

Model Statistics, Data, and Plots

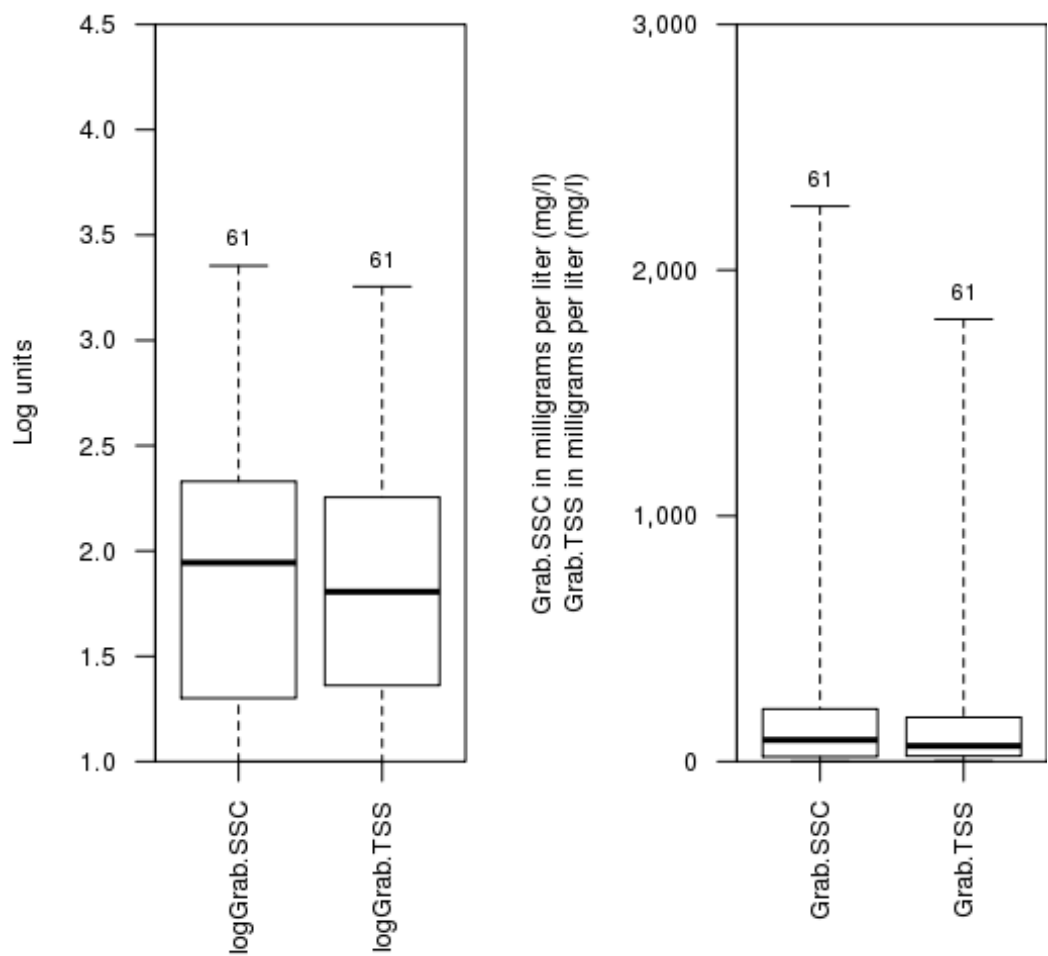
Model

$$\text{logGrab.SSC} = + 1.07 * \text{logGrab.TSS} - 0.0671$$

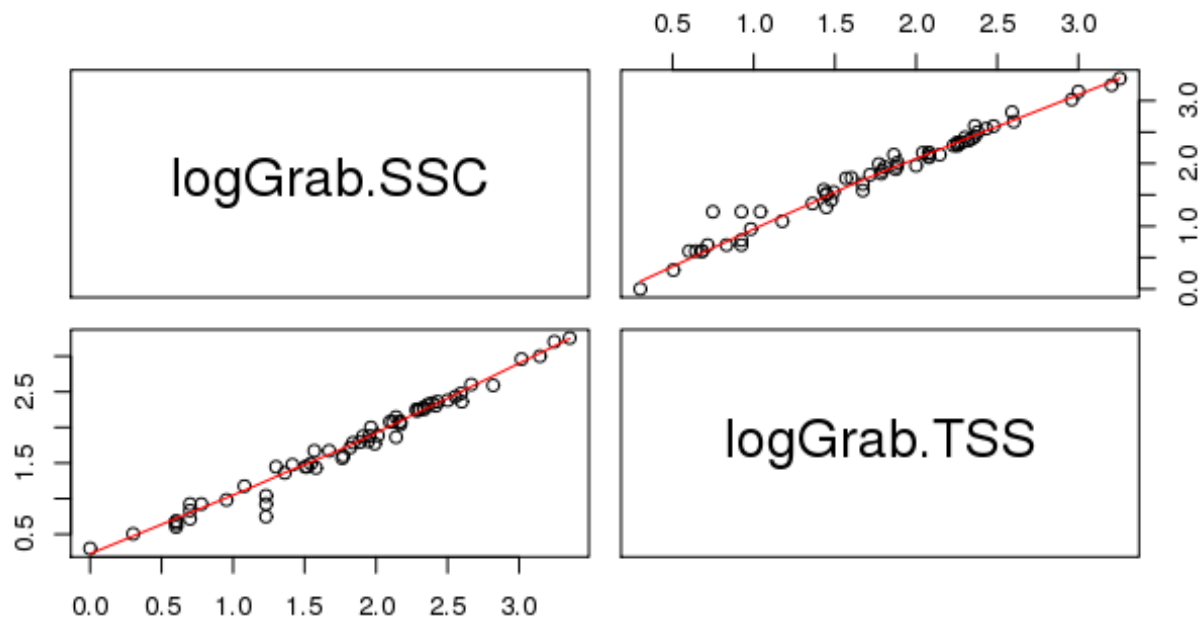
Variable Summary Statistics

	logGrab.SSC	Grab.SSC	logGrab.TSS	Grab.TSS
Minimum	0.00	1	0.301	2
1st Quartile	1.30	20	1.360	23
Median	1.94	88	1.810	64
Mean	1.81	219	1.750	177
3rd Quartile	2.33	214	2.260	180
Maximum	3.35	2260	3.260	1800

Box Plots



Exploratory Plots



Basic Model Statistics

Number of Observations	61
Standard error (RMSE)	0.123
Average Model standard percentage error (MSPE)	28.7
Coefficient of determination (R^2)	0.974
Adjusted Coefficient of Determination (Adj. R^2)	0.974
Bias Correction Factor (BCF)	1.05

Explanatory Variables

	Coefficients	Standard Error	t value	Pr(> t)
(Intercept)	-0.0671	0.0426	-1.57	1.21e-01
logGrab.TSS	1.0700	0.0226	47.30	1.24e-48

