Coastal Protection and Restoration Authority
150 Terrace Avenue, Baton Rouge, LA 70802 | coastal@la.gov | www.coastal.la.gov

2017 Coastal Master Plan

Attachment C3-23.8: Model Performance – Total Phosphorus

DRAFT

Report: Version I

Date: September 2016

Prepared By: Eric White and Yushi Wang (Water Institute of the Gulf)

Coastal Protection and Restoration Authority

This document was prepared in support of the 2017 Coastal Master Plan being prepared by the Coastal Protection and Restoration Authority (CPRA). CPRA was established by the Louisiana Legislature in response to Hurricanes Katrina and Rita through Act 8 of the First Extraordinary Session of 2005. Act 8 of the First Extraordinary Session of 2005 expanded the membership, duties, and responsibilities of CPRA and charged the new authority to develop and implement a comprehensive coastal protection plan, consisting of a master plan (revised every five years) and annual plans. CPRA's mandate is to develop, implement, and enforce a comprehensive coastal protection and restoration master plan.

DRAFT

Table1: Summary of Modeled and Mean Daily Observed Mean Daily Total Phosphorus (mg/L) for Calibration Period 2010-2013.

ICM Compartment	Station	# Observations	Predicted					Observed				
			Mean	Median	StDev	Min	Max	Mean	Median	StDev	Min	Max
23	LDEQ3594	10	0.09	0.08	0.02	0.07	0.11	0.19	0.19	0.12	0.05	0.35
26	LDEQ0032	10	0.05	0.04	0.03	0.02	0.10	0.20	0.17	0.10	0.05	0.36
28	LDEQ1089	2	0.02	0.02	0.01	0.01	0.03	0.10	0.10	0.06	0.06	0.14
30	LDEQ0105	32	0.06	0.05	0.03	0.02	0.13	0.16	0.12	0.10	0.06	0.38
31	LDEQ1073	7	0.02	0.02	0.01	0.01	0.04	0.13	0.10	0.09	0.06	0.32
35	LDEQ0035	2	0.04	0.04	0.03	0.02	0.06	0.21	0.21	0.16	0.09	0.32
36	LDEQ1047	2	0.02	0.02	0.02	0.01	0.03	0.08	0.08	0.01	0.07	0.09
37	LDEQ1043	6	0.02	0.02	0.01	0.01	0.05	0.14	0.09	0.10	0.06	0.31
39	LDEQ1087	3	0.02	0.02	0.01	0.01	0.03	0.11	0.08	0.06	0.08	0.18
42	LDEQ1086	8	0.02	0.01	0.01	0.01	0.03	2.24	0.16	5.85	0.07	####
45	LDEQ0138	26	0.03	0.02	0.02	0.01	0.07	0.16	0.12	0.14	0.06	0.71
46	LDEQ1062	7	0.03	0.03	0.02	0.01	0.06	0.10	0.11	0.02	0.07	0.13
48	LDEQ0106	35	0.04	0.03	0.02	0.01	0.08	0.16	0.16	0.09	0.05	0.34
49	LDEQ1084	1	0.02	0.02	-	0.02	0.02	0.08	0.08	-	0.08	0.08
52	LDEQ1082	4	0.03	0.03	0.01	0.02	0.04	0.16	0.17	0.05	0.10	0.21
53	LDEQ1063	6	0.03	0.03	0.02	0.02	0.06	0.10	0.10	0.03	0.05	0.14
55	LDEQ1083	6	0.03	0.03	0.01	0.03	0.05	0.12	0.12	0.06	0.05	0.18
59	LDEQ0638	8	0.02	0.01	0.01	0.01	0.04	0.15	0.10	0.13	0.05	0.36
65	LDEQ1095	10	0.04	0.04	0.01	0.04	0.06	0.11	0.11	0.04	0.06	0.17
66	LDEQ0307	7	0.03	0.03	0.02	0.02	0.07	0.10	0.10	0.03	0.06	0.16
66	LDEQ0307	7	0.03	0.03	0.02	0.02	0.07	0.10	0.10	0.03	0.06	0.16
66	LDEQ0307	7	0.03	0.03	0.02	0.02	0.07	0.10	0.10	0.03	0.06	0.16
81	LDEQ1081	13	0.03	0.04	0.02	0.01	0.06	0.18	0.15	0.09	0.06	0.36
82	LDEQ0006	4	0.04	0.04	0.02	0.02	0.06	0.17	0.14	0.12	0.08	0.34
97	LDEQ0298	9	0.06	0.06	0.02	0.03	0.09	7.11	0.18	20.70	0.14	####
107	LDEQ0007	6	0.03	0.03	0.01	0.01	0.05	0.15	0.16	0.05	0.07	0.20

DRAFT

ICM Compartment	Station	# Observations	Predicted					Observed				
			Mean	Median	StDev	Min	Max	Mean	Median	StDev	Min	Max
129	LDEQ1093	10	0.05	0.05	0.01	0.04	0.07	0.16	0.16	0.08	0.05	0.35
130	LDEQ0905	10	0.01	0.01	0.00	0.00	0.02	0.26	0.23	0.13	0.08	0.44
136	LDEQ0036	9	0.02	0.02	0.01	0.01	0.04	0.14	0.12	0.08	0.06	0.31
150	LDEQ1102	13	0.03	0.02	0.02	0.01	0.06	0.16	0.15	0.04	0.11	0.23
155	LDEQ1080	5	0.03	0.03	0.02	0.01	0.06	0.18	0.12	0.15	0.06	0.44
156	LDEQ1092	11	0.04	0.04	0.01	0.03	0.05	0.14	0.15	0.05	0.08	0.23
199	LDEQ0904	11	0.01	0.01	0.00	0.01	0.02	0.32	0.35	0.14	0.10	0.52
209	LDEQ0304	9	0.02	0.01	0.02	0.00	0.05	0.23	0.17	0.17	0.10	0.61
213	LDEQ3958	8	0.02	0.02	0.00	0.02	0.03	0.46	0.21	0.52	0.08	1.60
215	LDEQ0228	7	0.08	0.07	0.02	0.04	0.12	0.18	0.16	0.08	0.09	0.29
226	LDEQ0909	8	0.02	0.01	0.02	0.01	0.06	0.11	0.10	0.03	0.08	0.14
248	LDEQ0901	2	0.01	0.01	0.00	0.01	0.01	0.15	0.15	0.05	0.11	0.18
251	LDEQ0636	3	0.01	0.01	0.00	0.01	0.02	0.13	0.11	0.09	0.05	0.22
252	LDEQ4345	6	0.03	0.03	0.01	0.01	0.04	0.12	0.07	0.12	0.06	0.37
253	LDEQ0899	10	0.02	0.02	0.01	0.00	0.03	0.23	0.20	0.12	0.09	0.42
257	LDEQ0908	7	0.02	0.01	0.01	0.01	0.03	0.10	0.08	0.04	0.06	0.18
258	LDEQ0243	13	0.07	0.07	0.03	0.03	0.13	0.19	0.16	0.10	0.05	0.44
268	LDEQ0292	9	0.02	0.02	0.01	0.01	0.03	0.33	0.33	0.15	0.08	0.61
277	LDEQ0898	11	0.02	0.02	0.01	0.00	0.04	0.26	0.22	0.15	0.08	0.51
278	LDEQ0907	9	0.01	0.01	0.01	0.01	0.02	0.09	0.07	0.03	0.06	0.15
287	LDEQ0903	10	0.02	0.02	0.01	0.00	0.03	0.28	0.25	0.13	0.09	0.45
295	LDEQ0897	9	0.02	0.02	0.01	0.00	0.03	0.23	0.20	0.13	0.07	0.48
297	LDEQ0918	10	0.02	0.02	0.00	0.01	0.03	0.18	0.19	0.06	0.08	0.27
298	LDEQ0084	11	0.01	0.01	0.00	0.01	0.02	0.40	0.29	0.30	0.08	1.13
307	LDEQ0926	6	0.02	0.02	0.00	0.01	0.02	0.11	0.11	0.02	0.08	0.14
309	LDEQ0336	12	0.02	0.02	0.02	0.00	0.05	0.40	0.37	0.17	0.19	0.78
309	LDEQ0336	12	0.02	0.02	0.02	0.00	0.05	0.40	0.37	0.17	0.19	0.78

DRAFT

ICM Compartment	Station	# Observations	Predicted					Observed				
			Mean	Median	StDev	Min	Max	Mean	Median	StDev	Min	Max
309	LDEQ0336	12	0.02	0.02	0.02	0.00	0.05	0.40	0.37	0.17	0.19	0.78
312	LDEQ0945	11	0.04	0.03	0.01	0.02	0.06	0.13	0.14	0.05	0.06	0.22
314	LDEQ0922	11	0.03	0.03	0.01	0.02	0.04	0.11	0.08	0.06	0.05	0.25
316	LDEQ2843	10	0.04	0.04	0.01	0.03	0.07	0.22	0.15	0.24	0.06	0.88
324	LDEQ0341	11	0.03	0.03	0.00	0.03	0.04	0.26	0.18	0.25	0.06	0.78
325	LDEQ2844	8	0.03	0.02	0.01	0.01	0.05	0.12	0.12	0.06	0.05	0.22
331	LDEQ0925	5	0.01	0.01	0.00	0.01	0.02	0.09	0.09	0.02	0.07	0.12
342	LDEQ0293	37	0.08	0.07	0.03	0.03	0.16	0.23	0.16	0.17	0.05	0.75
343	LDEQ0080	10	0.02	0.02	0.01	0.00	0.06	0.35	0.30	0.16	0.20	0.70
348	LDEQ0924	4	0.05	0.04	0.03	0.03	0.08	0.15	0.12	0.12	0.05	0.32
349	LDEQ0340	11	0.04	0.04	0.02	0.02	0.07	0.25	0.22	0.12	0.09	0.45
361	LDEQ0946	9	0.01	0.01	0.01	0.00	0.02	0.29	0.25	0.18	0.08	0.58
363	LDEQ1198	9	0.01	0.00	0.01	0.00	0.02	0.22	0.21	0.08	0.10	0.34
366	LDEQ0923	3	0.01	0.01	0.01	0.00	0.02	0.16	0.18	0.08	0.07	0.22
368	LDEQ0349	10	0.09	0.00	0.13	0.00	0.30	0.21	0.18	0.16	0.06	0.61
372	LDEQ0347	10	1.76	1.44	0.70	1.12	2.92	0.23	0.15	0.18	0.06	0.50
372	LDEQ0347	10	1.76	1.44	0.70	1.12	2.92	0.23	0.15	0.18	0.06	0.50
377	LDEQ0953	3	0.02	0.02	0.00	0.02	0.02	0.12	0.12	0.01	0.12	0.13
381	LDEQ3001	11	0.01	0.01	0.01	0.00	0.03	0.27	0.26	0.12	0.07	0.43
392	LDEQ1196	10	0.13	0.13	0.01	0.12	0.14	0.14	0.13	0.05	0.06	0.25
393	LDEQ0930	0	-	-	-	-	-	-	-	-	-	-
394	LDEQ0110	11	0.04	0.04	0.02	0.02	0.08	0.36	0.37	0.21	0.15	0.86
399	LDEQ0346	8	0.04	0.04	0.04	0.00	0.11	0.20	0.20	0.12	0.08	0.44
413	LDEQ0144	9	0.02	0.02	0.01	0.01	0.03	0.30	0.29	0.09	0.17	0.43
419	LDEQ0959	2	0.04	0.04	0.01	0.03	0.05	0.17	0.17	0.09	0.10	0.23
421	LDEQ0940	11	0.04	0.04	0.01	0.02	0.07	0.33	0.38	0.16	0.06	0.60
425	LDEQ0954	8	0.04	0.04	0.02	0.03	0.07	0.19	0.16	0.12	0.08	0.43

DRAFT

ICM Compartment	Station	# Observations	Predicted					Observed				
			Mean	Median	StDev	Min	Max	Mean	Median	StDev	Min	Max
427	LDEQ0337	11	0.03	0.02	0.02	0.01	0.06	0.32	0.30	0.13	0.16	0.62
432	LDEQ0339	11	0.04	0.04	0.02	0.01	0.06	0.33	0.36	0.21	0.07	0.68
436	LDEQ1199	11	0.02	0.02	0.01	0.01	0.04	0.15	0.14	0.05	0.07	0.22
438	LDEQ0934	11	0.05	0.04	0.02	0.02	0.08	0.35	0.24	0.39	0.10	1.46
439	LDEQ0960	2	0.01	0.01	0.00	0.01	0.01	0.28	0.28	0.23	0.11	0.44
454	LDEQ0113	12	0.04	0.04	0.02	0.02	0.07	0.25	0.20	0.16	0.08	0.55
459	LDEQ0936	10	0.04	0.04	0.02	0.02	0.07	0.21	0.17	0.12	0.09	0.41
460	LDEQ0338	1	0.00	0.00	-	0.00	0.00	0.15	0.15	-	0.15	0.15
475	LDEQ0344	11	0.04	0.04	0.02	0.02	0.07	0.15	0.11	0.11	0.05	0.42
494	LDEQ0952	11	0.03	0.02	0.01	0.02	0.04	0.20	0.18	0.14	0.06	0.51
498	LDEQ0928	10	0.05	0.06	0.02	0.02	0.07	0.27	0.12	0.45	0.06	1.55
499	LDEQ0941	9	0.02	0.01	0.01	0.01	0.04	0.11	0.09	0.05	0.07	0.24
510	LDEQ0949	10	0.02	0.02	0.00	0.02	0.02	0.22	0.22	0.09	0.09	0.33
512	LDEQ0937	4	0.02	0.01	0.01	0.01	0.04	0.22	0.17	0.15	0.11	0.45
518	LDEQ0896	11	0.03	0.03	0.01	0.01	0.05	0.21	0.20	0.11	0.06	0.40
522	LDEQ0039	45	0.11	0.11	0.01	0.06	0.13	0.15	0.14	0.06	0.07	0.31
533	LDEQ0961	5	0.03	0.03	0.01	0.02	0.05	0.14	0.12	0.07	0.06	0.23
536	LDEQ3586	11	0.03	0.04	0.02	0.01	0.06	0.18	0.15	0.11	0.06	0.34
538	LDEQ1200	7	0.09	0.10	0.02	0.06	0.11	0.07	0.07	0.01	0.05	0.08
559	LDEQ1201	12	0.10	0.10	0.02	0.06	0.12	0.13	0.13	0.05	0.08	0.22
561	LDEQ0948	10	0.02	0.03	0.01	0.01	0.04	0.11	0.11	0.04	0.06	0.19
563	LDEQ1203	11	0.11	0.11	0.01	0.08	0.13	0.14	0.12	0.04	0.09	0.19
569	LDEQ0933	8	0.09	0.08	0.02	0.06	0.12	0.18	0.18	0.07	0.06	0.27
585	LDEQ0950	8	0.03	0.03	0.01	0.01	0.04	0.08	0.07	0.03	0.05	0.14
586	LDEQ0955	5	0.04	0.04	0.01	0.03	0.07	0.24	0.16	0.17	0.10	0.52
593	LDEQ1202	11	0.11	0.12	0.01	0.09	0.13	0.15	0.13	0.06	0.09	0.26
598	LDEQ0962	4	0.10	0.09	0.05	0.04	0.17	0.10	0.07	0.07	0.06	0.20

DRAFT

ICM Compartment	Station	# Observations	Predicted					Observed				
			Mean	Median	StDev	Min	Max	Mean	Median	StDev	Min	Max
648	LDEQ0692	6	0.07	0.07	0.03	0.03	0.12	0.12	0.11	0.05	0.07	0.20
649	LDEQ0957	7	0.03	0.03	0.01	0.02	0.04	0.08	0.07	0.03	0.05	0.14
658	LDEQ0685	11	0.10	0.11	0.02	0.06	0.12	0.16	0.15	0.06	0.09	0.28
678	LDEQ0683	12	0.05	0.06	0.02	0.01	0.07	0.18	0.14	0.08	0.05	0.33
692	LDEQ0691	6	0.08	0.08	0.01	0.06	0.09	0.12	0.11	0.05	0.08	0.20
718	LDEQ0693	12	0.05	0.06	0.02	0.01	0.07	0.17	0.16	0.08	0.06	0.29
719	LDEQ1204	6	0.07	0.07	0.02	0.04	0.10	0.17	0.16	0.08	0.09	0.30
724	LDEQ0316	6	0.07	0.07	0.02	0.05	0.09	0.11	0.11	0.03	0.07	0.15
728	LDEQ2116	15	0.06	0.05	0.02	0.04	0.09	0.19	0.17	0.06	0.12	0.32
729	LDEQ0696	11	0.06	0.06	0.01	0.05	0.08	0.10	0.09	0.02	0.08	0.13
732	LDEQ0679	7	0.06	0.06	0.02	0.03	0.08	0.18	0.17	0.05	0.11	0.25
747	LDEQ0678	8	0.04	0.04	0.01	0.03	0.07	0.21	0.21	0.07	0.13	0.31
748	LDEQ0003	47	0.16	0.19	0.07	0.01	0.31	0.21	0.20	0.08	0.09	0.48
750	LDEQ0660	10	0.03	0.01	0.03	0.00	0.07	0.61	0.17	1.14	0.07	3.71
752	LDEQ0697	12	0.04	0.04	0.01	0.03	0.04	0.12	0.11	0.04	0.07	0.20
773	LDEQ0655	10	0.09	0.10	0.05	0.01	0.16	0.15	0.14	0.08	0.06	0.26
782	LDEQ0695	11	0.02	0.02	0.02	0.01	0.07	0.34	0.16	0.48	0.13	1.77
784	LDEQ0098	9	0.10	0.11	0.05	0.02	0.17	0.18	0.14	0.11	0.06	0.41
802	LDEQ0822	8	0.13	0.13	0.02	0.11	0.17	0.10	0.09	0.03	0.06	0.14
815	LDEQ0823	8	0.08	0.11	0.05	0.01	0.14	0.11	0.13	0.05	0.05	0.18
816	LDEQ2115	8	0.00	0.00	0.01	0.00	0.02	0.09	0.09	0.03	0.06	0.13
826	LDEQ0657	9	0.01	0.01	0.01	0.00	0.03	0.14	0.11	0.08	0.07	0.30
829	LDEQ0851	8	0.01	0.01	0.01	0.00	0.02	0.17	0.15	0.08	0.09	0.29
833	LDEQ0026	25	0.02	0.01	0.02	0.00	0.06	0.11	0.10	0.04	0.05	0.21
842	LDEQ2752	6	0.02	0.02	0.01	0.01	0.04	0.09	0.09	0.03	0.05	0.13
846	LDEQ0827	5	0.02	0.01	0.02	0.01	0.04	0.10	0.08	0.03	0.06	0.13
849	LDEQ0828	5	0.01	0.01	0.00	0.00	0.01	0.06	0.05	0.02	0.05	0.10

DRAFT

ICM Compartment	Station	# Observations	Predicted					Observed				
			Mean	Median	StDev	Min	Max	Mean	Median	StDev	Min	Max
850	LDEQ0029	7	0.01	0.01	0.00	0.00	0.01	0.17	0.14	0.10	0.09	0.39
852	LDEQ0826	6	0.01	0.01	0.01	0.01	0.02	0.08	0.08	0.03	0.06	0.15
855	LDEQ2114	5	0.03	0.02	0.03	0.01	0.09	0.08	0.08	0.03	0.05	0.14
868	LDEQ1168	4	0.08	0.07	0.05	0.02	0.15	0.09	0.09	0.04	0.06	0.13
869	LDEQ1169	4	0.02	0.01	0.02	0.01	0.04	0.58	0.09	1.01	0.06	2.09
872	LDEQ0091	3	0.12	0.11	0.01	0.11	0.13	0.07	0.08	0.02	0.05	0.09
899	LDEQ1157	3	0.02	0.01	0.02	0.00	0.03	0.10	0.10	0.02	0.08	0.11
908	LDEQ0852	3	0.06	0.05	0.04	0.02	0.10	0.16	0.12	0.09	0.09	0.26
916	LDEQ1158	3	0.01	0.01	0.00	0.01	0.01	0.07	0.06	0.03	0.05	0.10
926	LDEQ1159	0	-	-	-	-	-	-	-	-	-	-
937	LDEQ1170	3	0.12	0.10	0.11	0.02	0.24	0.14	0.11	0.10	0.06	0.26

DRAFT

Table 2: Model Performance for Mean Daily Total Phosphorus (mg/L) for Calibration Period 2010-2013.

ICM Compartment	Station	# Observations	Daily RMSE	Daily Bias	Two-week RMSE	Two-week Bias	Monthly RMSE	Monthly Bias	Annual RMSE	Annual Bias
23	LDEQ3594	10	0.16	-0.11	0.16	-0.11	0.07	-0.11	0.12	-0.14
26	LDEQ0032	10	0.18	-0.15	0.18	-0.15	0.08	-0.15	0.15	-0.18
28	LDEQ1089	2	0.09	-0.08	0.09	-0.08	0.02	-0.08	0.04	-0.08
30	LDEQ0105	32	0.13	-0.10	0.13	-0.10	0.11	-0.10	0.09	-0.09
31	LDEQ1073	7	0.14	-0.11	0.14	-0.11	0.05	-0.11	0.07	-0.10
35	LDEQ0035	2	0.19	-0.16	0.19	-0.16	0.04	-0.16	0.08	-0.16
36	LDEQ1047	2	0.06	-0.06	0.06	-0.06	0.01	-0.06	0.03	-0.06
37	LDEQ1043	6	0.15	-0.12	0.15	-0.12	0.05	-0.12	0.07	-0.10
39	LDEQ1087	3	0.11	-0.09	0.11	-0.09	0.03	-0.09	0.06	-0.09
42	LDEQ1086	8	5.90	-2.22	5.90	-2.22	2.41	-2.22	4.19	-2.90
45	LDEQ0138	26	0.19	-0.14	0.19	-0.14	0.14	-0.14	0.13	-0.12
46	LDEQ1062	7	0.08	-0.07	0.08	-0.07	0.03	-0.07	0.05	-0.07
48	LDEQ0106	35	0.15	-0.13	0.15	-0.13	0.13	-0.13	0.14	-0.13
49	LDEQ1084	1	-	-	-	-	0.01	-0.06	0.03	-0.06
52	LDEQ1082	4	0.14	-0.14	0.14	-0.14	0.04	-0.14	0.09	-0.12
53	LDEQ1063	6	0.08	-0.07	0.08	-0.07	0.03	-0.07	0.05	-0.06
55	LDEQ1083	6	0.10	-0.08	0.10	-0.08	0.04	-0.08	0.08	-0.10
59	LDEQ0638	8	0.18	-0.13	0.18	-0.13	0.07	-0.13	0.08	-0.11
65	LDEQ1095	10	0.08	-0.07	0.08	-0.07	0.04	-0.07	0.05	-0.07
66	LDEQ0307	7	0.08	-0.07	0.08	-0.07	0.03	-0.07	0.05	-0.07
66	LDEQ0307	7	0.08	-0.07	0.08	-0.07	0.03	-0.07	0.05	-0.07
66	LDEQ0307	7	0.08	-0.07	0.08	-0.07	0.03	-0.07	0.05	-0.07
81	LDEQ1081	13	0.17	-0.14	0.17	-0.14	0.09	-0.14	0.12	-0.12
82	LDEQ0006	4	0.17	-0.13	0.17	-0.13	0.05	-0.13	0.08	-0.11
97	LDEQ0298	9	20.75	-7.05	20.75	-7.05	8.99	-7.05	5.25	-5.33
107	LDEQ0007	6	0.13	-0.12	0.13	-0.12	0.05	-0.12	0.08	-0.11

DRAFT

ICM Compartment	Station	# Observations	Daily RMSE	Daily Bias	Two-week RMSE	Two-week Bias	Monthly RMSE	Monthly Bias	Annual RMSE	Annual Bias
129	LDEQ1093	10	0.13	-0.11	0.13	-0.11	0.06	-0.11	0.06	-0.09
130	LDEQ0905	10	0.28	-0.25	0.28	-0.25	0.13	-0.25	0.22	-0.29
136	LDEQ0036	9	0.13	-0.12	0.13	-0.12	0.06	-0.12	0.08	-0.12
150	LDEQ1102	13	0.14	-0.13	0.14	-0.13	0.07	-0.13	0.08	-0.11
155	LDEQ1080	5	0.21	-0.15	0.21	-0.15	0.07	-0.15	0.11	-0.12
156	LDEQ1092	11	0.12	-0.11	0.12	-0.11	0.06	-0.11	0.08	-0.11
199	LDEQ0904	11	0.33	-0.31	0.33	-0.31	0.16	-0.31	0.23	-0.33
209	LDEQ0304	9	0.27	-0.22	0.27	-0.22	0.12	-0.22	0.15	-0.19
213	LDEQ3958	8	0.66	-0.44	0.66	-0.44	0.27	-0.44	0.32	-0.37
215	LDEQ0228	7	0.14	-0.11	0.14	-0.11	0.05	-0.11	0.07	-0.09
226	LDEQ0909	8	0.09	-0.09	0.09	-0.09	0.04	-0.09	0.06	-0.09
248	LDEQ0901	2	0.14	-0.14	0.14	-0.14	0.03	-0.14	0.07	-0.14
251	LDEQ0636	3	0.13	-0.11	0.13	-0.11	0.03	-0.11	0.06	-0.11
252	LDEQ4345	6	0.15	-0.09	0.15	-0.09	0.05	-0.09	0.05	-0.09
253	LDEQ0899	10	0.24	-0.21	0.24	-0.21	0.11	-0.21	0.18	-0.24
257	LDEQ0908	7	0.09	-0.08	0.09	-0.08	0.03	-0.08	0.05	-0.08
258	LDEQ0243	13	0.15	-0.11	0.15	-0.11	0.08	-0.11	0.07	-0.08
268	LDEQ0292	9	0.34	-0.31	0.34	-0.31	0.15	-0.31	0.26	-0.35
277	LDEQ0898	11	0.29	-0.24	0.29	-0.24	0.14	-0.24	0.22	-0.29
278	LDEQ0907	9	0.08	-0.07	0.08	-0.07	0.03	-0.07	0.05	-0.07
287	LDEQ0903	10	0.29	-0.26	0.29	-0.26	0.13	-0.26	0.22	-0.30
295	LDEQ0897	9	0.24	-0.21	0.24	-0.21	0.10	-0.21	0.19	-0.25
297	LDEQ0918	10	0.17	-0.16	0.17	-0.16	0.08	-0.16	0.11	-0.16
298	LDEQ0084	11	0.48	-0.39	0.48	-0.39	0.23	-0.39	0.25	-0.32
307	LDEQ0926	6	0.09	-0.09	0.09	-0.09	0.03	-0.09	0.05	-0.09
309	LDEQ0336	12	0.41	-0.37	0.41	-0.37	0.20	-0.37	0.27	-0.38
309	LDEQ0336	12	0.41	-0.37	0.41	-0.37	0.20	-0.37	0.27	-0.38

DRAFT

ICM Compartment	Station	# Observations	Daily RMSE	Daily Bias	Two-week RMSE	Two-week Bias	Monthly RMSE	Monthly Bias	Annual RMSE	Annual Bias
309	LDEQ0336	12	0.41	-0.37	0.41	-0.37	0.20	-0.37	0.27	-0.38
312	LDEQ0945	11	0.10	-0.09	0.10	-0.09	0.05	-0.09	0.06	-0.09
314	LDEQ0922	11	0.10	-0.08	0.10	-0.08	0.05	-0.08	0.05	-0.07
316	LDEQ2843	10	0.29	-0.18	0.29	-0.18	0.13	-0.18	0.12	-0.15
324	LDEQ0341	11	0.33	-0.22	0.33	-0.22	0.16	-0.22	0.13	-0.17
325	LDEQ2844	8	0.11	-0.09	0.11	-0.09	0.04	-0.09	0.07	-0.10
331	LDEQ0925	5	0.08	-0.08	0.08	-0.08	0.03	-0.08	0.06	-0.09
342	LDEQ0293	37	0.24	-0.15	0.24	-0.15	0.21	-0.15	0.17	-0.15
343	LDEQ0080	10	0.36	-0.33	0.36	-0.33	0.16	-0.33	0.24	-0.33
348	LDEQ0924	4	0.13	-0.10	0.13	-0.10	0.04	-0.10	0.05	-0.10
349	LDEQ0340	11	0.24	-0.21	0.24	-0.21	0.12	-0.21	0.20	-0.26
361	LDEQ0946	9	0.33	-0.28	0.33	-0.28	0.14	-0.28	0.19	-0.28
363	LDEQ1198	9	0.22	-0.21	0.22	-0.21	0.10	-0.21	0.17	-0.23
366	LDEQ0923	3	0.16	-0.15	0.16	-0.15	0.04	-0.15	0.07	-0.15
368	LDEQ0349	10	0.26	-0.13	0.26	-0.13	0.12	-0.13	0.17	-0.09
372	LDEQ0347	10	1.66	1.53	1.66	1.53	0.76	1.53	1.22	1.38
372	LDEQ0347	10	1.66	1.53	1.66	1.53	0.76	1.53	1.22	1.38
377	LDEQ0953	3	0.10	-0.10	0.10	-0.10	0.03	-0.10	0.05	-0.10
381	LDEQ3001	11	0.28	-0.25	0.28	-0.25	0.13	-0.25	0.22	-0.29
392	LDEQ1196	10	0.05	-0.01	0.05	-0.01	0.02	-0.01	0.01	0.00
393	LDEQ0930	0	-	-	-	-	-	-	-	-
394	LDEQ0110	11	0.38	-0.32	0.38	-0.32	0.18	-0.32	0.25	-0.34
399	LDEQ0346	8	0.21	-0.16	0.21	-0.16	0.09	-0.16	0.11	-0.16
413	LDEQ0144	9	0.29	-0.28	0.29	-0.28	0.13	-0.28	0.19	-0.27
419	LDEQ0959	2	0.14	-0.13	0.14	-0.13	0.03	-0.13	0.06	-0.13
421	LDEQ0940	11	0.32	-0.28	0.32	-0.28	0.15	-0.28	0.17	-0.24
425	LDEQ0954	8	0.19	-0.14	0.19	-0.14	0.08	-0.14	0.08	-0.11

DRAFT

ICM Compartment	Station	# Observations	Daily RMSE	Daily Bias	Two-week RMSE	Two-week Bias	Monthly RMSE	Monthly Bias	Annual RMSE	Annual Bias
427	LDEQ0337	11	0.32	-0.30	0.32	-0.30	0.16	-0.30	0.21	-0.30
432	LDEQ0339	11	0.36	-0.29	0.36	-0.29	0.17	-0.29	0.28	-0.37
436	LDEQ1199	11	0.14	-0.12	0.14	-0.12	0.07	-0.12	0.08	-0.11
438	LDEQ0934	11	0.48	-0.30	0.48	-0.30	0.23	-0.30	0.22	-0.31
439	LDEQ0960	2	0.31	-0.26	0.31	-0.26	0.06	-0.26	0.22	-0.26
454	LDEQ0113	12	0.27	-0.21	0.27	-0.21	0.13	-0.21	0.16	-0.22
459	LDEQ0936	10	0.21	-0.17	0.21	-0.17	0.09	-0.17	0.17	-0.22
460	LDEQ0338	1	-	-	-	-	0.02	-0.15	0.07	-0.15
475	LDEQ0344	11	0.16	-0.11	0.16	-0.11	0.08	-0.11	0.08	-0.11
494	LDEQ0952	11	0.22	-0.17	0.22	-0.17	0.10	-0.17	0.14	-0.19
498	LDEQ0928	10	0.49	-0.21	0.49	-0.21	0.22	-0.21	0.14	-0.17
499	LDEQ0941	9	0.11	-0.09	0.11	-0.09	0.05	-0.09	0.07	-0.09
510	LDEQ0949	10	0.22	-0.20	0.22	-0.20	0.10	-0.20	0.17	-0.23
512	LDEQ0937	4	0.24	-0.20	0.24	-0.20	0.07	-0.20	0.23	-0.23
518	LDEQ0896	11	0.21	-0.18	0.21	-0.18	0.10	-0.18	0.17	-0.22
522	LDEQ0039	45	0.07	-0.04	0.07	-0.04	0.07	-0.04	0.05	-0.04
533	LDEQ0961	5	0.13	-0.11	0.13	-0.11	0.04	-0.11	0.08	-0.11
536	LDEQ3586	11	0.17	-0.14	0.17	-0.14	0.08	-0.14	0.15	-0.19
538	LDEQ1200	7	0.03	0.02	0.03	0.02	0.01	0.02	0.02	0.02
559	LDEQ1201	12	0.05	-0.03	0.05	-0.03	0.02	-0.03	0.03	-0.04
561	LDEQ0948	10	0.10	-0.09	0.10	-0.09	0.05	-0.09	0.07	-0.09
563	LDEQ1203	11	0.05	-0.03	0.05	-0.03	0.02	-0.03	0.02	-0.03
569	LDEQ0933	8	0.10	-0.09	0.10	-0.09	0.04	-0.09	0.06	-0.08
585	LDEQ0950	8	0.06	-0.06	0.06	-0.06	0.03	-0.06	0.04	-0.05
586	LDEQ0955	5	0.25	-0.19	0.25	-0.19	0.08	-0.19	0.25	-0.30
593	LDEQ1202	11	0.06	-0.04	0.06	-0.04	0.03	-0.04	0.03	-0.04
598	LDEQ0962	4	0.09	0.00	0.09	0.00	0.03	0.00	0.03	0.00

DRAFT

ICM Compartment	Station	# Observations	Daily RMSE	Daily Bias	Two-week RMSE	Two-week Bias	Monthly RMSE	Monthly Bias	Annual RMSE	Annual Bias
648	LDEQ0692	6	0.06	-0.05	0.06	-0.05	0.02	-0.05	0.05	-0.07
649	LDEQ0957	7	0.07	-0.06	0.07	-0.06	0.02	-0.06	0.04	-0.05
658	LDEQ0685	11	0.09	-0.06	0.09	-0.06	0.05	-0.06	0.08	-0.09
678	LDEQ0683	12	0.15	-0.12	0.15	-0.12	0.07	-0.12	0.09	-0.13
692	LDEQ0691	6	0.06	-0.04	0.06	-0.04	0.02	-0.04	0.05	-0.06
718	LDEQ0693	12	0.15	-0.12	0.15	-0.12	0.07	-0.12	0.09	-0.13
719	LDEQ1204	6	0.11	-0.10	0.11	-0.10	0.04	-0.10	0.07	-0.09
724	LDEQ0316	6	0.06	-0.04	0.06	-0.04	0.02	-0.04	0.05	-0.05
728	LDEQ2116	15	0.14	-0.13	0.14	-0.13	0.08	-0.13	0.10	-0.12
729	LDEQ0696	11	0.05	-0.04	0.05	-0.04	0.02	-0.04	0.04	-0.05
732	LDEQ0679	7	0.13	-0.13	0.13	-0.13	0.05	-0.13	0.10	-0.12
747	LDEQ0678	8	0.18	-0.17	0.18	-0.17	0.07	-0.17	0.15	-0.17
748	LDEQ0003	47	0.10	-0.05	0.10	-0.05	0.10	-0.05	0.06	-0.05
750	LDEQ0660	10	1.22	-0.59	1.22	-0.59	0.56	-0.59	0.45	-0.63
752	LDEQ0697	12	0.09	-0.08	0.09	-0.08	0.05	-0.08	0.06	-0.09
773	LDEQ0655	10	0.07	-0.06	0.07	-0.06	0.03	-0.06	0.04	-0.05
782	LDEQ0695	11	0.56	-0.32	0.56	-0.32	0.27	-0.32	0.20	-0.28
784	LDEQ0098	9	0.11	-0.08	0.11	-0.08	0.05	-0.08	0.05	-0.07
802	LDEQ0822	8	0.05	0.04	0.05	0.04	0.02	0.04	0.02	0.03
815	LDEQ0823	8	0.07	-0.03	0.07	-0.03	0.03	-0.03	0.04	-0.04
816	LDEQ2115	8	0.09	-0.08	0.09	-0.08	0.03	-0.08	0.06	-0.08
826	LDEQ0657	9	0.15	-0.14	0.15	-0.14	0.07	-0.14	0.09	-0.12
829	LDEQ0851	8	0.18	-0.16	0.18	-0.16	0.07	-0.16	0.08	-0.16
833	LDEQ0026	25	0.10	-0.09	0.10	-0.09	0.07	-0.09	0.09	-0.09
842	LDEQ2752	6	0.07	-0.06	0.07	-0.06	0.02	-0.06	0.04	-0.06
846	LDEQ0827	5	0.08	-0.07	0.08	-0.07	0.02	-0.07	0.04	-0.07
849	LDEQ0828	5	0.06	-0.06	0.06	-0.06	0.02	-0.06	0.04	-0.05

DRAFT

ICM Compartment	Station	# Observations	Daily RMSE	Daily Bias	Two-week RMSE	Two-week Bias	Monthly RMSE	Monthly Bias	Annual RMSE	Annual Bias
850	LDEQ0029	7	0.19	-0.16	0.19	-0.16	0.07	-0.17	0.11	-0.16
852	LDEQ0826	6	0.08	-0.07	0.08	-0.07	0.03	-0.07	0.05	-0.07
855	LDEQ2114	5	0.05	-0.05	0.05	-0.05	0.02	-0.05	0.03	-0.04
868	LDEQ1168	4	0.03	-0.02	0.03	-0.02	0.01	-0.02	0.01	-0.02
869	LDEQ1169	4	1.04	-0.56	1.04	-0.56	0.30	-0.56	0.54	-0.56
872	LDEQ0091	3	0.05	0.04	0.05	0.04	0.01	0.04	0.04	0.05
899	LDEQ1157	3	0.08	-0.08	0.08	-0.08	0.02	-0.08	0.06	-0.08
908	LDEQ0852	3	0.11	-0.10	0.11	-0.10	0.03	-0.10	0.07	-0.09
916	LDEQ1158	3	0.07	-0.06	0.07	-0.06	0.02	-0.06	0.03	-0.06
926	LDEQ1159	0	-	-	-	-	-	-	-	-
937	LDEQ1170	3	0.17	-0.03	0.17	-0.03	0.04	-0.03	0.02	-0.02

DRAFT

Table 3: Summary of Modeled and Mean Daily Observed Mean Daily Total Phosphorus (mg/L) for Validation Period 2006-2009.

ICM Compartment	Station	# Observations	Predicted					Observed				
			Mean	Median	StDev	Min	Max	Mean	Median	StDev	Min	Max
23	LDEQ3594	9	0.09	0.08	0.02	0.07	0.13	0.09	0.08	0.02	0.06	0.12
26	LDEQ0032	21	0.05	0.03	0.03	0.02	0.11	0.10	0.10	0.02	0.06	0.15
28	LDEQ1089	12	0.01	0.01	0.00	0.01	0.02	0.11	0.11	0.03	0.05	0.17
30	LDEQ0105	40	0.05	0.04	0.03	0.02	0.11	0.12	0.11	0.03	0.06	0.21
31	LDEQ1073	9	0.02	0.01	0.01	0.00	0.04	0.08	0.07	0.01	0.06	0.10
35	LDEQ0035	9	0.02	0.02	0.01	0.01	0.04	0.08	0.07	0.02	0.06	0.12
36	LDEQ1047	10	0.01	0.01	0.01	0.00	0.03	0.10	0.08	0.05	0.06	0.21
37	LDEQ1043	10	0.02	0.01	0.01	0.01	0.04	0.08	0.08	0.03	0.06	0.14
39	LDEQ1087	10	0.02	0.02	0.00	0.01	0.02	0.08	0.08	0.02	0.05	0.11
42	LDEQ1086	10	0.02	0.02	0.01	0.01	0.02	0.09	0.09	0.02	0.06	0.11
45	LDEQ0138	37	0.02	0.01	0.01	0.01	0.04	0.08	0.08	0.02	0.05	0.16
46	LDEQ1062	16	0.01	0.01	0.01	0.00	0.03	0.10	0.09	0.03	0.06	0.20
48	LDEQ0106	43	0.02	0.02	0.01	0.01	0.08	0.12	0.11	0.05	0.05	0.33
49	LDEQ1084	9	0.02	0.03	0.01	0.01	0.03	0.10	0.09	0.05	0.06	0.22
52	LDEQ1082	11	0.03	0.03	0.00	0.02	0.04	0.12	0.11	0.04	0.09	0.22
53	LDEQ1063	15	0.02	0.01	0.01	0.00	0.03	0.09	0.08	0.02	0.05	0.14
55	LDEQ1083	10	0.03	0.03	0.01	0.02	0.04	0.12	0.12	0.02	0.08	0.15
59	LDEQ0638	12	0.02	0.01	0.01	0.01	0.04	0.11	0.09	0.05	0.07	0.21
65	LDEQ1095	7	0.05	0.05	0.01	0.04	0.06	0.15	0.14	0.05	0.12	0.26
66	LDEQ0307	17	0.02	0.02	0.01	0.00	0.06	0.13	0.12	0.06	0.07	0.33
66	LDEQ0307	17	0.02	0.02	0.01	0.00	0.06	0.13	0.12	0.06	0.07	0.33
66	LDEQ0307	17	0.02	0.02	0.01	0.00	0.06	0.13	0.12	0.06	0.07	0.33
81	LDEQ1081	12	0.03	0.03	0.01	0.01	0.04	0.14	0.14	0.05	0.06	0.27
82	LDEQ0006	11	0.04	0.03	0.01	0.03	0.05	0.13	0.12	0.05	0.07	0.24
97	LDEQ0298	13	0.04	0.03	0.02	0.01	0.08	0.24	0.22	0.10	0.13	0.50
107	LDEQ0007	12	0.03	0.03	0.01	0.01	0.04	0.13	0.13	0.04	0.07	0.22

DRAFT

ICM Compartment	Station	# Observations	Predicted					Observed				
			Mean	Median	StDev	Min	Max	Mean	Median	StDev	Min	Max
129	LDEQ1093	8	0.06	0.06	0.01	0.05	0.07	0.21	0.18	0.12	0.11	0.47
130	LDEQ0905	11	0.01	0.01	0.00	0.01	0.01	0.17	0.16	0.05	0.12	0.28
136	LDEQ0036	11	0.02	0.01	0.01	0.01	0.05	0.11	0.11	0.02	0.06	0.15
150	LDEQ1102	11	0.01	0.01	0.01	0.00	0.02	0.14	0.12	0.06	0.07	0.29
155	LDEQ1080	11	0.03	0.03	0.01	0.01	0.04	0.14	0.15	0.04	0.07	0.20
156	LDEQ1092	6	0.04	0.04	0.01	0.03	0.05	0.19	0.19	0.06	0.12	0.26
199	LDEQ0904	11	0.01	0.01	0.01	0.00	0.02	0.20	0.19	0.08	0.09	0.35
209	LDEQ0304	15	0.01	0.01	0.01	0.00	0.03	0.37	0.31	0.24	0.13	0.83
213	LDEQ3958	3	0.01	0.01	0.00	0.01	0.01	0.51	0.22	0.58	0.13	1.17
215	LDEQ0228	12	0.05	0.04	0.03	0.02	0.13	0.11	0.10	0.04	0.06	0.19
226	LDEQ0909	8	0.03	0.01	0.03	0.01	0.09	0.11	0.11	0.03	0.07	0.16
248	LDEQ0901	11	0.01	0.01	0.01	0.00	0.03	0.13	0.12	0.06	0.07	0.23
251	LDEQ0636	10	0.03	0.03	0.01	0.02	0.03	0.13	0.12	0.05	0.08	0.26
252	LDEQ4345	0	-	-	-	-	-	-	-	-	-	-
253	LDEQ0899	10	0.01	0.01	0.01	0.00	0.03	0.12	0.13	0.03	0.09	0.16
257	LDEQ0908	9	0.04	0.03	0.03	0.01	0.10	0.11	0.11	0.03	0.08	0.16
258	LDEQ0243	11	0.05	0.04	0.02	0.02	0.08	0.14	0.11	0.05	0.08	0.23
268	LDEQ0292	11	0.01	0.02	0.00	0.01	0.02	0.18	0.17	0.06	0.10	0.28
277	LDEQ0898	11	0.01	0.01	0.01	0.00	0.03	0.17	0.18	0.04	0.09	0.24
278	LDEQ0907	9	0.03	0.03	0.02	0.01	0.08	0.12	0.10	0.06	0.07	0.25
287	LDEQ0903	11	0.01	0.02	0.01	0.01	0.03	0.14	0.17	0.05	0.06	0.21
295	LDEQ0897	11	0.01	0.01	0.01	0.01	0.03	0.16	0.11	0.07	0.08	0.26
297	LDEQ0918	9	0.02	0.02	0.00	0.01	0.02	0.16	0.16	0.04	0.10	0.22
298	LDEQ0084	13	0.01	0.01	0.00	0.00	0.01	0.28	0.21	0.13	0.18	0.60
307	LDEQ0926	7	0.02	0.02	0.01	0.01	0.04	0.08	0.07	0.03	0.05	0.11
309	LDEQ0336	11	0.03	0.02	0.02	0.01	0.07	0.34	0.36	0.12	0.19	0.61
309	LDEQ0336	11	0.03	0.02	0.02	0.01	0.07	0.34	0.36	0.12	0.19	0.61

DRAFT

ICM Compartment	Station	# Observations	Predicted					Observed				
			Mean	Median	StDev	Min	Max	Mean	Median	StDev	Min	Max
309	LDEQ0336	11	0.03	0.02	0.02	0.01	0.07	0.34	0.36	0.12	0.19	0.61
312	LDEQ0945	11	0.03	0.03	0.01	0.00	0.04	0.15	0.16	0.03	0.11	0.20
314	LDEQ0922	8	0.03	0.03	0.01	0.02	0.04	0.14	0.14	0.05	0.08	0.21
316	LDEQ2843	11	0.03	0.03	0.01	0.00	0.05	0.16	0.15	0.07	0.09	0.37
324	LDEQ0341	12	0.03	0.03	0.00	0.02	0.03	0.41	0.40	0.17	0.18	0.75
325	LDEQ2844	13	0.02	0.03	0.01	0.00	0.04	0.14	0.15	0.04	0.09	0.22
331	LDEQ0925	5	0.02	0.02	0.02	0.01	0.05	0.07	0.06	0.02	0.05	0.11
342	LDEQ0293	47	0.08	0.09	0.02	0.01	0.13	0.15	0.14	0.06	0.07	0.33
343	LDEQ0080	11	0.03	0.04	0.02	0.01	0.07	0.27	0.26	0.09	0.16	0.45
348	LDEQ0924	12	0.07	0.05	0.05	0.03	0.20	0.15	0.15	0.03	0.10	0.21
349	LDEQ0340	10	0.05	0.05	0.02	0.03	0.09	0.19	0.19	0.04	0.14	0.24
361	LDEQ0946	13	0.02	0.02	0.01	0.00	0.03	0.20	0.17	0.11	0.11	0.49
363	LDEQ1198	12	0.02	0.01	0.04	0.00	0.11	0.27	0.24	0.12	0.15	0.52
366	LDEQ0923	12	0.02	0.02	0.01	0.00	0.04	0.15	0.15	0.04	0.10	0.23
368	LDEQ0349	11	0.00	0.00	0.00	0.00	0.00	0.13	0.13	0.04	0.06	0.18
372	LDEQ0347	11	0.30	0.17	0.30	0.00	0.77	0.33	0.26	0.19	0.11	0.60
372	LDEQ0347	11	0.30	0.17	0.30	0.00	0.77	0.33	0.26	0.19	0.11	0.60
377	LDEQ0953	6	0.02	0.02	0.00	0.02	0.02	0.10	0.10	0.02	0.07	0.12
381	LDEQ3001	11	0.02	0.02	0.01	0.01	0.03	0.15	0.14	0.05	0.06	0.24
392	LDEQ1196	12	0.13	0.13	0.01	0.11	0.14	0.22	0.20	0.07	0.14	0.38
393	LDEQ0930	10	0.04	0.03	0.02	0.00	0.09	0.35	0.21	0.33	0.11	1.12
394	LDEQ0110	11	0.06	0.06	0.02	0.03	0.09	0.24	0.21	0.10	0.14	0.48
399	LDEQ0346	12	0.02	0.00	0.03	0.00	0.08	0.23	0.22	0.08	0.11	0.35
413	LDEQ0144	12	0.01	0.01	0.01	0.00	0.02	0.52	0.26	0.77	0.12	2.91
419	LDEQ0959	12	0.04	0.03	0.02	0.03	0.09	0.18	0.16	0.07	0.11	0.39
421	LDEQ0940	12	0.05	0.05	0.02	0.03	0.08	0.37	0.32	0.27	0.14	1.14
425	LDEQ0954	12	0.04	0.03	0.01	0.02	0.06	0.20	0.21	0.06	0.10	0.29

DRAFT

ICM Compartment	Station	# Observations	Predicted					Observed				
			Mean	Median	StDev	Min	Max	Mean	Median	StDev	Min	Max
427	LDEQ0337	10	0.05	0.04	0.03	0.01	0.11	0.25	0.26	0.09	0.14	0.42
432	LDEQ0339	11	0.05	0.04	0.02	0.02	0.09	0.24	0.23	0.10	0.12	0.43
436	LDEQ1199	12	0.03	0.02	0.01	0.01	0.06	0.21	0.16	0.15	0.08	0.66
438	LDEQ0934	11	0.06	0.06	0.02	0.03	0.10	0.15	0.15	0.02	0.10	0.17
439	LDEQ0960	12	0.02	0.02	0.00	0.01	0.02	0.16	0.13	0.05	0.10	0.24
454	LDEQ0113	12	0.04	0.04	0.01	0.02	0.05	0.23	0.18	0.09	0.16	0.44
459	LDEQ0936	0	-	-	-	-	-	-	-	-	-	-
460	LDEQ0338	10	0.11	0.02	0.16	0.00	0.37	0.16	0.15	0.06	0.08	0.28
475	LDEQ0344	12	0.04	0.04	0.02	0.02	0.07	0.16	0.15	0.03	0.12	0.20
494	LDEQ0952	12	0.03	0.03	0.01	0.01	0.05	0.15	0.15	0.03	0.10	0.20
498	LDEQ0928	10	0.07	0.07	0.02	0.04	0.10	0.16	0.13	0.06	0.09	0.25
499	LDEQ0941	8	0.04	0.05	0.02	0.01	0.06	0.14	0.14	0.03	0.09	0.18
510	LDEQ0949	11	0.02	0.02	0.00	0.02	0.02	0.13	0.13	0.03	0.09	0.16
512	LDEQ0937	10	0.02	0.02	0.01	0.00	0.03	0.09	0.09	0.02	0.06	0.12
518	LDEQ0896	10	0.03	0.04	0.02	0.01	0.06	0.08	0.08	0.02	0.05	0.14
522	LDEQ0039	47	0.11	0.12	0.01	0.09	0.13	0.19	0.19	0.06	0.09	0.35
533	LDEQ0961	11	0.02	0.02	0.00	0.02	0.04	0.13	0.09	0.08	0.06	0.28
536	LDEQ3586	11	0.05	0.05	0.02	0.02	0.08	0.11	0.11	0.02	0.07	0.14
538	LDEQ1200	10	0.10	0.09	0.02	0.06	0.12	0.09	0.09	0.01	0.06	0.11
559	LDEQ1201	10	0.12	0.12	0.01	0.09	0.13	0.27	0.22	0.12	0.15	0.53
561	LDEQ0948	7	0.03	0.02	0.01	0.02	0.04	0.10	0.10	0.02	0.08	0.13
563	LDEQ1203	10	0.12	0.12	0.01	0.10	0.13	0.24	0.24	0.06	0.16	0.31
569	LDEQ0933	10	0.10	0.10	0.02	0.07	0.12	0.15	0.14	0.03	0.12	0.21
585	LDEQ0950	7	0.03	0.02	0.01	0.02	0.04	0.10	0.10	0.02	0.06	0.12
586	LDEQ0955	10	0.04	0.04	0.02	0.00	0.07	0.11	0.10	0.04	0.08	0.20
593	LDEQ1202	10	0.12	0.12	0.01	0.11	0.13	0.26	0.22	0.11	0.15	0.47
598	LDEQ0962	9	0.05	0.03	0.03	0.03	0.12	0.11	0.09	0.06	0.06	0.27

DRAFT

ICM Compartment	Station	# Observations	Predicted					Observed				
			Mean	Median	StDev	Min	Max	Mean	Median	StDev	Min	Max
648	LDEQ0692	11	0.07	0.08	0.02	0.04	0.10	0.16	0.15	0.06	0.10	0.32
649	LDEQ0957	4	0.03	0.02	0.00	0.02	0.03	0.10	0.08	0.05	0.06	0.16
658	LDEQ0685	14	0.09	0.09	0.02	0.06	0.11	0.20	0.20	0.04	0.15	0.28
678	LDEQ0683	12	0.07	0.07	0.01	0.04	0.08	0.17	0.16	0.04	0.11	0.26
692	LDEQ0691	11	0.07	0.07	0.02	0.01	0.08	0.20	0.17	0.07	0.13	0.34
718	LDEQ0693	12	0.06	0.07	0.01	0.05	0.08	0.16	0.15	0.05	0.07	0.24
719	LDEQ1204	0	-	-	-	-	-	-	-	-	-	-
724	LDEQ0316	12	0.07	0.07	0.01	0.05	0.09	0.13	0.13	0.06	0.06	0.28
728	LDEQ2116	12	0.06	0.07	0.02	0.01	0.08	0.30	0.30	0.07	0.21	0.49
729	LDEQ0696	11	0.07	0.07	0.01	0.05	0.09	0.12	0.13	0.03	0.08	0.17
732	LDEQ0679	12	0.05	0.06	0.02	0.01	0.07	0.28	0.28	0.07	0.20	0.41
747	LDEQ0678	12	0.05	0.05	0.02	0.01	0.07	0.27	0.27	0.03	0.22	0.32
748	LDEQ0003	48	0.18	0.19	0.07	0.03	0.30	0.26	0.24	0.14	0.11	0.97
750	LDEQ0660	12	0.02	0.02	0.01	0.00	0.05	0.24	0.23	0.08	0.16	0.41
752	LDEQ0697	0	-	-	-	-	-	-	-	-	-	-
773	LDEQ0655	12	0.15	0.16	0.04	0.06	0.20	0.22	0.22	0.06	0.16	0.37
782	LDEQ0695	12	0.02	0.02	0.02	0.01	0.06	0.65	0.32	0.89	0.14	3.32
784	LDEQ0098	12	0.16	0.16	0.03	0.08	0.20	0.39	0.34	0.25	0.15	1.10
802	LDEQ0822	7	0.14	0.13	0.02	0.12	0.17	0.12	0.09	0.07	0.07	0.26
815	LDEQ0823	11	0.11	0.11	0.01	0.10	0.12	0.15	0.15	0.05	0.09	0.25
816	LDEQ2115	12	0.00	0.00	0.00	0.00	0.01	0.21	0.21	0.10	0.07	0.44
826	LDEQ0657	12	0.04	0.04	0.02	0.01	0.09	0.19	0.18	0.07	0.13	0.40
829	LDEQ0851	10	0.01	0.01	0.01	0.00	0.04	0.14	0.13	0.04	0.10	0.24
833	LDEQ0026	40	0.03	0.03	0.02	0.00	0.10	0.11	0.10	0.02	0.07	0.17
842	LDEQ2752	6	0.02	0.01	0.02	0.01	0.05	0.08	0.08	0.03	0.05	0.12
846	LDEQ0827	6	0.01	0.01	0.00	0.01	0.02	0.09	0.08	0.04	0.05	0.16
849	LDEQ0828	3	0.00	0.00	0.00	0.00	0.01	0.07	0.06	0.02	0.05	0.09

DRAFT

ICM Compartment	Station	# Observations	Predicted					Observed				
			Mean	Median	StDev	Min	Max	Mean	Median	StDev	Min	Max
850	LDEQ0029	12	0.03	0.03	0.02	0.01	0.09	0.27	0.17	0.27	0.10	1.07
852	LDEQ0826	5	0.01	0.01	0.00	0.01	0.02	0.23	0.07	0.37	0.05	0.89
855	LDEQ2114	12	0.07	0.03	0.09	0.02	0.30	0.14	0.12	0.11	0.08	0.48
868	LDEQ1168	11	0.06	0.05	0.04	0.00	0.17	0.11	0.10	0.02	0.08	0.15
869	LDEQ1169	10	0.01	0.01	0.01	0.00	0.04	0.09	0.09	0.02	0.06	0.11
872	LDEQ0091	10	0.10	0.09	0.05	0.02	0.18	0.08	0.08	0.01	0.06	0.09
899	LDEQ1157	10	0.01	0.01	0.01	0.00	0.02	0.08	0.08	0.01	0.06	0.09
908	LDEQ0852	9	0.14	0.14	0.10	0.03	0.29	0.11	0.11	0.03	0.07	0.15
916	LDEQ1158	11	0.06	0.05	0.03	0.03	0.10	0.09	0.09	0.03	0.06	0.12
926	LDEQ1159	12	0.07	0.05	0.06	0.02	0.20	0.09	0.09	0.02	0.06	0.13
937	LDEQ1170	12	0.10	0.03	0.10	0.02	0.30	0.11	0.10	0.04	0.08	0.21

DRAFT

Table 4: Model Performance for Mean Daily Total Phosphorus (mg/L) for Validation Period 2006-2009.

ICM Compartment	Station	# Observations	Daily RMSE	Daily Bias	Two-week RMSE	Two-week Bias	Monthly RMSE	Monthly Bias	Annual RMSE	Annual Bias
23	LDEQ3594	9	0.03	0.00	0.03	0.00	0.01	0.00	0.00	0.00
26	LDEQ0032	21	0.06	-0.05	0.06	-0.05	0.04	-0.05	0.05	-0.06
28	LDEQ1089	12	0.10	-0.10	0.10	-0.10	0.04	-0.09	0.05	-0.10
30	LDEQ0105	40	0.07	-0.07	0.07	-0.07	0.06	-0.07	0.07	-0.06
31	LDEQ1073	9	0.06	-0.06	0.06	-0.06	0.03	-0.06	0.03	-0.06
35	LDEQ0035	9	0.06	-0.06	0.06	-0.06	0.03	-0.06	0.03	-0.06
36	LDEQ1047	10	0.10	-0.08	0.10	-0.08	0.04	-0.09	0.04	-0.08
37	LDEQ1043	10	0.07	-0.06	0.07	-0.06	0.03	-0.06	0.03	-0.06
39	LDEQ1087	10	0.06	-0.06	0.06	-0.06	0.03	-0.06	0.03	-0.06
42	LDEQ1086	10	0.07	-0.07	0.07	-0.07	0.03	-0.07	0.03	-0.07
45	LDEQ0138	37	0.07	-0.07	0.07	-0.07	0.06	-0.07	0.06	-0.06
46	LDEQ1062	16	0.09	-0.08	0.09	-0.08	0.05	-0.09	0.07	-0.08
48	LDEQ0106	43	0.11	-0.09	0.11	-0.09	0.10	-0.09	0.10	-0.10
49	LDEQ1084	9	0.09	-0.08	0.09	-0.08	0.04	-0.08	0.04	-0.08
52	LDEQ1082	11	0.10	-0.09	0.10	-0.09	0.05	-0.10	0.05	-0.09
53	LDEQ1063	15	0.08	-0.08	0.08	-0.08	0.04	-0.08	0.06	-0.07
55	LDEQ1083	10	0.09	-0.09	0.09	-0.09	0.04	-0.09	0.04	-0.09
59	LDEQ0638	12	0.11	-0.09	0.11	-0.09	0.05	-0.10	0.05	-0.09
65	LDEQ1095	7	0.12	-0.11	0.12	-0.11	0.04	-0.11	0.07	-0.10
66	LDEQ0307	17	0.13	-0.11	0.13	-0.11	0.07	-0.12	0.10	-0.11
66	LDEQ0307	17	0.13	-0.11	0.13	-0.11	0.07	-0.12	0.10	-0.11
66	LDEQ0307	17	0.13	-0.11	0.13	-0.11	0.07	-0.12	0.10	-0.11
81	LDEQ1081	12	0.12	-0.11	0.12	-0.11	0.06	-0.12	0.06	-0.11
82	LDEQ0006	11	0.10	-0.09	0.10	-0.09	0.05	-0.10	0.05	-0.09
97	LDEQ0298	13	0.22	-0.20	0.22	-0.20	0.10	-0.20	0.12	-0.17
107	LDEQ0007	12	0.11	-0.10	0.11	-0.10	0.05	-0.10	0.05	-0.10

DRAFT

ICM Compartment	Station	# Observations	Daily RMSE	Daily Bias	Two-week RMSE	Two-week Bias	Monthly RMSE	Monthly Bias	Annual RMSE	Annual Bias
129	LDEQ1093	8	0.19	-0.15	0.19	-0.15	0.08	-0.15	0.11	-0.14
130	LDEQ0905	11	0.17	-0.16	0.17	-0.16	0.08	-0.16	0.10	-0.14
136	LDEQ0036	11	0.09	-0.09	0.09	-0.09	0.04	-0.09	0.05	-0.09
150	LDEQ1102	11	0.14	-0.12	0.14	-0.12	0.06	-0.13	0.06	-0.12
155	LDEQ1080	11	0.12	-0.11	0.12	-0.11	0.05	-0.11	0.06	-0.11
156	LDEQ1092	6	0.15	-0.14	0.15	-0.14	0.05	-0.14	0.11	-0.14
199	LDEQ0904	11	0.21	-0.19	0.21	-0.19	0.10	-0.19	0.13	-0.17
209	LDEQ0304	15	0.43	-0.36	0.43	-0.36	0.21	-0.34	0.24	-0.34
213	LDEQ3958	3	0.69	-0.50	0.69	-0.50	0.17	-0.50	0.25	-0.50
215	LDEQ0228	12	0.07	-0.06	0.07	-0.06	0.03	-0.06	0.04	-0.06
226	LDEQ0909	8	0.09	-0.08	0.09	-0.08	0.04	-0.08	0.06	-0.08
248	LDEQ0901	11	0.13	-0.12	0.13	-0.12	0.06	-0.12	0.08	-0.11
251	LDEQ0636	10	0.12	-0.10	0.12	-0.10	0.05	-0.10	0.08	-0.11
252	LDEQ4345	0	-	-	-	-	-	-	-	-
253	LDEQ0899	10	0.11	-0.11	0.11	-0.11	0.05	-0.11	0.08	-0.11
257	LDEQ0908	9	0.08	-0.07	0.08	-0.07	0.03	-0.07	0.05	-0.07
258	LDEQ0243	11	0.10	-0.09	0.10	-0.09	0.04	-0.10	0.05	-0.09
268	LDEQ0292	11	0.18	-0.17	0.18	-0.17	0.08	-0.17	0.11	-0.16
277	LDEQ0898	11	0.16	-0.15	0.16	-0.15	0.08	-0.15	0.11	-0.15
278	LDEQ0907	9	0.11	-0.09	0.11	-0.09	0.05	-0.09	0.06	-0.09
287	LDEQ0903	11	0.14	-0.13	0.14	-0.13	0.06	-0.13	0.09	-0.13
295	LDEQ0897	11	0.16	-0.14	0.16	-0.14	0.08	-0.14	0.11	-0.15
297	LDEQ0918	9	0.15	-0.14	0.15	-0.14	0.06	-0.14	0.10	-0.14
298	LDEQ0084	13	0.30	-0.27	0.30	-0.27	0.15	-0.27	0.20	-0.29
307	LDEQ0926	7	0.06	-0.05	0.06	-0.05	0.02	-0.05	0.04	-0.05
309	LDEQ0336	11	0.33	-0.31	0.33	-0.31	0.16	-0.31	0.24	-0.33
309	LDEQ0336	11	0.33	-0.31	0.33	-0.31	0.16	-0.31	0.24	-0.33

DRAFT

ICM Compartment	Station	# Observations	Daily RMSE	Daily Bias	Two-week RMSE	Two-week Bias	Monthly RMSE	Monthly Bias	Annual RMSE	Annual Bias
309	LDEQ0336	11	0.33	-0.31	0.33	-0.31	0.16	-0.31	0.24	-0.33
312	LDEQ0945	11	0.13	-0.13	0.13	-0.13	0.06	-0.13	0.08	-0.11
314	LDEQ0922	8	0.11	-0.10	0.11	-0.10	0.05	-0.10	0.07	-0.10
316	LDEQ2843	11	0.15	-0.13	0.15	-0.13	0.07	-0.14	0.17	-0.22
324	LDEQ0341	12	0.42	-0.38	0.42	-0.38	0.18	-0.37	0.19	-0.38
325	LDEQ2844	13	0.13	-0.12	0.13	-0.12	0.06	-0.12	0.08	-0.10
331	LDEQ0925	5	0.05	-0.05	0.05	-0.05	0.02	-0.05	0.03	-0.05
342	LDEQ0293	47	0.10	-0.07	0.10	-0.07	0.09	-0.07	0.08	-0.07
343	LDEQ0080	11	0.26	-0.24	0.26	-0.24	0.12	-0.24	0.16	-0.22
348	LDEQ0924	12	0.11	-0.09	0.11	-0.09	0.05	-0.08	0.04	-0.09
349	LDEQ0340	10	0.14	-0.14	0.14	-0.14	0.06	-0.14	0.10	-0.14
361	LDEQ0946	13	0.22	-0.19	0.22	-0.19	0.11	-0.19	0.16	-0.23
363	LDEQ1198	12	0.28	-0.25	0.28	-0.25	0.14	-0.25	0.19	-0.27
366	LDEQ0923	12	0.13	-0.13	0.13	-0.13	0.06	-0.12	0.06	-0.13
368	LDEQ0349	11	0.13	-0.13	0.13	-0.13	0.06	-0.13	0.06	-0.13
372	LDEQ0347	11	0.31	-0.02	0.31	-0.02	0.14	0.00	0.01	-0.02
372	LDEQ0347	11	0.31	-0.02	0.31	-0.02	0.14	0.00	0.01	-0.02
377	LDEQ0953	6	0.08	-0.07	0.08	-0.07	0.03	-0.07	0.05	-0.07
381	LDEQ3001	11	0.14	-0.13	0.14	-0.13	0.07	-0.13	0.10	-0.14
392	LDEQ1196	12	0.11	-0.09	0.11	-0.09	0.06	-0.09	0.06	-0.07
393	LDEQ0930	10	0.45	-0.32	0.45	-0.32	0.20	-0.33	0.16	-0.32
394	LDEQ0110	11	0.21	-0.18	0.21	-0.18	0.10	-0.18	0.13	-0.18
399	LDEQ0346	12	0.22	-0.21	0.22	-0.21	0.10	-0.20	0.10	-0.21
413	LDEQ0144	12	0.90	-0.51	0.90	-0.51	0.45	-0.51	0.56	-0.69
419	LDEQ0959	12	0.16	-0.14	0.16	-0.14	0.06	-0.13	0.07	-0.14
421	LDEQ0940	12	0.41	-0.32	0.41	-0.32	0.21	-0.32	0.20	-0.28
425	LDEQ0954	12	0.18	-0.17	0.18	-0.17	0.08	-0.17	0.08	-0.17

DRAFT

ICM Compartment	Station	# Observations	Daily RMSE	Daily Bias	Two-week RMSE	Two-week Bias	Monthly RMSE	Monthly Bias	Annual RMSE	Annual Bias
427	LDEQ0337	10	0.23	-0.20	0.23	-0.20	0.10	-0.20	0.12	-0.16
432	LDEQ0339	11	0.22	-0.19	0.22	-0.19	0.11	-0.19	0.16	-0.22
436	LDEQ1199	12	0.23	-0.18	0.23	-0.18	0.11	-0.18	0.12	-0.17
438	LDEQ0934	11	0.09	-0.09	0.09	-0.09	0.04	-0.09	0.07	-0.10
439	LDEQ0960	12	0.15	-0.14	0.15	-0.14	0.07	-0.15	0.07	-0.14
454	LDEQ0113	12	0.21	-0.19	0.21	-0.19	0.09	-0.19	0.09	-0.19
459	LDEQ0936	0	-	-	-	-	-	-	-	-
460	LDEQ0338	10	0.16	-0.05	0.16	-0.05	0.07	-0.05	0.02	-0.05
475	LDEQ0344	12	0.12	-0.11	0.12	-0.11	0.05	-0.11	0.06	-0.11
494	LDEQ0952	12	0.13	-0.12	0.13	-0.12	0.06	-0.13	0.06	-0.12
498	LDEQ0928	10	0.11	-0.09	0.11	-0.09	0.04	-0.09	0.04	-0.09
499	LDEQ0941	8	0.10	-0.10	0.10	-0.10	0.04	-0.10	0.07	-0.10
510	LDEQ0949	11	0.11	-0.11	0.11	-0.11	0.05	-0.11	0.08	-0.11
512	LDEQ0937	10	0.07	-0.07	0.07	-0.07	0.03	-0.07	0.03	-0.07
518	LDEQ0896	10	0.05	-0.05	0.05	-0.05	0.02	-0.05	0.03	-0.05
522	LDEQ0039	47	0.09	-0.08	0.09	-0.08	0.09	-0.08	0.08	-0.07
533	LDEQ0961	11	0.13	-0.11	0.13	-0.11	0.06	-0.11	0.11	-0.14
536	LDEQ3586	11	0.07	-0.06	0.07	-0.06	0.03	-0.06	0.05	-0.07
538	LDEQ1200	10	0.02	0.01	0.02	0.01	0.01	0.01	0.01	0.01
559	LDEQ1201	10	0.19	-0.15	0.19	-0.15	0.09	-0.15	0.10	-0.13
561	LDEQ0948	7	0.08	-0.08	0.08	-0.08	0.03	-0.08	0.06	-0.08
563	LDEQ1203	10	0.13	-0.12	0.13	-0.12	0.06	-0.12	0.08	-0.11
569	LDEQ0933	10	0.07	-0.05	0.07	-0.05	0.03	-0.06	0.03	-0.05
585	LDEQ0950	7	0.07	-0.07	0.07	-0.07	0.03	-0.07	0.05	-0.07
586	LDEQ0955	10	0.08	-0.07	0.08	-0.07	0.03	-0.06	0.03	-0.07
593	LDEQ1202	10	0.18	-0.14	0.18	-0.14	0.08	-0.14	0.09	-0.12
598	LDEQ0962	9	0.07	-0.06	0.07	-0.06	0.03	-0.06	0.05	-0.07

DRAFT

ICM Compartment	Station	# Observations	Daily RMSE	Daily Bias	Two-week RMSE	Two-week Bias	Monthly RMSE	Monthly Bias	Annual RMSE	Annual Bias
648	LDEQ0692	11	0.10	-0.09	0.10	-0.09	0.04	-0.08	0.04	-0.09
649	LDEQ0957	4	0.08	-0.07	0.08	-0.07	0.02	-0.07	0.04	-0.06
658	LDEQ0685	14	0.11	-0.10	0.11	-0.10	0.05	-0.11	0.07	-0.10
678	LDEQ0683	12	0.10	-0.10	0.10	-0.10	0.05	-0.10	0.07	-0.10
692	LDEQ0691	11	0.15	-0.13	0.15	-0.13	0.06	-0.13	0.07	-0.13
718	LDEQ0693	12	0.11	-0.10	0.11	-0.10	0.05	-0.10	0.07	-0.10
719	LDEQ1204	0	-	-	-	-	-	-	-	-
724	LDEQ0316	12	0.09	-0.06	0.09	-0.06	0.04	-0.06	0.05	-0.07
728	LDEQ2116	12	0.24	-0.23	0.24	-0.23	0.11	-0.23	0.12	-0.23
729	LDEQ0696	11	0.06	-0.05	0.06	-0.05	0.03	-0.05	0.05	-0.06
732	LDEQ0679	12	0.24	-0.23	0.24	-0.23	0.11	-0.24	0.12	-0.23
747	LDEQ0678	12	0.22	-0.22	0.22	-0.22	0.10	-0.22	0.11	-0.22
748	LDEQ0003	48	0.14	-0.07	0.14	-0.07	0.14	-0.07	0.08	-0.07
750	LDEQ0660	12	0.23	-0.22	0.23	-0.22	0.10	-0.21	0.11	-0.22
752	LDEQ0697	0	-	-	-	-	-	-	-	-
773	LDEQ0655	12	0.09	-0.07	0.09	-0.07	0.04	-0.07	0.04	-0.07
782	LDEQ0695	12	1.05	-0.63	1.05	-0.63	0.50	-0.66	0.31	-0.63
784	LDEQ0098	12	0.34	-0.24	0.34	-0.24	0.12	-0.20	0.12	-0.24
802	LDEQ0822	7	0.06	0.02	0.06	0.02	0.02	0.02	0.03	0.01
815	LDEQ0823	11	0.06	-0.03	0.06	-0.03	0.03	-0.03	0.02	-0.03
816	LDEQ2115	12	0.23	-0.20	0.23	-0.20	0.10	-0.20	0.10	-0.20
826	LDEQ0657	12	0.17	-0.15	0.17	-0.15	0.08	-0.16	0.08	-0.15
829	LDEQ0851	10	0.14	-0.13	0.14	-0.13	0.06	-0.13	0.09	-0.12
833	LDEQ0026	40	0.08	-0.07	0.08	-0.07	0.07	-0.07	0.07	-0.07
842	LDEQ2752	6	0.07	-0.06	0.07	-0.06	0.02	-0.06	0.05	-0.07
846	LDEQ0827	6	0.08	-0.07	0.08	-0.07	0.03	-0.07	0.05	-0.07
849	LDEQ0828	3	0.06	-0.06	0.06	-0.06	0.02	-0.06	0.04	-0.06

DRAFT

ICM Compartment	Station	# Observations	Daily RMSE	Daily Bias	Two-week RMSE	Two-week Bias	Monthly RMSE	Monthly Bias	Annual RMSE	Annual Bias
850	LDEQ0029	12	0.35	-0.24	0.35	-0.24	0.17	-0.25	0.12	-0.24
852	LDEQ0826	5	0.40	-0.22	0.40	-0.22	0.13	-0.22	0.17	-0.20
855	LDEQ2114	12	0.17	-0.08	0.17	-0.08	0.08	-0.08	0.04	-0.08
868	LDEQ1168	11	0.07	-0.05	0.07	-0.05	0.03	-0.05	0.05	-0.07
869	LDEQ1169	10	0.08	-0.08	0.08	-0.08	0.04	-0.08	0.06	-0.08
872	LDEQ0091	10	0.05	0.03	0.05	0.03	0.02	0.03	0.01	0.03
899	LDEQ1157	10	0.07	-0.07	0.07	-0.07	0.03	-0.07	0.04	-0.07
908	LDEQ0852	9	0.09	0.03	0.09	0.03	0.04	0.03	0.04	0.04
916	LDEQ1158	11	0.05	-0.03	0.05	-0.03	0.02	-0.04	0.02	-0.03
926	LDEQ1159	12	0.07	-0.02	0.07	-0.02	0.03	-0.02	0.01	-0.02
937	LDEQ1170	12	0.12	-0.01	0.12	-0.01	0.05	-0.01	0.01	-0.01

DRAFT

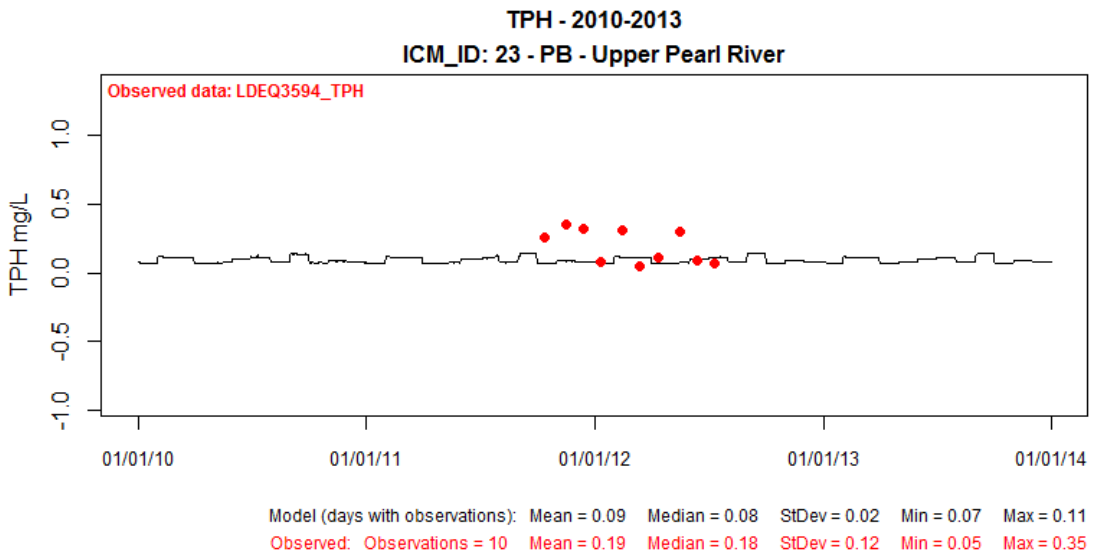

Figure 1: Modeled Total Phosphorus at ICM Compartment 23 (solid black line) Compared to Observed Data at LDEQ3594 for Calibration Period 2010-2013.

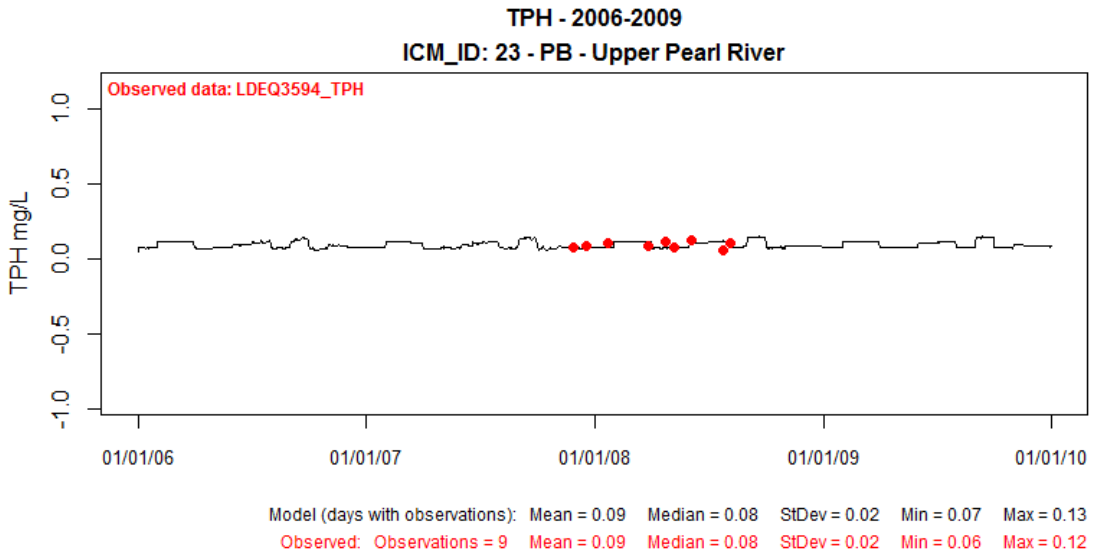

Figure 2: Modeled Total Phosphorus at ICM Compartment 23 (solid black line) Compared to Observed Data at LDEQ3594 for Validation Period 2006-2009.

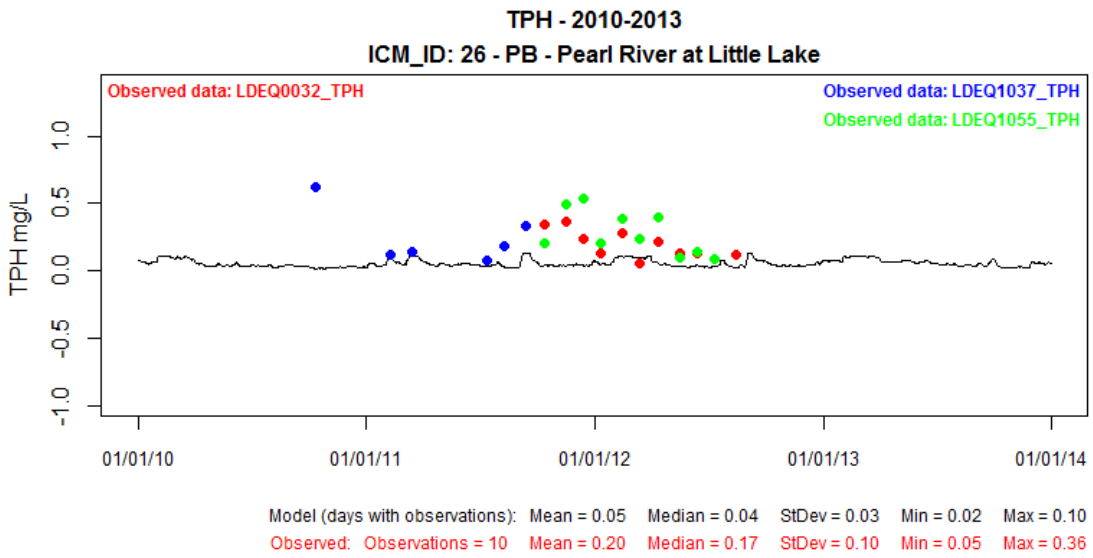

Figure 3: Modeled Total Phosphorus at ICM Compartment 26 (solid black line) Compared to Observed Data at LDEQ0032 for Calibration Period 2010-2013.

