03168000
vs. NR6_8640_8500+NR3_8740_8500+NR3_8690_8500

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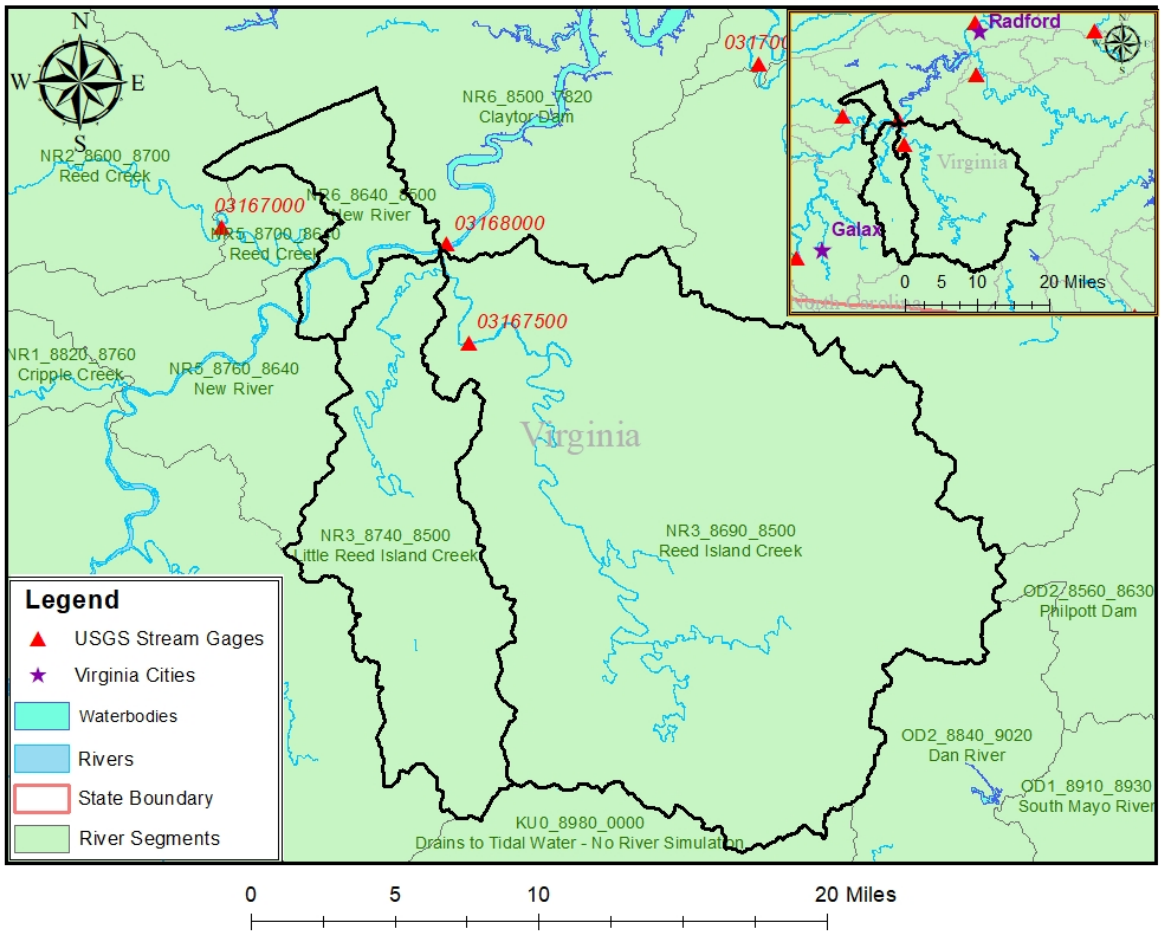

This river segment follows part of the flow of the New River. The gage is located in Pulaski County, VA (Lat 3656'15", Long 8044'45") approximately 21 miles north of Galax, VA. Drainage area is 2212 sq. miles. This gage started taking data in 1929 and is still taking data. Flow in this area is regulated by the American Electric Power Companys power plants at Buck and Byllesby approximately 25 miles upstream. This station is also 21 miles upstream of Claytor Dam, which is also owned and operated by the American Electric Power Company. The average daily discharge error between the model and gage data for the 20 year timespan was -5.1%, with 27.1% of its rolling three month time spans above 20% error.

