03175500 vs. NR2_8210_8180

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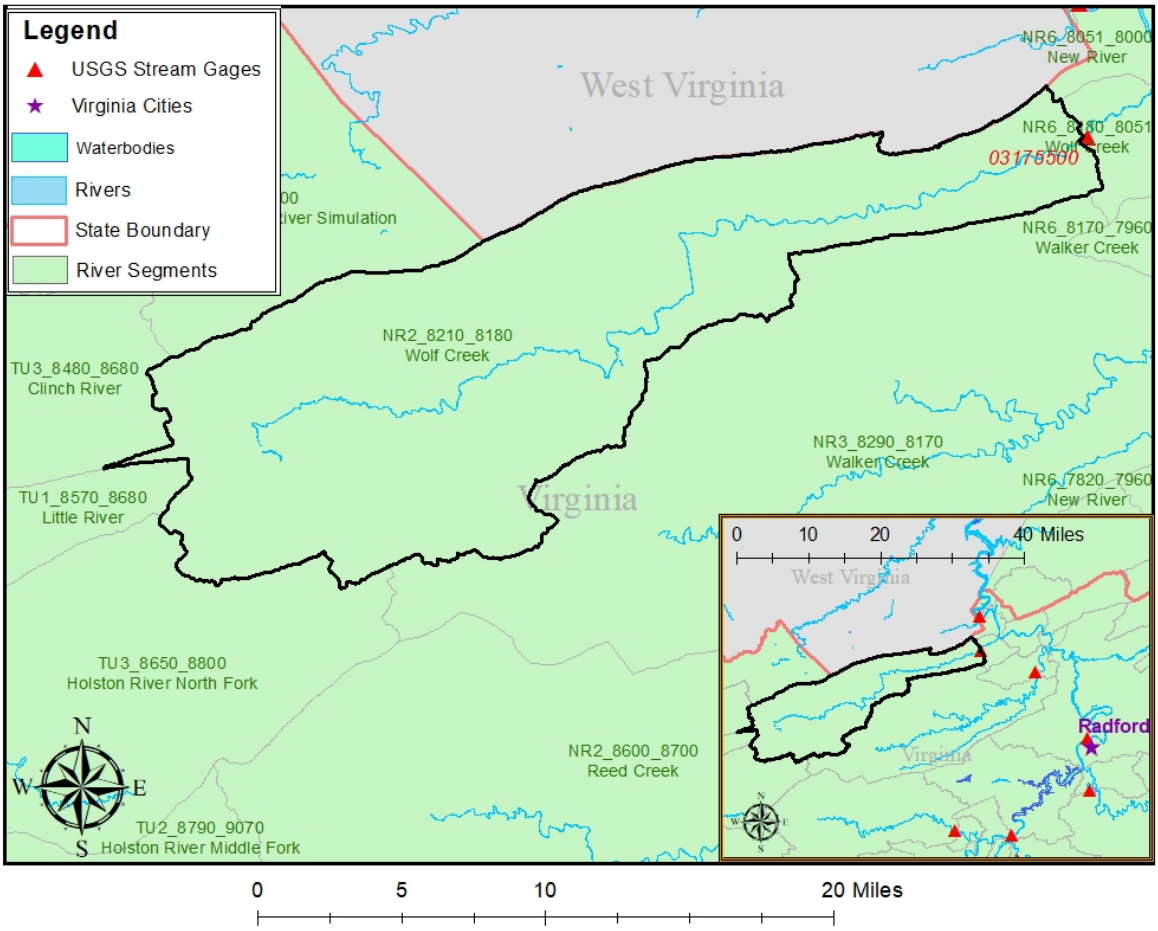

This river segment follows part of the flow of the Wolf Creek, a tributary of the New River. The gage is located in Giles County, VA (Lat 3718'20", Long 8051'00") approximately 20 miles northwest of Radford, VA. Drainage area is 223 sq. miles. This gage started taking data in 1908 and is still taking data but there is a gap from 1995-10-01 to 1996-09-30. 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 4.97%, with 47.5% of its rolling three month time spans above 20% error.

