02071000 vs. OD4_9140_8990

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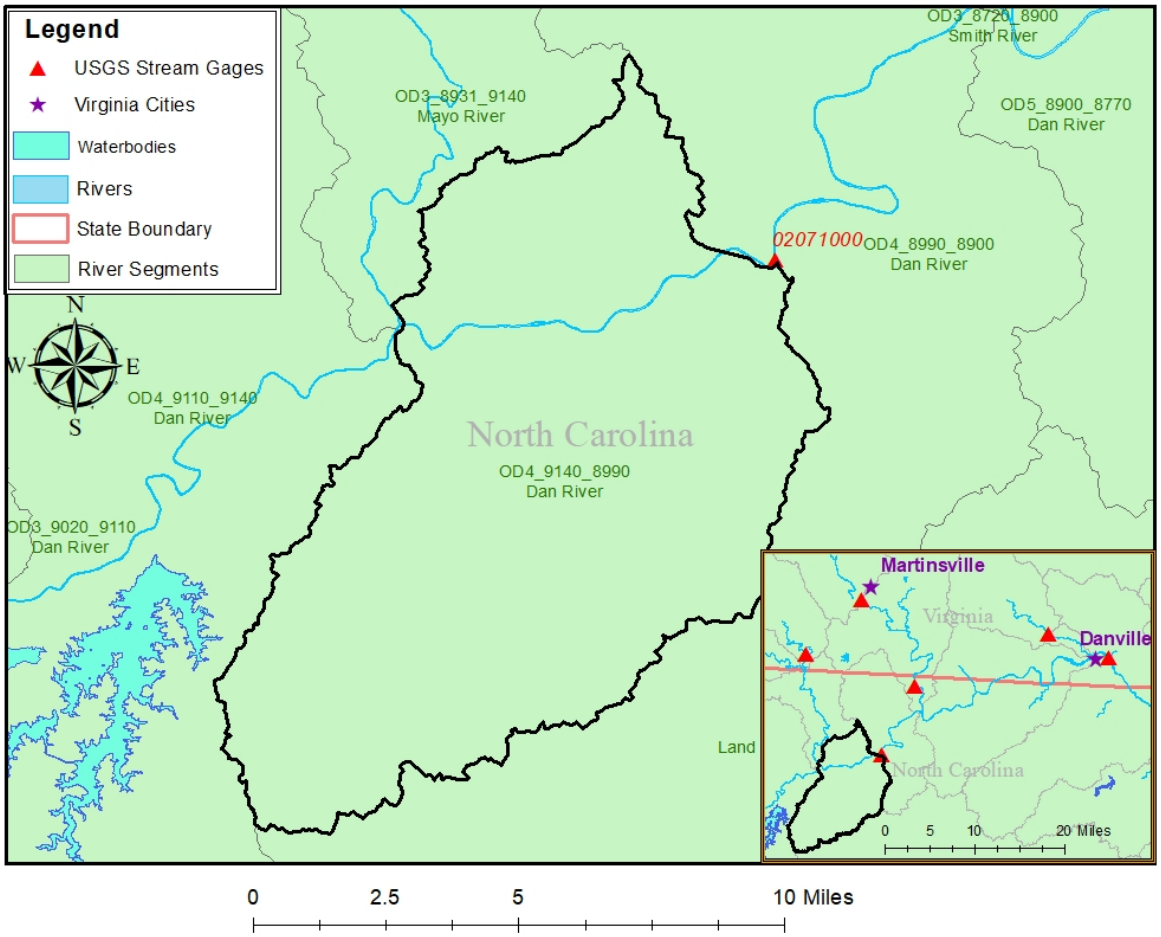

This river segment follows part of the flow of the Dan River, a tributary of the Roanoke River. The gage is located in Rockingham County, NC (Lat 3624'45", Long 7949'34") approximately 27 miles southwest of Danville, VA. Drainage area is 1053 sq. miles. This gage started taking data in 1939 and is still taking data. There are slight diurnal fluctuations and regulations at low flow stages caused by the Talbott and Townes reservoirs. The average daily discharge error between the model and gage data for the 20 year timespan was -2.59%, with 34.2% of its rolling three month time spans above 20% error.

