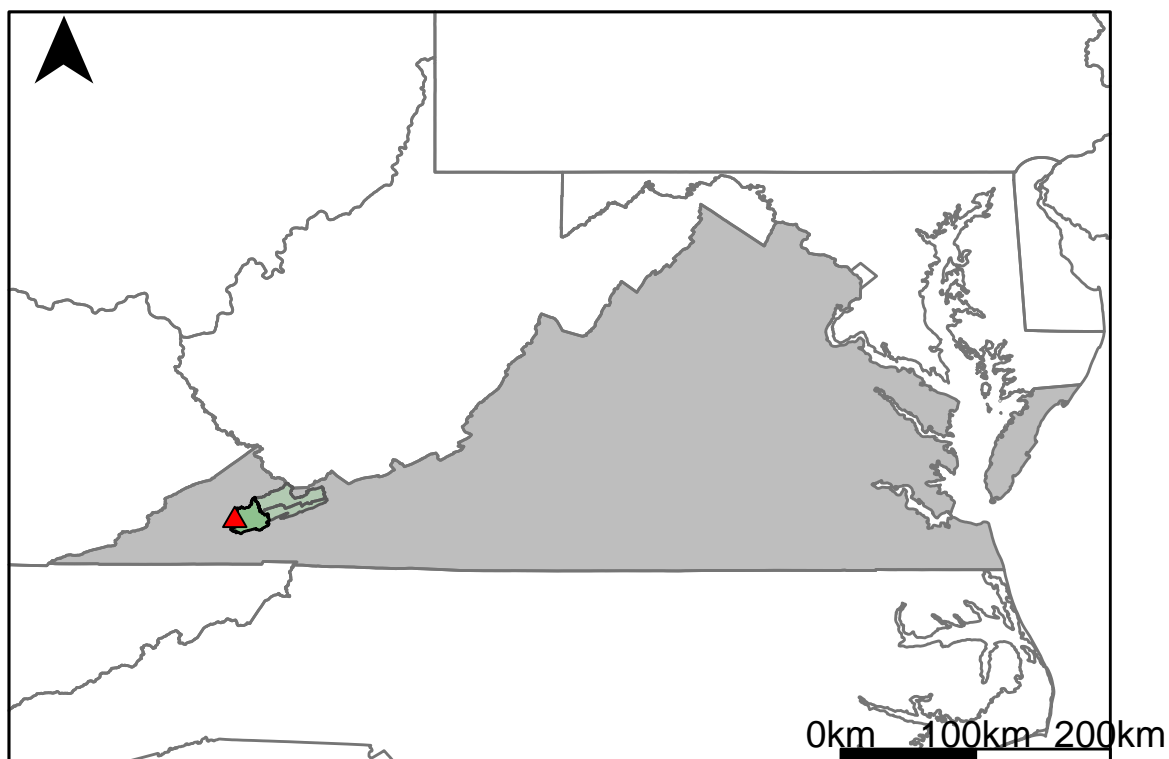


03524000 vs. TU4_8680_8810



This river segment follows part of the flow of the Clinch River, a tributary of the Tennessee River. The gage is located in Russell County, VA (Lat 36°56'41", Long 82°09'18") approximately 24 miles north of Bristol, VA. Drainage area is 533 sq. miles. This gage started taking data in 1920 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 -0.28%, with 39.2% of its rolling three month time spans above 20% error.

Table 1: Monthly Low Flows

	USGS Gage	Model	Pct. Error
Jan. Low Flow	91	86.8	4.62
Feb. Low Flow	94.1	178	-89.2
Mar. Low Flow	201	250	-24.4
Apr. Low Flow	270	396	-46.7
May Low Flow	481	491	-2.08
Jun. Low Flow	488	586	-20.1
Jul. Low Flow	441	398	9.75
Aug. Low Flow	307	245	20.2
Sep. Low Flow	189	193	-2.12
Oct. Low Flow	153	116	24.2
Nov. Low Flow	114	122	-7.02
Dec. Low Flow	93	83.5	10.2