Table 1: Monthly Low Flows

	USGS Gage	Model	Pct. Error
Jan. Low Flow	32	27.2	15
Feb. Low Flow	45	71.6	-59.1
Mar. Low Flow	88	97.3	-10.6
Apr. Low Flow	118	148	-25.4
May Low Flow	176	195	-10.8
Jun. Low Flow	244	247	-1.23
Jul. Low Flow	192	166	13.5
Aug. Low Flow	116	87.8	24.3
Sep. Low Flow	76.4	45.8	40.1
Oct. Low Flow	52.7	19.7	62.6
Nov. Low Flow	38	20.8	45.3
Dec. Low Flow	33.5	18.9	43.6

Table 2: Monthly Average Flows

	USGS Gage	Model	Pct. Error
Overall Mean Flow	302	287	4.97
Jan. Mean Flow	409	405	0.98
Feb. Mean Flow	545	531	2.57
Mar. Mean Flow	594	544	8.42
Apr. Mean Flow	501	396	21
May Mean Flow	383	307	19.8
Jun. Mean Flow	237	237	0
Jul. Mean Flow	132	138	-4.55
Aug. Mean Flow	102	112	-9.8
Sep. Mean Flow	121	146	-20.7
Oct. Mean Flow	113	148	-31
Nov. Mean Flow	199	200	-0.5
Dec. Mean Flow	300	301	-0.33

Table 3: Monthly High Flows

	USGS Gage	Model	Pct. Error
Jan. High Flow	106	132	-24.5
Feb. High Flow	296	347	-17.2
Mar. High Flow	1200	626	47.8
Apr. High Flow	1530	1440	5.88
May High Flow	1380	1230	10.9
Jun. High Flow	1650	1510	8.48
Jul. High Flow	871	946	-8.61
Aug. High Flow	958	764	20.3
Sep. High Flow	438	522	-19.2
Oct. High Flow	312	182	41.7
Nov. High Flow	154	178	-15.6
Dec. High Flow	155	142	8.39

Table 4: Period Low Flows

	USGS Gage	Model	Pct. Error
Min. 1 Day Min	10	0	100
Med. 1 Day Min	28	2.61	90.7
Min. 3 Day Min	11.3	0.01	99.9
Med. 3 Day Min	29	3.74	87.1
Min. 7 Day Min	16	0.45	97.2
Med. 7 Day Min	31.5	4.89	84.5
Min. 30 Day Min	23.1	3.54	84.7
Med. 30 Day Min	38.2	18.2	52.4
Min. 90 Day Min	33.2	14	57.8
Med. 90 Day Min	64	60.6	5.31
7Q10	20.5	0.92	95.5
Year of 90-Day Min. Flow	1988	1988	0
Drought Year Mean	126	106	15.9
Mean Baseflow	146	146	0

Table 5: Period High Flows

	USGS Gage	Model	Pct. Error
Max. 1 Day Max	7910	6620	16.3
Med. 1 Day Max	3810	3610	5.25
Max. 3 Day Max	5630	4150	26.3
Med. 3 Day Max	2590	2250	13.1
Max. 7 Day Max	3080	2380	22.7
Med. 7 Day Max	1630	1590	2.45
Max. 30 Day Max	1770	1480	16.4
Med. 30 Day Max	850	718	15.5
Max. 90 Day Max	1110	989	10.9
Med. 90 Day Max	632	559	11.6

Table 6: Non-Exceedance Flows

	USGS Gage	Model	Pct. Error
1% Non-Exceedance	24	2.75	88.5
5% Non-Exceedance	33	11.2	66.1
50% Non-Exceedance	159	168	-5.66
95% Non-Exceedance	969	915	5.57
99% Non-Exceedance	1930	2040	-5.7
Sept. 10% Non-Exceedance	5.95	27.5	-362

