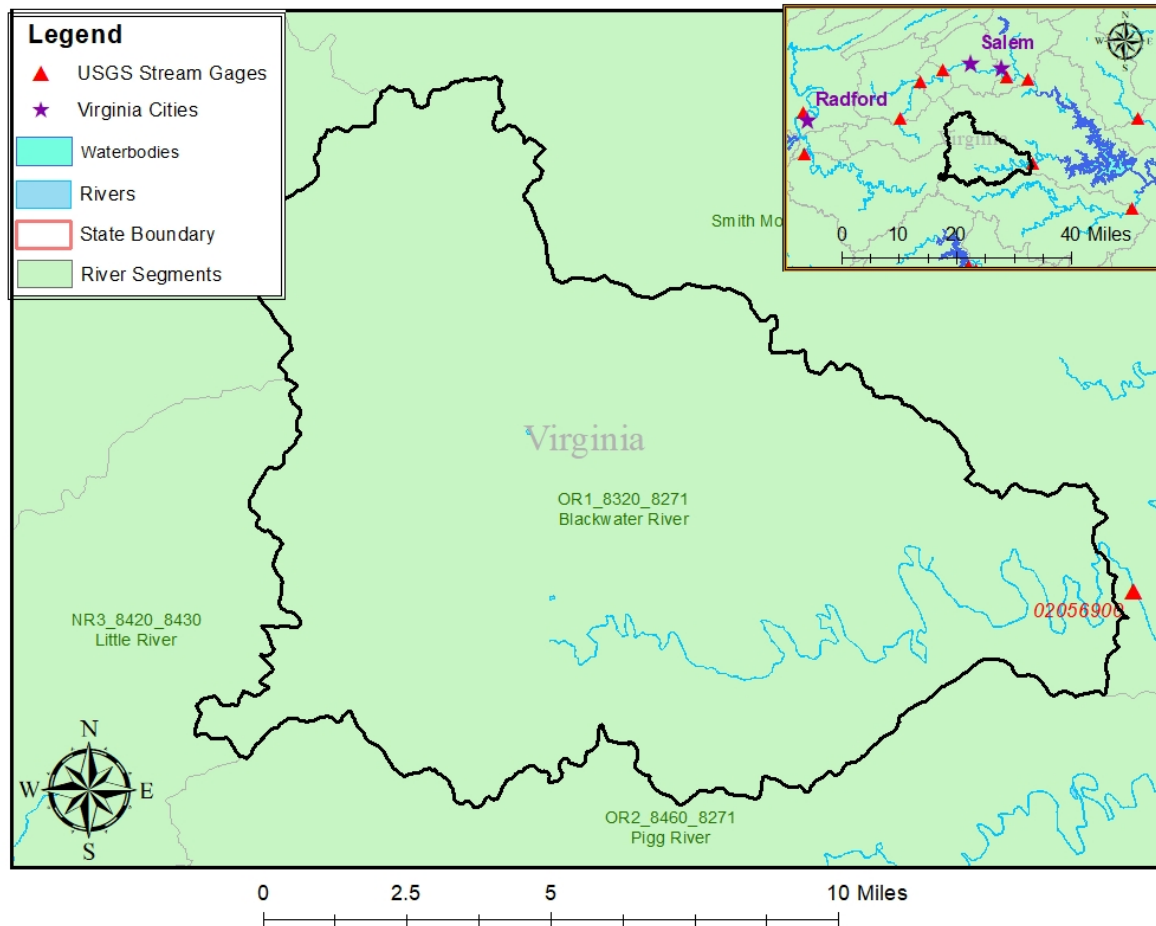


02056900 vs. OR1_8320_8271

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July 11, 2018



This river segment follows part of the flow of the Blackwater River, a tributary of the Roanoke River. The gage is located in Franklin County, VA (Lat 37°02'42", Long 79°50'40") approximately 20 miles southeast of Salem, VA. Drainage area is 115 sq. miles. This gage started taking data in 1976 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 -0.76%, with 42.1% of its rolling three month time spans above 20% error.