Table 2: Monthly Average Flows

	USGS Gage	Model	Pct. Error
Overall Mean Flow	701	703	-0.28
Jan. Mean Flow	1010	1010	0
Feb. Mean Flow	1360	1430	-5.15
Mar. Mean Flow	1340	1310	2.24
Apr. Mean Flow	1110	965	13.1
May Mean Flow	826	715	13.4
Jun. Mean Flow	567	512	9.7
Jul. Mean Flow	352	354	-0.57
Aug. Mean Flow	294	326	-10.9
Sep. Mean Flow	215	301	-40
Oct. Mean Flow	222	334	-50.5
Nov. Mean Flow	435	479	-10.1
Dec. Mean Flow	738	754	-2.17

Table 3: Monthly High Flows

	USGS Gage	Model	Pct. Error
Jan. High Flow	215	354	-64.7
Feb. High Flow	1260	923	26.7
Mar. High Flow	2500	1300	48
Apr. High Flow	3210	3520	-9.66
May High Flow	5120	3250	36.5
Jun. High Flow	3530	3990	-13
Jul. High Flow	1940	1800	7.22
Aug. High Flow	2750	1660	39.6
Sep. High Flow	1050	938	10.7
Oct. High Flow	787	493	37.4
Nov. High Flow	533	479	10.1
Dec. High Flow	346	354	-2.31

Table 4: Period Low Flows

	USGS Gage	Model	Pct. Error
Min. 1 Day Min	39	8.21	78.9
Med. 1 Day Min	70	35.7	49
Min. 3 Day Min	44	8.65	80.3
Med. 3 Day Min	70.3	38.6	45.1
Min. 7 Day Min	49	10	79.6
Med. 7 Day Min	72.9	45.6	37.4
Min. 30 Day Min	62.7	27.6	56
Med. 30 Day Min	90.8	74.4	18.1
Min. 90 Day Min	83.4	69.6	16.5
Med. 90 Day Min	172	191	-11
7Q10	55.4	18.4	66.8
Year of 90-Day Min. Flow	1988	1988	0
Drought Year Mean	287	703	-145
Mean Baseflow	333	375	-12.6

Table 5: Period High Flows

	USGS Gage	Model	Pct. Error
Max. 1 Day Max	20100	19100	4.98
Med. 1 Day Max	8530	8170	4.22
Max. 3 Day Max	11400	13200	-15.8
Med. 3 Day Max	6190	5140	17
Max. 7 Day Max	6930	7210	-4.04
Med. 7 Day Max	4030	3390	15.9
Max. 30 Day Max	3410	4050	-18.8
Med. 30 Day Max	2050	1920	6.34
Max. 90 Day Max	2210	2720	-23.1
Med. 90 Day Max	1430	1410	1.4

Table 6: Non-Exceedance Flows

	USGS Gage	Model	Pct. Error
1% Non-Exceedance	60.7	34	44
5% Non-Exceedance	83	74	10.8
50% Non-Exceedance	371	423	-14
95% Non-Exceedance	2270	2070	8.81
99% Non-Exceedance	5020	4980	0.8
Sept. 10% Non-Exceedance	56.1	55.9	0.36

