02062500 vs. OR5_7890_7970

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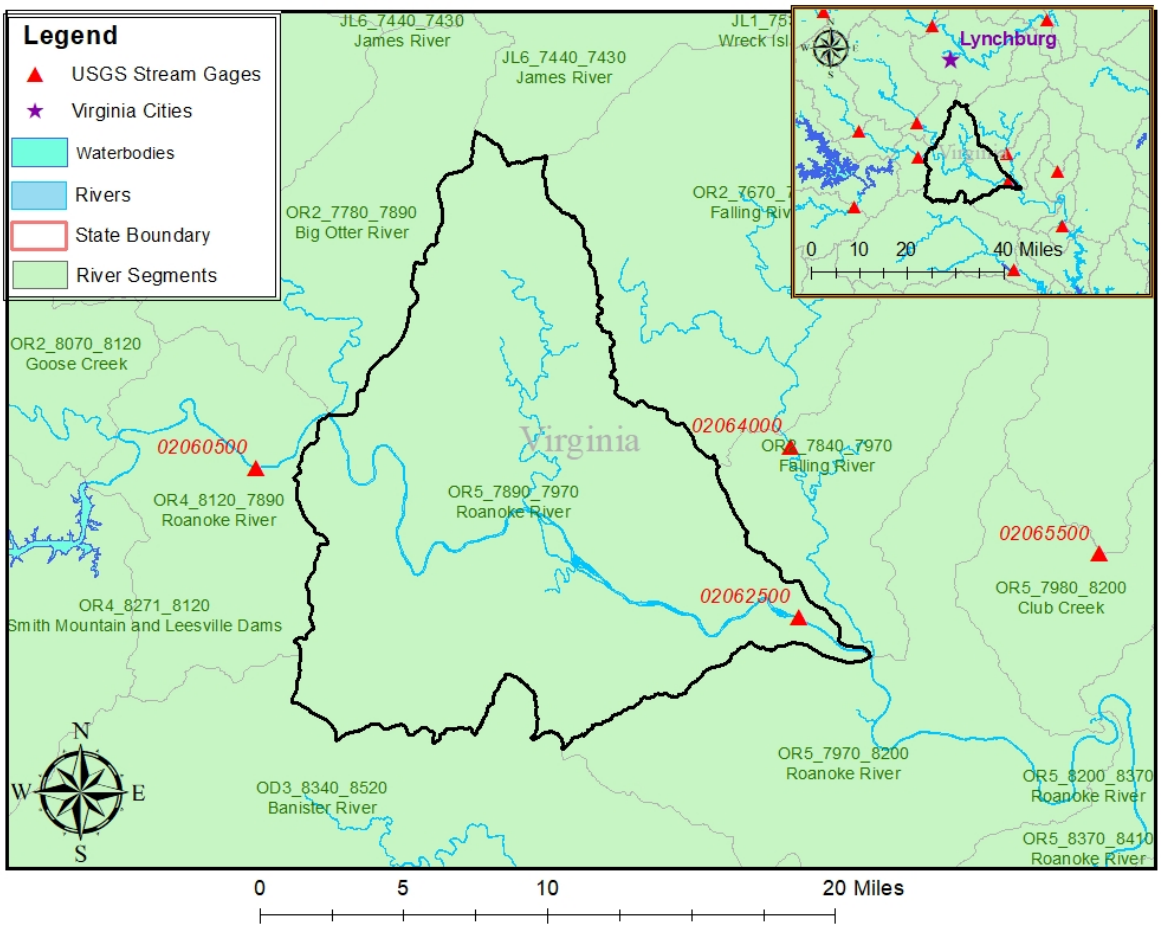
July 11, 2018



This river segment follows part of the flow of the Roanoke River. The gage is located in Campbell County, VA (Lat 3702'22.0", Long 7856'44.6") approximately 28 miles southeast of Lynchburg, VA. Drainage area is 2404 sq. miles. This gage started taking data in 1923 and is still taking data. The Smith Mountain and Leesville Dams are located in this area and may affect the flow. The average daily discharge error between the model and gage data for the 20 year timespan was -2.01%, with 39.6% of its rolling three month time spans above 20% error.

