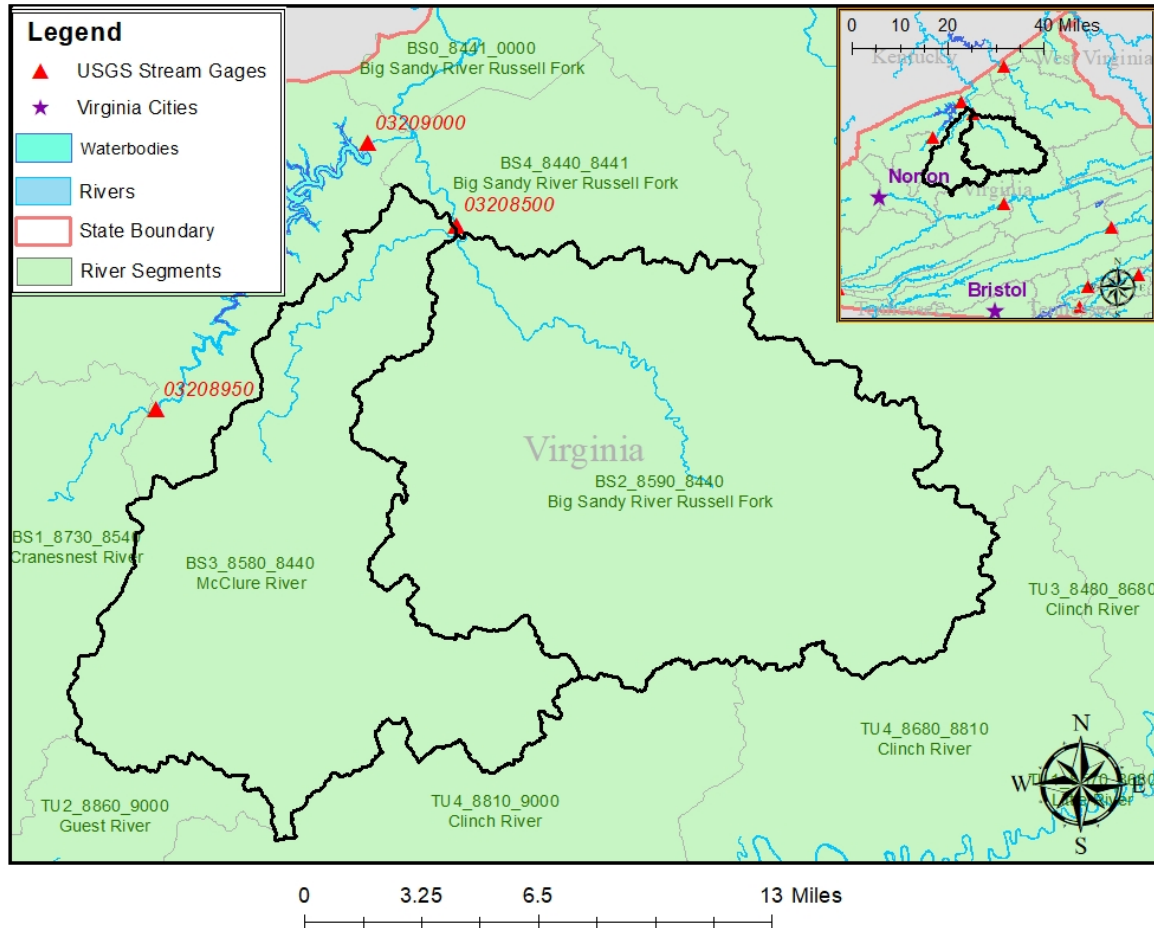


03208500 vs. BS2_8590_8440+BS3_8580_8440

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This river segment follows part of the flow of the Russell Fork, a tributary of the Big Sandy River. The gage is located in Dickenson County, VA (Lat 3712'25", Long 8217'45") approximately 26 miles northeast of Norton, VA. Drainage area is 286 sq. miles. This gage started taking data in 1926 and is still taking data. There are no known anthropogenic alterations in this area that would affect the flow conditions. The average daily discharge error between the model and gage data for the 20 year timespan was -3.83%, with 52.5% of its rolling three month time spans above 20% error.