Fig. 1: Hydrograph

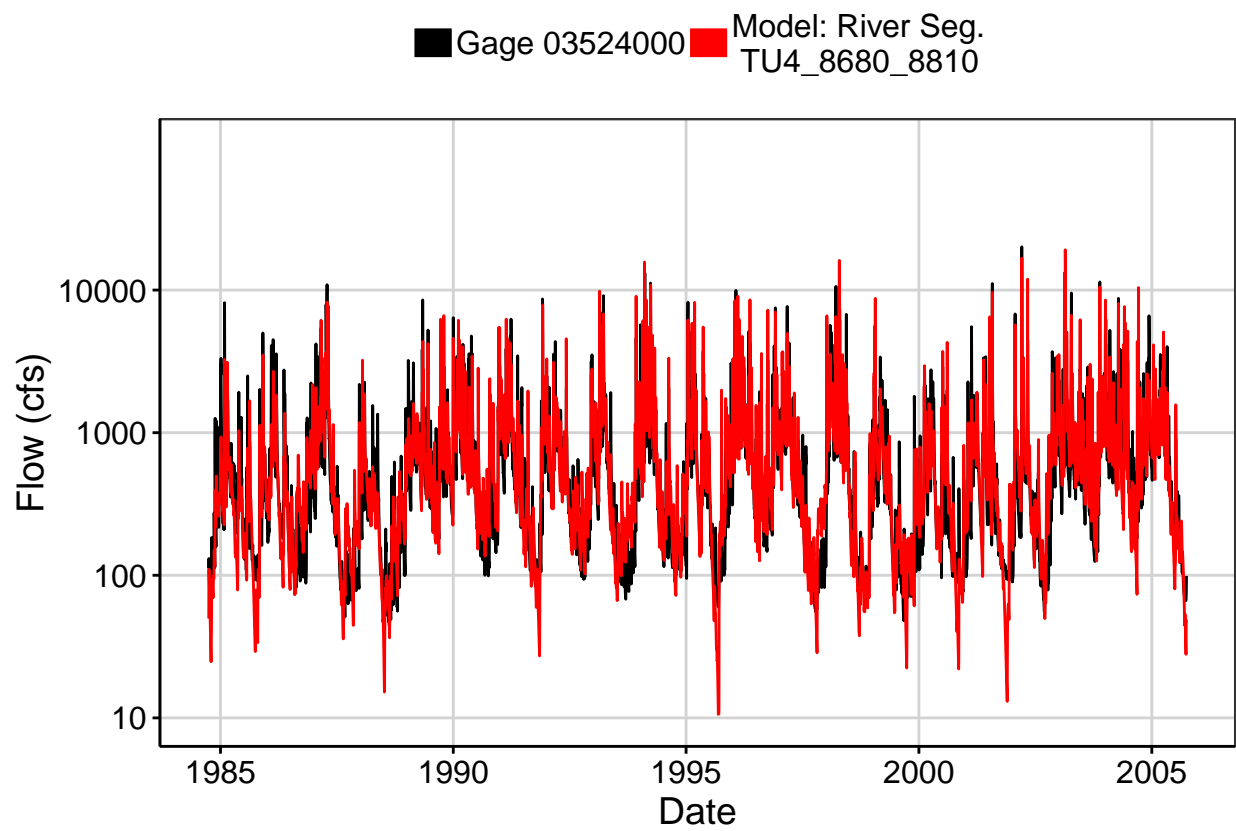


Fig. 2: Zoomed Hydrograph