Table 1: Monthly Low Flows

	USGS Gage	Model	Pct. Error
Jan. Low Flow	962	543	43.6
Feb. Low Flow	971	628	35.3
Mar. Low Flow	1030	1230	-19.4
Apr. Low Flow	1140	1490	-30.7
May Low Flow	1340	2120	-58.2
Jun. Low Flow	1460	2160	-47.9
Jul. Low Flow	1370	1320	3.65
Aug. Low Flow	1540	1050	31.8
Sep. Low Flow	1170	939	19.7
Oct. Low Flow	1010	650	35.6
Nov. Low Flow	972	611	37.1
Dec. Low Flow	911	582	36.1

Table 2: Monthly Average Flows

	USGS Gage	Model	Pct. Error
Overall Mean Flow	2490	2540	-2.01
Jan. Mean Flow	2850	3170	-11.2
Feb. Mean Flow	3270	3820	-16.8
Mar. Mean Flow	3900	4570	-17.2
Apr. Mean Flow	3730	3830	-2.68
May Mean Flow	2750	2630	4.36
Jun. Mean Flow	2330	2210	5.15
Jul. Mean Flow	1660	1360	18.1
Aug. Mean Flow	1570	1190	24.2
Sep. Mean Flow	2170	2010	7.37
Oct. Mean Flow	1630	1610	1.23
Nov. Mean Flow	1970	1920	2.54
Dec. Mean Flow	2160	2240	-3.7

Table 3: Monthly High Flows

	USGS Gage	Model	Pct. Error
Jan. High Flow	1440	1120	22.2
Feb. High Flow	4520	3930	13.1
Mar. High Flow	3390	3800	-12.1
Apr. High Flow	8660	7060	18.5
May High Flow	7710	5450	29.3
Jun. High Flow	10800	11200	-3.7
Jul. High Flow	9690	8840	8.77
Aug. High Flow	5310	5000	5.84
Sep. High Flow	3060	2550	16.7
Oct. High Flow	2560	1640	35.9
Nov. High Flow	2380	1180	50.4
Dec. High Flow	1860	1070	42.5

Table 4: Period Low Flows

	USGS Gage	Model	Pct. Error
Min. 1 Day Min	229	93.7	59.1
Med. 1 Day Min	637	340	46.6
Min. 3 Day Min	276	94.4	65.8
Med. 3 Day Min	831	348	58.1
Min. 7 Day Min	350	96.2	72.5
Med. 7 Day Min	888	375	57.8
Min. 30 Day Min	401	118	70.6
Med. 30 Day Min	932	500	46.4
Min. 90 Day Min	468	203	56.6
Med. 90 Day Min	1180	741	37.2
7Q10	497	141	71.6
Year of 90-Day Min. Flow	2002	2002	0
Drought Year Mean	741	572	22.8
Mean Baseflow	1360	1470	-8.09

Table 5: Period High Flows

	USGS Gage	Model	Pct. Error
Max. 1 Day Max	65600	82100	-25.2
Med. 1 Day Max	29200	31400	-7.53
Max. 3 Day Max	48800	51400	-5.33
Med. 3 Day Max	25200	24400	3.17
Max. 7 Day Max	30100	29500	1.99
Med. 7 Day Max	15100	14400	4.64
Max. 30 Day Max	14600	14400	1.37
Med. 30 Day Max	6810	6540	3.96
Max. 90 Day Max	8240	9650	-17.1
Med. 90 Day Max	4320	4650	-7.64

Table 6: Non-Exceedance Flows

	USGS Gage	Model	Pct. Error
1% Non-Exceedance	389	145	62.7
5% Non-Exceedance	619	354	42.8
50% Non-Exceedance	1480	1460	1.35
95% Non-Exceedance	7070	7520	-6.36
99% Non-Exceedance	18800	18300	2.66
Sept. 10% Non-Exceedance	362	646	-78.5