Table 1: Monthly Low Flows

	USGS Gage	Model	Pct. Error
Jan. Low Flow	26	43.3	-66.5
Feb. Low Flow	26.2	75	-186
Mar. Low Flow	60	160	-167
Apr. Low Flow	111	211	-90.1
May Low Flow	191	248	-29.8
Jun. Low Flow	218	249	-14.2
Jul. Low Flow	258	175	32.2
Aug. Low Flow	120	111	7.5
Sep. Low Flow	64	73	-14.1
Oct. Low Flow	56	41.4	26.1
Nov. Low Flow	39	35.6	8.72
Dec. Low Flow	27	29.1	-7.78

Table 2: Monthly Average Flows

	USGS Gage	Model	Pct. Error
Overall Mean Flow	366	380	-3.83
Jan. Mean Flow	488	533	-9.22
Feb. Mean Flow	733	770	-5.05
Mar. Mean Flow	751	679	9.59
Apr. Mean Flow	674	512	24
May Mean Flow	433	405	6.47
Jun. Mean Flow	281	267	4.98
Jul. Mean Flow	194	173	10.8
Aug. Mean Flow	122	165	-35.2
Sep. Mean Flow	94.3	148	-56.9
Oct. Mean Flow	108	197	-82.4
Nov. Mean Flow	177	285	-61
Dec. Mean Flow	357	448	-25.5

Table 3: Monthly High Flows

	USGS Gage	Model	Pct. Error
Jan. High Flow	126	272	-116
Feb. High Flow	955	1240	-29.8
Mar. High Flow	1250	1140	8.8
Apr. High Flow	1820	1300	28.6
May High Flow	3640	2700	25.8
Jun. High Flow	2040	1710	16.2
Jul. High Flow	1300	1330	-2.31
Aug. High Flow	1320	1440	-9.09
Sep. High Flow	508	490	3.54
Oct. High Flow	437	374	14.4
Nov. High Flow	363	505	-39.1
Dec. High Flow	246	227	7.72

Table 4: Period Low Flows

	USGS Gage	Model	Pct. Error
Min. 1 Day Min	8.2	1.31	84
Med. 1 Day Min	17	14.7	13.5
Min. 3 Day Min	8.73	1.86	78.7
Med. 3 Day Min	17.6	15.9	9.66
Min. 7 Day Min	9.17	3.2	65.1
Med. 7 Day Min	20.3	19.5	3.94
Min. 30 Day Min	12.7	12.9	-1.57
Med. 30 Day Min	28.8	40.7	-41.3
Min. 90 Day Min	28.5	24.6	13.7
Med. 90 Day Min	75.1	93.9	-25
7Q10	12.3	6.18	49.8
Year of 90-Day Min. Flow	1988	1988	0
Drought Year Mean	132	133	-0.76
Mean Baseflow	143	175	-22.4

Table 5: Period High Flows

	USGS Gage	Model	Pct. Error
Max. 1 Day Max	15000	14200	5.33
Med. 1 Day Max	5940	6010	-1.18
Max. 3 Day Max	7440	8730	-17.3
Med. 3 Day Max	3590	3210	10.6
Max. 7 Day Max	4400	5650	-28.4
Med. 7 Day Max	2570	2180	15.2
Max. 30 Day Max	2030	2270	-11.8
Med. 30 Day Max	1150	1120	2.61
Max. 90 Day Max	1470	1670	-13.6
Med. 90 Day Max	766	730	4.7

Table 6: Non-Exceedance Flows

	USGS Gage	Model	Pct. Error
1% Non-Exceedance	15	12.3	18
5% Non-Exceedance	24	29.1	-21.3
50% Non-Exceedance	159	215	-35.2
95% Non-Exceedance	1260	1160	7.94
99% Non-Exceedance	3380	3140	7.1
Sept. 10% Non-Exceedance	18.5	18	2.7