Table 1: Monthly Low Flows

	USGS Gage	Model	Pct. Error
Jan. Low Flow	900	802	10.9
Feb. Low Flow	1040	1030	0.96
Mar. Low Flow	1450	1770	-22.1
Apr. Low Flow	1200	1750	-45.8
May Low Flow	2220	2630	-18.5
Jun. Low Flow	2590	3190	-23.2
Jul. Low Flow	2520	2430	3.57
Aug. Low Flow	2180	2030	6.88
Sep. Low Flow	1730	1750	-1.16
Oct. Low Flow	1360	1210	11
Nov. Low Flow	1110	1110	0
Dec. Low Flow	879	965	-9.78

Table 2: Monthly Average Flows

	USGS Gage	Model	Pct. Error
Overall Mean Flow	3140	3300	-5.1
Jan. Mean Flow	3690	3940	-6.78
Feb. Mean Flow	4270	4910	-15
Mar. Mean Flow	4870	5550	-14
Apr. Mean Flow	4470	4680	-4.7
May Mean Flow	3580	3420	4.47
Jun. Mean Flow	2980	3000	-0.67
Jul. Mean Flow	2230	2120	4.93
Aug. Mean Flow	2050	2150	-4.88
Sep. Mean Flow	2180	2330	-6.88
Oct. Mean Flow	1990	2140	-7.54
Nov. Mean Flow	2680	2640	1.49
Dec. Mean Flow	2790	2790	0

Table 3: Monthly High Flows

	USGS Gage	Model	Pct. Error
Jan. High Flow	2860	1700	40.6
Feb. High Flow	5960	4650	22
Mar. High Flow	5300	4130	22.1
Apr. High Flow	8300	9010	-8.55
May High Flow	8630	7540	12.6
Jun. High Flow	12700	13900	-9.45
Jul. High Flow	9720	9620	1.03
Aug. High Flow	7250	7800	-7.59
Sep. High Flow	4550	4070	10.5
Oct. High Flow	3320	3130	5.72
Nov. High Flow	3200	2200	31.2
Dec. High Flow	3350	2470	26.3

Table 4: Period Low Flows

	USGS Gage	Model	Pct. Error
Min. 1 Day Min	446	274	38.6
Med. 1 Day Min	823	710	13.7
Min. 3 Day Min	457	279	38.9
Med. 3 Day Min	874	731	16.4
Min. 7 Day Min	501	287	42.7
Med. 7 Day Min	914	764	16.4
Min. 30 Day Min	653	376	42.4
Med. 30 Day Min	1060	925	12.7
Min. 90 Day Min	825	838	-1.58
Med. 90 Day Min	1540	1290	16.2
7Q10	641	425	33.7
Year of 90-Day Min. Flow	2002	1988	100
Drought Year Mean	1500	1720	-14.7
Mean Baseflow	1960	2220	-13.3

Table 5: Period High Flows

	USGS Gage	Model	Pct. Error
Max. 1 Day Max	84700	65500	22.7
Med. 1 Day Max	30200	34100	-12.9
Max. 3 Day Max	49600	40300	18.8
Med. 3 Day Max	20300	28500	-40.4
Max. 7 Day Max	26400	25000	5.3
Med. 7 Day Max	13400	15900	-18.7
Max. 30 Day Max	12000	13200	-10
Med. 30 Day Max	6930	8000	-15.4
Max. 90 Day Max	8580	9640	-12.4
Med. 90 Day Max	5600	5600	0

Table 6: Non-Exceedance Flows

	USGS Gage	Model	Pct. Error
1% Non-Exceedance	683	550	19.5
5% Non-Exceedance	887	786	11.4
50% Non-Exceedance	2240	2300	-2.68
95% Non-Exceedance	7770	8460	-8.88
99% Non-Exceedance	16800	18800	-11.9
Sept. 10% Non-Exceedance	818	888	-8.56