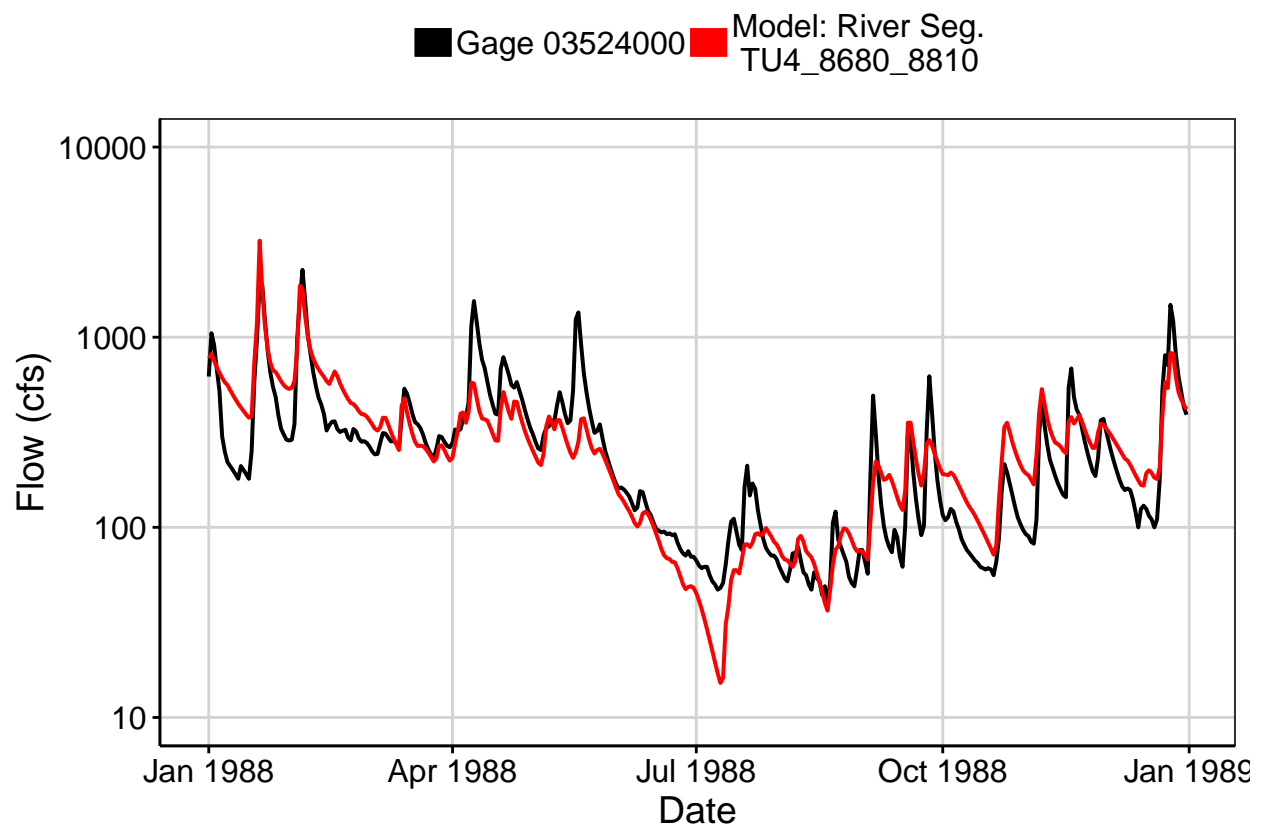


Fig. 3: Flow Exceedance

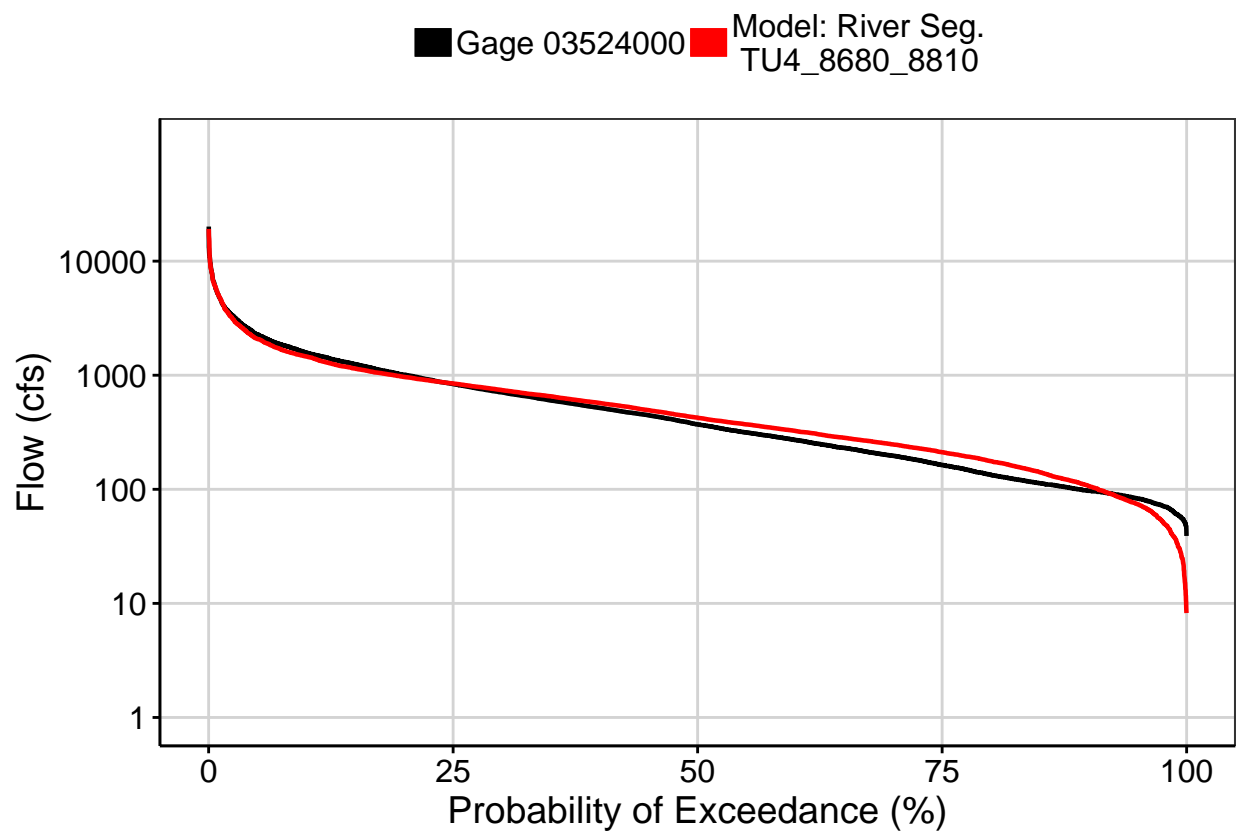