Fig. 1: Hydrograph

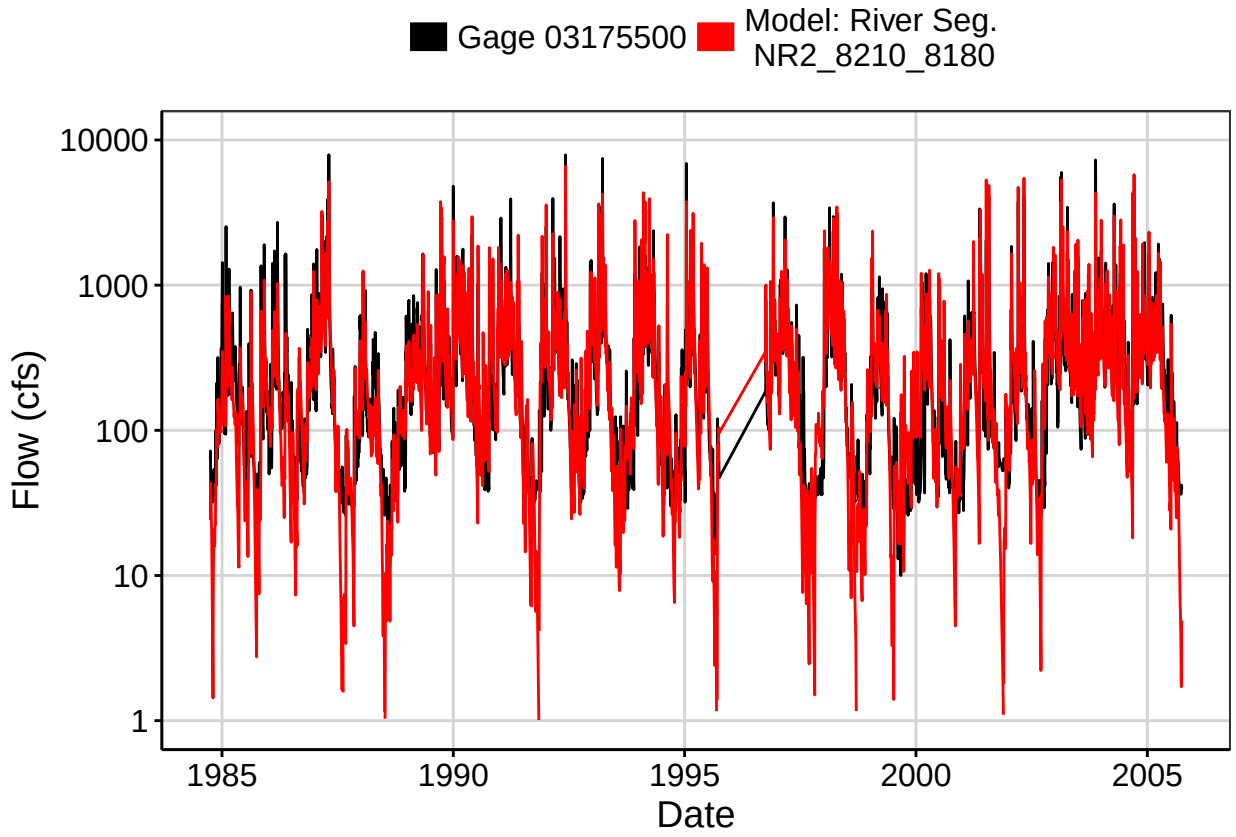

Fig. 2: Zoomed Hydrograph