Table 1: Monthly Low Flows

	USGS Gage	Model	Pct. Error
Jan. Low Flow	36	21.8	39.4
Feb. Low Flow	50	36	28
Mar. Low Flow	59	68	-15.3
Apr. Low Flow	58	81.7	-40.9
May Low Flow	89	104	-16.9
Jun. Low Flow	104	106	-1.92
Jul. Low Flow	95	64.7	31.9
Aug. Low Flow	81	52.4	35.3
Sep. Low Flow	59	49.1	16.8
Oct. Low Flow	40	32.9	17.8
Nov. Low Flow	32	30.8	3.75
Dec. Low Flow	34	25.9	23.8

Table 2: Monthly Average Flows

	USGS Gage	Model	Pct. Error
Overall Mean Flow	131	132	-0.76
Jan. Mean Flow	155	165	-6.45
Feb. Mean Flow	165	194	-17.6
Mar. Mean Flow	207	244	-17.9
Apr. Mean Flow	201	193	3.98
May Mean Flow	128	126	1.56
Jun. Mean Flow	129	109	15.5
Jul. Mean Flow	88.5	75.5	14.7
Aug. Mean Flow	77.6	68.1	12.2
Sep. Mean Flow	110	109	0.91
Oct. Mean Flow	79.8	80.1	-0.38
Nov. Mean Flow	120	106	11.7
Dec. Mean Flow	115	120	-4.35

Table 3: Monthly High Flows

	USGS Gage	Model	Pct. Error
Jan. High Flow	131	73.9	43.6
Feb. High Flow	289	292	-1.04
Mar. High Flow	250	237	5.2
Apr. High Flow	388	367	5.41
May High Flow	393	332	15.5
Jun. High Flow	714	773	-8.26
Jul. High Flow	323	425	-31.6
Aug. High Flow	240	233	2.92
Sep. High Flow	156	114	26.9
Oct. High Flow	168	90.4	46.2
Nov. High Flow	130	74.2	42.9
Dec. High Flow	209	82.3	60.6

Table 4: Period Low Flows

	USGS Gage	Model	Pct. Error
Min. 1 Day Min	3.83	2.52	34.2
Med. 1 Day Min	24	13.9	42.1
Min. 3 Day Min	4.2	2.63	37.4
Med. 3 Day Min	26	14.2	45.4
Min. 7 Day Min	4.61	2.9	37.1
Med. 7 Day Min	28.6	15.1	47.2
Min. 30 Day Min	12.7	5.32	58.1
Med. 30 Day Min	39.6	22	44.4
Min. 90 Day Min	17.9	14.9	16.8
Med. 90 Day Min	52.3	38.7	26
7Q10	12	6.24	48
Year of 90-Day Min. Flow	2002	2002	0
Drought Year Mean	37.1	37.7	-1.62
Mean Baseflow	76.8	77.4	-0.78

Table 5: Period High Flows

	USGS Gage	Model	Pct. Error
Max. 1 Day Max	5410	6470	-19.6
Med. 1 Day Max	2270	1960	13.7
Max. 3 Day Max	3370	3050	9.5
Med. 3 Day Max	1190	1320	-10.9
Max. 7 Day Max	1860	1540	17.2
Med. 7 Day Max	632	782	-23.7
Max. 30 Day Max	842	800	4.99
Med. 30 Day Max	319	328	-2.82
Max. 90 Day Max	505	490	2.97
Med. 90 Day Max	220	240	-9.09

Table 6: Non-Exceedance Flows

	USGS Gage	Model	Pct. Error
1% Non-Exceedance	13	8.73	32.8
5% Non-Exceedance	25	15.2	39.2
50% Non-Exceedance	85	78.1	8.12
95% Non-Exceedance	330	351	-6.36
99% Non-Exceedance	915	1070	-16.9
Sept. 10% Non-Exceedance	14.2	24.9	-75.4

