

APPENDIX H

Calibration and Verification Tables and Graphs

Legend

- 2015/2016 Flow Monitors
- ✱ 2015/2016 Rain Gages
- Trunk Sewer Pipes
- Modeled Outfalls**
 - ▲ Emergency Outfalls
 - ▲ Active Outfalls
- RDII Sewersheds (labeled by downstream flow meter)**
 - Red outline: Sewer Owner = City of Peoria
 - Blue outline: Sewer Owner = GPSD
- Approximate Drainage Area Type**
 - Pink: Combined Through Storm Sewers
 - Green: Partially Separate
 - Orange: Separate
 - Teal: Combined Direct

The map displays various labeled areas and features:

- Labeled Areas:** BRADLEY, DARST, HARDEES, GLENOAKS.
- Flow Meters:** 000-11FT, 000-07FT, 000-09FT + 000-08FT, 000-10FT, 000-06FT direct, 007-05FT, 003-05FT, 007-06FT, 003-07FT, 003-02FP, 003-03FP, 003-04FT direct, 006-03FP, 007-03FP, 016-06FT, 016-08FT, 016-09, 016-02FP, 014-01FT, 016-03FP, 016-04FT direct, 017-02FP, 017-02FP direct, 017-04 direct, 018-06FP, 018-07FT direct, 018-05FP, 019-04FT, 019-05FT, 019-07FT, 019-06FT, 019-02FP, 019-08FT, 018.
- Other Labels:** Peoria High Reservoir, Springdale Cemetery, Parkview Cemetery, Kickapoo Creek Rd, W War Memorial Dr, N Northmoor Rd, W Northmoor Rd, W Northmoor Dr, W Northmoor St, W Northmoor Ave, W Northmoor Ct, W Northmoor Pl, W Northmoor Ln, W Northmoor Way, W Northmoor Dr, W Northmoor St, W Northmoor Ave, W Northmoor Ct, W Northmoor Ln, W Northmoor Way, W Northmoor Dr, W Northmoor St, W Northmoor Ave, W Northmoor Ct, W Northmoor Ln, W Northmoor Way.

A scale bar indicates 0.5 miles, and a north arrow is present in the bottom right corner.

RFI M2 Flow

Date	Duration (h)	Rainfall (in) RG006	Maximum Flow (cfs)		Maximum Flow (mgd)		Total Volume (ft³)		Volume (million gallons)		Peak Flow Rate (-15% to +25%)	Flow Volume (-10% to +20%)	Rainfall Variability			
CALIBRATION EVENTS - FLOW																
5/10/2017 18:45	4.25	0.51	95.670	94.660	61.803	61.150	957300	1010000	7.1606	7.5548	-1%	6%	Relatively Uniform			
5/19/2017 22:35	5.33	0.24	57.240	70.000	36.977	45.220	637200	831400	4.7663	6.2189	22%	30%	Possibly Uniform			
5/20/2017 6:55	8.08	0.44	98.270	97.660	63.482	63.088	1371000	1636000	10.2551	12.2373	-1%	19%	Relatively Uniform			
5/26/2017 14:50	3.67	0.62	80.420	84.750	51.951	54.749	713600	800700	5.3377	5.9892	5%	12%	Relatively Uniform			
6/15/2017 1:50	3.67	0.53	81.580	87.040	52.701	56.228	681500	777500	5.0976	5.8157	7%	14%	Possibly Uniform			
7/10/2017 6:15	6.08	0.36	79.420	90.520	51.305	58.476	1007000	1348000	7.5324	10.0830	14%	34%	Relatively Uniform			
7/10/2017 18:45	5.17	1.29	96.230	95.370	62.165	61.609	1046000	1286000	7.8241	9.6193	-1%	23%	Possibly Uniform			
7/26/2017 20:20	5.17	0.50	94.530	93.750	61.066	60.563	1000000	1198000	7.4800	8.9610	-1%	20%	Relatively Uniform			
8/22/2017 2:00	4.42	0.31	73.890	87.440	47.733	56.486	681500	932900	5.0976	6.9781	18%	37%	Relatively Uniform			
10/14/2017 13:20	4.17	0.23	76.720	84.770	49.561	54.761	714600	874300	5.3452	6.5398	10%	22%	Variable			
10/14/2017 19:35	13.58	1.85	98.330	96.930	63.521	62.617	3331000	3863000	24.9159	28.8952	-1%	16%	Relatively Uniform			
VERIFICATION EVENTS - FLOW																
4/26/2017 22:30	9.50	0.55	84.300	87.780	54.458	56.706	1747000	2032000	13.0676	15.1994	4%	16%	Relatively Uniform			
4/29/2017 11:00	37.92	3.91	Bad Meter Data								-	-	Possibly Uniform			
5/19/2017 7:00	8.00	0.43	80.650	87.970	52.100	56.829	1222000	1568000	9.1406	11.7286	9%	28%	Possibly Uniform			
6/17/2017 21:00	8.50	0.32	93.950	95.530	60.692	61.712	1202000	1594000	8.9910	11.9231	2%	33%	Variable			
7/22/2017 6:15	5.75	0.45	82.470	90.690	53.276	58.586	840700	1117000	6.2884	8.3552	10%	33%	Variable			
9/18/2017 21:30	5.50	0.73	Bad Meter Data								-	-	Variable			
10/10/2017 13:10	5.75	0.66	92.220	94.880	59.574	61.292	1020000	1341000	7.6296	10.0307	3%	31%	Possibly Uniform			
10/10/2017 19:00	9.17	0.73	94.570	95.110	61.092	61.441	1453000	2060000	10.8684	15.4088	1%	42%	Possibly Uniform			
10/22/2017 5:30	10.42	0.68	89.700	93.940	57.946	60.685	1408000	2127000	10.5318	15.9100	5%	51%	Variable			
Notes: The modeled dry weather flow rates tend to be approximately 7 cfs higher than metered flow rates.									WEIGHTED AVERAGES							
									Calibration - Relatively Uniform					4%	19%	
									Calibration - Possibly Uniform					7%	22%	
									Calibration - Variable					10%	22%	
									Calibration - All Events					5%	20%	
									Verification - Relatively Uniform					4%	16%	
									Verification - Possibly Uniform					4%	34%	
									Verification - Variable					5%	40%	
									Verification - All Events					5%	33%	
									Weighted Average - All Events					5%	25%	All Events
									NET AVERAGES							
									Calibration - Relatively Uniform					5%	5%	
									Calibration - Possibly Uniform					9%	9%	
									Calibration - Variable					10%	10%	
									Calibration- All Events					7%	7%	
									Verification - Relatively Uniform					4%	4%	
									Verification - Possibly Uniform					4%	4%	
									Verification - Variable					5%	5%	
									Verification- All Events					5%	5%	
									Net Average - All Events					6%	26%	All Events

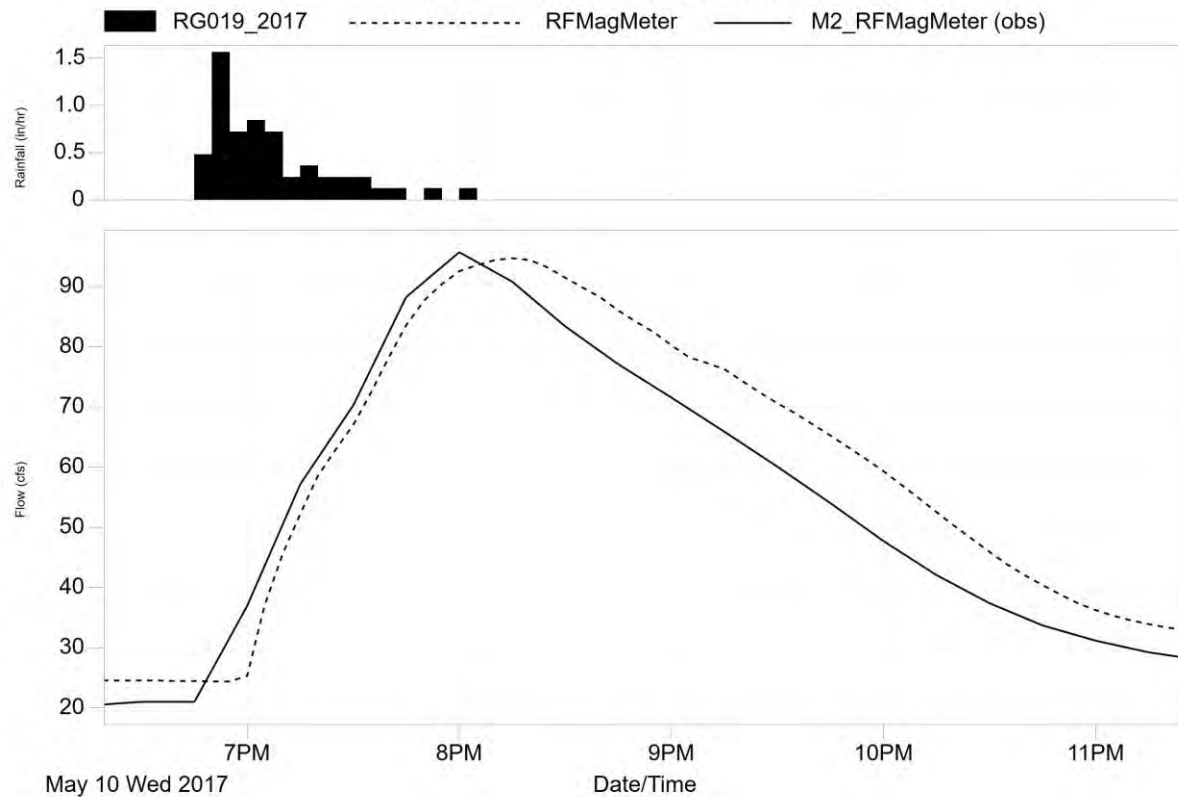
Notes:

The modeled dry weather flow rates tend to be approximately 7 cfs higher than metered flow rates.

RFI M2 – Calibration Events

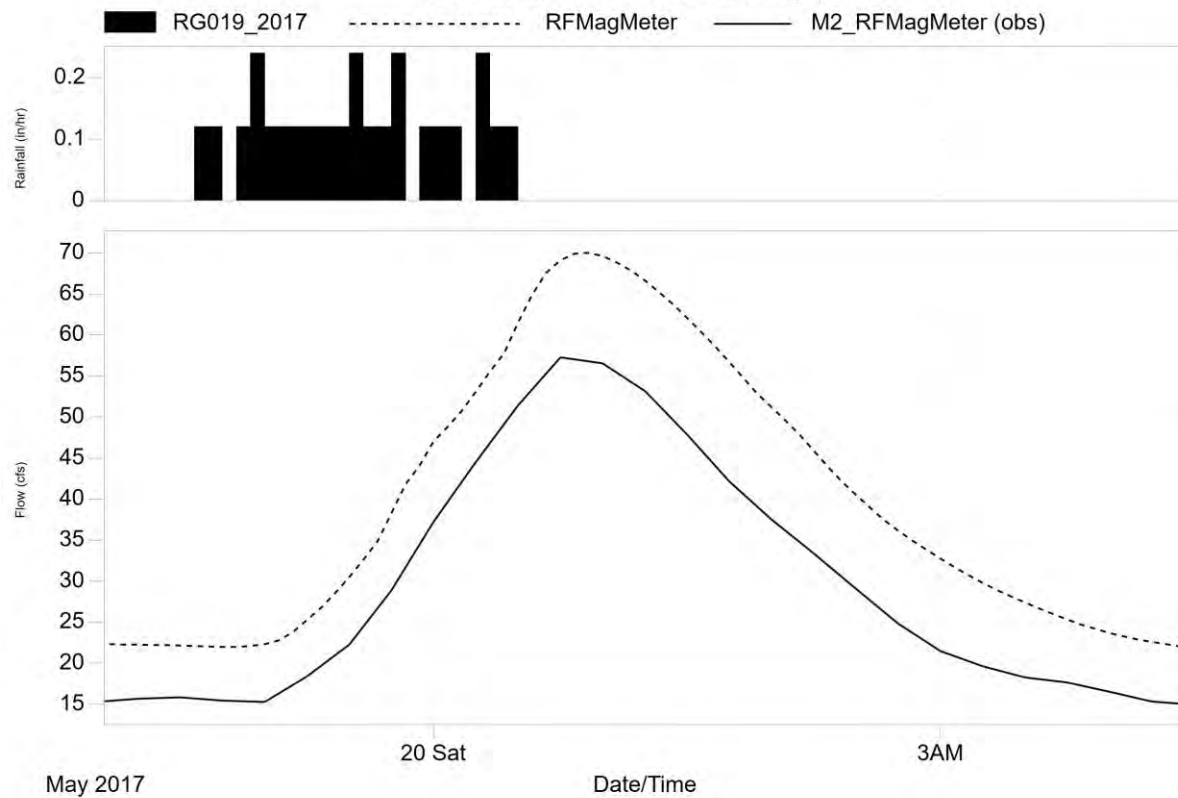
Event of May 10, 2017

Duration: 4.25 h, Total Rainfall: 0.51 (in)



Event of May 19, 2017

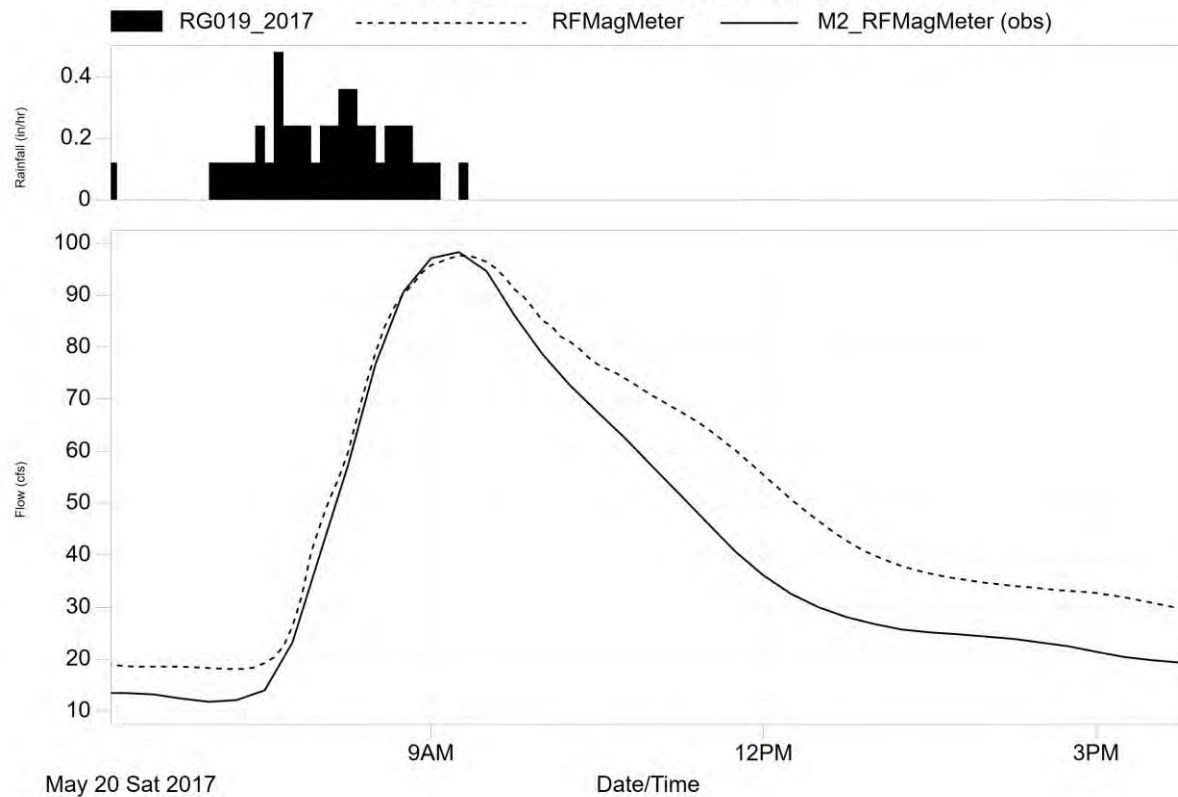
Duration: 5.33 h, Total Rainfall: 0.24 (in)



RFI M2 – Calibration Events

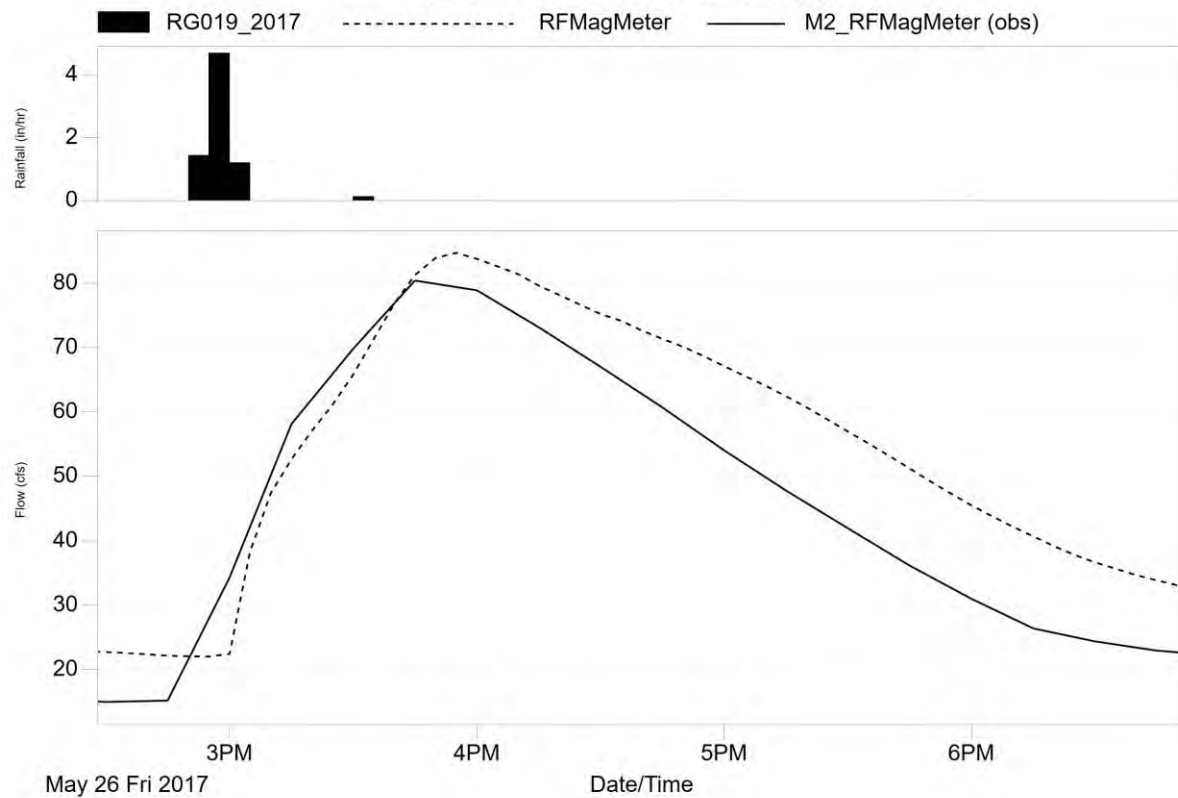
Event of May 20, 2017

Duration: 8.08 h, Total Rainfall: 0.44 (in)



Event of May 26, 2017

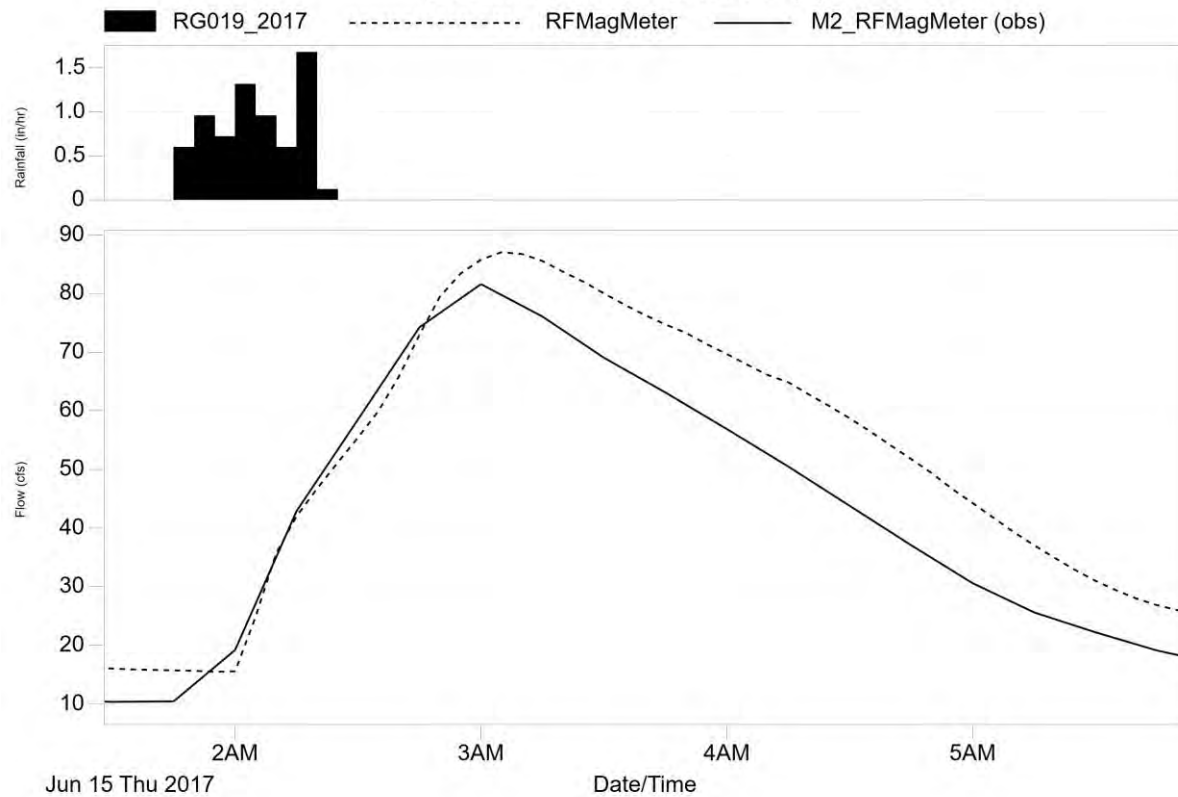
Duration: 3.67 h, Total Rainfall: 0.62 (in)



RFI M2 – Calibration Events

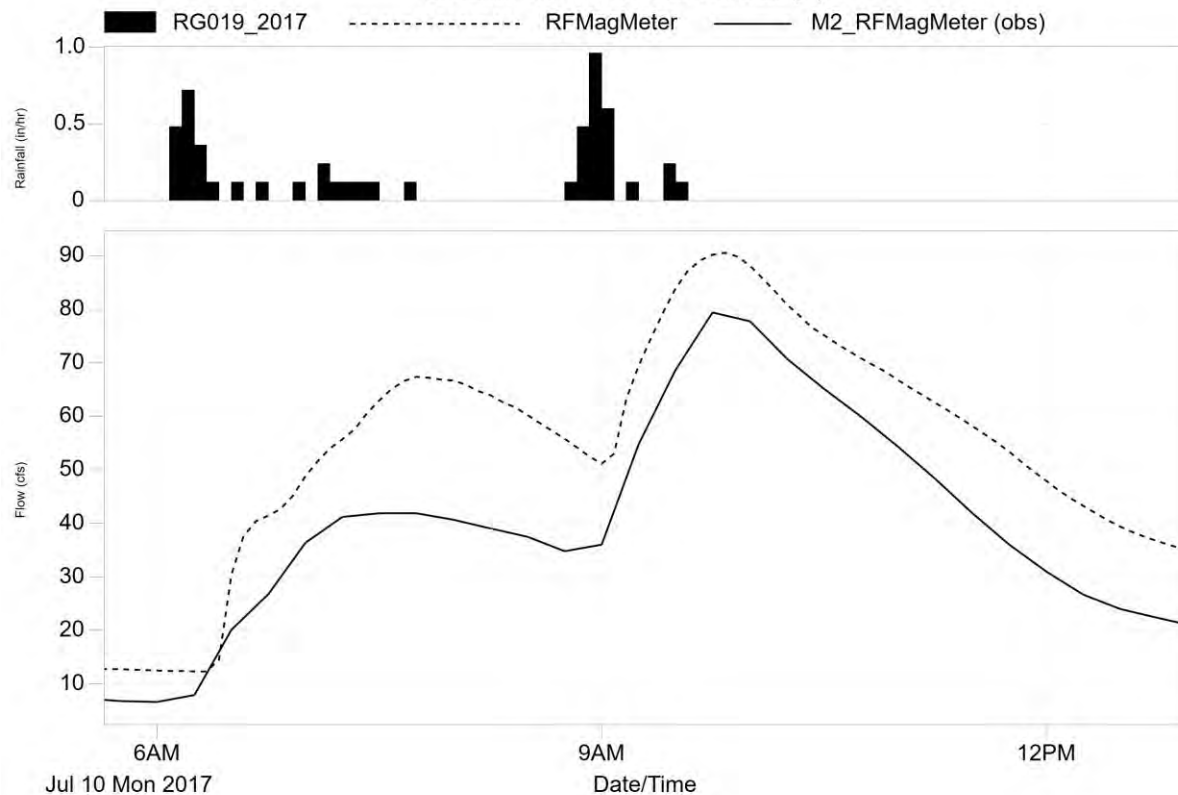
Event of June 15, 2017

Duration: 3.67 h, Total Rainfall: 0.53 (in)



Event of July 10, 2017

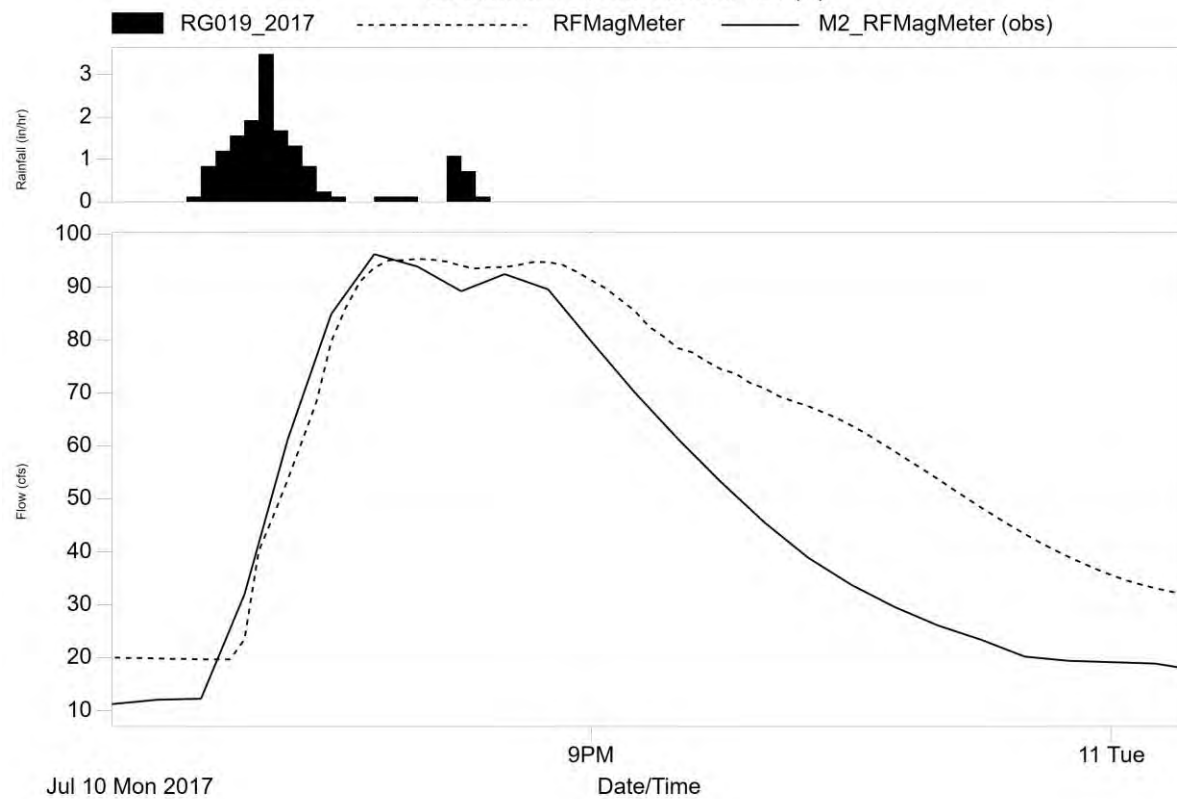
Duration: 6.08 h, Total Rainfall: 0.36 (in)



RFI M2 – Calibration Events

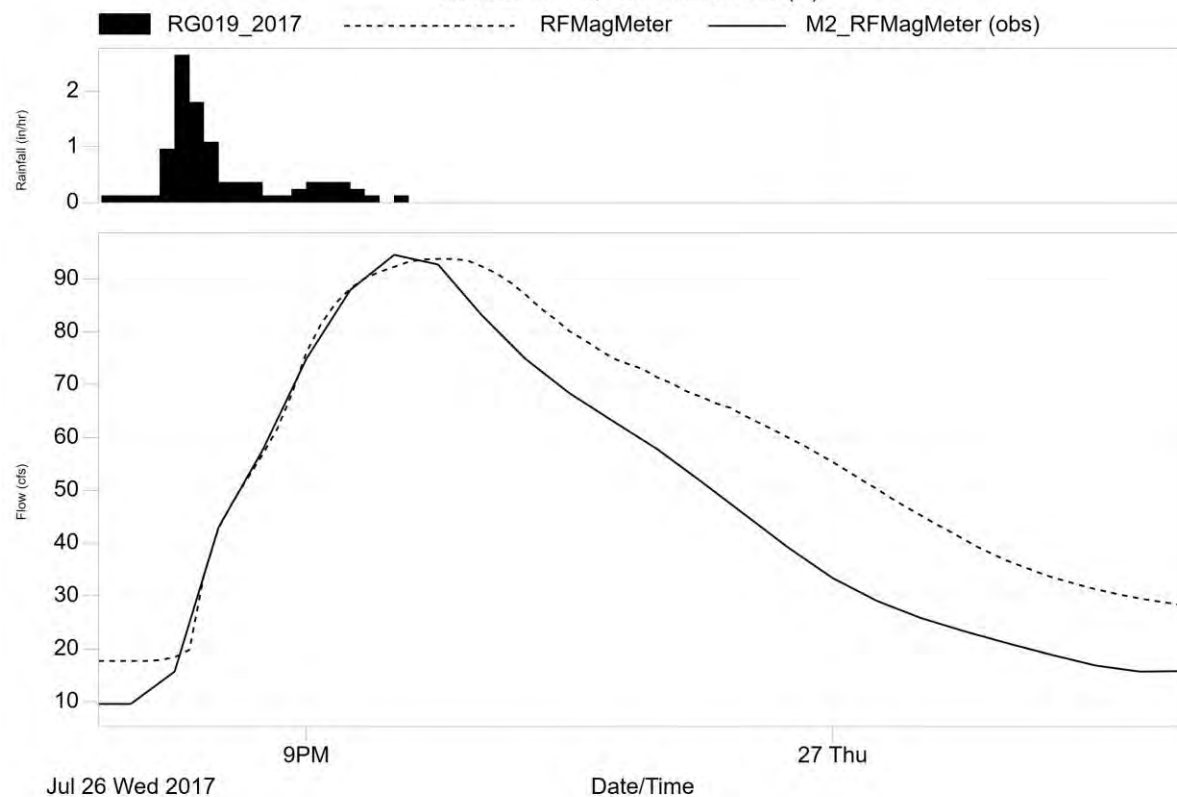
Event of July 10, 2017

Duration: 5.17 h, Total Rainfall: 1.29 (in)



Event of July 26, 2017

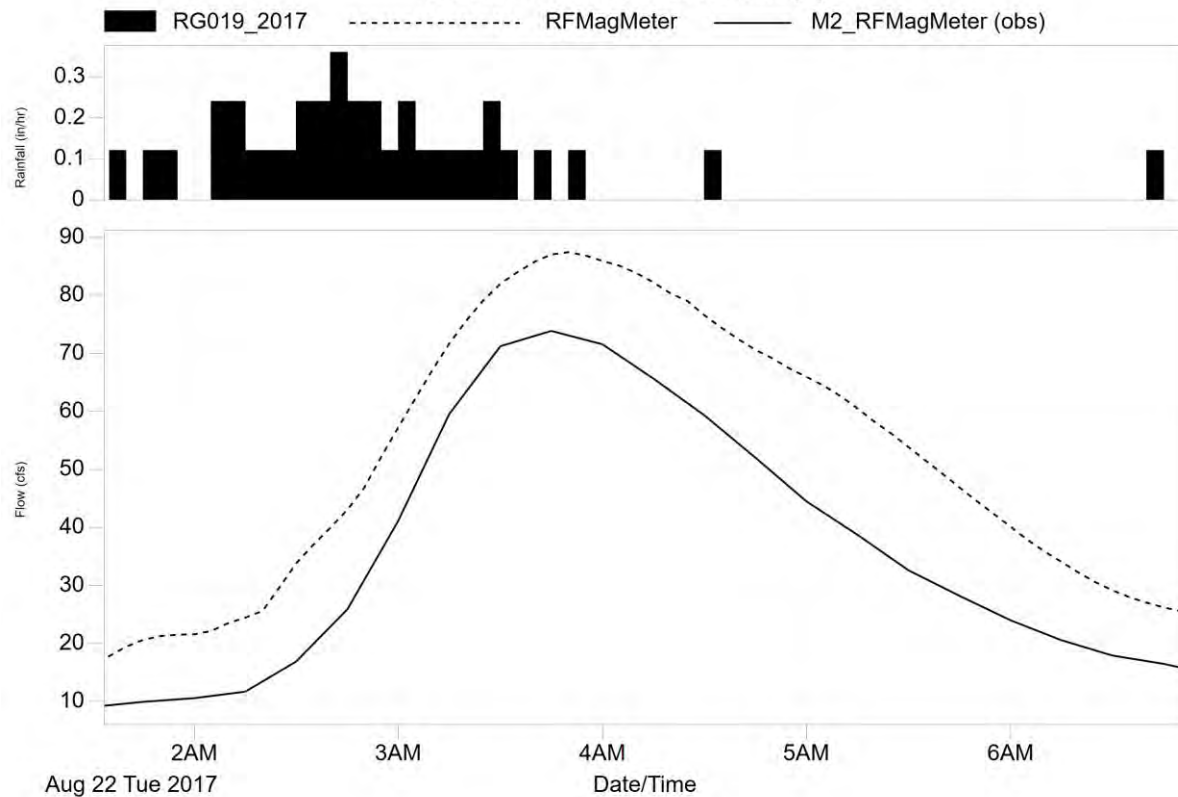
Duration: 5.17 h, Total Rainfall: 0.5 (in)



RFI M2 – Calibration Events

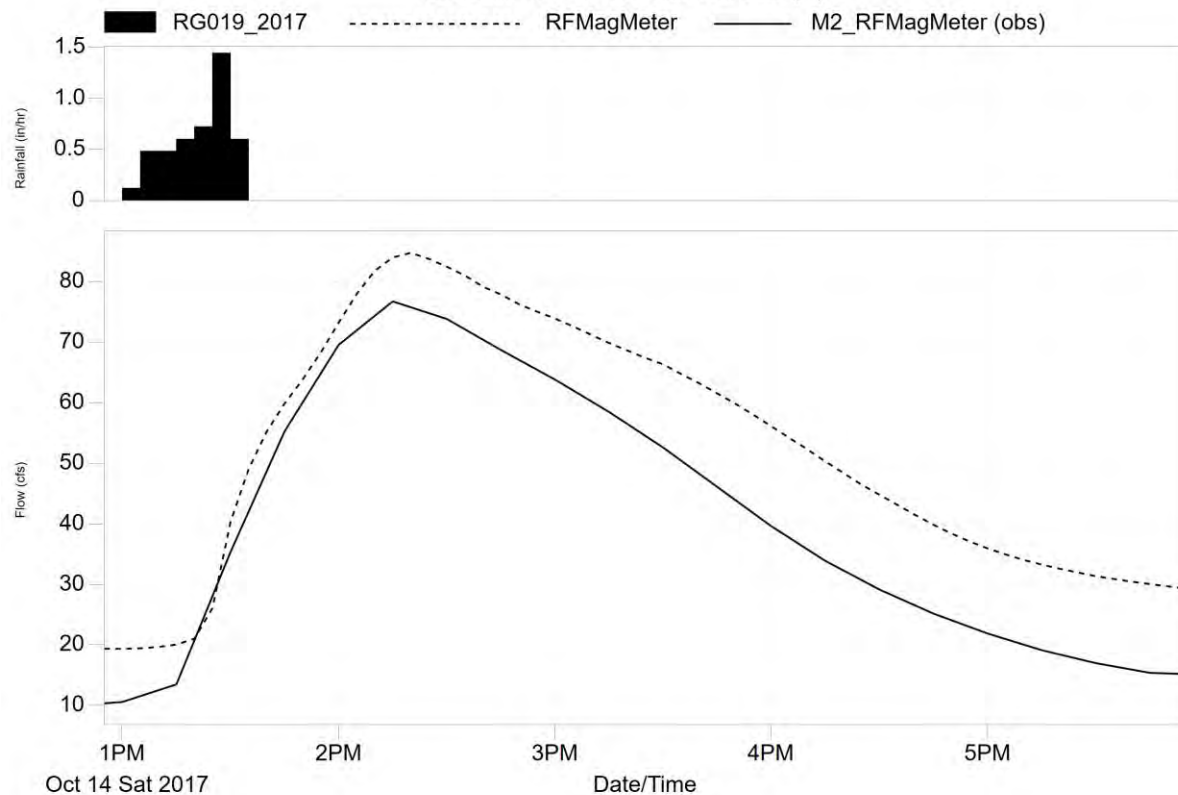
Event of August 22, 2017

Duration: 4.42 h, Total Rainfall: 0.31 (in)



Event of October 14, 2017

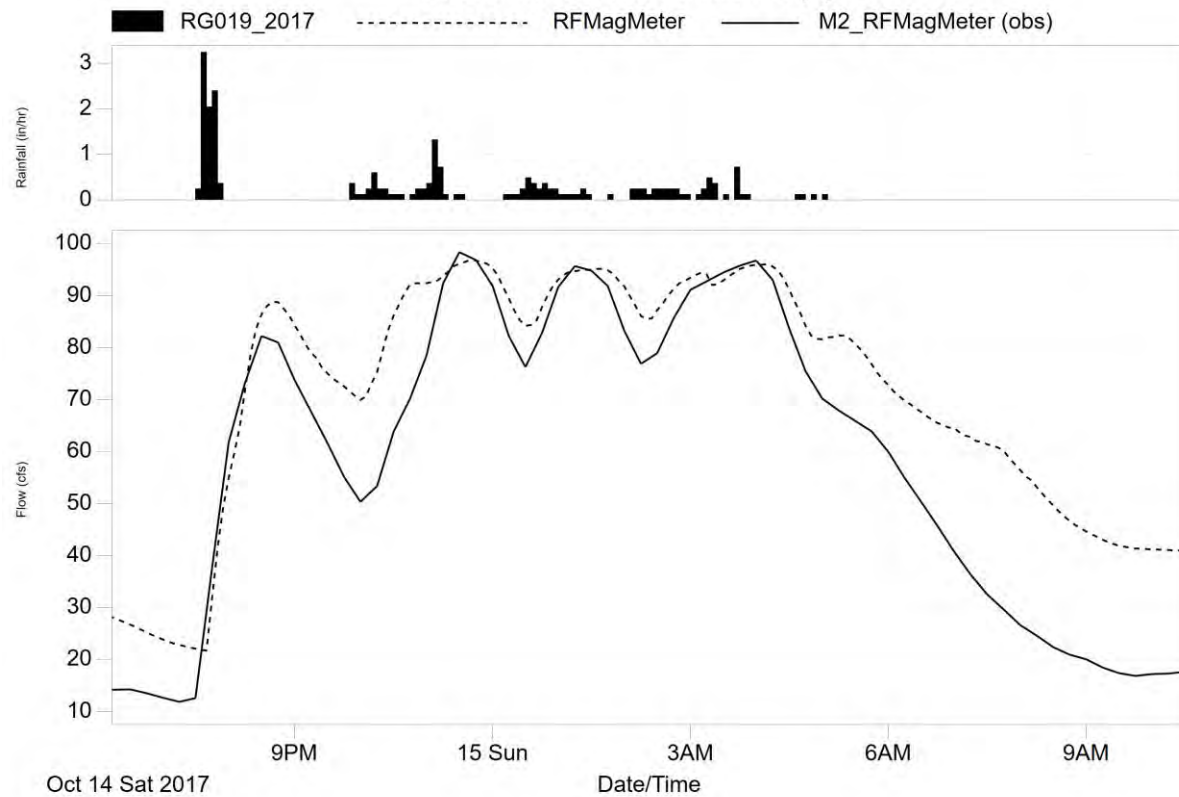
Duration: 4.17 h, Total Rainfall: 0.23 (in)



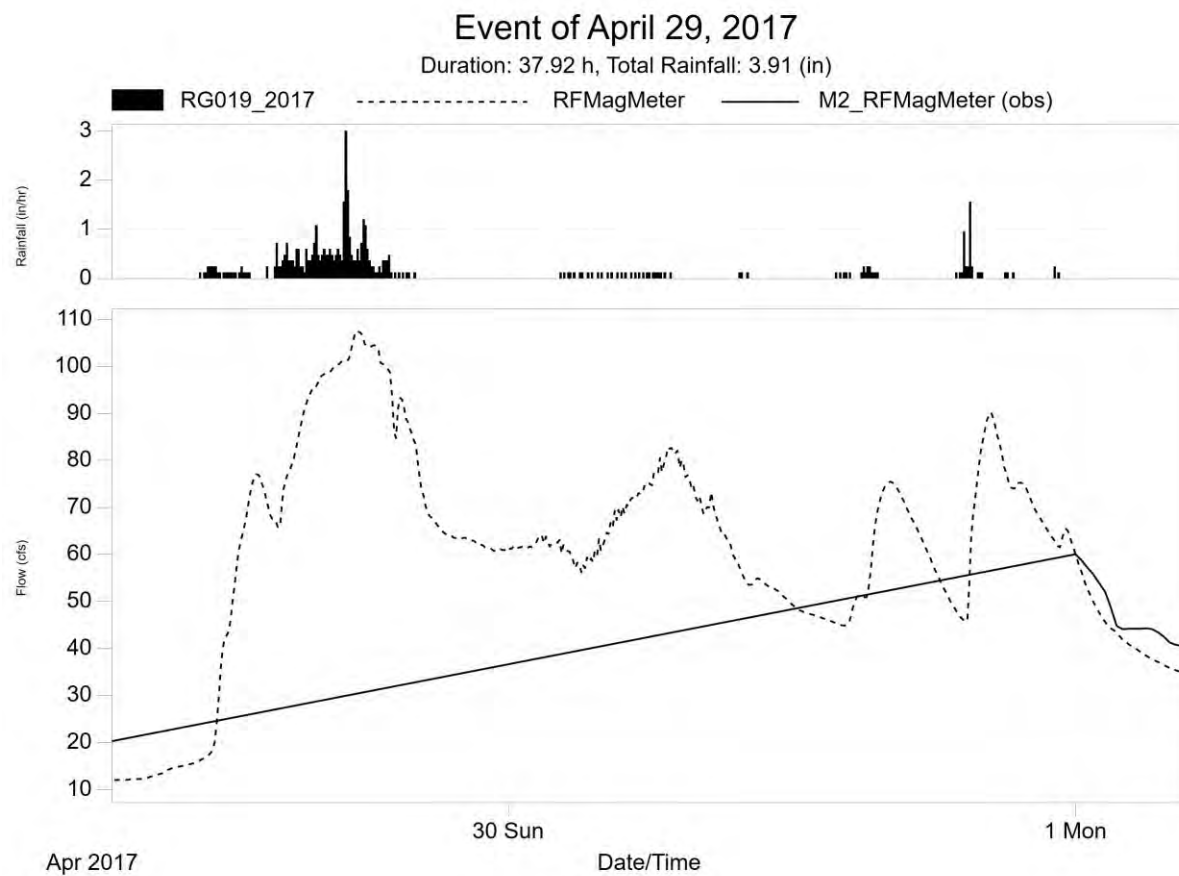
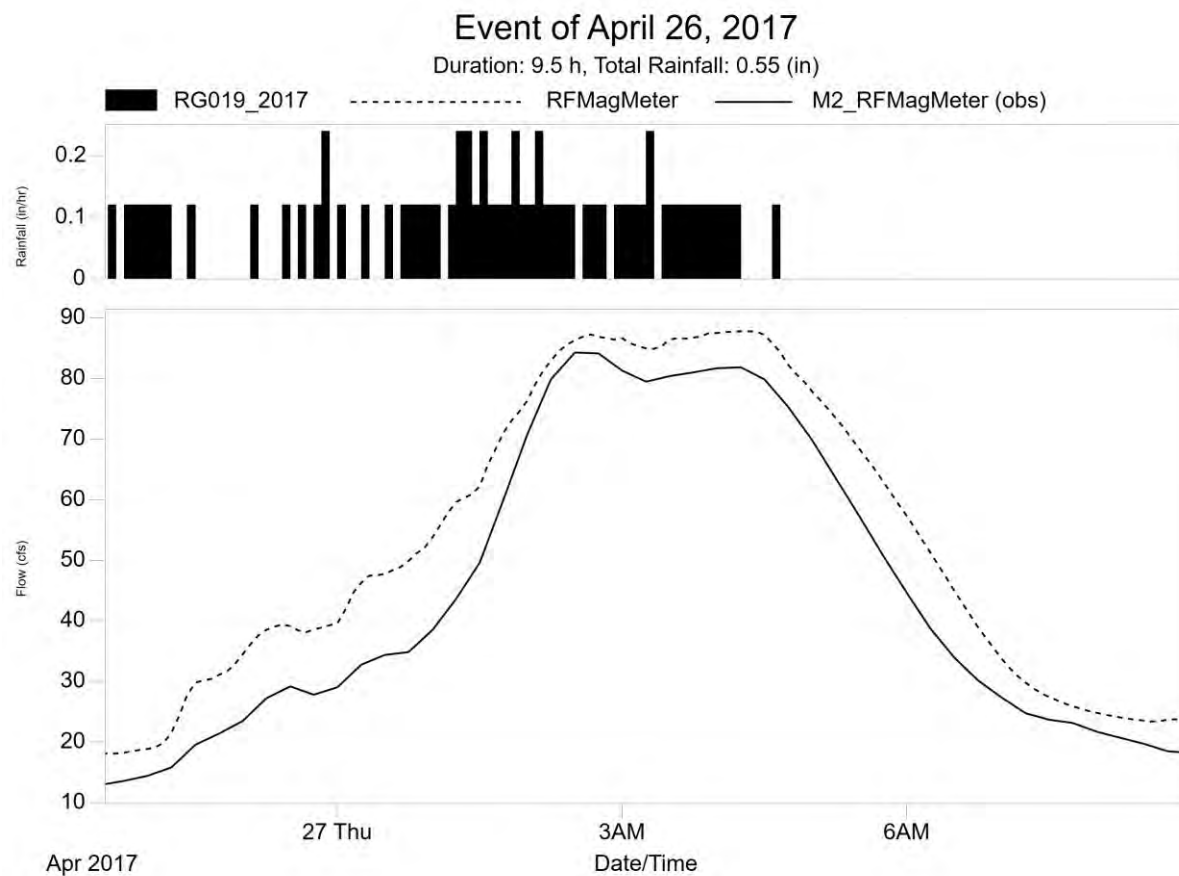
RFI M2 – Calibration Events

Event of October 14, 2017

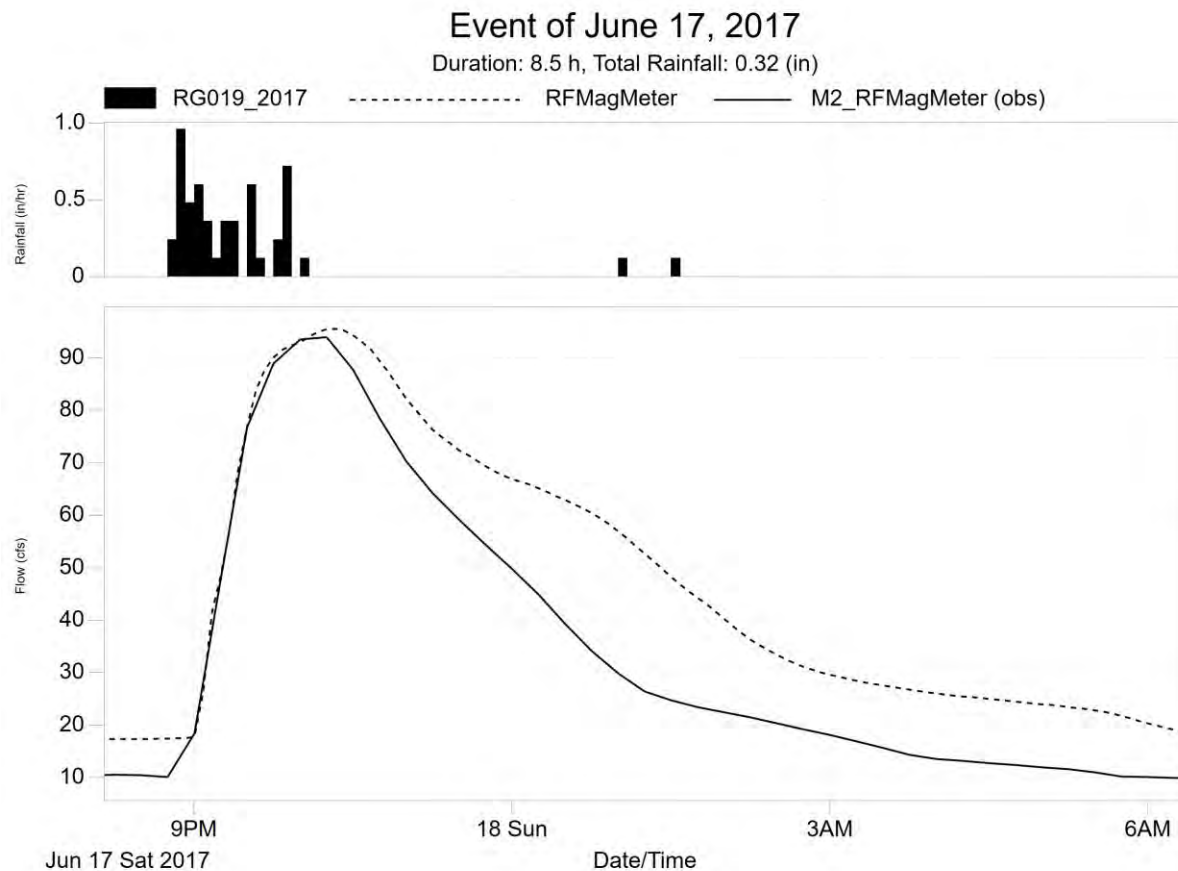
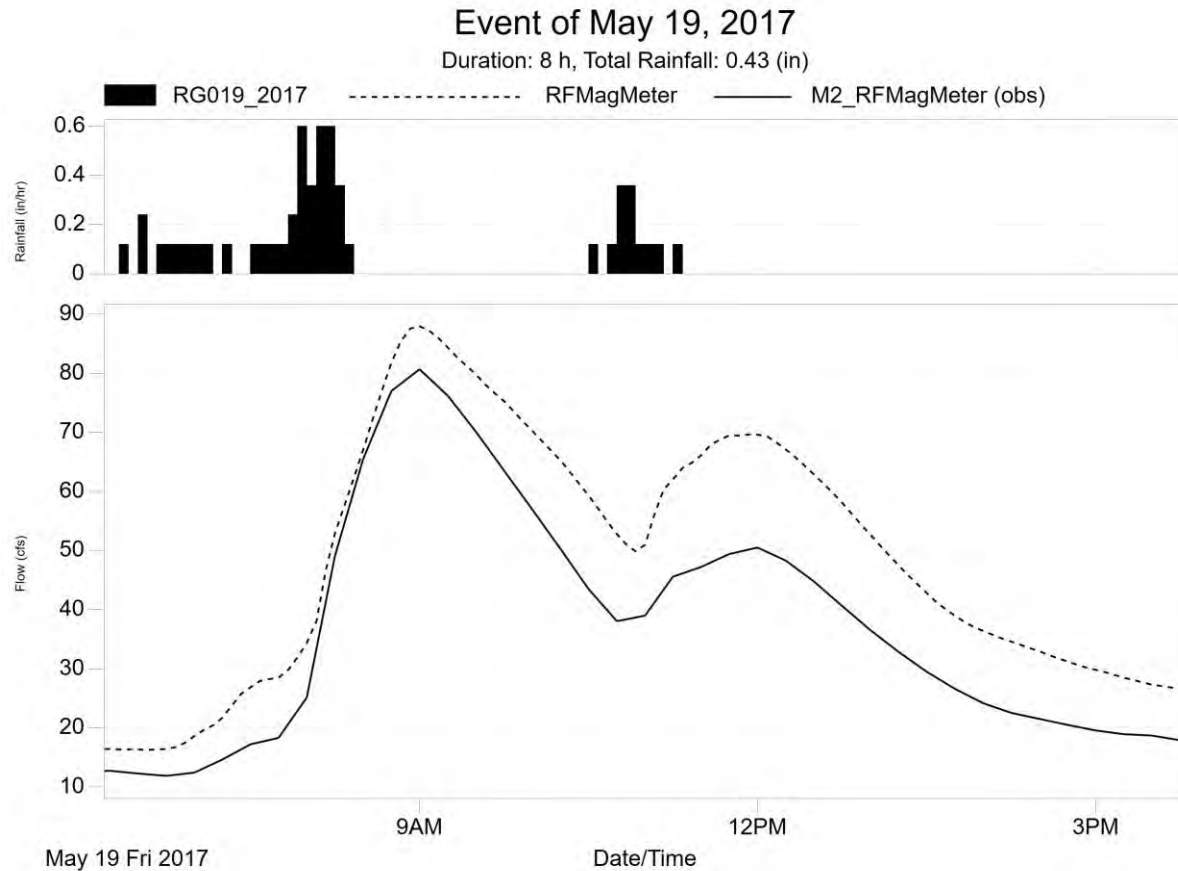
Duration: 13.58 h, Total Rainfall: 1.85 (in)



RFI M2 – Verification Events



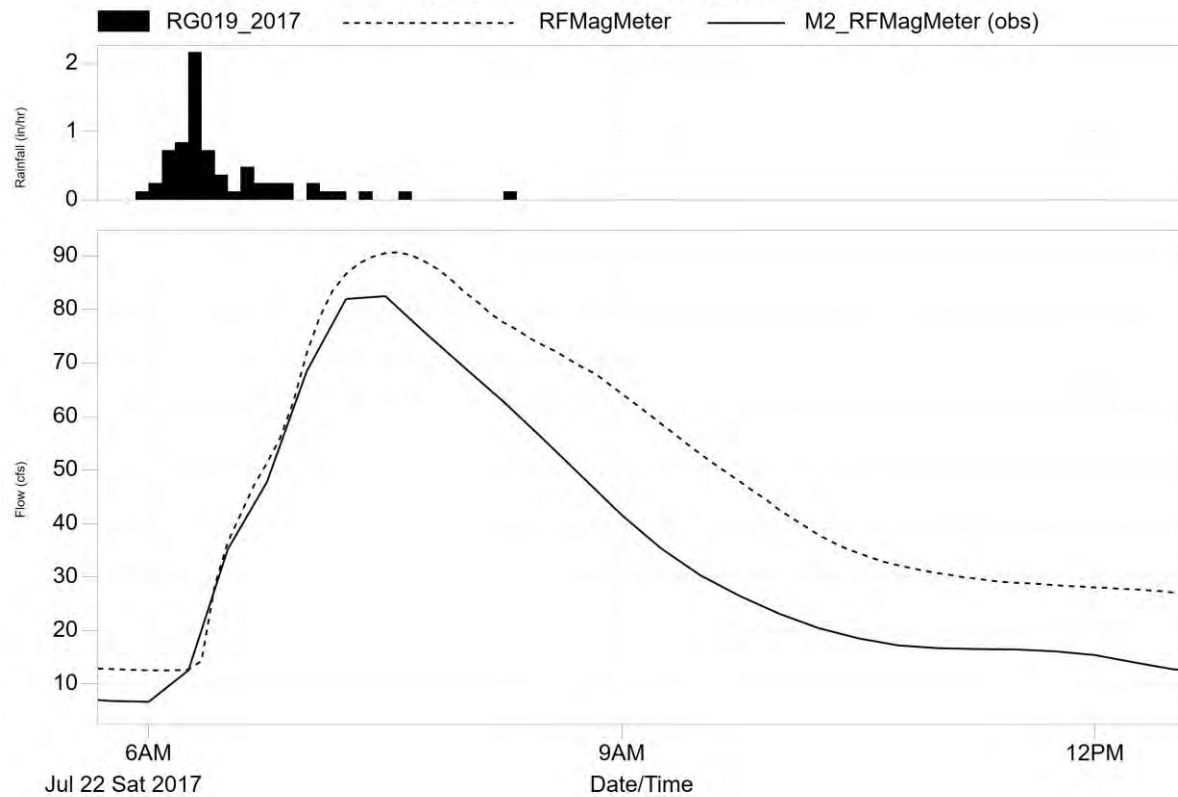
RFI M2 – Verification Events



RFI M2 – Verification Events

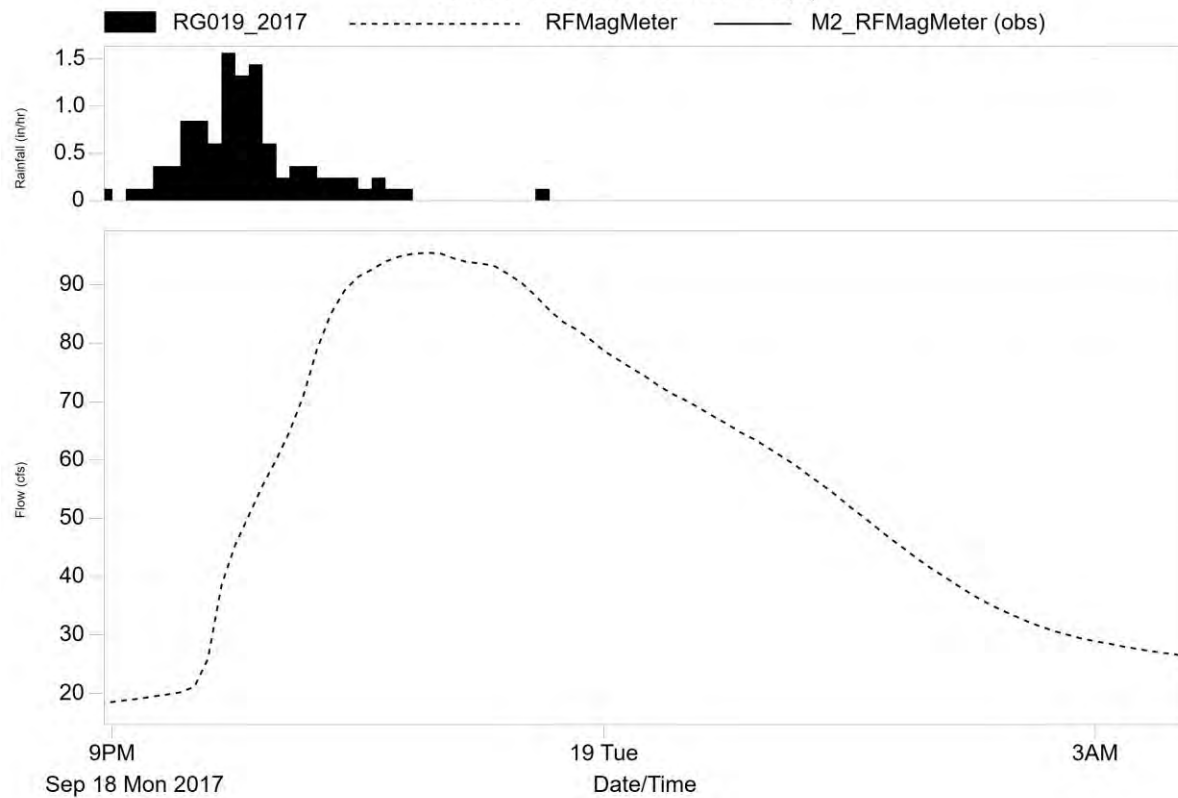
Event of July 22, 2017

Duration: 5.75 h, Total Rainfall: 0.45 (in)



Event of September 18, 2017

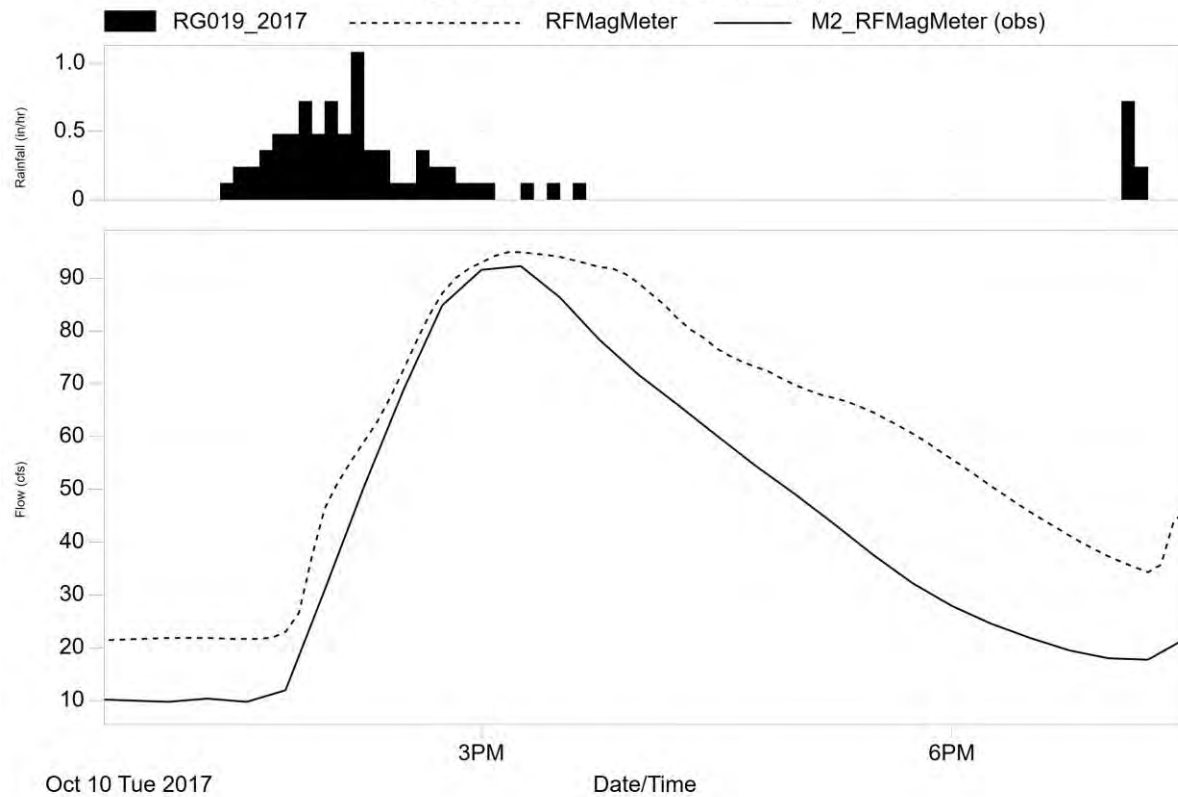
Duration: 5.5 h, Total Rainfall: 0.73 (in)



RFI M2 – Verification Events

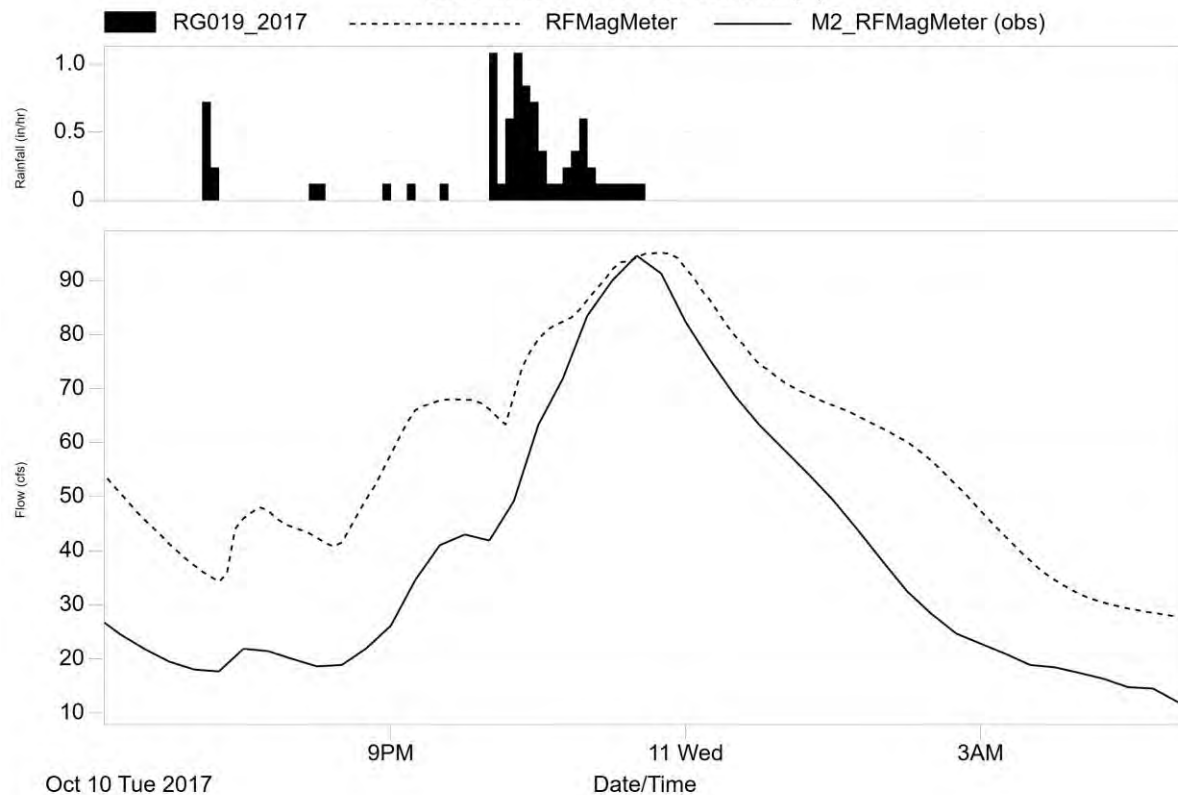
Event of October 10, 2017

Duration: 5.75 h, Total Rainfall: 0.66 (in)

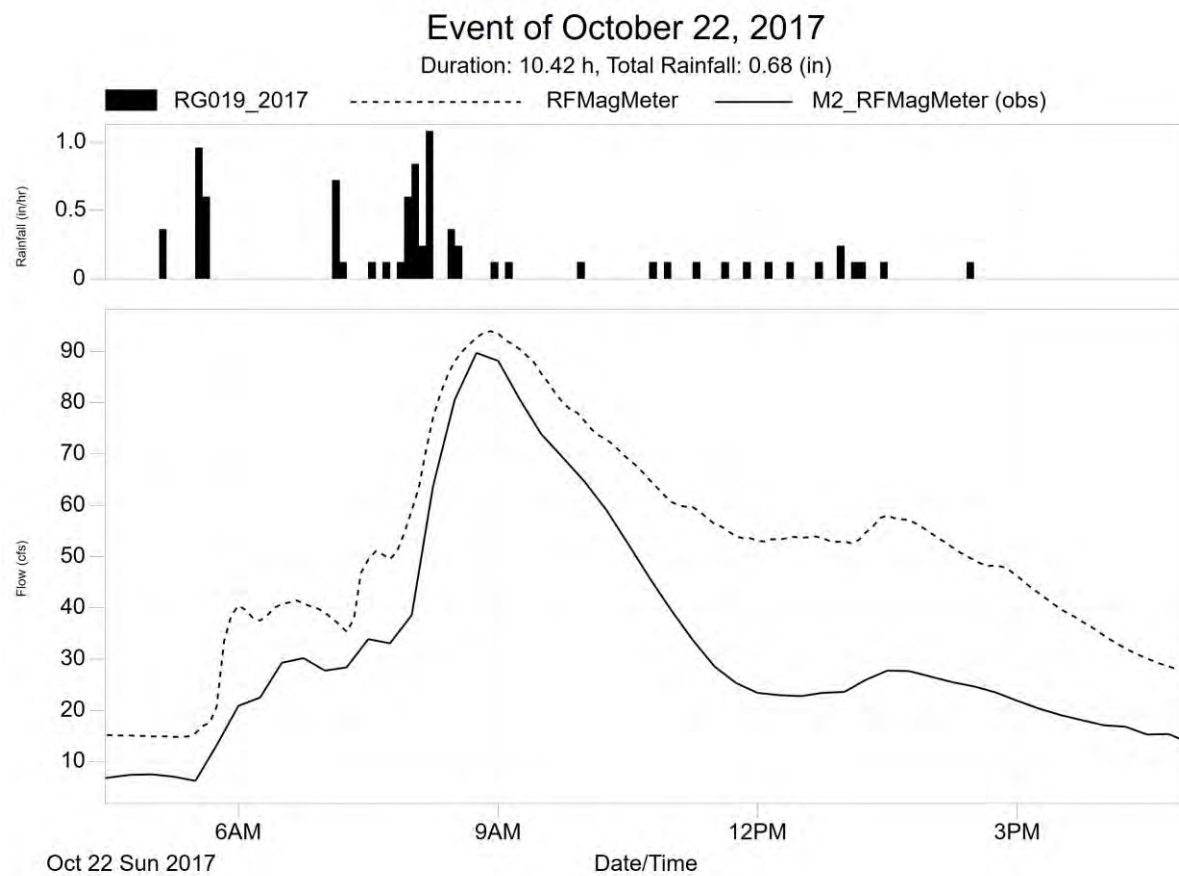


Event of October 10, 2017

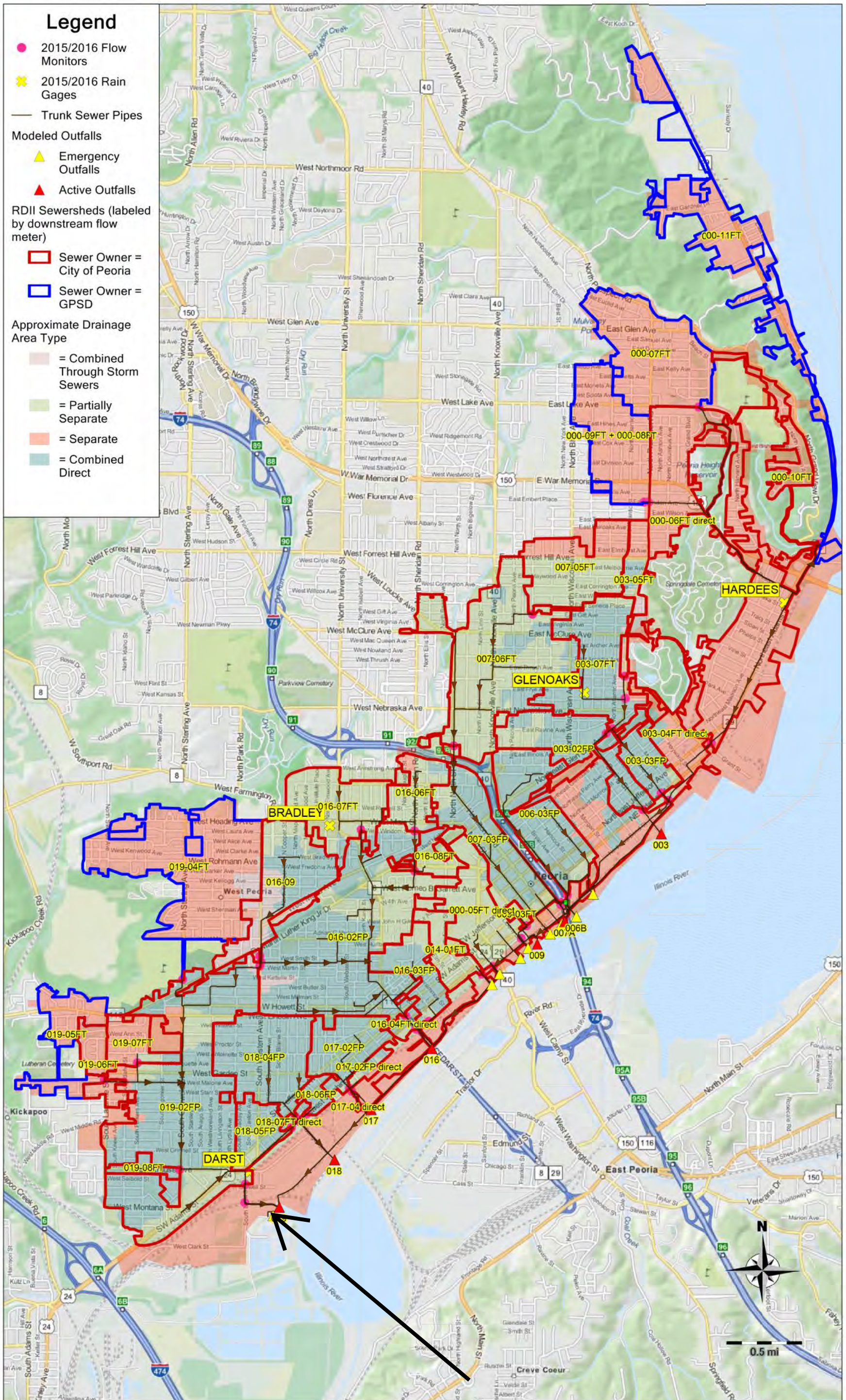
Duration: 9.17 h, Total Rainfall: 0.73 (in)