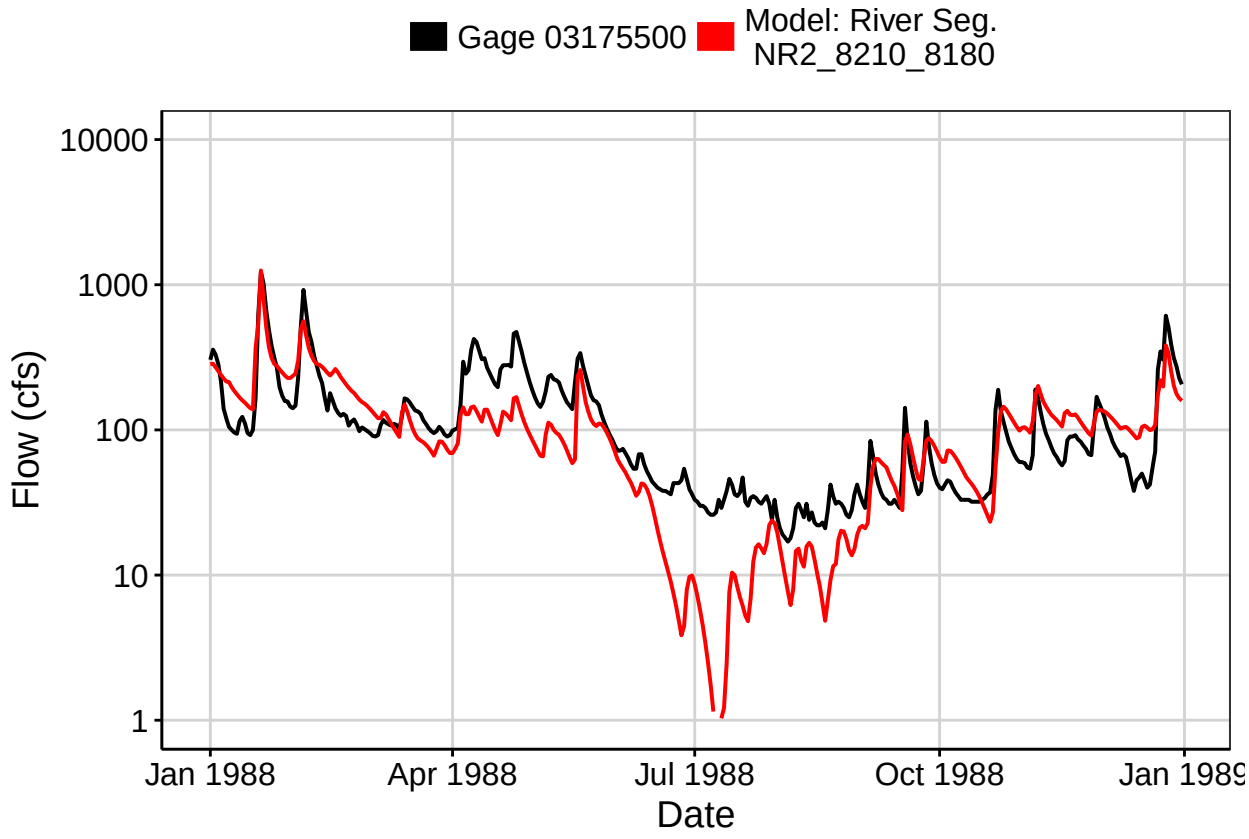

Fig. 3: Flow Exceedance

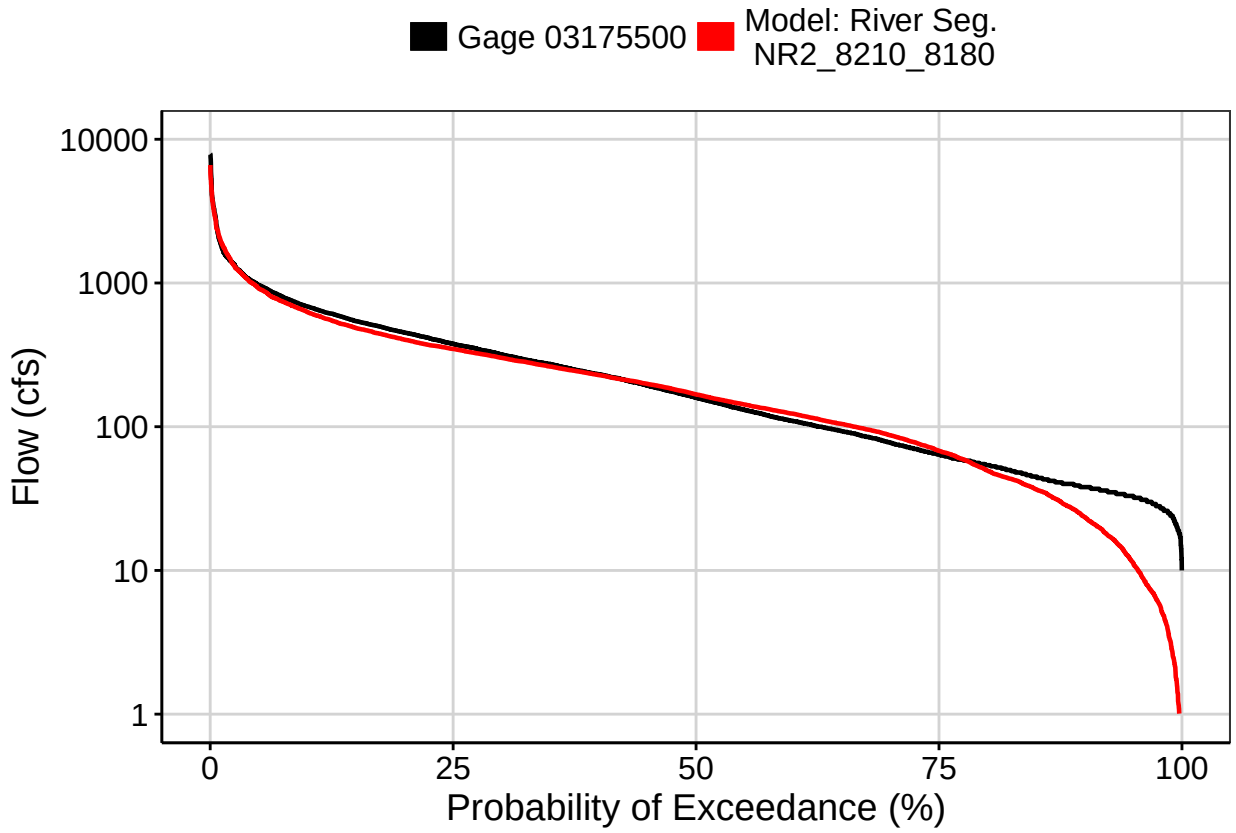

