02074500 vs. OD2_8670_8890

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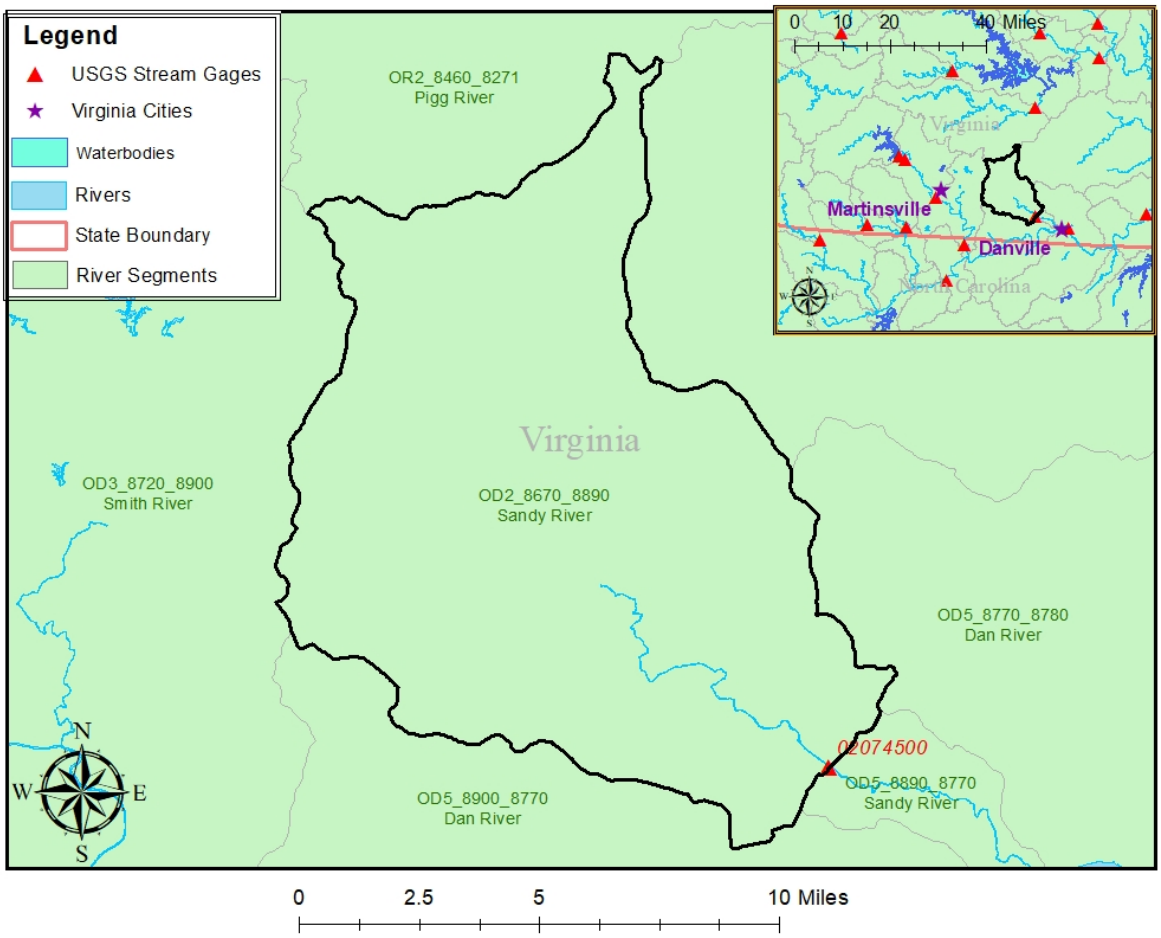

This river segment follows part of the flow of the Sandy River, a tributary of the Dan River. The gage is located in Pittsylvania County, VA (Lat 3637'10", Long 7930'16") approximately 6 miles northwest of Danville, VA. Drainage area is 111 sq. miles. This gage started taking data in 1929 and is still taking data. There is s diurnal fluctuation at low flow caused by Stony Mill, a small mill upstream. The average daily discharge error between the model and gage data for the 20 year timespan was 3.39%, with 54.6% of its rolling three month time spans above 20% error.