RFI M2 – Verification Events



Level Meter 000-01LE Location Map



RFI 000-01LE Depth

Date	Duration (h)	Maximum Depth (ft)		Minimum Depth (ft)		Average Depth (ft)		Maximum Depth (ft)	Minimum Depth (ft)	Average Depth (ft)	Rainfall Variability			
		metered	modeled	metered	modeled	metered	modeled	Surcharged: -0.33 ft to +1.67 ft						
CALIBRATION EVENTS - DEPTH								Non-Surcharged: -0.33 ft to +0.33 ft						
5/10/2017 18:45	4.3	Bad Meter Data						0.13	-0.06	-0.04	Relatively Uniform			
5/19/2017 22:35	5.3	3.2	3.3	2.2	2.1	2.6	2.6				Possibly Uniform			
5/20/2017 6:55	8.1	4.6	4.8	Meter Spikes to Zero		3.0	3.2				0.20	-	0.20	Relatively Uniform
5/26/2017 14:50	3.7	4.0	4.1	Meter Spikes to Zero		3.0	3.2				0.07	-	0.23	Relatively Uniform
6/15/2017 1:50	3.7	4.0	4.1	2.0	2.0	3.1	3.0				0.10	0.02	-0.07	Possibly Uniform
7/10/2017 6:15	6.1	4.0	4.3	Meter Spikes to Zeor		2.8	3.1				0.29	-	0.25	Relatively Uniform
7/10/2017 18:45	5.2	Bad Meter Data						-	-	-	Possibly Uniform			
7/26/2017 20:20	5.2	4.4	4.6	1.0	2.1	3.1	3.3	0.17	1.07	0.25	Relatively Uniform			
8/22/2017 2:00	4.4	3.7	4.1	1.9	2.1	2.8	3.0	0.42	0.21	0.19	Relatively Uniform			
10/14/2017 13:20	4.2	3.8	4.0	2.1	2.1	3.0	3.0	0.19	0.03	0.01	Variable			
10/14/2017 19:35	13.6	4.6	5.6	Meter Spikes to Zero		3.6	4.4	0.98	-	0.84	Relatively Uniform			
VERIFICATION EVENTS - DEPTH														
4/26/2017 22:30	9.5	4.1	4.2	2.3	2.2	3.1	3.1	0.07	-0.07	0.01	Relatively Uniform			
4/29/2017 11:00	37.9	8.6	7.3	Meter Spikes to Zero		5.2	4.6	-1.28	-	-0.57	Possibly Uniform			
5/19/2017 7:00	8.0	4.0	4.2	2.1	2.1	2.9	2.9	0.16	0.00	0.01	Possibly Uniform			
6/17/2017 21:00	8.5	4.4	4.6	Meter Spikes to Zero		2.6	2.9	0.23	-	0.38	Variable			
7/22/2017 6:15	5.8	4.1	4.3	2.1	2.0	2.8	2.9	0.22	-0.06	0.11	Variable			
9/18/2017 21:30	5.5	4.4	4.6	2.0	2.1	3.1	3.3	0.23	0.15	0.21	Variable			
10/10/2017 13:10	5.8	4.4	4.6	2.0	2.1	3.1	3.4	0.21	0.11	0.30	Possibly Uniform			
10/10/2017 19:00	9.2	4.4	4.8	Meter Spikes to Close Zero		2.9	3.4	0.40	-	0.51	Possibly Uniform			
10/22/2017 5:30	10.4	4.4	4.6	Meter Spikes to Zero		2.8	3.0	0.21	-	0.24	Variable			

Notes:

Surcharge Depth = 4.5 feet

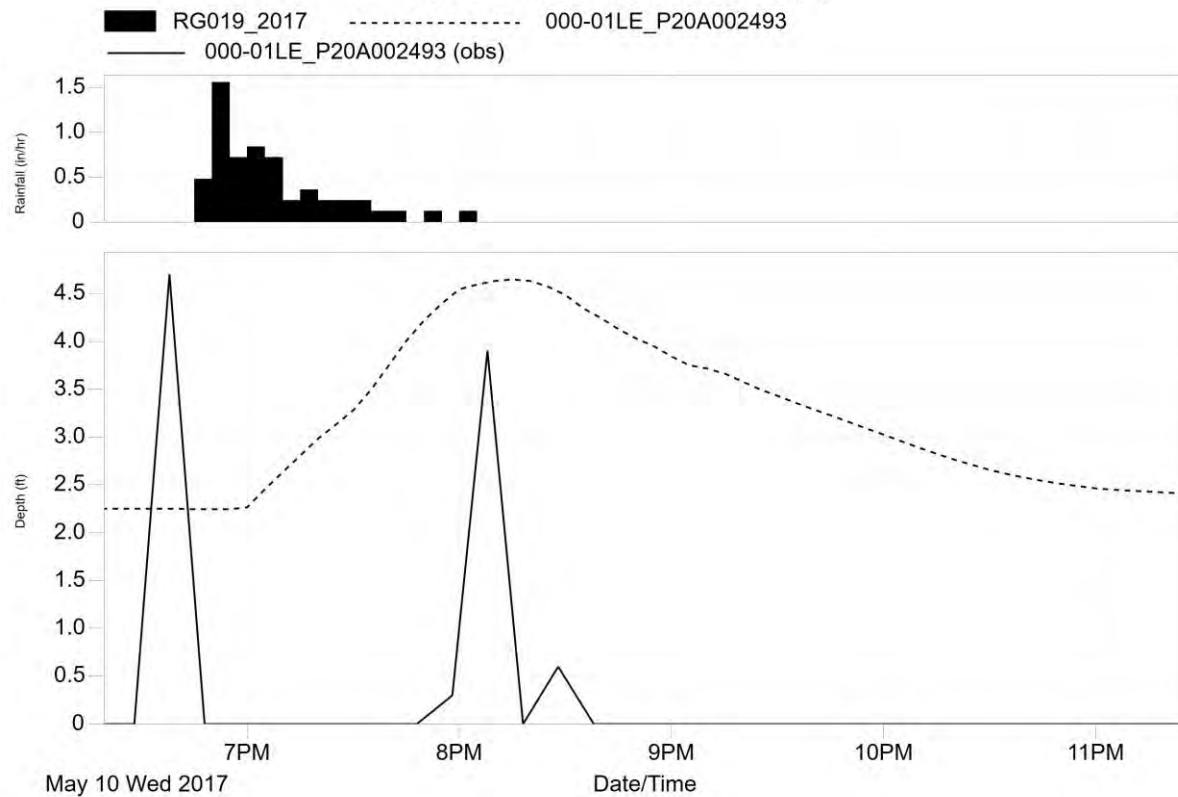
Meter data spikes to zero and close to zero were removed from the minimum depth calculation

WEIGHTED AVERAGES				
Calibration - Relatively Uniform	0.36	0.51	0.34	
Calibration - Possibly Uniform	0.11	-0.02	-0.06	
Calibration - Variable	0.19	0.03	0.01	
Calibration - All Events	0.29	0.16	0.22	
Verification - Relatively Uniform	0.07	-0.07	0.01	
Verification - Possibly Uniform	-0.36	0.06	-0.04	
Verification - Variable	0.22	0.04	0.23	
Verification - All Events	-0.08	0.02	0.07	
Weighted Average - All Events	0.09	0.09	0.15	All Events
NET AVERAGES				
Calibration - Relatively Uniform	0.35	0.64	0.33	
Calibration - Possibly Uniform	0.11	-0.02	-0.06	
Calibration - Variable	0.19	0.03	0.01	
Calibration- All Events	0.28	0.25	0.21	
Verification - Relatively Uniform	0.07	-0.07	0.01	
Verification - Possibly Uniform	-0.13	0.06	0.06	
Verification - Variable	0.22	0.04	0.23	
Verification- All Events	0.05	0.03	0.13	
Net Average - All Events	0.17	0.14	0.17	All Events

RFI at Darst 000-01LE – Calibration Events

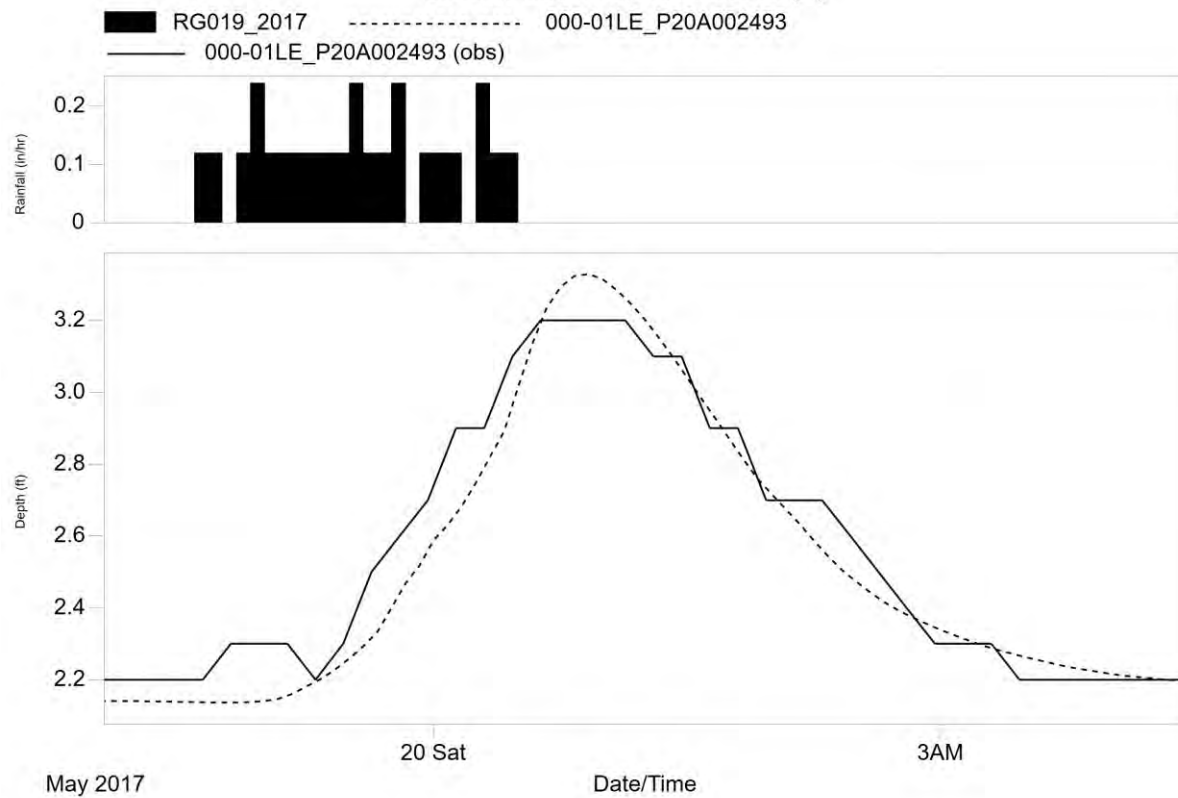
Event of May 10, 2017

Duration: 4.25 h, Total Rainfall: 0.51 (in)

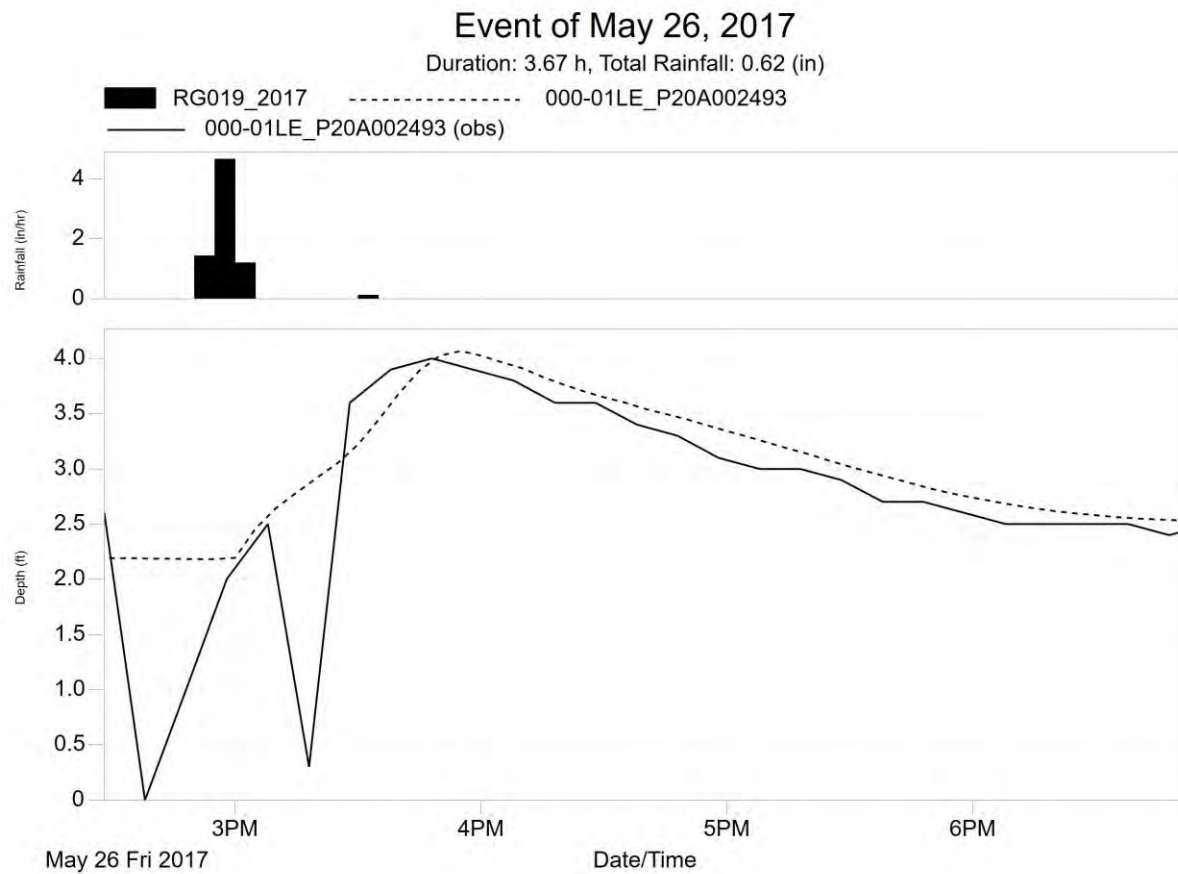
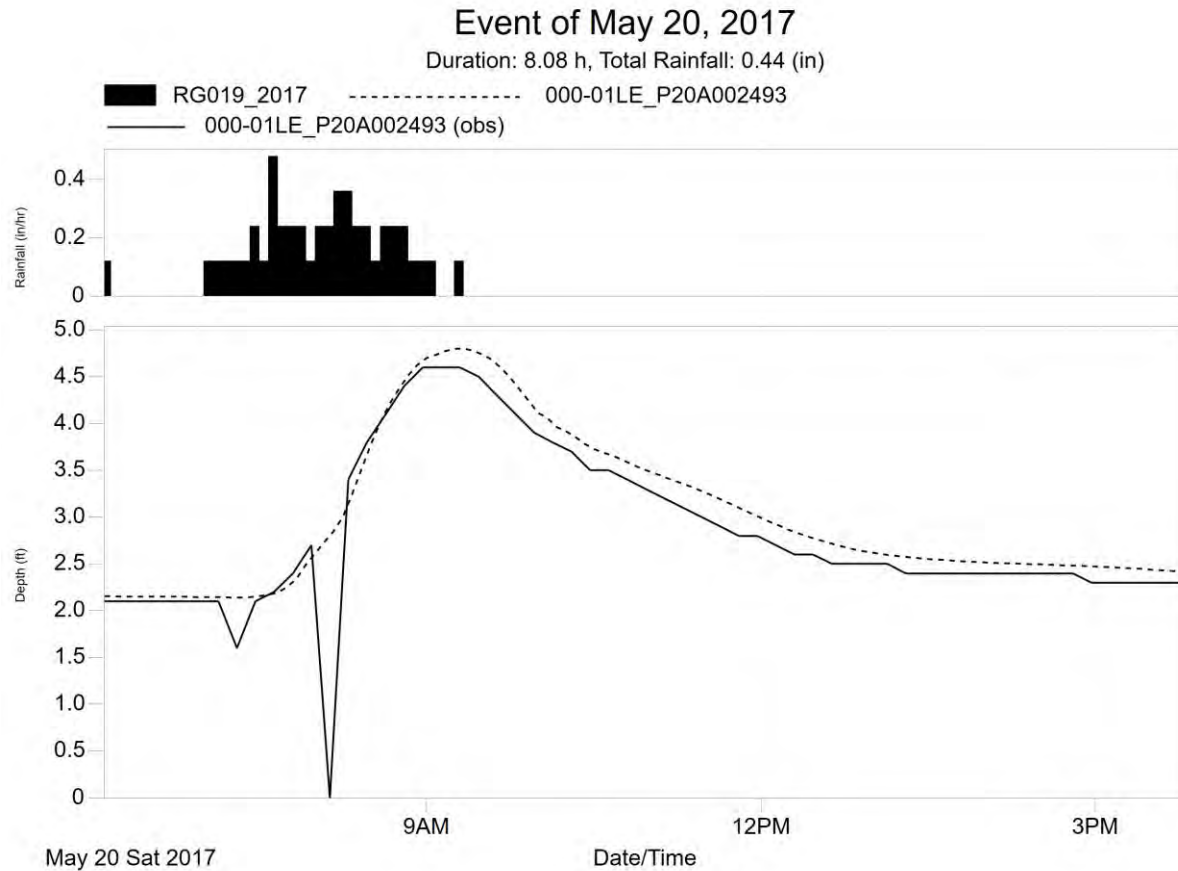


Event of May 19, 2017

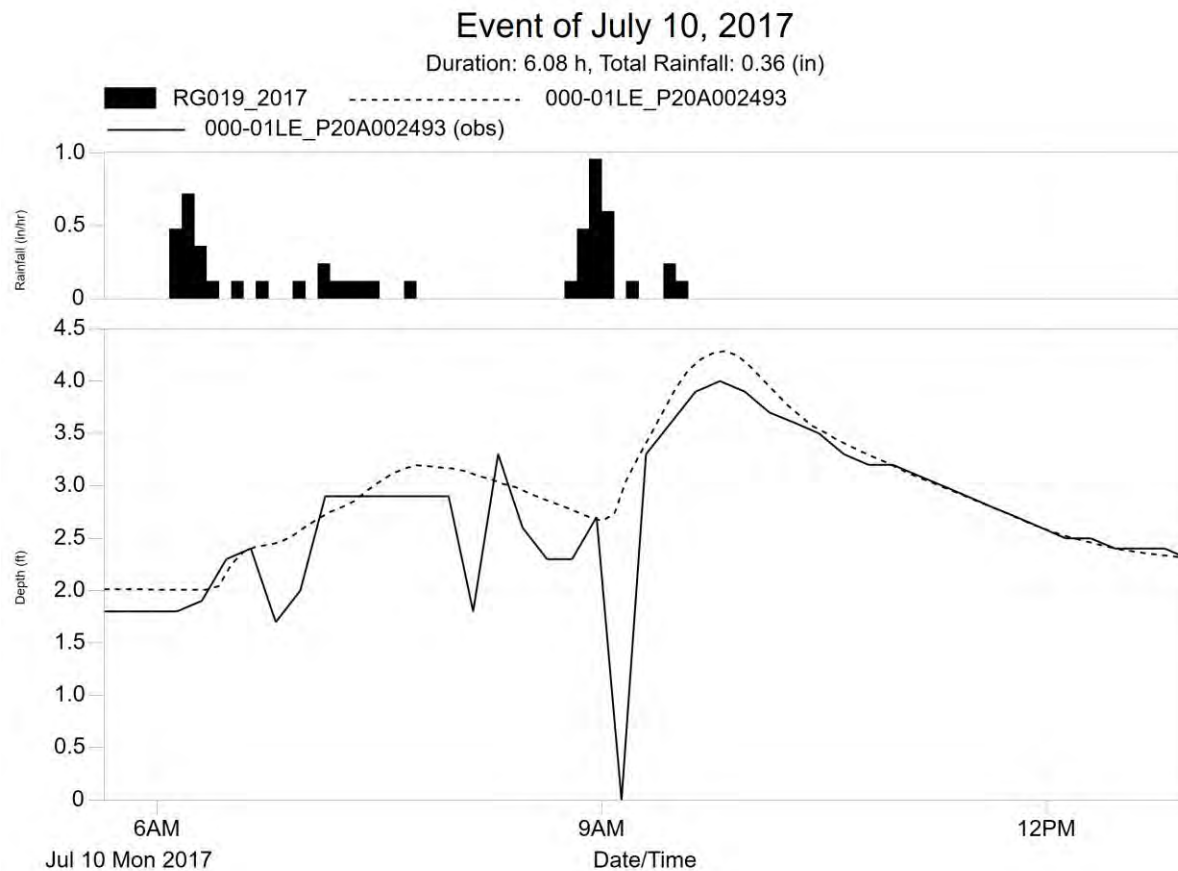
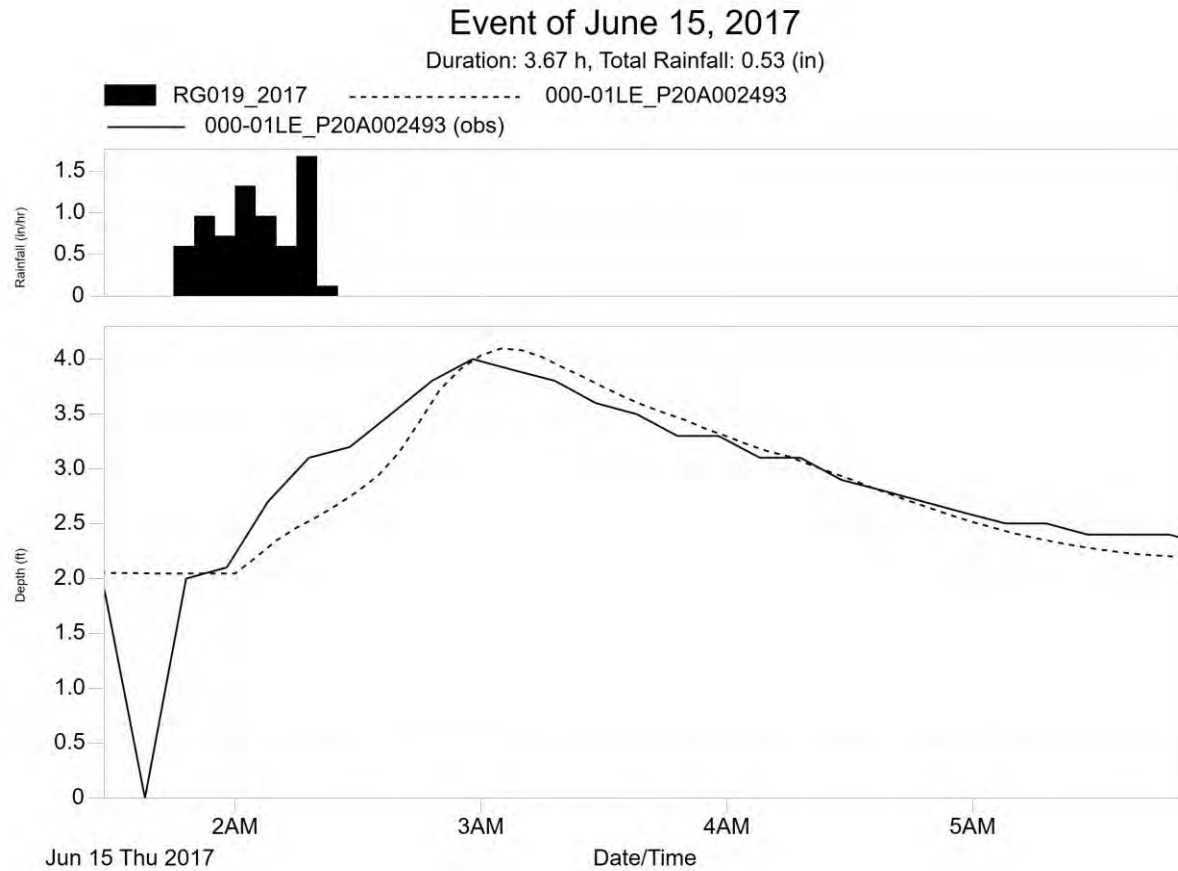
Duration: 5.33 h, Total Rainfall: 0.24 (in)



RFI at Darst 000-01LE – Calibration Events



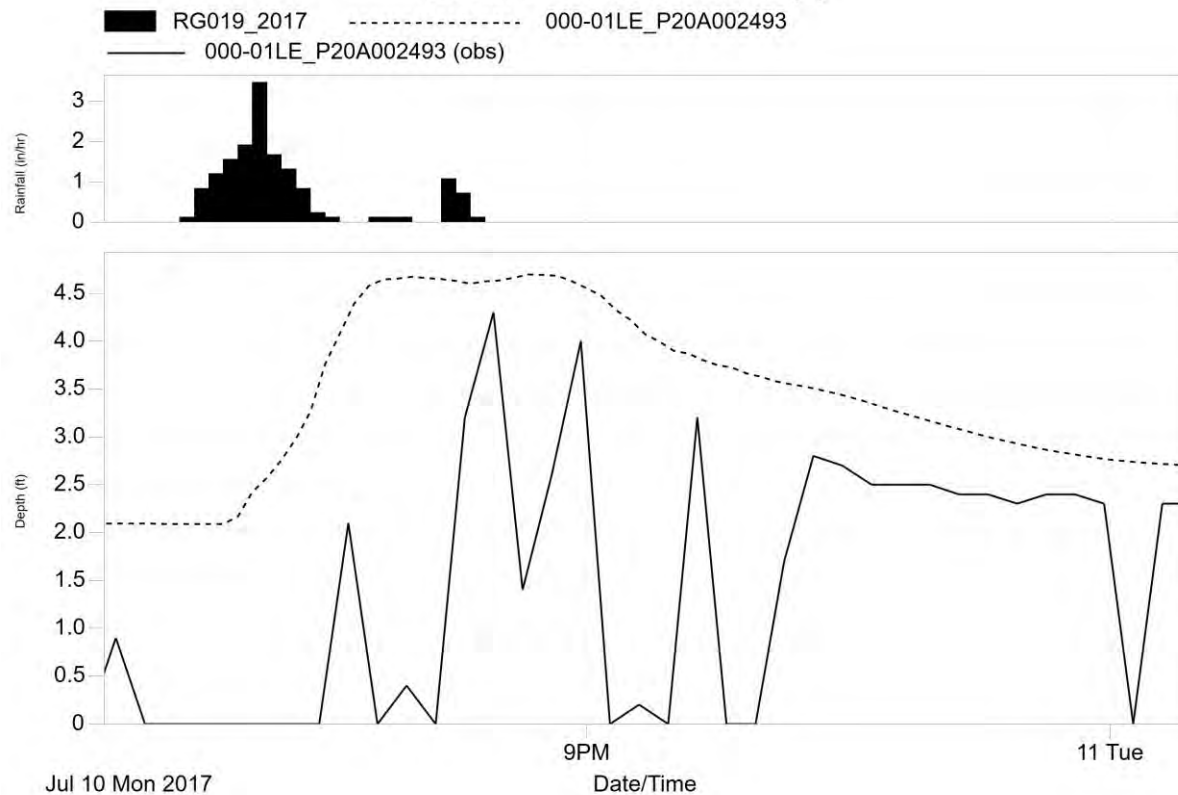
RFI at Darst 000-01LE – Calibration Events



RFI at Darst 000-01LE – Calibration Events

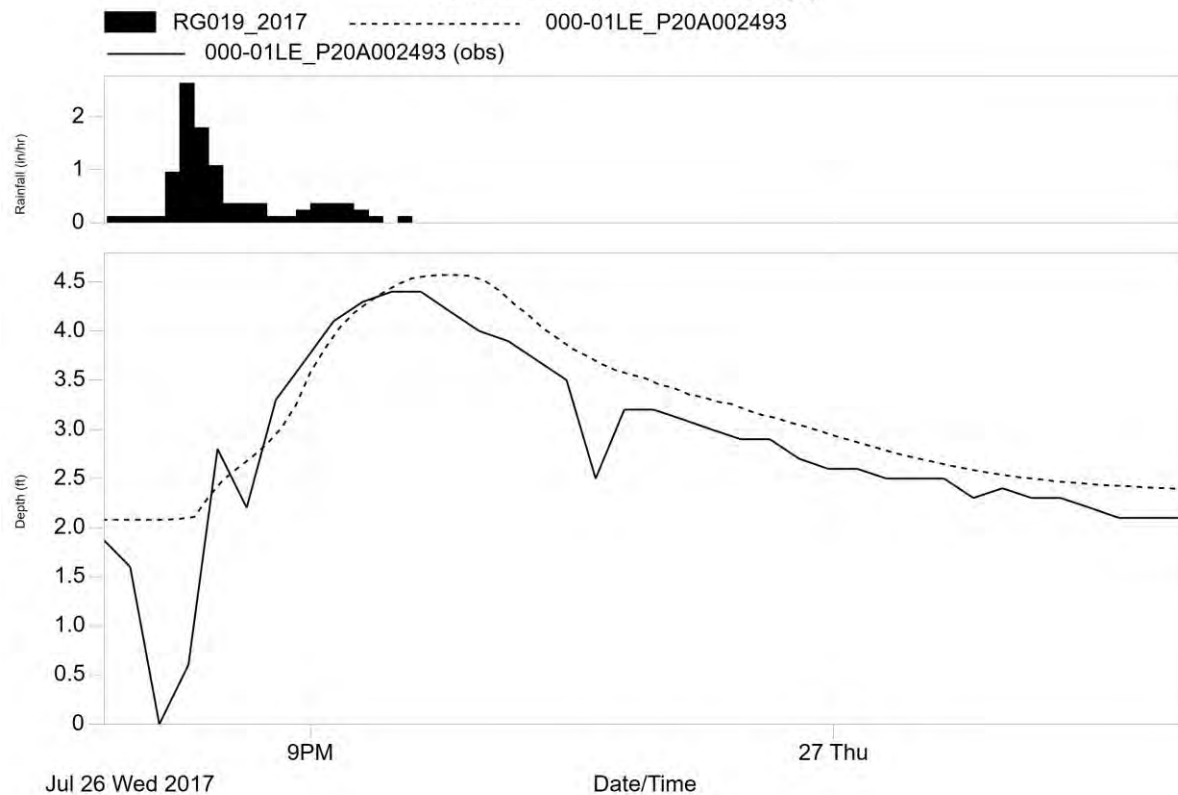
Event of July 10, 2017

Duration: 5.17 h, Total Rainfall: 1.29 (in)



Event of July 26, 2017

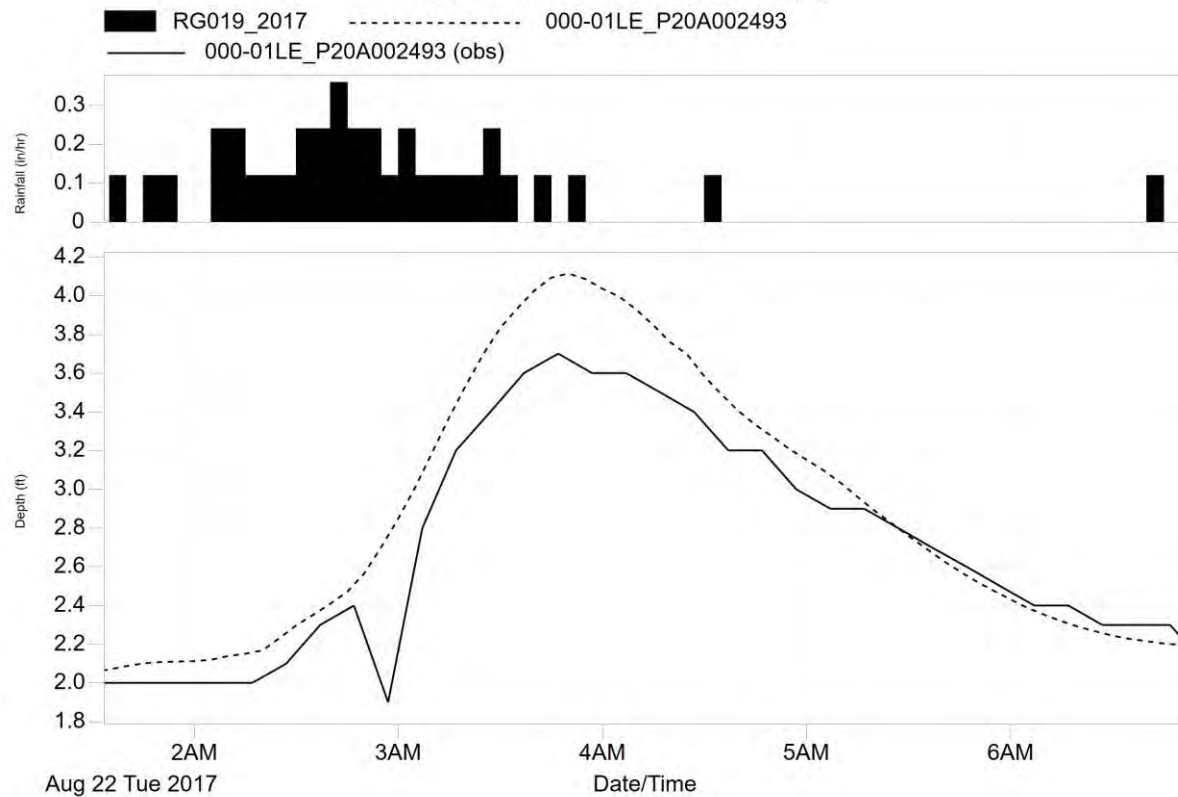
Duration: 5.17 h, Total Rainfall: 0.5 (in)



RFI at Darst 000-01LE – Calibration Events

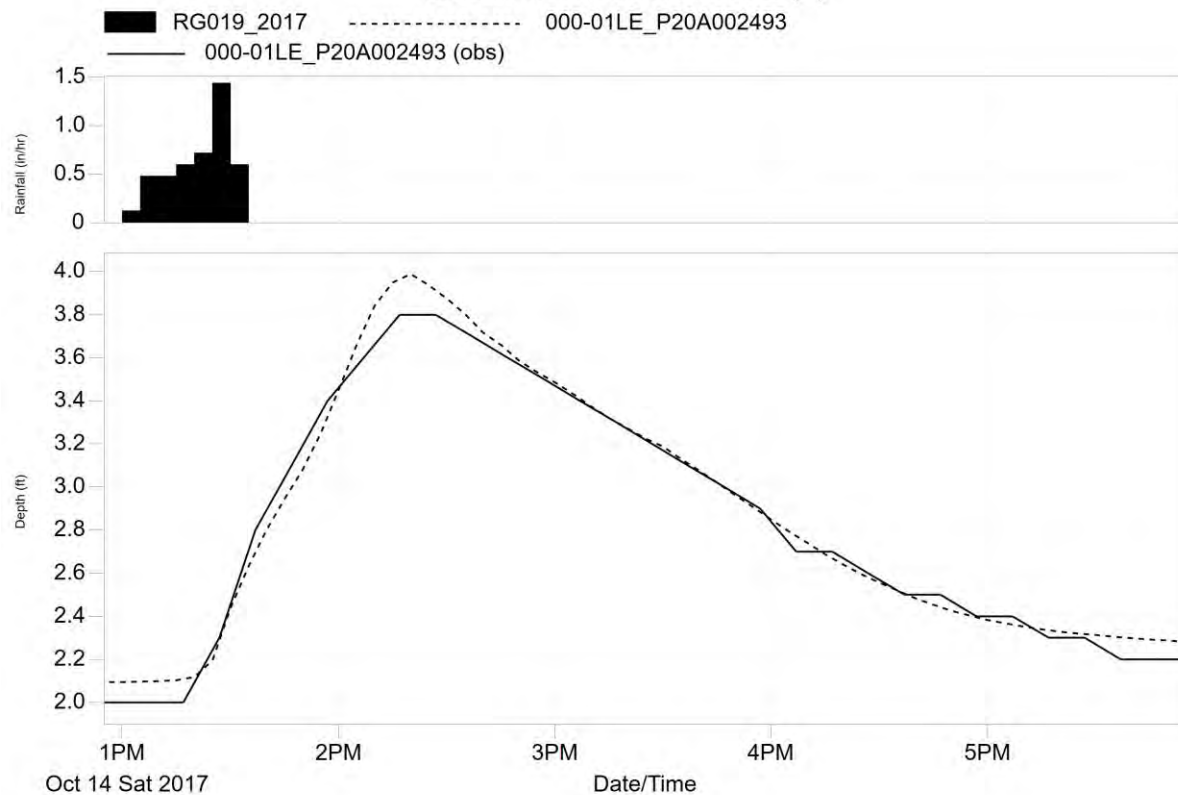
Event of August 22, 2017

Duration: 4.42 h, Total Rainfall: 0.31 (in)

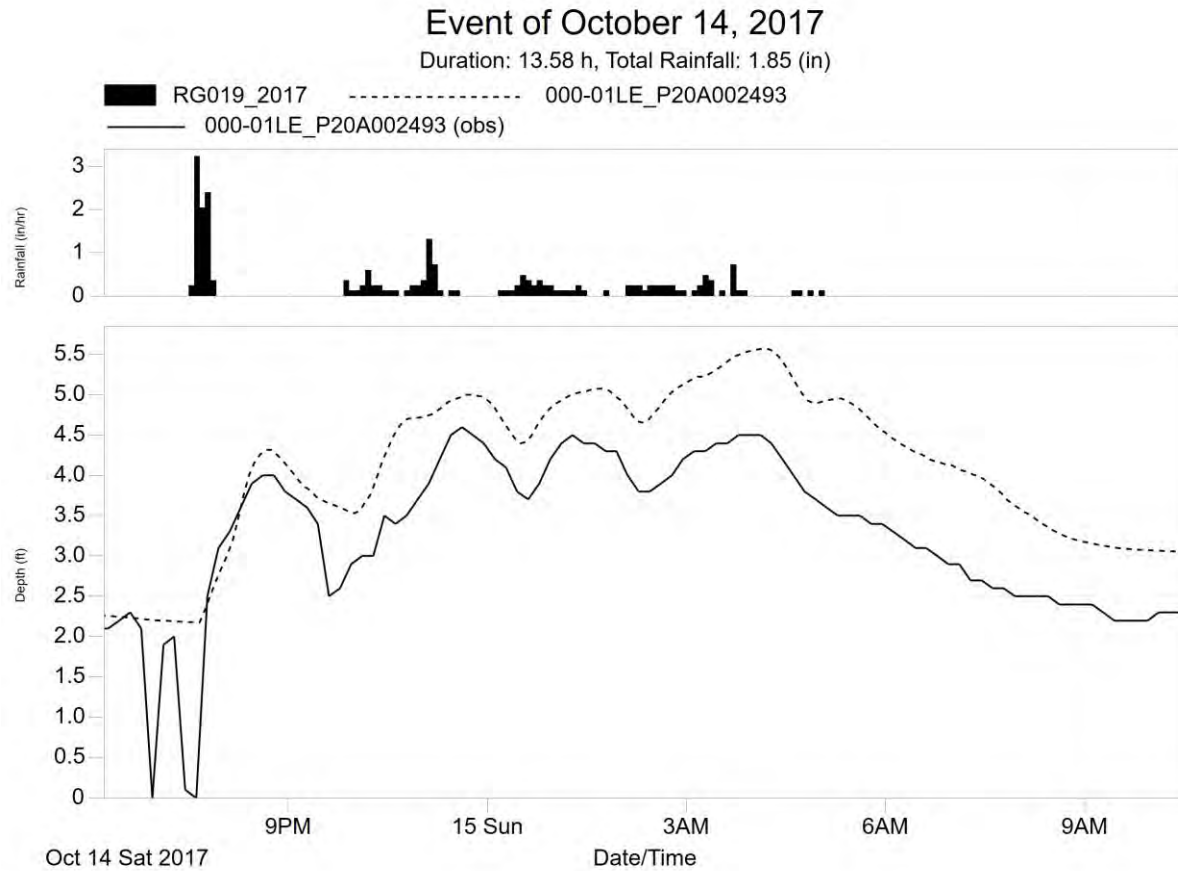


Event of October 14, 2017

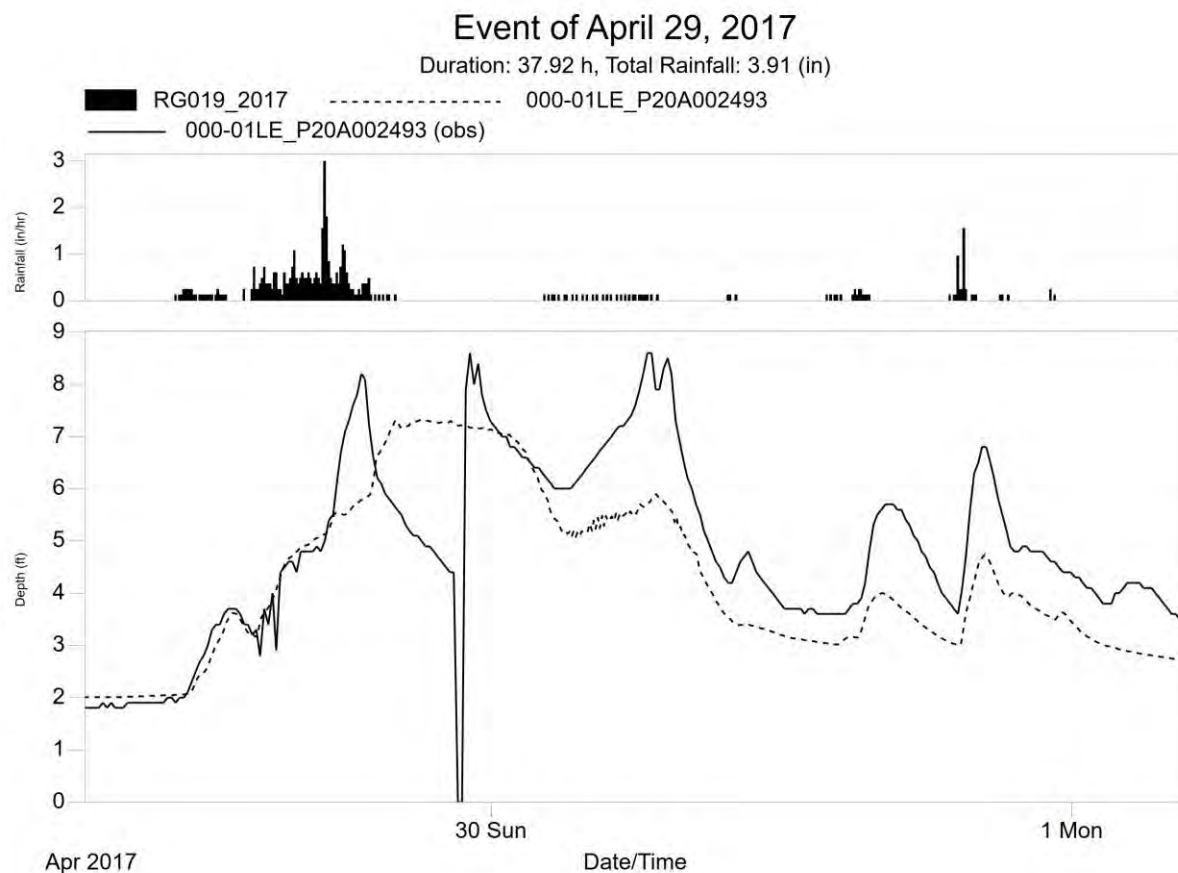
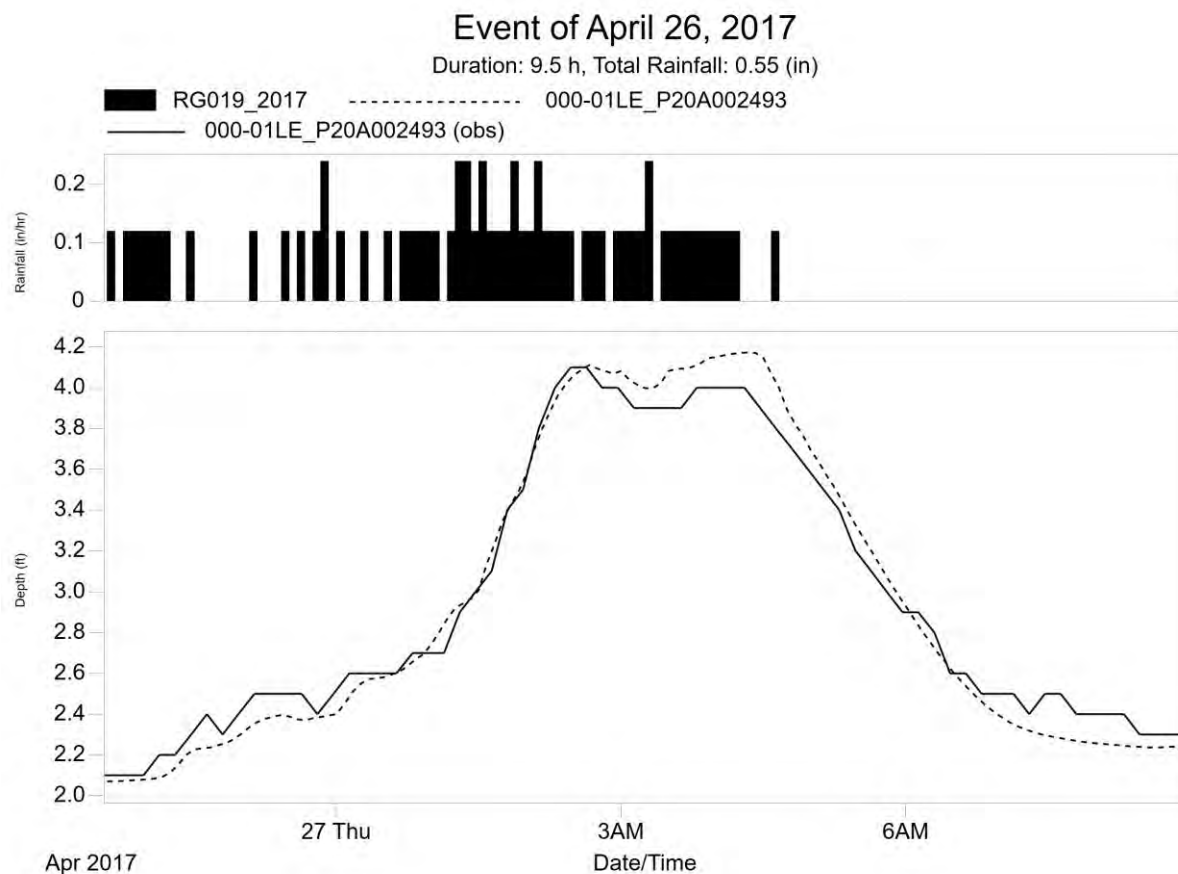
Duration: 4.17 h, Total Rainfall: 0.23 (in)



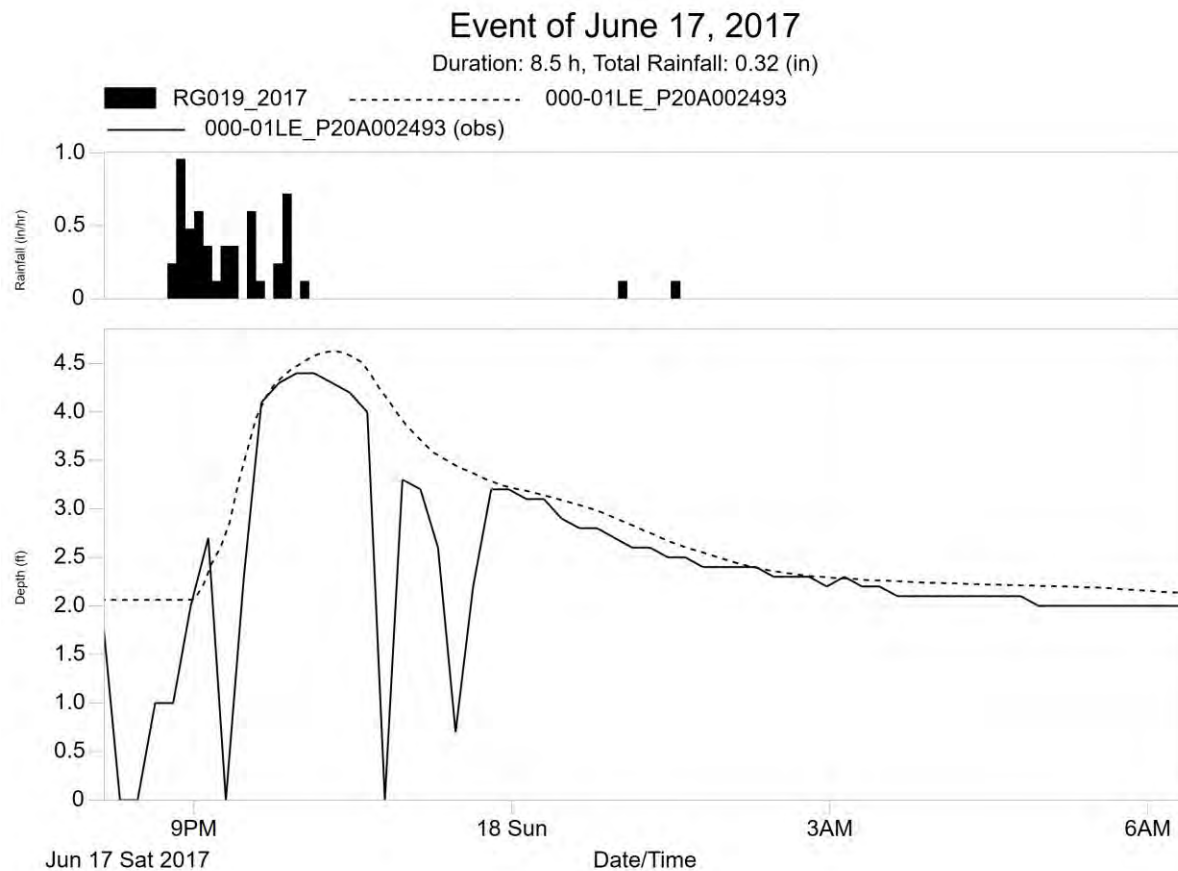
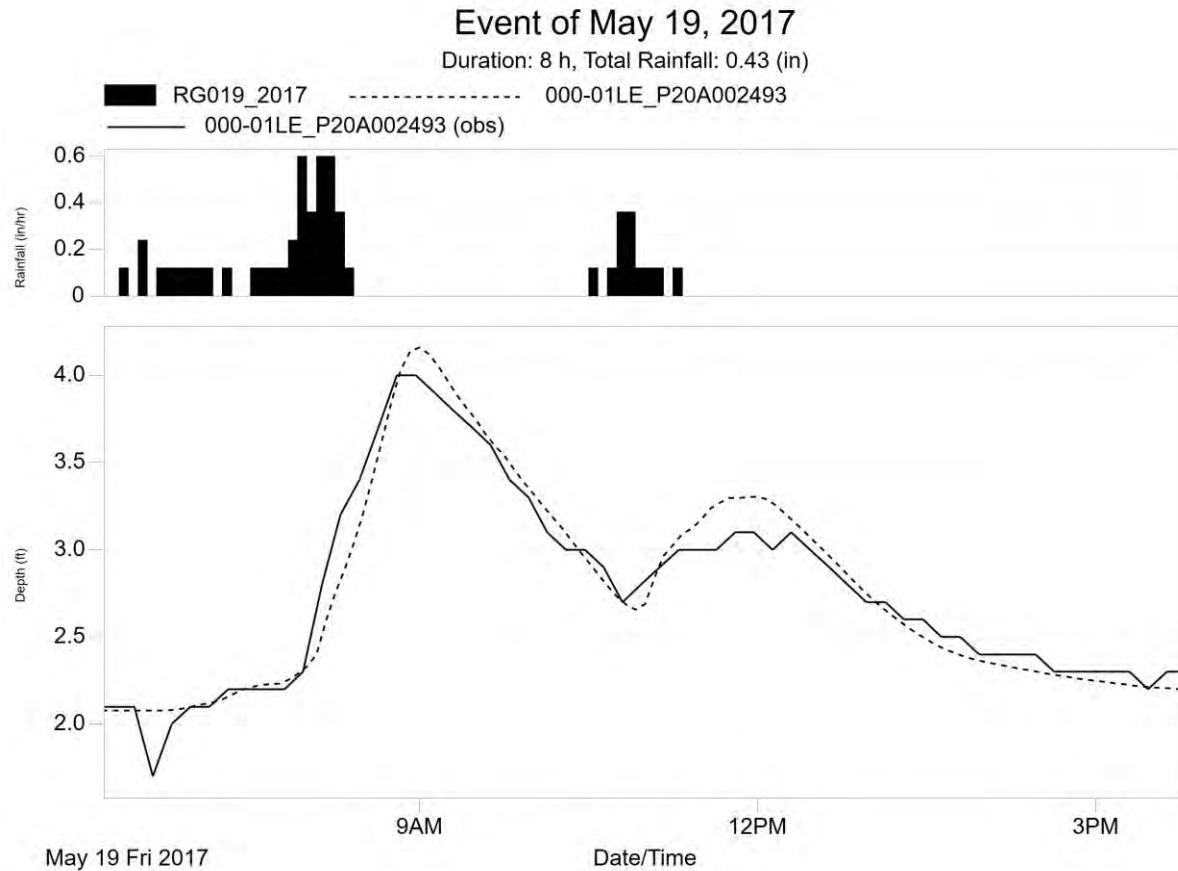
RFI at Darst 000-01LE – Calibration Events



RFI at Darst 000-01LE – Verification Events



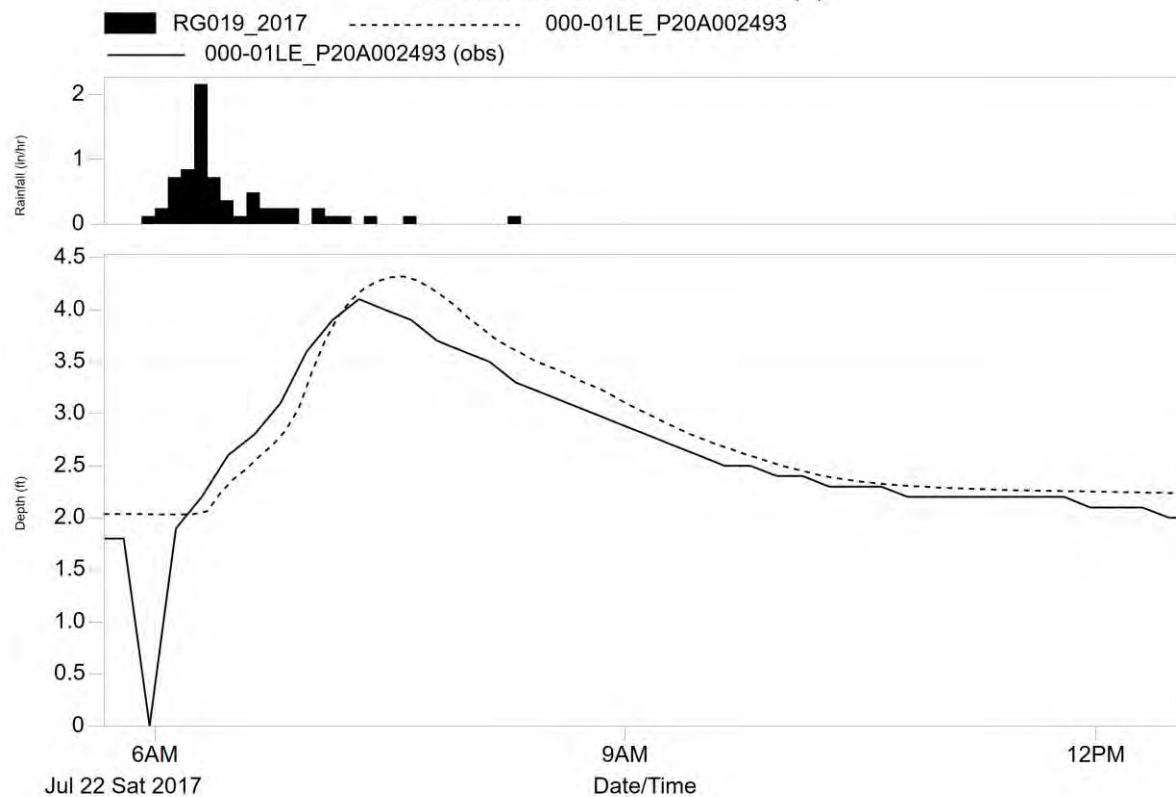
RFI at Darst 000-01LE – Verification Events



RFI at Darst 000-01LE – Verification Events

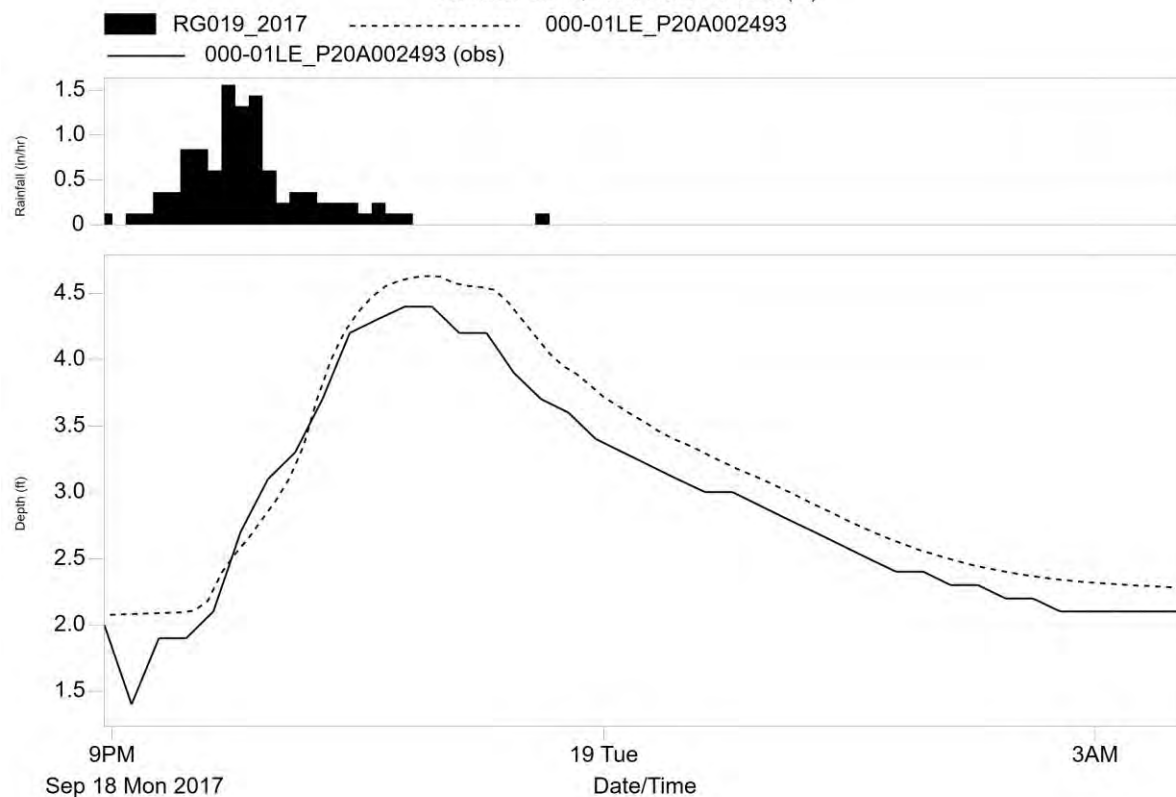
Event of July 22, 2017

Duration: 5.75 h, Total Rainfall: 0.45 (in)



Event of September 18, 2017

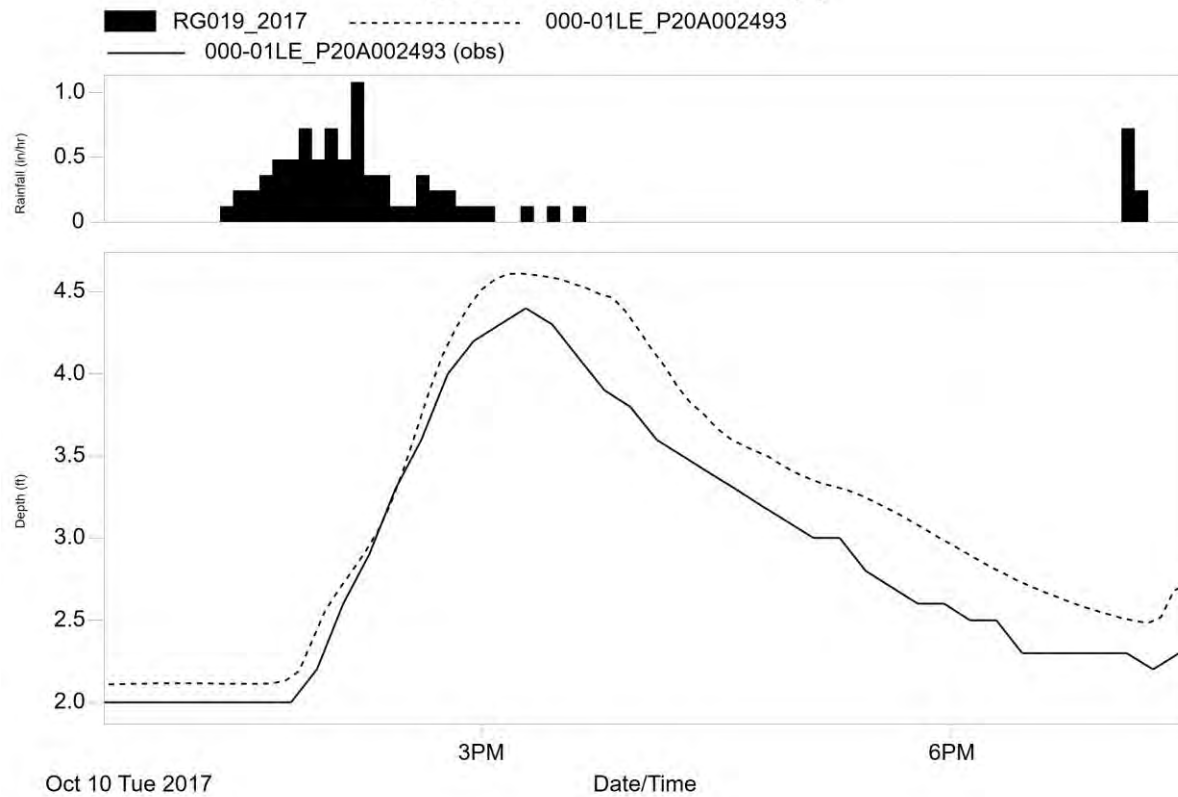
Duration: 5.5 h, Total Rainfall: 0.73 (in)



RFI at Darst 000-01LE – Verification Events

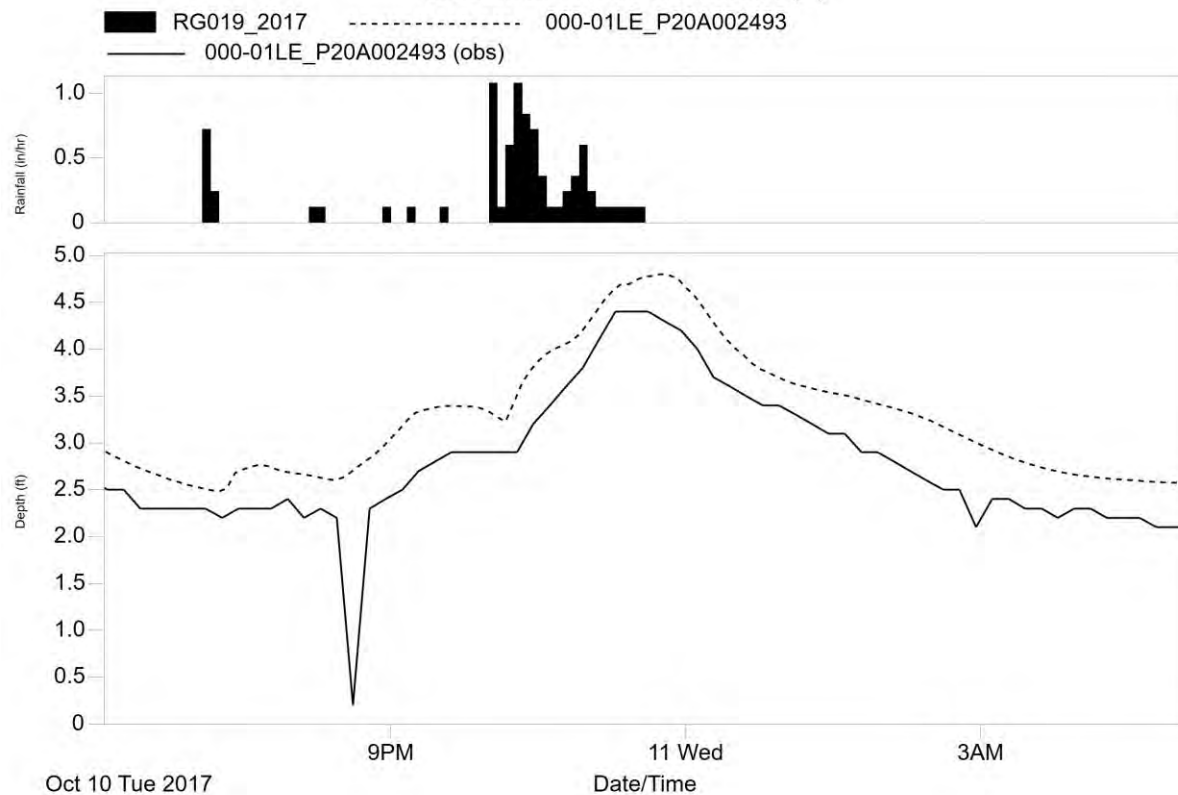
Event of October 10, 2017

Duration: 5.75 h, Total Rainfall: 0.66 (in)

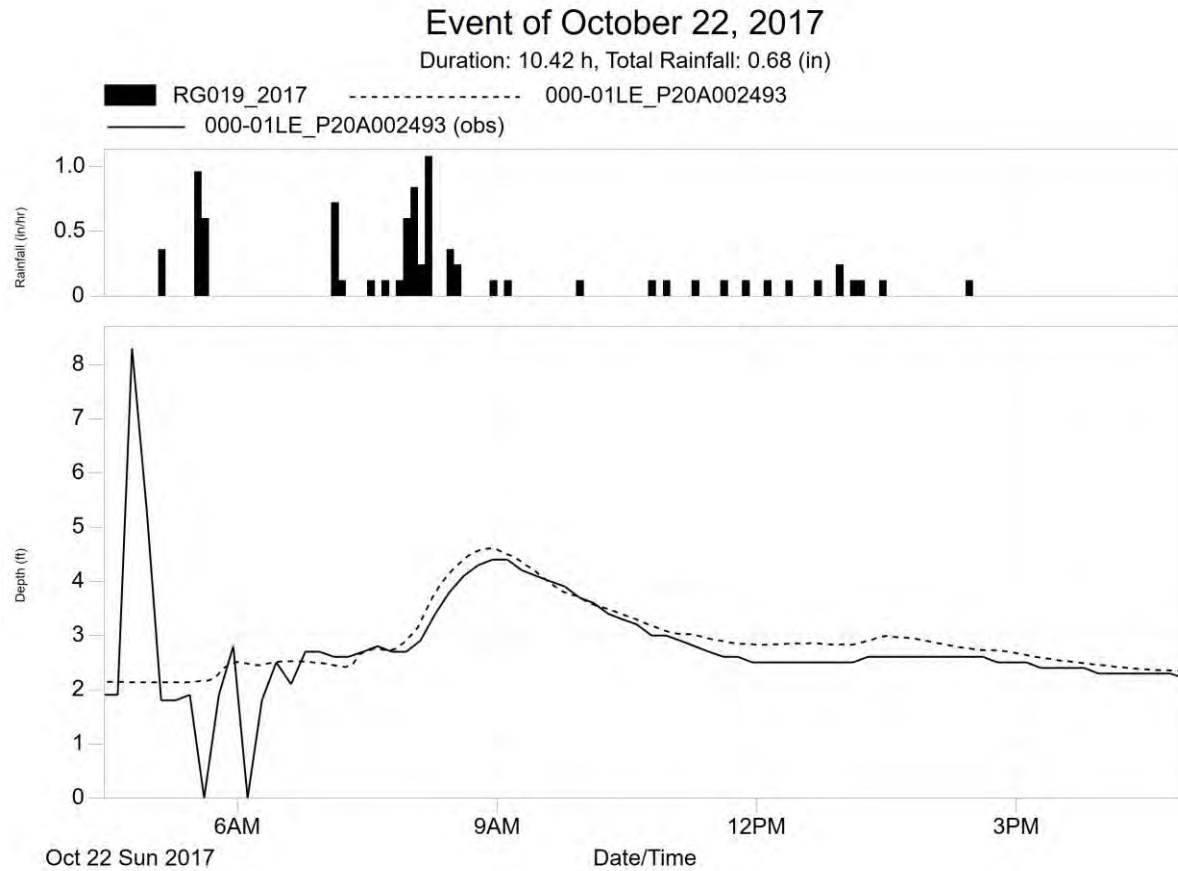


Event of October 10, 2017

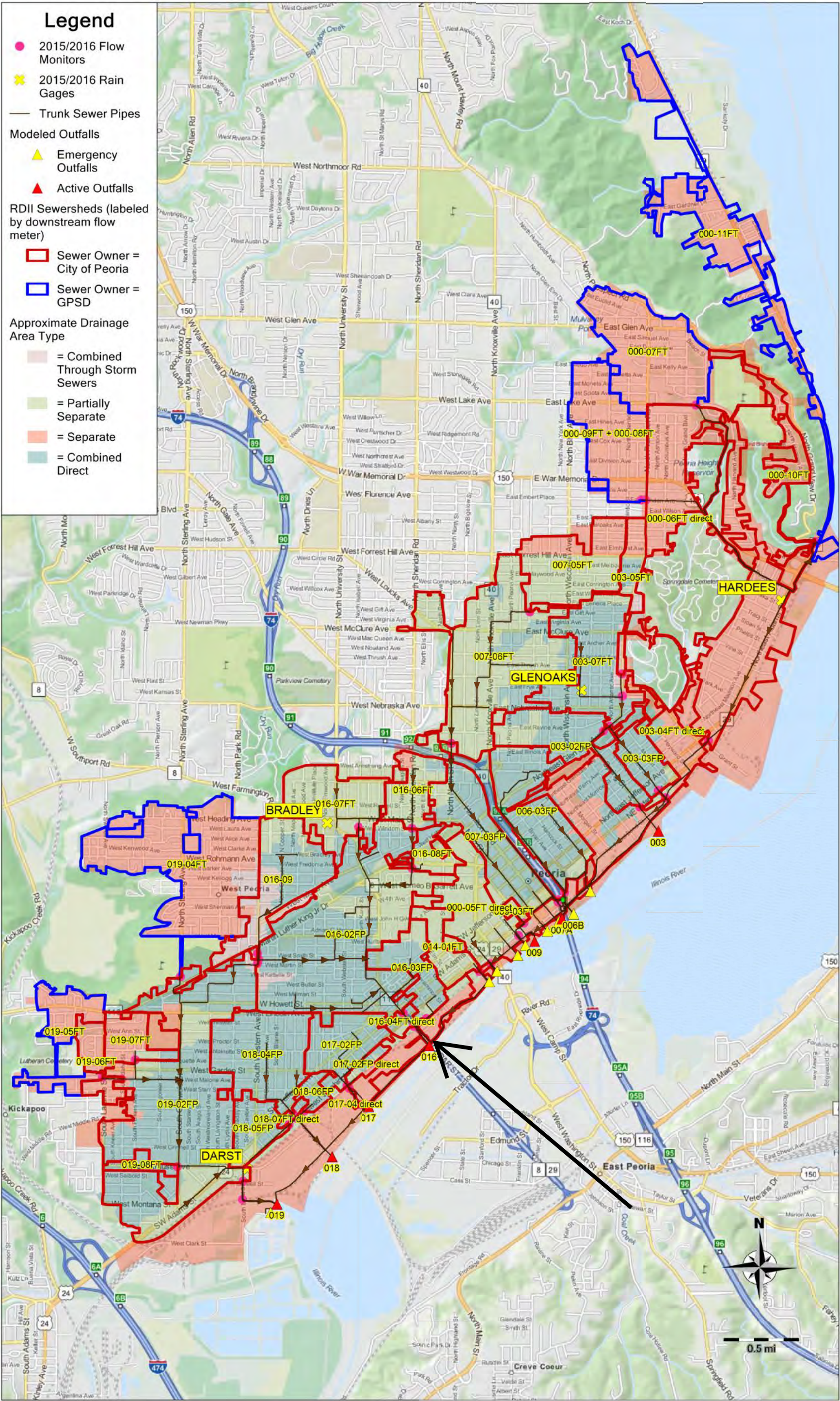
Duration: 9.17 h, Total Rainfall: 0.73 (in)