Fig. 1: Hydrograph

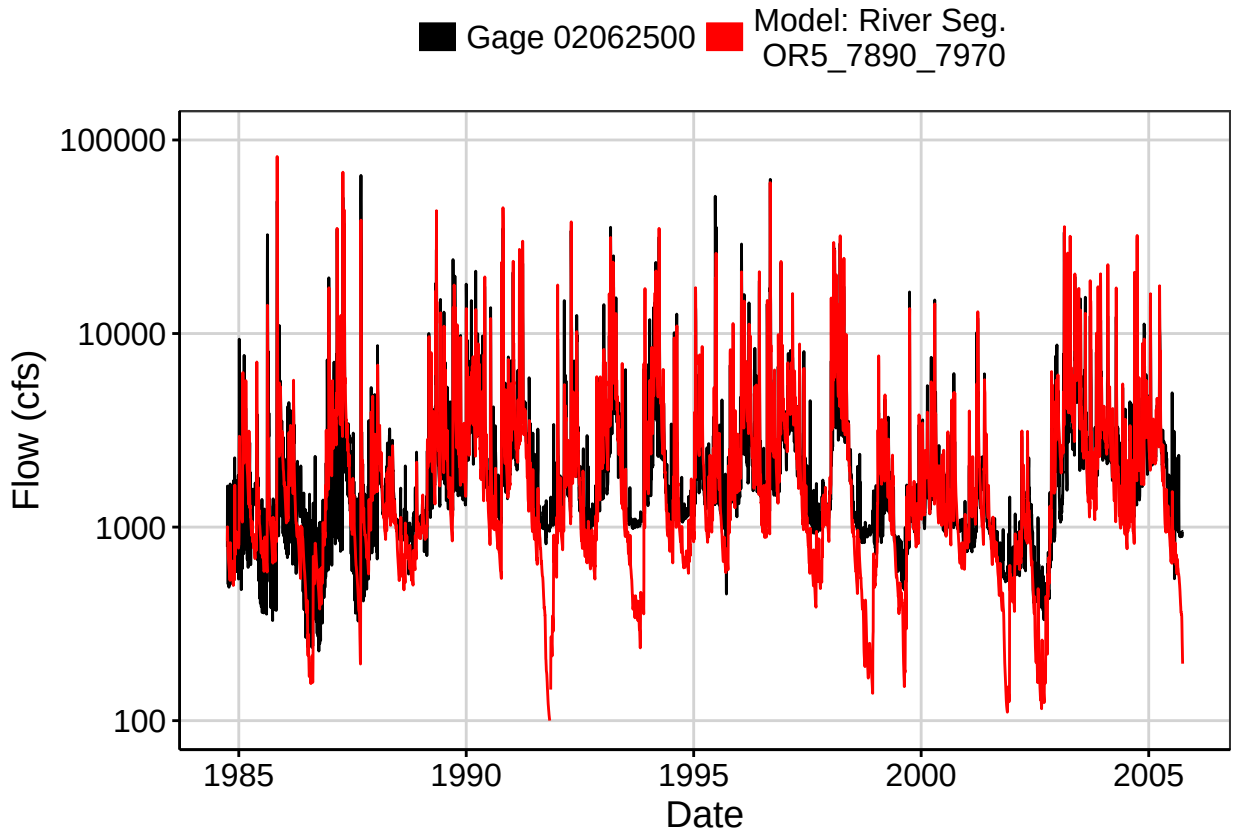


Fig. 2: Zoomed Hydrograph