Fig. 4: Baseflow

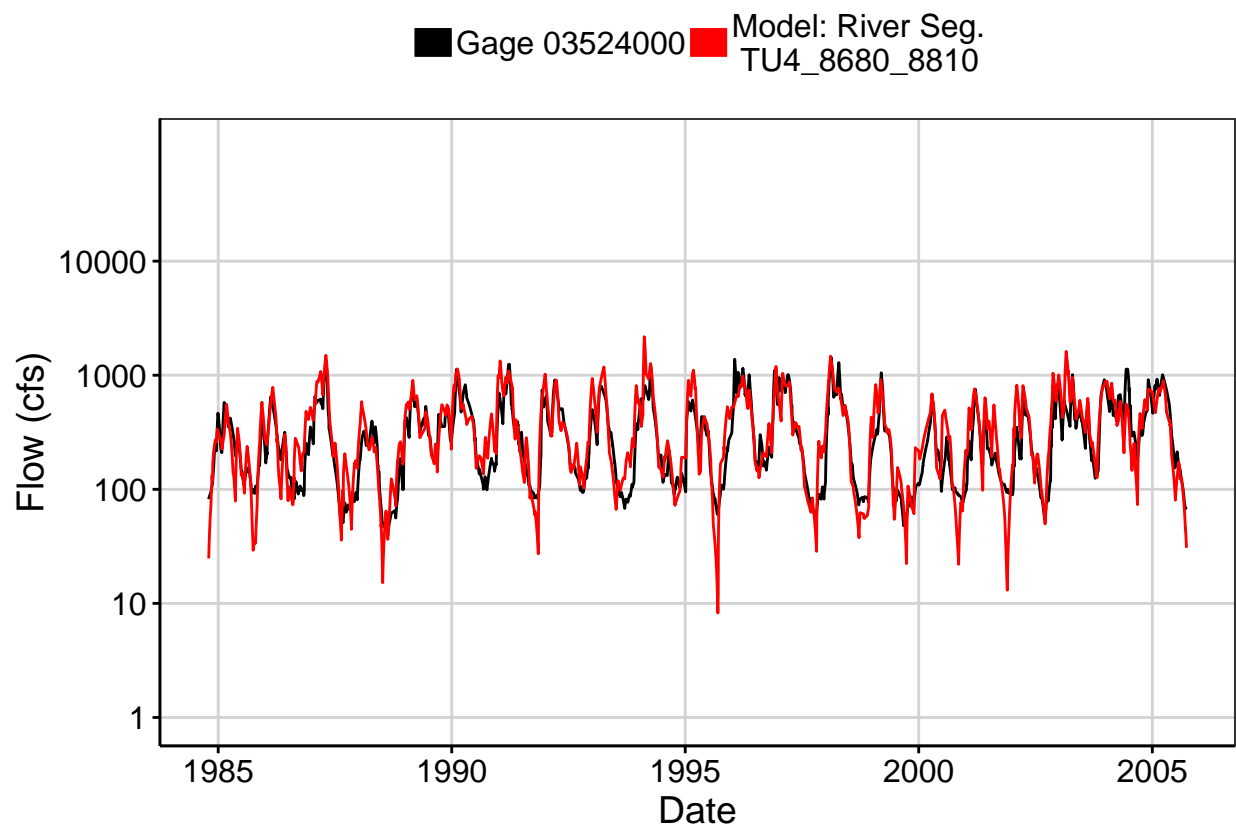


Fig. 5: Combined Baseflow