Fig. 1: Hydrograph

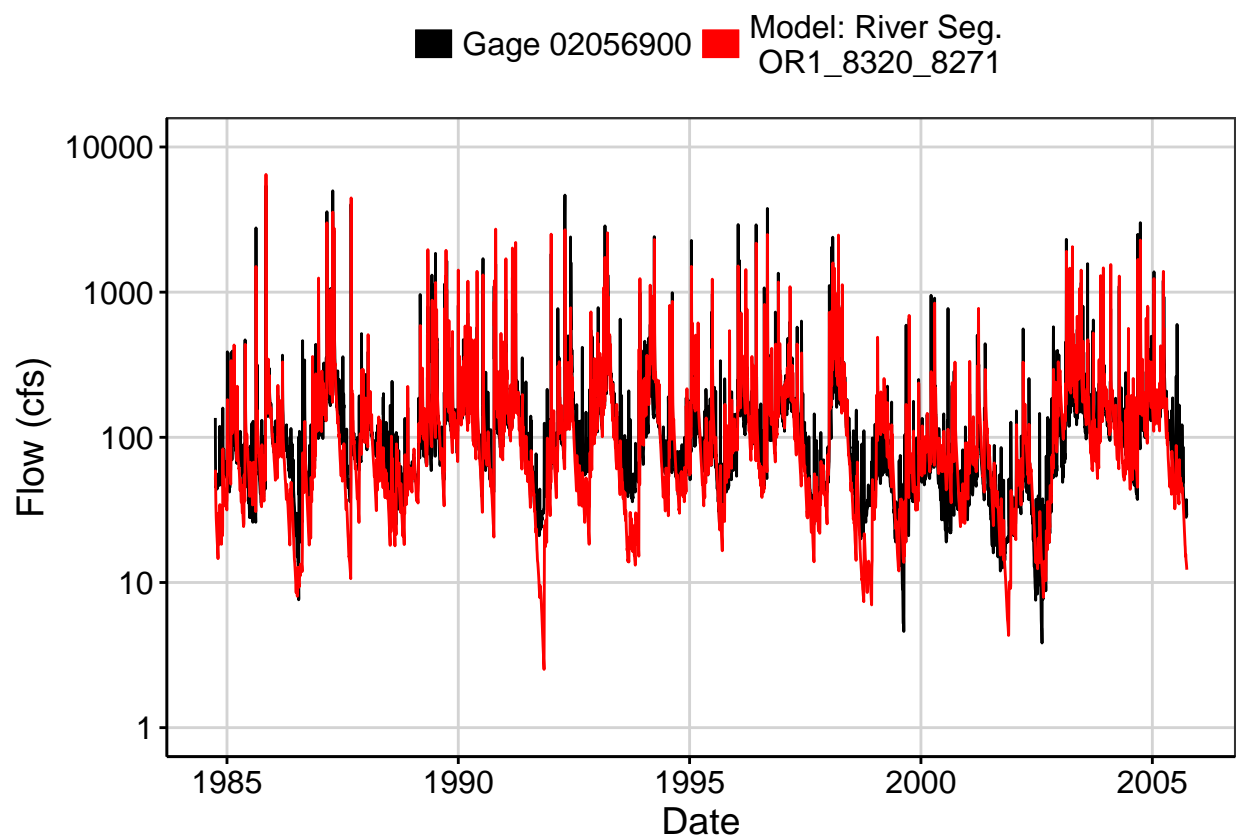


Fig. 2: Zoomed Hydrograph