Correlation Matrix

	Intercept	E.vars
Intercept	1.000	-0.929
E.vars	-0.929	1.000

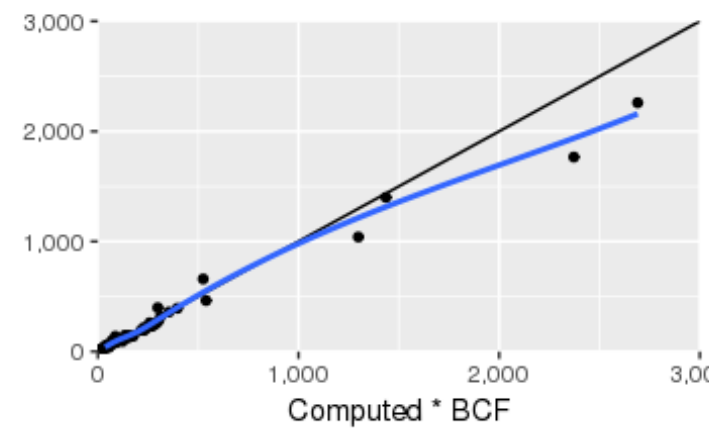
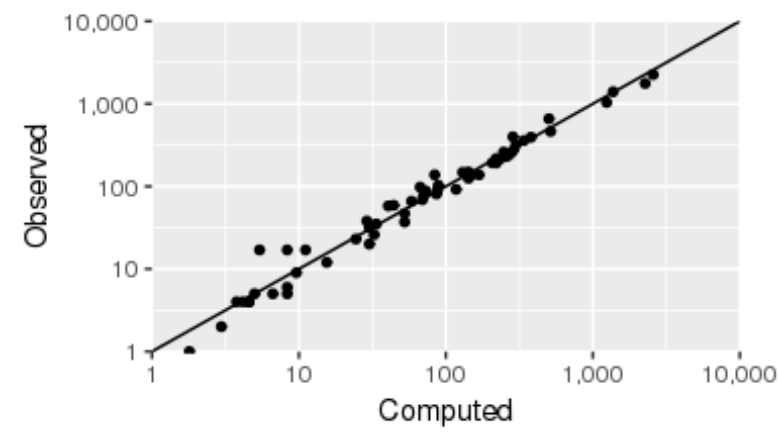
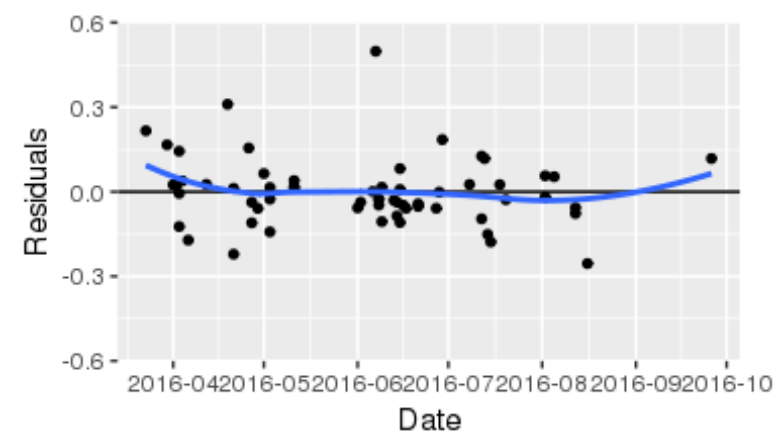
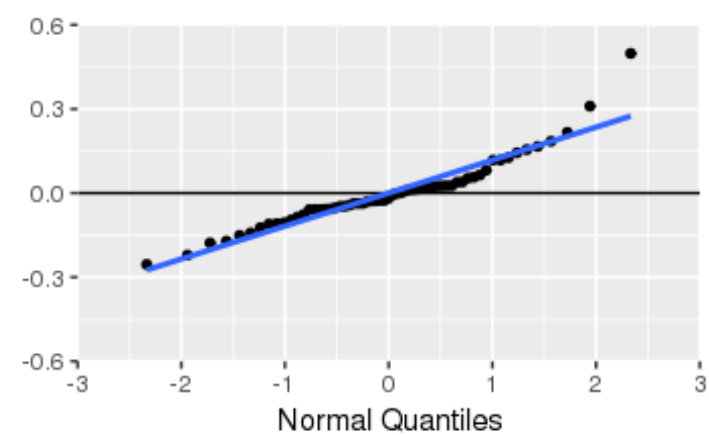
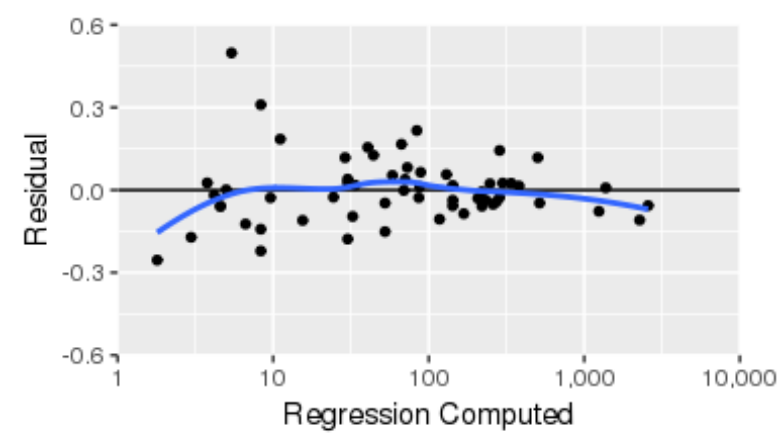
Outlier Test Criteria