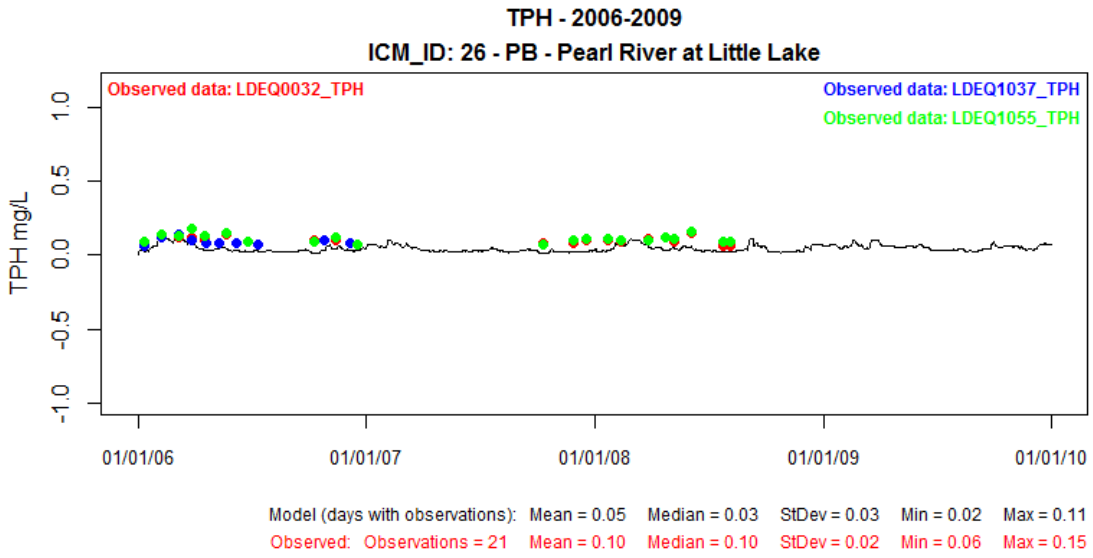

Figure 4: Modeled Total Phosphorus at ICM Compartment 26 (solid black line) Compared to Observed Data at LDEQ0032 for Validation Period 2006-2009.

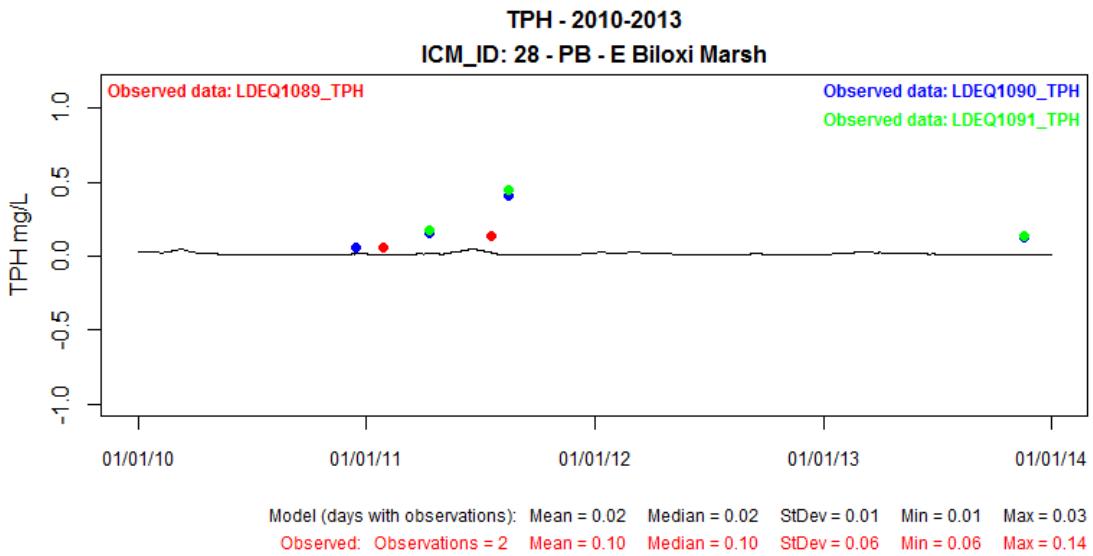

Figure 5: Modeled Total Phosphorus at ICM Compartment 28 (solid black line) Compared to Observed Data at LDEQ1089 for Calibration Period 2010-2013.

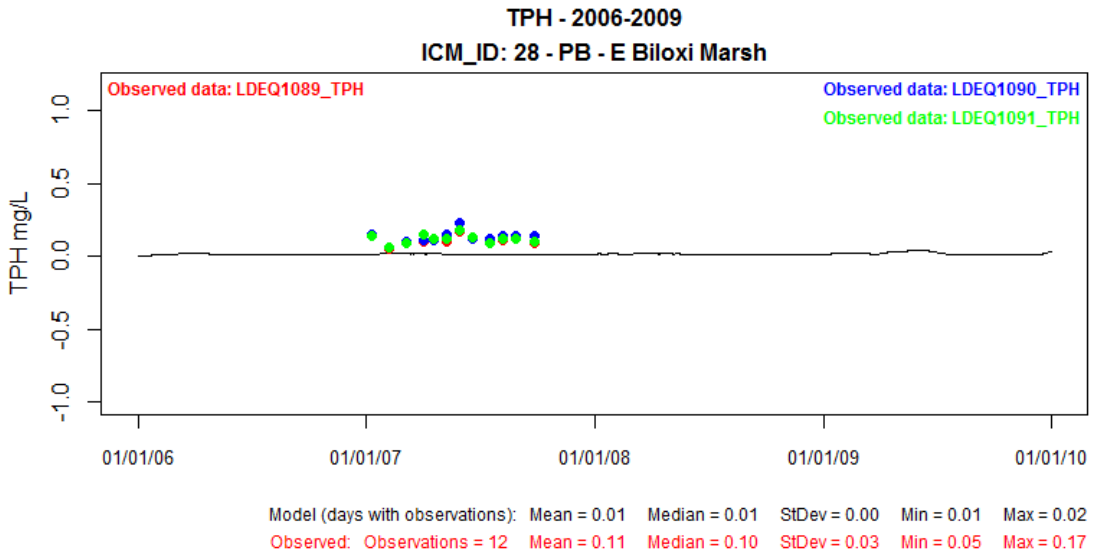

Figure 6: Modeled Total Phosphorus at ICM Compartment 28 (solid black line) Compared to Observed Data at LDEQ1089 for Validation Period 2006-2009.

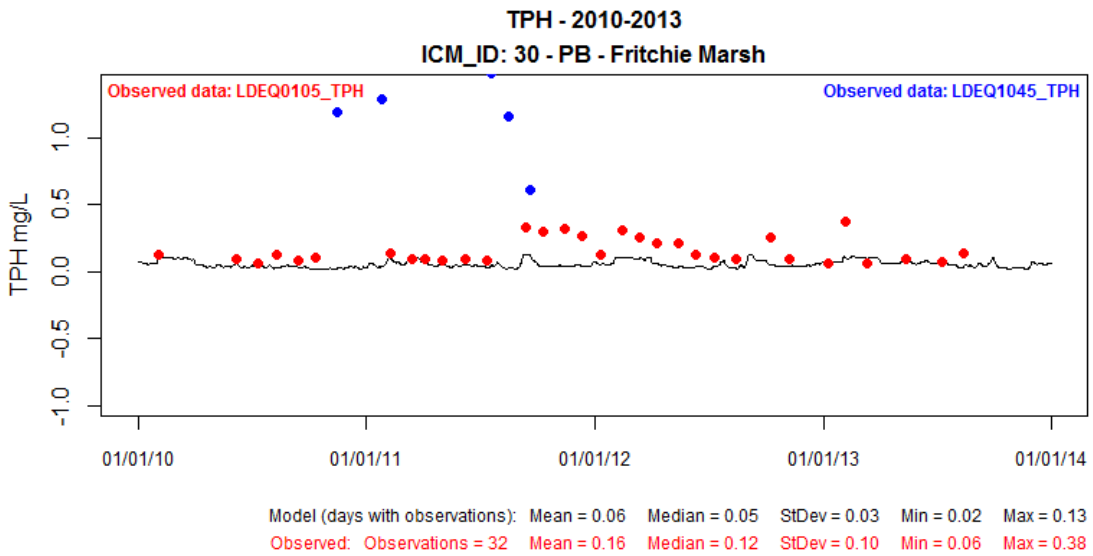

Figure 7: Modeled Total Phosphorus at ICM Compartment 30 (solid black line) Compared to Observed Data at LDEQ0105 for Calibration Period 2010-2013.

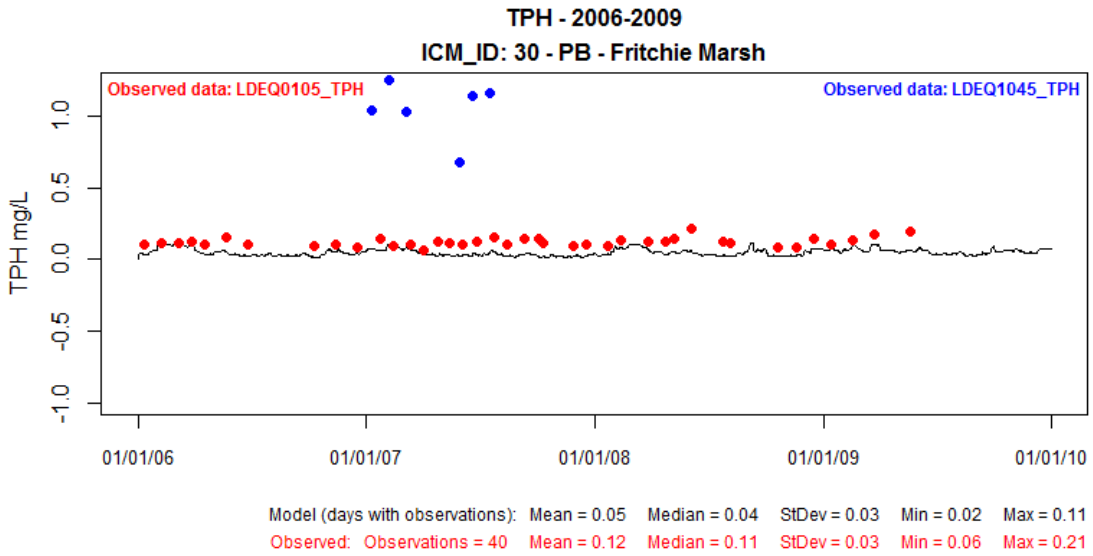

Figure 8: Modeled Total Phosphorus at ICM Compartment 30 (solid black line) Compared to Observed Data at LDEQ0105 for Validation Period 2006-2009.

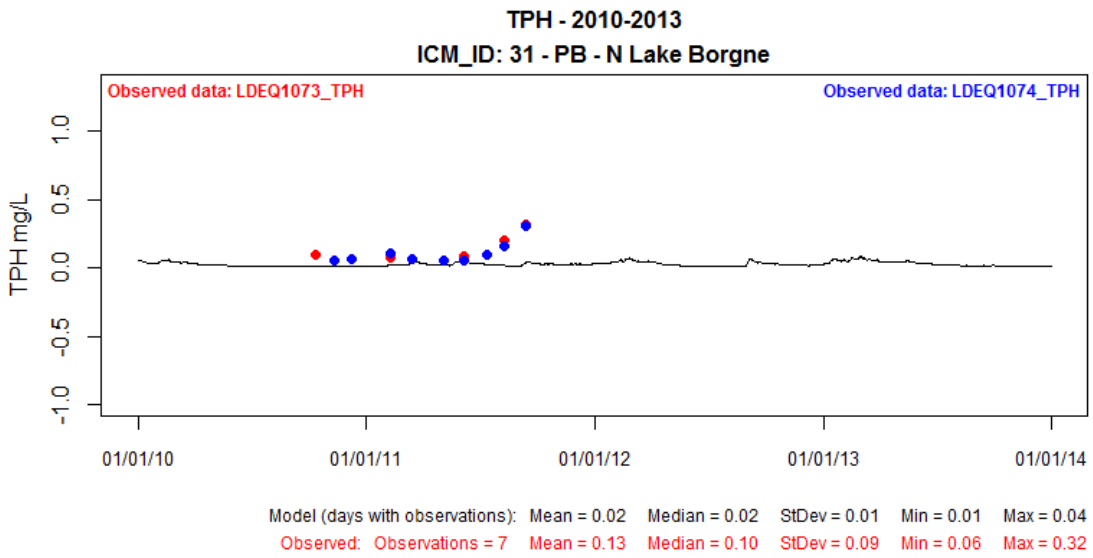

Figure 9: Modeled Total Phosphorus at ICM Compartment 31 (solid black line) Compared to Observed Data at LDEQ1073 for Calibration Period 2010-2013.

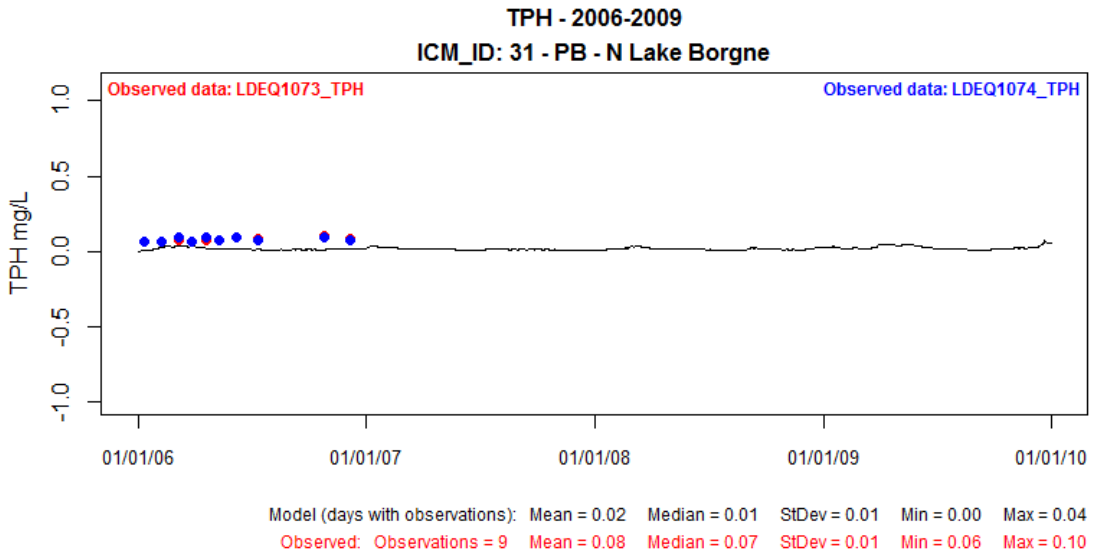

Figure 10: Modeled Total Phosphorus at ICM Compartment 31 (solid black line) Compared to Observed Data at LDEQ1073 for Validation Period 2006-2009.

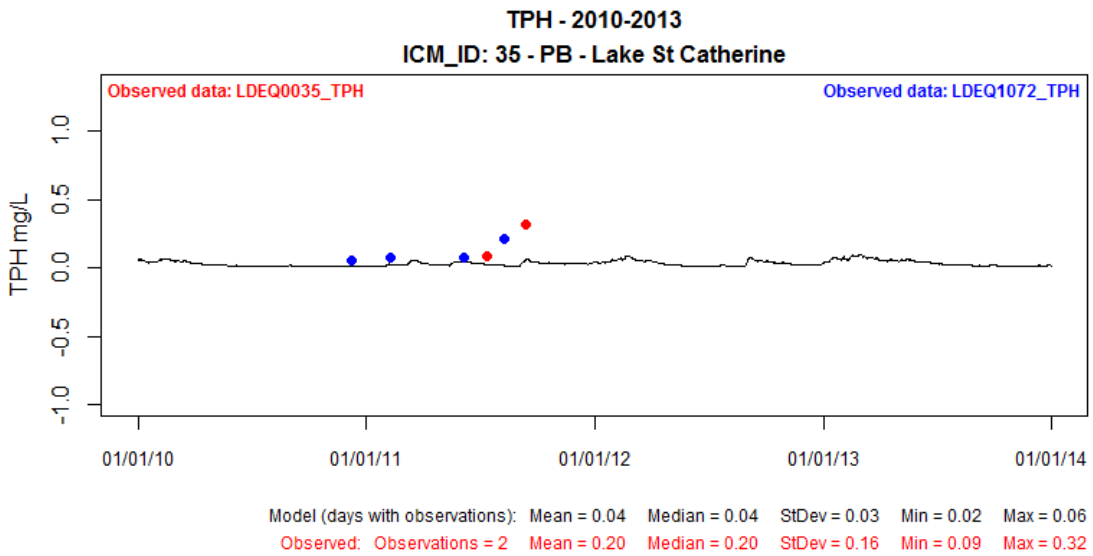

Figure 11: Modeled Total Phosphorus at ICM Compartment 35 (solid black line) Compared to Observed Data at LDEQ0035 for Calibration Period 2010-2013.

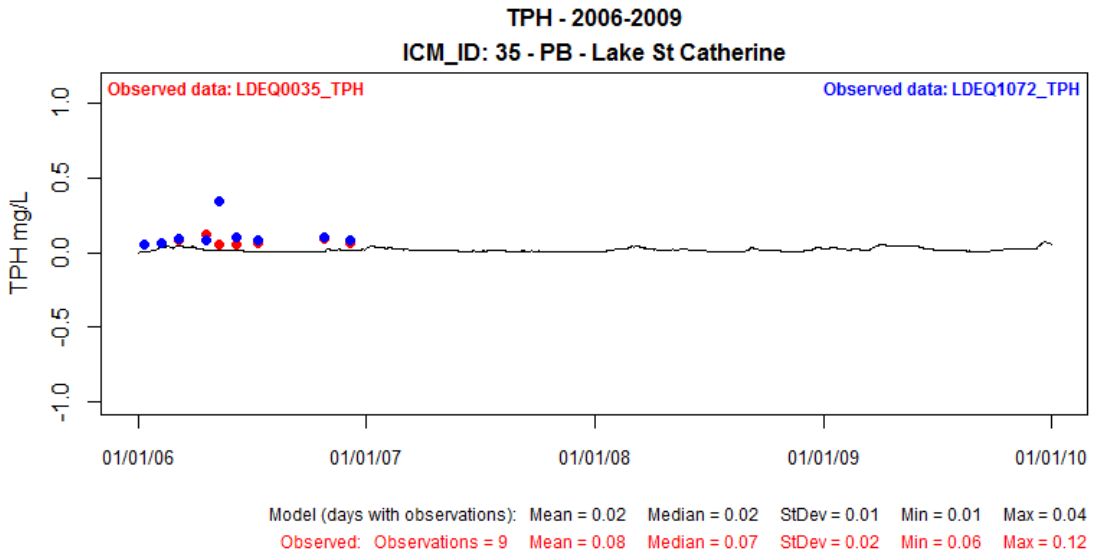

Figure 12: Modeled Total Phosphorus at ICM Compartment 35 (solid black line) Compared to Observed Data at LDEQ0035 for Validation Period 2006-2009.

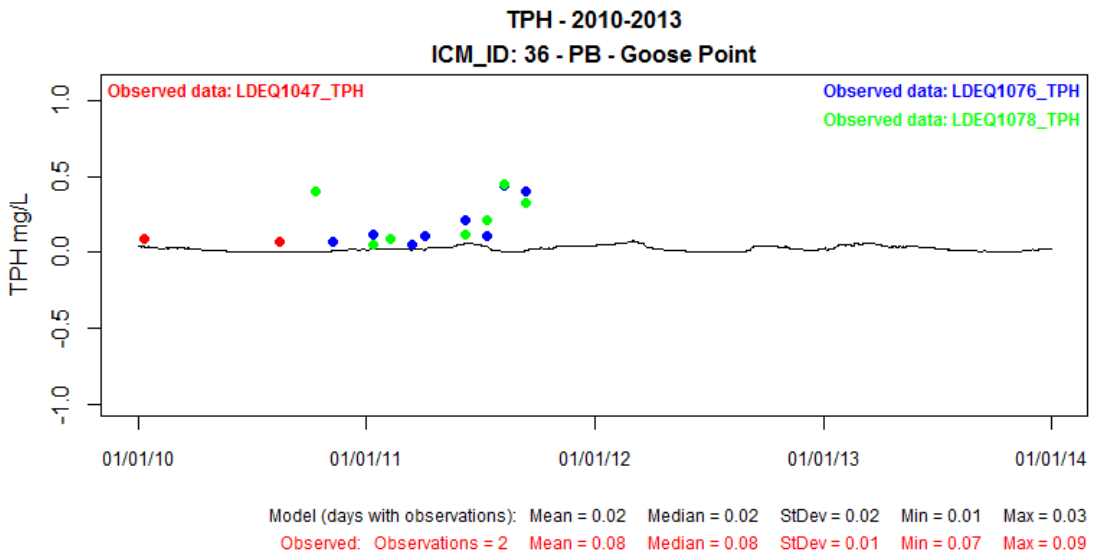

Figure 13: Modeled Total Phosphorus at ICM Compartment 36 (solid black line) Compared to Observed Data at LDEQ1047 for Calibration Period 2010-2013.

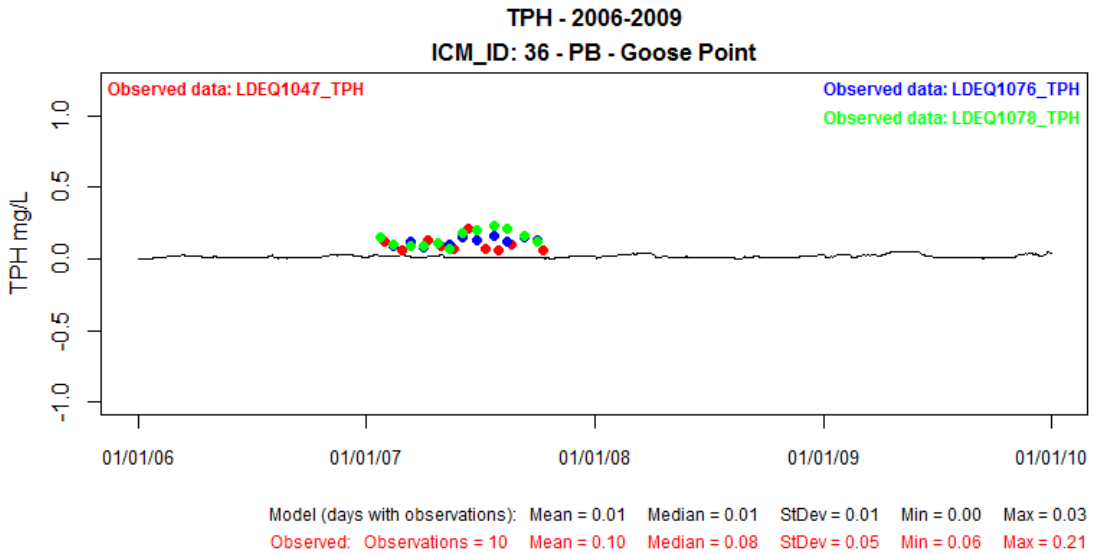

Figure 14: Modeled Total Phosphorus at ICM Compartment 36 (solid black line) Compared to Observed Data at LDEQ1047 for Validation Period 2006-2009.

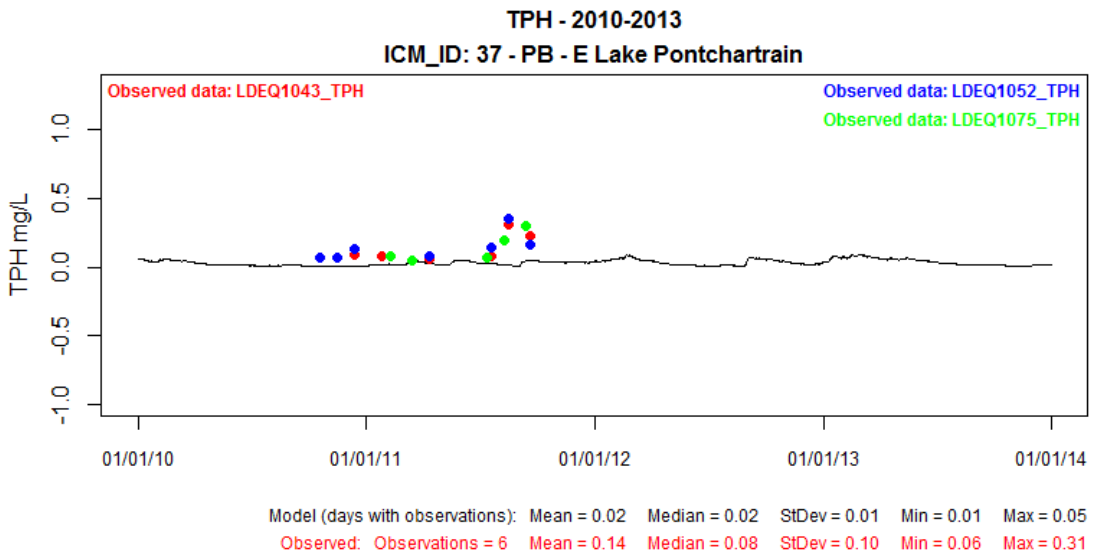

Figure 15: Modeled Total Phosphorus at ICM Compartment 37 (solid black line) Compared to Observed Data at LDEQ1043 for Calibration Period 2010-2013.

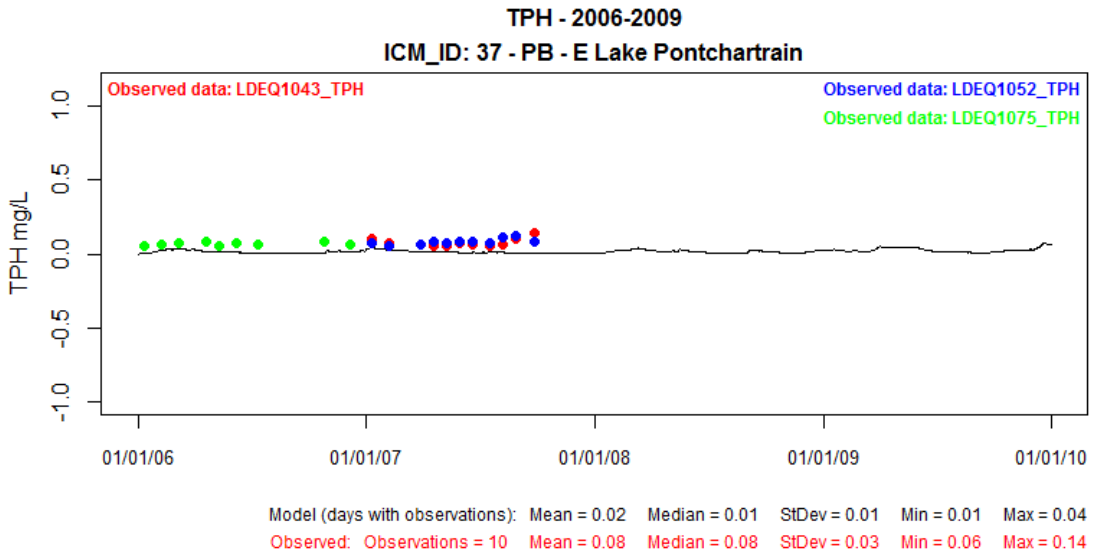

Figure 16: Modeled Total Phosphorus at ICM Compartment 37 (solid black line) Compared to Observed Data at LDEQ1043 for Validation Period 2006-2009.

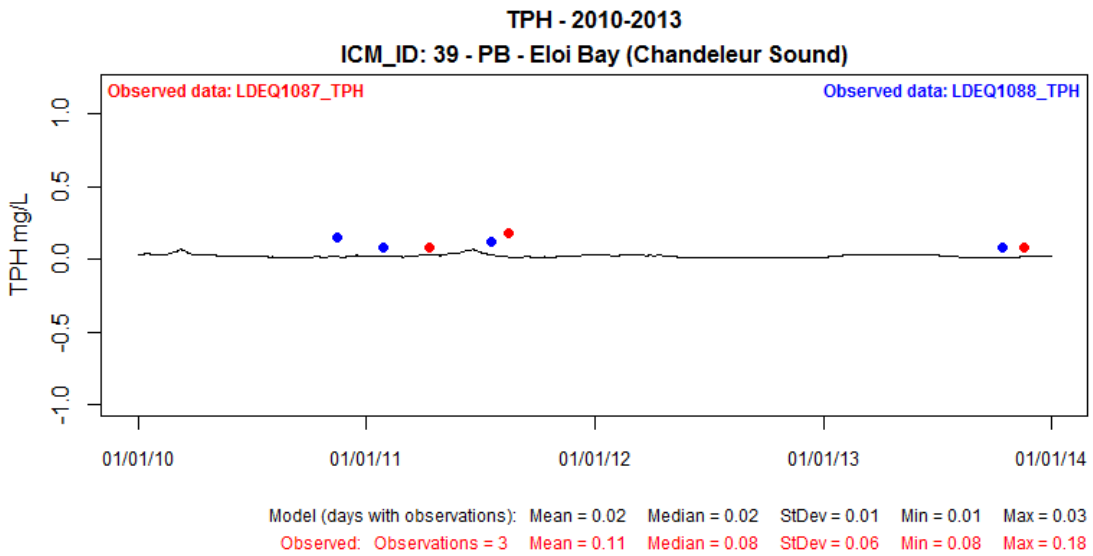

Figure 17: Modeled Total Phosphorus at ICM Compartment 39 (solid black line) Compared to Observed Data at LDEQ1087 for Calibration Period 2010-2013.

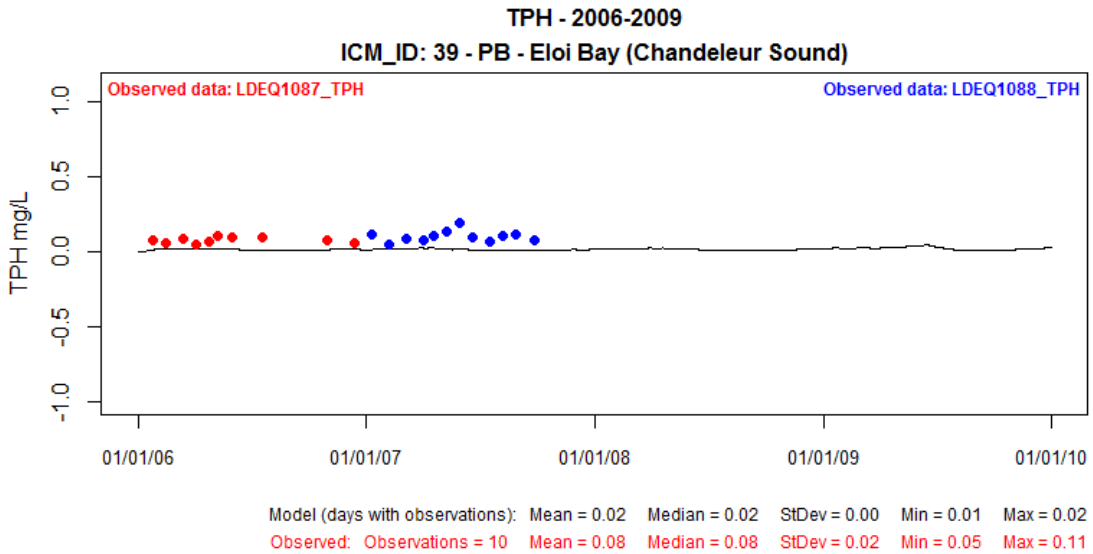

Figure 18: Modeled Total Phosphorus at ICM Compartment 39 (solid black line) Compared to Observed Data at LDEQ1087 for Validation Period 2006-2009.

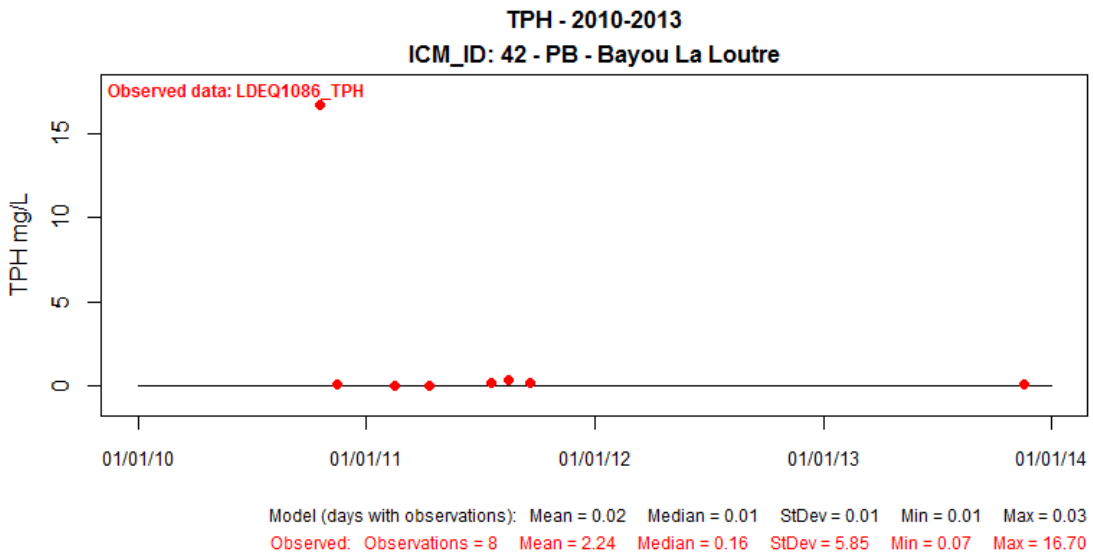

Figure 19: Modeled Total Phosphorus at ICM Compartment 42 (solid black line) Compared to Observed Data at LDEQ1086 for Calibration Period 2010-2013.

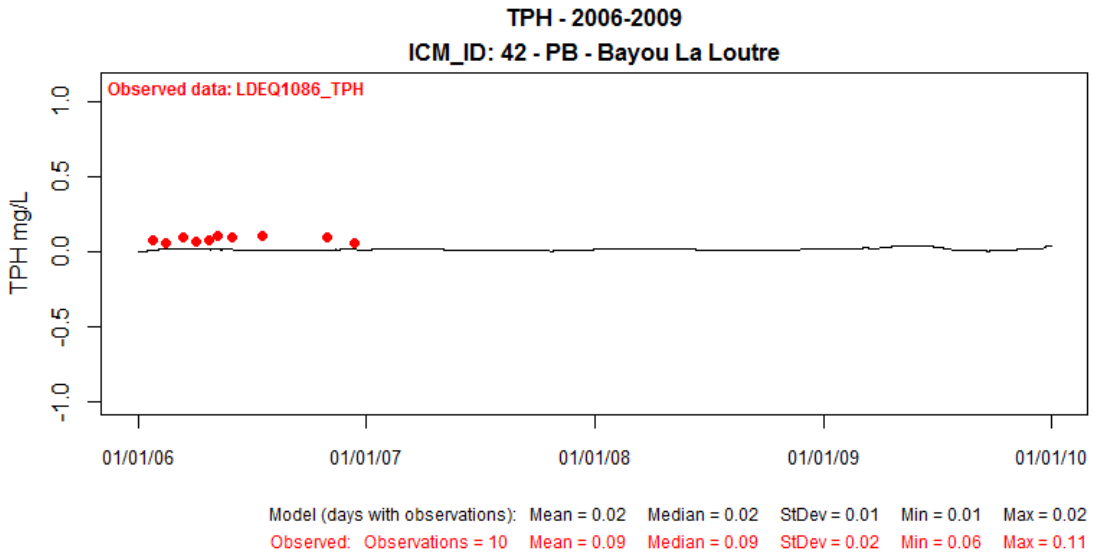

Figure 20: Modeled Total Phosphorus at ICM Compartment 42 (solid black line) Compared to Observed Data at LDEQ1086 for Validation Period 2006-2009.

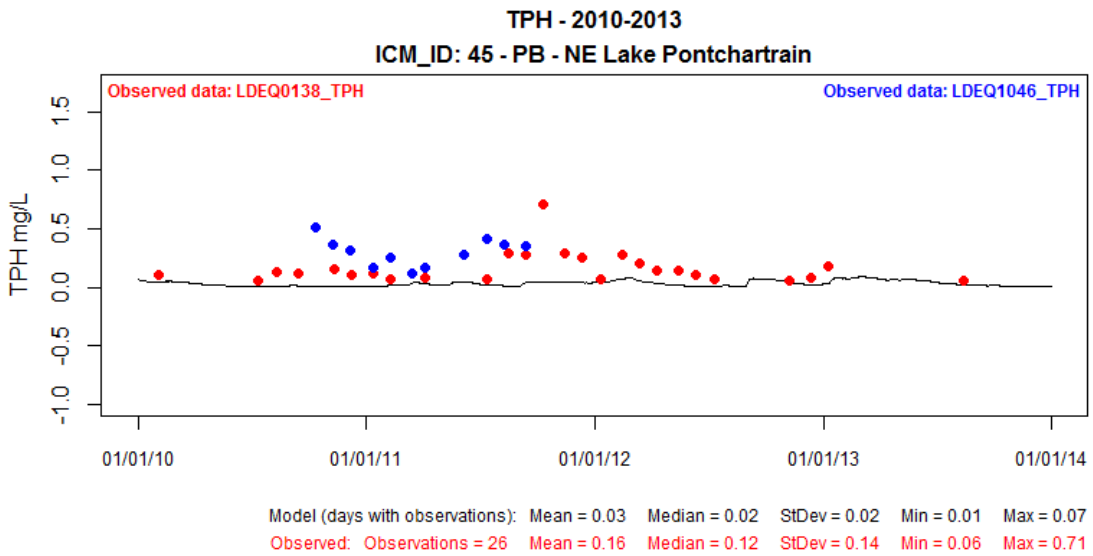

Figure 21: Modeled Total Phosphorus at ICM Compartment 45 (solid black line) Compared to Observed Data at LDEQ0138 for Calibration Period 2010-2013.

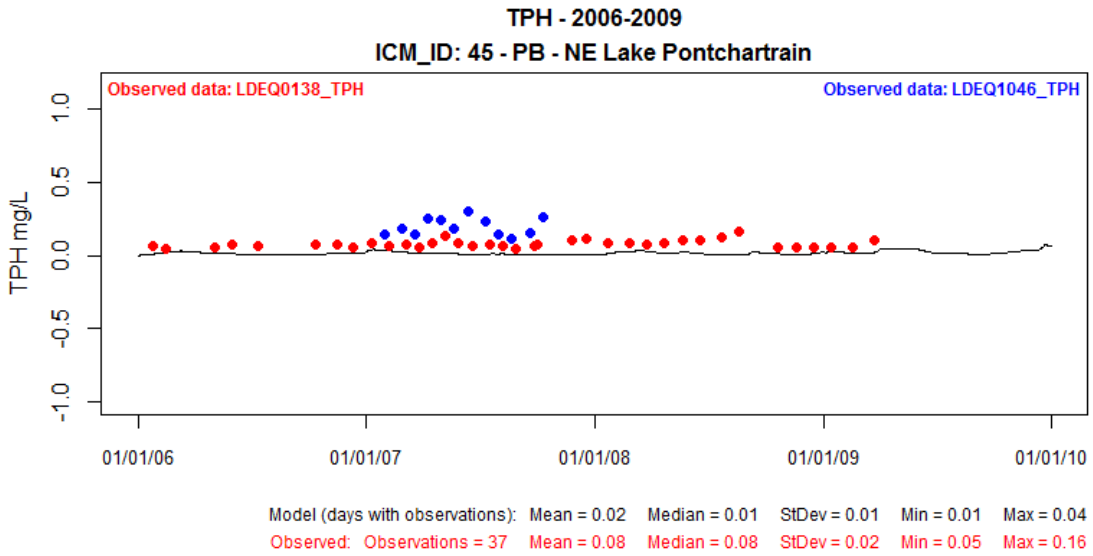

Figure 22: Modeled Total Phosphorus at ICM Compartment 45 (solid black line) Compared to Observed Data at LDEQ0138 for Validation Period 2006-2009.

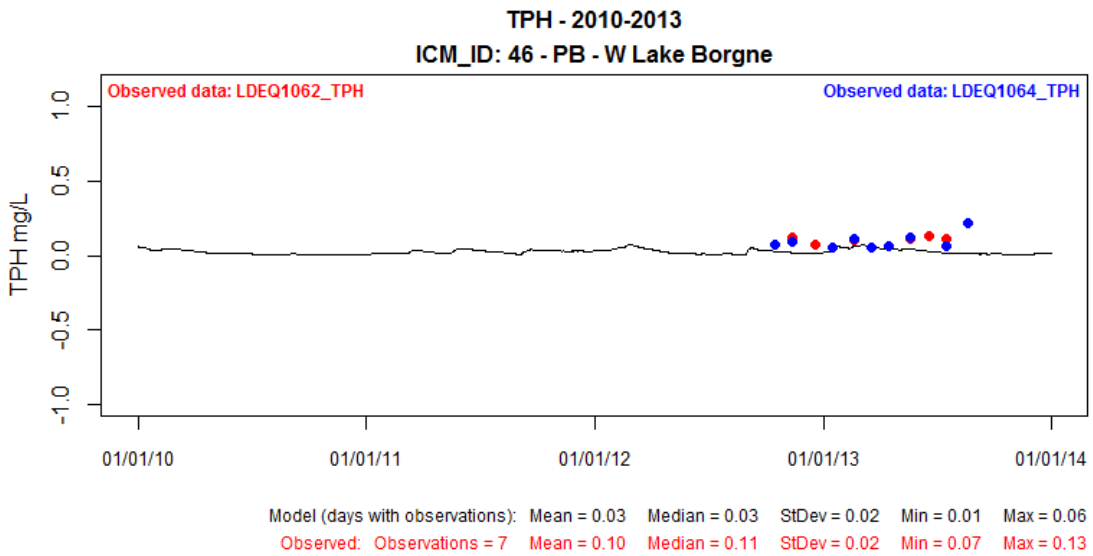

Figure 23: Modeled Total Phosphorus at ICM Compartment 46 (solid black line) Compared to Observed Data at LDEQ1062 for Calibration Period 2010-2013.

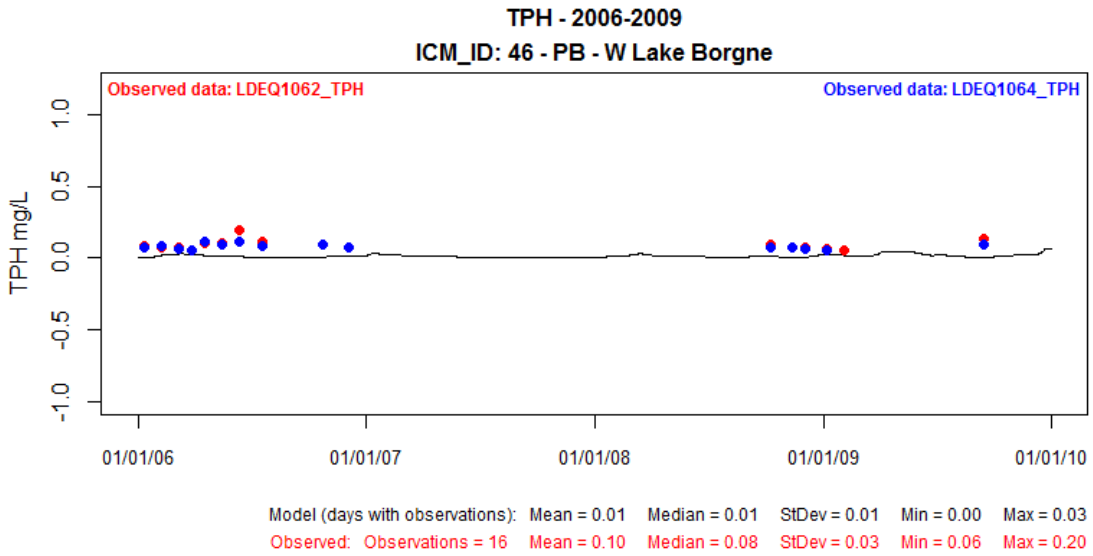

Figure 24: Modeled Total Phosphorus at ICM Compartment 46 (solid black line) Compared to Observed Data at LDEQ1062 for Validation Period 2006-2009.

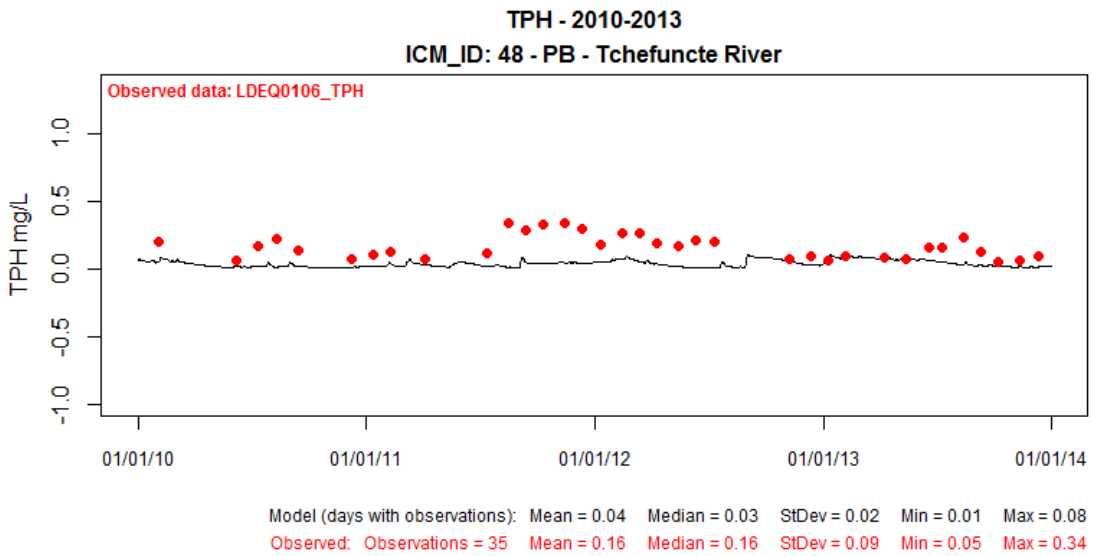

Figure 25: Modeled Total Phosphorus at ICM Compartment 48 (solid black line) Compared to Observed Data at LDEQ0106 for Calibration Period 2010-2013.

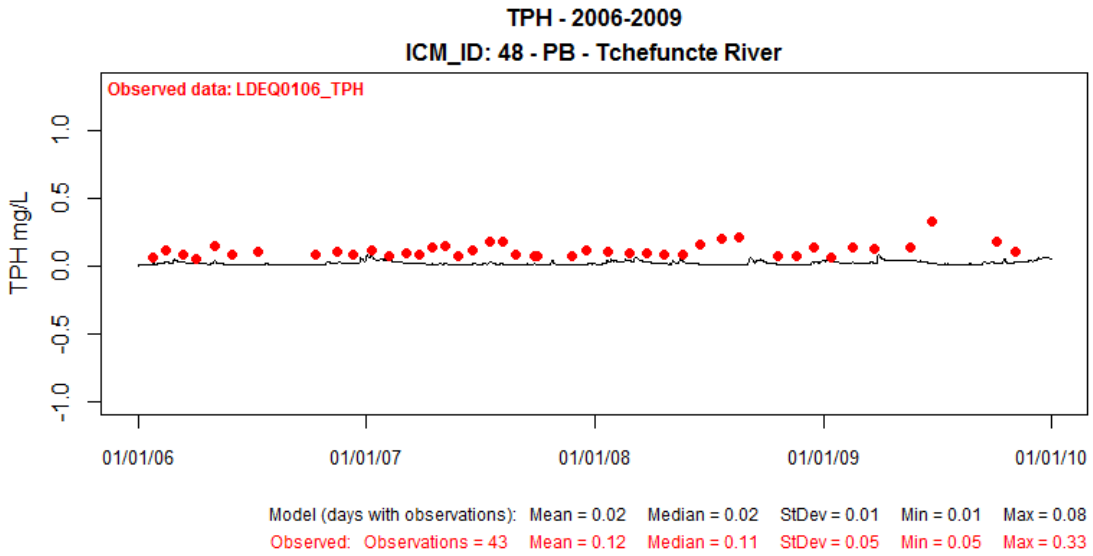

Figure 26: Modeled Total Phosphorus at ICM Compartment 48 (solid black line) Compared to Observed Data at LDEQ0106 for Validation Period 2006-2009.

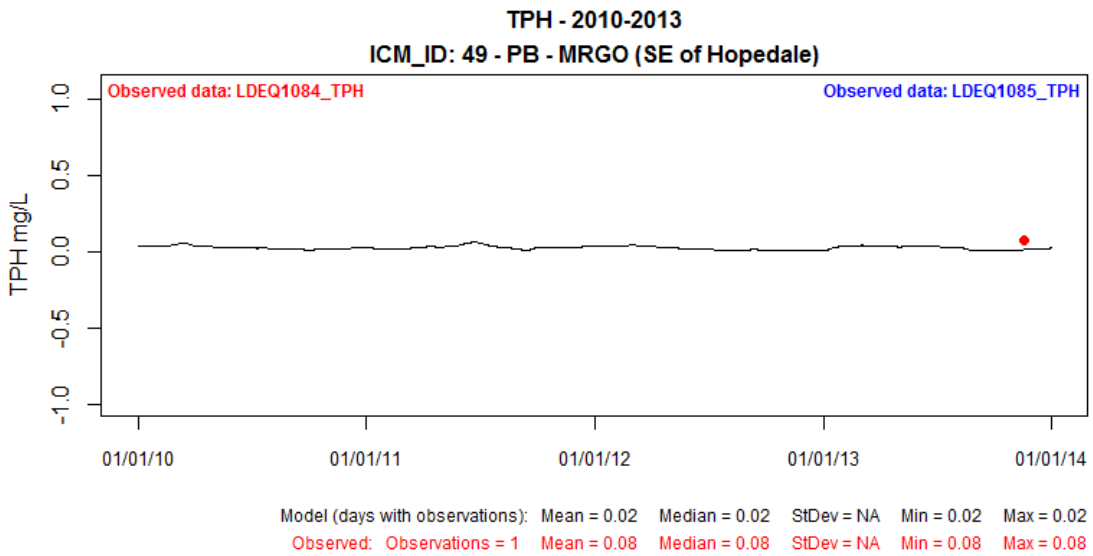

Figure 27: Modeled Total Phosphorus at ICM Compartment 49 (solid black line) Compared to Observed Data at LDEQ1084 for Calibration Period 2010-2013.

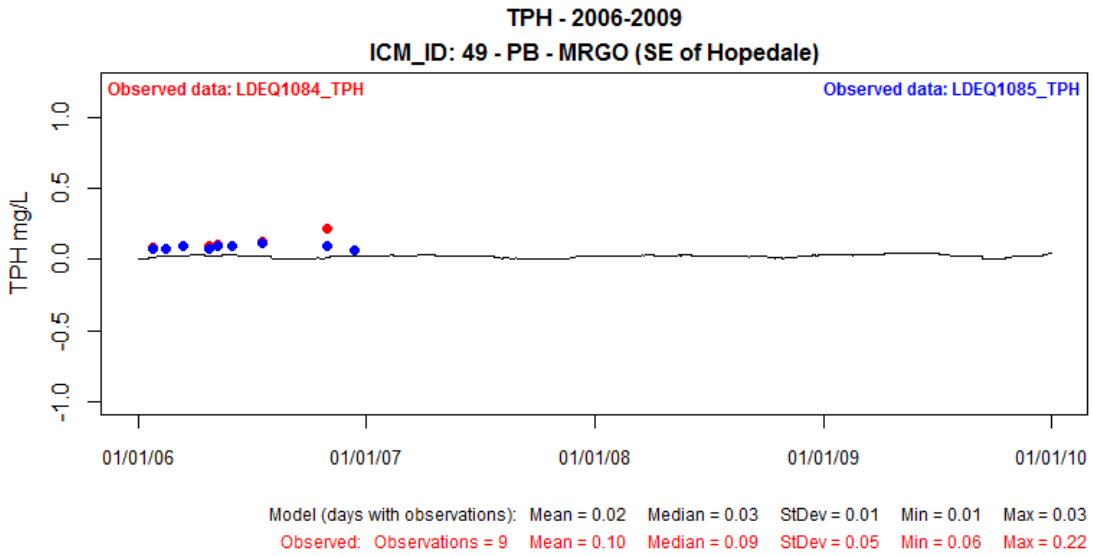

Figure 28: Modeled Total Phosphorus at ICM Compartment 49 (solid black line) Compared to Observed Data at LDEQ1084 for Validation Period 2006-2009.

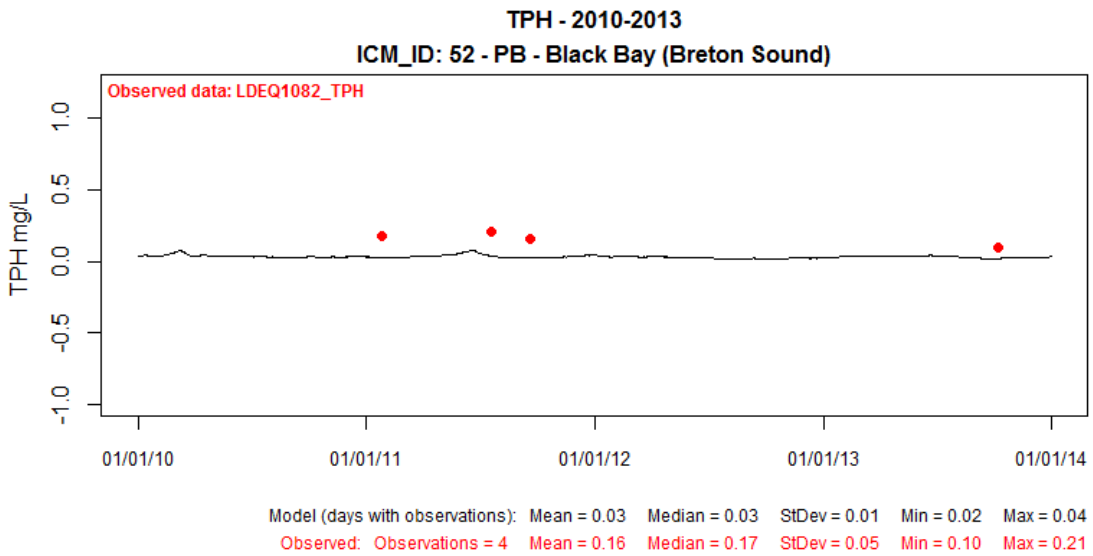

Figure 29: Modeled Total Phosphorus at ICM Compartment 52 (solid black line) Compared to Observed Data at LDEQ1082 for Calibration Period 2010-2013.

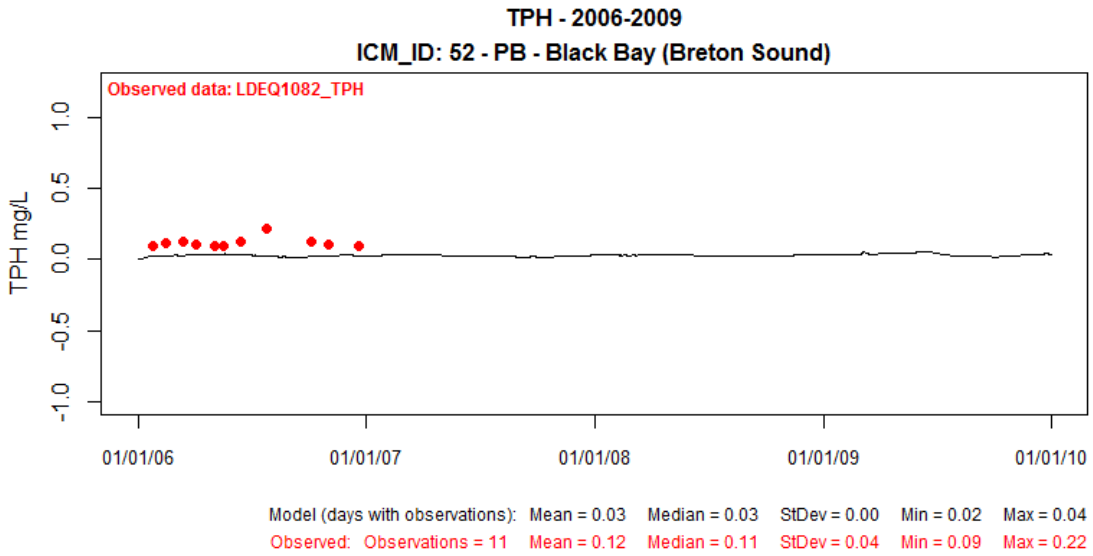

Figure 30: Modeled Total Phosphorus at ICM Compartment 52 (solid black line) Compared to Observed Data at LDEQ1082 for Validation Period 2006-2009.

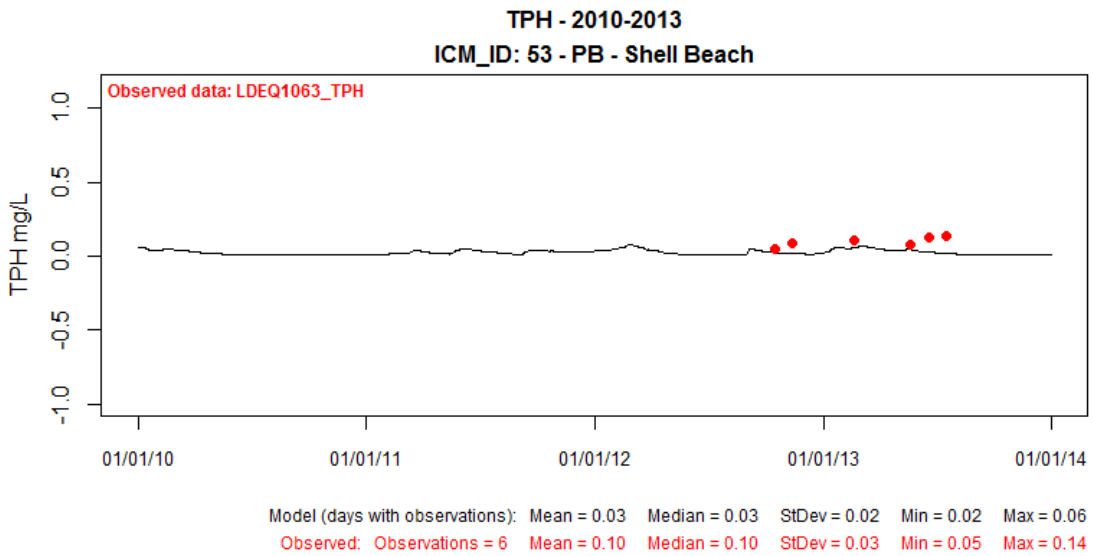

Figure 31: Modeled Total Phosphorus at ICM Compartment 53 (solid black line) Compared to Observed Data at LDEQ1063 for Calibration Period 2010-2013.

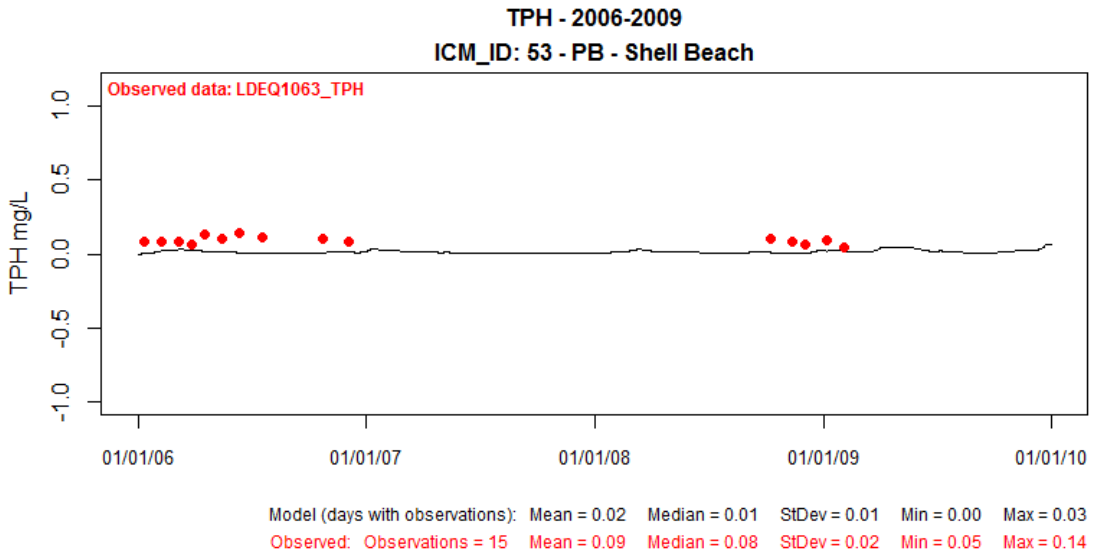

Figure 32: Modeled Total Phosphorus at ICM Compartment 53 (solid black line) Compared to Observed Data at LDEQ1063 for Validation Period 2006-2009.

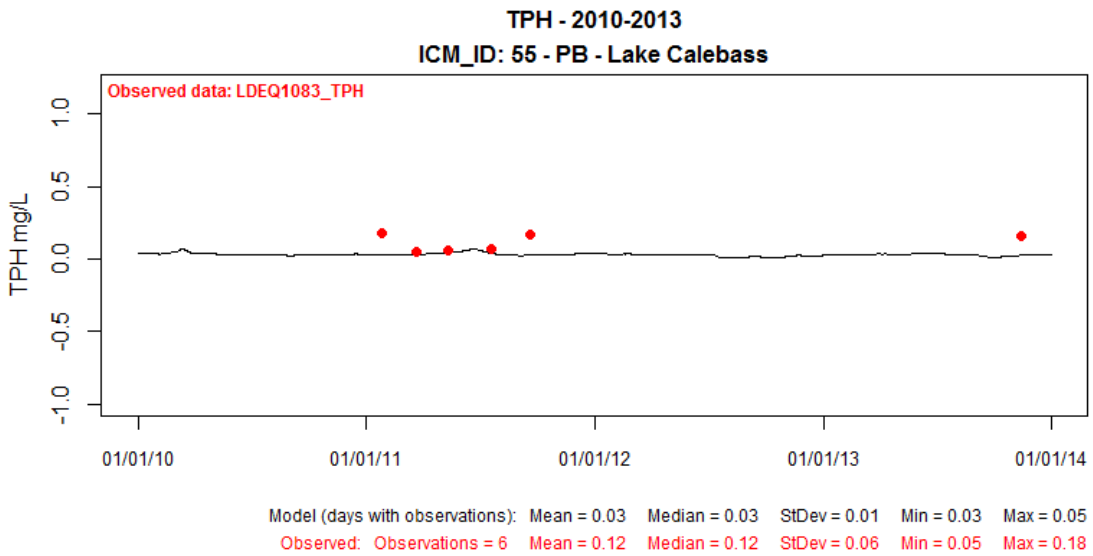

Figure 33: Modeled Total Phosphorus at ICM Compartment 55 (solid black line) Compared to Observed Data at LDEQ1083 for Calibration Period 2010-2013.

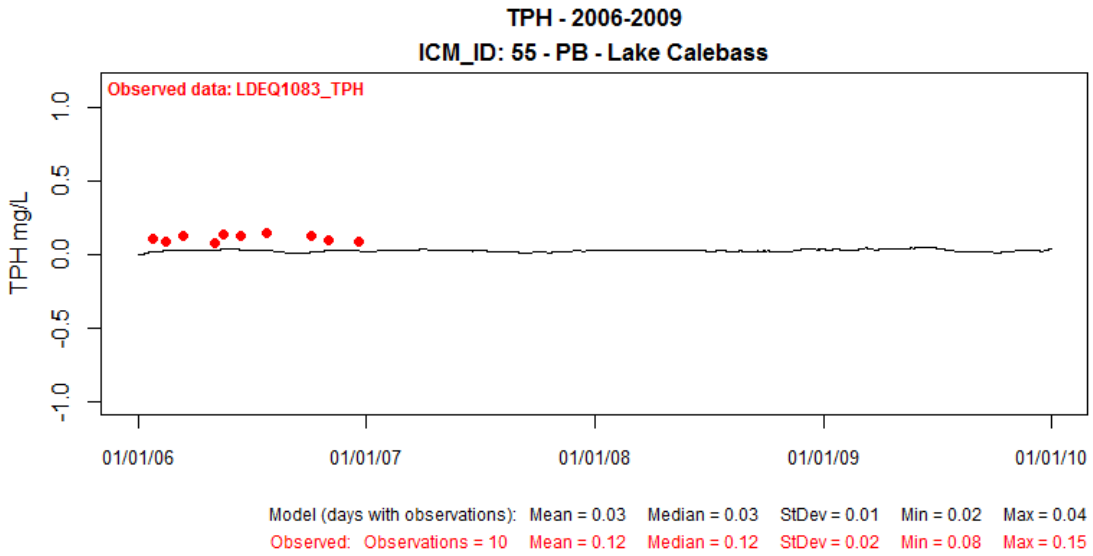

Figure 34: Modeled Total Phosphorus at ICM Compartment 55 (solid black line) Compared to Observed Data at LDEQ1083 for Validation Period 2006-2009.

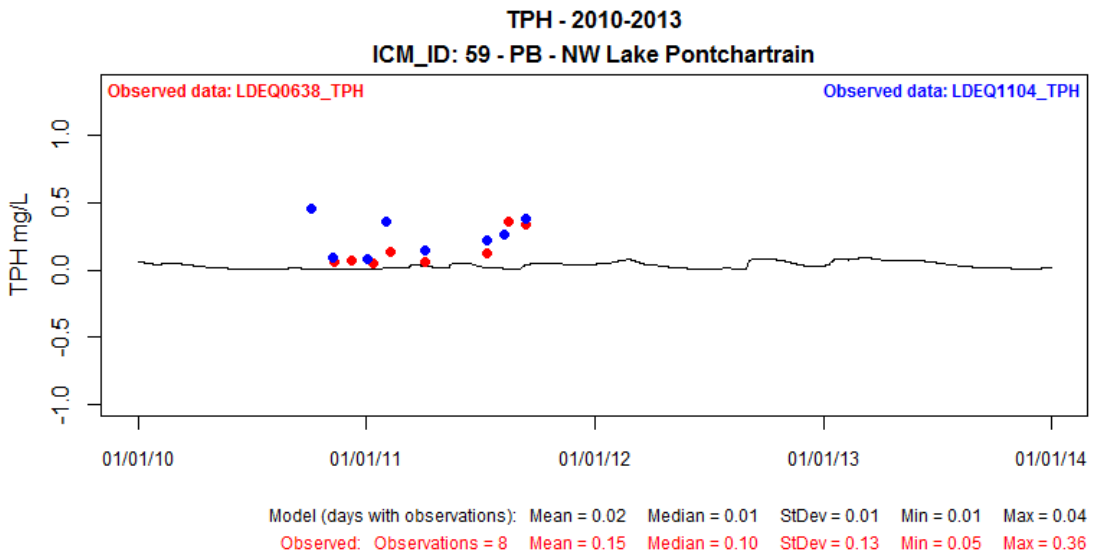

Figure 35: Modeled Total Phosphorus at ICM Compartment 59 (solid black line) Compared to Observed Data at LDEQ0638 for Calibration Period 2010-2013.

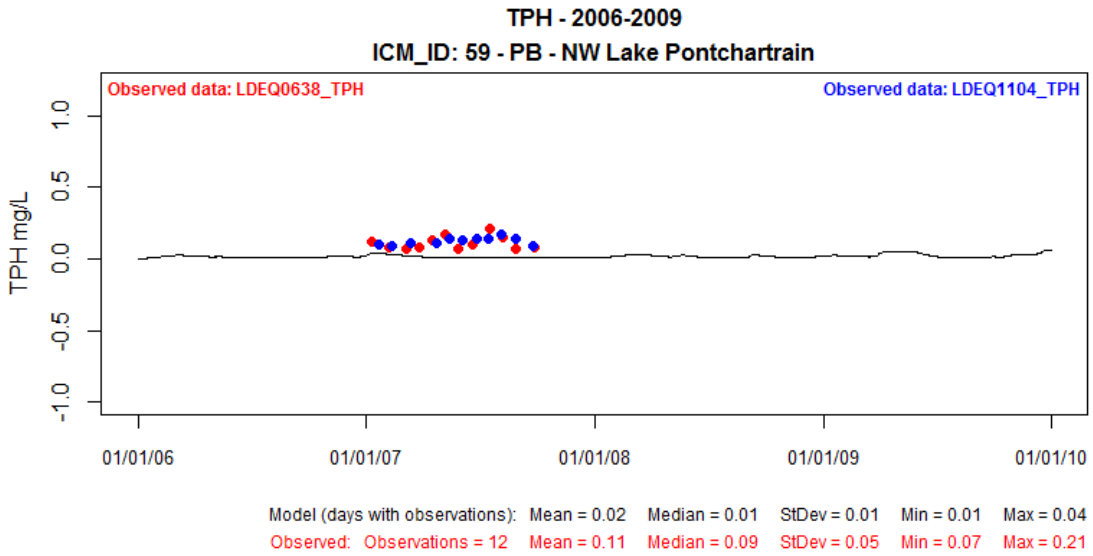

Figure 36: Modeled Total Phosphorus at ICM Compartment 59 (solid black line) Compared to Observed Data at LDEQ0638 for Validation Period 2006-2009.

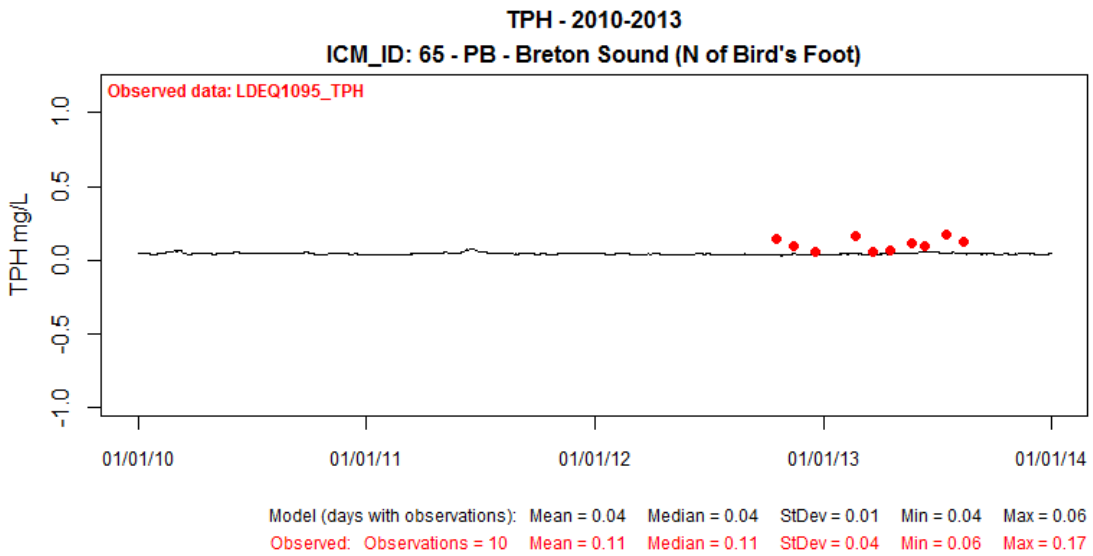

Figure 37: Modeled Total Phosphorus at ICM Compartment 65 (solid black line) Compared to Observed Data at LDEQ1095 for Calibration Period 2010-2013.

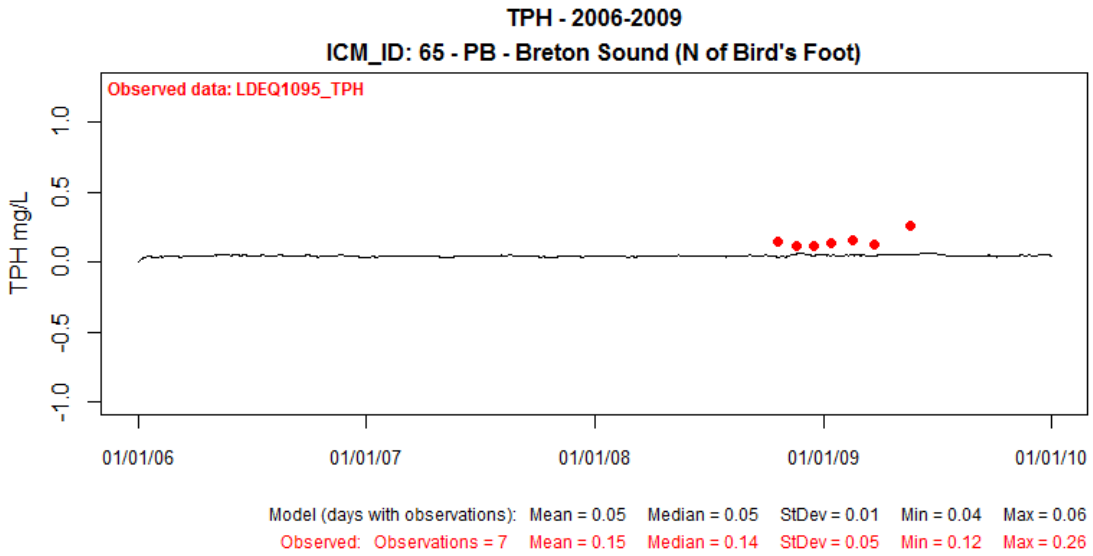

Figure 38: Modeled Total Phosphorus at ICM Compartment 65 (solid black line) Compared to Observed Data at LDEQ1095 for Validation Period 2006-2009.

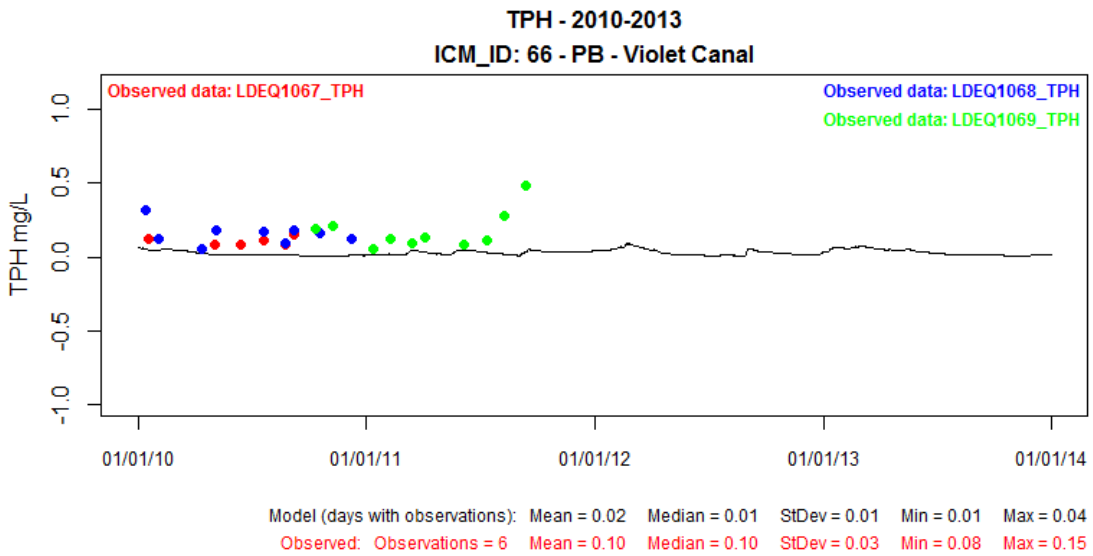

Figure 39: Modeled Total Phosphorus at ICM Compartment 66 (solid black line) Compared to Observed Data at LDEQ1067 for Calibration Period 2010-2013.

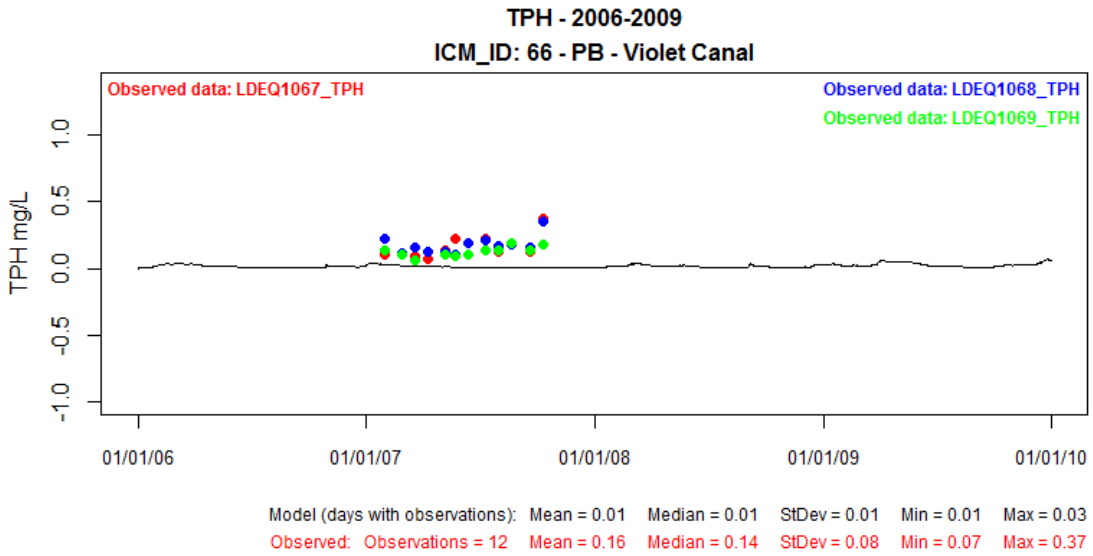

Figure 40: Modeled Total Phosphorus at ICM Compartment 66 (solid black line) Compared to Observed Data at LDEQ1067 for Validation Period 2006-2009.

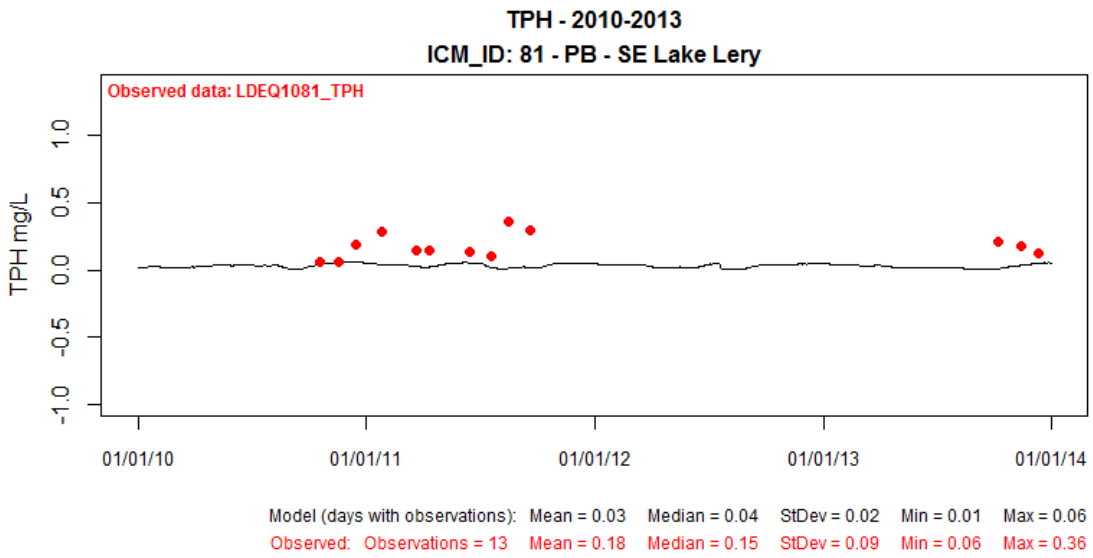

Figure 41: Modeled Total Phosphorus at ICM Compartment 81 (solid black line) Compared to Observed Data at LDEQ1081 for Calibration Period 2010-2013.