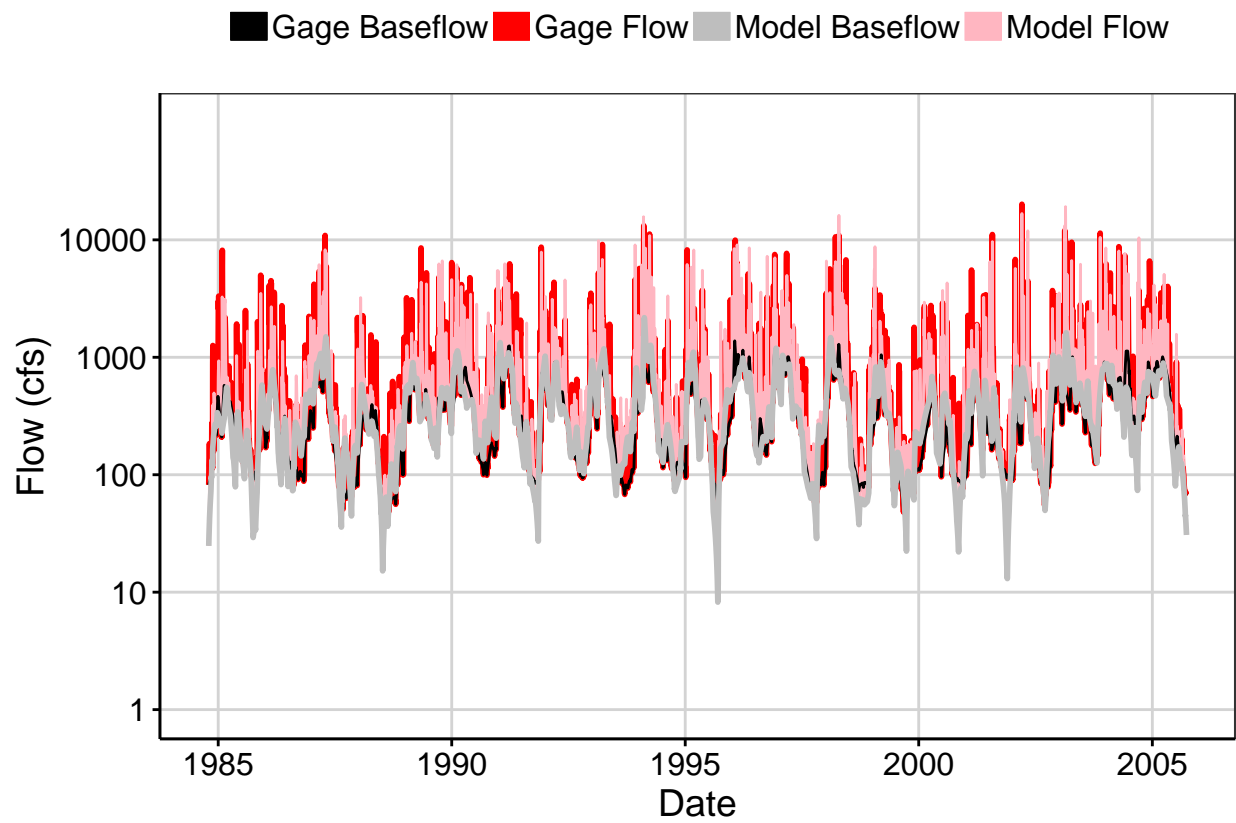


Fig. 6: Largest Error Segment

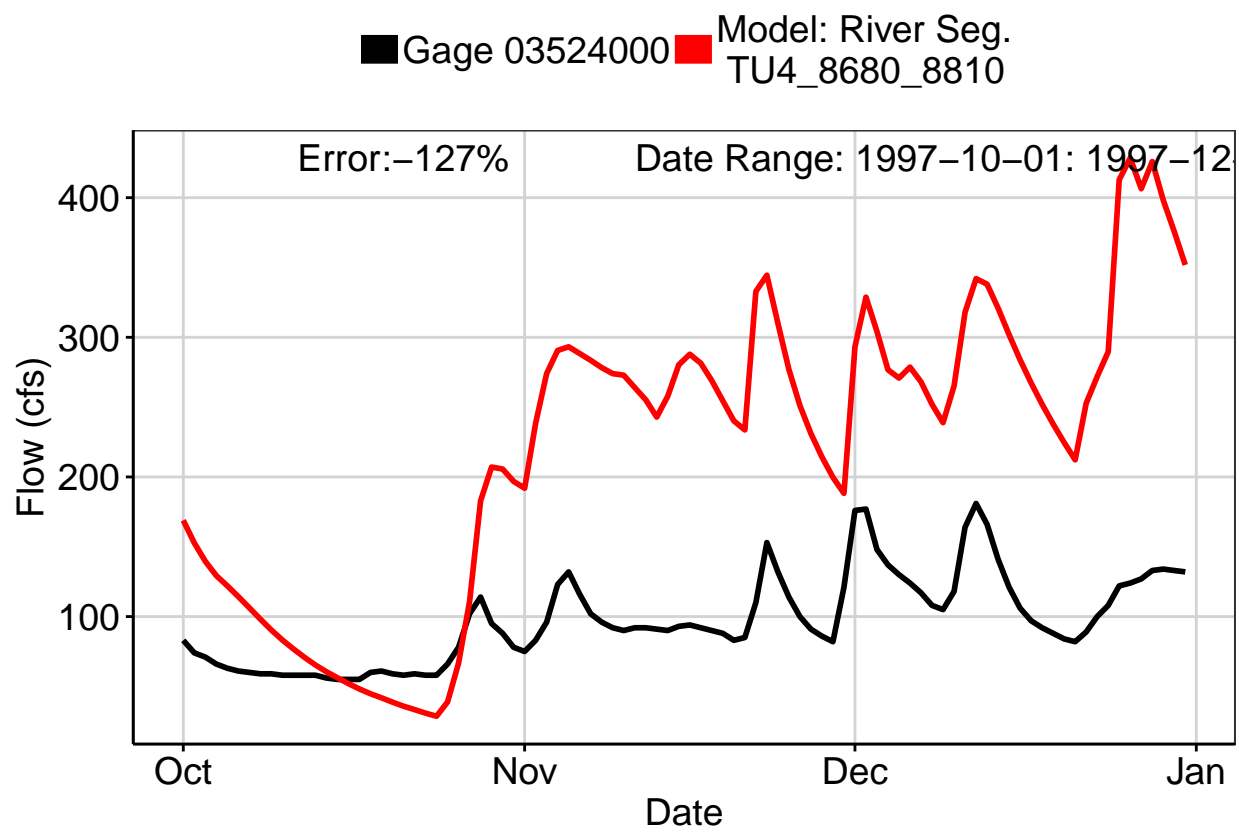