Fig. 1: Hydrograph

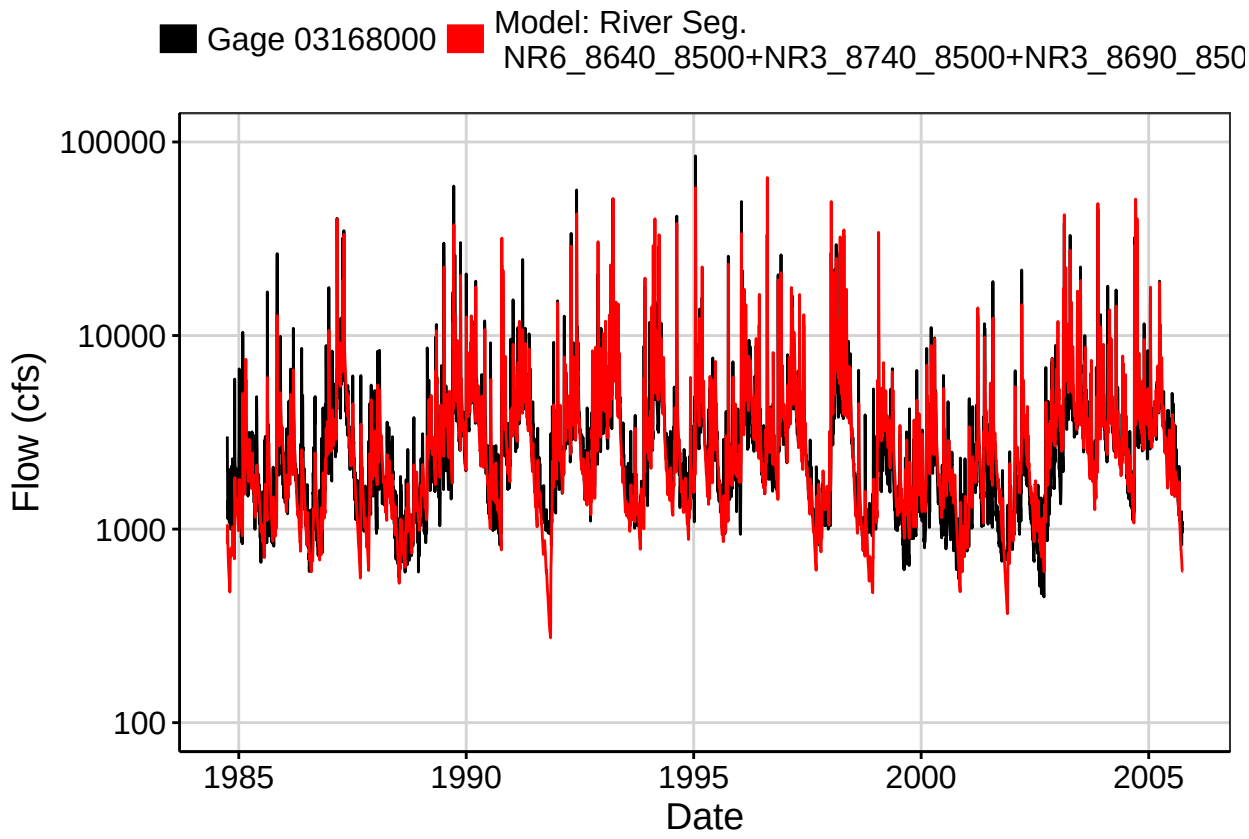

Fig. 2: Zoomed Hydrograph