Table 1: Monthly Low Flows

	USGS Gage	Model	Pct. Error
Jan. Low Flow	424	278	34.4
Feb. Low Flow	510	371	27.3
Mar. Low Flow	591	555	6.09
Apr. Low Flow	618	664	-7.44
May Low Flow	814	976	-19.9
Jun. Low Flow	880	961	-9.2
Jul. Low Flow	804	820	-1.99
Aug. Low Flow	715	705	1.4
Sep. Low Flow	632	563	10.9
Oct. Low Flow	488	452	7.38
Nov. Low Flow	391	391	0
Dec. Low Flow	338	314	7.1

Table 2: Monthly Average Flows

	USGS Gage	Model	Pct. Error
Overall Mean Flow	1160	1190	-2.59
Jan. Mean Flow	1340	1400	-4.48
Feb. Mean Flow	1410	1580	-12.1
Mar. Mean Flow	1890	2170	-14.8
Apr. Mean Flow	1630	1790	-9.82
May Mean Flow	1220	1240	-1.64
Jun. Mean Flow	1070	1100	-2.8
Jul. Mean Flow	884	723	18.2
Aug. Mean Flow	827	786	4.96
Sep. Mean Flow	887	938	-5.75
Oct. Mean Flow	811	789	2.71
Nov. Mean Flow	895	827	7.6
Dec. Mean Flow	1050	1020	2.86

Table 3: Monthly High Flows

	USGS Gage	Model	Pct. Error
Jan. High Flow	1020	786	22.9
Feb. High Flow	2070	2130	-2.9
Mar. High Flow	3190	2140	32.9
Apr. High Flow	3940	4040	-2.54
May High Flow	4230	2670	36.9
Jun. High Flow	6330	6530	-3.16
Jul. High Flow	2880	3570	-24
Aug. High Flow	2130	2630	-23.5
Sep. High Flow	1810	1330	26.5
Oct. High Flow	1520	950	37.5
Nov. High Flow	2060	798	61.3
Dec. High Flow	1300	775	40.4

Table 4: Period Low Flows

	USGS Gage	Model	Pct. Error
Min. 1 Day Min	63	94.3	-49.7
Med. 1 Day Min	297	244	17.8
Min. 3 Day Min	63.7	96	-50.7
Med. 3 Day Min	310	247	20.3
Min. 7 Day Min	65.3	100	-53.1
Med. 7 Day Min	340	259	23.8
Min. 30 Day Min	99.6	107	-7.43
Med. 30 Day Min	402	327	18.7
Min. 90 Day Min	156	188	-20.5
Med. 90 Day Min	586	439	25.1
7Q10	142	144	-1.41
Year of 90-Day Min. Flow	2002	2002	0
Drought Year Mean	373	356	4.56
Mean Baseflow	709	751	-5.92

Table 5: Period High Flows

	USGS Gage	Model	Pct. Error
Max. 1 Day Max	27800	31200	-12.2
Med. 1 Day Max	15600	14000	10.3
Max. 3 Day Max	18800	19800	-5.32
Med. 3 Day Max	9560	9590	-0.31
Max. 7 Day Max	10100	10800	-6.93
Med. 7 Day Max	5590	5610	-0.36
Max. 30 Day Max	5040	5780	-14.7
Med. 30 Day Max	2560	2830	-10.5
Max. 90 Day Max	3450	3950	-14.5
Med. 90 Day Max	1630	2050	-25.8

Table 6: Non-Exceedance Flows

	USGS Gage	Model	Pct. Error
1% Non-Exceedance	172	159	7.56
5% Non-Exceedance	296	233	21.3
50% Non-Exceedance	797	778	2.38
95% Non-Exceedance	2860	3160	-10.5
99% Non-Exceedance	7510	8340	-11.1
Sept. 10% Non-Exceedance	295	295	0