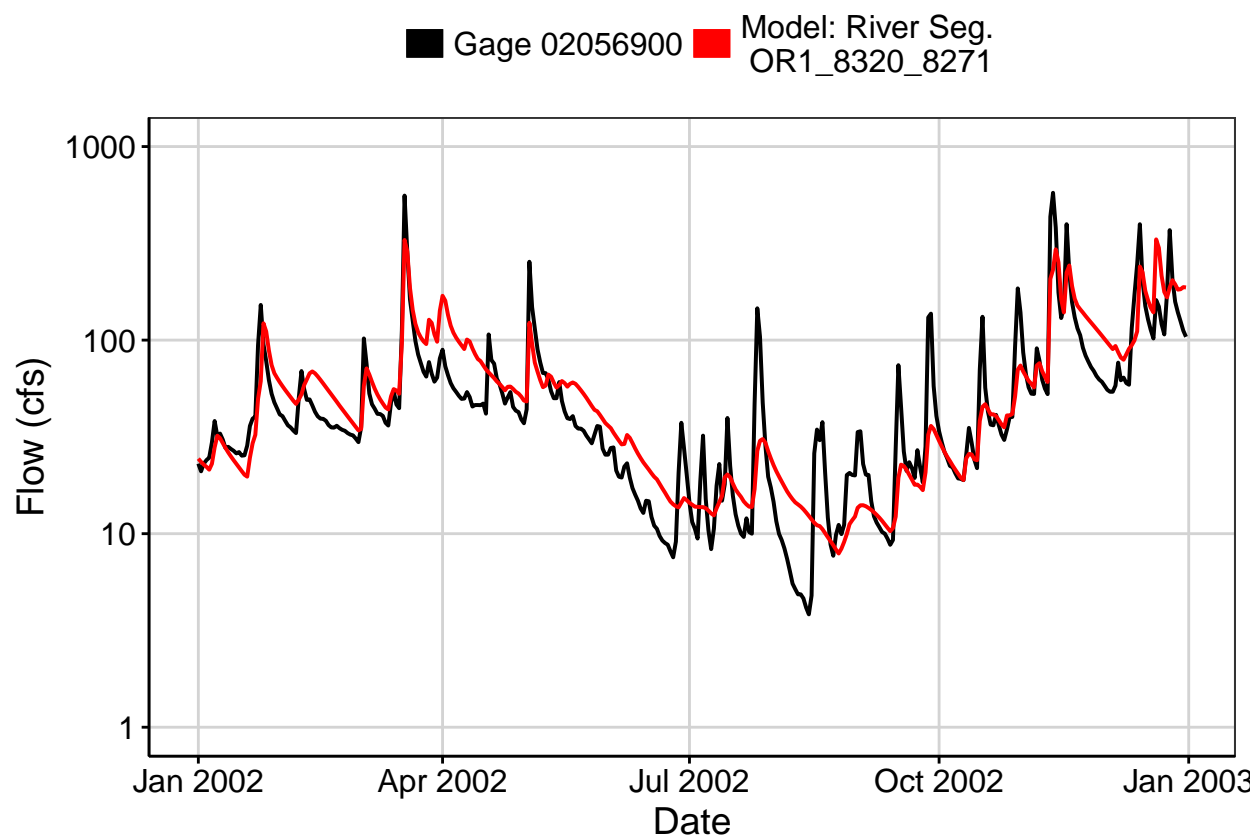


Fig. 3: Flow Exceedance

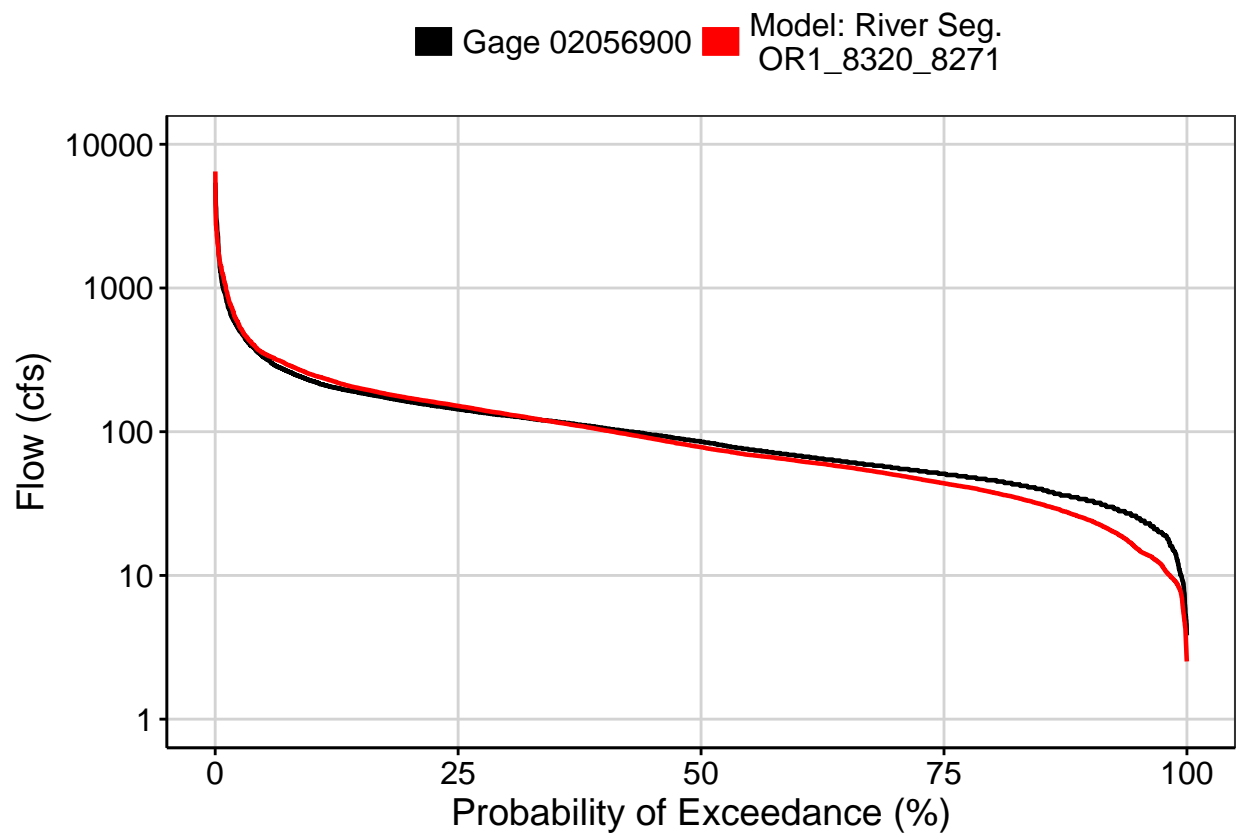