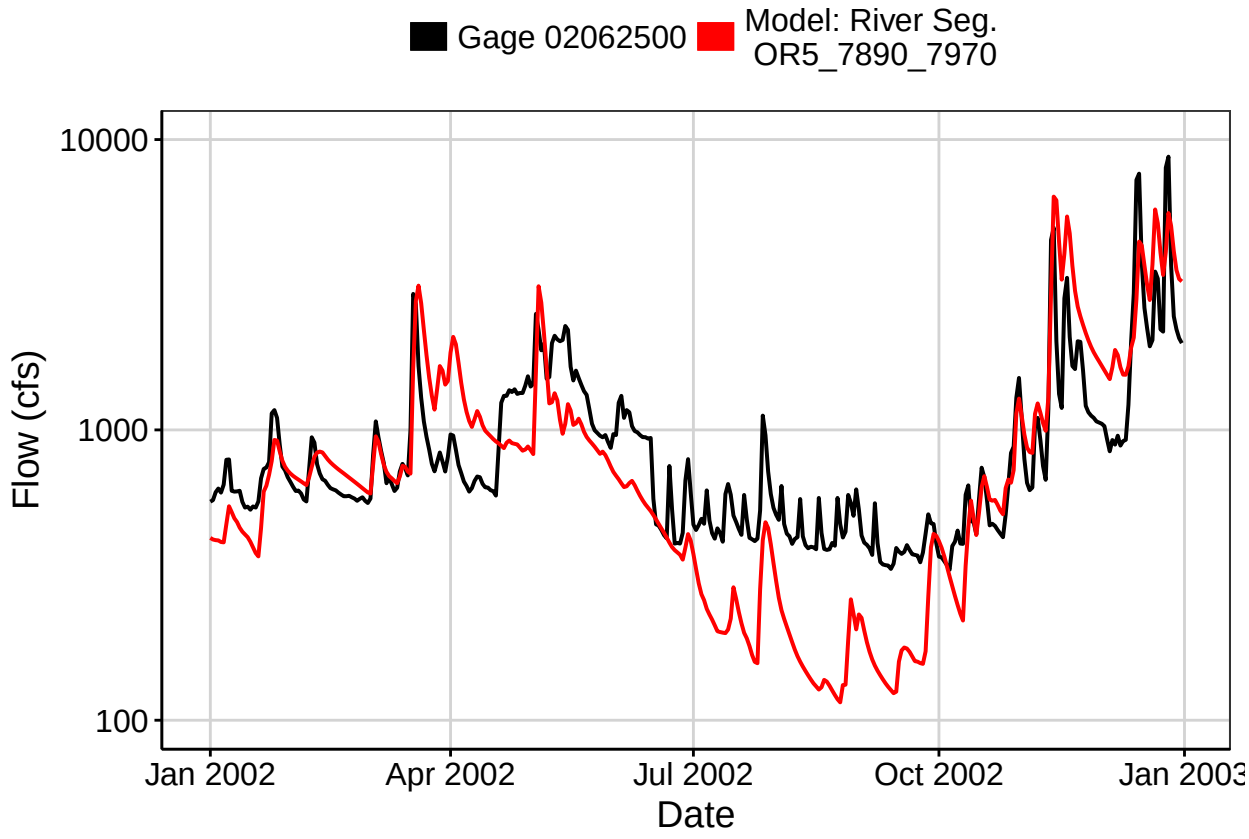


Fig. 3: Flow Exceedance

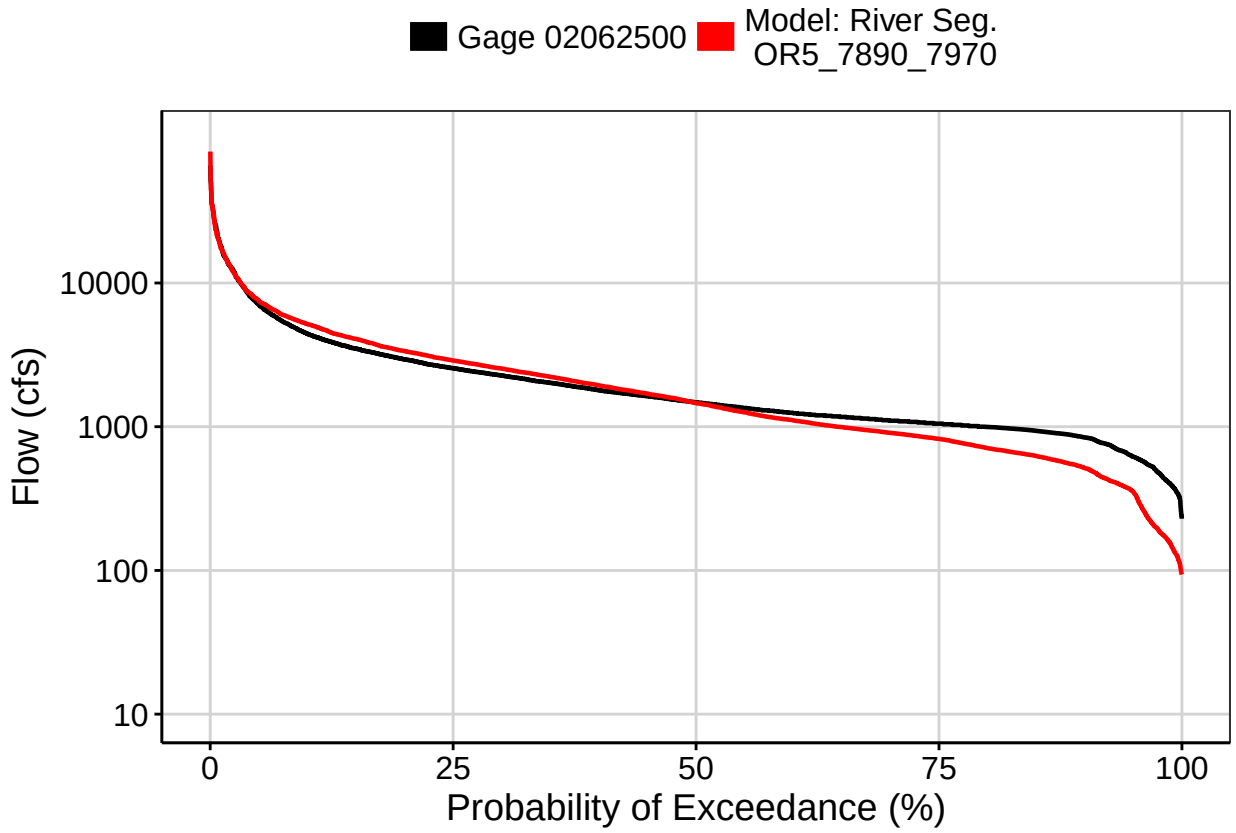