RFI at Darst 000-01LE – Verification Events



Level Meter 000-02LE Location Map



RFI 000-02LE Depth

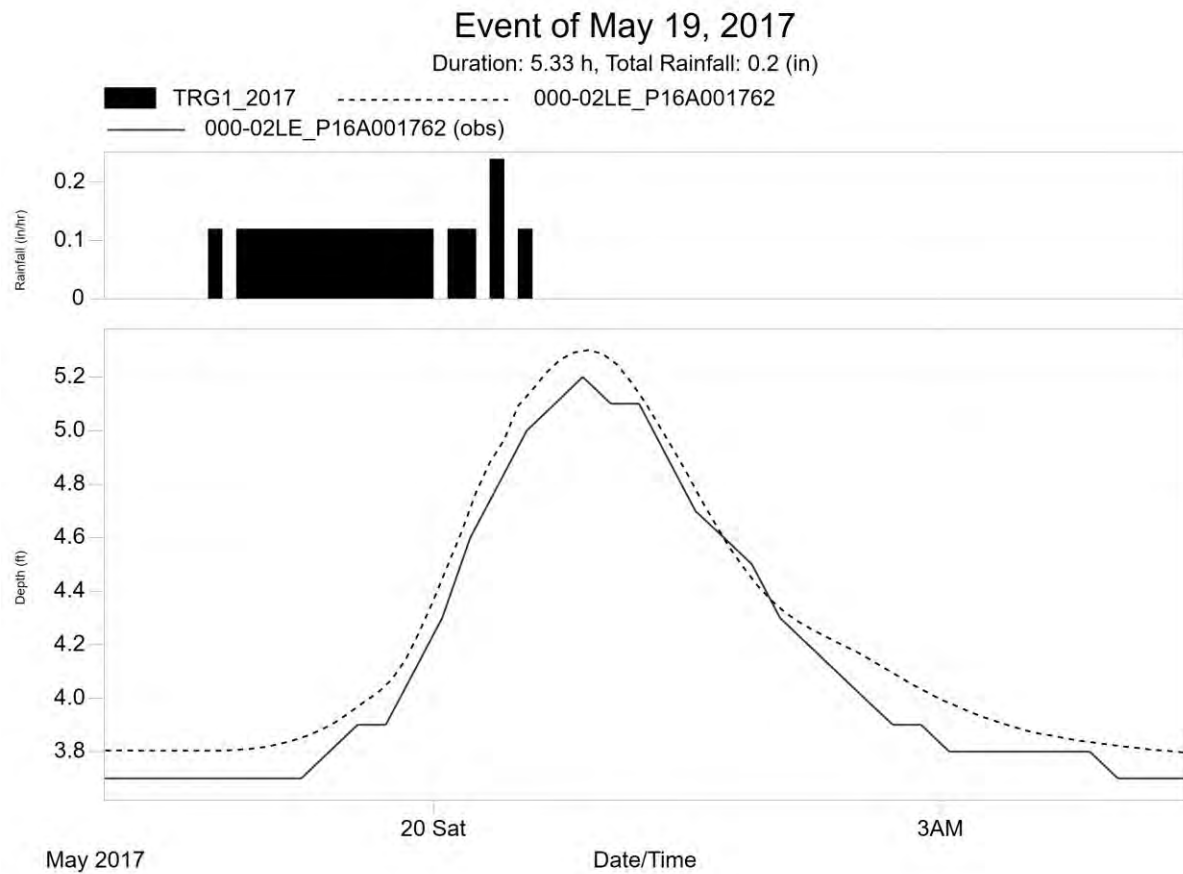
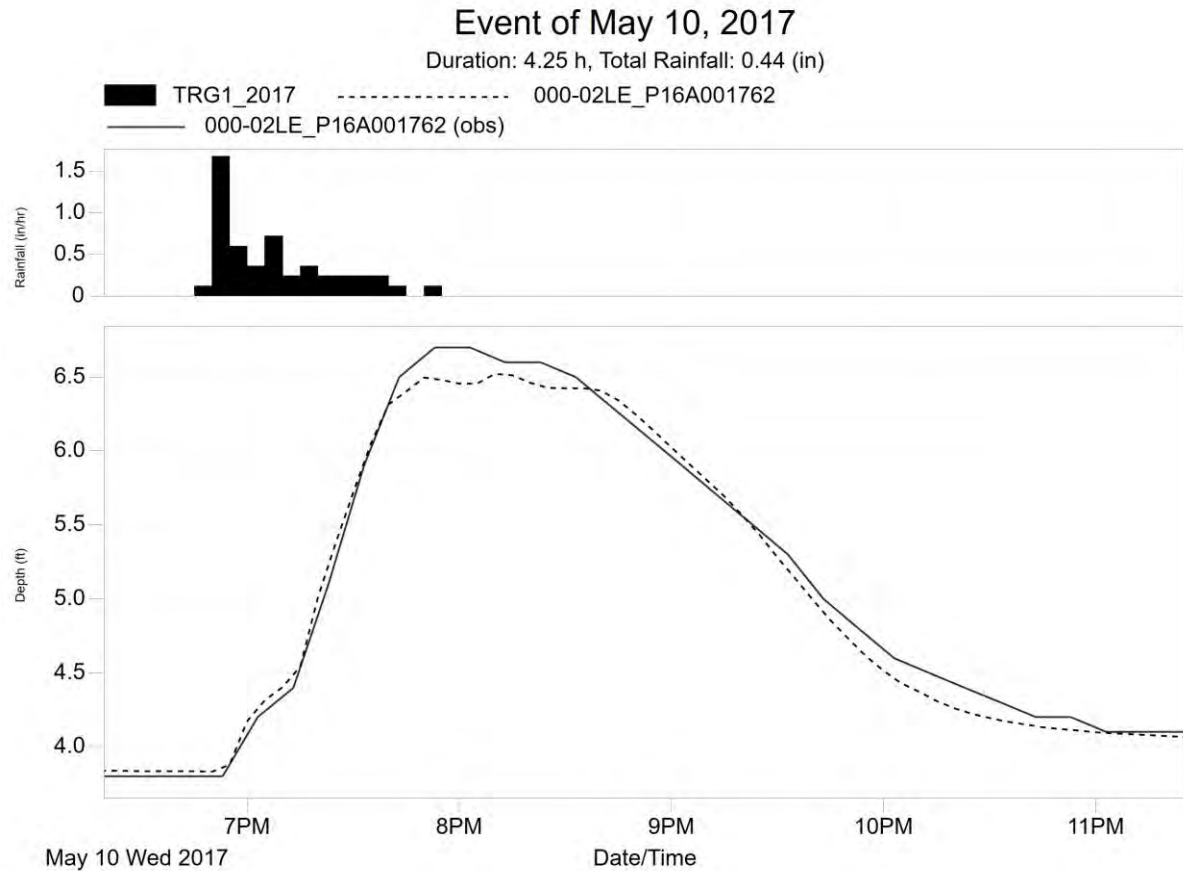
Date	Duration (h)	Maximum Depth (ft)		Minimum Depth (ft)		Average Depth (ft)		Maximum Depth (ft)	Minimum Depth (ft)	Average Depth (ft)	Rainfall Variability
		metered	modeled	metered	modeled	metered	modeled	Surcharged: -0.33 ft to +1.67 ft			
CALIBRATION EVENTS - DEPTH								Non-Surcharged: -0.33 ft to +0.33 ft			
5/10/2017 18:45	4.3	6.7	6.5	3.8	3.8	5.3	5.3	-0.18	0.03	-0.05	Relatively Uniform
5/19/2017 22:35	5.3	5.2	5.3	3.7	3.8	4.2	4.3	0.10	0.10	0.10	Possibly Uniform
5/20/2017 6:55	8.1	6.8	6.6	3.6	3.7	4.9	5.1	-0.19	0.10	0.14	Relatively Uniform
5/26/2017 14:50	3.7	6.6	6.4	3.8	3.9	5.2	5.3	-0.17	0.08	0.11	Relatively Uniform
6/15/2017 1:50	3.7	6.6	6.5	3.6	3.7	5.2	5.2	-0.13	0.12	0.03	Possibly Uniform
7/10/2017 6:15	6.1	6.6	6.8	3.6	3.7	5.0	5.3	0.17	0.11	0.25	Relatively Uniform
7/10/2017 18:45	5.2	7.0	8.3	Meter spikes to zero		4.6	5.7	1.29	-	1.06	Possibly Uniform
7/26/2017 20:20	5.2	6.7	6.6	3.8	3.9	5.2	5.5	-0.12	0.09	0.25	Relatively Uniform
8/22/2017 2:00	4.4	6.0	6.3	3.7	3.8	4.7	5.1	0.28	0.17	0.34	Relatively Uniform
10/14/2017 13:20	4.2	6.5	6.4	3.9	4.2	5.0	5.2	-0.07	0.27	0.16	Variable
10/14/2017 19:35	13.6	7.2	7.0	3.8	3.9	5.8	6.2	-0.16	0.12	0.38	Relatively Uniform
VERIFICATION EVENTS - DEPTH											
4/26/2017 22:30	9.5	6.4	6.4	3.9	4.0	5.1	5.1	0.04	0.09	0.06	Relatively Uniform
4/29/2017 11:00	37.9	9.3	8.3	3.7	3.8	6.1	5.9	-1.02	0.06	-0.24	Possibly Uniform
5/19/2017 7:00	8.0	6.5	6.4	3.6	3.7	4.6	4.8	-0.09	0.07	0.14	Possibly Uniform
6/17/2017 21:00	8.5	6.8	6.8	3.0	3.9	4.8	5.1	0.04	0.95	0.35	Variable
7/22/2017 6:15	5.8	6.6	6.5	3.5	3.7	4.7	5.0	-0.13	0.20	0.30	Variable
9/18/2017 21:30	5.5	6.8	7.3	3.7	3.9	5.1	5.5	0.51	0.20	0.36	Variable
10/10/2017 13:10	5.8	6.7	7.0	3.7	3.9	5.1	5.5	0.28	0.16	0.38	Possibly Uniform
10/10/2017 19:00	9.2	6.7	6.6	3.8	4.2	4.9	5.4	-0.08	0.37	0.45	Possibly Uniform
10/22/2017 5:30	10.4	6.7	6.8	3.4	3.7	4.6	5.0	0.06	0.32	0.38	Variable
Notes: Surcharge Depth = 6.5 feet Meter data spikes to zero were removed from the minimum depth calculation						WEIGHTED AVERAGES					
						Calibration - Relatively Uniform		-0.06	0.10	0.20	
						Calibration - Possibly Uniform		0.46	0.11	0.39	
						Calibration - Variable		-0.07	0.27	0.16	
						Calibration - All Events		0.08	0.12	0.25	
						Verification - Relatively Uniform		0.04	0.09	0.06	
						Verification - Possibly Uniform		-0.30	0.17	0.16	
						Verification - Variable		0.12	0.40	0.35	
						Verification - All Events		-0.08	0.25	0.23	
						Weighted Average - All Events		0.00	0.18	0.24	All Events
						NET AVERAGES					
						Calibration - Relatively Uniform		-0.05	0.10	0.20	
						Calibration - Possibly Uniform		0.42	0.11	0.40	
						Calibration - Variable		-0.07	0.27	0.16	
						Calibration- All Events		0.07	0.12	0.25	
						Verification - Relatively Uniform		0.04	0.09	0.06	
						Verification - Possibly Uniform		-0.23	0.16	0.18	
						Verification - Variable		0.12	0.42	0.35	
						Verification- All Events		-0.04	0.27	0.24	
Net Average - All Events		0.03	0.20	0.26	All Events						

Notes:

Surcharge Depth = 6.5 feet

Meter data spikes to zero were removed from the minimum depth calculation

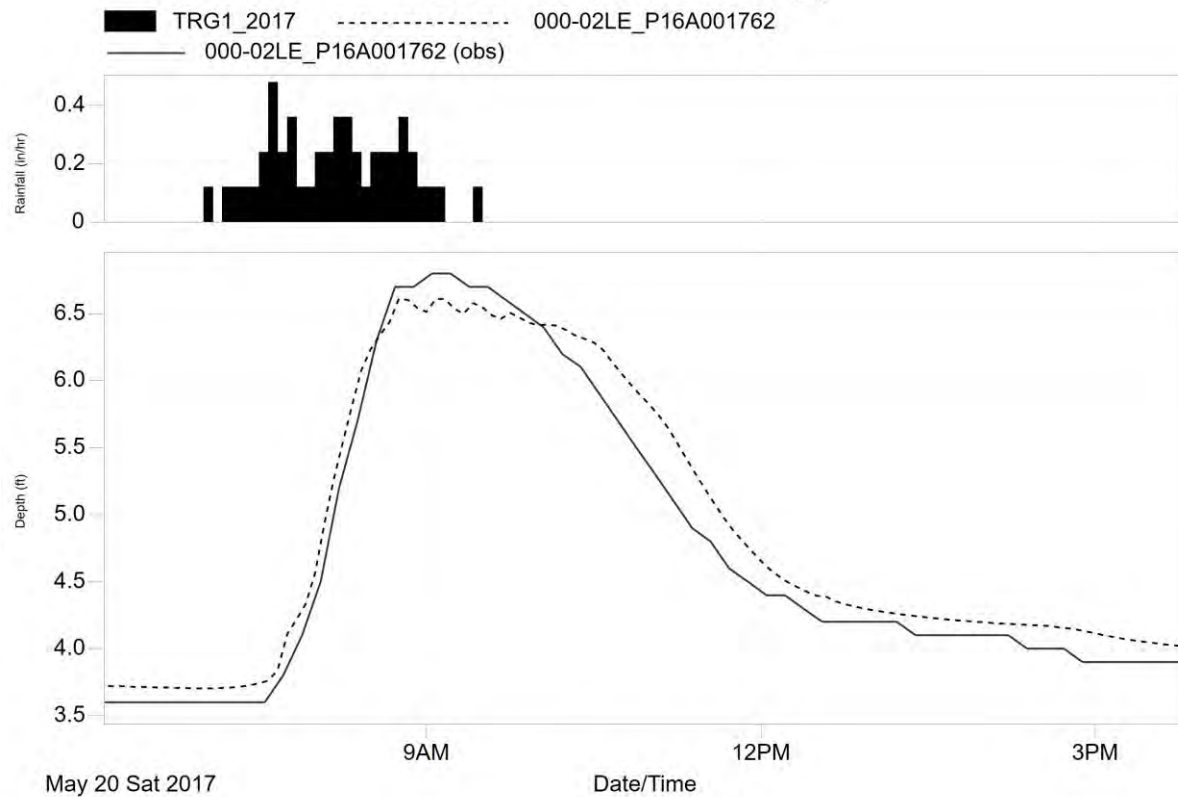
RFI at Cedar 000-02LE – Calibration Events



RFI at Cedar 000-02LE – Calibration Events

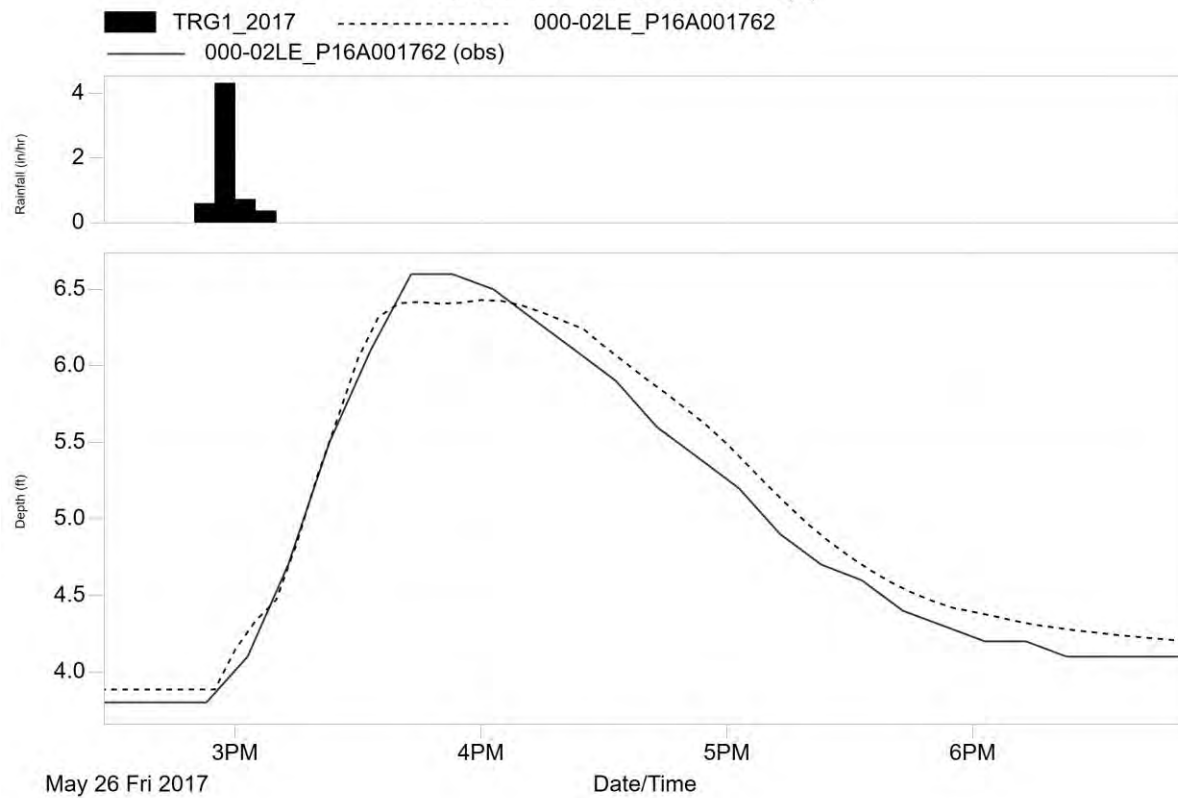
Event of May 20, 2017

Duration: 8.08 h, Total Rainfall: 0.46 (in)

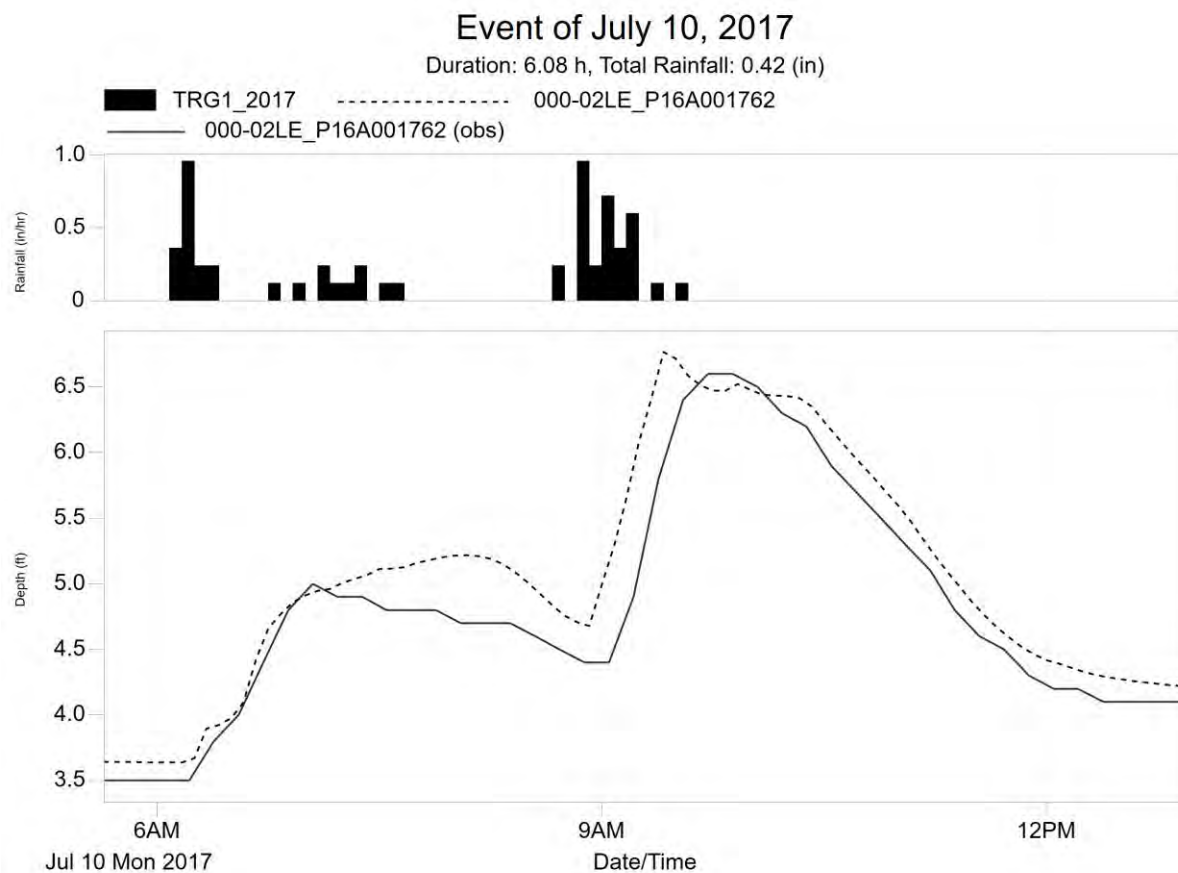
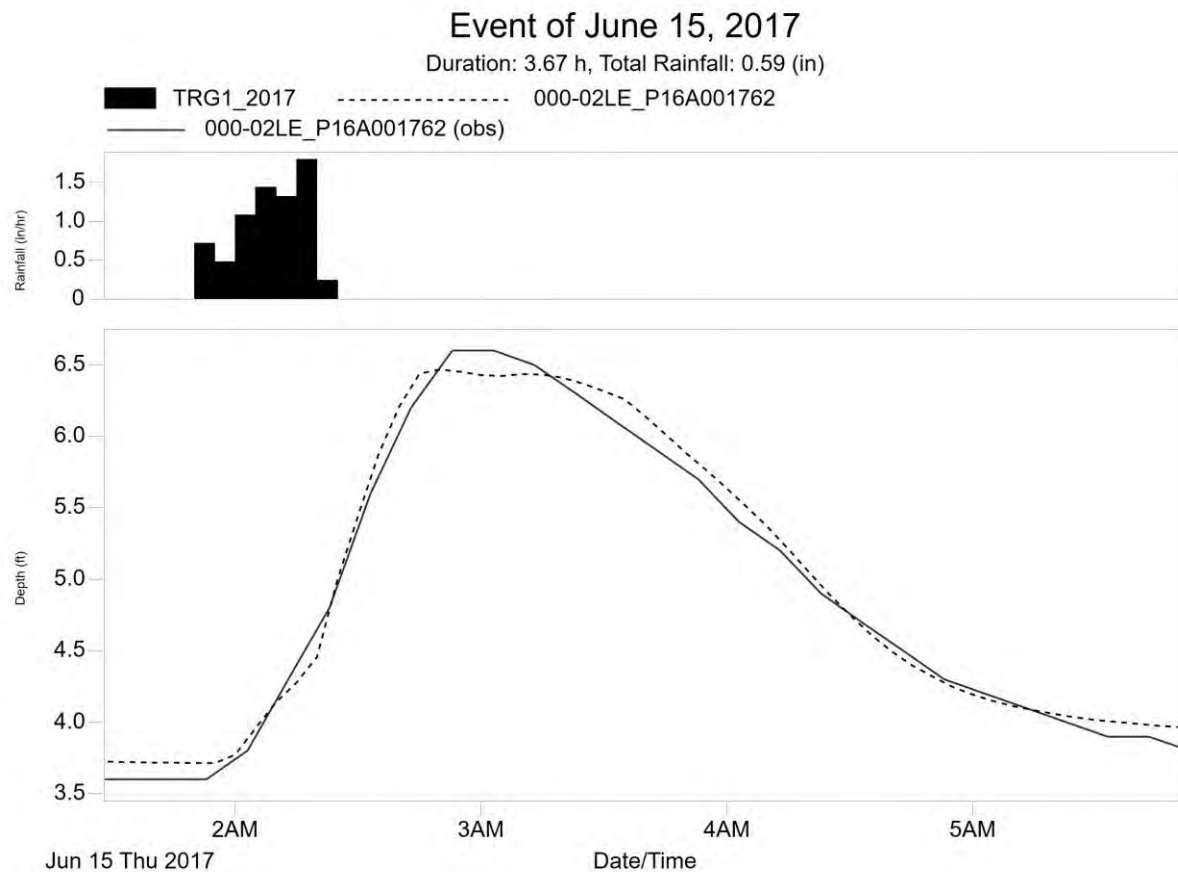


Event of May 26, 2017

Duration: 3.67 h, Total Rainfall: 0.5 (in)



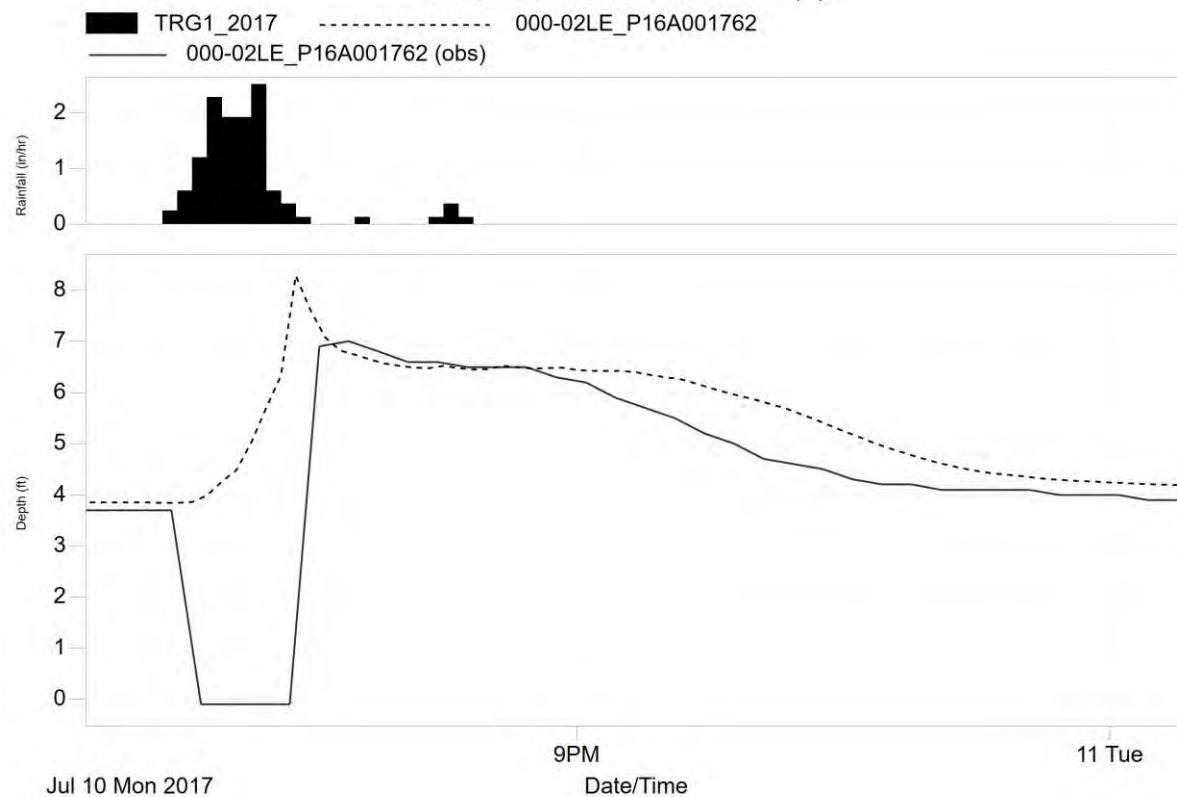
RFI at Cedar 000-02LE – Calibration Events



RFI at Cedar 000-02LE – Calibration Events

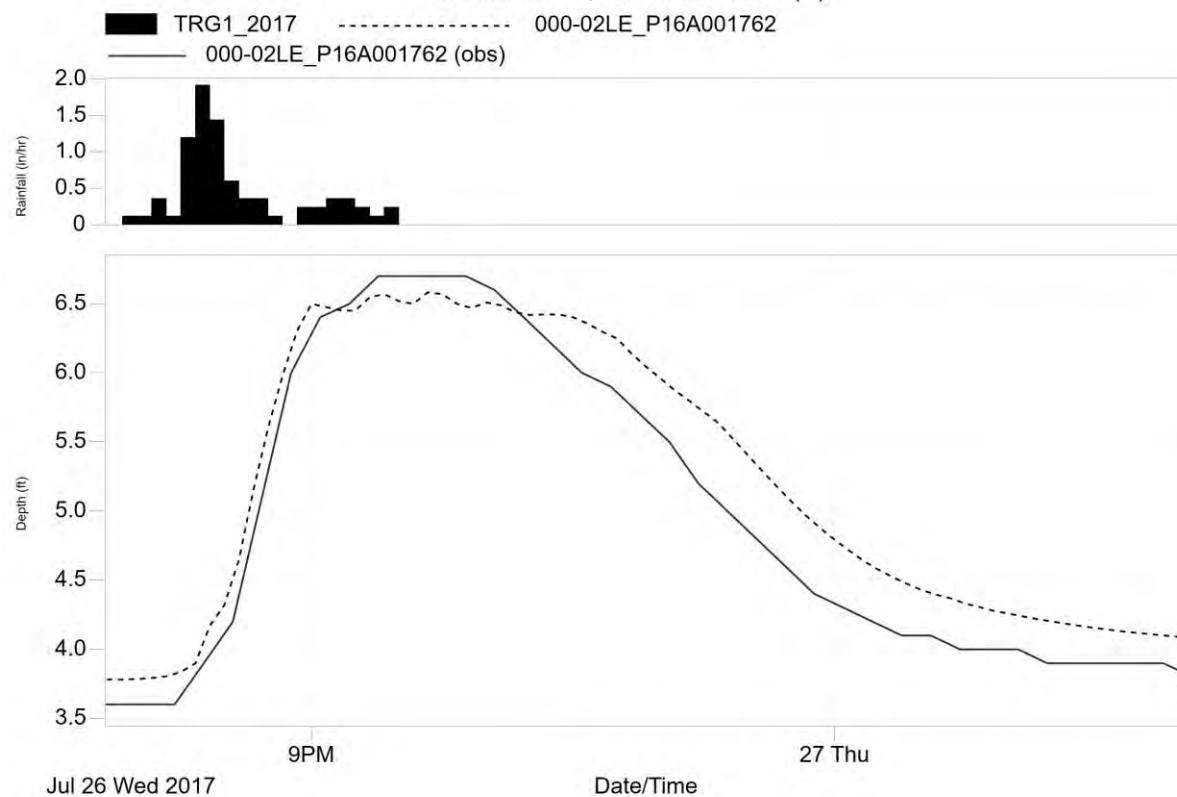
Event of July 10, 2017

Duration: 5.17 h, Total Rainfall: 1.02 (in)



Event of July 26, 2017

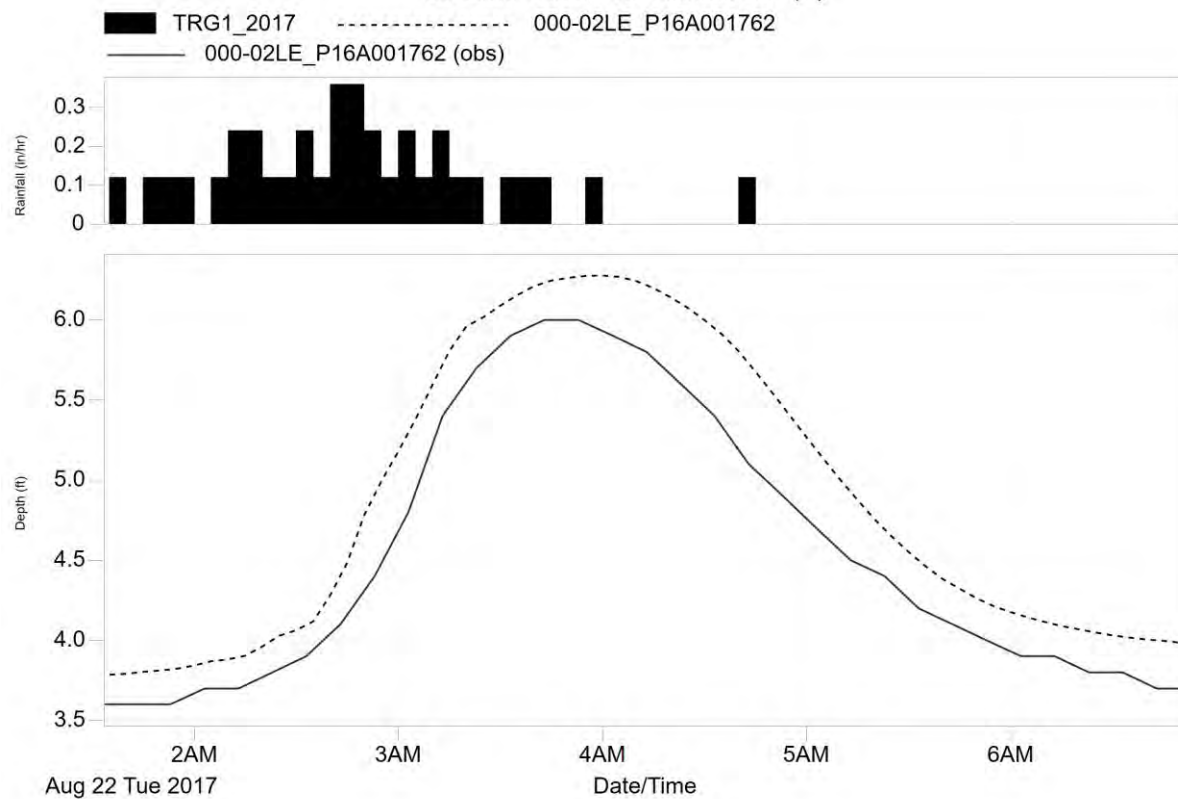
Duration: 5.17 h, Total Rainfall: 0.55 (in)



RFI at Cedar 000-02LE – Calibration Events

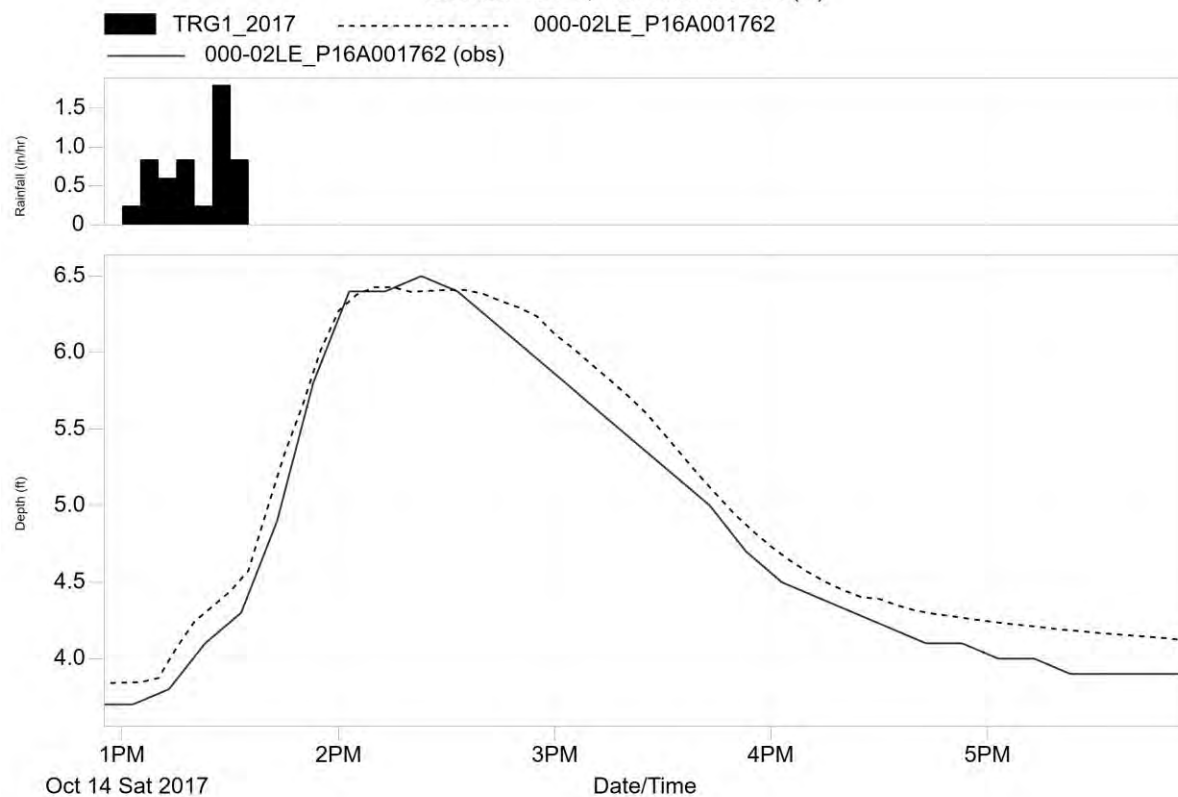
Event of August 22, 2017

Duration: 4.42 h, Total Rainfall: 0.31 (in)

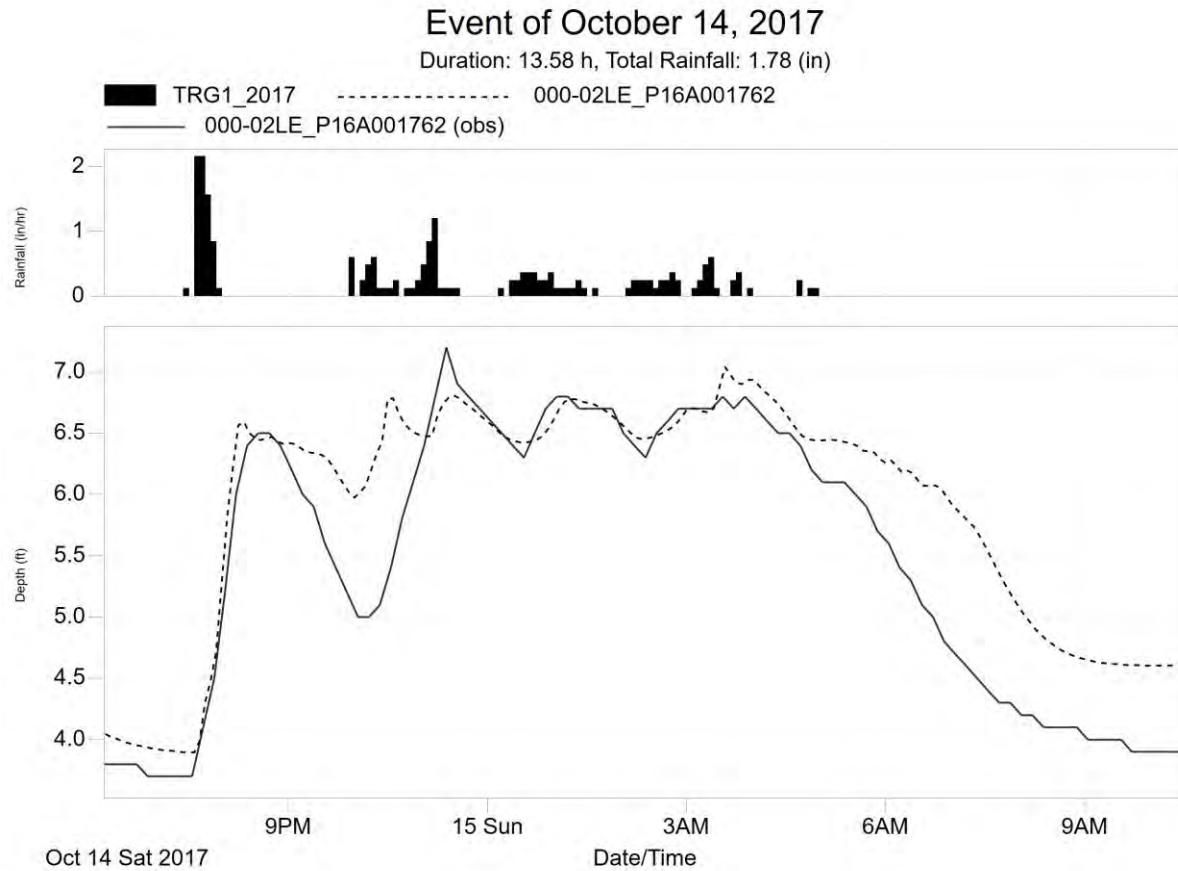


Event of October 14, 2017

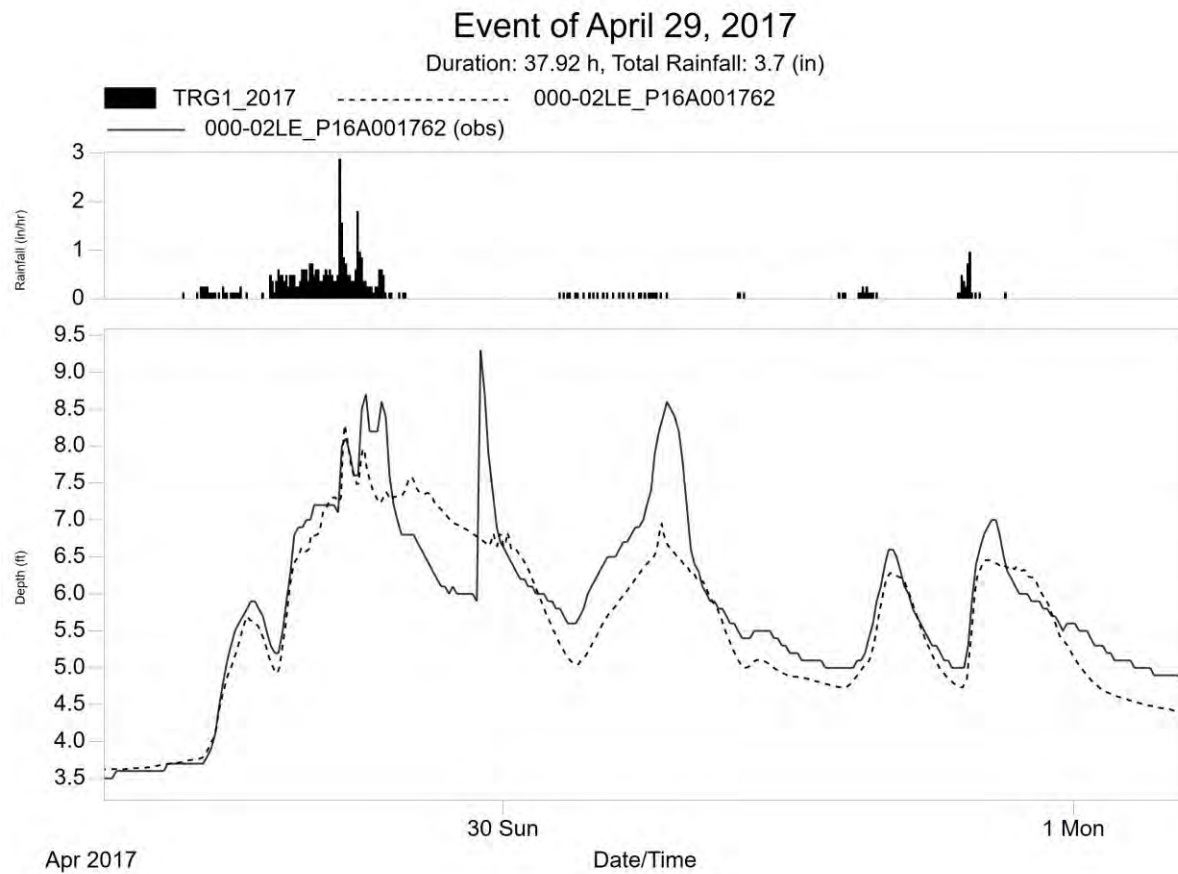
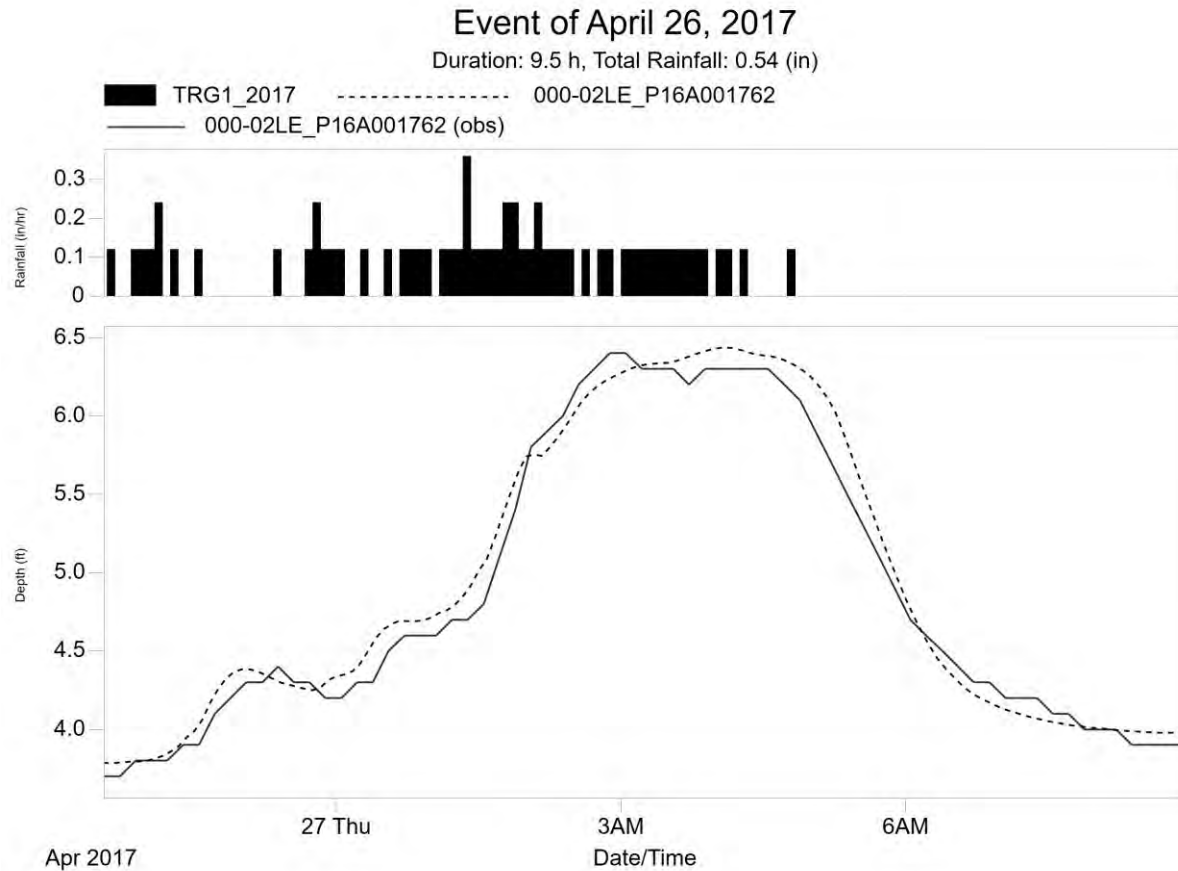
Duration: 4.17 h, Total Rainfall: 0.24 (in)



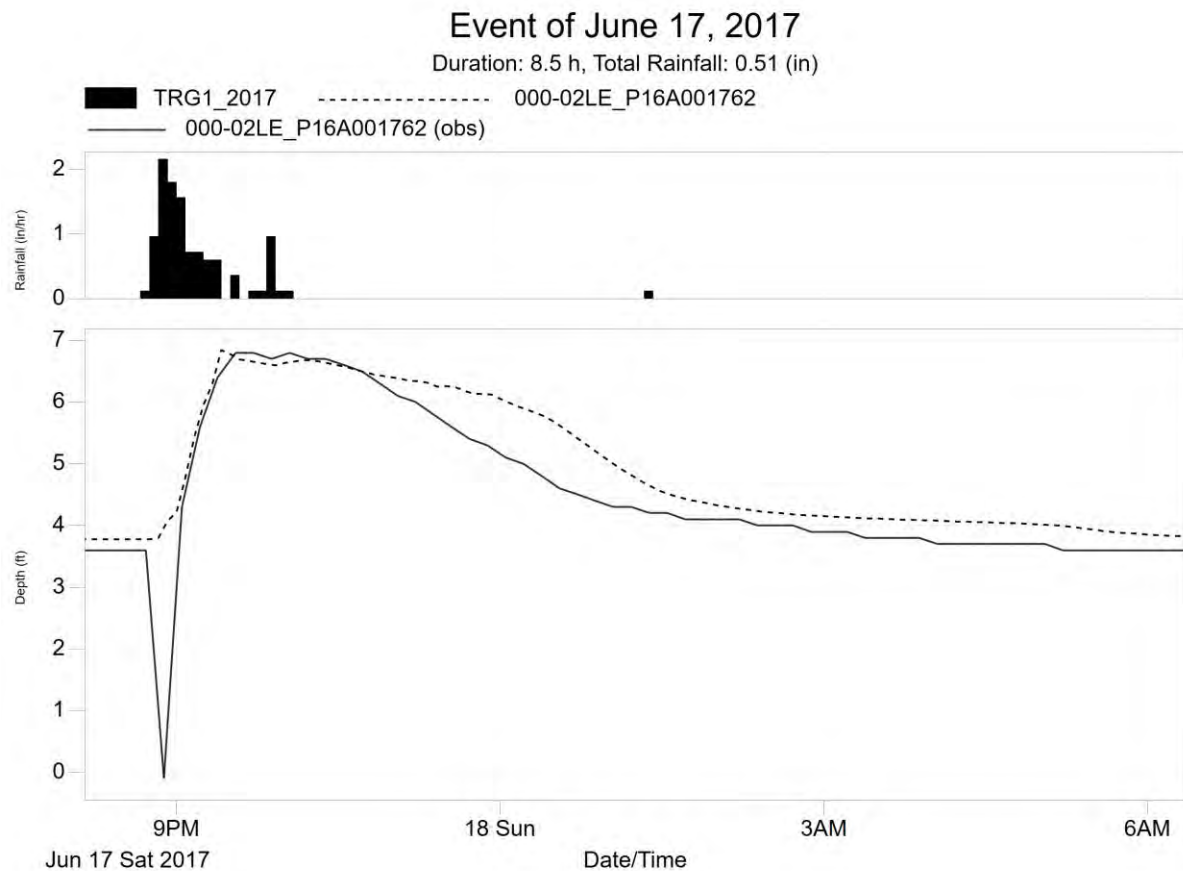
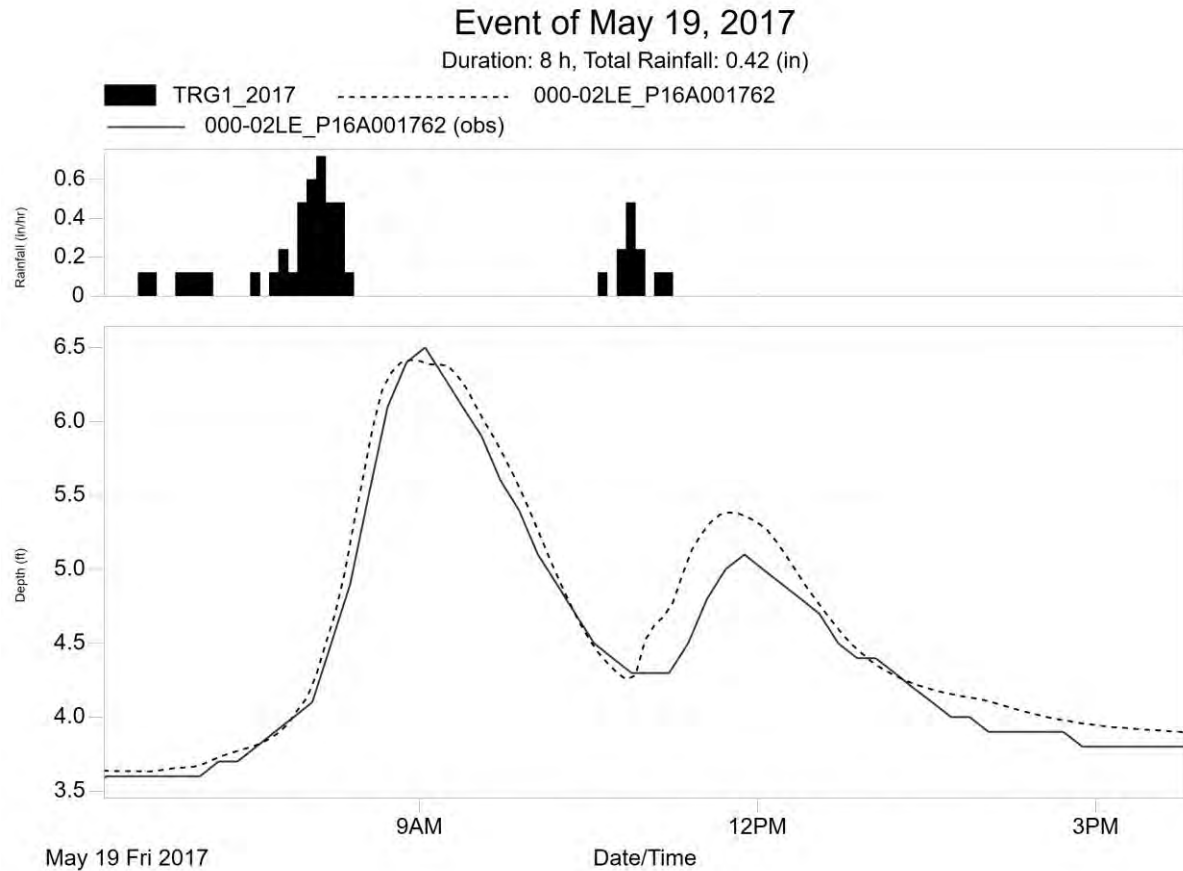
RFI at Cedar 000-02LE – Calibration Events



RFI at Cedar 000-02LE – Verification Events



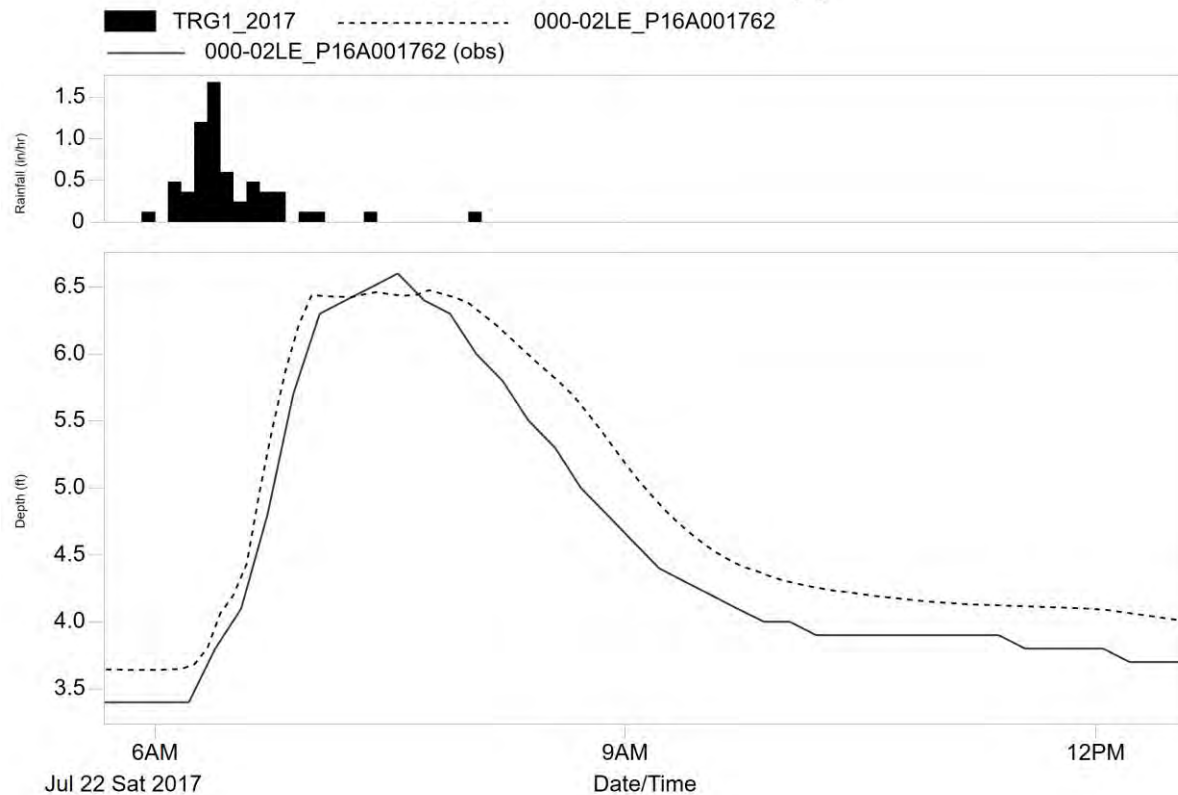
RFI at Cedar 000-02LE – Verification Events



RFI at Cedar 000-02LE – Verification Events

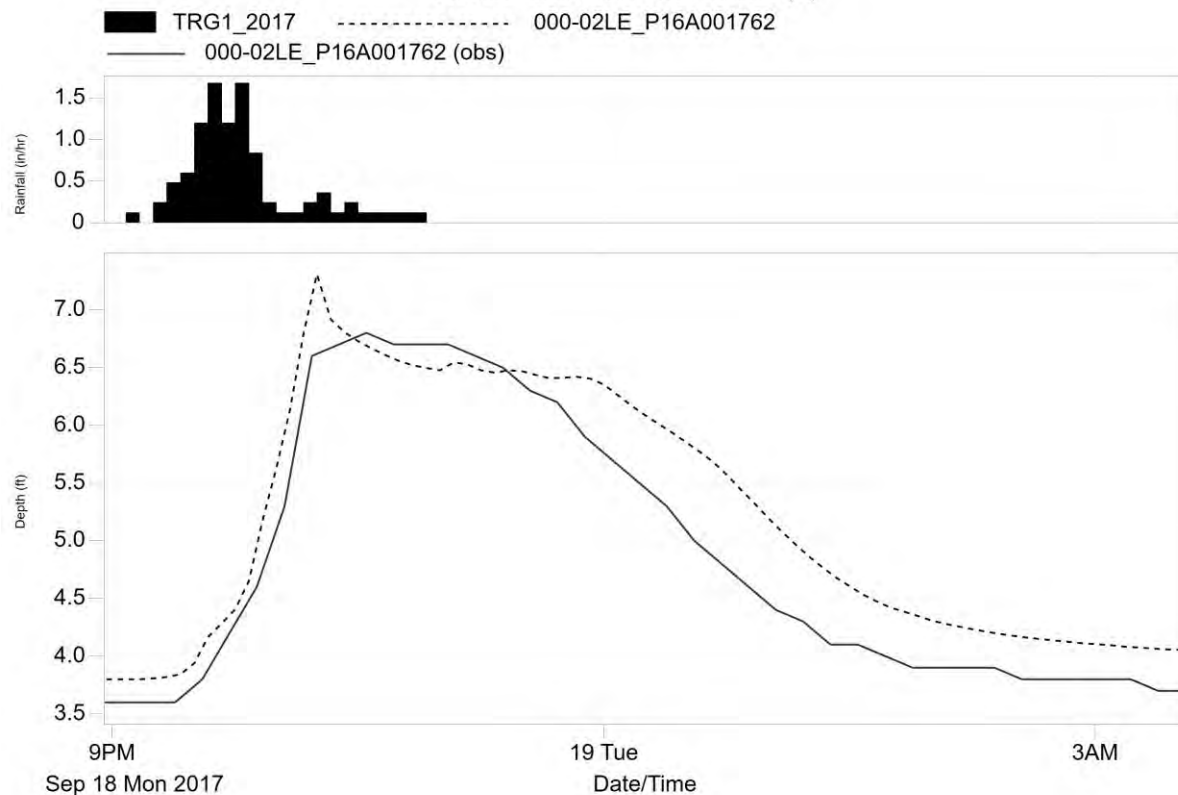
Event of July 22, 2017

Duration: 5.75 h, Total Rainfall: 0.45 (in)

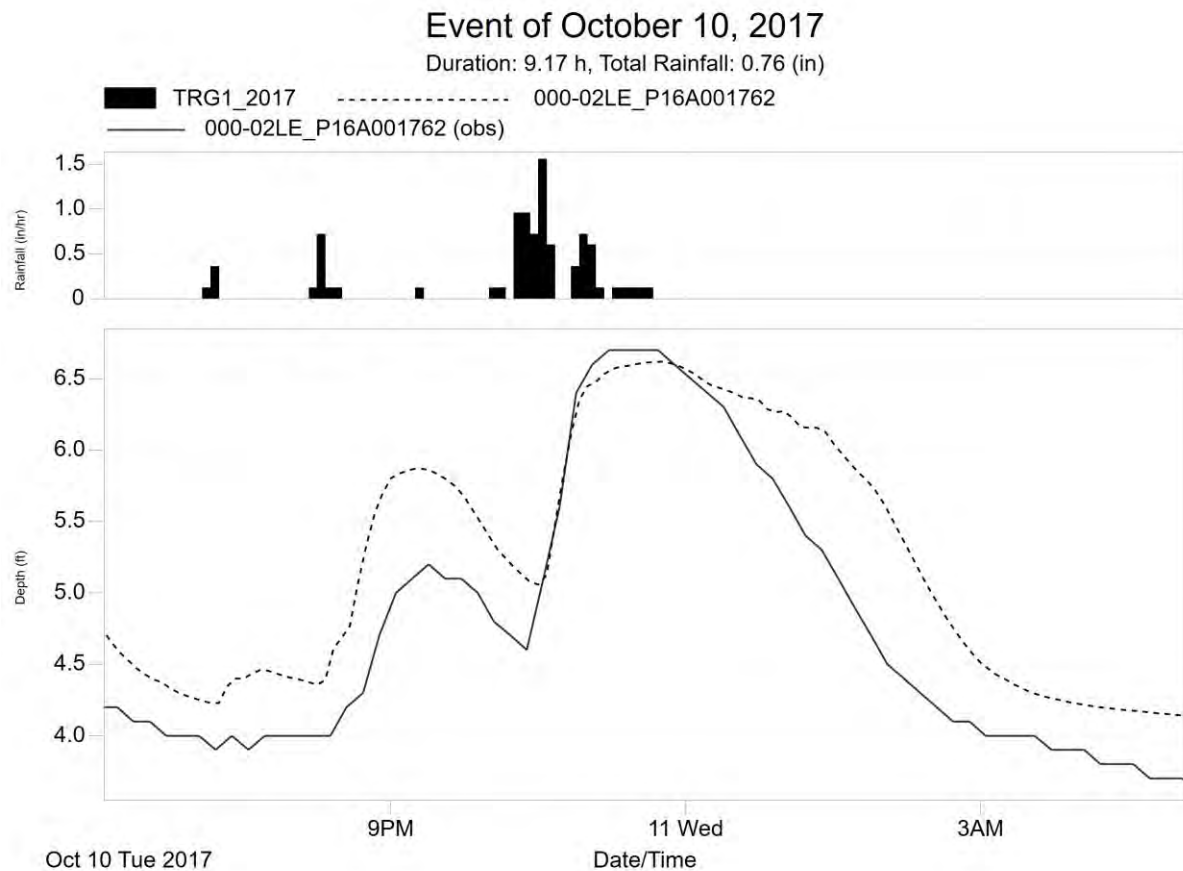
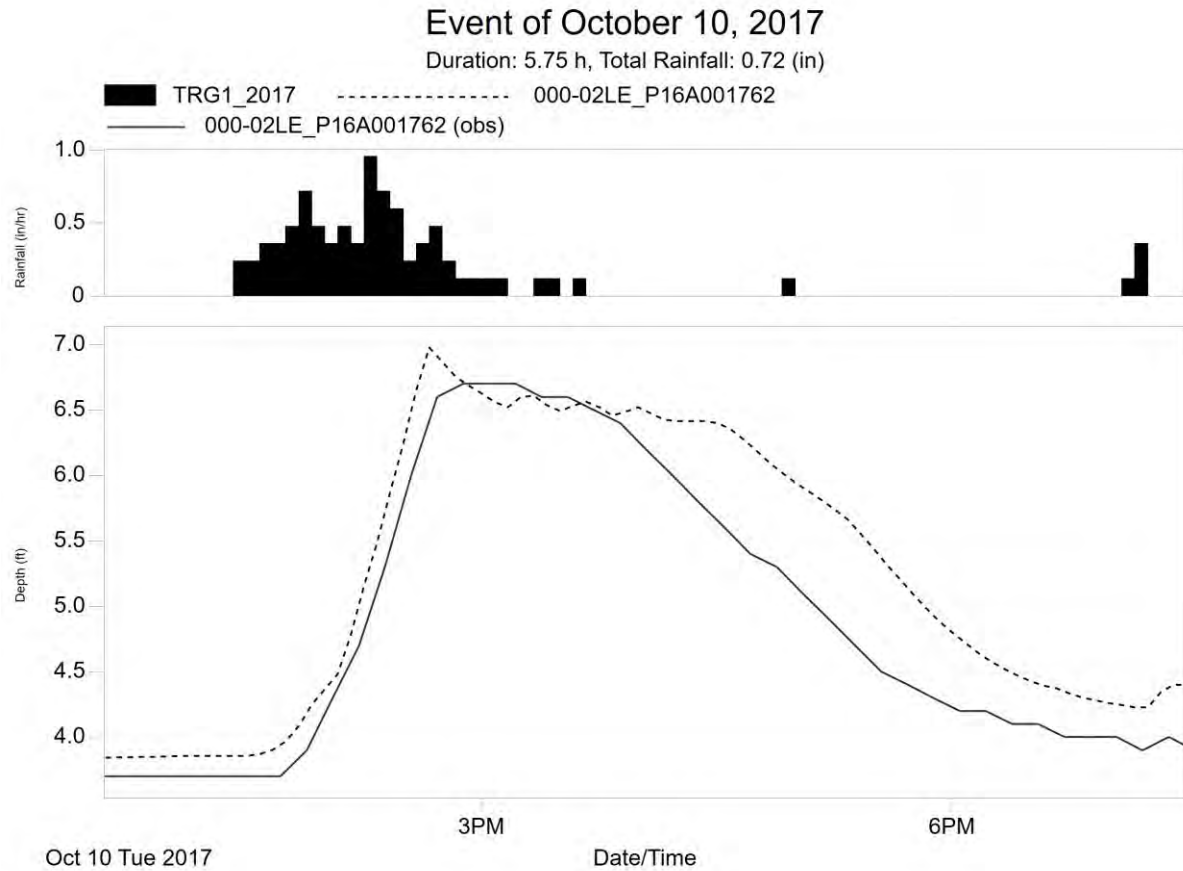


Event of September 18, 2017

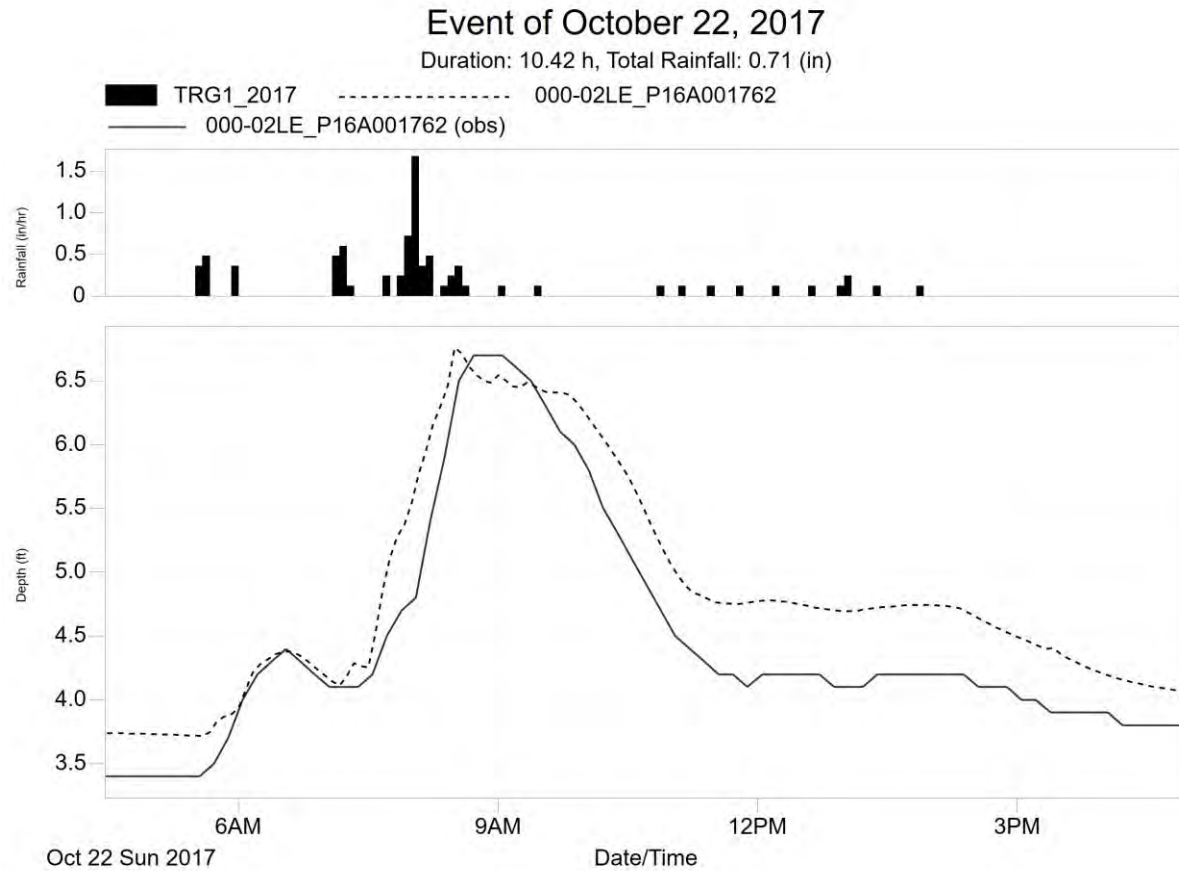
Duration: 5.5 h, Total Rainfall: 0.72 (in)