Fig. 4: Baseflow

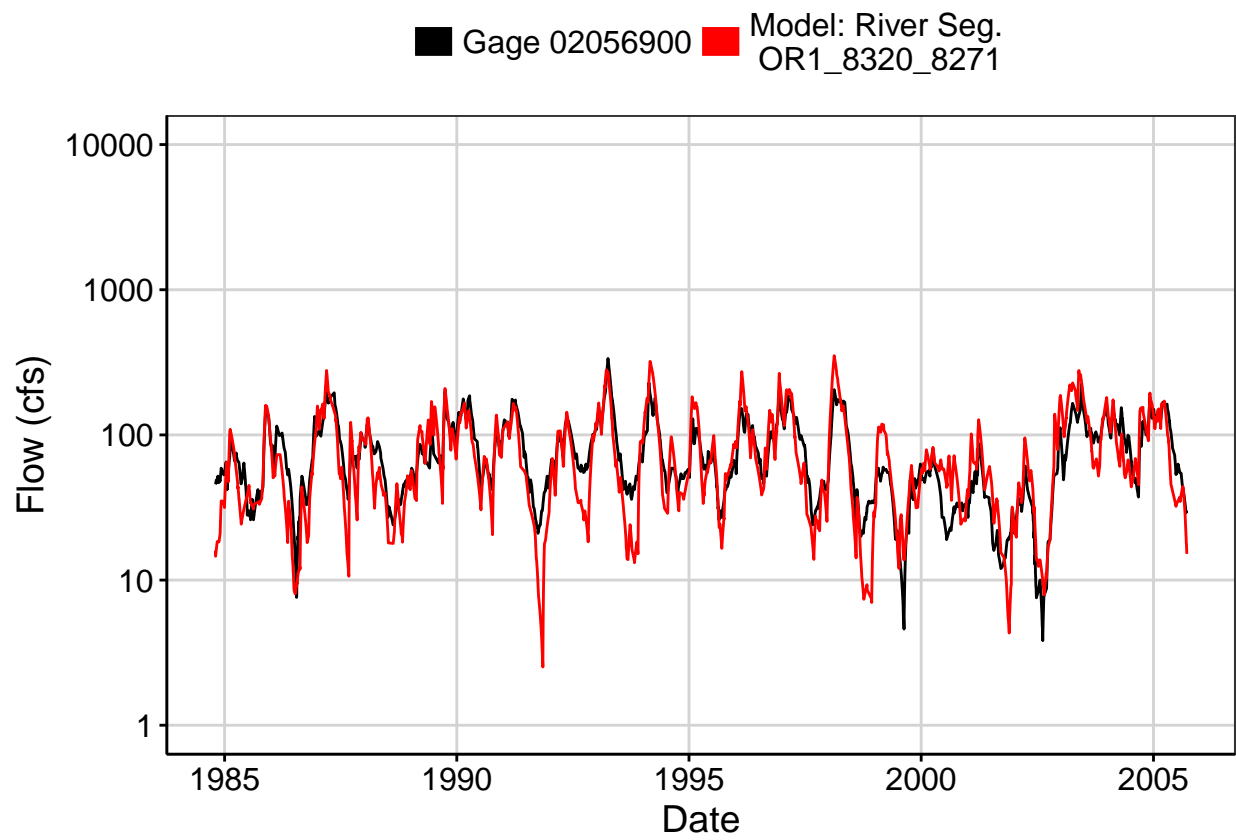


Fig. 5: Combined Baseflow