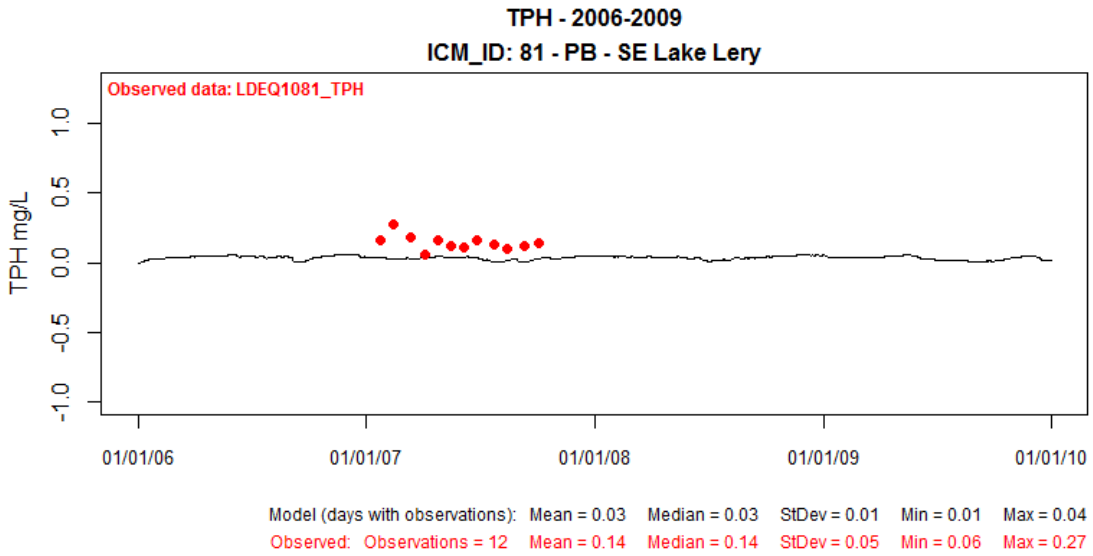

Figure 42: Modeled Total Phosphorus at ICM Compartment 81 (solid black line) Compared to Observed Data at LDEQ1081 for Validation Period 2006-2009.

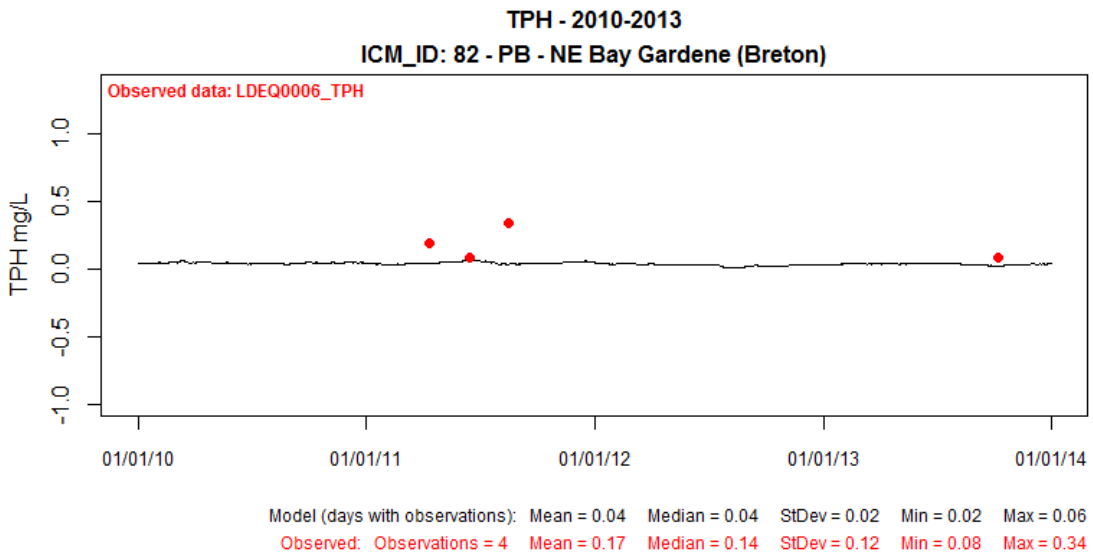

Figure 43: Modeled Total Phosphorus at ICM Compartment 82 (solid black line) Compared to Observed Data at LDEQ0006 for Calibration Period 2010-2013.

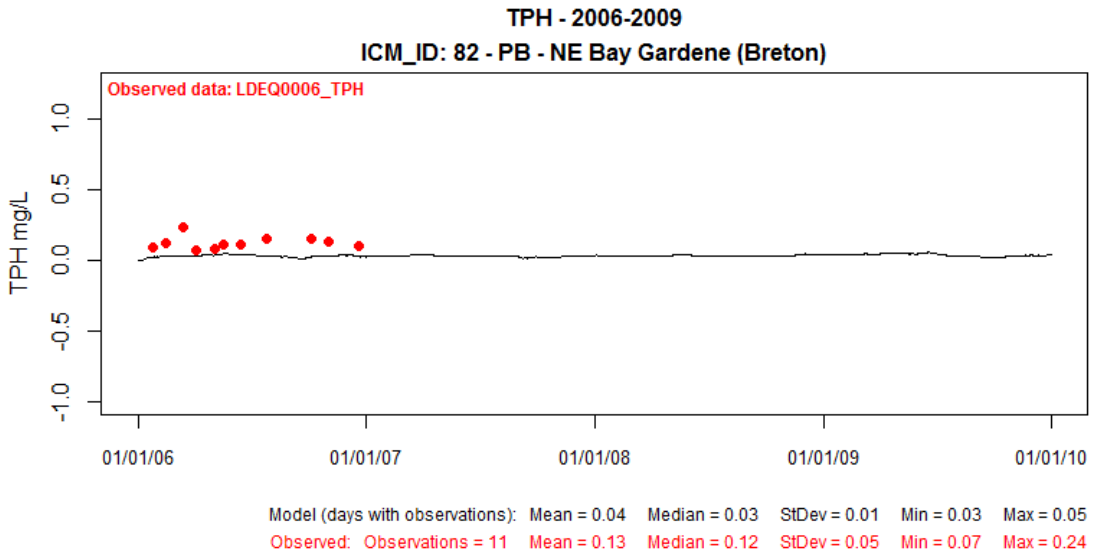

Figure 44: Modeled Total Phosphorus at ICM Compartment 82 (solid black line) Compared to Observed Data at LDEQ0006 for Validation Period 2006-2009.

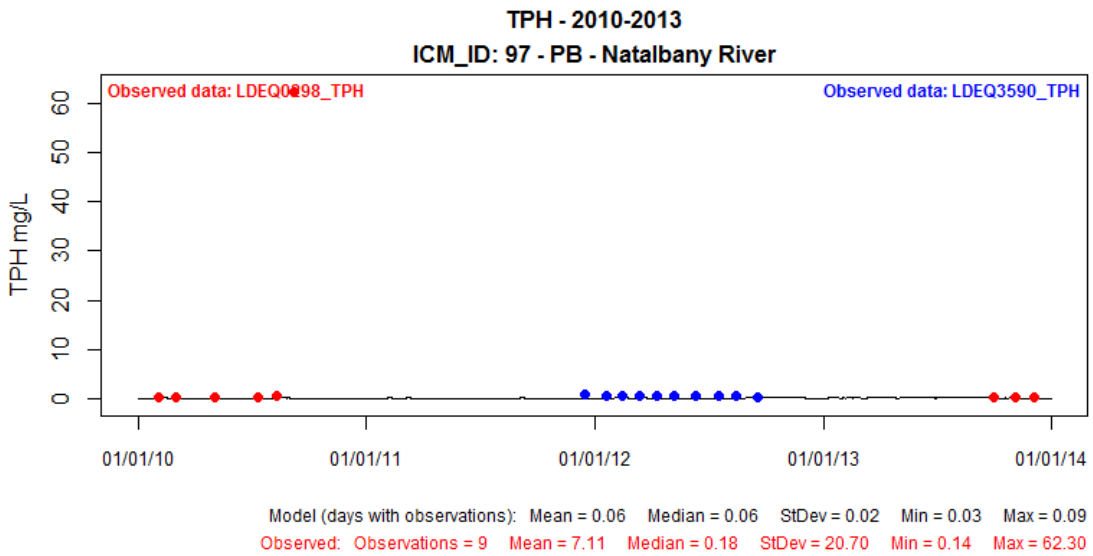

Figure 45: Modeled Total Phosphorus at ICM Compartment 97 (solid black line) Compared to Observed Data at LDEQ0298 for Calibration Period 2010-2013.

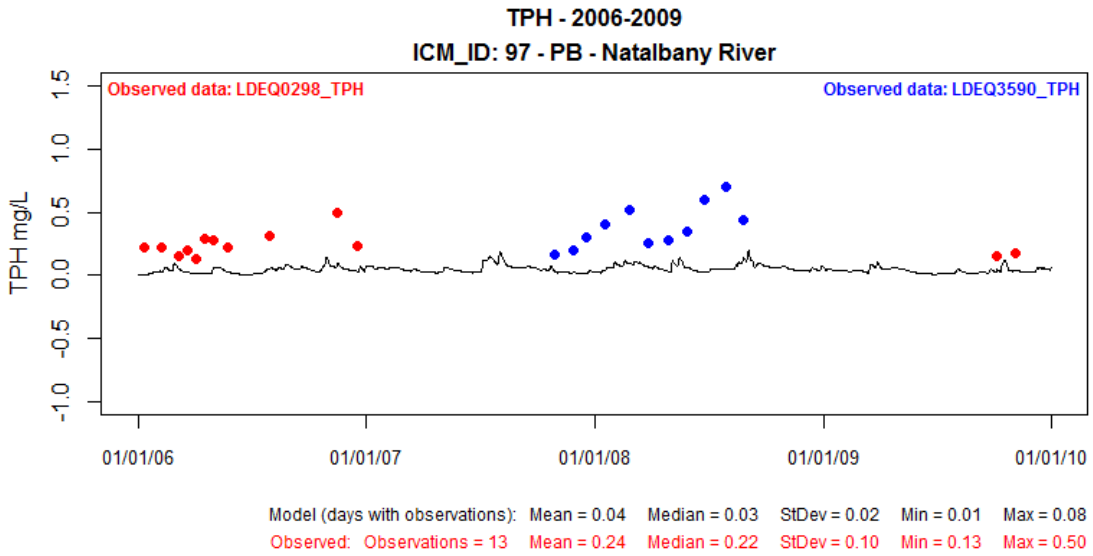

Figure 46: Modeled Total Phosphorus at ICM Compartment 97 (solid black line) Compared to Observed Data at LDEQ0298 for Validation Period 2006-2009.

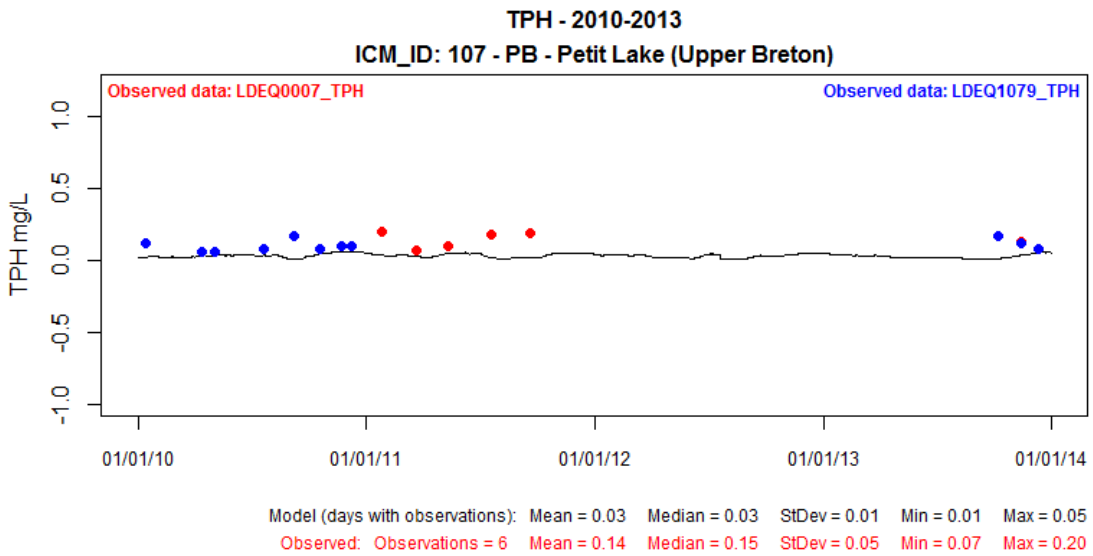

Figure 47: Modeled Total Phosphorus at ICM Compartment 107 (solid black line) Compared to Observed Data at LDEQ0007 for Calibration Period 2010-2013.

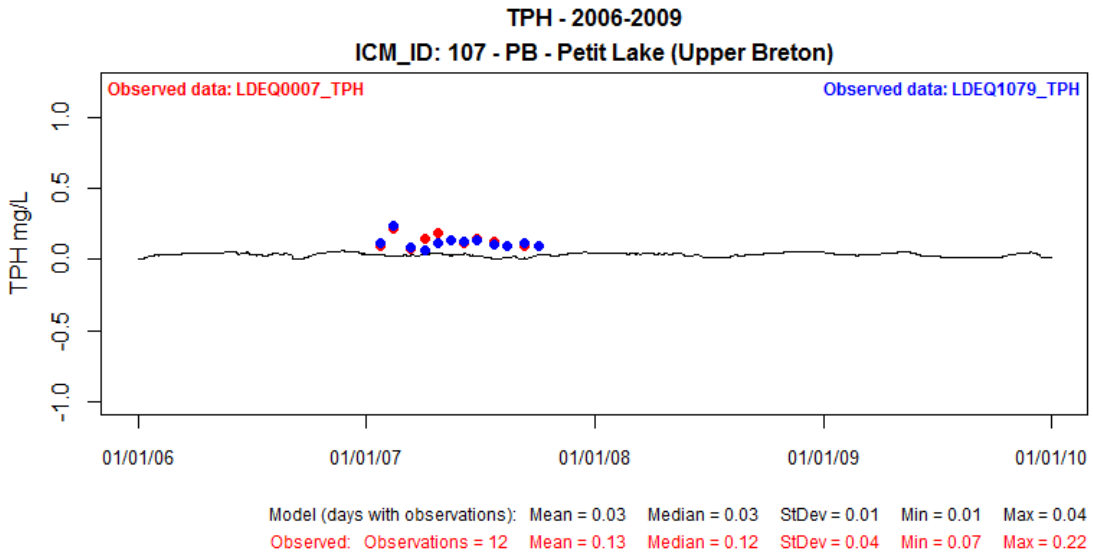

Figure 48: Modeled Total Phosphorus at ICM Compartment 107 (solid black line) Compared to Observed Data at LDEQ0007 for Validation Period 2006-2009.

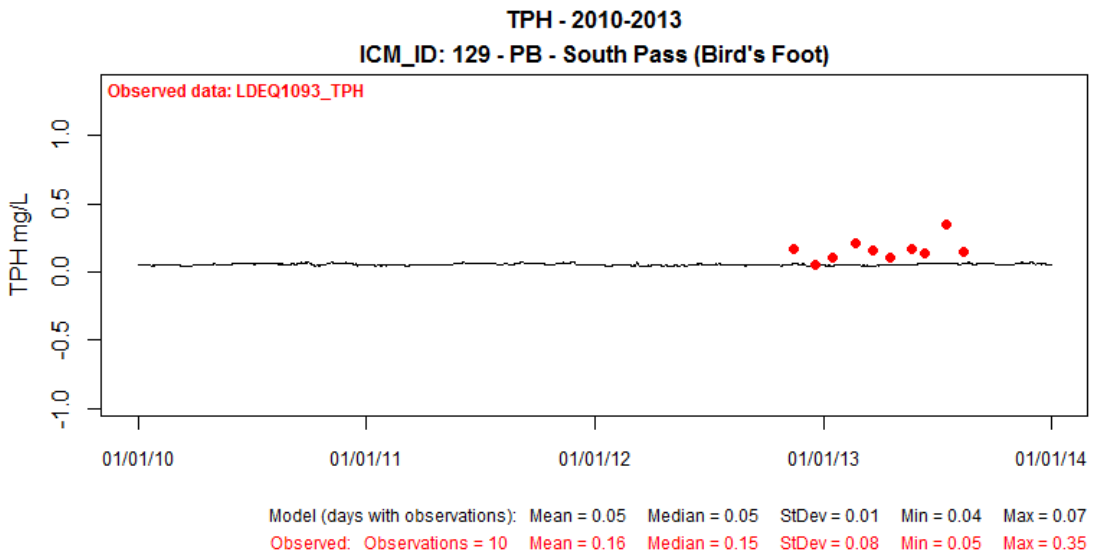

Figure 49: Modeled Total Phosphorus at ICM Compartment 129 (solid black line) Compared to Observed Data at LDEQ1093 for Calibration Period 2010-2013.

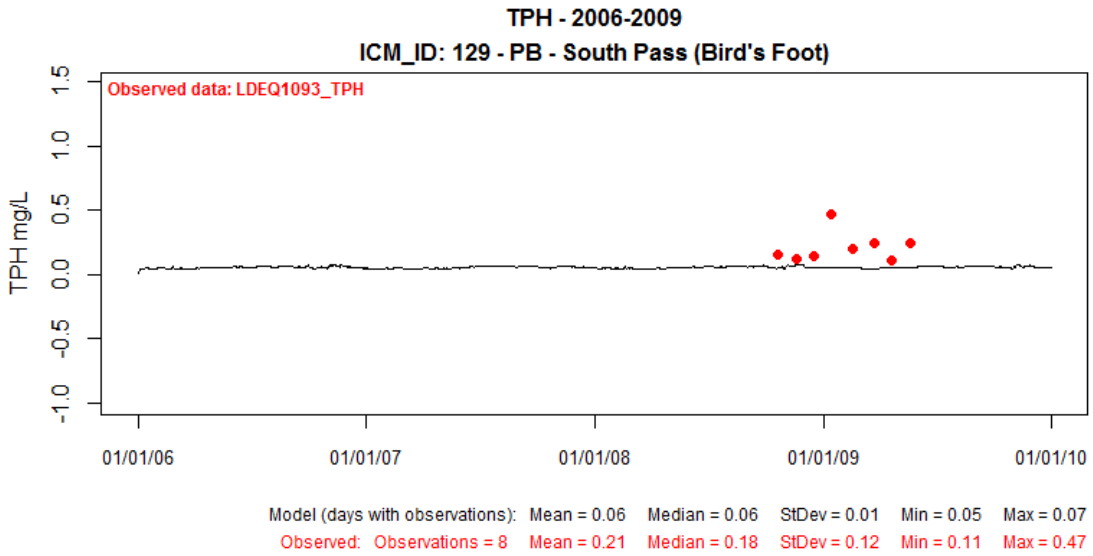

Figure 50: Modeled Total Phosphorus at ICM Compartment 129 (solid black line) Compared to Observed Data at LDEQ1093 for Validation Period 2006-2009.

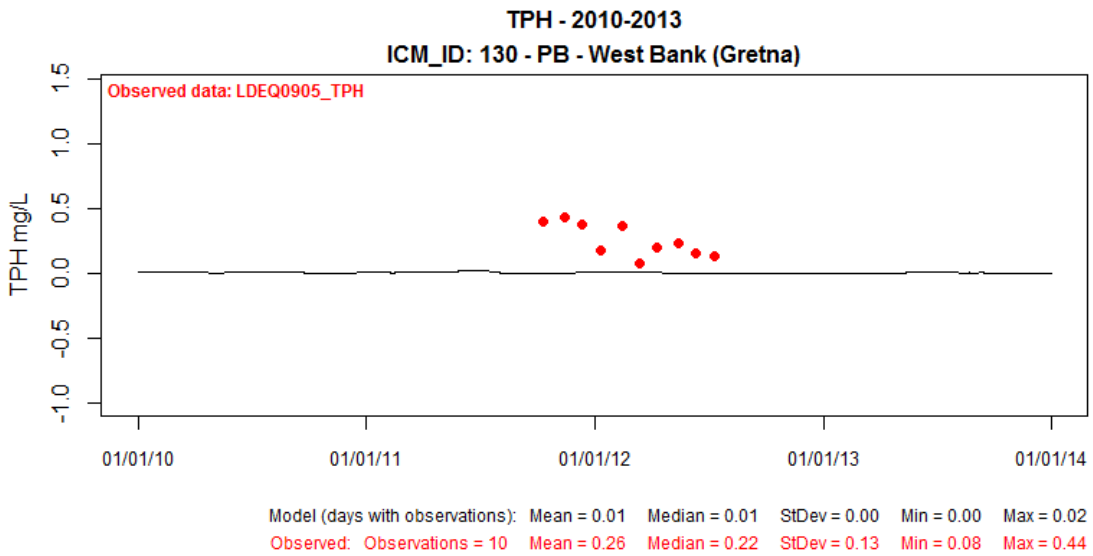

Figure 51: Modeled Total Phosphorus at ICM Compartment 130 (solid black line) Compared to Observed Data at LDEQ0905 for Calibration Period 2010-2013.

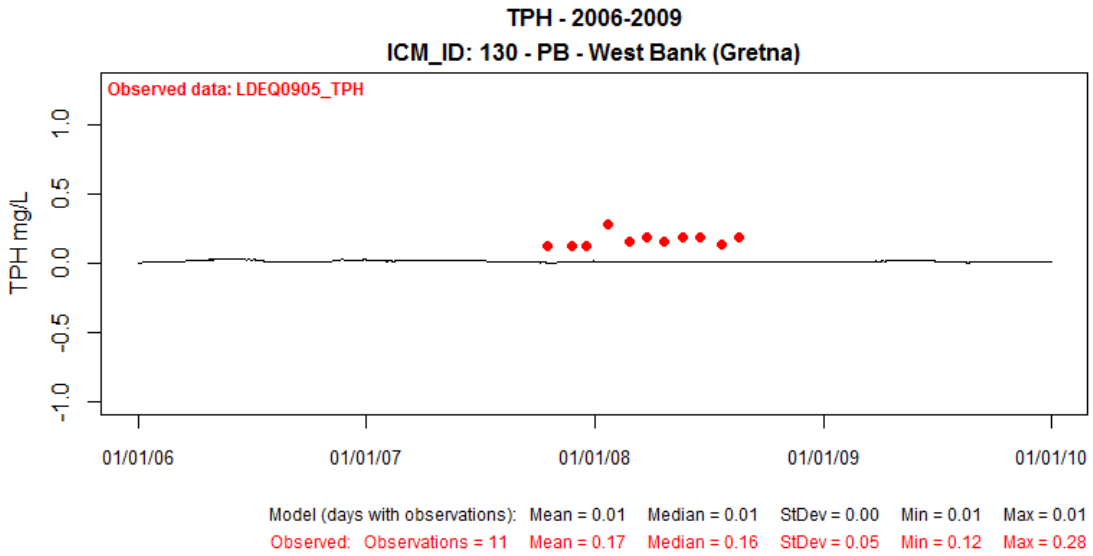

Figure 52: Modeled Total Phosphorus at ICM Compartment 130 (solid black line) Compared to Observed Data at LDEQ0905 for Validation Period 2006-2009.

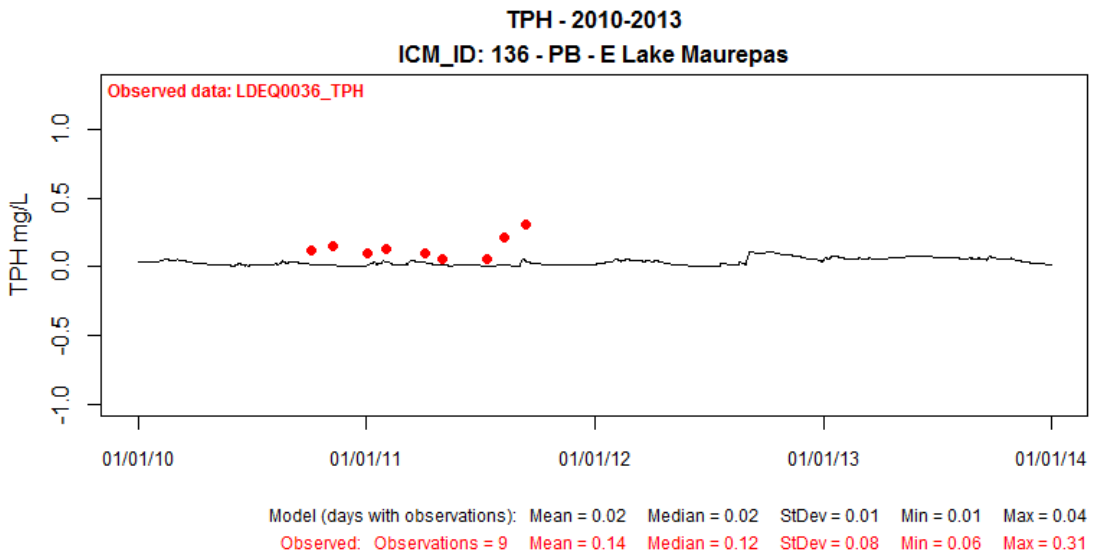

Figure 53: Modeled Total Phosphorus at ICM Compartment 136 (solid black line) Compared to Observed Data at LDEQ0036 for Calibration Period 2010-2013.

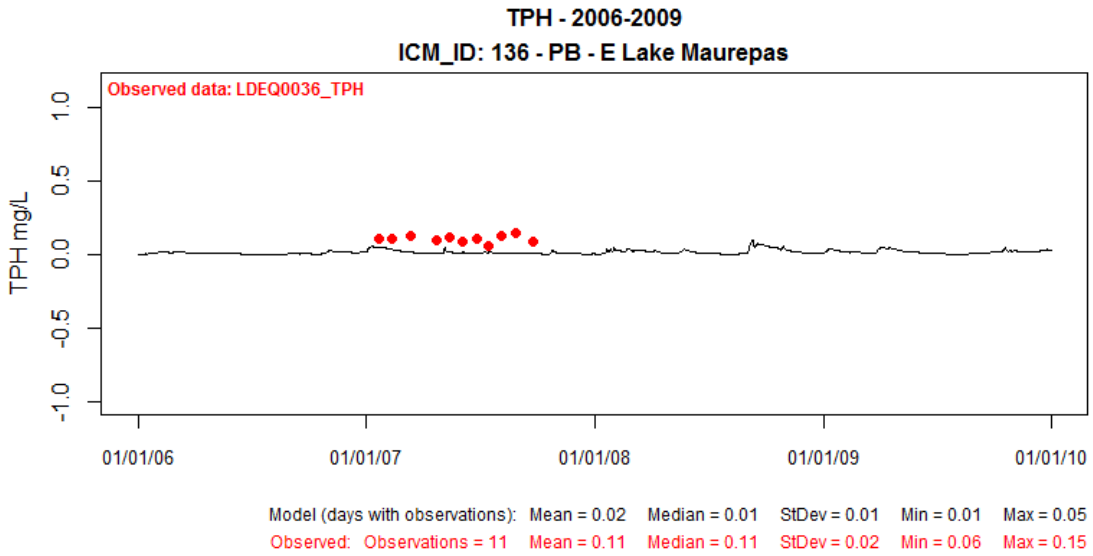

Figure 54: Modeled Total Phosphorus at ICM Compartment 136 (solid black line) Compared to Observed Data at LDEQ0036 for Validation Period 2006-2009.

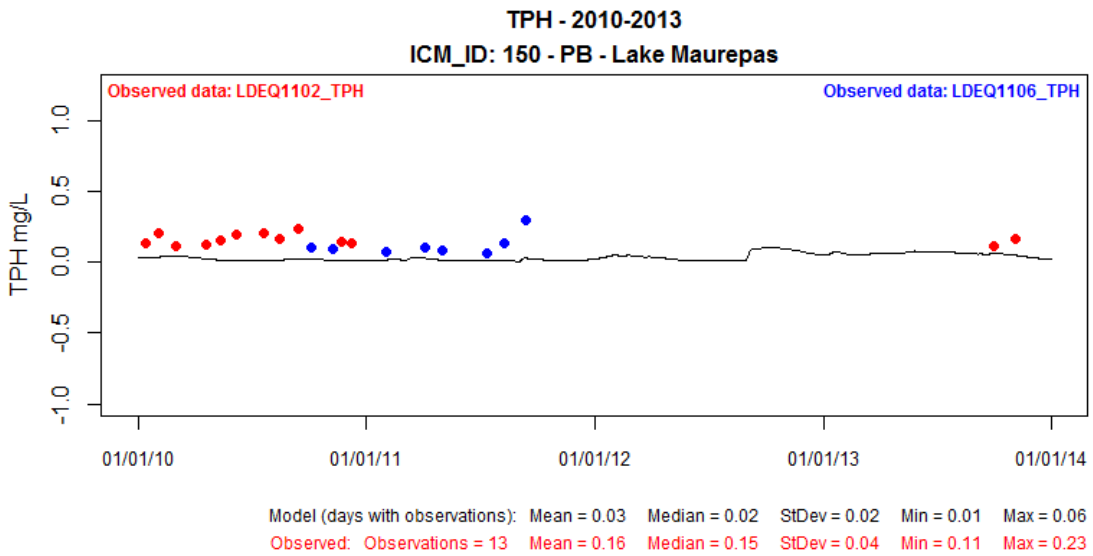

Figure 55: Modeled Total Phosphorus at ICM Compartment 150 (solid black line) Compared to Observed Data at LDEQ1102 for Calibration Period 2010-2013.

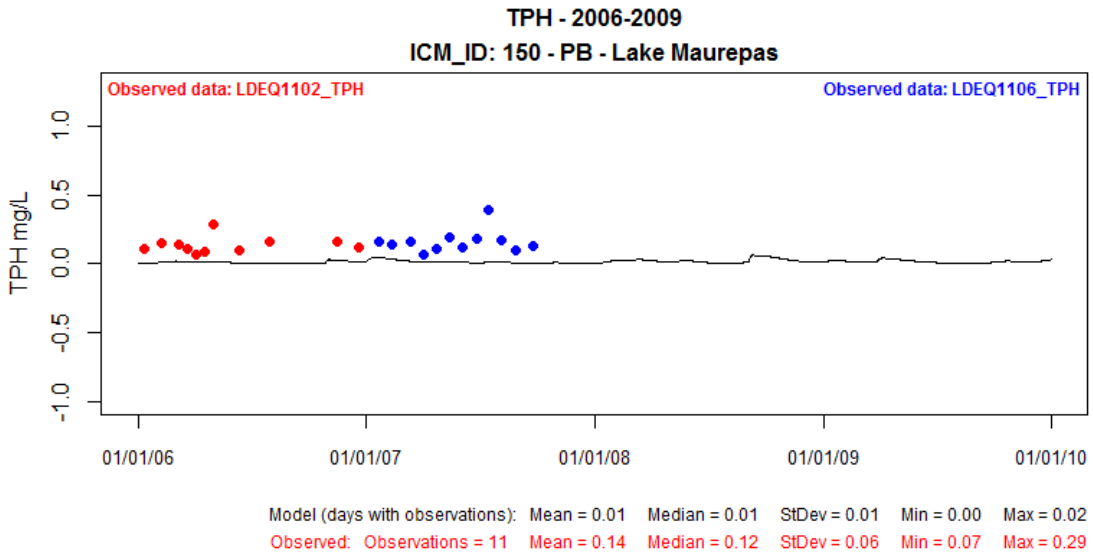

Figure 56: Modeled Total Phosphorus at ICM Compartment 150 (solid black line) Compared to Observed Data at LDEQ1102 for Validation Period 2006-2009.

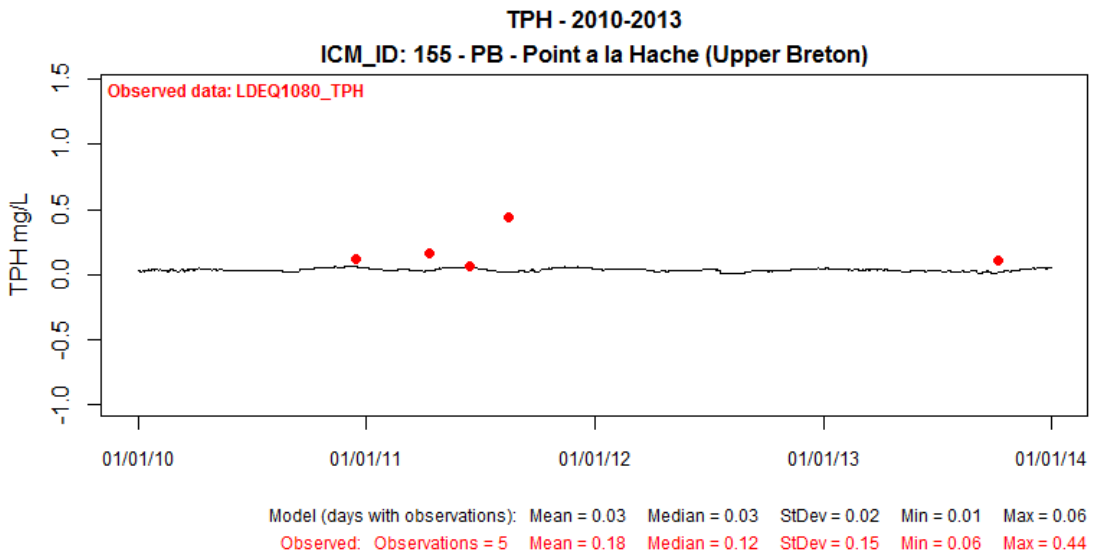

Figure 57: Modeled Total Phosphorus at ICM Compartment 155 (solid black line) Compared to Observed Data at LDEQ1080 for Calibration Period 2010-2013.

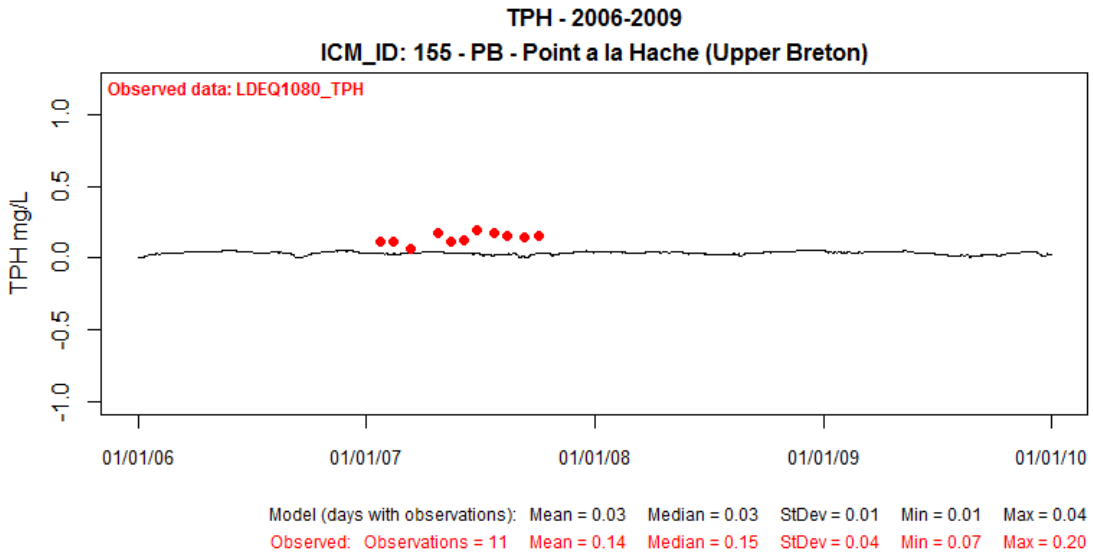

Figure 58: Modeled Total Phosphorus at ICM Compartment 155 (solid black line) Compared to Observed Data at LDEQ1080 for Validation Period 2006-2009.

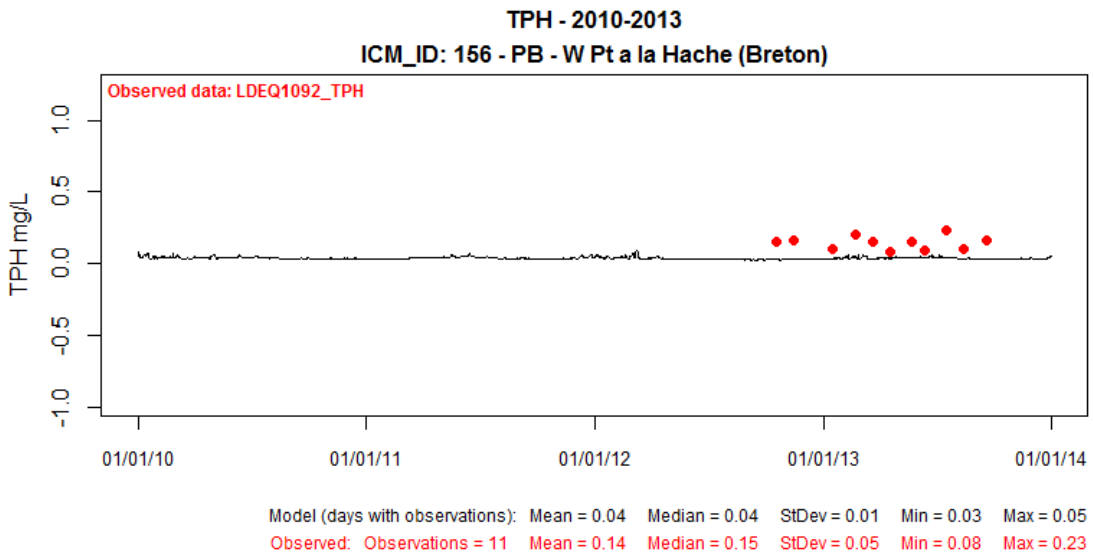

Figure 59: Modeled Total Phosphorus at ICM Compartment 156 (solid black line) Compared to Observed Data at LDEQ1092 for Calibration Period 2010-2013.

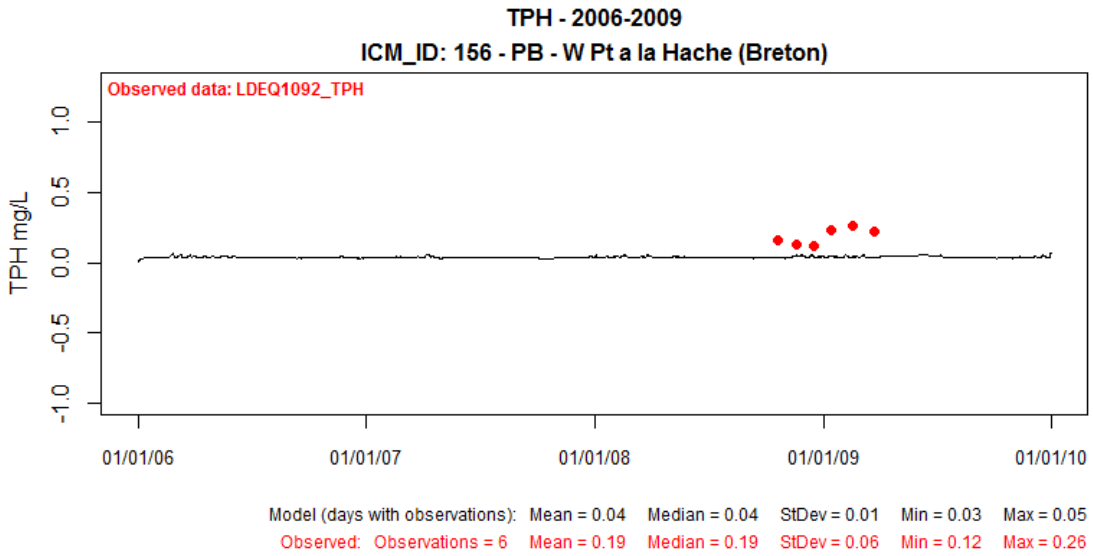

Figure 60: Modeled Total Phosphorus at ICM Compartment 156 (solid black line) Compared to Observed Data at LDEQ1092 for Validation Period 2006-2009.

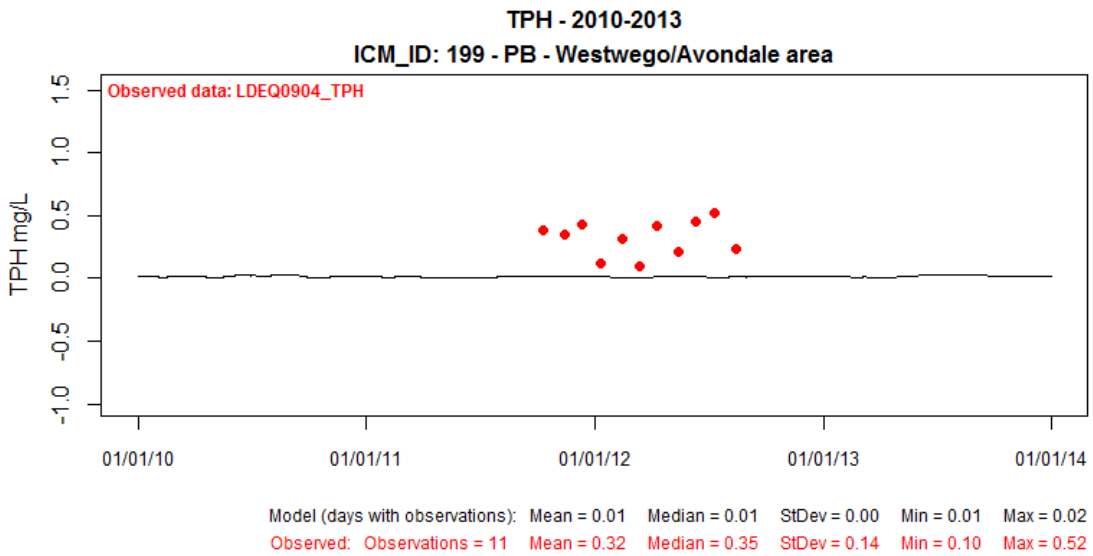

Figure 61: Modeled Total Phosphorus at ICM Compartment 199 (solid black line) Compared to Observed Data at LDEQ0904 for Calibration Period 2010-2013.

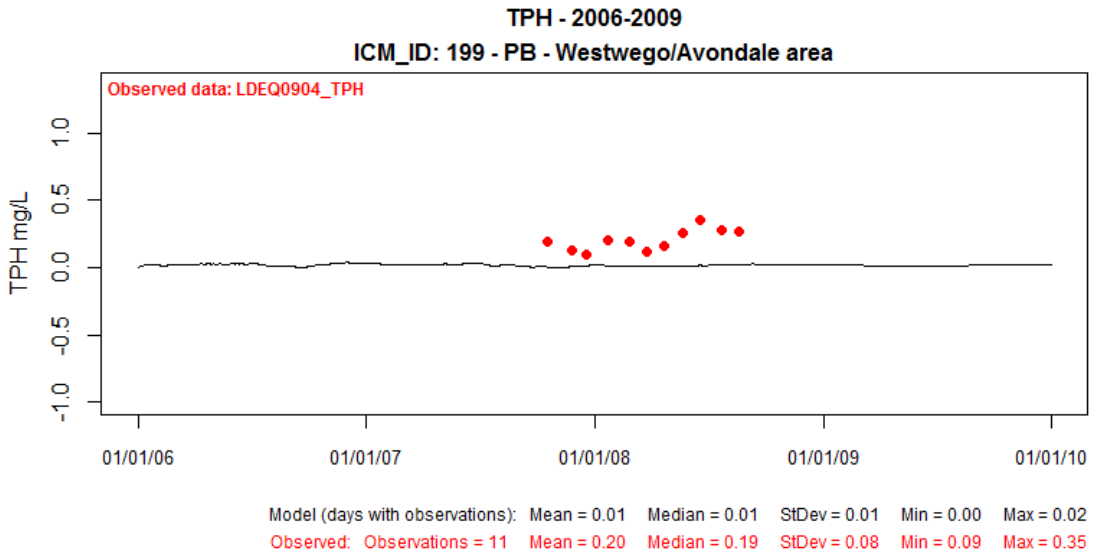

Figure 62: Modeled Total Phosphorus at ICM Compartment 199 (solid black line) Compared to Observed Data at LDEQ0904 for Validation Period 2006-2009.

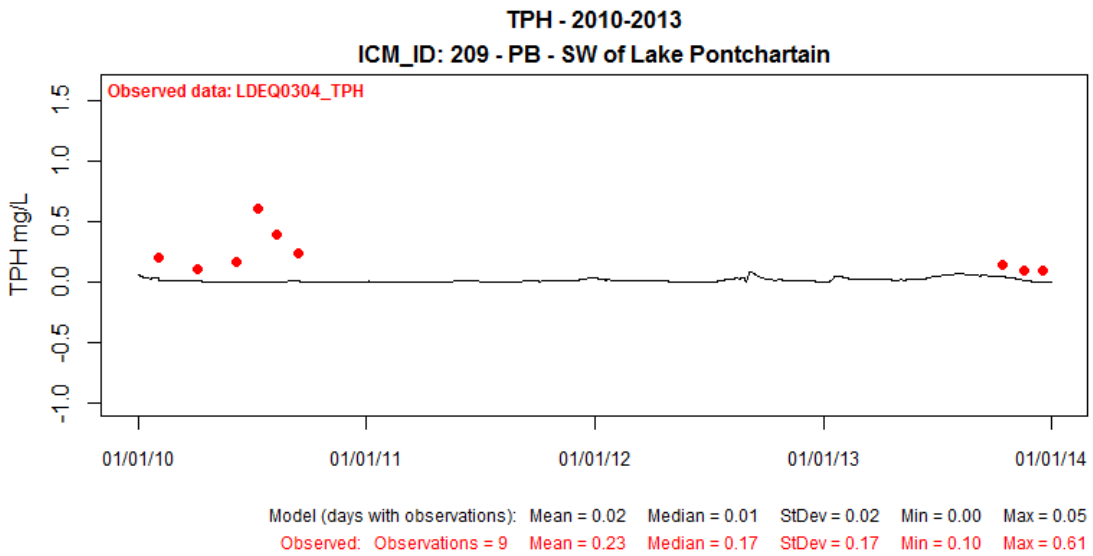

Figure 63: Modeled Total Phosphorus at ICM Compartment 209 (solid black line) Compared to Observed Data at LDEQ0304 for Calibration Period 2010-2013.

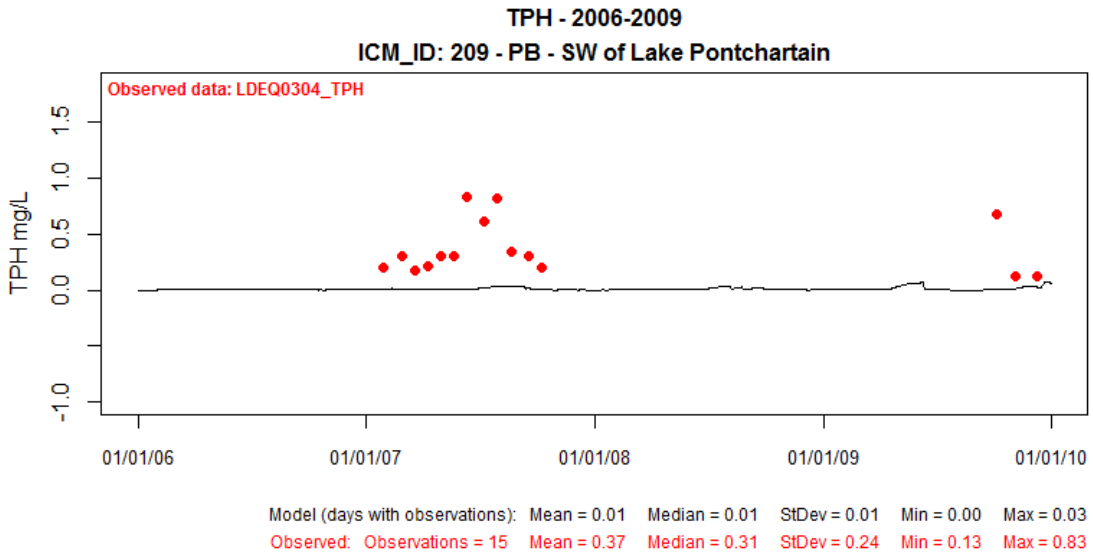

Figure 64: Modeled Total Phosphorus at ICM Compartment 209 (solid black line) Compared to Observed Data at LDEQ0304 for Validation Period 2006-2009.

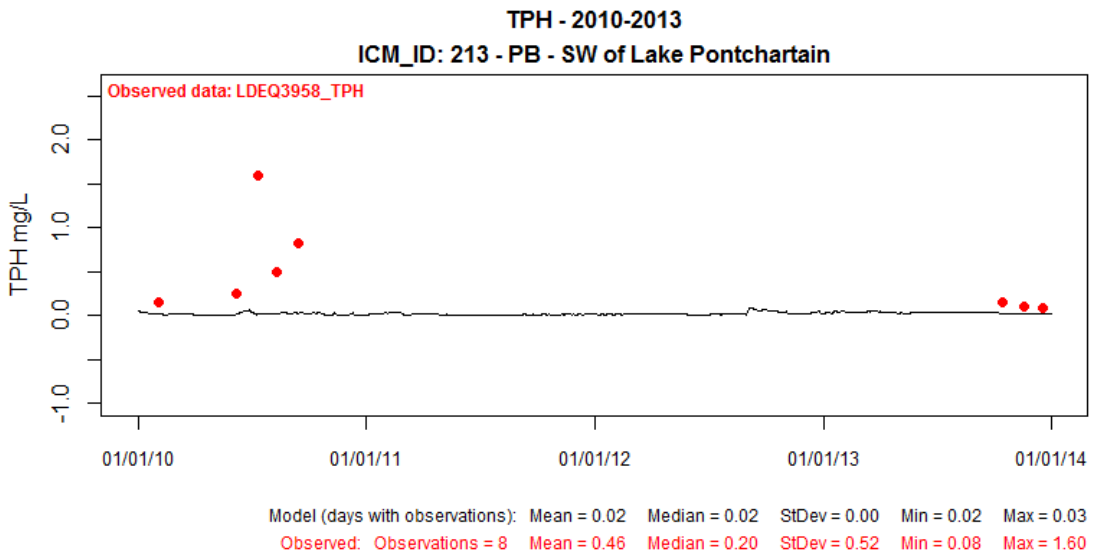

Figure 65: Modeled Total Phosphorus at ICM Compartment 213 (solid black line) Compared to Observed Data at LDEQ3958 for Calibration Period 2010-2013.

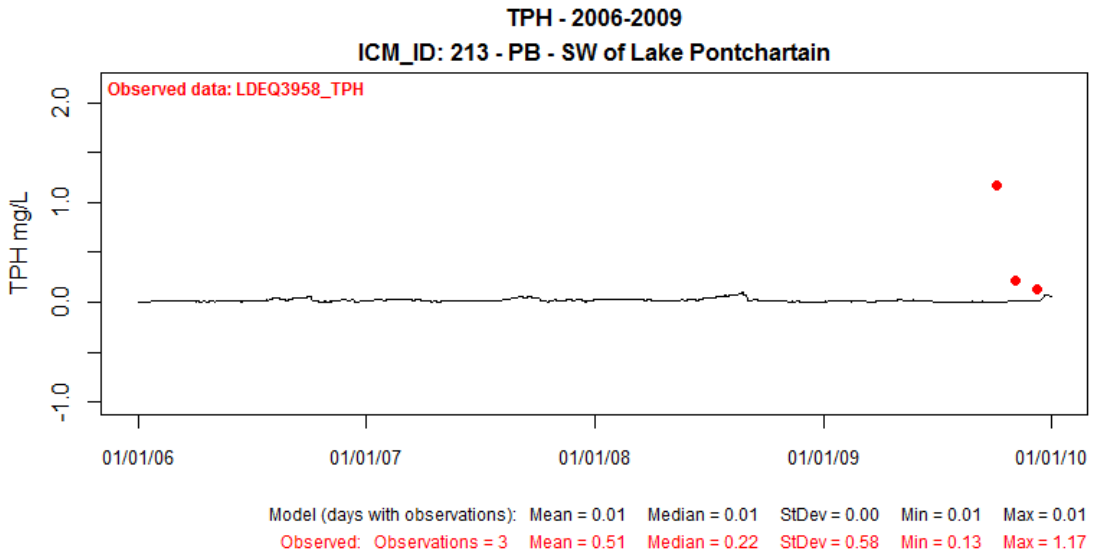

Figure 66: Modeled Total Phosphorus at ICM Compartment 213 (solid black line) Compared to Observed Data at LDEQ3958 for Validation Period 2006-2009.

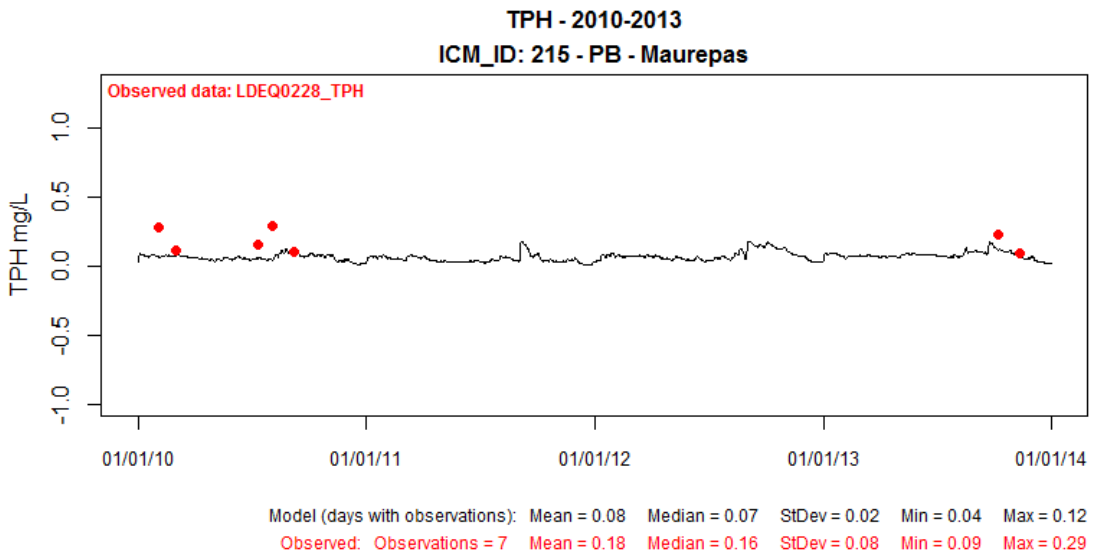

Figure 67: Modeled Total Phosphorus at ICM Compartment 215 (solid black line) Compared to Observed Data at LDEQ0228 for Calibration Period 2010-2013.

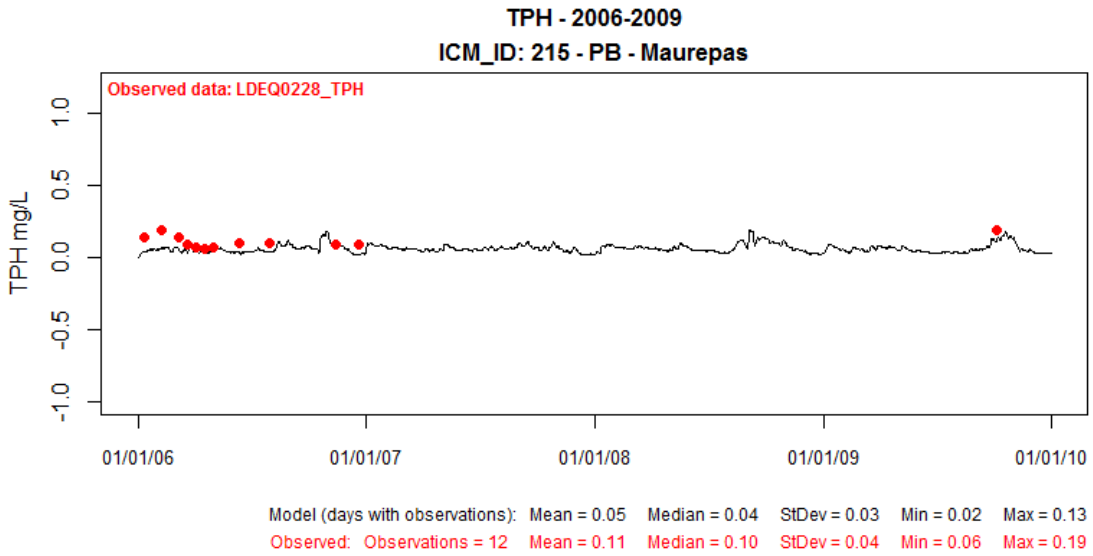

Figure 68: Modeled Total Phosphorus at ICM Compartment 215 (solid black line) Compared to Observed Data at LDEQ0228 for Validation Period 2006-2009.

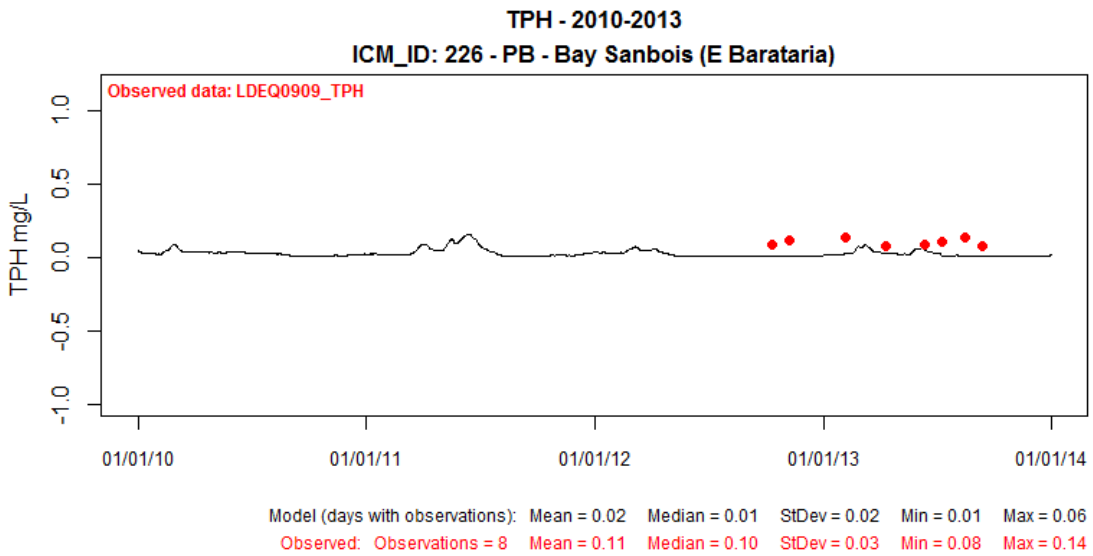

Figure 69: Modeled Total Phosphorus at ICM Compartment 226 (solid black line) Compared to Observed Data at LDEQ0909 for Calibration Period 2010-2013.

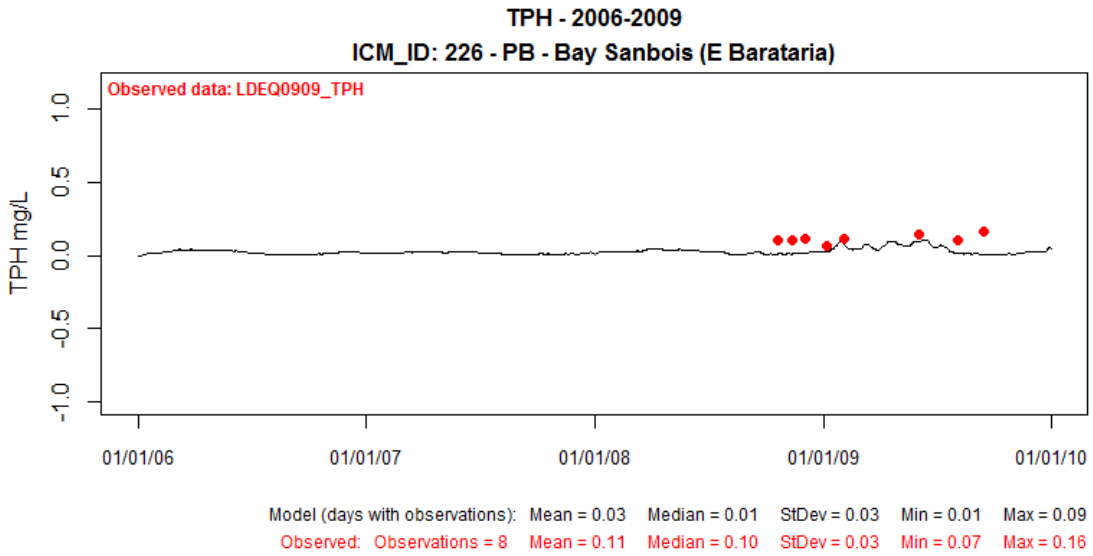

Figure 70: Modeled Total Phosphorus at ICM Compartment 226 (solid black line) Compared to Observed Data at LDEQ0909 for Validation Period 2006-2009.

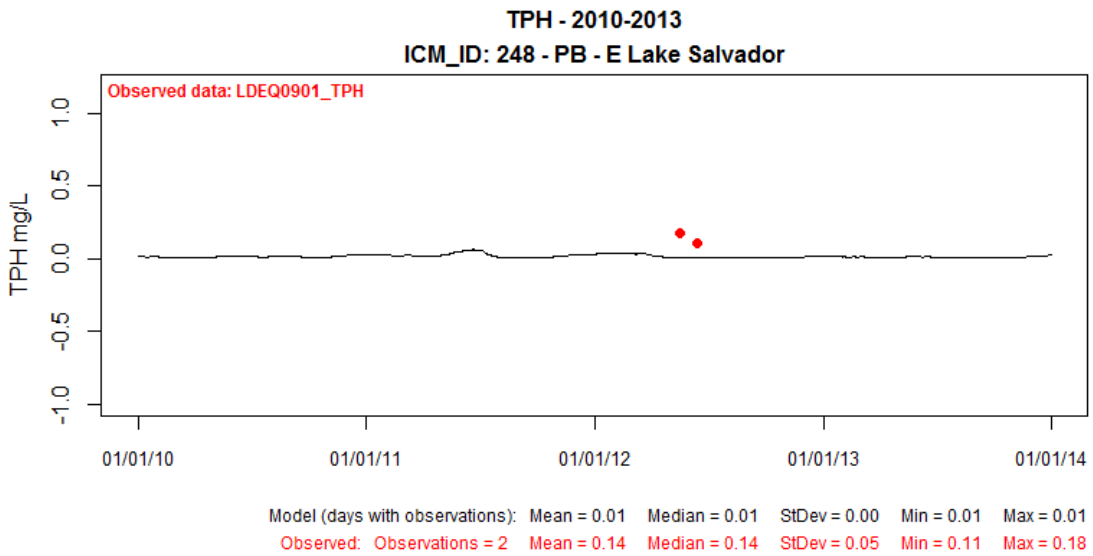

Figure 71: Modeled Total Phosphorus at ICM Compartment 248 (solid black line) Compared to Observed Data at LDEQ0901 for Calibration Period 2010-2013.

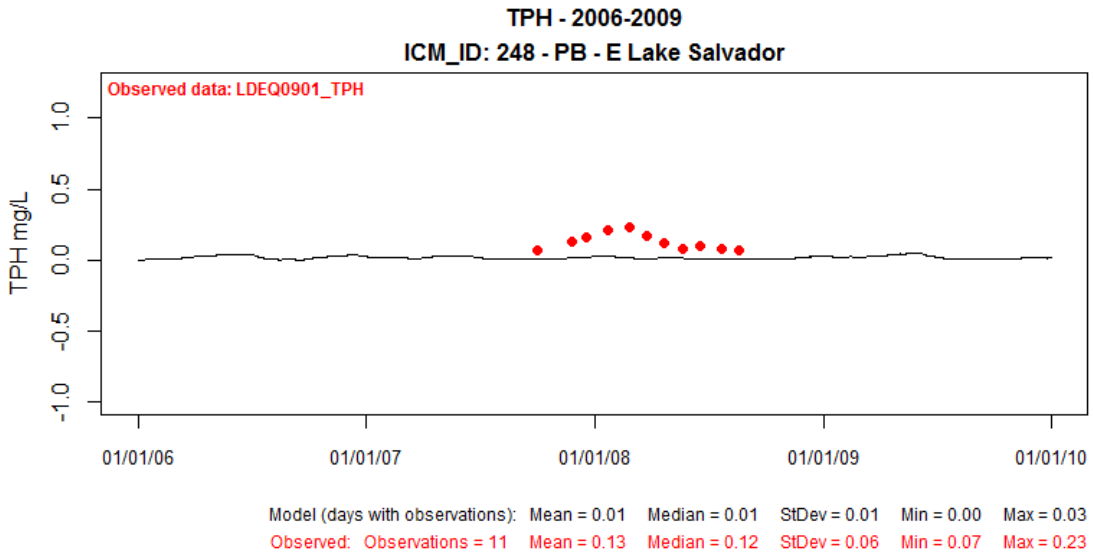

Figure 72: Modeled Total Phosphorus at ICM Compartment 248 (solid black line) Compared to Observed Data at LDEQ0901 for Validation Period 2006-2009.

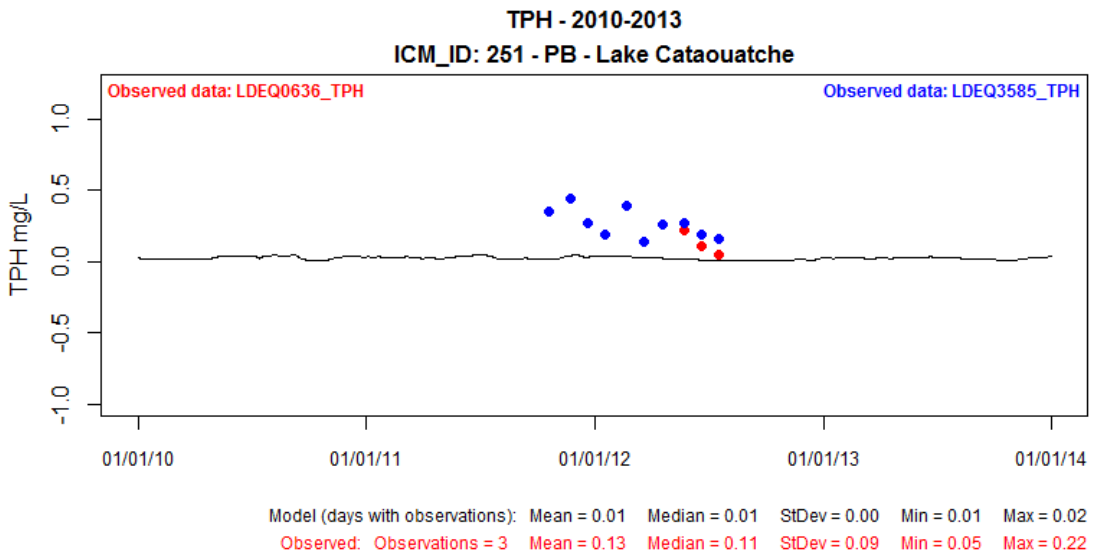

Figure 73: Modeled Total Phosphorus at ICM Compartment 251 (solid black line) Compared to Observed Data at LDEQ0636 for Calibration Period 2010-2013.

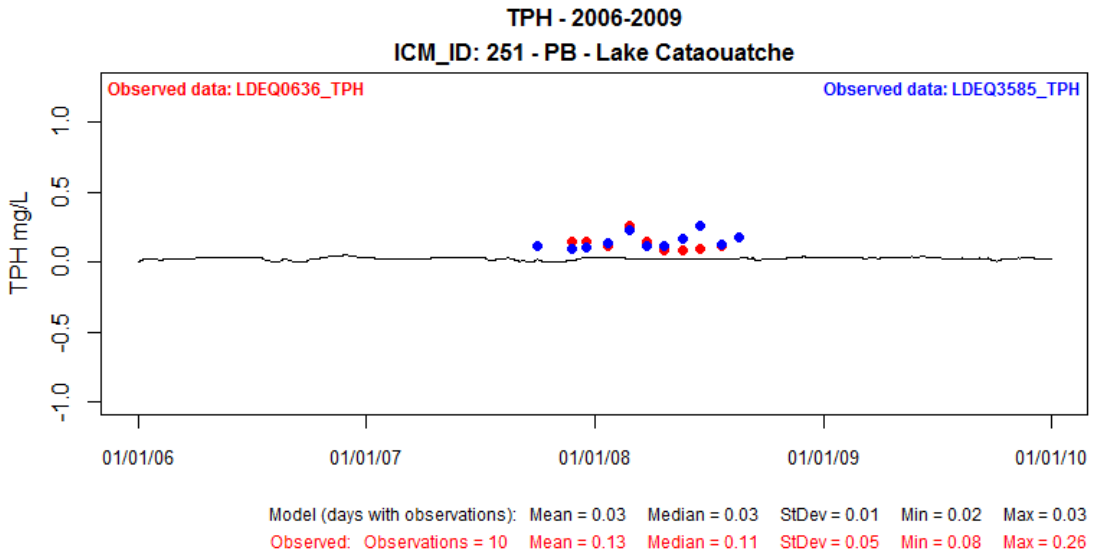

Figure 74: Modeled Total Phosphorus at ICM Compartment 251 (solid black line) Compared to Observed Data at LDEQ0636 for Validation Period 2006-2009.

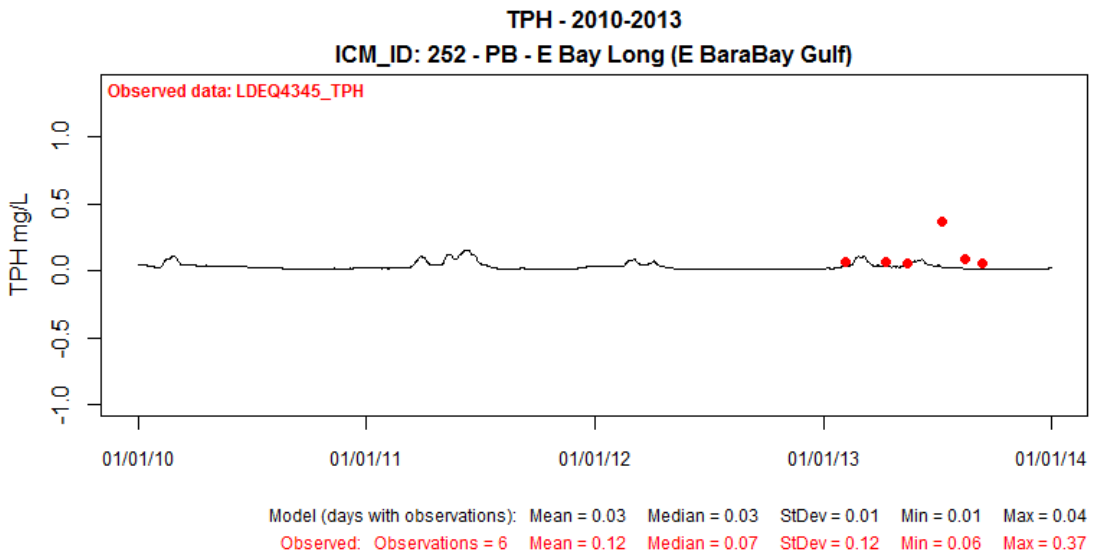

Figure 75: Modeled Total Phosphorus at ICM Compartment 252 (solid black line) Compared to Observed Data at LDEQ4345 for Calibration Period 2010-2013.

Figure 76: No Validation Figure for ICM Compartment 252.

DRAFT

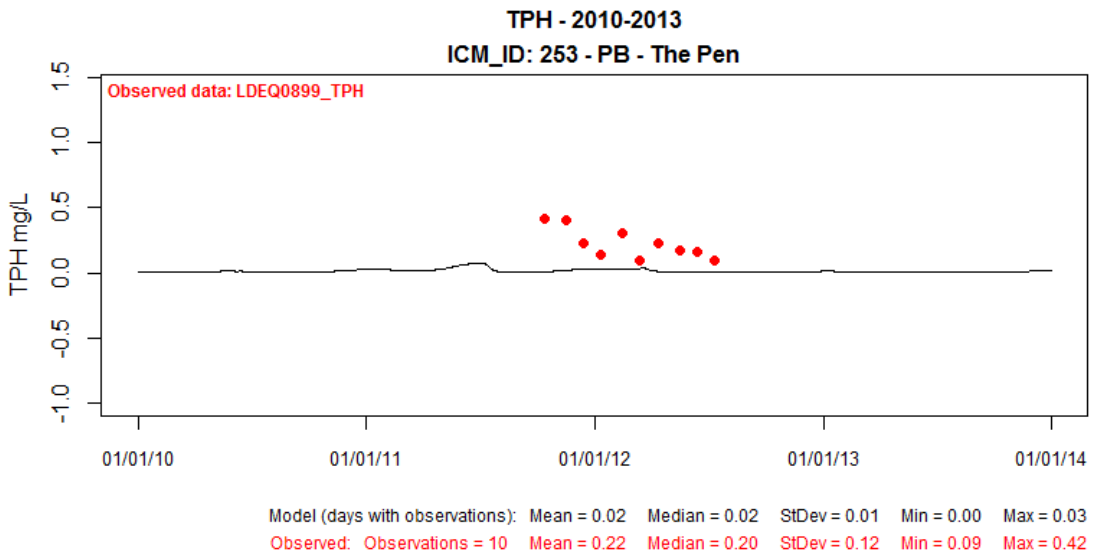

Figure 77: Modeled Total Phosphorus at ICM Compartment 253 (solid black line) Compared to Observed Data at LDEQ0899 for Calibration Period 2010-2013.

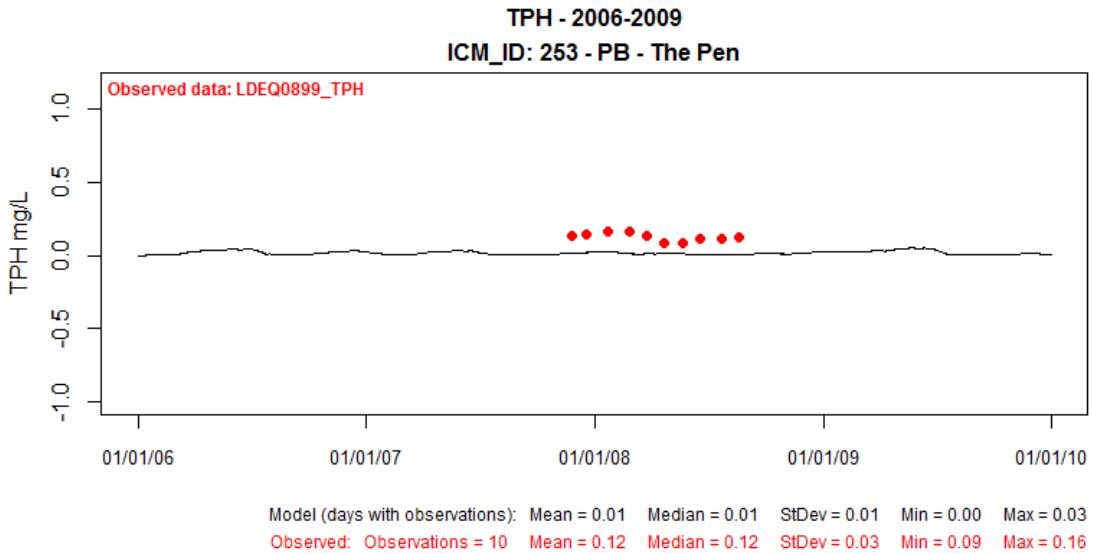

Figure 78: Modeled Total Phosphorus at ICM Compartment 253 (solid black line) Compared to Observed Data at LDEQ0899 for Validation Period 2006-2009.

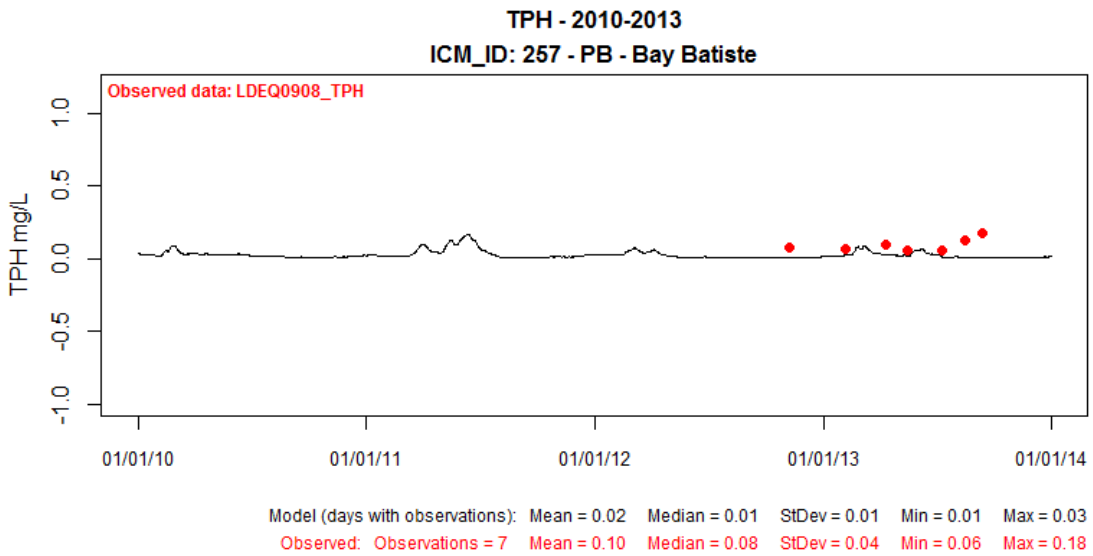

Figure 79: Modeled Total Phosphorus at ICM Compartment 257 (solid black line) Compared to Observed Data at LDEQ0908 for Calibration Period 2010-2013.

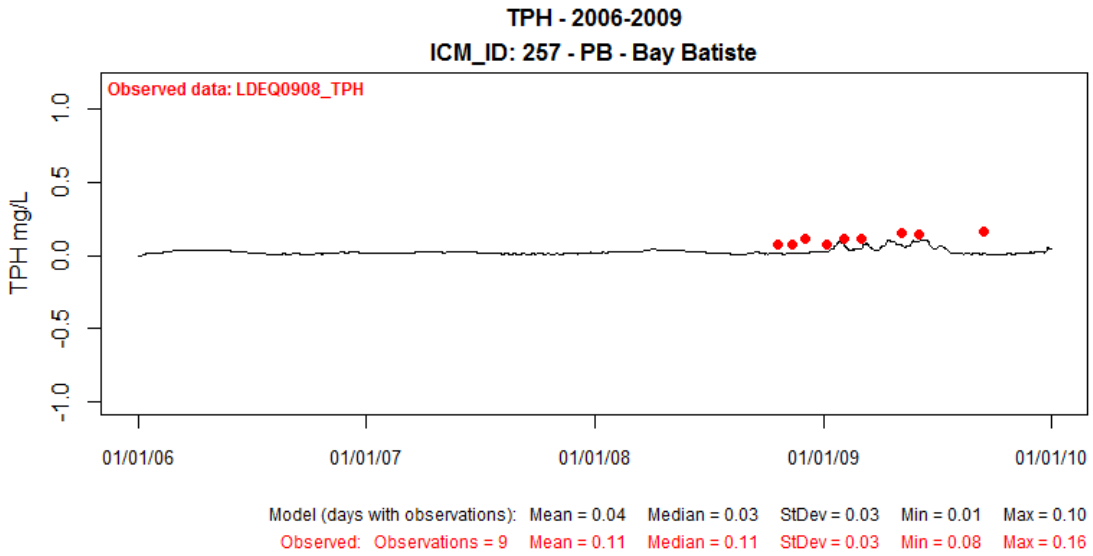

Figure 80: Modeled Total Phosphorus at ICM Compartment 257 (solid black line) Compared to Observed Data at LDEQ0908 for Validation Period 2006-2009.

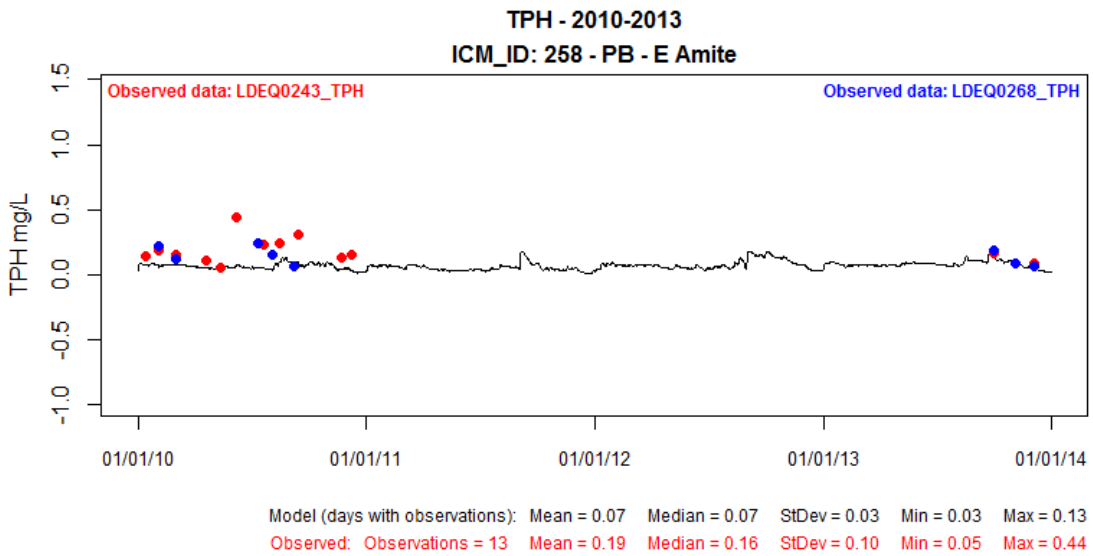

Figure 81: Modeled Total Phosphorus at ICM Compartment 258 (solid black line) Compared to Observed Data at LDEQ0243 for Calibration Period 2010-2013.