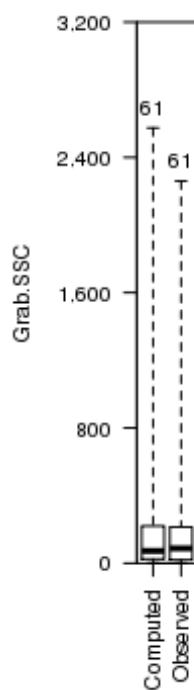
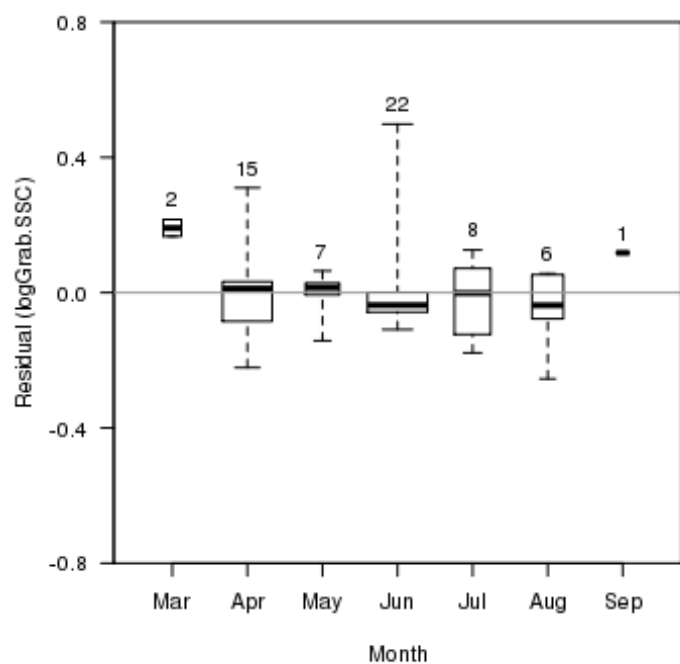
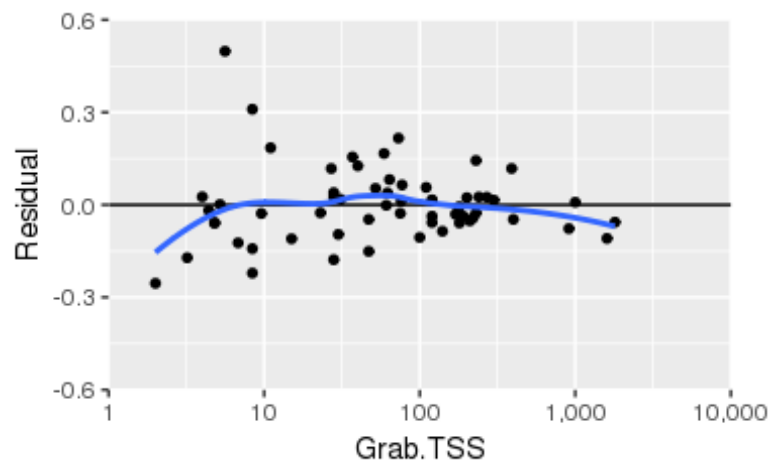
Leverage	Cook's D	DFFITS
0.0492	0.1055	0.2561