Fig. 4: Baseflow

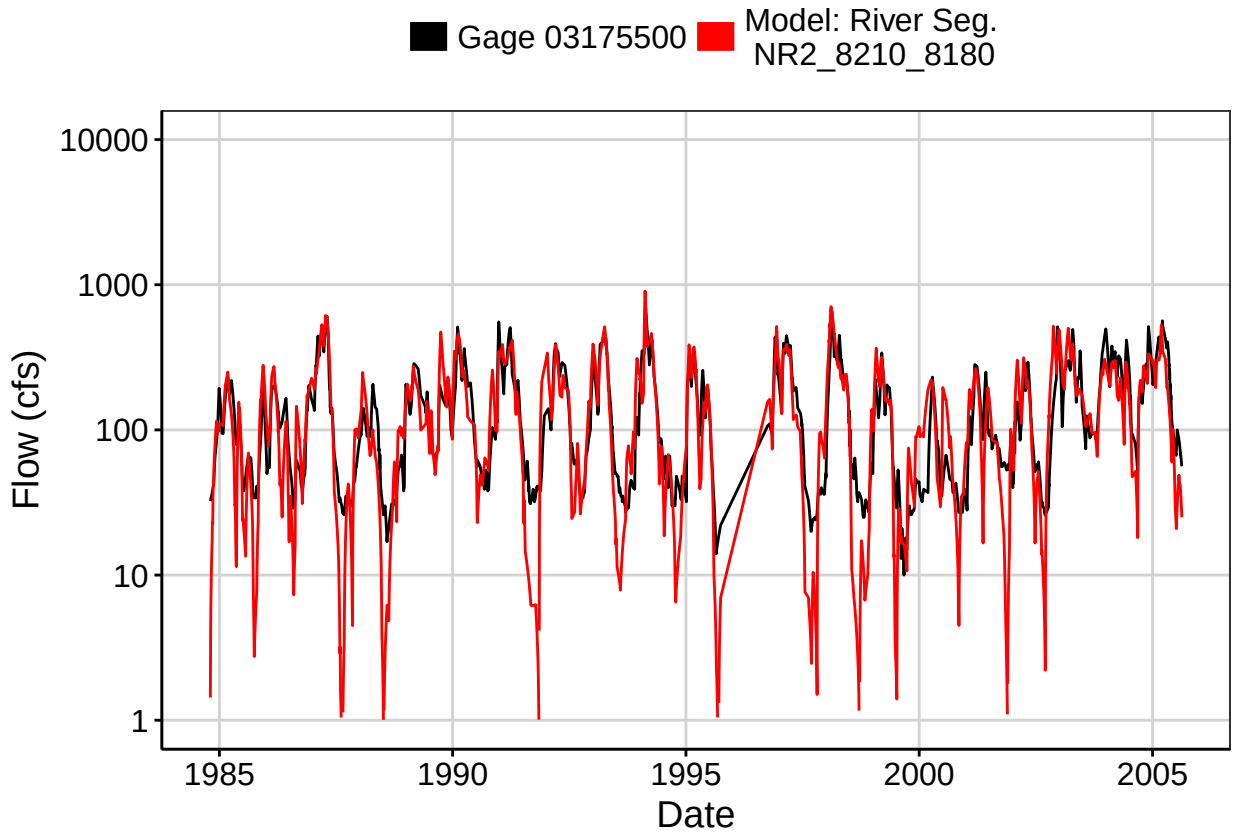

Fig. 5: Combined Baseflow