Table 1: Monthly Low Flows

	USGS Gage	Model	Pct. Error
Jan. Low Flow	42	16.3	61.2
Feb. Low Flow	50	24.9	50.2
Mar. Low Flow	55	36.5	33.6
Apr. Low Flow	59	59.3	-0.51
May Low Flow	72	96.9	-34.6
Jun. Low Flow	88	98.6	-12
Jul. Low Flow	76.3	67.8	11.1
Aug. Low Flow	64.6	47.4	26.6
Sep. Low Flow	52	34.2	34.2
Oct. Low Flow	39	22.3	42.8
Nov. Low Flow	36	19.3	46.4
Dec. Low Flow	36	14.6	59.4

Table 2: Monthly Average Flows

	USGS Gage	Model	Pct. Error
Overall Mean Flow	118	114	3.39
Jan. Mean Flow	149	143	4.03
Feb. Mean Flow	146	177	-21.2
Mar. Mean Flow	193	232	-20.2
Apr. Mean Flow	156	169	-8.33
May Mean Flow	116	111	4.31
Jun. Mean Flow	103	93.7	9.03
Jul. Mean Flow	79.1	49	38.1
Aug. Mean Flow	86.1	51.1	40.7
Sep. Mean Flow	114	94.5	17.1
Oct. Mean Flow	83.9	72	14.2
Nov. Mean Flow	90.1	78.1	13.3
Dec. Mean Flow	107	98.2	8.22

Table 3: Monthly High Flows

	USGS Gage	Model	Pct. Error
Jan. High Flow	112	67.7	39.6
Feb. High Flow	200	282	-41
Mar. High Flow	255	298	-16.9
Apr. High Flow	533	442	17.1
May High Flow	518	378	27
Jun. High Flow	630	1030	-63.5
Jul. High Flow	280	307	-9.64
Aug. High Flow	236	183	22.5
Sep. High Flow	165	170	-3.03
Oct. High Flow	192	90	53.1
Nov. High Flow	156	58.8	62.3
Dec. High Flow	134	63.5	52.6

Table 4: Period Low Flows

	USGS Gage	Model	Pct. Error
Min. 1 Day Min	6.4	2.87	55.2
Med. 1 Day Min	33	9.42	71.5
Min. 3 Day Min	6.56	2.93	55.3
Med. 3 Day Min	33.3	9.78	70.6
Min. 7 Day Min	7.82	3.09	60.5
Med. 7 Day Min	34.1	10.5	69.2
Min. 30 Day Min	10.6	3.73	64.8
Med. 30 Day Min	41.7	15.2	63.5
Min. 90 Day Min	16.6	8.19	50.7
Med. 90 Day Min	59	27	54.2
7Q10	14.6	4.61	68.4
Year of 90-Day Min. Flow	2002	2002	0
Drought Year Mean	44.8	24.3	45.8
Mean Baseflow	64.5	60.3	6.51

Table 5: Period High Flows

	USGS Gage	Model	Pct. Error
Max. 1 Day Max	8340	8340	0
Med. 1 Day Max	2660	2220	16.5
Max. 3 Day Max	4770	5130	-7.55
Med. 3 Day Max	1380	1160	15.9
Max. 7 Day Max	2780	2610	6.12
Med. 7 Day Max	662	607	8.31
Max. 30 Day Max	836	792	5.26
Med. 30 Day Max	282	313	-11
Max. 90 Day Max	364	442	-21.4
Med. 90 Day Max	188	210	-11.7

Table 6: Non-Exceedance Flows

	USGS Gage	Model	Pct. Error
1% Non-Exceedance	17	4.95	70.9
5% Non-Exceedance	29	10.7	63.1
50% Non-Exceedance	73.8	61	17.3
95% Non-Exceedance	274	313	-14.2
99% Non-Exceedance	974	1050	-7.8
Sept. 10% Non-Exceedance	10.2	28	-175