Fig. 4: Baseflow

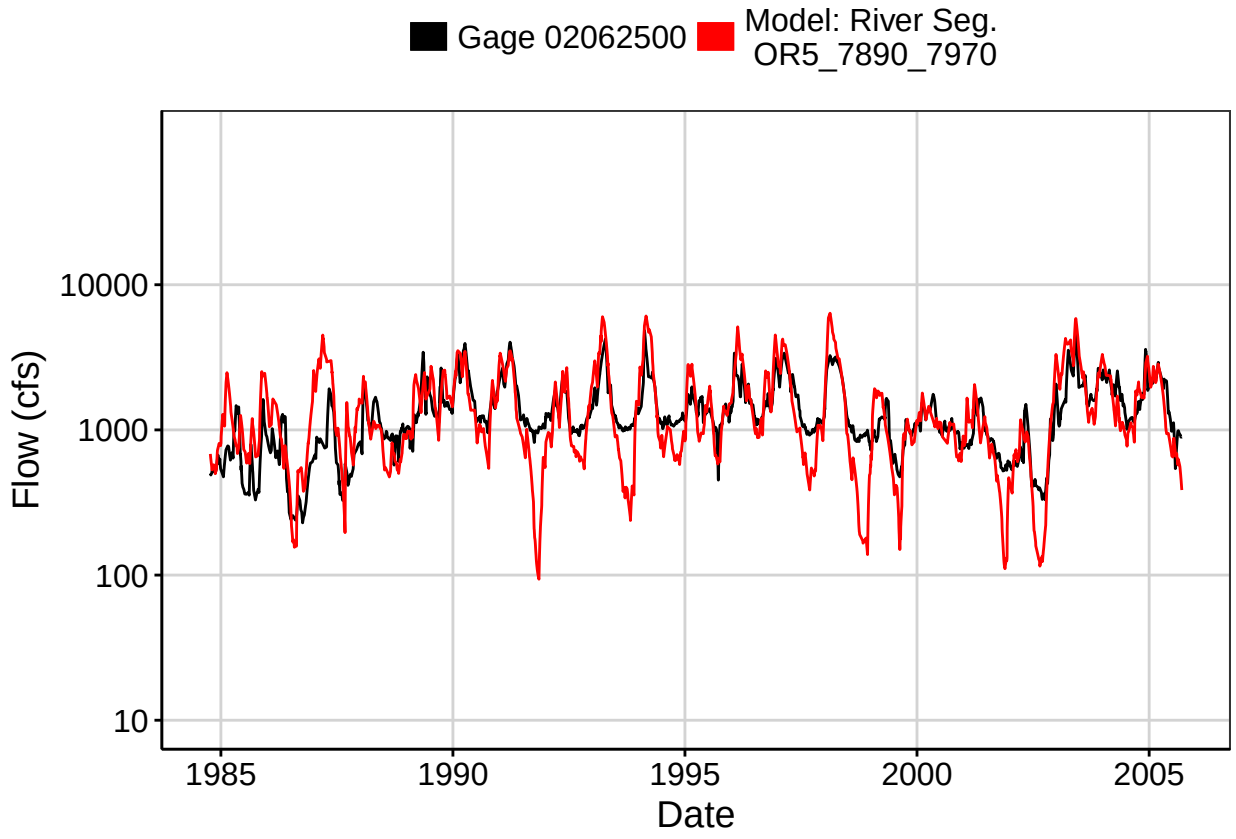


Fig. 5: Combined Baseflow