Fig. 1: Hydrograph

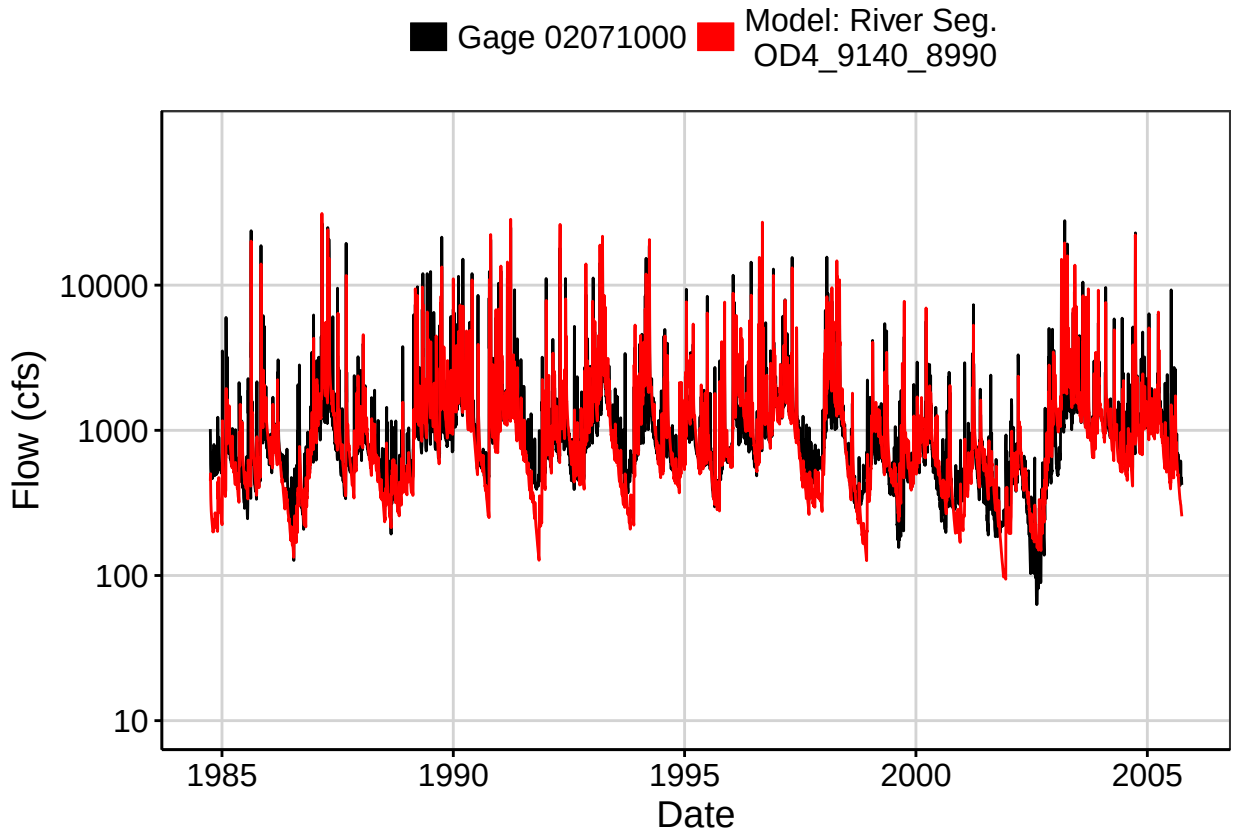

Fig. 2: Zoomed Hydrograph