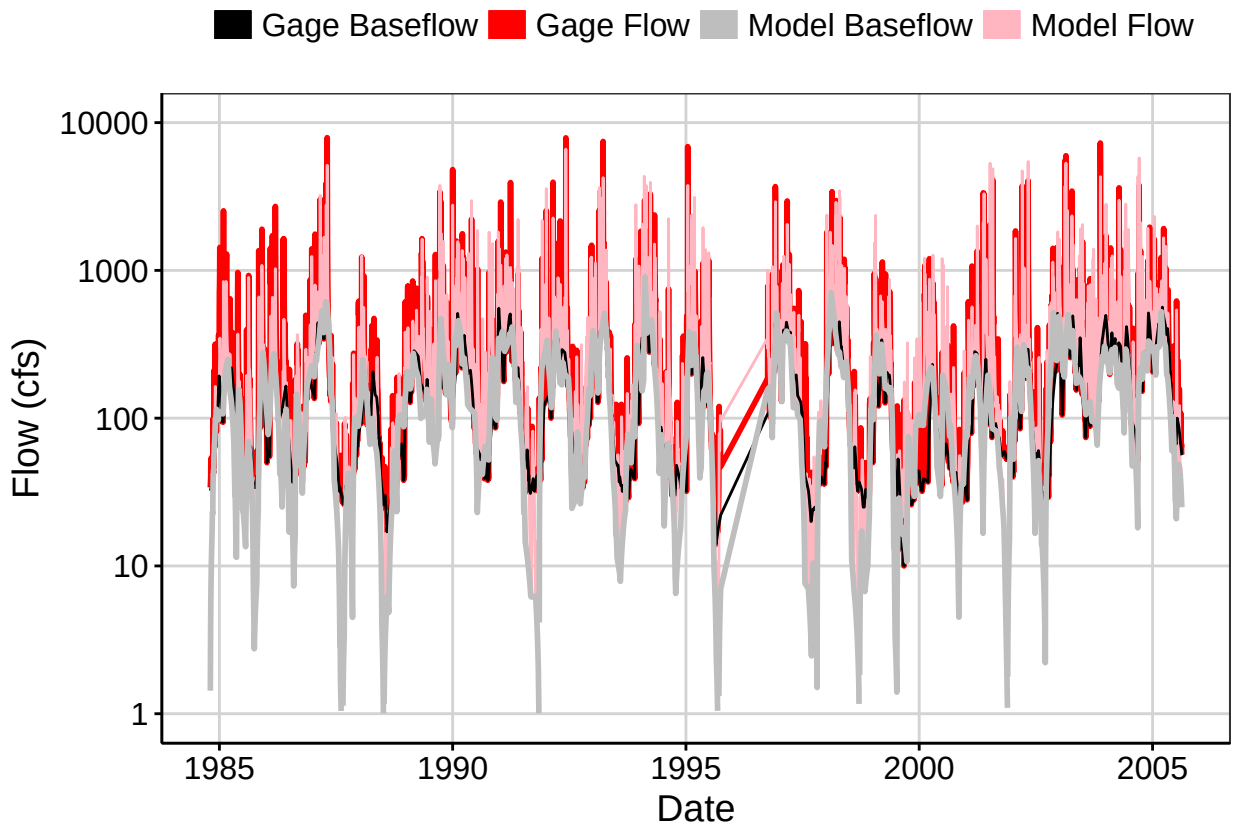

Fig. 6: Largest Error Segment

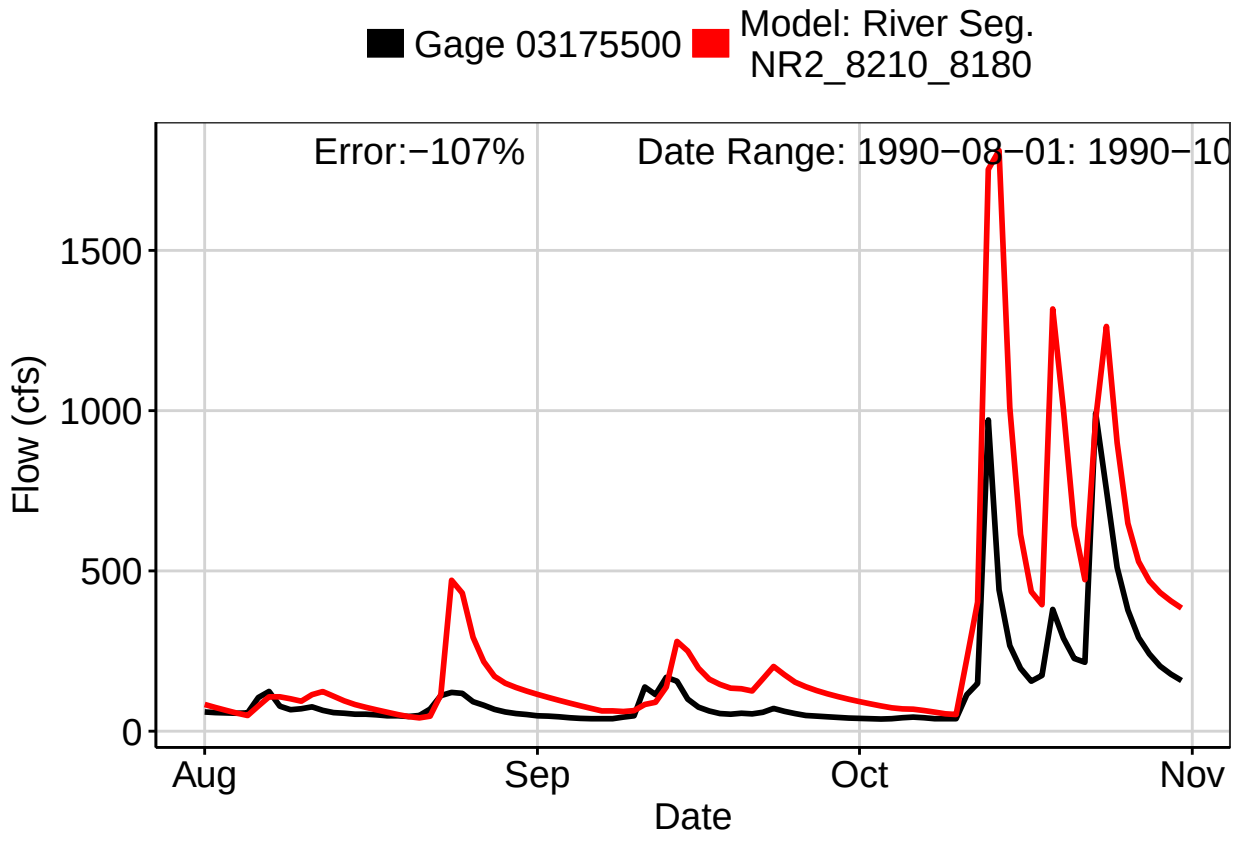