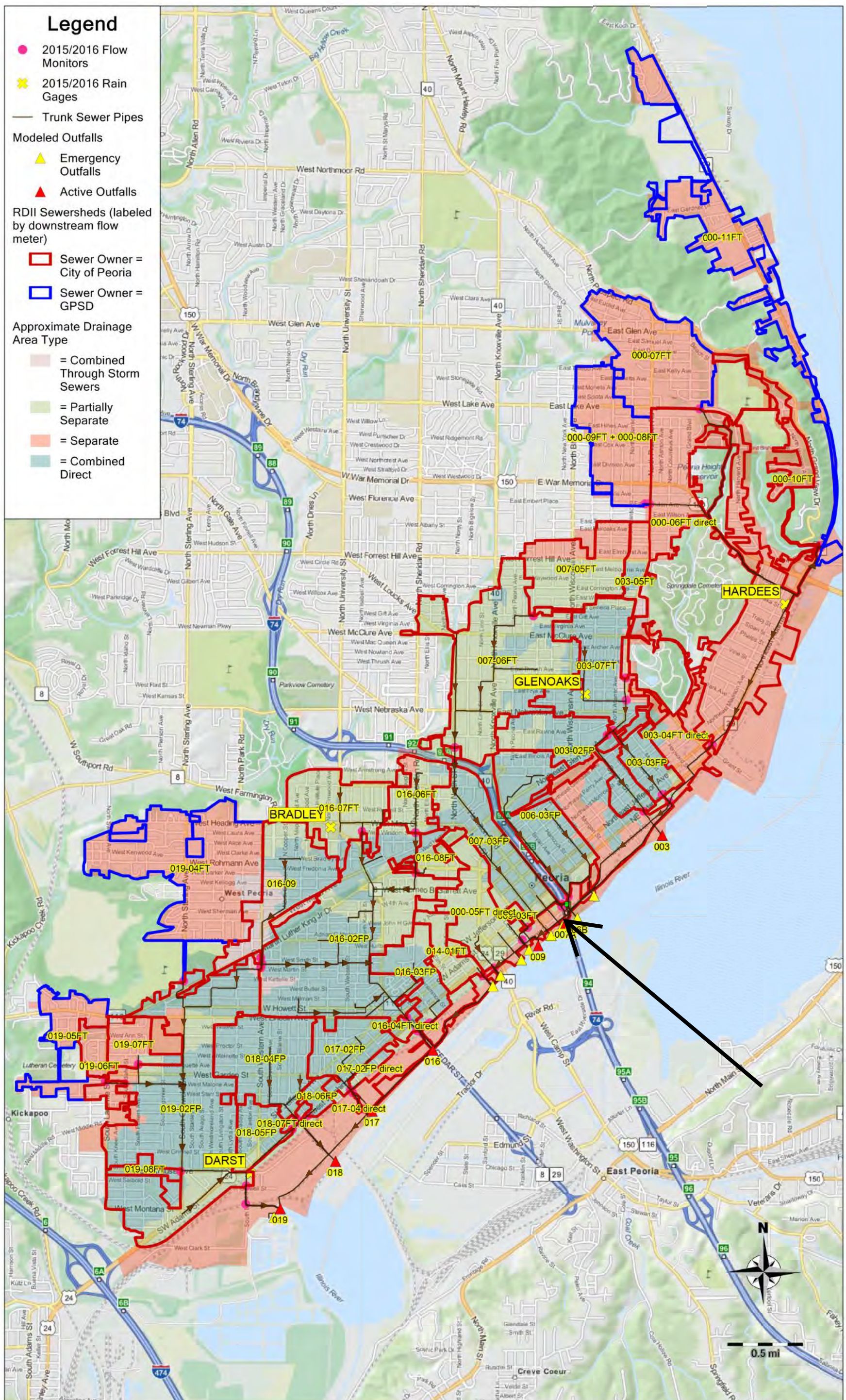
RFI at Cedar 000-02LE – Verification Events



RFI at Cedar 000-02LE – Verification Events



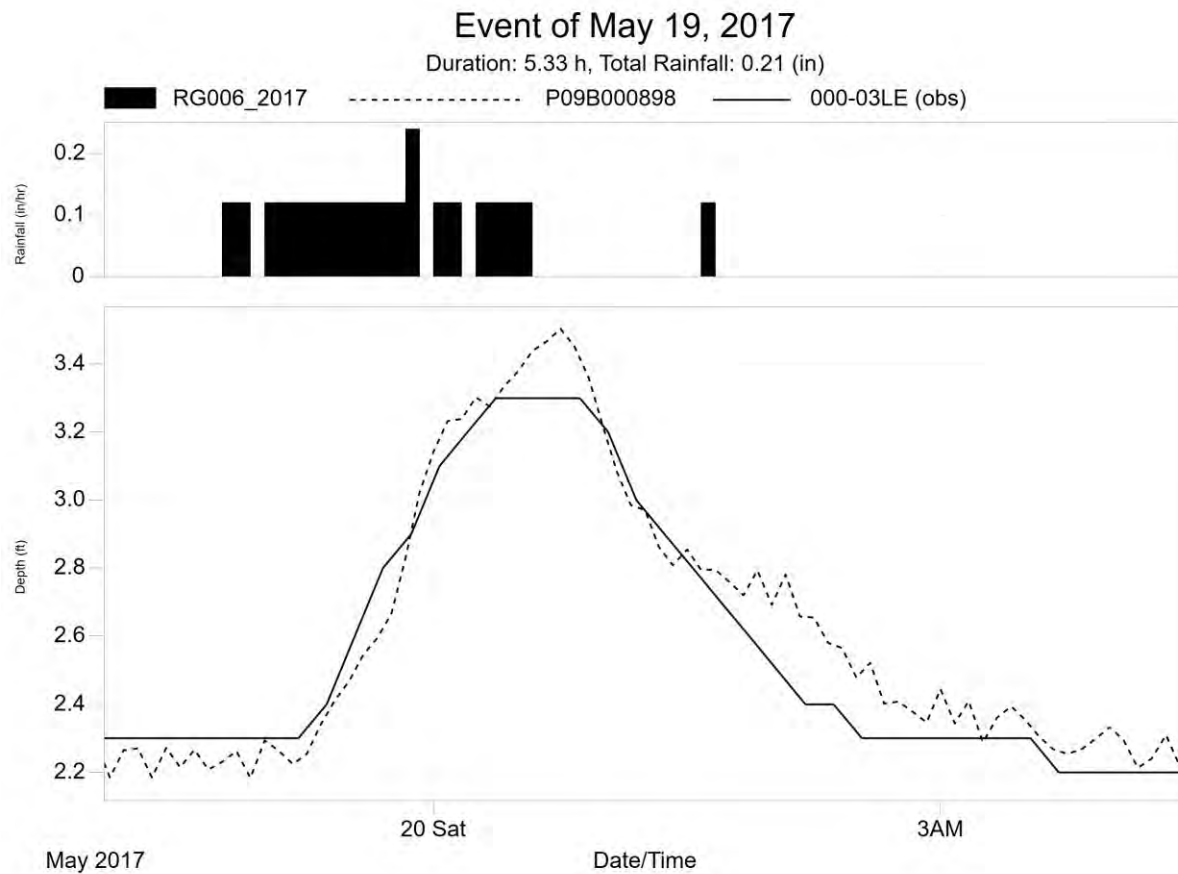
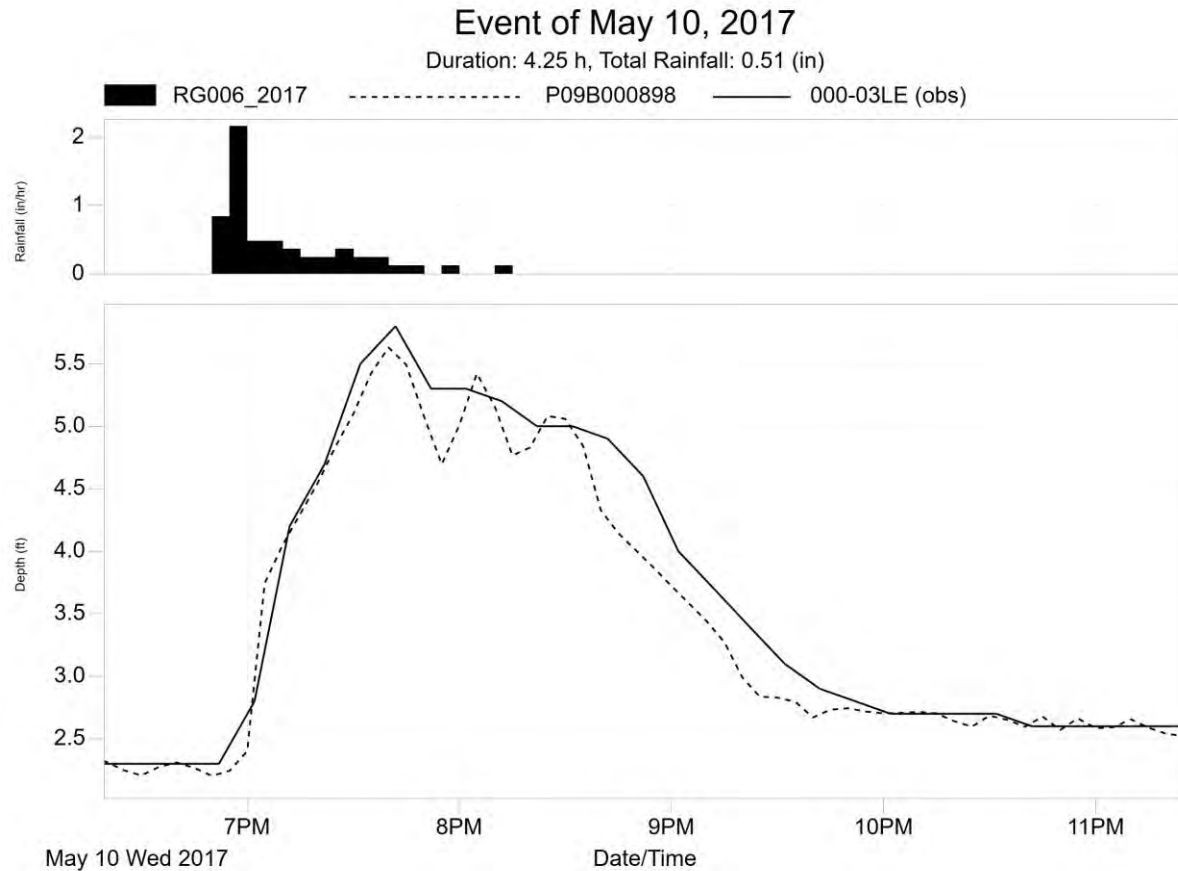
Level Meter 000-03LE Location Map



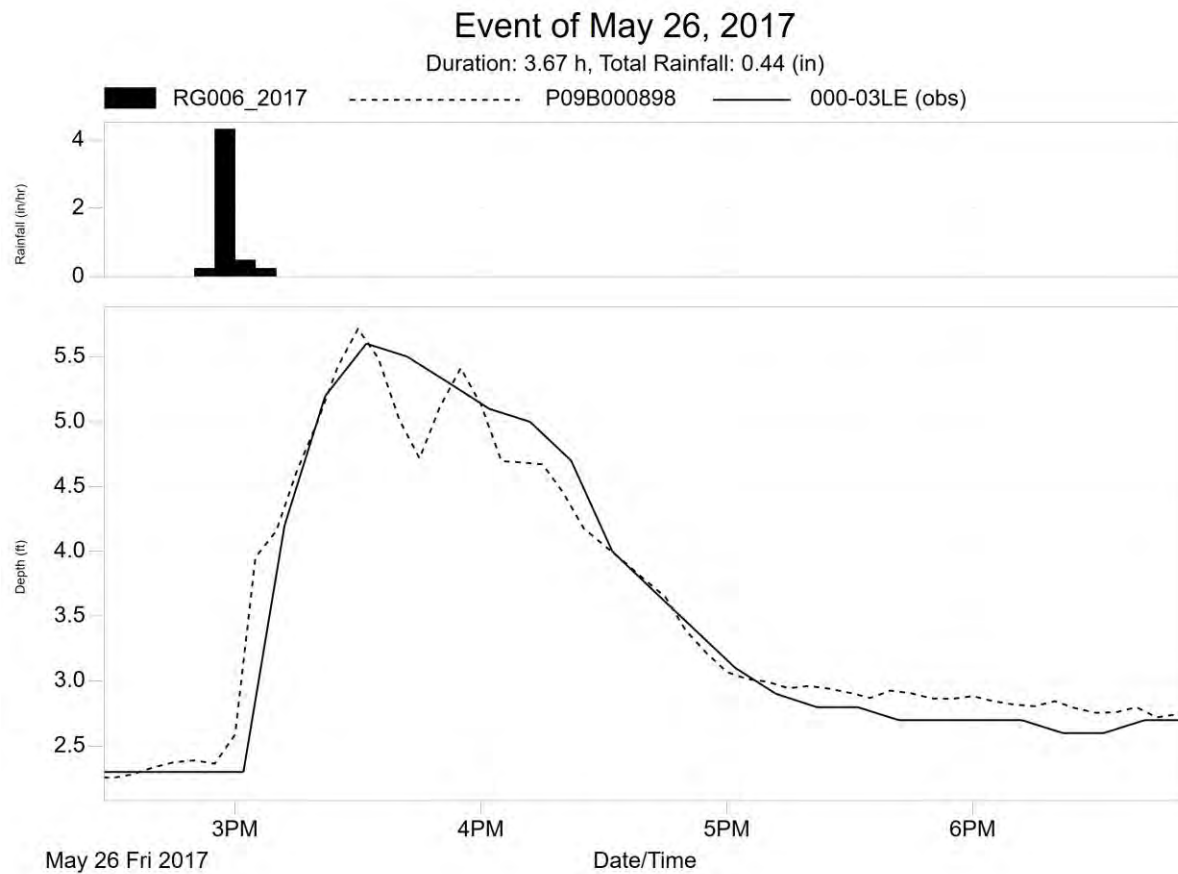
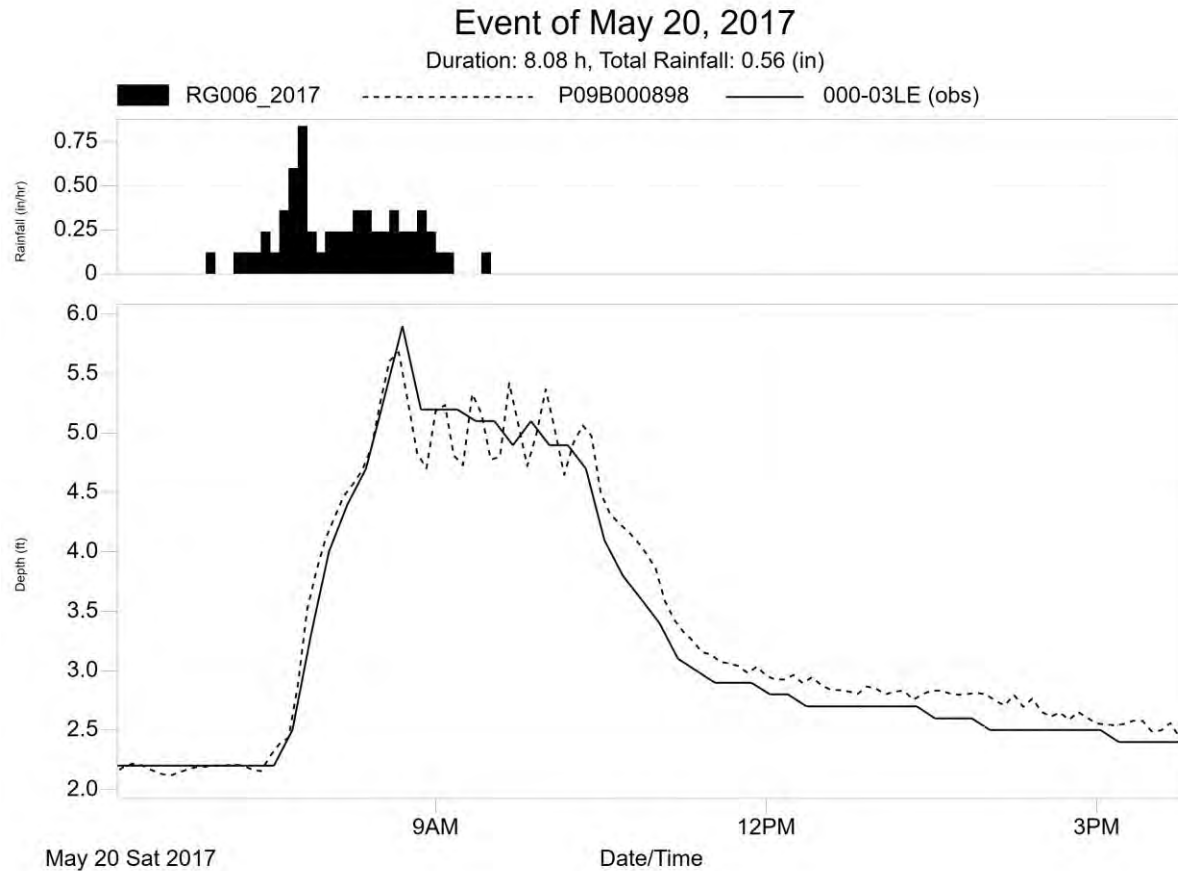
RFI 000-03LE Depth

Date	Duration (h)	Maximum Depth (ft)		Minimum Depth (ft)		Average Depth (ft)		Maximum Depth (ft)	Minimum Depth (ft)	Average Depth (ft)	Rainfall Variability
		metered	modeled	metered	modeled	metered	modeled	Surcharged: -0.33 ft to +1.67 ft			
CALIBRATION EVENTS - DEPTH								Non-Surcharged: -0.33 ft to +0.33 ft			
5/10/2017 18:45	4.3	5.8	5.6	2.3	2.2	3.8	3.7	-0.17	-0.09	-0.17	Relatively Uniform
5/19/2017 22:35	5.3	3.3	3.5	2.2	2.2	2.6	2.7	0.20	-0.02	0.05	Possibly Uniform
5/20/2017 6:55	8.1	5.9	5.7	2.2	2.2	3.5	3.6	-0.22	-0.04	0.12	Relatively Uniform
5/26/2017 14:50	3.7	5.6	5.7	2.3	2.4	3.7	3.7	0.12	0.07	0.03	Relatively Uniform
6/15/2017 1:50	3.7	5.5	5.9	2.1	2.1	3.7	3.6	0.36	-0.03	-0.05	Possibly Uniform
7/10/2017 6:15	6.1	5.6	6.0	2.2	2.1	3.5	3.7	0.42	-0.13	0.19	Relatively Uniform
7/10/2017 18:45	5.2	6.1	6.9	2.2	2.4	3.7	4.1	0.85	0.13	0.45	Possibly Uniform
7/26/2017 20:20	5.2	5.8	5.8	2.5	2.7	3.8	4.0	-0.03	0.19	0.15	Relatively Uniform
8/22/2017 2:00	4.4	4.2	4.6	2.2	2.3	3.1	3.4	0.41	0.14	0.30	Relatively Uniform
10/14/2017 13:20	4.2	5.5	5.7	2.4	2.6	3.5	3.7	0.15	0.22	0.12	Variable
10/14/2017 19:35	13.6	7.1	6.0	2.5	2.3	4.4	4.8	-1.06	-0.19	0.38	Relatively Uniform
VERIFICATION EVENTS - DEPTH											
4/26/2017 22:30	9.5	4.6	4.9	2.5	2.6	3.3	3.5	0.28	0.05	0.14	Relatively Uniform
4/29/2017 11:00	37.9	7.4	7.1	2.2	2.2	4.8	4.4	-0.25	-0.05	-0.38	Possibly Uniform
5/19/2017 7:00	8.0	5.0	5.5	2.2	2.2	3.0	3.1	0.46	-0.02	0.08	Possibly Uniform
6/17/2017 21:00	8.5	6.2	6.3	2.2	2.3	3.3	3.7	0.10	0.13	0.36	Variable
7/22/2017 6:15	5.8	5.7	5.8	2.1	2.2	3.3	3.5	0.09	0.09	0.25	Variable
9/18/2017 21:30	5.5	5.9	6.6	2.3	2.4	3.6	3.9	0.67	0.14	0.33	Variable
10/10/2017 13:10	5.8	5.8	6.0	2.2	2.2	3.7	3.9	0.23	0.02	0.26	Possibly Uniform
10/10/2017 19:00	9.2	6.1	6.4	2.2	2.6	3.5	3.9	0.33	0.41	0.42	Possibly Uniform
10/22/2017 5:30	10.4	5.6	6.1	2.0	2.1	3.1	3.4	0.53	0.12	0.37	Variable
Notes: Surcharge Depth = 5.0 feet						WEIGHTED AVERAGES					
						Calibration - Relatively Uniform		-0.13	-0.01	0.15	
						Calibration - Possibly Uniform		0.52	0.03	0.16	
						Calibration - Variable		0.15	0.22	0.12	
						Calibration - All Events		0.06	0.02	0.15	
						Verification - Relatively Uniform		0.28	0.05	0.14	
						Verification - Possibly Uniform		0.16	0.09	0.05	
						Verification - Variable		0.34	0.12	0.33	
						Verification - All Events		0.25	0.10	0.18	
						Weighted Average - All Events		0.15	0.06	0.16	All Events
						NET AVERAGES					
						Calibration - Relatively Uniform		-0.08	-0.01	0.15	
						Calibration - Possibly Uniform		0.47	0.03	0.15	
						Calibration - Variable		0.15	0.22	0.12	
						Calibration- All Events		0.09	0.02	0.14	
						Verification - Relatively Uniform		0.28	0.05	0.14	
						Verification - Possibly Uniform		0.19	0.09	0.09	
						Verification - Variable		0.35	0.12	0.33	
						Verification- All Events		0.27	0.10	0.20	
						Net Average - All Events		0.19	0.06	0.19	All Events

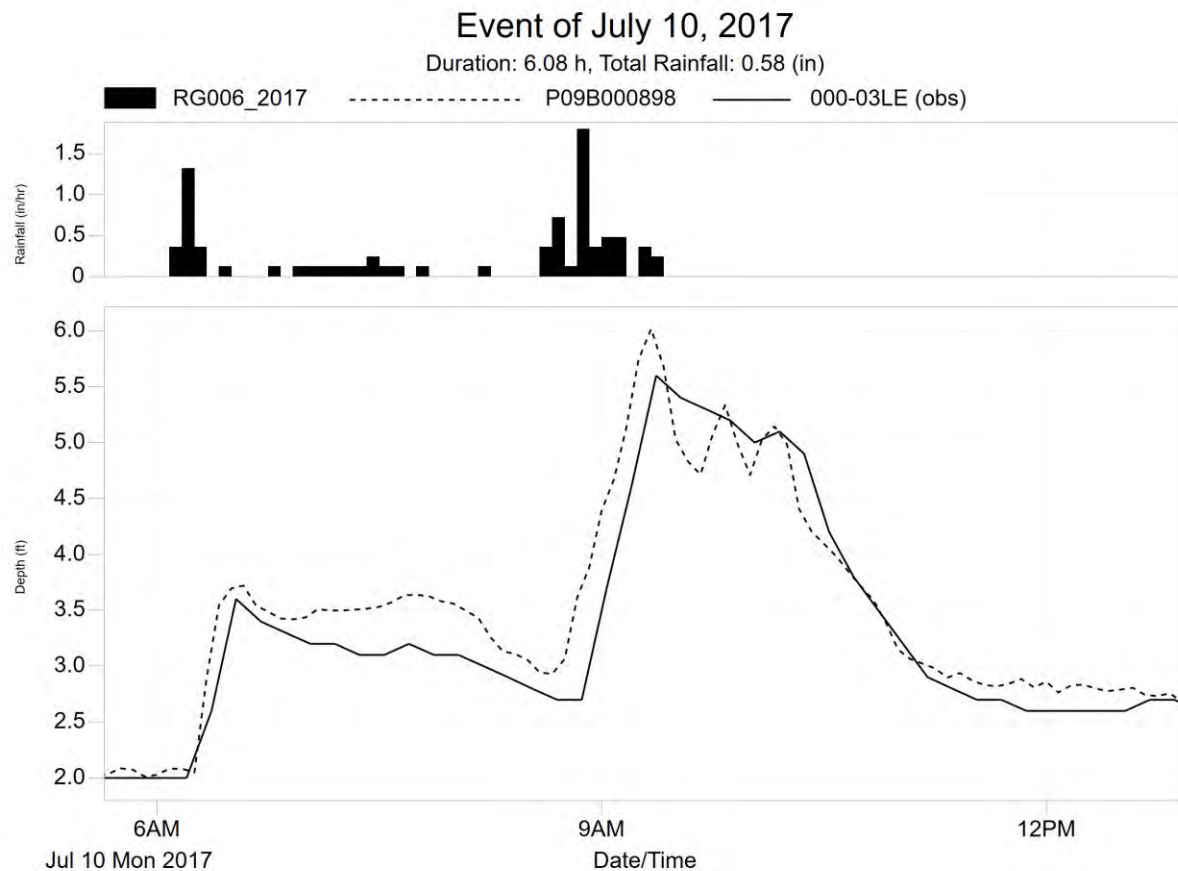
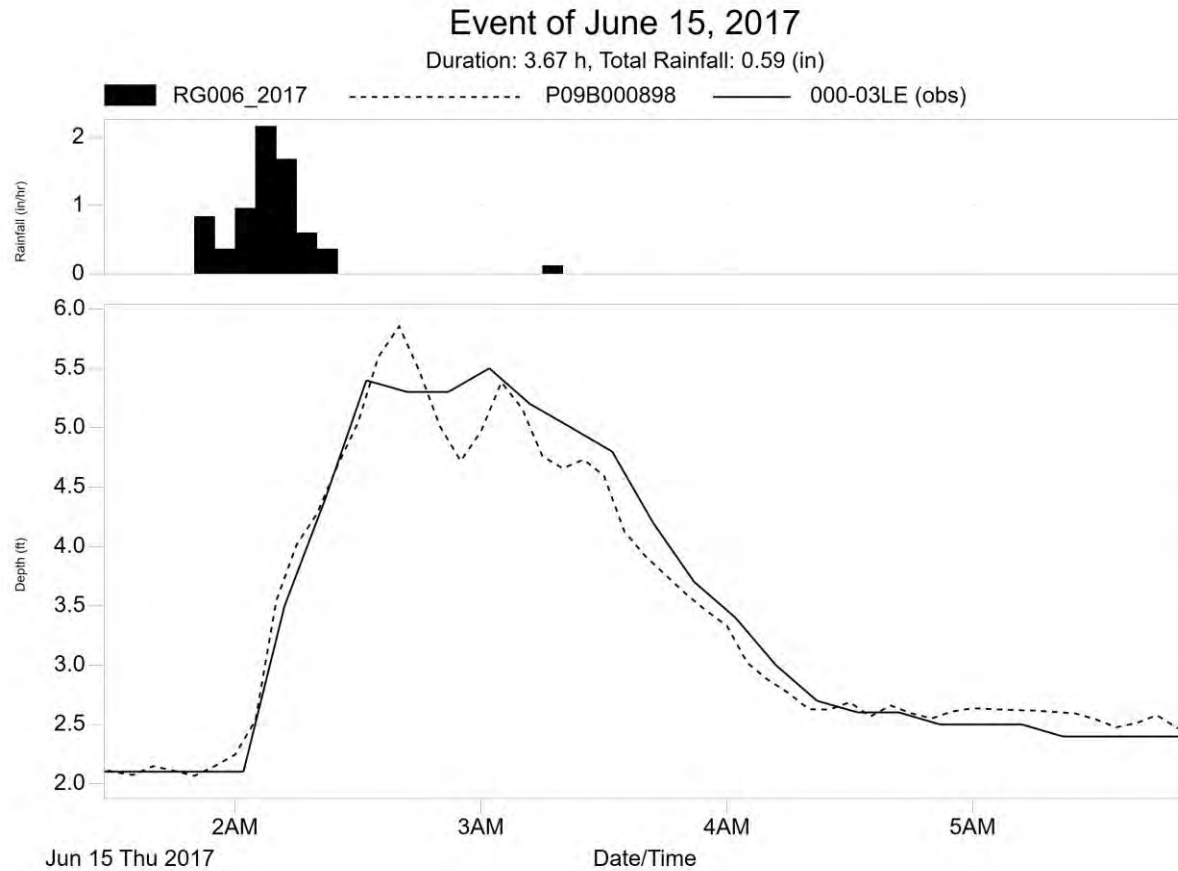
RFI at Fayette 000-03LE – Calibration Events



RFI at Fayette 000-03LE – Calibration Events



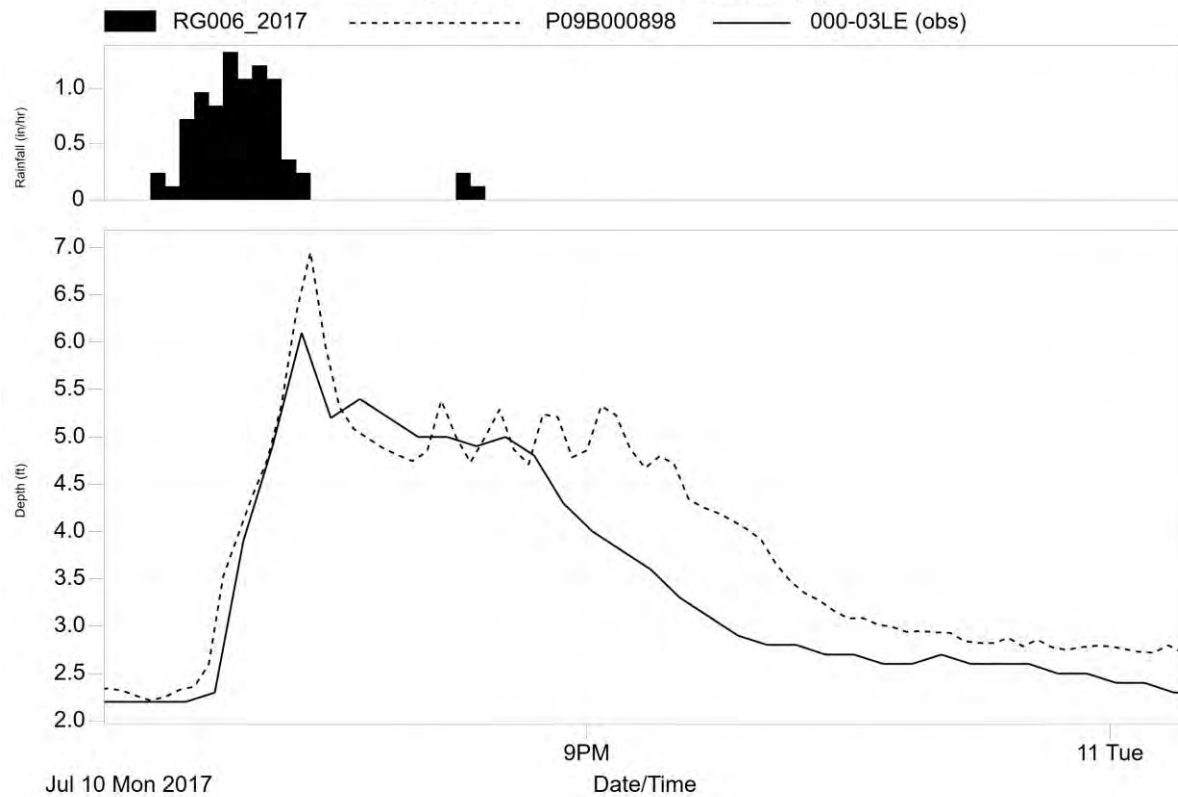
RFI at Fayette 000-03LE – Calibration Events



RFI at Fayette 000-03LE – Calibration Events

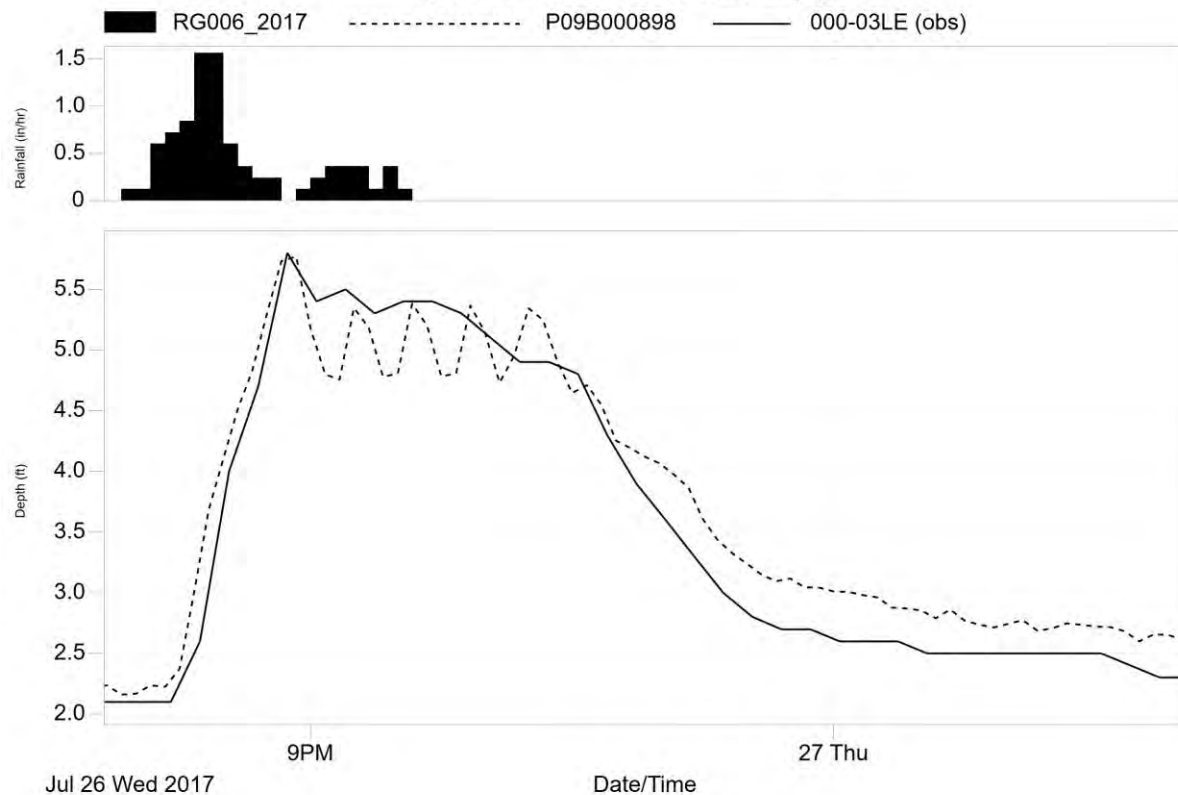
Event of July 10, 2017

Duration: 5.17 h, Total Rainfall: 0.62 (in)

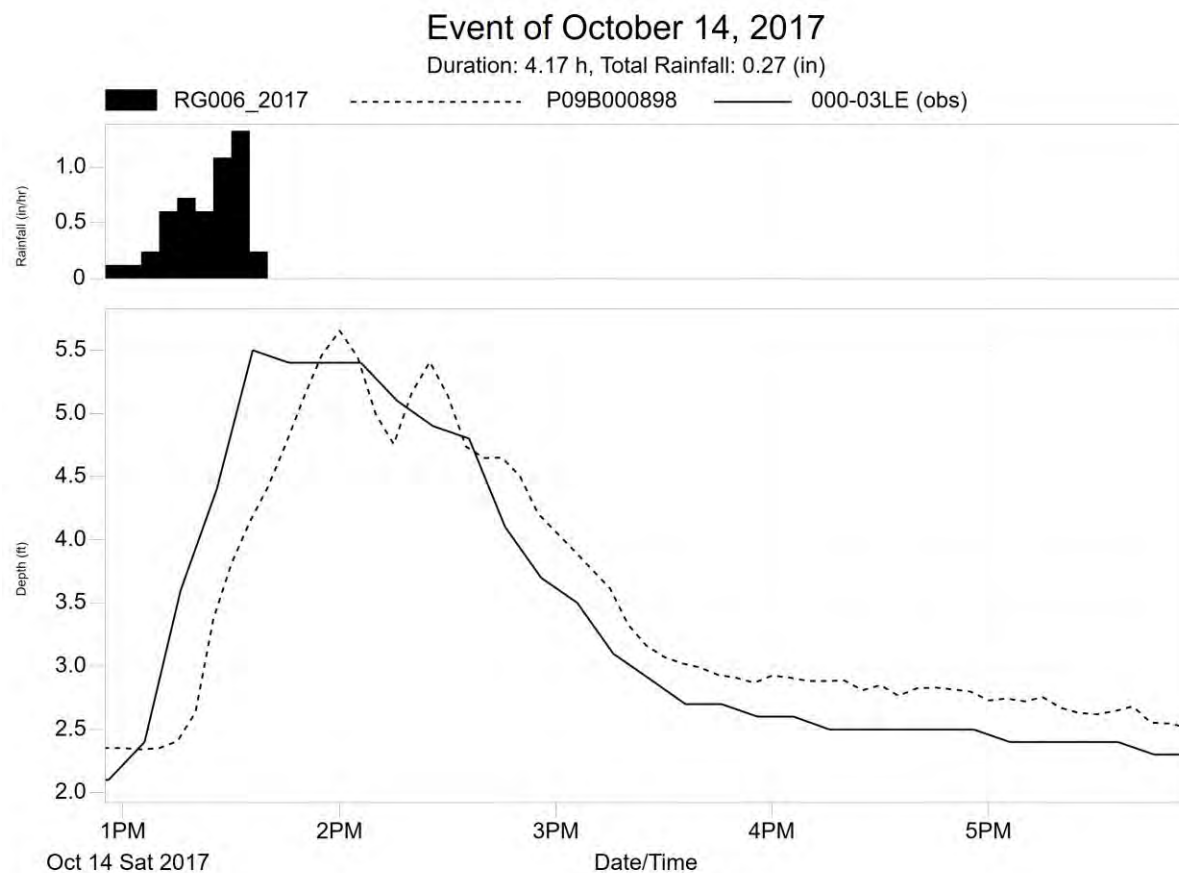
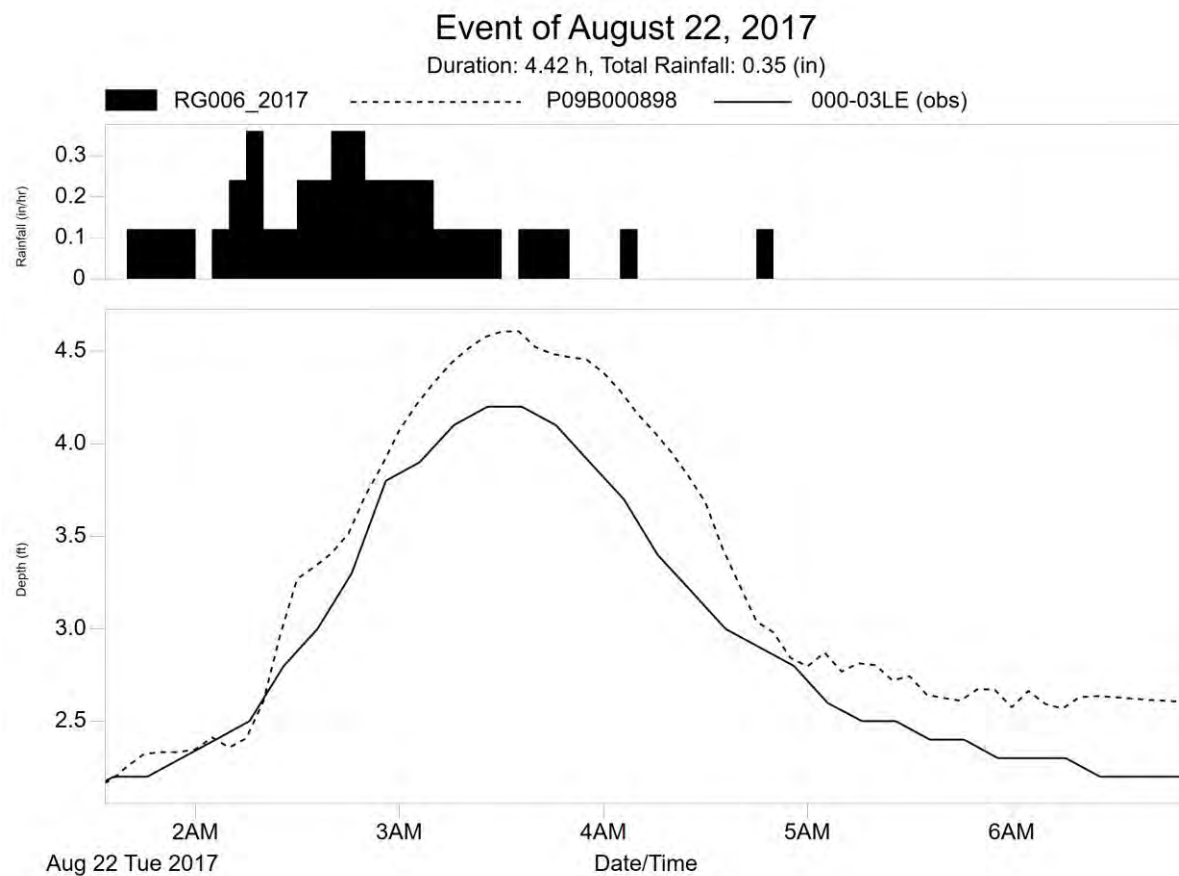


Event of July 26, 2017

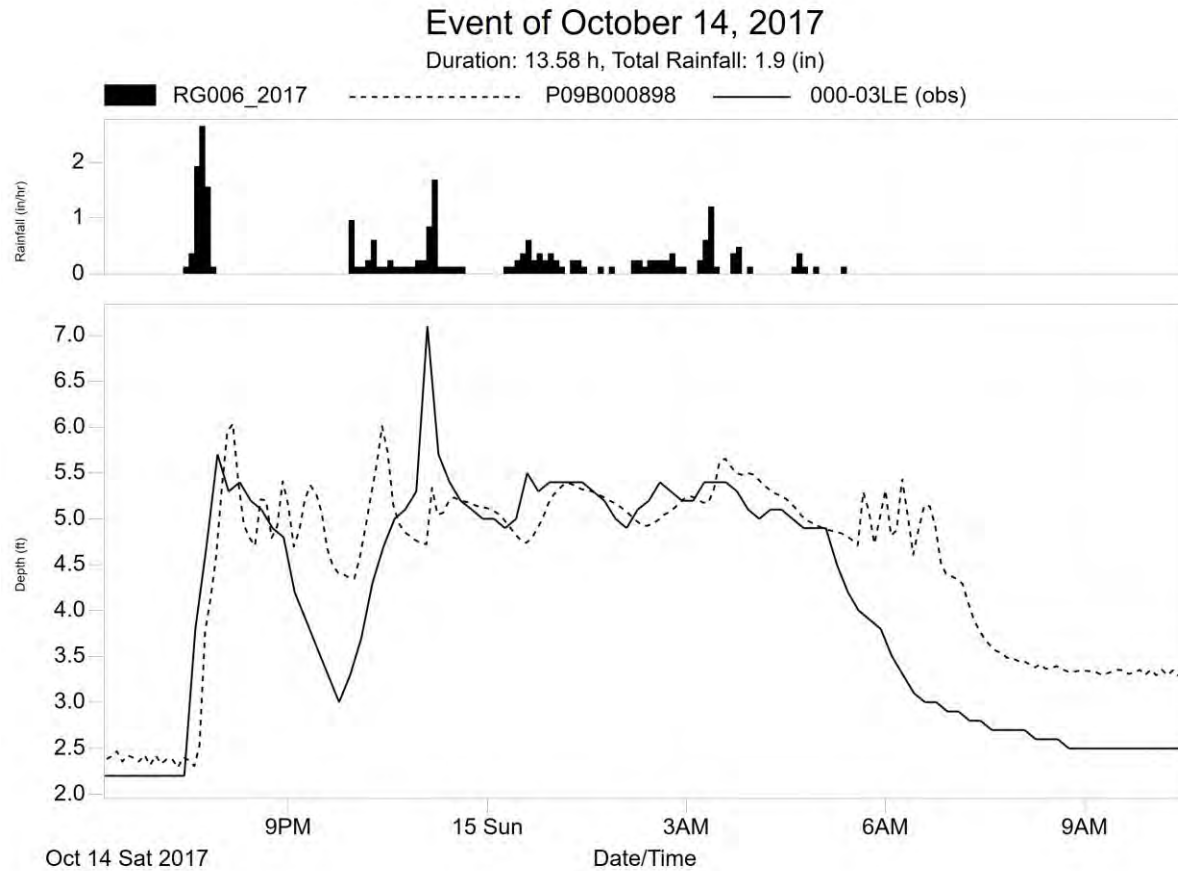
Duration: 5.17 h, Total Rainfall: 0.55 (in)



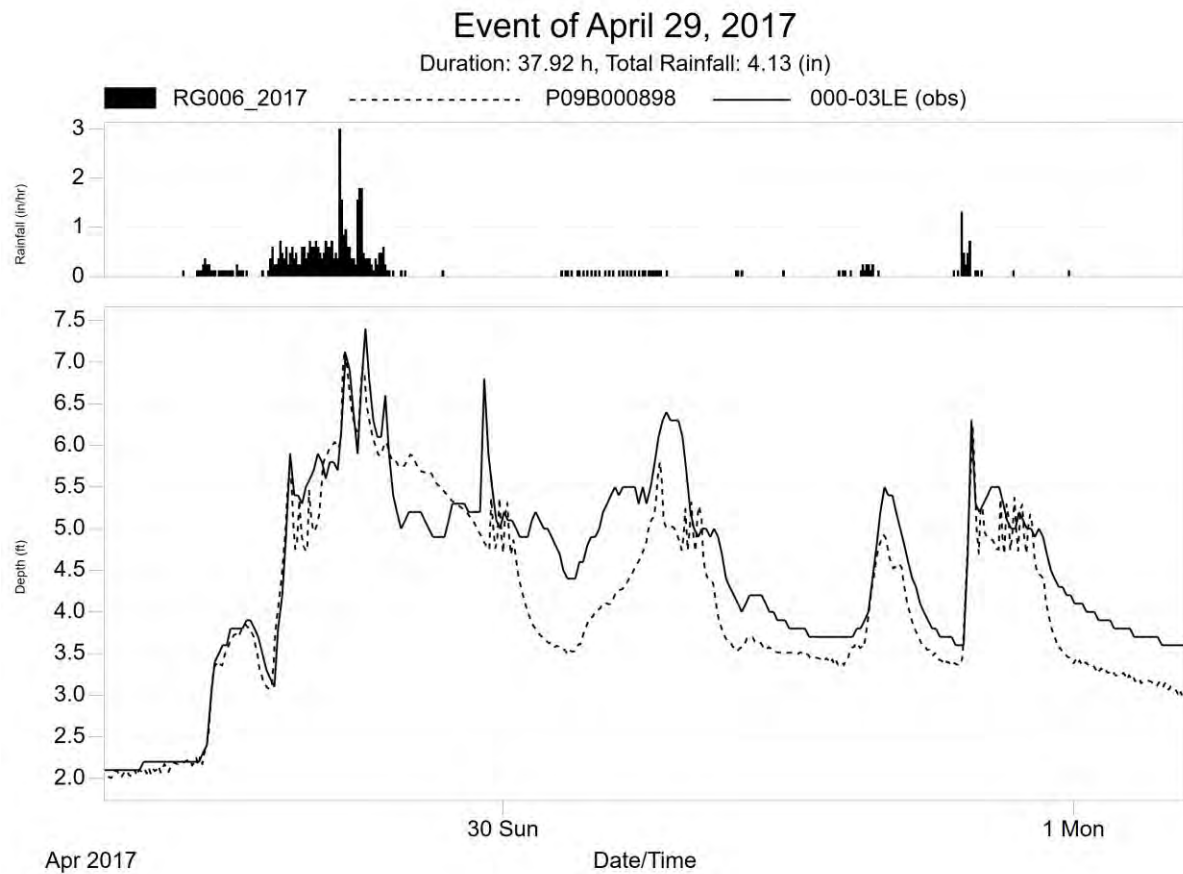
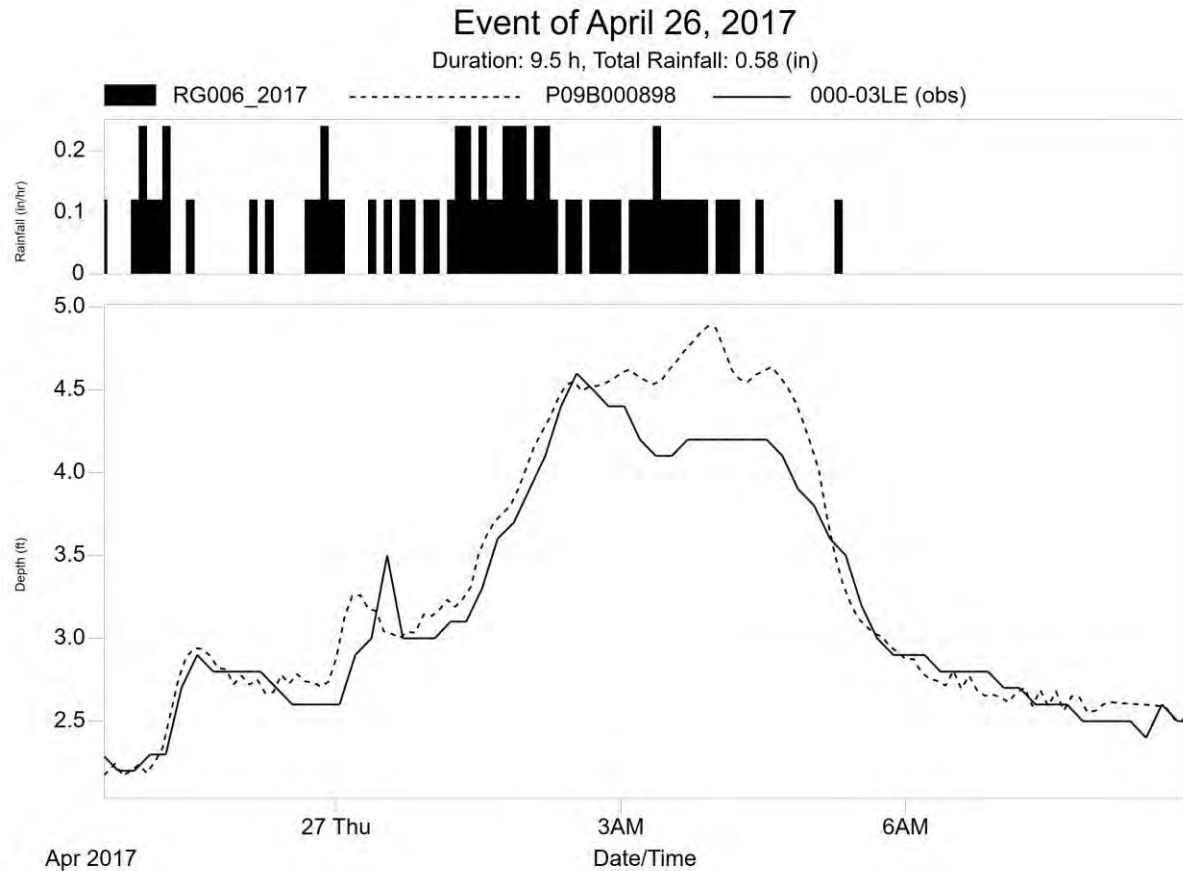
RFI at Fayette 000-03LE – Calibration Events



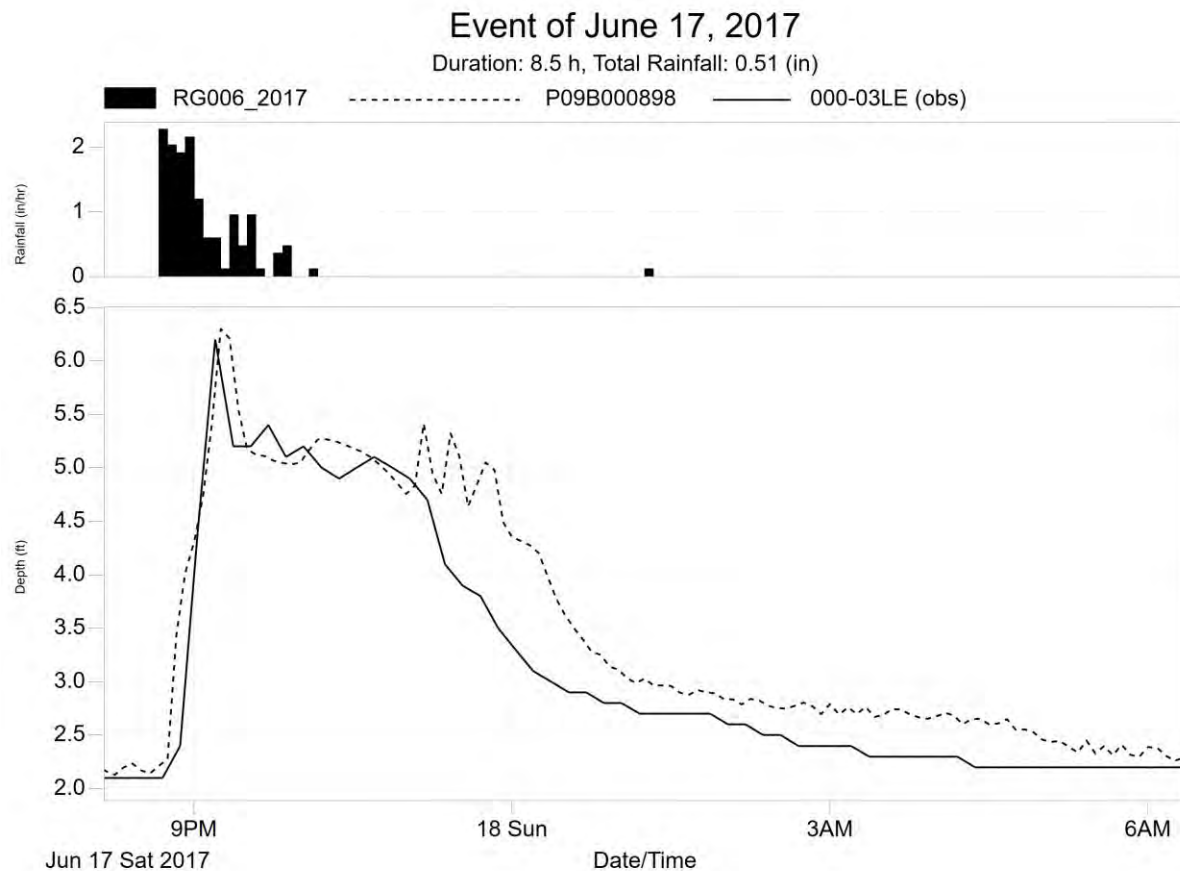
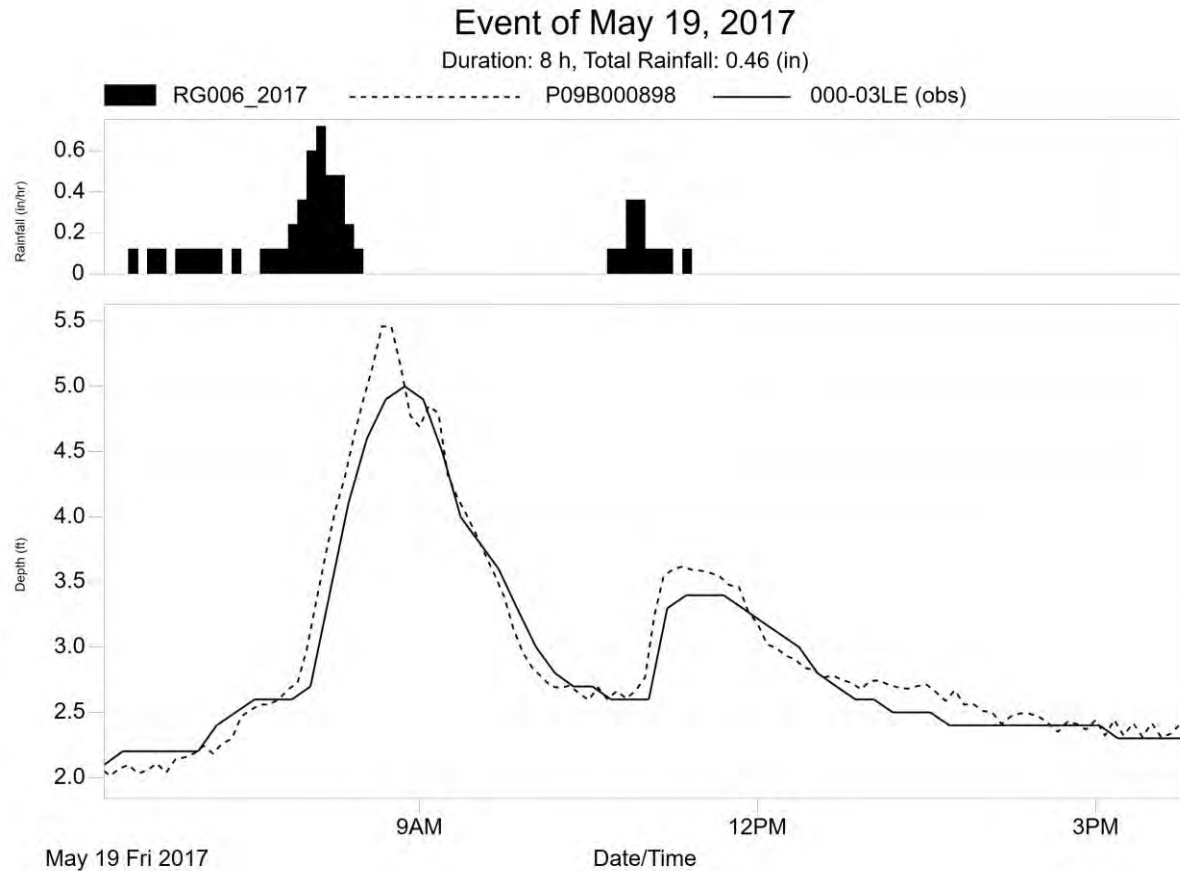
RFI at Fayette 000-03LE – Calibration Events



RFI at Fayette 000-03LE – Verification Events



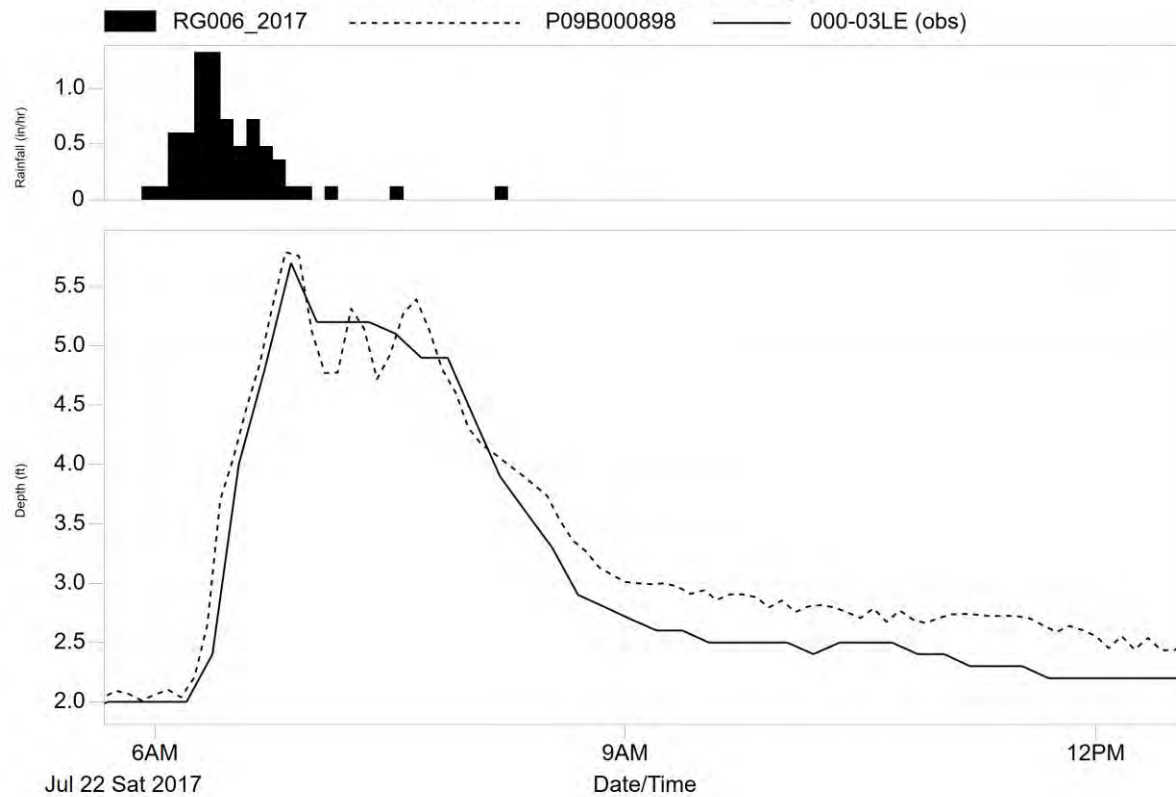
RFI at Fayette 000-03LE – Verification Events



RFI at Fayette 000-03LE – Verification Events

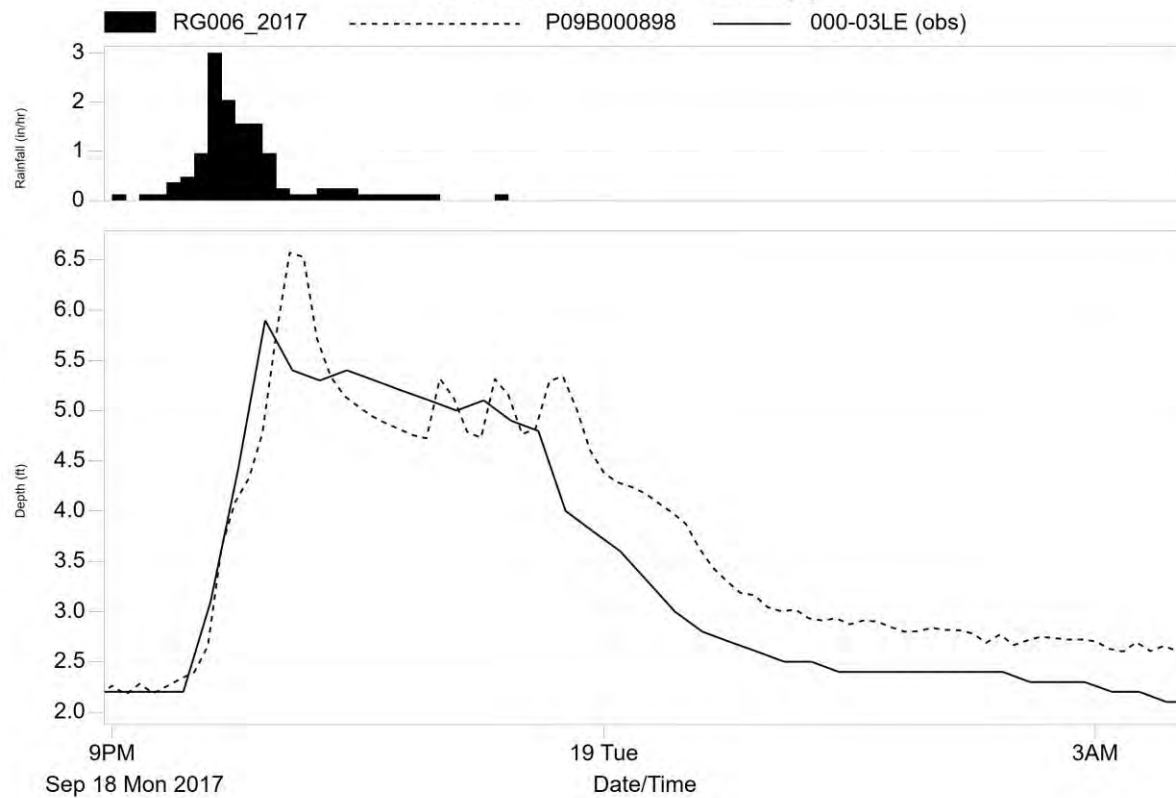
Event of July 22, 2017

Duration: 5.75 h, Total Rainfall: 0.5 (in)

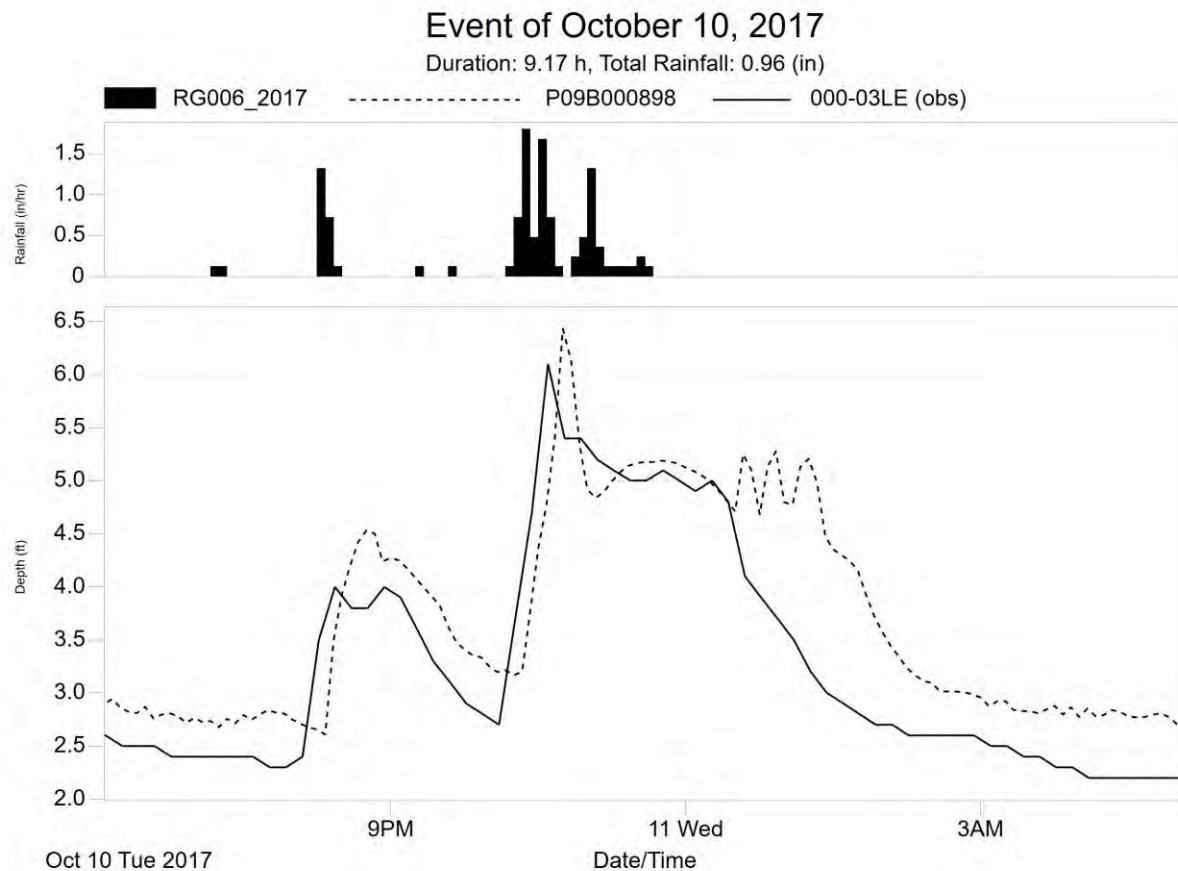
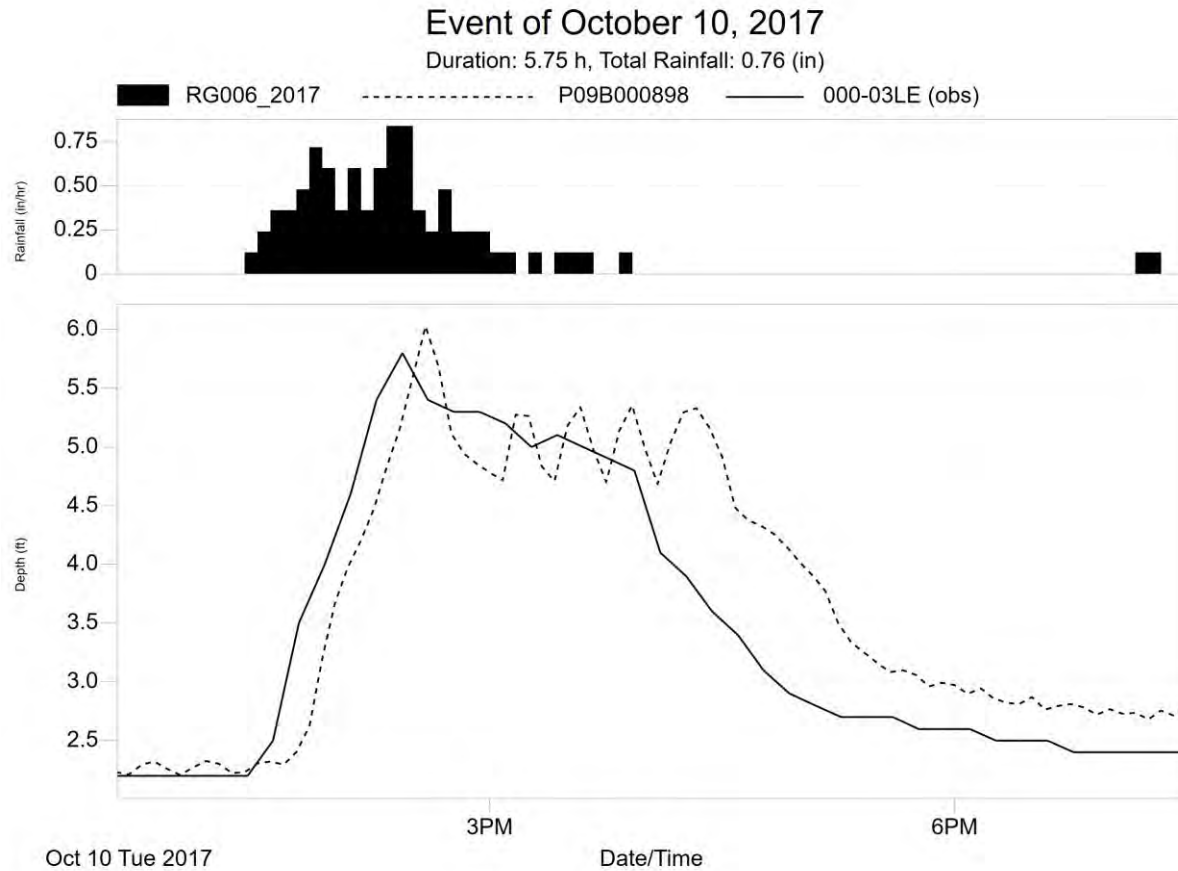


Event of September 18, 2017

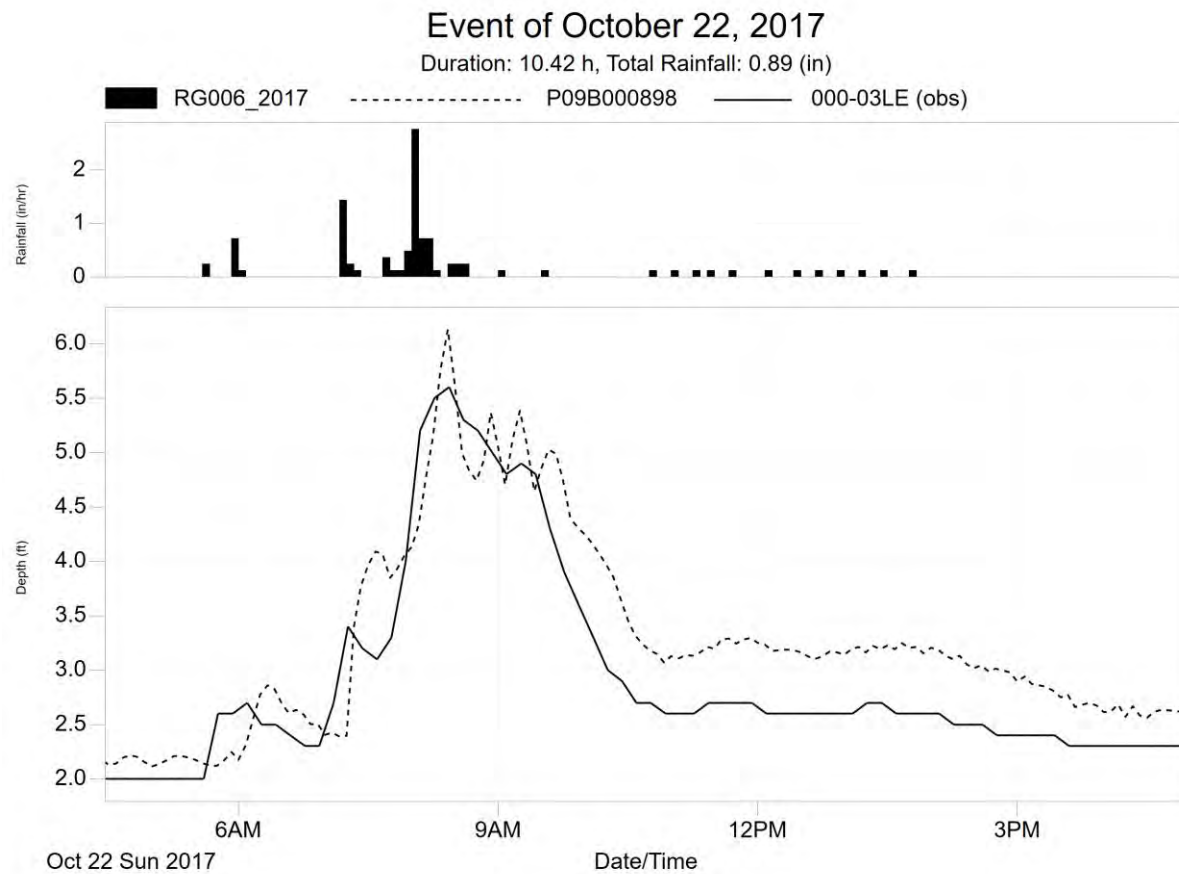
Duration: 5.5 h, Total Rainfall: 1.01 (in)