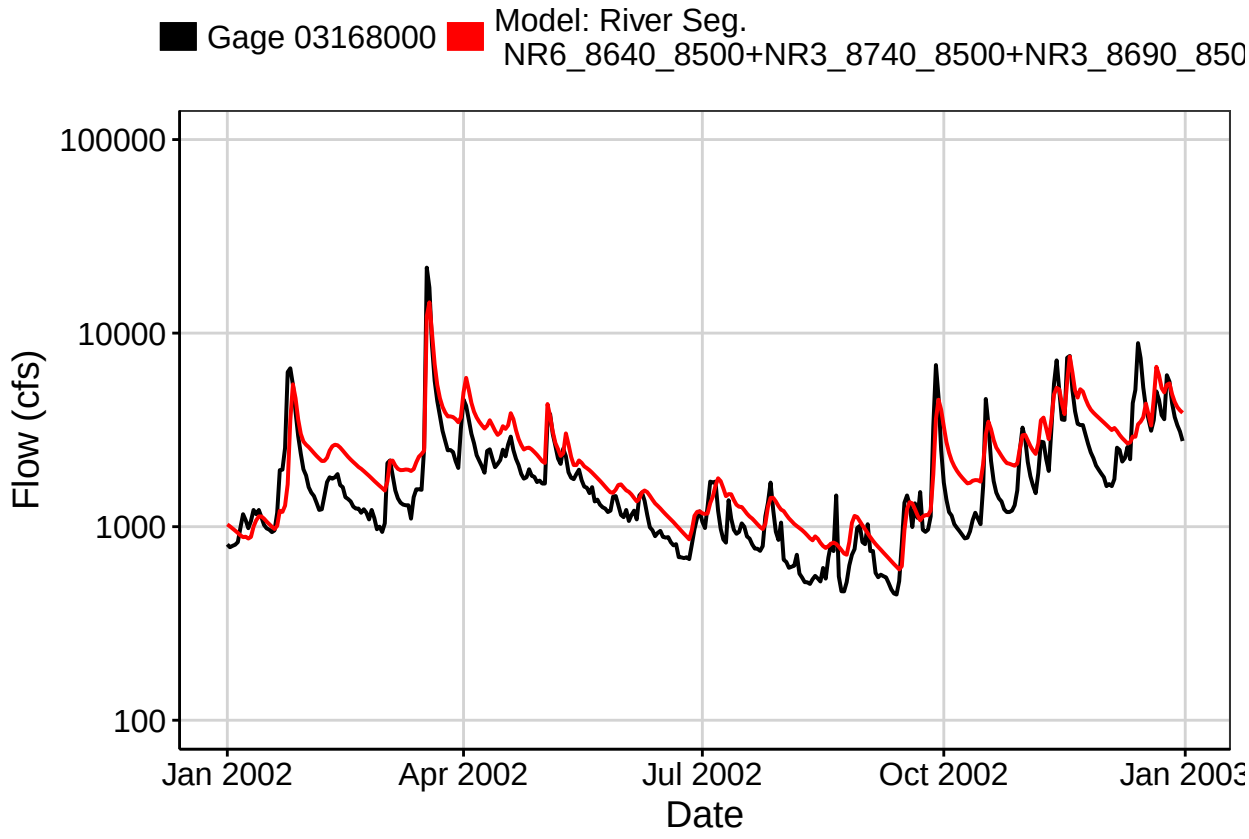

Fig. 3: Flow Exceedance

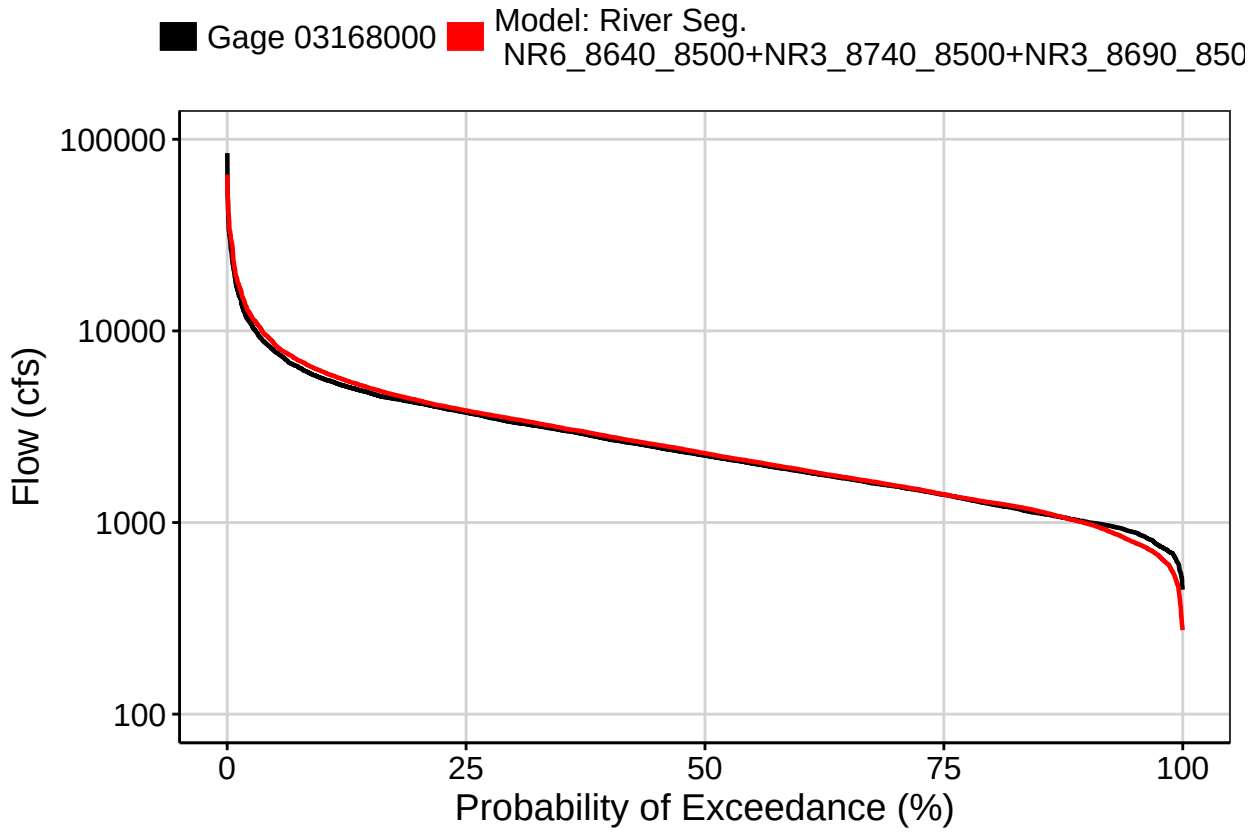