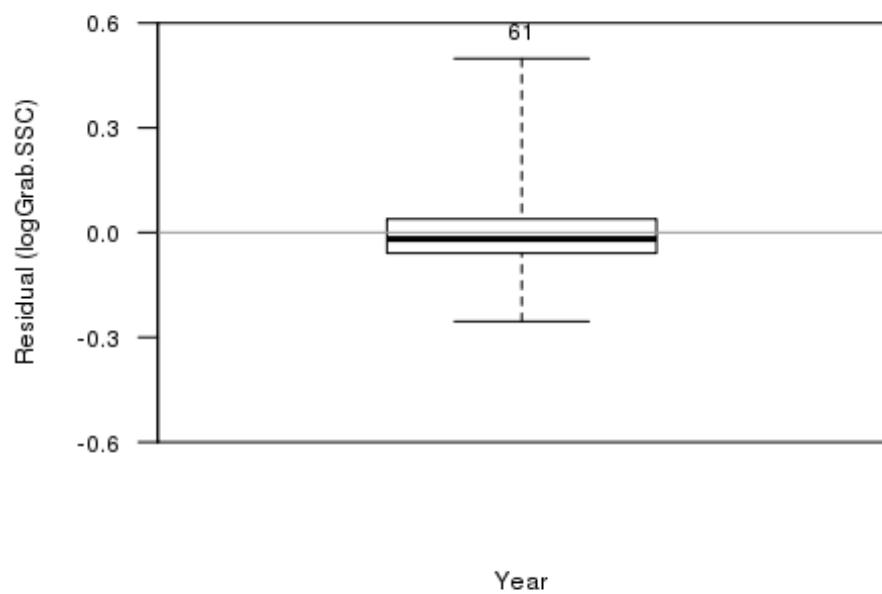
Flagged Observations

	logGrab.SSC	Estimate	Residual	Standard	Residual	Studentized	Residual	Leverage	Cook's D	DFFITS
4/19/2016 12:40	1.230	0.920	0.31000		2.57000		2.71000	0.0397	1.37e-01	0.55100
6/7/2016 10:50	1.230	0.732	0.49800		4.16000		4.91000	0.0506	4.61e-01	1.13000
8/16/2016 9:40	0.000	0.255	-0.25500		-2.17000		-2.24000	0.0877	2.26e-01	-0.69500
4/6/2016 15:35	0.301	0.473	-0.17200		-1.45000		-1.46000	0.0691	7.77e-02	-0.39800
8/2/2016 10:35	0.602	0.620	-0.01830		-0.15300		-0.15200	0.0581	7.26e-04	-0.03780
4/21/2016 10:05	0.699	0.920	-0.22100		-1.84000		-1.88000	0.0397	6.98e-02	-0.38200
6/6/2016 13:05	0.699	0.698	0.00110		0.00922		0.00914	0.0528	2.37e-06	0.00216
6/17/2016 11:40	0.602	0.661	-0.05870		-0.49100		-0.48800	0.0553	7.06e-03	-0.11800
6/27/2016 14:05	0.602	0.661	-0.05870		-0.49100		-0.48800	0.0553	7.06e-03	-0.11800
7/8/2016 12:15	0.602	0.576	0.02590		0.21800		0.21600	0.0612	1.55e-03	0.05520
6/29/2016 9:40	1.230	1.050	0.18500		1.53000		1.55000	0.0336	4.07e-02	0.28900
6/15/2016 17:35	3.150	3.140	0.00822		0.06930		0.06870	0.0687	1.77e-04	0.01870
8/11/2016 19:50	3.350	3.410	-0.05650		-0.48300		-0.48000	0.0923	1.19e-02	-0.15300
8/12/2016 7:00	3.020	3.090	-0.07710		-0.64900		-0.64600	0.0653	1.47e-02	-0.17100
6/15/2016 9:05	3.250	3.360	-0.10900		-0.92800		-0.92700	0.0873	4.12e-02	-0.28700

