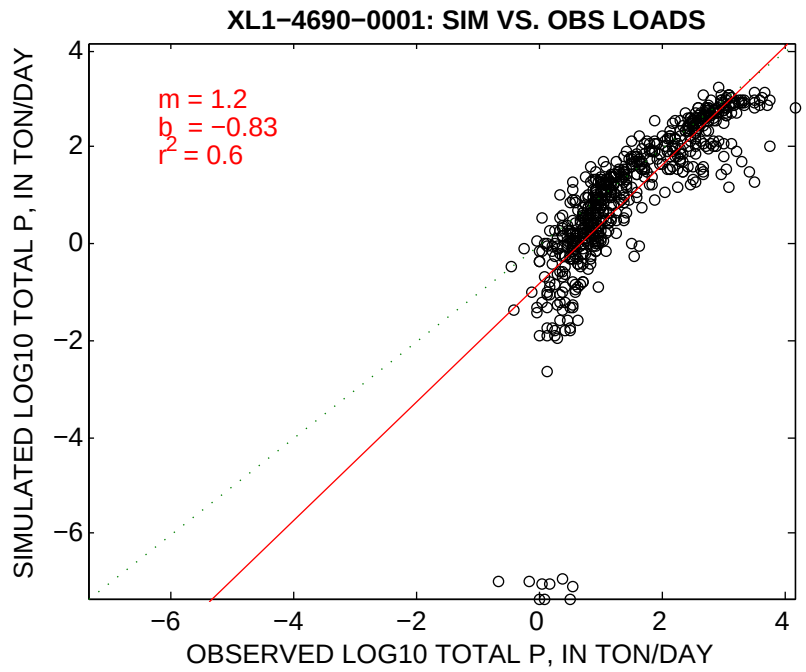


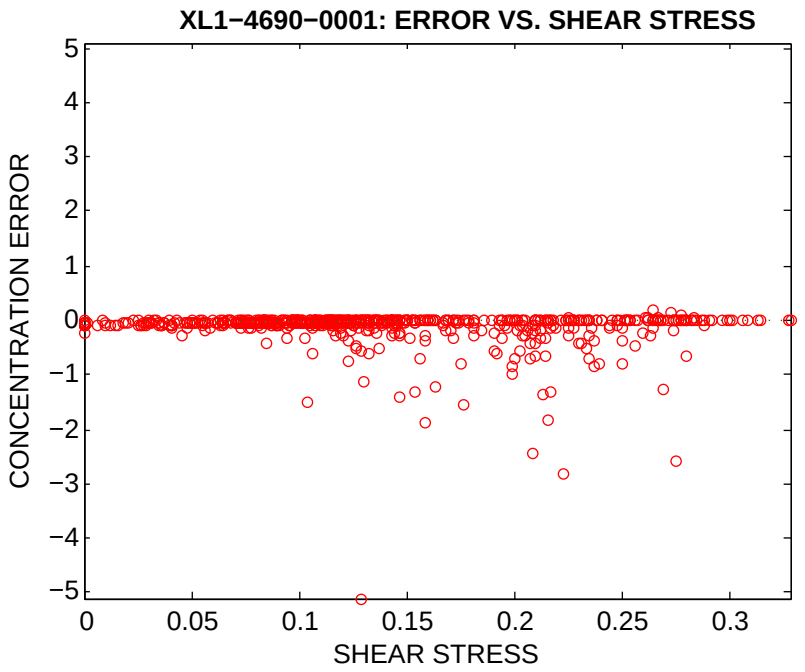


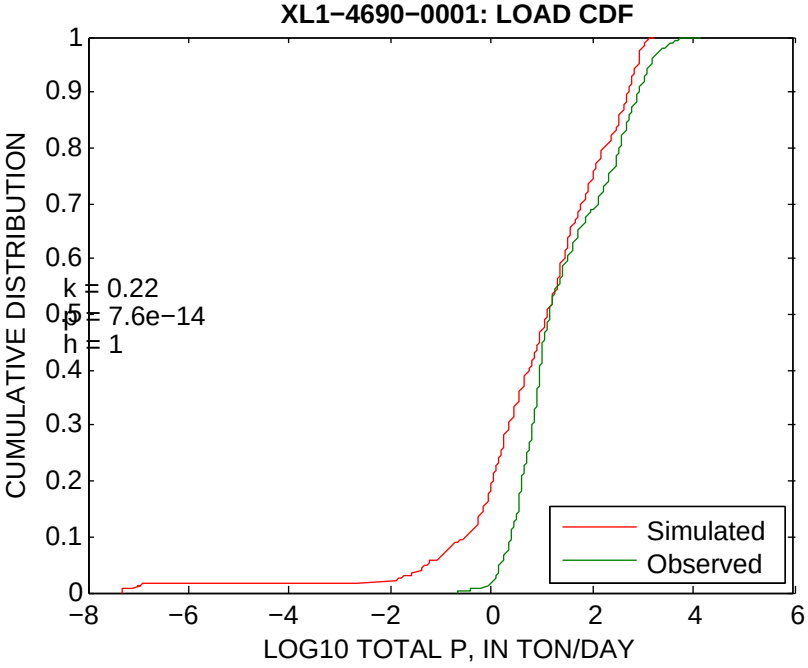


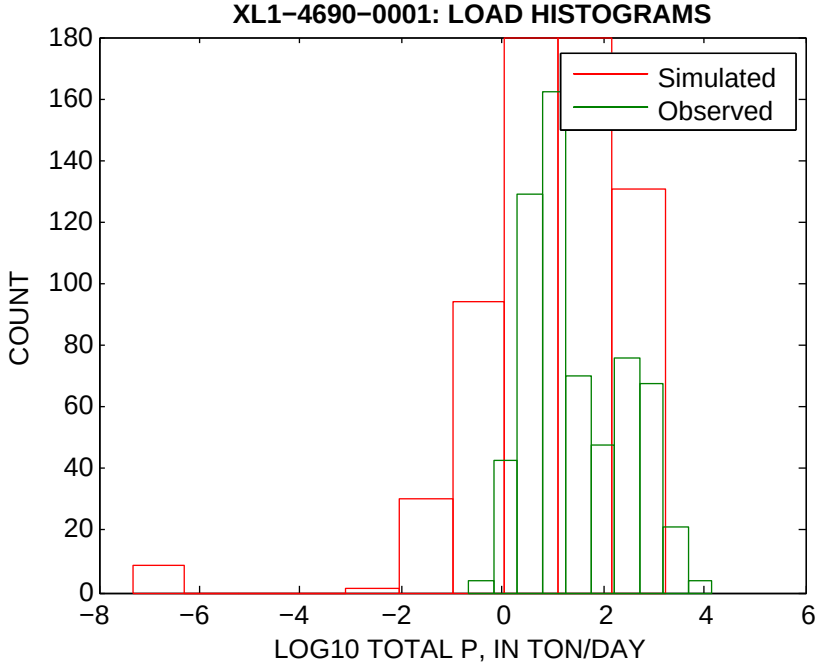


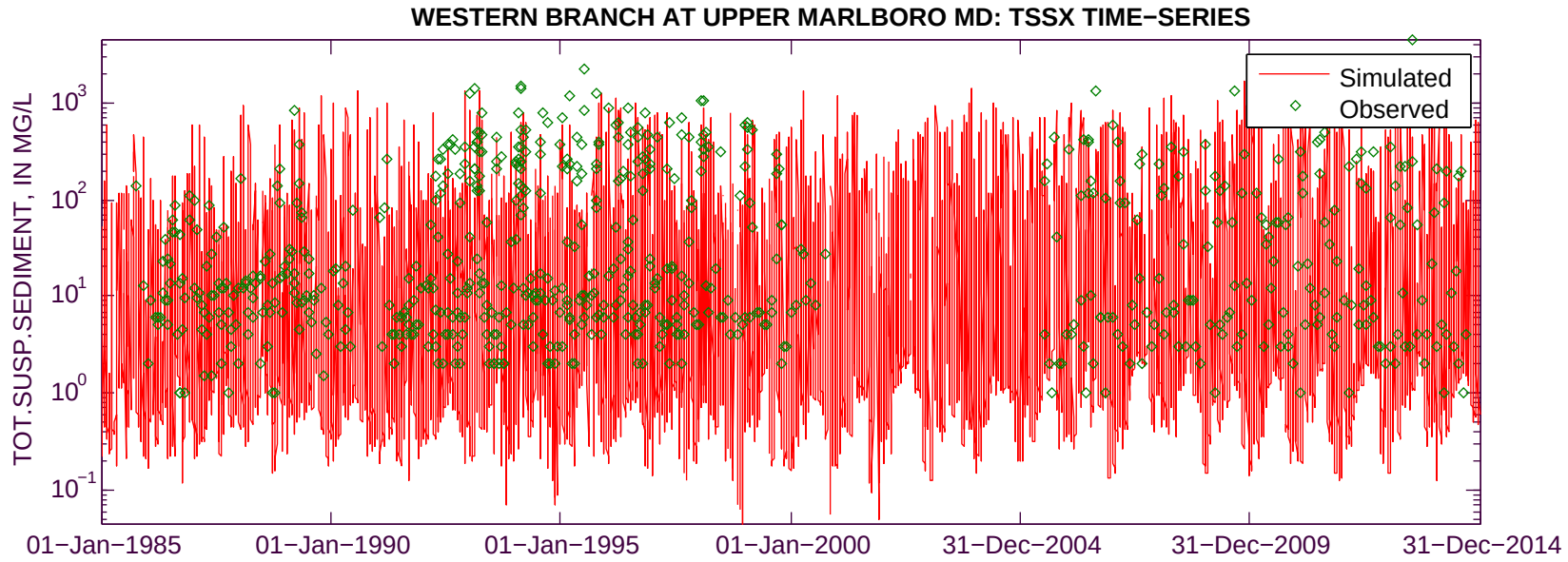
LOAD DATA
LOG10

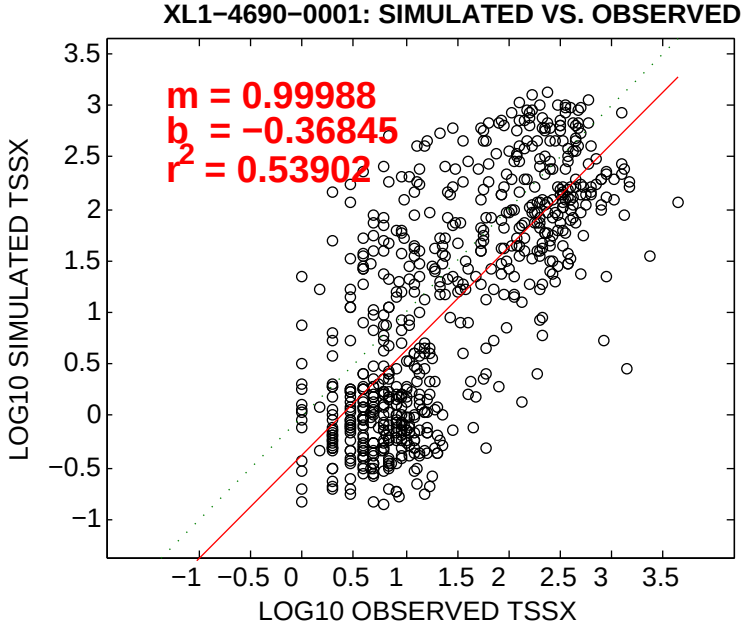


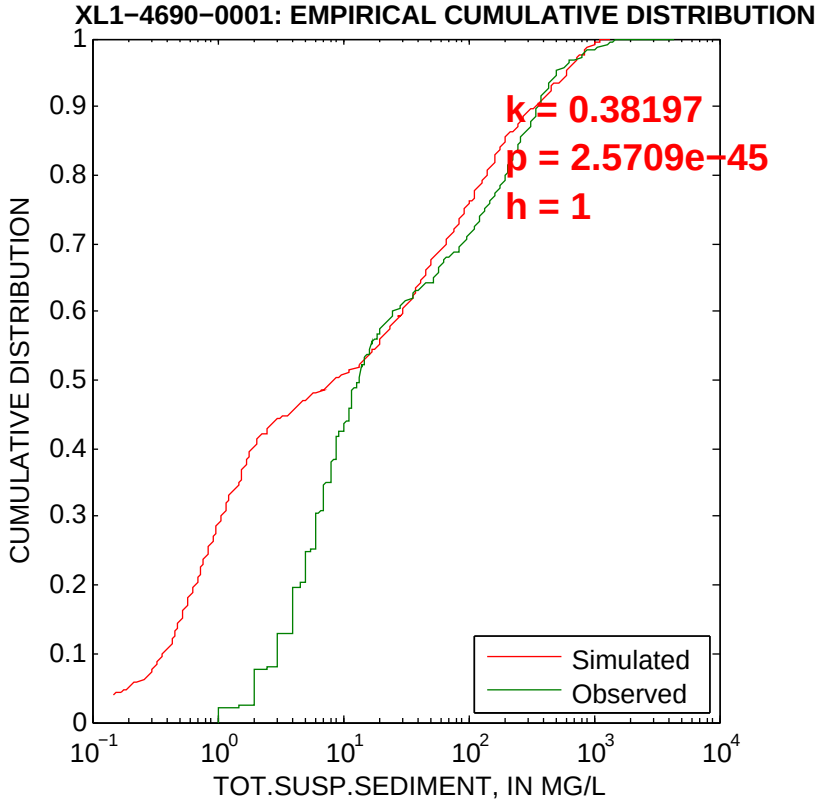












DATA SELECTION

scenario	file
P620171001WQ	TSSX.calib

plot: TSSX - total suspended ...

Dates: 1/1/1985 – 12/31/201

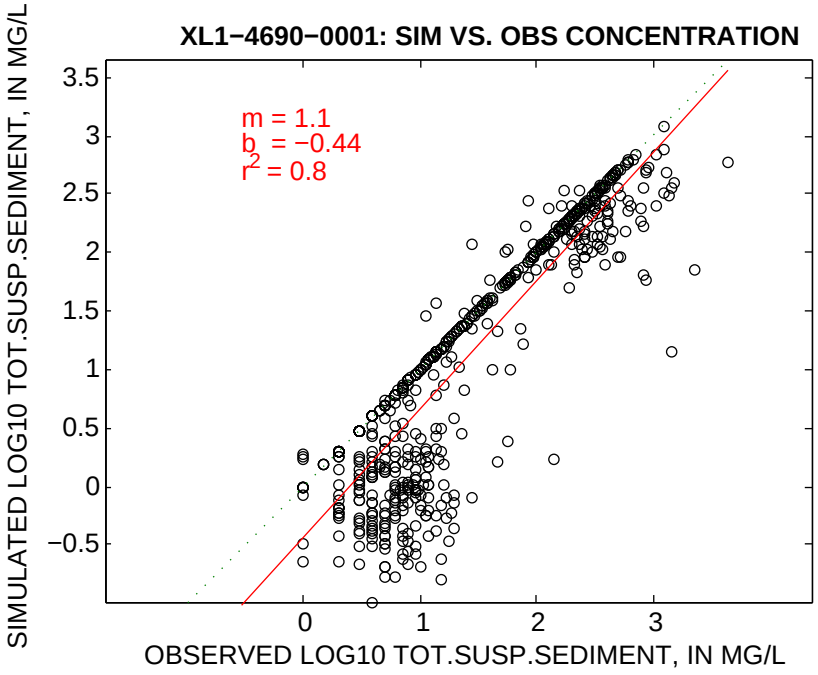
Drive	Directory	Observed
N/A	model	OBS20161101

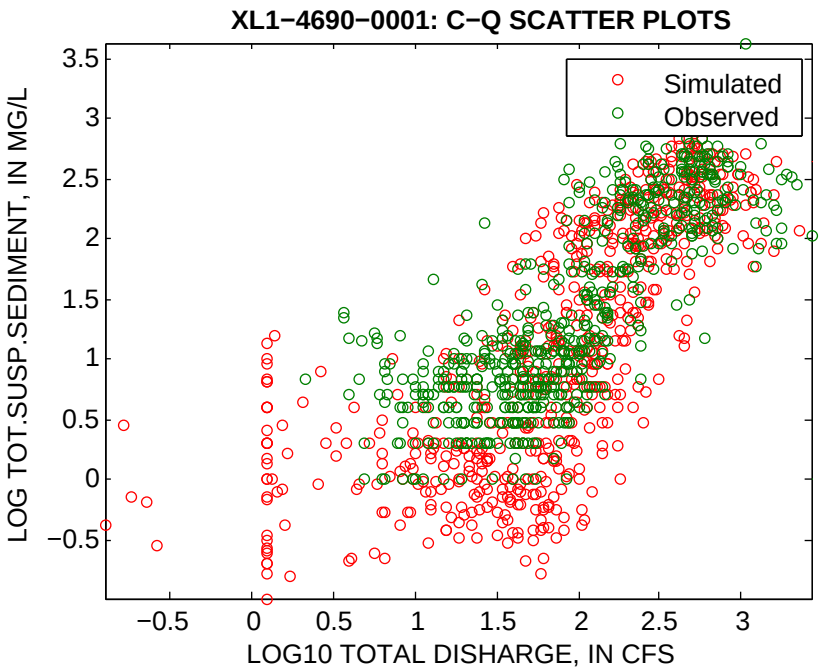
STATISTICS

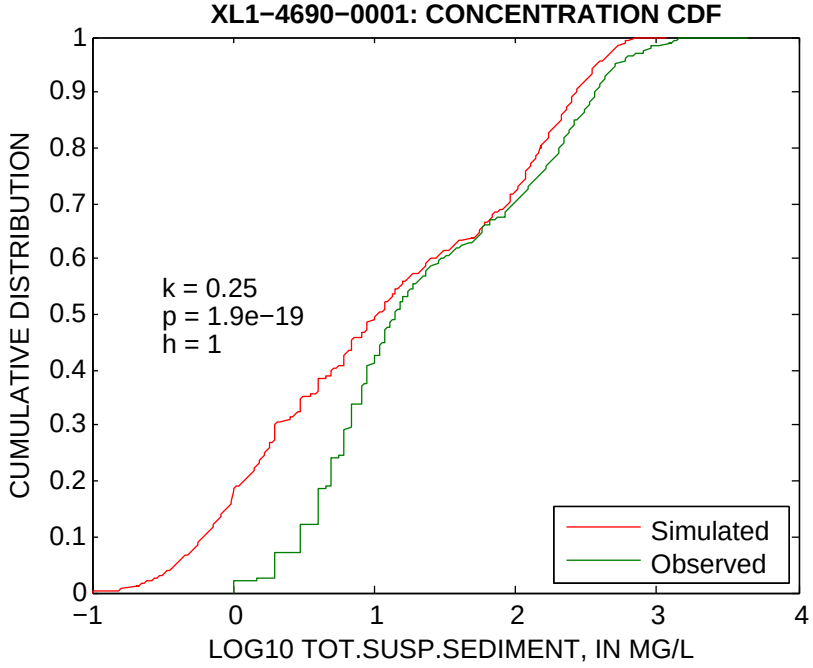
	n	observe	simulate
		699	674
min		1	0
		0	-0.849489
mean		123.081	103.858
		1.40396	1.03535
media		13.5	8.5536
		1.14613	1.12083
max		4345	1352.9
		3.63799	3.13127
varian		78222.7	43976.4
		0.661725	1.22735
JB		0.001	0.001
		0.001	0.001
		ra	log
%		-15.6181	-26.255
err.va		90233.2	0.701855
rel.std.err		1.15354	1.06065
mod.eff		-0.153542	-0.060645

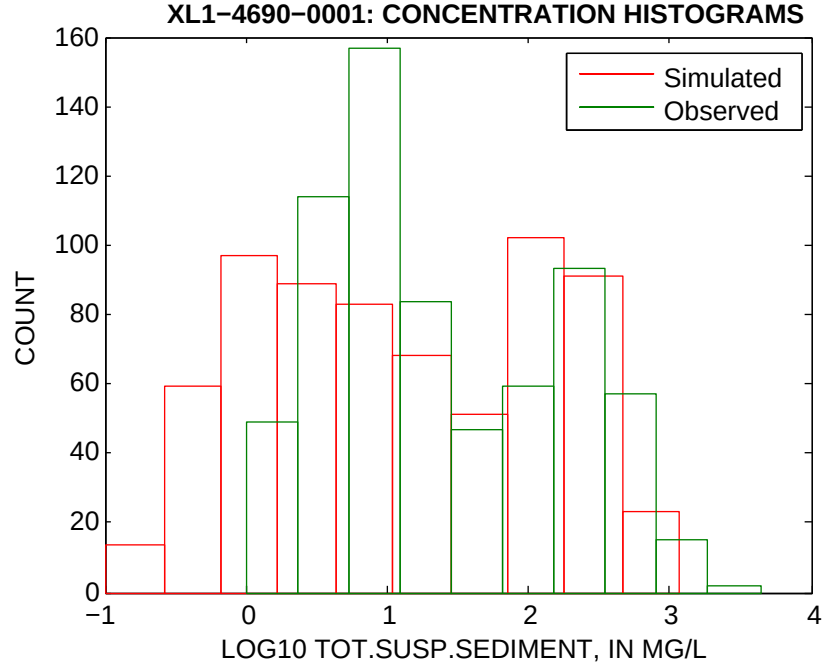
VERSION 3.1

ALL DATA
LOG10

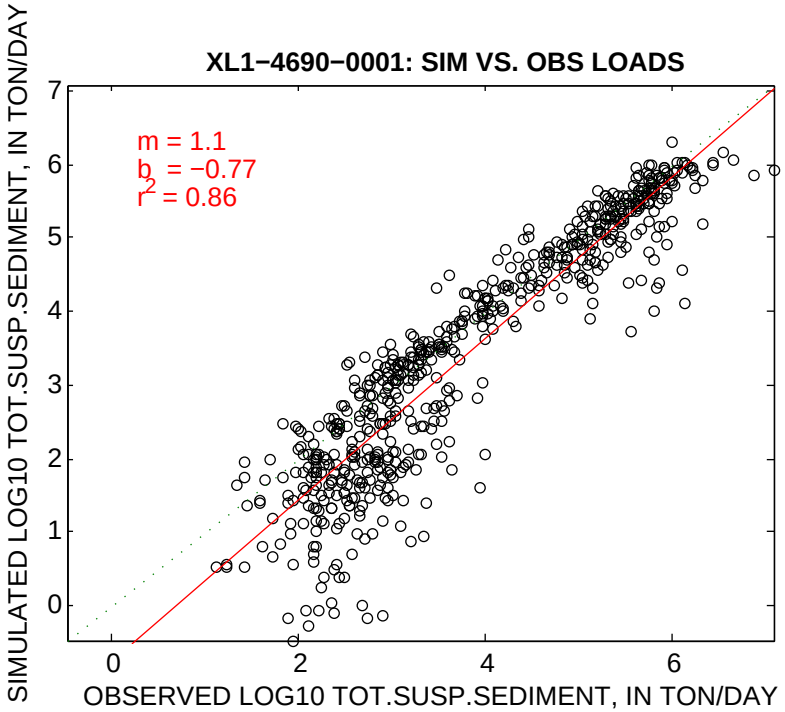


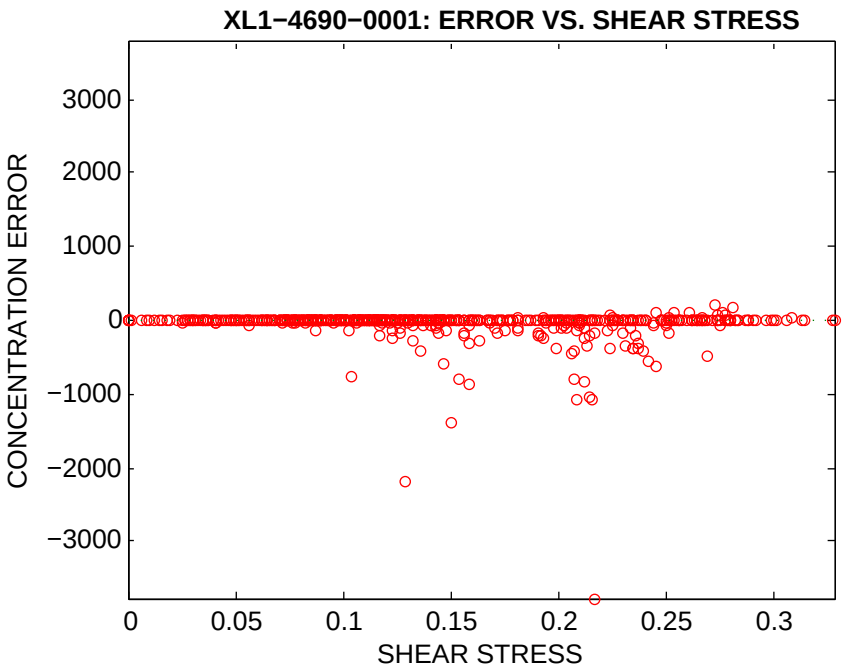


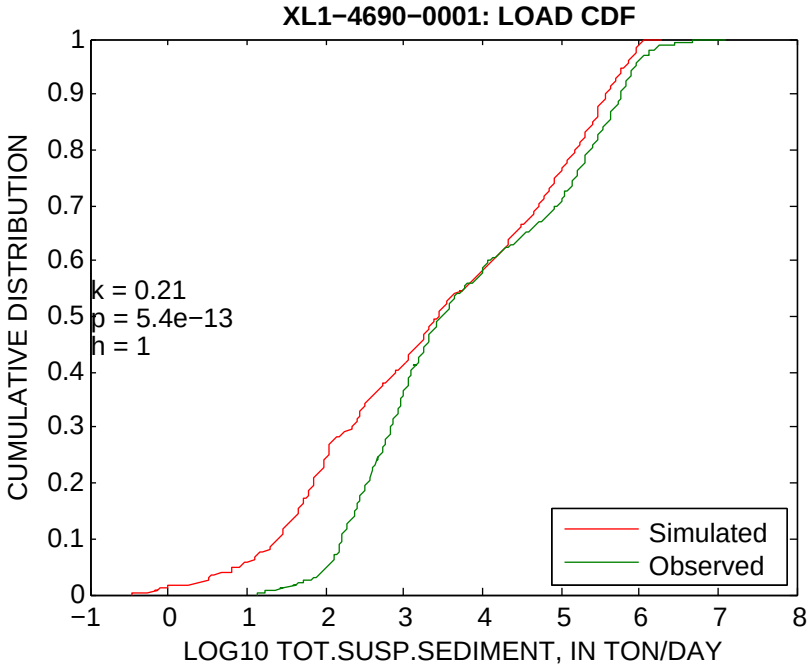


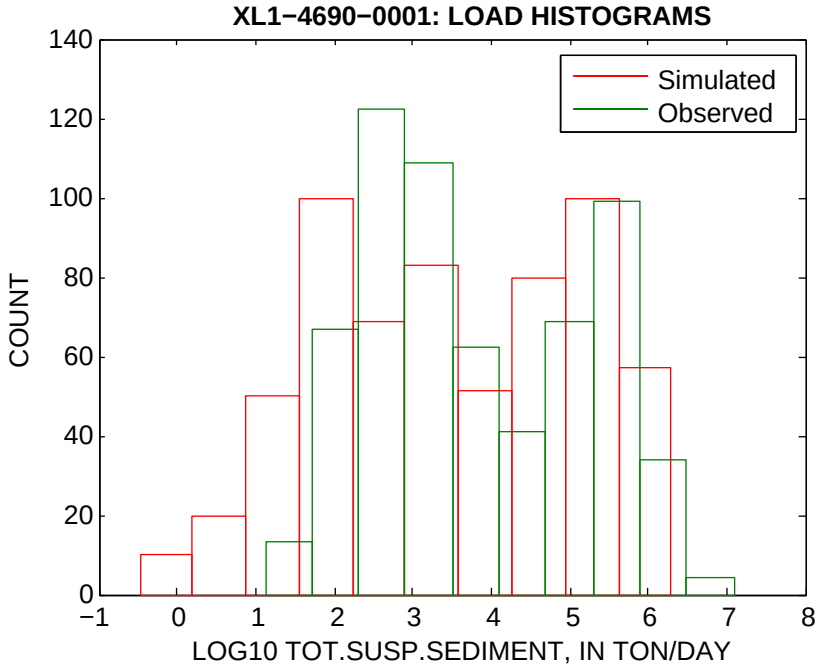


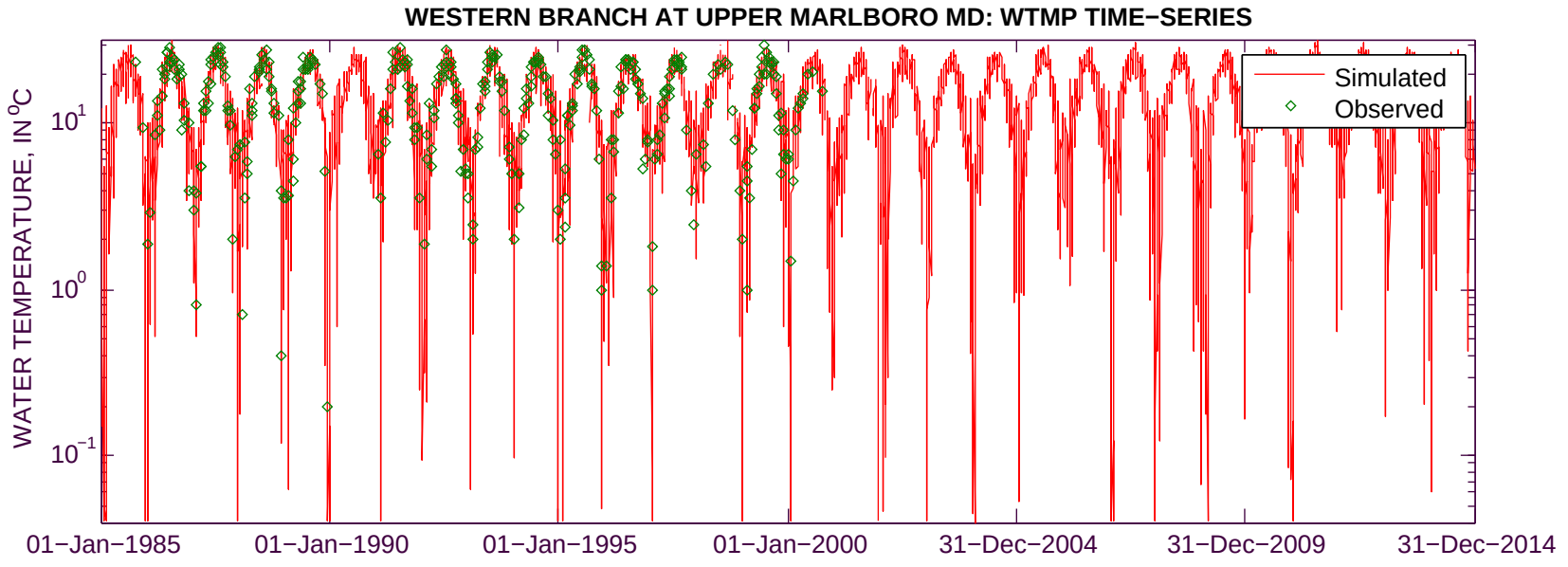
LOAD DATA
LOG10

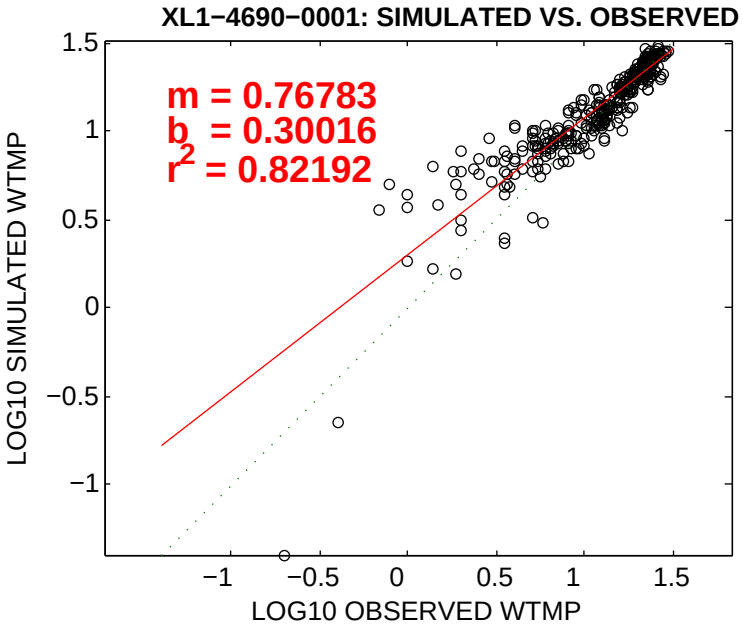


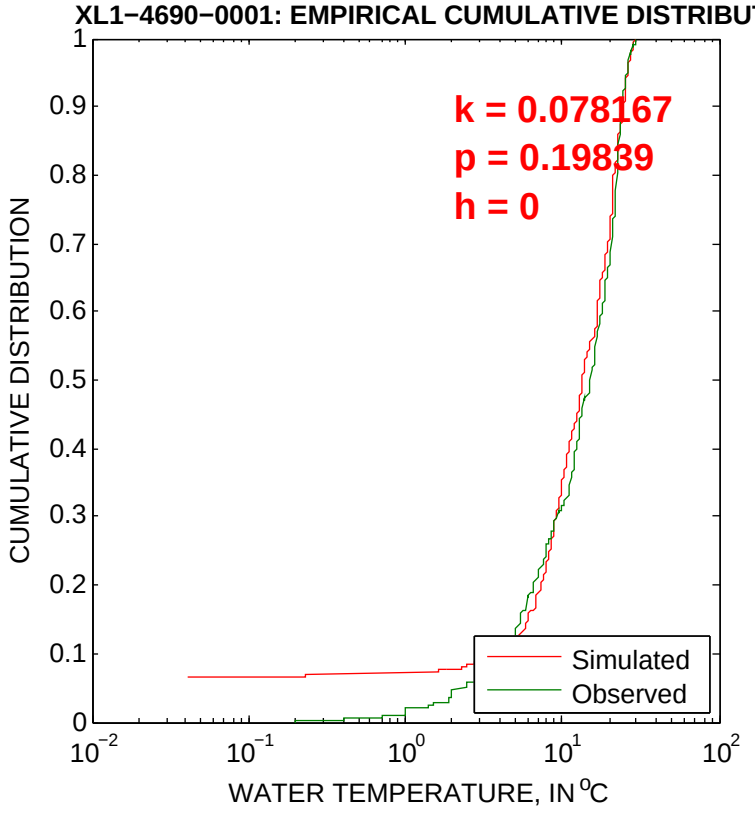












DATA SELECTION

scenario	file
P620171001WQ	WTMP.calib

plot: WTMP - water tempera...

Dates: 1/1/1985 – 12/31/201

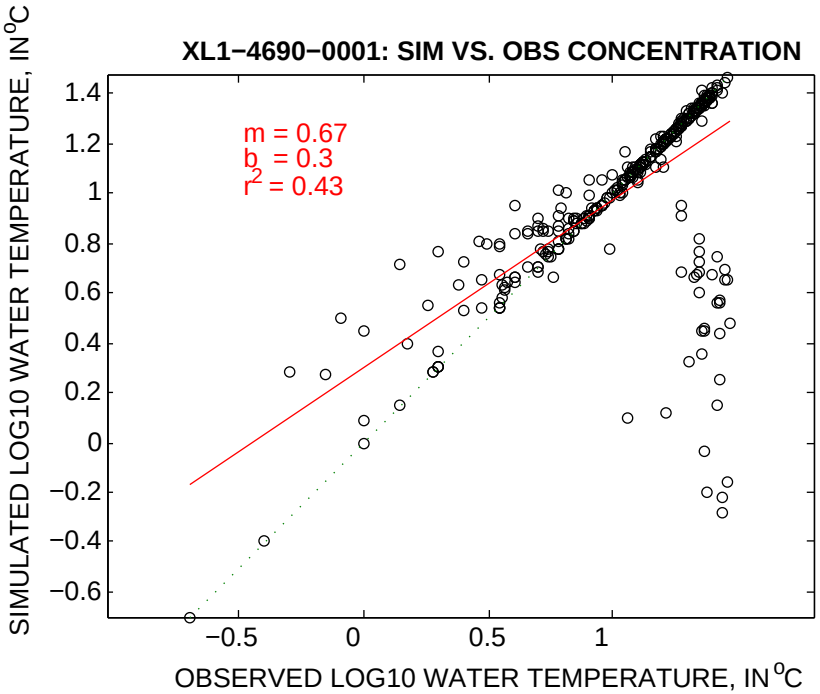
Drive	Directory	Observed
N/A	model	OBS20161101

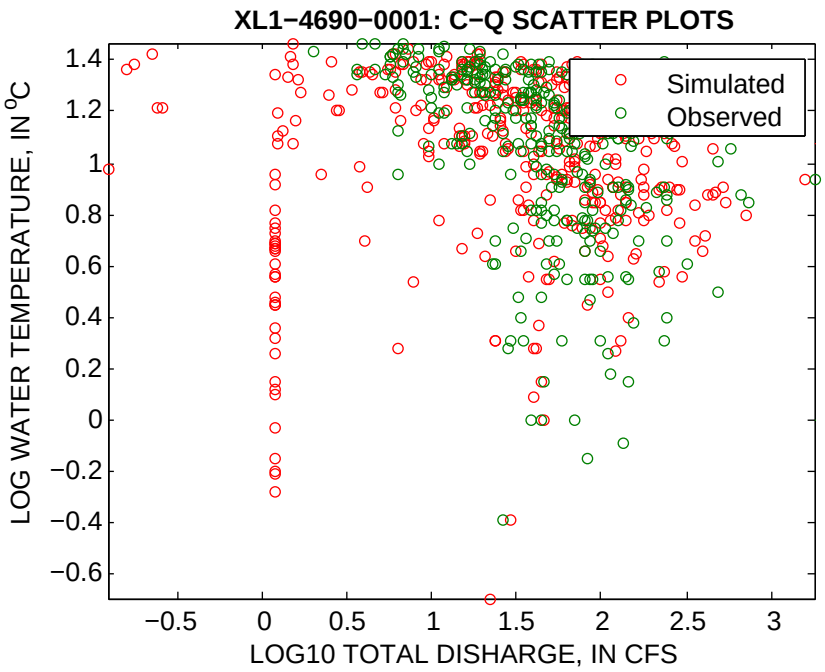
STATISTICS

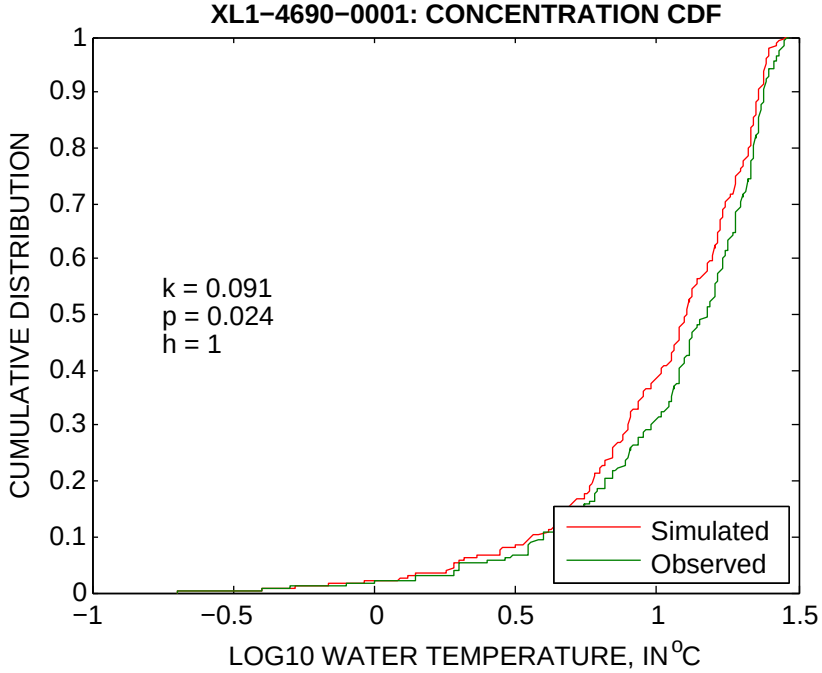
n	371	347
	observe	**simulate**
min	0.2	0
	-0.69897	-1.39395
mean	14.7814	14.114
	1.05611	1.11107
media	15.5	13.435
	1.16732	1.15537
max	29.5	29.905
	1.46982	1.47574
varian	58.8523	59.9513
	0.120601	0.0865076
JB	0.001189	0.005178
	0.001	0.001
	ra	log
%	-4.51521	5.20417
err.va	40.047	0.0249357
rel.std.err	0.680466	0.206762
mod.eff	0.319534	0.793238

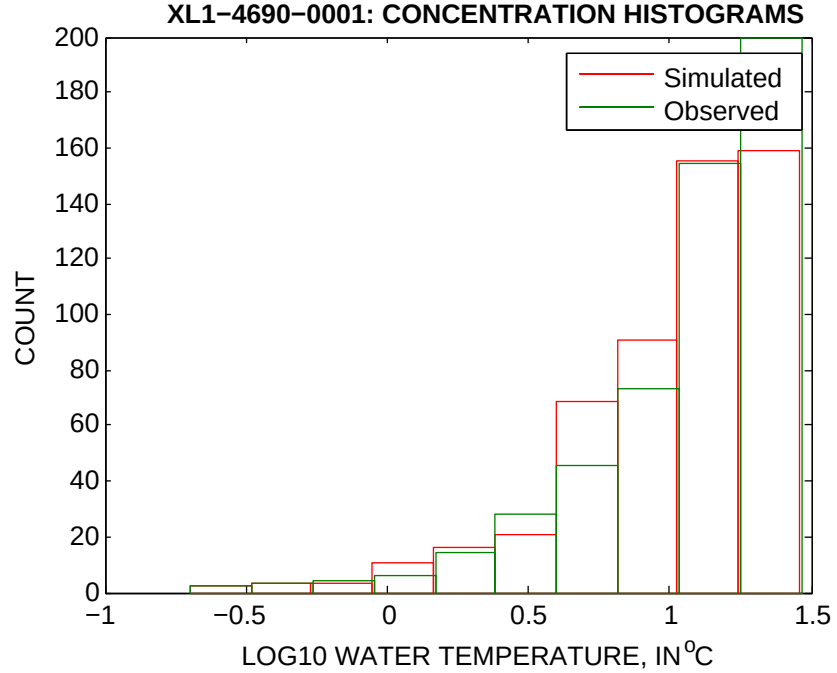
VERSION 2.1

ALL DATA
LOG10

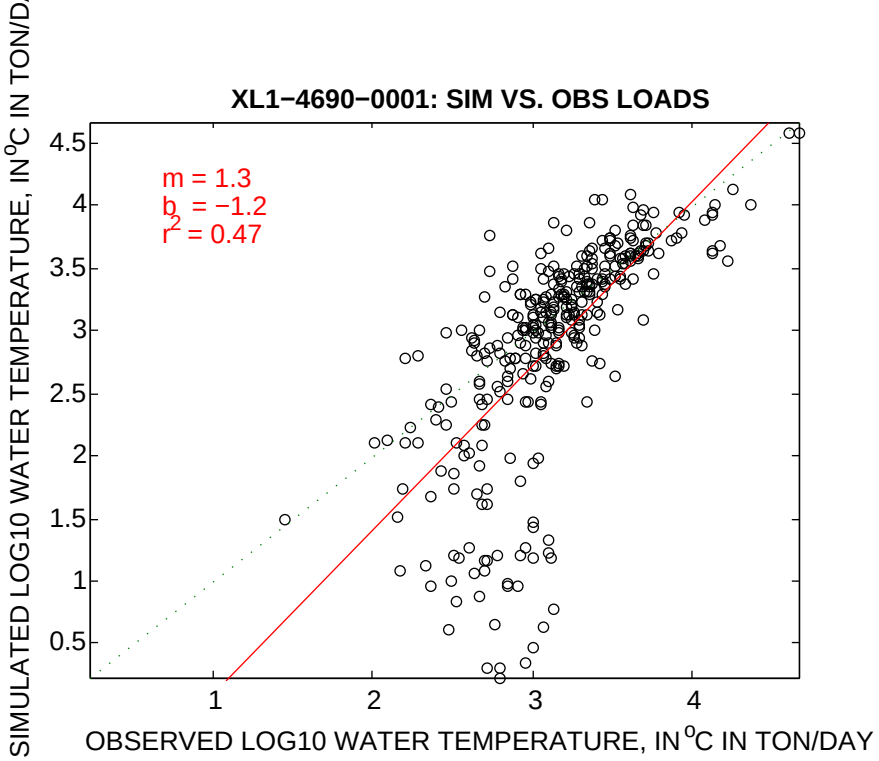




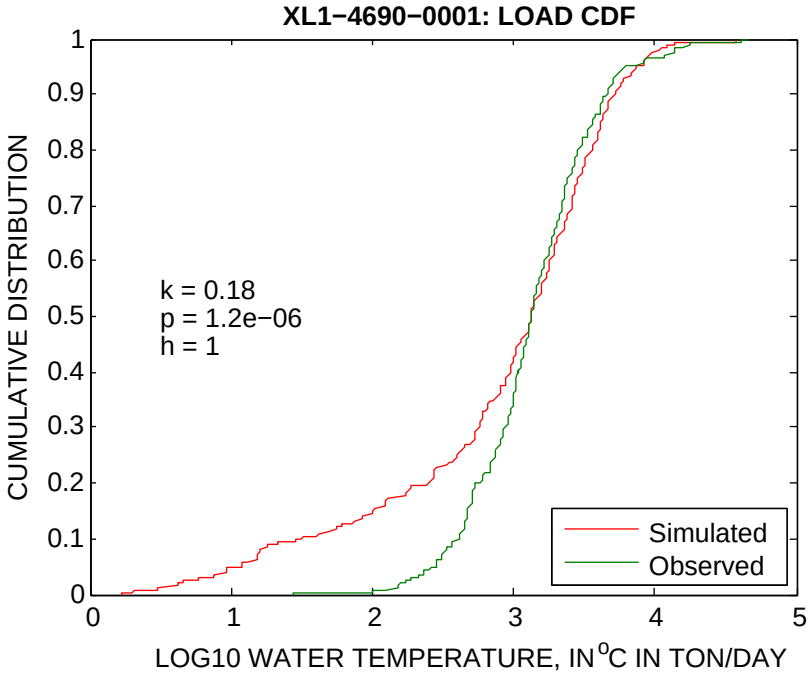


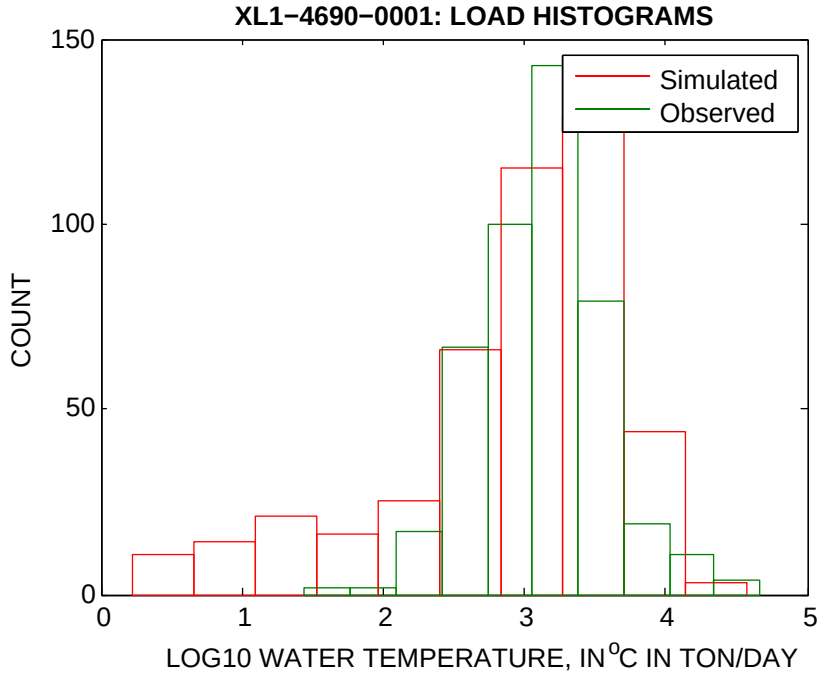


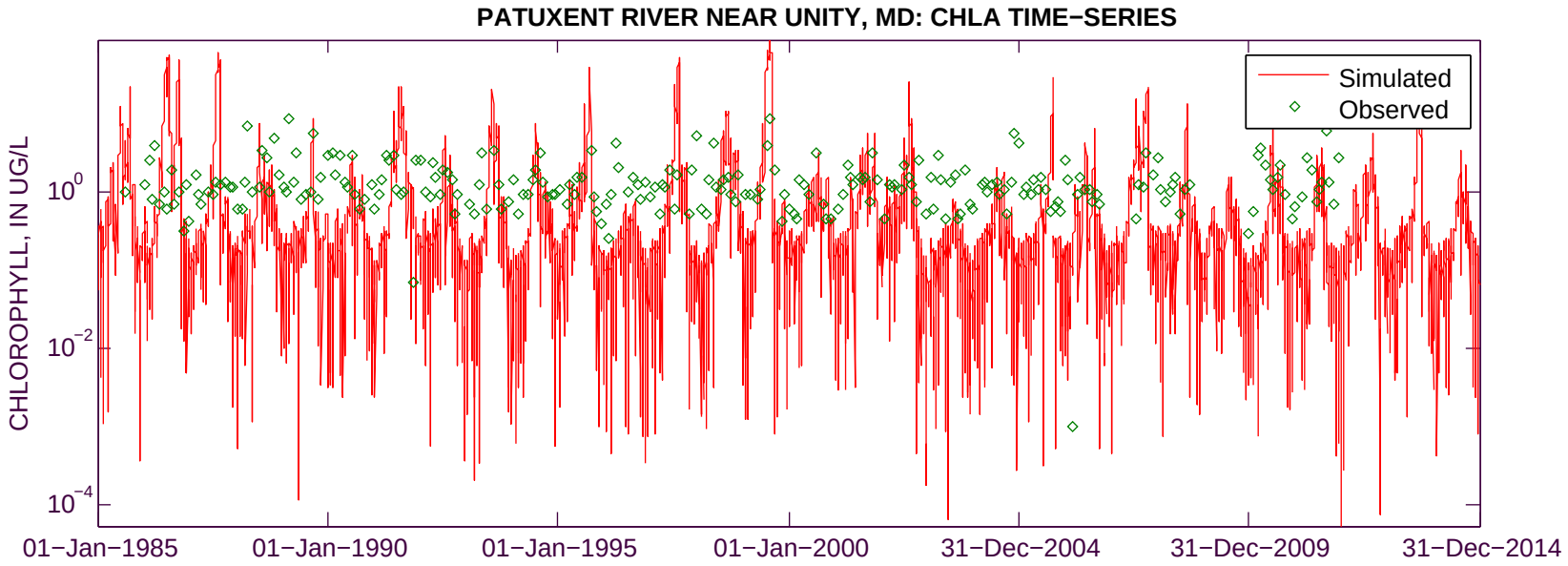
LOAD DATA
LOG10

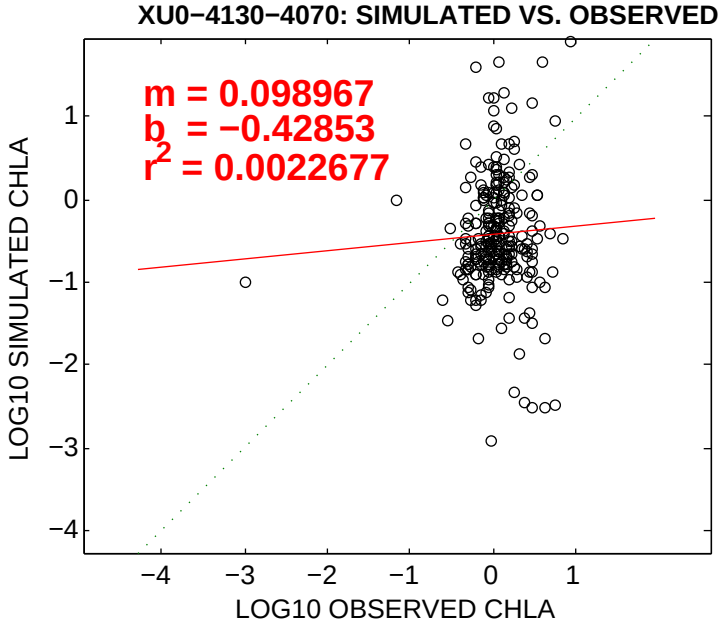


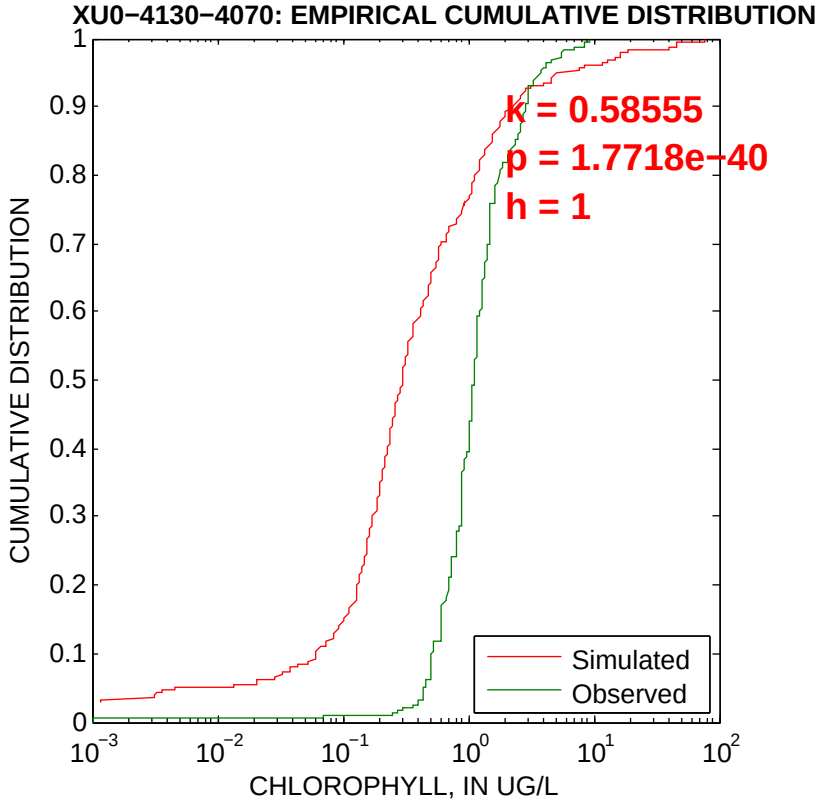












DATA SELECTION

scenario	file
P620171001WQ	CHLA.calib

plot: CHLA - chlorophyll A

Dates 1/1/1985 12/31/201

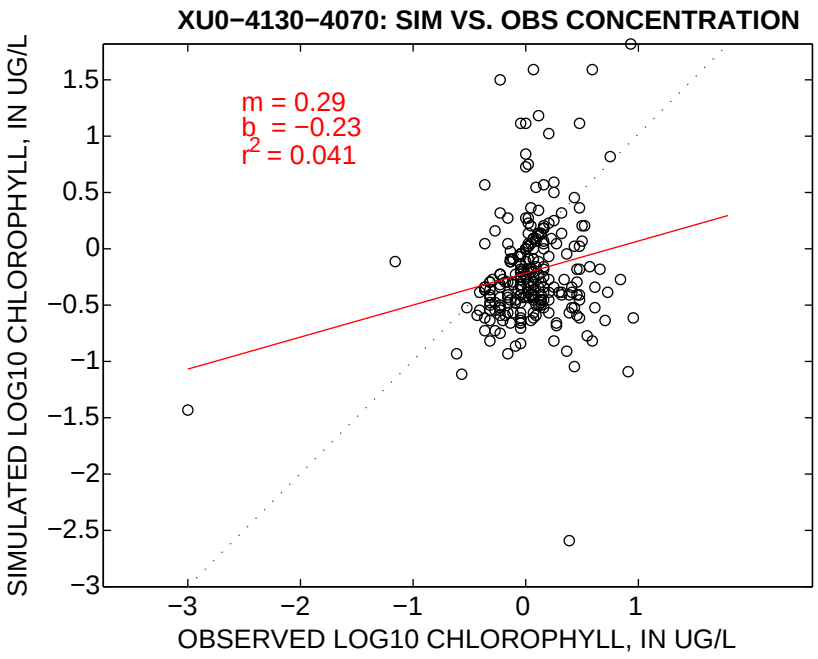
Drive	Directory	Observed
N/A	model	OBS20161101

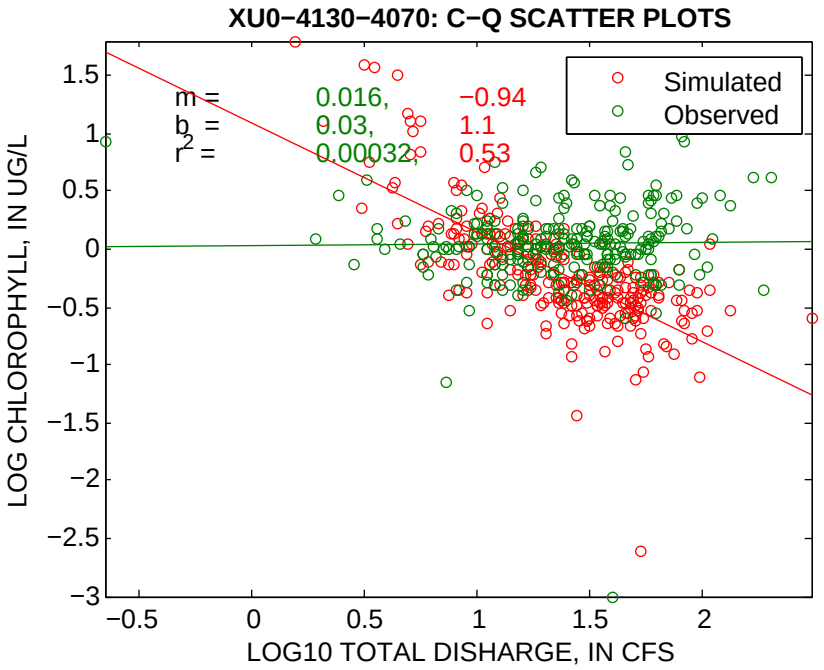
STATISTICS

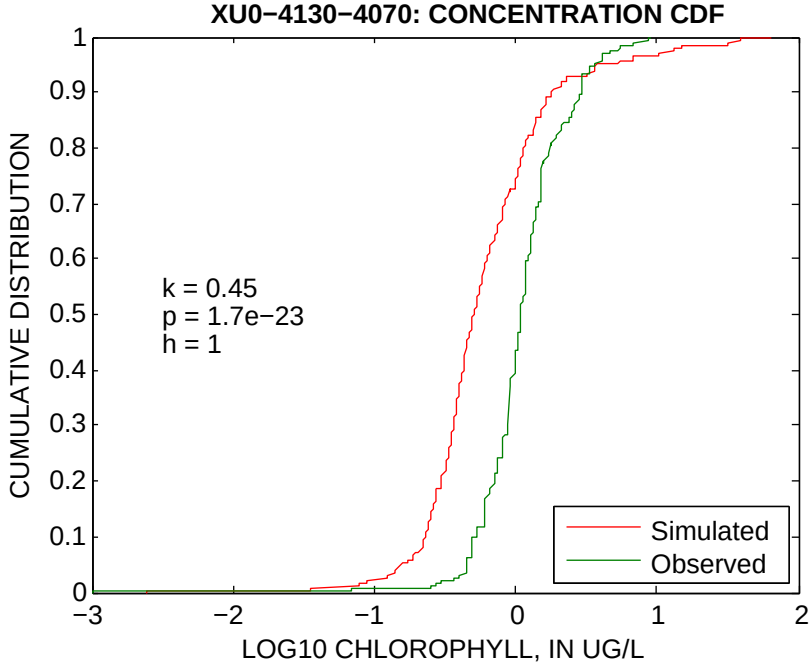
	n	observe	simulate
		263	256
min		0.001	0
		-3	-2.92046
mean		1.47524	1.80851
		0.0438736	-0.424191
media		1.1	0.29864
		0.0398106	-0.517477
max		9.259	77.449
		0.938119	1.88902
varian		1.66398	48.6749
		0.110908	0.479026
JB		0.001	0.001
		0.001	0.001
		ra	log
%		22.5913	-1066.85
err.va		45.7145	0.787925
rel.std.err		27.4731	7.10433
mod.eff		-26.4731	-6.10433

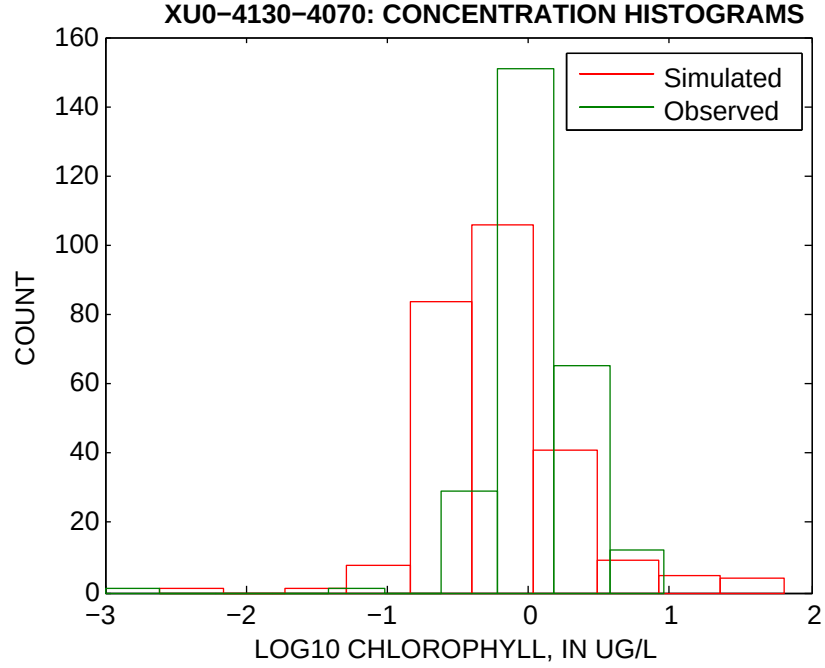
VERSION

ALL DATA
LOG10

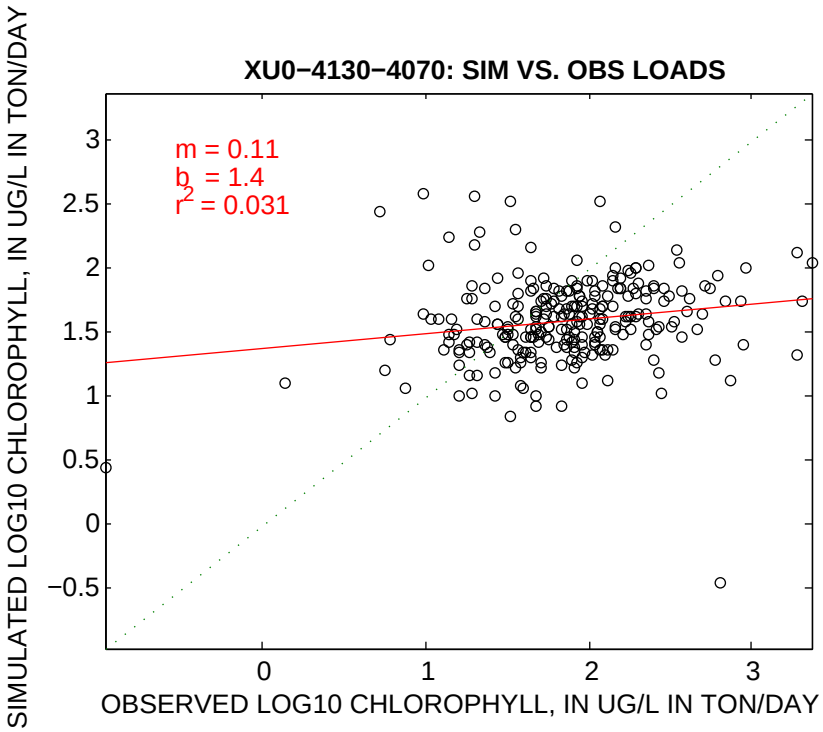


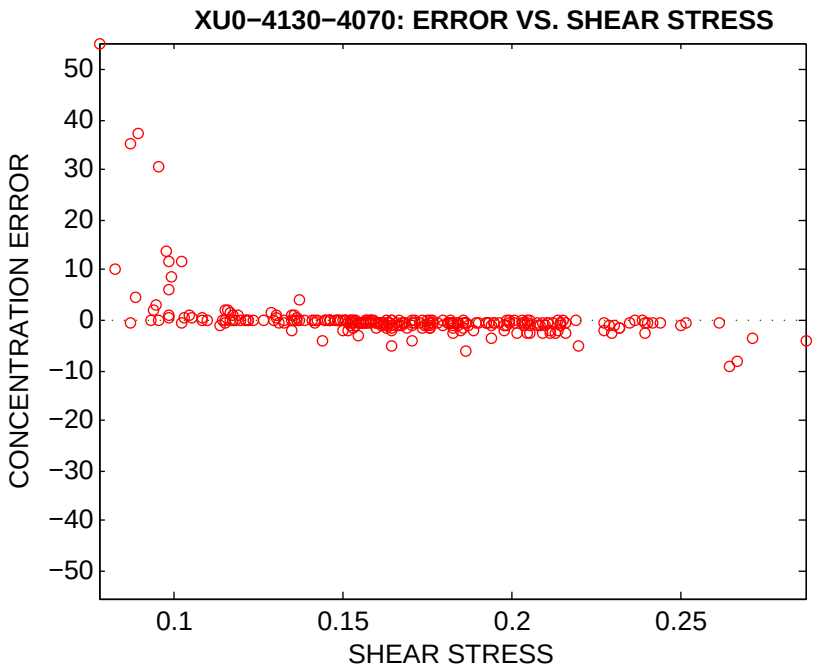


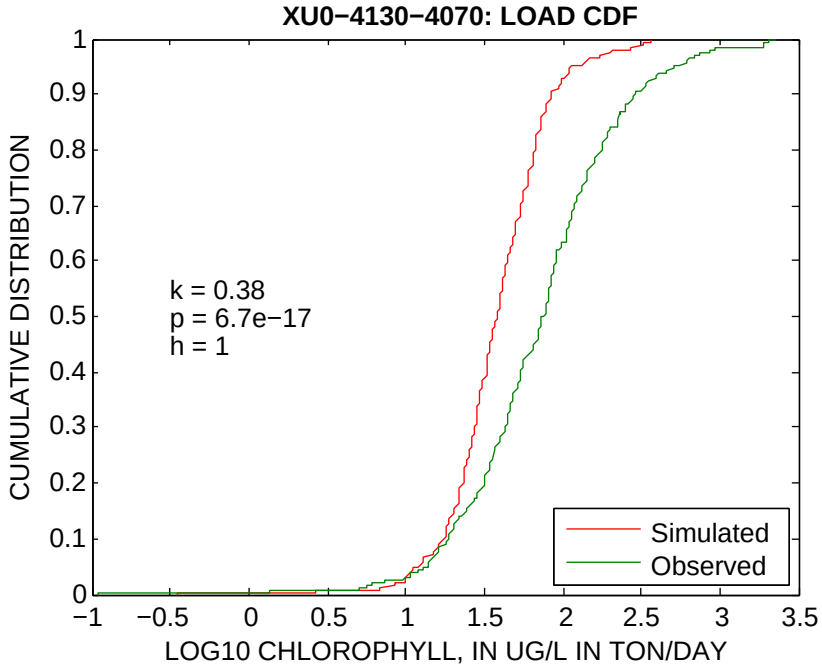


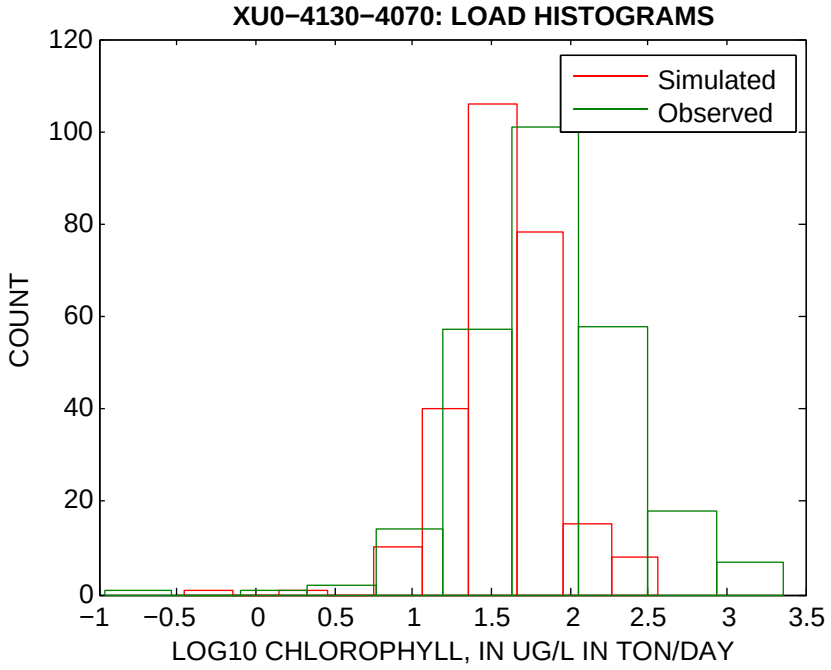


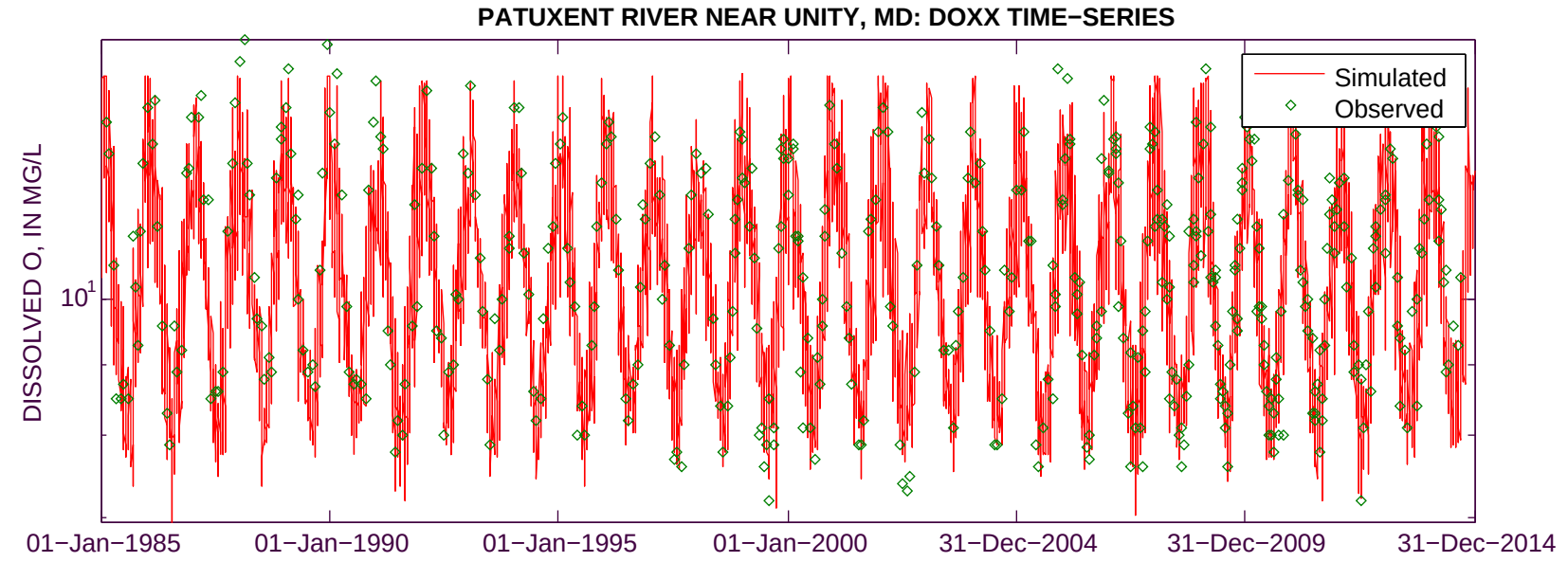
LOAD DATA
LOG10

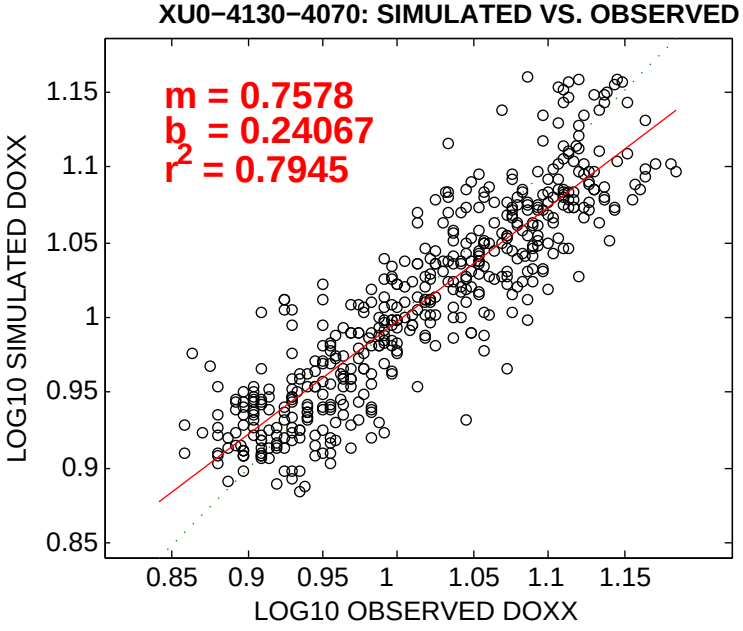


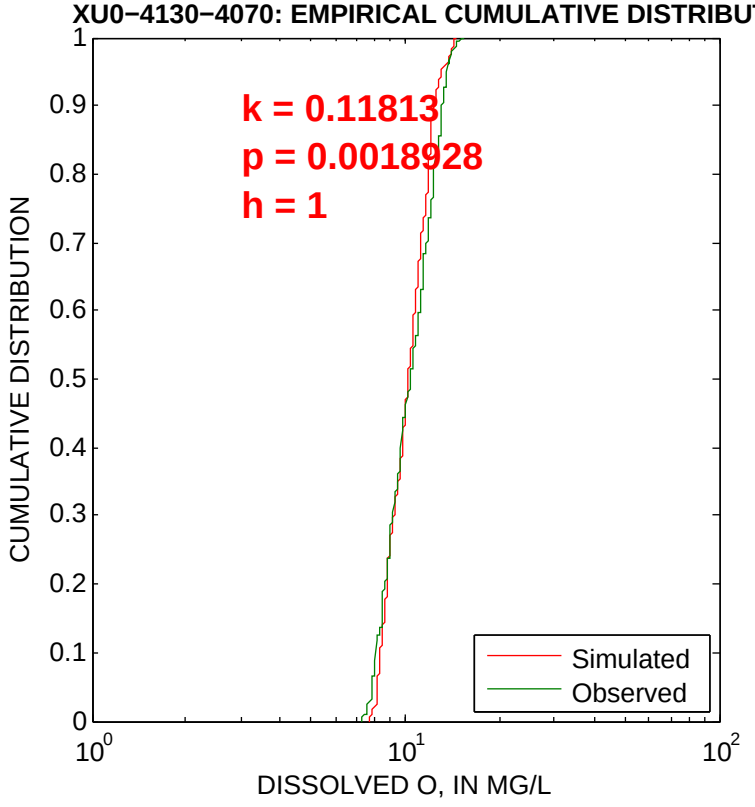












DATA SELECTION

scenario: P620171001WQ | file: DOXX.calib

plot: DOXX - dissolved oxygen

Dates: 1/1/1985 – 12/31/201

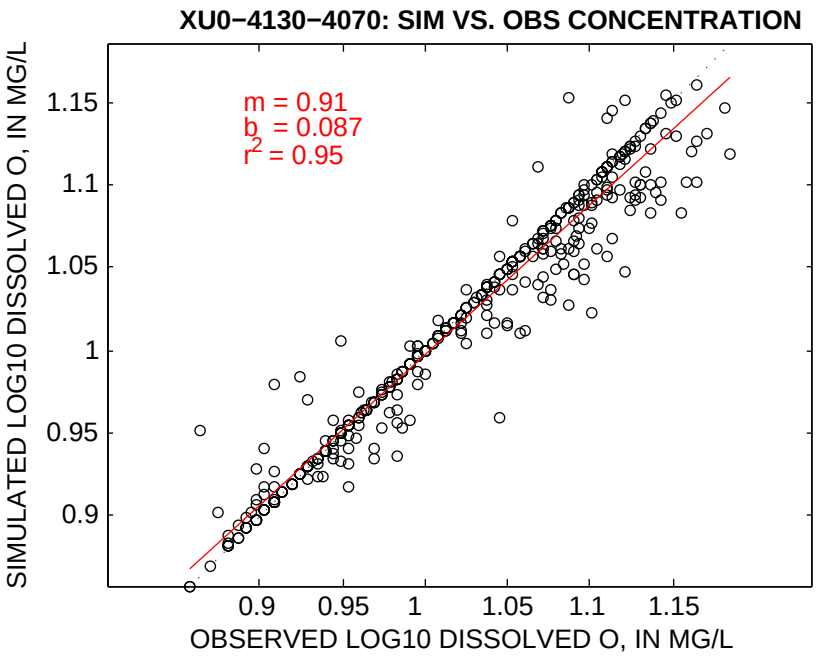
Drive: N/A | Directory: model | Observed: OBS20161101

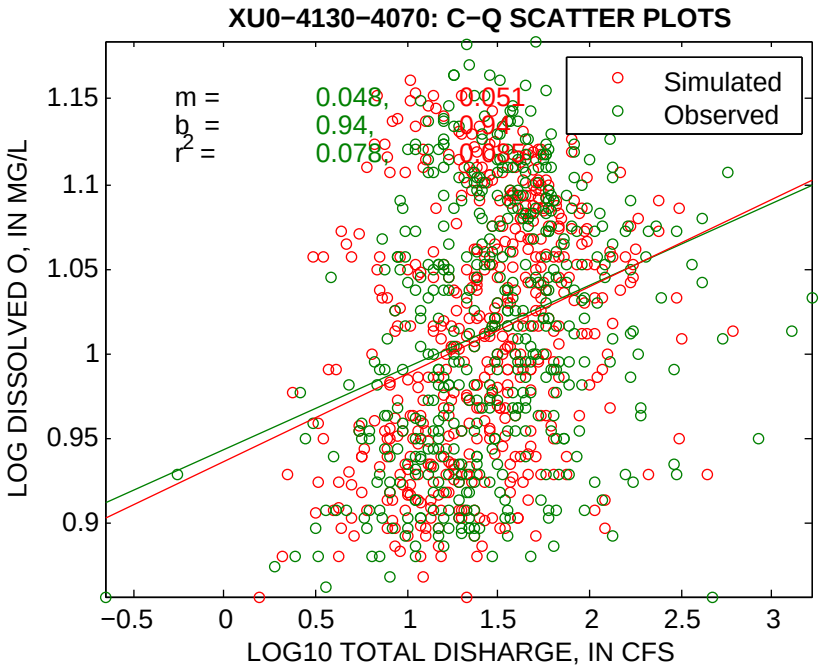
STATISTICS

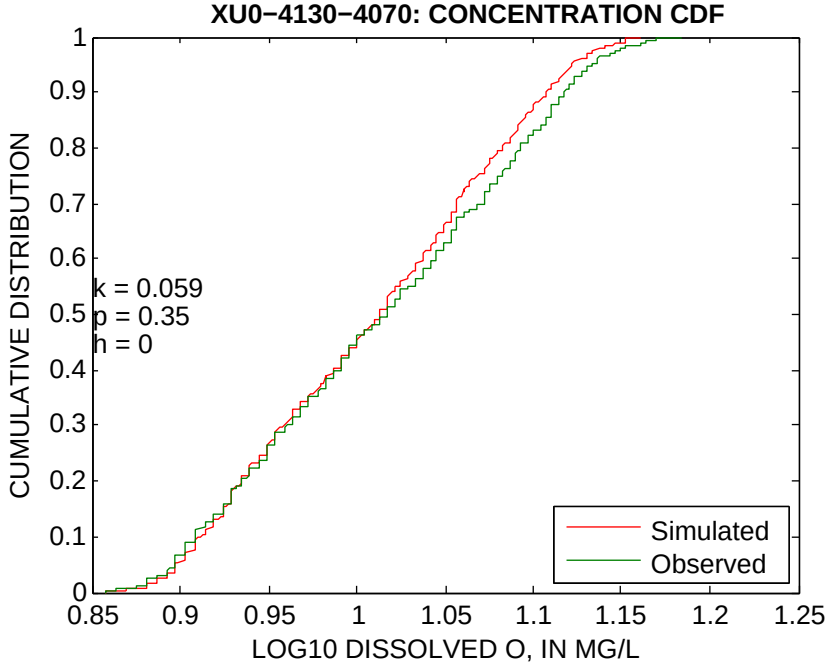
	n	491	491
		observe	simulate
min		7.2	7.6682
		0.857332	0.884693
mean		10.5222	10.3519
		1.01519	1.00999
media		10.4	10.257
		1.01703	1.01102
max		15.3	14.433
		1.18469	1.15936
varian		3.53173	2.5289
		0.00603177	0.00435974
JB		0.001	0.001331
		0.001	0.002201
		ra	log
%		-1.61858	-0.513054
err.va		0.794708	0.00127693
rel.std.err		0.22502	0.211701
mod.eff		0.77498	0.788299

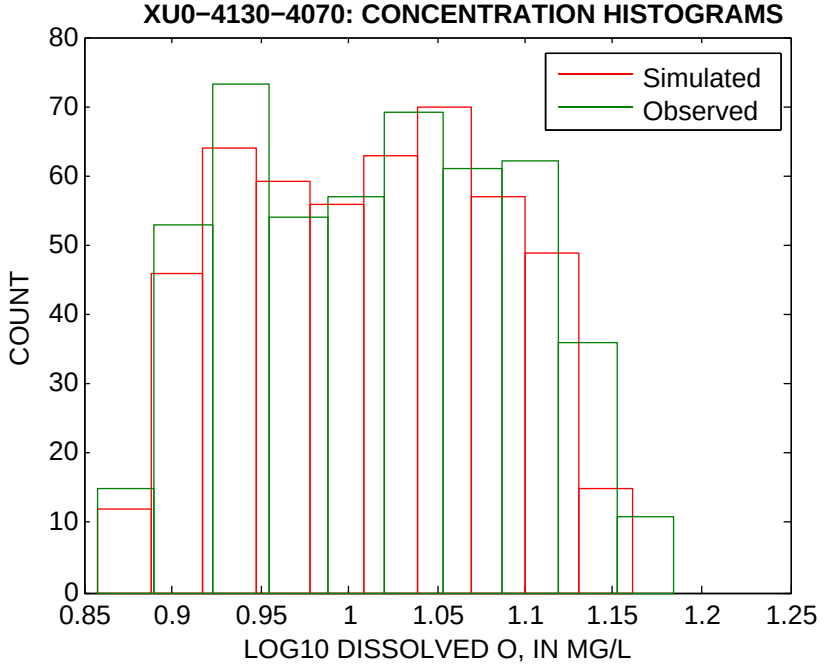
VERSION 2.1

ALL DATA
LOG10

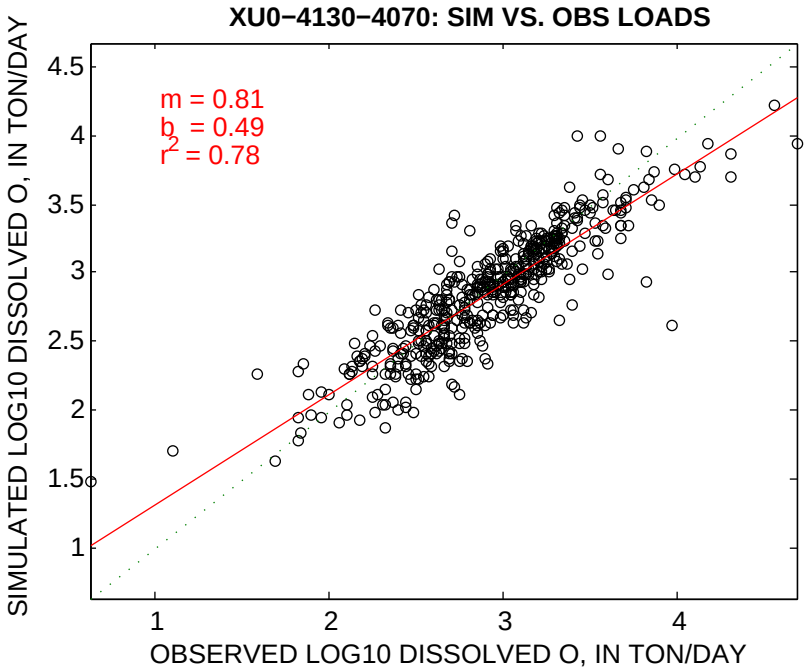


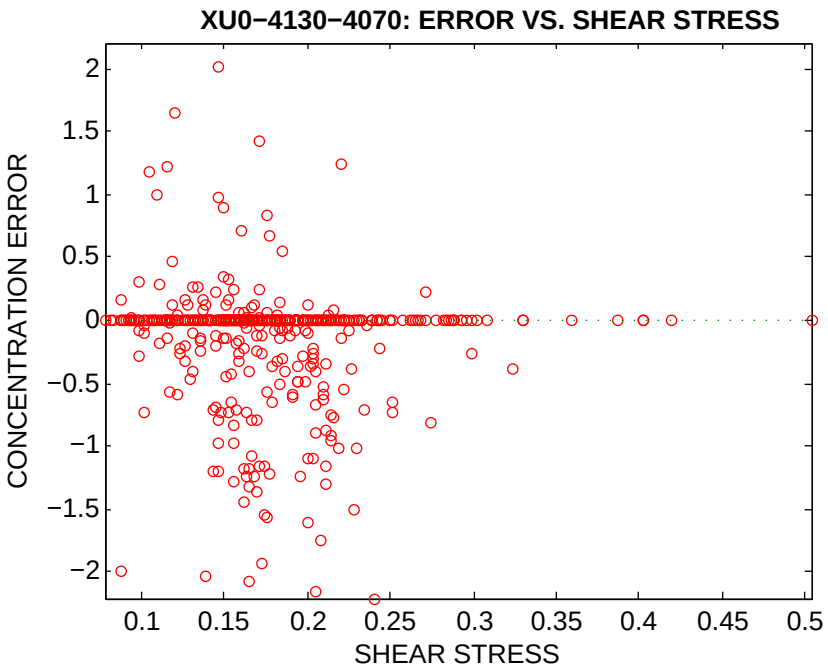


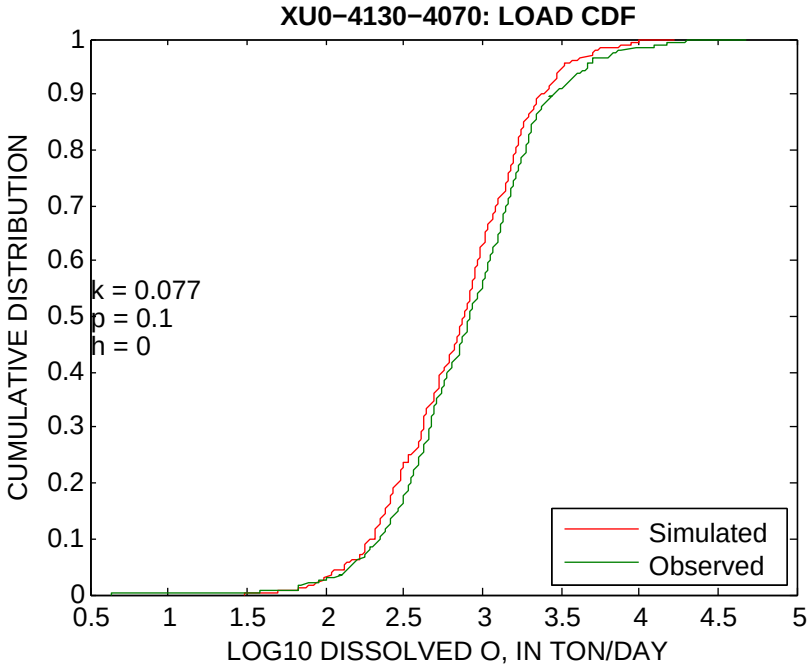


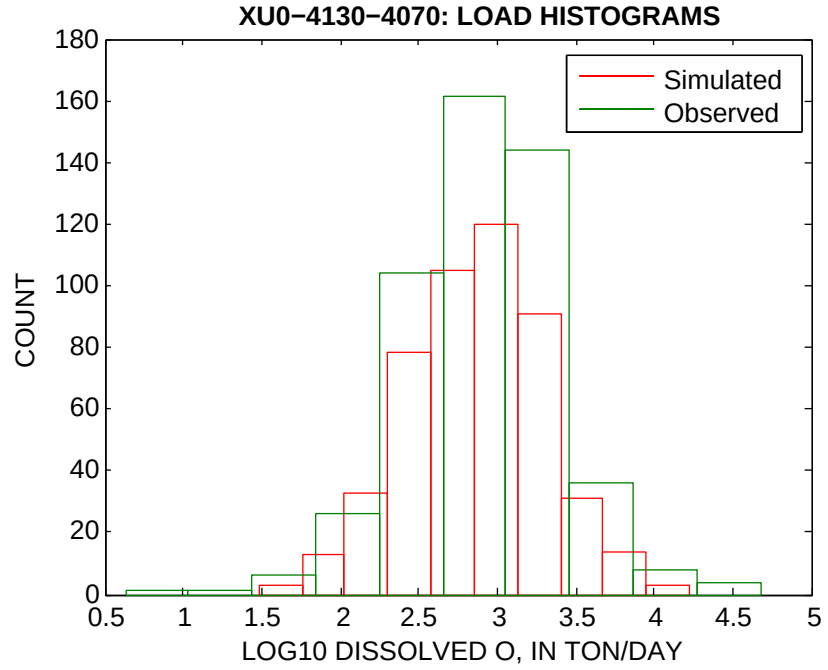


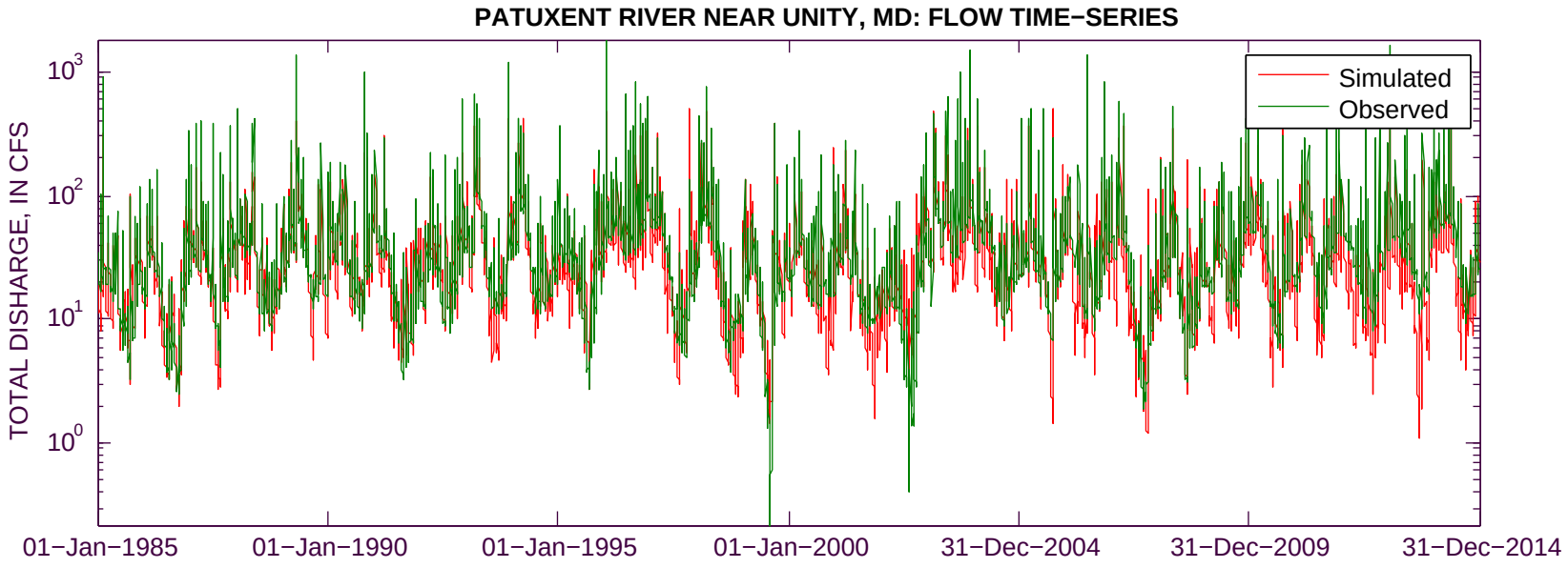
LOAD DATA
LOG10

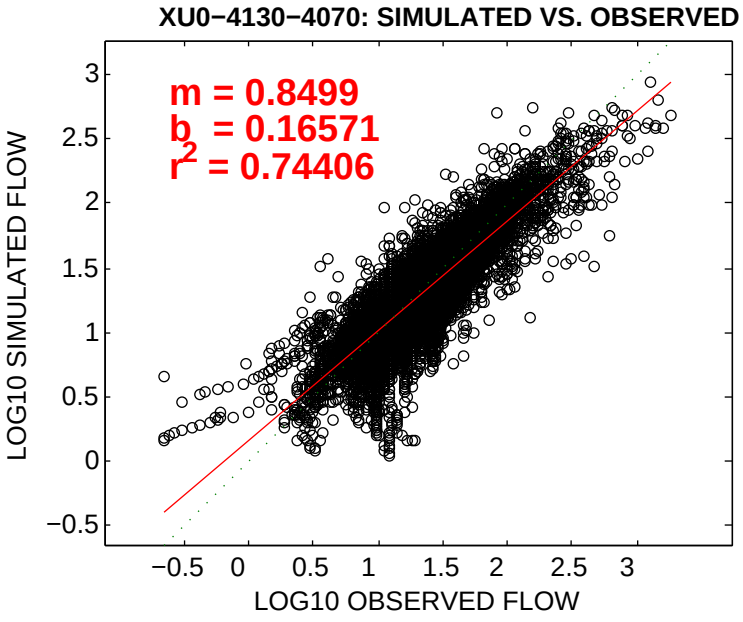


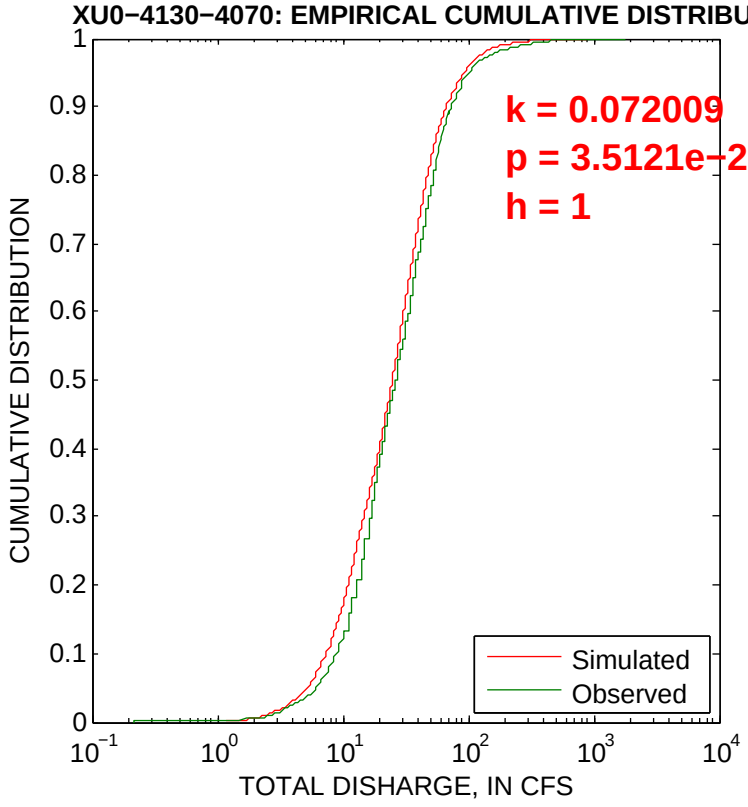












DATA SELECTION

scenario: P620171001WQ | file: _FLOW.calib

plot: FLOW - total discharge

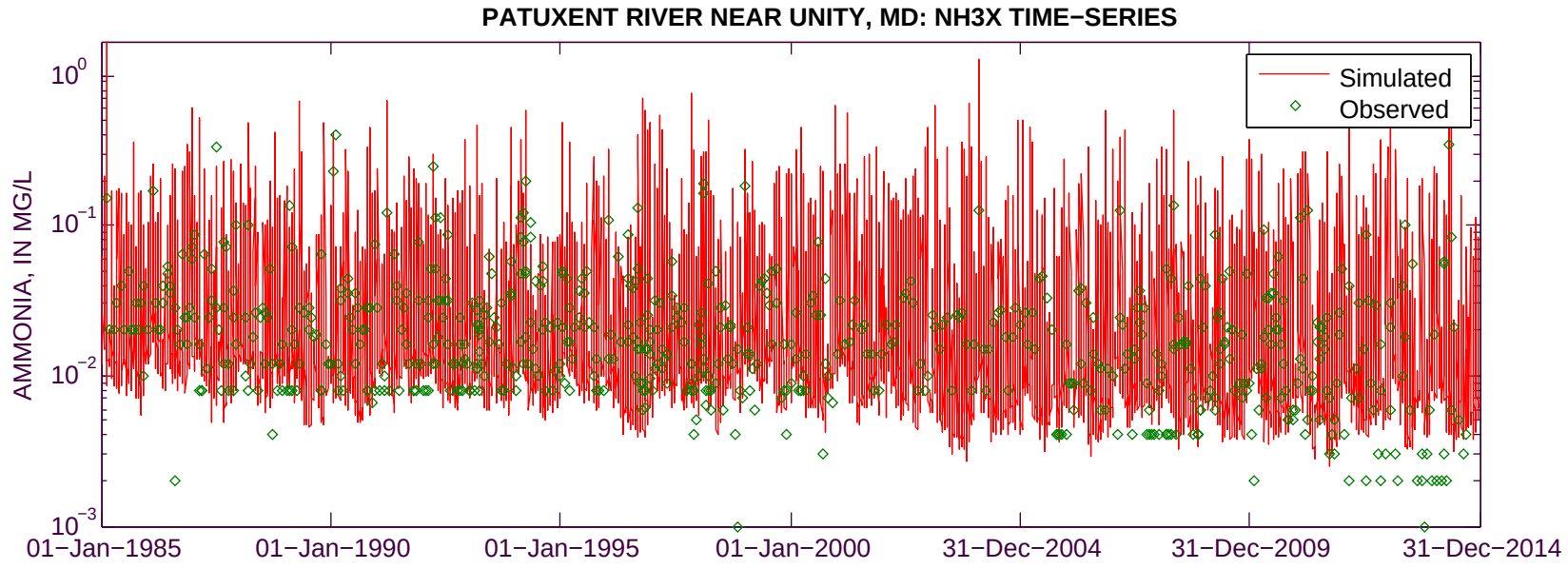
Dates: 1/1/1985 – 12/31/201

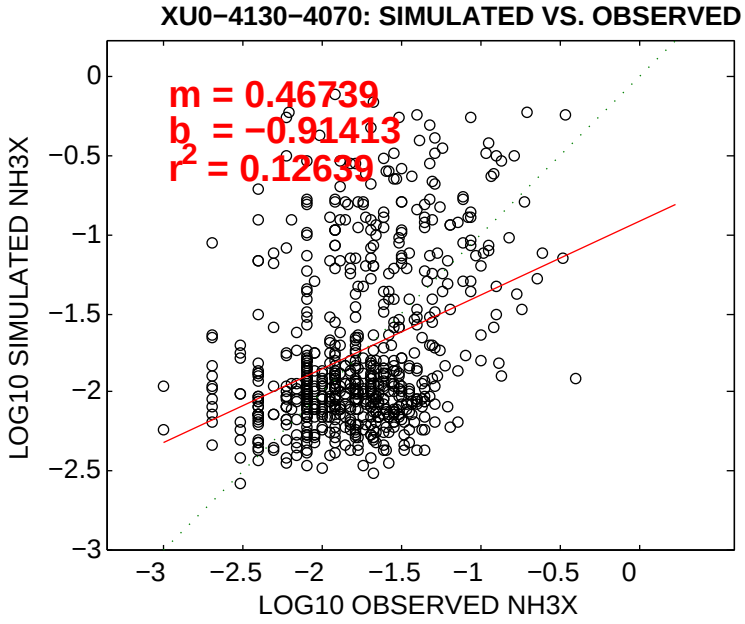
Drive | Directory: N/A | model | Observed: OBS20161101

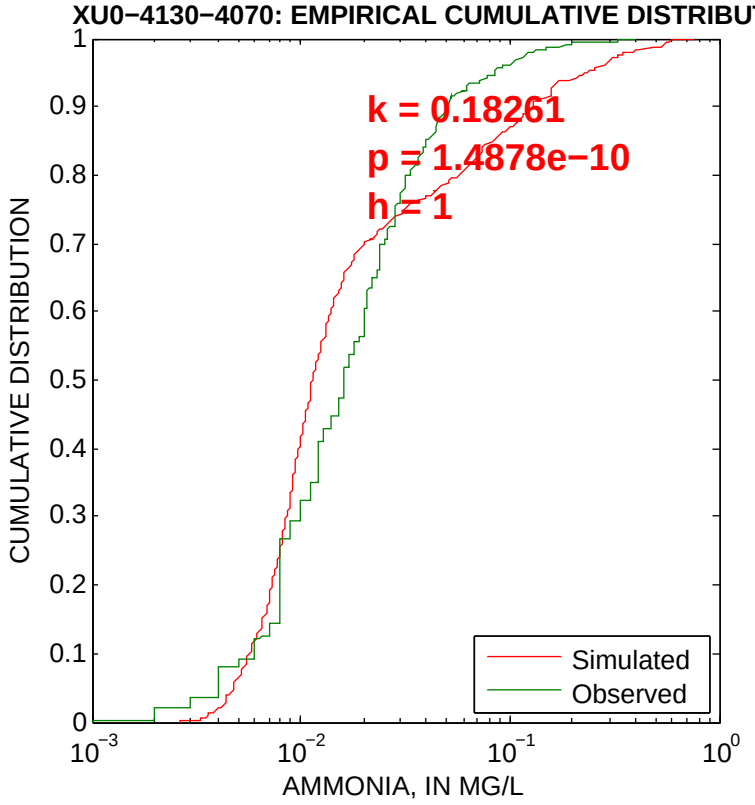
STATISTICS

		observe	simulate
n		10957	10957
min		0.22	1.1022
		-0.657577	0.0422604
mean		40.6331	34.75
		1.41796	1.37083
media		26	25.007
		1.41497	1.39806
max		1840	885.17
		3.26482	2.94703
varian		4425.25	1622.15
		0.153859	0.149364
JB		0.001	0.001
		0.001	0.001
		ra	log
%		-14.4785	-3.32386
err.va		1817.67	0.0439163
rel.std.err		0.41075	0.285431
mod.eff		0.58925	0.714569

VERSION 2.1







DATA SELECTION

scenario: P620171001WQ | file: NH3X.calib

plot: NH3X - ammonia

Dates: 1/1/1985 – 12/31/201

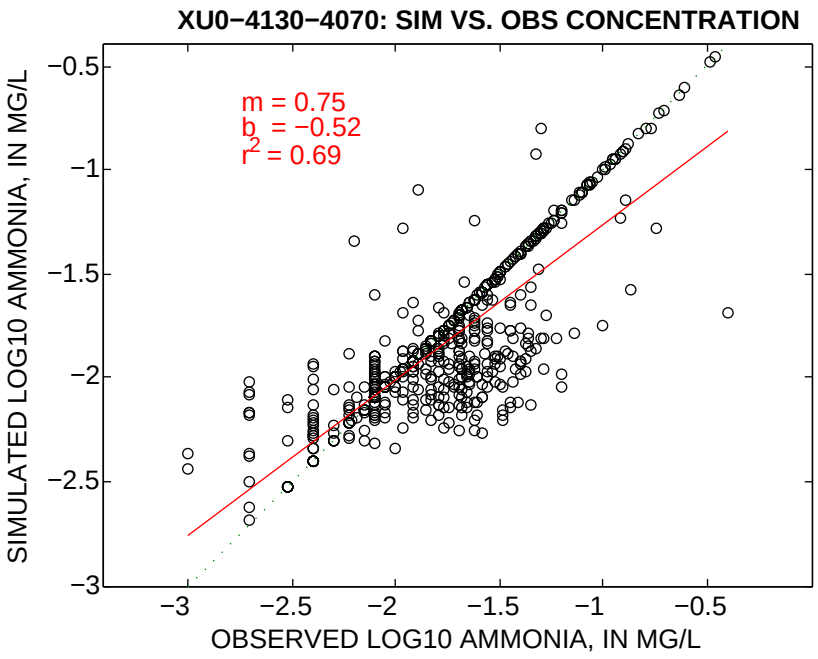
Drive: N/A | Directory: model | Observed: OBS20161101

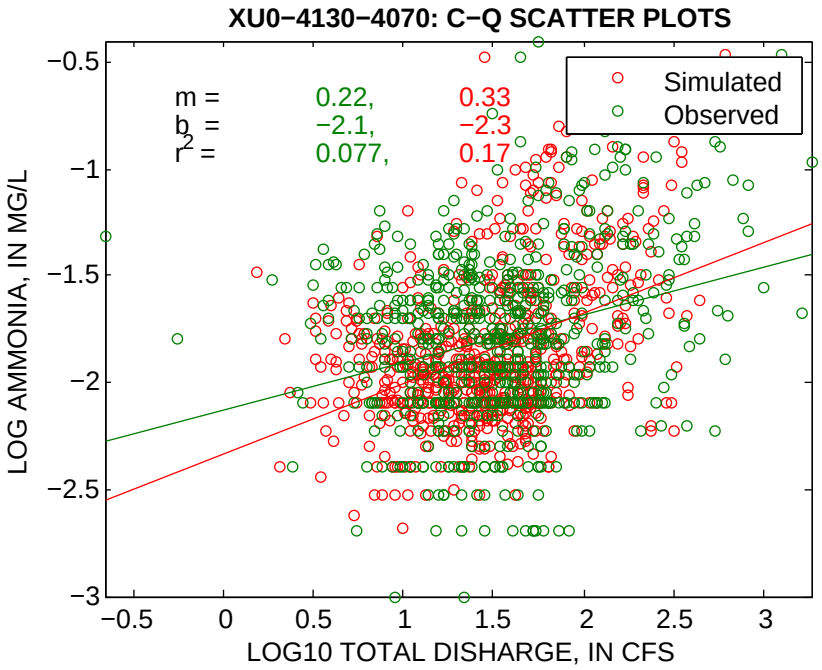
STATISTICS

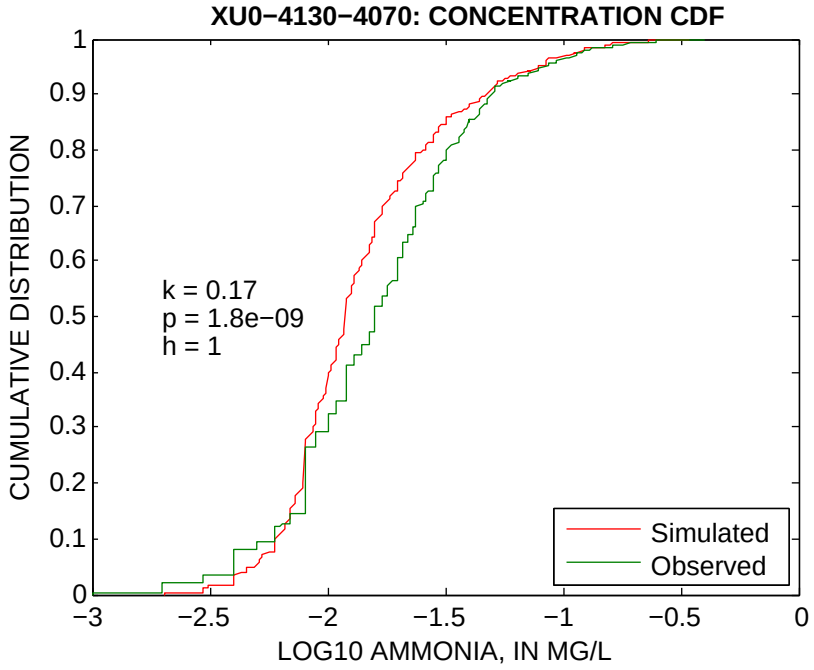
	n	observe	simulate
		690	690
min		0.001	0.0026168
		-3	-2.58223
mean		0.0262035	0.0471008
		-1.78264	-1.74732
media		0.016	0.011337
		-1.79588	-1.9455
max		0.4	0.75715
		-0.39794	-0.120818
varian		0.00131591	0.00899684
		0.158488	0.273935
JB		0.001	0.001
		0.004346	0.001
		ra	log
%		79.7497	-1.98126
err.va		0.00879685	0.285519
rel.std.err		6.68499	1.80152
mod.eff		-5.68499	-0.801515

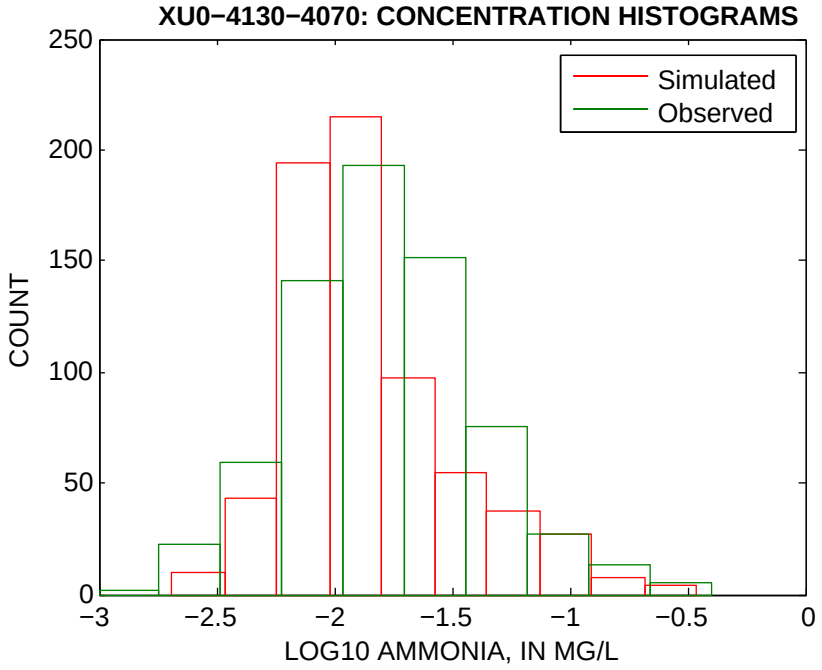
VERSION 2.1

ALL DATA
LOG10

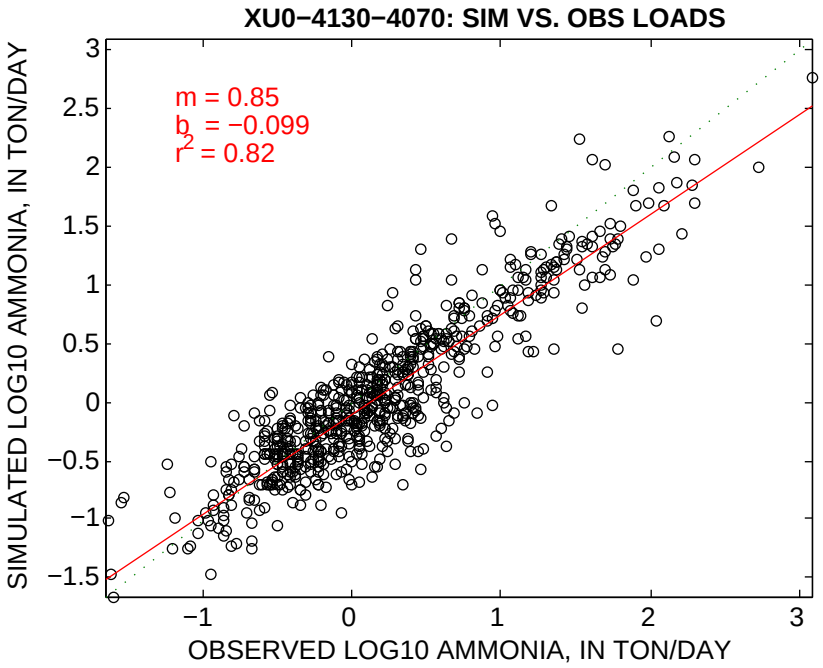


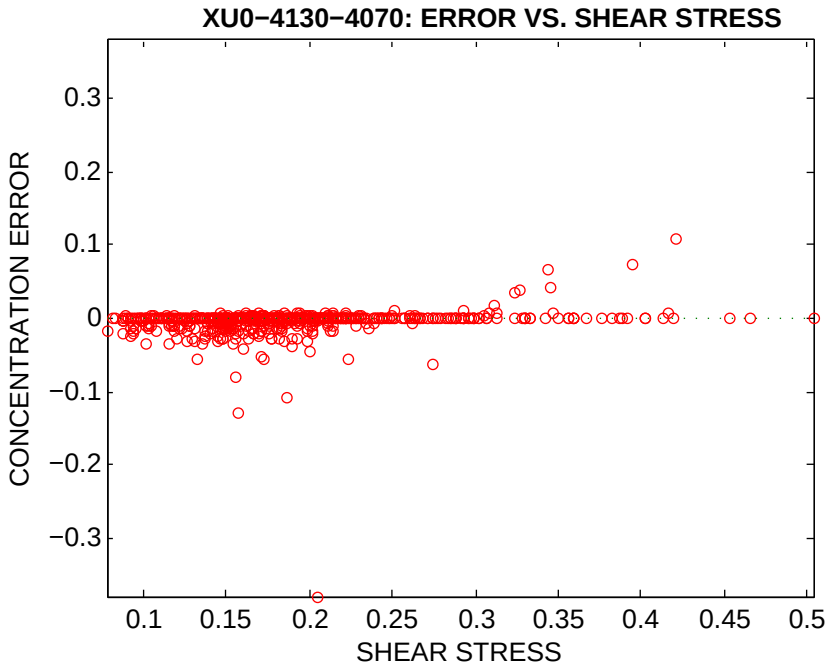


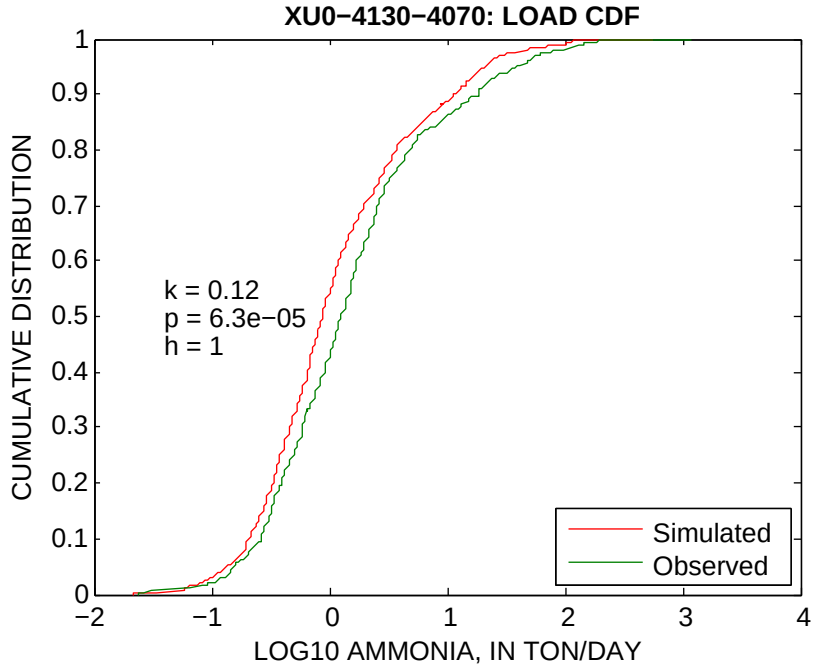


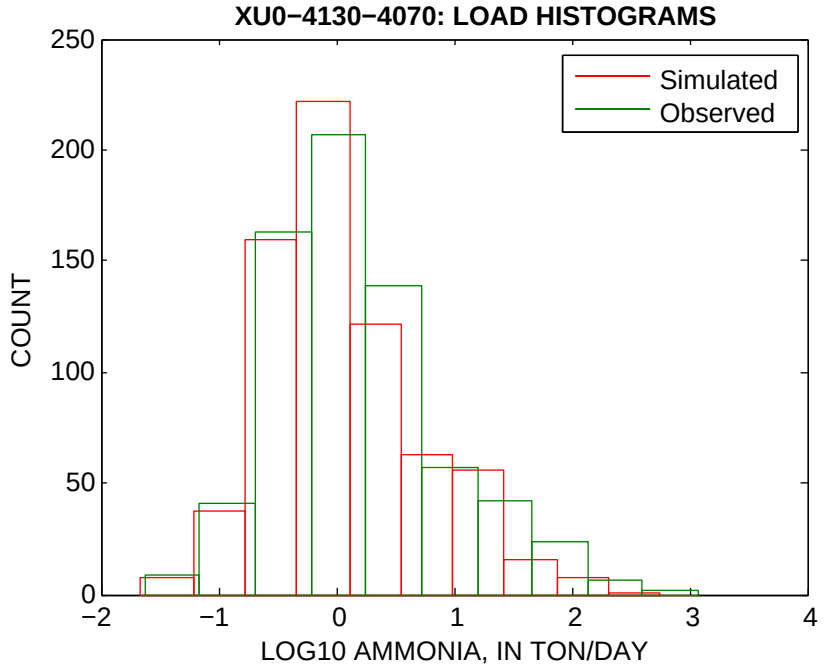


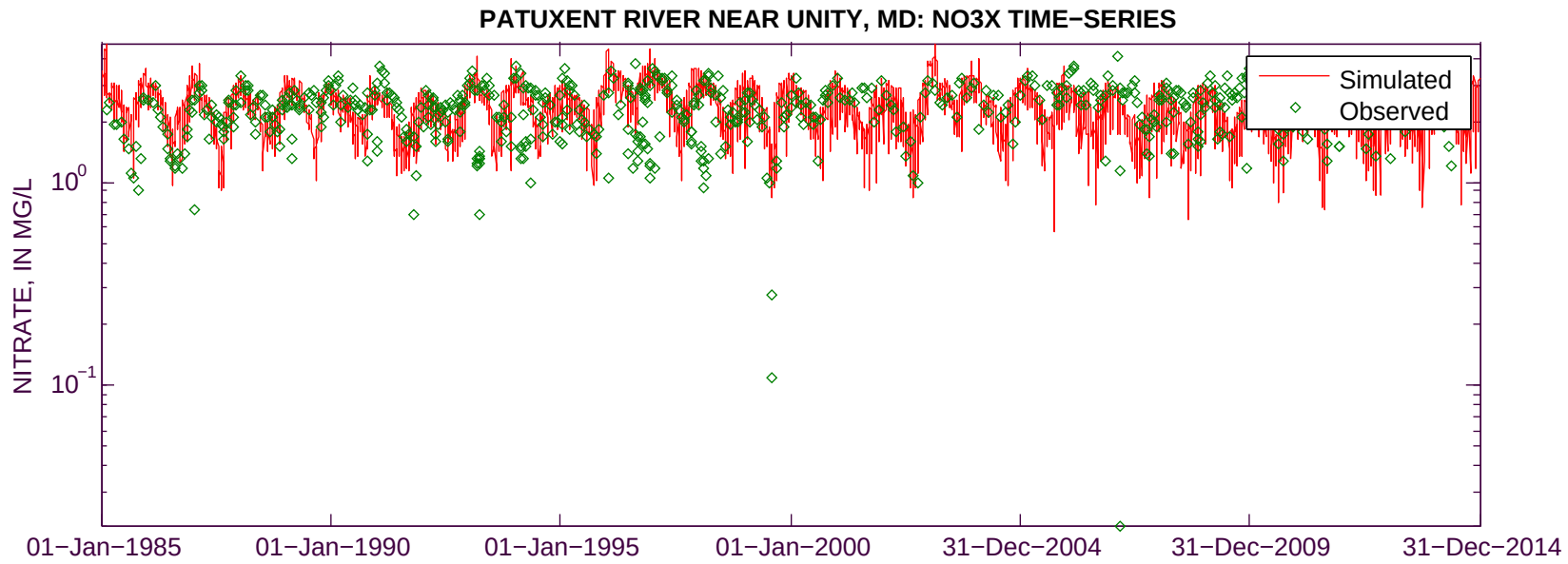
LOAD DATA
LOG10

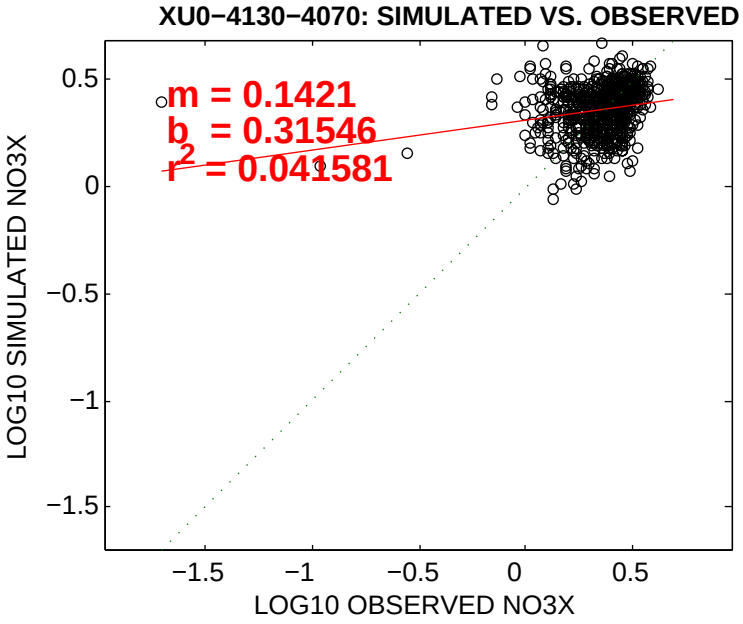


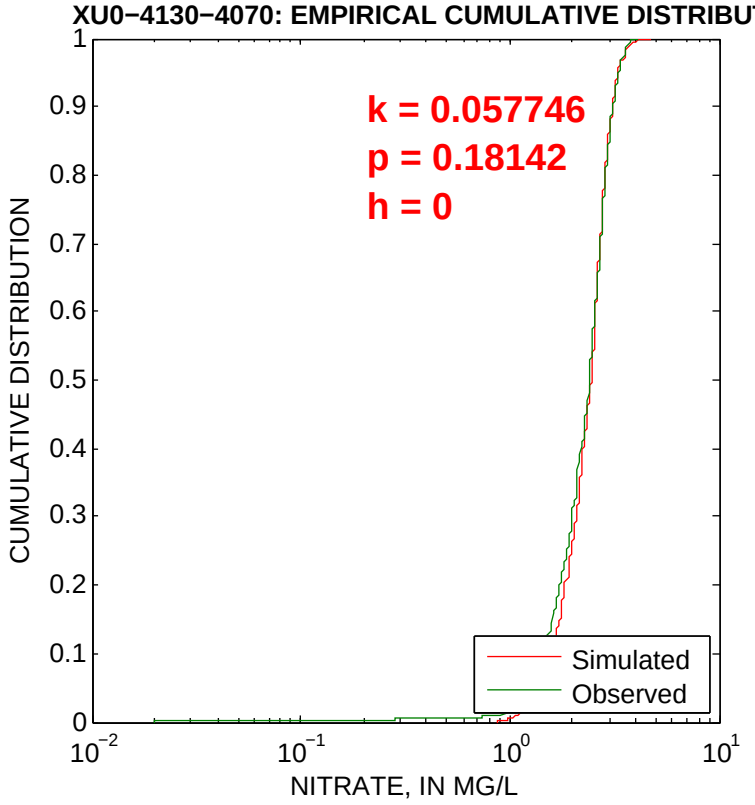












DATA SELECTION

scenario	file
P620171001WQ	NO3X.calib

plot: NO3X - nitrate

Dates	1/1/1985	12/31/201

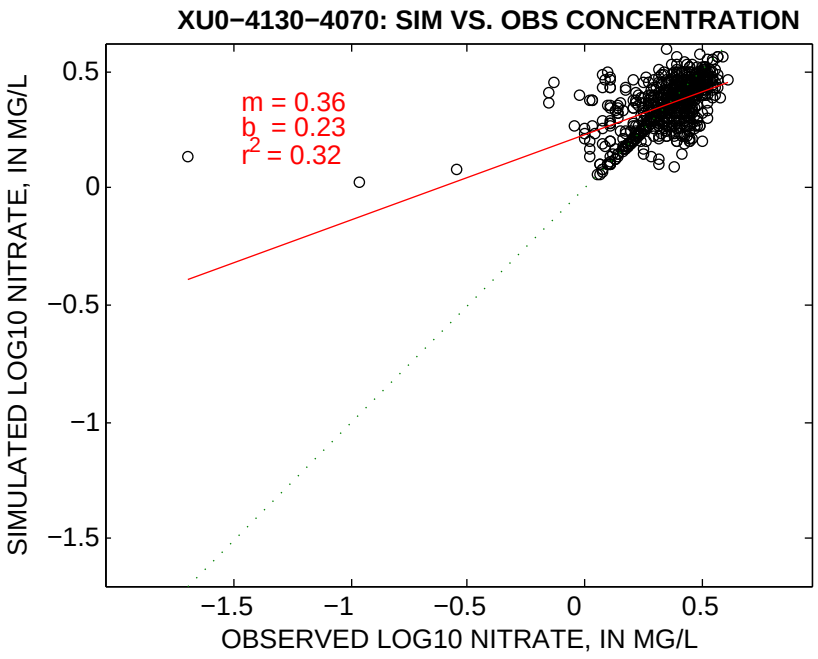
Drive	Directory	Observed
N/A	model	OBS20161101

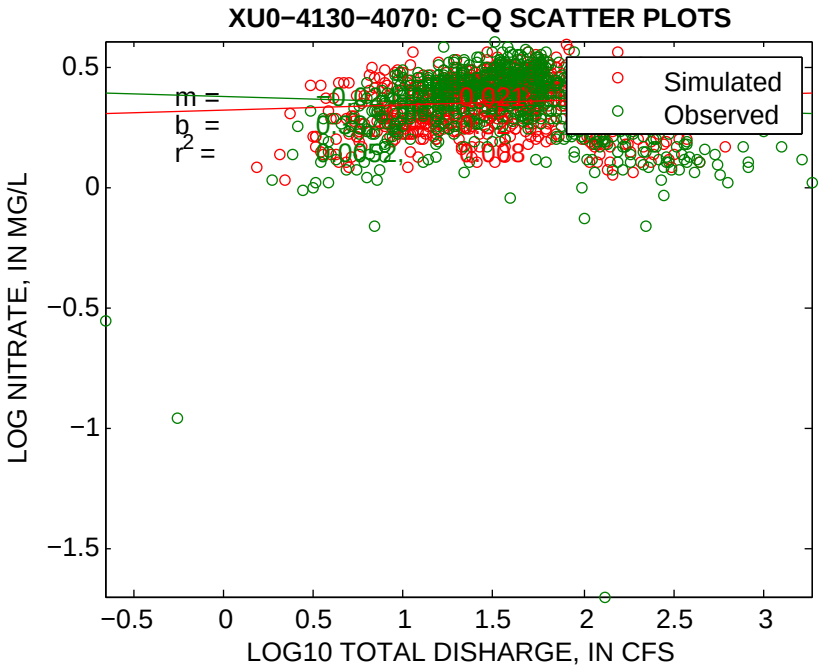
STATISTICS

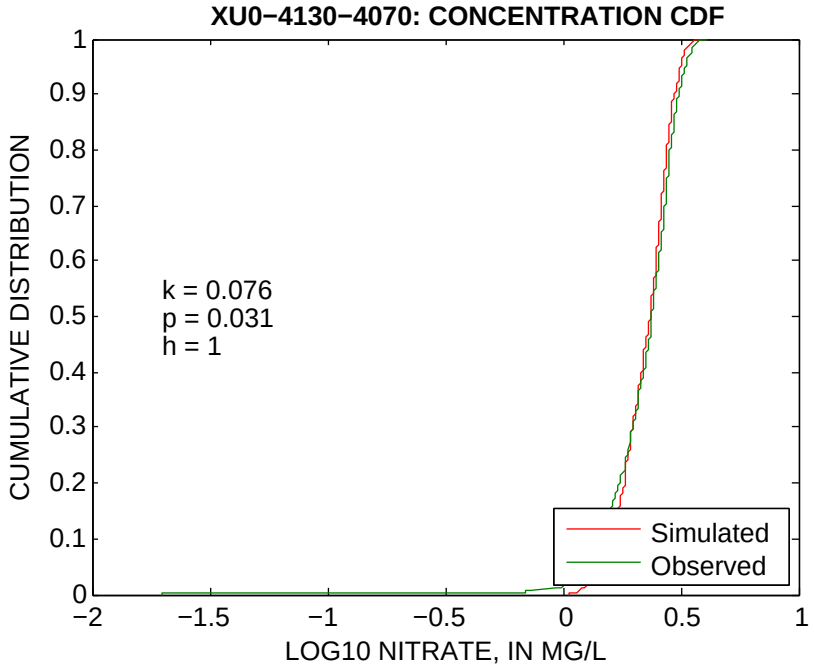
	n	710	710
		observe	simulate
min		0.02	0.86766
		-1.69897	-0.0616504
mean		2.33271	2.39067
		0.345595	0.364567
media		2.4	2.4564
		0.380211	0.390299
max		4.11	4.7068
		0.613842	0.672726
varian		0.416776	0.339587
		0.0264232	0.0128313
JB		0.012997	0.5
		0.001	0.001
		ra	log
%		2.4846	5.48957
err.va		0.57409	0.0321055
rel.std.err		1.37745	1.21505
mod.eff		-0.377454	-0.215051

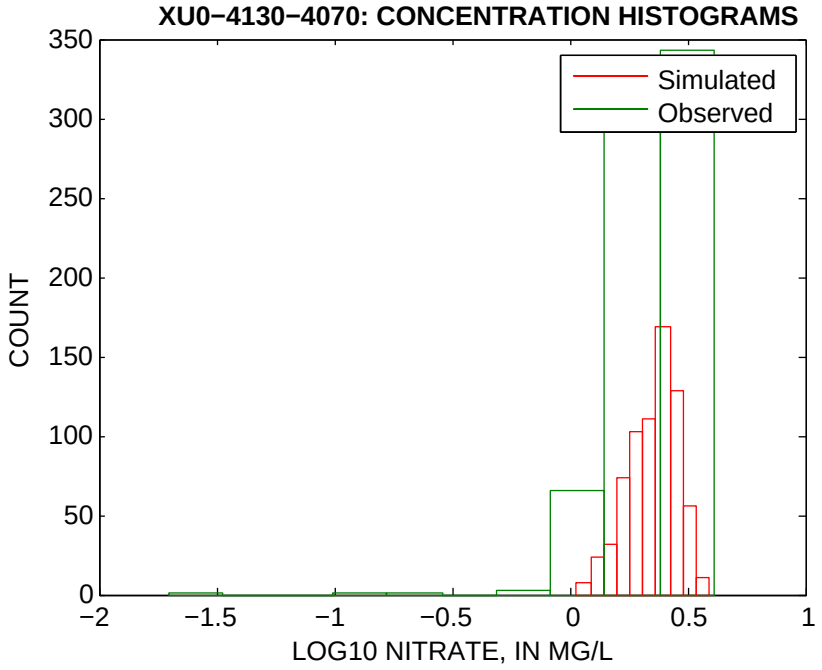
VERSION

ALL DATA
LOG10

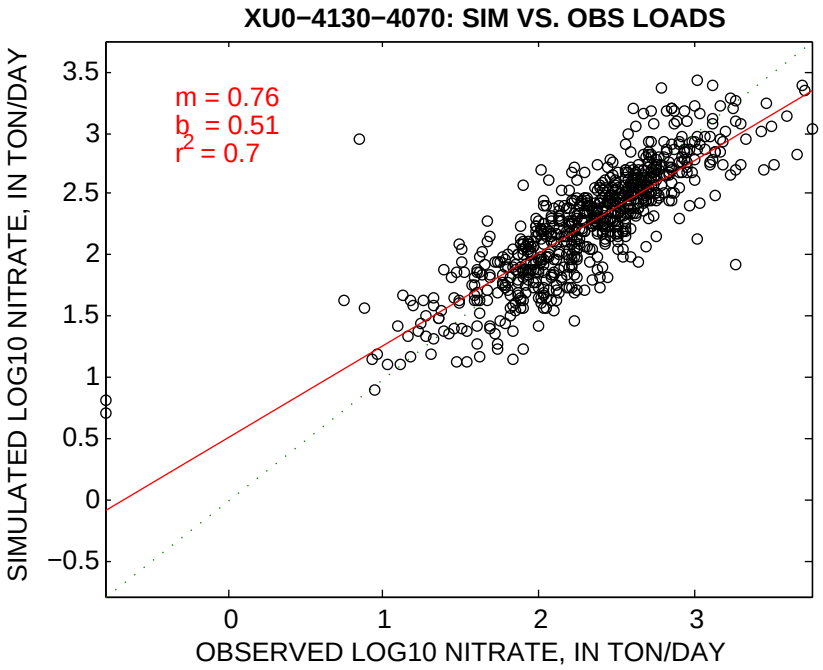


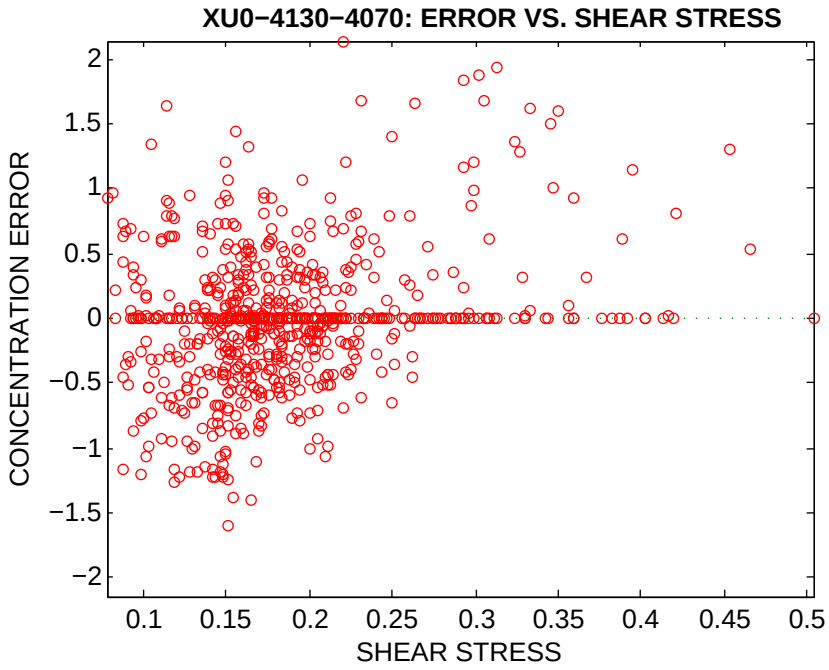


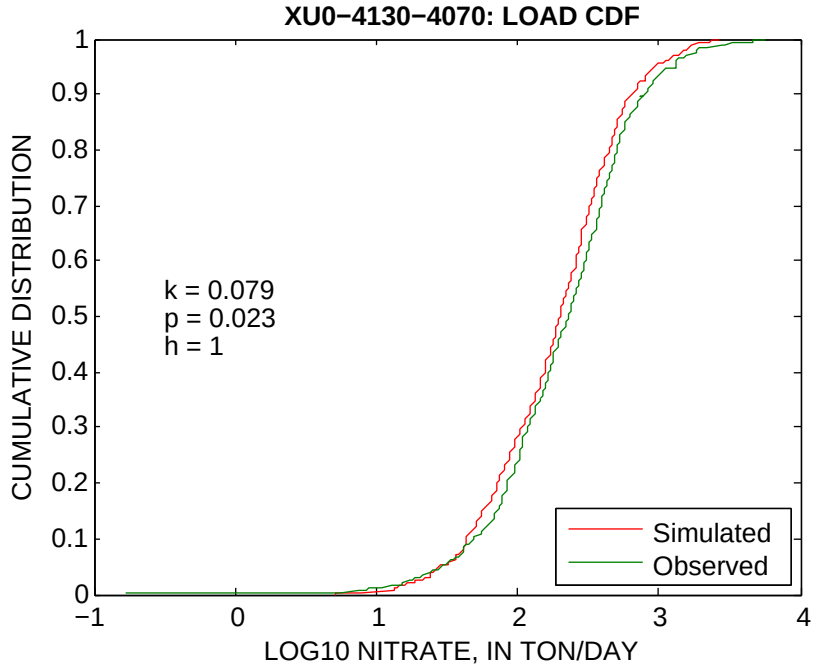


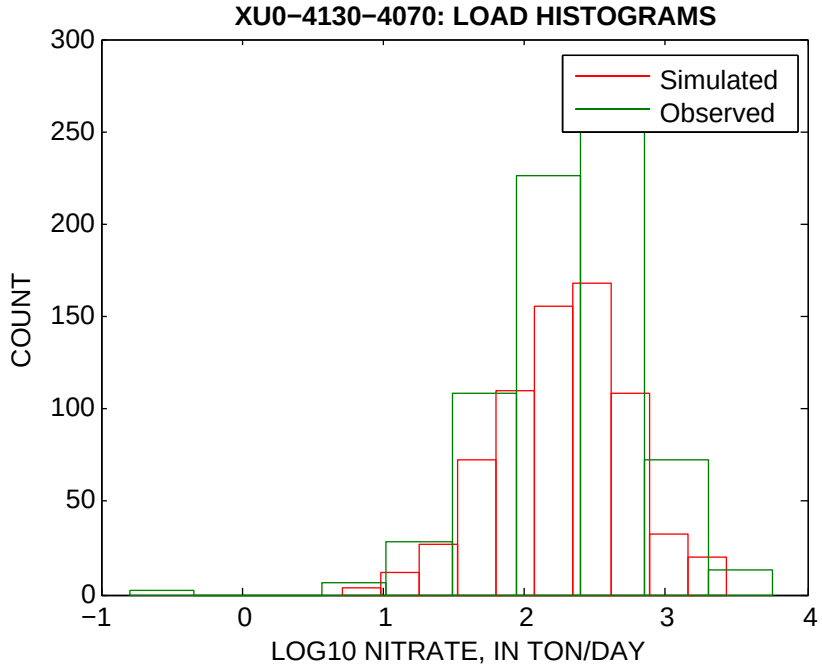


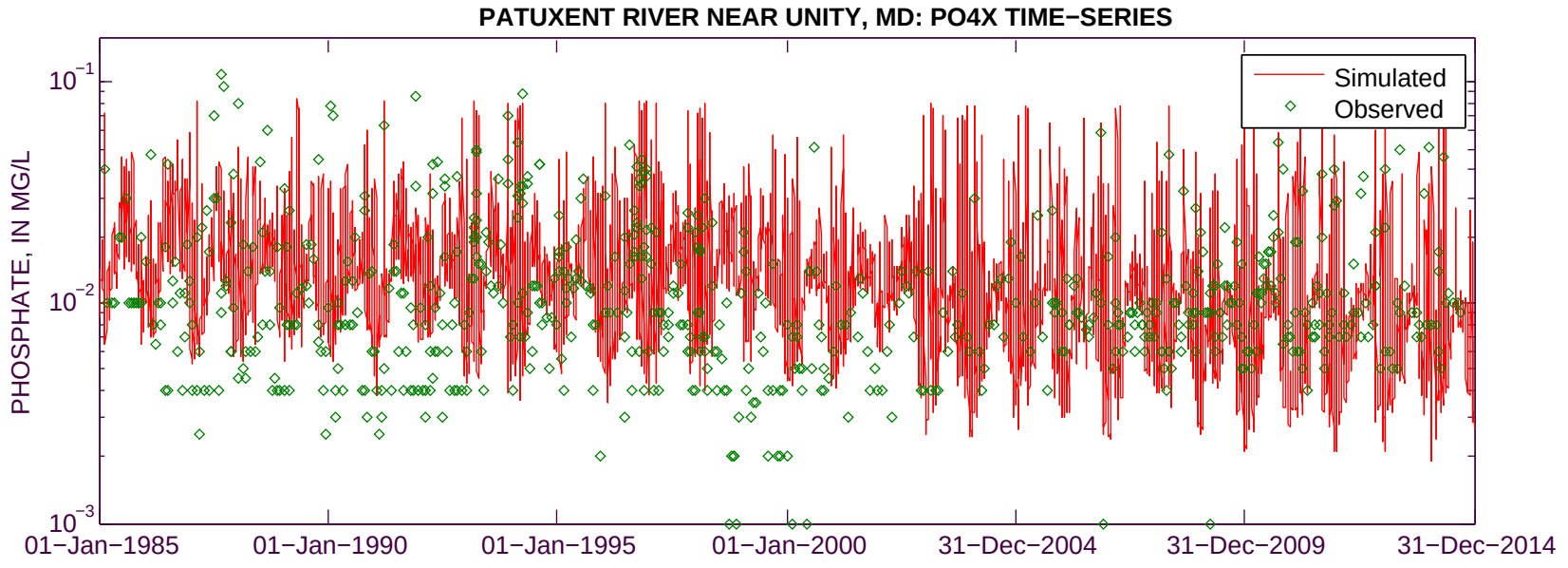
LOAD DATA
LOG10

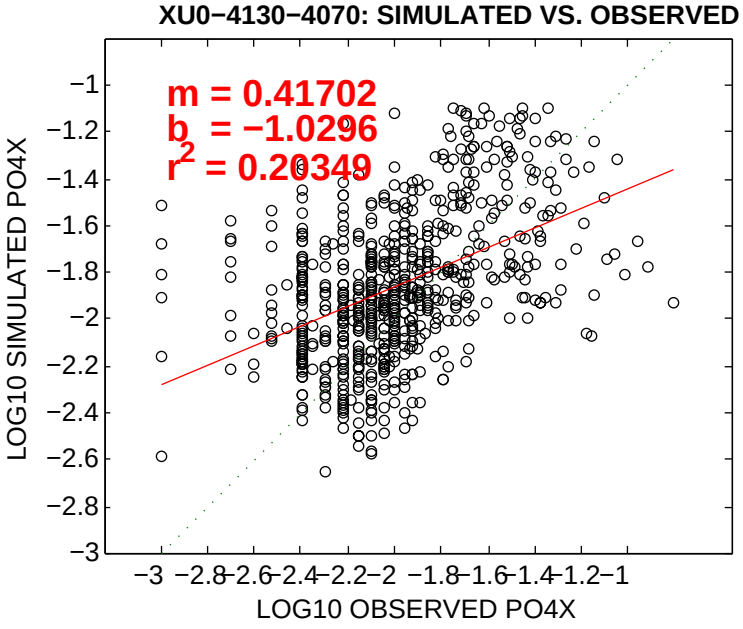


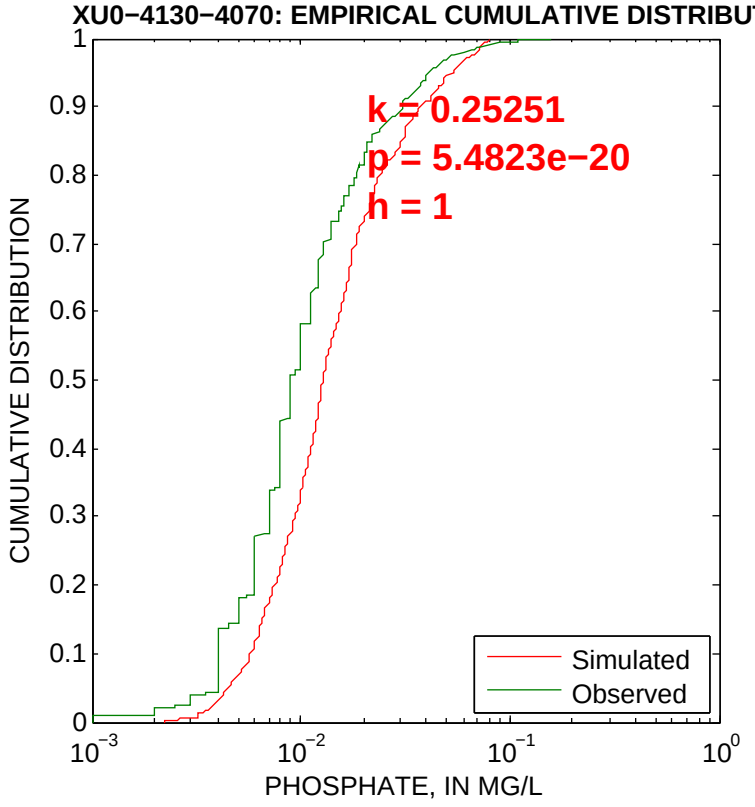












DATA SELECTION

scenario: P620171001WQ | file: PO4X.calib

plot: PO4X - phosphate

Dates: 1/1/1985 – 12/31/201

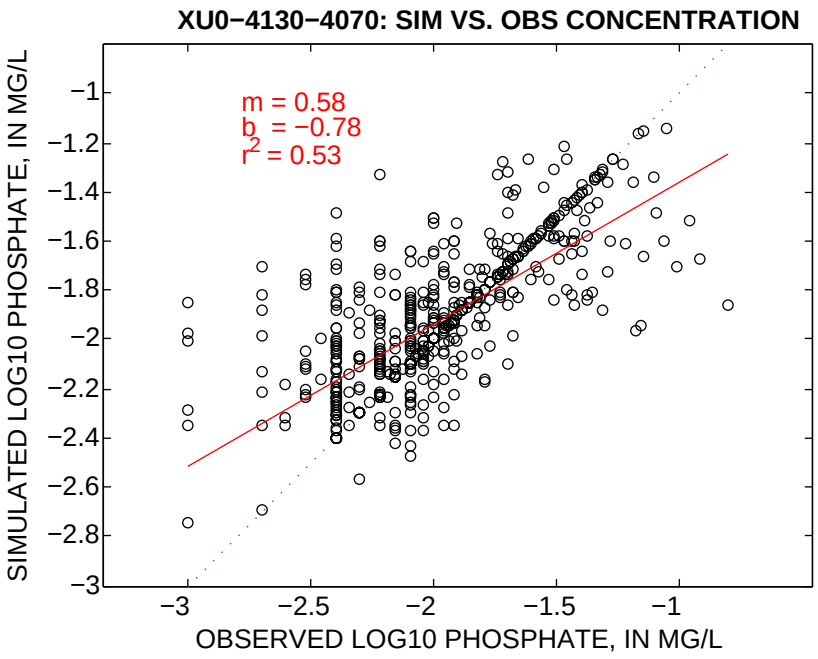
Drive: N/A | Directory: model | Observed: OBS20161101

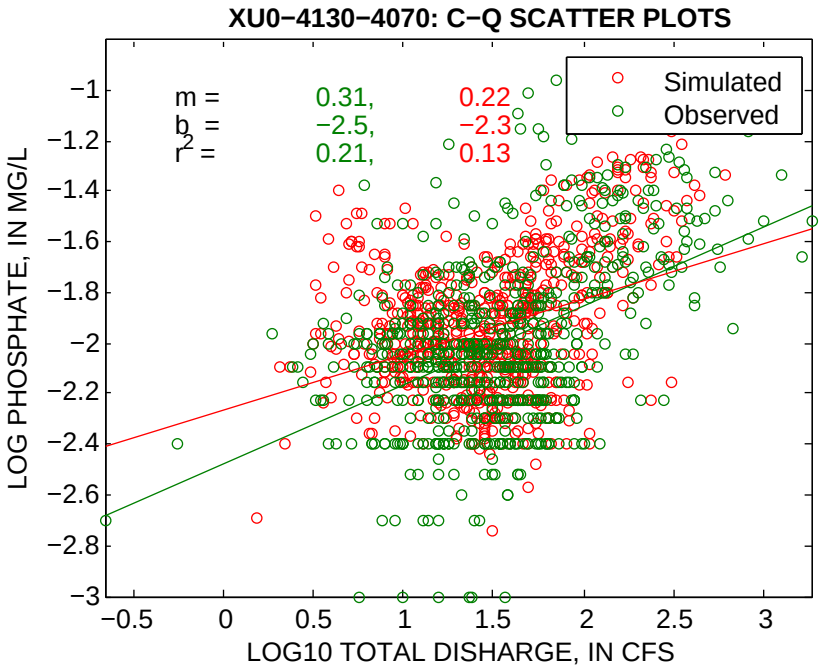
STATISTICS

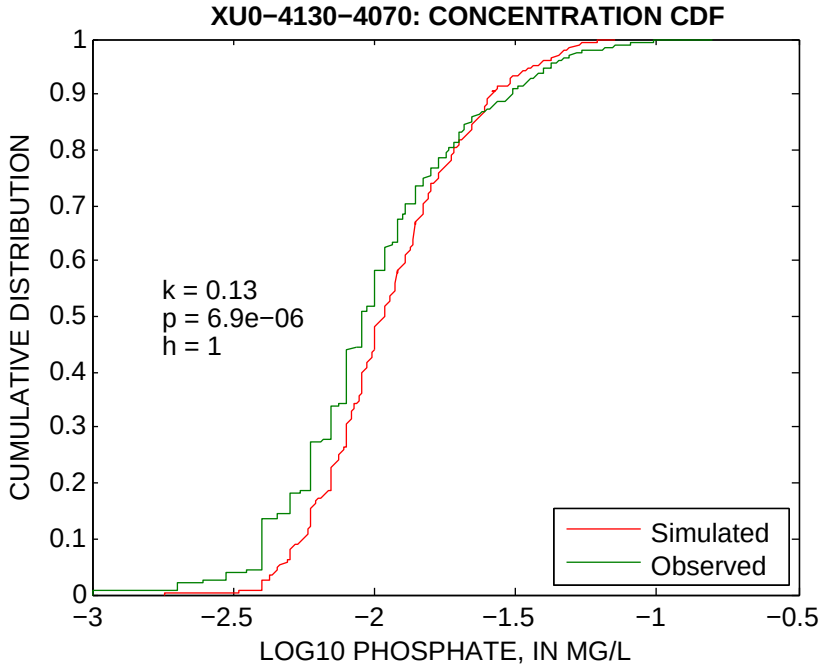
		observe	simulate
n		697	697
min		0.001	0.002256
		-3	-2.64666
mean		0.0140908	0.0179779
		-1.99437	-1.86131
media		0.009	0.012822
		-2.04576	-1.89204
max		0.157	0.080711
		-0.8041	-1.09307
varian		0.0002274	0.00022780
		0.111493	0.0952836
JB		0.001	0.001
		0.001	0.004666
		ra	log
%		27.5862	-6.67178
err.va		0.00030301	0.131518
rel.std.err		1.3325	1.17961
mod.eff		-0.332496	-0.179609

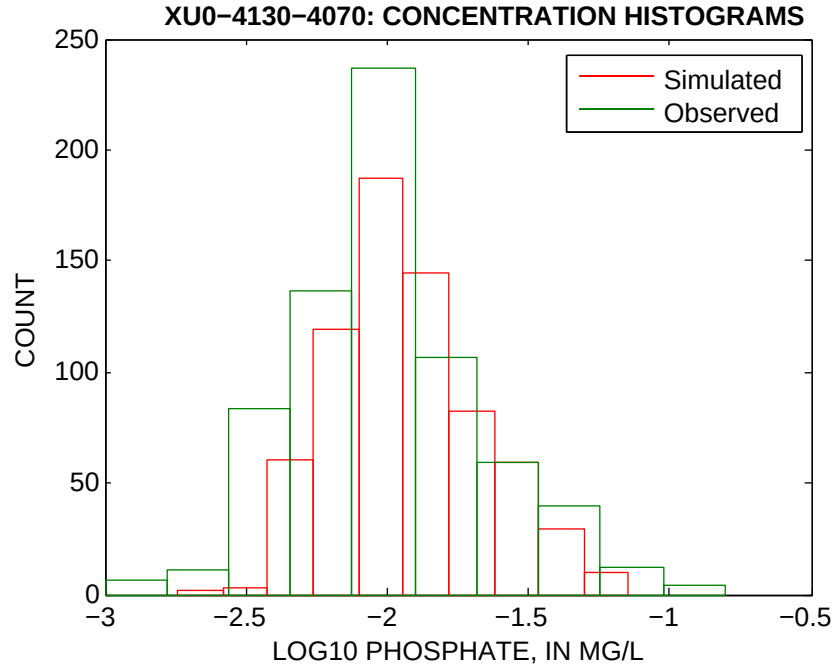
VERSION 2.1

ALL DATA
LOG10

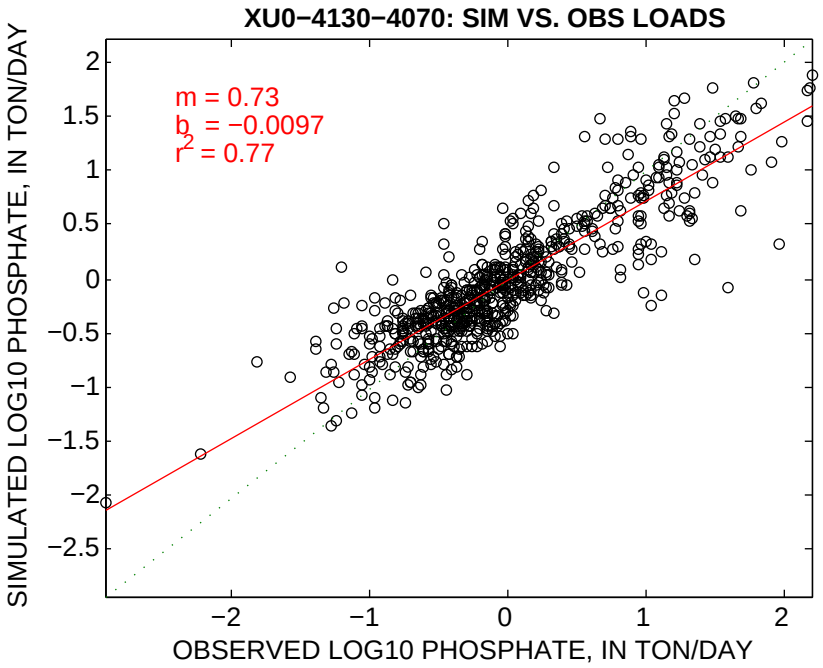


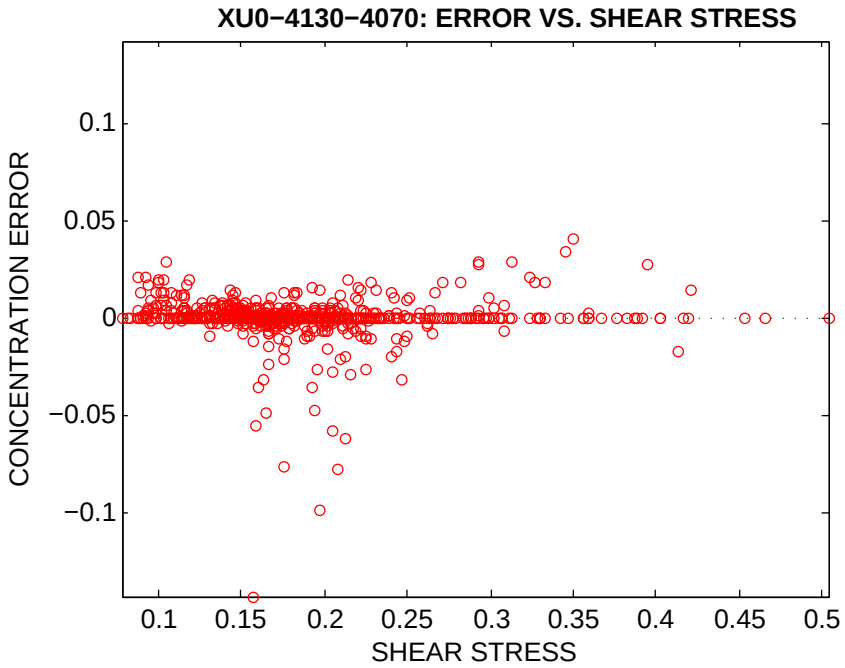


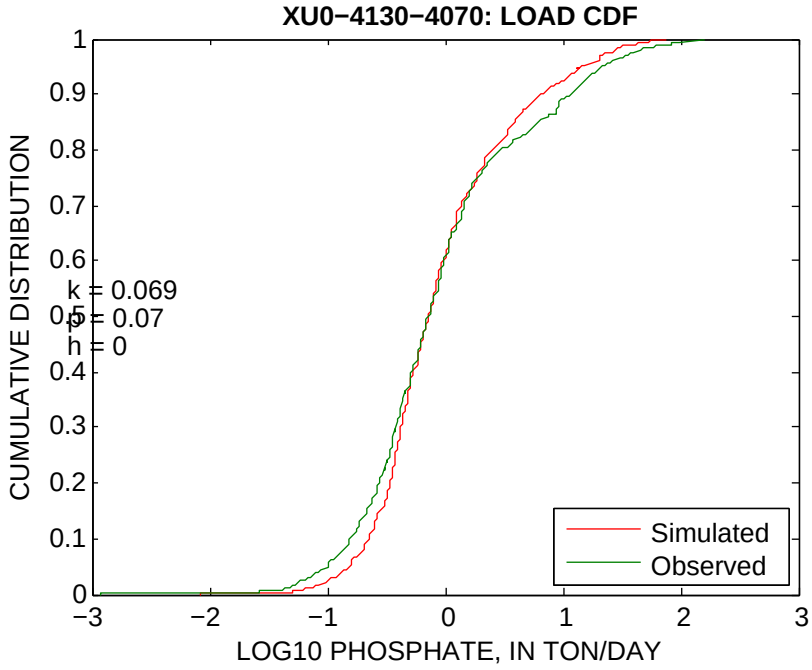


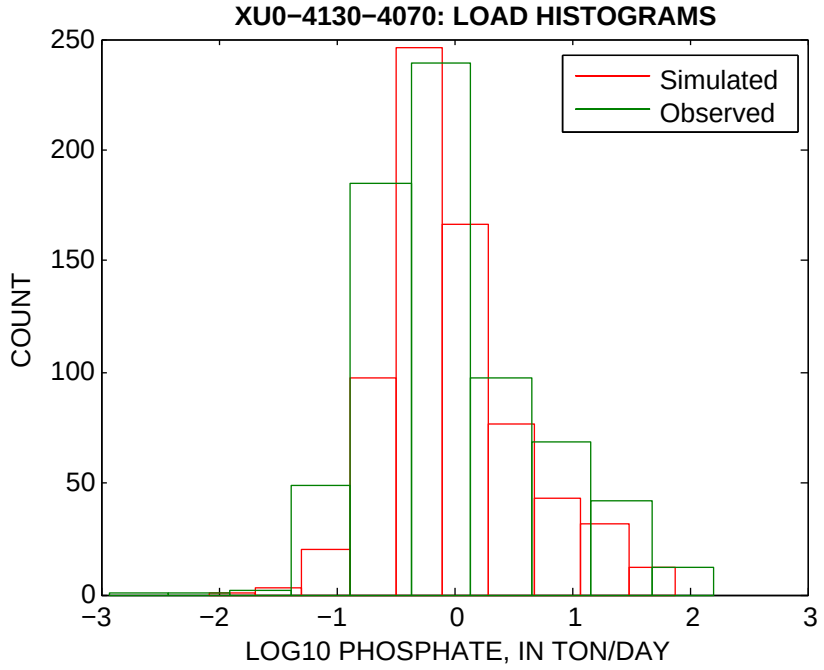


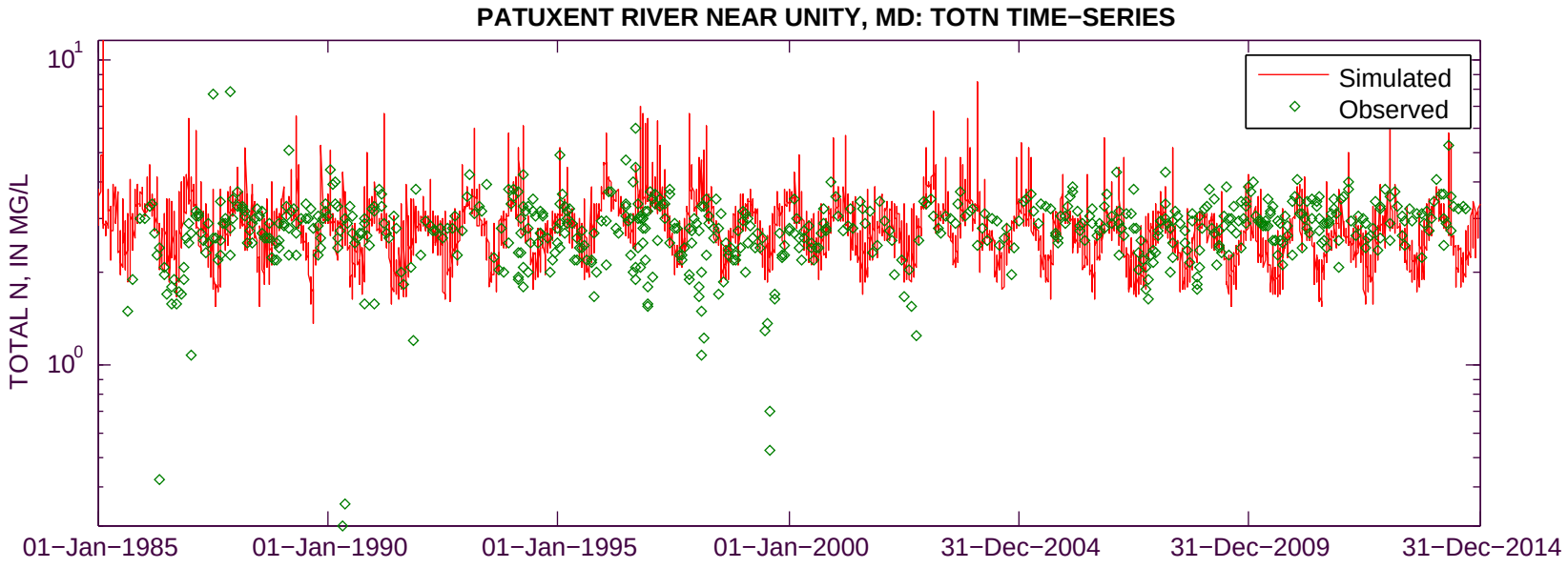
LOAD DATA
LOG10

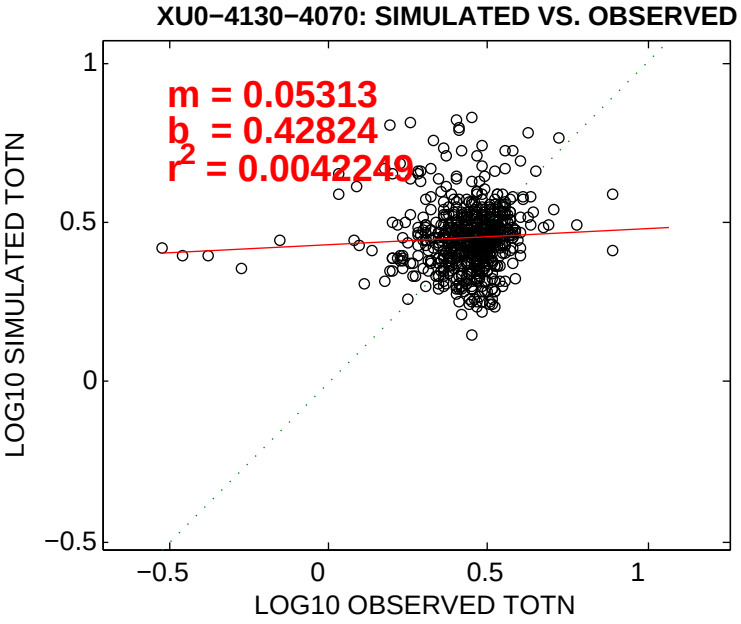


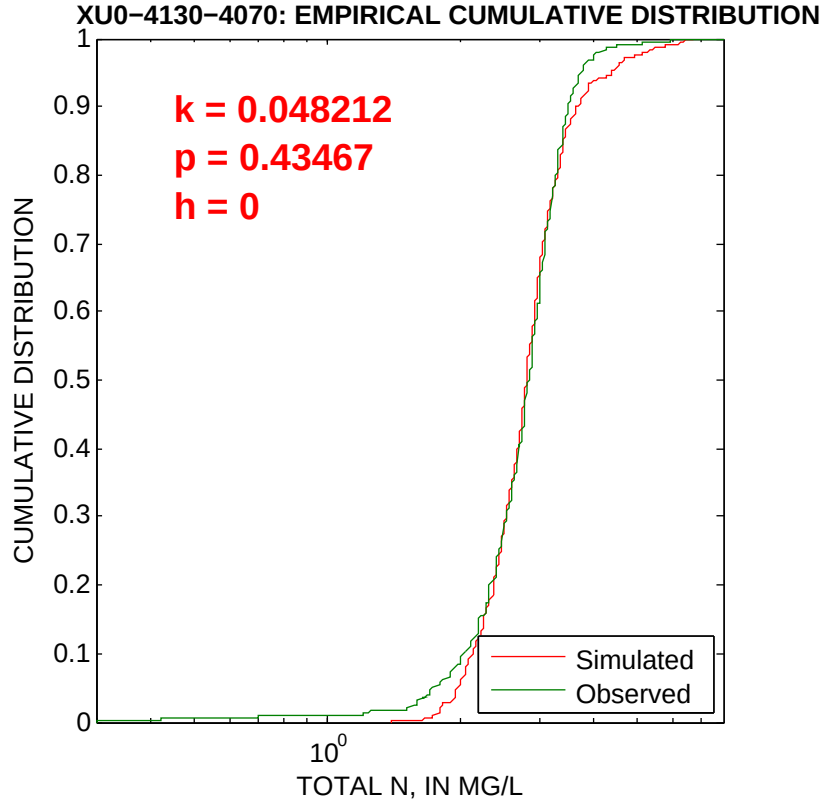












DATA SELECTION

scenario	file
P620171001WQ	TOTN.calib

plot: TOTN - total nitrogen

Dates: 1/1/1985 – 12/31/201

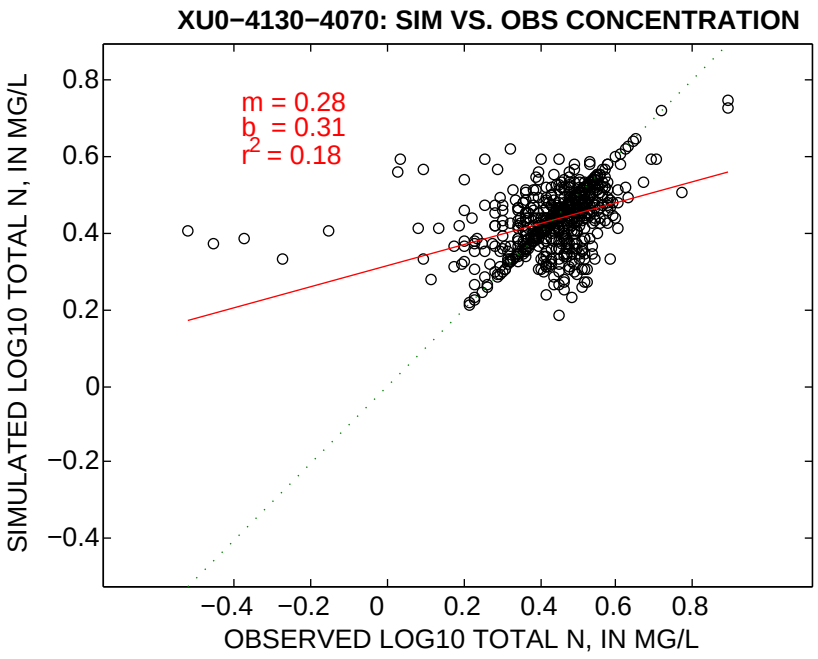
Drive	Directory	Observed
N/A	model	OBS20161101

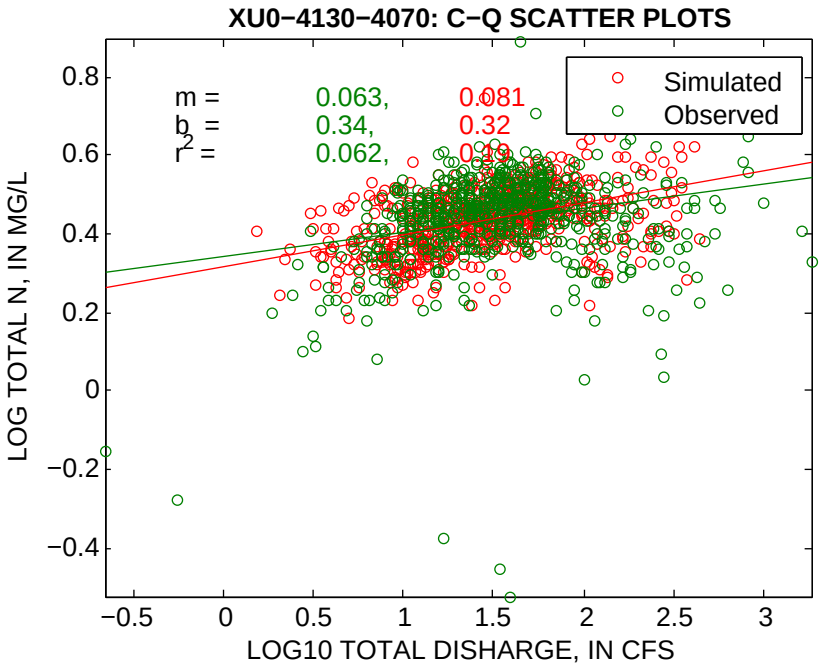
STATISTICS

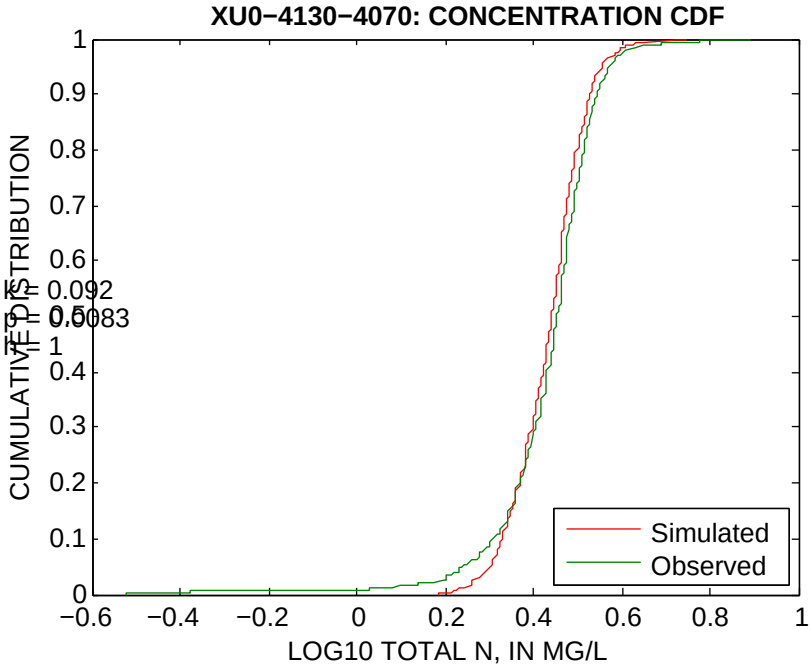
	n	643	643
		observe	simulate
min		0.3	1.4
		-0.522879	0.146128
mean		2.82446	2.90784
		0.436354	0.451419
media		2.85	2.8103
		0.454845	0.448753
max		7.8	6.7059
		0.892095	0.826457
varian		0.471138	0.55427
		0.0149857	0.0100125
JB		0.001	0.001
		0.001	0.001
		ra	log
%		2.95194	3.45242
err.va		0.954417	0.0236331
rel.std.err		2.02577	1.57704
mod.eff		-1.02577	-0.577044

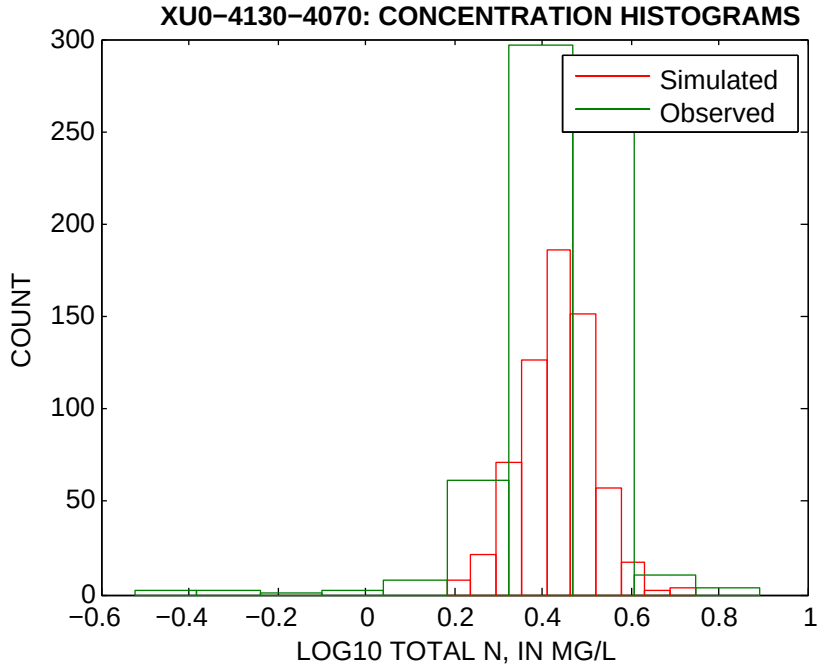
VERSION 2.1

ALL DATA
LOG10

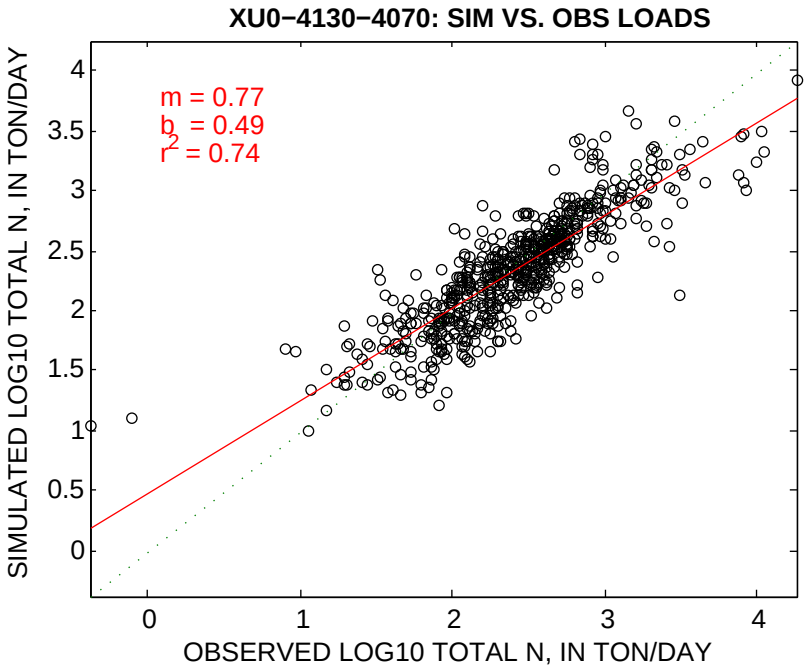




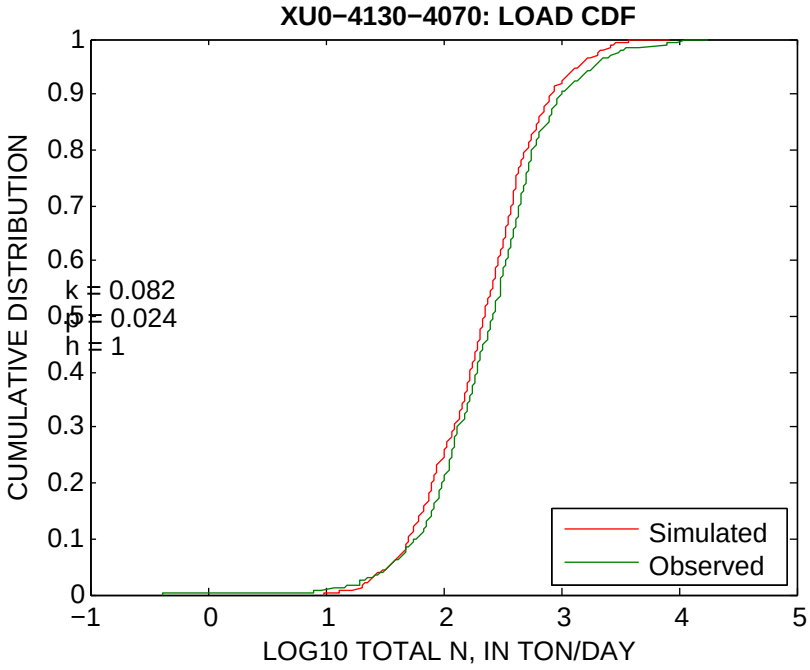


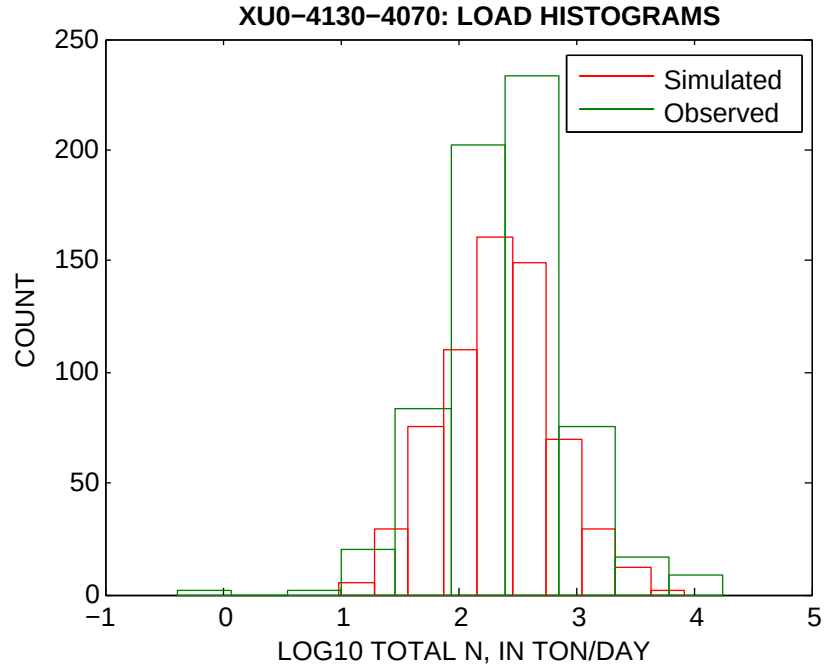


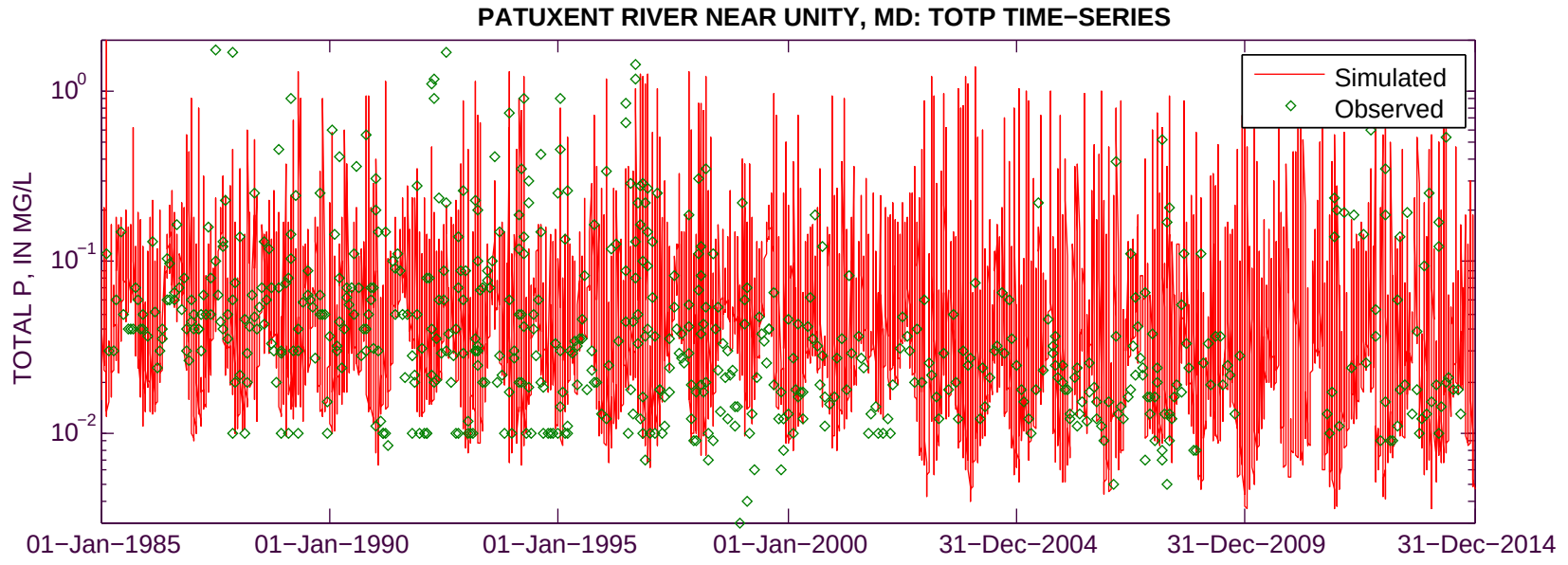
LOAD DATA
LOG10

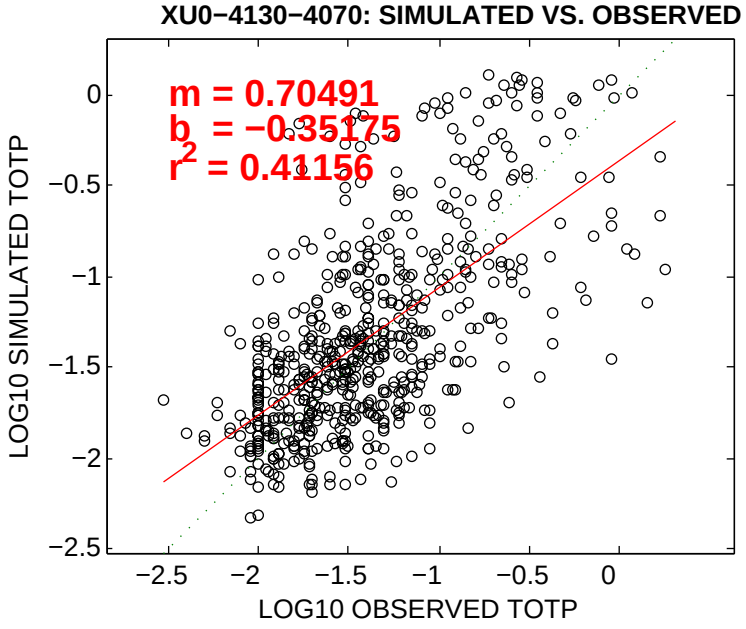


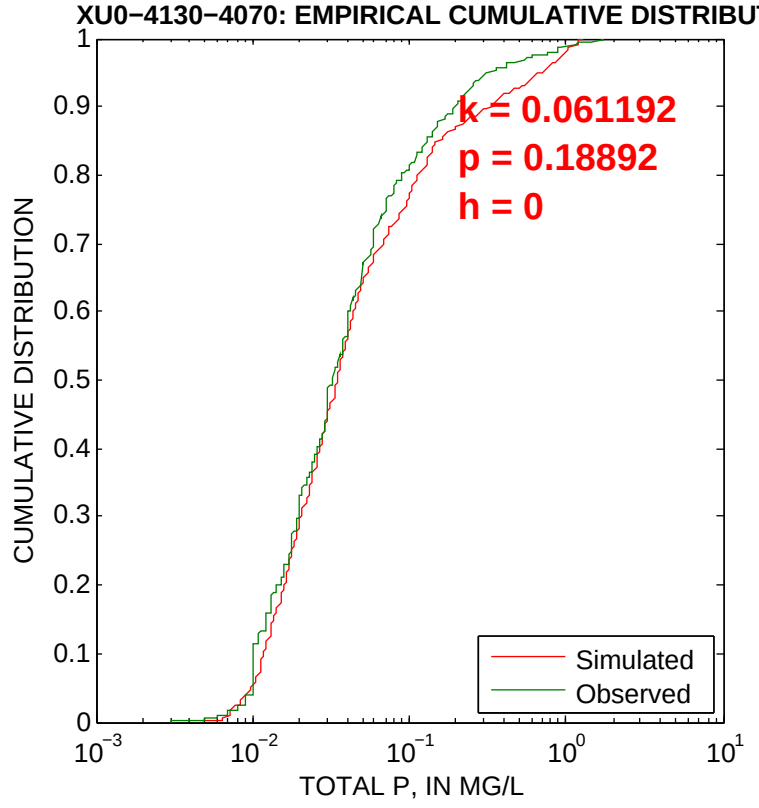












DATA SELECTION

scenario	file
P620171001WQ	TOTP.calib

plot: TOTP - total phosphorus

Dates: 1/1/1985 – 12/31/201

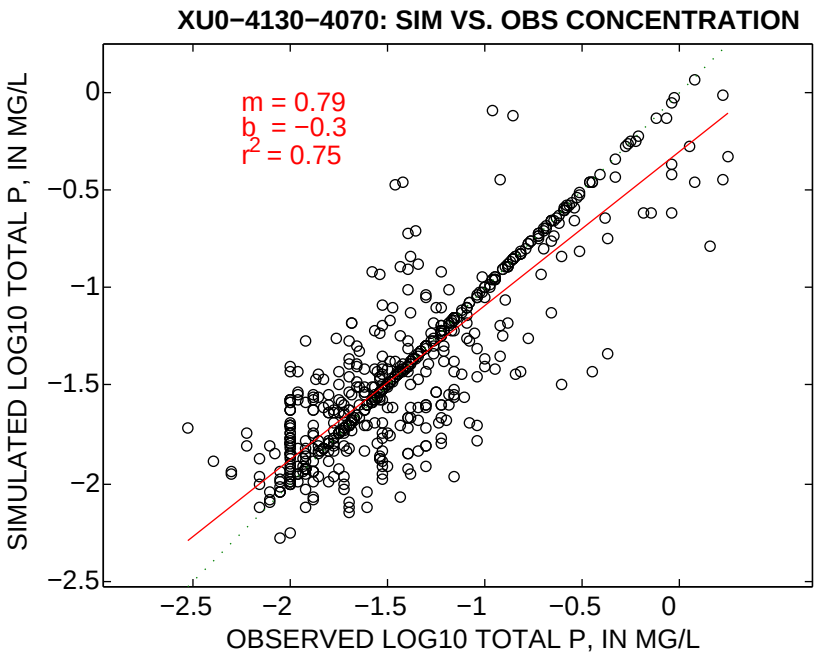
Drive	Directory	Observed
N/A	model	OBS20161101

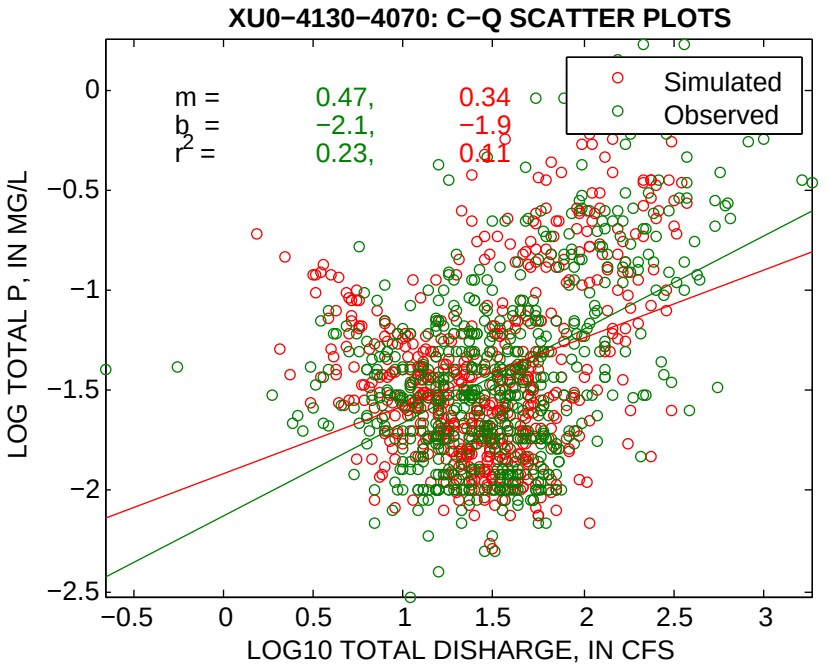
STATISTICS

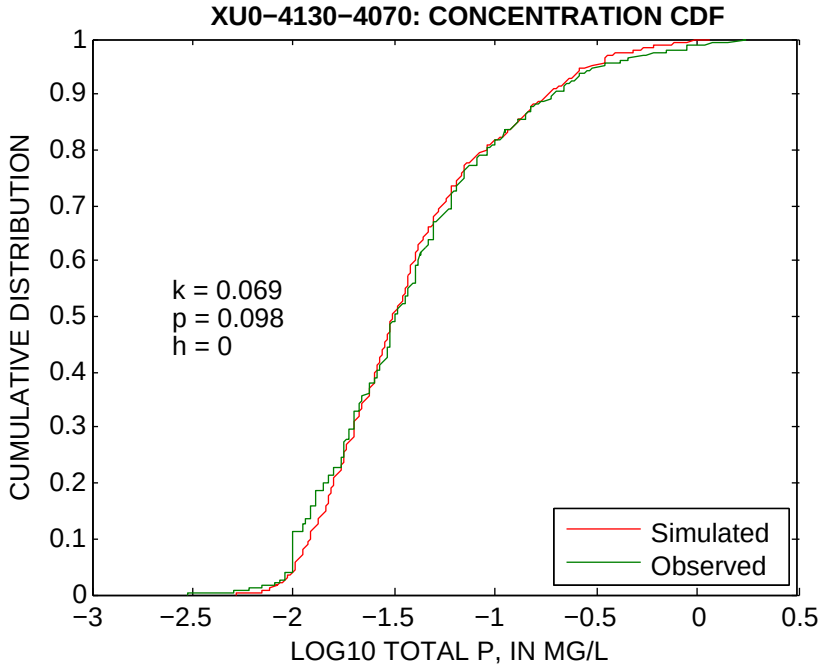
	n	621	621
		observe	simulate
min		0.003	0.004625
		-2.52288	-2.33489
mean		0.089749	0.118649
		-1.40787	-1.34417
media		0.032	0.034491
		-1.49485	-1.46229
max		1.75	1.2794
		0.243038	0.107006
varian		0.0370199	0.0516088
		0.239222	0.288822
JB		0.001	0.001
		0.001	0.001
		ra	log
%		32.2005	-4.52447
err.va		0.0556482	0.194849
rel.std.err		1.5032	0.814512
mod.eff		-0.503199	0.185488

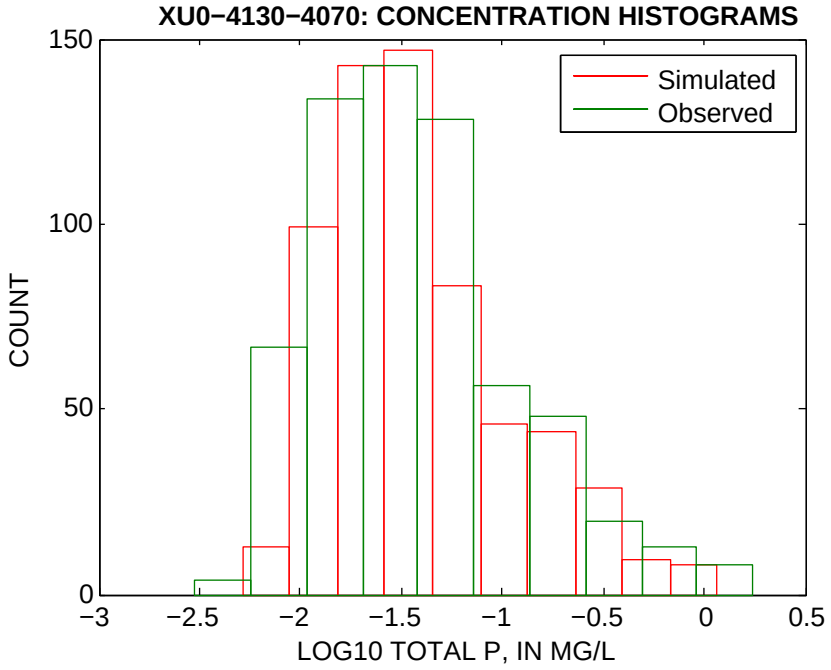
VERSION 2.1

ALL DATA
LOG10

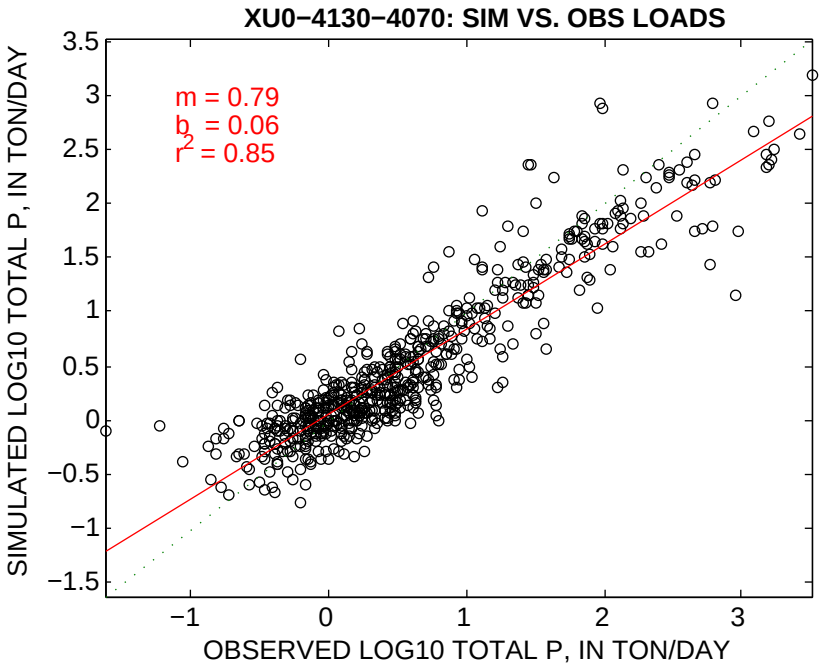


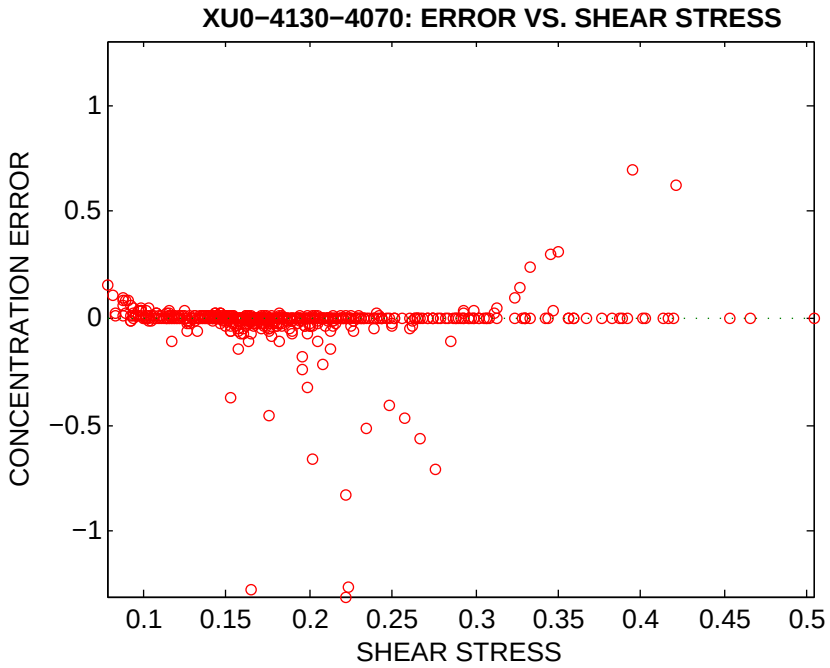


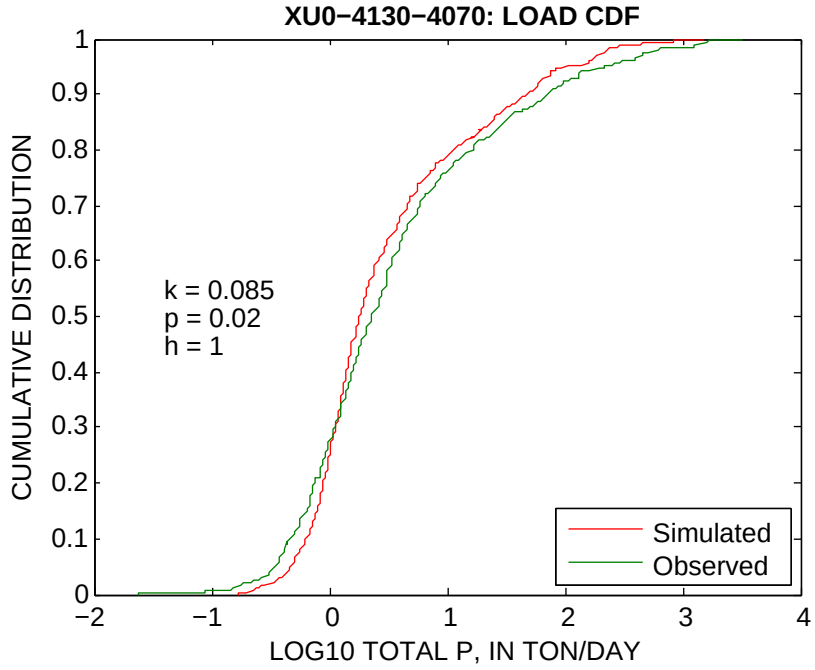


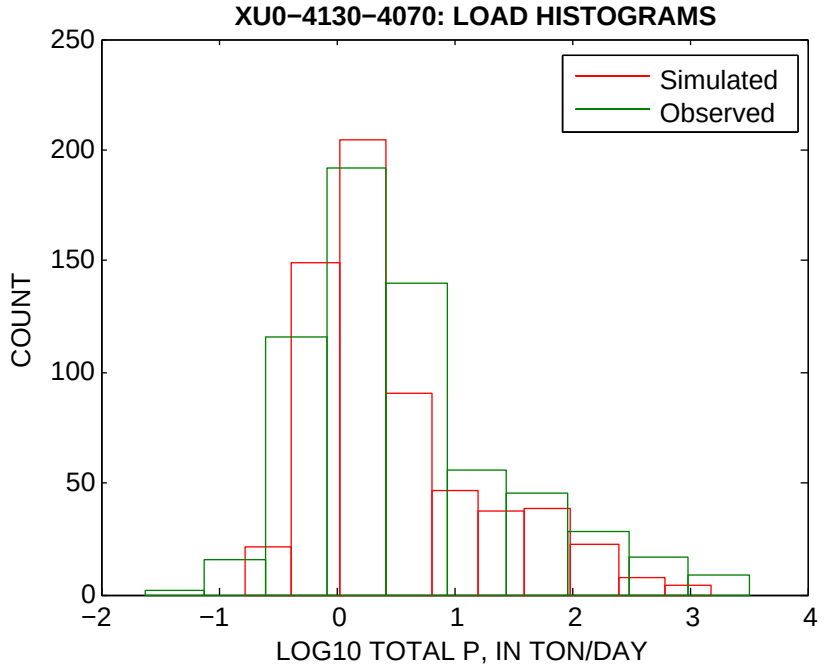


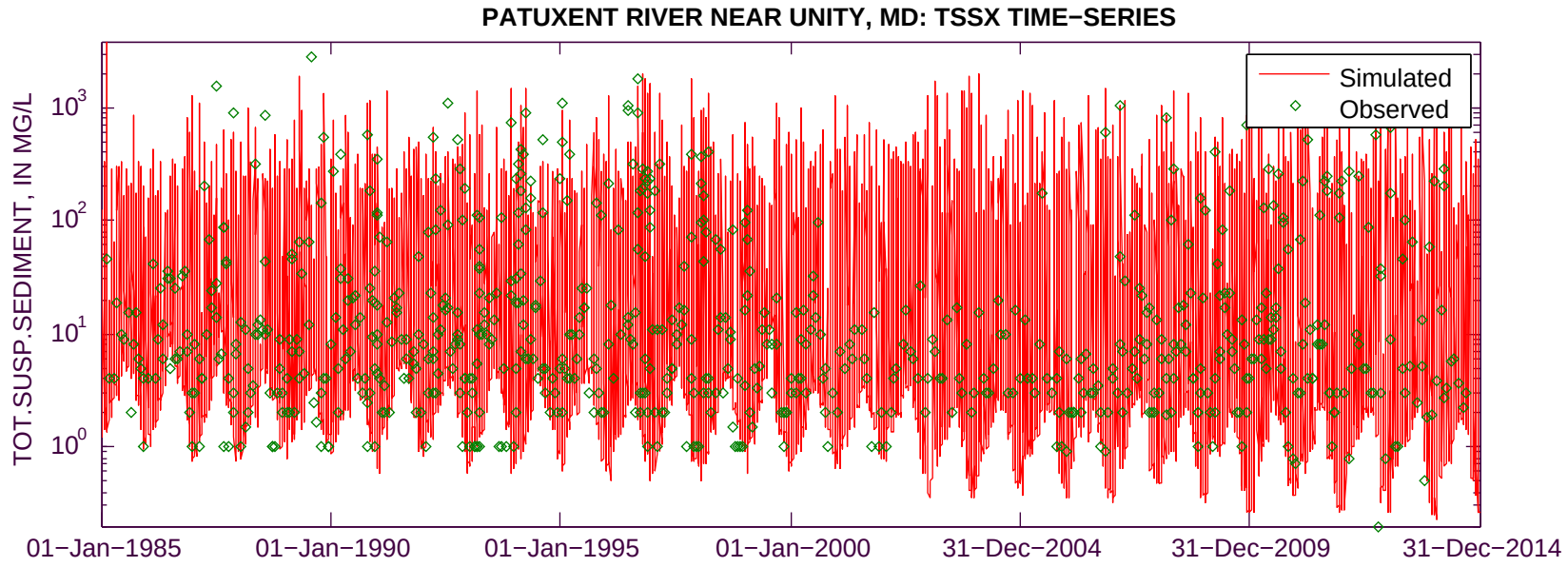
LOAD DATA
LOG10

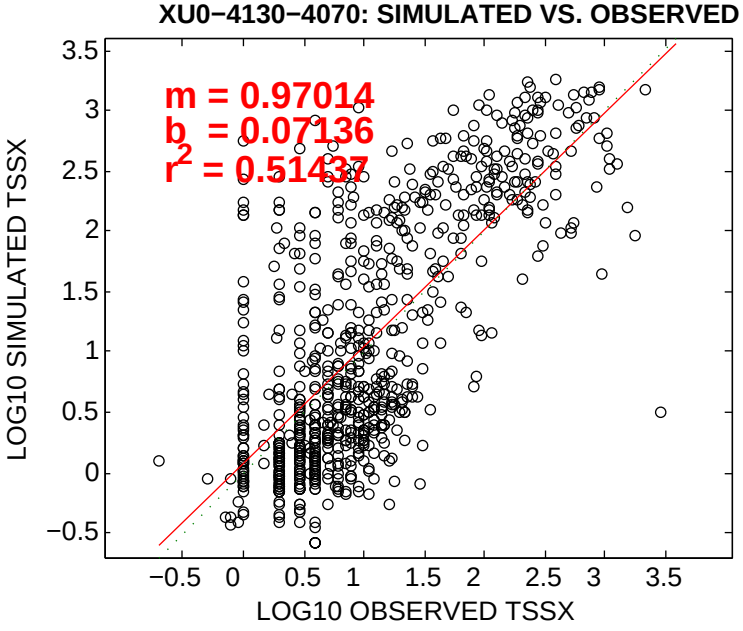


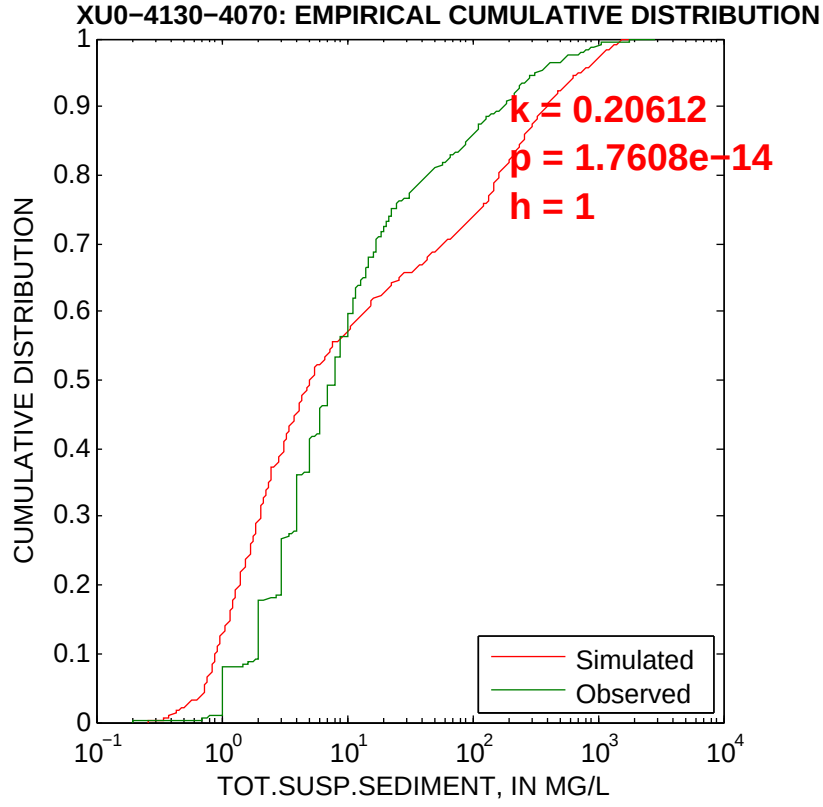












DATA SELECTION

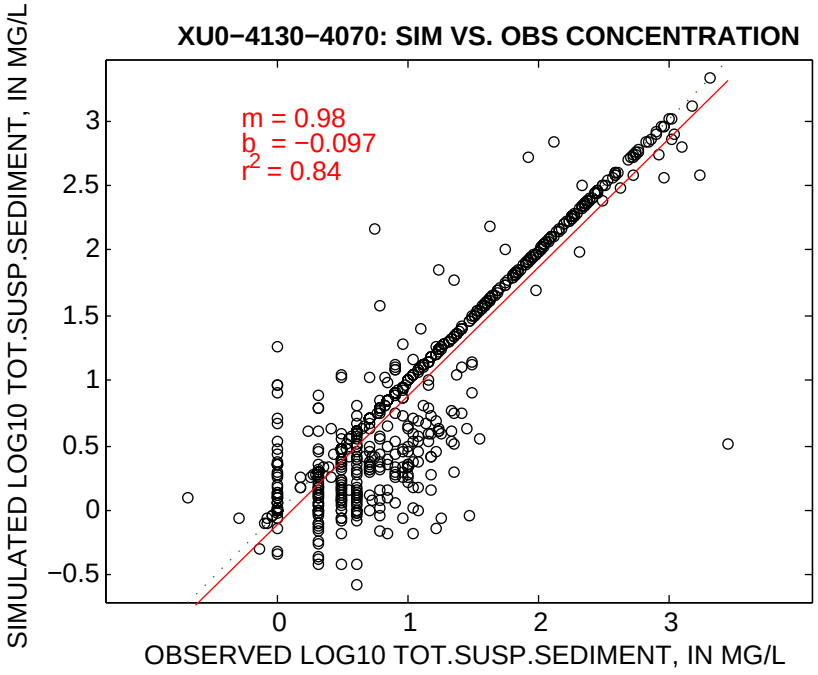
scenario: P620171001WQ
file: TSSX.calib
plot: TSSX - total suspended ...
Dates: 1/1/1985 12/31/201
Drive: N/A
Directory: model
Observed: OBS20161101

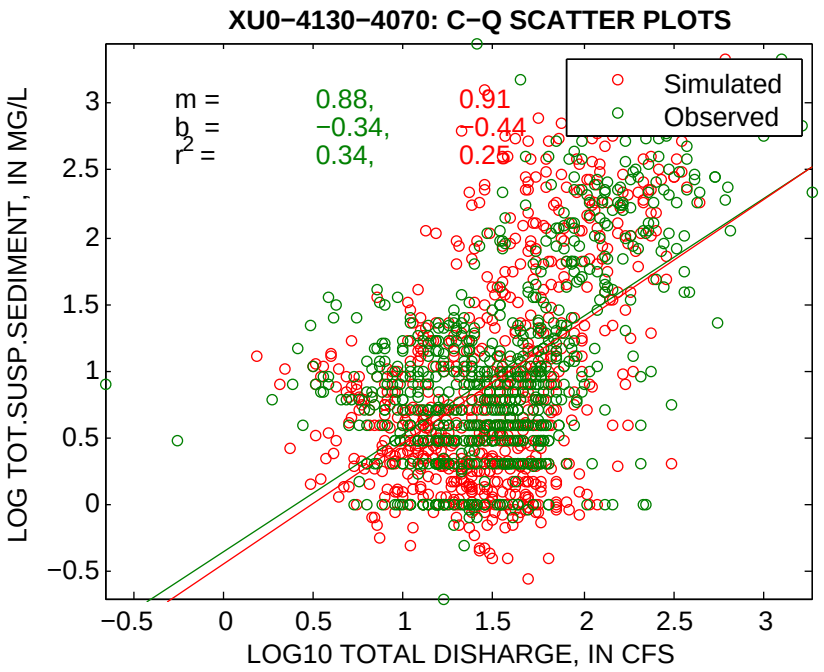
STATISTICS

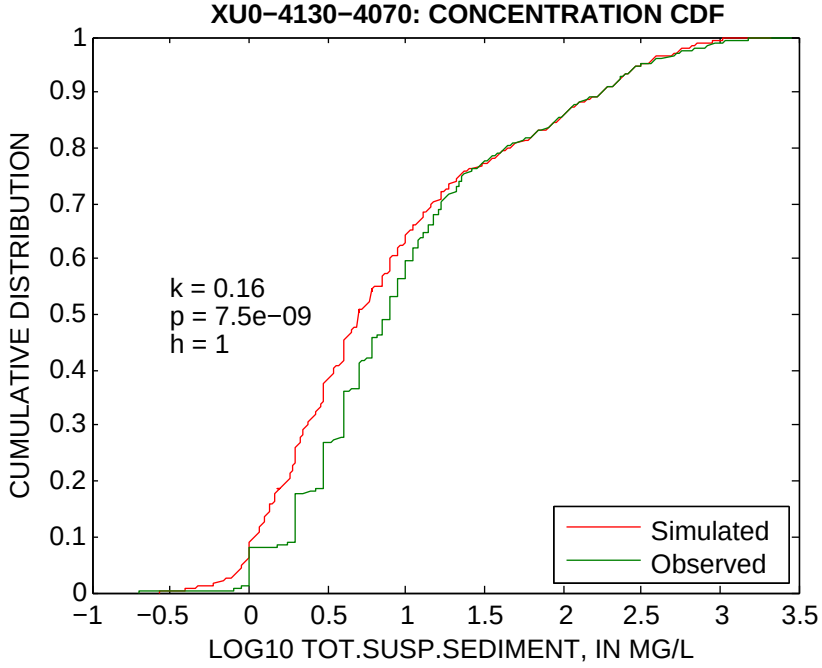
		observe	simulate
n		752	752
min		0.2	0.2665
		-0.69897	-0.574303
mean		68.8052	125.769
		1.03675	1.07716
media		8	5.19835
		0.90309	0.715865
max		2850	1797
		3.45484	3.25455
varian		45754.2	76317.3
		0.564364	1.03265
JB		0.001	0.001
		0.001	0.001
		ra	log
%		82.7896	3.89725
err.va		69852.8	0.503621
rel.std.err		1.5267	0.892369
mod.eff		-0.526696	0.107631

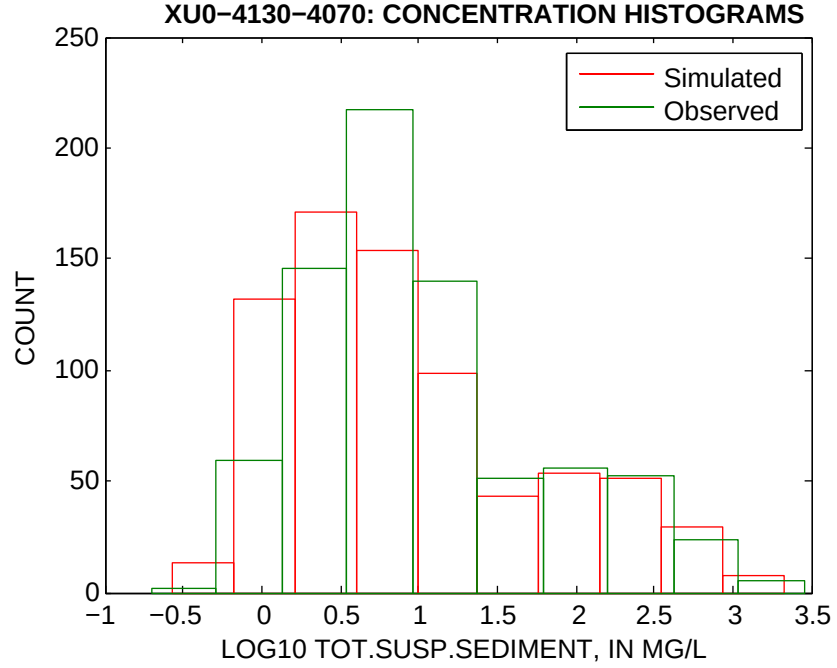
VERSION 2.1

ALL DATA
LOG10

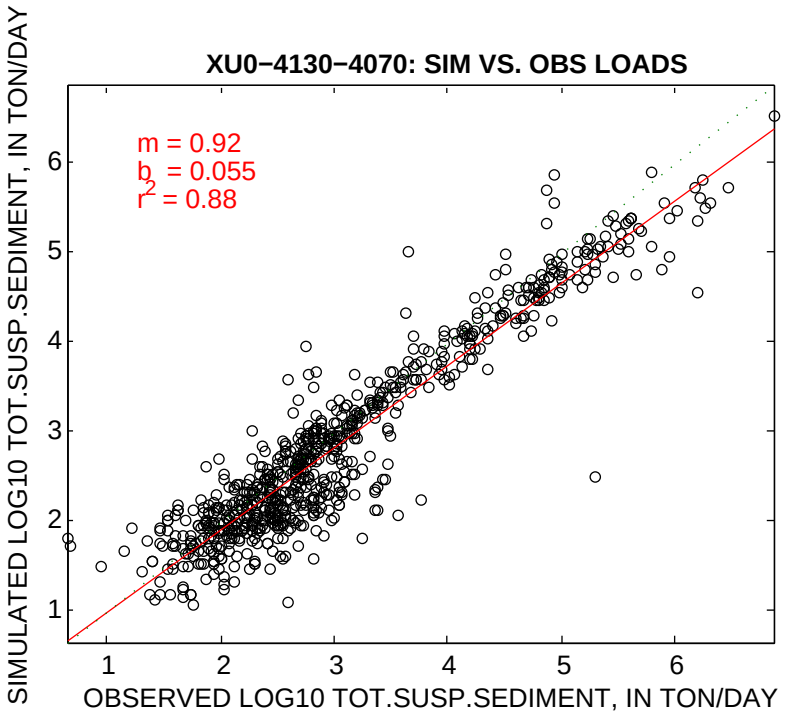


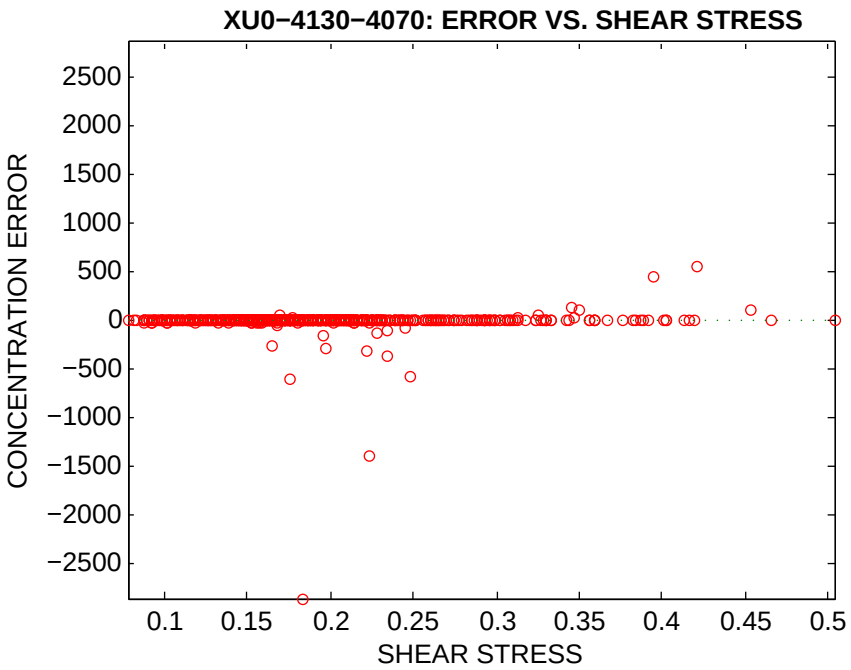


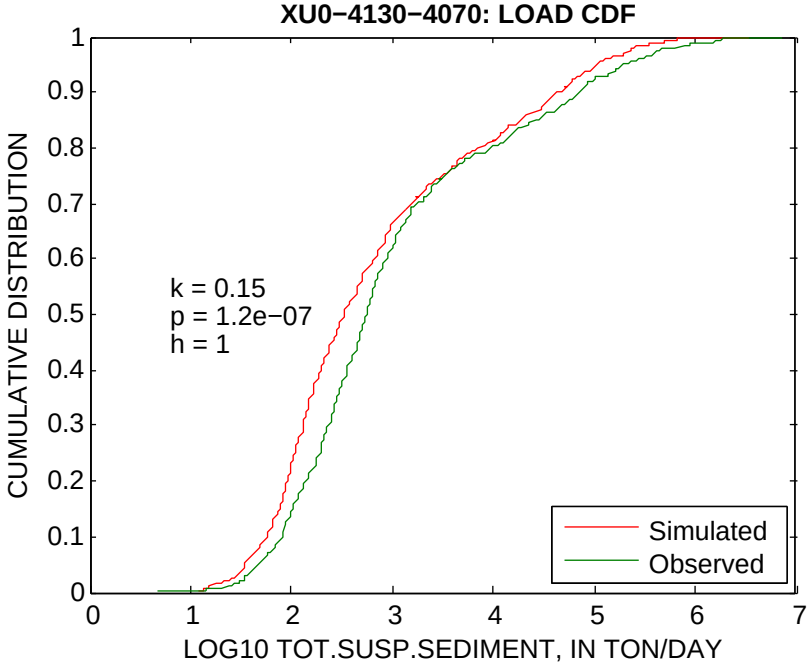


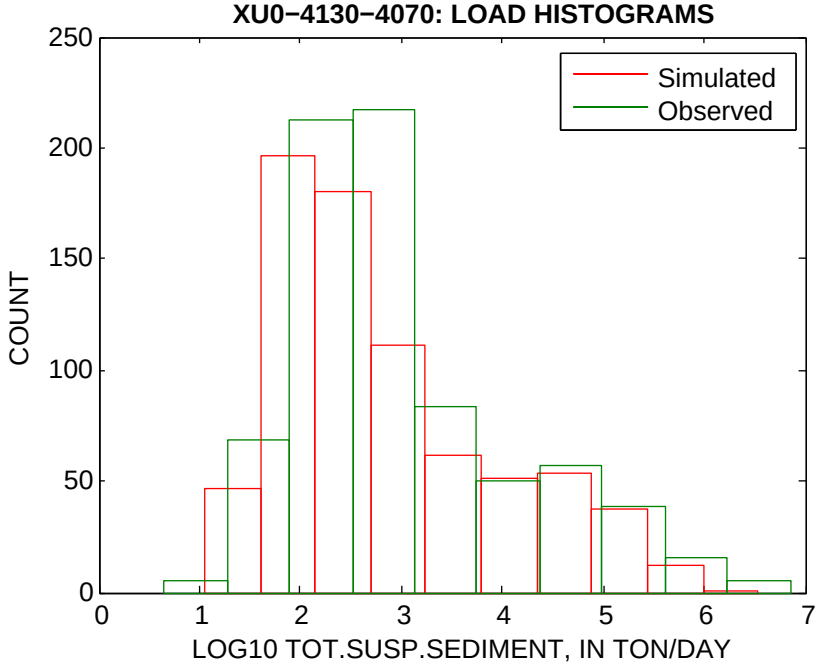


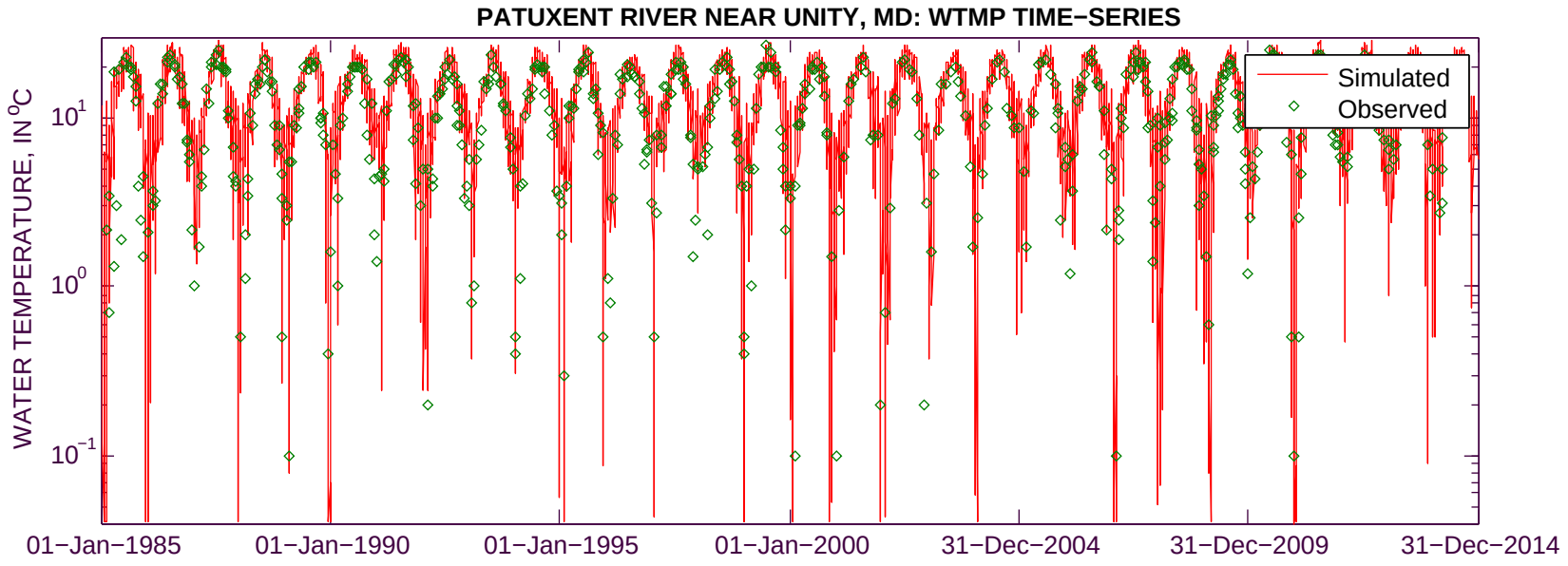
LOAD DATA
LOG10

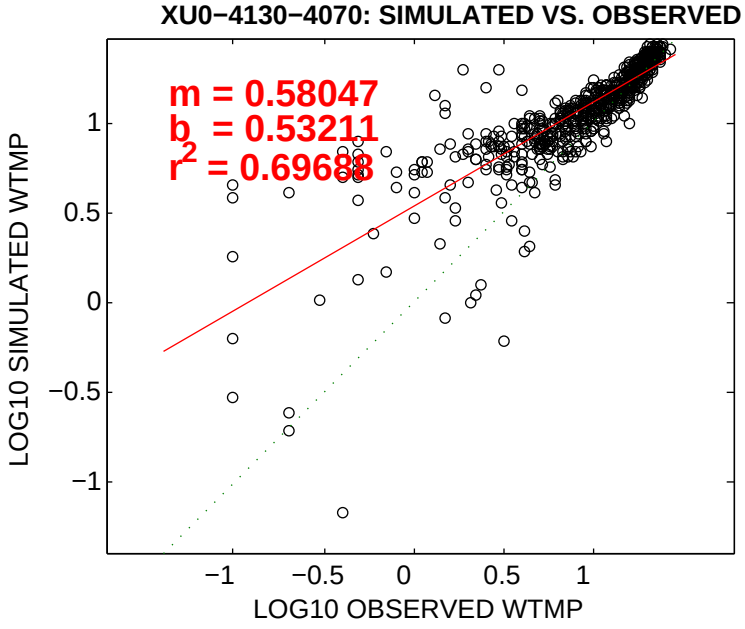


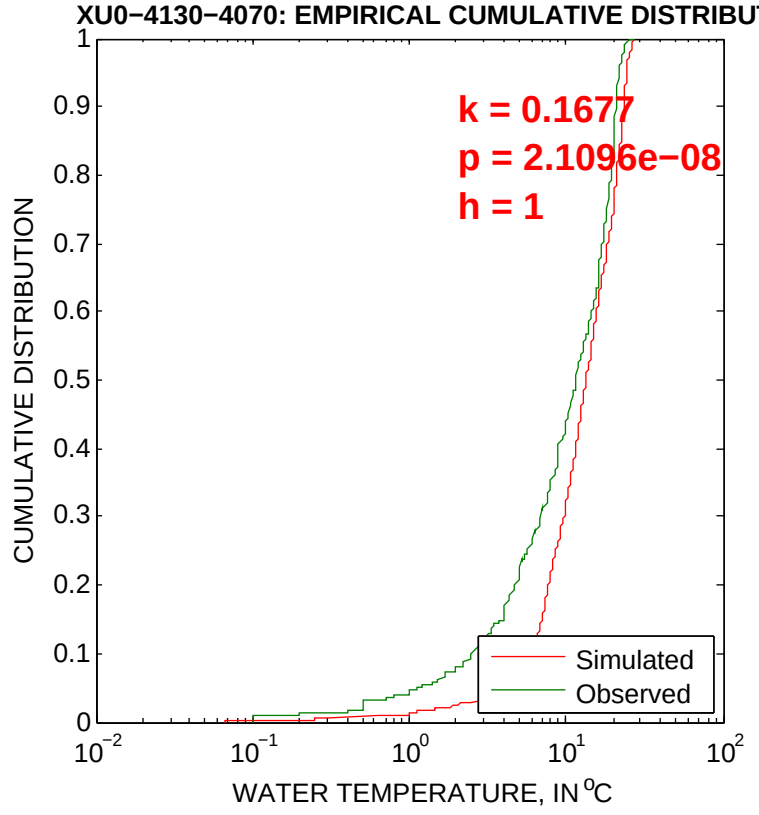












DATA SELECTION

scenario	file
P620171001WQ	WTMP.calib

plot: WTMP - water tempera...