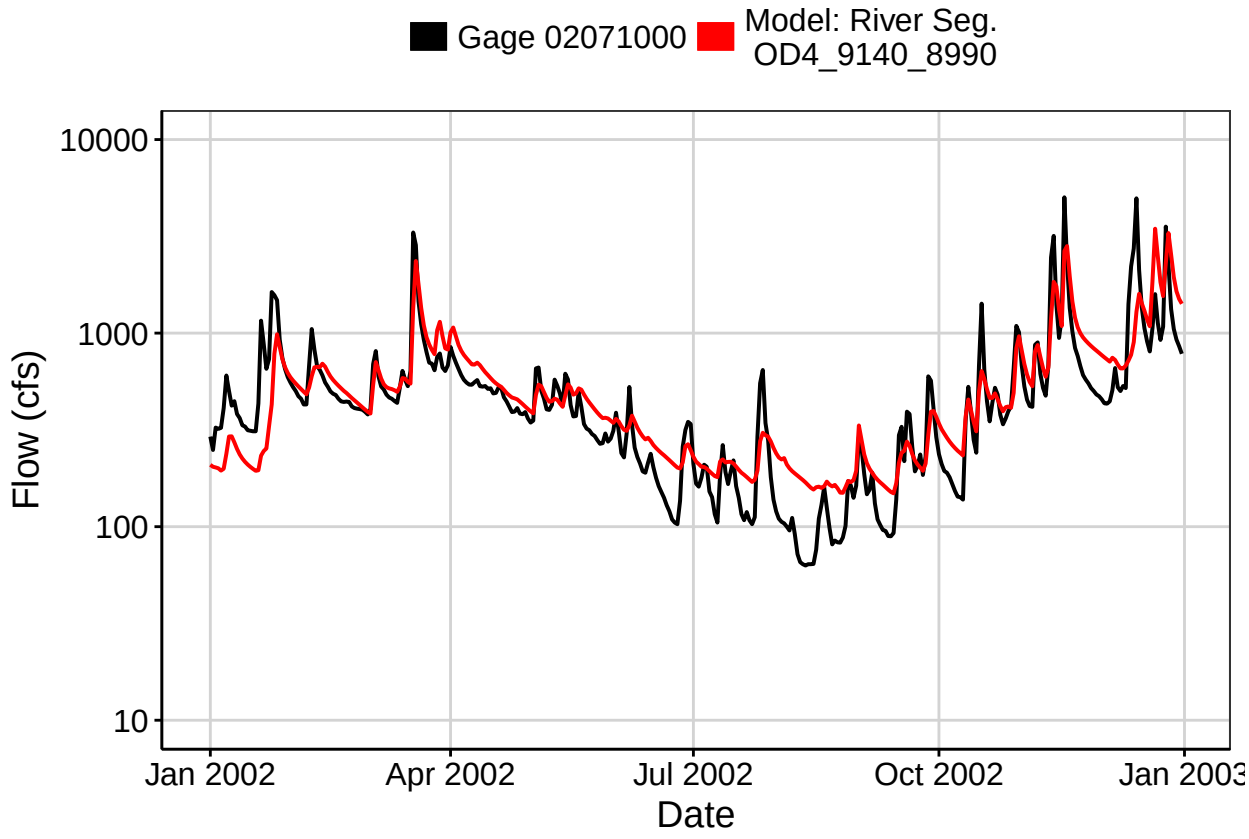

Fig. 3: Flow Exceedance

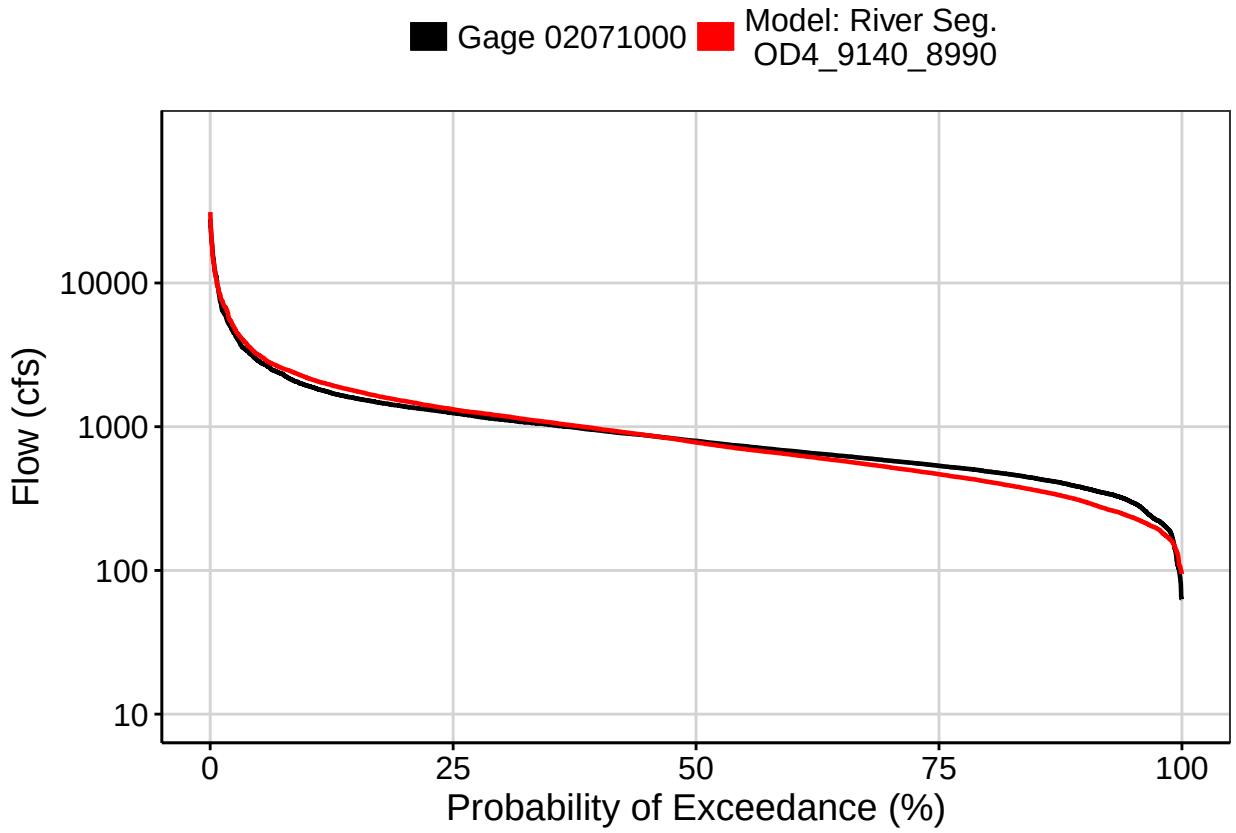