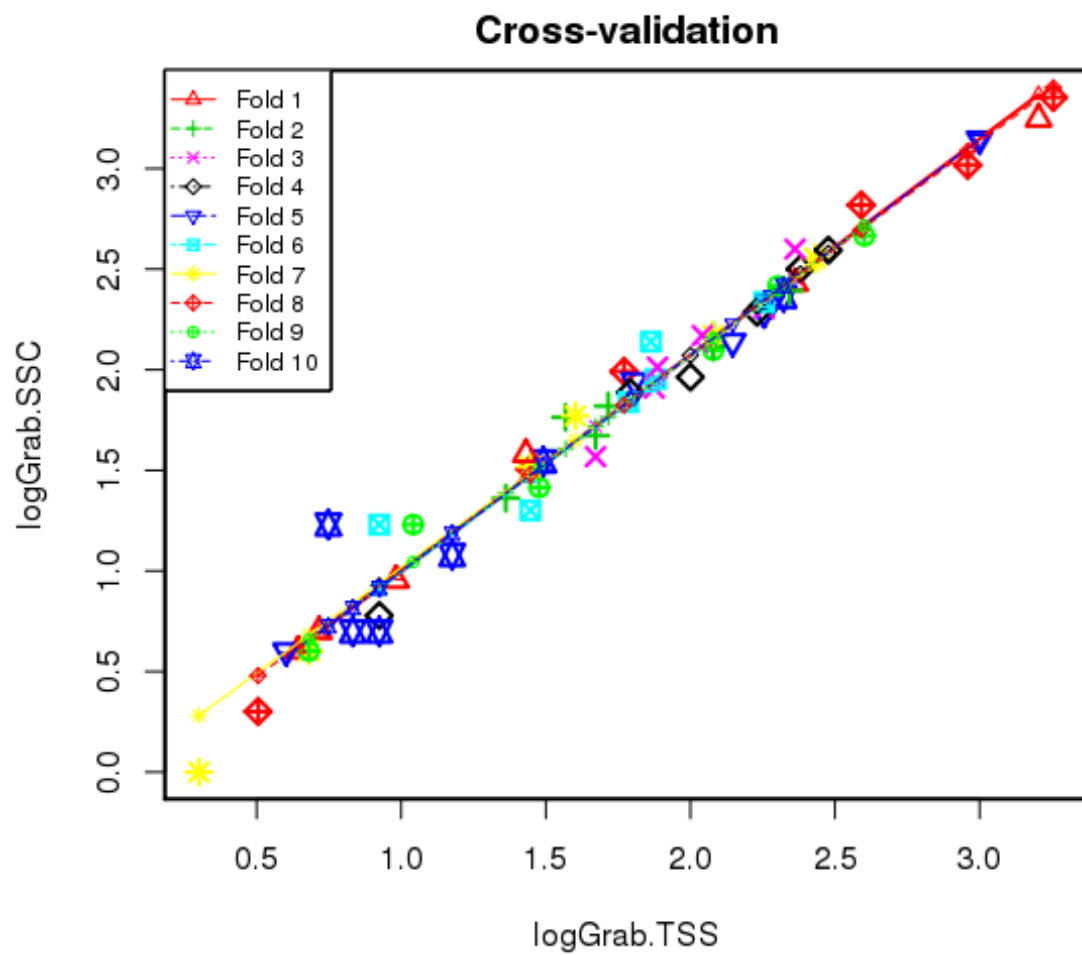
Statistical Plots



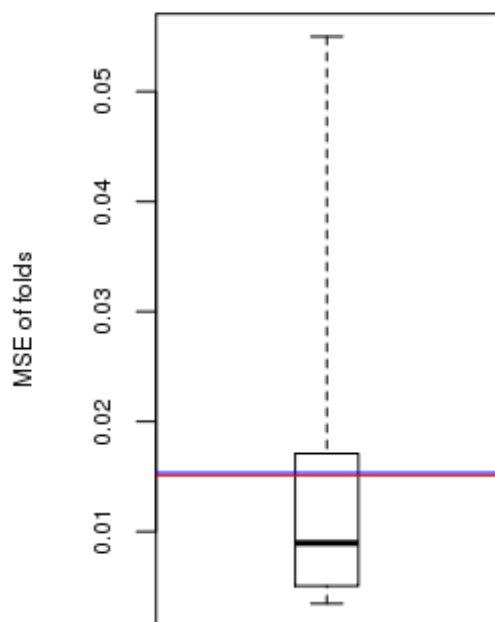




Cross Validation



Minimum MSE of folds: 0.00345
 Mean MSE of folds: 0.01530
 Median MSE of folds: 0.00896
 Maximum MSE of folds: 0.05500
 (Mean MSE of folds) / (Model MSE): 1.02000



Red line - Model MSE

Blue line - Mean MSE of folds

Model-Calibration Data Set

	Date	logGrab.SSC	logGrab.TSS	Grab.SSC	Grab.TSS	Computed logGrab.SSC	Computed Grab.SSC	Residual	Normal Quantiles	Censored Values
0										
1	2016-03-30	1.99	1.77	98	59	1.82	69.8	0.166	1.44	--
2	2016-04-19	1.23	0.924	17	8.4	0.92	8.7	0.31	1.94	--
3	2016-04-26	1.76	1.57	58	37	1.61	42.4	0.155	1.33	--
4	2016-06-07	1.23	0.748	17	5.6	0.732	5.64	0.498	2.33	--
5	2016-06-15	1.94	1.81	88	64	1.86	76.2	0.082	0.942	--
6	2016-07-12	1.77	1.6	59	40	1.64	46.1	0.126	1.15	--
7	2016-08-16	0	0.301	1	2	0.255	1.88	-0.255	-2.33	--
8	2016-04-06	0.301	0.505	2	3.2	0.473	3.1	-0.172	-1.56	--
9	2016-04-27	1.08	1.18	12	15	1.19	16.2	-0.11	-1.15	--
10	2016-05-03	0.778	0.924	6	8.4	0.92	8.7	-0.142	-1.33	--
11	2016-06-08	1.36	1.36	23	23	1.39	25.5	-0.026	-0.041	--