Fig. 4: Baseflow

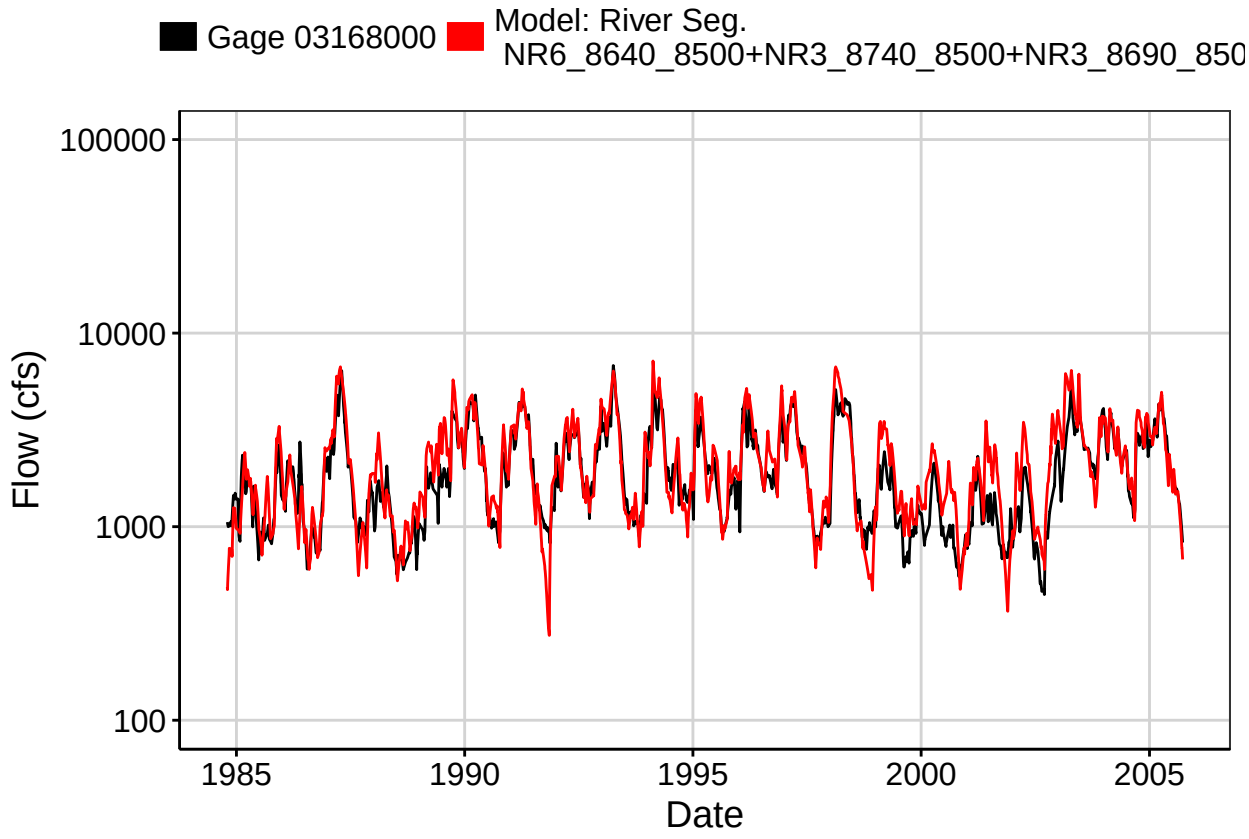

Fig. 5: Combined Baseflow