Fig. 1: Hydrograph

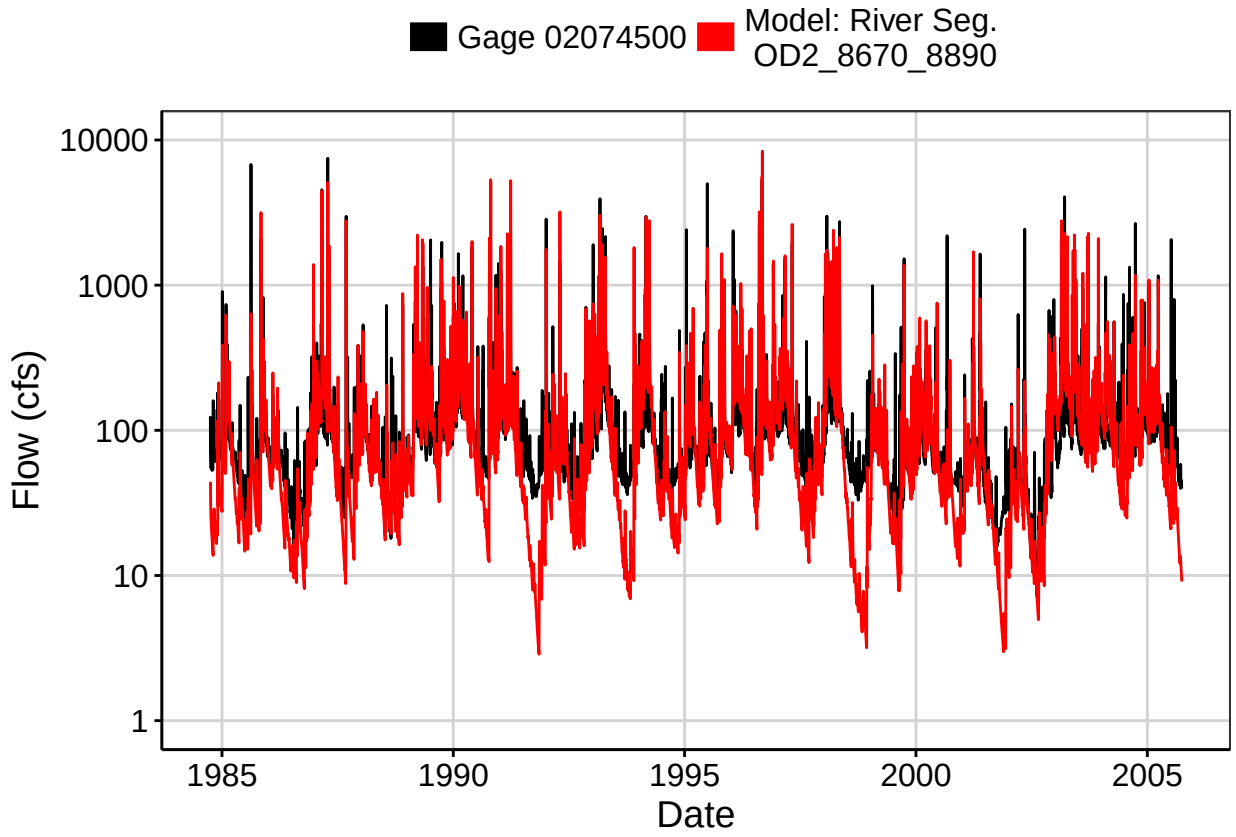

Fig. 2: Zoomed Hydrograph