12	2016-07-20	0.954	0.982	9	9.6	0.982	10	-0.0281	-0.165	--
13	2016-08-02	0.602	0.643	4	4.4	0.62	4.36	-0.0183	0	--
14	2016-08-05	1.82	1.72	66	52	1.77	61	0.0534	0.765	--
15	2016-04-03	0.699	0.833	5	6.8	0.822	6.94	-0.123	-1.24	--
16	2016-04-21	0.699	0.924	5	8.4	0.92	8.7	-0.221	-1.94	--
17	2016-06-06	0.699	0.716	5	5.2	0.698	5.21	0.0011	0.123	--
18	2016-06-17	0.602	0.681	4	4.8	0.661	4.79	-0.0587	-0.711	--
19	2016-06-27	0.602	0.681	4	4.8	0.661	4.79	-0.0587	-0.659	--
20	2016-07-08	0.602	0.602	4	4	0.576	3.94	0.0259	0.56	--
21	2016-07-12	1.41	1.48	26	30	1.51	33.9	-0.096	-0.942	--
22	2016-07-15	1.3	1.45	20	28	1.48	31.5	-0.178	-1.72	--
23	2016-04-04	1.89	1.79	77	62	1.85	73.6	0.0387	0.659	--
24	2016-04-21	1.95	1.88	90	76	1.94	91.5	0.012	0.206	--
25	2016-04-29	2.28	2.26	192	180	2.34	230	-0.059	-0.765	--
26	2016-05-01	2.01	1.89	103	77	1.95	92.8	0.0645	0.88	--
27	2016-06-01	2.1	2.08	125	120	2.15	149	-0.0573	-0.609	--
28	2016-06-29	1.23	1.04	17	11	1.05	11.6	0.185	1.56	--
29	2016-07-18	2.5	2.38	317	240	2.48	313	0.0253	0.513	--
30	2016-04-01	2.56	2.43	359	270	2.53	355	0.0247	0.467	--
31	2016-04-03	2.6	2.36	398	230	2.46	299	0.144	1.24	--
32	2016-04-27	2.33	2.28	214	190	2.37	244	-0.037	-0.334	--
33	2016-05-03	2.59	2.48	393	300	2.58	397	0.0151	0.291	--
34	2016-05-11	2.17	2.08	147	120	2.15	149	0.0131	0.248	--
35	2016-06-15	3.15	3	1400	1000	3.14	1440	0.00822	0.165	--
36	2016-06-21	2.36	2.32	230	210	2.41	271	-0.0521	-0.513	--
37	2016-09-26	2.82	2.59	659	390	2.7	525	0.118	1.08	--
38	2016-04-02	2.42	2.3	261	201	2.39	259	0.0231	0.422	--
39	2016-05-03	2.43	2.36	269	230	2.46	299	-0.0263	-0.082	--
40	2016-06-02	2.31	2.26	202	180	2.34	230	-0.037	-0.291	--
41	2016-06-09	2.17	2.08	148	120	2.15	149	0.0161	0.334	--
42	2016-06-14	2.12	2.08	131	120	2.15	149	-0.0369	-0.248	--
43	2016-06-16	2.67	2.6	463	400	2.71	539	-0.0472	-0.467	--
44	2016-06-21	2.39	2.34	247	220	2.44	285	-0.0427	-0.377	--
45	2016-08-02	2.17	2.04	148	110	2.11	136	0.0565	0.821	--
46	2016-04-12	1.51	1.45	32	28	1.48	31.5	0.0262	0.609	--
47	2016-05-11	1.54	1.49	35	31	1.53	35.1	0.0179	0.377	--
48	2016-06-08	1.67	1.67	47	47	1.72	54.8	-0.0472	-0.422	--
49	2016-06-13	2.29	2.23	193	170	2.32	216	-0.0302	-0.206	--
50	2016-06-28	1.84	1.79	69	61	1.84	72.4	-0.0014	0.082	--
51	2016-07-14	1.57	1.67	37	47	1.72	54.8	-0.151	-1.44	--
52	2016-08-12	3.35	3.26	2260	1800	3.41	2690	-0.0565	-0.56	--
53	2016-08-12	3.02	2.96	1040	910	3.09	1300	-0.0771	-0.821	--
54	2016-03-23	2.14	1.86	138	73	1.92	87.7	0.216	1.72	--
55	2016-04-03	2.34	2.26	217	180	2.34	230	-0.00584	0.041	--
56	2016-05-11	1.52	1.45	33	28	1.48	31.5	0.0395	0.711	--
57	2016-06-08	1.91	1.88	81	75	1.94	90.2	-0.0276	-0.123	--
58	2016-06-09	1.96	2	92	100	2.07	123	-0.106	-1.01	--
59	2016-06-14	2.14	2.15	138	140	2.23	176	-0.0858	-0.88	--
60	2016-06-15	3.25	3.2	1770	1600	3.36	2370	-0.109	-1.08	--
61	2016-07-13	1.58	1.43	38	27	1.46	30.3	0.118	1.01	--

Definitions

Grab.SSC: Suspended sediment concentration (SSC) in mg/l (80154)
Grab.TSS: Total suspended solids in mg/l (00530)

App Version 1.0