Dates: 1/1/1985 – 12/31/201

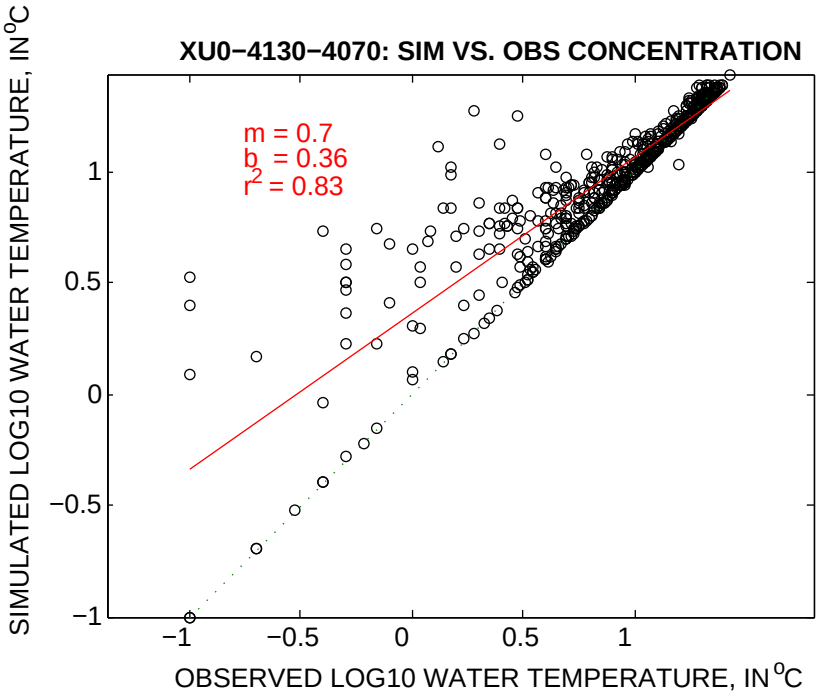
Drive	Directory	Observed
N/A	model	OBS20161101

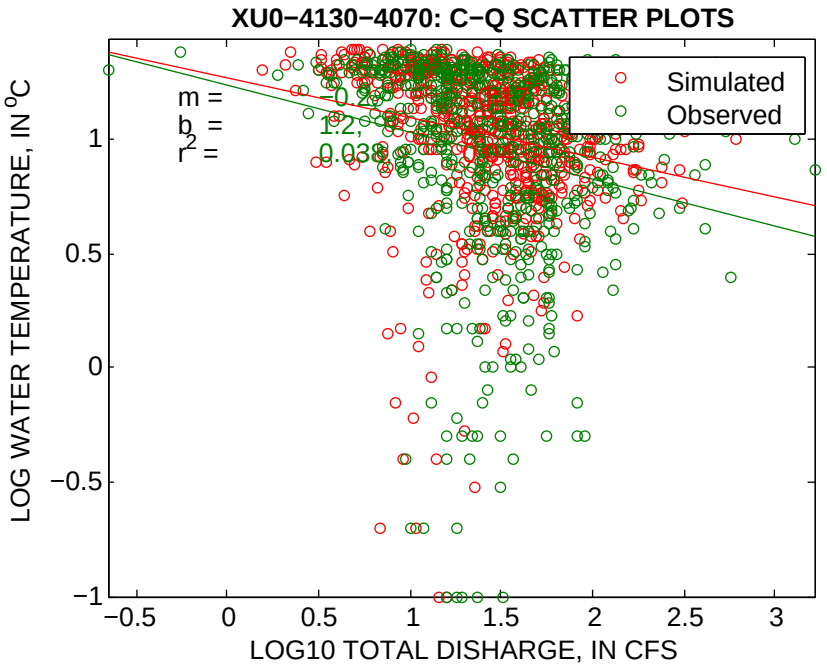
STATISTICS

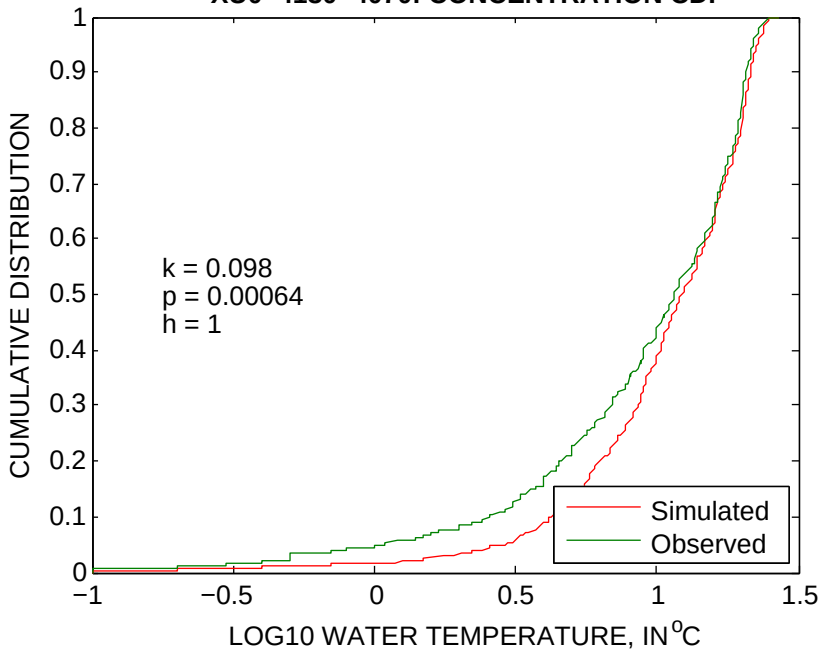
	n	644	644
		observe	simulate
min		0.1	0.067828
		-1	-1.16859
mean		11.8904	14.1066
		0.94249	1.0792
media		11.5	13.427
		1.0607	1.12798
max		27	27.528
		1.43136	1.43977
varian		47.6984	43.4412
		0.183875	0.0889043
JB		0.001	0.001
		0.001	0.001
		ra	log
%		18.6386	14.5049
err.va		10.991	0.0780299
rel.std.err		0.230426	0.424363
mod.eff		0.769574	0.575637

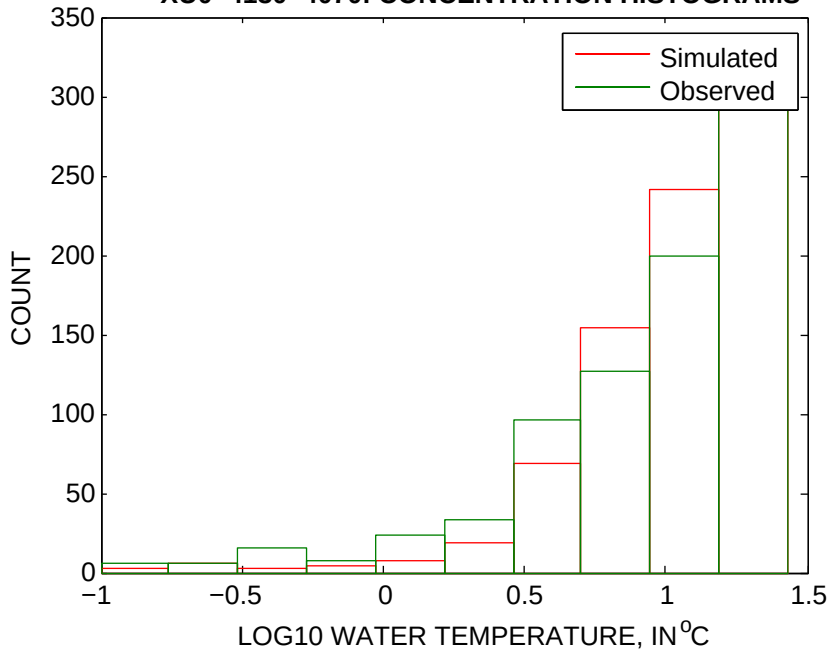
VERSION 2.1

ALL DATA
LOG10

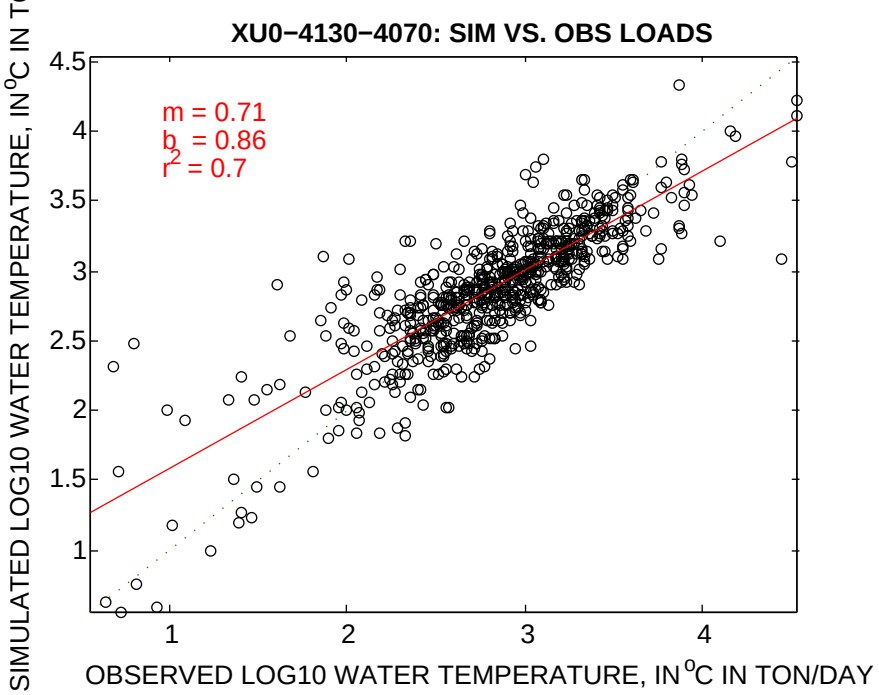


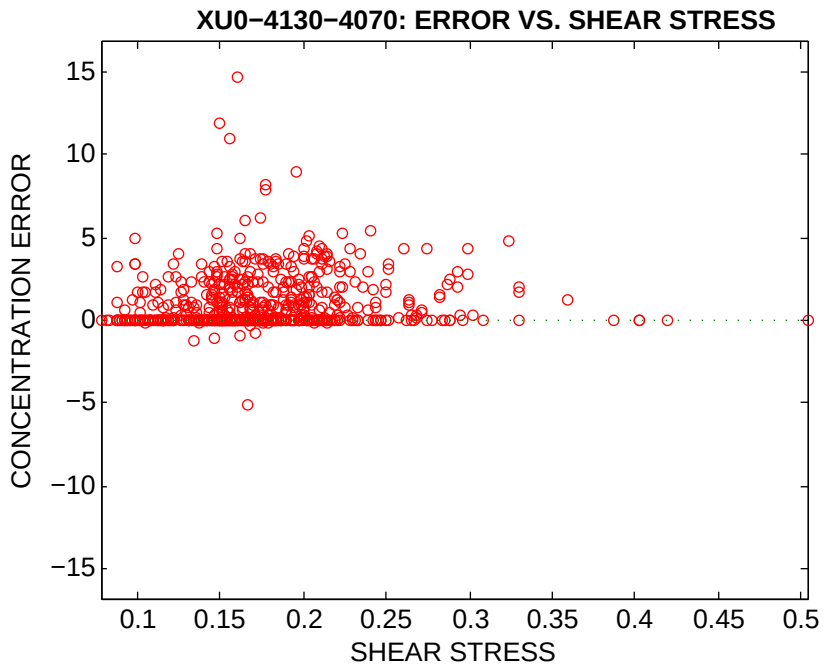


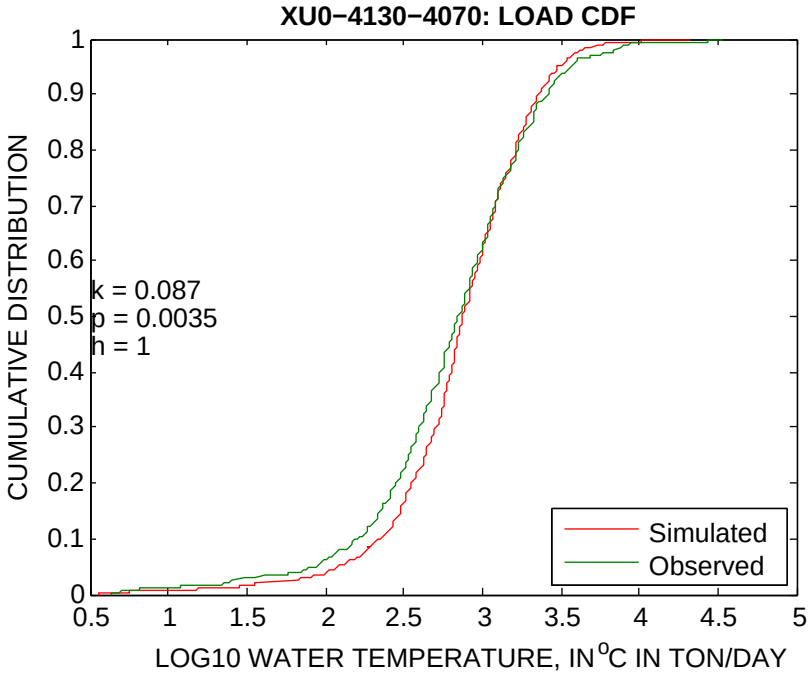


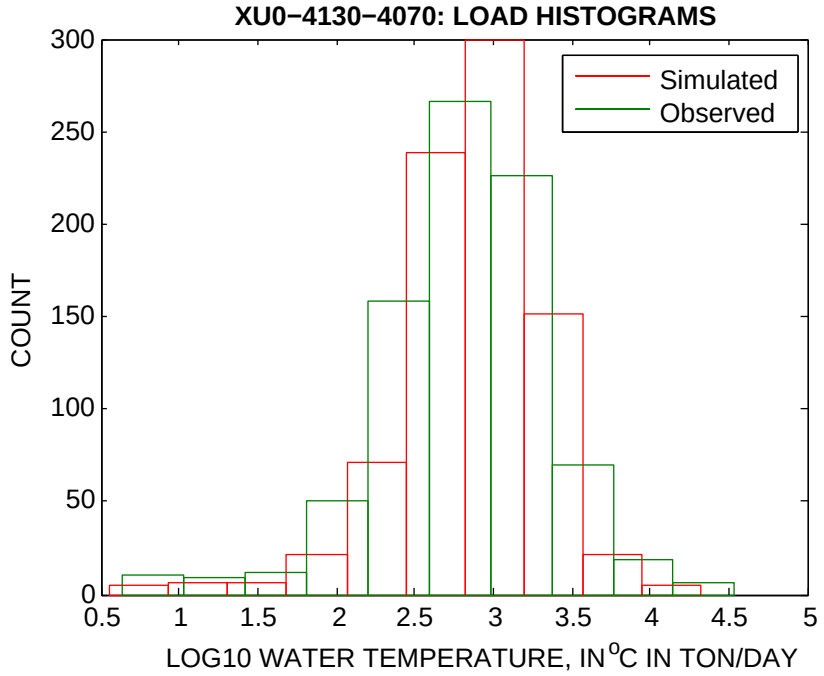


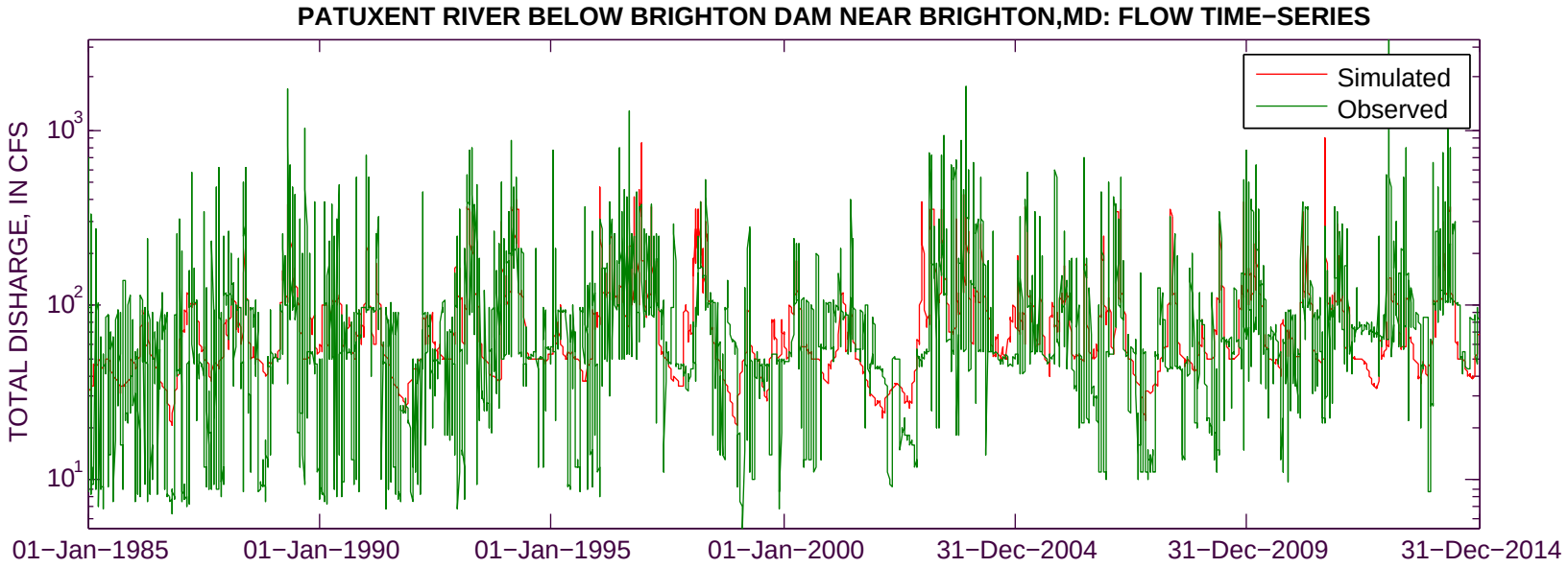
LOAD DATA
LOG10

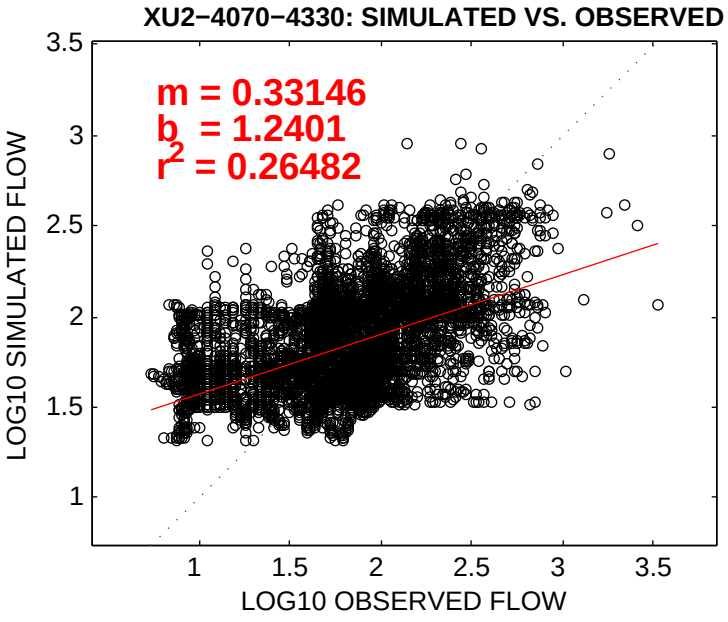


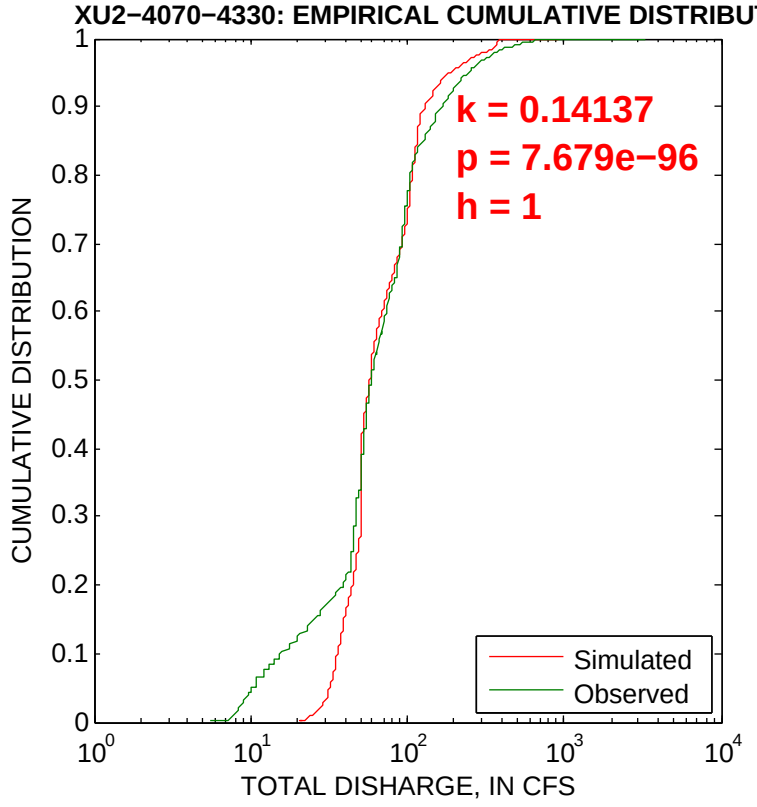












DATA SELECTION

scenario: P620171001WQ | file: _FLOW.calib

plot: FLOW - total discharge

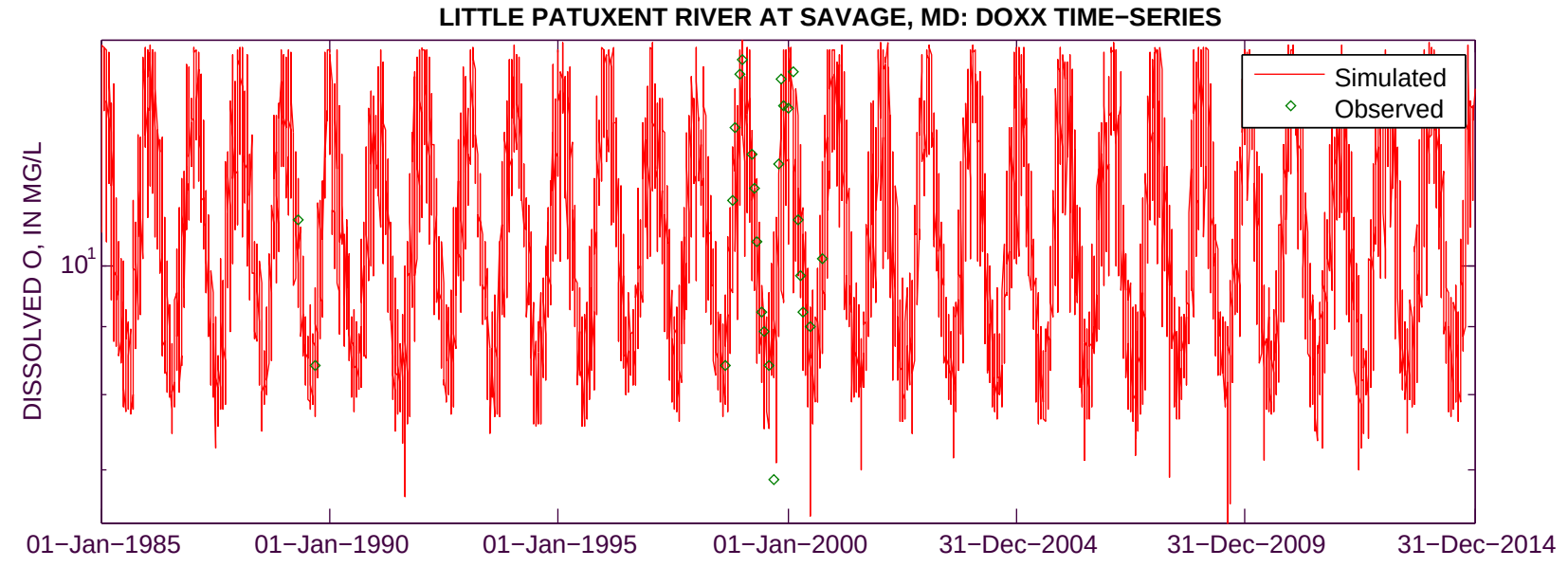
Dates: 1/1/1985 – 12/31/201

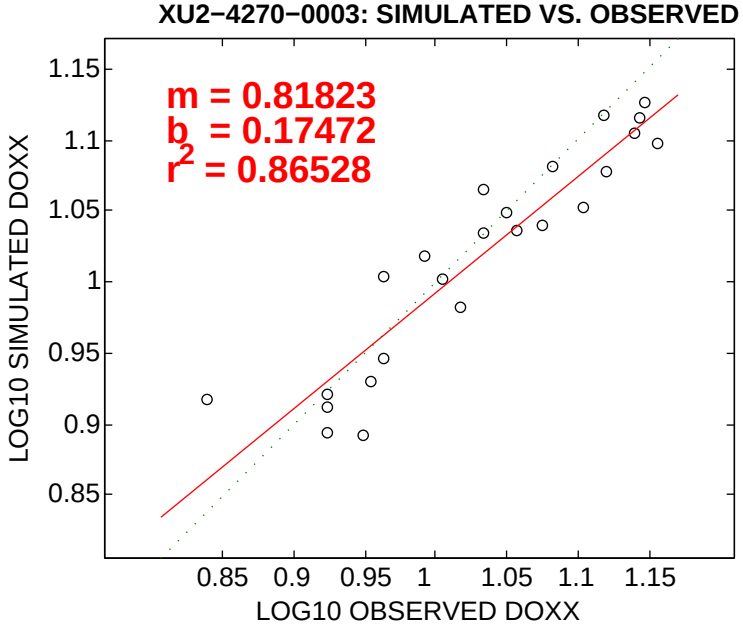
Drive | Directory: N/A | model | Observed: OBS20161101

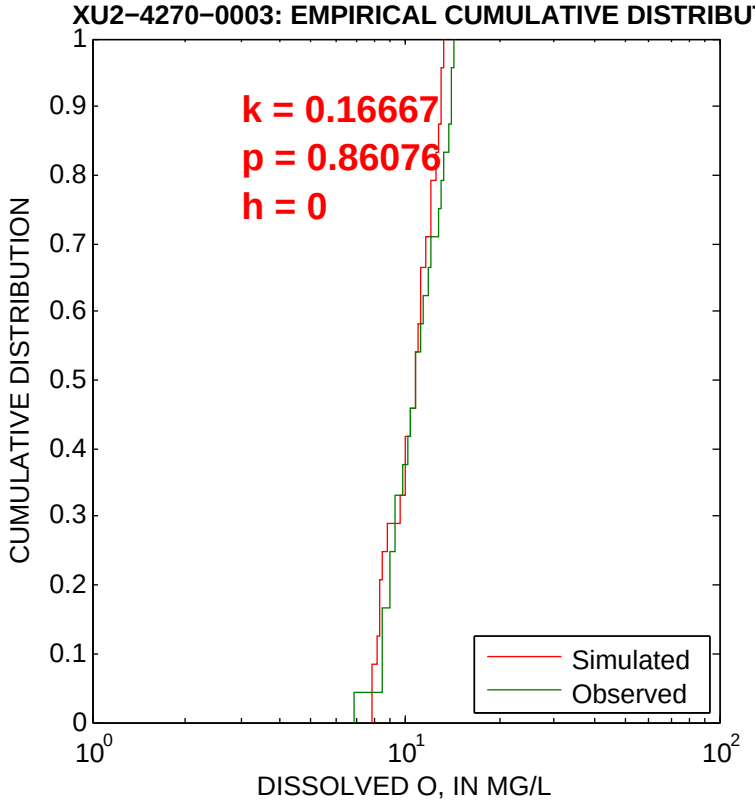
STATISTICS

n	10957	10957
	observe	simulate
min	5.4	20.494
	0.732394	1.31163
mean	86.6717	80.961
	1.77797	1.82939
media	58	57.954
	1.76343	1.76308
max	3350	905.21
	3.52504	2.95675
varian	10397.5	3943.27
	0.140812	0.0584194
JB	0.001	0.001
	0.001	0.001
	ra	log
%	-6.58887	2.89196
err.va	7794.45	0.108527
rel.std.err	0.749649	0.770726
mod.eff	0.250351	0.229274

VERSION 2.1







DATA SELECTION

scenario: P620171001WQ | file: DOXX.calib

plot: DOXX - dissolved oxygen

Dates: 1/1/1985 – 12/31/201

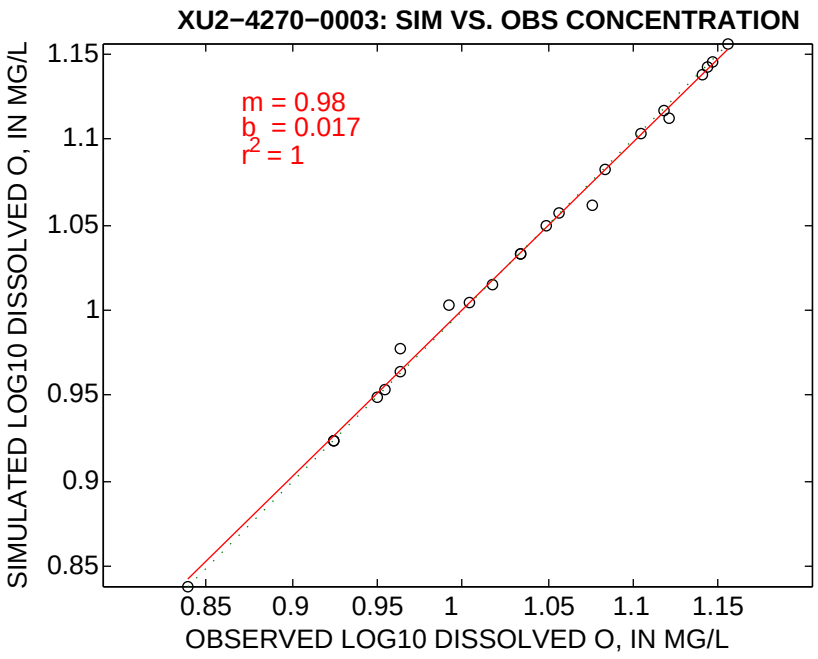
Drive: N/A | Directory: model | Observed: OBS20161101

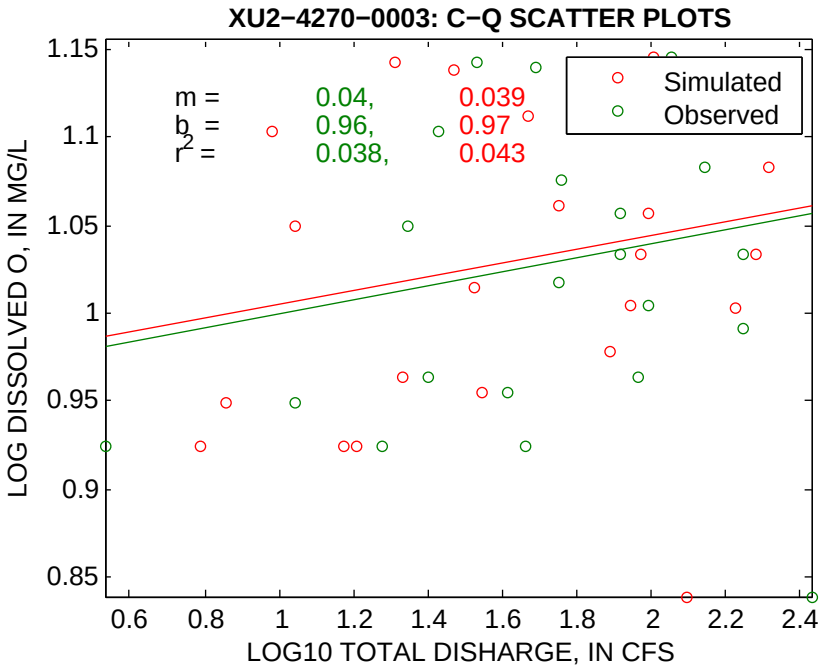
STATISTICS

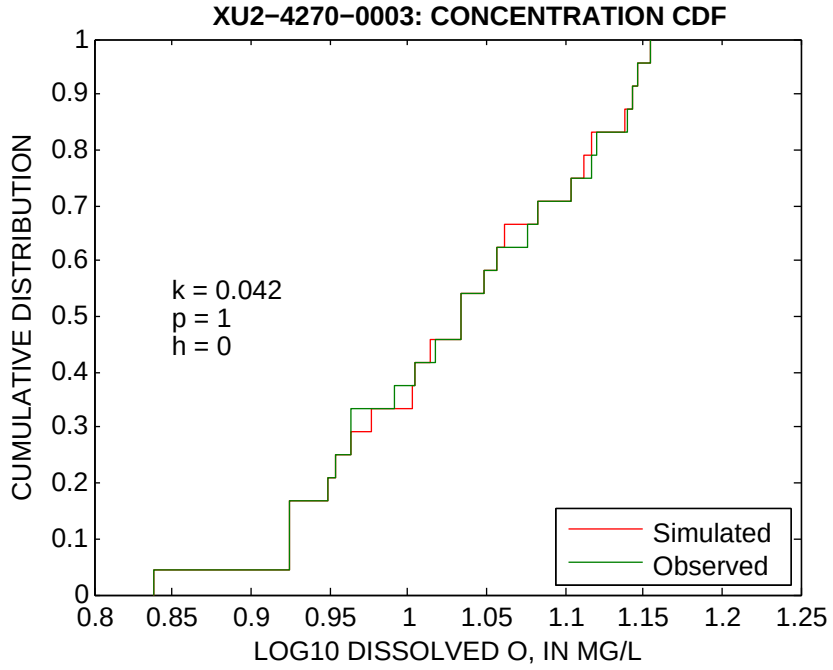
		observe	simulate
n		24	24
min		6.9	7.8085
		0.838849	0.892568
mean		10.9125	10.5586
		1.0297	1.01725
media		10.8	10.8435
		1.03342	1.03517
max		14.3	13.357
		1.15534	1.12571
varian		4.56462	3.28416
		0.00759514	0.00587662
JB		0.325438	0.222614
		0.463085	0.172335
		ra	log
%		-3.24276	-1.20916
err.va		0.711634	0.00120444
rel.std.err		0.155902	0.158581
mod.eff		0.844098	0.841419

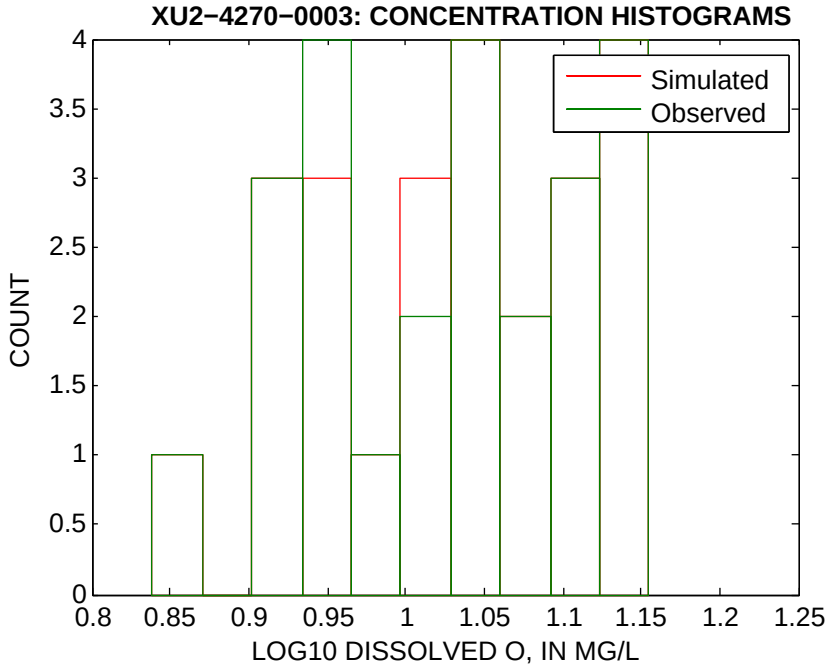
VERSION 2.1

ALL DATA
LOG10

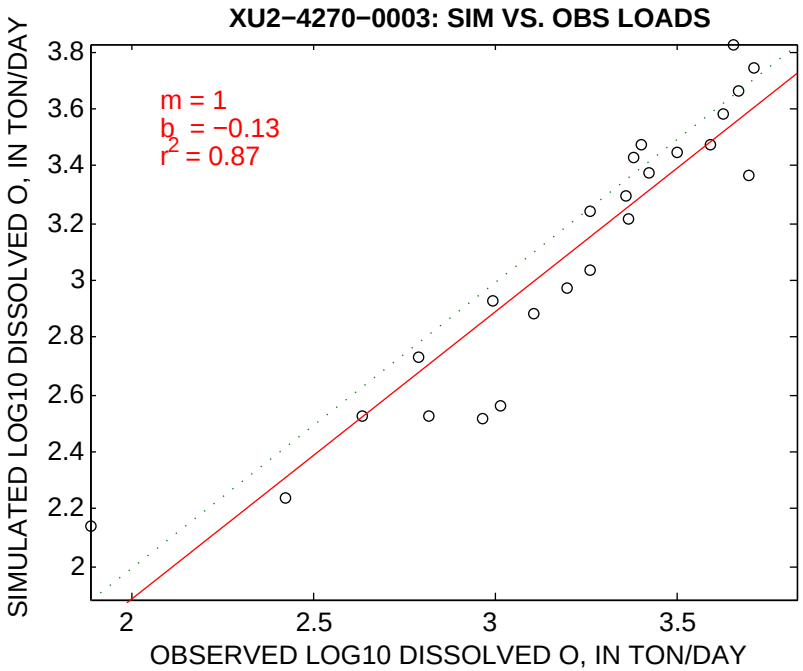




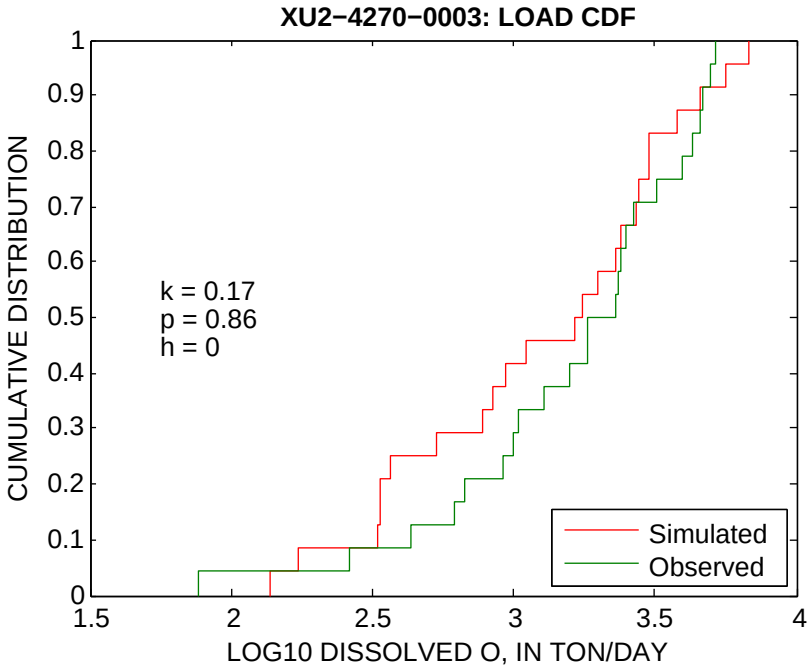


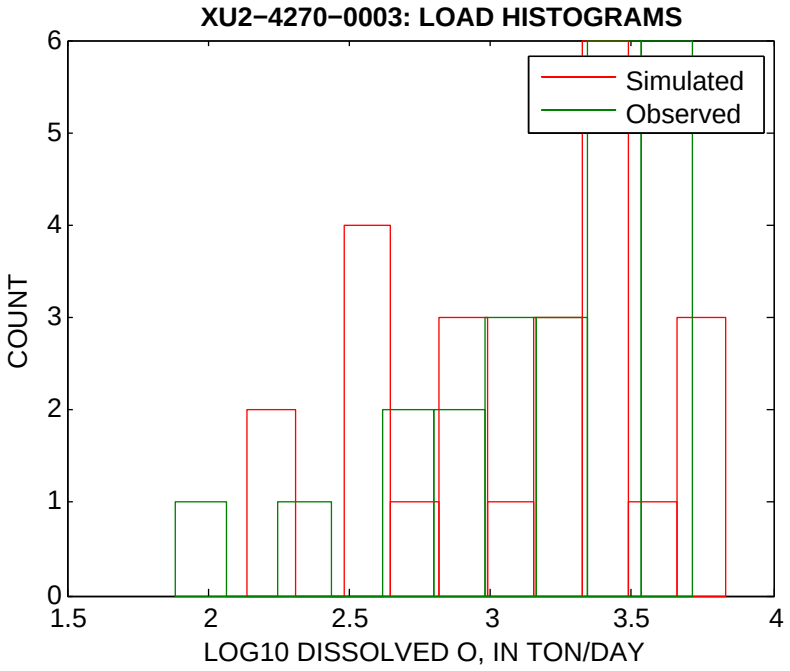


LOAD DATA
LOG10

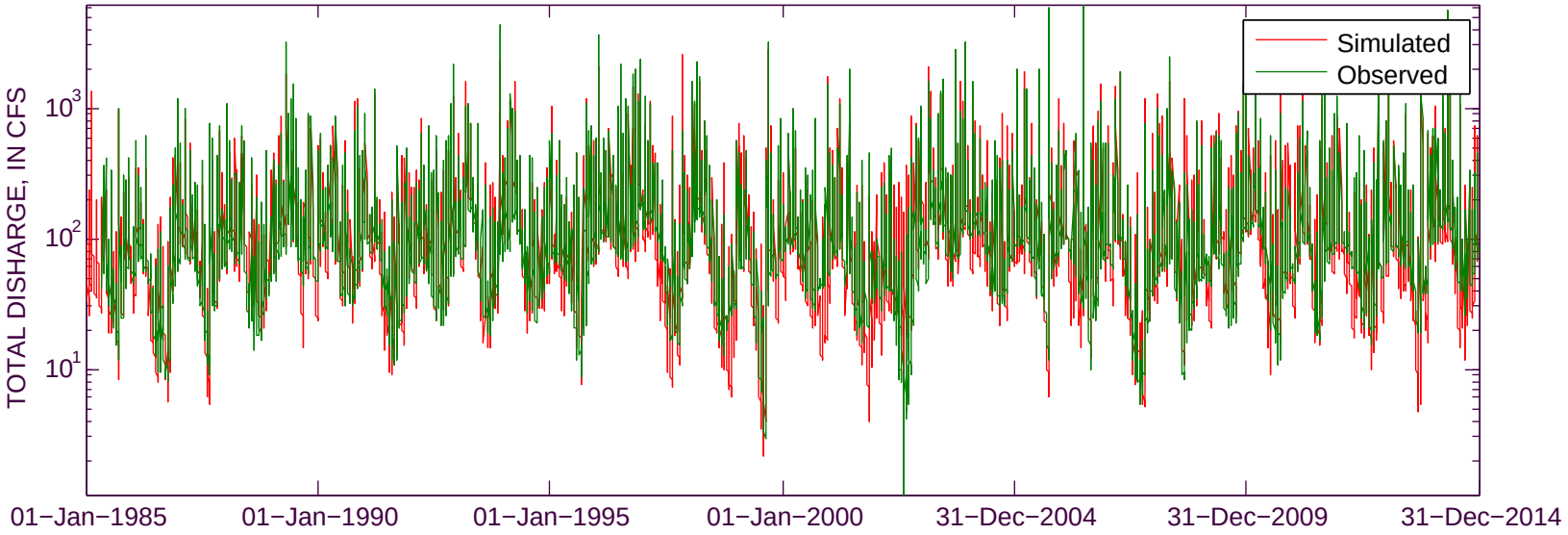




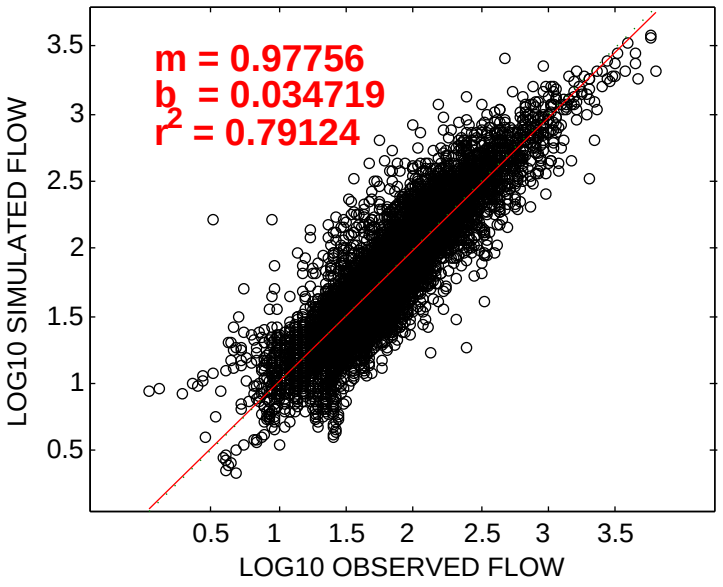




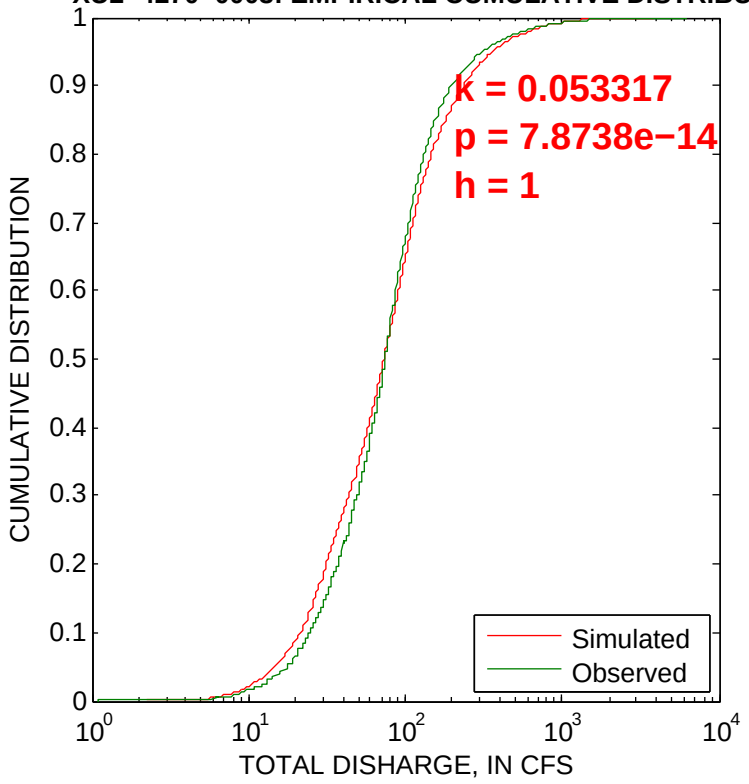
LITTLE PATUXENT RIVER AT SAVAGE, MD: FLOW TIME-SERIES



XU2-4270-0003: SIMULATED VS. OBSERVED



XU2-4270-0003: EMPIRICAL CUMULATIVE DISTRIBUTION



DATA SELECTION

scenario: P620171001WQ | file: _FLOW.calib

plot: FLOW - total discharge

Dates: 1/1/1985 – 12/31/201

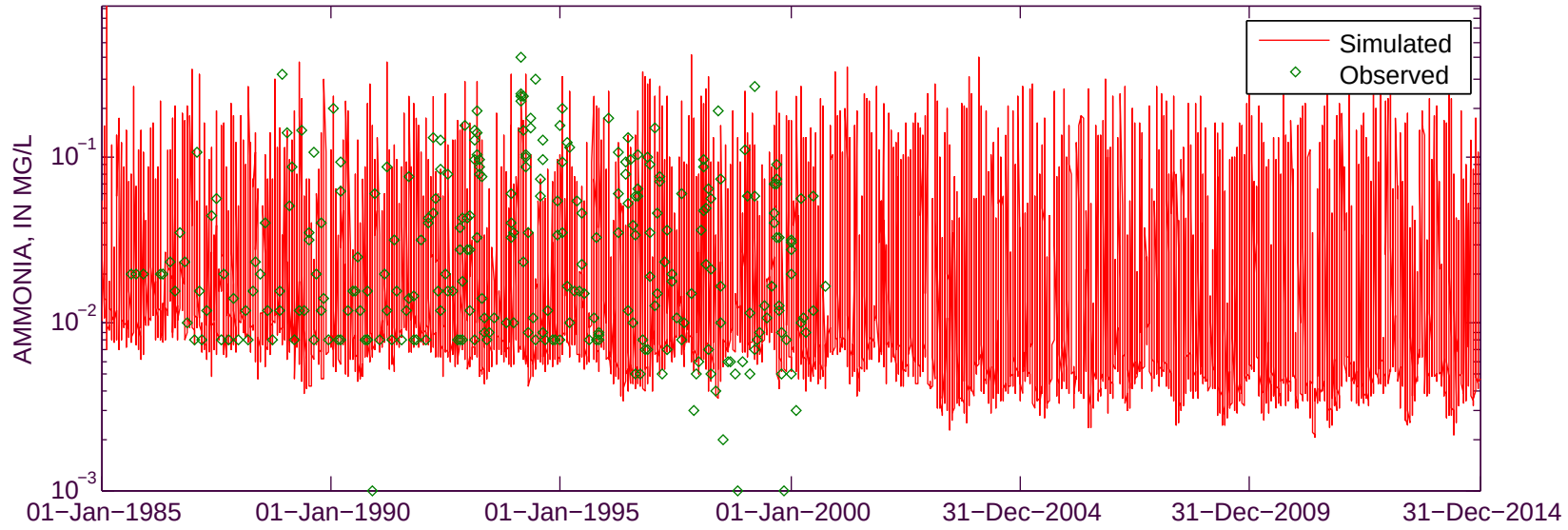
Drive: N/A | Directory: model | Observed: OBS20161101

STATISTICS

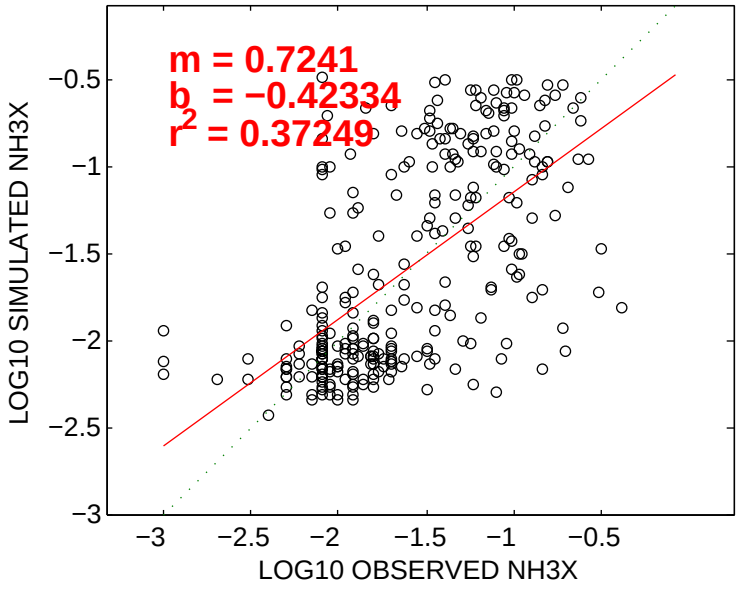
		observe	simulate
n		10822	10822
min		1.1	2.1424
		0.0413927	0.330901
mean		115.733	119.196
		1.8622	1.85513
media		74	73.364
		1.86923	1.86548
max		6280	3809.6
		3.79796	3.58088
varian		47394.2	33681.5
		0.146472	0.1769
JB		0.001	0.001
		0.001	0.001
		ra	log
%		2.99263	-0.380022
err.va		12060.3	0.0370526
rel.std.err		0.254467	0.252967
mod.eff		0.745533	0.747033

VERSION 2.1

LITTLE PATUXENT RIVER AT SAVAGE, MD: NH3X TIME-SERIES



XU2-4270-0003: SIMULATED VS. OBSERVED



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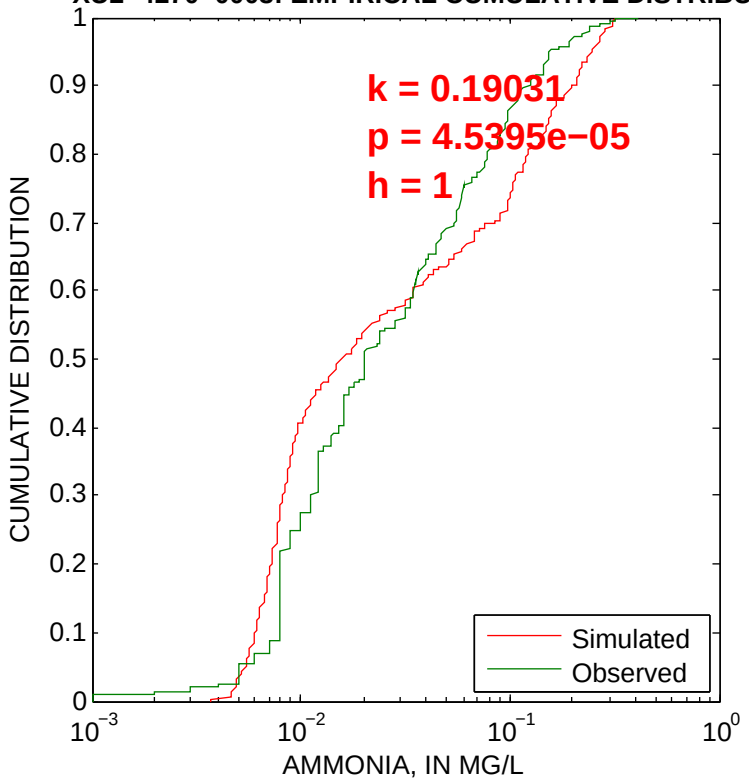


DATA SELECTION

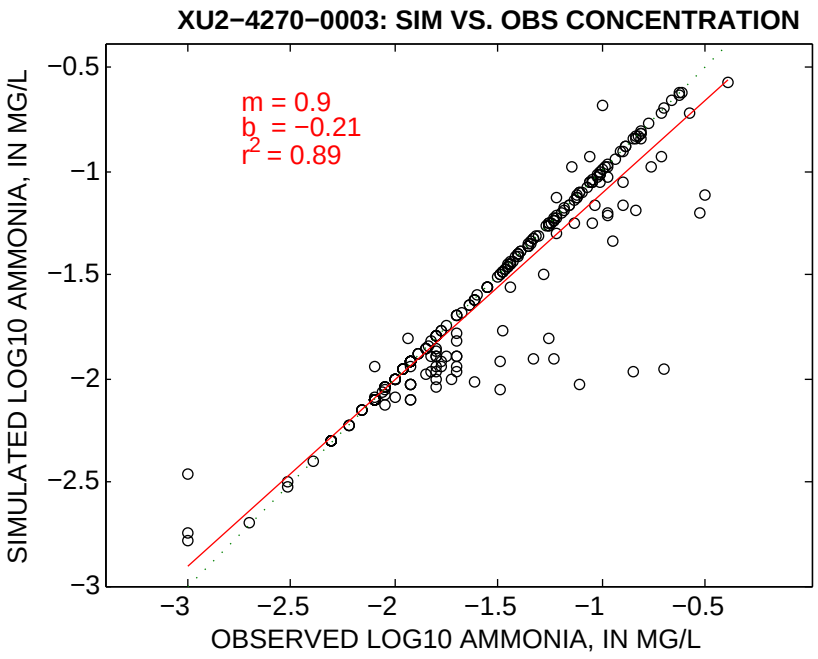
scenario: P620171001WQ
file: NH3X.calib
plot: NH3X - ammonia
Dates: 1/1/1985 – 12/31/201
Drive: N/A
Directory: model
Observed: OBS20161101

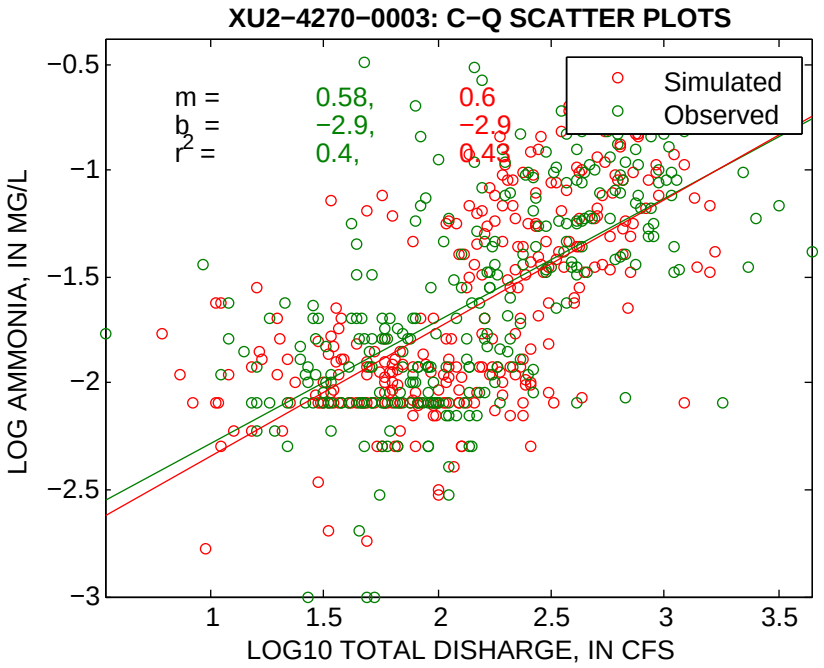
STATISTICS

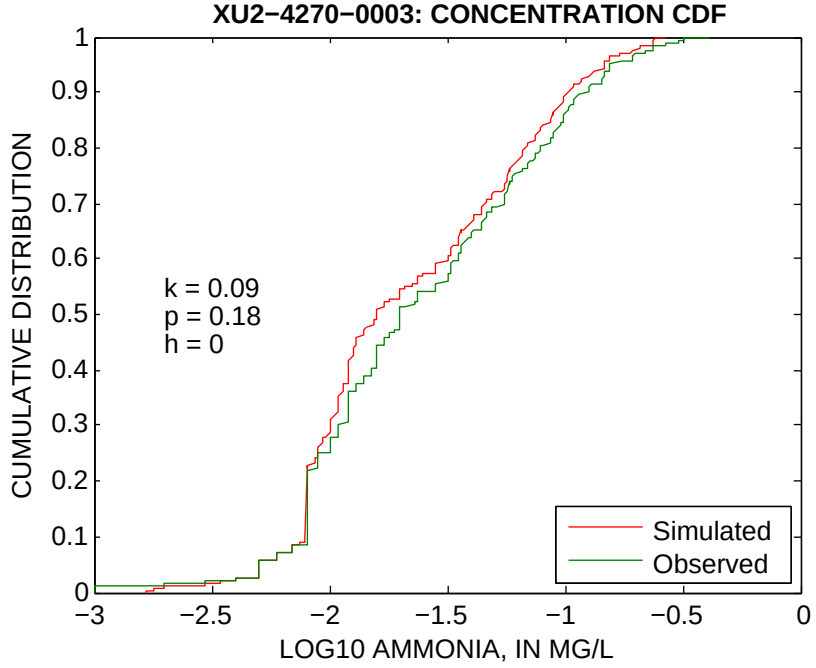
		observe	simulate
n		289	289
min		0.001	0.0037191
		-3	-2.42956
mean		0.0475139	0.063531
		-1.60101	-1.58263
media		0.02	0.015494
		-1.69897	-1.80984
max		0.408	0.32583
		-0.38934	-0.487009
varian		0.00351874	0.00657784
		0.249952	0.351835
JB		0.001	0.001
	☑	0.091726	0.001
		ra	log
%		33.7104	-1.14793
err.va		0.00671933	0.240147
rel.std.err		1.90959	0.960769
mod.eff		-0.909585	0.0392308

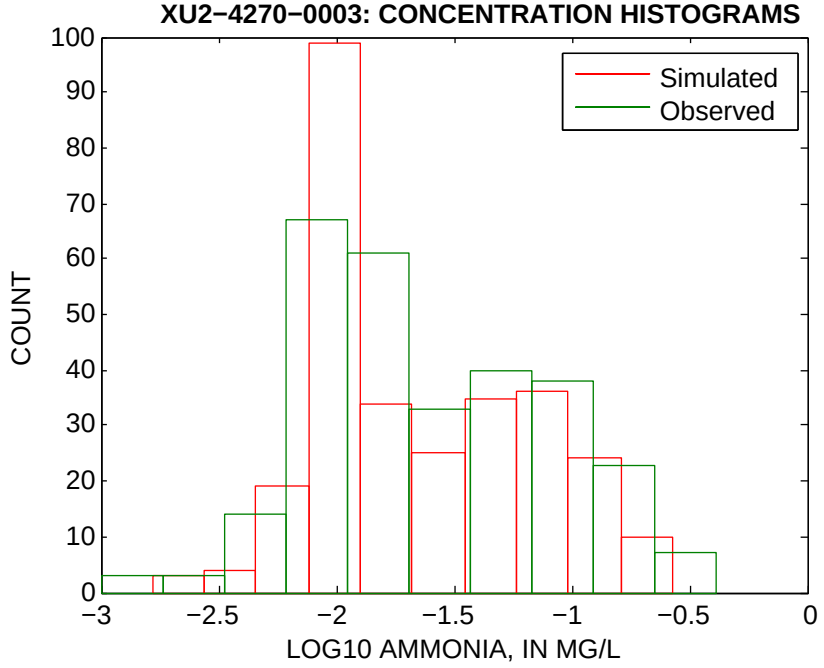
VERSION 2.1

ALL DATA
LOG10

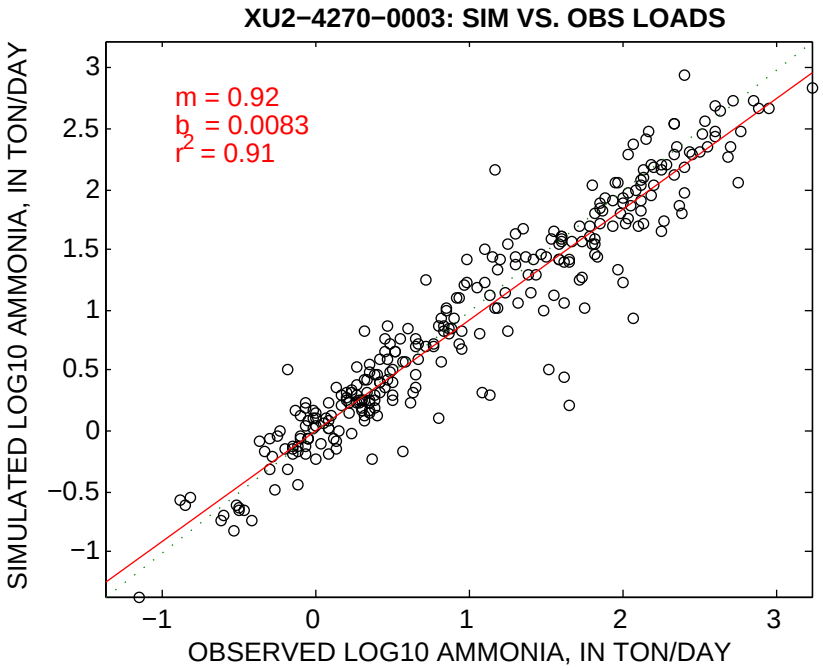


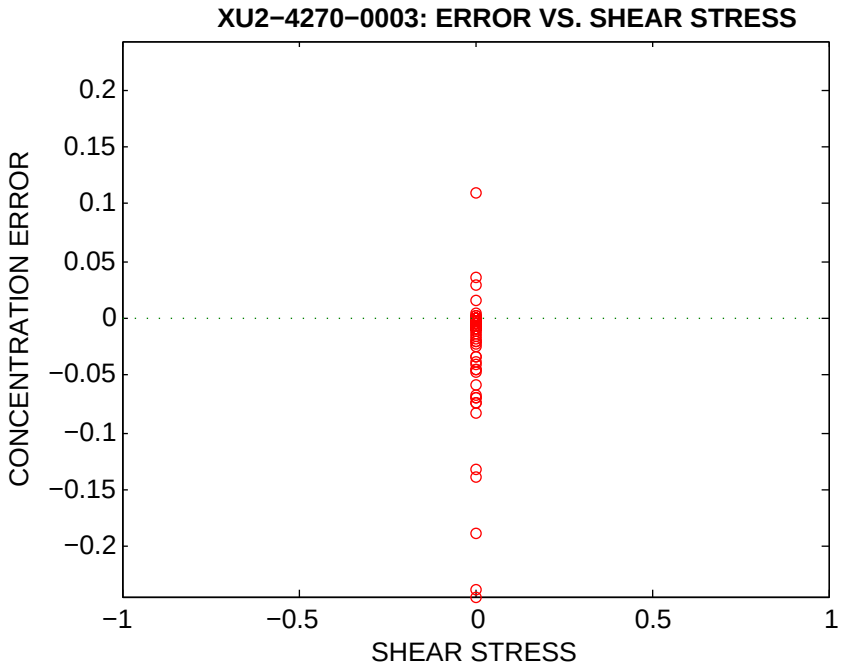


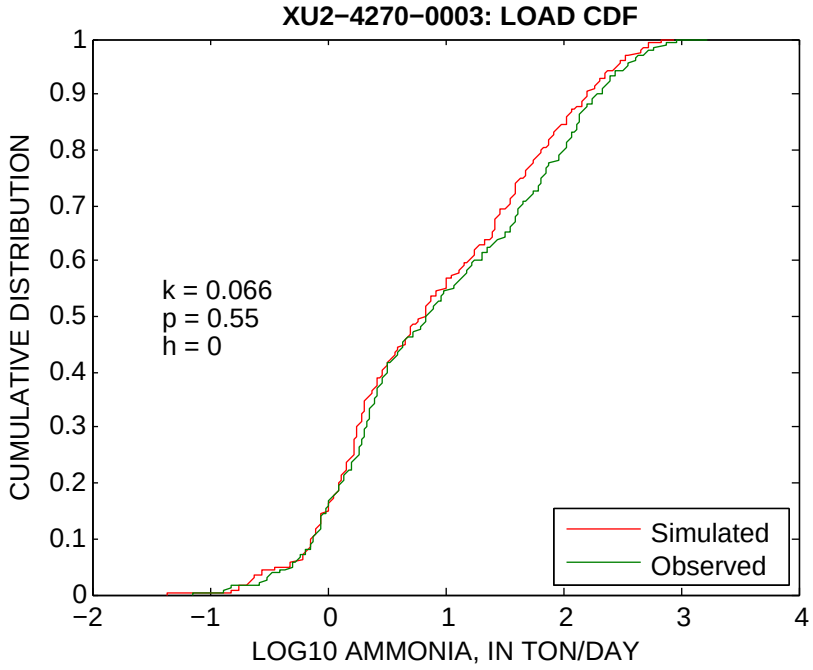


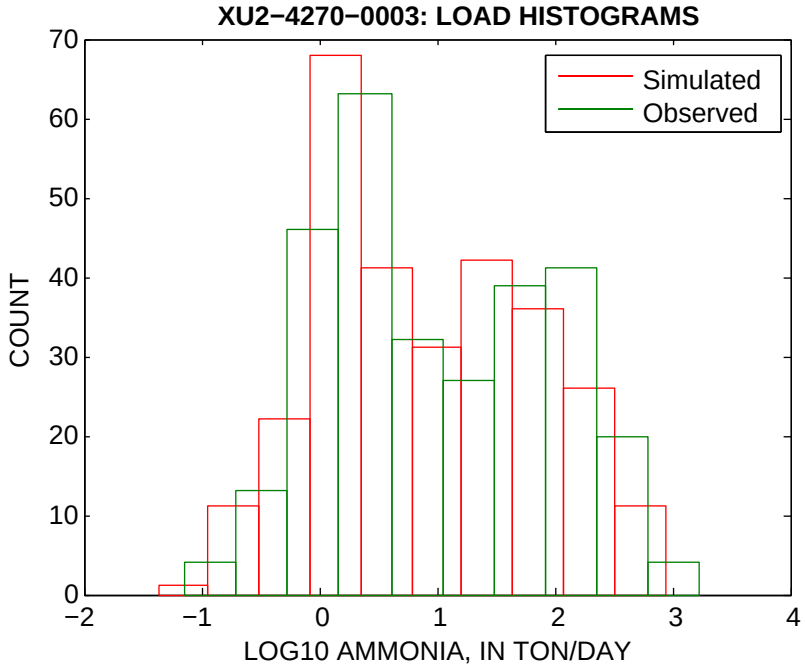


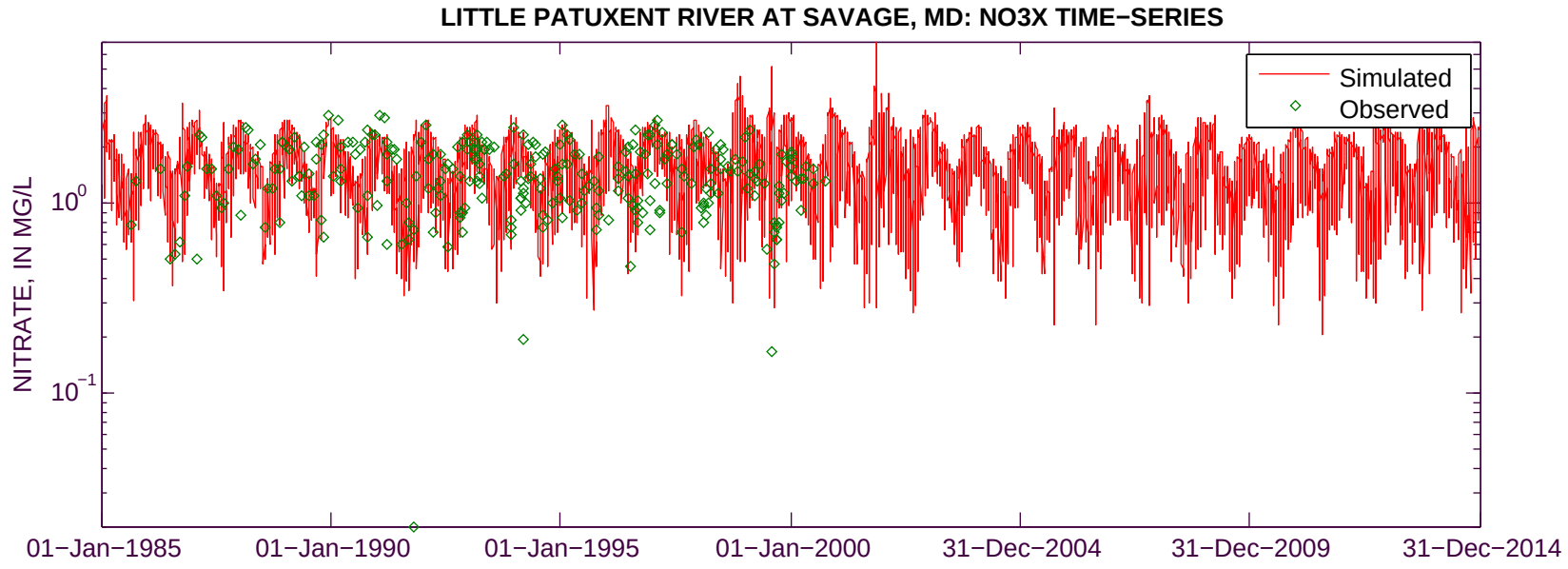
LOAD DATA
LOG10

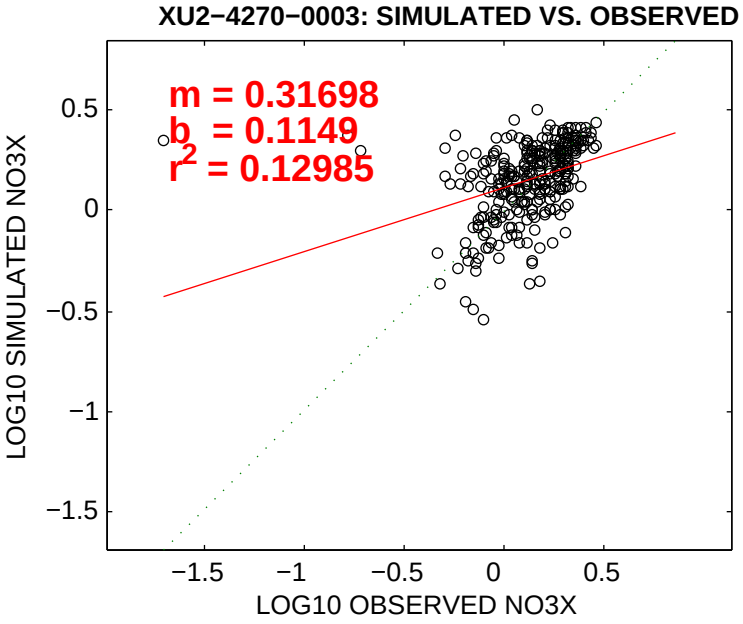


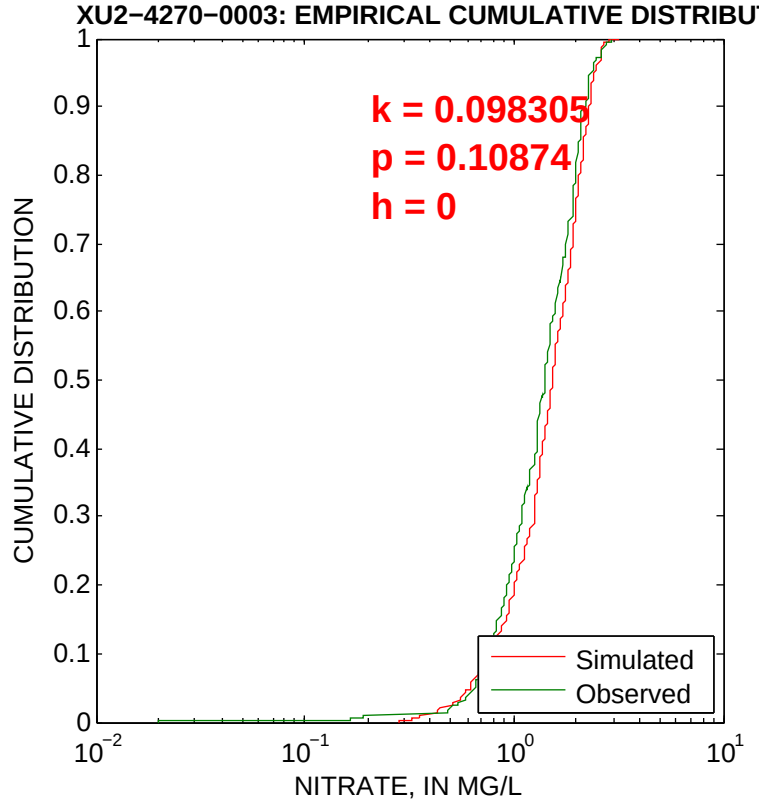












DATA SELECTION

scenario	file
P620171001WQ	NO3X.calib

plot: NO3X - nitrate

Dates: 1/1/1985 – 12/31/201

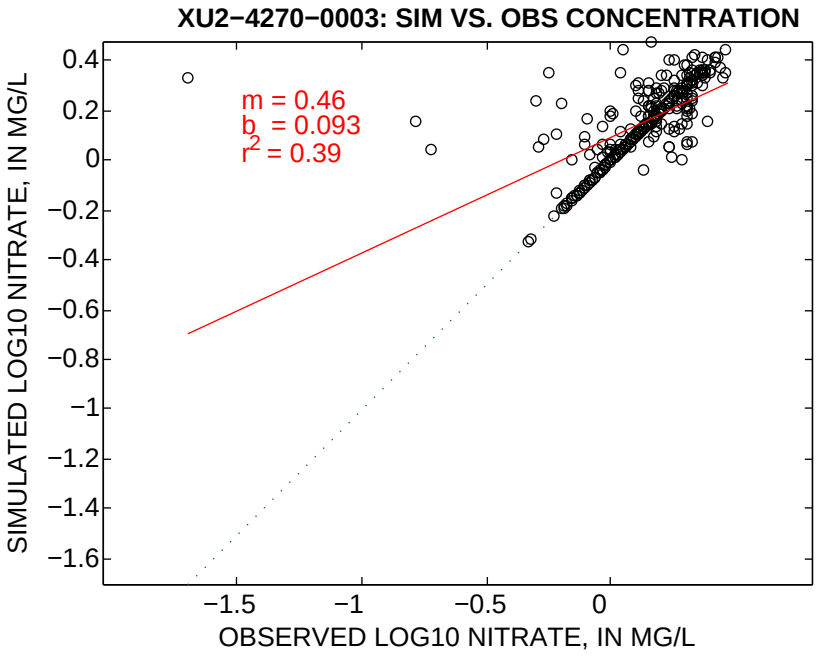
Drive	Directory	Observed
N/A	model	OBS20161101

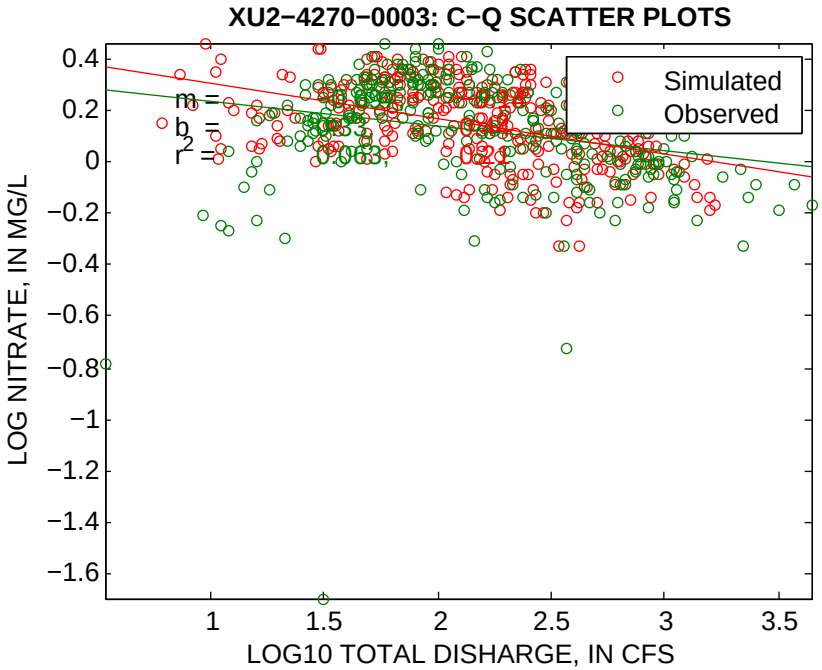
STATISTICS

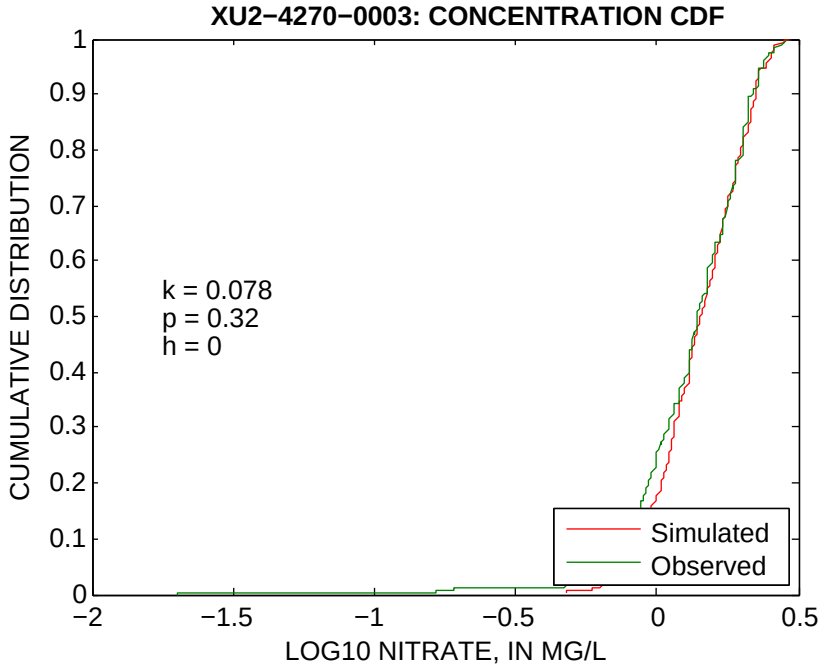
	n	295	295
		observe	simulate
min		0.02	0.28446
		-1.69897	-0.545979
mean		1.45248	1.54653
		0.121792	0.153508
media		1.4	1.5312
		0.146128	0.185032
max		2.9	3.1856
		0.462398	0.503191
varian		0.308551	0.325574
		0.0461545	0.0357144
JB		0.054664	0.067199
		0.001	0.001
		ra	log
%		6.47502	26.0411
err.va		0.328369	0.0536181
rel.std.err		1.06423	1.16171
mod.eff		-0.0642278	-0.161709

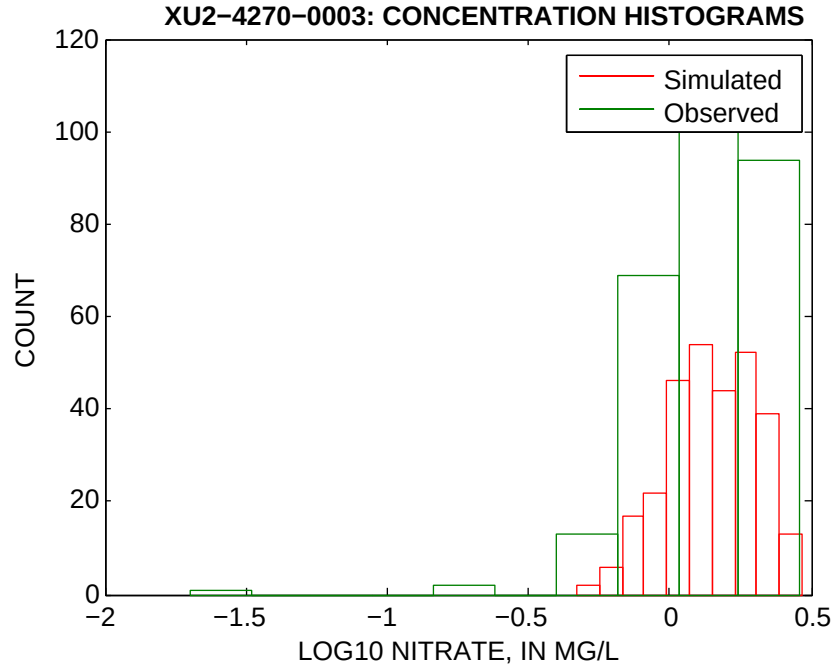
VERSION 2.1

ALL DATA
LOG10

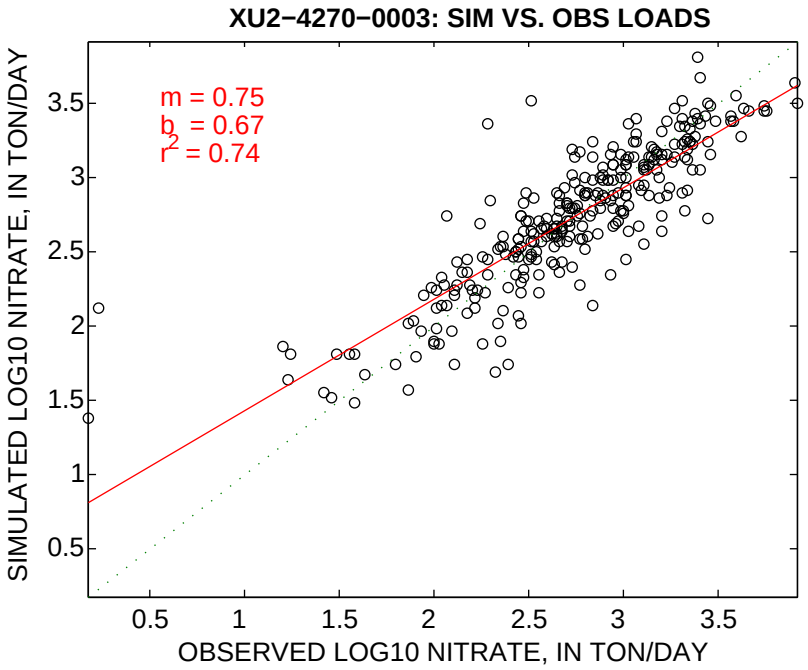


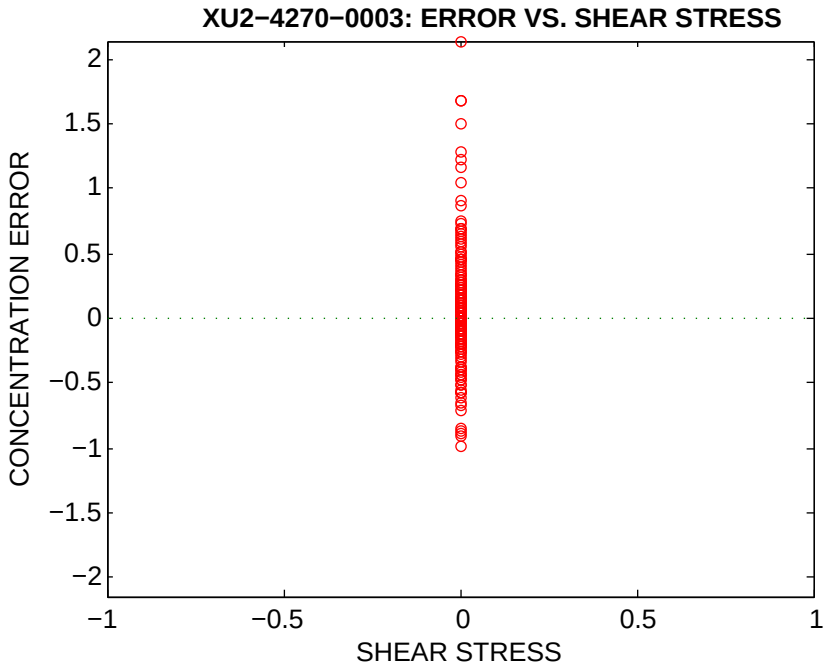


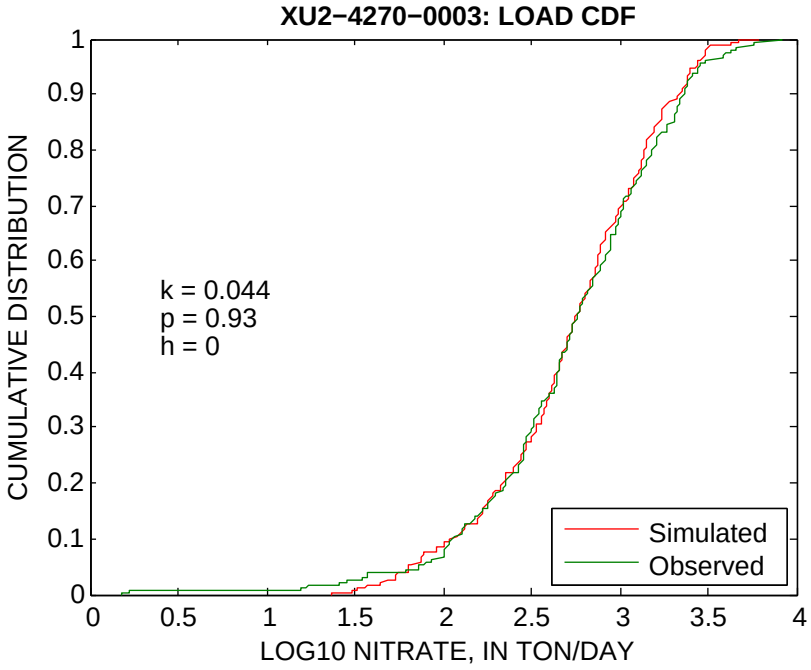


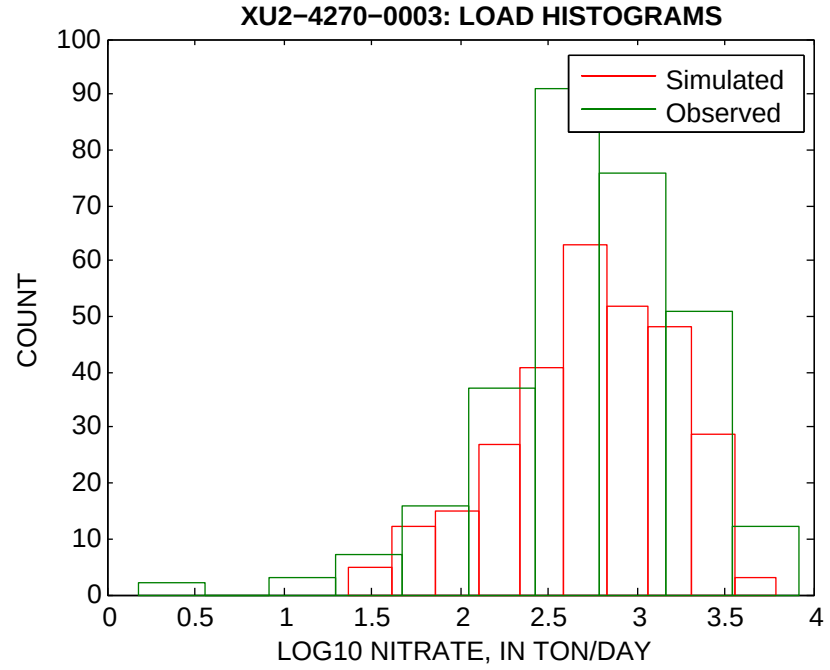


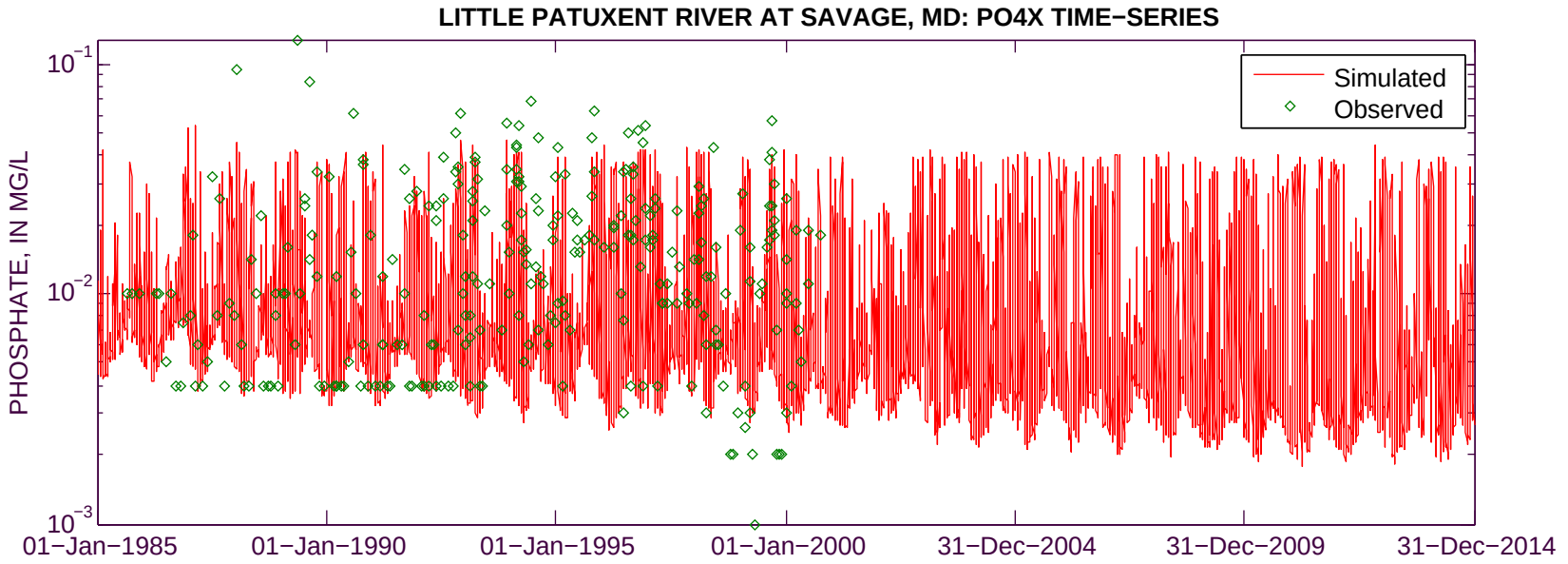
LOAD DATA
LOG10

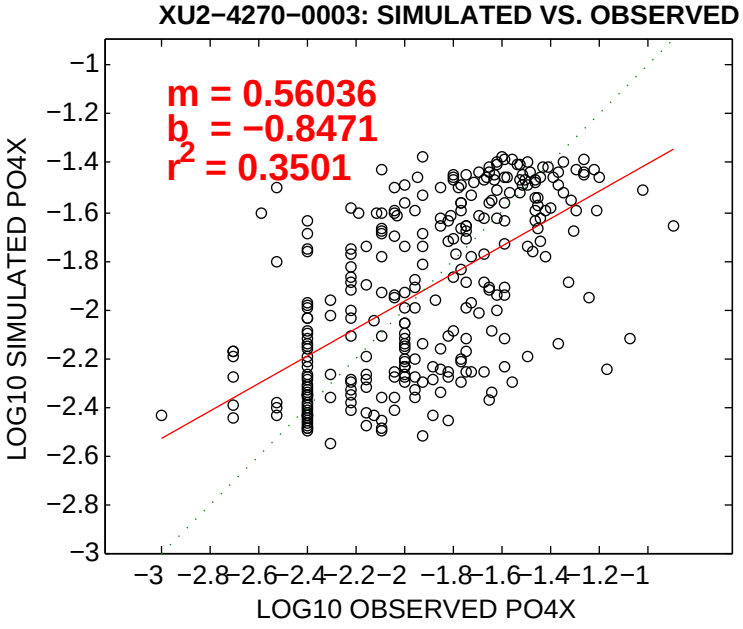


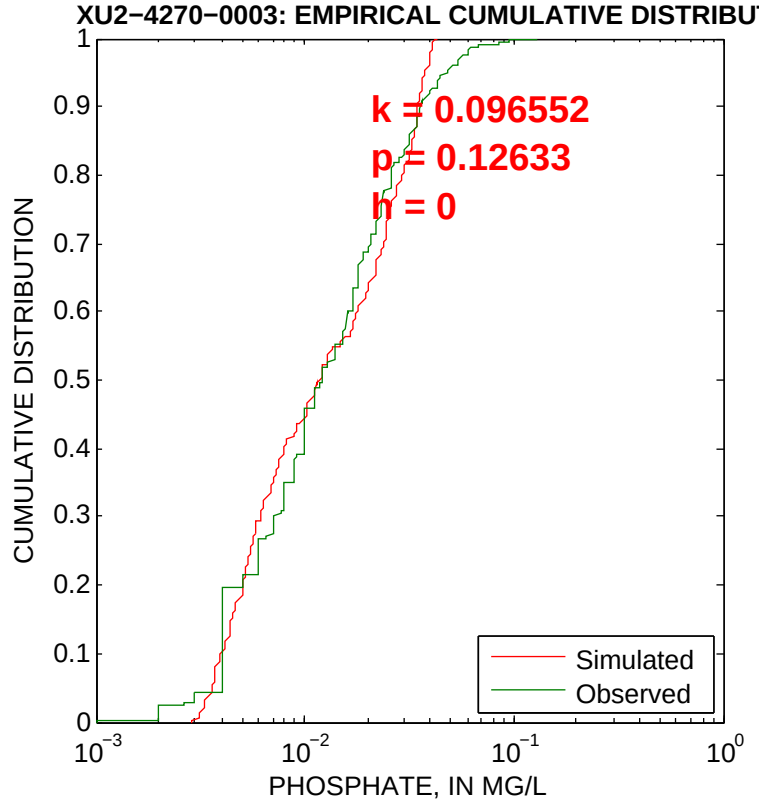












DATA SELECTION

scenario: P620171001WQ | file: PO4X.calib

plot: PO4X - phosphate

Dates: 1/1/1985 – 12/31/201

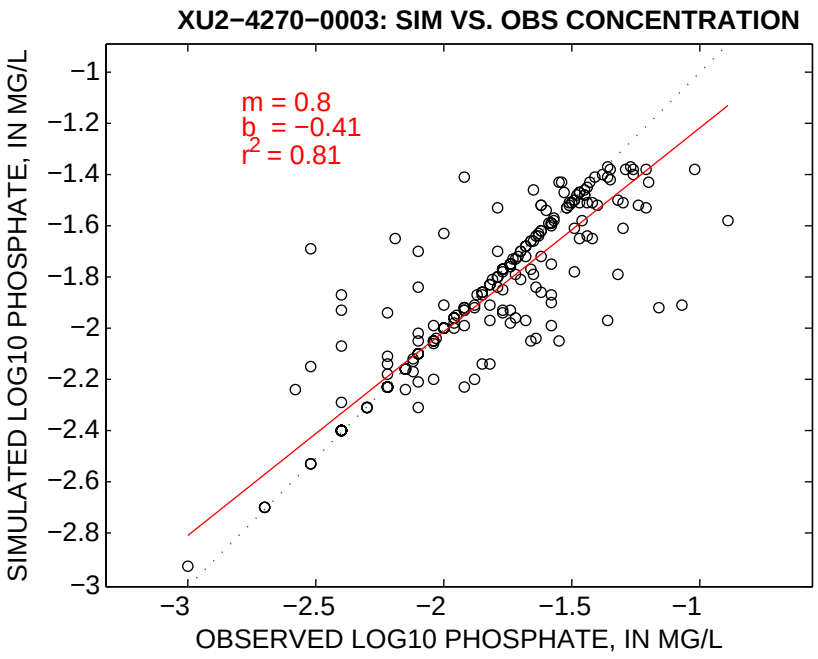
Drive: N/A | Directory: model | Observed: OBS20161101

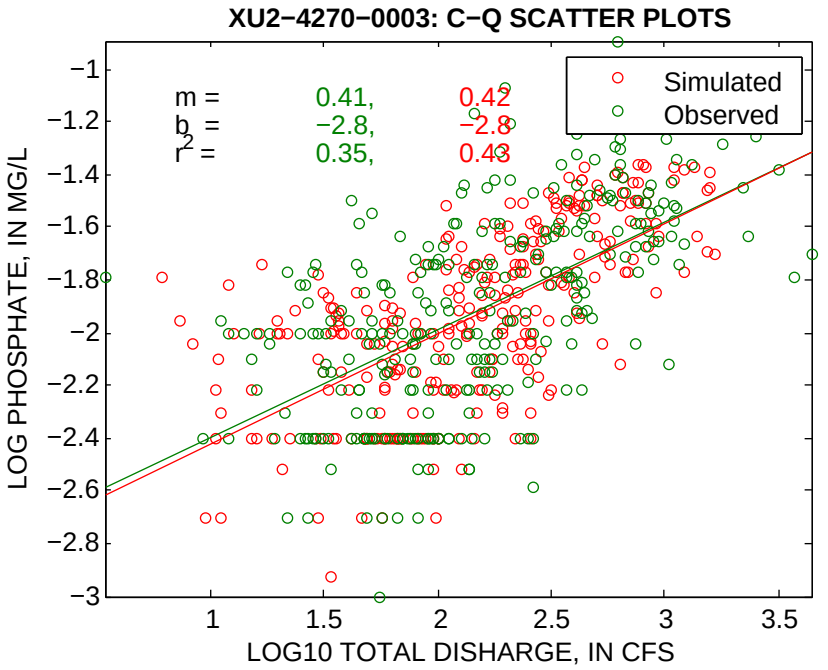
STATISTICS

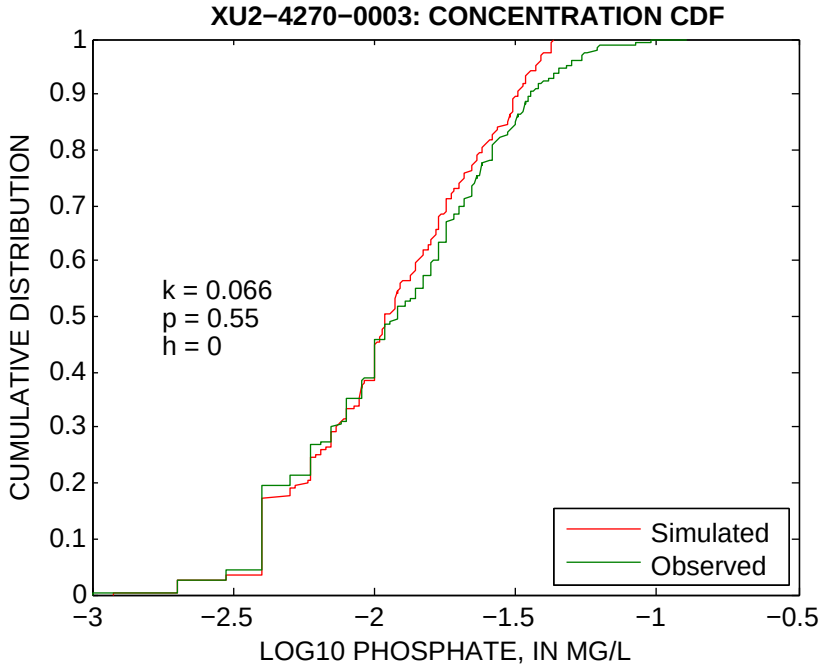
n	290	290
	observe	simulate
min	0.001	0.0028431
	-3	-2.54621
mean	0.0173038	0.0163085
	-1.91878	-1.92231
media	0.012	0.0117745
	-1.92082	-1.92906
max	0.128	0.042544
	-0.89279	-1.37116
varian	0.00025805	0.00014296
	0.142039	0.127394
JB	0.001	0.001
	0.095302	0.001
	ra	log
%	-5.75174	0.183618
err.va	0.00021356	0.11026
rel.std.err	0.827601	0.776269
mod.eff	0.172399	0.223731

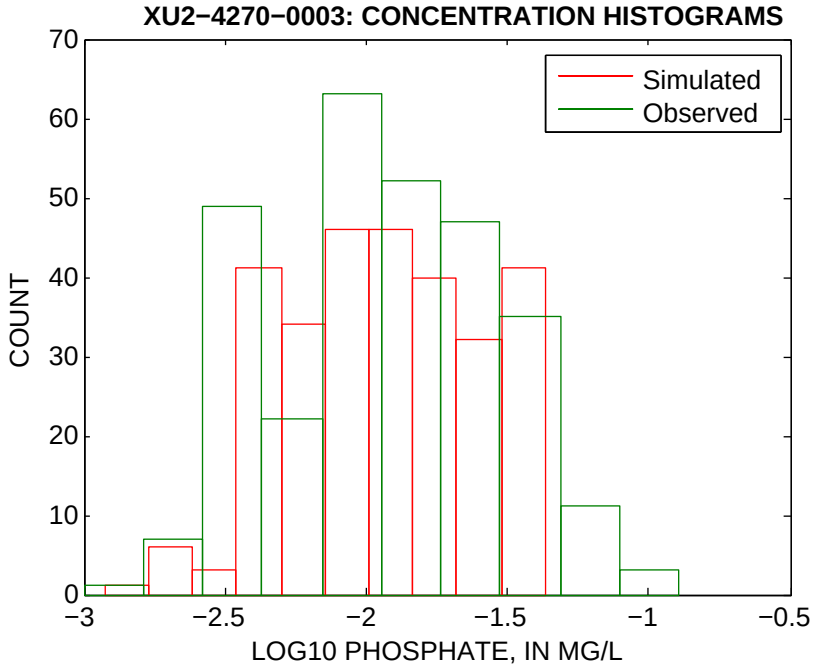
VERSION 2.1

ALL DATA
LOG10

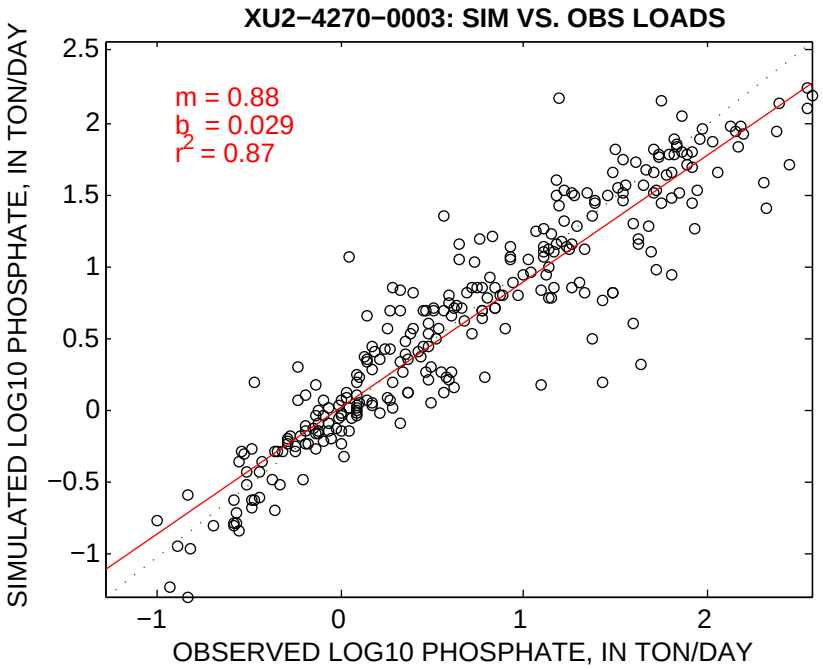




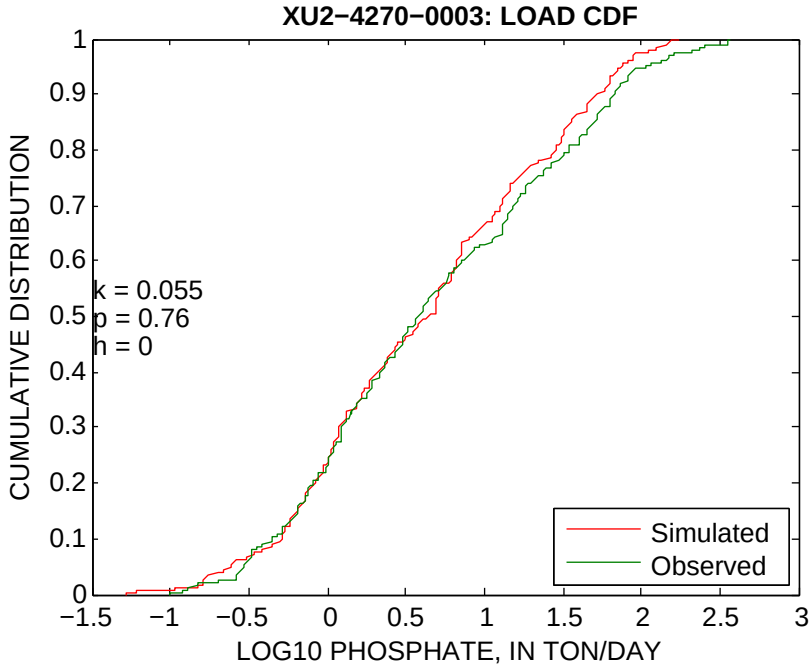


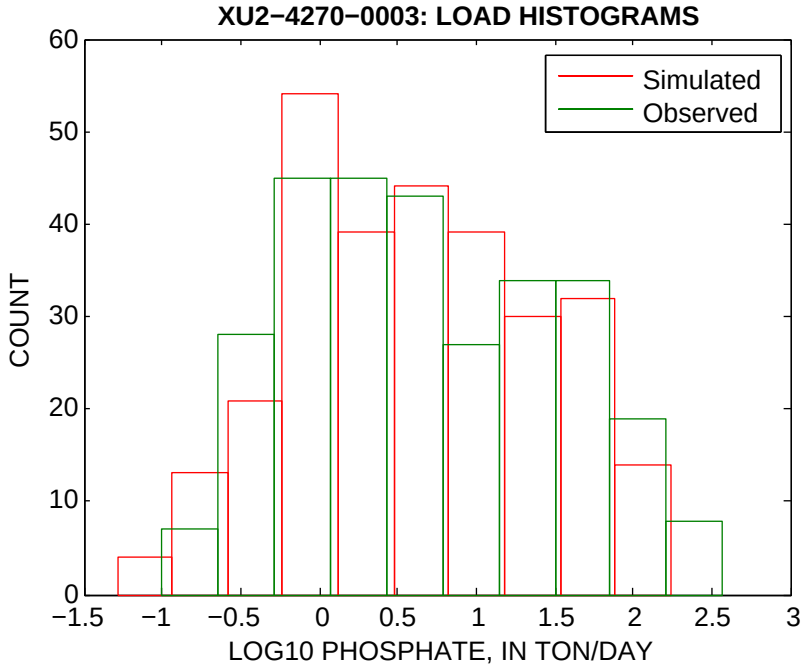


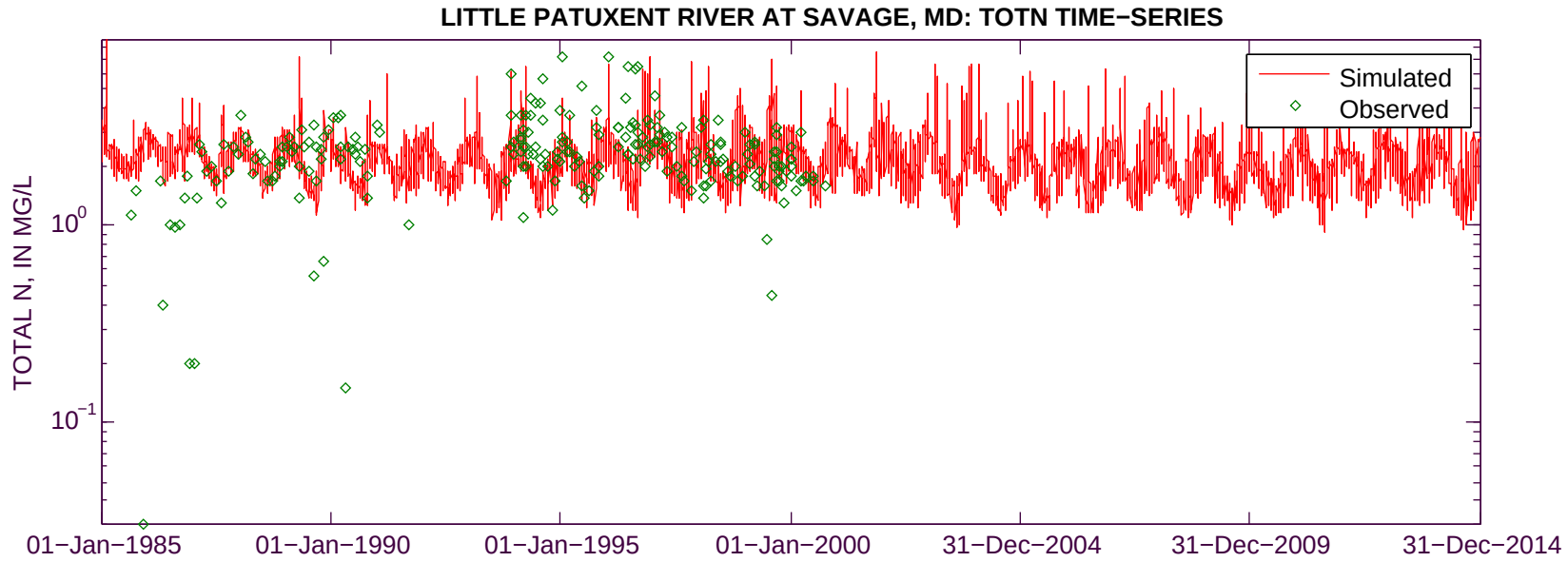
LOAD DATA
LOG10

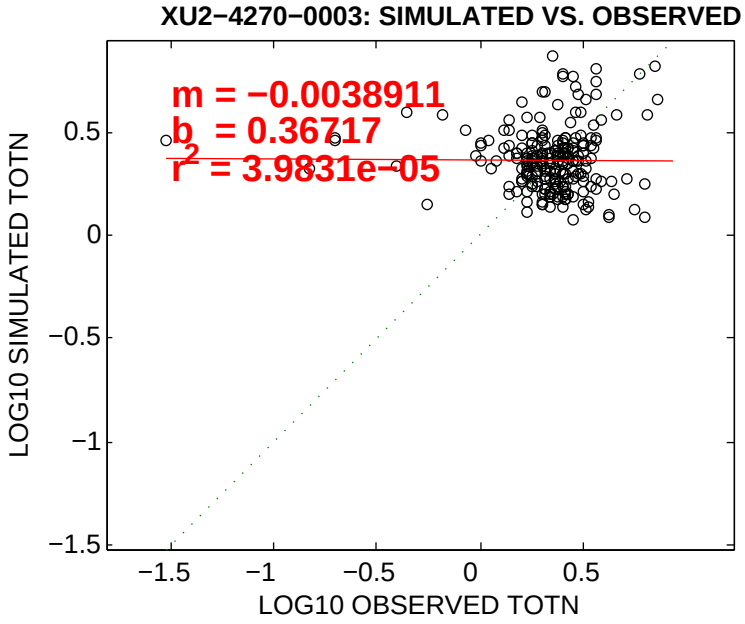


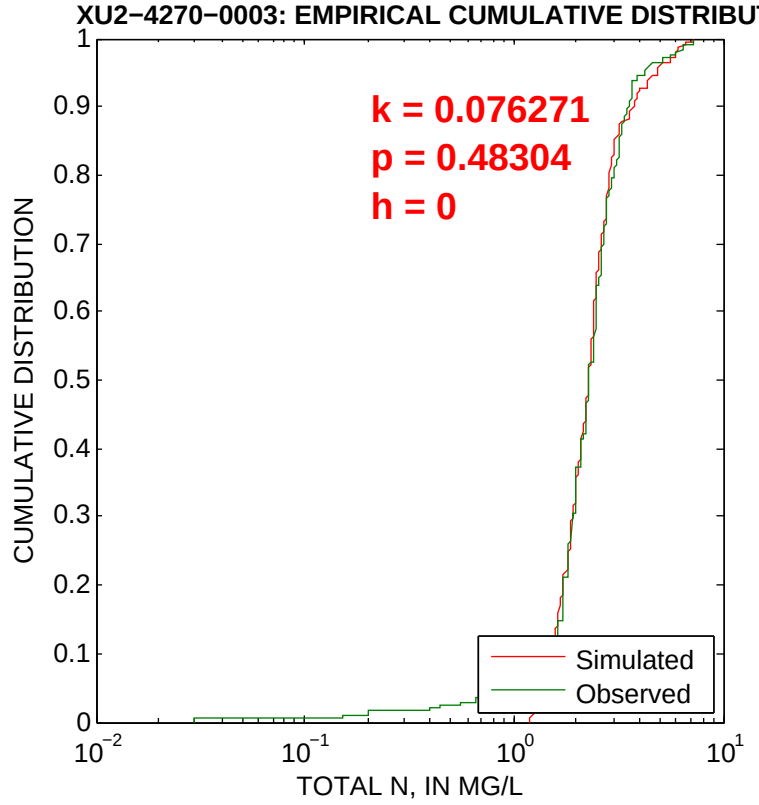












DATA SELECTION

scenario	file
P620171001WQ	TOTN.calib

plot: TOTN - total nitrogen

Dates: 1/1/1985 – 12/31/201

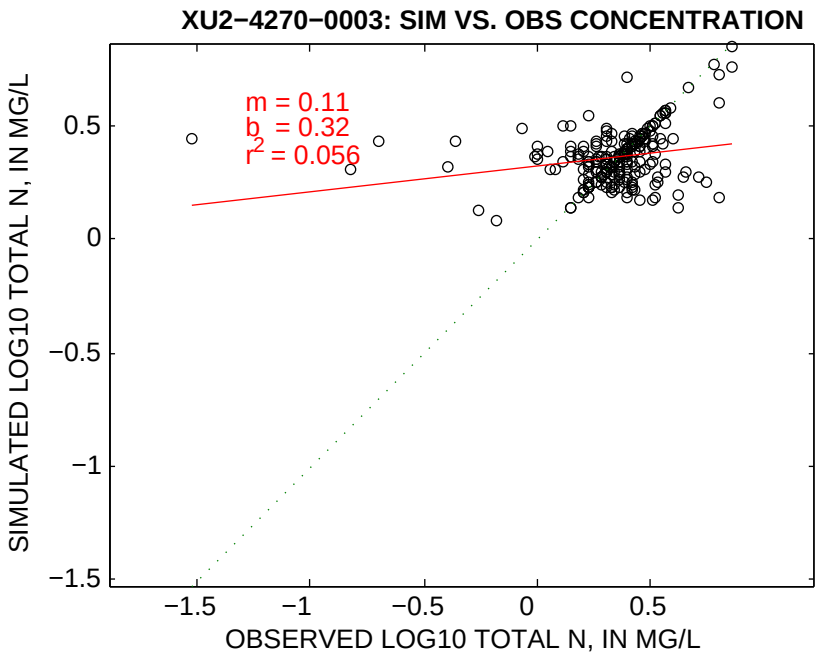
Drive	Directory	Observed
N/A	model	OBS20161101

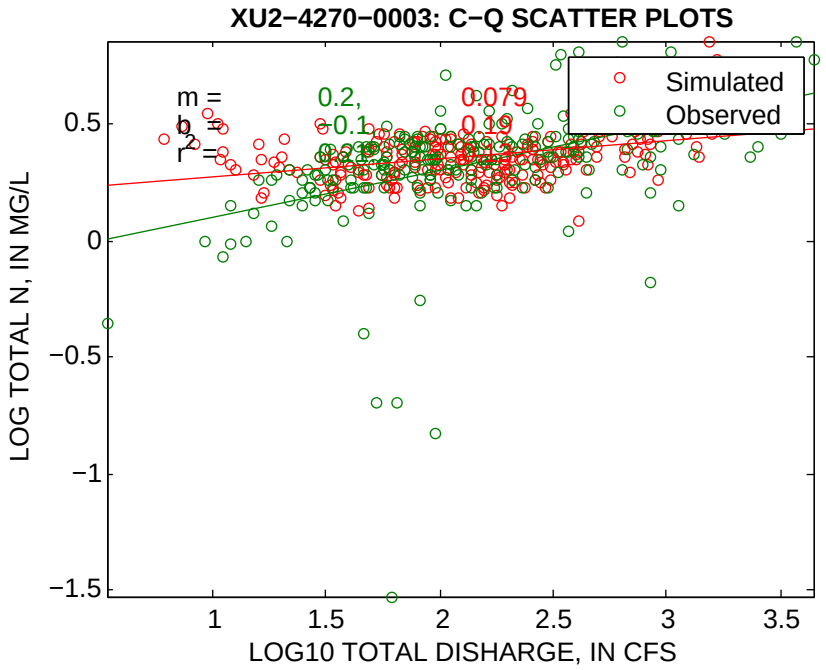
STATISTICS

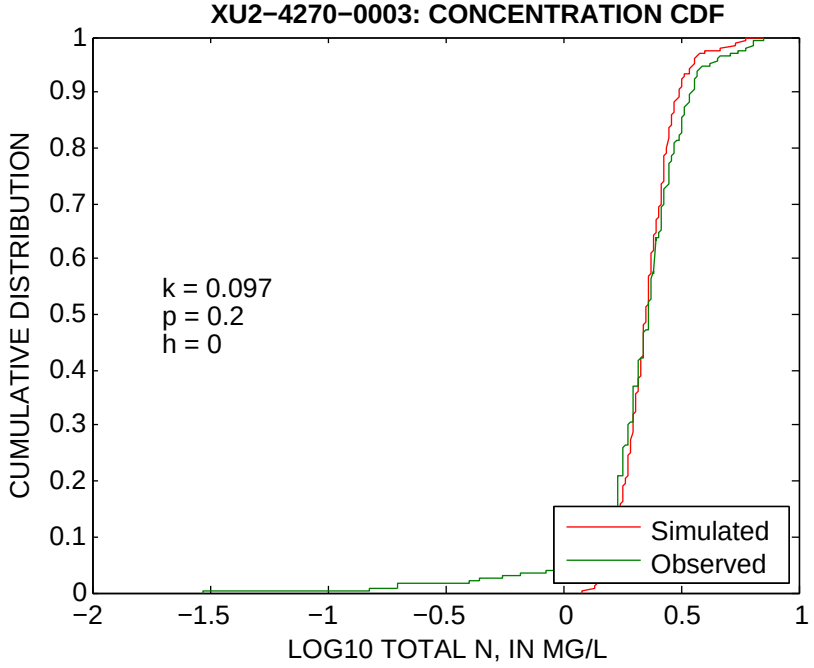
	n	236	236
		observe	simulate
min		0.03	1.1992
		-1.52288	0.0788916
mean		2.4346	2.48241
		0.337428	0.365855
media		2.3	2.282
		0.361728	0.358315
max		7.2	7.3073
		0.857332	0.863757
varian		1.13659	1.06992
		0.0605489	0.0230162
JB		0.001	0.001
		0.001	0.001
		ra	log
%		1.96367	8.42455
err.va		1.8402	0.0848479
rel.std.err		1.61906	1.40131
mod.eff		-0.619063	-0.401311

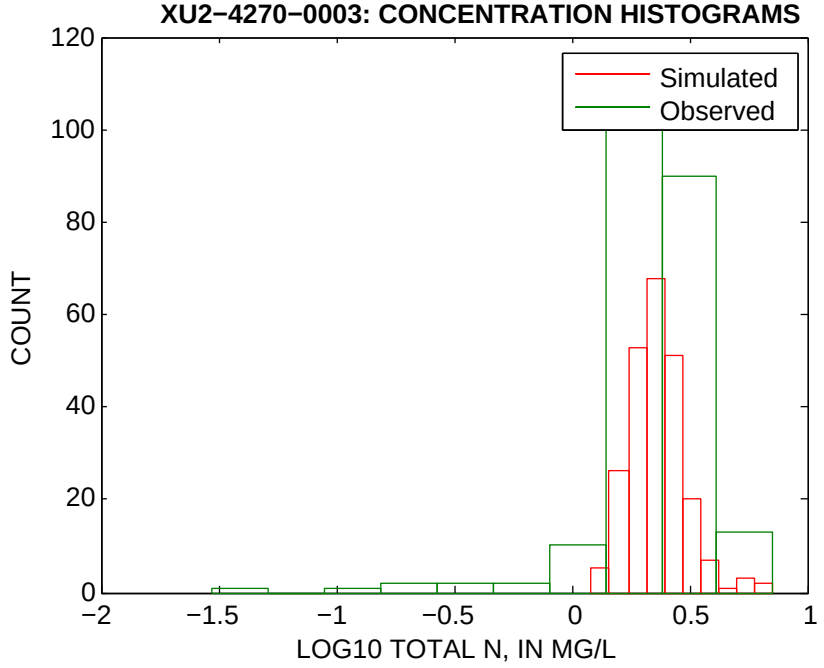
VERSION 2.1

ALL DATA
LOG10

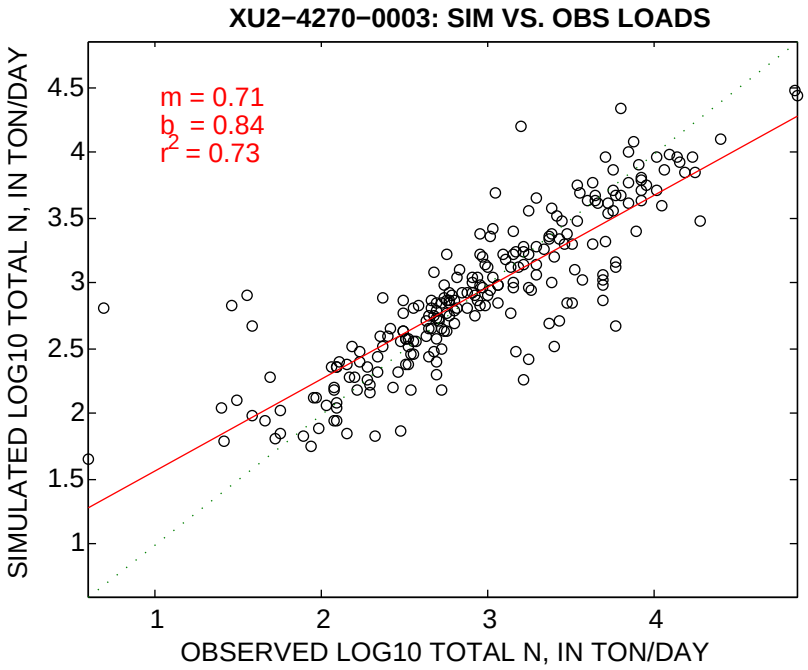




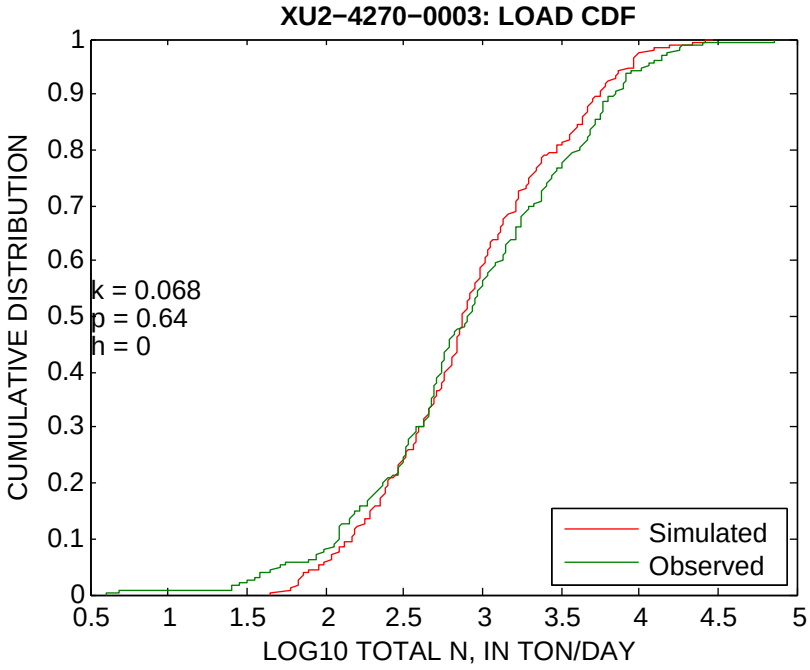


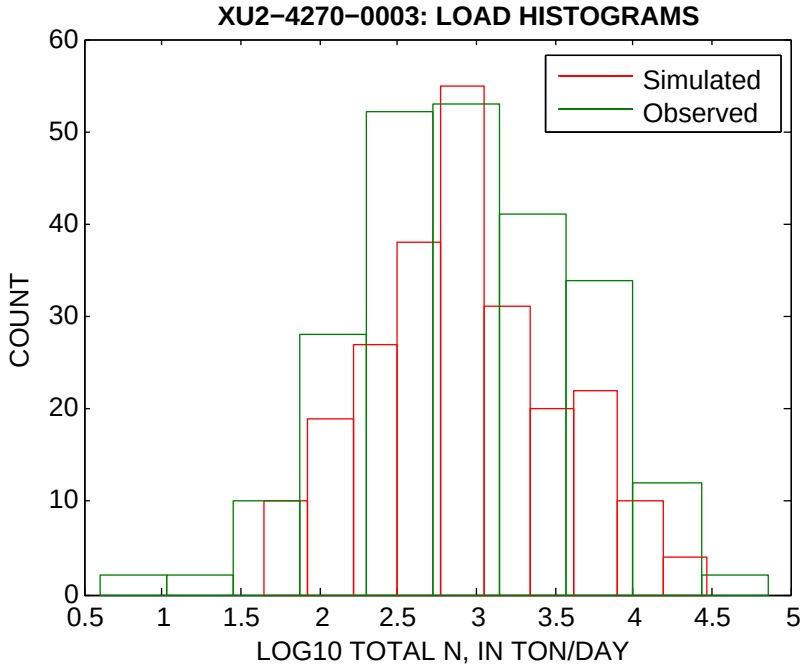


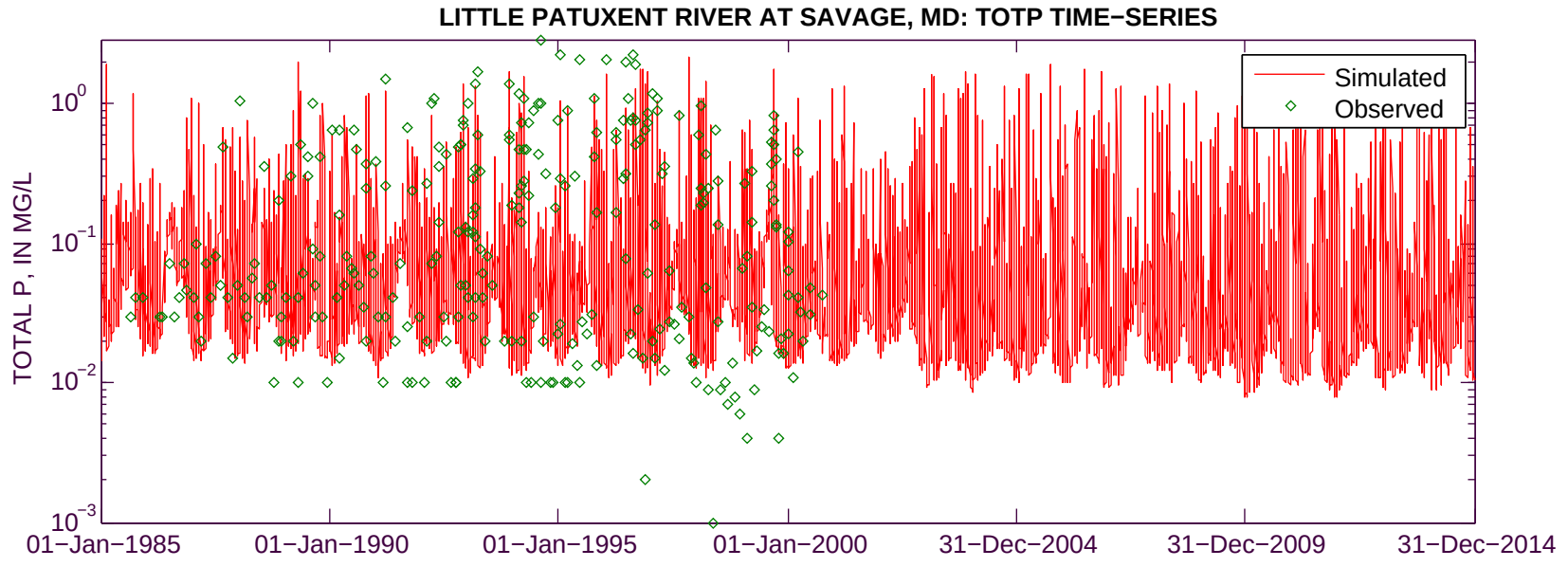
LOAD DATA
LOG10

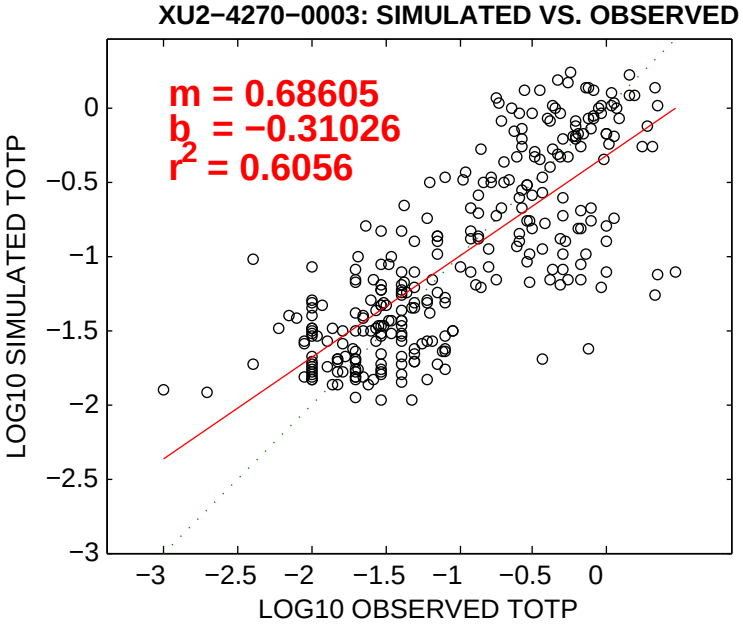


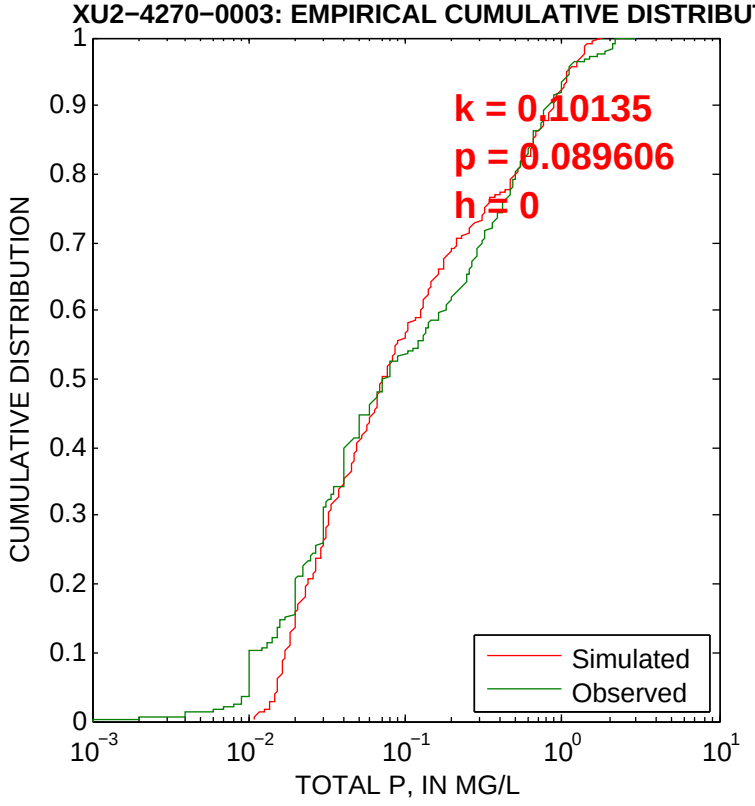












DATA SELECTION

scenario: P620171001WQ | file: TOTP.calib

plot: TOTP - total phosphorus

Dates: 1/1/1985 – 12/31/201

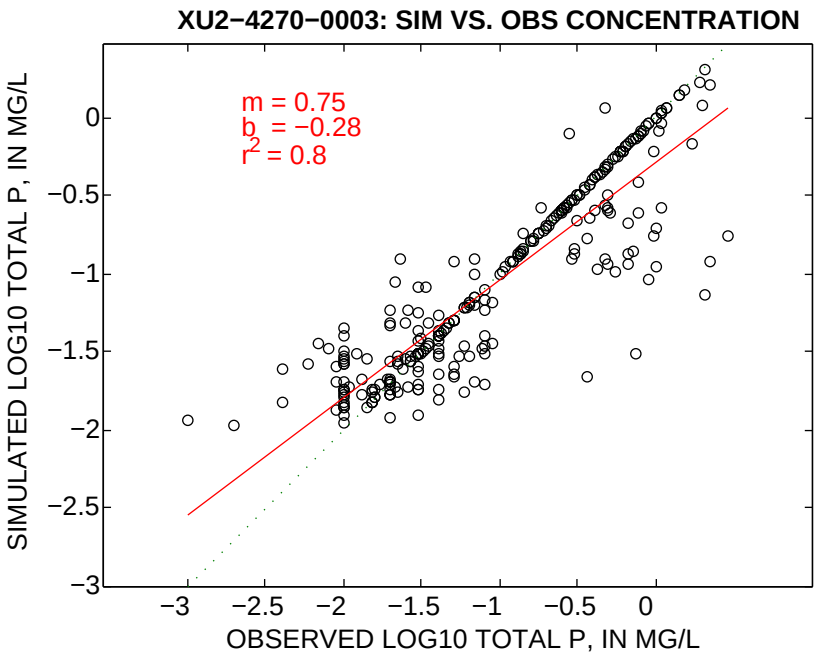
Drive | Directory: N/A | model | Observed: OBS20161101

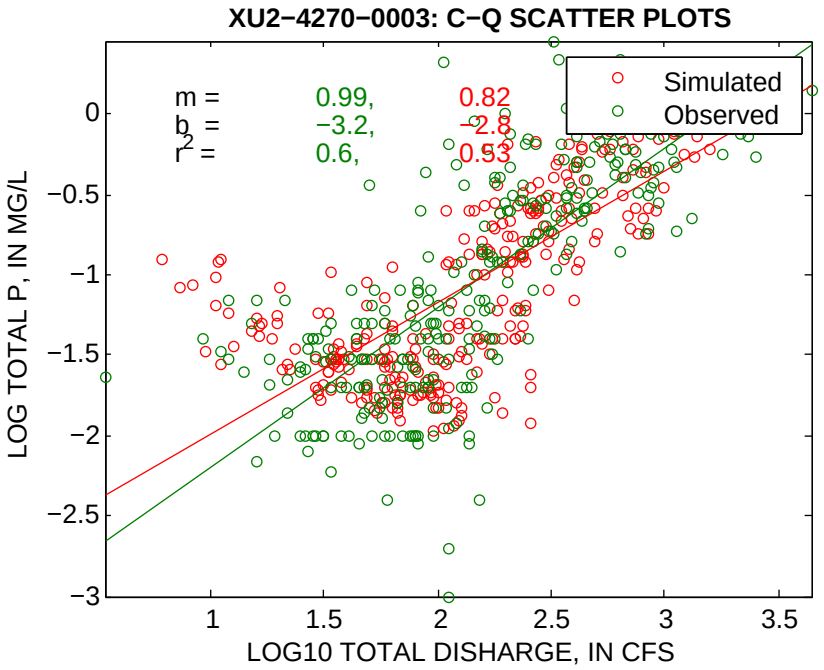
STATISTICS

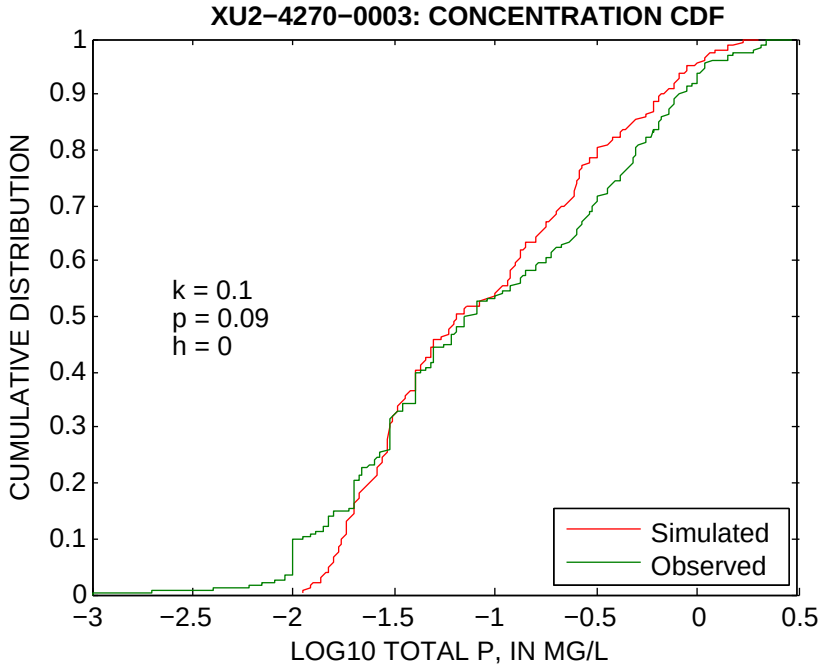
	observe	simulate
n	296	296
min	0.001 -3	0.010671 -1.97179
mean	0.293856 -1.01837	0.262925 -1.00892
media	0.074 -1.1314	0.0703585 -1.15268
max	2.9 0.462398	1.755 0.244277
varian	0.196292 0.496025	0.141561 0.385507
JB	0.001 0.008248	0.001 0.001403
	ra	log
%	-10.5259	-0.927887
err.va	0.157201	0.201021
rel.std.err	0.800851	0.405264
mod.eff	0.199149	0.594736

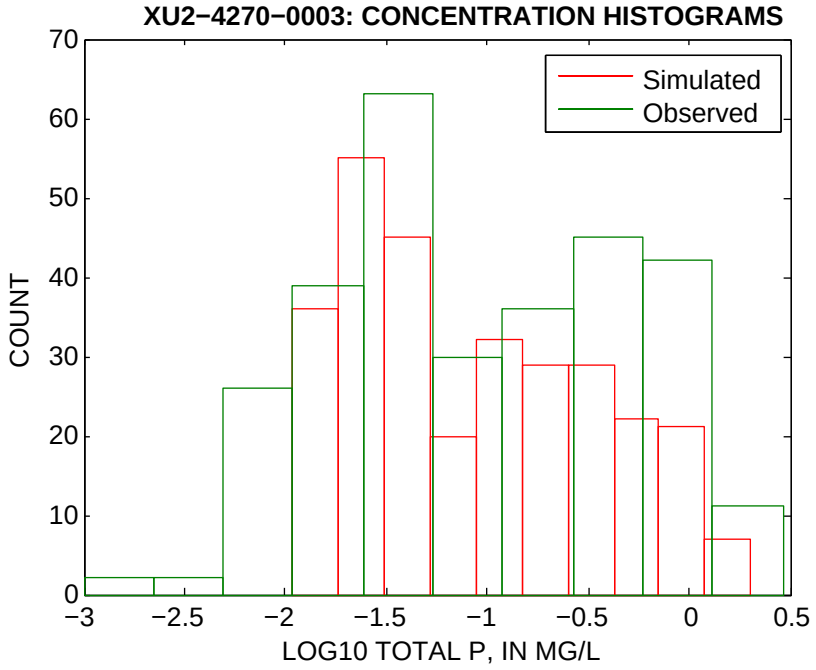
VERSION 2.1

ALL DATA
LOG10

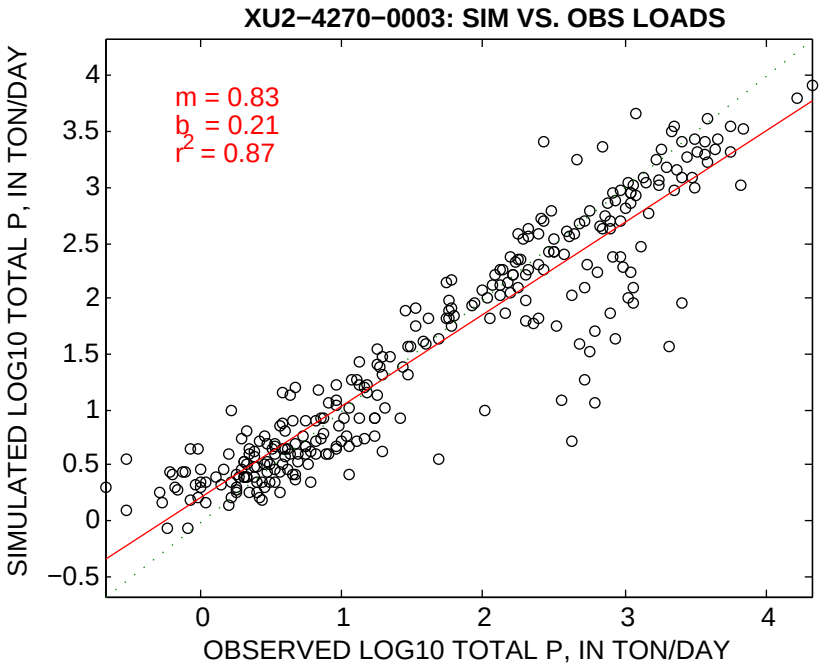




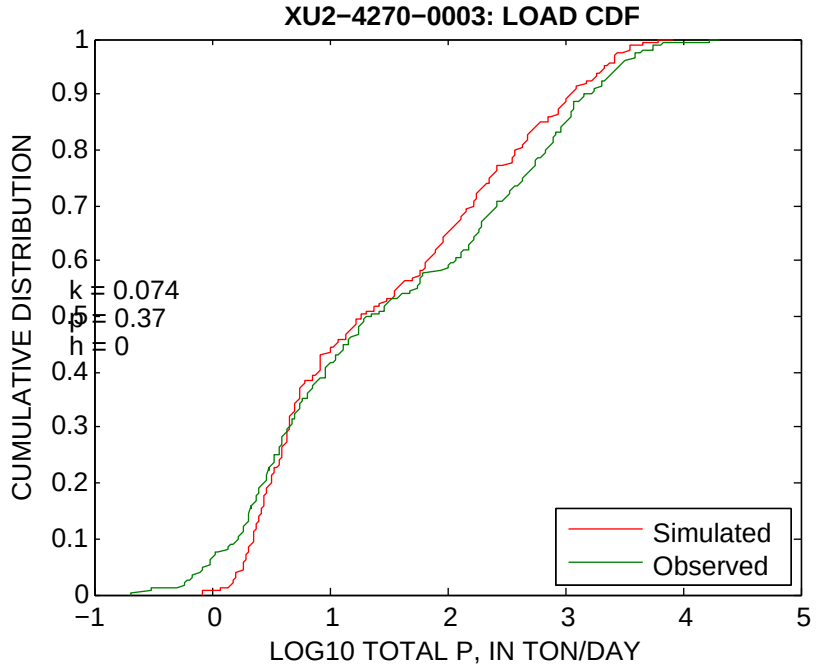


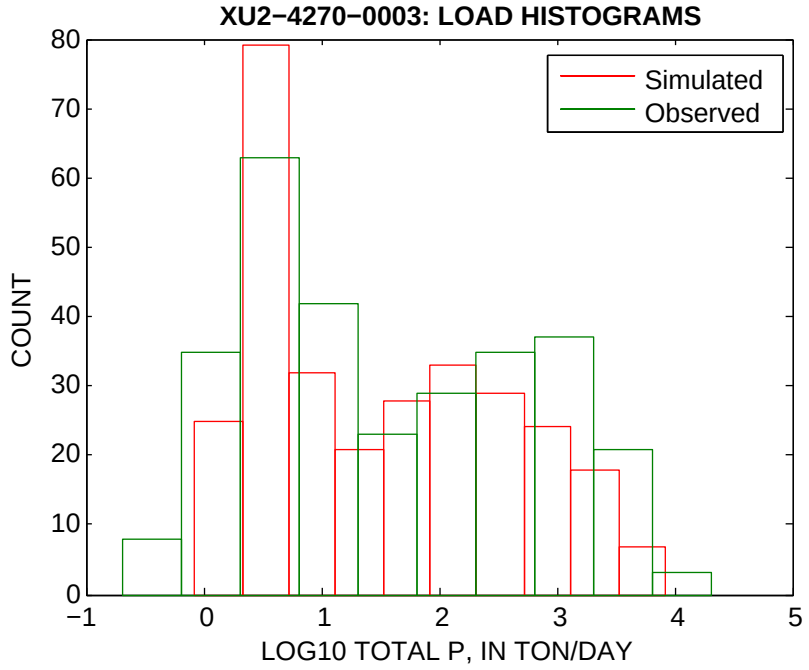


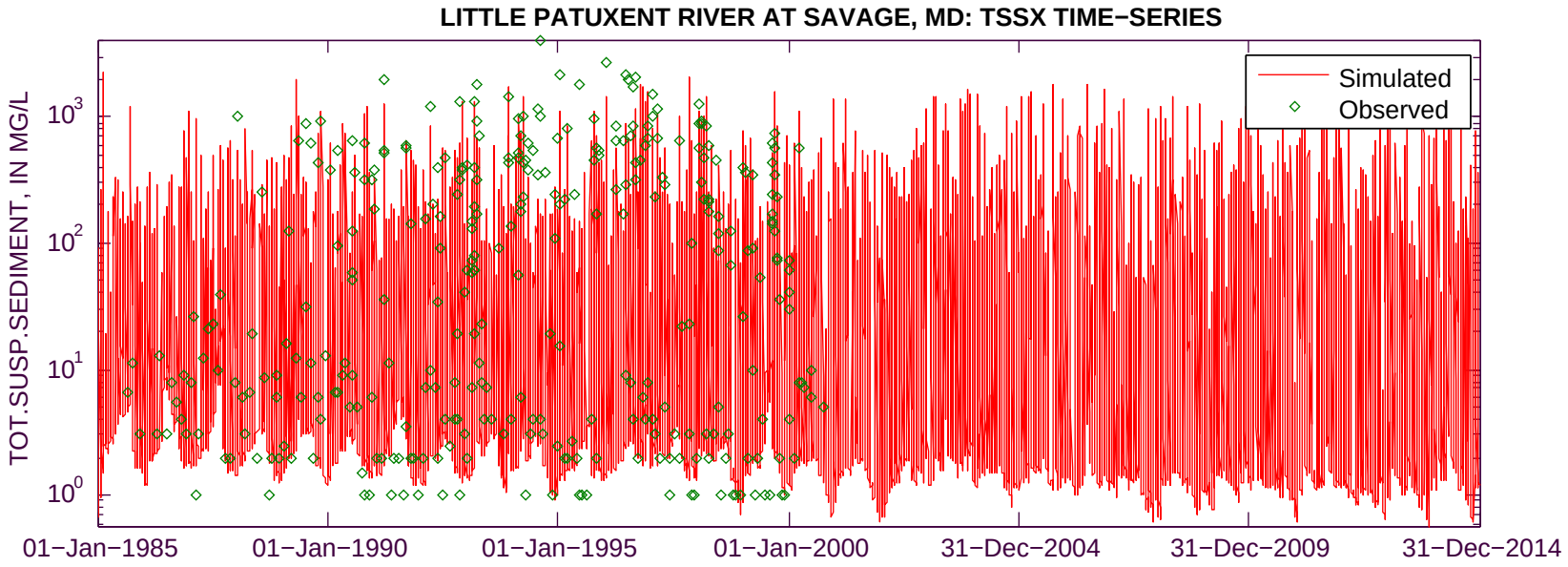
LOAD DATA
LOG10

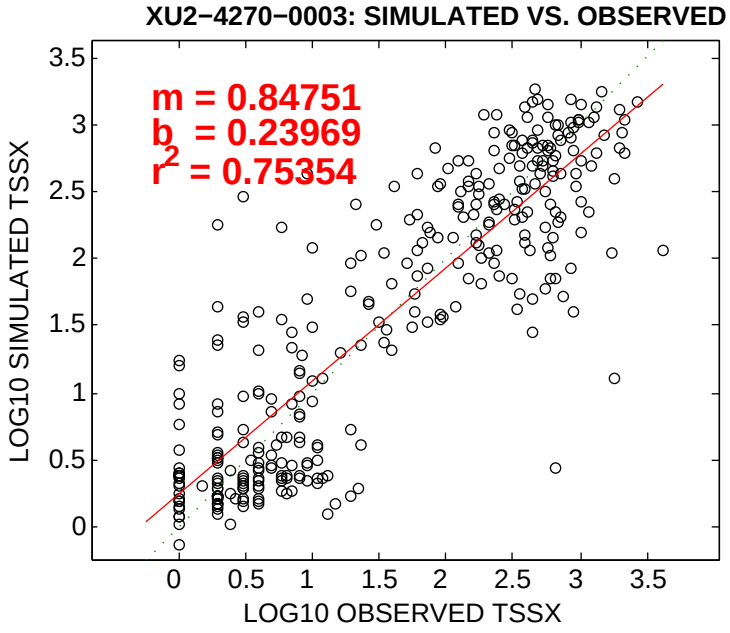


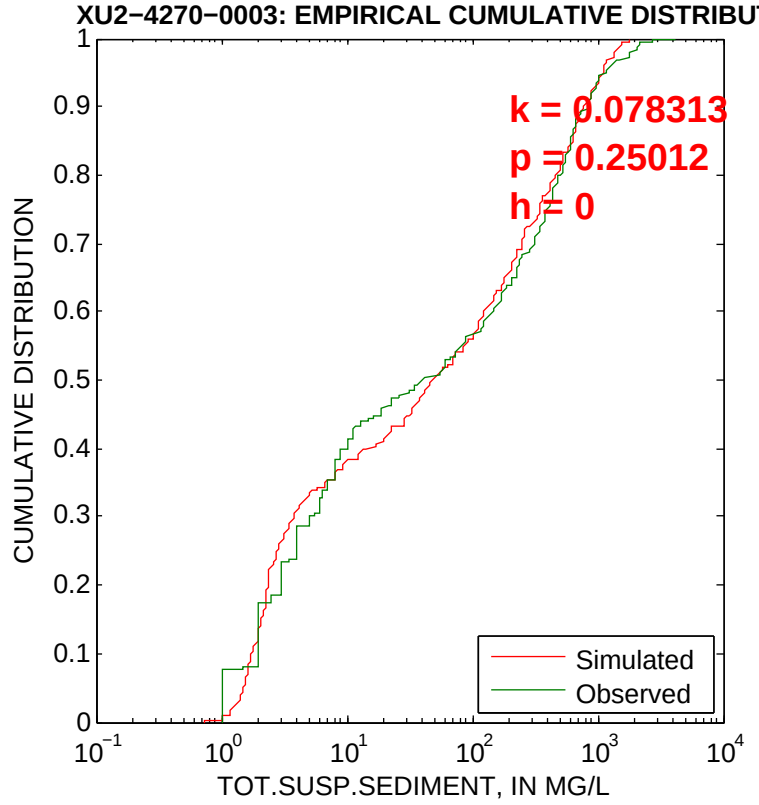












DATA SELECTION

scenario	file
P620171001WQ	TSSX.calib

plot: TSSX - total suspended ...

Dates: 1/1/1985 – 12/31/201

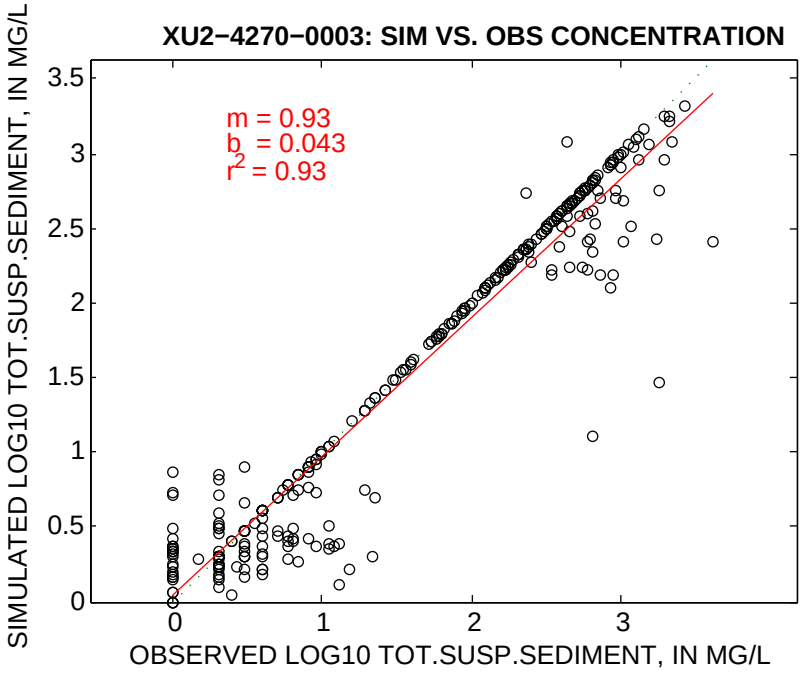
Drive	Directory	Observed
N/A	model	OBS20161101

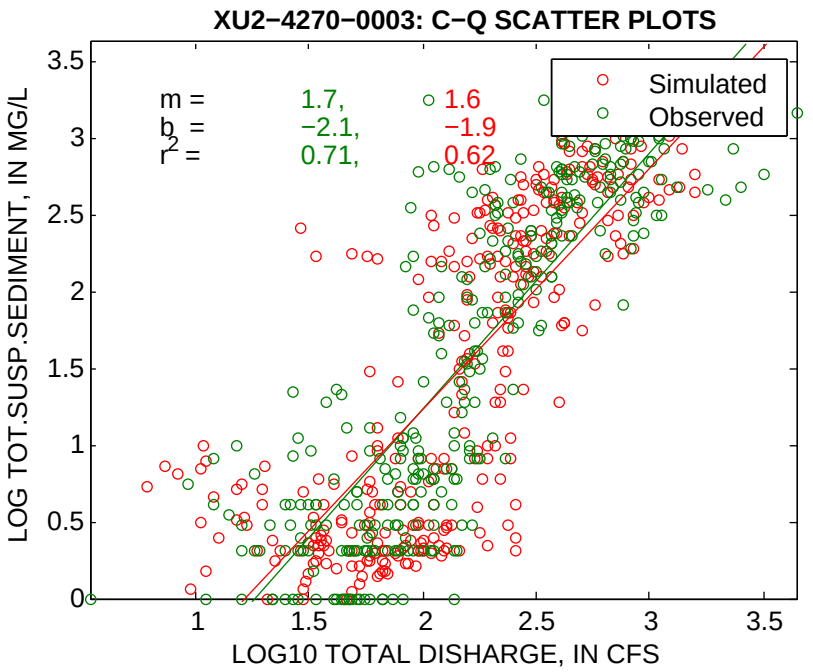
STATISTICS

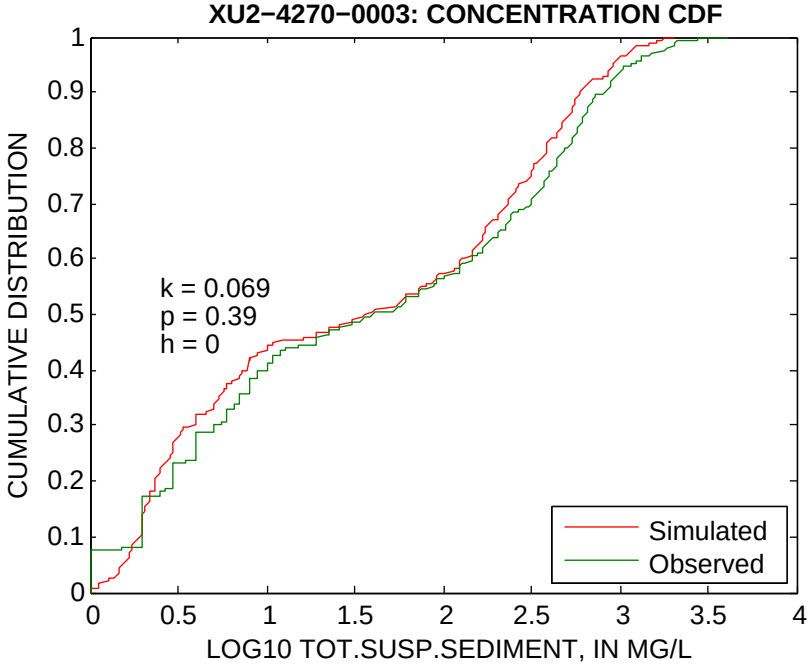
	n	332	332
		observe	simulate
min		1	0.72852
		0	-0.137559
mean		279.162	244.522
		1.58389	1.58206
media		40.5	49.812
		1.60742	1.69731
max		4150	1820.5
		3.61805	3.26019
varian		233927	137701
		1.12202	1.06952
JB		0.001	0.001
		0.001	0.001
		ra	log
%		-12.4084	-0.115538
err.va		172464	0.289684
rel.std.err		0.737253	0.25818
mod.eff		0.262747	0.74182

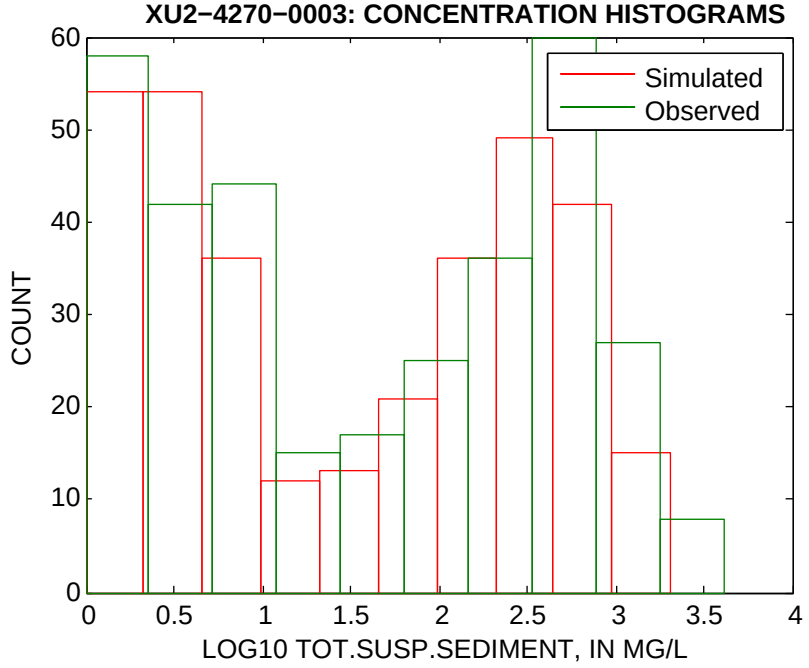
VERSION 2.1

ALL DATA
LOG10

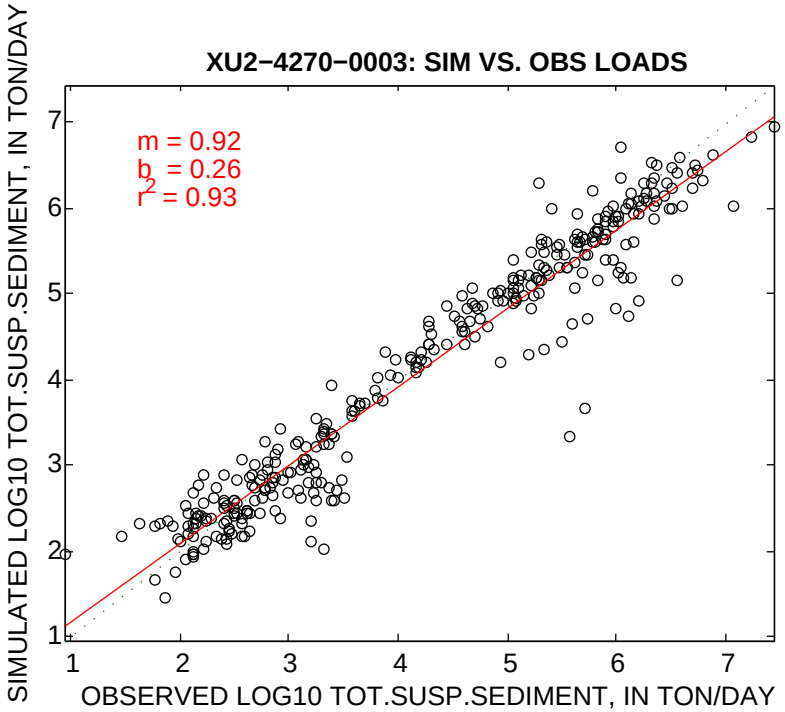




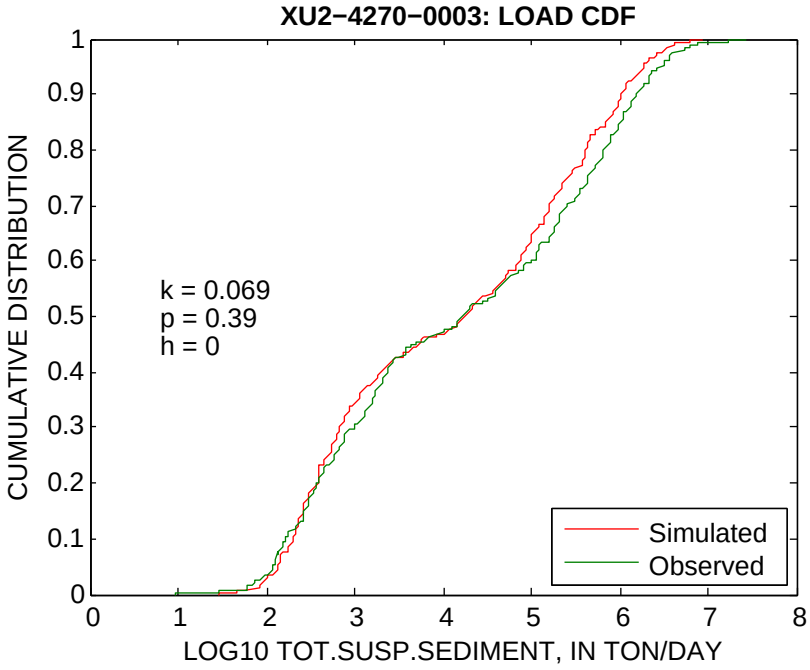


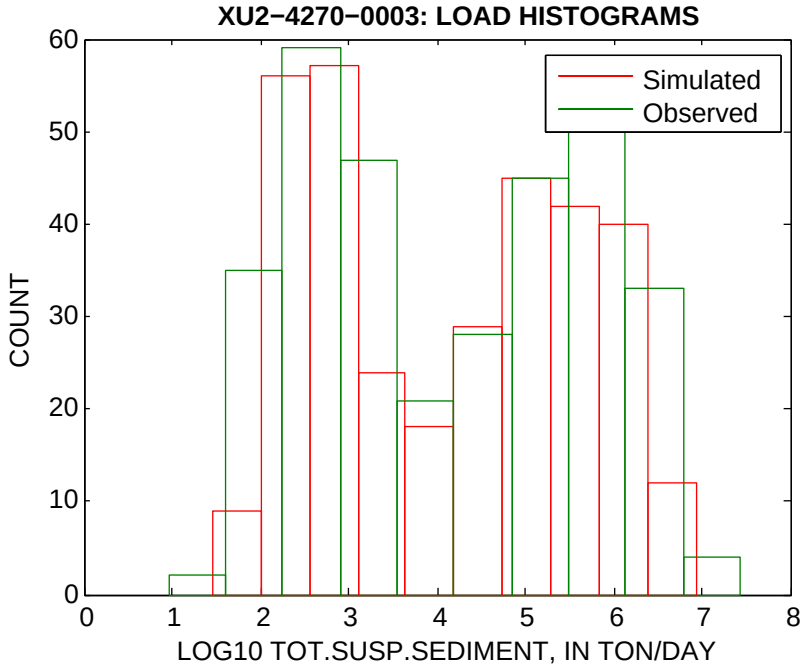


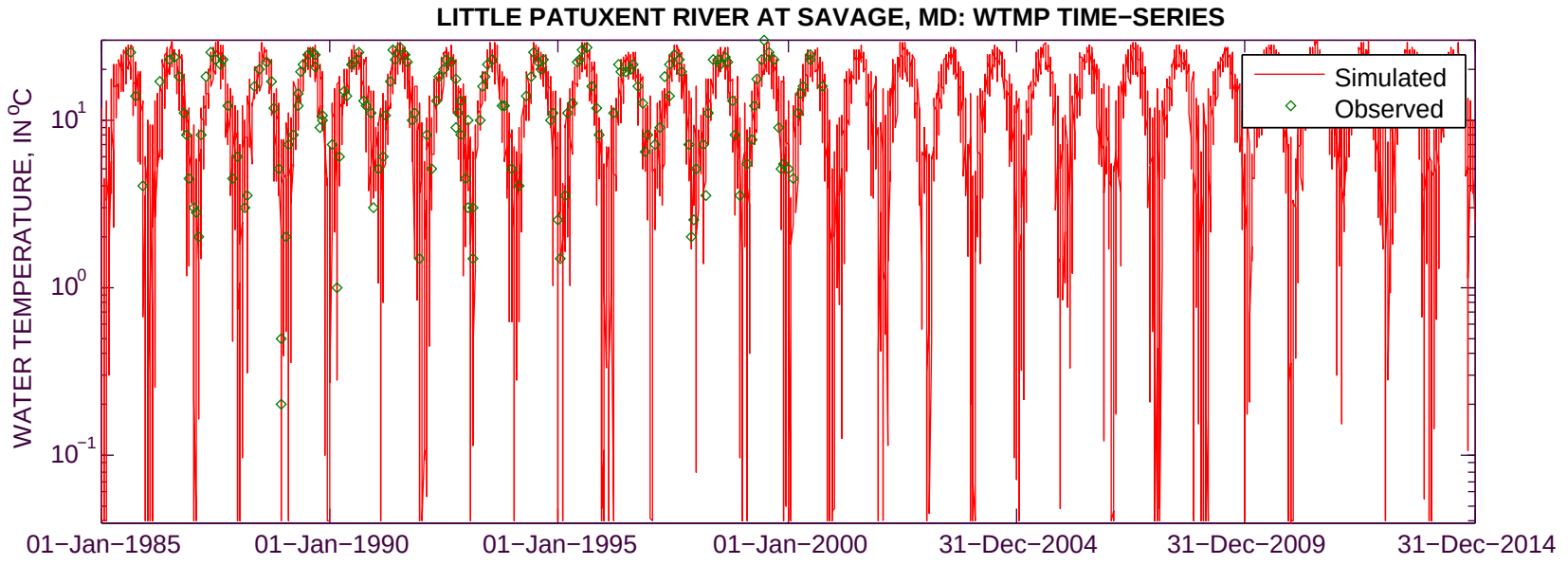
LOAD DATA
LOG10

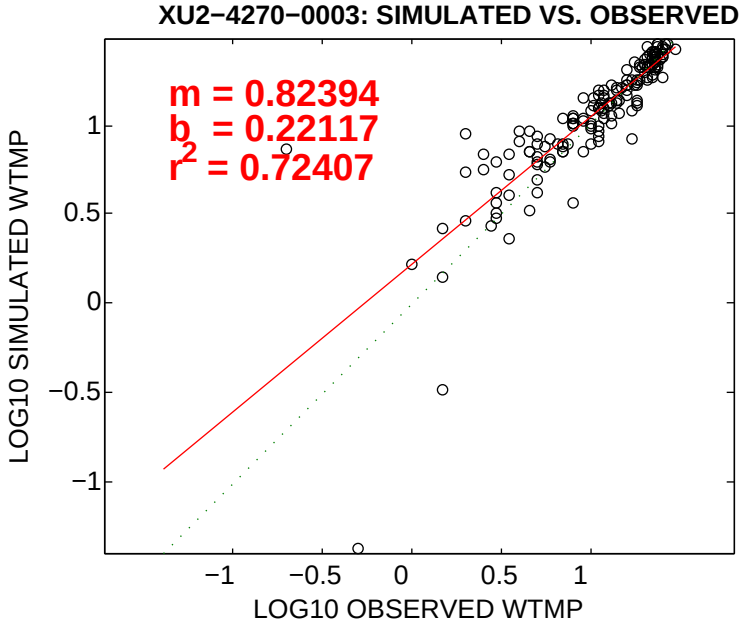


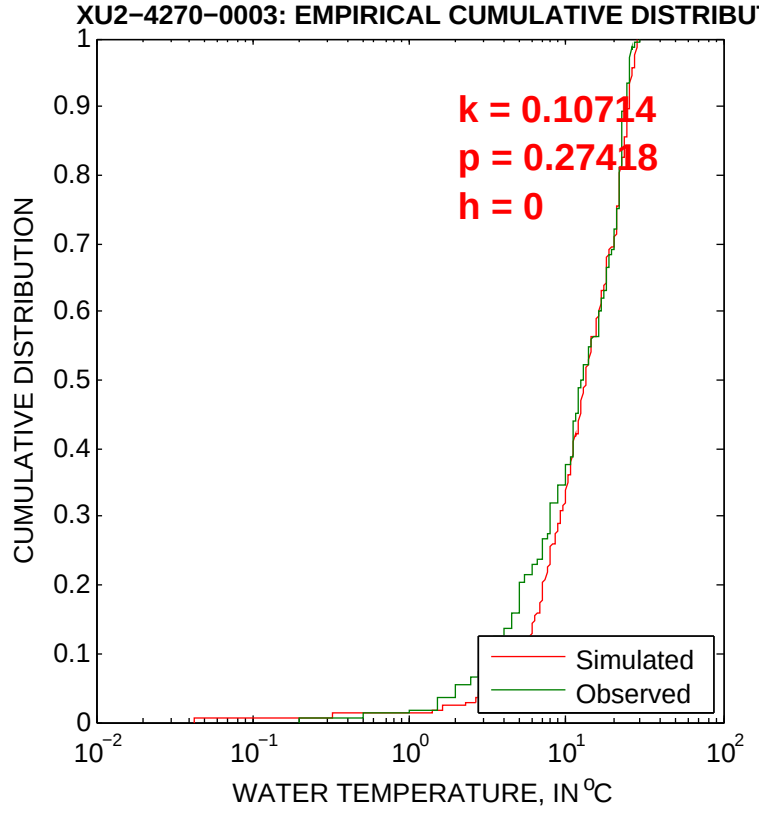












DATA SELECTION

scenario	file
P620171001WQ	WTMP.calib

plot: WTMP - water tempera...

Dates: 1/1/1985 – 12/31/201

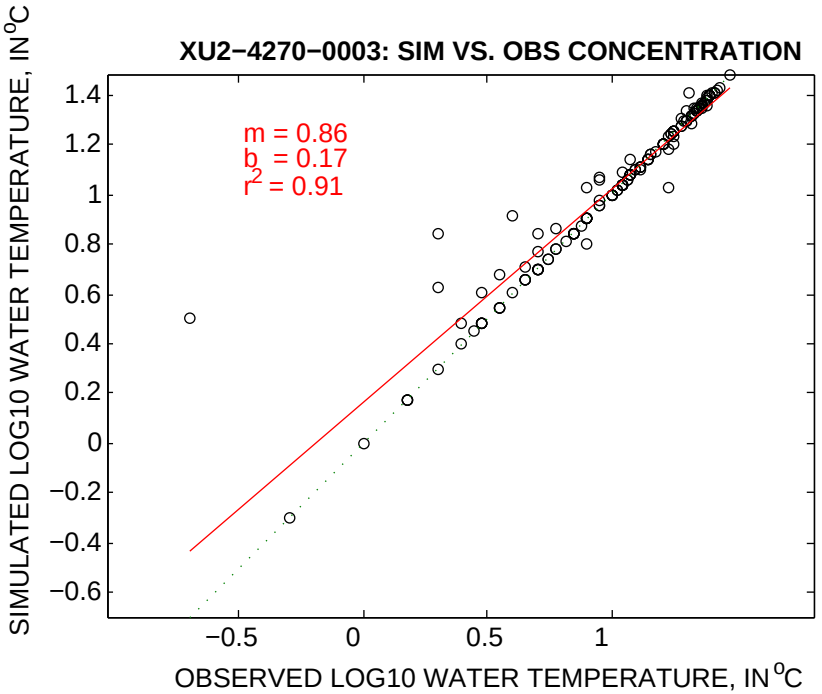
Drive	Directory	Observed
N/A	model	OBS20161101

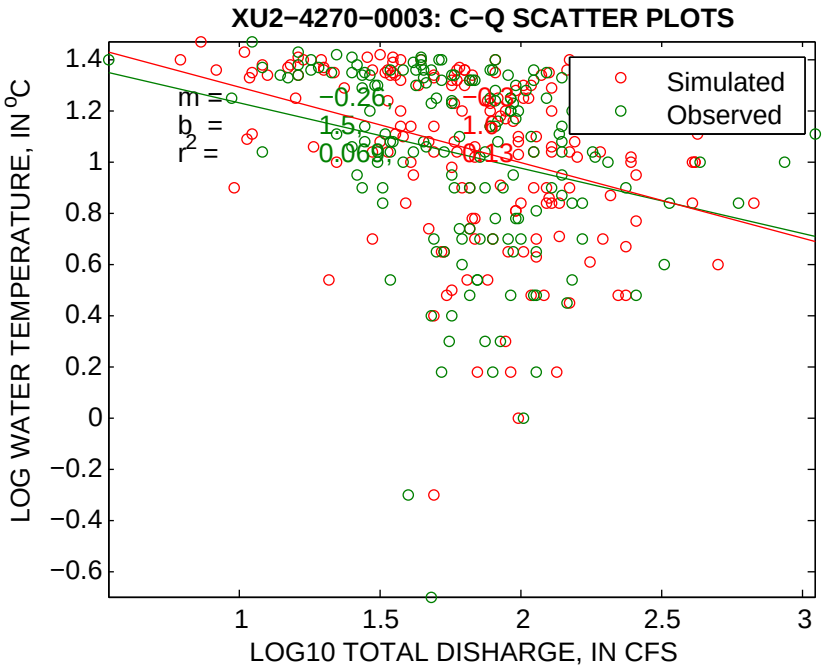
STATISTICS

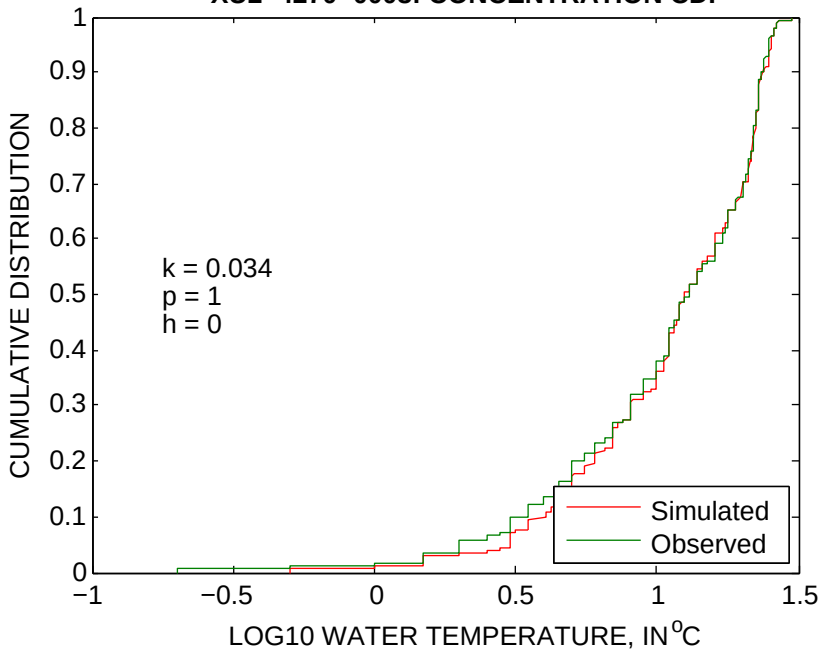
	n	168	168
		observe	simulate
min		0.2	0.042623
		-0.69897	-1.37036
mean		13.6518	14.3791
		1.02541	1.06604
media		12.75	13.25
		1.10543	1.12221
max		30	28.277
		1.47712	1.45143
varian		59.8698	56.3794
		0.134941	0.126519
JB		0.011103	0.017723
		0.001	0.001
		ra	log
%		5.3279	3.96275
err.va		6.73453	0.0407543
rel.std.err		0.112486	0.302017
mod.eff		0.887514	0.697983

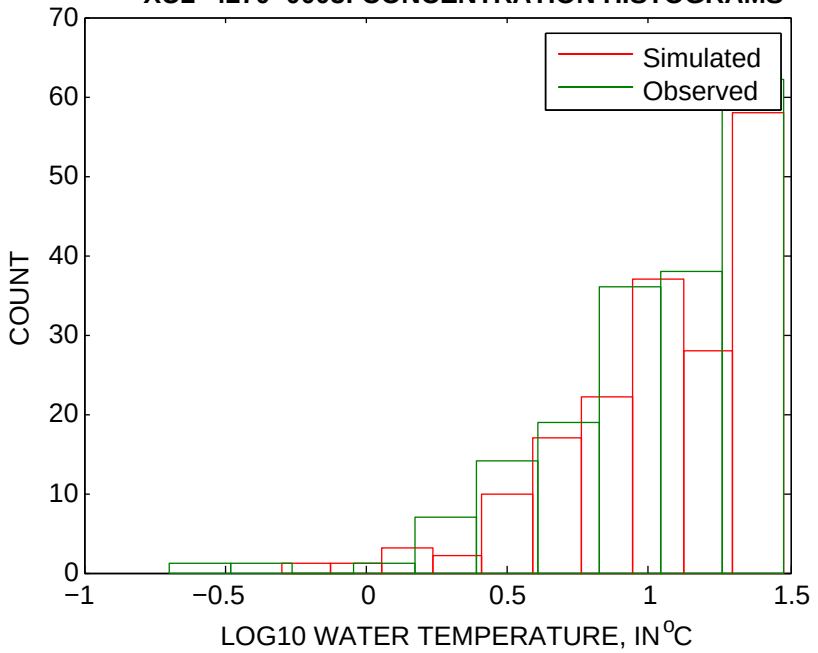
VERSION 2.1

ALL DATA
LOG10

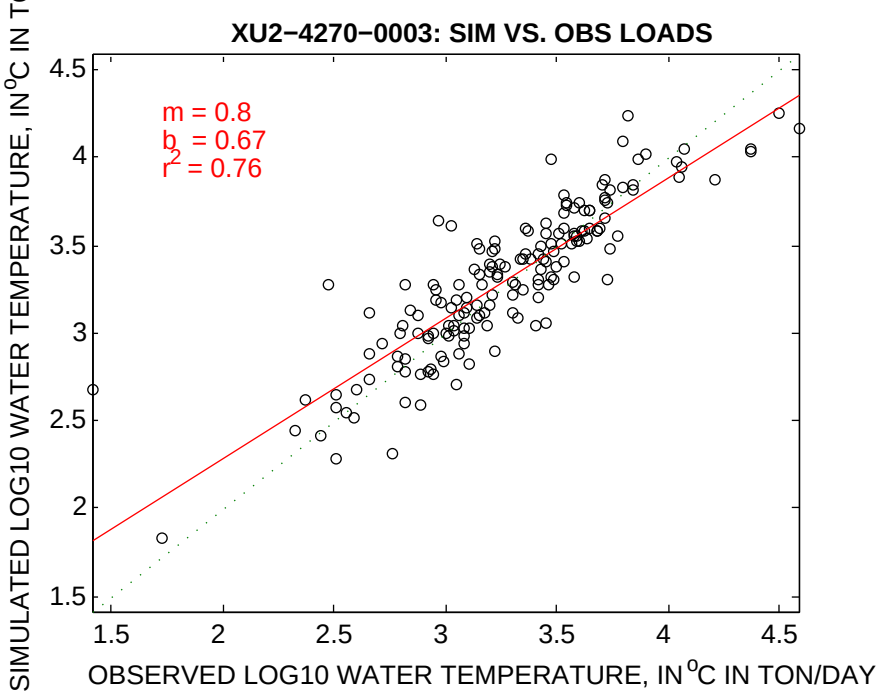




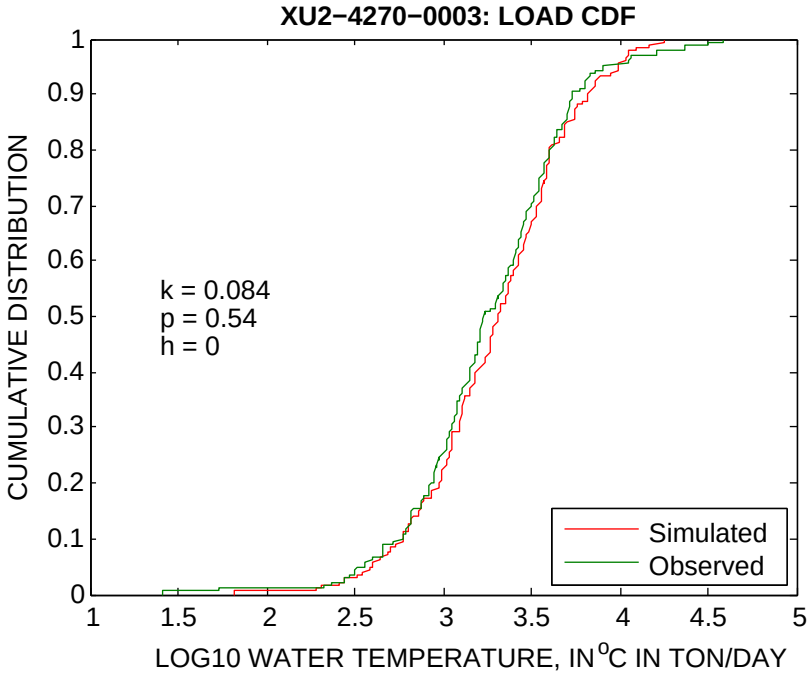


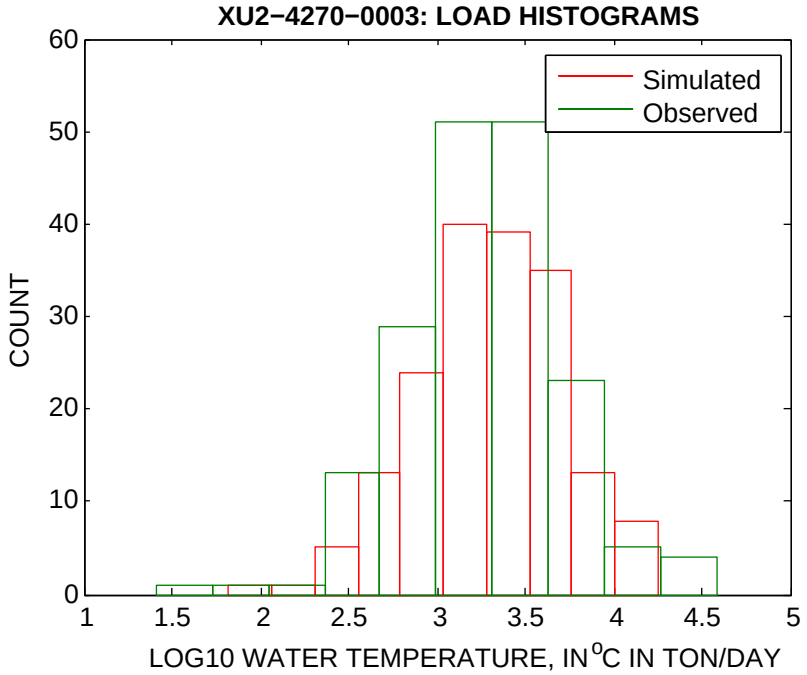


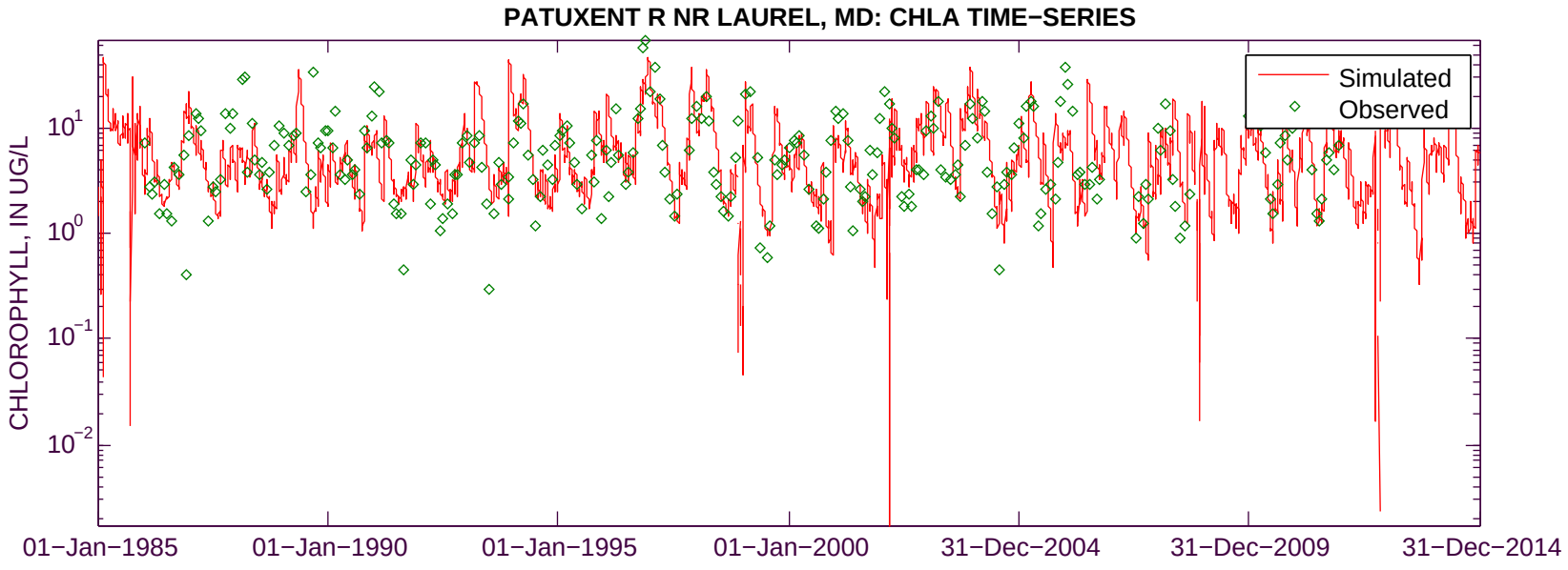
LOAD DATA
LOG10

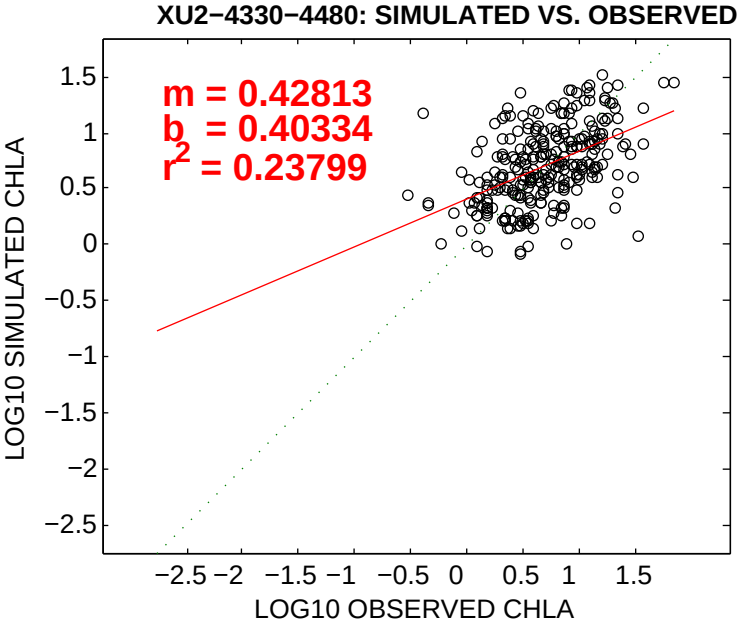


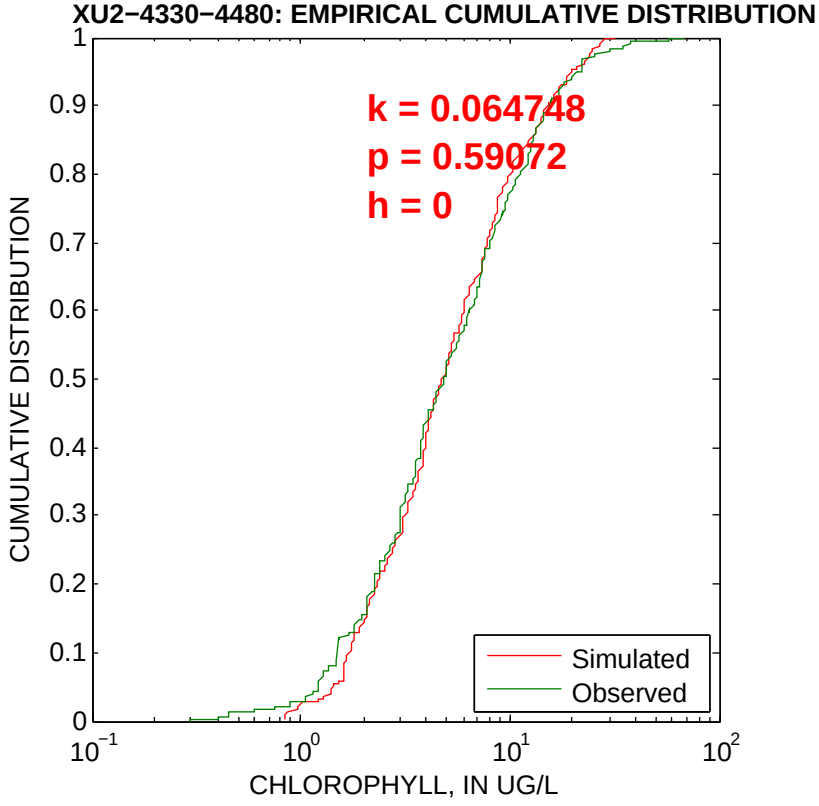












DATA SELECTION

scenario	file
P620171001WQ	CHLA.calib

plot: CHLA - chlorophyll A

Dates	1/1/1985	12/31/201

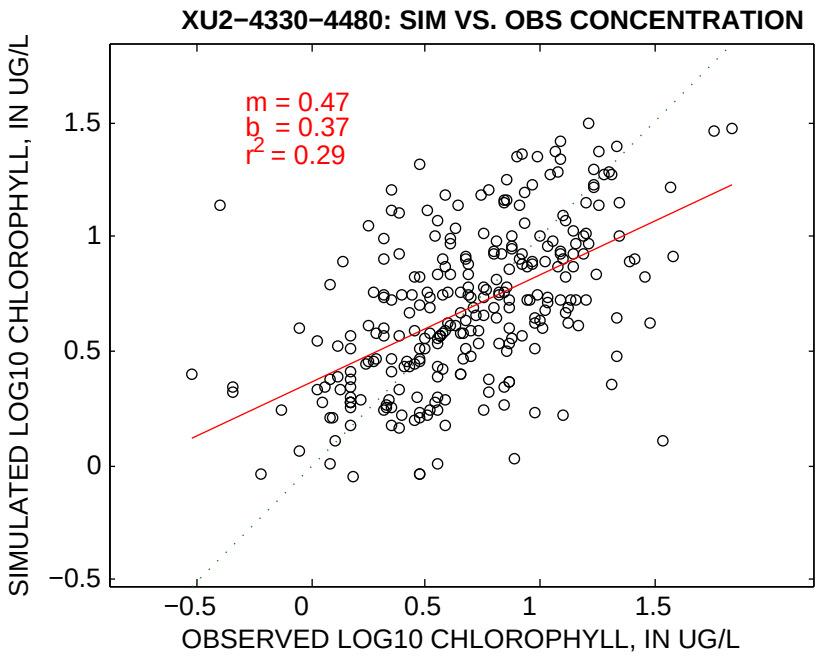
Drive	Directory	Observed
N/A	model	OBS20161101

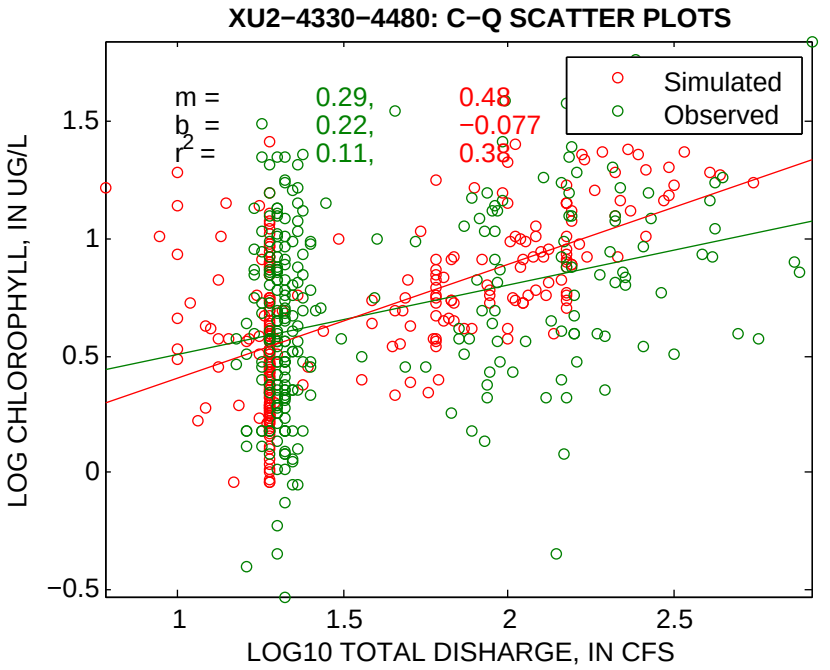
STATISTICS

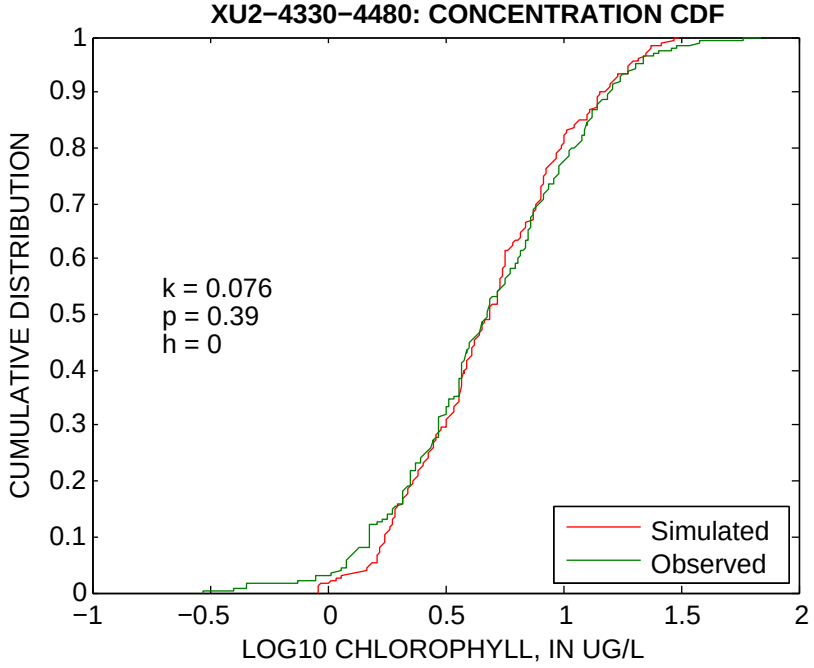
	n	278	277
		observe	simulate
min		0.3	0
		-0.522879	-0.0792038
mean		7.40417	6.86193
		0.690084	0.698789
media		4.78	4.7507
		0.679428	0.682172
max		69.078	32.346
		1.83934	1.50982
varian		63.7927	35.3397
		0.158695	0.122222
JB		0.001	0.001
		0.5	0.073103
		ra	log
%		-7.32338	1.26142
err.va		55.7252	0.145108
rel.std.err		0.873535	0.914386
mod.eff		0.126465	0.085614

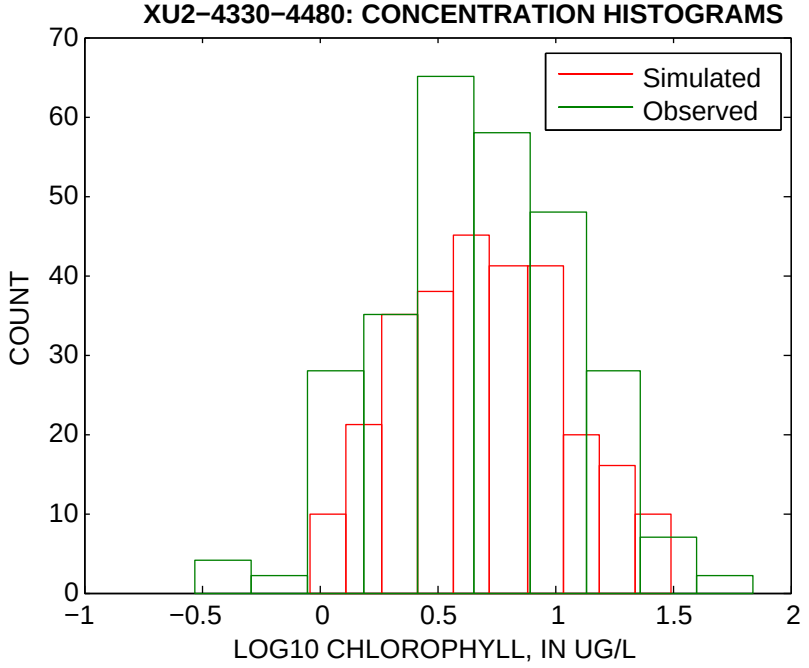
VERSION 2.1

ALL DATA
LOG10

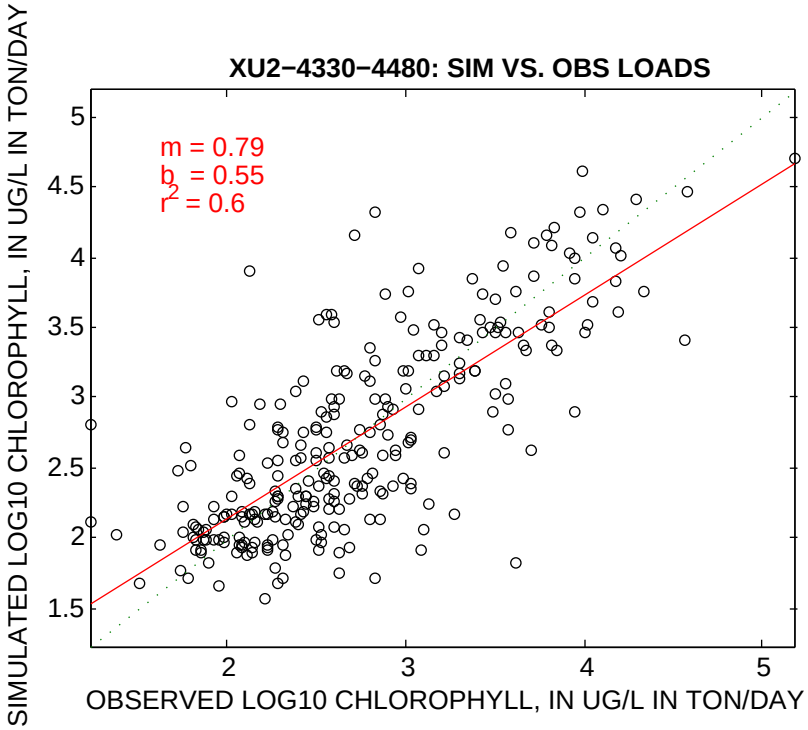




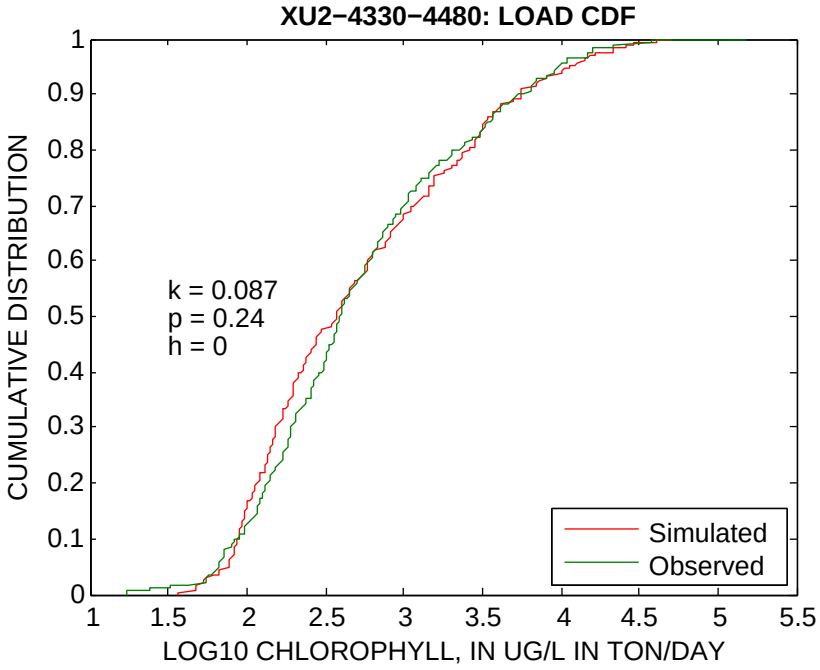


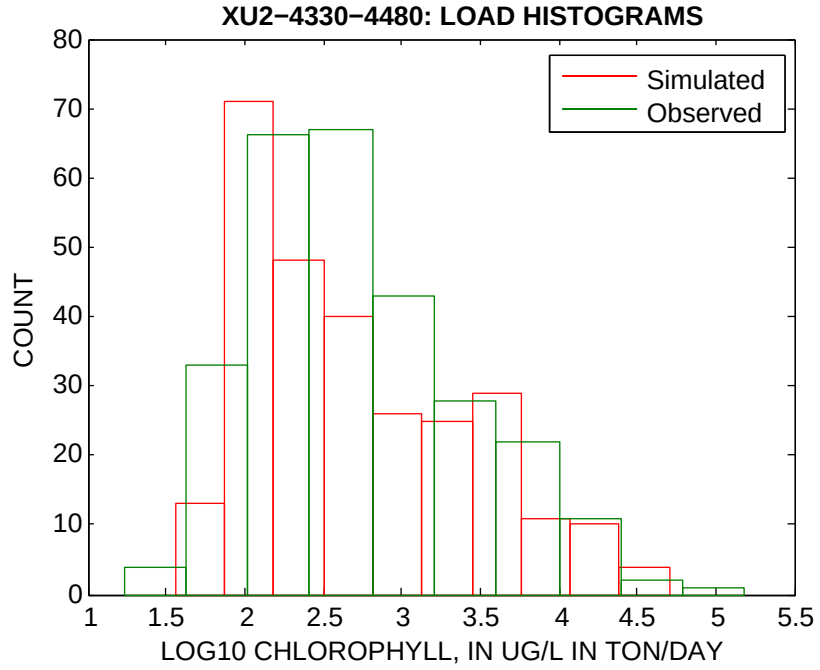


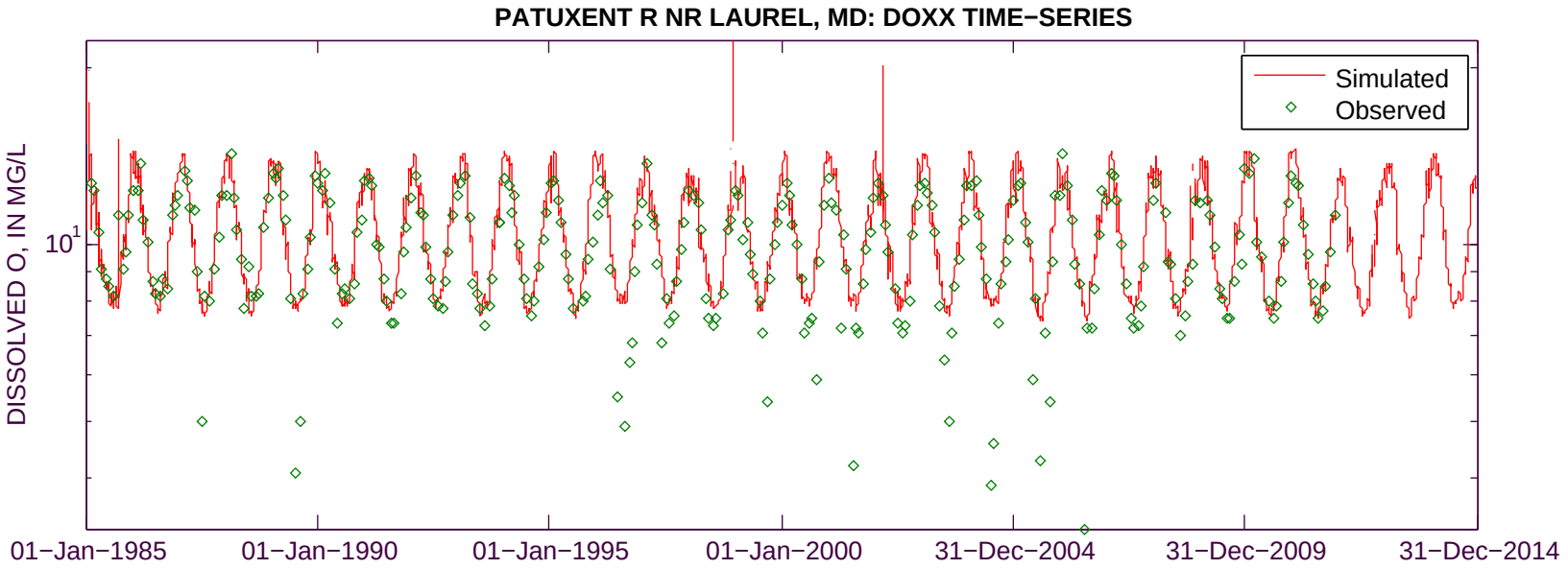
LOAD DATA
LOG10

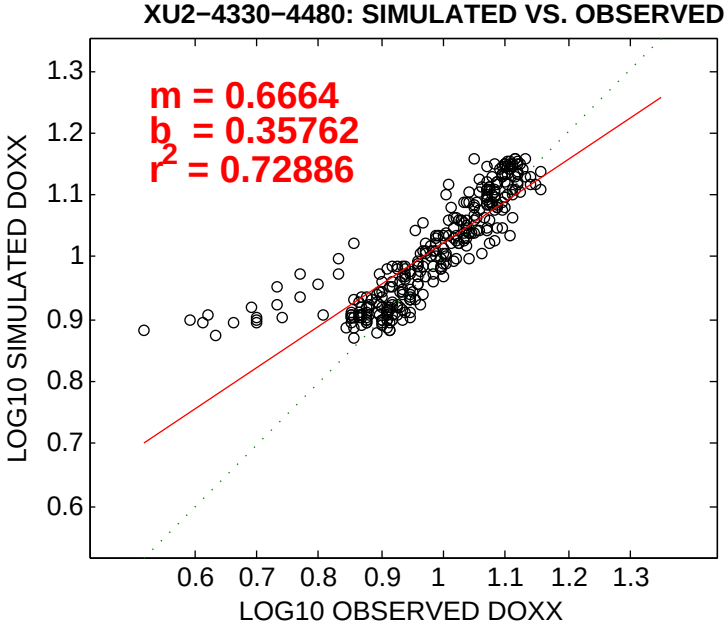


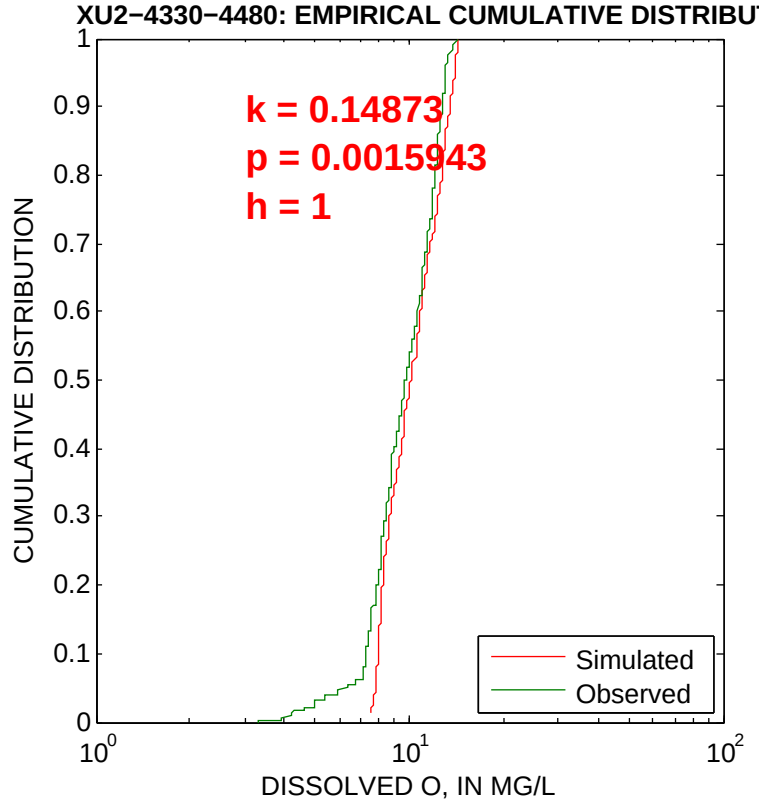












DATA SELECTION

scenario	file
P620171001WQ	DOXX.calib

plot: DOXX - dissolved oxygen

Dates: 1/1/1985 – 12/31/201

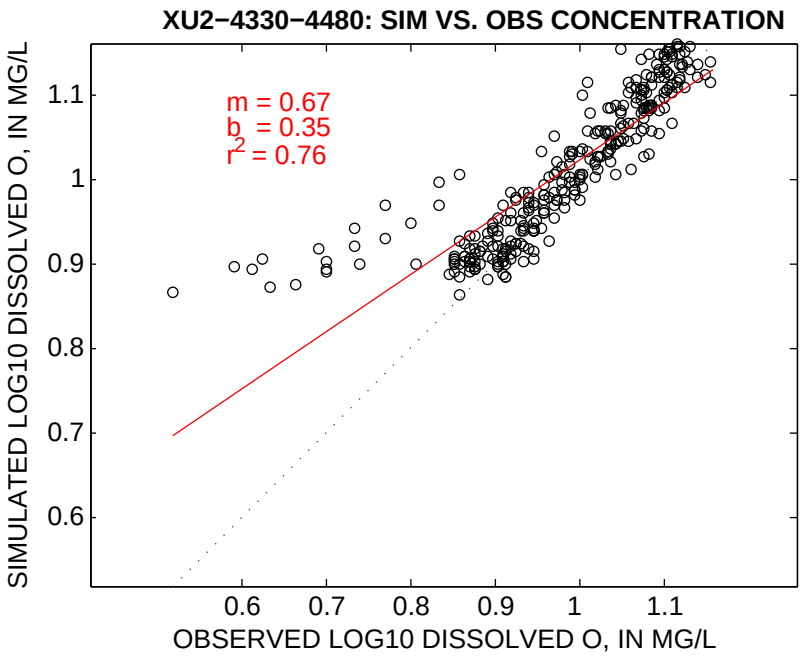
Drive	Directory	Observed
N/A	model	OBS20161101

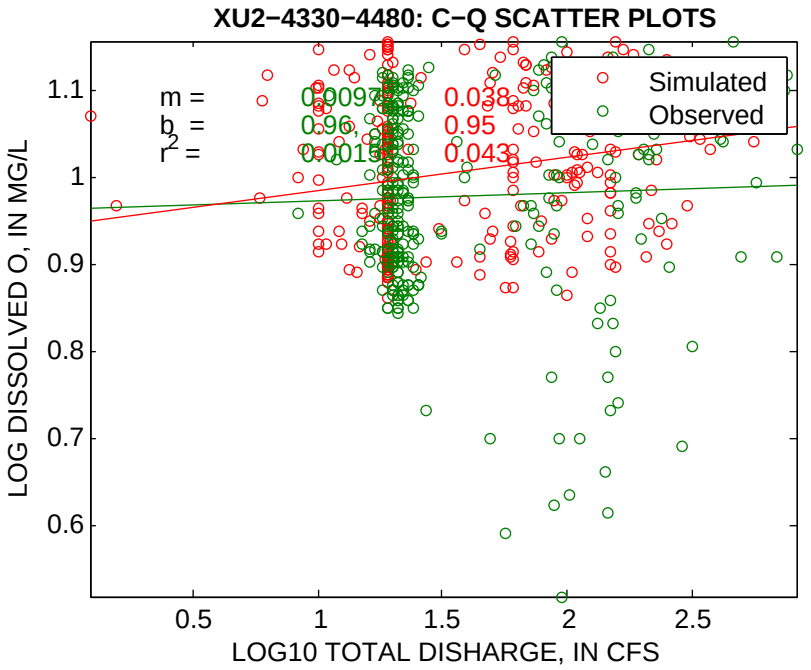
STATISTICS

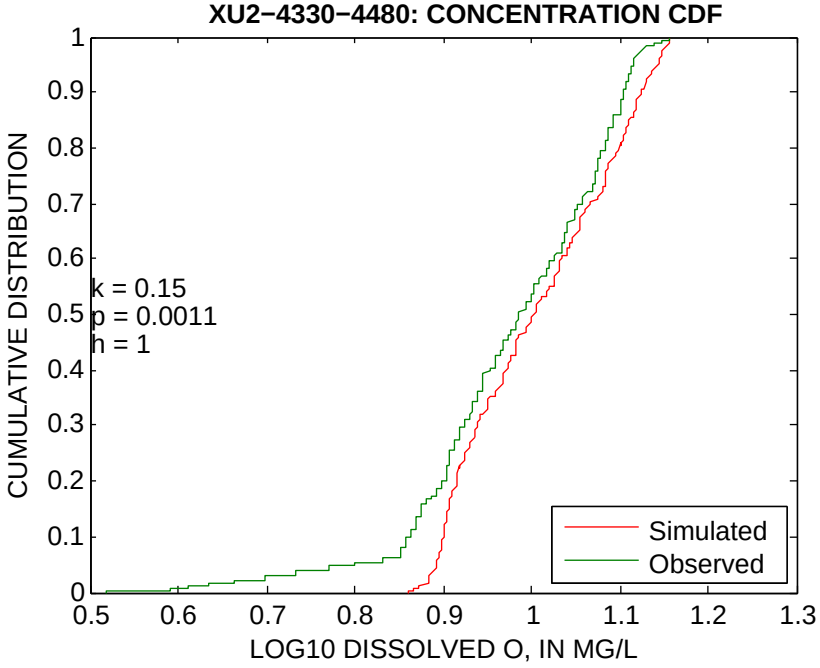
n	316	313
	observe	**simulate**
min	3.3	0
	0.518514	0.869959
mean	9.83334	10.3455
	0.979739	1.01052
media	9.75	10.103
	0.986772	1.00745
max	14.3	14.427
	1.15534	1.15918
varian	4.97277	5.2561
	0.011926	0.00726643
JB	0.040709	0.001
	0.001	0.001153
	ra	log
%	5.20799	3.14142
err.va	2.41907	0.00424774
rel.std.err	0.486464	0.356175
mod.eff	0.513536	0.643825

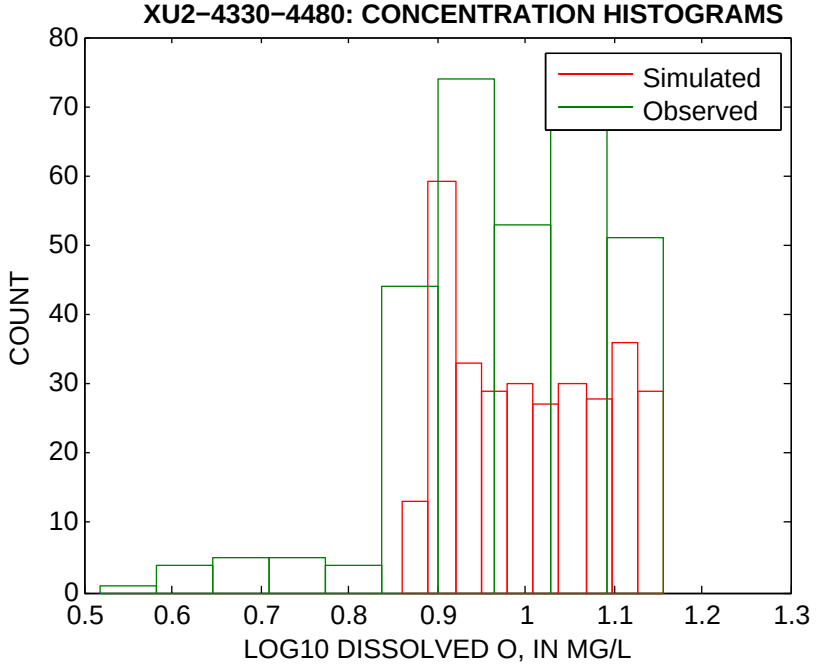
VERSION

ALL DATA
LOG10

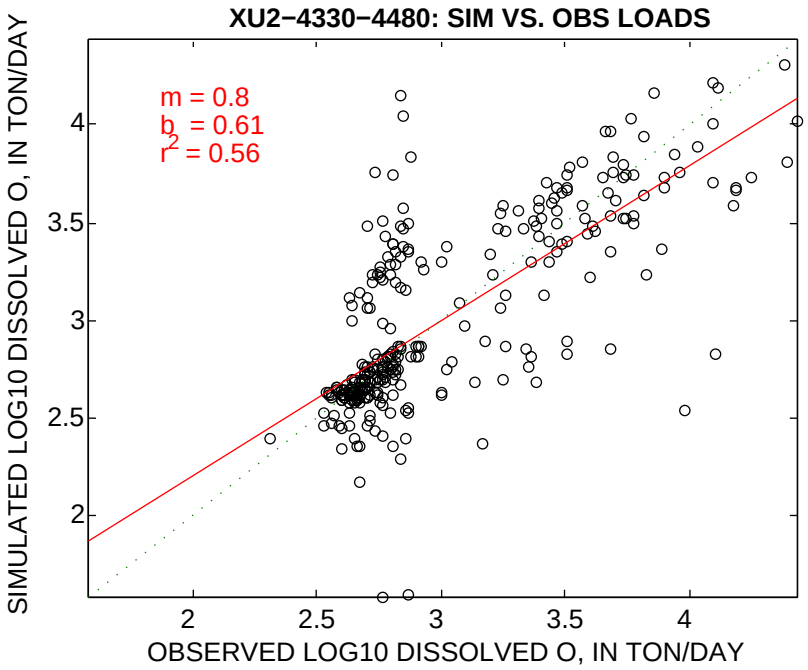


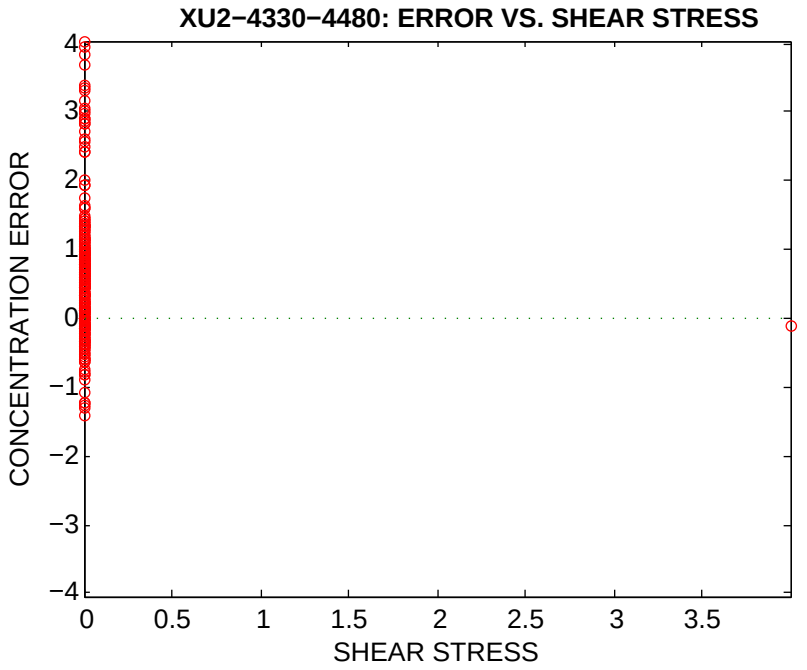


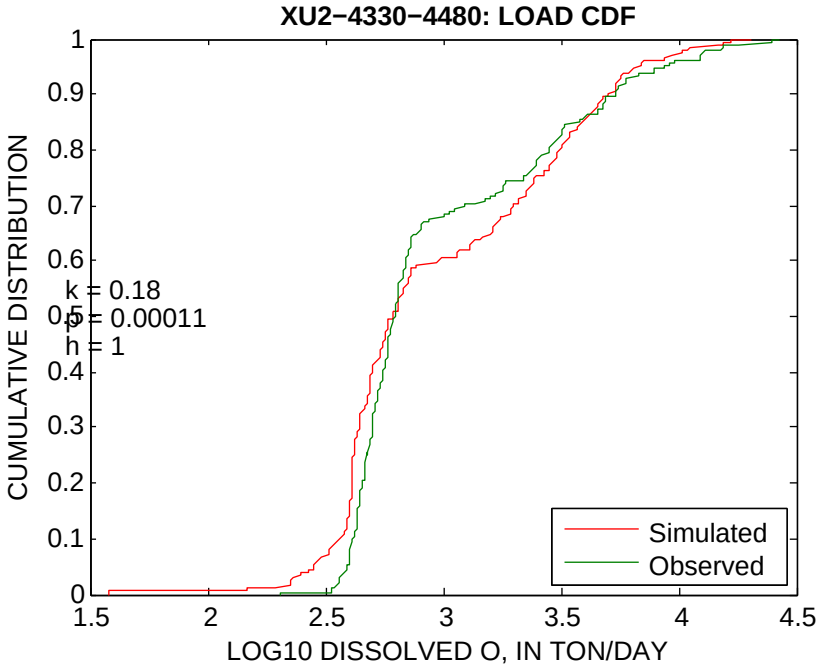


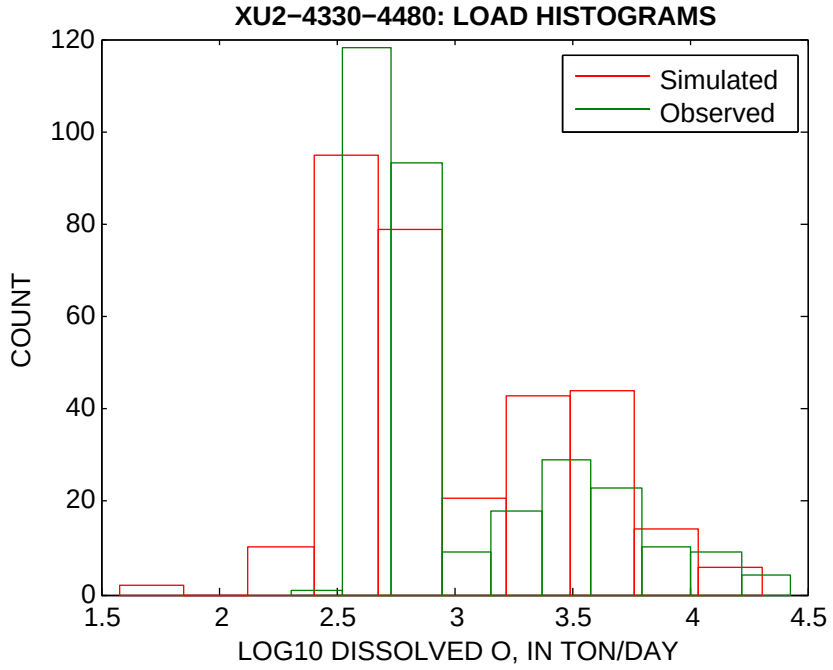


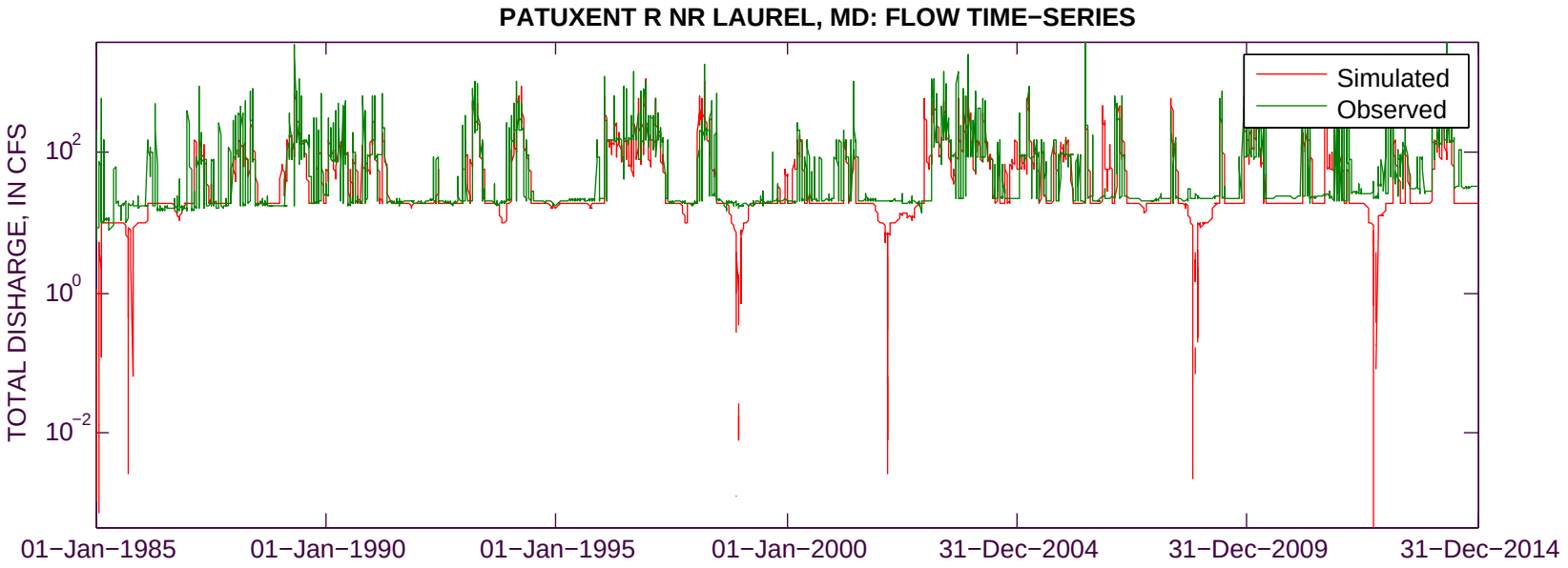
LOAD DATA
LOG10

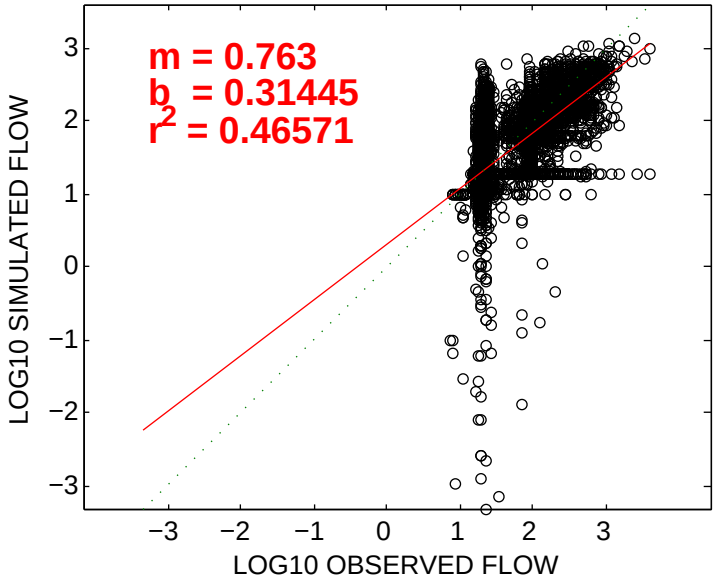


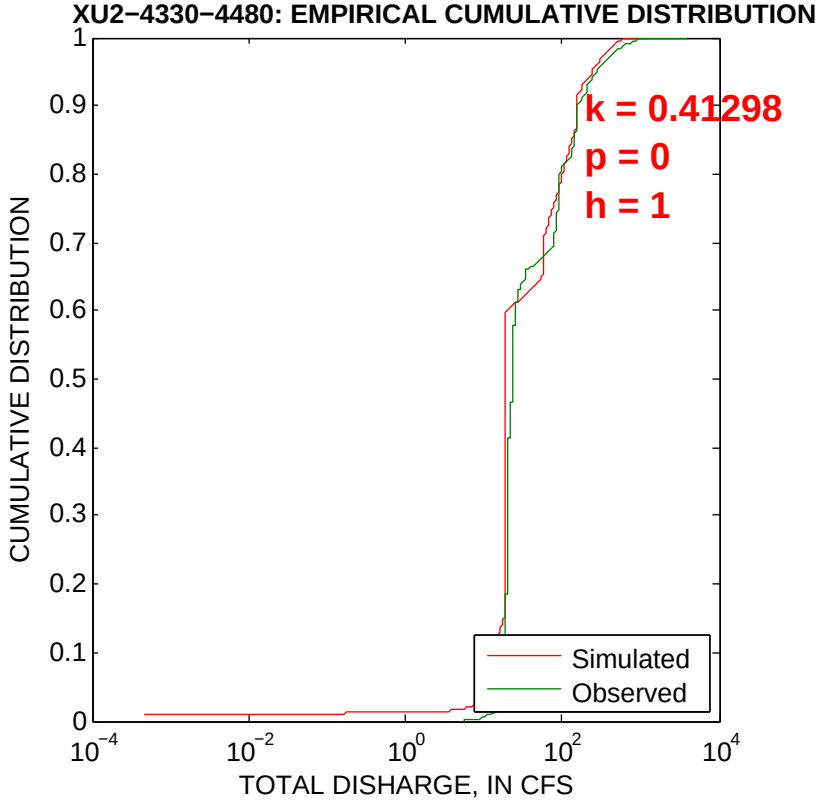












DATA SELECTION

scenario	file
P620171001WQ	_FLOW.calib

plot: FLOW - total discharge

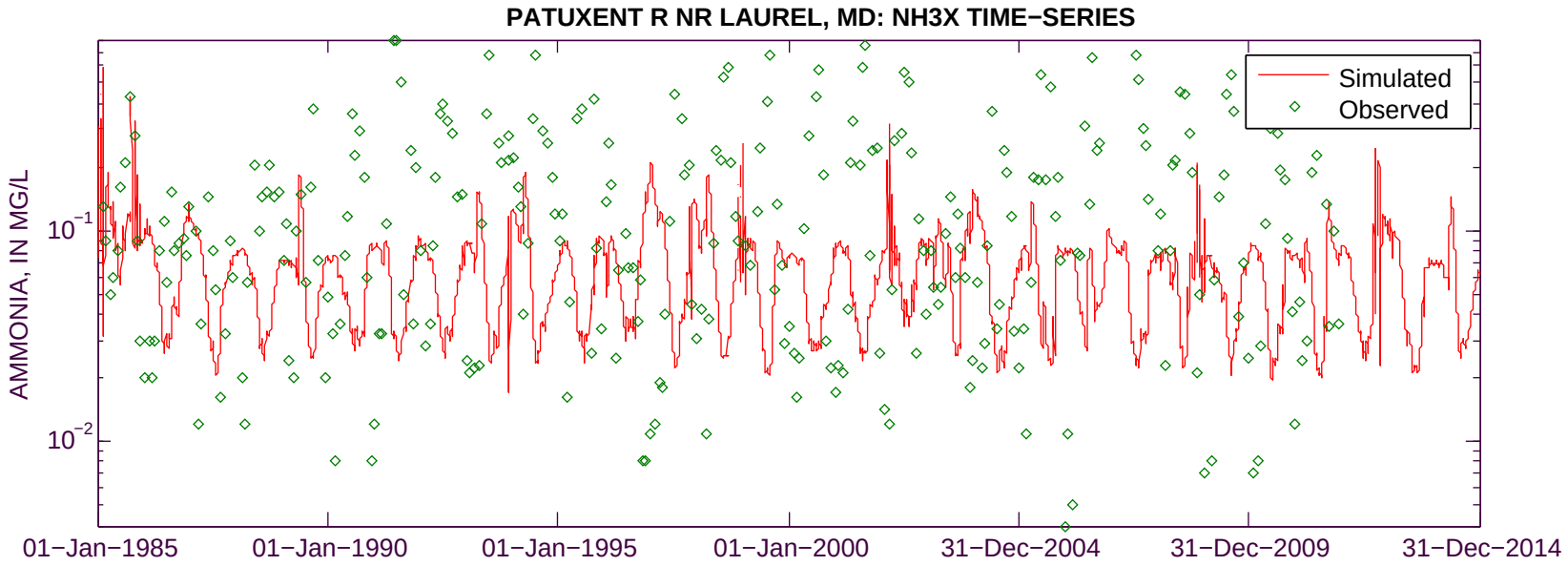
Dates: 1/1/1985 – 12/31/201

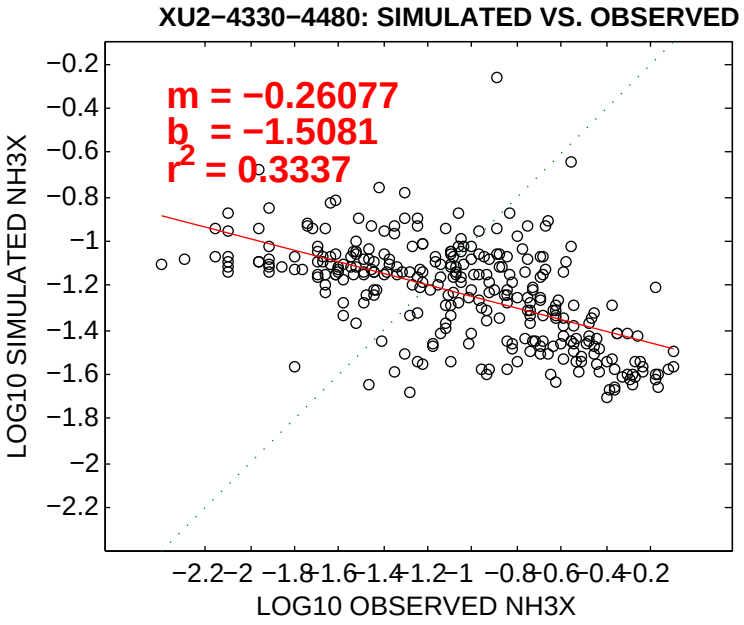
Drive	Directory	Observed
N/A	model	OBS20161101

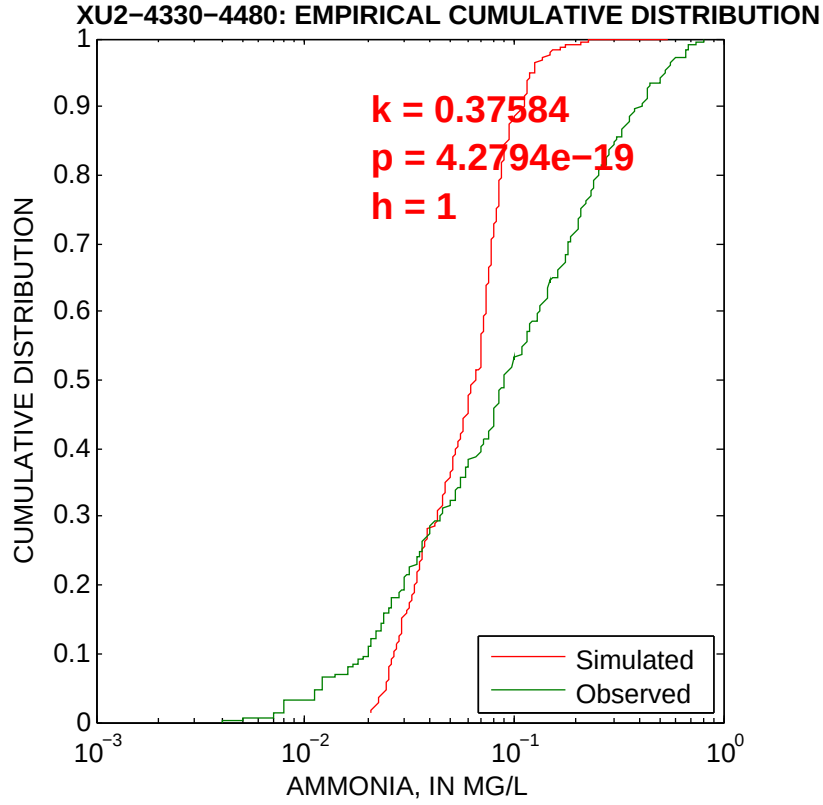
STATISTICS

	n	observe	simulate
		10957	10858
min		5.7	0
		0.880814	-3.33285
mean		77.2494	65.2432
		1.602	1.53678
media		23	19
		1.36173	1.27875
max		3940	1310.1
		3.5955	3.1173
varian		21812.9	9402.73
		0.185875	0.232357
JB		0.001	0.001
		0.001	0.001
		ra	log
%		-15.5421	-4.07131
err.va		13304.8	0.138841
rel.std.err		0.60995	0.74696
mod.eff		0.39005	0.25304

VERSION 2.1







DATA SELECTION

scenario	file
P620171001WQ	NH3X.calib

plot: NH3X - ammonia

Dates: 1/1/1985 – 12/31/201

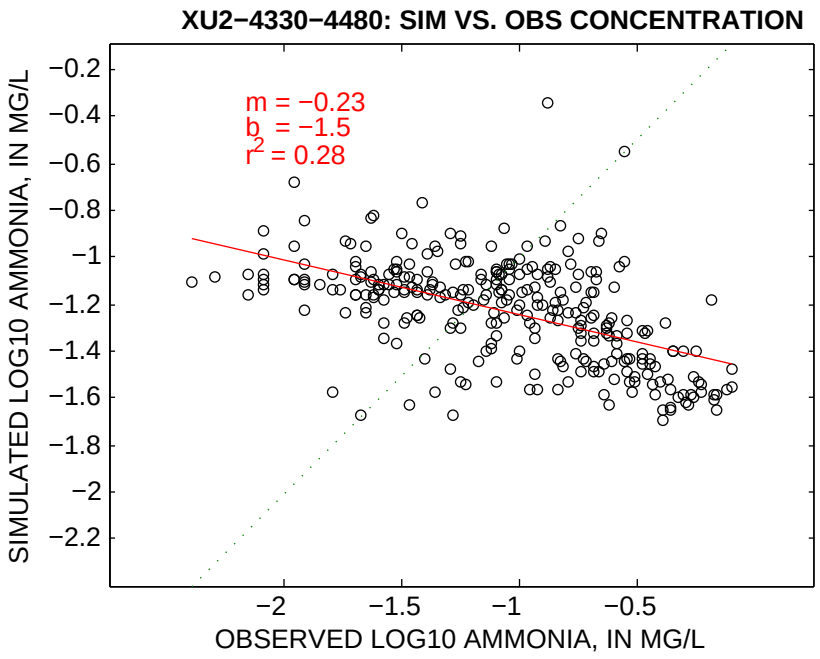
Drive	Directory	Observed
N/A	model	OBS20161101

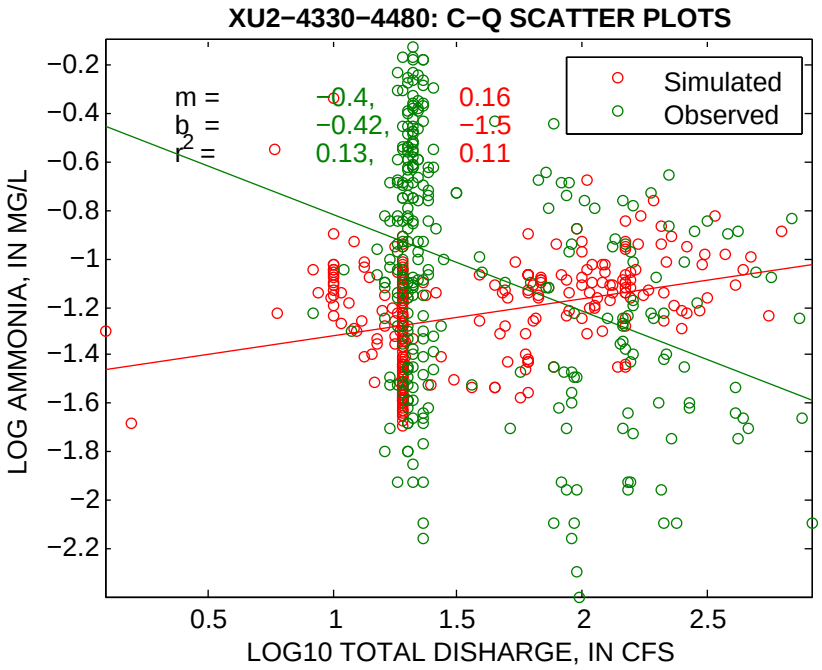
STATISTICS

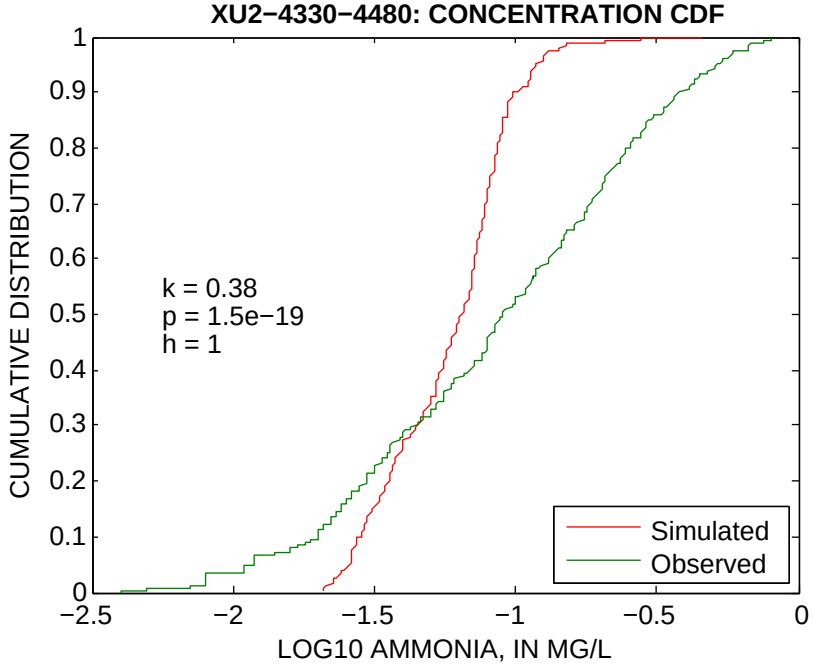
	n	observe	simulate
		298	295
min		0.004	0
		-2.39794	-1.69982
mean		0.155674	0.0666741
		-1.05805	-1.23222
media		0.09	0.065284
		-1.04576	-1.17975
max		0.8	0.54581
		-0.09691	-0.262959
varian		0.0270452	0.00187306
		0.252575	0.0514691
JB		0.001	0.001
		0.022982	0.5
		ra	log
%		-57.1708	16.4612
err.va		0.0424463	0.46621
rel.std.err		1.56946	1.84583
mod.eff		-0.56946	-0.845829

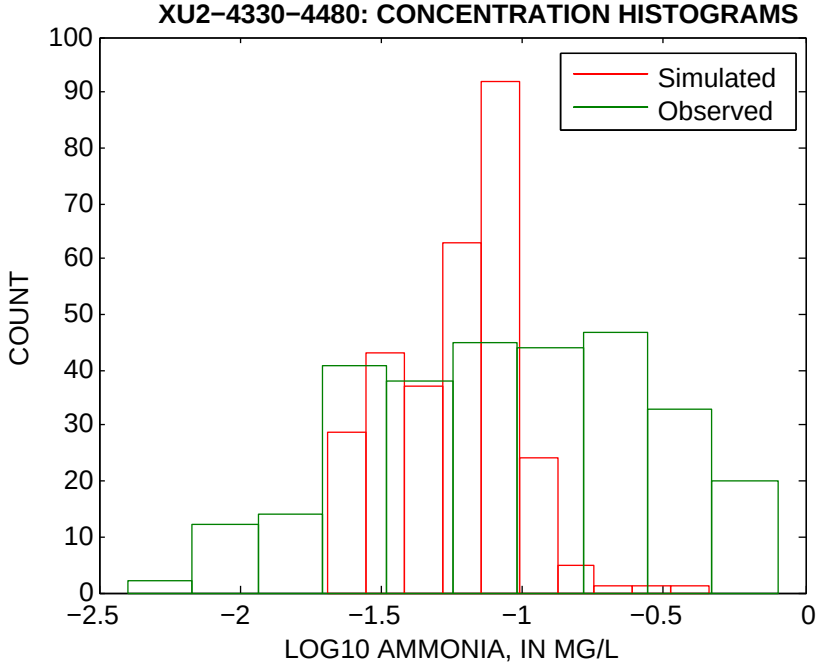
VERSION 2.1

ALL DATA
LOG10

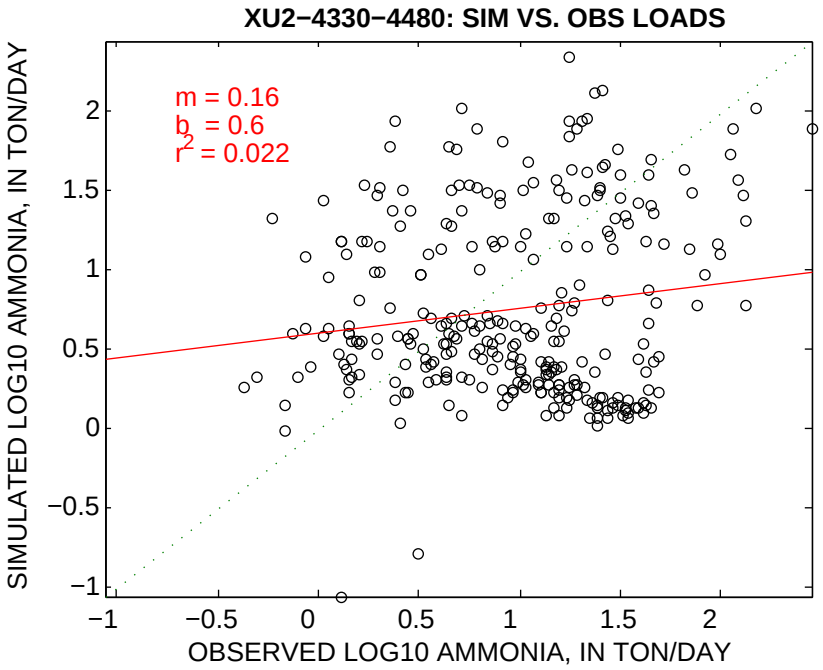


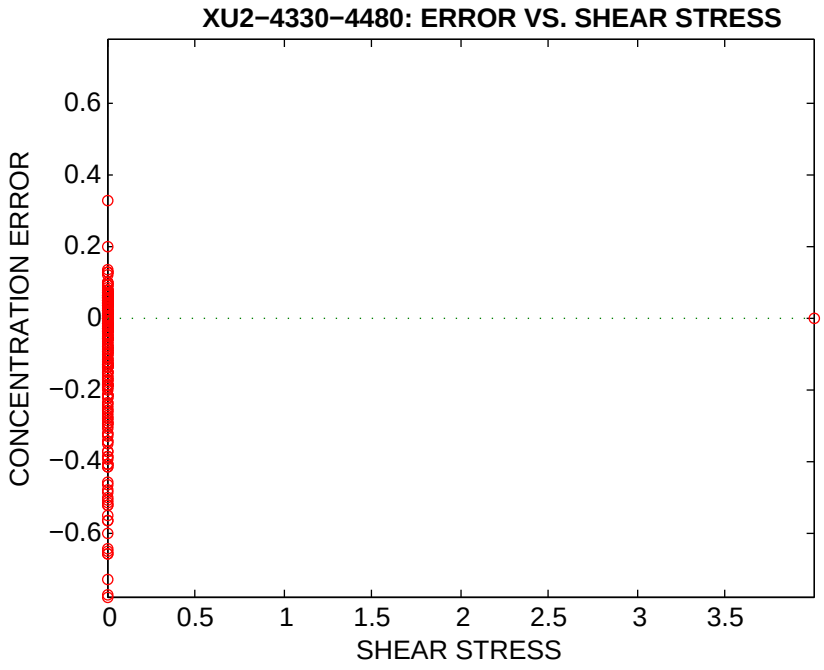


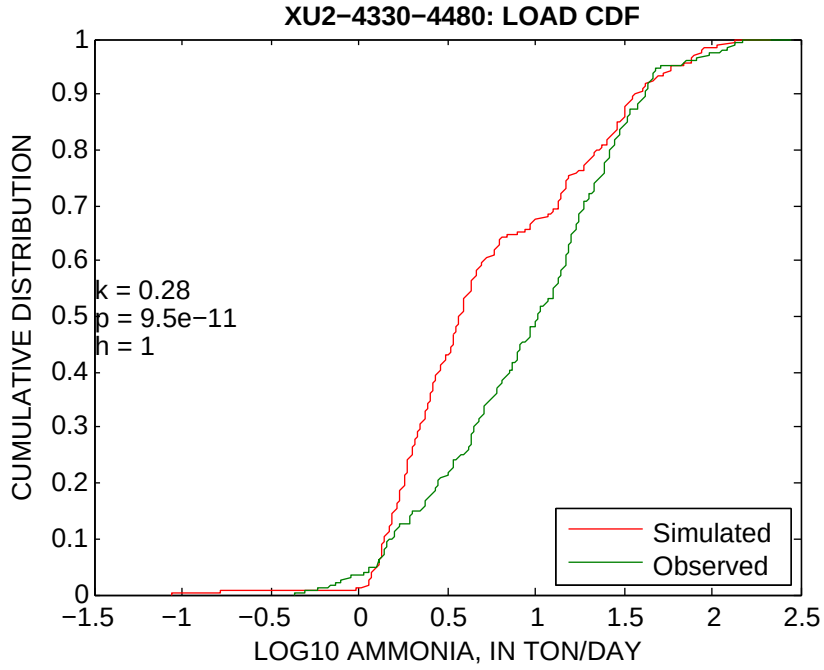


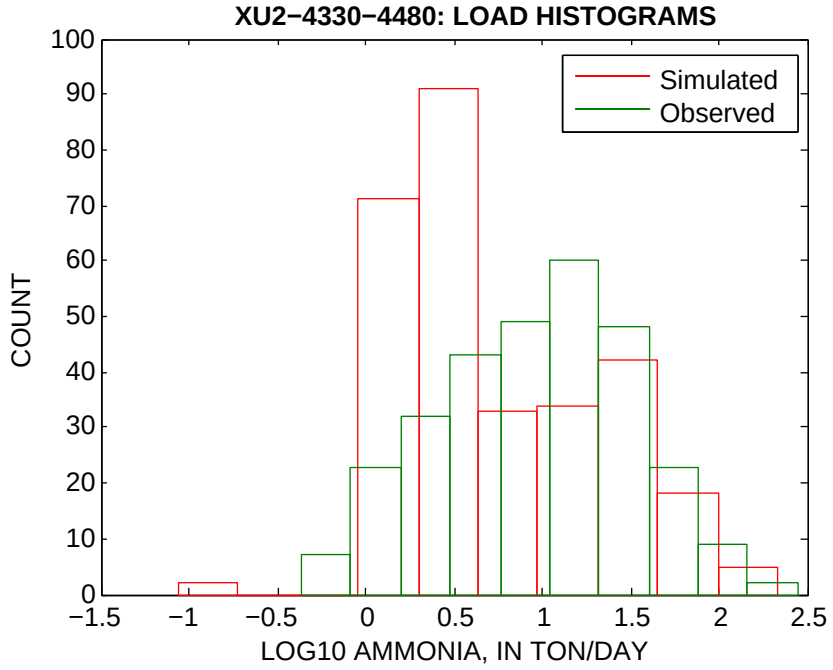


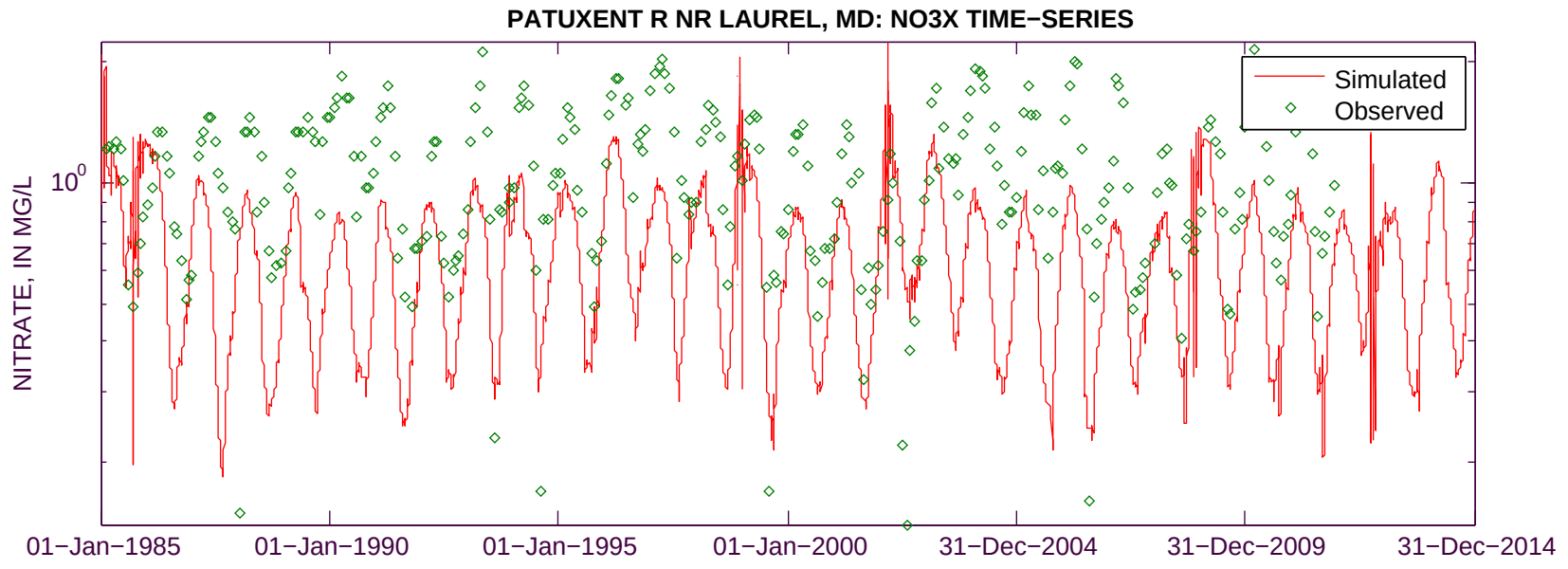
LOAD DATA
LOG10

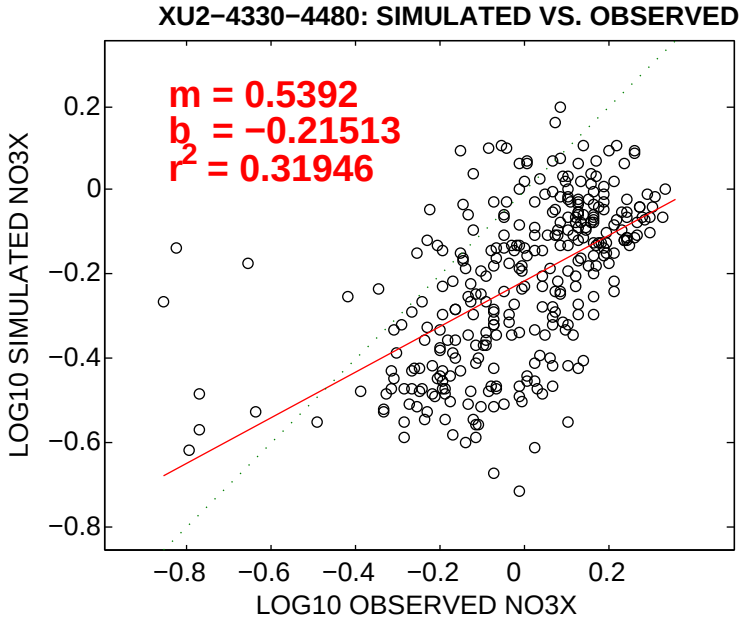


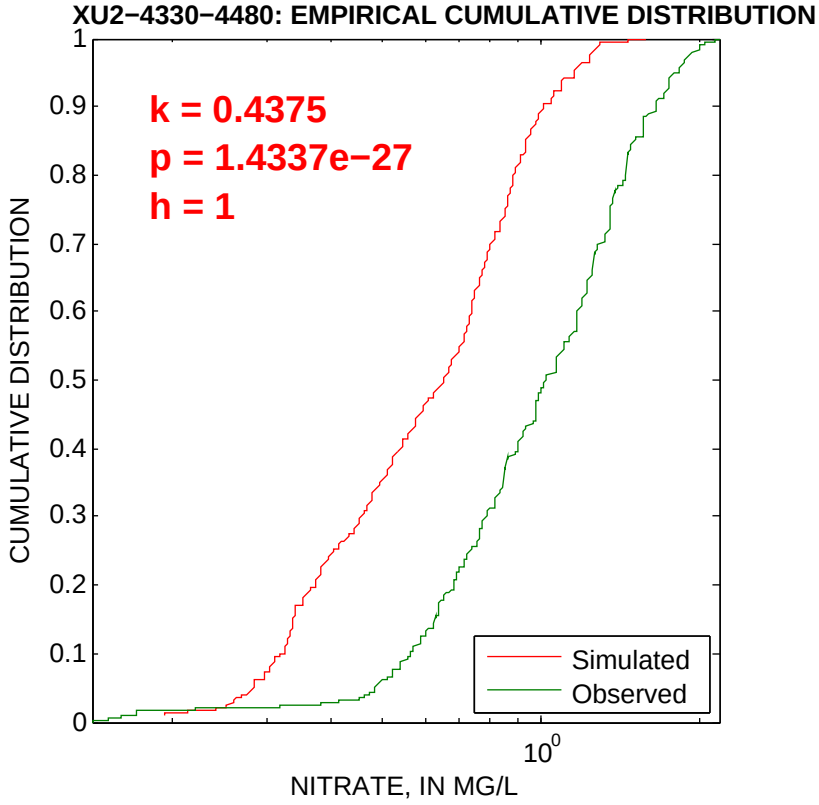












DATA SELECTION

scenario	file
P620171001WQ	NO3X.calib

plot: NO3X - nitrate

Dates: 1/1/1985 – 12/31/201

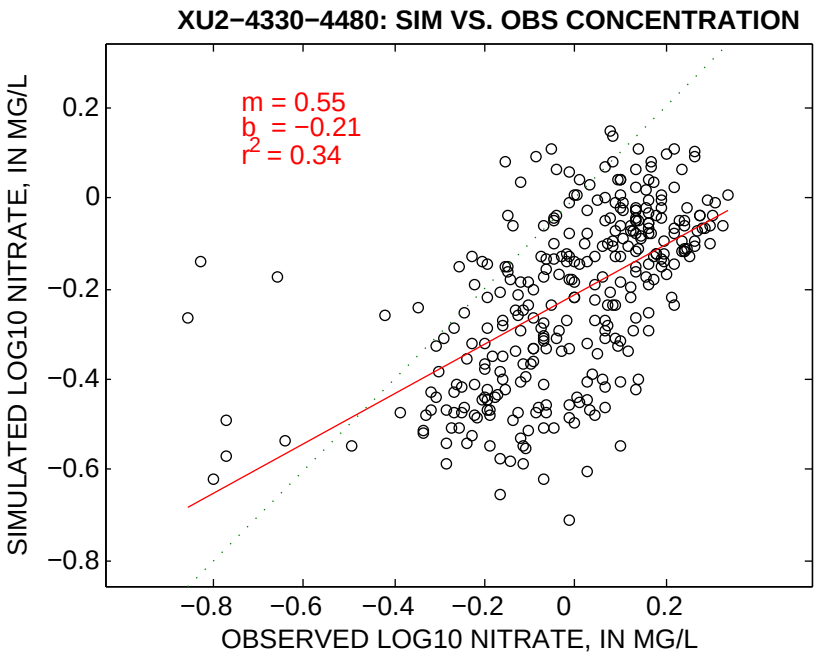
Drive	Directory	Observed
N/A	model	OBS20161101

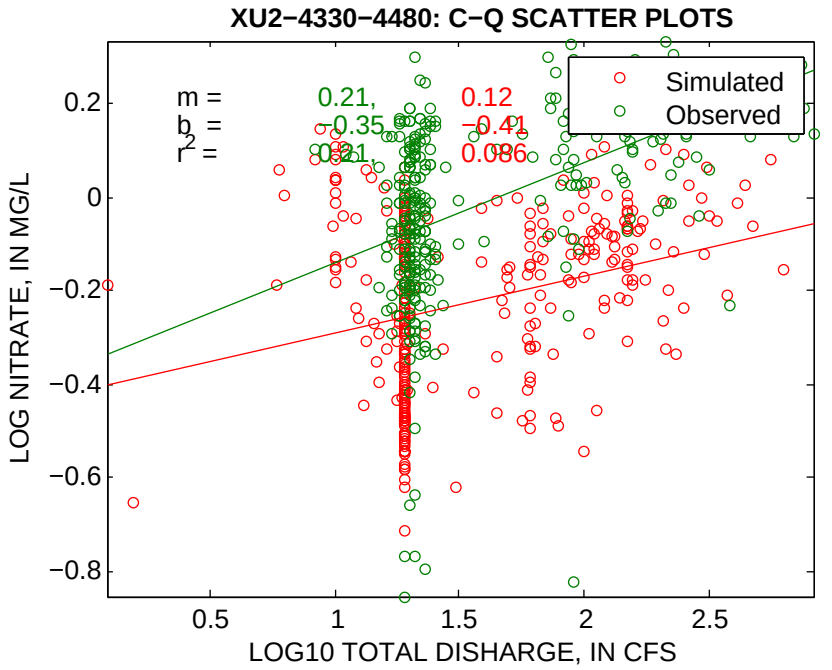
STATISTICS

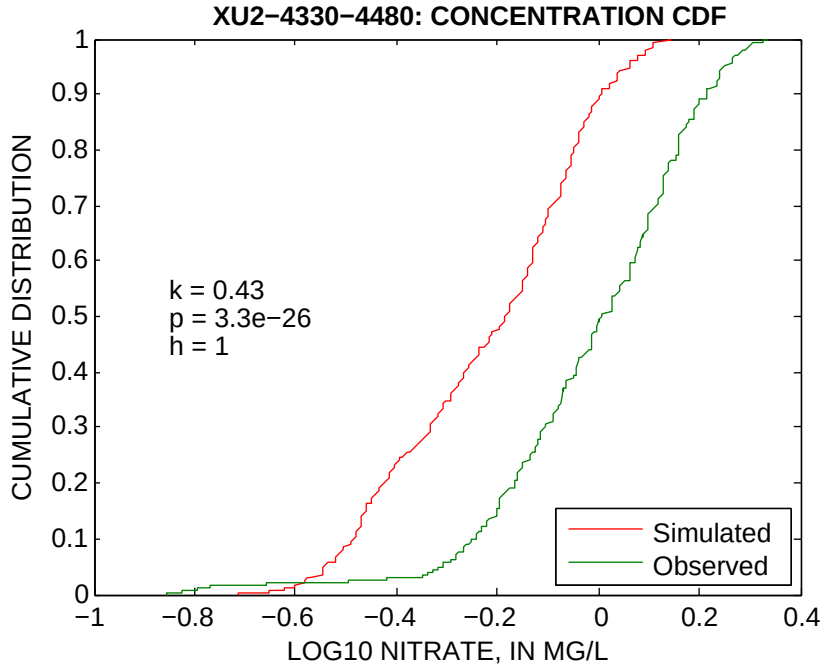
	n	observe	simulate
		320	317
min		0.14	0
		-0.853872	-0.714015
mean		1.06213	0.651662
		-0.0124077	-0.22182
media		1.0175	0.6519
		0.00860017	-0.18262
max		2.166	1.5695
		0.335658	0.195761
varian		0.173561	0.0778874
		0.0403003	0.0366764
JB		0.031978	0.020996
		0.001	0.004831
		ra	log
%		-38.646	1687.77
err.va		0.289395	0.0775096
rel.std.err		1.6674	1.9233
mod.eff		-0.667396	-0.9233