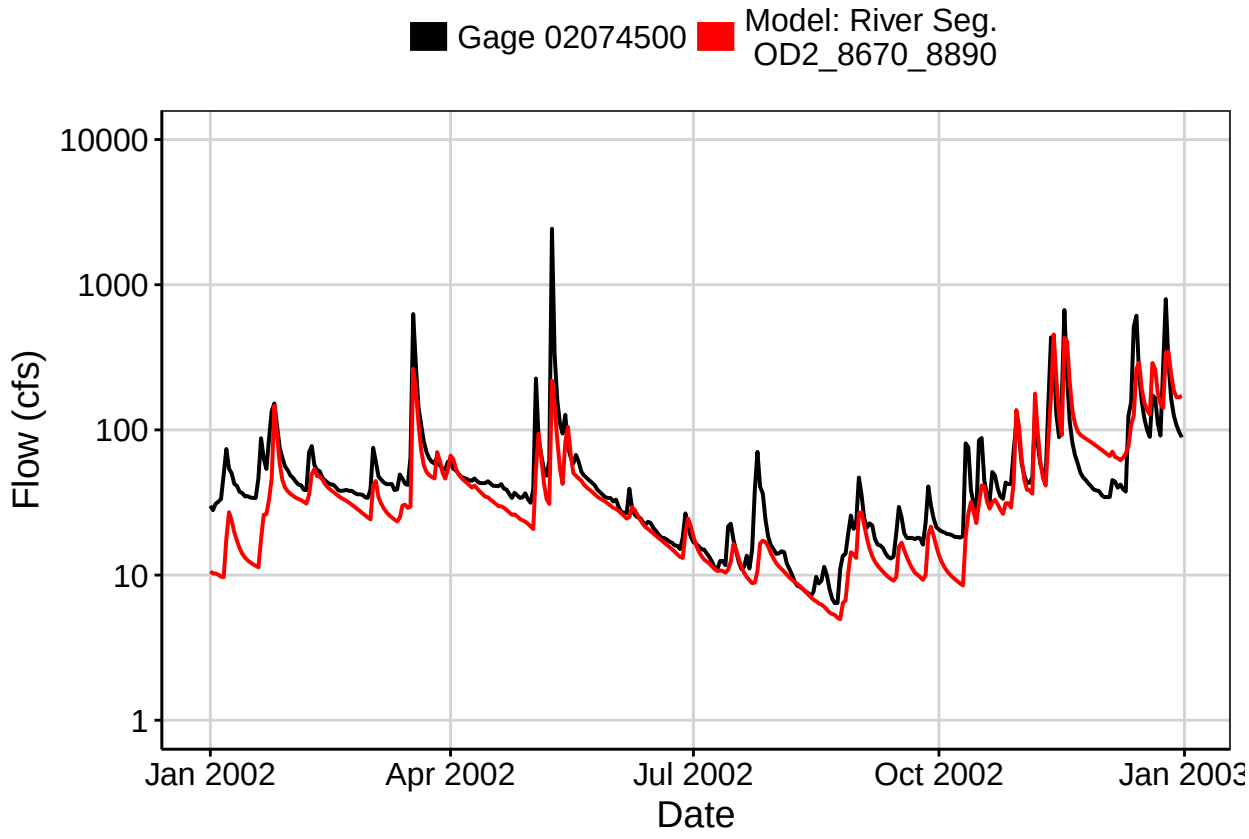

Fig. 3: Flow Exceedance

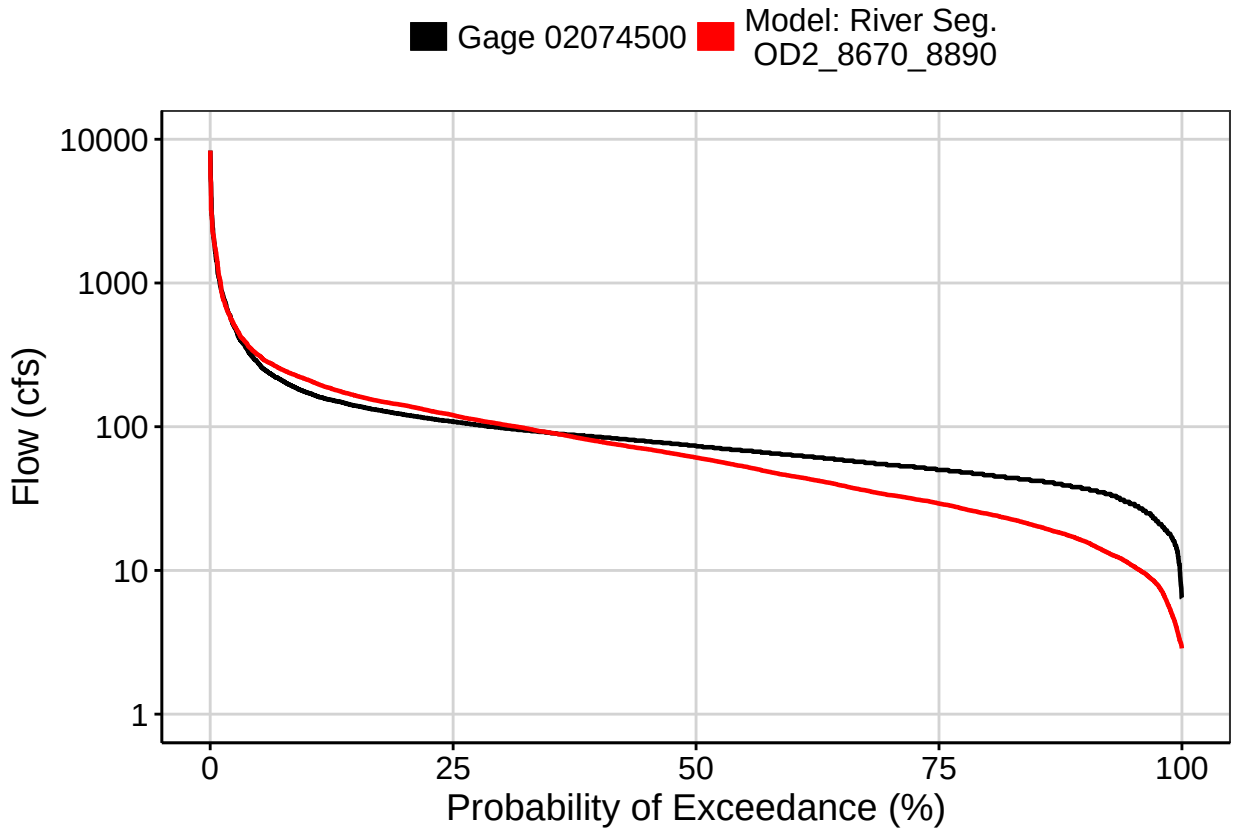