Fig. 4: Baseflow

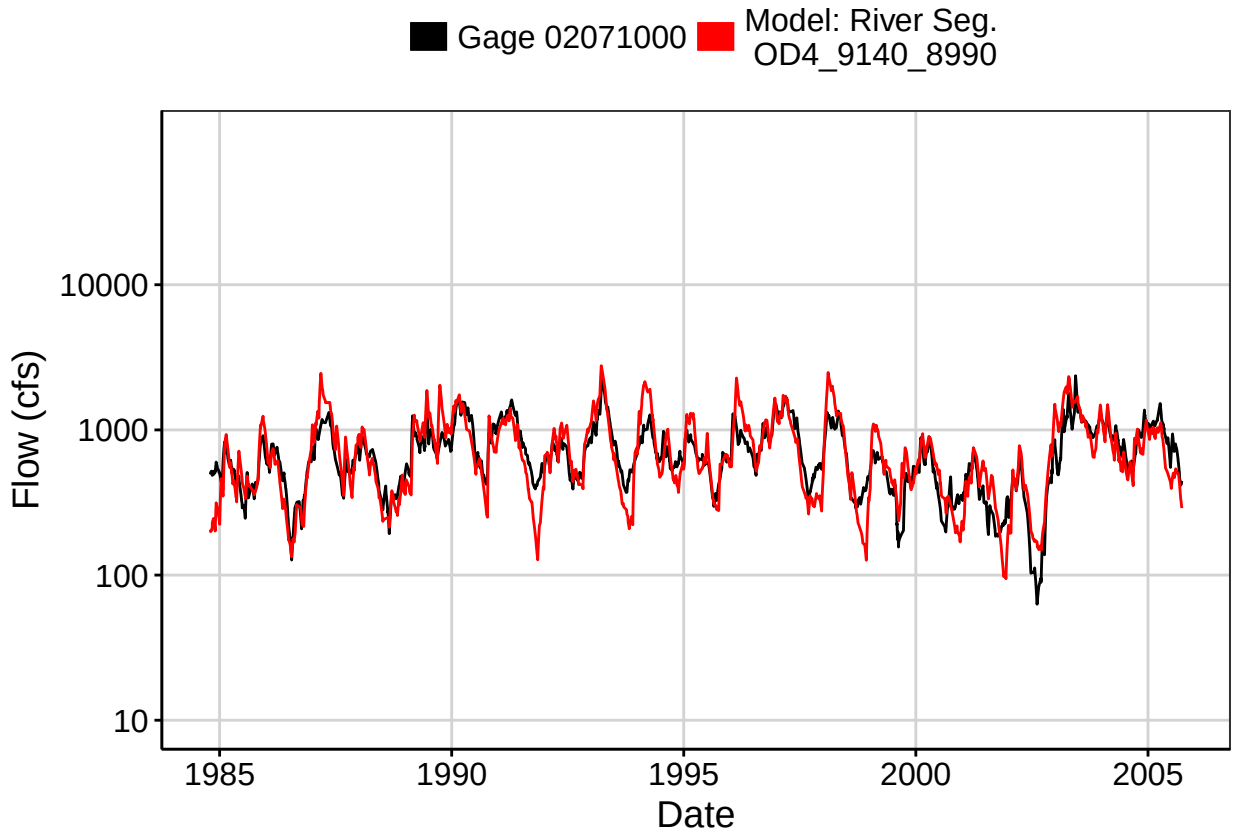

Fig. 5: Combined Baseflow