Fig. 7: Second Largest Error Segment

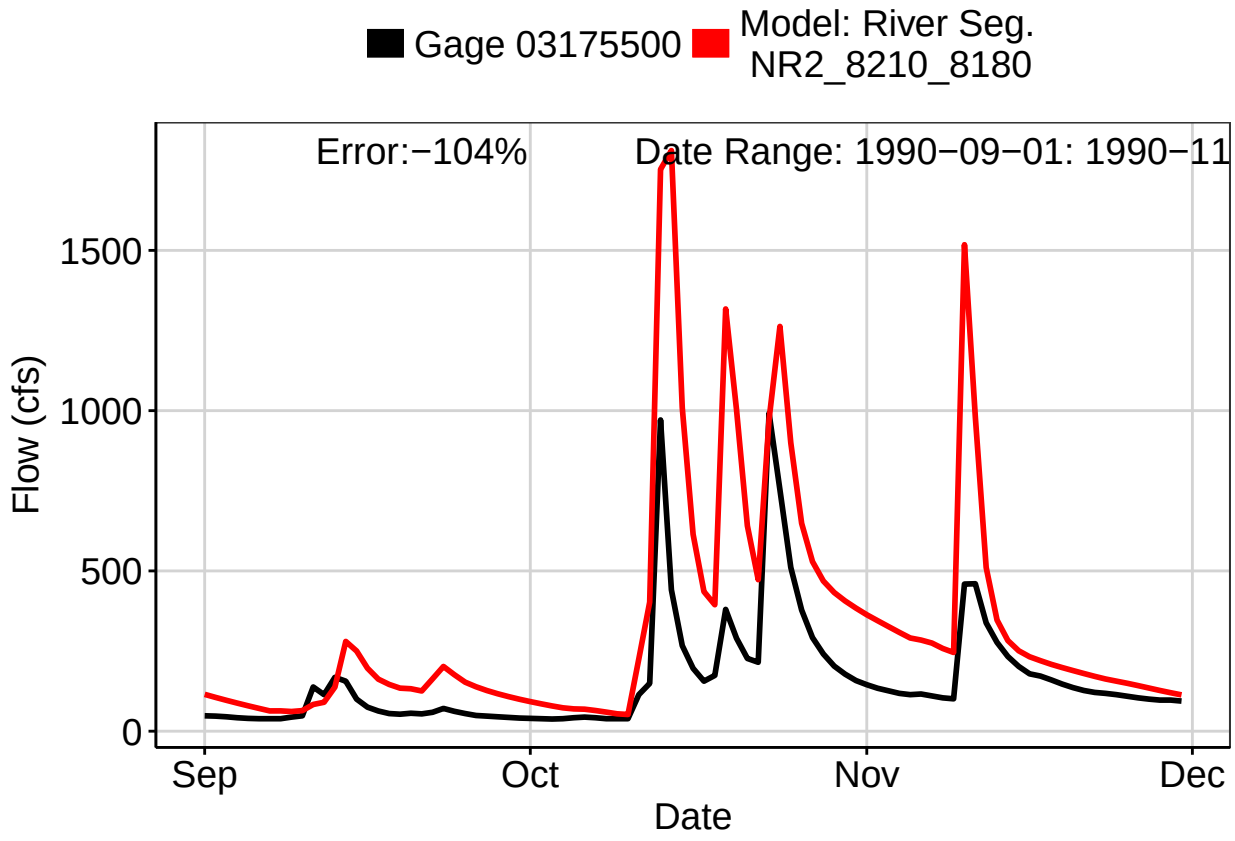