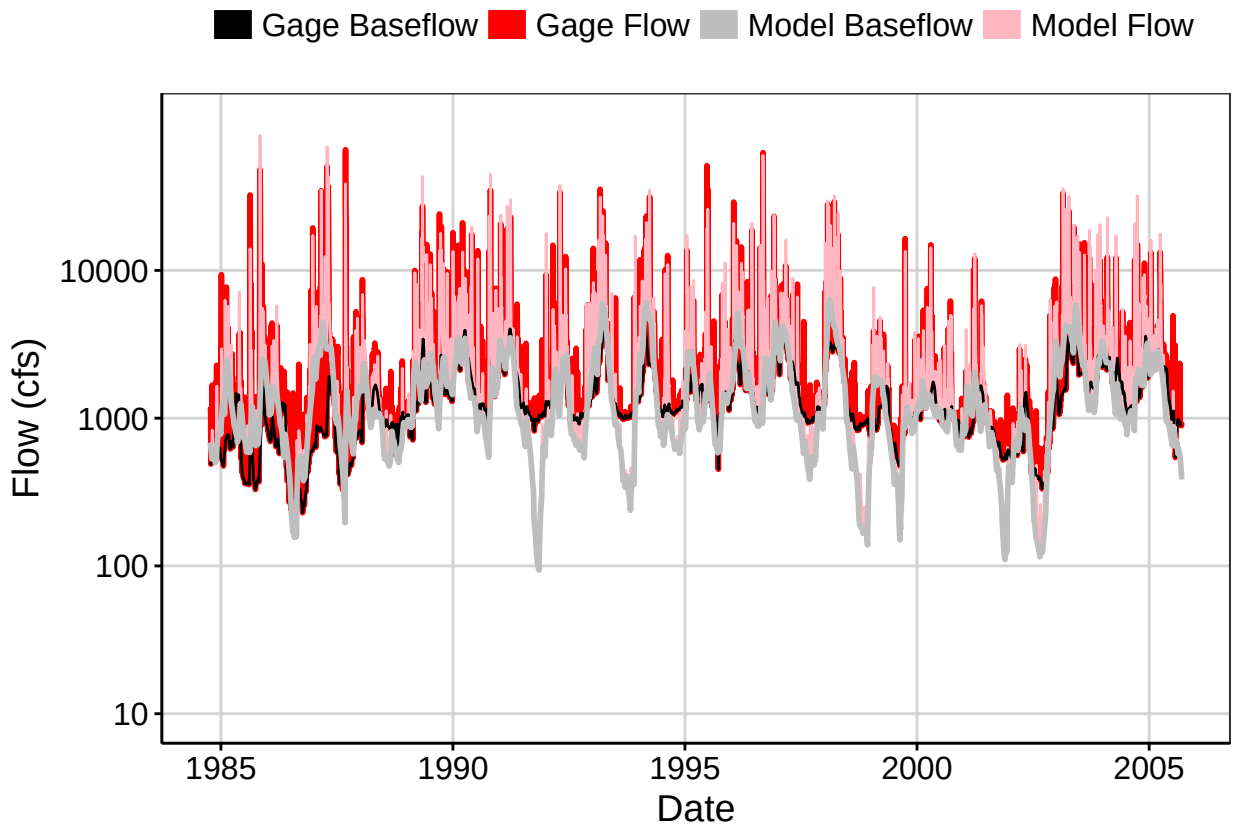


Fig. 6: Largest Error Segment

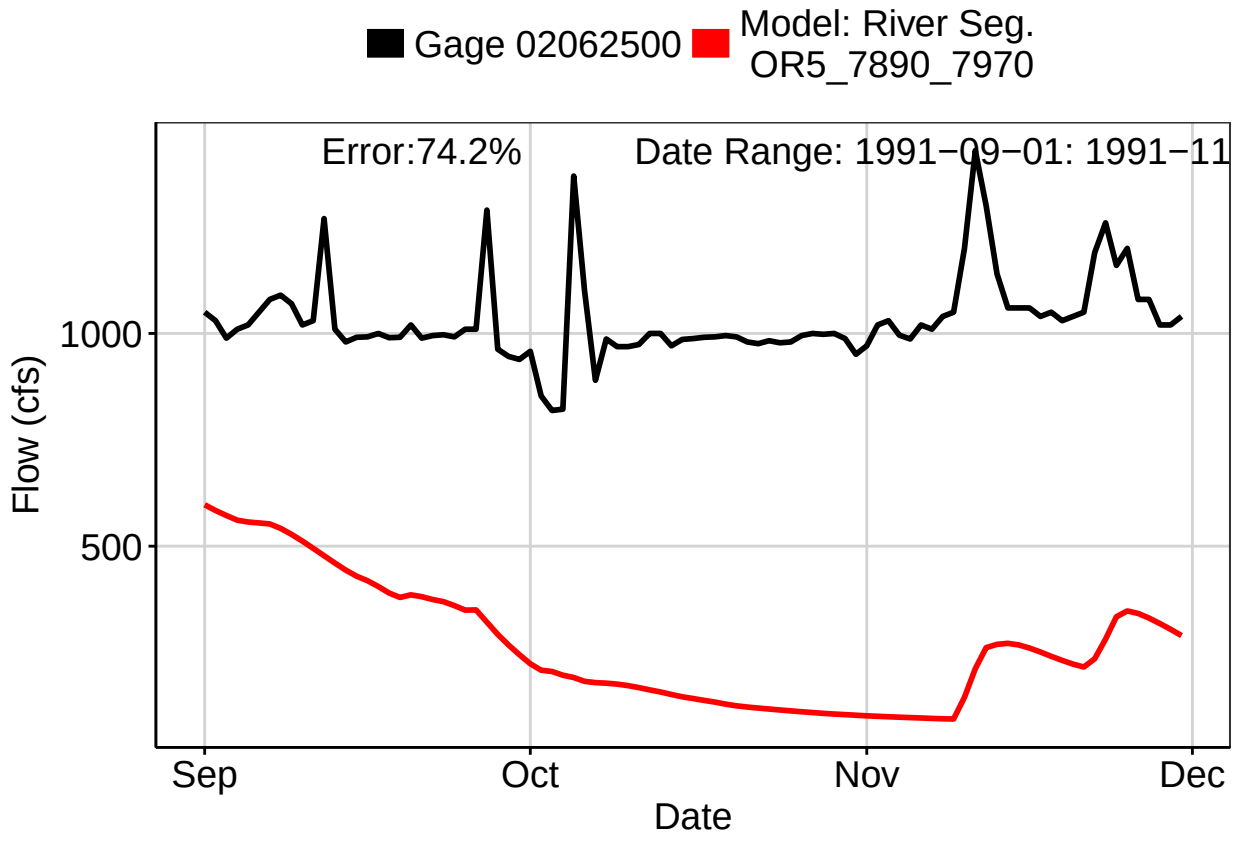