RFI at Fayette 000-03LE – Verification Events



RFI at Fayette 000-03LE – Verification Events



[illegible]

RFI 000-04LE Depth

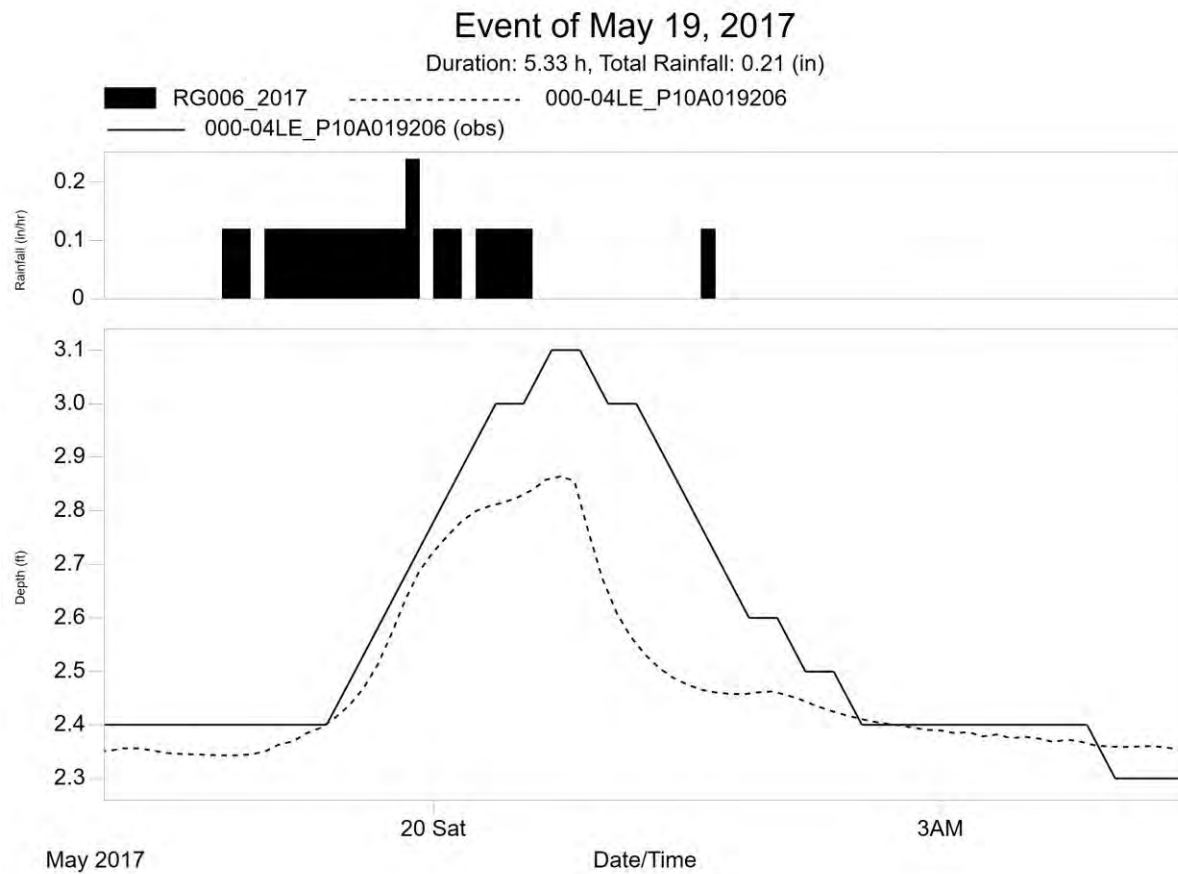
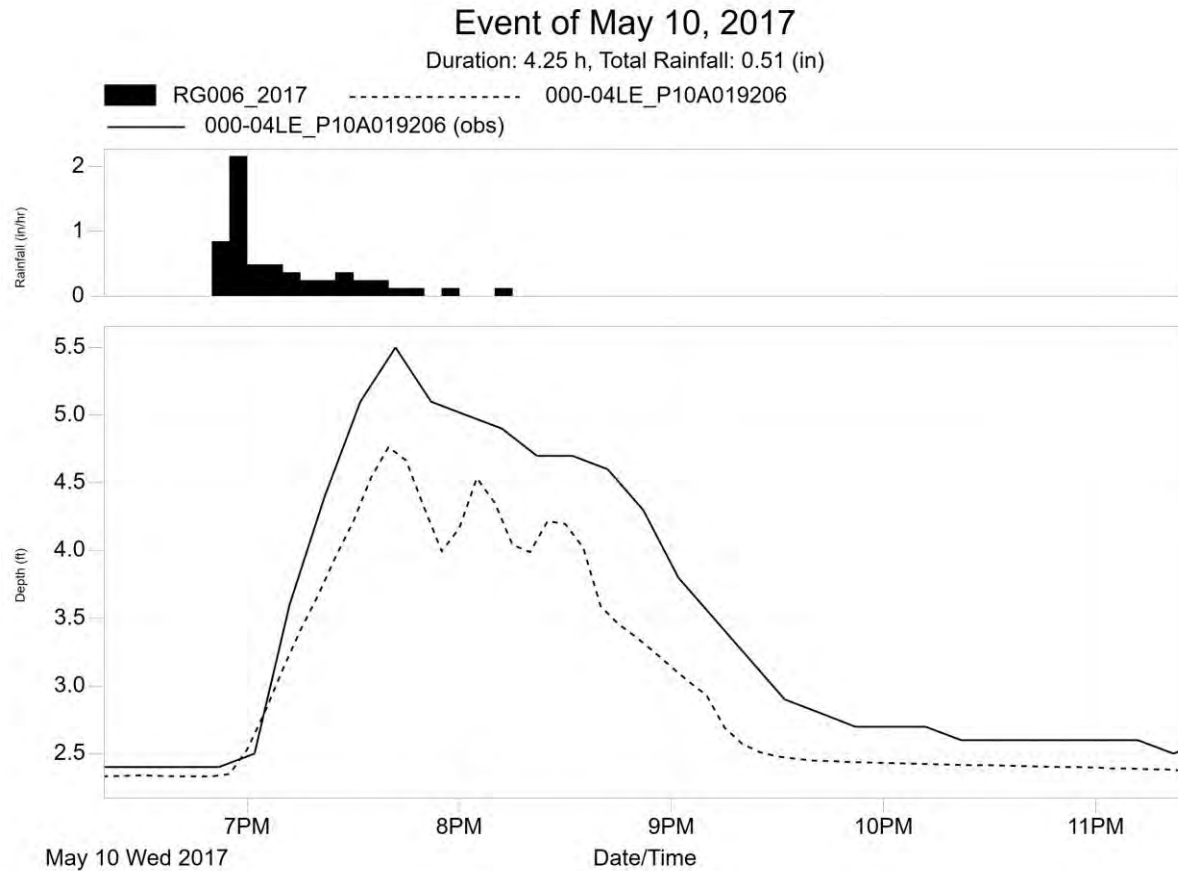
Date	Duration (h)	Maximum Depth (ft)		Minimum Depth (ft)		Average Depth (ft)		Maximum Depth (ft)	Minimum Depth (ft)	Average Depth (ft)	Rainfall Variability
		metered	modeled	metered	modeled	metered	modeled	Surcharged: -0.33 ft to +1.67 ft			
CALIBRATION EVENTS - DEPTH								Non-Surcharged: -0.33 ft to +0.33 ft			
5/10/2017 18:45	4.3	5.5	4.8	2.4	2.3	3.6	3.2	-0.74	-0.07	-0.49	Relatively Uniform
5/19/2017 22:35	5.3	3.1	2.9	2.4	2.3	2.6	2.5	-0.24	-0.03	-0.12	Possibly Uniform
5/20/2017 6:55	8.1	5.3	4.8	2.3	2.3	3.3	3.1	-0.45	0.01	-0.18	Relatively Uniform
5/26/2017 14:50	3.7	5.2	4.9	2.5	2.4	3.5	3.2	-0.26	-0.12	-0.35	Relatively Uniform
6/15/2017 1:50	3.7	5.2	5.1	2.3	2.3	3.5	3.1	-0.12	-0.03	-0.35	Possibly Uniform
7/10/2017 6:15	6.1	5.2	5.3	2.2	2.4	3.3	3.2	0.05	0.12	-0.19	Relatively Uniform
7/10/2017 18:45	5.2	5.9	6.1	2.4	2.4	3.6	3.6	0.24	-0.03	-0.03	Possibly Uniform
7/26/2017 20:20	5.2	5.3	5.0	2.4	2.5	3.7	3.4	-0.29	0.09	-0.28	Relatively Uniform
8/22/2017 2:00	4.4	3.9	3.8	2.4	2.4	2.9	2.9	-0.08	-0.03	-0.03	Relatively Uniform
10/14/2017 13:20	4.2	5.2	4.9	2.4	2.4	3.4	3.1	-0.34	0.02	-0.32	Variable
10/14/2017 19:35	13.6	6.9	5.3	2.7	2.4	4.3	4.2	-1.56	-0.27	-0.10	Relatively Uniform
VERIFICATION EVENTS - DEPTH											
4/26/2017 22:30	9.5	4.3	4.2	2.6	2.4	3.2	3.0	-0.06	-0.15	-0.18	Relatively Uniform
4/29/2017 11:00	37.9	7.2	6.6	2.4	2.3	4.6	3.8	-0.64	-0.07	-0.80	Possibly Uniform
5/19/2017 7:00	8.0	4.6	4.6	2.4	2.3	2.9	2.8	0.02	-0.09	-0.16	Possibly Uniform
6/17/2017 21:00	8.5	5.9	5.5	2.4	2.4	3.3	3.3	-0.35	0.01	-0.04	Variable
7/22/2017 6:15	5.8	5.3	5.0	2.1	2.3	3.2	3.1	-0.33	0.20	-0.08	Variable
9/18/2017 21:30	5.5	5.5	5.9	2.4	2.4	3.5	3.4	0.43	0.06	-0.03	Variable
10/10/2017 13:10	5.8	5.6	5.2	2.4	2.4	3.5	3.4	-0.45	-0.04	-0.14	Possibly Uniform
10/10/2017 19:00	9.2	5.9	5.6	2.4	2.5	3.4	3.4	-0.27	0.08	-0.01	Possibly Uniform
10/22/2017 5:30	10.4	5.2	5.3	2.2	2.3	3.0	3.0	0.11	0.08	-0.06	Variable

Notes:

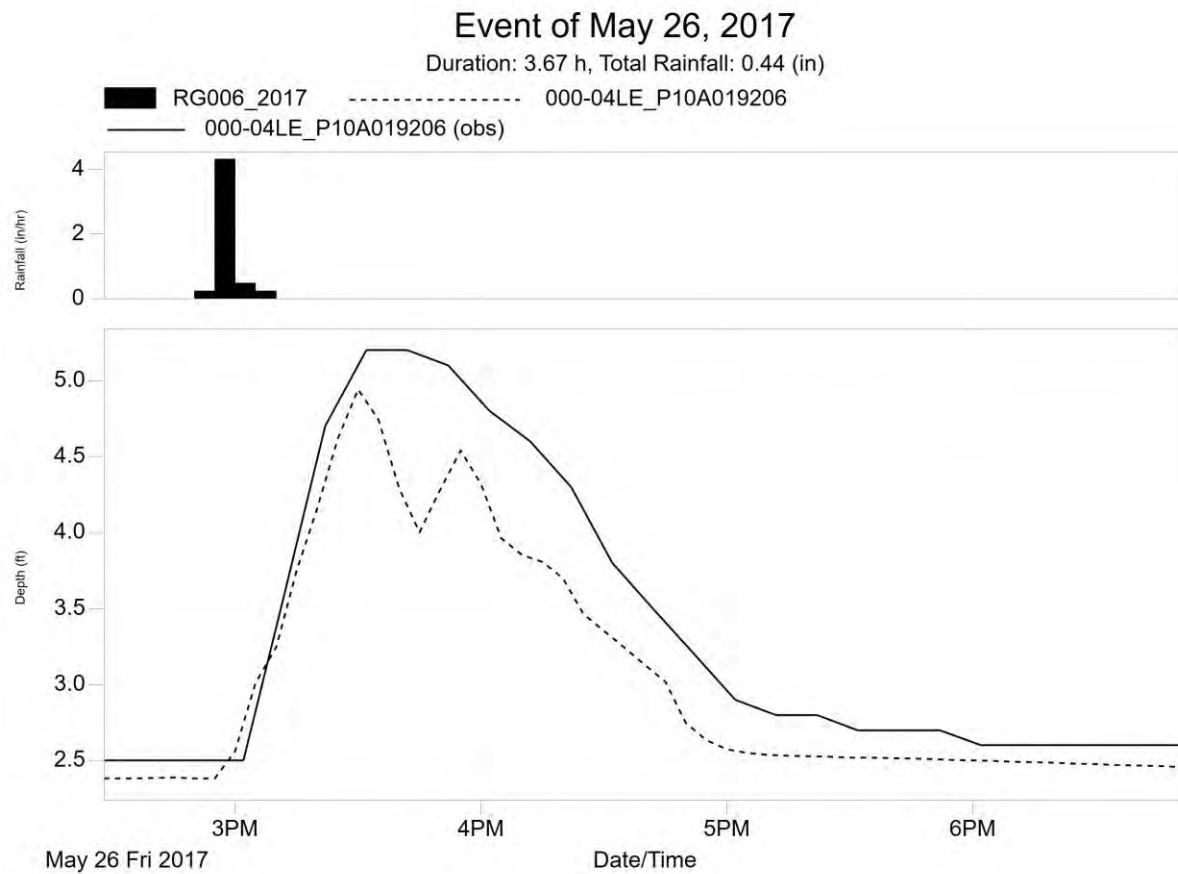
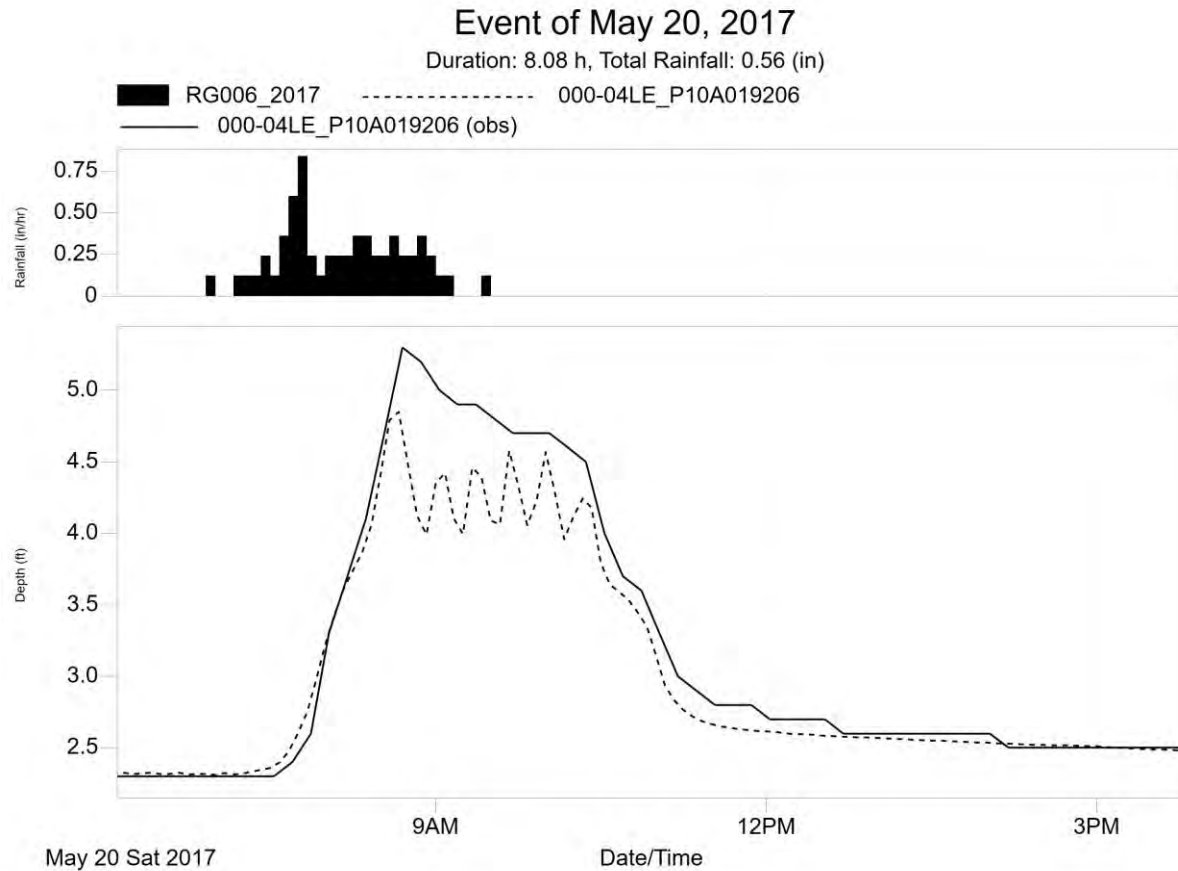
Surcharge Depth = 4.0 feet

WEIGHTED AVERAGES				
Calibration - Relatively Uniform	-0.54	-0.04	-0.23	
Calibration - Possibly Uniform	0.01	-0.03	-0.17	
Calibration - Variable	-0.34	0.02	-0.32	
Calibration - All Events	-0.38	-0.03	-0.22	
Verification - Relatively Uniform	-0.06	-0.15	-0.18	
Verification - Possibly Uniform	-0.37	-0.03	-0.32	
Verification - Variable	-0.04	0.08	-0.05	
Verification - All Events	-0.20	0.00	-0.19	
Weighted Average - All Events	-0.30	-0.02	-0.21	All Events
NET AVERAGES				
Calibration - Relatively Uniform	-0.47	-0.04	-0.23	
Calibration - Possibly Uniform	-0.04	-0.03	-0.17	
Calibration - Variable	-0.34	0.02	-0.32	
Calibration - All Events	-0.34	-0.03	-0.22	
Verification - Relatively Uniform	-0.06	-0.15	-0.18	
Verification - Possibly Uniform	-0.34	-0.03	-0.28	
Verification - Variable	-0.04	0.09	-0.05	
Verification - All Events	-0.17	0.01	-0.17	
Net Average - All Events	-0.24	-0.01	-0.18	All Events

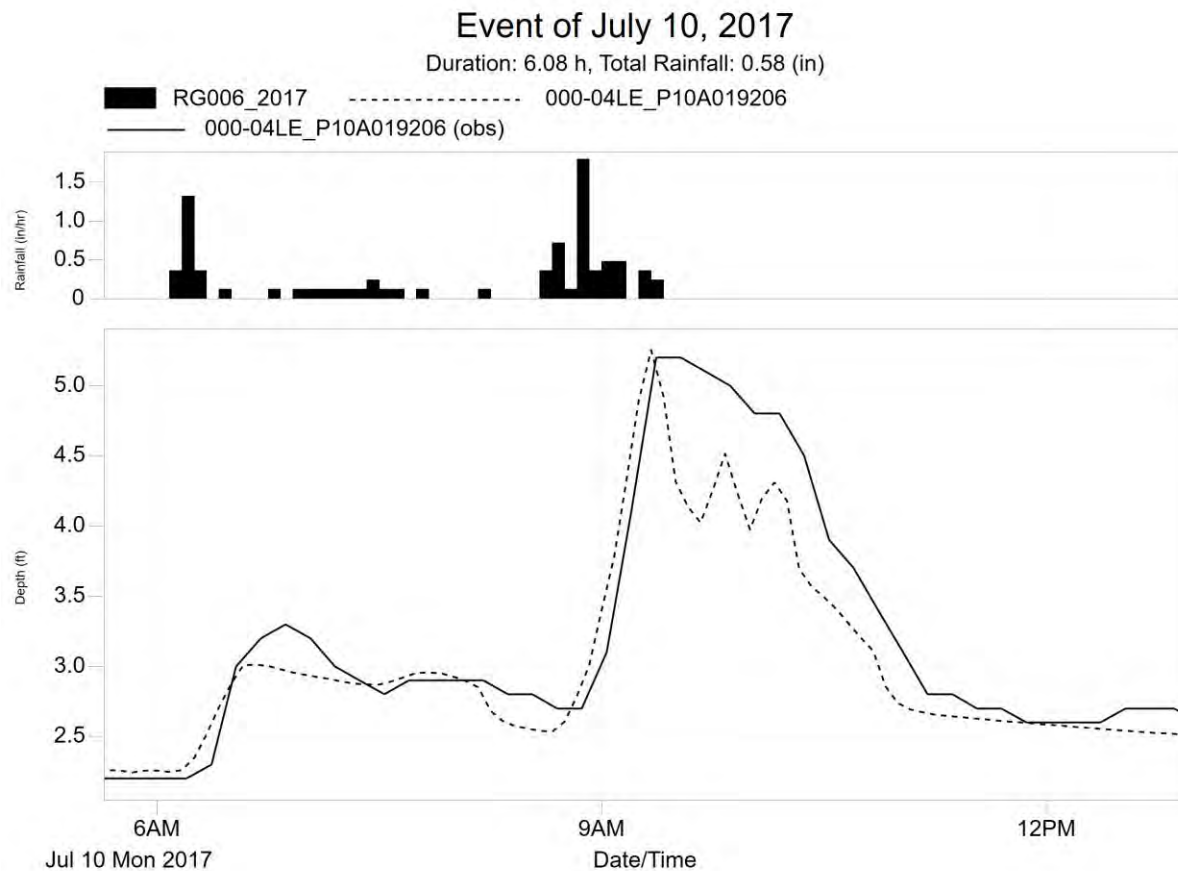
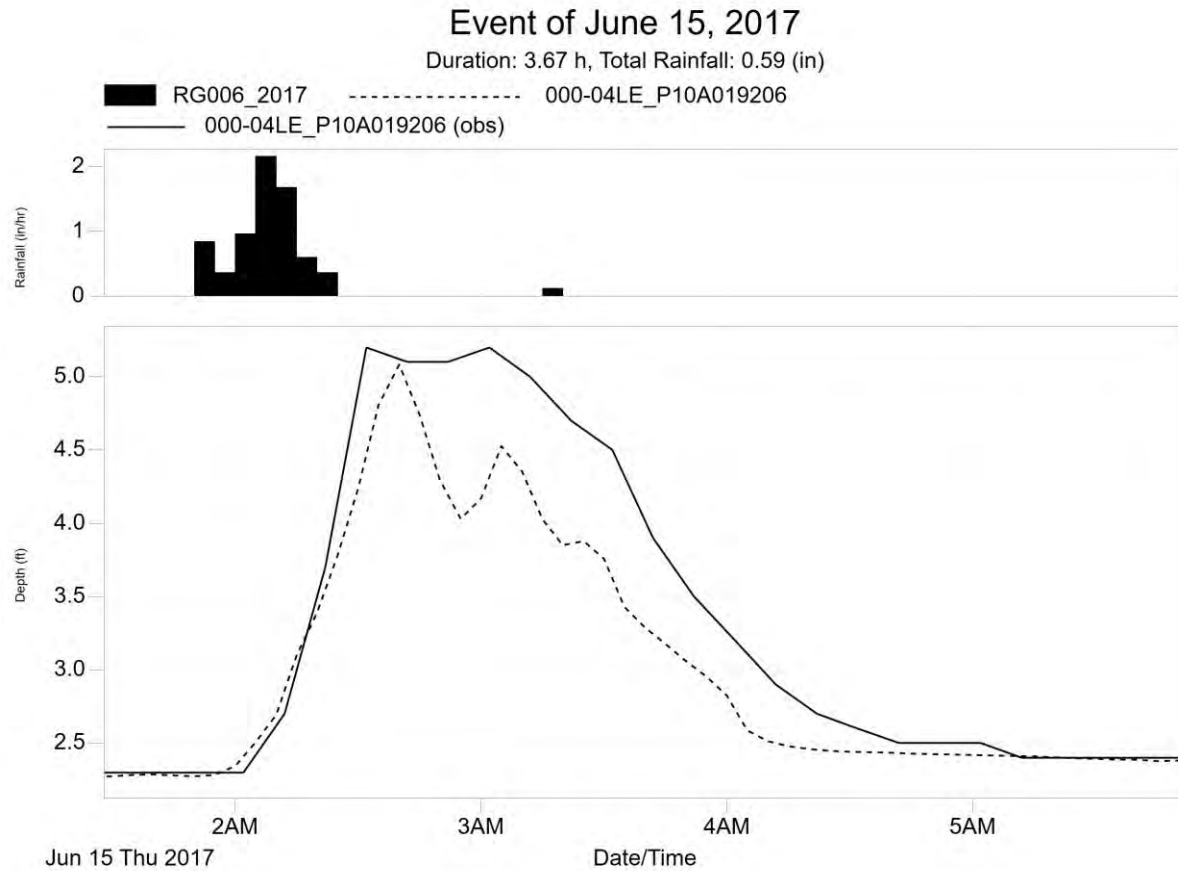
RFI at Eaton 000-04LE – Calibration Events



RFI at Eaton 000-04LE – Calibration Events



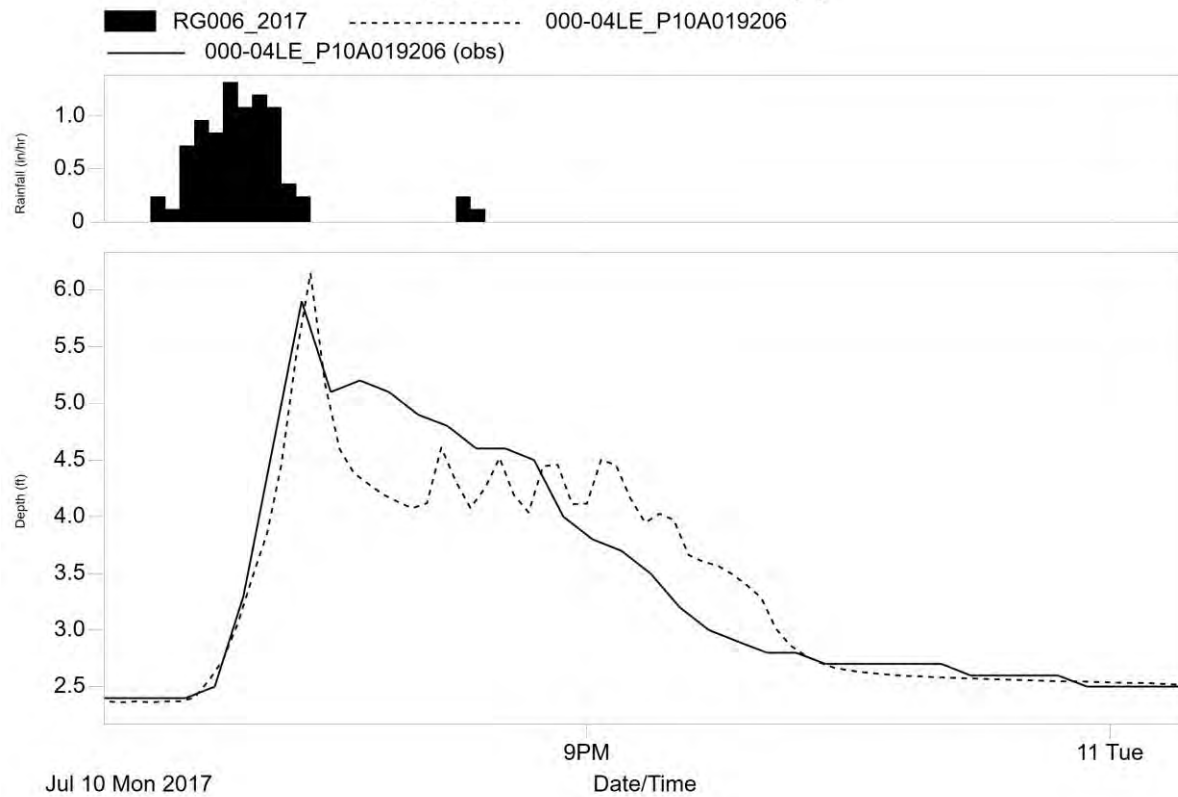
RFI at Eaton 000-04LE – Calibration Events



RFI at Eaton 000-04LE – Calibration Events

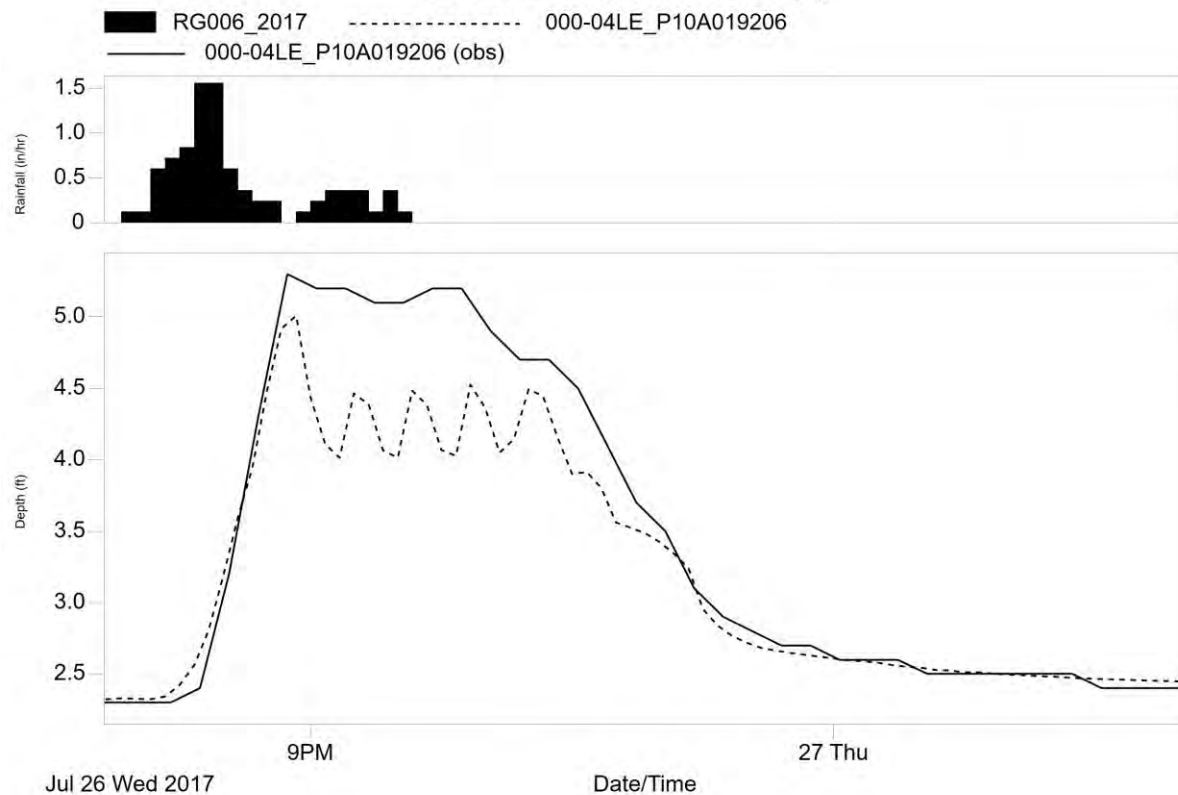
Event of July 10, 2017

Duration: 5.17 h, Total Rainfall: 0.62 (in)



Event of July 26, 2017

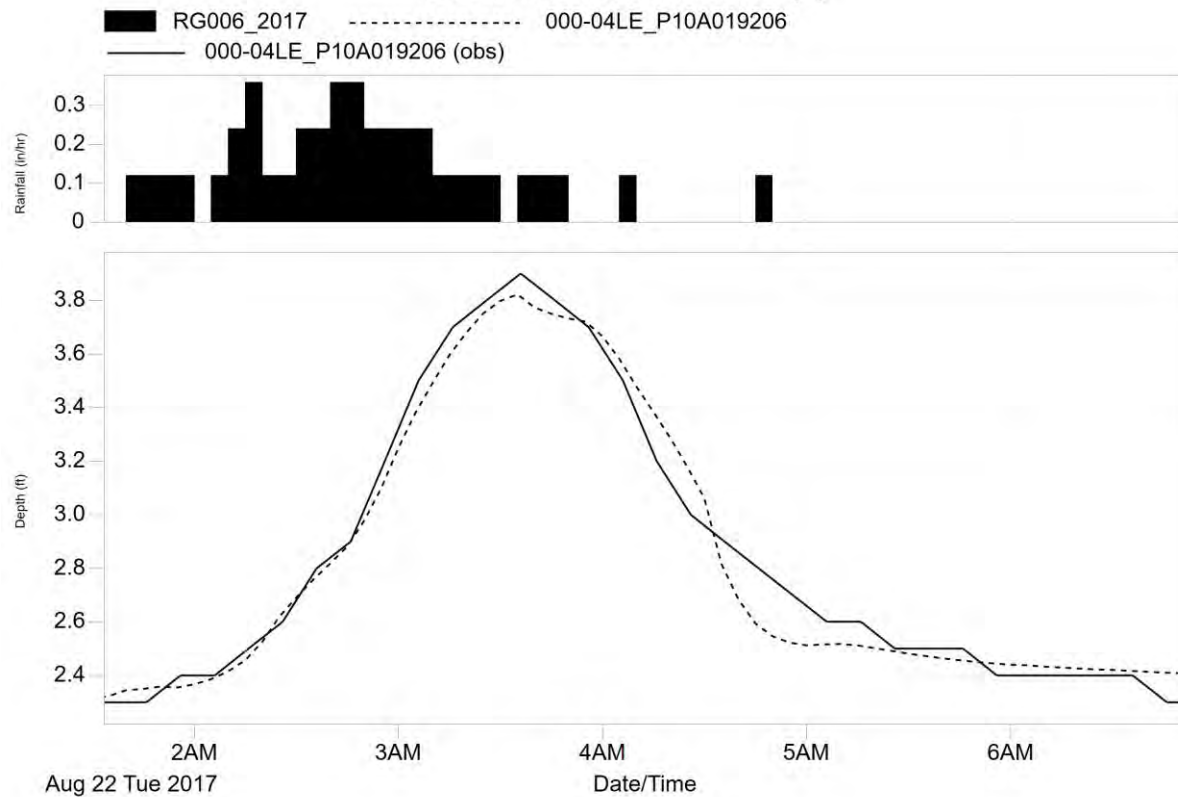
Duration: 5.17 h, Total Rainfall: 0.55 (in)



RFI at Eaton 000-04LE – Calibration Events

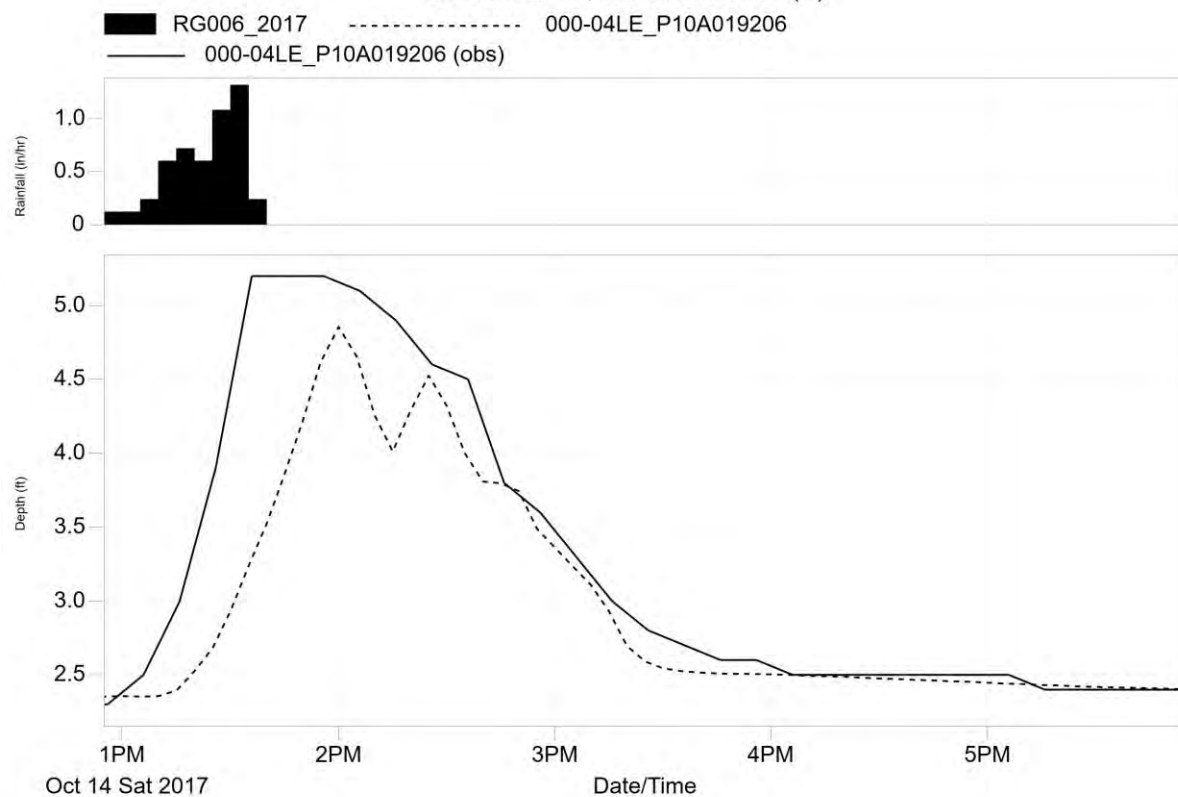
Event of August 22, 2017

Duration: 4.42 h, Total Rainfall: 0.35 (in)

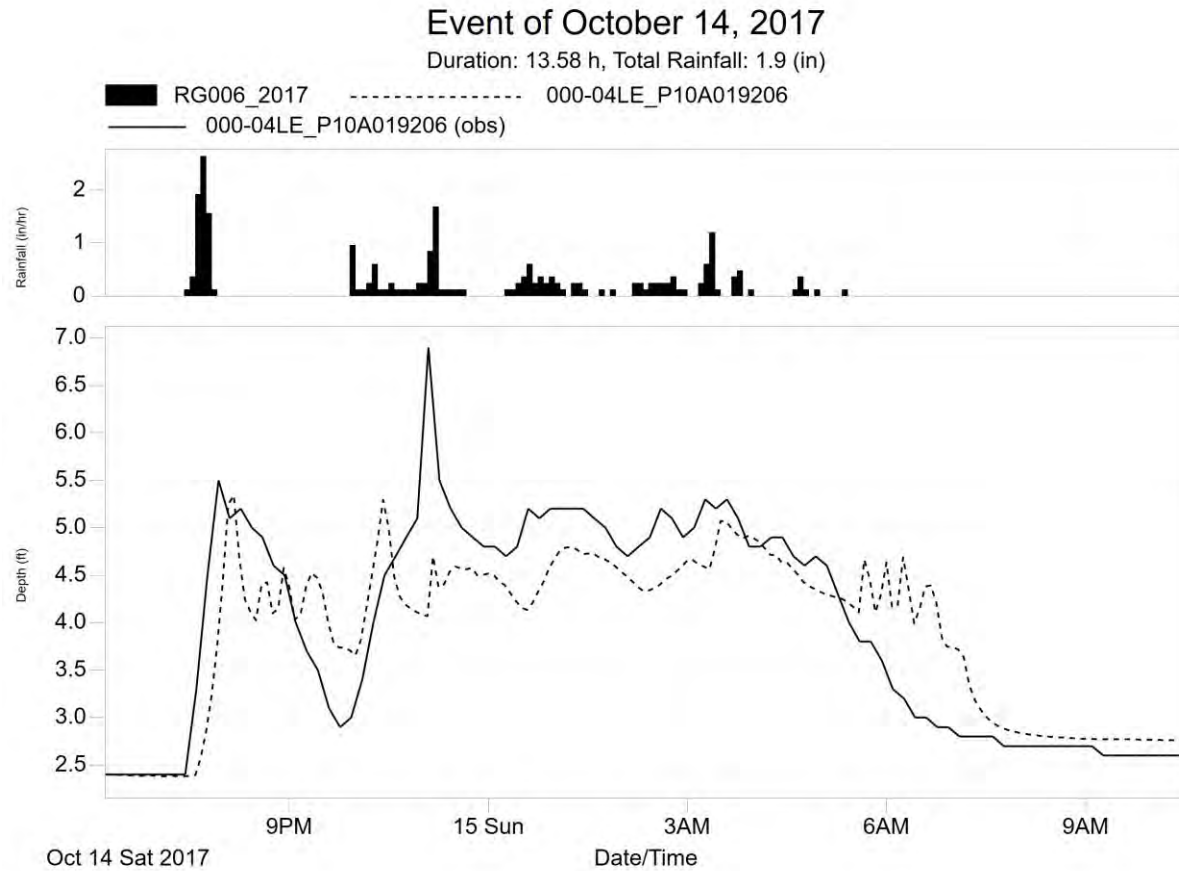


Event of October 14, 2017

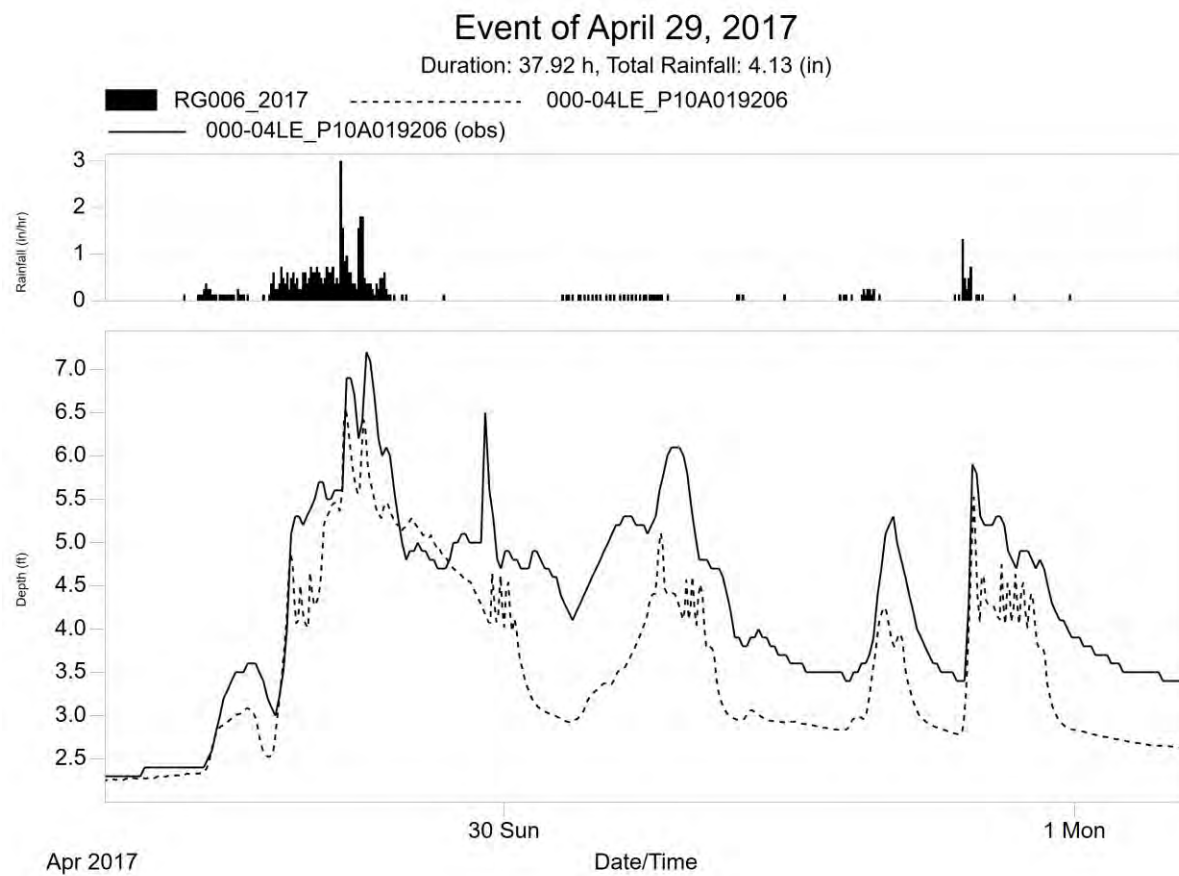
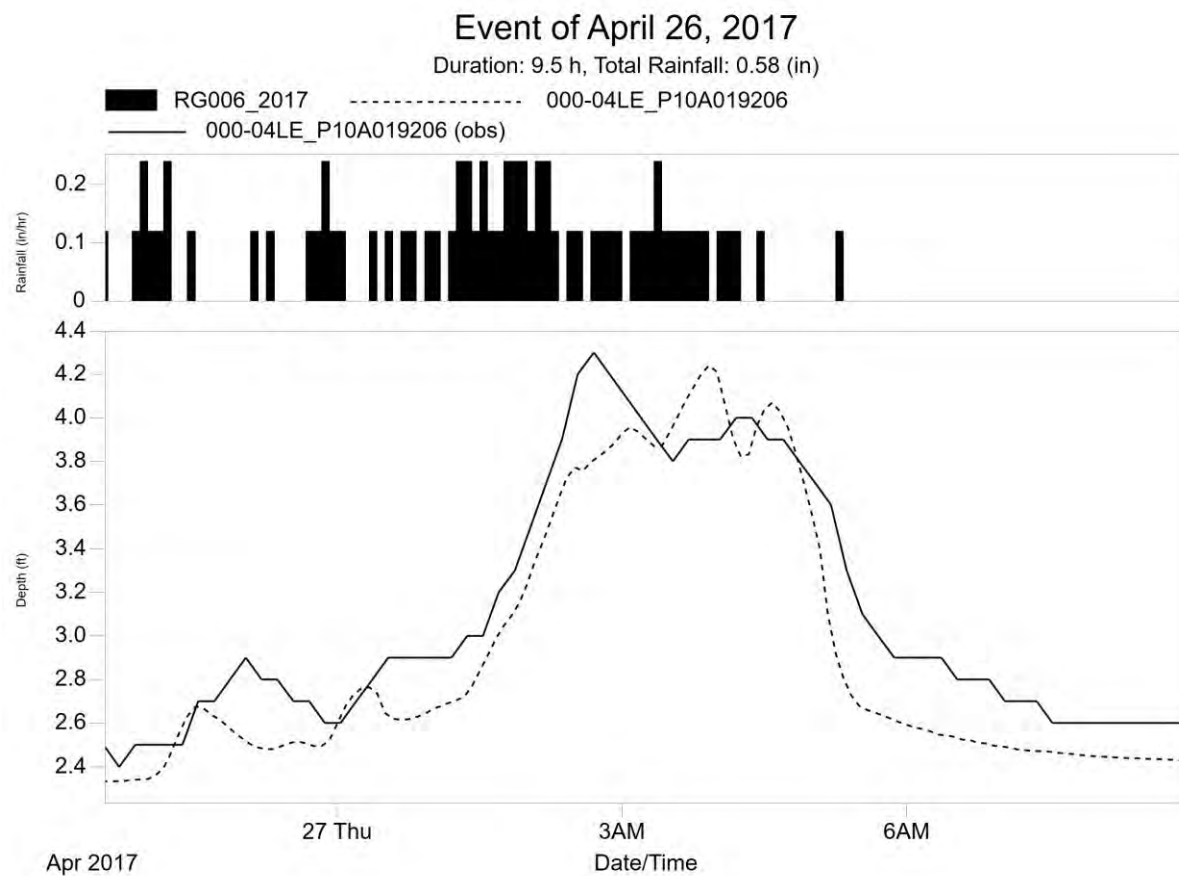
Duration: 4.17 h, Total Rainfall: 0.27 (in)



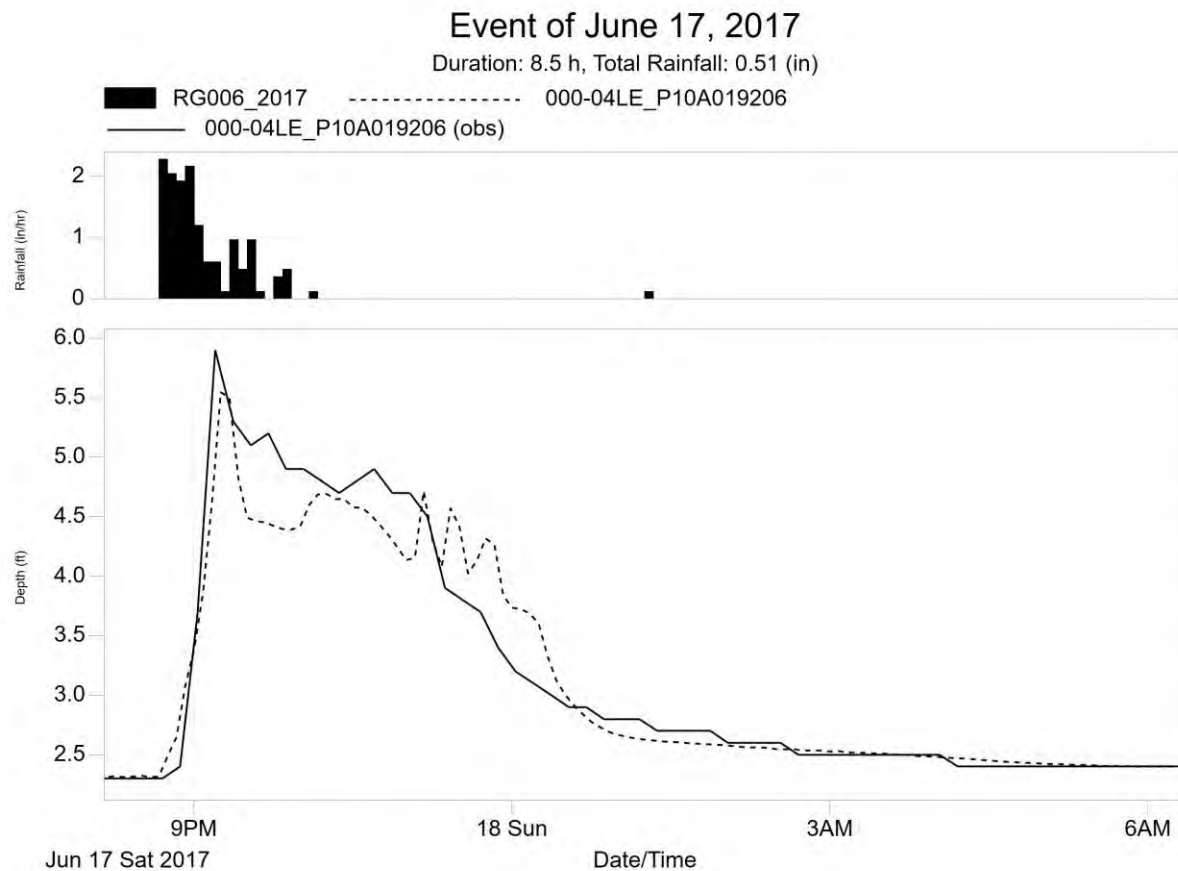
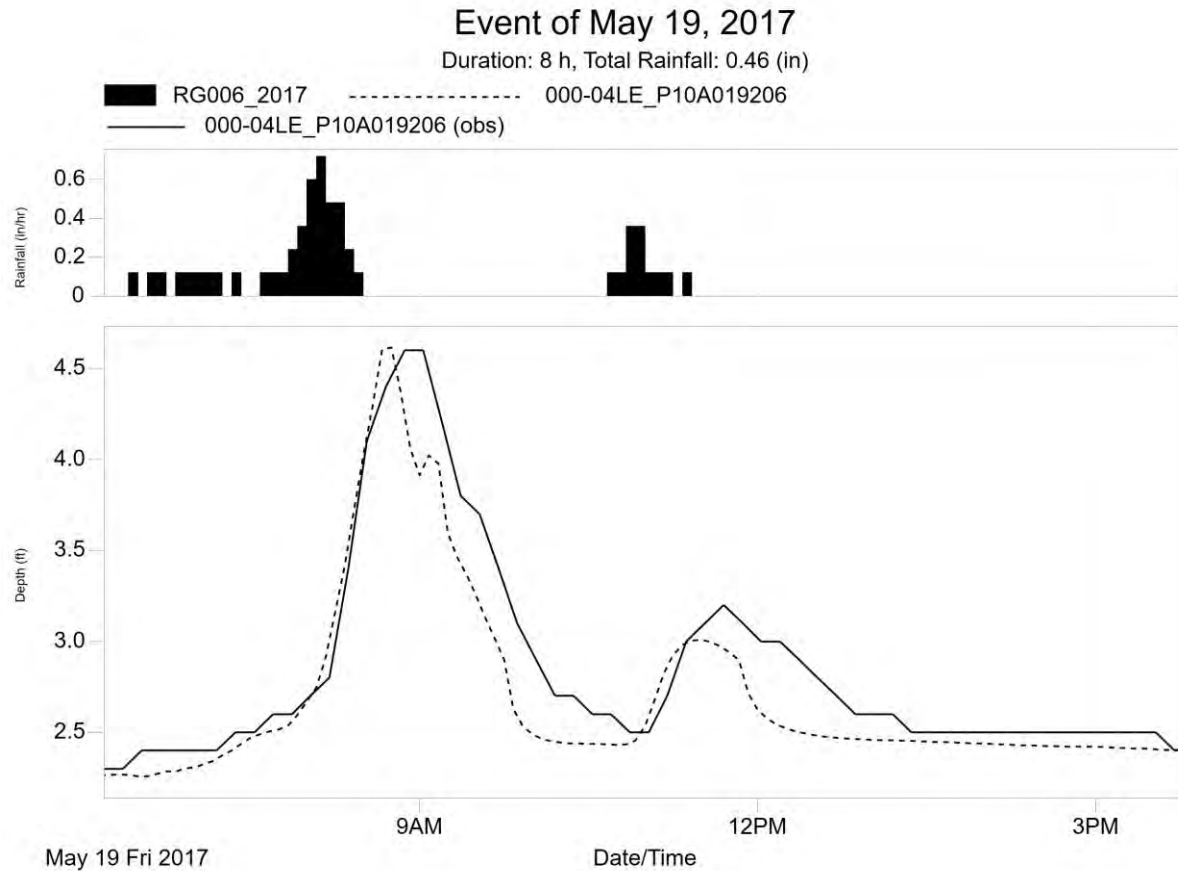
RFI at Eaton 000-04LE – Calibration Events



RFI at Eaton 000-04LE – Verification Events



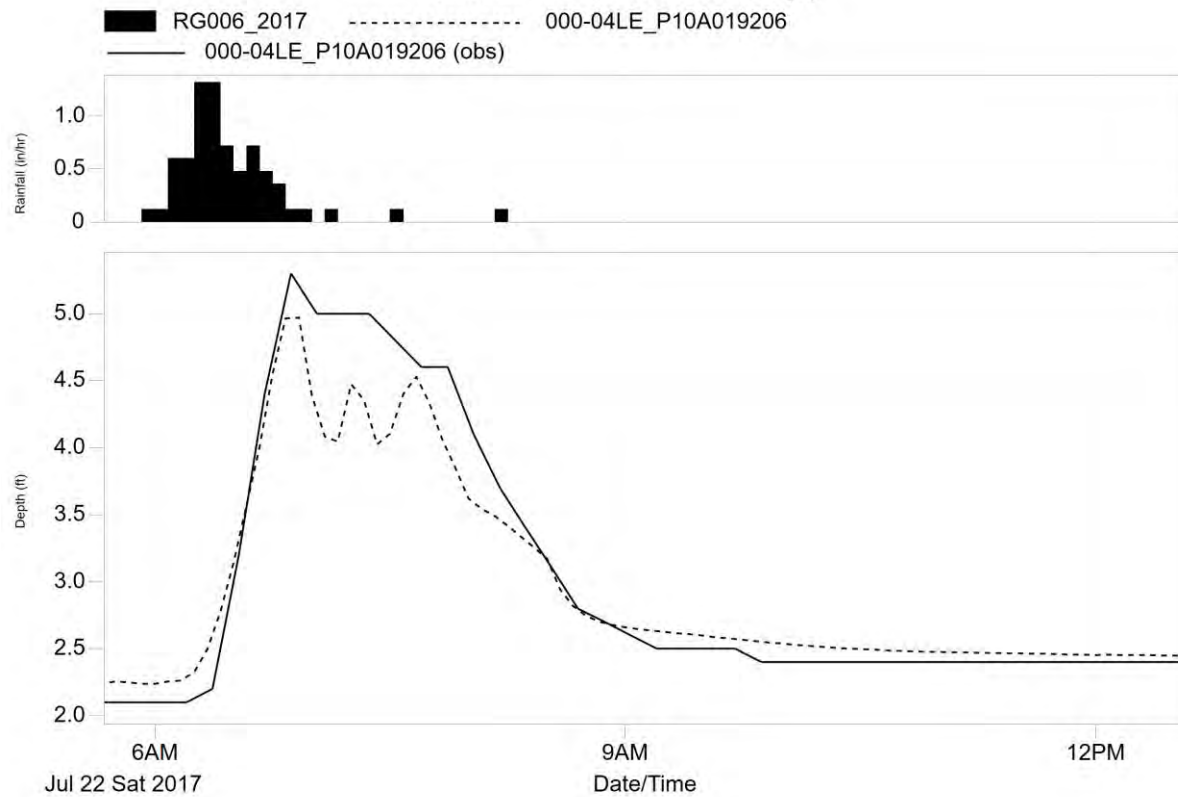
RFI at Eaton 000-04LE – Verification Events



RFI at Eaton 000-04LE – Verification Events

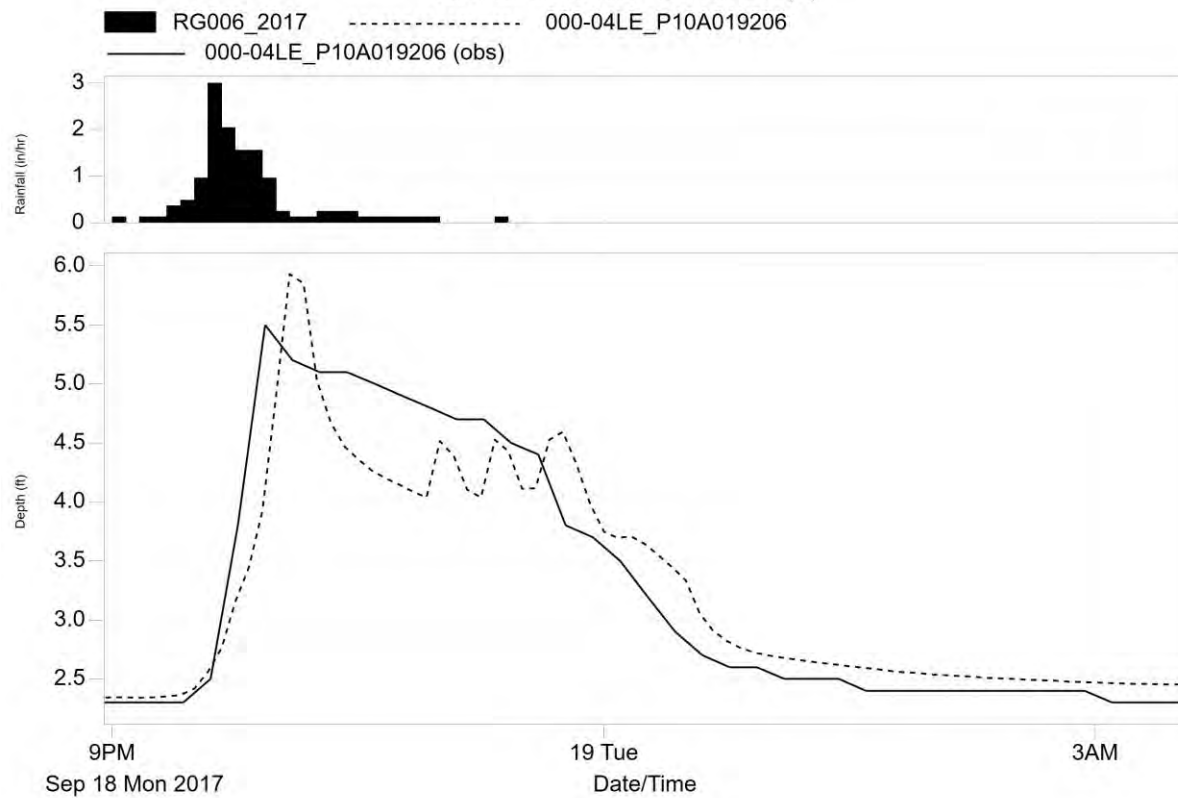
Event of July 22, 2017

Duration: 5.75 h, Total Rainfall: 0.5 (in)

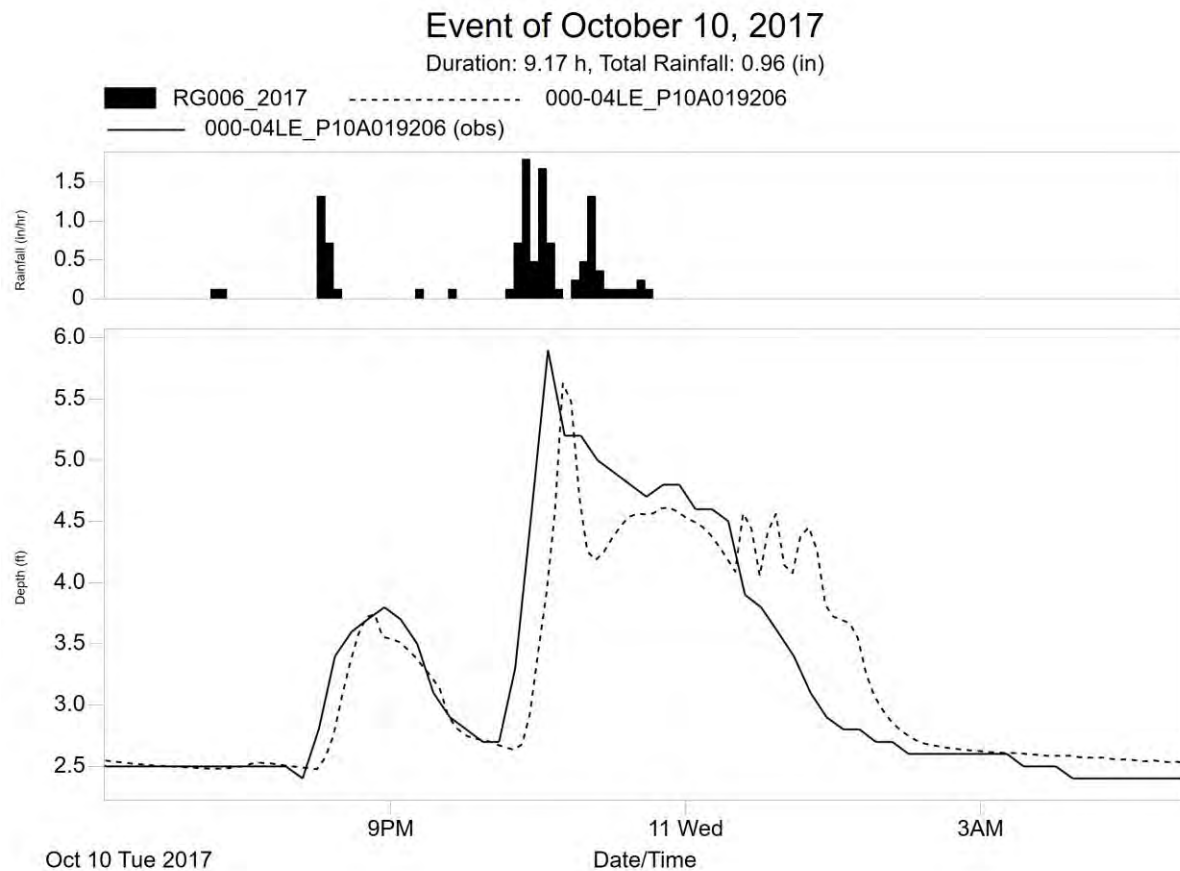
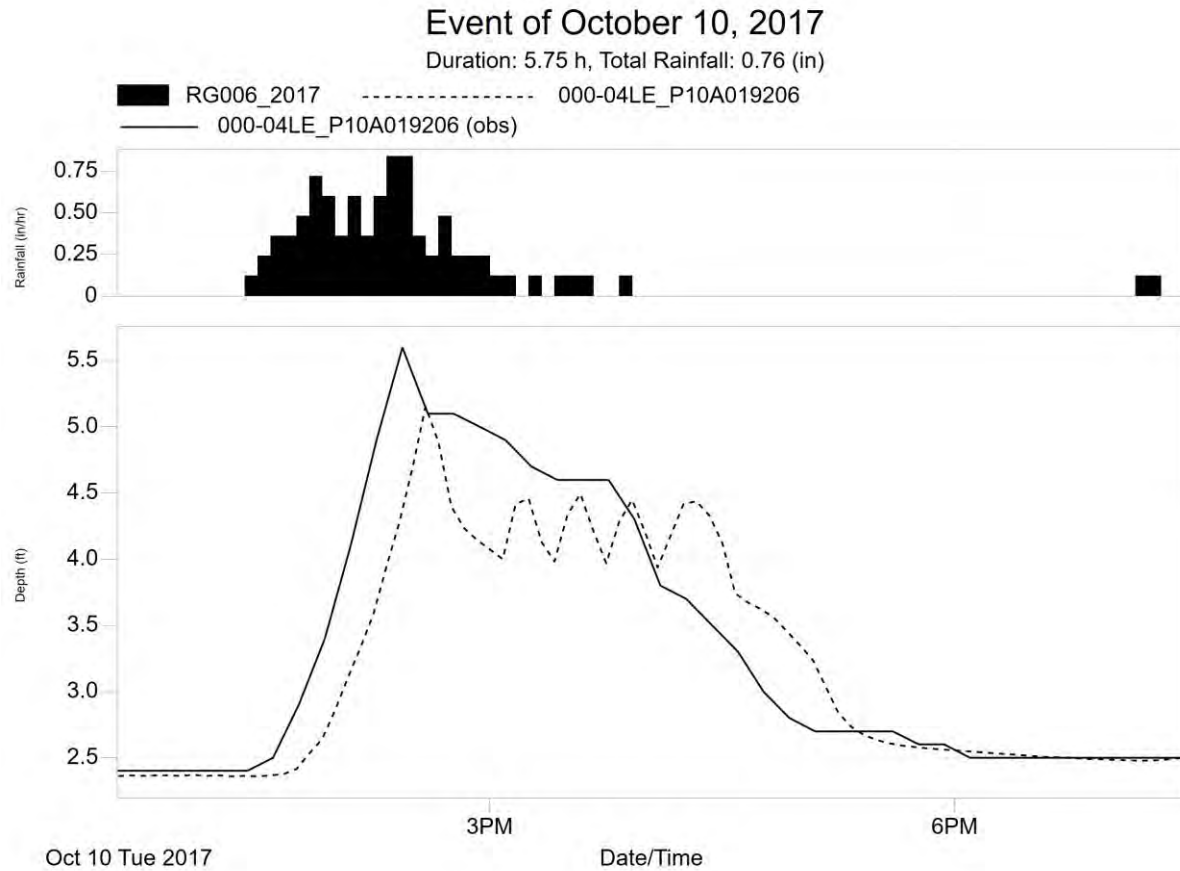


Event of September 18, 2017

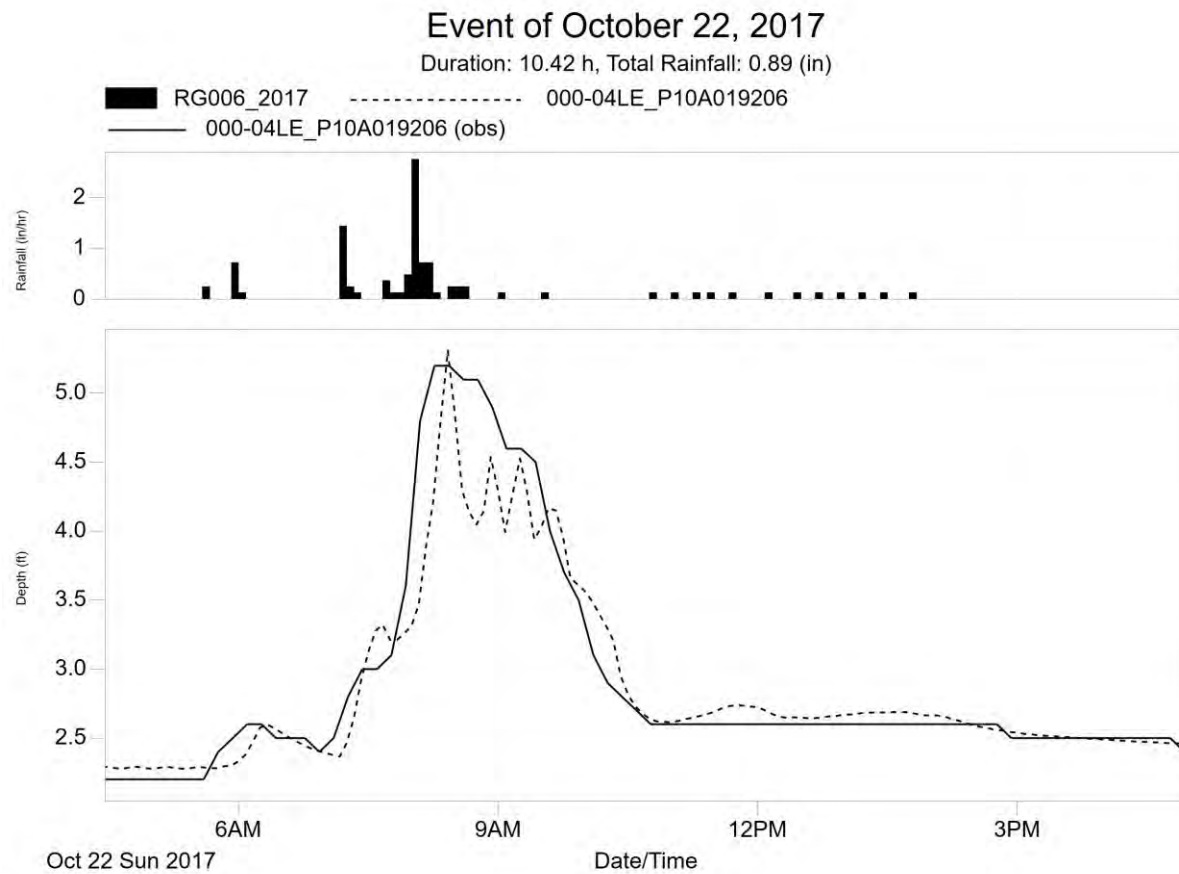
Duration: 5.5 h, Total Rainfall: 1.01 (in)