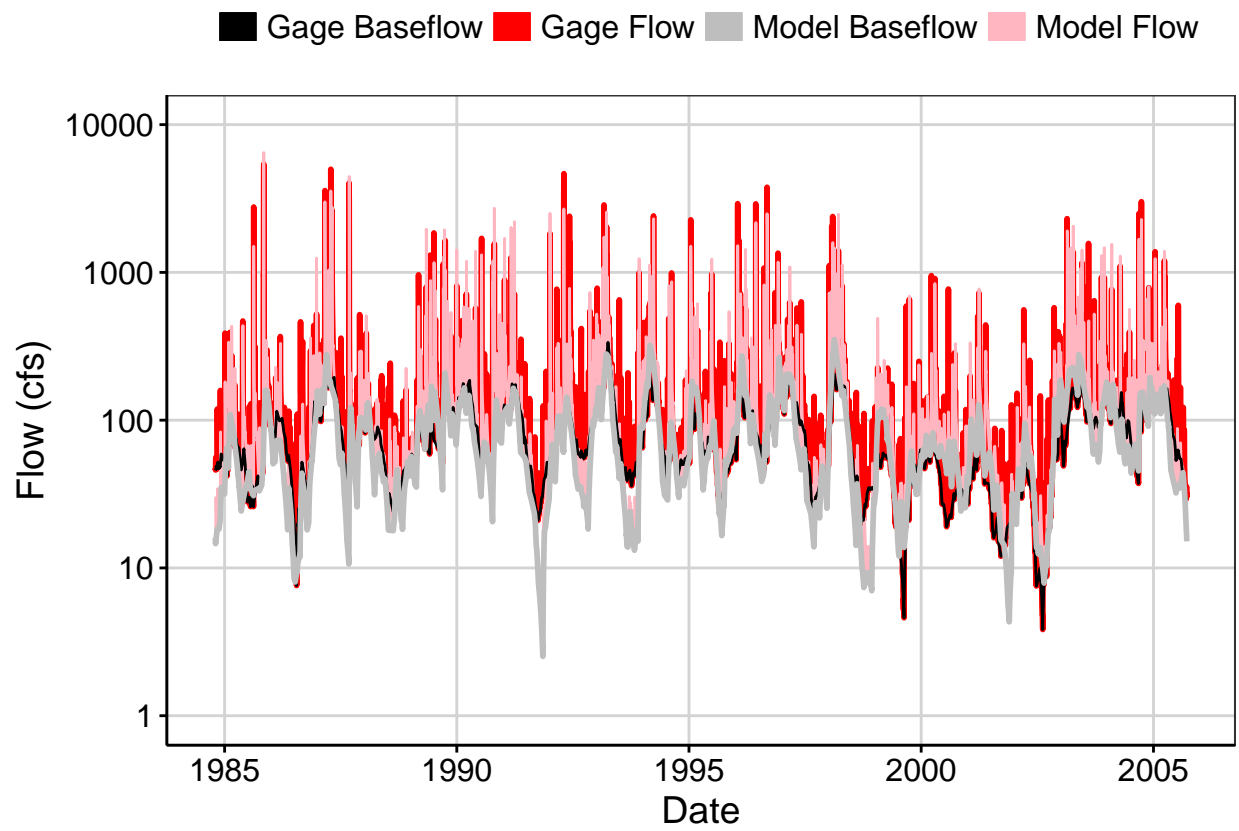


Fig. 6: Largest Error Segment

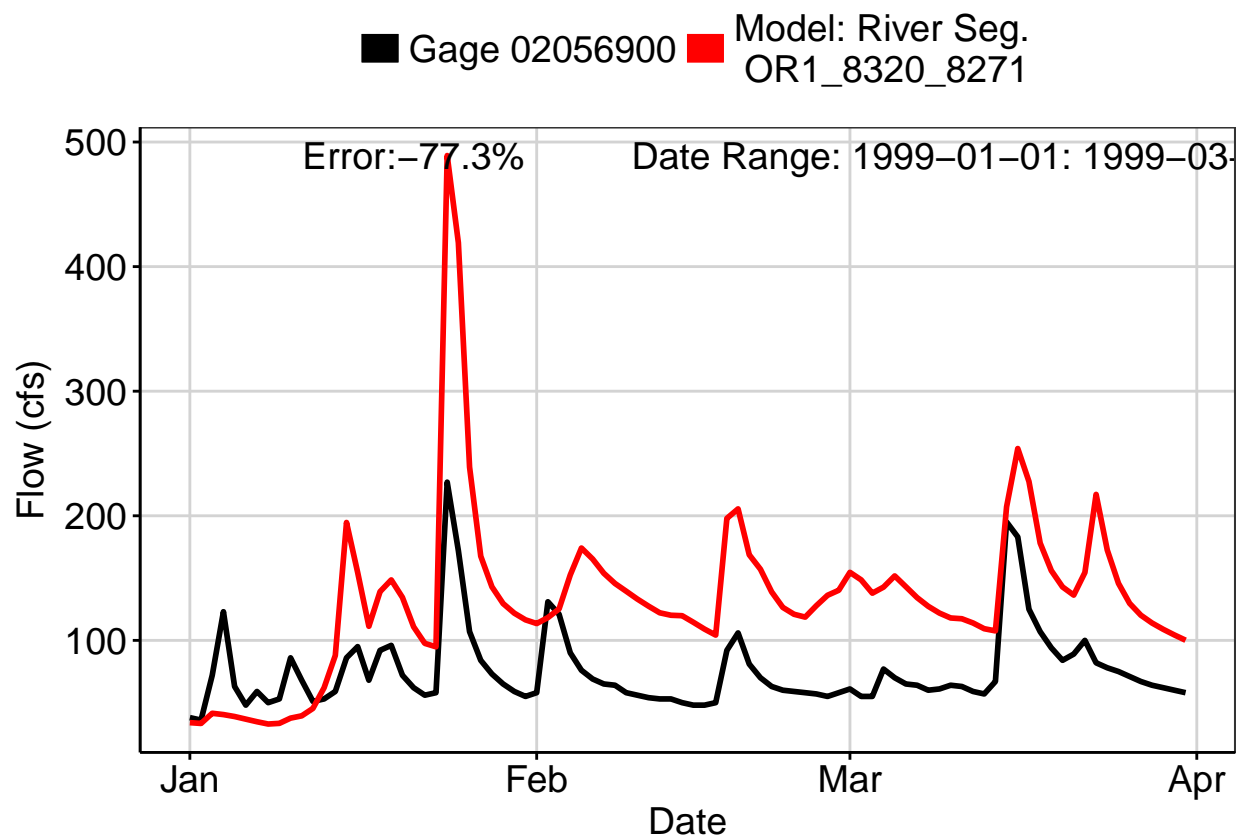