Fig. 4: Baseflow

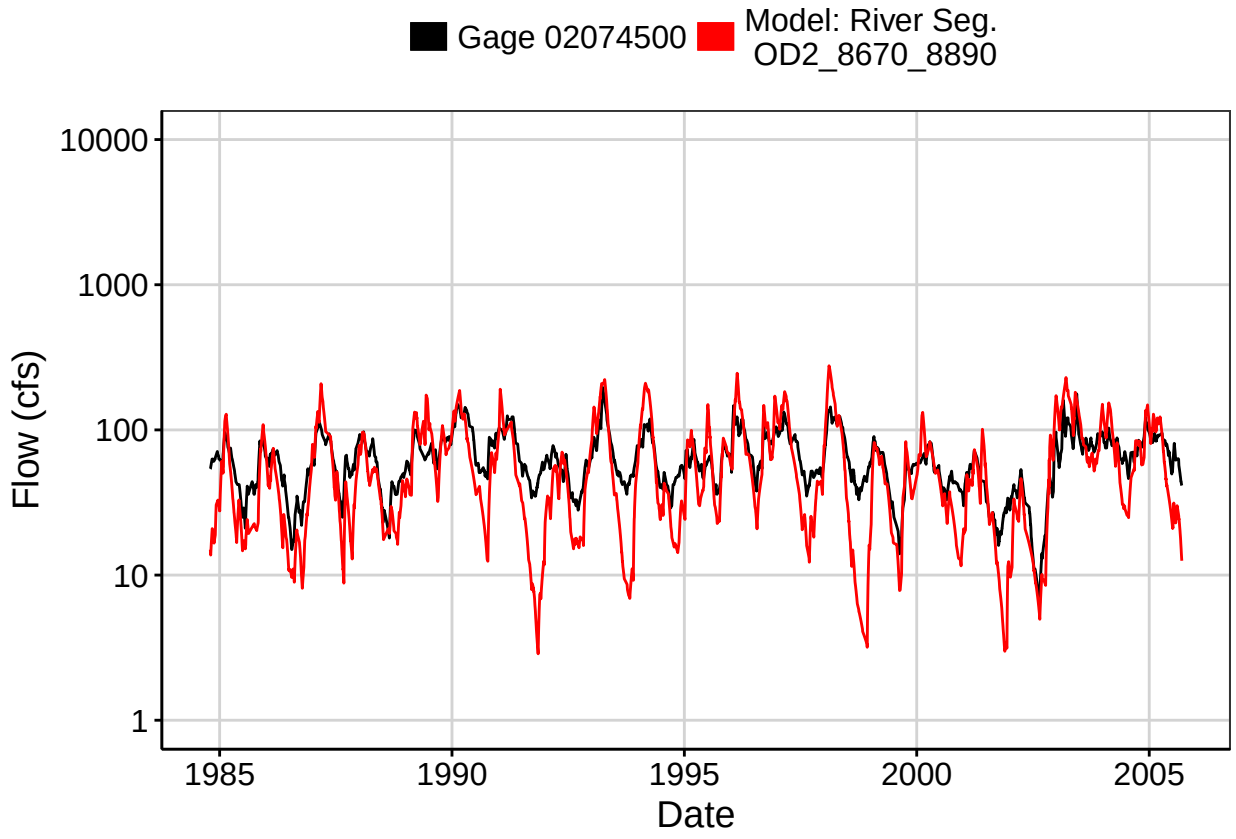

Fig. 5: Combined Baseflow