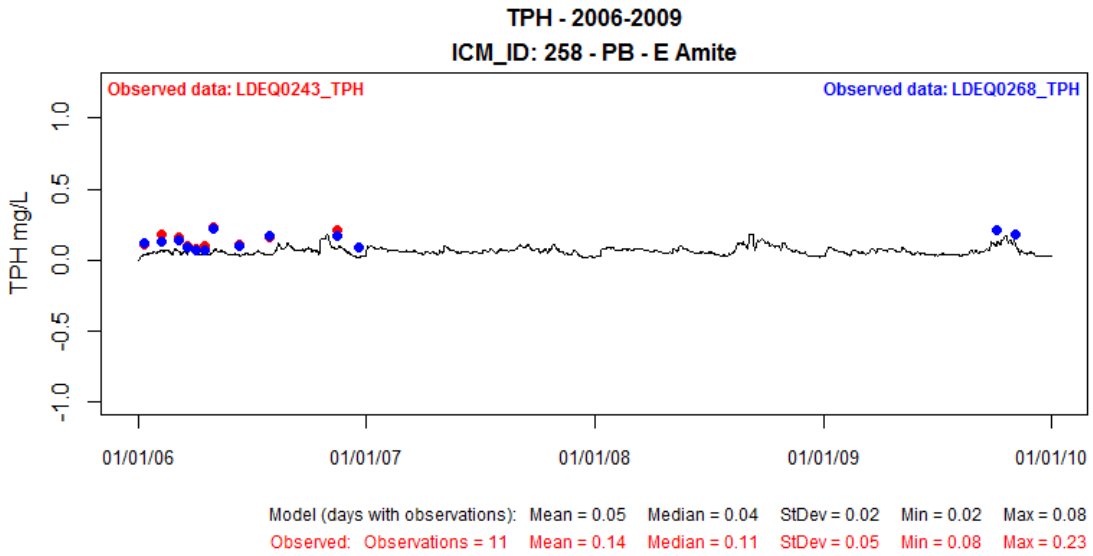

Figure 82: Modeled Total Phosphorus at ICM Compartment 258 (solid black line) Compared to Observed Data at LDEQ0243 for Validation Period 2006-2009.

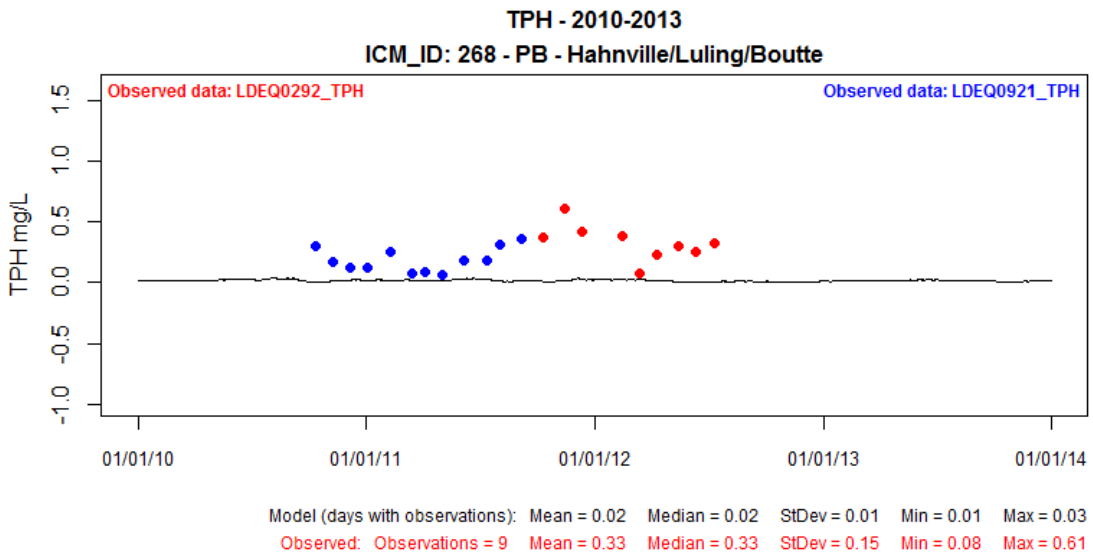

Figure 83: Modeled Total Phosphorus at ICM Compartment 268 (solid black line) Compared to Observed Data at LDEQ0292 for Calibration Period 2010-2013.

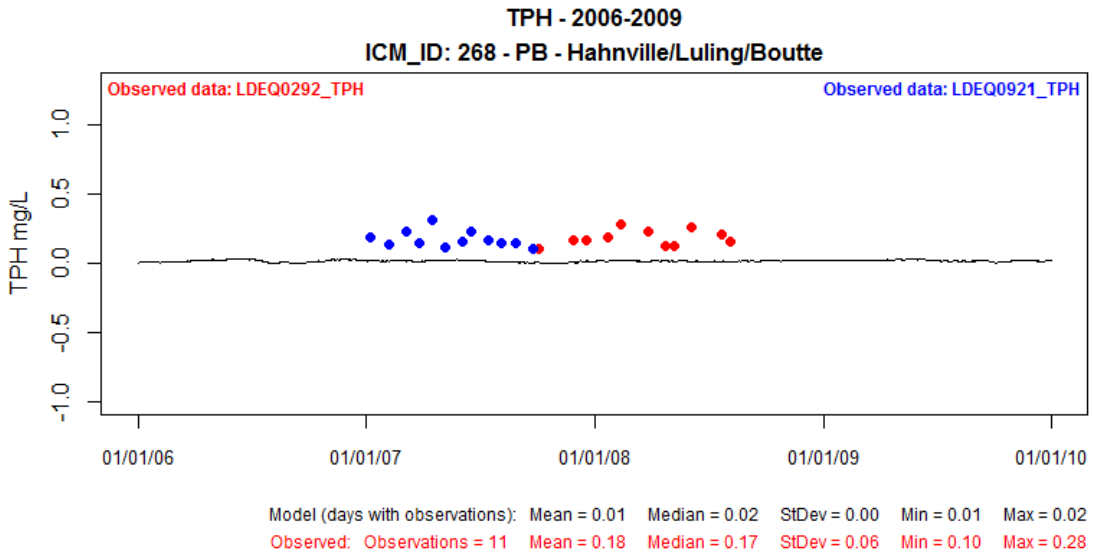

Figure 84: Modeled Total Phosphorus at ICM Compartment 268 (solid black line) Compared to Observed Data at LDEQ0292 for Validation Period 2006-2009.

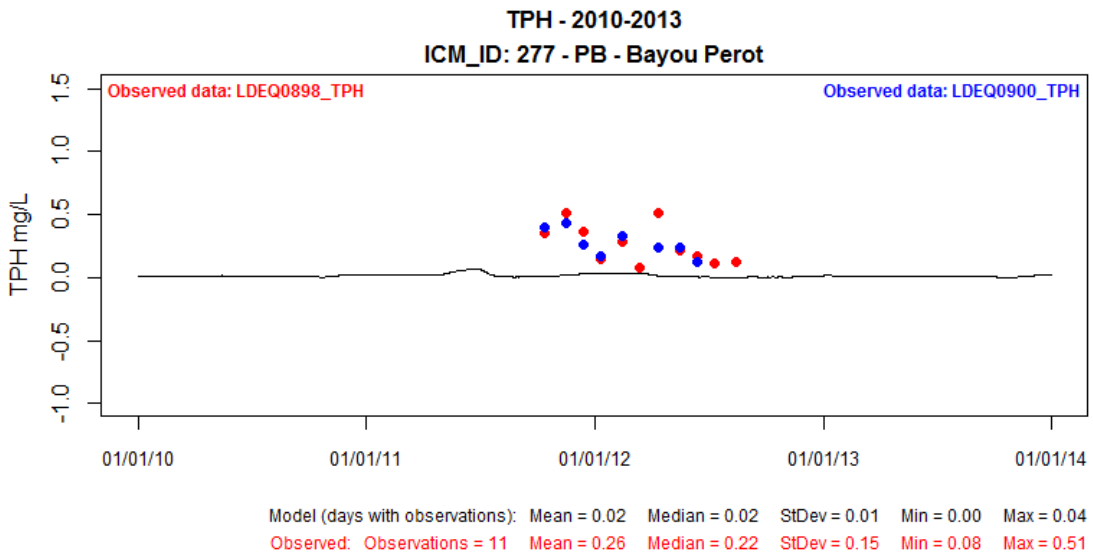

Figure 85: Modeled Total Phosphorus at ICM Compartment 277 (solid black line) Compared to Observed Data at LDEQ0898 for Calibration Period 2010-2013.

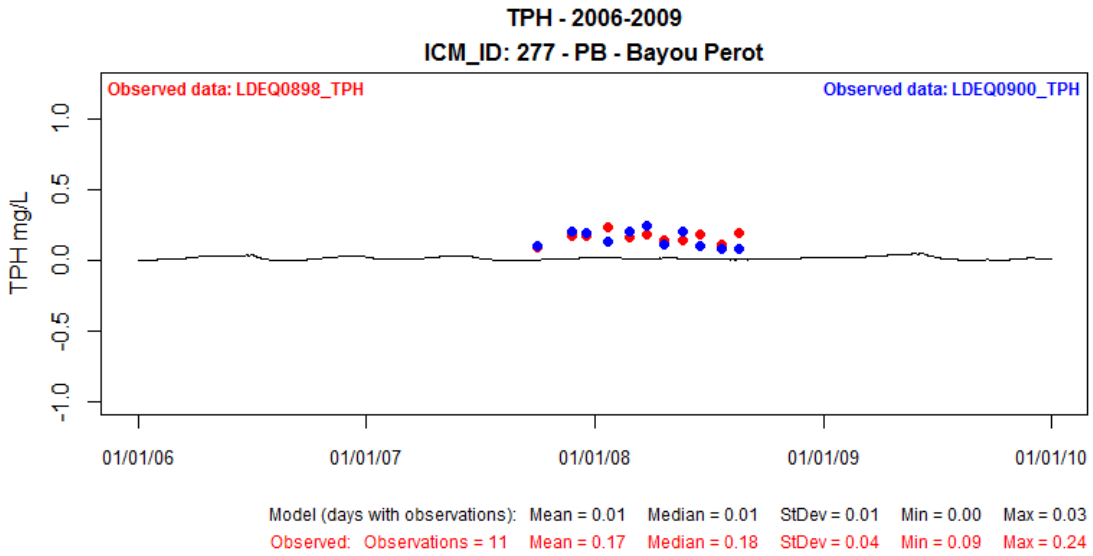

Figure 86: Modeled Total Phosphorus at ICM Compartment 277 (solid black line) Compared to Observed Data at LDEQ0898 for Validation Period 2006-2009.

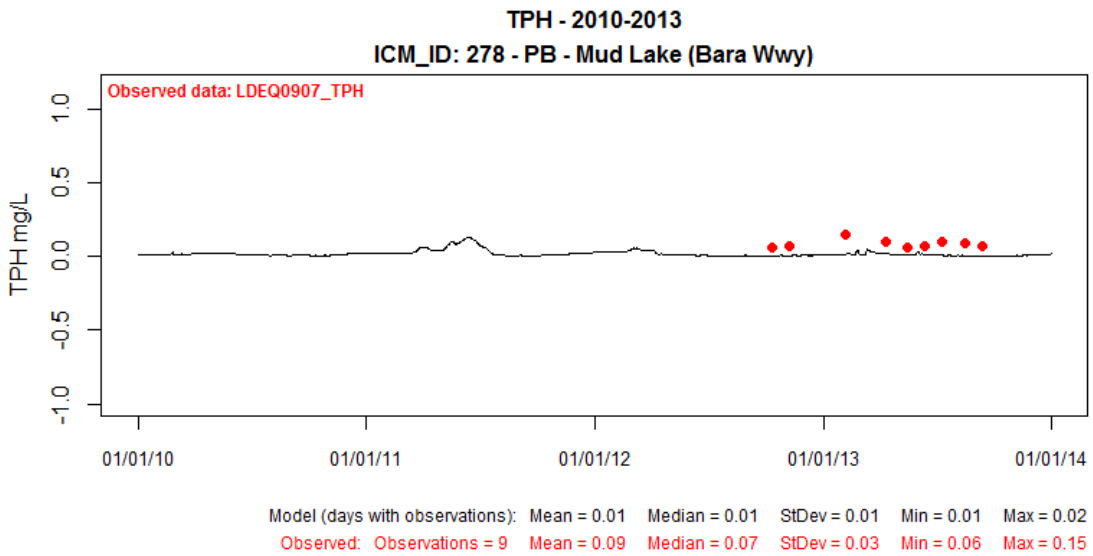

Figure 87: Modeled Total Phosphorus at ICM Compartment 278 (solid black line) Compared to Observed Data at LDEQ0907 for Calibration Period 2010-2013.

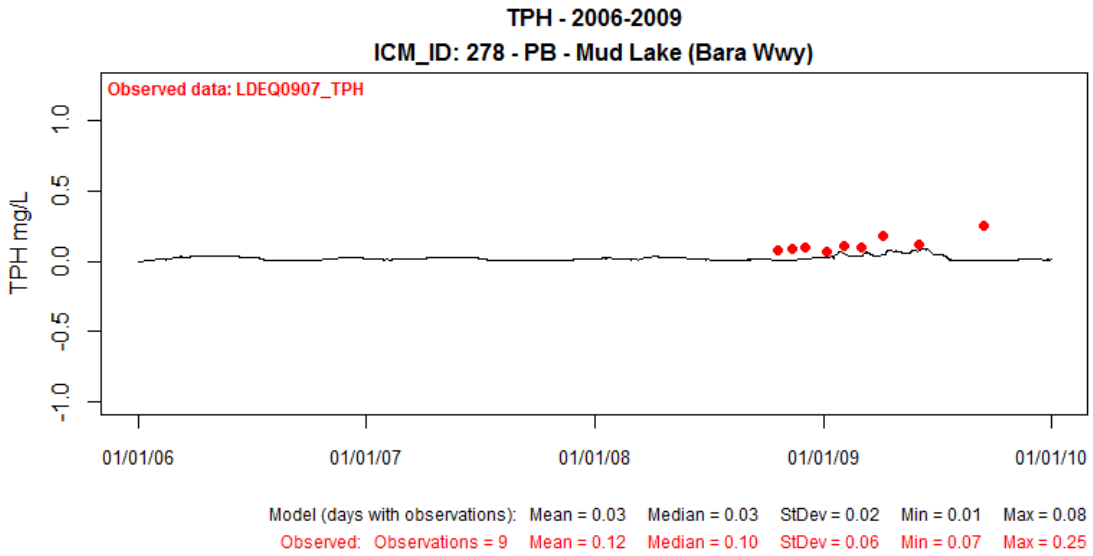

Figure 88: Modeled Total Phosphorus at ICM Compartment 278 (solid black line) Compared to Observed Data at LDEQ0907 for Validation Period 2006-2009.

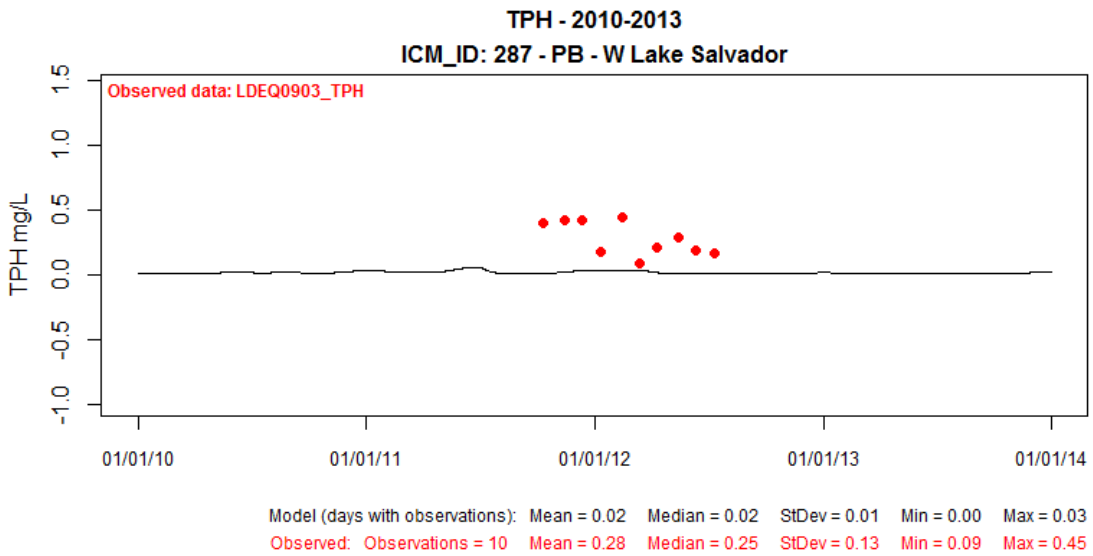

Figure 89: Modeled Total Phosphorus at ICM Compartment 287 (solid black line) Compared to Observed Data at LDEQ0903 for Calibration Period 2010-2013.

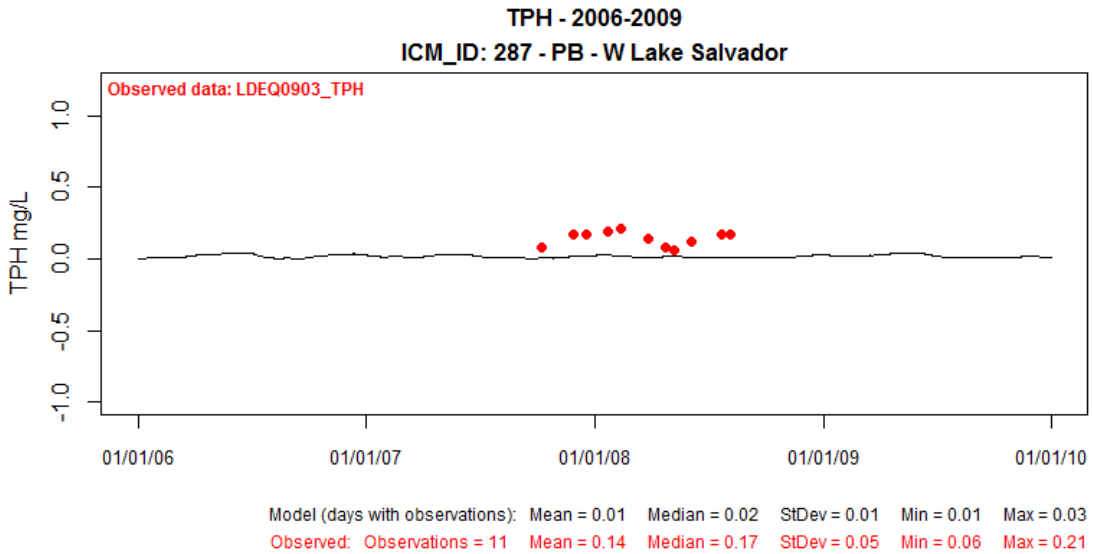

Figure 90: Modeled Total Phosphorus at ICM Compartment 287 (solid black line) Compared to Observed Data at LDEQ0903 for Validation Period 2006-2009.

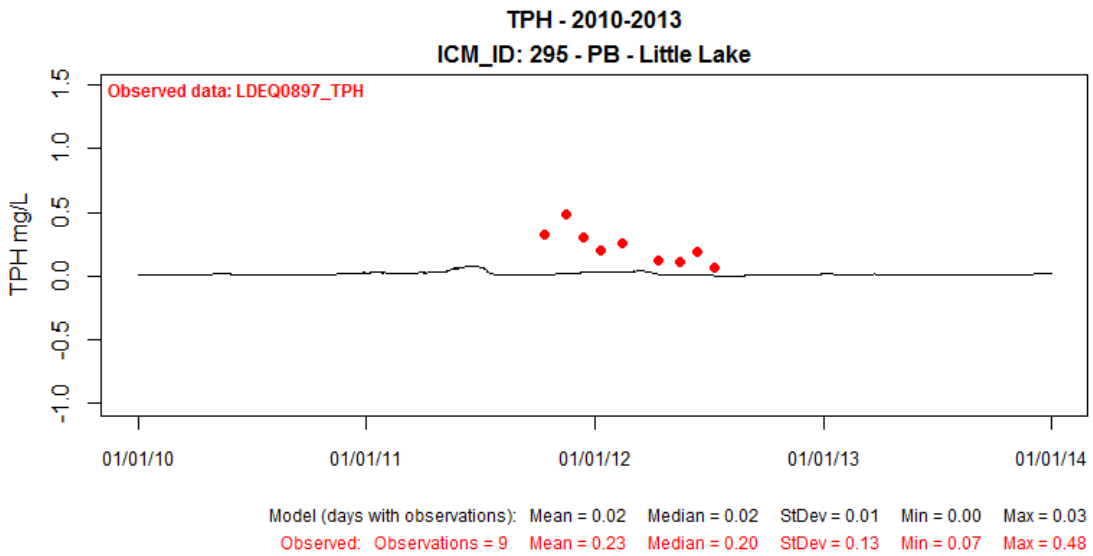

Figure 91: Modeled Total Phosphorus at ICM Compartment 295 (solid black line) Compared to Observed Data at LDEQ0897 for Calibration Period 2010-2013.

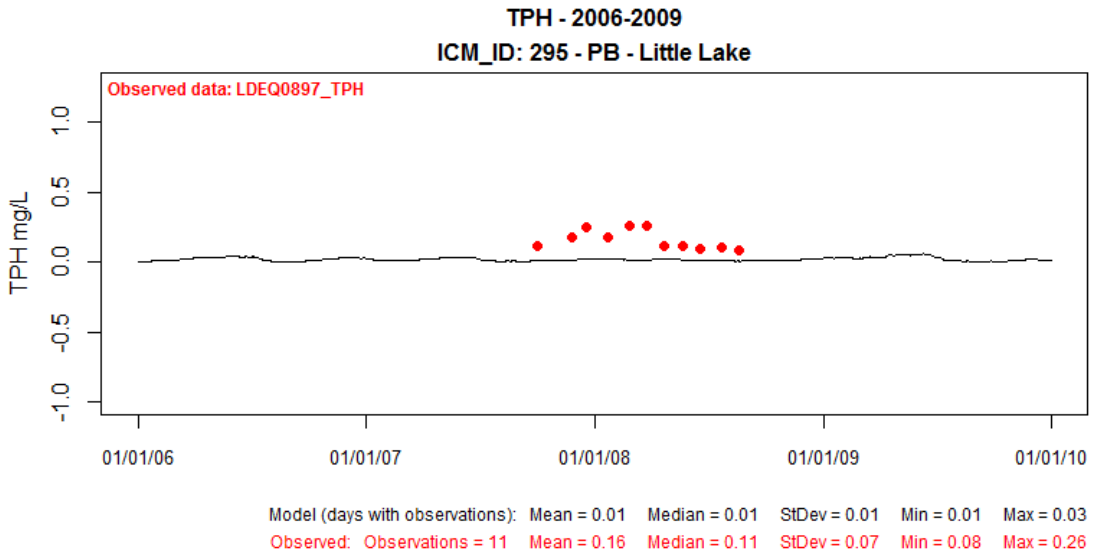

Figure 92: Modeled Total Phosphorus at ICM Compartment 295 (solid black line) Compared to Observed Data at LDEQ0897 for Validation Period 2006-2009.

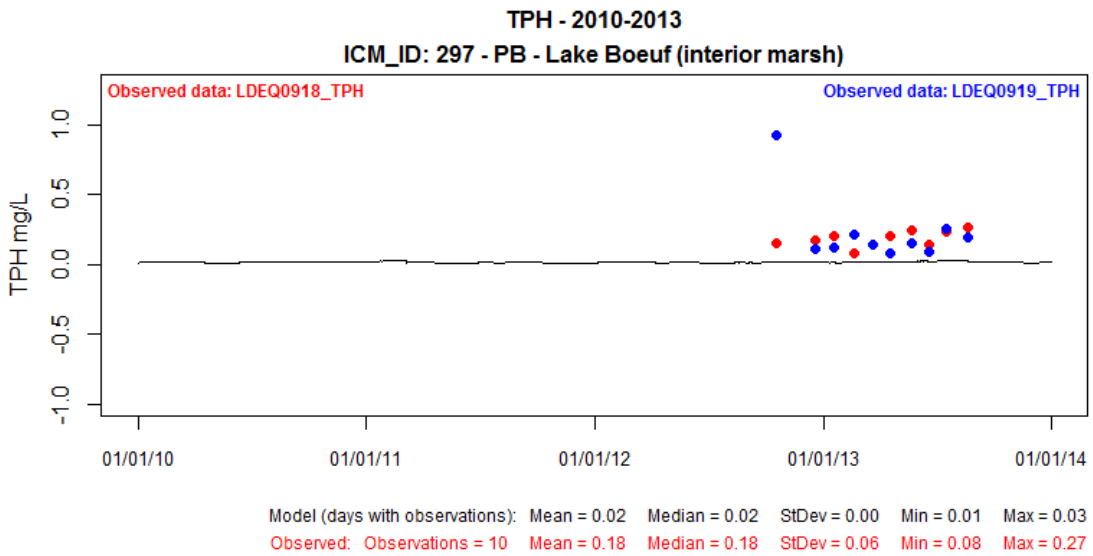

Figure 93: Modeled Total Phosphorus at ICM Compartment 297 (solid black line) Compared to Observed Data at LDEQ0918 for Calibration Period 2010-2013.

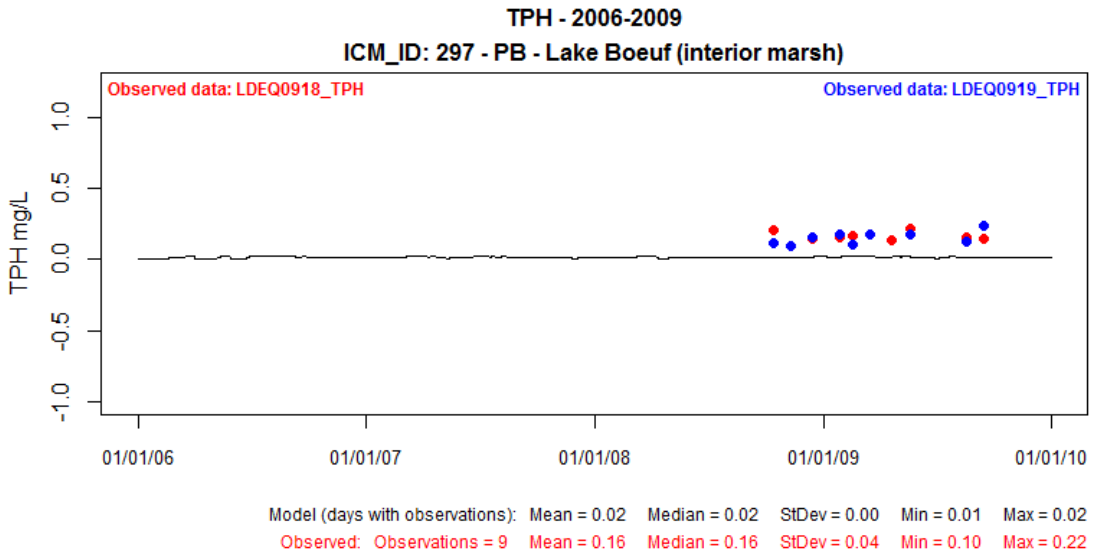

Figure 94: Modeled Total Phosphorus at ICM Compartment 297 (solid black line) Compared to Observed Data at LDEQ0918 for Validation Period 2006-2009.

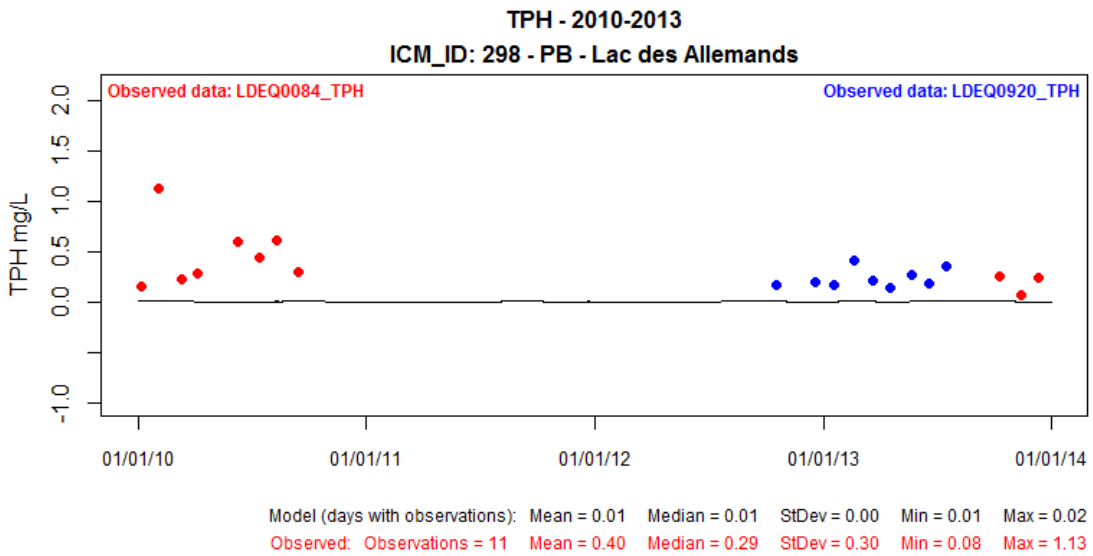

Figure 95: Modeled Total Phosphorus at ICM Compartment 298 (solid black line) Compared to Observed Data at LDEQ0084 for Calibration Period 2010-2013.

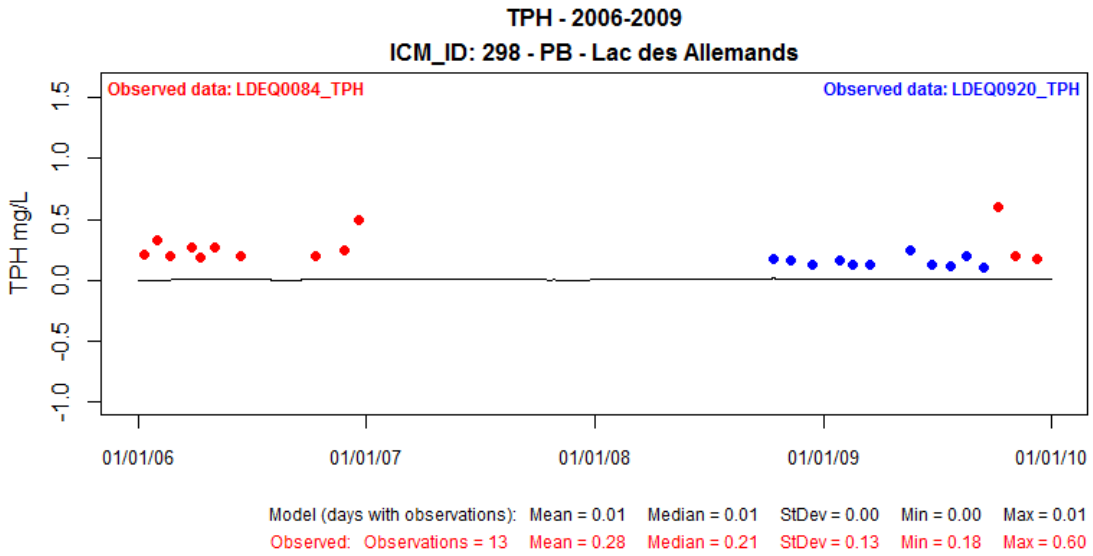

Figure 96: Modeled Total Phosphorus at ICM Compartment 298 (solid black line) Compared to Observed Data at LDEQ0084 for Validation Period 2006-2009.

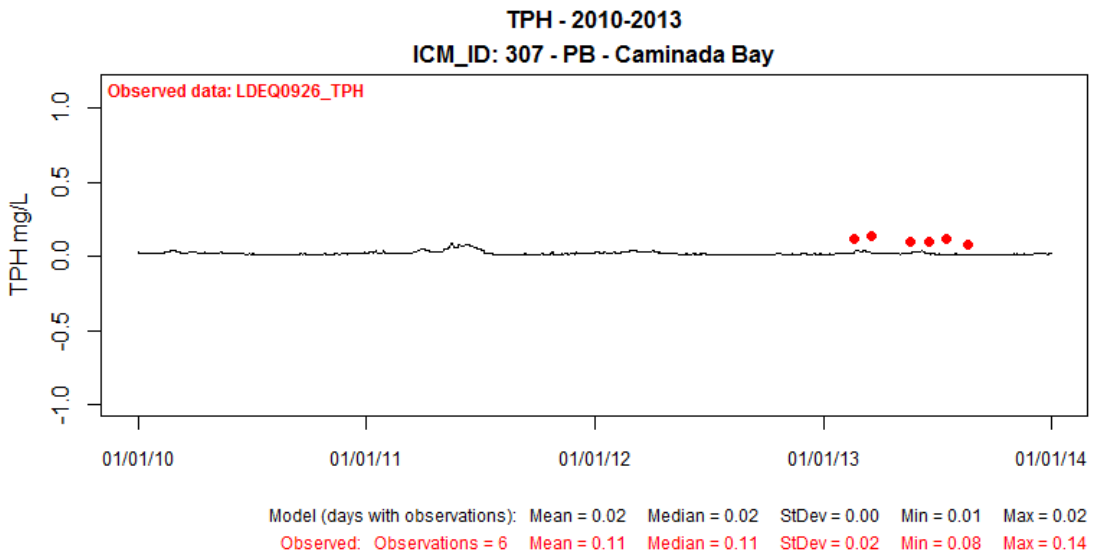

Figure 97: Modeled Total Phosphorus at ICM Compartment 307 (solid black line) Compared to Observed Data at LDEQ0926 for Calibration Period 2010-2013.

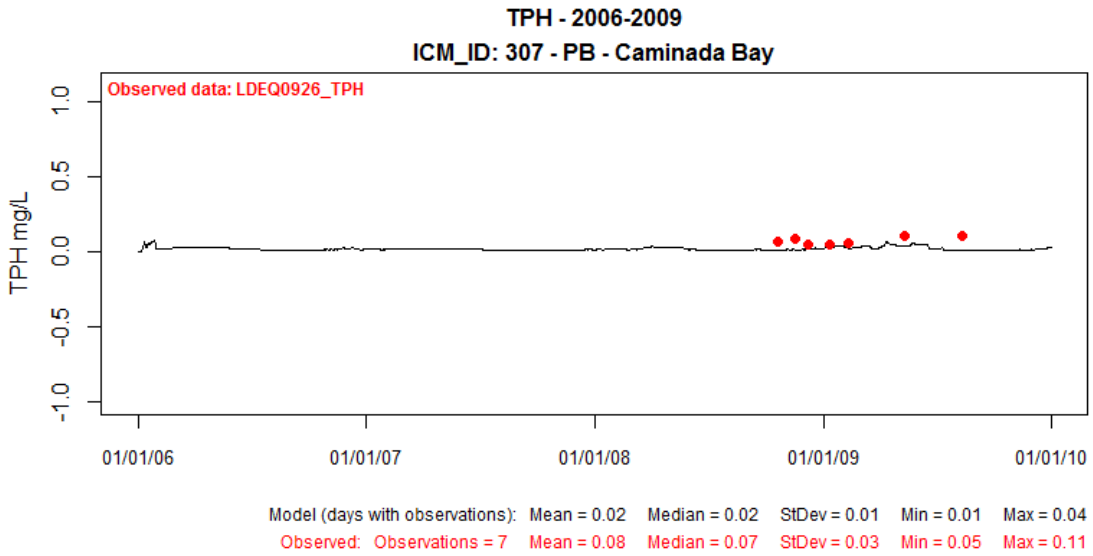

Figure 98: Modeled Total Phosphorus at ICM Compartment 307 (solid black line) Compared to Observed Data at LDEQ0926 for Validation Period 2006-2009.

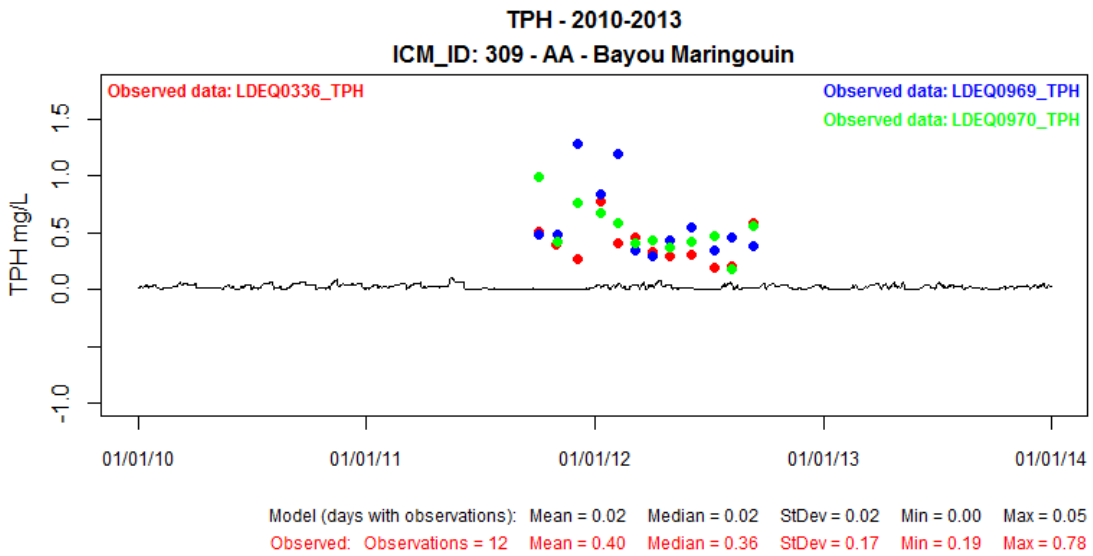

Figure 99: Modeled Total Phosphorus at ICM Compartment 309 (solid black line) Compared to Observed Data at LDEQ0336 for Calibration Period 2010-2013.

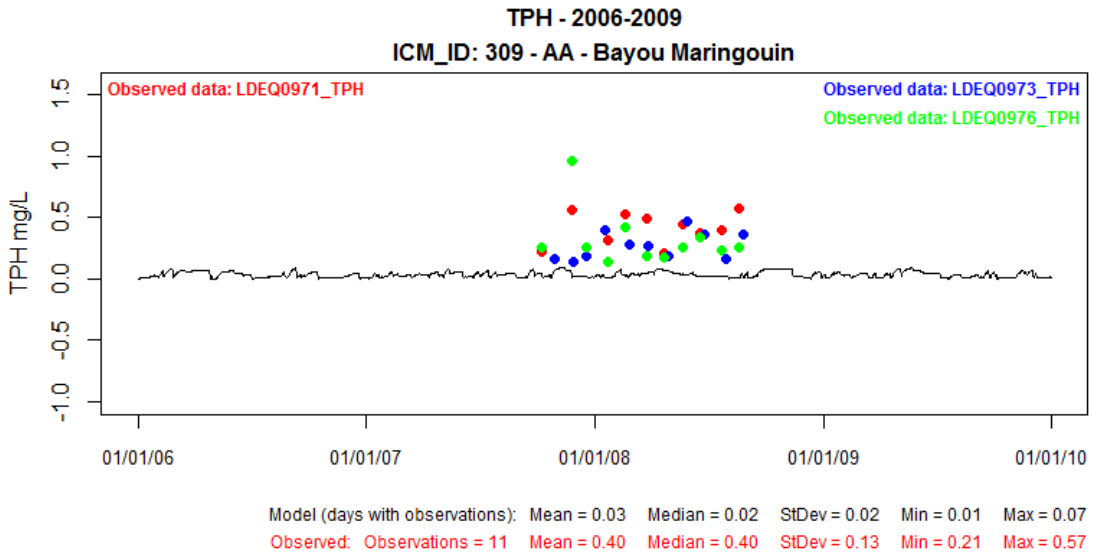

Figure 100: Modeled Total Phosphorus at ICM Compartment 309 (solid black line) Compared to Observed Data at LDEQ0971 for Validation Period 2006-2009.

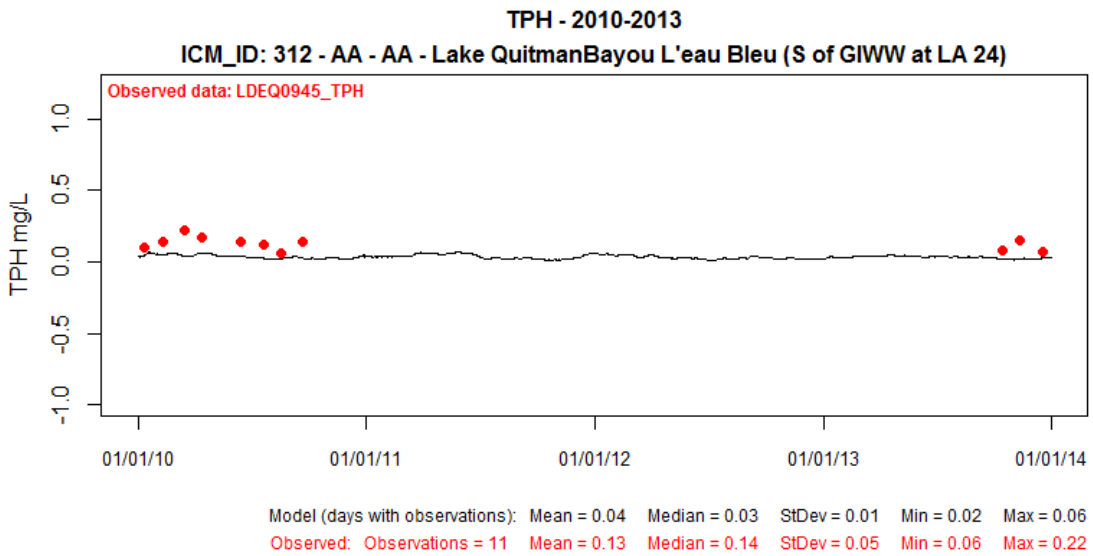

Figure 101: Modeled Total Phosphorus at ICM Compartment 312 (solid black line) Compared to Observed Data at LDEQ0945 for Calibration Period 2010-2013.

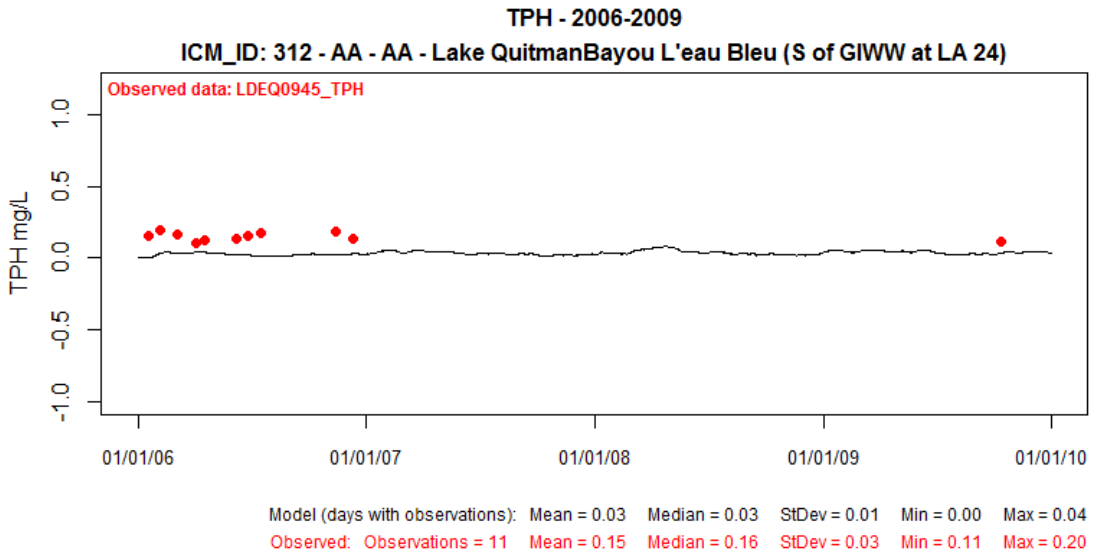

Figure 102: Modeled Total Phosphorus at ICM Compartment 312 (solid black line) Compared to Observed Data at LDEQ0945 for Validation Period 2006-2009.

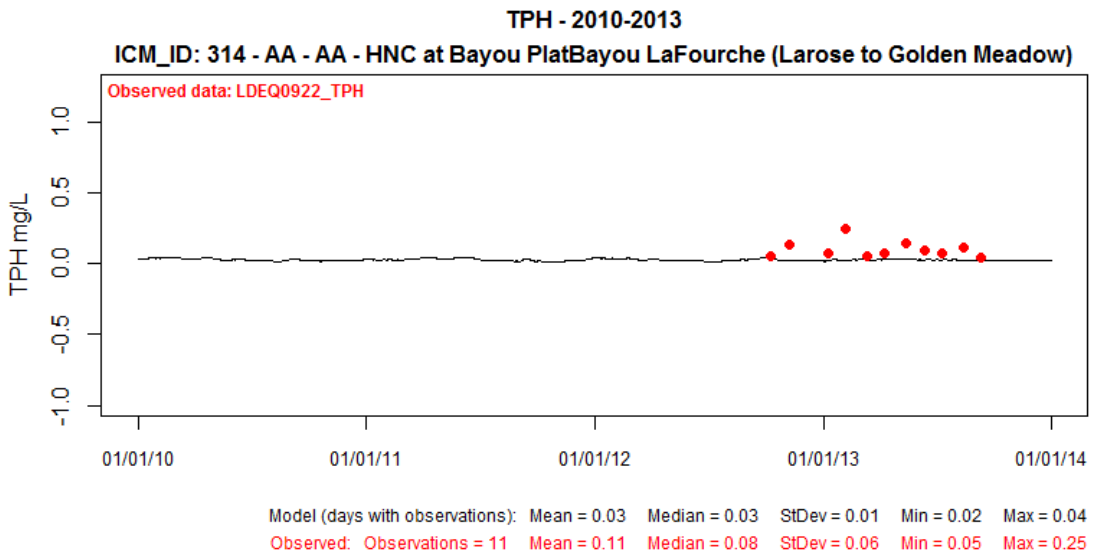

Figure 103: Modeled Total Phosphorus at ICM Compartment 314 (solid black line) Compared to Observed Data at LDEQ0922 for Calibration Period 2010-2013.

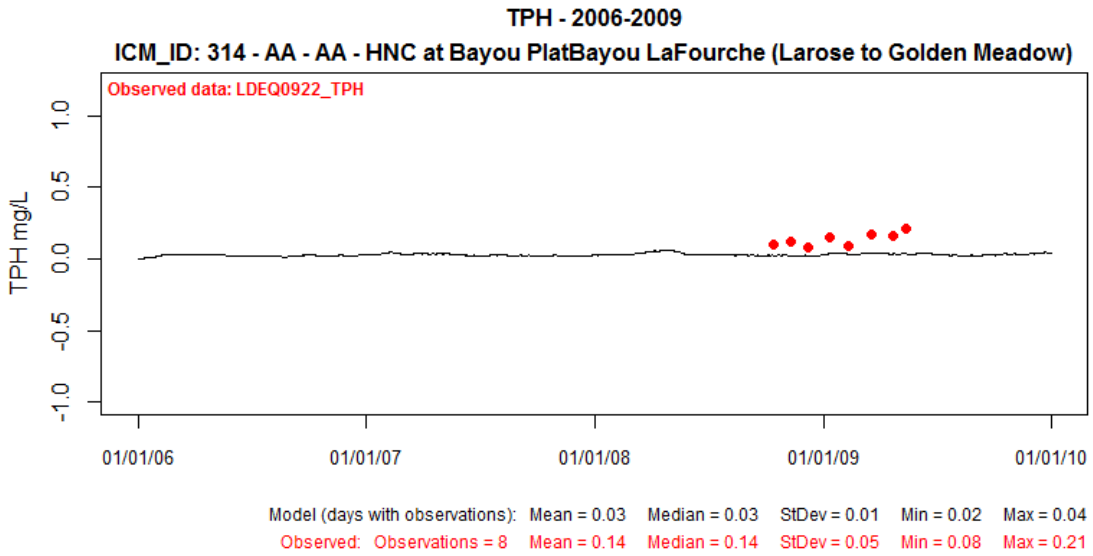

Figure 104: Modeled Total Phosphorus at ICM Compartment 314 (solid black line) Compared to Observed Data at LDEQ0922 for Validation Period 2006-2009.

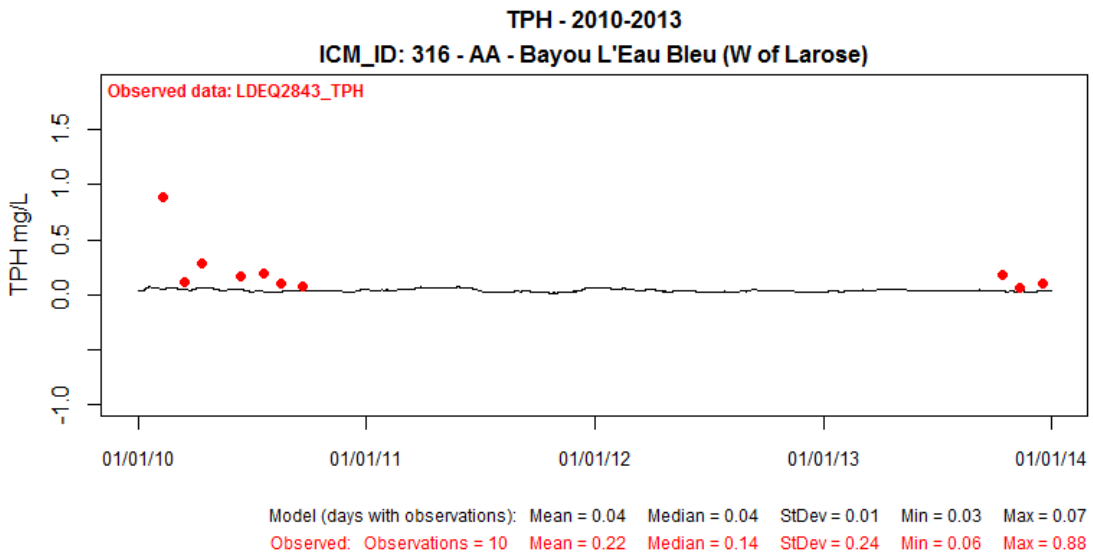

Figure 105: Modeled Total Phosphorus at ICM Compartment 316 (solid black line) Compared to Observed Data at LDEQ2843 for Calibration Period 2010-2013.

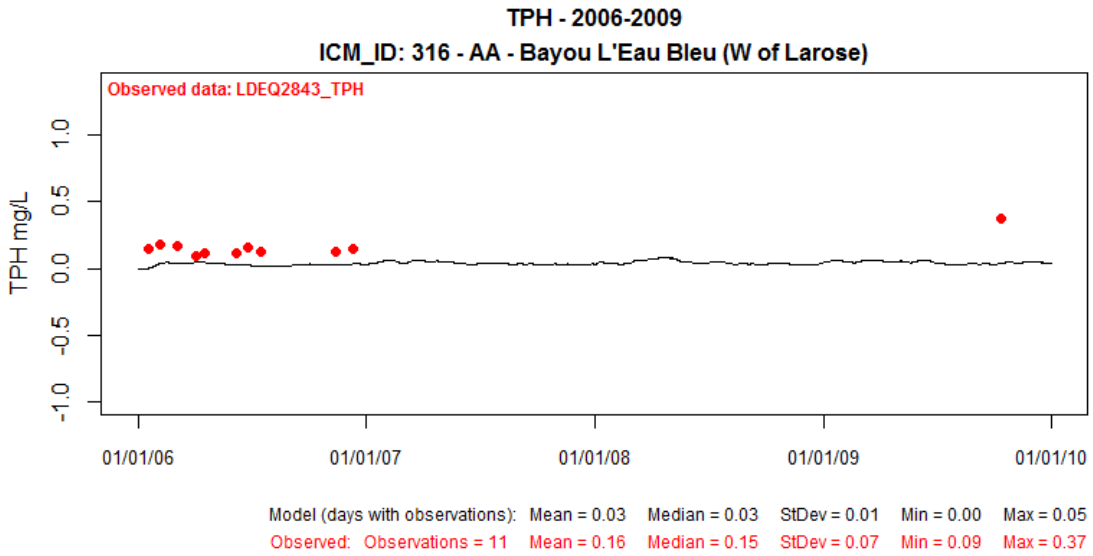

Figure 106: Modeled Total Phosphorus at ICM Compartment 316 (solid black line) Compared to Observed Data at LDEQ2843 for Validation Period 2006-2009.

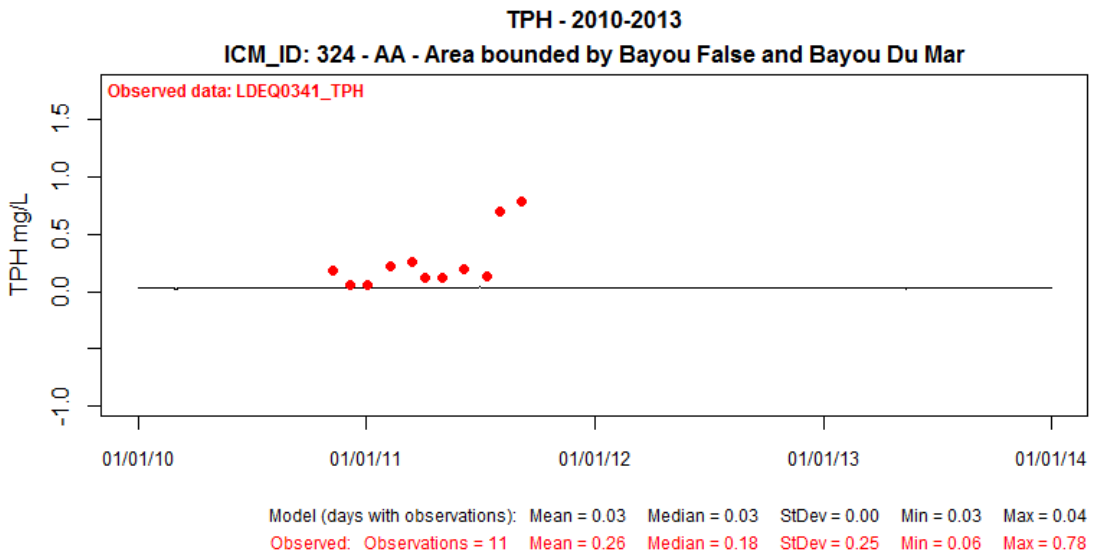

Figure 107: Modeled Total Phosphorus at ICM Compartment 324 (solid black line) Compared to Observed Data at LDEQ0341 for Calibration Period 2010-2013.

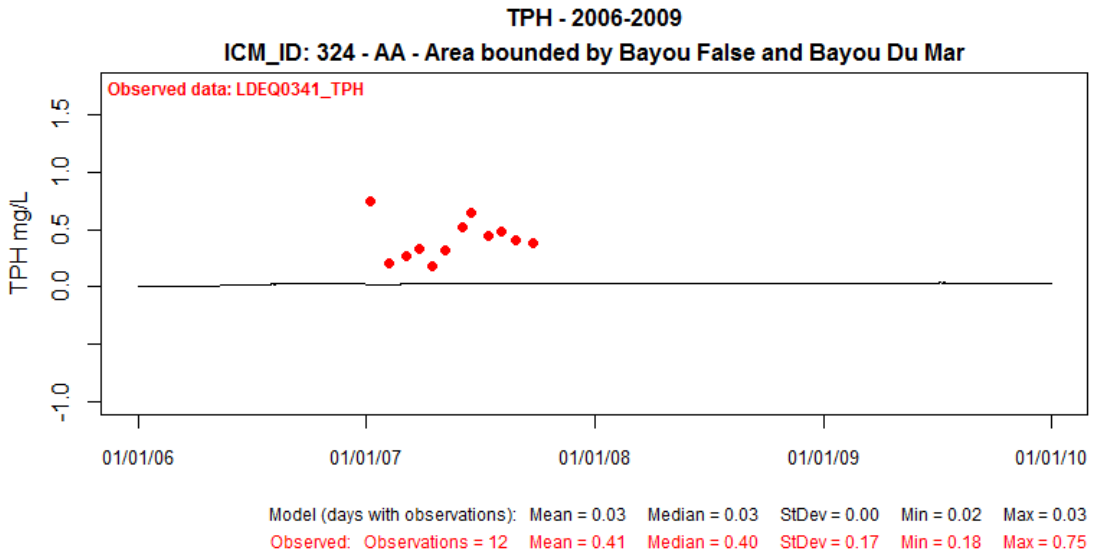

Figure 108: Modeled Total Phosphorus at ICM Compartment 324 (solid black line) Compared to Observed Data at LDEQ0341 for Validation Period 2006-2009.

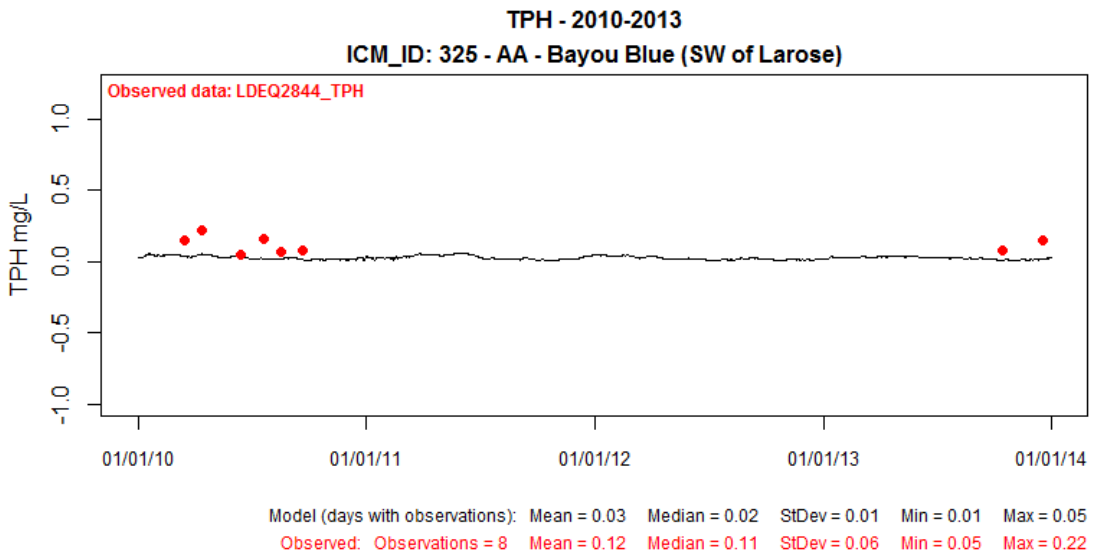

Figure 109: Modeled Total Phosphorus at ICM Compartment 325 (solid black line) Compared to Observed Data at LDEQ2844 for Calibration Period 2010-2013.

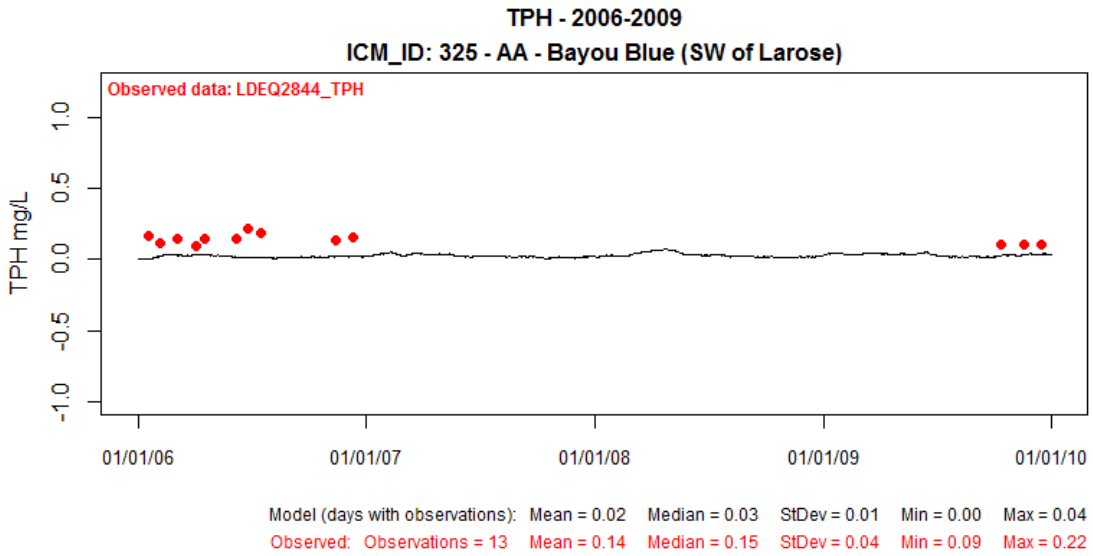

Figure 110: Modeled Total Phosphorus at ICM Compartment 325 (solid black line) Compared to Observed Data at LDEQ2844 for Validation Period 2006-2009.

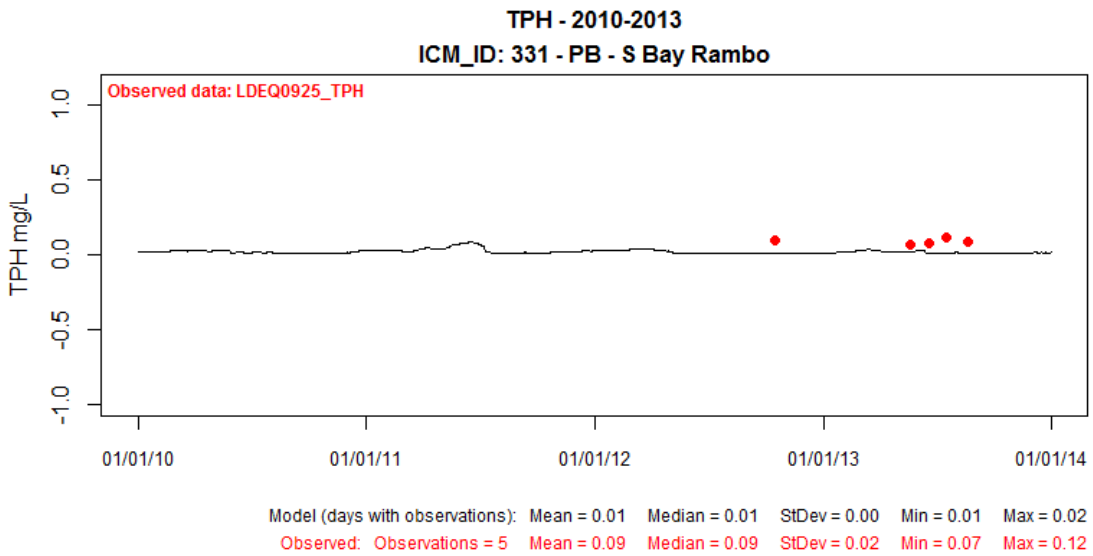

Figure 111: Modeled Total Phosphorus at ICM Compartment 331 (solid black line) Compared to Observed Data at LDEQ0925 for Calibration Period 2010-2013.

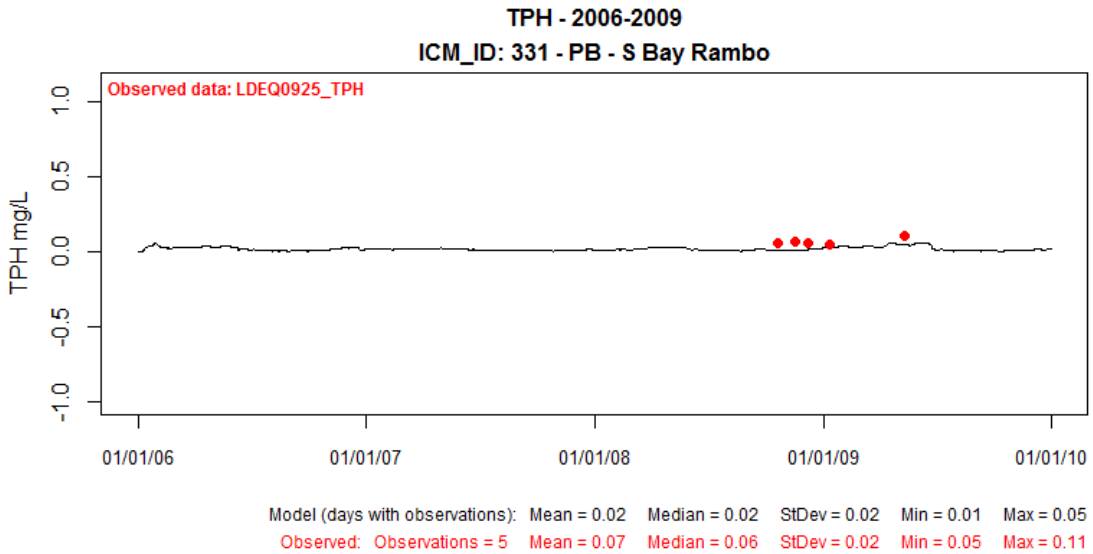

Figure 112: Modeled Total Phosphorus at ICM Compartment 331 (solid black line) Compared to Observed Data at LDEQ0925 for Validation Period 2006-2009.

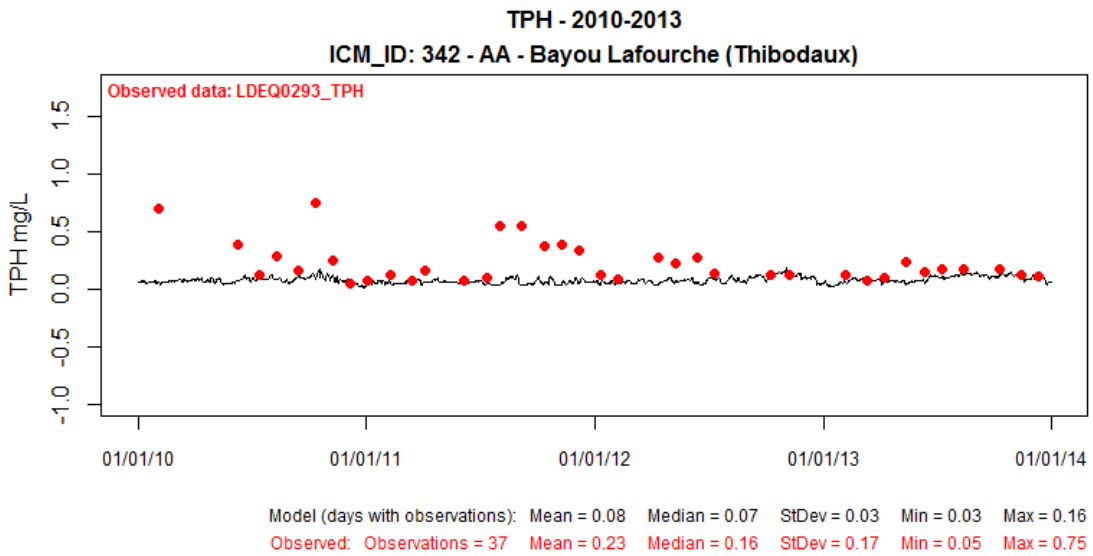

Figure 113: Modeled Total Phosphorus at ICM Compartment 342 (solid black line) Compared to Observed Data at LDEQ0293 for Calibration Period 2010-2013.

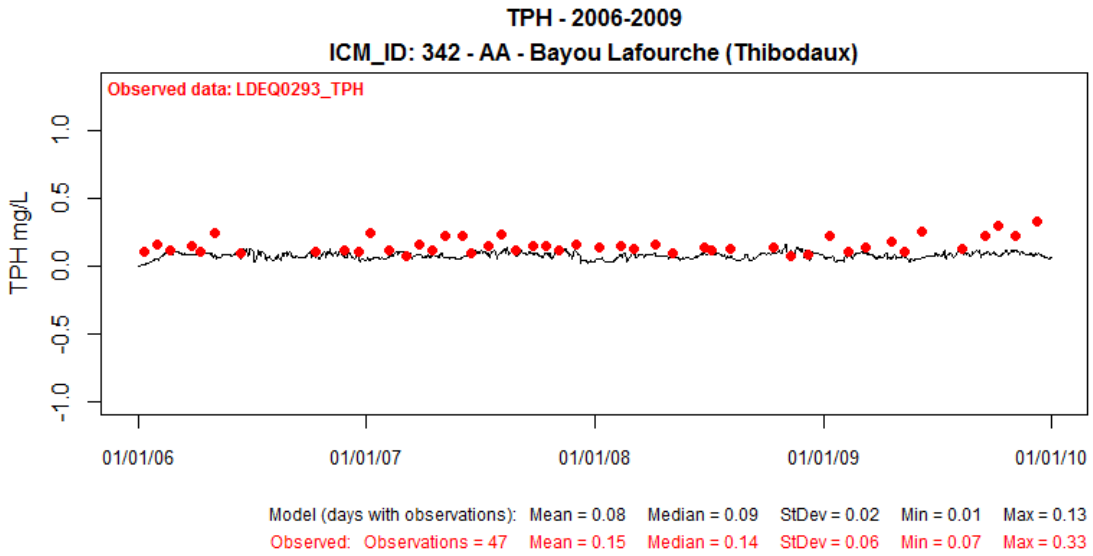

Figure 114: Modeled Total Phosphorus at ICM Compartment 342 (solid black line) Compared to Observed Data at LDEQ0293 for Validation Period 2006-2009.

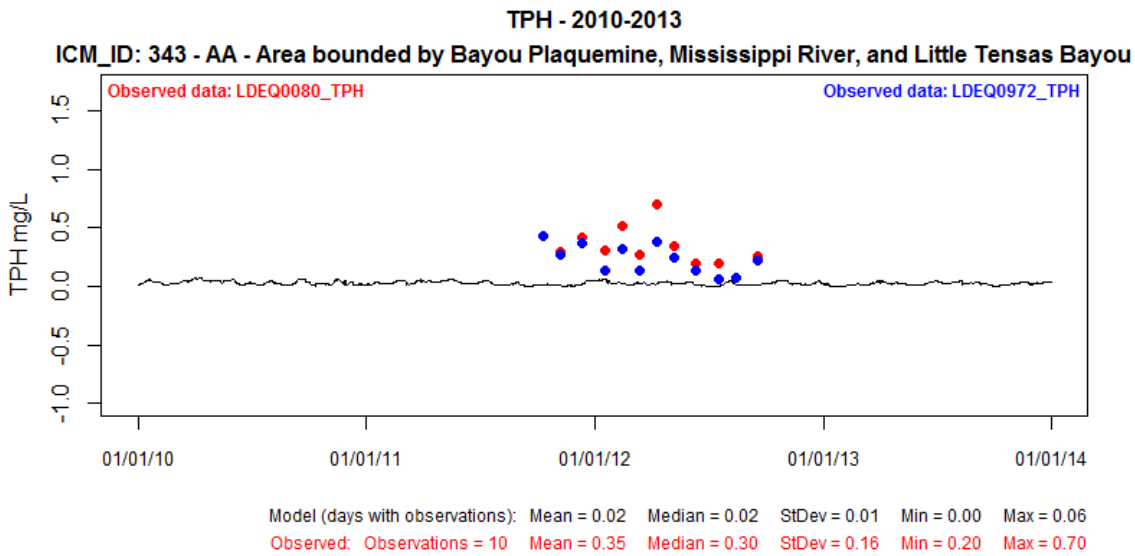

Figure 115: Modeled Total Phosphorus at ICM Compartment 343 (solid black line) Compared to Observed Data at LDEQ0080 for Calibration Period 2010-2013.

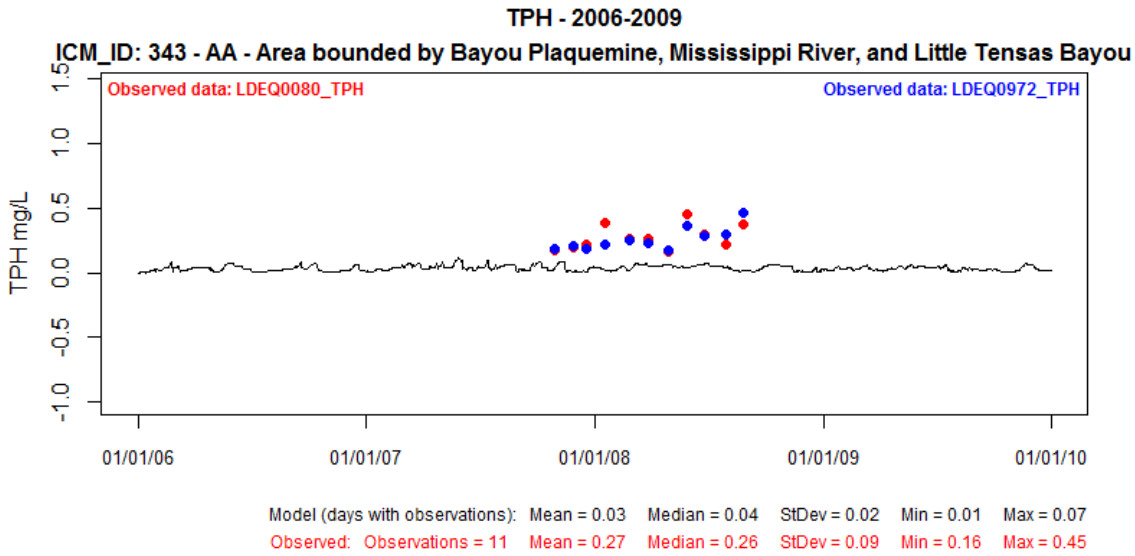

Figure 116: Modeled Total Phosphorus at ICM Compartment 343 (solid black line) Compared to Observed Data at LDEQ0080 for Validation Period 2006-2009.

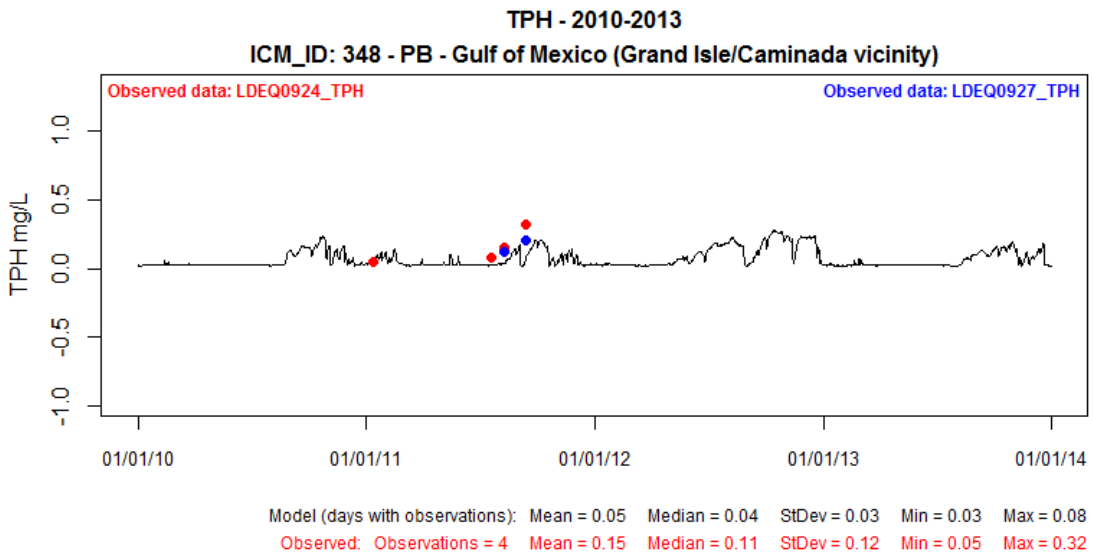

Figure 117: Modeled Total Phosphorus at ICM Compartment 348 (solid black line) Compared to Observed Data at LDEQ0924 for Calibration Period 2010-2013.

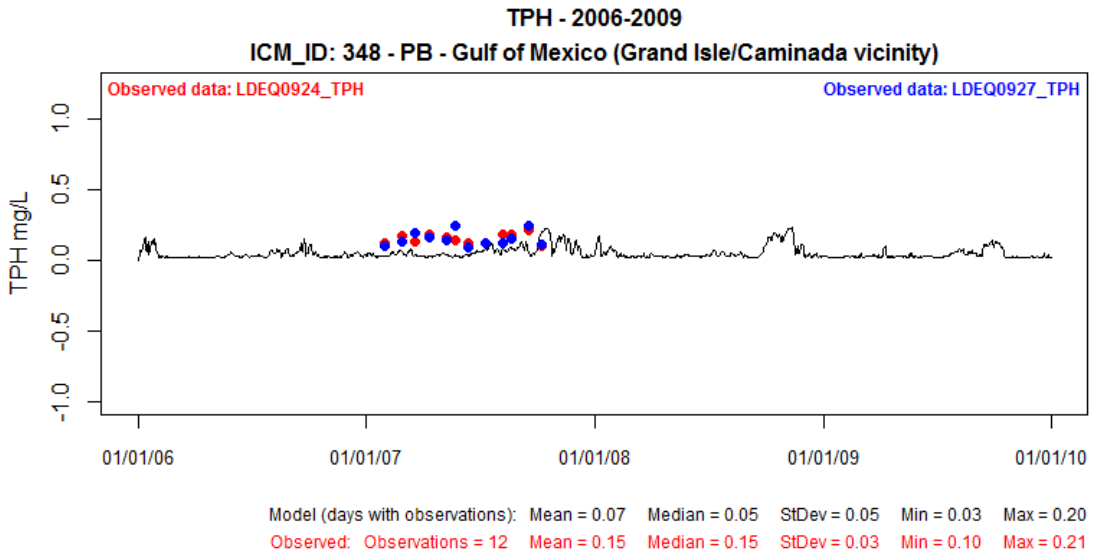

Figure 118: Modeled Total Phosphorus at ICM Compartment 348 (solid black line) Compared to Observed Data at LDEQ0924 for Validation Period 2006-2009.

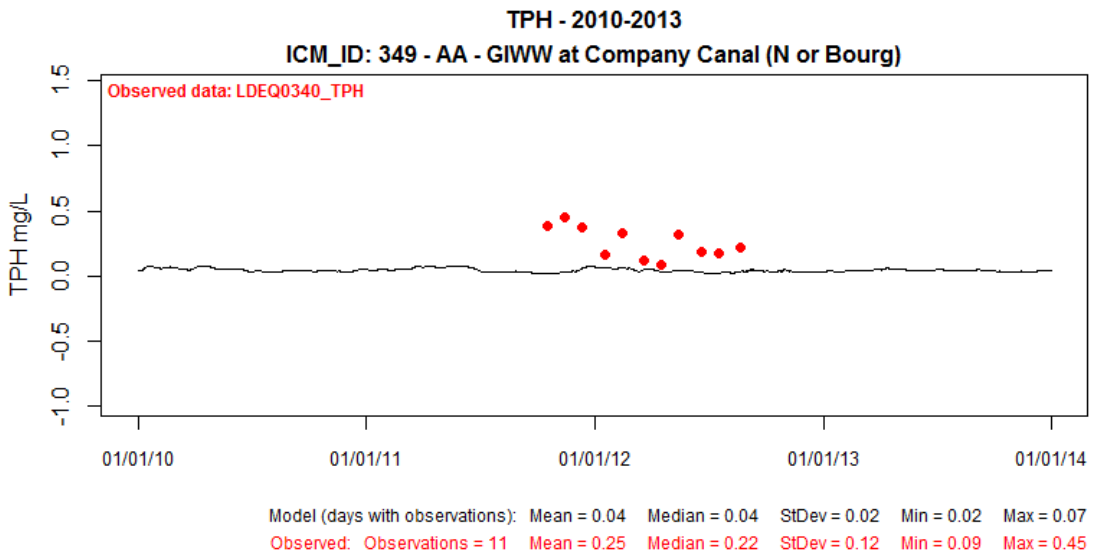

Figure 119: Modeled Total Phosphorus at ICM Compartment 349 (solid black line) Compared to Observed Data at LDEQ0340 for Calibration Period 2010-2013.