Fig. 1: Hydrograph

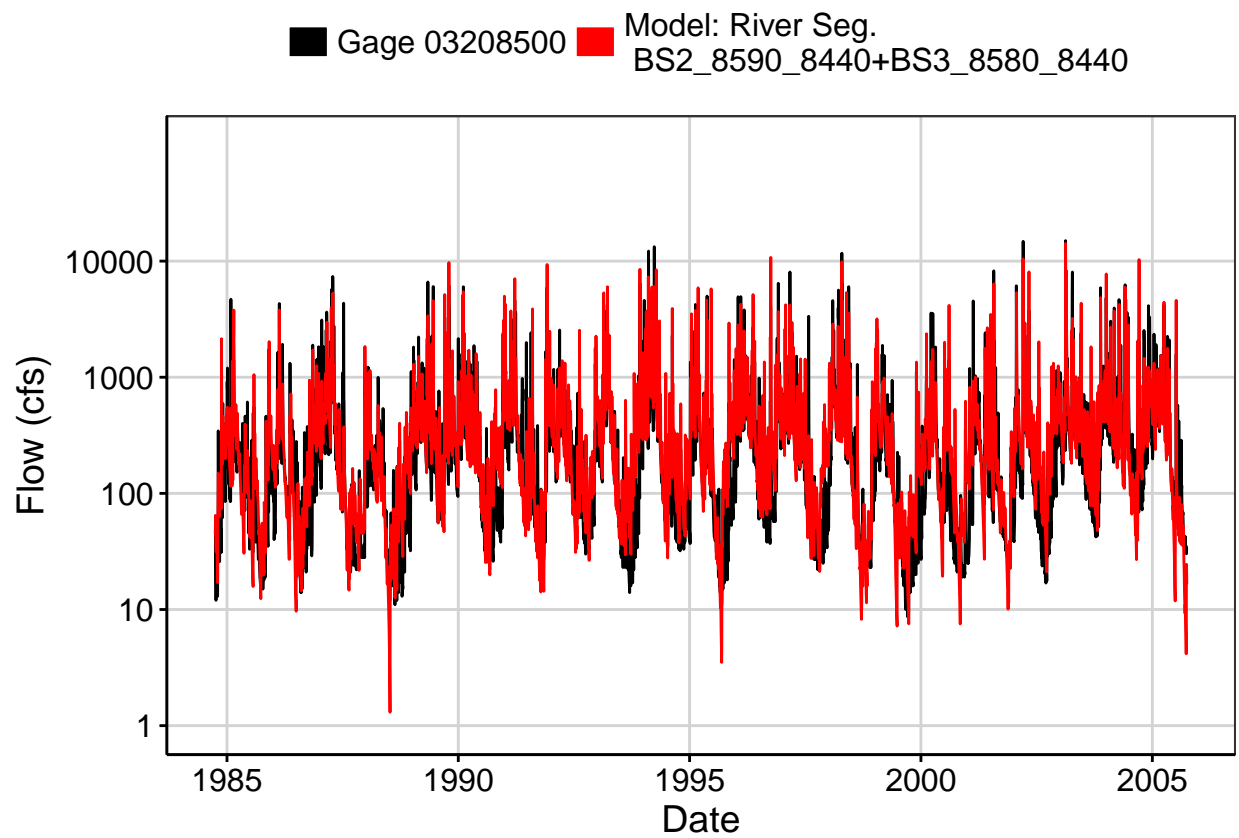


Fig. 2: Zoomed Hydrograph