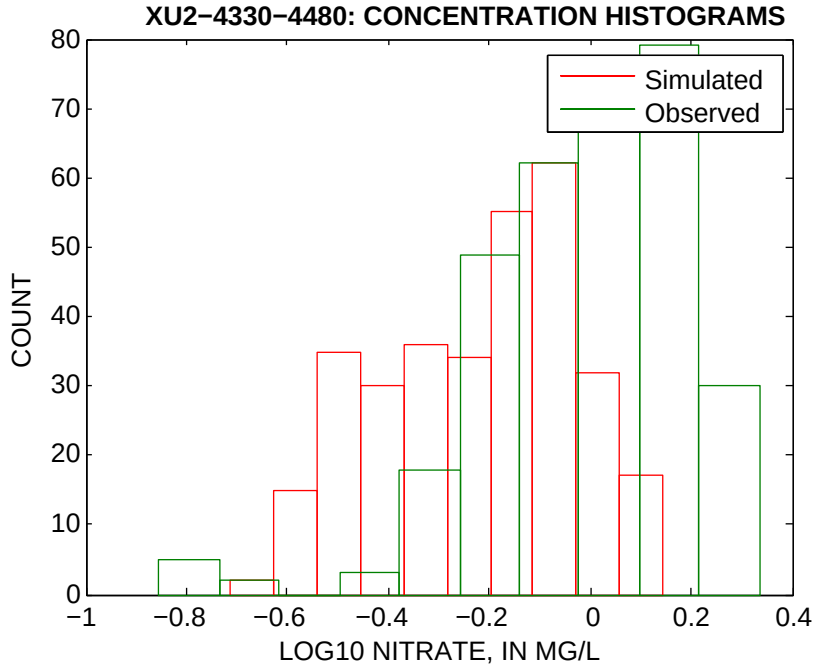
VERSION 2.1

ALL DATA
LOG10

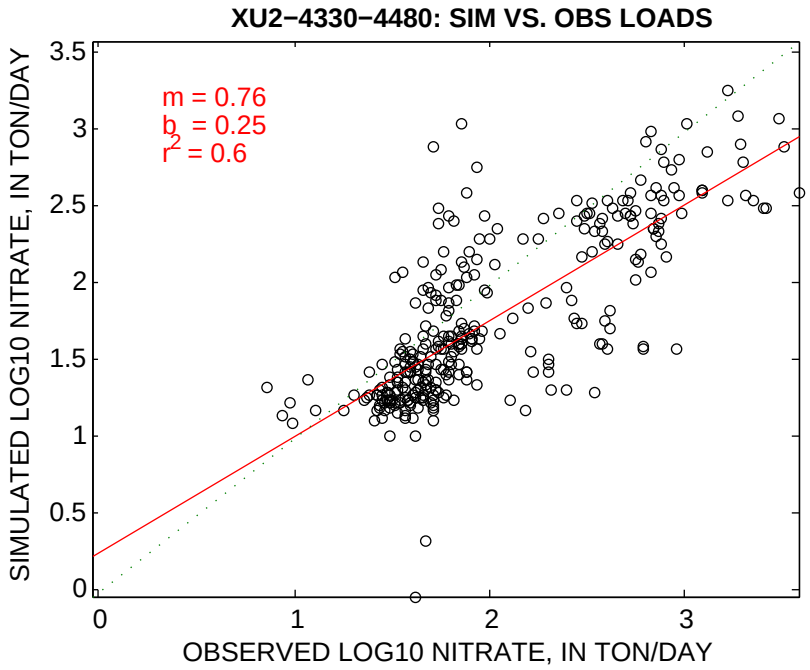




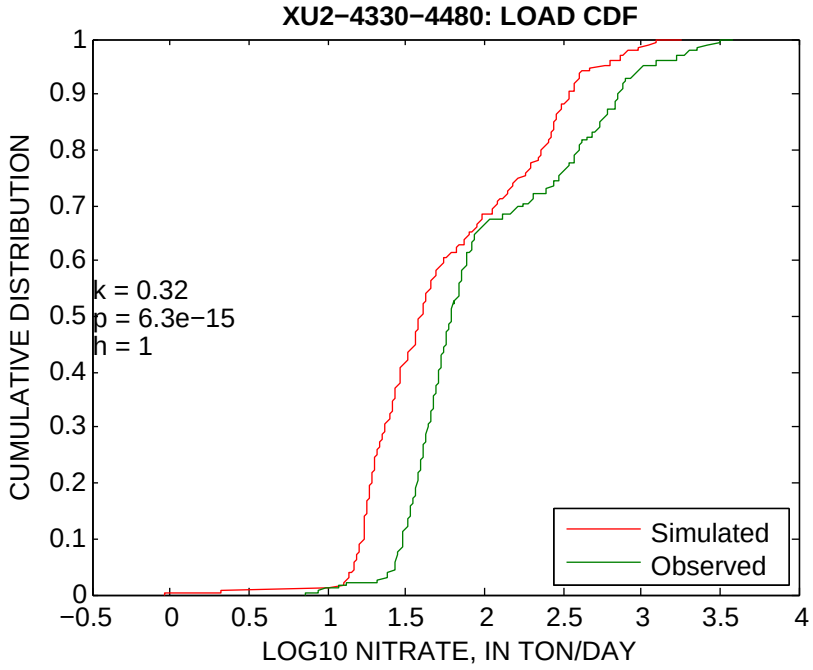


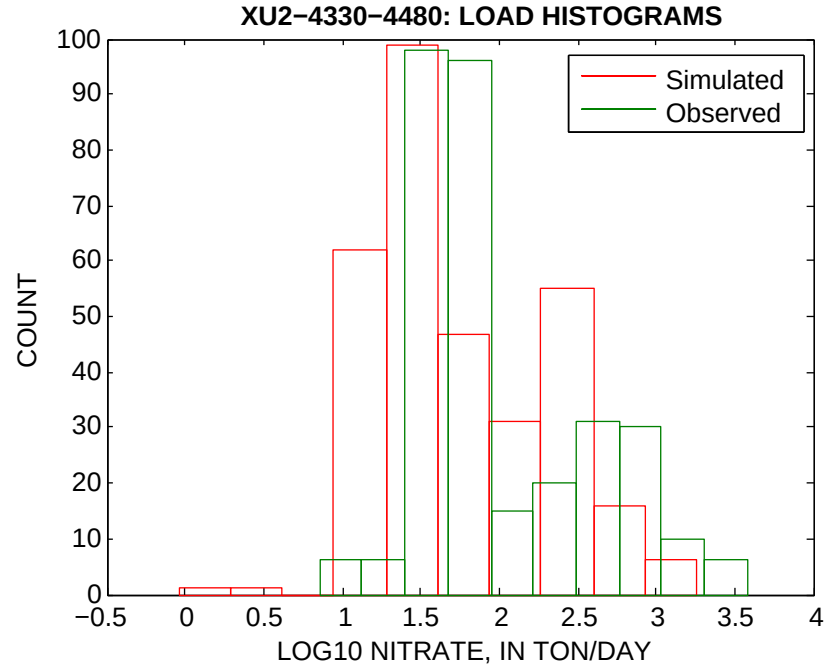


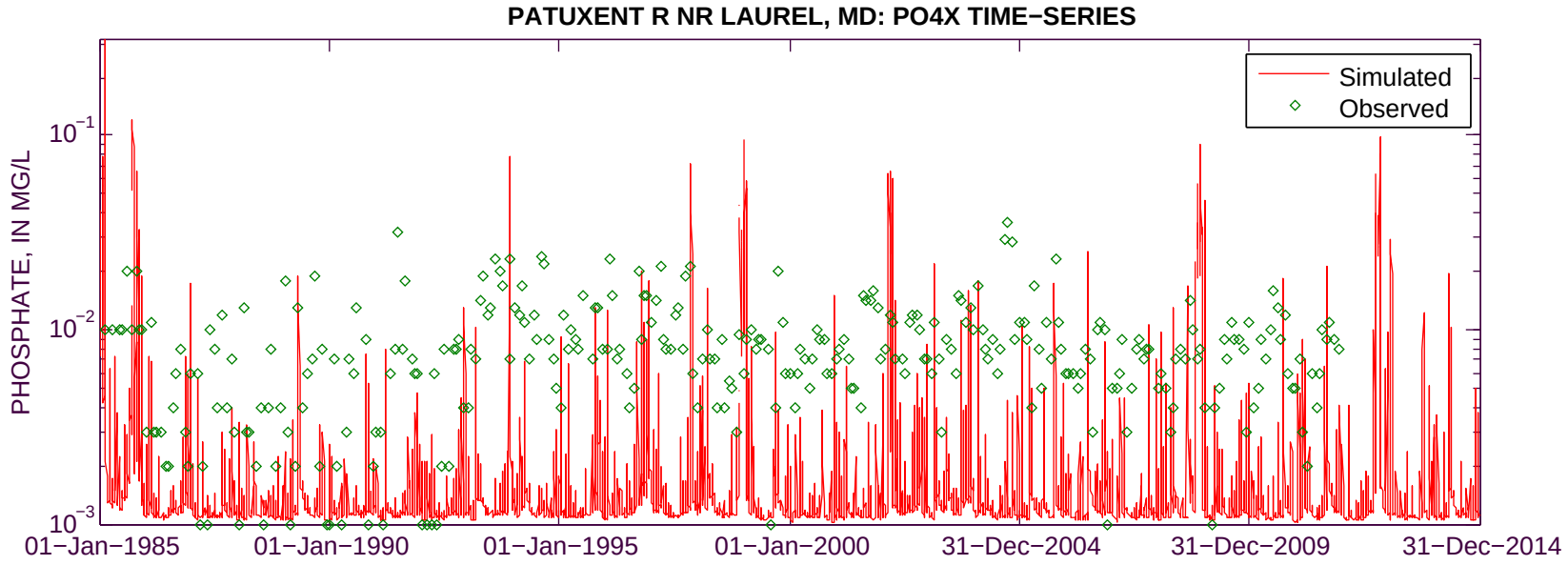
LOAD DATA
LOG10

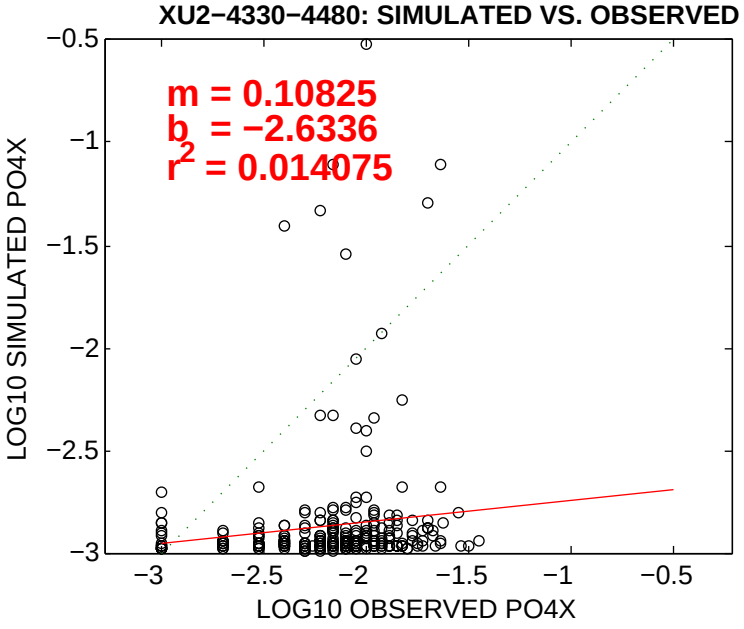


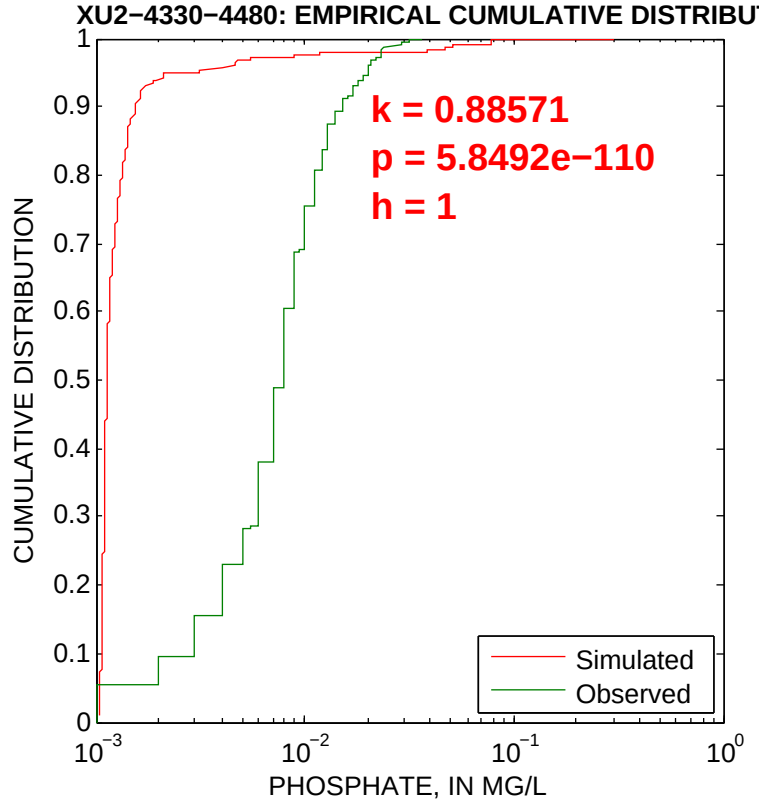












DATA SELECTION

scenario: P620171001WQ | file: PO4X.calib

plot: PO4X - phosphate

Dates: 1/1/1985 – 12/31/201

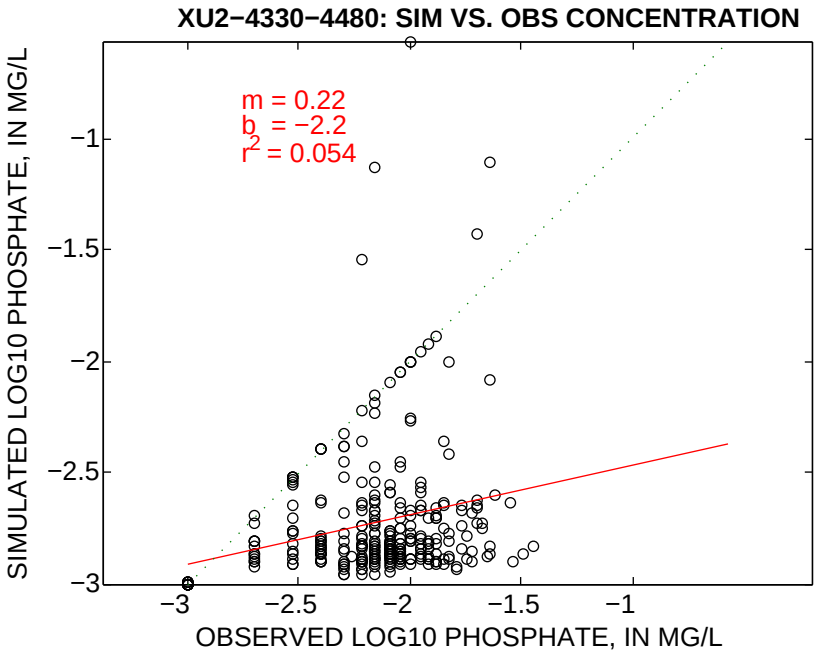
Drive: N/A | Directory: model | Observed: OBS20161101

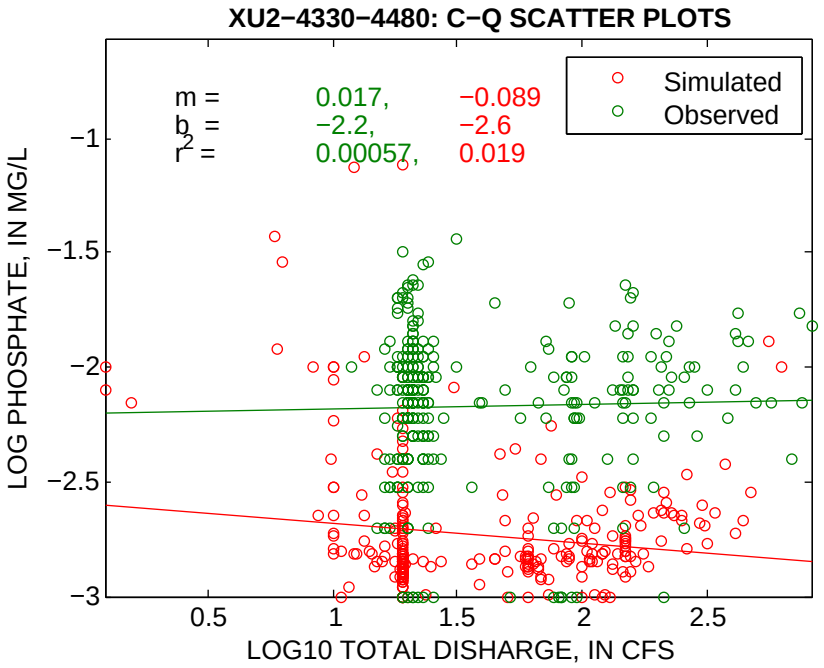
STATISTICS

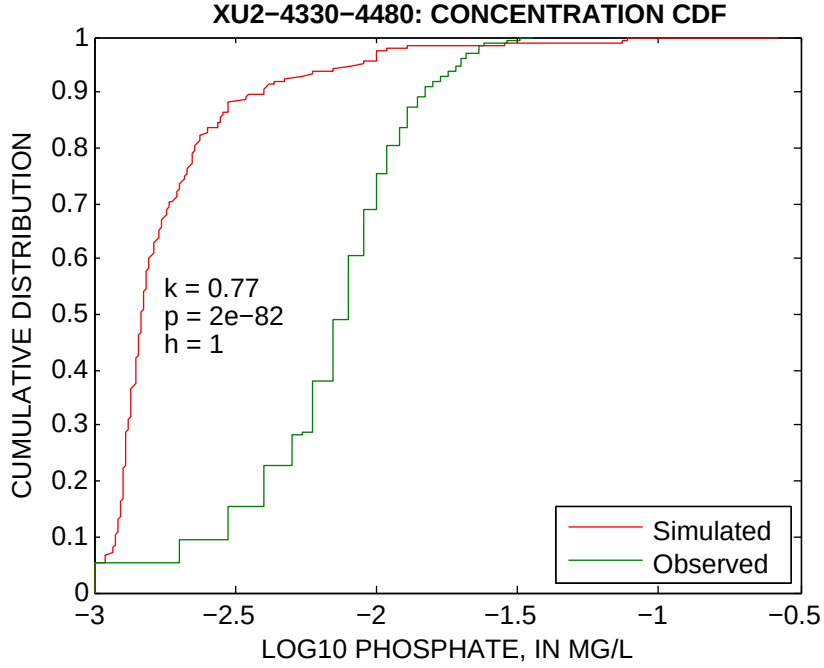
	observe	simulate
n	315	312
min	0.001 -3	0 -2.98666
mean	0.00841905 -2.17127	0.00325993 -2.86863
media	0.008 -2.09691	0.0011337 -2.94539
max	0.036 -1.4437	0.30051 -0.522141
varian	2.93828e-0 0.0994795	0.00034073 0.0828125
JB	0.001 0.001	0.001 0.001
	ra	log
%	-61.2791	32.1177
err.va	0.00038474	0.648632
rel.std.err	13.0943	6.52025
mod.eff	-12.0943	-5.52025

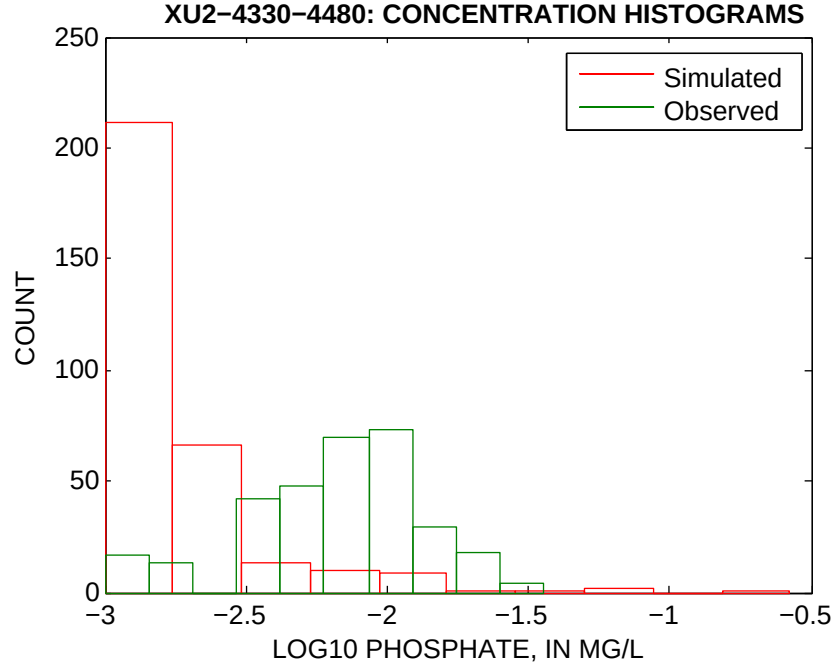
VERSION 2.1

ALL DATA
LOG10

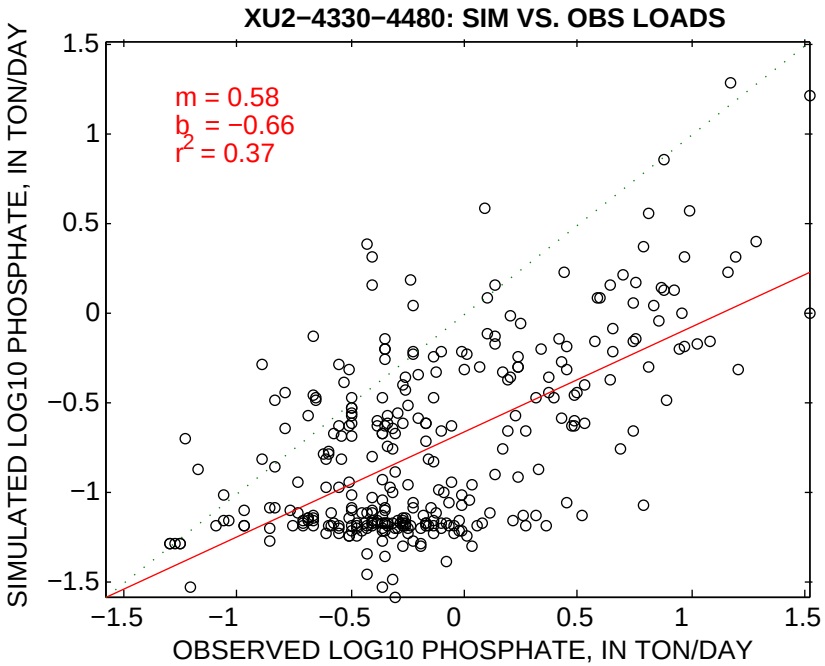


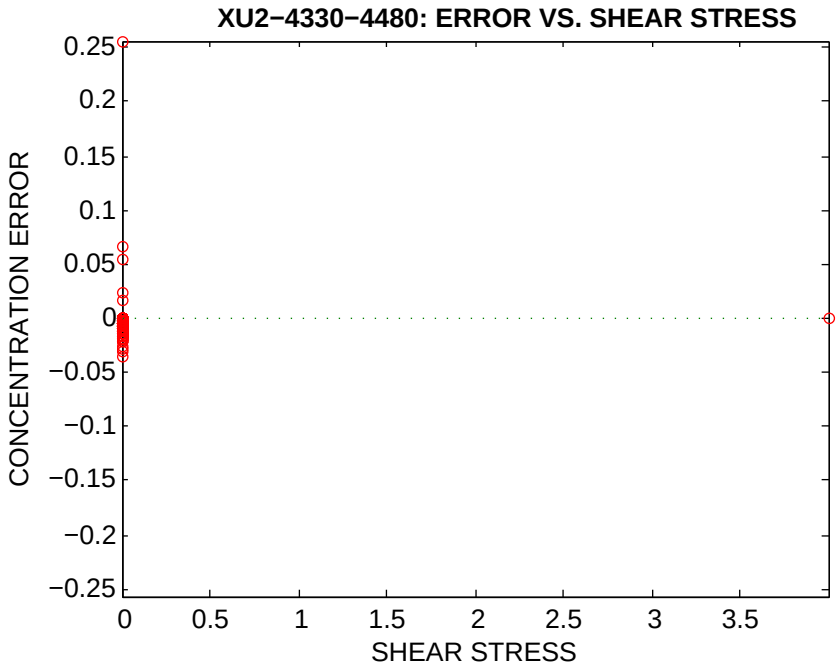


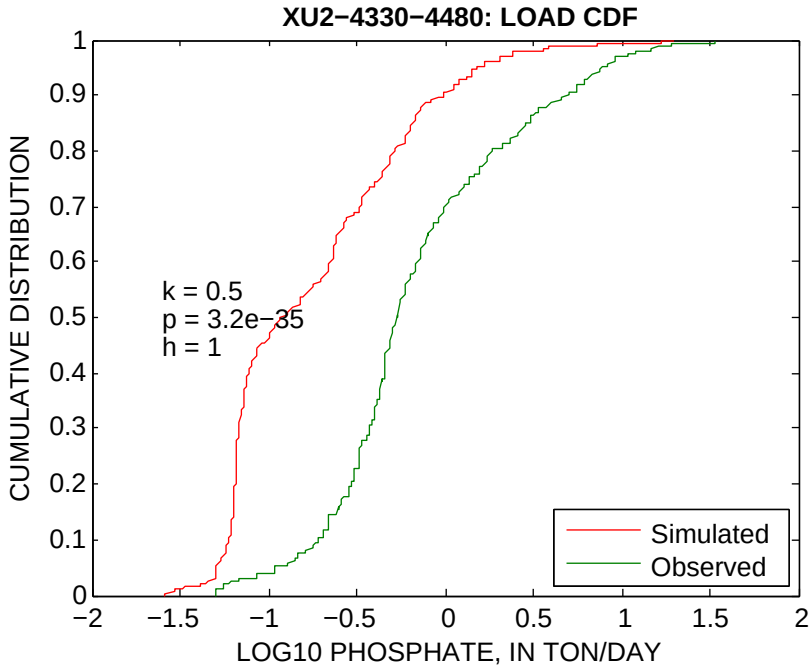


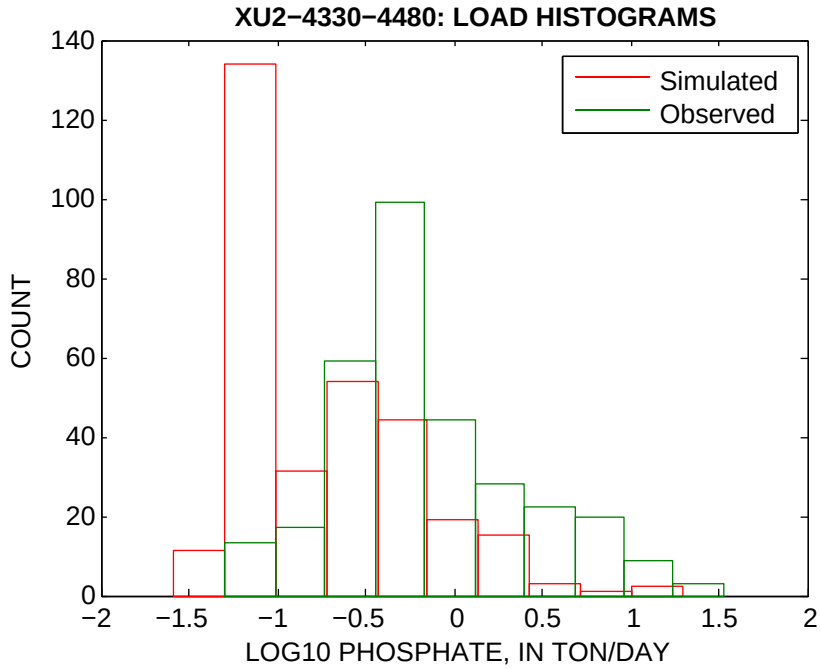


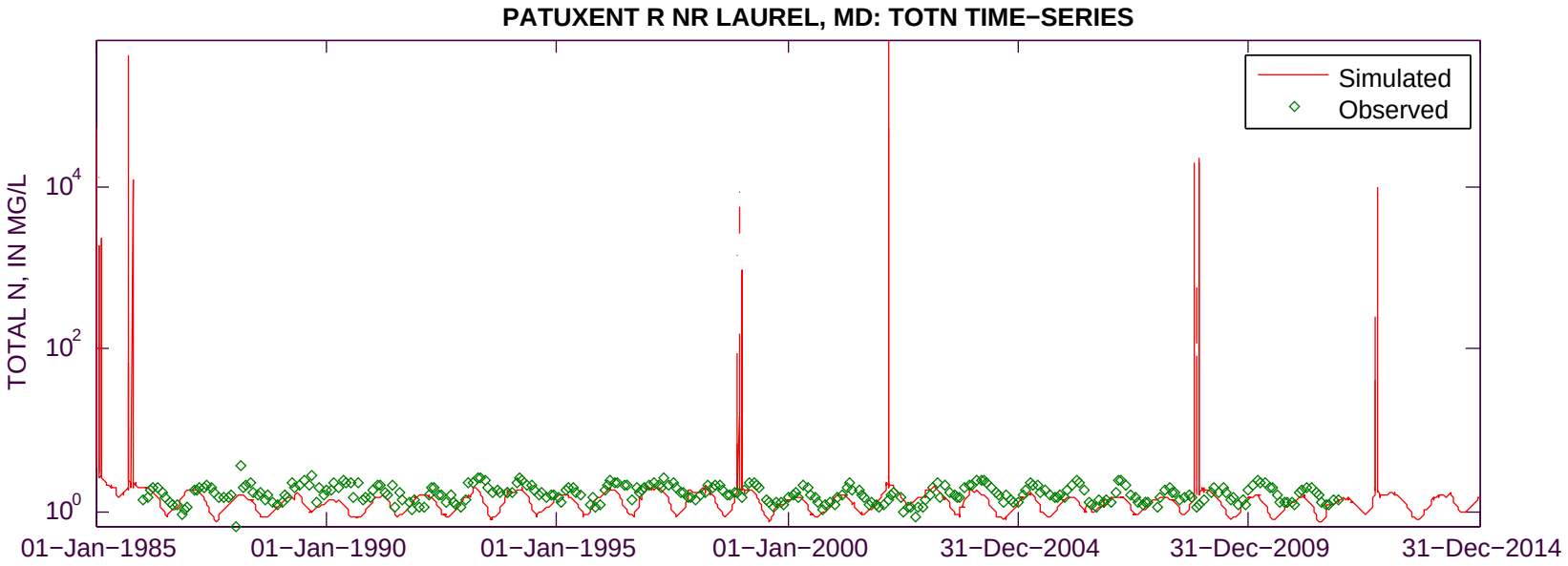
LOAD DATA
LOG10

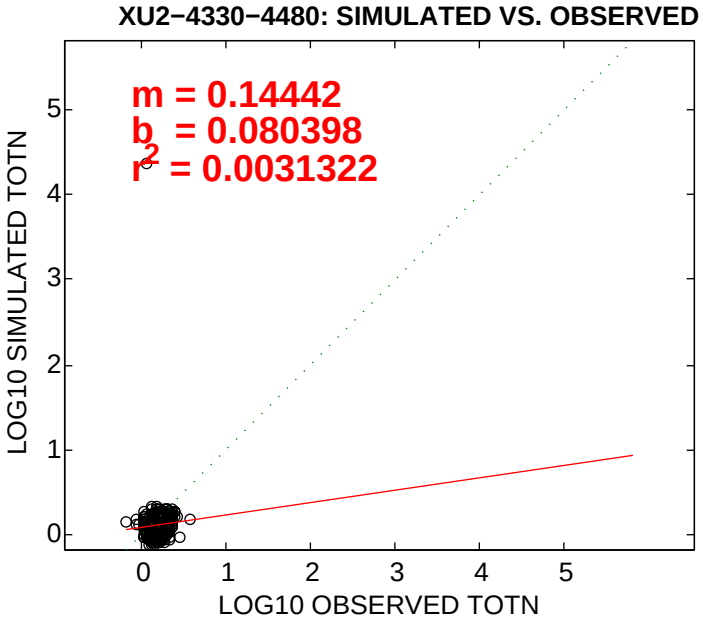


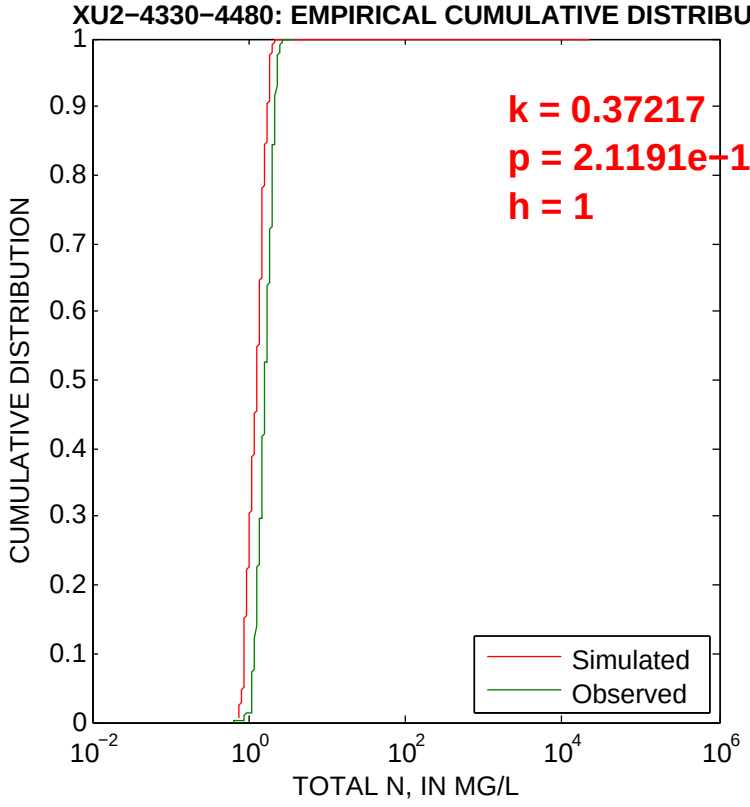


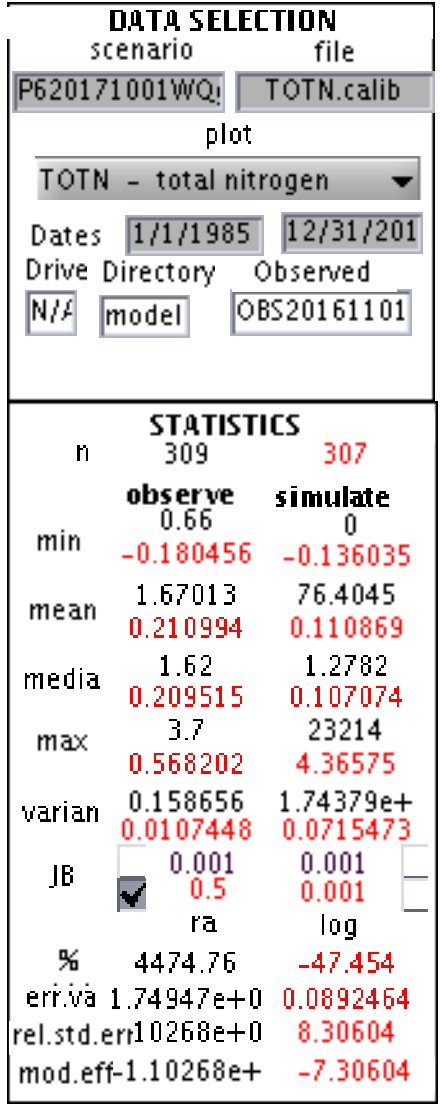





PATUXENT R NR LAUREL, MD: TOTN TIME-SERIES
Simulated
Observed
TOTAL N, IN MG/L
10^4
10^2
10^0
01-Jan-1985
01-Jan-1990
01-Jan-1995
01-Jan-2000
31-Dec-2004
31-Dec-2009
31-Dec-2014

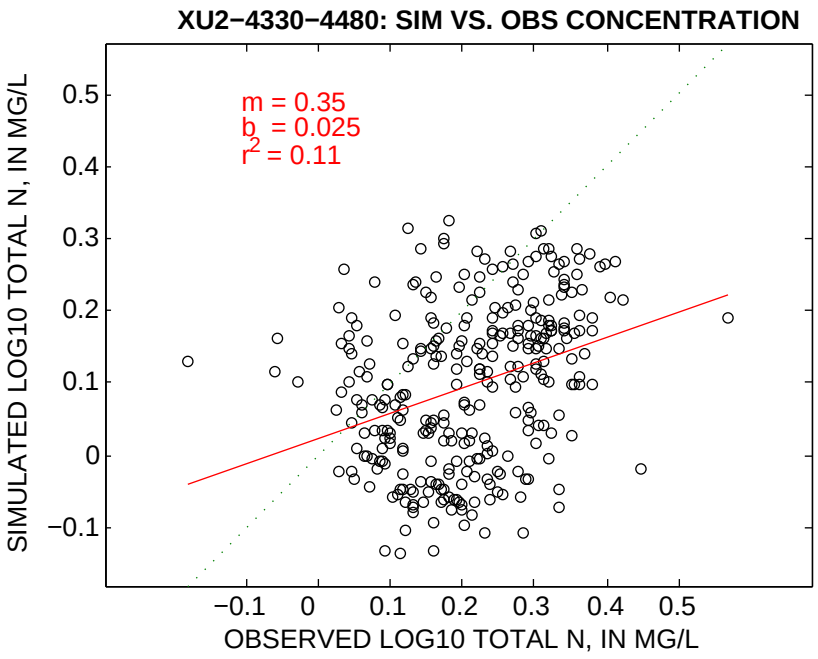

XU2-4330-4480: SIMULATED VS. OBSERVED
m = 0.14442
b = 0.080398
r^2 = 0.0031322
LOG10 SIMULATED TOTN
LOG10 OBSERVED TOTN
0
1
2
3
4
5

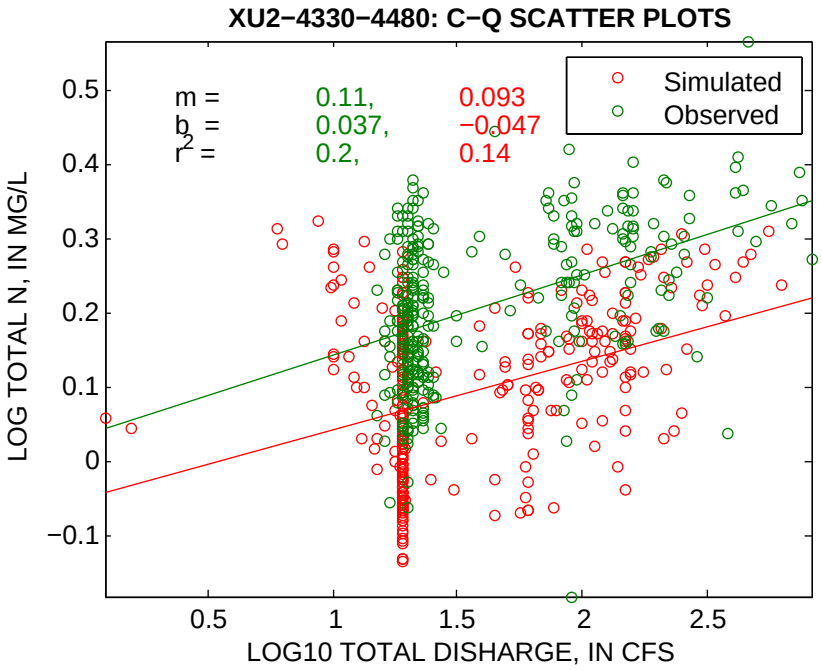

XU2-4330-4480: EMPIRICAL CUMULATIVE DISTRIBUTION
k = 0.37217
p = 2.1191e-19
h = 1
Simulated
Observed
CUMULATIVE DISTRIBUTION
TOTAL N, IN MG/L
10^{-2}
10^0
10^2
10^4
10^6

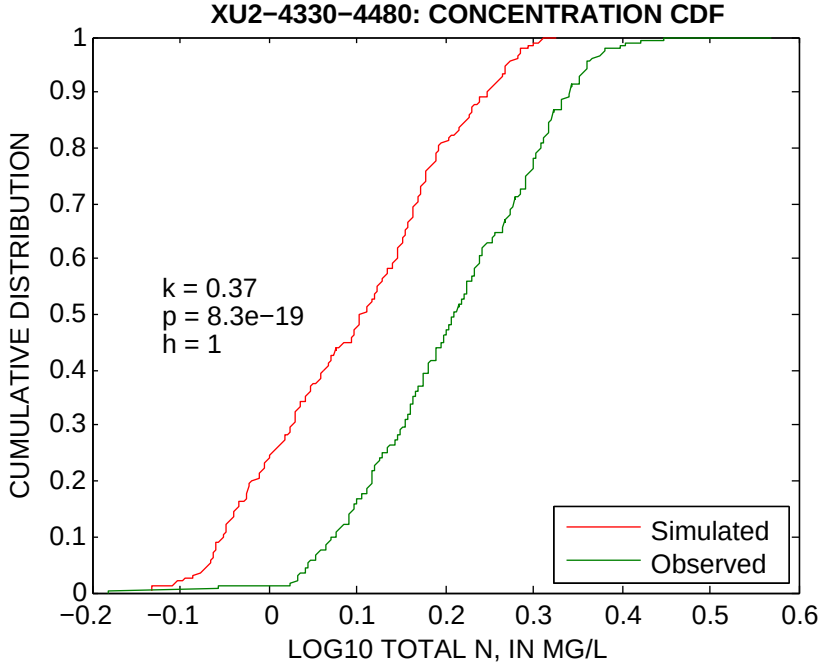

DATA SELECTION
scenario
file
P620171001WQ
TOTN.calib
plot
TOTN - total nitrogen
Dates
1/1/1985
12/31/201
Drive
Directory
Observed
N/A
model
OBS20161101
STATISTICS
n
309
307
observe
simulate
min
0.66
0
-0.180456
-0.136035
mean
1.67013
76.4045
0.210994
0.110869
media
1.62
1.2782
0.209515
0.107074
max
3.7
23214
0.568202
4.36575
varian
0.158656
1.74379e+
0.0107448
0.0715473
JB
0.001
0.001
0.5
0.001
ra
log
%
4474.76
-47.454
err.va
1.74947e+0
0.0892464
rel.std.err
10268e+0
8.30604
mod.eff
-1.10268e+
-7.30604

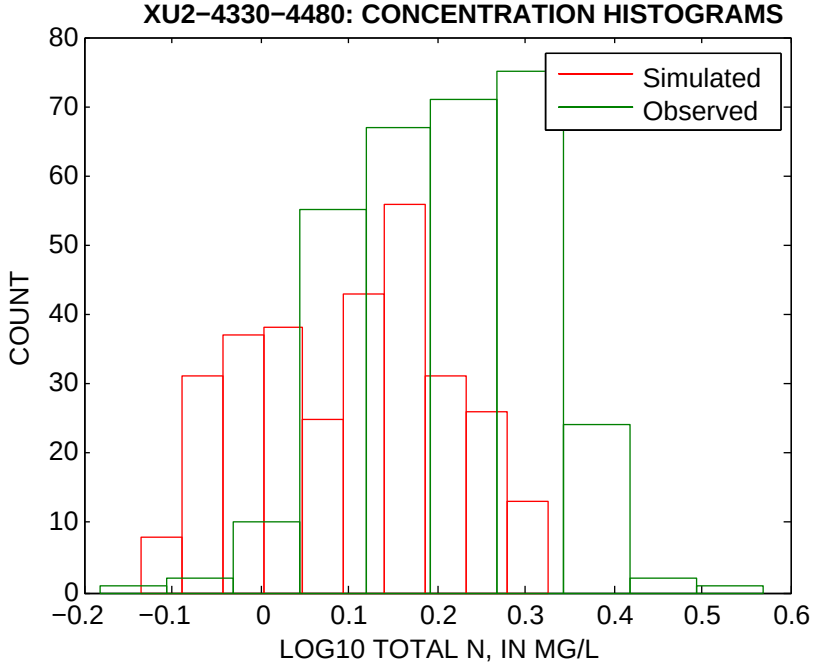
VERSION

ALL DATA
LOG10

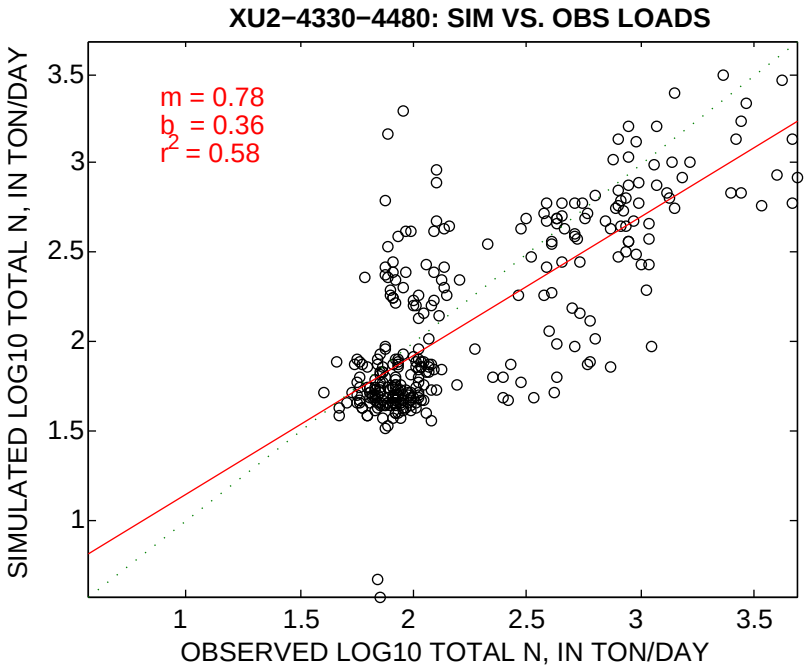


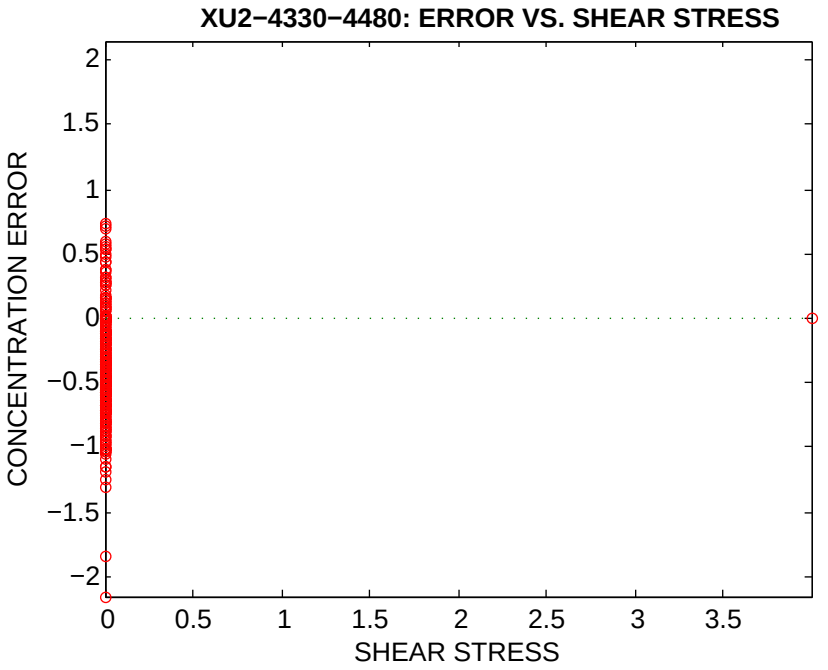


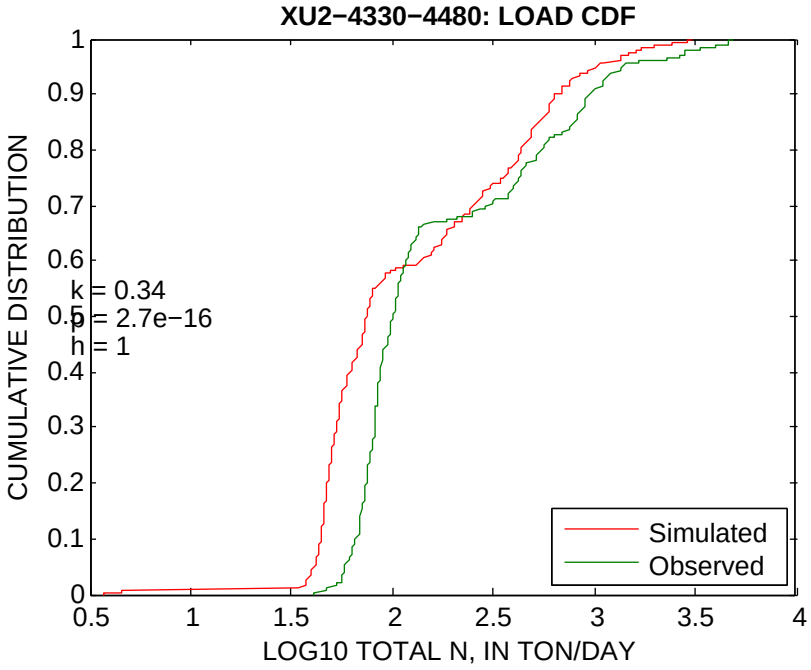


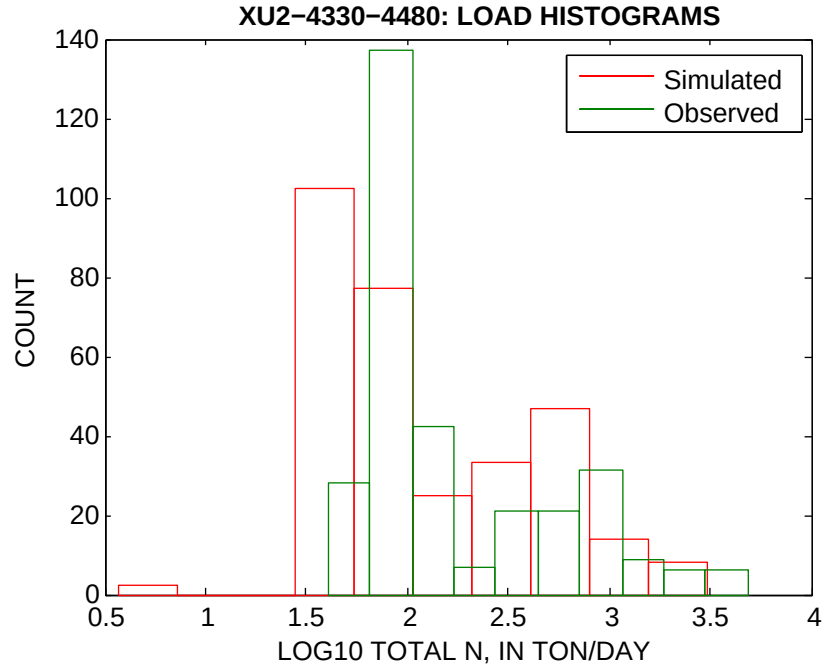


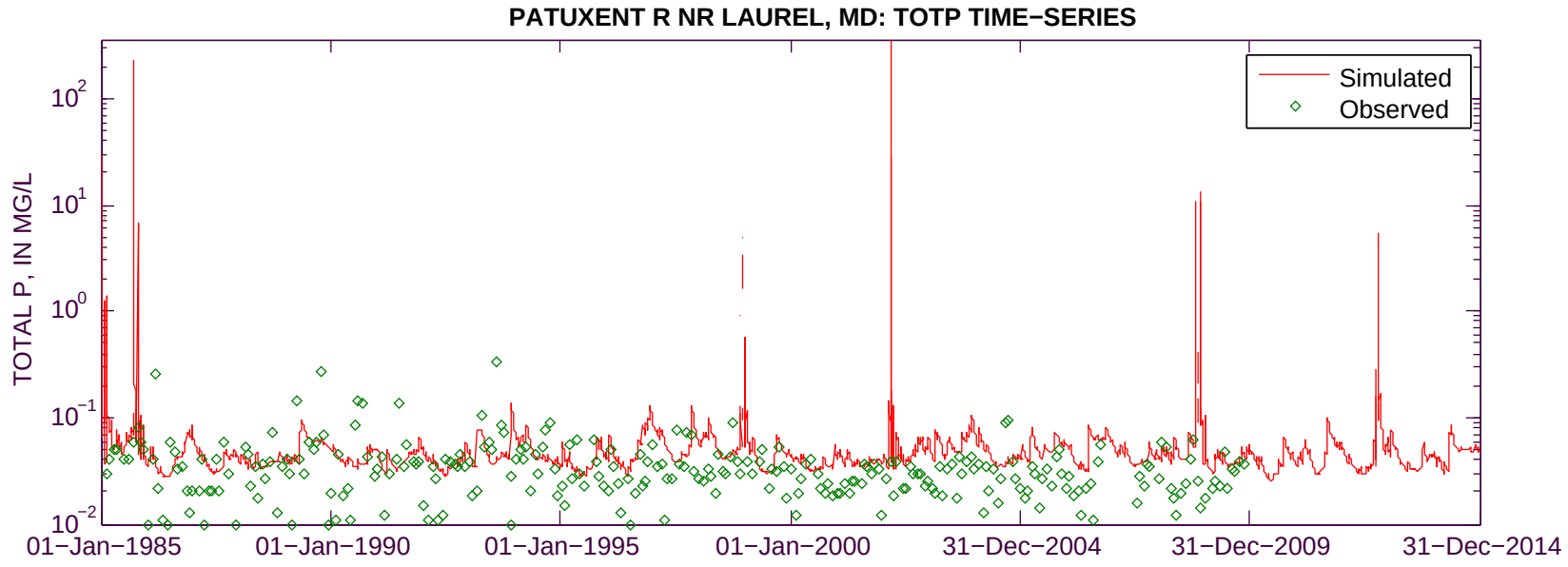
LOAD DATA
LOG10

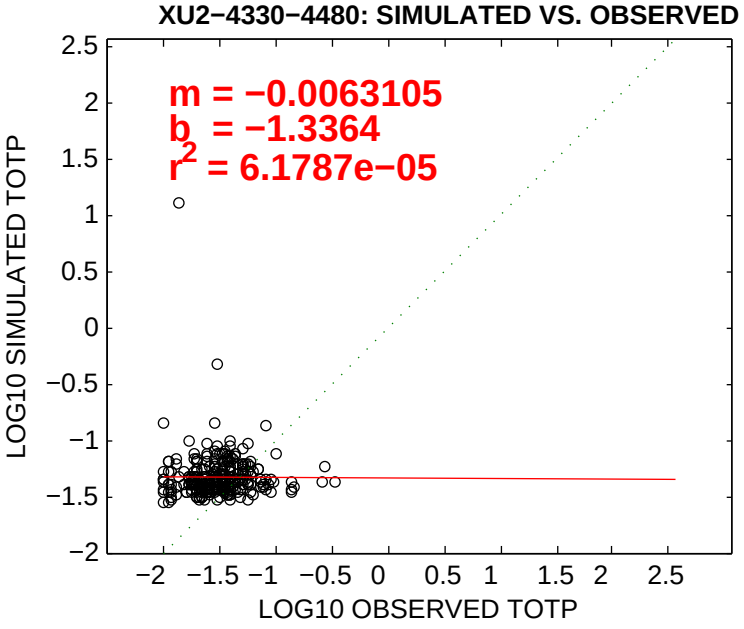


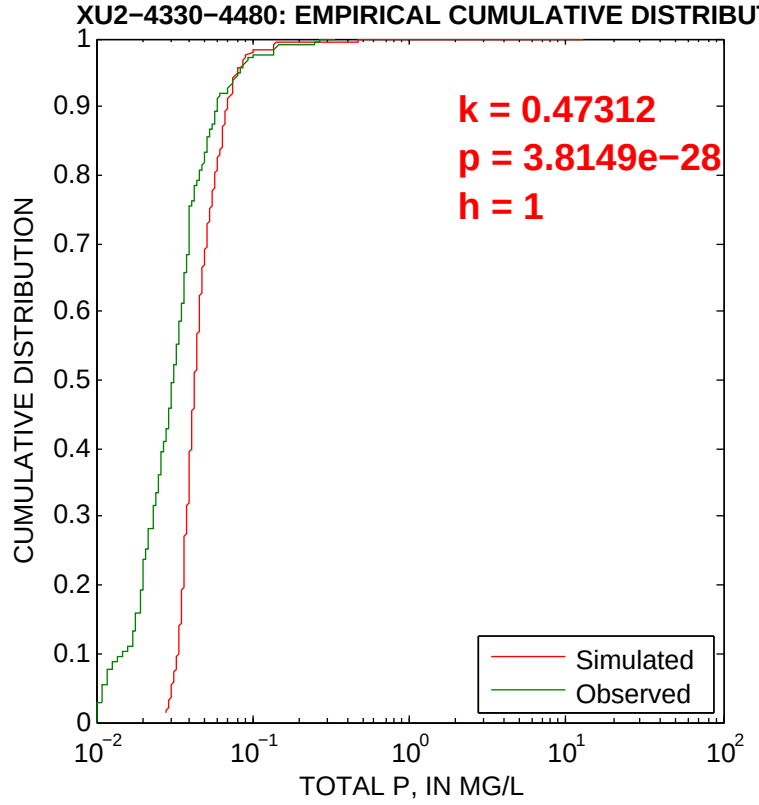












DATA SELECTION

scenario	file
P620171001WQ	TOTP.calib

plot: TOTP - total phosphorus

Dates: 1/1/1985 – 12/31/201

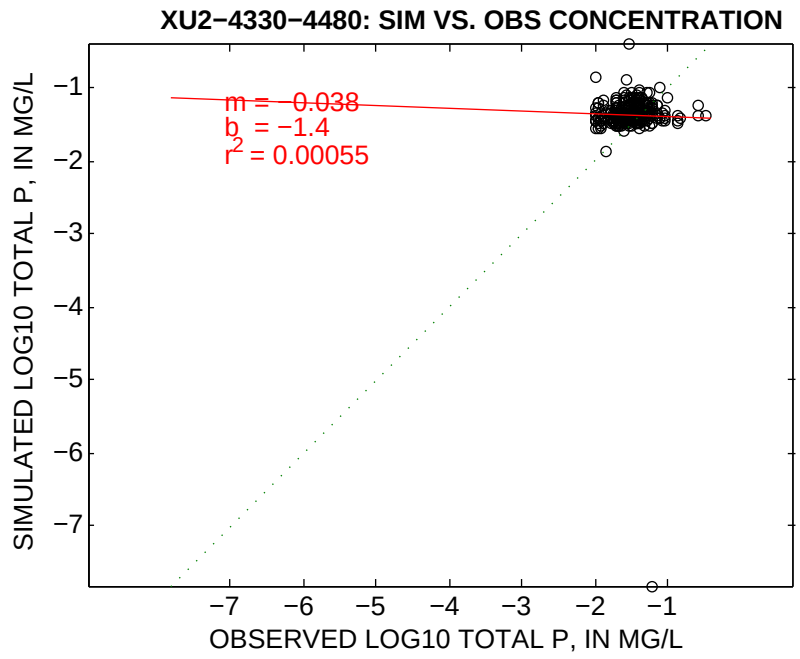
Drive	Directory	Observed
N/A	model	OBS20161101

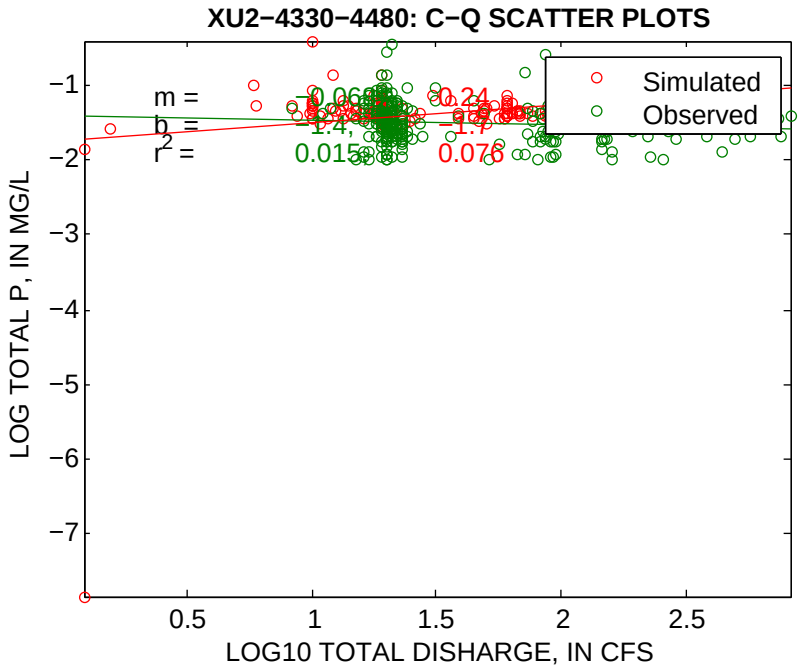
STATISTICS

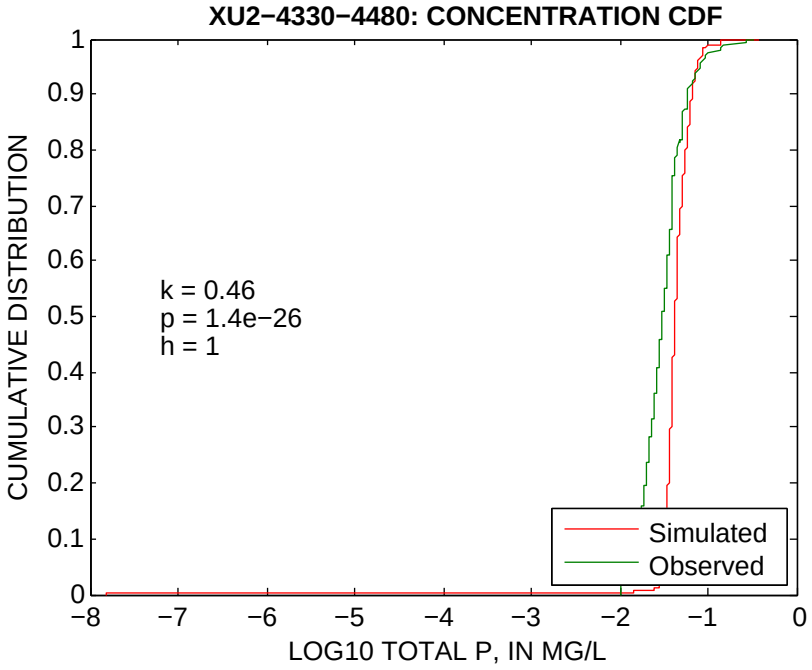
	n	279	276
		observe	simulate
min		0.01 -2	0 -1.56086
mean		0.0376738 -1.51047	0.0958466 -1.3269
media		0.031 -1.50864	0.043116 -1.36405
max		0.339 -0.4698	13.132 1.11833
varian		0.00114337 0.0640761	0.614449 0.0412981
JB		0.001 0.001	0.001 0.001
		ra	log
%		154.411	-12.1532
err.va		0.621218	0.140003
rel.std.err		543.321	2.18496
mod.eff		-542.321	-1.18496

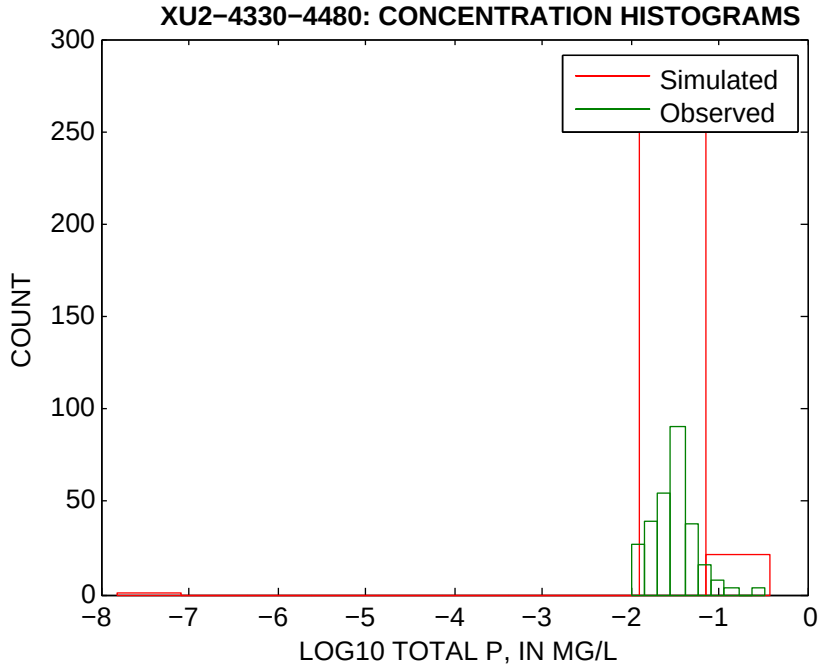
VERSION

ALL DATA
LOG10

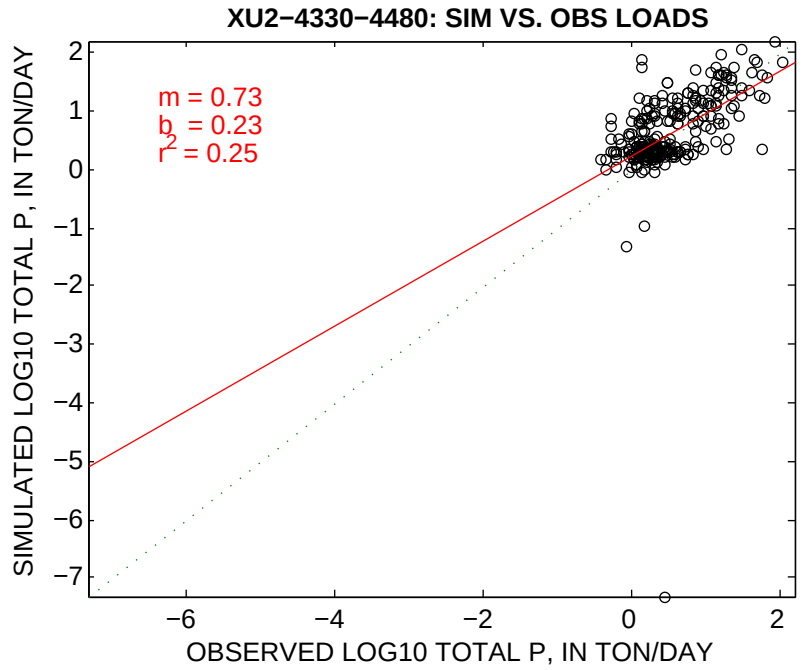


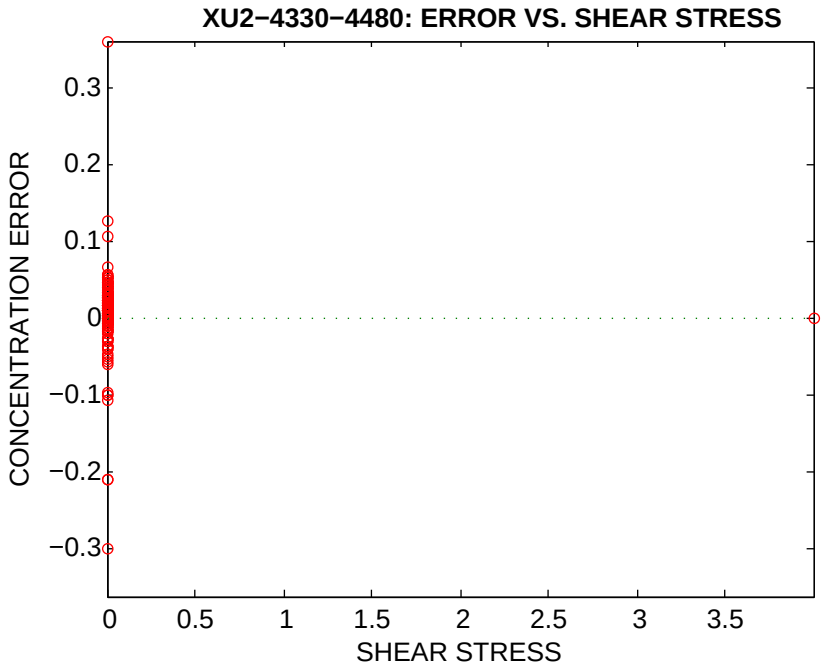


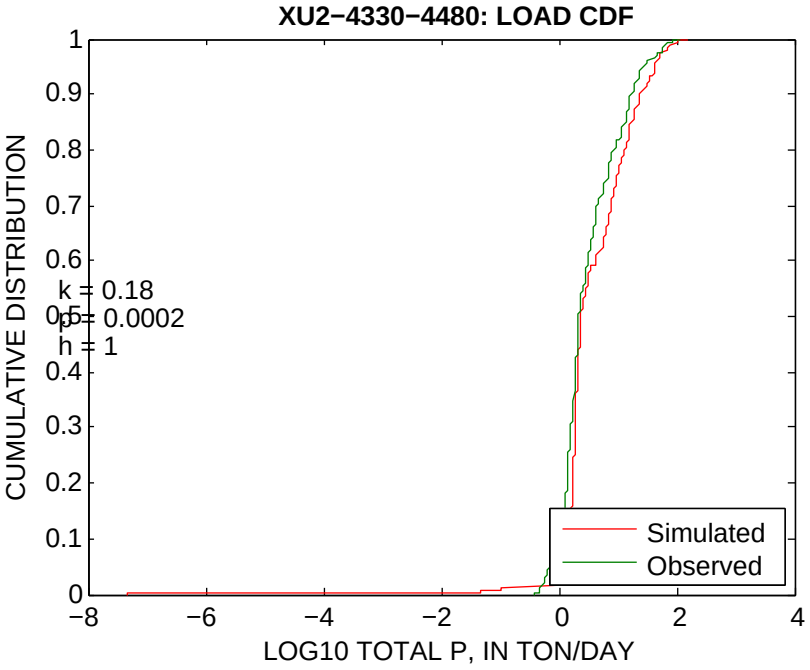


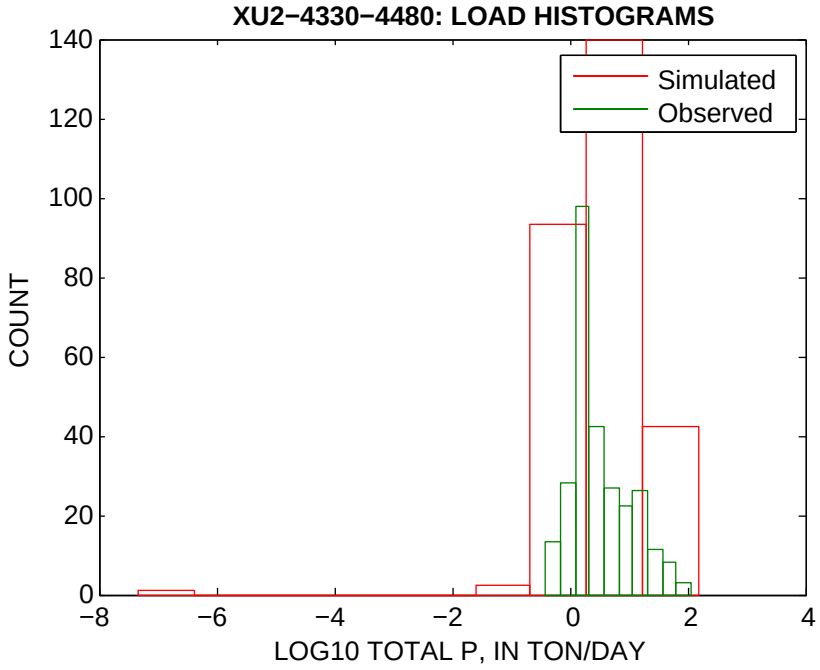


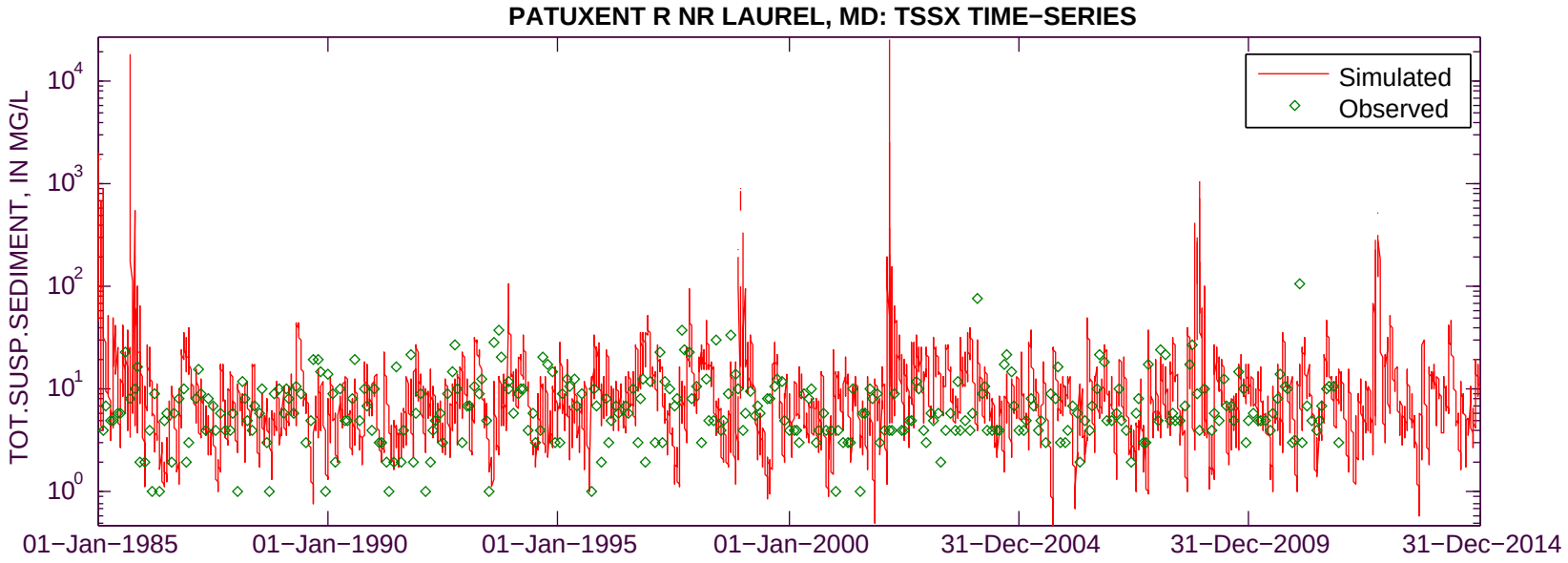
LOAD DATA
LOG10

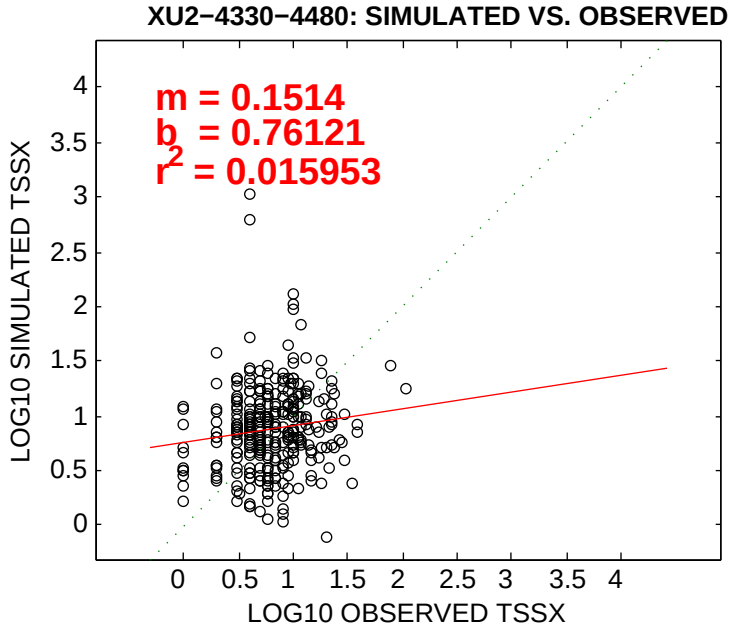


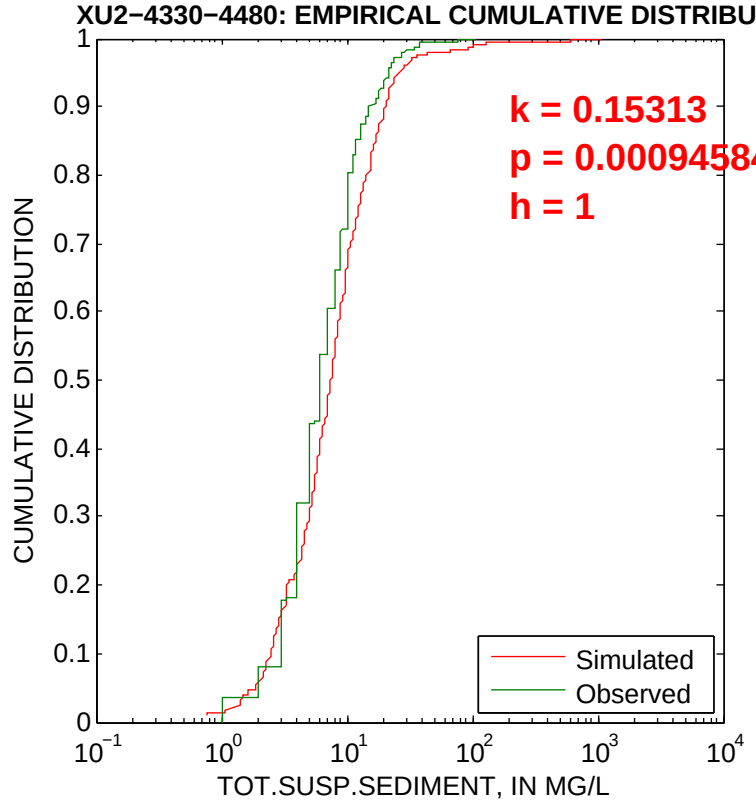












DATA SELECTION

scenario	file
P620171001WQ	TSSX.calib

plot: TSSX - total suspended ...

Dates: 1/1/1985 – 12/31/201

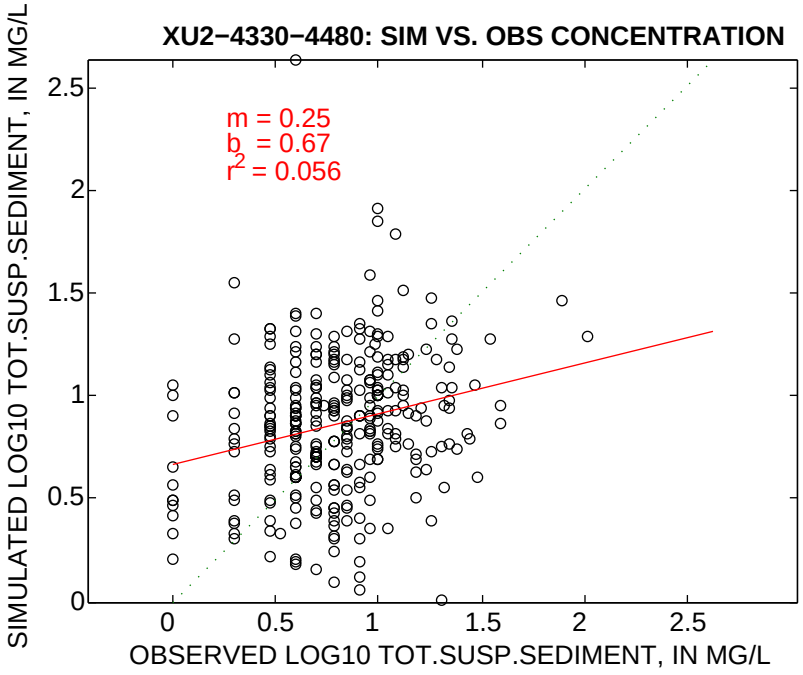
Drive	Directory	Observed
N/A	model	OBS20161101

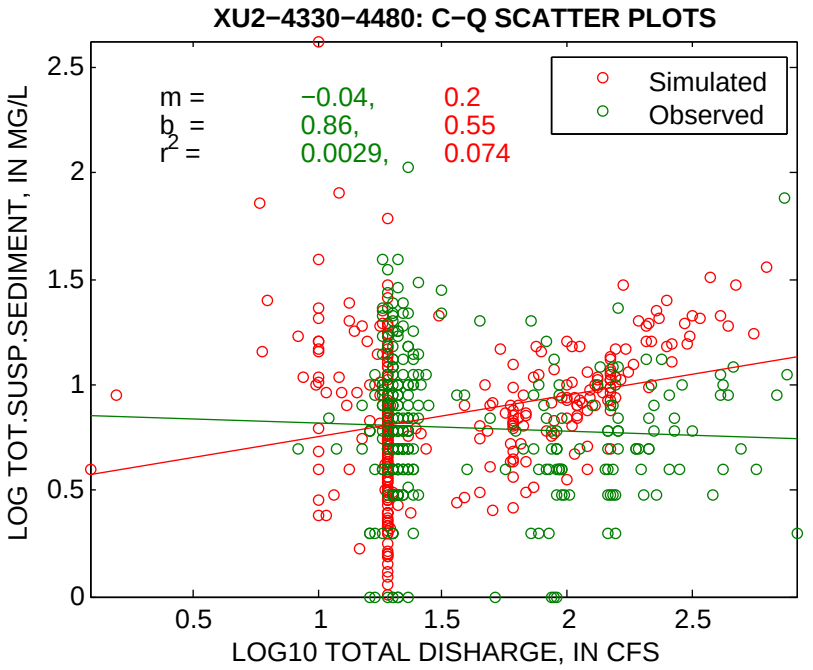
STATISTICS

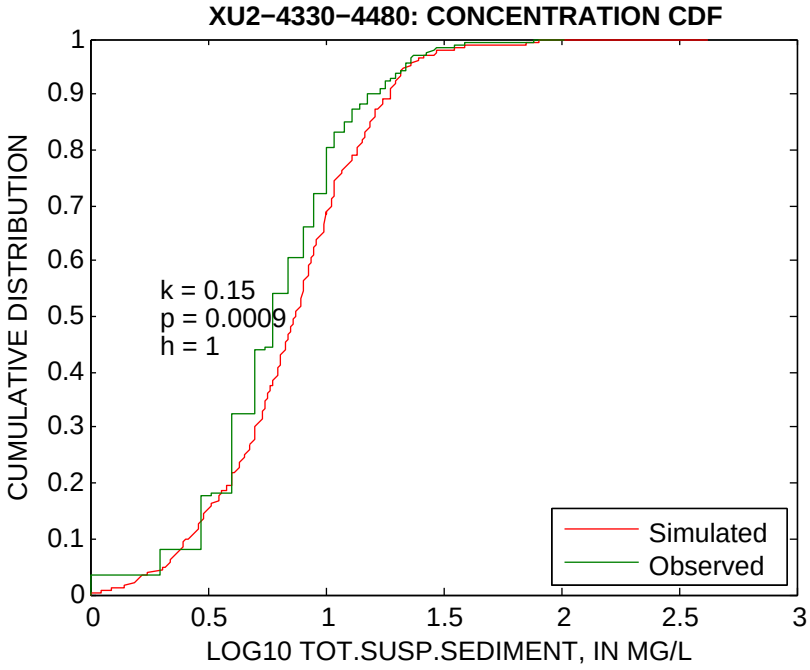
	n	observe	simulate
		320	317
min		1	0
		0	-0.107049
mean		8.40406	15.6814
		0.795893	0.881713
media		6	7.5541
		0.778151	0.879961
max		105	1087.9
		2.02119	3.03659
varian		81.3459	4914.85
		0.103799	0.149148
JB		0.001	0.001
		0.009959	0.001
		ra	log
%		86.5929	10.7828
err.va		5074.81	0.228905
rel.std.err		62.3855	2.20527
mod.eff		-61.3855	-1.20527

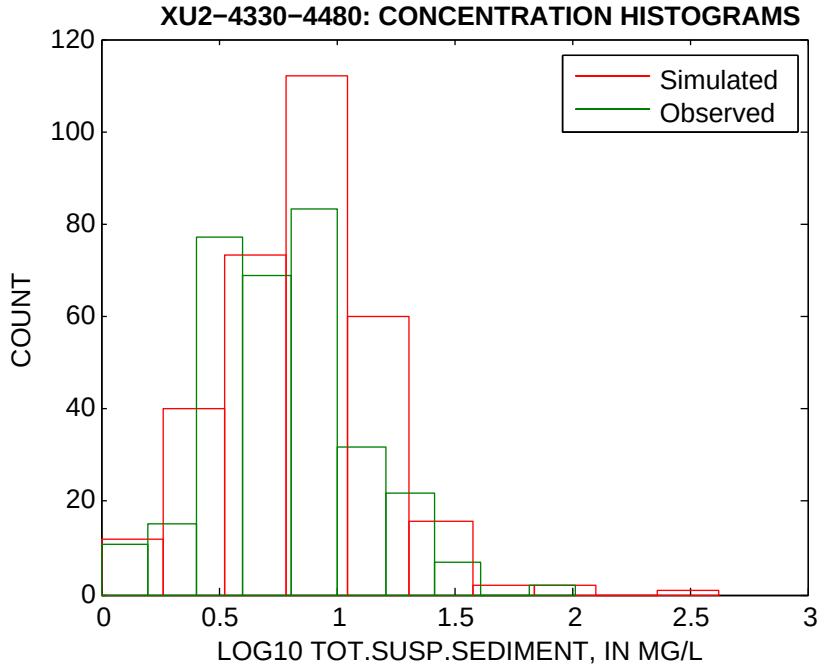
VERSION 2.1

ALL DATA
LOG10

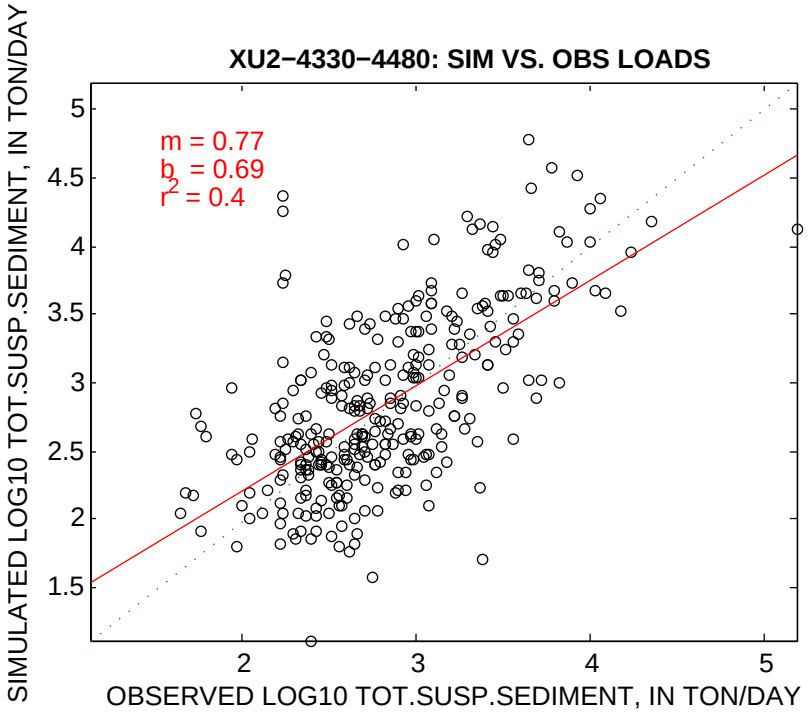


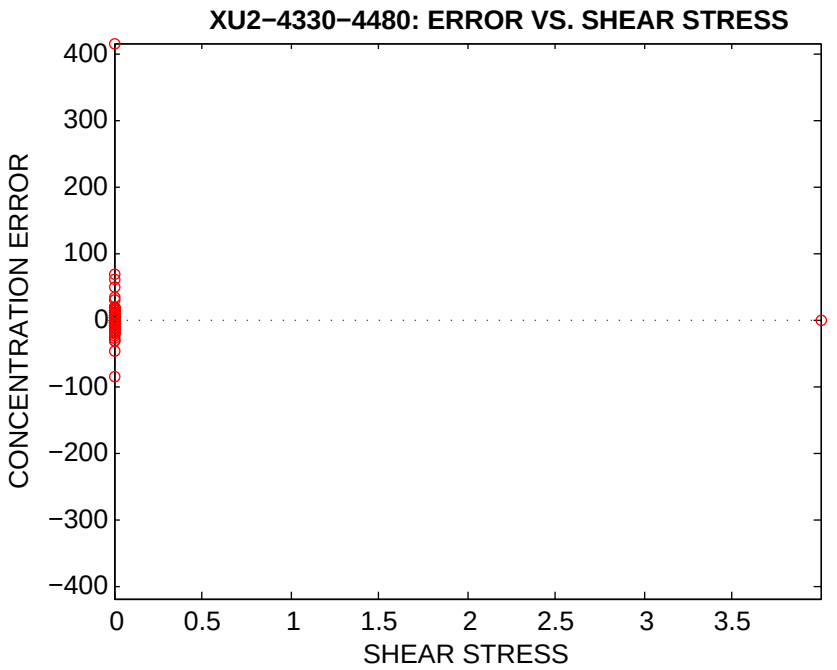


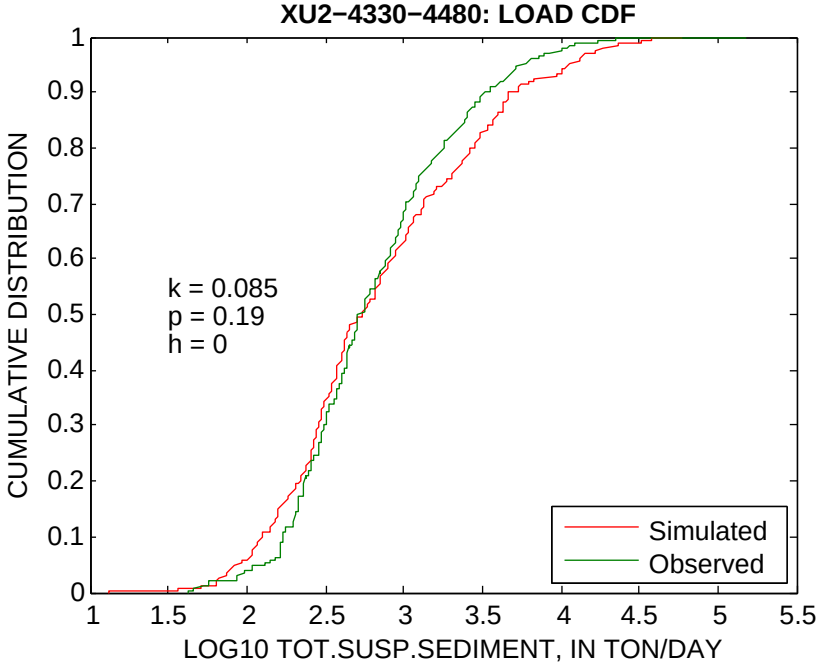


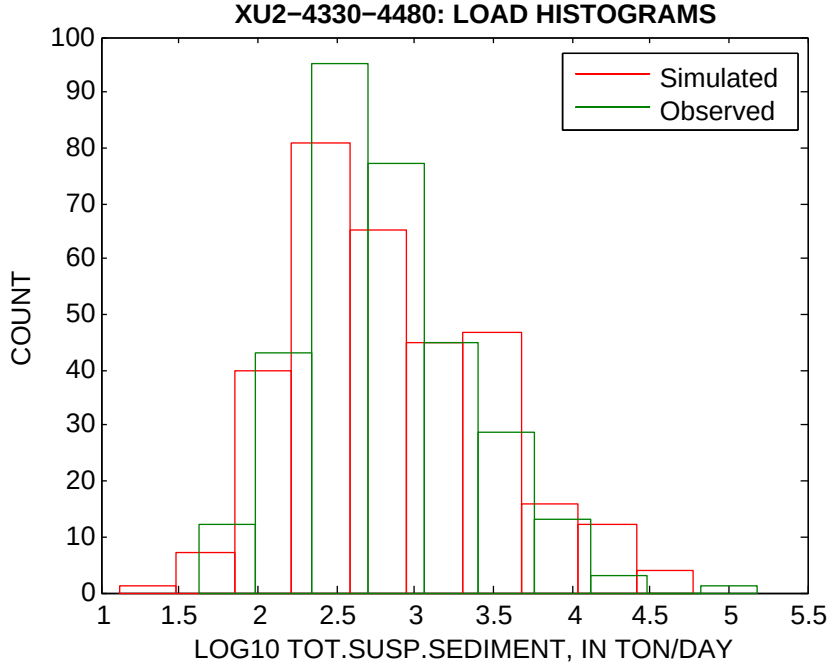


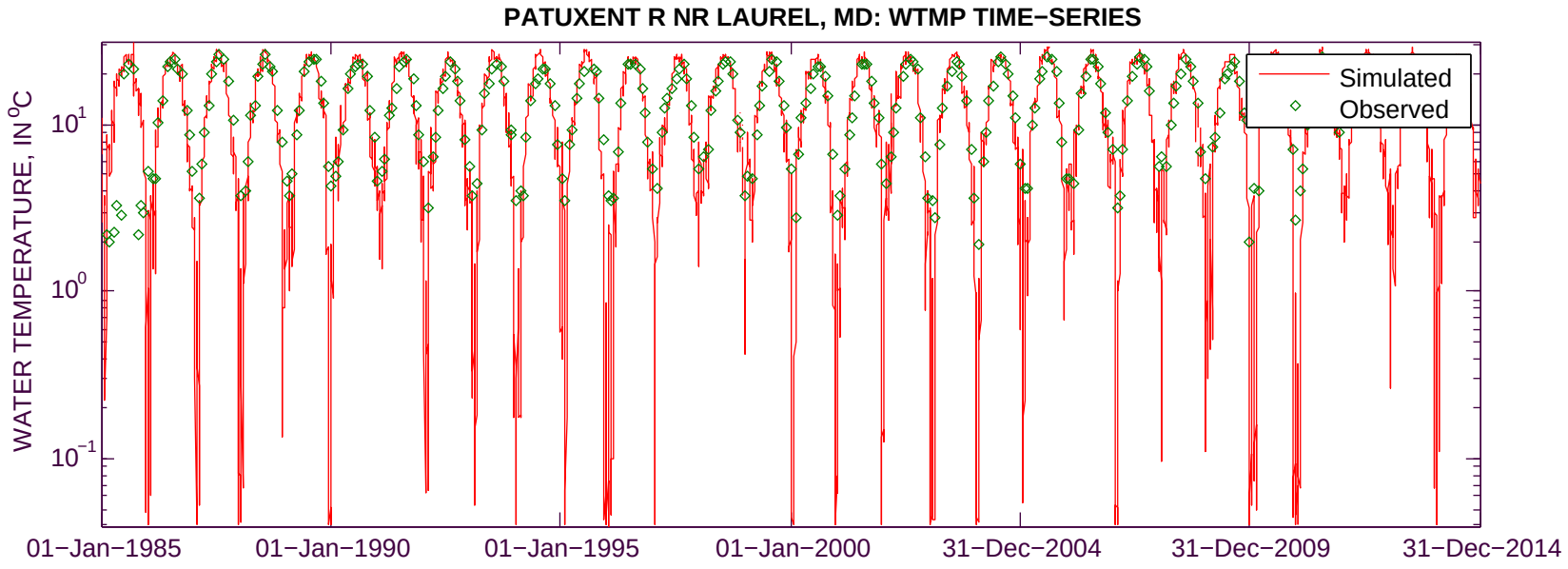
LOAD DATA
LOG10

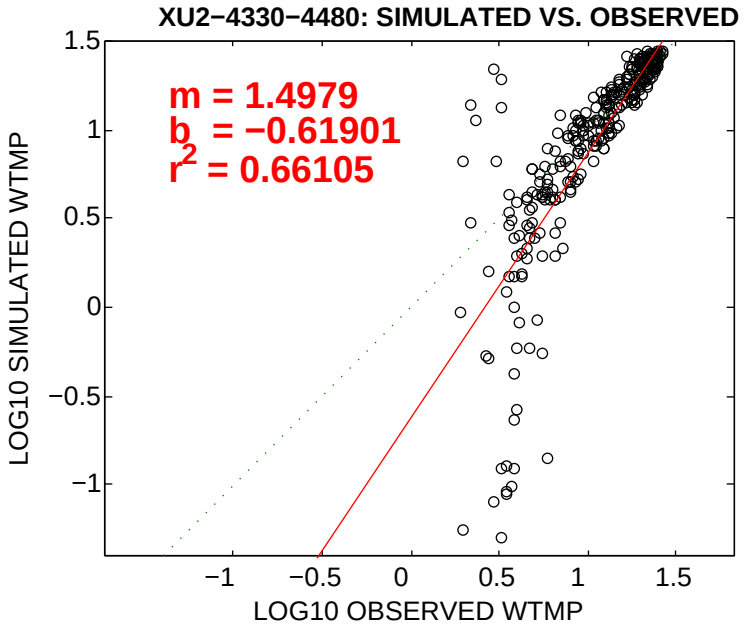


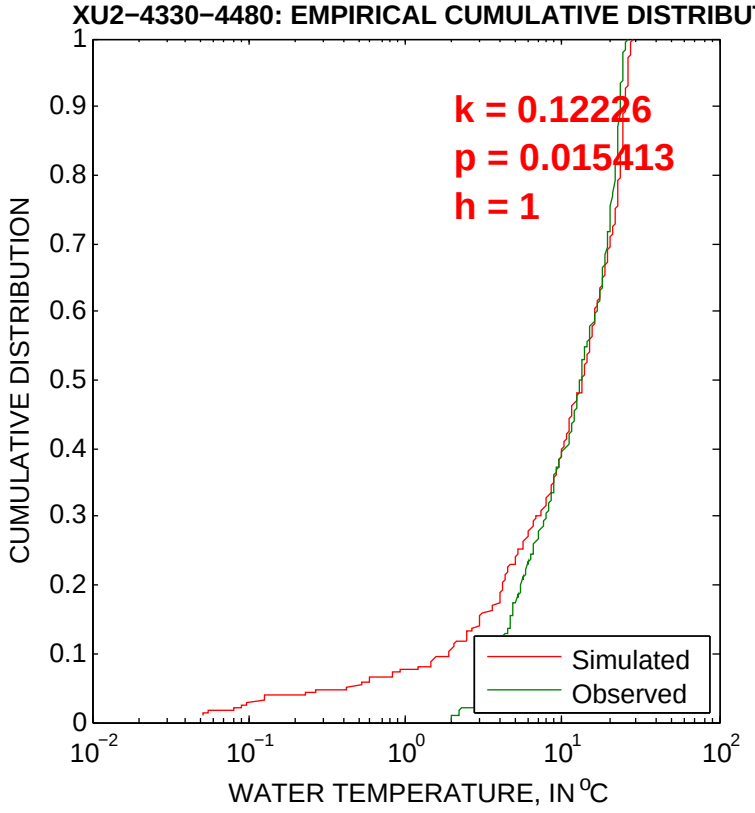












DATA SELECTION

scenario: P620171001WQ | file: WTMP.calib

plot: WTMP - water tempera...

Dates: 1/1/1985 – 12/31/201

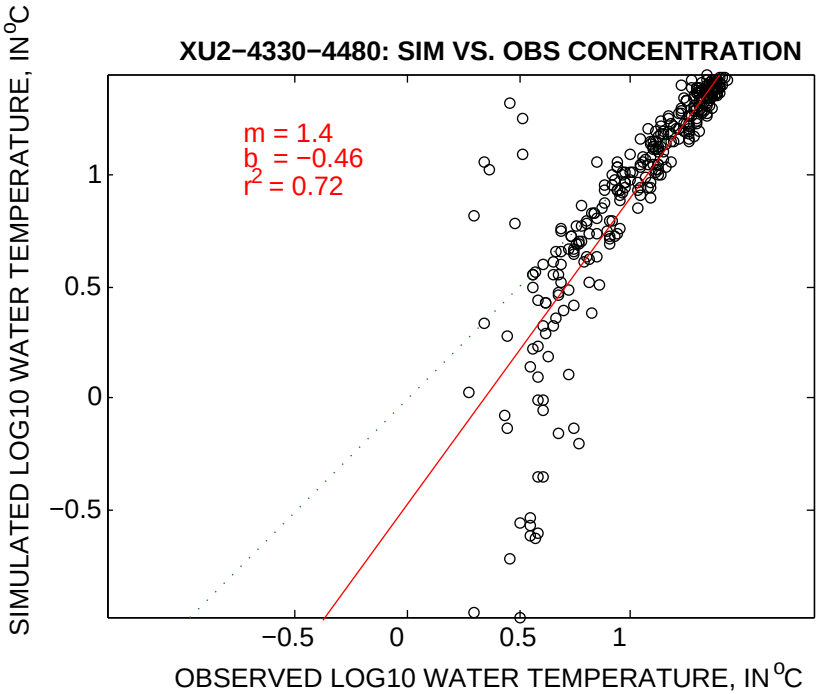
Drive: N/A | Directory: model | Observed: OBS20161101

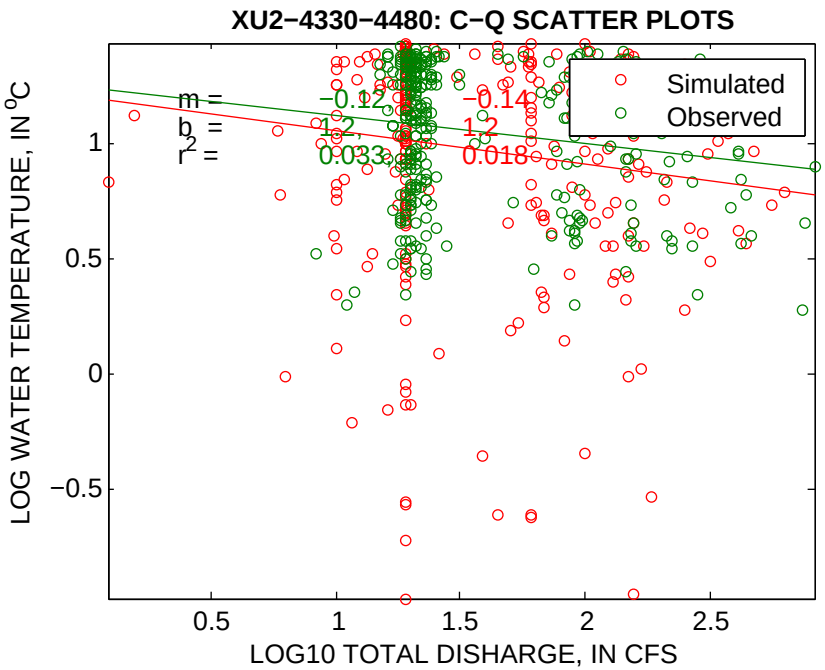
STATISTICS

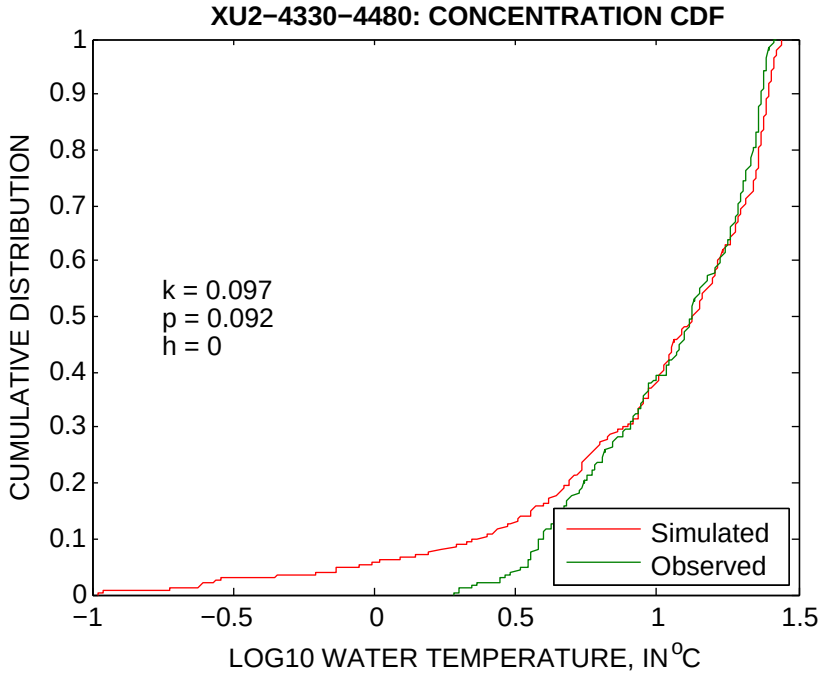
		observe	simulate
n		319	316
min		1.9	0
		0.278754	-1.29685
mean		13.5883	13.5433
		1.04757	0.9502
media		13.2	13.615
		1.11892	1.13527
max		26.7	28.172
		1.42651	1.44982
varian		54.0162	75.3914
		0.088033	0.298817
JB		0.001	0.001001
		0.001	0.001
		ra	log
% err.va		-0.330875	-9.29501
		12.3827	0.132624
rel.std.err		0.229241	1.50652
mod.eff		0.770759	-0.506521

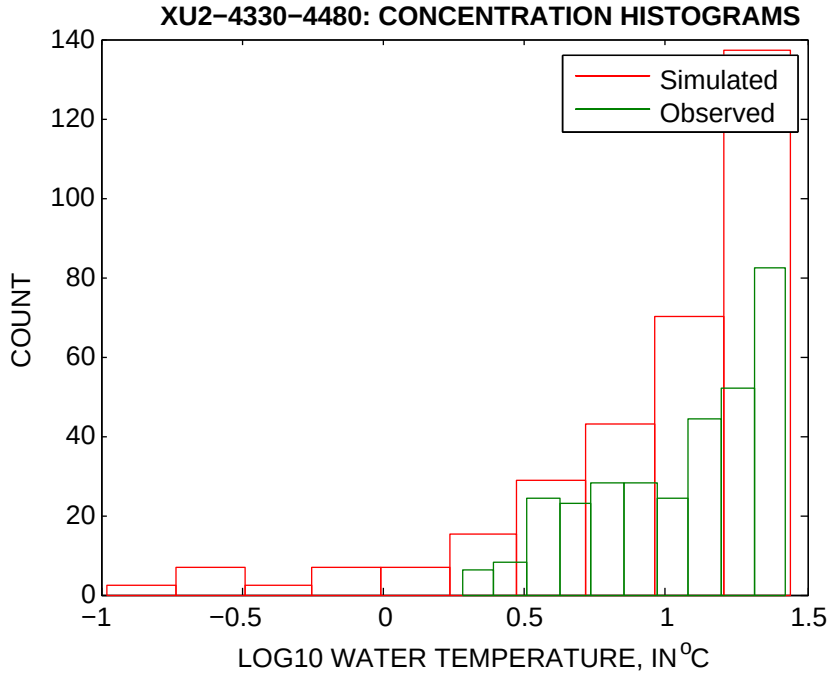
VERSION 2.1

ALL DATA
LOG10

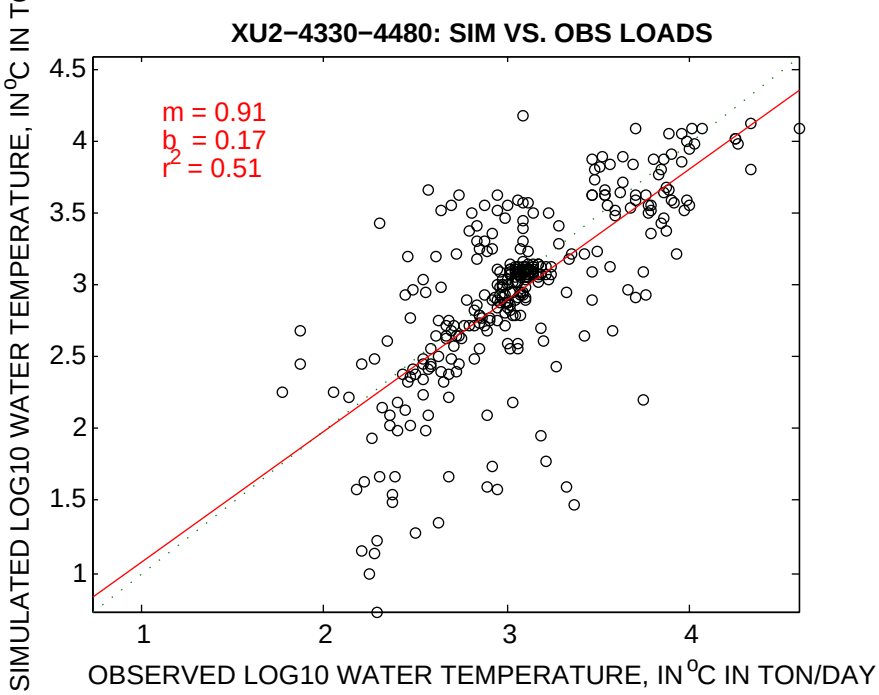


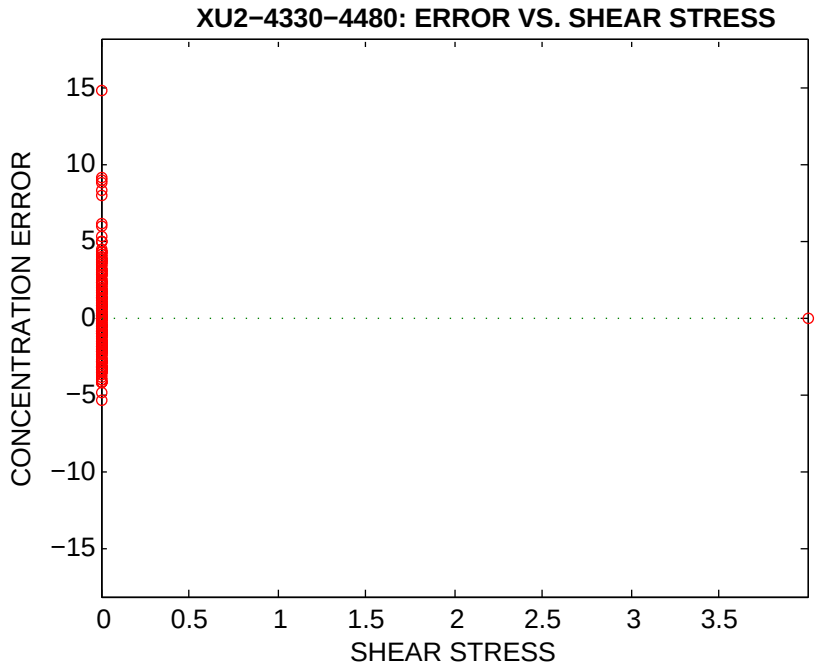


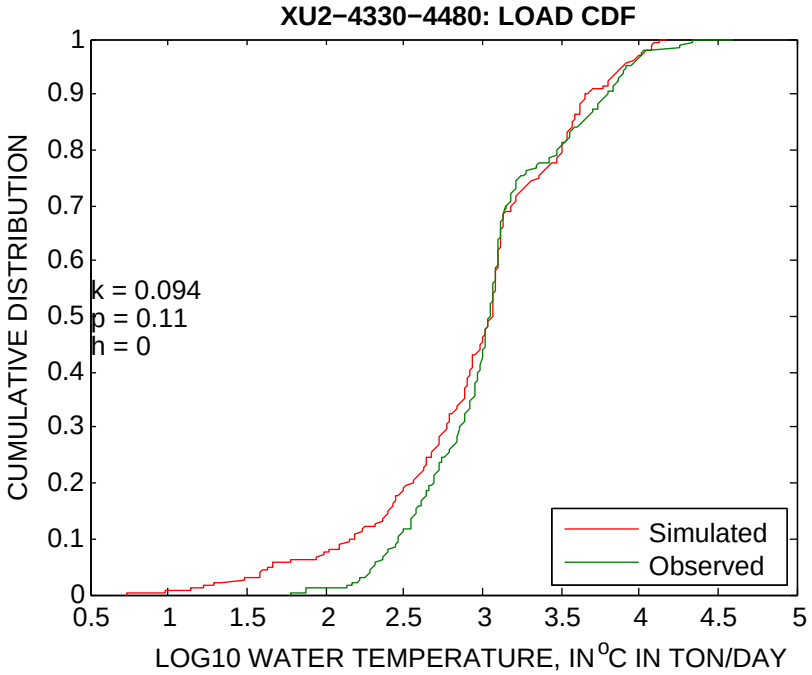


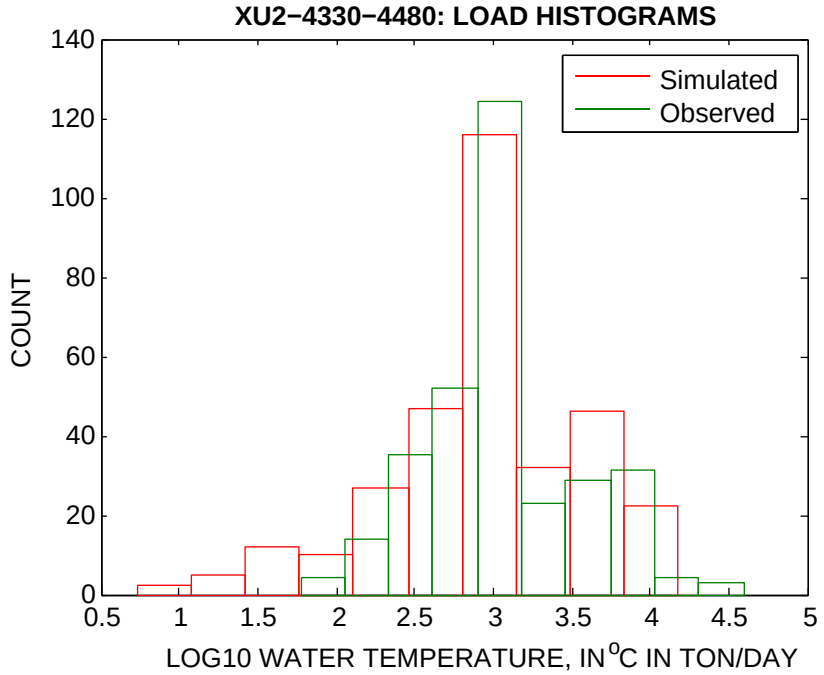


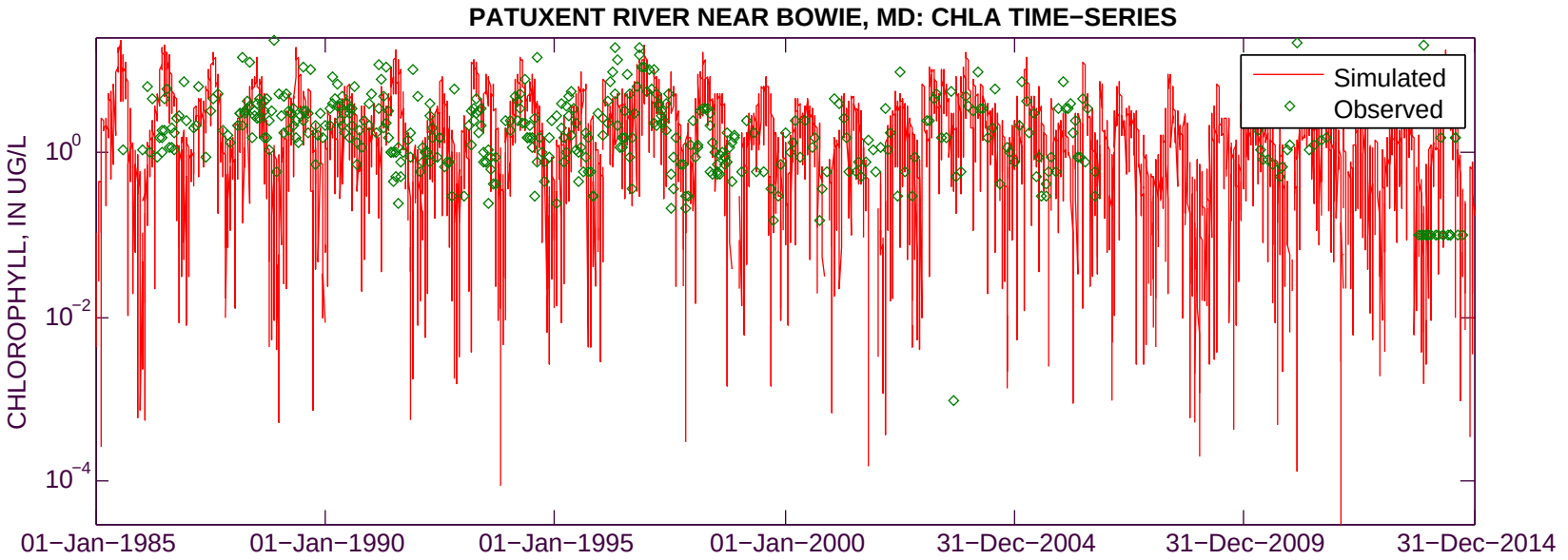
LOAD DATA
LOG10

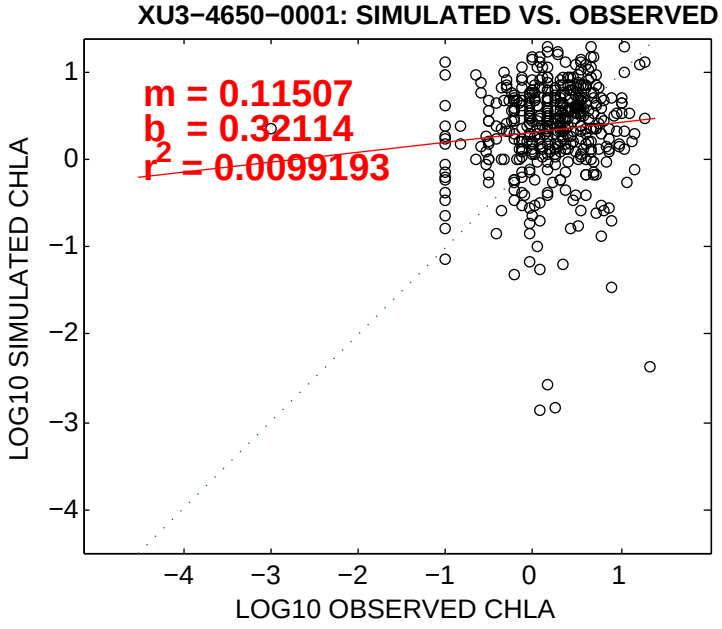


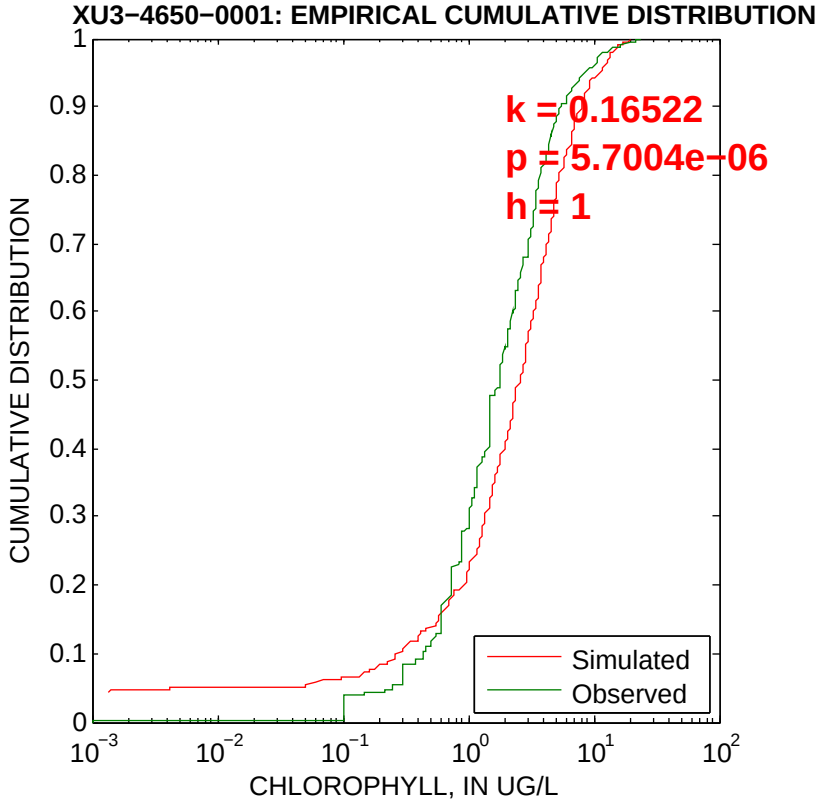












DATA SELECTION

scenario: P620171001WQ | file: CHLA.calib

plot: CHLA - chlorophyll A

Dates: 1/1/1985 – 12/31/201

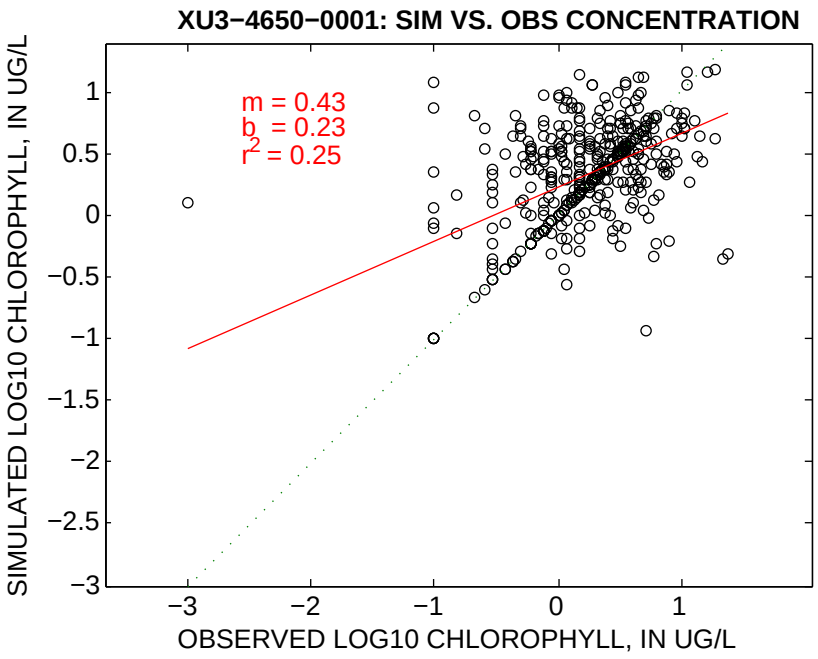
Drive: N/A | Directory: model | Observed: OBS20161101

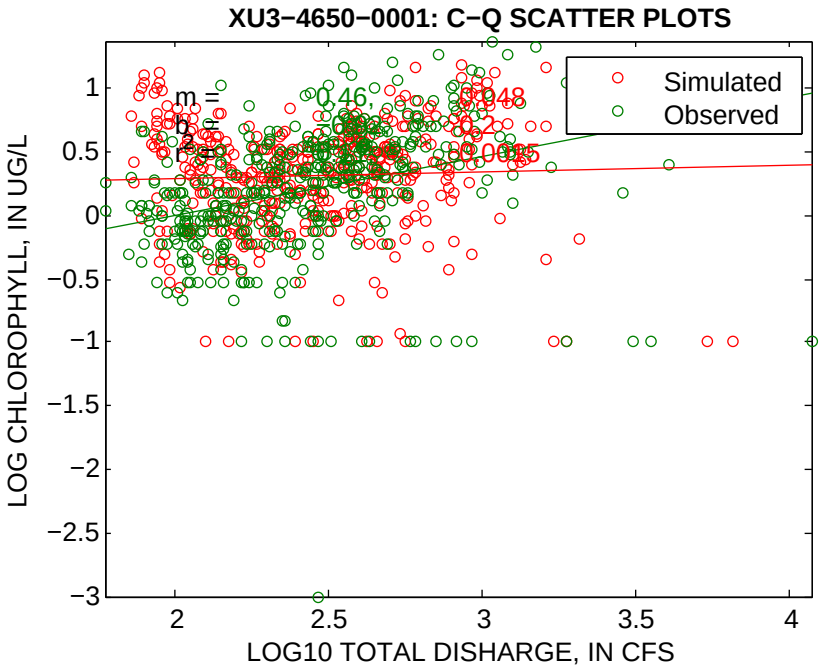
STATISTICS

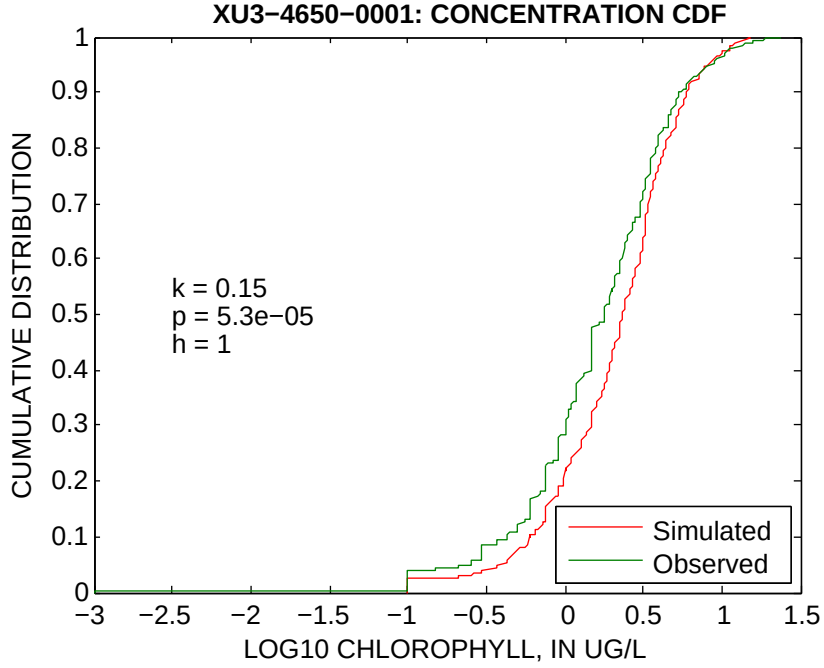
	n	observe	simulate
		460	441
min		0.001	0
		-3	-2.87475
mean		2.72029	3.57118
		0.206844	0.344939
media		1.79	2.56715
		0.253822	0.445184
max		23.9	19.44
		1.3295	1.2887
varian		9.81594	12.2559
		0.233598	0.311817
JB		0.001	0.001
		0.001	0.001
		ra	log
%		31.2792	66.7631
err.va		21.805	0.51077
rel.std.err		2.22138	2.18653
mod.eff		-1.22138	-1.18653

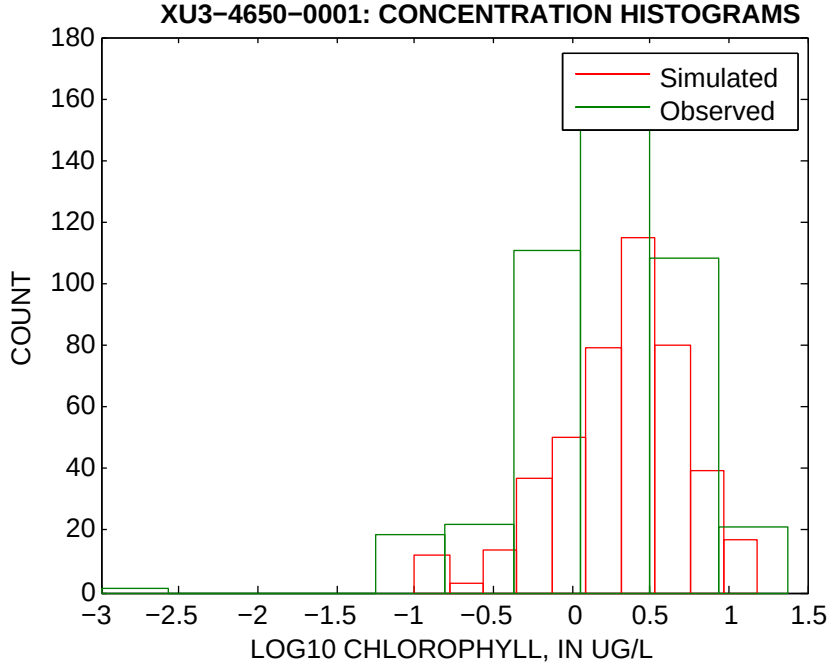
VERSION 3.1

ALL DATA
LOG10

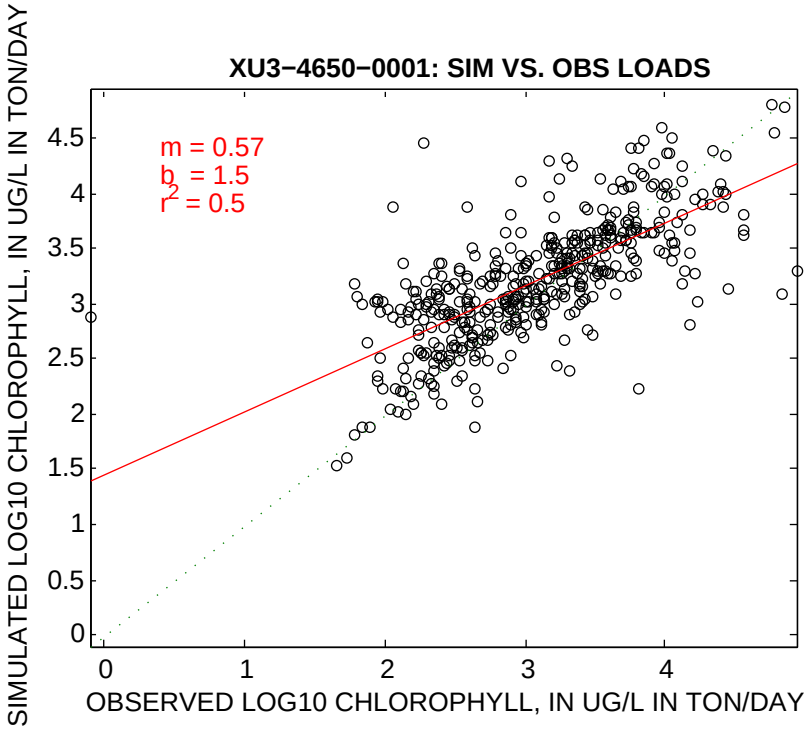


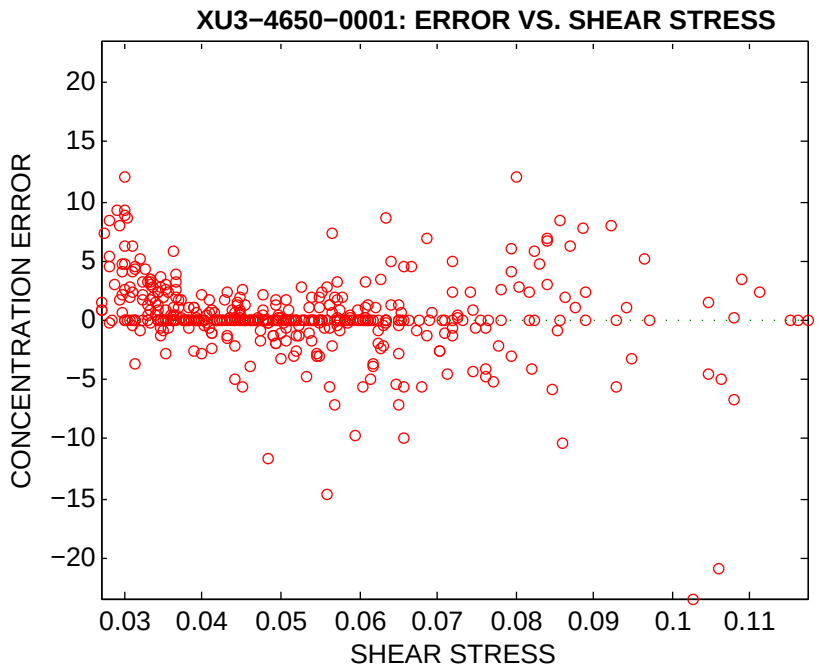


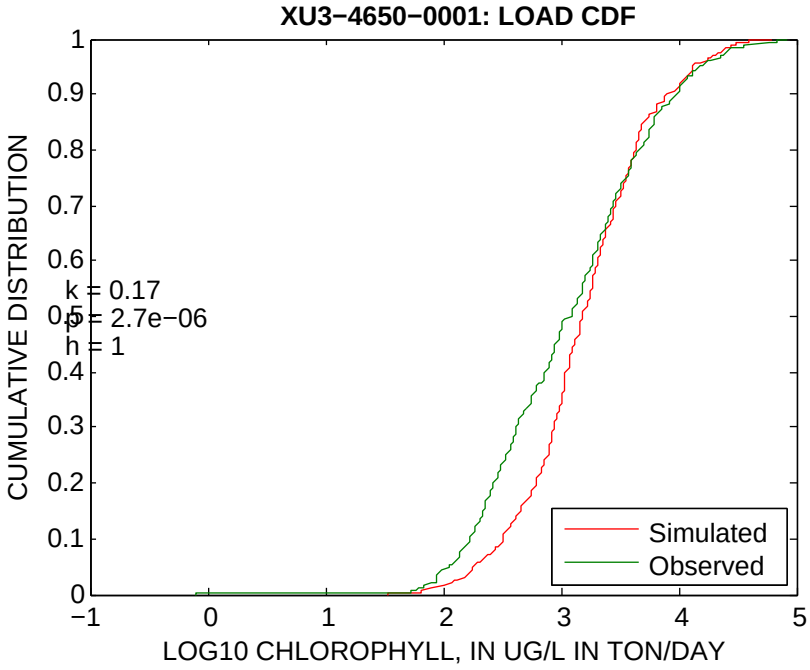


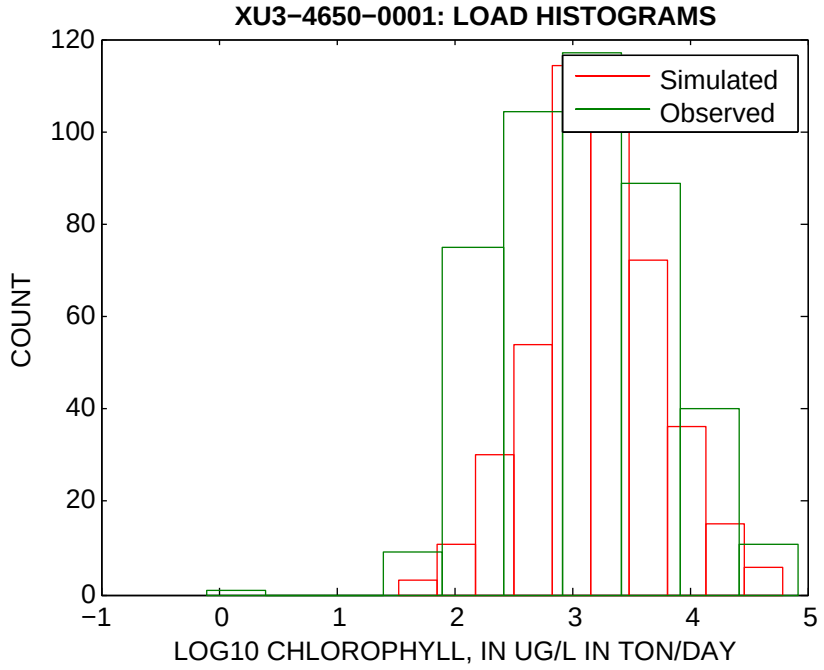


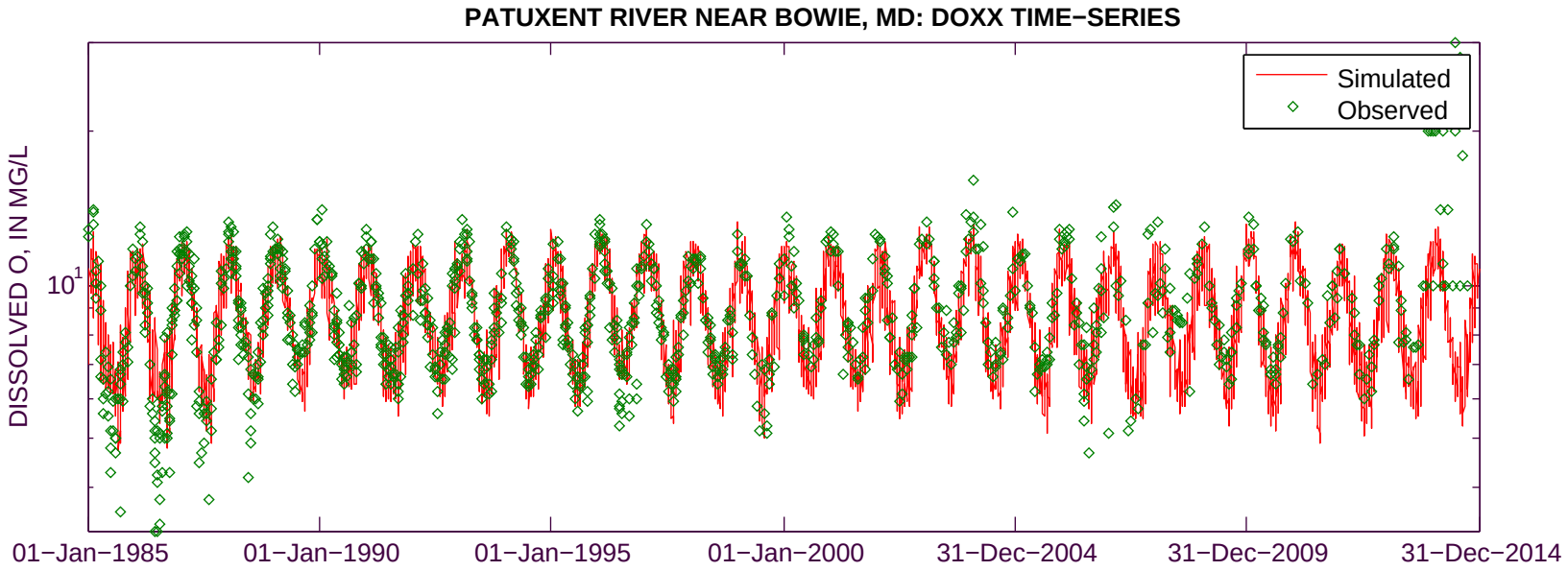
LOAD DATA
LOG10

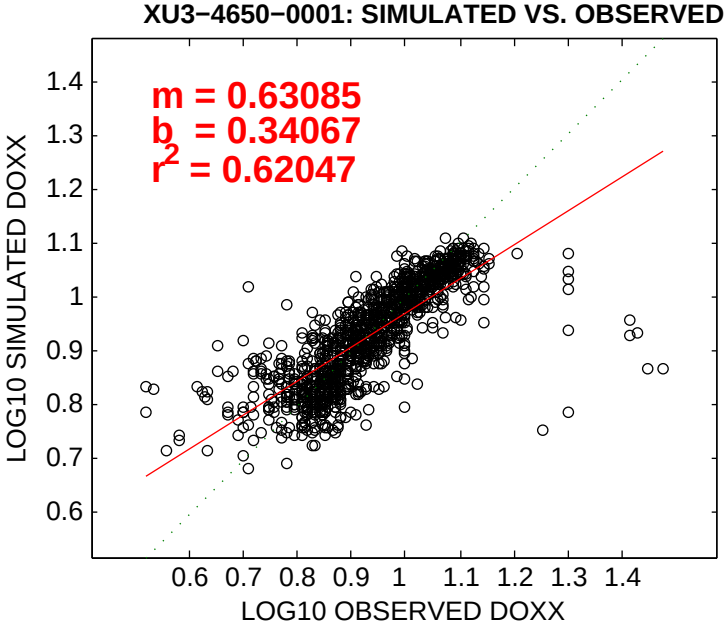


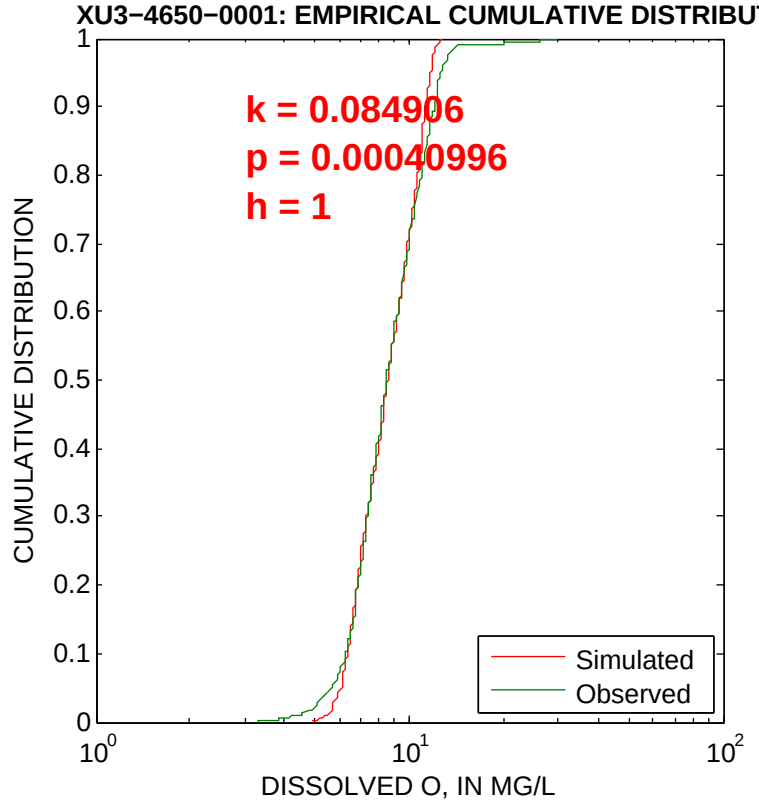












DATA SELECTION

scenario	file
P620171001WQ	DOXX.calib

plot: DOXX - dissolved oxygen

Dates: 1/1/1985 – 12/31/201

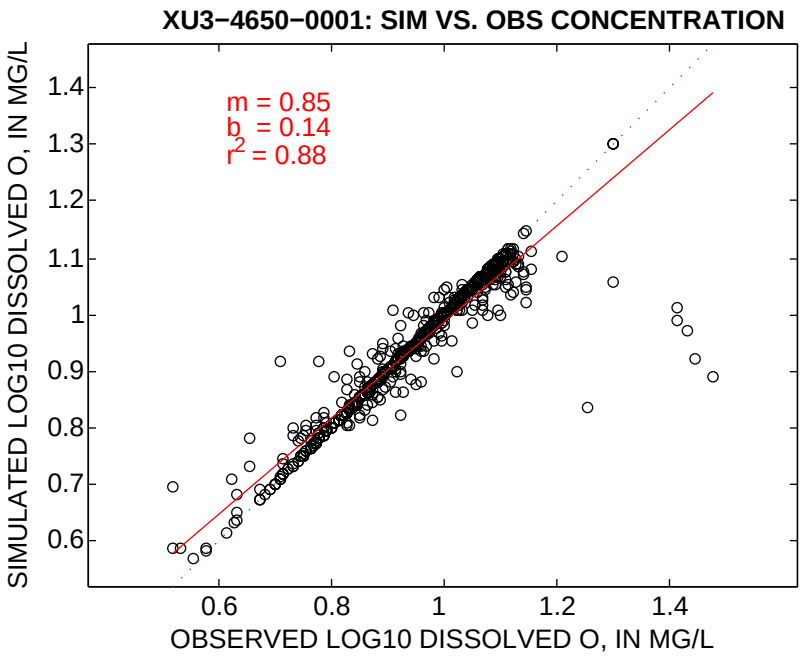
Drive	Directory	Observed
N/A	model	OBS20161101

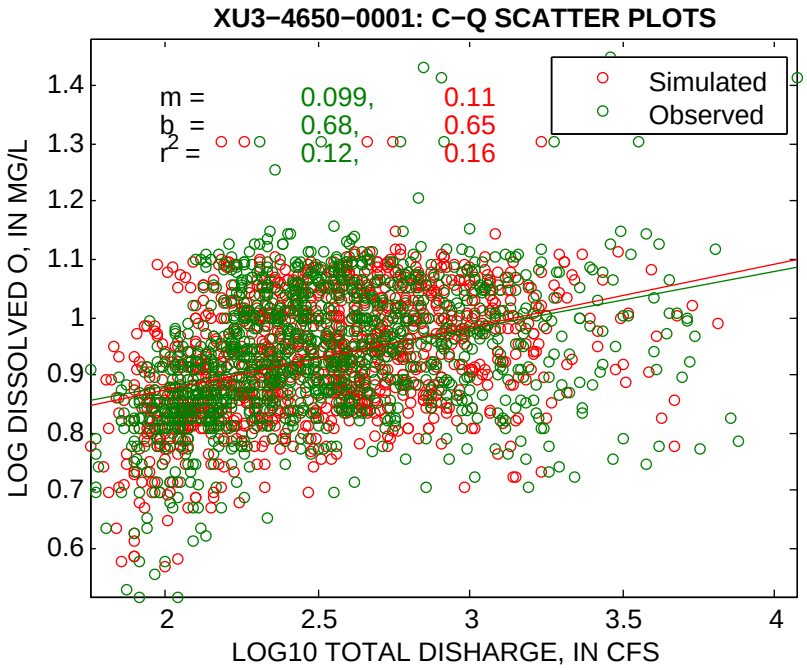
STATISTICS

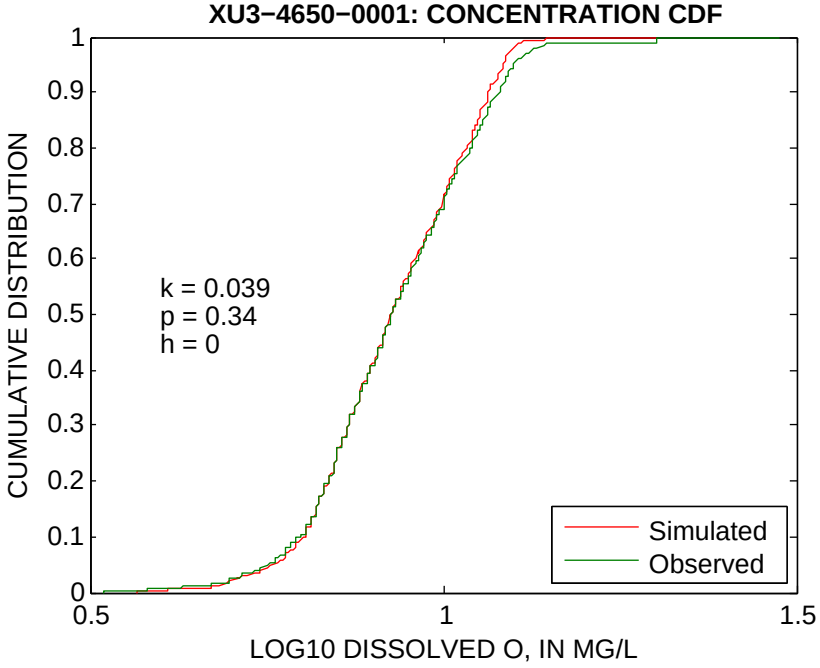
	n	1166	1166
		observe	simulate
min		3.3	4.7976
		0.518514	0.681024
mean		8.90907	8.70253
		0.933512	0.929574
media		8.461	8.539
		0.927419	0.931407
max		30	12.818
		1.47712	1.10782
varian		6.81817	3.44255
		0.0138391	0.00887631
JB		0.001	0.001
		0.001	0.001
		ra	log
%		-2.31831	-0.421869
err.va		3.3658	0.00527025
rel.std.err		0.493651	0.380824
mod.eff		0.506349	0.619176

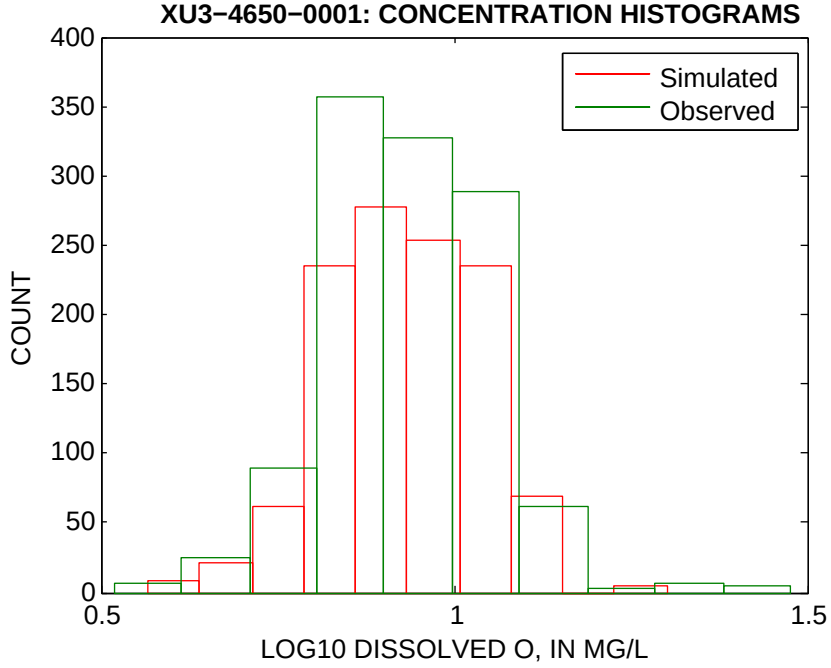
VERSION 2.1

ALL DATA
LOG10

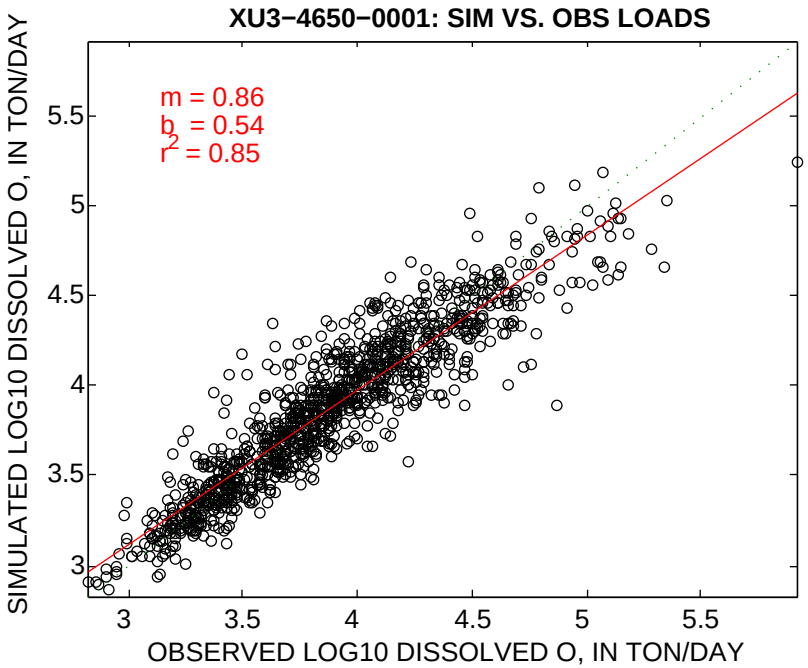


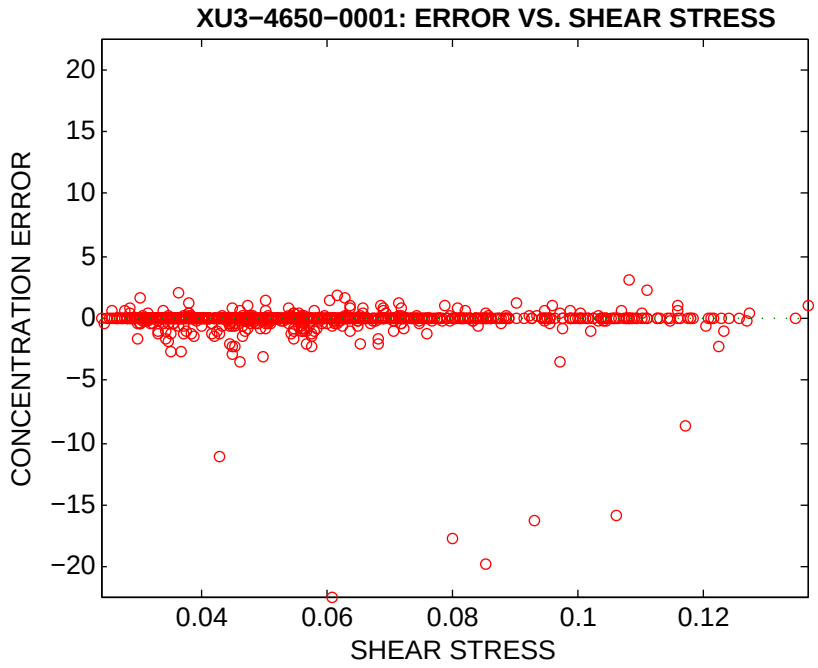


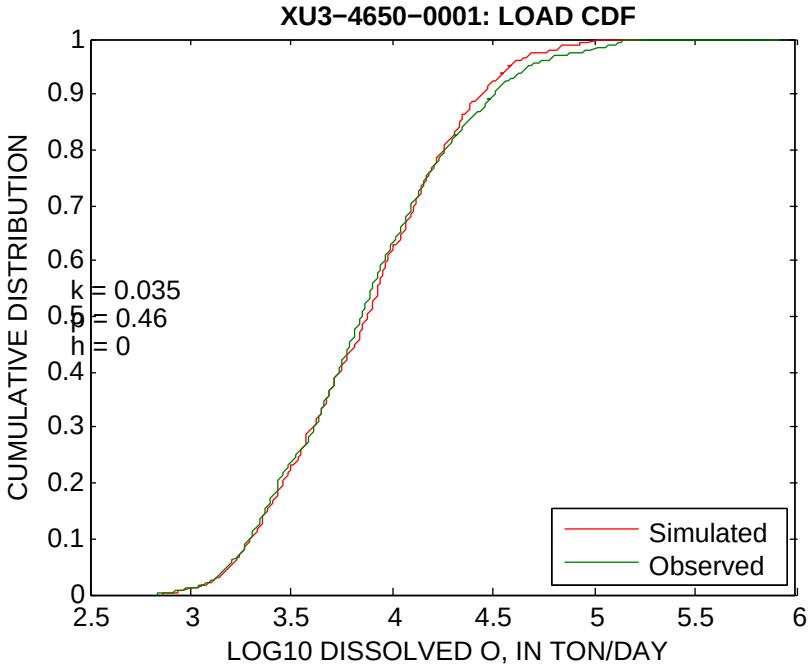


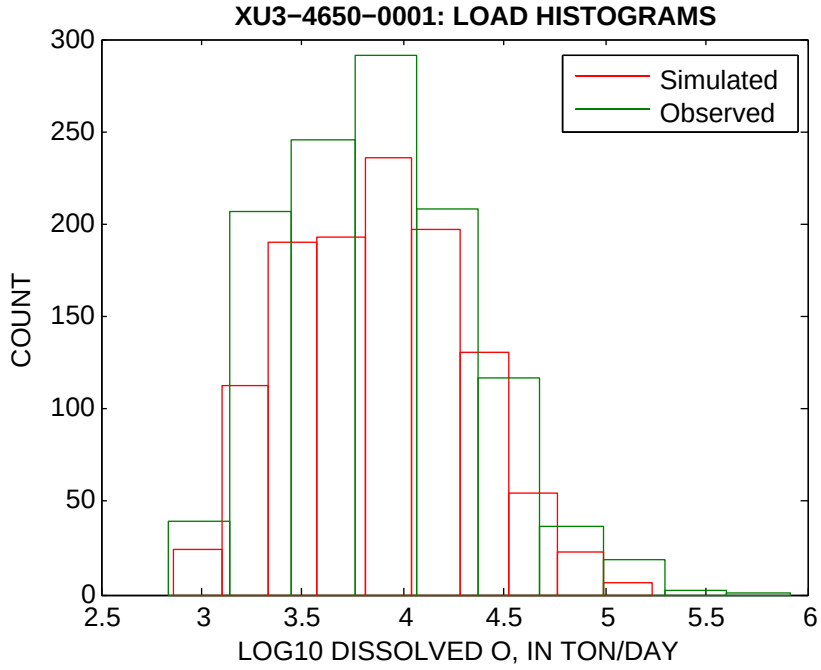


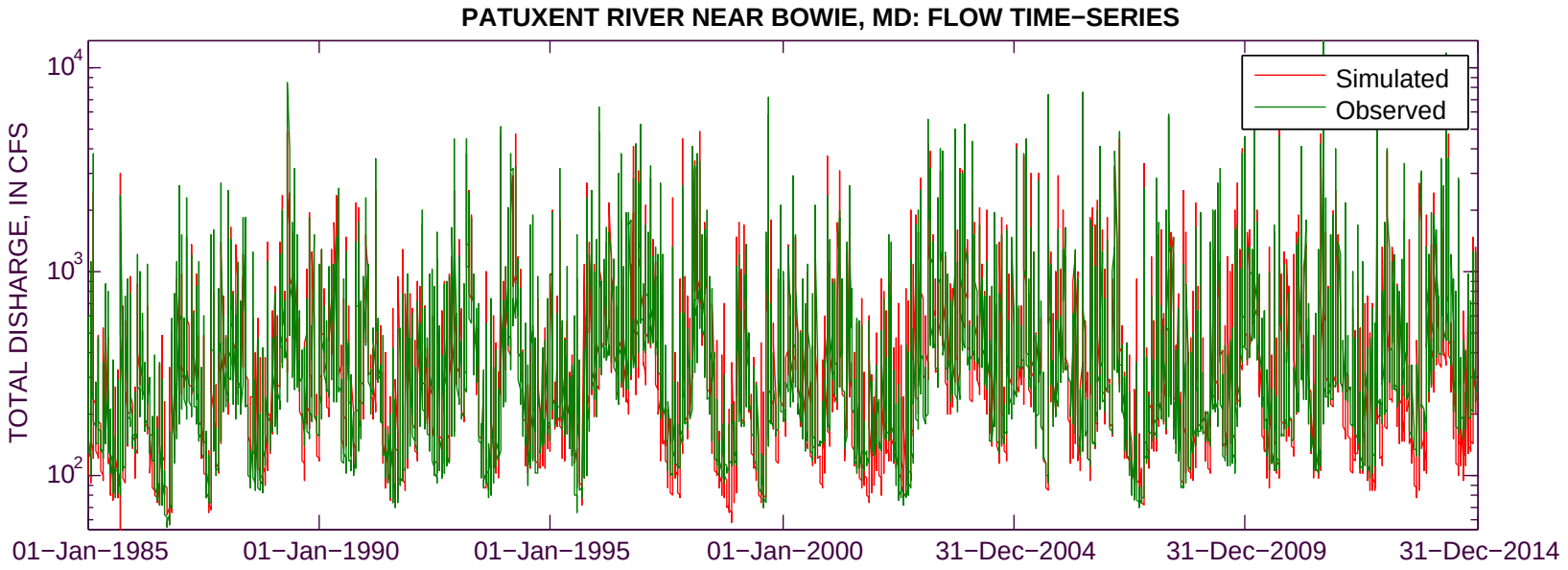
LOAD DATA
LOG10

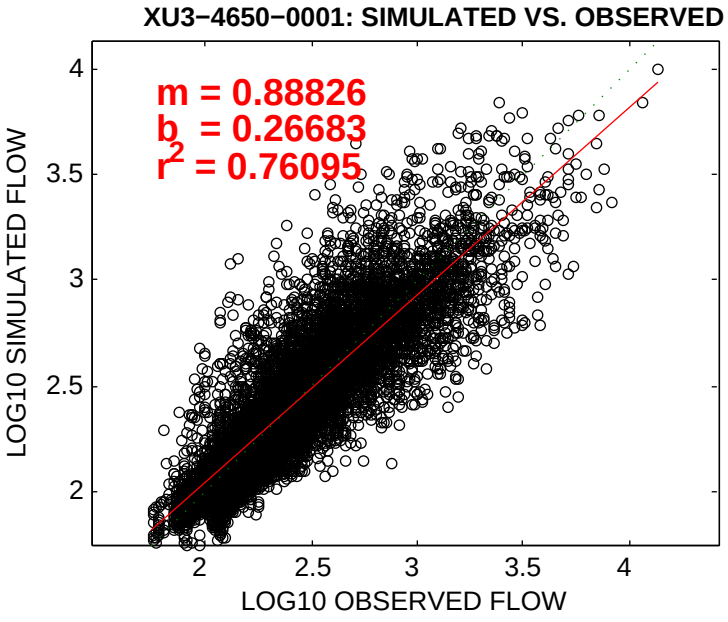


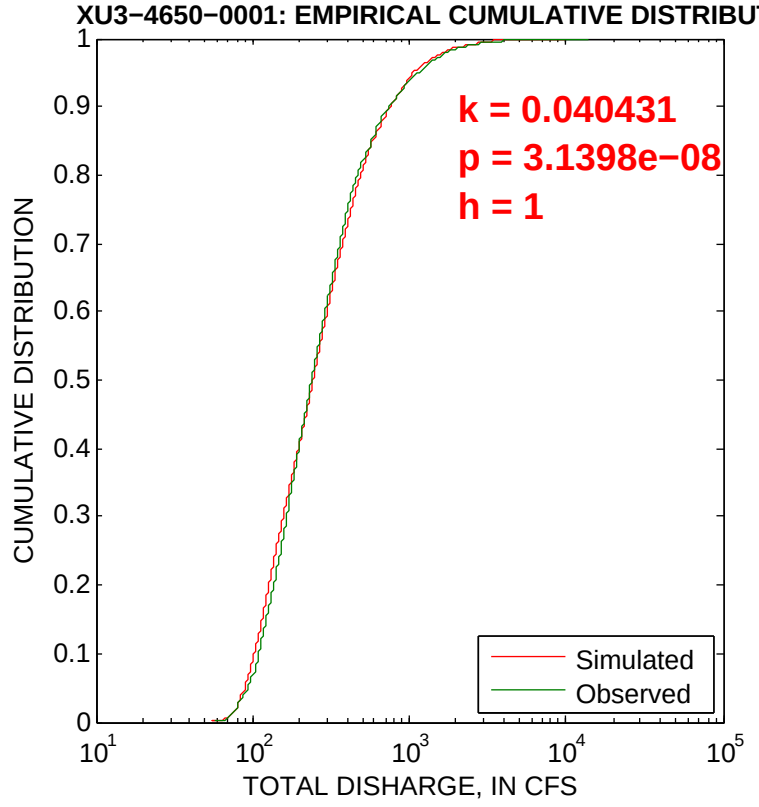












DATA SELECTION

scenario: P620171001WQ | file: _FLOW.calib

plot: FLOW - total discharge

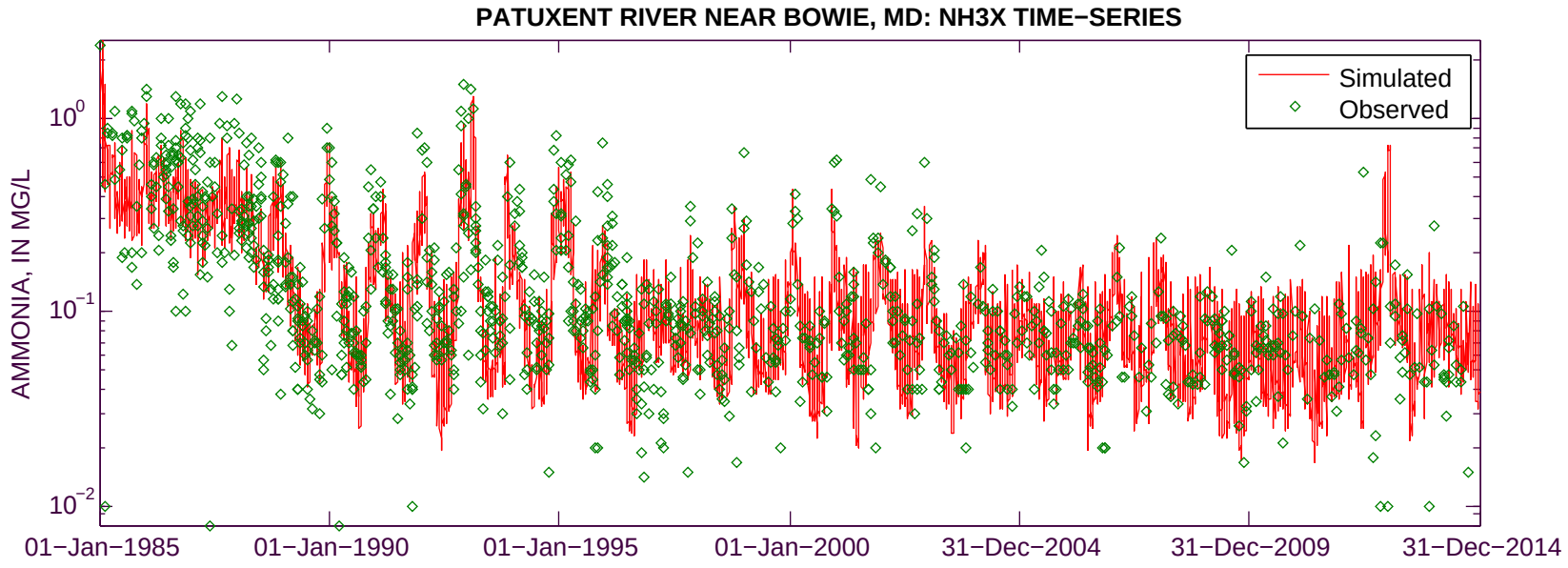
Dates: 1/1/1985 – 12/31/201

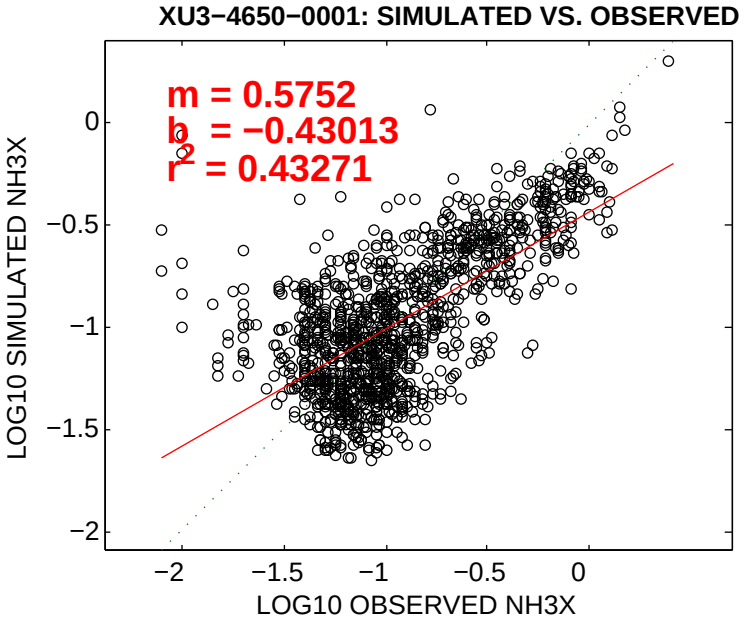
Drive: N/A | Directory: model | Observed: OBS20161101

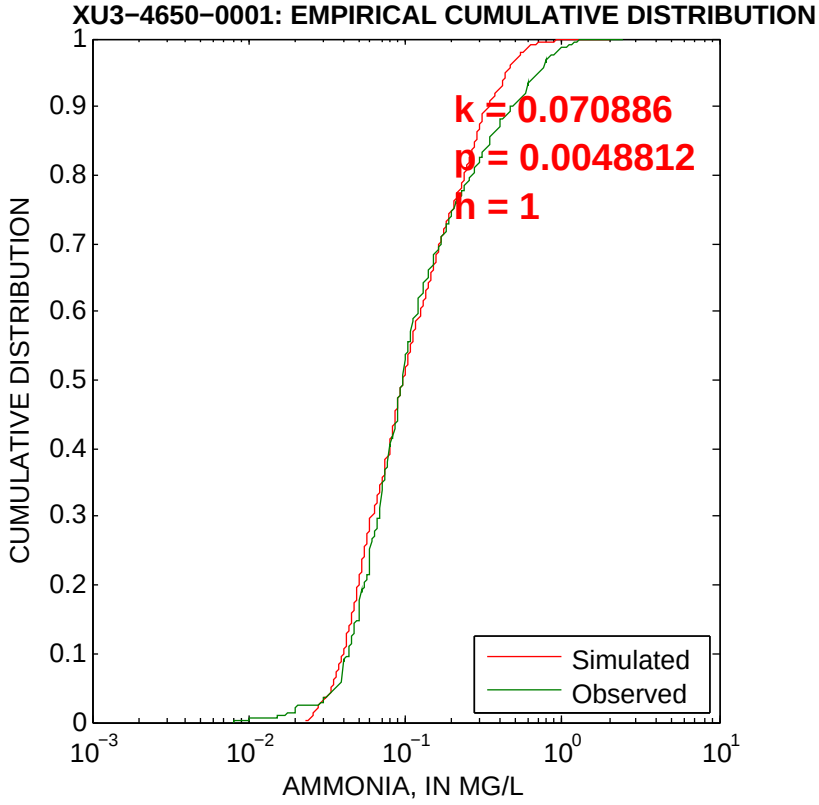
STATISTICS

	observe	simulate
n	10957	10957
min	56	55.037
	1.74819	1.74065
mean	384.233	378.503
	2.42432	2.42025
media	239	245.05
	2.3784	2.38925
max	13700	9957.3
	4.13672	3.99814
varian	272083	221354
	0.111067	0.115162
JB	0.001	0.001
	0.001	0.001
	ra	log
%	-1.49127	-0.168048
err.va	127598	0.0289332
rel.std.err	0.468967	0.260502
mod.eff	0.531033	0.739498

VERSION 2.1







DATA SELECTION

scenario: P620171001WQ | file: NH3X.calib

plot: NH3X - ammonia

Dates: 1/1/1985 – 12/31/201

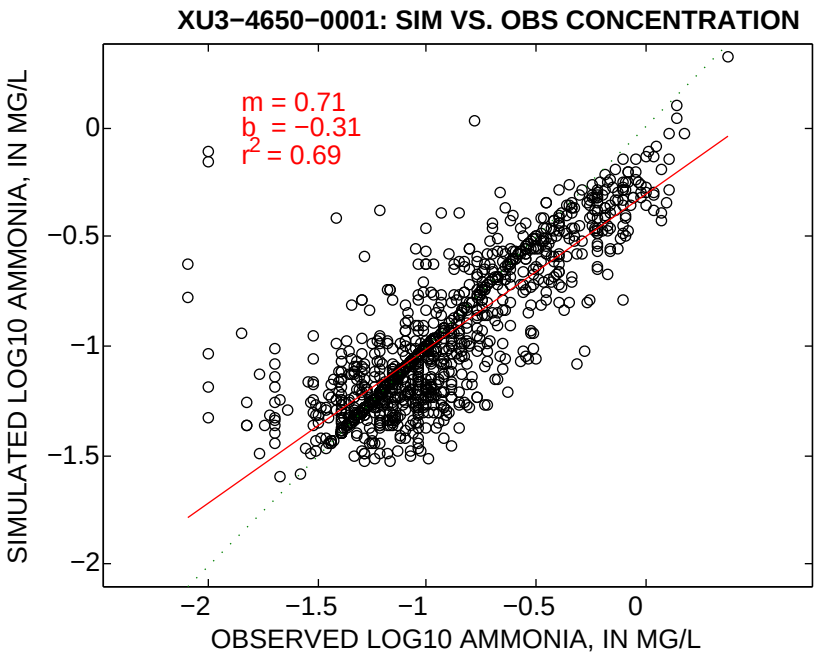
Drive: N/A | Directory: model | Observed: OBS20161101

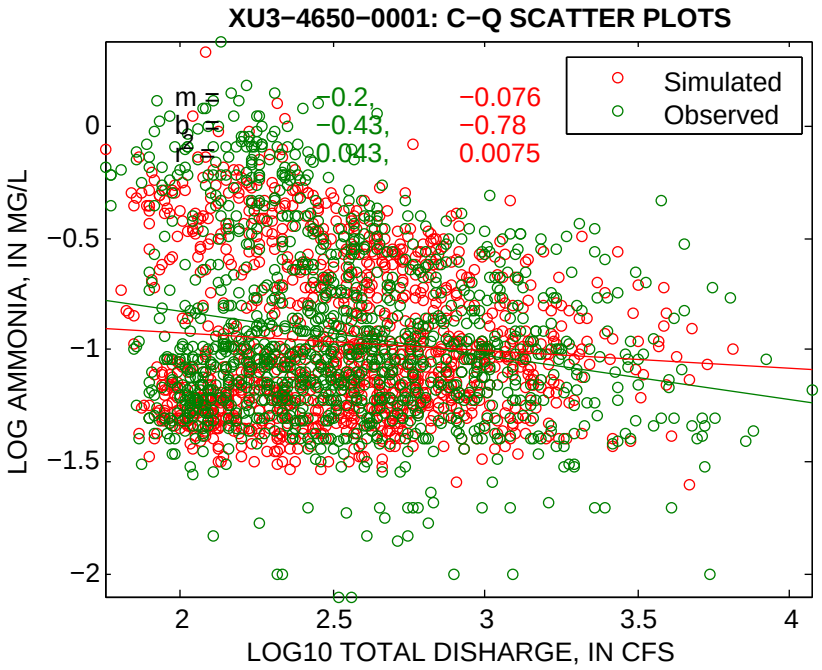
STATISTICS

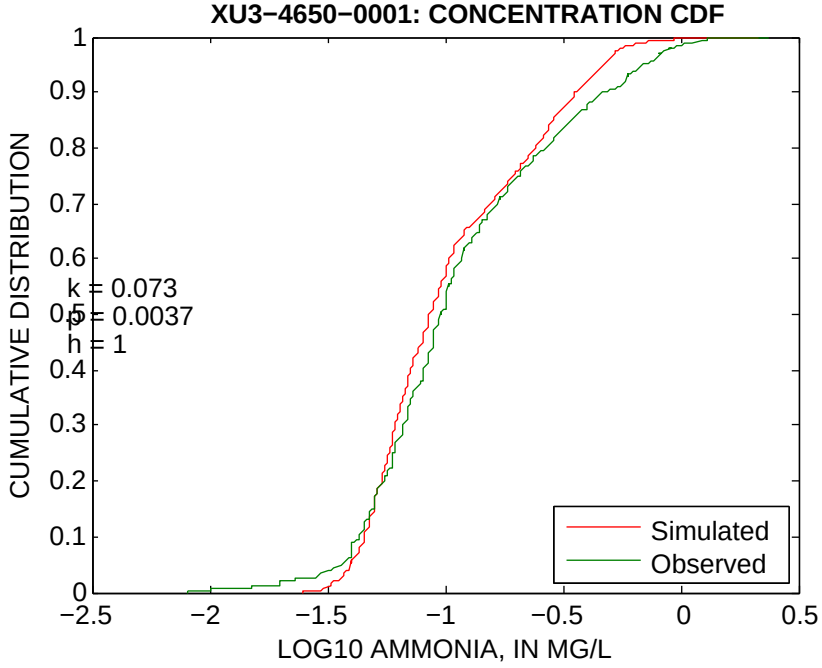
		observe	simulate
n		1185	1185
min		0.008	0.021908
		-2.09691	-1.6594
mean		0.189998	0.15345
		-0.932996	-0.966785
media		0.096	0.096748
		-1.01773	-1.01436
max		2.4	2.0395
		0.380211	0.309524
varian		0.0555074	0.0236084
		0.163493	0.125007
JB		0.001	0.001
		0.001	0.001
		ra	log
%		-19.236	3.62162
err.va		0.0233464	0.101562
rel.std.err		0.420601	0.621197
mod.eff		0.579399	0.378803

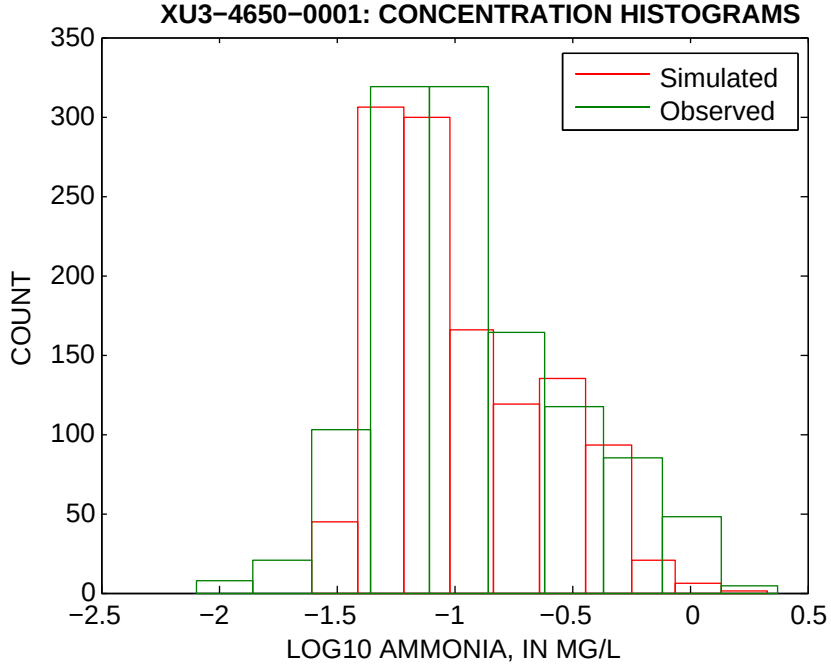
VERSION 2.1

ALL DATA
LOG10

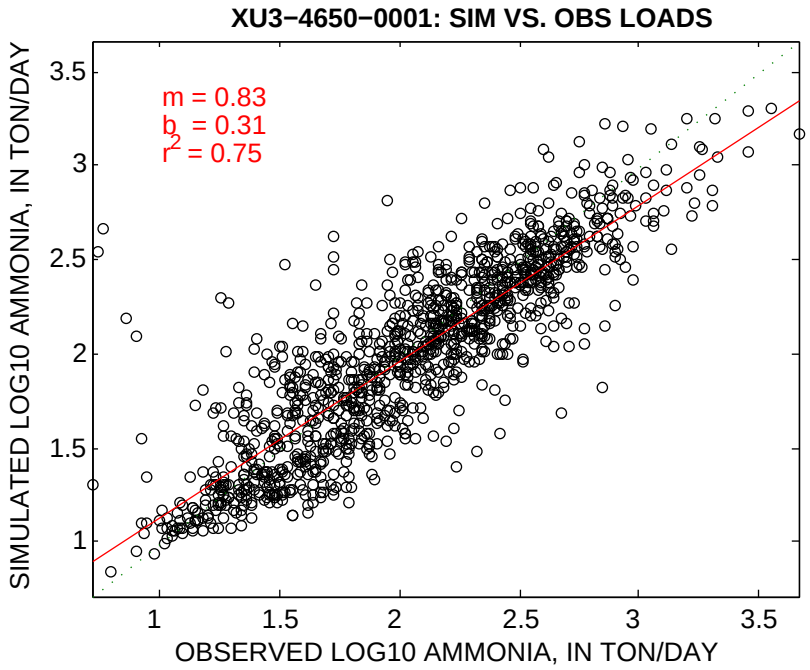


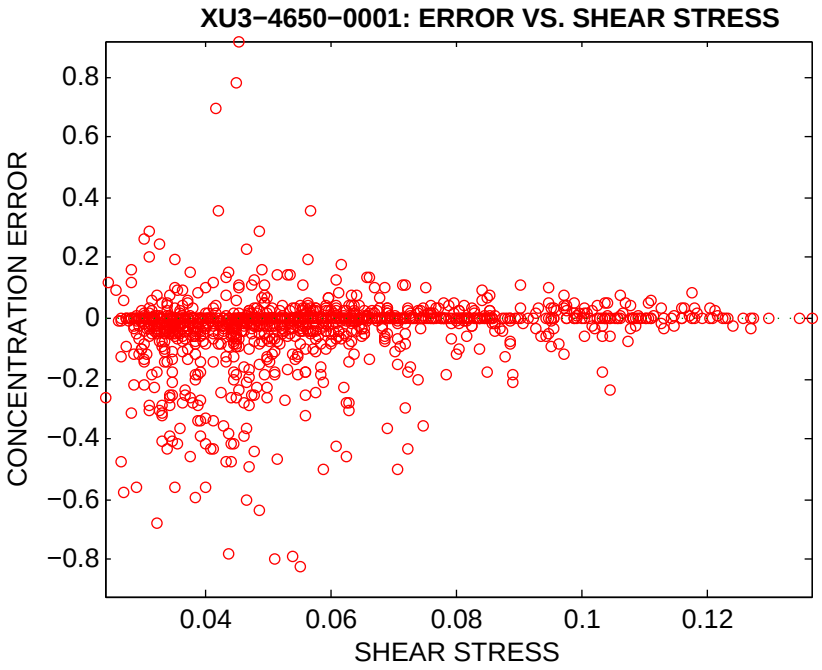


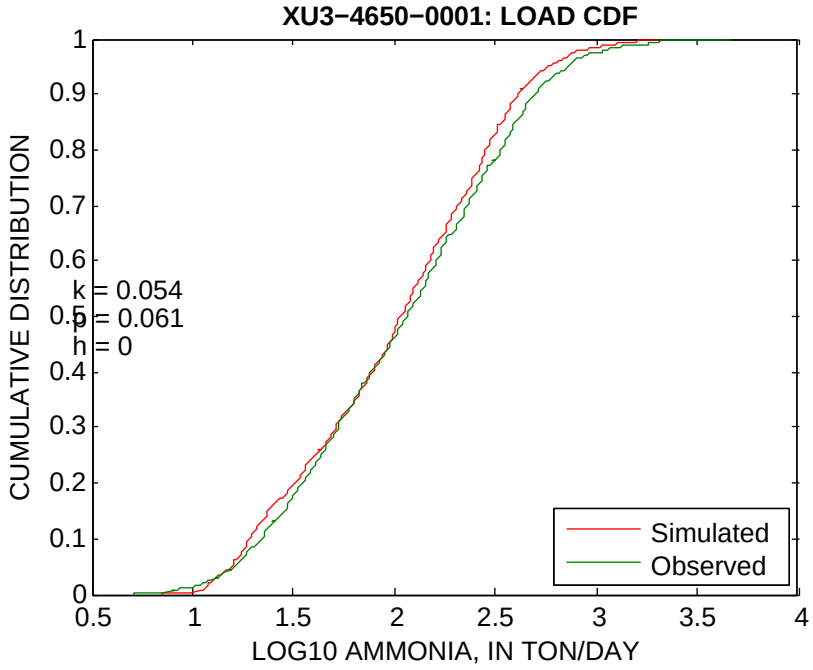


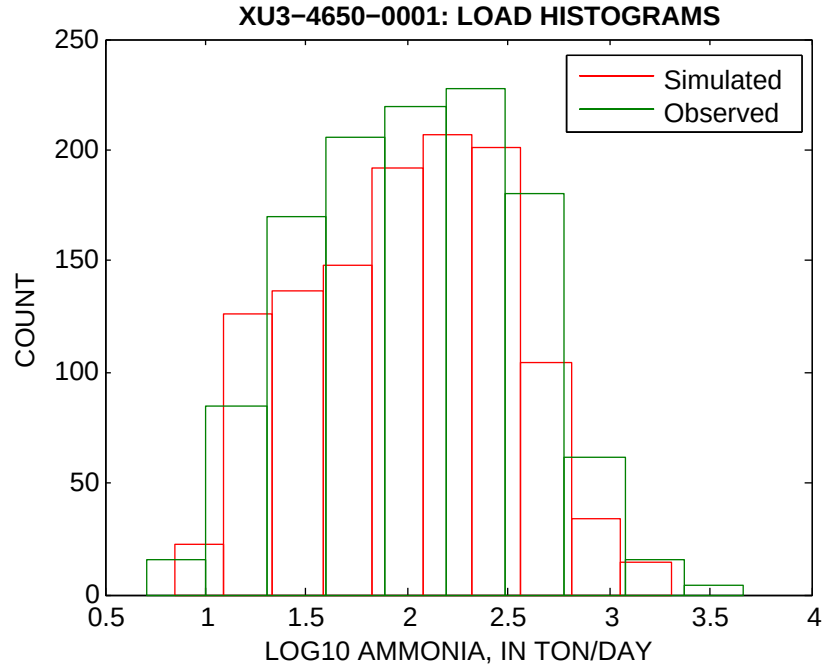


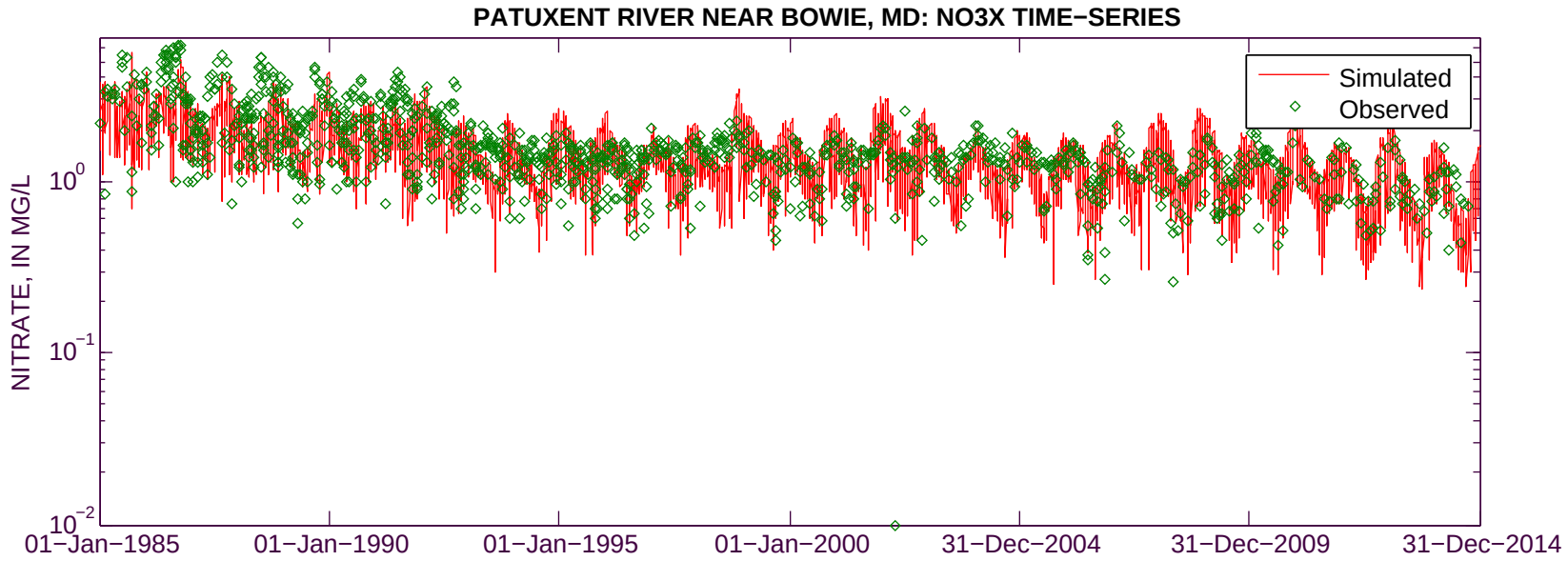
LOAD DATA
LOG10

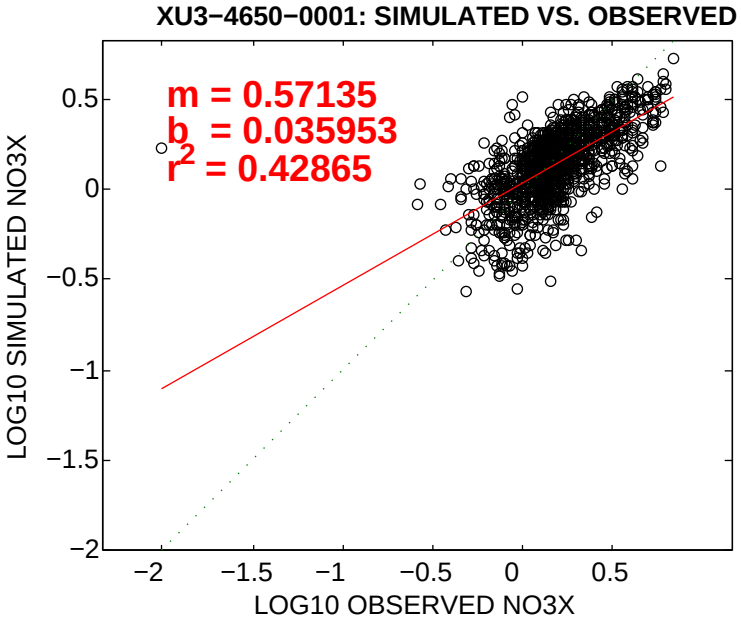


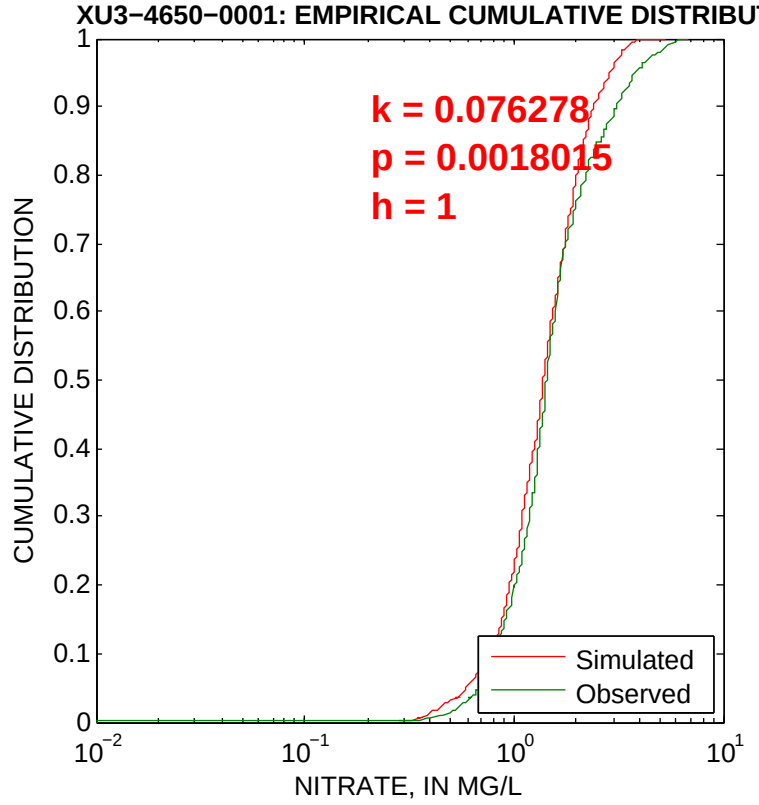












DATA SELECTION

scenario	file
P620171001WQ	NO3X.calib

plot: NO3X - nitrate

Dates: 1/1/1985 – 12/31/201

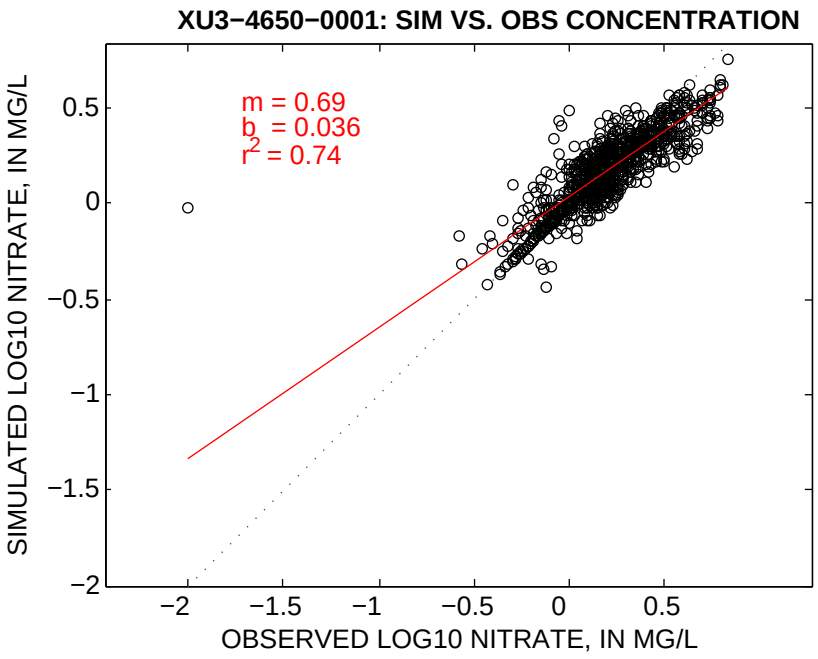
Drive	Directory	Observed
N/A	model	OBS20161101

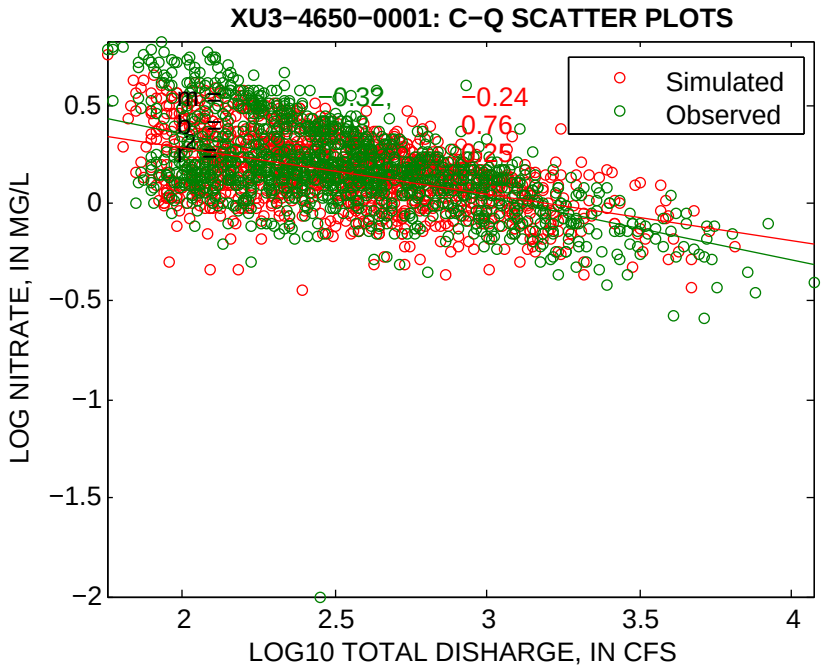
STATISTICS

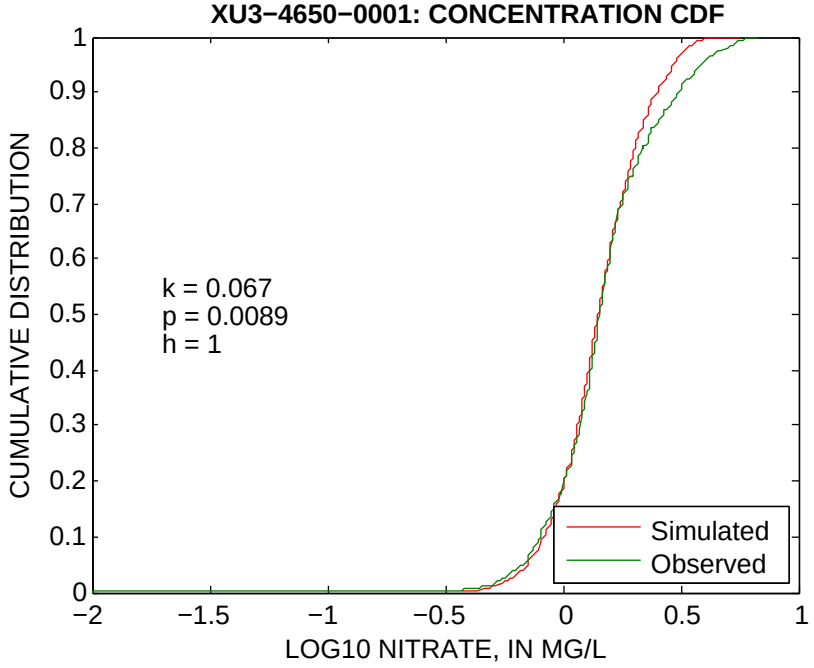
	n	1193	1193
		observe	simulate
min		0.01	0.27151
		-2	-0.566214
mean		1.72171	1.51407
		0.174881	0.135872
media		1.435	1.3844
		0.156852	0.141262
max		6.74	5.3055
		0.82866	0.724726
varian		1.02683	0.470011
		0.0531855	0.0405041
JB		0.001	0.001
		0.001	0.001
		ra	log
%		-12.0604	-22.306
err.va		0.533213	0.0344372
rel.std.err		0.51928	0.647493
mod.eff		0.48072	0.352507

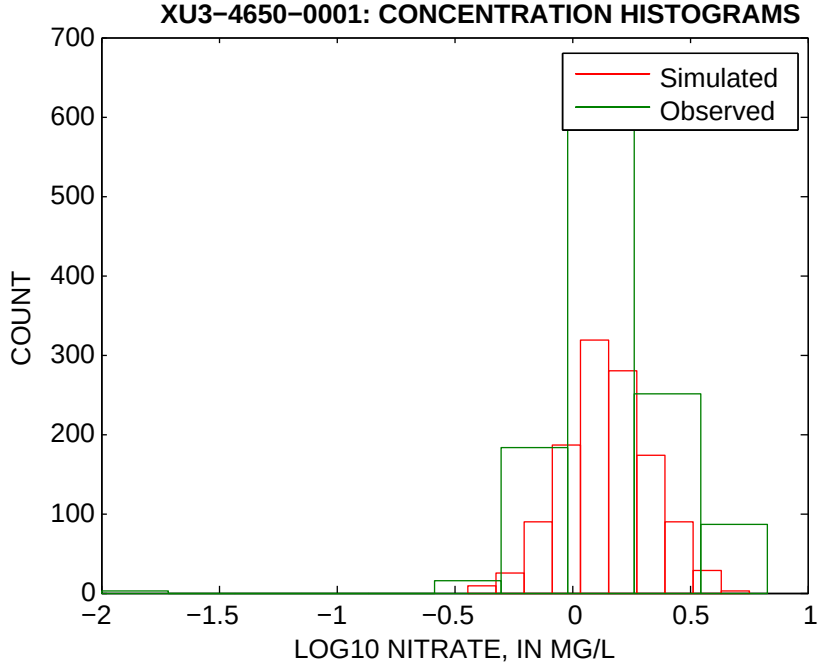
VERSION 2.1

ALL DATA
LOG10

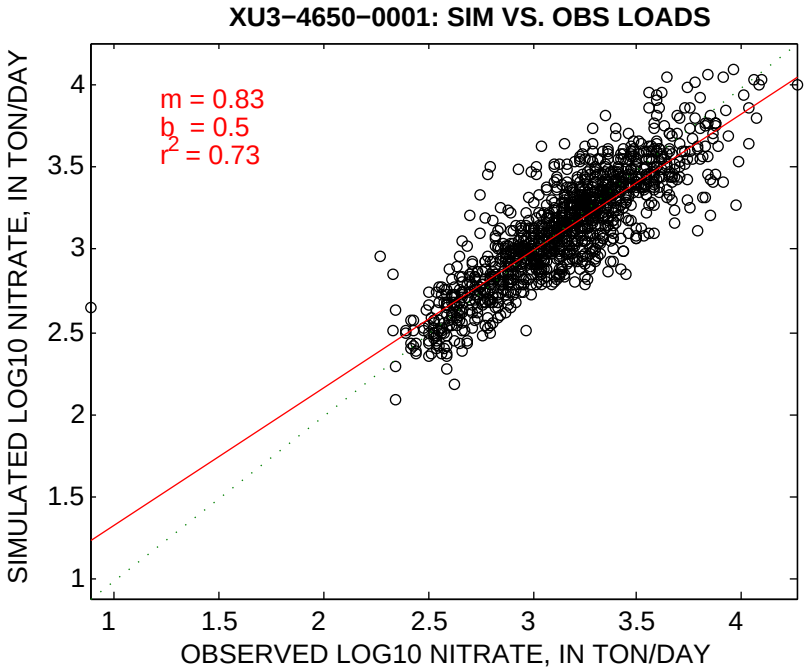


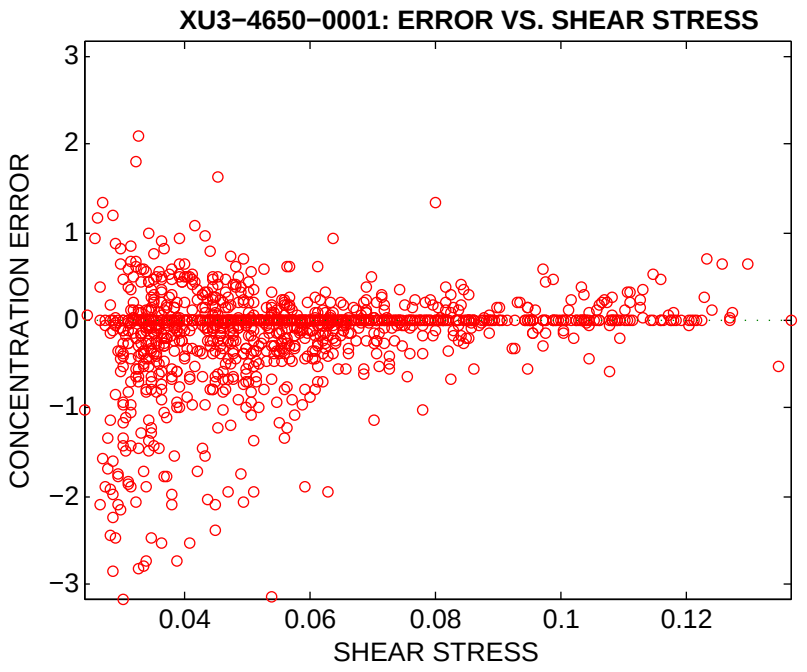


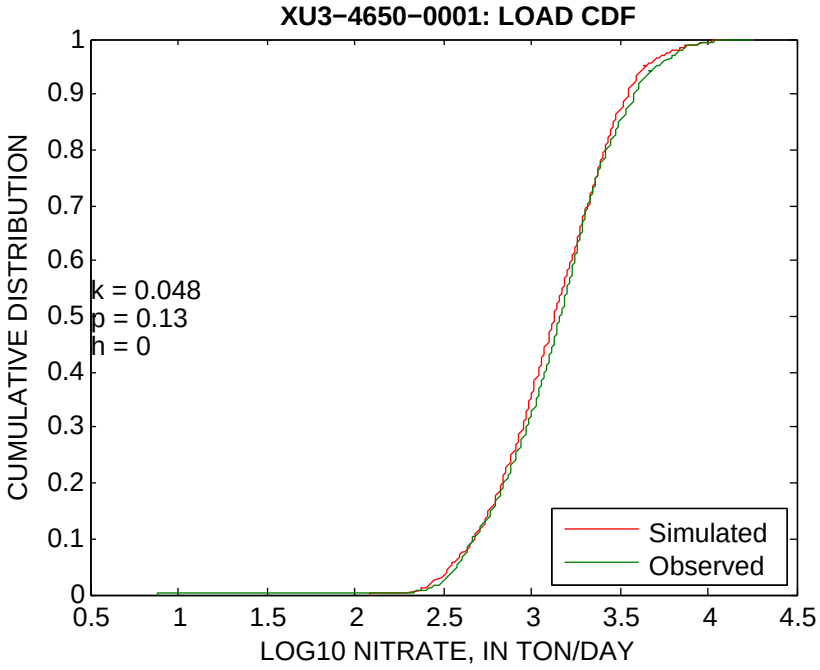


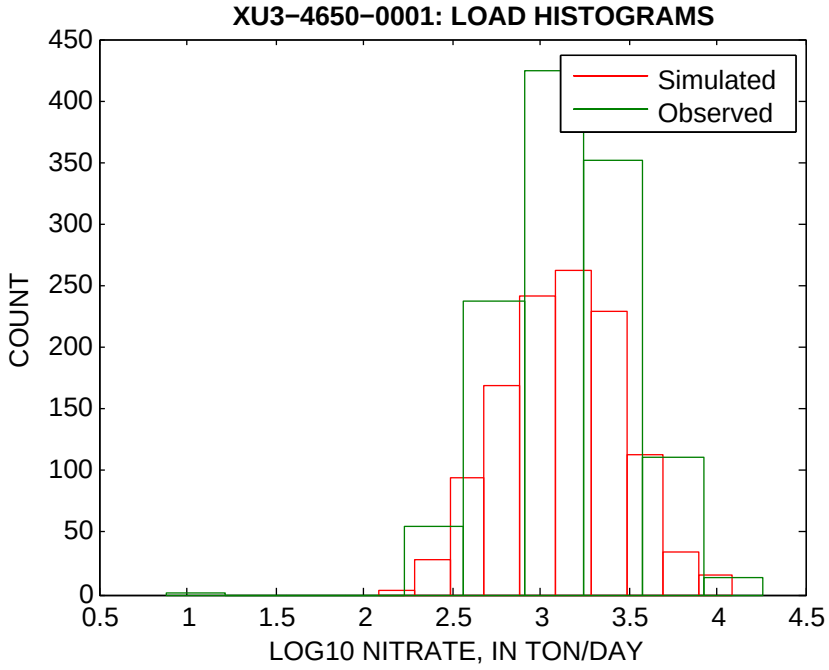


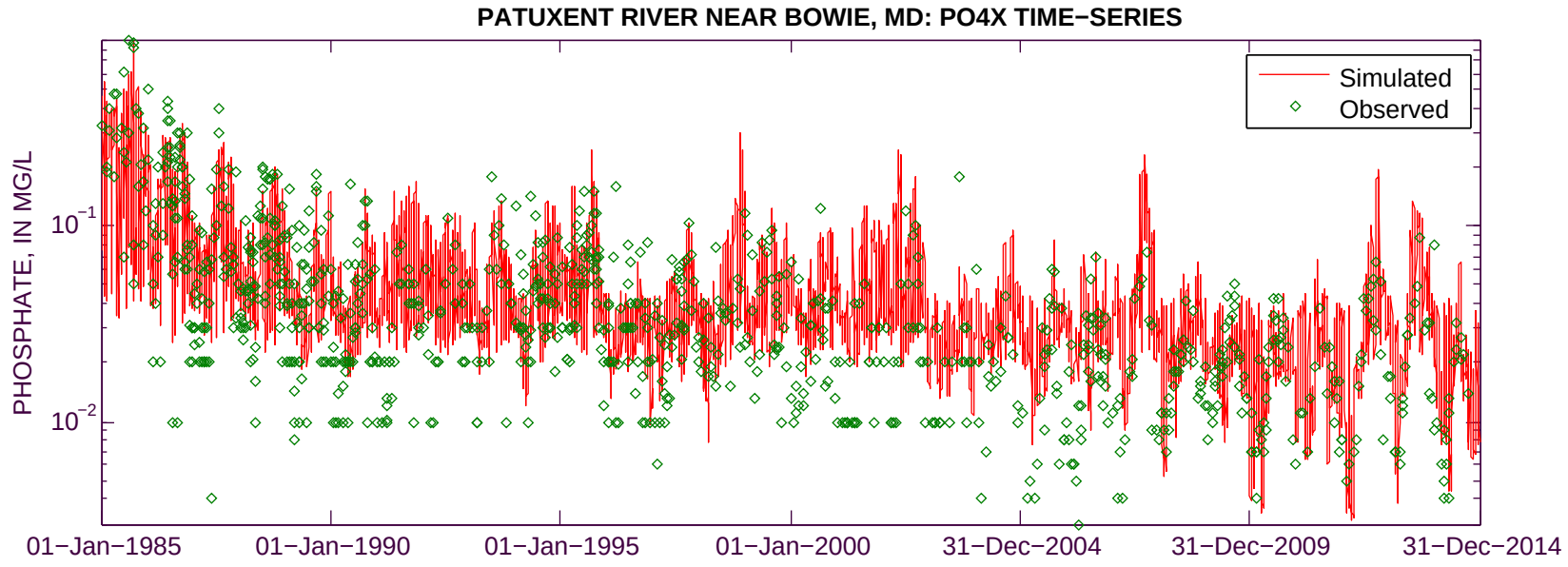
LOAD DATA
LOG10

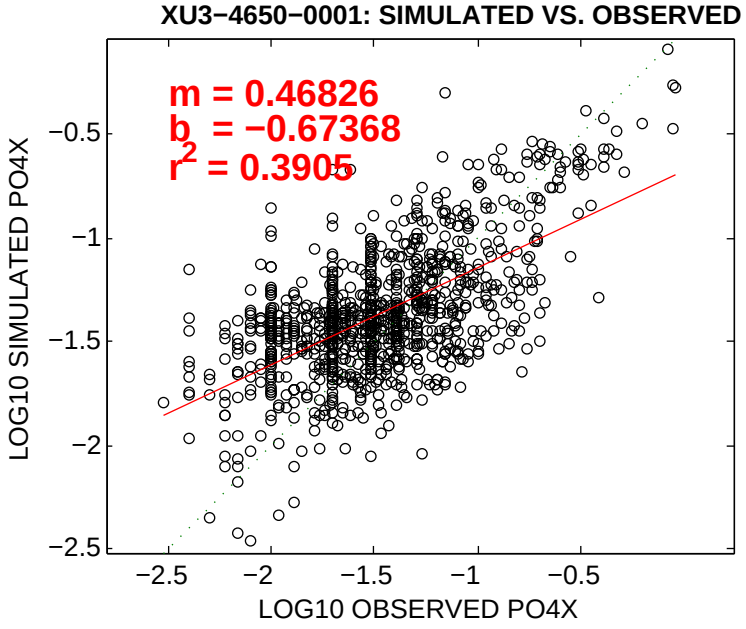


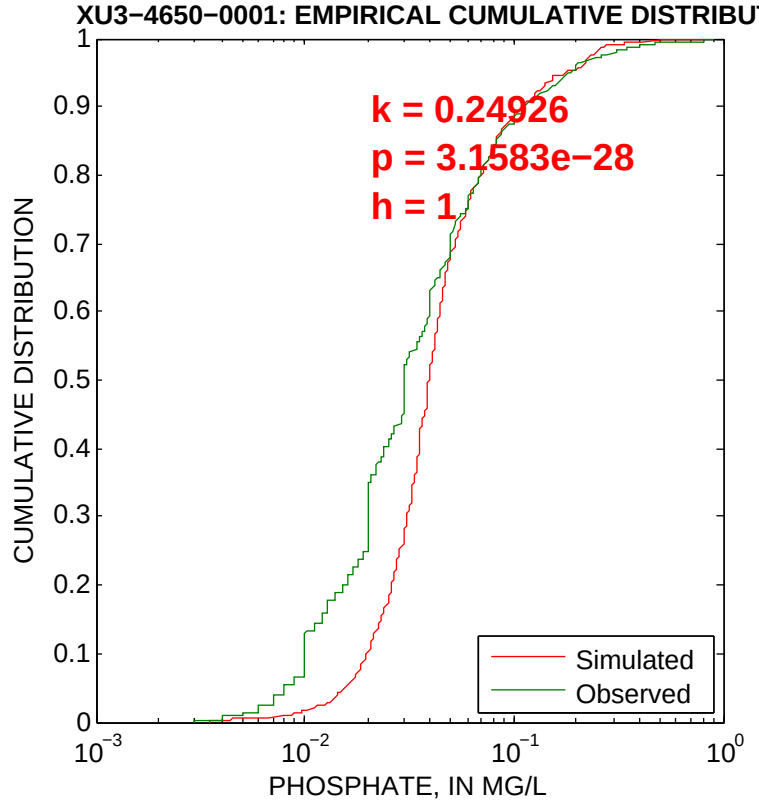












DATA SELECTION

scenario	file
P620171001WQ	PO4X.calib

plot: PO4X - phosphate

Dates: 1/1/1985 – 12/31/201

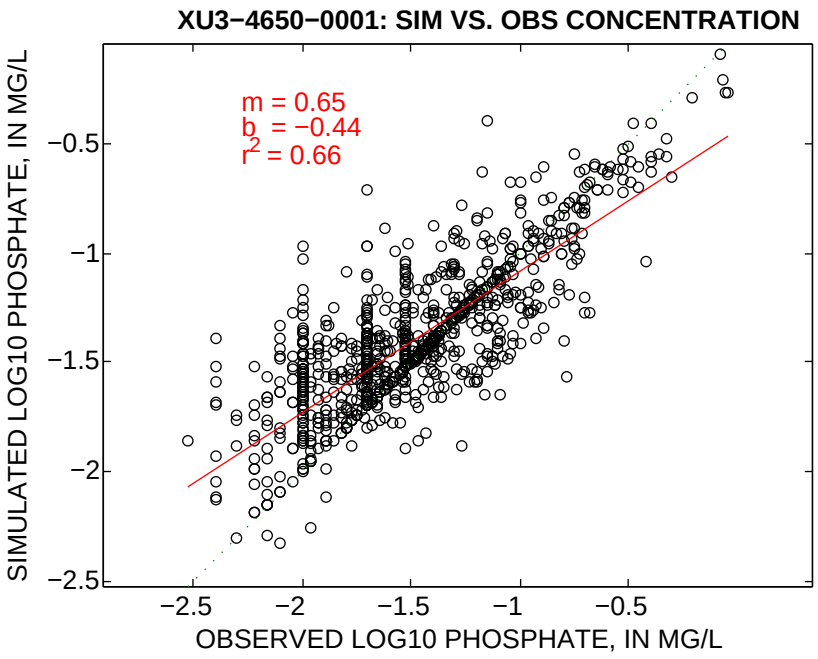
Drive	Directory	Observed
N/A	model	OBS20161101

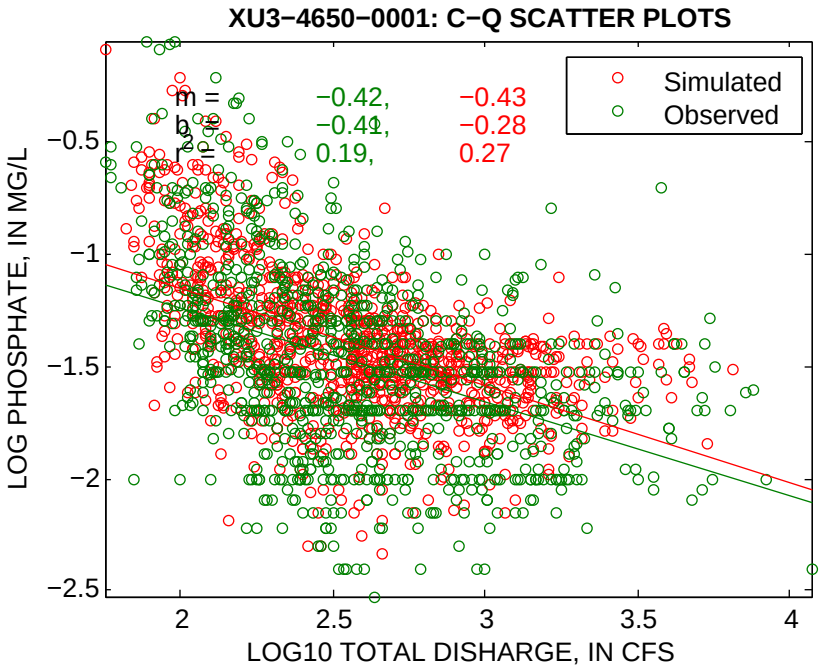
STATISTICS

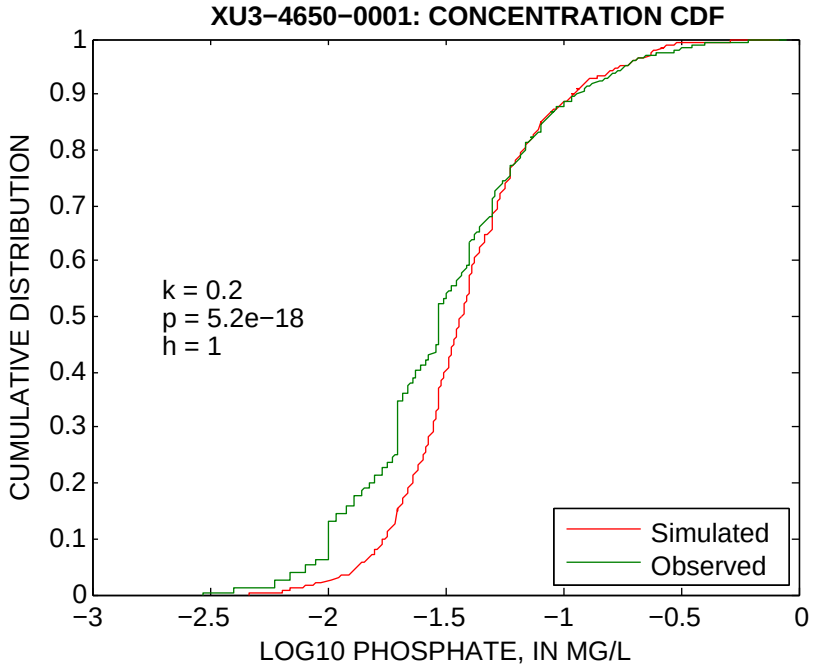
	n	1019	1019
		observe	simulate
min		0.003	0.0034844
		-2.52288	-2.45787
mean		0.0552368	0.0576619
		-1.48063	-1.367
media		0.03	0.039364
		-1.52288	-1.4049
max		0.9	0.8132
		-0.0457575	-0.0898026
varian		0.00693042	0.00388783
		0.167634	0.0941279
JB		0.001	0.001
		0.001	0.001
		ra	log
%		4.3903	-7.67454
err.va		0.00274139	0.117694
rel.std.err		0.39556	0.702087
mod.eff		0.60444	0.297913

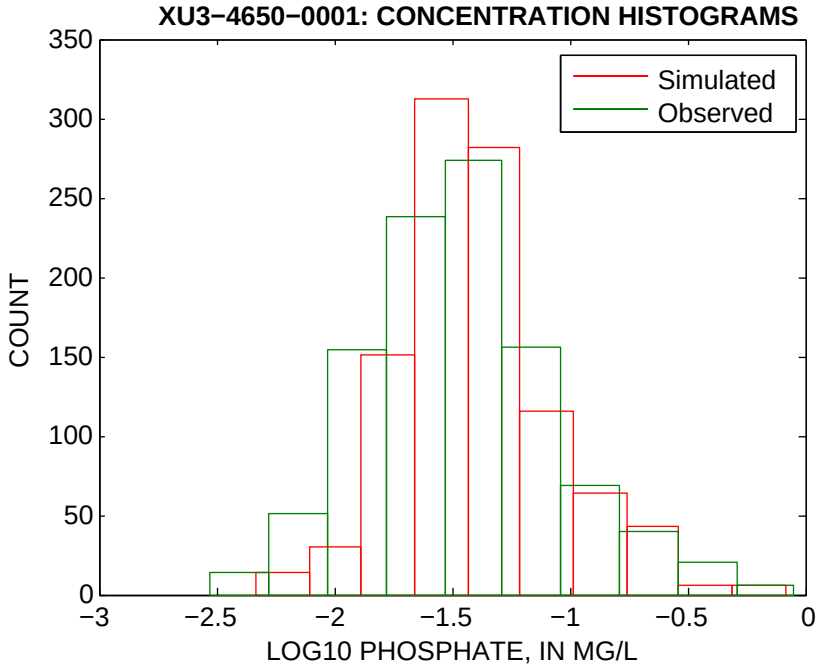
VERSION 2.1

ALL DATA
LOG10

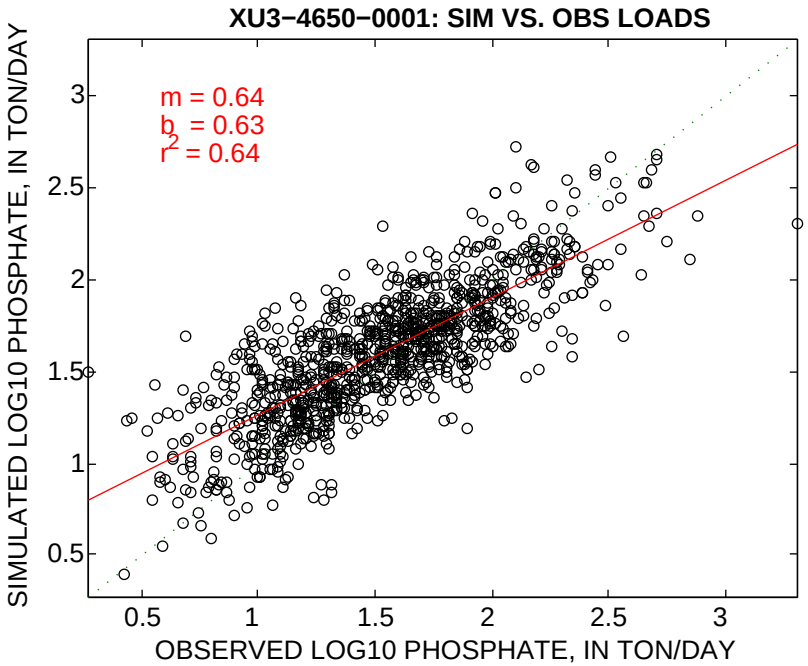


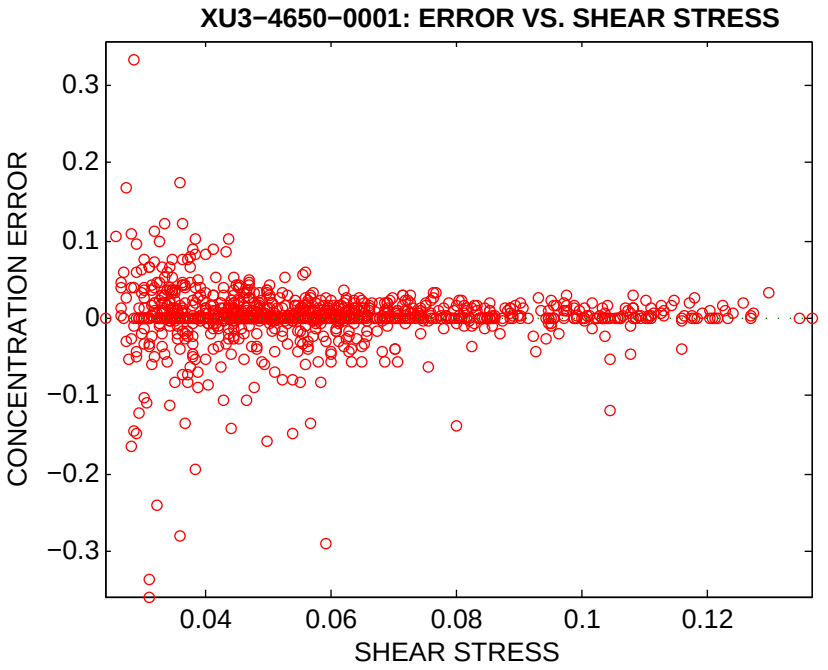


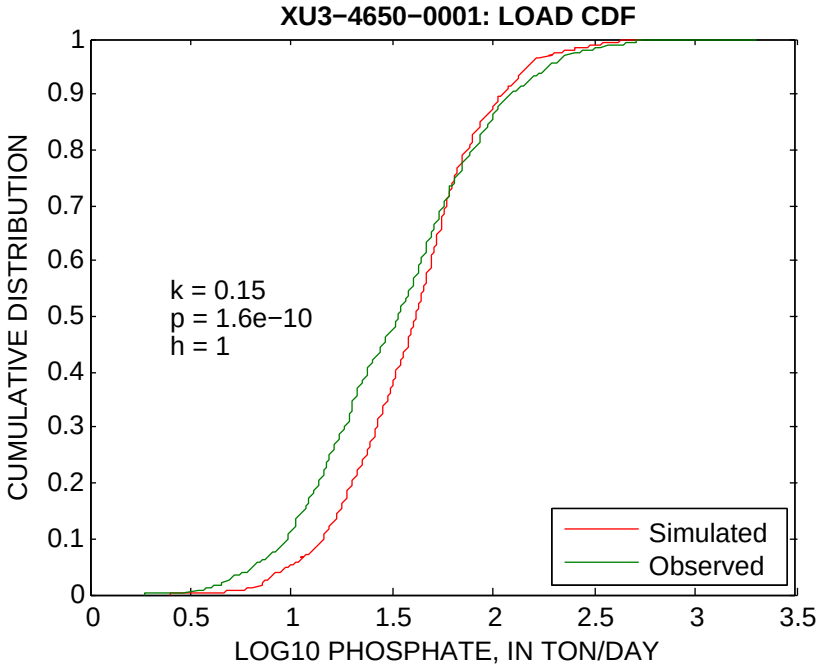


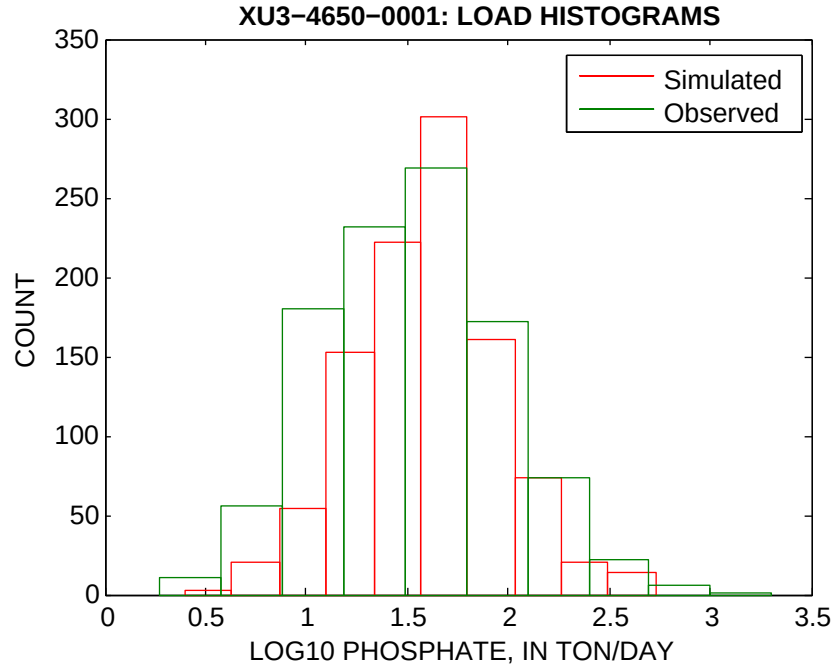


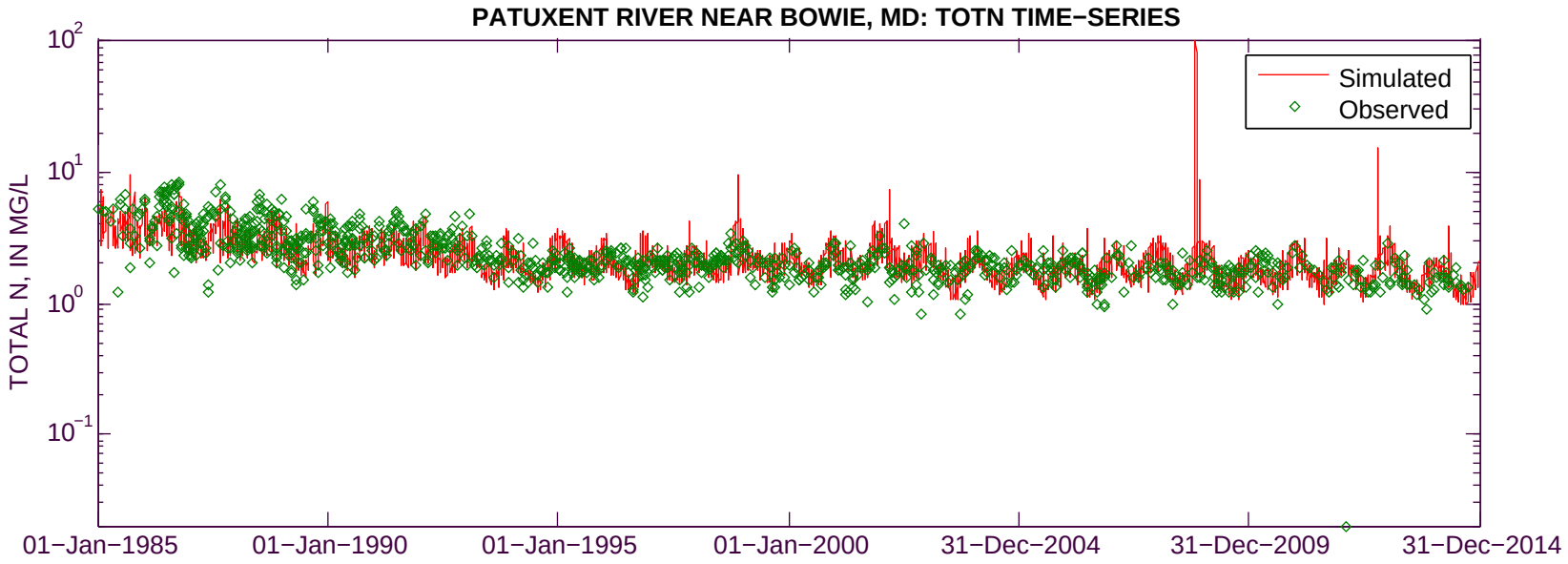
LOAD DATA
LOG10

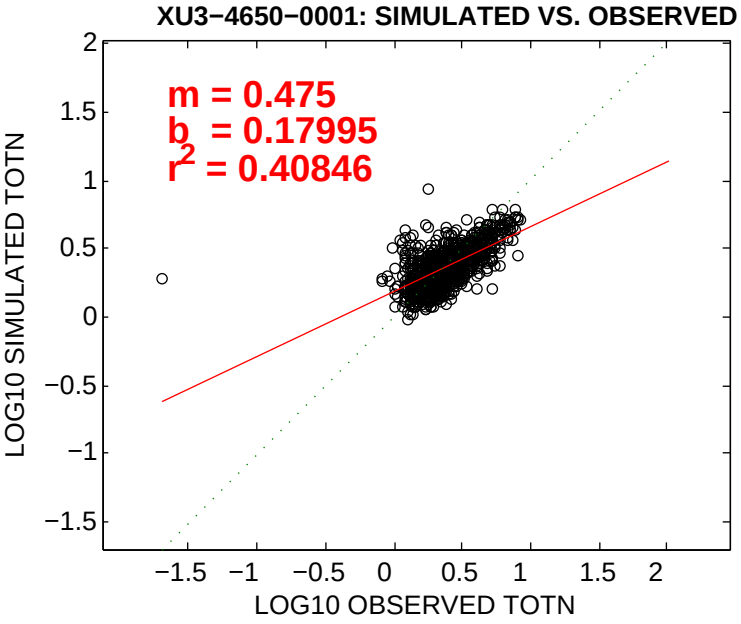


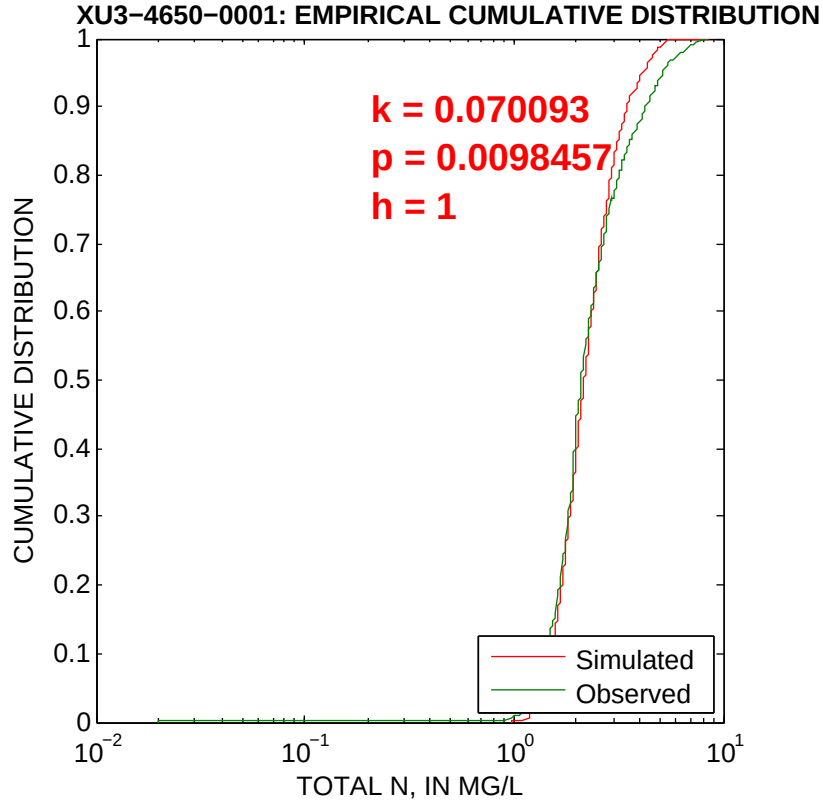












DATA SELECTION

scenario: P620171001WQ | file: TOTN.calib

plot: TOTN - total nitrogen

Dates: 1/1/1985 – 12/31/201

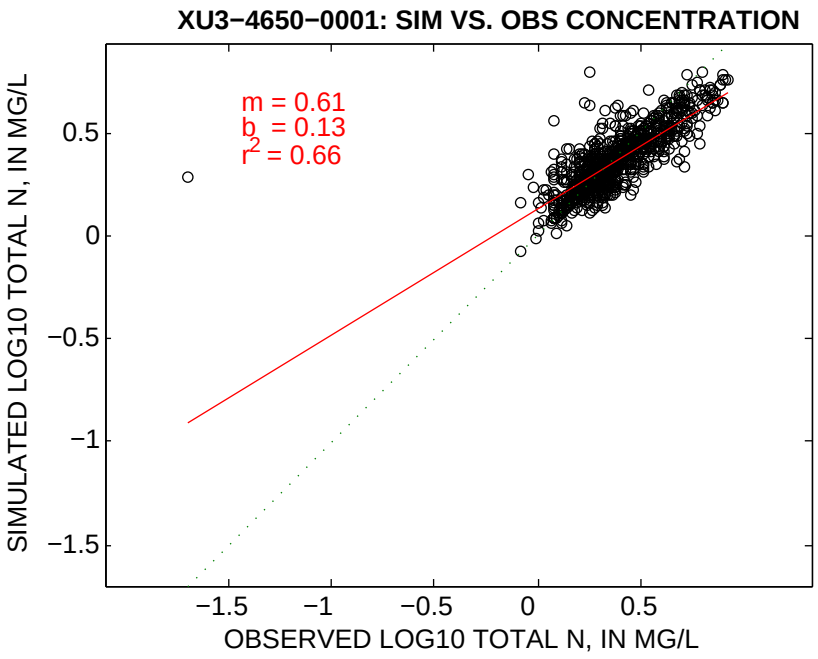
Drive: N/A | Directory: model | Observed: OBS20161101

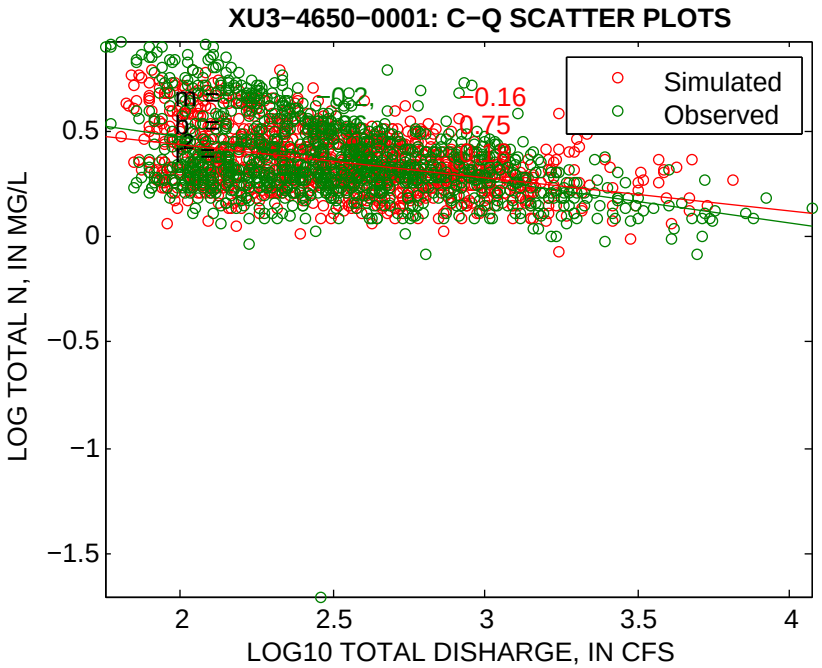
STATISTICS

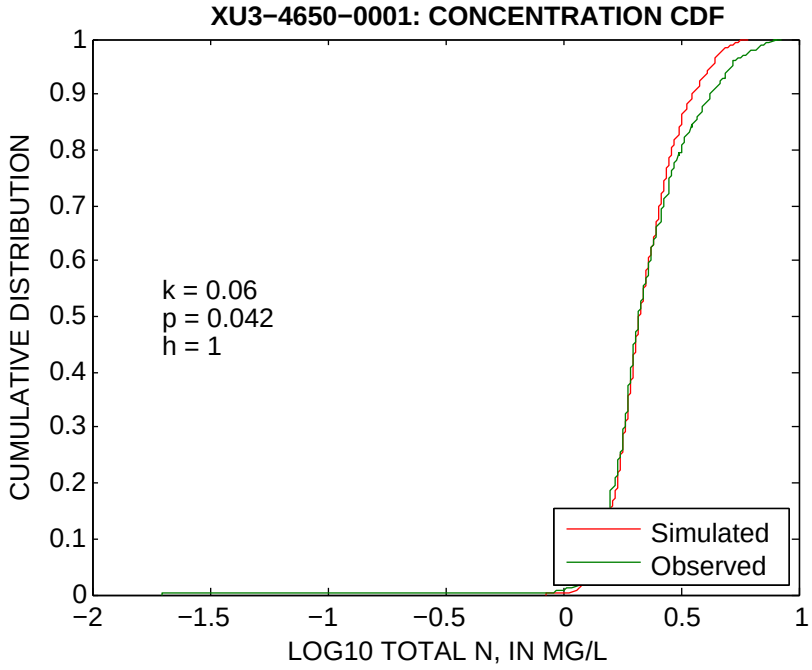
		observe	simulate
n		1070	1070
min		0.02	0.97515
		-1.69897	-0.0109286
mean		2.53566	2.37683
		0.360998	0.351426
media		2.1	2.1683
		0.322219	0.336119
max		8.4	8.6155
		0.924279	0.93528
varian		1.6006	0.744571
		0.0367977	0.0203266
JB		0.001	0.001
		0.001	0.001
		ra	log
%		-6.26409	-2.65138
err.va		0.834136	0.0222581
rel.std.err		0.521141	0.604878
mod.eff		0.478859	0.395122

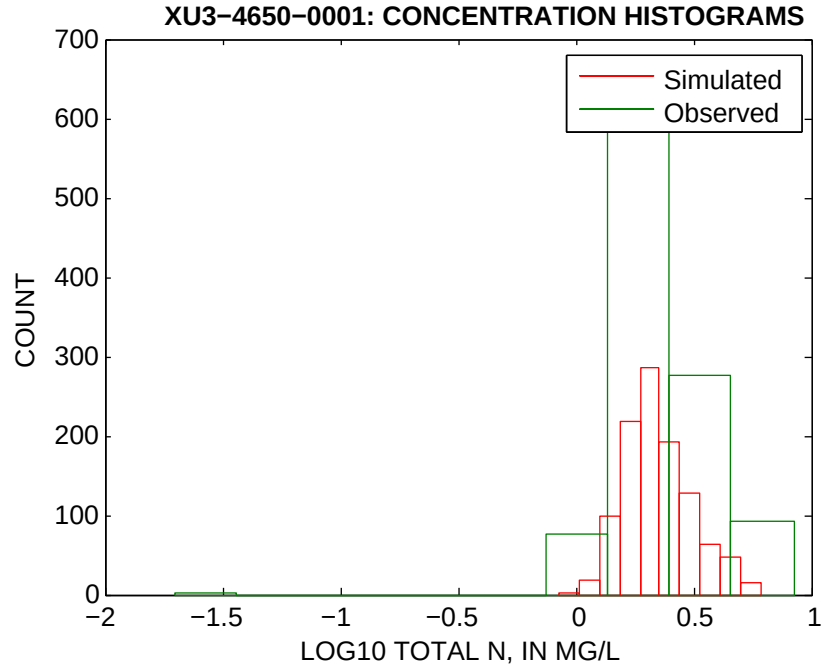
VERSION 2.1

ALL DATA
LOG10

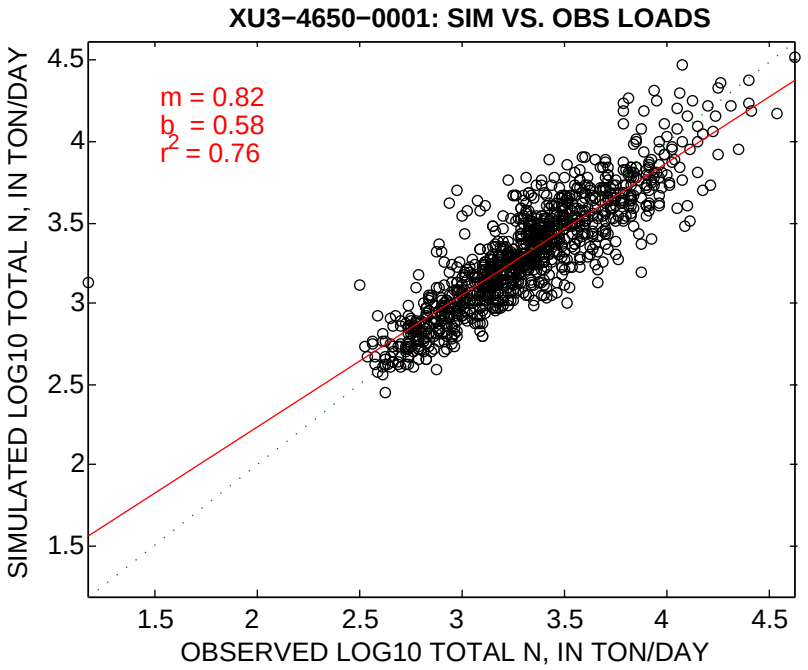


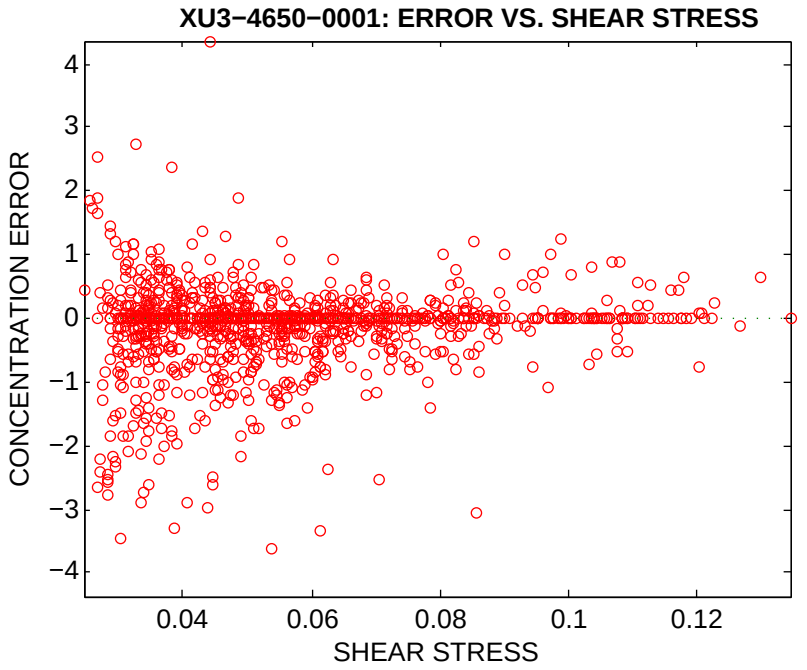


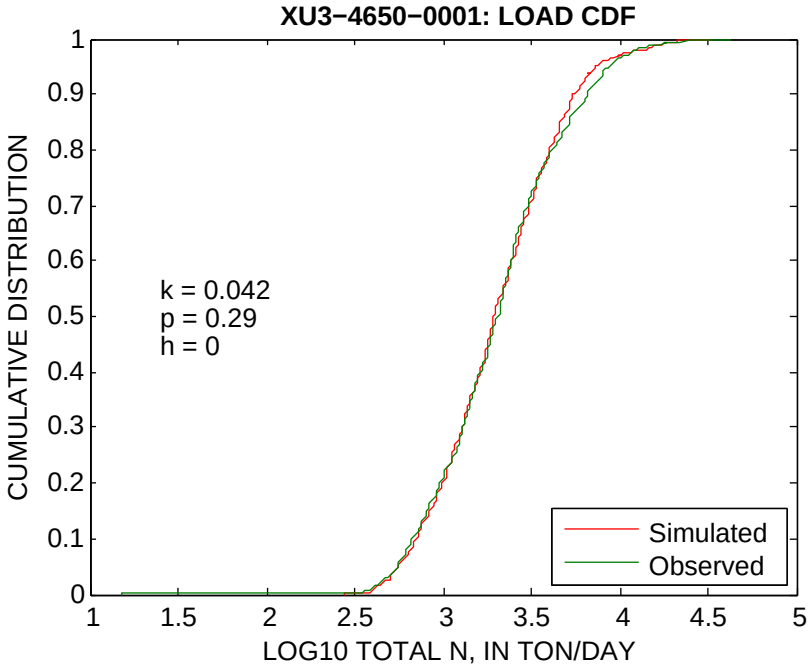


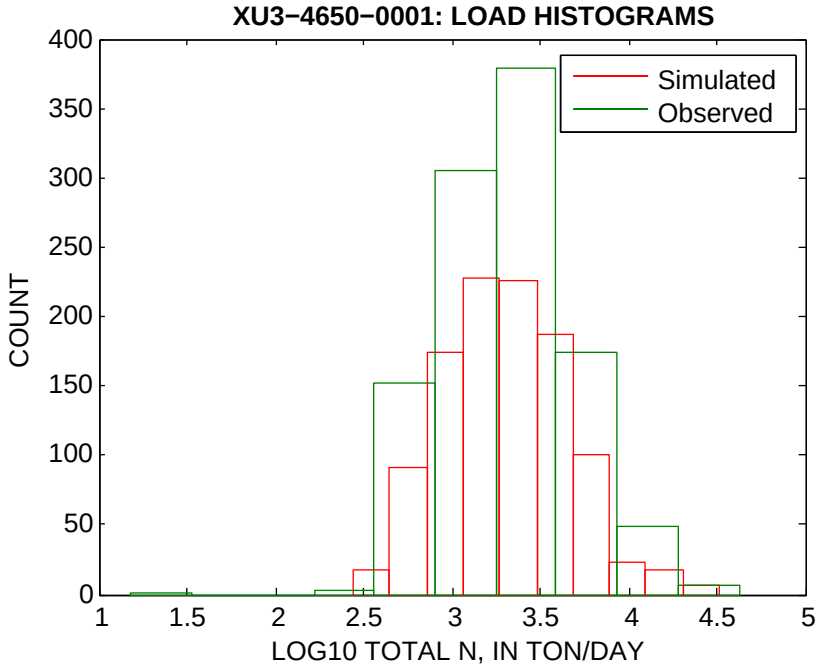


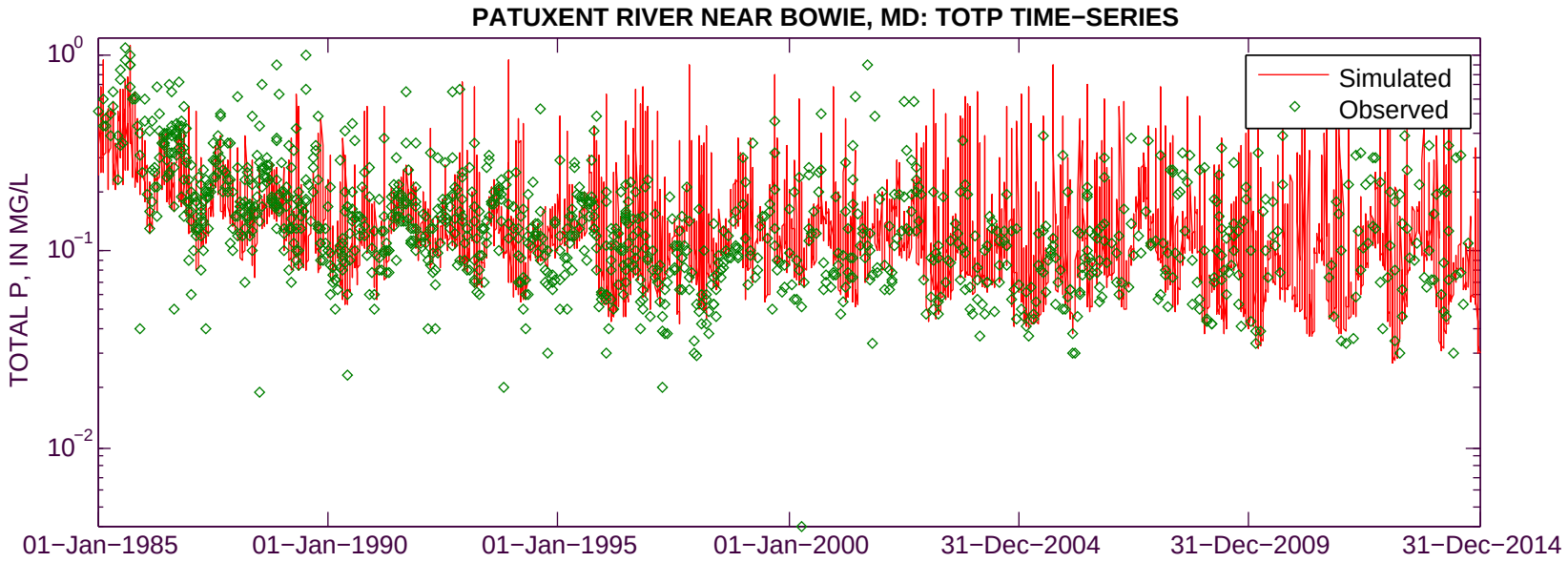
LOAD DATA
LOG10

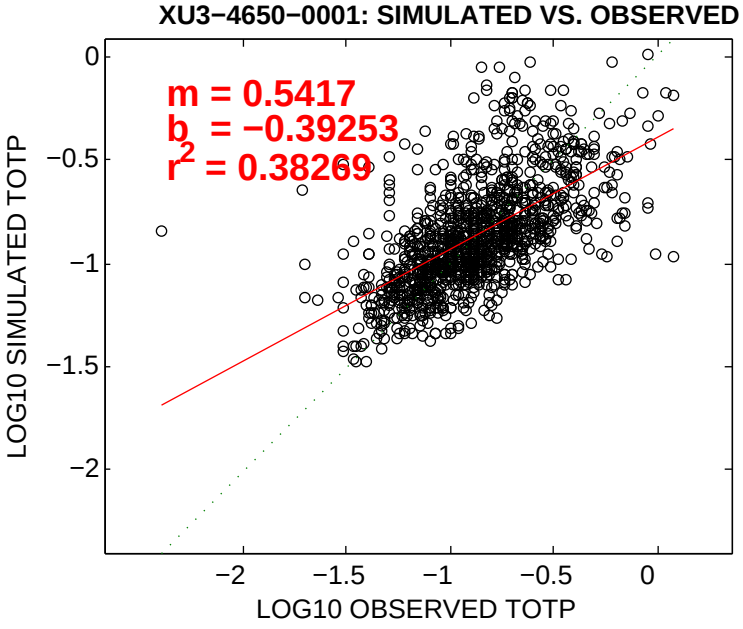


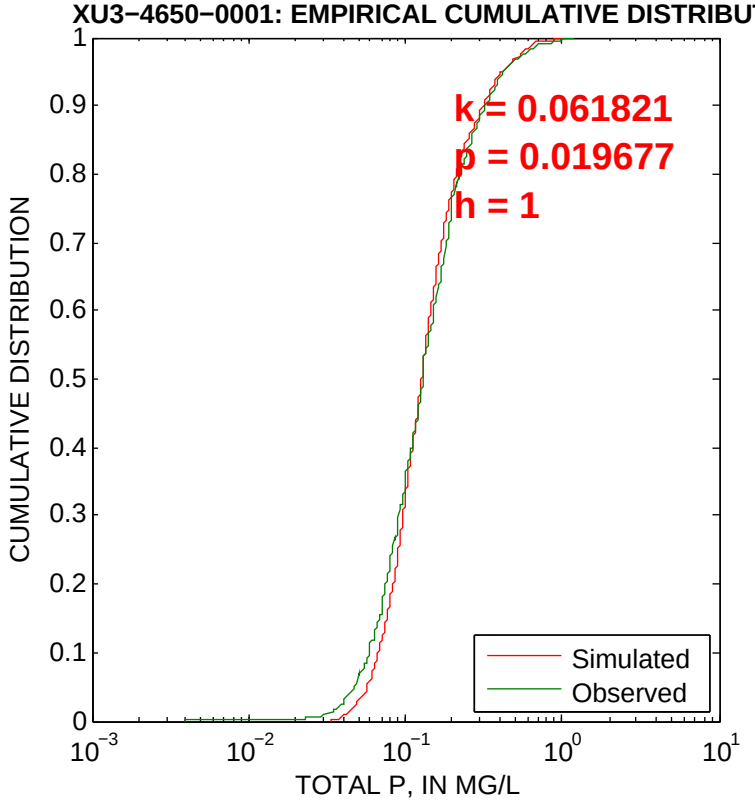












DATA SELECTION

scenario	file
P620171001WQ	TOTP.calib

plot: TOTP - total phosphorus

Dates: 1/1/1985 – 12/31/201

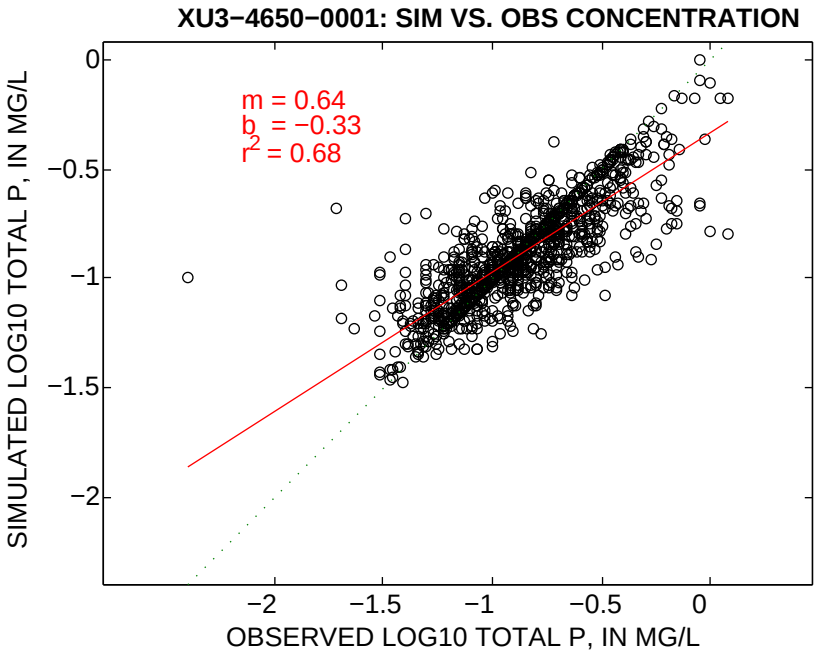
Drive	Directory	Observed
N/A	model	OBS20161101

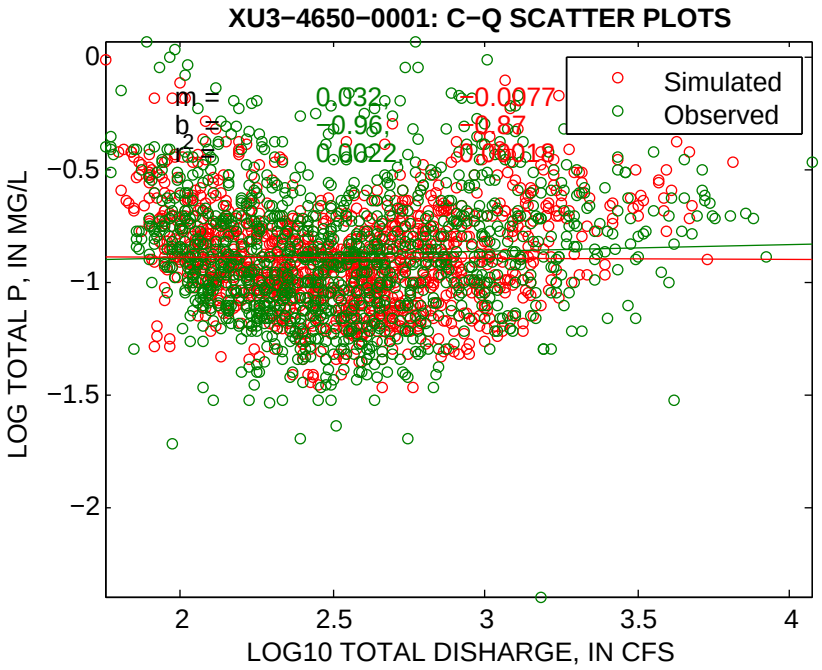
STATISTICS

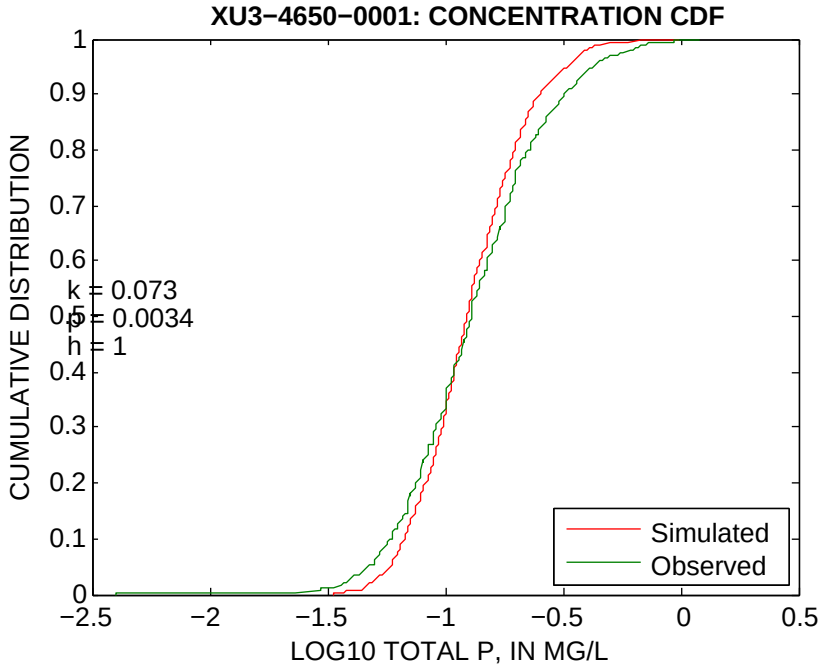
	n	observe	simulate
		1197	1197
min		0.004	0.03324
		-2.39794	-1.47834
mean		0.169818	0.16541
		-0.874874	-0.866441
media		0.13	0.12734
		-0.886057	-0.895035
max		1.2	1.0196
		0.0791812	0.00842983
varian		0.0200471	0.0157487
		0.0862624	0.0661429
JB		0.001	0.001
		0.001	0.001
		ra	log
%		-2.59564	-0.963934
err.va		0.0184553	0.0590206
rel.std.err		0.920601	0.684199
mod.eff		0.0793992	0.315801

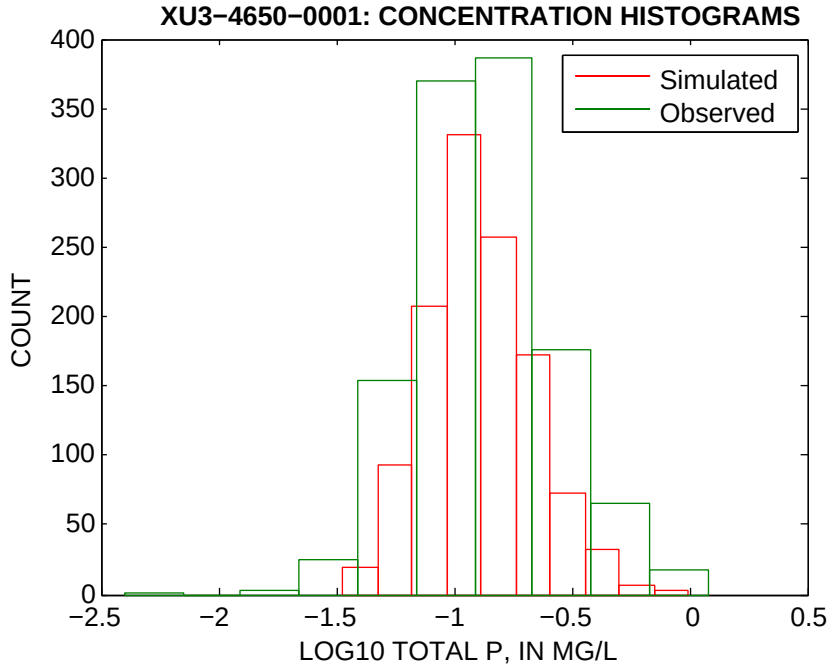
VERSION 2.1

ALL DATA
LOG10

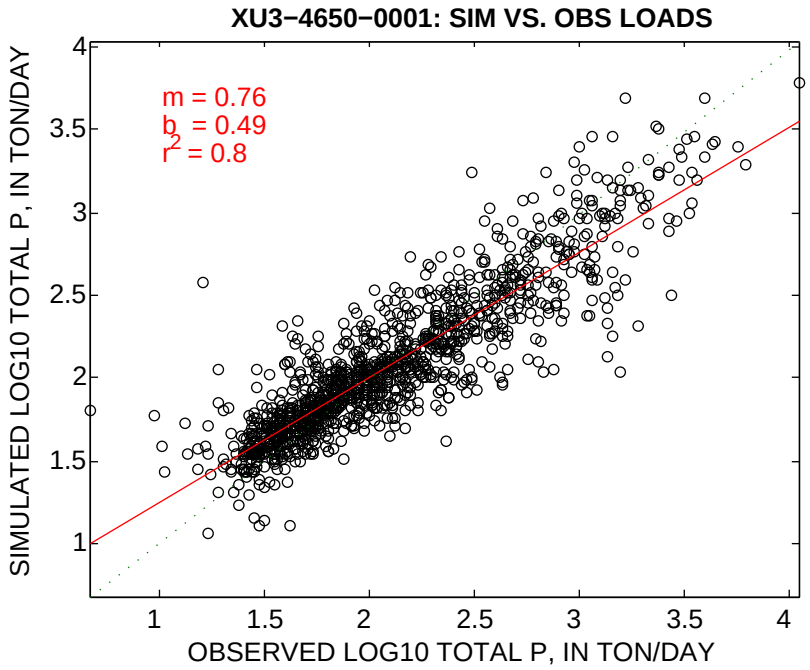


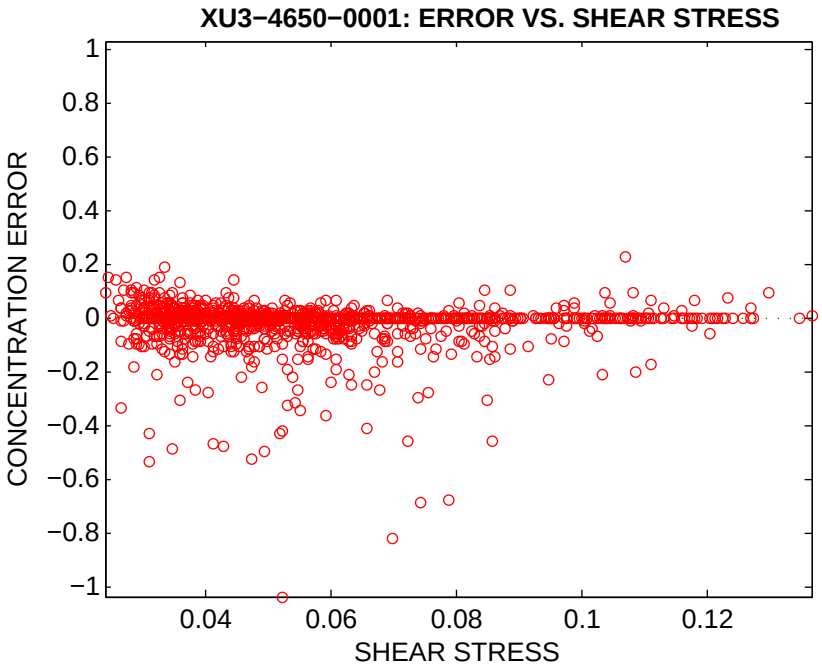


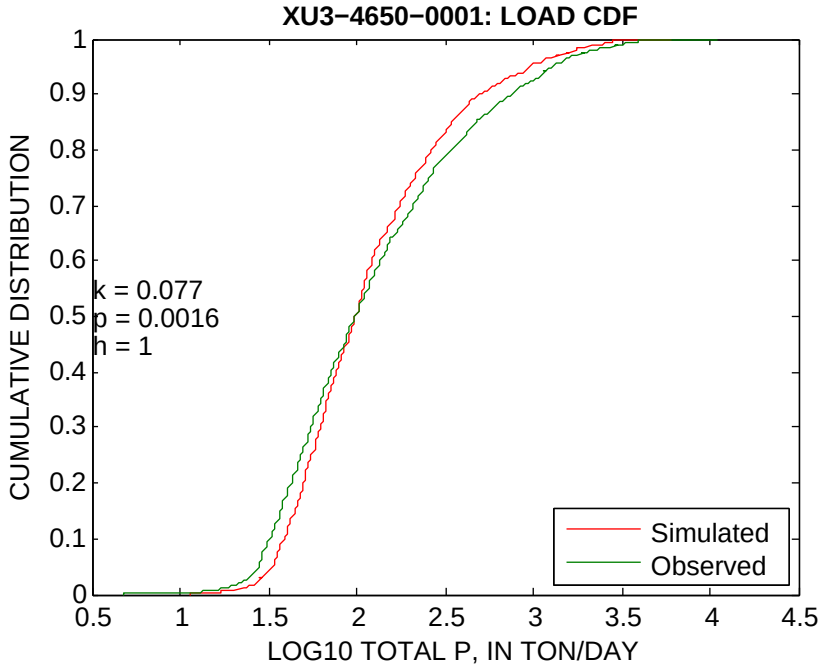


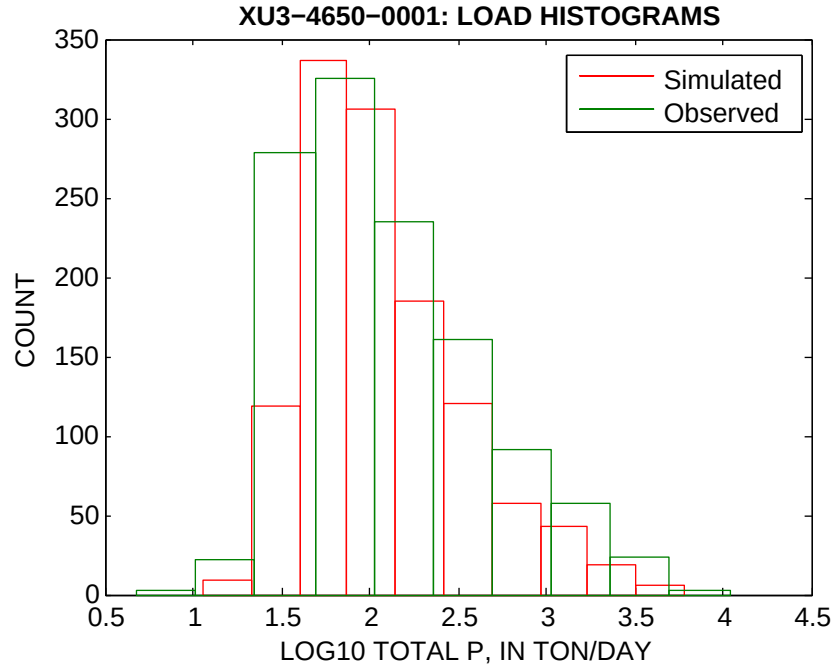


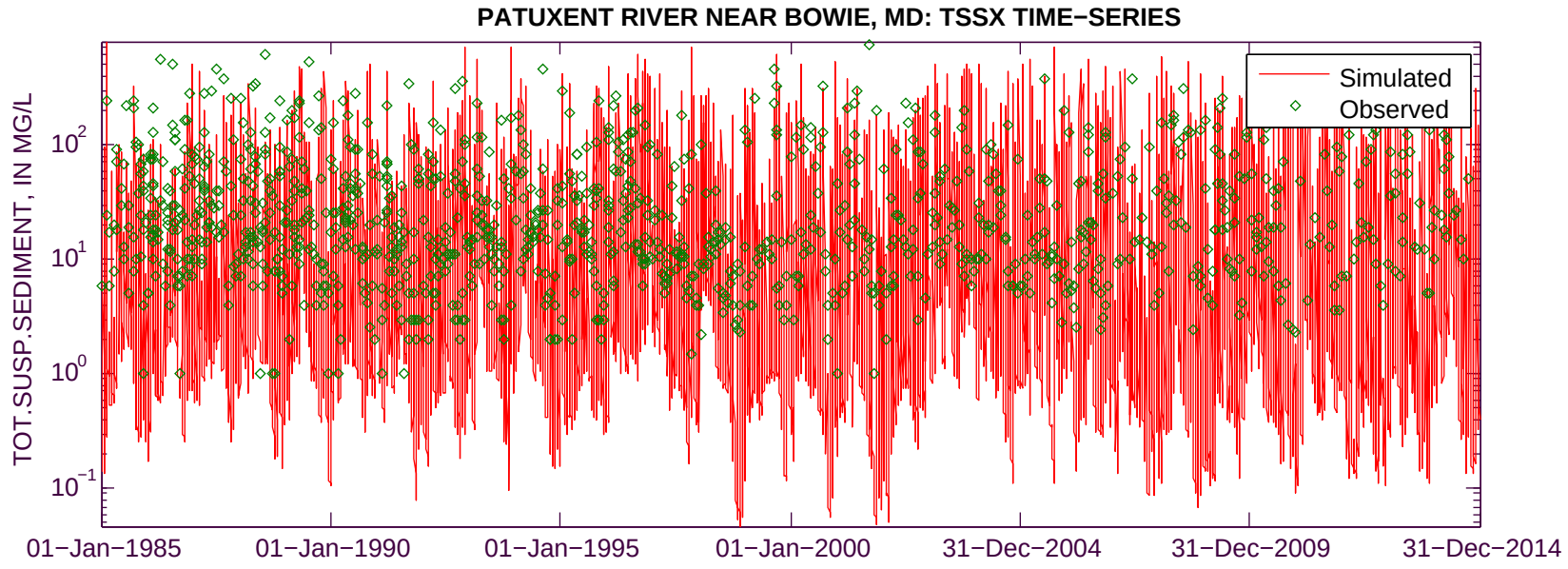
LOAD DATA
LOG10

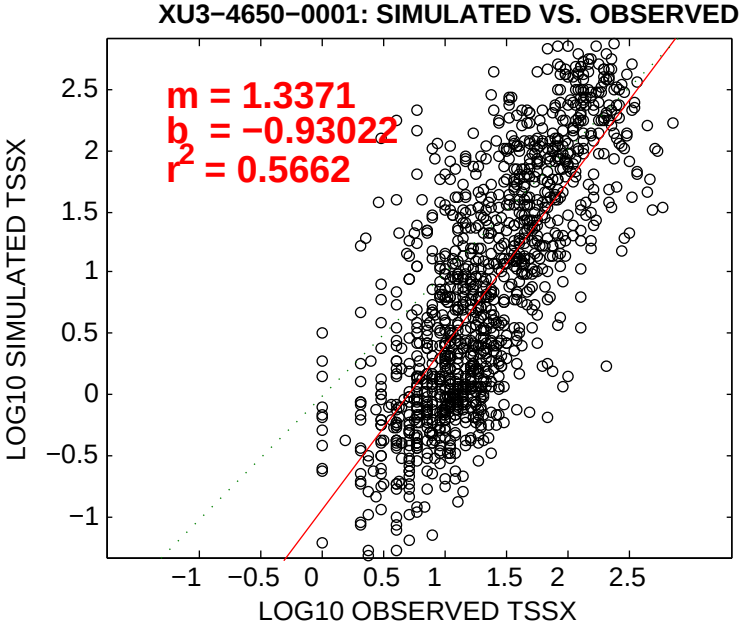


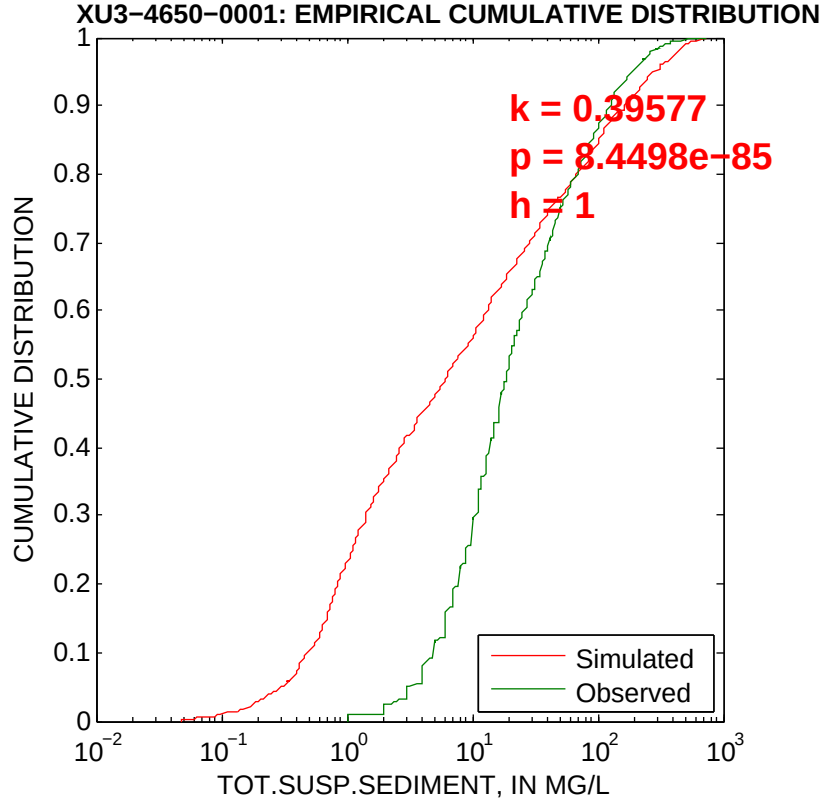












DATA SELECTION

scenario	file
P620171001WQ	TSSX.calib

plot: TSSX - total suspended ...