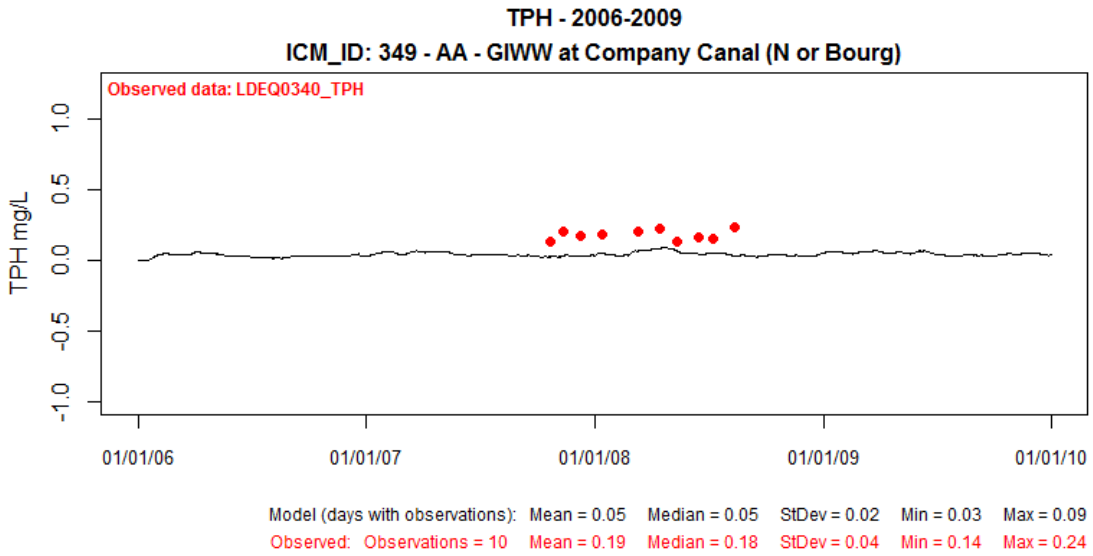

Figure 120: Modeled Total Phosphorus at ICM Compartment 349 (solid black line) Compared to Observed Data at LDEQ0340 for Validation Period 2006-2009.

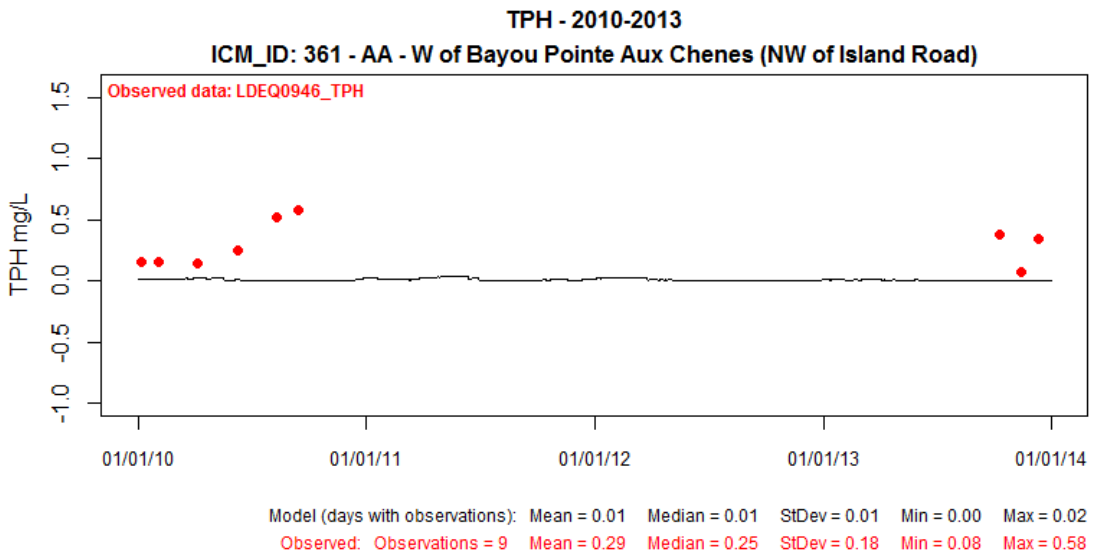

Figure 121: Modeled Total Phosphorus at ICM Compartment 361 (solid black line) Compared to Observed Data at LDEQ0946 for Calibration Period 2010-2013.

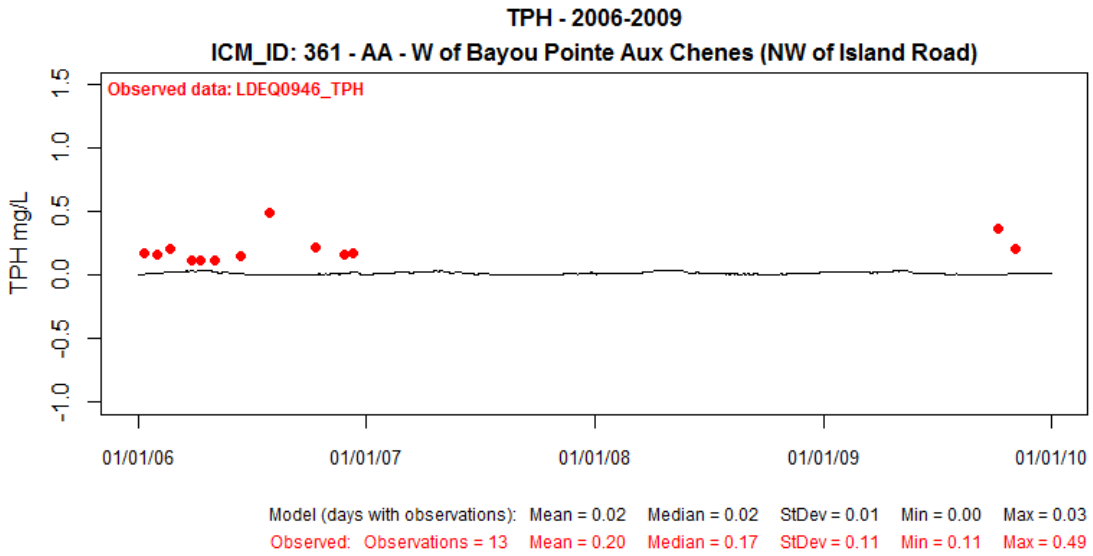

Figure 122: Modeled Phosphorus at ICM Compartment 361 (solid black line) Compared to Observed Data at LDEQ0946 for Validation Period 2006-2009.

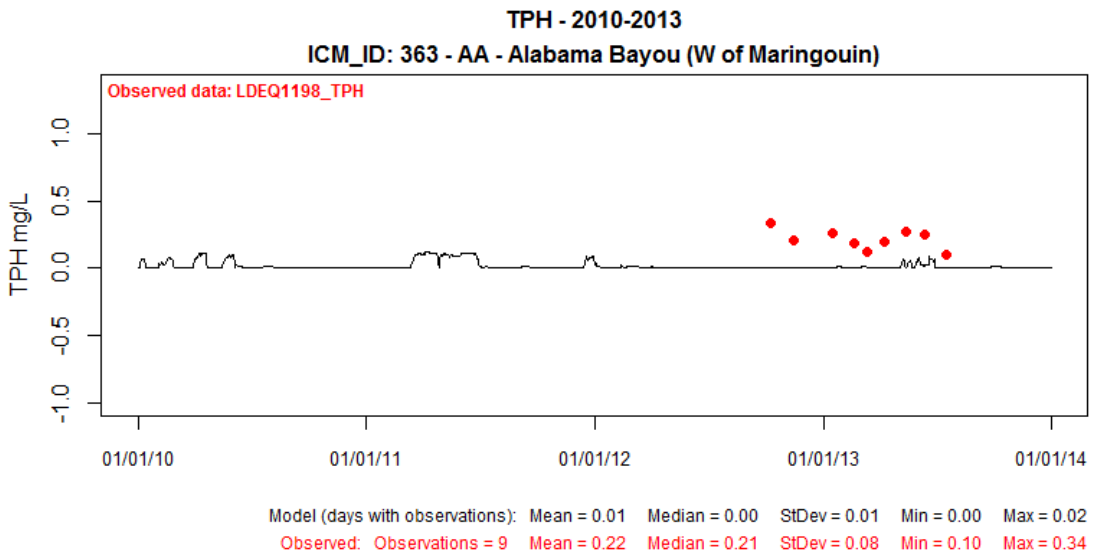

Figure 123: Modeled Total Phosphorus at ICM Compartment 363 (solid black line) Compared to Observed Data at LDEQ1198 for Calibration Period 2010-2013.

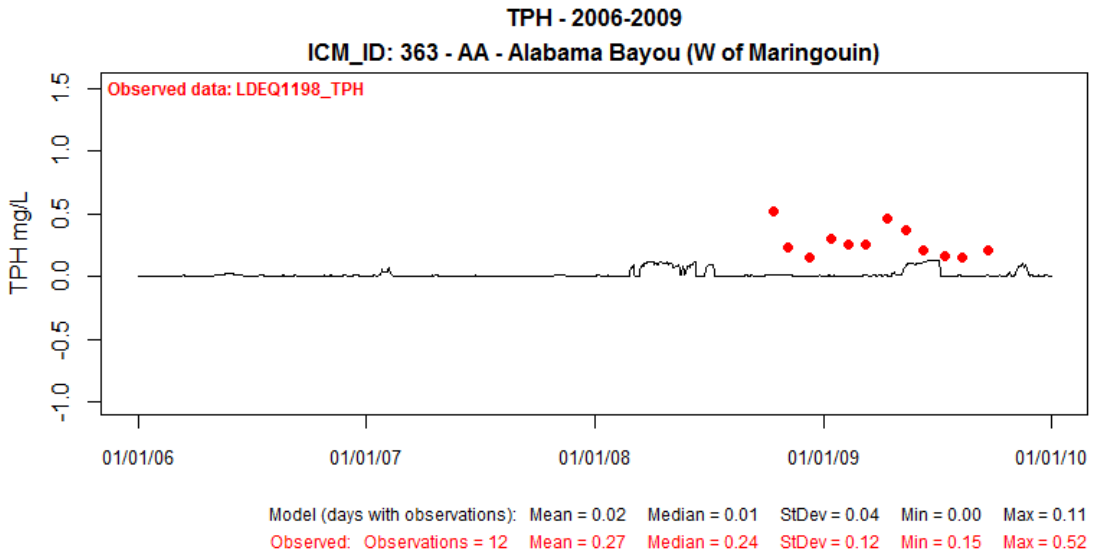

Figure 124: Modeled Total Phosphorus at ICM Compartment 363 (solid black line) Compared to Observed Data at LDEQ1198 for Validation Period 2006-2009.

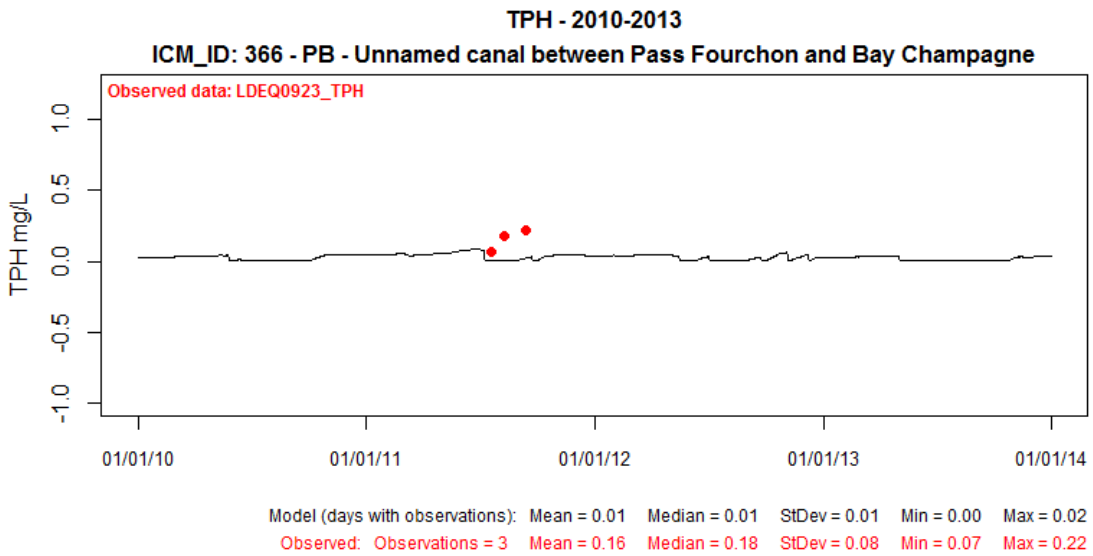

Figure 125: Modeled Total Phosphorus at ICM Compartment 366 (solid black line) Compared to Observed Data at LDEQ0923 for Calibration Period 2010-2013.

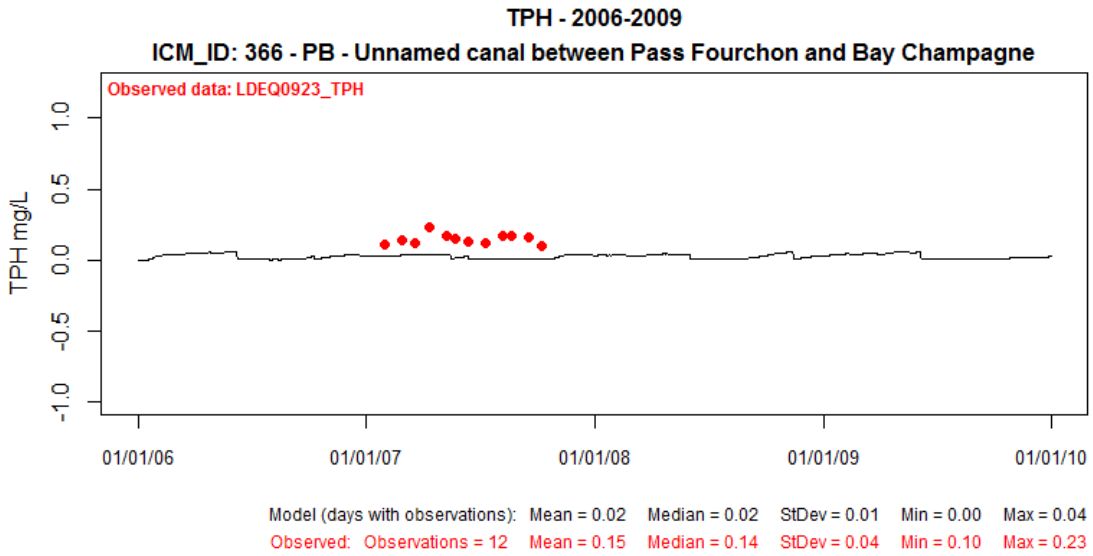

Figure 126: Modeled Total Phosphorus at ICM Compartment 366 (solid black line) Compared to Observed Data at LDEQ0923 for Validation Period 2006-2009.

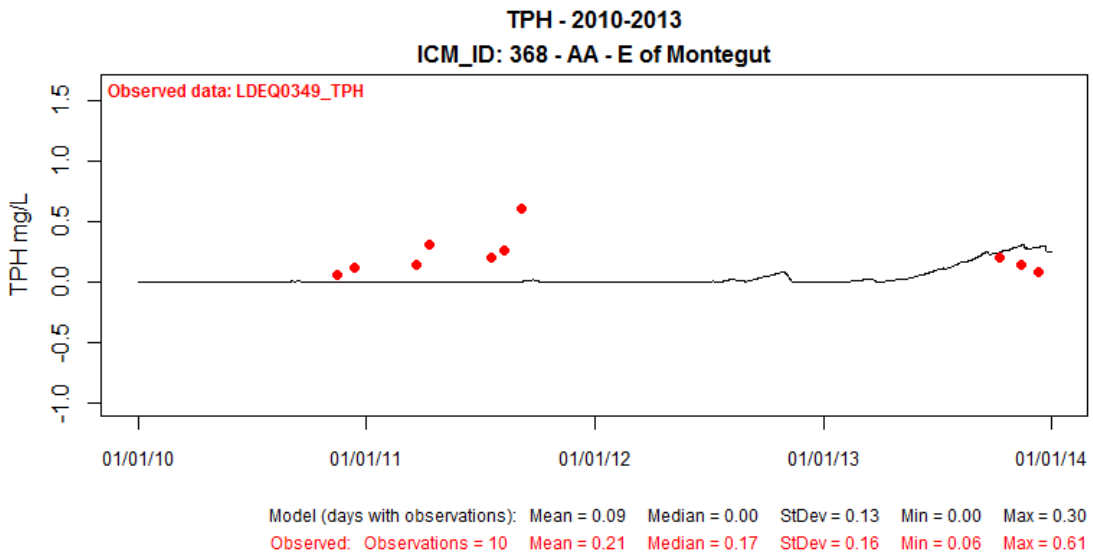

Figure 127: Modeled Total Phosphorus at ICM Compartment 368 (solid black line) Compared to Observed Data at LDEQ0349 for Calibration Period 2010-2013.

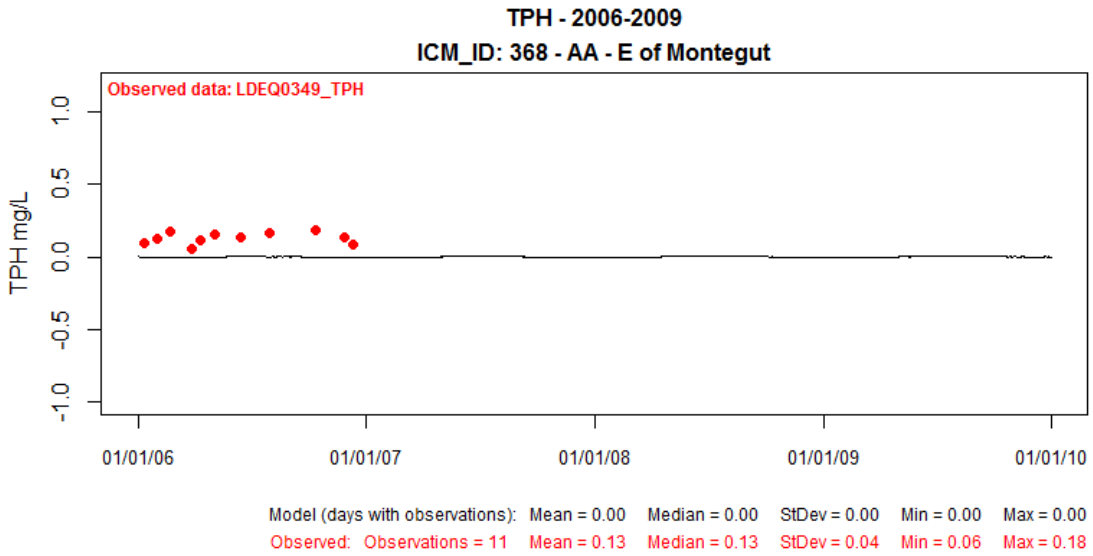

Figure 128: Modeled Total Phosphorus at ICM Compartment 368 (solid black line) Compared to Observed Data at LDEQ0349 for Validation Period 2006-2009.

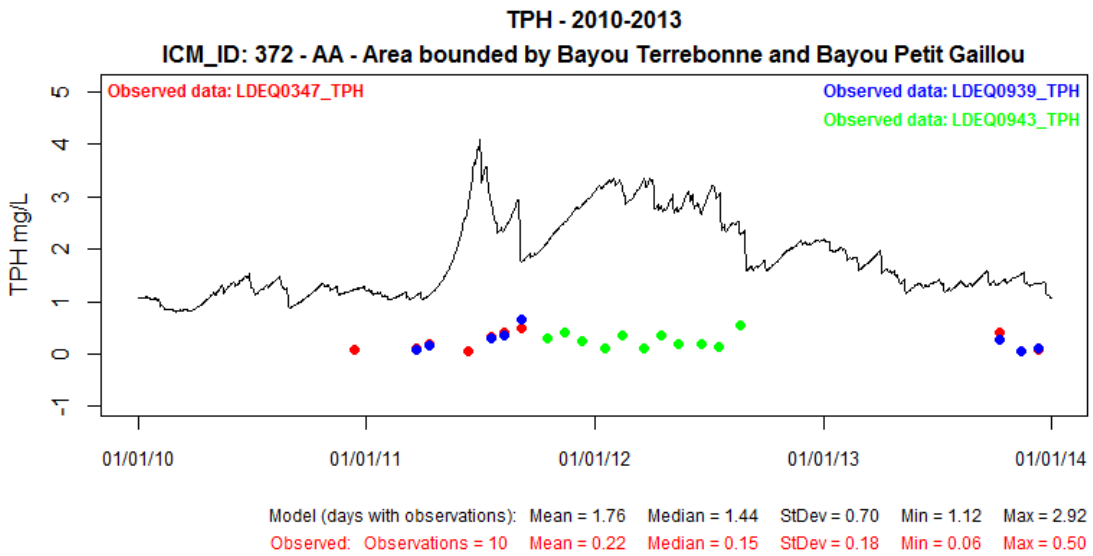

Figure 129: Modeled Total Phosphorus at ICM Compartment 372 (solid black line) Compared to Observed Data at LDEQ0347 for Calibration Period 2010-2013.

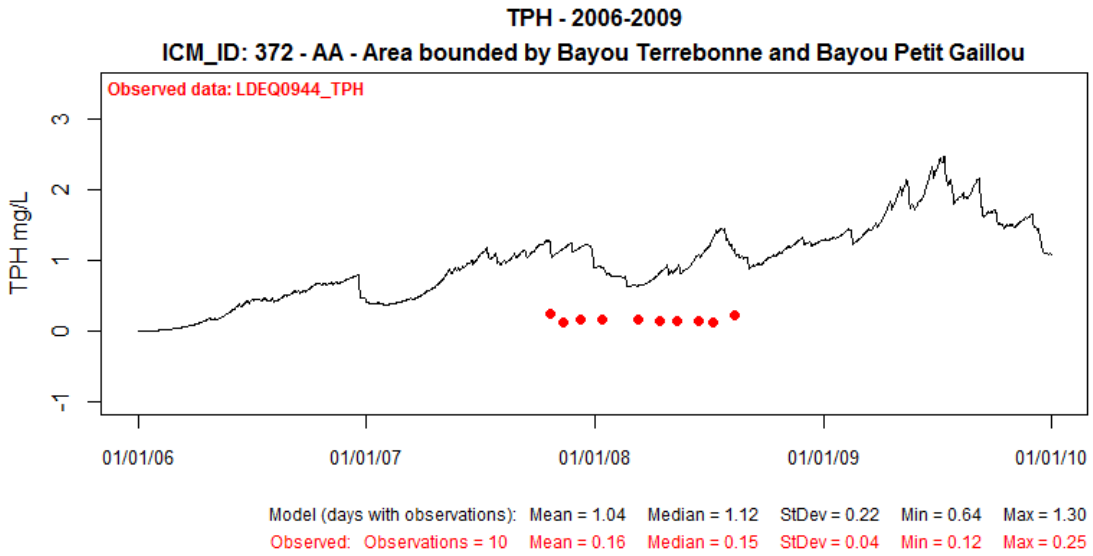

Figure 130: Modeled Total Phosphorus at ICM Compartment 372 (solid black line) Compared to Observed Data at LDEQ0944 for Validation Period 2006-2009.

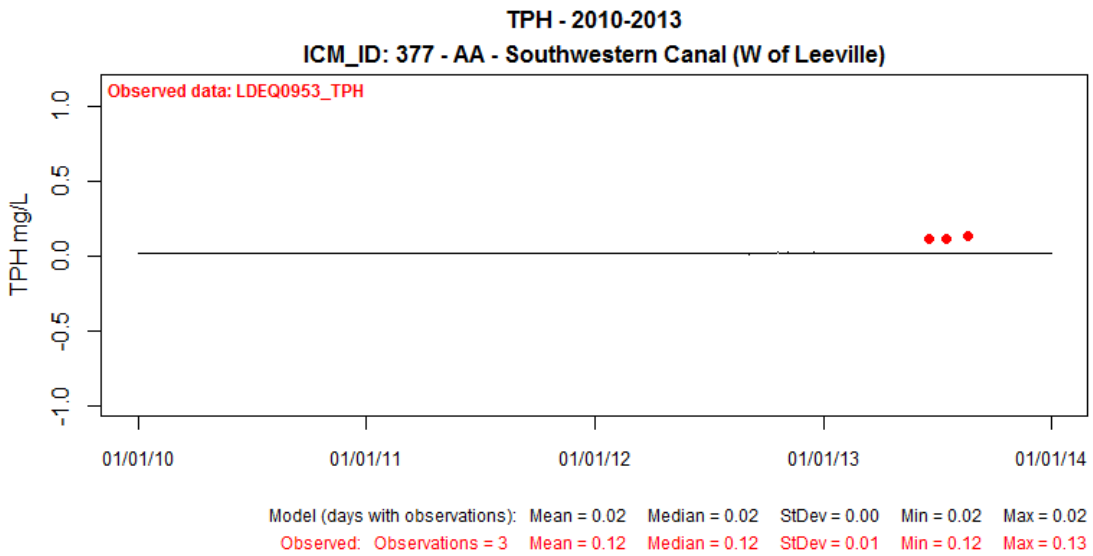

Figure 131: Modeled Total Phosphorus at ICM Compartment 377 (solid black line) Compared to Observed Data at LDEQ0953 for Calibration Period 2010-2013.

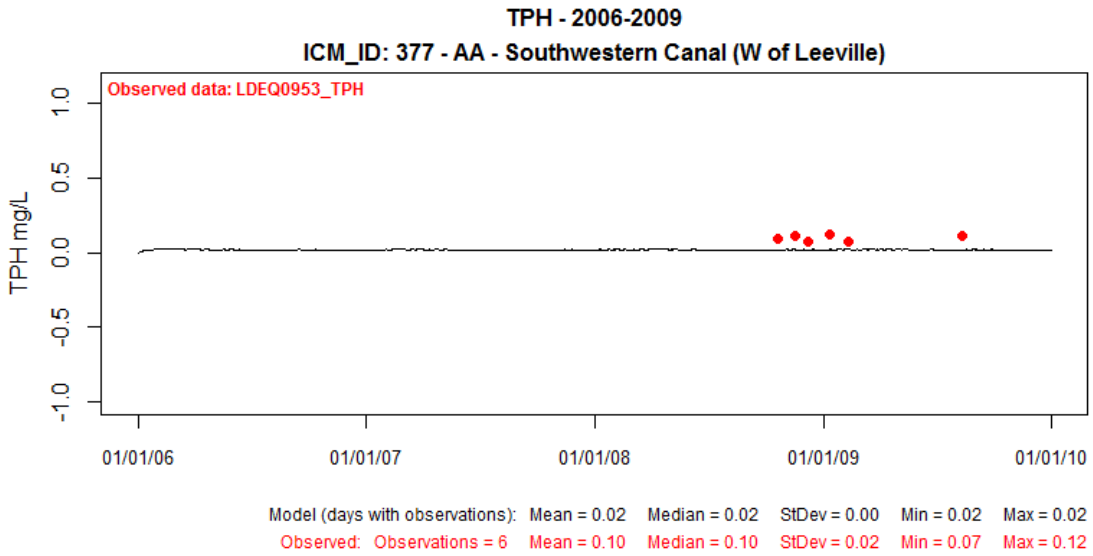

Figure 132: Modeled Total Phosphorus at ICM Compartment 377 (solid black line) Compared to Observed Data at LDEQ0953 for Validation Period 2006-2009.

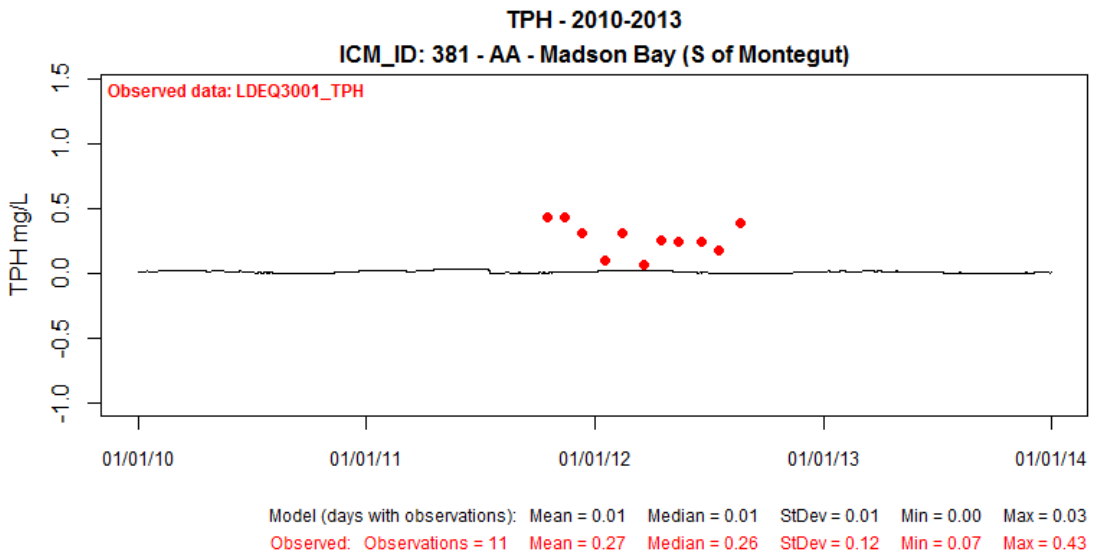

Figure 133: Modeled Total Phosphorus at ICM Compartment 381 (solid black line) Compared to Observed Data at LDEQ3001 for Calibration Period 2010-2013.

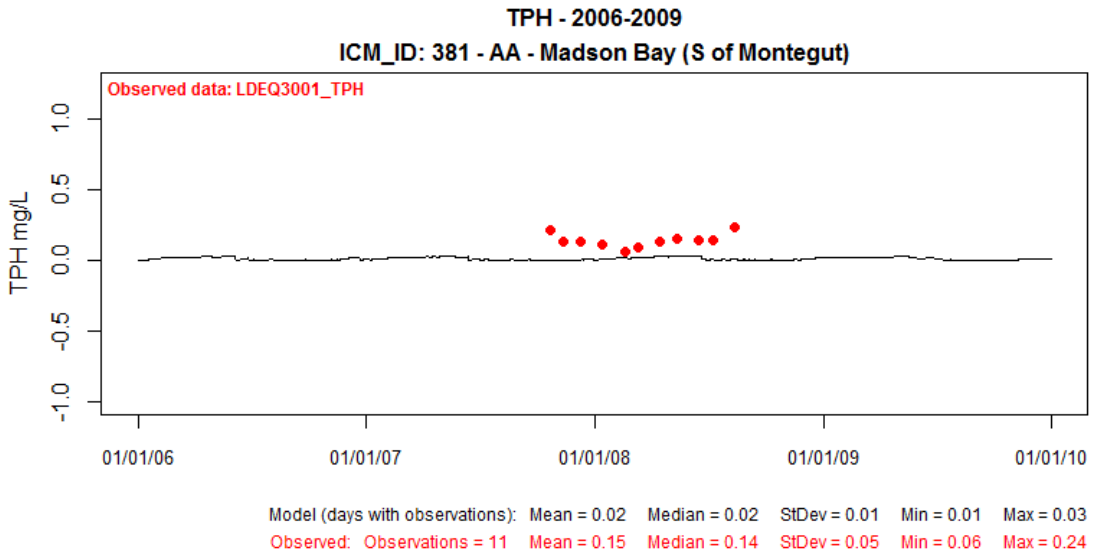

Figure 134: Modeled Total Phosphorus at ICM Compartment 381 (solid black line) Compared to Observed Data at LDEQ3001 for Validation Period 2006-2009.

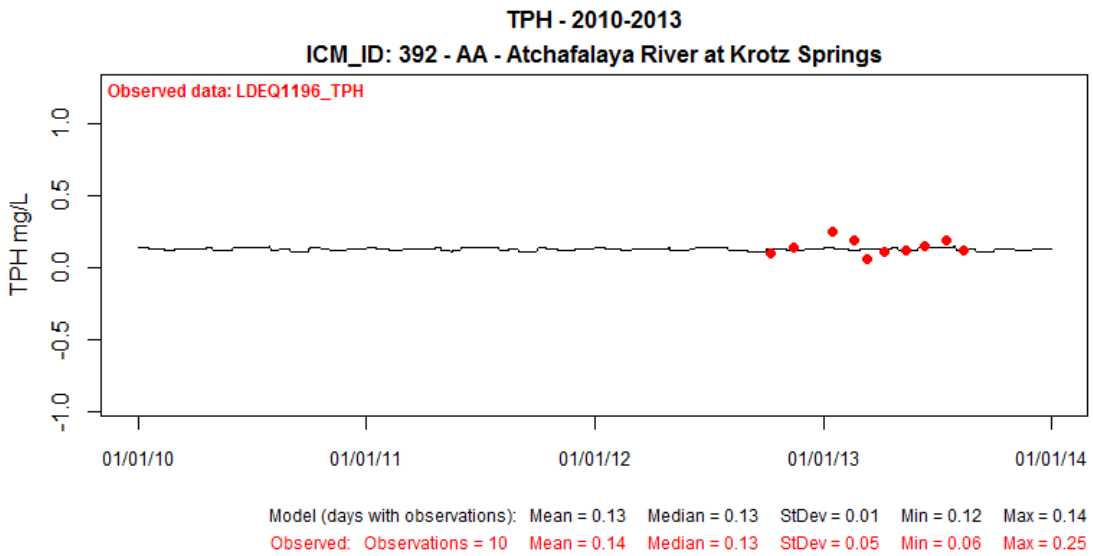

Figure 135: Modeled Total Phosphorus at ICM Compartment 392 (solid black line) Compared to Observed Data at LDEQ1196 for Calibration Period 2010-2013.

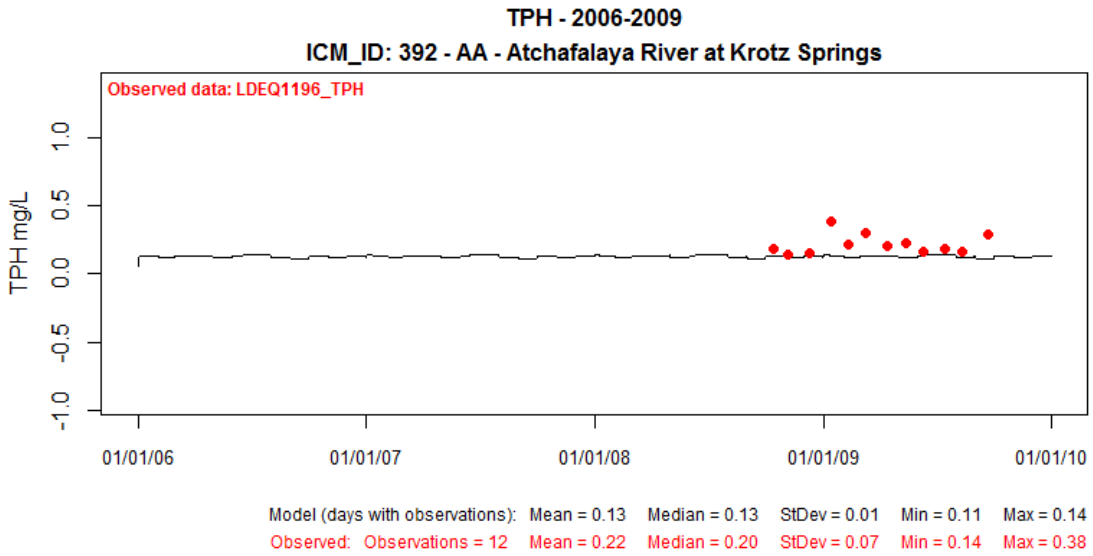

Figure 136: Modeled Total Phosphorus at ICM Compartment 392 (solid black line) Compared to Observed Data at LDEQ1196 for Validation Period 2006-2009.

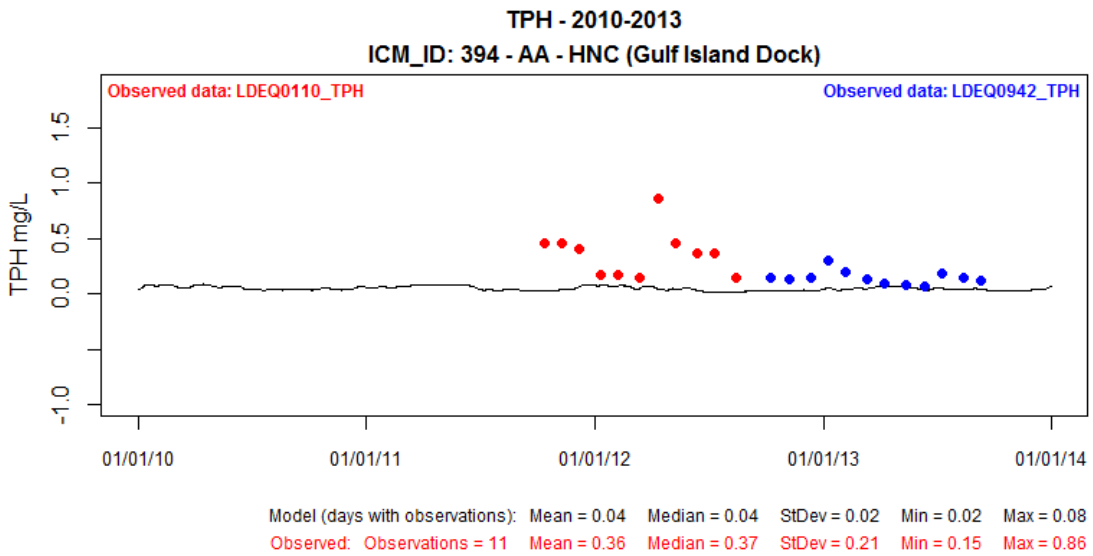

Figure 137: Modeled Total Phosphorus at ICM Compartment 394 (solid black line) Compared to Observed Data at LDEQ0110 for Calibration Period 2010-2013.

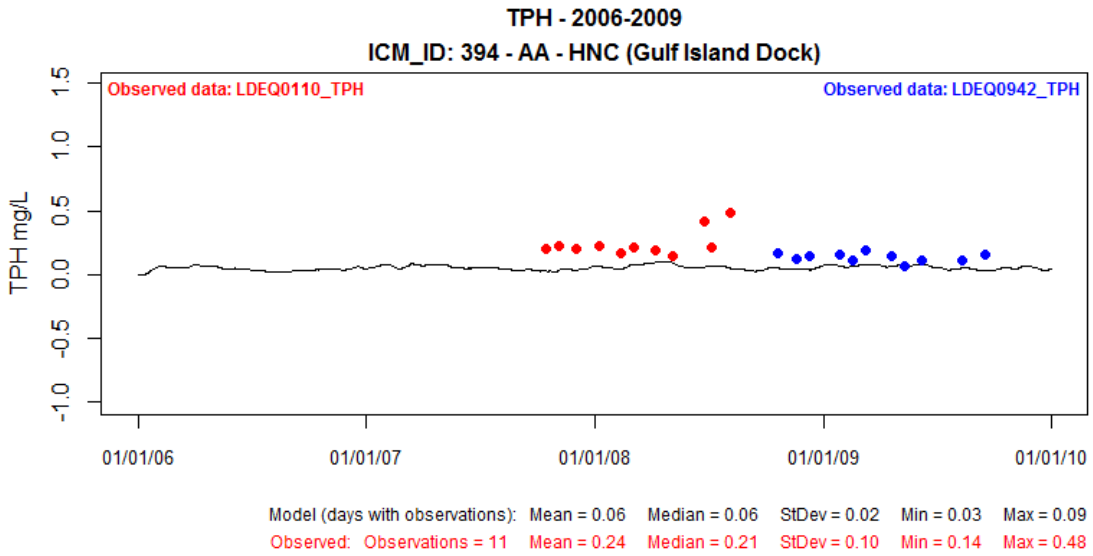

Figure 138: Modeled Total Phosphorus at ICM Compartment 394 (solid black line) Compared to Observed Data at LDEQ0110 for Validation Period 2006-2009.

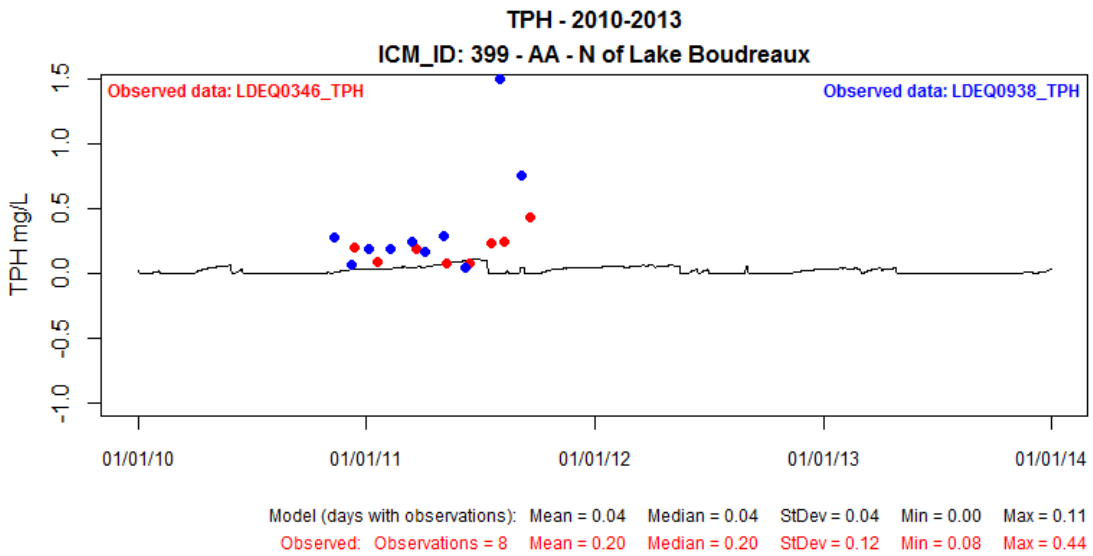

Figure 139: Modeled Total Phosphorus at ICM Compartment 399 (solid black line) Compared to Observed Data at LDEQ0346 for Calibration Period 2010-2013.

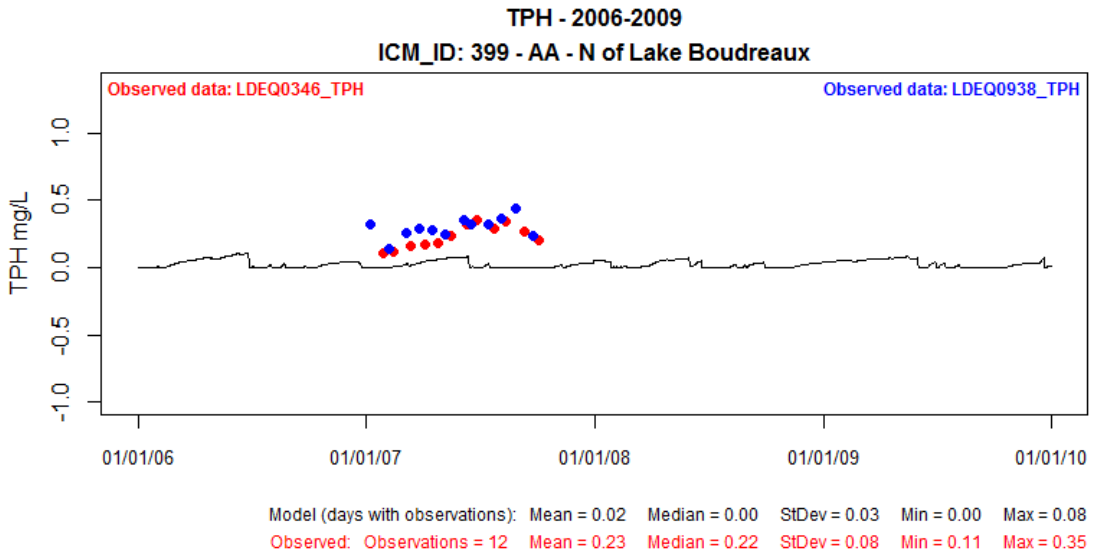

Figure 140: Modeled Total Phosphorus at ICM Compartment 399 (solid black line) Compared to Observed Data at LDEQ0346 for Validation Period 2006-2009.

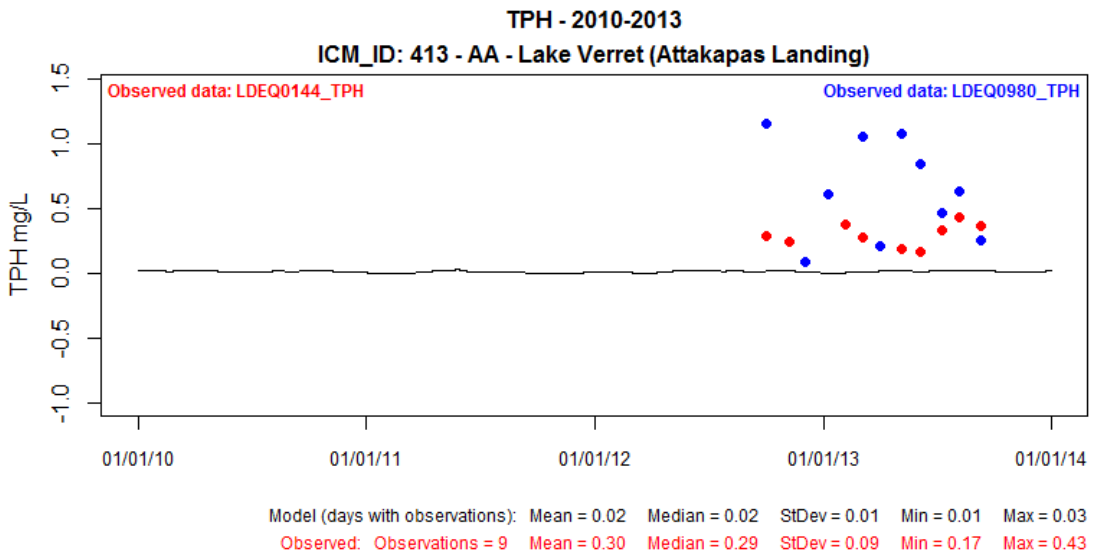

Figure 141: Modeled Total Phosphorus at ICM Compartment 413 (solid black line) Compared to Observed Data at LDEQ0144 for Calibration Period 2010-2013.

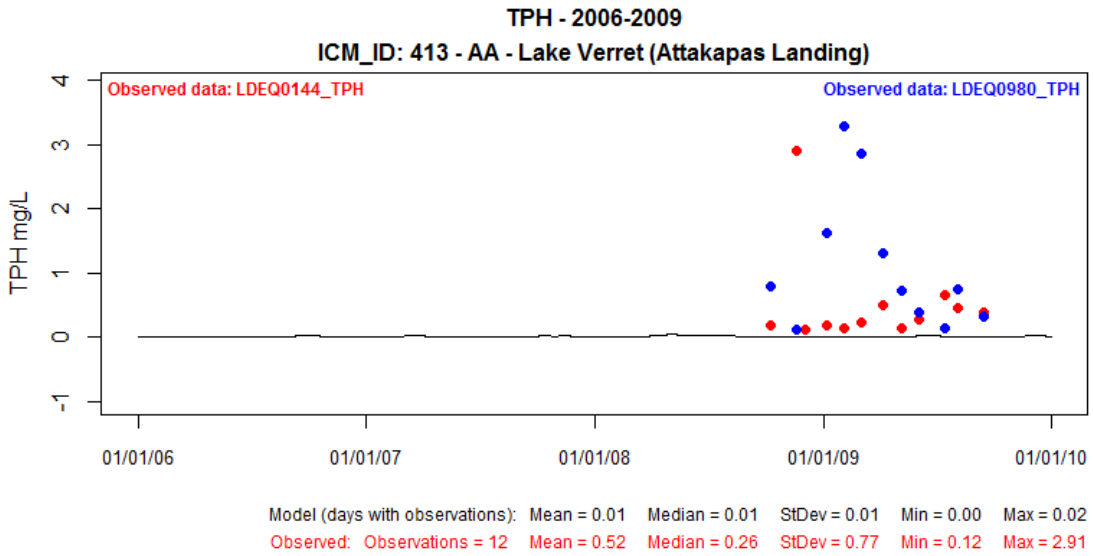

Figure 142: Modeled Total Phosphorus at ICM Compartment 413 (solid black line) Compared to Observed Data at LDEQ0144 for Validation Period 2006-2009.

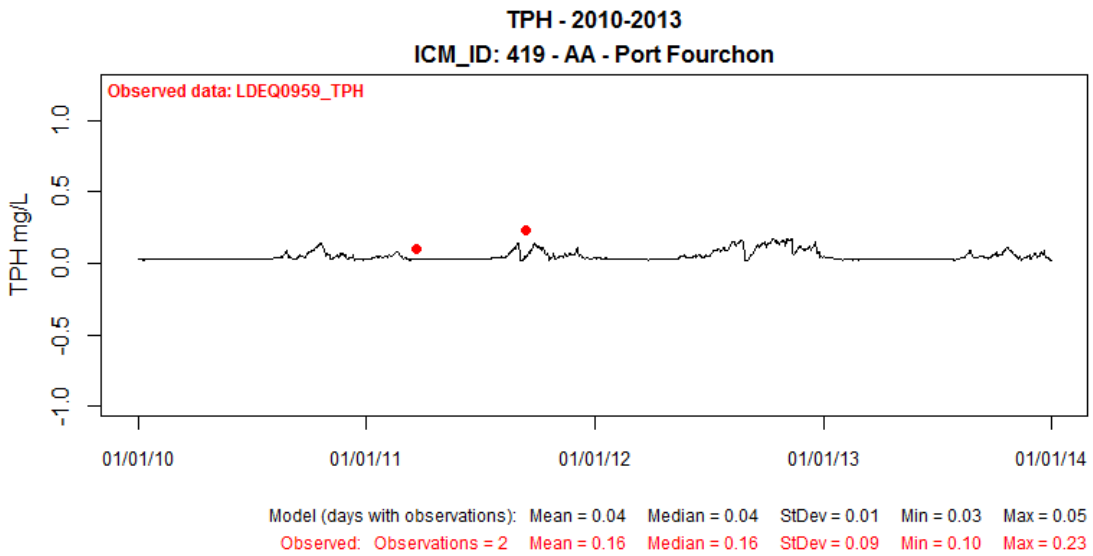

Figure 143: Modeled Total Phosphorus at ICM Compartment 419 (solid black line) Compared to Observed Data at LDEQ0959 for Calibration Period 2010-2013.

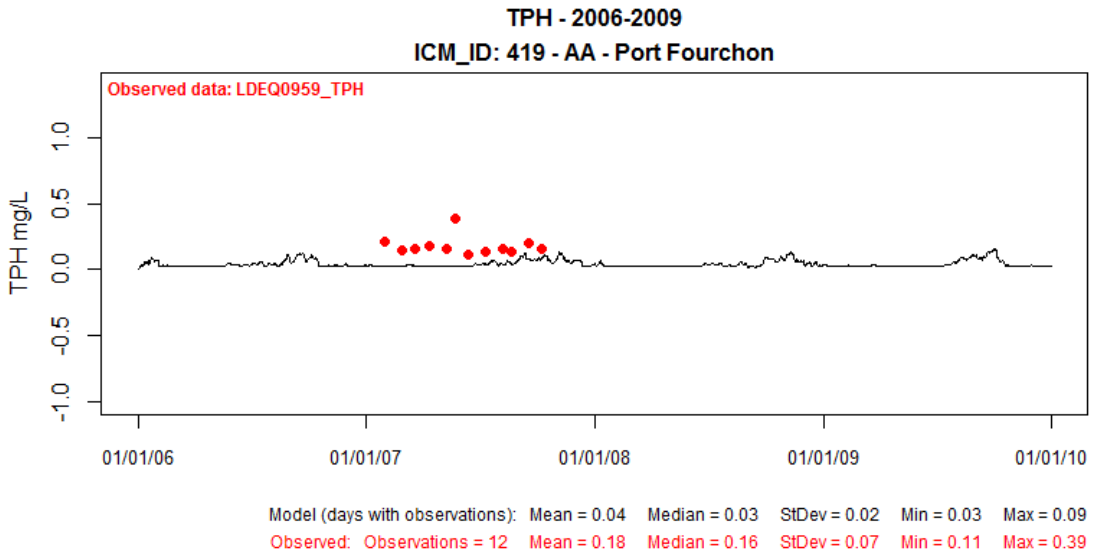

Figure 144: Modeled Total Phosphorus at ICM Compartment 419 (solid black line) Compared to Observed Data at LDEQ0959 for Validation Period 2006-2009.

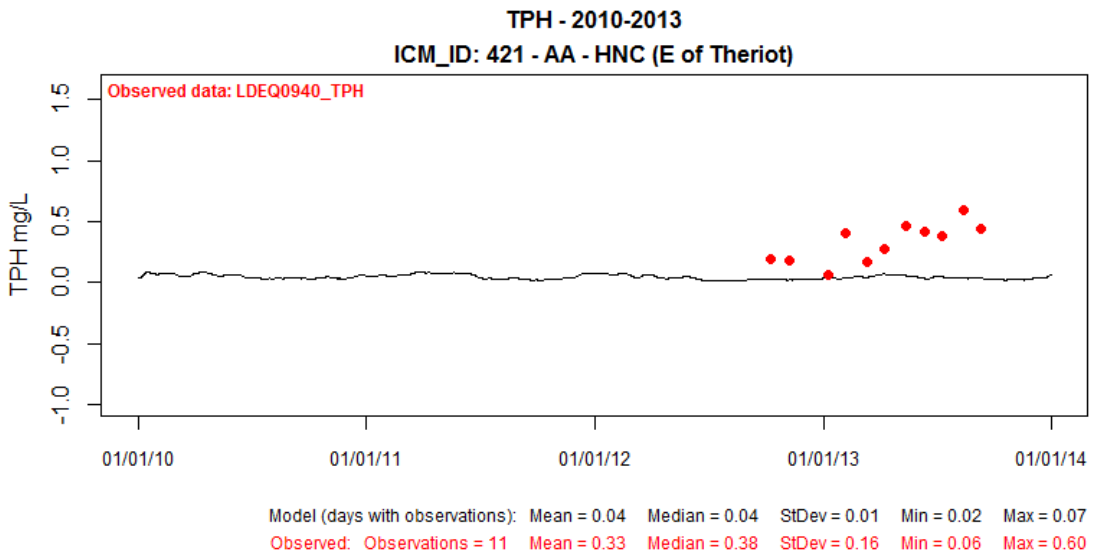

Figure 145: Modeled Total Phosphorus at ICM Compartment 421 (solid black line) Compared to Observed Data at LDEQ0940 for Calibration Period 2010-2013.

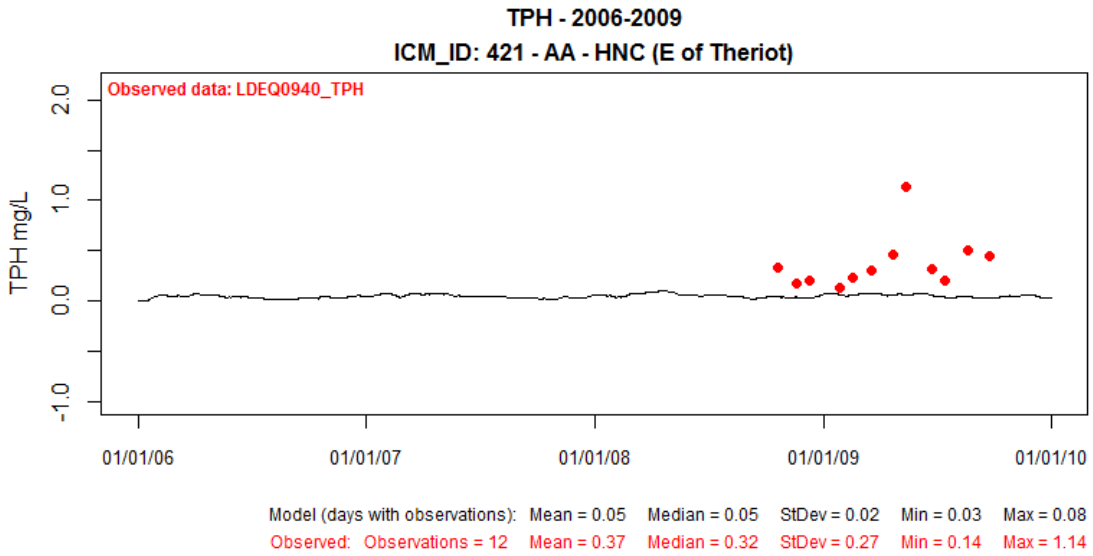

Figure 146: Modeled Total Phosphorus at ICM Compartment 421 (solid black line) Compared to Observed Data at LDEQ0940 for Validation Period 2006-2009.

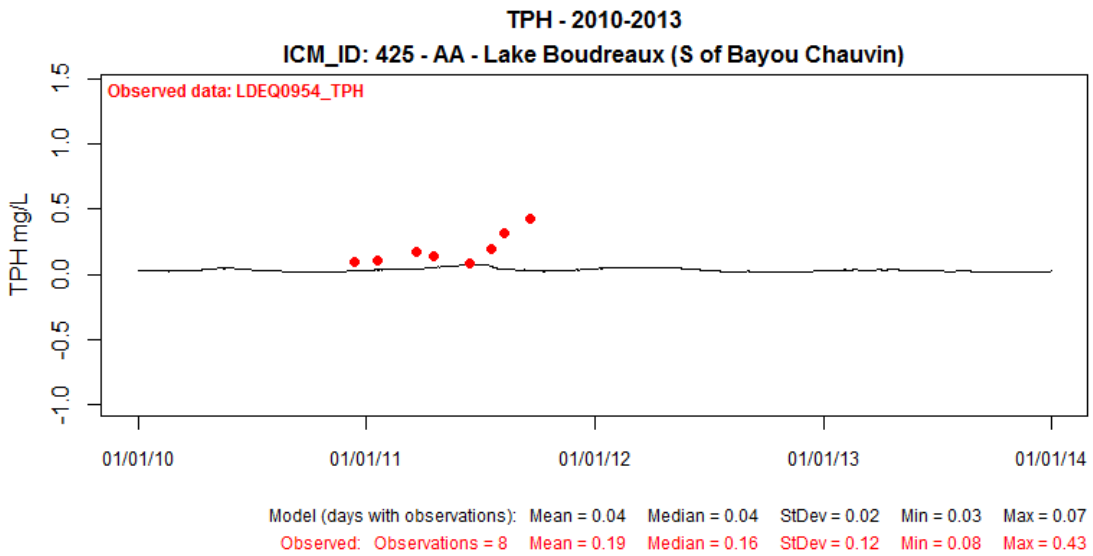

Figure 147: Modeled Total Phosphorus at ICM Compartment 425 (solid black line) Compared to Observed Data at LDEQ0954 for Calibration Period 2010-2013.

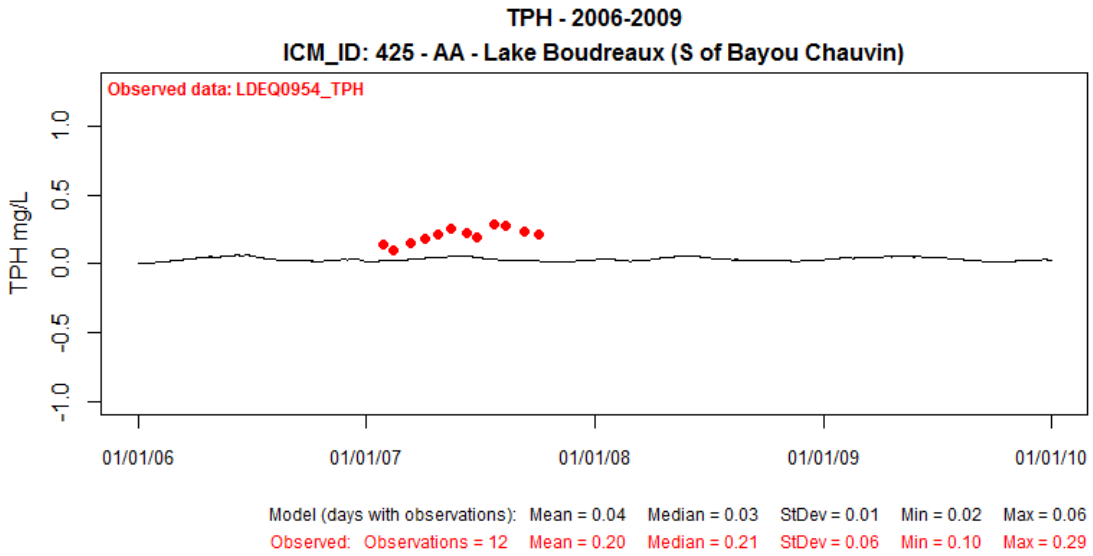

Figure 148: Modeled Total Phosphorus at ICM Compartment 425 (solid black line) Compared to Observed Data at LDEQ0954 for Validation Period 2006-2009.

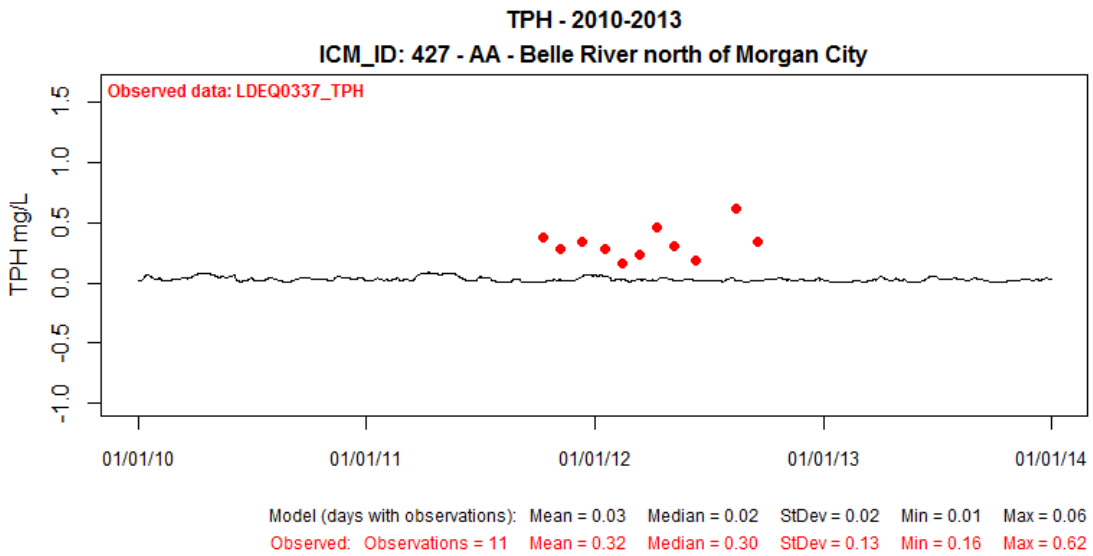

Figure 149: Modeled Total Phosphorus at ICM Compartment 427 (solid black line) Compared to Observed Data at LDEQ0337 for Calibration Period 2010-2013.

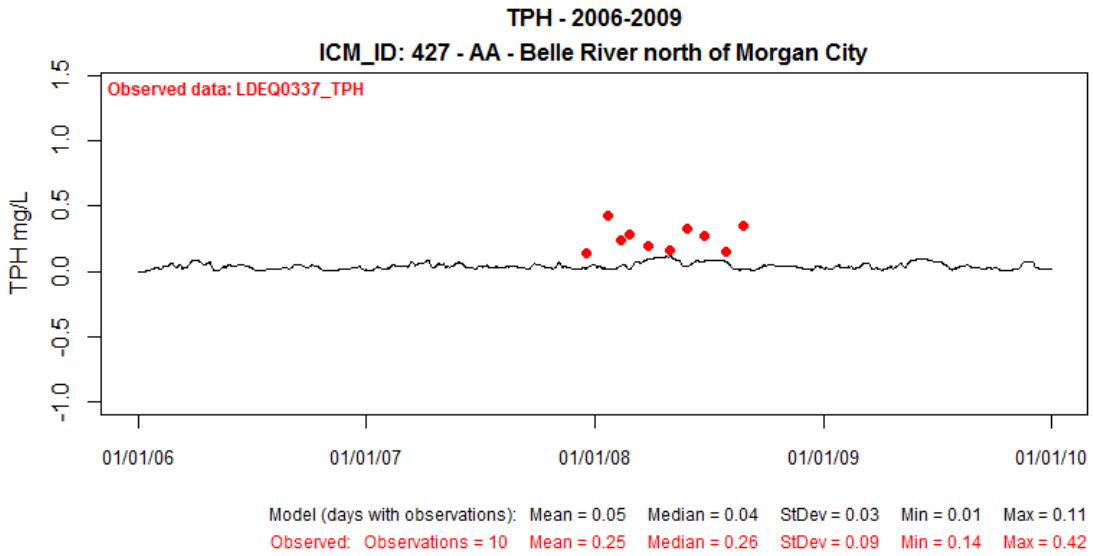

Figure 150: Modeled Total Phosphorus at ICM Compartment 427 (solid black line) Compared to Observed Data at LDEQ0337 for Validation Period 2006-2009.

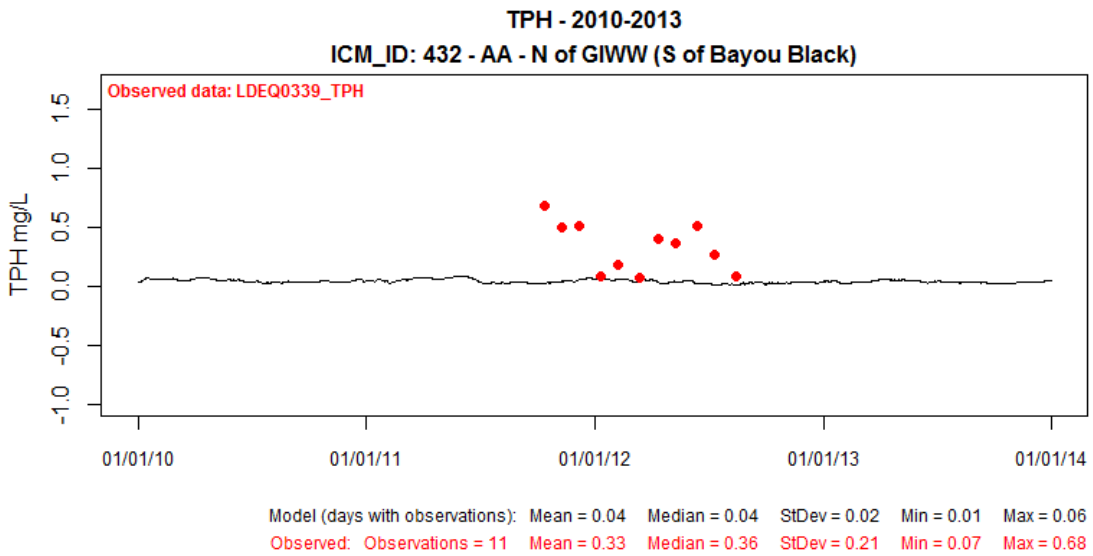

Figure 151: Modeled Total Phosphorus at ICM Compartment 432 (solid black line) Compared to Observed Data at LDEQ0339 for Calibration Period 2010-2013.

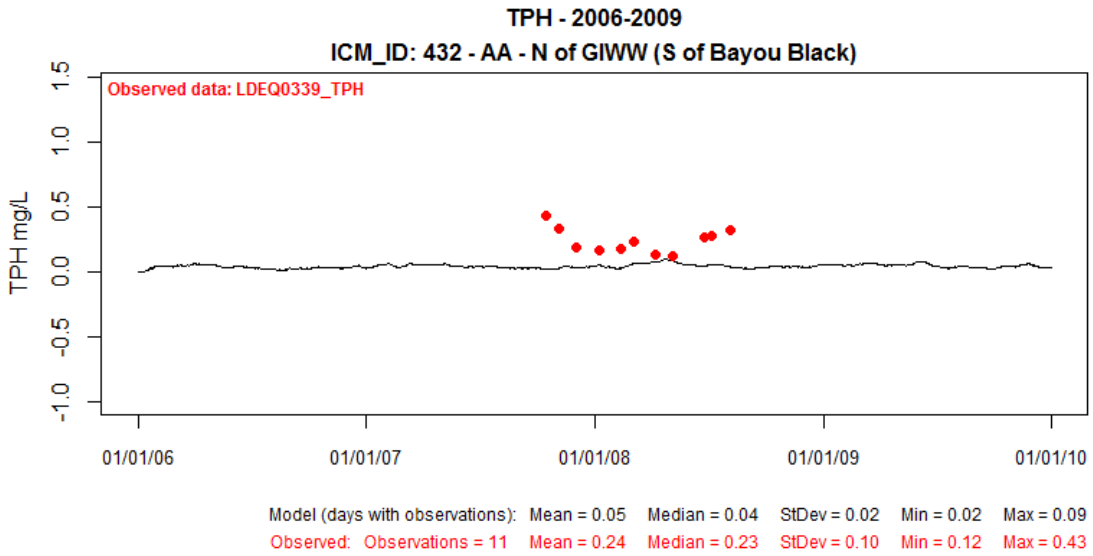

Figure 152: Modeled Total Phosphorus at ICM Compartment 432 (solid black line) Compared to Observed Data at LDEQ0339 for Validation Period 2006-2009.

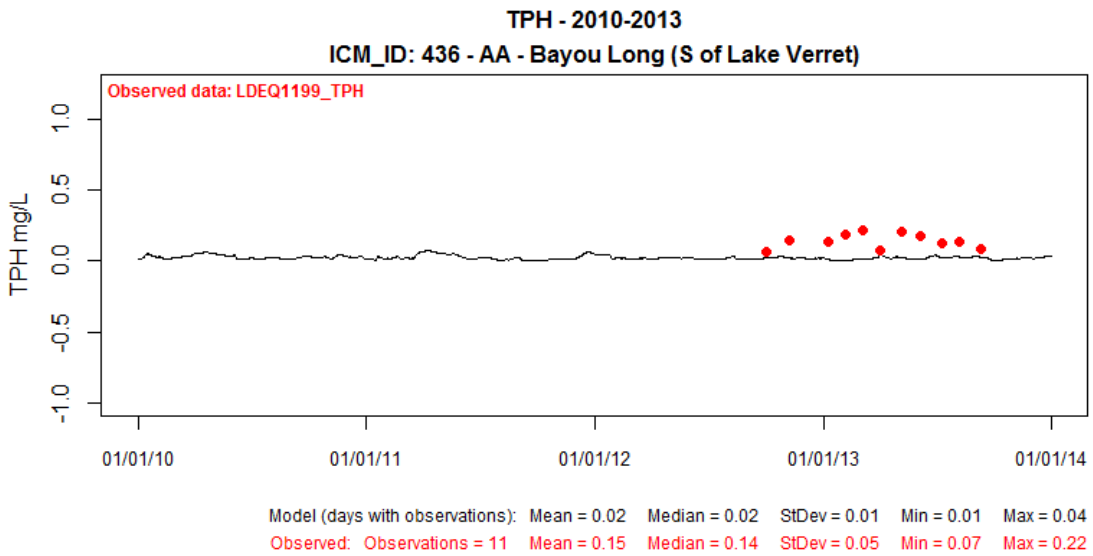

Figure 153: Modeled Total Phosphorus at ICM Compartment 436 (solid black line) Compared to Observed Data at LDEQ1199 for Calibration Period 2010-2013.

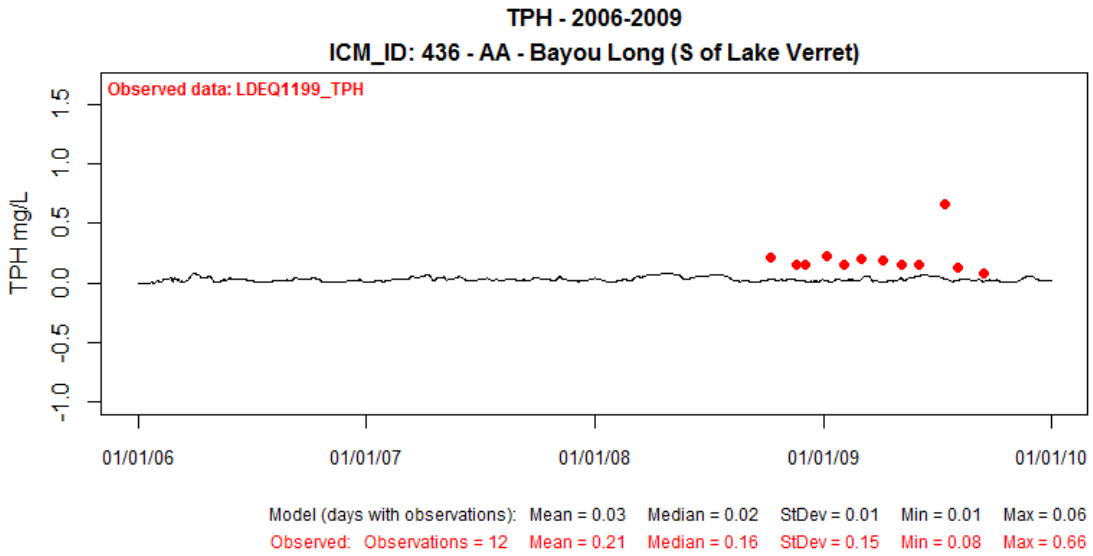

Figure 154: Modeled Total Phosphorus at ICM Compartment 436 (solid black line) Compared to Observed Data at LDEQ1199 for Validation Period 2006-2009.

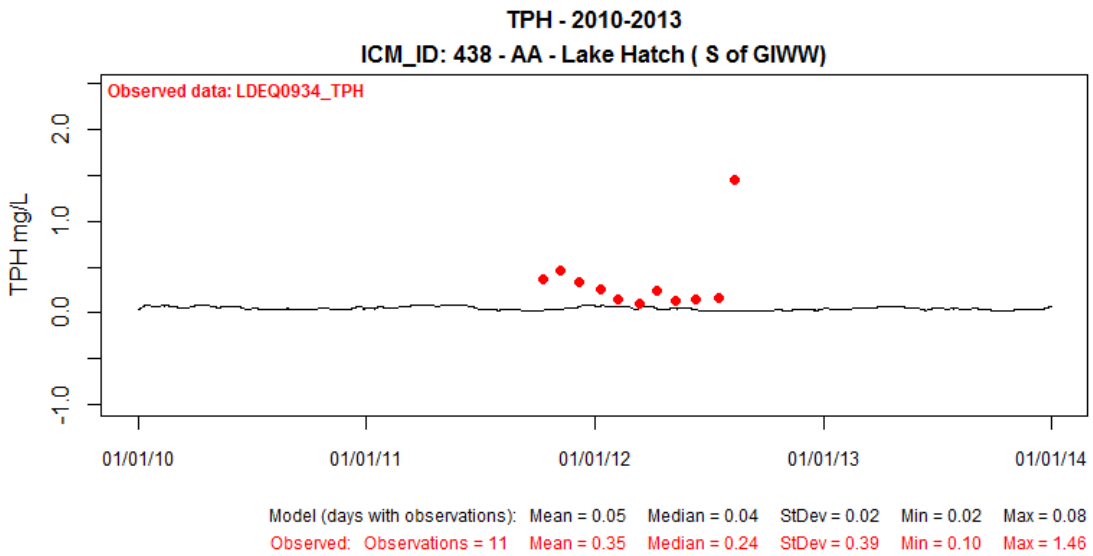

Figure 155: Modeled Total Phosphorus at ICM Compartment 438 (solid black line) Compared to Observed Data at LDEQ0934 for Calibration Period 2010-2013.

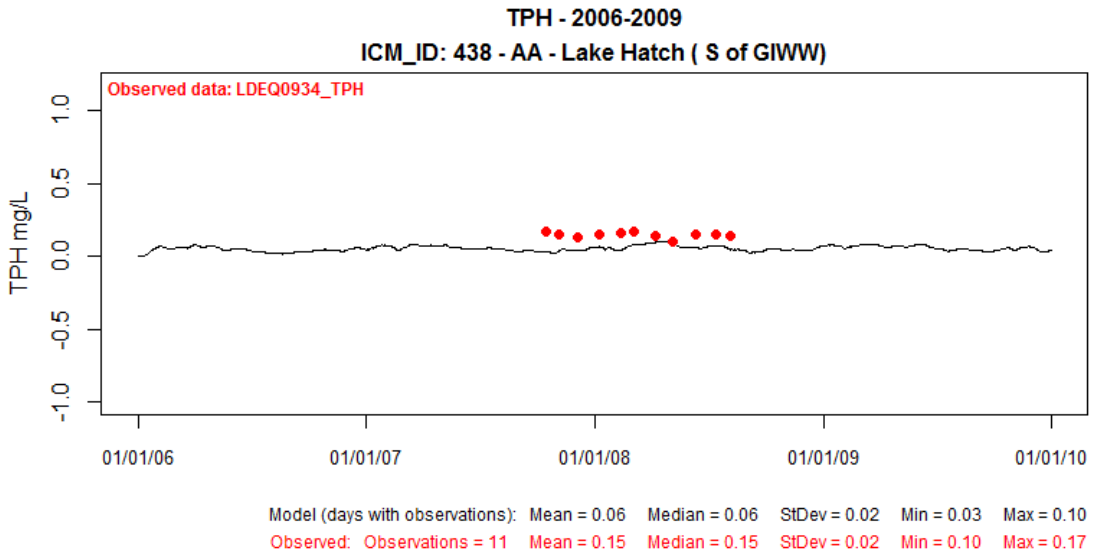

Figure 156: Modeled Total Phosphorus at ICM Compartment 438 (solid black line) Compared to Observed Data at LDEQ0934 for Validation Period 2006-2009.

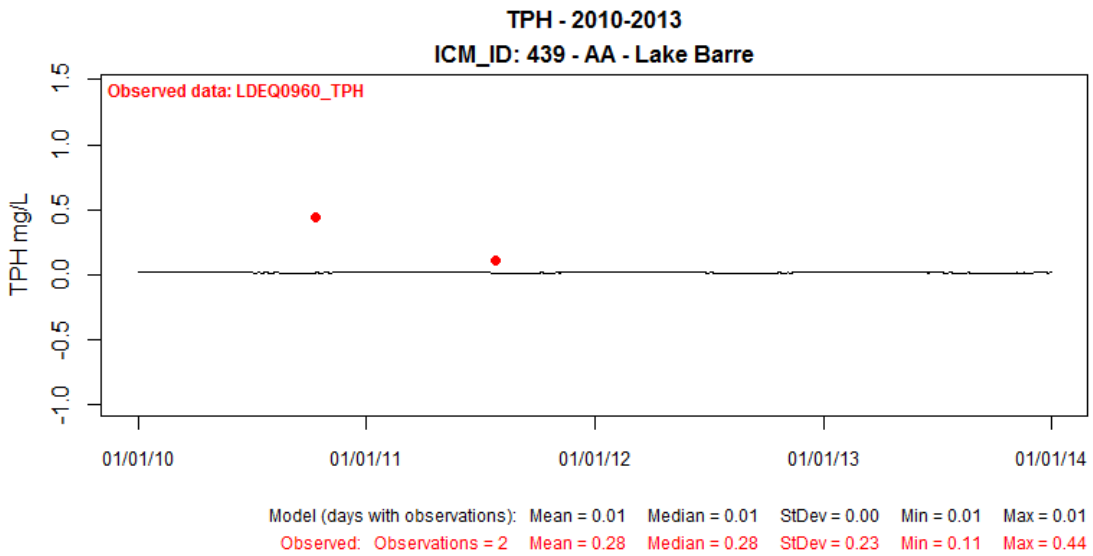

Figure 157: Modeled Total Phosphorus at ICM Compartment 439 (solid black line) Compared to Observed Data at LDEQ0960 for Calibration Period 2010-2013.

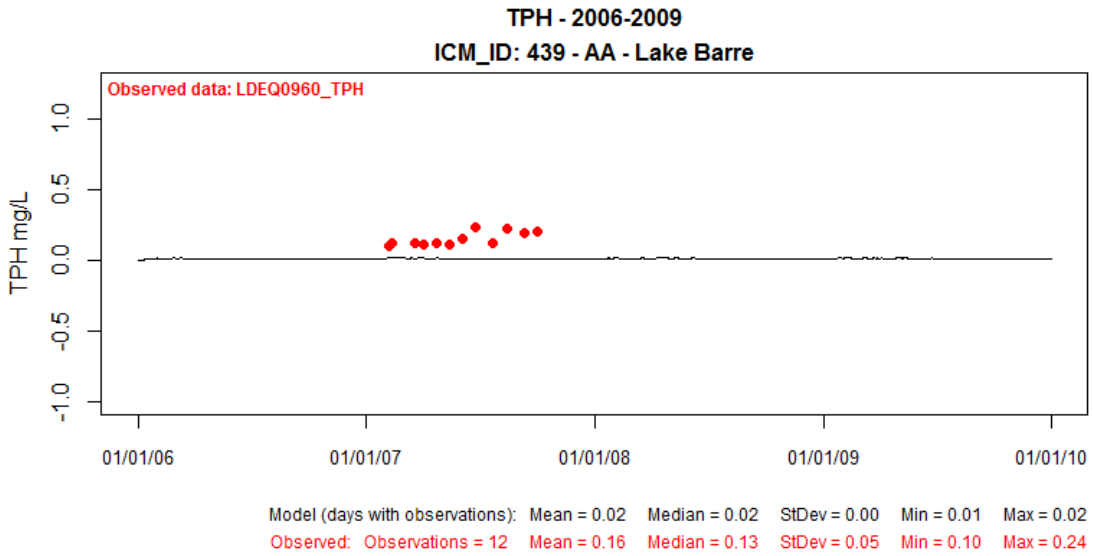

Figure 158: Modeled Total Phosphorus at ICM Compartment 439 (solid black line) Compared to Observed Data at LDEQ0960 for Validation Period 2006-2009.