Fig. 7: Second Largest Error Segment

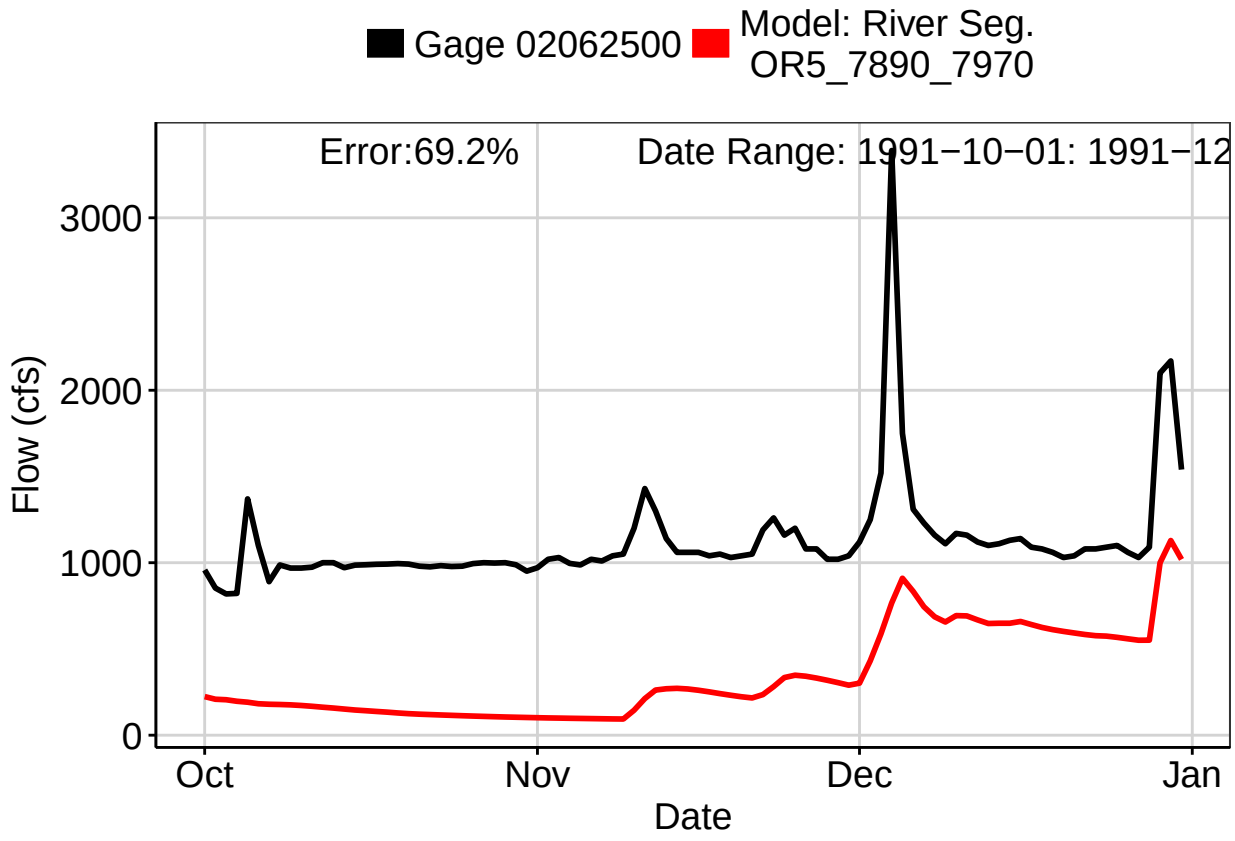