Fig. 7: Second Largest Error Segment

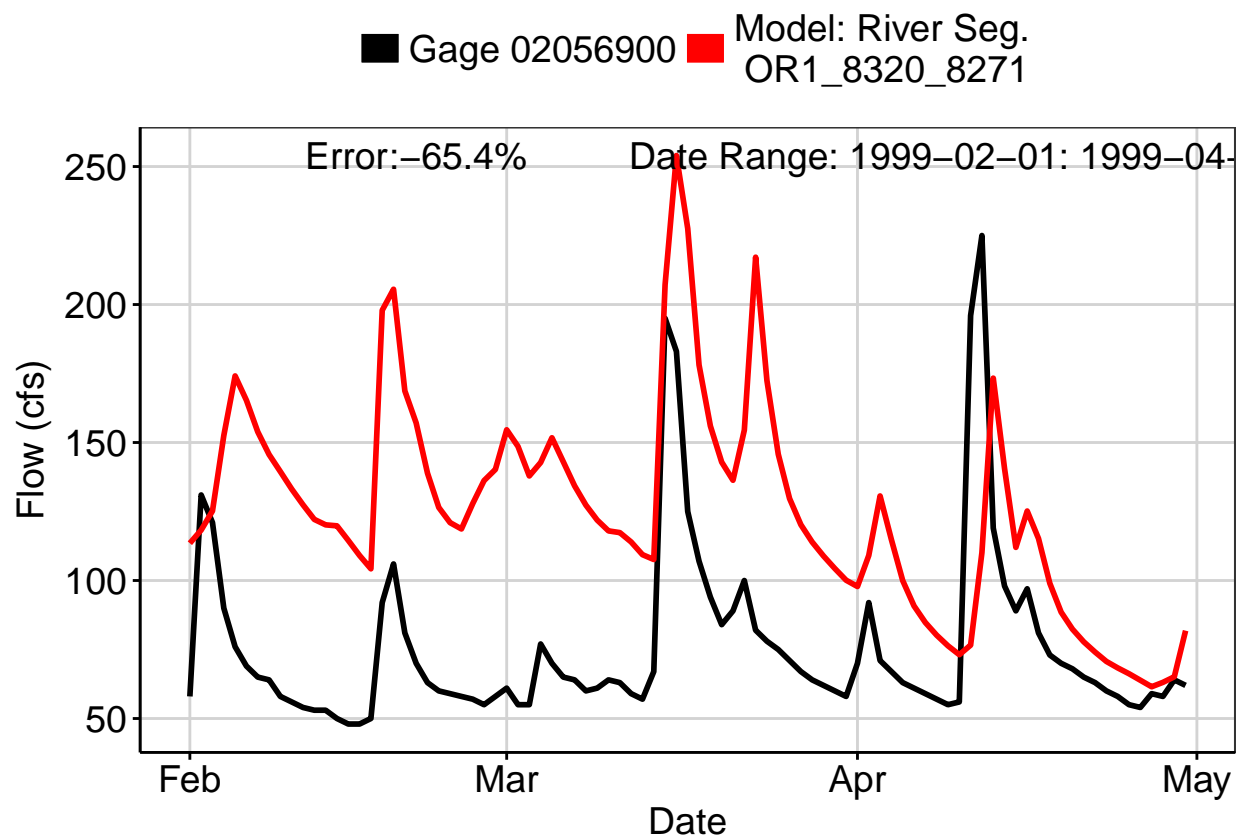