Fig. 7: Second Largest Error Segment

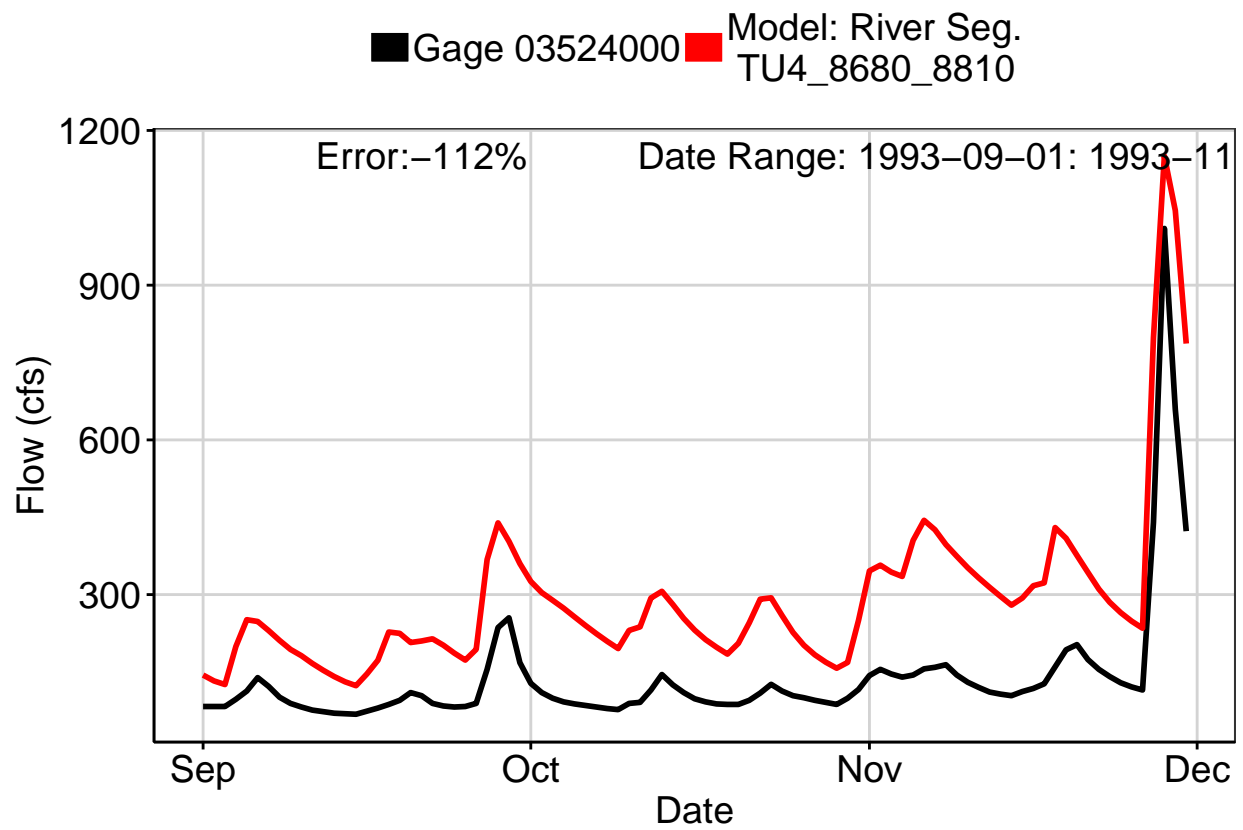