Fig. 8: Third Largest Error Segment

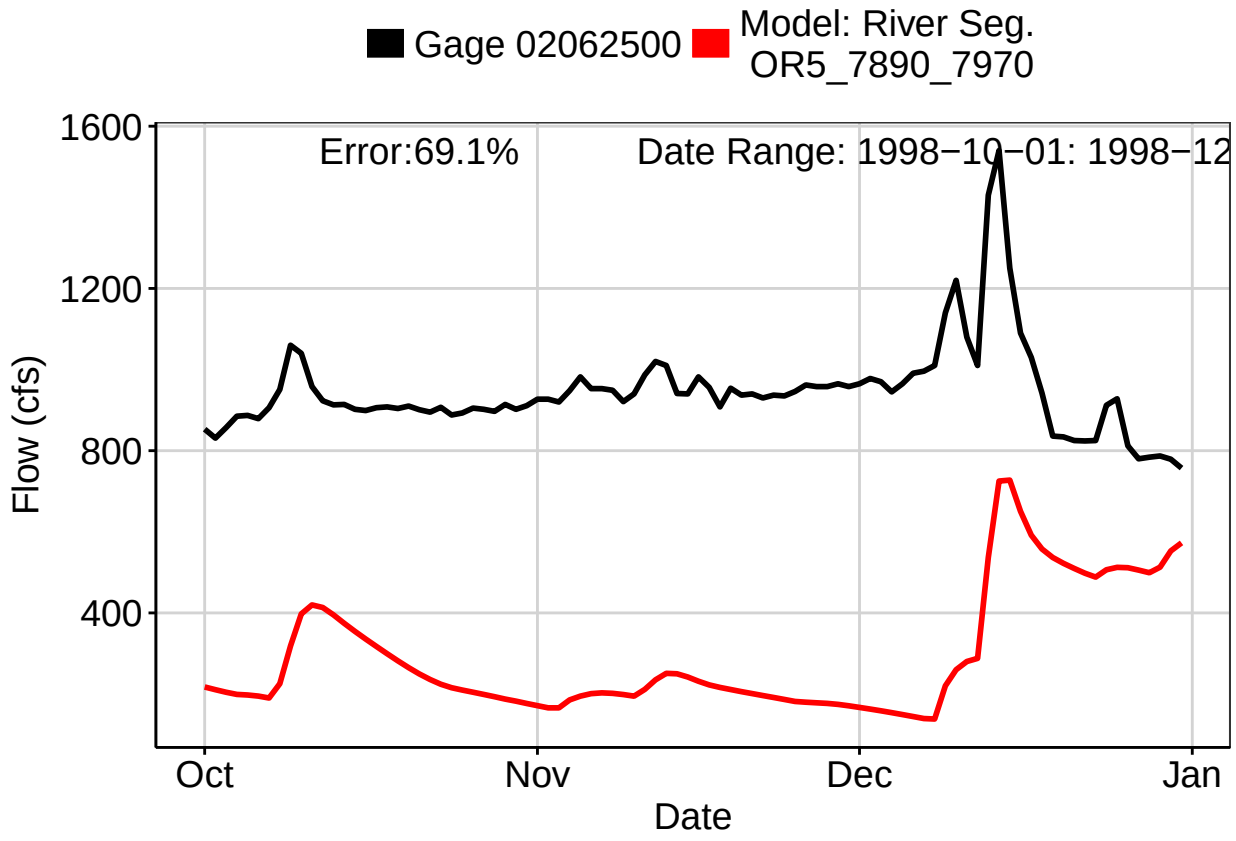


Fig. 9: Residuals Plot