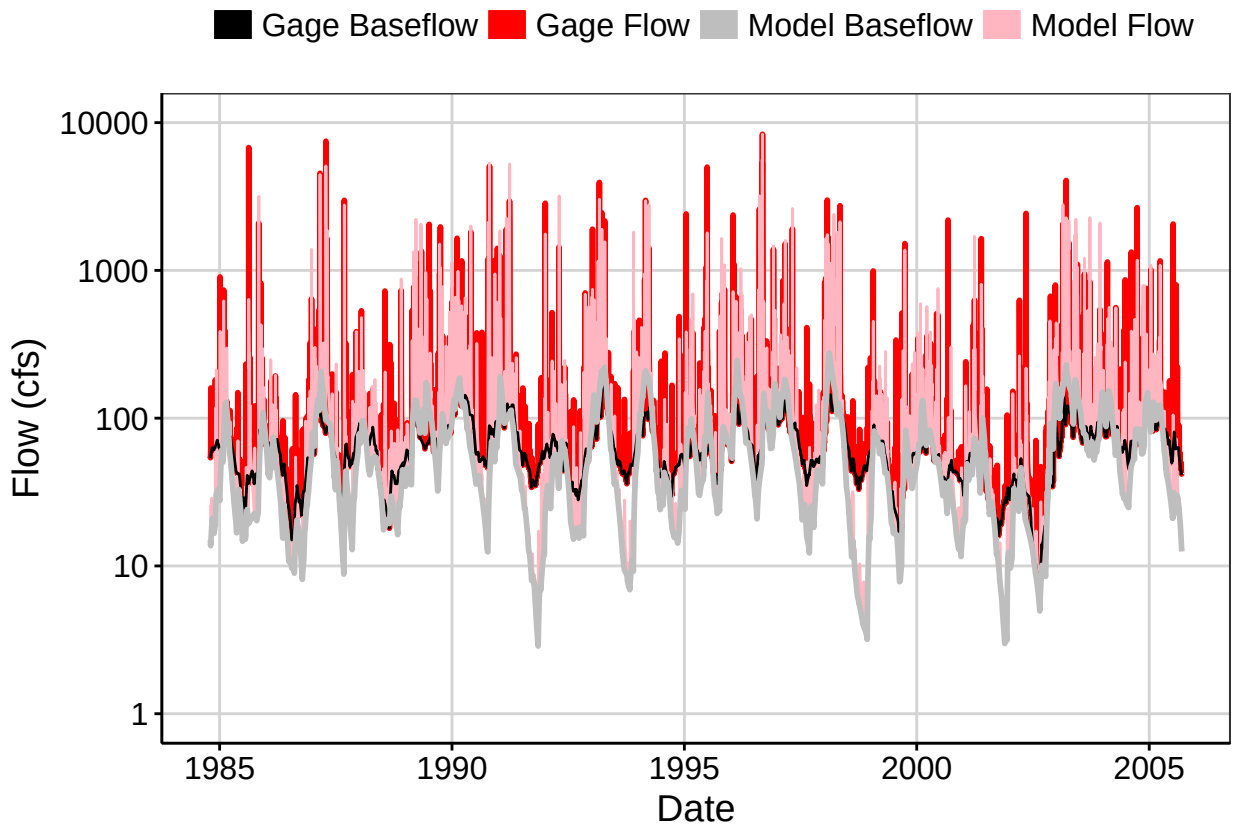

Fig. 6: Largest Error Segment

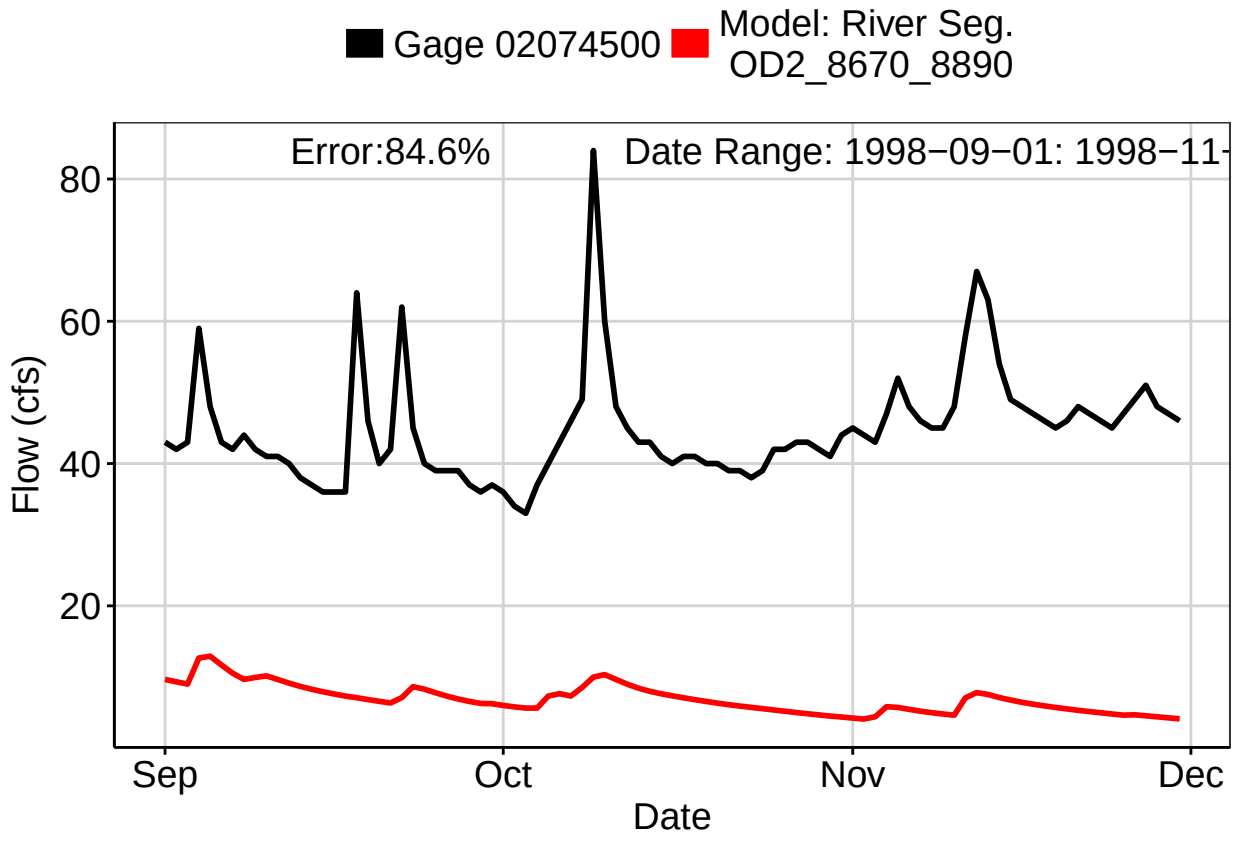