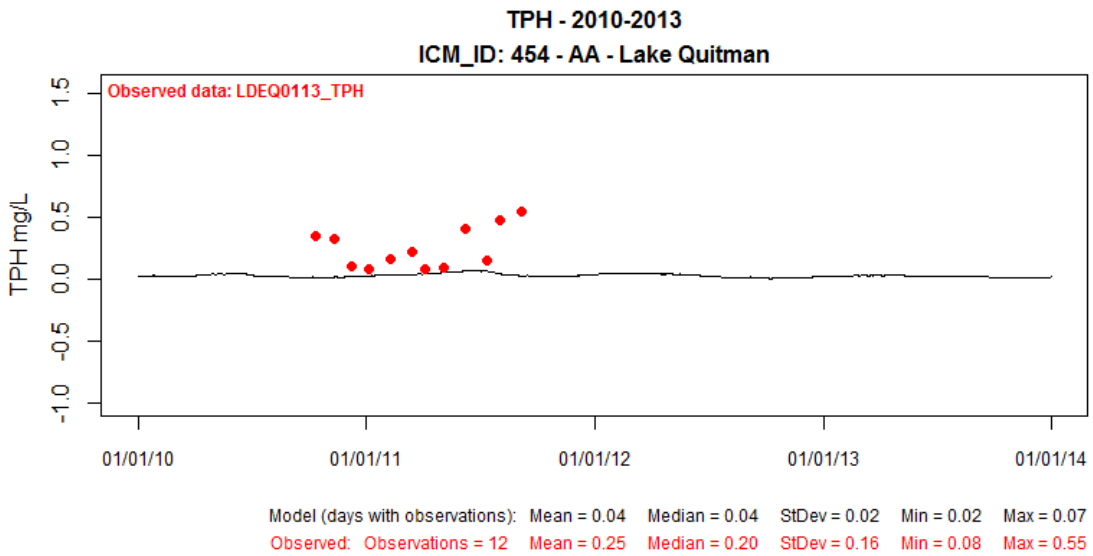

Figure 159: Modeled Total Phosphorus at ICM Compartment 454 (solid black line) Compared to Observed Data at LDEQ0113 for Calibration Period 2010-2013.

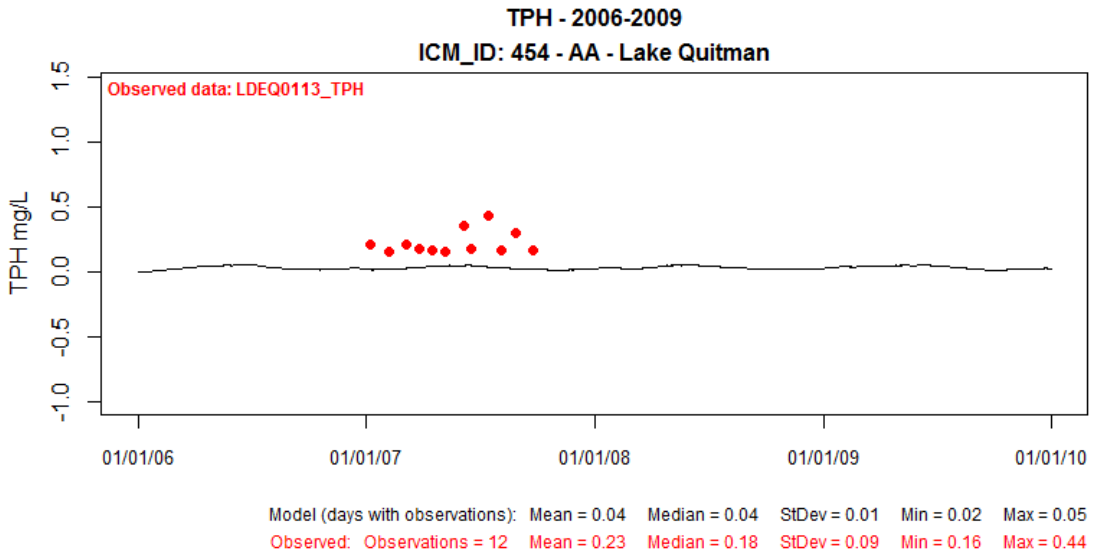

Figure 160: Modeled Total Phosphorus at ICM Compartment 454 (solid black line) Compared to Observed Data at LDEQ0113 for Validation Period 2006-2009.

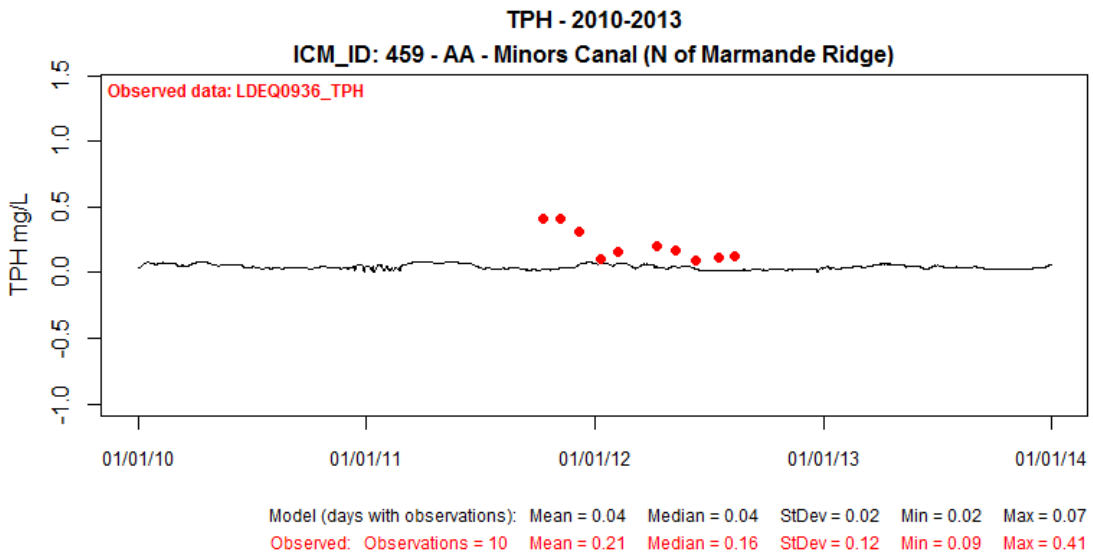

Figure 161: Modeled Total Phosphorus at ICM Compartment 459 (solid black line) Compared to Observed Data at LDEQ0936 for Calibration Period 2010-2013.

Figure 162: No Validation Figure for ICM Compartment 459.

DRAFT

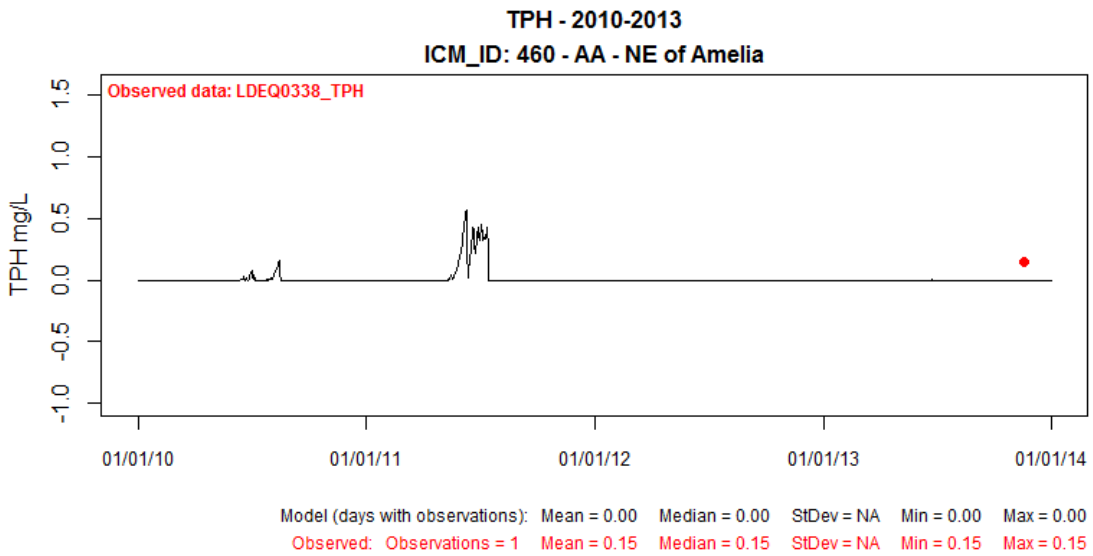

Figure 163: Modeled Total Phosphorus at ICM Compartment 460 (solid black line) Compared to Observed Data at LDEQ0338 for Calibration Period 2010-2013.

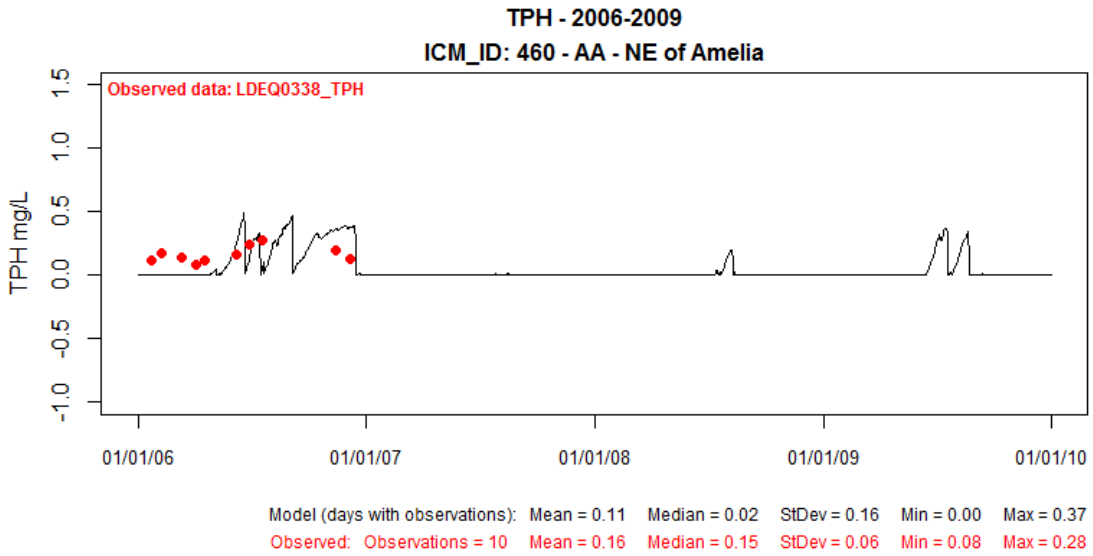

Figure 164: Modeled Total Phosphorus at ICM Compartment 460 (solid black line) Compared to Observed Data at LDEQ0338 for Validation Period 2006-2009.

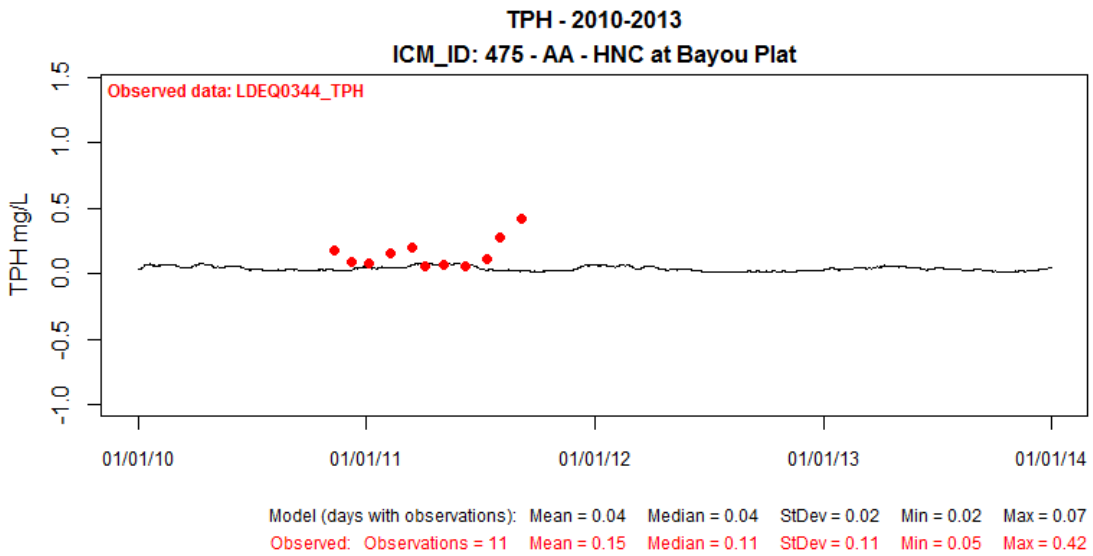

Figure 165: Modeled Total Phosphorus at ICM Compartment 475 (solid black line) Compared to Observed Data at LDEQ0344 for Calibration Period 2010-2013.

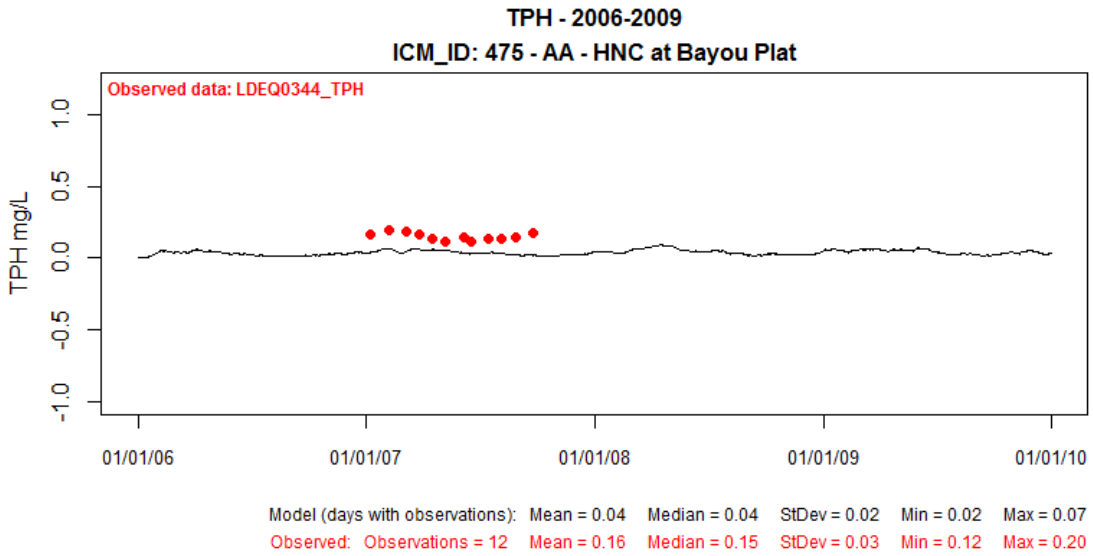

Figure 166: Modeled Total Phosphorus at ICM Compartment 475 (solid black line) Compared to Observed Data at LDEQ0344 for Validation Period 2006-2009.

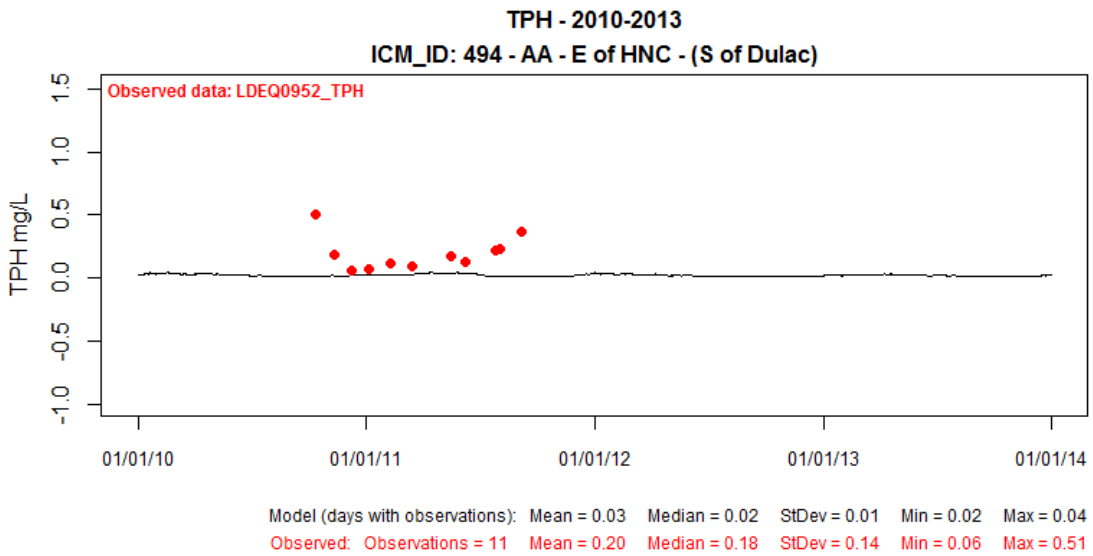

Figure 167: Modeled Total Phosphorus at ICM Compartment 494 (solid black line) Compared to Observed Data at LDEQ0952 for Calibration Period 2010-2013.

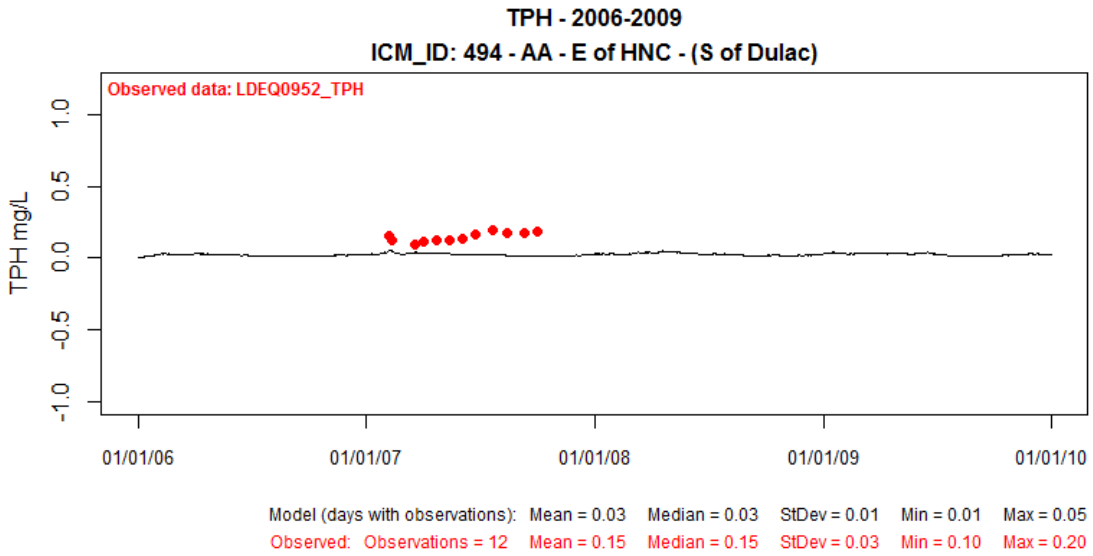

Figure 168: Modeled Total Phosphorus at ICM Compartment 494 (solid black line) Compared to Observed Data at LDEQ0952 for Validation Period 2006-2009.

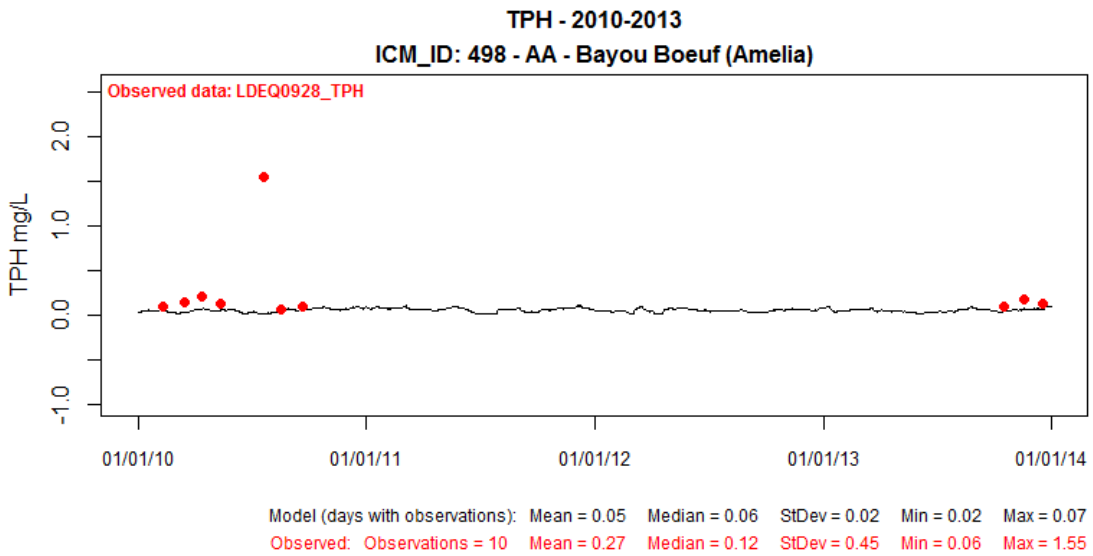

Figure 169: Modeled Total Phosphorus at ICM Compartment 498 (solid black line) Compared to Observed Data at LDEQ0928 for Calibration Period 2010-2013.

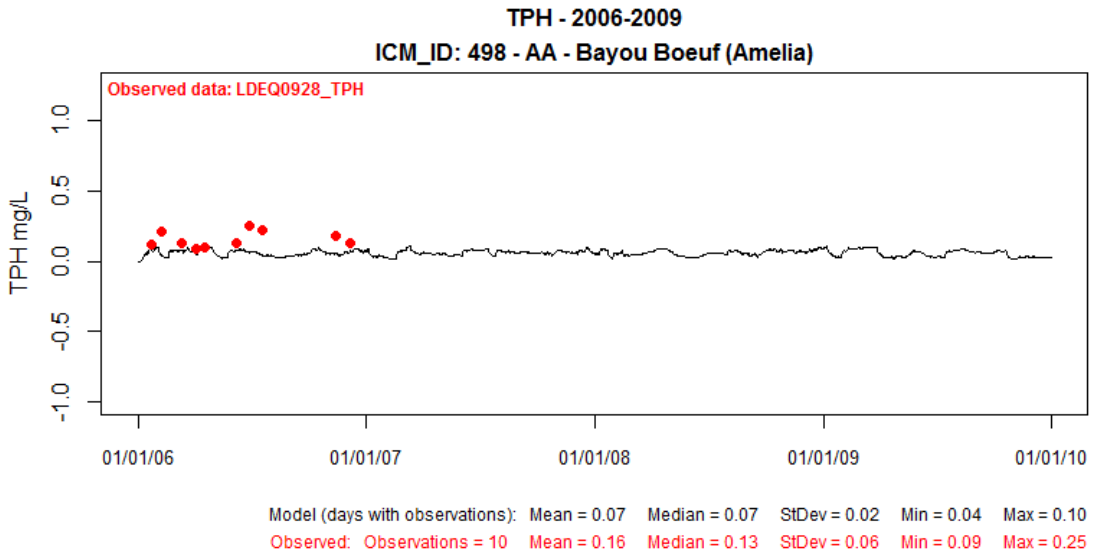

Figure 170: Modeled Total Phosphorus at ICM Compartment 498 (solid black line) Compared to Observed Data at LDEQ0928 for Validation Period 2006-2009.

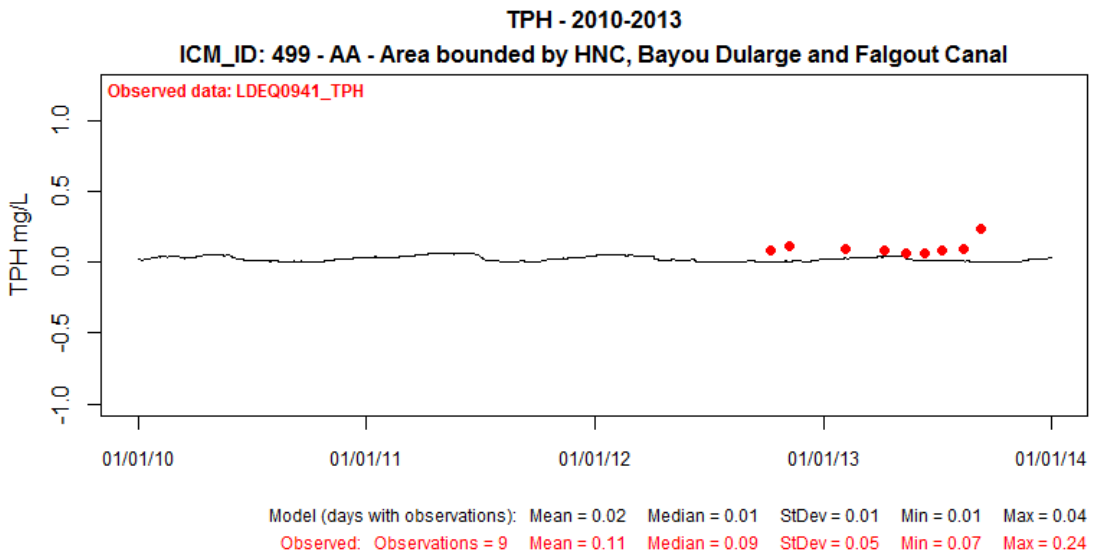

Figure 171: Modeled Total Phosphorus at ICM Compartment 499 (solid black line) Compared to Observed Data at LDEQ0941 for Calibration Period 2010-2013.

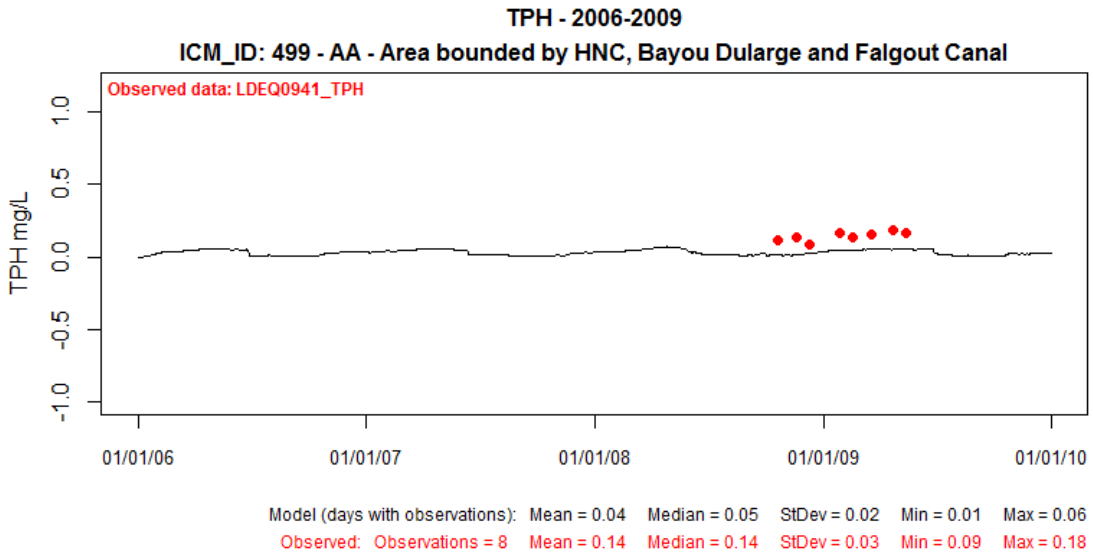

Figure 172: Modeled Total Phosphorus at ICM Compartment 499 (solid black line) Compared to Observed Data at LDEQ0941 for Validation Period 2006-2009.

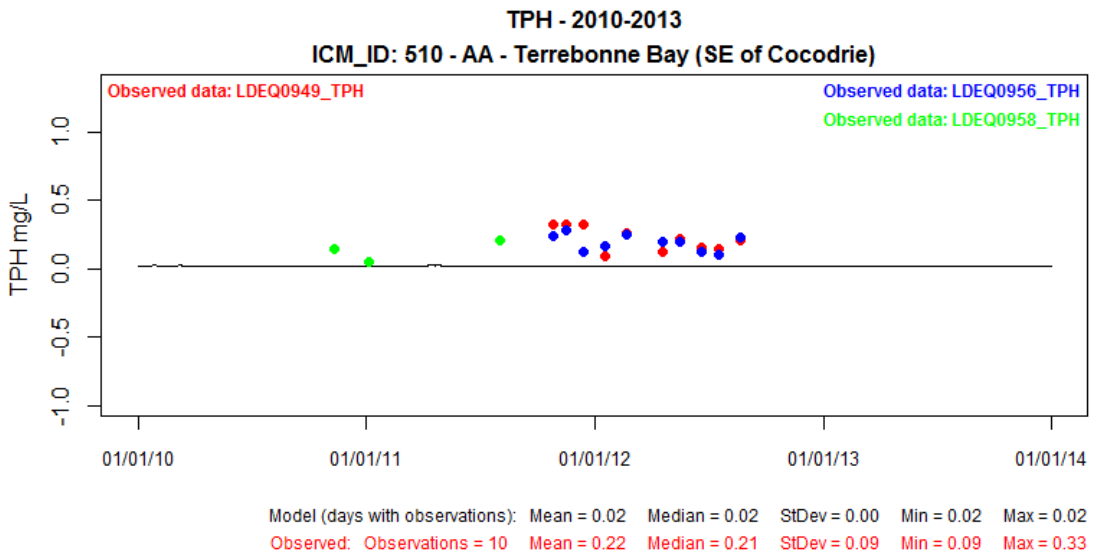

Figure 173: Modeled Total Phosphorus at ICM Compartment 510 (solid black line) Compared to Observed Data at LDEQ0949 for Calibration Period 2010-2013.

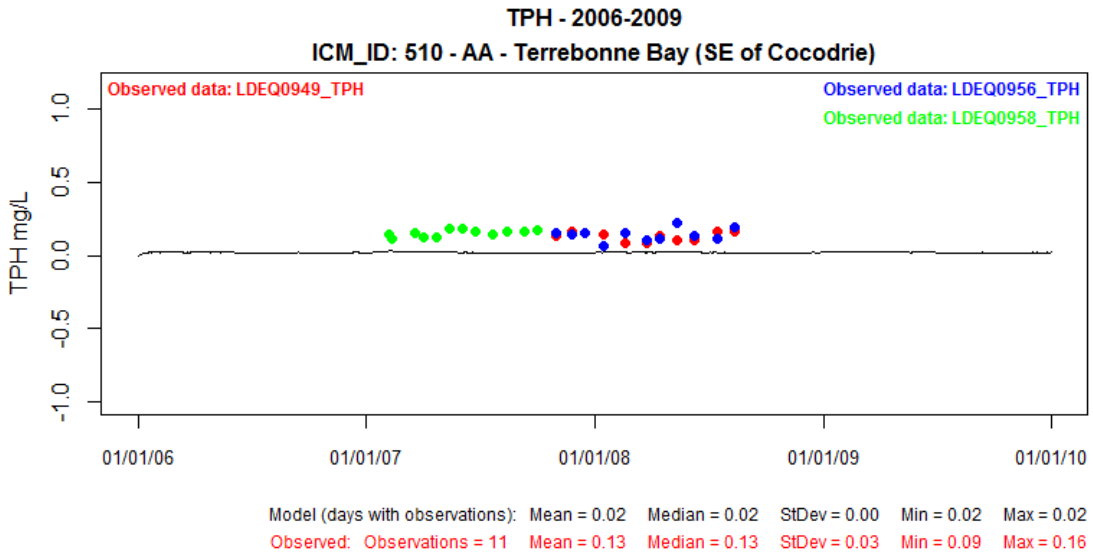

Figure 174: Modeled Total Phosphorus at ICM Compartment 510 (solid black line) Compared to Observed Data at LDEQ0949 for Validation Period 2006-2009.

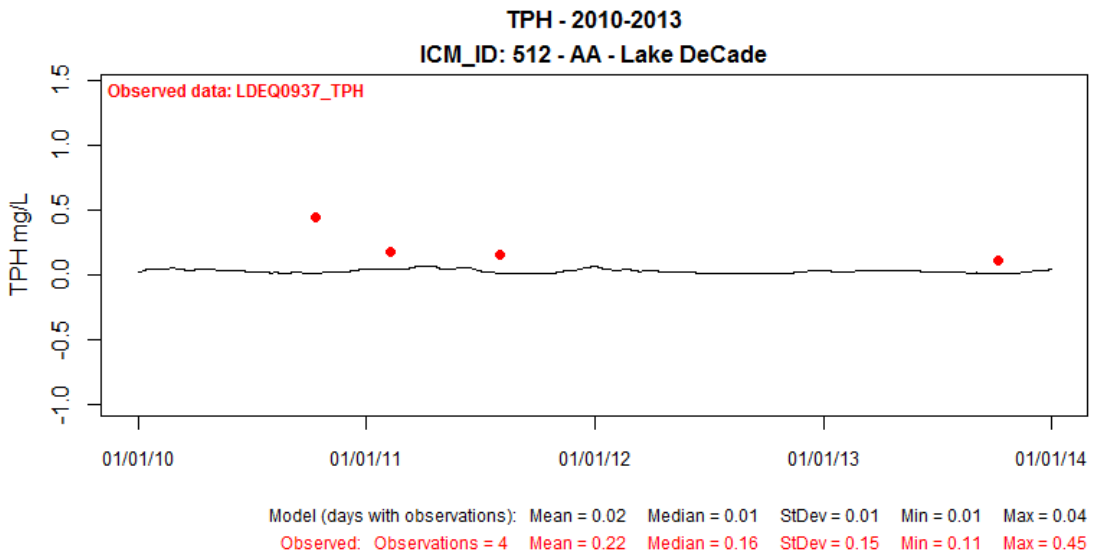

Figure 175: Modeled Total Phosphorus at ICM Compartment 512 (solid black line) Compared to Observed Data at LDEQ0937 for Calibration Period 2010-2013.

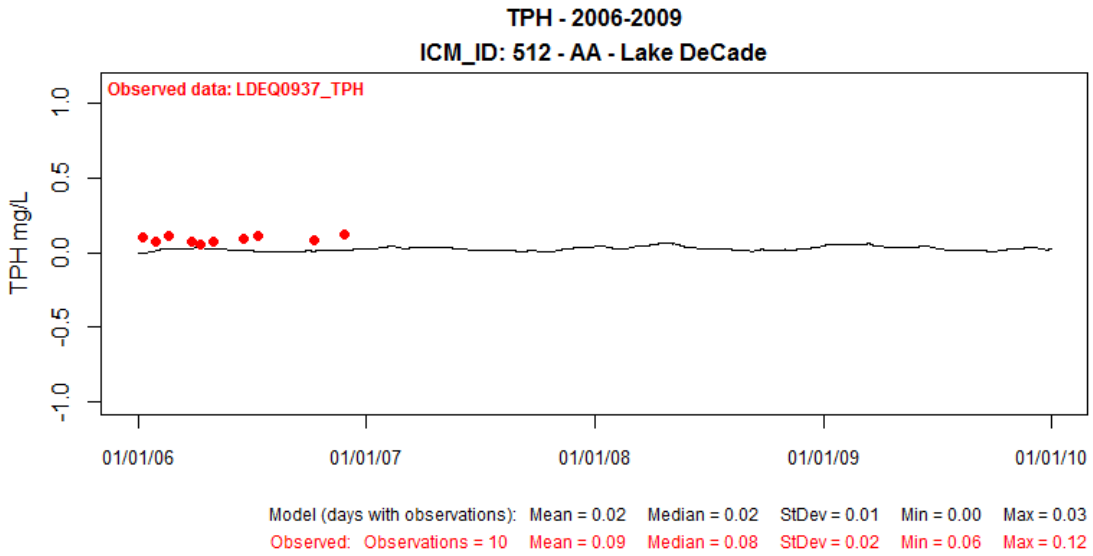

Figure 176: Modeled Total Phosphorus at ICM Compartment 512 (solid black line) Compared to Observed Data at LDEQ0937 for Validation Period 2006-2009.

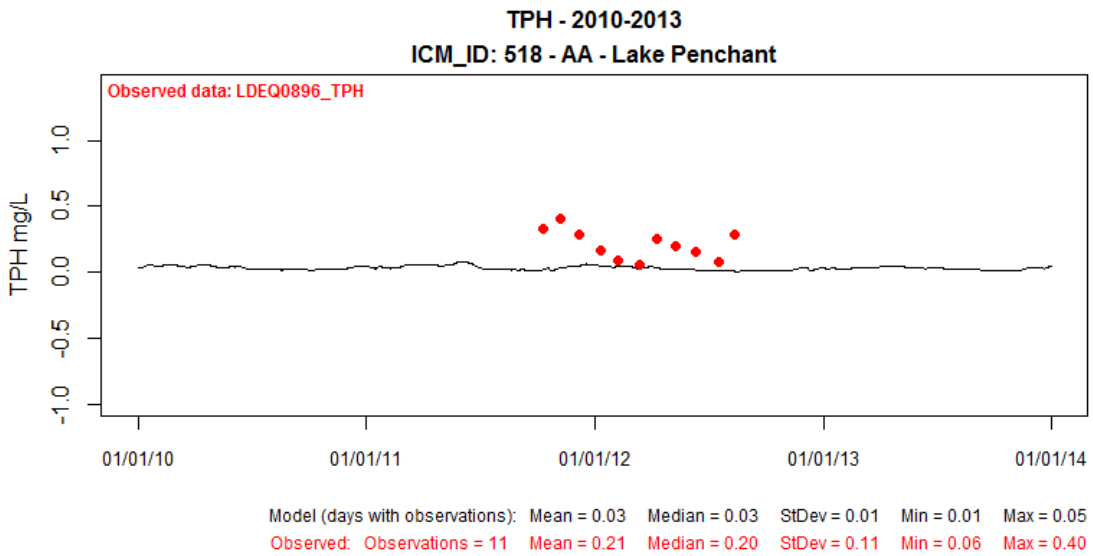

Figure 177: Modeled Total Phosphorus at ICM Compartment 518 (solid black line) Compared to Observed Data at LDEQ0896 for Calibration Period 2010-2013.

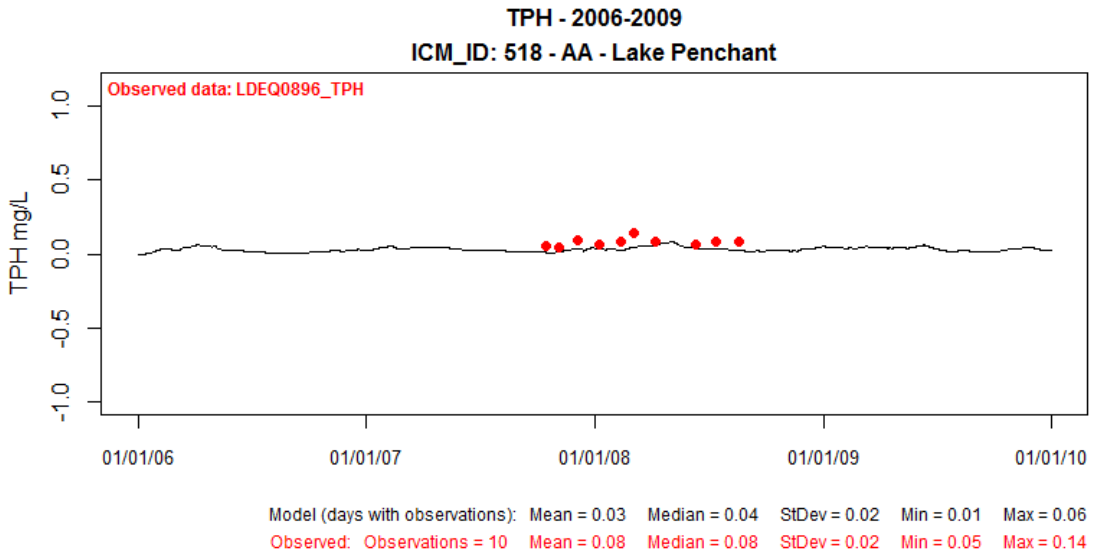

Figure 178: Modeled Total Phosphorus at ICM Compartment 518 (solid black line) Compared to Observed Data at LDEQ0896 for Validation Period 2006-2009.

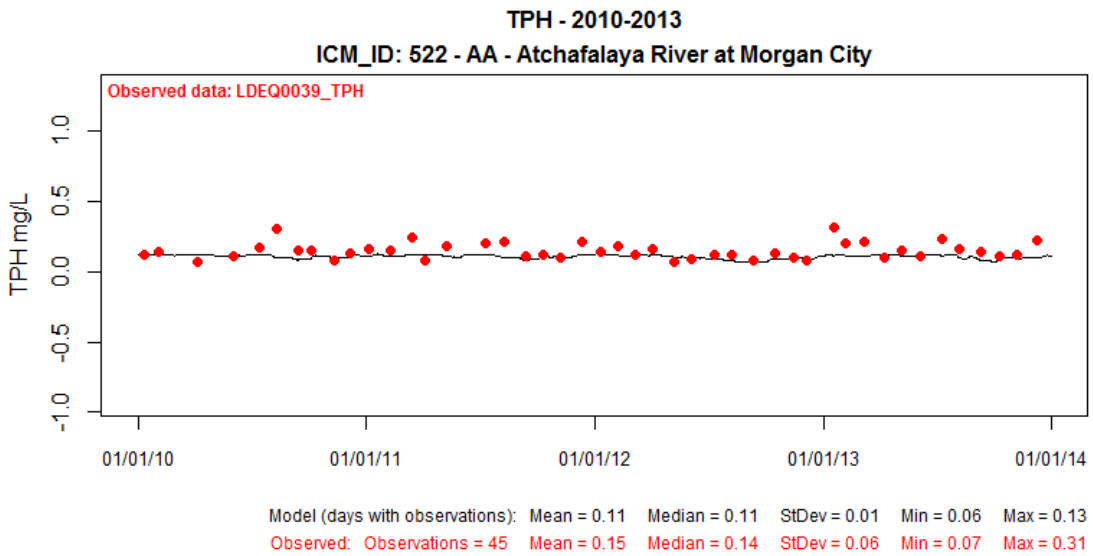

Figure 179: Modeled Total Phosphorus at ICM Compartment 522 (solid black line) Compared to Observed Data at LDEQ0039 for Calibration Period 2010-2013.

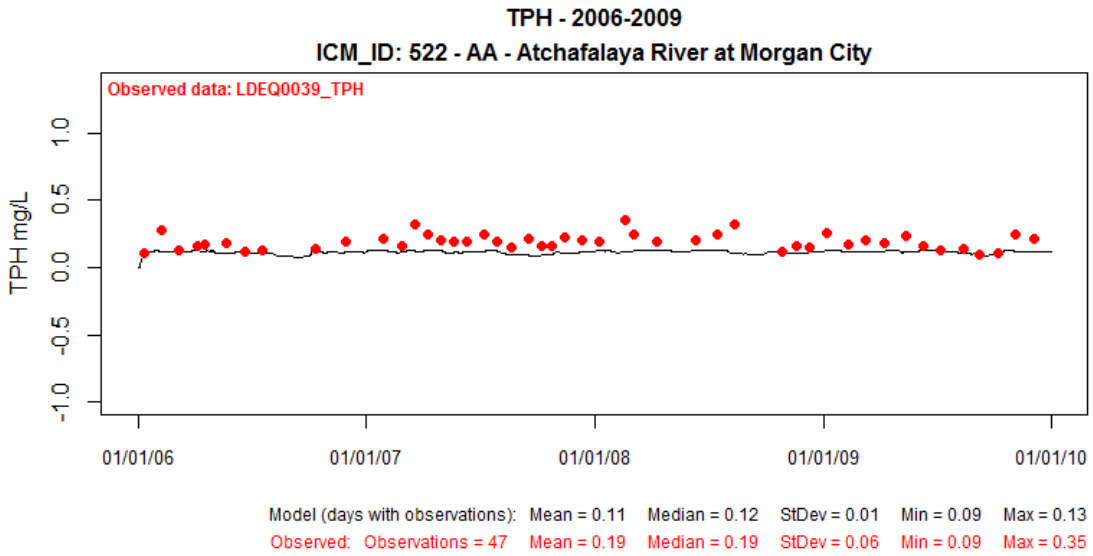

Figure 180: Modeled Total Phosphorus at ICM Compartment 522 (solid black line) Compared to Observed Data at LDEQ0039 for Validation Period 2006-2009.

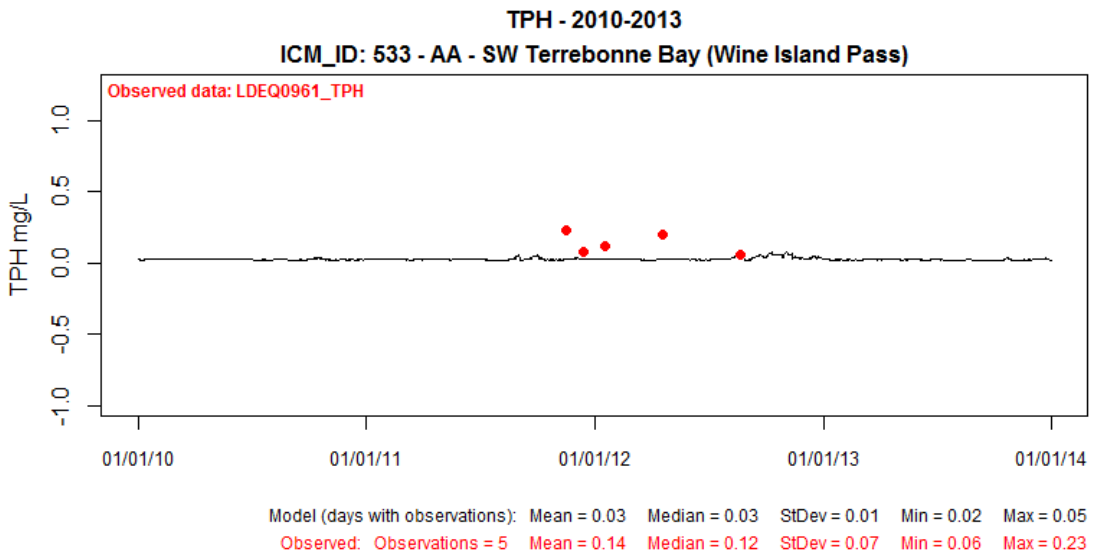

Figure 181: Modeled Total Phosphorus at ICM Compartment 533 (solid black line) Compared to Observed Data at LDEQ0961 for Calibration Period 2010-2013.

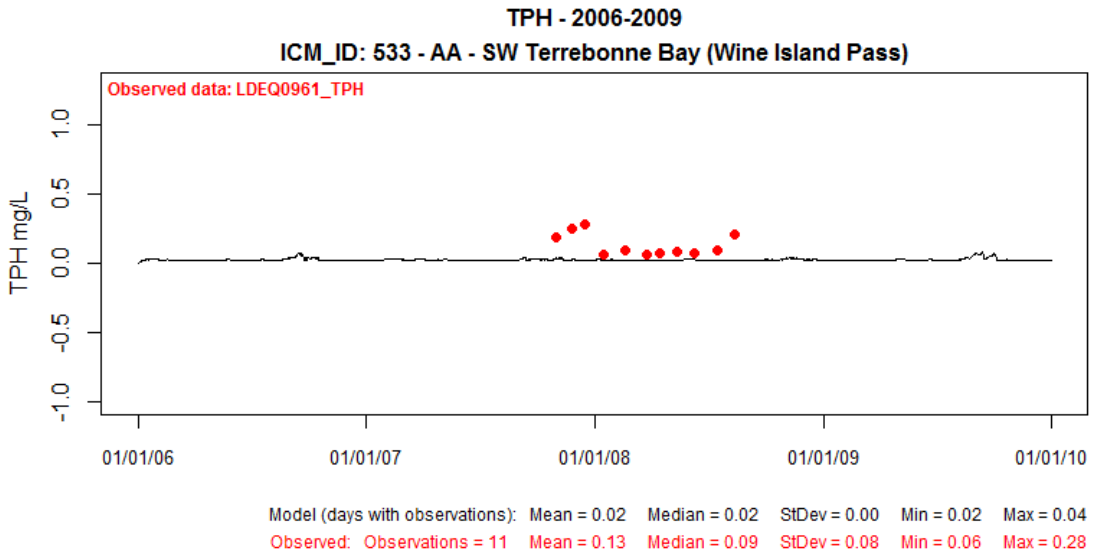

Figure 182: Modeled Total Phosphorus at ICM Compartment 533 (solid black line) Compared to Observed Data at LDEQ0961 for Validation Period 2006-2009.

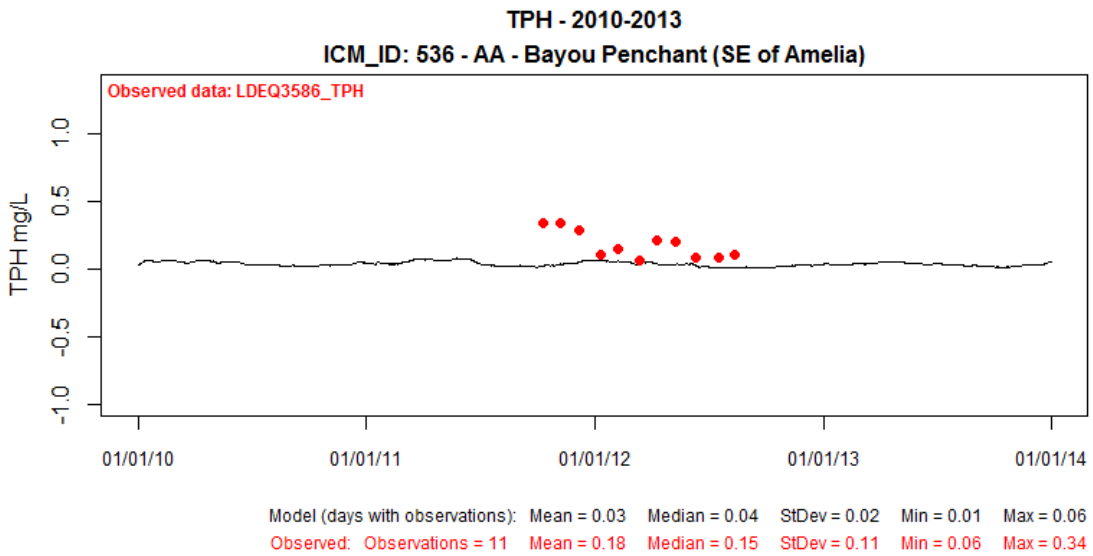

Figure 183: Modeled Total Phosphorus at ICM Compartment 536 (solid black line) Compared to Observed Data at LDEQ3586 for Calibration Period 2010-2013.

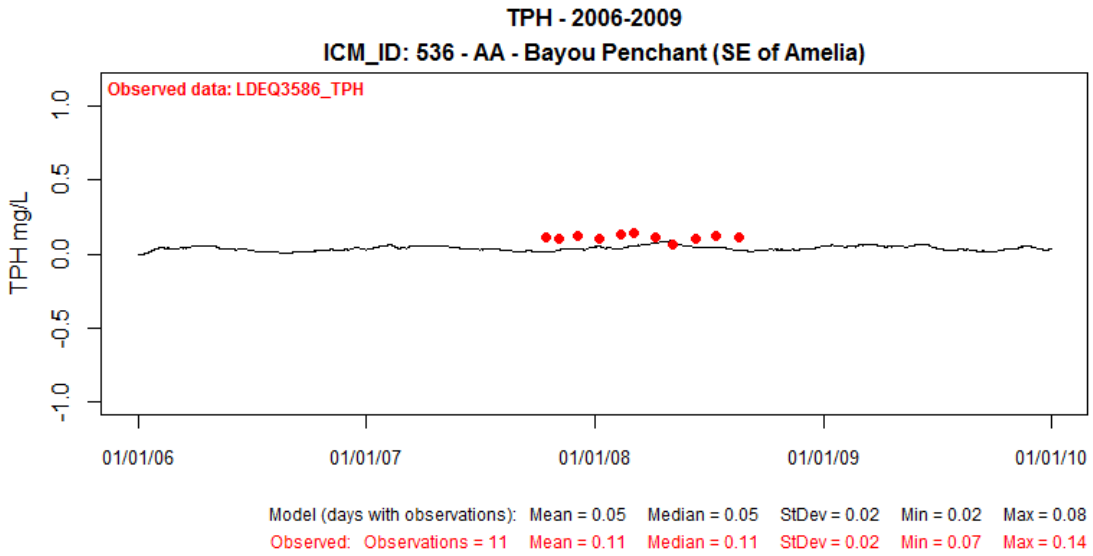

Figure 184: Modeled Total Phosphorus at ICM Compartment 536 (solid black line) Compared to Observed Data at LDEQ3586 for Validation Period 2006-2009.

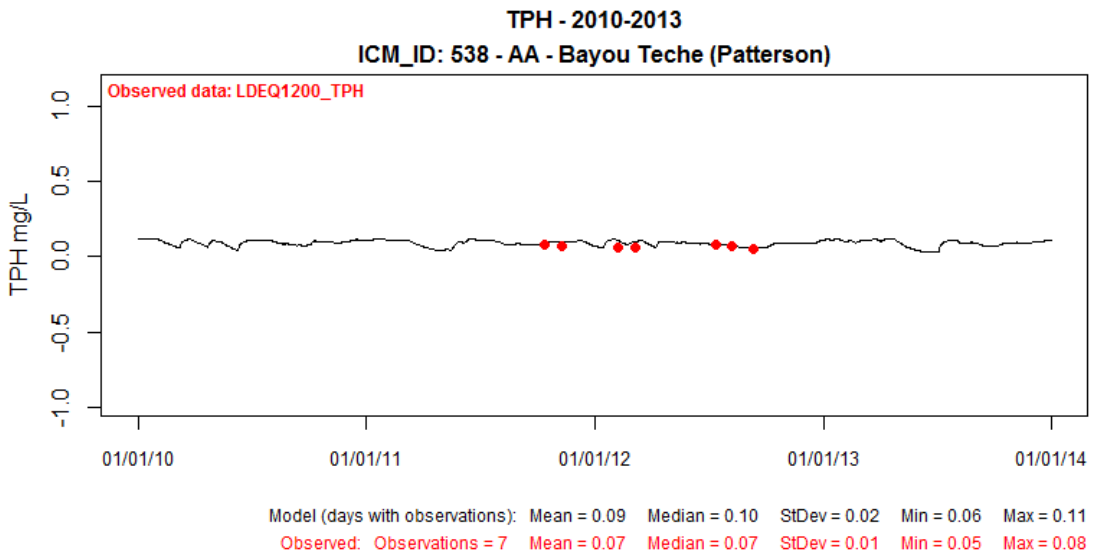

Figure 185: Modeled Total Phosphorus at ICM Compartment 538 (solid black line) Compared to Observed Data at LDEQ1200 for Calibration Period 2010-2013.

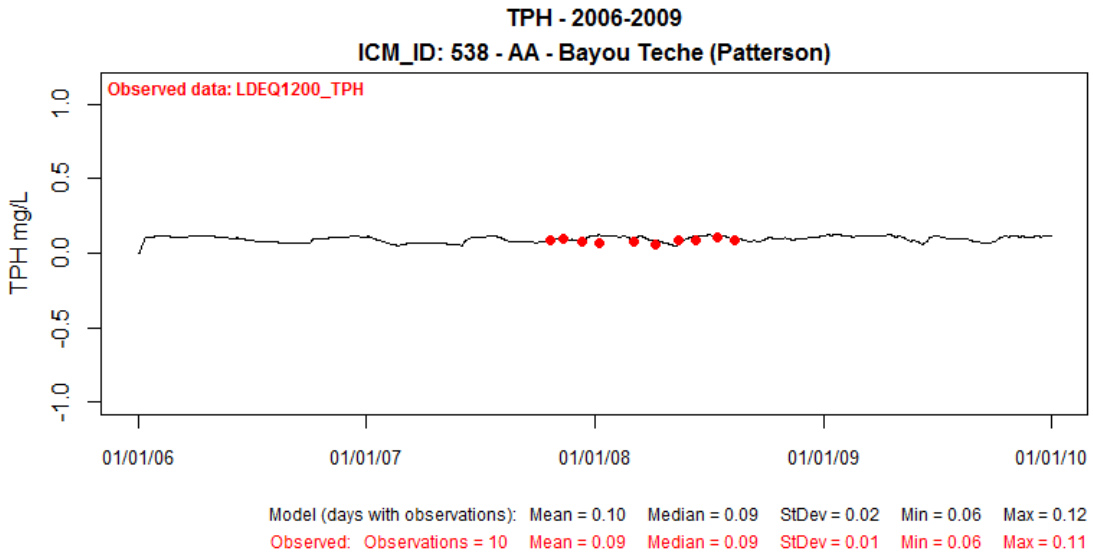

Figure 186: Modeled Total Phosphorus at ICM Compartment 538 (solid black line) Compared to Observed Data at LDEQ1200 for Validation Period 2006-2009.

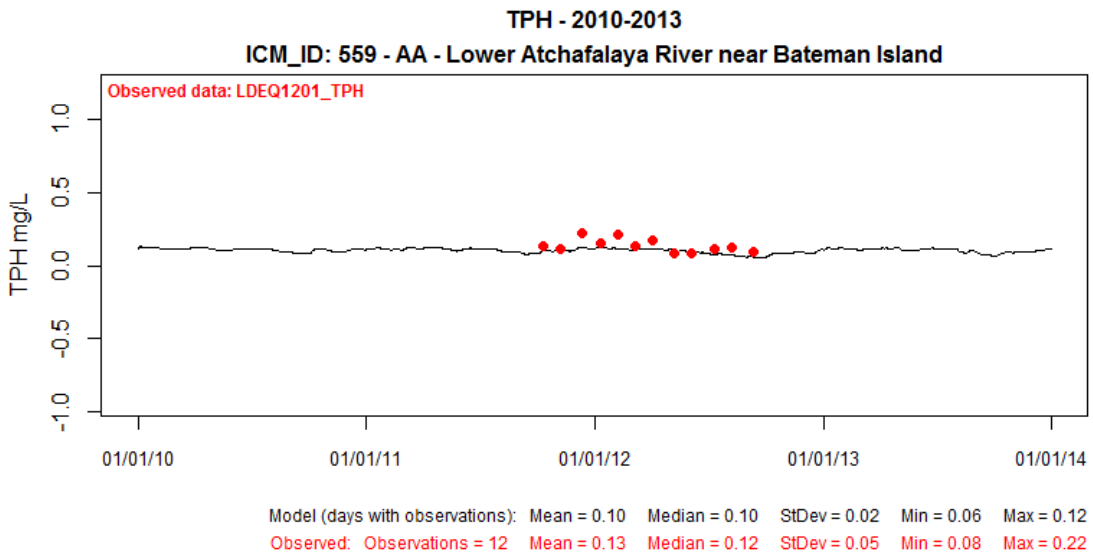

Figure 187: Modeled Total Phosphorus at ICM Compartment 559 (solid black line) Compared to Observed Data at LDEQ1201 for Calibration Period 2010-2013.

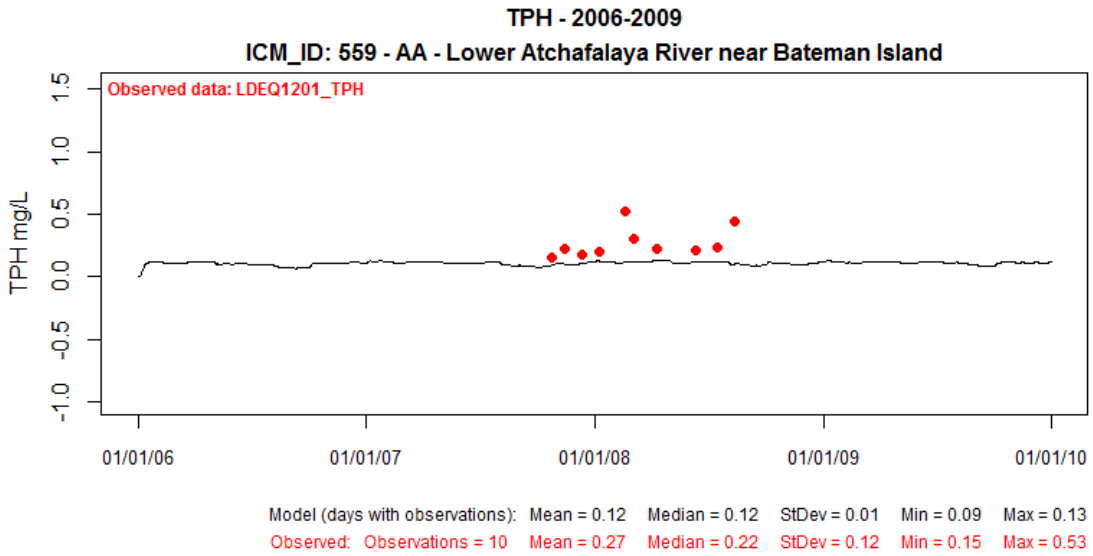

Figure 188: Modeled Total Phosphorus at ICM Compartment 559 (solid black line) Compared to Observed Data at LDEQ1201 for Validation Period 2006-2009.

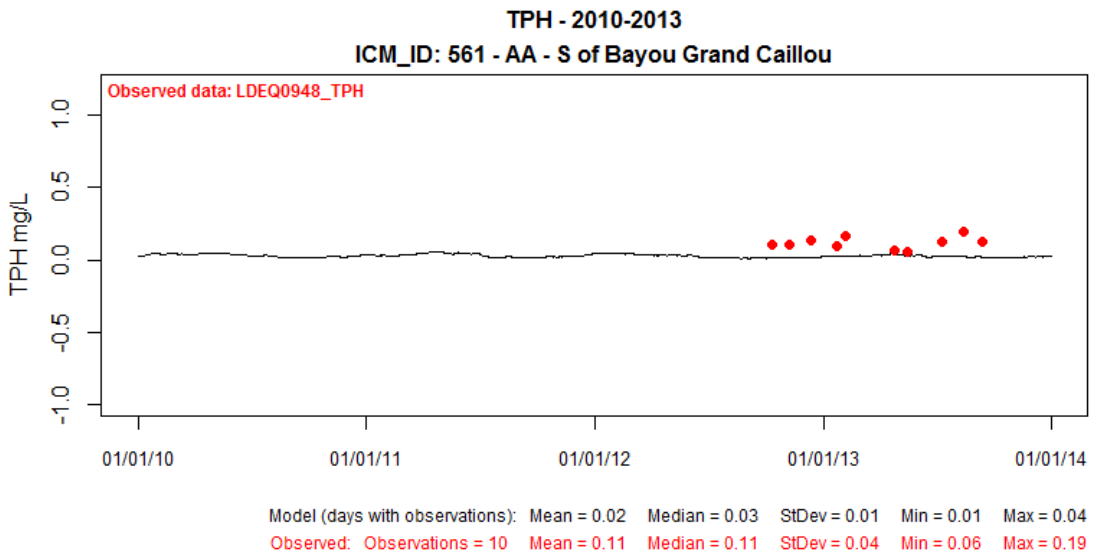

Figure 189: Modeled Total Phosphorus at ICM Compartment 561 (solid black line) Compared to Observed Data at LDEQ0948 for Calibration Period 2010-2013.

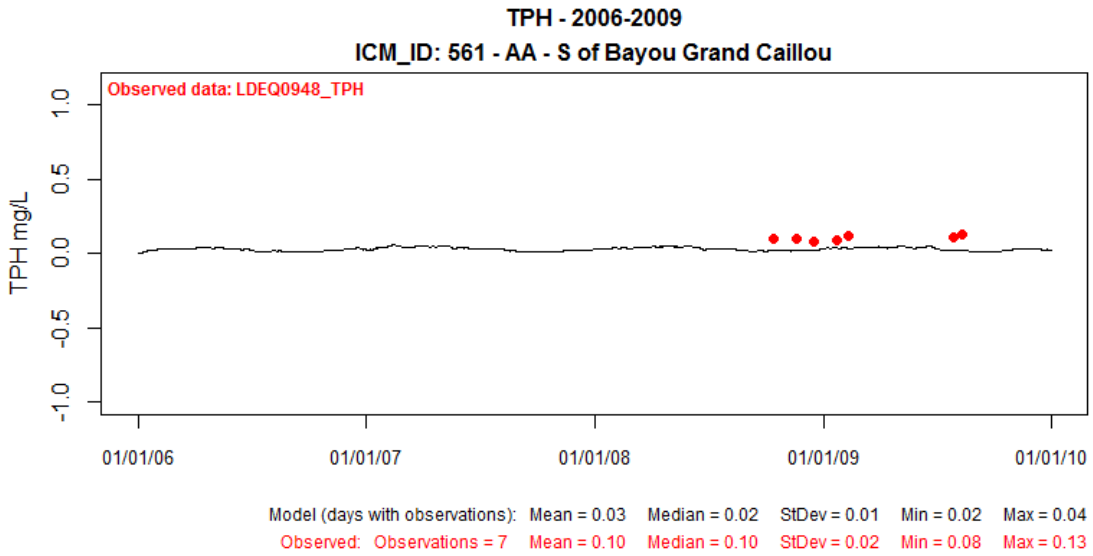

Figure 190: Modeled Total Phosphorus at ICM Compartment 561 (solid black line) Compared to Observed Data at LDEQ0948 for Validation Period 2006-2009.

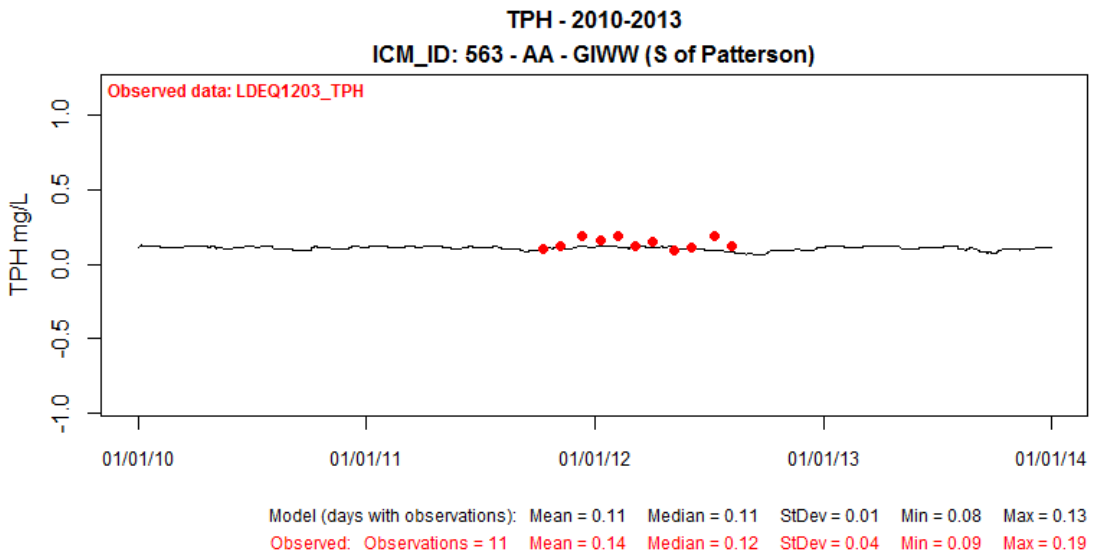

Figure 191: Modeled Total Phosphorus at ICM Compartment 563 (solid black line) Compared to Observed Data at LDEQ1203 for Calibration Period 2010-2013.

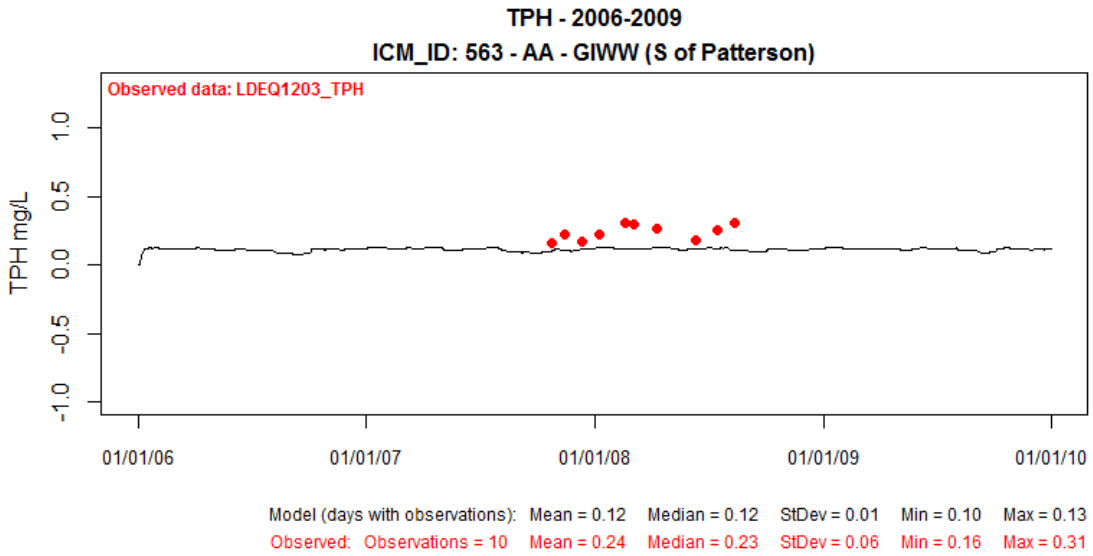

Figure 192: Modeled Total Phosphorus at ICM Compartment 563 (solid black line) Compared to Observed Data at LDEQ1203 for Validation Period 2006-2009.

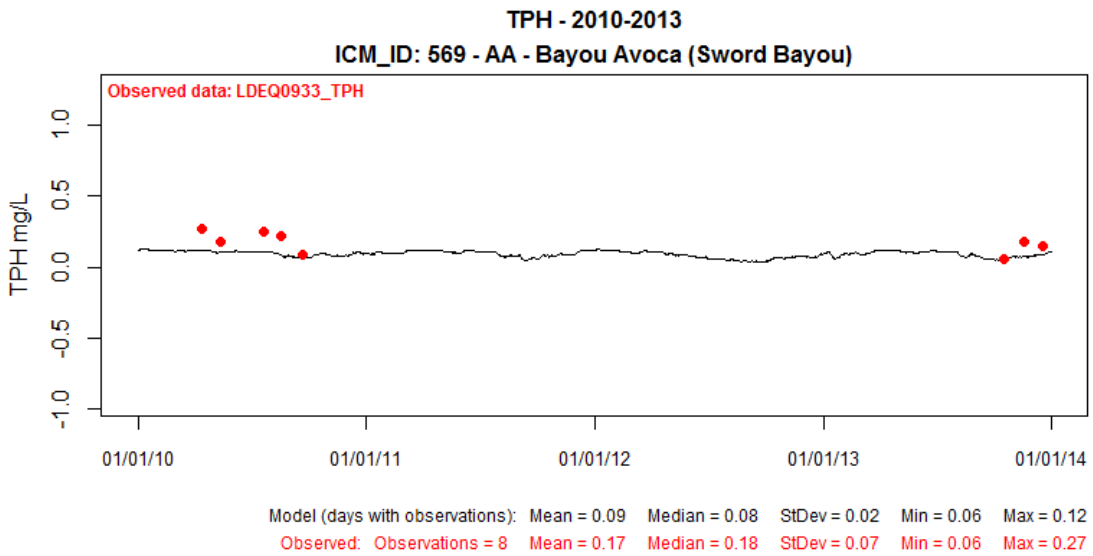

Figure 193: Modeled Total Phosphorus at ICM Compartment 569 (solid black line) Compared to Observed Data at LDEQ0933 for Calibration Period 2010-2013.

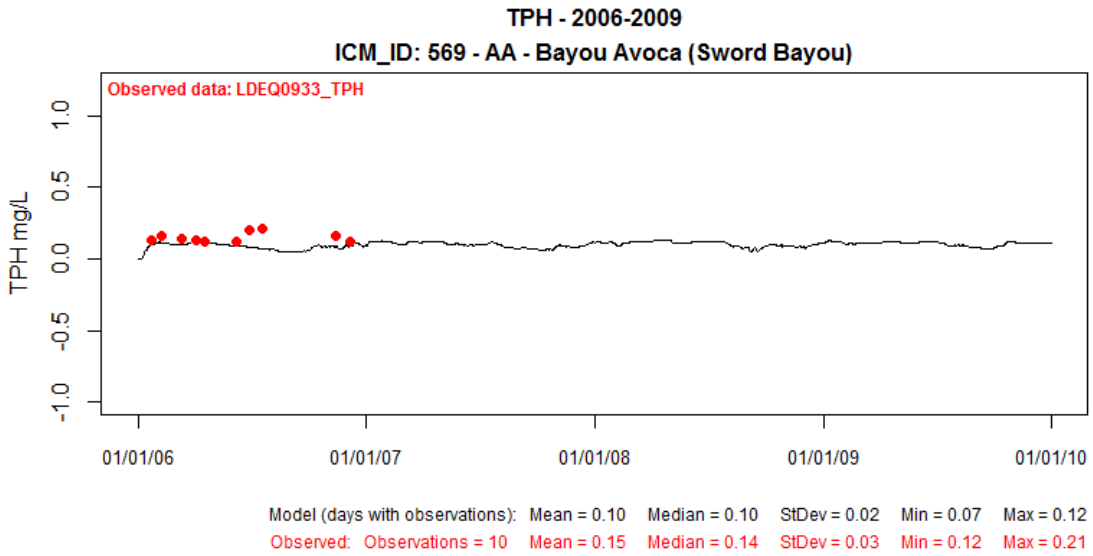

Figure 194: Modeled Total Phosphorus at ICM Compartment 569 (solid black line) Compared to Observed Data at LDEQ0933 for Validation Period 2006-2009.

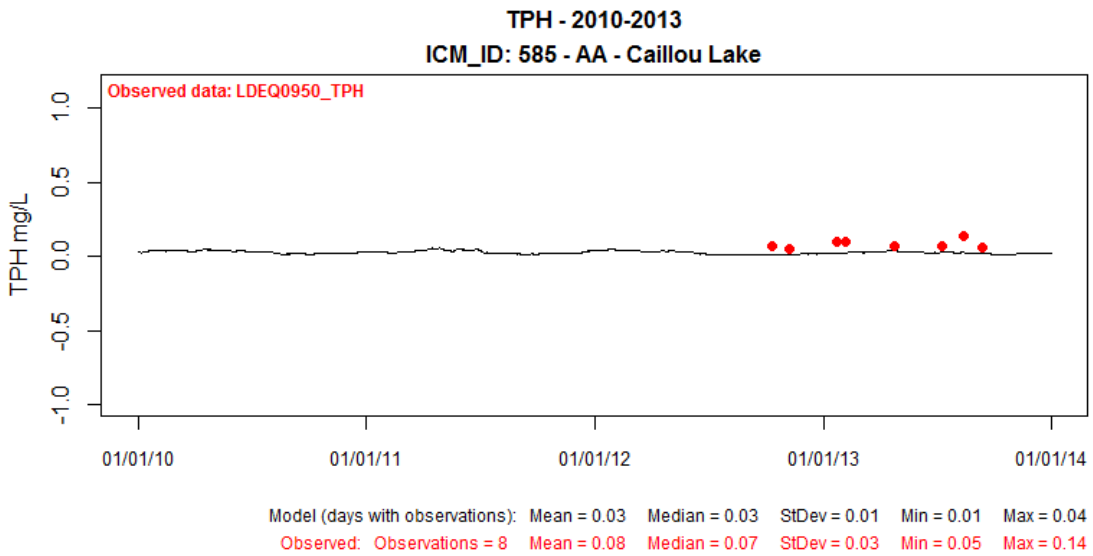

Figure 195: Modeled Total Phosphorus at ICM Compartment 585 (solid black line) Compared to Observed Data at LDEQ0950 for Calibration Period 2010-2013.

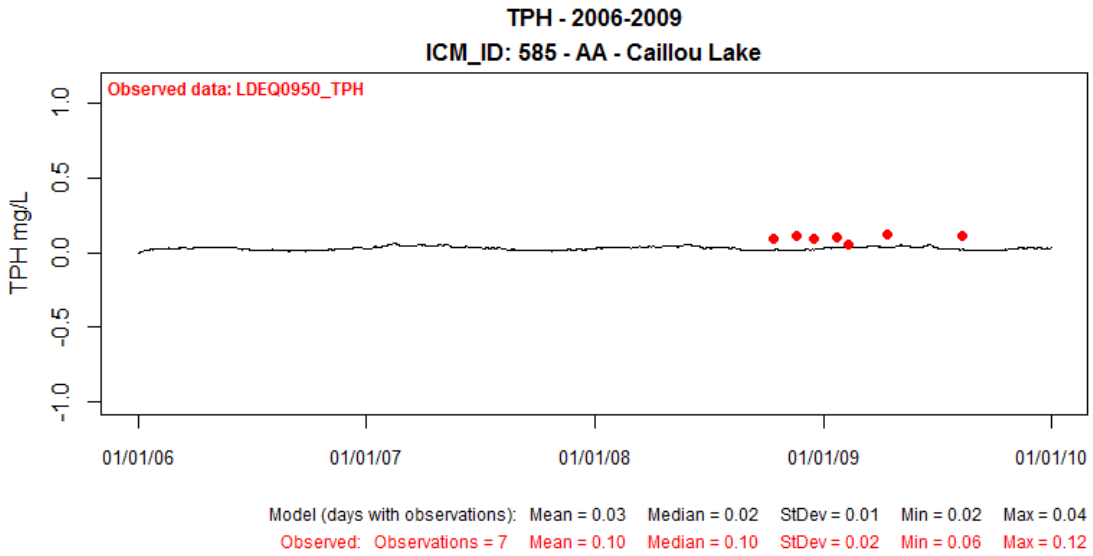

Figure 196: Modeled Total Phosphorus at ICM Compartment 585 (solid black line) Compared to Observed Data at LDEQ0950 for Validation Period 2006-2009.

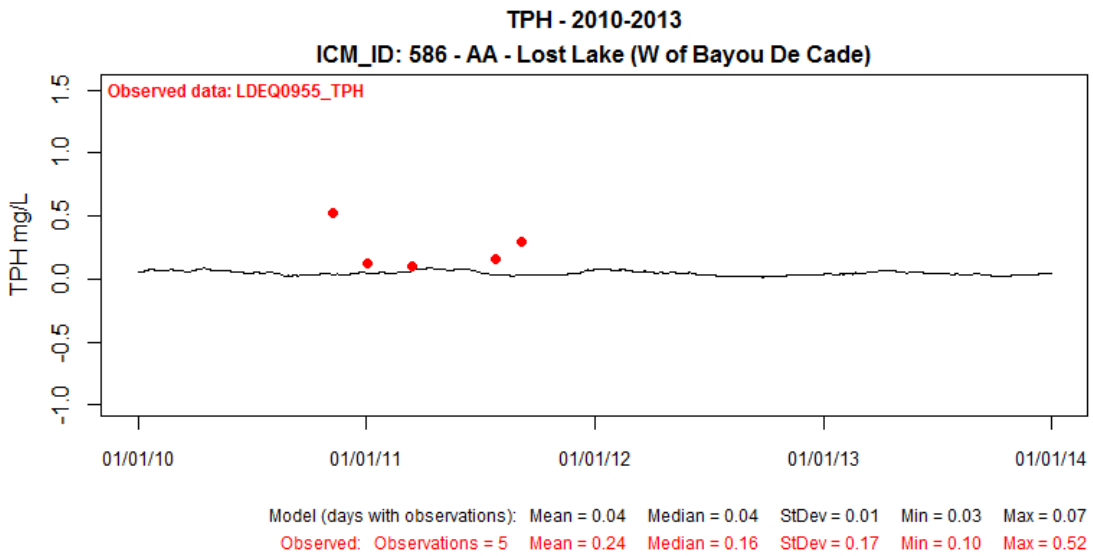

Figure 197: Modeled Total Phosphorus at ICM Compartment 586 (solid black line) Compared to Observed Data at LDEQ0955 for Calibration Period 2010-2013.