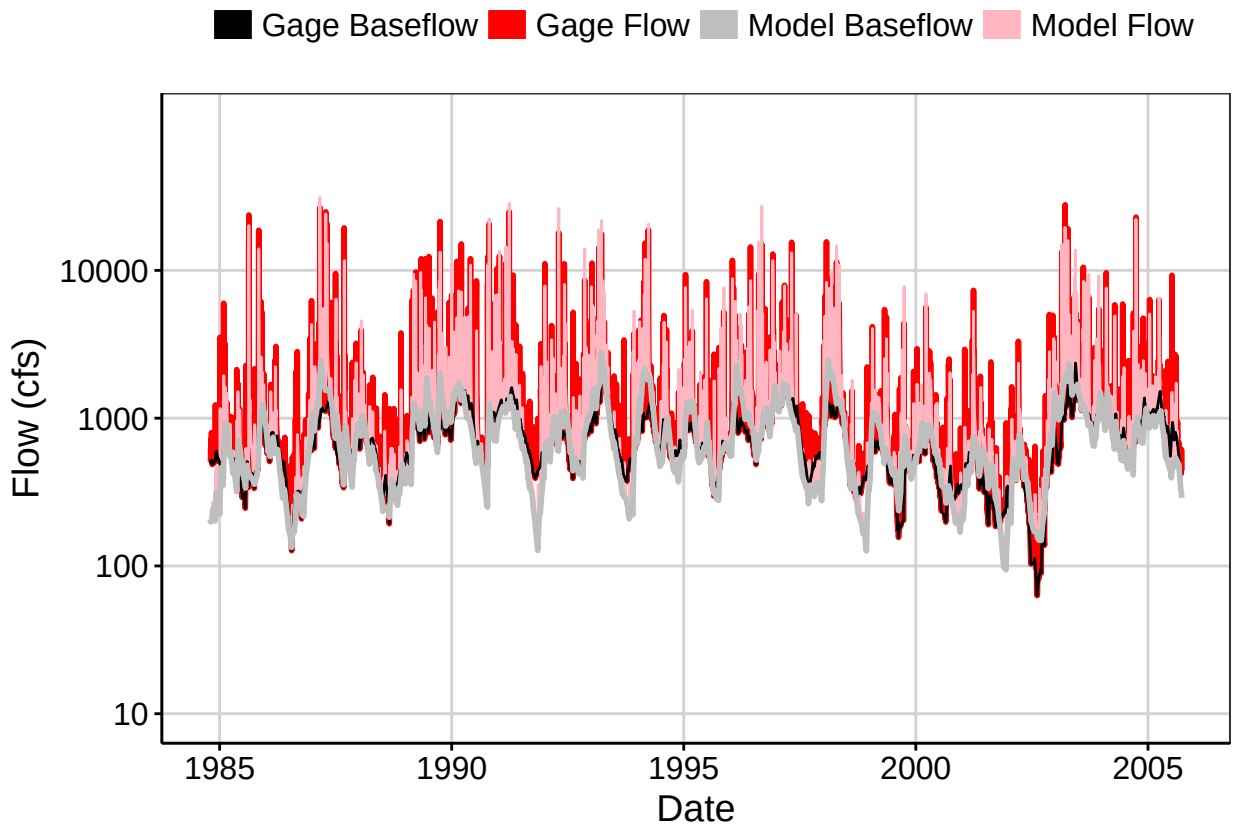

Fig. 6: Largest Error Segment

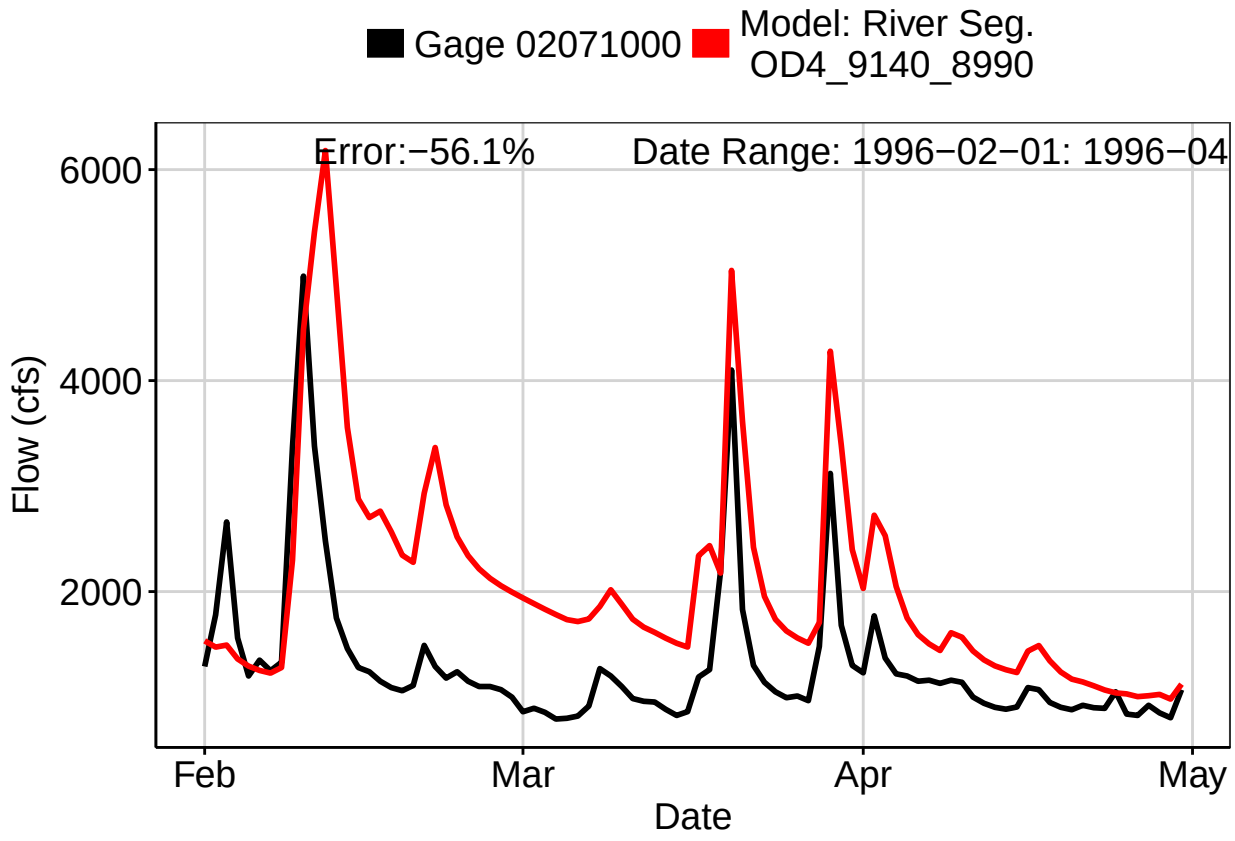