Fig. 7: Second Largest Error Segment

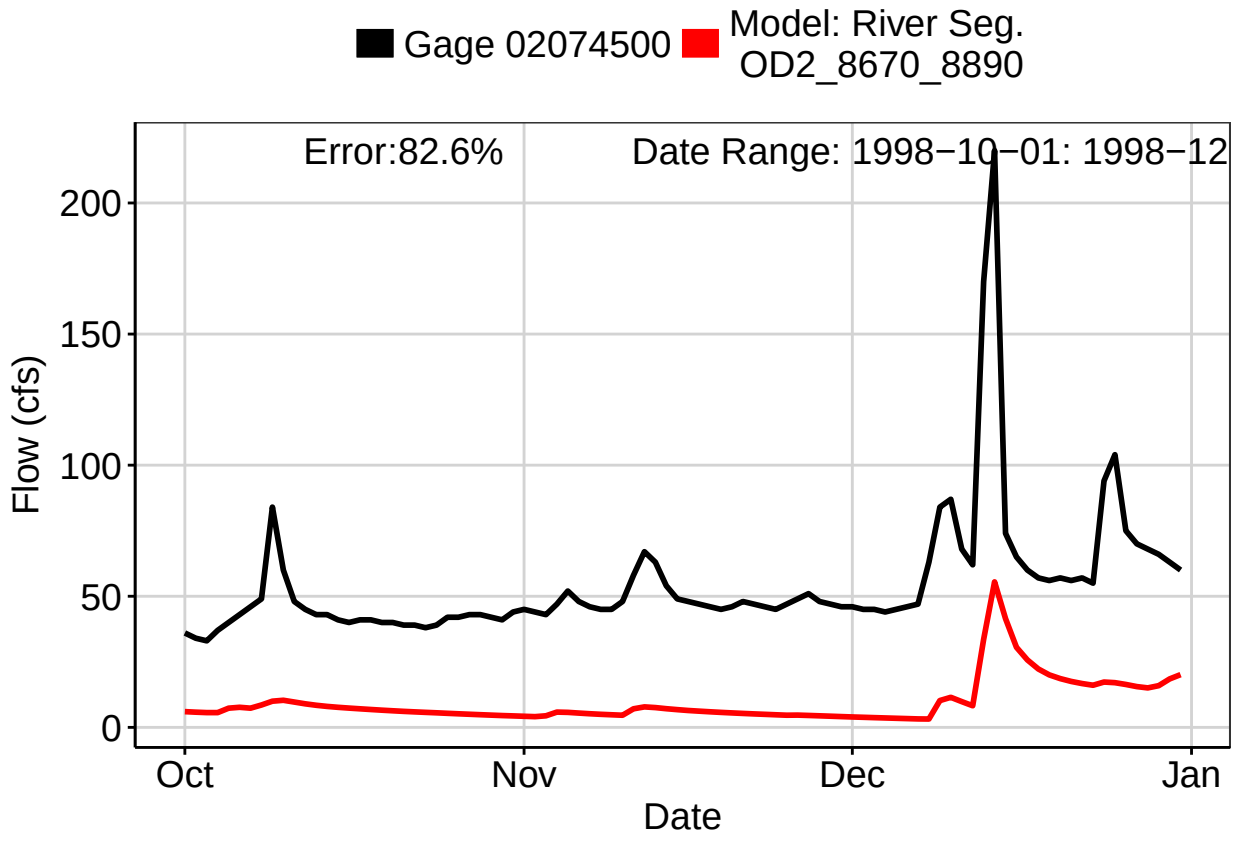