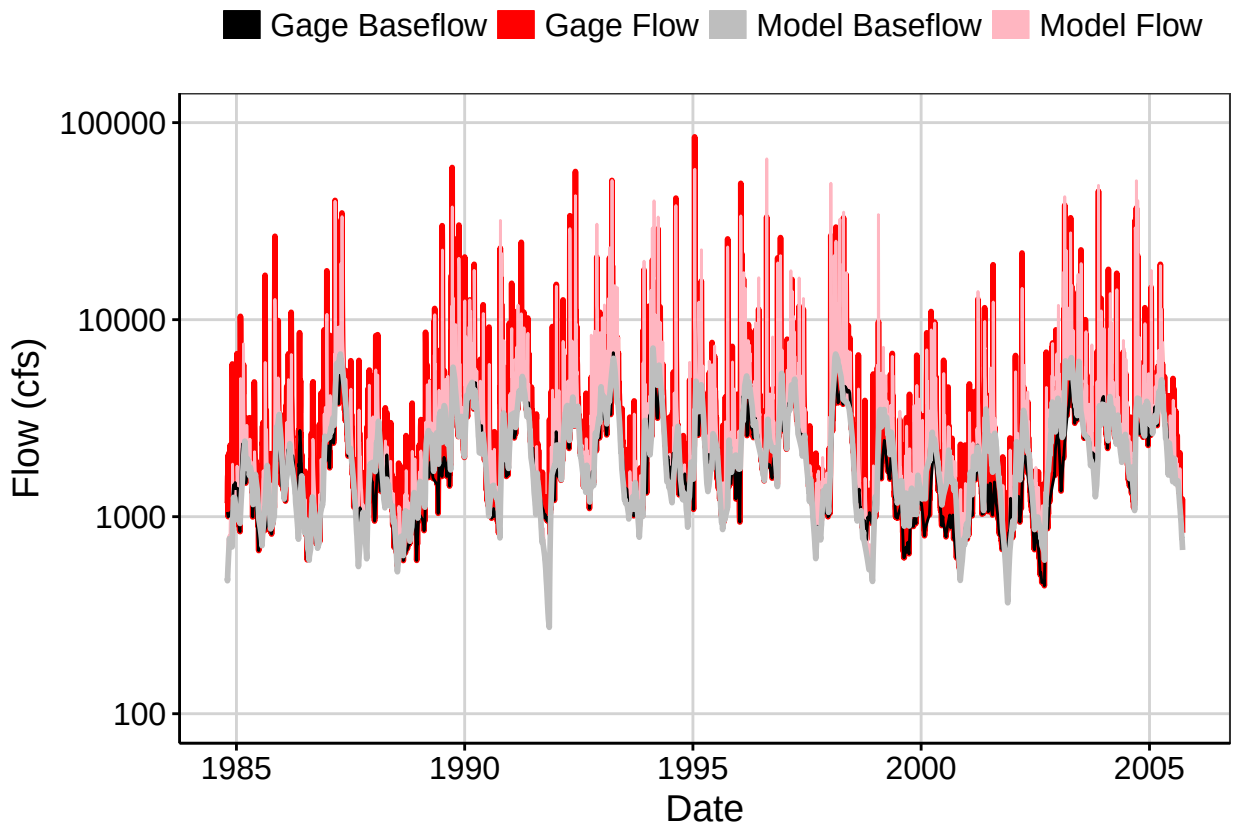

Fig. 6: Largest Error Segment

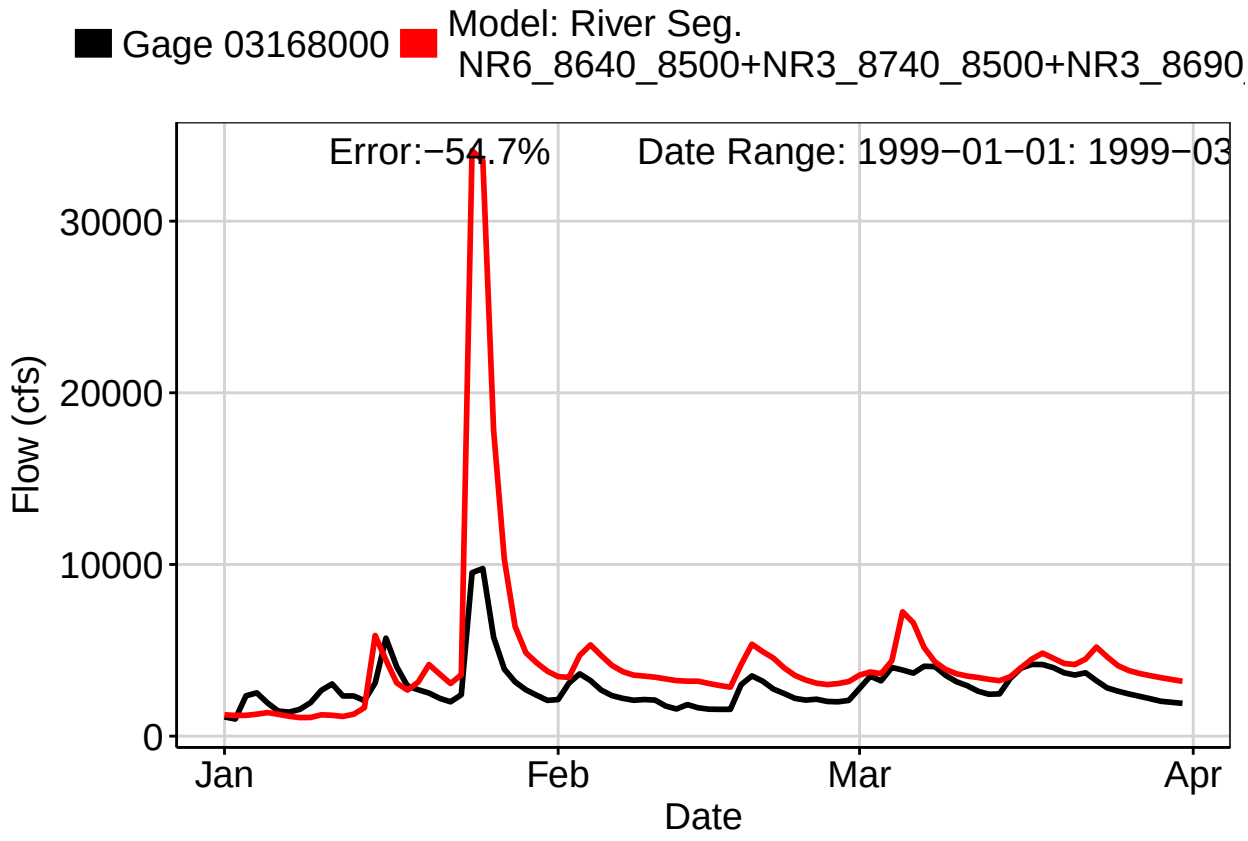