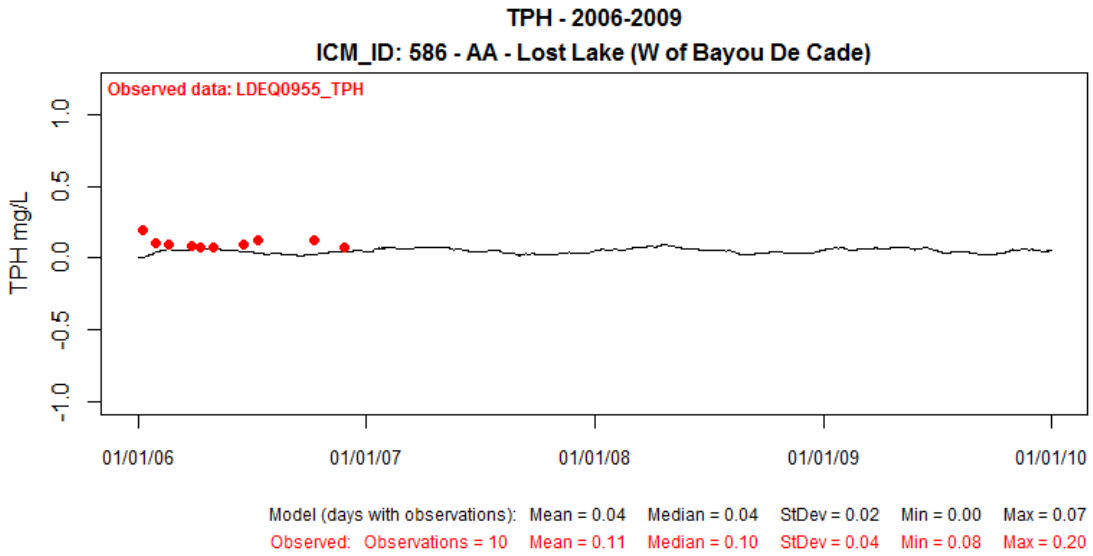

Figure 198: Modeled Total Phosphorus at ICM Compartment 586 (solid black line) Compared to Observed Data at LDEQ0955 for Validation Period 2006-2009.

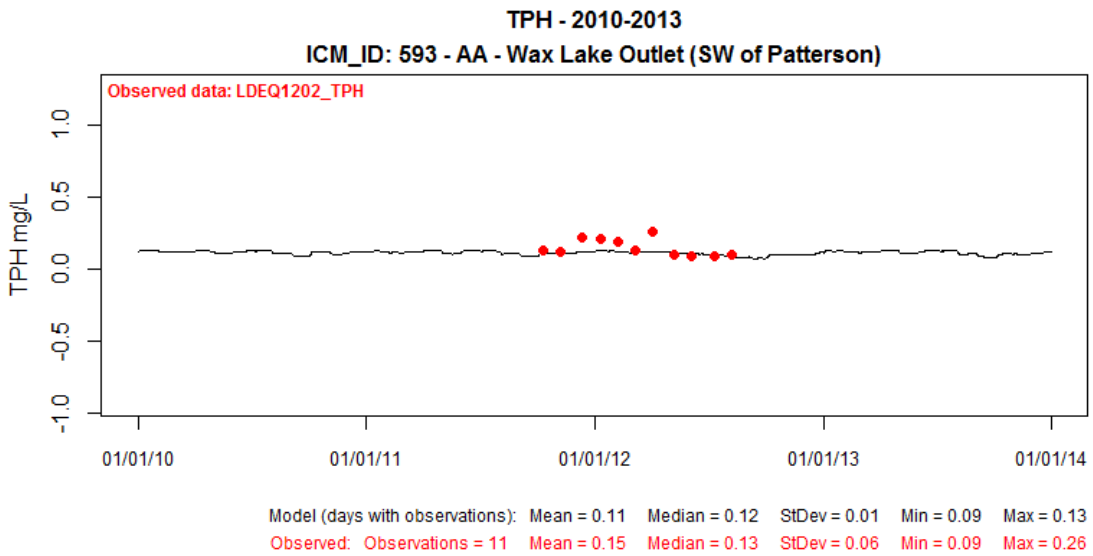

Figure 199: Modeled Total Phosphorus at ICM Compartment 593 (solid black line) Compared to Observed Data at LDEQ1202 for Calibration Period 2010-2013.

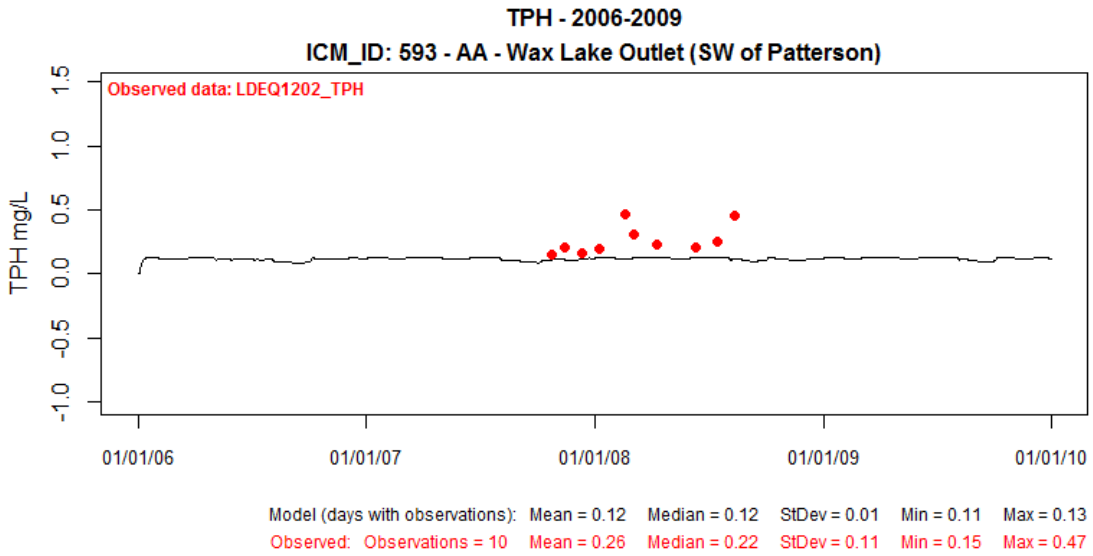

Figure 200: Modeled Total Phosphorus at ICM Compartment 593 (solid black line) Compared to Observed Data at LDEQ1202 for Validation Period 2006-2009.

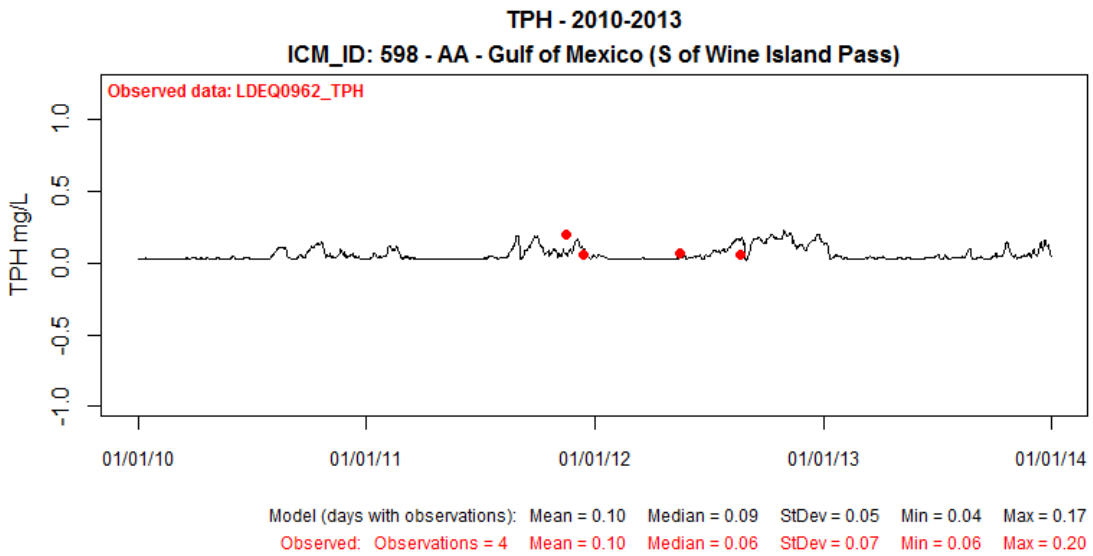

Figure 201: Modeled Total Phosphorus at ICM Compartment 598 (solid black line) Compared to Observed Data at LDEQ0962 for Calibration Period 2010-2013.

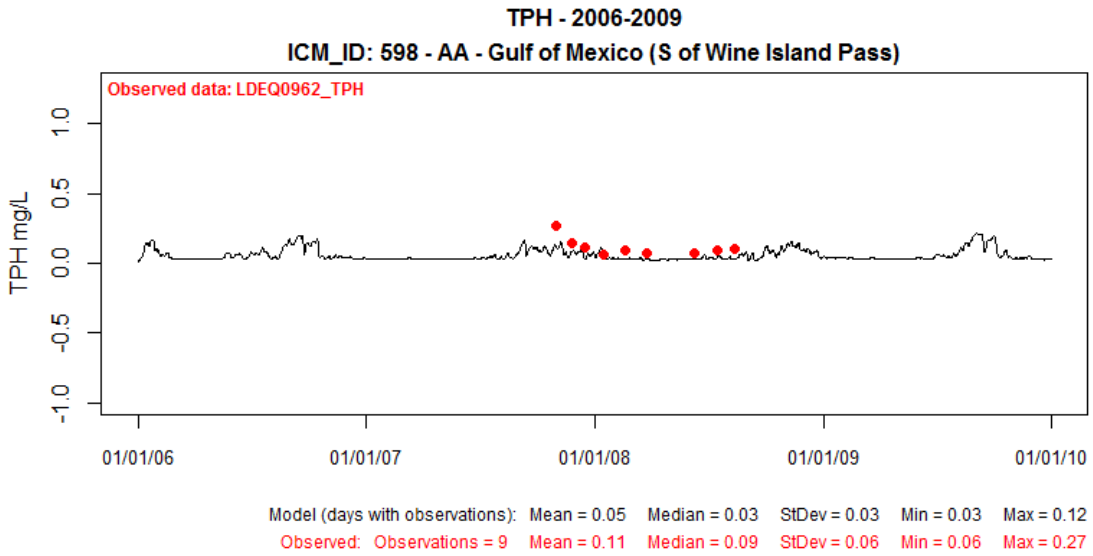

Figure 202: Modeled Total Phosphorus at ICM Compartment 598 (solid black line) Compared to Observed Data at LDEQ0962 for Validation Period 2006-2009.

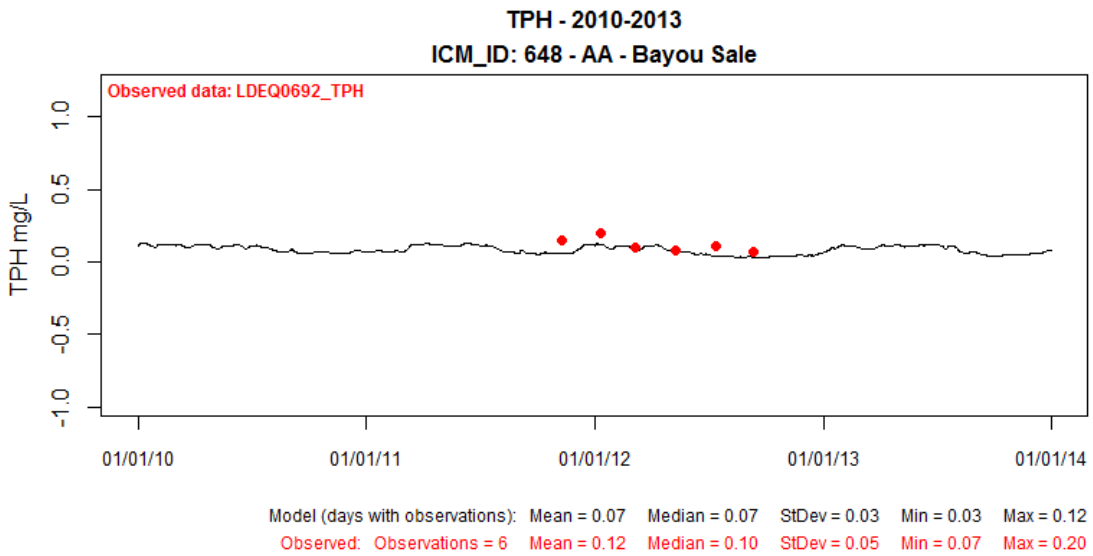

Figure 203: Modeled Total Phosphorus at ICM Compartment 648 (solid black line) Compared to Observed Data at LDEQ0692 for Calibration Period 2010-2013.

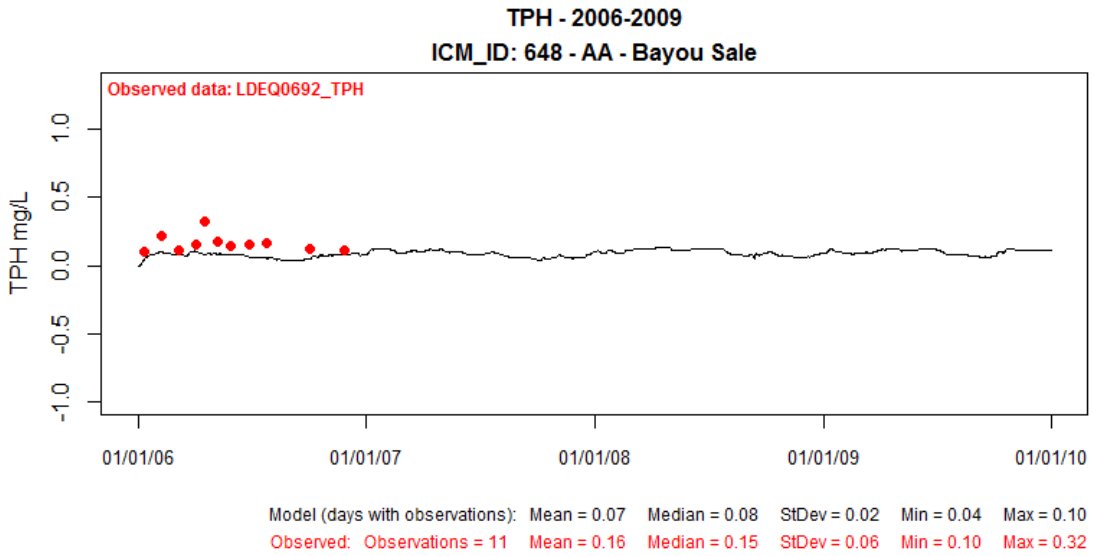

Figure 204: Modeled Total Phosphorus at ICM Compartment 648 (solid black line) Compared to Observed Data at LDEQ0692 for Validation Period 2006-2009.

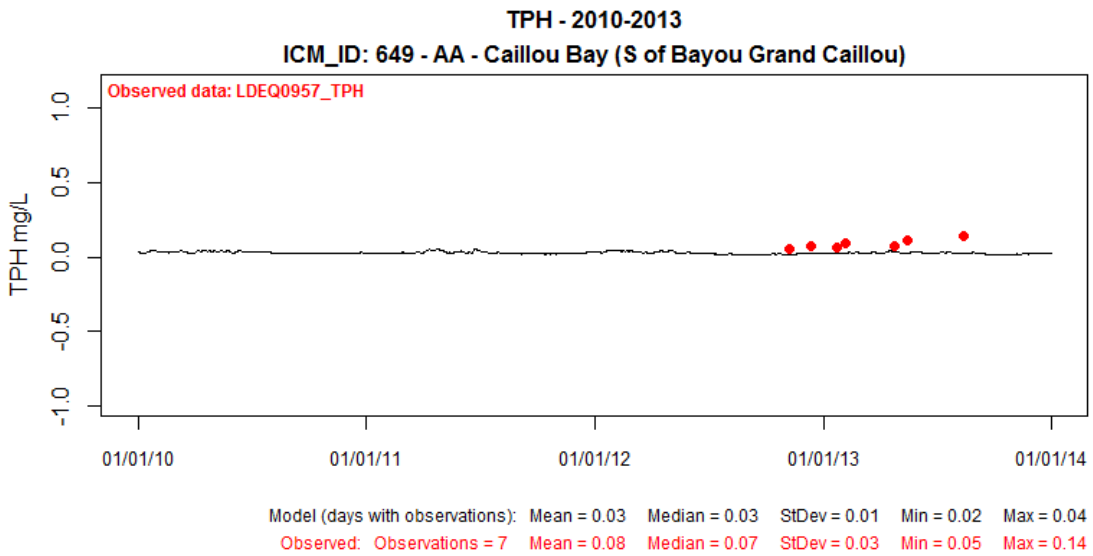

Figure 205: Modeled Total Phosphorus at ICM Compartment 649 (solid black line) Compared to Observed Data at LDEQ0957 for Calibration Period 2010-2013.

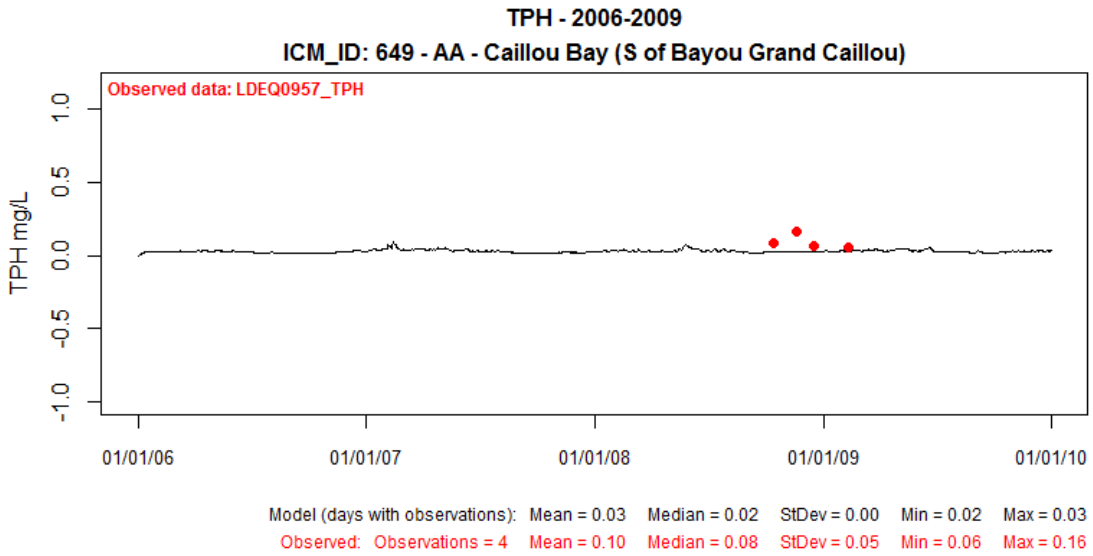

Figure 206: Modeled Total Phosphorus at ICM Compartment 649 (solid black line) Compared to Observed Data at LDEQ0957 for Validation Period 2006-2009.

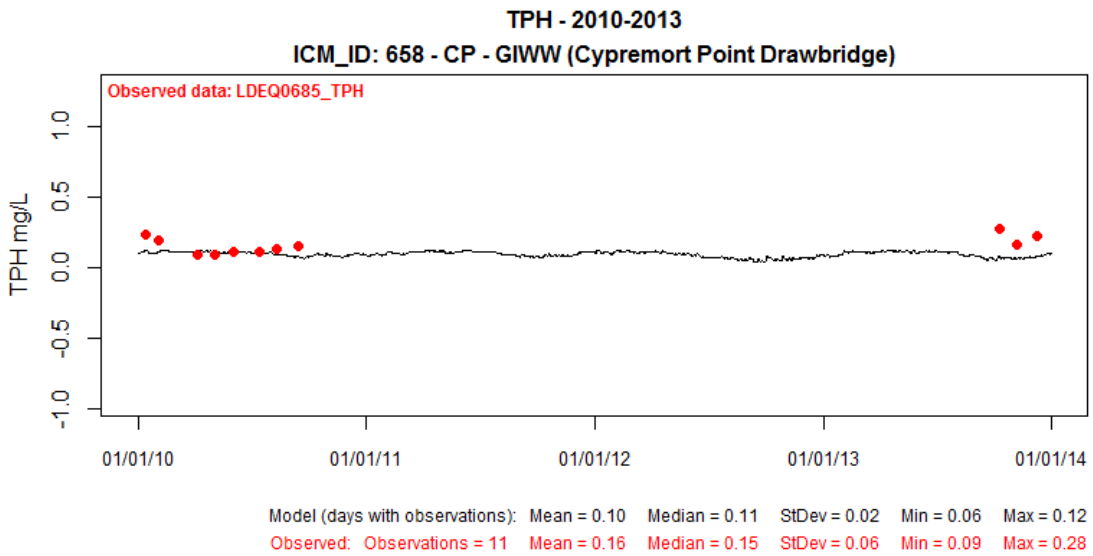

Figure 207: Modeled Total Phosphorus at ICM Compartment 658 (solid black line) Compared to Observed Data at LDEQ0685 for Calibration Period 2010-2013.

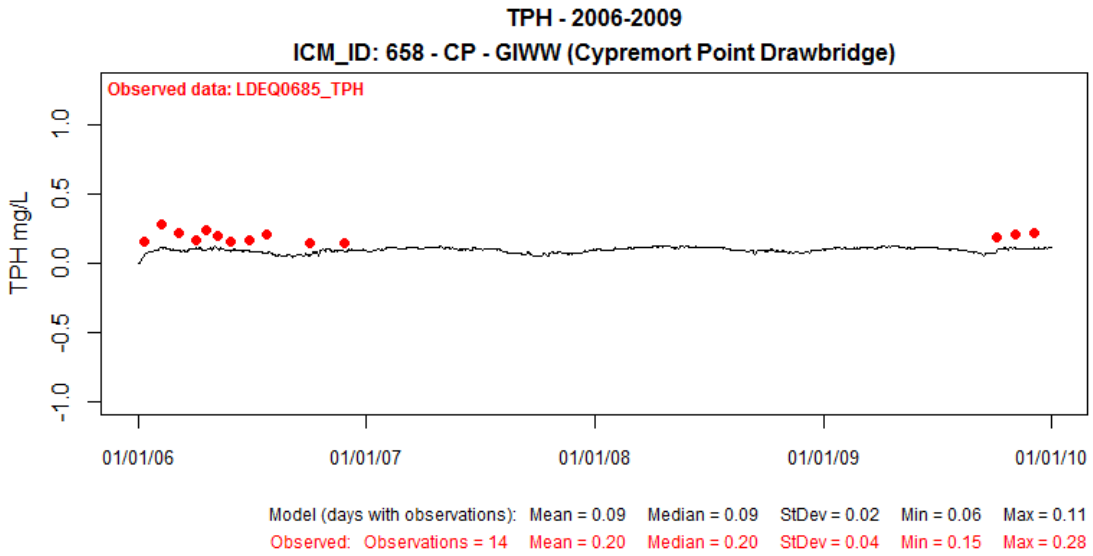

Figure 208: Modeled Total Phosphorus at ICM Compartment 658 (solid black line) Compared to Observed Data at LDEQ0685 for Validation Period 2006-2009.

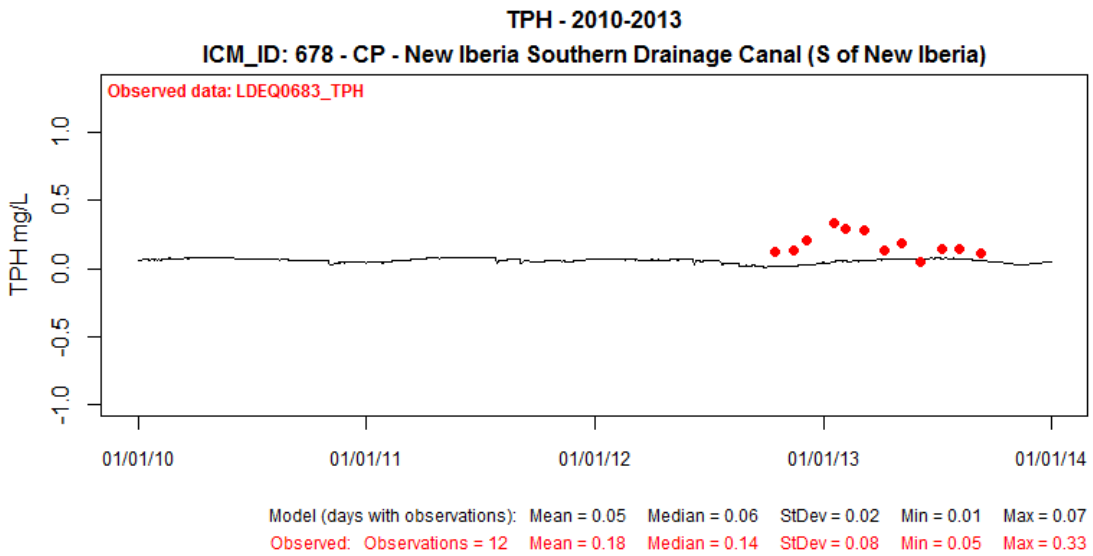

Figure 209: Modeled Total Phosphorus at ICM Compartment 678 (solid black line) Compared to Observed Data at LDEQ0683 for Calibration Period 2010-2013.

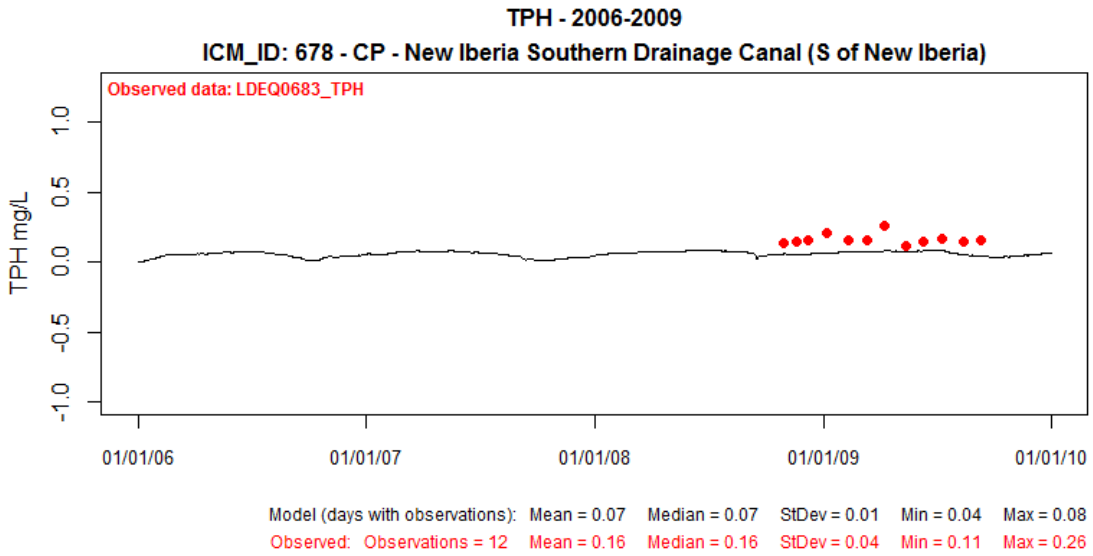

Figure 210: Modeled Total Phosphorus at ICM Compartment 678 (solid black line) Compared to Observed Data at LDEQ0683 for Validation Period 2006-2009.

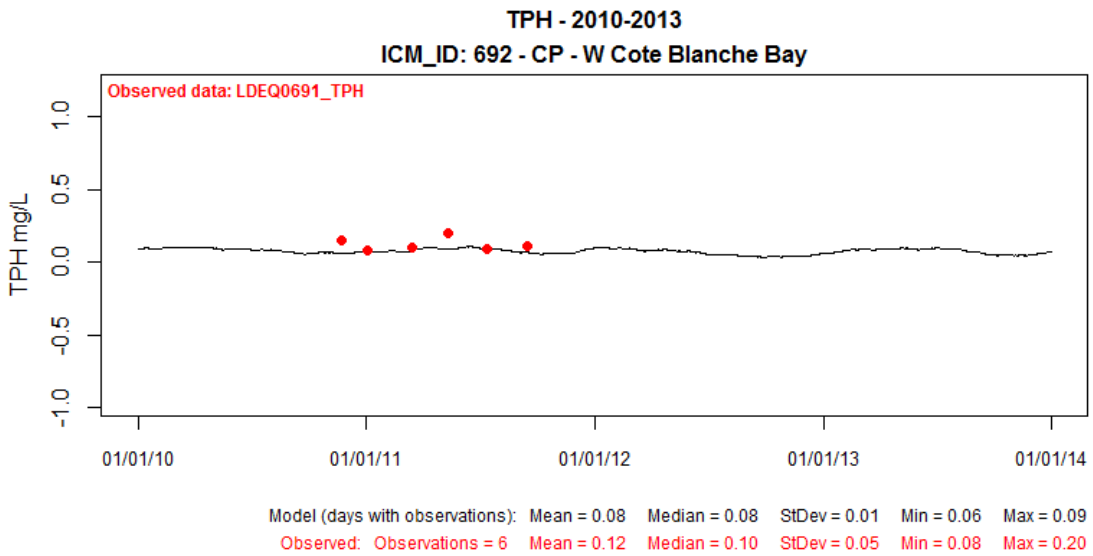

Figure 211: Modeled Total Phosphorus at ICM Compartment 692 (solid black line) Compared to Observed Data at LDEQ0691 for Calibration Period 2010-2013.

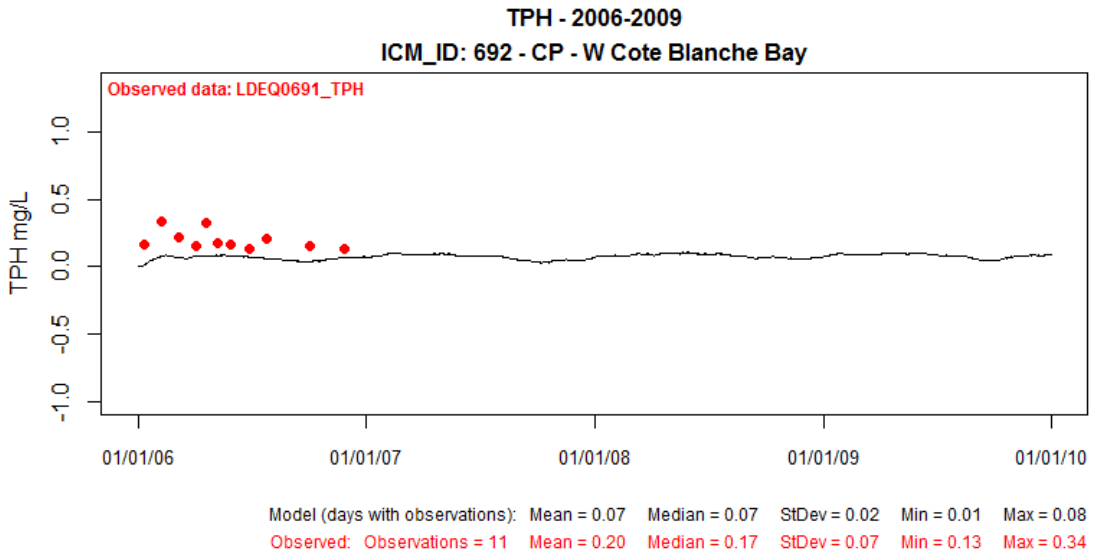

Figure 212: Modeled Total Phosphorus at ICM Compartment 692 (solid black line) Compared to Observed Data at LDEQ0691 for Validation Period 2006-2009.

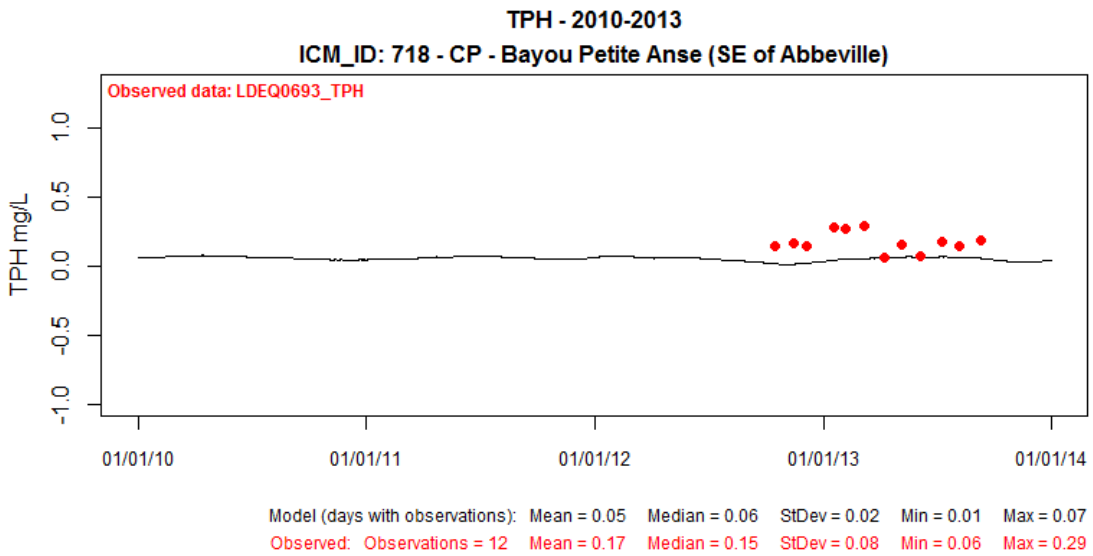

Figure 213: Modeled Total Phosphorus at ICM Compartment 718 (solid black line) Compared to Observed Data at LDEQ0693 for Calibration Period 2010-2013.

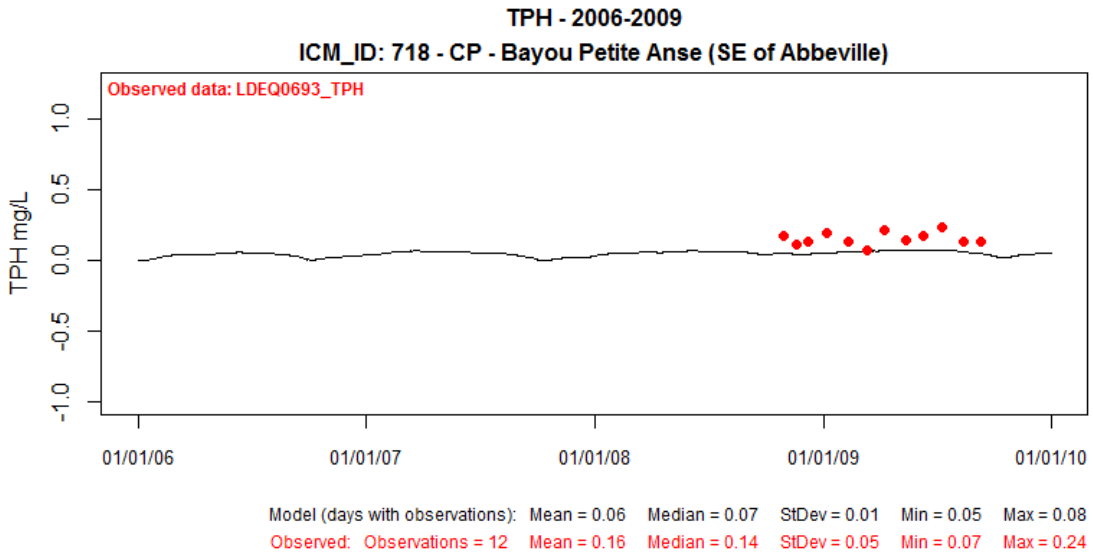

Figure 214: Modeled Total Phosphorus at ICM Compartment 718 (solid black line) Compared to Observed Data at LDEQ0693 for Validation Period 2006-2009.

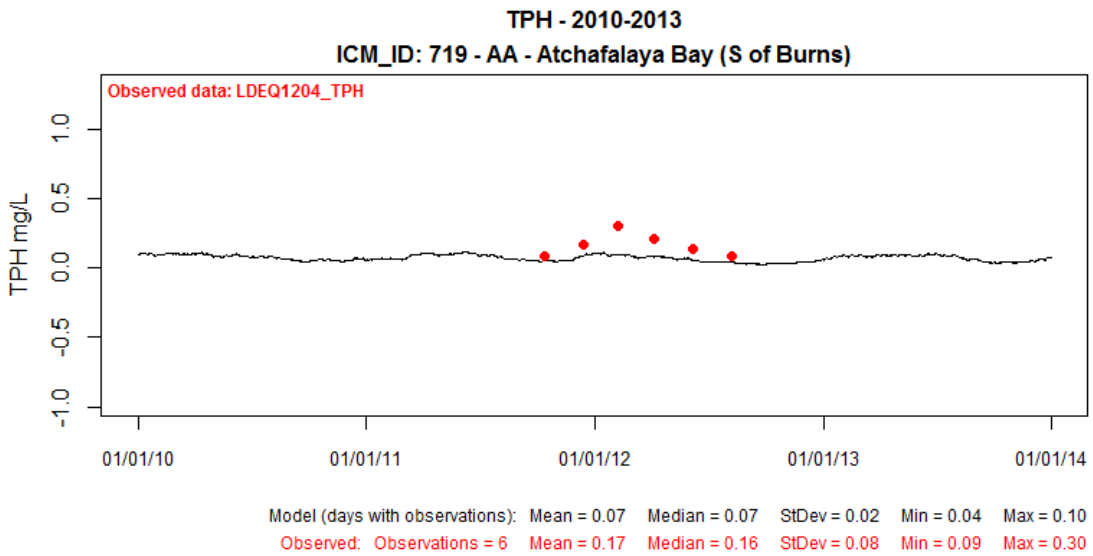

Figure 215: Modeled Total Phosphorus at ICM Compartment 719 (solid black line) Compared to Observed Data at LDEQ1204 for Calibration Period 2010-2013.

Figure 216: No Validation Figure for ICM Compartment 719.

DRAFT

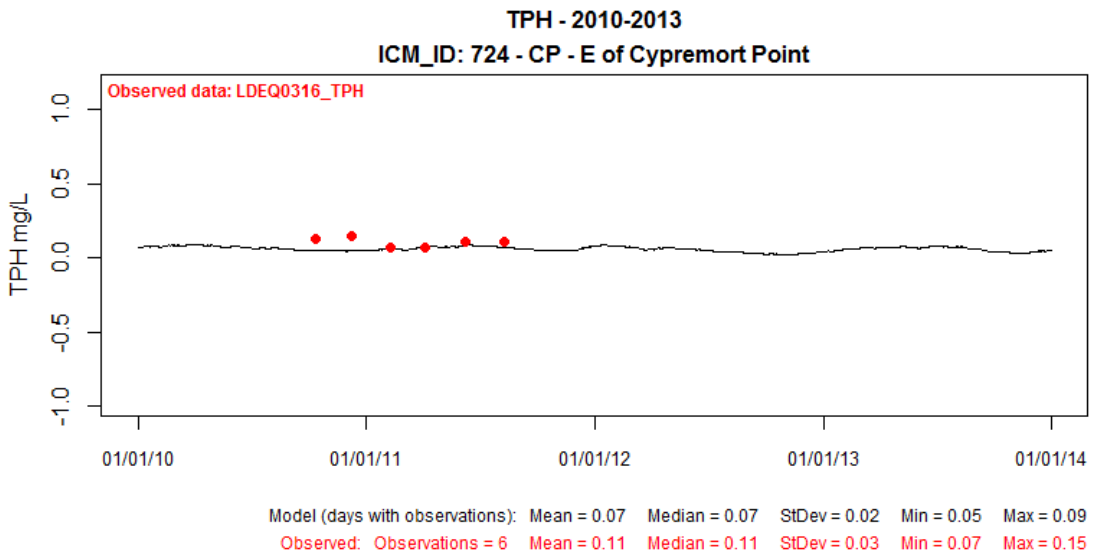

Figure 217: Modeled Total Phosphorus at ICM Compartment 724 (solid black line) Compared to Observed Data at LDEQ0316 for Calibration Period 2010-2013.

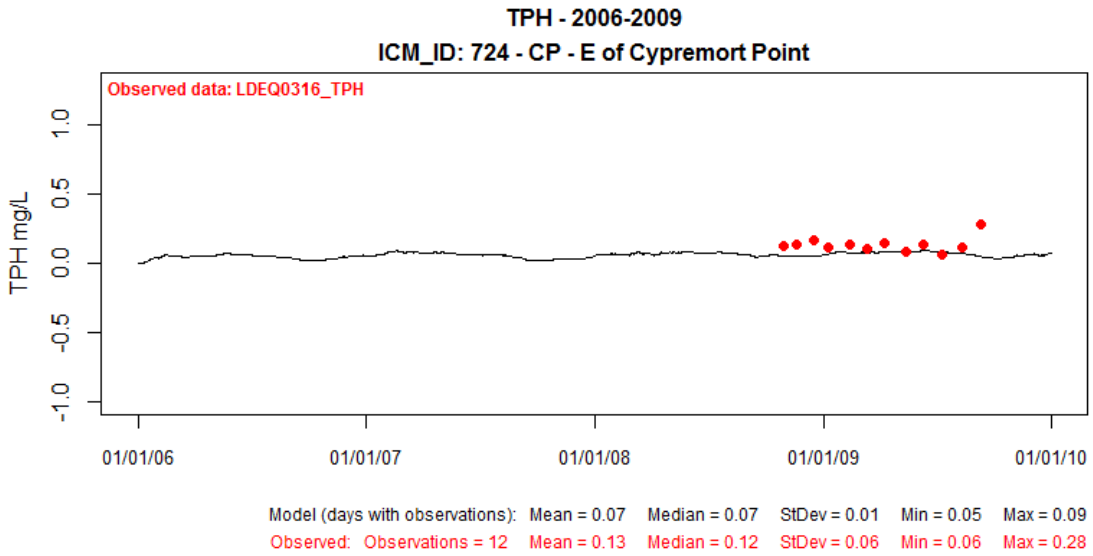

Figure 218: Modeled Total Phosphorus at ICM Compartment 724 (solid black line) Compared to Observed Data at LDEQ0316 for Validation Period 2006-2009.

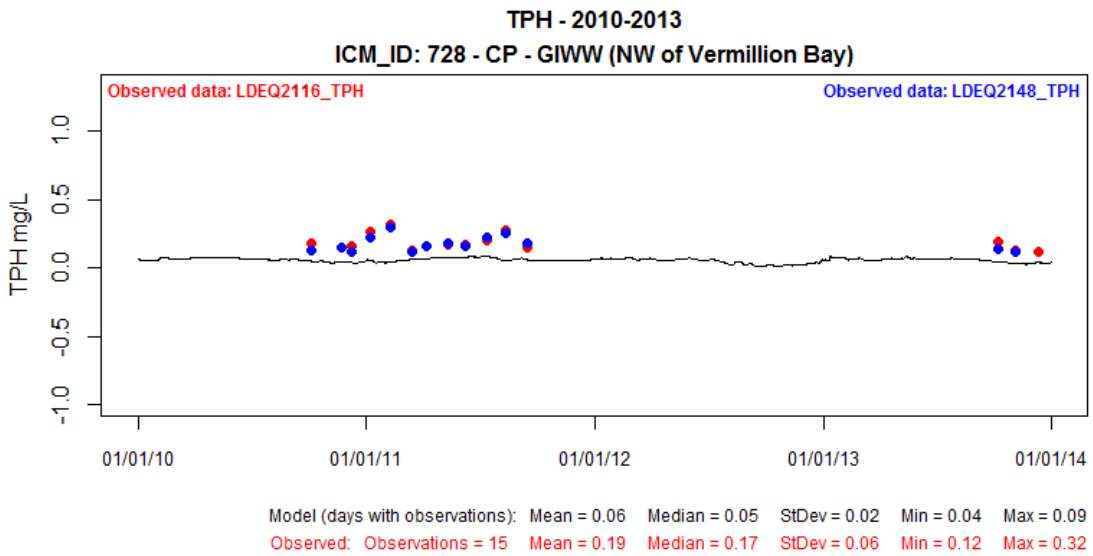

Figure 219: Modeled Total Phosphorus at ICM Compartment 728 (solid black line) Compared to Observed Data at LDEQ2116 for Calibration Period 2010-2013.

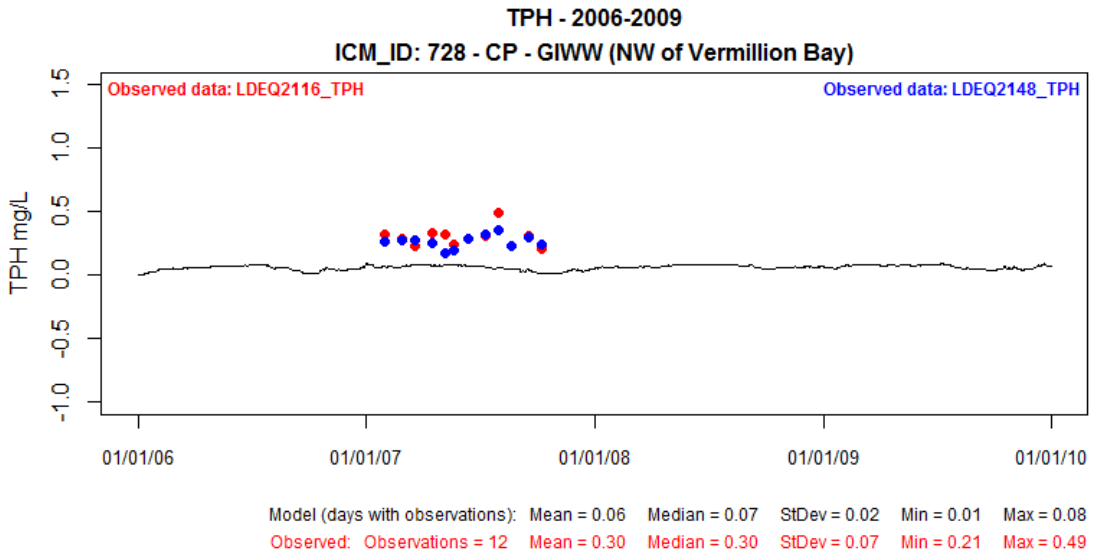

Figure 220: Modeled Total Phosphorus at ICM Compartment 728 (solid black line) Compared to Observed Data at LDEQ2116 for Validation Period 2006-2009.

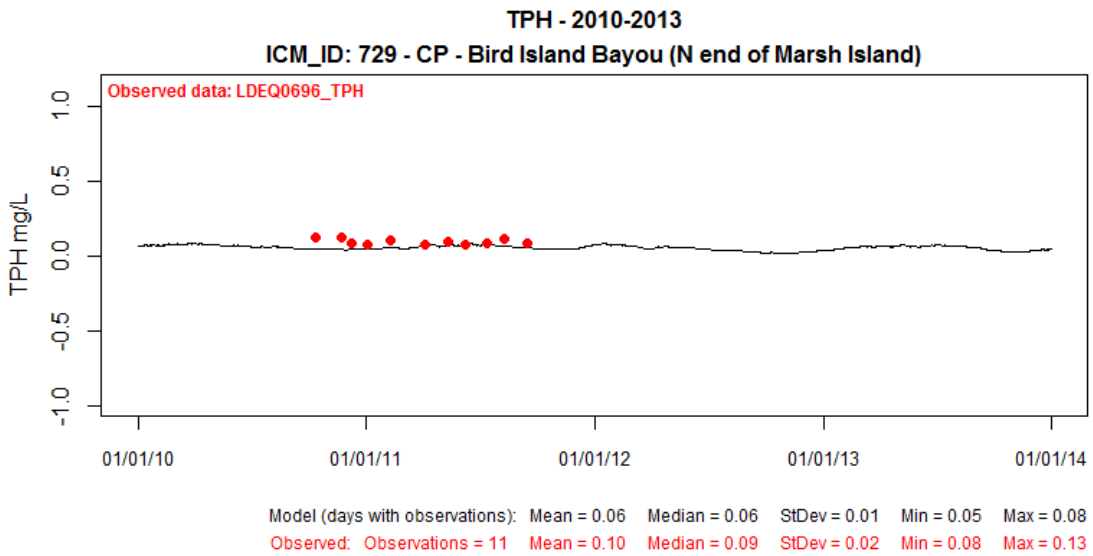

Figure 221: Modeled Total Phosphorus at ICM Compartment 729 (solid black line) Compared to Observed Data at LDEQ0696 for Calibration Period 2010-2013.

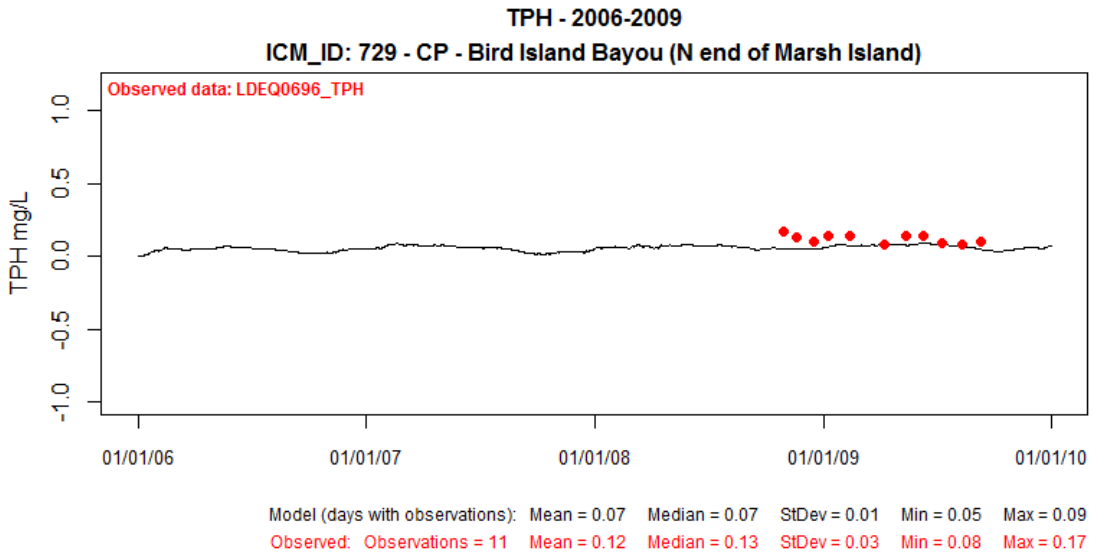

Figure 222: Modeled Total Phosphorus at ICM Compartment 729 (solid black line) Compared to Observed Data at LDEQ0696 for Validation Period 2006-2009.

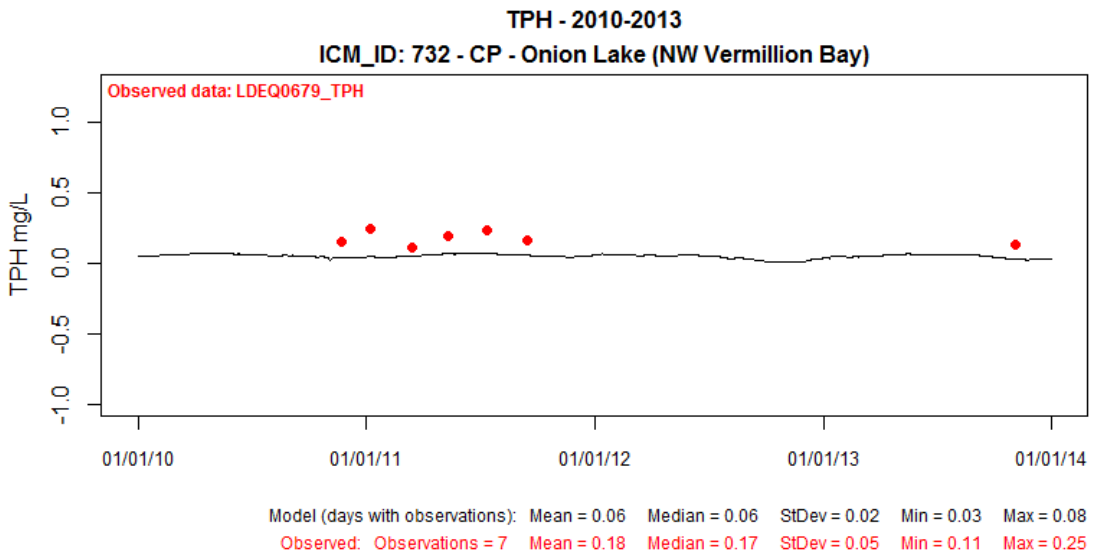

Figure 223: Modeled Total Phosphorus at ICM Compartment 732 (solid black line) Compared to Observed Data at LDEQ0679 for Calibration Period 2010-2013.

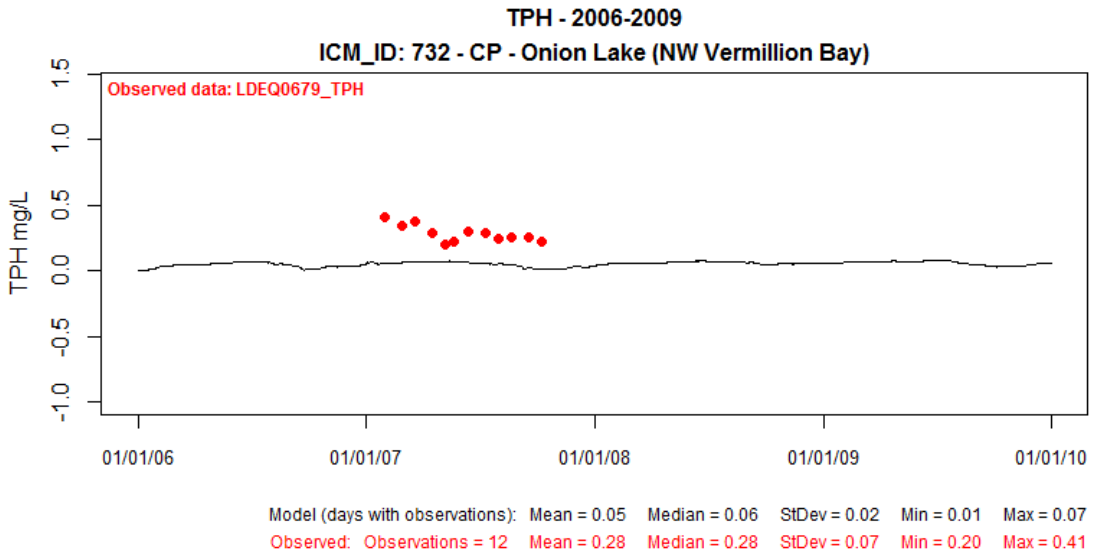

Figure 224: Modeled Total Phosphorus at ICM Compartment 732 (solid black line) Compared to Observed Data at LDEQ0679 for Validation Period 2006-2009.

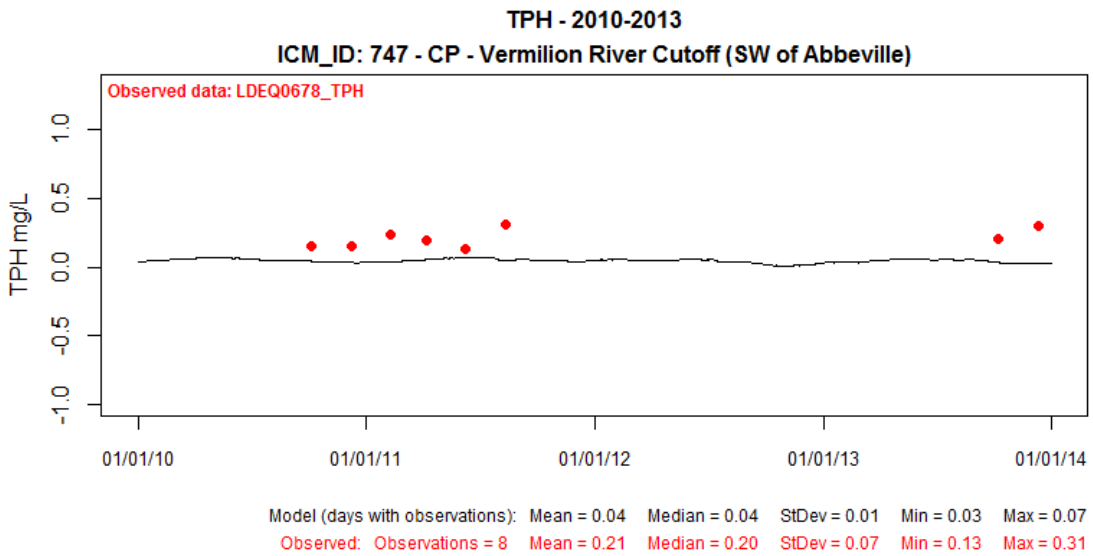

Figure 225: Modeled Total Phosphorus at ICM Compartment 747 (solid black line) Compared to Observed Data at LDEQ0678 for Calibration Period 2010-2013.

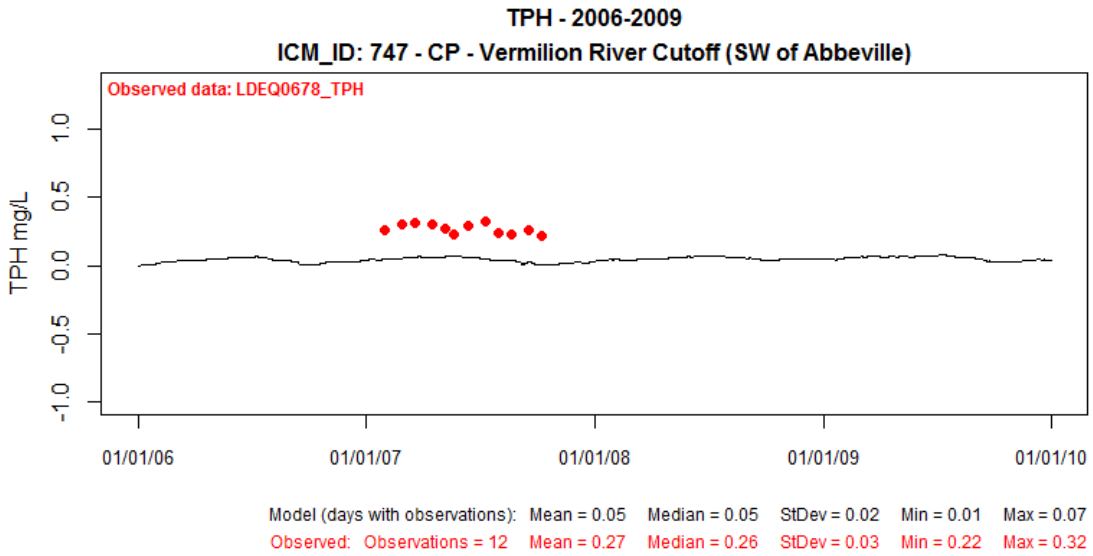

Figure 226: Modeled Total Phosphorus at ICM Compartment 747 (solid black line) Compared to Observed Data at LDEQ0678 for Validation Period 2006-2009.

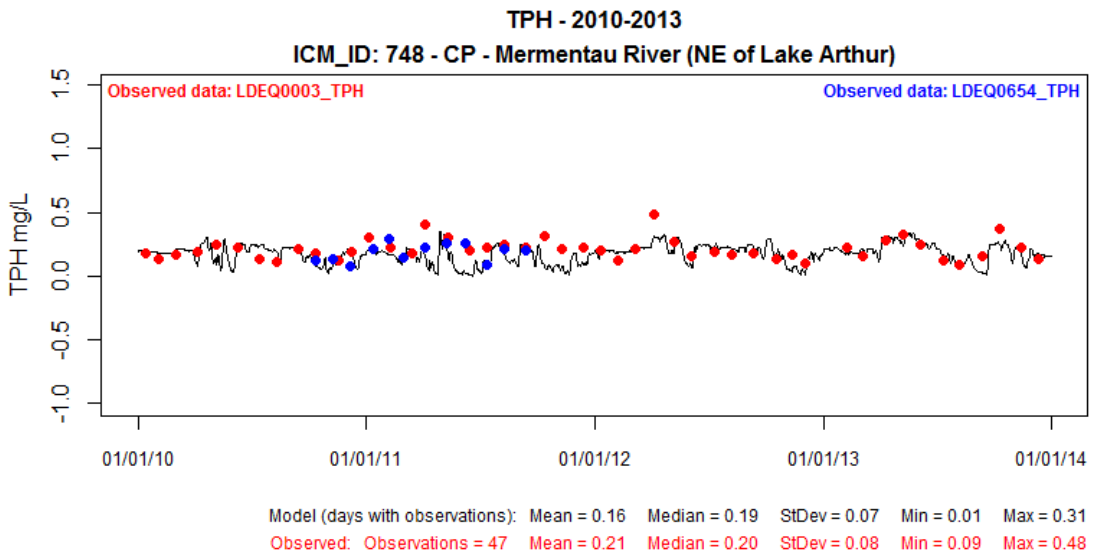

Figure 227: Modeled Total Phosphorus at ICM Compartment 748 (solid black line) Compared to Observed Data at LDEQ0003 for Calibration Period 2010-2013.

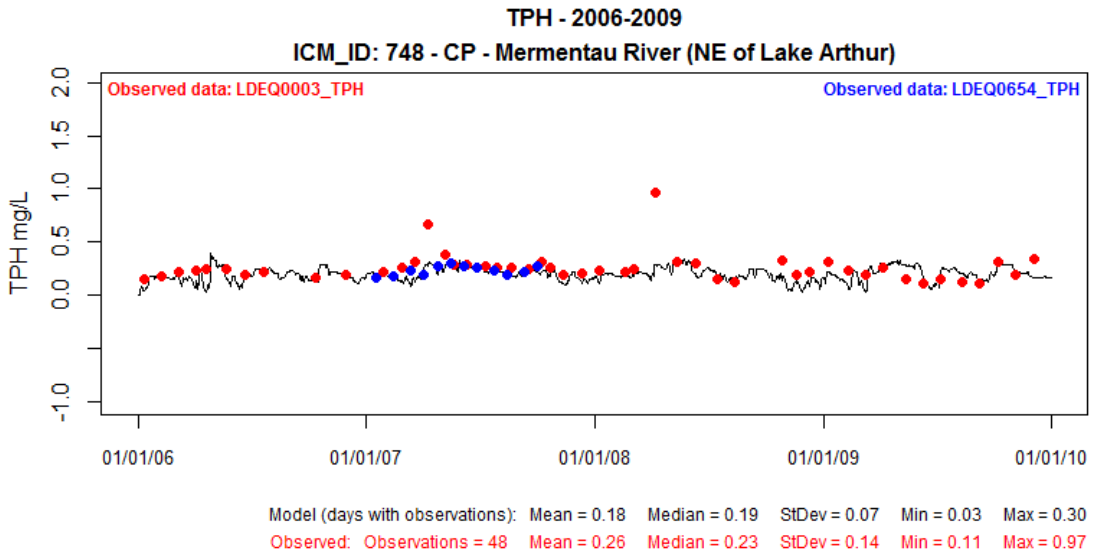

Figure 228: Modeled Total Phosphorus at ICM Compartment 748 (solid black line) Compared to Observed Data at LDEQ0003 for Validation Period 2006-2009.

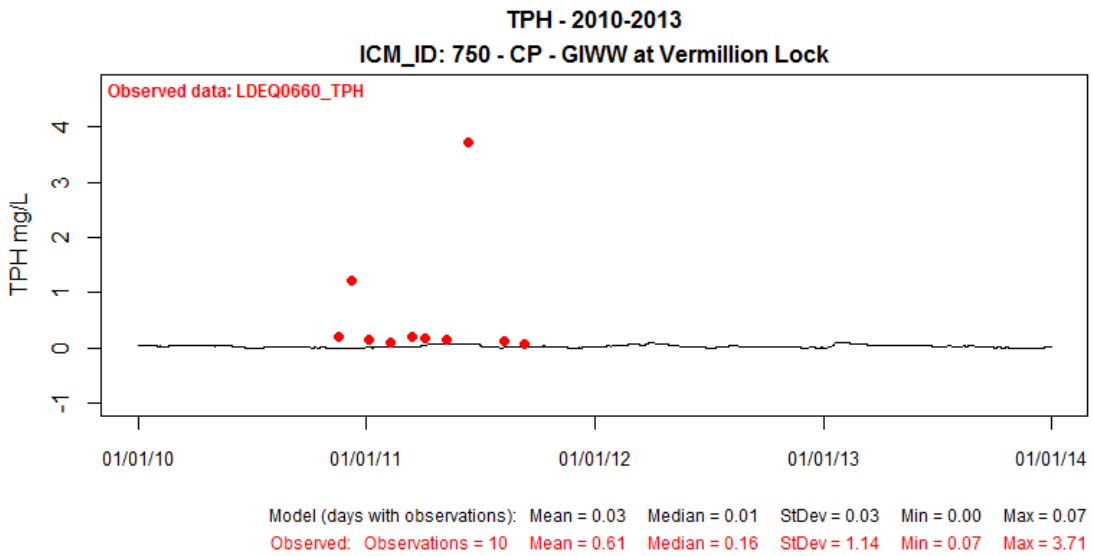

Figure 229: Modeled Total Phosphorus at ICM Compartment 750 (solid black line) Compared to Observed Data at LDEQ0660 for Calibration Period 2010-2013.

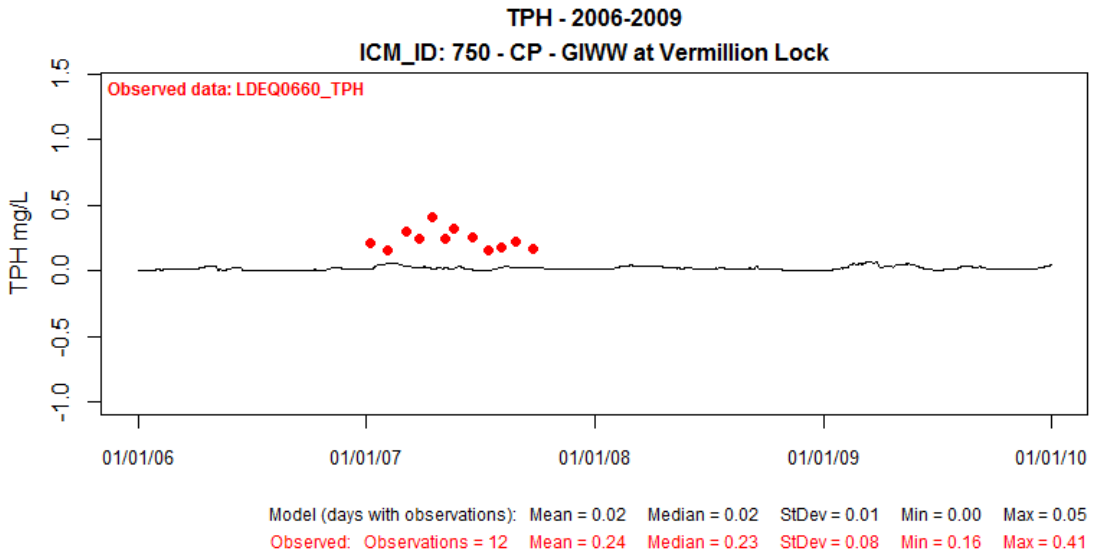

Figure 230: Modeled Total Phosphorus at ICM Compartment 750 (solid black line) Compared to Observed Data at LDEQ0660 for Validation Period 2006-2009.

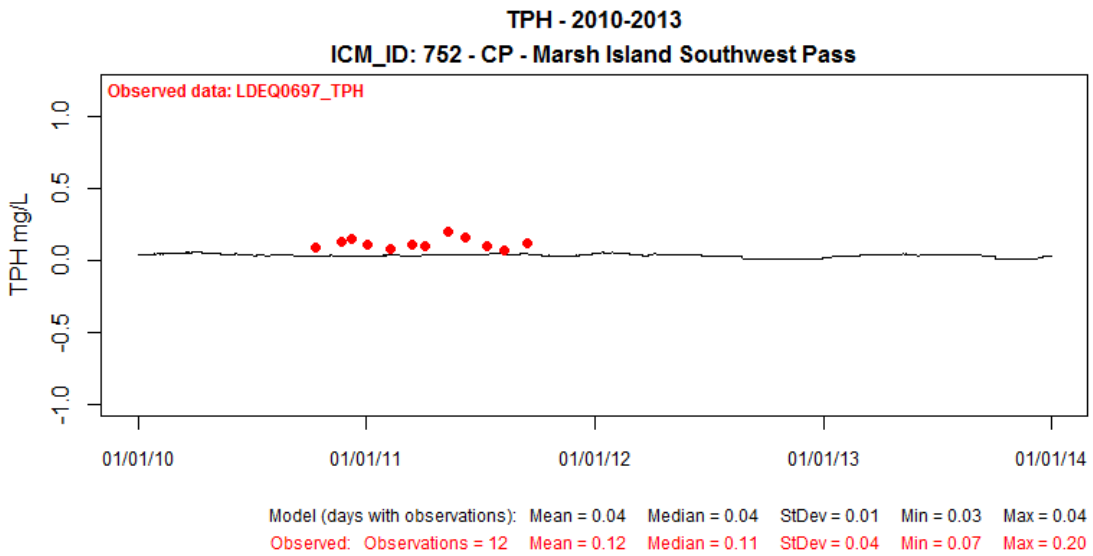

Figure 231: Modeled Total Phosphorus at ICM Compartment 752 (solid black line) Compared to Observed Data at LDEQ0697 for Calibration Period 2010-2013.

Figure 232: No Validation Figure for ICM Compartment 752.

DRAFT

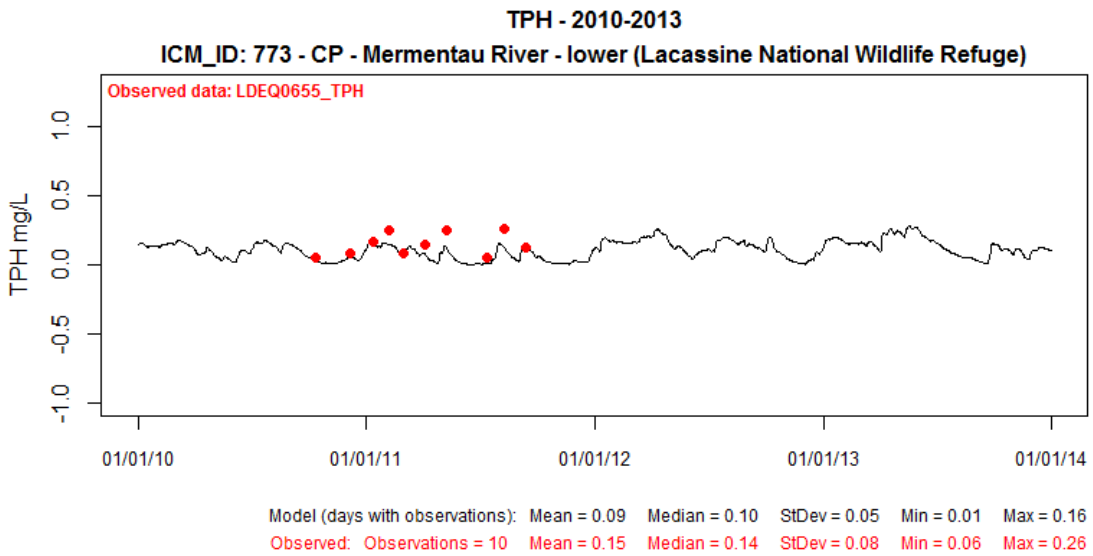

Figure 233: Modeled Total Phosphorus at ICM Compartment 773 (solid black line) Compared to Observed Data at LDEQ0655 for Calibration Period 2010-2013.

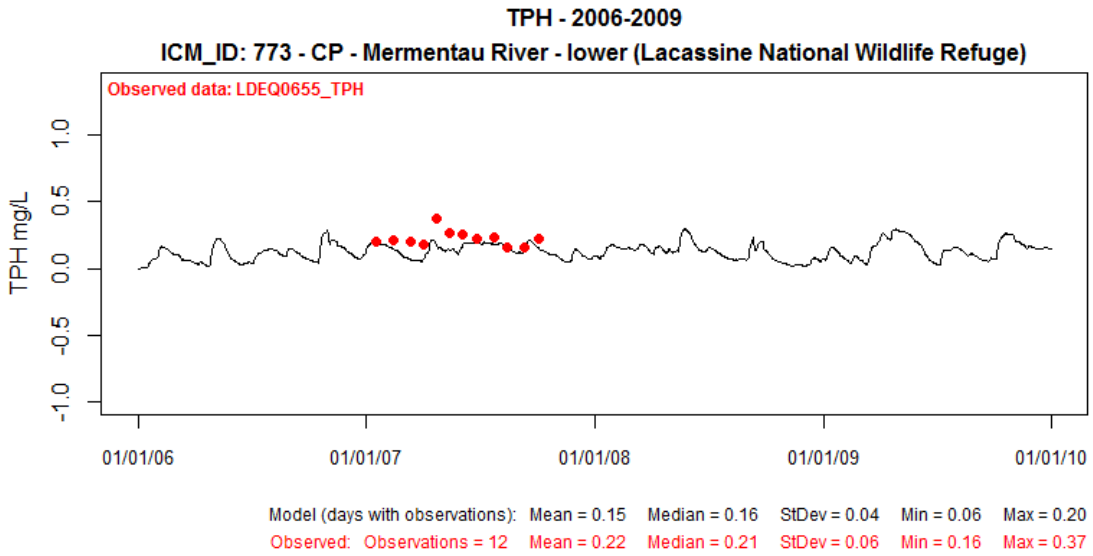

Figure 234: Modeled Total Phosphorus at ICM Compartment 773 (solid black line) Compared to Observed Data at LDEQ0655 for Validation Period 2006-2009.

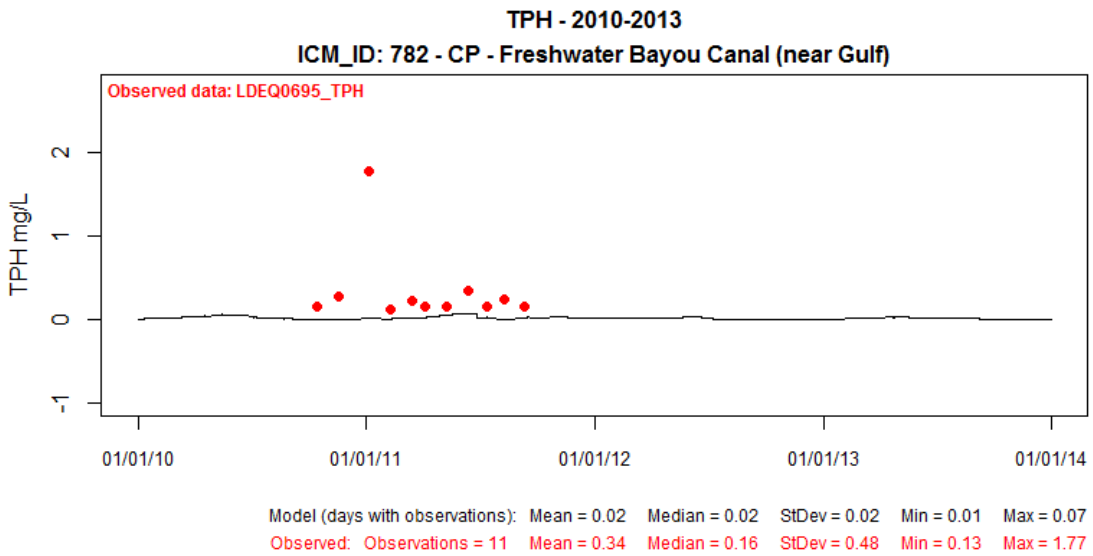

Figure 235: Modeled Total Phosphorus at ICM Compartment 782 (solid black line) Compared to Observed Data at LDEQ0695 for Calibration Period 2010-2013.

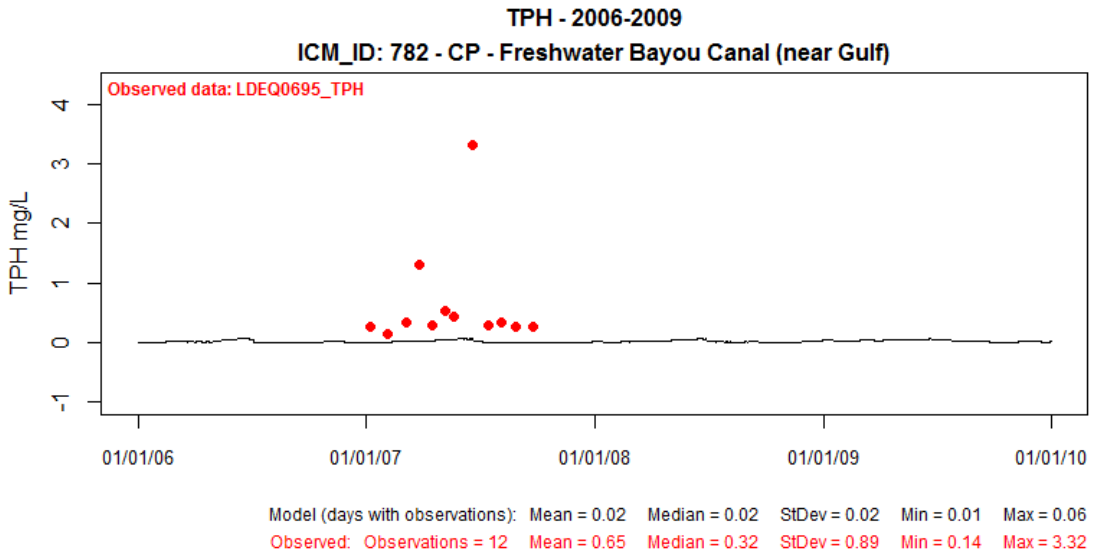

Figure 236: Modeled Total Phosphorus at ICM Compartment 782 (solid black line) Compared to Observed Data at LDEQ0695 for Validation Period 2006-2009.

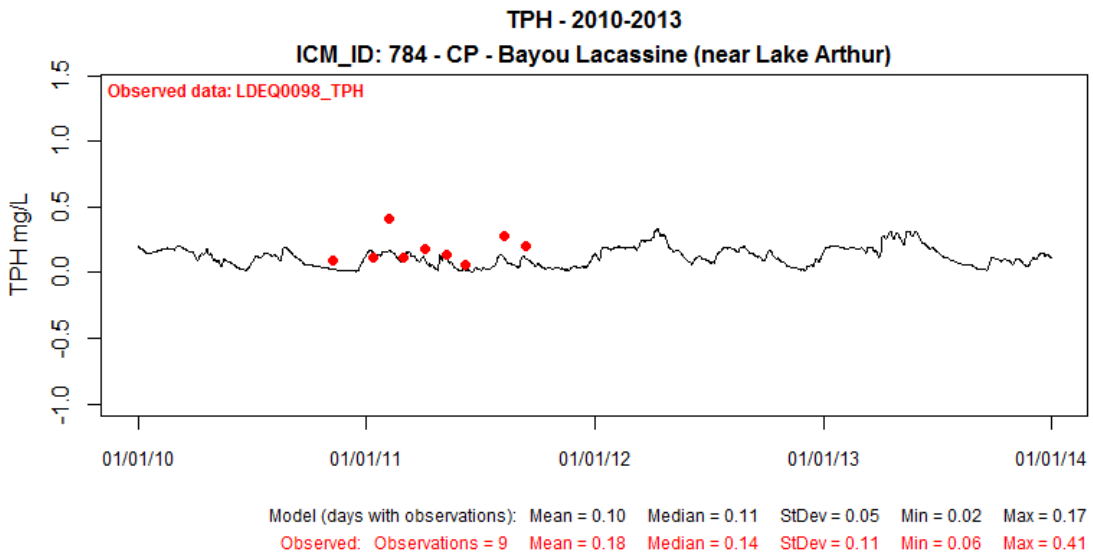

Figure 237: Modeled Total Phosphorus at ICM Compartment 784 (solid black line) Compared to Observed Data at LDEQ0098 for Calibration Period 2010-2013.

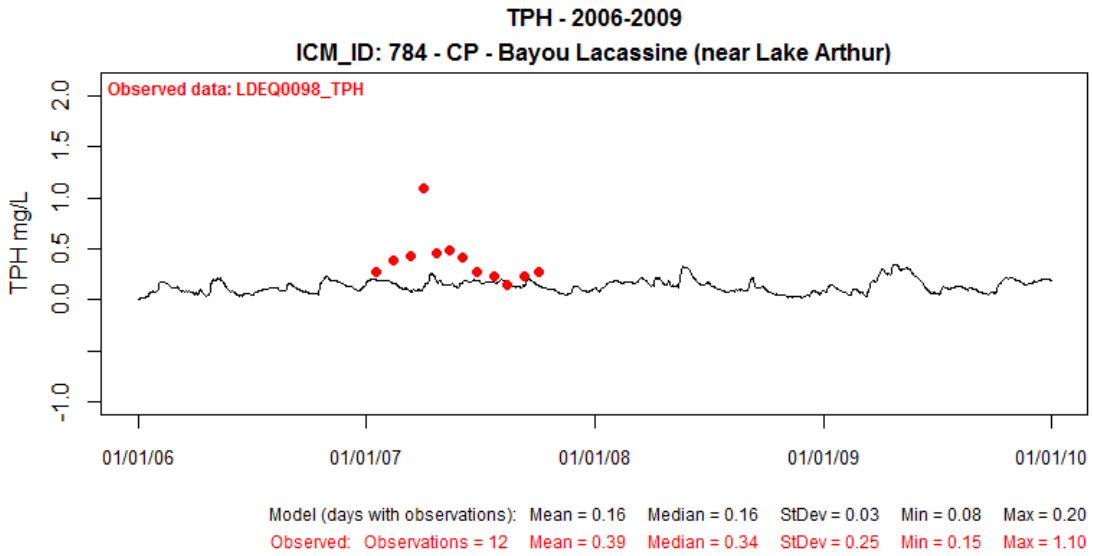

Figure 238: Modeled Total Phosphorus at ICM Compartment 784 (solid black line) Compared to Observed Data at LDEQ0098 for Validation Period 2006-2009.