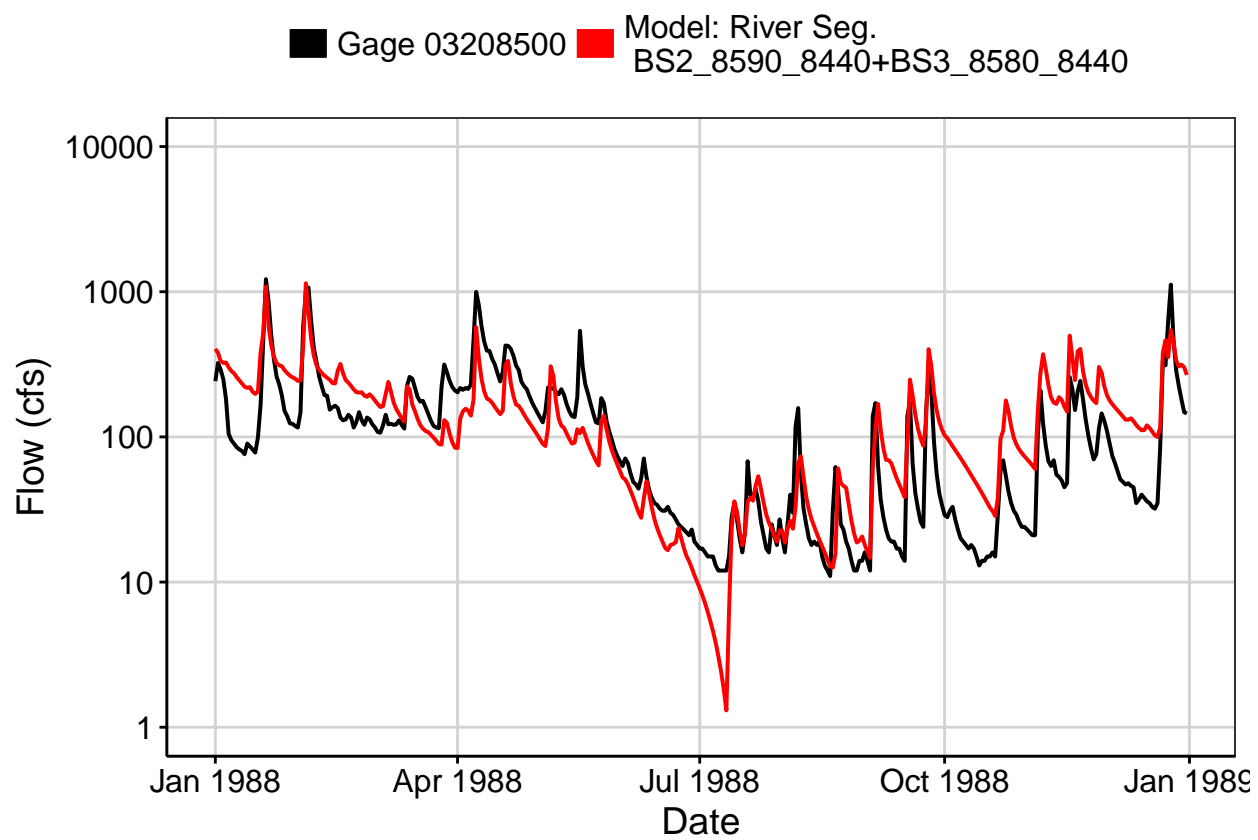


Fig. 3: Flow Exceedance

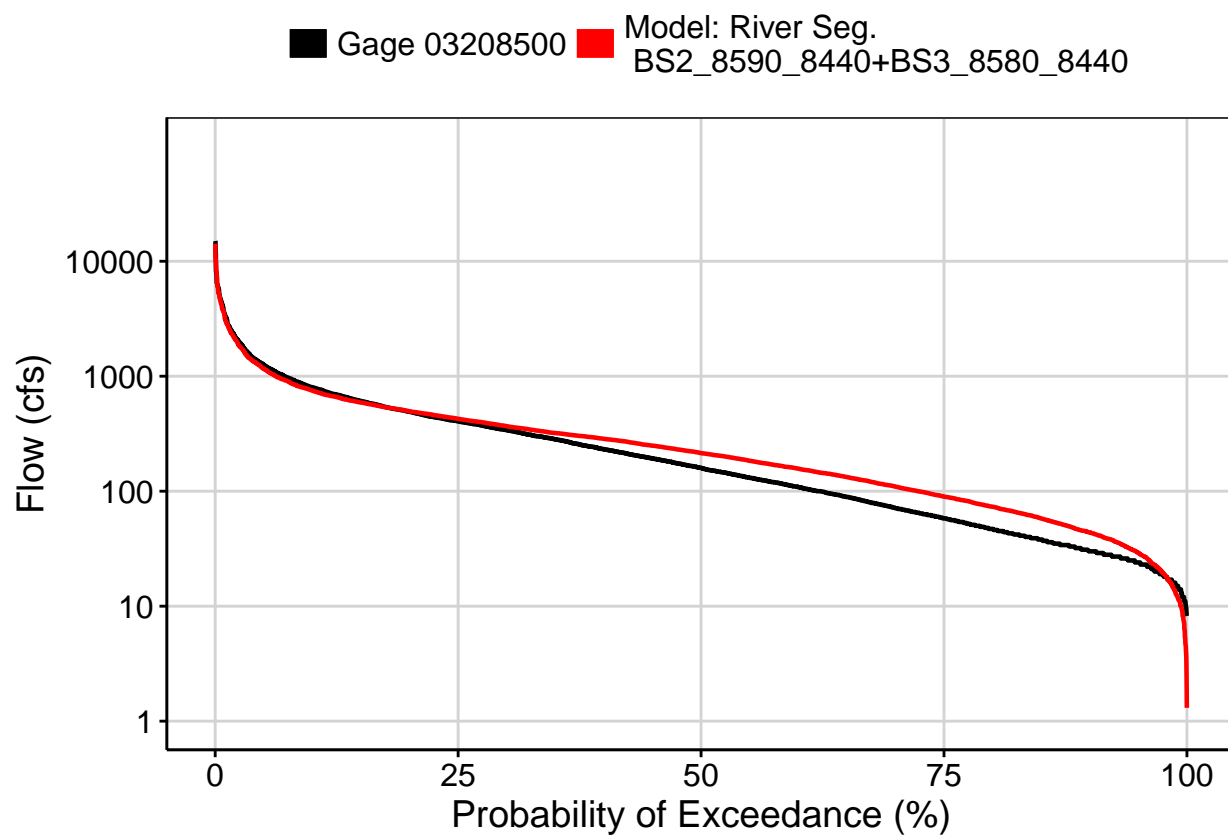