Fig. 8: Third Largest Error Segment

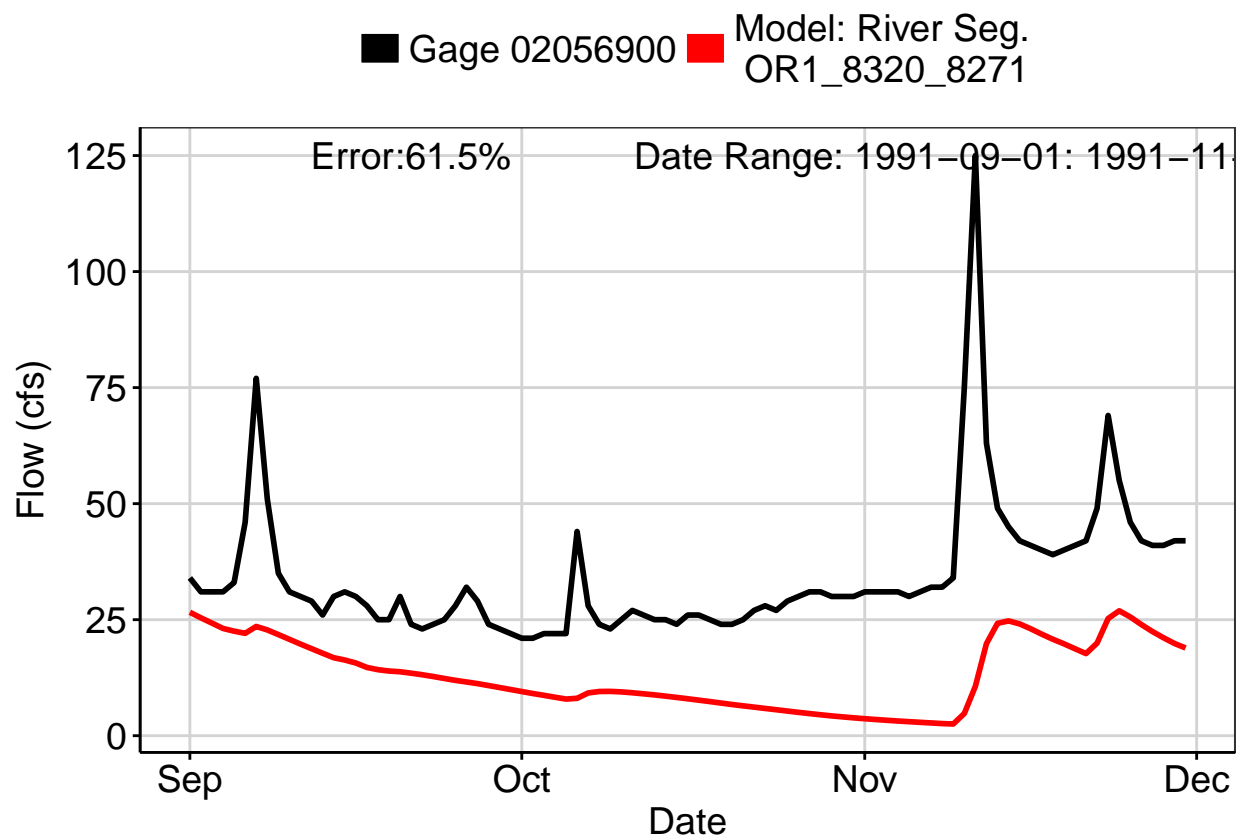


Fig. 9: Residuals Plot