Fig. 7: Second Largest Error Segment

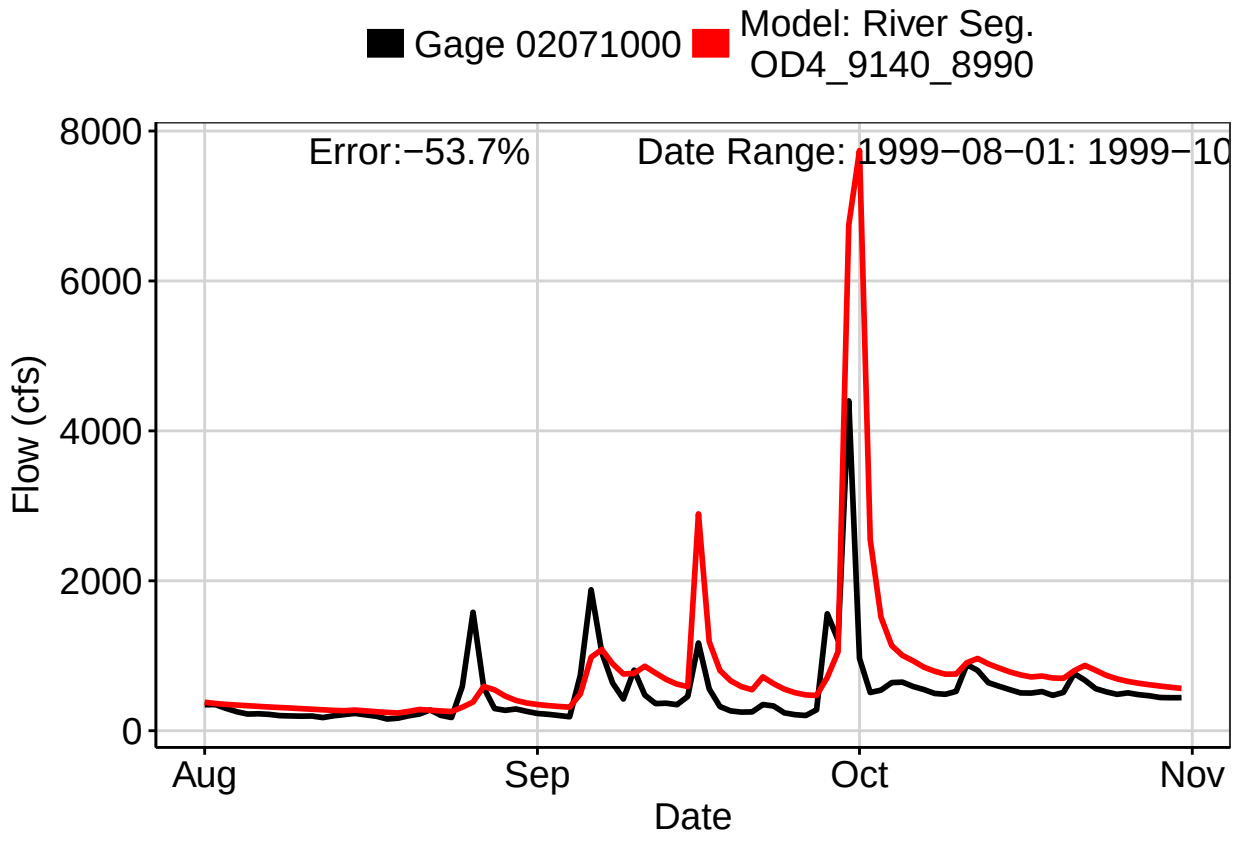