Fig. 4: Baseflow

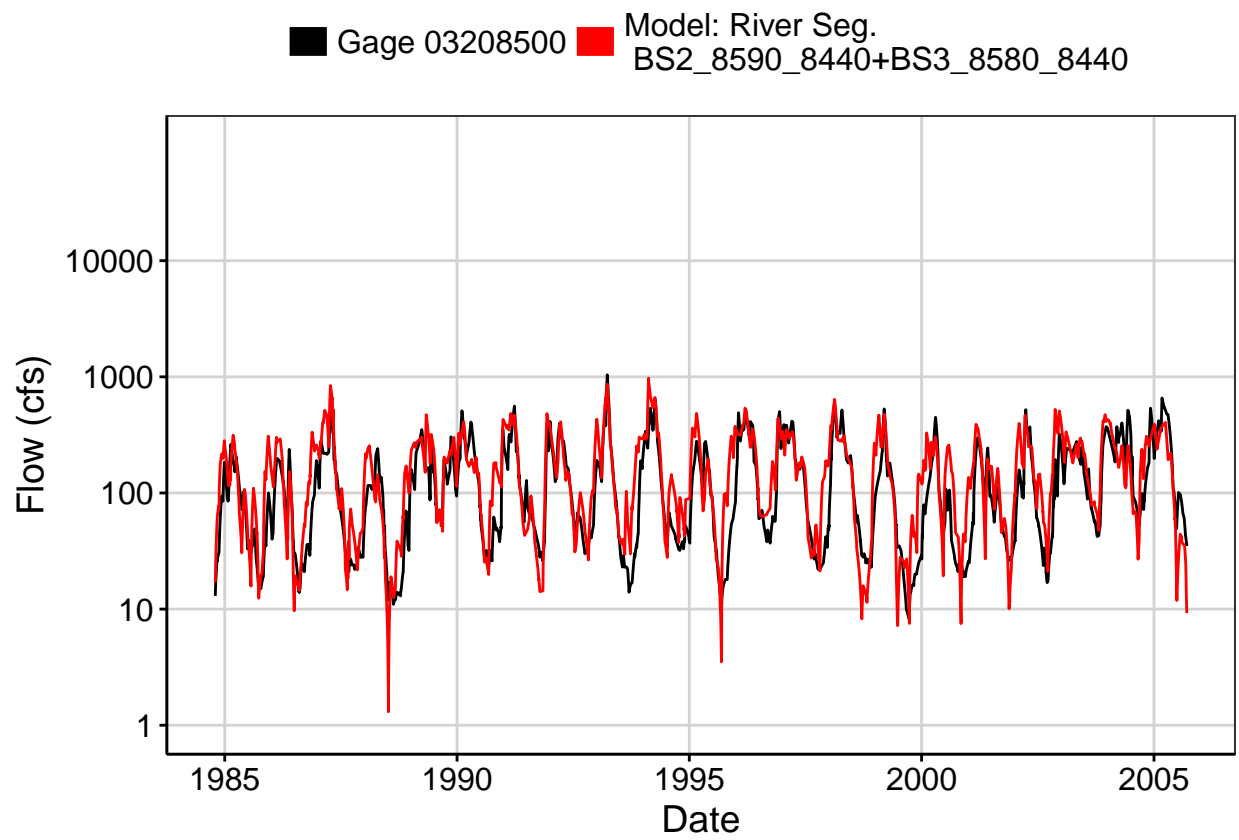


Fig. 5: Combined Baseflow