Dates: 1/1/1985 – 12/31/201

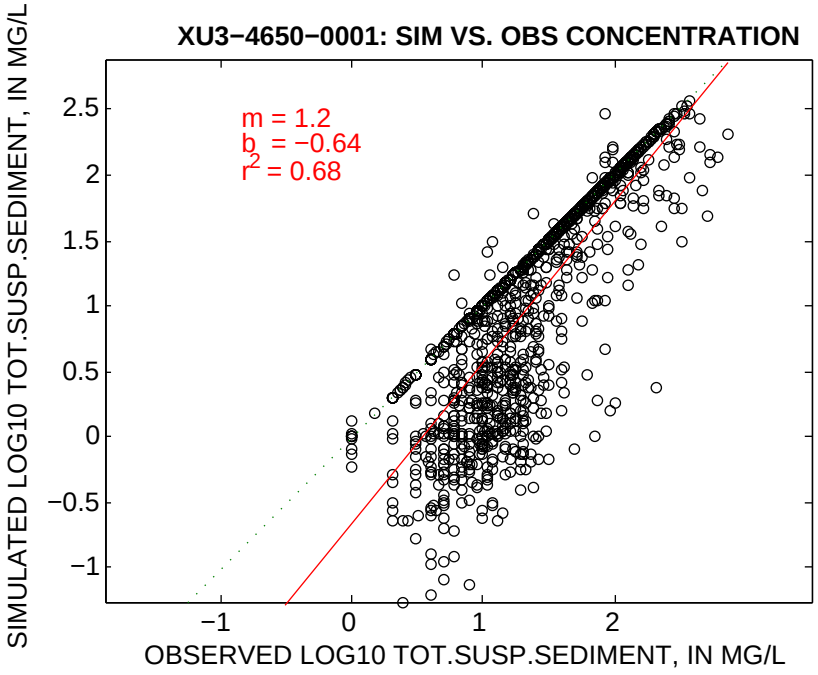
Drive	Directory	Observed
N/A	model	OBS20161101

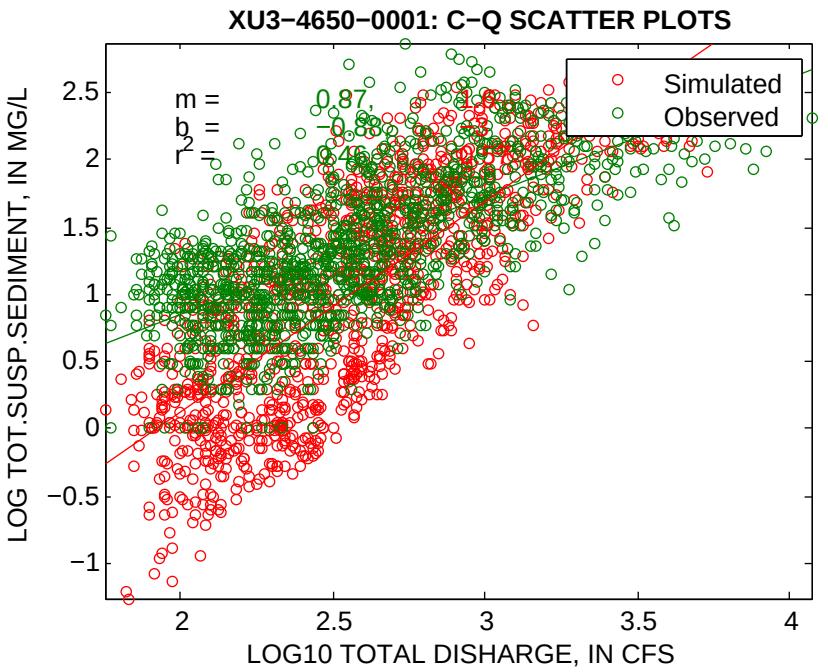
STATISTICS

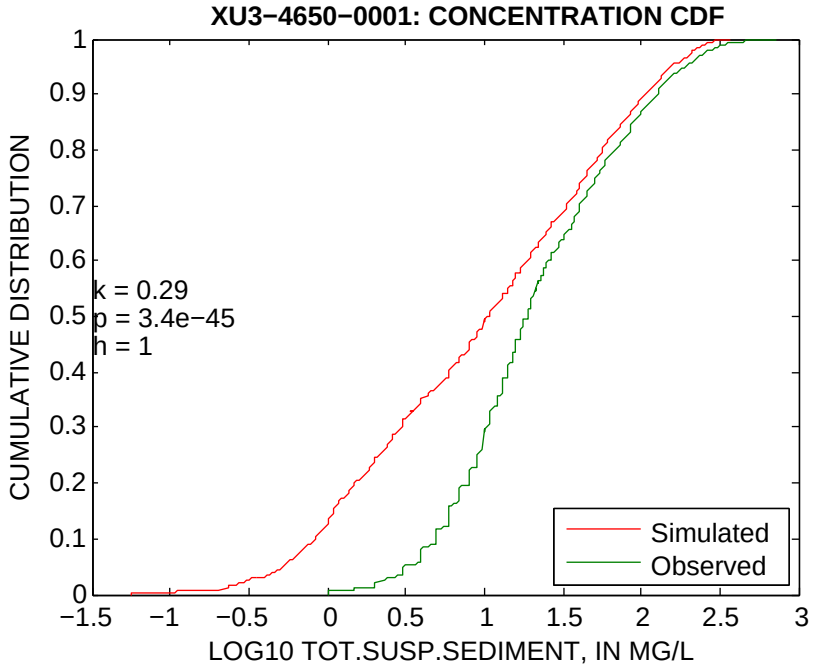
	n	observe	simulate
		1228	1228
min		1	0.047464
		0	-1.32364
mean		47.426	51.8846
		1.33715	0.857739
media		19	6.18755
		1.27875	0.791519
max		740	733.17
		2.86923	2.8652
varian		5396.65	11550
		0.289231	0.913329
JB		0.001	0.001
		0.001	0.001
		ra	log
%		9.40117	-35.8532
err.va		8737.6	0.659097
rel.std.err		1.61908	2.27879
mod.eff		-0.619079	-1.27879

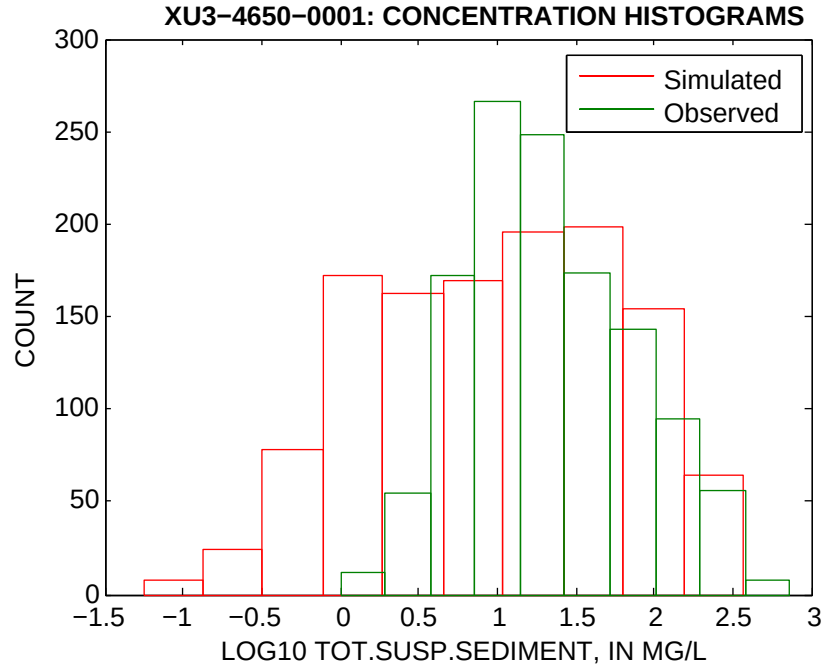
VERSION 2.1

ALL DATA
LOG10

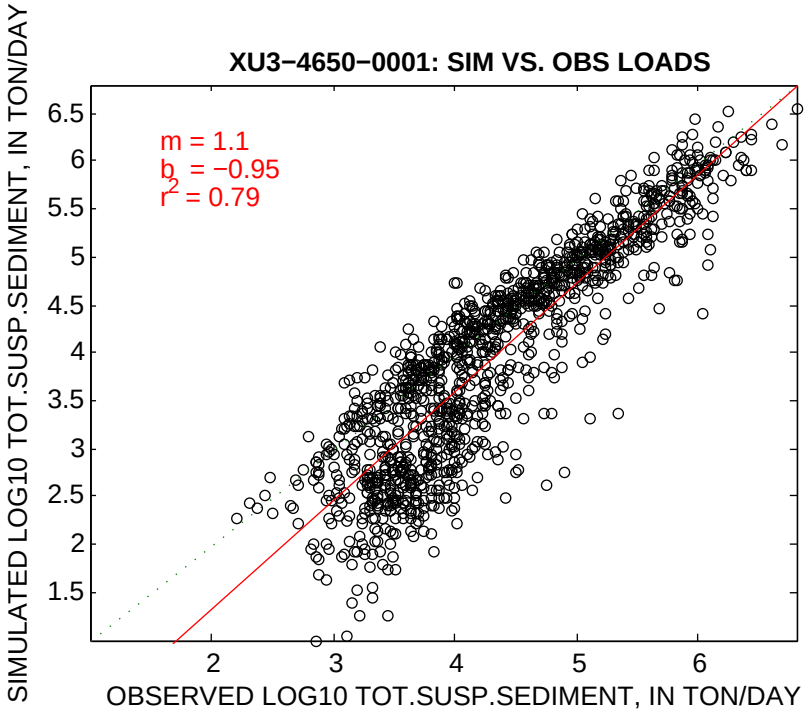




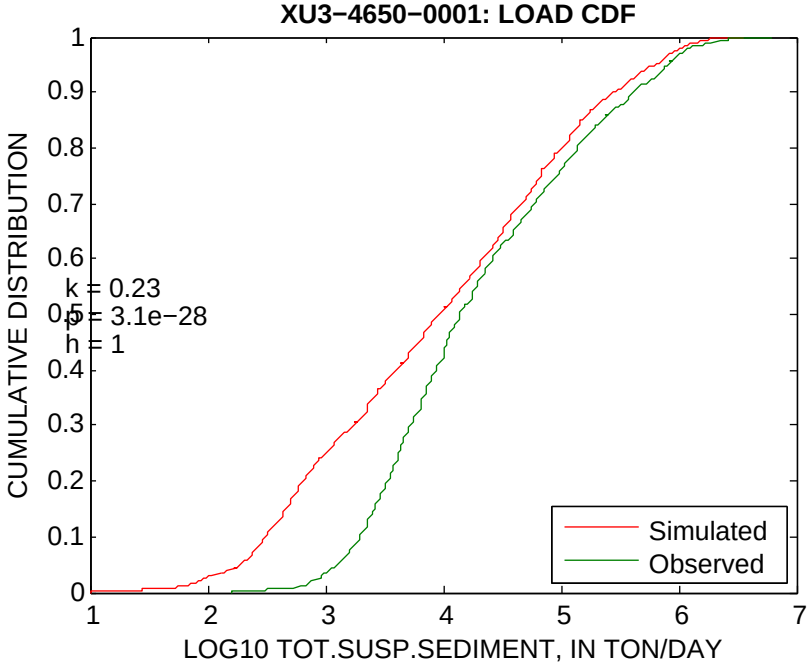


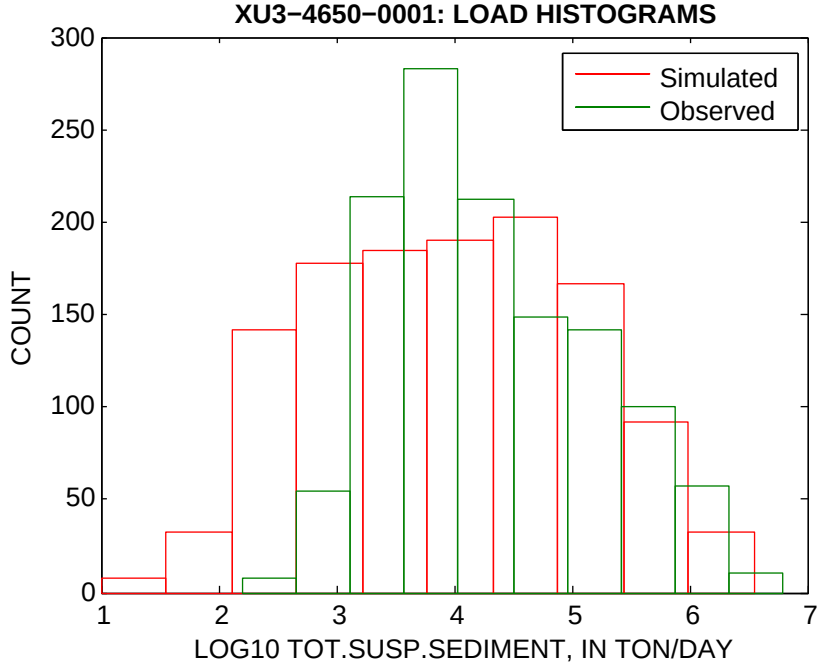


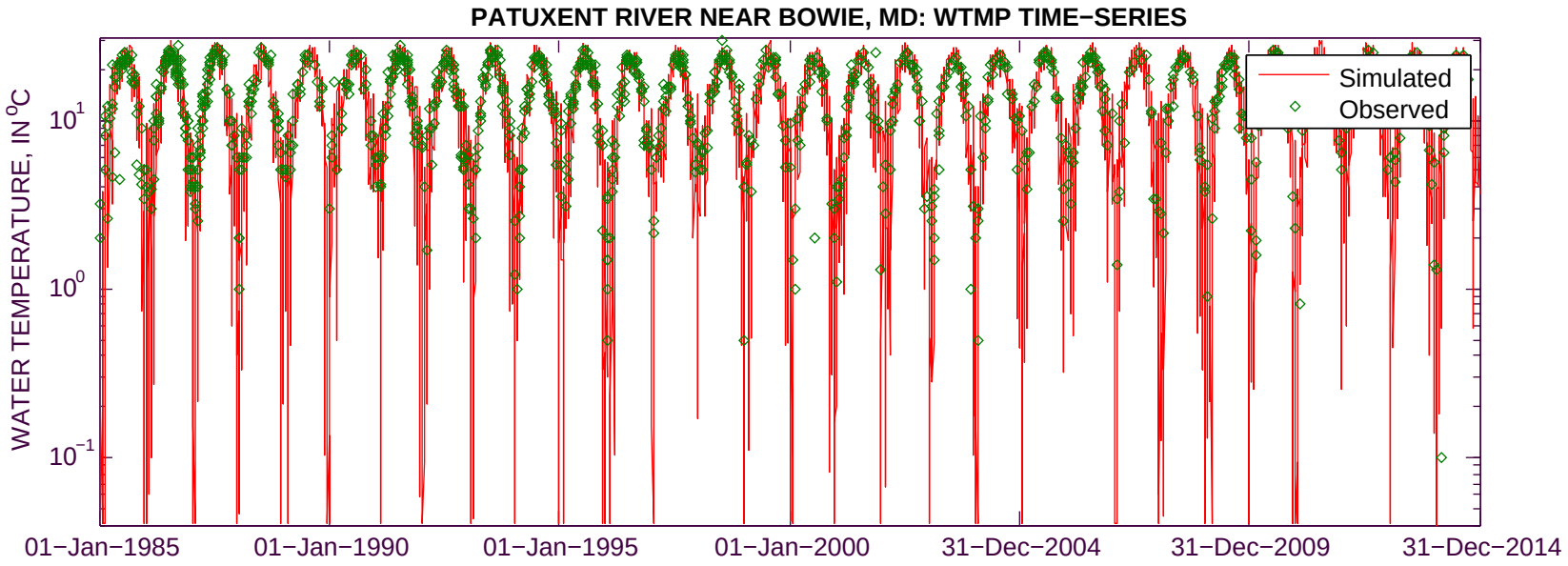
LOAD DATA
LOG10

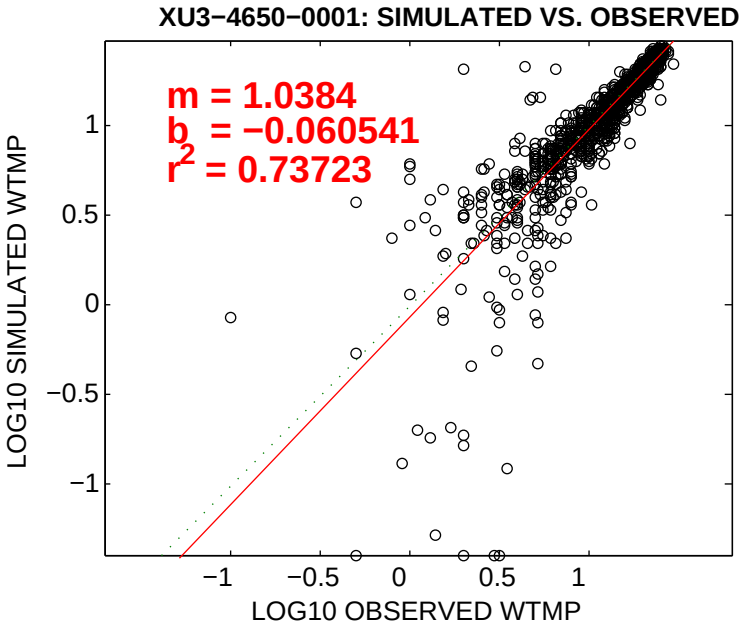


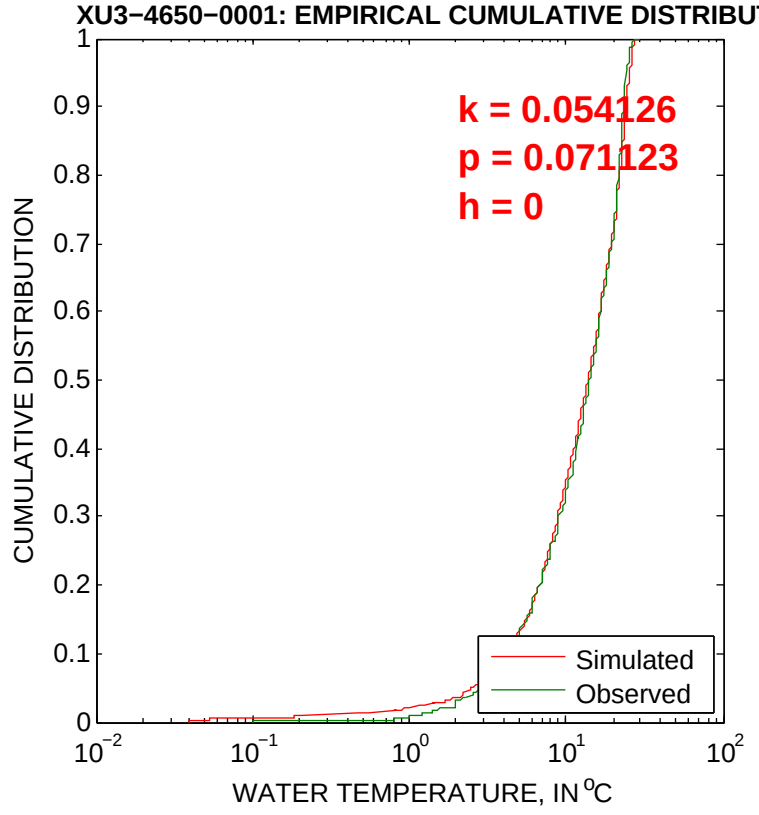












DATA SELECTION

scenario	file
P620171001WQ	WTMP.calib

plot: WTMP - water tempera...

Dates: 1/1/1985 – 12/31/201

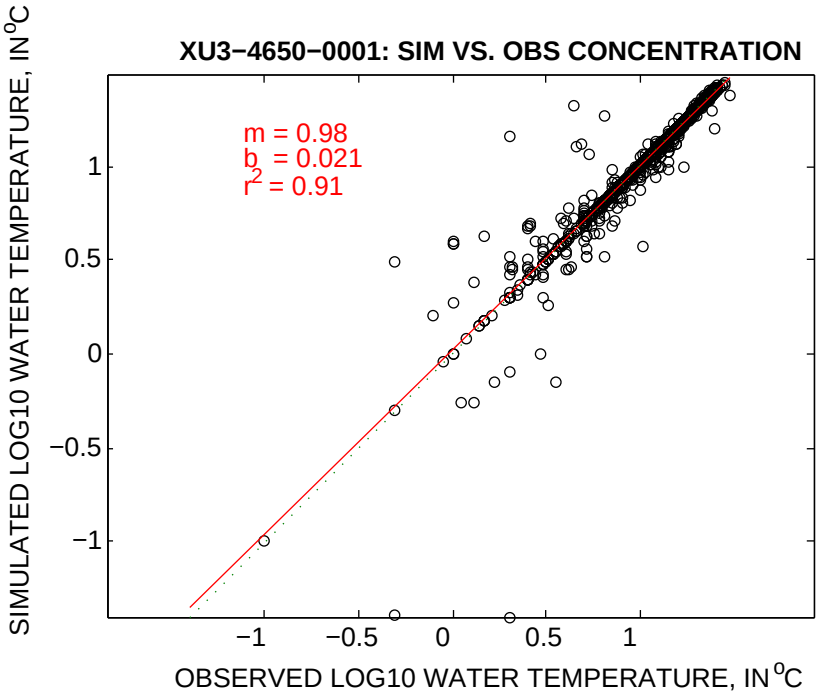
Drive	Directory	Observed
N/A	model	OBS20161101

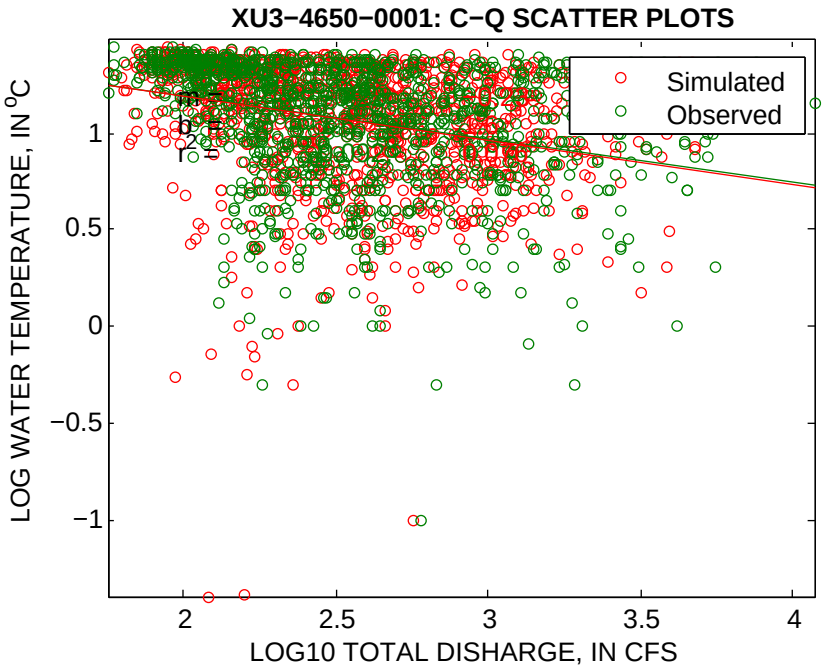
STATISTICS

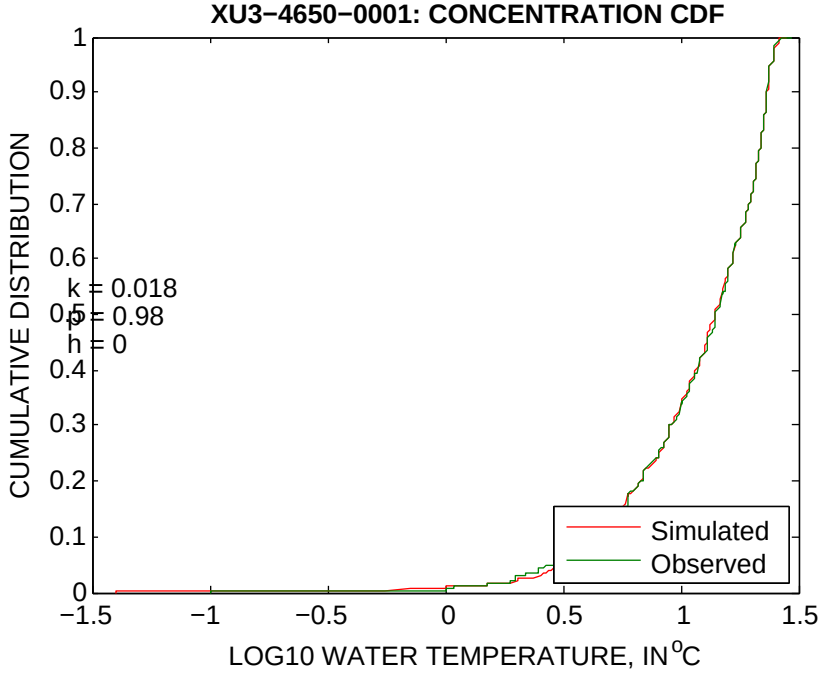
	n	observe	simulate
		1127	1127
min		0.1	0.04002
		-1	-1.39772
mean		14.1394	14.1
		1.06743	1.04792
media		14.1	13.819
		1.14922	1.14048
max		30	28.11
		1.47712	1.44886
varian		50.4082	54.9486
		0.0971055	0.14204
JB		0.001	0.001
		0.001	0.001
		ra	log
%		-0.279195	-1.827
err.va		4.60857	0.0378481
rel.std.err		0.091425	0.389763
mod.eff		0.908575	0.610237

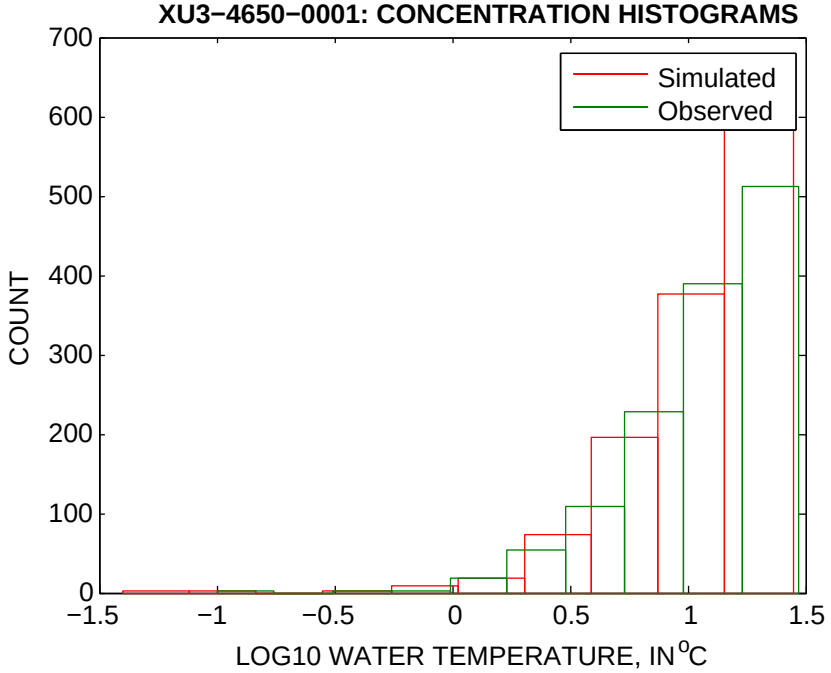
VERSION 2.1

ALL DATA
LOG10

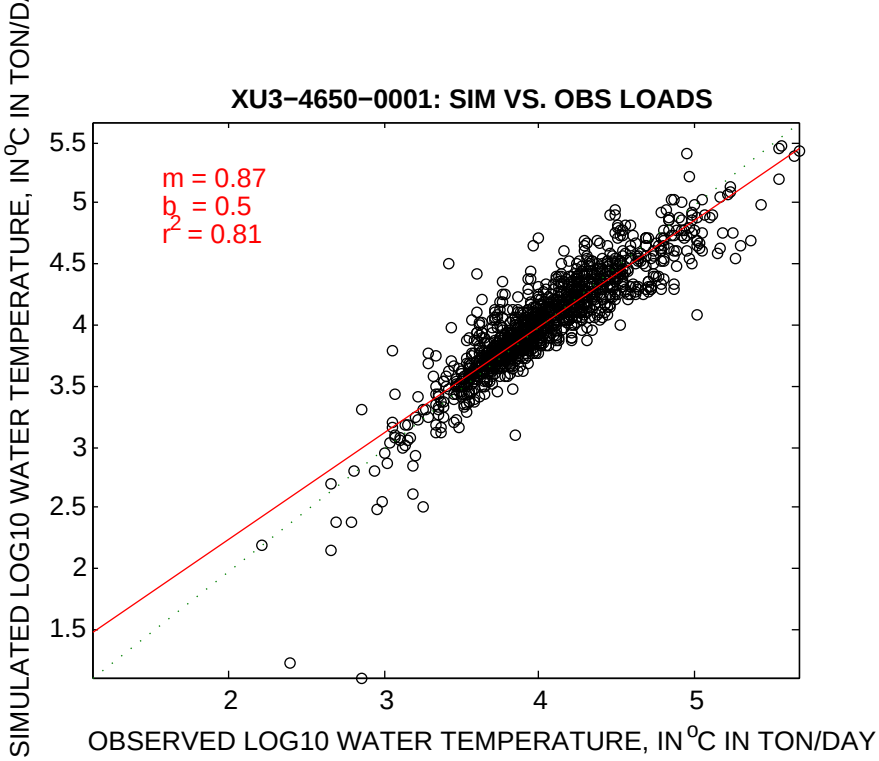


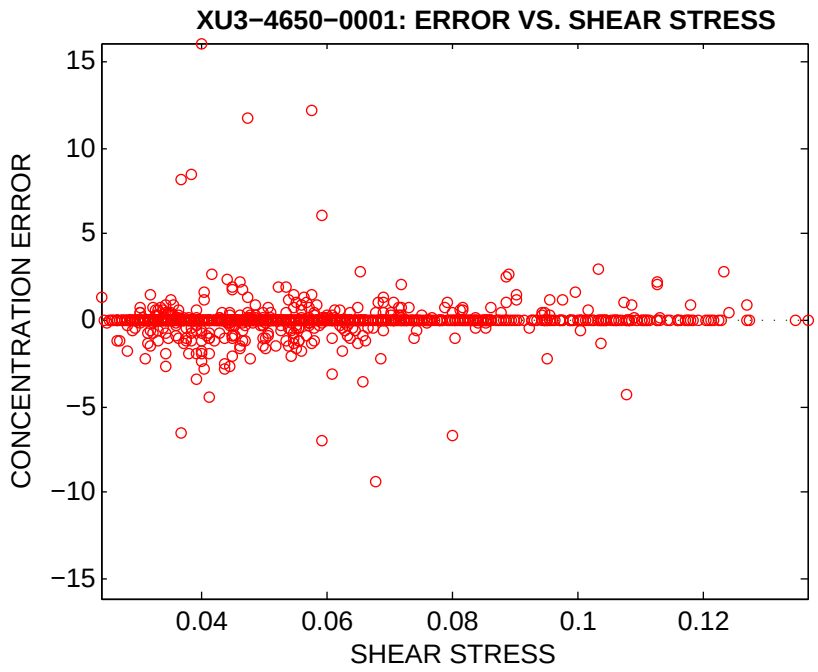


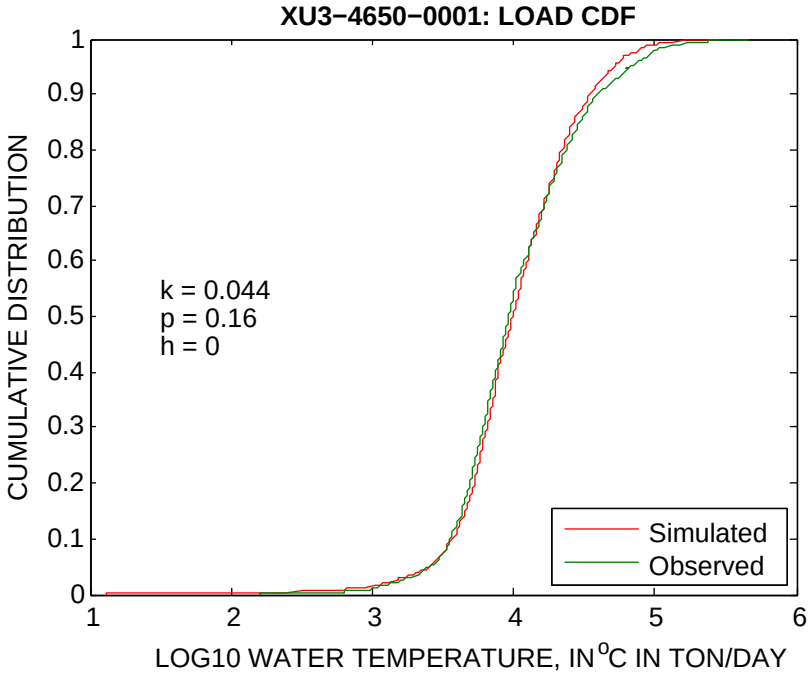


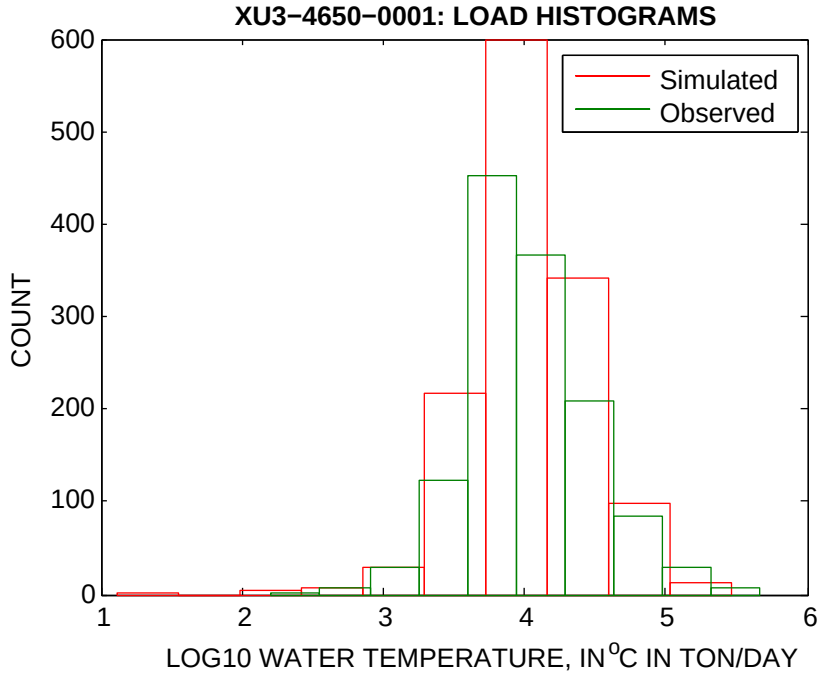


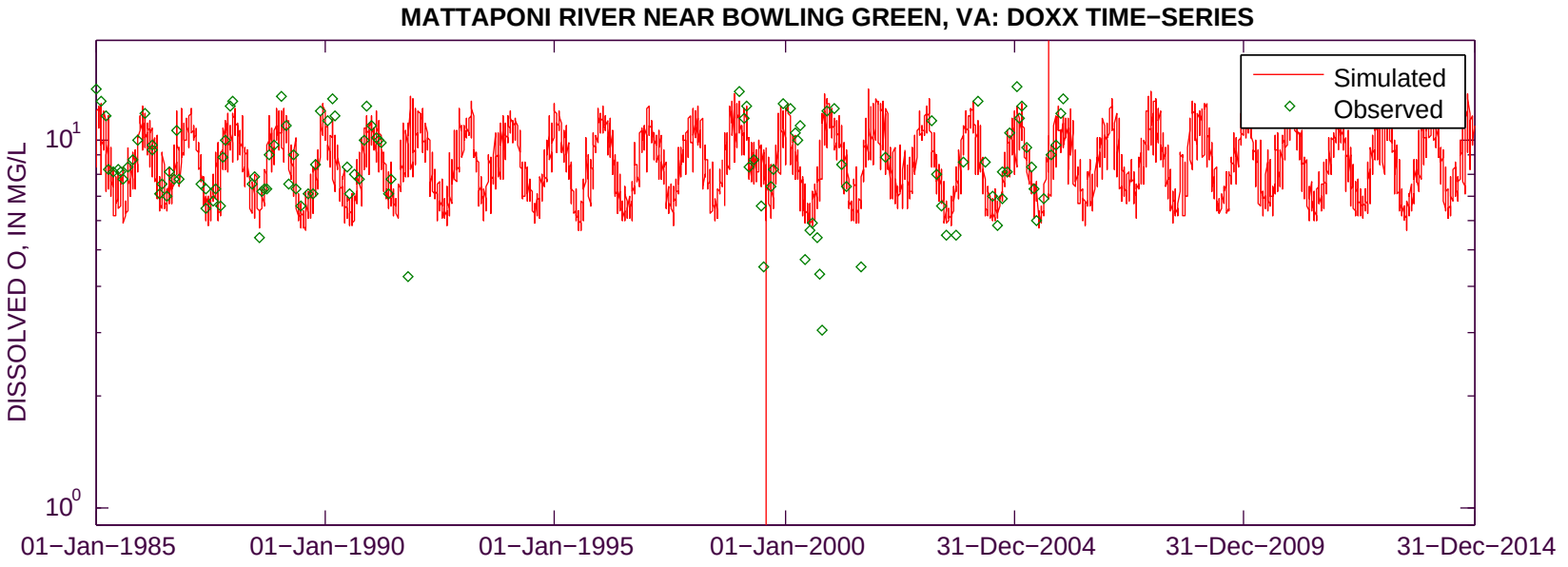
LOAD DATA
LOG10

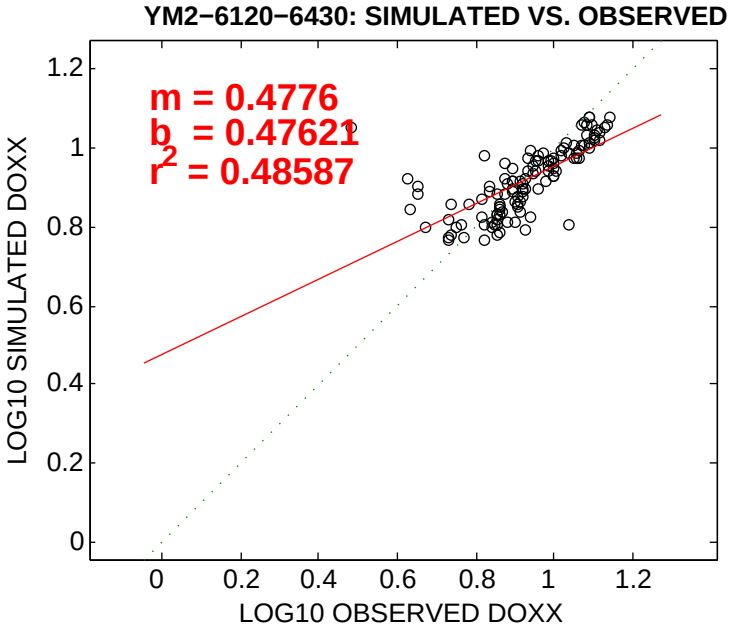


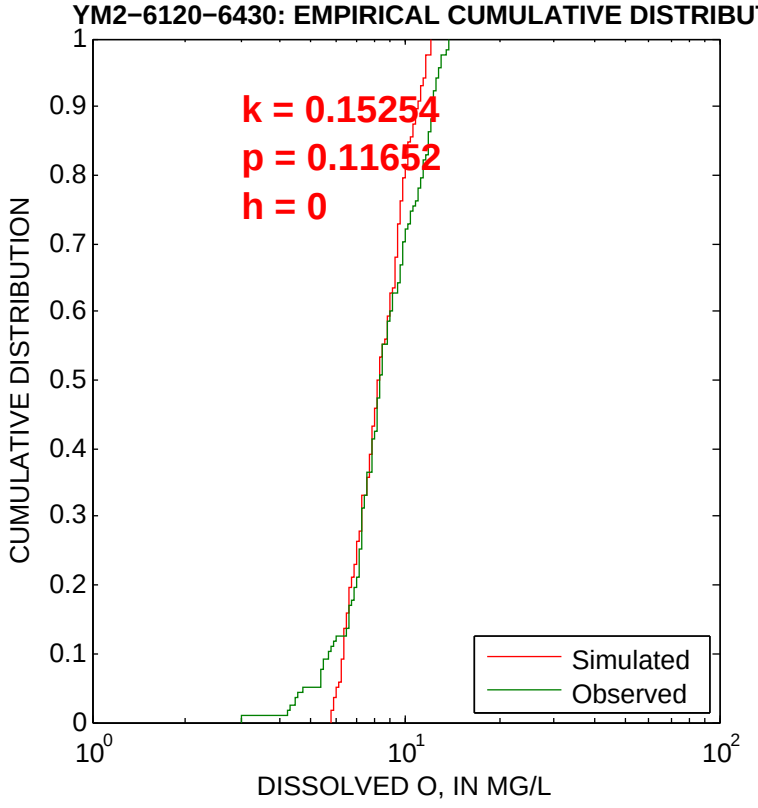












DATA SELECTION

scenario	file
P620171001WQ	DOXX.calib

plot: DOXX - dissolved oxygen

Dates: 1/1/1985 – 12/31/201

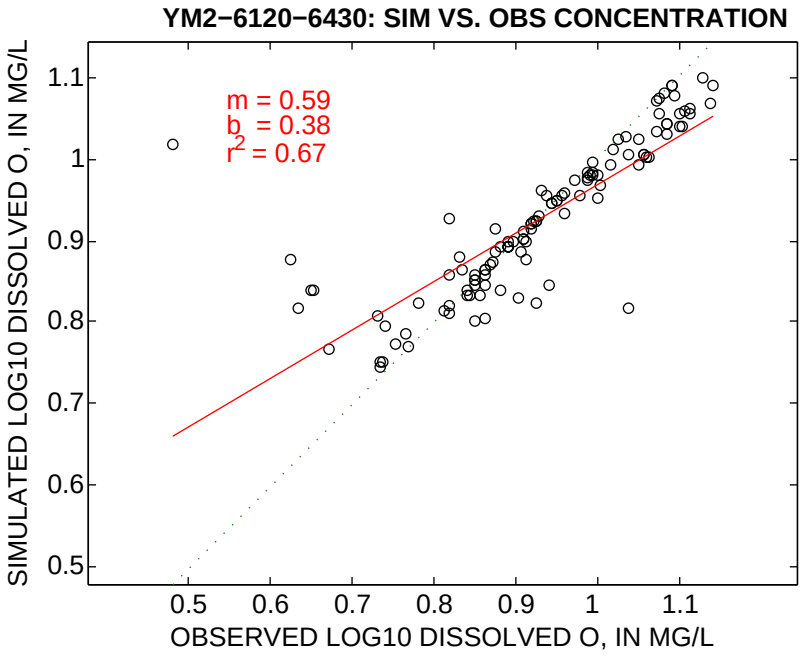
Drive	Directory	Observed
N/A	model	OBS20161101

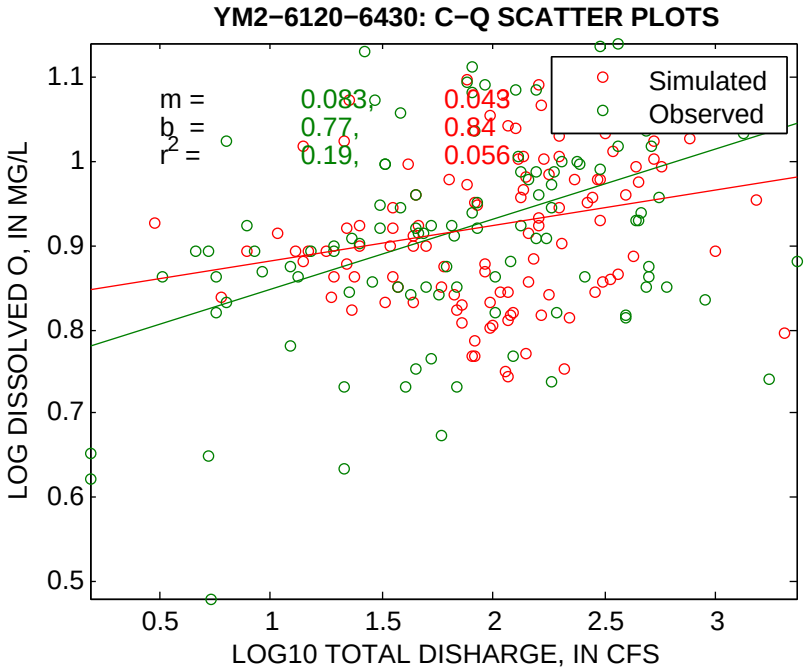
STATISTICS

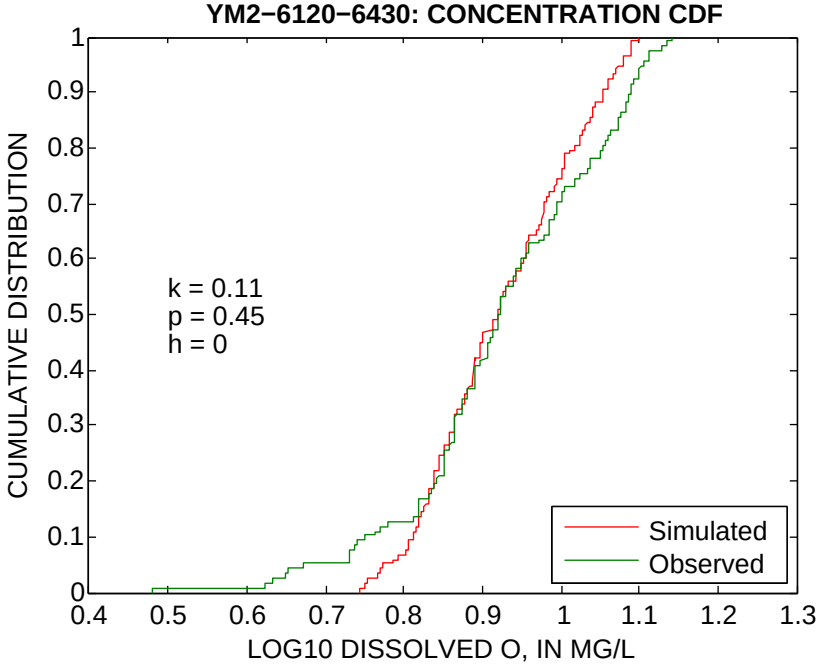
	n	118	118
		observe	simulate
min		3.02	5.8133
		0.480007	0.764423
mean		8.76737	8.44943
		0.925547	0.918257
media		8.33	8.21335
		0.920642	0.914519
max		13.85	12.006
		1.14145	1.0794
varian		5.76992	2.85374
		0.0160043	0.00751363
JB		0.196922	0.041972
		0.029642	0.049866
		ra	log
%		-3.62645	-0.787561
err.va		2.37513	0.00828408
rel.std.err		0.41164	0.517617
mod.eff		0.58836	0.482383

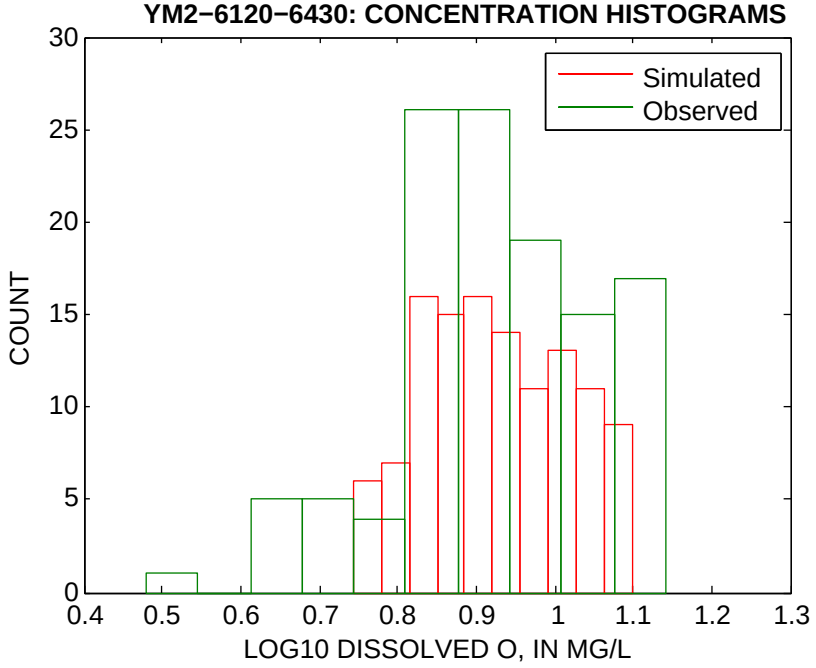
VERSION

ALL DATA
LOG10

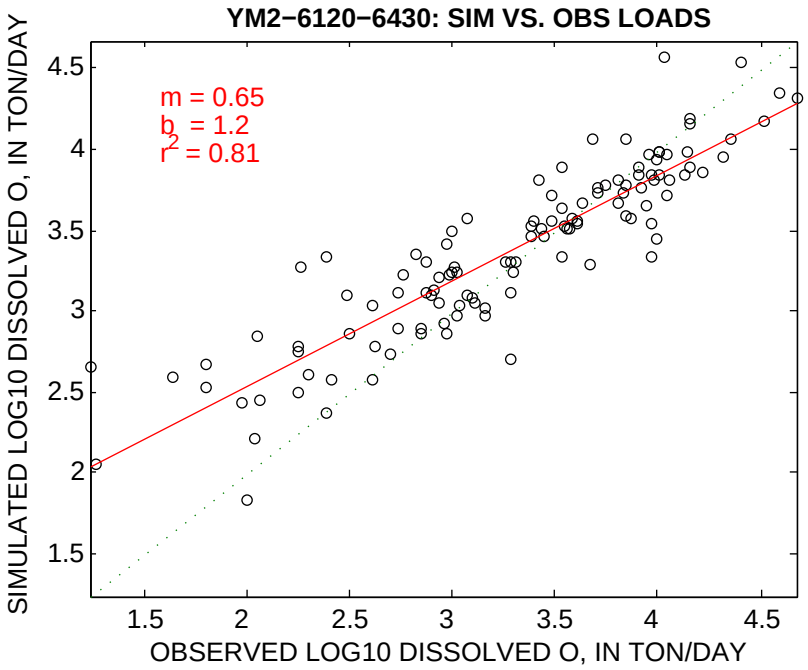


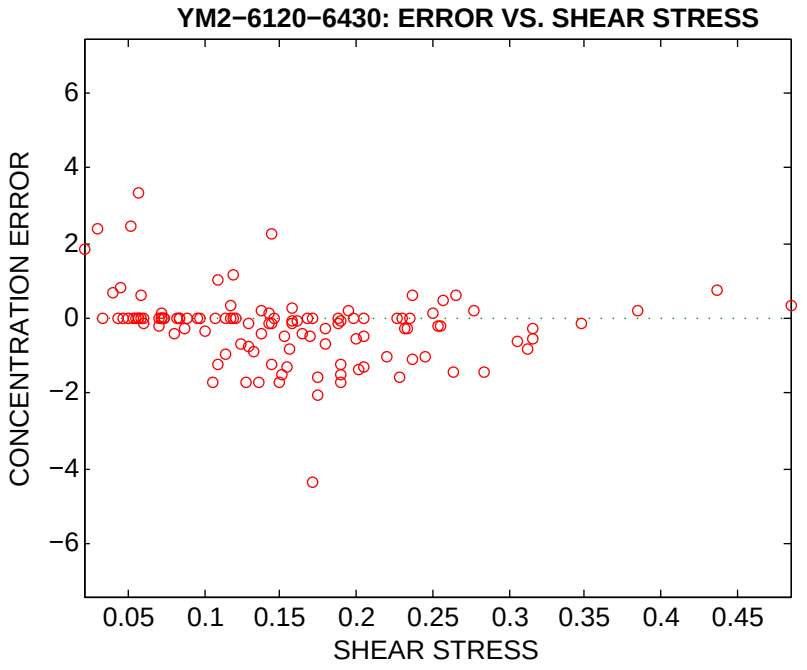


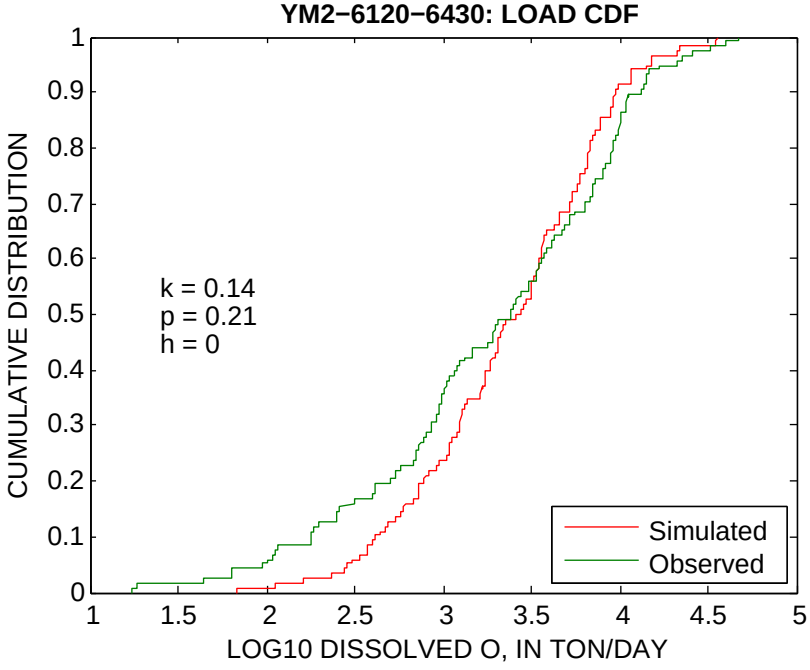


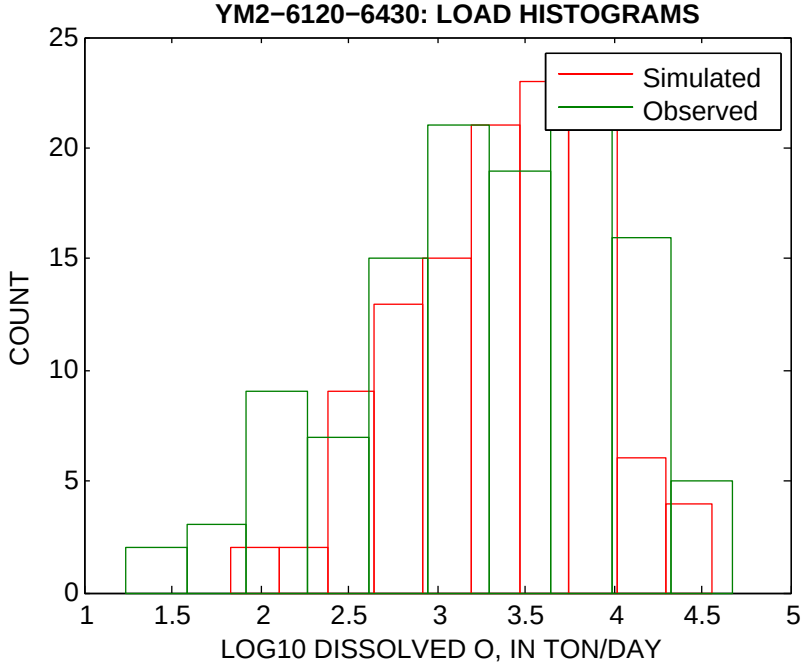


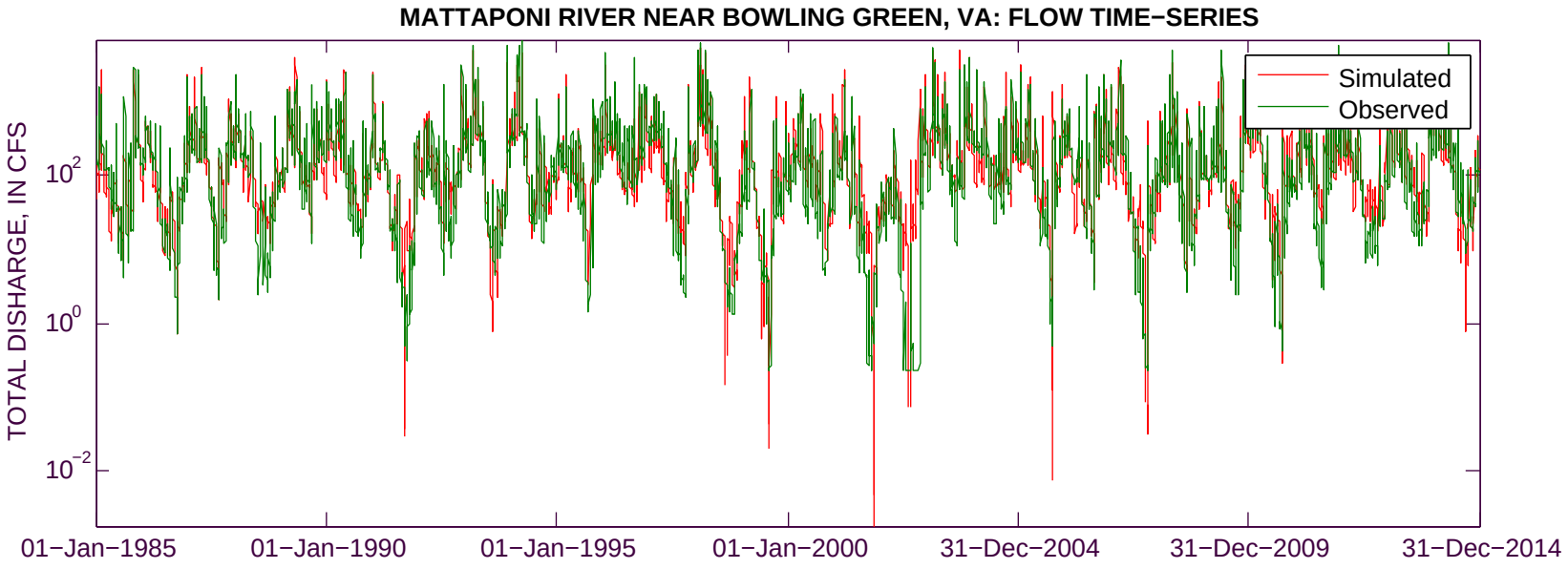
LOAD DATA
LOG10

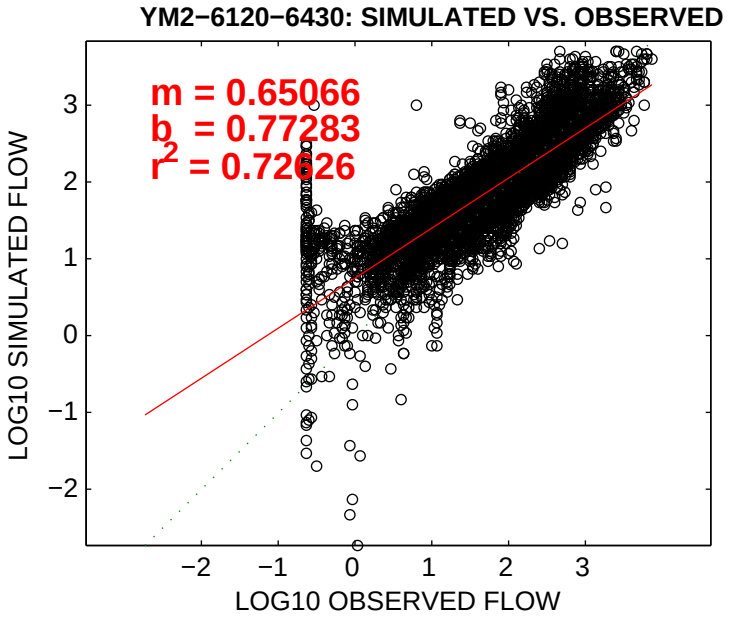


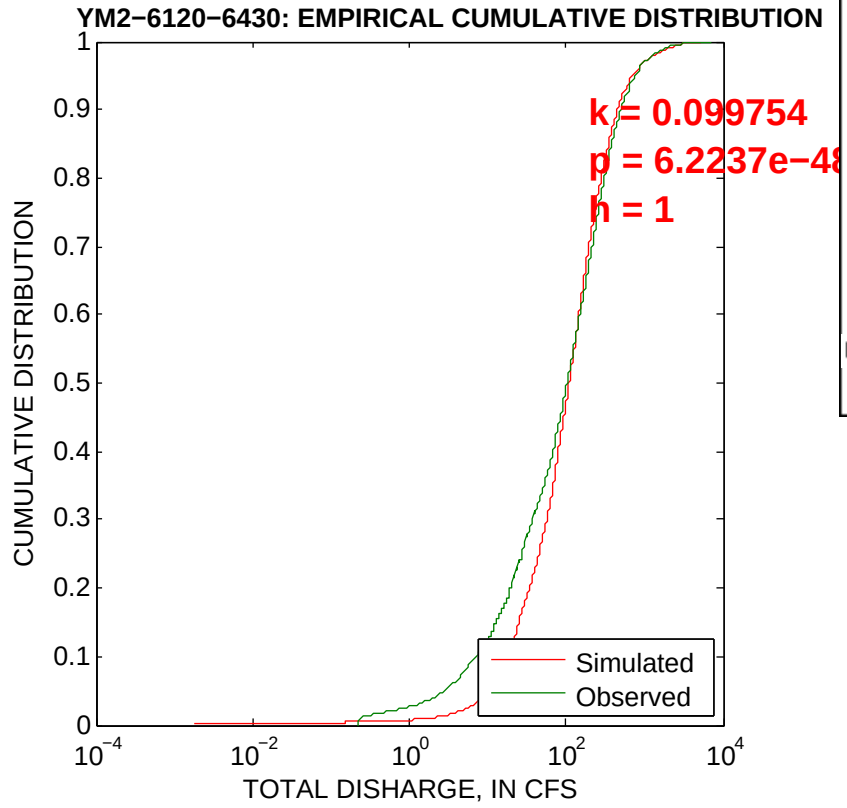












DATA SELECTION

scenario	file
P620171001WQ	_FLOW.calib

plot: FLOW - total discharge

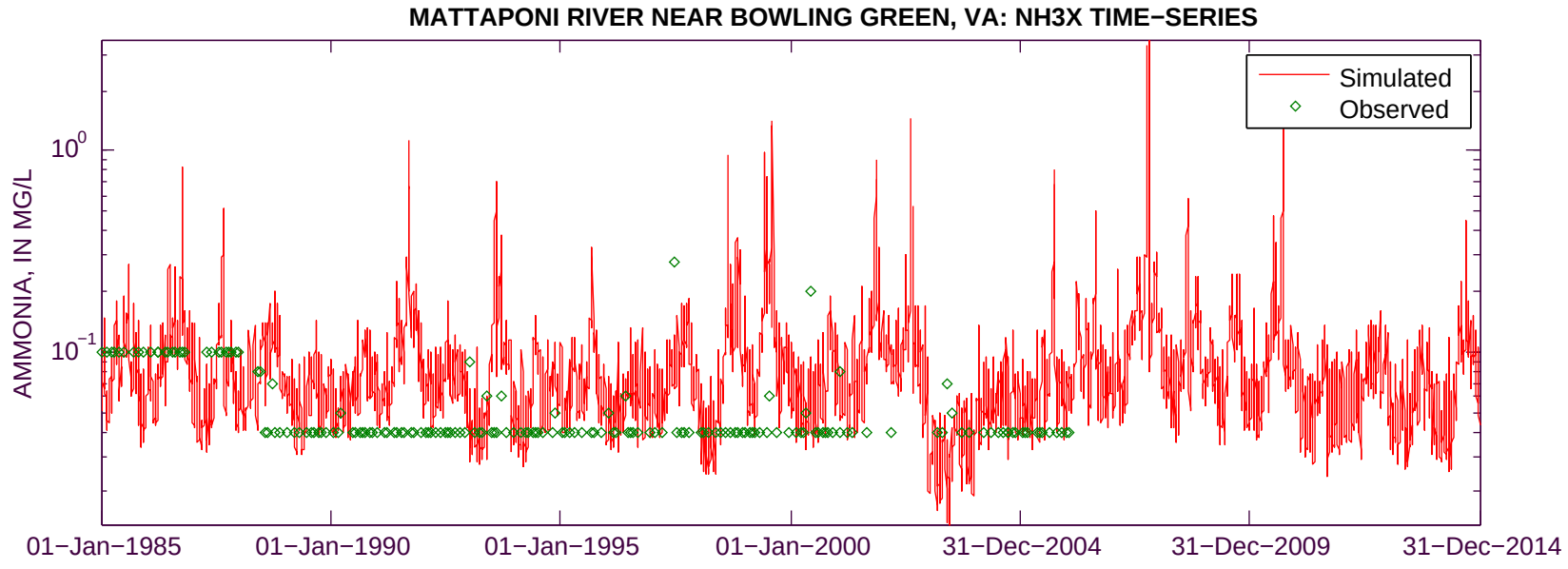
Dates: 1/1/1985 — 12/31/201

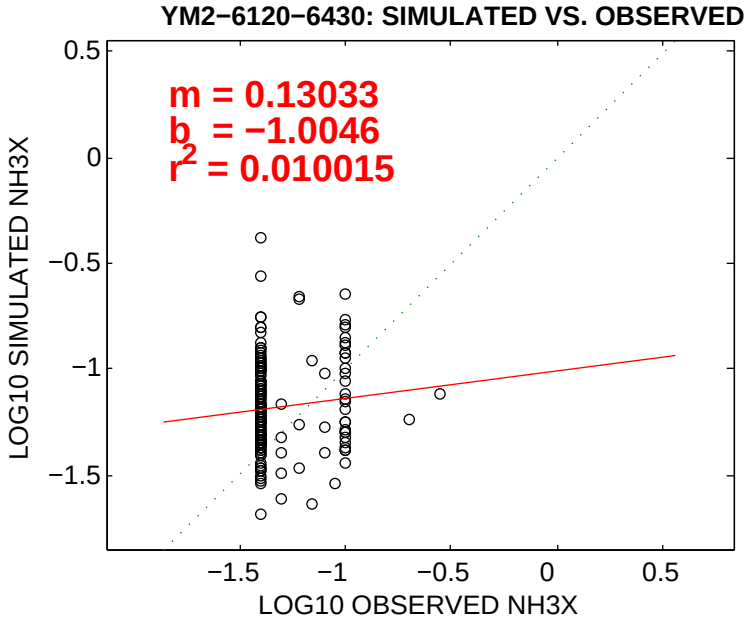
Drive	Directory	Observed
N/A	model	OBS20161101

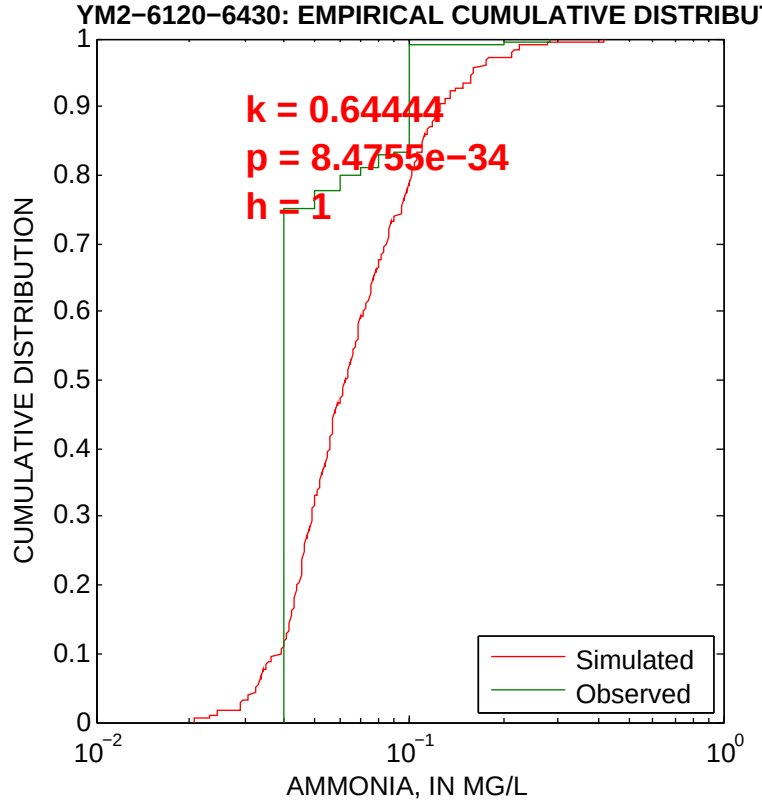
STATISTICS

	observe	simulate
n	10957	10930
min	0.222378	0
	-0.652908	-2.7434
mean	221.984	218.008
	1.88381	1.99854
media	103.222	109.93
	2.01796	2.04265
max	7140.22	5283.3
	3.85371	3.72291
varian	169950	150055
	0.572773	0.333887
JB	0.001	0.001
	0.001	0.001
	ra	log
%	-1.79079	6.0905
err.va	93131.1	0.174466
rel.std.err	0.547992	0.304598
mod.eff	0.452008	0.695402

VERSION







DATA SELECTION

scenario	file
P620171001WQ	NH3X.calib

plot: NH3X - ammonia

Dates: 1/1/1985 – 12/31/201

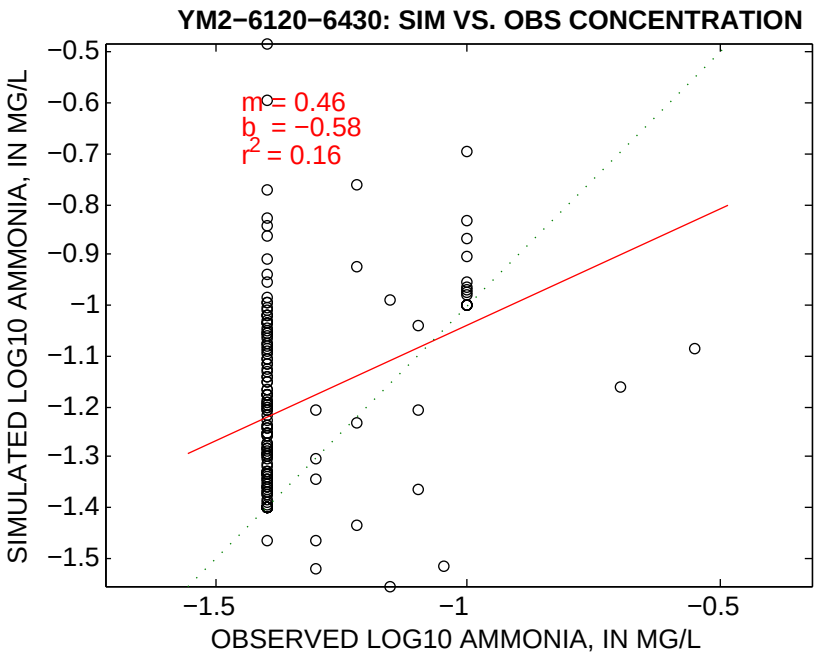
Drive	Directory	Observed
N/A	model	OBS20161101

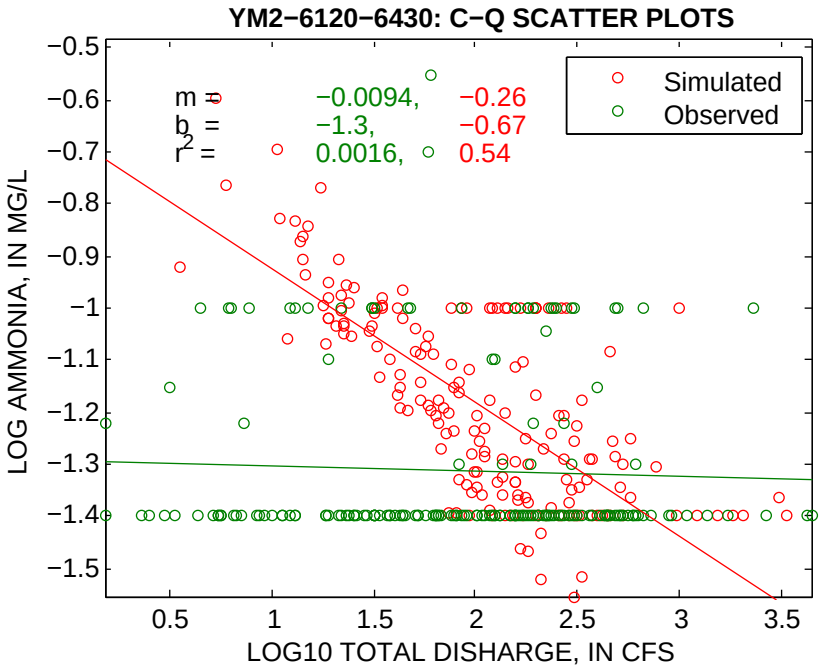
STATISTICS

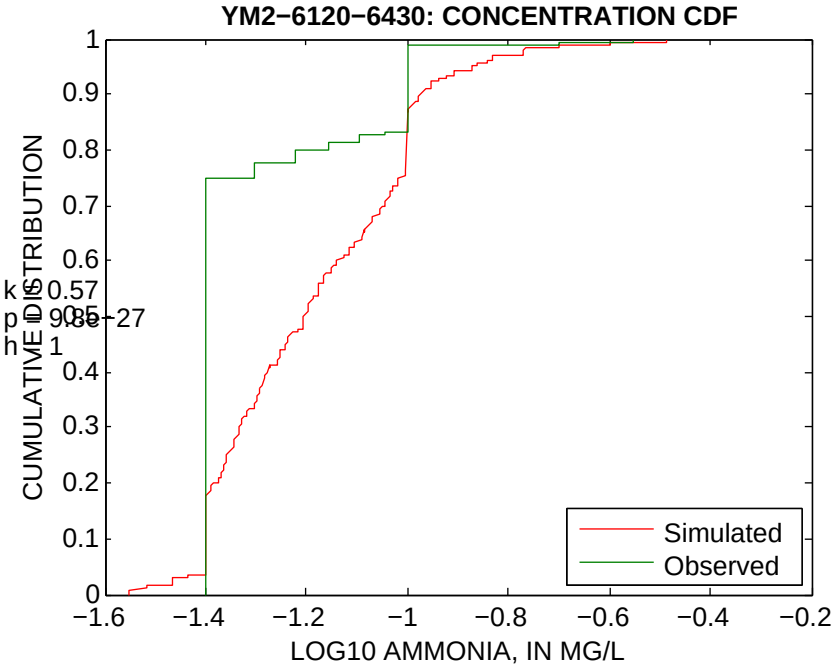
	n	180	180
		observe	simulate
min		0.04	0.020598
		-1.39794	-1.68617
mean		0.0535556	0.0765409
		-1.31118	-1.17551
media		0.04	0.0632335
		-1.39794	-1.19906
max		0.28	0.41393
		-0.552842	-0.383073
varian		0.00090572	0.00231742
		0.0277478	0.0470557
JB		0.001	0.001
		0.001	0.011906
		ra	log
%		42.9187	-10.3476
err.va		0.00353349	0.0860818
rel.std.err		3.90129	3.1023
mod.eff		-2.90129	-2.1023

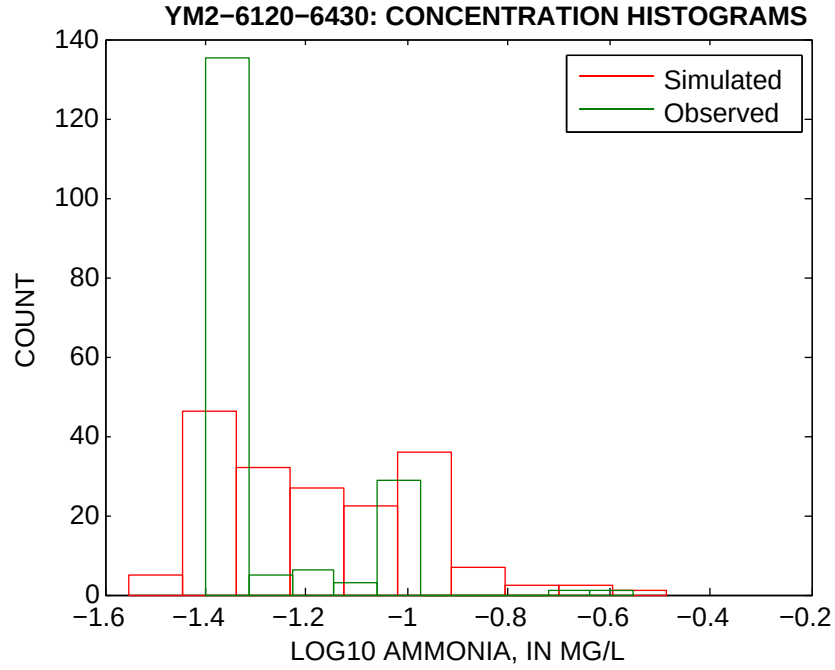
VERSION 2.1

ALL DATA
LOG10

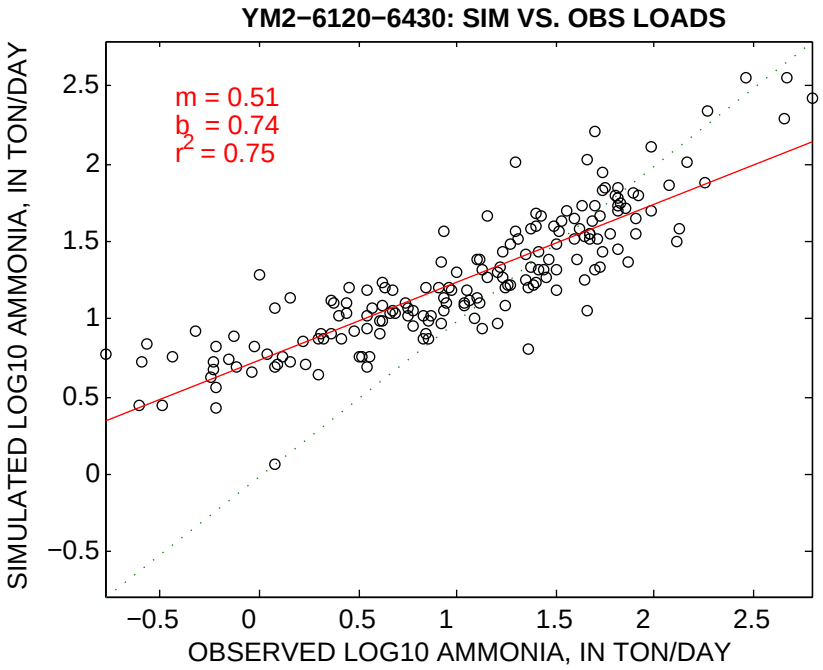


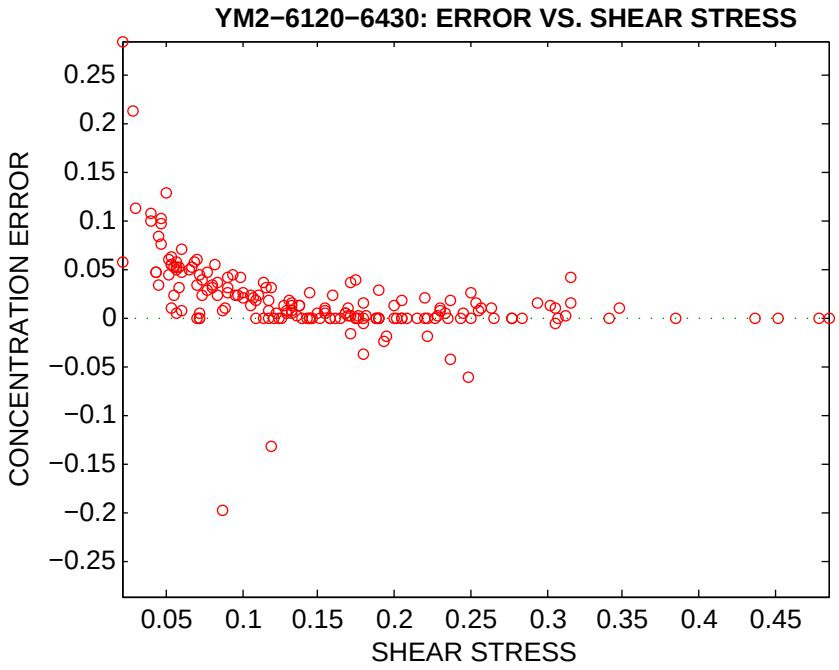


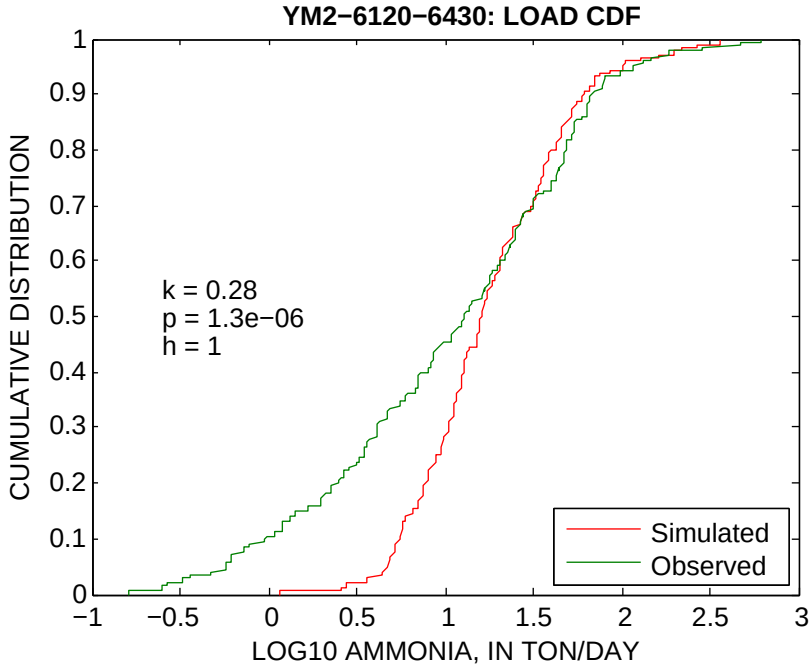


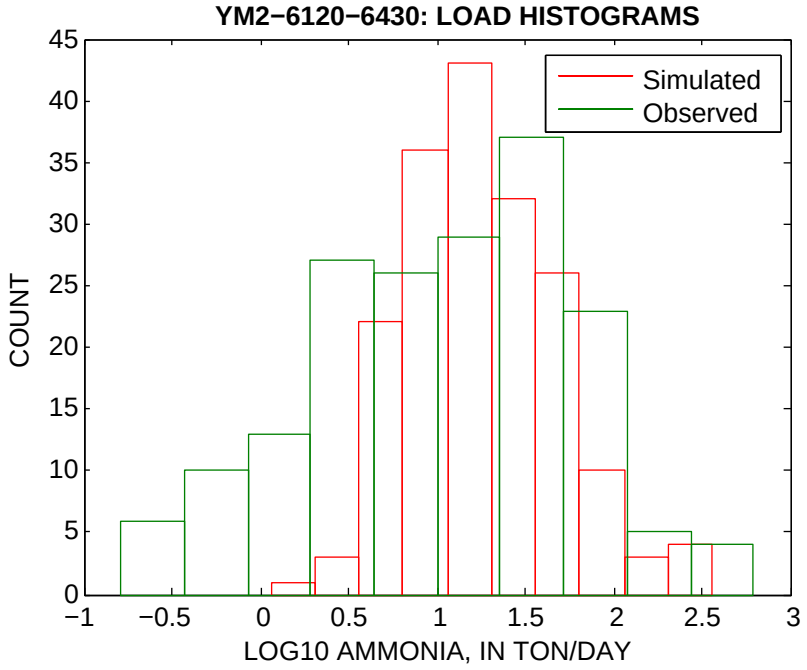


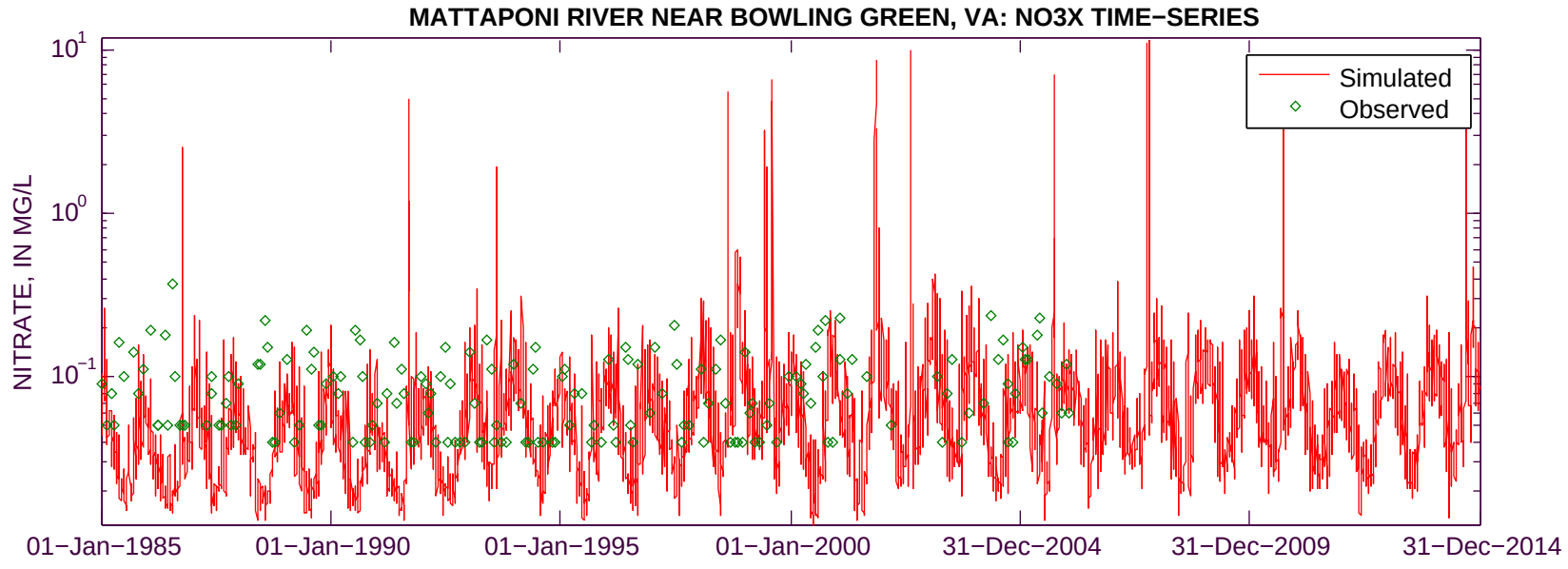
LOAD DATA
LOG10

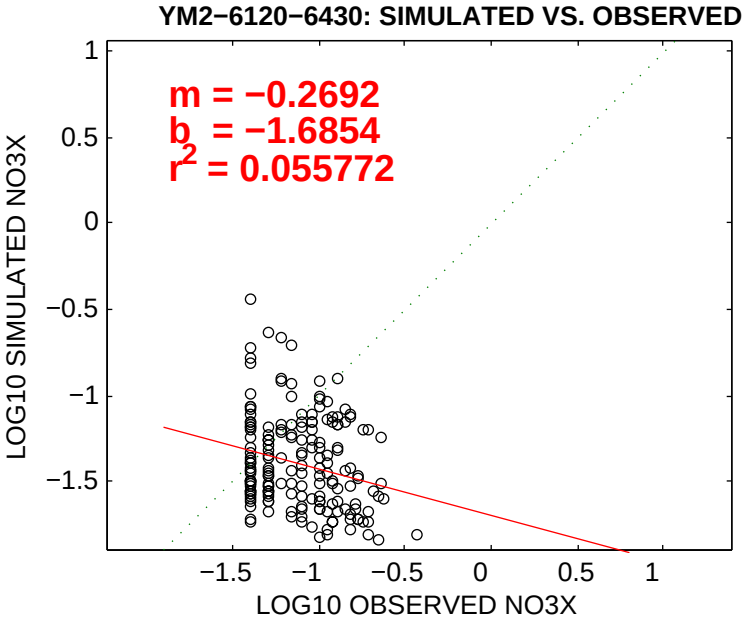


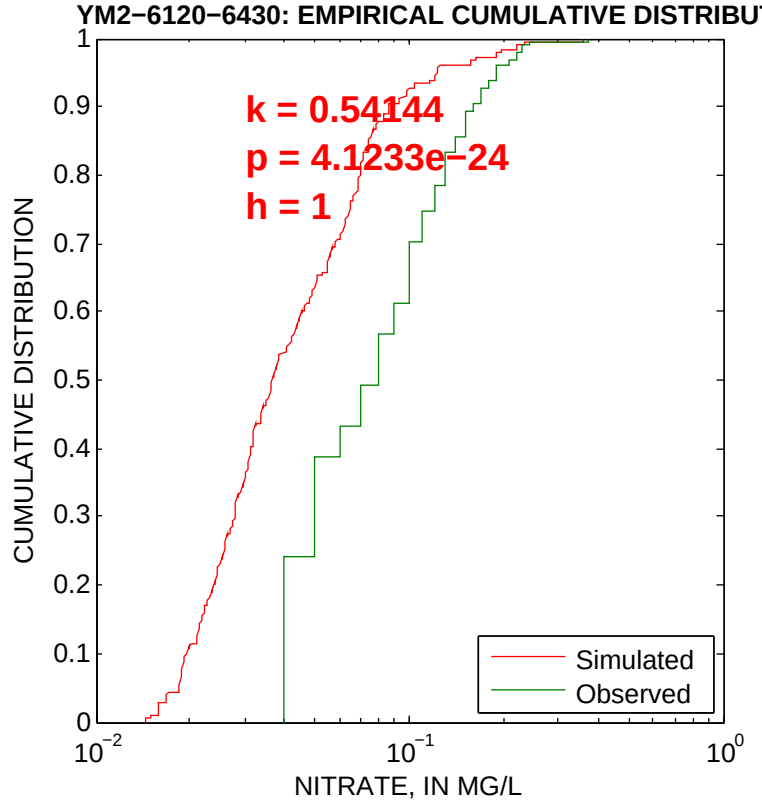












DATA SELECTION

scenario: P620171001WQ | file: NO3X.calib

plot: NO3X - nitrate

Dates: 1/1/1985 – 12/31/201

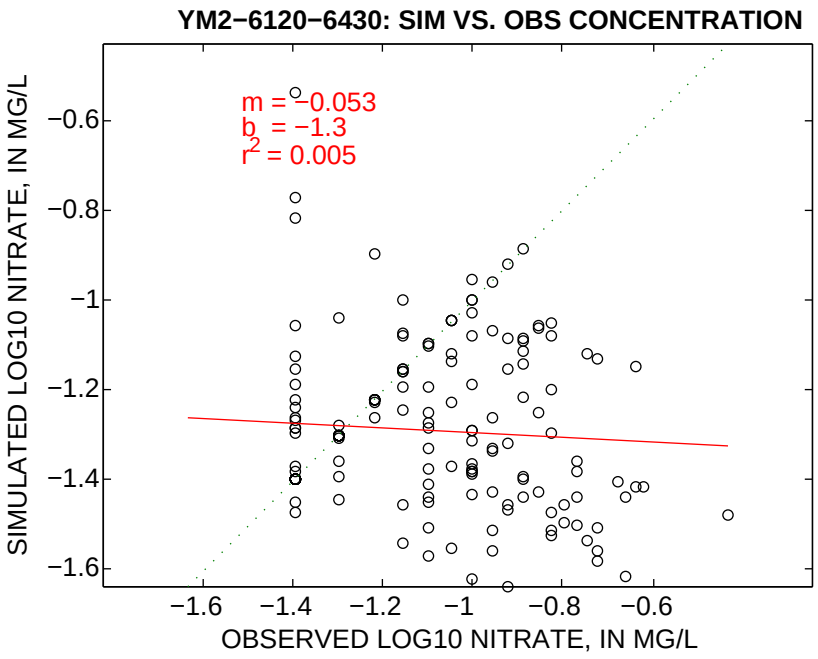
Drive: N/A | Directory: model | Observed: OBS20161101

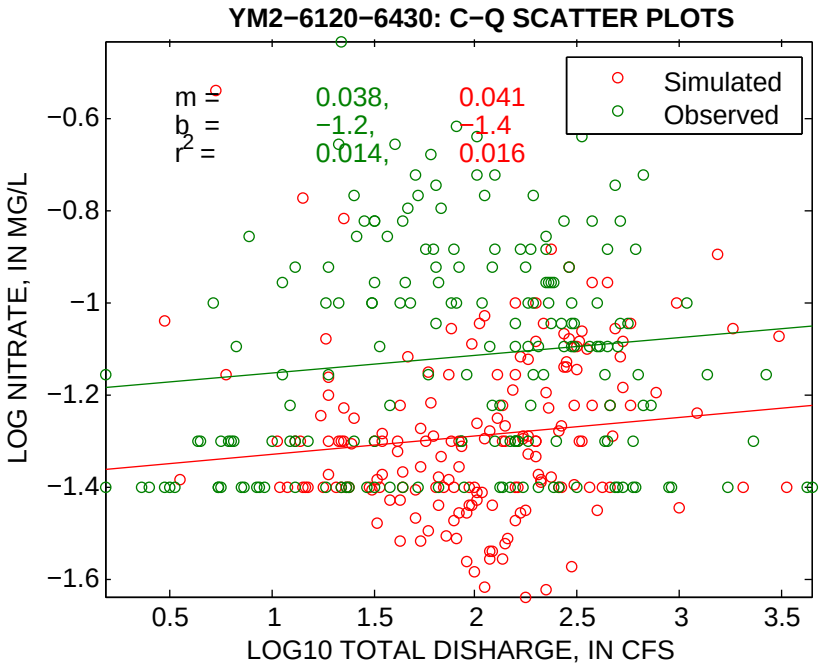
STATISTICS

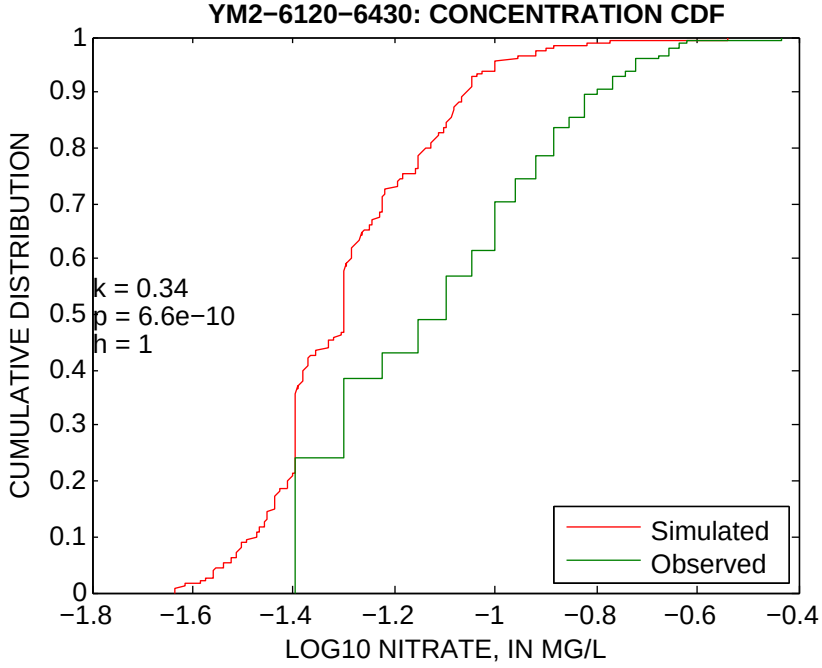
n	181	181
	observe	simulate
min	0.04	0.014375
	-1.39794	-1.84239
mean	0.088895	0.0512476
	-1.11699	-1.38469
media	0.08	0.036626
	-1.09691	-1.43621
max	0.37	0.36119
	-0.431798	-0.442264
varian	0.00280544	0.00187666
	0.0551871	0.0717073
JB	0.001	0.001
	0.014927	0.005410
	ra	log
%	-42.3504	23.9661
err.va	0.00703066	0.228668
rel.std.err	2.50608	4.14351
mod.eff	-1.50608	-3.14351

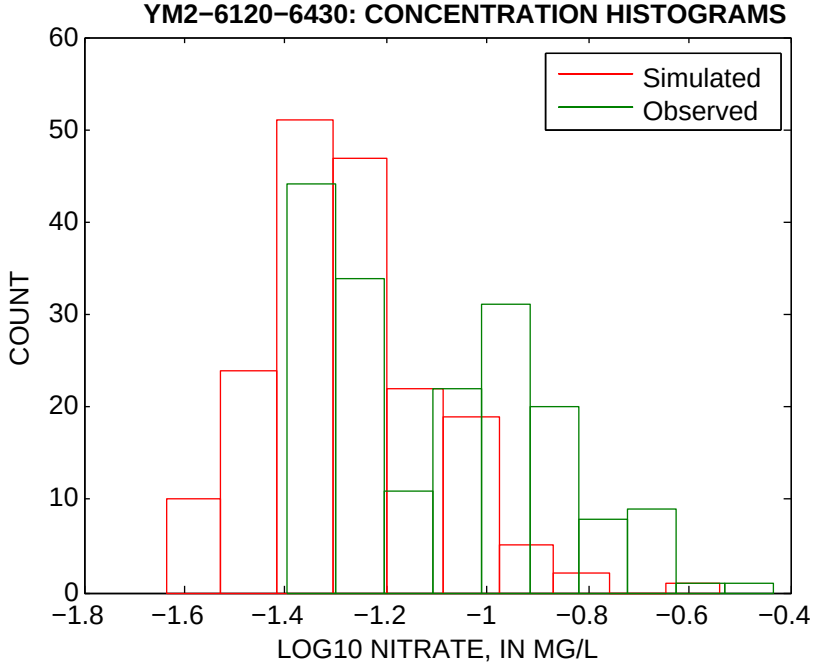
VERSION 2.1

ALL DATA
LOG10

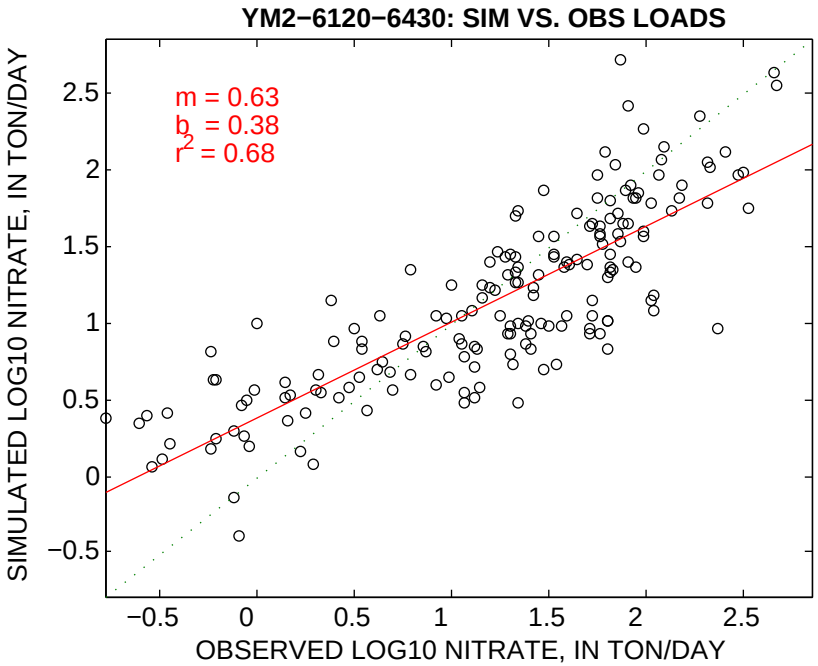


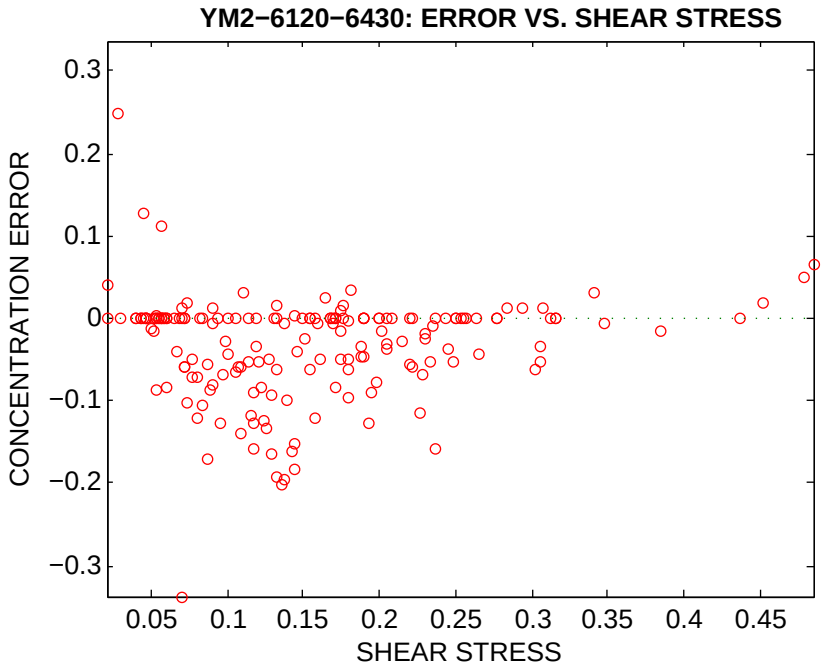


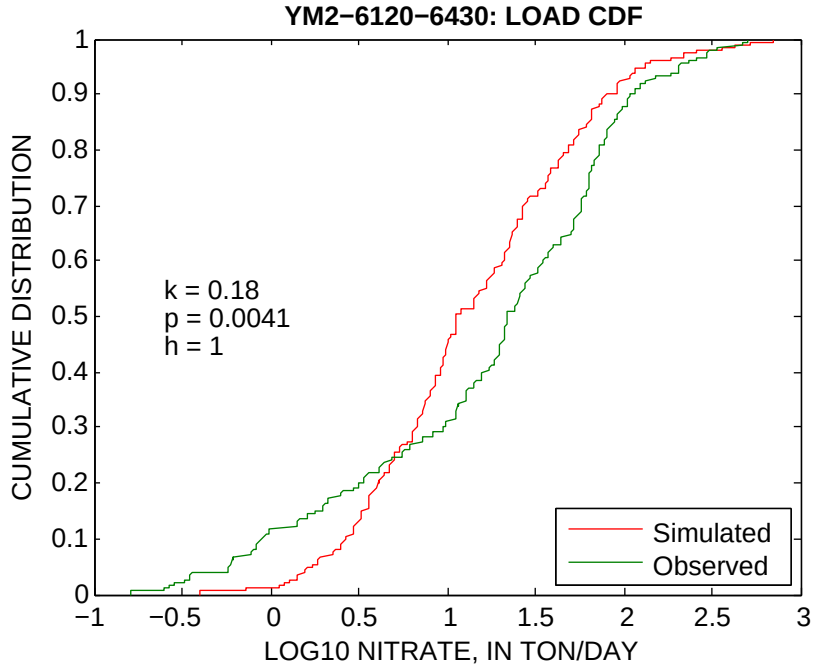


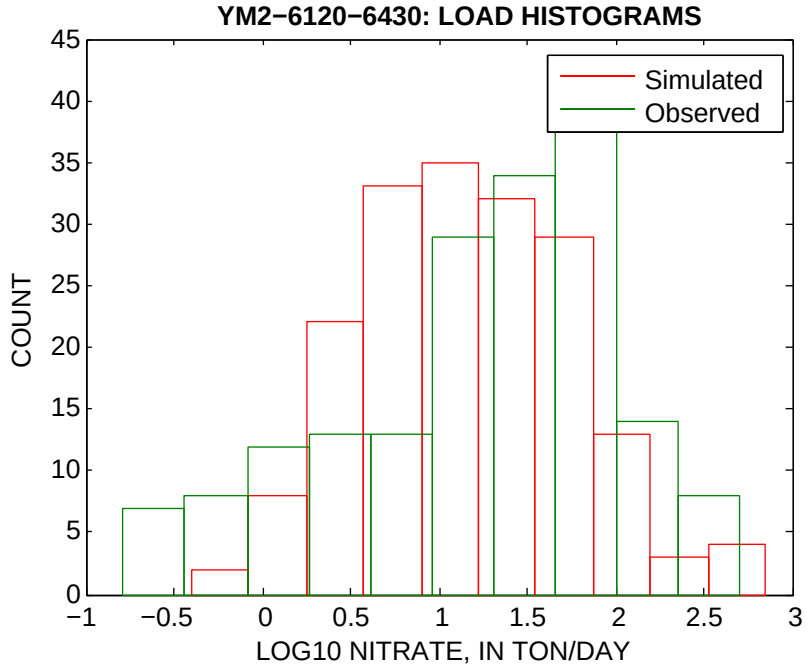


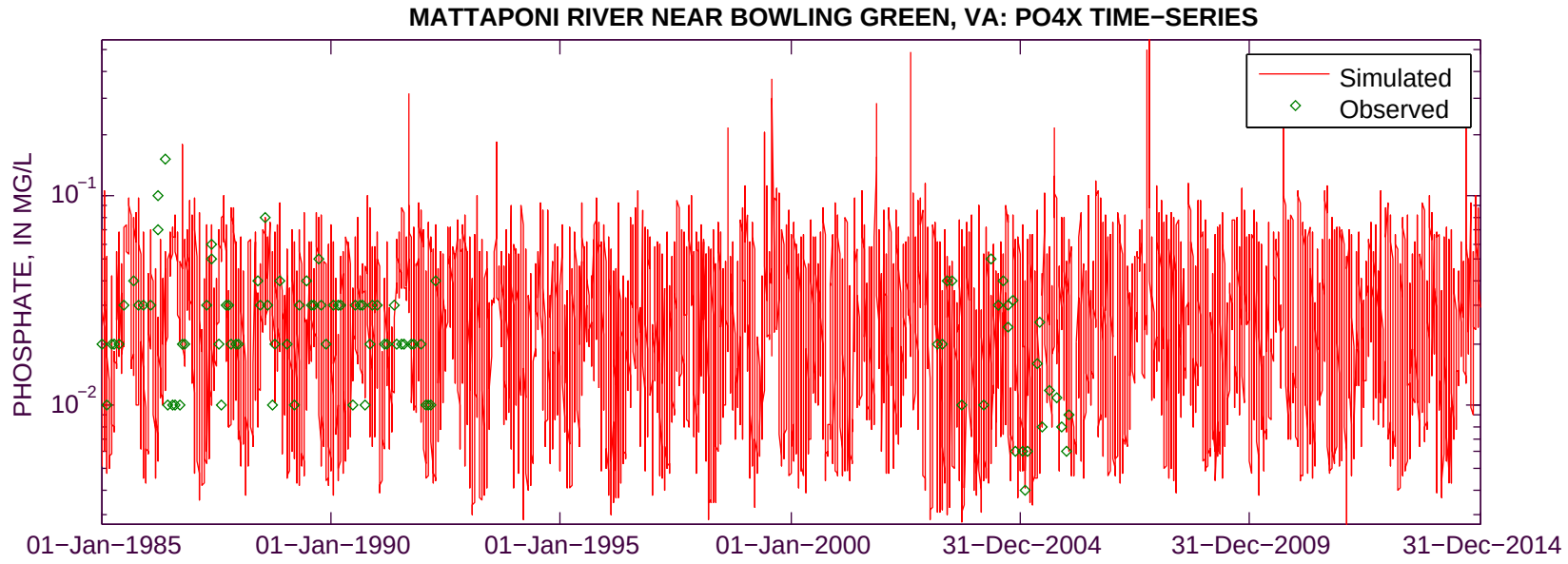
LOAD DATA
LOG10

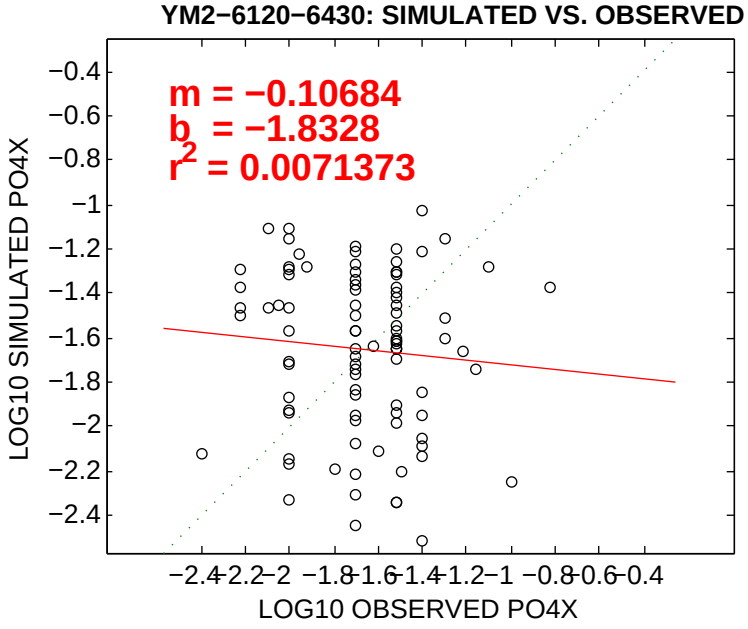


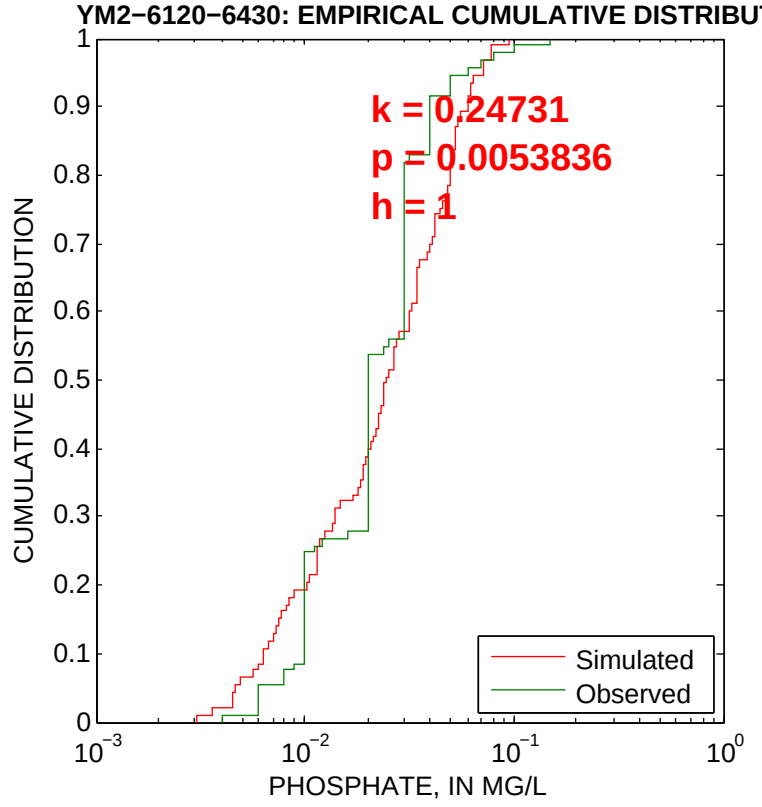












DATA SELECTION

scenario	file
P620171001WQ	PO4X.calib

plot: PO4X - phosphate

Dates: 1/1/1985 – 12/31/201

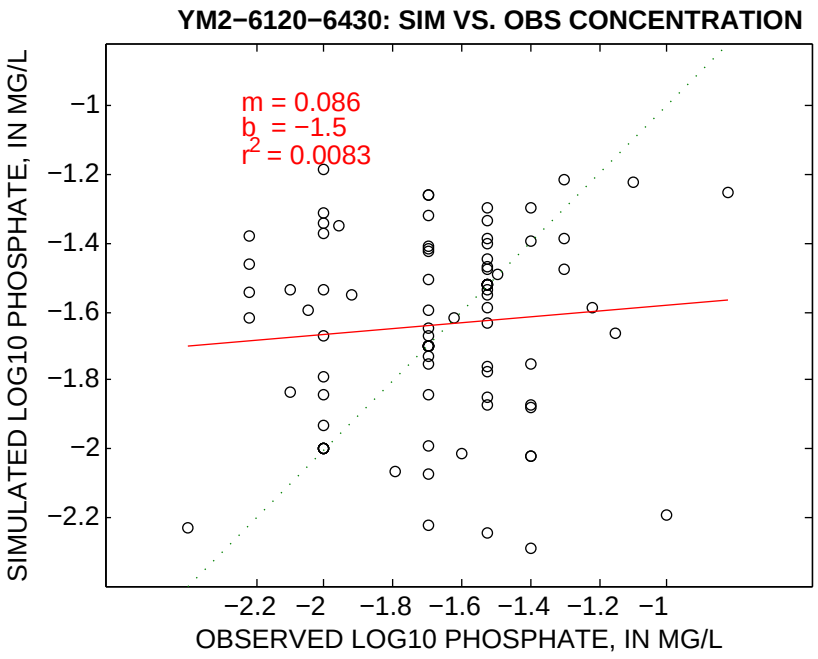
Drive	Directory	Observed
N/A	model	OBS20161101

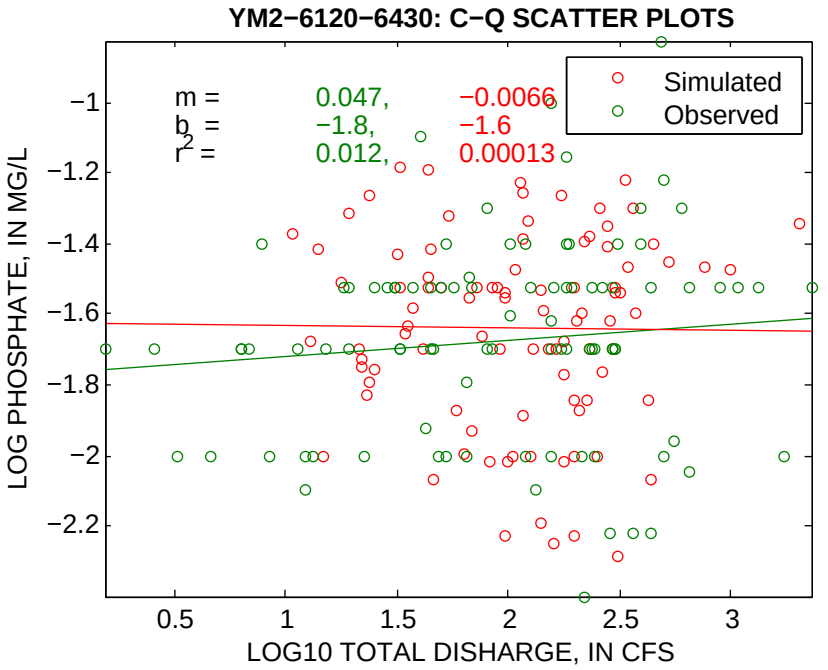
STATISTICS

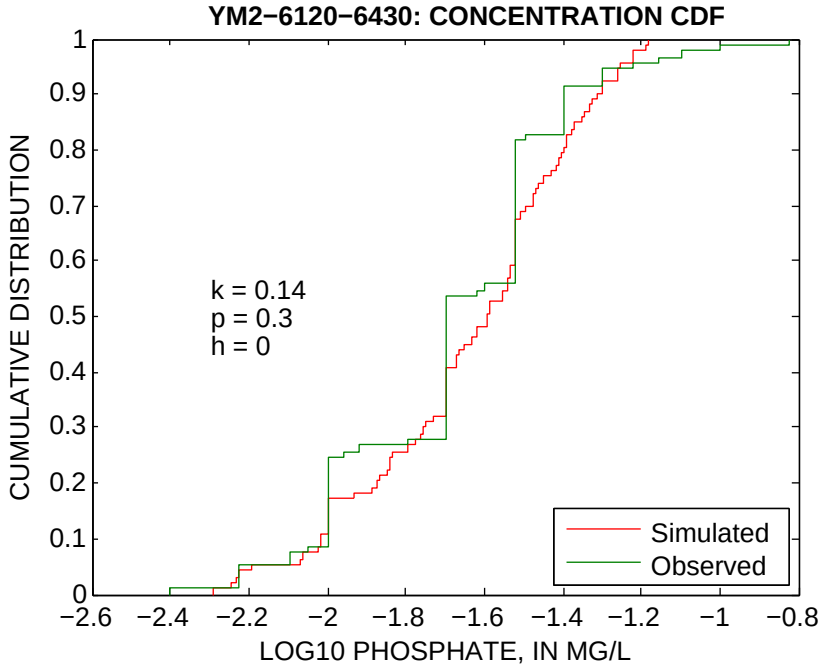
	n	93	93
		observe	simulate
min		0.004	0.0030407
		-2.39794	-2.51703
mean		0.0263763	0.0297439
		-1.67339	-1.65404
media		0.02	0.024822
		-1.69897	-1.60516
max		0.15	0.09379
		-0.823909	-1.02784
varian		0.00042188	0.00042945
		0.0824518	0.13186
JB		0.001	0.019151
		0.5	0.048116
		ra	log
%		12.7675	-1.15656
err.va		0.00088847	0.232309
rel.std.err		2.10595	2.81751
mod.eff		-1.10595	-1.81751

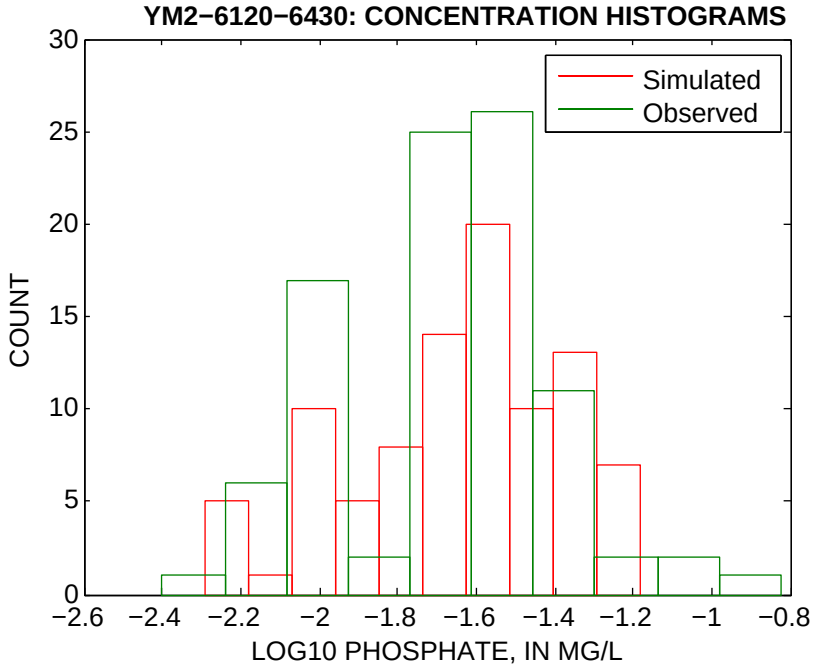
VERSION 2.1

ALL DATA
LOG10

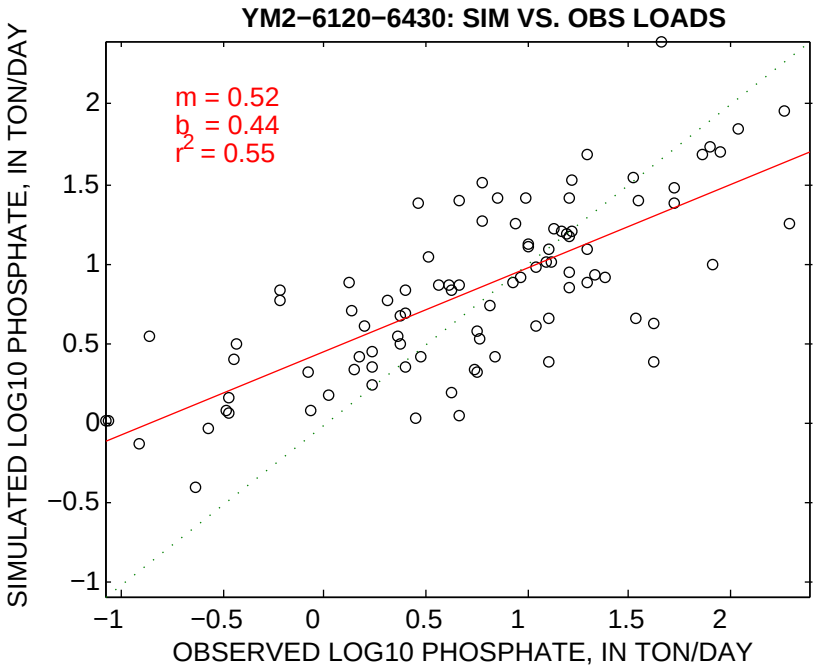


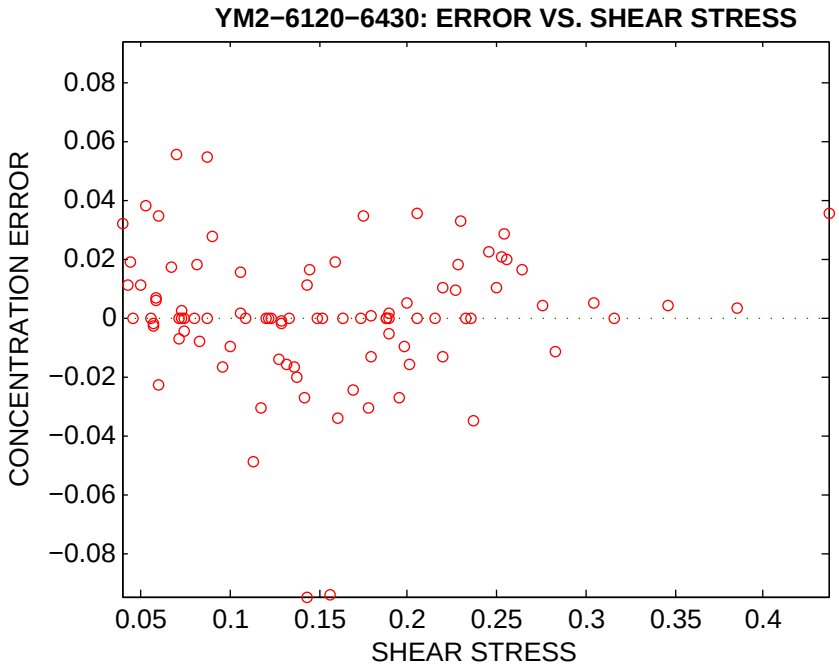


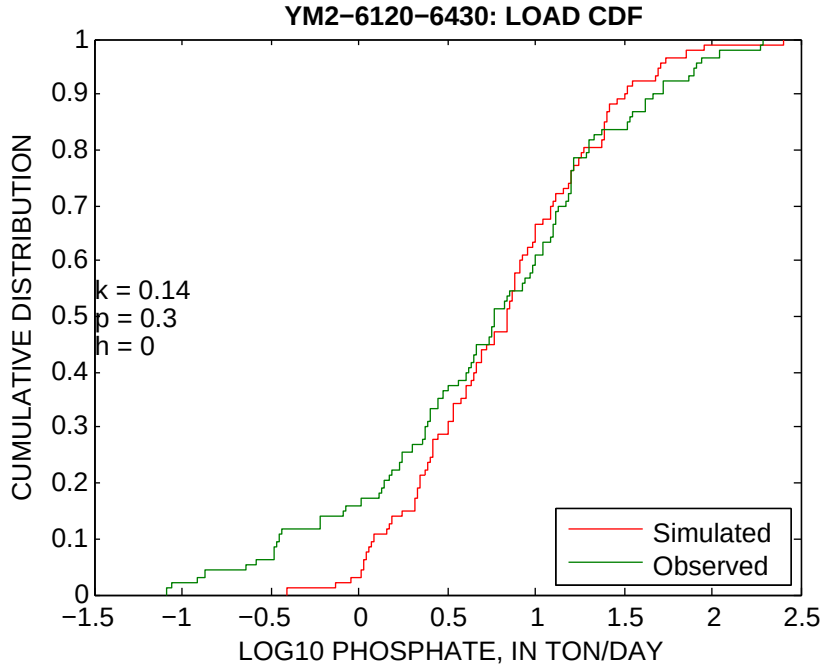


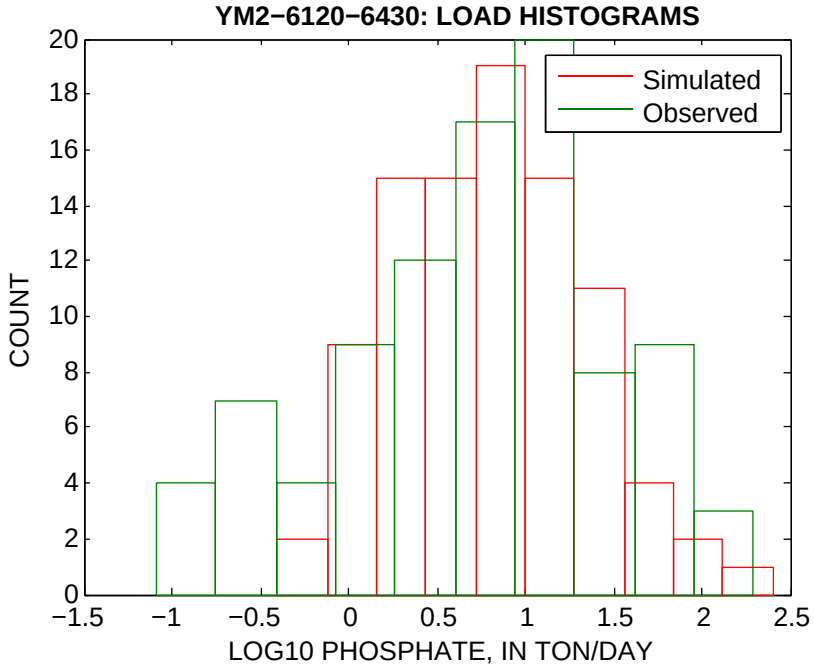


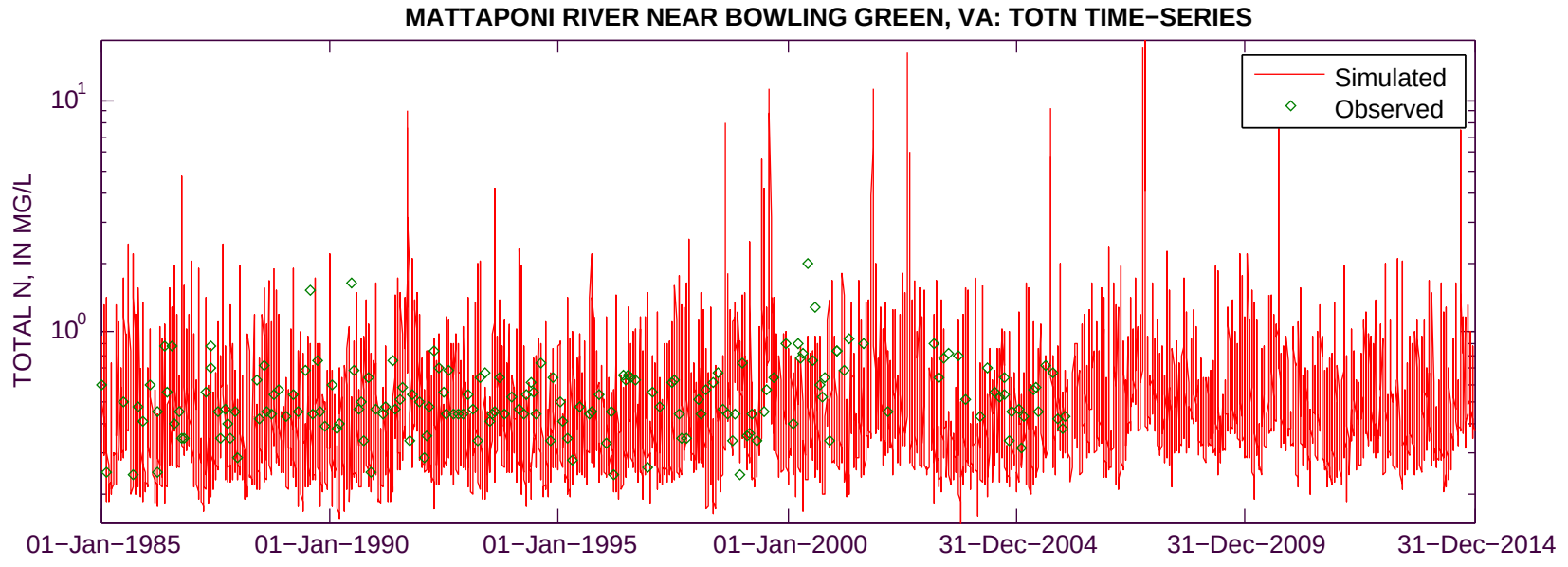
LOAD DATA
LOG10

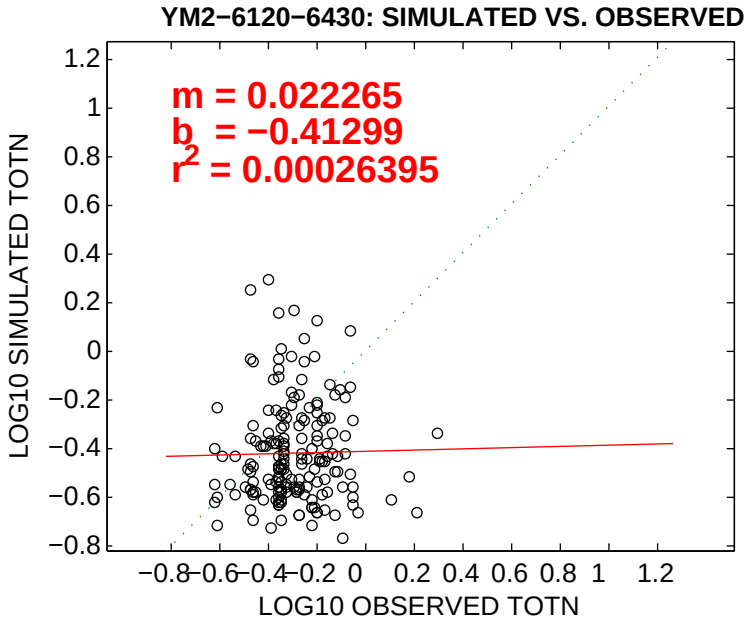


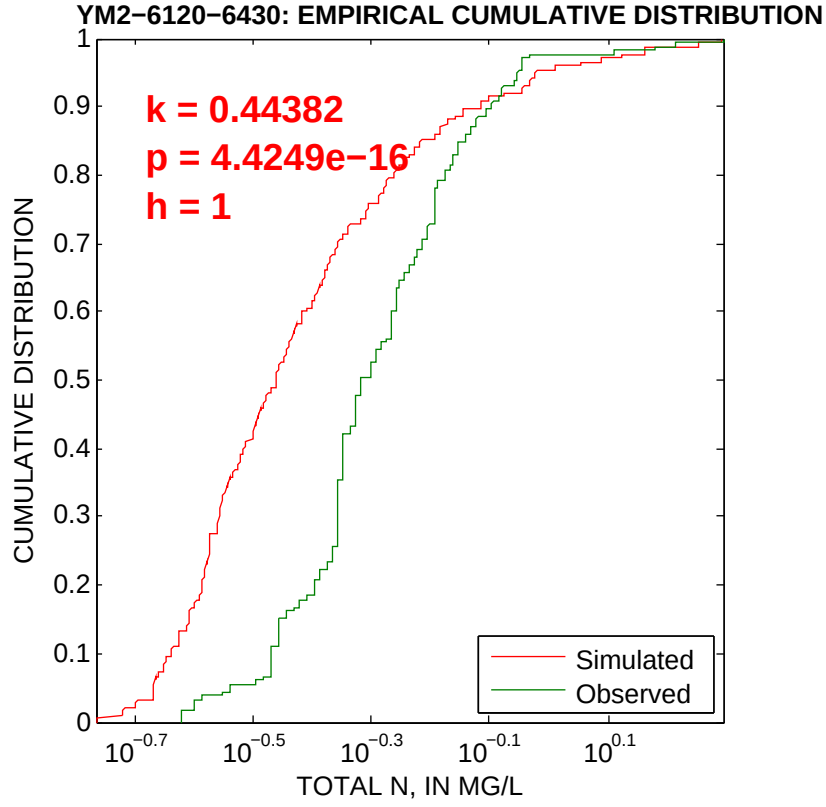












DATA SELECTION

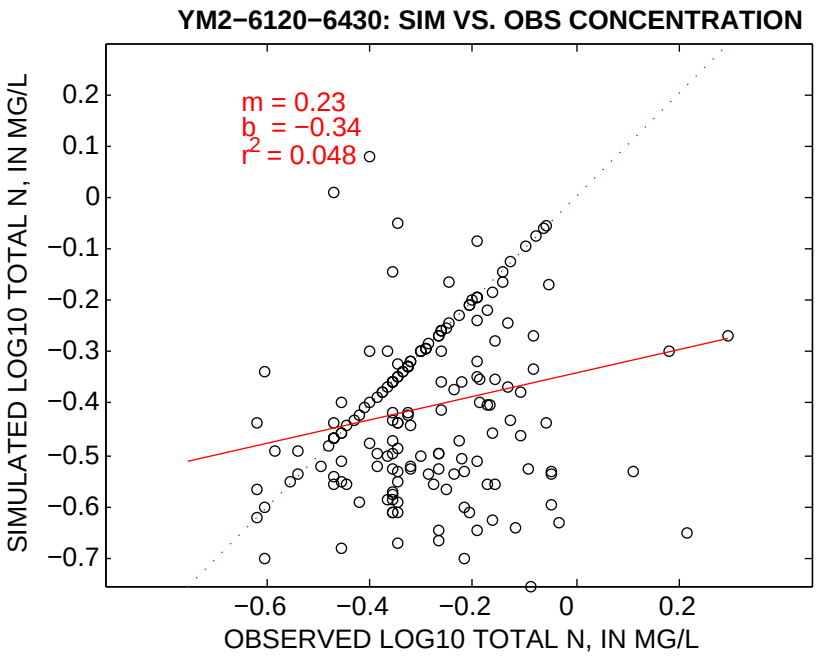
scenario: P620171001WQ
file: TOTN.calib
plot: TOTN - total nitrogen
Dates: 1/1/1985 – 12/31/201
Drive: N/A
Directory: model
Observed: OBS20161101

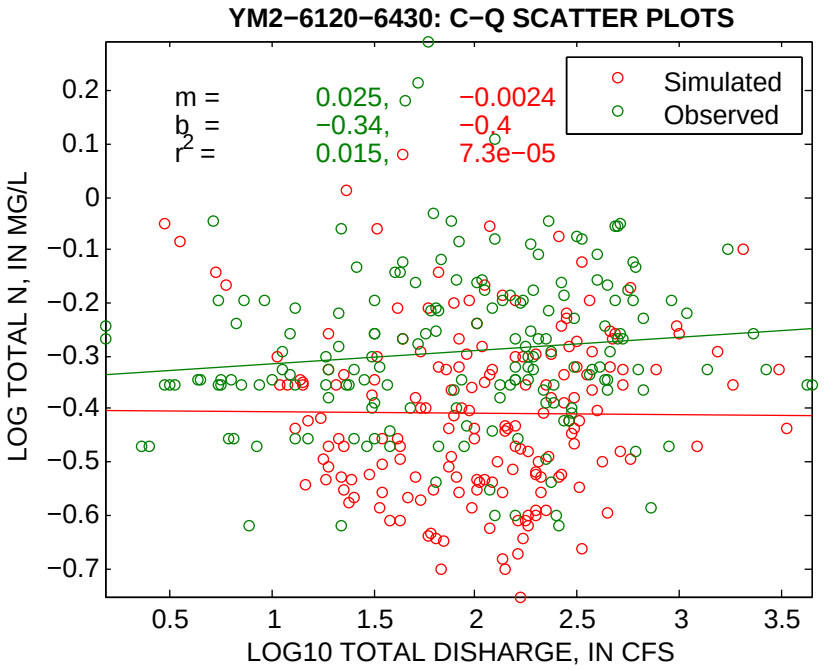
STATISTICS

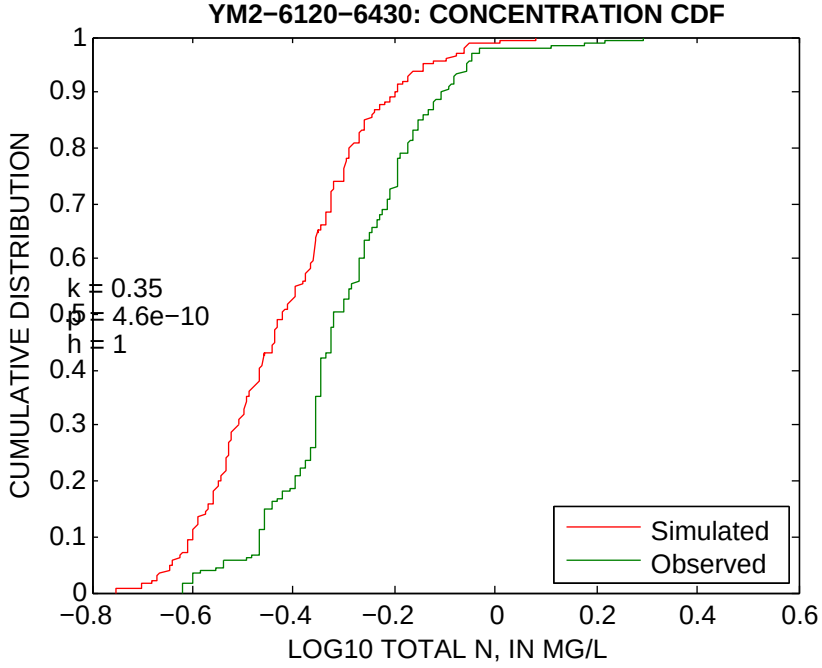
n	178	178
	observe	simulate
min	0.24	0.17111
	-0.619789	-0.766725
mean	0.547472	0.435415
	-0.290074	-0.419445
media	0.48	0.34573
	-0.318759	-0.461263
max	1.97	1.957
	0.294466	0.291591
varian	0.0519456	0.0788345
	0.023016	0.0432266
JB	0.001	0.001
	0.001825	0.001
	ra	log
%	-20.468	44.5994
err.va	0.147658	0.0820492
rel.std.err	2.84255	3.56487
mod.eff	-1.84255	-2.56487

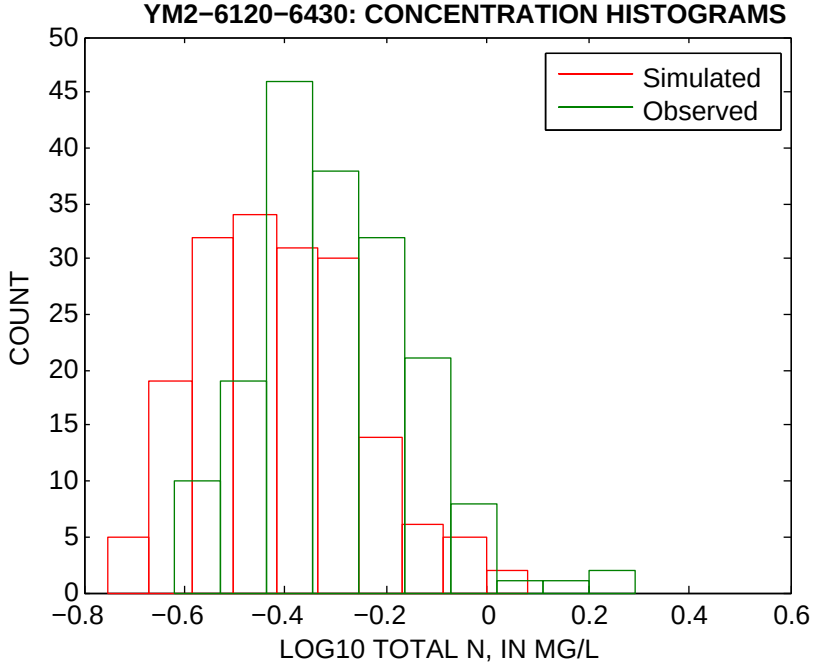
VERSION 2.1

ALL DATA
LOG10

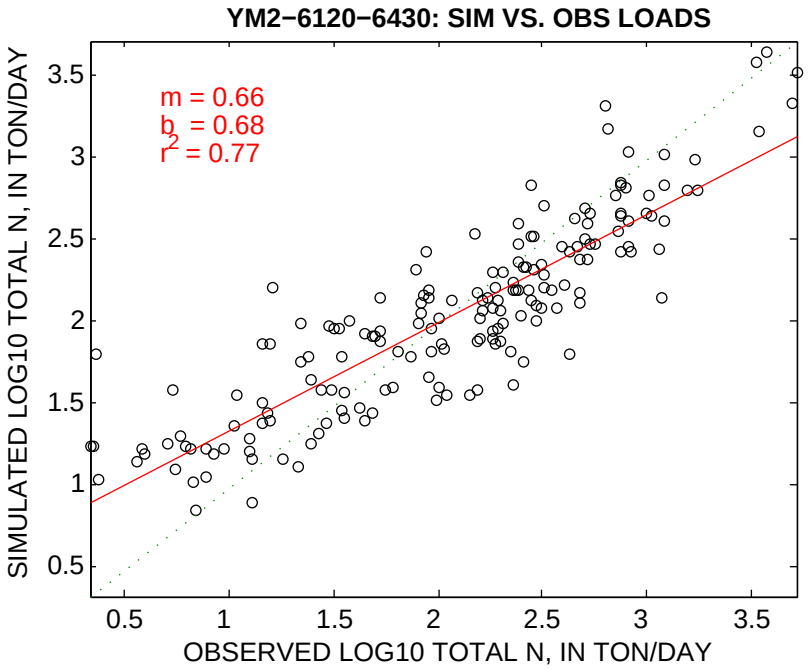


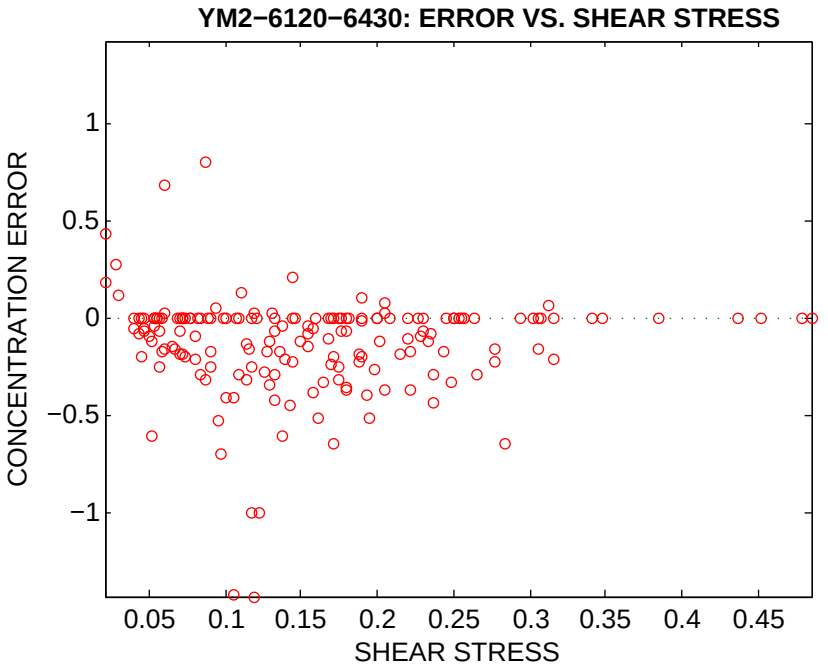


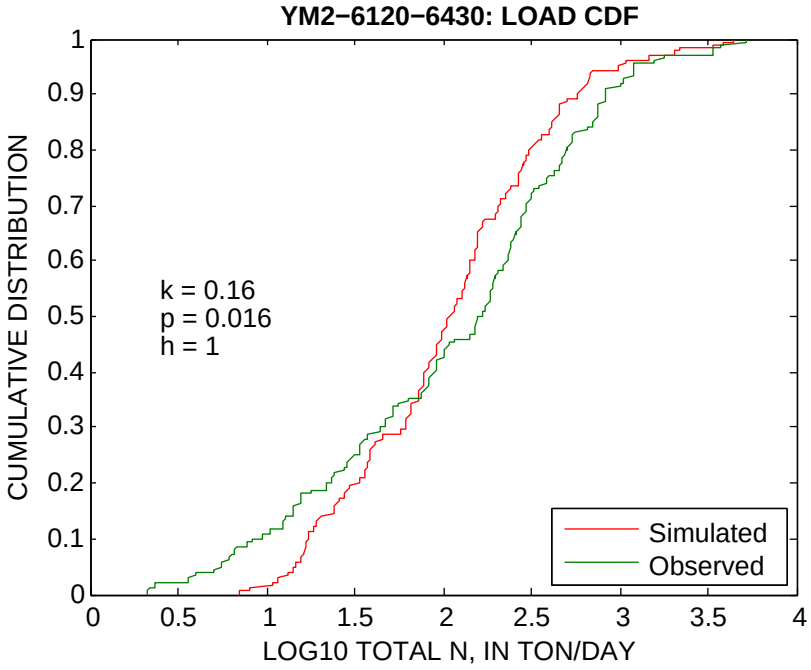


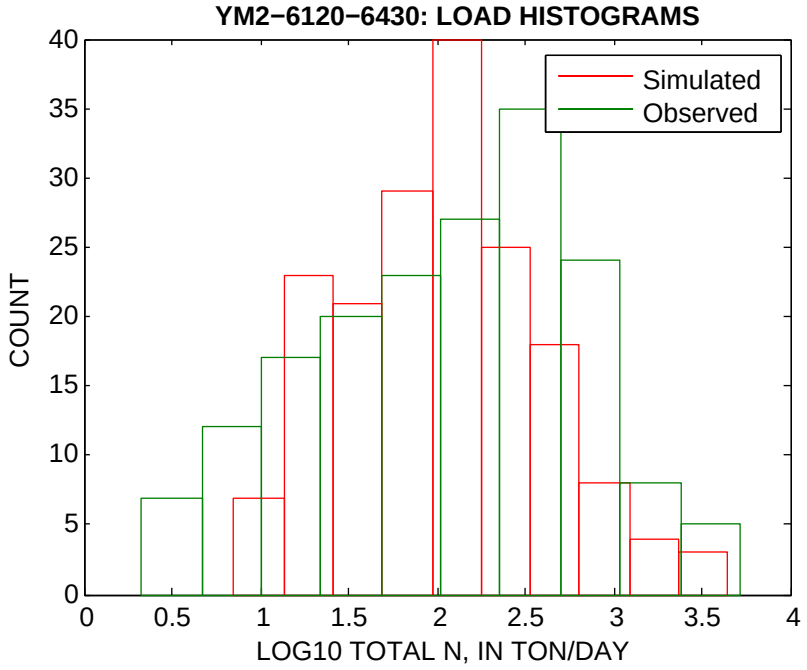


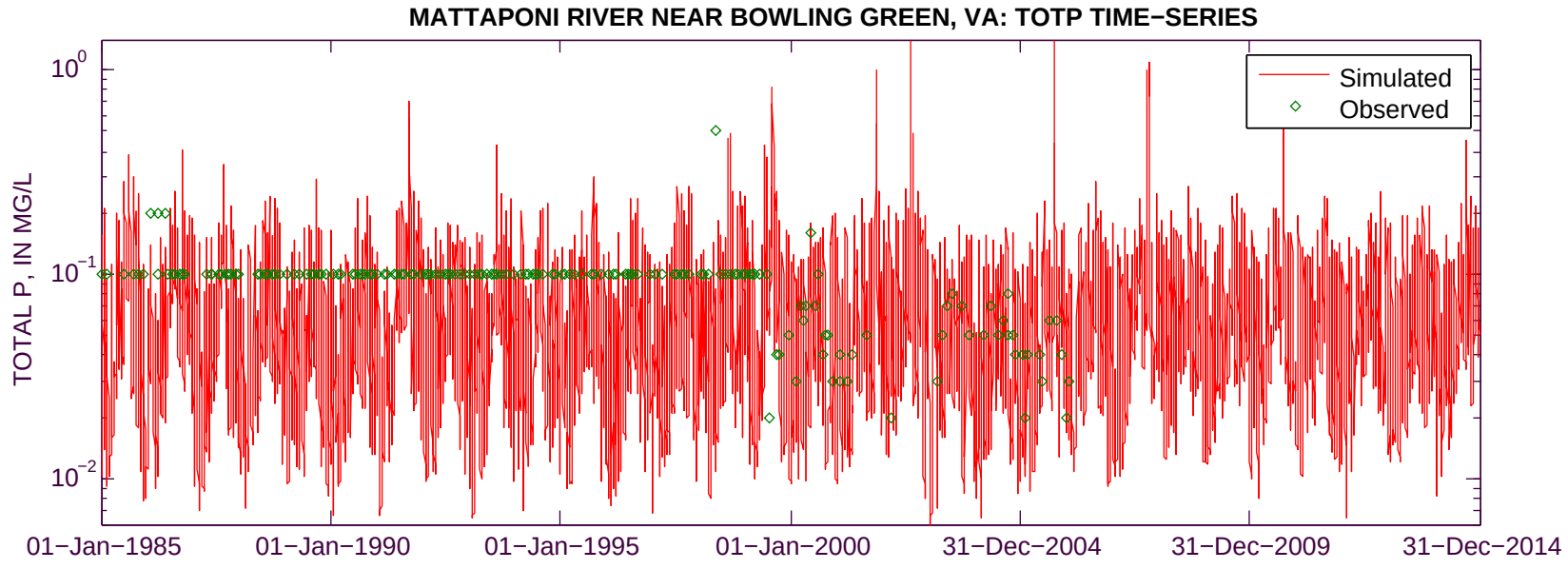
LOAD DATA
LOG10

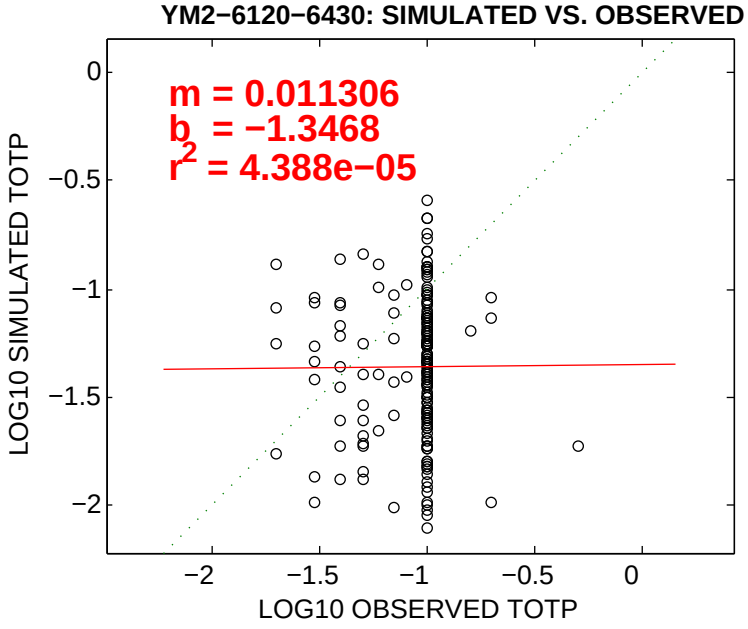


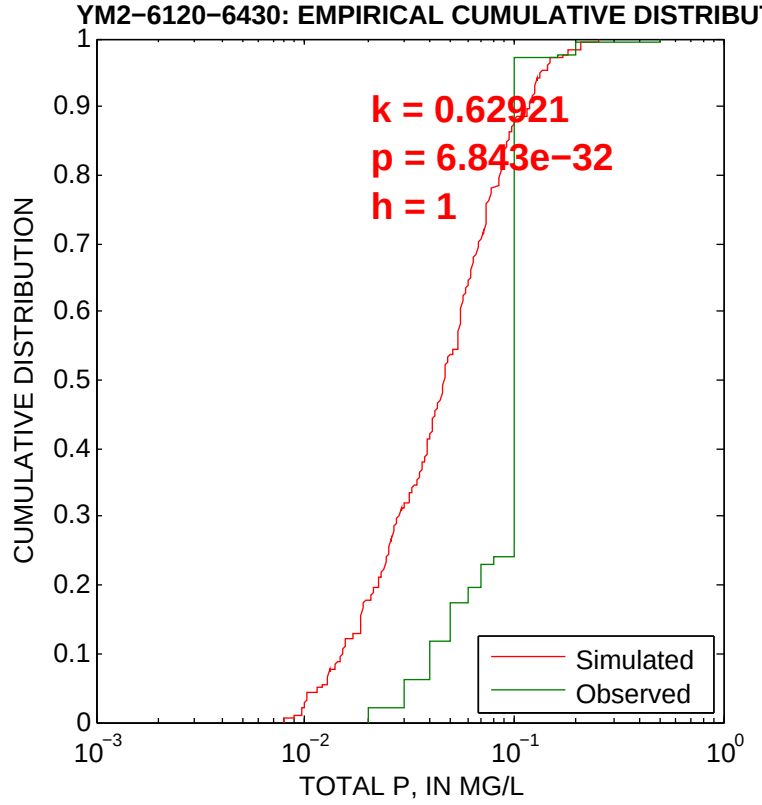












DATA SELECTION

scenario	file
P620171001WQ	TOTP.calib

plot: TOTP - total phosphorus

Dates 1/1/1985 12/31/201

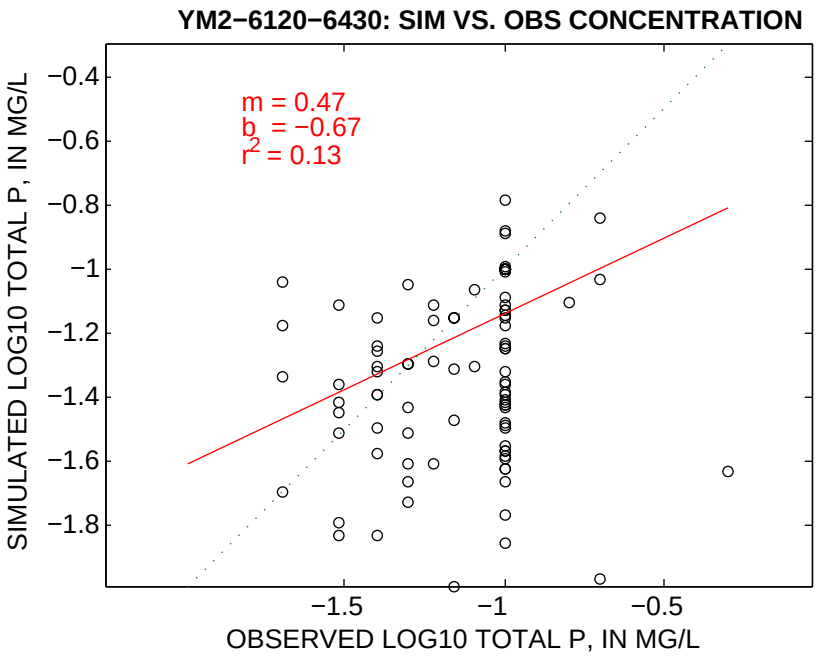
Drive	Directory	Observed
N/A	model	OBS20161101

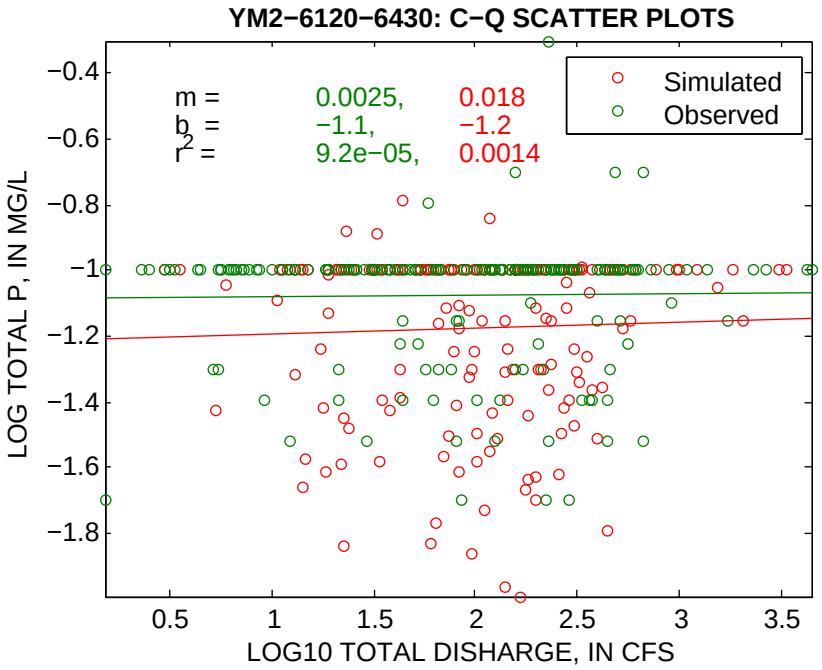
STATISTICS

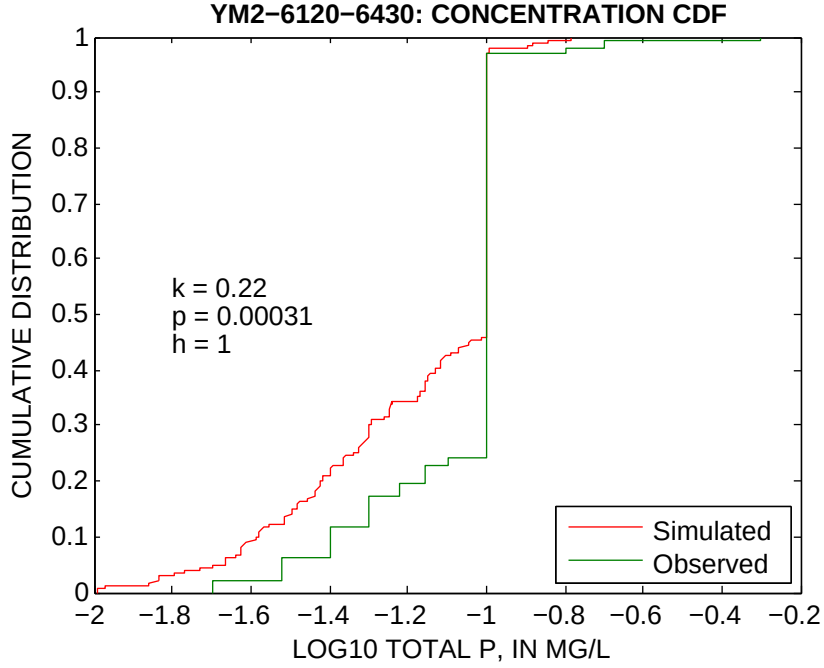
	n	observe	simulate
		178	178
min		0.02	0.0078738
		-1.69897	-2.10382
mean		0.0914045	0.0569569
		-1.07669	-1.35902
media		0.1	0.046395
		-1	-1.33353
max		0.5	0.25617
		-0.30103	-0.591472
varian		0.00177372	0.00181358
		0.036569	0.106532
JB		0.001	0.001
		0.001	0.138451
		ra	log
%		-37.6869	26.2222
err.va		0.00487164	0.222435
rel.std.err		2.74656	6.08261
mod.eff		-1.74656	-5.08261

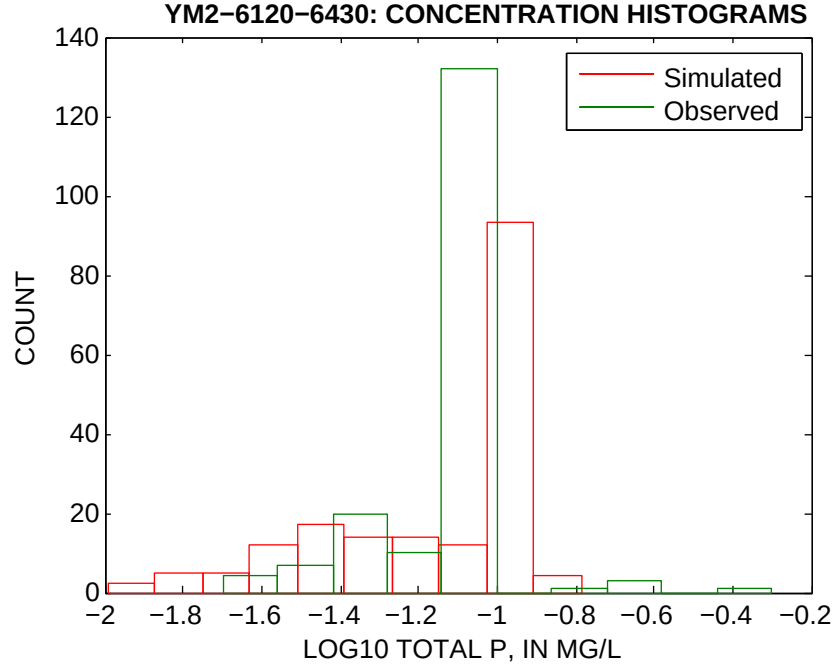
VERSION 2.1

ALL DATA
LOG10

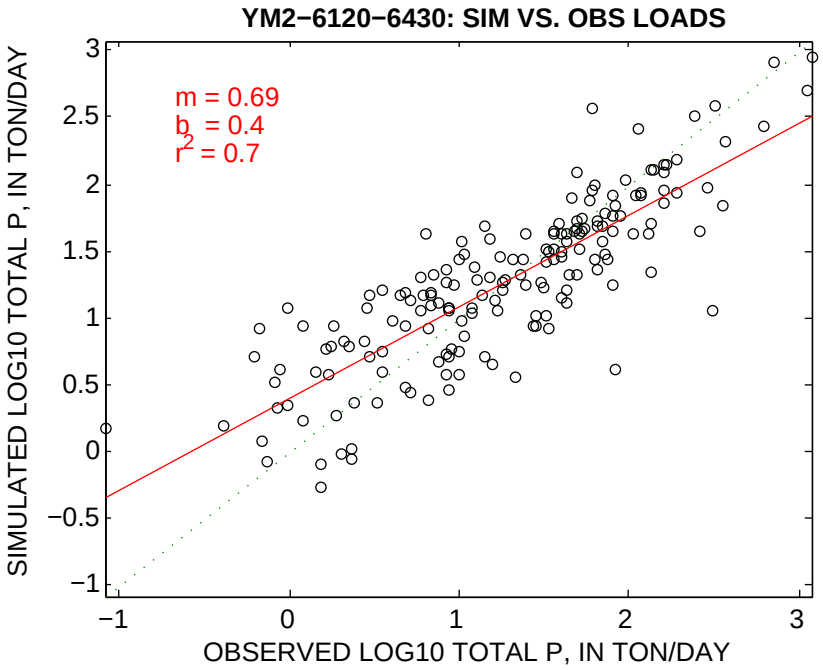


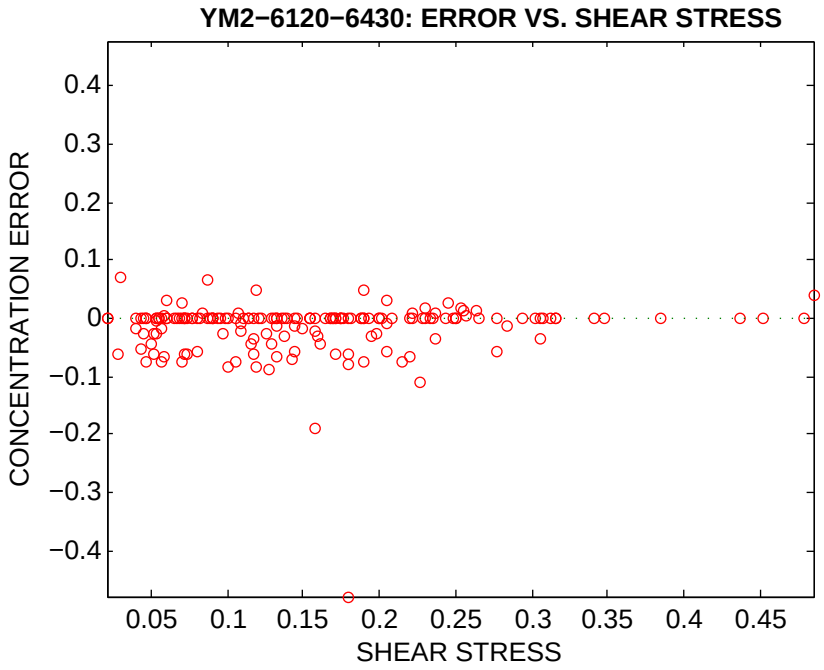


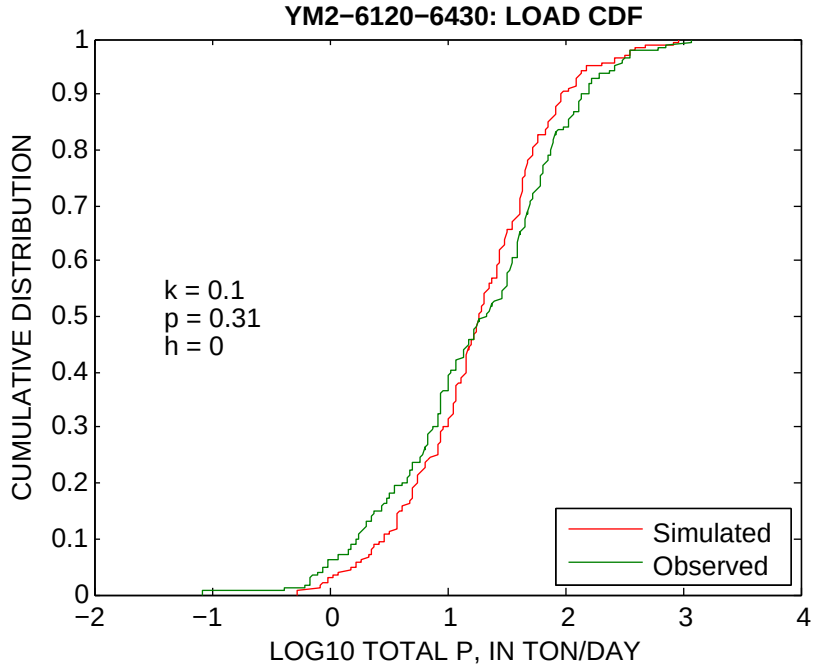


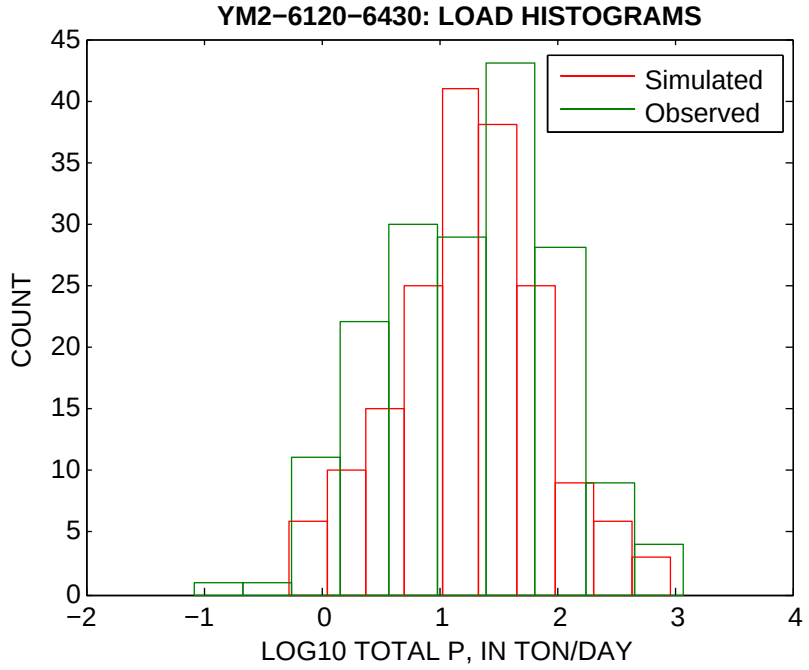


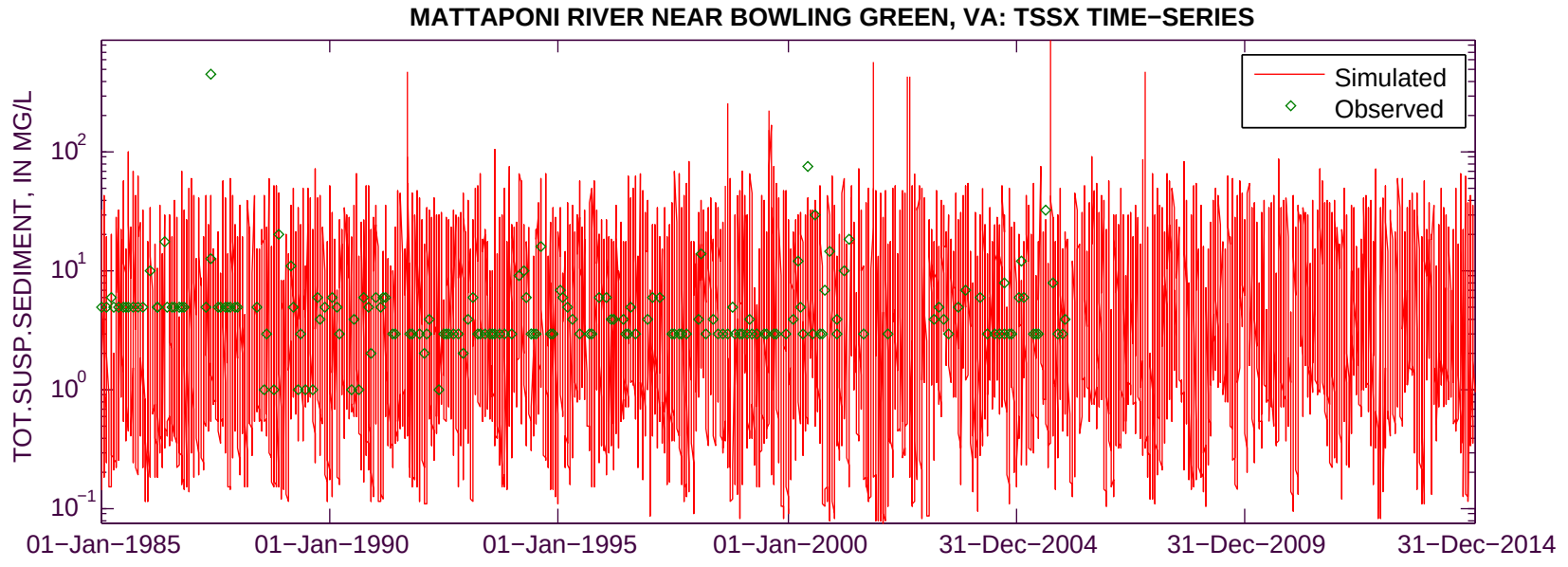
LOAD DATA
LOG10

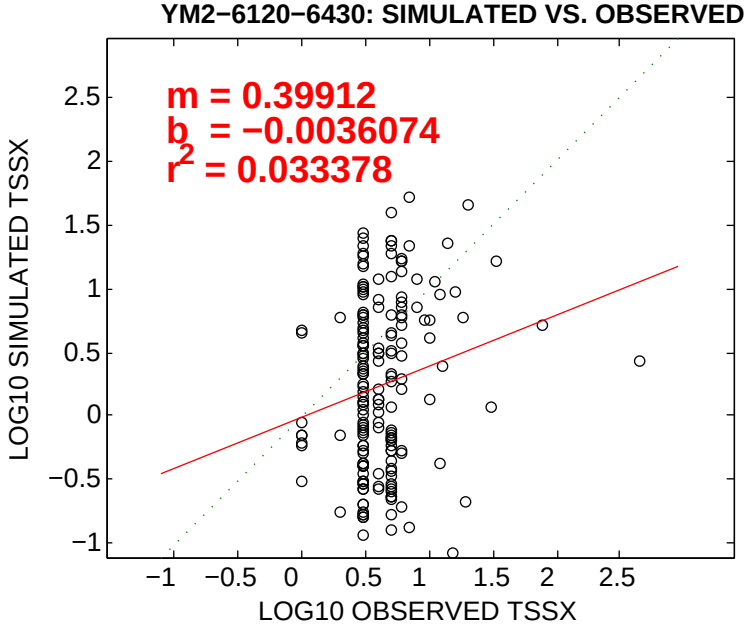


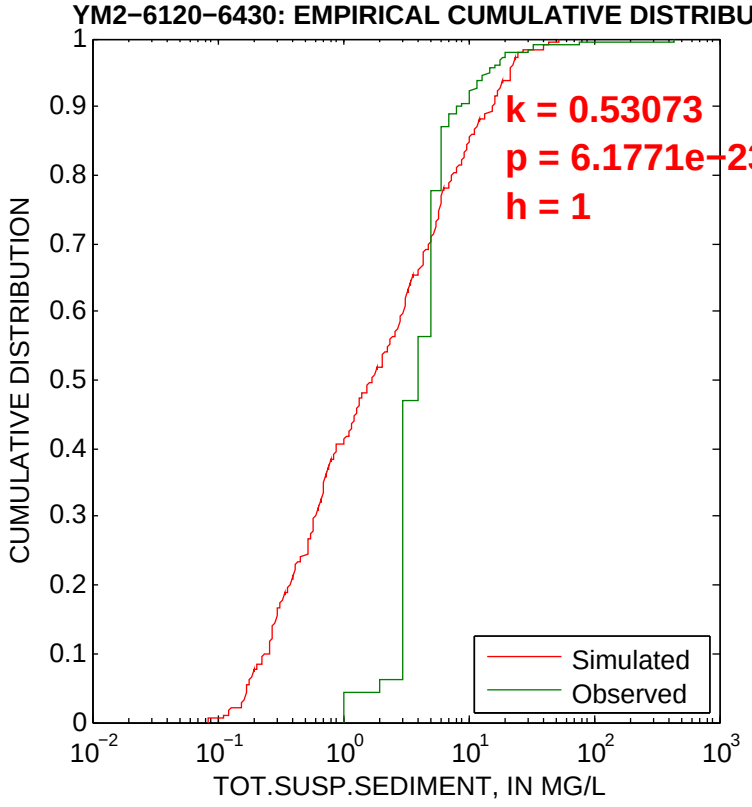












DATA SELECTION

scenario	file
P620171001WQ	TSSX.calib

plot: TSSX - total suspended ...

Dates: 1/1/1985 – 12/31/201

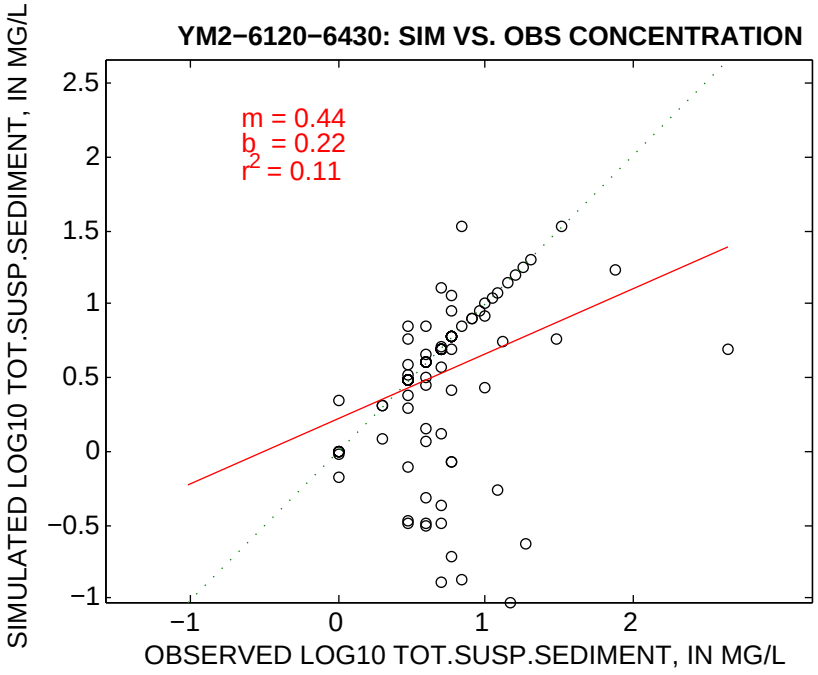
Drive	Directory	Observed
N/A	model	OBS20161101

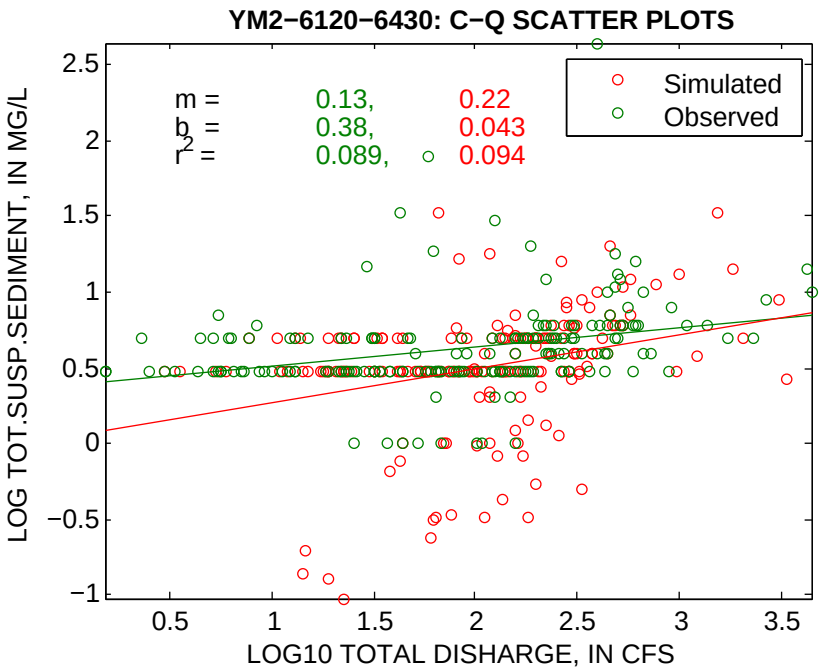
STATISTICS

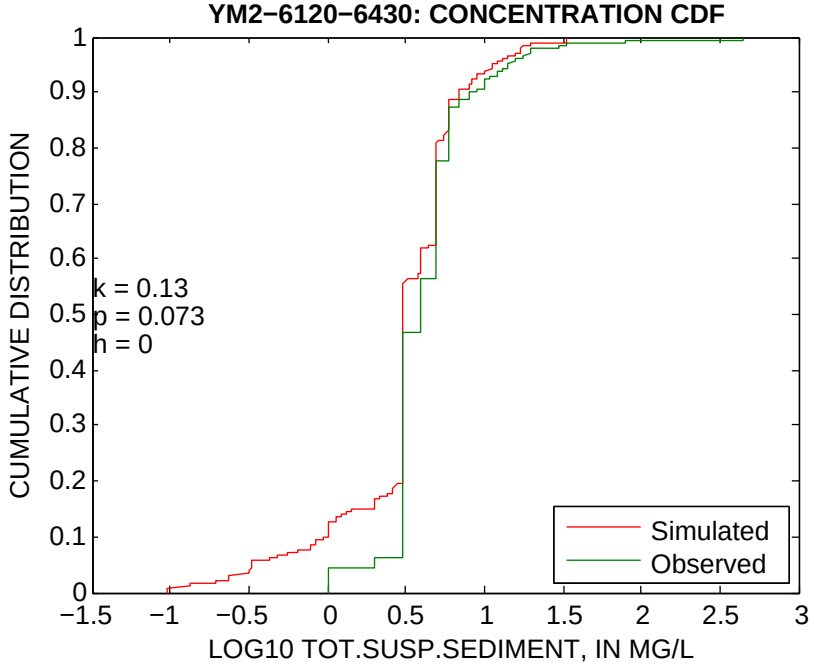
	observe	simulate
n	179	179
min	1 0	0.084189 -1.07474
mean	7.85475 0.632767	5.10504 0.24894
media	4 0.60206	1.703 0.231215
max	446 2.64933	52.776 1.72244
varian	1131.75 0.0939134	64.7773 0.4482
JB	0.001 0.001	0.001 0.023085
	ra	log
%	-35.007	-60.6585
err.va	1200.53	0.615299
rel.std.err	1.06077	6.55177
mod.eff	-0.0607685	-5.55177

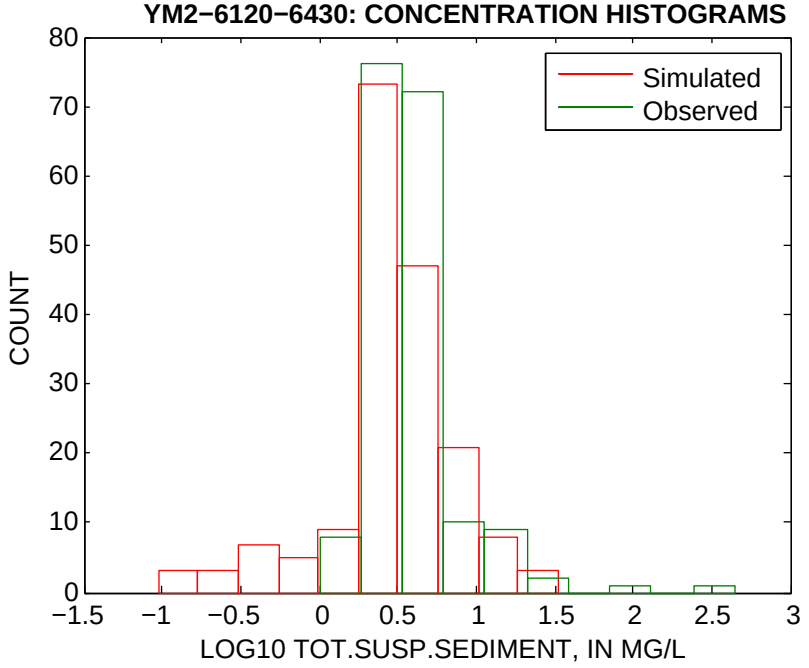
VERSION 2.1

ALL DATA
LOG10

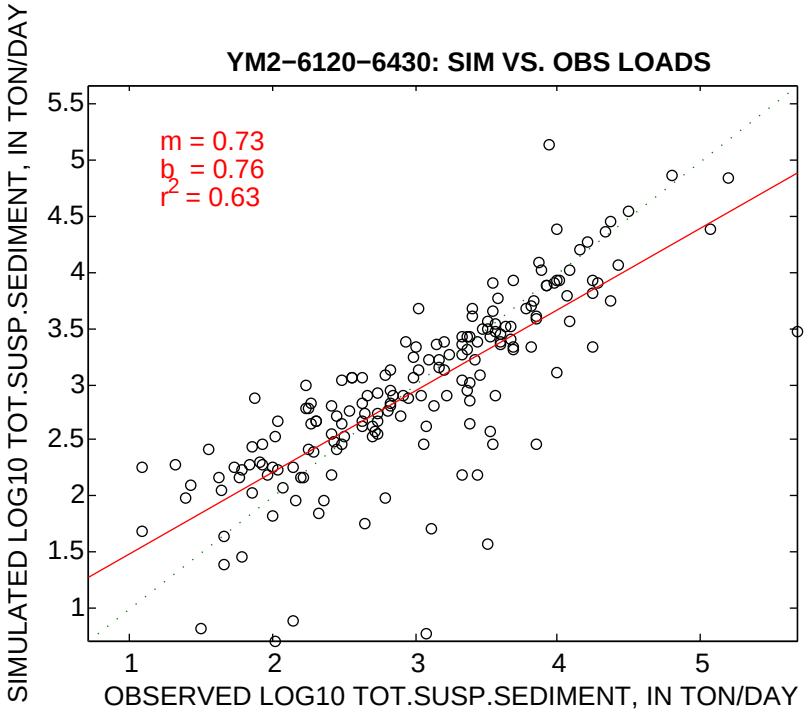


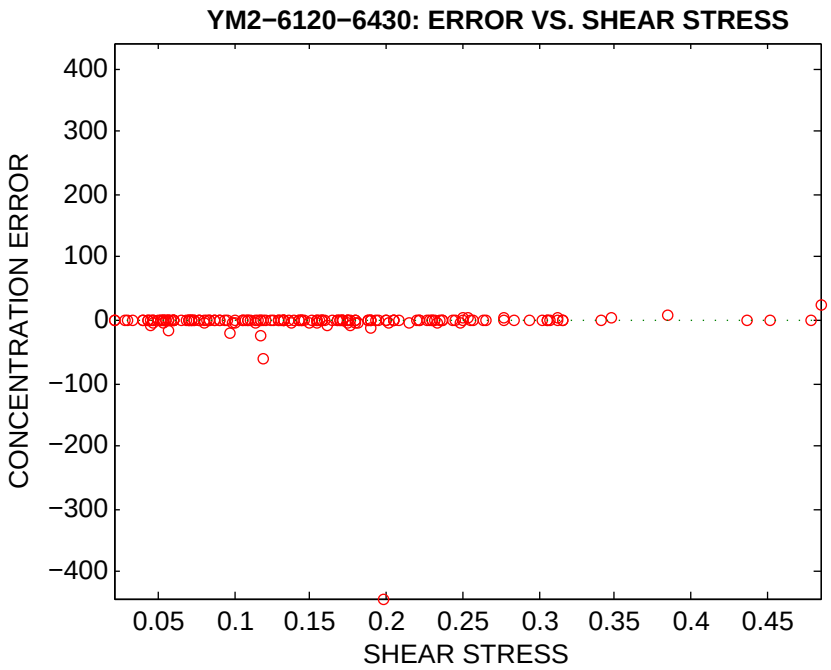


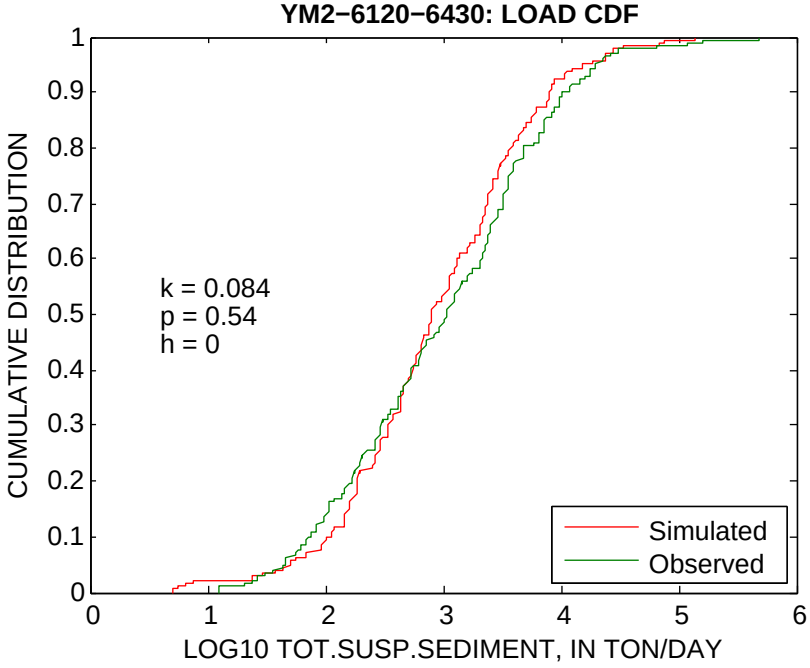


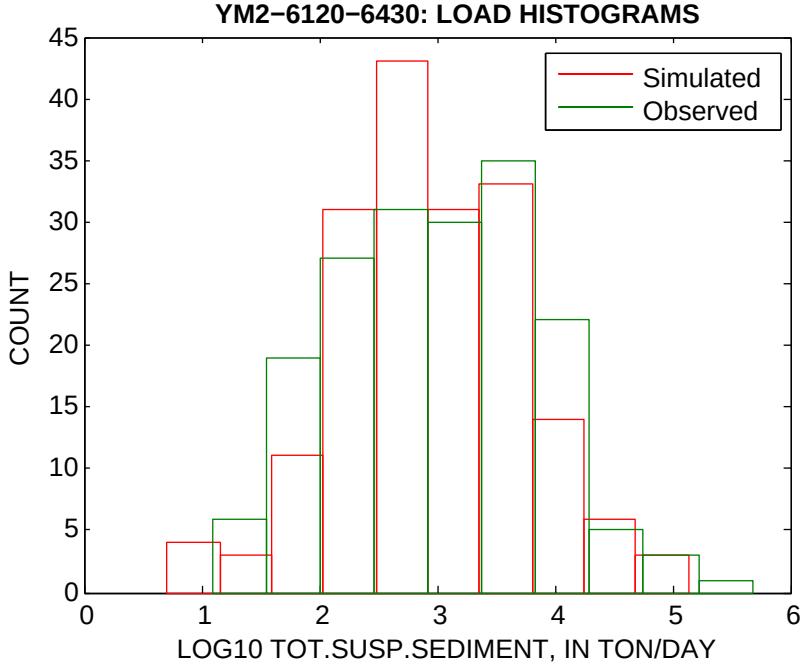


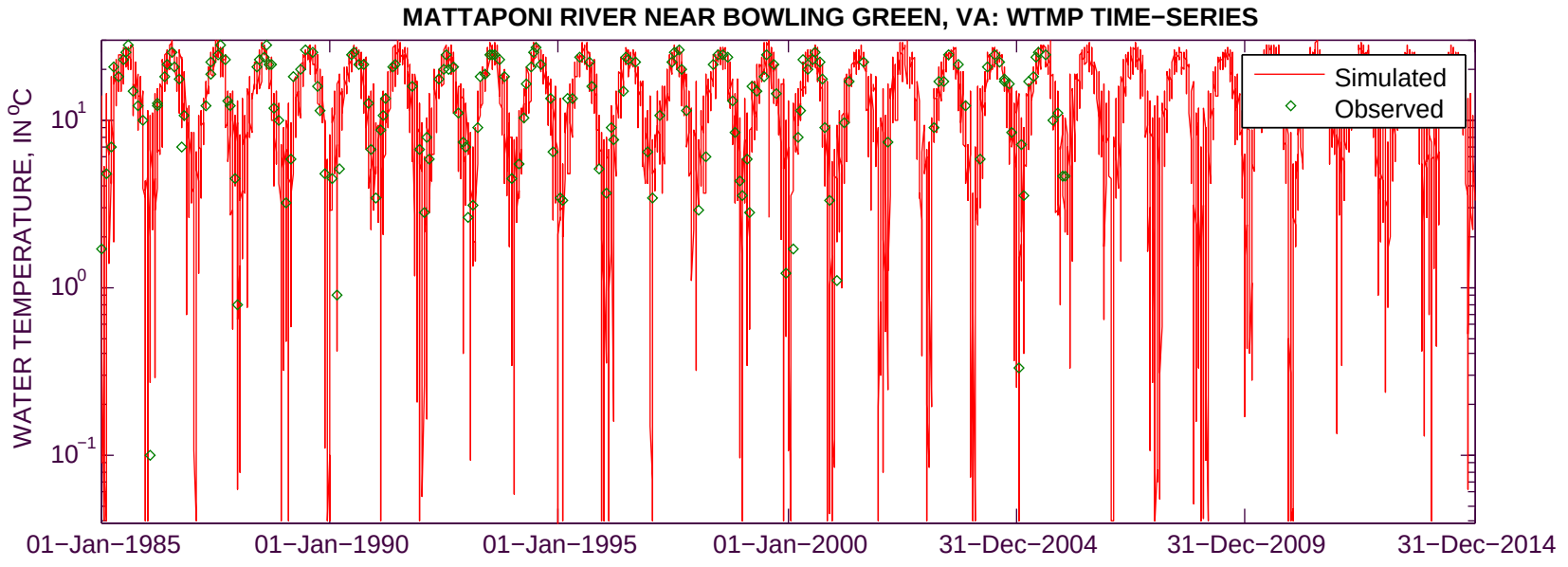
LOAD DATA
LOG10

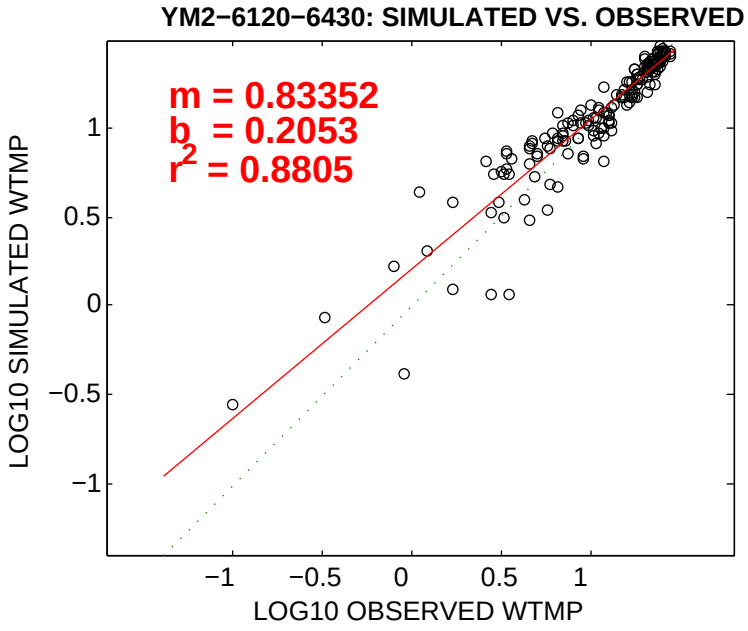


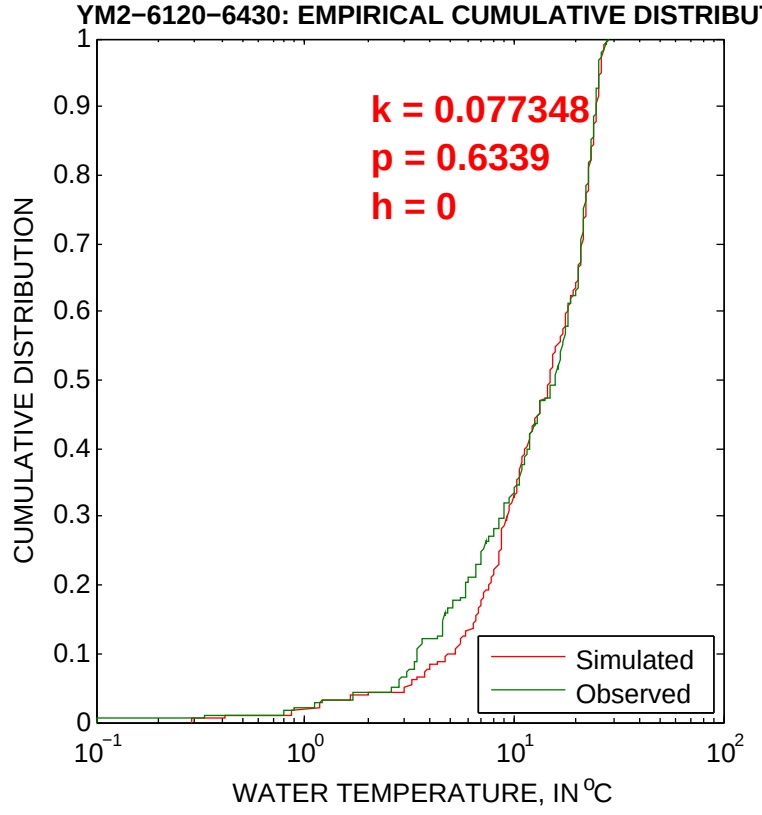












DATA SELECTION

scenario	file
P620171001WQ	WTMP.calib

plot: WTMP - water tempera...