Fig. 8: Third Largest Error Segment

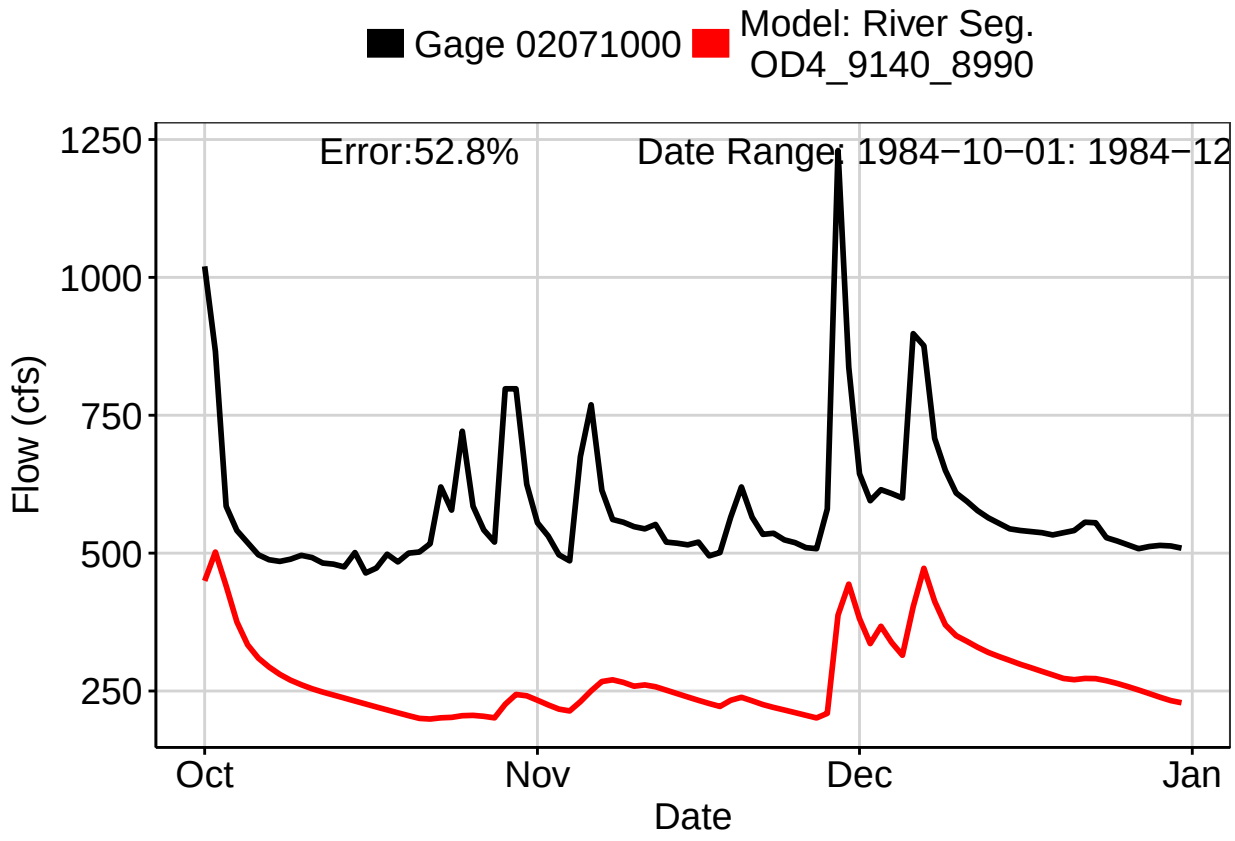

Fig. 9: Residuals Plot