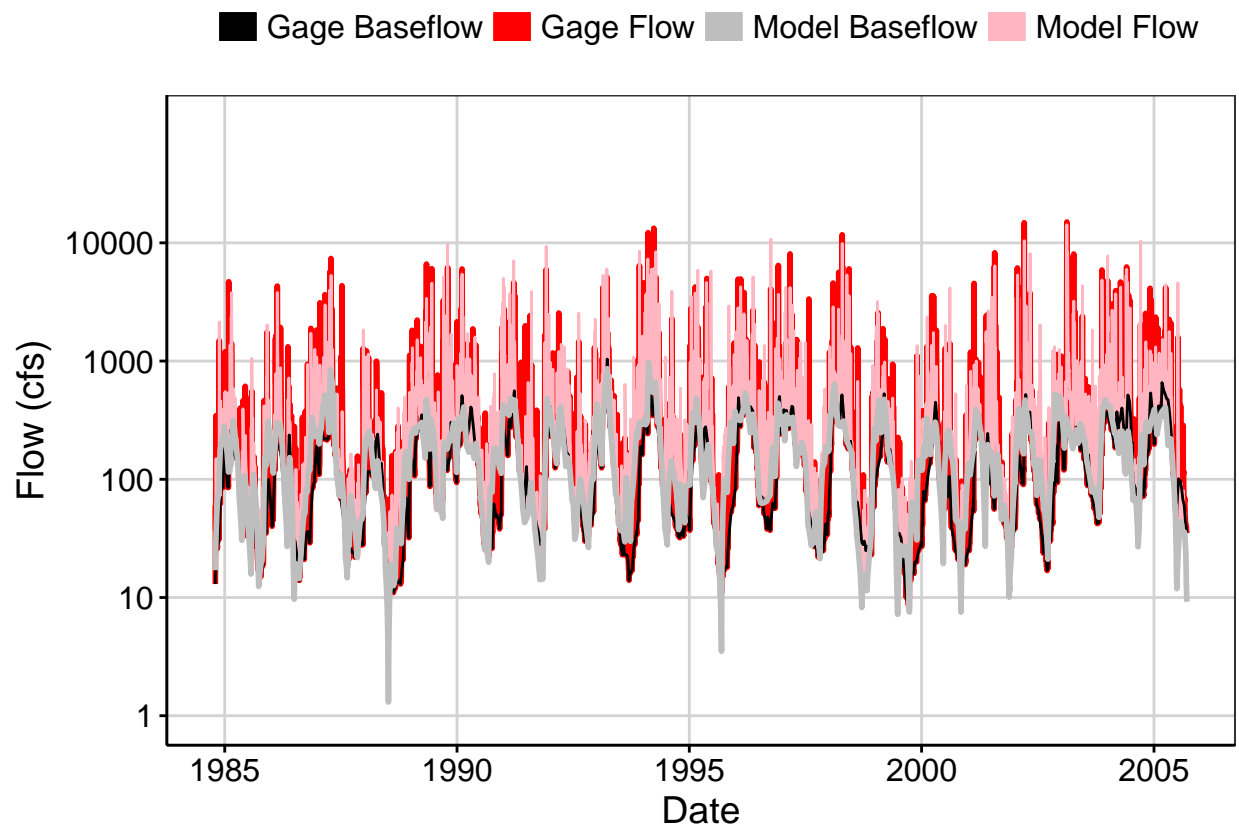


Fig. 6: Largest Error Segment

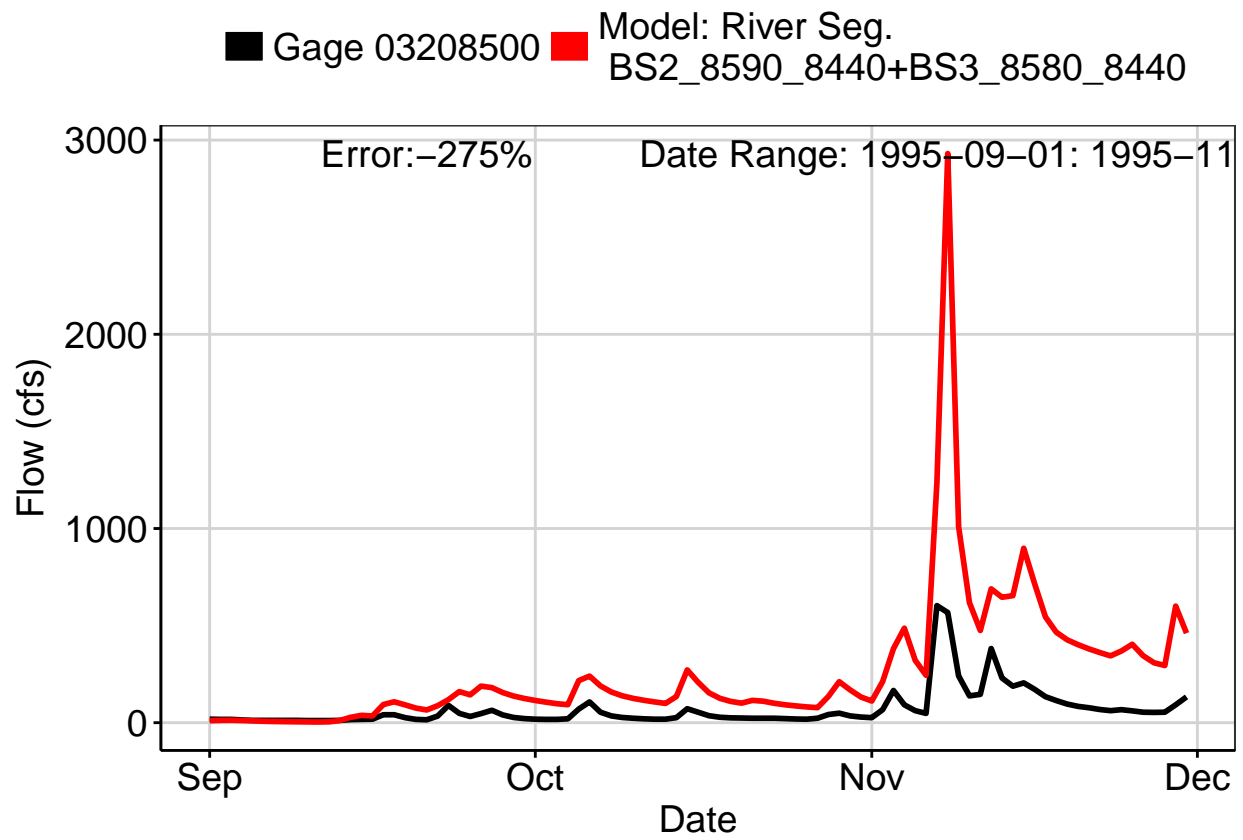