Dates: 1/1/1985 – 12/31/201

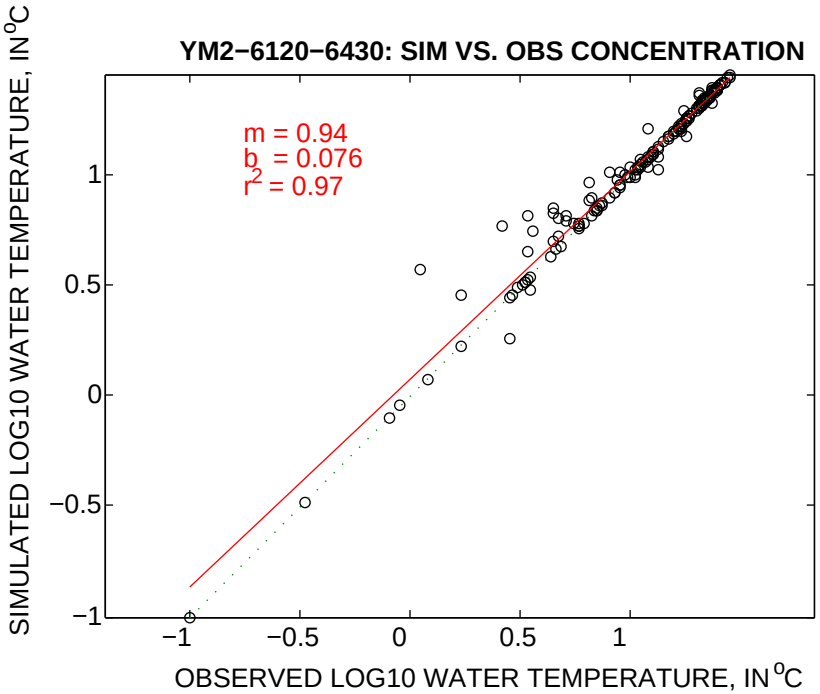
Drive	Directory	Observed
N/A	model	OBS20161101

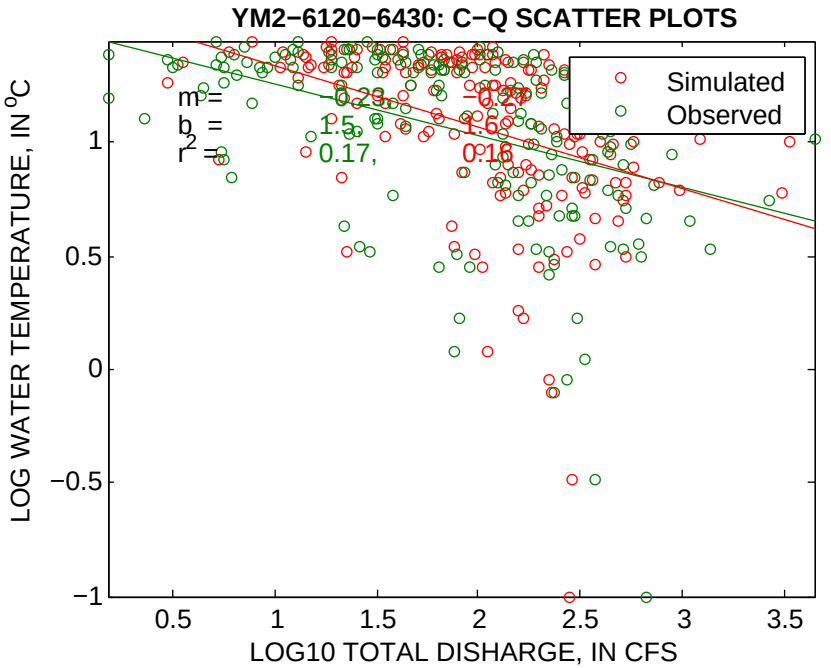
STATISTICS

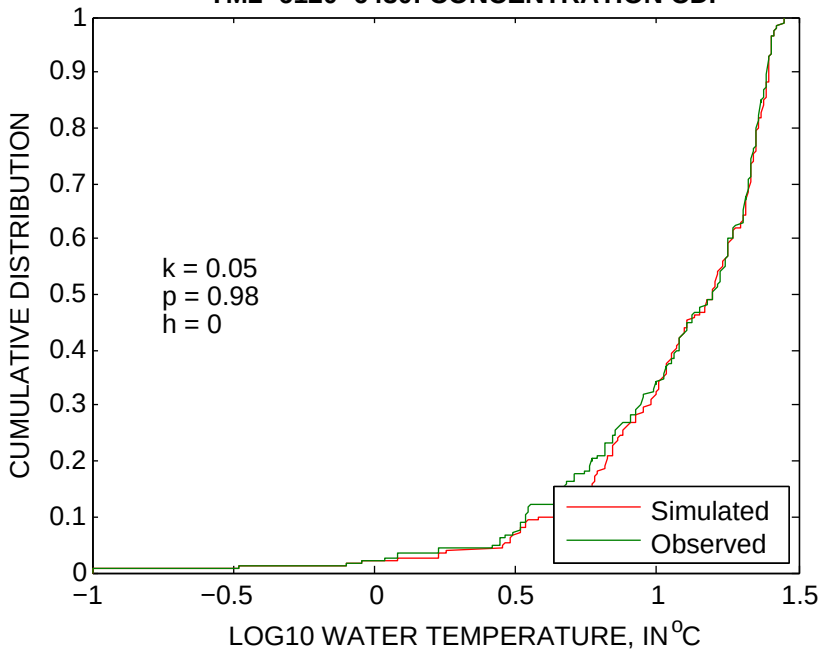
	n	observe	simulate
		181	181
min		0.1	0.28403
		-1	-0.546636
mean		14.6423	14.972
		1.05343	1.08337
media		15.7	14.81
		1.1959	1.17056
max		28.2	28.46
		1.45025	1.45423
varian		63.8219	58.6246
		0.149232	0.117753
JB		0.006789	0.010415
		0.001	0.001
		ra	log
%		2.25184	2.84135
err.va		4.51292	0.0191084
rel.std.err		0.707112	0.128045
mod.eff		0.929289	0.871955

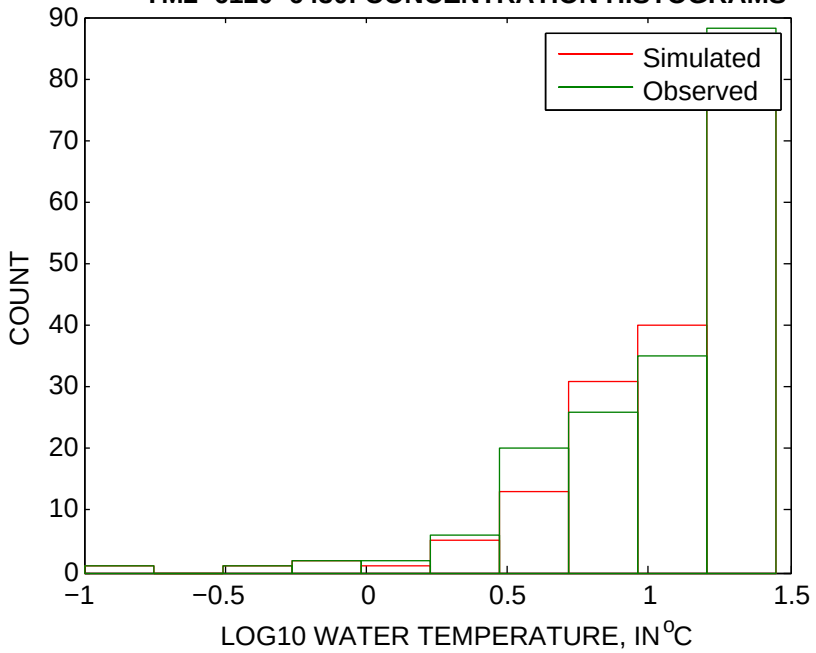
VERSION 2.1

ALL DATA
LOG10

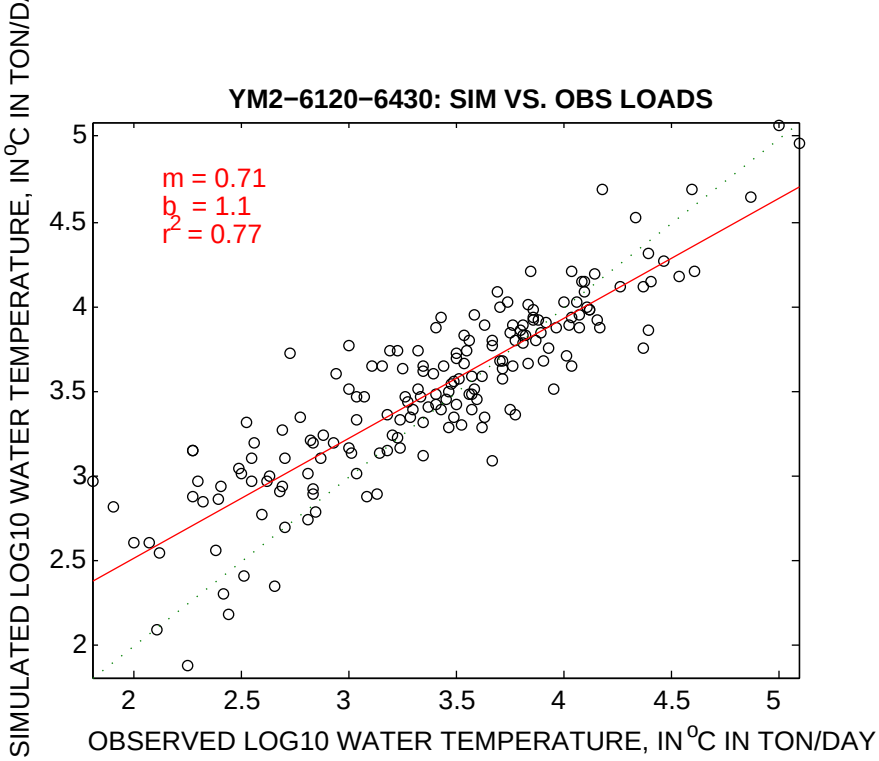


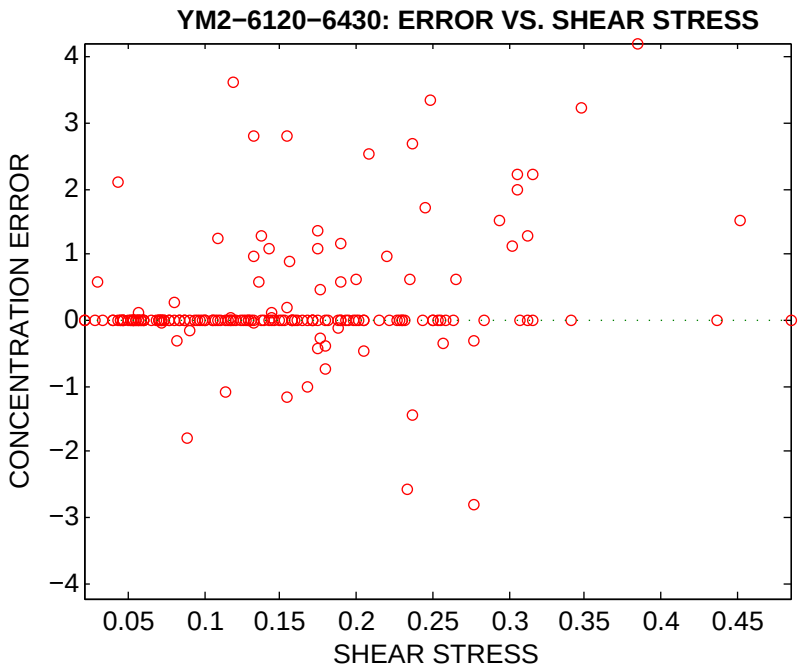


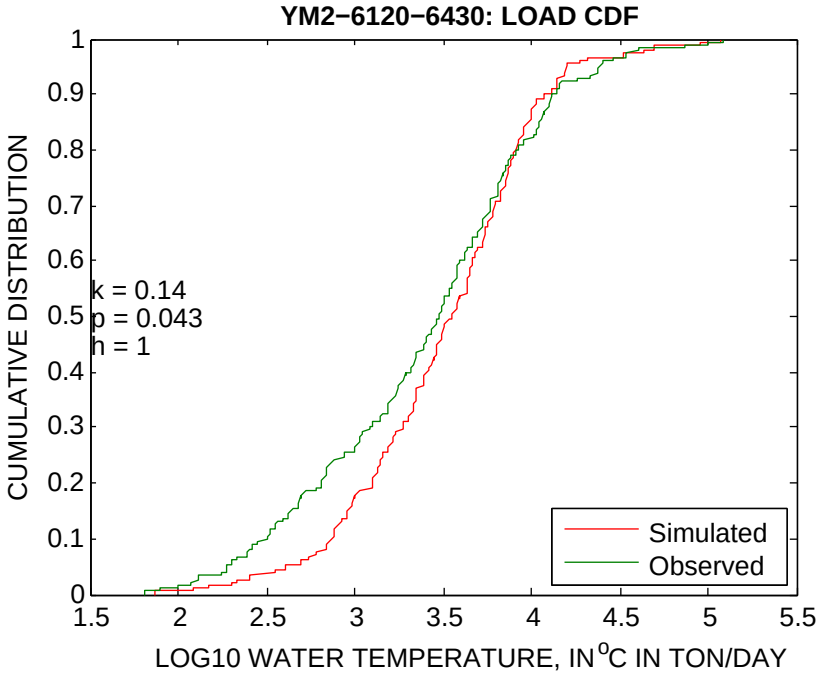


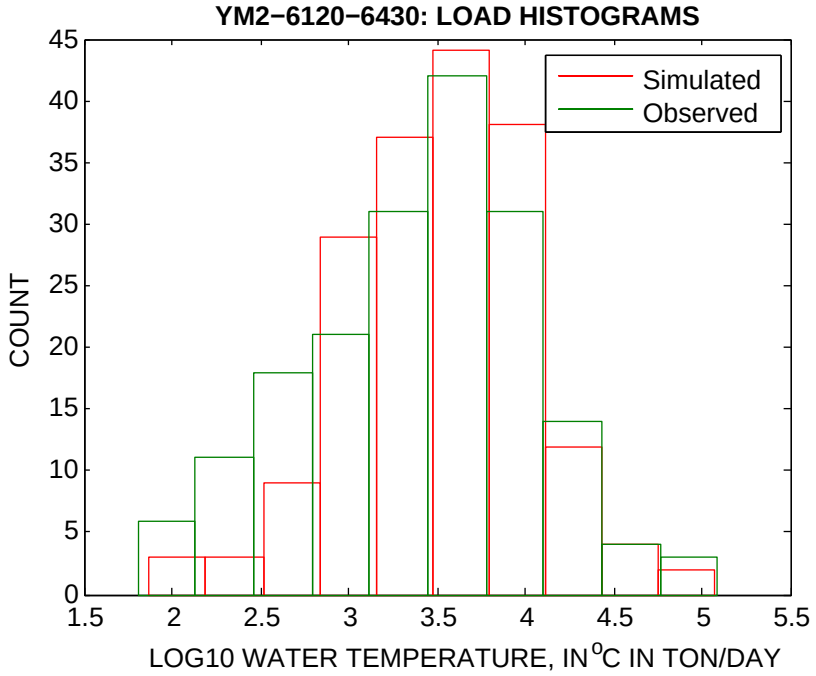


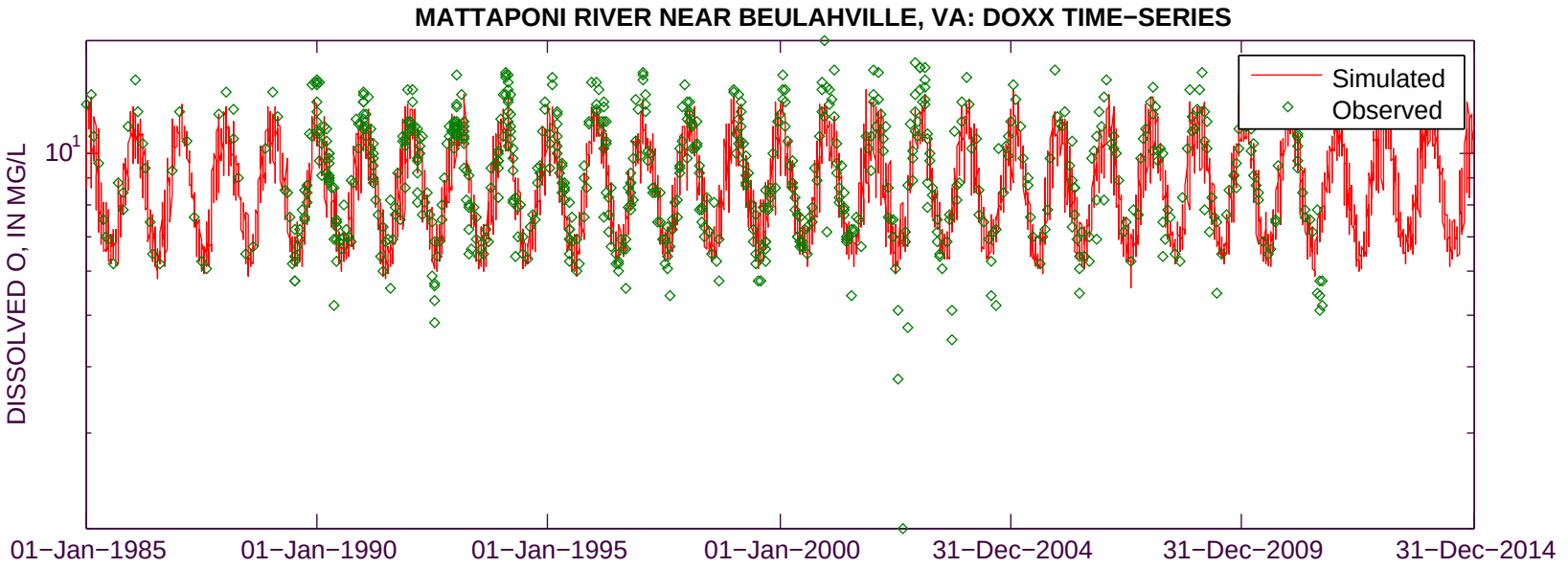
LOAD DATA
LOG10

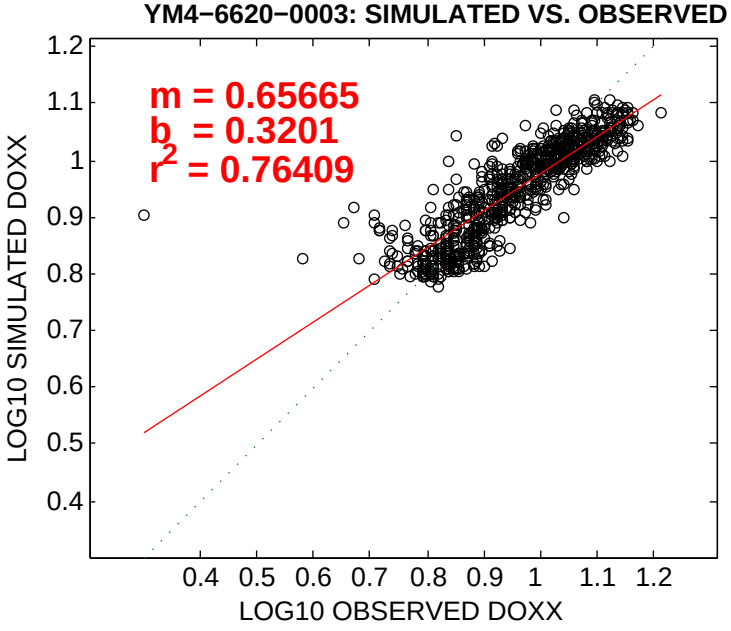


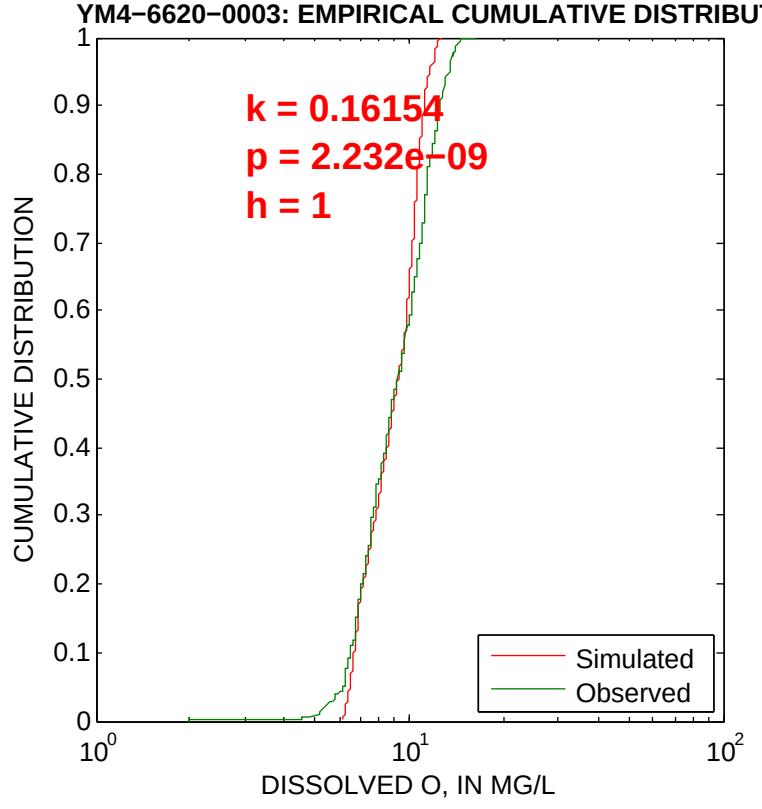












DATA SELECTION

scenario	file
P620171001WQ	DOXX.calib

plot: DOXX - dissolved oxygen

Dates: 1/1/1985 – 12/31/201

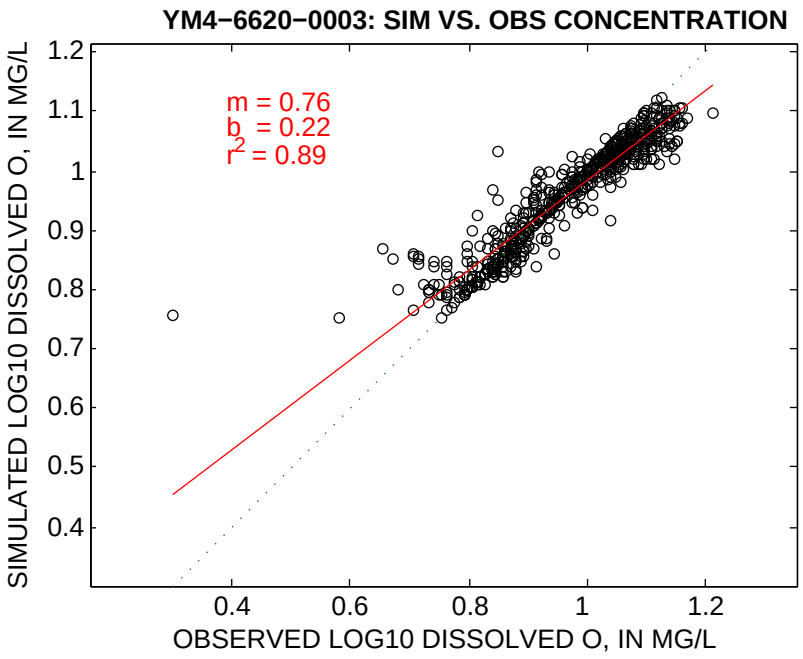
Drive	Directory	Observed
N/A	model	OBS20161101

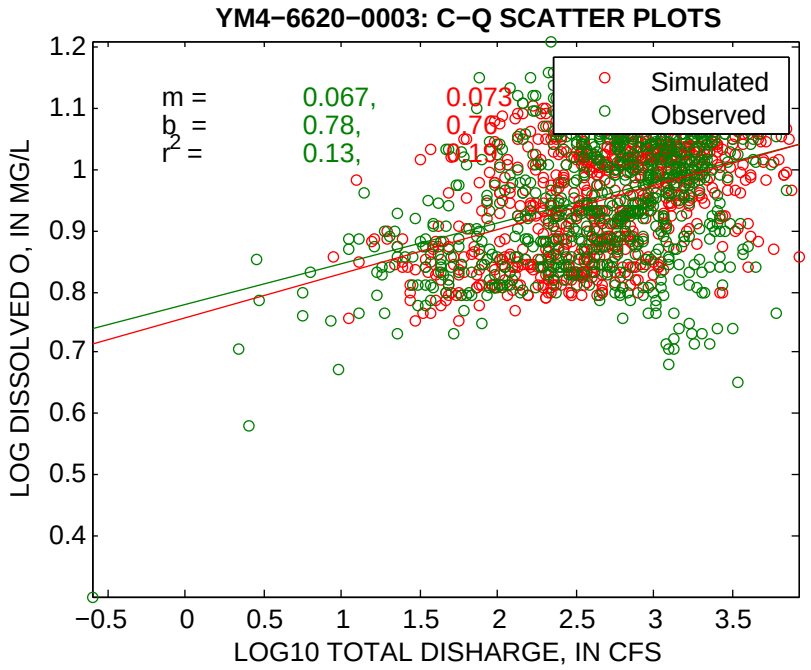
STATISTICS

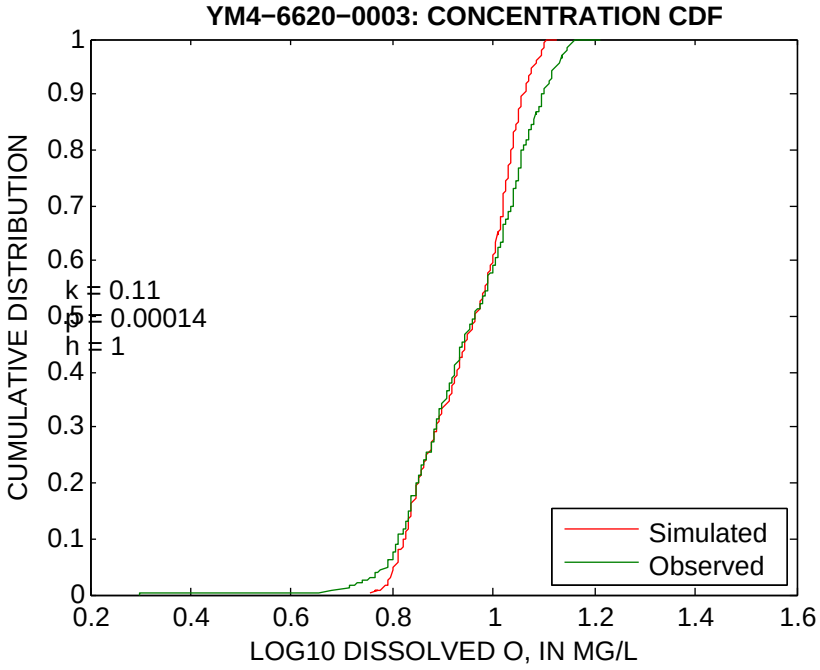
	n	780	780
		observe	simulate
min		2	5.9954
		0.30103	0.777818
mean		9.3577	9.04981
		0.957165	0.948627
media		9.2	9.21645
		0.963788	0.964564
max		16.3	12.824
		1.21219	1.10802
varian		5.41902	2.9121
		0.0126091	0.00711562
JB		0.001	0.001
		0.001	0.001
		ra	log
%		-3.29024	-0.891941
err.va		1.3363	0.00323813
rel.std.err		0.246595	0.256808
mod.eff		0.753405	0.743192

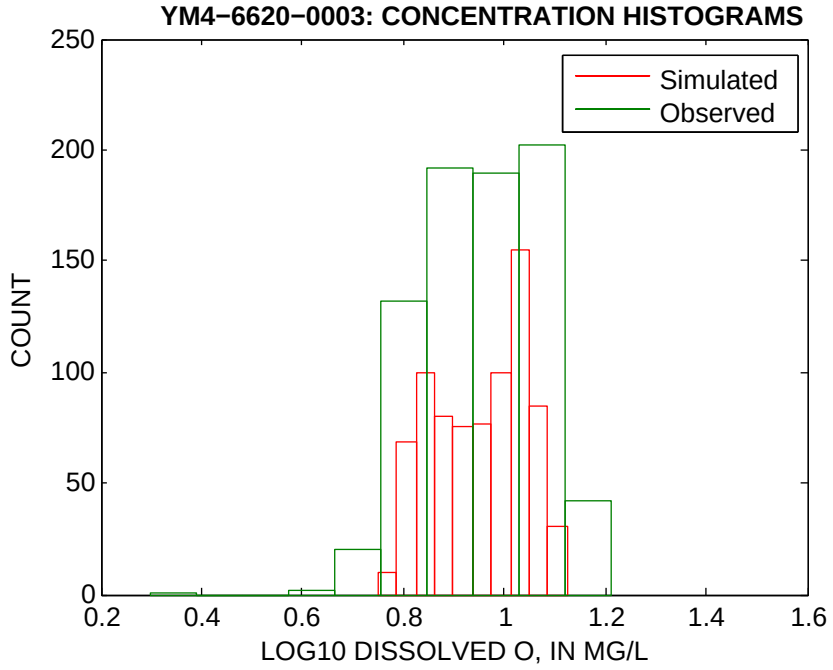
VERSION 2.1

ALL DATA
LOG10

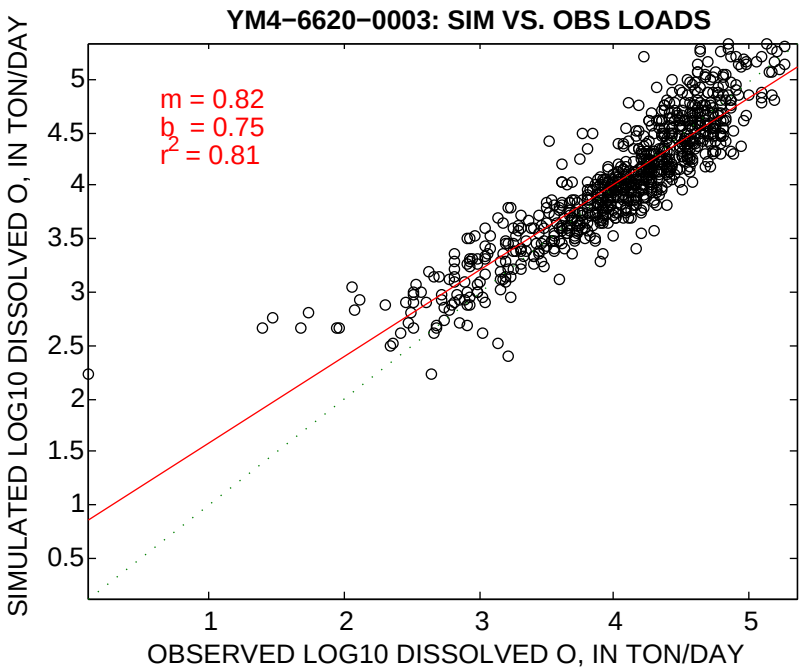


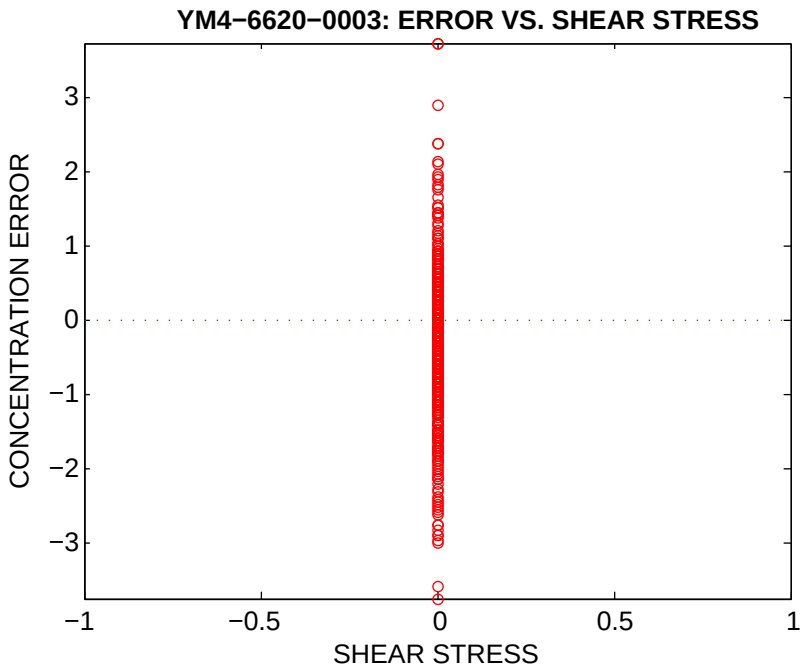


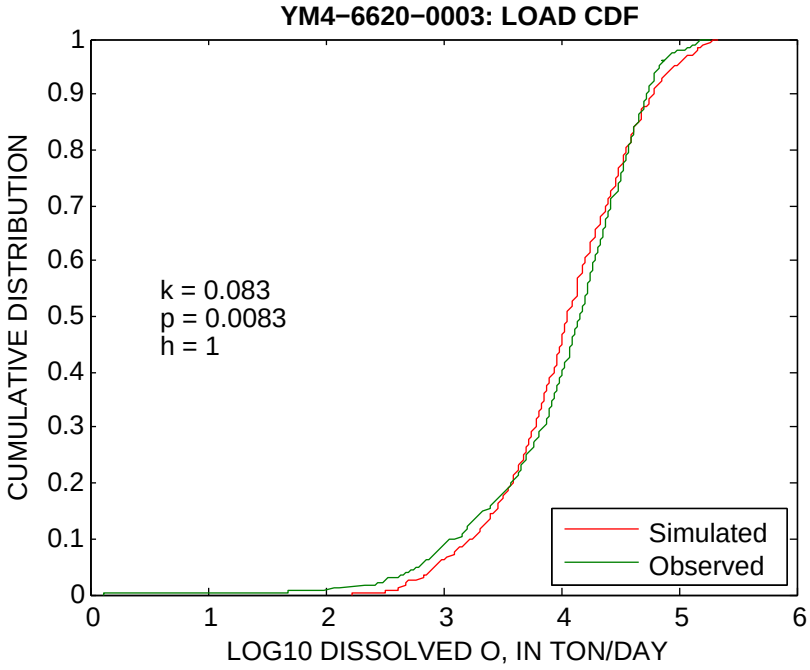


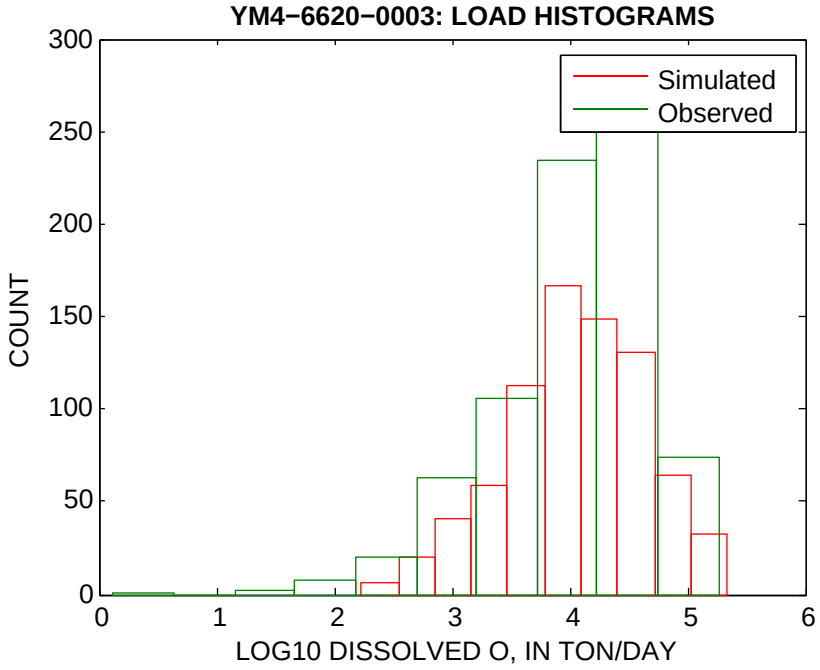


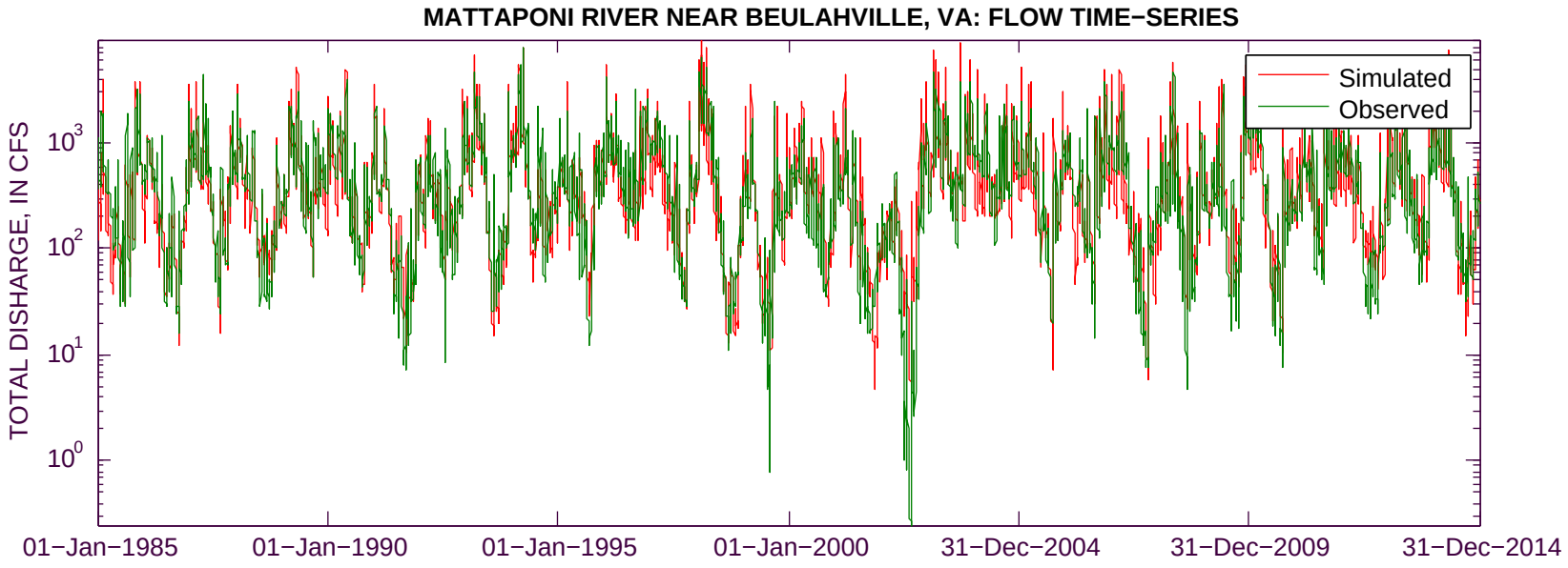
LOAD DATA
LOG10

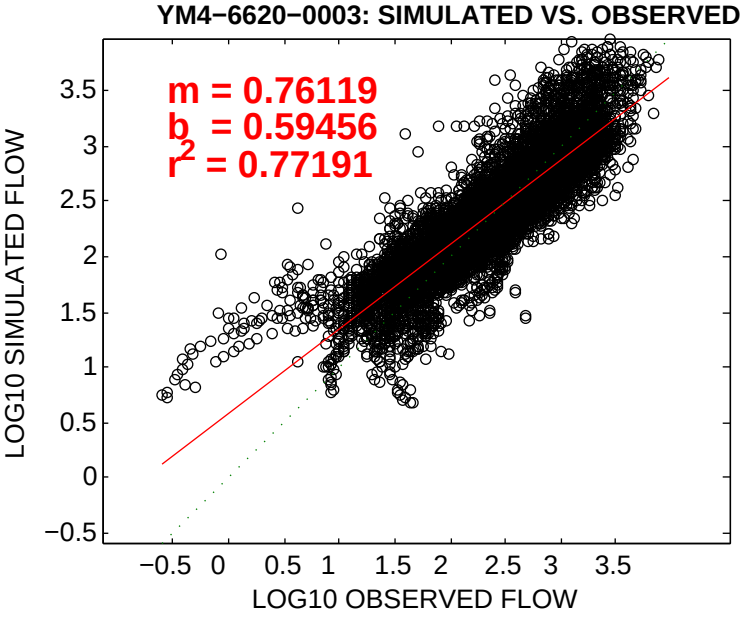


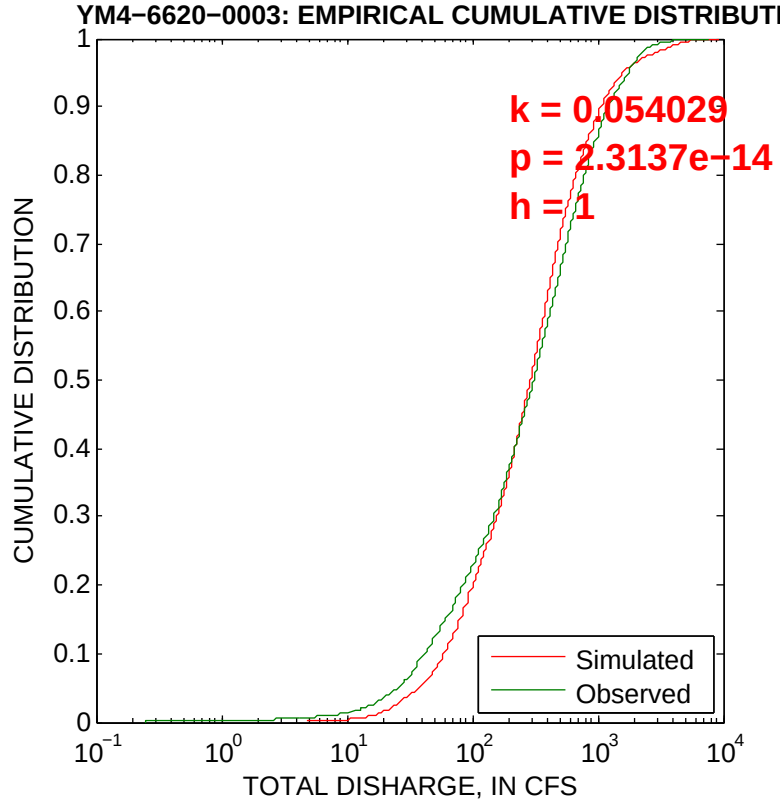












DATA SELECTION

scenario	file
P620171001WQ	_FLOW.calib

plot: FLOW - total discharge

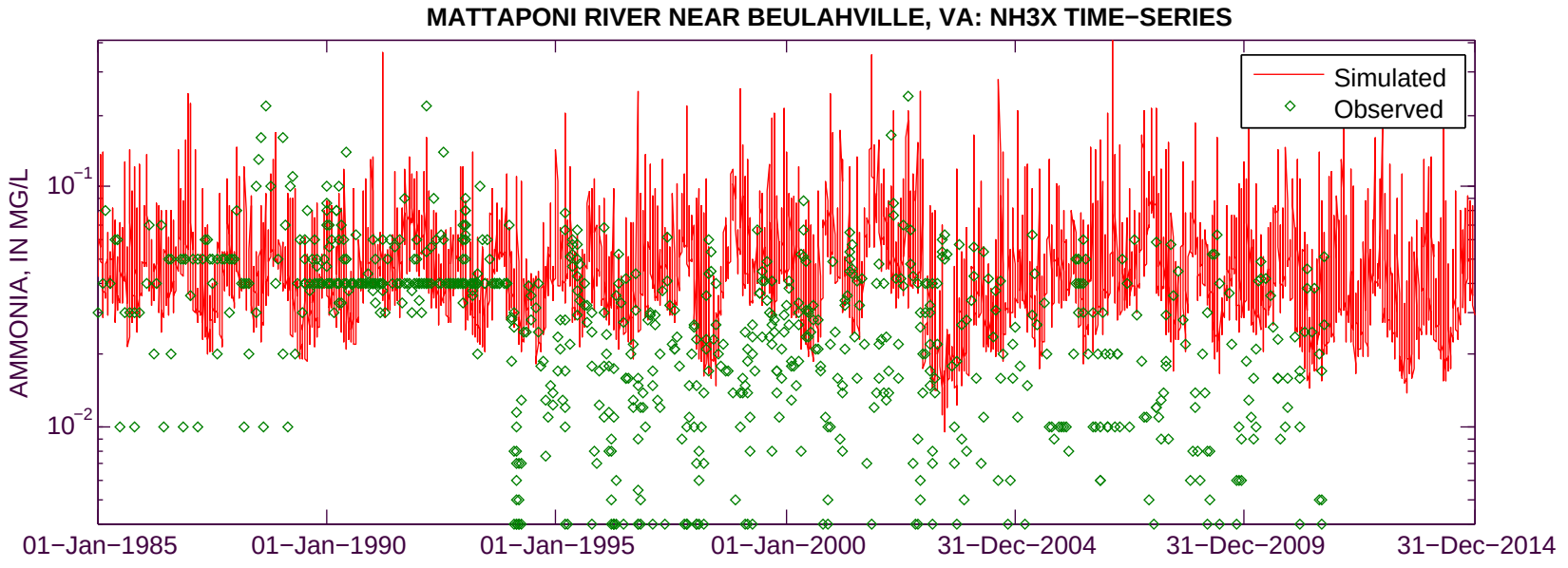
Dates: 1/1/1985 – 12/31/201

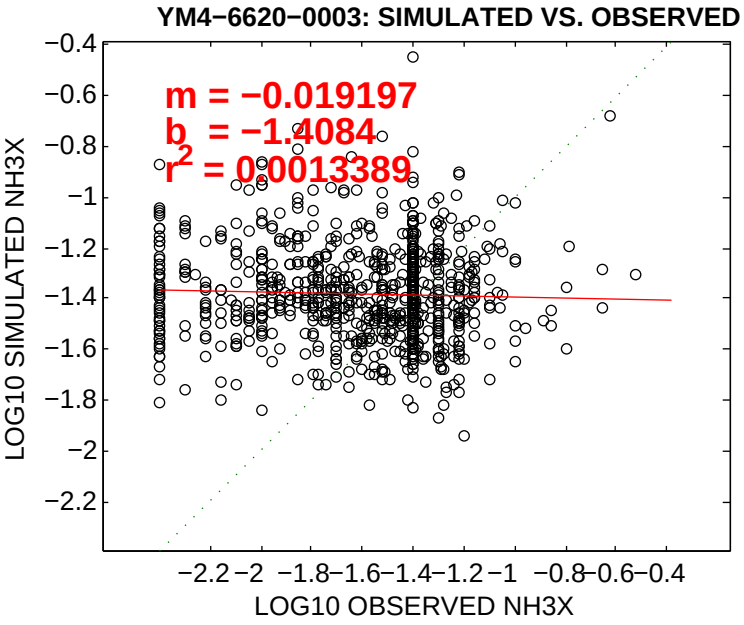
Drive	Directory	Observed
N/A	model	OBS20161101

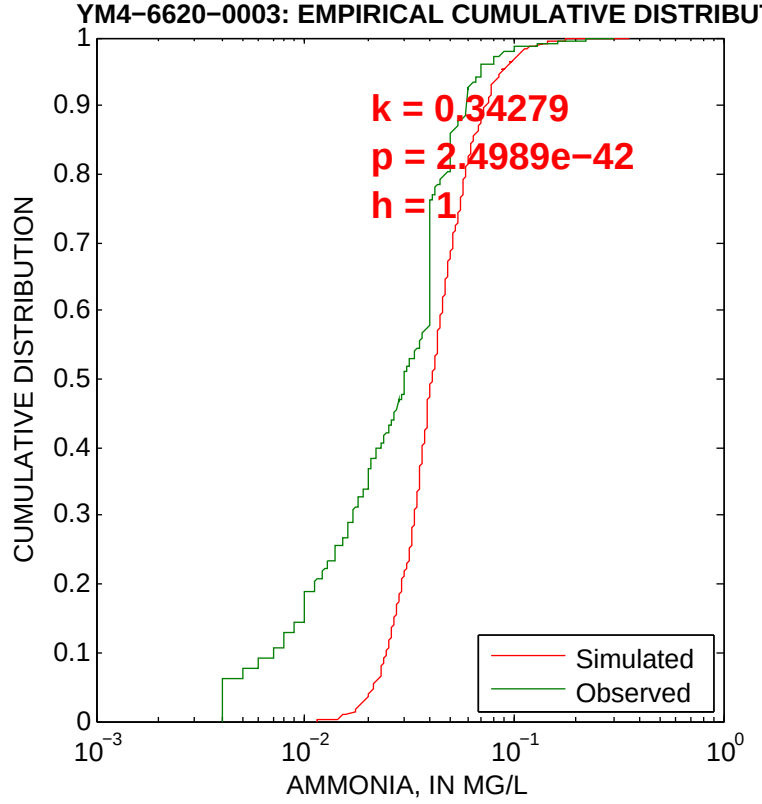
STATISTICS

	observe	simulate
n	10957	10957
min	0.25	4.6714
	-0.60206	0.669447
mean	514.118	507.847
	2.41598	2.43358
media	311	293.37
	2.49276	2.46742
max	7780	9445.6
	3.89098	3.97523
varian	387209	555249
	0.328854	0.246842
JB	0.001	0.001
	0.001	0.001
	ra	log
%	-1.21967	0.728255
err.va	285703	0.0753671
rel.std.err	0.737853	0.229181
mod.eff	0.262147	0.770819

VERSION 2.1







DATA SELECTION

scenario	file
P620171001WQ	NH3X.calib

plot: NH3X - ammonia

Dates: 1/1/1985 – 12/31/201

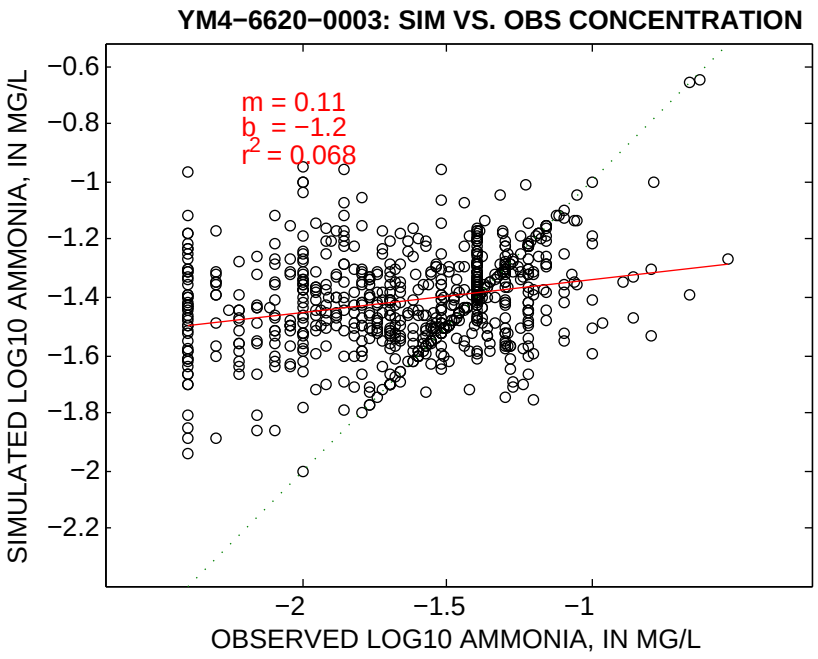
Drive	Directory	Observed
N/A	model	OBS20161101

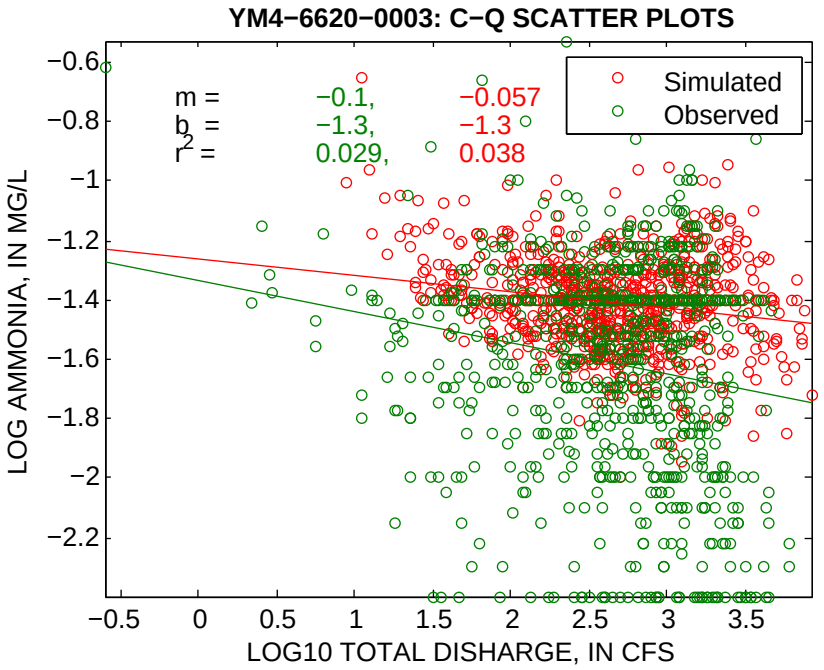
STATISTICS

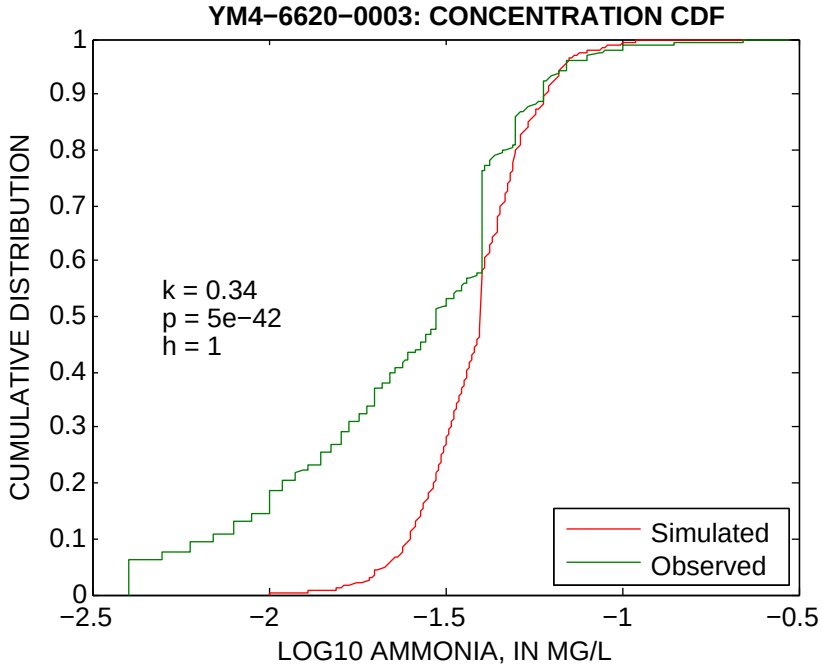
	observe	simulate
n	811	811
min	0.004 -2.39794	0.01146 -1.94082
mean	0.0329761 -1.61185	0.0464779 -1.3775
media	0.03 -1.52288	0.040506 -1.39248
max	0.298 -0.525784	0.36091 -0.442601
varian	0.00072155 0.130625	0.0006389 0.0359541
JB	0.001 0.001	0.001 0.001
	ra	log
%	40.9443	-14.5394
err.va	0.00150545	0.226584
rel.std.err	2.08641	1.73461
mod.eff	-1.08641	-0.734612

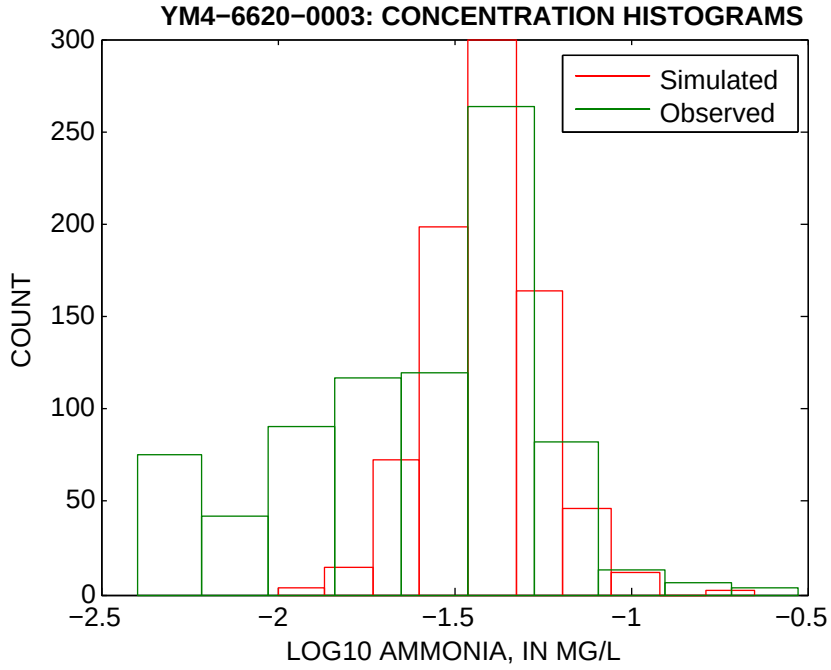
VERSION 2.1

ALL DATA
LOG10

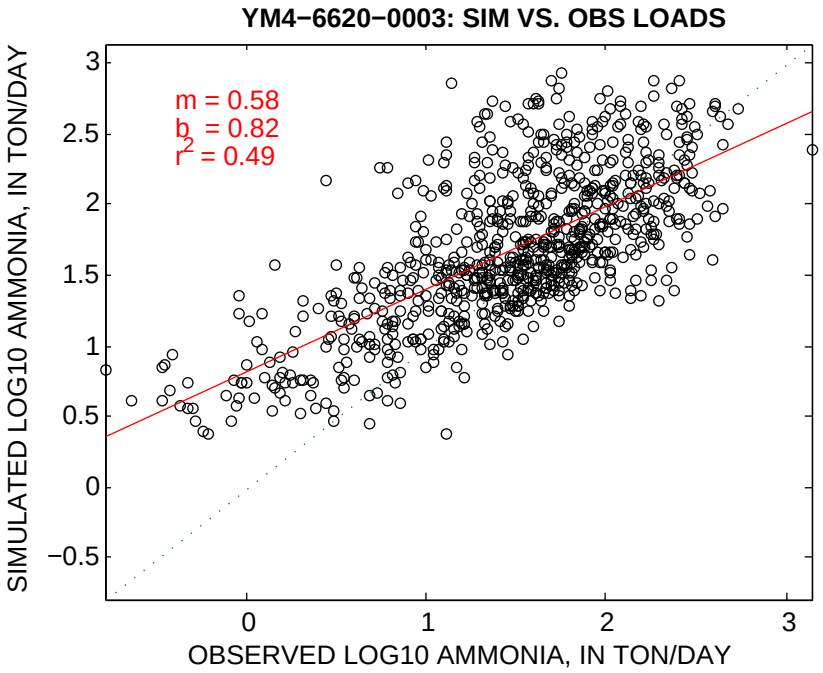


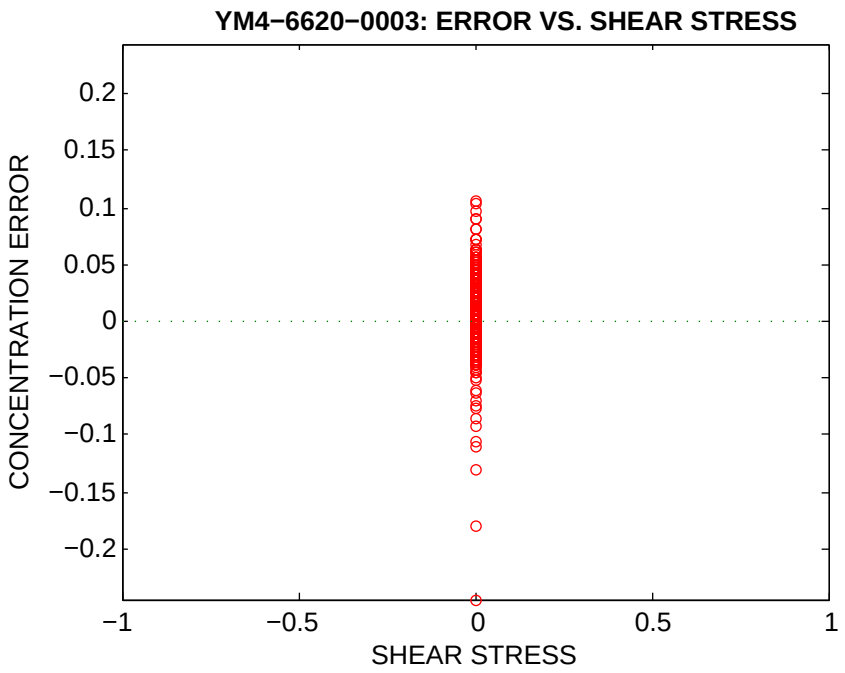


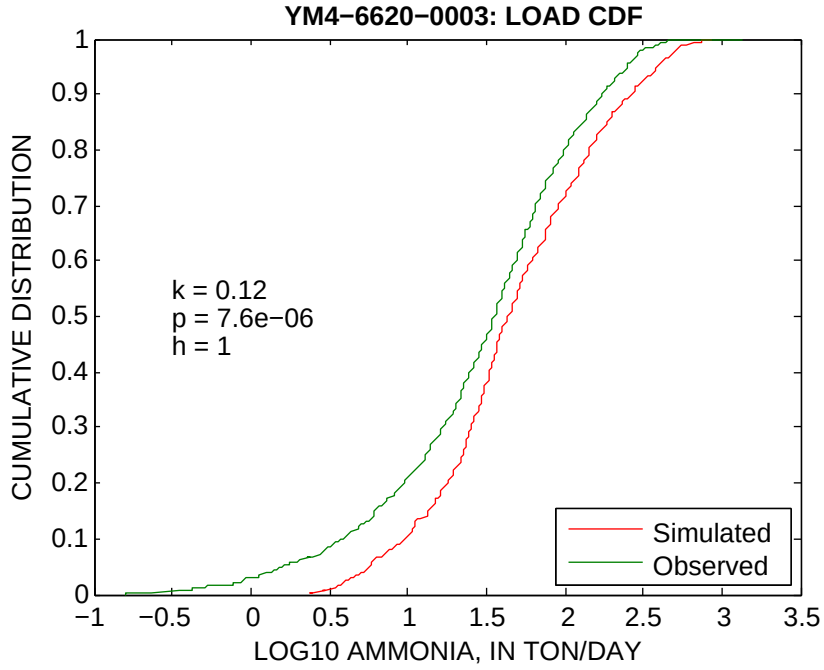


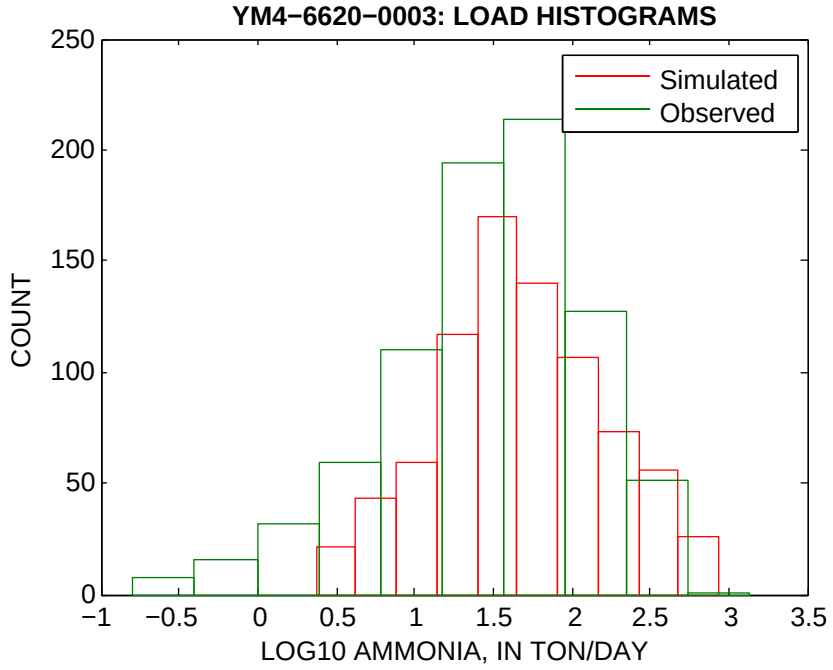


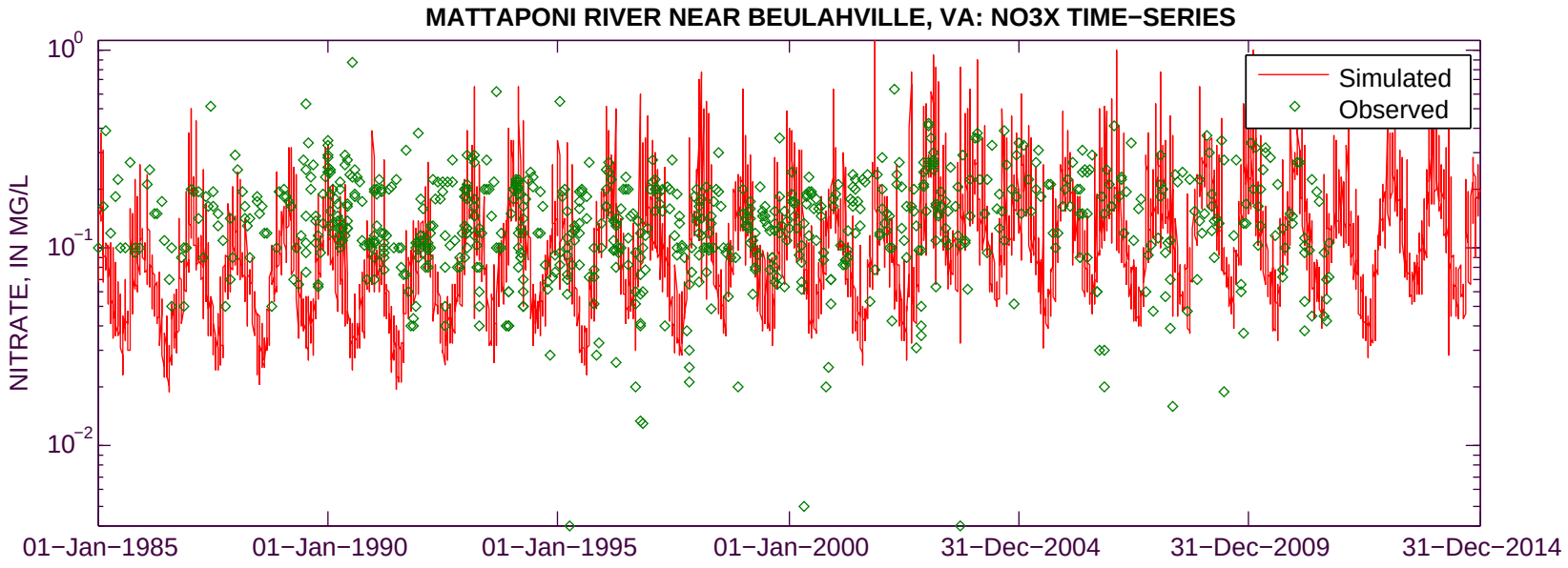
LOAD DATA
LOG10

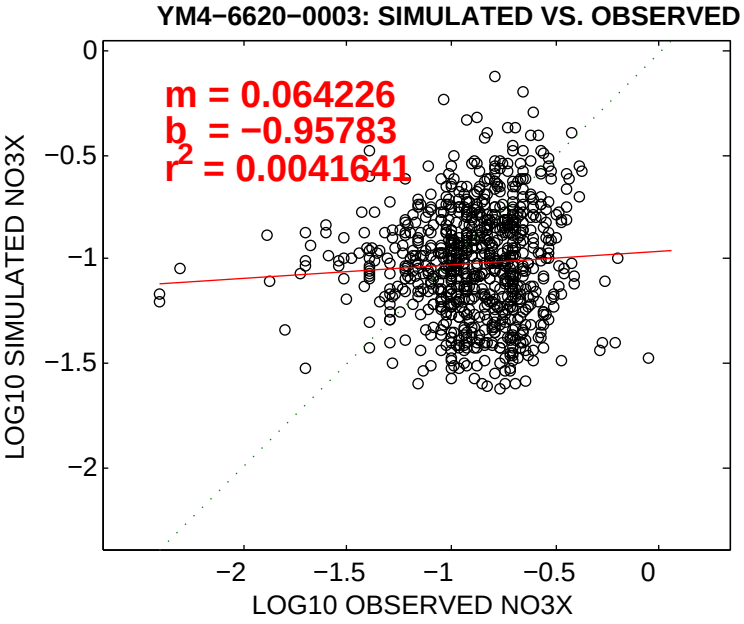


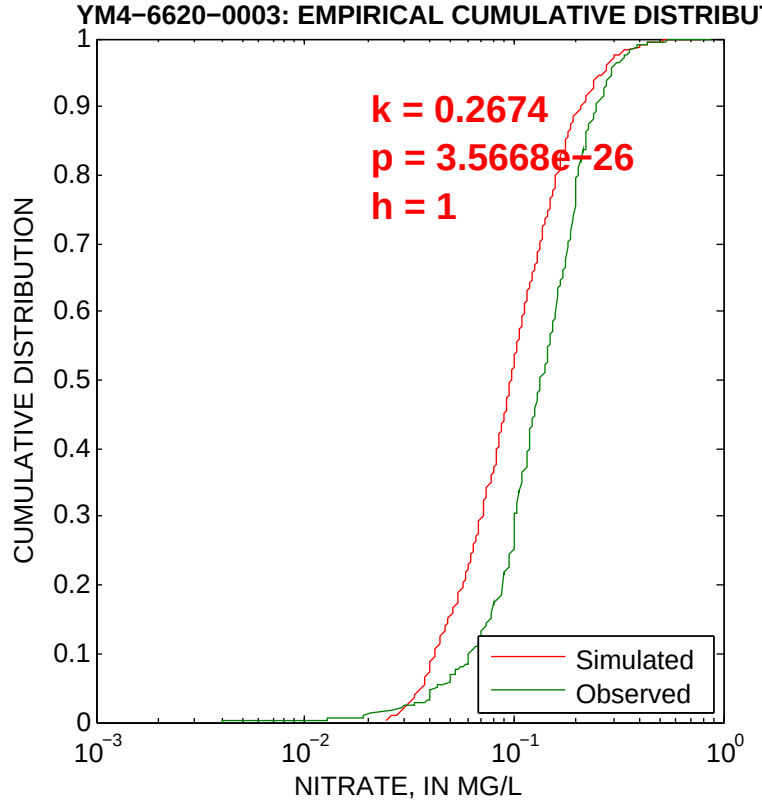












DATA SELECTION

scenario: P620171001WQ | file: NO3X.calib

plot: NO3X - nitrate

Dates: 1/1/1985 – 12/31/201

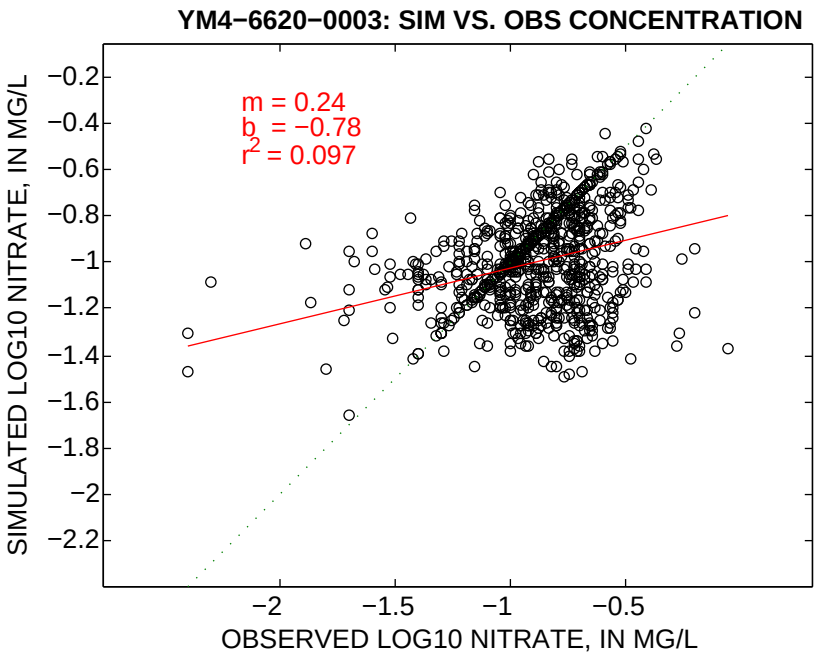
Drive | Directory | Observed: N/A | model | OBS20161101

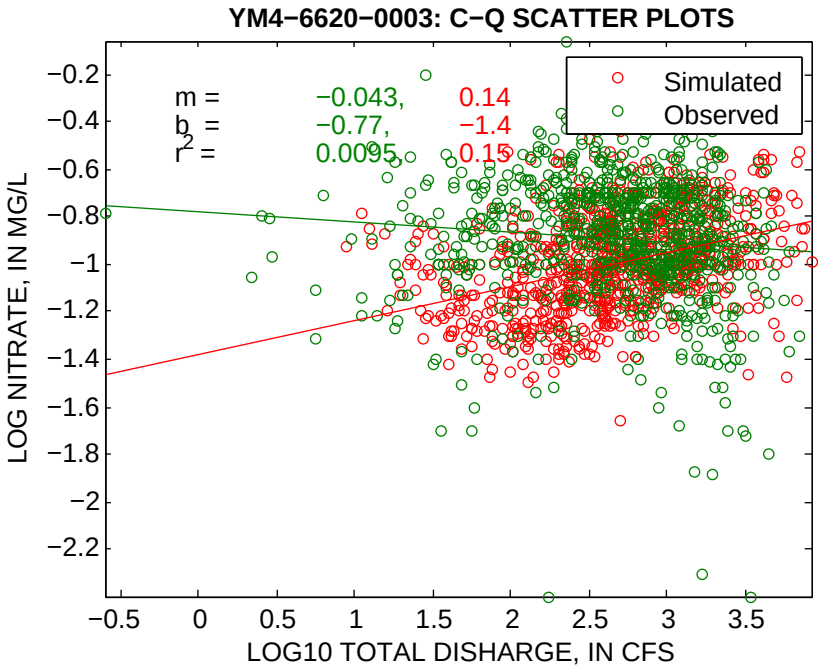
STATISTICS

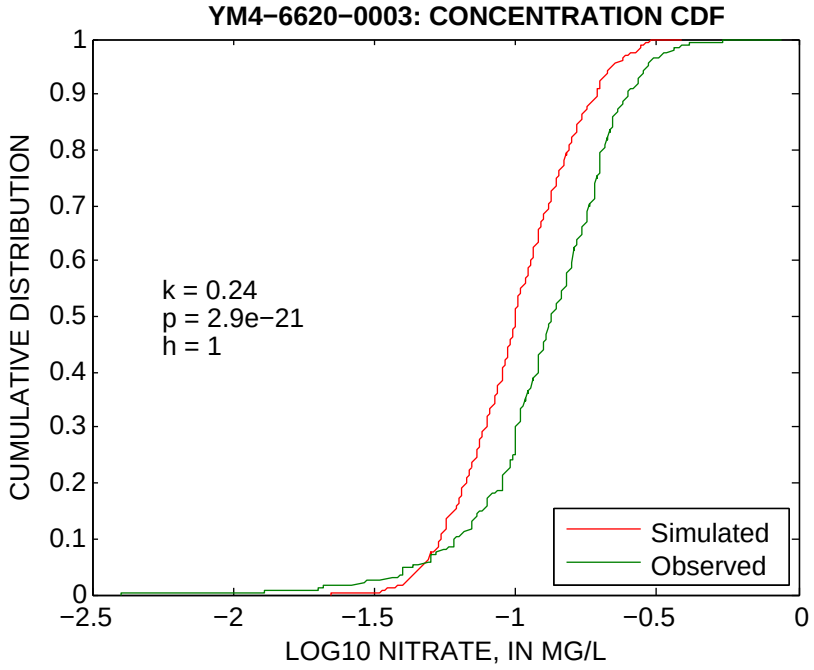
	n	819	819
		observe	simulate
min		0.004	0.023768
		-2.39794	-1.62401
mean		0.151234	0.116465
		-0.888774	-1.01492
media		0.135	0.09646
		-0.869666	-1.01565
max		0.875	0.76593
		-0.0579919	-0.115811
varian		0.00715131	0.00639903
		0.069742	0.0690868
JB		0.001	0.001
		0.001	0.155993
		ra	log
%		-22.9902	14.1928
err.va		0.0133715	0.145802
rel.std.err		1.86979	2.09058
mod.eff		-0.869792	-1.09058

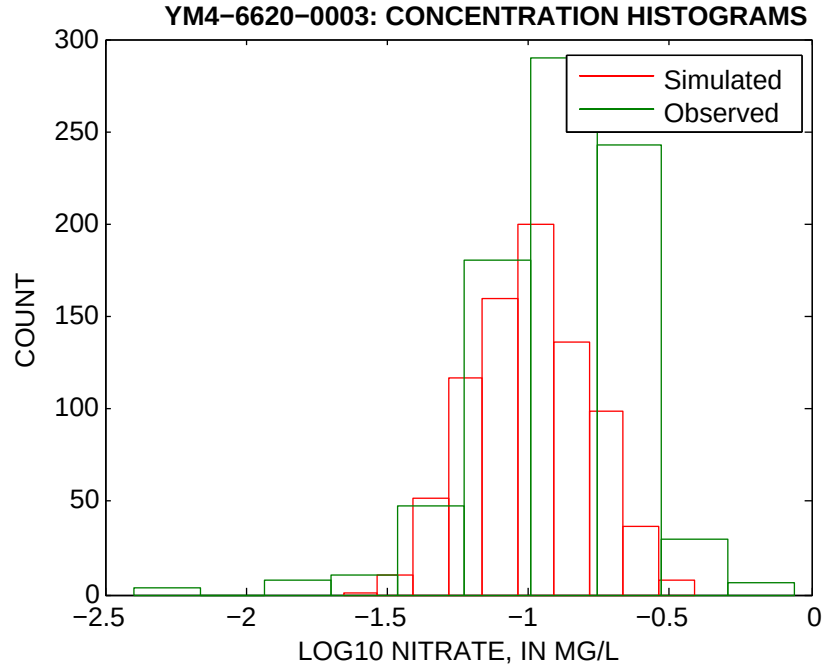
VERSION 2.1

ALL DATA
LOG10

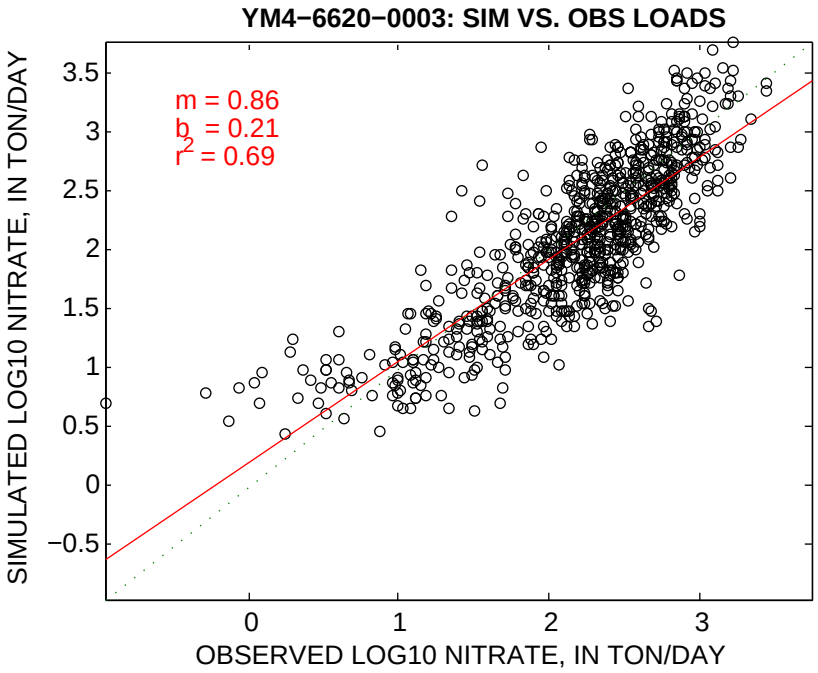


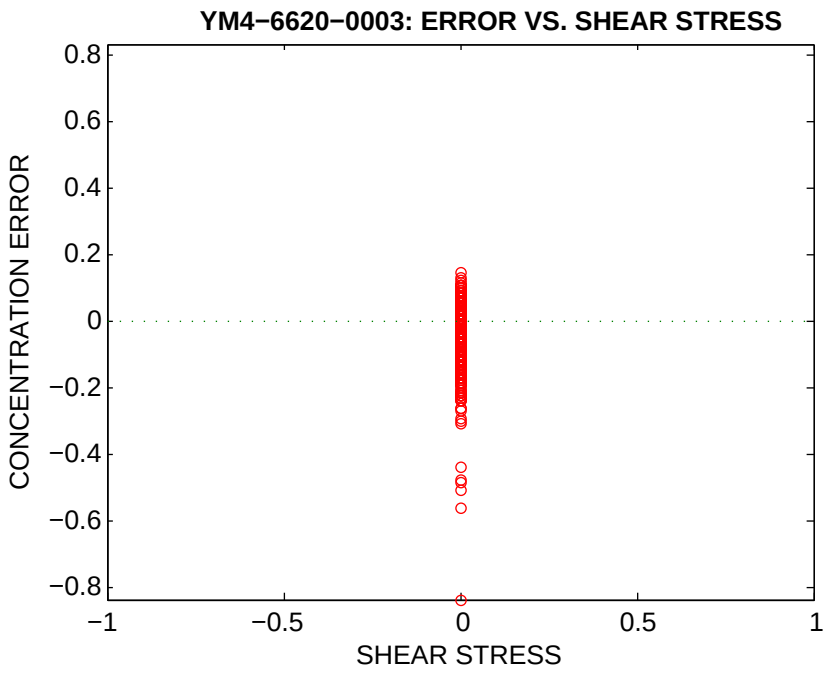


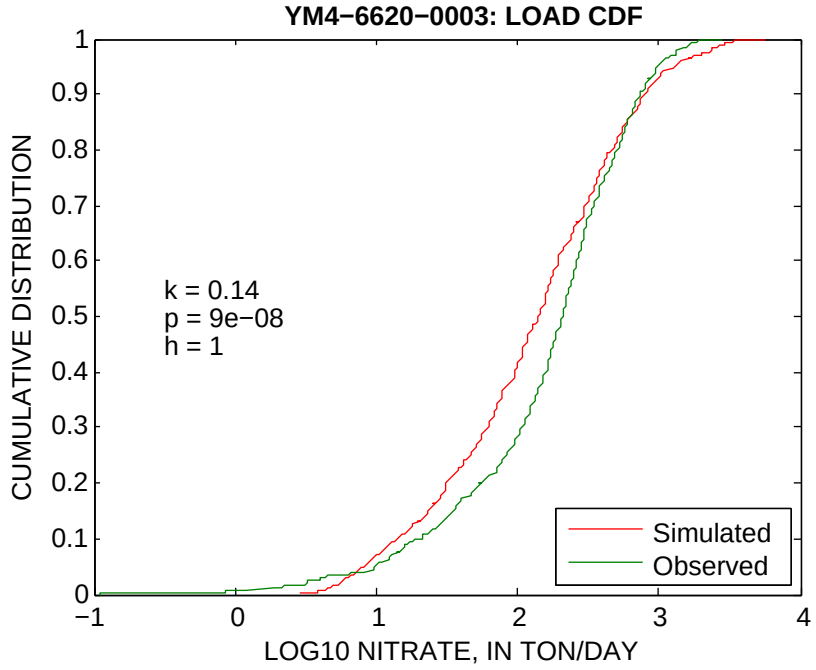


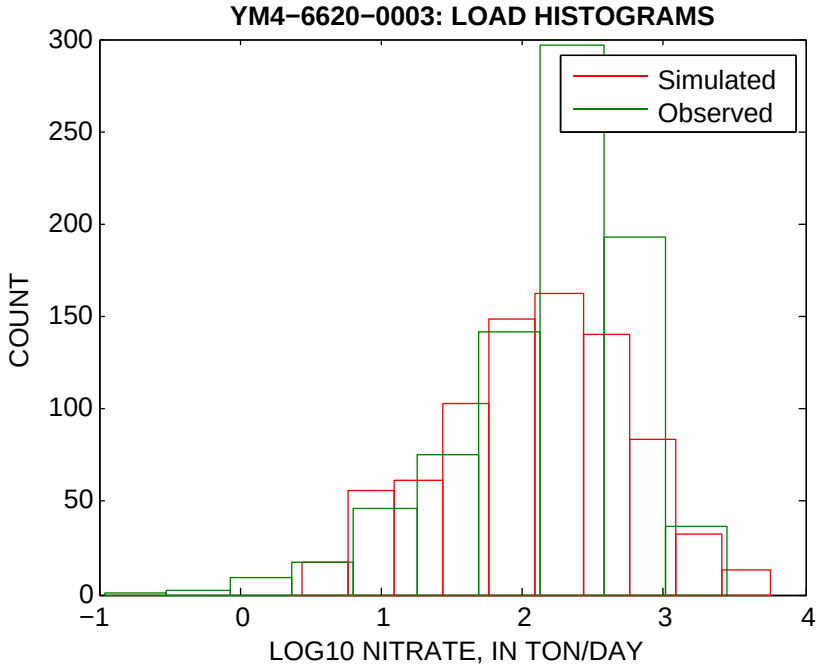


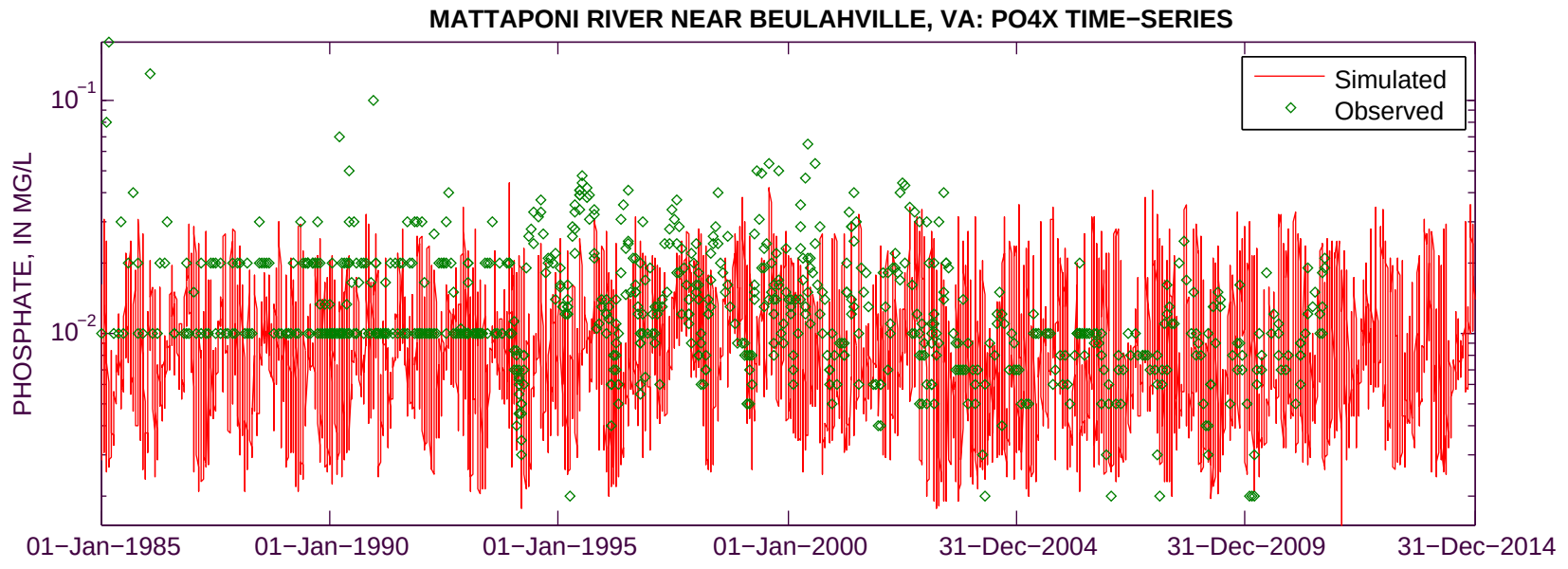
LOAD DATA
LOG10

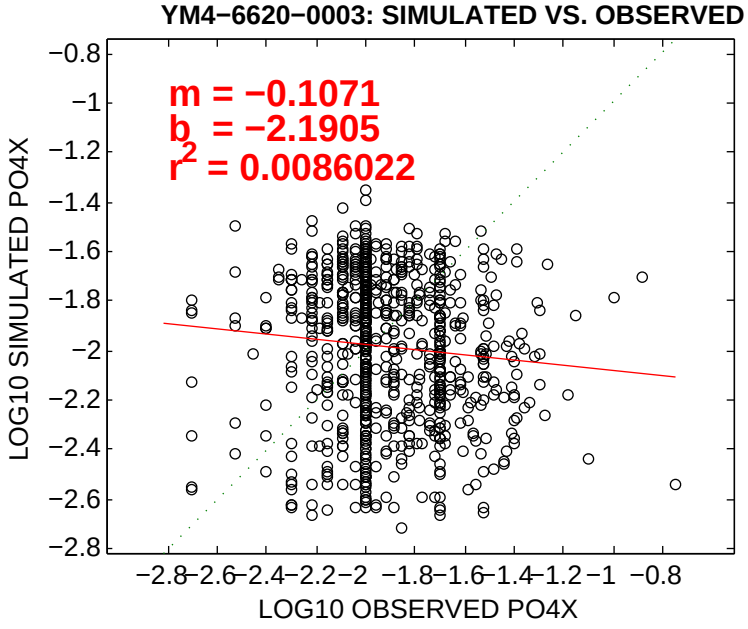


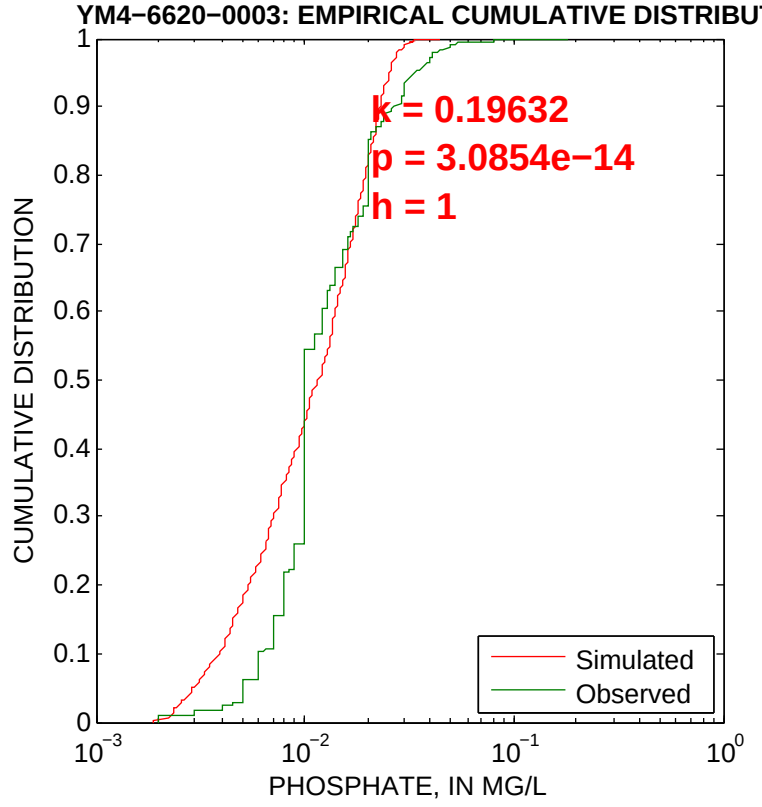












DATA SELECTION

scenario: P620171001WQ | file: PO4X.calib

plot: PO4X - phosphate

Dates: 1/1/1985 – 12/31/201

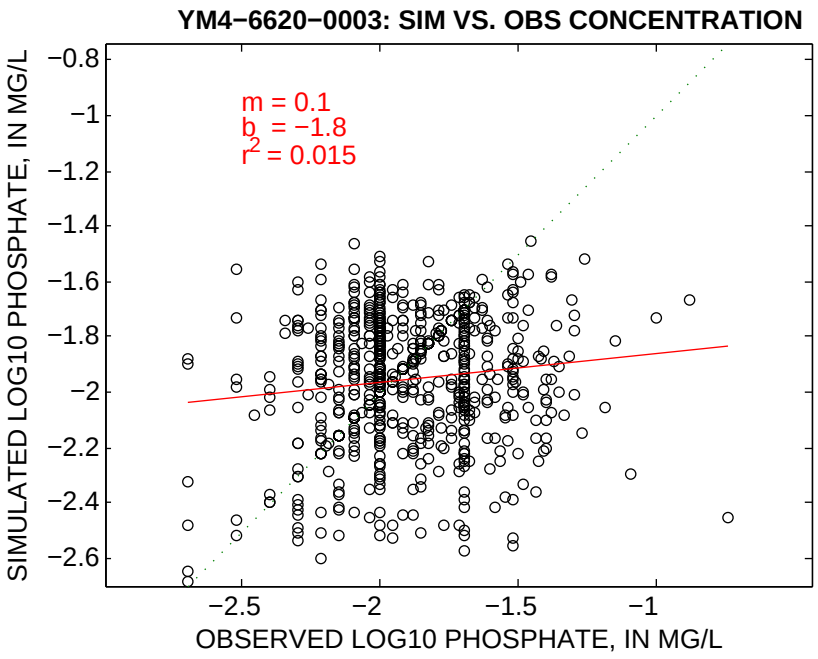
Drive Directory: N/A | model | Observed: OBS20161101

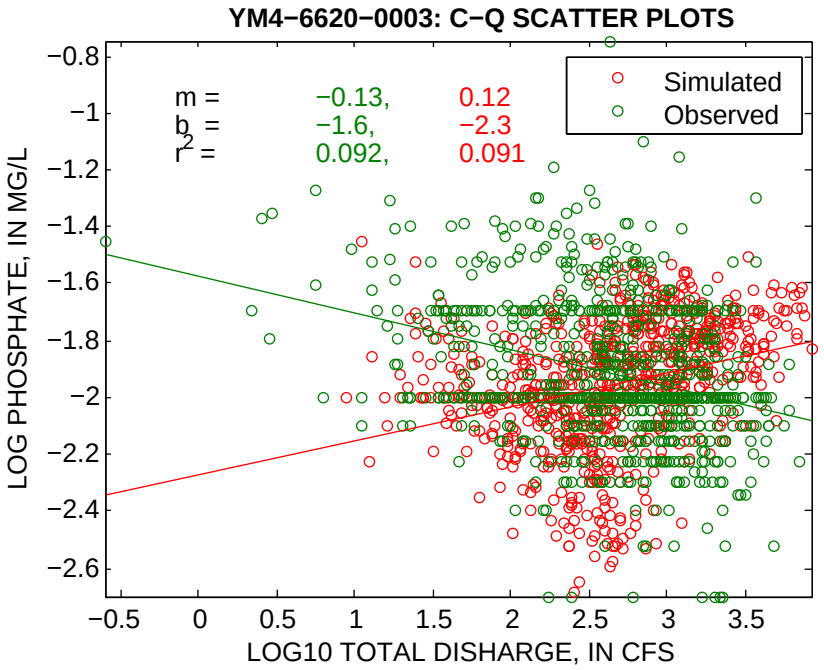
STATISTICS

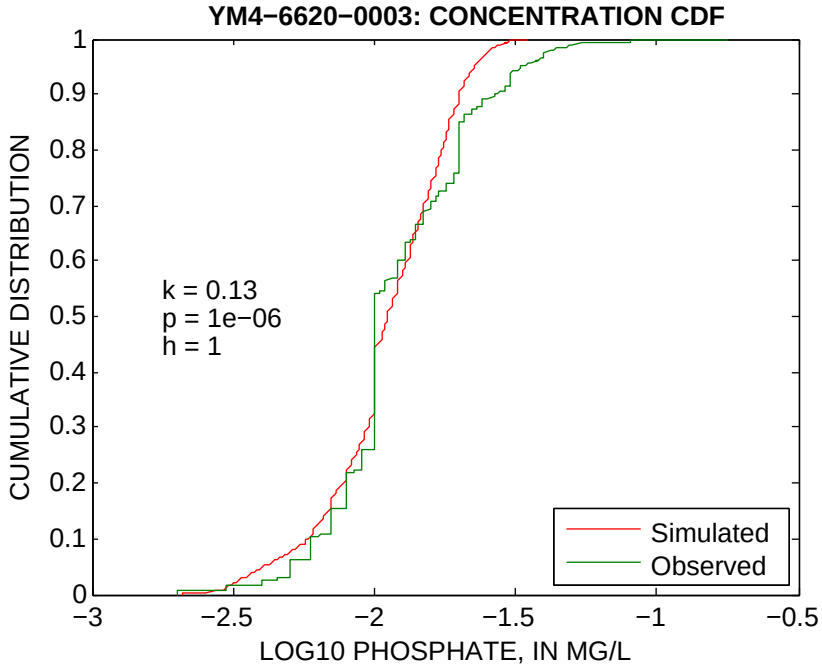
		observe	simulate
n		815	815
min		0.002	0.0019047
		-2.69897	-2.72017
mean		0.0147072	0.0126304
		-1.91448	-1.98545
media		0.01	0.011689
		-2	-1.93222
max		0.18	0.044137
		-0.744727	-1.3552
varian		0.00014624	5.43723e-0
		0.0641196	0.0855064
JB		0.001	0.001
		0.001	0.001
		ra	log
%		-14.121	3.70742
err.va		0.00022586	0.168405
rel.std.err		1.5444	2.62642
mod.eff		-0.544401	-1.62642

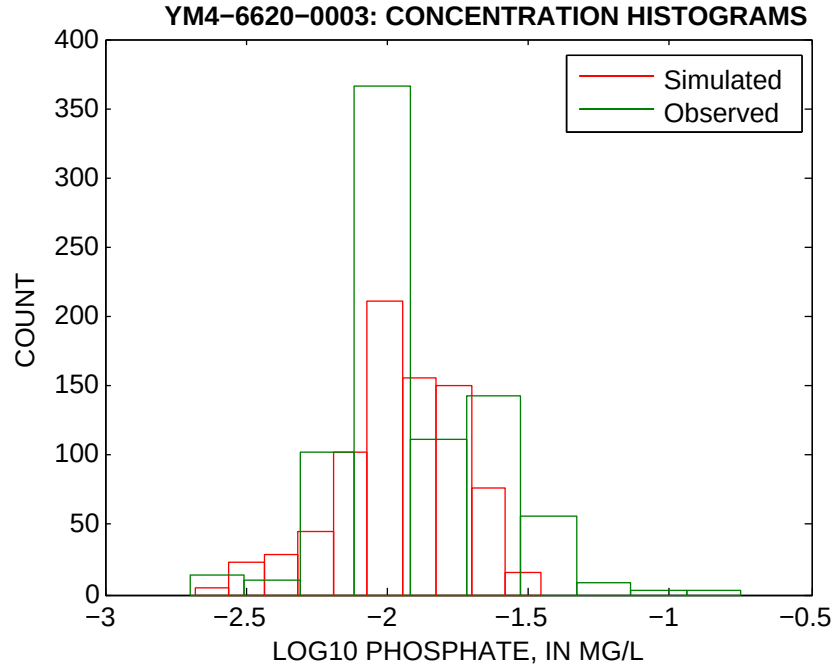
VERSION 2.1

ALL DATA
LOG10

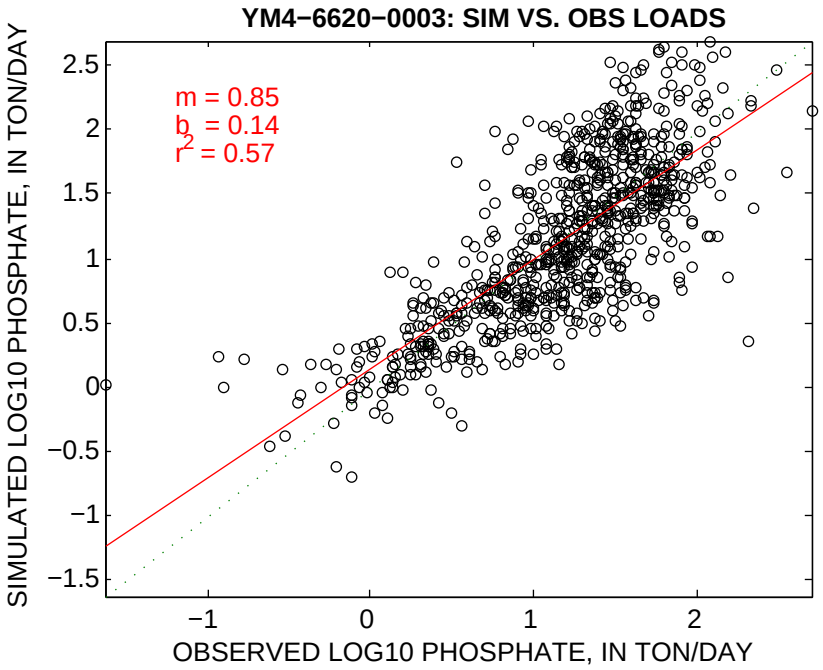


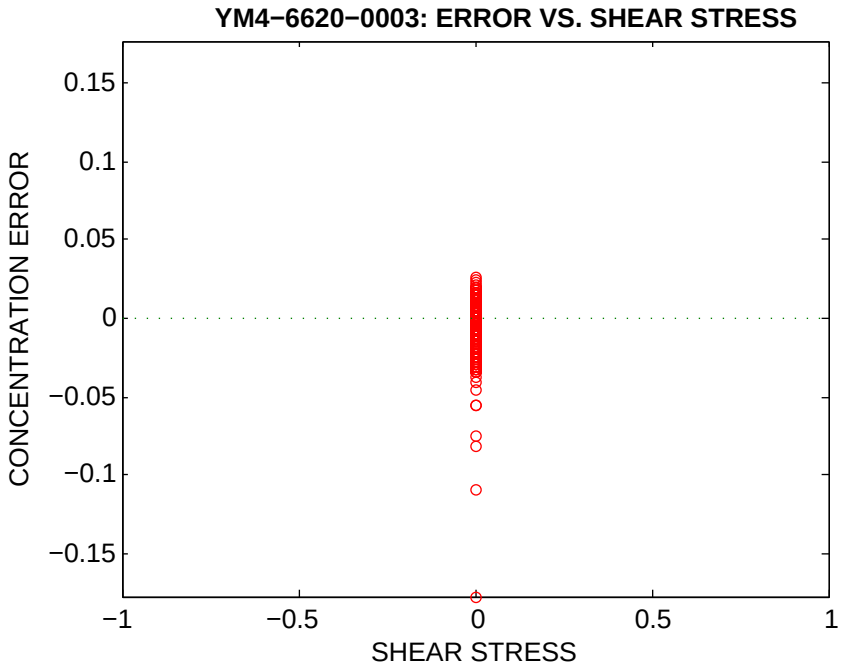


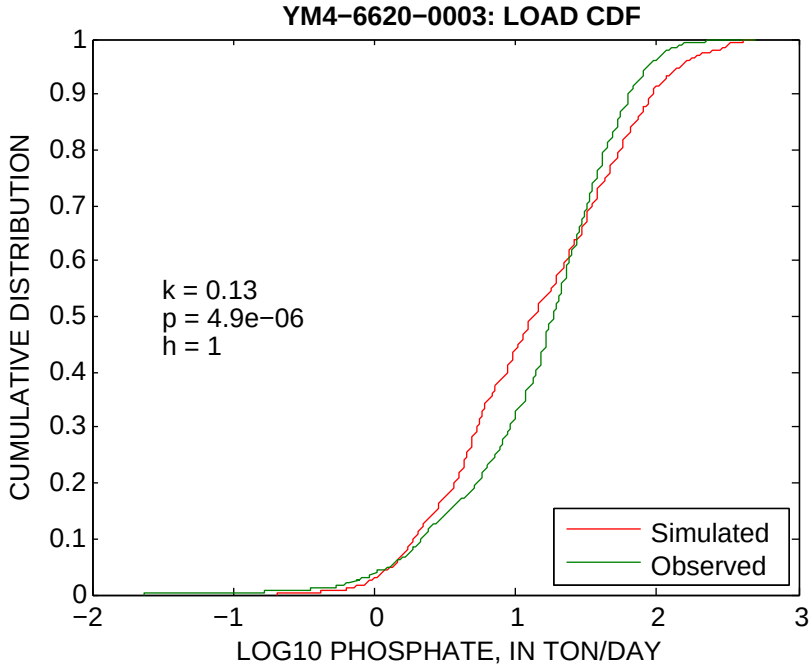


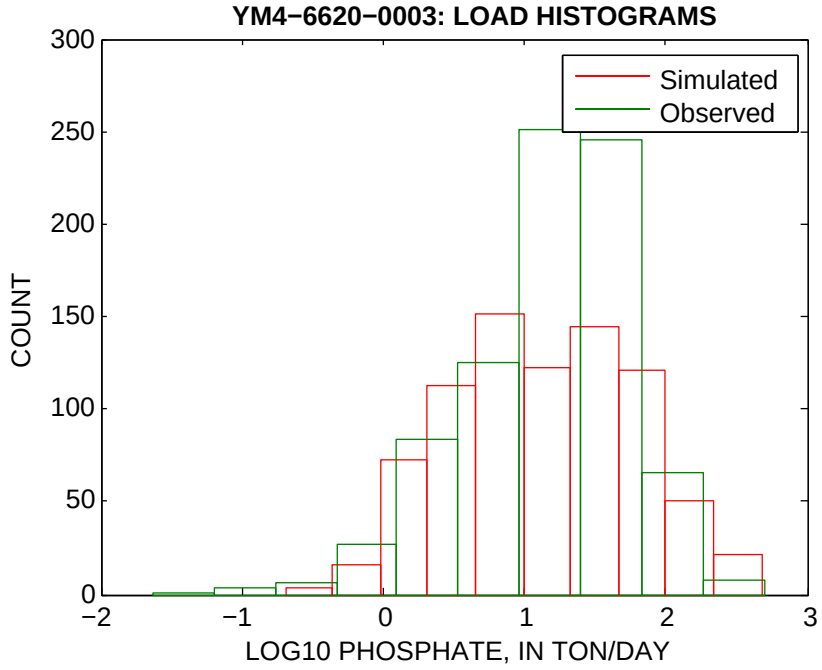


LOAD DATA
LOG10

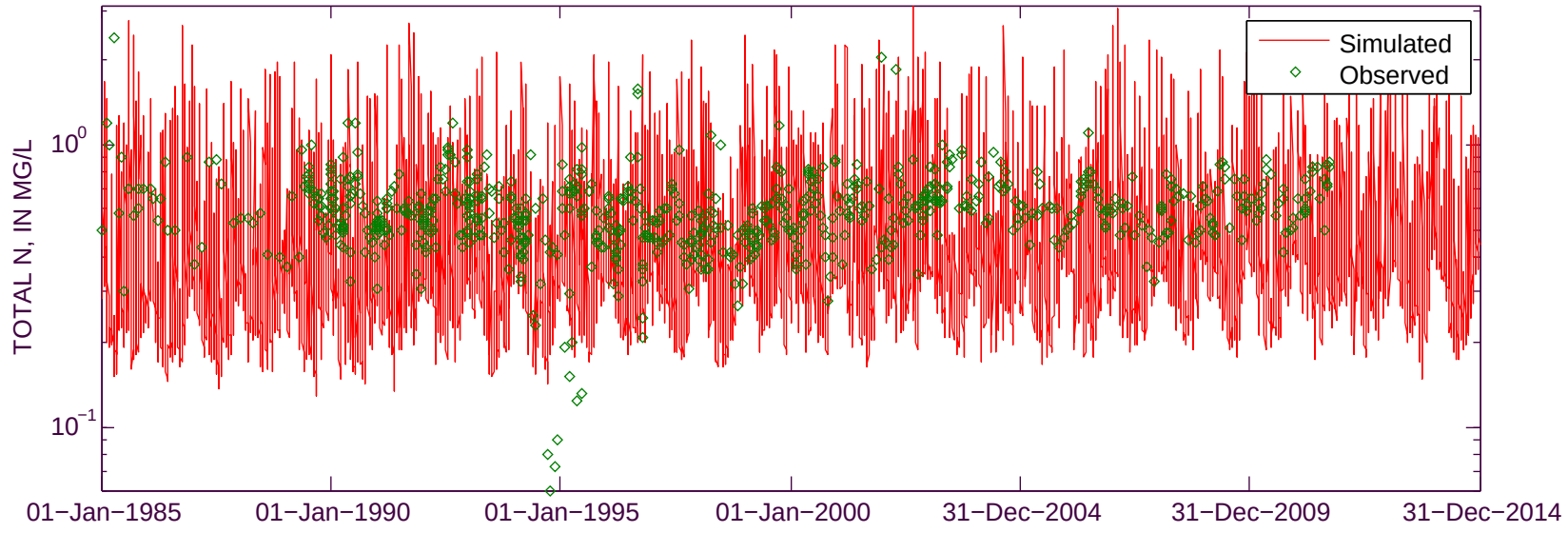




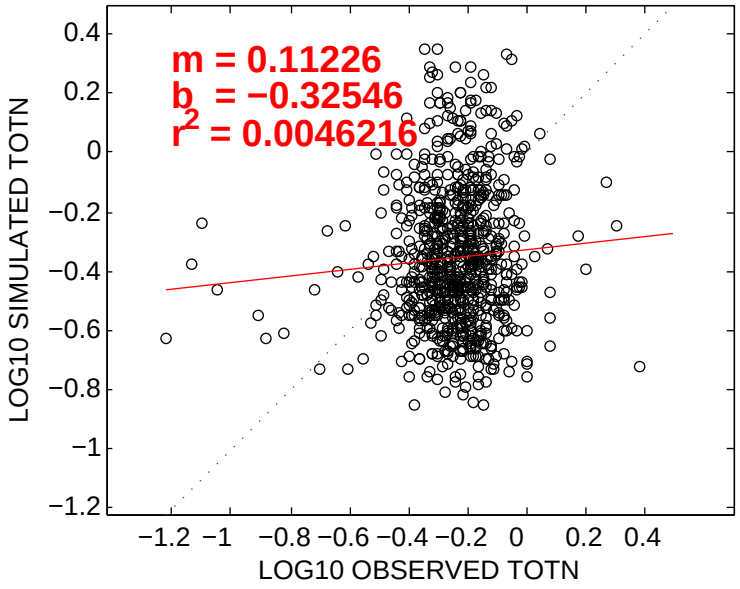




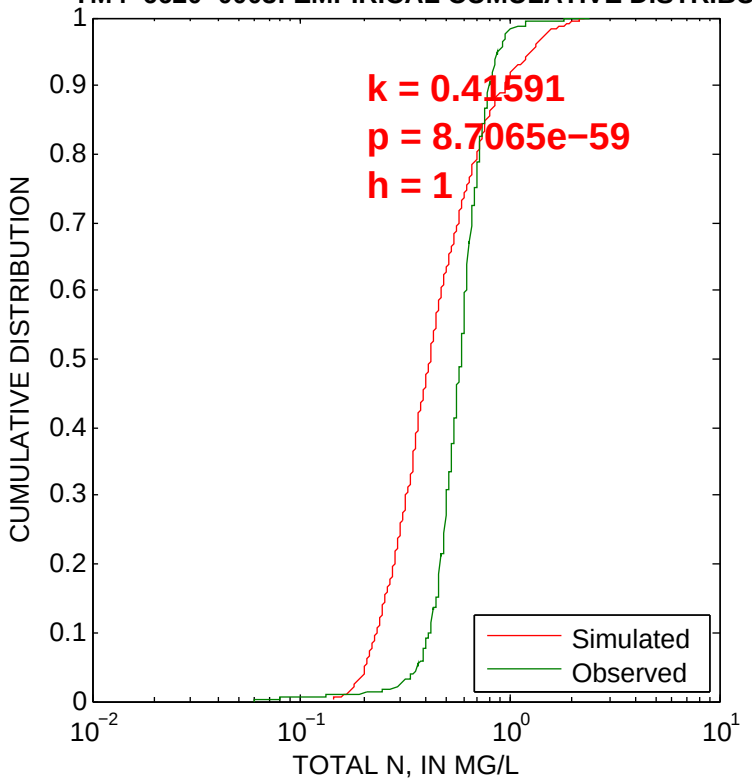
MATTAPONI RIVER NEAR BEULAHVILLE, VA: TOTN TIME-SERIES



YM4-6620-0003: SIMULATED VS. OBSERVED



YM4-6620-0003: EMPIRICAL CUMULATIVE DISTRIBUTION



DATA SELECTION

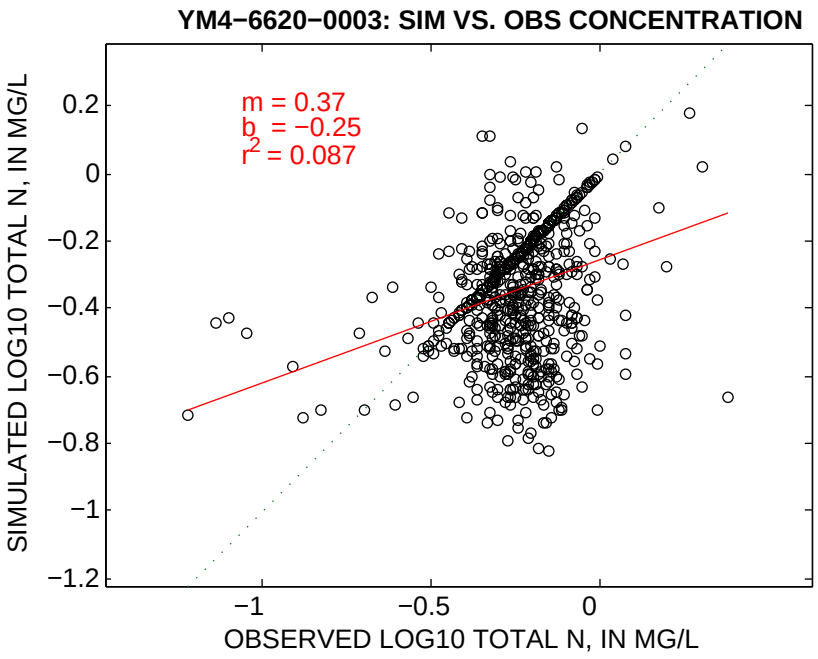
scenario: P620171001WQ
file: TOTN.calib
plot: TOTN - total nitrogen
Dates: 1/1/1985 – 12/31/201
Drive: N/A
Directory: model
Observed: OBS20161101

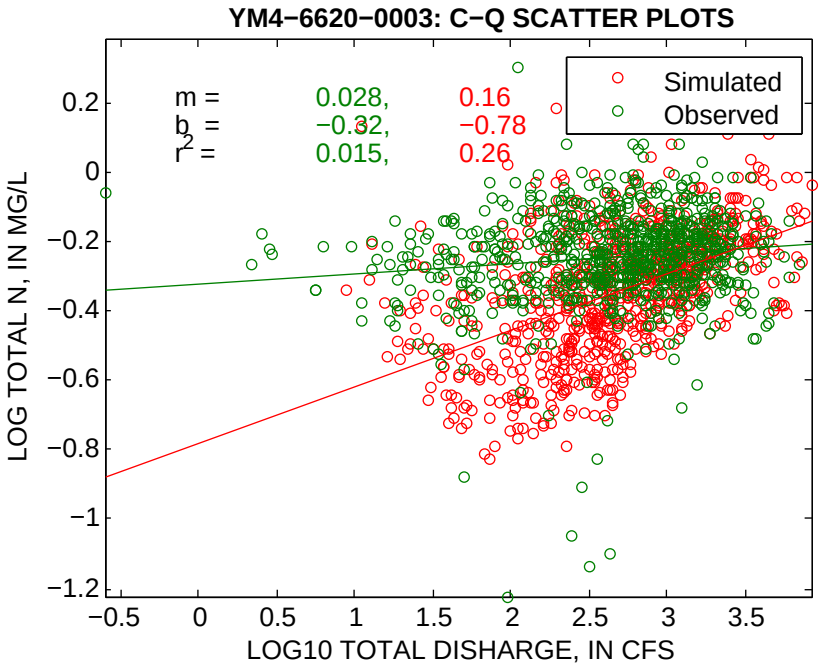
STATISTICS

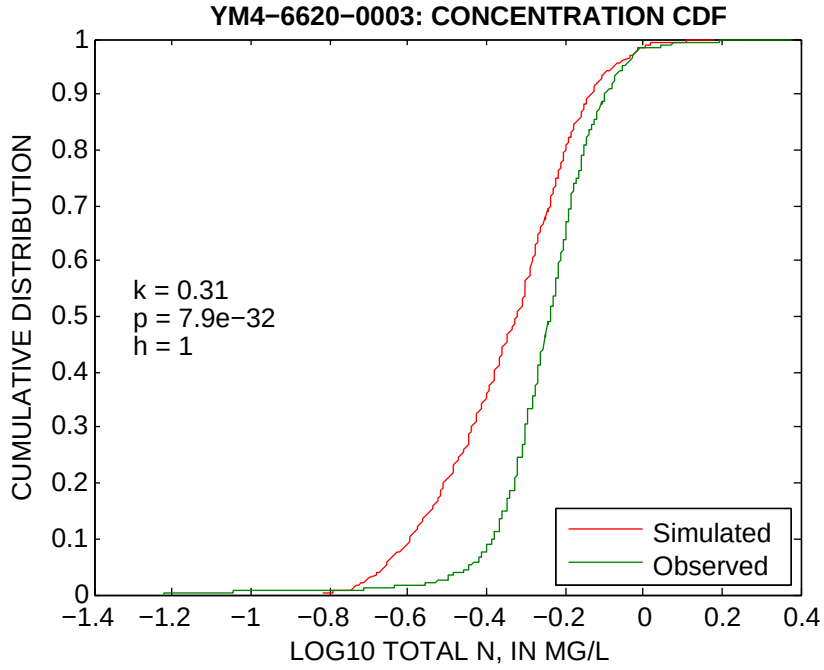
	n	observe	simulate
		767	767
min		0.06	0.1413
		-1.22185	-0.849858
mean		0.598806	0.520966
		-0.243999	-0.352853
media		0.58	0.41759
		-0.236572	-0.37925
max		2.4	2.2541
		0.380211	0.352973
varian		0.0371042	0.116593
		0.0203037	0.0553619
JB		0.001	0.001
		0.001	0.001
		ra	log
%		-12.9992	44.6125
err.va		0.15283	0.0829718
rel.std.err		4.11893	4.08653
mod.eff		-3.11893	-3.08653

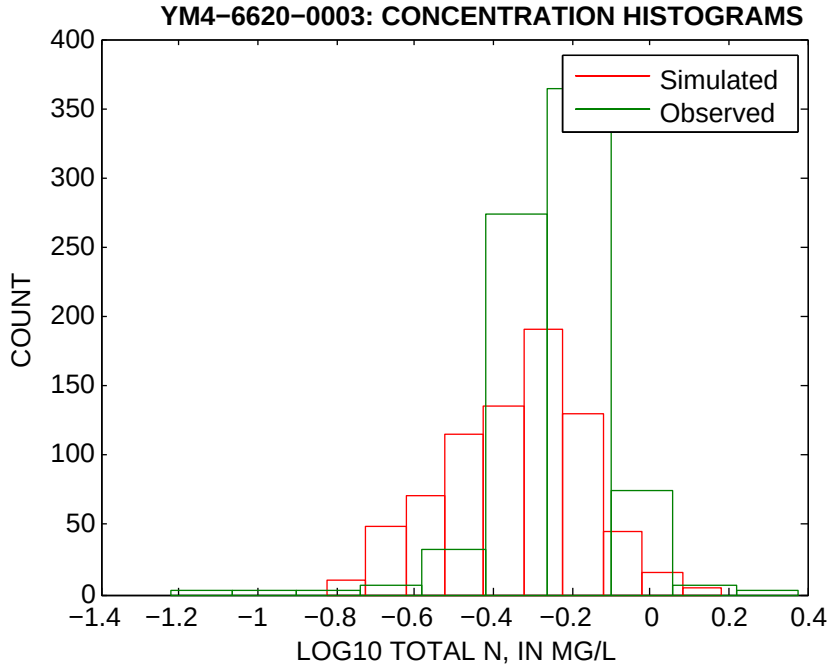
VERSION 2.1

ALL DATA
LOG10

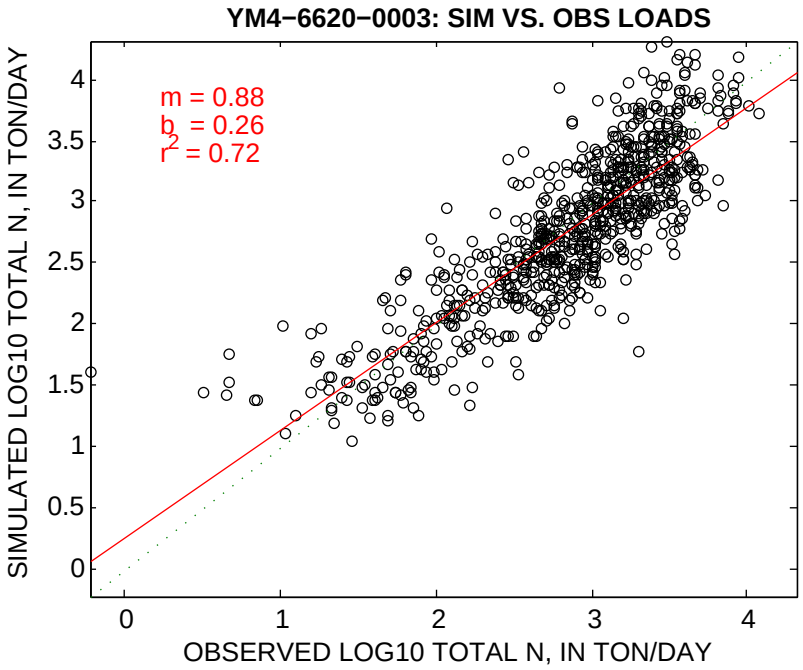


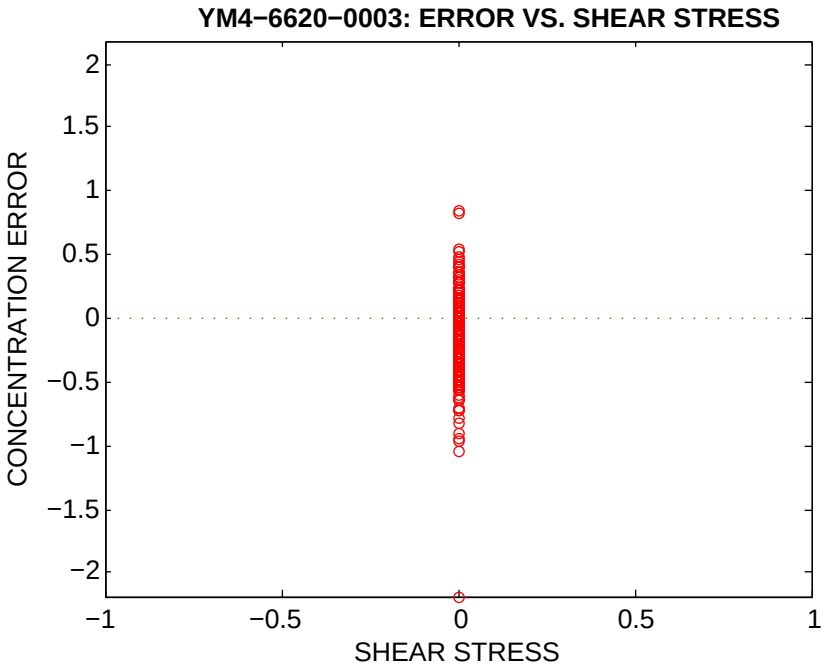


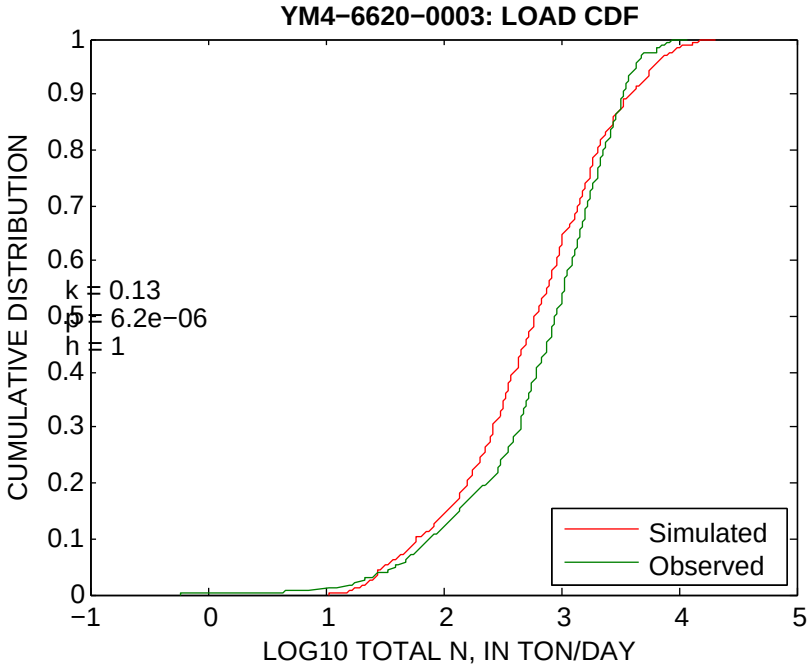


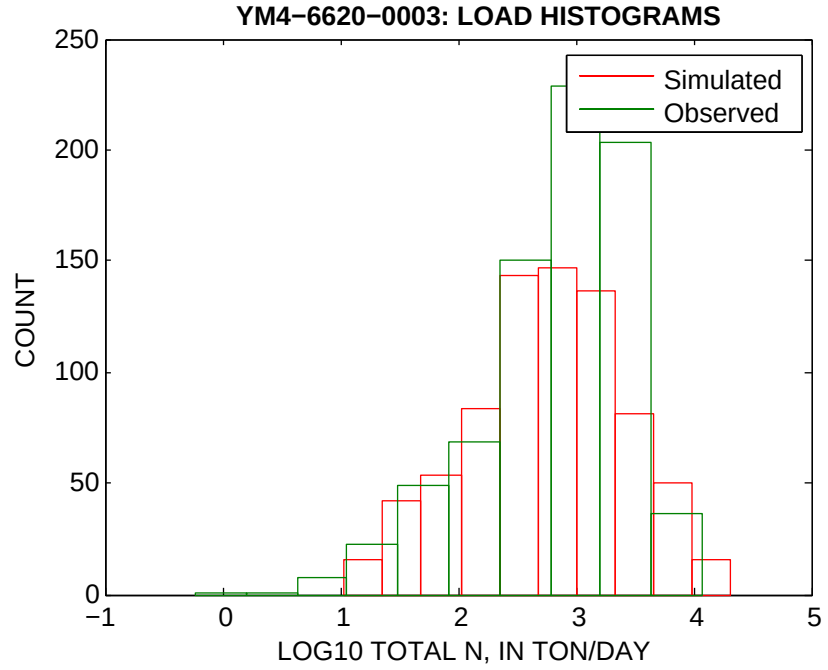


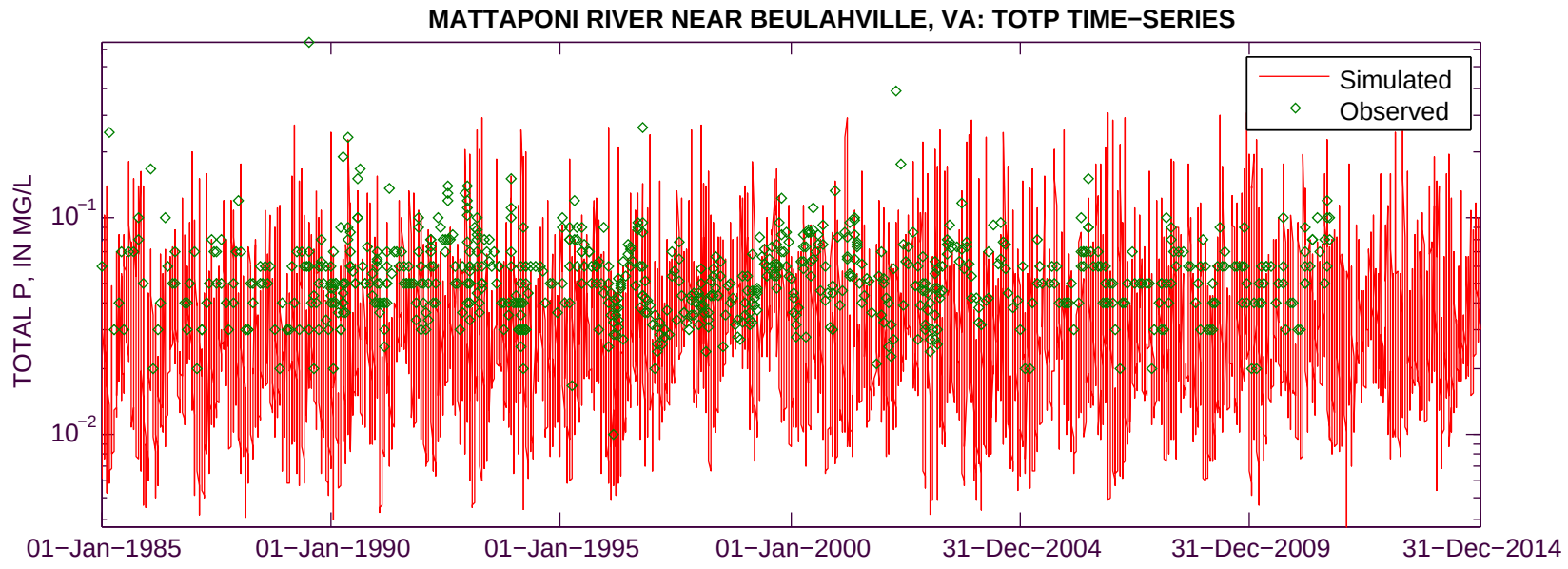
LOAD DATA
LOG10

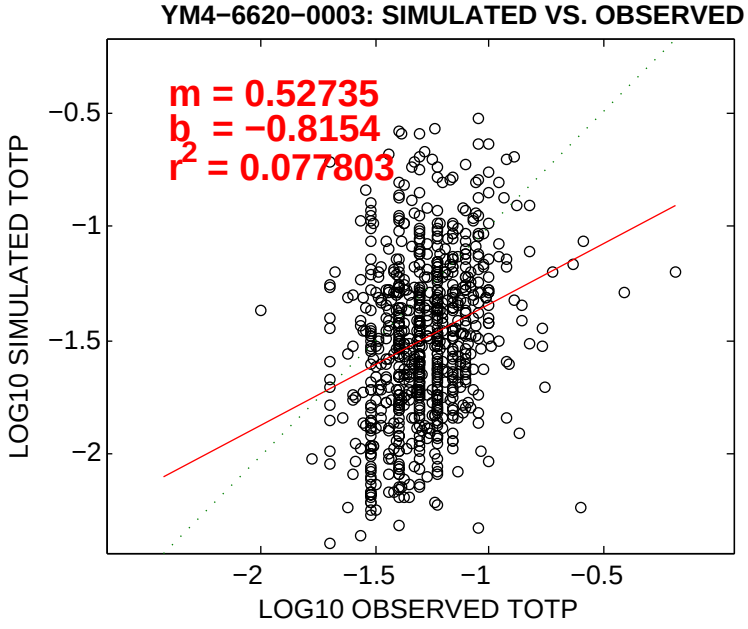


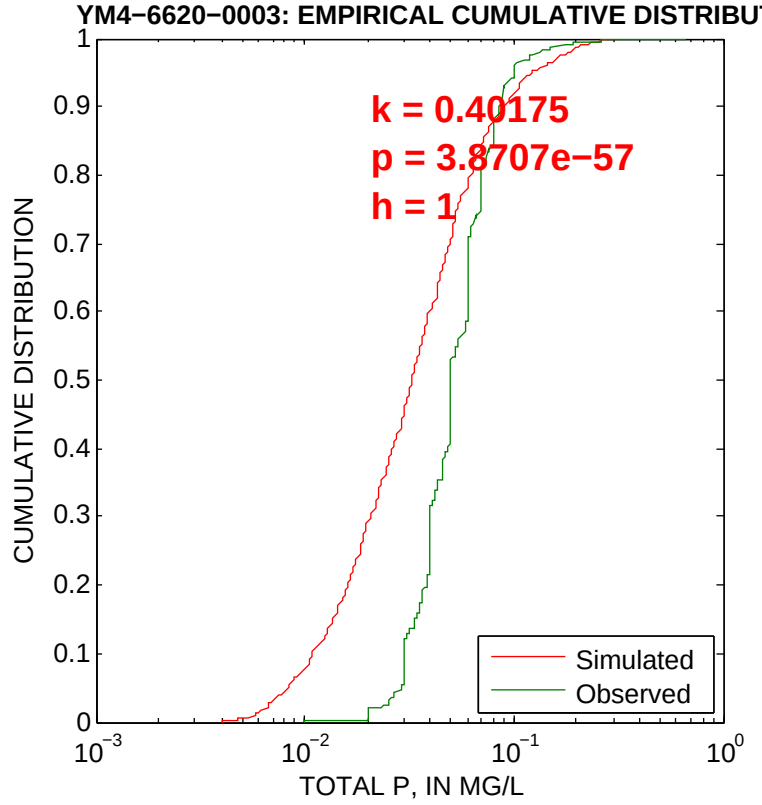












DATA SELECTION

scenario	file
P620171001WQ	TOTP.calib

plot: TOTP - total phosphorus

Dates: 1/1/1985 – 12/31/201

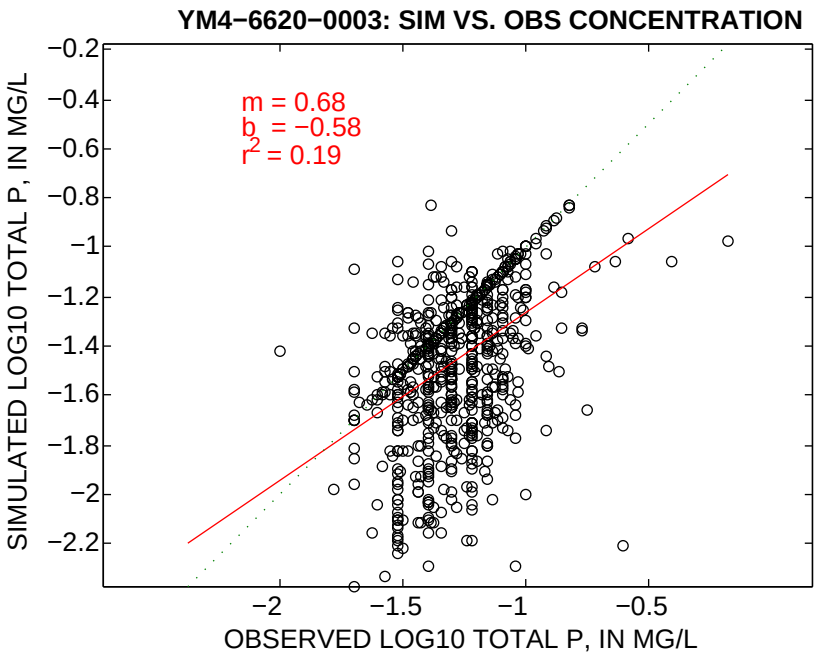
Drive	Directory	Observed
N/A	model	OBS20161101

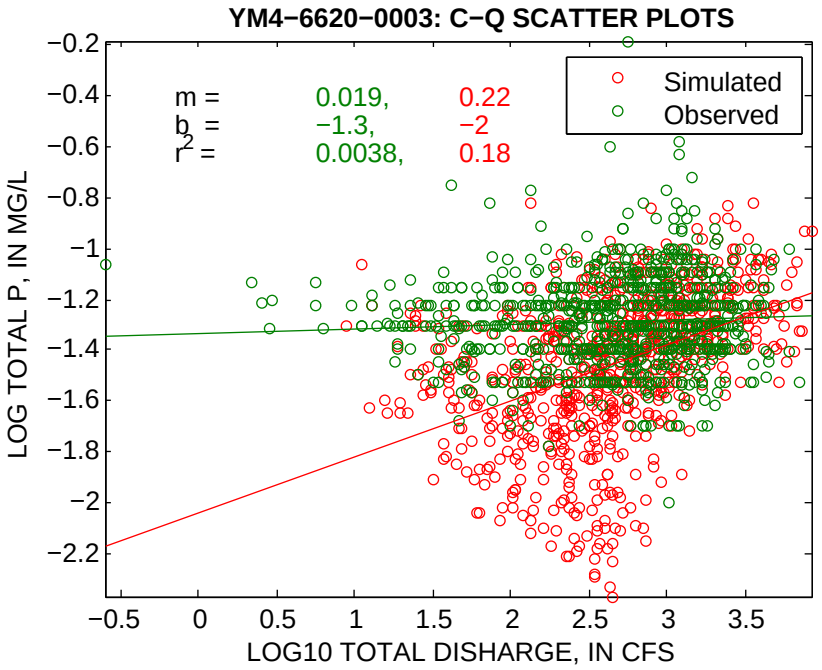
STATISTICS

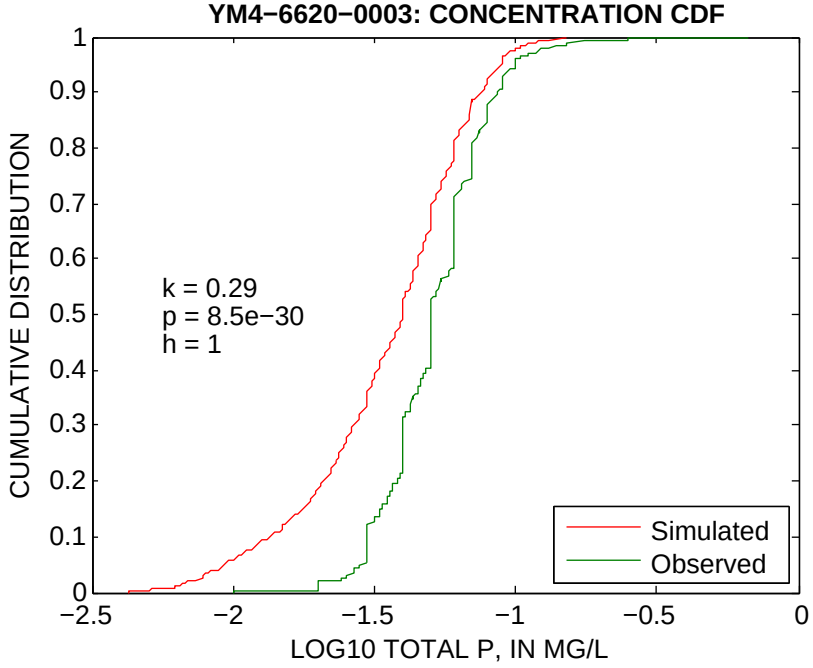
	n	799	799
		observe	simulate
min		0.01	0.004059
		-2	-2.39158
mean		0.0575847	0.044442
		-1.28386	-1.49244
media		0.05	0.032716
		-1.30103	-1.48524
max		0.66	0.30085
		-0.180456	-0.52165
varian		0.00128673	0.00167985
		0.0339379	0.121306
JB		0.001	0.001
		0.001	0.241054
		ra	log
%		-22.8233	16.2462
err.va		0.00267941	0.16301
rel.std.err		2.08234	4.80318
mod.eff		-1.08234	-3.80318

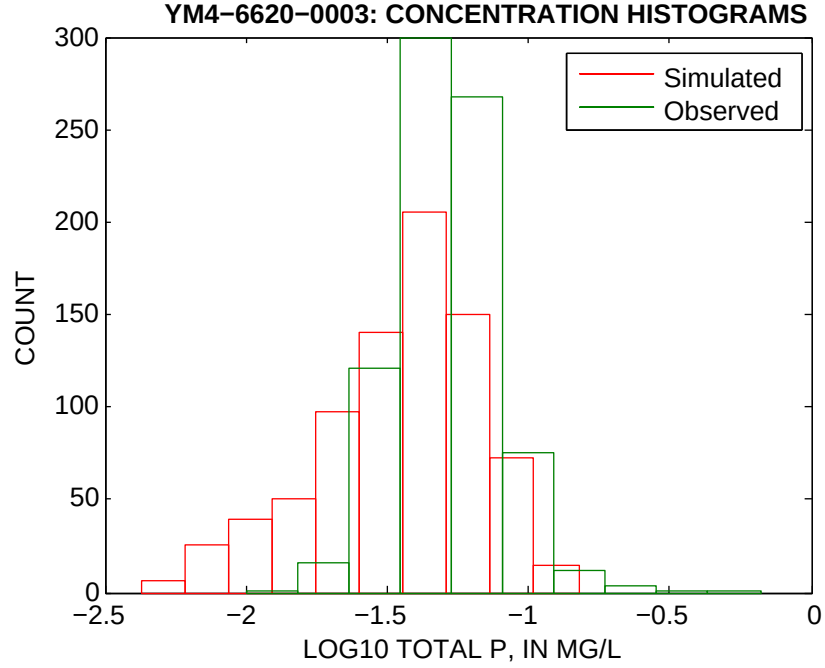
VERSION 2.1

ALL DATA
LOG10

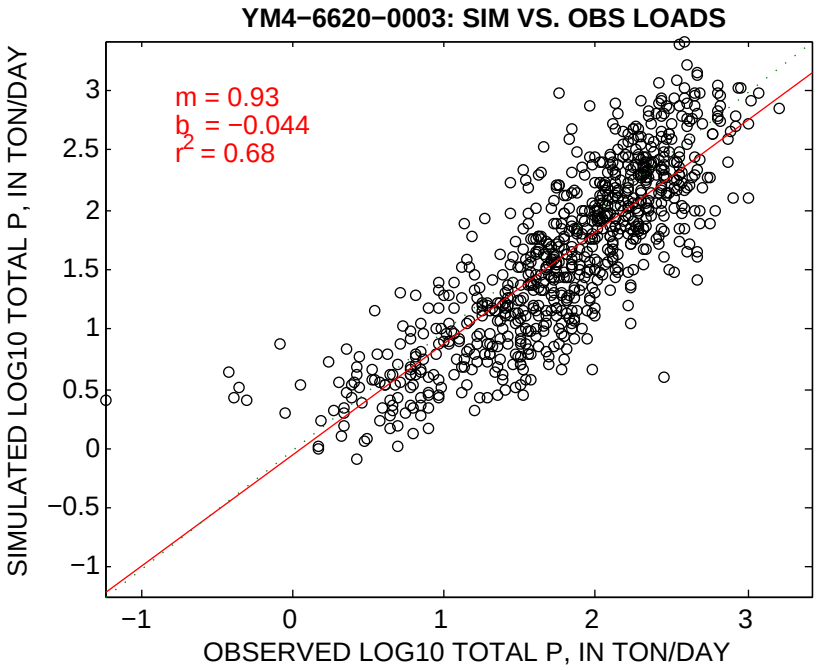


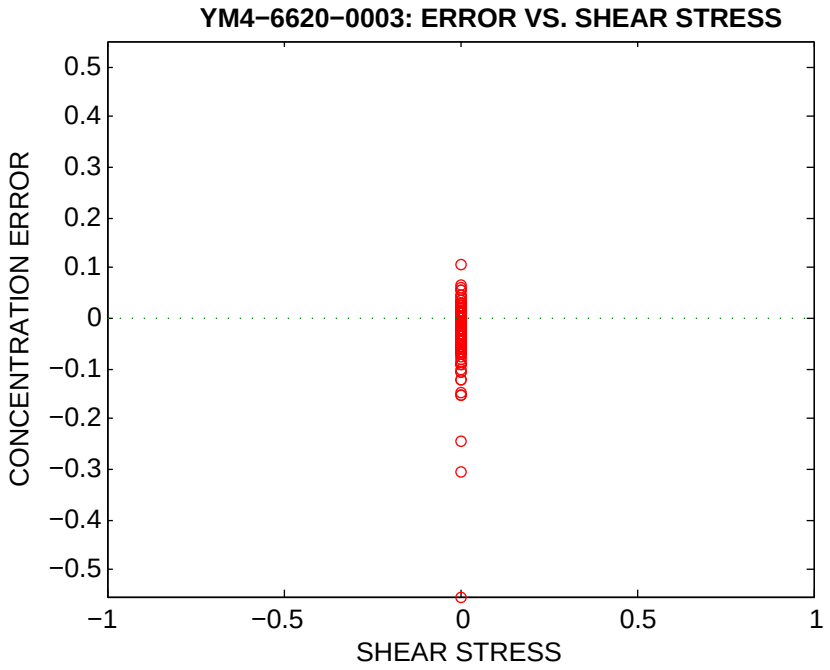


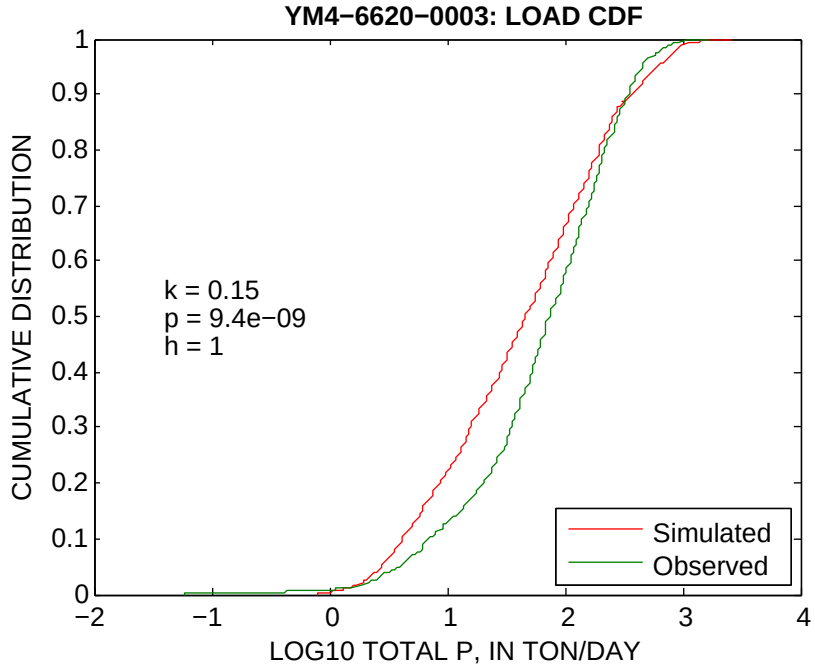


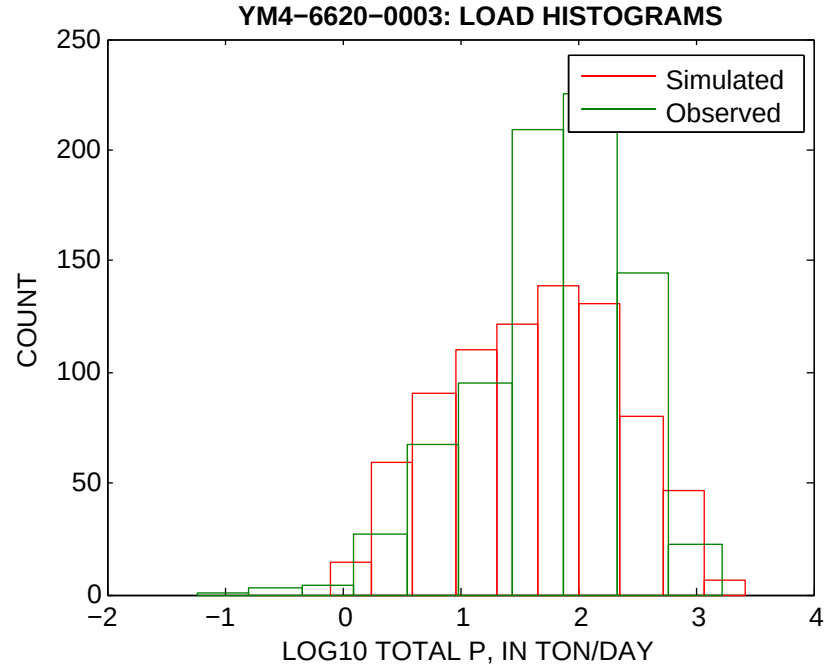


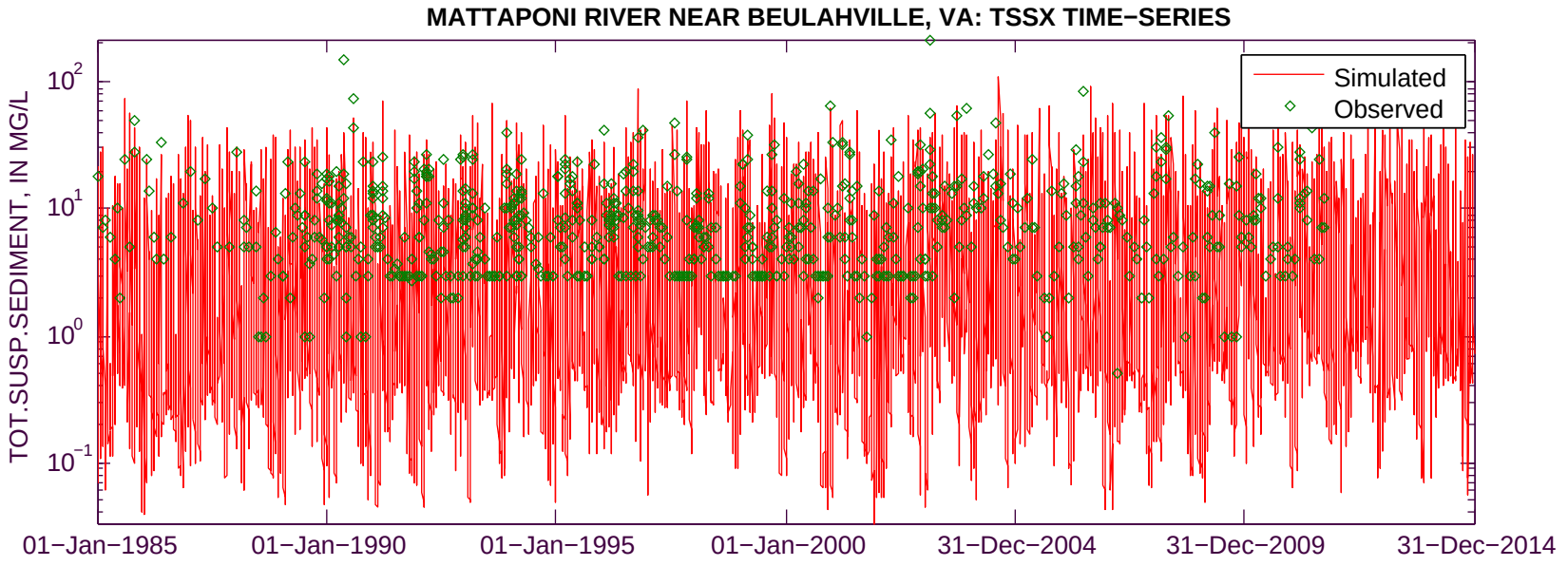
LOAD DATA
LOG10

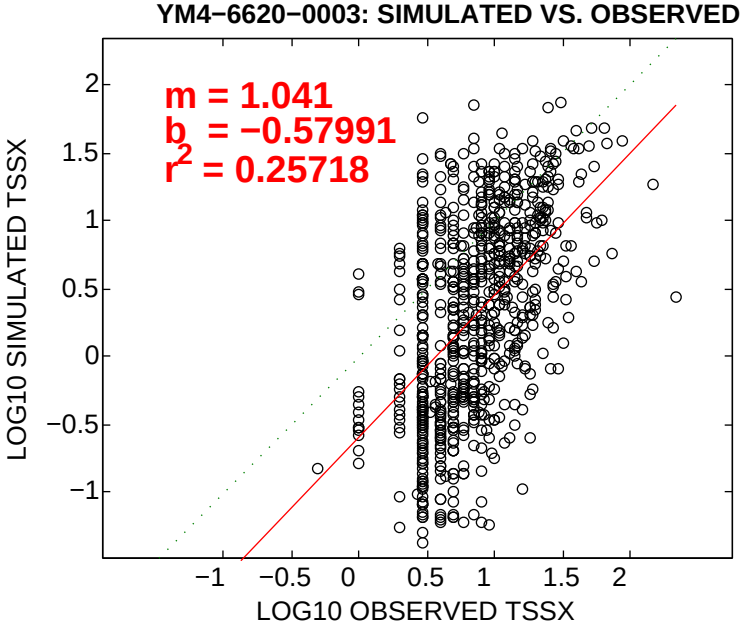


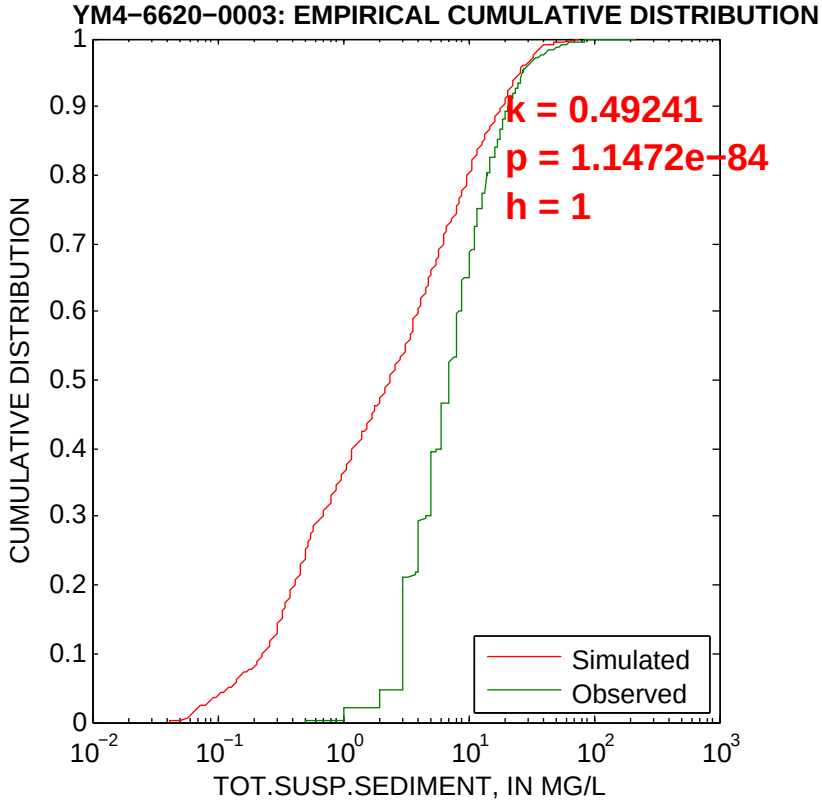












DATA SELECTION

scenario	file
P620171001WQ	TSSX.calib

plot: TSSX - total suspended ...

Dates: 1/1/1985 – 12/31/201

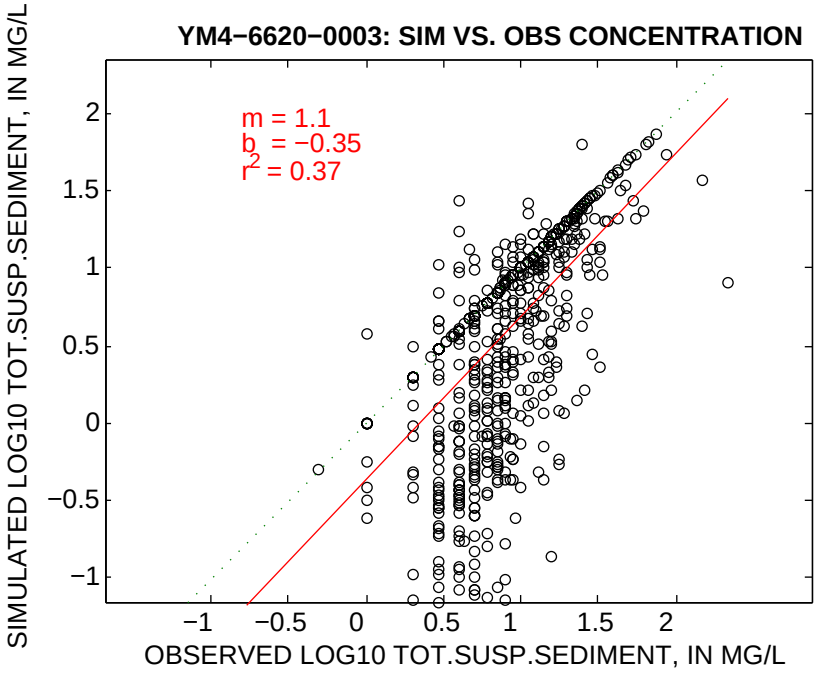
Drive	Directory	Observed
N/A	model	OBS20161101

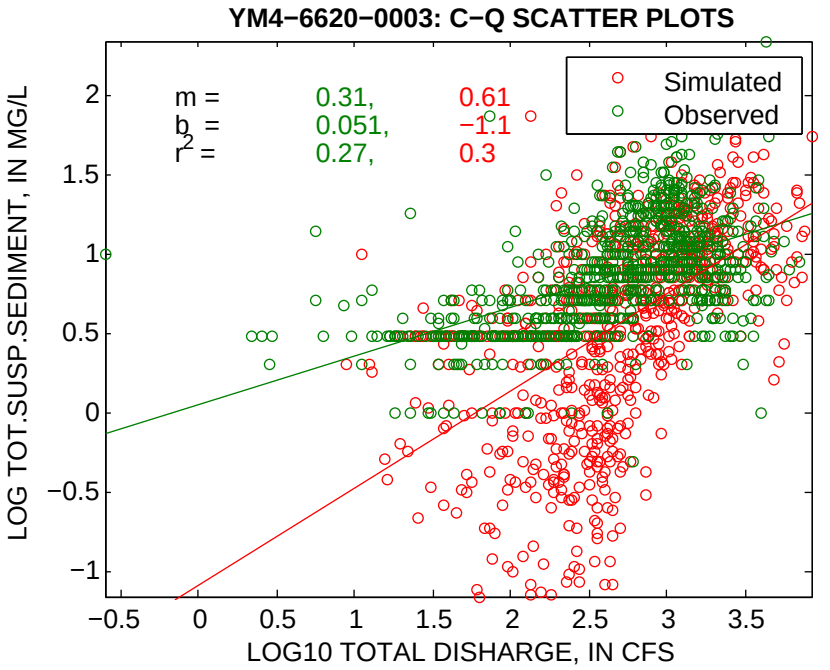
STATISTICS

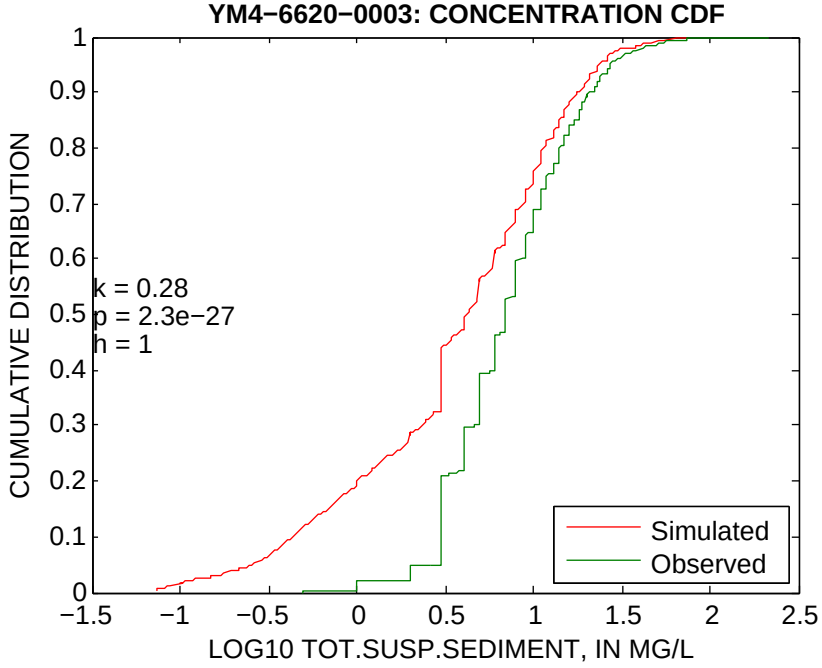
	n	790	790
		observe	simulate
min		0.5	0.042718
		-0.30103	-1.36939
mean		10.4723	6.3164
		0.861454	0.316837
media		7	2.3672
		0.845098	0.374235
max		218	75.56
		2.33846	1.87829
varian		174.234	91.5344
		0.124638	0.525154
JB		0.001	0.001
		0.001793	0.001
		ra	log
%		-39.6849	-63.2207
err.va		198.321	0.687287
rel.std.err		1.13825	5.51428
mod.eff		-0.138249	-4.51428

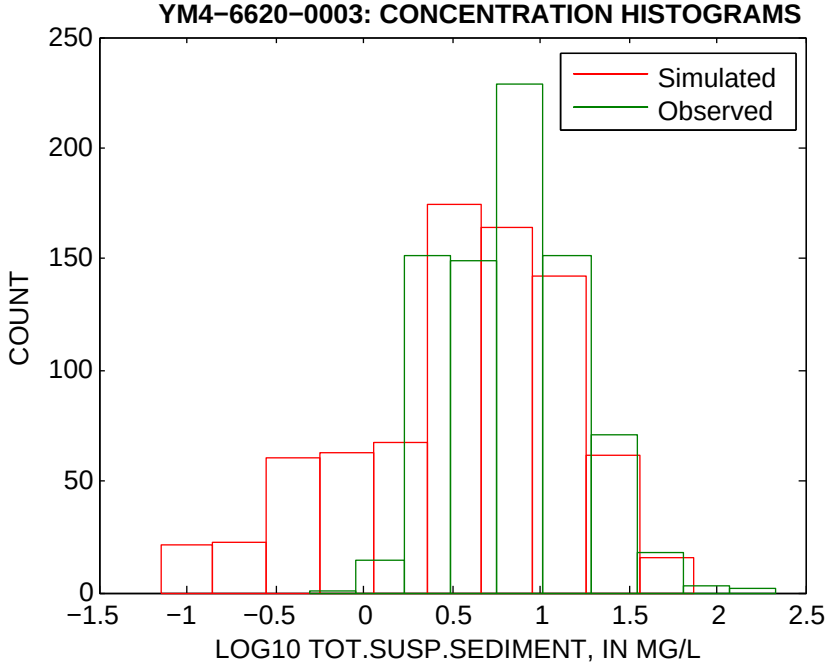
VERSION

ALL DATA
LOG10

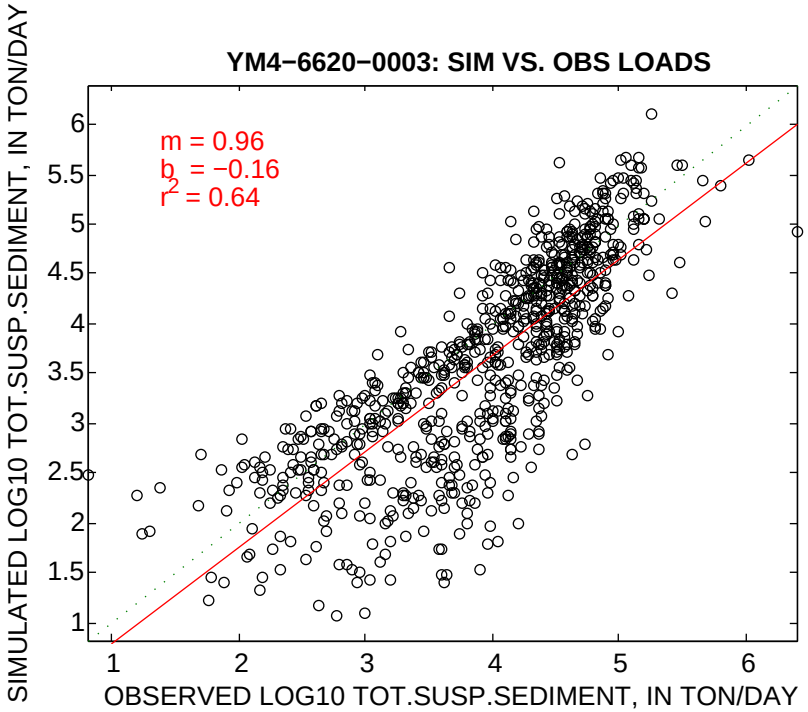


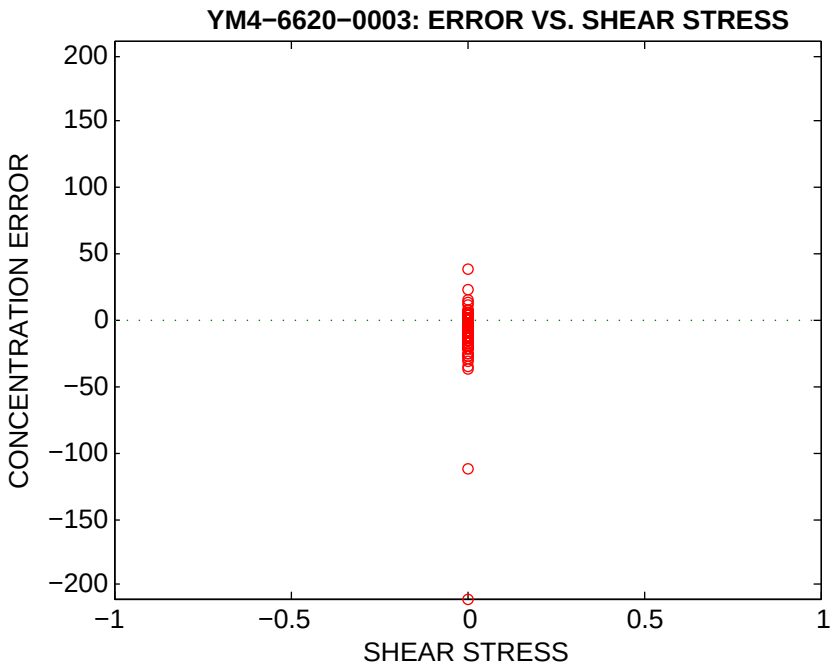


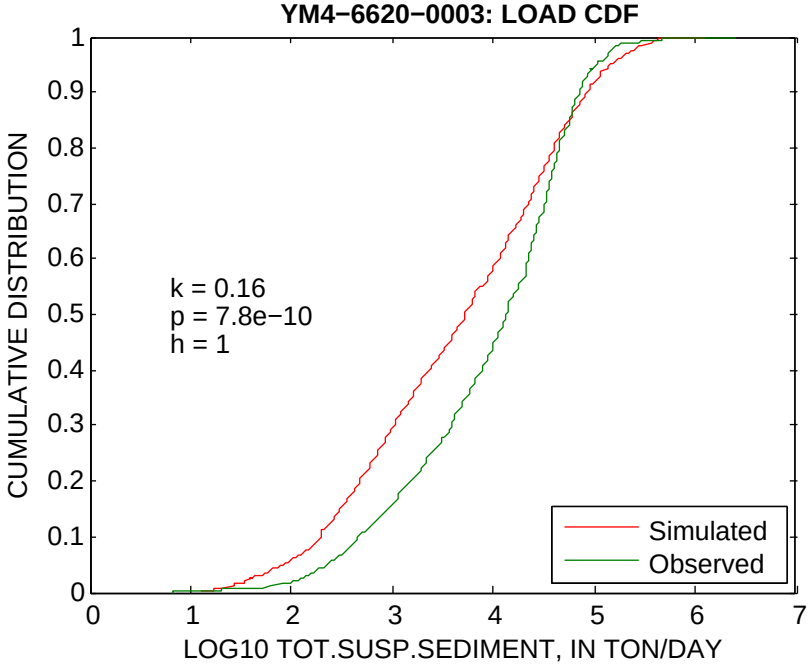


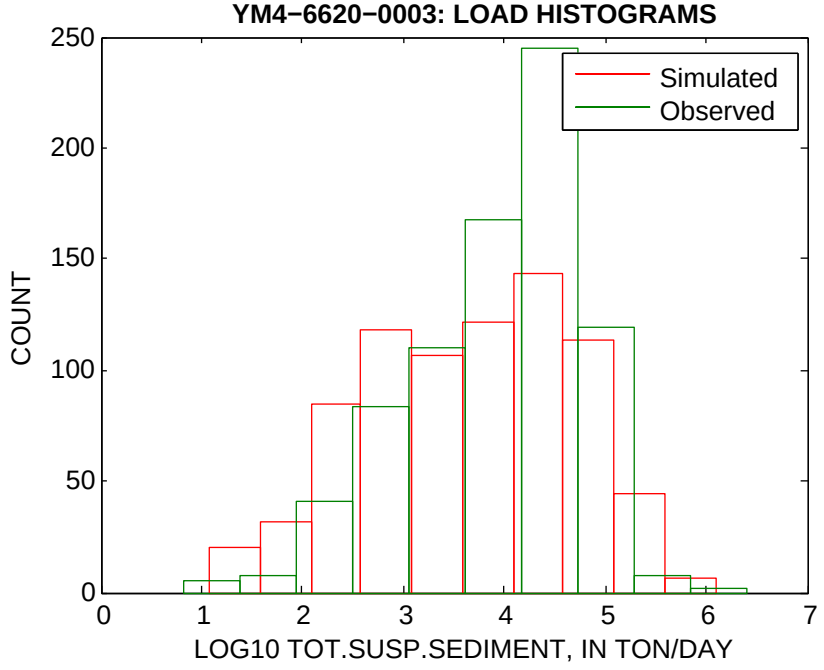


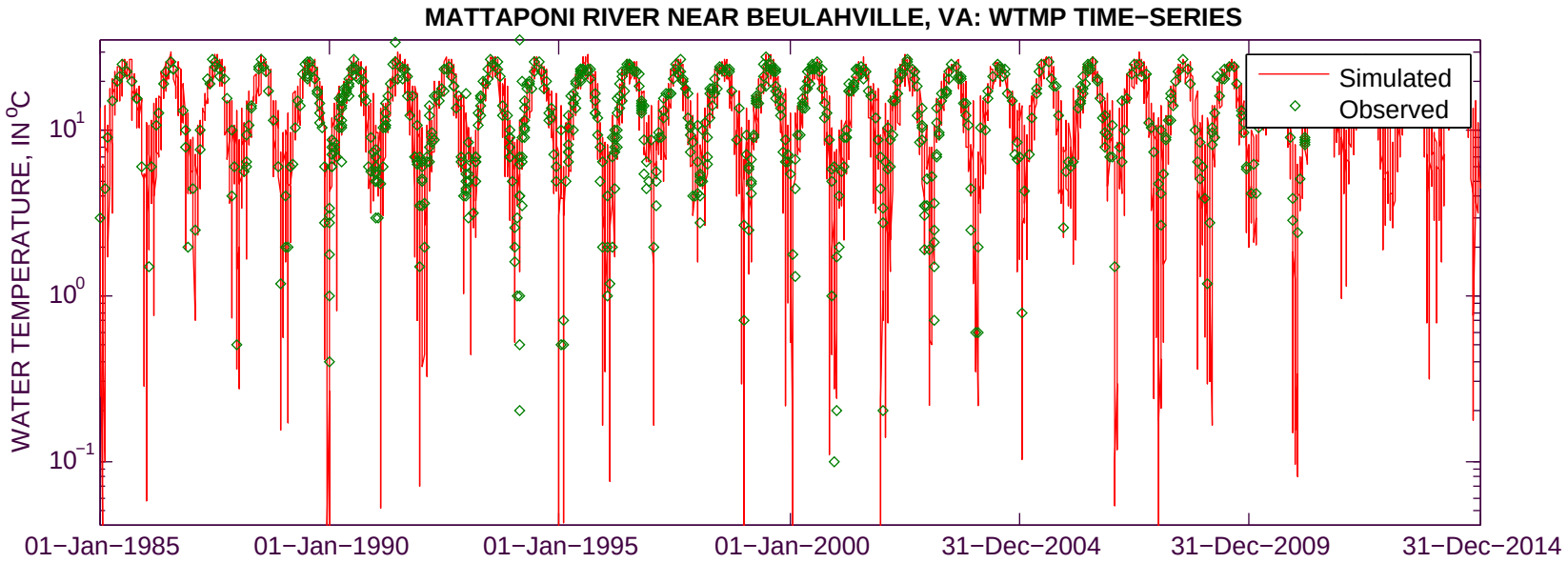
LOAD DATA
LOG10

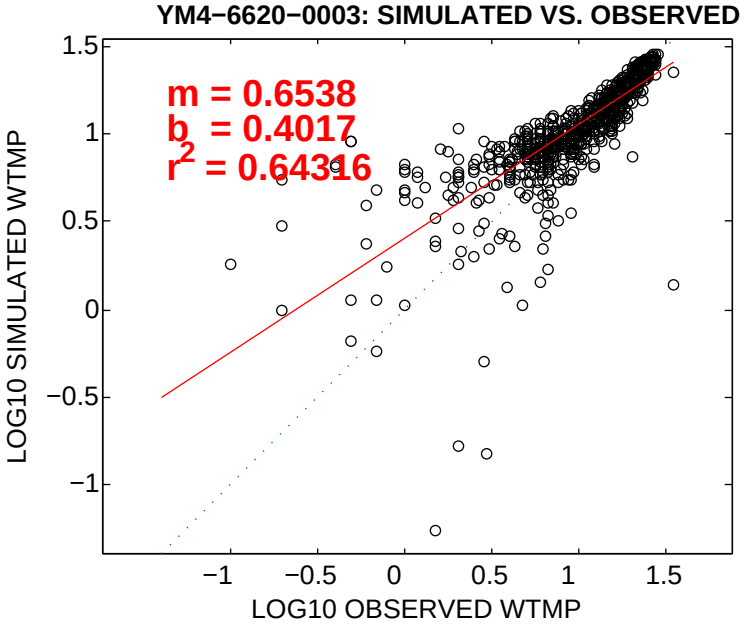


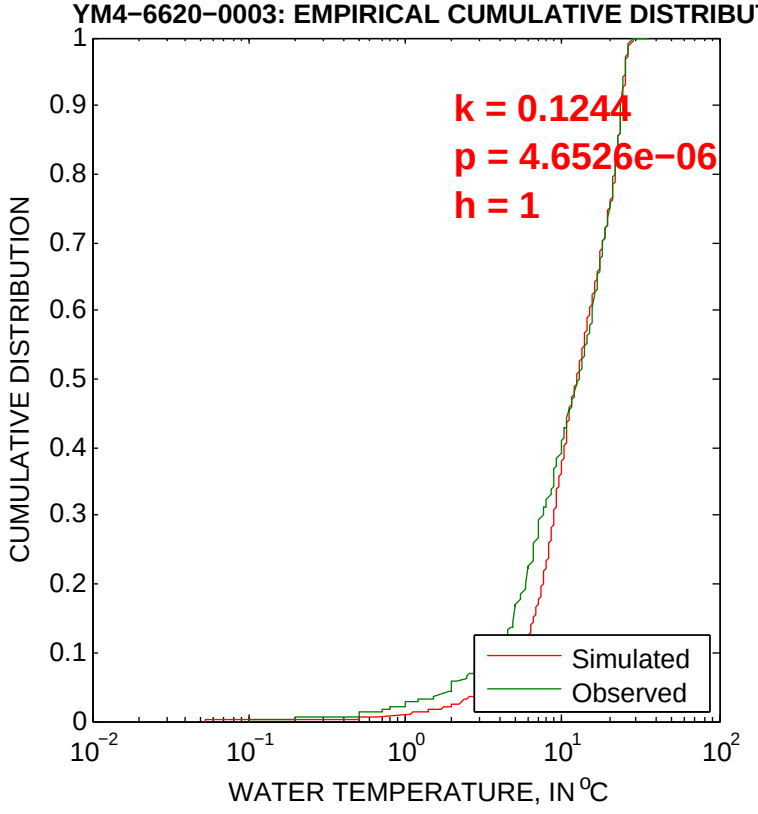












DATA SELECTION

scenario	file
P620171001WQ	WTMP.calib

plot: WTMP - water tempera...

Dates: 1/1/1985 – 12/31/201

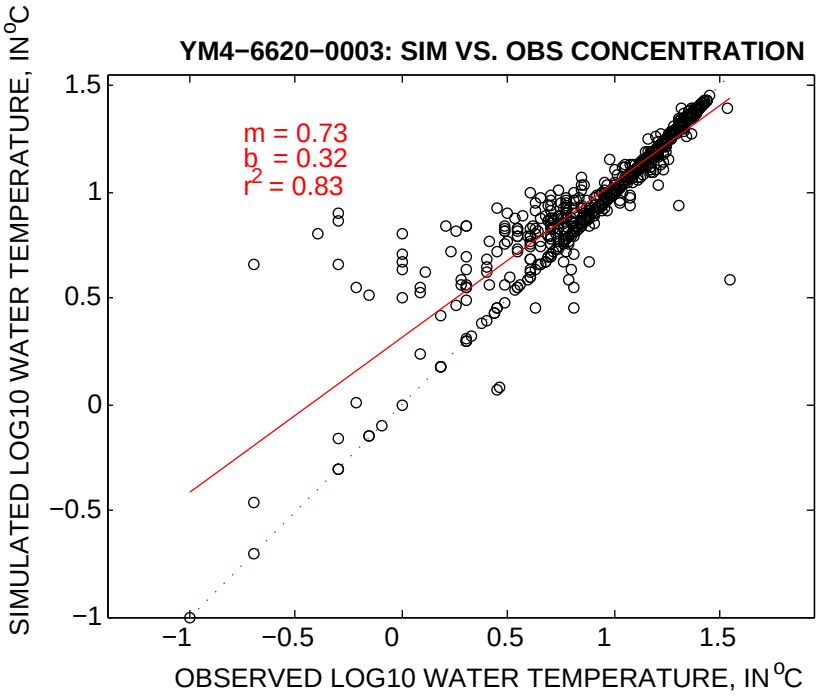
Drive	Directory	Observed
N/A	model	OBS20161101

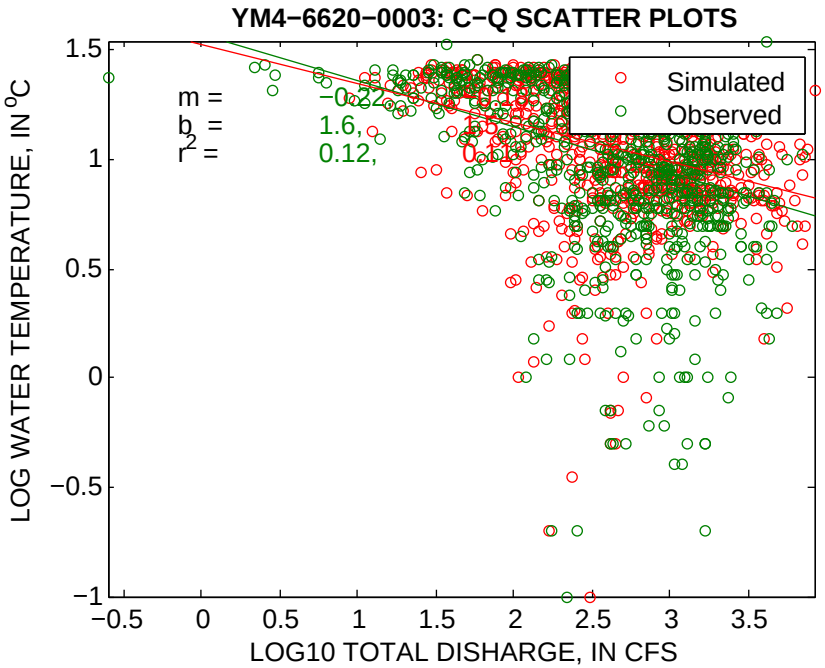
STATISTICS

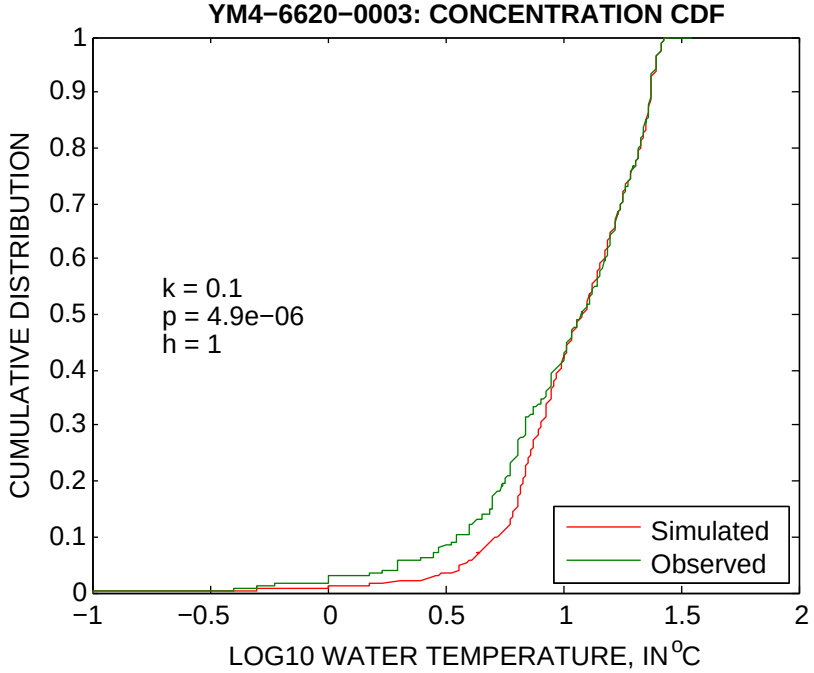
n	828	828
	observe	**simulate**
min	0.1	0.053824
	-1	-1.26902
mean	13.3096	13.8372
	1.01366	1.06443
media	12.9	12.342
	1.11059	1.09139
max	35	28.56
	1.54407	1.45576
varian	57.9522	49.4643
	0.137157	0.0911579
JB	0.001	0.001
	0.001	0.001
	ra	log
%	3.96367	5.00859
err.va	7.58722	0.0515482
rel.std.err	0.130922	0.375833
mod.eff	0.869078	0.624167

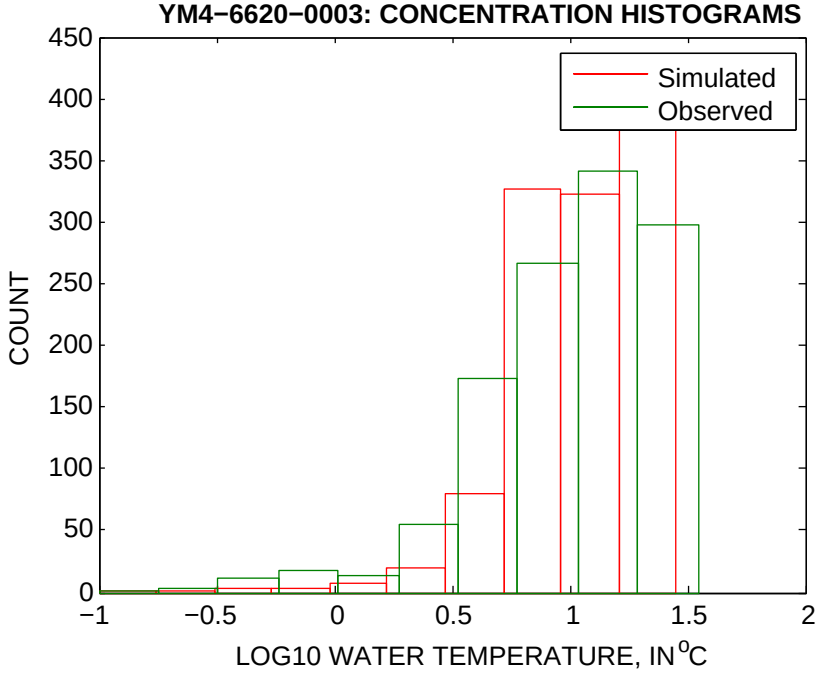
VERSION 2.1

ALL DATA
LOG10

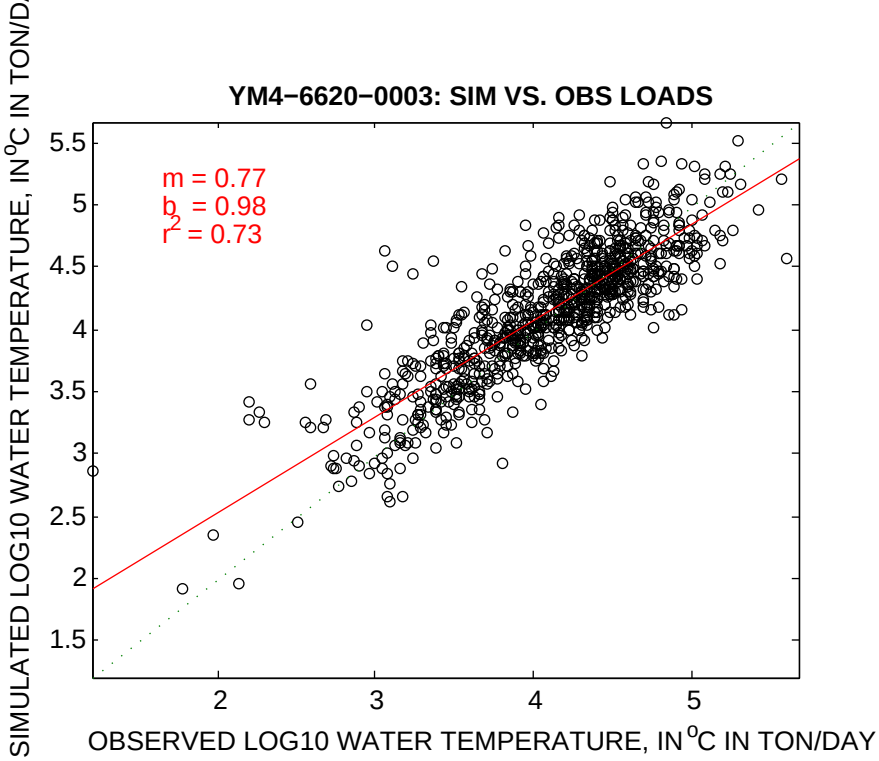


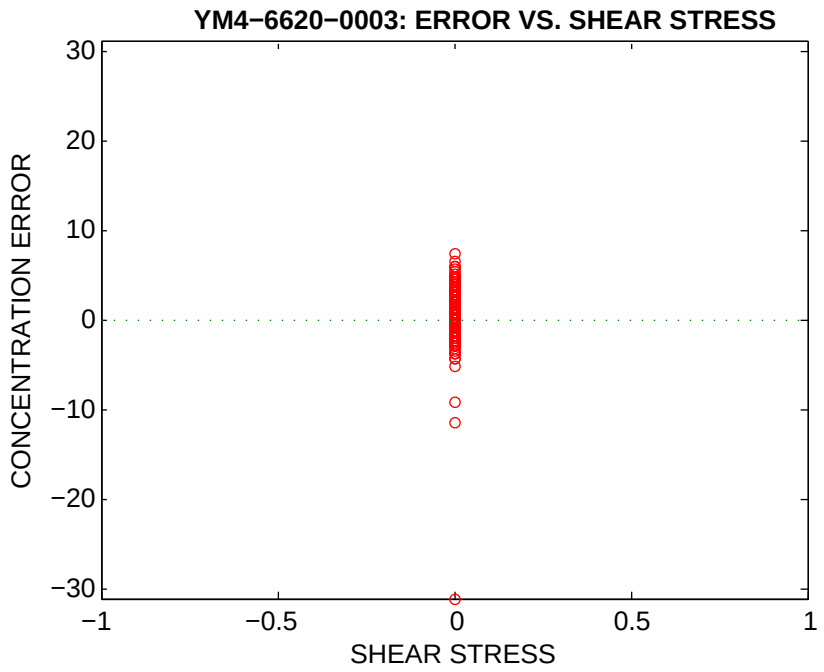


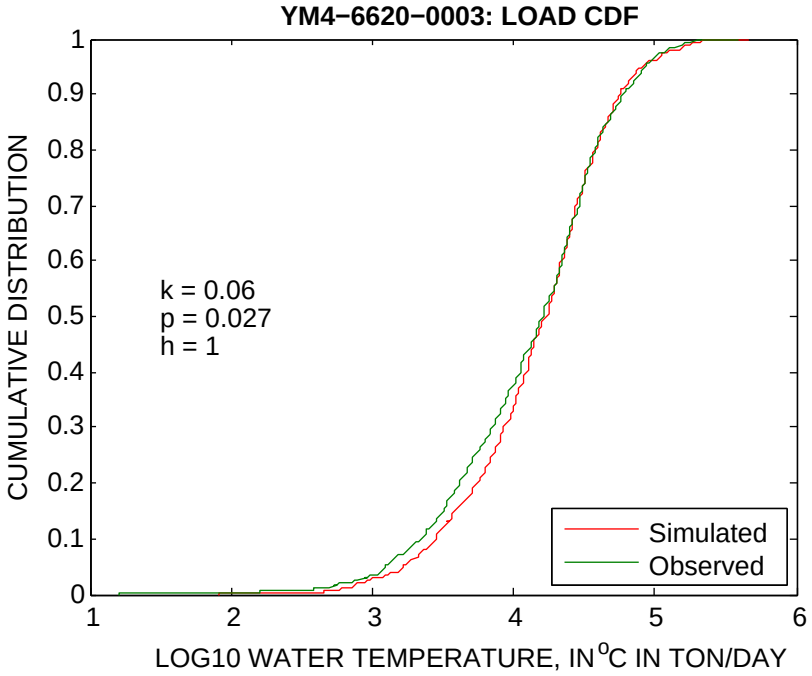


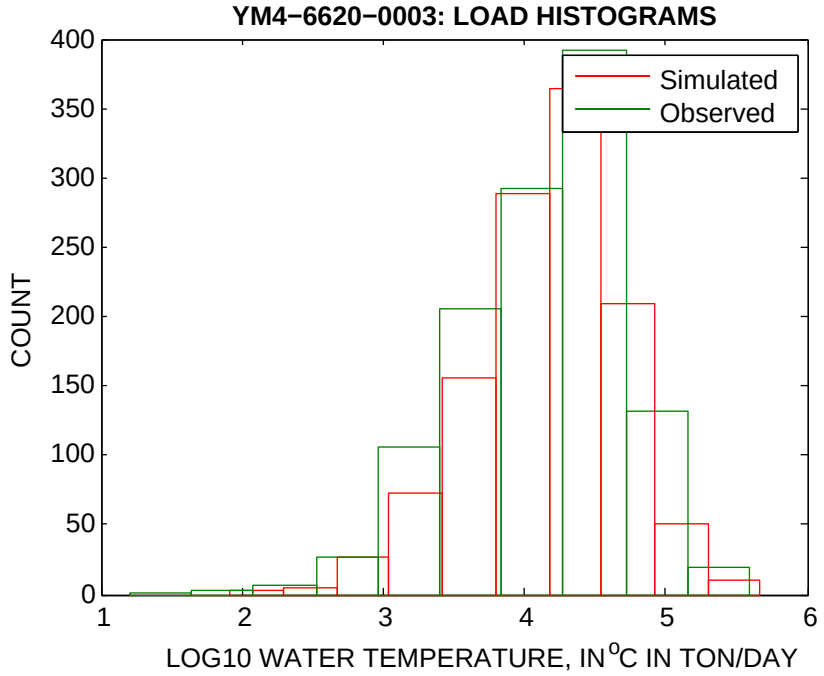


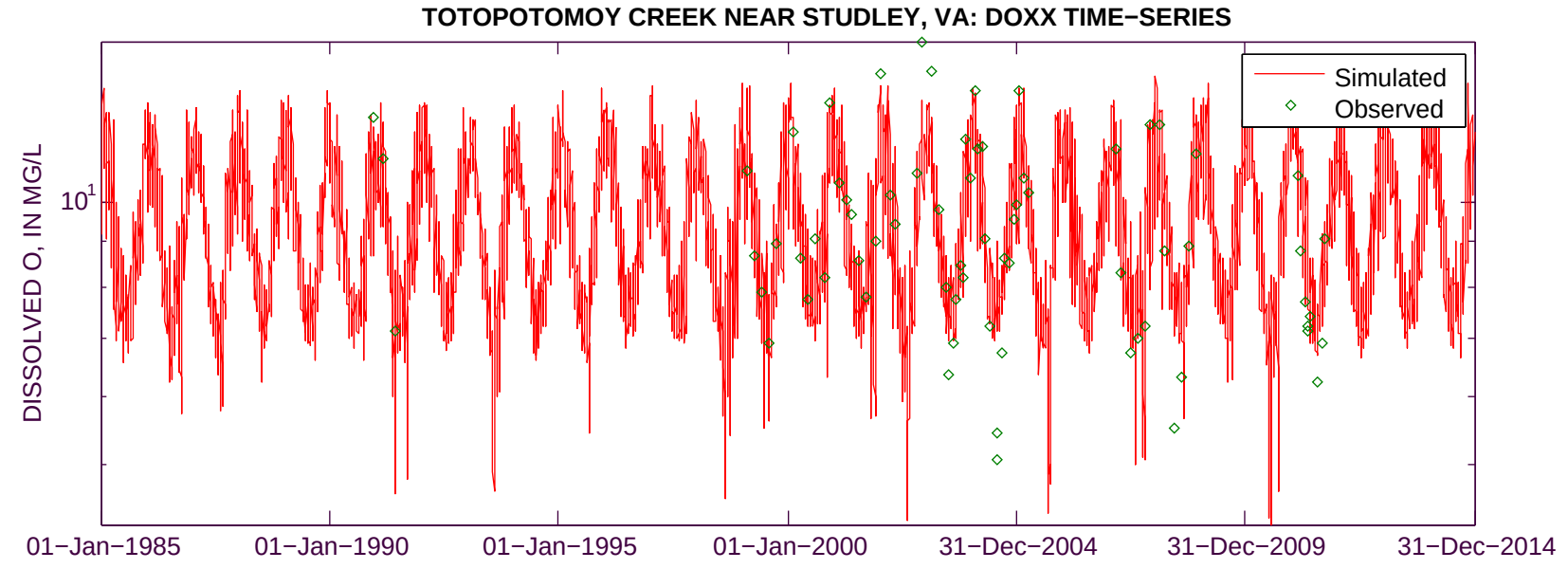
LOAD DATA
LOG10

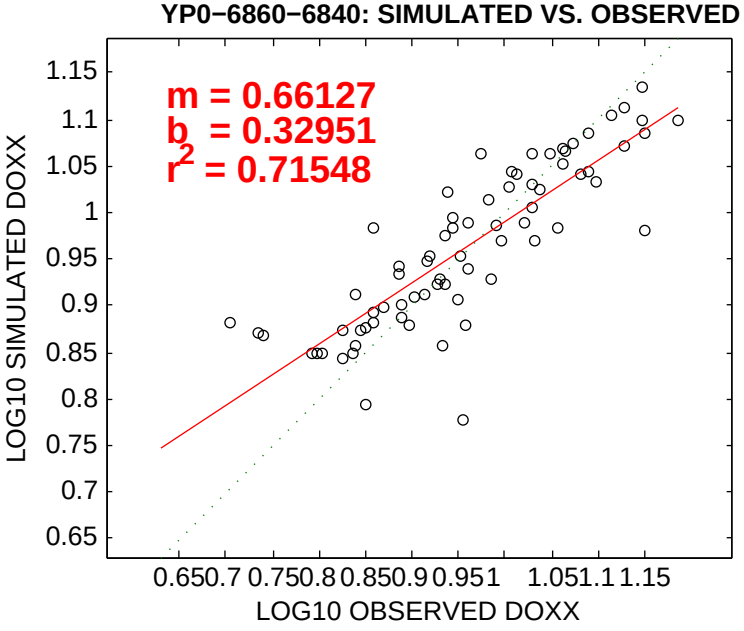


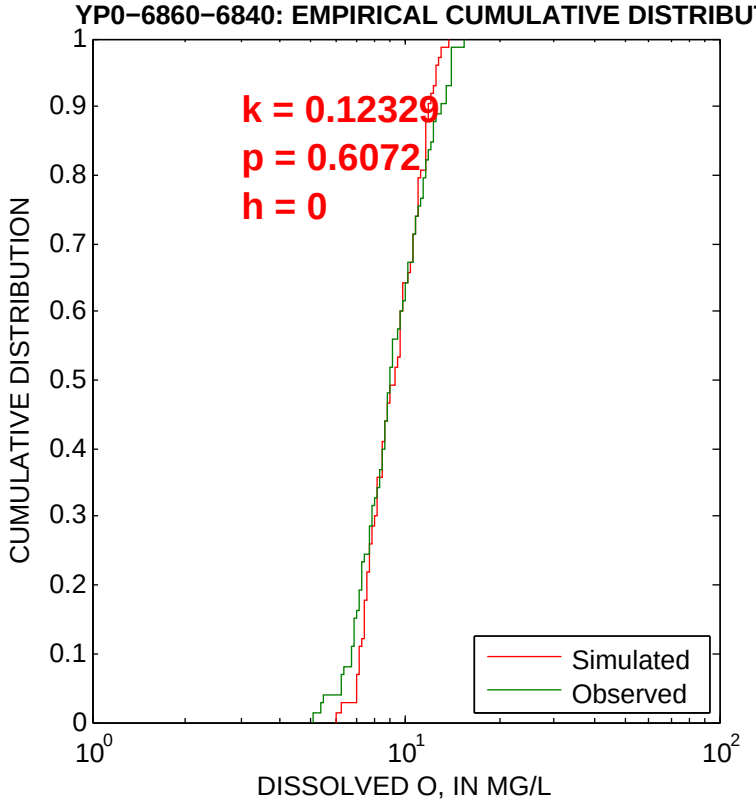












DATA SELECTION

scenario	file
P620171001WQ	DOXX.calib

plot: DOXX - dissolved oxygen

Dates: 1/1/1985 – 12/31/201

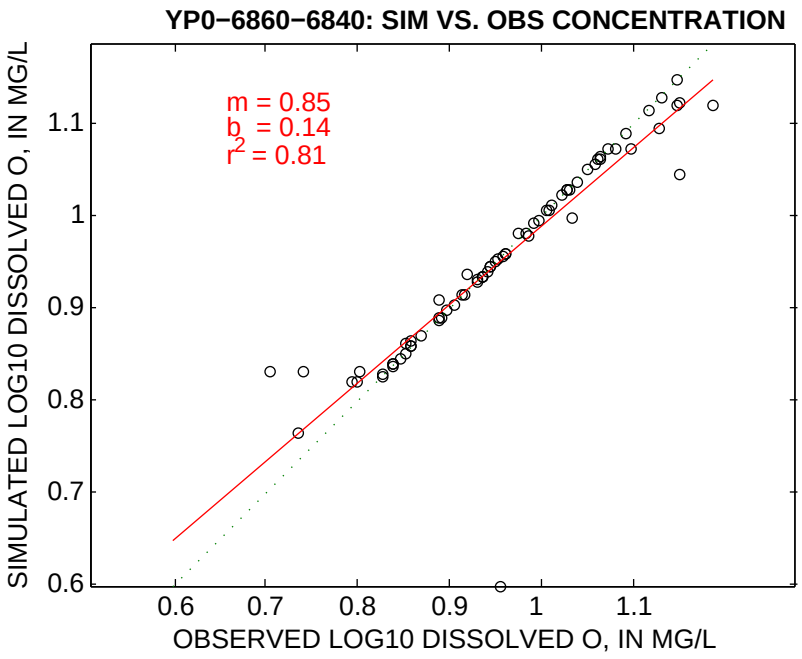
Drive	Directory	Observed
N/A	model	OBS20161101

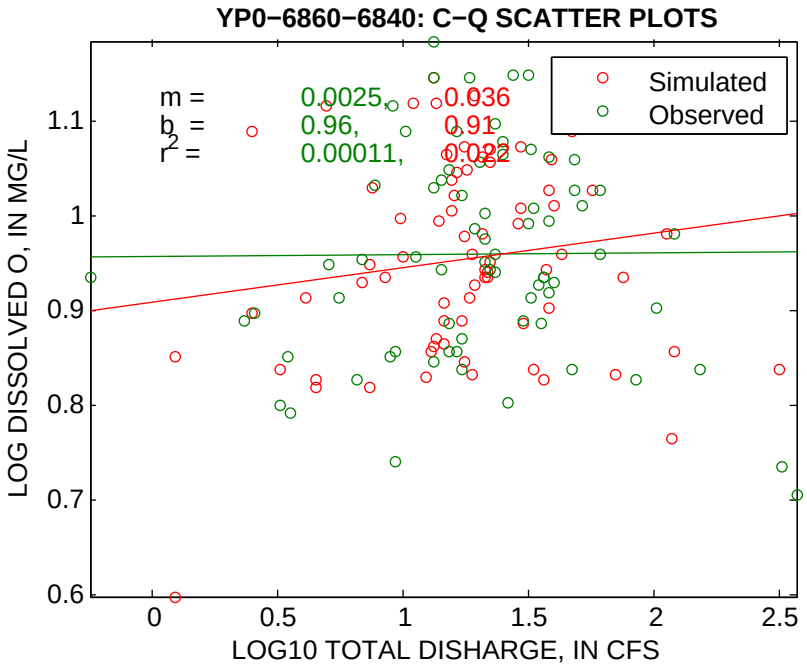
STATISTICS

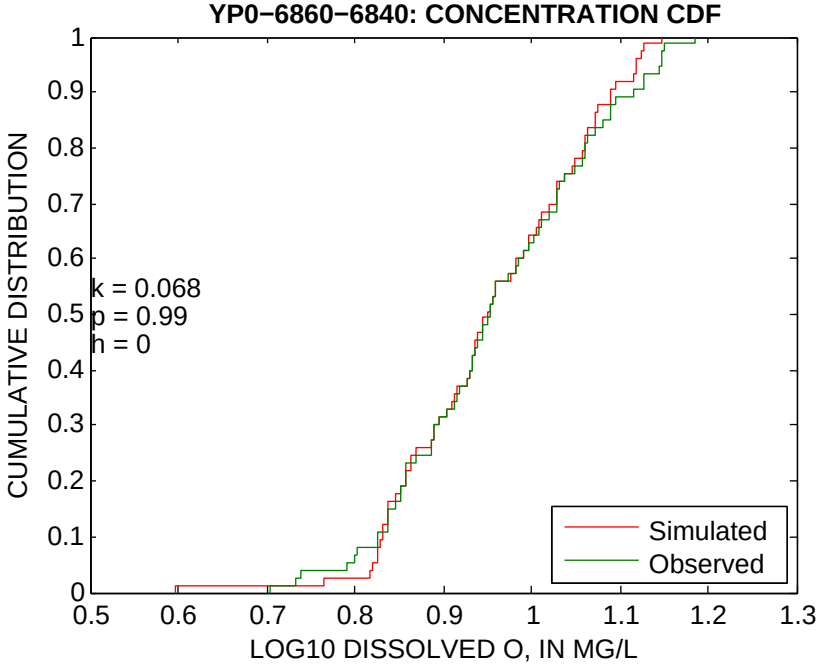
	n	73	73
		observe	simulate
min		5.07	5.9791
		0.705008	0.776636
mean		9.4063	9.38732
		0.959632	0.964083
media		8.96	9.3271
		0.952308	0.969747
max		15.33	13.652
		1.18554	1.1352
varian		5.7336	3.49039
		0.0122069	0.00746046
JB		✓ 0.098811	0.081360 ✓
		✓ 0.480157	0.124699 ✓
		ra	log
%		-0.201817	0.46387
err.va		1.49864	0.00354331
rel.std.err		0.261379	0.290271
mod.eff		0.738621	0.709729

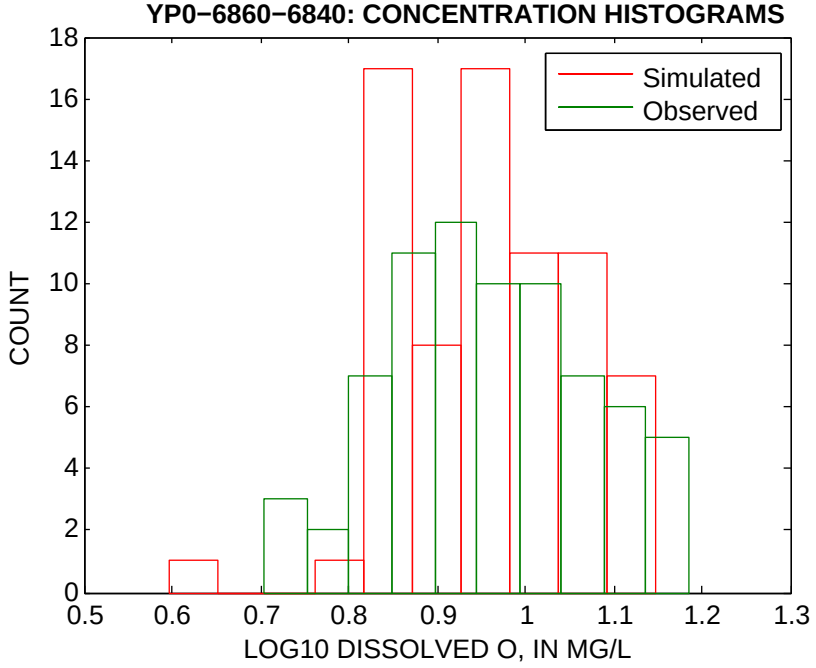
VERSION 2.1

ALL DATA
LOG10

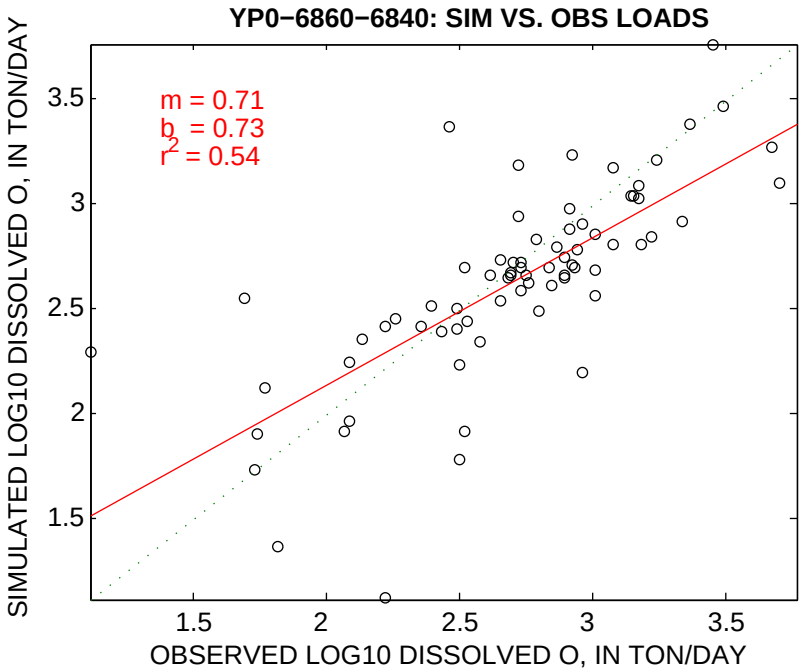


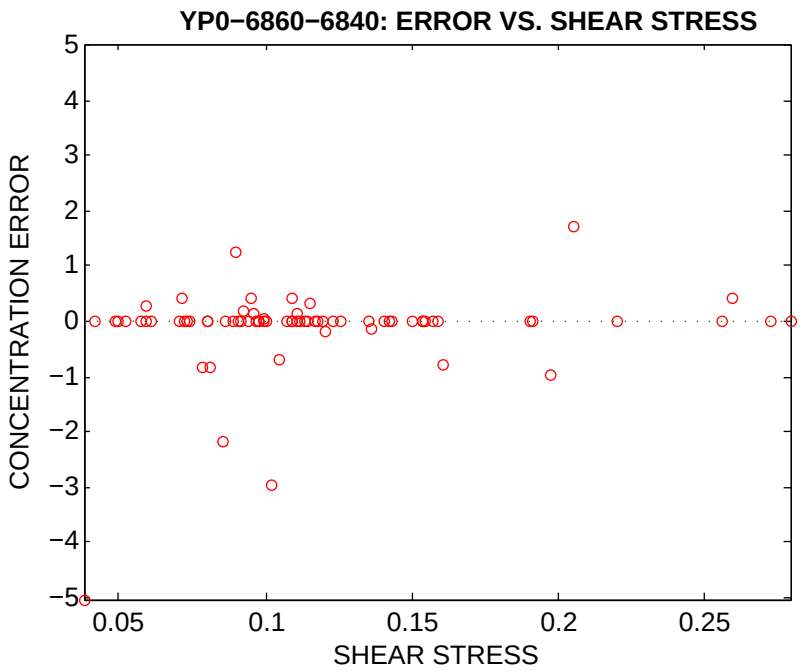


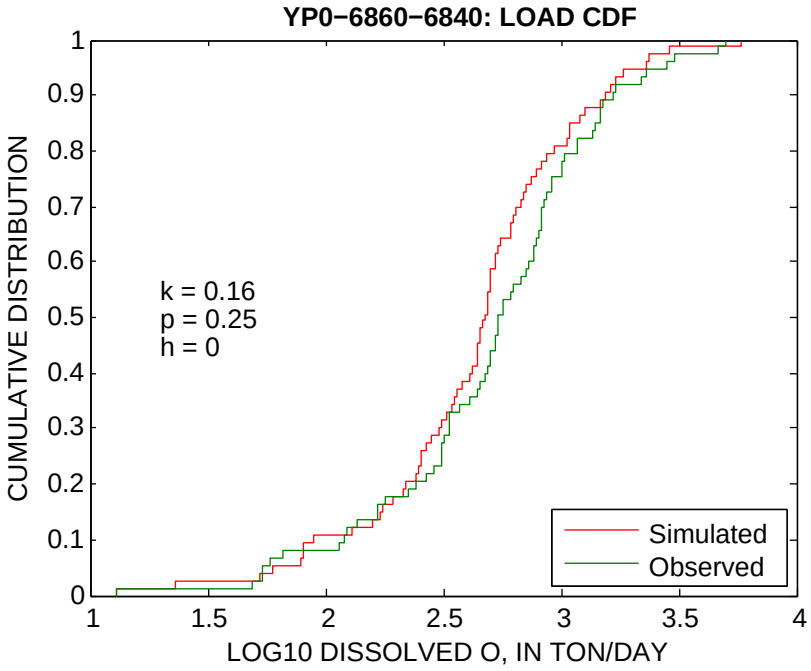


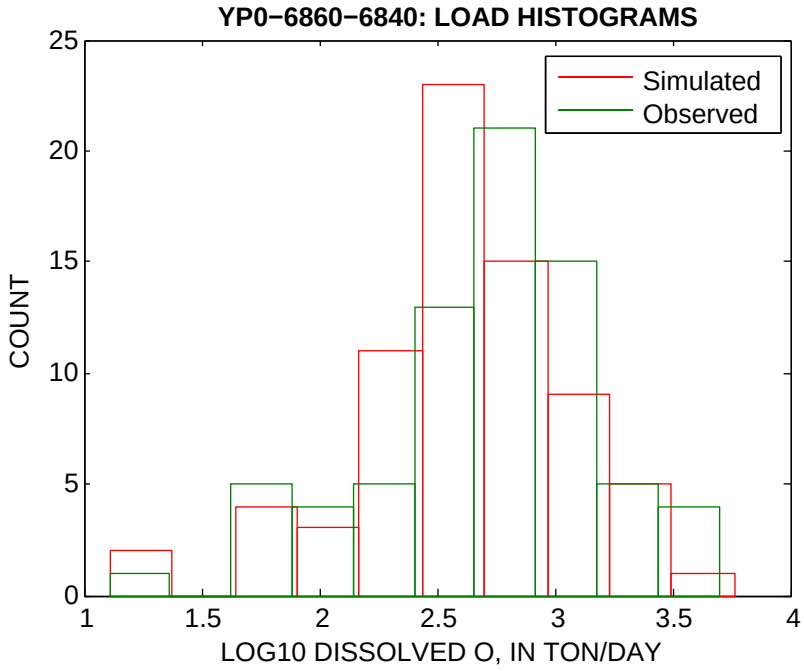


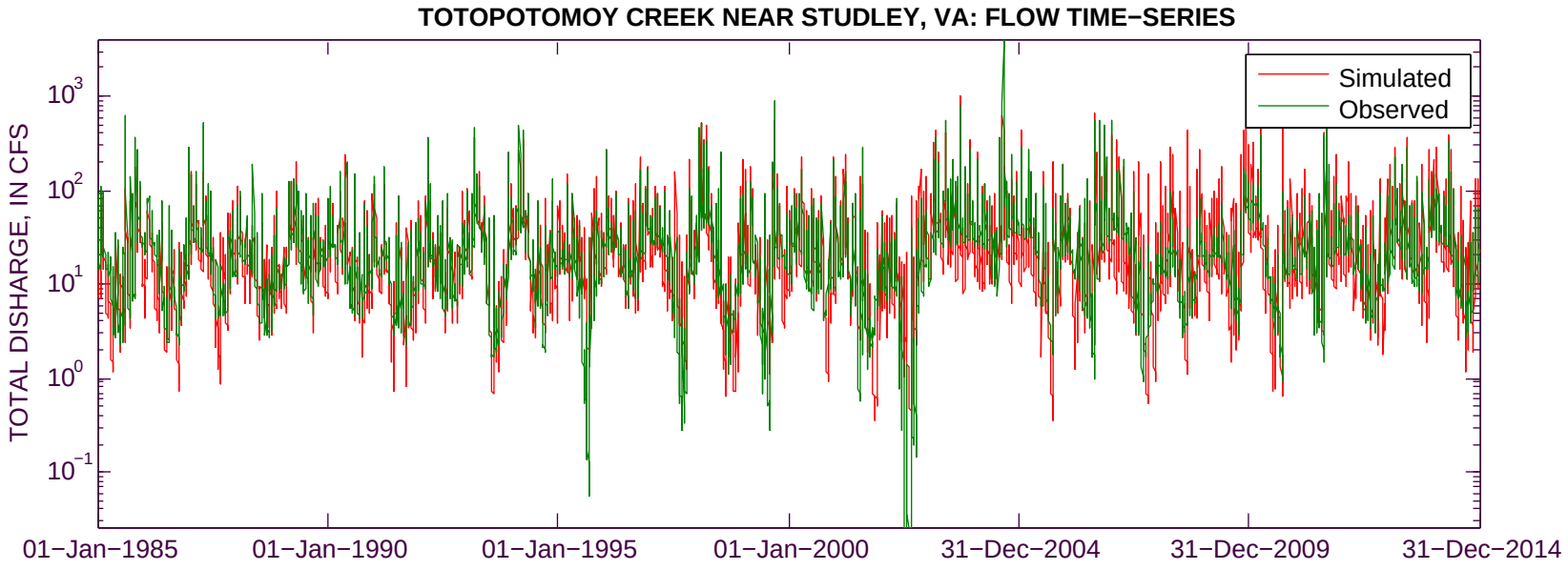
LOAD DATA
LOG10

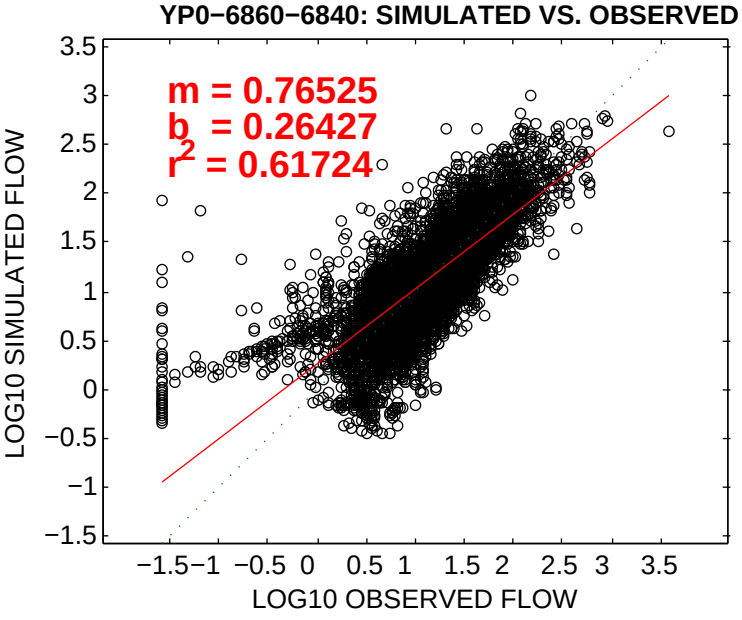


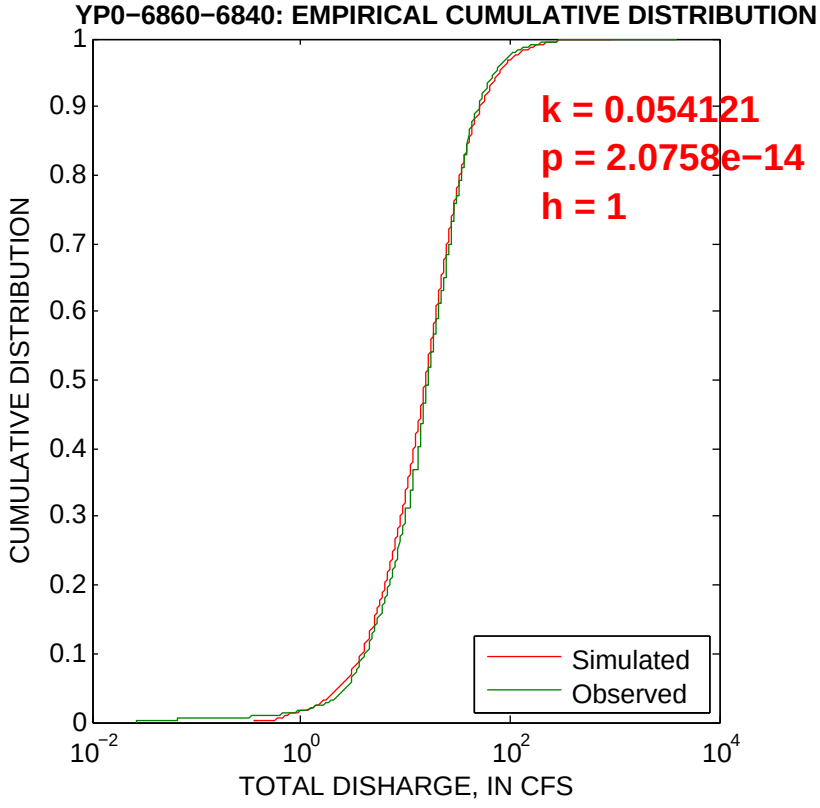












DATA SELECTION

scenario: P620171001WQ | file: _FLOW.calib

plot: FLOW - total discharge

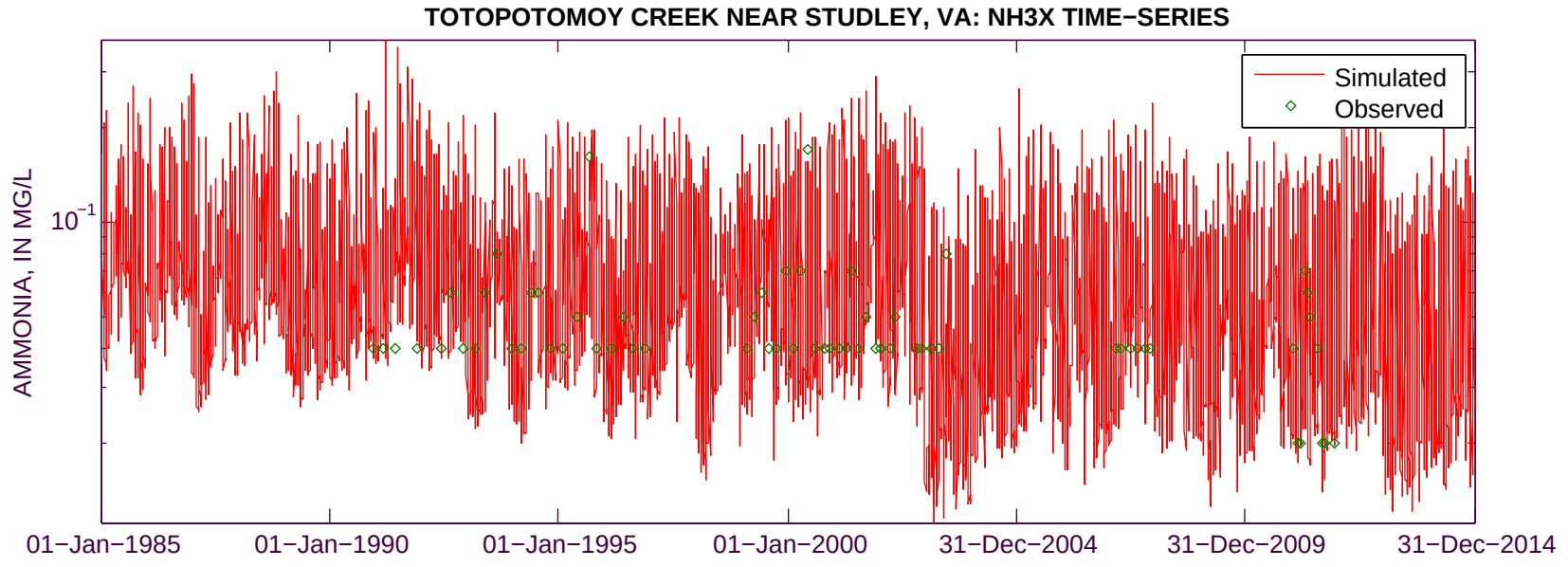
Dates: 1/1/1985 – 12/31/201

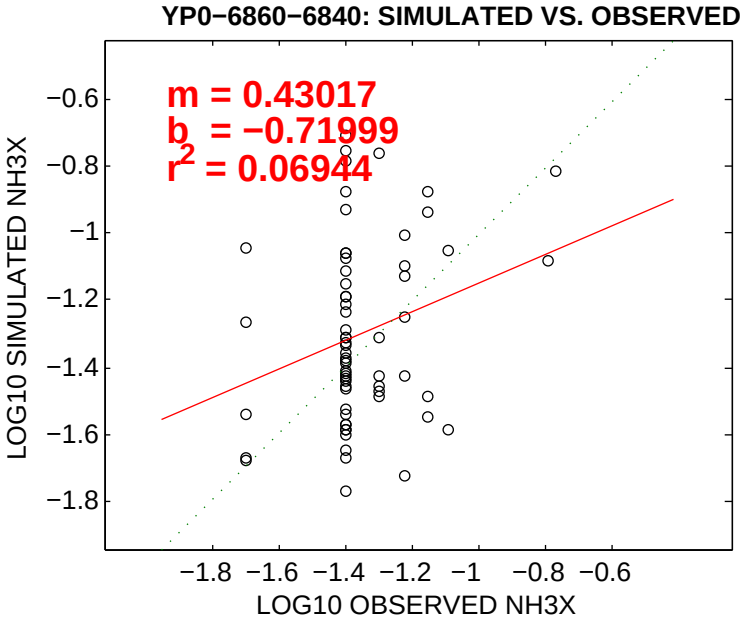
Drive: N/A | Directory: model | Observed: OBS20161101

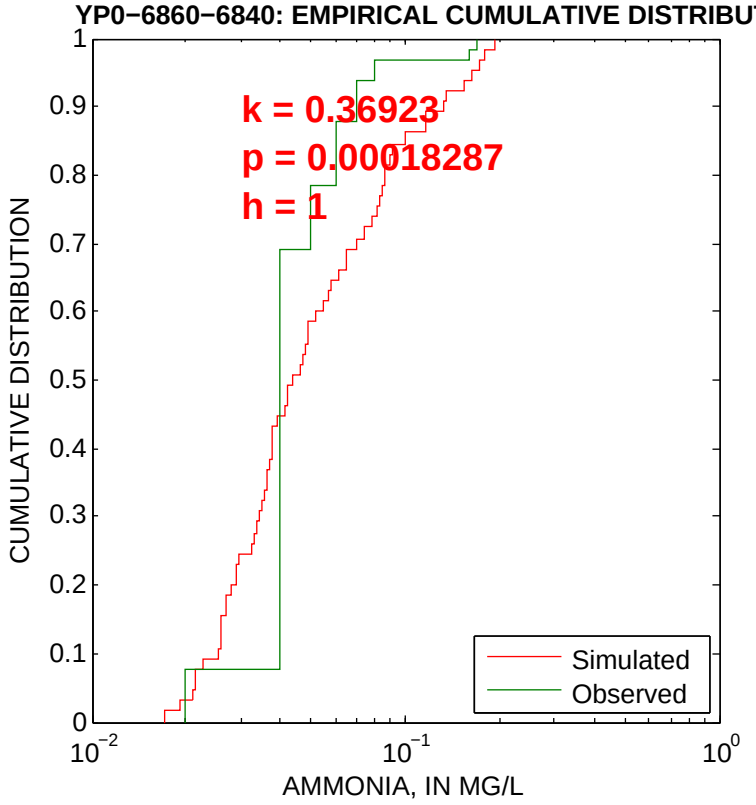
STATISTICS

		observe	simulate
n		10957	10957
min		0.026243	0.35082
		-1.58099	-0.454916
mean		26.1271	25.9238
		1.18488	1.17099
media		17.0262	15.751
		1.23112	1.19731
max		3840.03	983.12
		3.58433	2.99261
varian		2857.53	1569.08
		0.226602	0.214986
JB		0.001	0.001
		0.001	0.001
		ra	log
%		-0.778315	-1.17179
err.va		1974.6	0.0949681
rel.std.err		0.691017	0.419096
mod.eff		0.308983	0.580904

VERSION 2.1







DATA SELECTION

scenario: P620171001WQ | file: NH3X.calib

plot: NH3X - ammonia

Dates: 1/1/1985 – 12/31/201

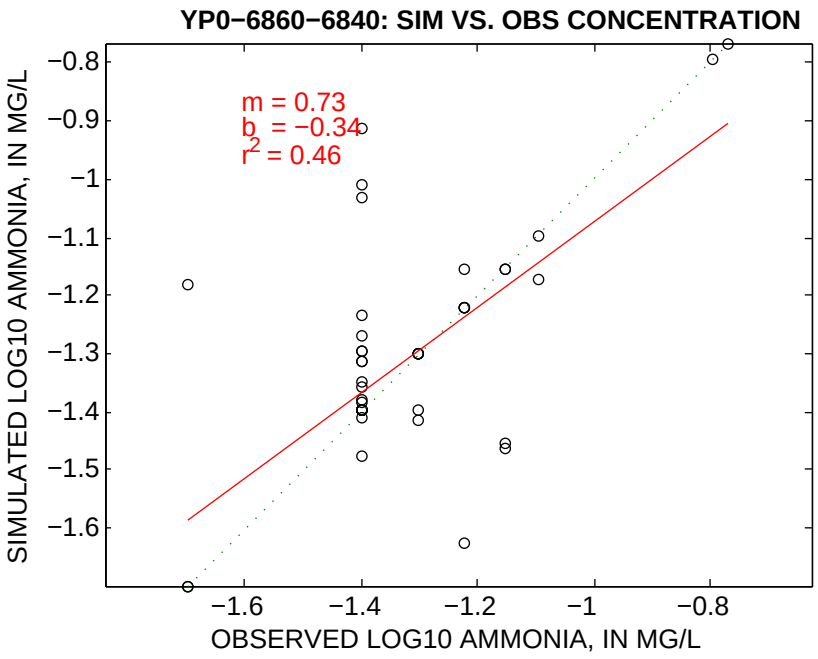
Drive | Directory | Observed: N/A | model | OBS20161101

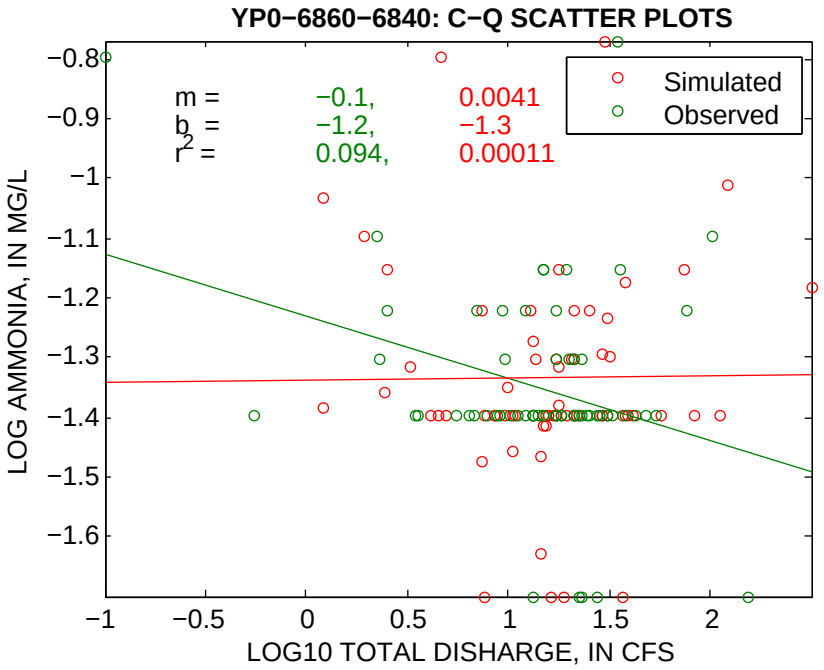
STATISTICS

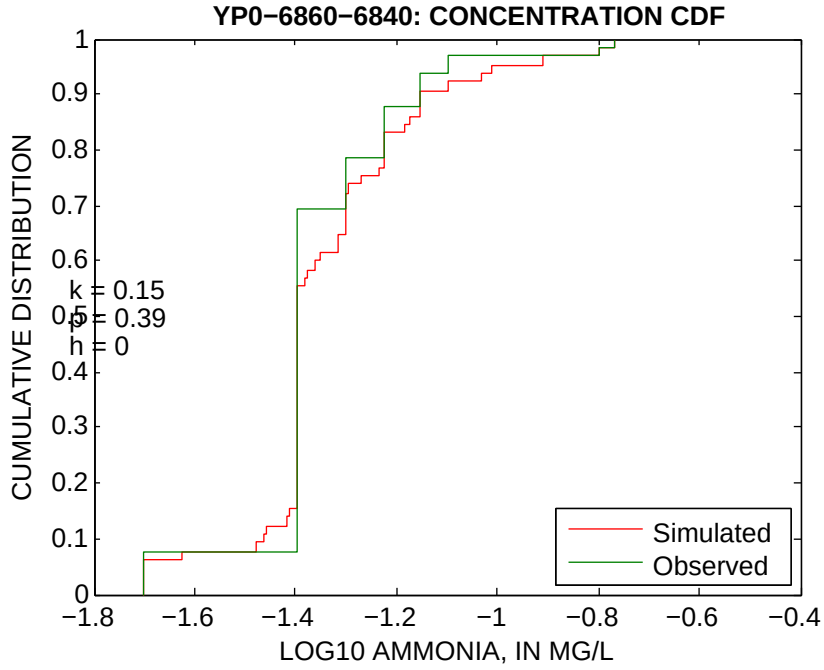
	n	65	65
		observe	simulate
min		0.02	0.017071
		-1.69897	-1.76774
mean		0.0481538	0.0610402
		-1.35275	-1.30191
media		0.04	0.044145
		-1.39794	-1.35512
max		0.17	0.19487
		-0.769551	-0.710255
varian		0.00060591	0.00185033
		0.0271499	0.0723506
JB		0.001	0.001381
		0.001	0.091725
		ra	log
%		26.7607	-3.75832
err.va		0.00205838	0.0787674
rel.std.err		3.39714	2.9012
mod.eff		-2.39714	-1.9012

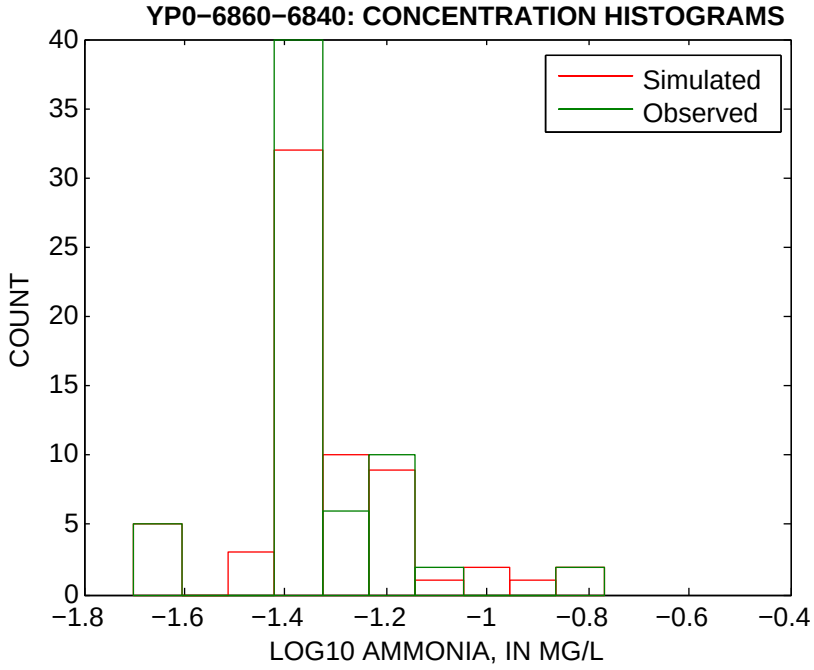
VERSION

ALL DATA
LOG10

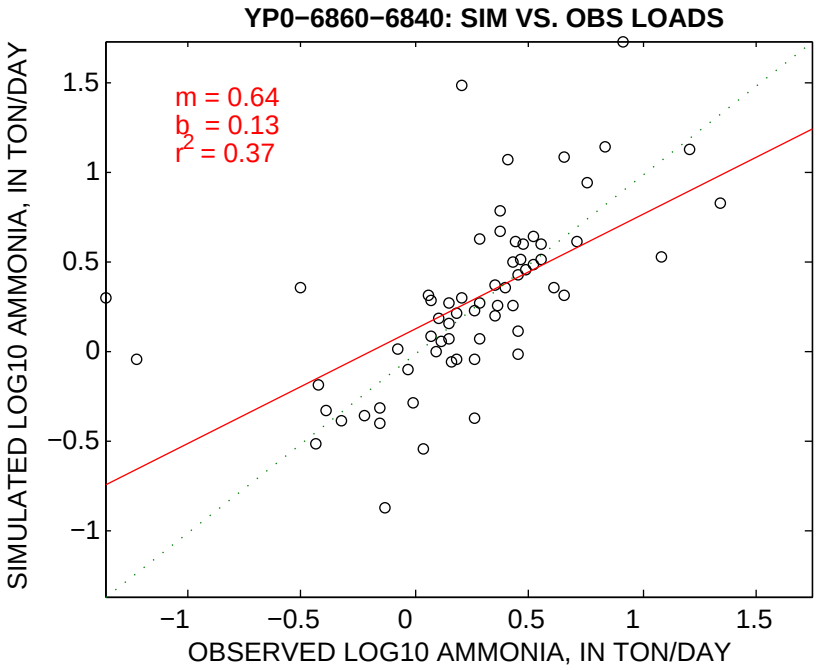


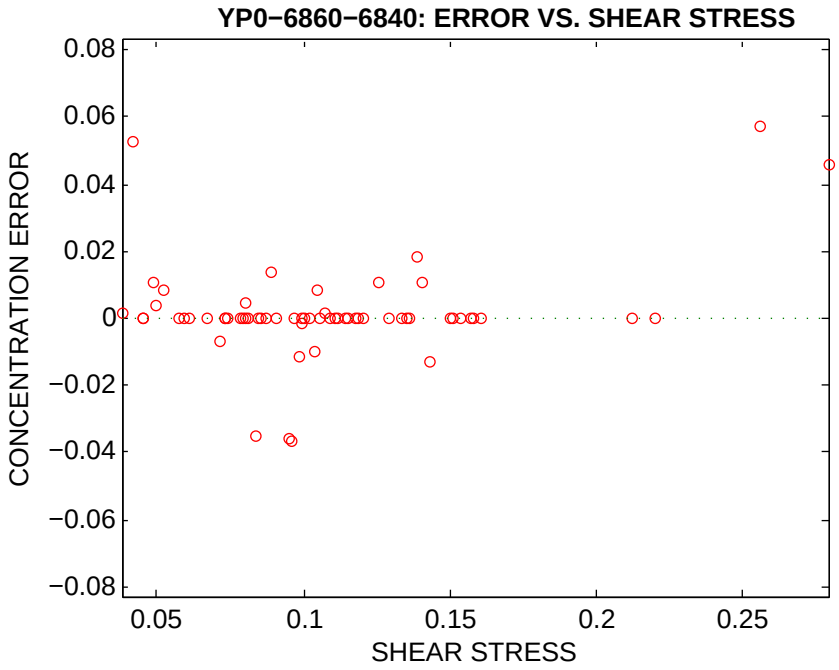


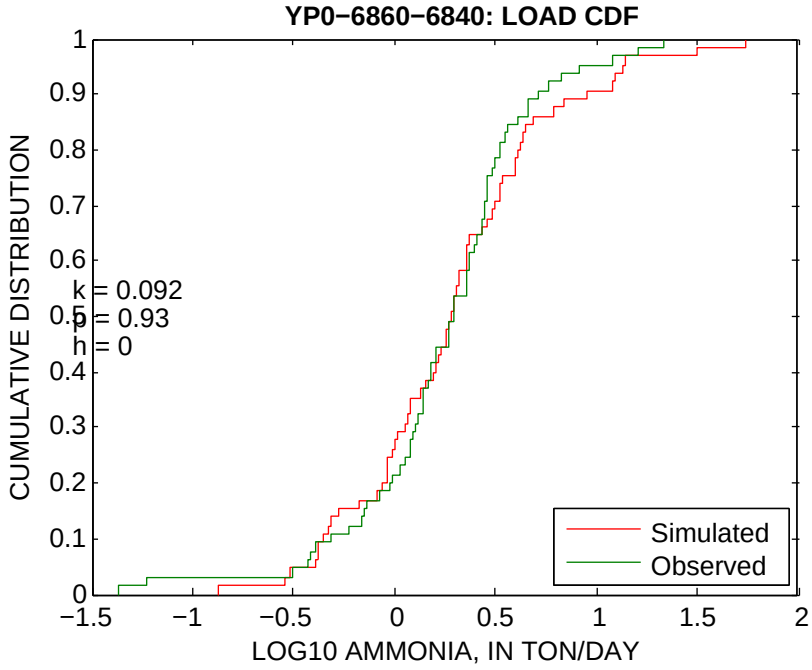


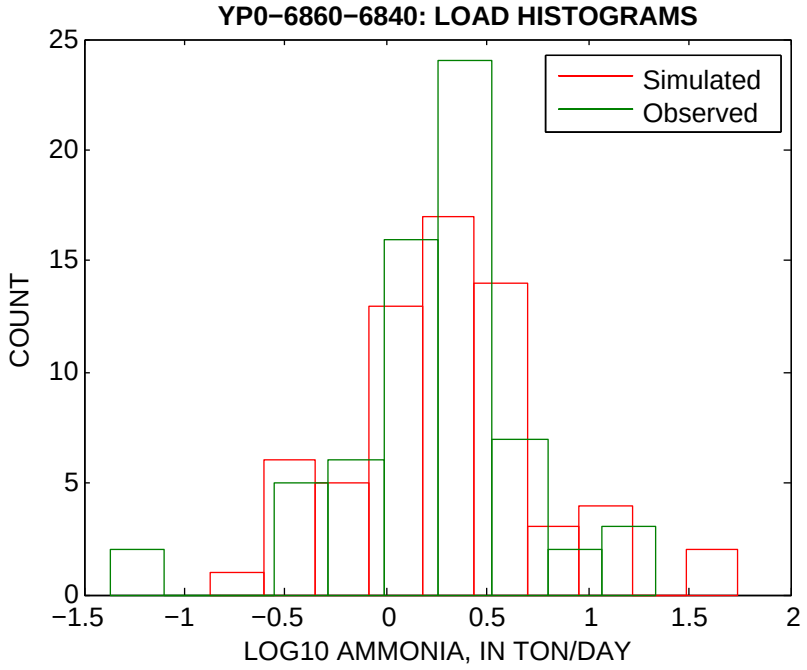


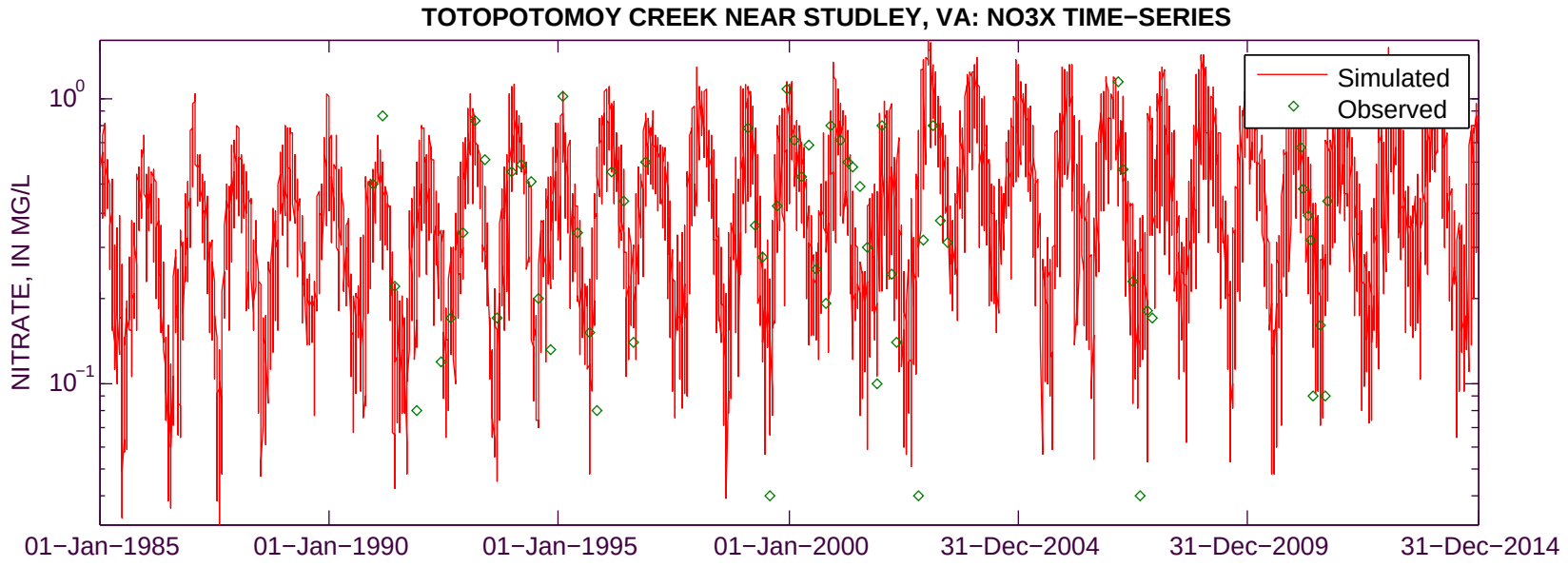
LOAD DATA
LOG10

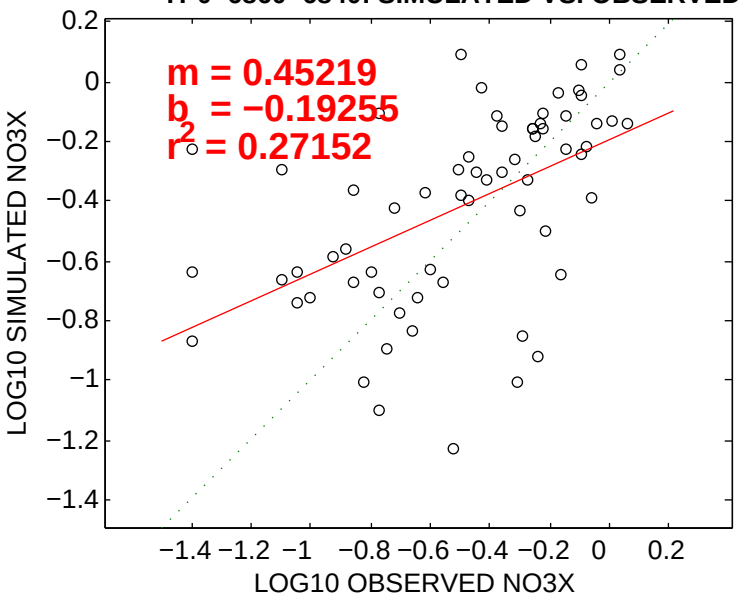


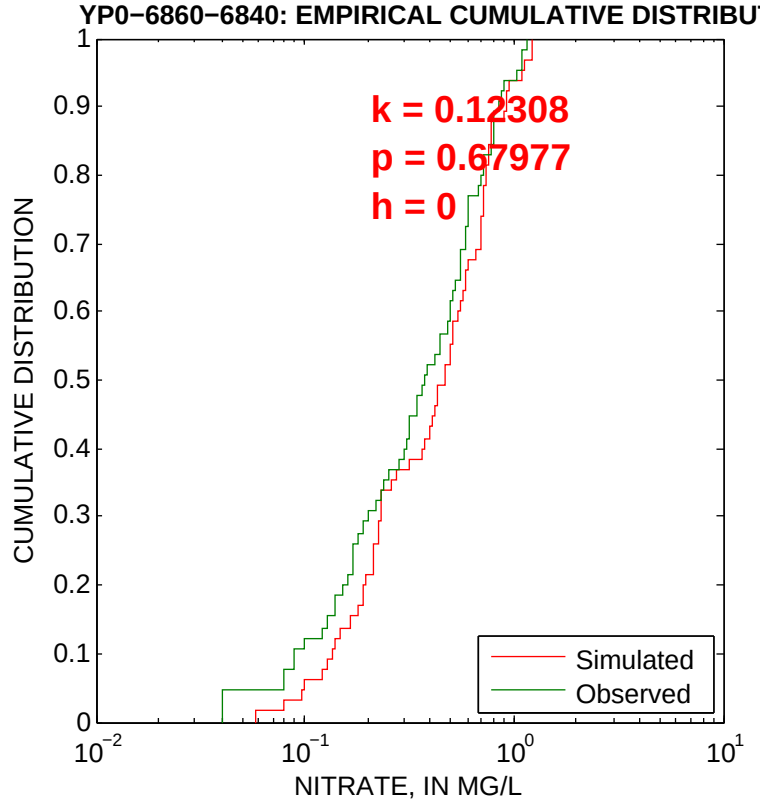












DATA SELECTION

scenario	file
P620171001WQ	NO3X.calib

plot: NO3X - nitrate

Dates 1/1/1985 12/31/201

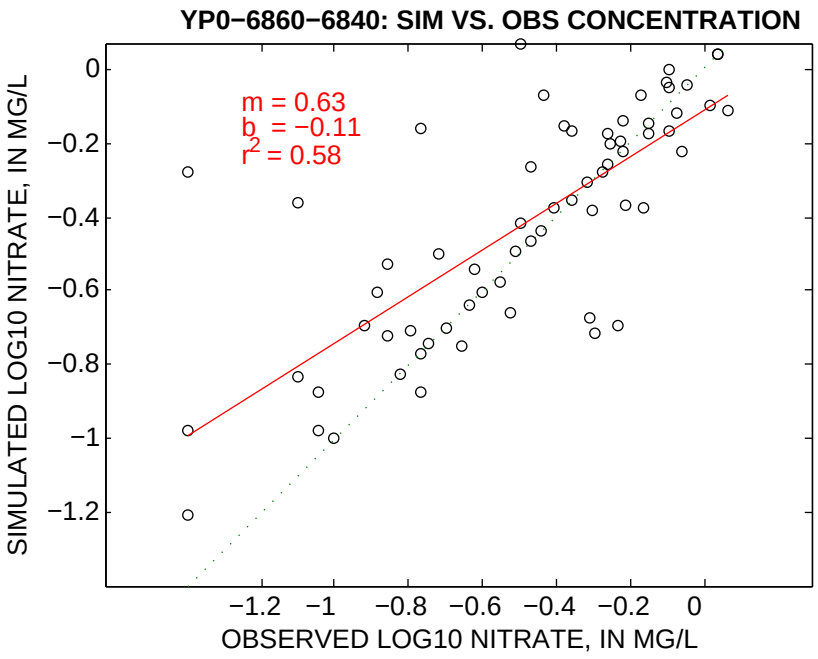
Drive	Directory	Observed
N/A	model	OBS20161101

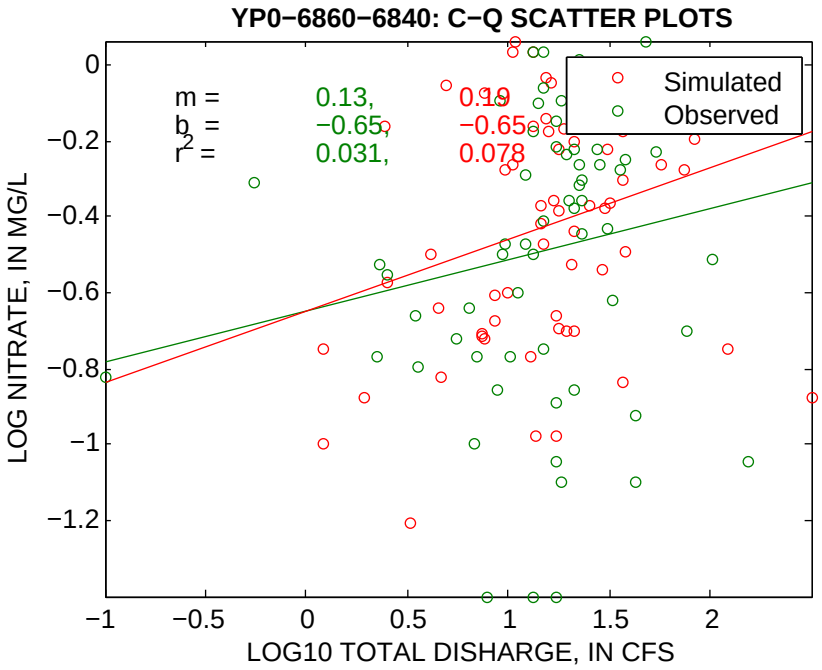
STATISTICS

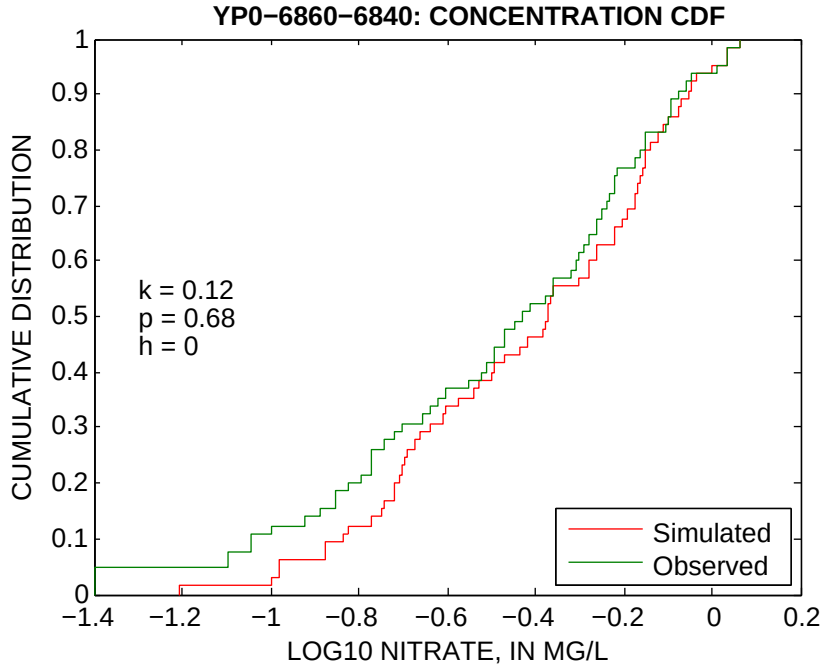
	n	65	65
		observe	simulate
min		0.04	0.05869
		-1.39794	-1.23144
mean		0.433385	0.486837
		-0.491198	-0.414668
media		0.37	0.46596
		-0.431798	-0.331651
max		1.16	1.2408
		0.064458	0.0937018
varian		0.087104	0.0929457
		0.138645	0.104411
JB		0.053918	0.068134
		0.054589	0.081361
		ra	log
%		12.3337	-15.5802
err.va		0.0711834	0.123616
rel.std.err		0.817223	0.891601
mod.eff		0.182777	0.108399

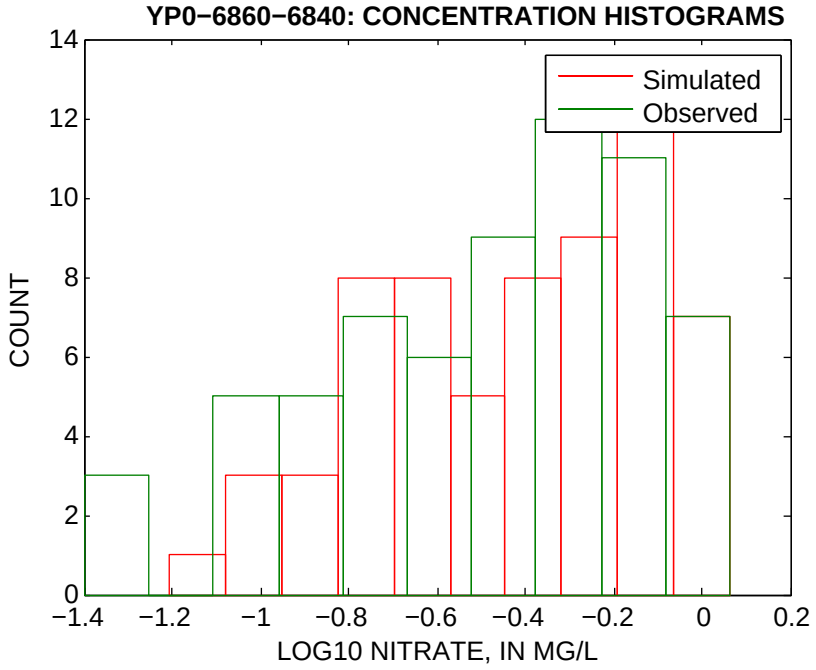
VERSION 2.1

ALL DATA
LOG10

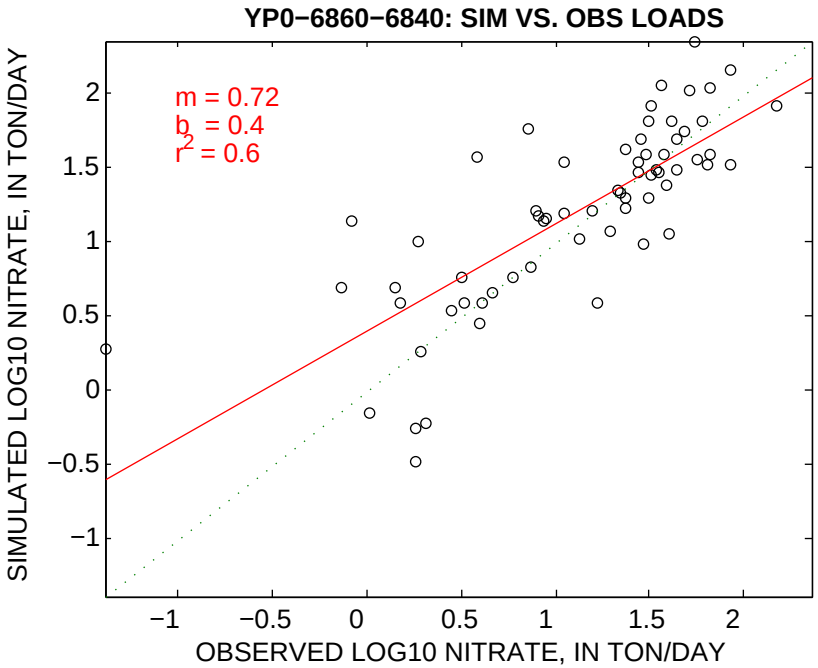


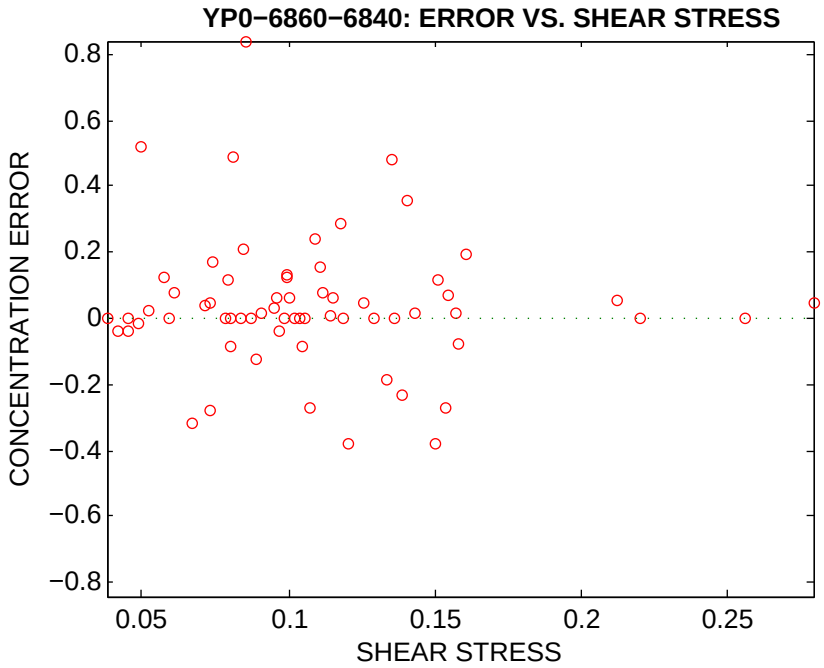


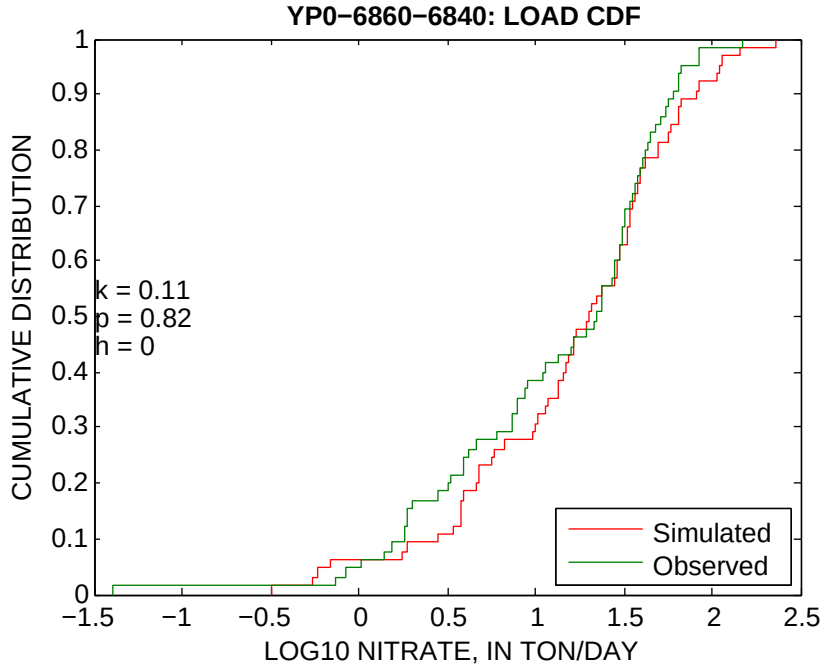


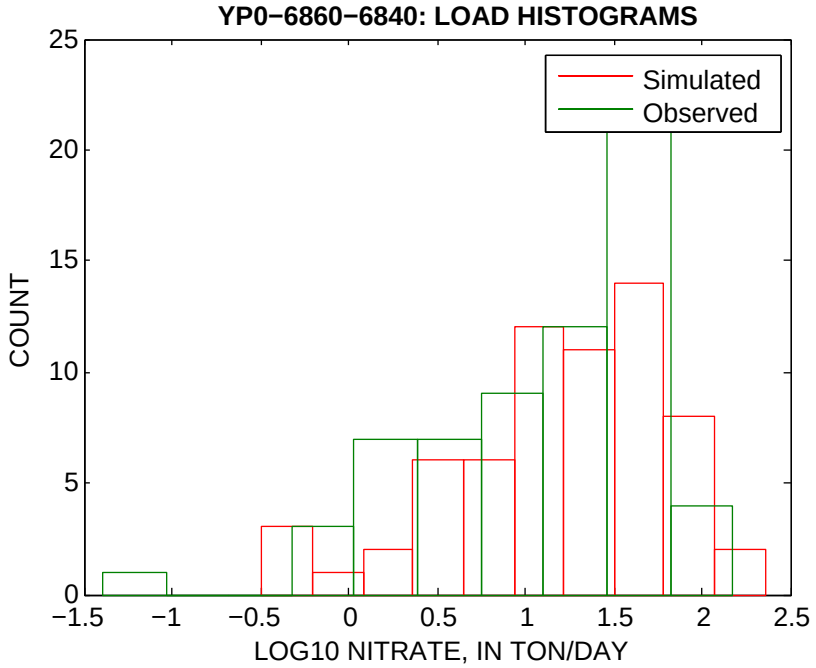


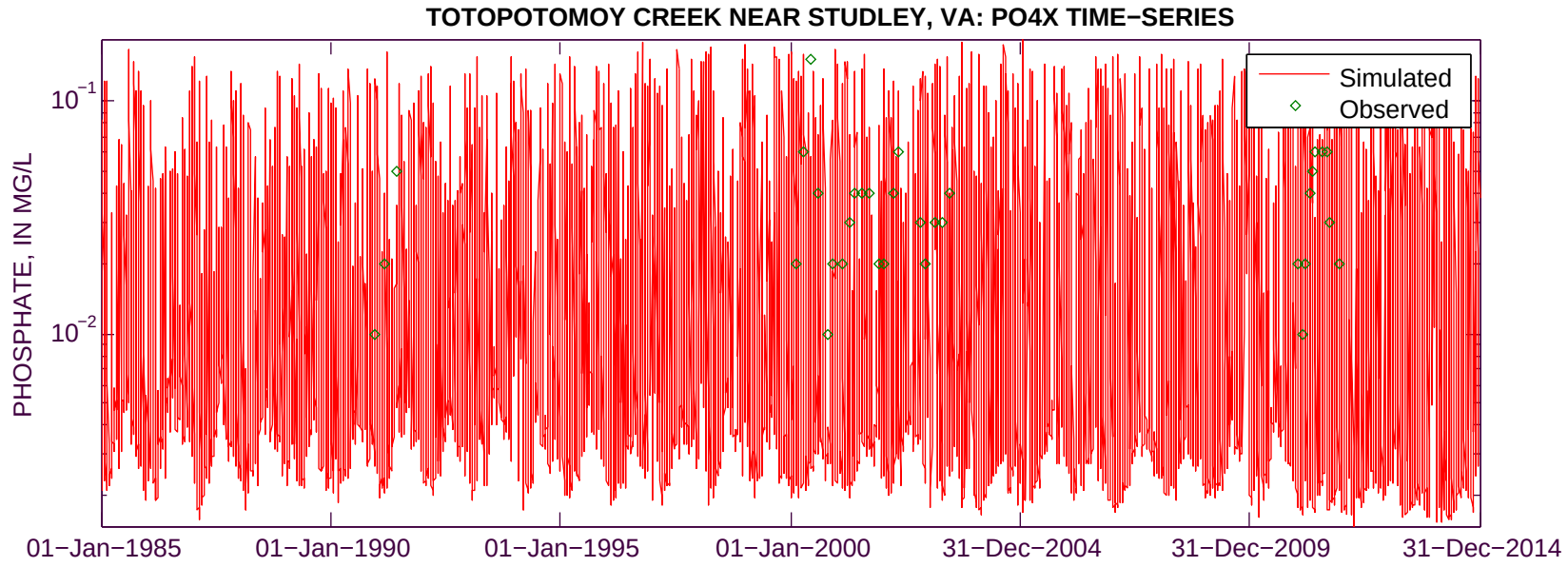
LOAD DATA
LOG10

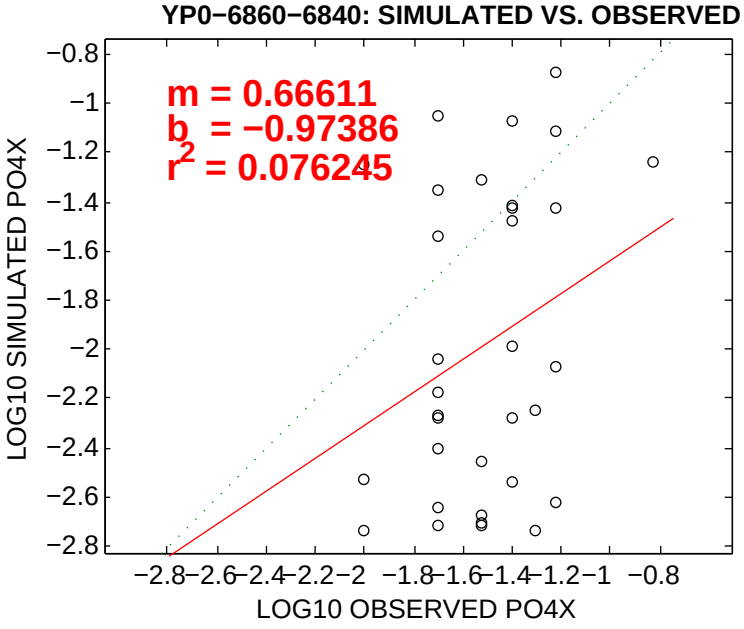


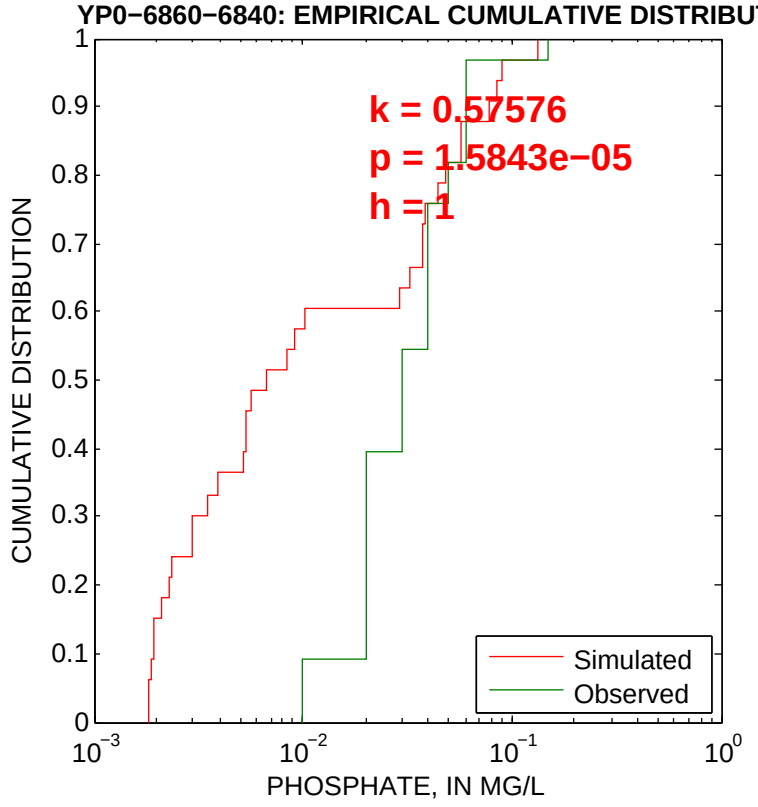












DATA SELECTION

scenario: P620171001WQ | file: PO4X.calib

plot: PO4X - phosphate

Dates: 1/1/1985 – 12/31/201

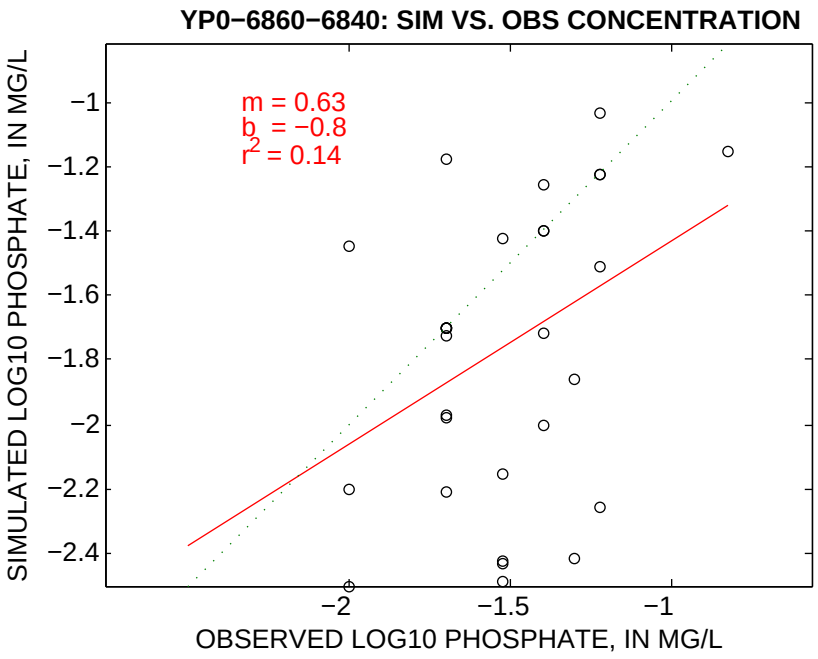
Drive: N/A | Directory: model | Observed: OBS20161101

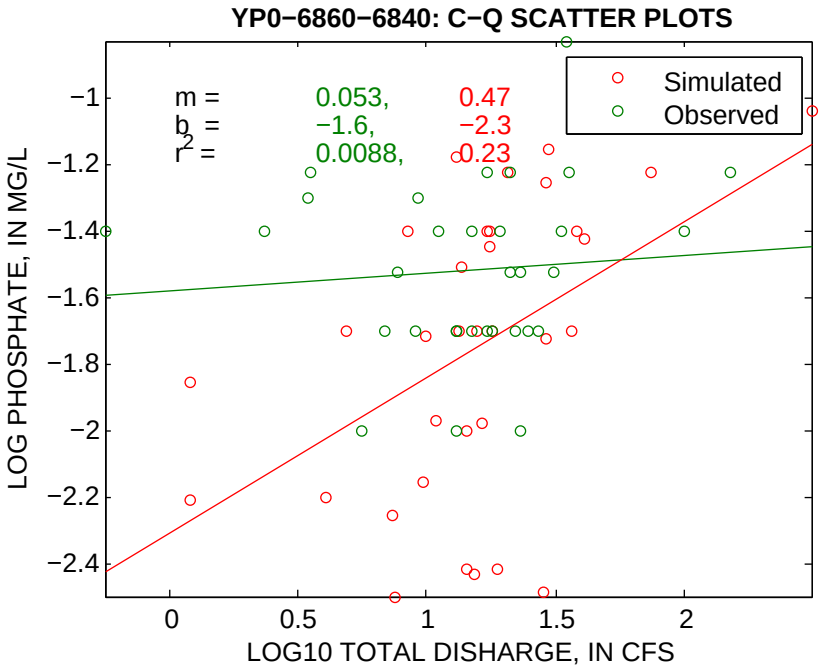
STATISTICS

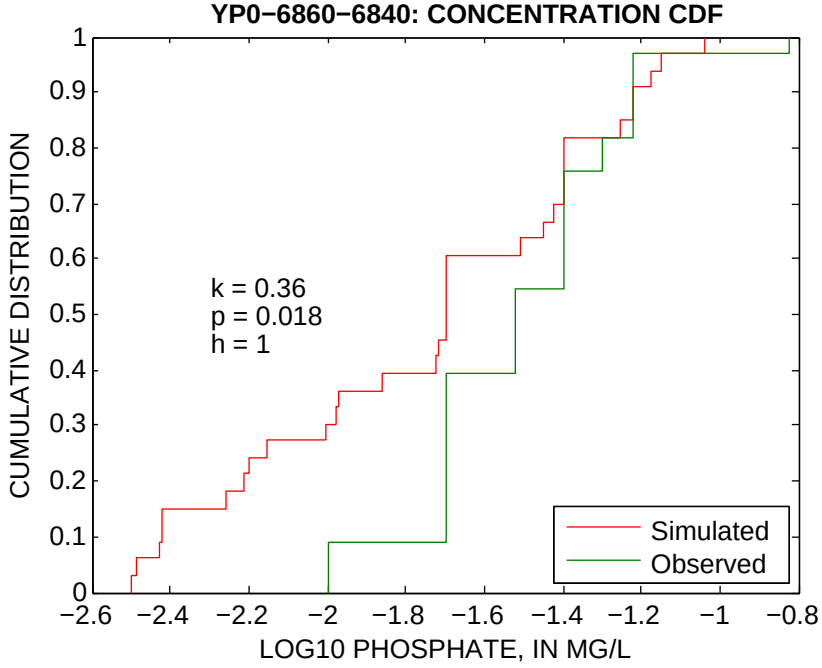
	n	observe	simulate
		33	33
min		0.01	0.0018247
		-2	-2.73881
mean		0.0366667	0.0258061
		-1.51288	-1.98161
media		0.03	0.0066722
		-1.52288	-2.17573
max		0.15	0.13343
		-0.823909	-0.874747
varian		0.00066041	0.00107463
		0.0668459	0.38901
JB		0.001	0.003873
		0.5	0.077974
		ra	log
%		-29.6199	30.9827
err.va		0.00135599	0.593376
rel.std.err		2.05323	8.87677
mod.eff		-1.05323	-7.87677