Fig. 8: Third Largest Error Segment

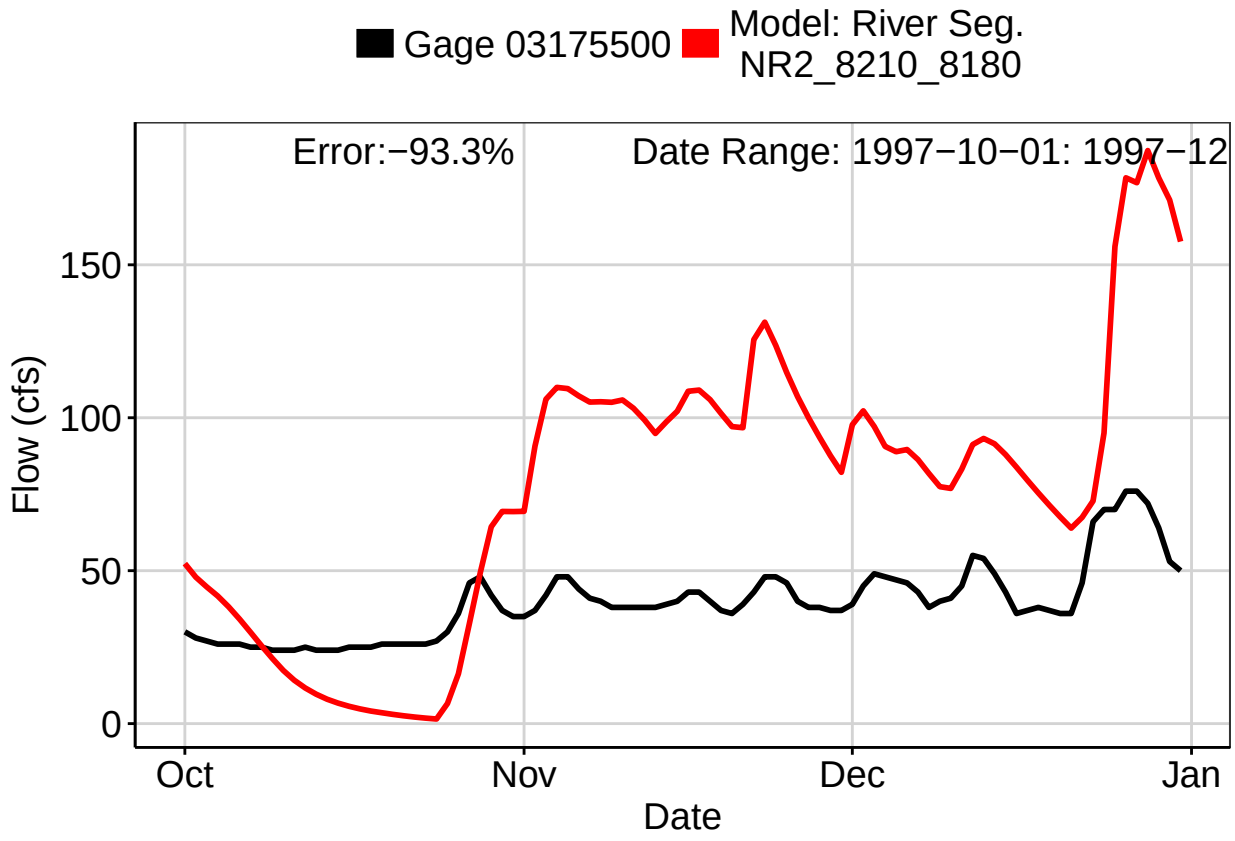

Fig. 9: Residuals Plot