Fig. 7: Second Largest Error Segment

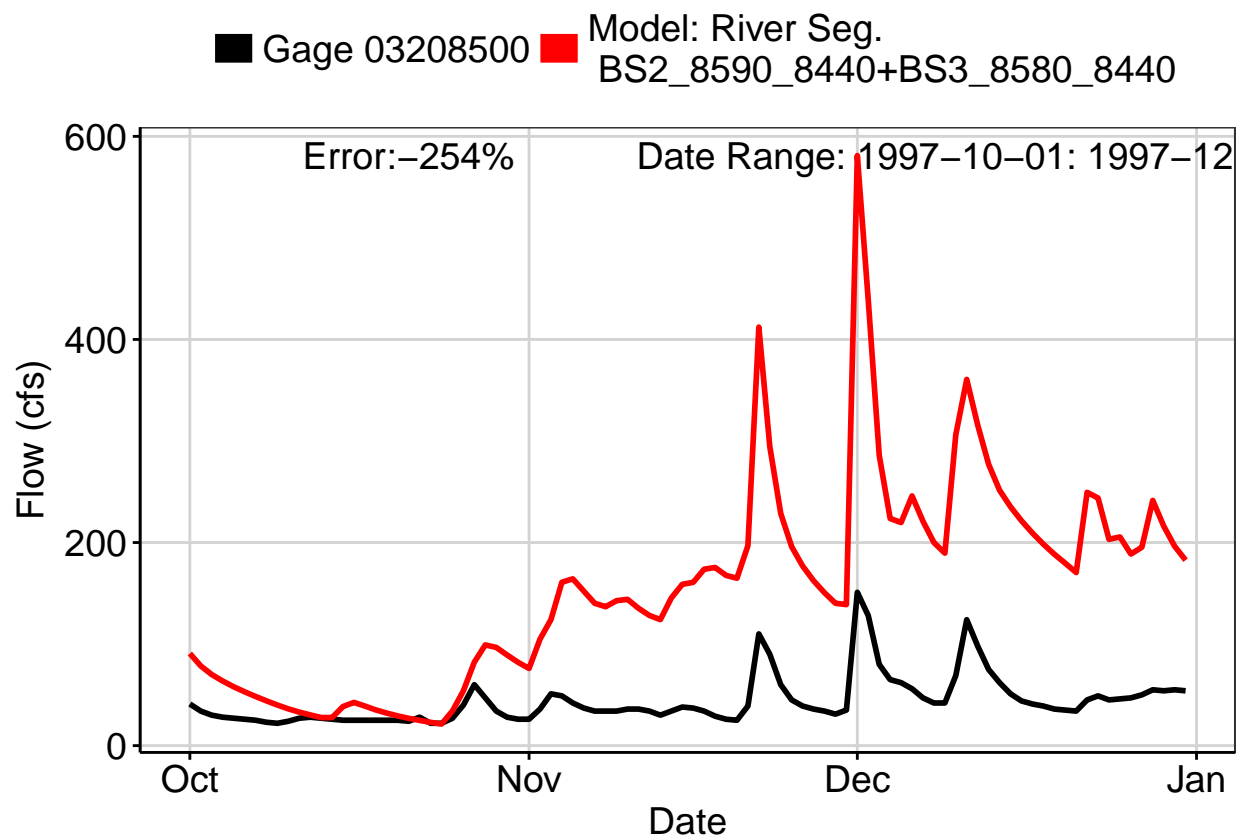