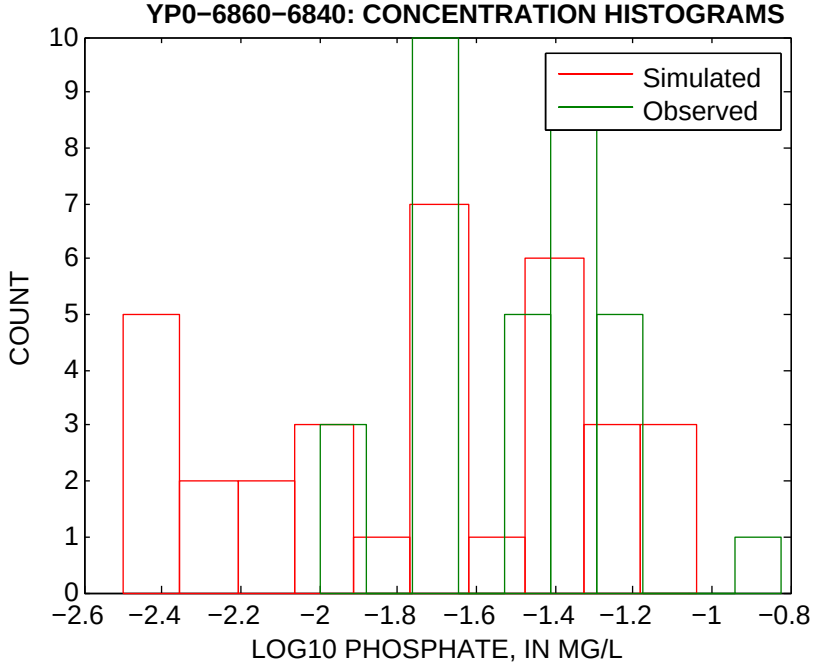
VERSION 2.1

ALL DATA
LOG10

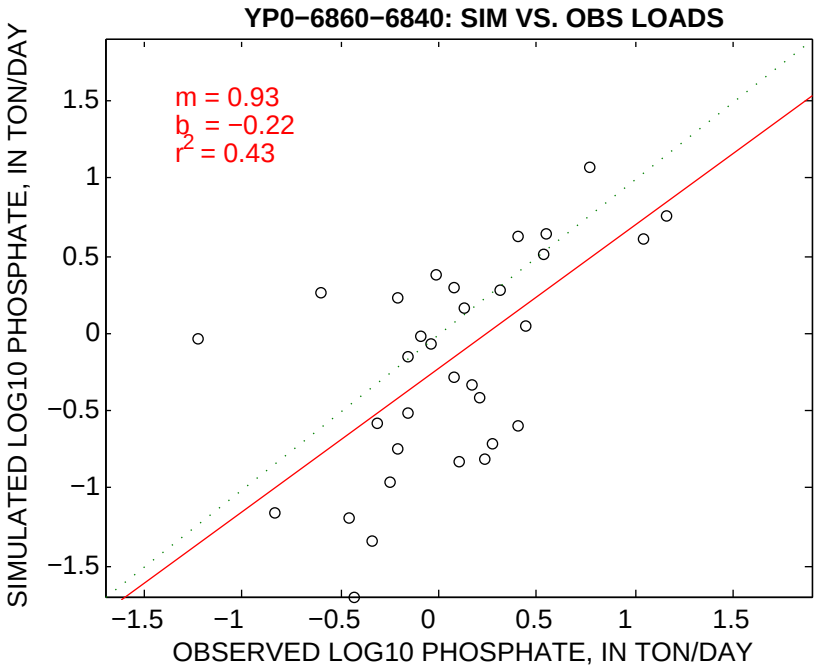


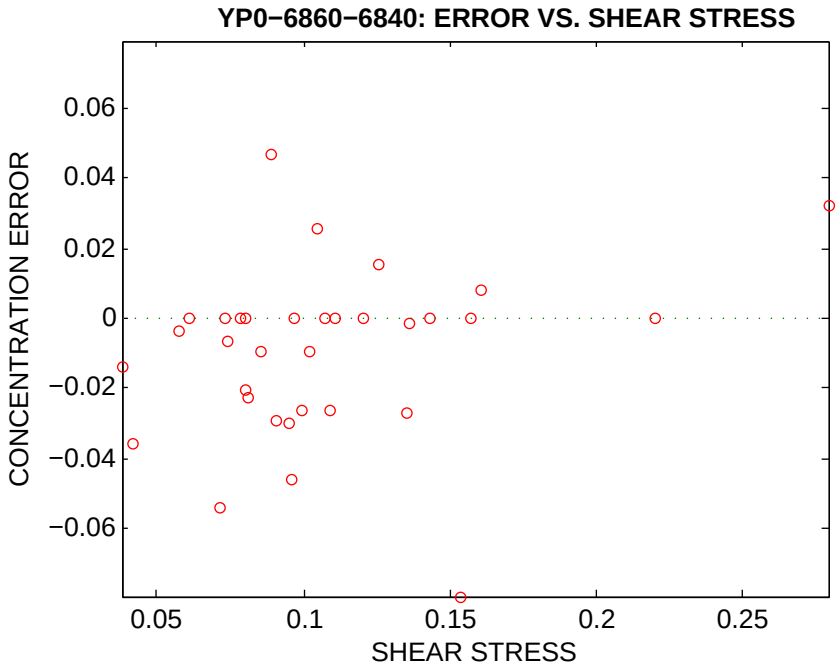


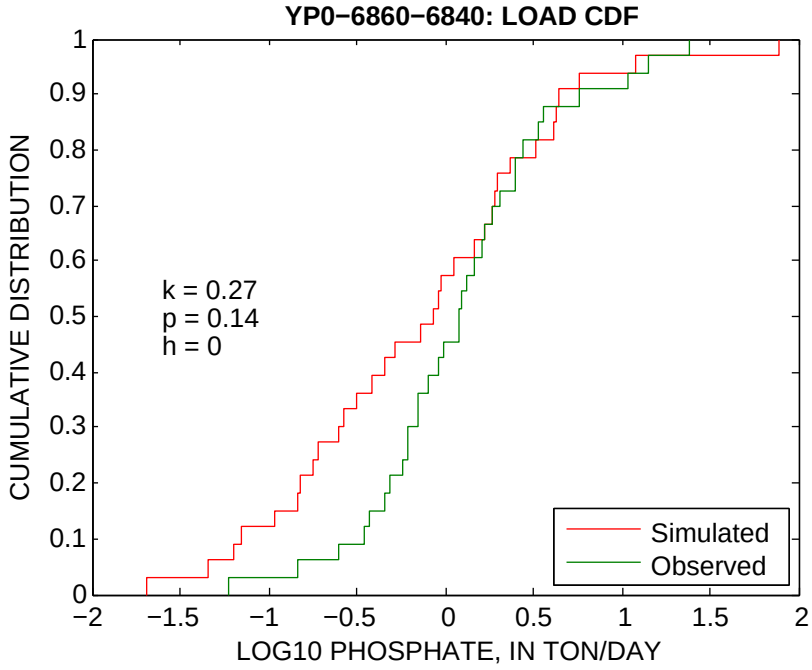


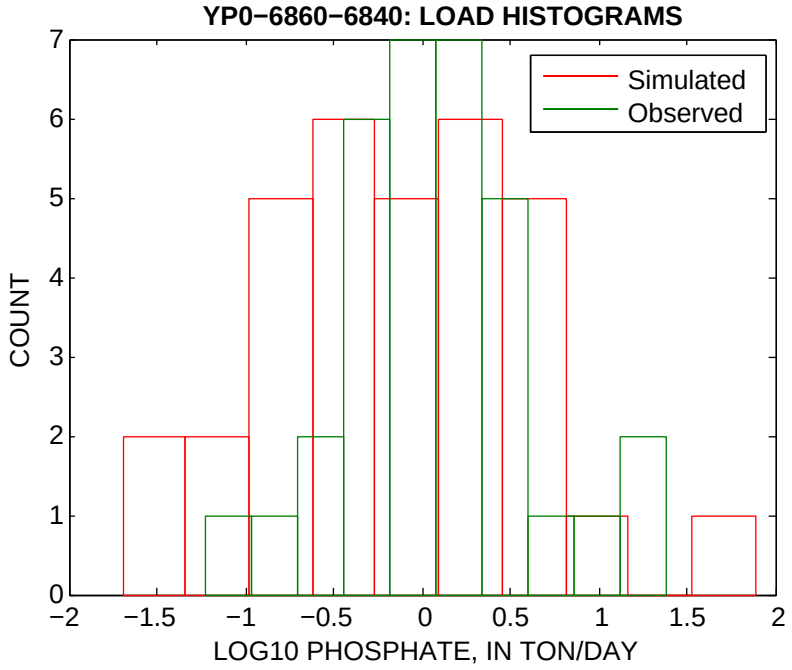


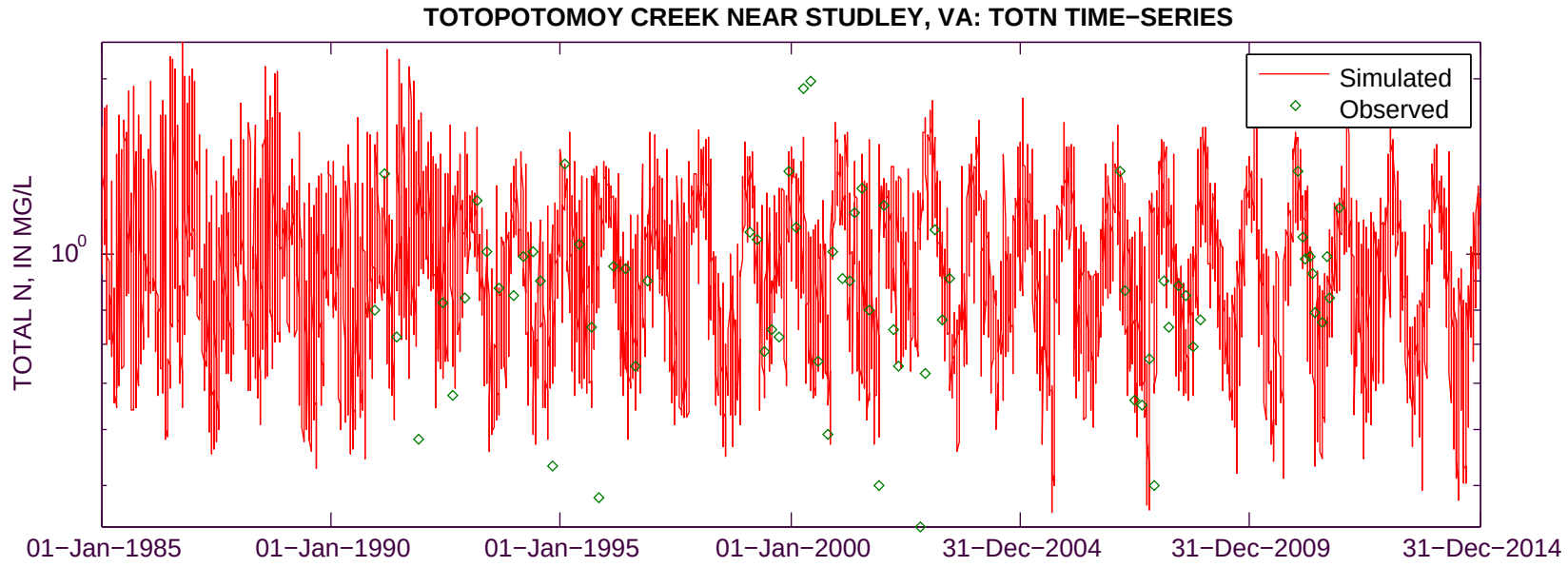
LOAD DATA
LOG10

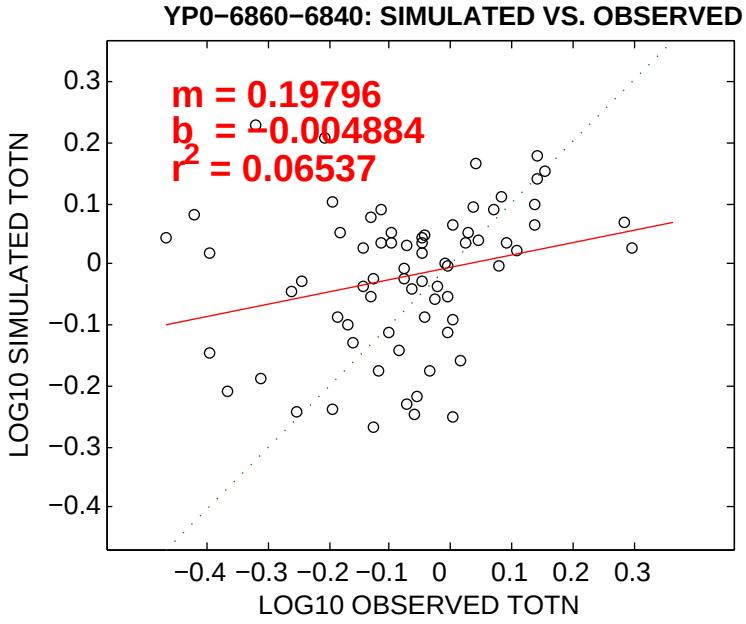


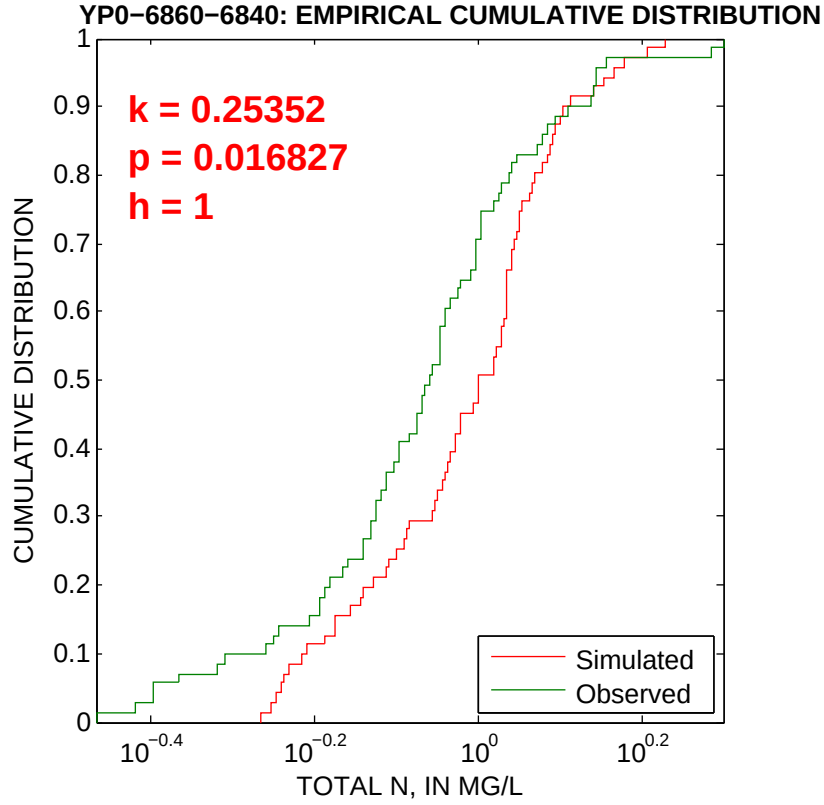












DATA SELECTION

scenario: P620171001WQ; file: TOTN.calib

plot: TOTN - total nitrogen

Dates: 1/1/1985 – 12/31/201

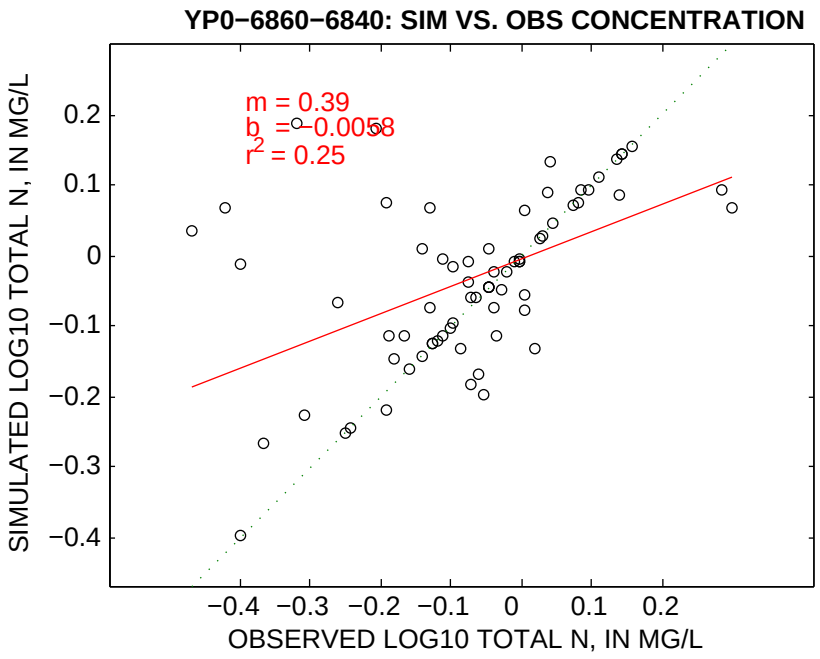
Drive: N/A; Directory: model; Observed: OBS20161101

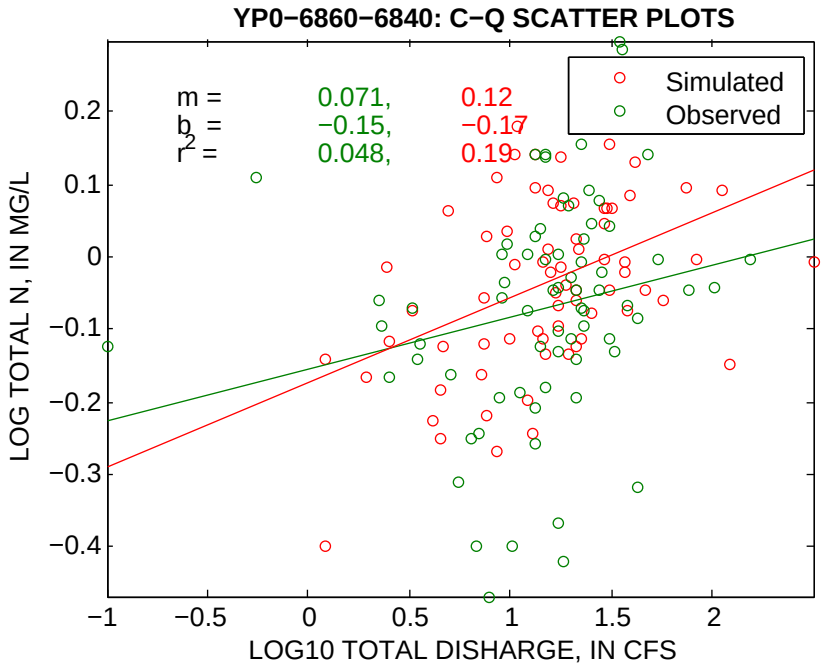
STATISTICS

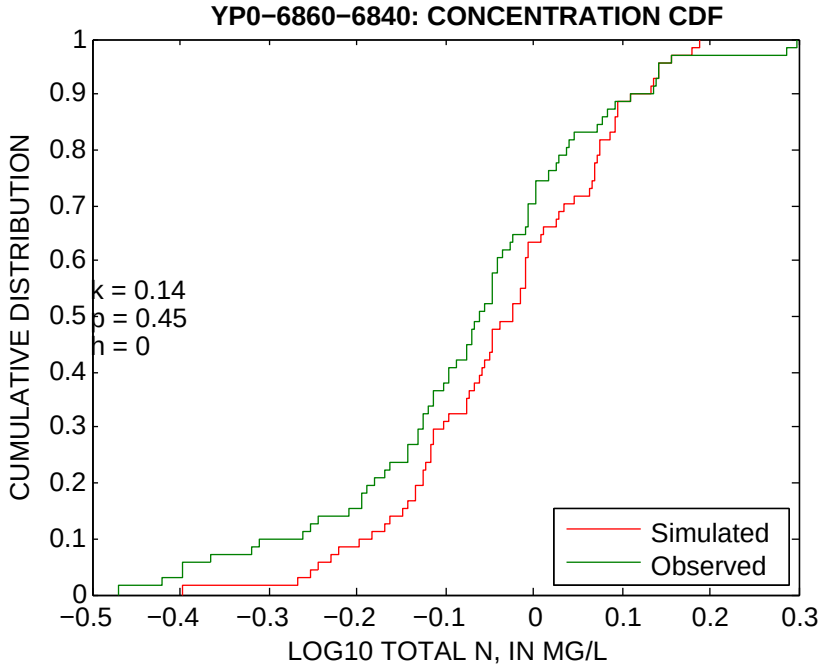
		observe	simulate
n		71	71
min		0.34	0.54242
		-0.468521	-0.265664
mean		0.89831	0.991428
		-0.0725249	-0.0192412
media		0.87	1.0001
		-0.0604807	4.34273e-0
max		1.99	1.6955
		0.298853	0.229298
varian		0.0992857	0.0679947
		0.0235942	0.0141447
JB		0.002460	0.5
		0.33728	0.215515
		ra	log
%		10.366	-73.4696
err.va		0.128254	0.0312771
rel.std.err		1.29176	1.32563
mod.eff		-0.291764	-0.325625

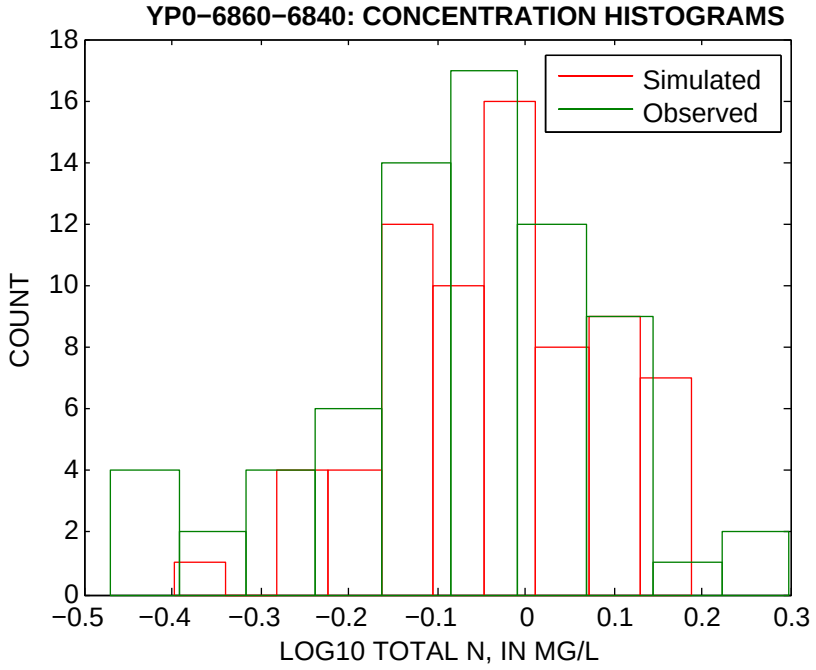
VERSION 2.1

ALL DATA
LOG10

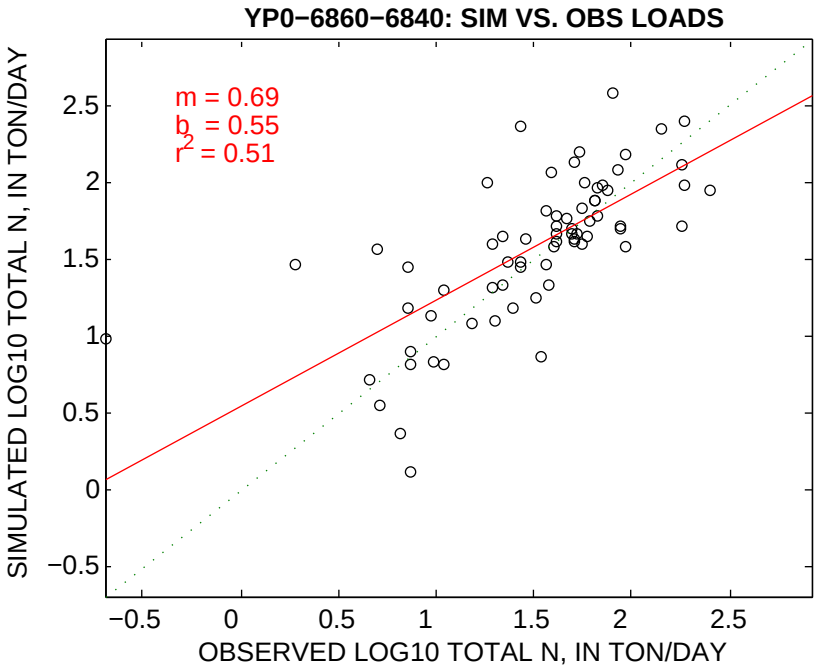


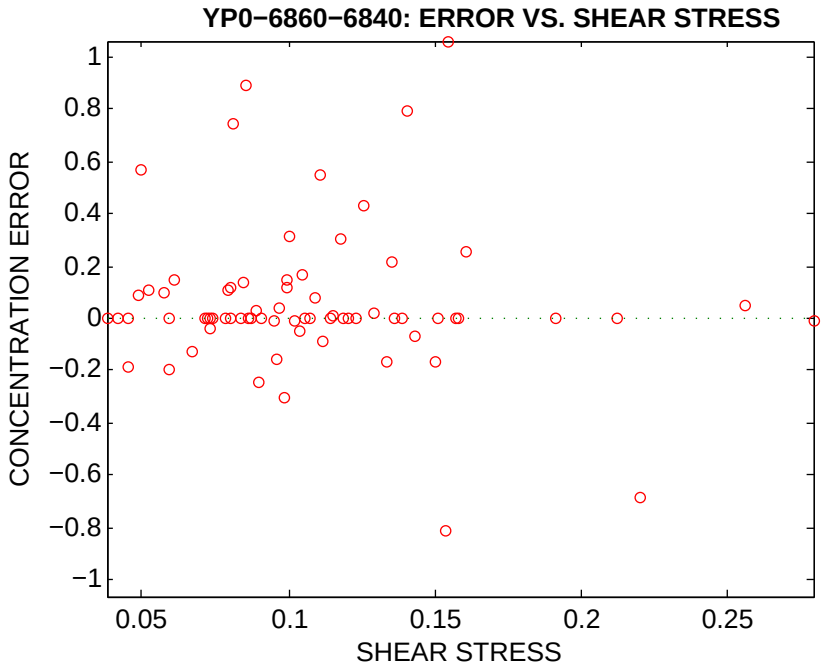


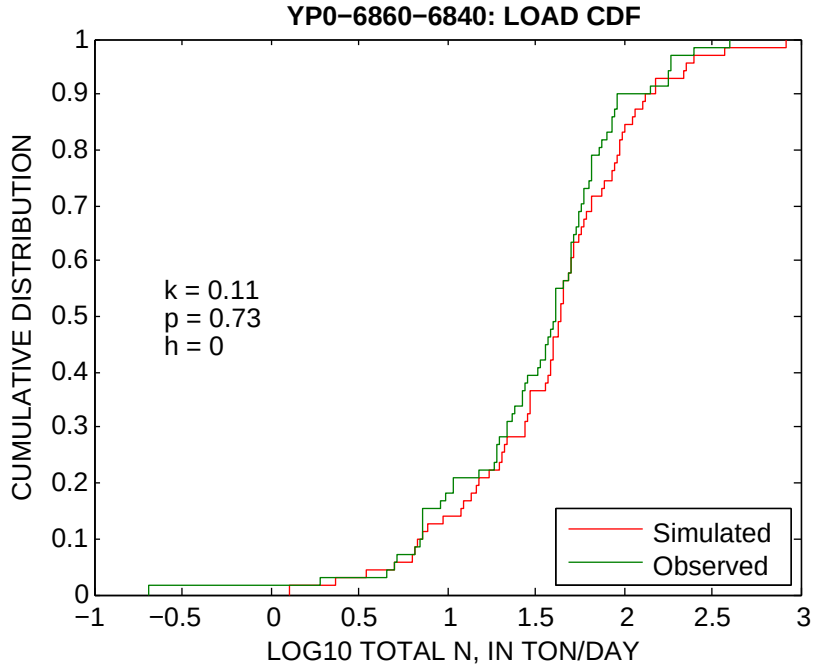


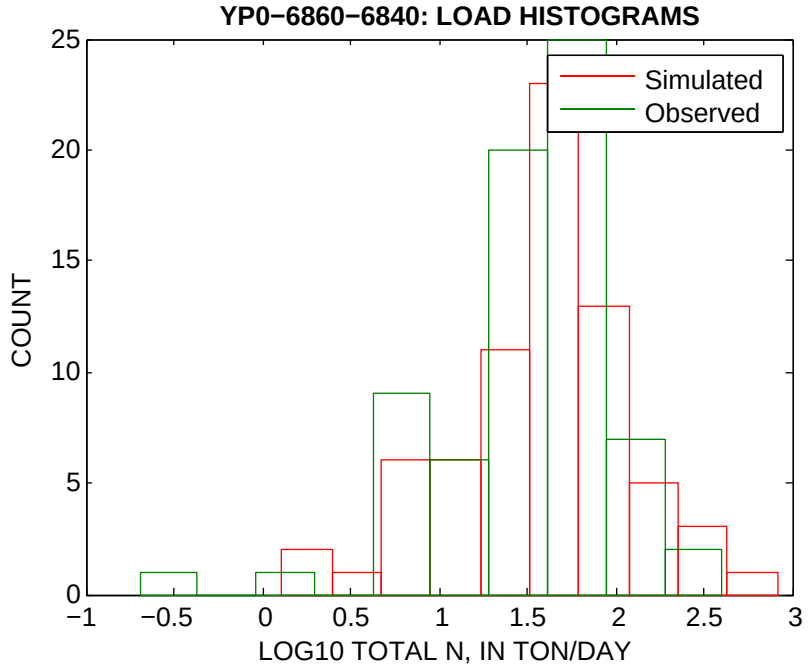


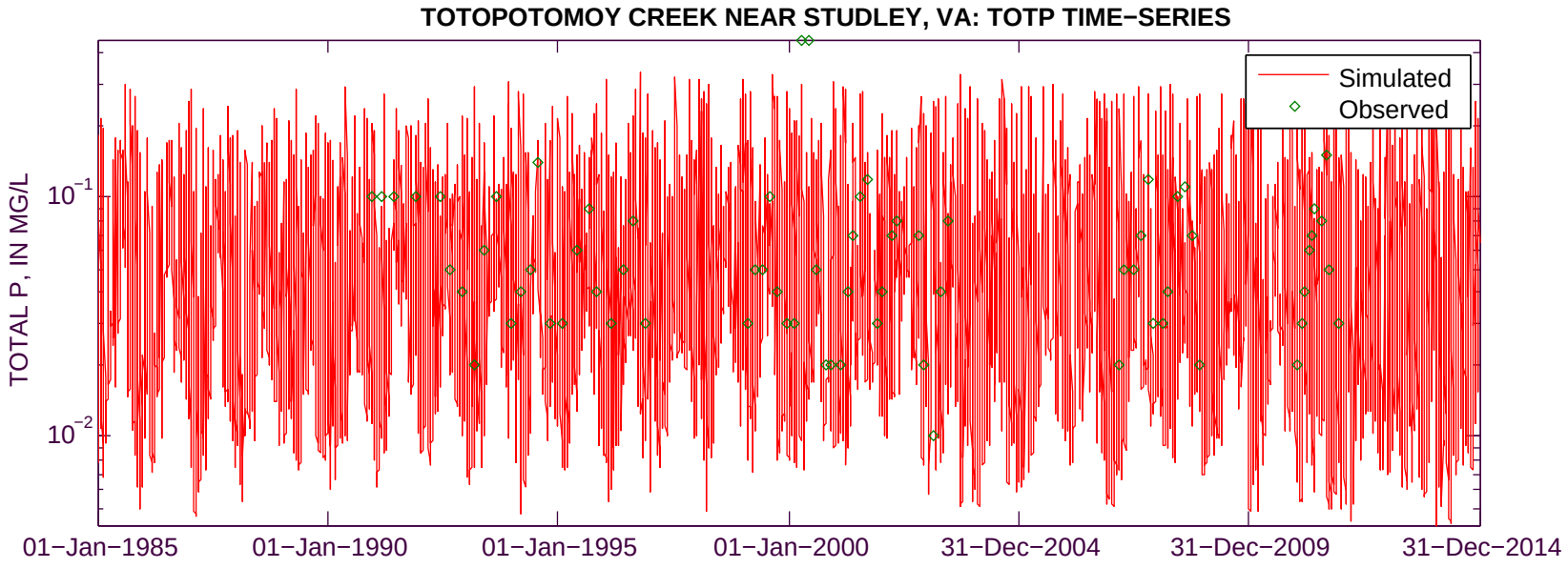
LOAD DATA
LOG10

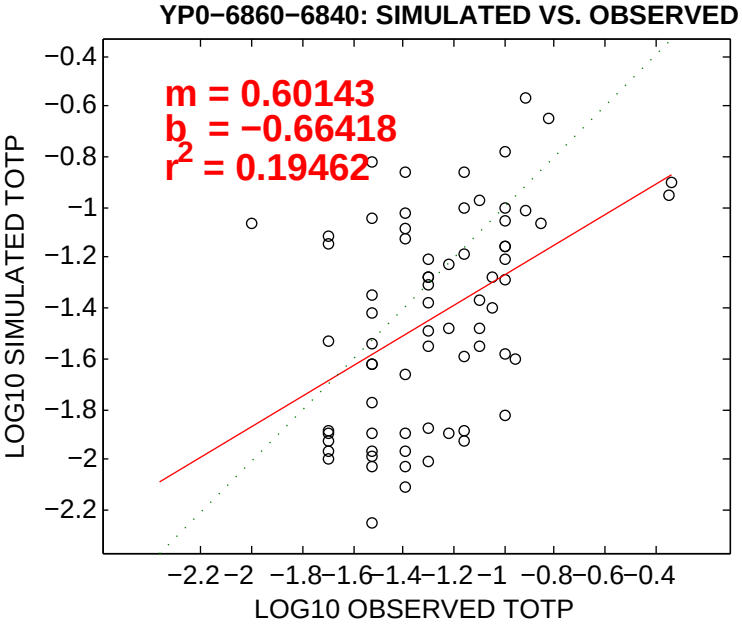


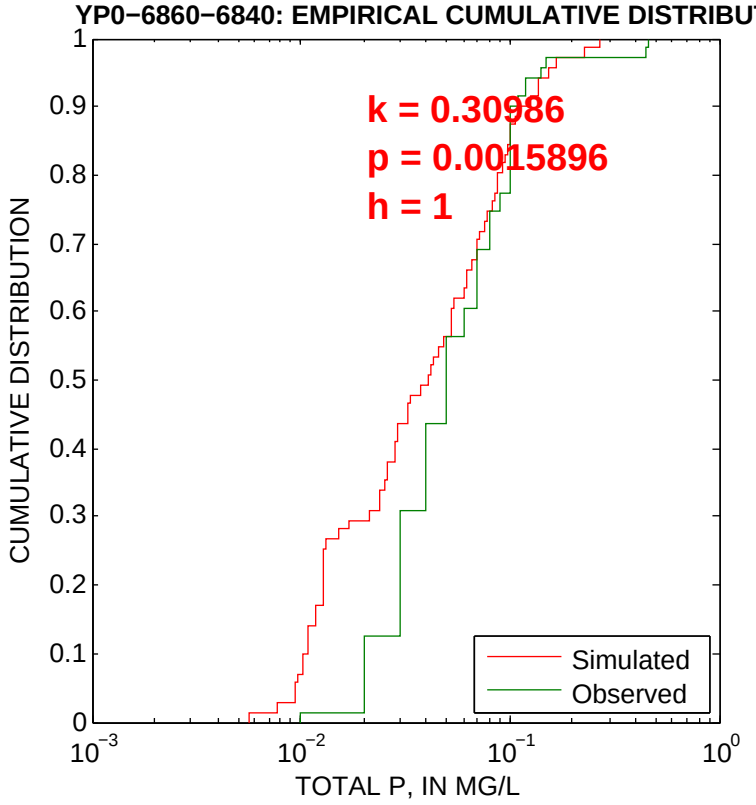












DATA SELECTION

scenario	file
P620171001WQ	TOTP.calib

plot: TOTP - total phosphorus

Dates: 1/1/1985 – 12/31/201

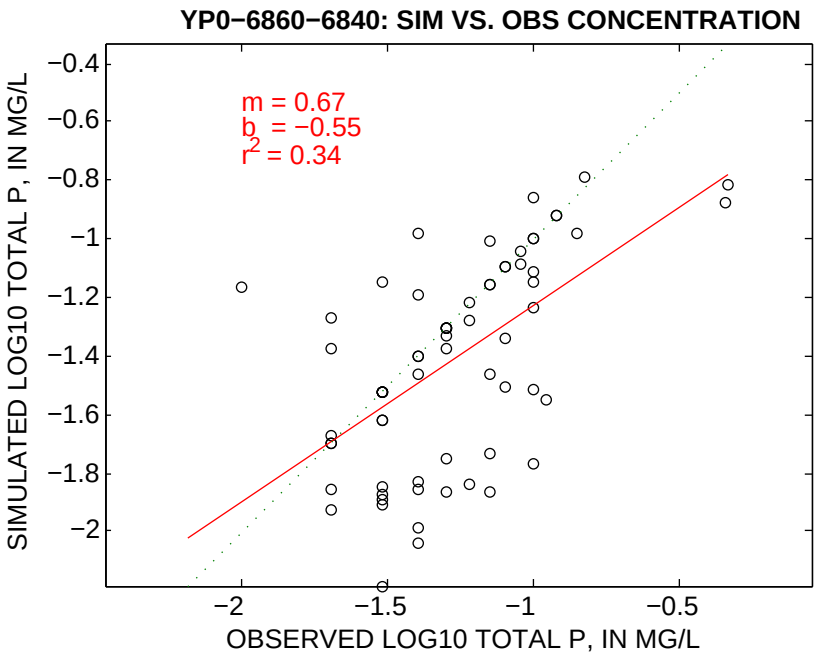
Drive	Directory	Observed
N/A	model	OBS20161101

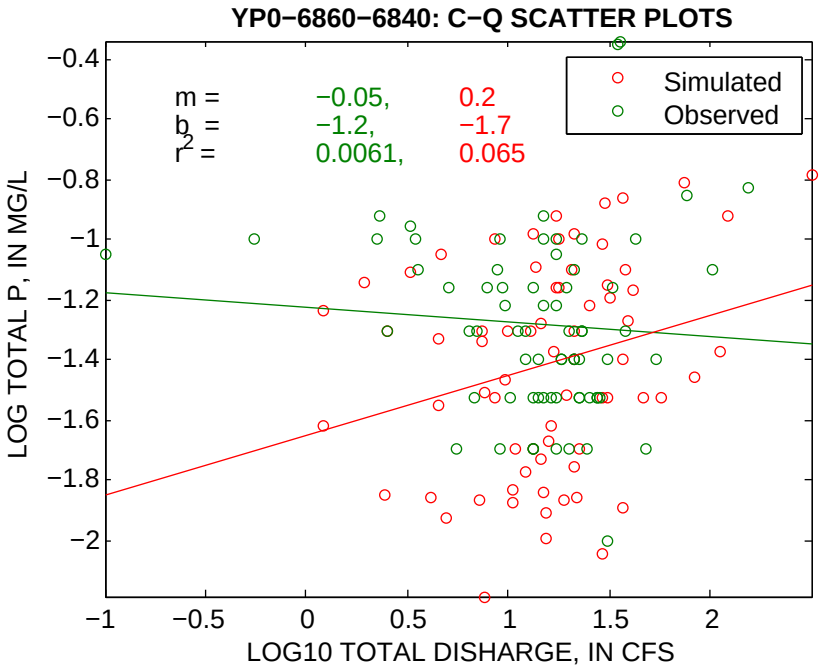
STATISTICS

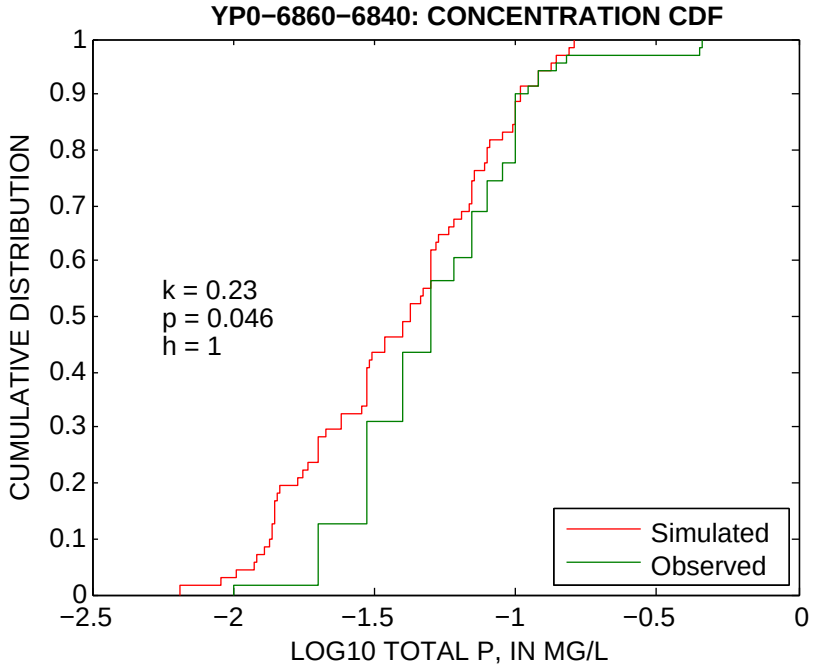
	n	71	71
		observe	simulate
min		0.01	0.0056016
		-2	-2.25169
mean		0.0692958	0.055521
		-1.28051	-1.43432
media		0.05	0.040234
		-1.30103	-1.39541
max		0.46	0.2706
		-0.337242	-0.567672
varian		0.0054295	0.00267616
		0.0911825	0.16947
JB		0.001	0.001
		0.033768	0.110242
		ra	log
%		-19.8782	12.0118
err.va		0.00531255	0.174969
rel.std.err		0.978461	1.91889
mod.eff		0.0215393	-0.91889

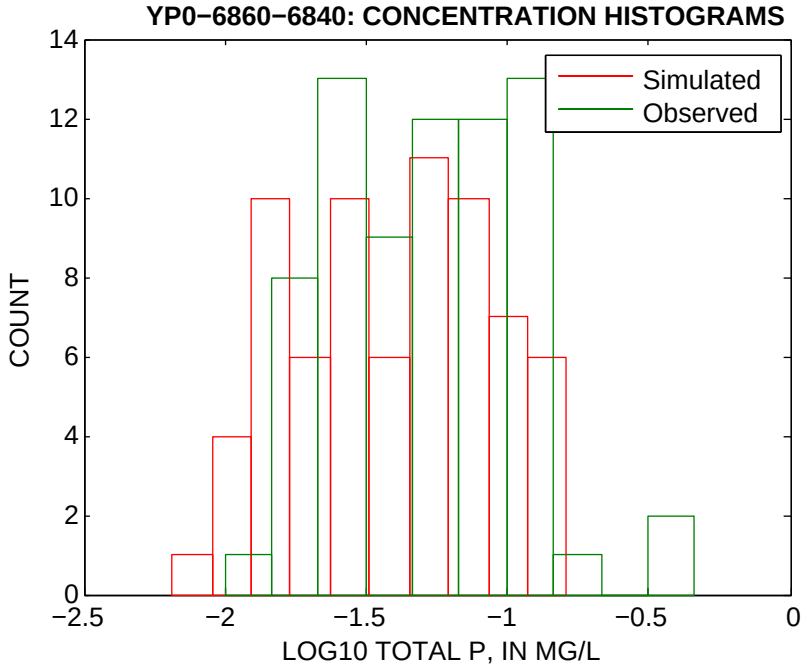
VERSION

ALL DATA
LOG10

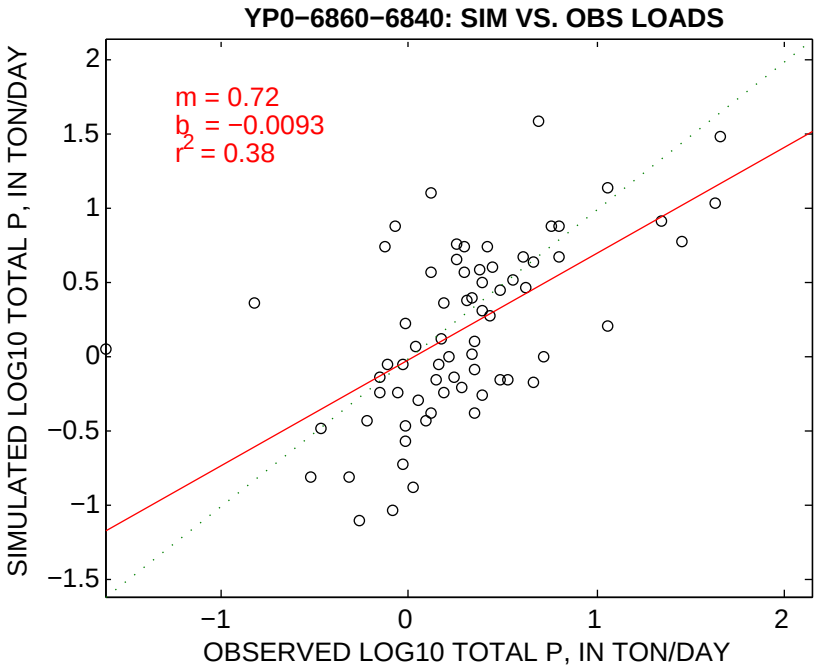


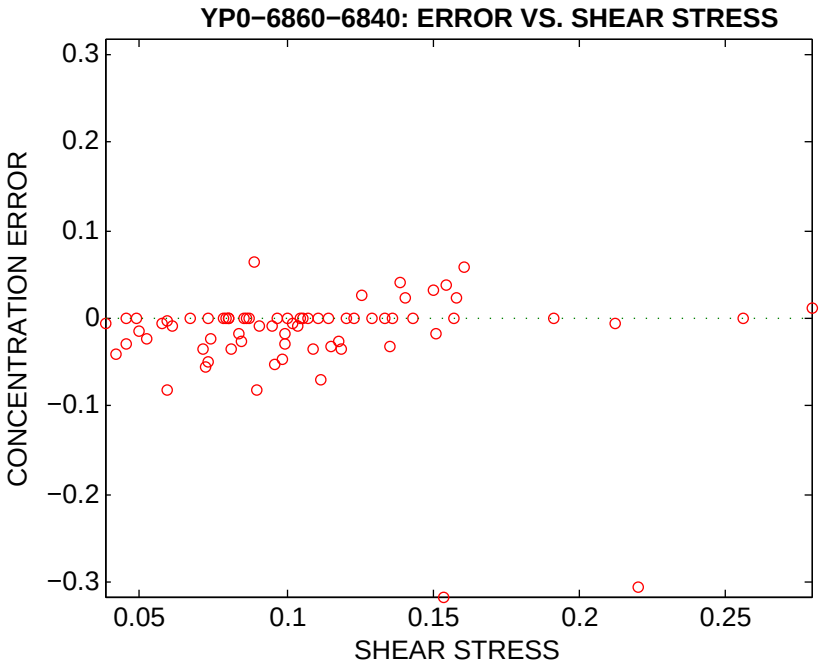


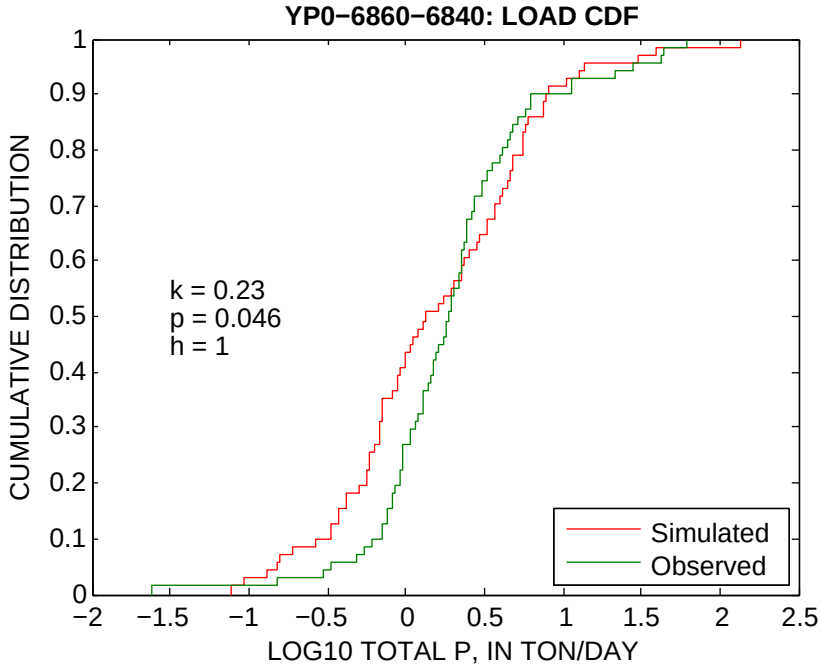


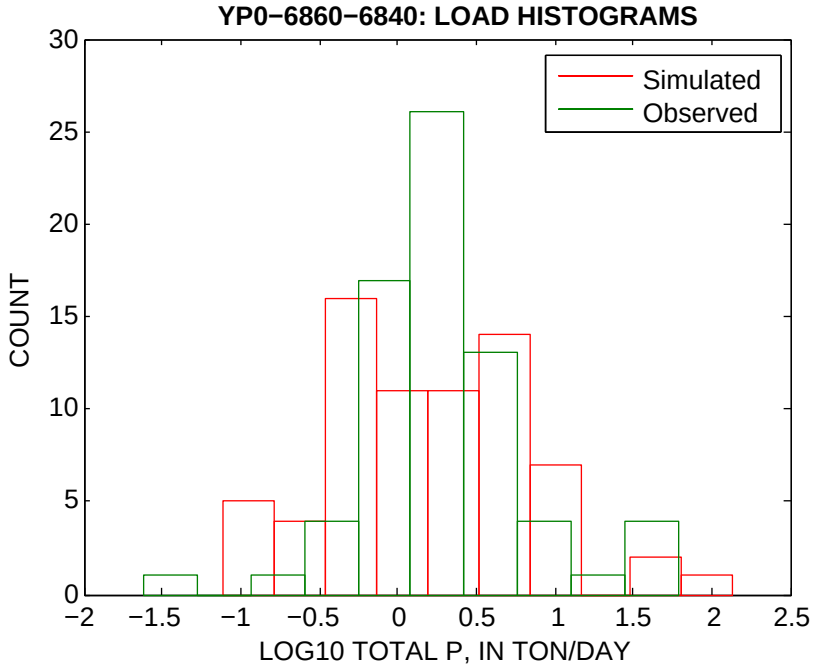


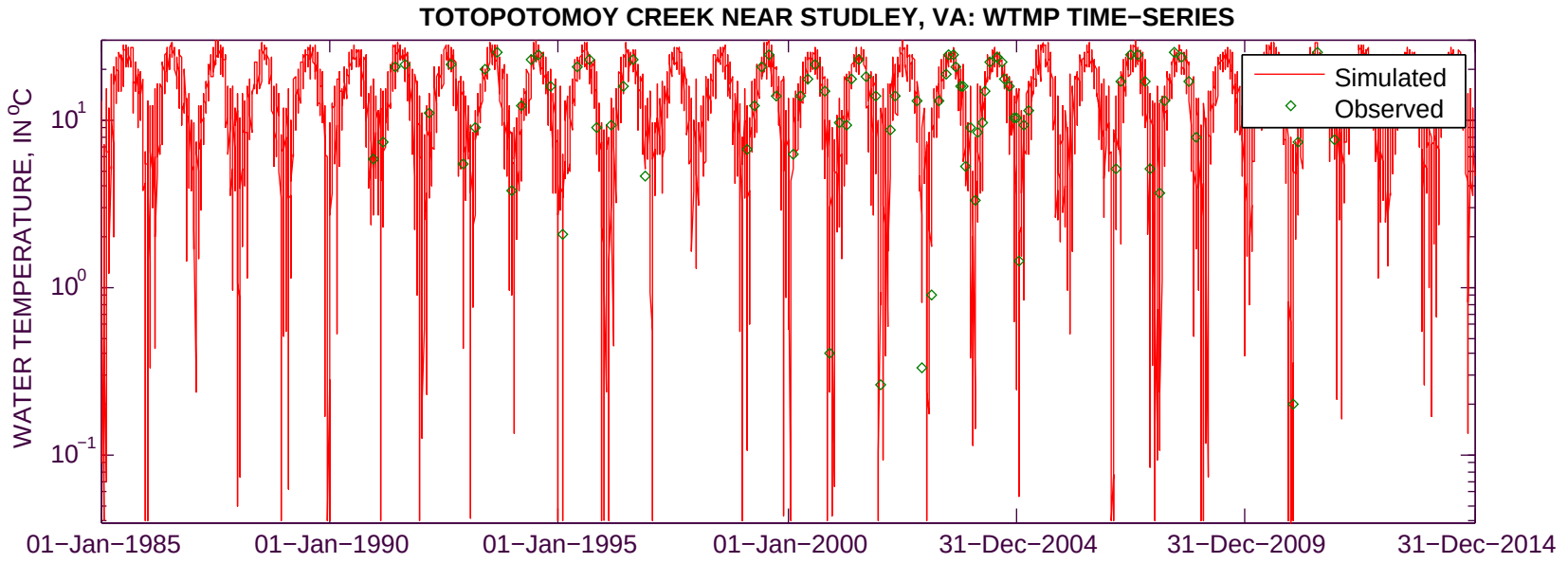
LOAD DATA
LOG10

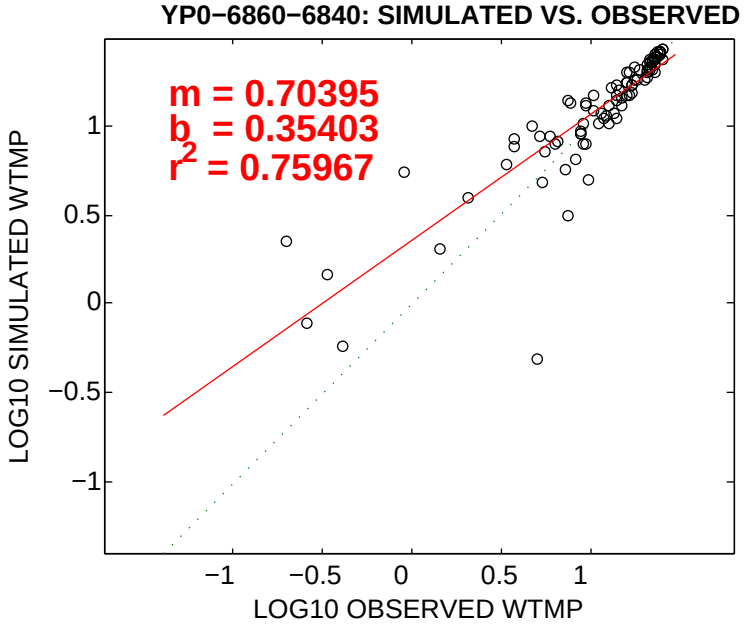


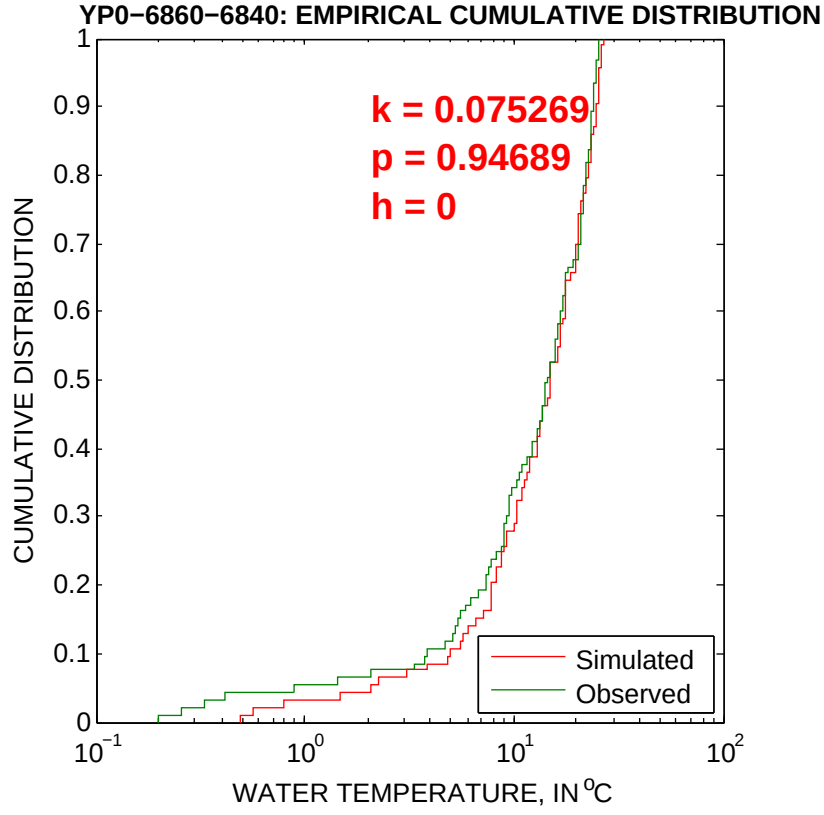












DATA SELECTION

scenario	file
P620171001WQ	WTMP.calib

plot: WTMP - water tempera...

Dates 1/1/1985 12/31/201

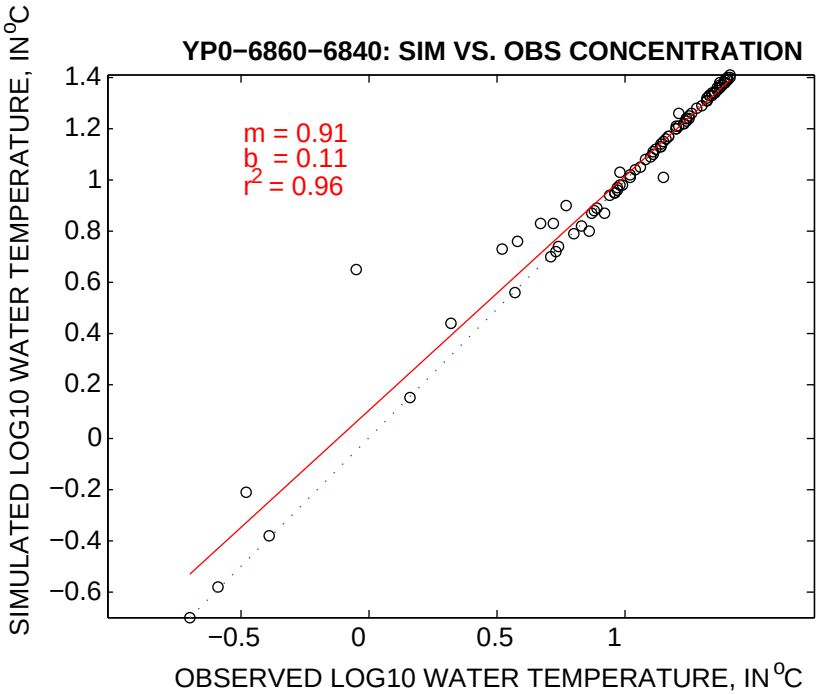
Drive	Directory	Observed
N/A	model	OBS20161101

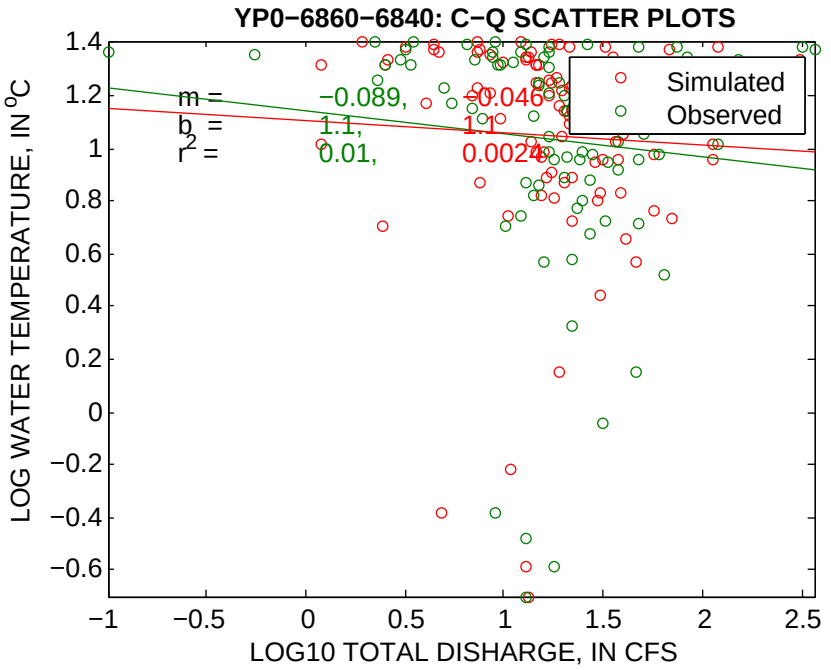
STATISTICS

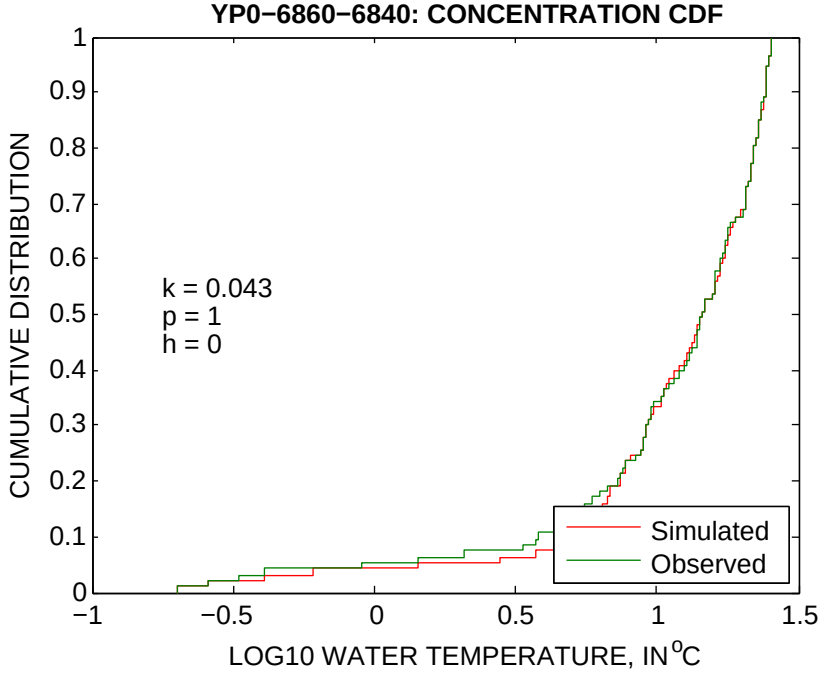
	n	93	93
		observe	simulate
min		0.2	0.4957
		-0.69897	-0.304781
mean		14.2877	14.8973
		1.03109	1.07987
media		14.5	14.893
		1.16137	1.17298
max		25.6	26.604
		1.40824	1.42495
varian		56.0533	54.2166
		0.193413	0.126165
JB		0.049757	0.069968
		0.001	0.001
		ra	log
%		4.26627	4.72996
err.va		5.21761	0.0496772
rel.std.err		0.0930829	0.256846
mod.eff		0.906917	0.743154

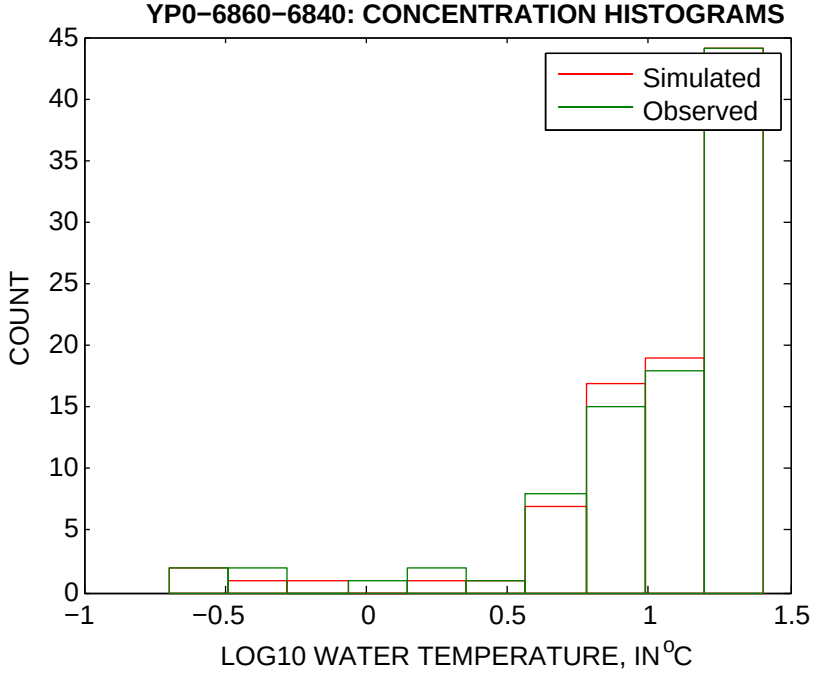
VERSION 2.1

ALL DATA
LOG10

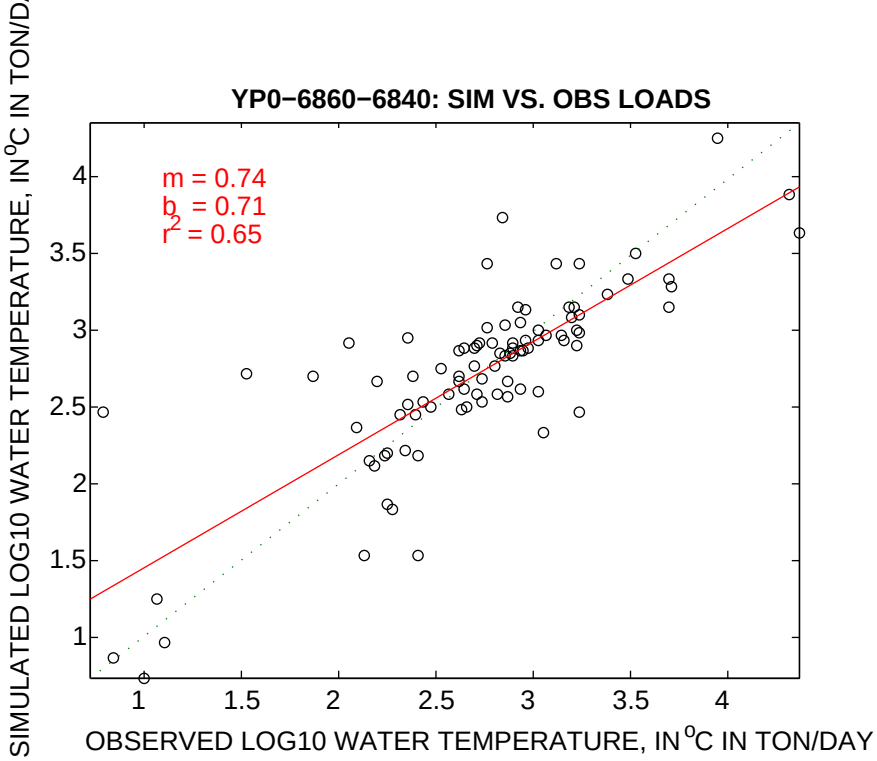


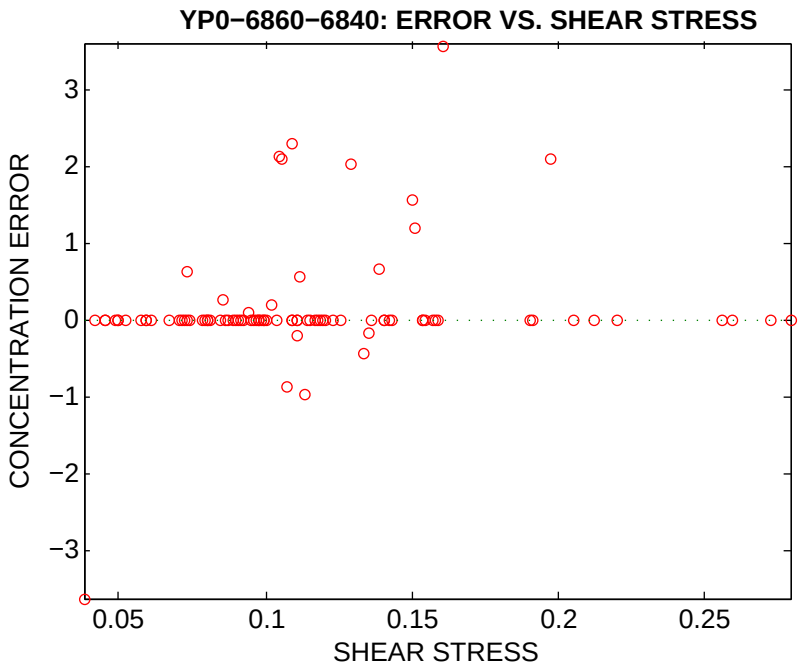


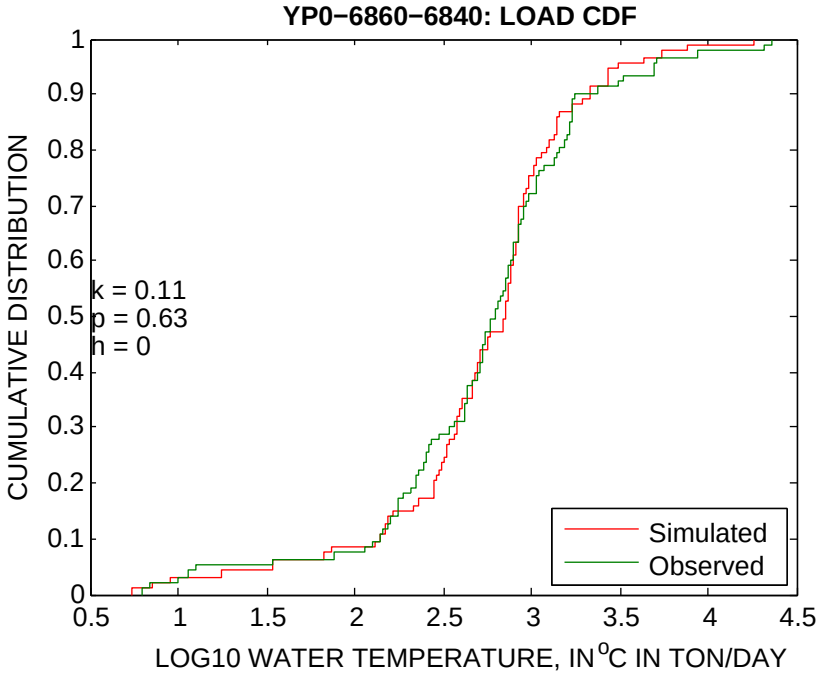


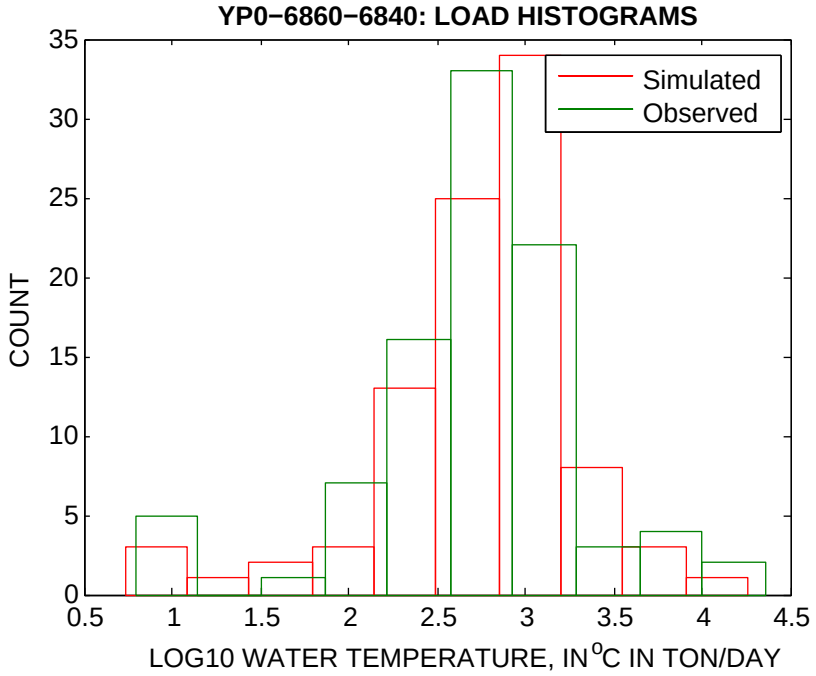


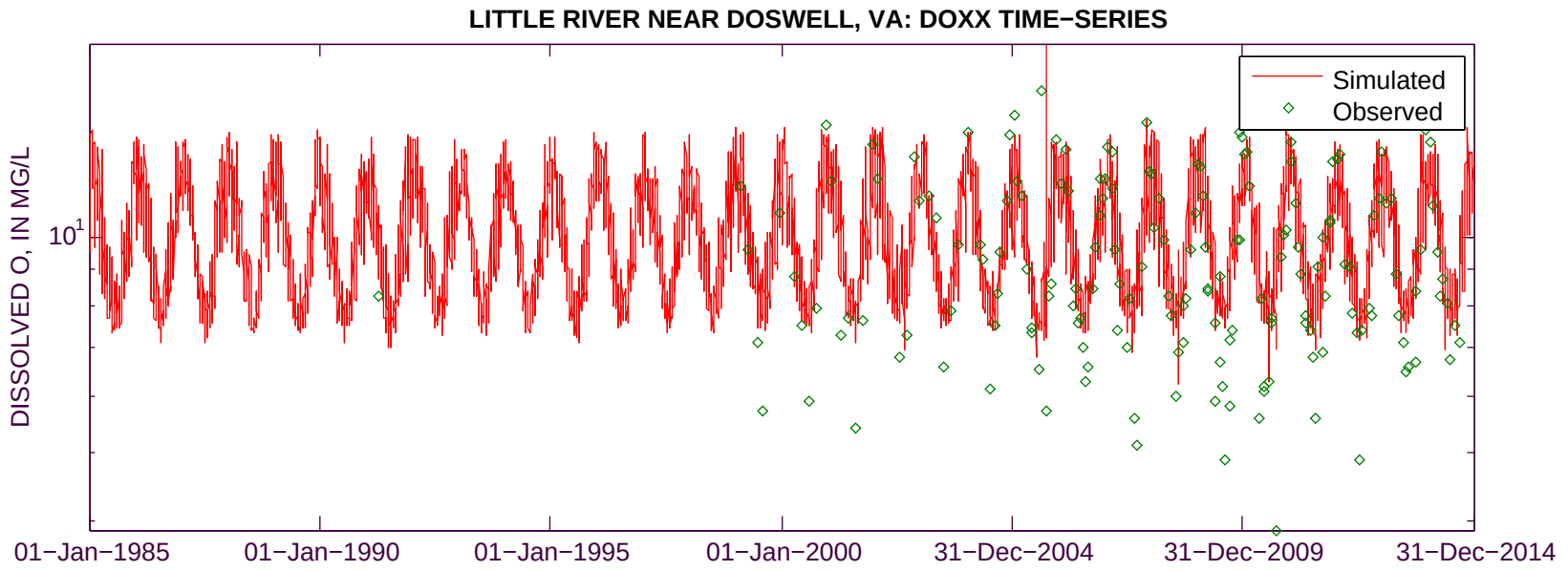
LOAD DATA
LOG10

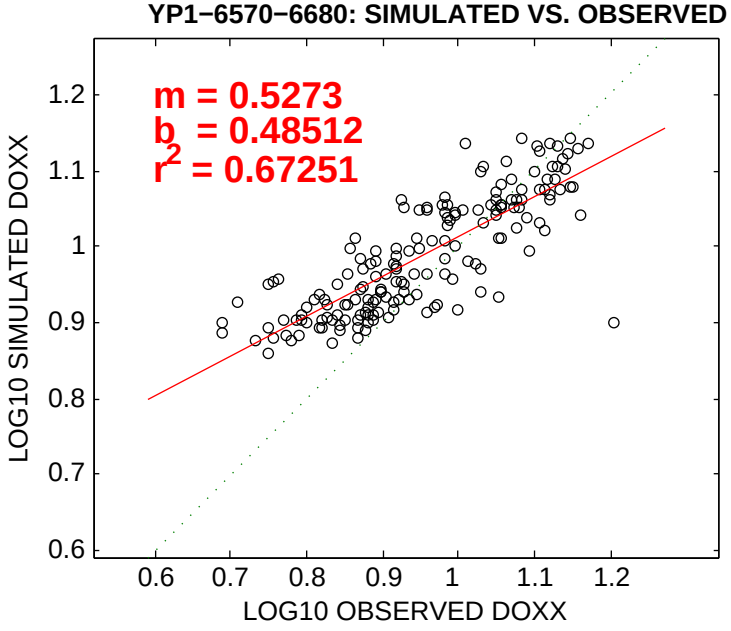


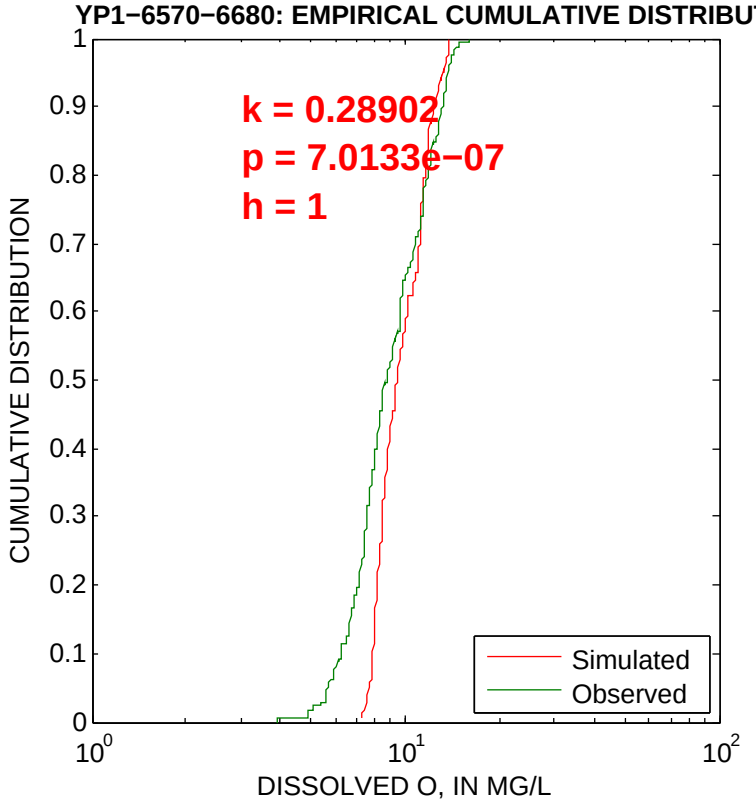












DATA SELECTION

scenario	file
P620171001WQ	DOXX.calib

plot: DOXX - dissolved oxygen

Dates: 1/1/1985 – 12/31/201

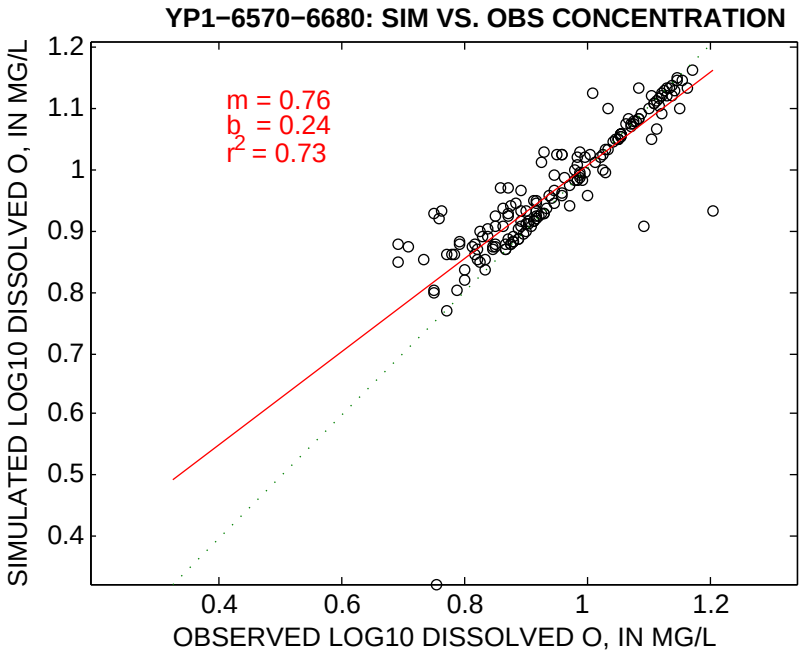
Drive	Directory	Observed
N/A	model	OBS20161101

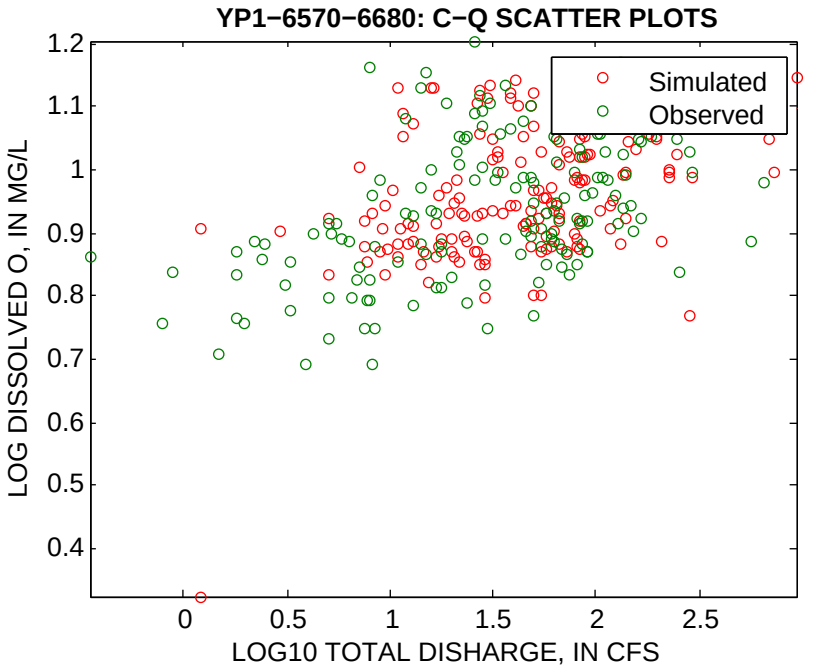
STATISTICS

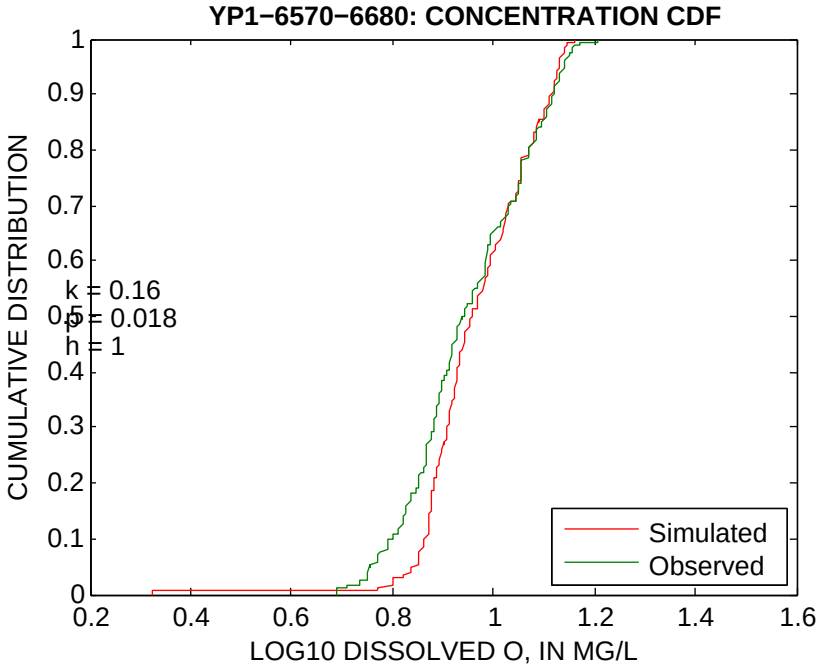
	n	173	172
		observe	simulate
min		3.9	0
		0.690196	0.859162
mean		9.28301	9.81639
		0.953165	0.987723
media		8.72	9.4182
		0.9425	0.974734
max		16.04	13.876
		1.2052	1.14226
varian		6.57695	3.69422
		0.0140412	0.00580527
JB		0.021082	0.001
		0.053394	0.010414
		ra	log
%		5.74582	3.62561
err.va		2.62068	0.00623986
rel.std.err		0.398464	0.444398
mod.eff		0.601536	0.555602

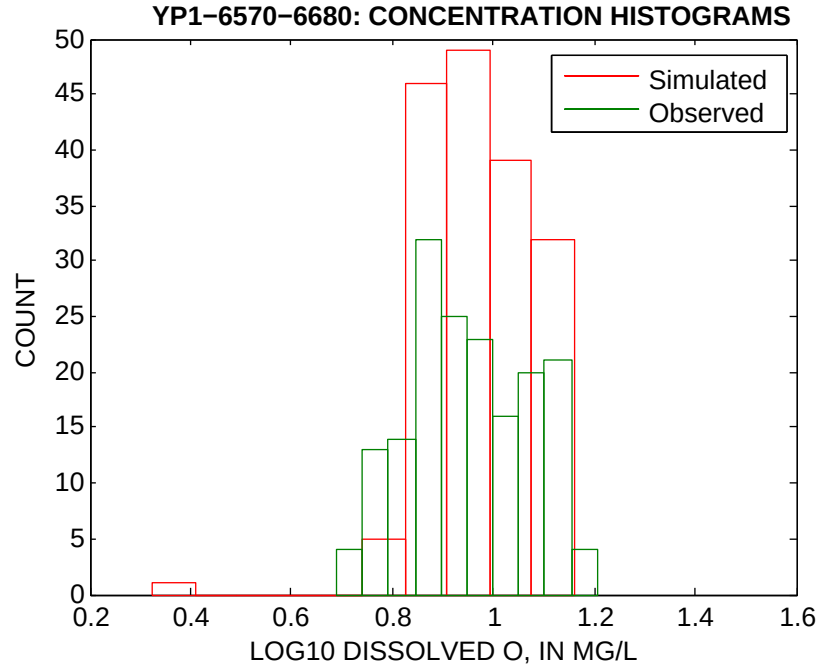
VERSION

ALL DATA
LOG10

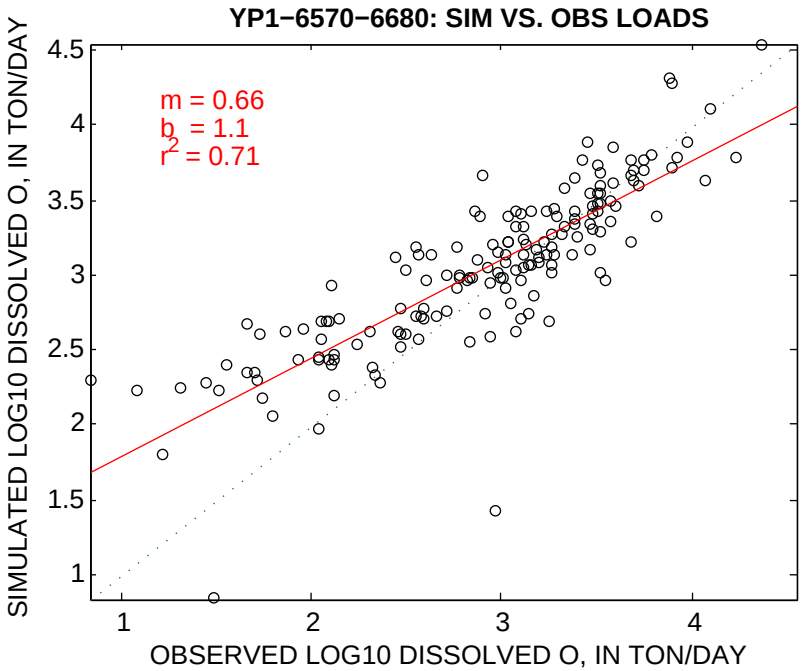


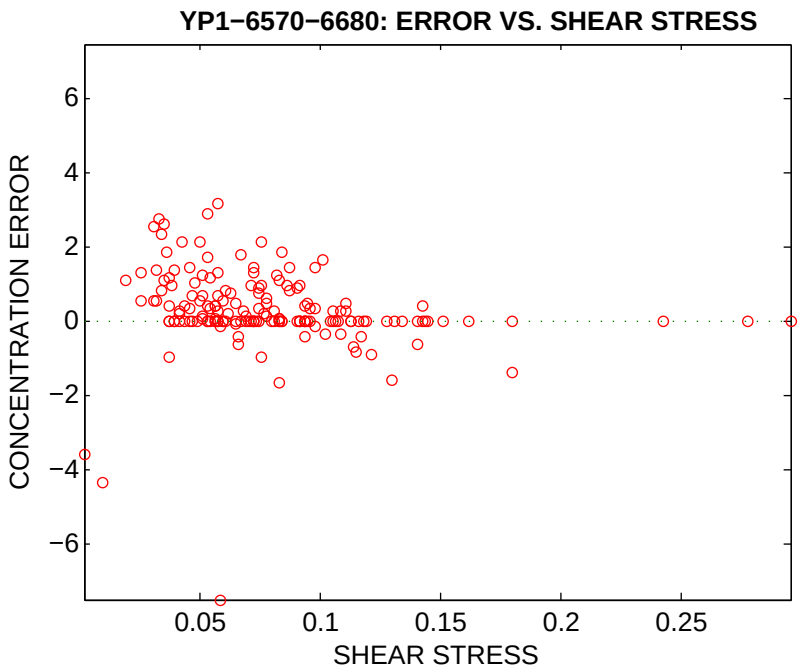


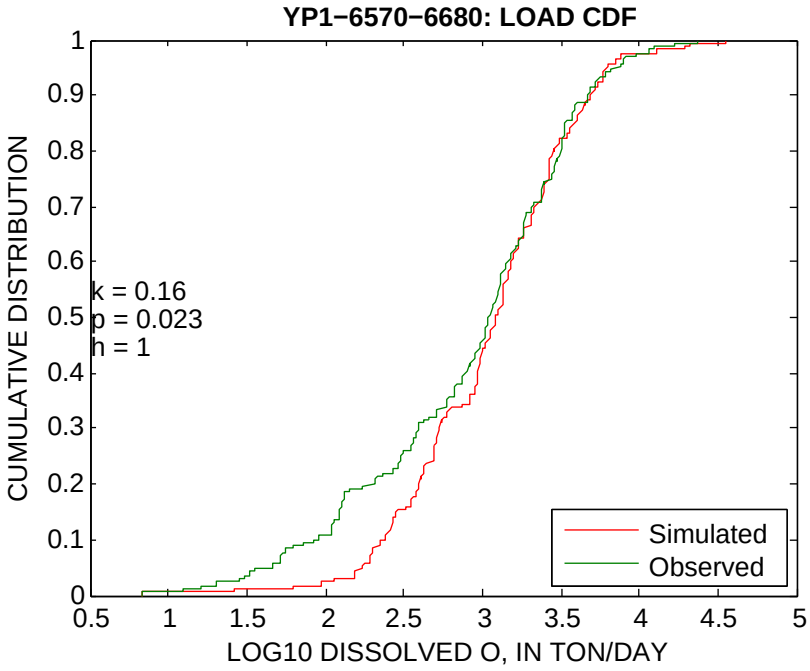


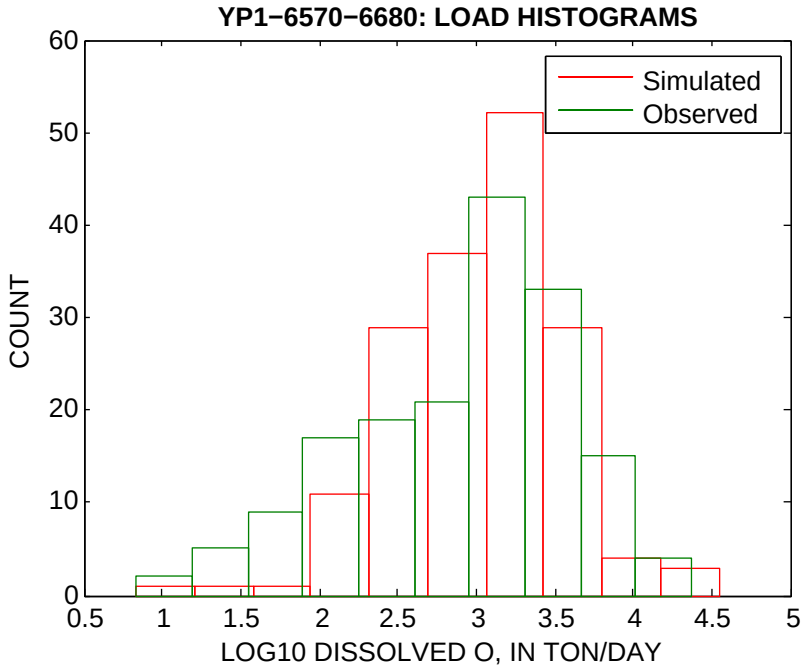


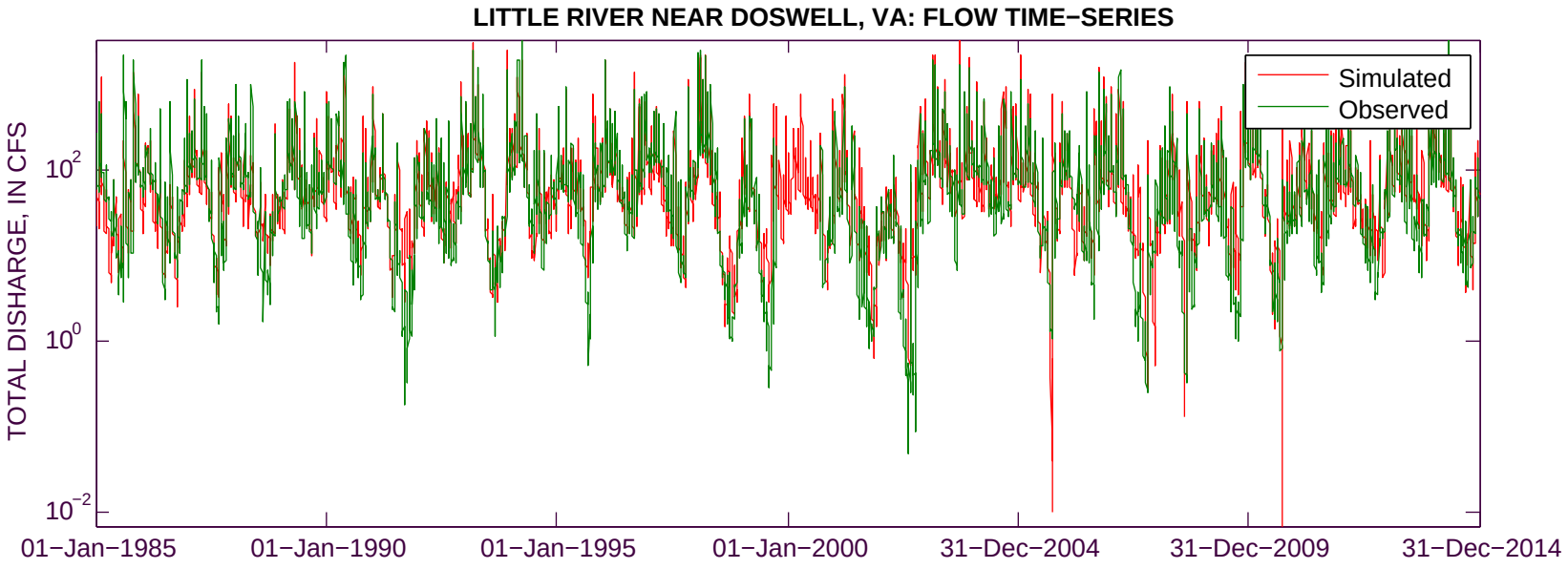
LOAD DATA
LOG10

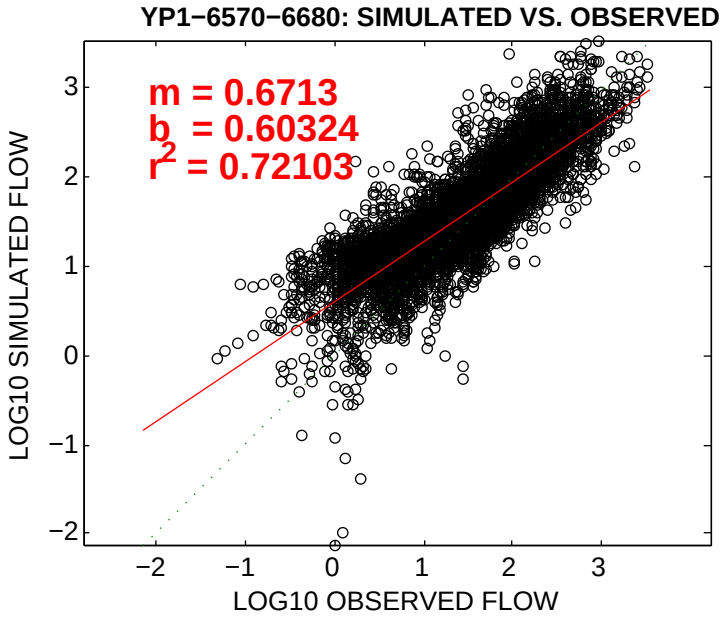


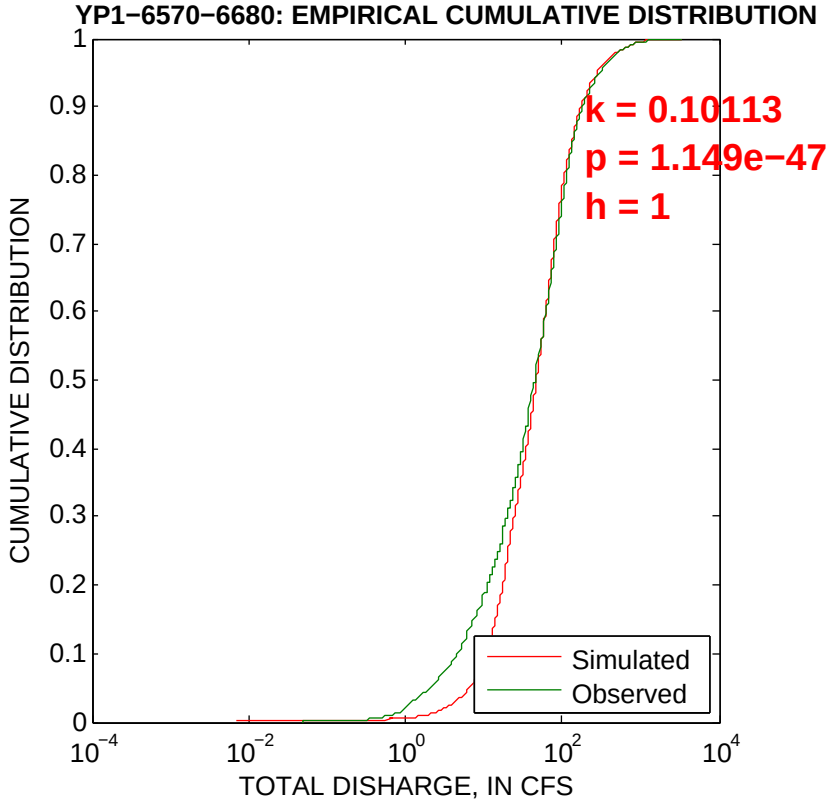












DATA SELECTION

scenario	file
P620171001WQ	_FLOW.calib

plot: FLOW - total discharge

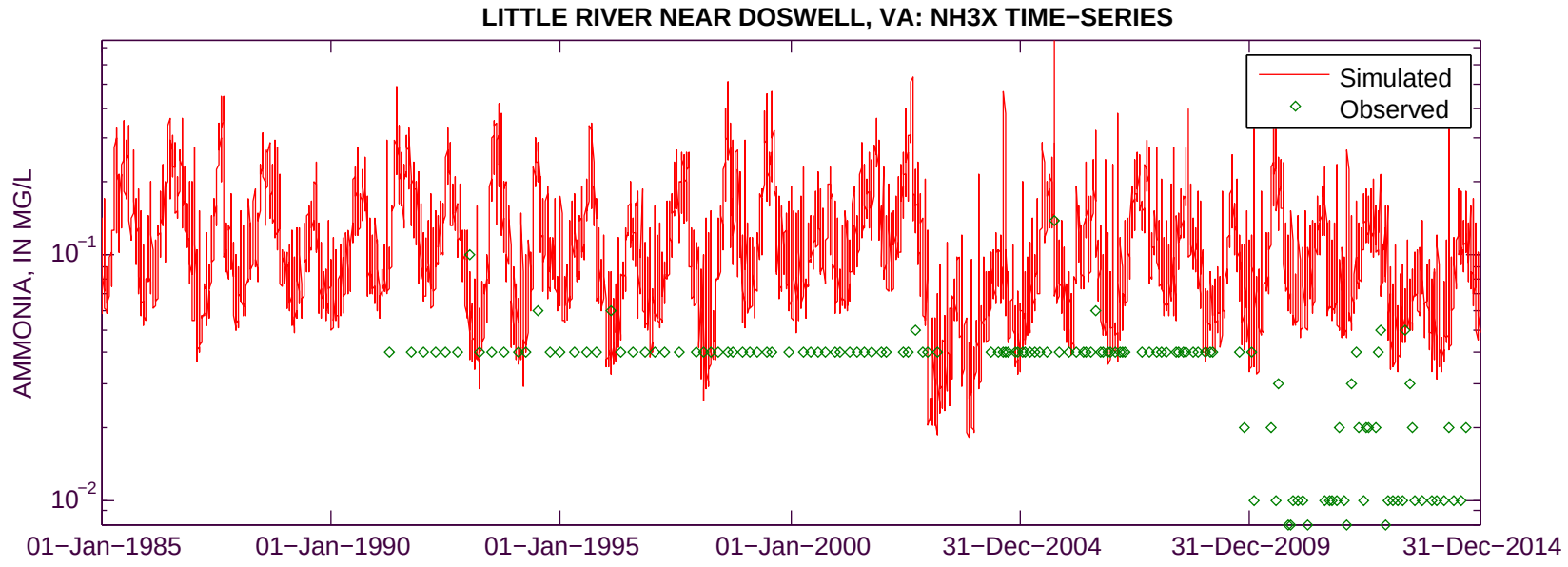
Dates: 1/1/1985 – 12/31/201

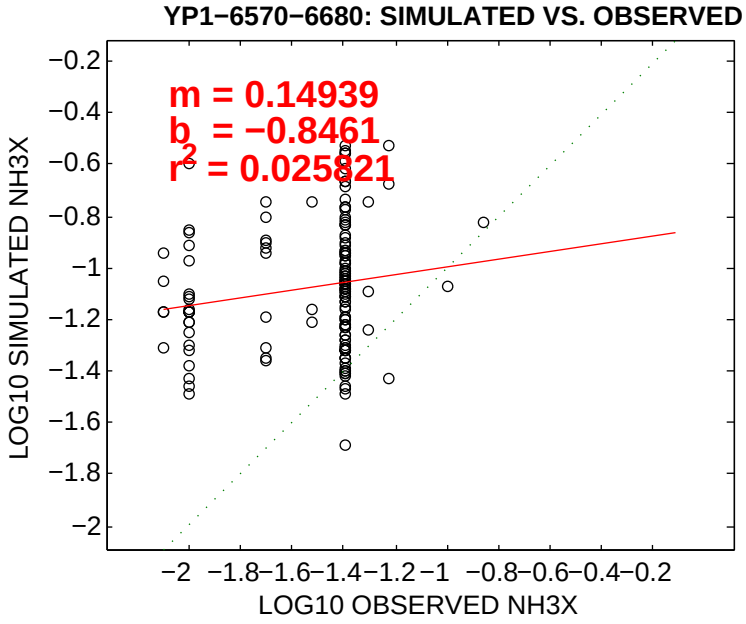
Drive	Directory	Observed
N/A	model	OBS20161101

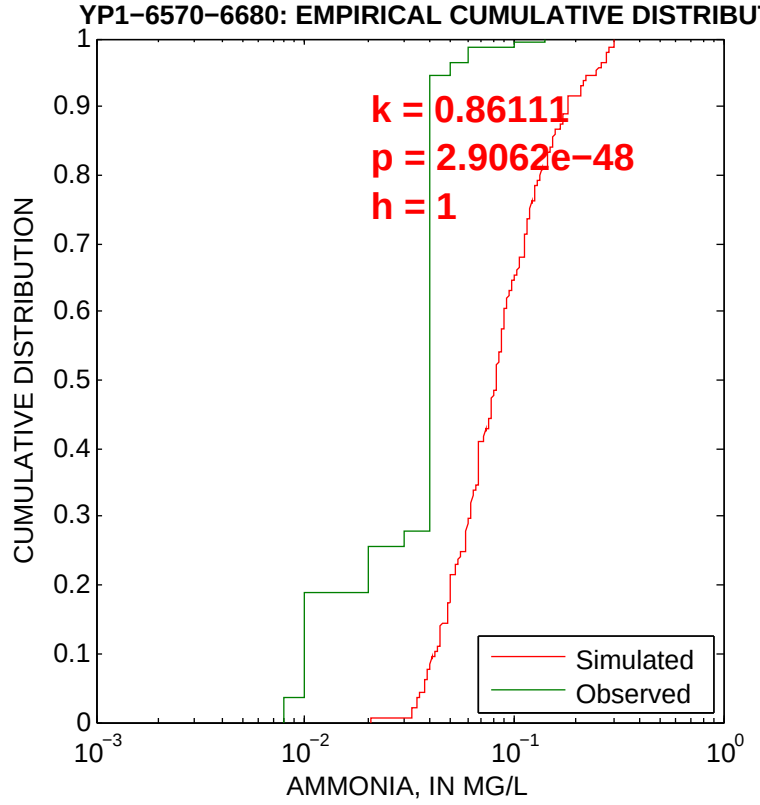
STATISTICS

	n	observe	simulate
		10600	10583
min		0.05	0
		-1.30103	-2.14307
mean		89.0148	88.2287
		1.55986	1.65038
media		45	47.368
		1.65321	1.67649
max		3320	3427.4
		3.52114	3.53496
varian		28619.6	26193.6
		0.413059	0.258164
JB		0.001	0.001
		0.001	0.001
		ra	log
%		-0.883127	5.80297
err.va		19121.7	0.12484
rel.std.err		0.668133	0.302234
mod.eff		0.331867	0.697766

VERSION 2.1







DATA SELECTION

scenario	file
P620171001WQ	NH3X.calib

plot: NH3X - ammonia

Dates: 1/1/1985 – 12/31/201

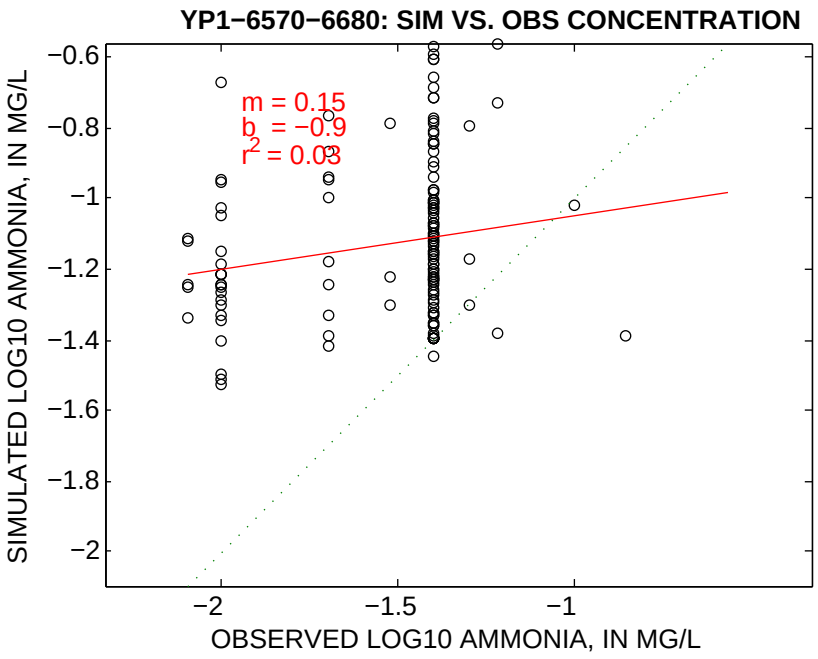
Drive	Directory	Observed
N/A	model	OBS20161101

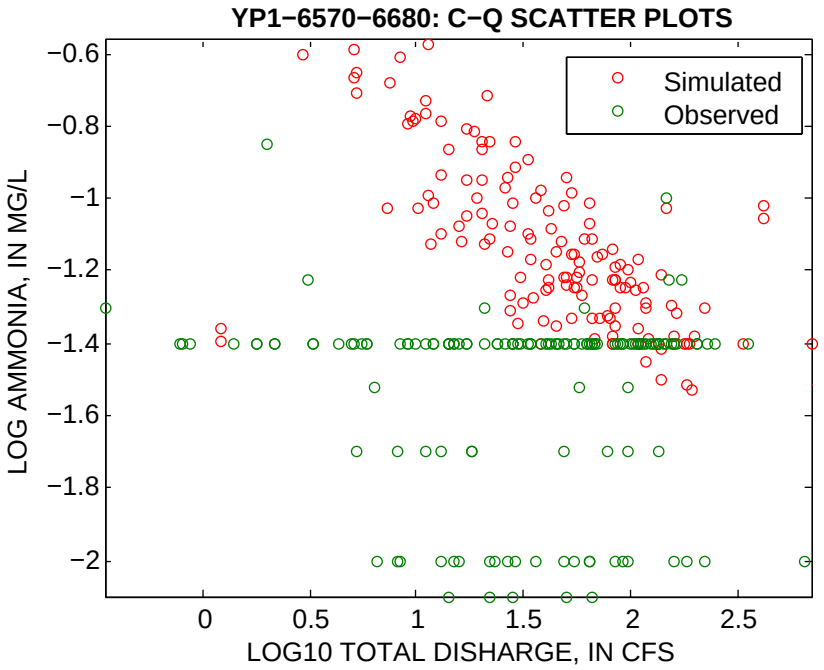
STATISTICS

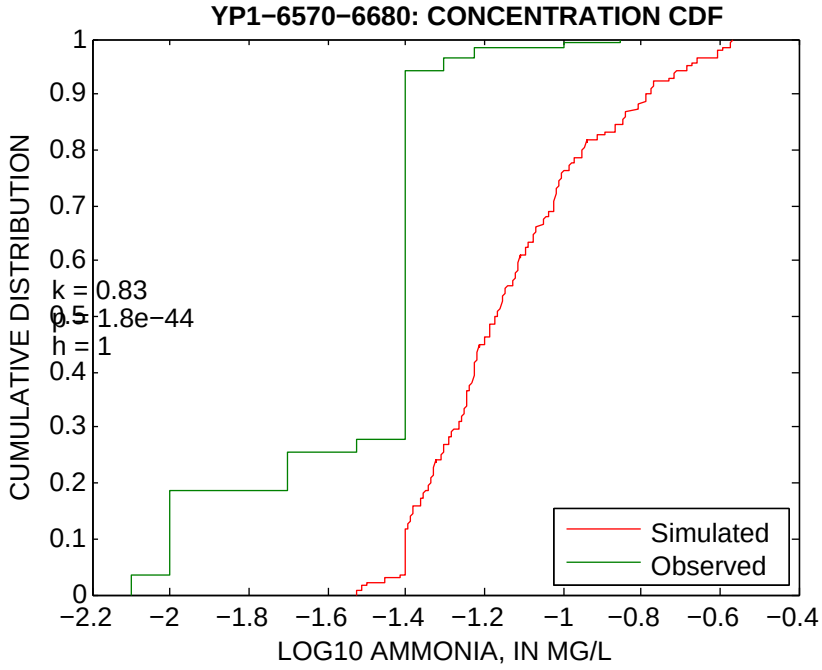
	n	144	144
		observe	simulate
min		0.008	0.020575
		-2.09691	-1.68666
mean		0.0344444	0.0988384
		-1.52547	-1.07399
media		0.04	0.081924
		-1.39794	-1.08659
max		0.14	0.29886
		-0.853872	-0.524532
varian		0.00027885	0.00368411
		0.0671599	0.0580473
JB		0.001	0.001
		0.001488	0.176526
		ra	log
%		186.95	-29.5958
err.va		0.00778968	0.310397
rel.std.err		27.935	4.62176
mod.eff		-26.935	-3.62176

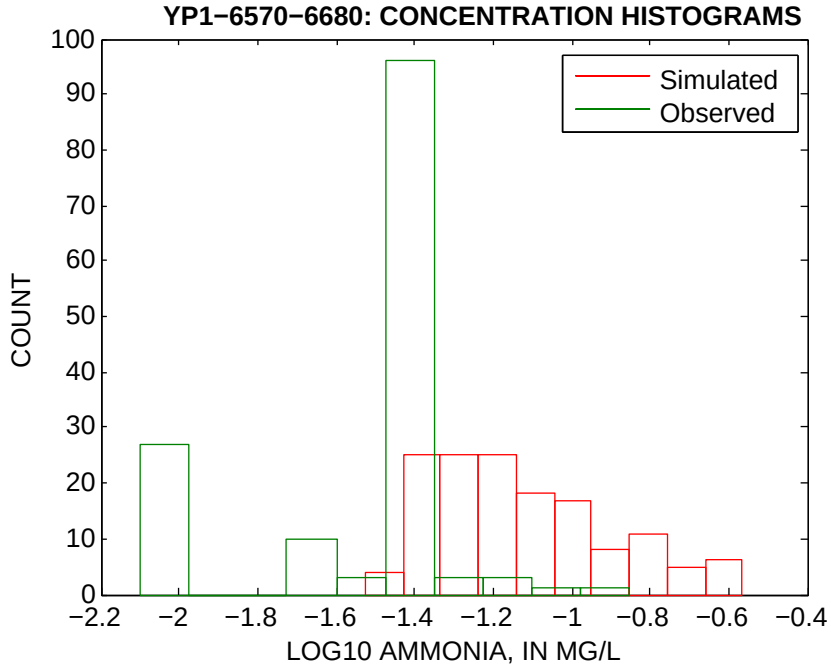
VERSION 2.1

ALL DATA
LOG10

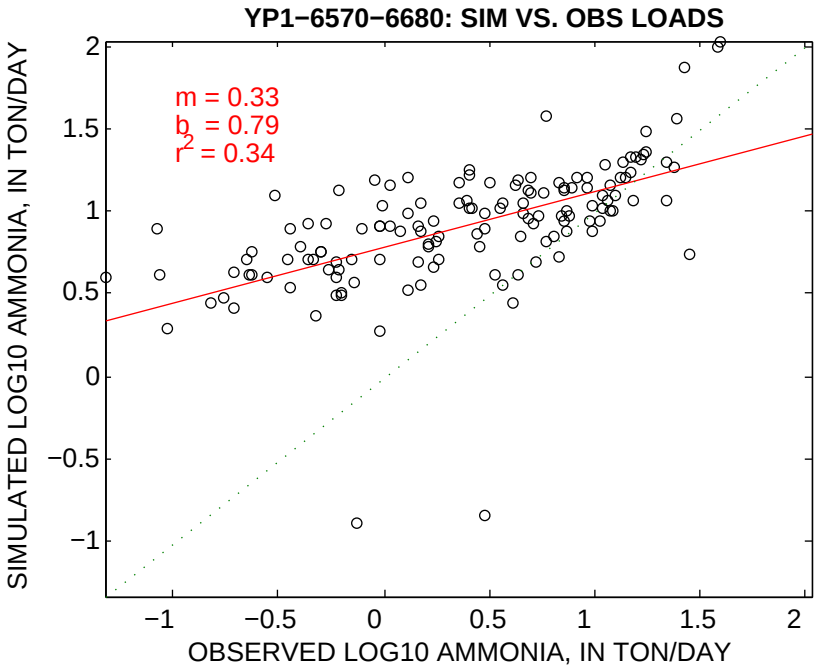


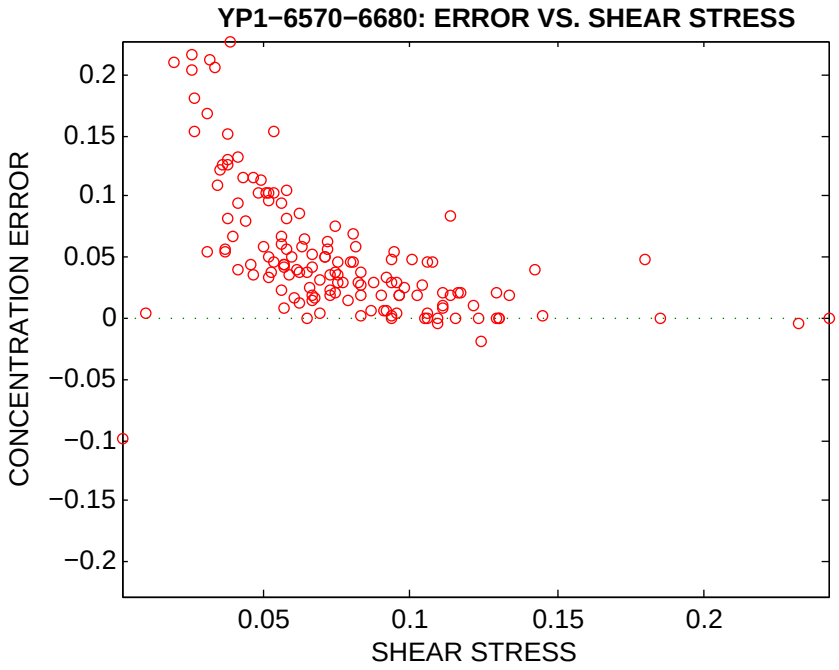


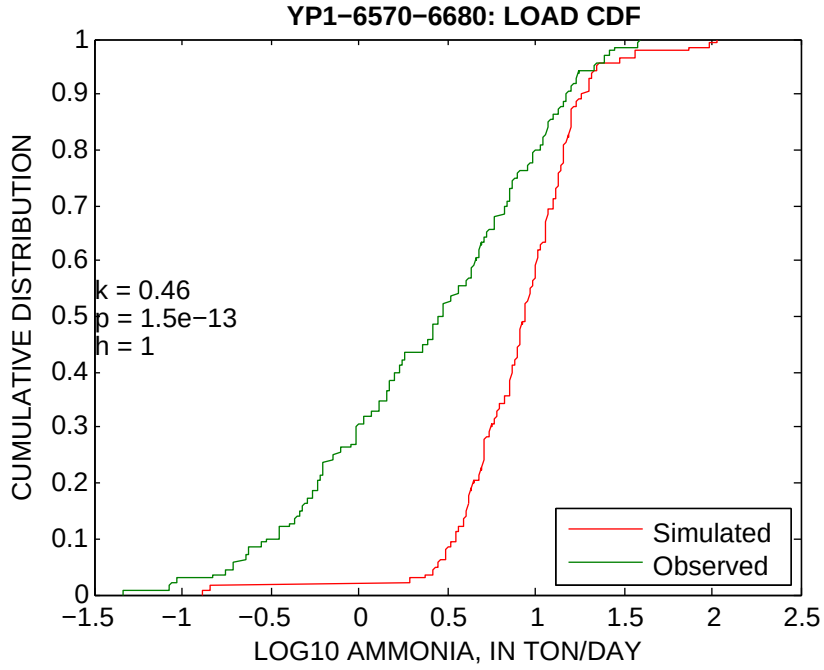


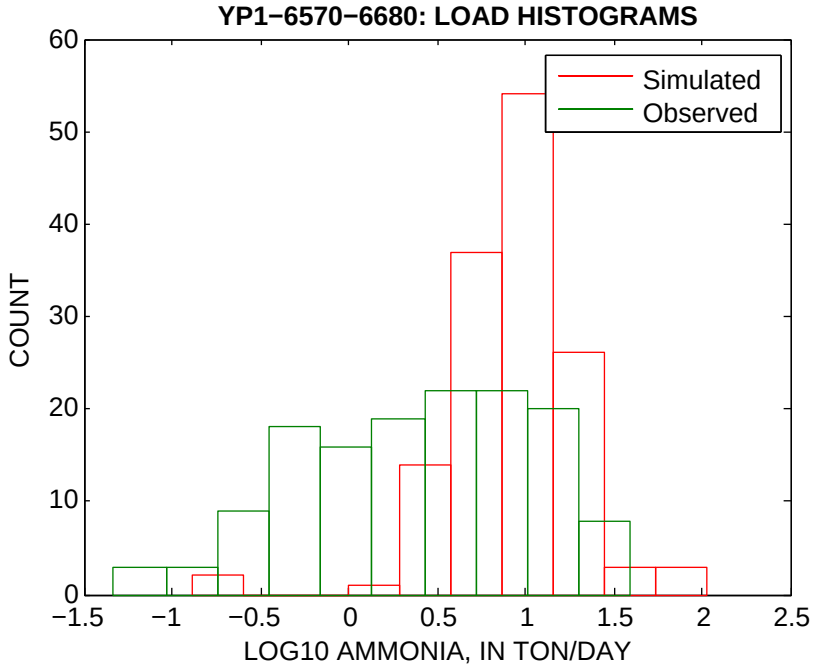


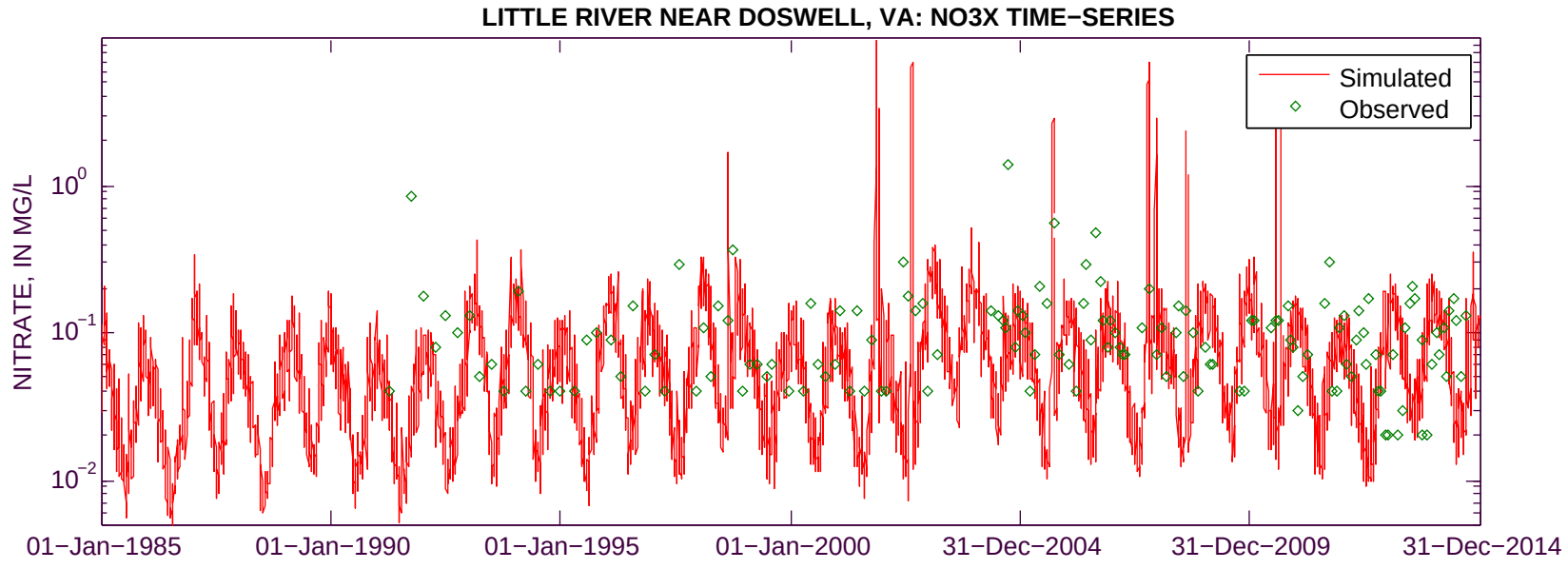
LOAD DATA
LOG10

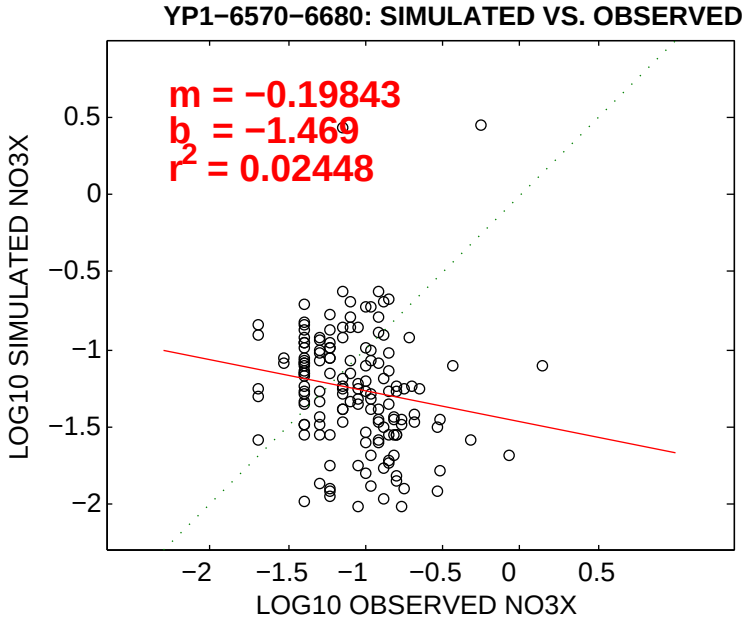


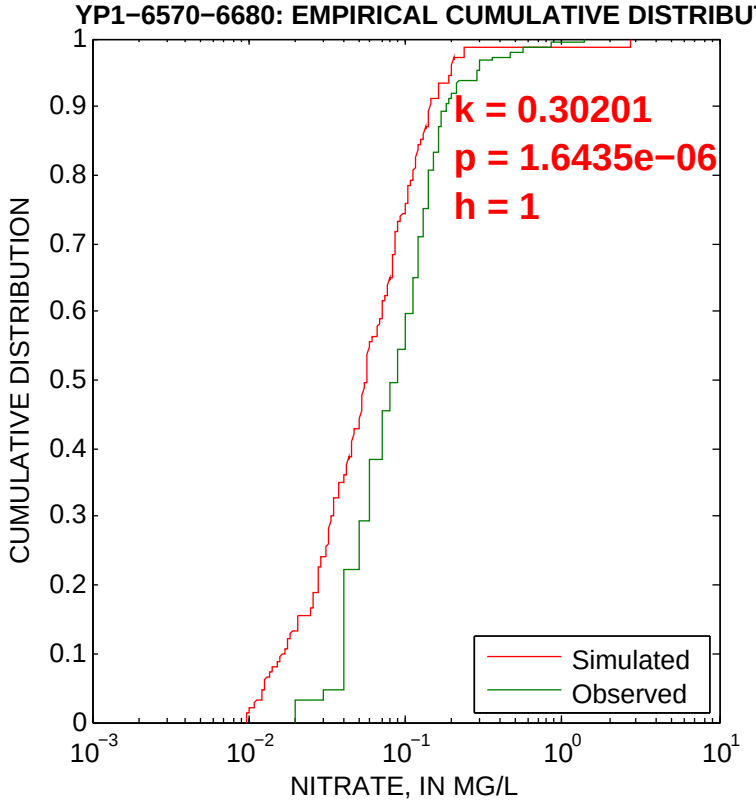












DATA SELECTION

scenario	file
P620171001WQ	NO3X.calib

plot: NO3X - nitrate

Dates: 1/1/1985 – 12/31/201

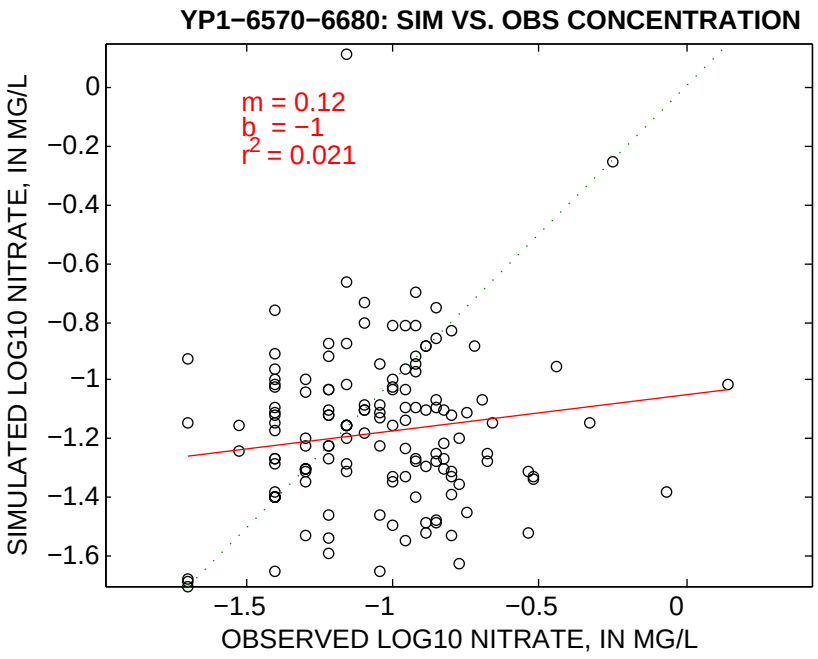
Drive	Directory	Observed
N/A	model	OBS20161101

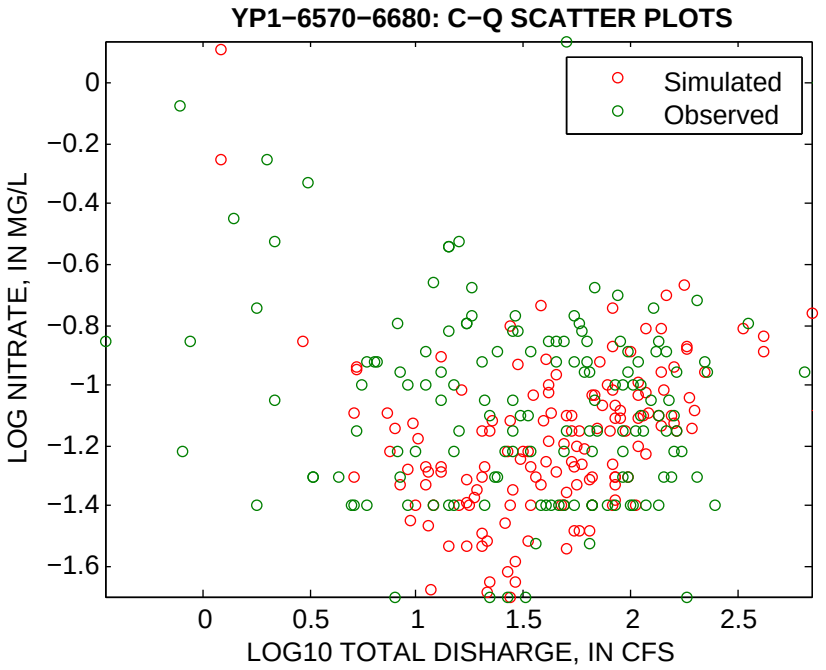
STATISTICS

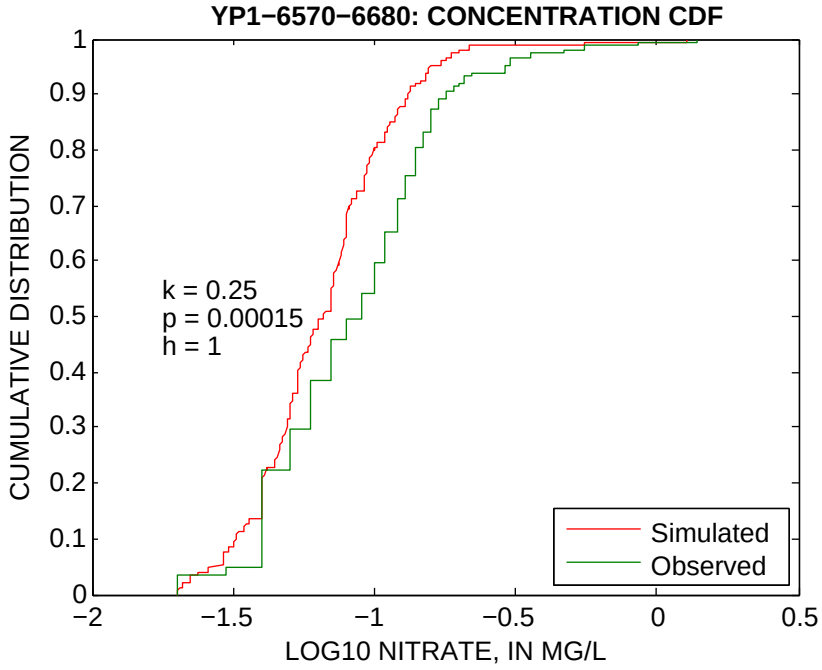
	n	149	149
		observe	simulate
min		0.02	0.009583
		-1.69897	-2.0185
mean		0.116376	0.105399
		-1.06823	-1.25704
media		0.09	0.056187
		-1.04576	-1.25036
max		1.39	2.7831
		0.143015	0.444529
varian		0.0208787	0.0981278
		0.096181	0.154699
JB		0.001	0.001
		0.002856	0.001
		ra	log
%		-9.43207	17.6751
err.va		0.106497	0.32494
rel.std.err		5.10074	3.37842
mod.eff		-4.10074	-2.37842

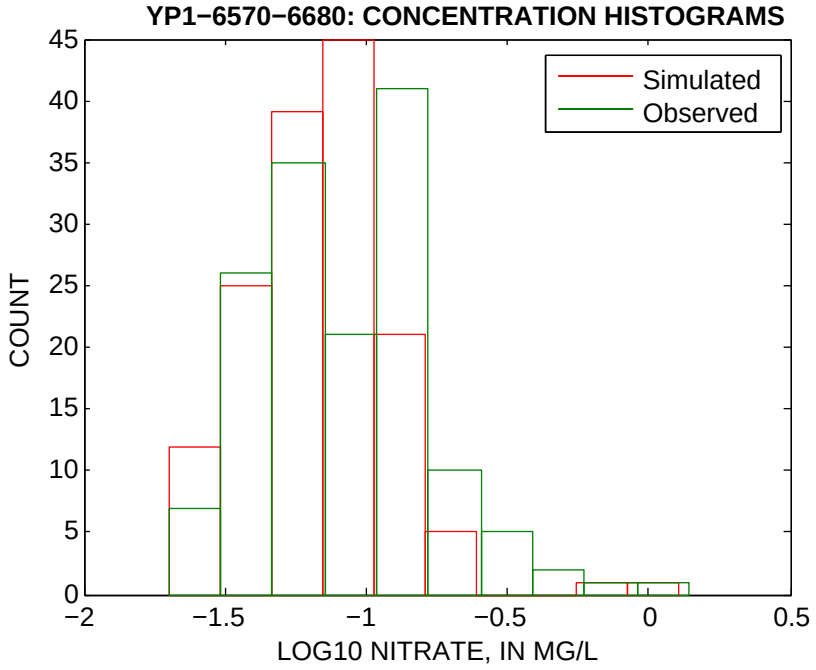
VERSION 2.1

ALL DATA
LOG10

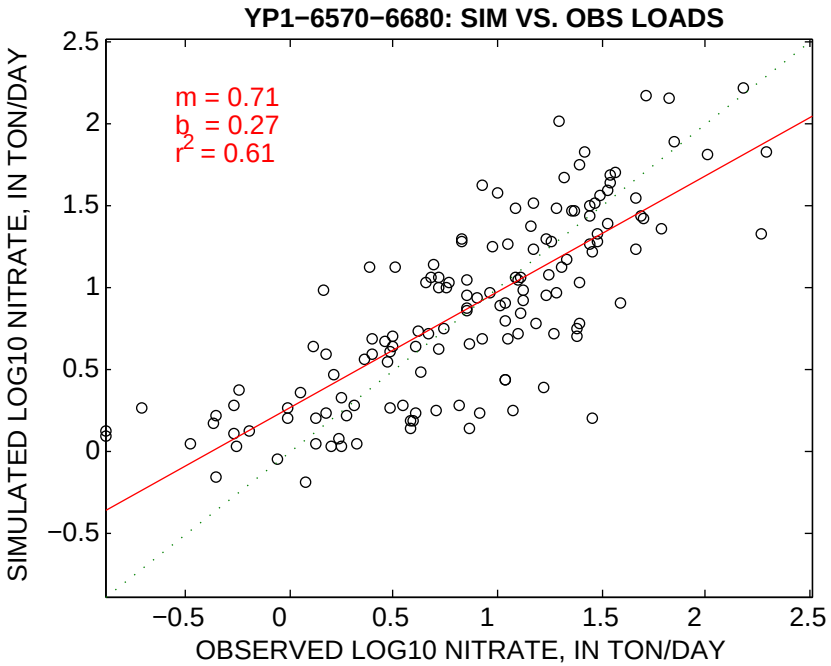


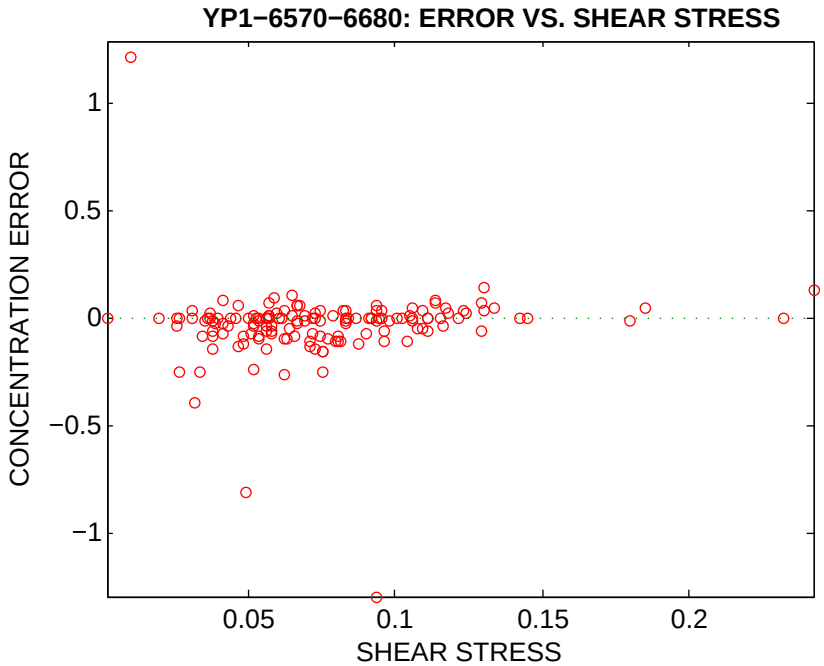


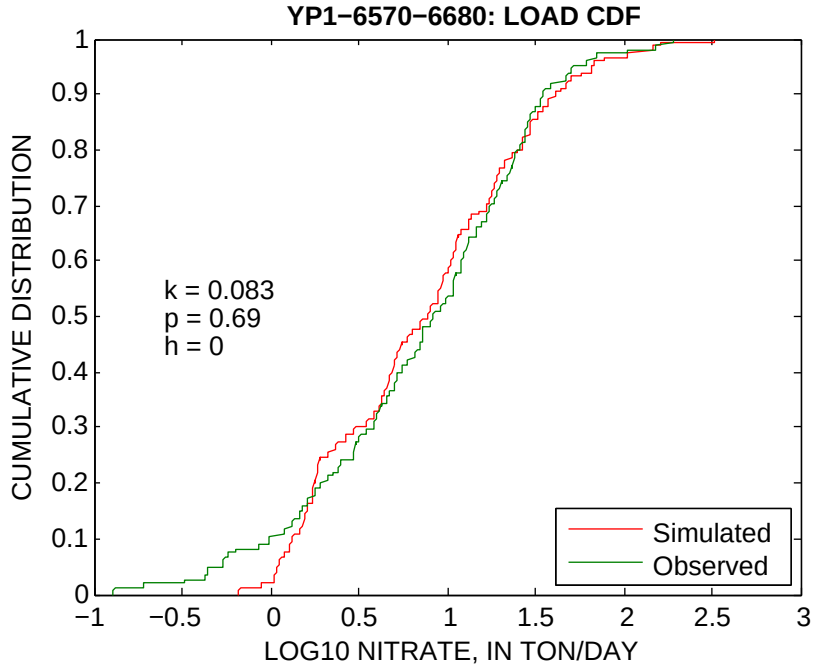


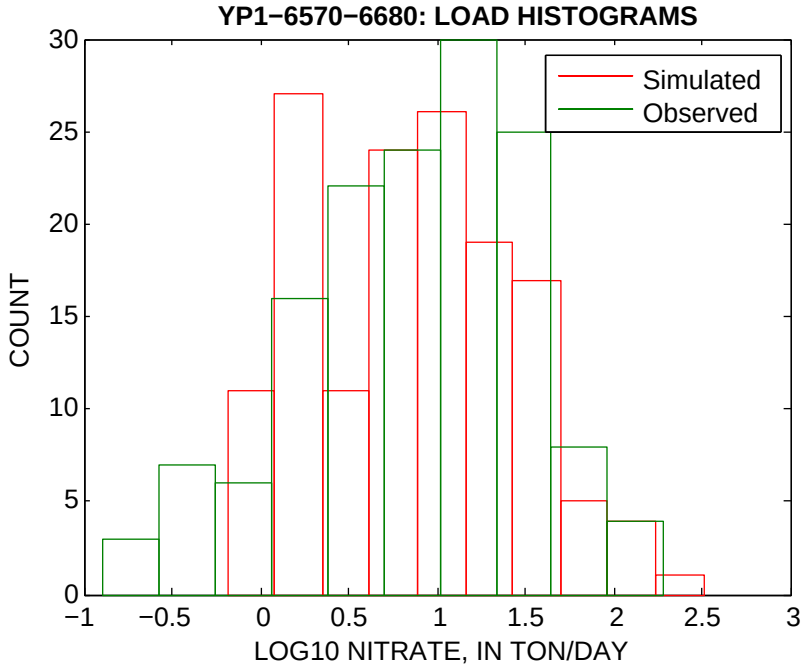


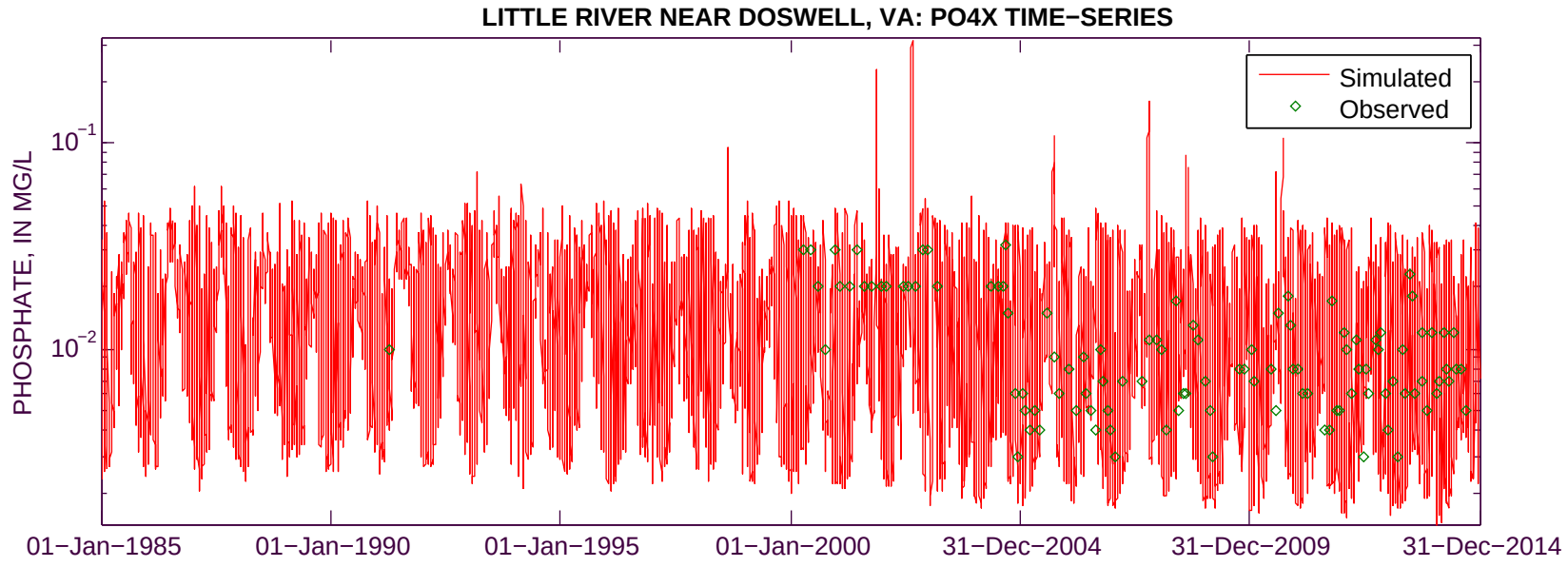
LOAD DATA
LOG10

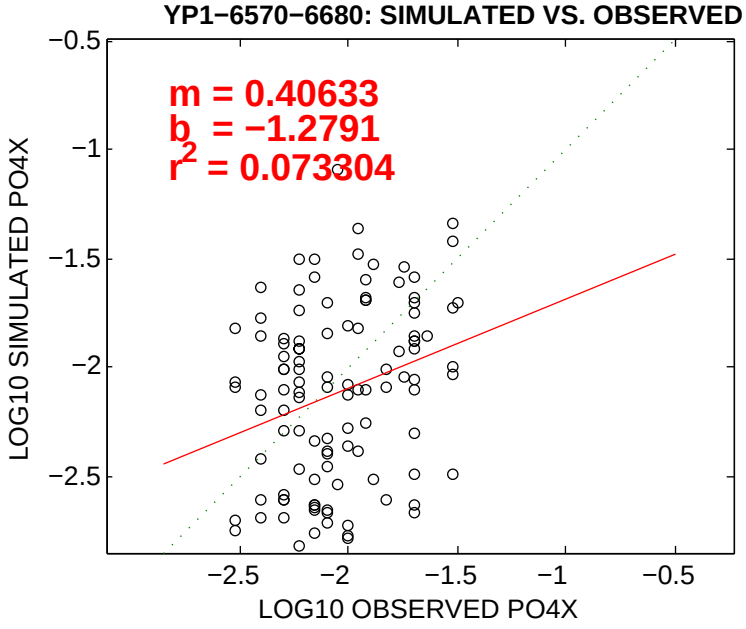


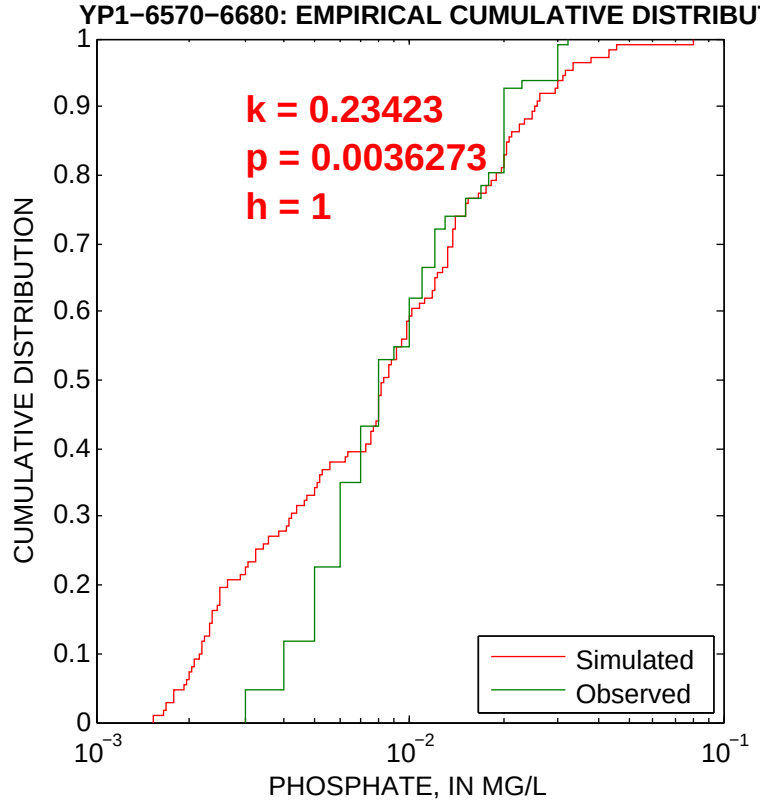












DATA SELECTION

scenario	file
P620171001WQ	PO4X.calib

plot: PO4X - phosphate

Dates: 1/1/1985 – 12/31/201

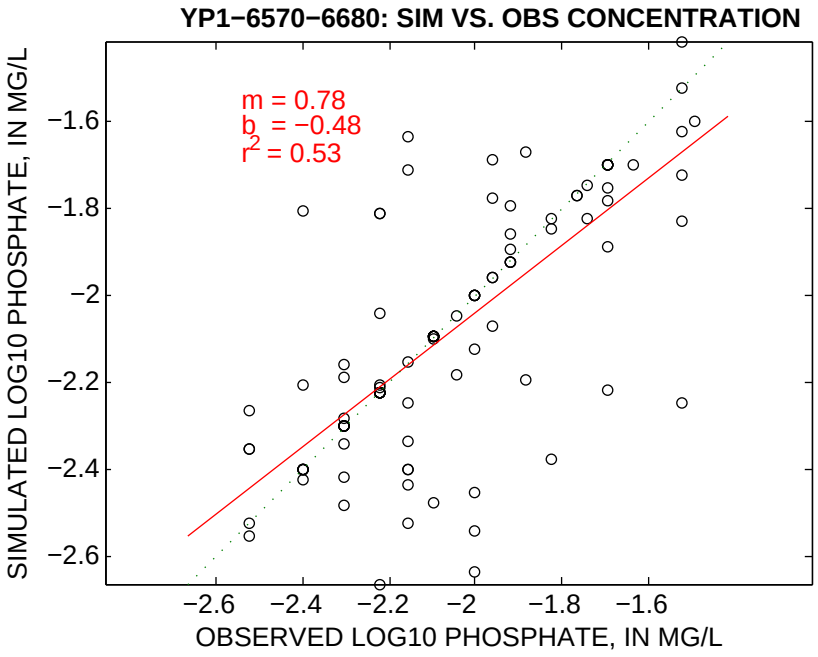
Drive	Directory	Observed
N/A	model	OBS20161101

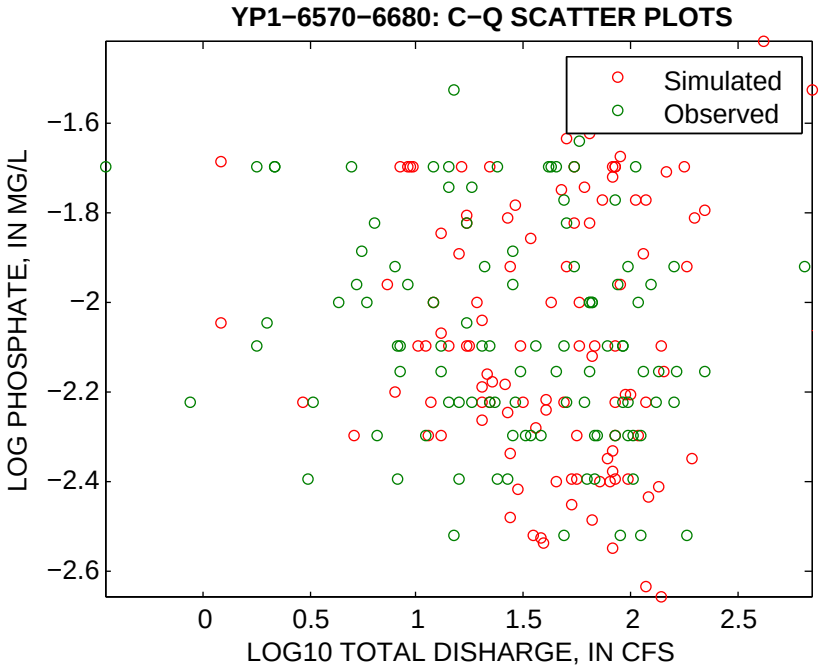
STATISTICS

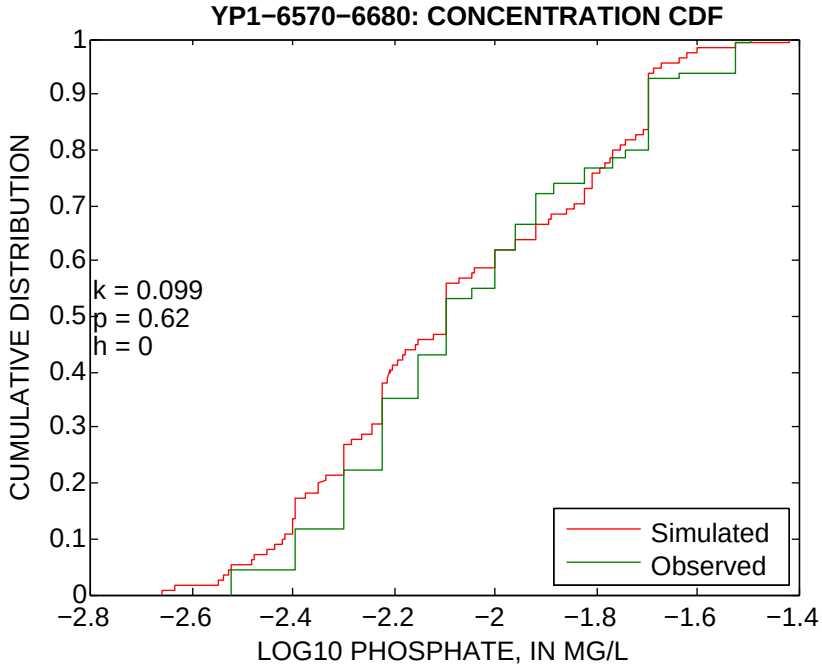
	n	111	111
		observe	simulate
min		0.003	0.001534
		-2.52288	-2.81417
mean		0.011018	0.0117037
		-2.04247	-2.10902
media		0.008	0.0082798
		-2.09691	-2.08198
max		0.032	0.080794
		-1.49485	-1.09262
varian		5.33633e-0	0.00013393
		0.0723258	0.162903
JB		0.001052	0.001
		0.075310	0.100779
		ra	log
%		6.22367	3.25851
err.va		0.00014642	0.180922
rel.std.err		2.74393	2.50148
mod.eff		-1.74393	-1.50148

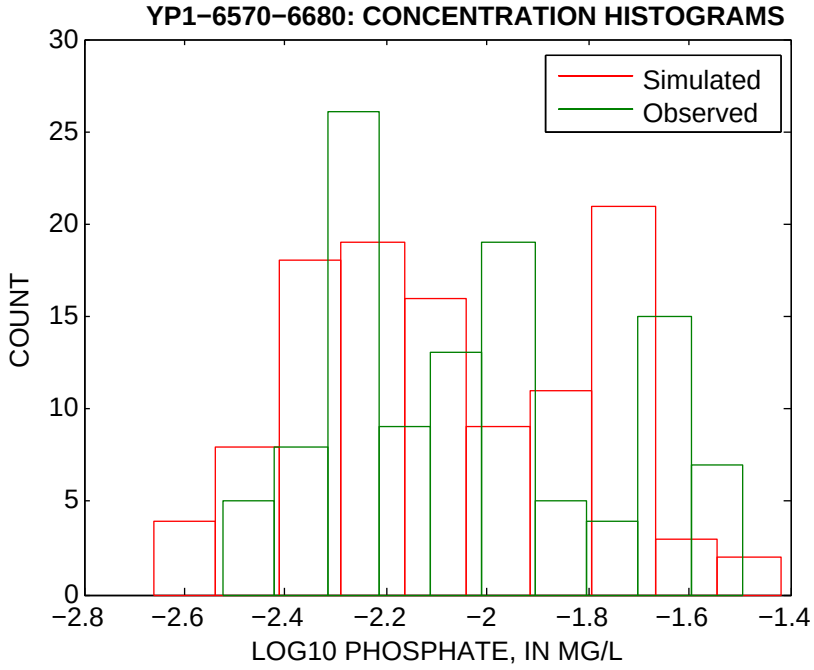
VERSION 2.1

ALL DATA
LOG10

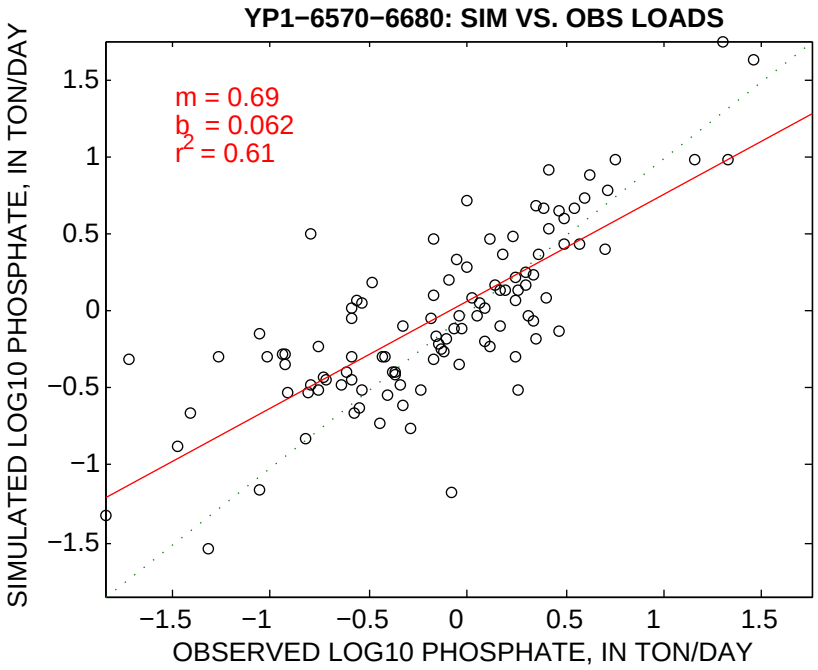


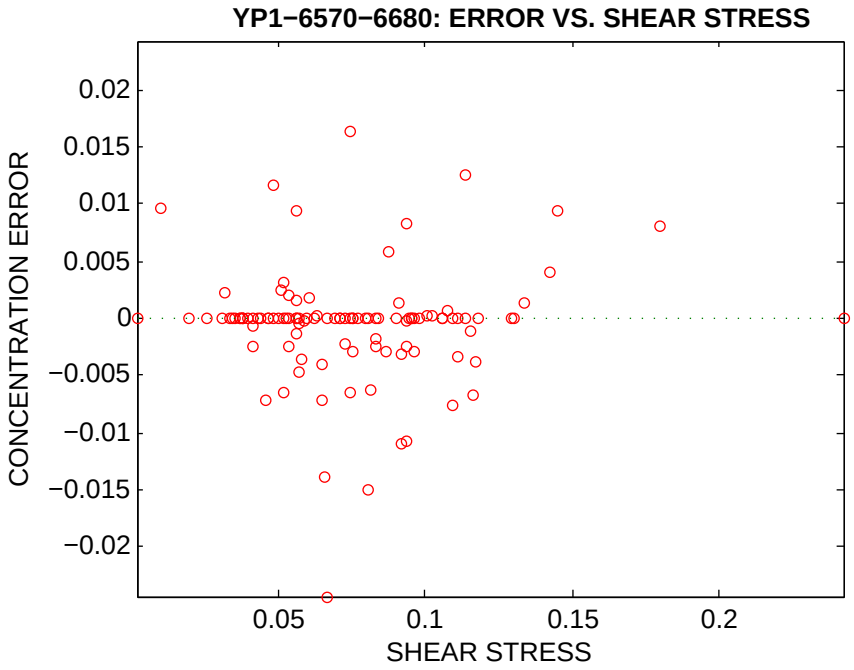


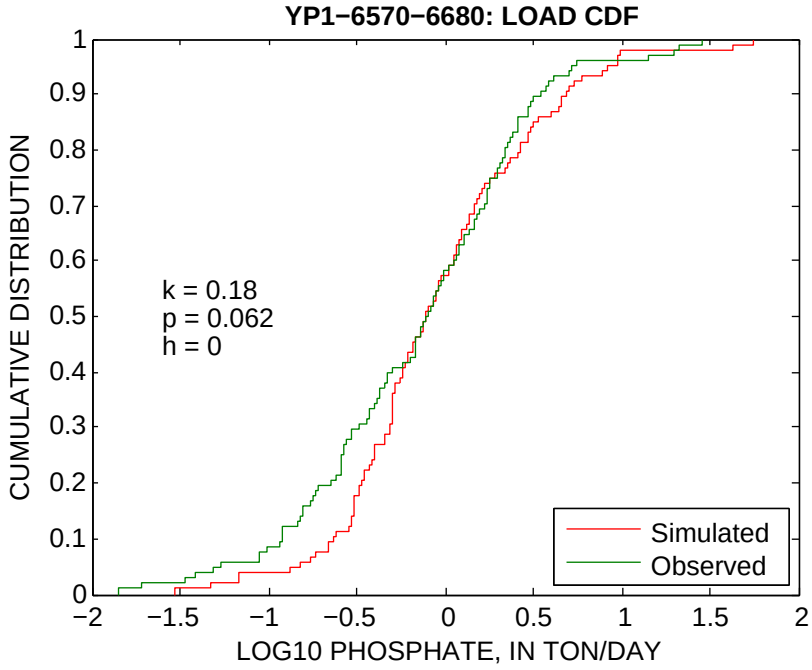


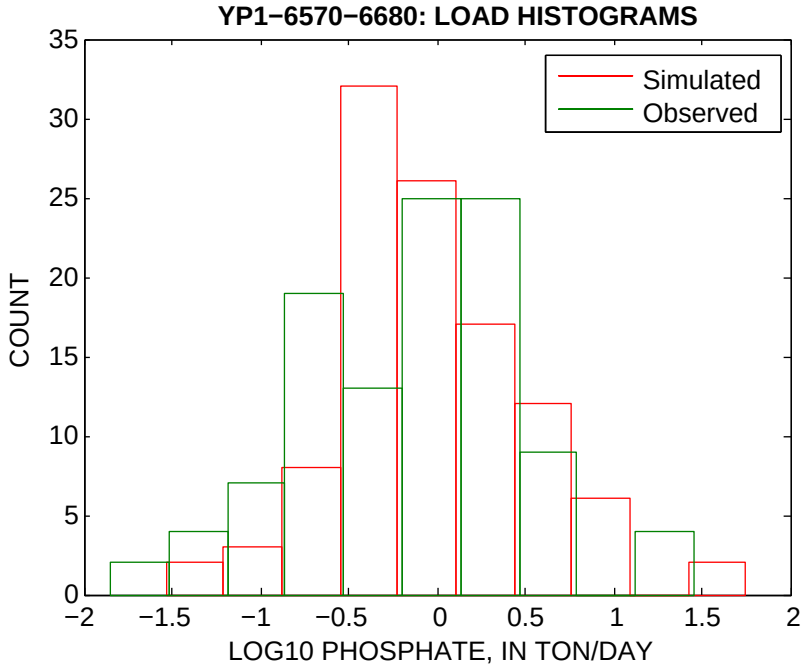


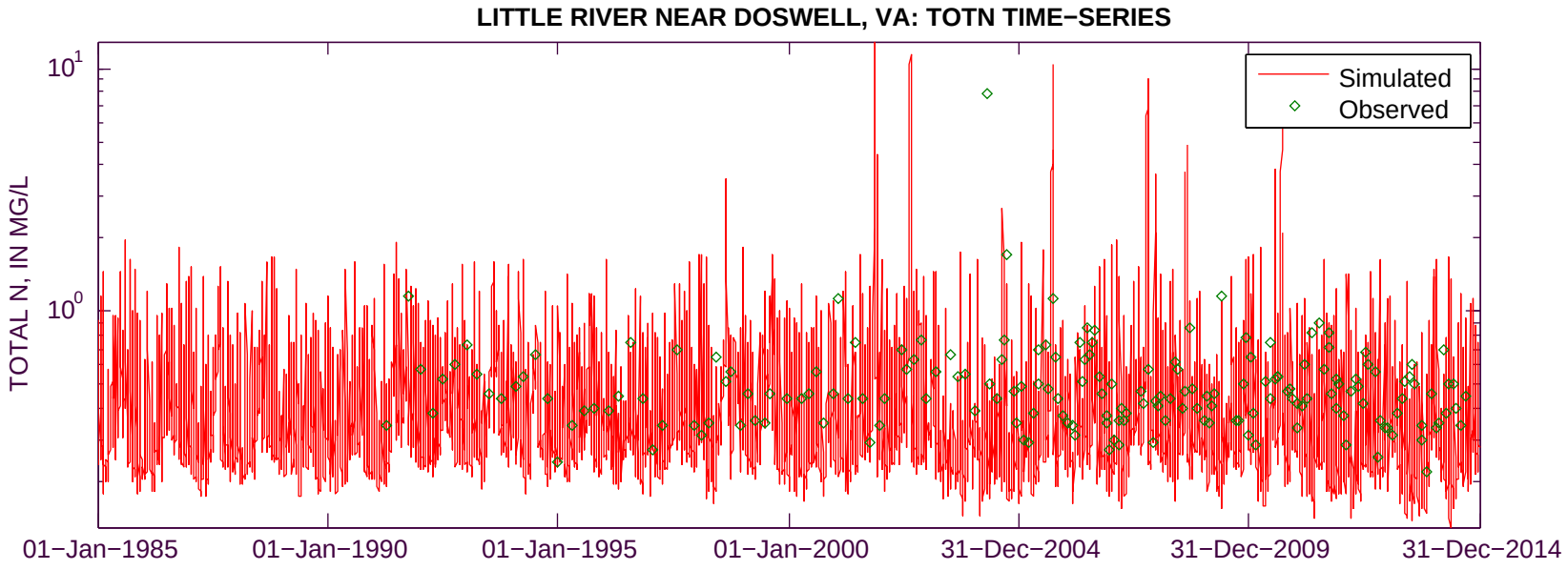
LOAD DATA
LOG10

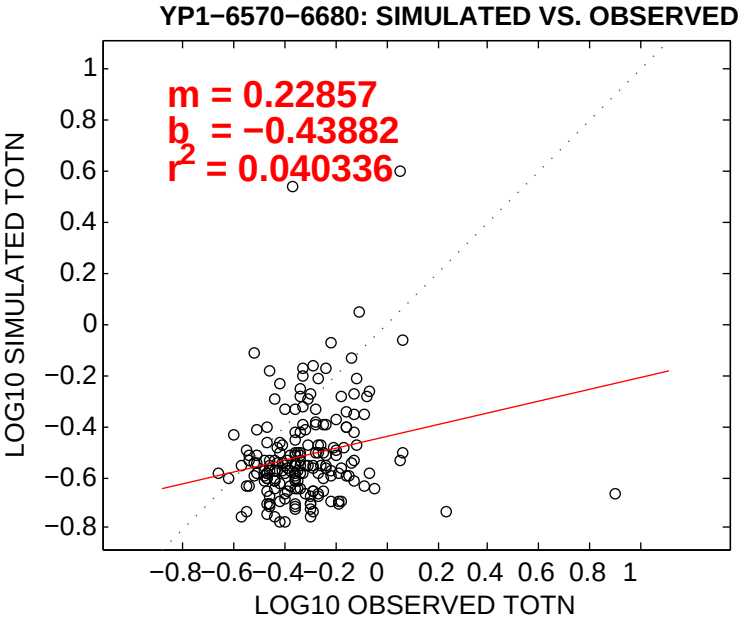


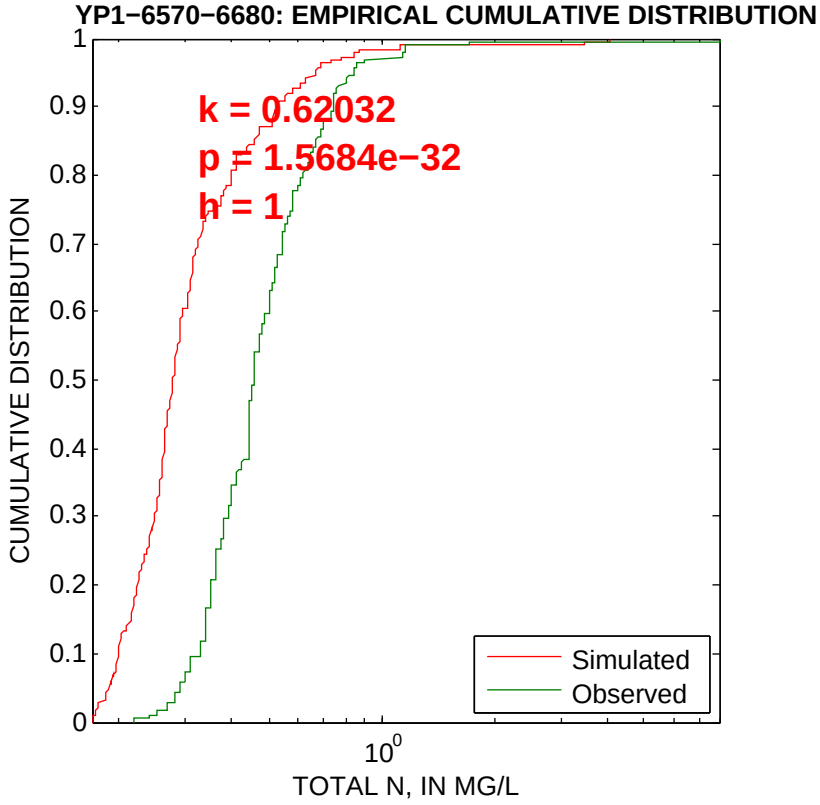












DATA SELECTION

scenario	file
P620171001WQ	TOTN.calib

plot: TOTN - total nitrogen

Dates: 1/1/1985 – 12/31/201

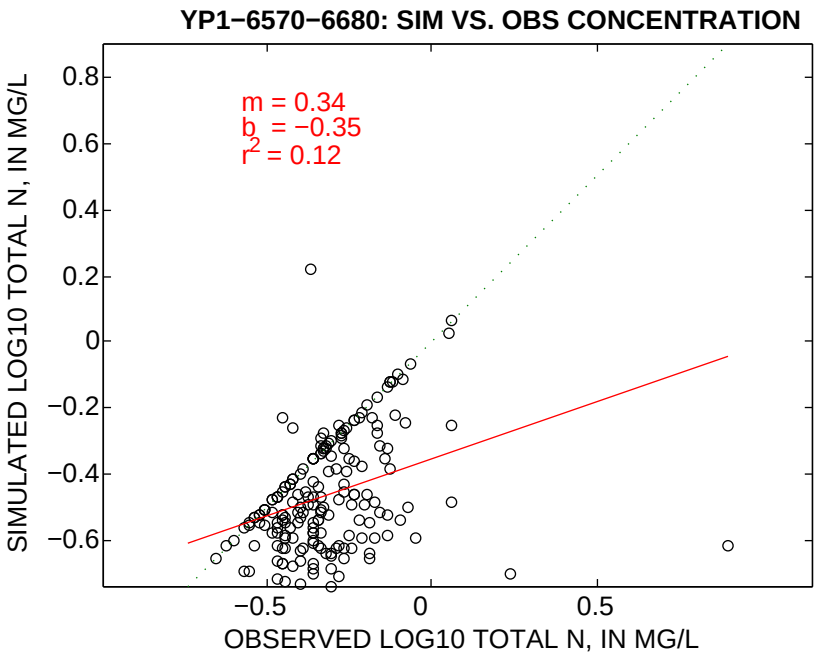
Drive	Directory	Observed
N/A	model	OBS20161101

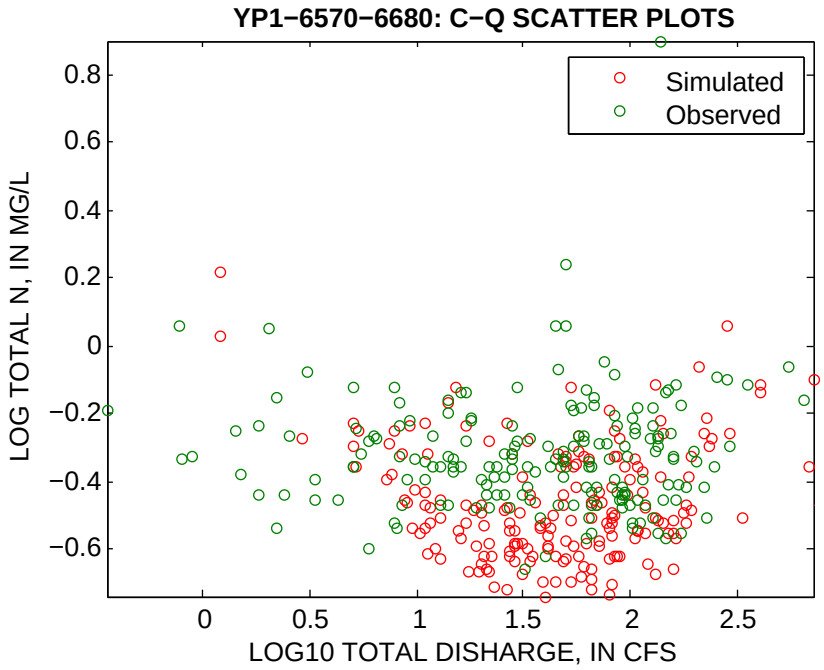
STATISTICS

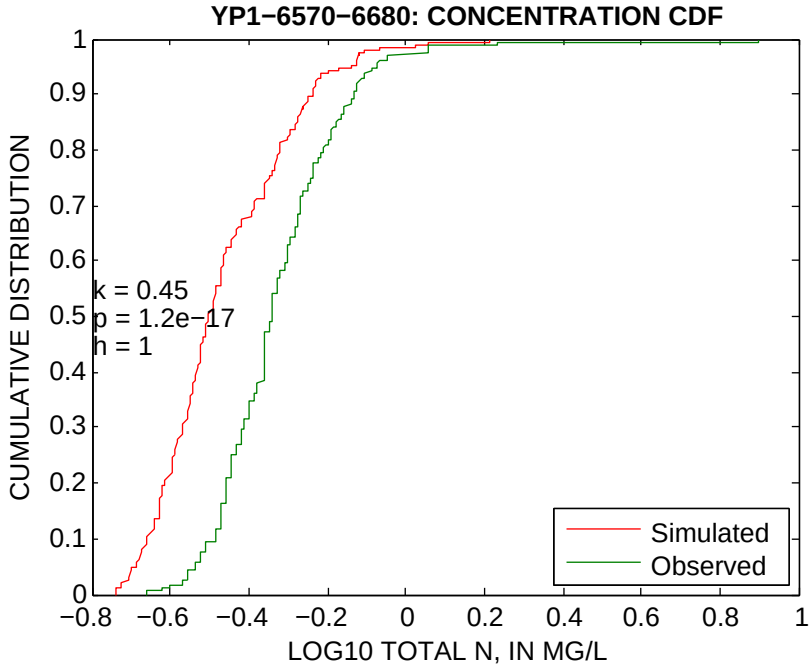
	n	observe	simulate
		187	187
min		0.22	0.16854
		-0.657577	-0.773297
mean		0.539439	0.358979
		-0.32046	-0.512071
media		0.46	0.27843
		-0.337242	-0.555284
max		7.93	4.0357
		0.899273	0.605919
varian		0.332677	0.146873
		0.0287562	0.0372462
JB		0.001	0.001
		0.001	0.001
		ra	log
% err.va		-33.4532	59.7925
		0.488532	0.0897688
rel.std.err		1.46849	3.12172
mod.eff		-0.468485	-2.12172

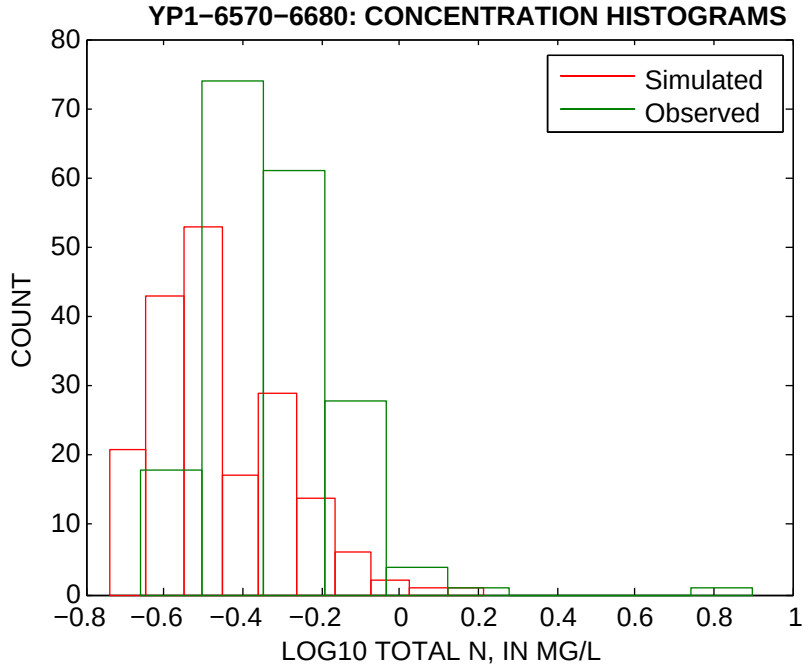
VERSION 2.1

ALL DATA
LOG10

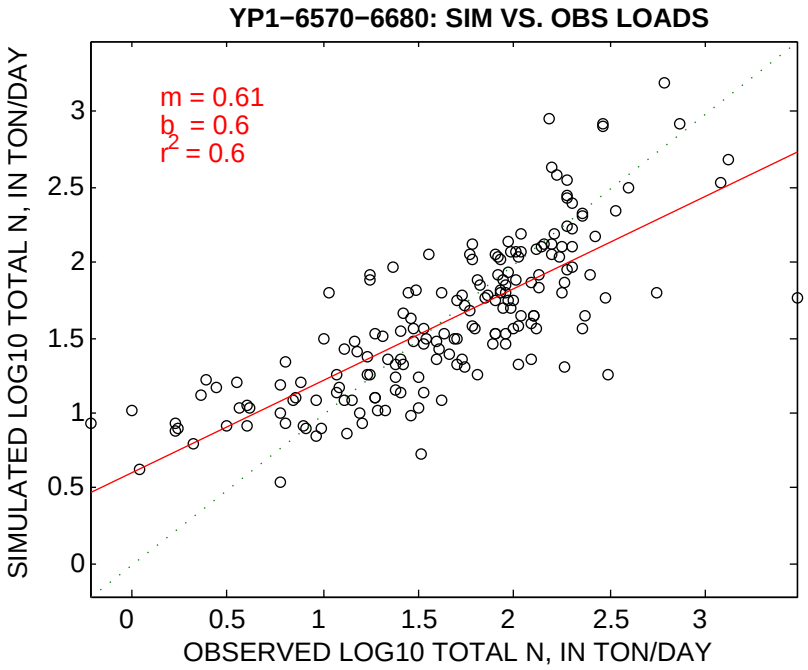


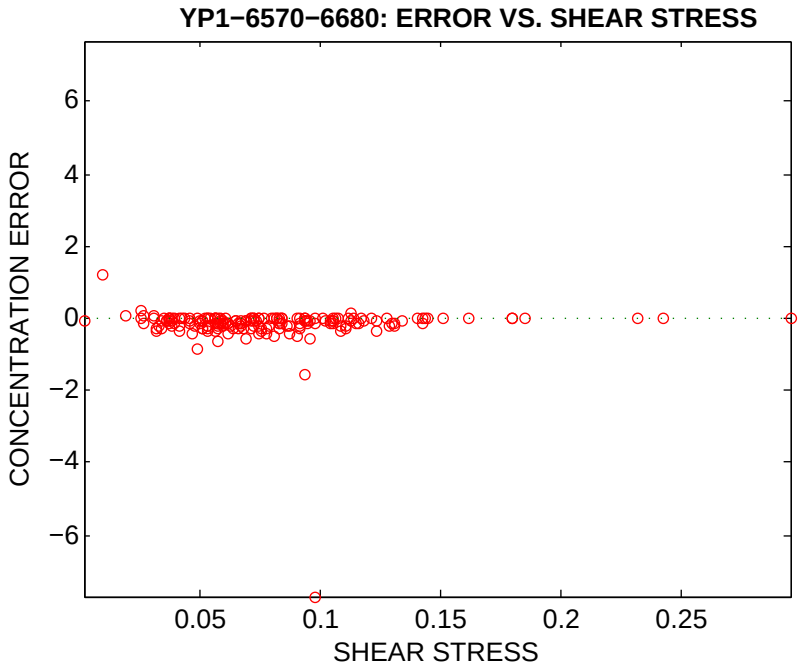


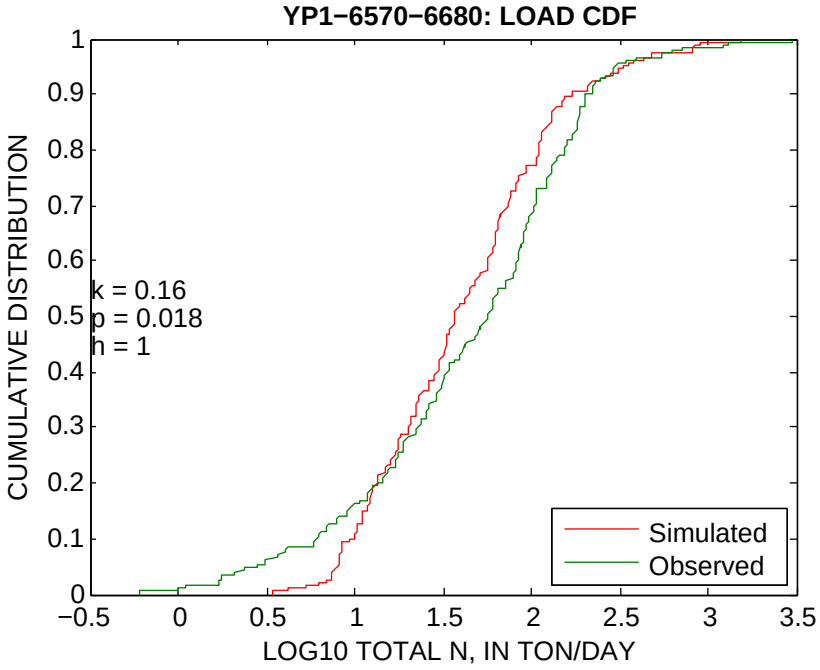


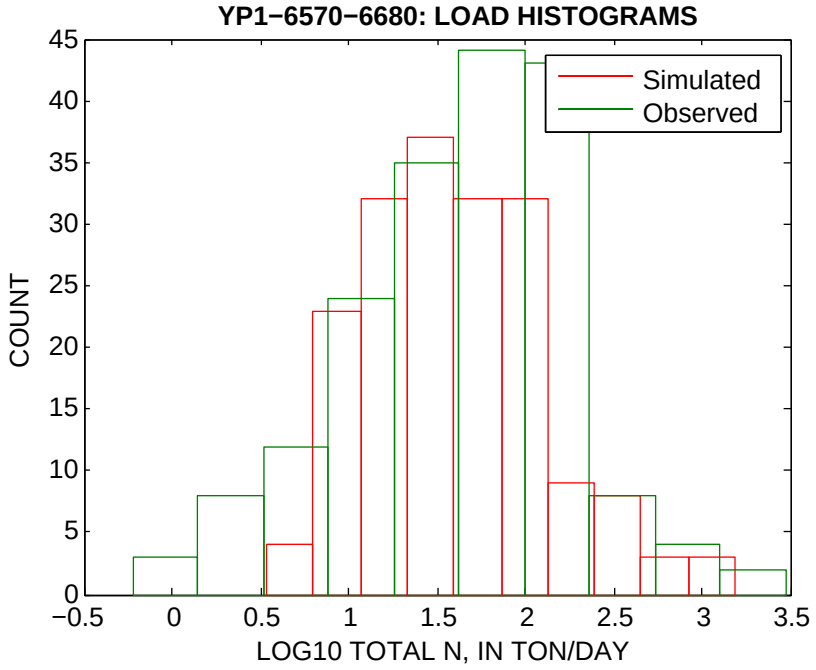


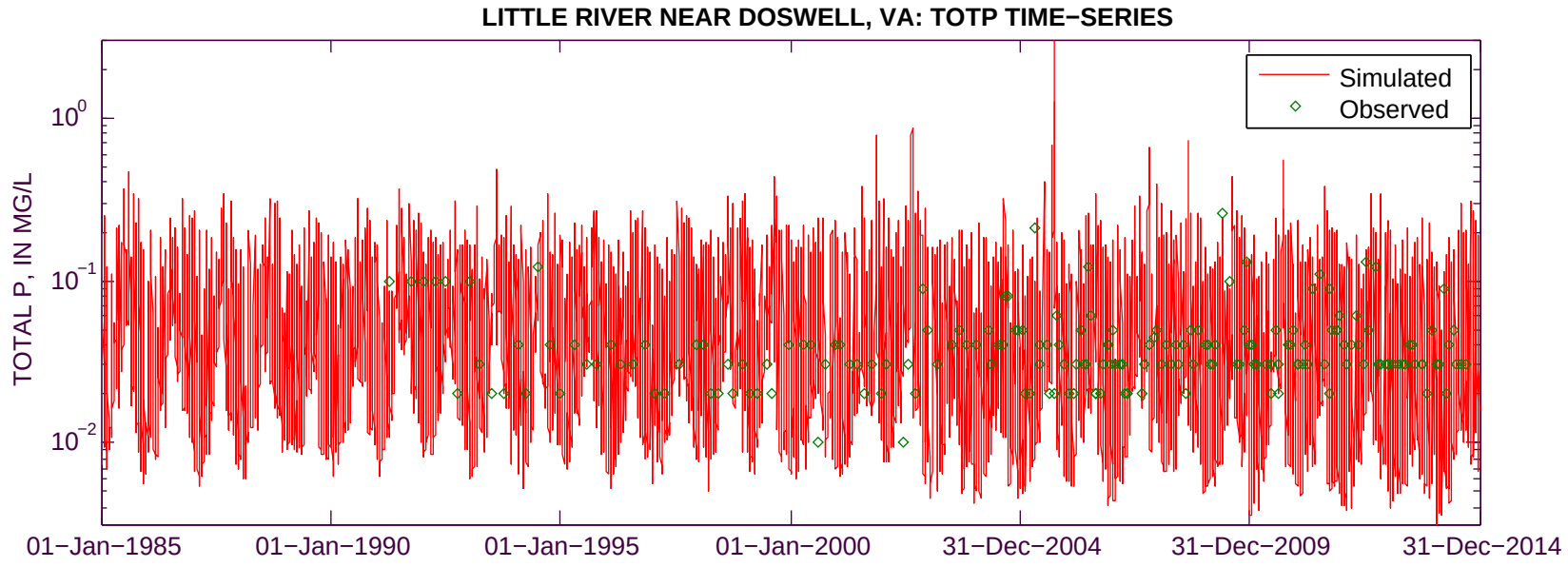
LOAD DATA
LOG10

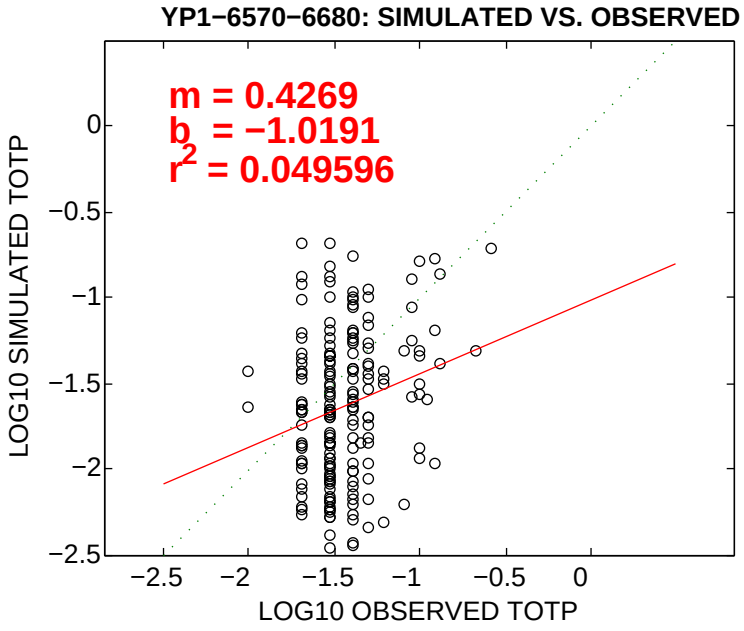


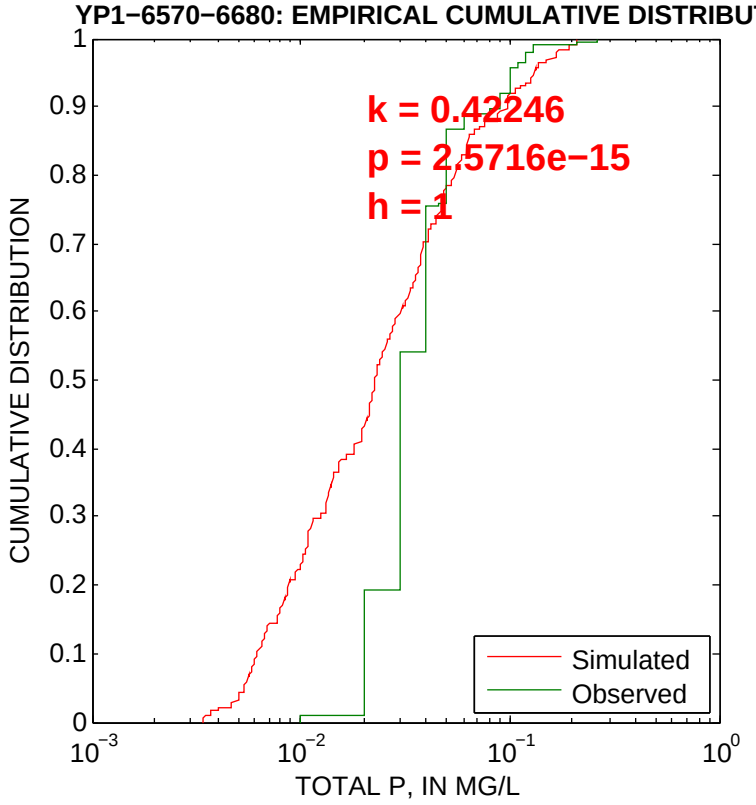












DATA SELECTION

scenario	file
P620171001WQ	TOTP.calib

plot: TOTP - total phosphorus

Dates: 1/1/1985 – 12/31/201

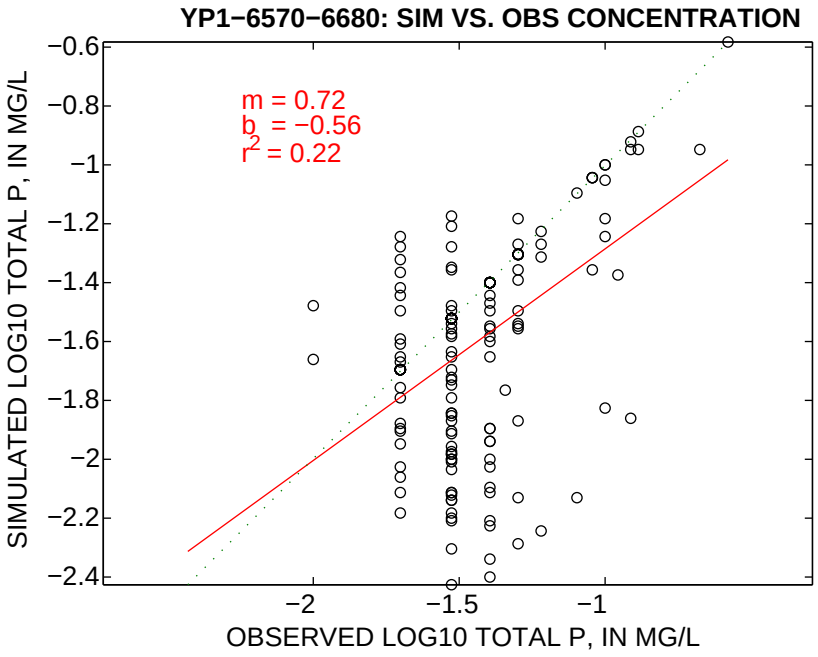
Drive	Directory	Observed
N/A	model	OBS20161101

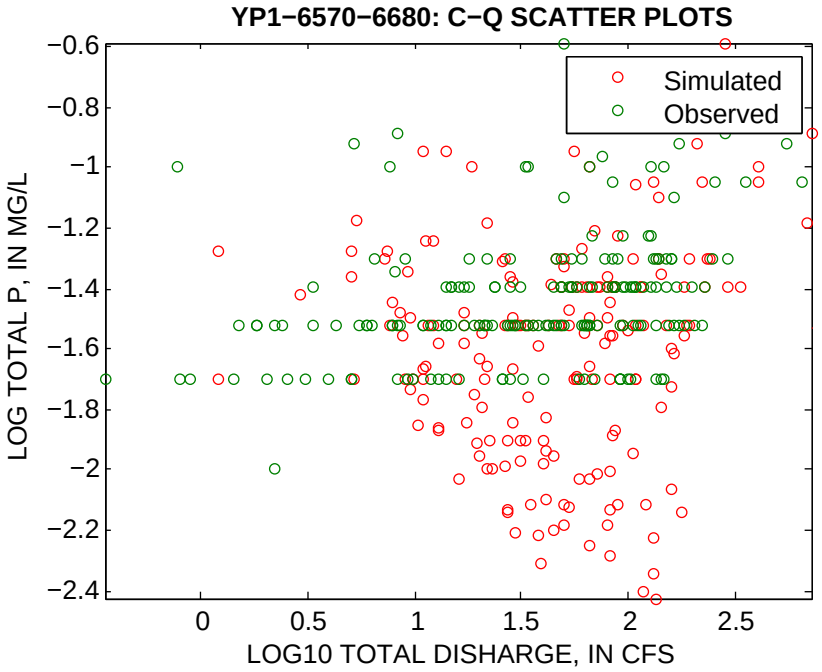
STATISTICS

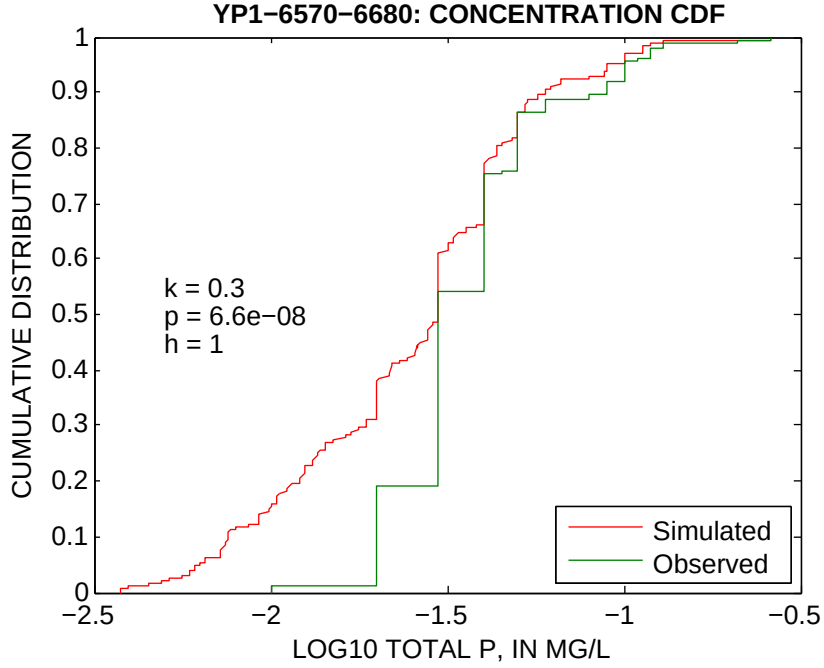
	n	187	187
		observe	simulate
min		0.01	0.0033974
		-2	-2.46885
mean		0.0425401	0.0375226
		-1.43881	-1.63333
media		0.03	0.022486
		-1.52288	-1.64809
max		0.26	0.20923
		-0.585027	-0.679376
varian		0.00096945	0.00167489
		0.0493983	0.181517
JB		0.001	0.001
		0.001	0.060856
		ra	log
%		-11.7949	13.5194
err.va		0.0018994	0.22678
rel.std.err		1.95924	4.59084
mod.eff		-0.959245	-3.59084

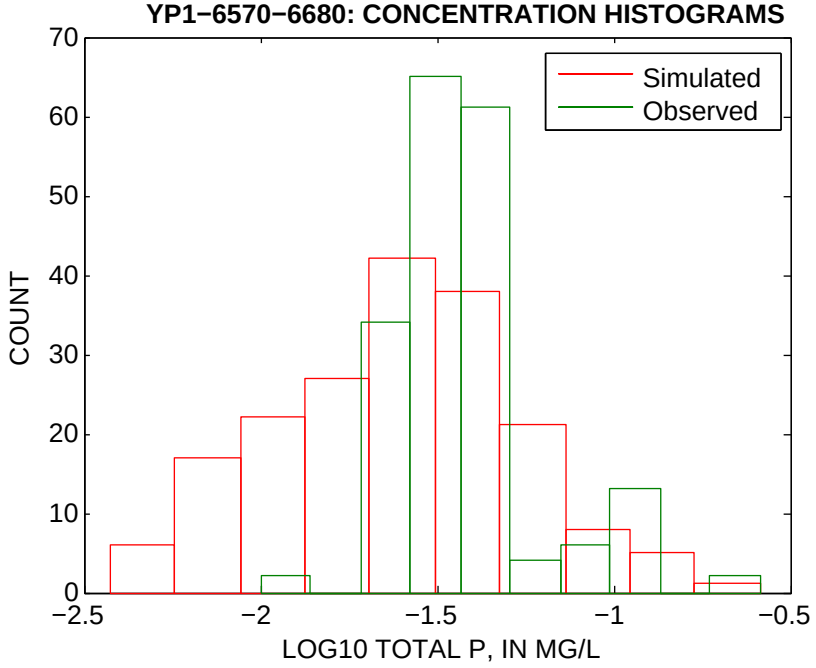
VERSION 2.1

ALL DATA
LOG10

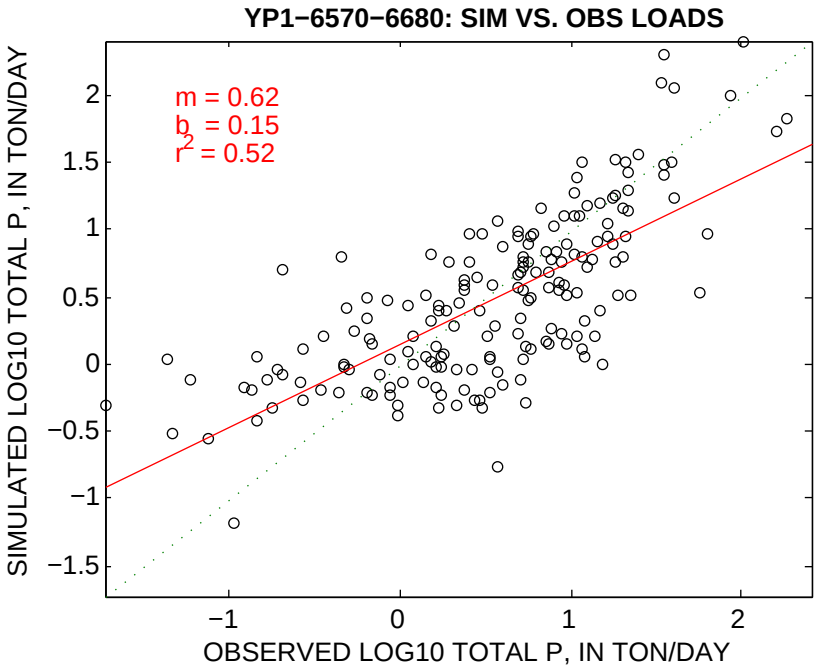


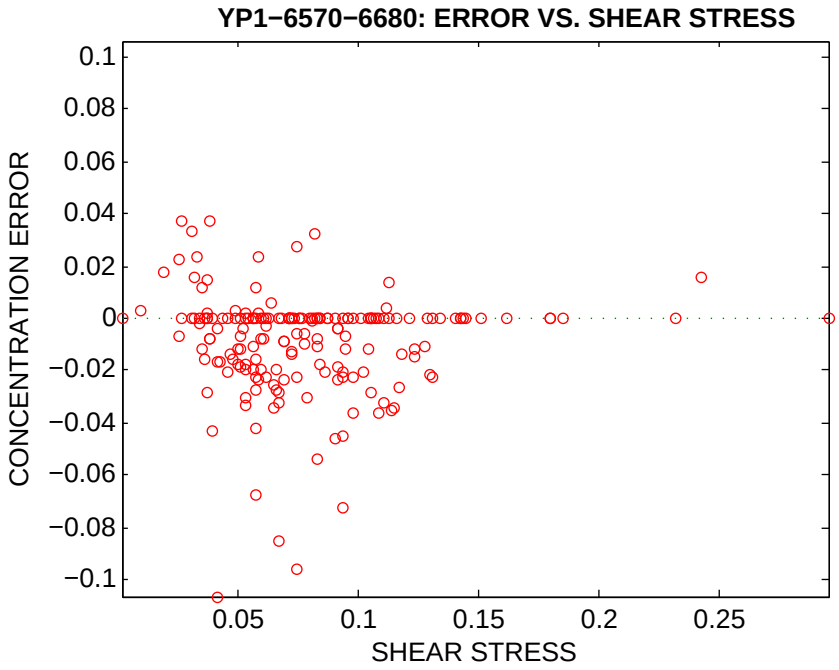


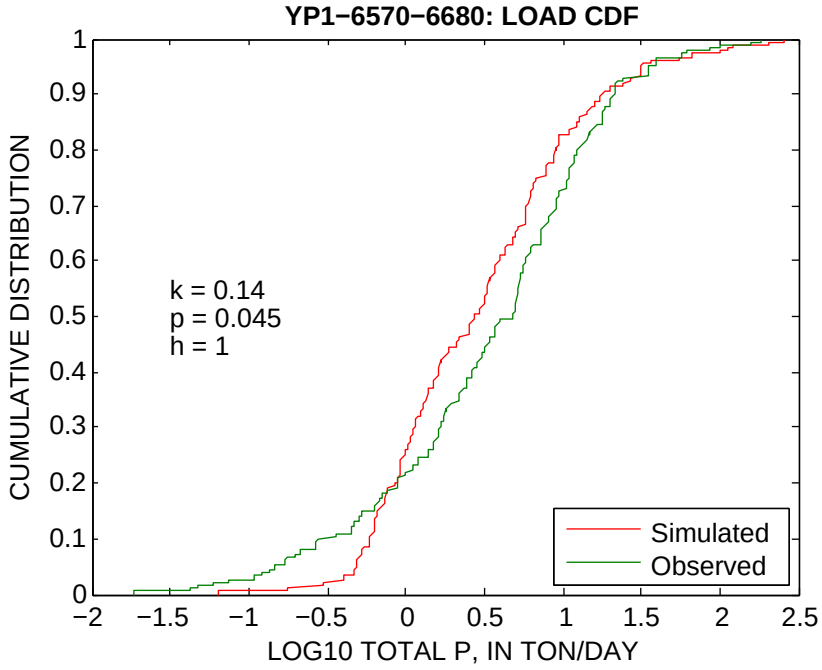


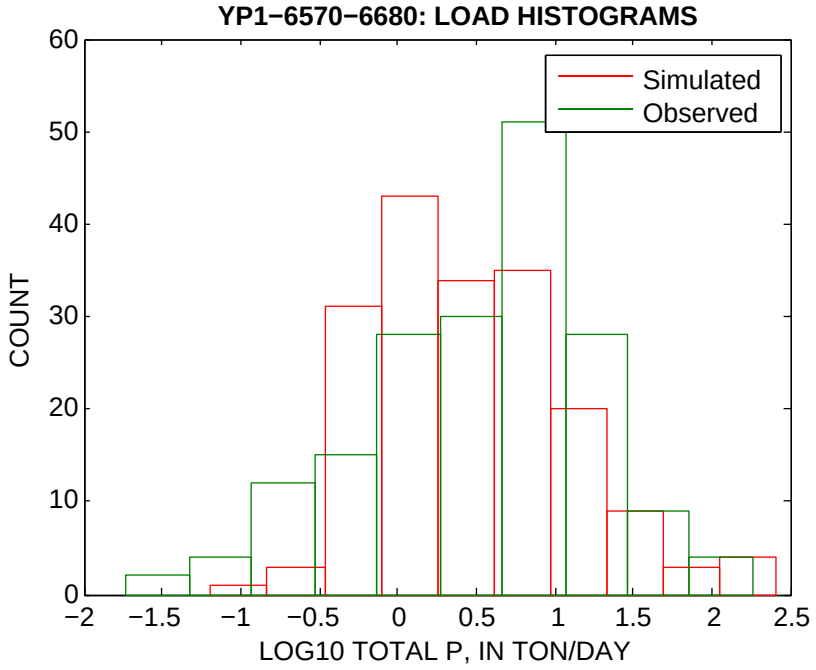


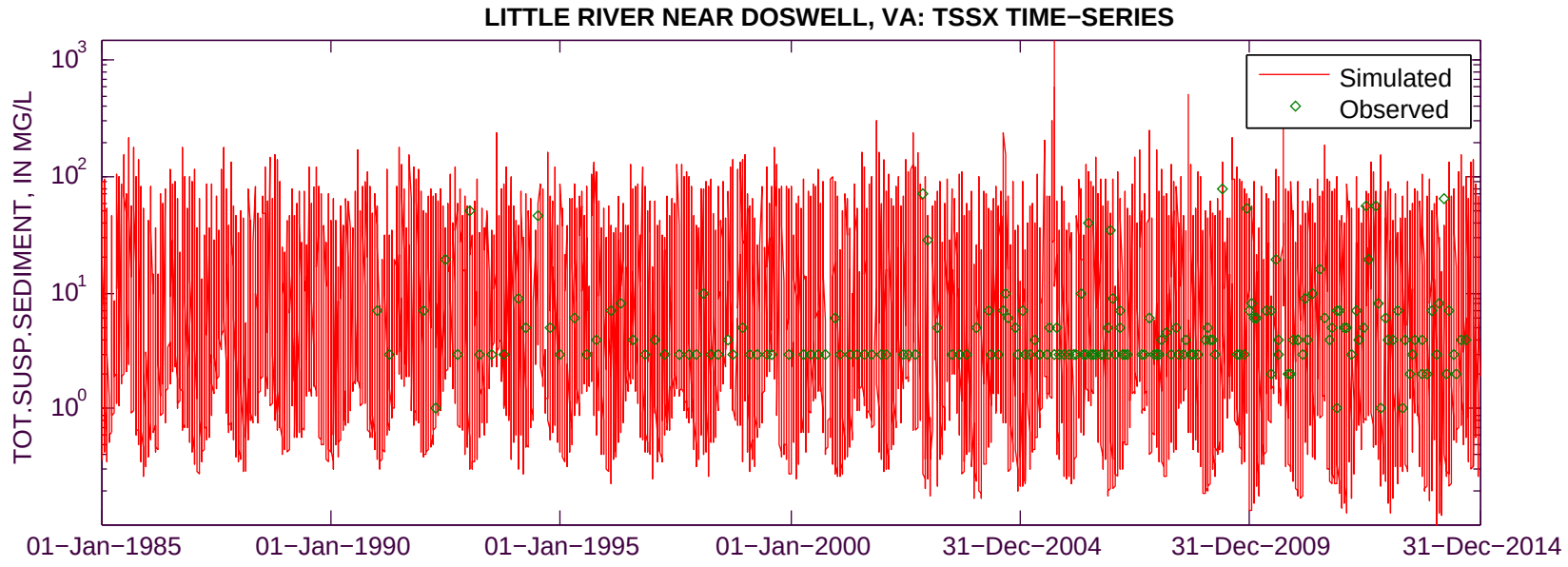
LOAD DATA
LOG10

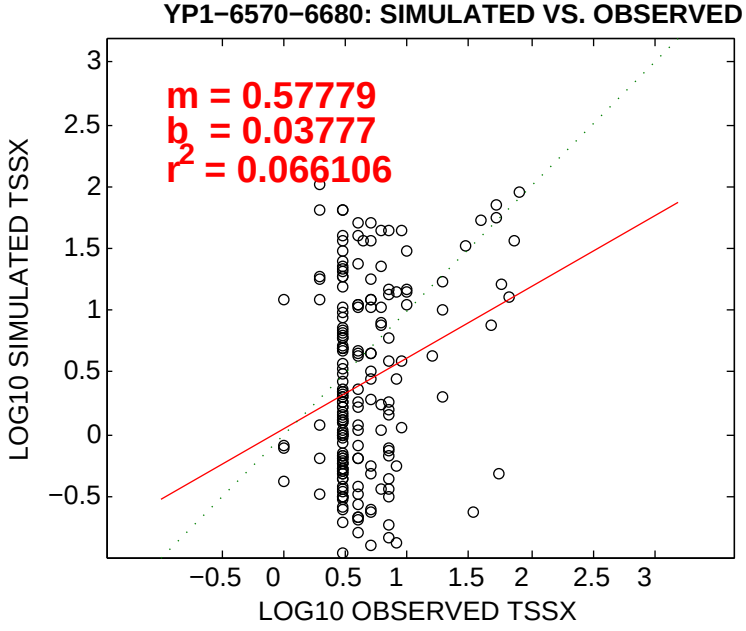


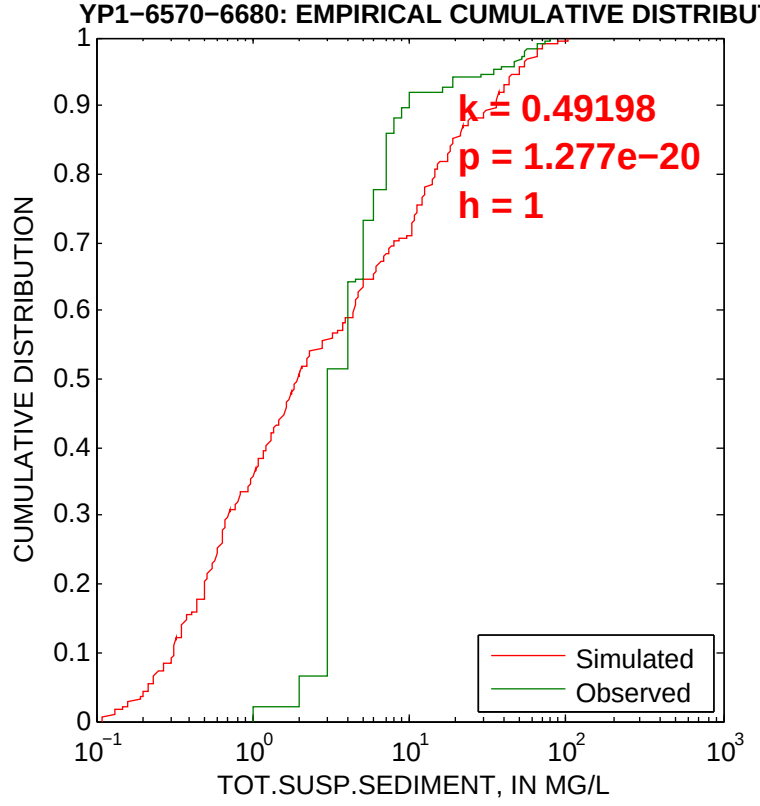












DATA SELECTION

scenario	file
P620171001WQ	TSSX.calib

plot: TSSX - total suspended ...

Dates: 1/1/1985 – 12/31/201

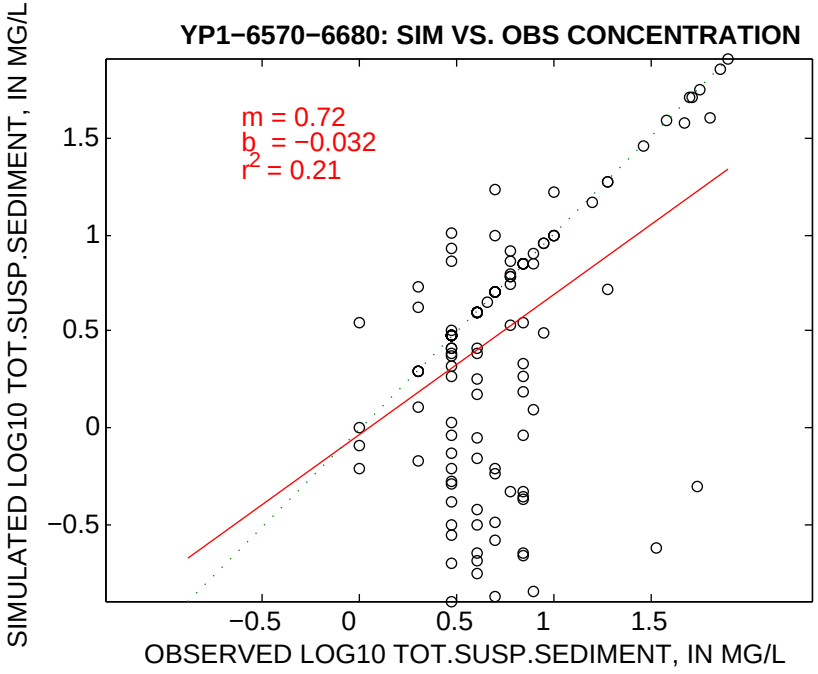
Drive	Directory	Observed
N/A	model	OBS20161101

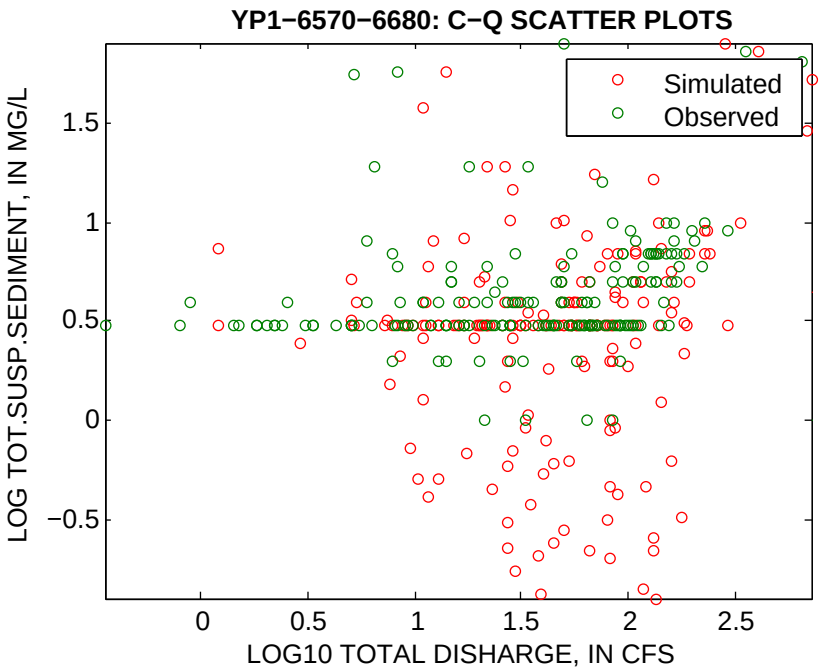
STATISTICS

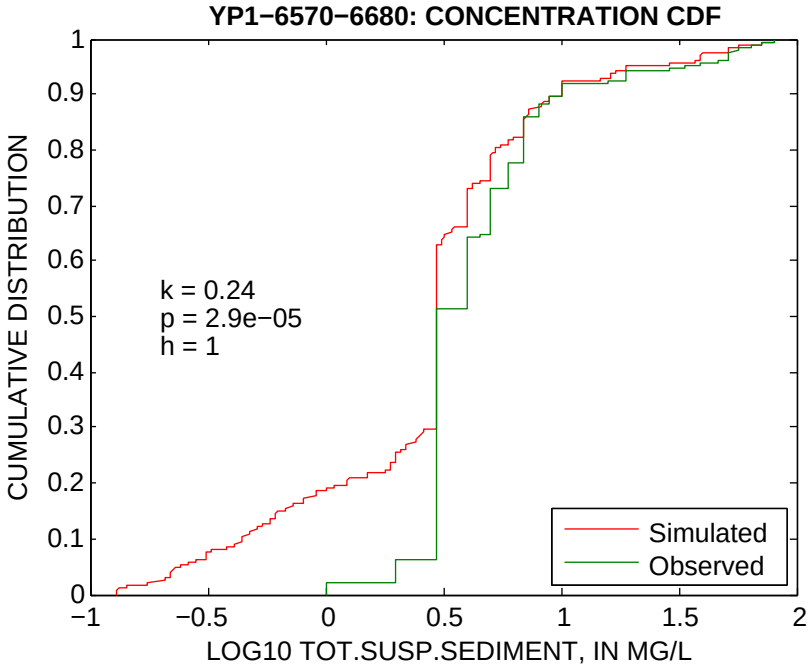
	n	187	187
		observe	simulate
min		1	0.10963
		0	-0.960071
mean		7.30214	10.0035
		0.656604	0.417149
media		3	1.9669
		0.477121	0.293782
max		80	102.47
		1.90309	2.0106
varian		150.807	298.008
		0.112536	0.568315
JB		0.001	0.001
		0.001	0.014016
		ra	log
%		36.9944	-36.4687
err.va		296.936	0.608454
rel.std.err		1.96897	5.40676
mod.eff		-0.968974	-4.40676

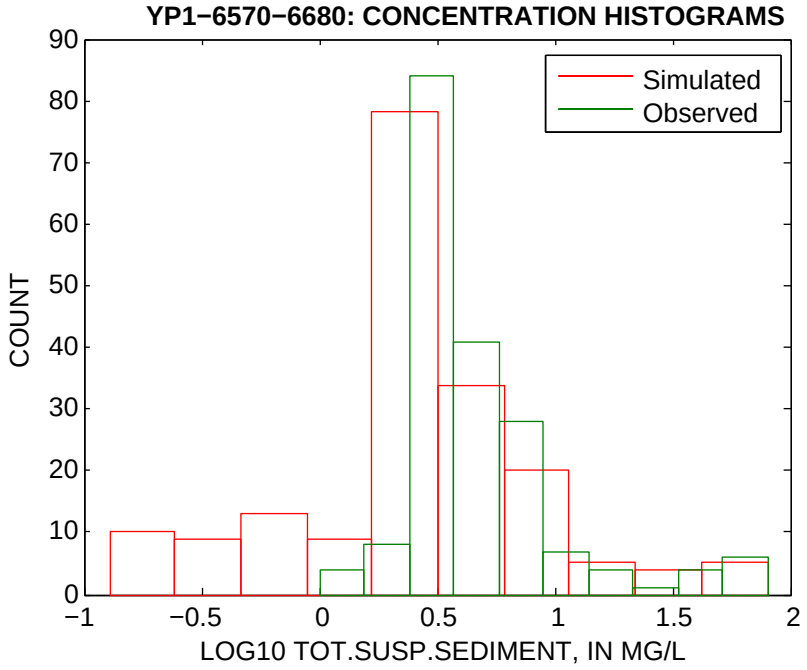
VERSION

ALL DATA
LOG10

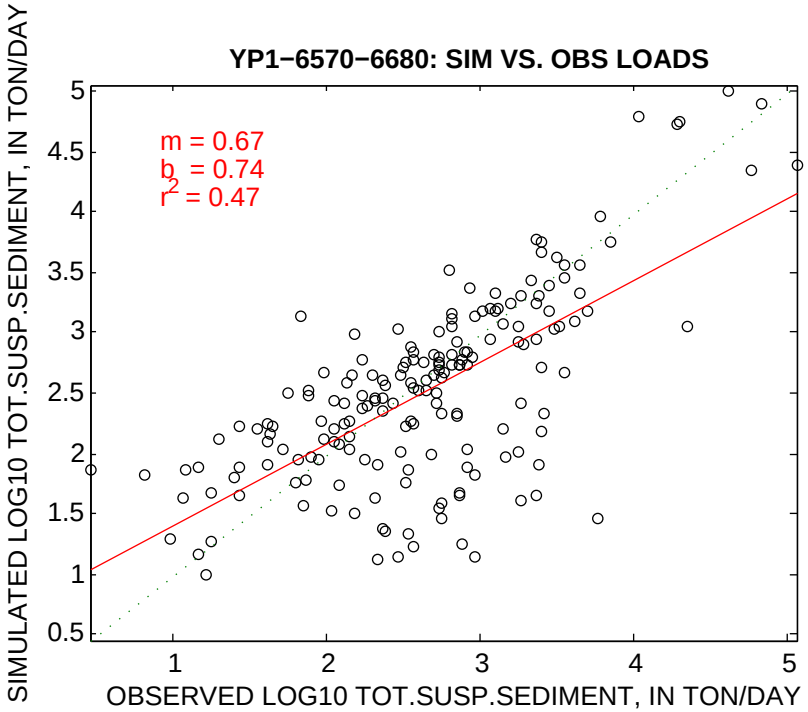


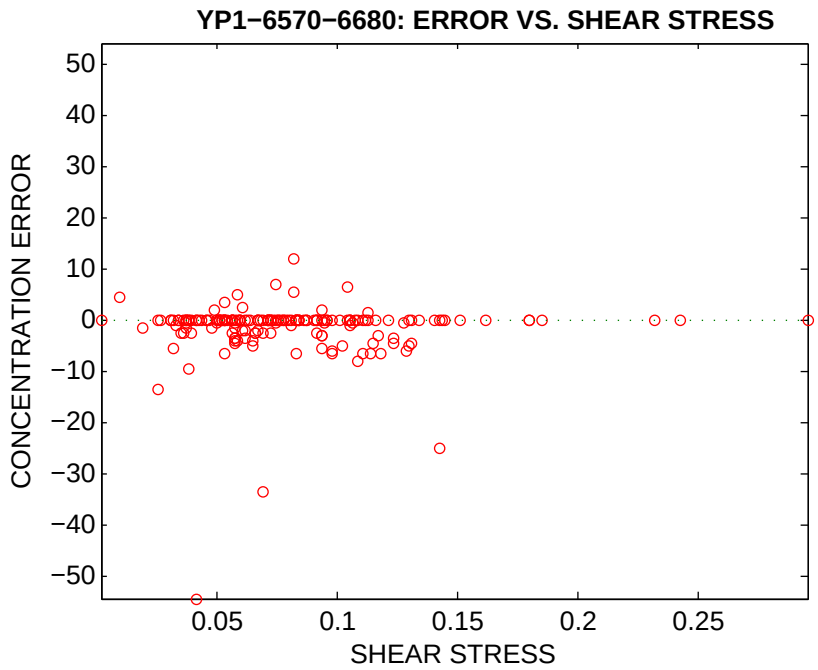


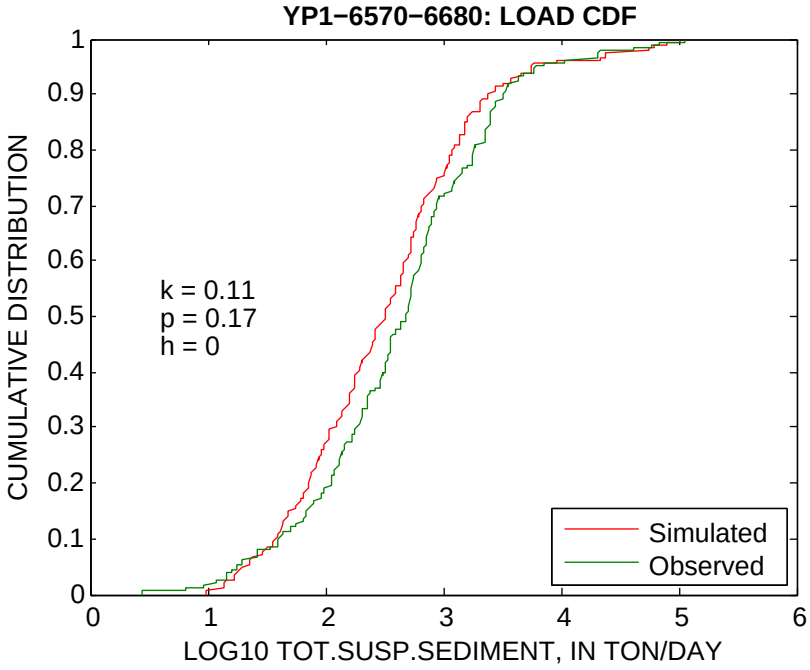


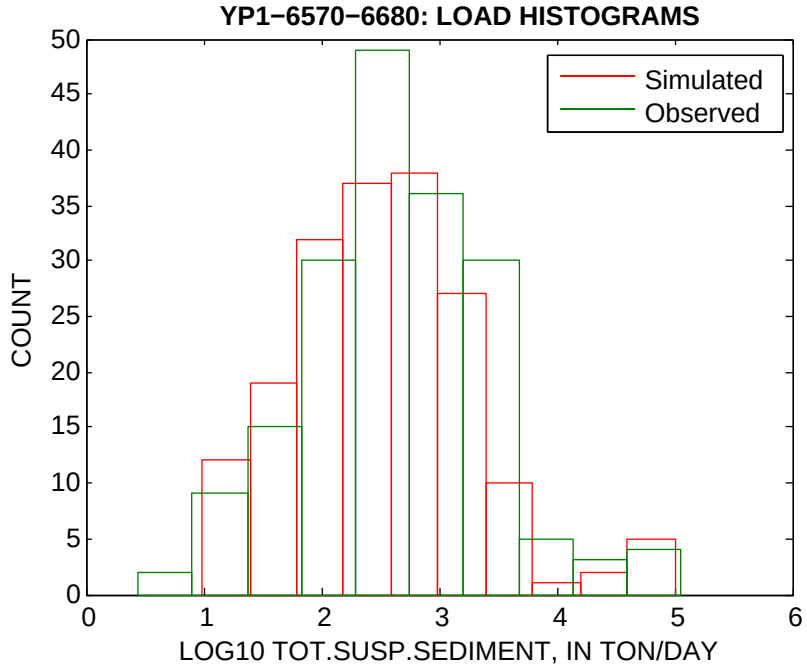


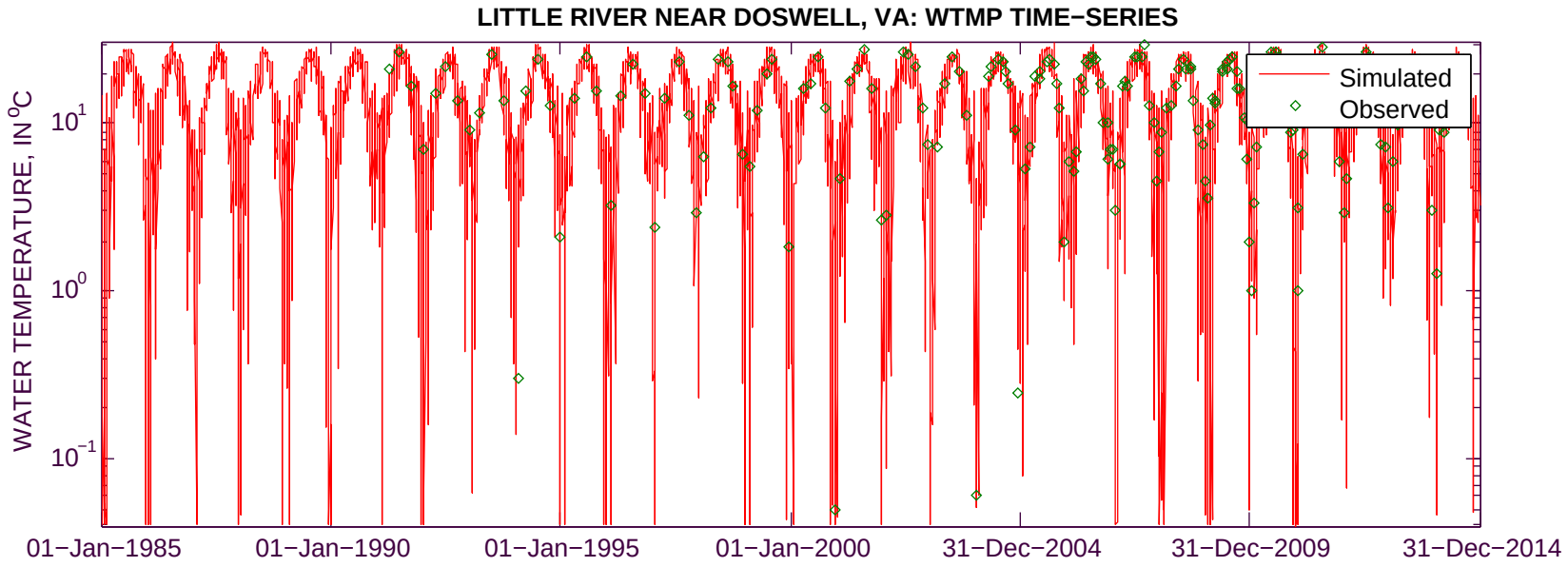
LOAD DATA
LOG10

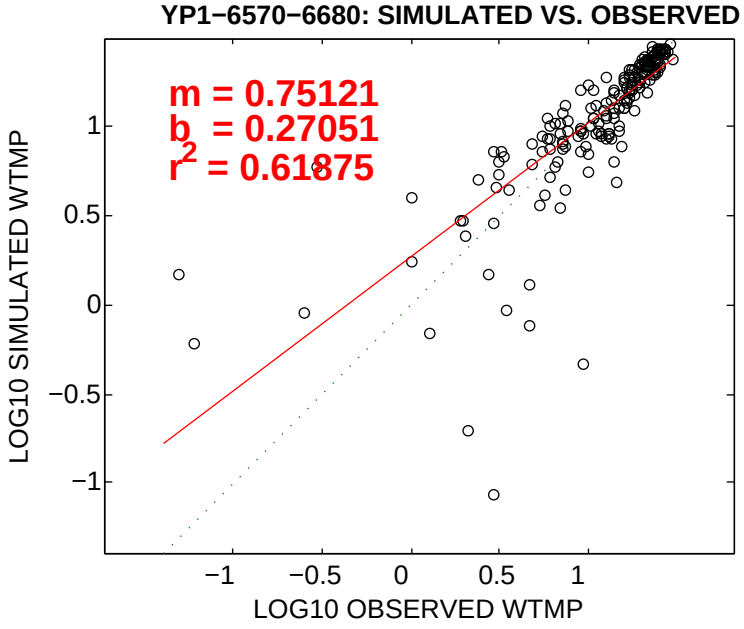


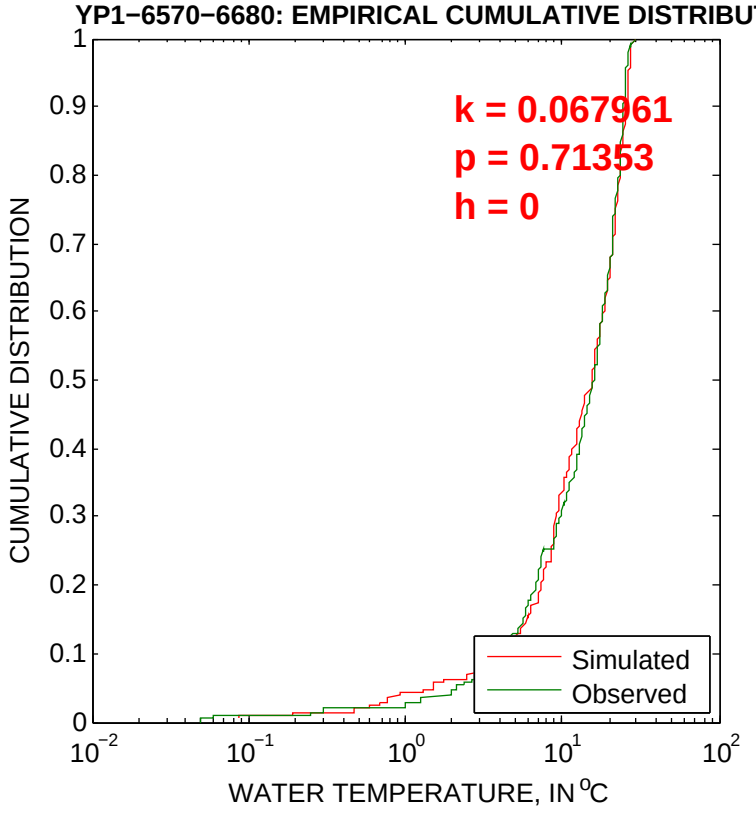












DATA SELECTION

scenario	file
P620171001WQ	WTMP.calib

plot: WTMP - water tempera...