Fig. 8: Third Largest Error Segment

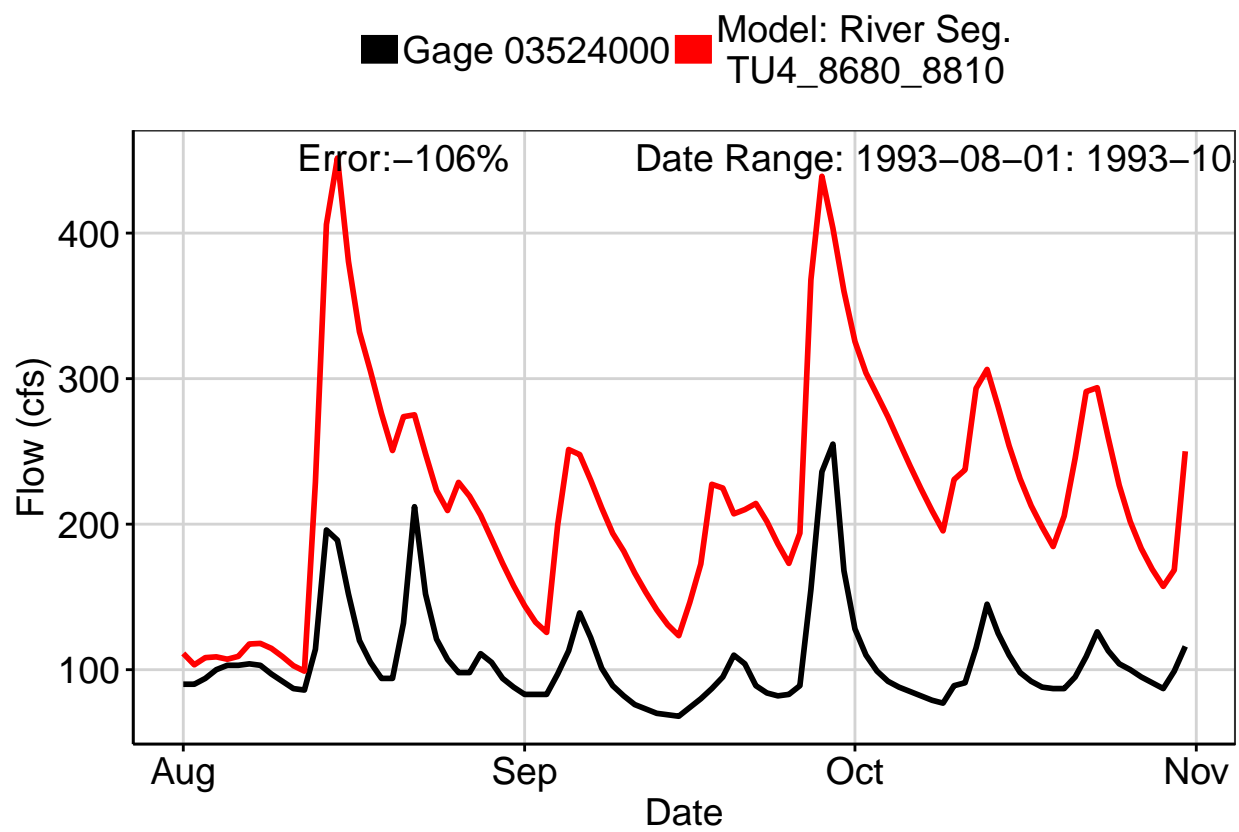


Fig. 9: Residuals Plot