Fig. 8: Third Largest Error Segment

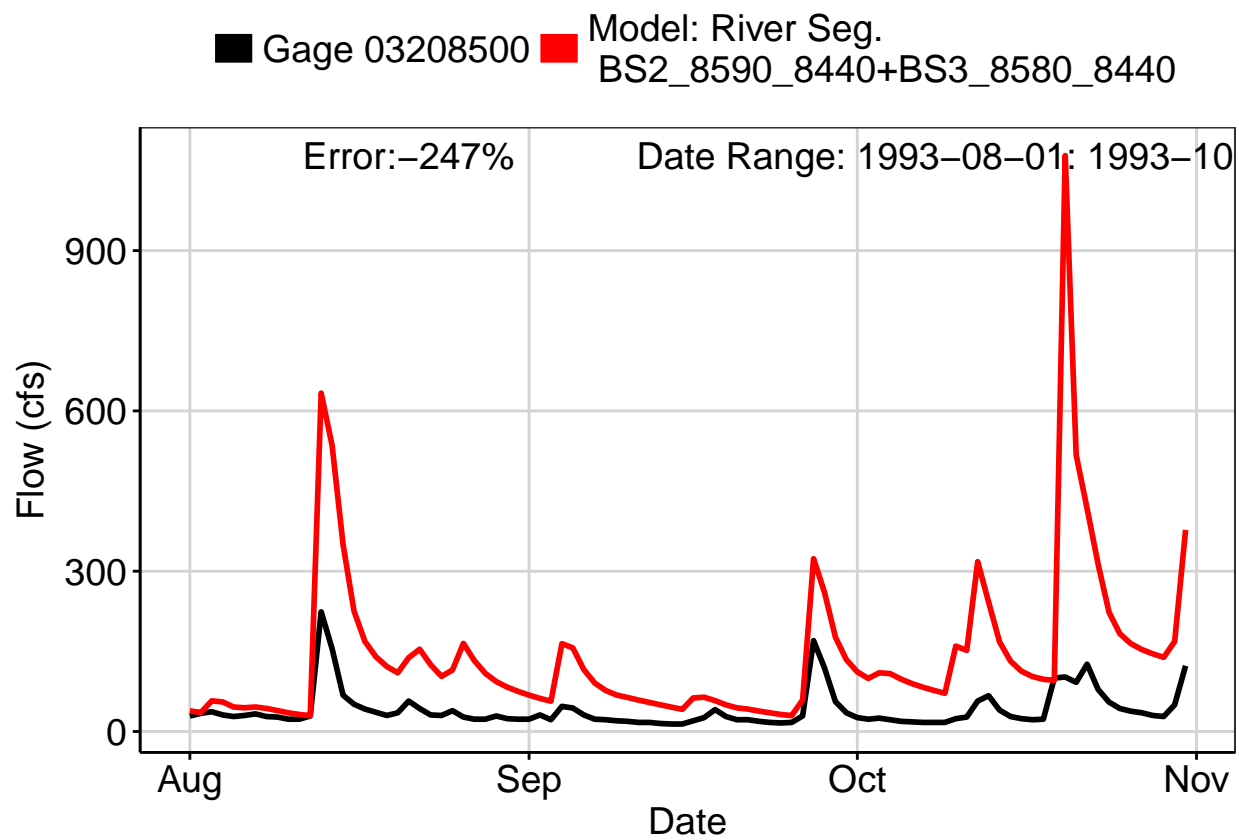


Fig. 9: Residuals Plot