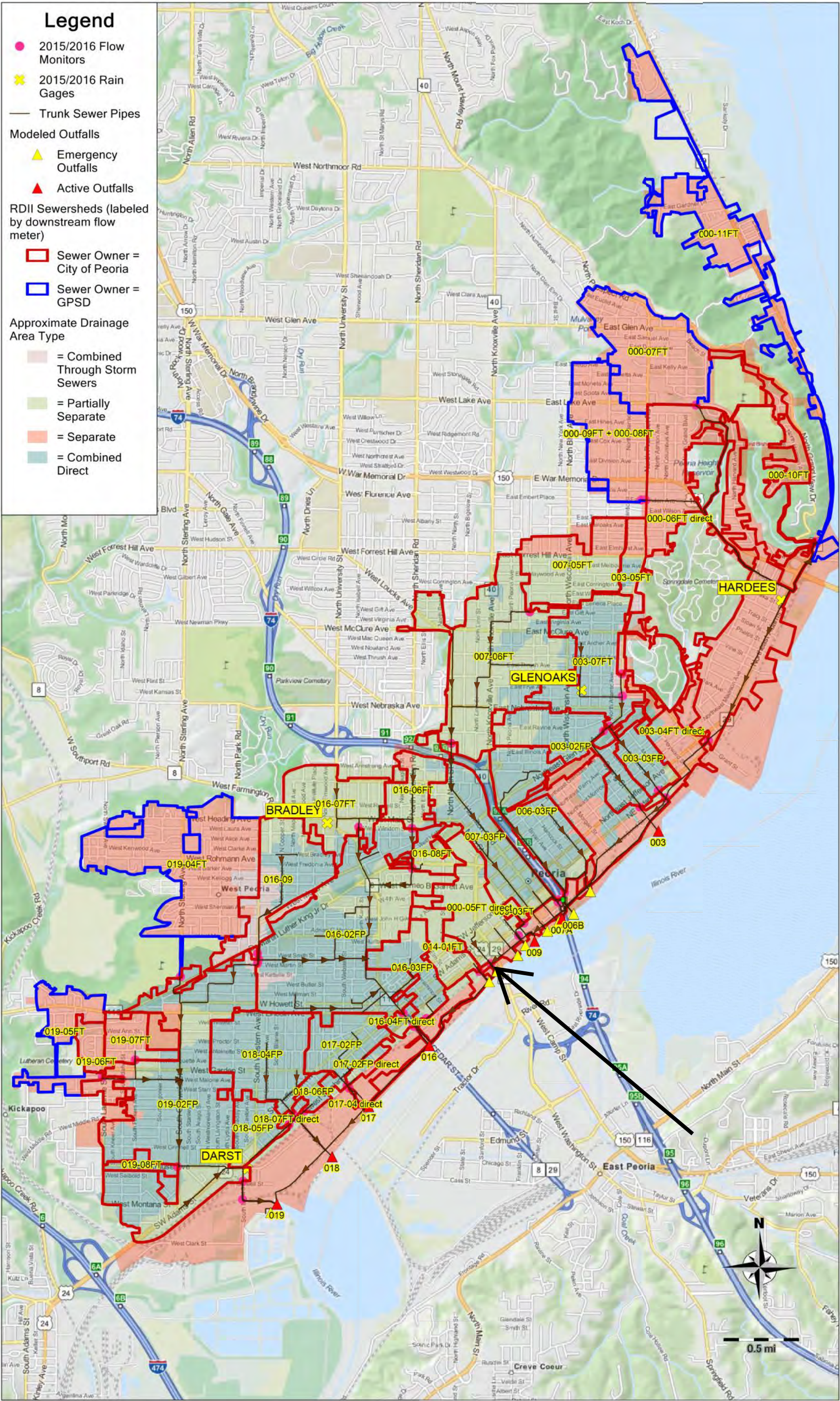
RFI at Eaton 000-04LE – Verification Events



RFI at Eaton 000-04LE – Verification Events



Flow Monitor 000-05FT Location Map



Interceptor 000-05FT Flow

Date	Duration (h)	Rainfall (in)	Maximum Flow (cfs)		Maximum Flow (mgd)		Total Volume (ft³)		Volume (million gallons)		Peak Flow Rate	Flow Volume	Rainfall Variability
		Bradley Edited	Observed	Modeled	Observed	Modeled	Observed	Modeled	Observed	Modeled	(-15% to +25%)	(-10% to +20%)	
CALIBRATION EVENTS - FLOW													
9/8/2015 10:50	9.8	0.86	45.1	50.5	29.1	32.6	671300	901400	5.0	6.7	12%	34%	variable
9/18/2015 13:05	17.5	1.62	38.9	46.9	25.1	30.3	1208000	1657000	9.0	12.4	20%	37%	relatively uniform
11/5/2015 14:05	17.3	0.43	29.7	41.4	19.2	26.7	646800	1052000	4.8	7.9	40%	63%	possibly uniform
11/11/2015 19:40	9.3	0.61	39.4	50.5	25.5	32.6	484200	787800	3.6	5.9	28%	63%	relatively uniform
11/16/2015 21:45	55.0	2.35	42.8	45.5	27.6	29.4	3663000	4952000	27.4	37.0	6%	35%	variable
11/26/2015 20:55	28.7	1.12	41.0	44.7	26.5	28.9	2333000	3057000	17.5	22.9	9%	31%	possibly uniform
12/13/2015 2:40	47.7	1.77	38.8	45.4	25.1	29.3	3327000	4033000	24.9	30.2	17%	21%	possibly uniform
12/21/2015 0:30	15.0	0.56	37.8	42.9	24.4	27.7	1034000	1315000	7.7	9.8	14%	27%	relatively uniform
12/23/2015 6:40	21.0	0.73	40.5	50.7	26.2	32.8	1466000	1981000	11.0	14.8	25%	35%	variable
12/28/2015 2:05	34.8	1.60	40.4	47.1	26.1	30.4	3779000	4534000	28.3	33.9	17%	20%	variable
VERIFICATION EVENTS - FLOW													
6/15/2015 19:35	76.2	1.70	45.1	52.3	29.2	33.8	6336000	6447000	47.4	48.2	16%	2%	variable
6/24/2015 18:10	84.4	1.91	53.9	52.0	34.8	33.6	7944000	8205000	59.4	61.4	-4%	3%	variable
6/28/2015 16:50	24.2	0.52	53.8	56.6	34.8	36.5	2356000	2318000	17.6	17.3	5%	-2%	variable
7/8/2015 4:50	48.3	1.39	44.1	45.1	28.5	29.1	3456000	3449000	25.9	25.8	2%	0%	relatively uniform
7/11/2015 6:00	50.6	1.07	47.5	50.2	30.7	32.4	3847000	4141000	28.8	31.0	6%	8%	possibly uniform
7/16/2015 5:20	48.0	1.16	50.6	49.3	32.7	31.8	2998000	3256000	22.4	24.4	-3%	9%	relatively uniform
7/29/2015 1:30	4.5	0.47	45.7	57.8	29.5	37.3	409900	482000	3.1	3.6	26%	18%	variable
8/18/2015 2:05	6.2	0.45	42.8	50.7	27.6	32.7	402700	528400	3.0	4.0	18%	31%	possibly uniform
8/18/2015 15:10	10.6	0.66	41.3	50.5	26.7	32.6	666100	907000	5.0	6.8	22%	36%	relatively uniform
Results are from the 10/27/16 model Flow volumes are high, likely due in part to DWF being modeled approximately 1.5 to 2.0 cfs higher than metered flow								WEIGHTED AVERAGES					
								Calibration - Relatively Uniform		21%	38%	relatively uniform	
								Calibration - Possibly Uniform		20%	29%	possibly uniform	
								Calibration - Variable		15%	29%	variable	
								Calibration Weighted - All Events		18%	30%		
								Verification - Relatively Uniform		7%	7%	relatively uniform	
								Verification - Possibly Uniform		12%	10%	possibly uniform	
								Verification - Variable		10%	2%	variable	
								Verification Weighted - All Events		9%	5%		
								Weighted Average - All Events		14%	15%		
								NET AVERAGES					
								Calibration - Relatively Uniform		21%	42%	relatively uniform	
								Calibration - Possibly Uniform		22%	38%	possibly uniform	
								Calibration - Variable		15%	31%	variable	
								Calibration Net - All Events		19%	37%		
								Verification - Relatively Uniform		7%	15%	relatively uniform	
								Verification - Possibly Uniform		12%	19%	possibly uniform	
								Verification - Variable		11%	5%	variable	
								Verification Net - All Events		10%	12%		
								Net Average - All Events		15%	25%		

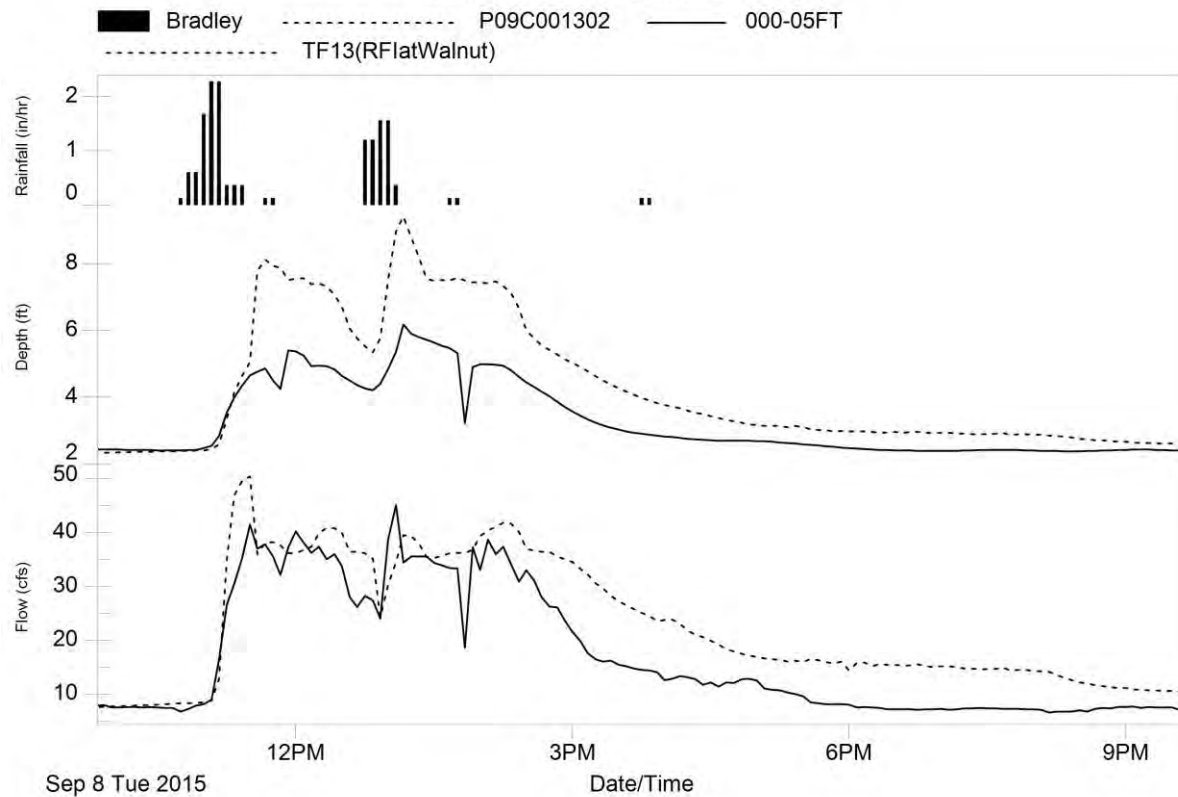
Interceptor 000-05FT Depth

Date	Duration (h)	Maximum Depth (ft)		Minimum Depth (ft)		Average Depth (ft)		Maximum Depth (ft)	Minimum Depth (ft)	Average Depth (ft)	Rainfall Variability
		metered	modeled	metered	modeled	metered	modeled	Surcharged: -0.33 ft to +1.67 ft			
CALIBRATION EVENTS - DEPTH								Non-Surcharged: -0.33 ft to +0.33 ft			
9/8/2015 10:50	9.8	6.2	9.4	2.4	2.4	3.4	4.6	3.2	0.01	1.2	variable
9/18/2015 13:05	17.5	8.0	9.2	2.4	2.5	3.5	4.7	1.3	0.1	1.1	relatively uniform
11/5/2015 14:05	17.3	4.0	6.3	2.3	2.4	2.7	3.2	2.3	0.1	0.5	possibly uniform
11/11/2015 19:40	9.3	5.4	9.4	2.3	2.4	3.1	4.1	4.0	0.2	1.0	relatively uniform
11/16/2015 21:45	55.0	5.9	8.8	2.4	2.5	3.4	4.5	2.9	0.1	1.1	variable
11/26/2015 20:55	28.7	6.0	7.9	2.4	2.6	3.7	4.9	1.9	0.2	1.2	possibly uniform
12/13/2015 2:40	47.7	5.8	7.9	2.3	2.3	3.4	4.3	2.1	0.1	0.8	possibly uniform
12/21/2015 0:30	15.0	4.9	7.7	2.5	2.8	3.3	4.5	2.8	0.3	1.1	relatively uniform
12/23/2015 6:40	21.0	5.6	8.1	2.5	2.4	3.4	4.0	2.4	-0.1	0.6	variable
12/28/2015 2:05	34.8	7.8	8.7	2.8	3.0	4.6	5.9	0.9	0.1	1.3	variable
VERIFICATION EVENTS - DEPTH											
6/15/2015 19:35	76.2	7.4	9.3	2.7	2.8	3.4	3.9	1.9	0.2	0.5	variable
6/24/2015 18:10	84.4	7.1	9.8	3.0	2.9	3.7	4.2	2.7	-0.1	0.5	variable
6/28/2015 16:50	24.2	7.5	9.3	3.2	3.2	3.9	4.2	1.8	0.1	0.3	variable
7/8/2015 4:50	48.3	6.6	8.1	2.4	2.3	3.2	3.7	1.5	-0.1	0.5	relatively uniform
7/11/2015 6:00	50.6	6.0	10.8	2.5	2.4	3.3	3.8	4.8	-0.02	0.5	possibly uniform
7/16/2015 5:20	48.0	6.1	9.9	2.5	2.5	3.0	3.5	3.8	0.1	0.5	relatively uniform
7/29/2015 1:30	4.5	5.7	9.2	2.4	2.4	3.9	5.0	3.5	-0.02	1.1	variable
8/18/2015 2:05	6.2	5.3	8.1	2.3	2.4	3.3	4.1	2.8	0.05	0.9	possibly uniform
8/18/2015 15:10	10.6	5.7	8.3	2.4	2.6	3.3	4.2	2.7	0.2	1.0	relatively uniform
Results are from the 10/27/16 model Surcharge Depth = 5.5 ft Averages/weighted averages use surcharged criteria, as most events are surcharged				WEIGHTED AVERAGES							
				Calibration - Relatively Uniform				2.5	0.2	1.1	relatively uniform
				Calibration - Possibly Uniform				2.1	0.1	0.9	possibly uniform
				Calibration - Variable				2.3	0.03	1.0	variable
				Calibration Weighted - All Events				2.3	0.1	1.0	
				Verification - Relatively Uniform				2.6	0.1	0.6	relatively uniform
				Verification - Possibly Uniform				3.8	0.01	0.7	possibly uniform
				Verification - Variable				2.4	0.03	0.6	variable
				Verification Weighted - All Events				2.8	0.04	0.6	
				Weighted Average - All Events				2.5	0.1	0.8	
				NET AVERAGES							
				Calibration - Relatively Uniform				2.7	0.2	1.1	relatively uniform
				Calibration - Possibly Uniform				2.1	0.1	0.9	possibly uniform
				Calibration - Variable				2.4	0.03	1.0	variable
				Calibration Net - All Events				2.4	0.1	1.0	
				Verification - Relatively Uniform				2.7	0.1	0.6	relatively uniform
				Verification - Possibly Uniform				3.8	0.01	0.7	possibly uniform
				Verification - Variable				2.5	0.03	0.6	variable
				Verification Net - All Events				2.8	0.04	0.6	
				Net Average - All Events				2.6	0.1	0.8	

RFI at Walnut 000-05FT – Calibration Events

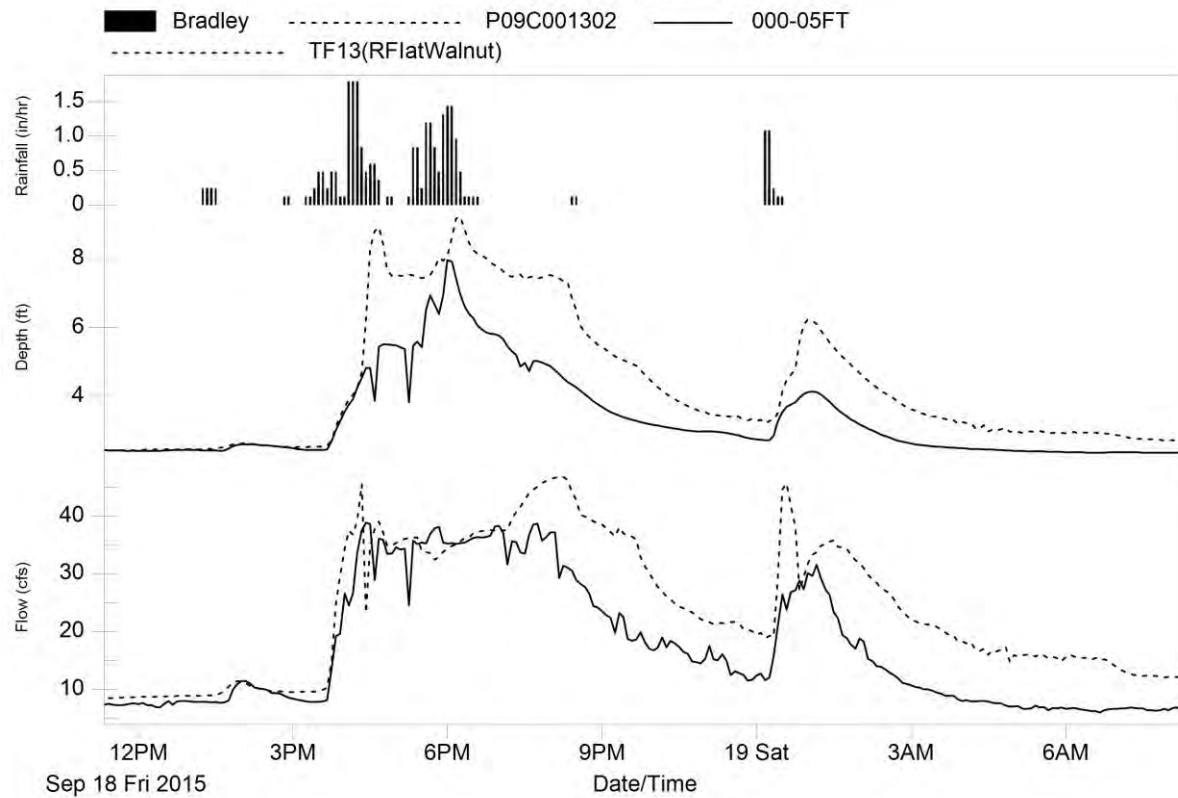
Event of September 8, 2015

Duration: 9.83 h, Total Rainfall: 0.86 (in)



Event of September 18, 2015

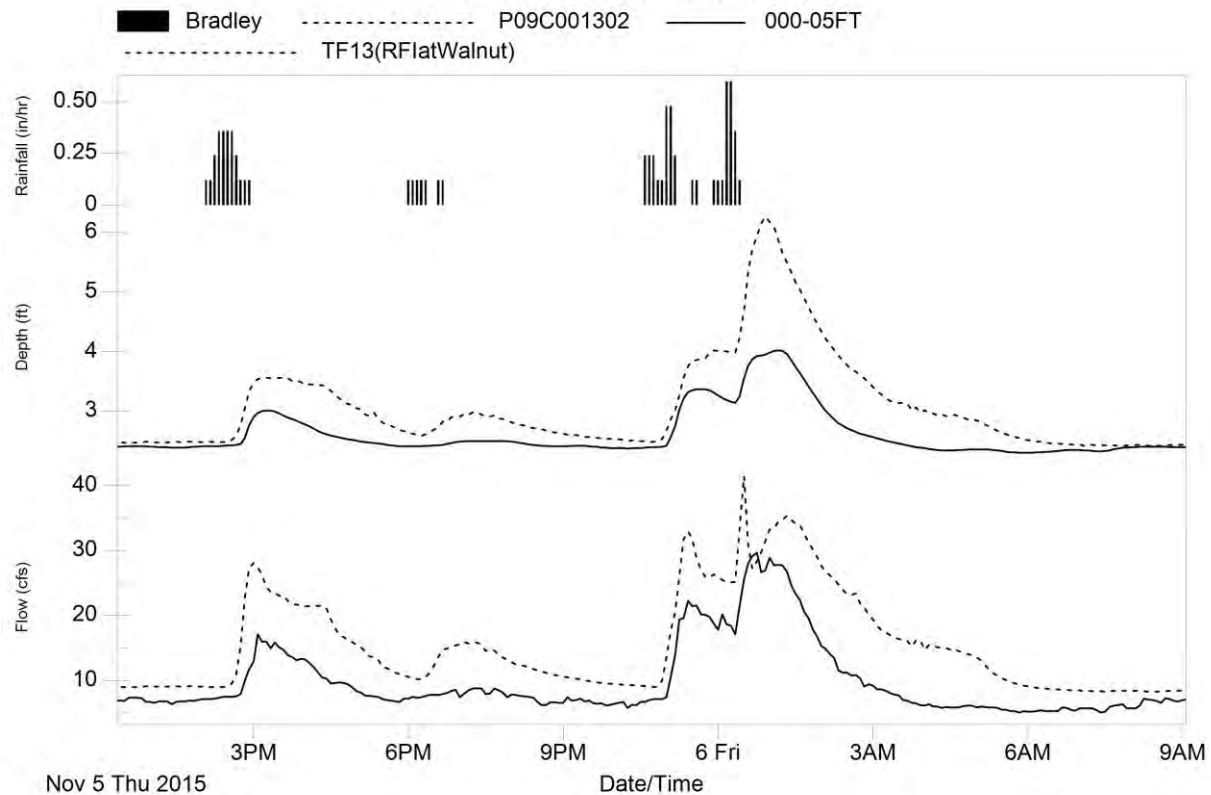
Duration: 17.5 h, Total Rainfall: 1.62 (in)



RFI at Walnut 000-05FT – Calibration Events

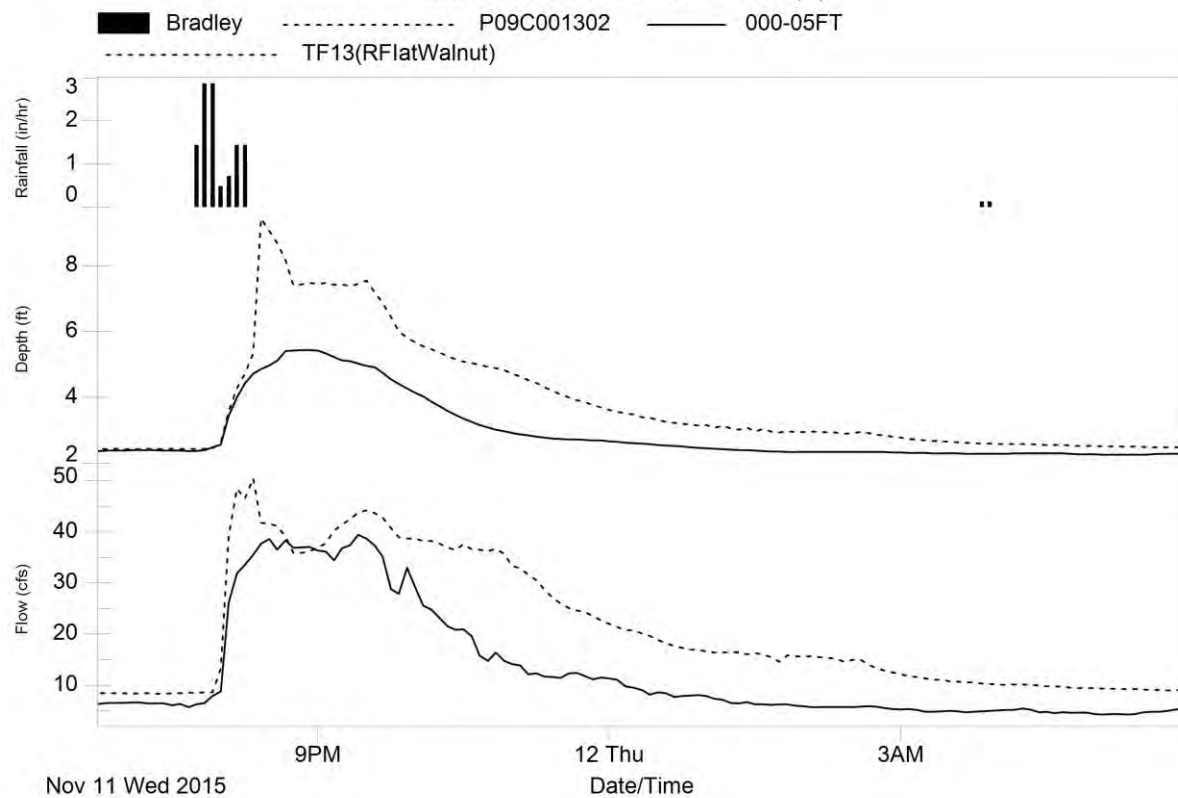
Event of November 5, 2015

Duration: 17.25 h, Total Rainfall: 0.43 (in)



Event of November 11, 2015

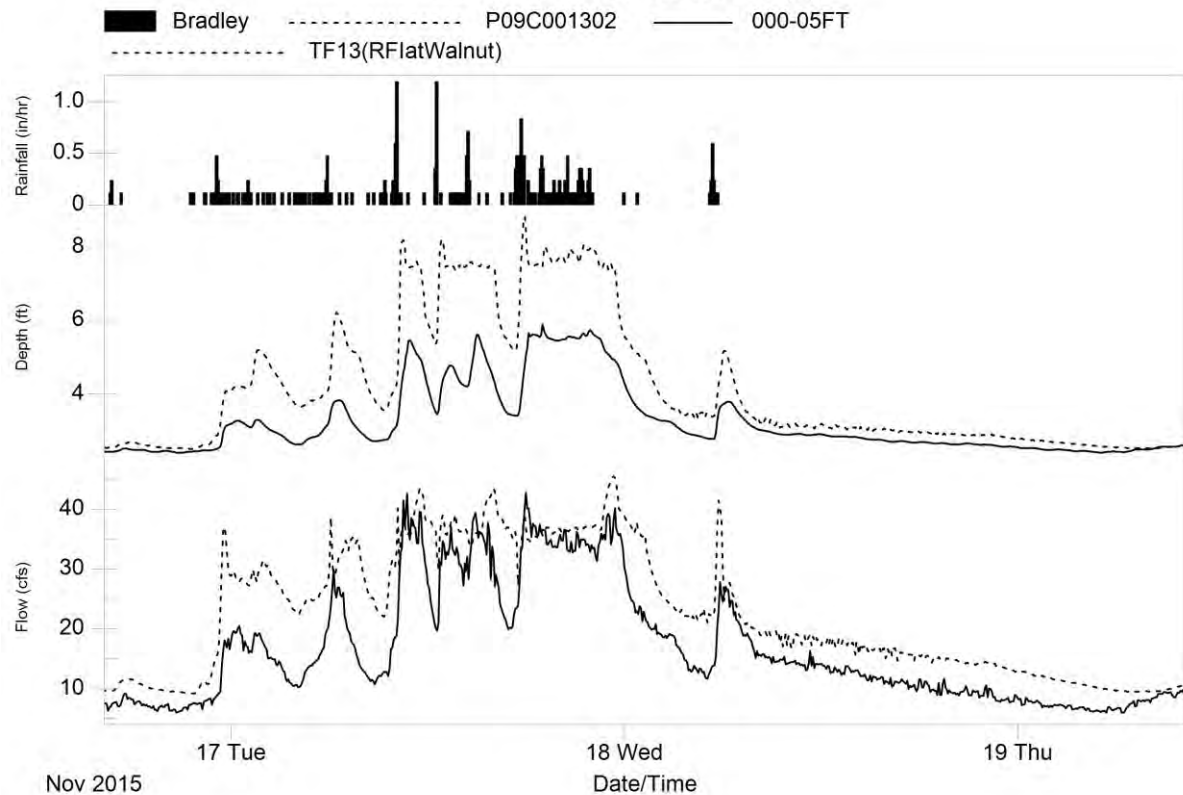
Duration: 9.33 h, Total Rainfall: 0.61 (in)



RFI at Walnut 000-05FT – Calibration Events

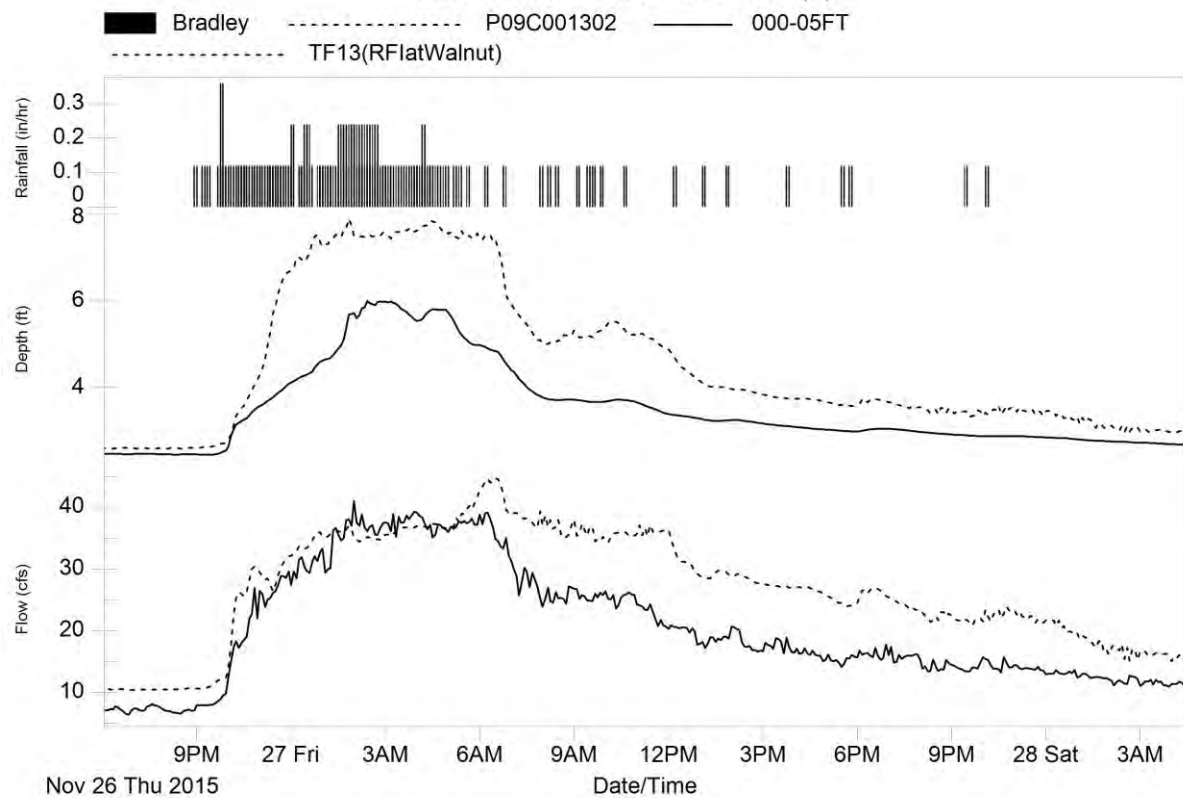
Event of November 16, 2015

Duration: 55 h, Total Rainfall: 2.35 (in)



Event of November 26, 2015

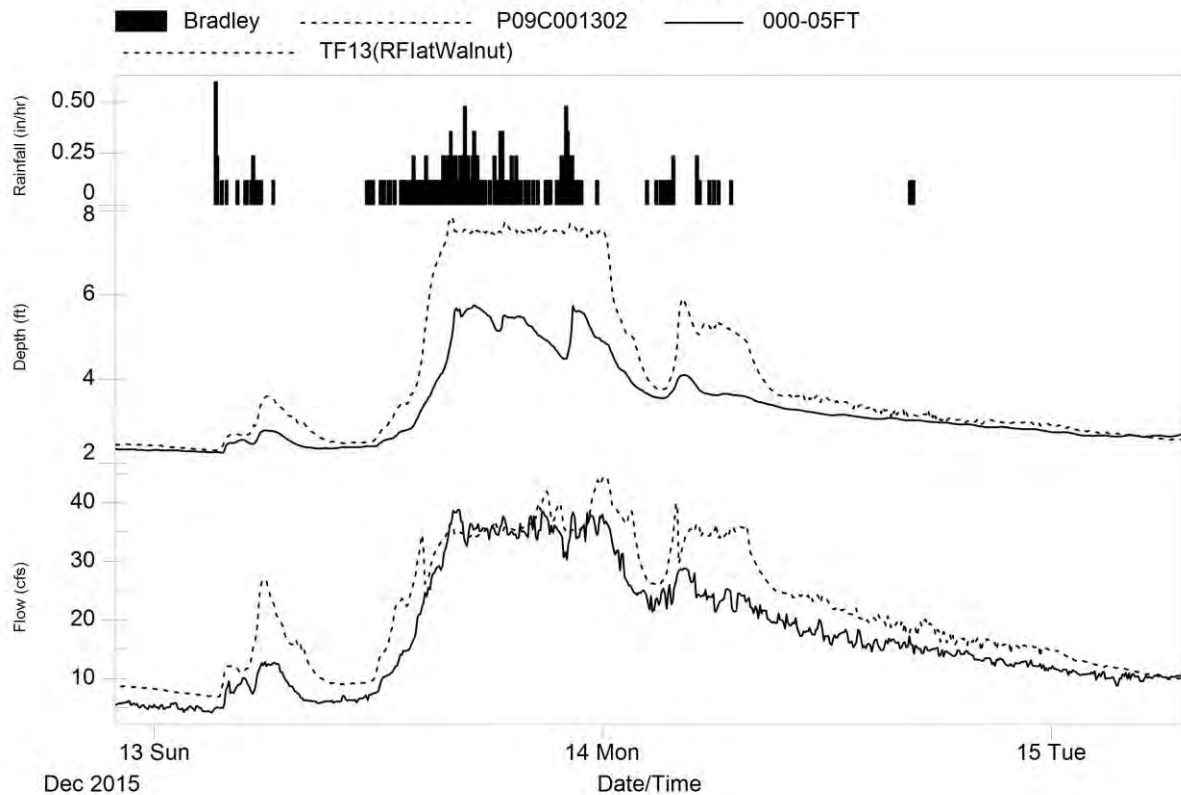
Duration: 28.67 h, Total Rainfall: 1.12 (in)



RFI at Walnut 000-05FT – Calibration Events

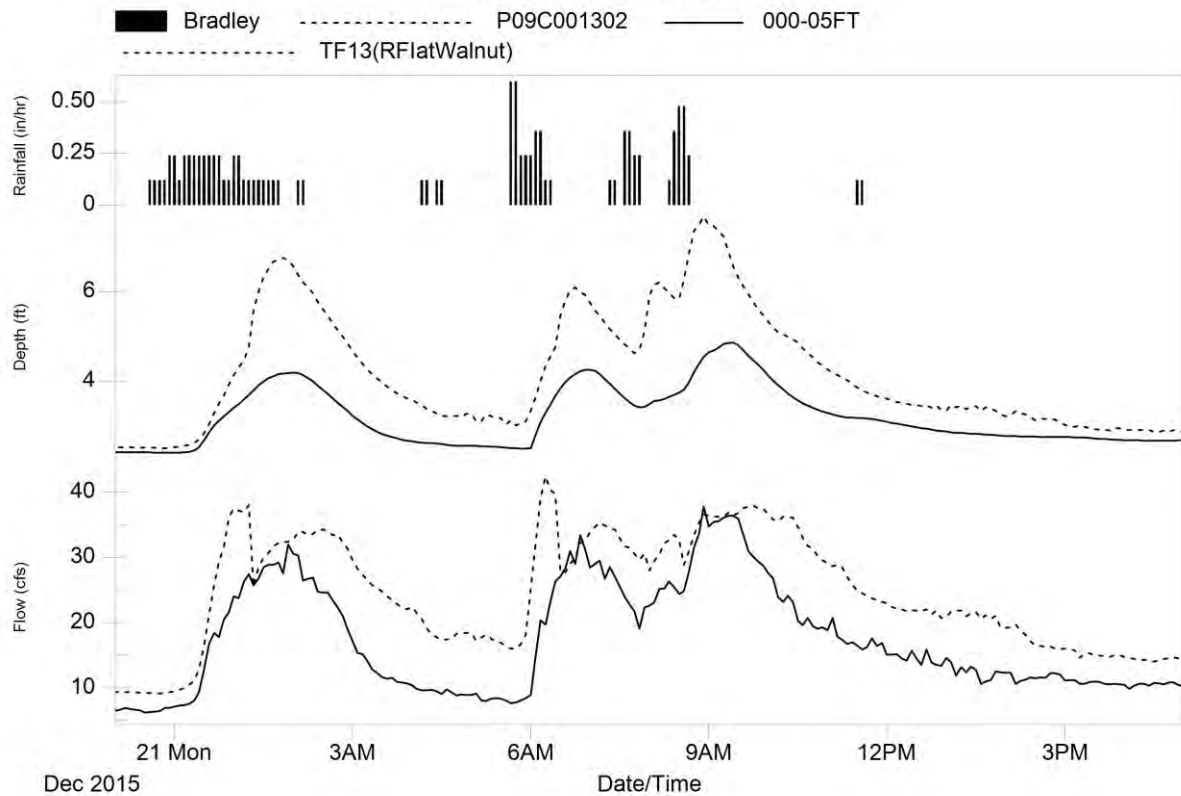
Event of December 13, 2015

Duration: 47.67 h, Total Rainfall: 1.77 (in)



Event of December 21, 2015

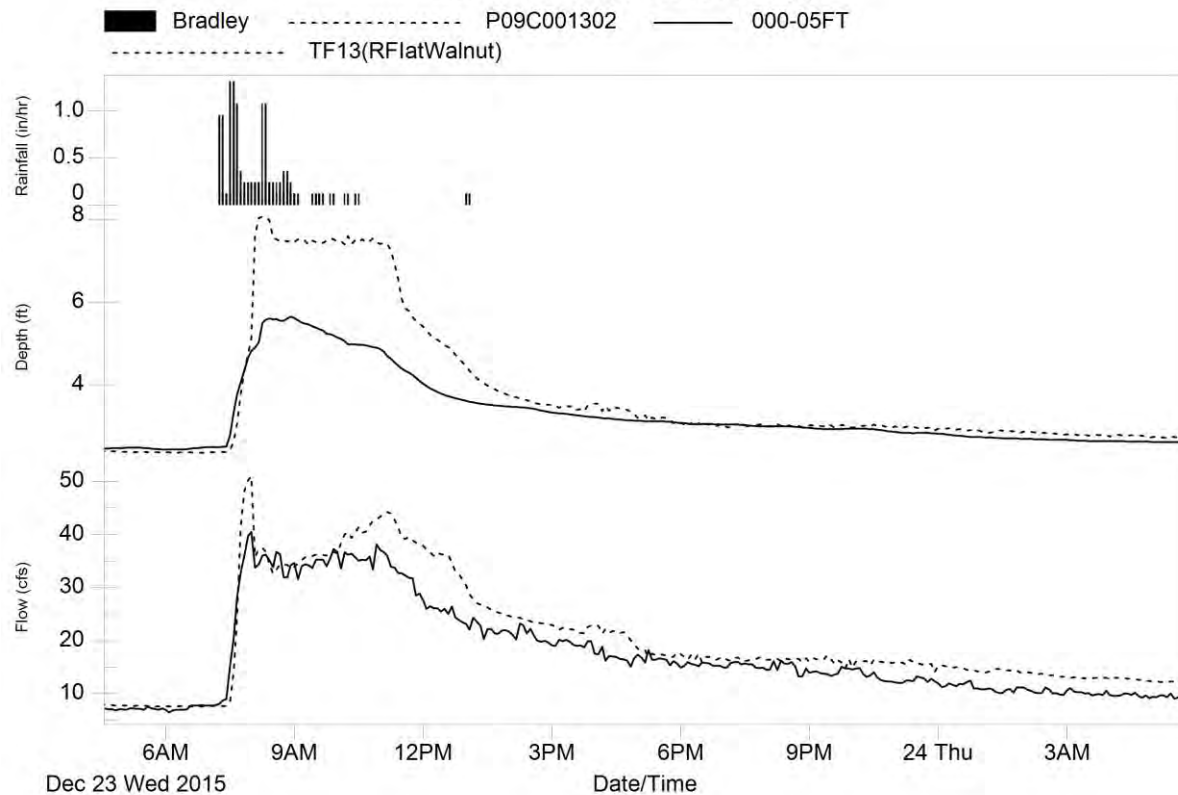
Duration: 15 h, Total Rainfall: 0.56 (in)



RFI at Walnut 000-05FT – Calibration Events

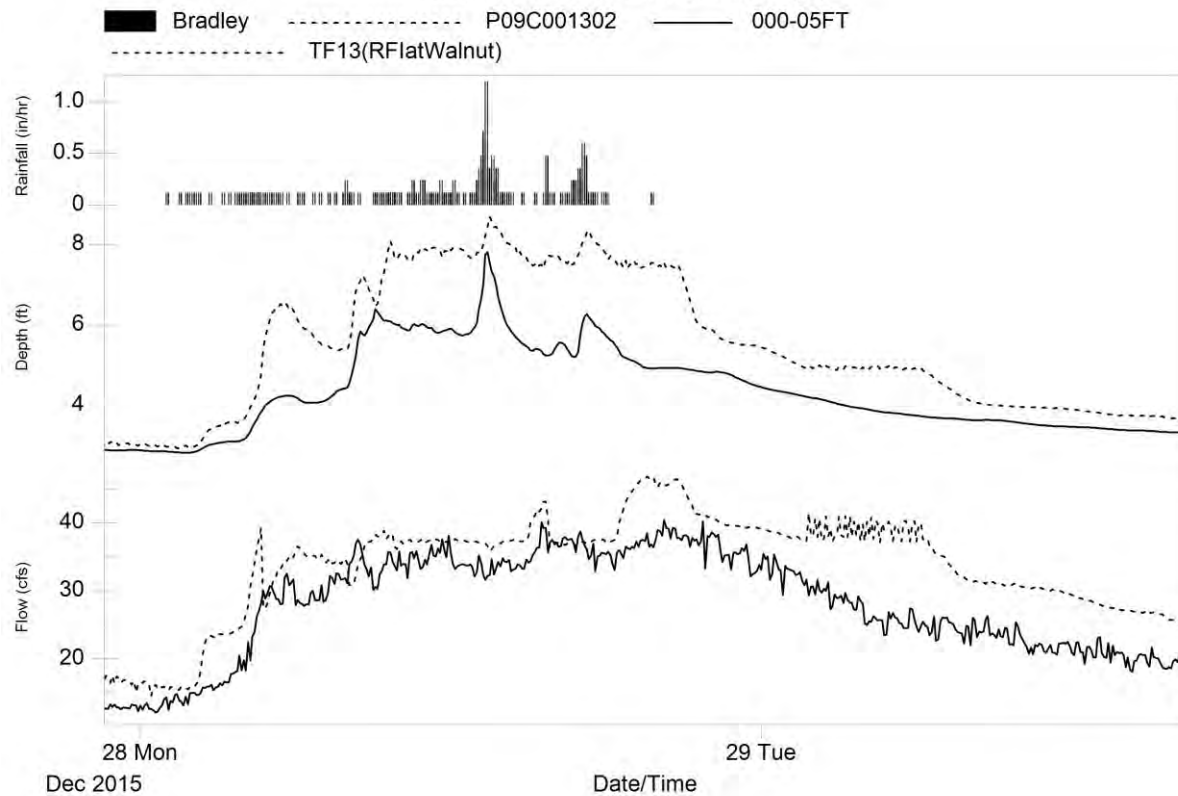
Event of December 23, 2015

Duration: 21 h, Total Rainfall: 0.73 (in)



Event of December 28, 2015

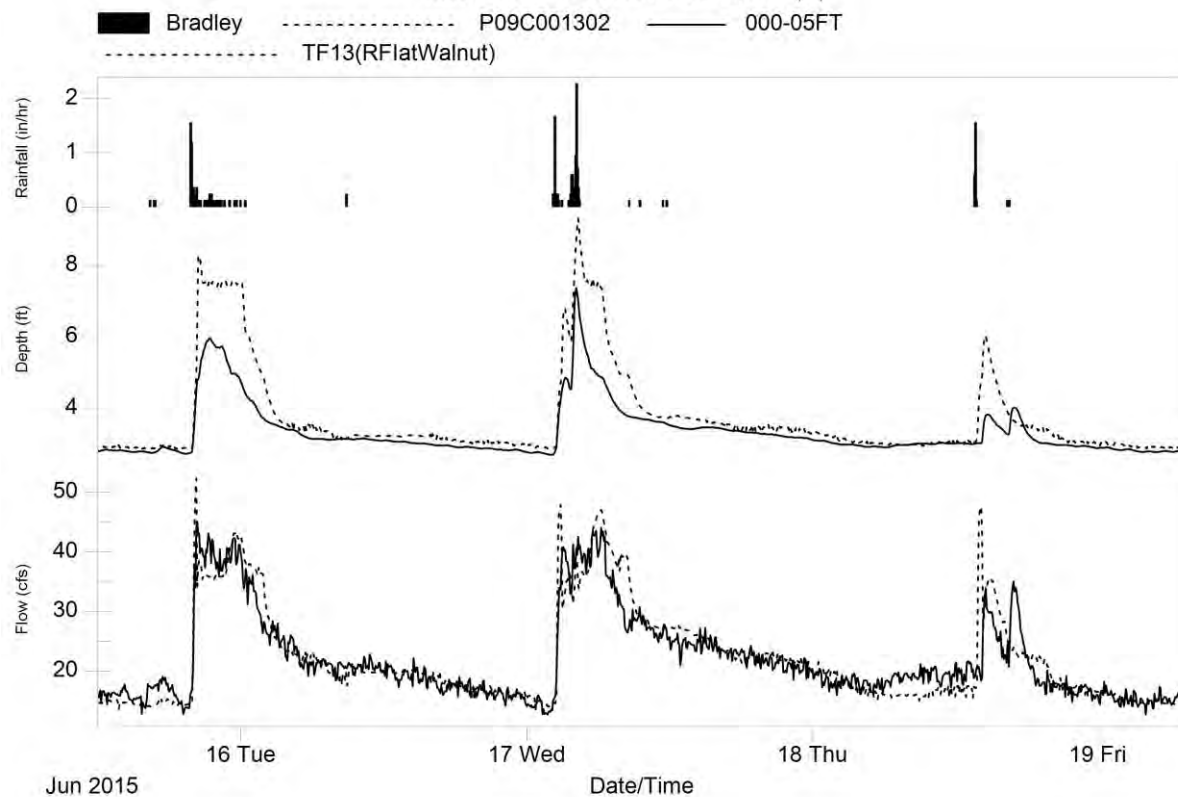
Duration: 34.83 h, Total Rainfall: 1.6 (in)



RFI at Walnut 000-05FT – Verification Events

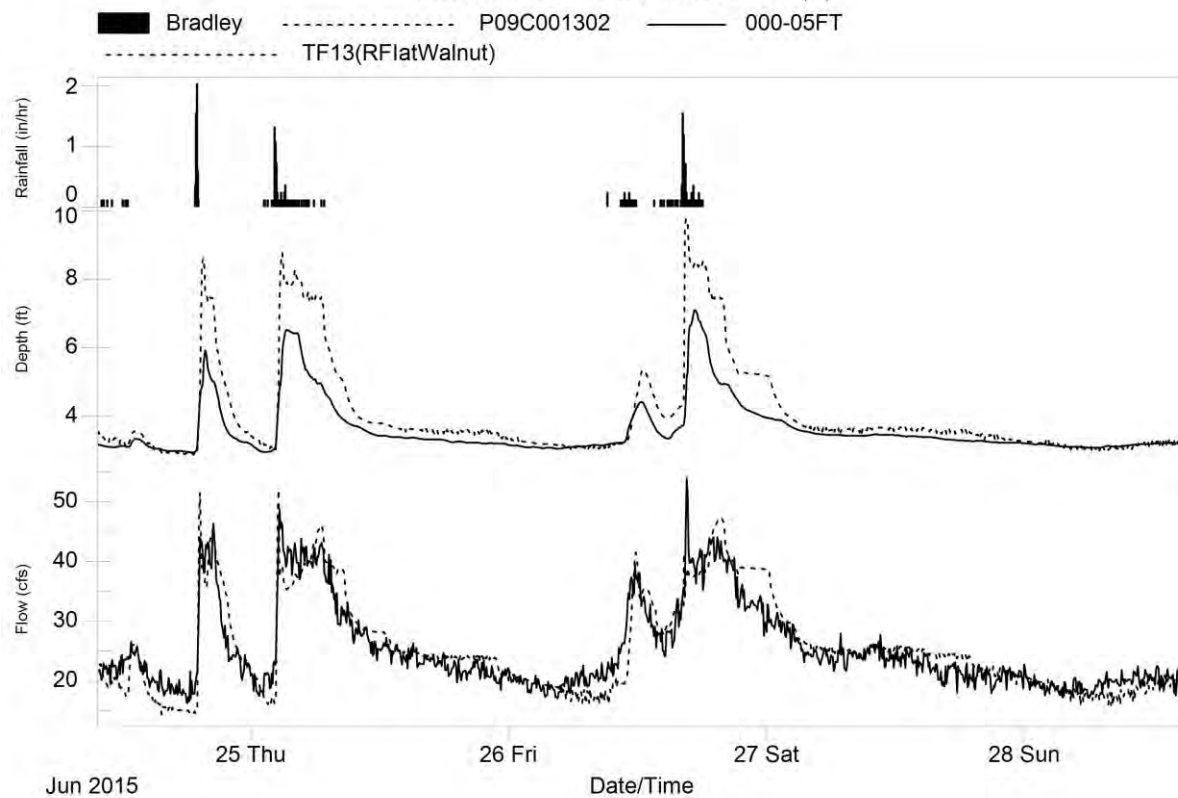
Event of June 15, 2015

Duration: 76.17 h, Total Rainfall: 1.7 (in)



Event of June 24, 2015

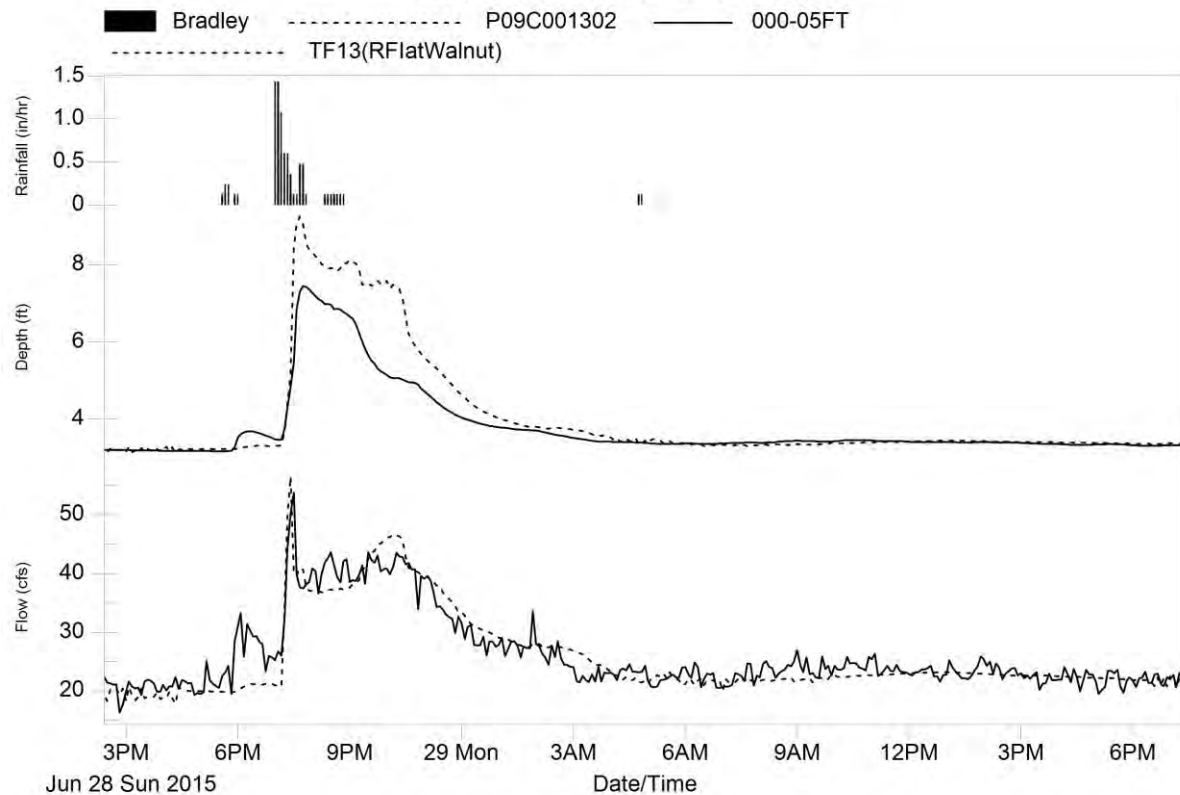
Duration: 84.42 h, Total Rainfall: 1.91 (in)



RFI at Walnut 000-05FT – Verification Events

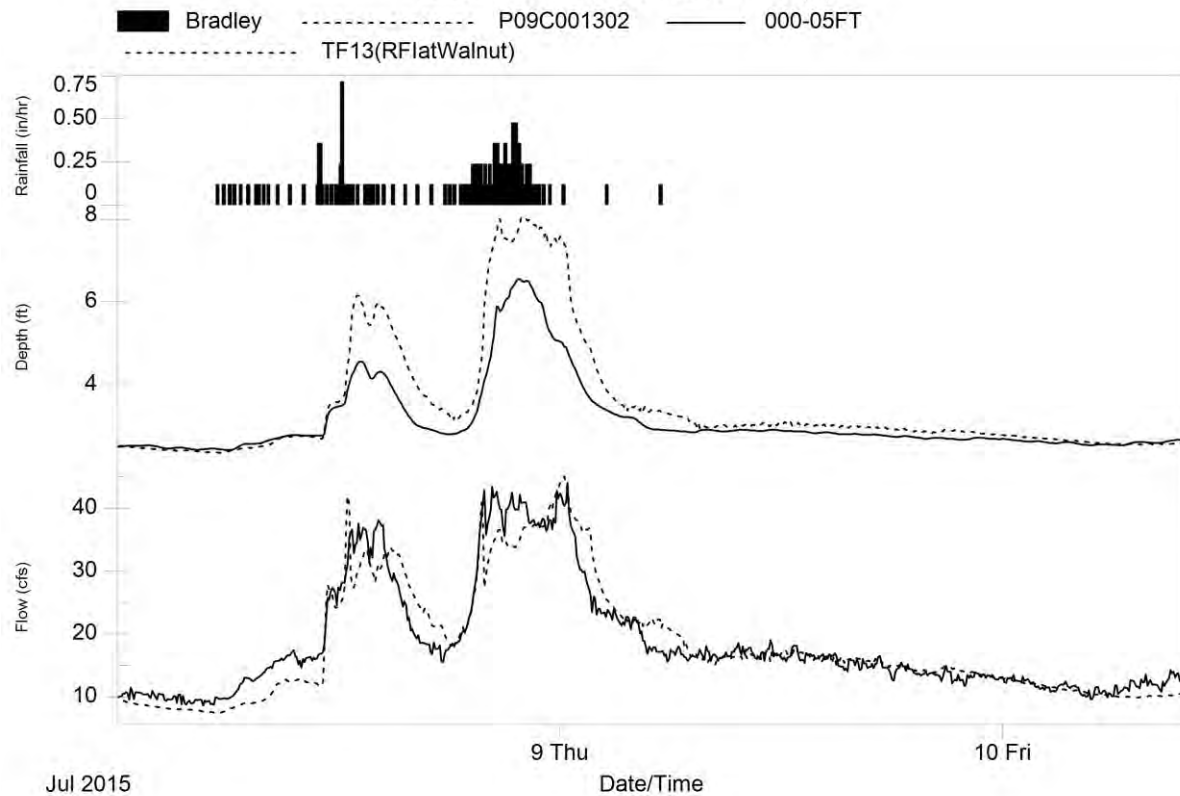
Event of June 28, 2015

Duration: 24.17 h, Total Rainfall: 0.52 (in)

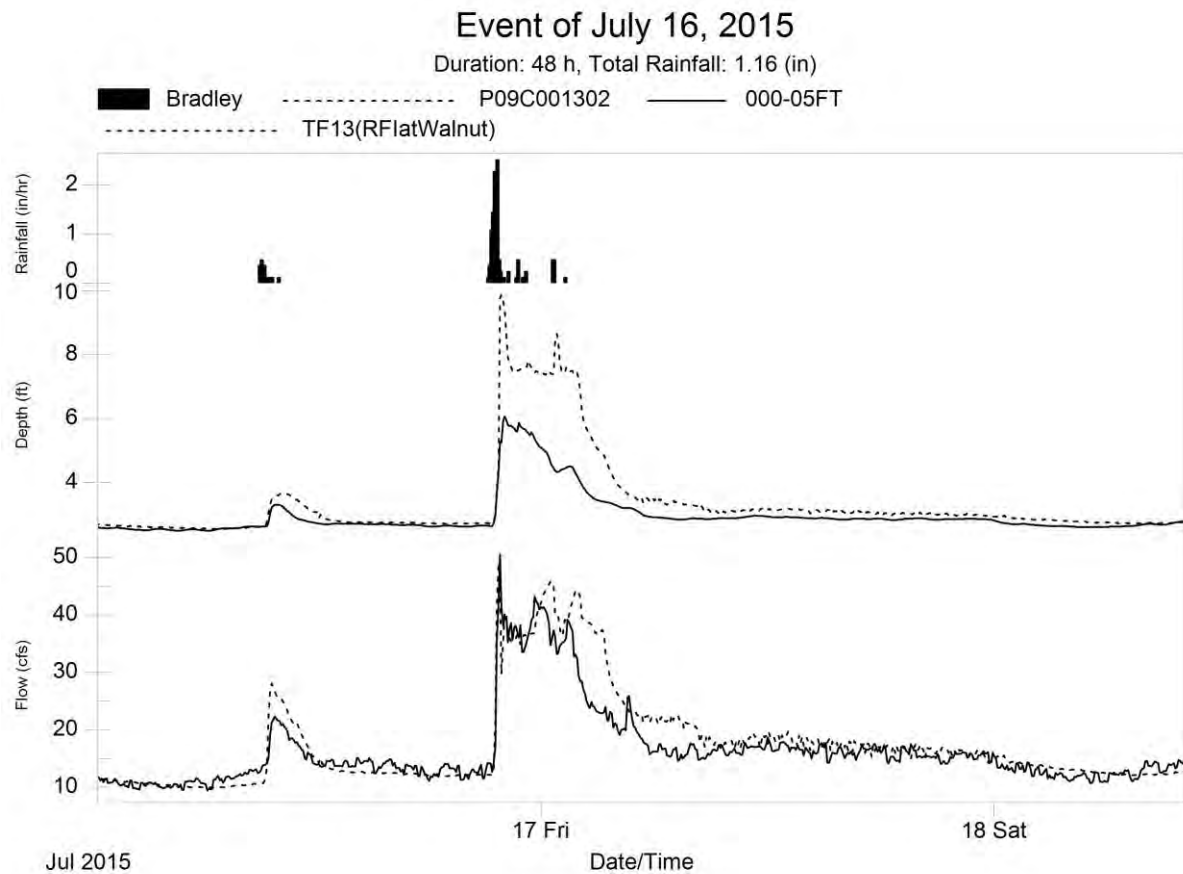
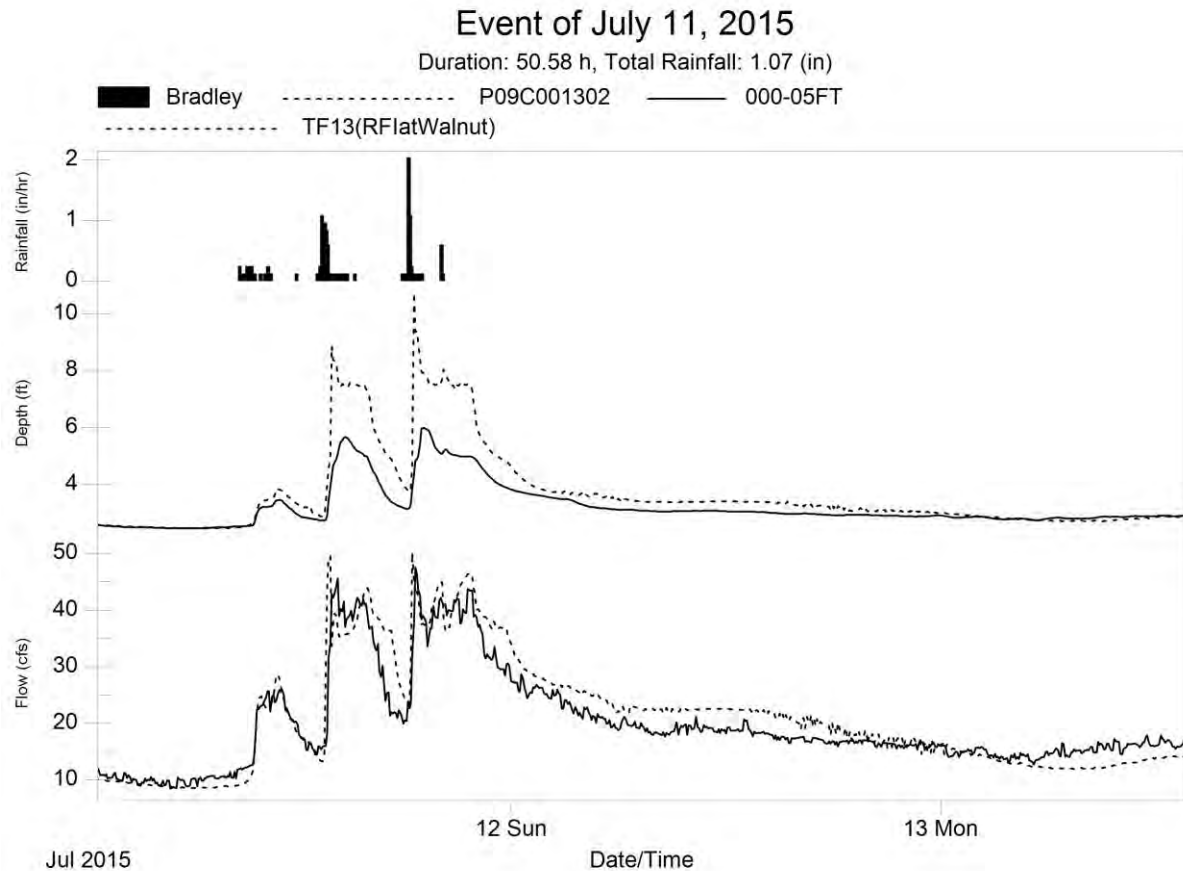


Event of July 8, 2015

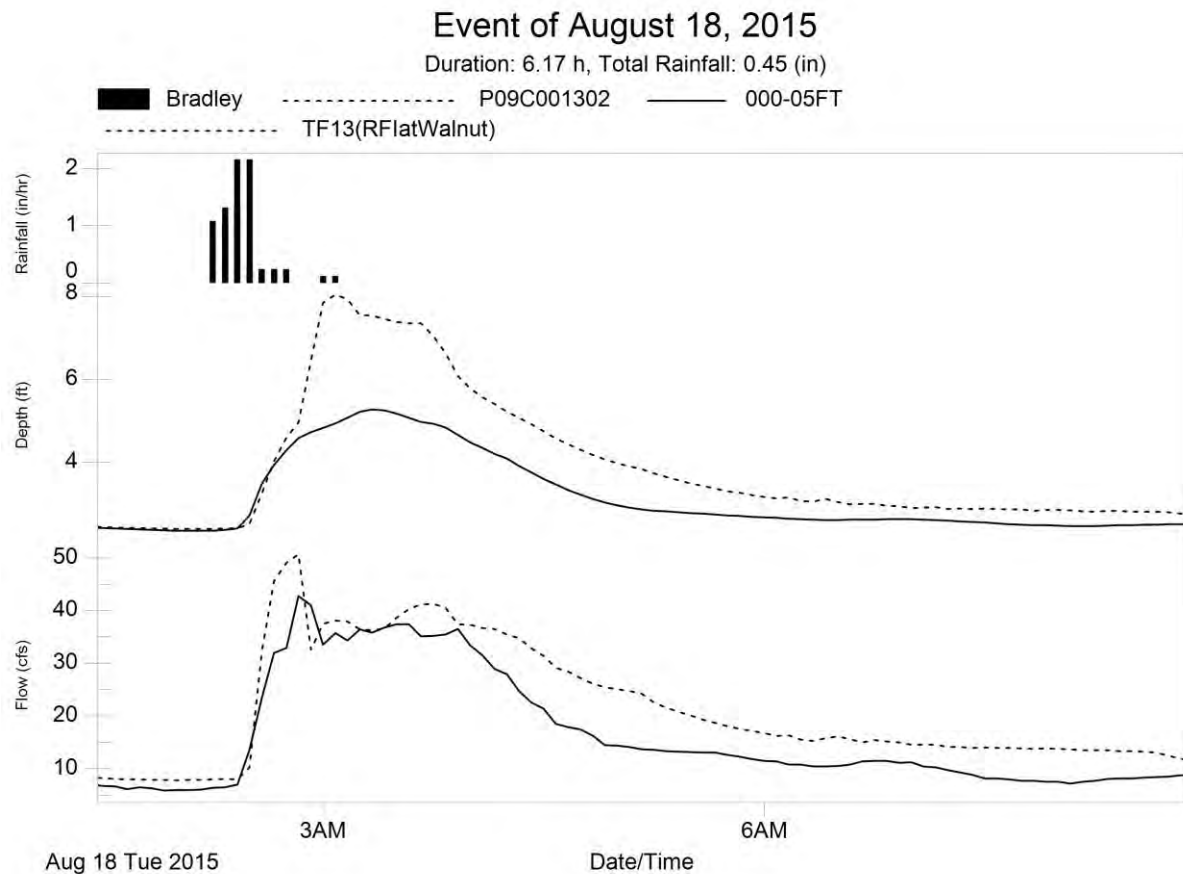
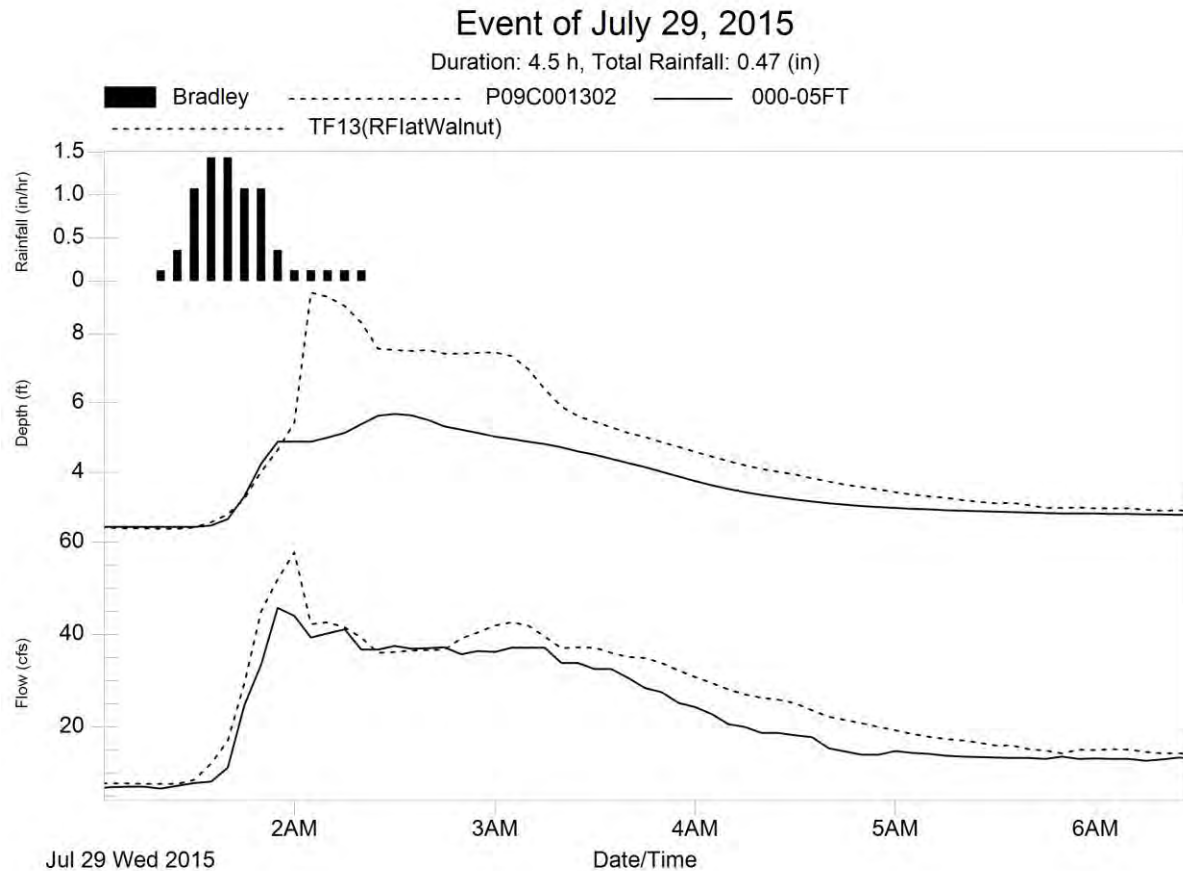
Duration: 48.25 h, Total Rainfall: 1.39 (in)



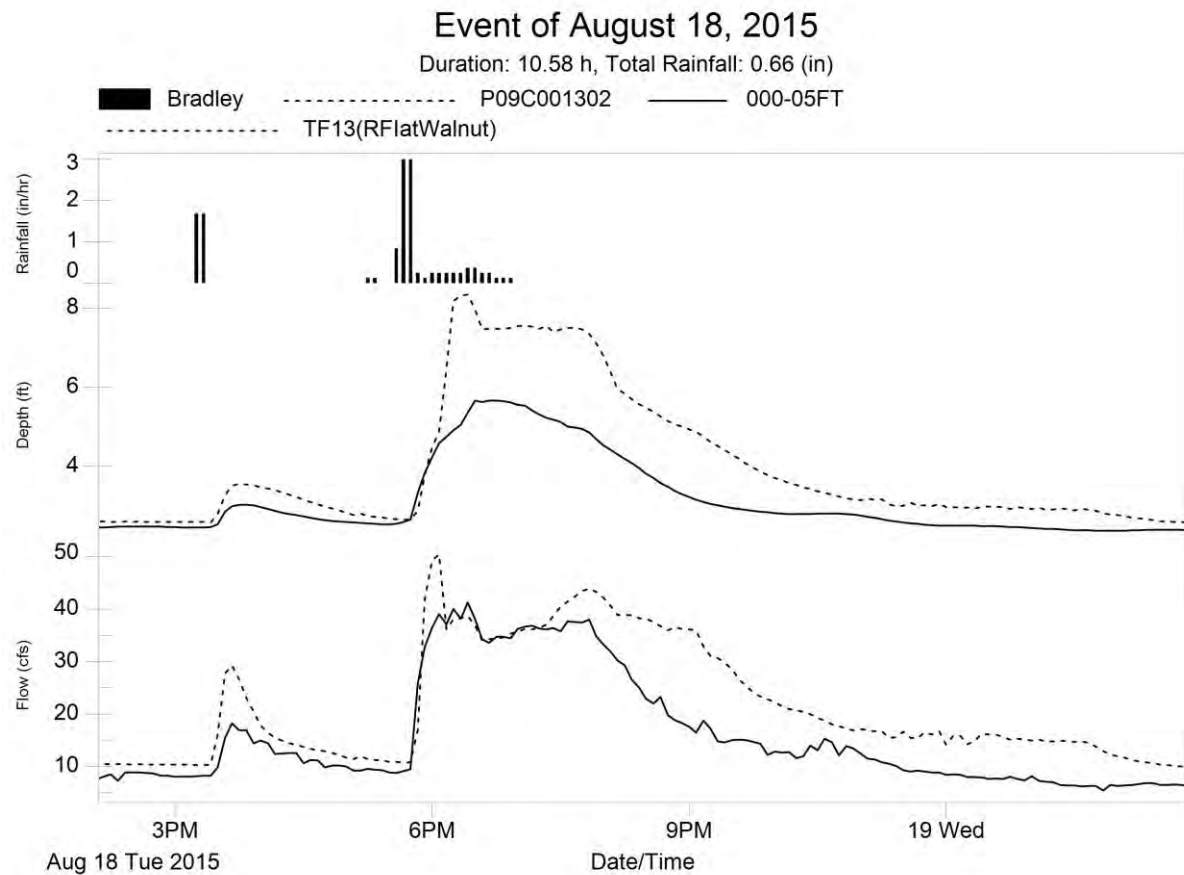
RFI at Walnut 000-05FT – Verification Events