Fig. 7: Second Largest Error Segment

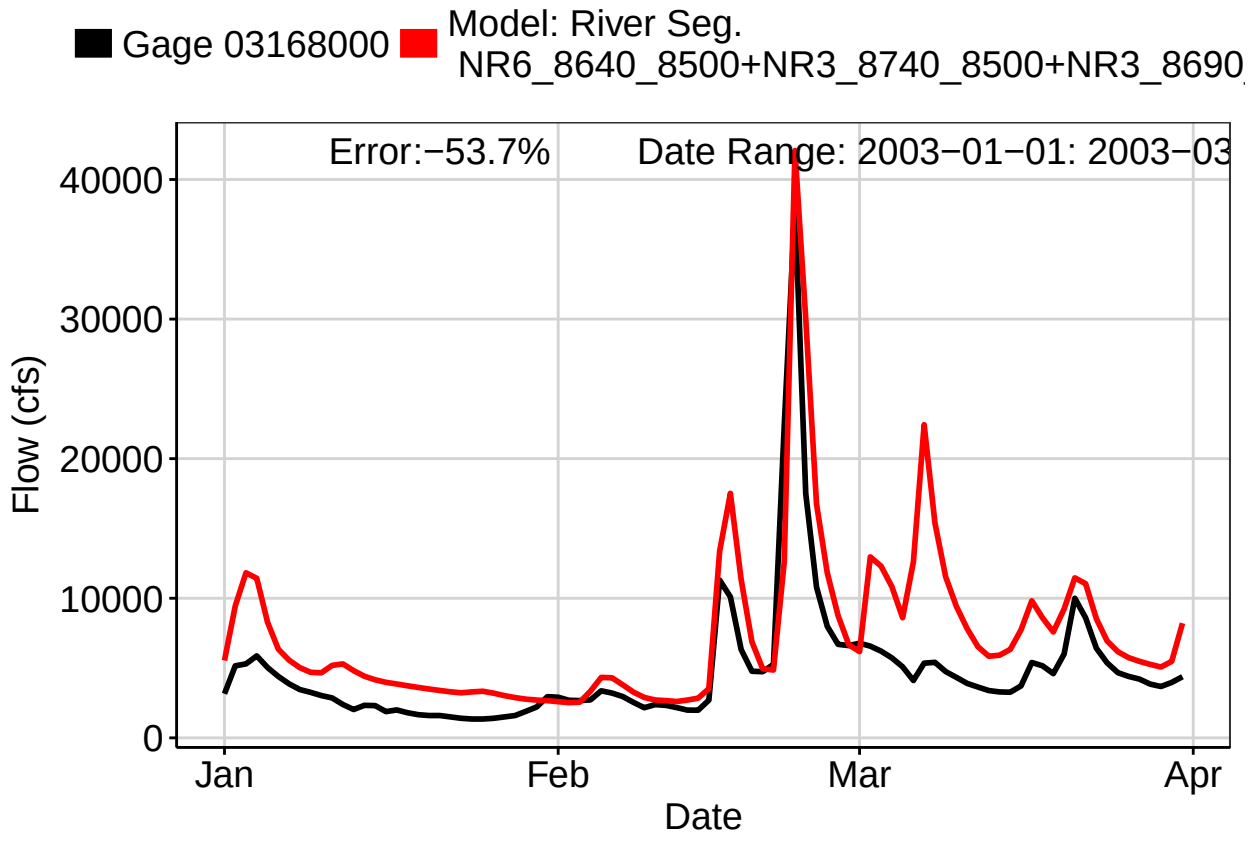