Fig. 8: Third Largest Error Segment

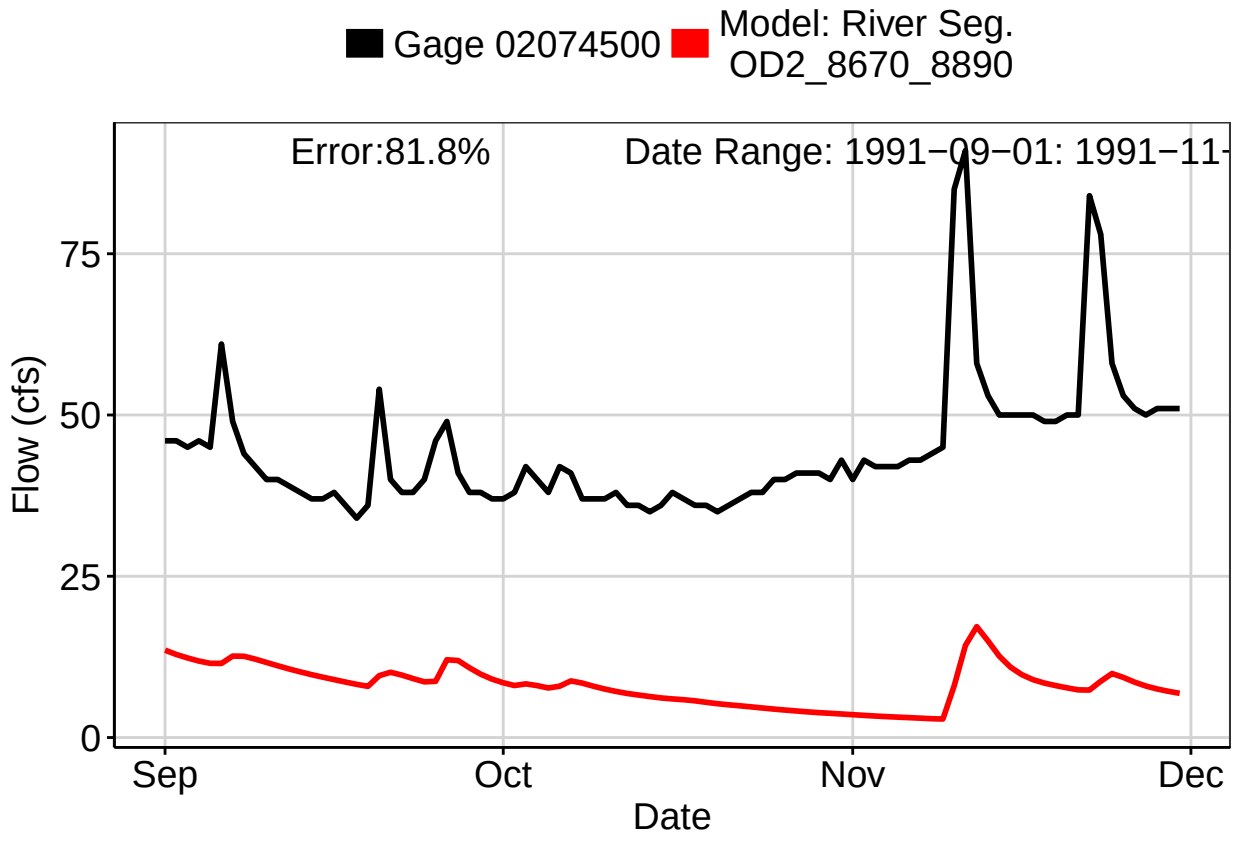

Fig. 9: Residuals Plot