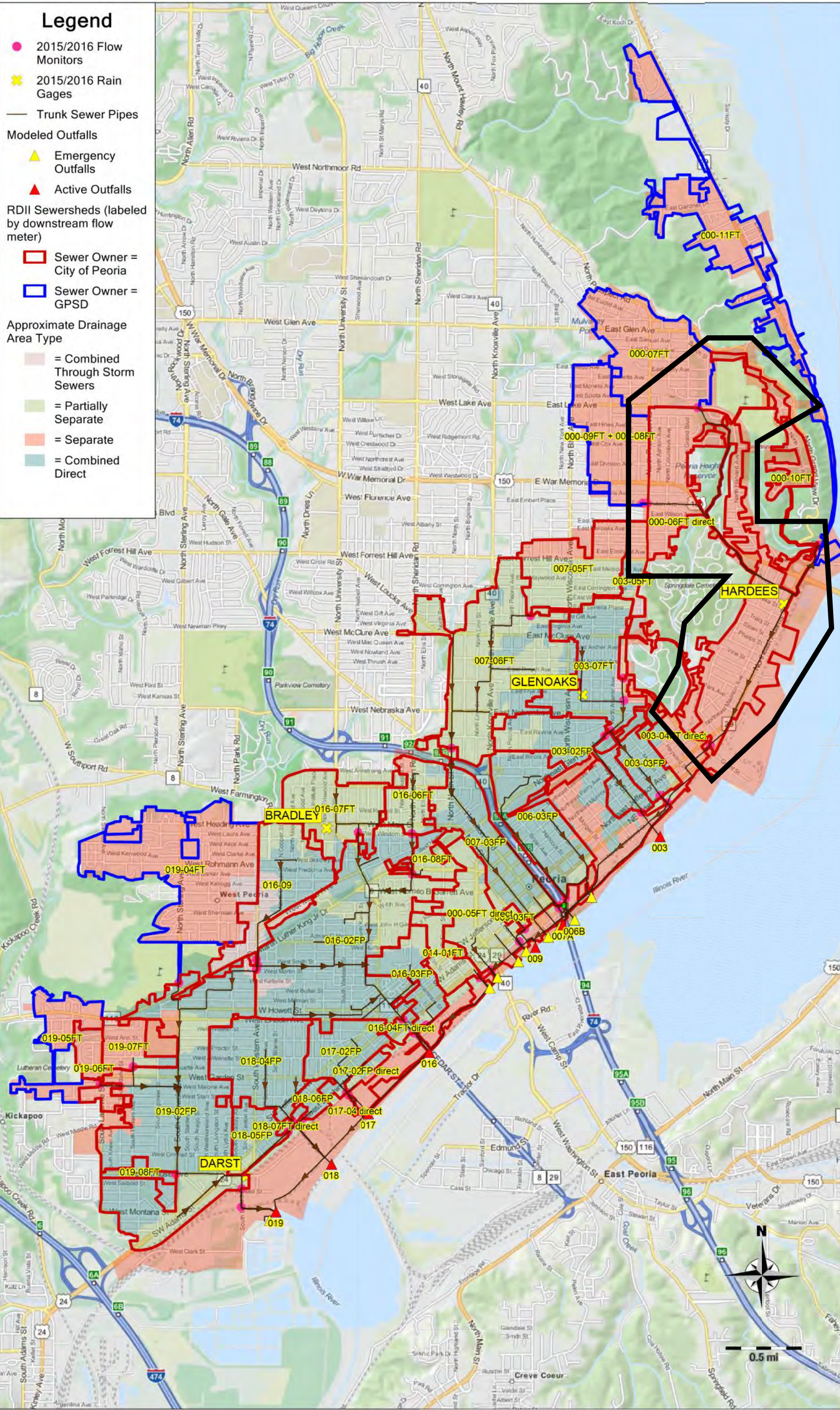
RFI at Walnut 000-05FT – Verification Events

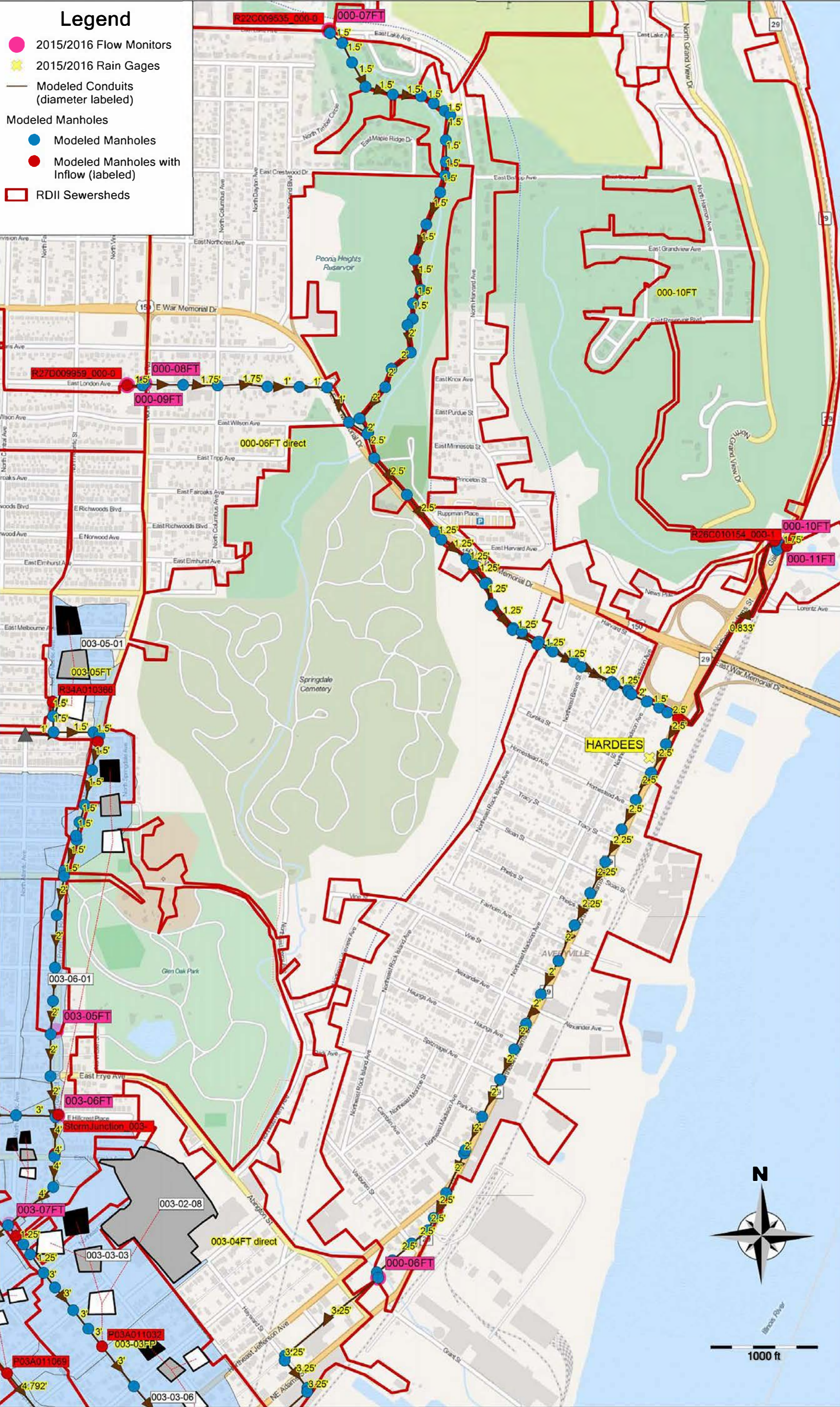


RFI at Walnut 000-05FT – Verification Events



Flow Monitor 000-06FT direct Overview Map





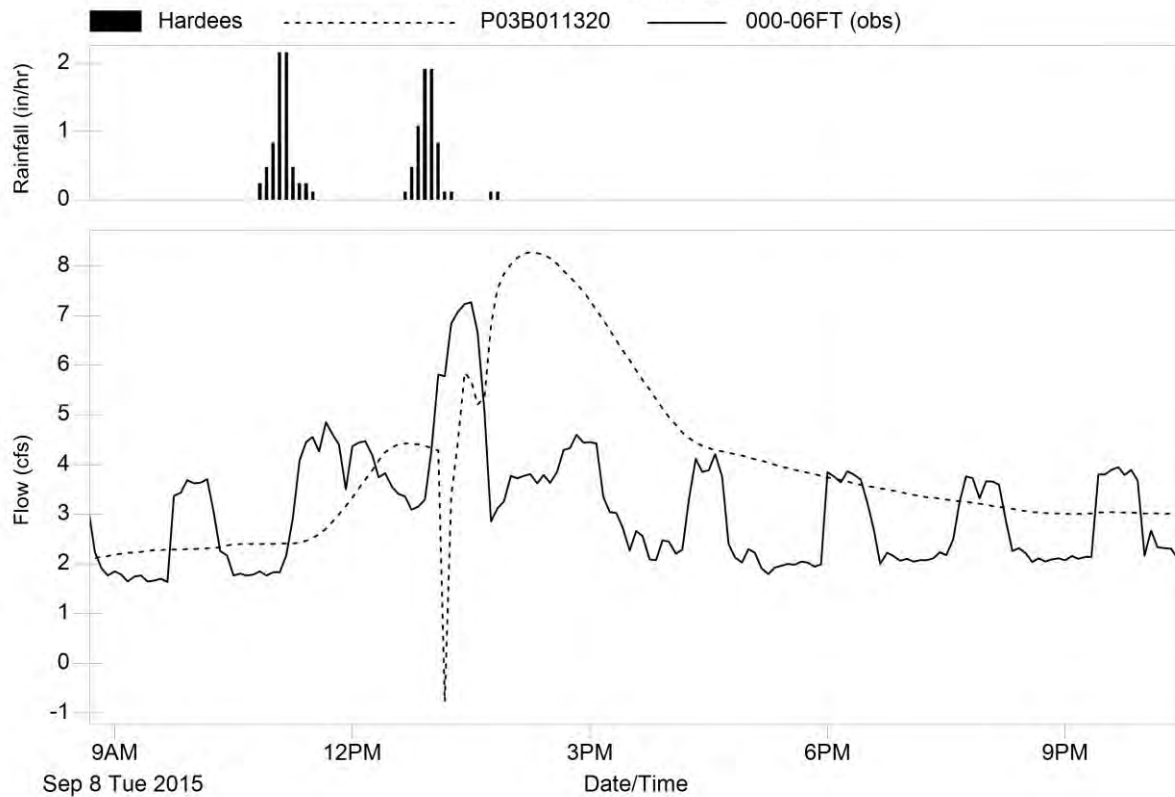
Date	Duration (h)	Rainfall (in)	Maximum Flow (cfs)		Maximum Flow (mgd)		Total Volume (ft³)		Volume (million gallons)		Peak Flow Rate (-15% to +25%)	Flow Volume (-10% to +20%)	Rainfall Variability
		Hardees Edited	Observed	Modeled	Observed	Modeled	Observed	Modeled	Observed	Modeled			
CALIBRATION EVENTS - FLOW													
9/8/2015 9:50	11.5	0.79	7.27	8.28	4.697	5.346	132200	172900	0.989	1.293	14%	31%	possibly uniform
9/18/2015 12:35	18.08	1.61	17.46	14.79	11.279	9.554	345800	411500	2.587	3.078	-15%	19%	relatively uniform
11/5/2015 13:15	26.83	0.47	4.21	4.19	2.720	2.707	241200	284900	1.804	2.131	0%	18%	possibly uniform
11/11/2015 19:00	7.67	0.76	7.55	10.22	4.876	6.602	95290	152700	0.713	1.142	35%	60%	relatively uniform
11/16/2015 12:30	64.42	2.39	12.58	13.74	8.127	8.876	1162000	1350000	8.692	10.098	9%	16%	variable
11/26/2015 18:20	62.42	1.42	11.84	13.76	7.649	8.889	1254000	1541000	9.380	11.527	16%	23%	possibly uniform
12/13/2015 2:50	47.17	1.71	14.48	11.52	9.354	7.442	1116000	1048000	8.348	7.839	-20%	-6%	possibly uniform
12/20/2015 21:55	25.58	0.68	7.68	6.92	4.962	4.470	401900	411500	3.006	3.078	-10%	2%	possibly uniform
12/23/2015 6:30	25	0.62	12.02	9.09	7.765	5.873	596800	485300	4.464	3.630	-24%	-19%	variable
12/28/2015 1:05	53.33	2.28	17.59	16.90	11.363	10.917	2019000	2076000	15.102	15.528	-4%	3%	relatively uniform
VERIFICATION EVENTS - FLOW													
6/17/2015 1:50	35.33	0.82	11.38	14.79	7.351	9.554	1001000	975300	7.487	7.295	30%	-3%	variable
6/24/2015 4:35	107.67	2.11	17.46	14.75	11.279	9.529	2909000	2658000	21.759	19.882	-16%	-9%	possibly uniform
6/28/2015 13:55	65.67	0.68	9.887	12.36	6.387	7.985	1577000	1518000	11.796	11.355	25%	-4%	relatively uniform
7/8/2015 4:45	49.92	1.38	12.91	14.75	8.340	9.529	1449000	1059000	10.839	7.921			relatively uniform
7/11/2015 8:00	112.58	1.43	21.39	14.81	13.818	9.567	3046000	2372000	22.784	17.743			relatively uniform
7/16/2015 20:15	35.25	0.92	12.99	11.6	8.392	7.494	993500	783400	7.431	5.860			relatively uniform
7/29/2015 1:05	3.92	0.77	11.63	9.042	7.513	5.841	97670	78560	0.731	0.588			variable
8/18/2015 2:15	2.83	0.46	4.792	5.213	3.096	3.368	28780	38220	0.215	0.286	9%	33%	possibly uniform
8/18/2015 15:10	35.42	0.52	6.567	8.009	4.242	5.174	371500	415700	2.779	3.109	22%	12%	relatively uniform
Note: Meter data is inexplicably uniformly higher than typical from 7/8 - 7/29. Values are tabulated above but not included in averages.								WEIGHTED AVERAGES					
								Calibration - Relatively Uniform		-2%	7%	relatively uniform	
								Calibration - Possibly Uniform		-2%	10%	possibly uniform	
								Calibration - Variable		-7%	4%	variable	
								Calibration Weighted - All Events		-3%	8%		
								Verification - Relatively Uniform		6%	0%	relatively uniform	
								Verification - Possibly Uniform		-10%	-8%	possibly uniform	
								Verification - Variable		15%	-2%	variable	
								Verification Weighted - All Events		5%	-2%		
								Weighted Average - All Events		1%	2%		
								NET AVERAGES					
								Calibration - Relatively Uniform		5%	27%	relatively uniform	
								Calibration - Possibly Uniform		0%	14%	possibly uniform	
								Calibration - Variable		-8%	-1%	variable	
								Calibration Net - All Events		0%	15%		
								Verification - Relatively Uniform		23%	4%	relatively uniform	
								Verification - Possibly Uniform		-3%	12%	possibly uniform	
								Verification - Variable		30%	-3%	variable	
								Verification Net - All Events		14%	6%		
Net Average - All Events		5%	12%										

Note: Meter data is inexplicably uniformly higher than typical from 7/8 - 7/29. Values are tabulated above but not included in averages.

RFI 000-06FT – Calibration Events

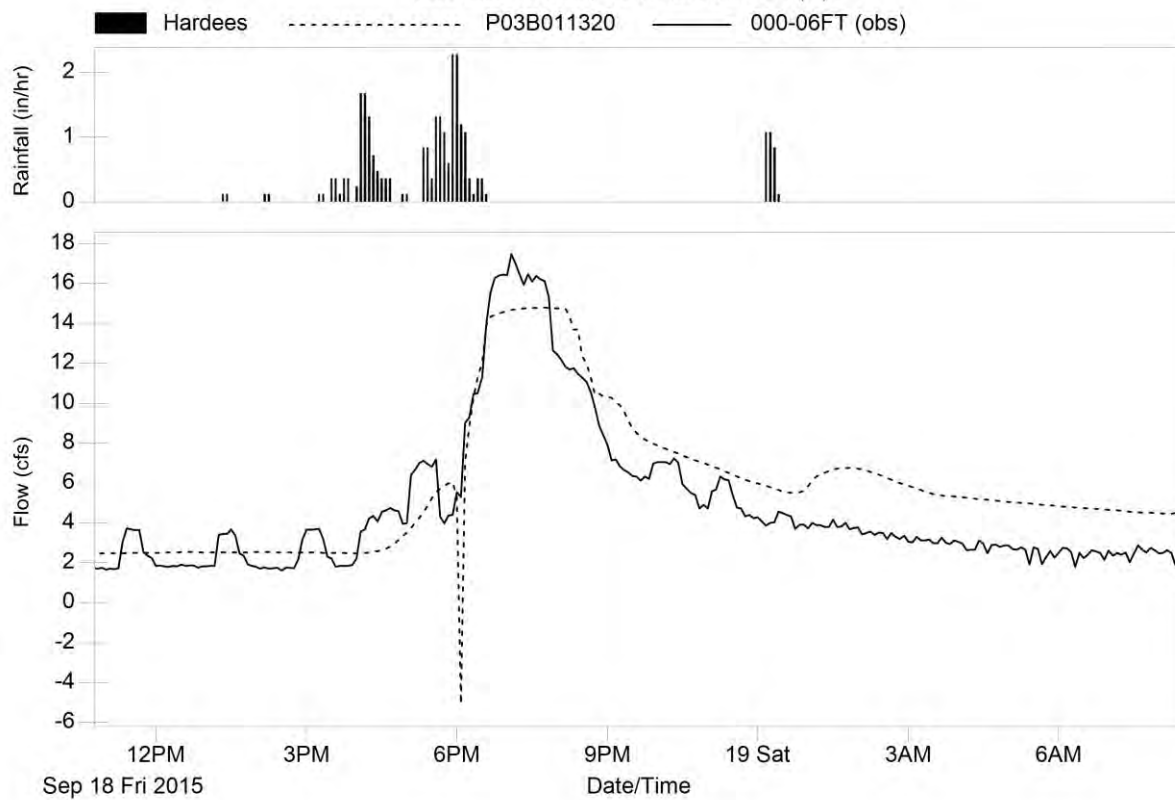
Event of September 8, 2015

Duration: 11.5 h, Total Rainfall: 0.79 (in)



Event of September 18, 2015

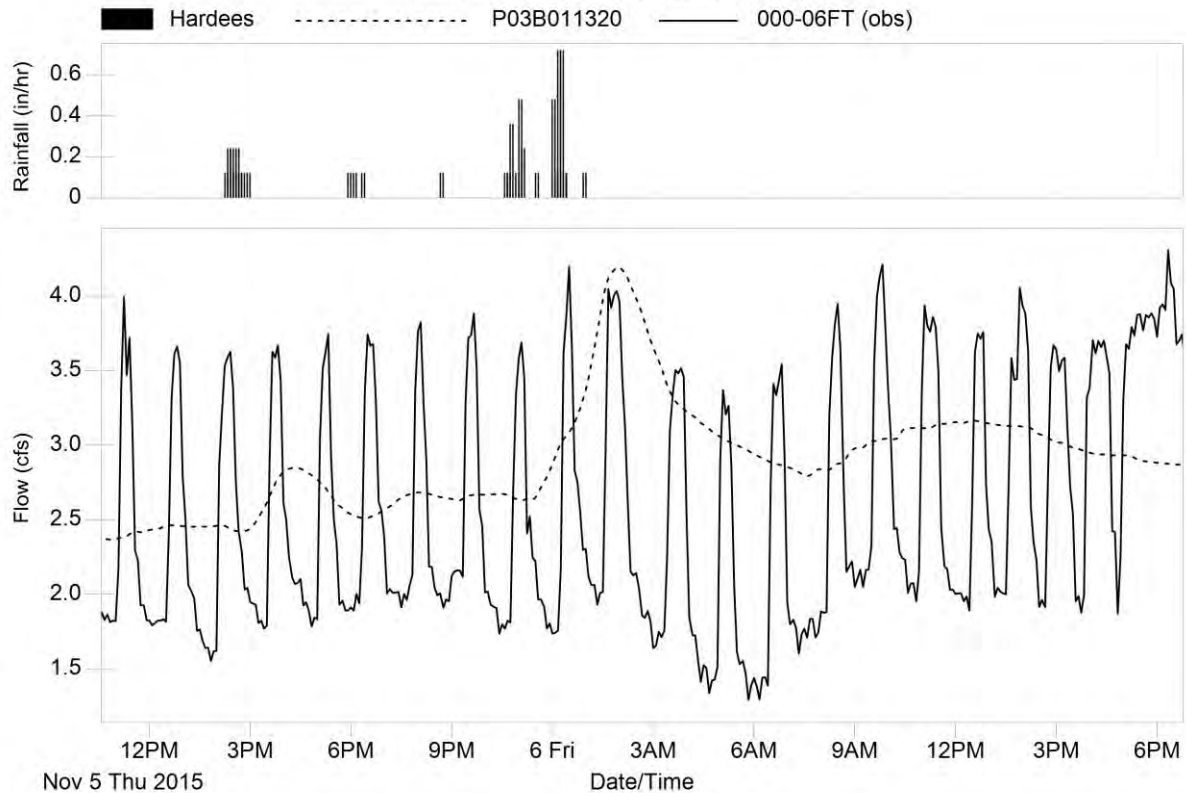
Duration: 18.08 h, Total Rainfall: 1.61 (in)



RFI 000-06FT – Calibration Events

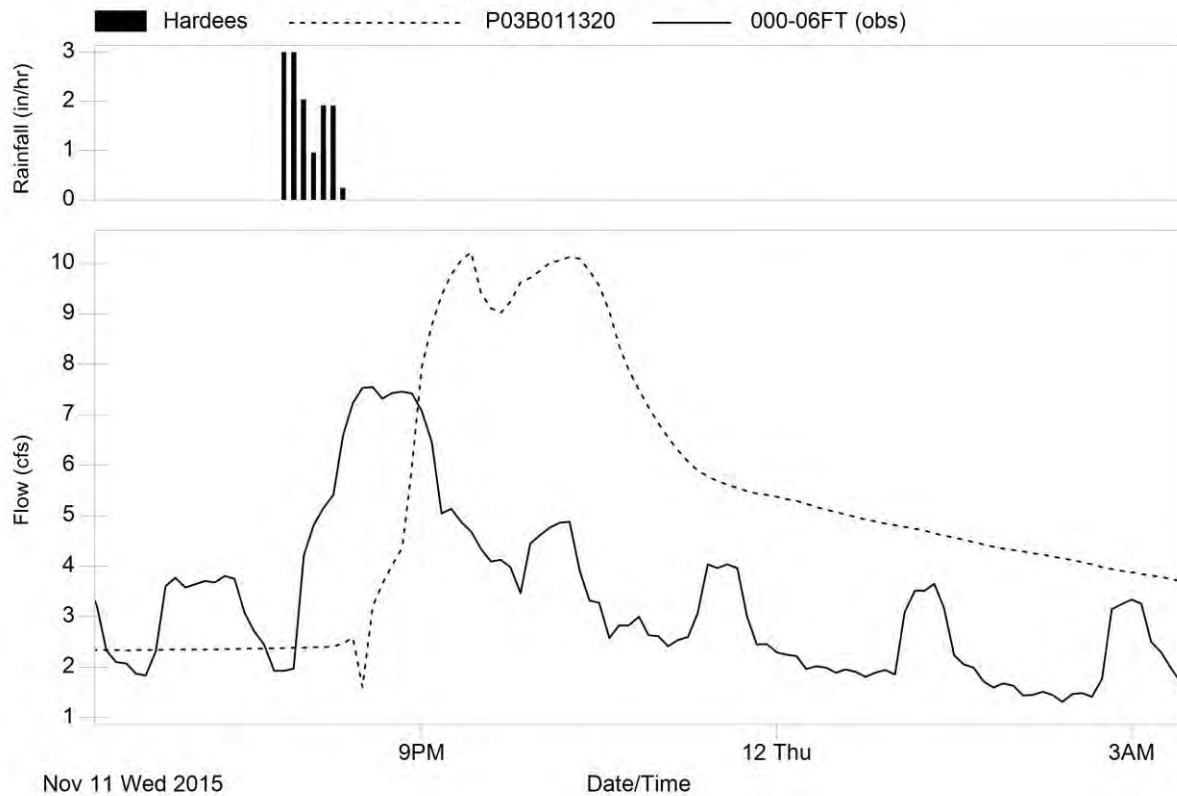
Event of November 5, 2015

Duration: 26.83 h, Total Rainfall: 0.47 (in)



Event of November 11, 2015

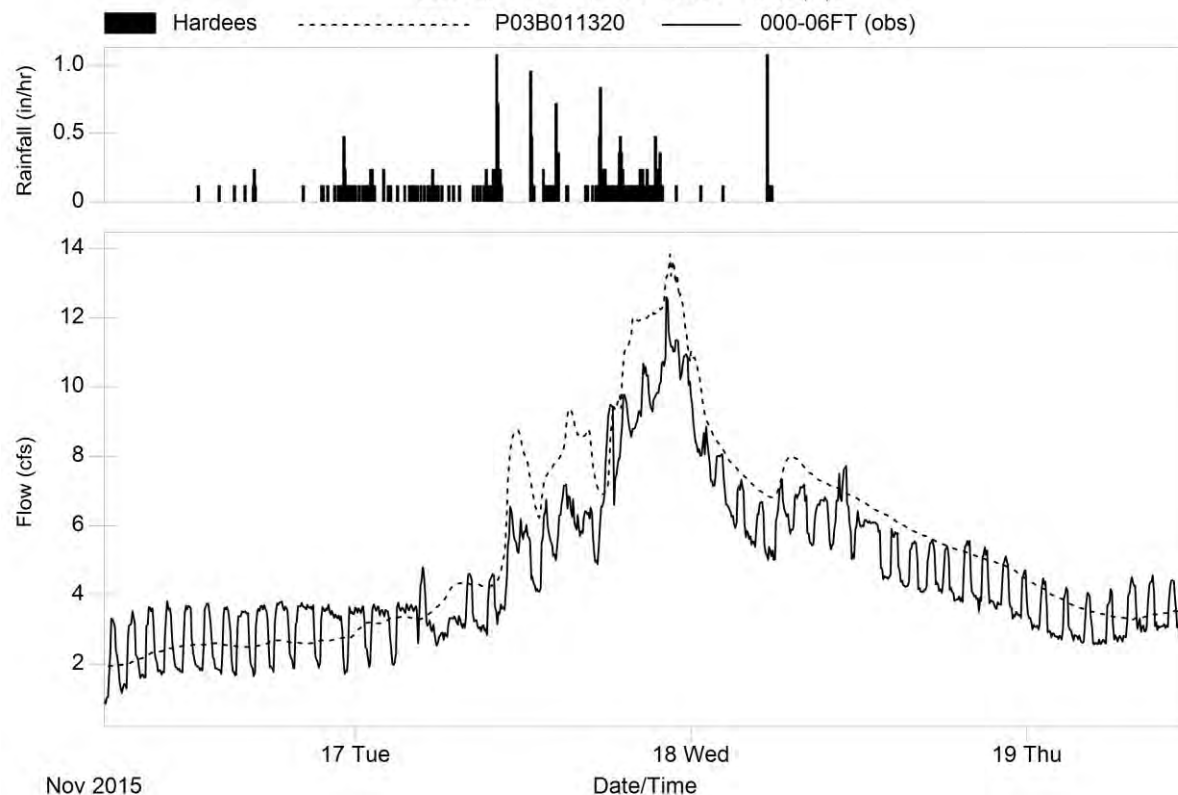
Duration: 7.67 h, Total Rainfall: 0.76 (in)



RFI 000-06FT – Calibration Events

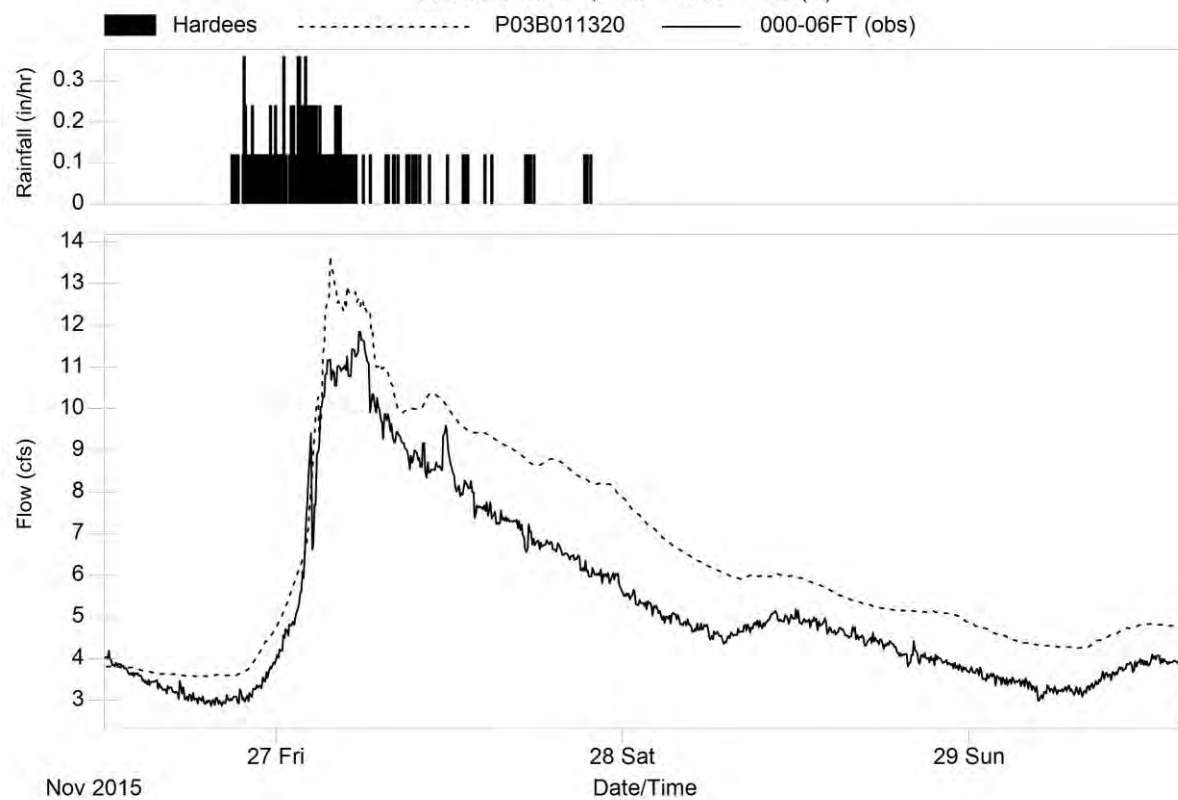
Event of November 16, 2015

Duration: 64.42 h, Total Rainfall: 2.39 (in)



Event of November 26, 2015

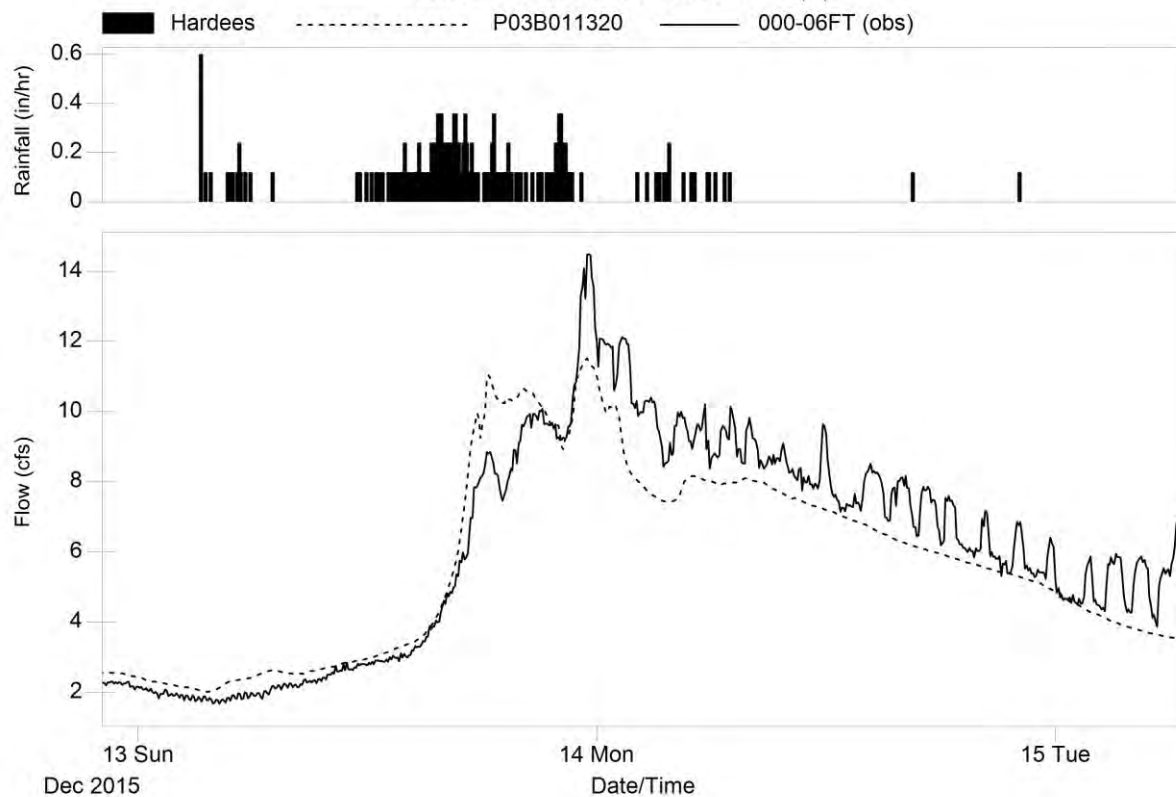
Duration: 62.42 h, Total Rainfall: 1.42 (in)



RFI 000-06FT – Calibration Events

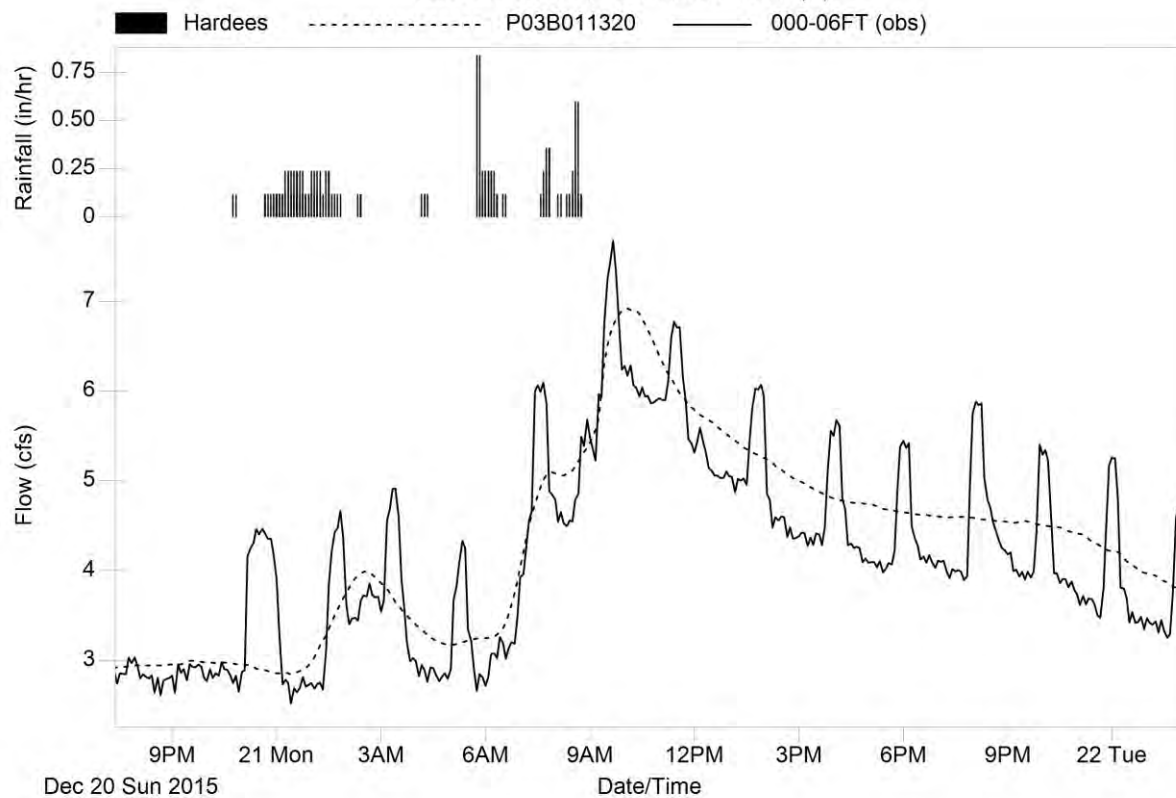
Event of December 13, 2015

Duration: 47.17 h, Total Rainfall: 1.71 (in)



Event of December 20, 2015

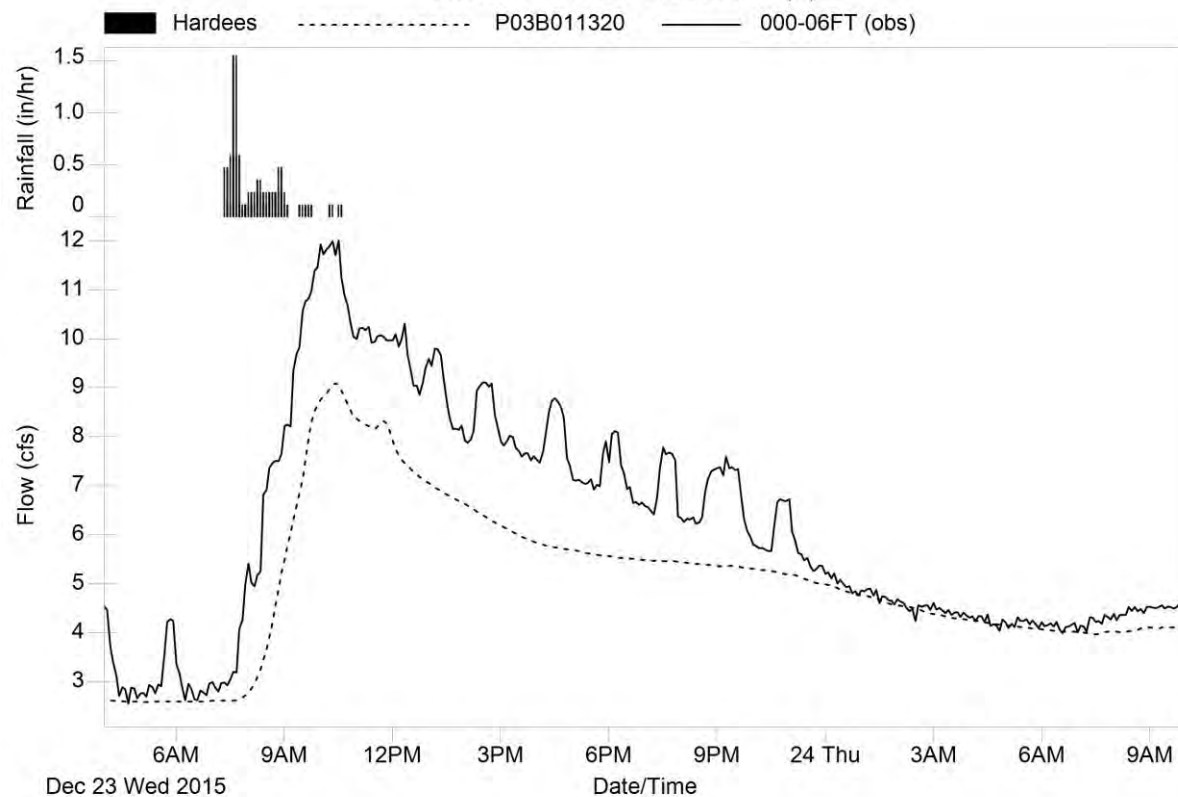
Duration: 25.58 h, Total Rainfall: 0.68 (in)



RFI 000-06FT – Calibration Events

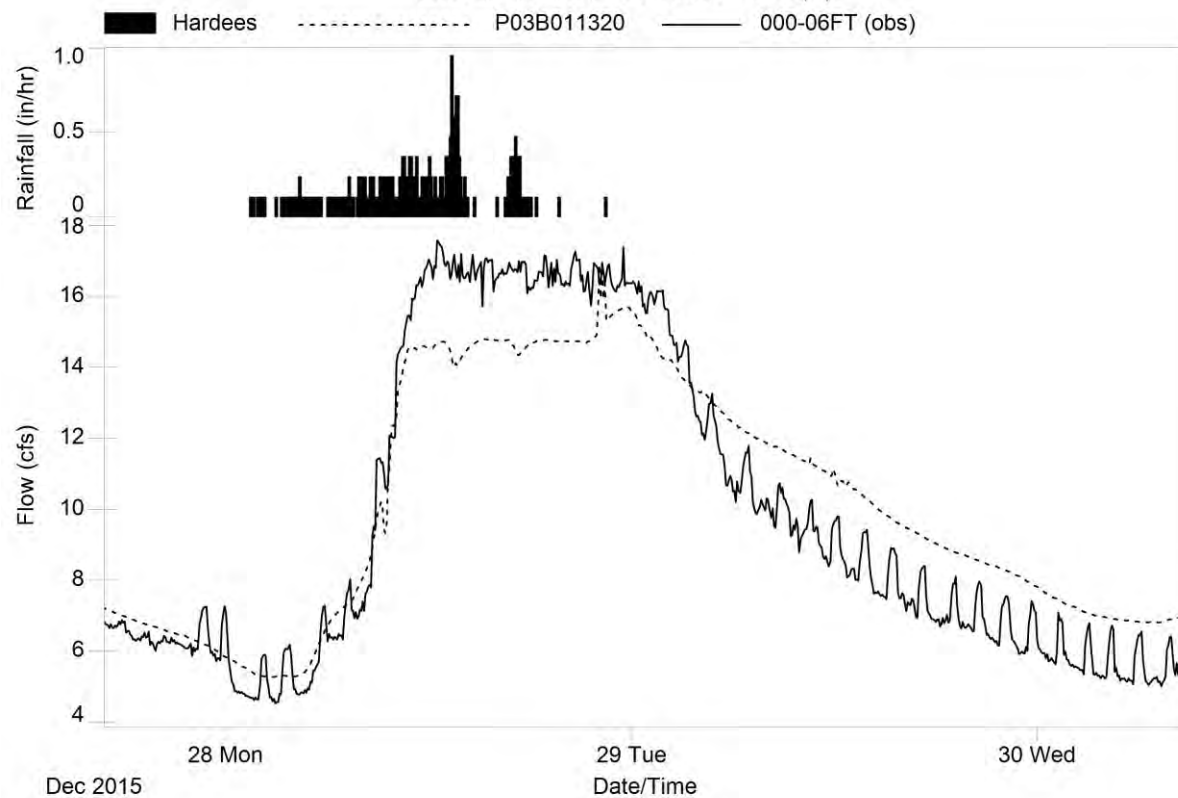
Event of December 23, 2015

Duration: 25 h, Total Rainfall: 0.62 (in)



Event of December 28, 2015

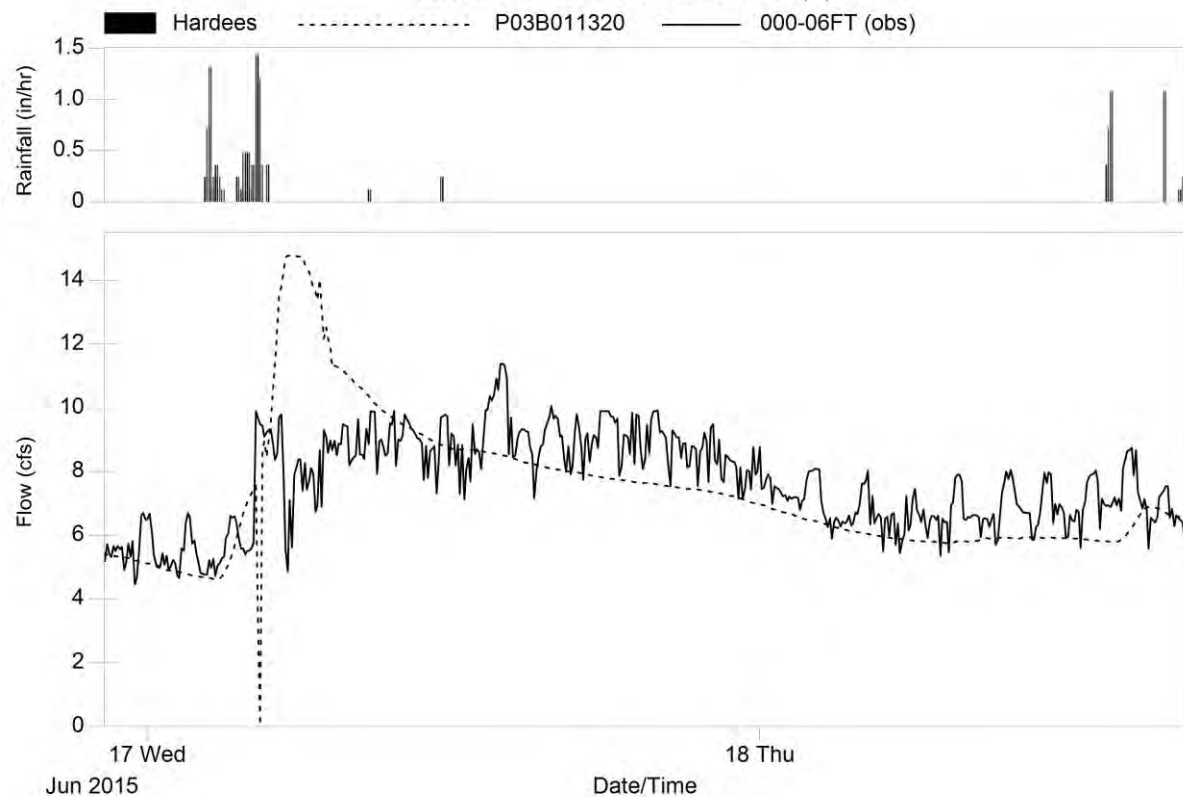
Duration: 53.33 h, Total Rainfall: 2.28 (in)



RFI 000-06FT – Verification Events

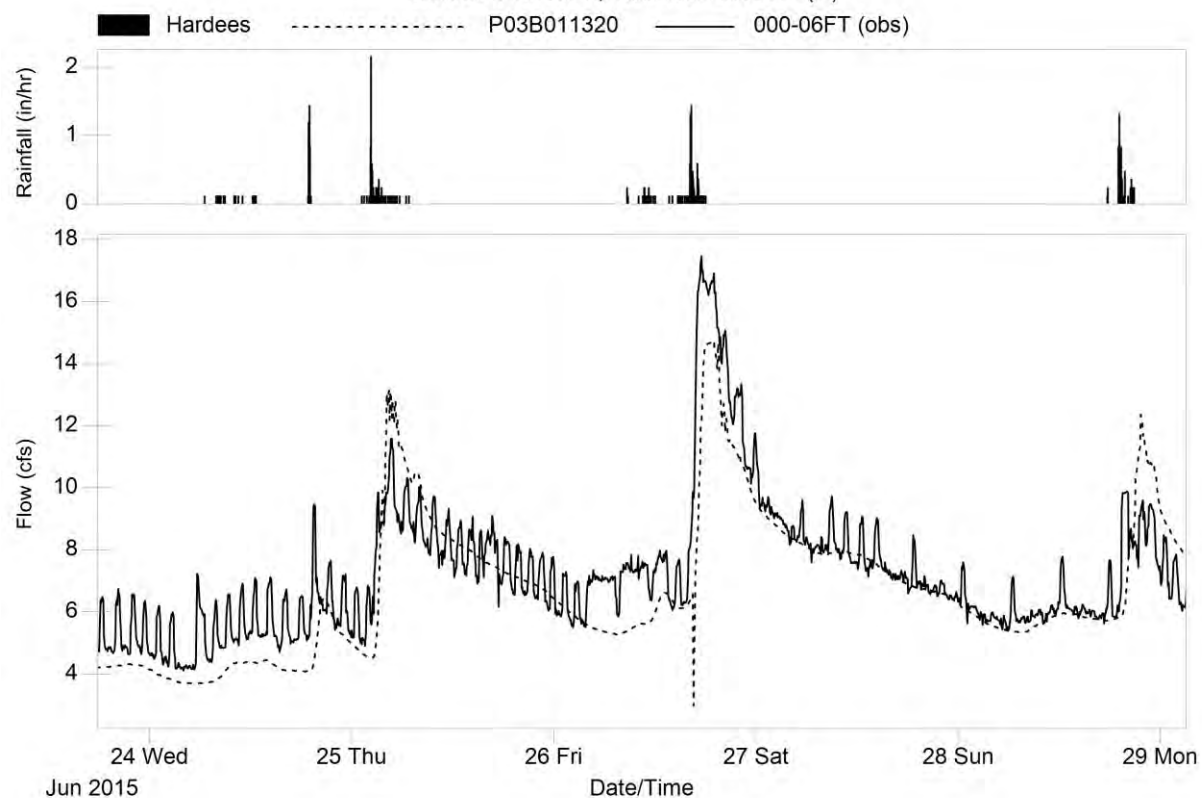
Event of June 17, 2015

Duration: 35.33 h, Total Rainfall: 0.82 (in)



Event of June 24, 2015

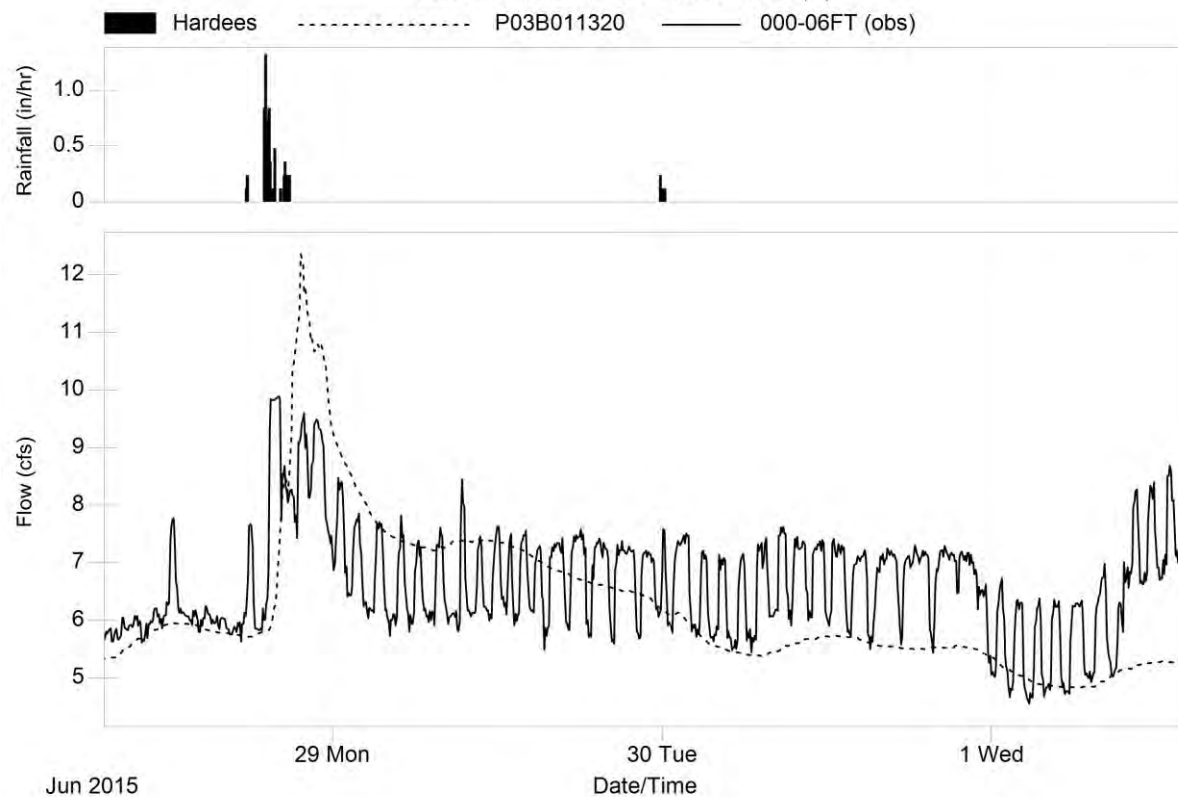
Duration: 107.67 h, Total Rainfall: 2.11 (in)



RFI 000-06FT – Verification Events

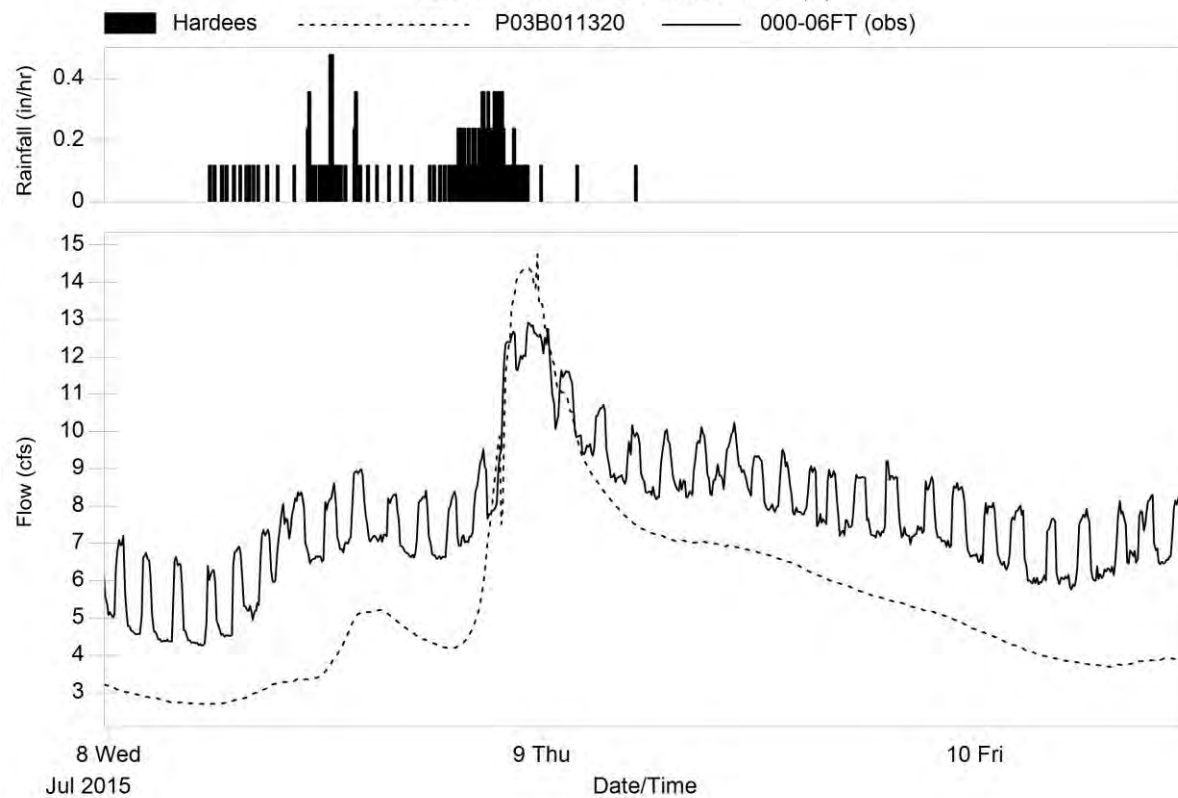
Event of June 28, 2015

Duration: 65.67 h, Total Rainfall: 0.68 (in)



Event of July 8, 2015

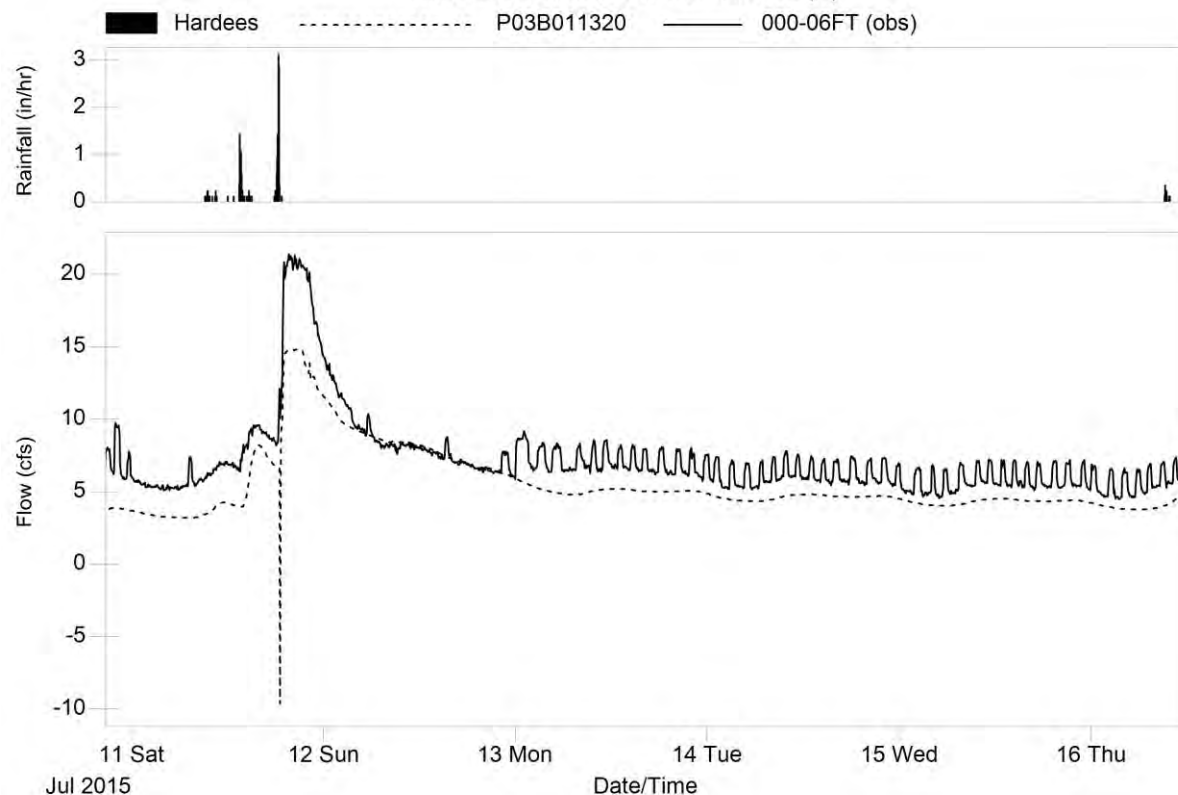
Duration: 49.92 h, Total Rainfall: 1.38 (in)



RFI 000-06FT – Verification Events

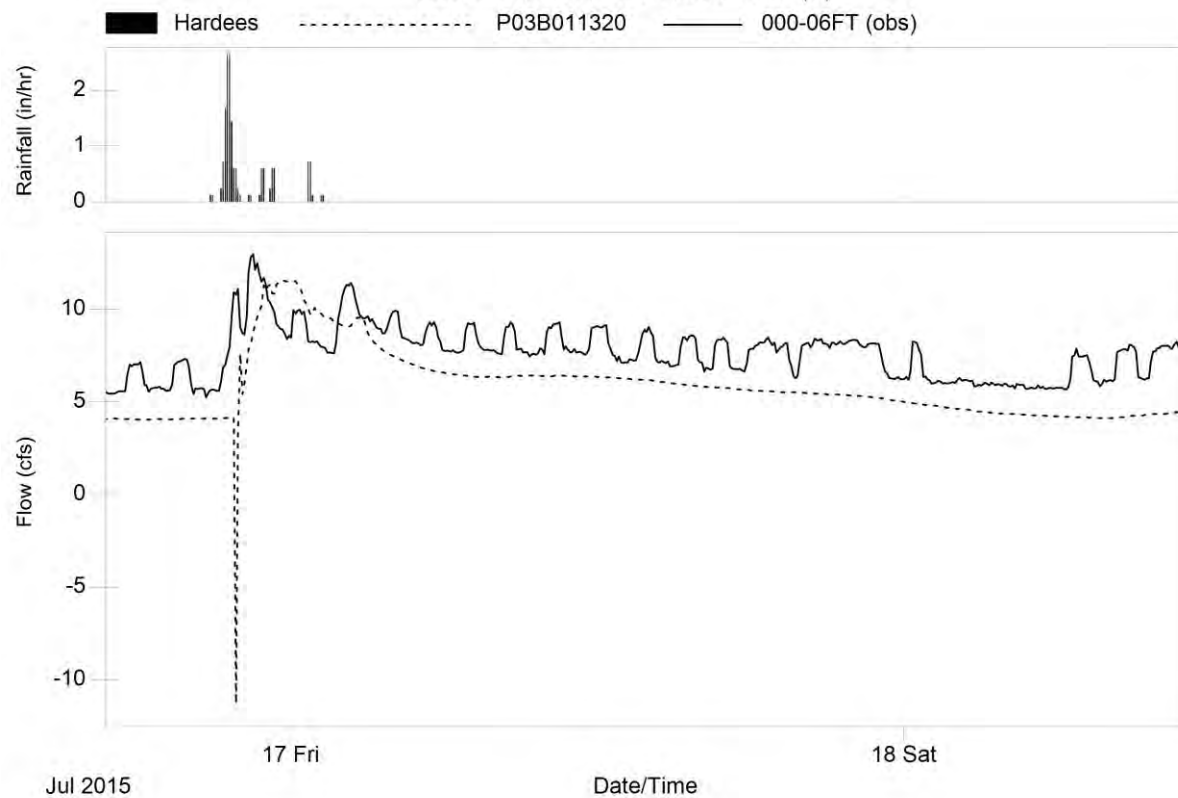
Event of July 11, 2015

Duration: 112.58 h, Total Rainfall: 1.43 (in)



Event of July 16, 2015

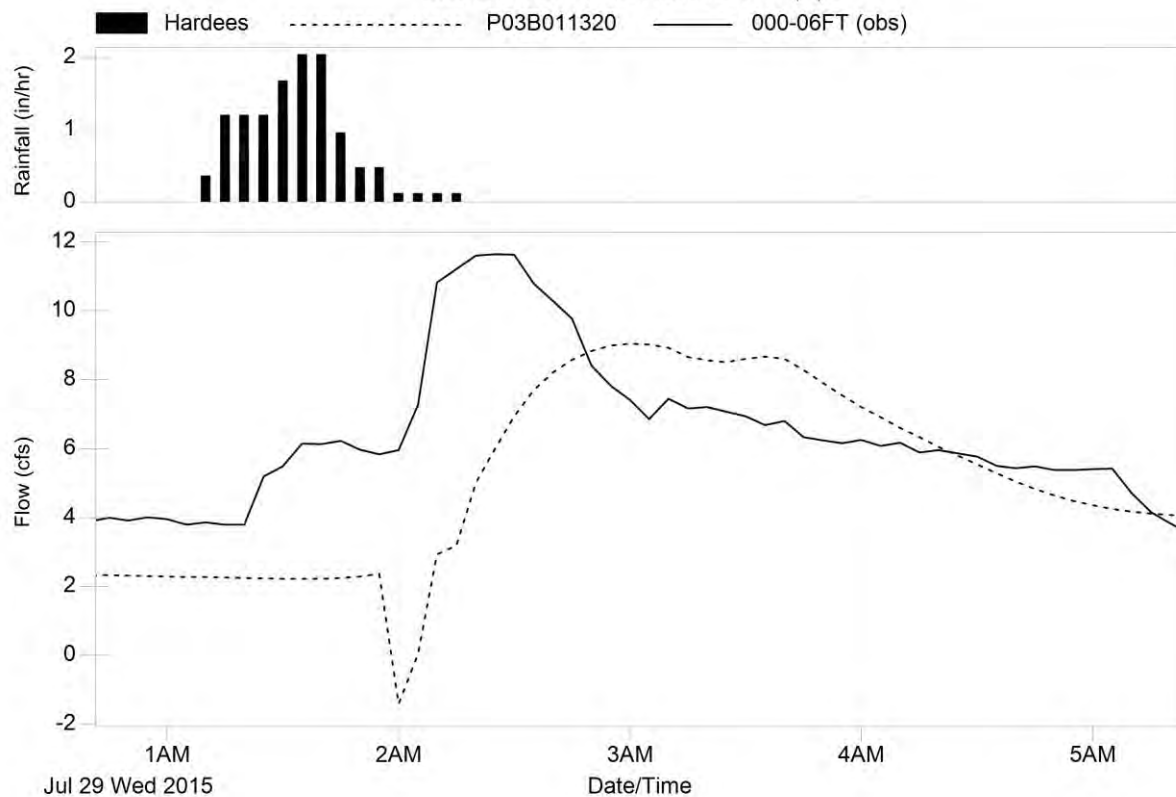
Duration: 35.25 h, Total Rainfall: 0.92 (in)



RFI 000-06FT – Verification Events

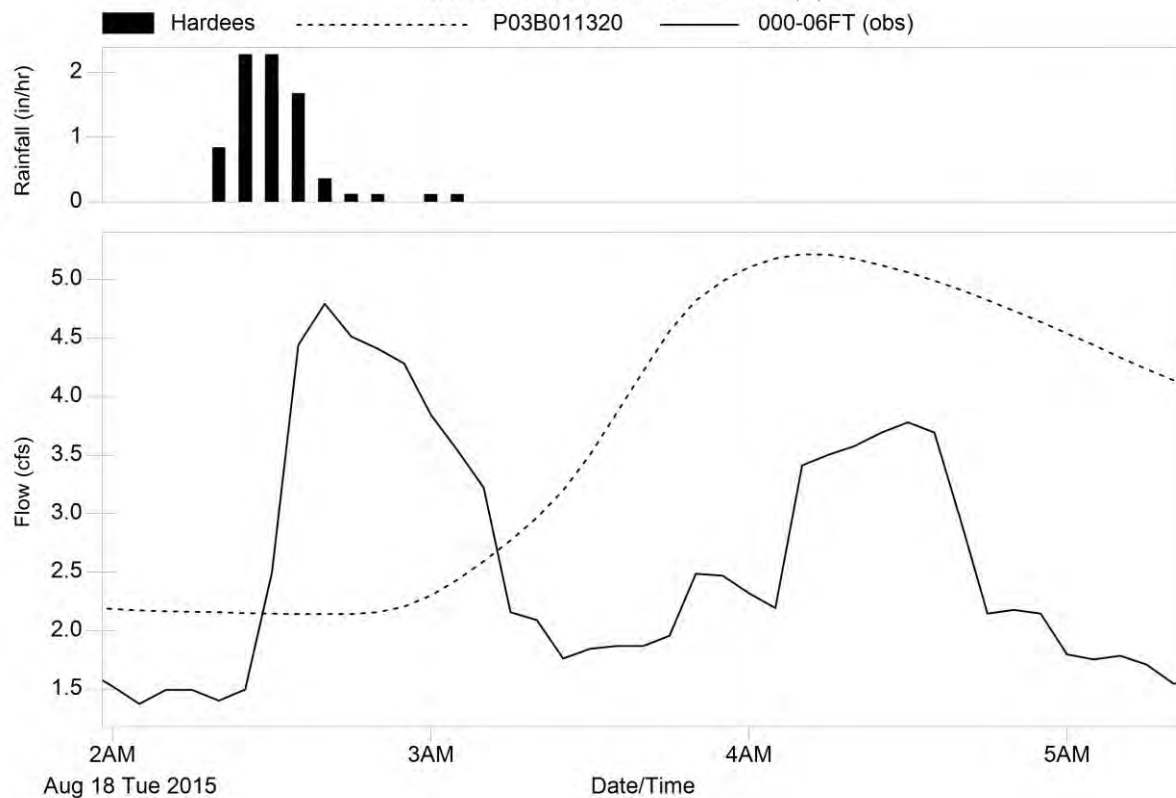
Event of July 29, 2015

Duration: 3.92 h, Total Rainfall: 0.77 (in)



Event of August 18, 2015

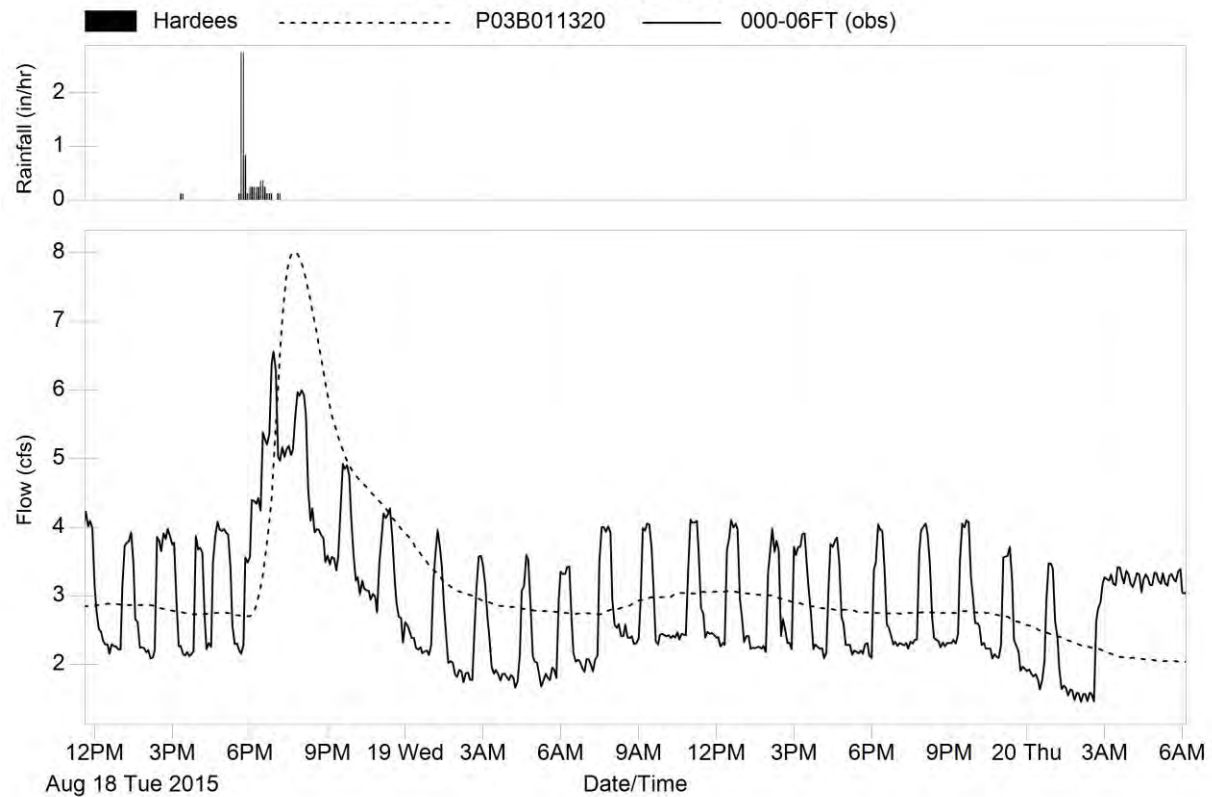
Duration: 2.83 h, Total Rainfall: 0.46 (in)