Fig. 8: Third Largest Error Segment

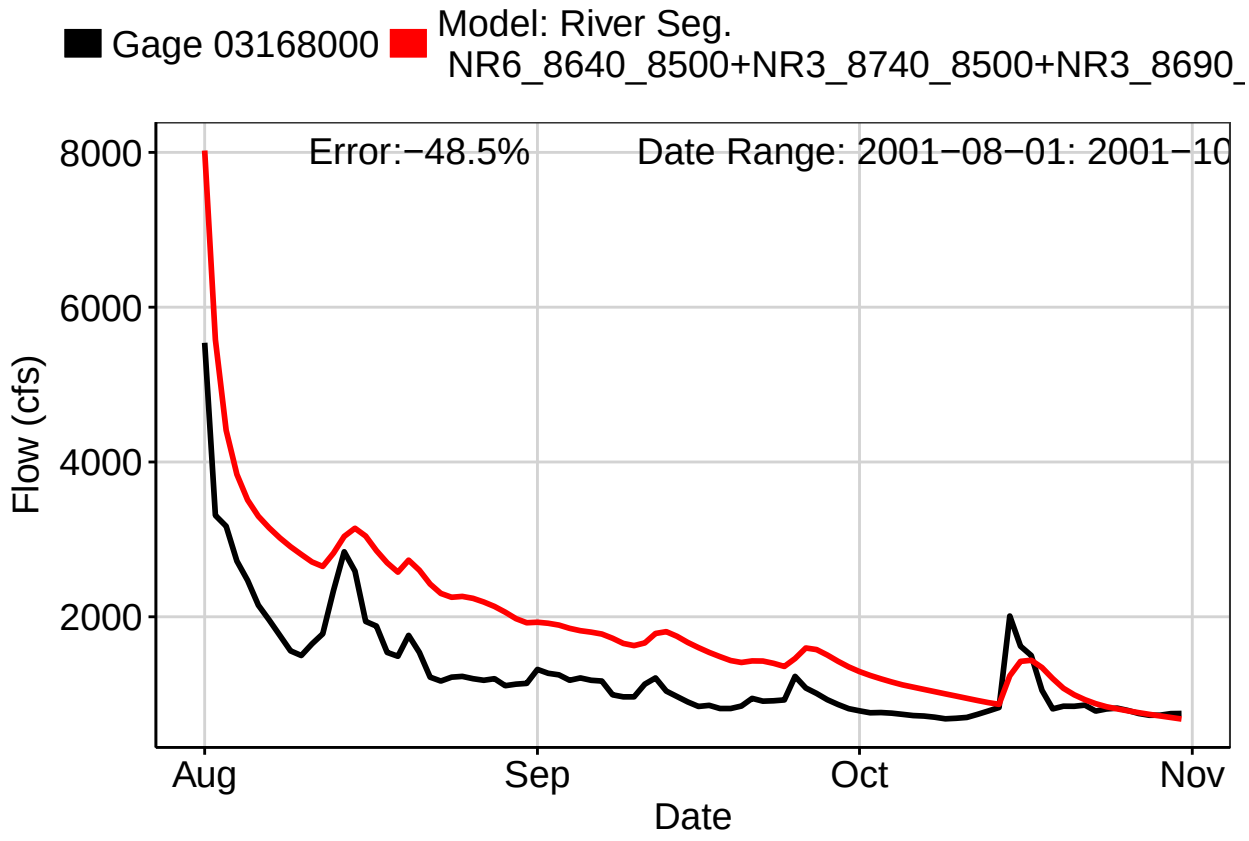

Fig. 9: Residuals Plot