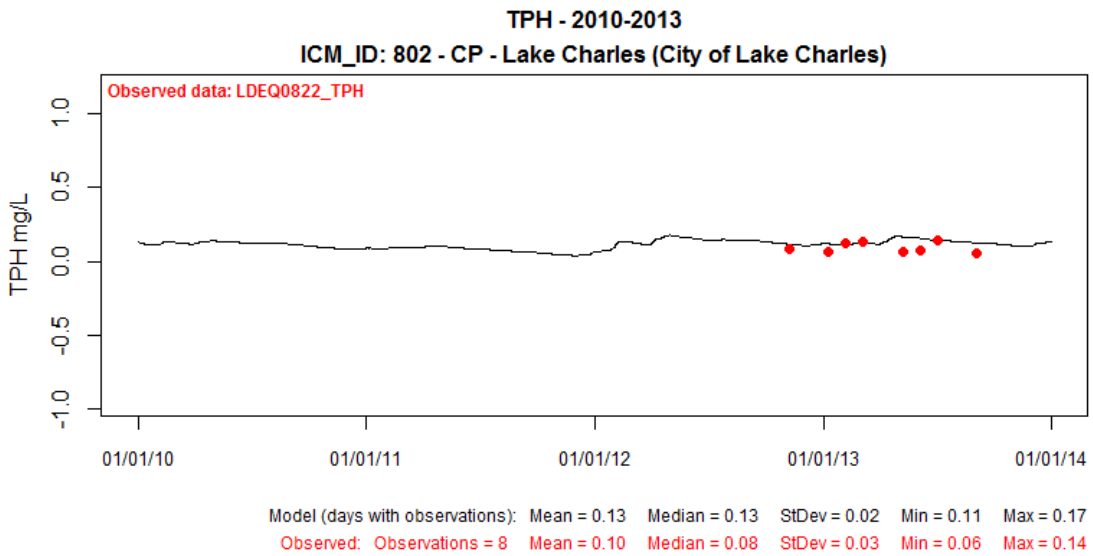

Figure 239: Modeled Total Phosphorus at ICM Compartment 802 (solid black line) Compared to Observed Data at LDEQ0822 for Calibration Period 2010-2013.

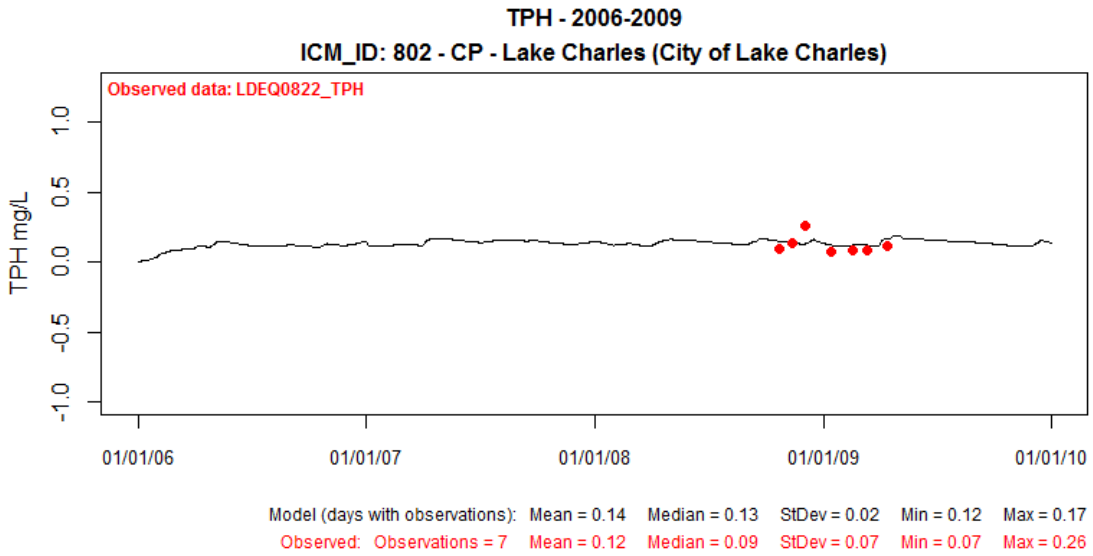

Figure 240: Modeled Total Phosphorus at ICM Compartment 802 (solid black line) Compared to Observed Data at LDEQ0822 for Validation Period 2006-2009.

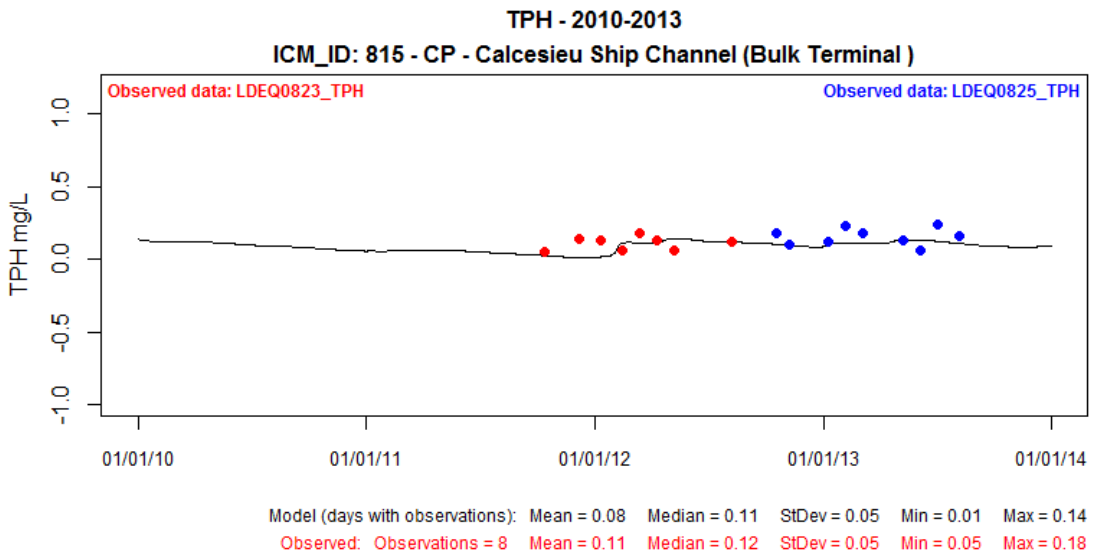

Figure 241: Modeled Total Phosphorus at ICM Compartment 815 (solid black line) Compared to Observed Data at LDEQ0823 for Calibration Period 2010-2013.

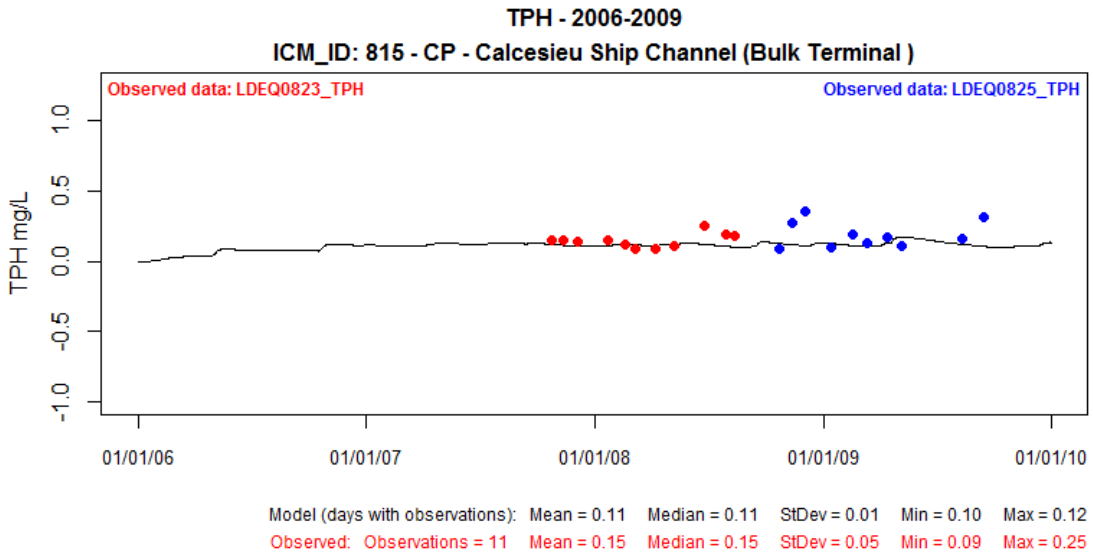

Figure 242: Modeled Total Phosphorus at ICM Compartment 815 (solid black line) Compared to Observed Data at LDEQ0823 for Validation Period 2006-2009.

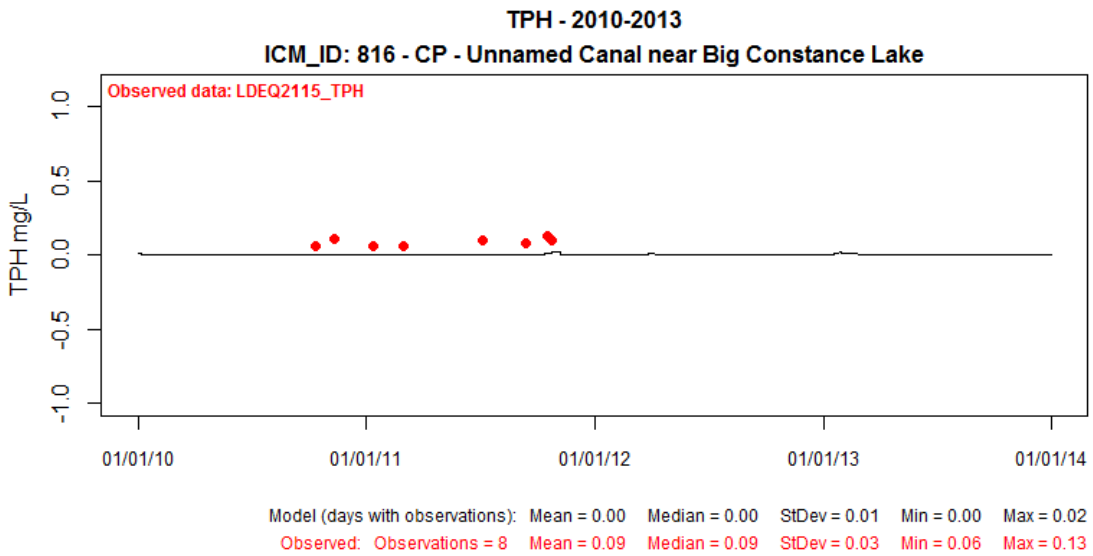

Figure 243: Modeled Total Phosphorus at ICM Compartment 816 (solid black line) Compared to Observed Data at LDEQ2115 for Calibration Period 2010-2013.

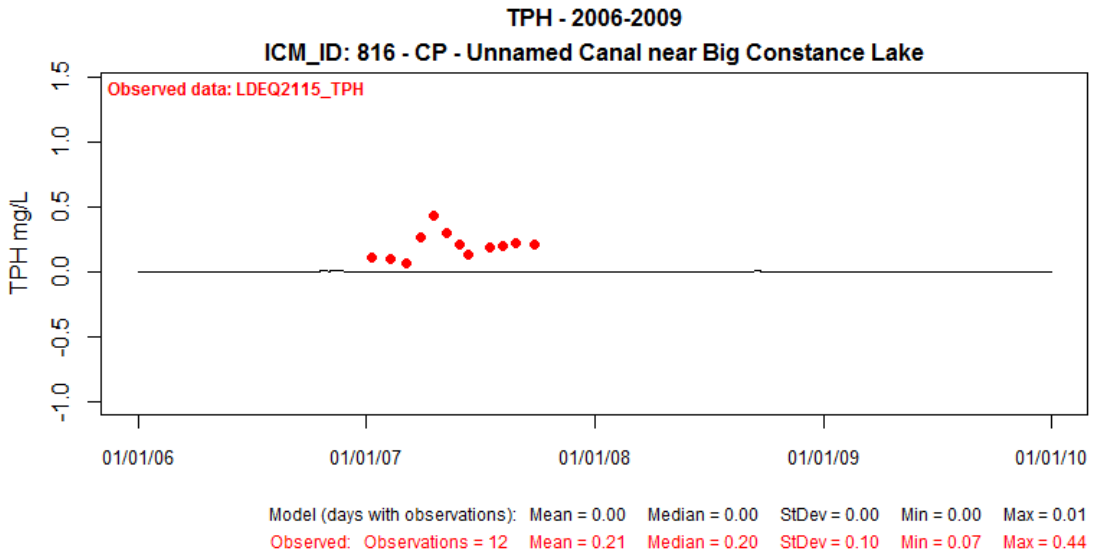

Figure 244: Modeled Total Phosphorus at ICM Compartment 816 (solid black line) Compared to Observed Data at LDEQ2115 for Validation Period 2006-2009.

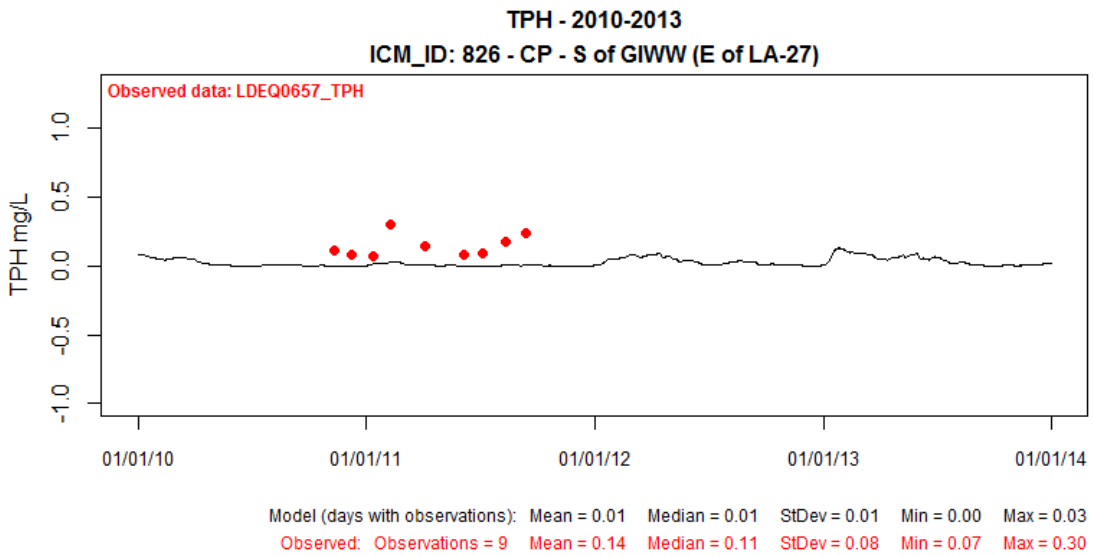

Figure 245: Modeled Total Phosphorus at ICM Compartment 826 (solid black line) Compared to Observed Data at LDEQ0657 for Calibration Period 2010-2013.

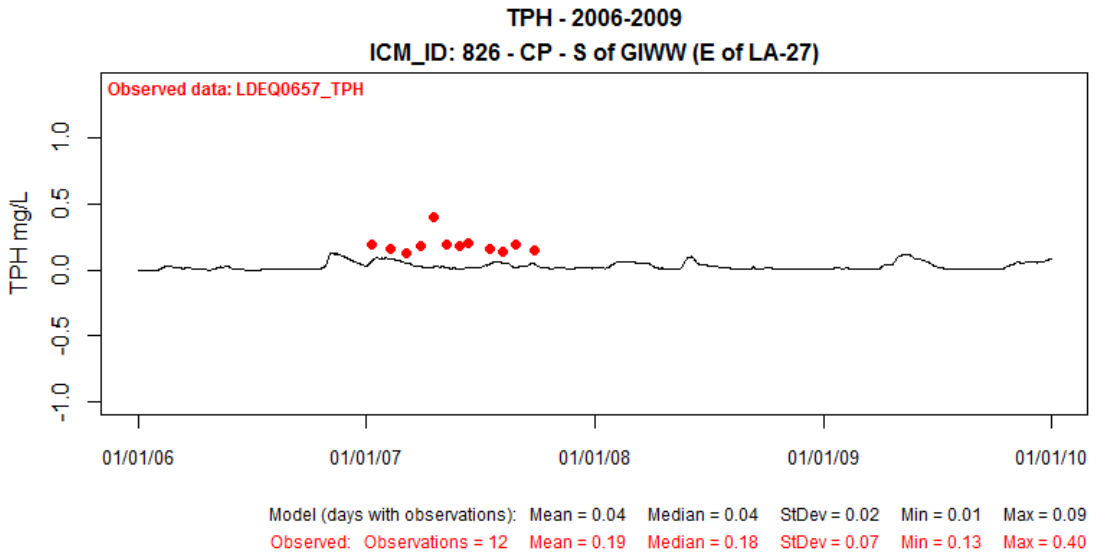

Figure 246: Modeled Total Phosphorus at ICM Compartment 826 (solid black line) Compared to Observed Data at LDEQ0657 for Validation Period 2006-2009.

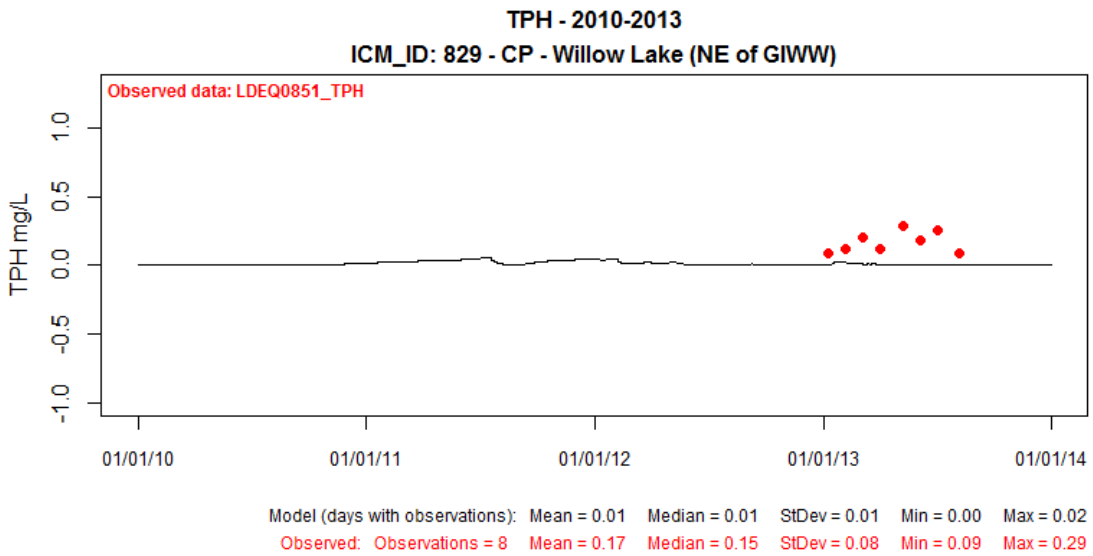

Figure 247: Modeled Total Phosphorus at ICM Compartment 829 (solid black line) Compared to Observed Data at LDEQ0851 for Calibration Period 2010-2013.

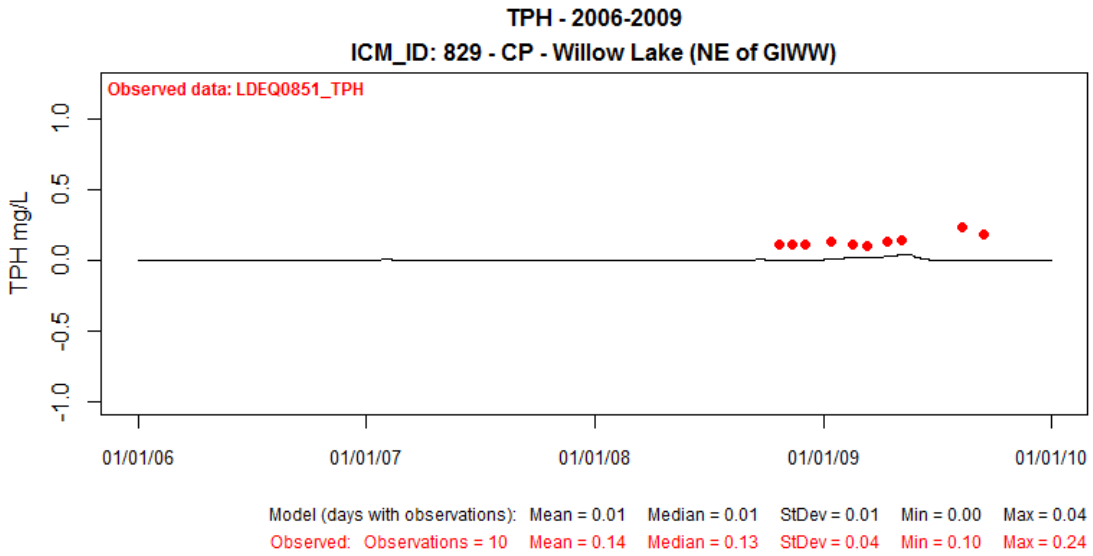

Figure 248: Modeled Total Phosphorus at ICM Compartment 829 (solid black line) Compared to Observed Data at LDEQ0851 for Validation Period 2006-2009.

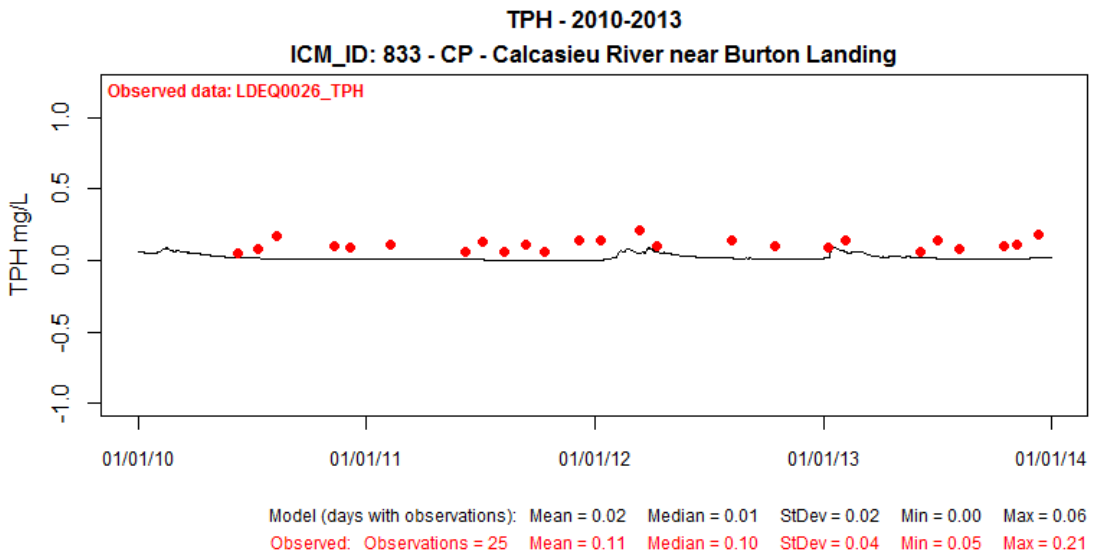

Figure 249: Modeled Total Phosphorus at ICM Compartment 833 (solid black line) Compared to Observed Data at LDEQ0026 for Calibration Period 2010-2013.

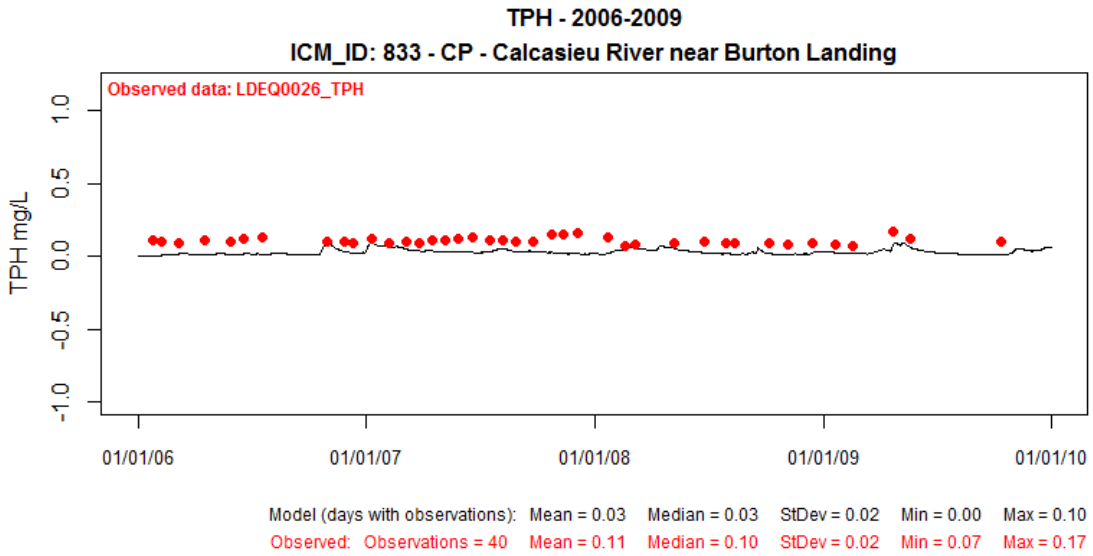

Figure 250: Modeled Total Phosphorus at ICM Compartment 833 (solid black line) Compared to Observed Data at LDEQ0026 for Validation Period 2006-2009.

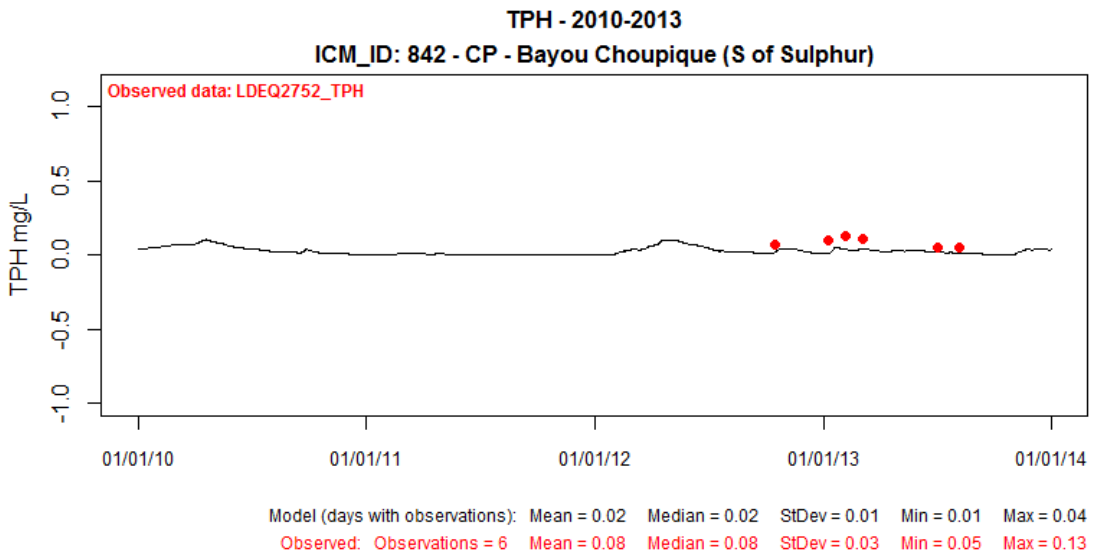

Figure 251: Modeled Total Phosphorus at ICM Compartment 842 (solid black line) Compared to Observed Data at LDEQ2752 for Calibration Period 2010-2013.

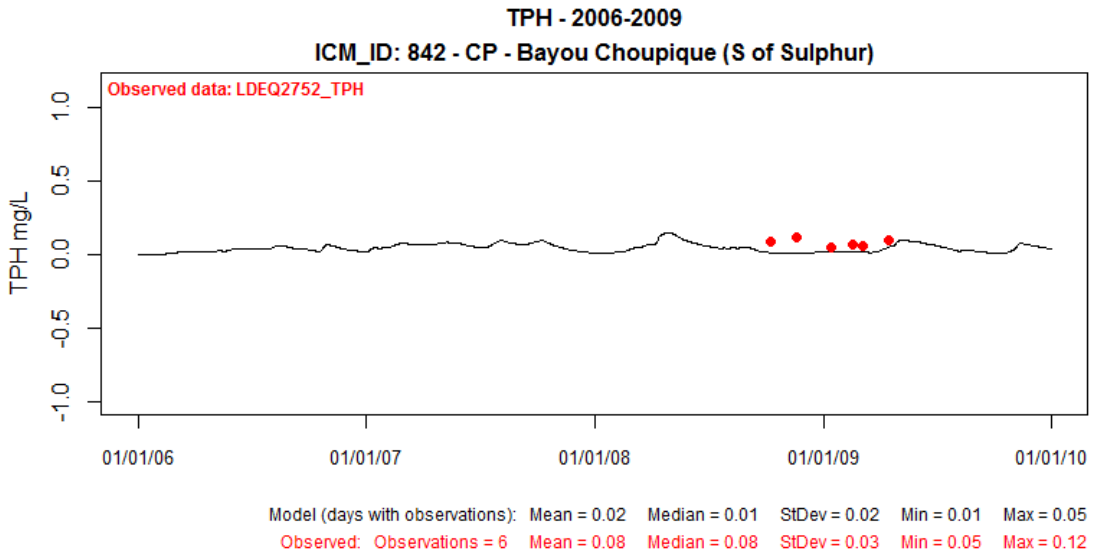

Figure 252: Modeled Total Phosphorus at ICM Compartment 842 (solid black line) Compared to Observed Data at LDEQ2752 for Validation Period 2006-2009.

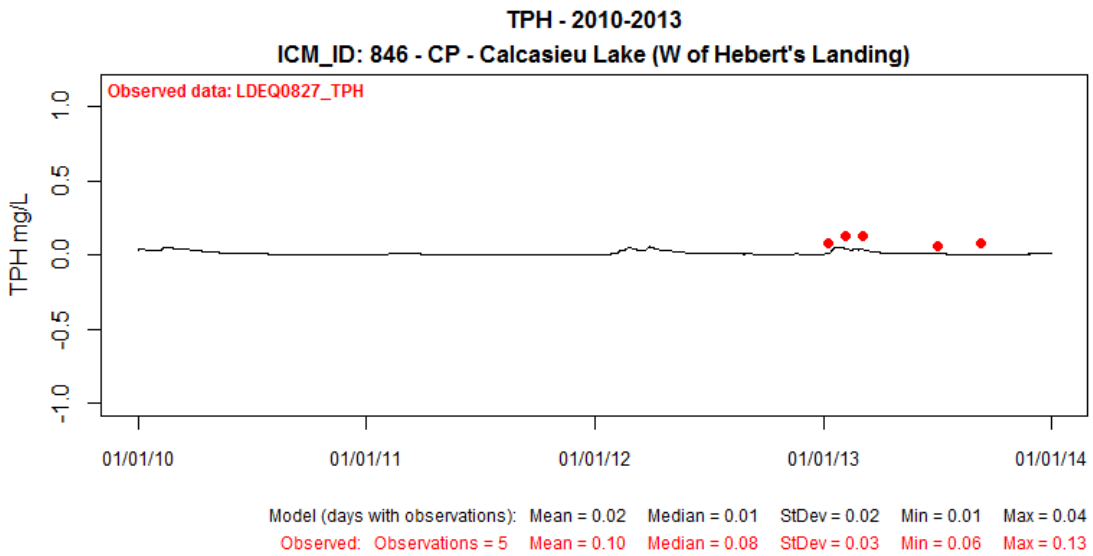

Figure 253: Modeled Total Phosphorus at ICM Compartment 846 (solid black line) Compared to Observed Data at LDEQ0827 for Calibration Period 2010-2013.

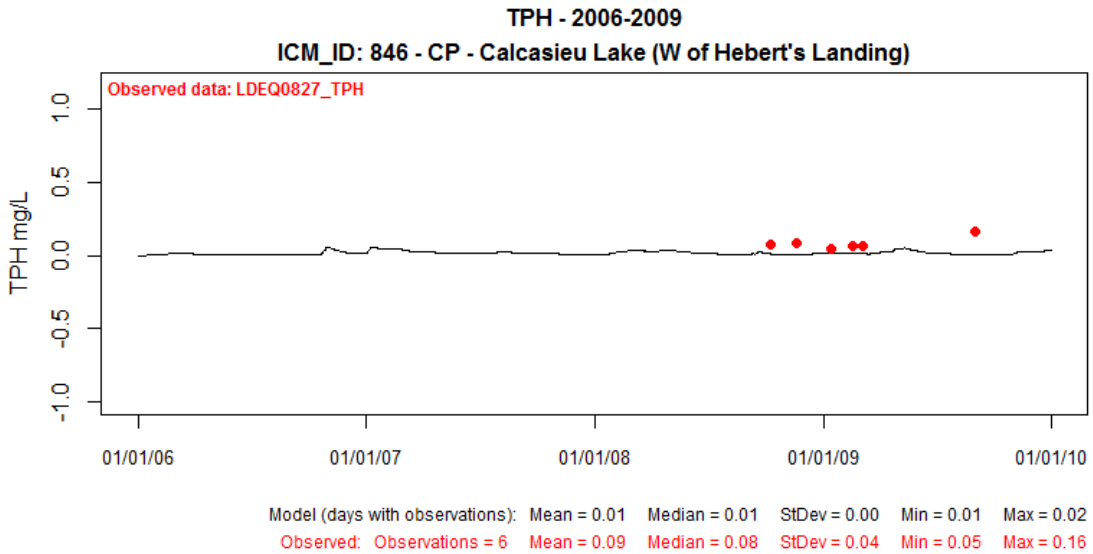

Figure 254: Modeled Total Phosphorus at ICM Compartment 846 (solid black line) Compared to Observed Data at LDEQ0827 for Validation Period 2006-2009.

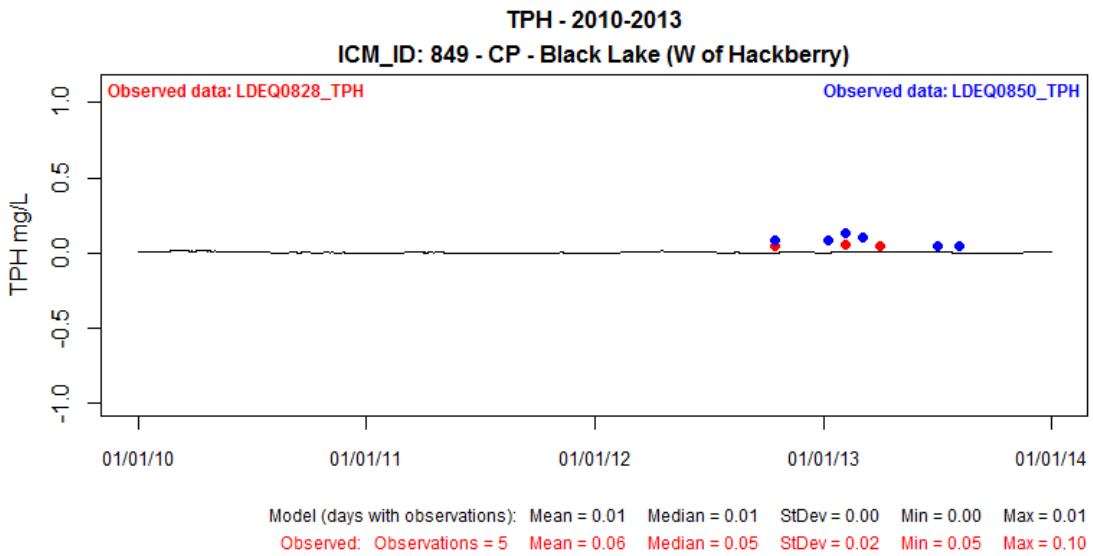

Figure 255: Modeled Total Phosphorus at ICM Compartment 849 (solid black line) Compared to Observed Data at LDEQ0828 for Calibration Period 2010-2013.

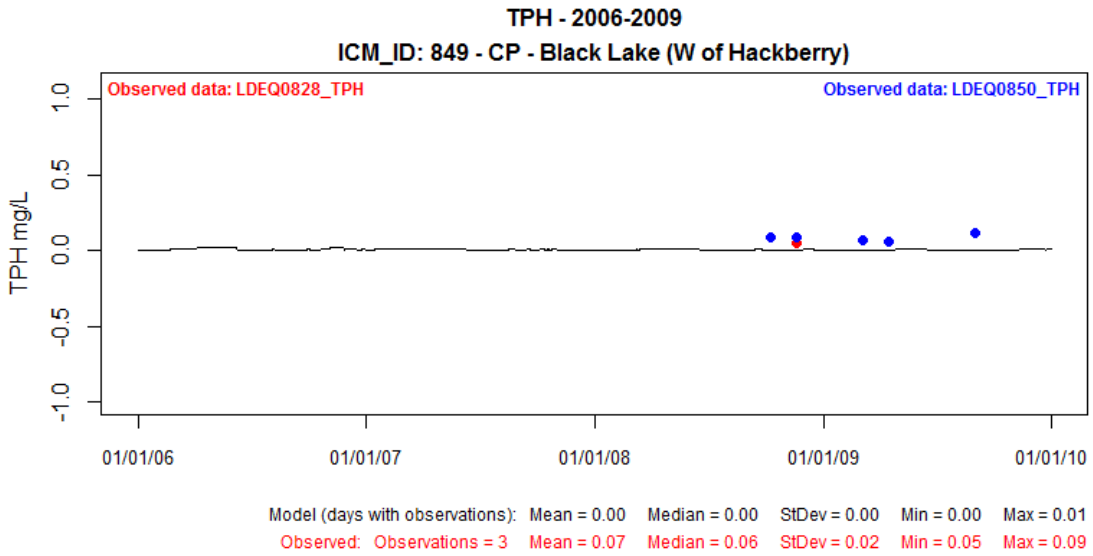

Figure 256: Modeled Total Phosphorus at ICM Compartment 849 (solid black line) Compared to Observed Data at LDEQ0828 for Validation Period 2006-2009.

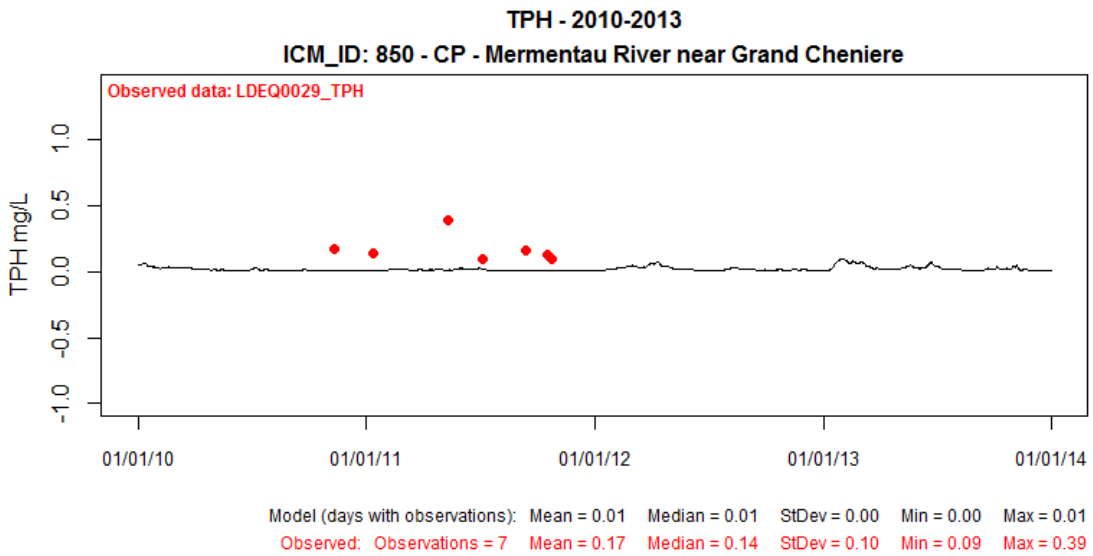

Figure 257: Modeled Total Phosphorus at ICM Compartment 850 (solid black line) Compared to Observed Data at LDEQ0029 for Calibration Period 2010-2013.

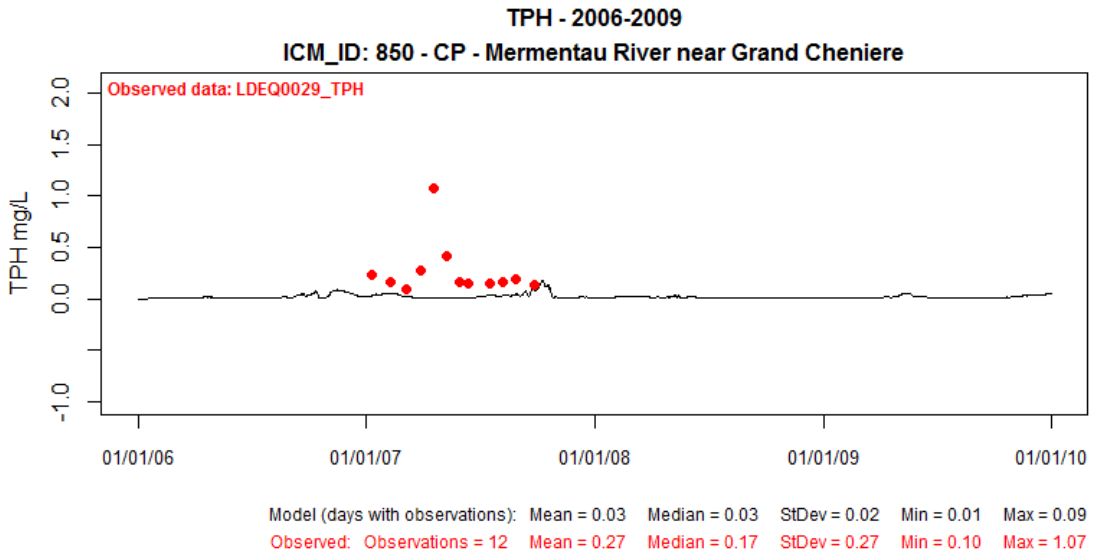

Figure 258: Modeled Total Phosphorus at ICM Compartment 850 (solid black line) Compared to Observed Data at LDEQ0029 for Validation Period 2006-2009.

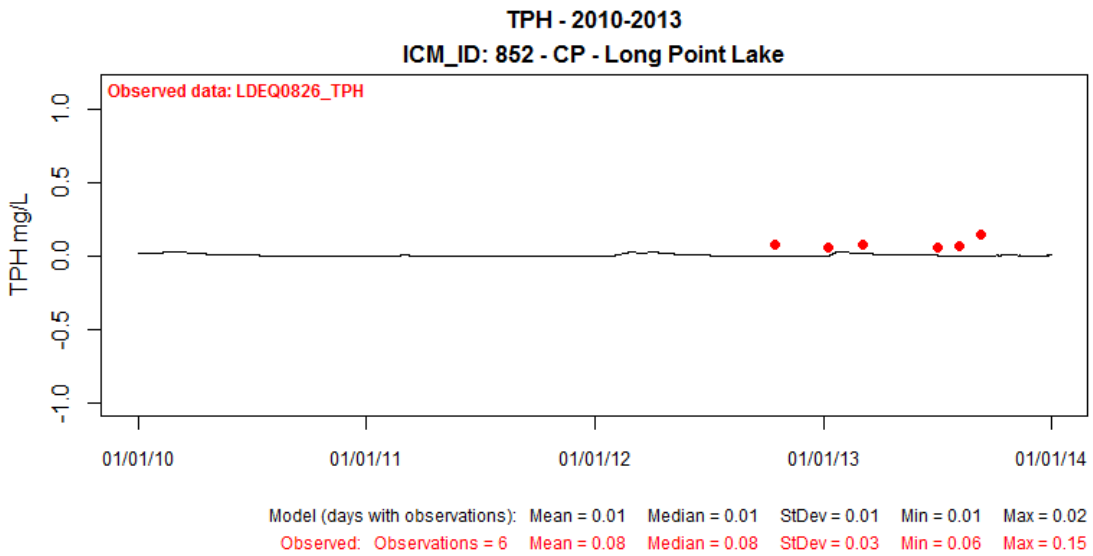

Figure 259: Modeled Total Phosphorus at ICM Compartment 852 (solid black line) Compared to Observed Data at LDEQ0826 for Calibration Period 2010-2013.

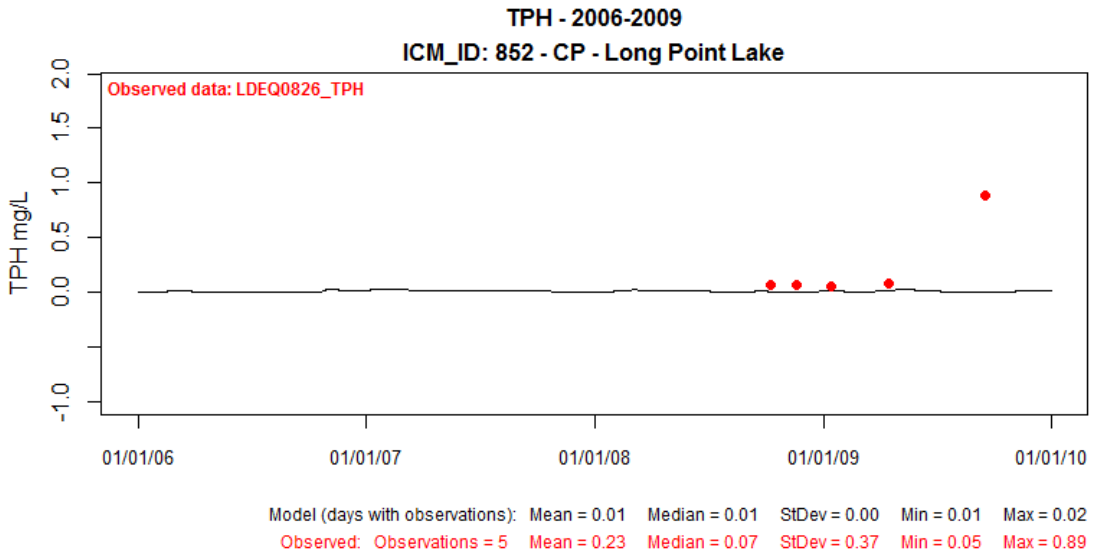

Figure 260: Modeled Total Phosphorus at ICM Compartment 852 (solid black line) Compared to Observed Data at LDEQ0826 for Validation Period 2006-2009.

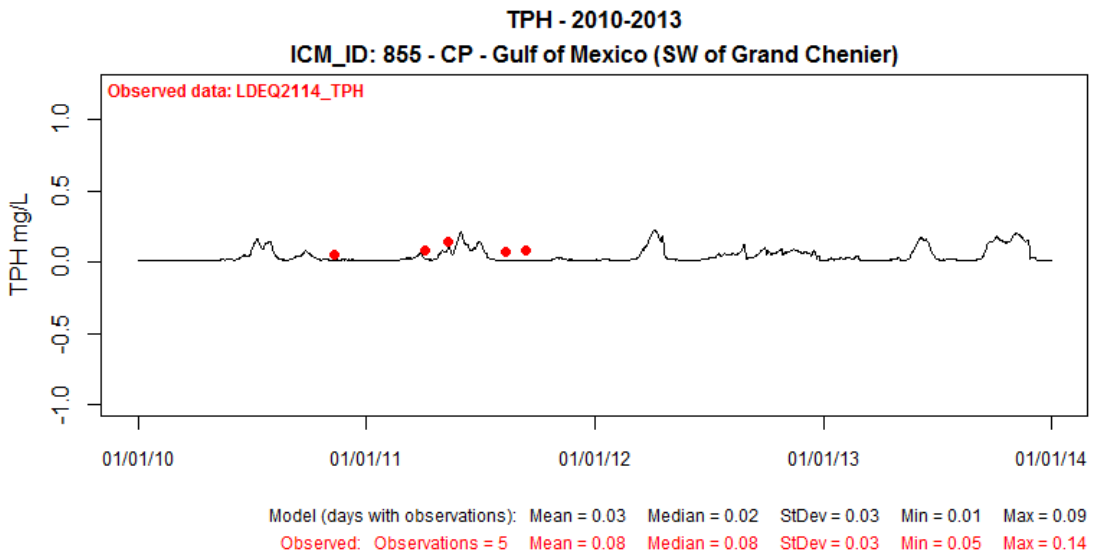

Figure 261: Modeled Total Phosphorus at ICM Compartment 855 (solid black line) Compared to Observed Data at LDEQ2114 for Calibration Period 2010-2013.

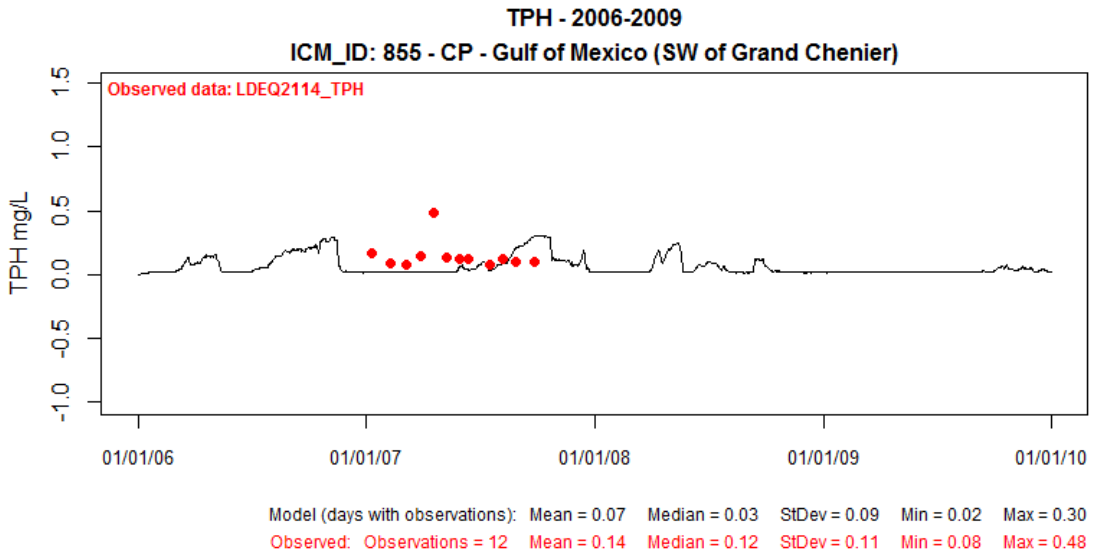

Figure 262: Modeled Total Phosphorus at ICM Compartment 855 (solid black line) Compared to Observed Data at LDEQ2114 for Validation Period 2006-2009.

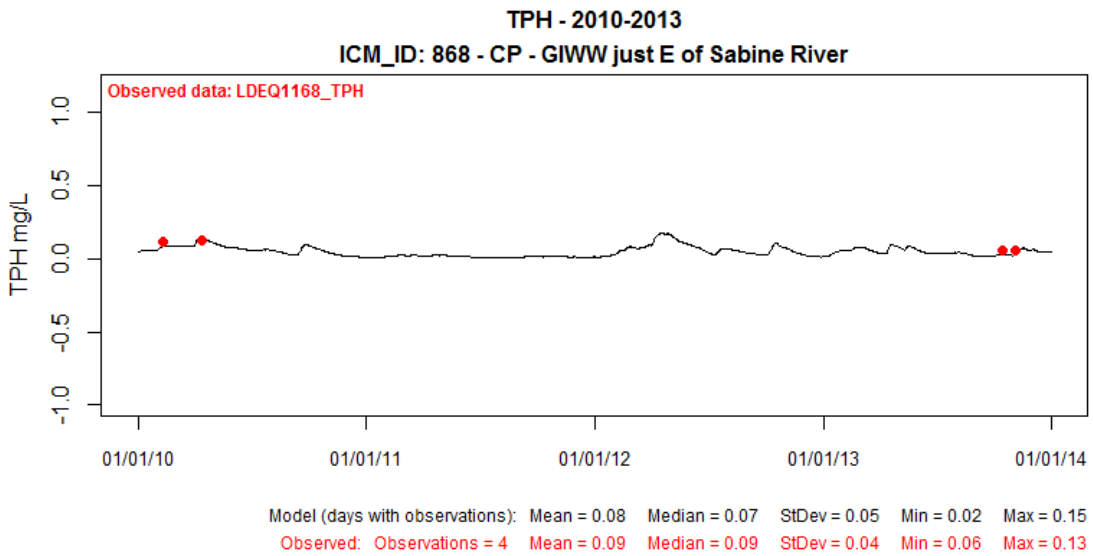

Figure 263: Modeled Total Phosphorus at ICM Compartment 868 (solid black line) Compared to Observed Data at LDEQ1168 for Calibration Period 2010-2013.

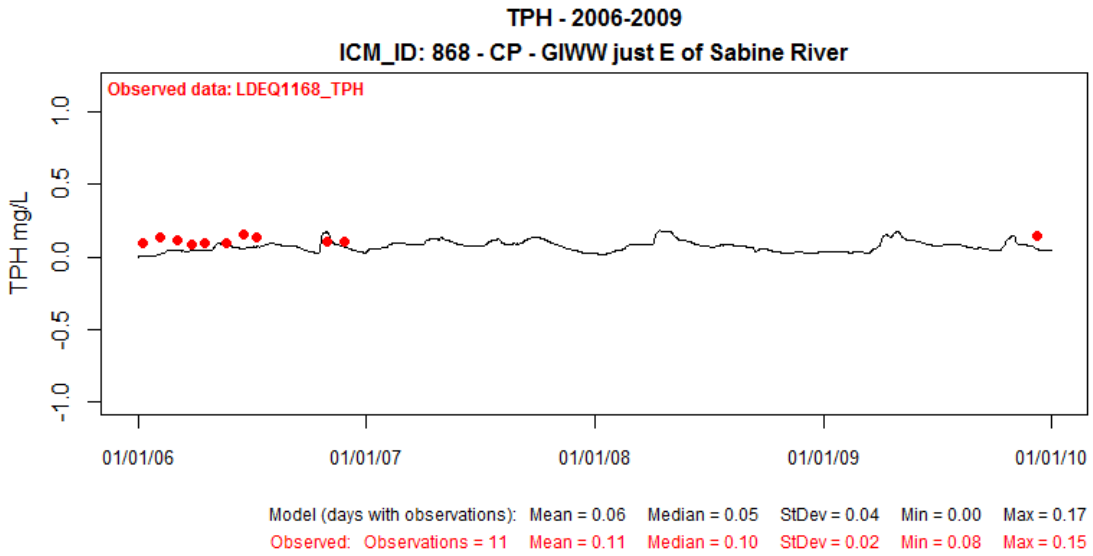

Figure 264: Modeled Total Phosphorus at ICM Compartment 868 (solid black line) Compared to Observed Data at LDEQ1168 for Validation Period 2006-2009.

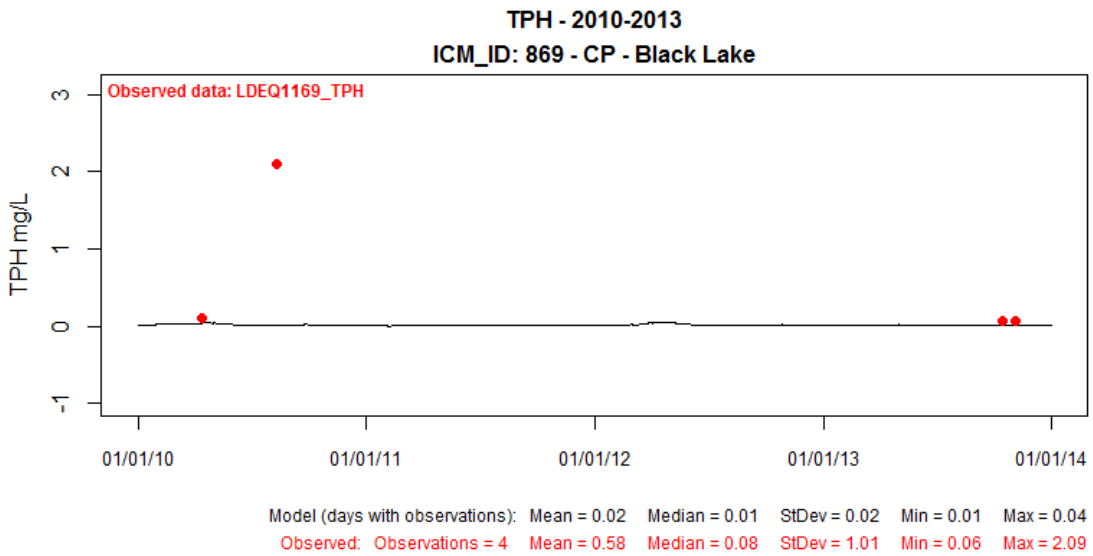

Figure 265: Modeled Total Phosphorus at ICM Compartment 869 (solid black line) Compared to Observed Data at LDEQ1169 for Calibration Period 2010-2013.

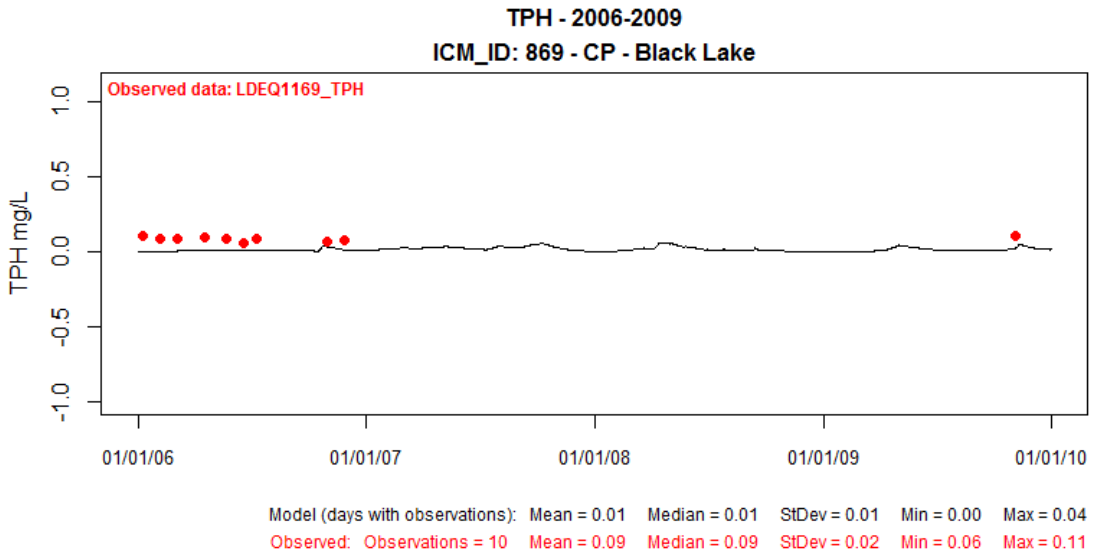

Figure 266: Modeled Total Phosphorus at ICM Compartment 869 (solid black line) Compared to Observed Data at LDEQ1169 for Validation Period 2006-2009.

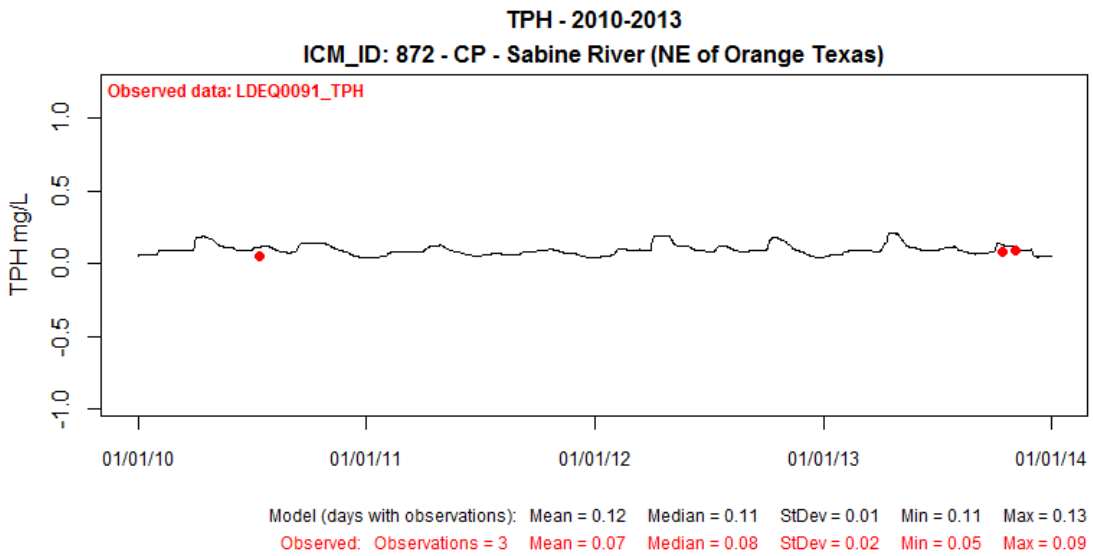

Figure 267: Modeled Total Phosphorus at ICM Compartment 872 (solid black line) Compared to Observed Data at LDEQ0091 for Calibration Period 2010-2013.

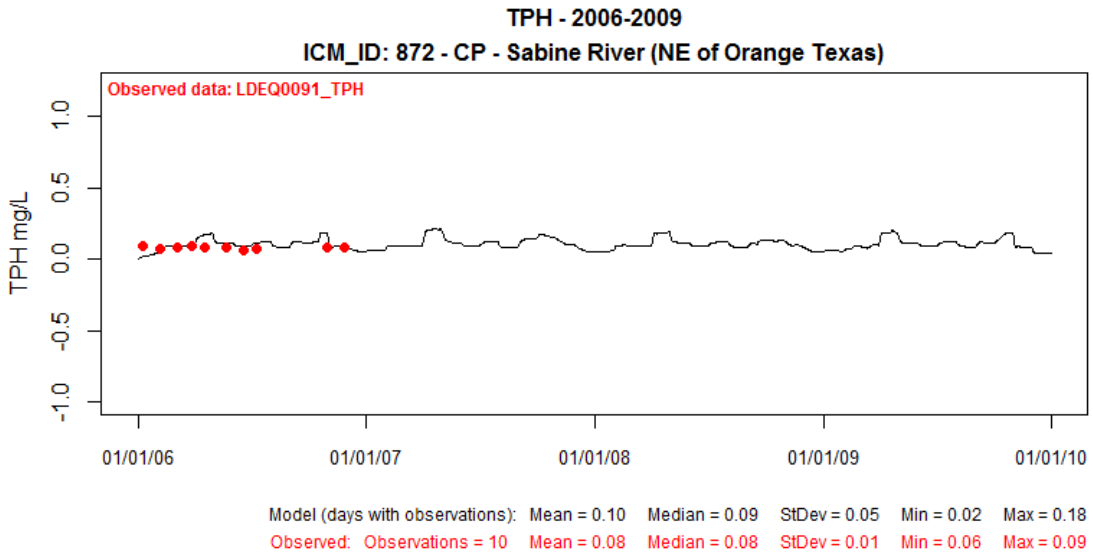

Figure 268: Modeled Total Phosphorus at ICM Compartment 872 (solid black line) Compared to Observed Data at LDEQ0091 for Validation Period 2006-2009.

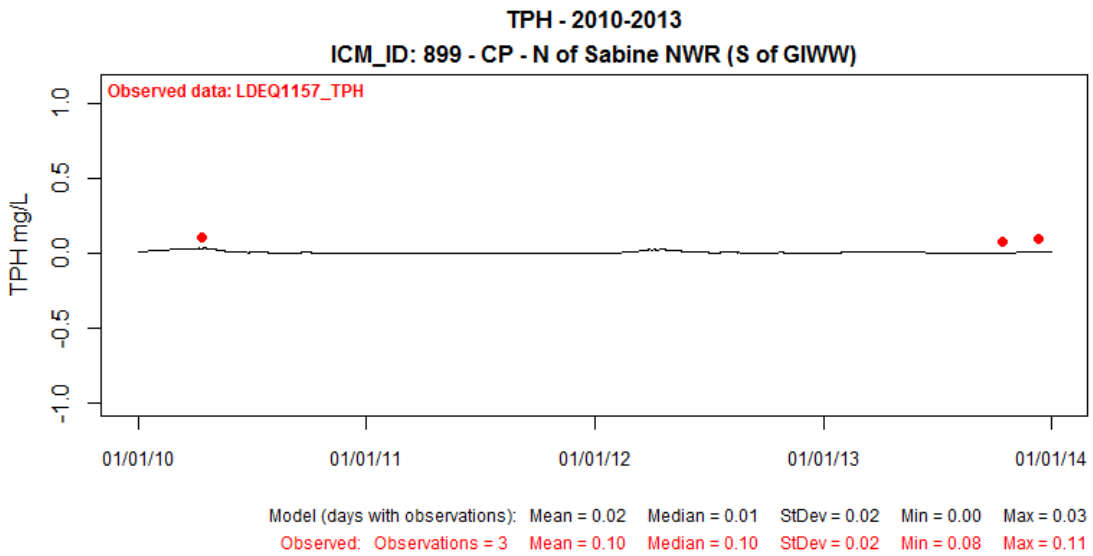

Figure 269: Modeled Total Phosphorus at ICM Compartment 899 (solid black line) Compared to Observed Data at LDEQ1157 for Calibration Period 2010-2013.

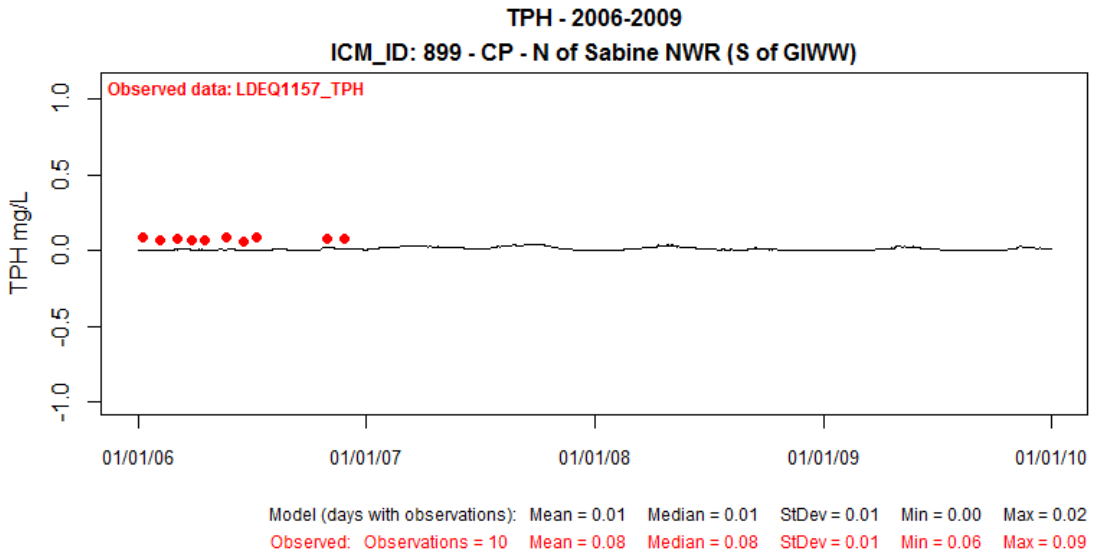

Figure 270: Modeled Total Phosphorus at ICM Compartment 899 (solid black line) Compared to Observed Data at LDEQ1157 for Validation Period 2006-2009.

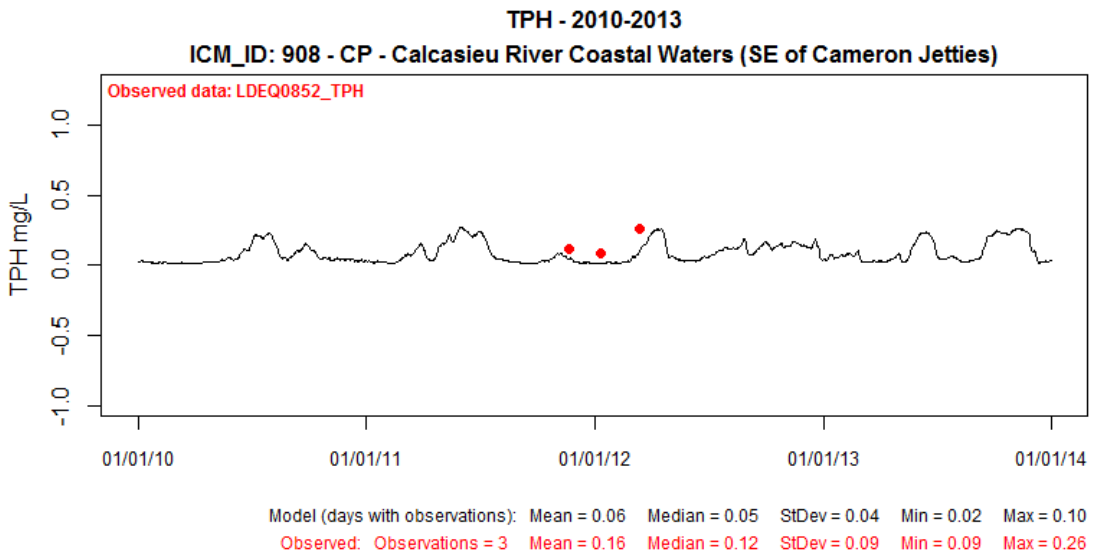

Figure 271: Modeled Total Phosphorus at ICM Compartment 908 (solid black line) Compared to Observed Data at LDEQ0852 for Calibration Period 2010-2013.

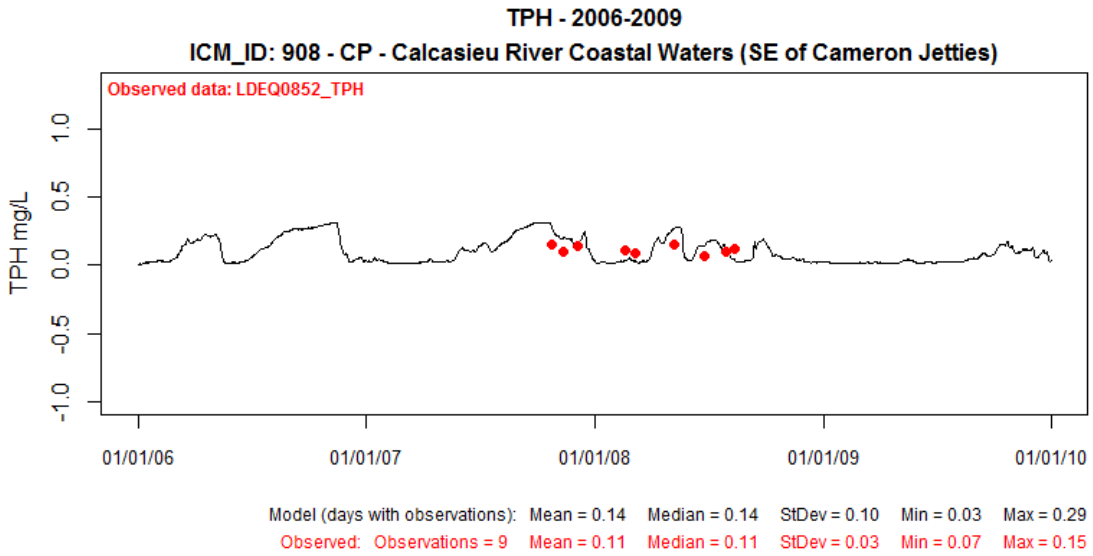

Figure 272: Modeled Total Phosphorus at ICM Compartment 908 (solid black line) Compared to Observed Data at LDEQ0852 for Validation Period 2006-2009.

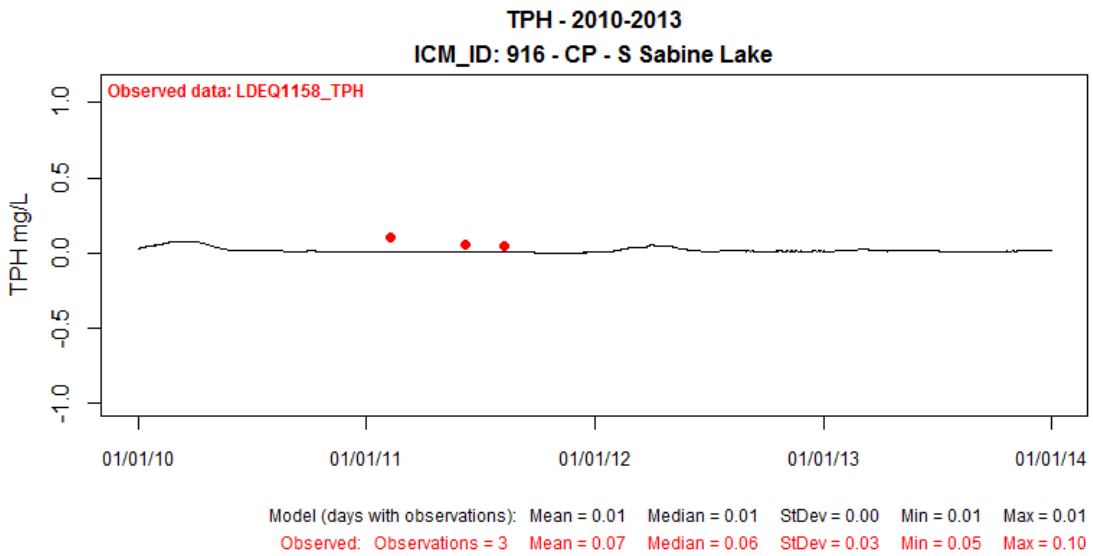

Figure 273: Modeled Total Phosphorus at ICM Compartment 916 (solid black line) Compared to Observed Data at LDEQ1158 for Calibration Period 2010-2013.

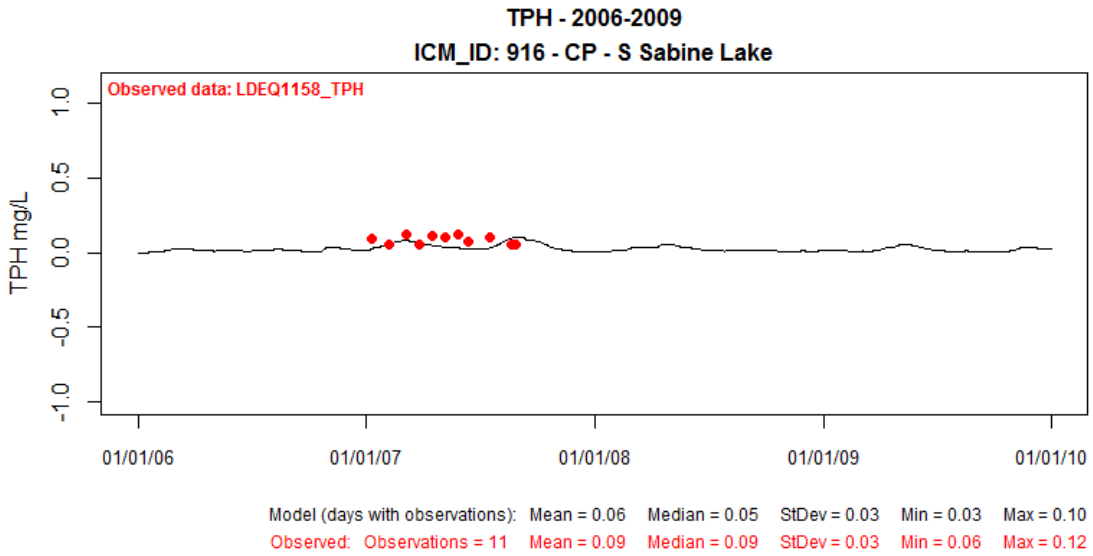

Figure 274: Modeled Total Phosphorus at ICM Compartment 916 (solid black line) Compared to Observed Data at LDEQ1158 for Validation Period 2006-2009.

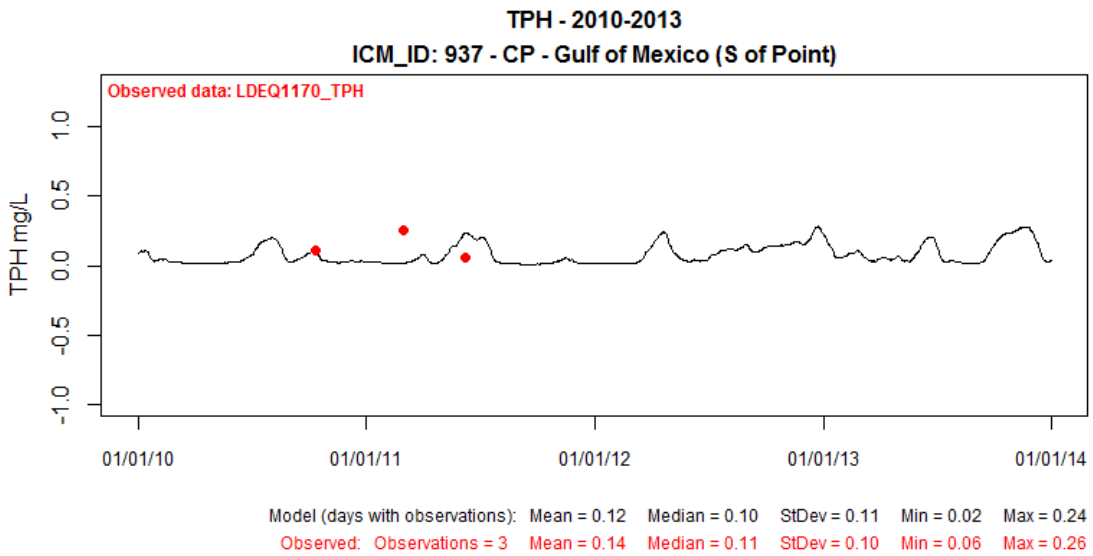

Figure 275: Modeled Total Phosphorus at ICM Compartment 937 (solid black line) Compared to Observed Data at LDEQ1170 for Calibration Period 2010-2013.

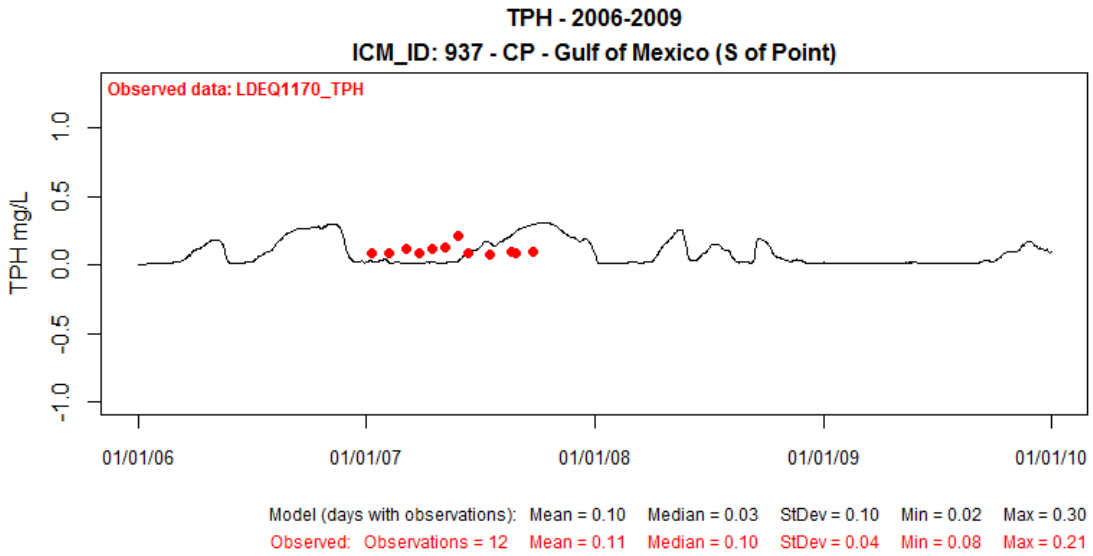

Figure 276: Modeled Total Phosphorus at ICM Compartment 937 (solid black line) Compared to Observed Data at LDEQ1170 for Validation Period 2006-2009.