Dates 1/1/1985 12/31/201

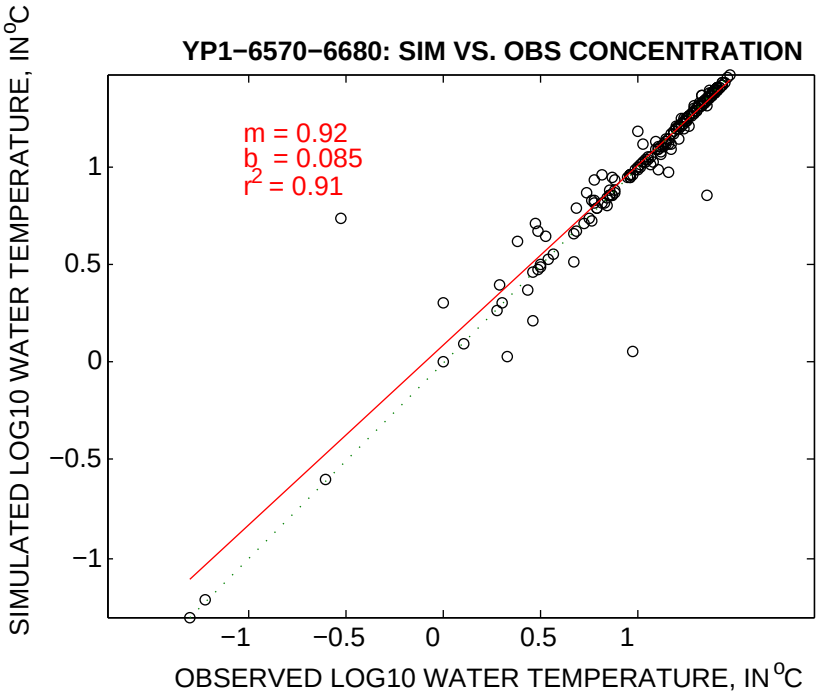
Drive	Directory	Observed
N/A	model	OBS20161101

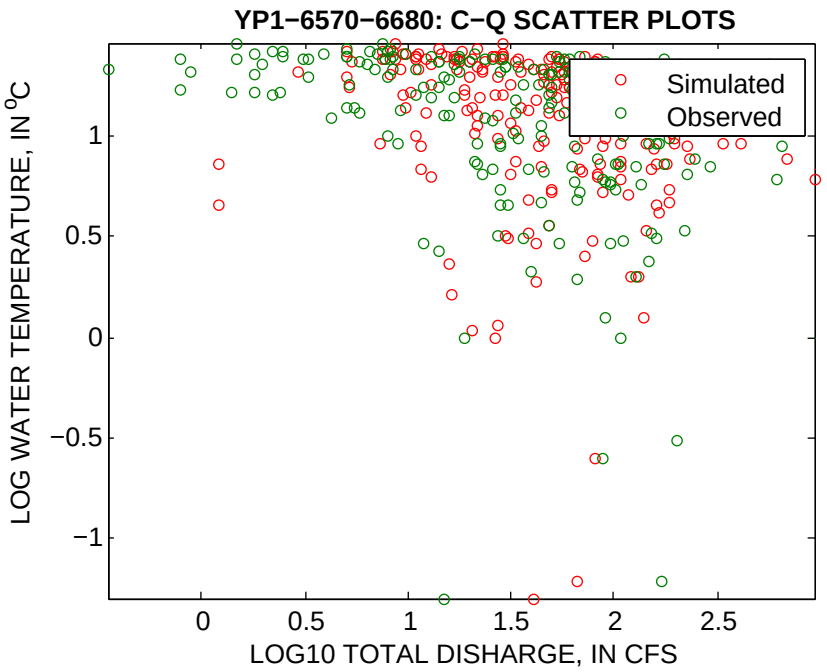
STATISTICS

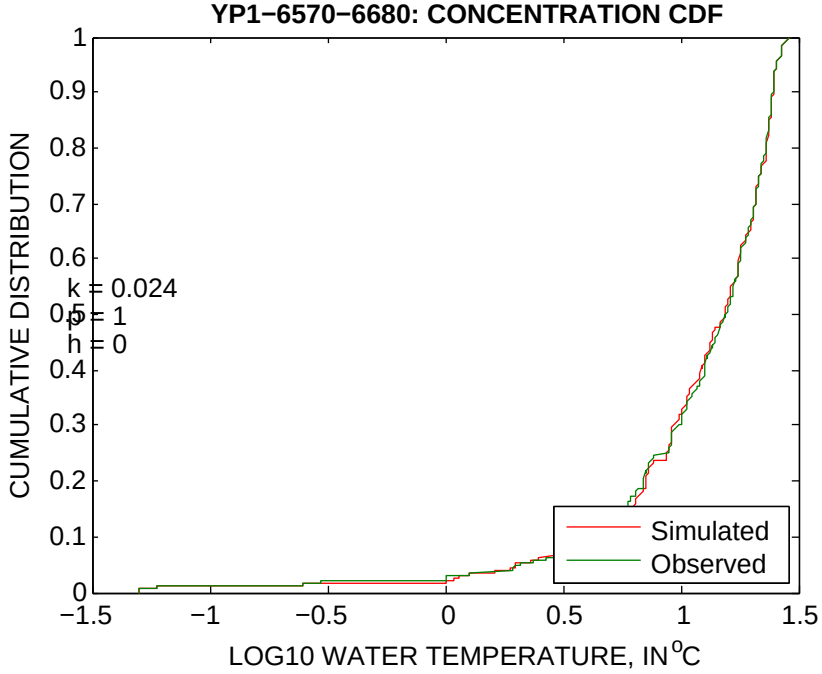
	n	observe	simulate
		206	205
min		0.05	0
		-1.30103	-1.06192
mean		15.0244	15.0459
		1.06033	1.06705
media		15.97	15.559
		1.2014	1.19385
max		29.3	29.553
		1.46687	1.4706
varian		61.1622	65.0377
		0.177274	0.16168
JB		0.007640	0.008785
		0.001	0.001
		ra	log
%		0.143451	0.633352
err.va		10.6192	0.072658
rel.std.err		0.173624	0.409862
mod.eff		0.826376	0.590138

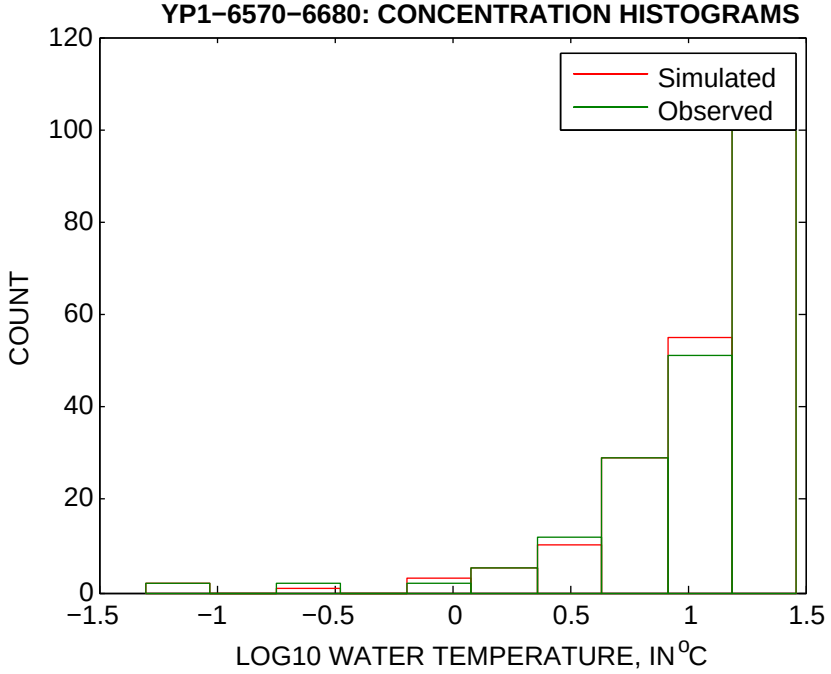
VERSION 2.1

ALL DATA
LOG10

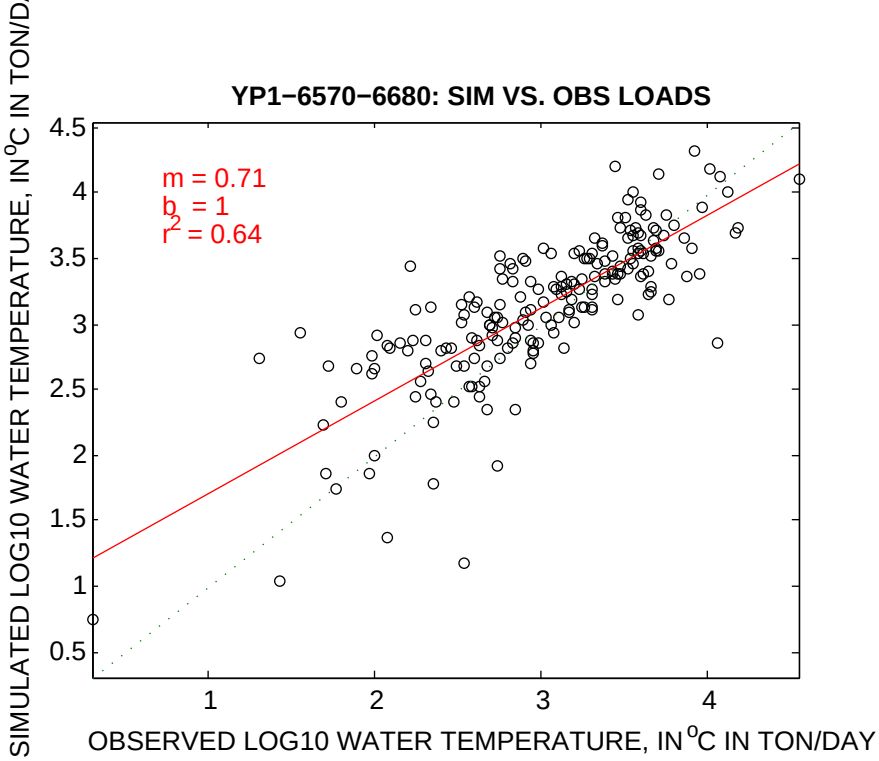


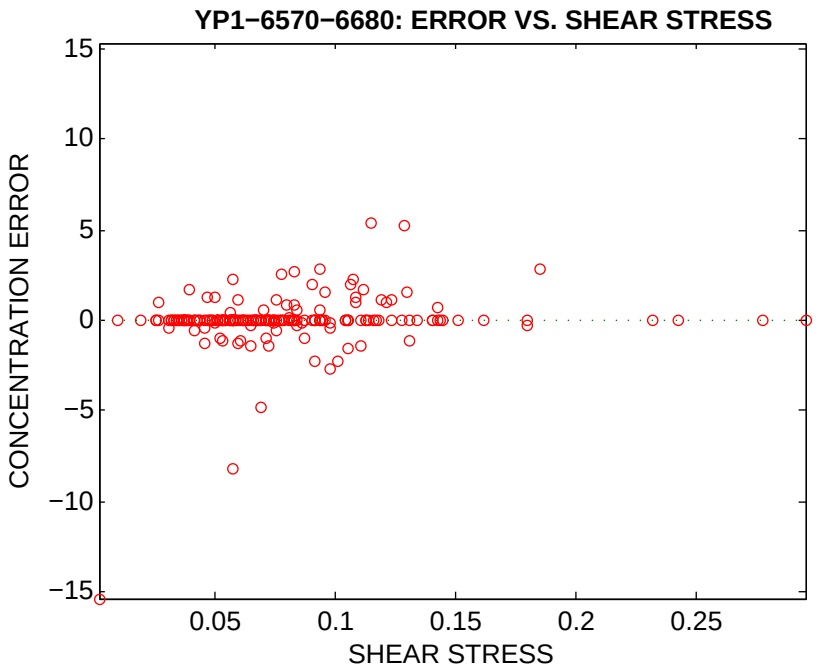


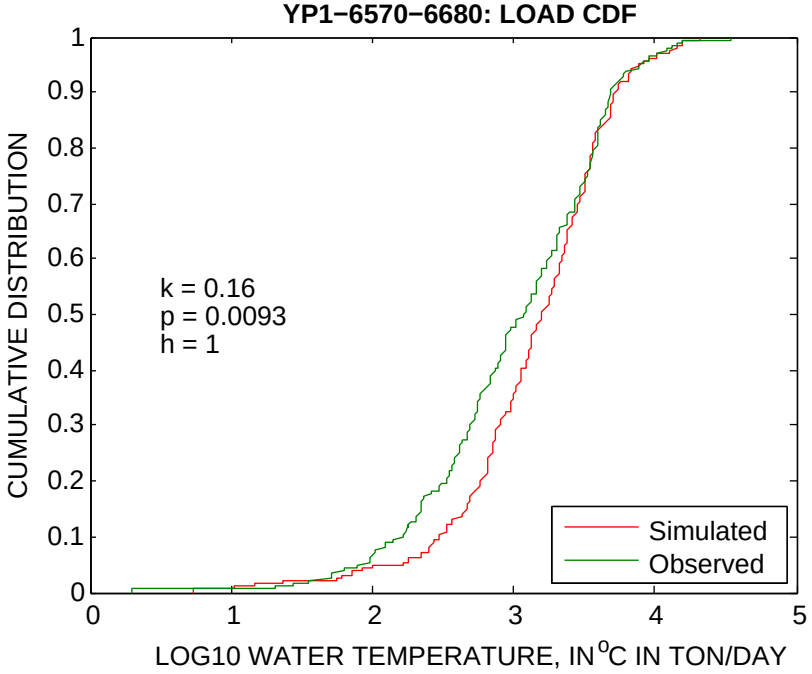


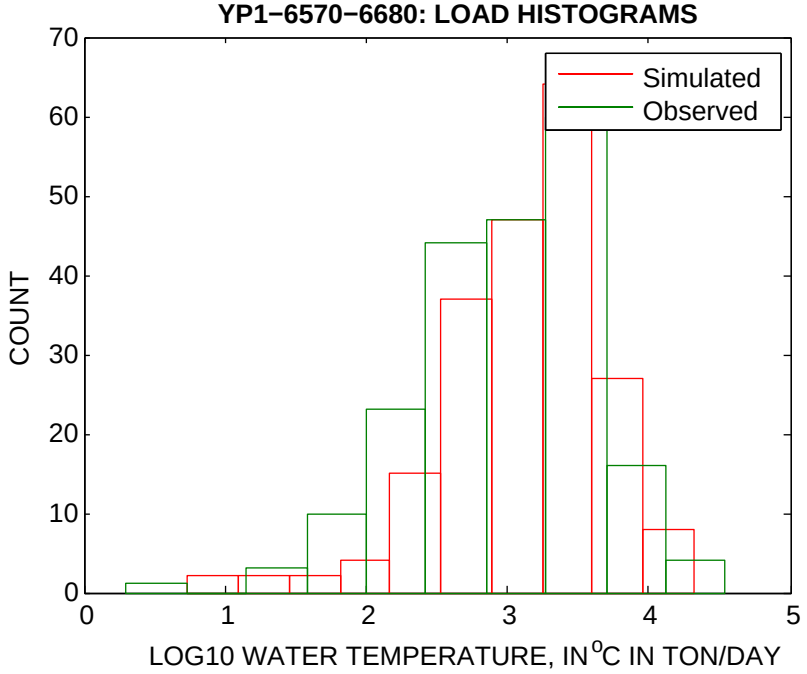


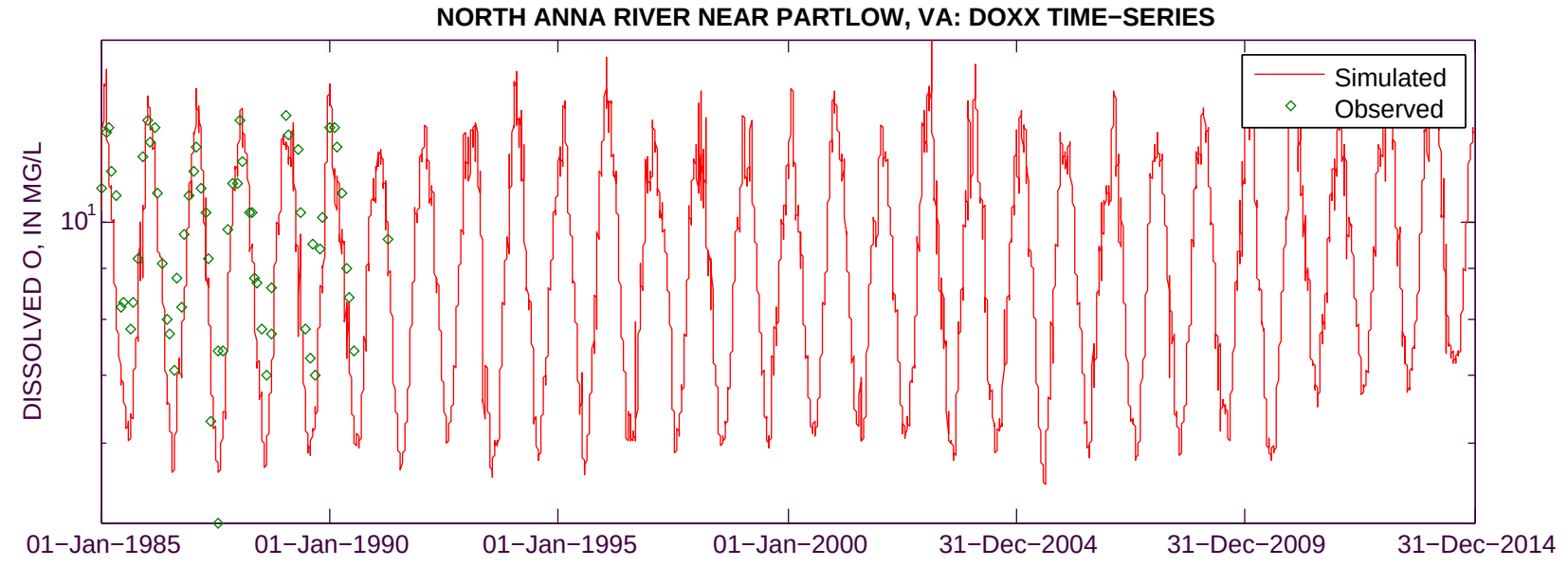
LOAD DATA
LOG10

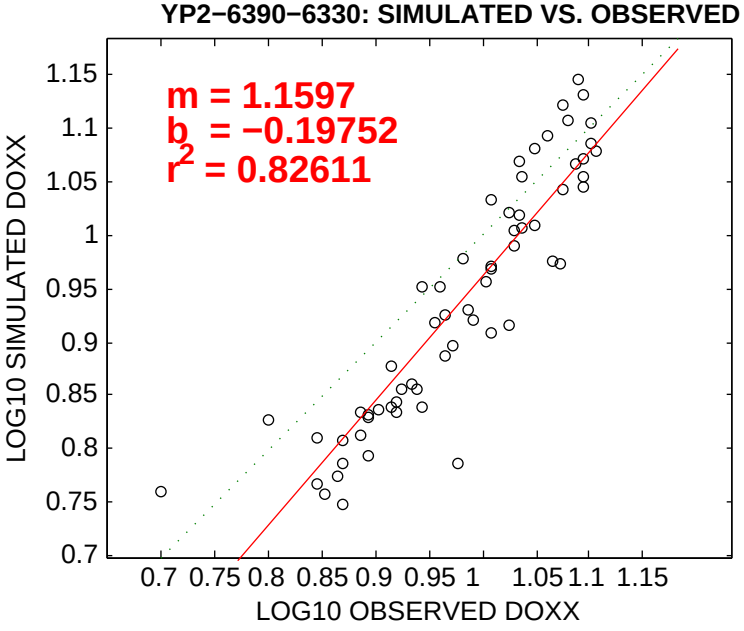


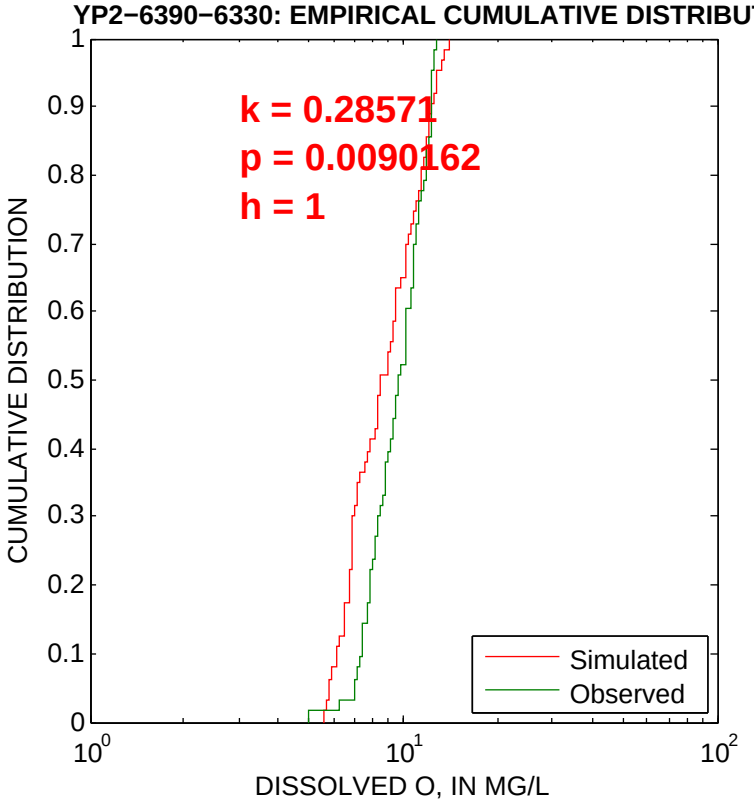












DATA SELECTION

scenario	file
P620171001WQ	DOXX.calib

plot: DOXX - dissolved oxygen

Dates: 1/1/1985 – 12/31/201

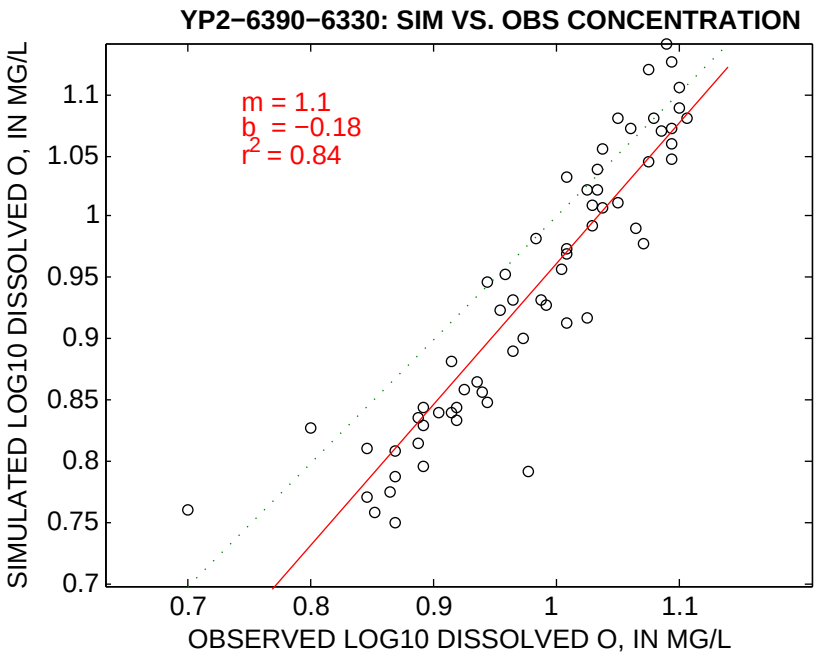
Drive	Directory	Observed
N/A	model	OBS20161101

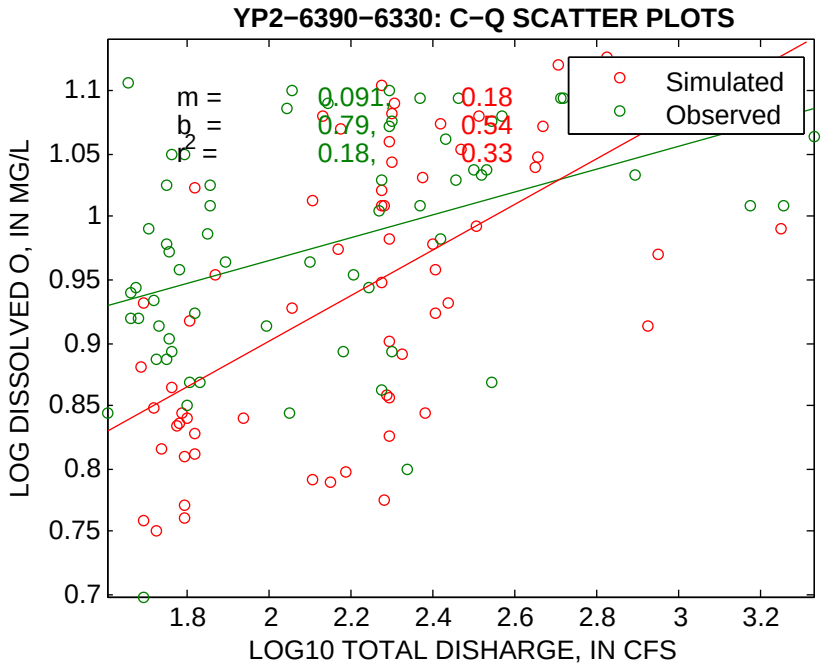
STATISTICS

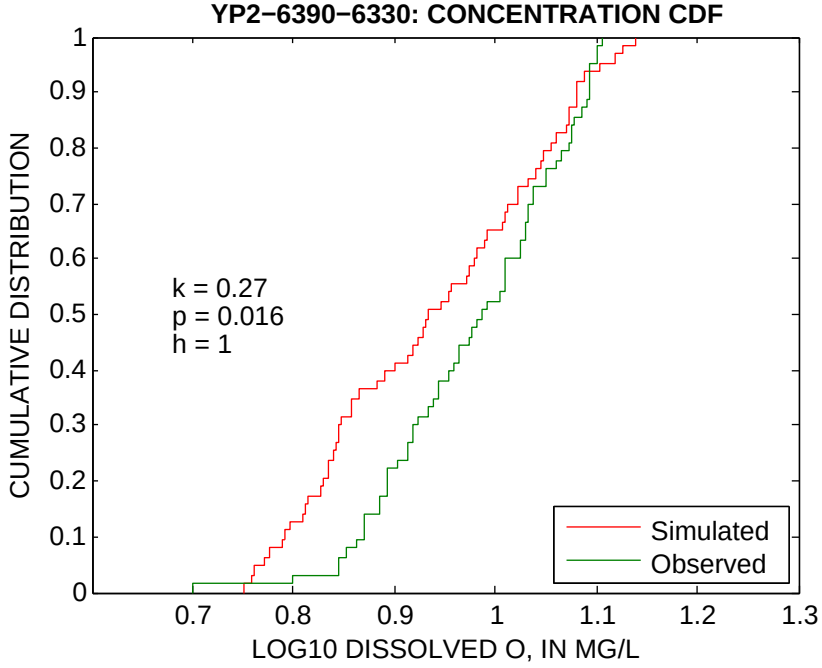
	n	63	63
		observe	simulate
min		5	5.6081
		0.69897	0.748816
mean		9.70794	8.95002
		0.978438	0.937148
media		9.7	8.5083
		0.986772	0.929843
max		12.8	13.965
		1.10721	1.14504
varian		3.59977	5.52399
		0.00796363	0.0129642
JB		✓ 0.199381	0.064591 ✓
		✓ 0.115078	0.072389 ✓
		ra	log
%		-7.80716	-4.22004
err.va		1.55377	0.00418972
rel.std.err		0.431629	0.526107
mod.eff		0.568371	0.473893

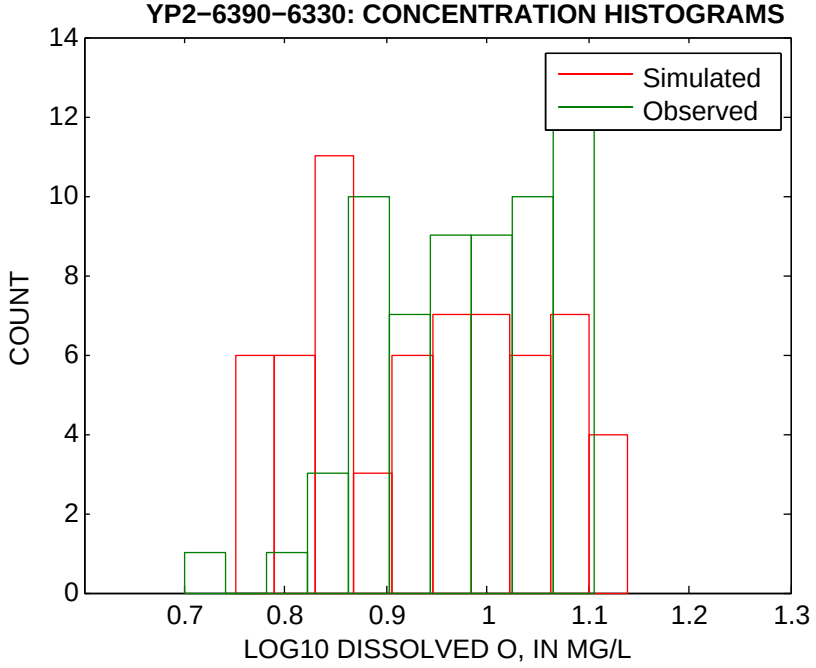
VERSION 2.1

ALL DATA
LOG10

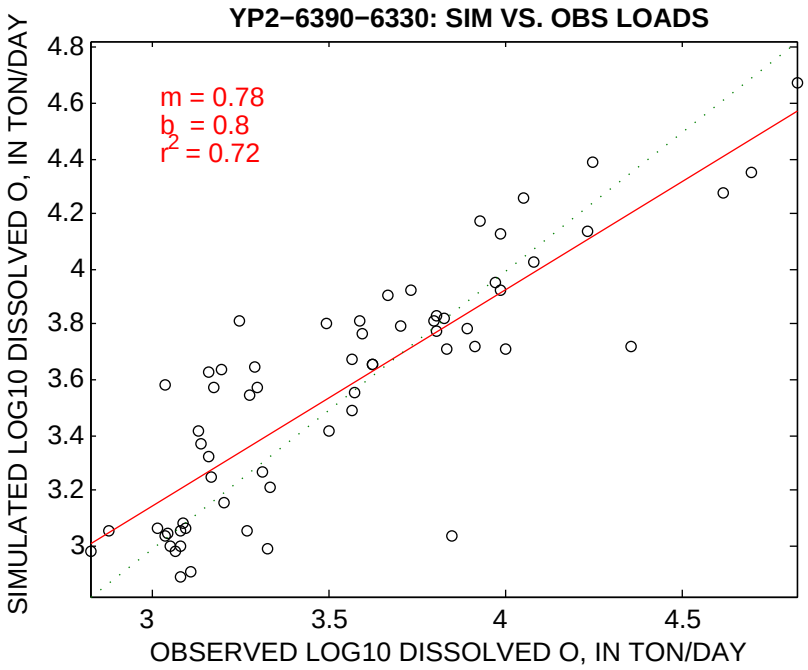


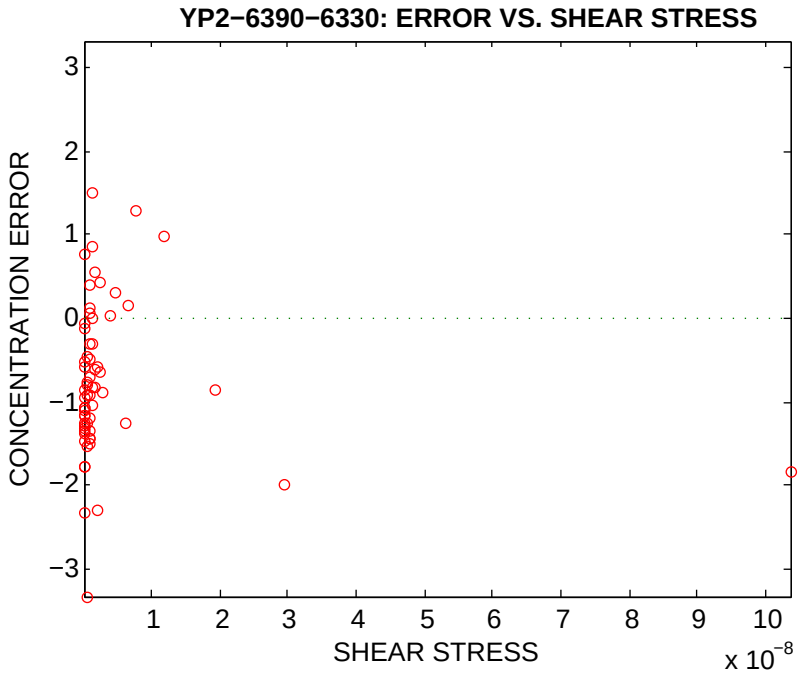


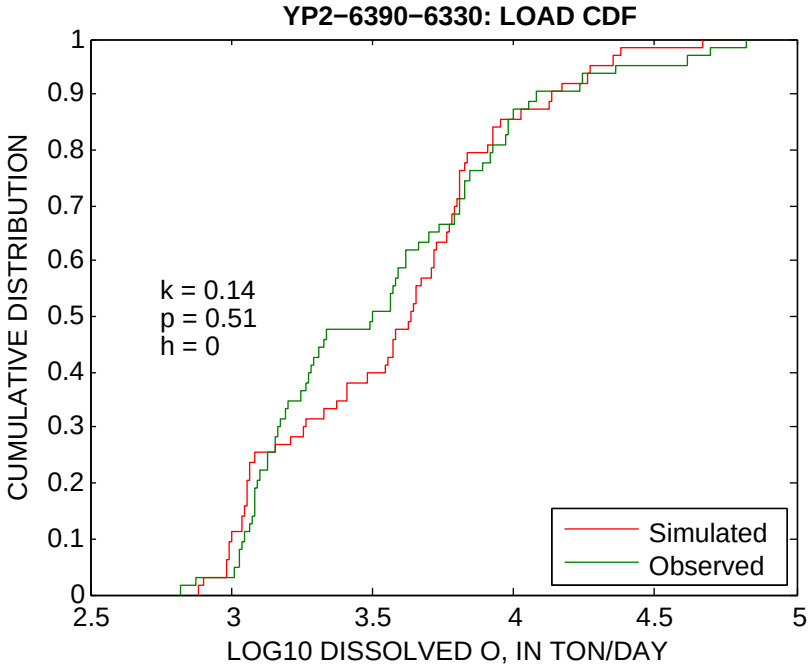


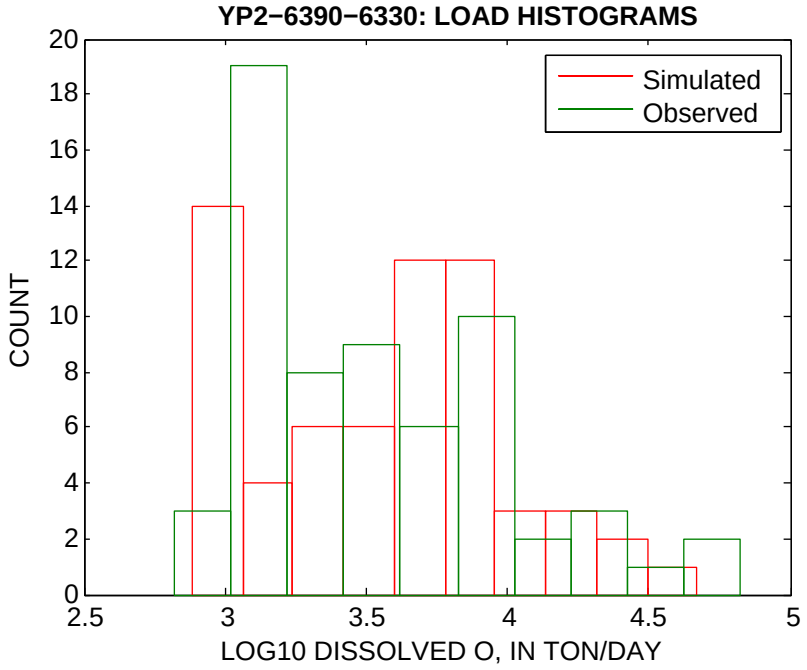


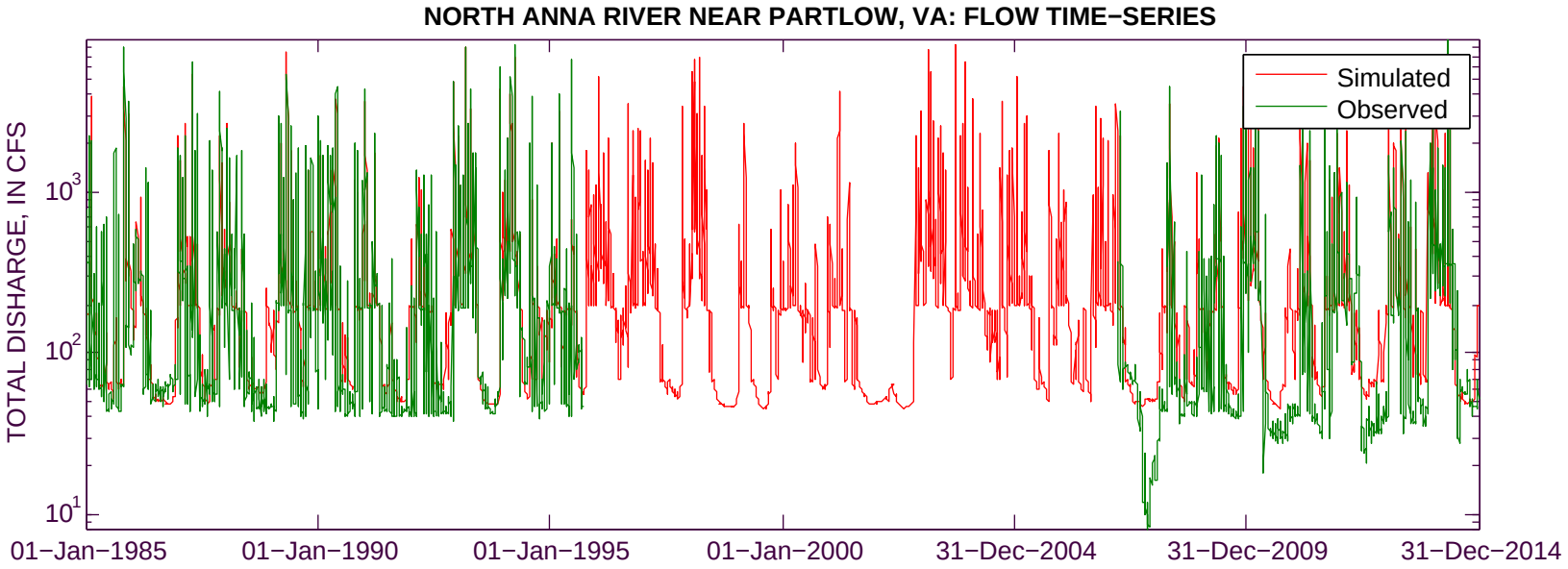
LOAD DATA
LOG10

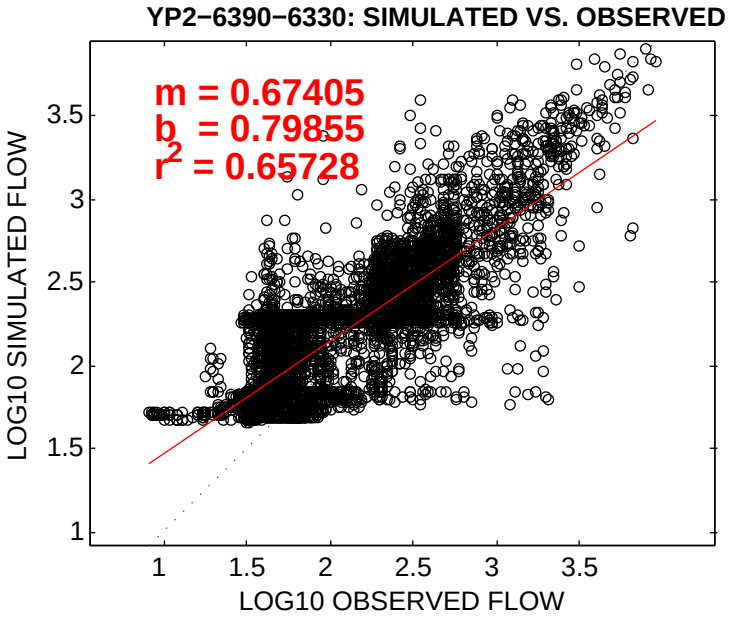


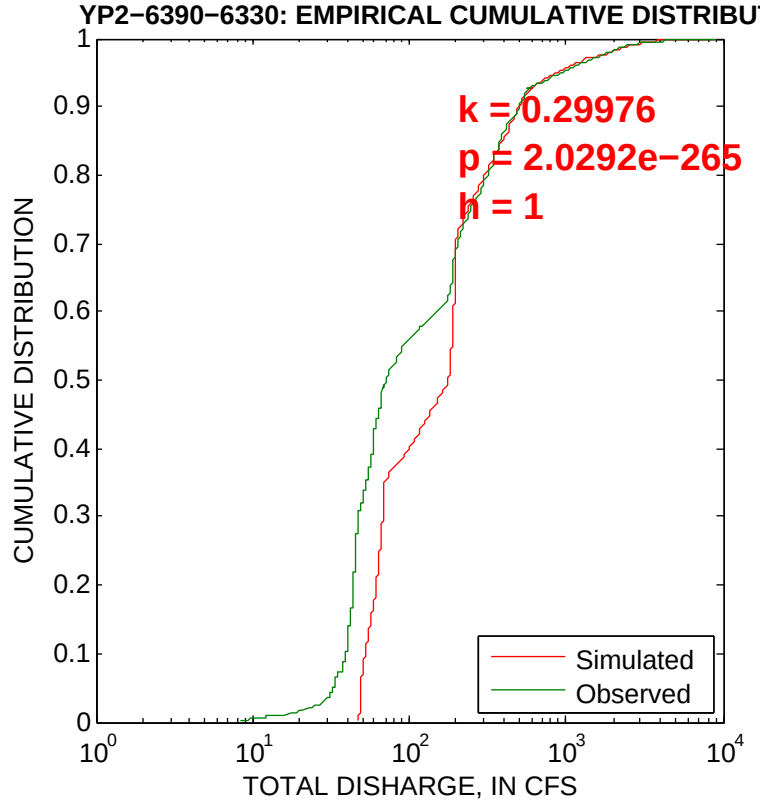












DATA SELECTION

scenario: P620171001WQ | file: _FLOW.calib

plot: FLOW - total discharge

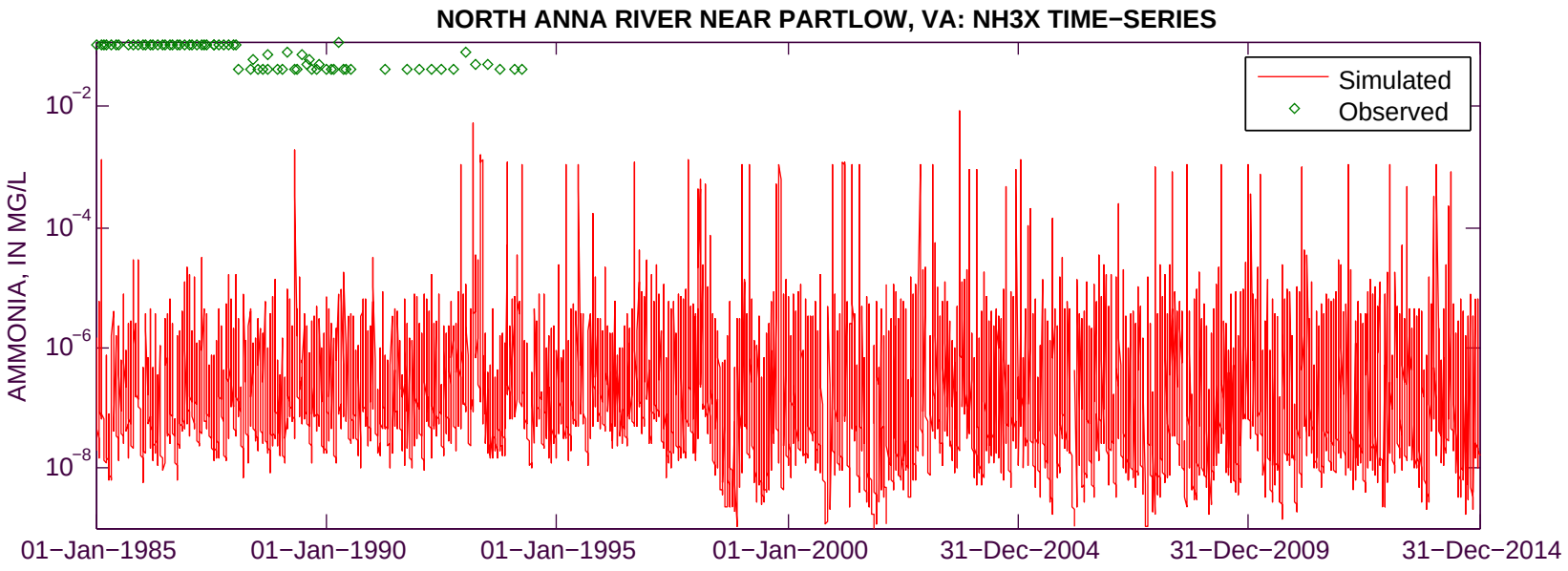
Dates: 1/1/1985 – 12/31/201

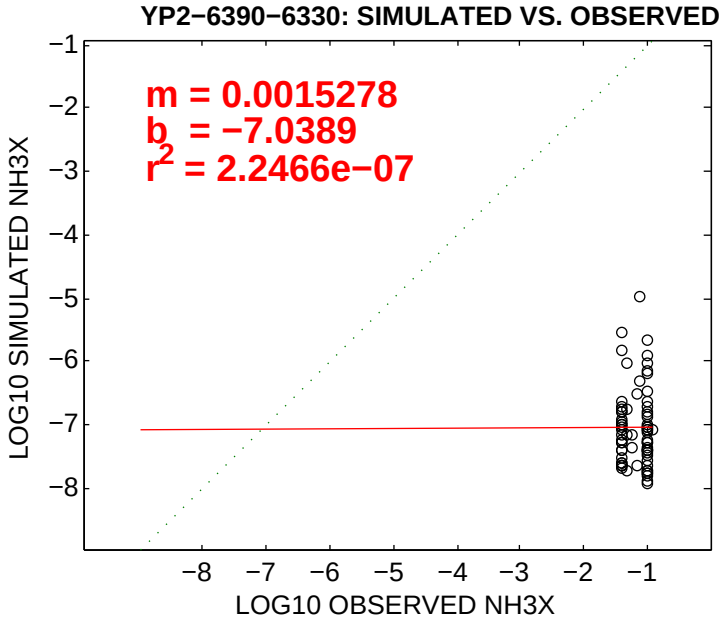
Drive | Directory | Observed: N/A | model | OBS20161101

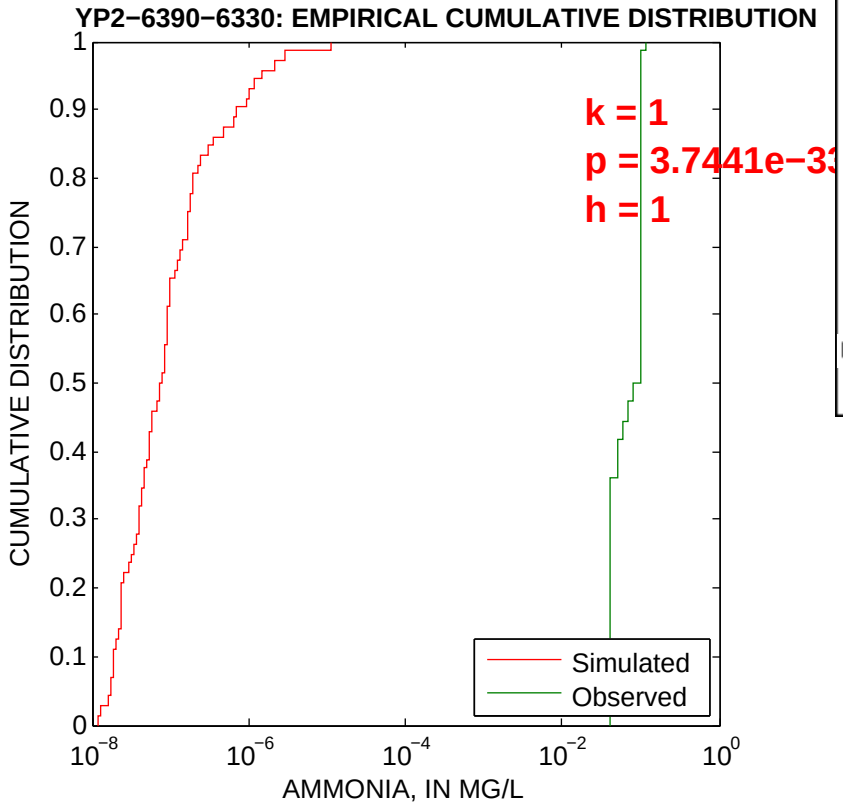
STATISTICS

	observe	simulate
n	6762	6762
min	8.2	45.658
	0.913814	1.65952
mean	254.535	273.031
	2.05343	2.18266
media	71	176.765
	1.85126	2.2474
max	8980	8006.7
	3.95328	3.90345
varian	299505	256846
	0.241988	0.167274
JB	0.001	0.001
	0.001	0.001
	ra	log
%	7.26662	6.29361
err.va	93412.3	0.0997426
rel.std.err	0.311889	0.41218
mod.eff	0.688111	0.58782

VERSION 2.1







DATA SELECTION

scenario	file
P620171001WQ	NH3X.calib

plot: NH3X - ammonia

Dates: 1/1/1985 – 12/31/201

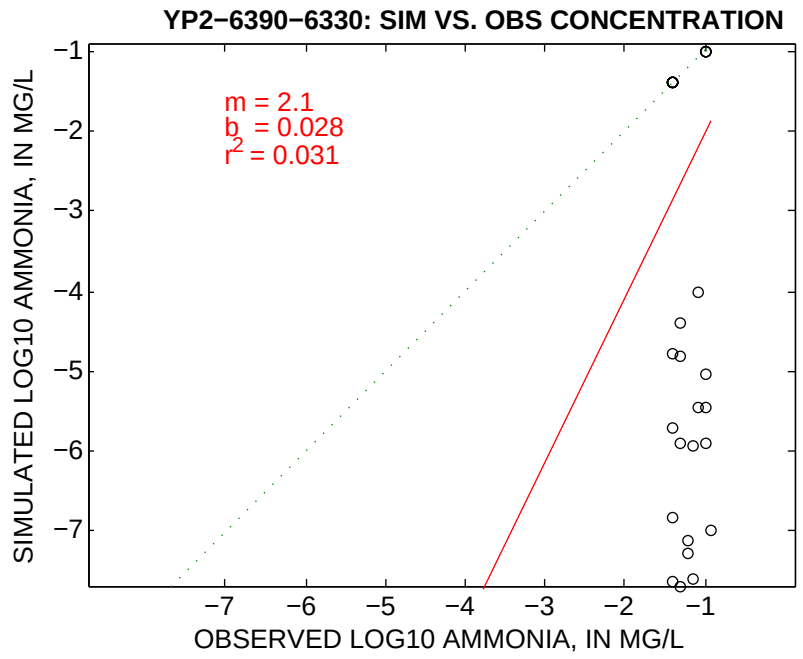
Drive: N/A | Directory: model | Observed: OBS20161101

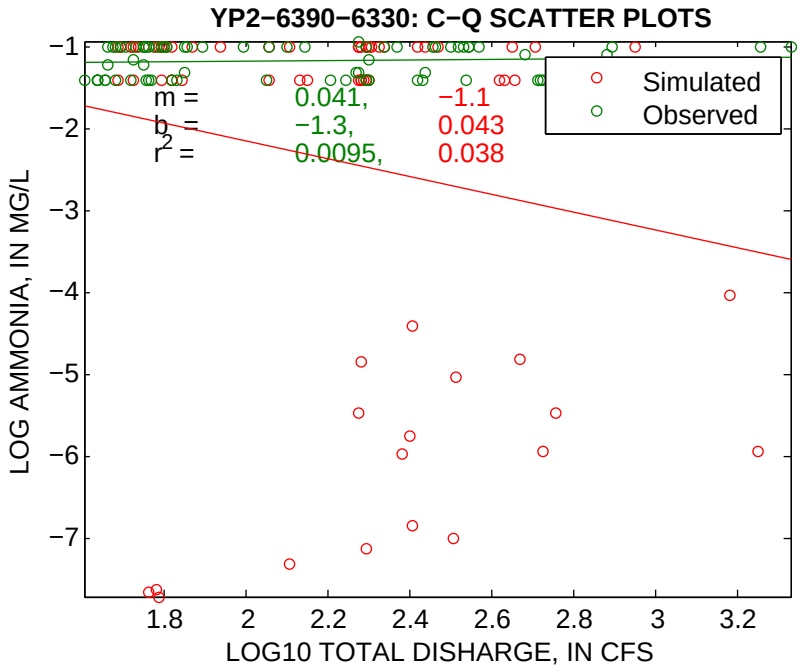
STATISTICS

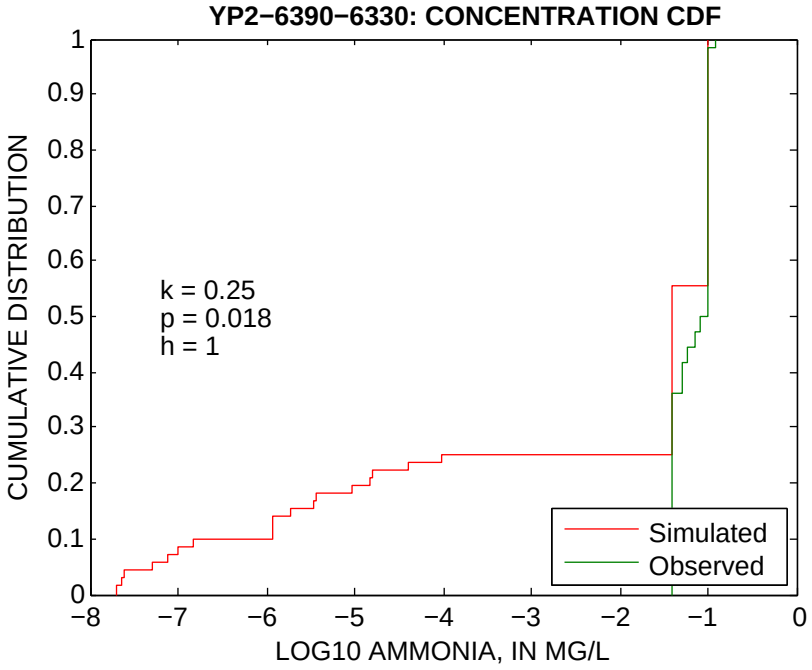
	n	72	72
		observe	simulate
min		0.04	1.1988e-08
		-1.39794	-7.92125
mean		0.0733333	3.84607e-0
		-1.17248	-7.04073
media		0.09	7.6595e-08
		-1.04846	-7.11642
max		0.12	1.1015e-05
		-0.920819	-4.95802
varian		0.00082535	1.84781e-1
		0.035341	0.367171
JB		0.014879	0.001
		0.014173	0.004591
		ra	log
%		-99.9995	500.498
err.va		0.00627881	35.3238
rel.std.err		7.60744	999.512
mod.eff		-6.60744	-998.512

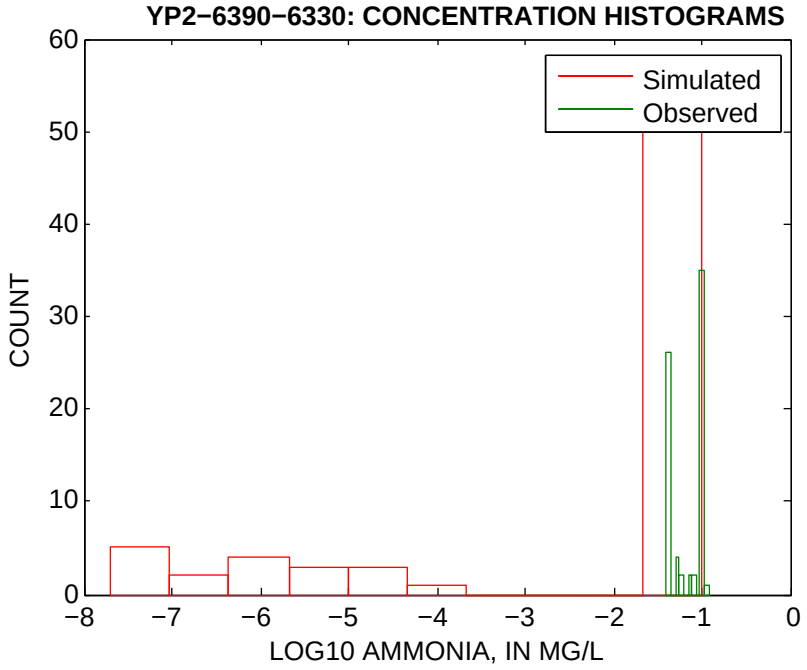
VERSION 2.1

ALL DATA
LOG10

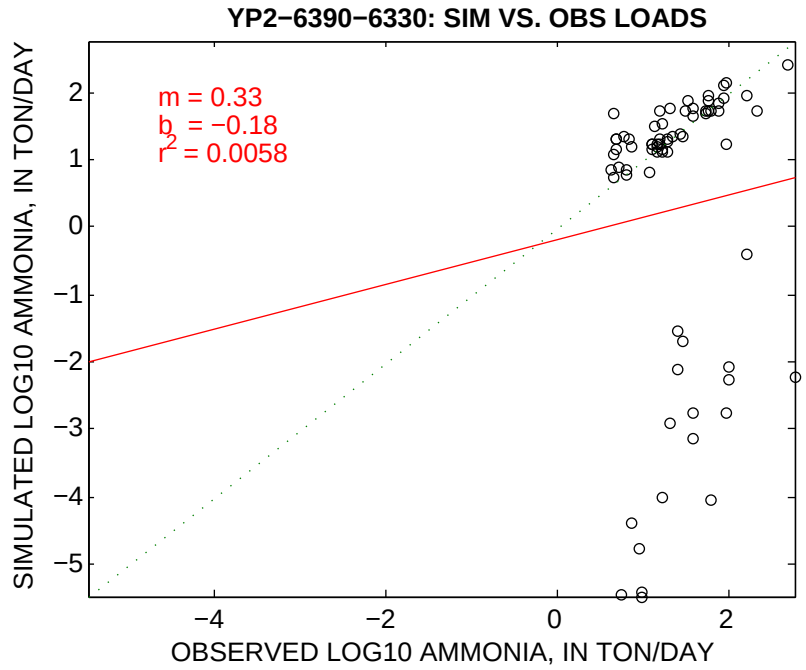


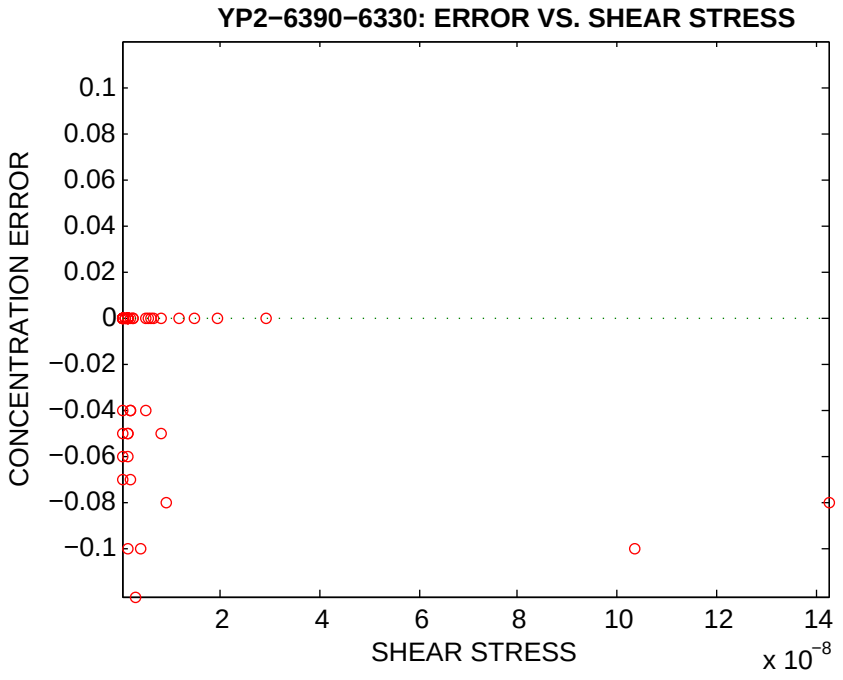


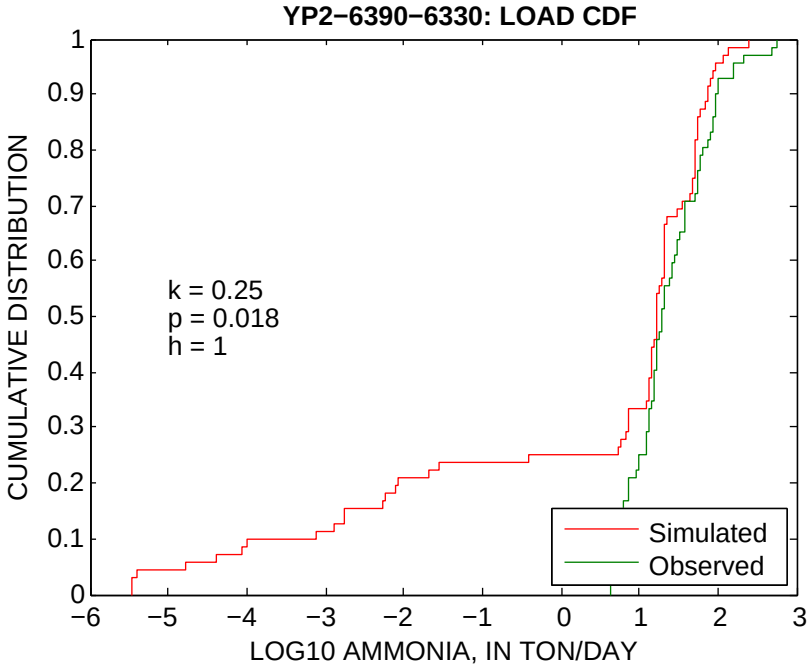


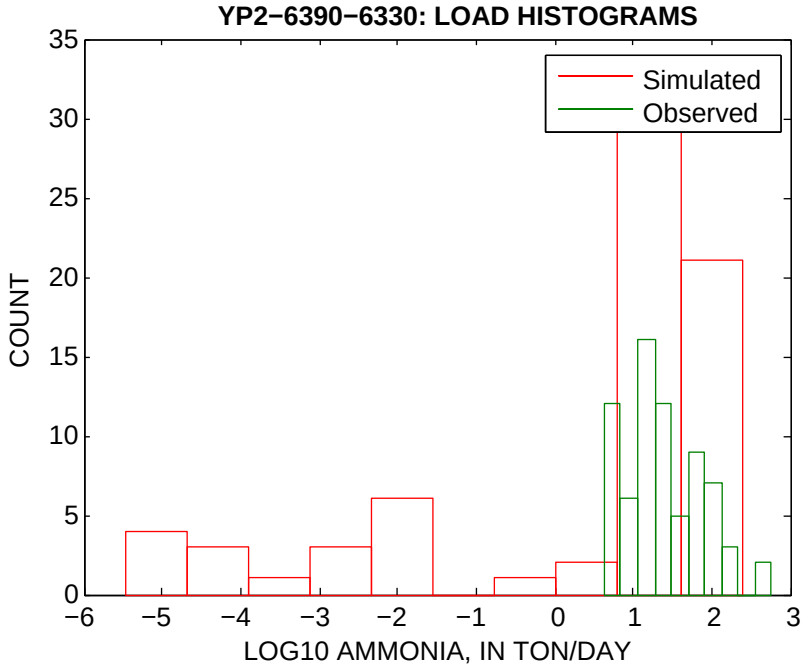


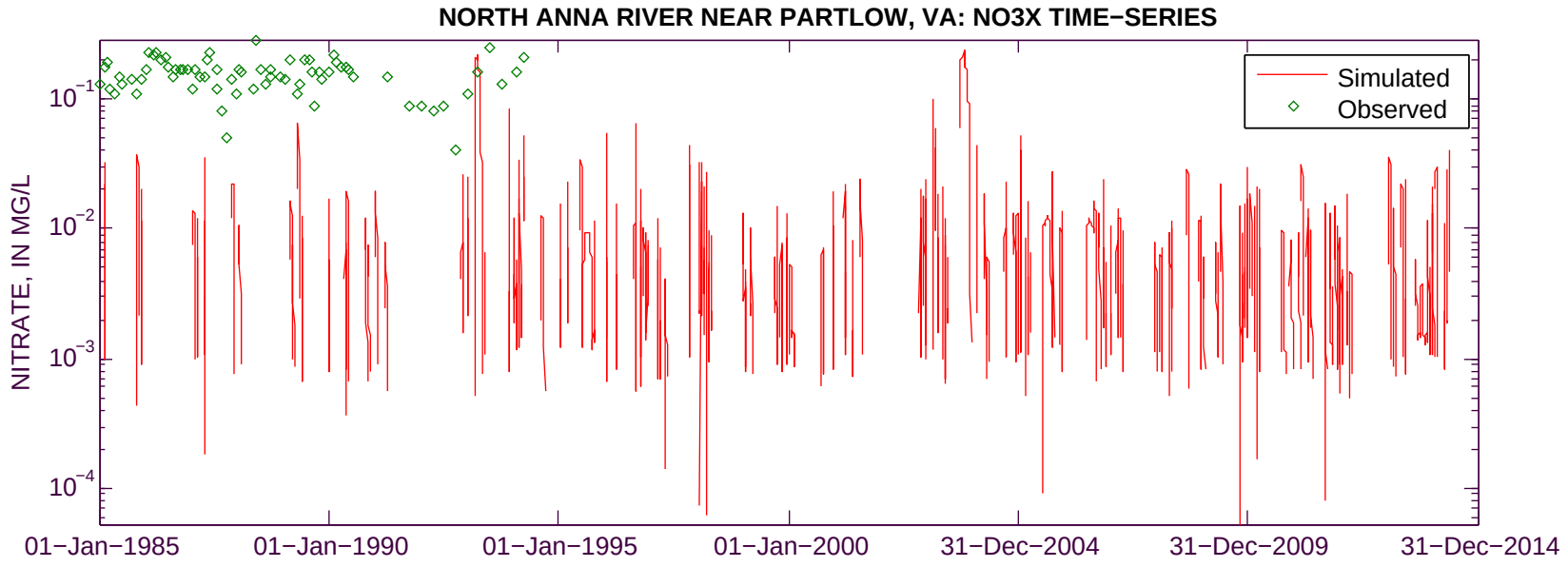
LOAD DATA
LOG10

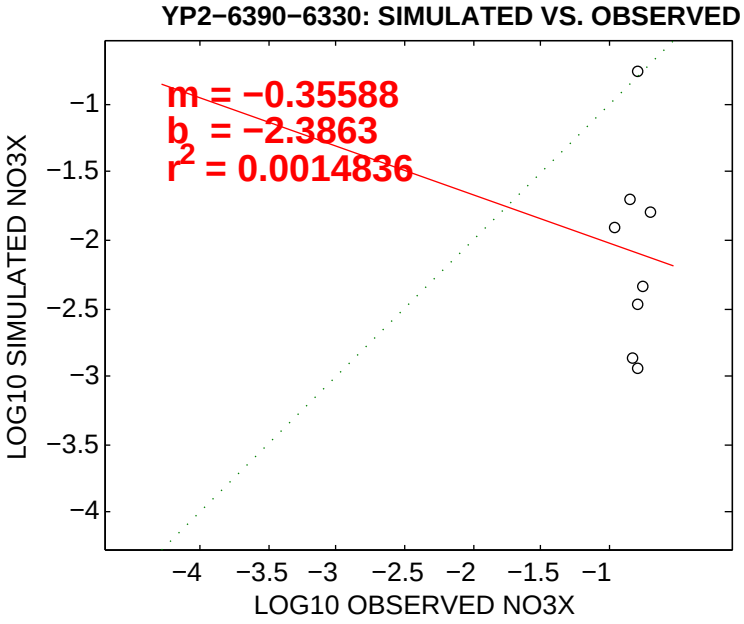


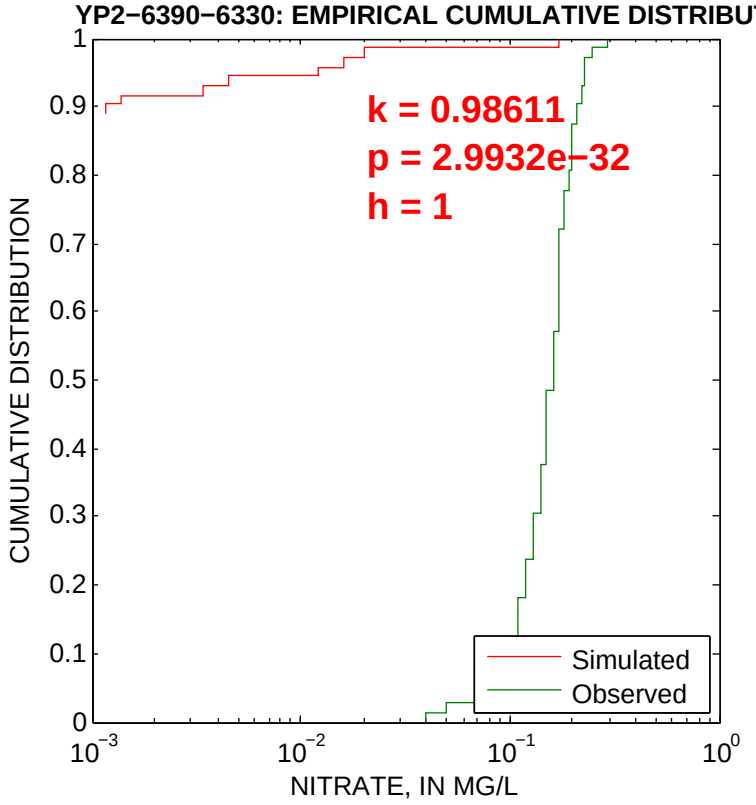












DATA SELECTION

scenario	file
P620171001WQ	NO3X.calib

plot: NO3X - nitrate

Dates: 1/1/1985 – 12/31/201

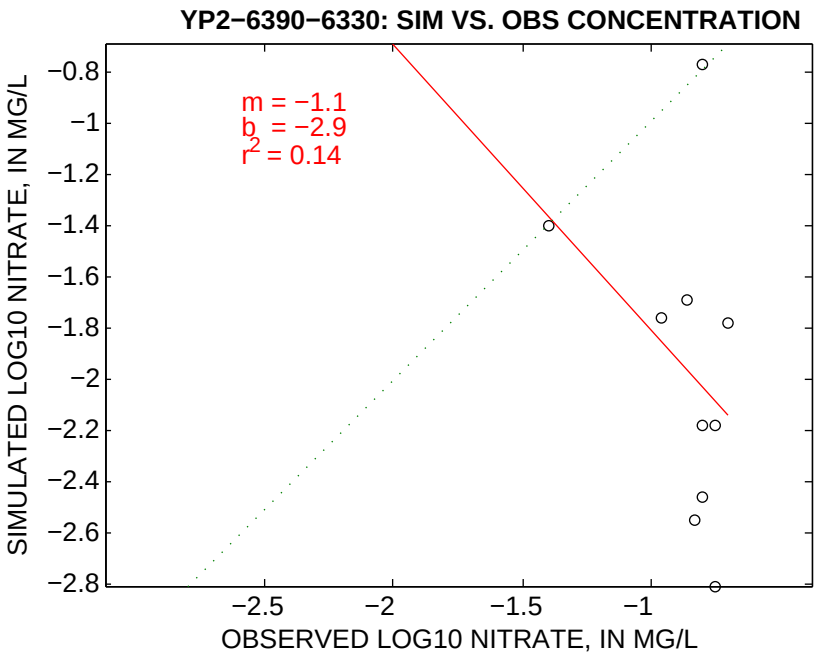
Drive	Directory	Observed
N/A	model	OBS20161101

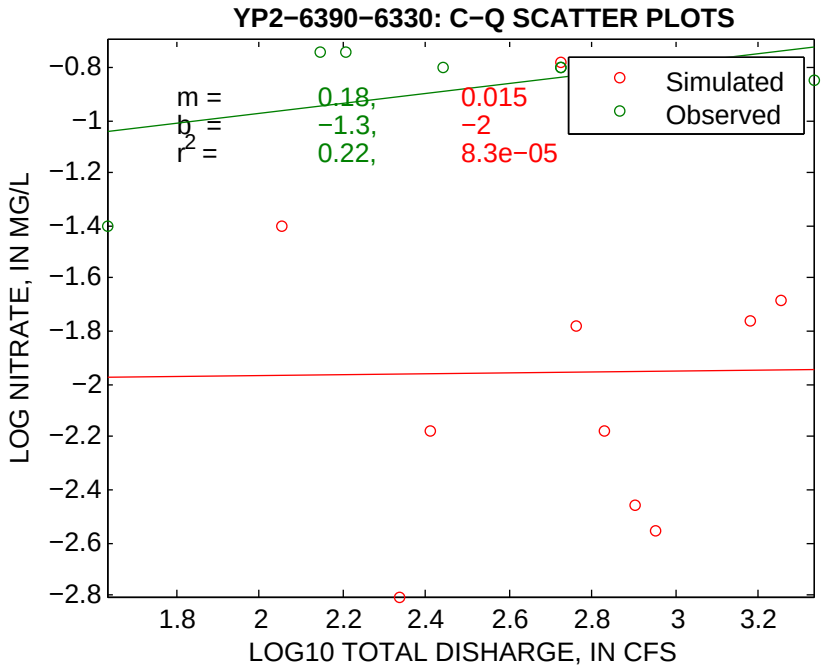
STATISTICS

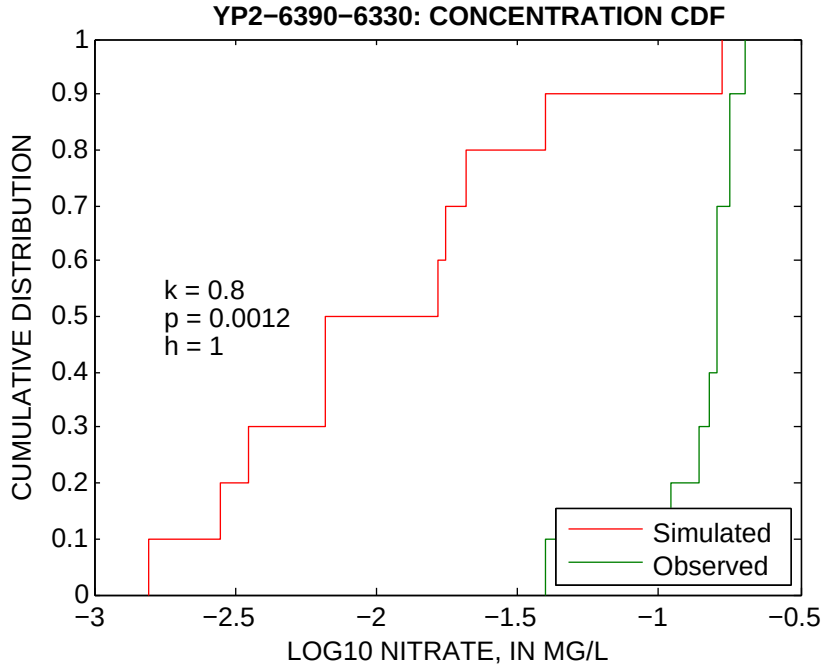
	n	72	8
		observe	simulate
min		0.04	0
		-0.958607	-2.93442
mean		0.155694	0.00316844
		-0.808466	-2.0986
media		0.16	0
		-0.79588	-2.13159
max		0.29	0.16929
		-0.69897	-0.771369
varian		0.00208683	0.00040541
		0.00590997	0.50452
JB		0.5	0.001
		0.5	0.5
		ra	log
%		-97.965	159.578
err.va		0.0260645	2.41685
rel.std.err		12.49	408.945
mod.eff		-11.49	-407.945

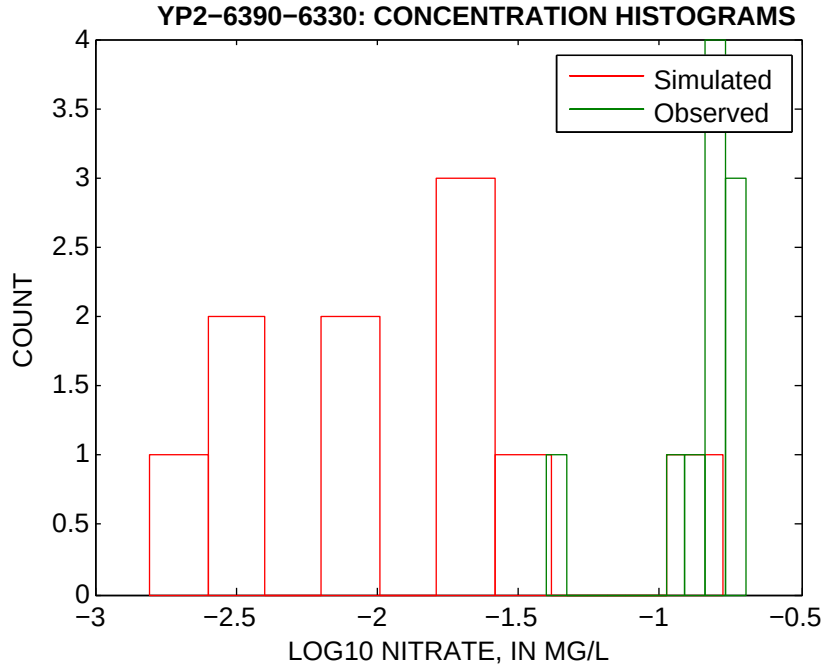
VERSION 2.1

ALL DATA
LOG10

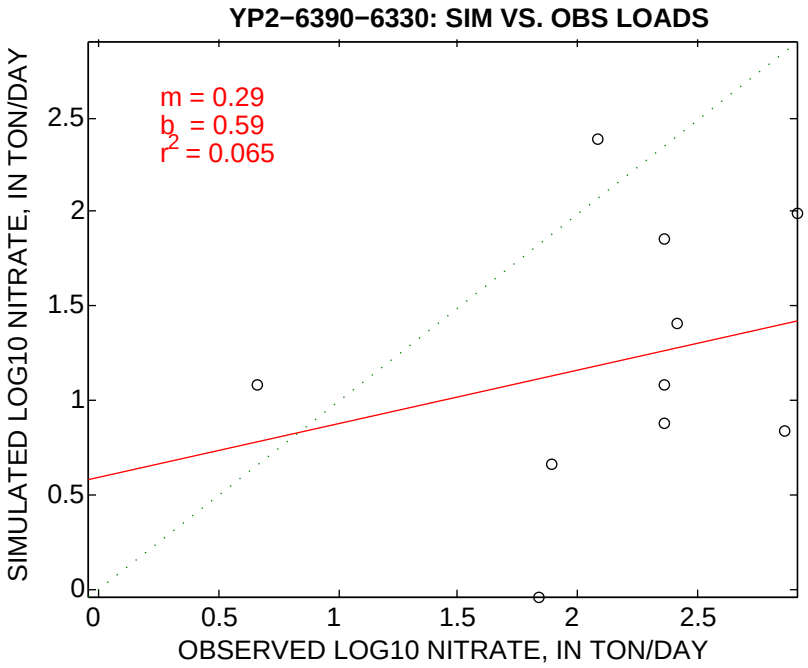


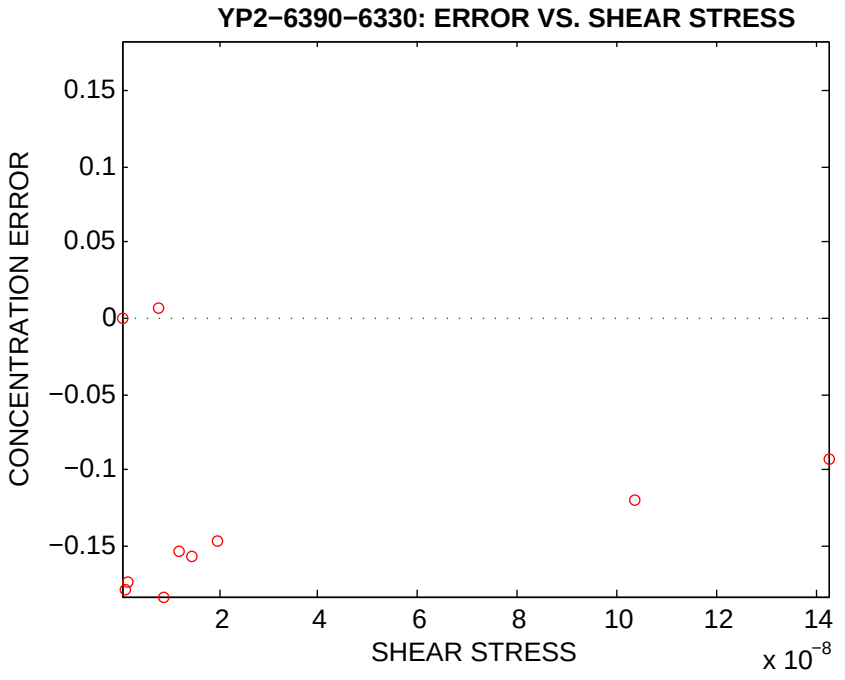


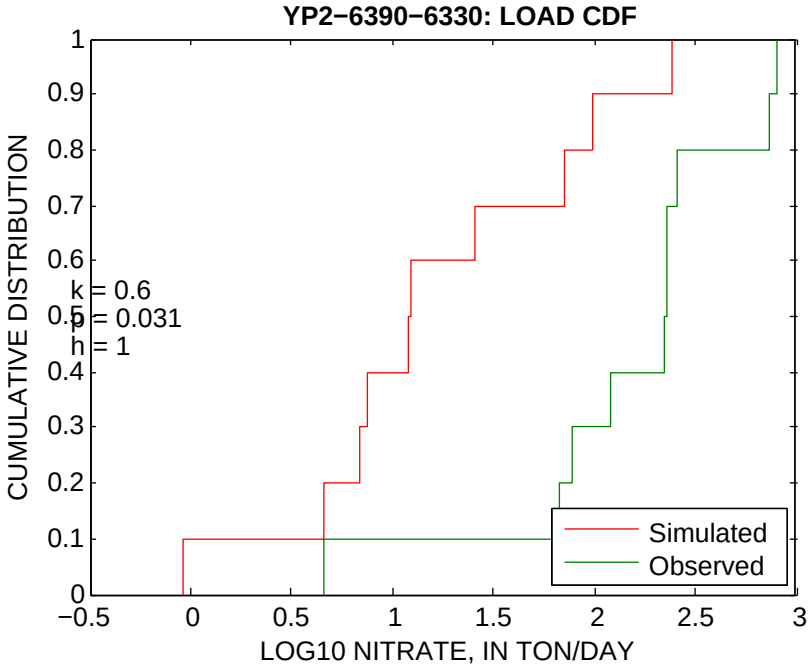


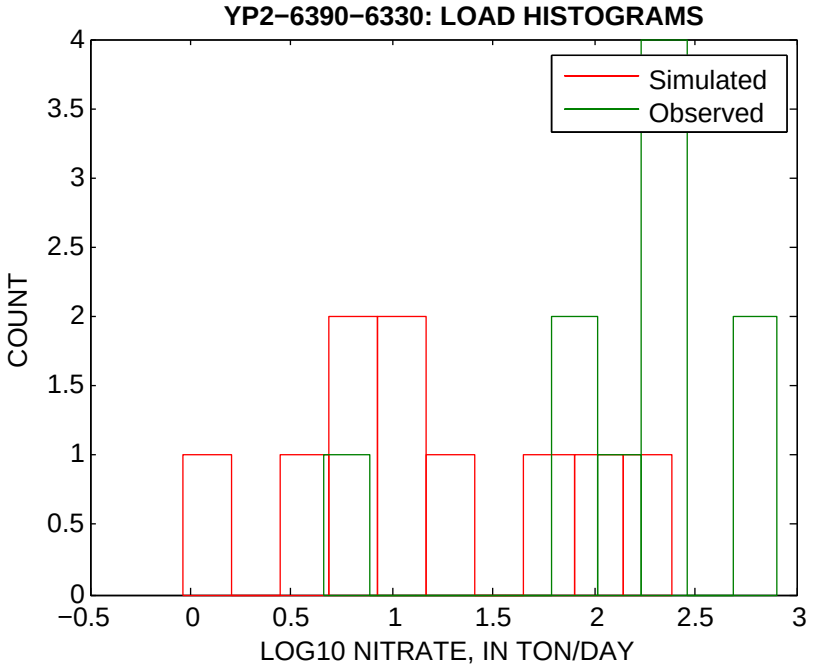


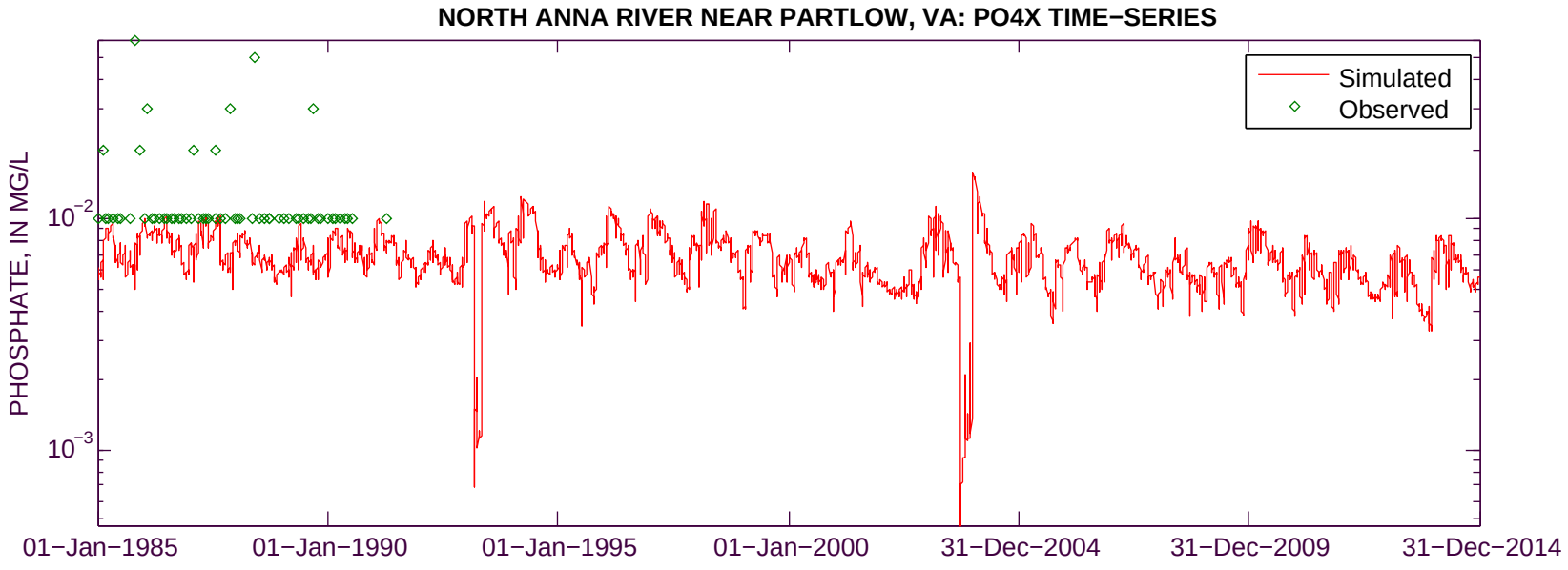
LOAD DATA
LOG10

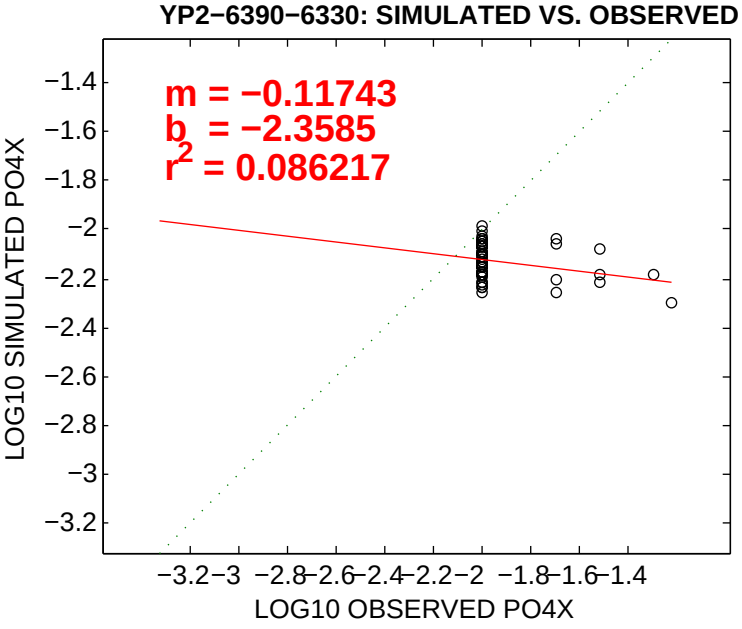


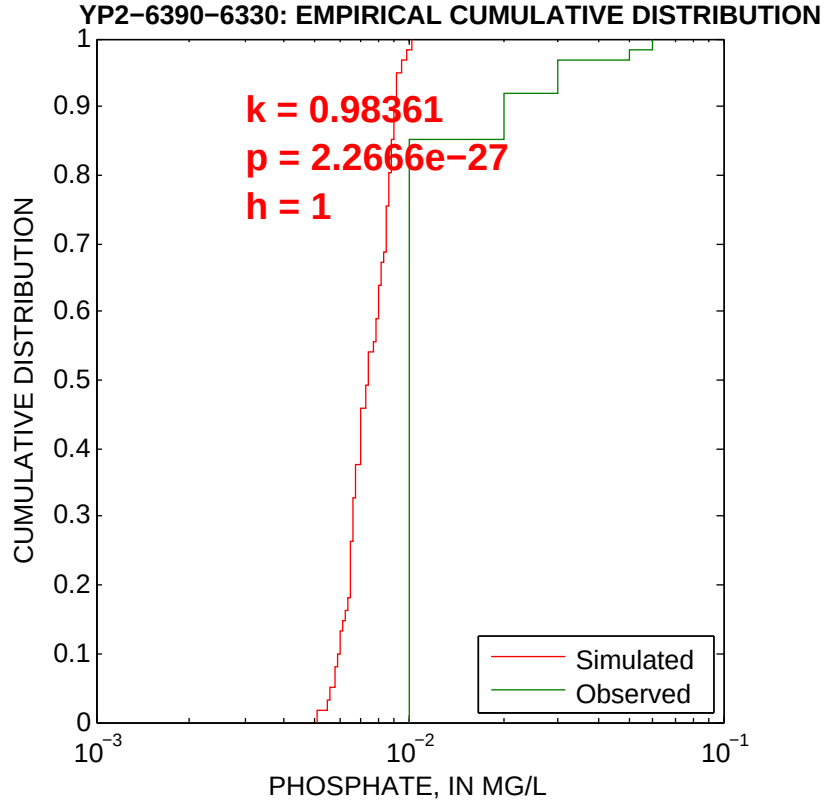












DATA SELECTION

scenario	file
P620171001WQ	PO4X.calib

plot: PO4X - phosphate

Dates: 1/1/1985 – 12/31/201

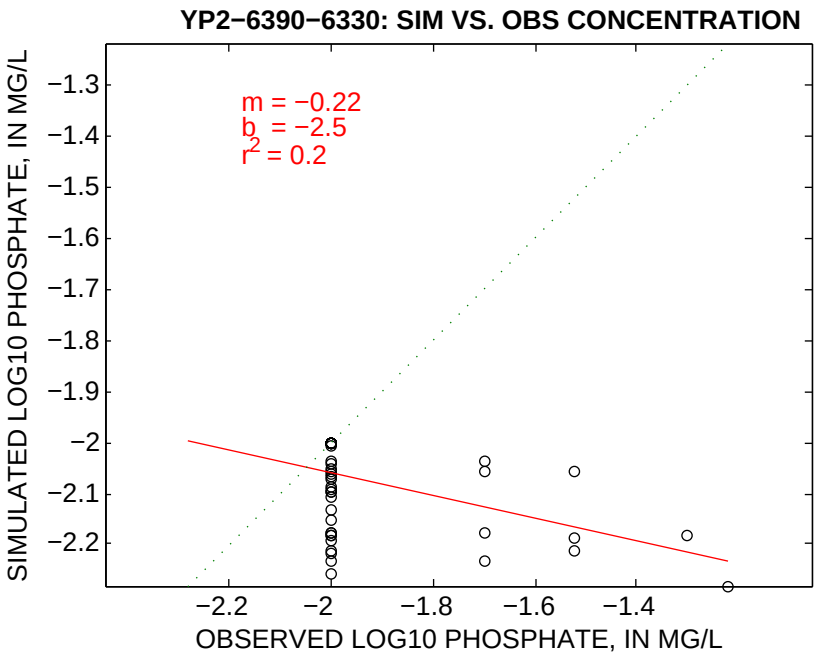
Drive: N/A | Directory: model | Observed: OBS20161101

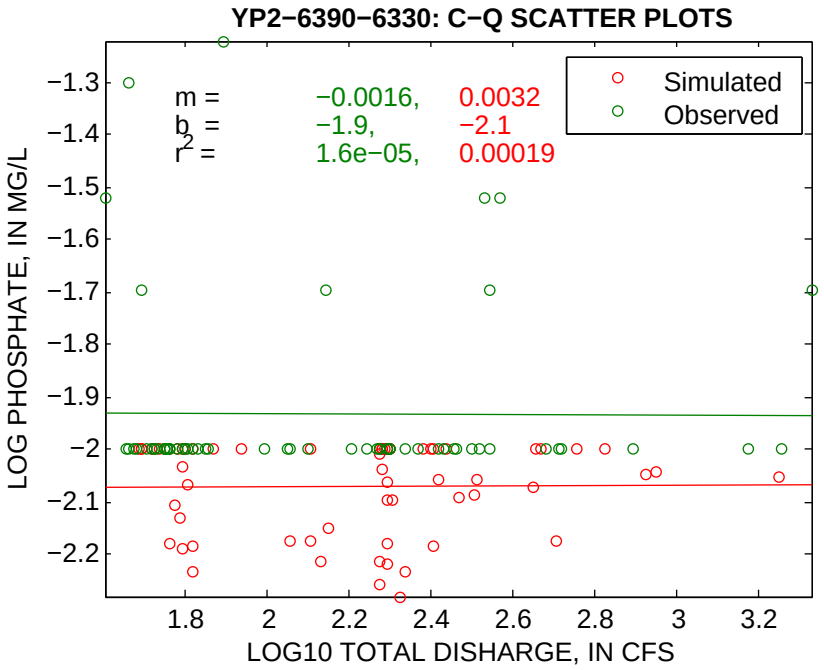
STATISTICS

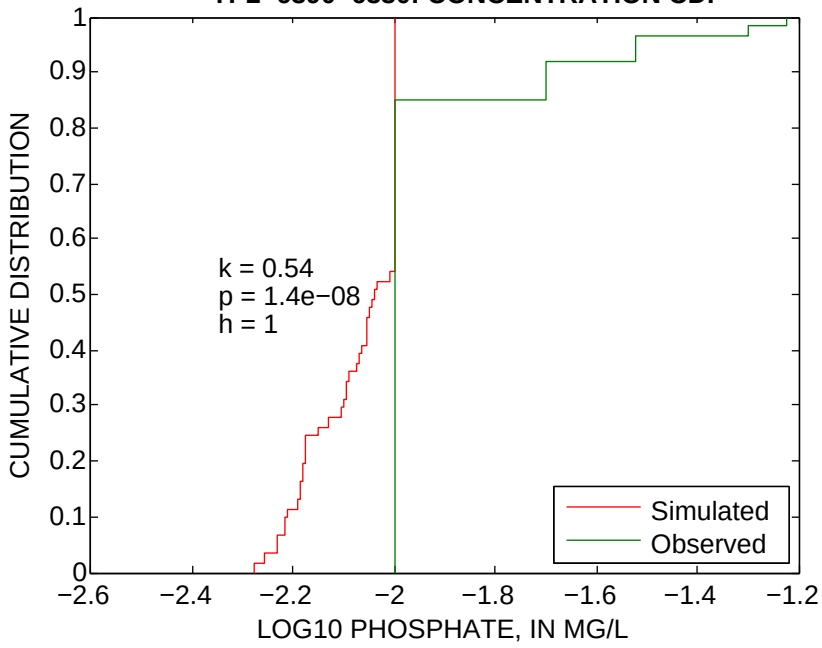
	n	61	61
		observe	simulate
min		0.01	0.0050791
		-2	-2.29421
mean		0.0131148	0.00748149
		-1.93258	-2.13159
media		0.01	0.0073413
		-2	-2.13423
max		0.06	0.010238
		-1.22185	-1.98978
varian		8.51366e-0	1.44371e-0
		0.031037	0.00496391
JB		0.001	0.198158
		0.001	0.231777
		ra	log
%		-42.9536	10.2974
err.va		0.00012530	0.0835534
rel.std.err		1.47183	2.69206
mod.eff		-0.47183	-1.69206

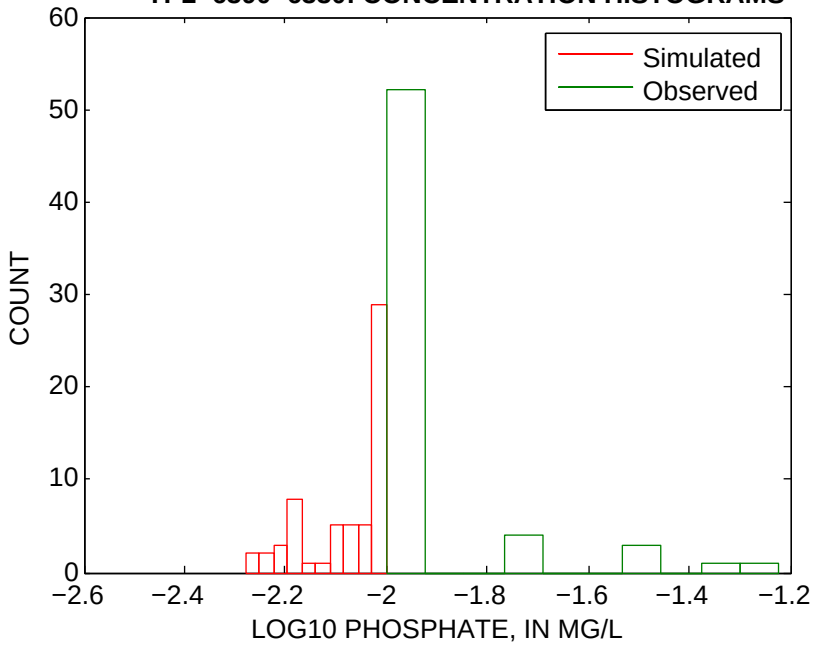
VERSION 2.1

ALL DATA
LOG10

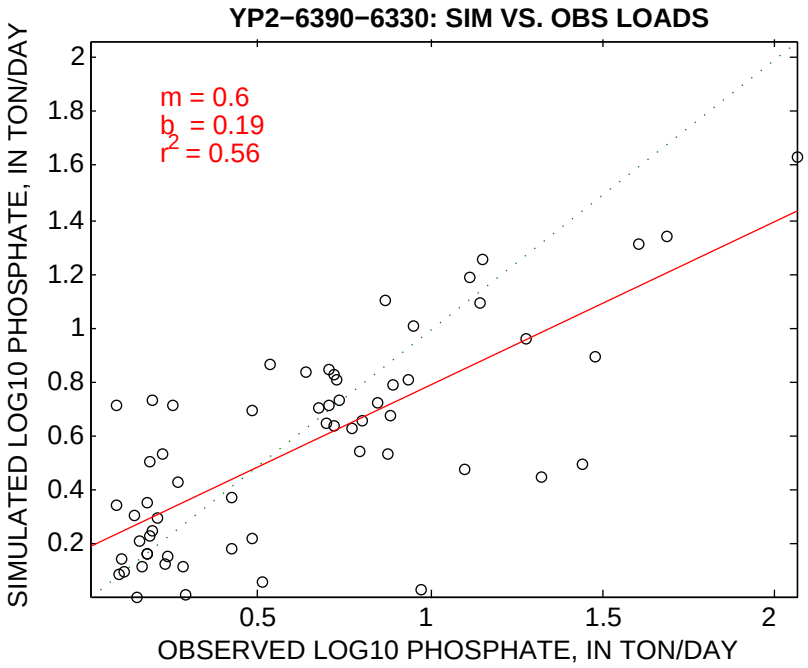


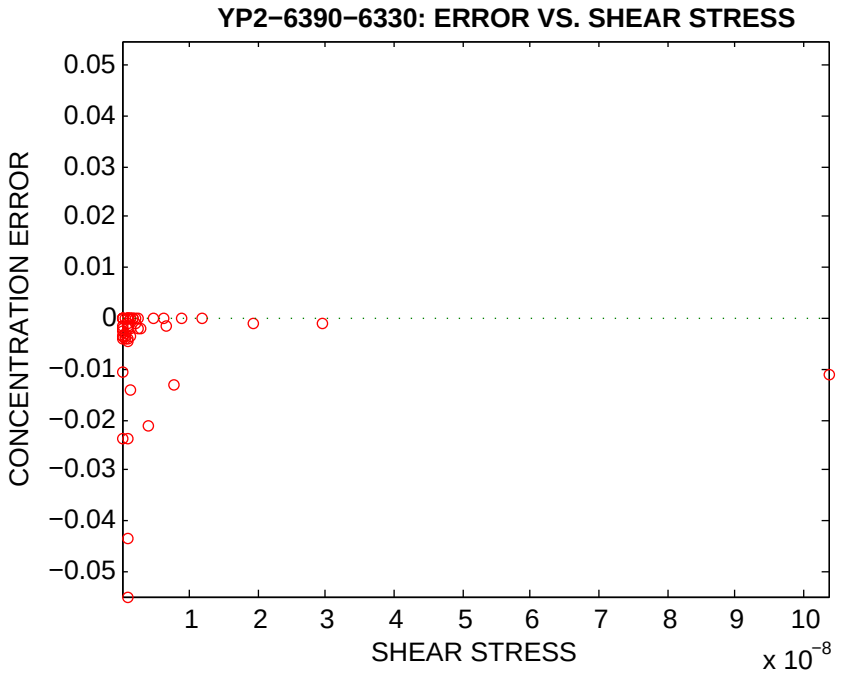


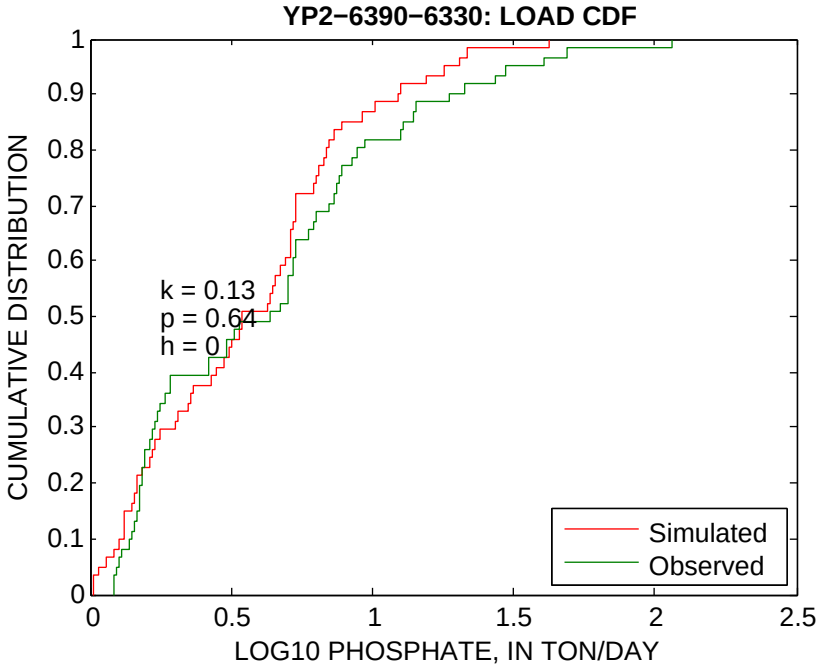


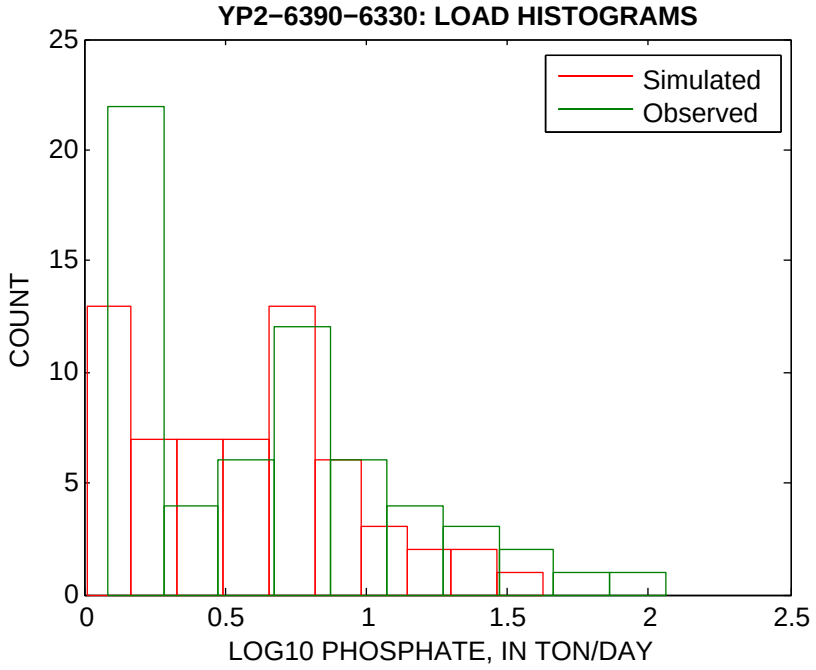


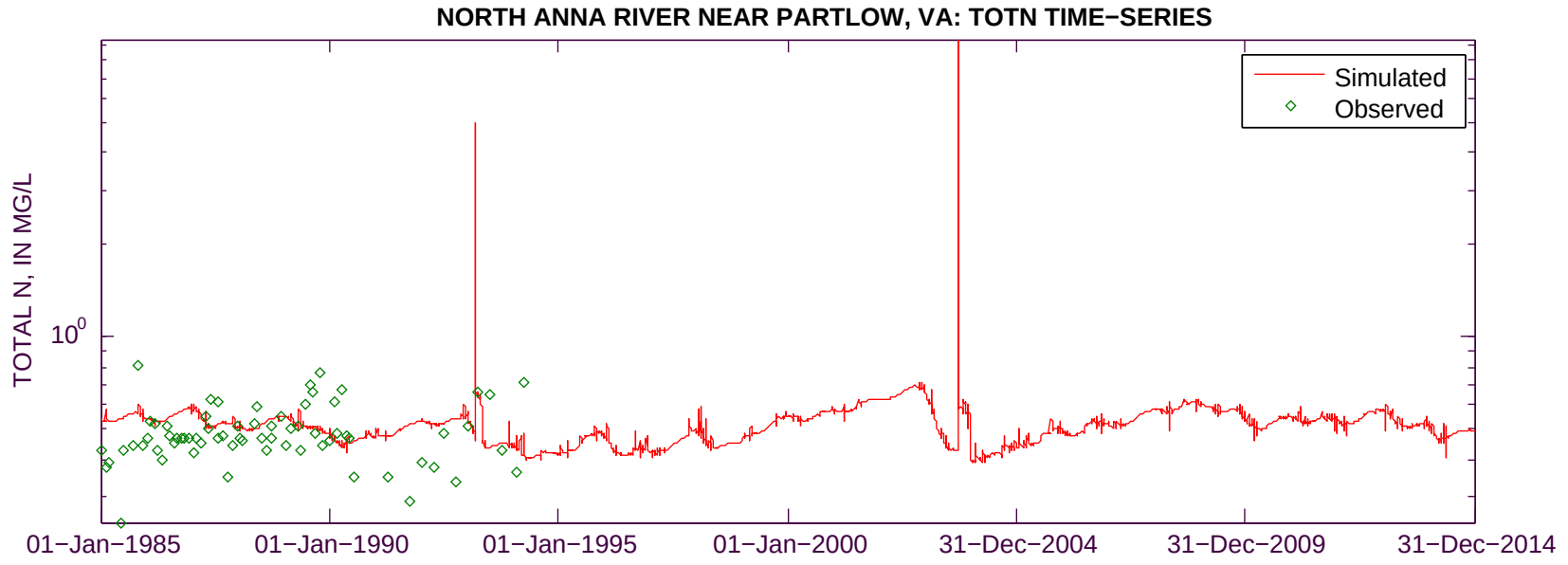
LOAD DATA
LOG10

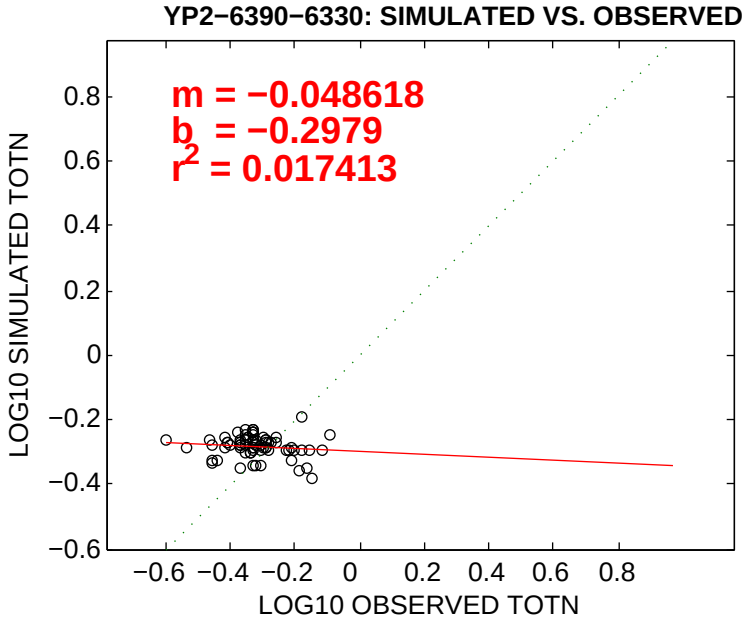


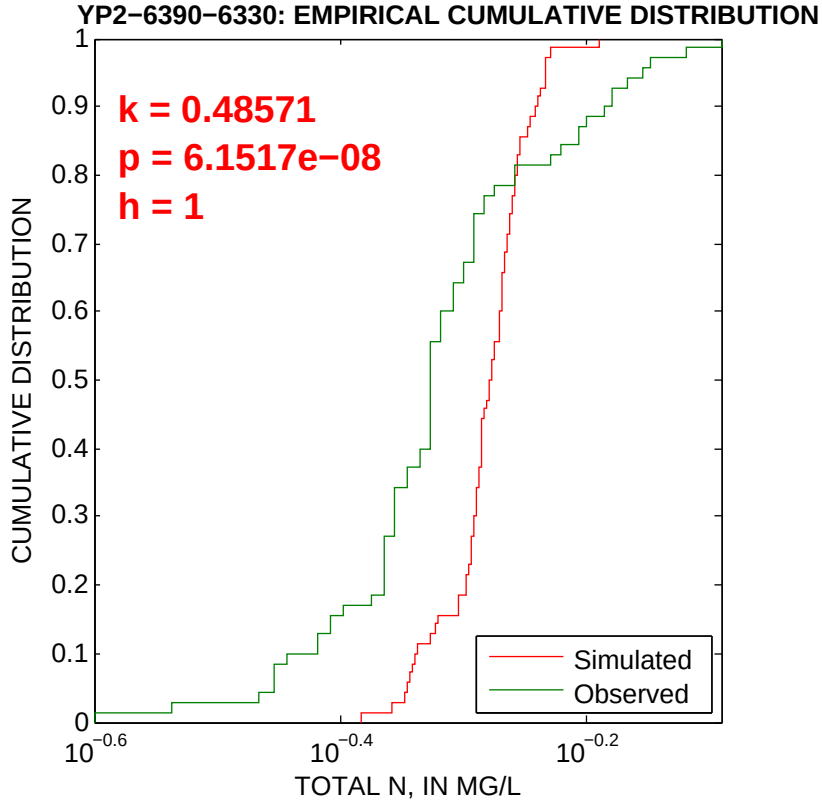












DATA SELECTION

scenario	file
P620171001WQ	TOTN.calib

plot: TOTN - total nitrogen

Dates: 1/1/1985 – 12/31/201

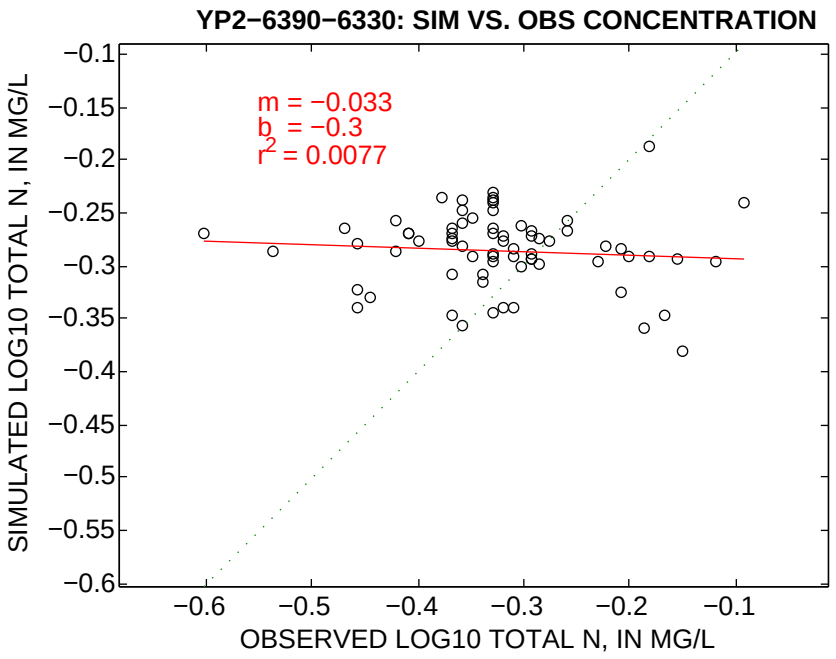
Drive	Directory	Observed
N/A	model	OBS20161101

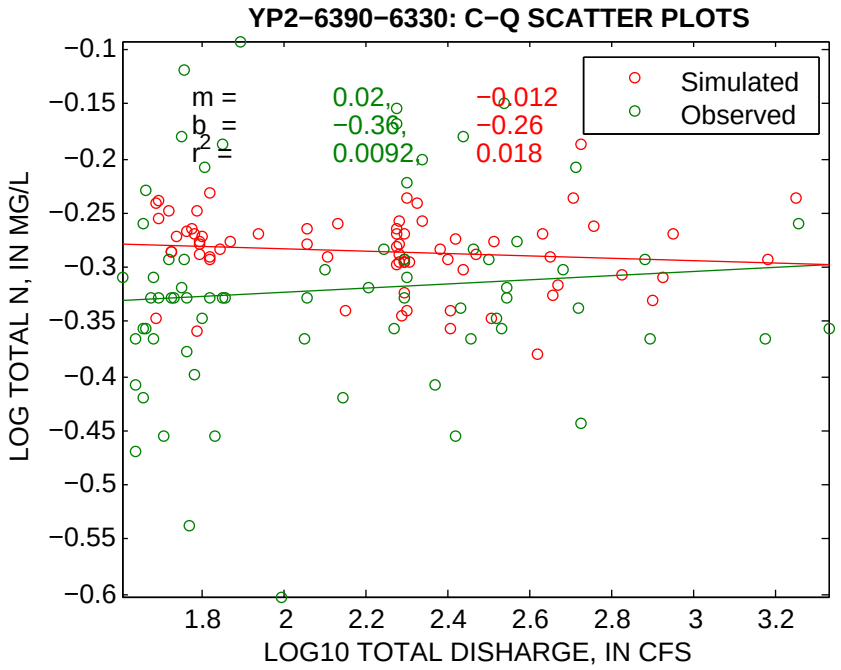
STATISTICS

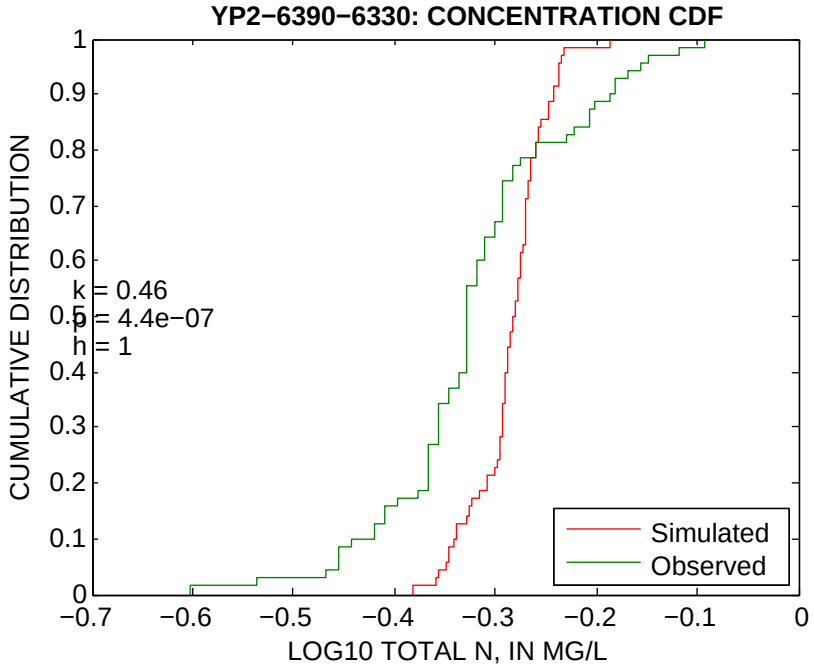
	n	70	70
		observe	simulate
min		0.25	0.41371
		-0.60206	-0.383304
mean		0.489143	0.523569
		-0.320274	-0.282326
media		0.47	0.52686
		-0.327902	-0.278306
max		0.81	0.64475
		-0.091515	-0.190609
varian		0.0111935	0.00162655
		0.00855567	0.00116141
JB		0.020205	0.205847
		0.257444	0.052923
		ra	log
%		7.03805	-11.8485
err.va		0.0151469	0.0120099
rel.std.err		1.3532	1.40374
mod.eff		-0.353195	-0.403737

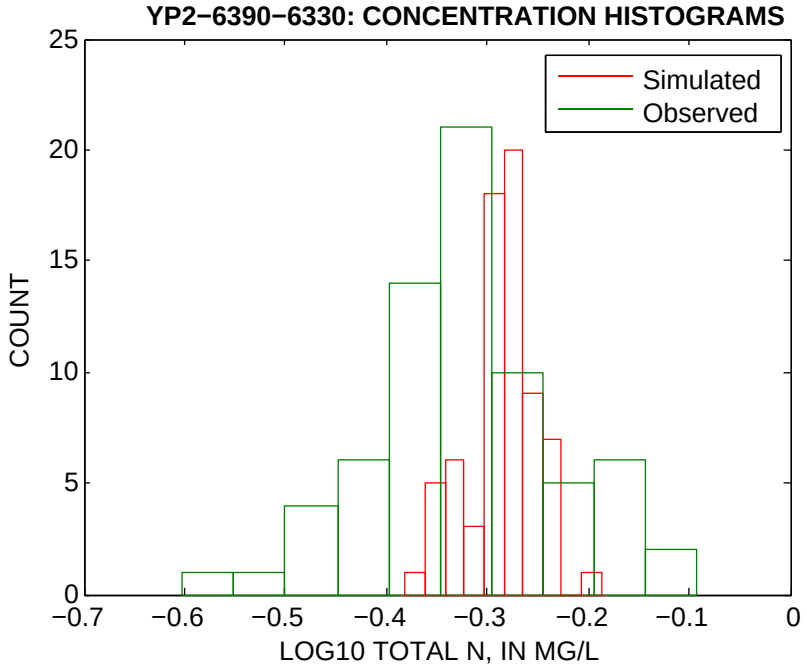
VERSION

ALL DATA
LOG10

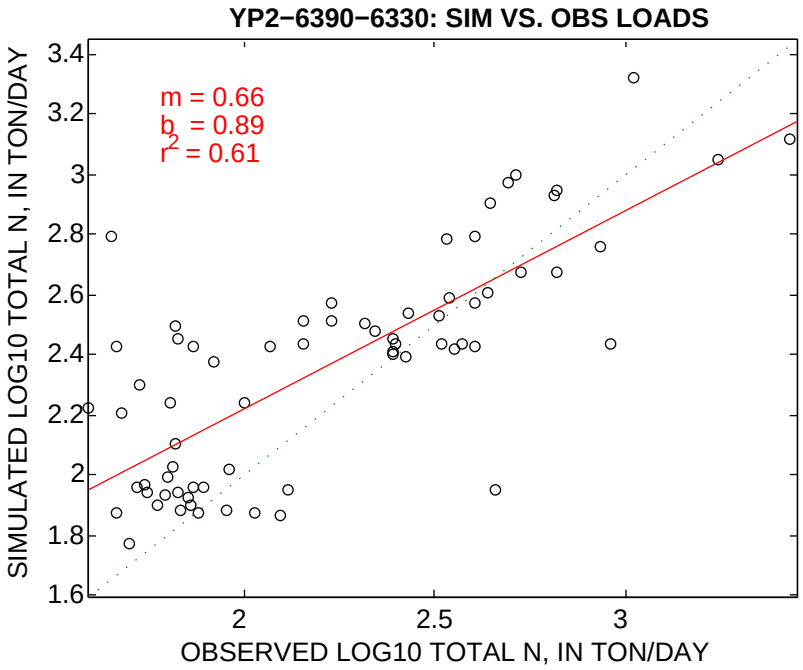


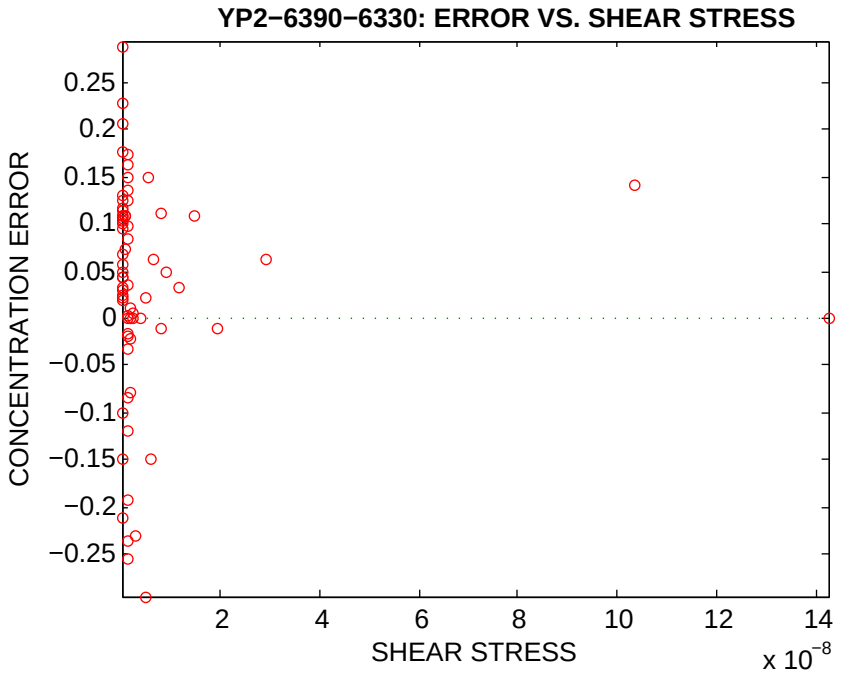


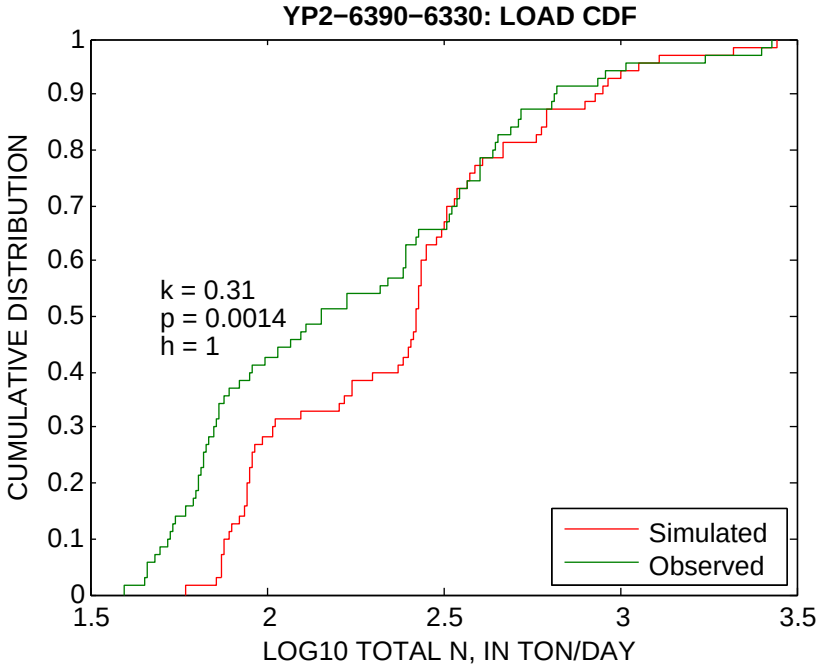


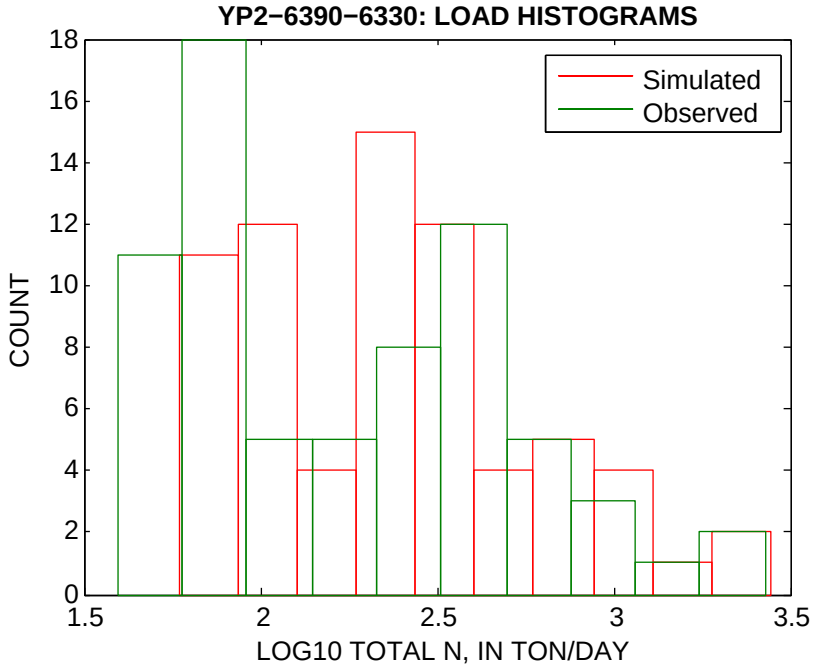


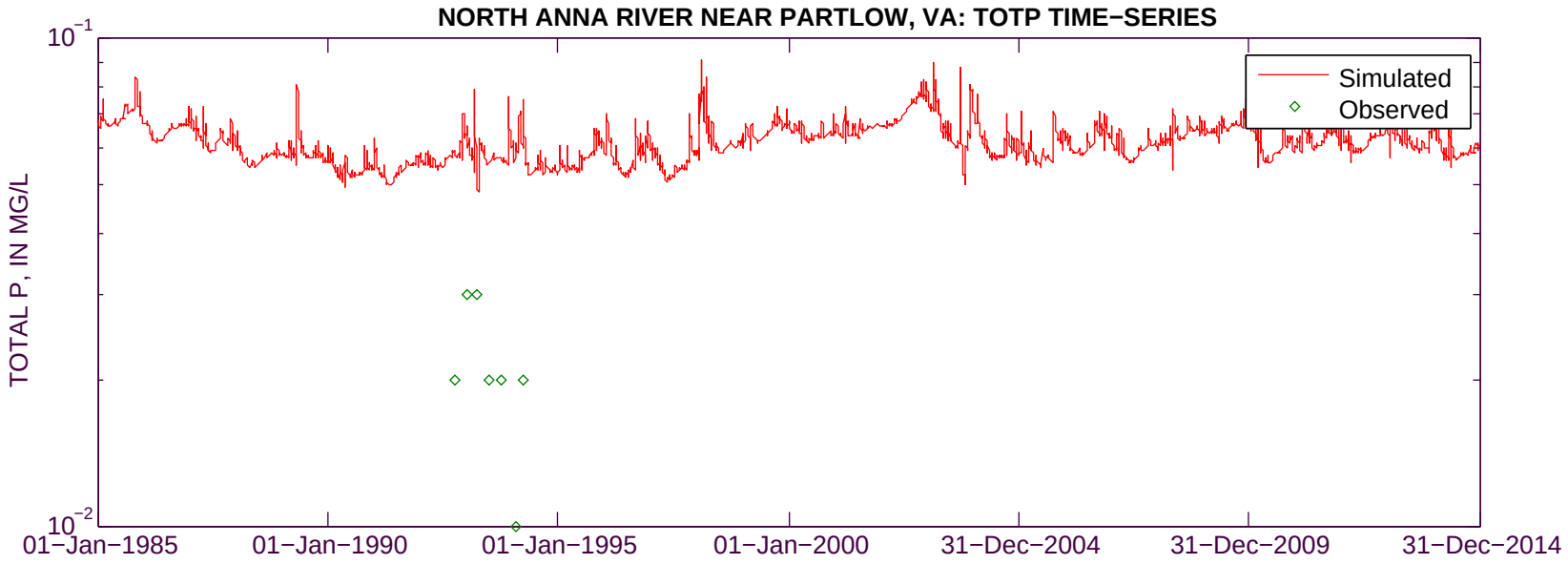
LOAD DATA
LOG10

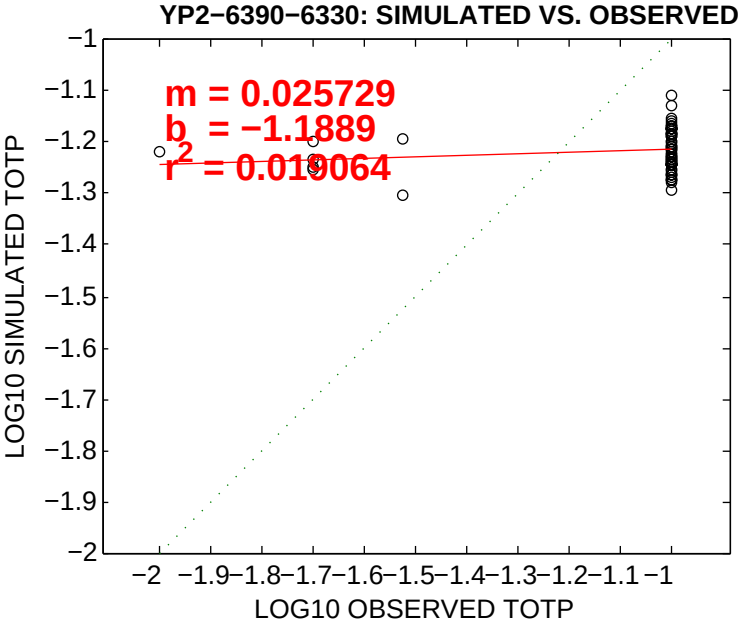


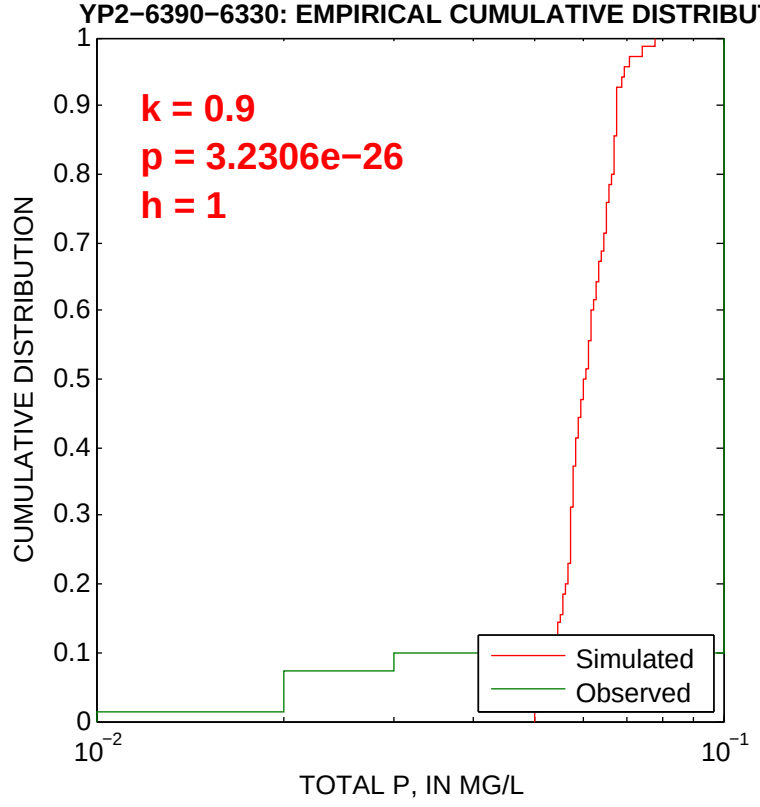












DATA SELECTION

scenario	file
P620171001WQ	TOTP.calib

plot: TOTP - total phosphorus

Dates: 1/1/1985 – 12/31/201

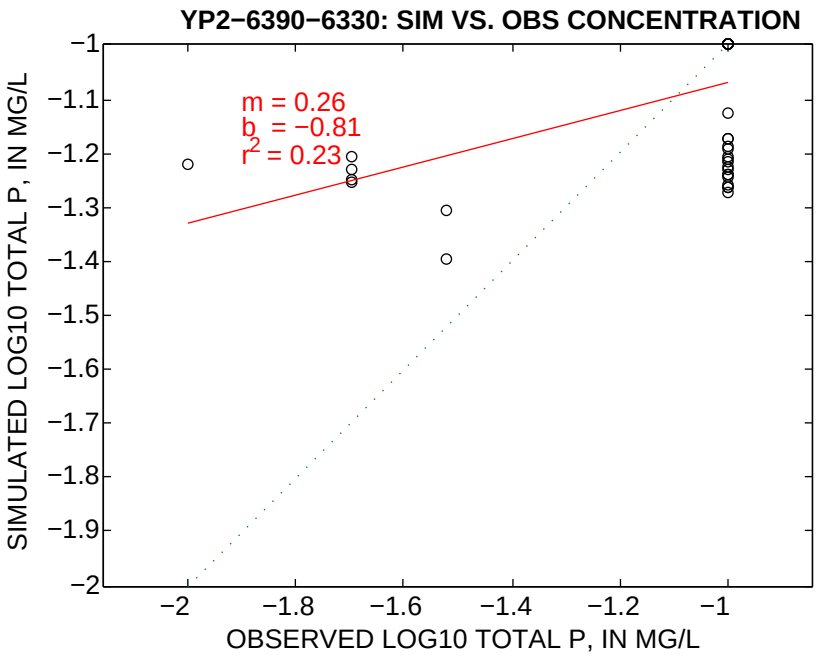
Drive	Directory	Observed
N/A	model	OBS20161101

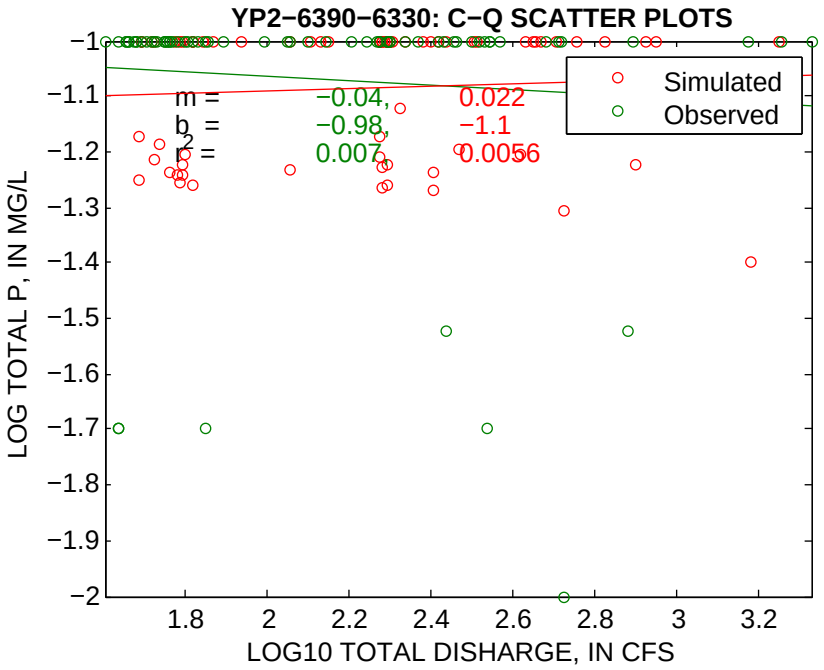
STATISTICS

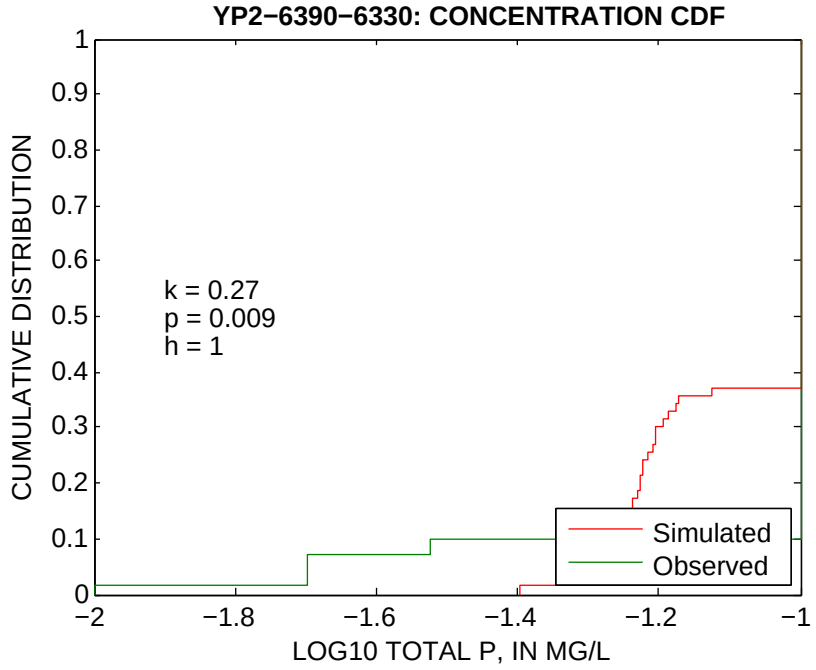
	n	70	70
		observe	simulate
min		0.01	0.050014
		-2	-1.30091
mean		0.0921429	0.0610151
		-1.06917	-1.21638
media		0.1	0.0604025
		-1	-1.21895
max		0.1	0.077882
		-1	-1.10856
varian		0.00056780	3.21276e-0
		0.0458864	0.00159338
JB		0.001	0.217042
		0.001	0.5
		ra	log
%		-33.782	13.7692
err.va		0.00154194	0.067105
rel.std.err		2.71561	1.46242
mod.eff		-1.71561	-0.462416

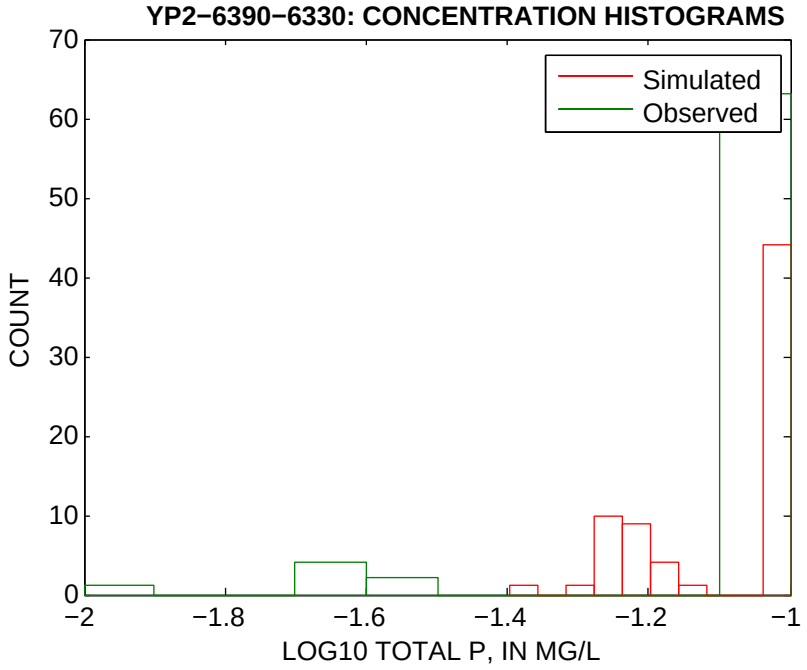
VERSION 2.1

ALL DATA
LOG10

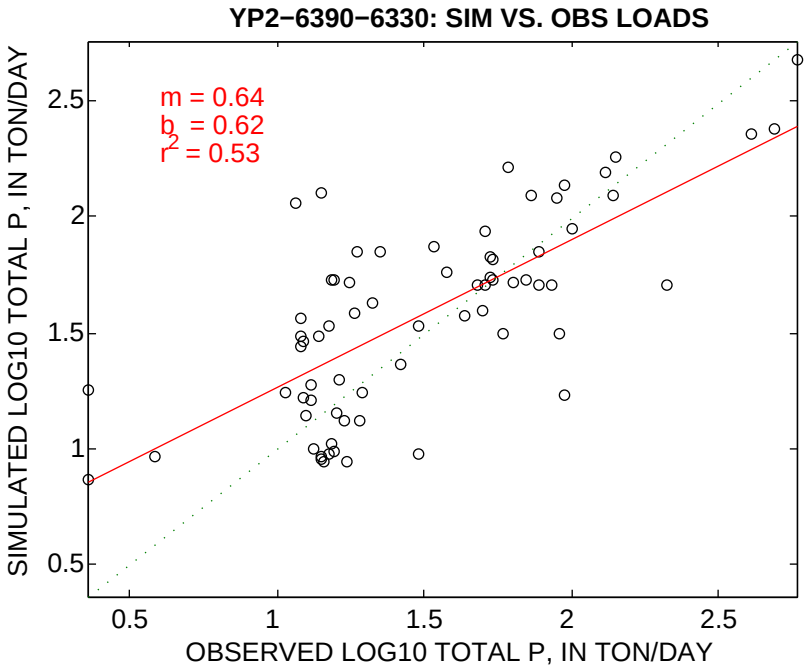


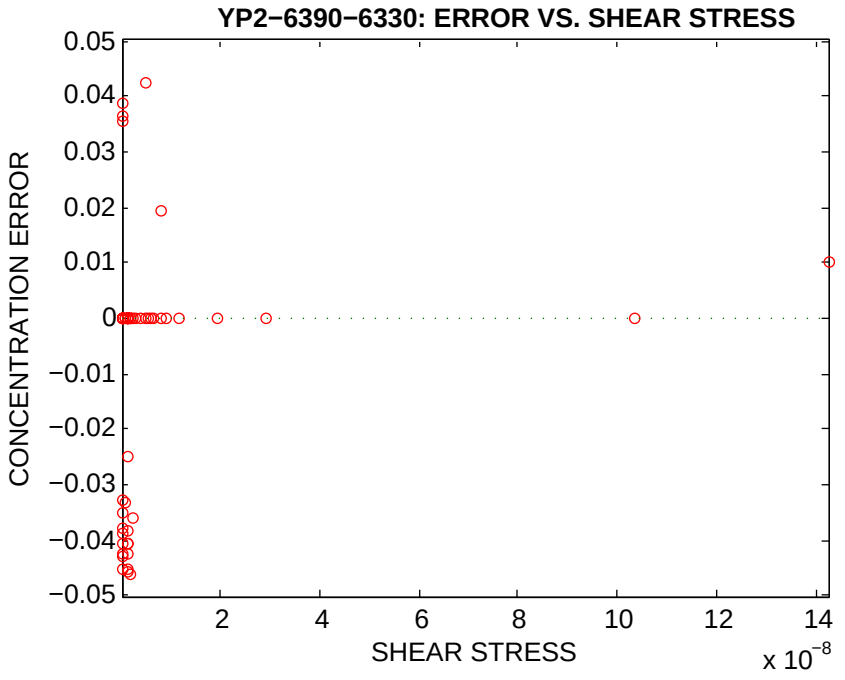


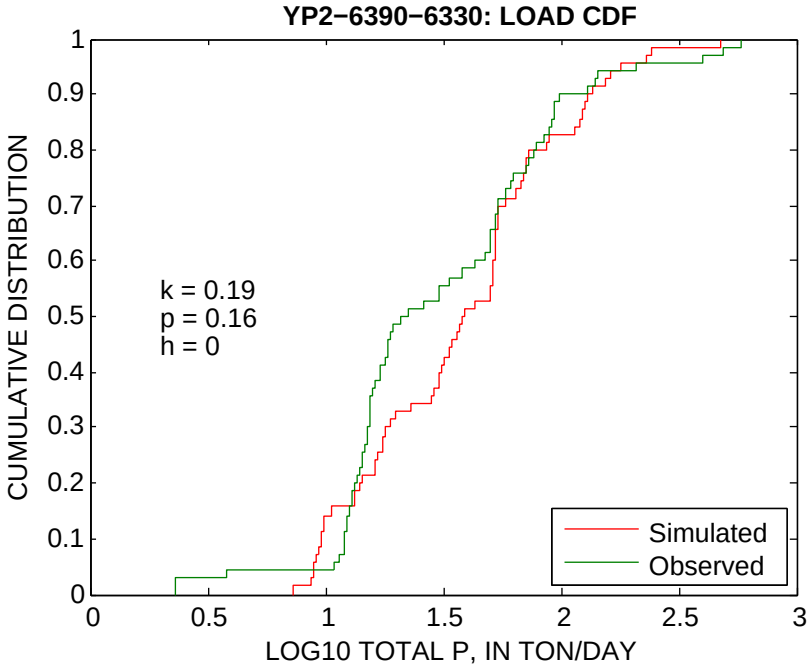


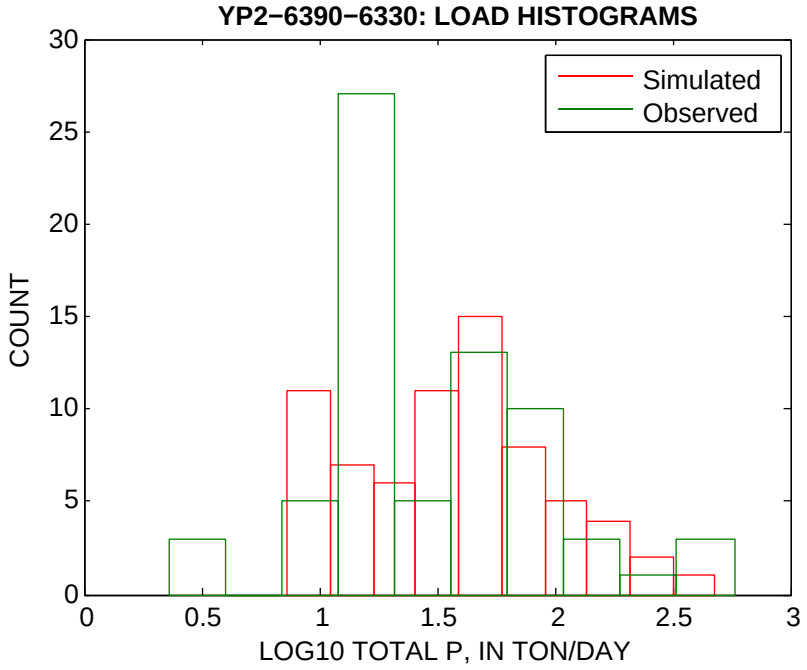


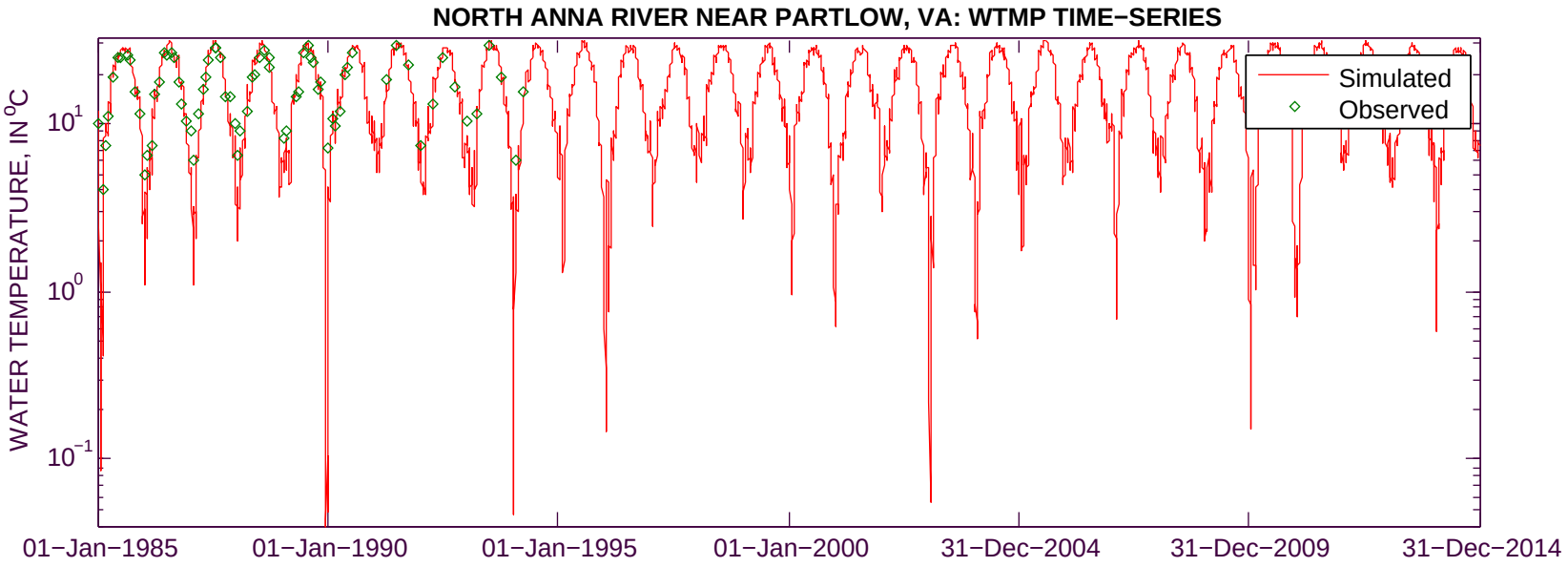
LOAD DATA
LOG10

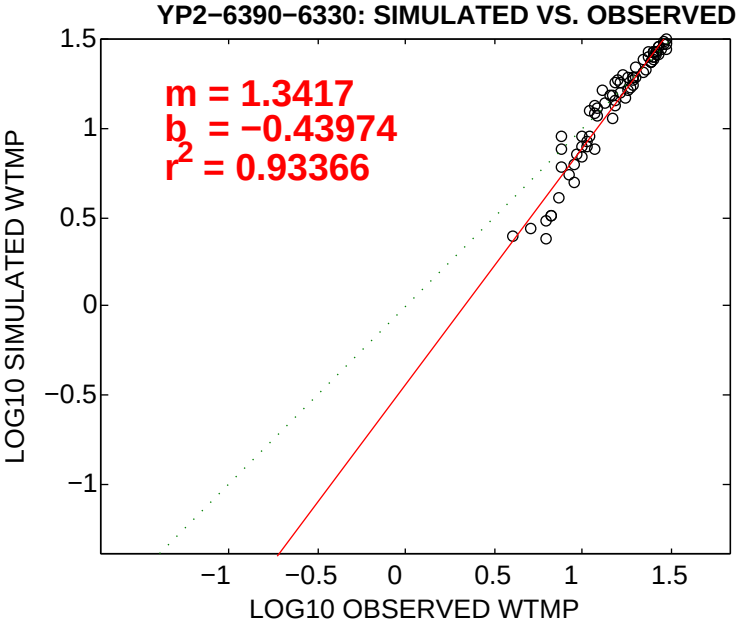


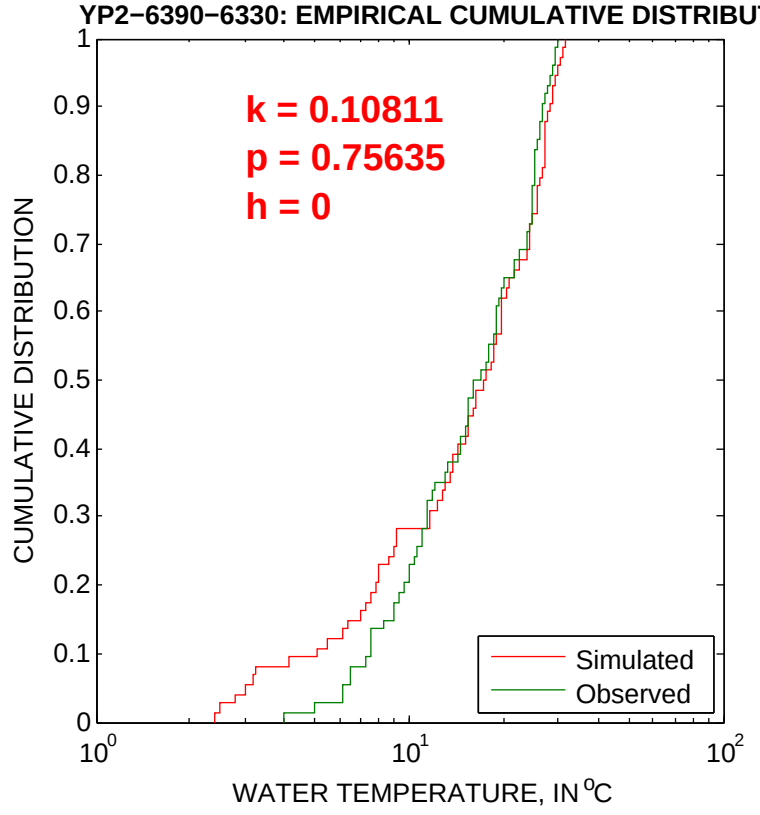












DATA SELECTION

scenario	file
P620171001WQ	WTMP.calib

plot: WTMP - water tempera...

Dates 1/1/1985 12/31/201

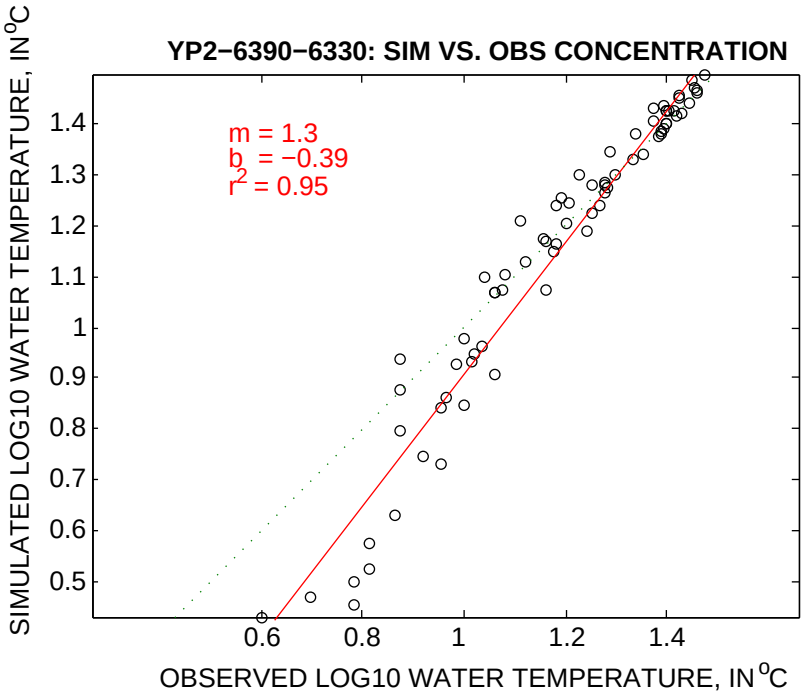
Drive	Directory	Observed
N/A	model	OBS20161101

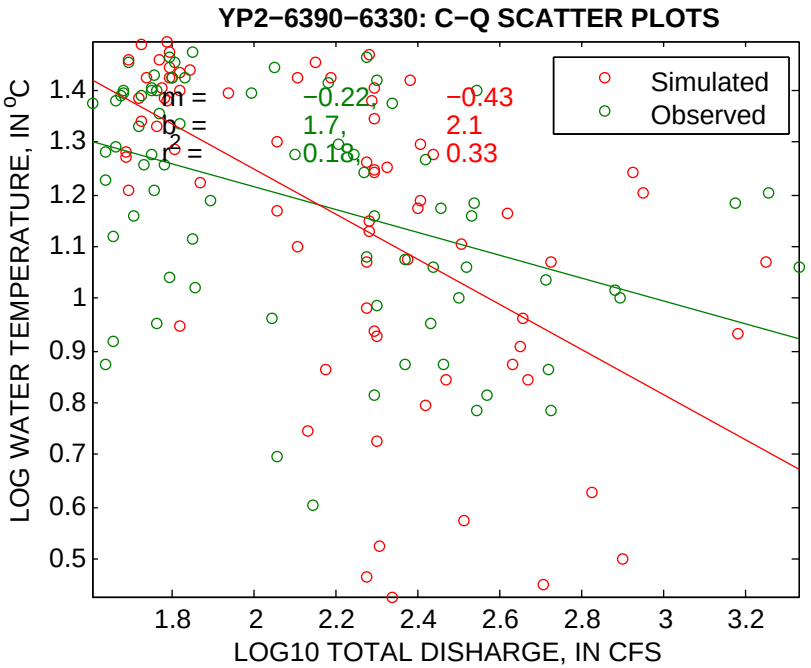
STATISTICS

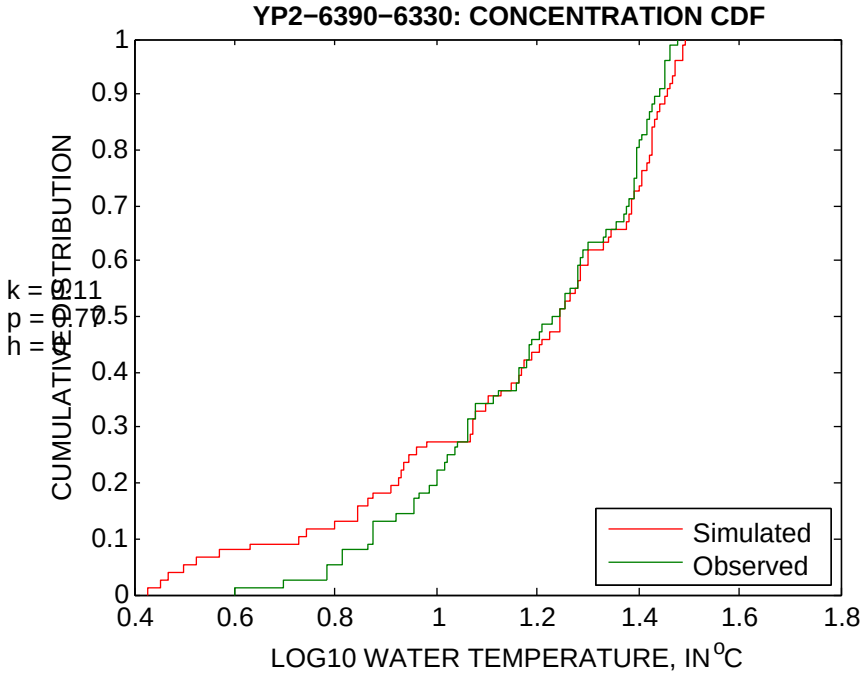
	n	74	74
		observe	simulate
min		4 0.60206	2.394 0.379124
mean		17.0797 1.18407	17.0246 1.14894
media		16.5 1.21736	17.5025 1.24306
max		29.9 1.47567	31.58 1.49941
varian		54.8953 0.0476198	75.4033 0.0918153
JB		0.052139 0.049425	0.058946 0.010591
		ra	log
% err.va		-0.322644 4.19416	-2.96697 0.0129022
rel.std.err		0.0764029	0.270942
mod.eff		0.923597	0.729058

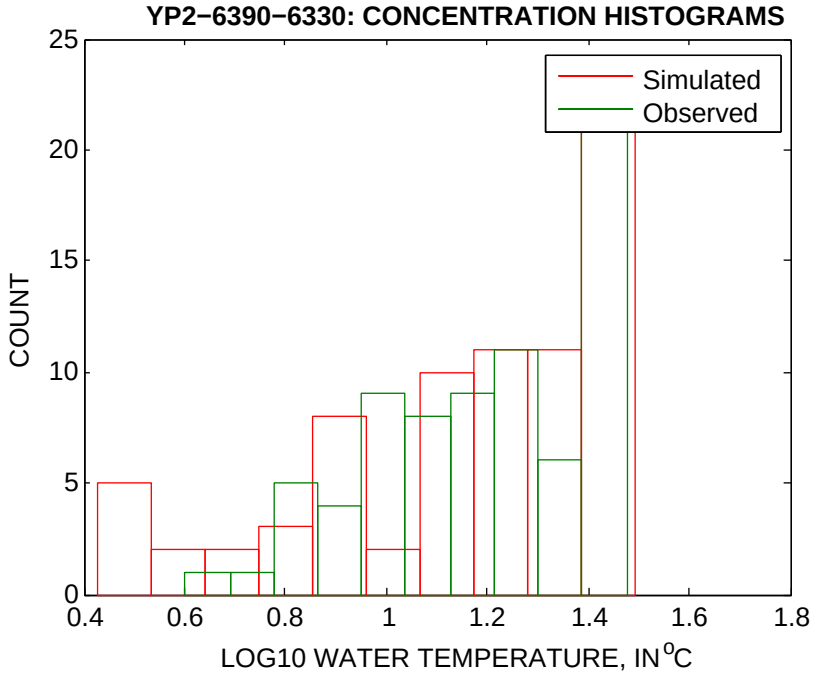
VERSION 2.1

ALL DATA
LOG10

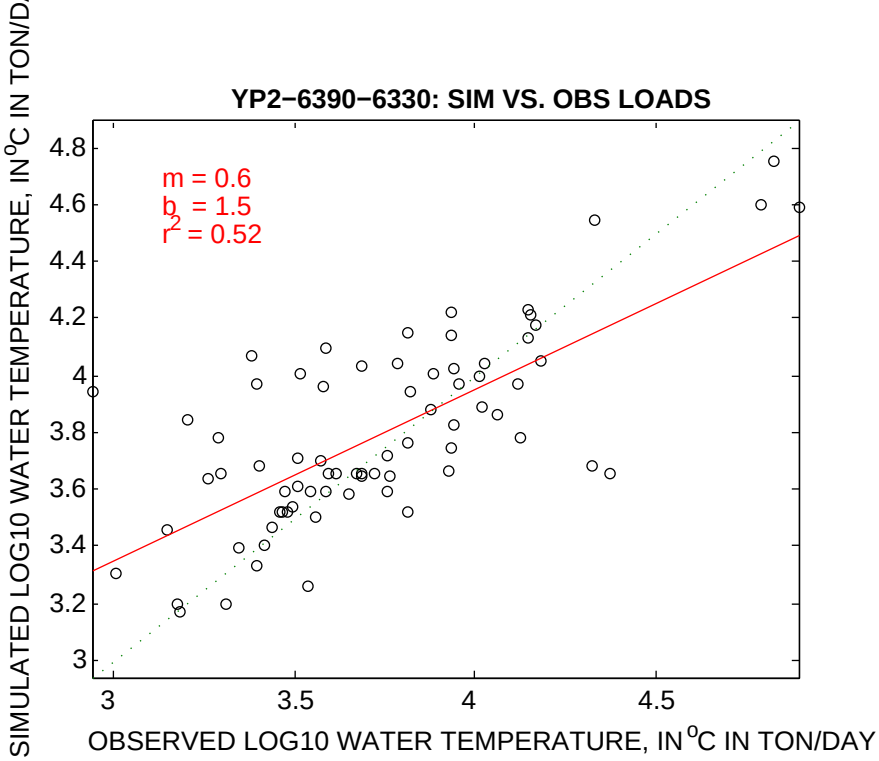


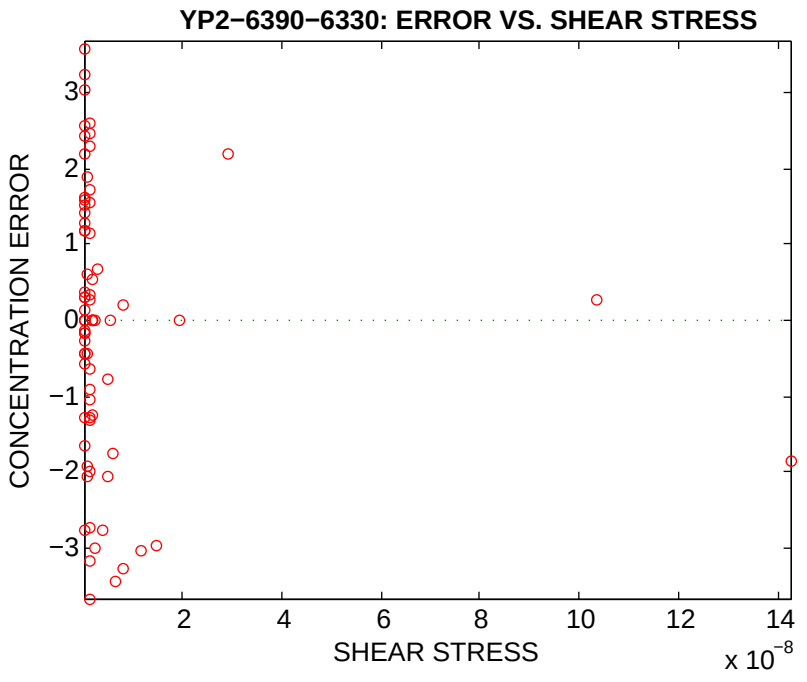


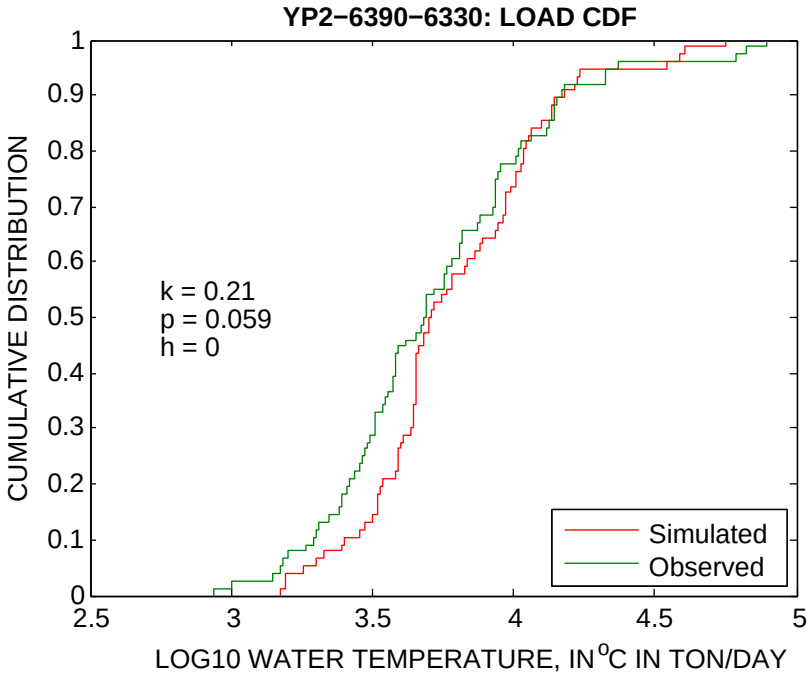


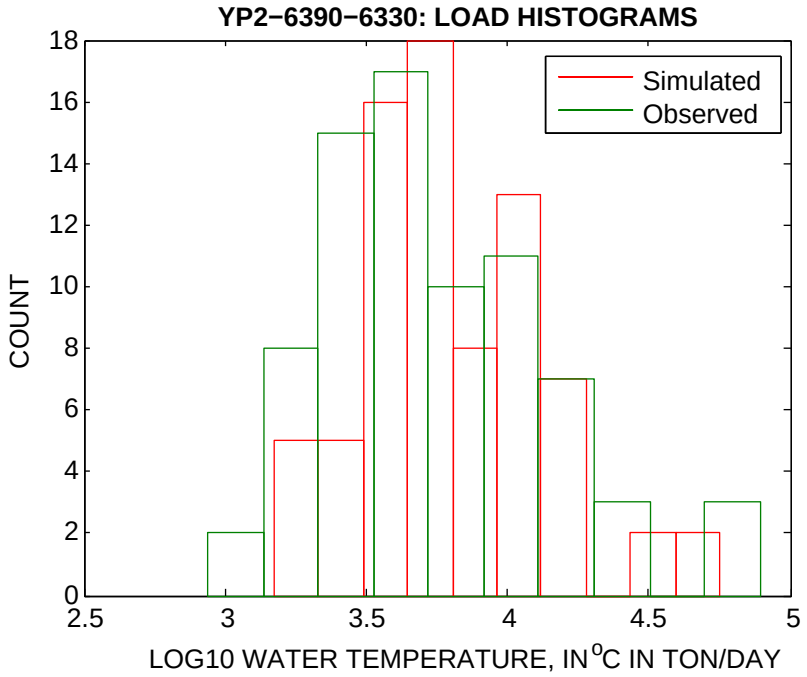


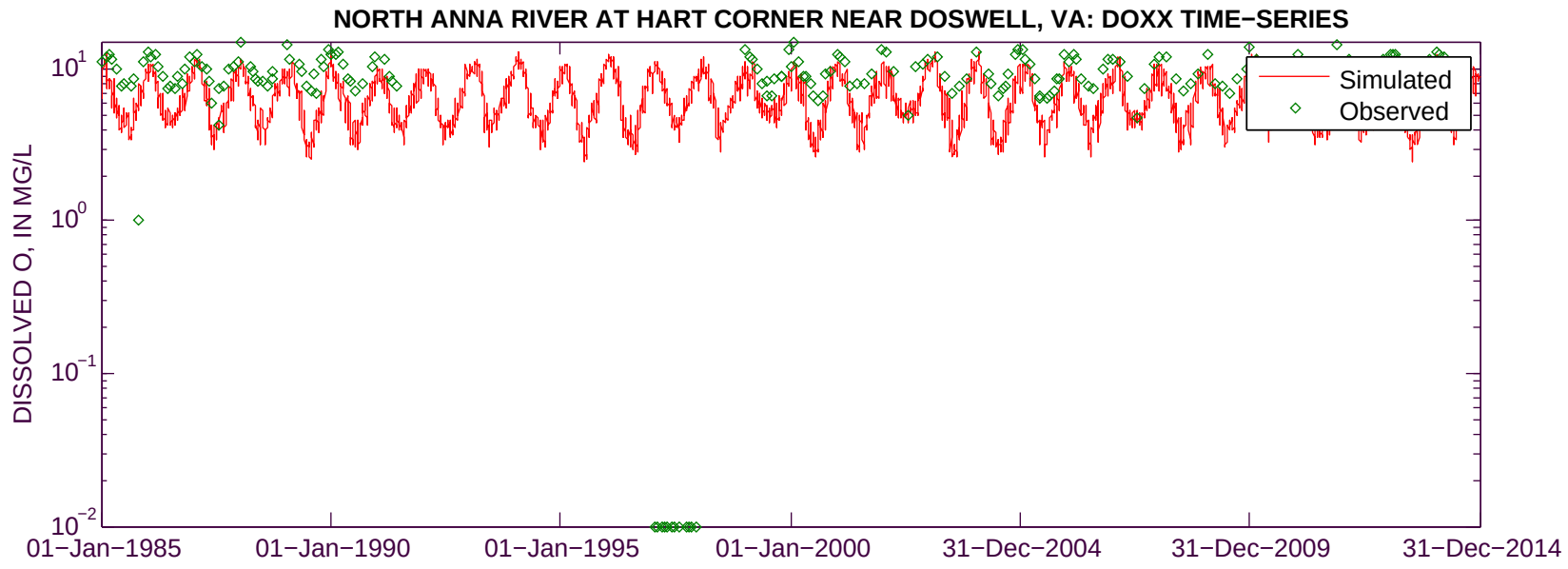
LOAD DATA
LOG10

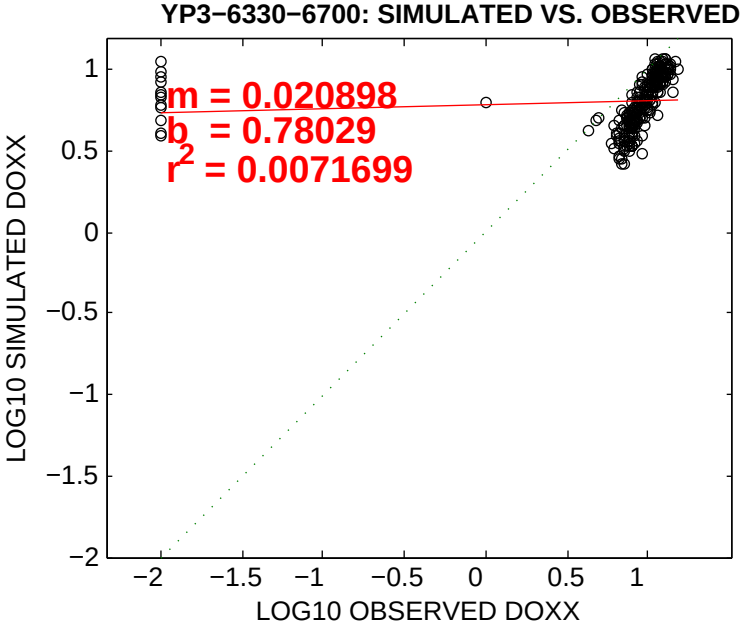


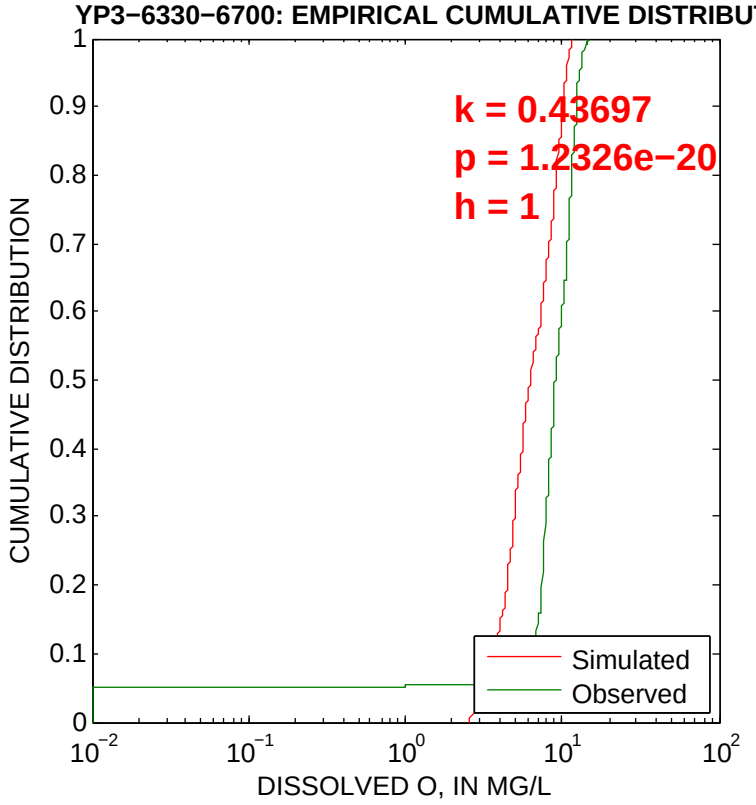












DATA SELECTION

scenario	file
P620171001WQ	DOXX.calib

plot: DOXX - dissolved oxygen

Dates: 1/1/1985 – 12/31/201

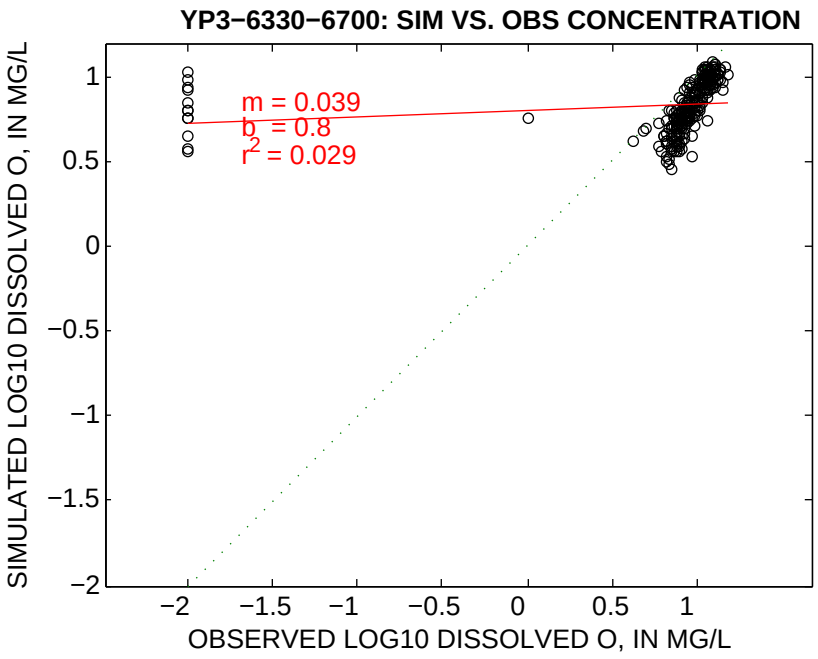
Drive	Directory	Observed
N/A	model	OBS20161101

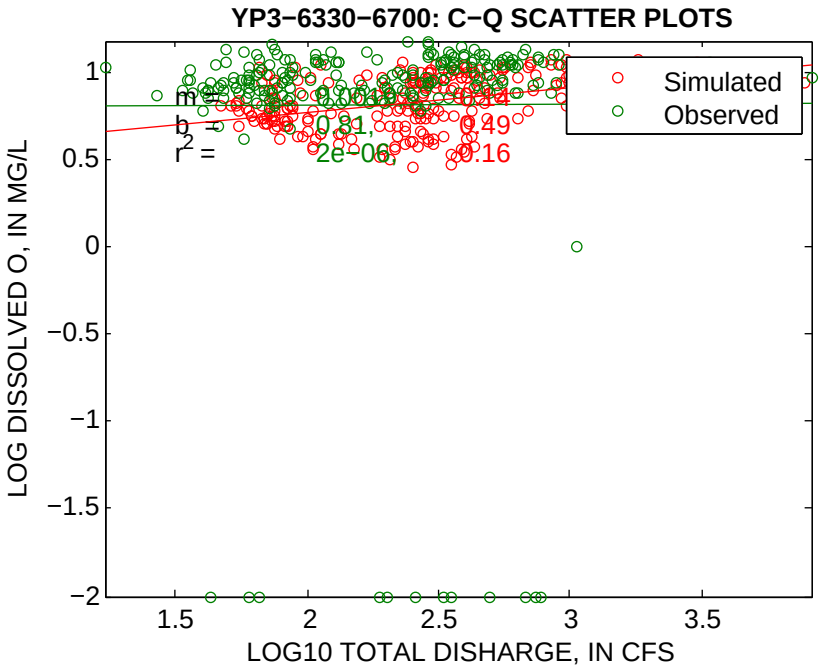
STATISTICS

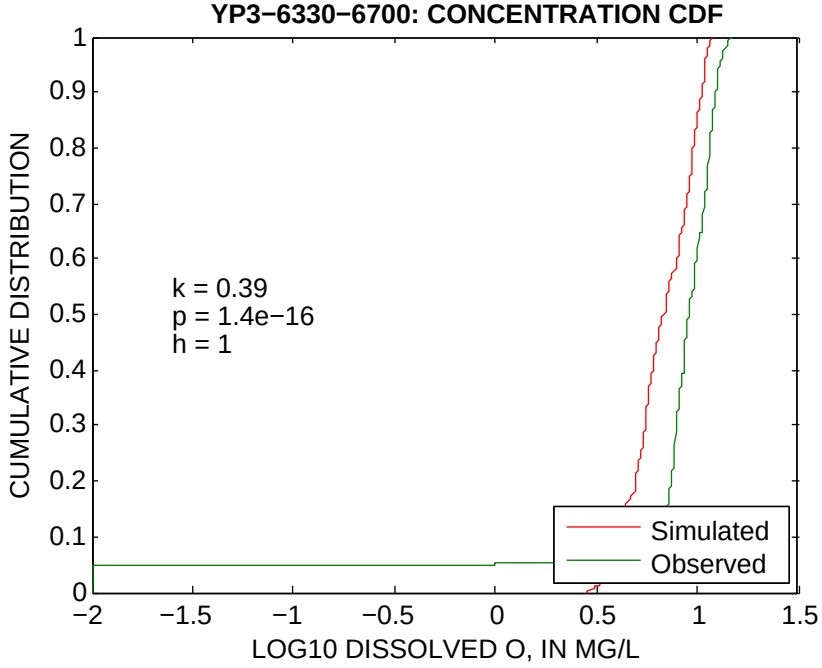
	n	observe	simulate
		238	238
min		0.01	2.5982
		-2	0.414673
mean		9.07273	6.70926
		0.817103	0.797366
media		9.08	6.3038
		0.958085	0.799601
max		15.2	11.653
		1.18184	1.06644
varian		8.95861	5.75835
		0.436348	0.0265778
JB		0.001	0.005177
		0.001	0.010906
		ra	log
%		-26.0503	-2.41552
err.va		12.218	0.44508
rel.std.err		1.36383	1.02001
mod.eff		-0.363832	-0.0200107

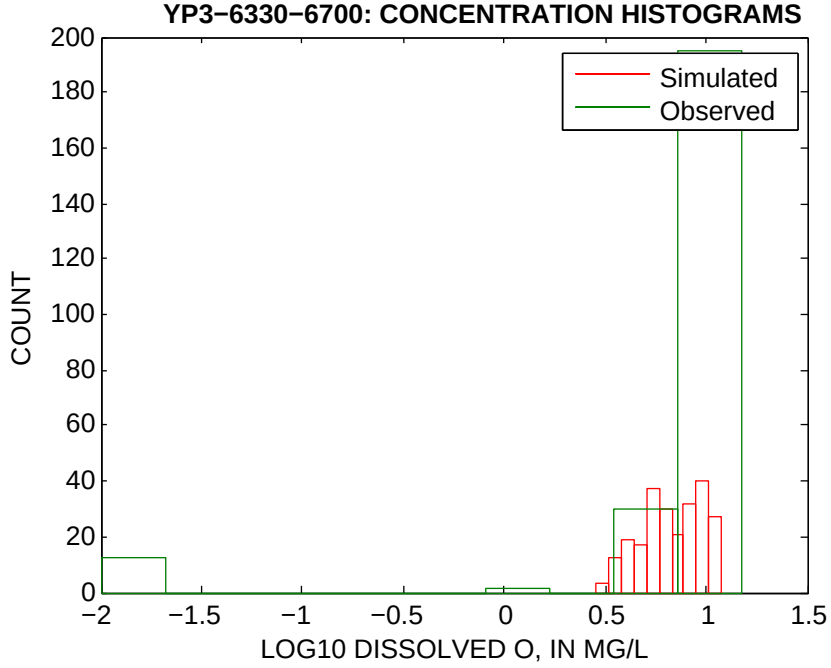
VERSION 2.1

ALL DATA
LOG10

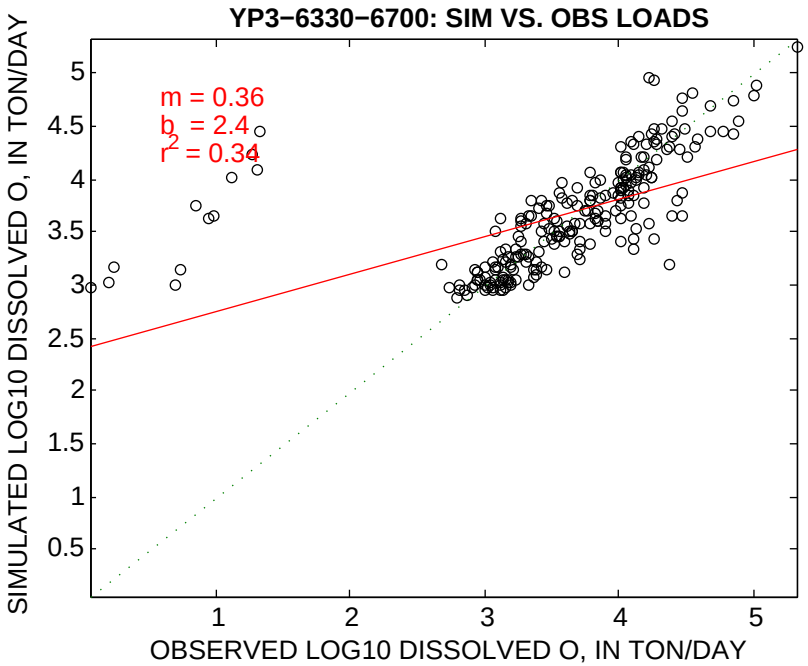


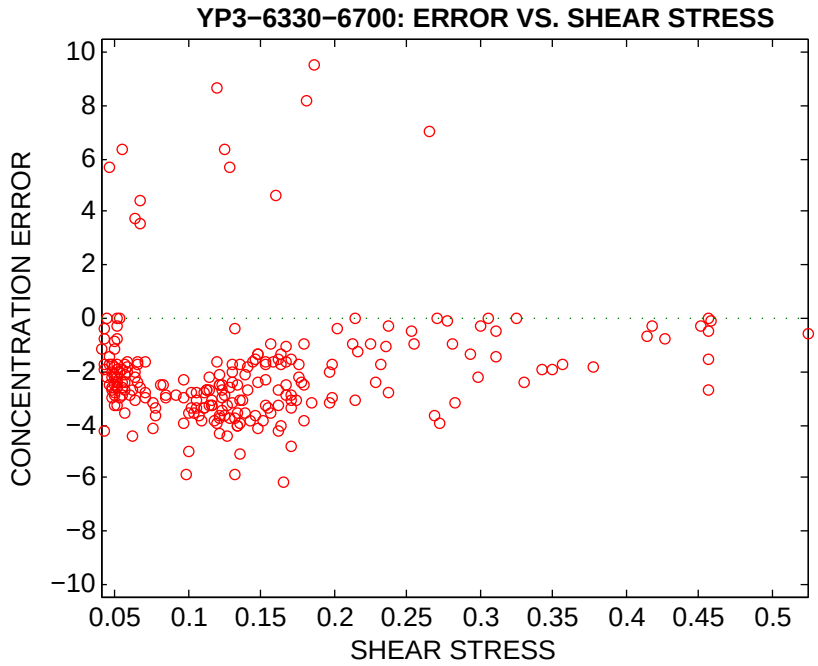


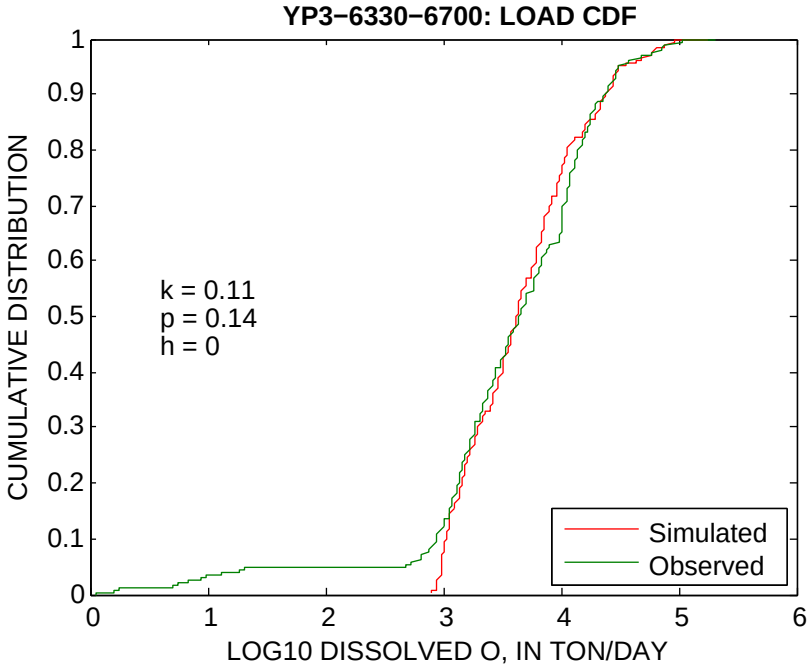


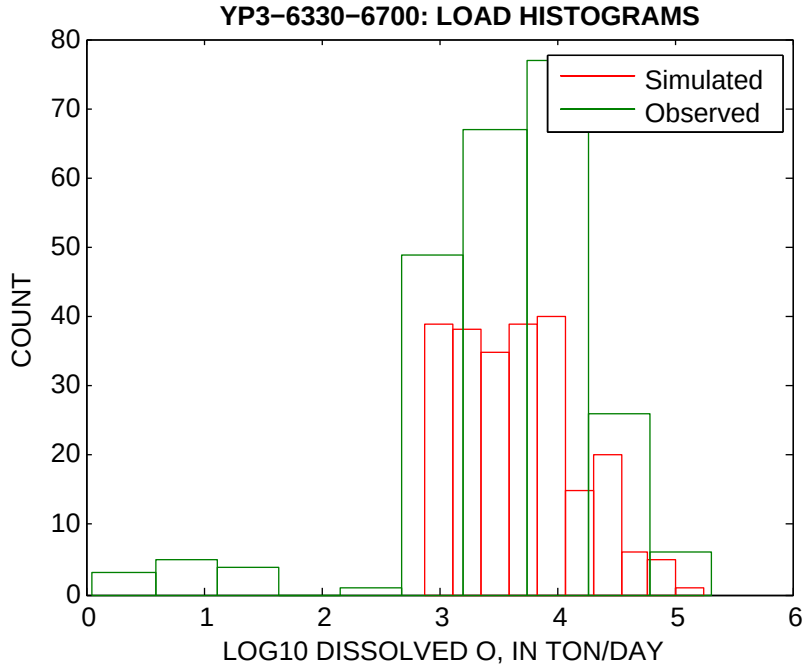


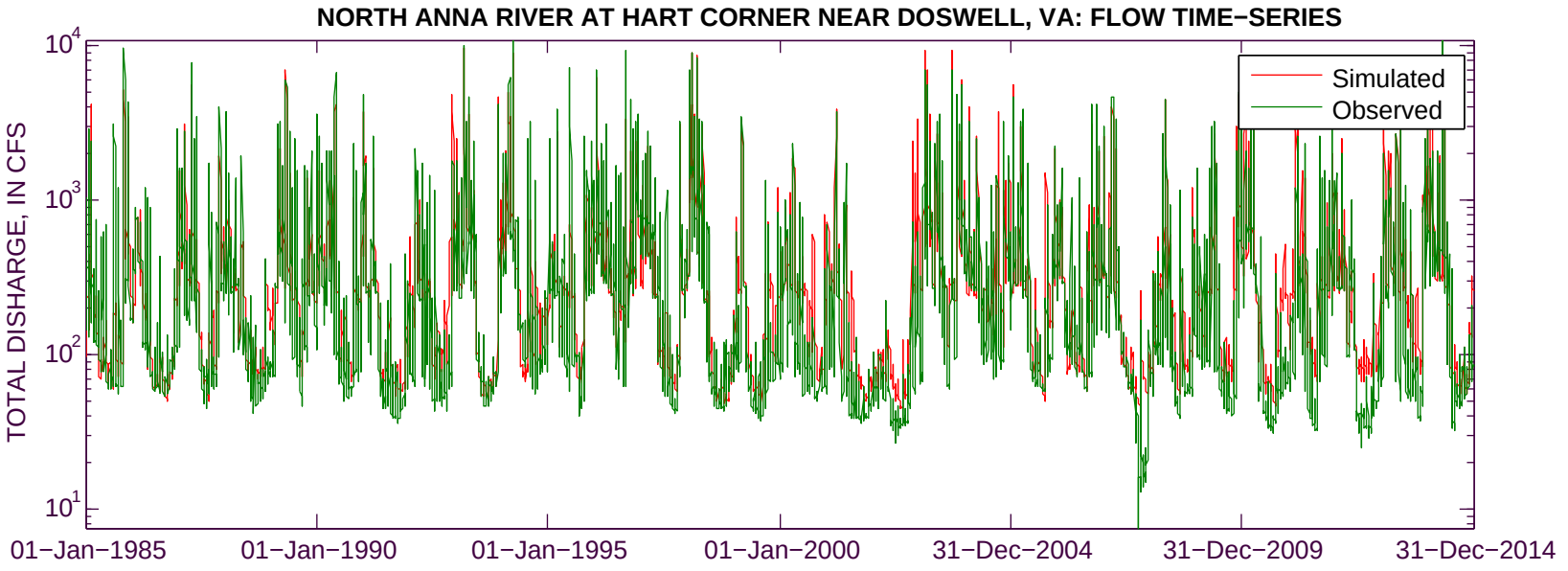
LOAD DATA
LOG10

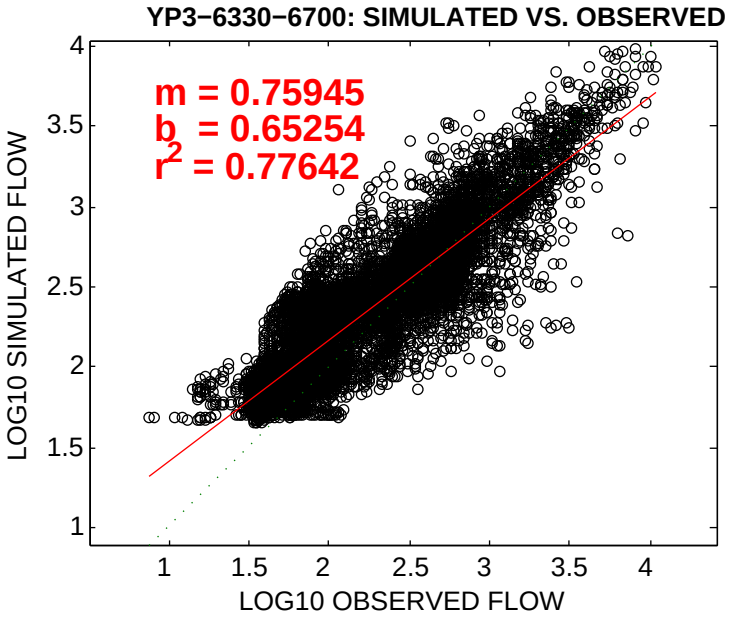


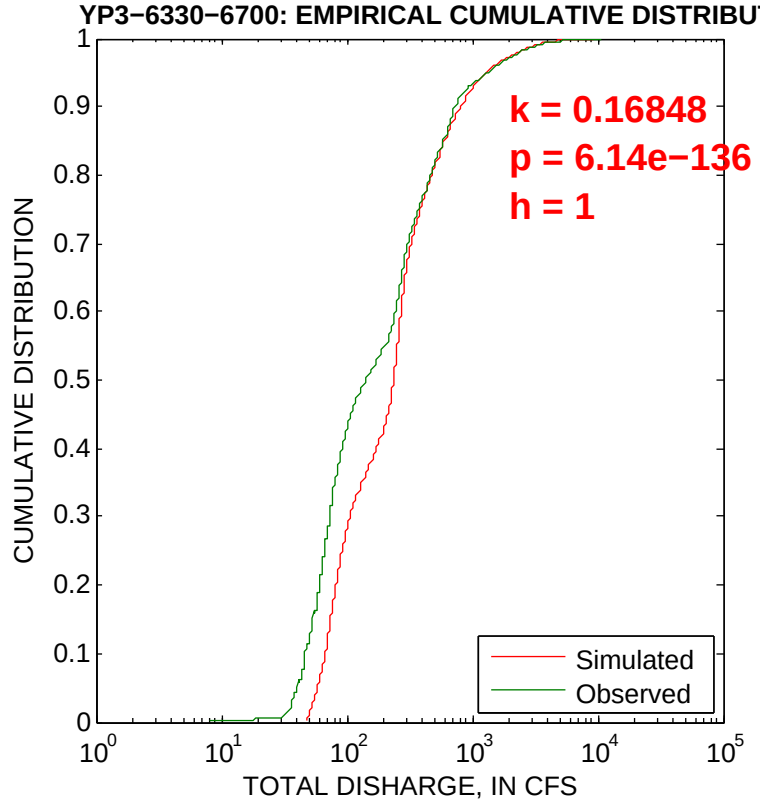












DATA SELECTION

scenario: P620171001WQ | file: _FLOW.calib

plot: FLOW - total discharge

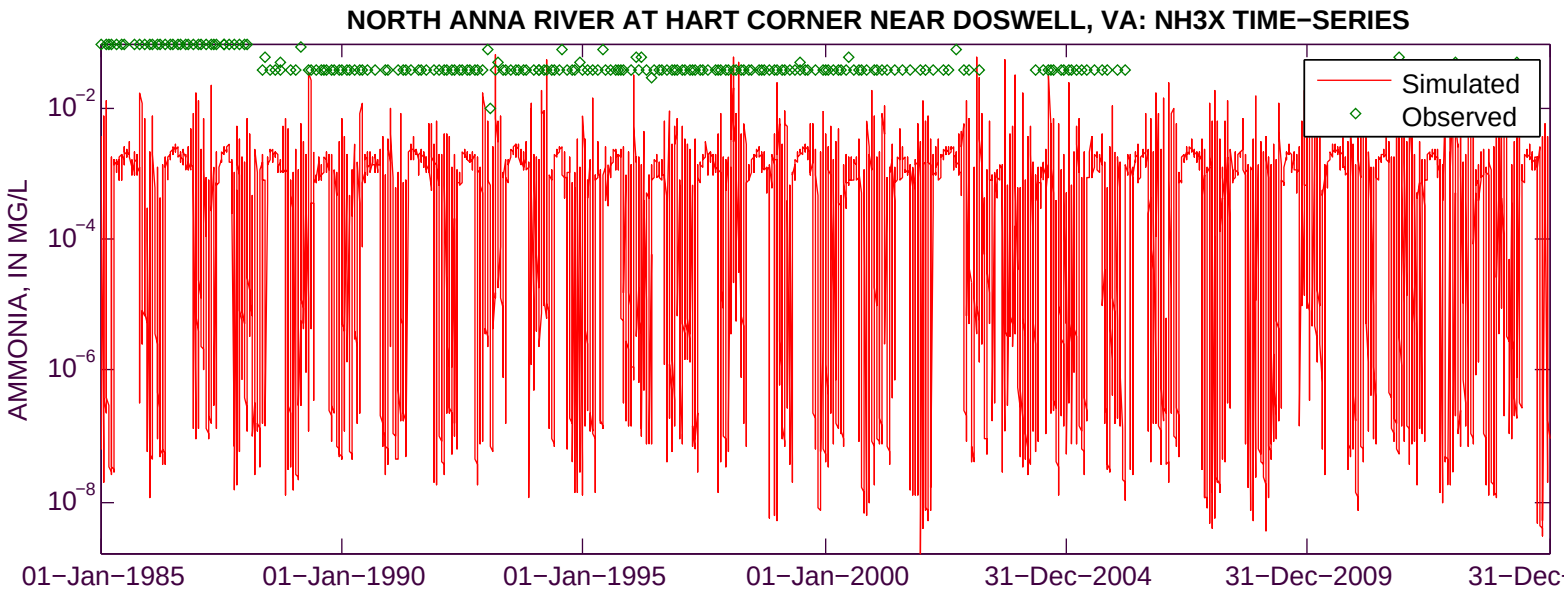
Dates: 1/1/1985 – 12/31/201

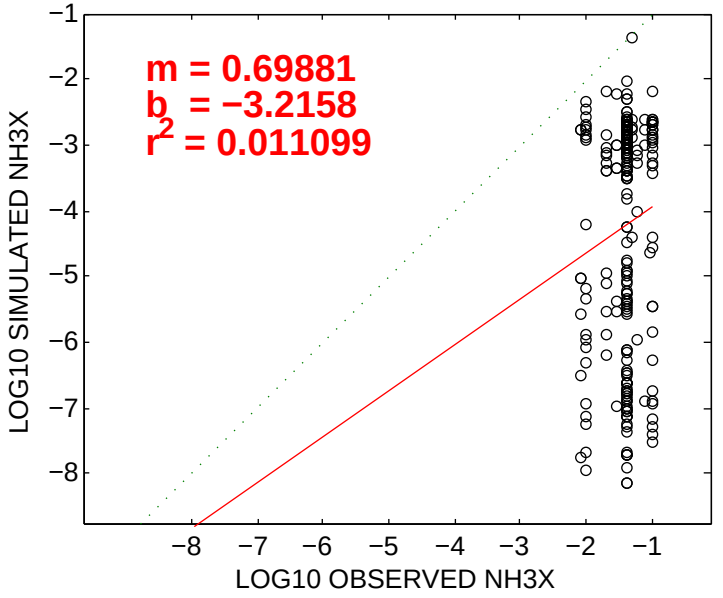
Drive: N/A | Directory: model | Observed: OBS20161101

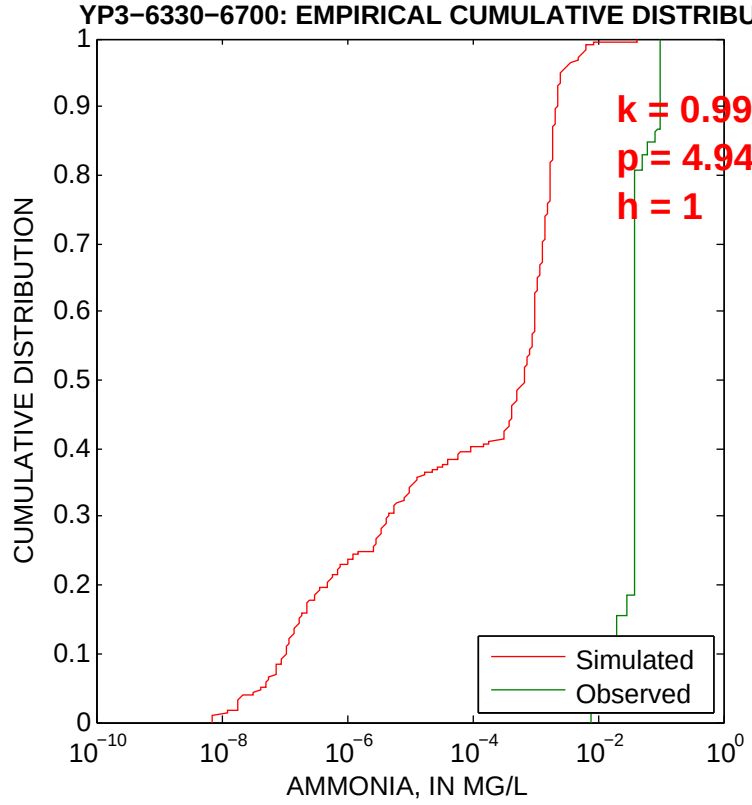
STATISTICS

		observe	simulate
n		10957	10957
min		7.6	45.186
		0.880814	1.655
mean		364.311	394.41
		2.23567	2.35043
media		142	237.89
		2.15229	2.37638
max		10900	9462.6
		4.03743	3.97601
varian		471813	410830
		0.241964	0.179742
JB		0.001	0.001
		0.001	0.001
		ra	log
%		8.26173	5.1327
err.va		120951	0.0673563
rel.std.err		0.256353	0.278373
mod.eff		0.743647	0.721627

VERSION 2.1







DATA SELECTION

scenario: P620171001WQ | file: NH3X.calib

plot: NH3X - ammonia

Dates: 1/1/1985 | 12/31/201

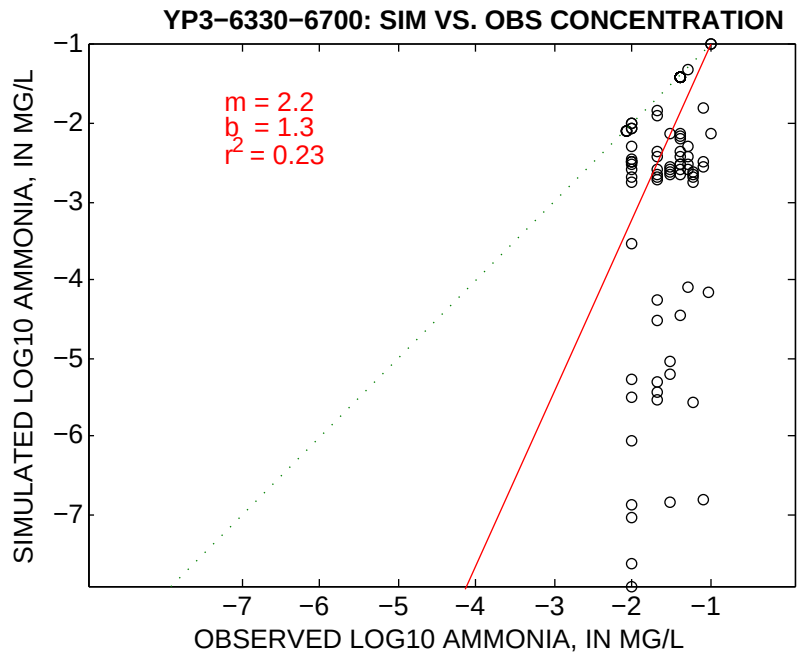
Drive | Directory: N/A | model | Observed: OBS20161101

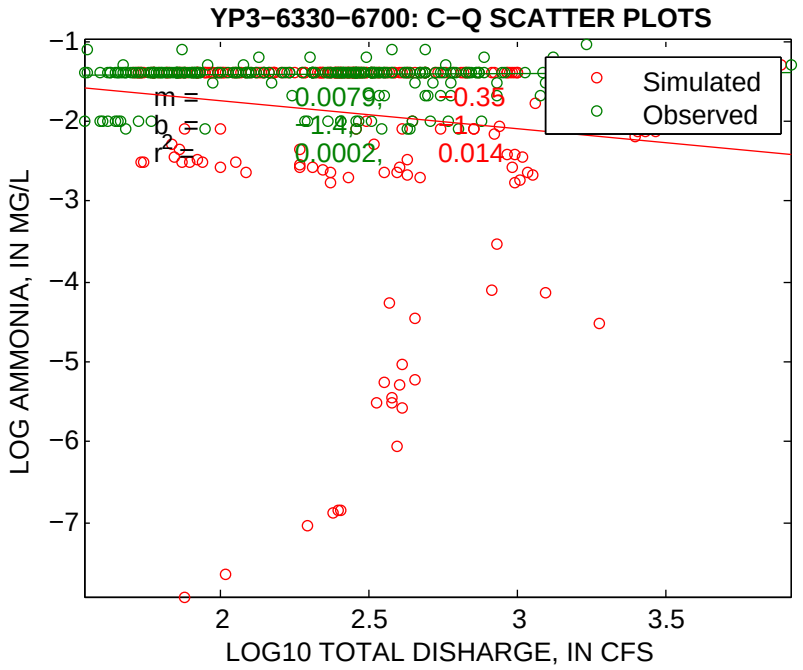
STATISTICS

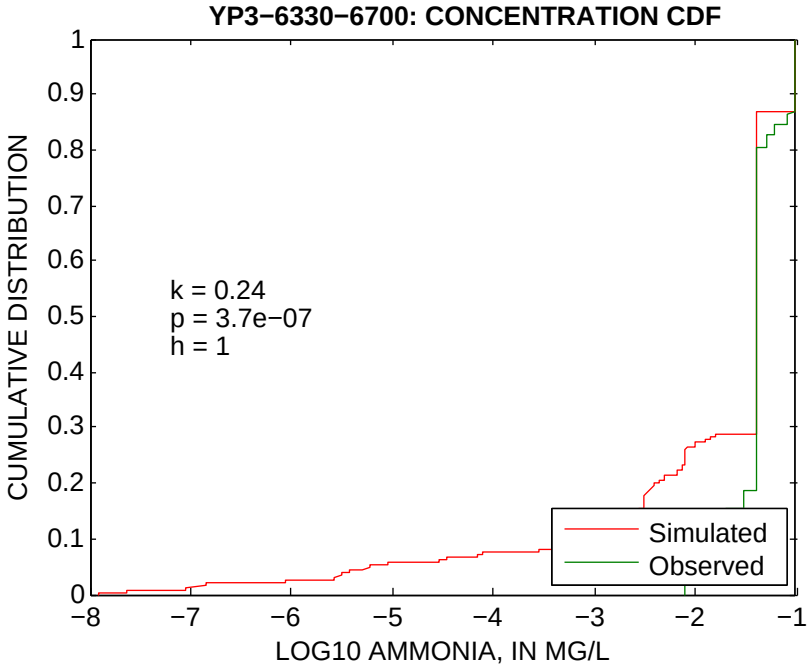
n	262	262
	observe	simulate
min	0.008	7.446e-09
	-2.09691	-8.12808
mean	0.0448702	0.00112373
	-1.41894	-4.20735
media	0.04	0.00067881
	-1.39794	-3.16827
max	0.1	0.042704
	-1	-1.36953
varian	0.00062587	8.25646e-0
	0.0707266	3.11193
JB	0.001	0.001
	0.001	0.001
	ra	log
%	-97.4956	196.513
err.va	0.0025503	10.8888
rel.std.err	4.07477	153.957
mod.eff	-3.07477	-152.957

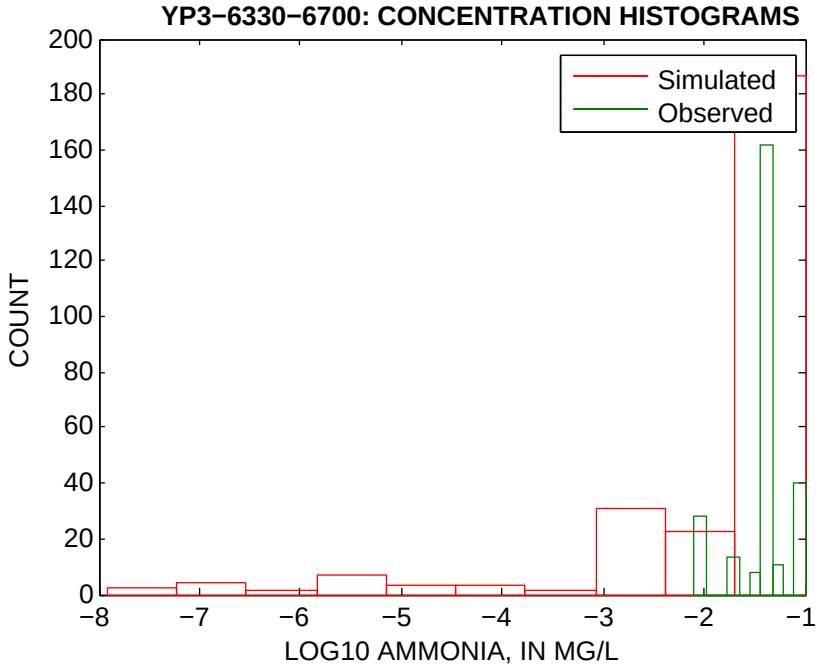
VERSION 2.1

ALL DATA
LOG10

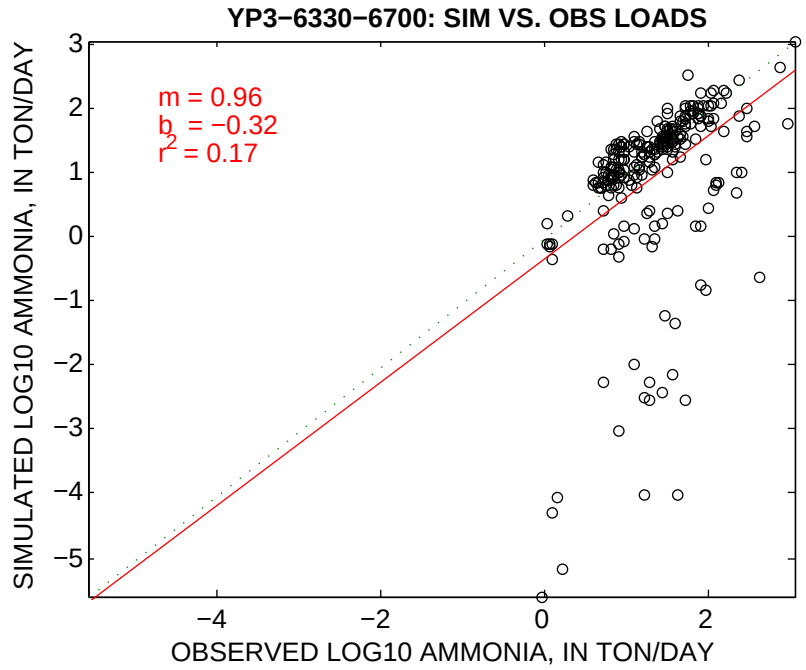


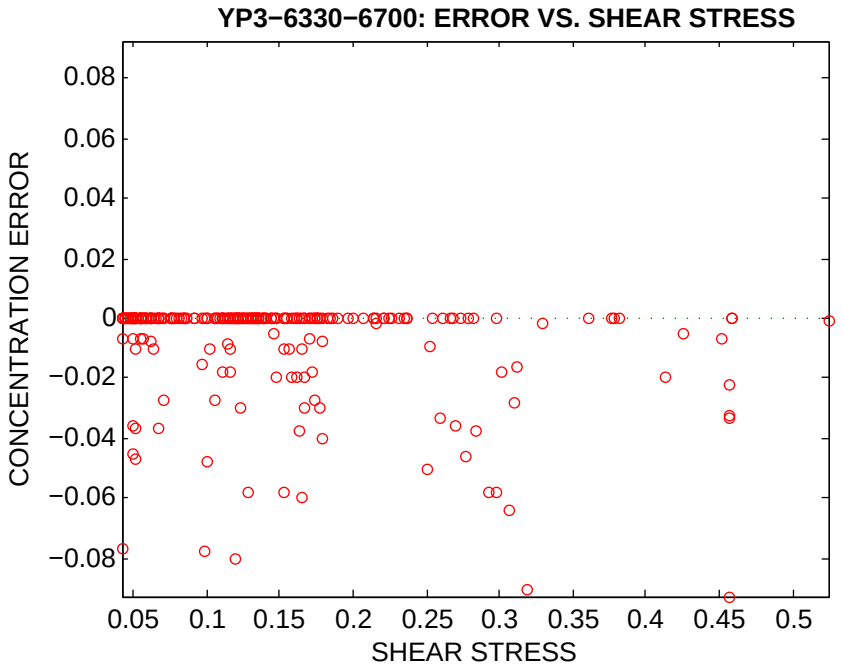


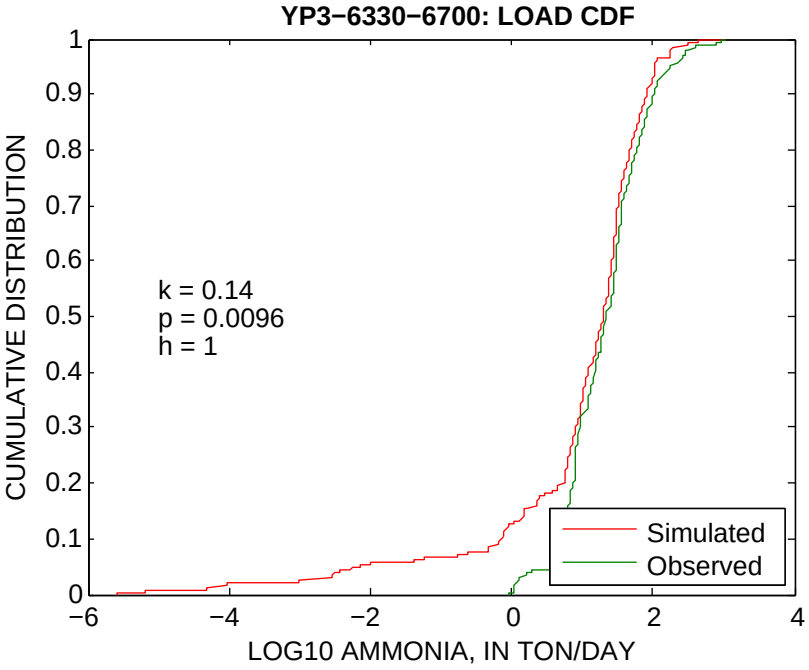


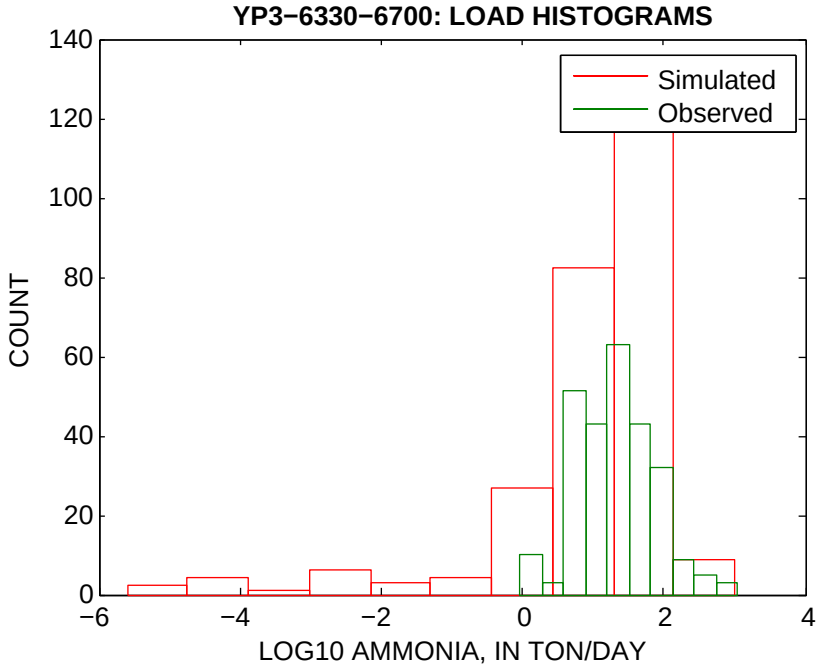


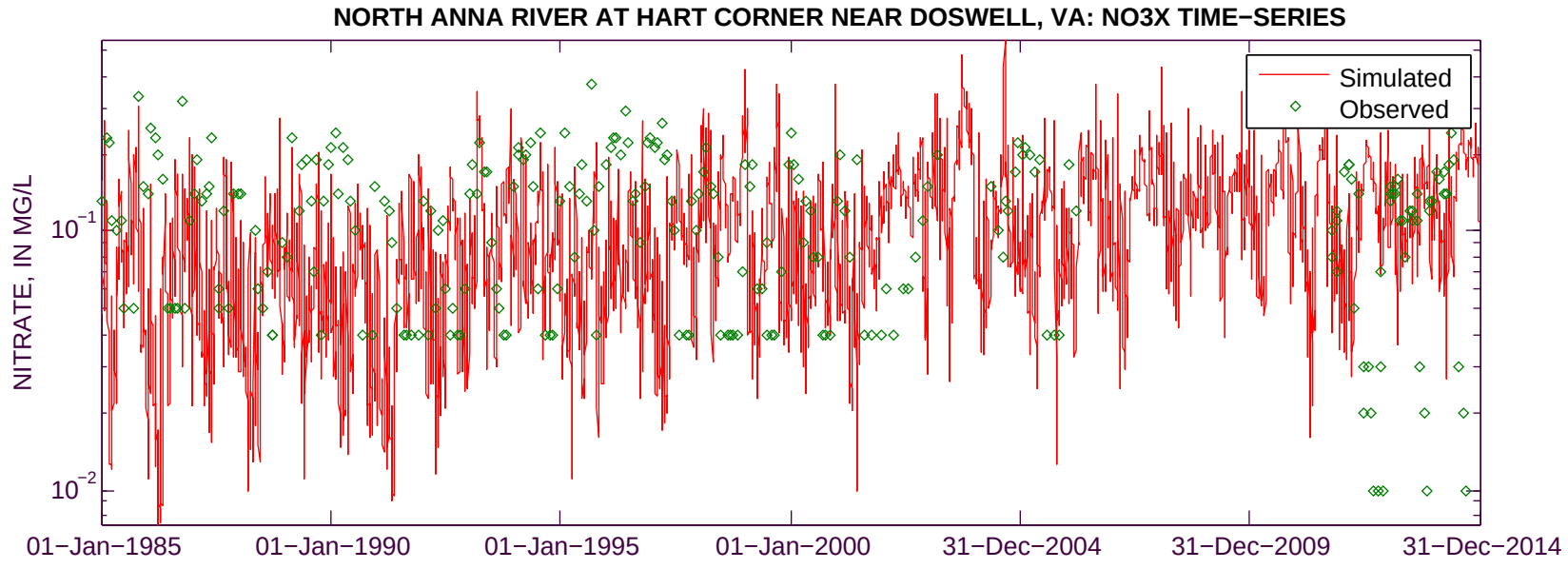
LOAD DATA
LOG10

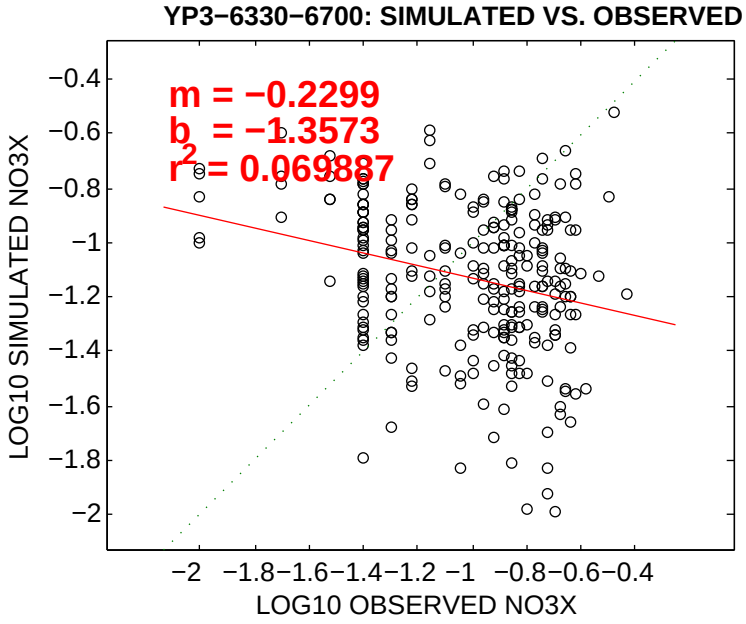


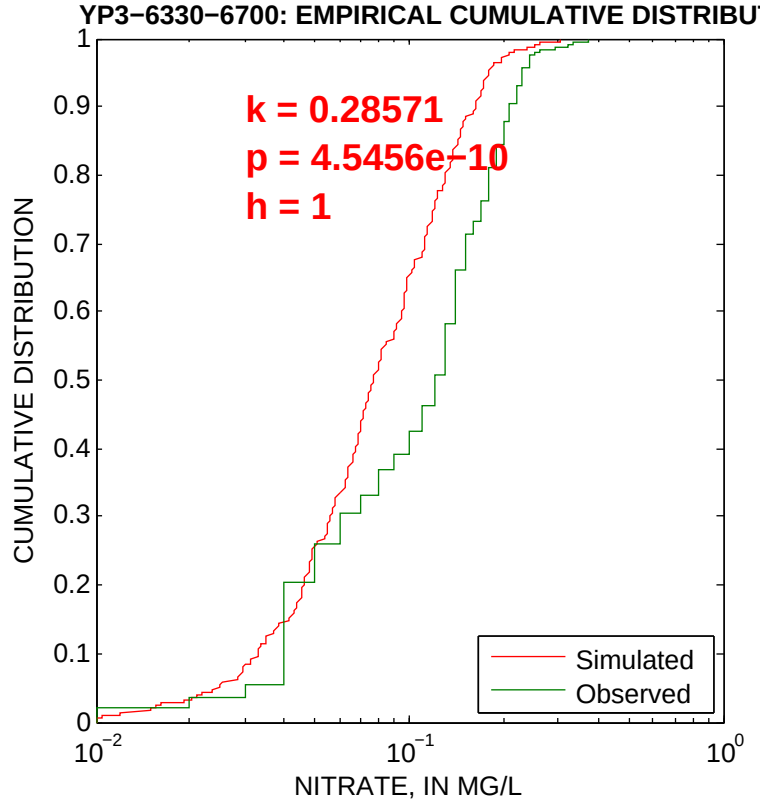












DATA SELECTION

scenario: P620171001WQ | file: NO3X.calib

plot: NO3X - nitrate

Dates: 1/1/1985 – 12/31/201

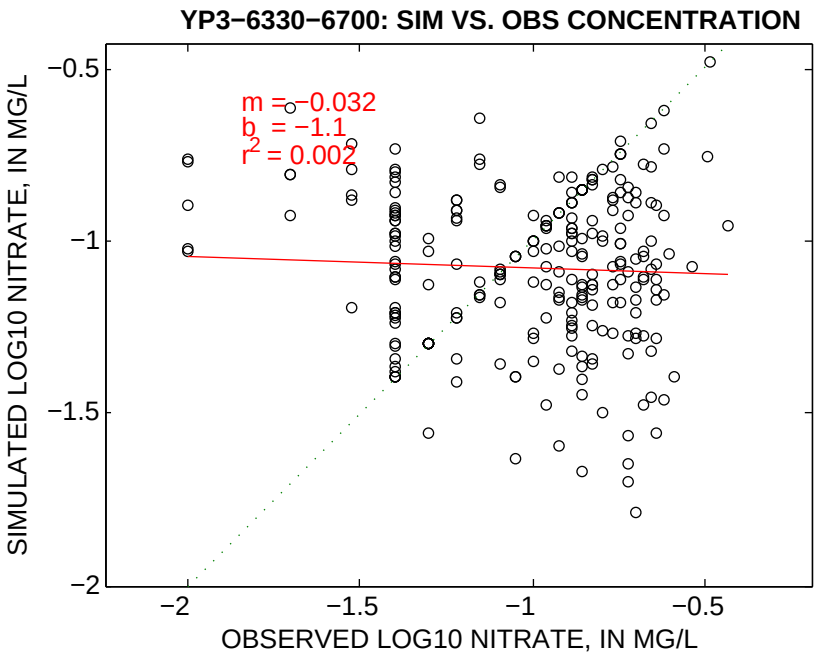
Drive | Directory | Observed: N/A | model | OBS20161101

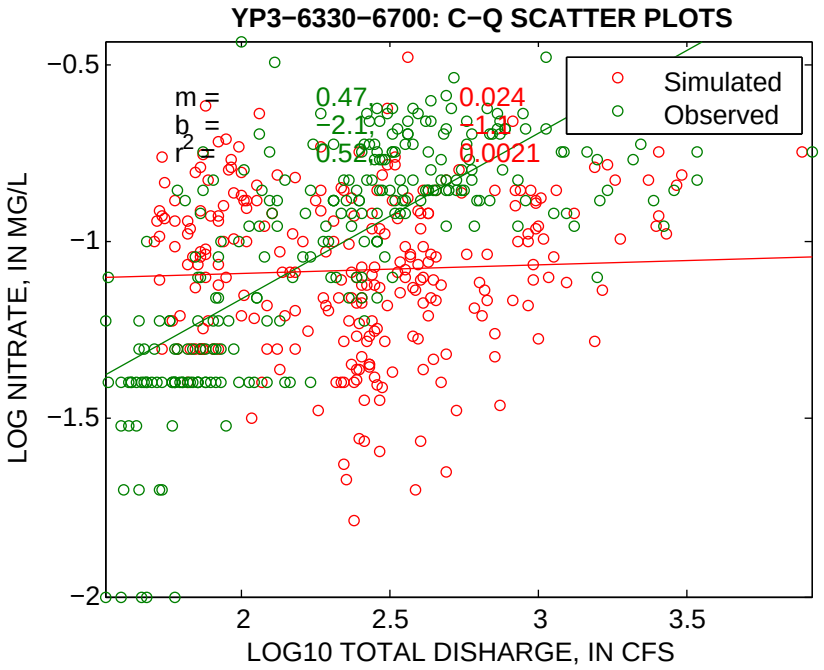
STATISTICS

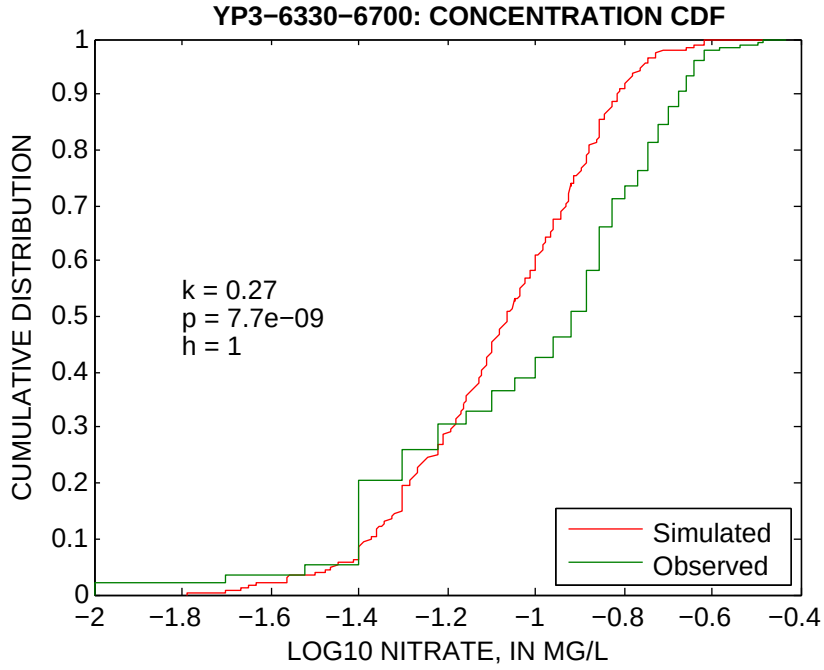
		observe	simulate
n		266	266
min		0.01	0.01013
		-2	-1.99439
mean		0.119962	0.0892245
		-1.01242	-1.12454
media		0.12	0.0772625
		-0.920819	-1.11203
max		0.37	0.30265
		-0.431798	-0.519059
varian		0.0047249	0.00255917
		0.0967779	0.0731895
JB		0.012813	0.001
		0.001	0.005252
		ra	log
%		-25.623	11.0745
err.va		0.00946007	0.227084
rel.std.err		2.00217	2.34644
mod.eff		-1.00217	-1.34644

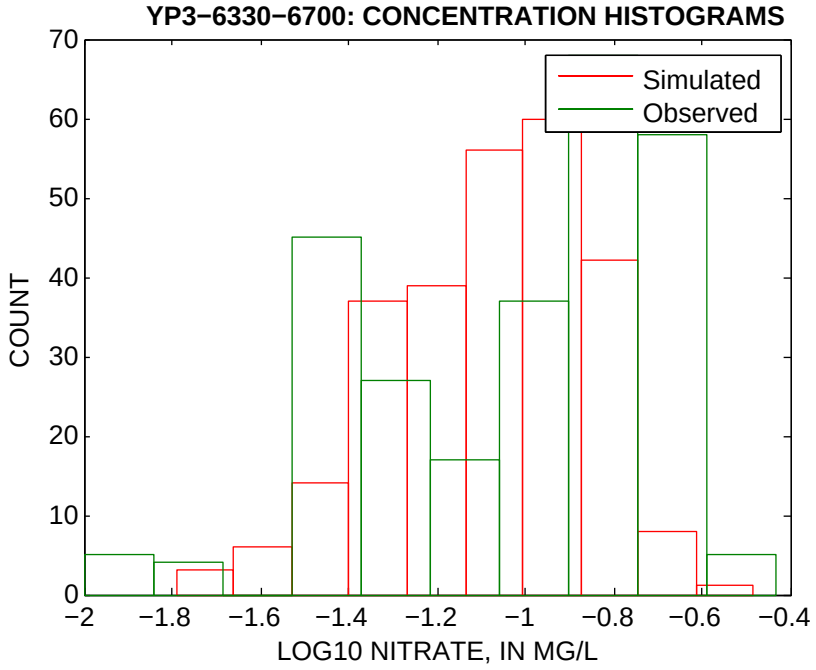
VERSION 2.1

ALL DATA
LOG10

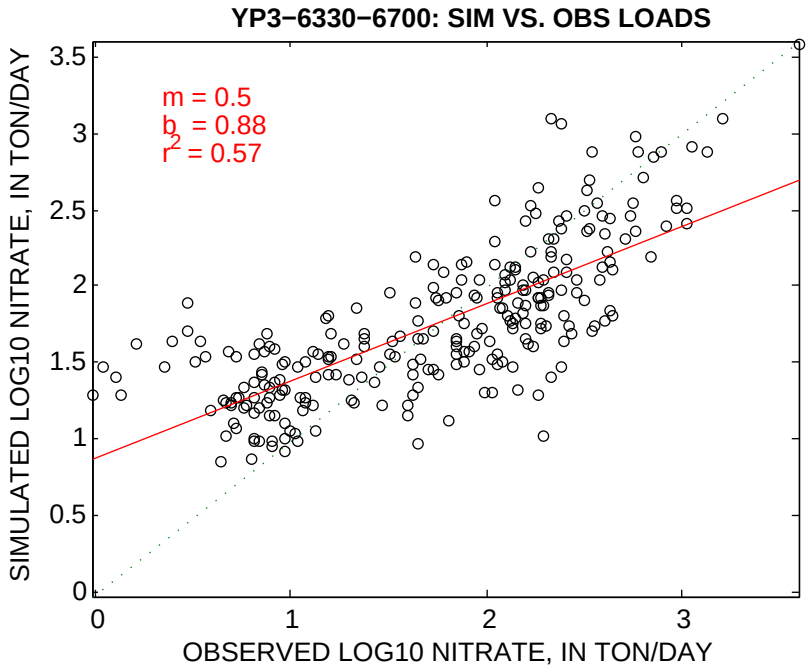


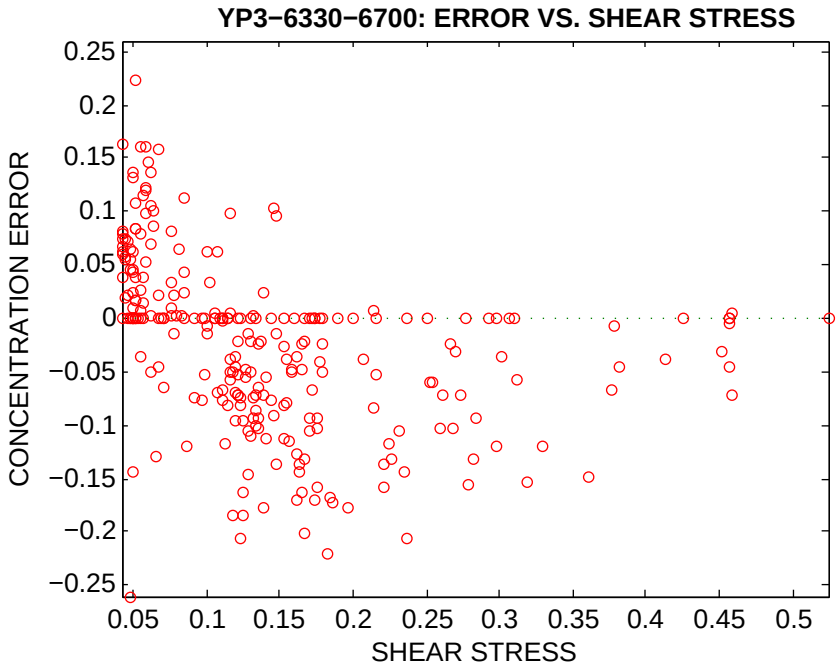


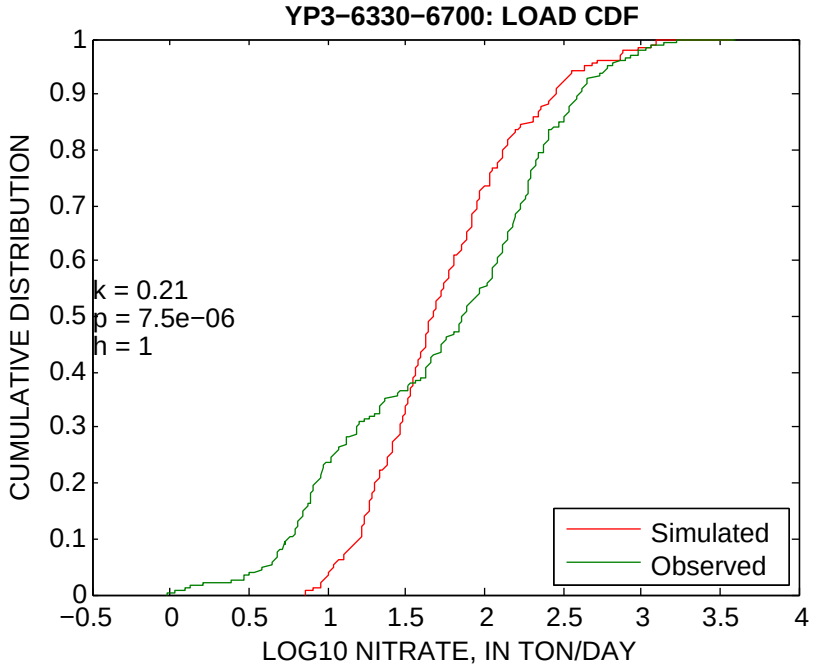


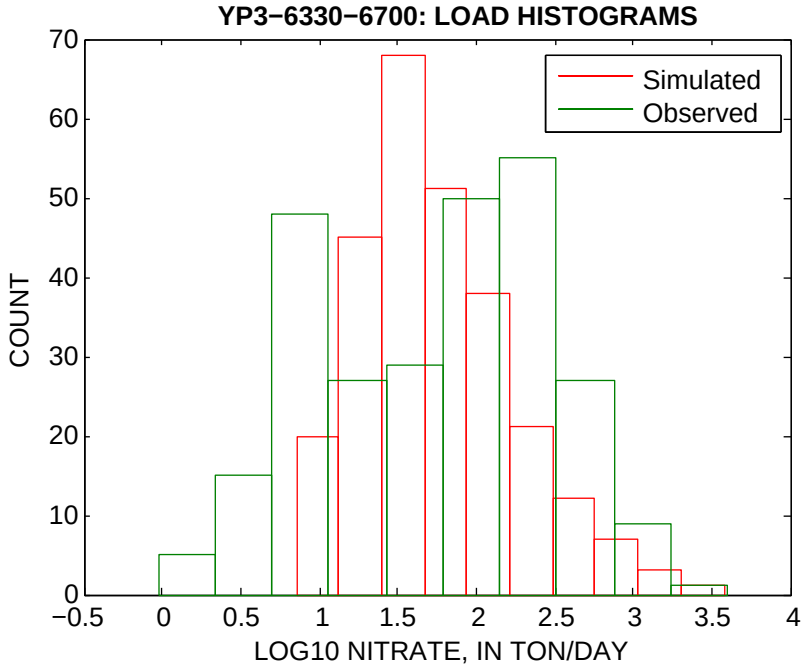


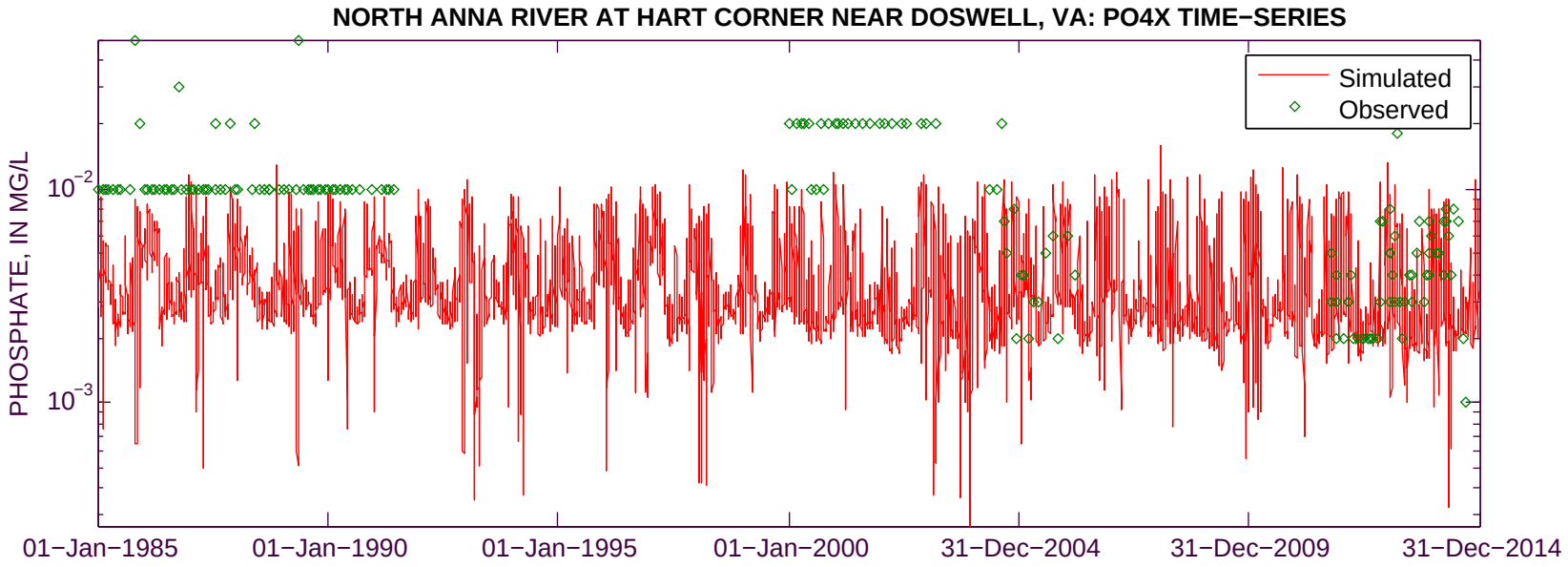
LOAD DATA
LOG10

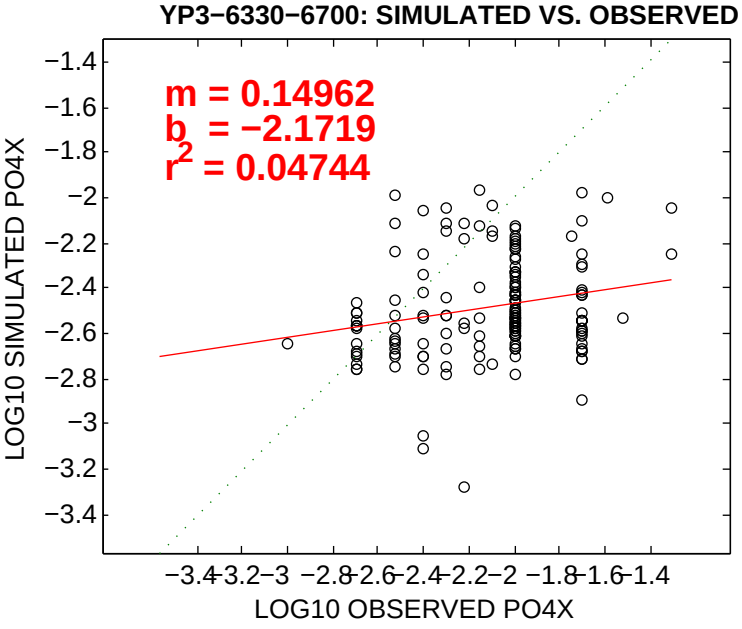


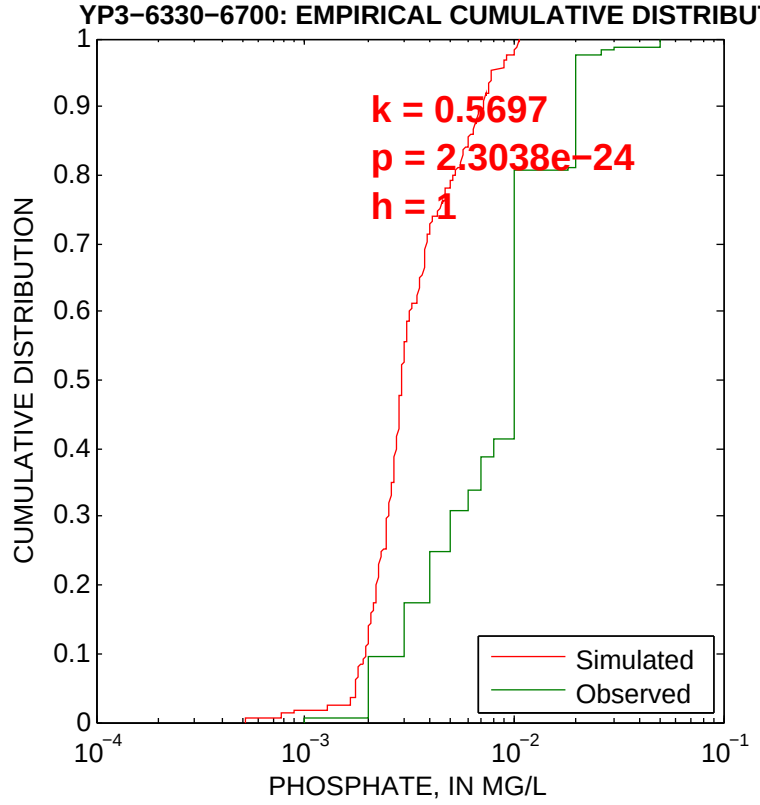












DATA SELECTION

scenario	file
P620171001WQ	PO4X.calib

plot: PO4X - phosphate

Dates: 1/1/1985 – 12/31/201

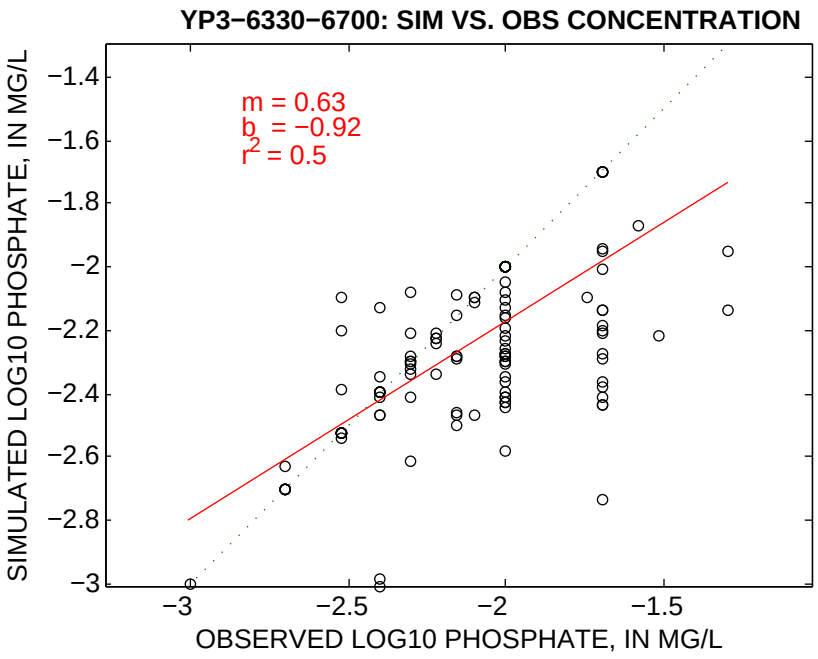
Drive	Directory	Observed
N/A	model	OBS20161101

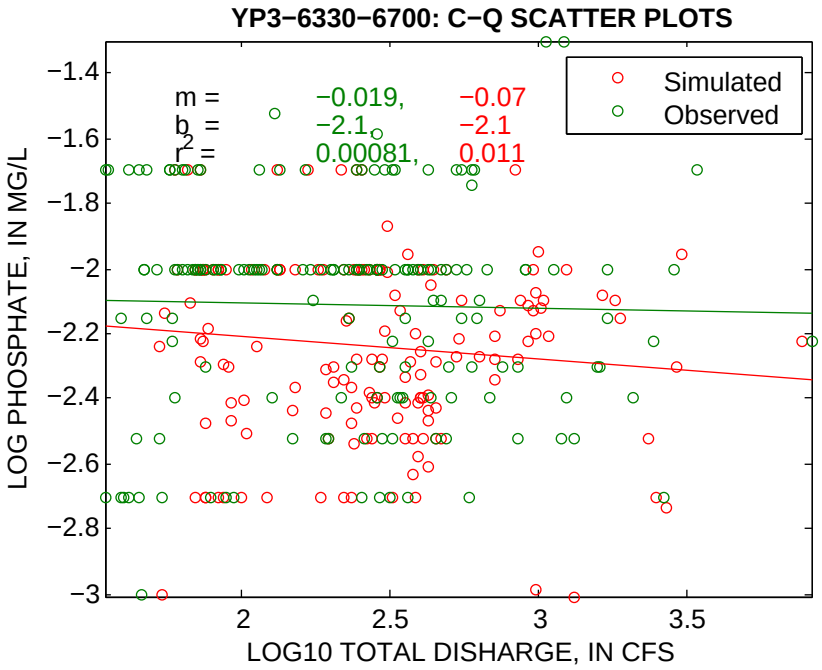
STATISTICS

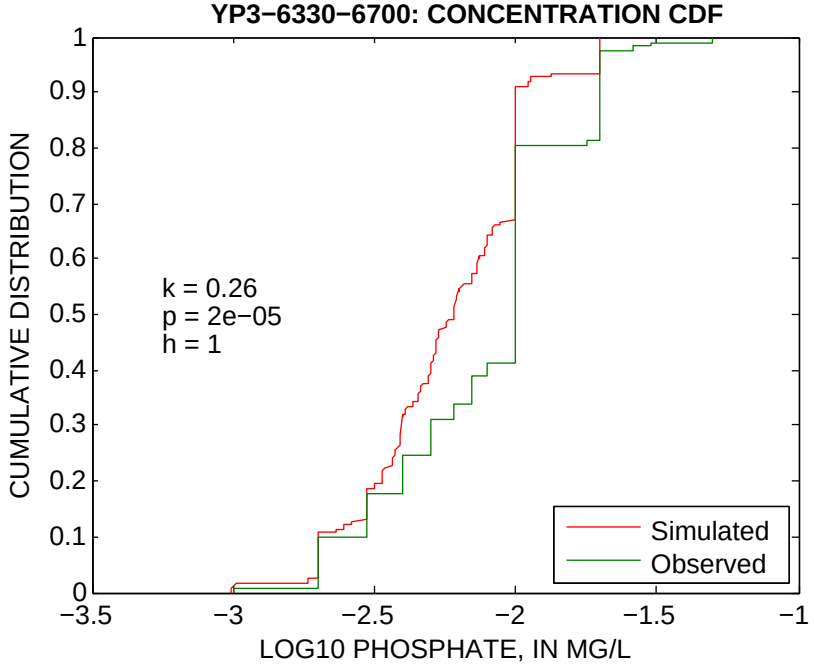
	n	165	165
		observe	simulate
min		0.001	0.00052582
		-3	-3.27916
mean		0.01	0.00371836
		-2.10988	-2.4876
media		0.01	0.0029172
		-2	-2.53503
max		0.05	0.010693
		-1.30103	-1.9709
varian		5.57805e-0	4.38831e-0
		0.104032	0.0490881
JB		0.001	0.001
		0.158258	0.122005
		ra	log
%		-62.8164	17.9024
err.va		9.42299e-0	0.265532
rel.std.err		1.6893	2.5524
mod.eff		-0.689298	-1.5524

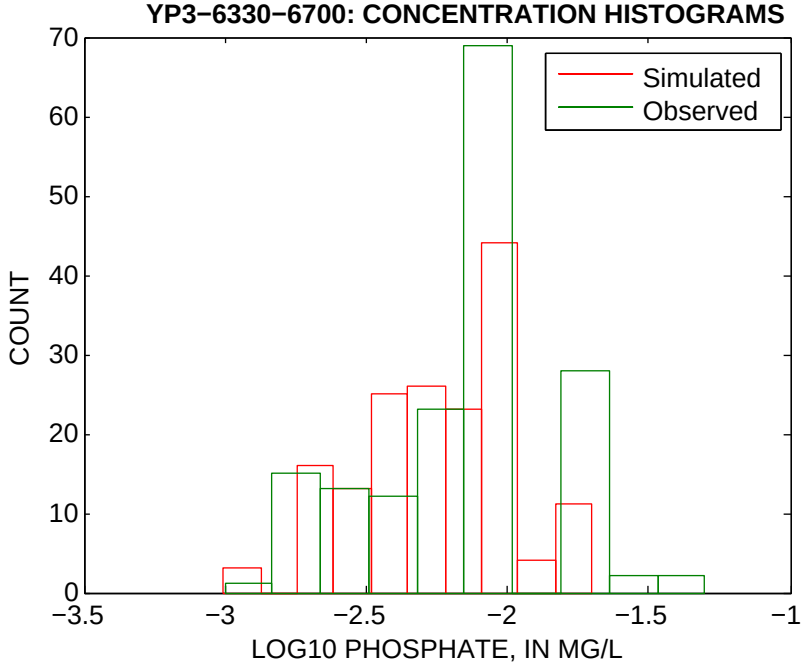
VERSION 2.1

ALL DATA
LOG10

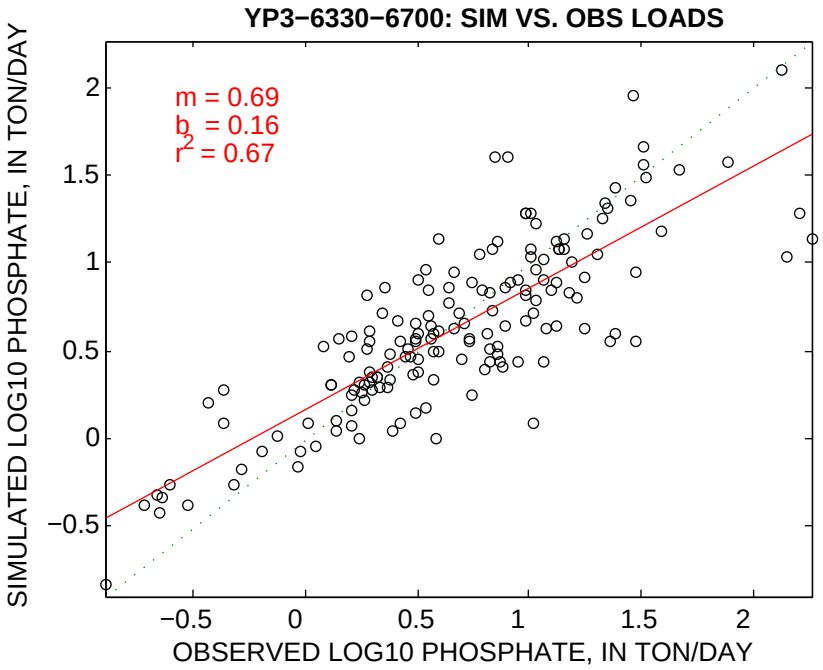


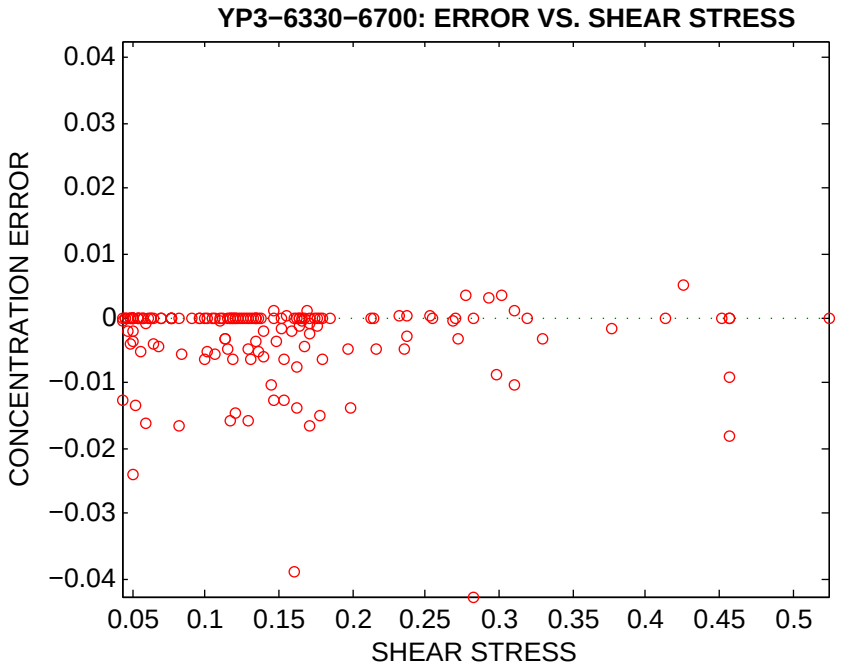


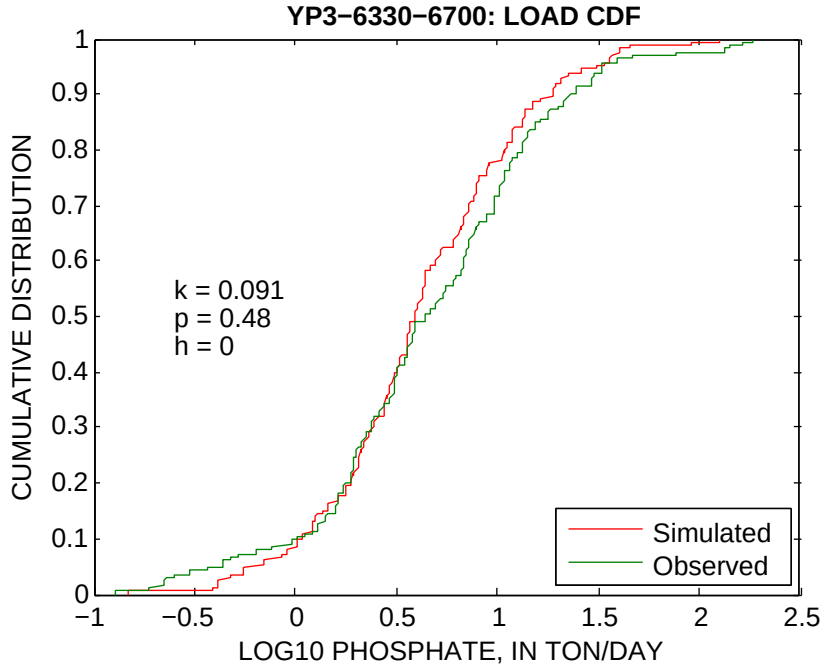


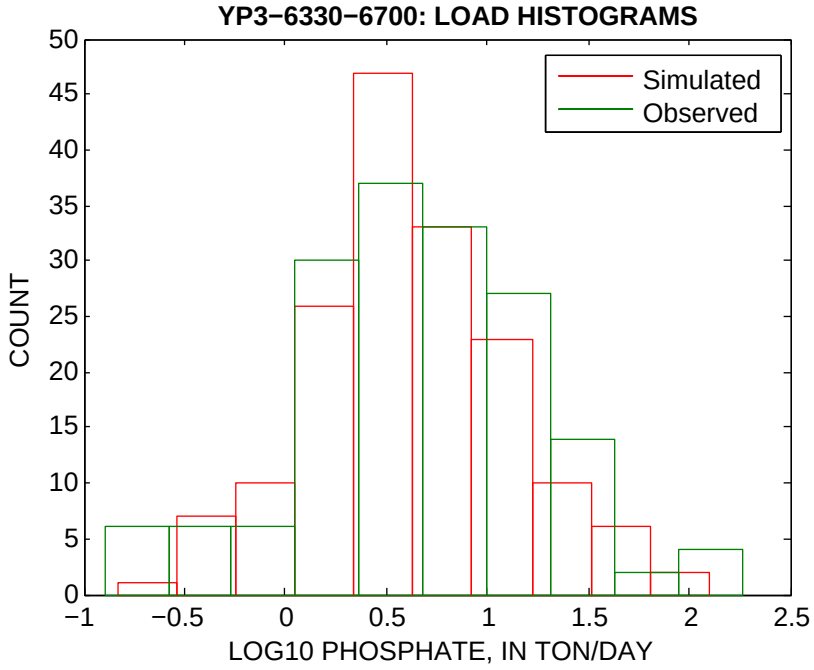


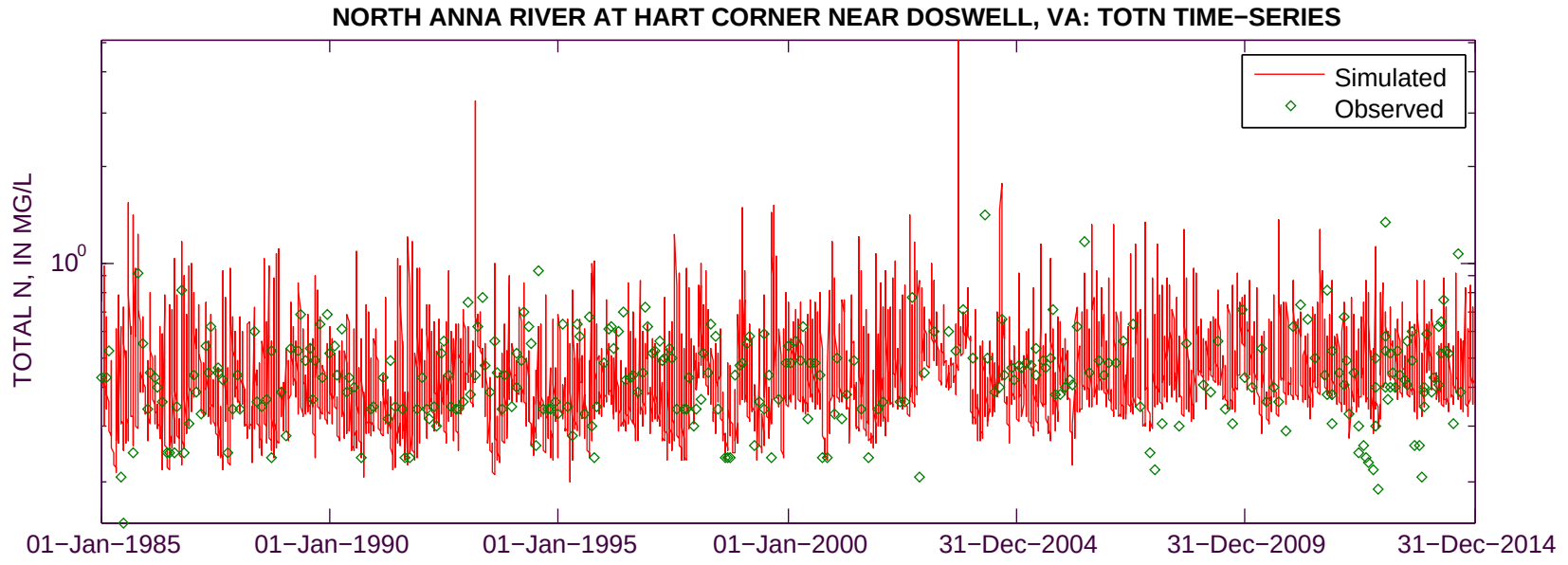
LOAD DATA
LOG10

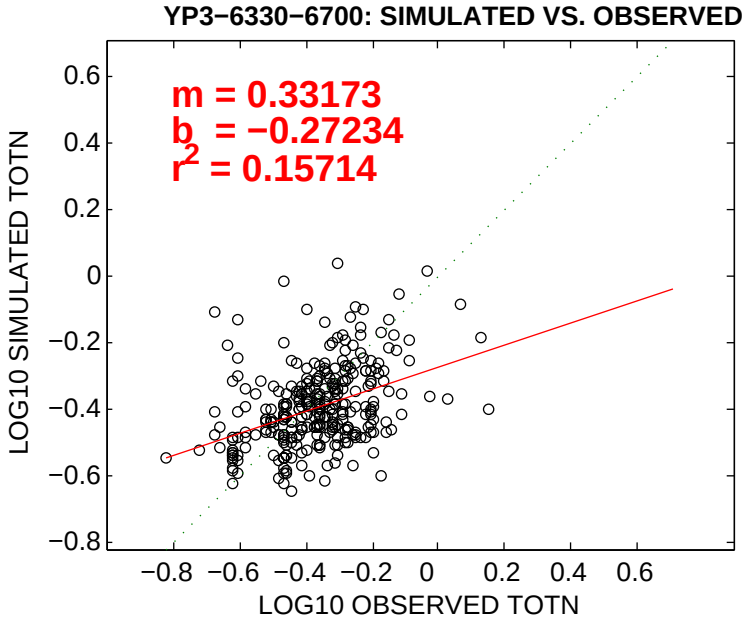


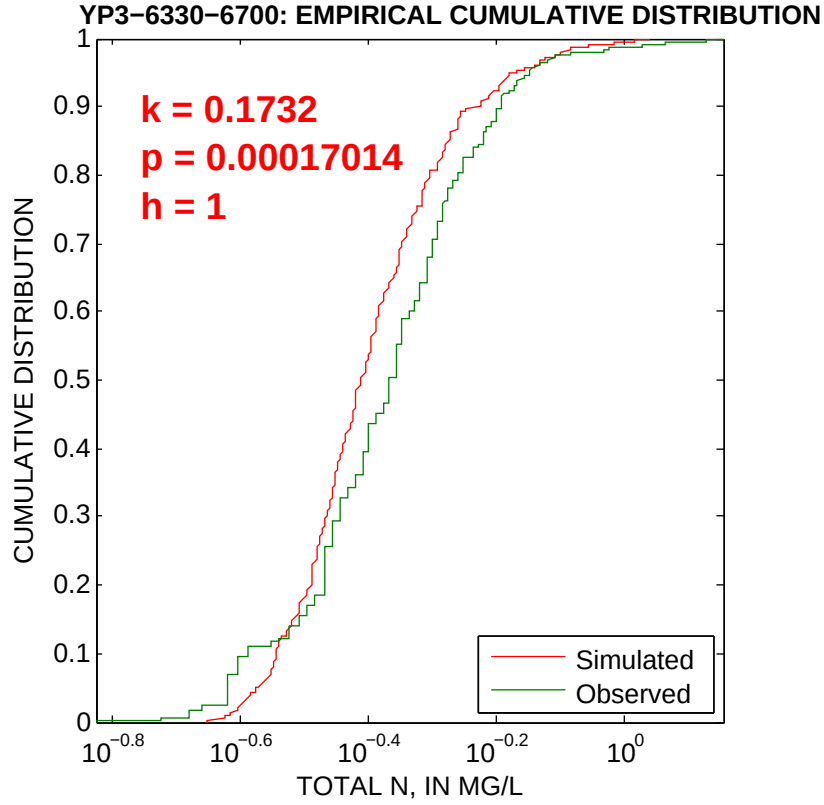












DATA SELECTION

scenario	file
P620171001WQ	TOTN.calib

plot: TOTN - total nitrogen

Dates: 1/1/1985 – 12/31/201

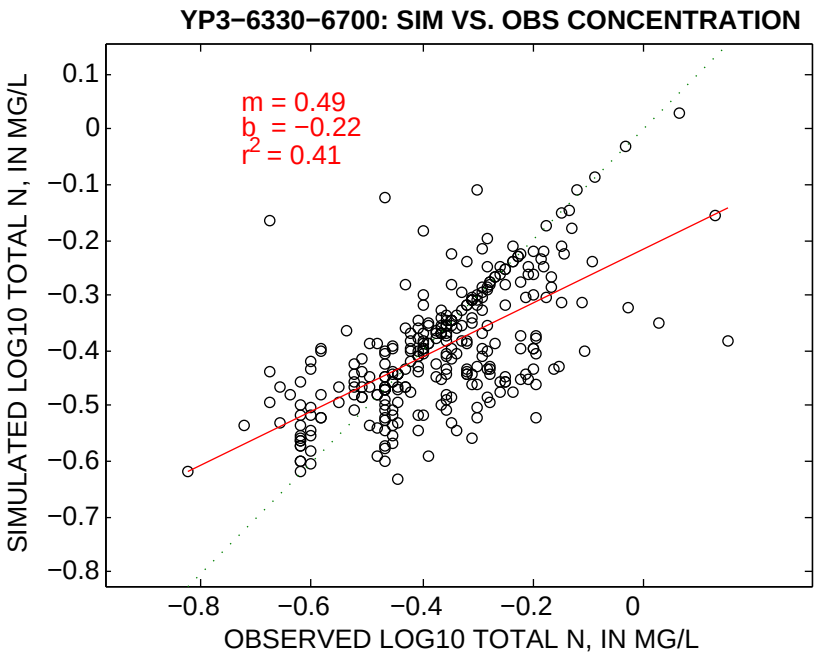
Drive	Directory	Observed
N/A	model	OBS20161101

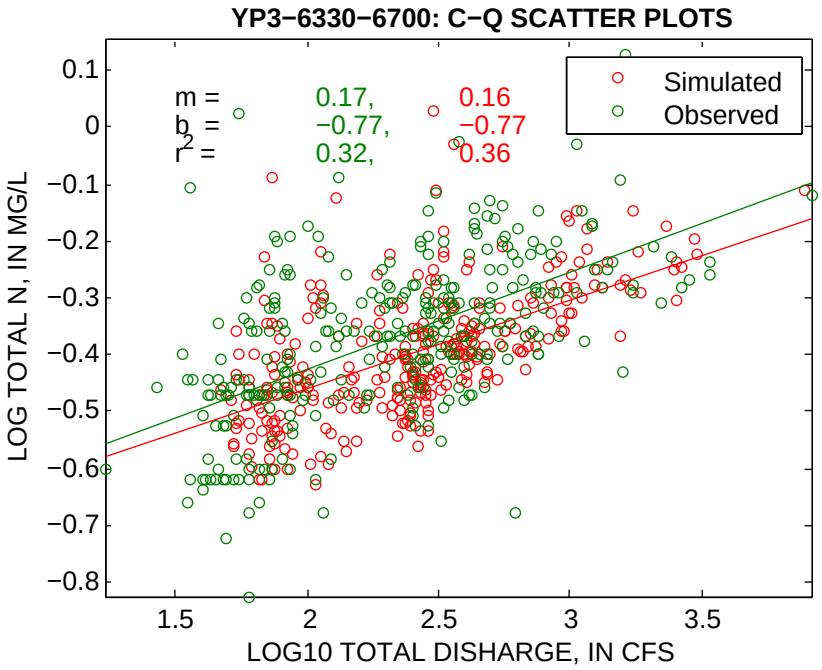
STATISTICS

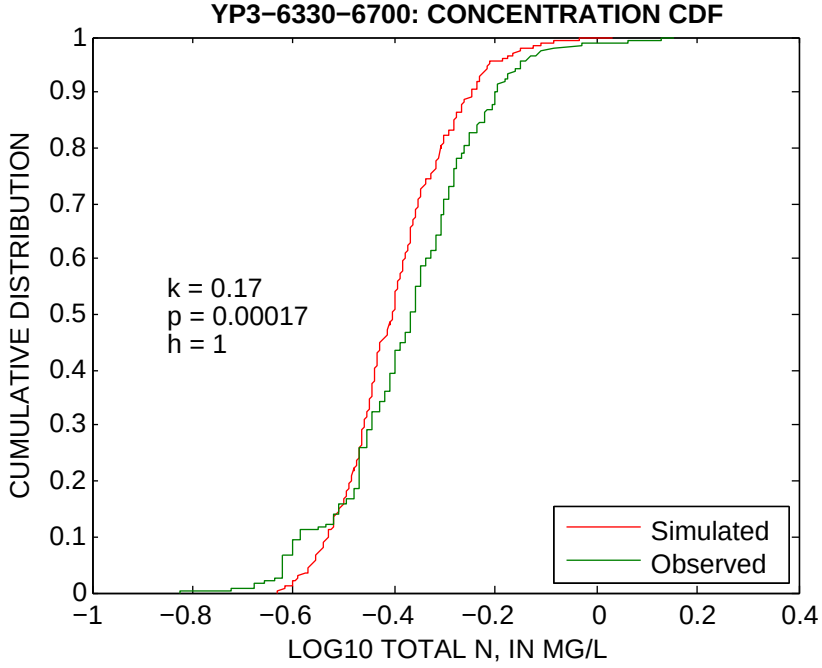
	n	observe	simulate
		306	306
min		0.15	0.22456
		-0.823909	-0.648668
mean		0.451716	0.419851
		-0.369953	-0.395068
media		0.43	0.387015
		-0.366532	-0.412272
max		1.42	1.0895
		0.152288	0.0372272
varian		0.0268853	0.0176807
		0.021148	0.0148102
JB		0.001	0.001
		0.033607	0.001
		ra	log
%		-7.05408	6.78876
err.va		0.0292247	0.0225602
rel.std.err		1.08701	1.06678
mod.eff		-0.0870126	-0.0667792

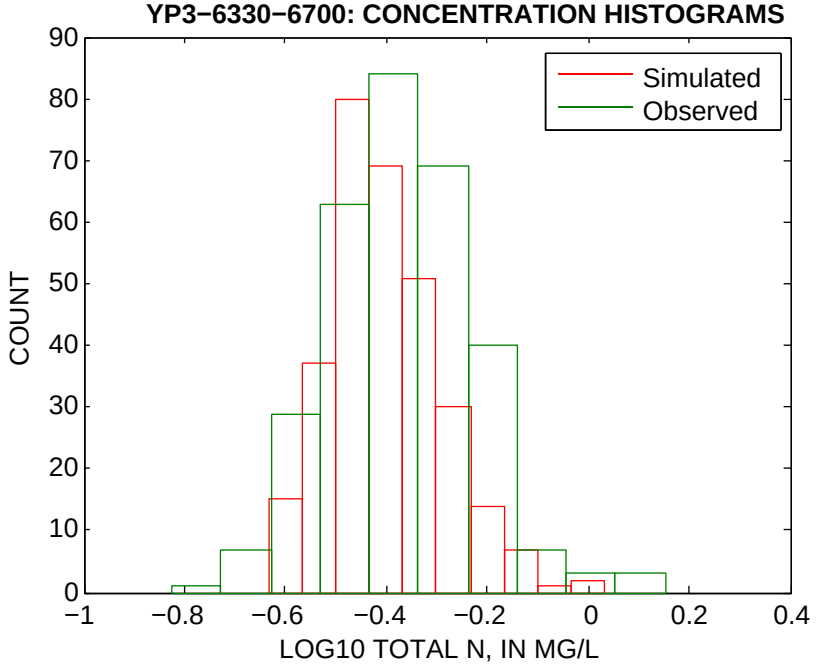
VERSION 2.1

ALL DATA
LOG10

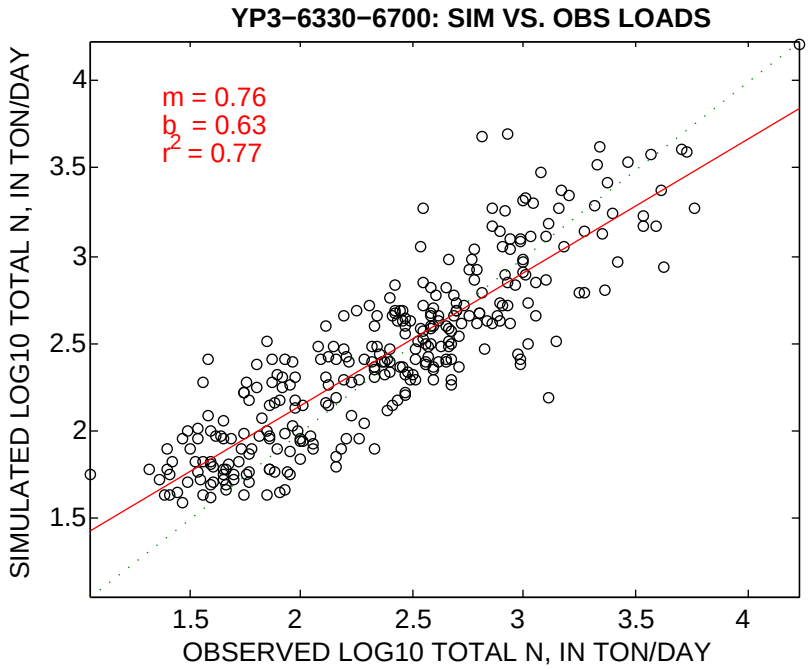


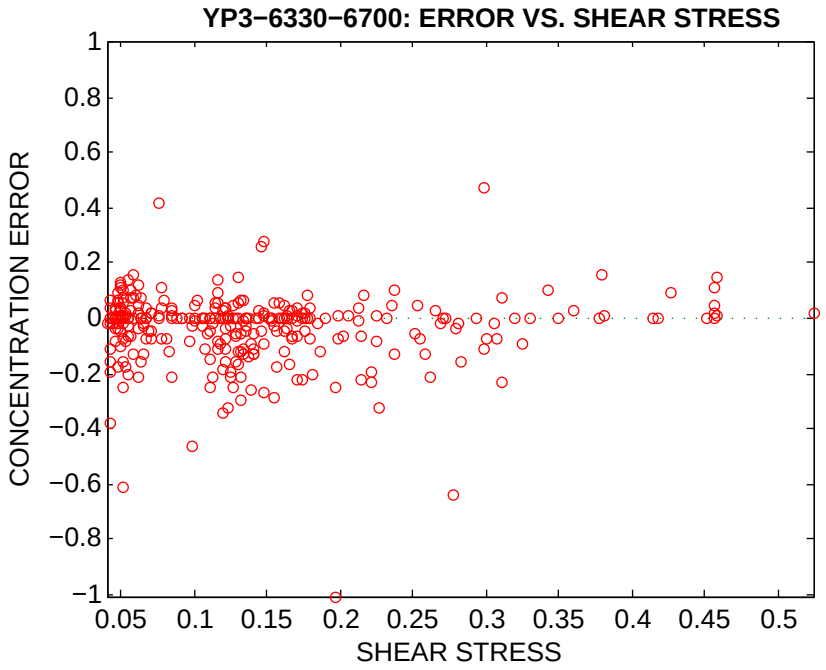


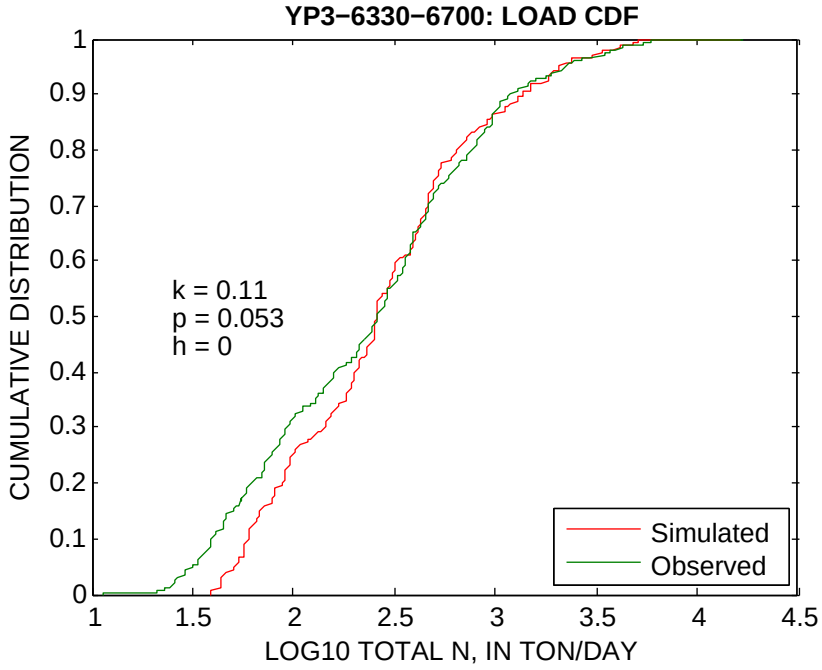


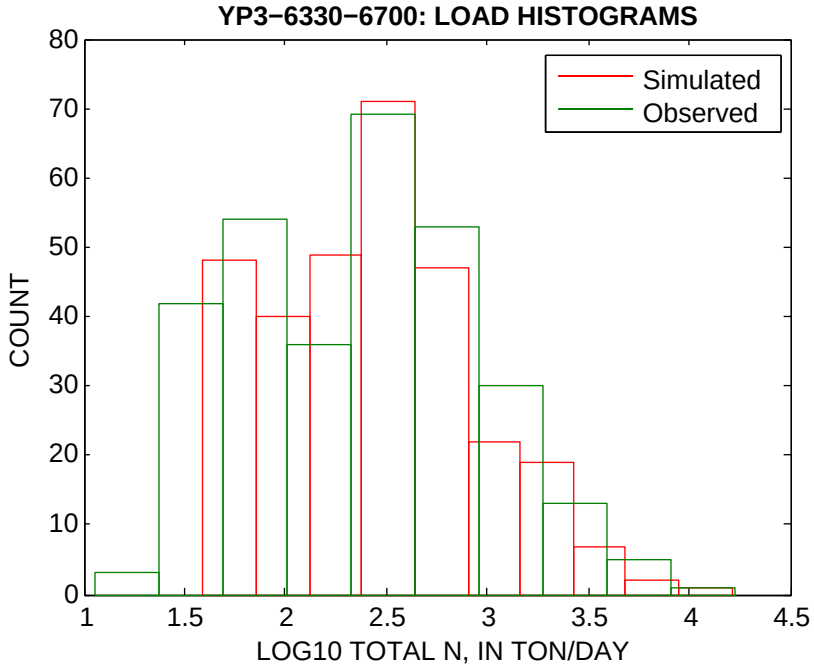


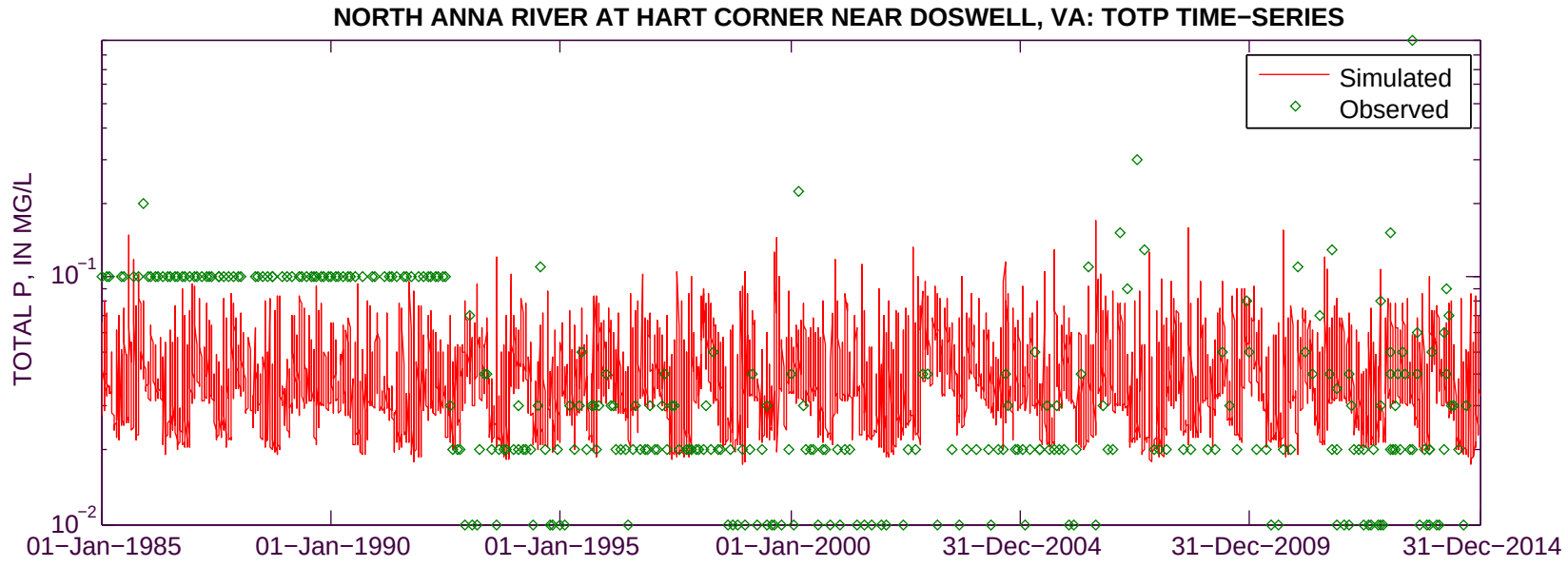
LOAD DATA
LOG10

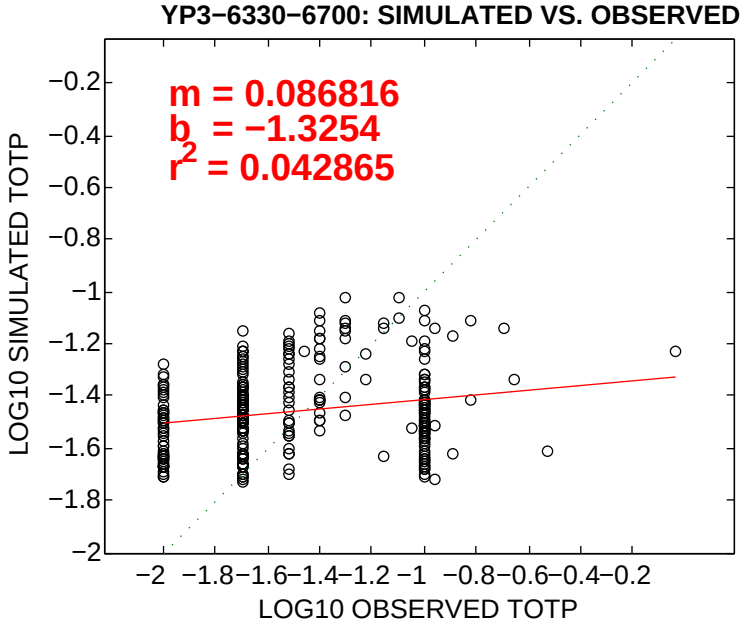


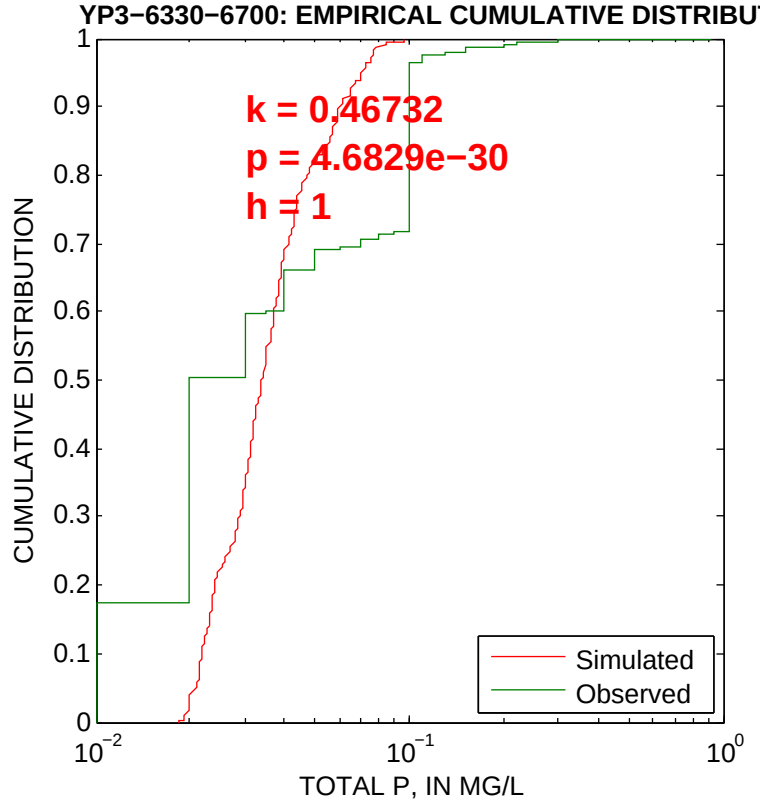












DATA SELECTION

scenario	file
P620171001WQ	TOTP.calib

plot: TOTP - total phosphorus

Dates: 1/1/1985 – 12/31/201

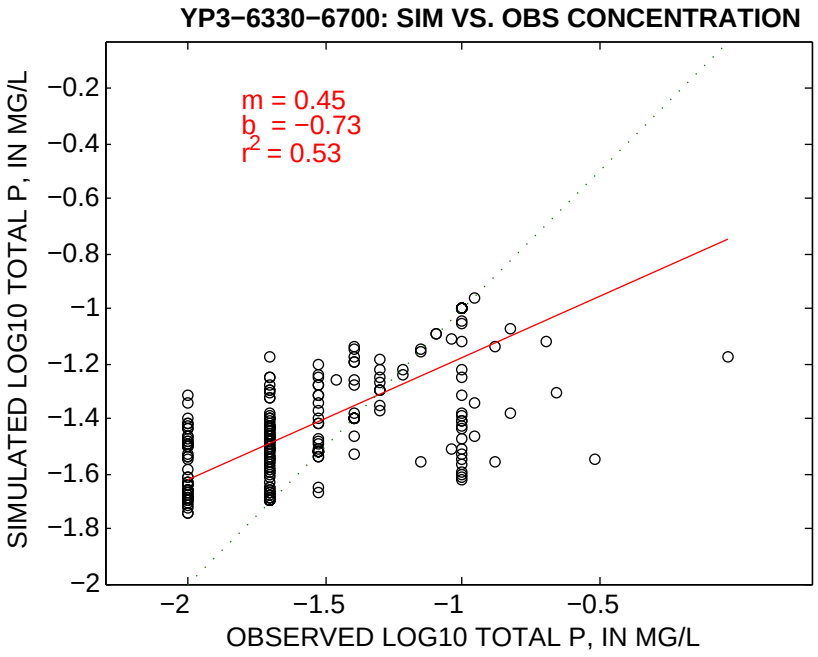
Drive	Directory	Observed
N/A	model	OBS20161101

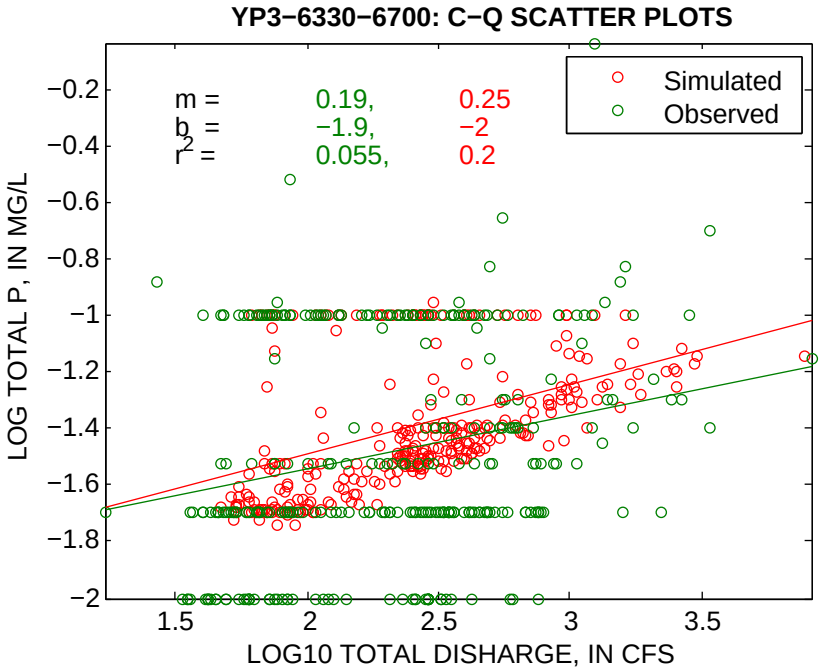
STATISTICS

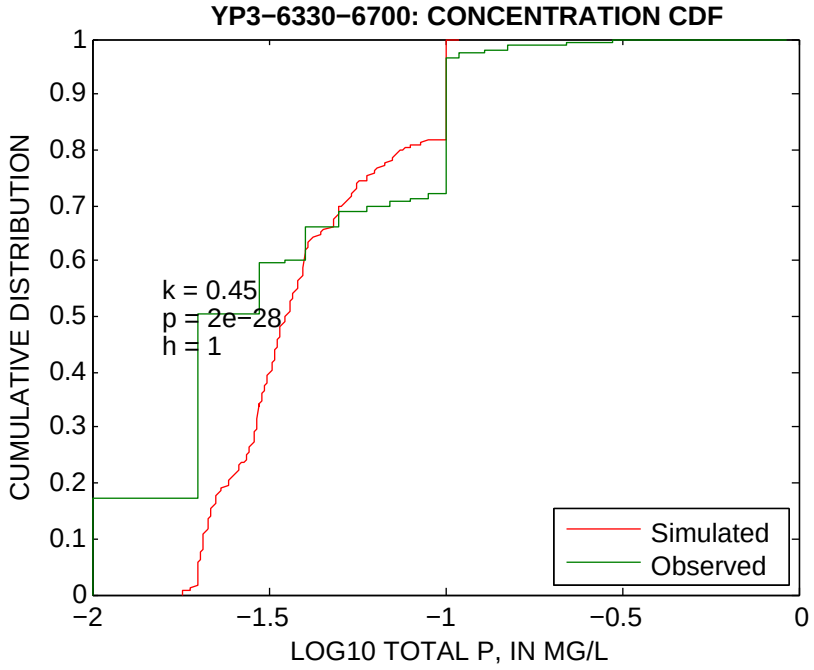
	n	observe	simulate
		306	306
min		0.01	0.018551
		-2	-1.73163
mean		0.0500817	0.0377617
		-1.482	-1.45401
media		0.02	0.0339065
		-1.69897	-1.46972
max		0.92	0.095854
		-0.0362122	-1.01839
varian		0.0042545	0.00023469
		0.146577	0.0257728
JB		0.001	0.001
		0.005581	0.006830
		ra	log
%		-24.5999	-1.88859
err.va		0.00437216	0.147686
rel.std.err		1.02766	1.00756
mod.eff		-0.0276557	-0.00756094

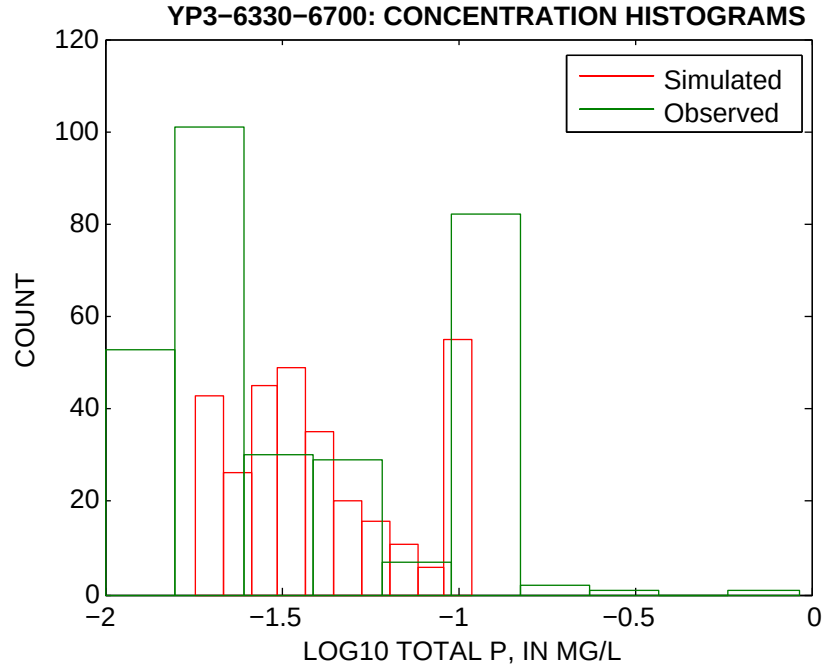
VERSION 2.1

ALL DATA
LOG10

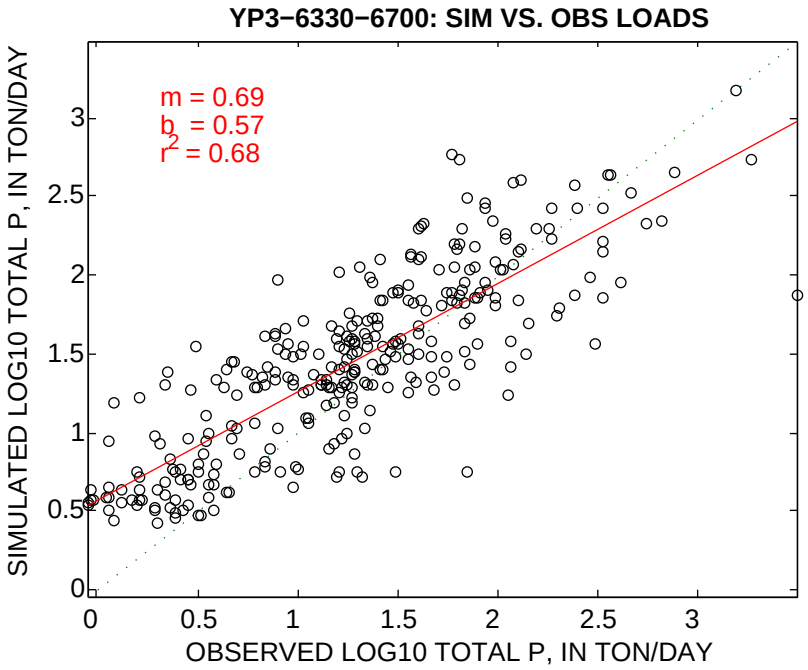


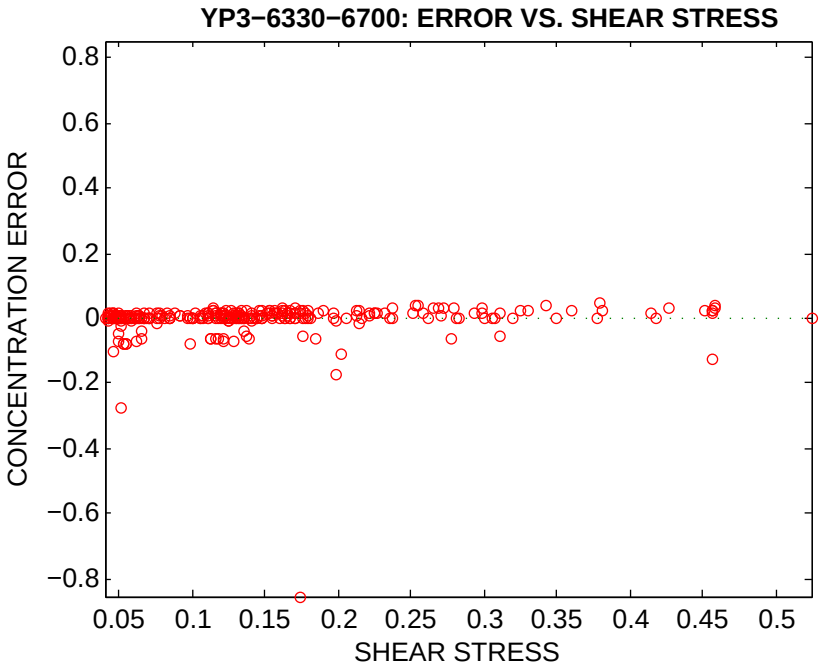


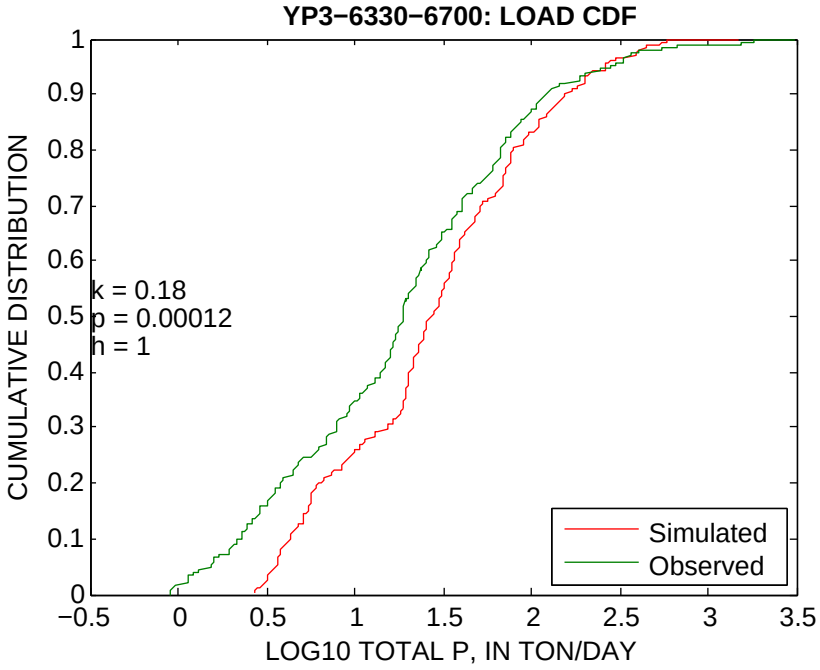


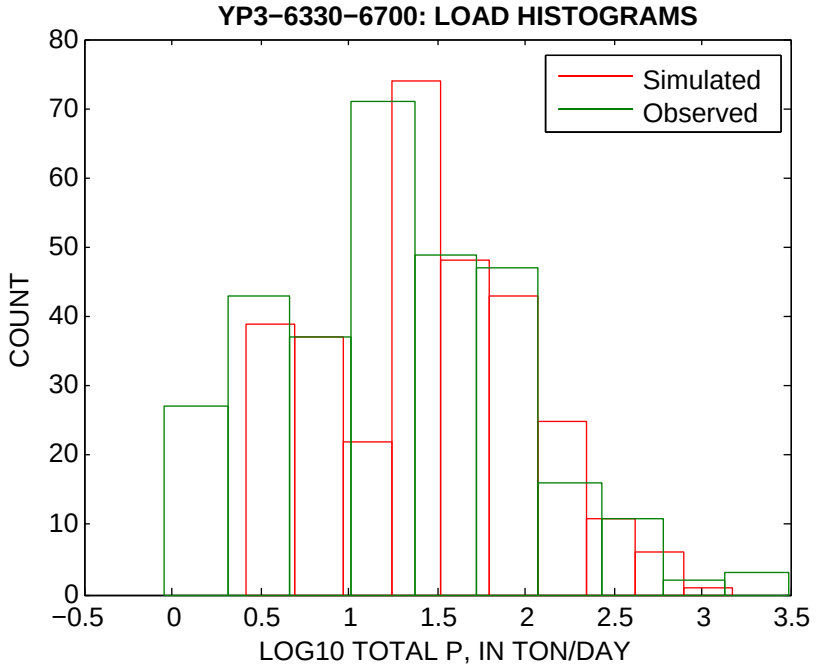


LOAD DATA
LOG10

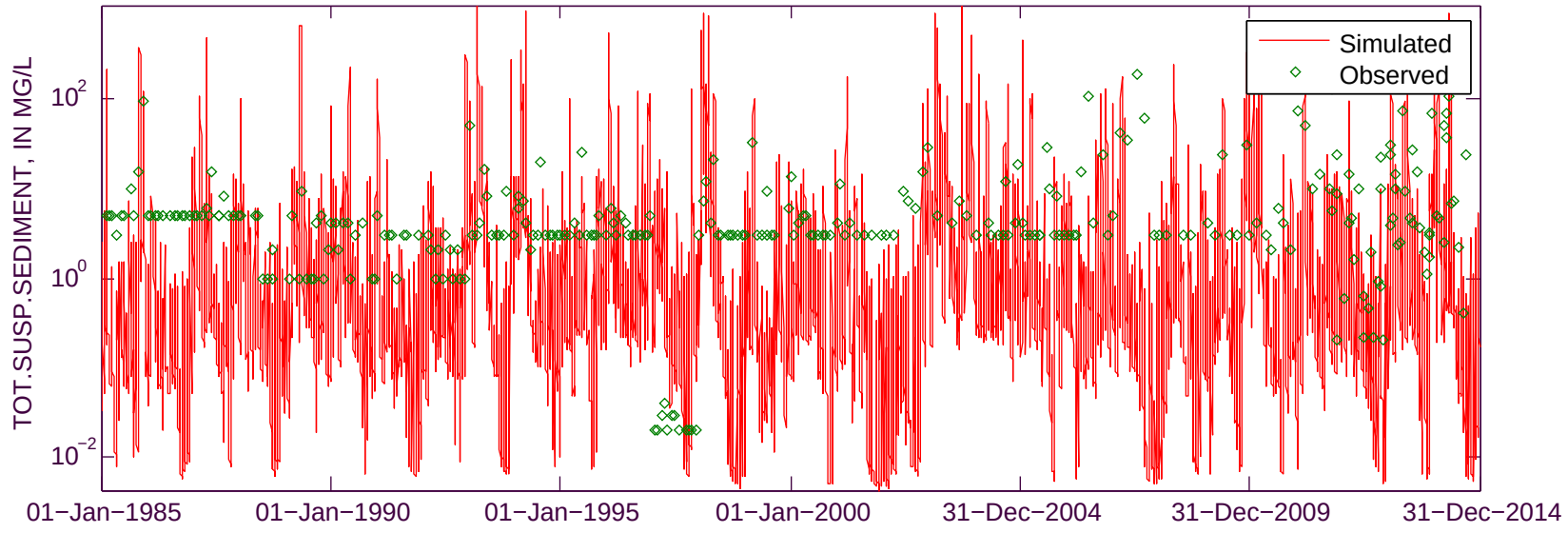




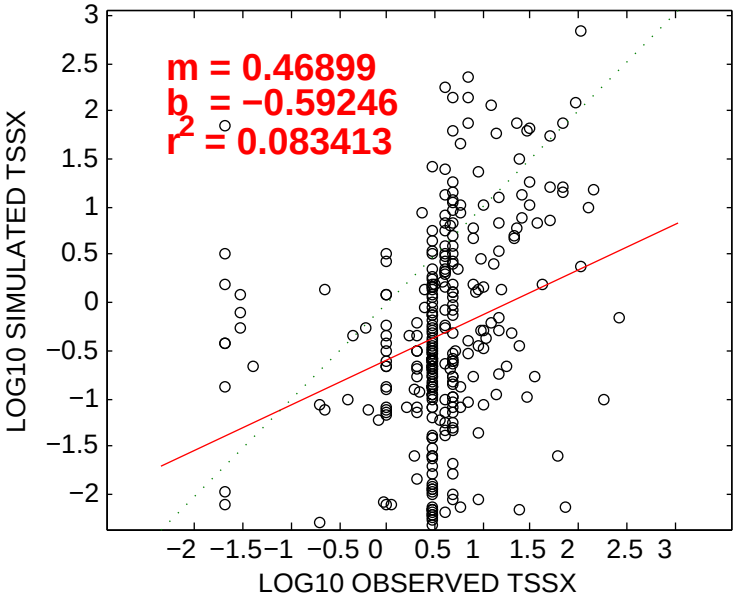




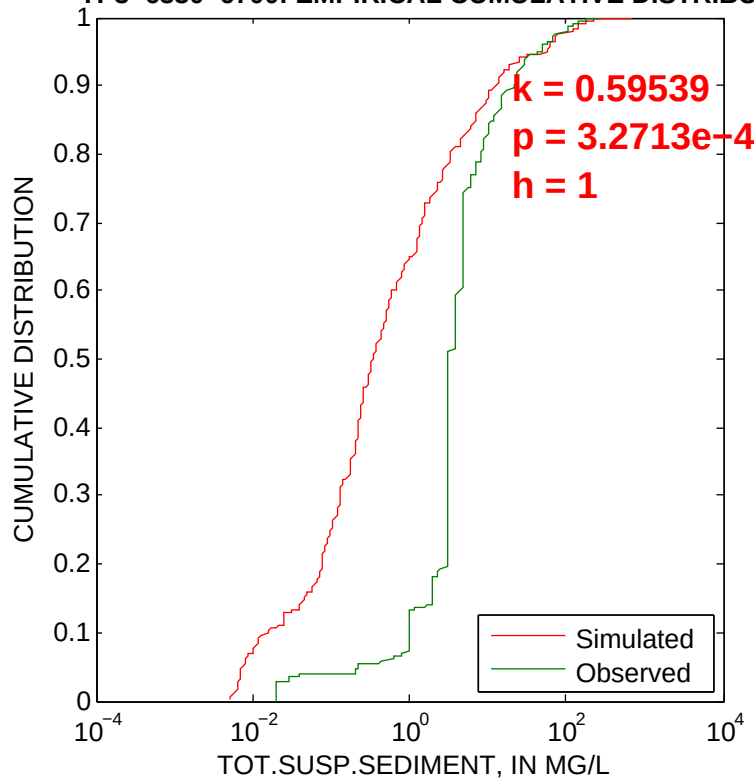
NORTH ANNA RIVER AT HART CORNER NEAR DOSWELL, VA: TSSX TIME-SERIES



YP3-6330-6700: SIMULATED VS. OBSERVED



YP3-6330-6700: EMPIRICAL CUMULATIVE DISTRIBUTION



DATA SELECTION

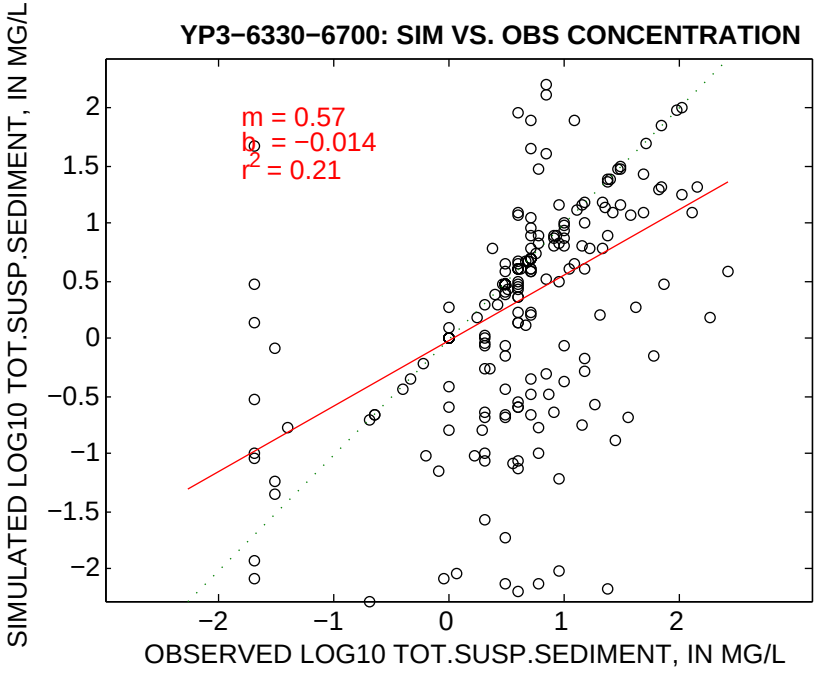
scenario: P620171001WQ
file: TSSX.calib
plot: TSSX - total suspended ...
Dates: 1/1/1985 – 12/31/201
Drive: N/A
Directory: model
Observed: OBS20161101

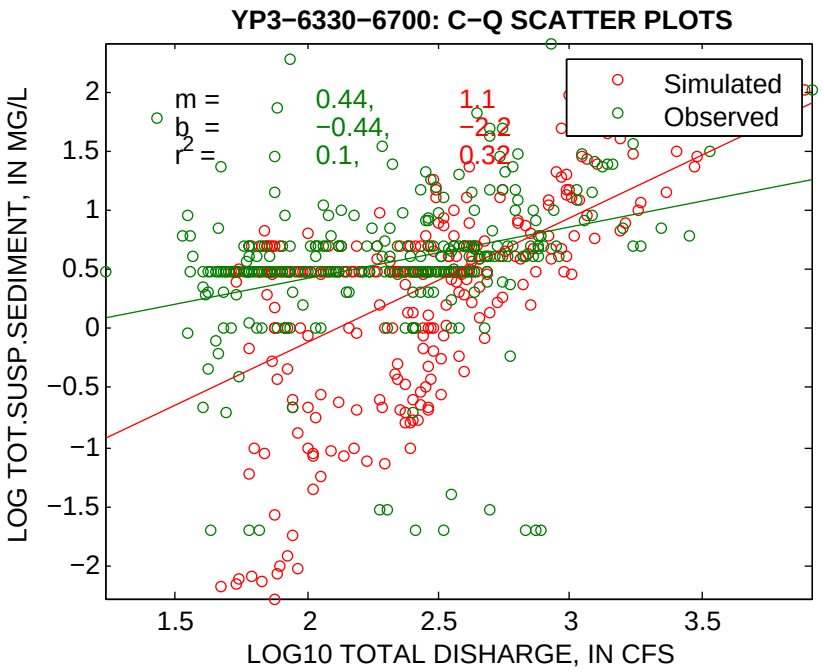
STATISTICS

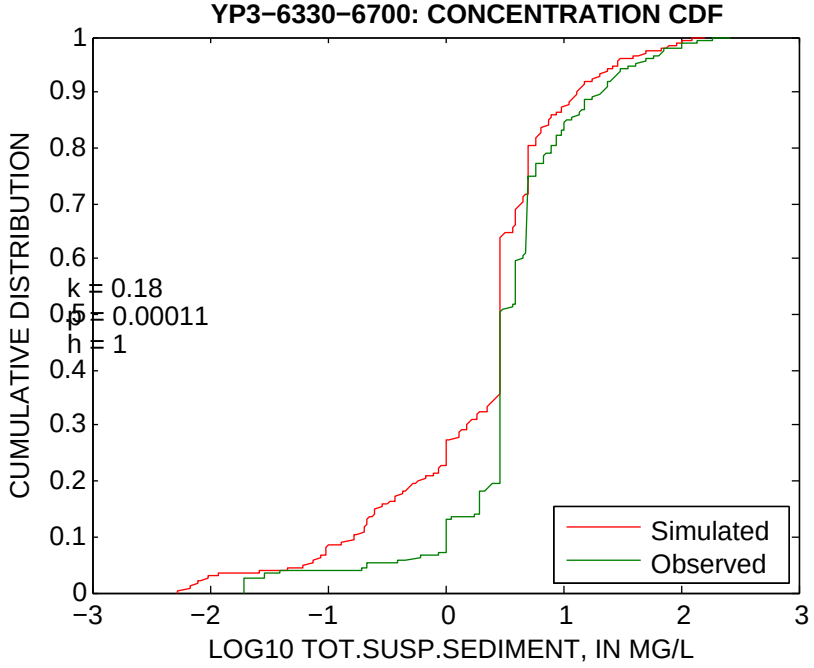
		observe	simulate
n		304	304
min		0.02	0.0048557
		-1.69897	-2.31375
mean		10.1999	9.33365
		0.569262	-0.325484
media		3	0.34549
		0.477121	-0.461691
max		259	675.7
		2.4133	2.82975
varian		612.46	2075.78
		0.421053	1.11026
JB		0.001	0.001
		0.001	0.051495
		ra	log
%		-8.49265	-157.176
err.va		2133.52	1.93959
rel.std.err		3.48353	4.60652
mod.eff		-2.48353	-3.60652

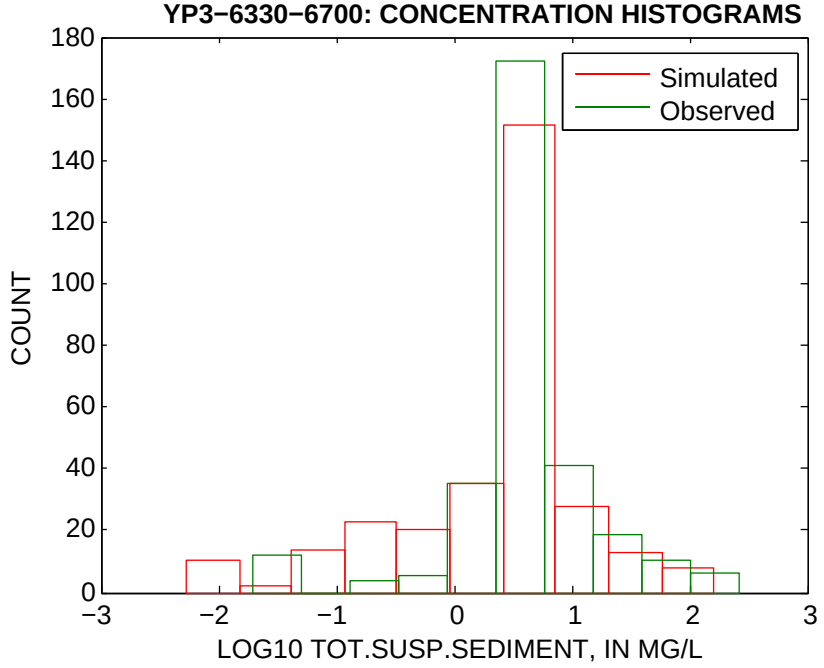
VERSION 2.1

ALL DATA
LOG10

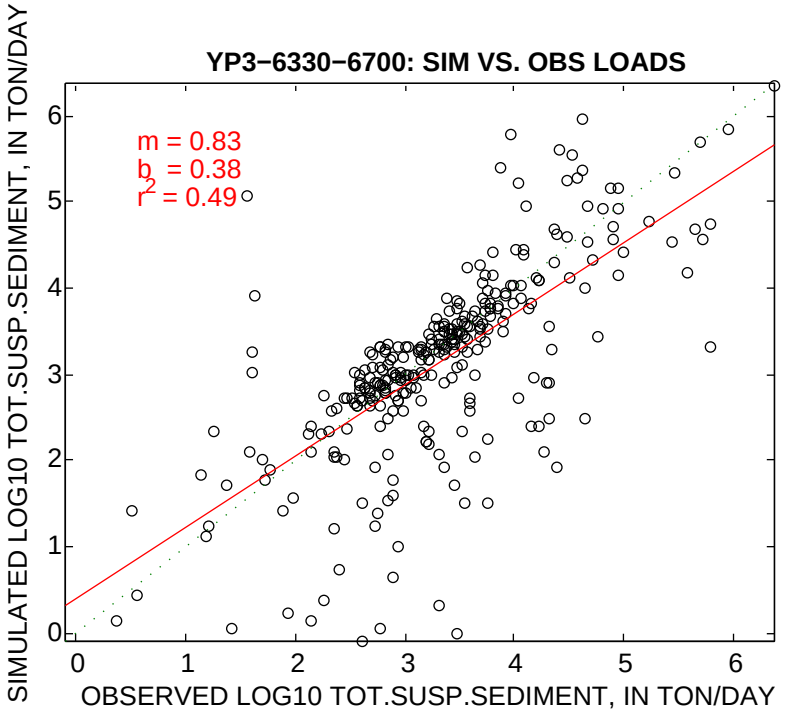


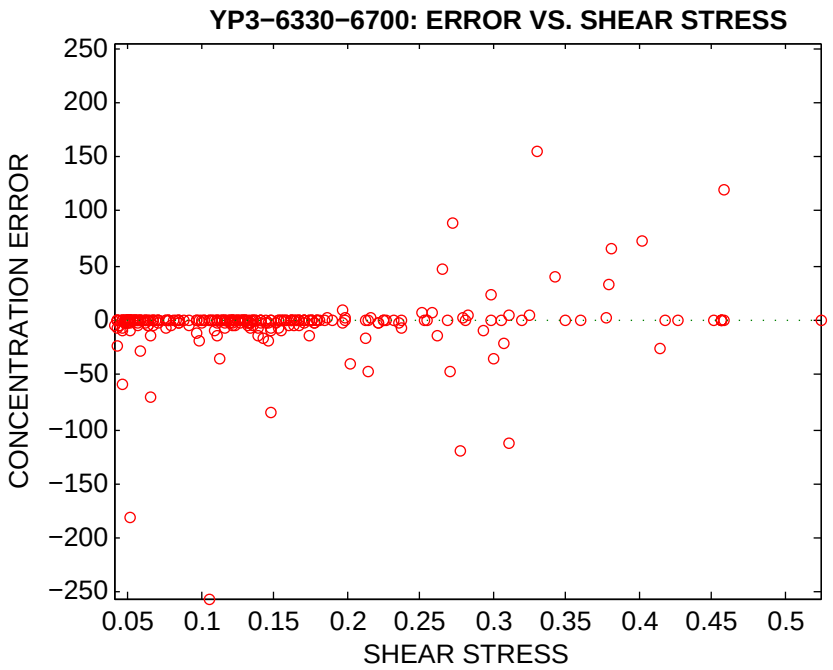


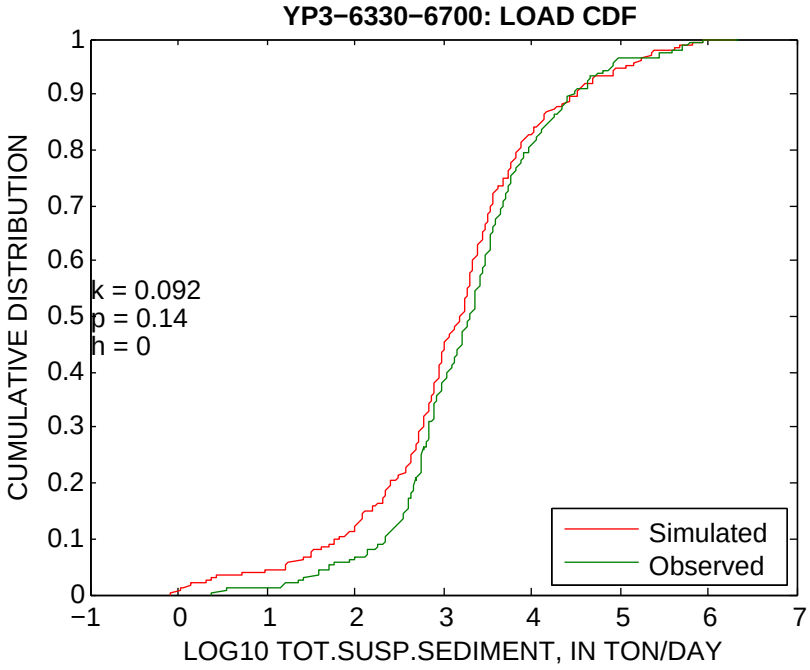


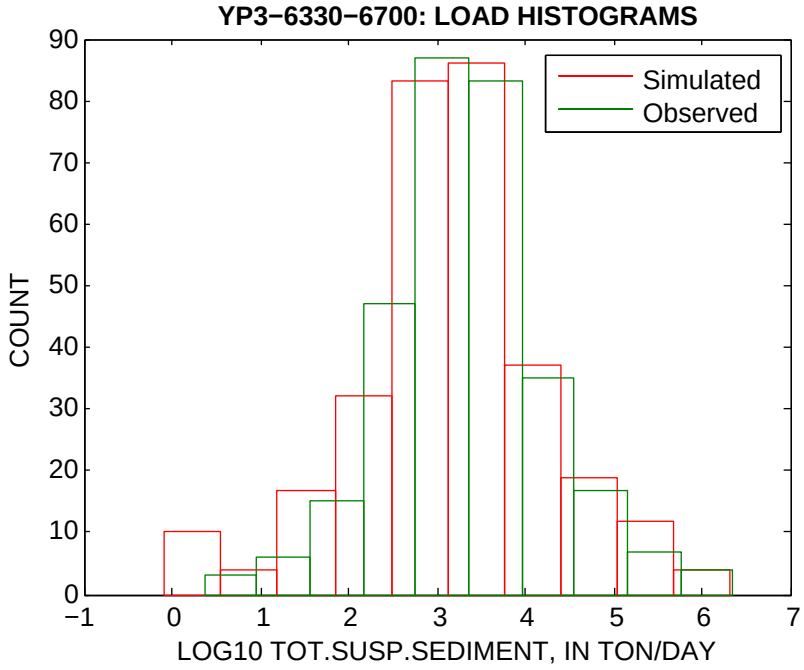


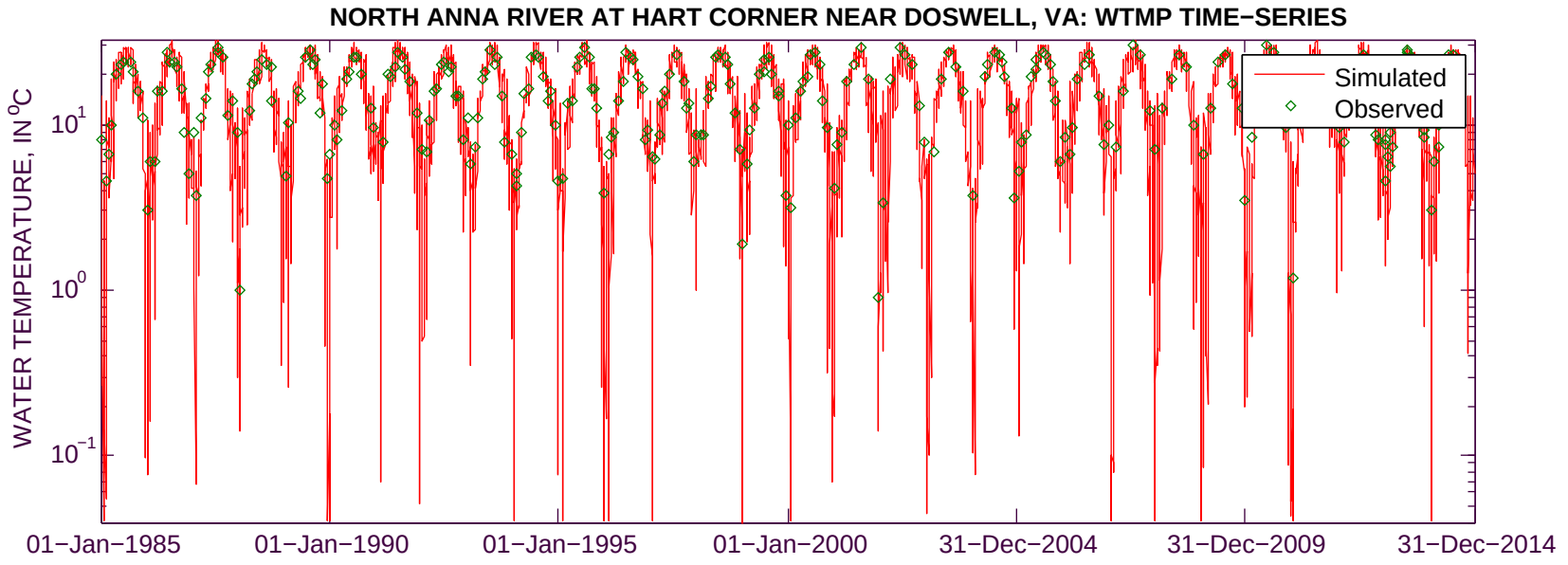
LOAD DATA
LOG10

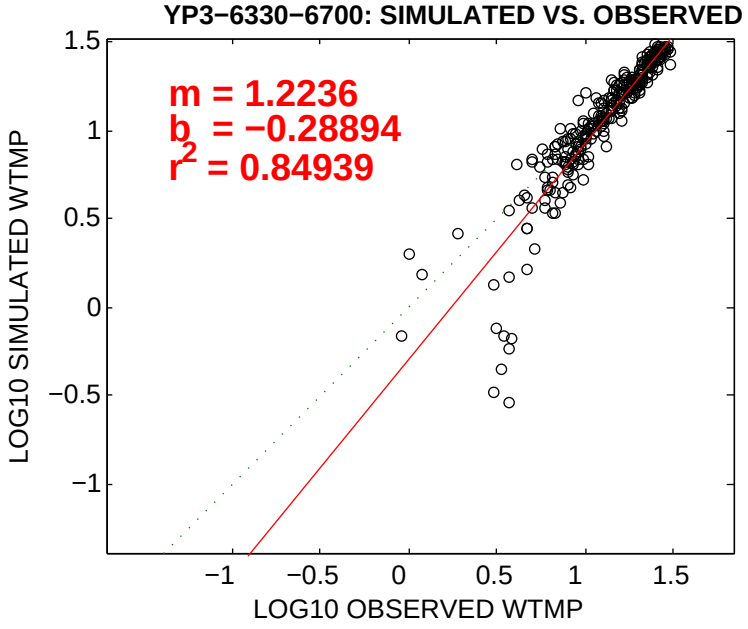


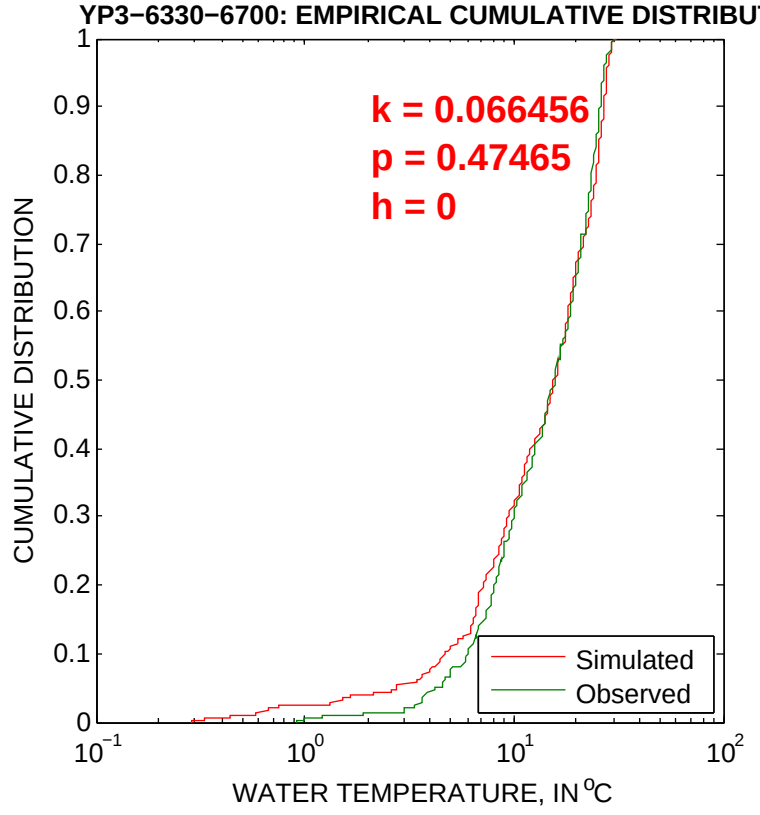












DATA SELECTION

scenario	file
P620171001WQ	WTMP.calib

plot: WTMP - water tempera...

Dates 1/1/1985 12/31/201

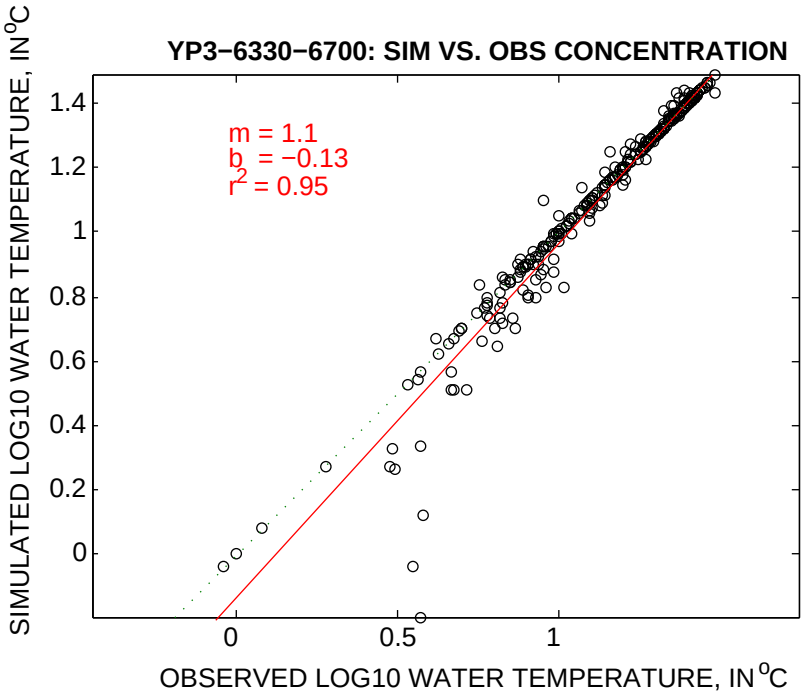
Drive	Directory	Observed
N/A	model	OBS20161101

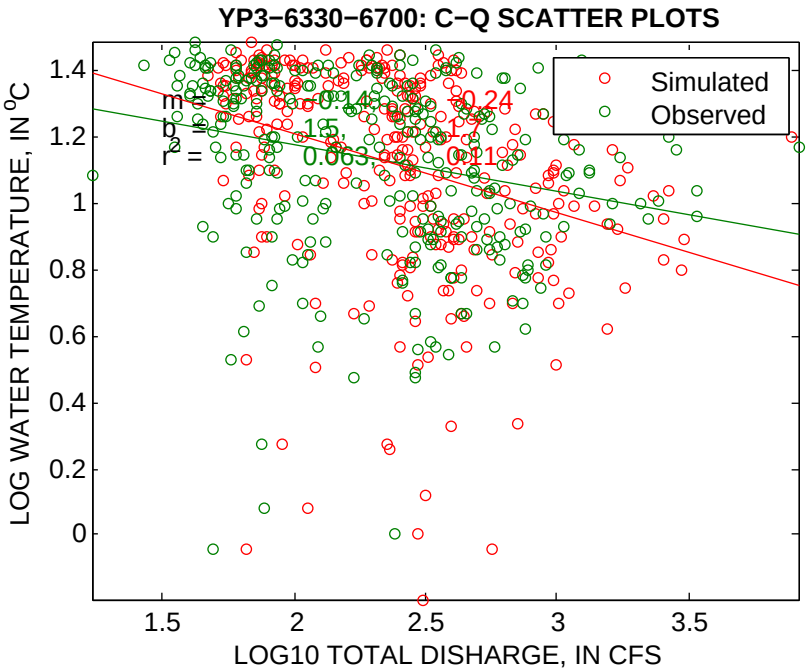
STATISTICS

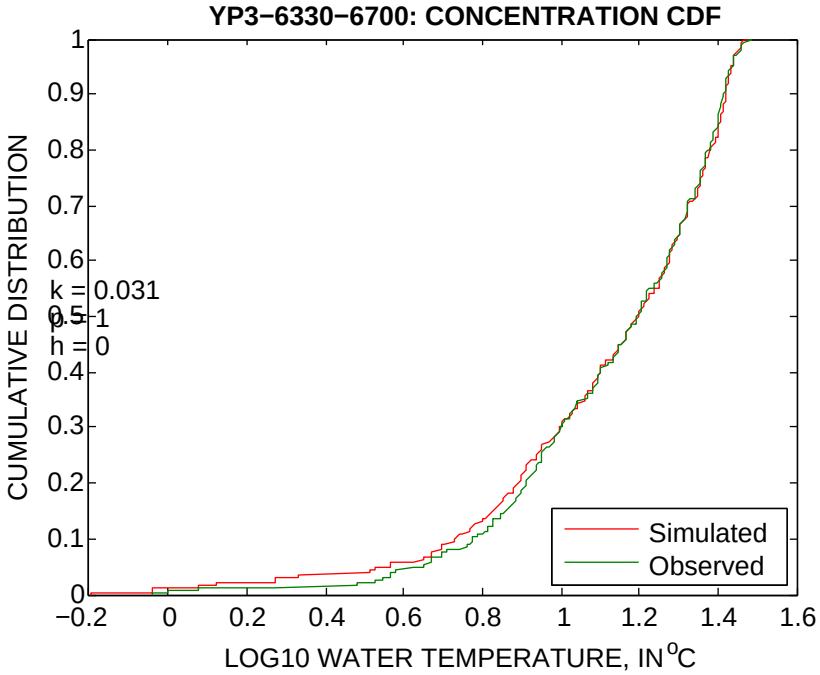
n	316	316
	observe	**simulate**
min	0.91	0.291
	-0.0409586	-0.536107
mean	15.7635	15.6307
	1.13025	1.09404
media	15.68	15.6095
	1.19535	1.19338
max	30.5	30.695
	1.4843	1.48707
varian	56.9763	68.9427
	0.0730095	0.128694
JB	0.002138	0.002213
	0.001	0.001
	ra	log
%	-0.842365	-3.20357
err.va	4.09369	0.0243488
rel.std.err	0.718491	0.333502
mod.eff	0.928151	0.666498

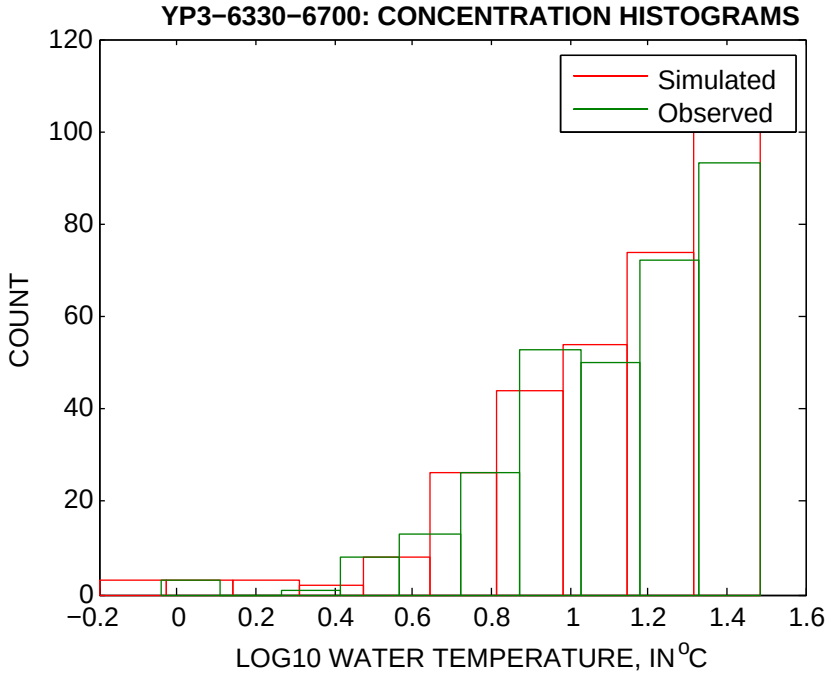
VERSION 2.1

ALL DATA
LOG10

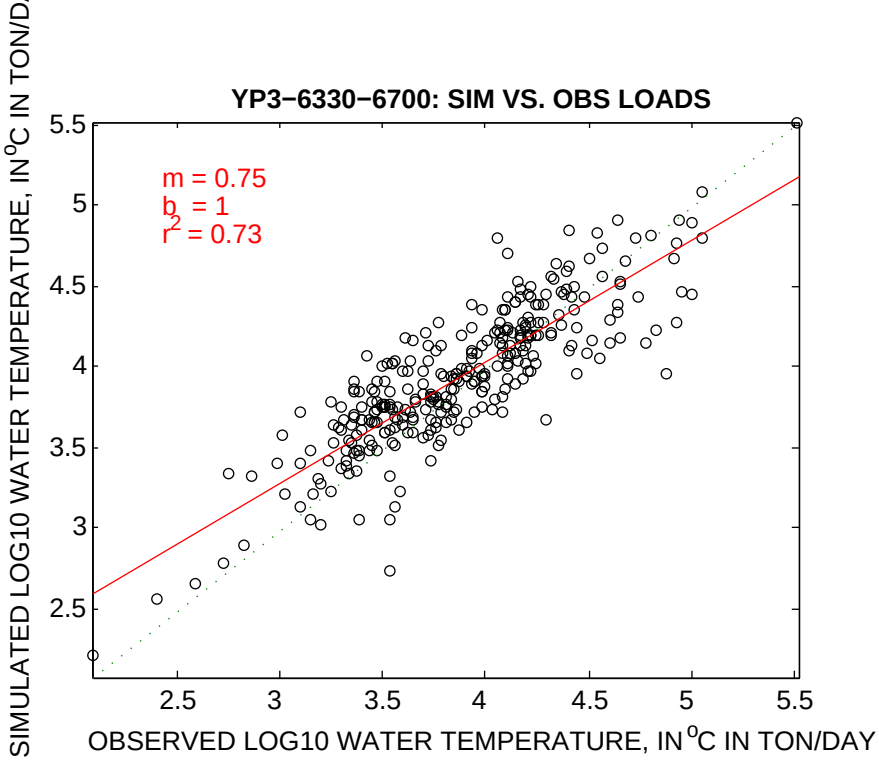


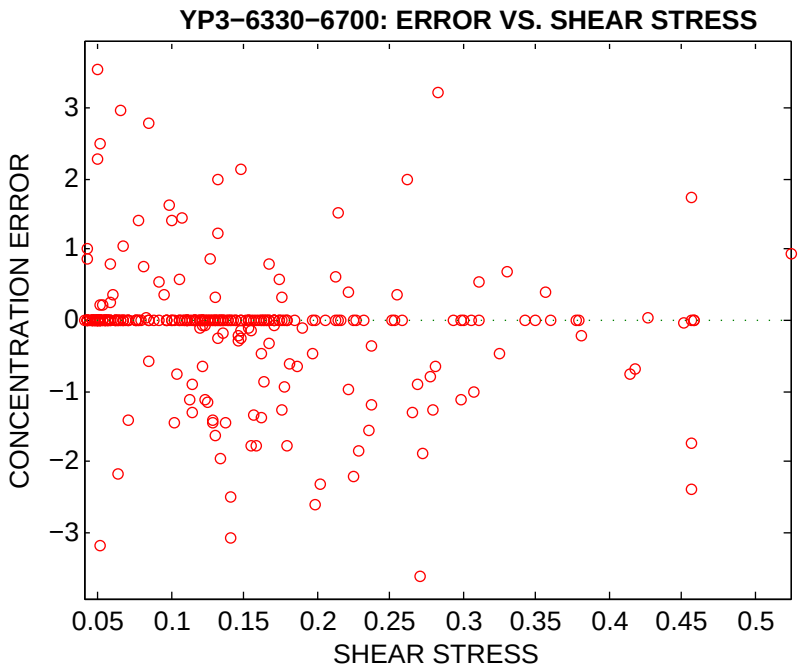


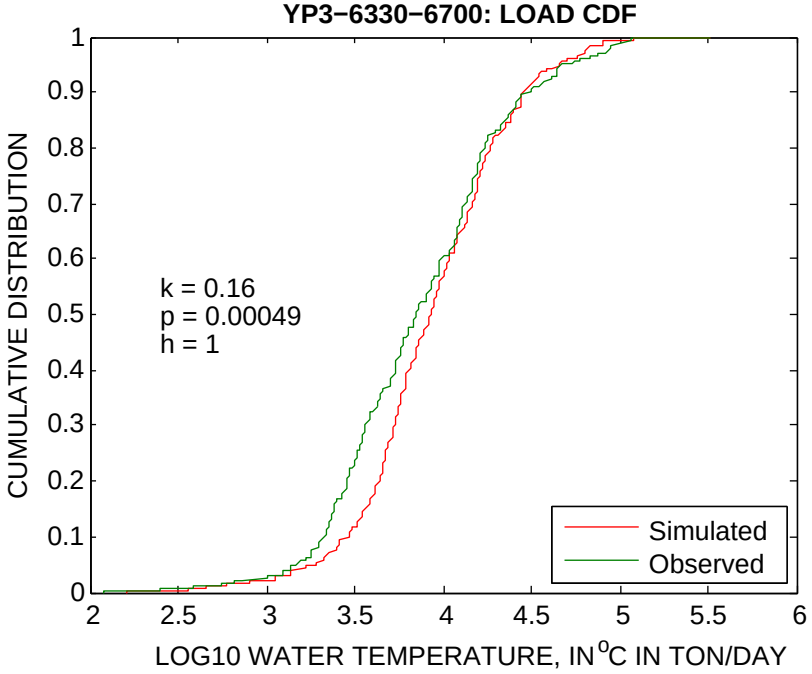


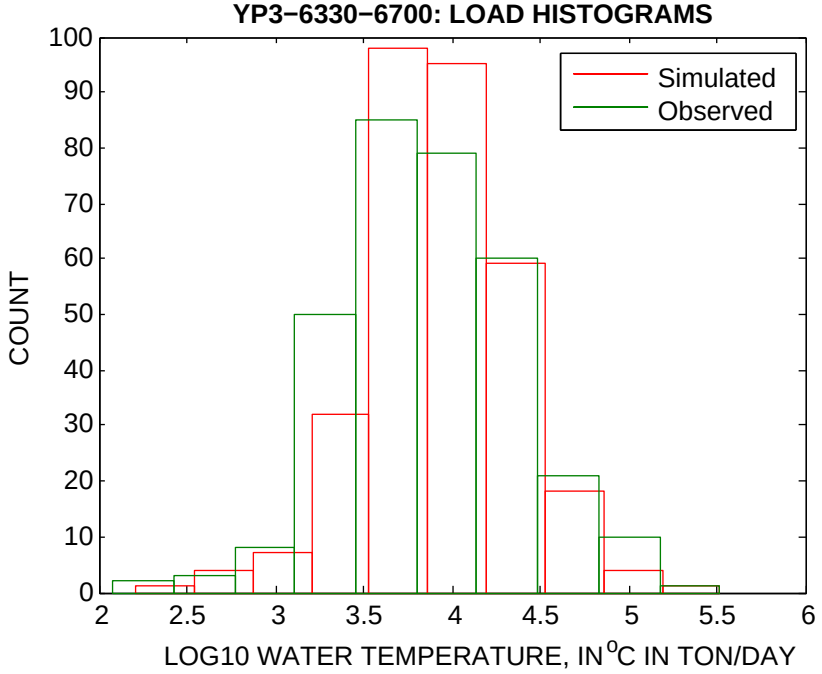


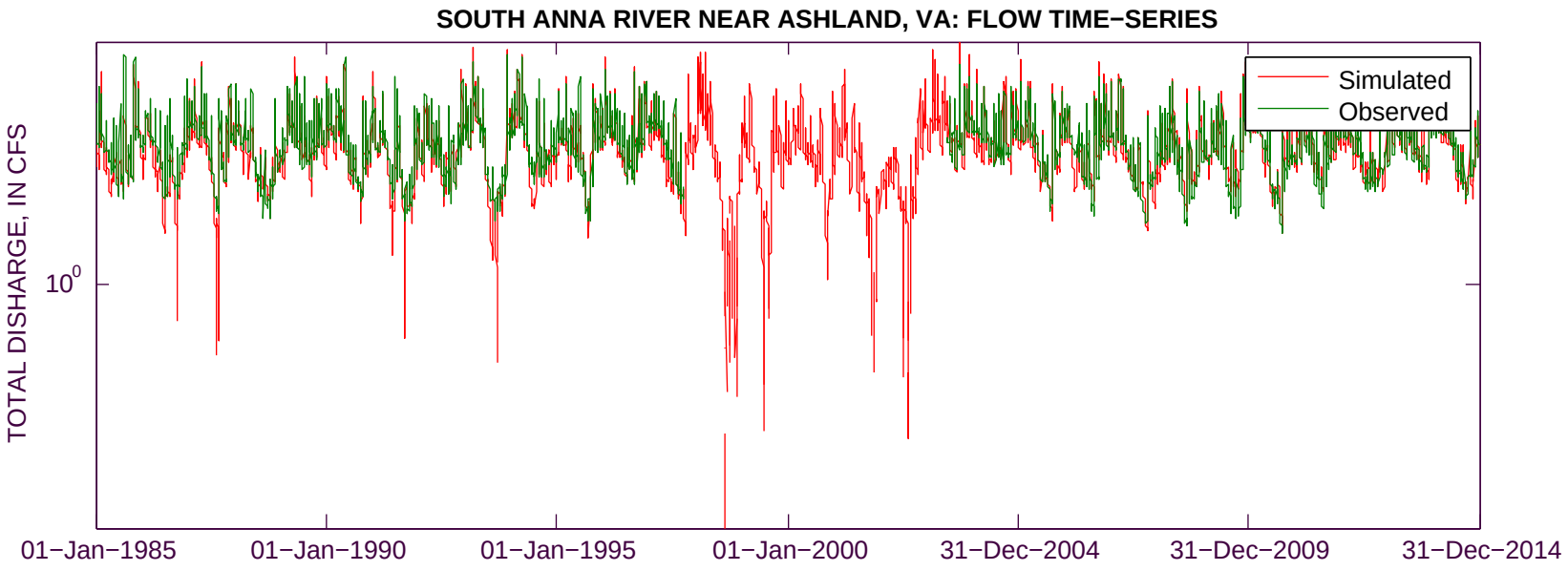
LOAD DATA
LOG10

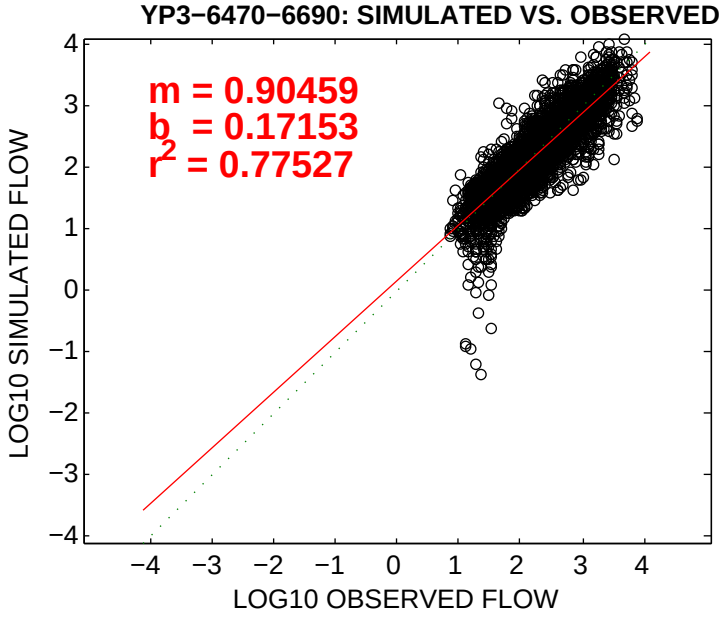


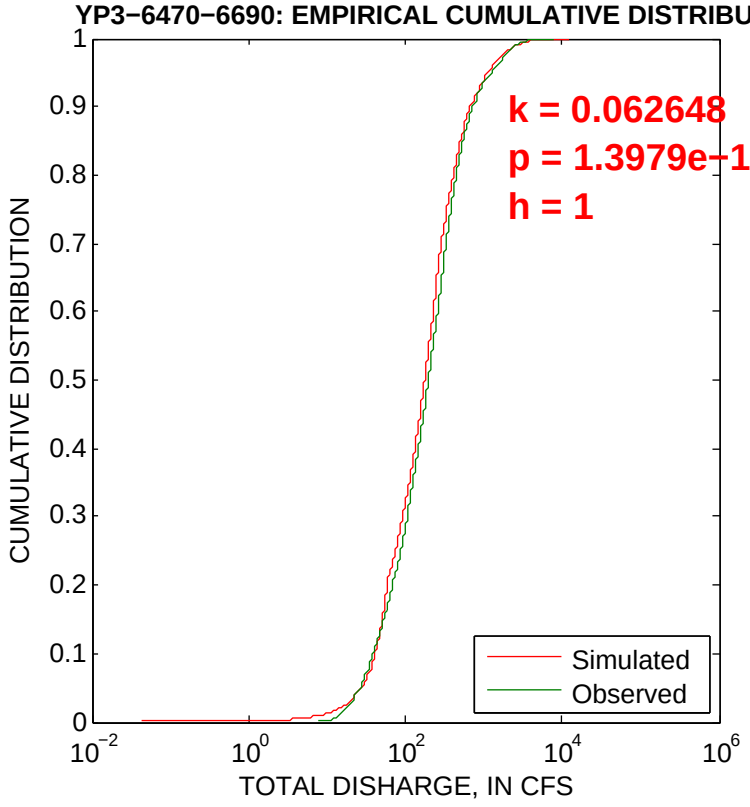












DATA SELECTION

scenario: P620171001WQ | file: _FLOW.calib

plot: FLOW - total discharge

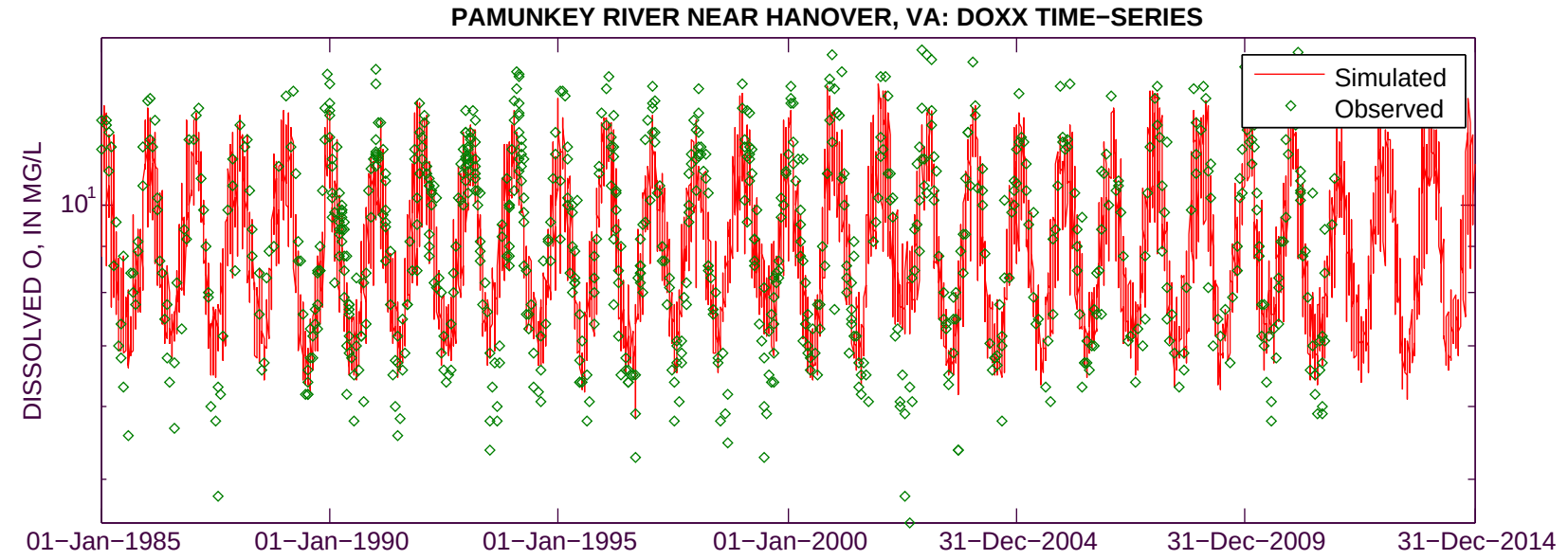
Dates: 1/1/1985 – 12/31/201

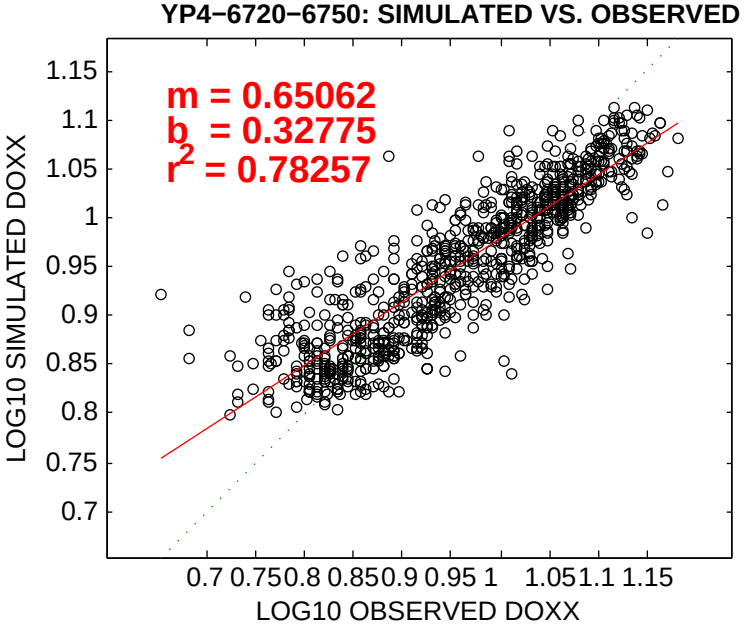
Drive | Directory: N/A | model | Observed: OBS20161101

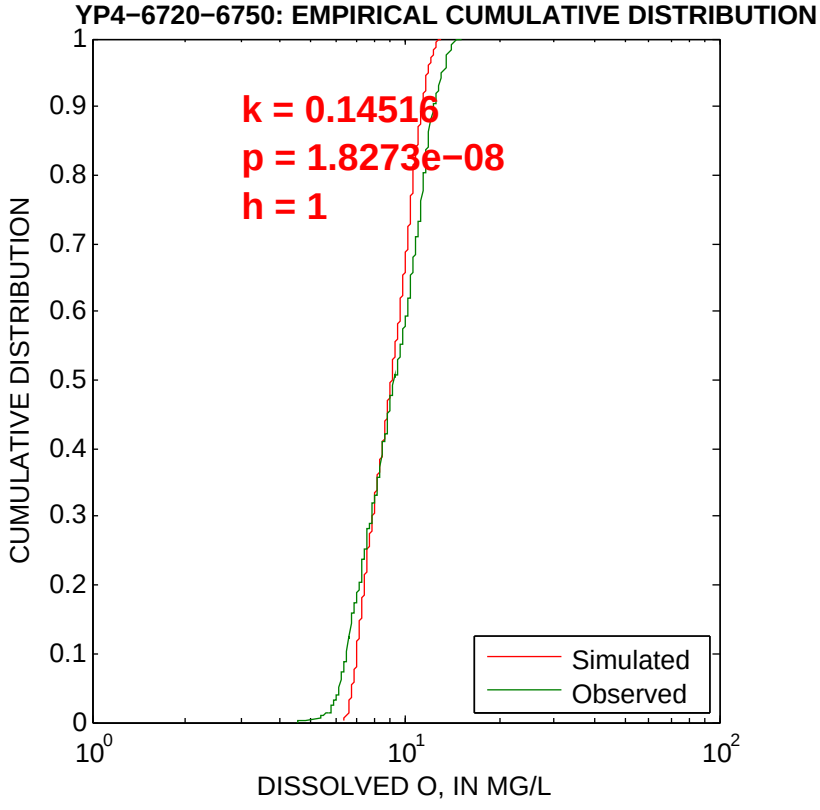
STATISTICS

		observe	simulate
n		8859	8852
min		7.3	0
		0.863323	-1.35139
mean		351.96	329.212
		2.26944	2.22445
media		199	176.65
		2.29885	2.2479
max		7680	12482
		3.88536	4.09628
varian		294061	323323
		0.241894	0.255314
JB		0.001	0.001
	☑	0.334991	0.001
		ra	log
%		-6.46299	-1.98241
err.va		170099	0.0616023
rel.std.err		0.578449	0.254667
mod.eff		0.421551	0.745333

VERSION 2.1







DATA SELECTION

scenario: P620171001WQ | file: DOXX.calib

plot: DOXX - dissolved oxygen

Dates: 1/1/1985 – 12/31/201

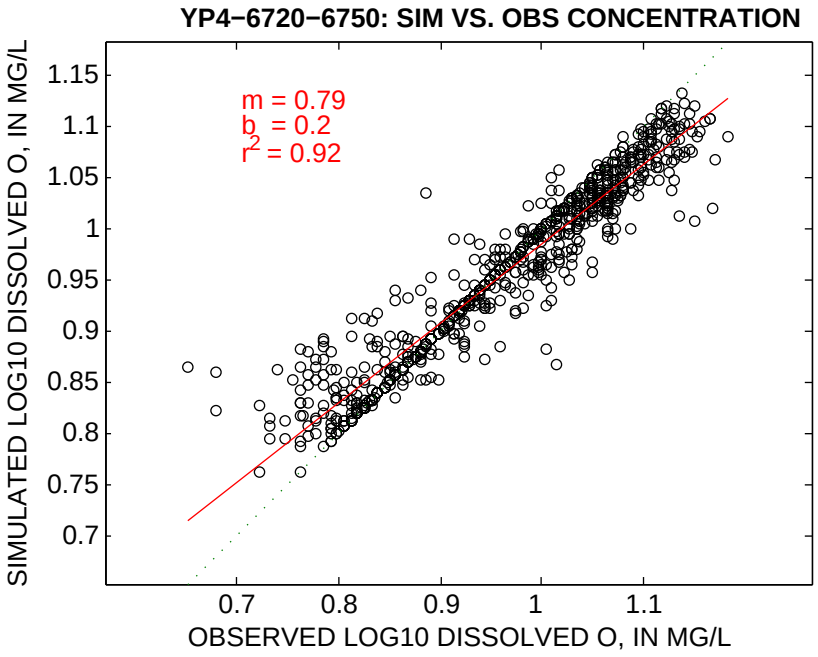
Drive | Directory: N/A | model | Observed: OBS20161101

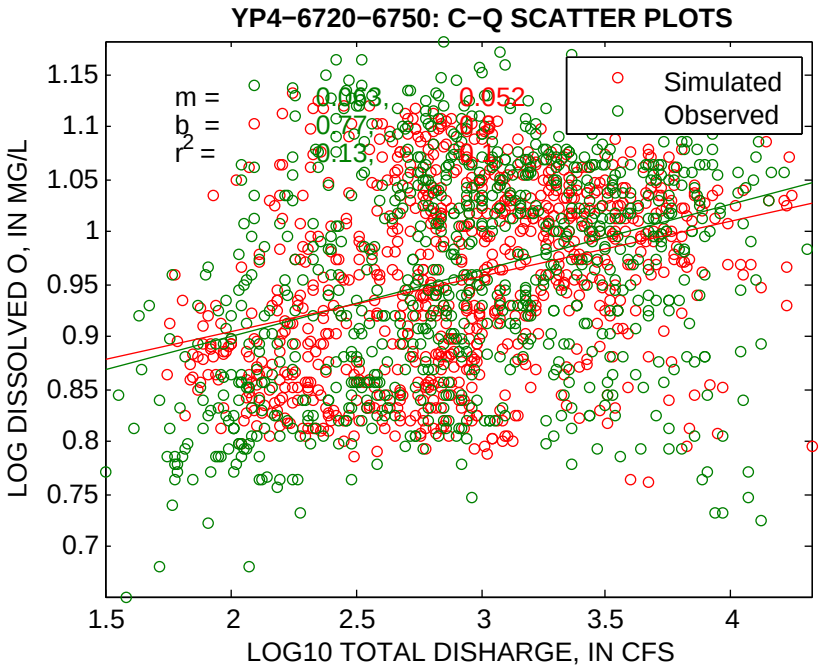
STATISTICS

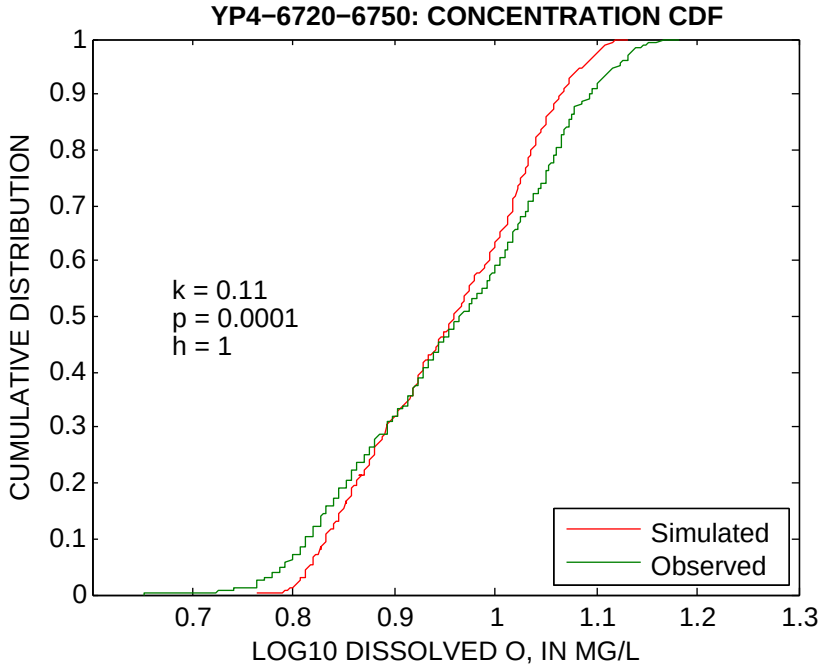
n	868	868
	observe	simulate
min	4.5	6.3058
	0.653213	0.79974
mean	9.37789	9.09782
	0.959464	0.951998
media	9.2	9.0446
	0.963788	0.956389
max	15.2	12.978
	1.18184	1.11321
varian	4.98834	2.63698
	0.0112021	0.00605944
JB	0.001	0.001
	0.001	0.001
	ra	log
%	-2.98656	-0.778133
err.va	1.21374	0.00274072
rel.std.err	0.243315	0.24466
mod.eff	0.756685	0.75534

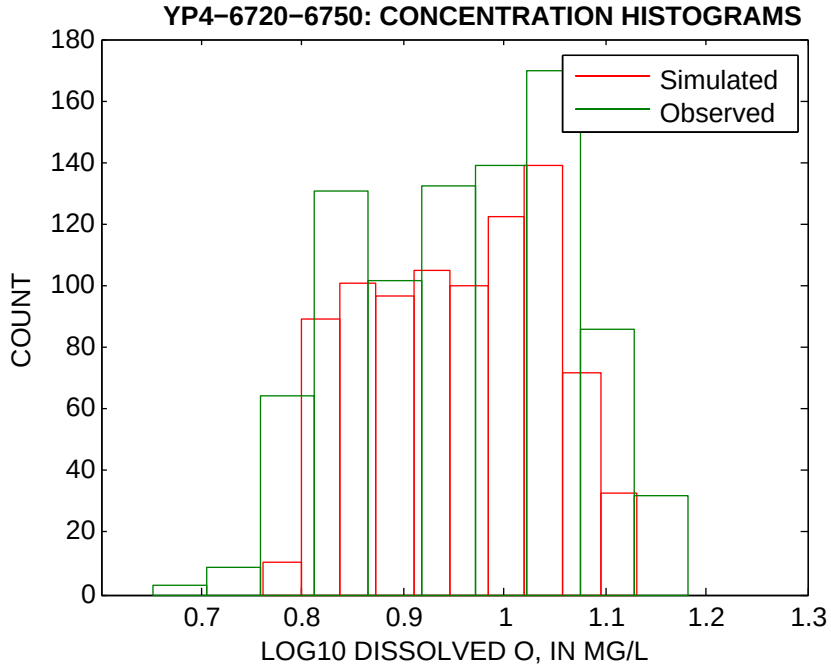
VERSION 2.1

ALL DATA
LOG10

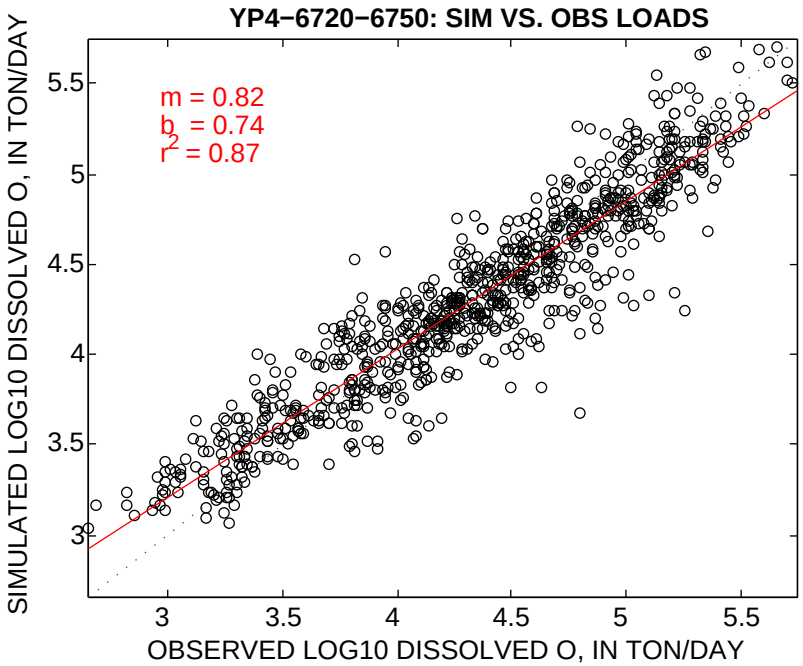


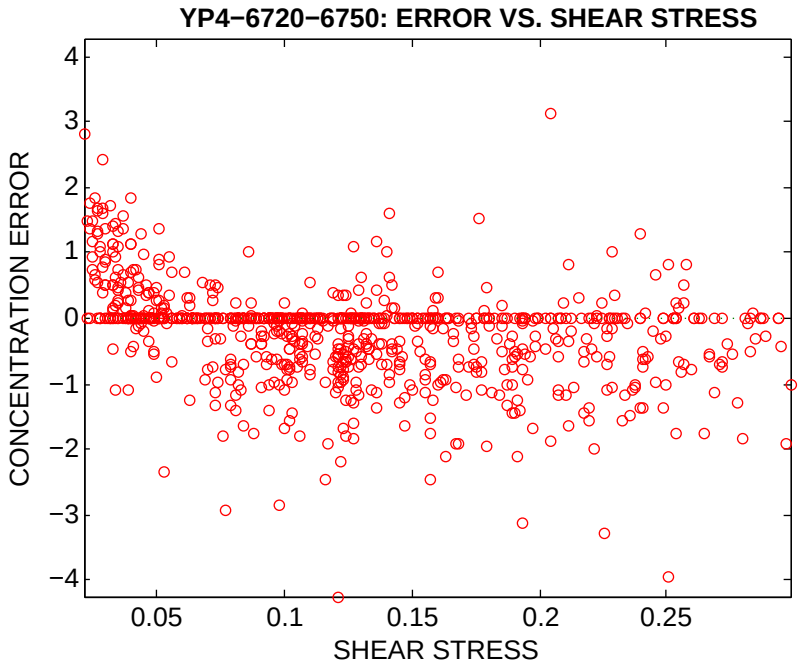


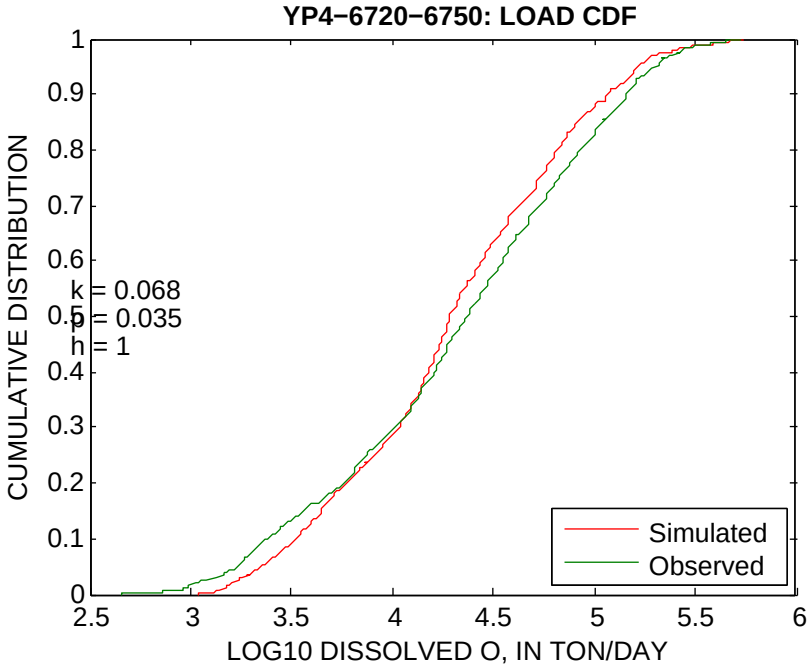


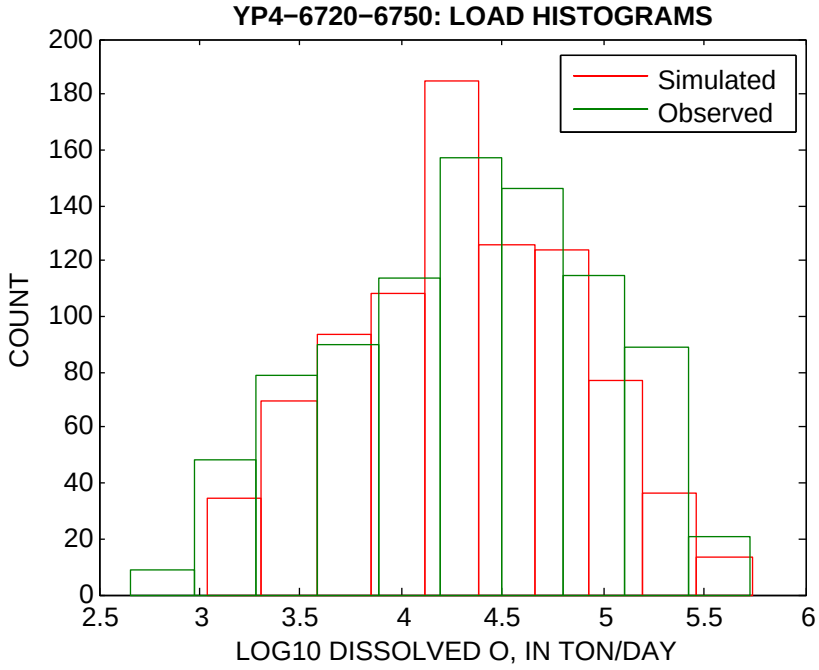


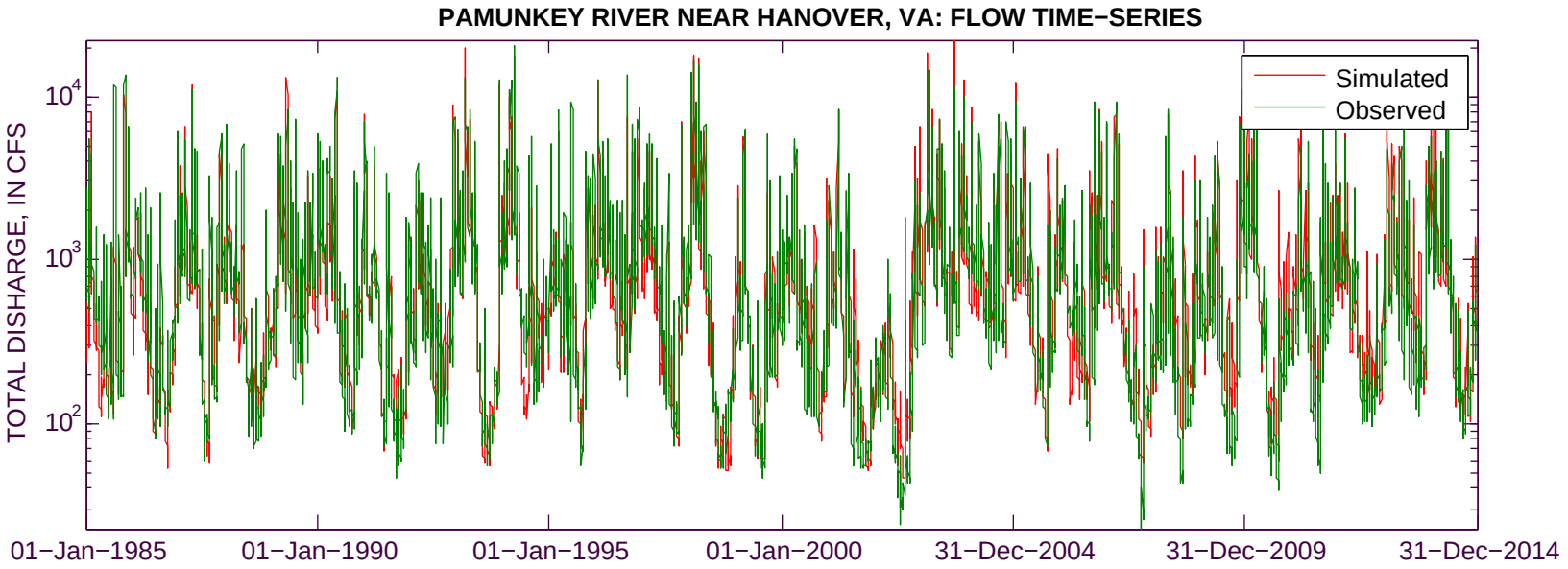
LOAD DATA
LOG10

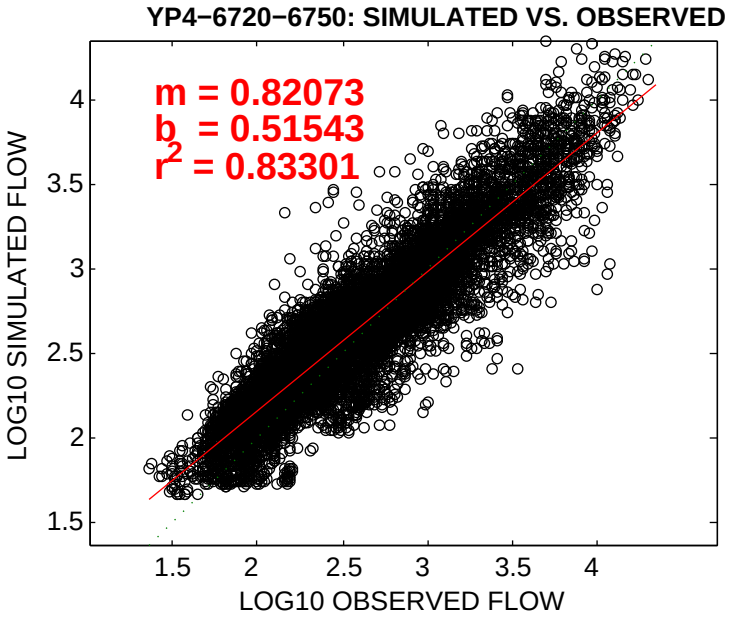


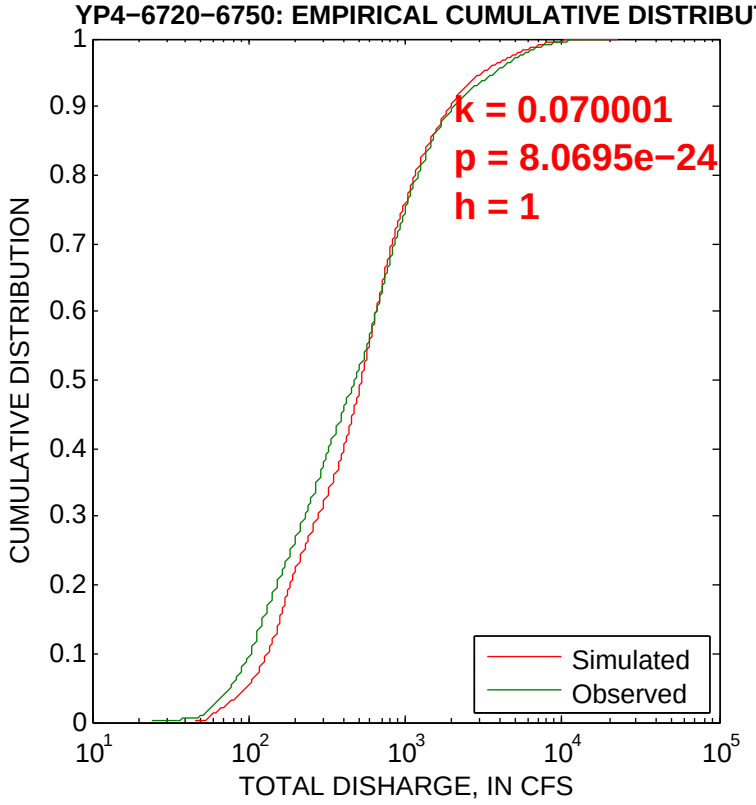












DATA SELECTION

scenario: P620171001WQ | file: _FLOW.calib

plot: FLOW - total discharge

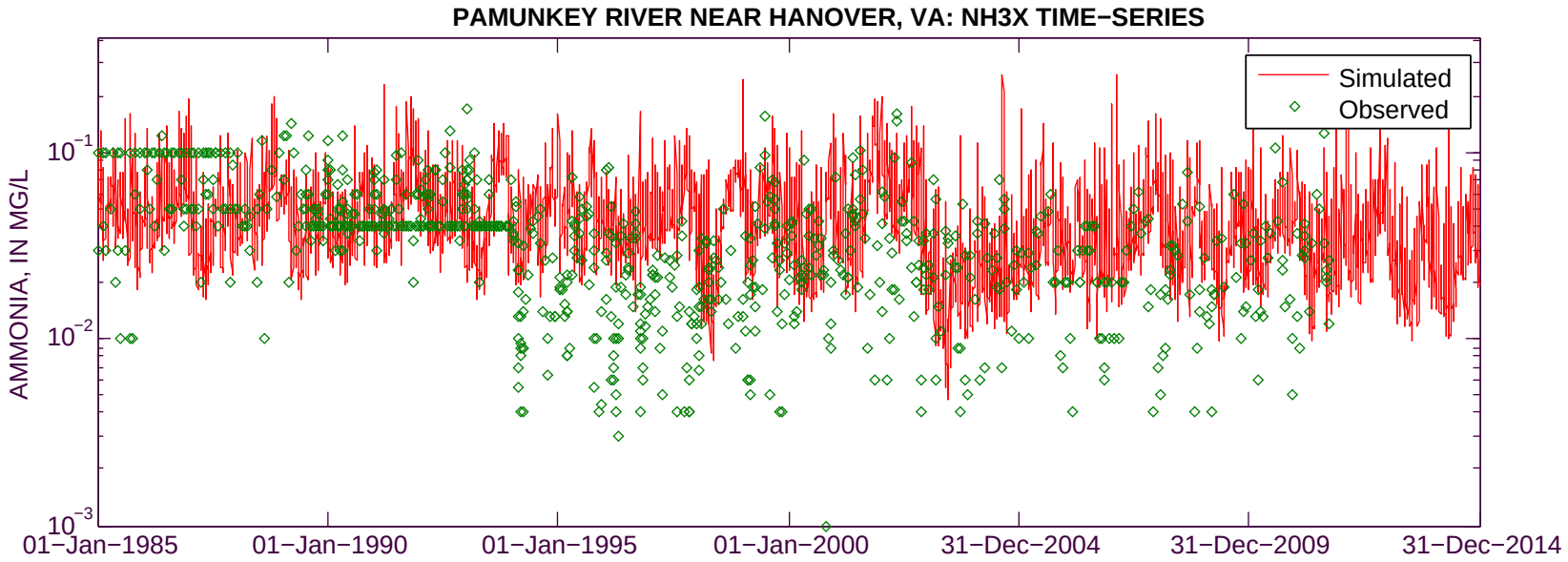
Dates: 1/1/1985 – 12/31/201

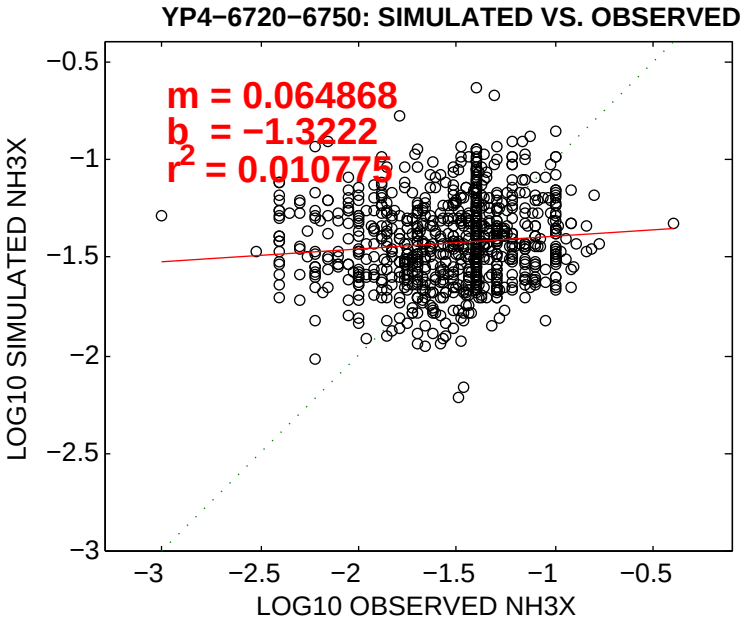
Drive: N/A | Directory: model | Observed: OBS20161101

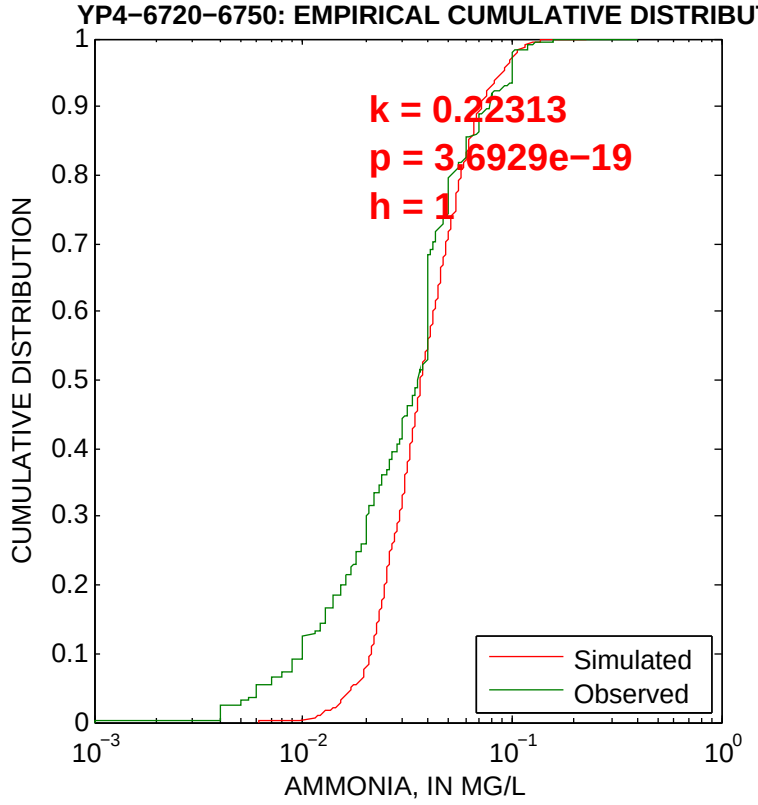
STATISTICS

		observe	simulate
n		10957	10957
min		23	46.182
		1.36173	1.66447
mean		952.108	921.426
		2.66807	2.70519
media		481	525.32
		2.68215	2.72042
max		20400	22238
		4.30963	4.3471
varian		2.35955e+0	2.06248e+
		0.258132	0.208732
JB		0.001	0.001
		0.001	0.001
		ra	log
%		-3.22263	1.3913
err.va		757083	0.0445299
rel.std.err		0.32086	0.172508
mod.eff		0.67914	0.827492

VERSION 2.1







DATA SELECTION

scenario	file
P620171001WQ	NH3X.calib

plot: NH3X - ammonia

Dates: 1/1/1985 – 12/31/201

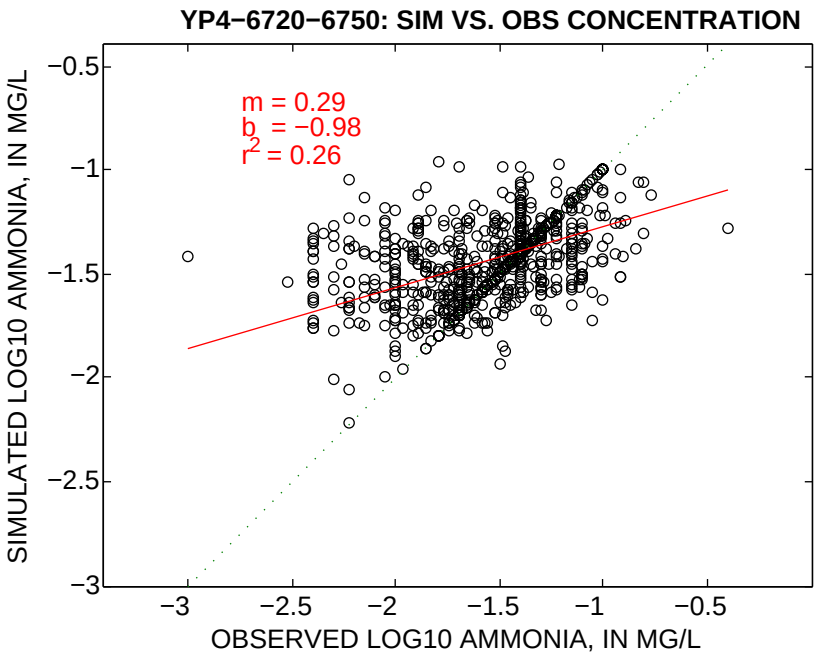
Drive	Directory	Observed
N/A	model	OBS20161101

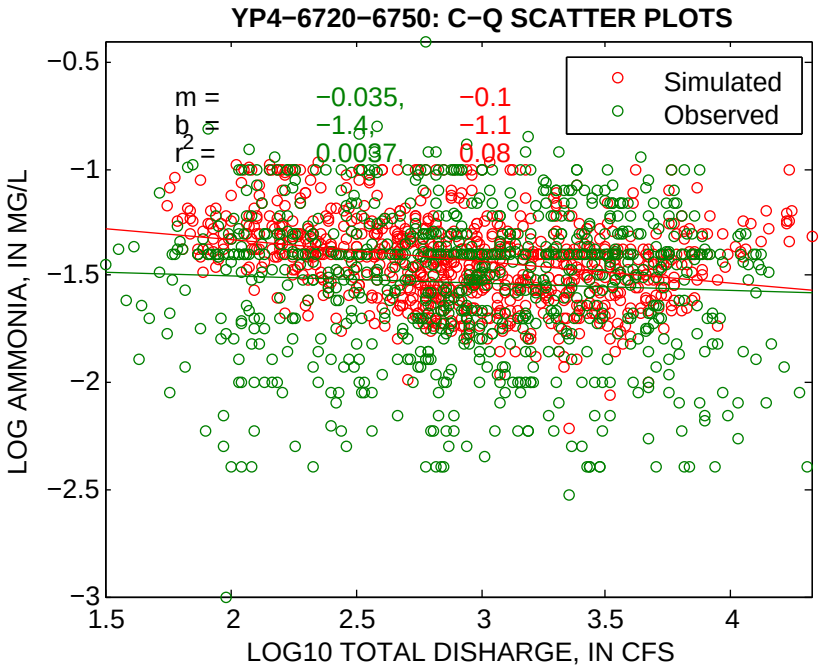
STATISTICS

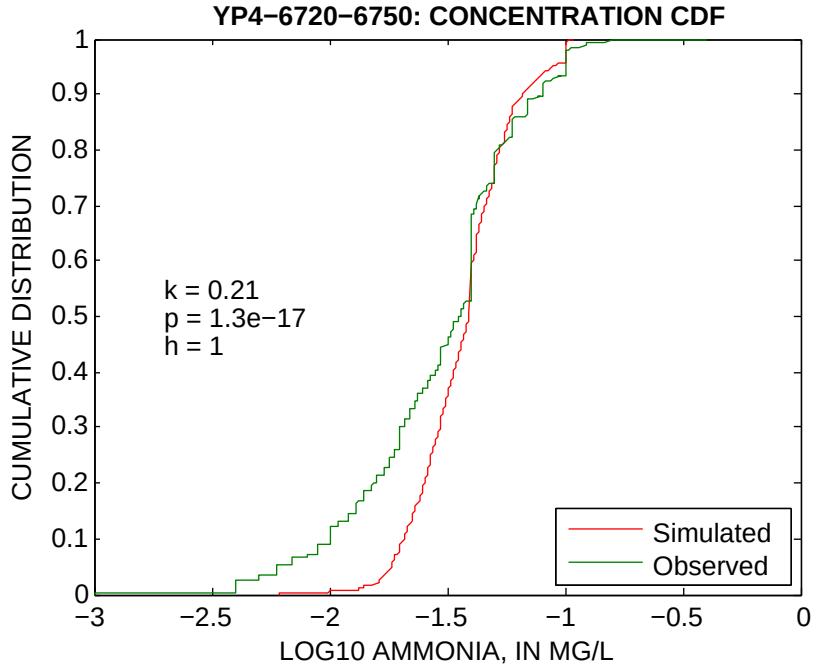
	n	856	856
		observe	simulate
min		0.001	0.0060911
		-3	-2.2153
mean		0.0387553	0.0429078
		-1.52998	-1.42146
media		0.03525	0.036785
		-1.45285	-1.43433
max		0.4	0.22867
		-0.39794	-0.640791
varian		0.00087716	0.00055216
		0.117626	0.0459347
JB		0.001	0.001
		0.001	0.149226
		ra	log
%		10.7146	-7.09314
err.va		0.0013187	0.160091
rel.std.err		1.50337	1.36102
mod.eff		-0.503369	-0.361024

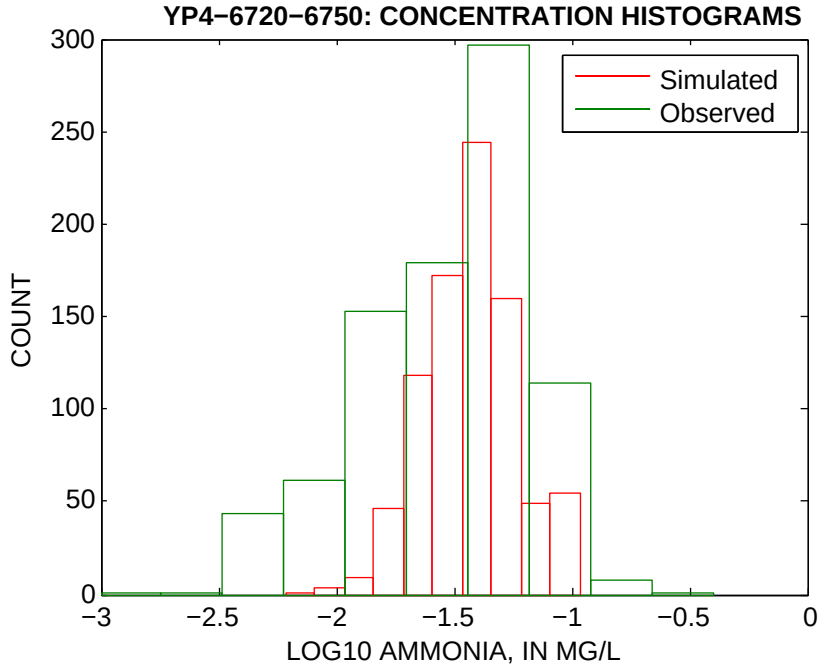
VERSION 2.1

ALL DATA
LOG10

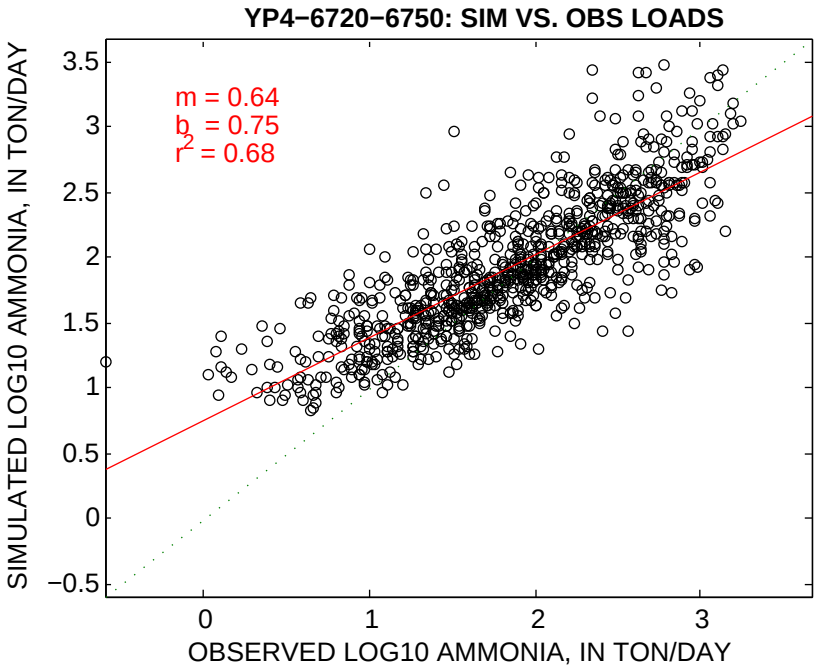


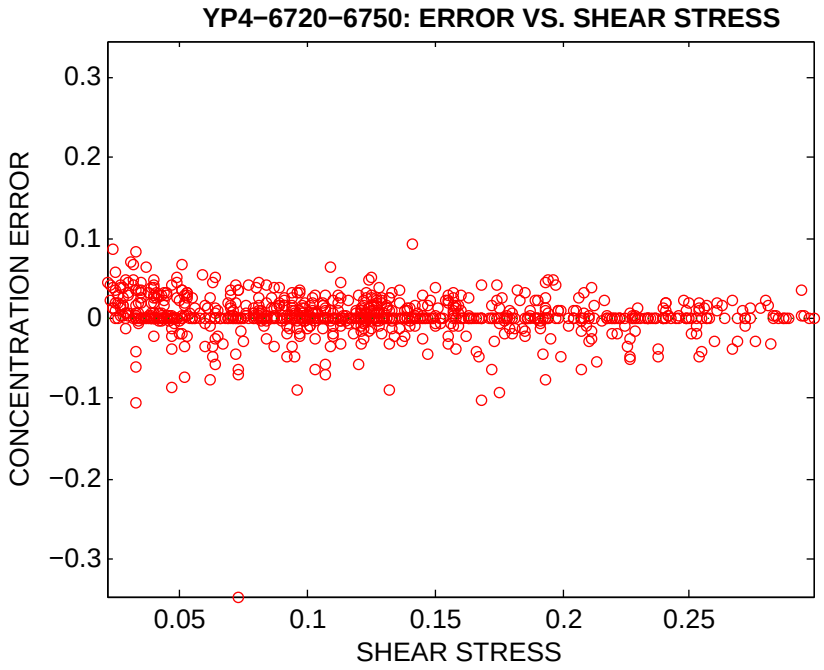


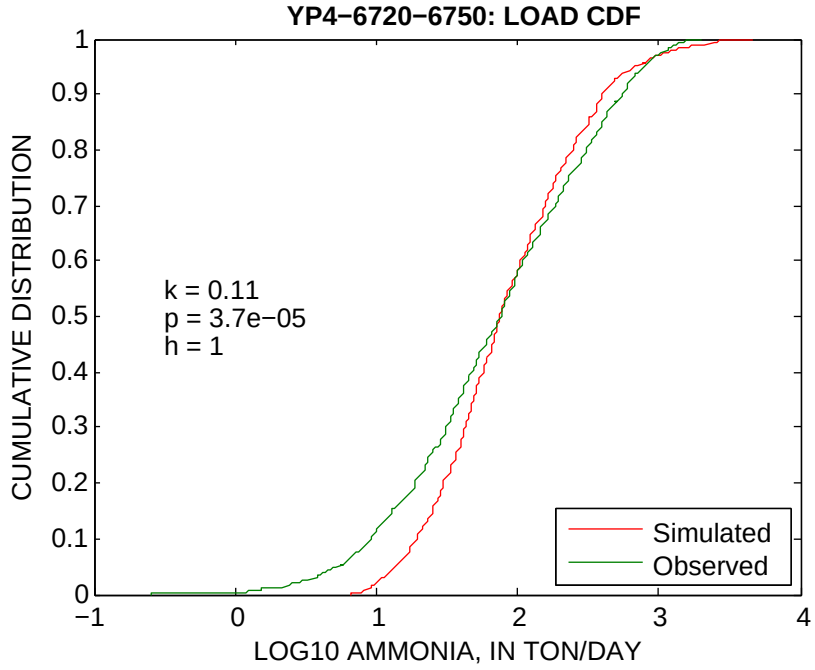


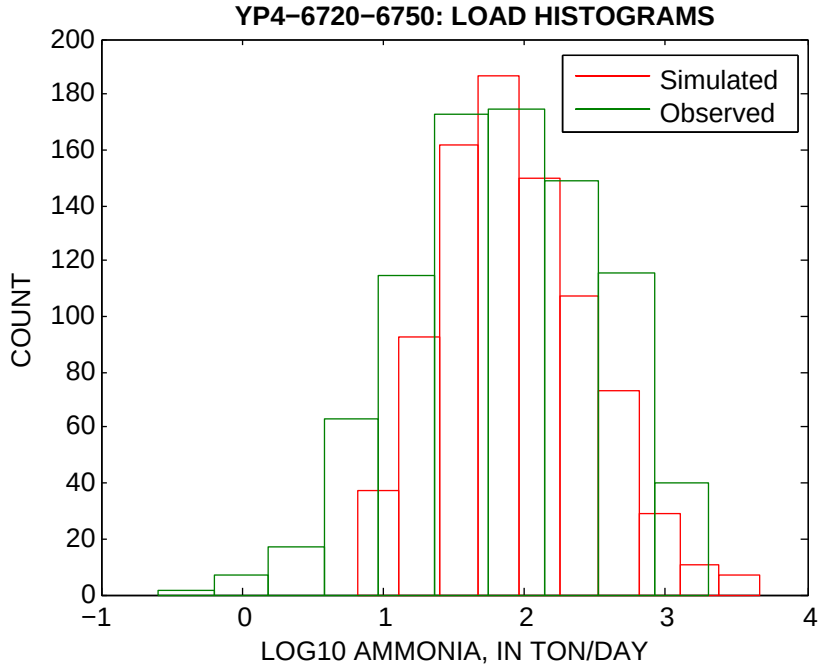


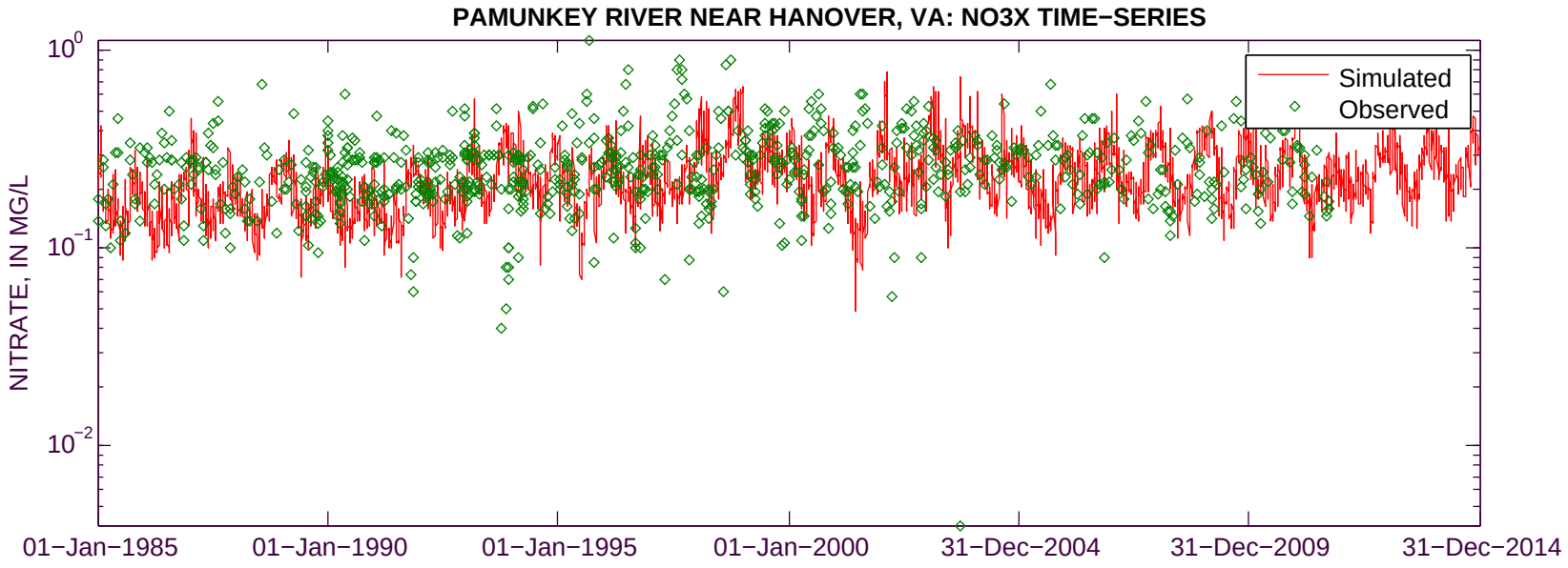
LOAD DATA
LOG10

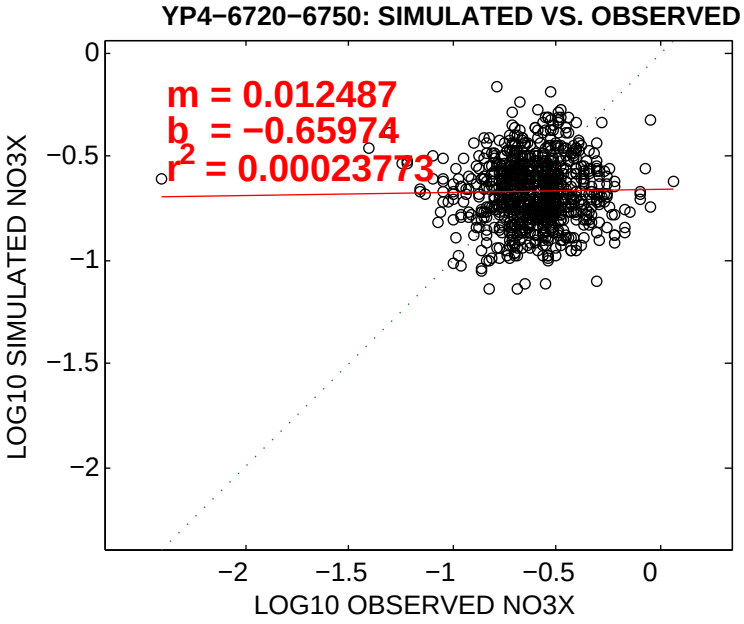


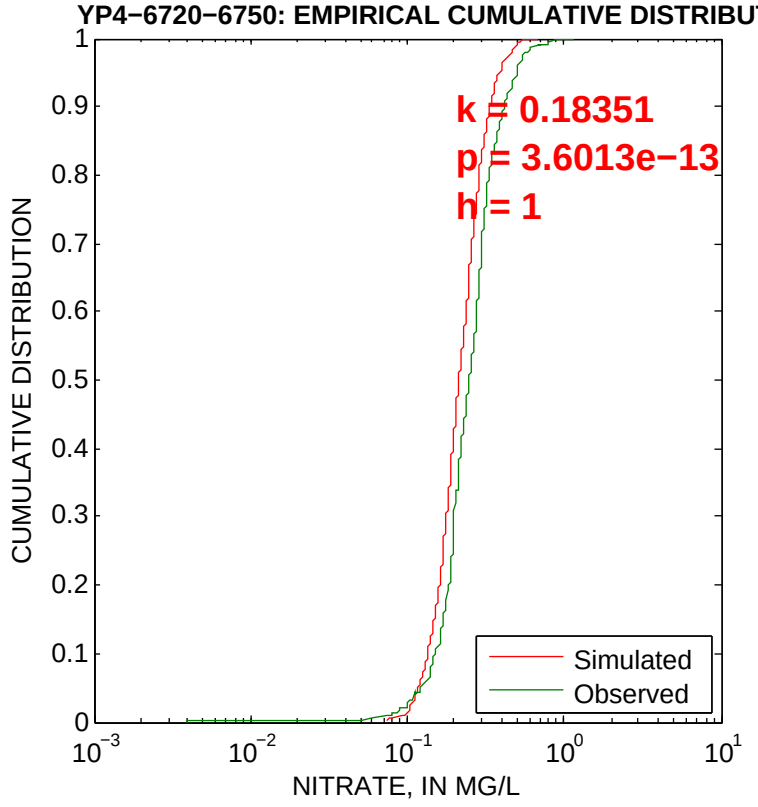












DATA SELECTION

scenario: P620171001WQ | file: NO3X.calib

plot: NO3X - nitrate

Dates: 1/1/1985 – 12/31/201

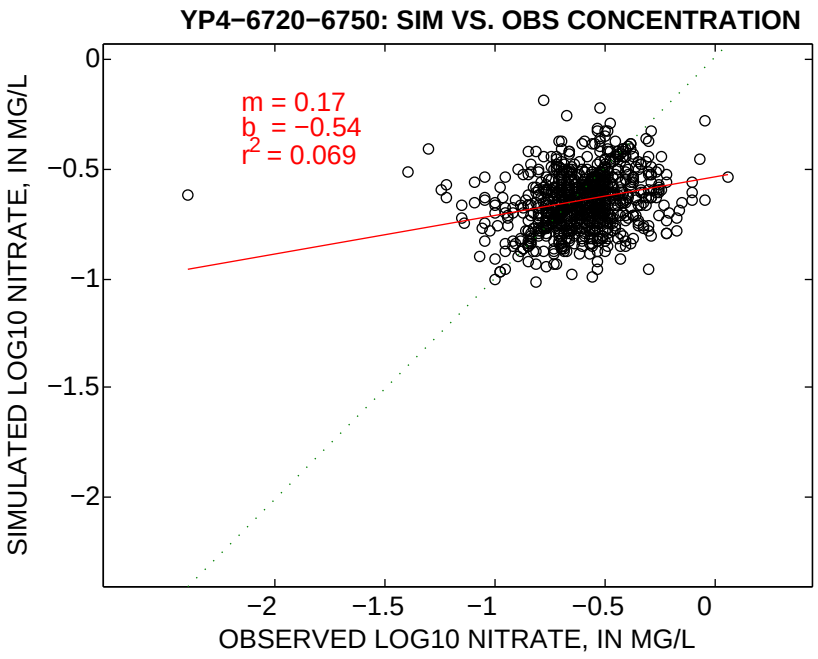
Drive | Directory | Observed: N/A | model | OBS20161101

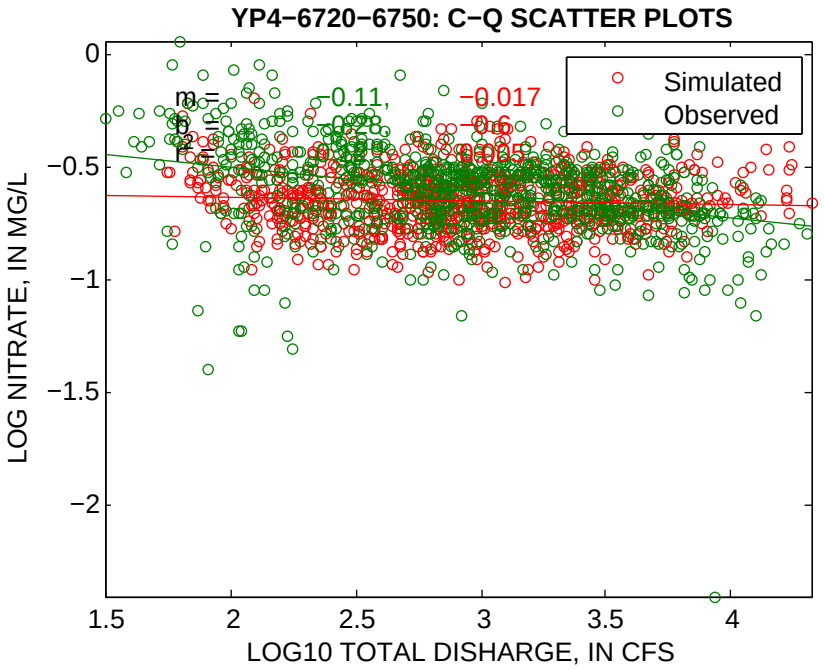
STATISTICS

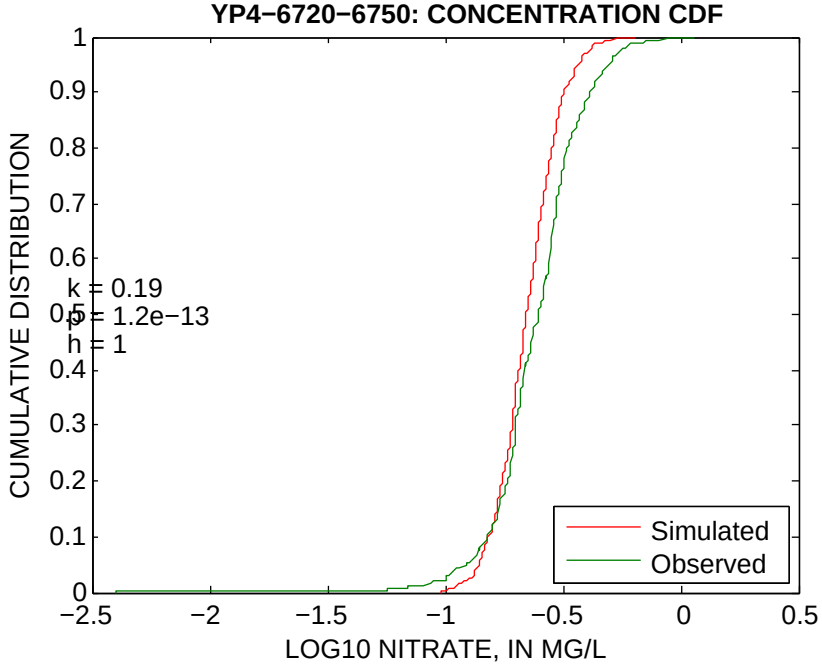
		observe	simulate
n		861	861
min		0.004	0.072055
		-2.39794	-1.14234
mean		0.269826	0.229401
		-0.608343	-0.66734
media		0.25	0.21399
		-0.60206	-0.669607
max		1.15	0.68979
		0.0606978	-0.161283
varian		0.0144617	0.00727115
		0.036942	0.0242301
JB		0.001	0.001
		0.001	0.5
		ra	log
%		-14.9818	9.69803
err.va		0.0230757	0.0637343
rel.std.err		1.59564	1.72525
mod.eff		-0.595645	-0.725252

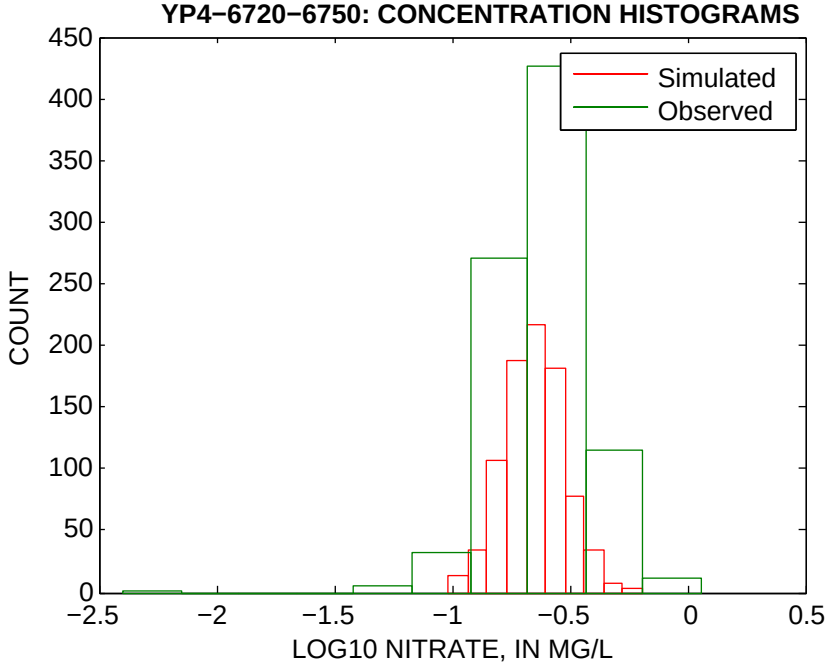
VERSION 2.1

ALL DATA
LOG10

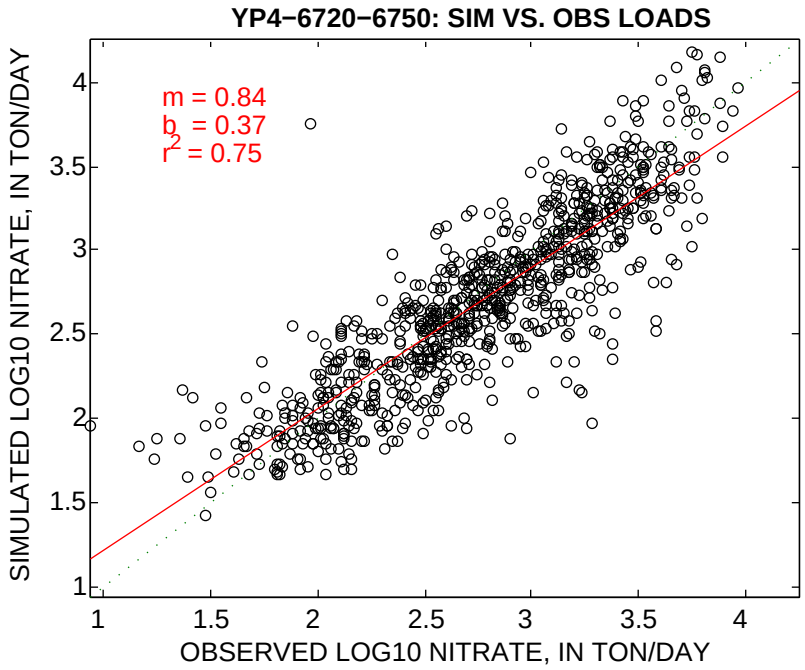


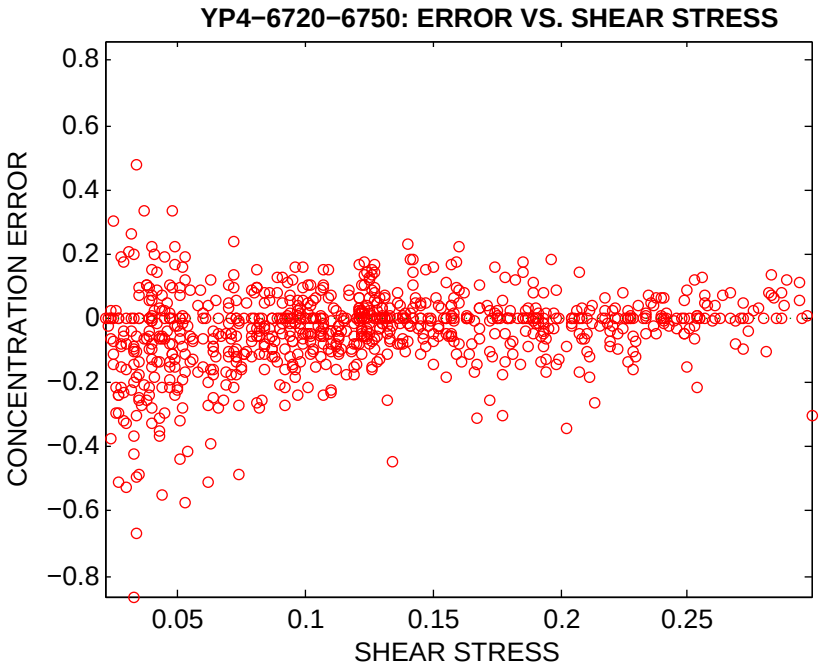


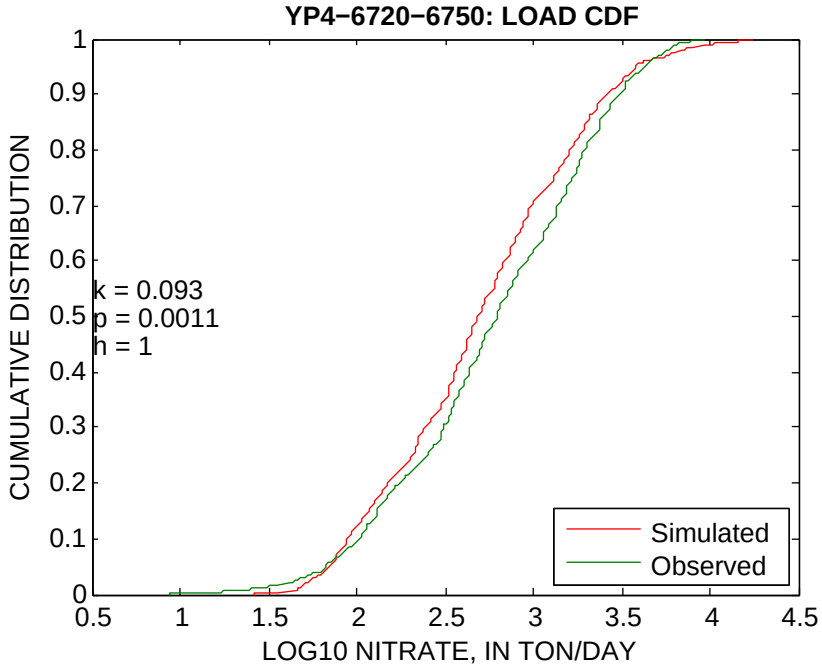


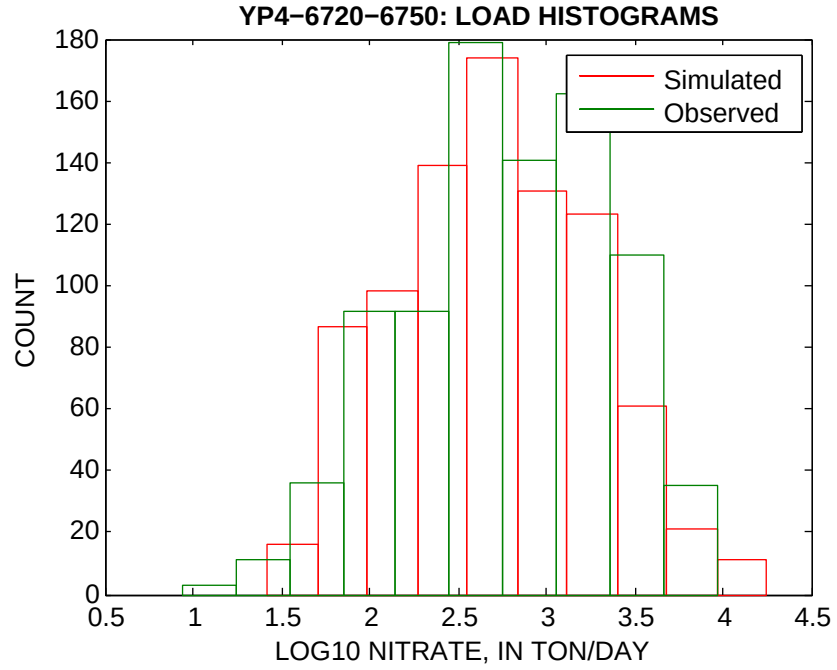


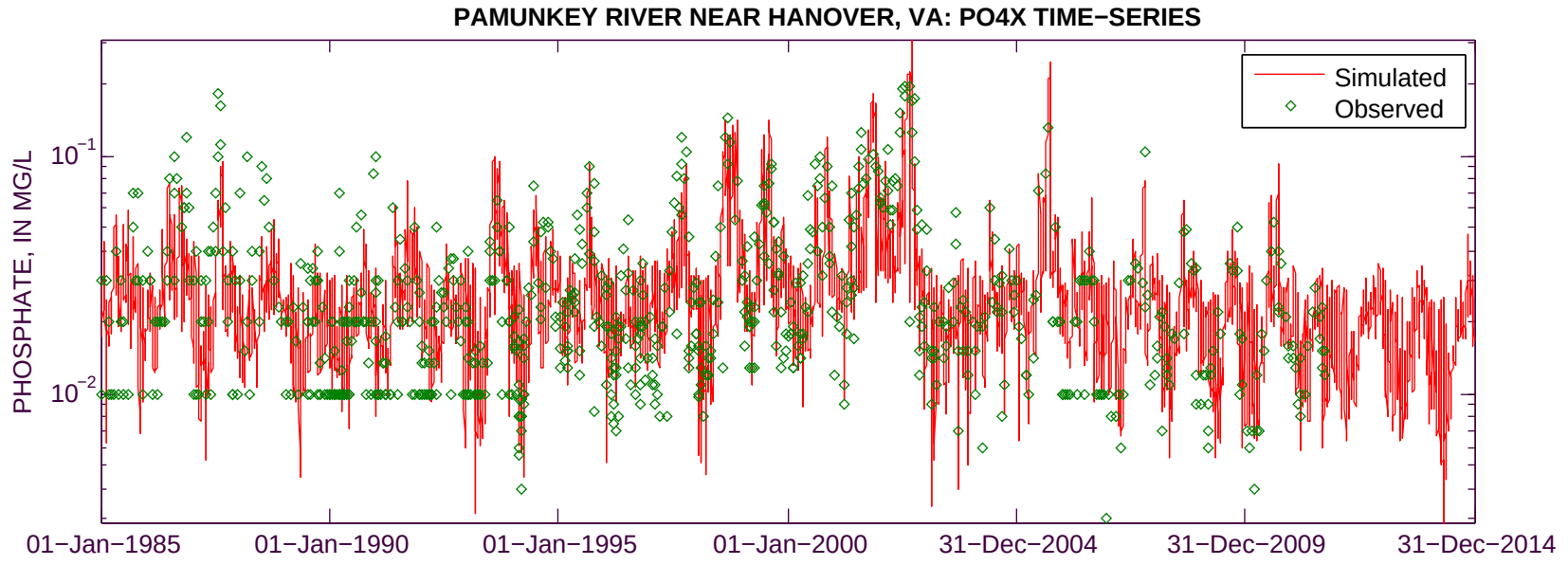
LOAD DATA
LOG10

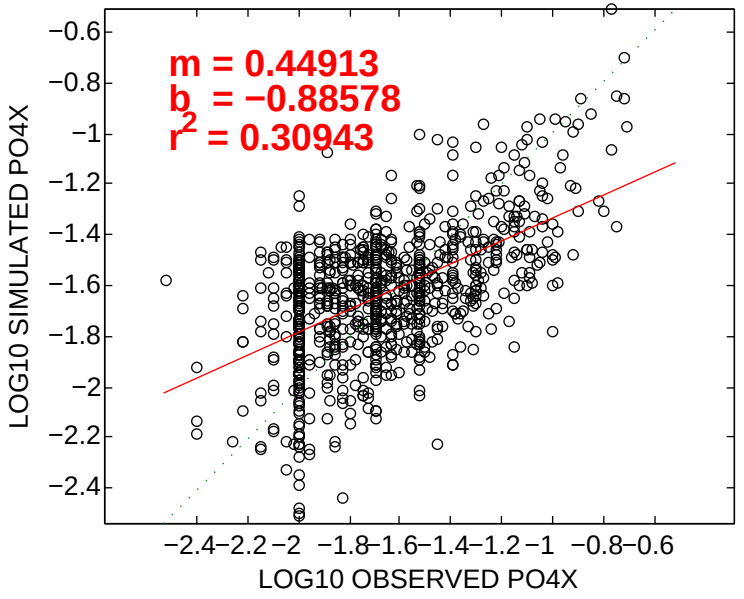


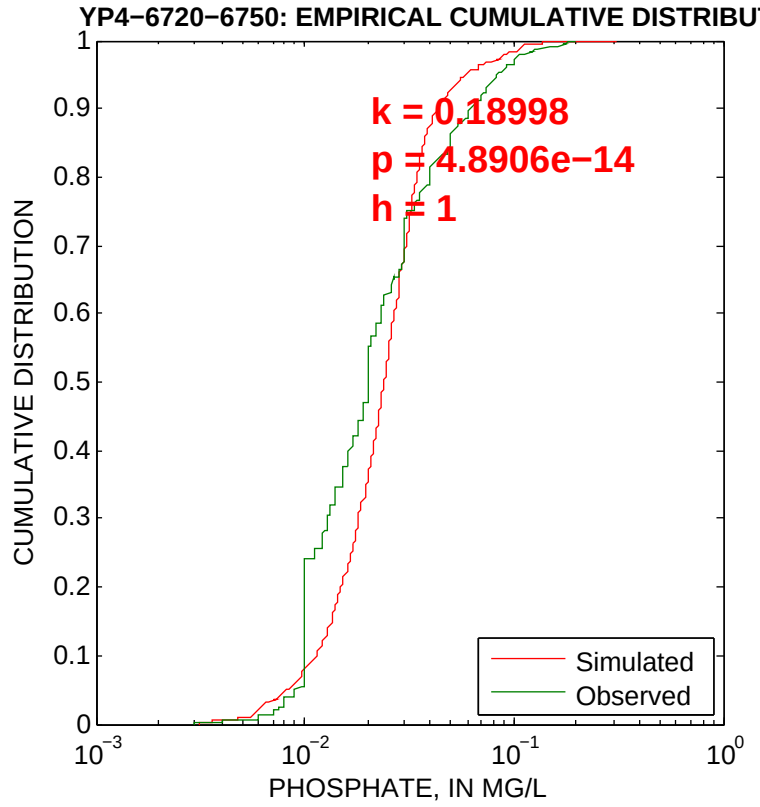












DATA SELECTION

scenario	file
P620171001WQ	PO4X.calib

plot: PO4X - phosphate

Dates: 1/1/1985 – 12/31/201

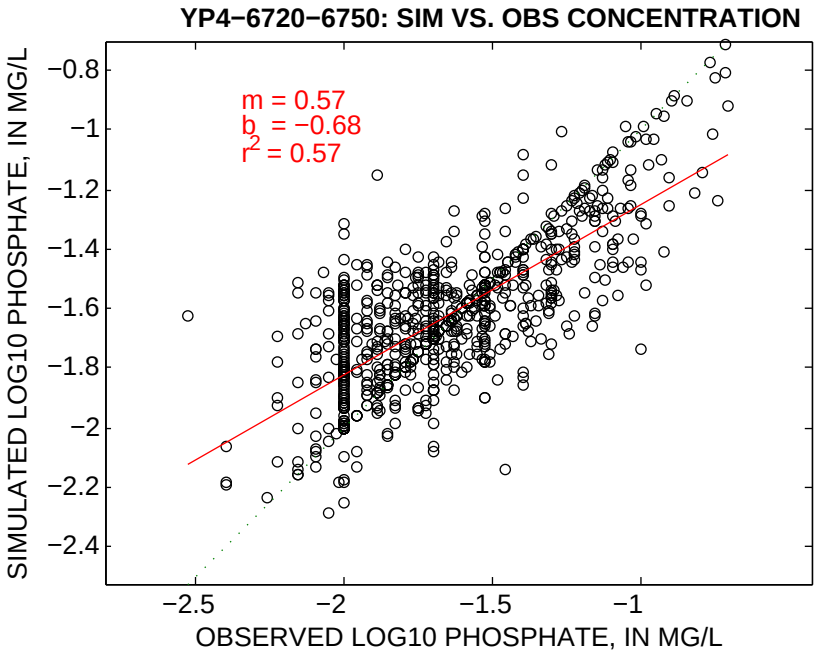
Drive	Directory	Observed
N/A	model	OBS20161101

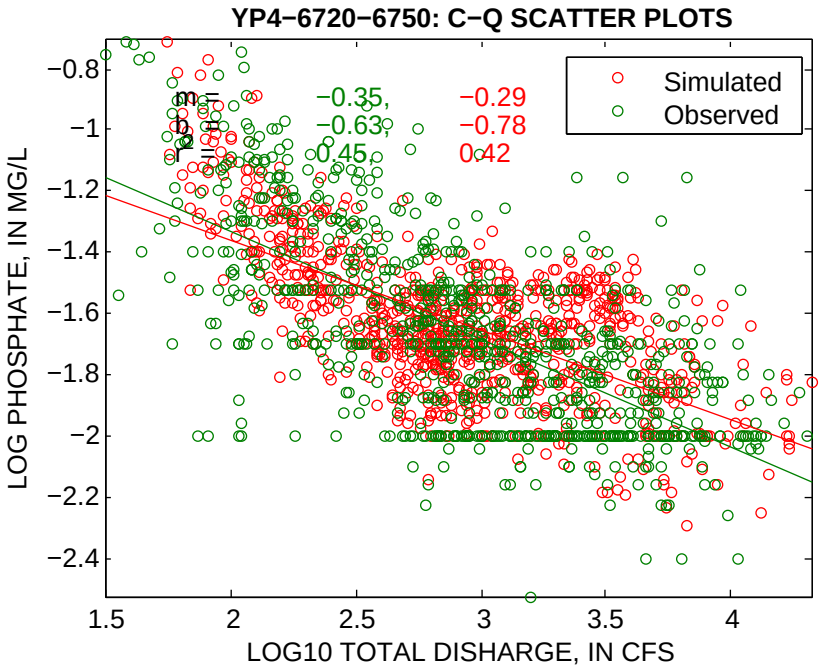
STATISTICS

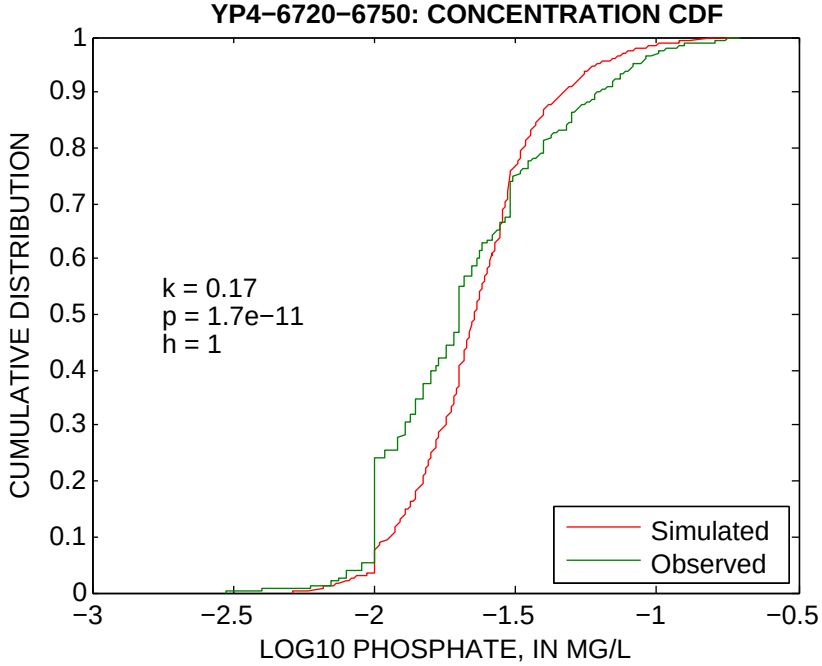
		observe	simulate
n		858	858
min		0.003	0.0031161
		-2.52288	-2.50639
mean		0.0289859	0.0277711
		-1.66725	-1.63459
media		0.02	0.024135
		-1.69897	-1.61735
max		0.196	0.30825
		-0.707744	-0.511097
varian		0.00075872	0.00044796
		0.0998735	0.0651092
JB		0.001	0.001
		0.001	0.001
		ra	log
%		-4.191	-1.95885
err.va		0.0004434	0.0763376
rel.std.err		0.584403	0.764343
mod.eff		0.415597	0.235657

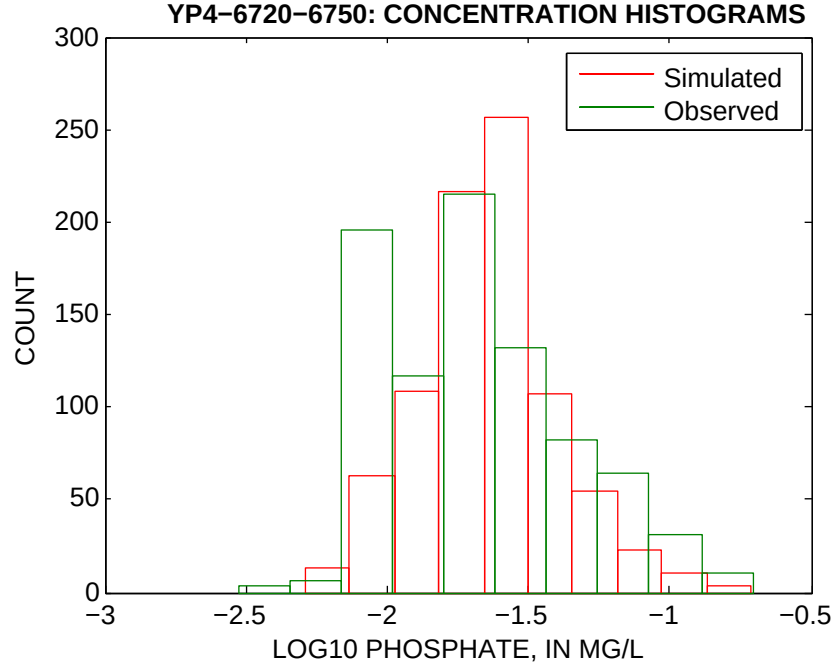
VERSION 2.1

ALL DATA
LOG10

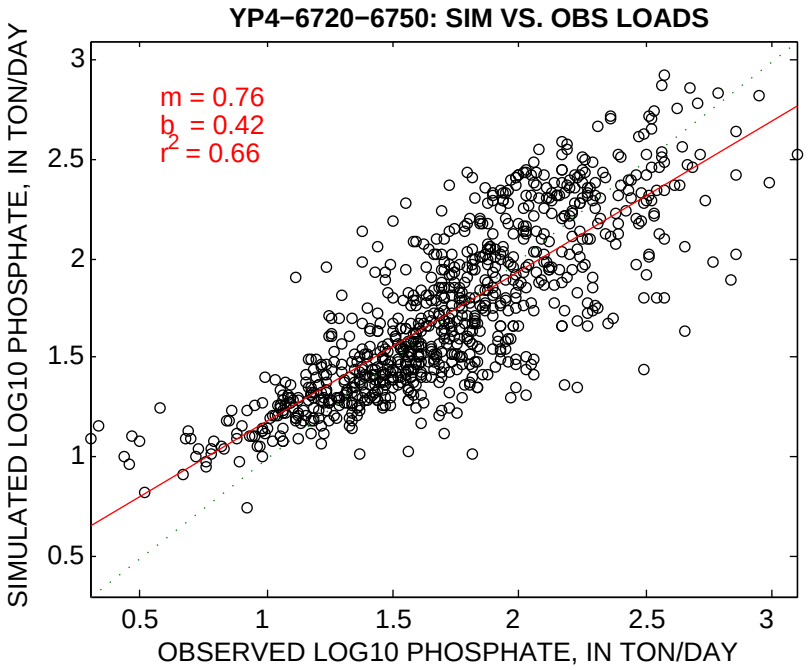


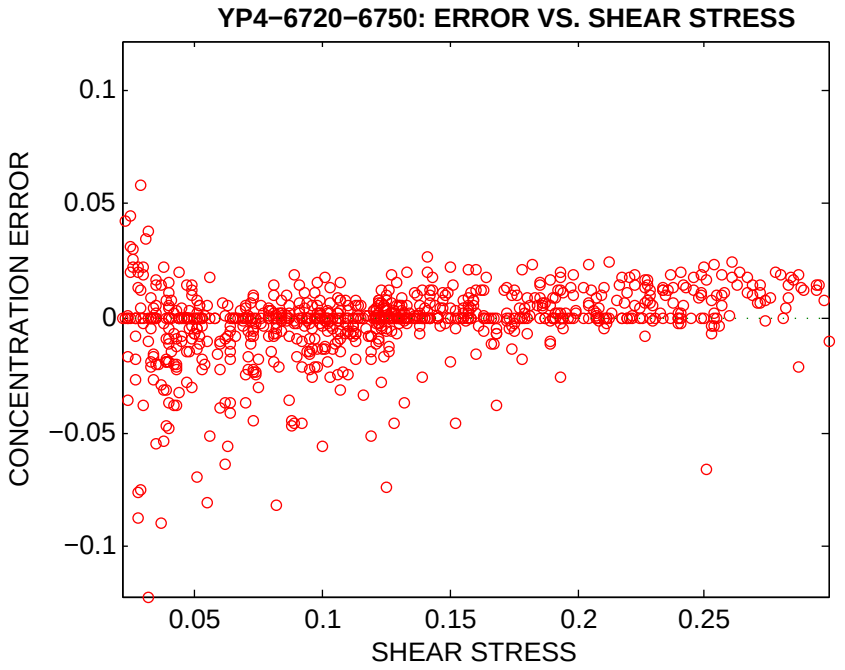


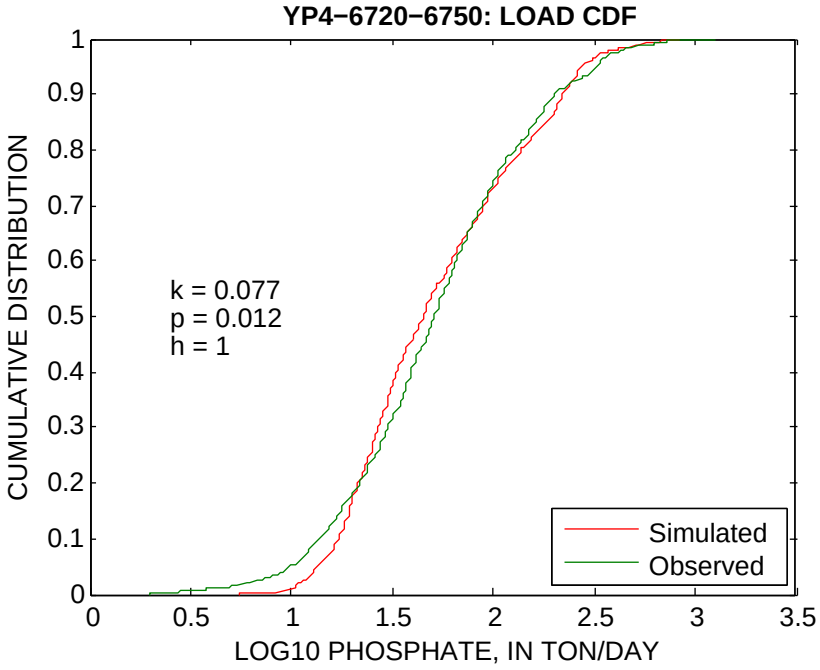


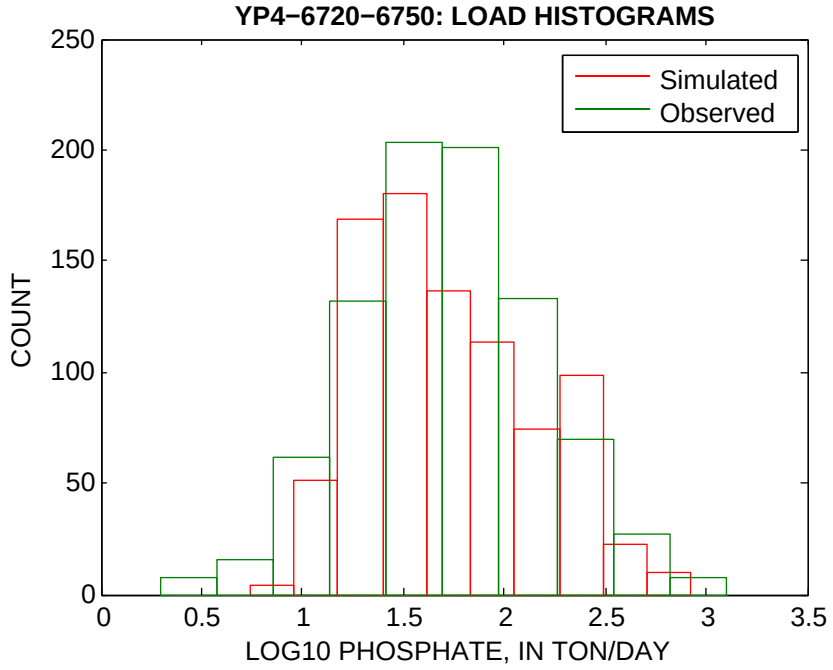


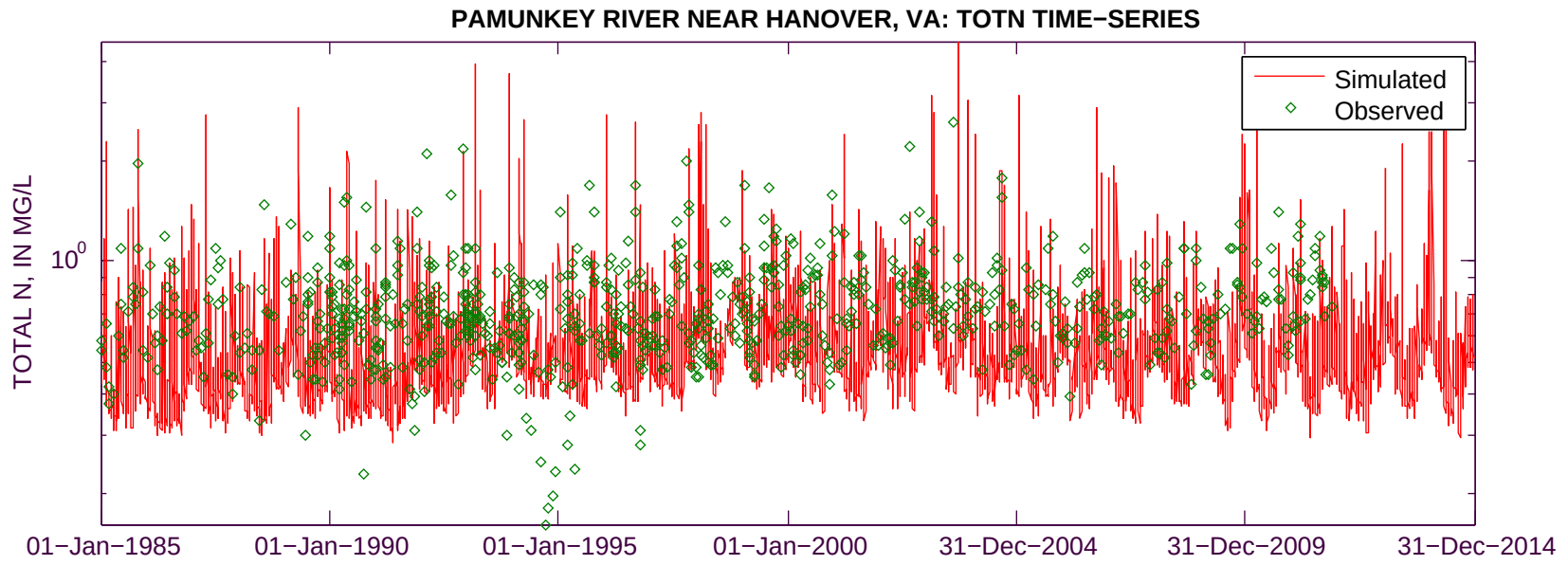
LOAD DATA
LOG10

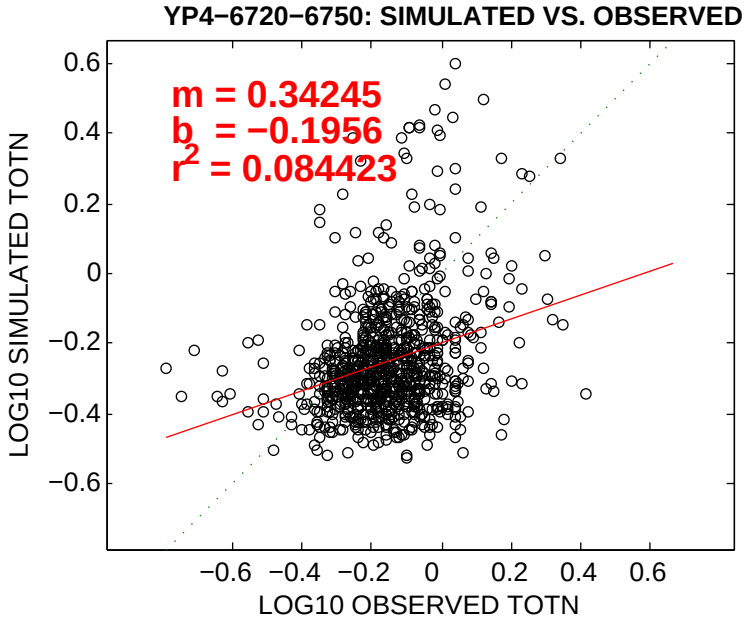


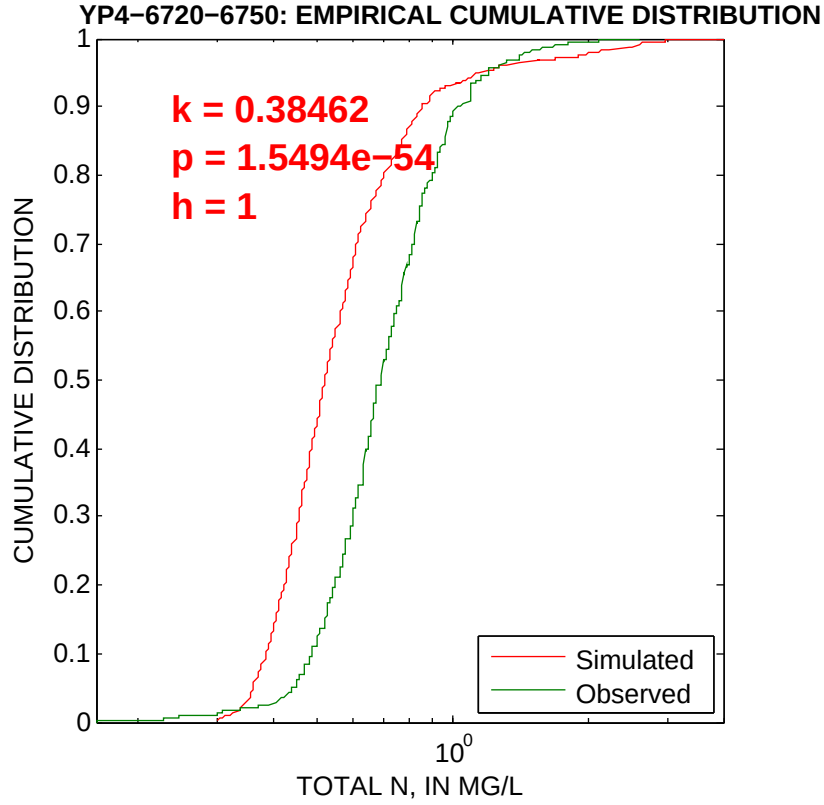












DATA SELECTION

scenario: P620171001WQ | file: TOTN.calib

plot: TOTN - total nitrogen

Dates: 1/1/1985 – 12/31/201

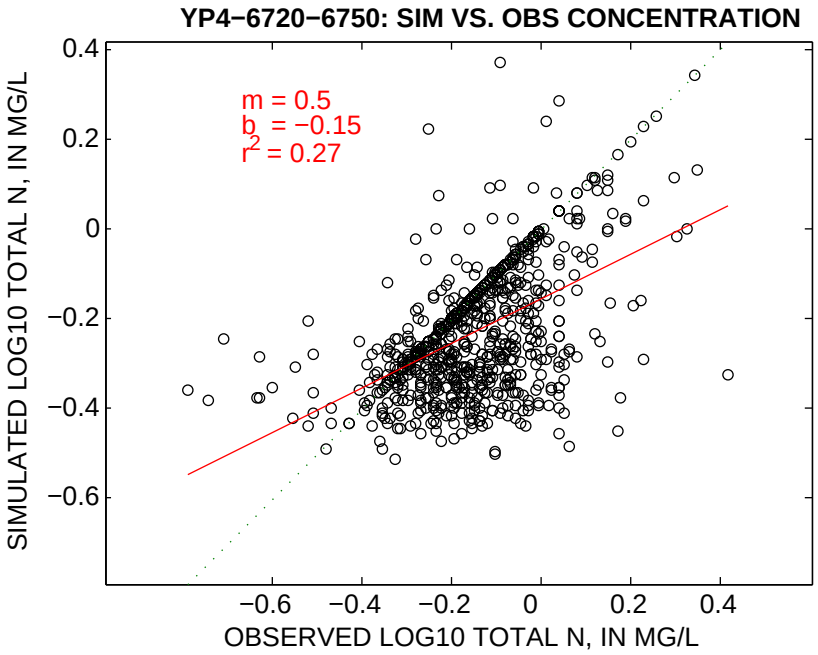
Drive: N/A | Directory: model | Observed: OBS20161101

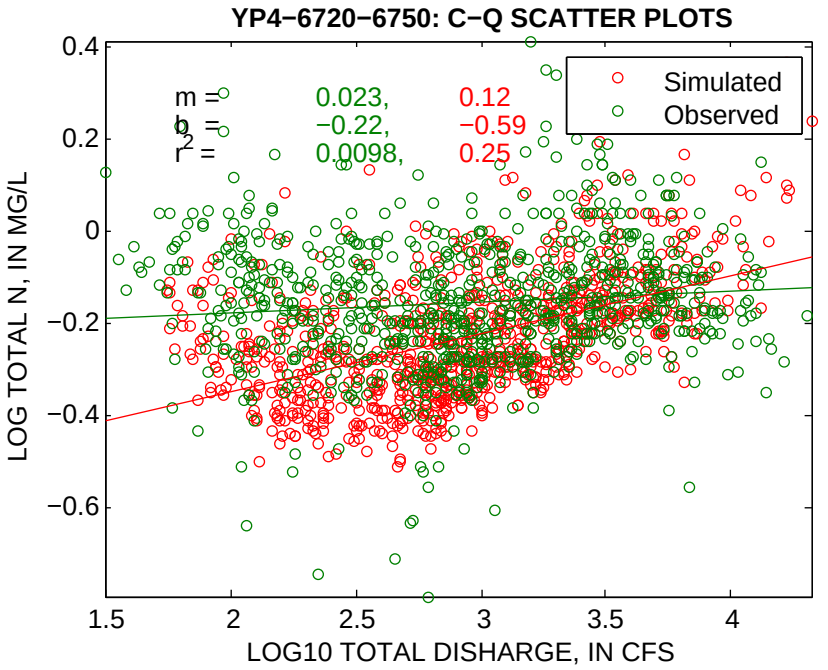
STATISTICS

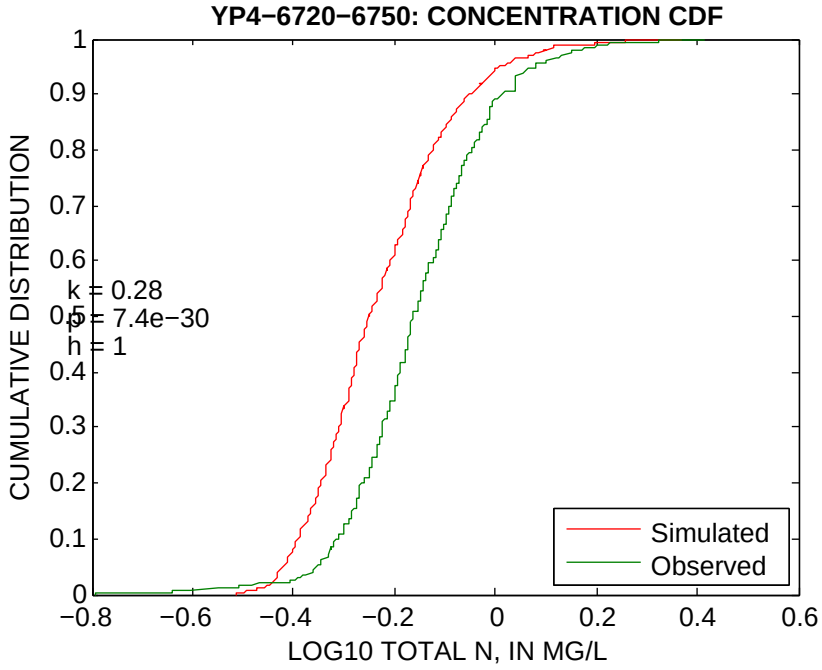
		observe	simulate
n		832	832
min		0.162	0.29671
		-0.790485	-0.527668
mean		0.743053	0.622525
		-0.152802	-0.24793
media		0.69	0.52196
		-0.161151	-0.282363
max		2.61	3.9663
		0.416641	0.598386
varian		0.0703455	0.145982
		0.0203468	0.0282638
JB		0.001	0.001
		0.001	0.001
		ra	log
%		-16.2207	62.2553
err.va		0.175777	0.0437352
rel.std.err		2.49877	2.14949
mod.eff		-1.49877	-1.14949

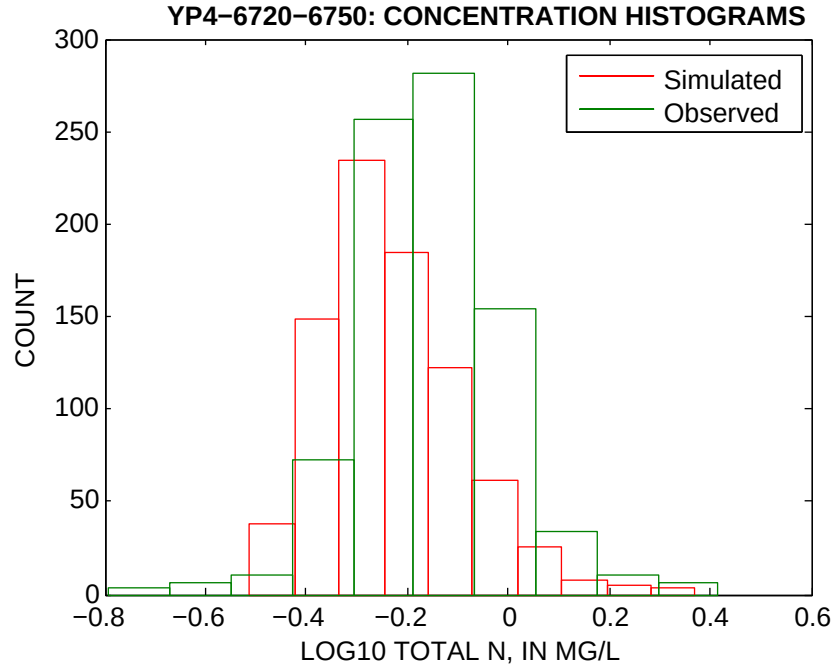
VERSION 2.1

ALL DATA
LOG10

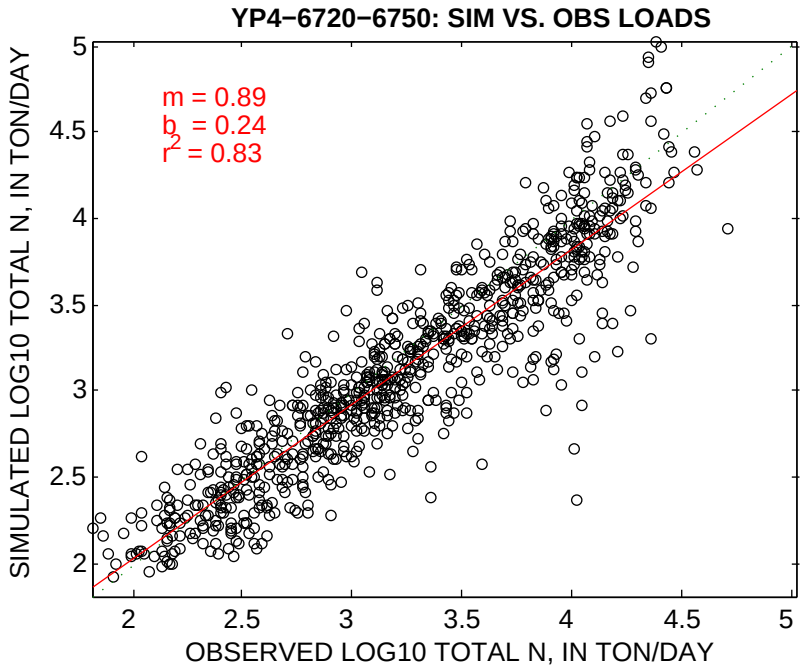


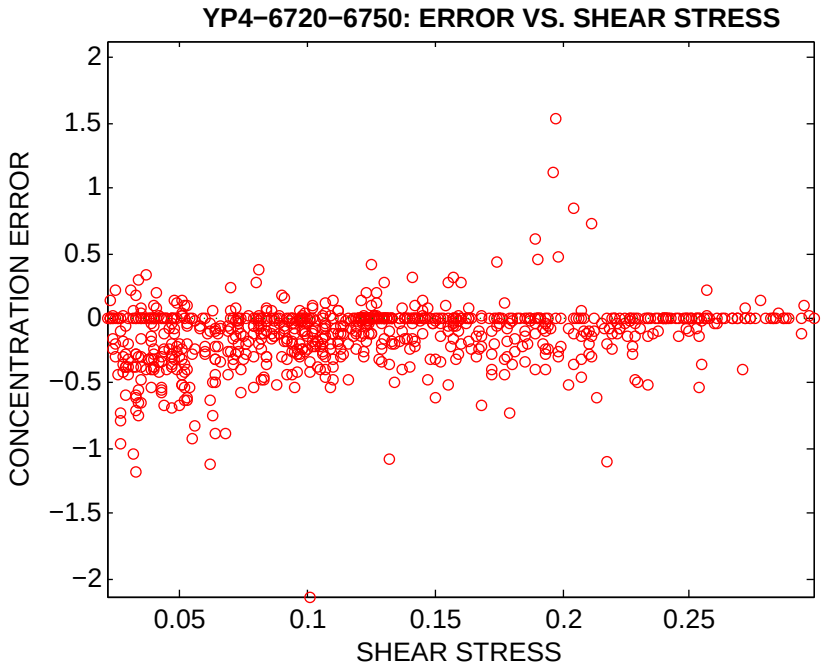


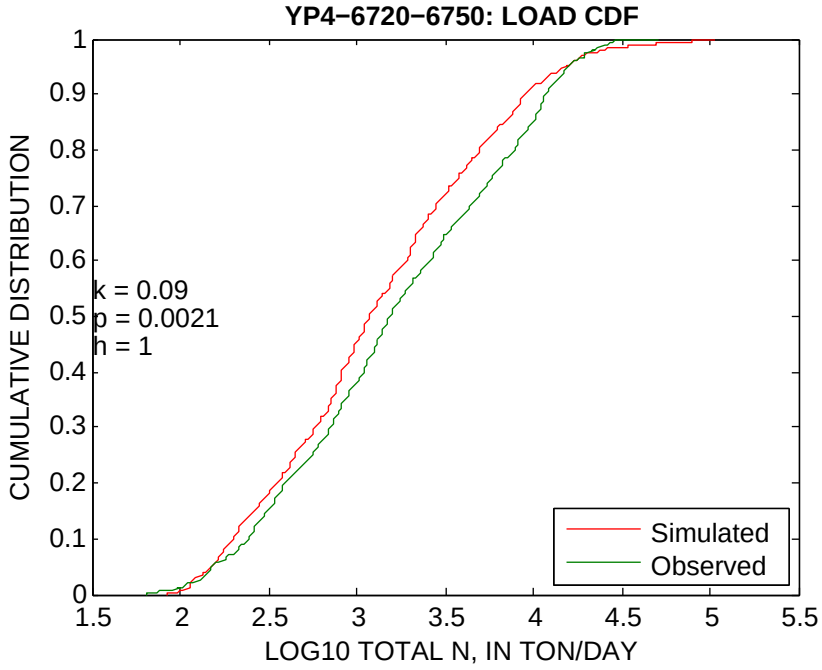


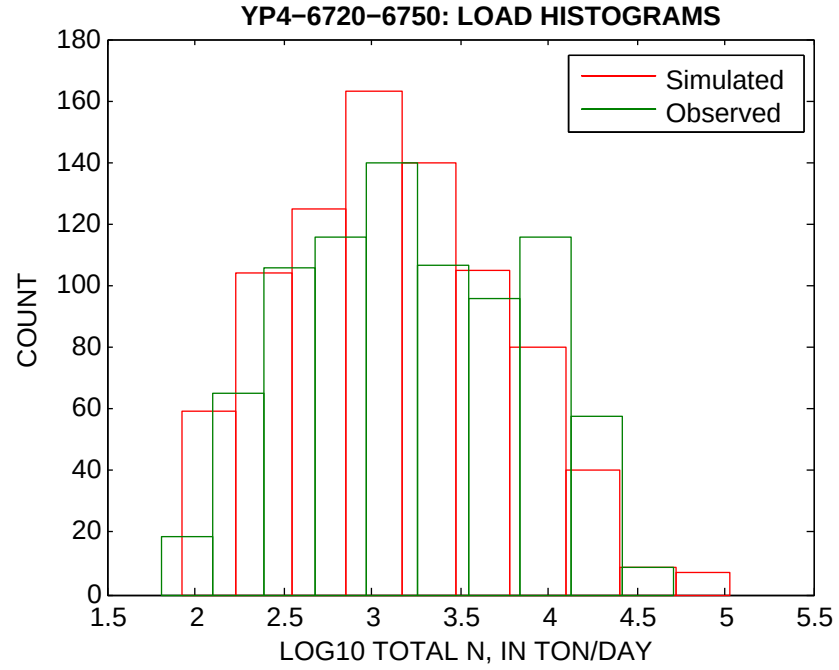


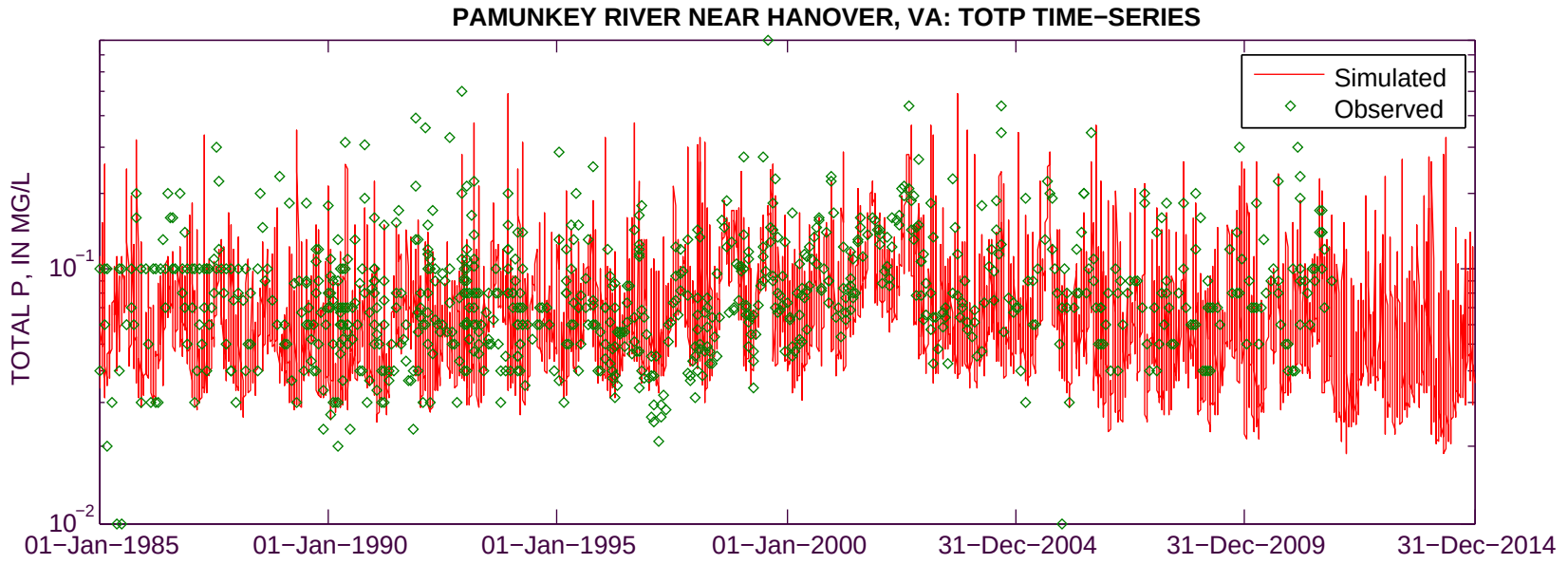
LOAD DATA
LOG10

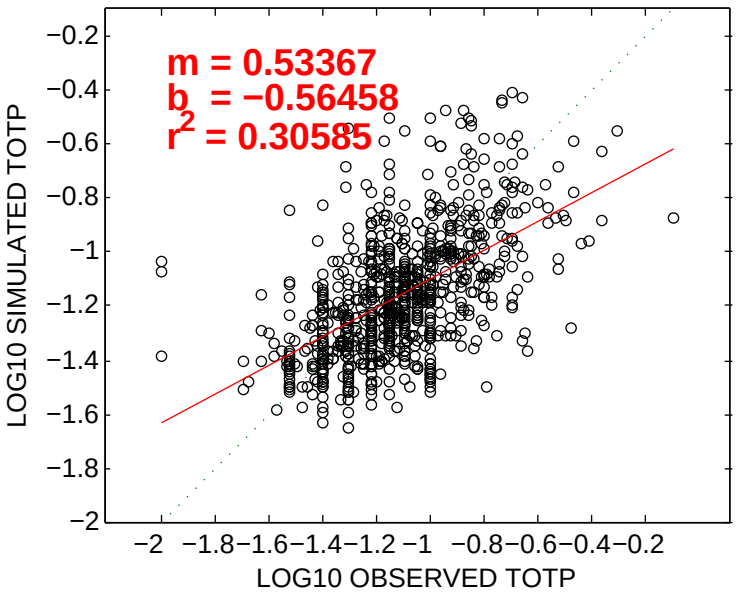


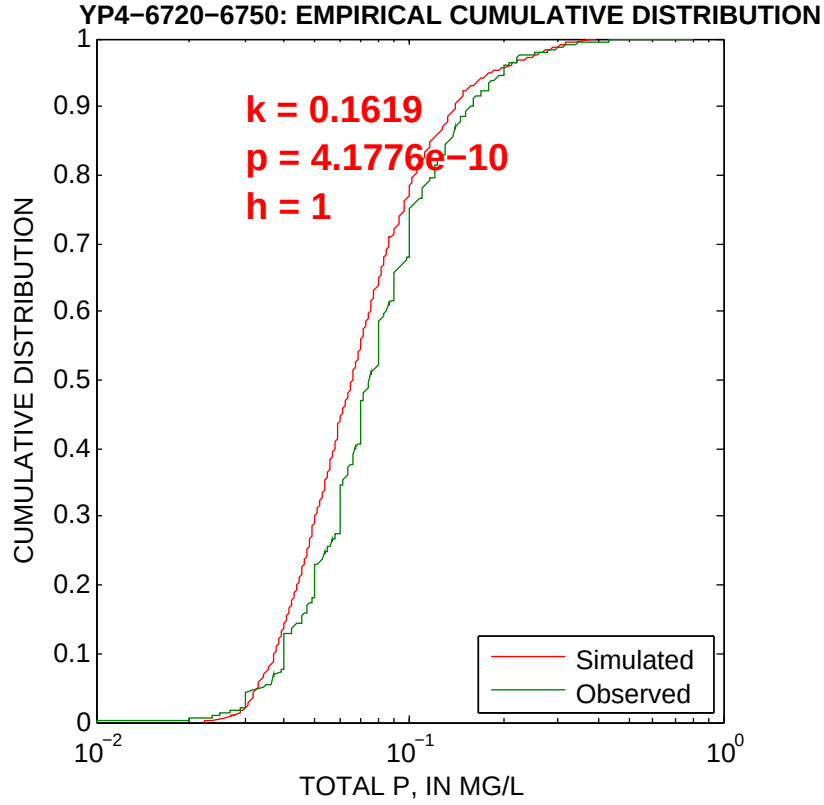












DATA SELECTION

scenario	file
P620171001WQ	TOTP.calib

plot: TOTP - total phosphorus

Dates: 1/1/1985 – 12/31/201

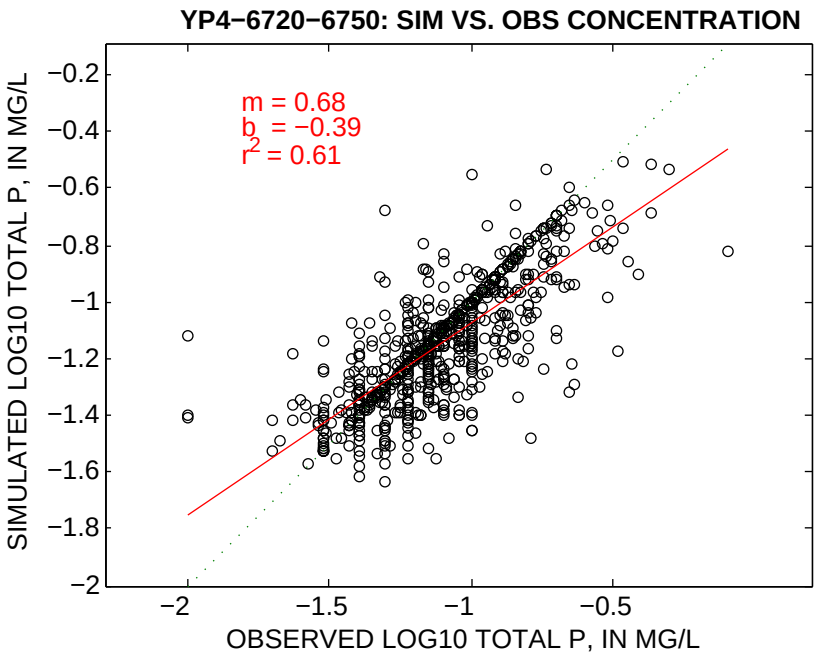
Drive	Directory	Observed
N/A	model	OBS20161101

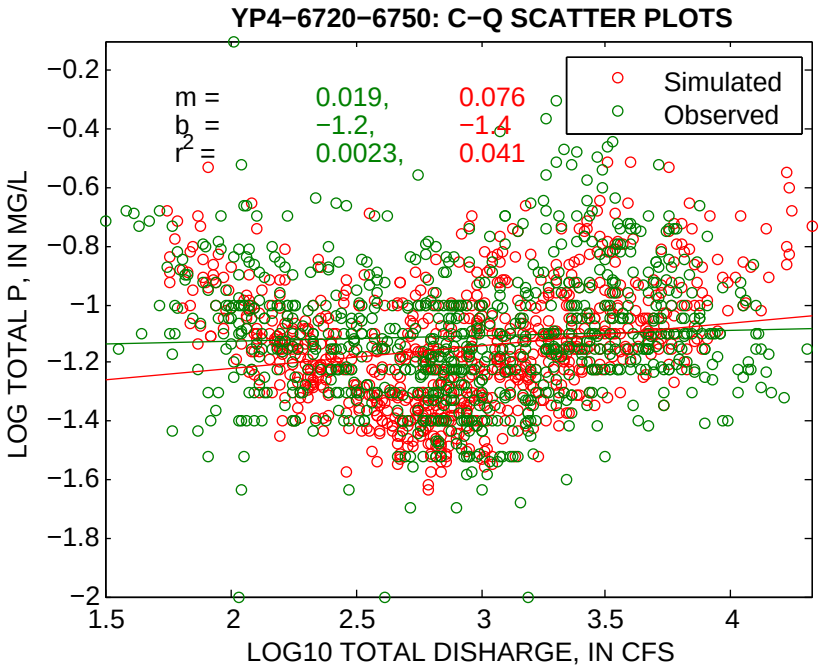
STATISTICS

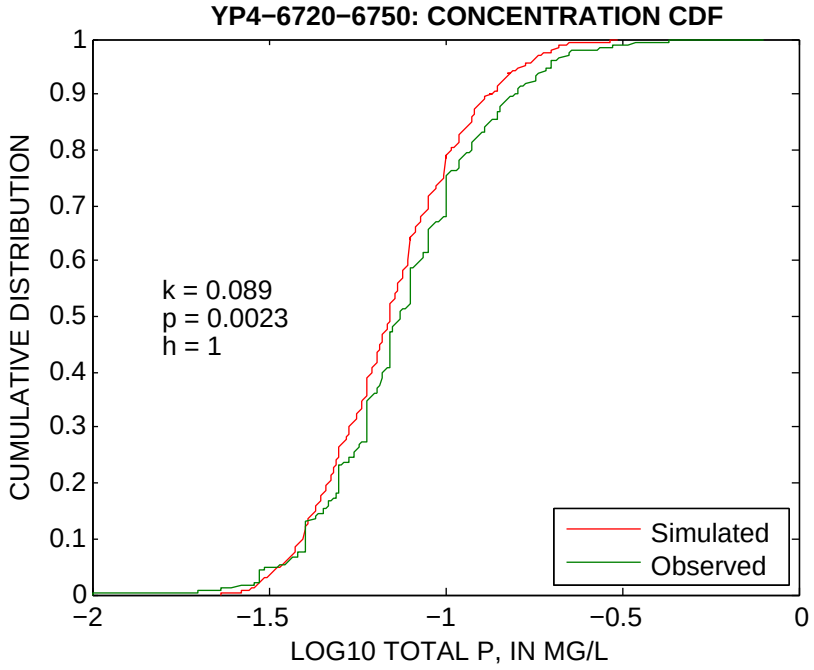
	observe	simulate
n	840	840
min	0.01 -2	0.022359 -1.65055
mean	0.0905413 -1.1117	0.0811123 -1.15786
media	0.075 -1.12494	0.0657275 -1.18225
max	0.802 -0.0958256	0.39466 -0.403777
varian	0.00380631 0.055805	0.00291336 0.0519651
JB	0.001 0.001	0.001 0.001
	ra	log
%	-10.414	4.15282
err.va	0.00369113	0.0503405
rel.std.err	0.96974	0.90208
mod.eff	0.0302596	0.0979199

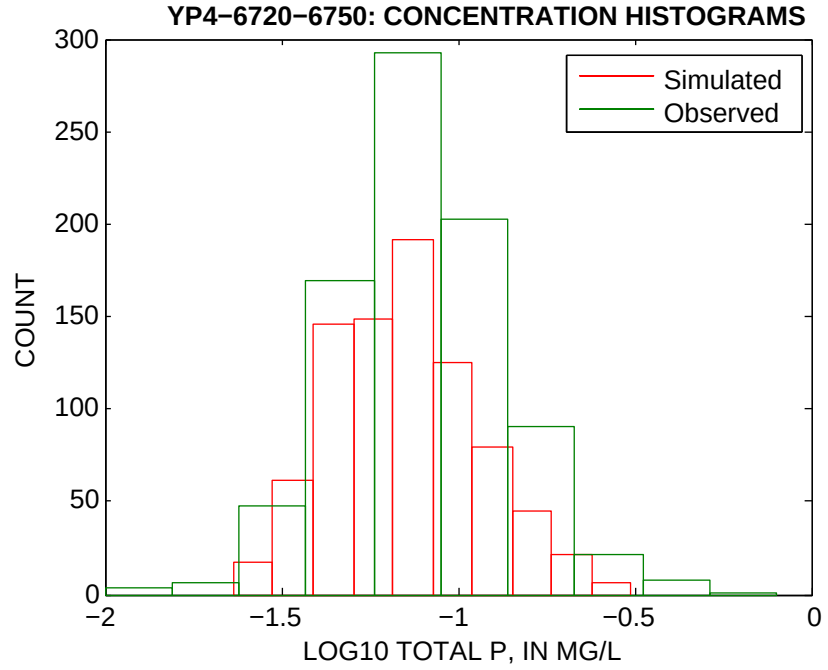
VERSION 2.1

ALL DATA
LOG10

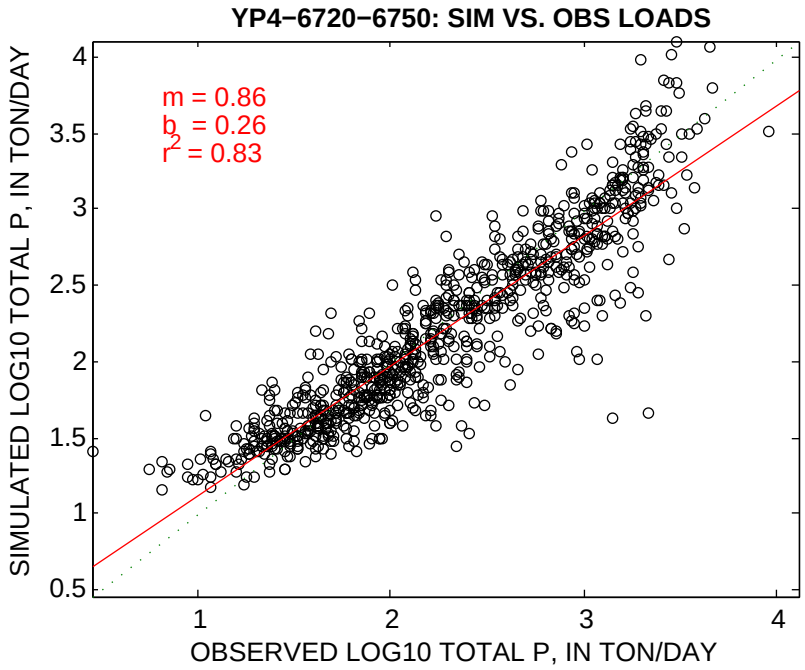


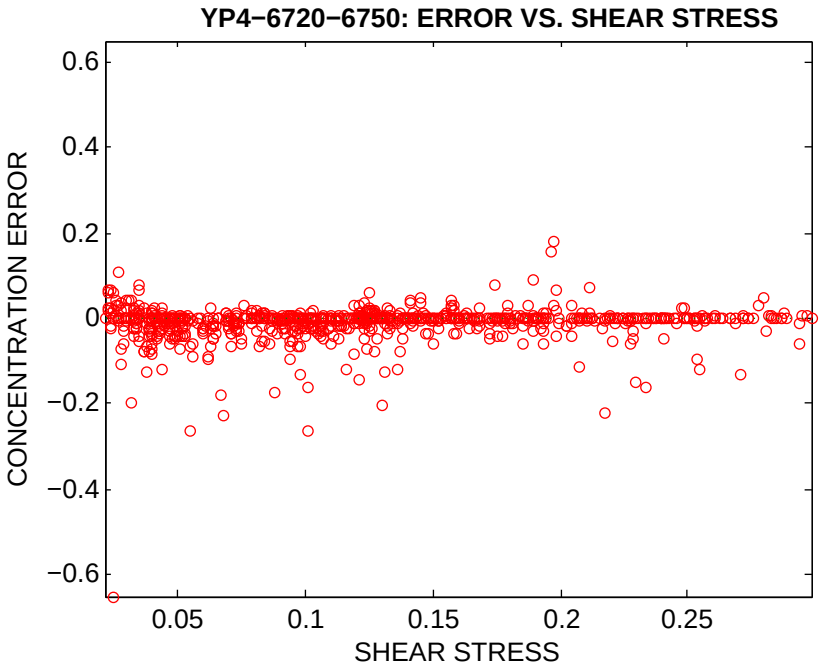


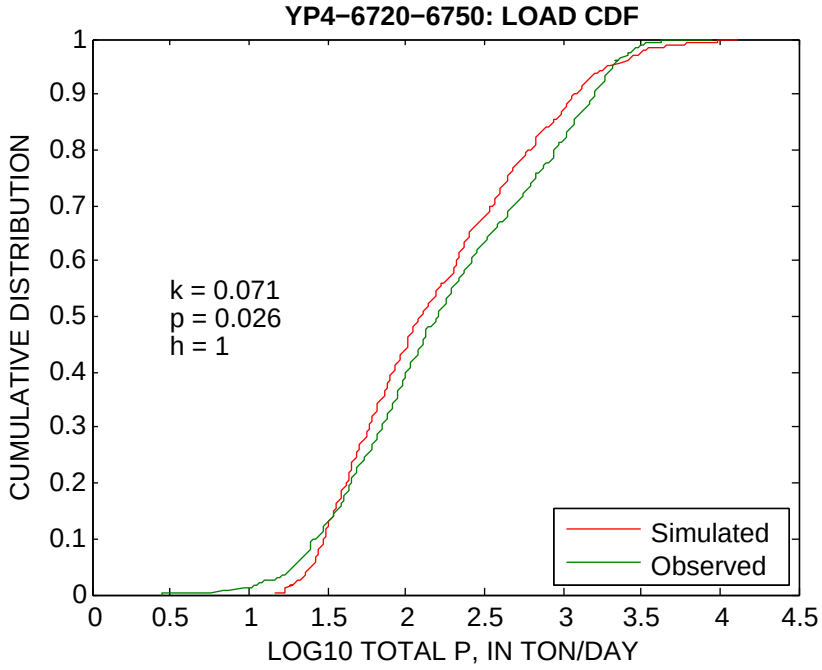


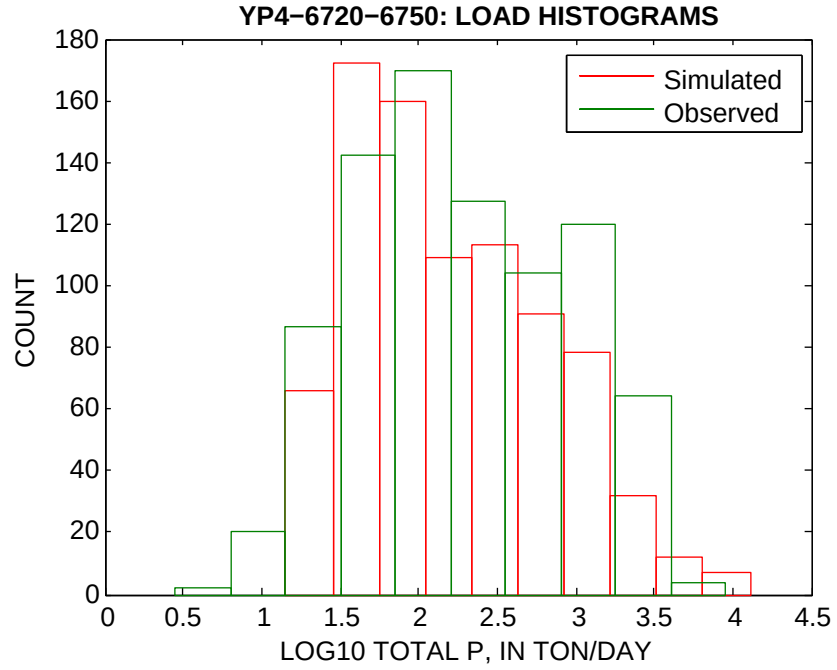


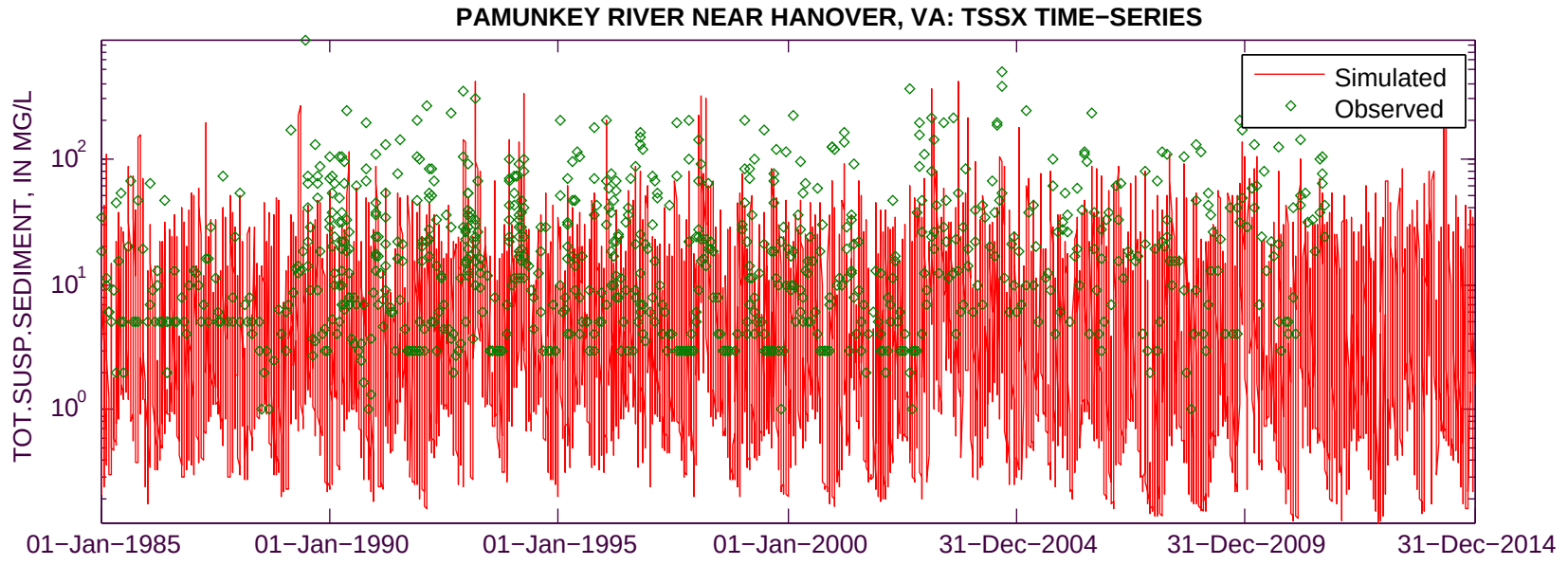
LOAD DATA
LOG10

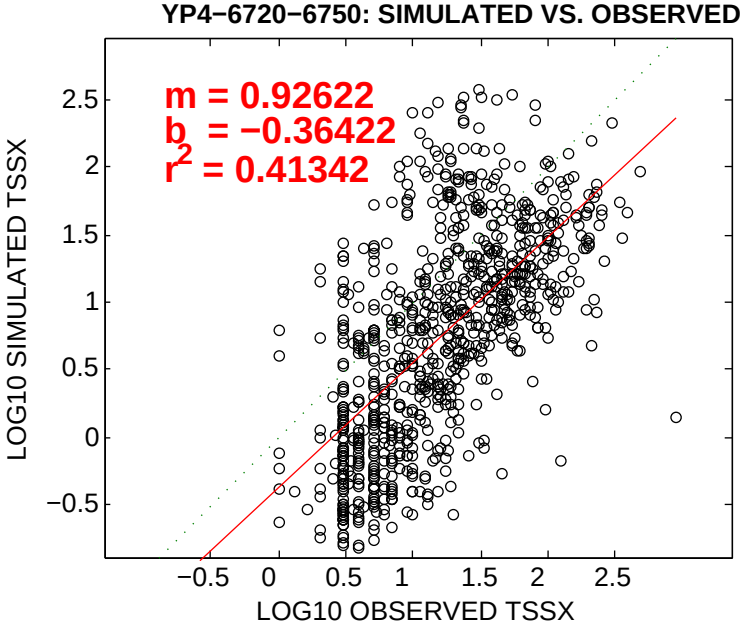


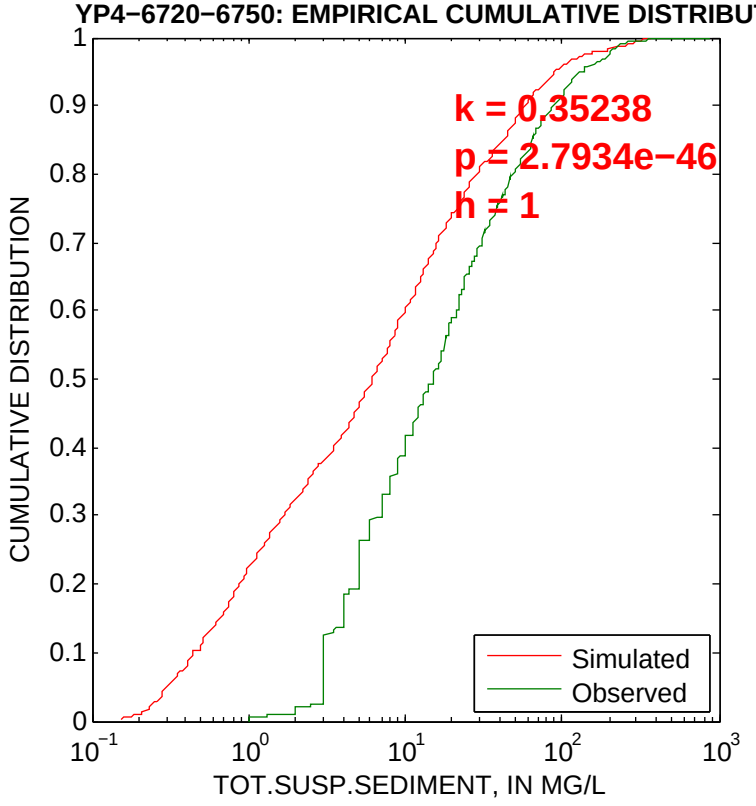












DATA SELECTION

scenario	file
P620171001WQ	TSSX.calib

plot: TSSX - total suspended ...

Dates: 1/1/1985 — 12/31/201

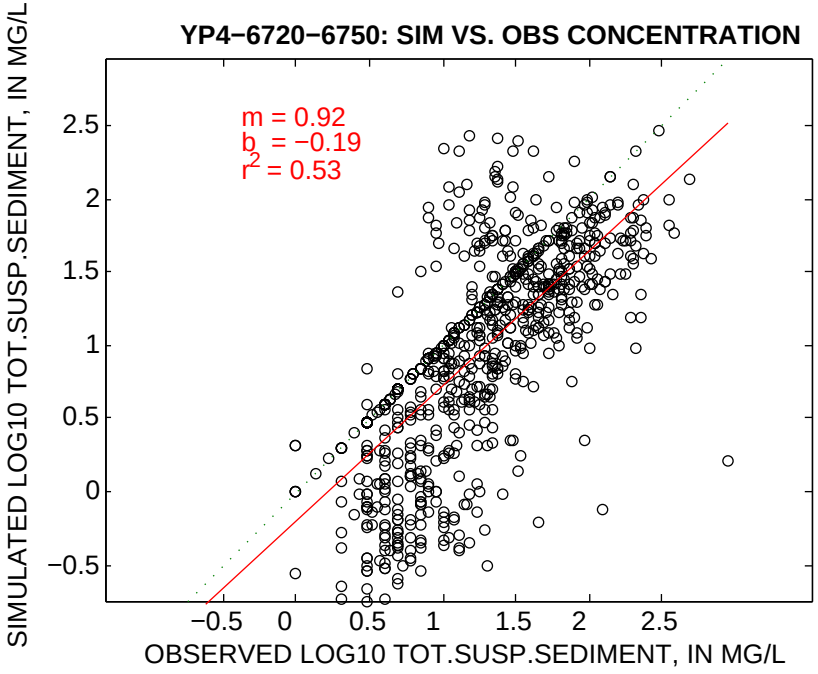
Drive	Directory	Observed
N/A	model	OBS20161101

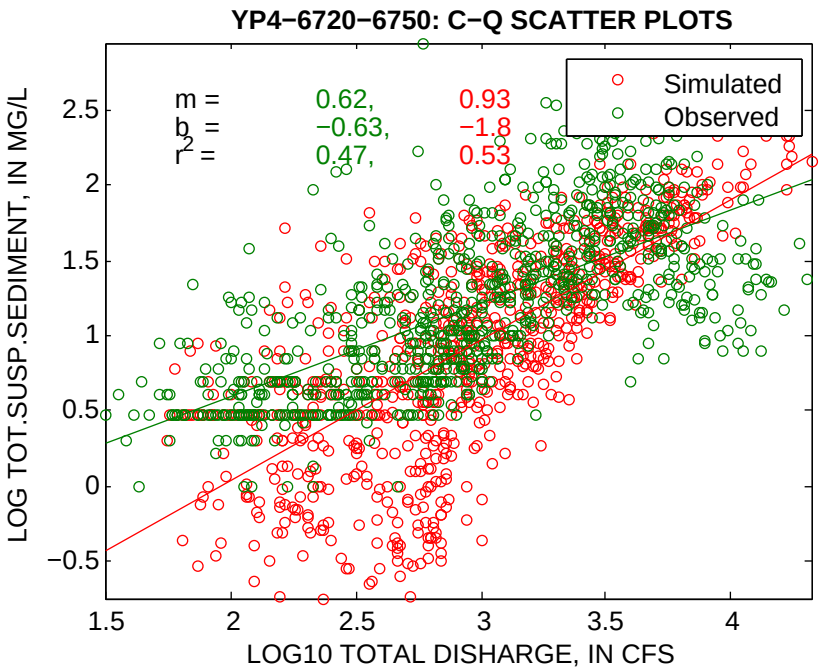
STATISTICS

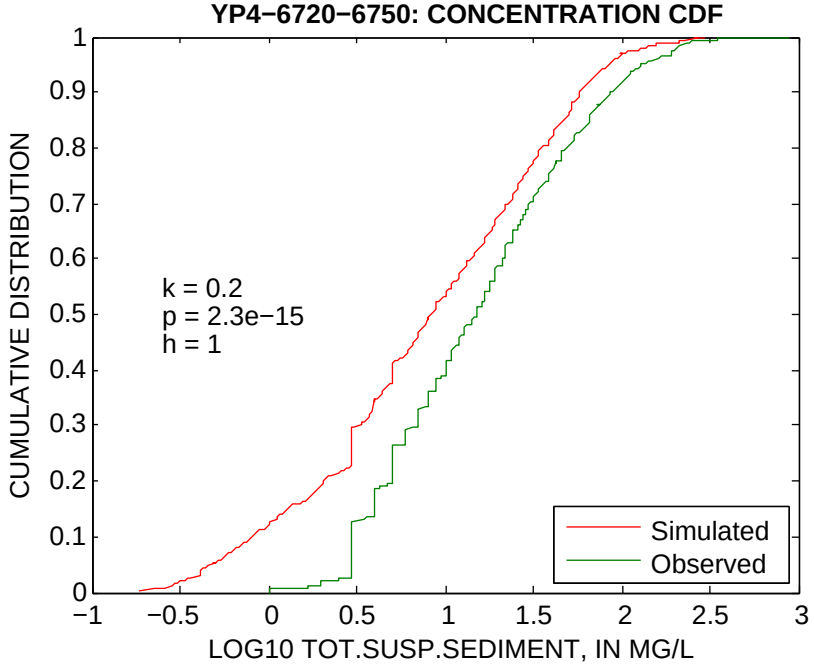
	n	observe	simulate
		840	840
min		1	0.15087
		0	-0.821397
mean		34.9159	22.127
		1.1937	0.741412
media		15	6.2295
		1.17609	0.794453
max		890	373.54
		2.94939	2.57234
varian		3506.61	2051.84
		0.294194	0.610477
JB		0.001	0.001
		0.001	0.001
		ra	log
%		-36.6278	-37.8897
err.va		4704.23	0.564505
rel.std.err		1.34153	1.91882
mod.eff		-0.34153	-0.918816

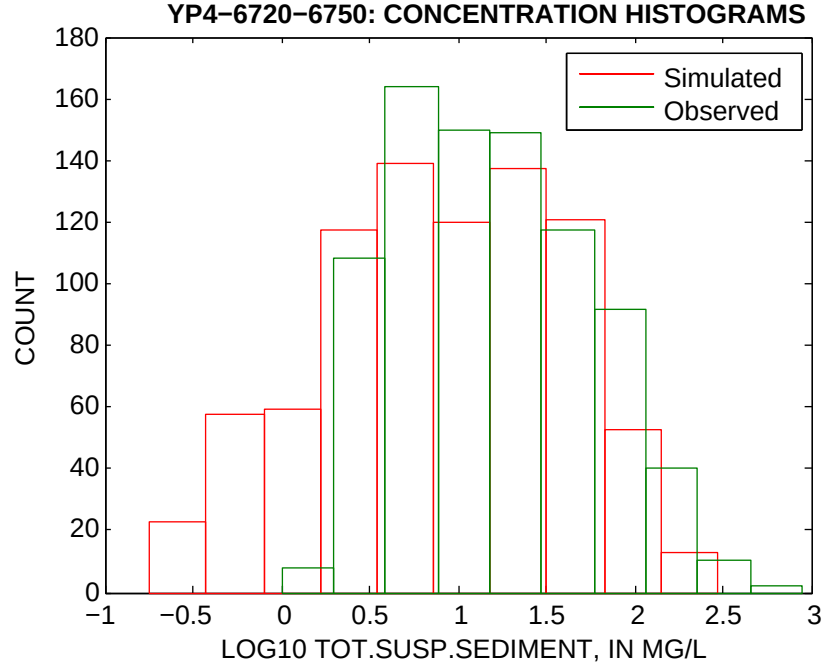
VERSION 2.1

ALL DATA
LOG10

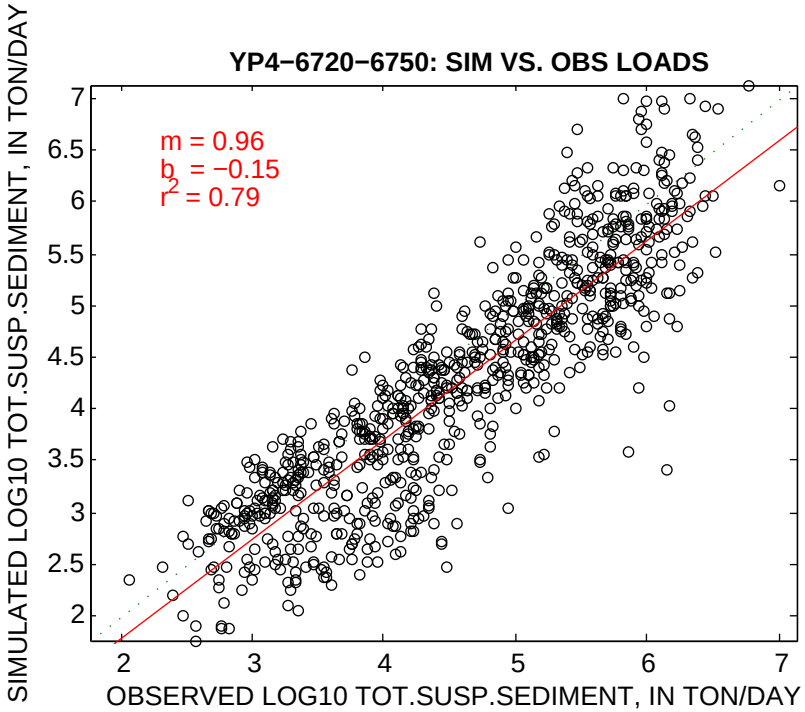


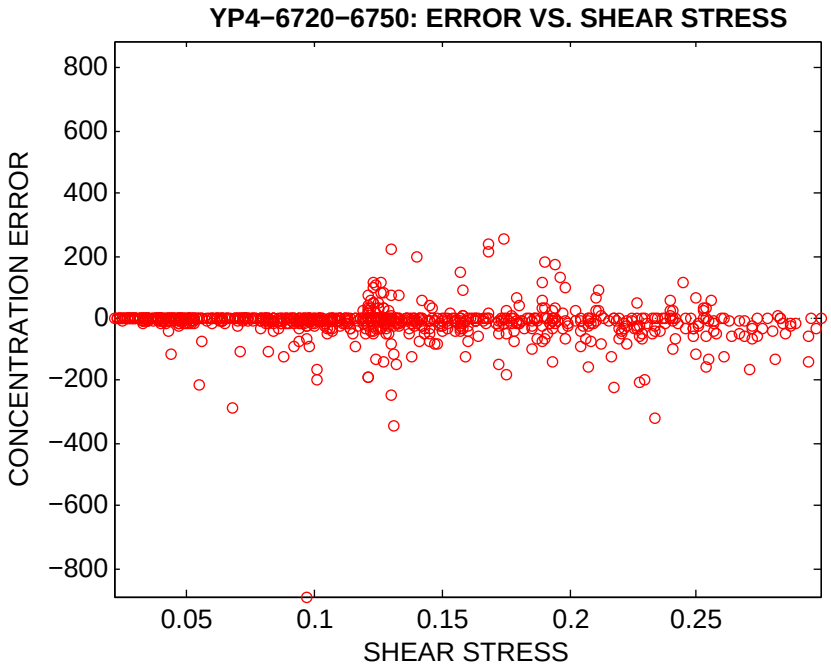


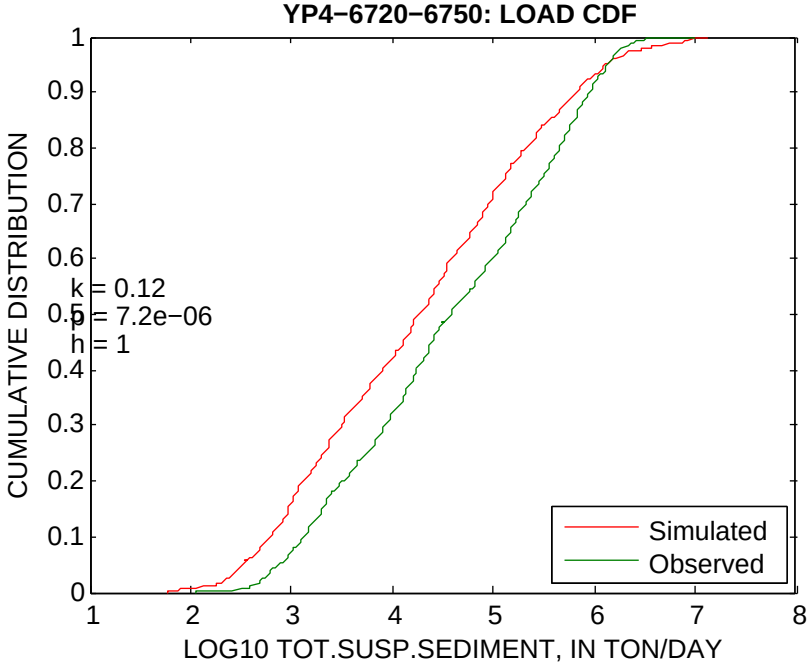


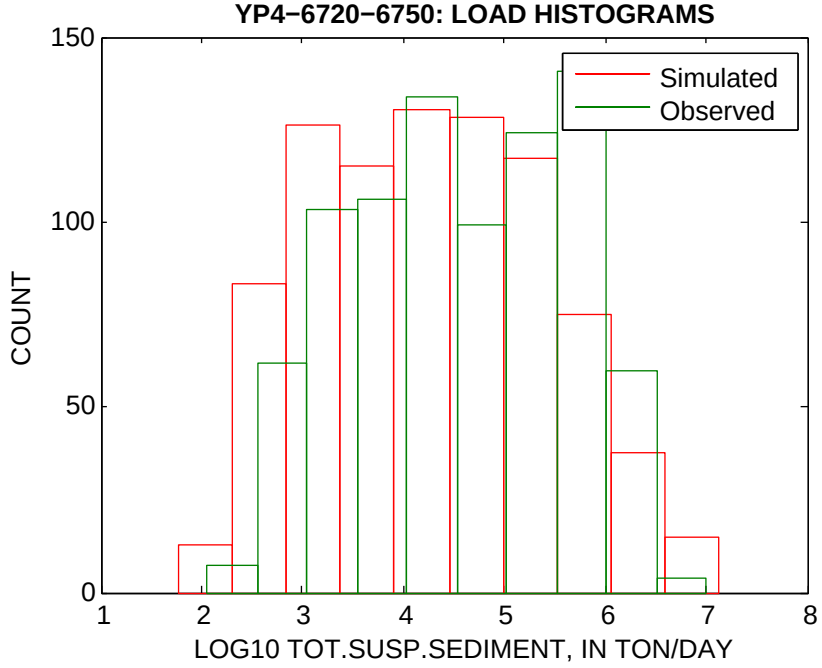


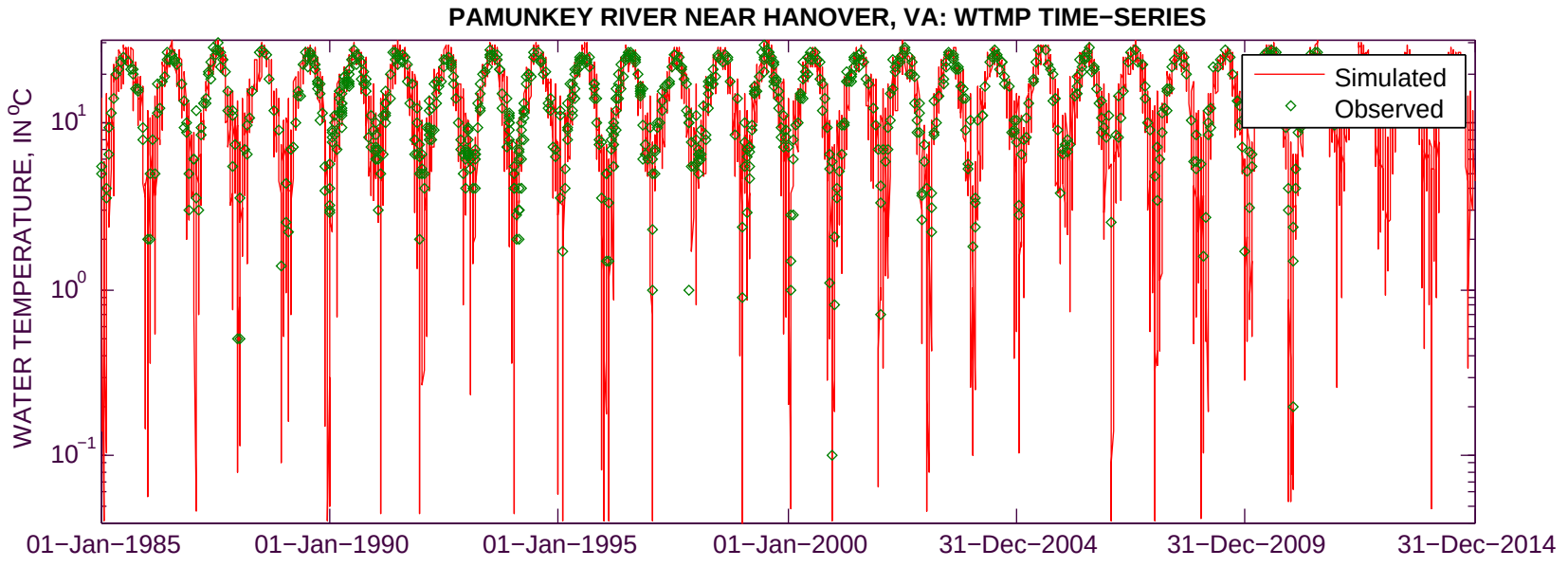
LOAD DATA
LOG10

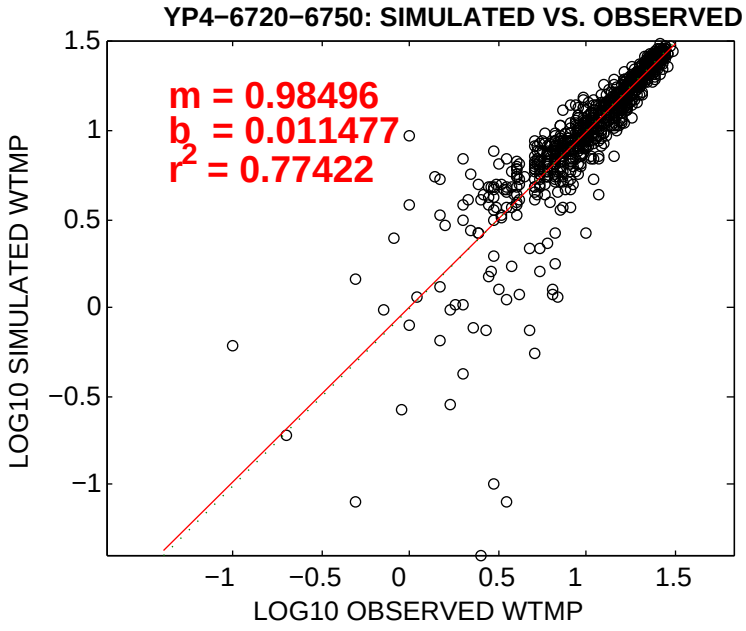


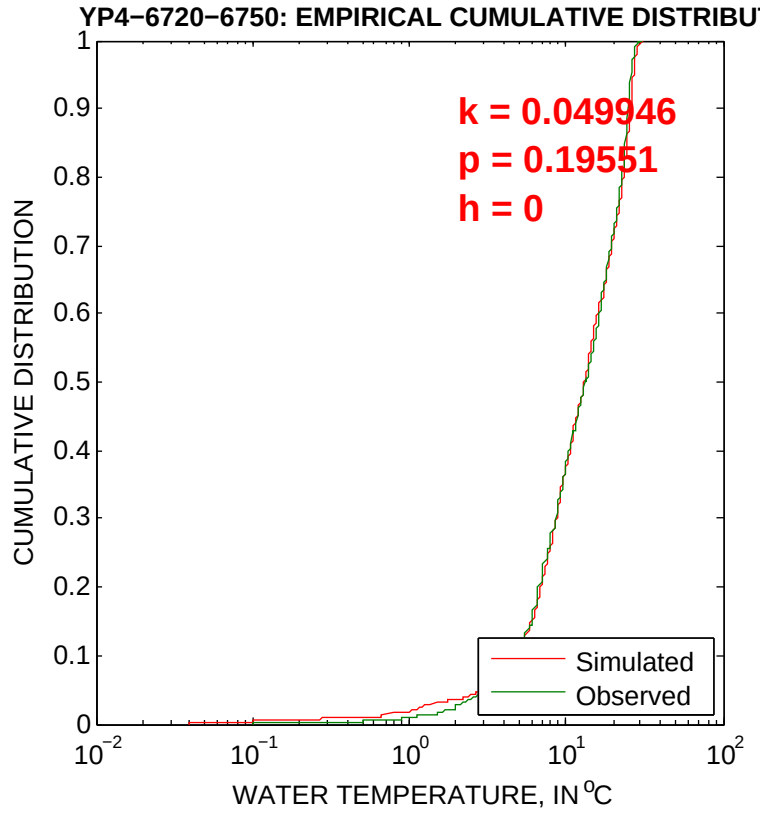












DATA SELECTION

scenario	file
P620171001WQ	WTMP.calib

plot: WTMP - water tempera...

Dates: 1/1/1985 – 12/31/201

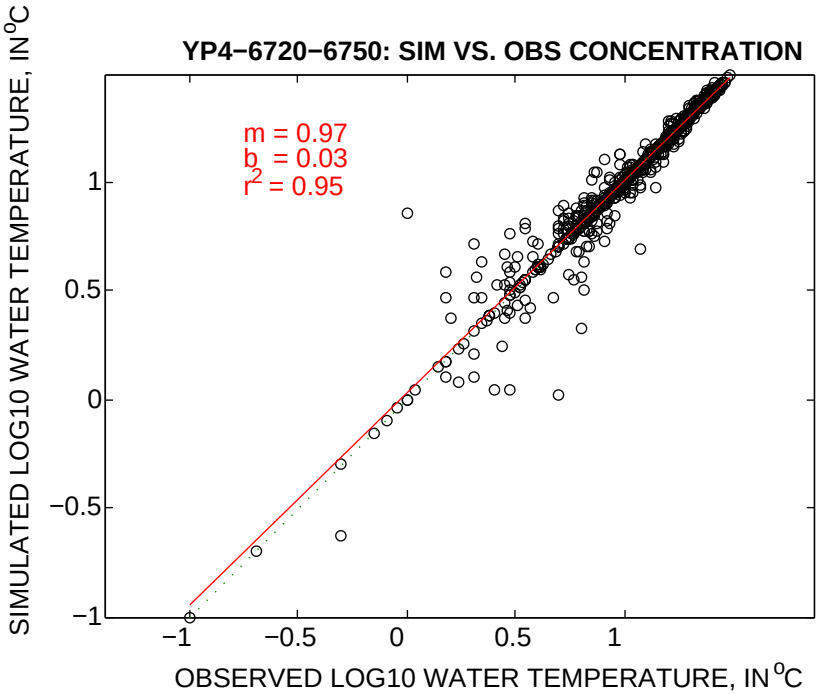
Drive	Directory	Observed
N/A	model	OBS20161101

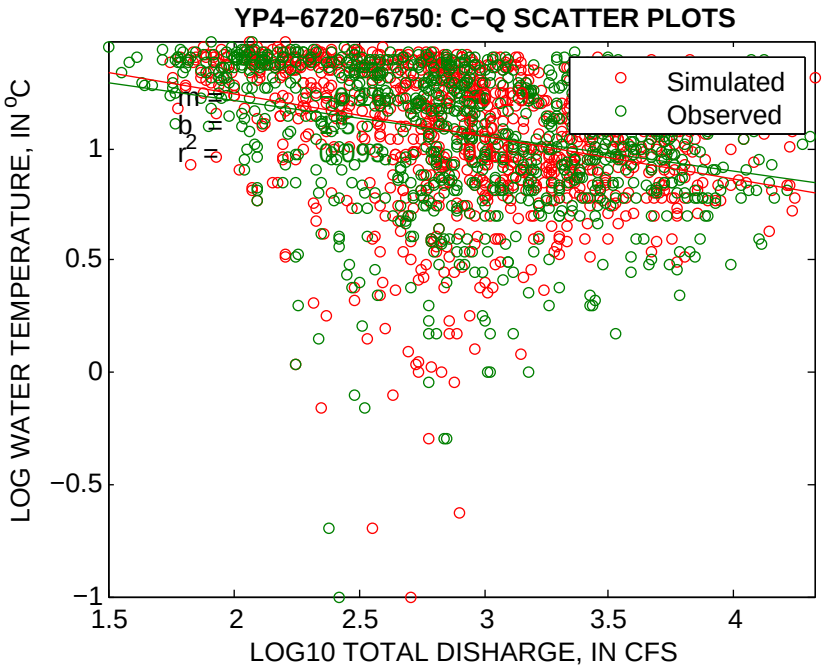
STATISTICS

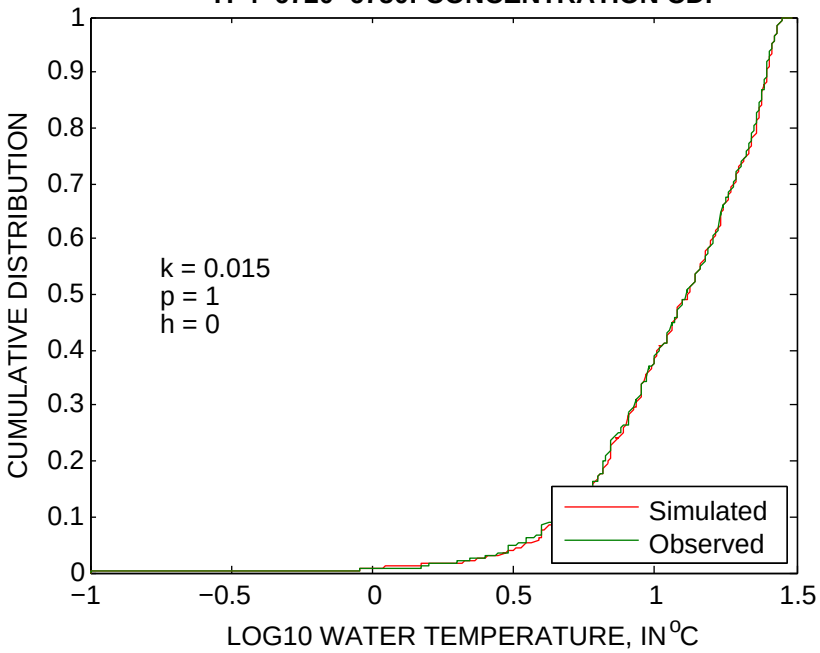
	n	observe	simulate
		921	921
min		0.1	0.040028
		-1	-1.39764
mean		14.2031	14.3812
		1.06407	1.05955
media		13.4	13.257
		1.1271	1.12245
max		30.5	30.704
		1.4843	1.48719
varian		58.1628	62.0592
		0.10139	0.127049
JB		0.001	0.001
		0.001	0.001
		ra	log
%		1.25401	-0.42496
err.va		4.20403	0.028729
rel.std.err		0.0722804	0.283353
mod.eff		0.92772	0.716647

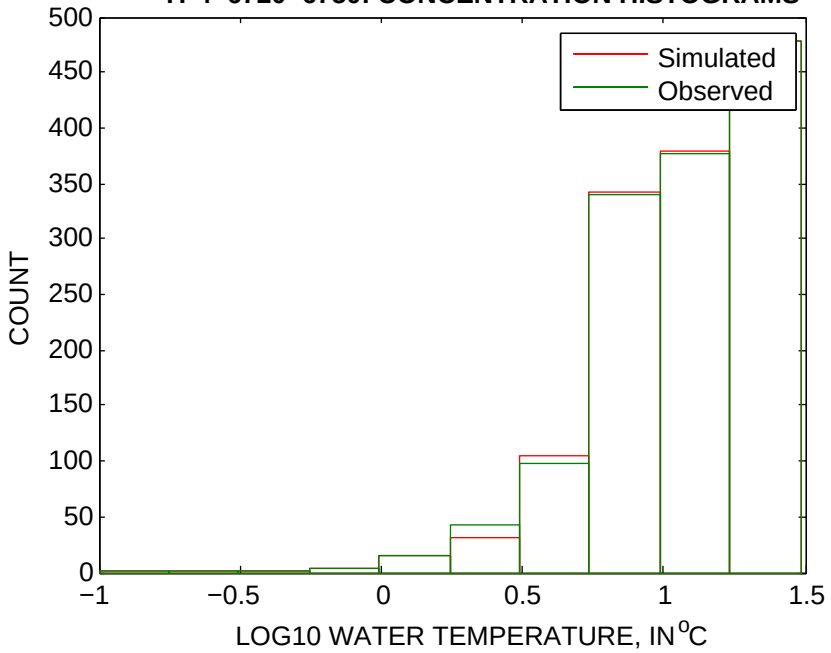
VERSION 2.1

ALL DATA
LOG10









LOAD DATA
LOG10