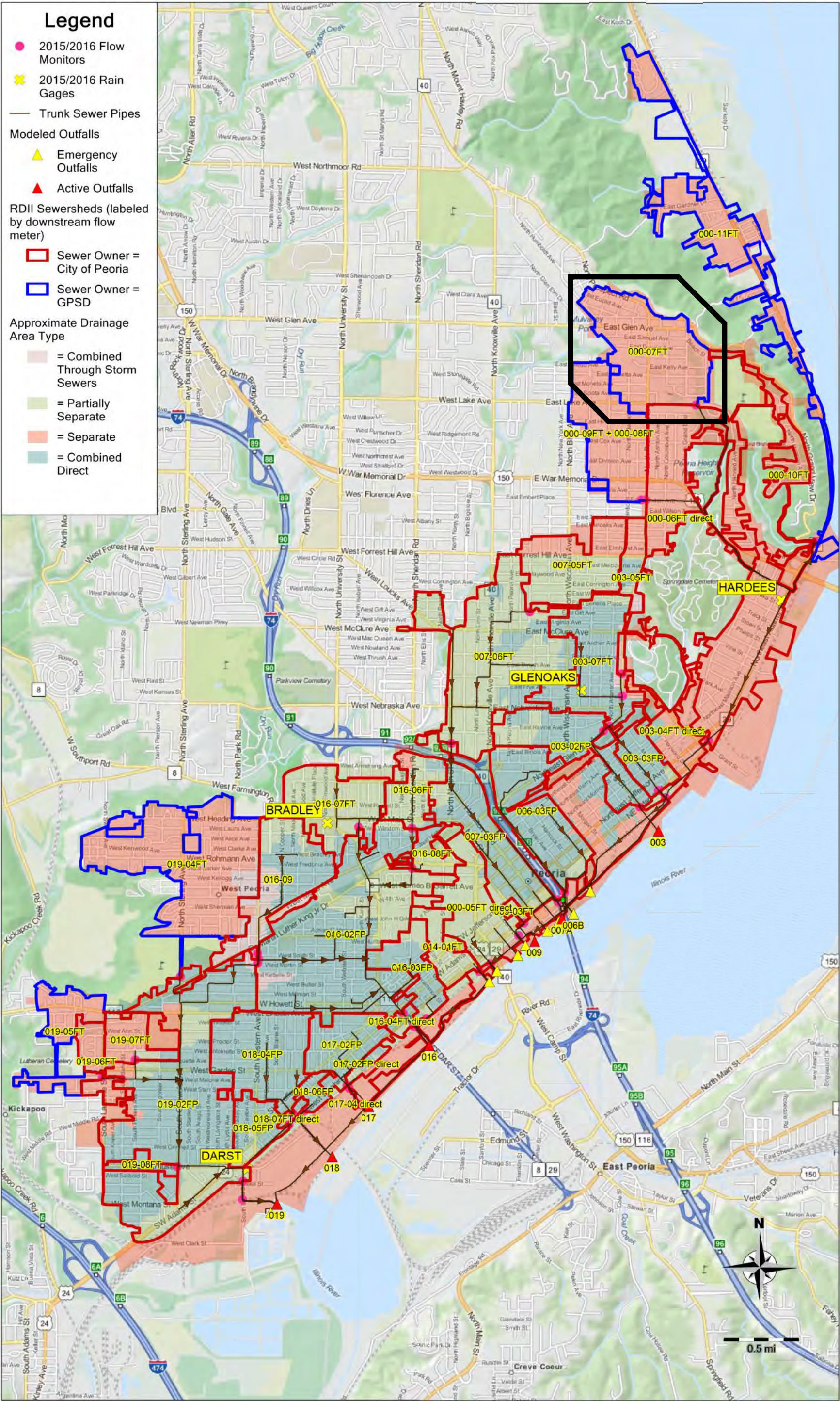
RFI 000-06FT – Verification Events

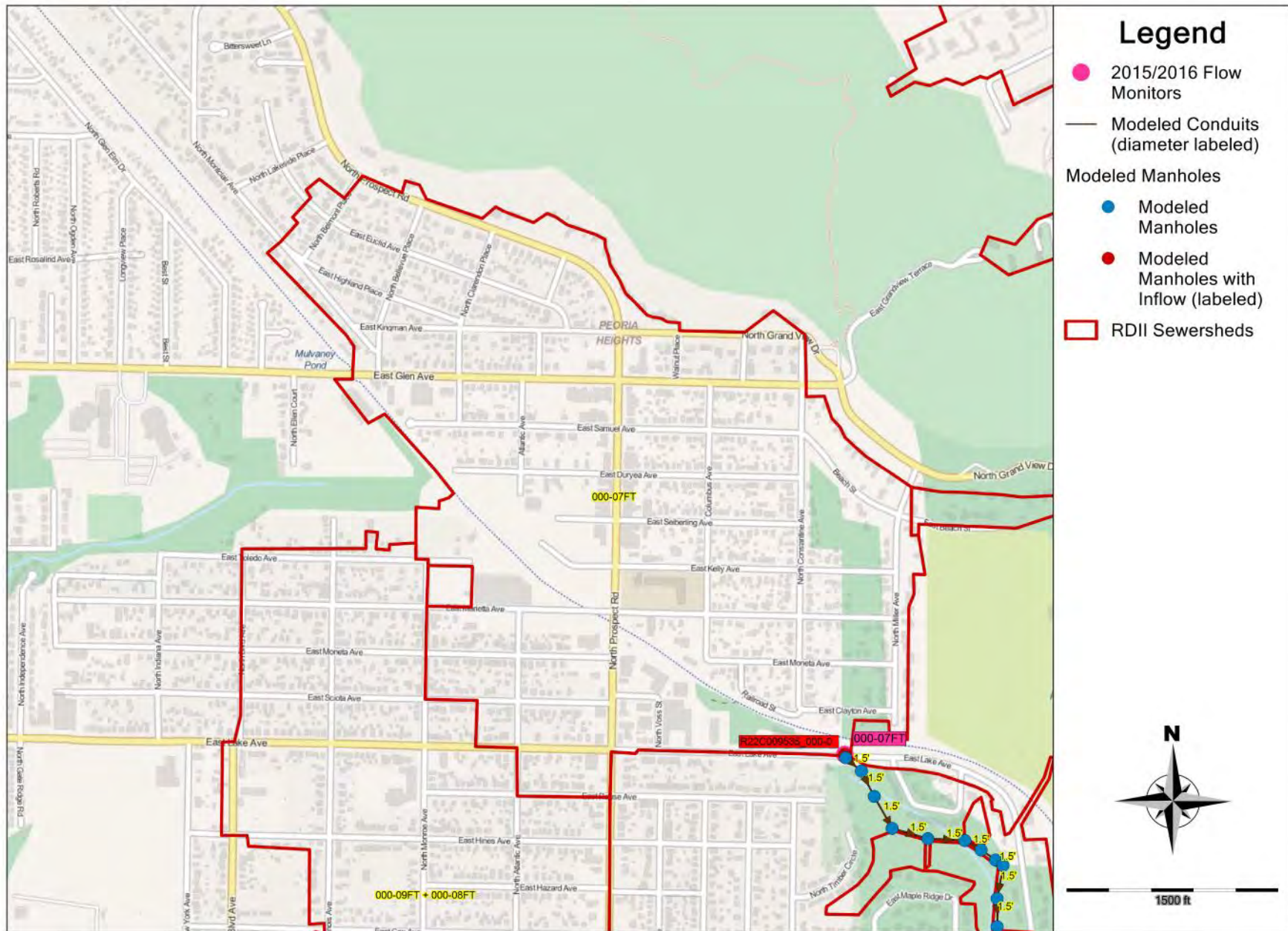
Event of August 18, 2015

Duration: 35.42 h, Total Rainfall: 0.52 (in)



Flow Monitor 000-07FT Overview Map



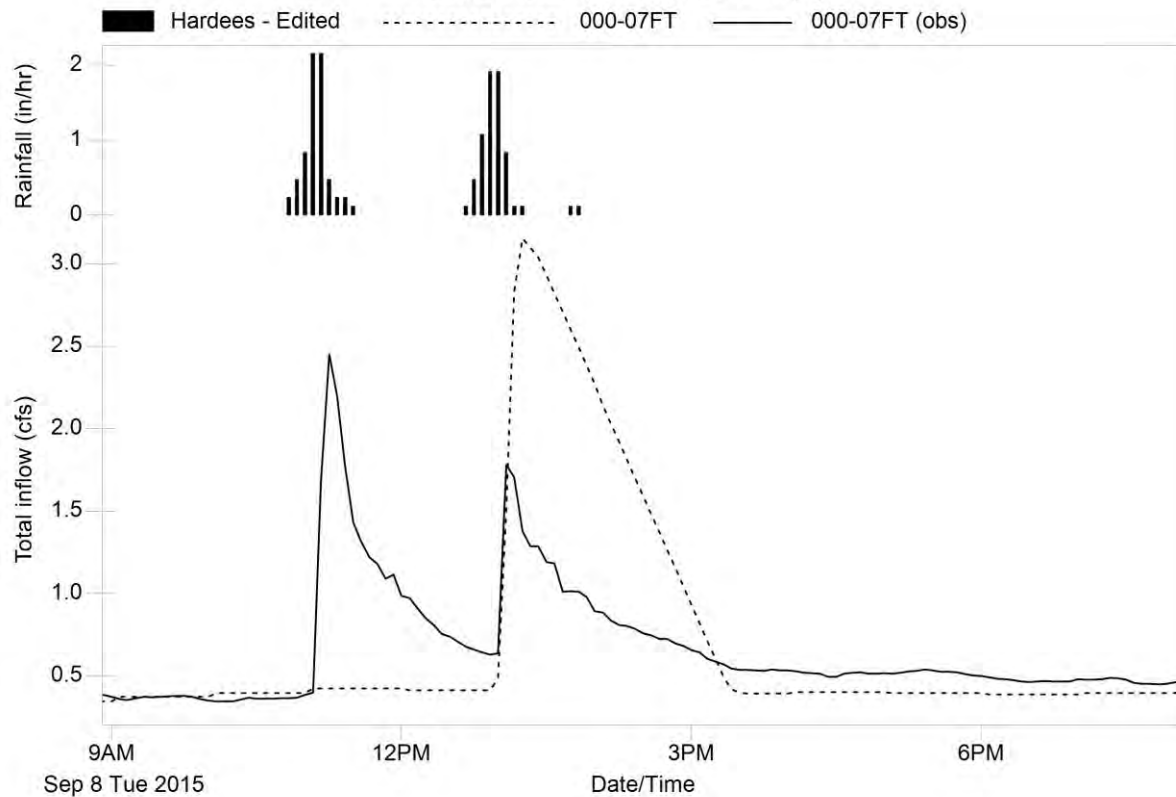


Date	Duration (h)	Rainfall (in)	Maximum Flow (cfs)		Maximum Flow (mgd)		Total Volume (ft³)		Volume (million gallons)		Peak Flow Rate (-15% to +25%)	Flow Volume (-10% to +20%)	Rainfall Variability	
		Hardees Edited	Observed	Modeled	Observed	Modeled	Observed	Modeled	Observed	Modeled				
CALIBRATION EVENTS - FLOW														
9/8/2015 9:50	9.33	0.79	2.453	3.157	1.585	2.039	24110	26020	0.180	0.195	29%	8%	possibly uniform	
9/18/2015 12:20	43.5	1.61	10.48	9.922	6.770	6.410	227500	225300	1.702	1.685	-5%	-1%	relatively uniform	
11/5/2015 13:05	22.75	0.47	0.8062	1.026	0.521	0.663	41470	60030	0.310	0.449	27%	45%	possibly uniform	
11/11/2015 17:35	11.42	0.76	2.004	3.746	1.295	2.420	25540	61640	0.191	0.461	87%	141%	relatively uniform	
11/16/2015 21:10	43.08	2.3	4.469	6.197	2.887	4.003	266200	422500	1.991	3.160	39%	59%	variable	
11/26/2015 18:15	34.83	1.42	4.213	5.749	2.722	3.714	310200	381200	2.320	2.851	36%	23%	possibly uniform	
12/13/2015 1:05	40.5	1.7	4.589	5.049	2.964	3.262	325100	341400	2.432	2.554	10%	5%	possibly uniform	
12/20/2015 21:25	17.92	0.68	2.197	2.611	1.419	1.687	88480	105100	0.662	0.786	19%	19%	possibly uniform	
12/23/2015 5:00	18	0.62	4.116	2.959	2.659	1.912	157600	126100	1.179	0.943	-28%	-20%	variable	
12/28/2015 0:45	44.25	2.28	11.3	9.92	7.300	6.408	702100	686200	5.252	5.133	-12%	-2%	relatively uniform	
VERIFICATION EVENTS - FLOW														
6/17/2015 1:50	35.33	0.82	4.249	5.473	2.745	3.536	300900	302700	2.251	2.264	29%	1%	variable	
6/24/2015 4:35	107.67	2.11	4.738	4.636	3.061	2.995	628900	664700	4.704	4.972	-2%	6%	possibly uniform	
6/28/2015 13:55	65.67	0.68	2.583	2.803	1.669	1.811	286600	310500	2.144	2.323	9%	8%	relatively uniform	
7/8/2015 4:45	49.92	1.38	3.033	5.242	1.959	3.386	228700	249300	1.711	1.865	73%	9%	relatively uniform	
7/11/2015 8:00	112.58	1.43	10.46	10.15	6.757	6.557	649500	529600	4.858	3.961	-3%	-18%	relatively uniform	
7/16/2015 20:15	35.25	0.92	4.661	3.257	3.011	2.104	176700	172900	1.322	1.293	-30%	-2%	relatively uniform	
7/29/2015 1:35	3.92	0.77	3.836	2.983	2.478	1.927	24160	18480	0.181	0.138	-22%	-24%	variable	
8/18/2015 2:15	2.83	0.46	0.8804	0.2676	0.569	0.173	4964	2694	0.037	0.020	-70%	-46%	possibly uniform	
8/18/2015 15:10	35.42	0.52	2.712	2.039	1.752	1.317	75900	66080	0.568	0.494	-25%	-13%	relatively uniform	
								WEIGHTED AVERAGES						
								Calibration - Relatively Uniform				-1%	2%	relatively uniform
								Calibration - Possibly Uniform				23%	16%	possibly uniform
								Calibration - Variable				7%	29%	variable
								Calibration Weighted - All Events				8%	12%	
								Verification - Relatively Uniform				0%	-6%	relatively uniform
								Verification - Possibly Uniform				-13%	5%	possibly uniform
								Verification - Variable				5%	-1%	variable
								Verification Weighted - All Events				-1%	-2%	
								Weighted Average - All Events				4%	5%	
								NET AVERAGES						
								Calibration - Relatively Uniform				23%	46%	relatively uniform
								Calibration - Possibly Uniform				24%	20%	possibly uniform
								Calibration - Variable				5%	19%	variable
								Calibration Net - All Events				20%	28%	
								Verification - Relatively Uniform				5%	-3%	relatively uniform
								Verification - Possibly Uniform				-36%	-20%	possibly uniform
								Verification - Variable				3%	-11%	variable
								Verification Net - All Events				-5%	-9%	
								Net Average - All Events				8%	10%	

000-07FT – Calibration Events

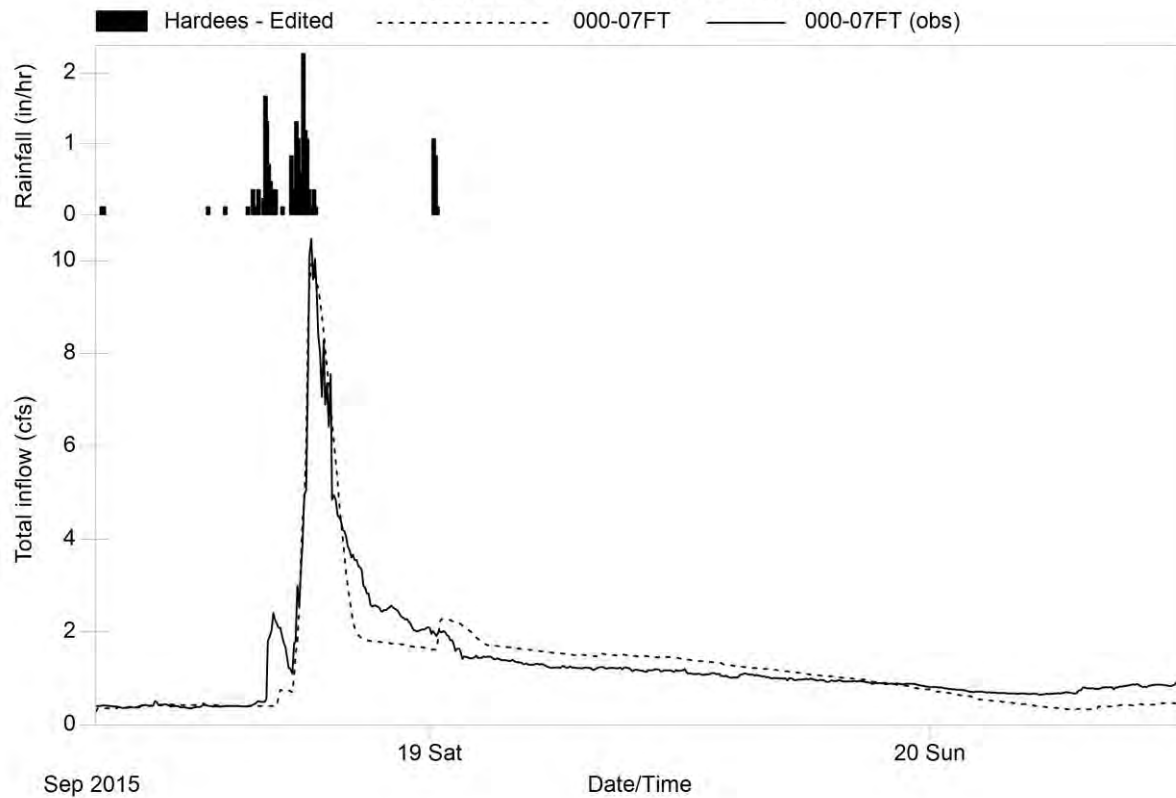
Event of September 8, 2015

Duration: 9.33 h, Total Rainfall: 0.79 (in)



Event of September 18, 2015

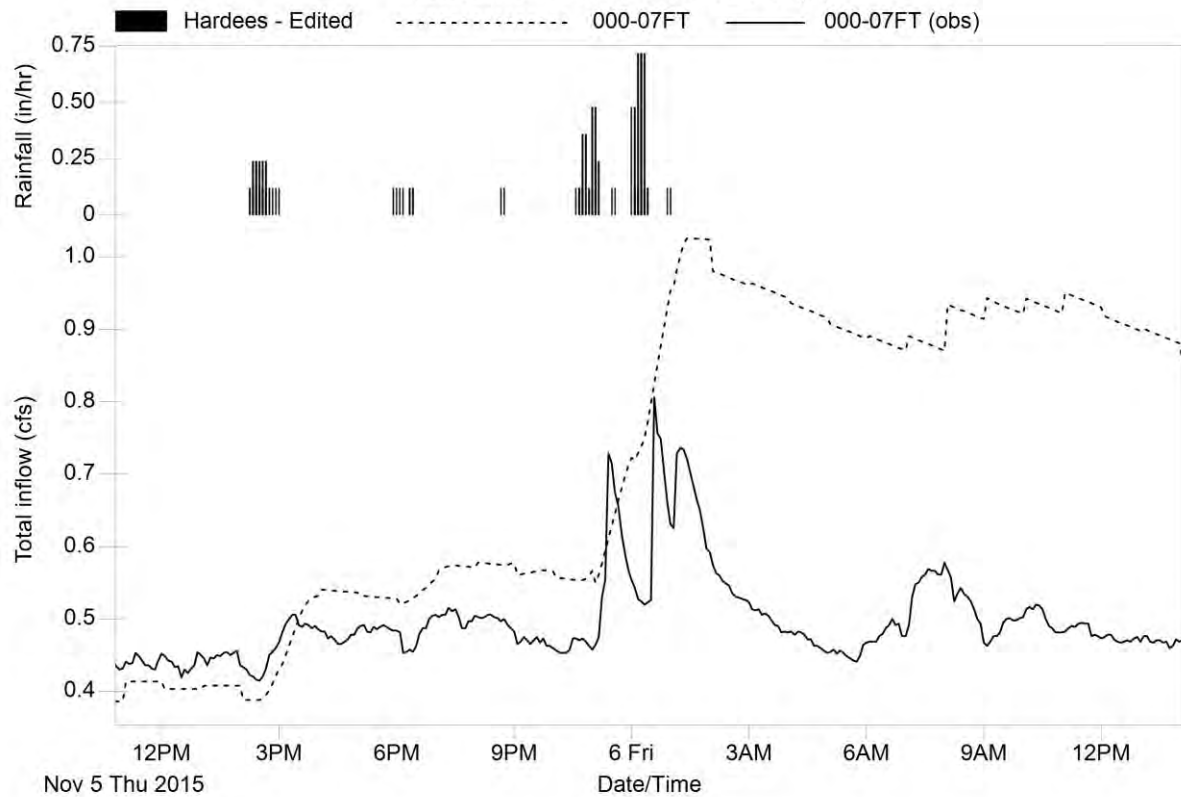
Duration: 43.5 h, Total Rainfall: 1.61 (in)



000-07FT – Calibration Events

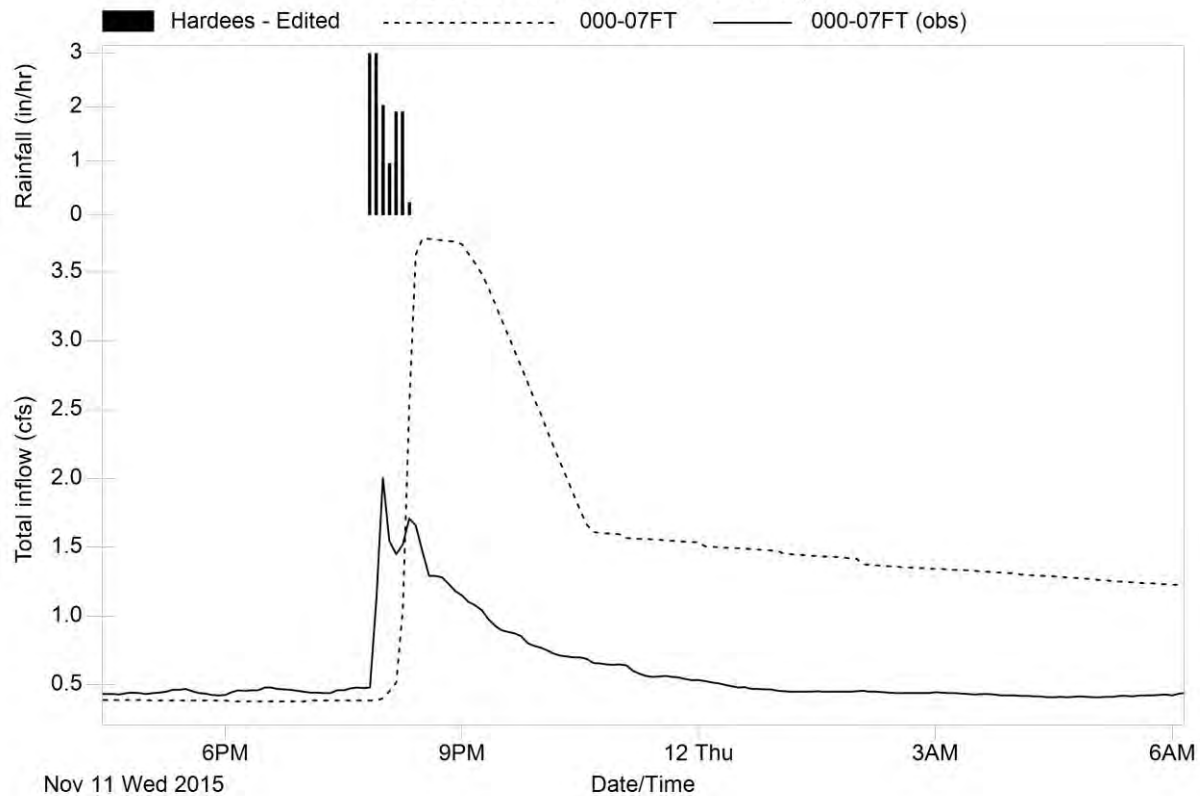
Event of November 5, 2015

Duration: 22.75 h, Total Rainfall: 0.47 (in)



Event of November 11, 2015

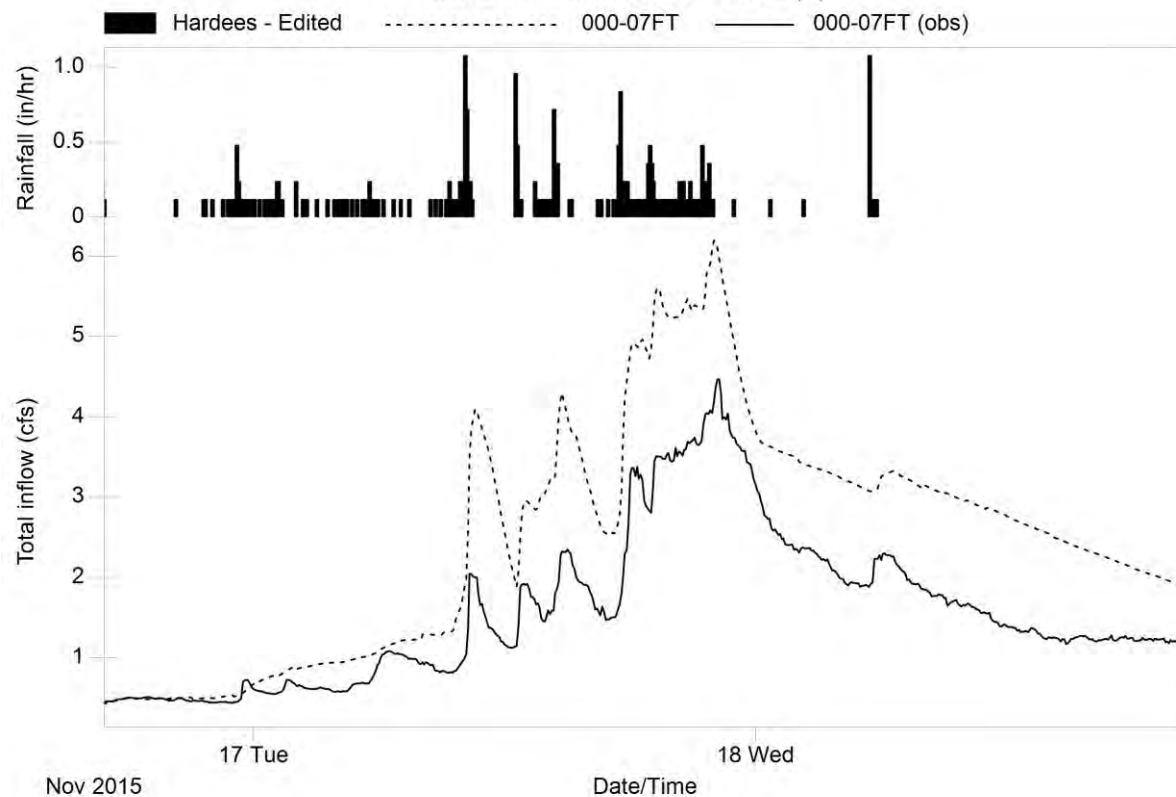
Duration: 11.42 h, Total Rainfall: 0.76 (in)



000-07FT – Calibration Events

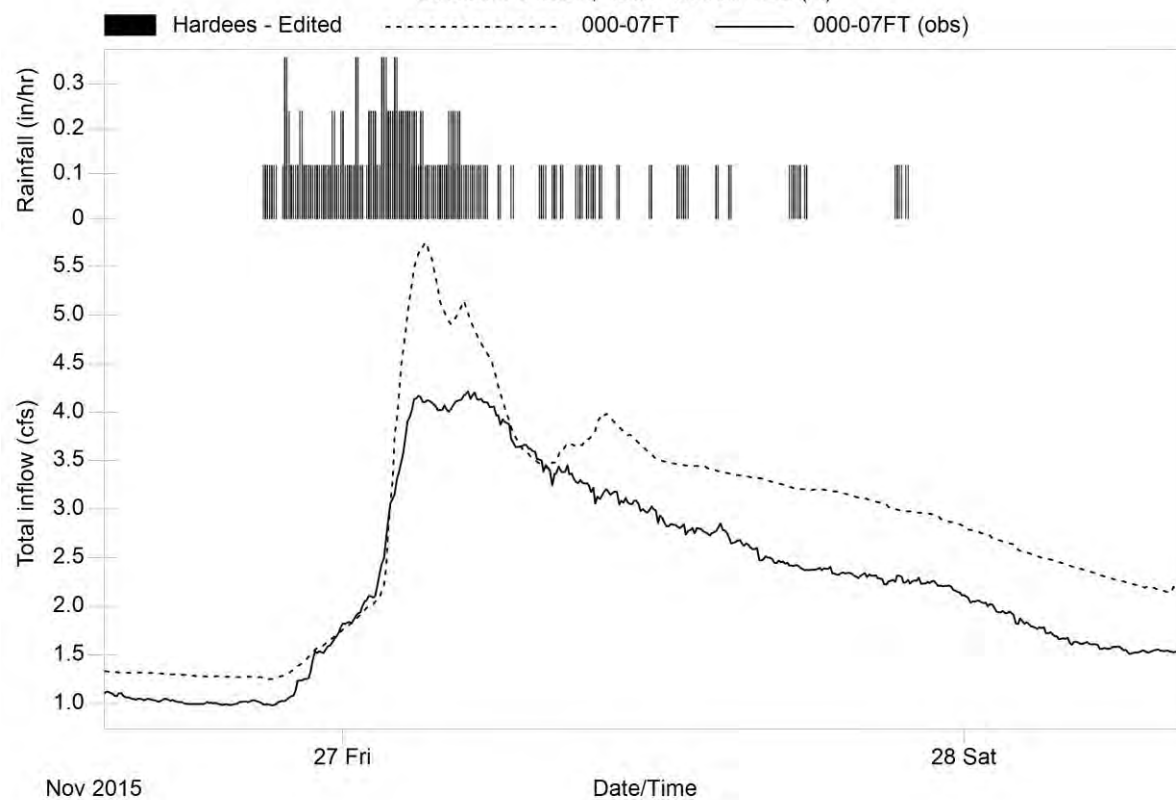
Event of November 16, 2015

Duration: 43.08 h, Total Rainfall: 2.3 (in)



Event of November 26, 2015

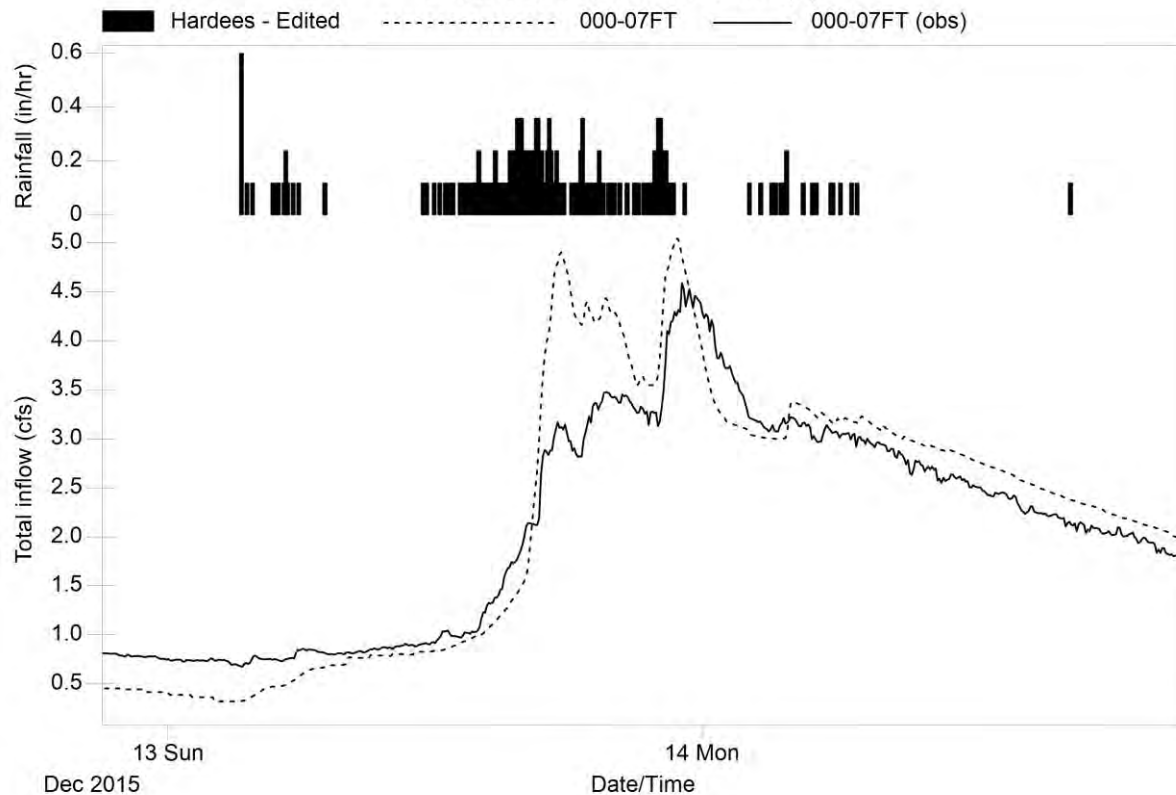
Duration: 34.83 h, Total Rainfall: 1.42 (in)



000-07FT – Calibration Events

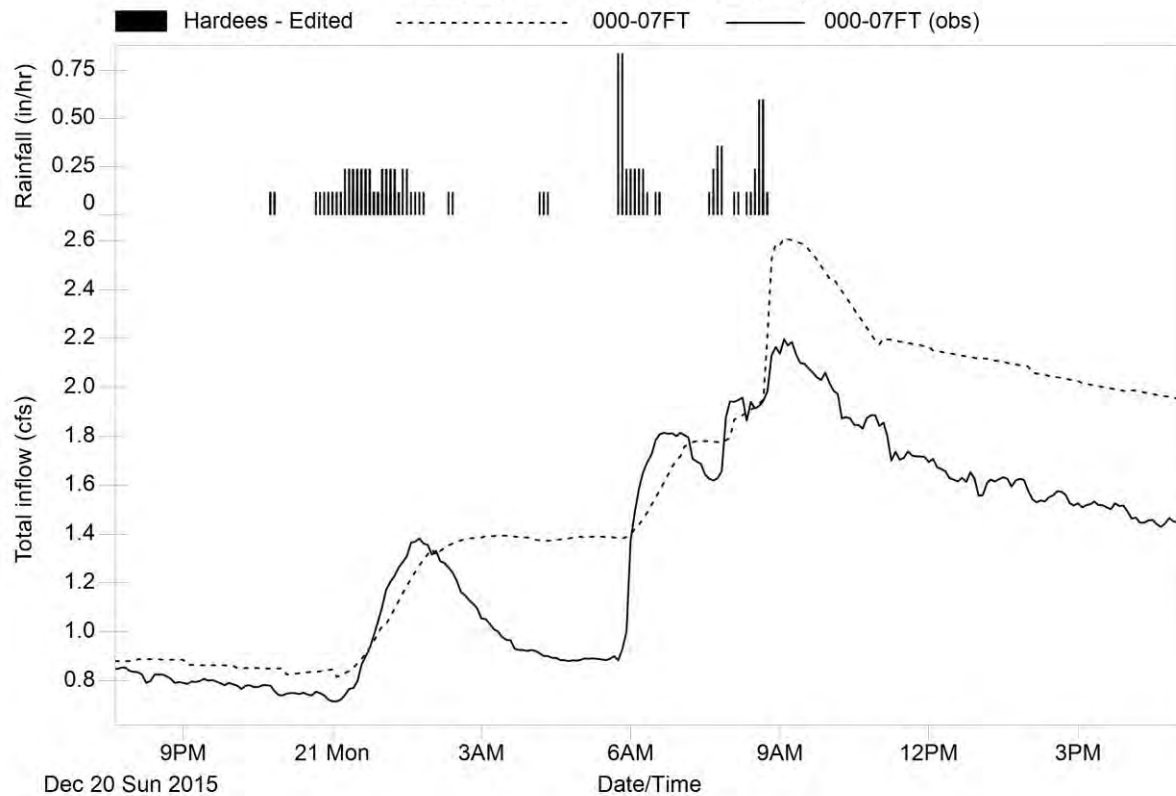
Event of December 13, 2015

Duration: 40.5 h, Total Rainfall: 1.7 (in)



Event of December 20, 2015

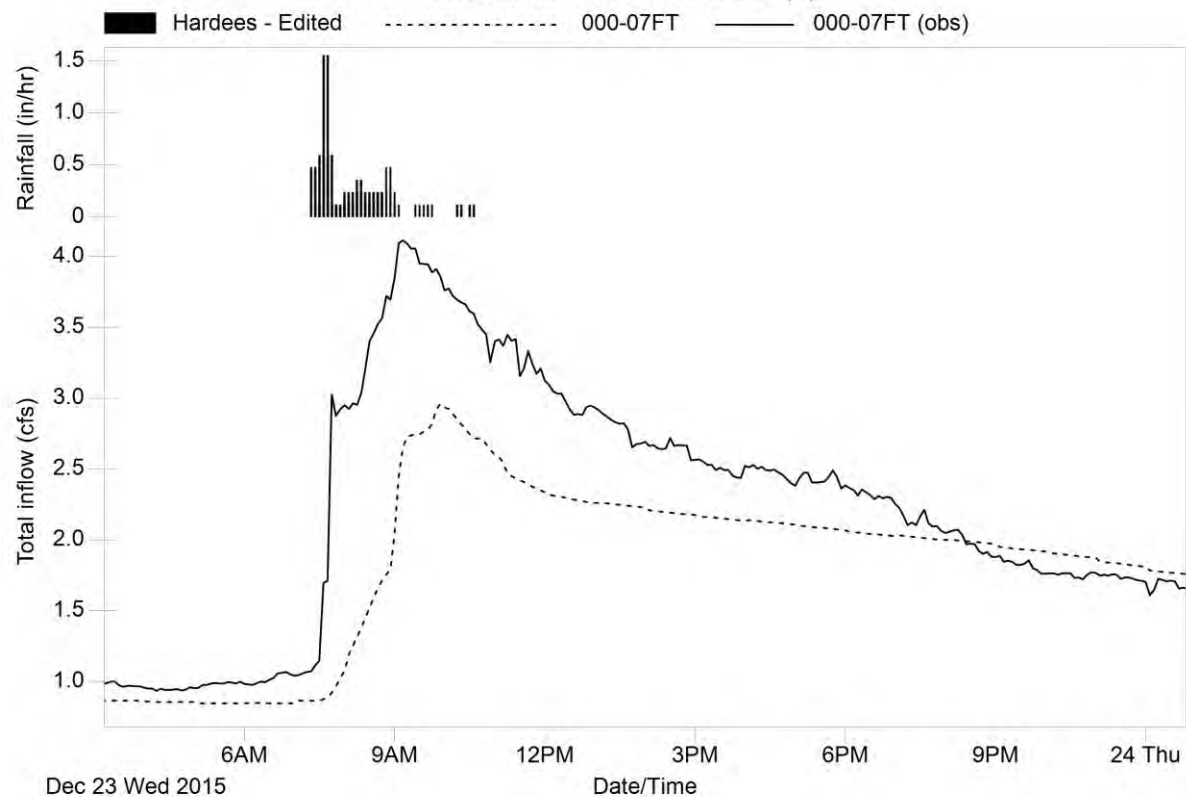
Duration: 17.92 h, Total Rainfall: 0.68 (in)



000-07FT – Calibration Events

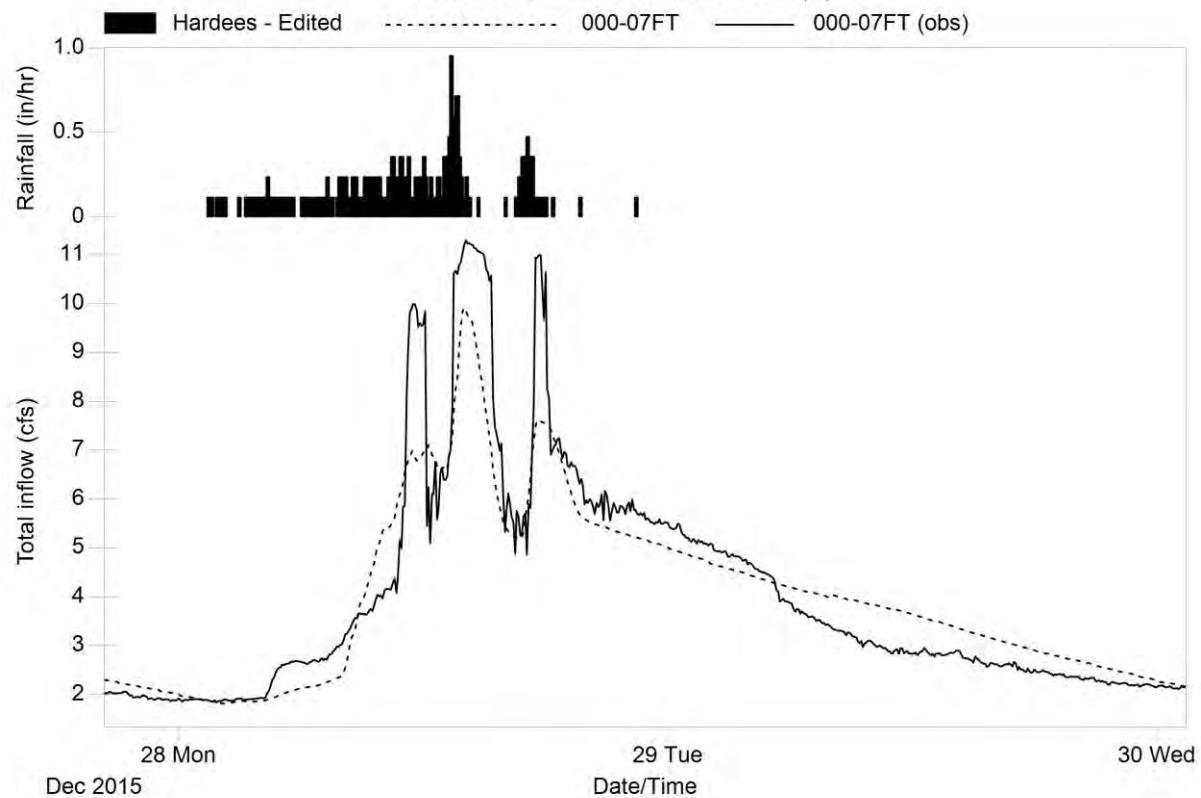
Event of December 23, 2015

Duration: 18 h, Total Rainfall: 0.62 (in)



Event of December 28, 2015

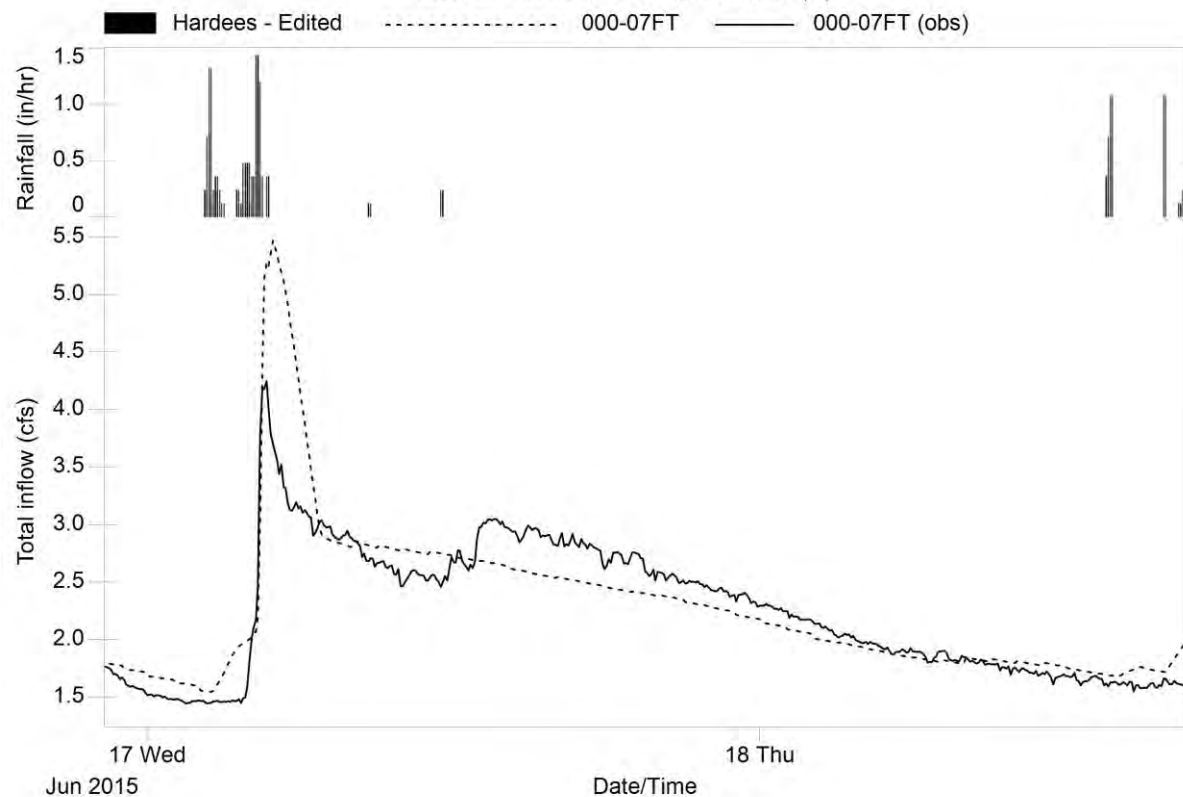
Duration: 44.25 h, Total Rainfall: 2.28 (in)



000-07FT – Verification Events

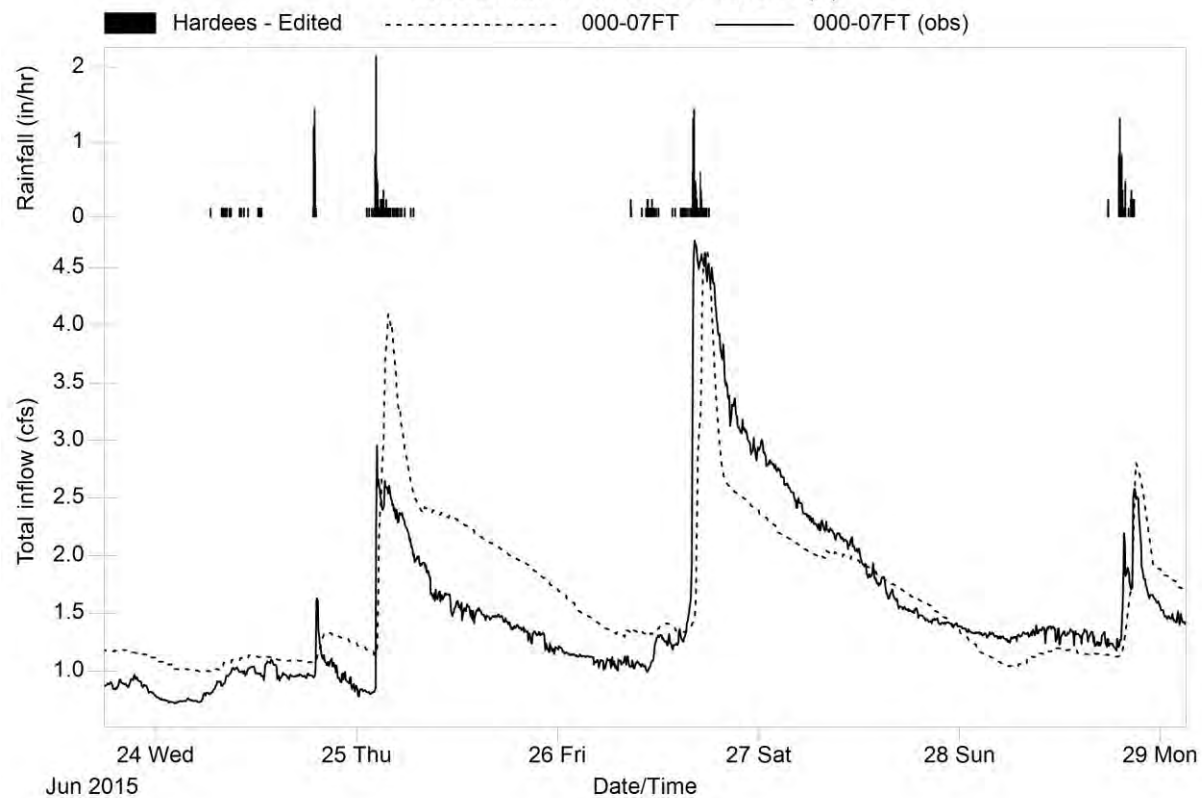
Event of June 17, 2015

Duration: 35.33 h, Total Rainfall: 0.82 (in)



Event of June 24, 2015

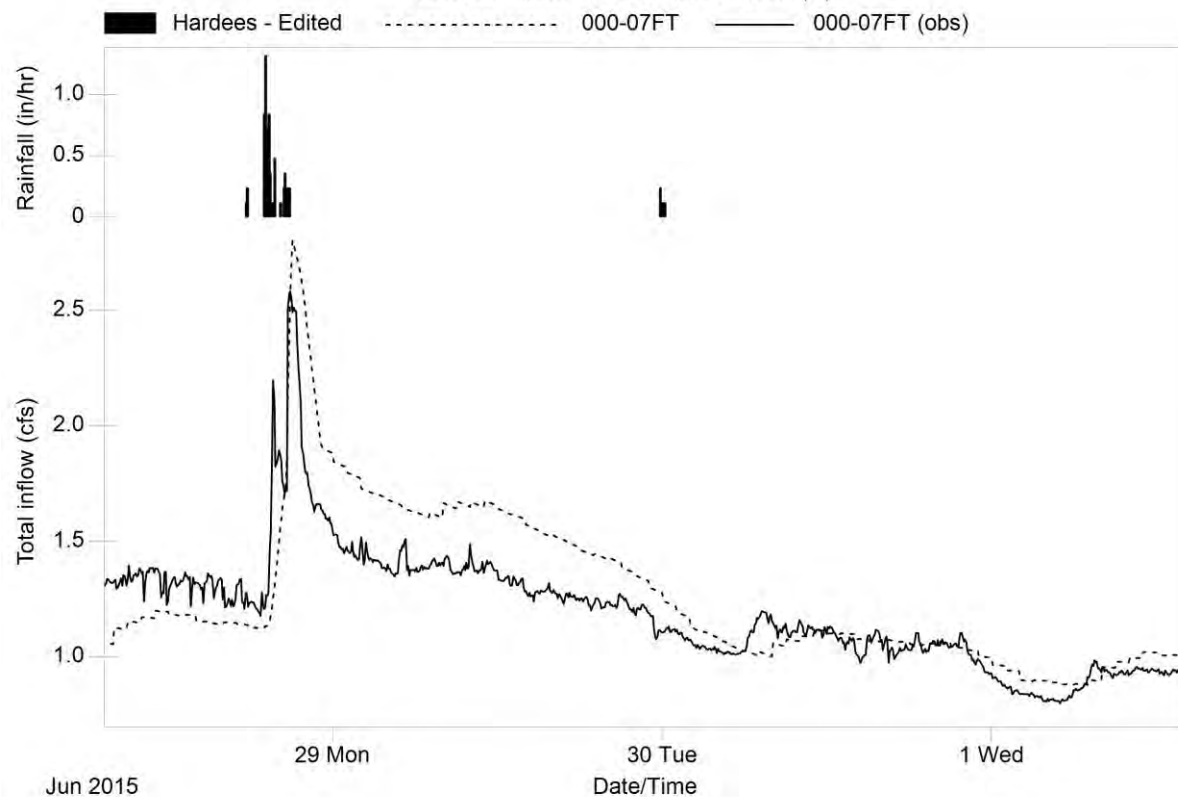
Duration: 107.67 h, Total Rainfall: 2.11 (in)



000-07FT – Verification Events

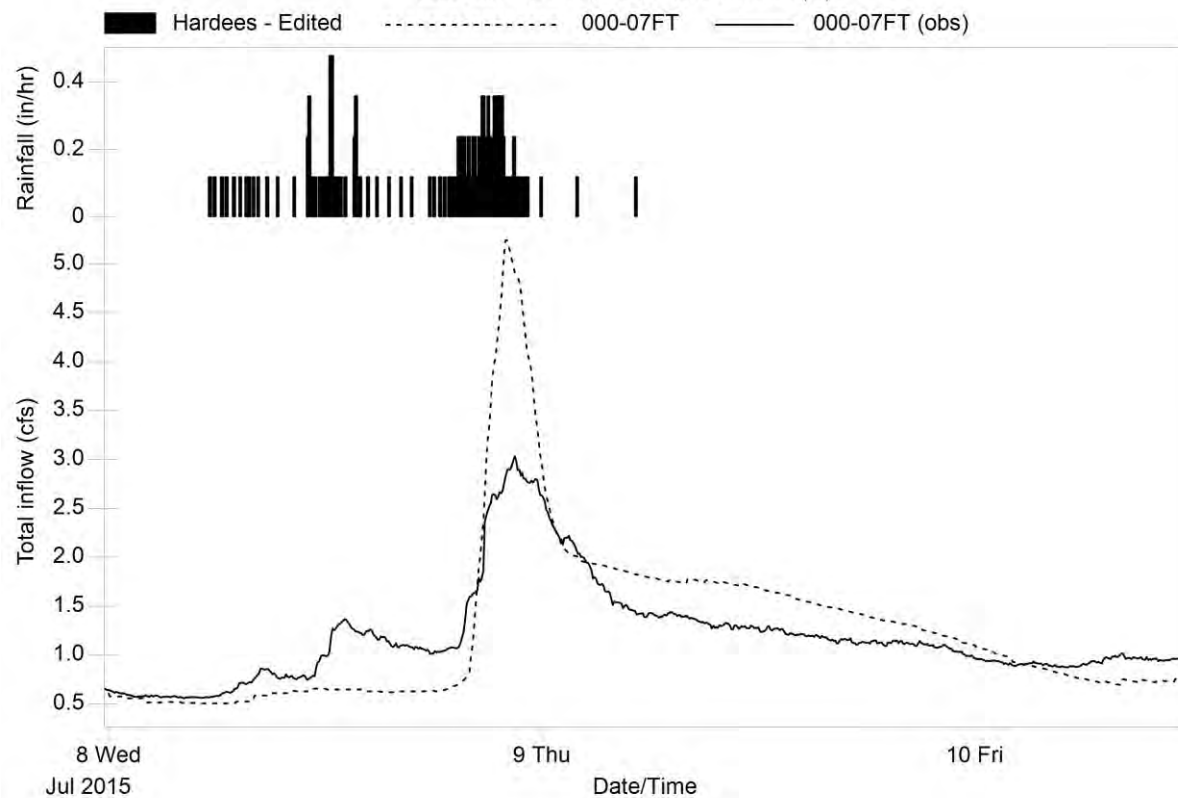
Event of June 28, 2015

Duration: 65.67 h, Total Rainfall: 0.68 (in)



Event of July 8, 2015

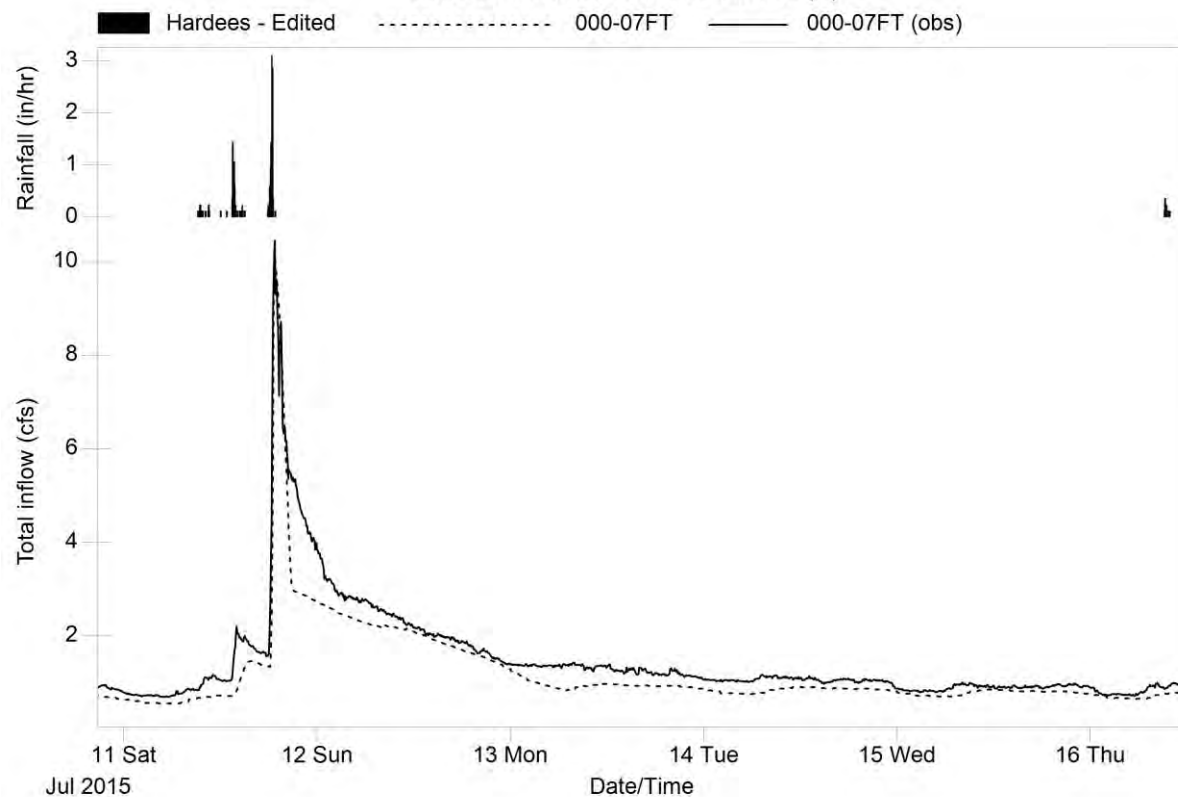
Duration: 49.92 h, Total Rainfall: 1.38 (in)



000-07FT – Verification Events

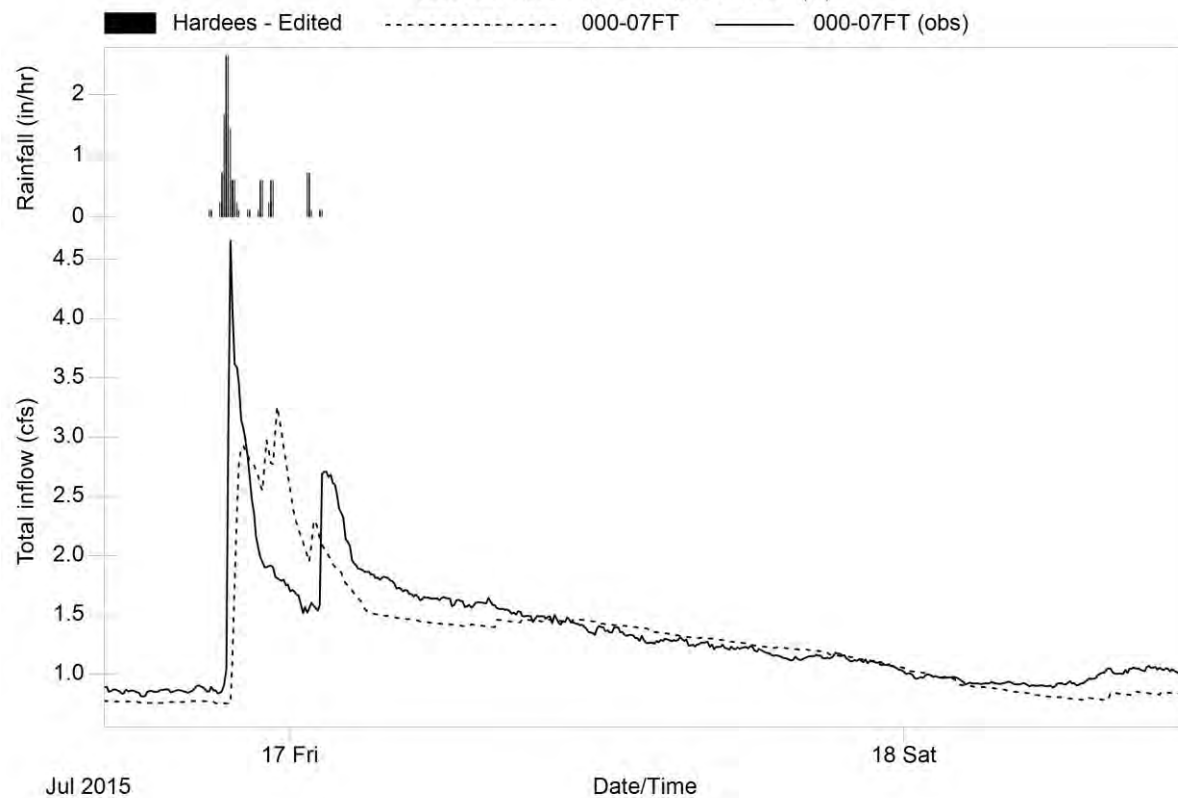
Event of July 11, 2015

Duration: 112.58 h, Total Rainfall: 1.43 (in)



Event of July 16, 2015

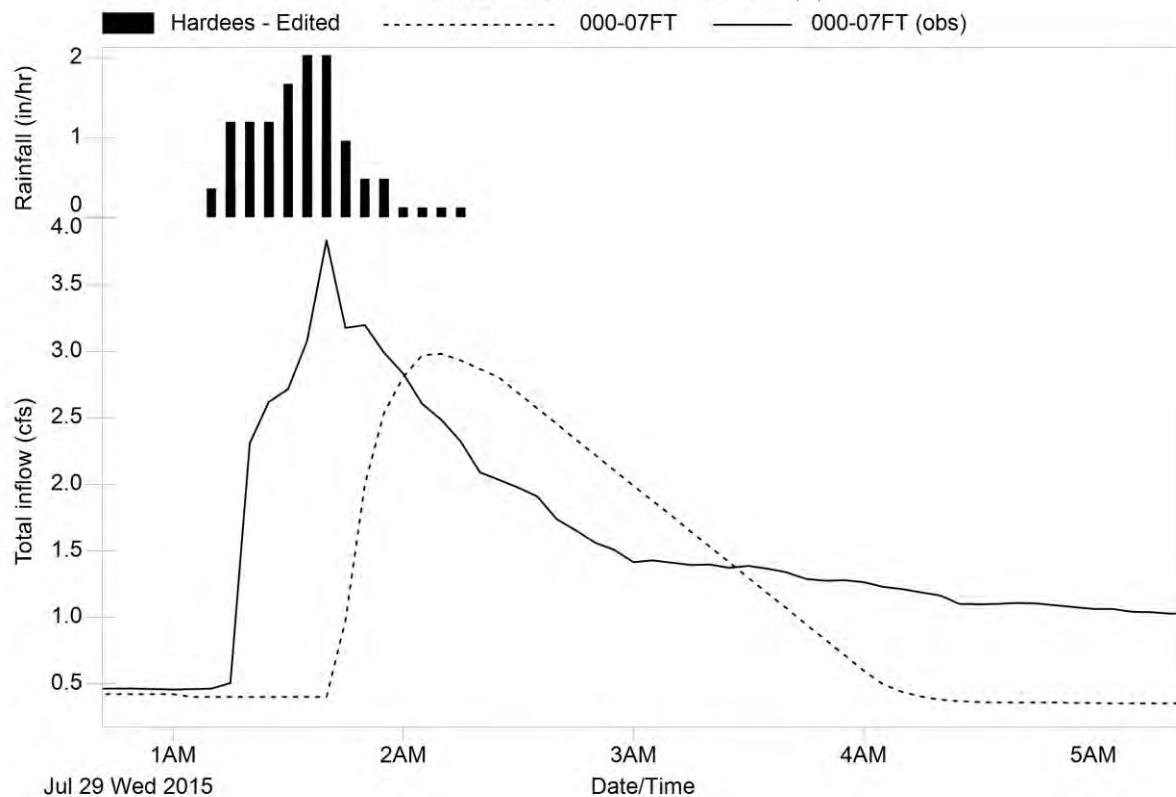
Duration: 35.25 h, Total Rainfall: 0.92 (in)



000-07FT – Verification Events

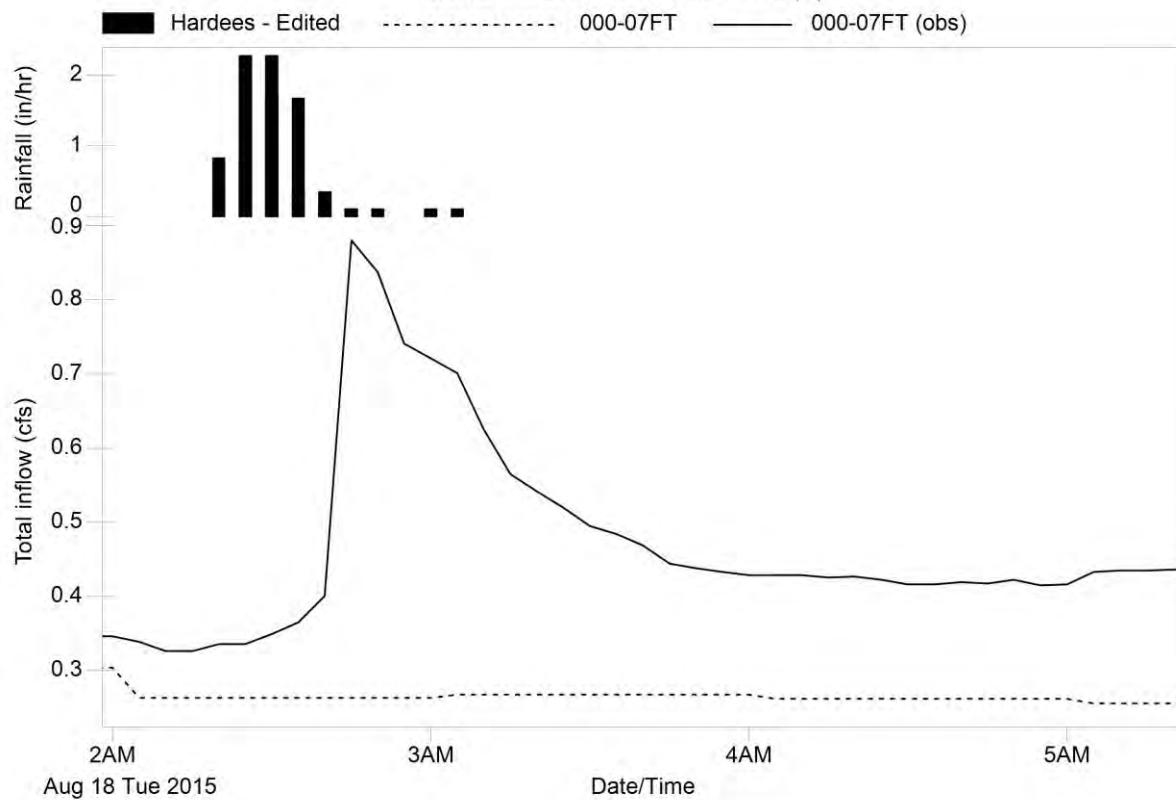
Event of July 29, 2015

Duration: 3.92 h, Total Rainfall: 0.77 (in)



Event of August 18, 2015

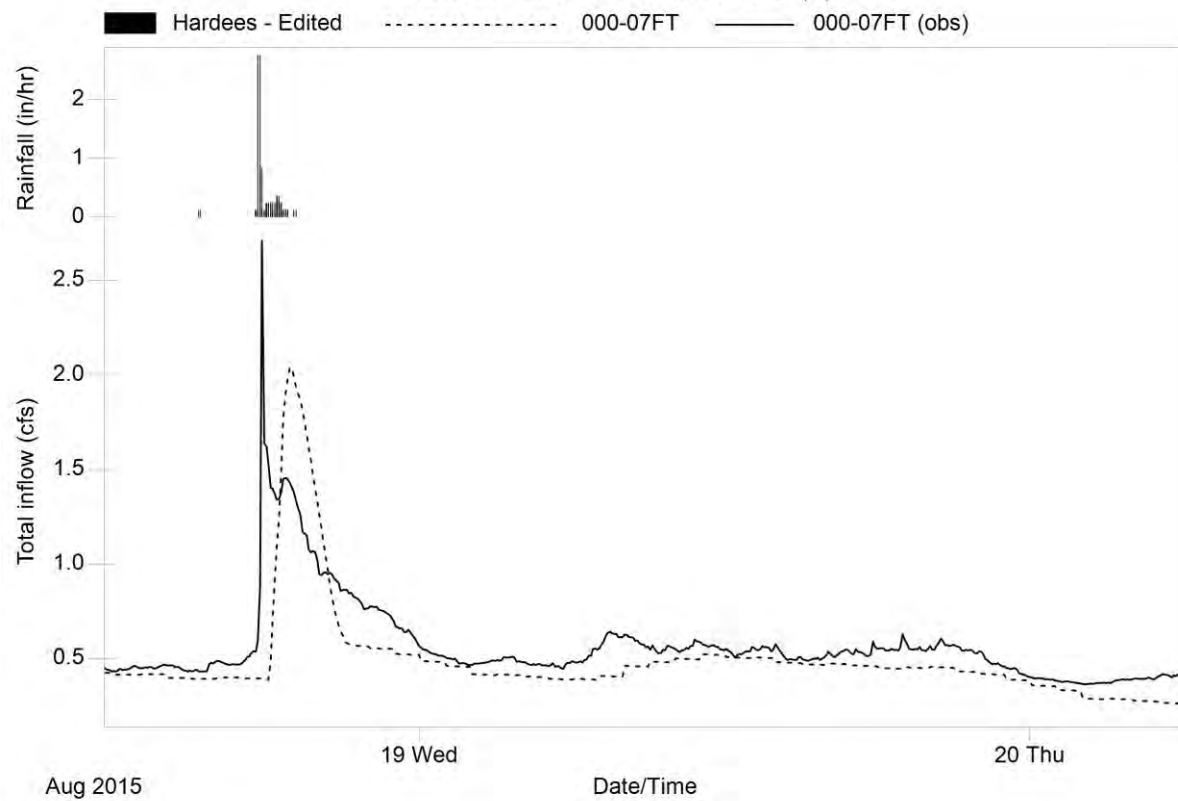
Duration: 2.83 h, Total Rainfall: 0.46 (in)



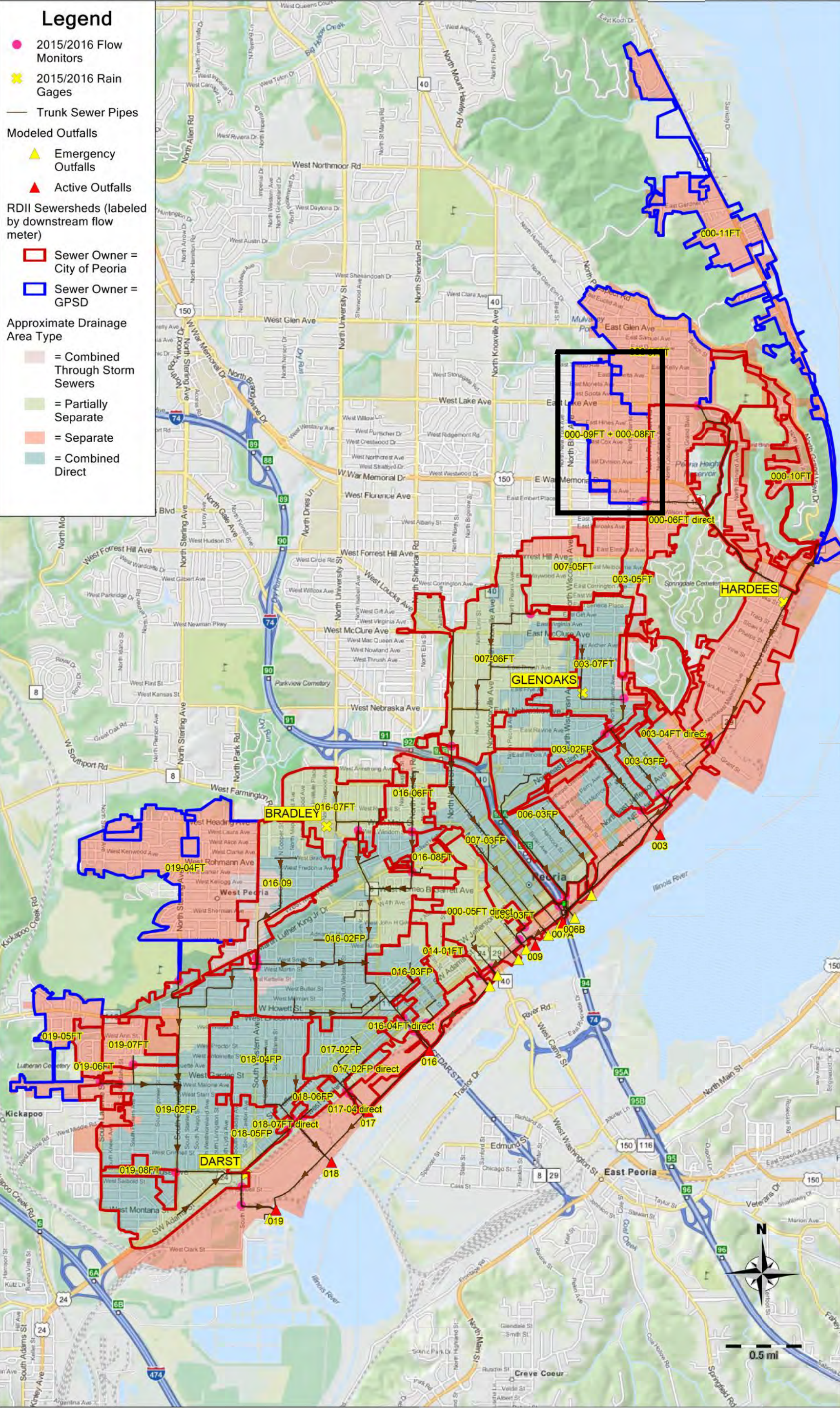
000-07FT – Verification Events

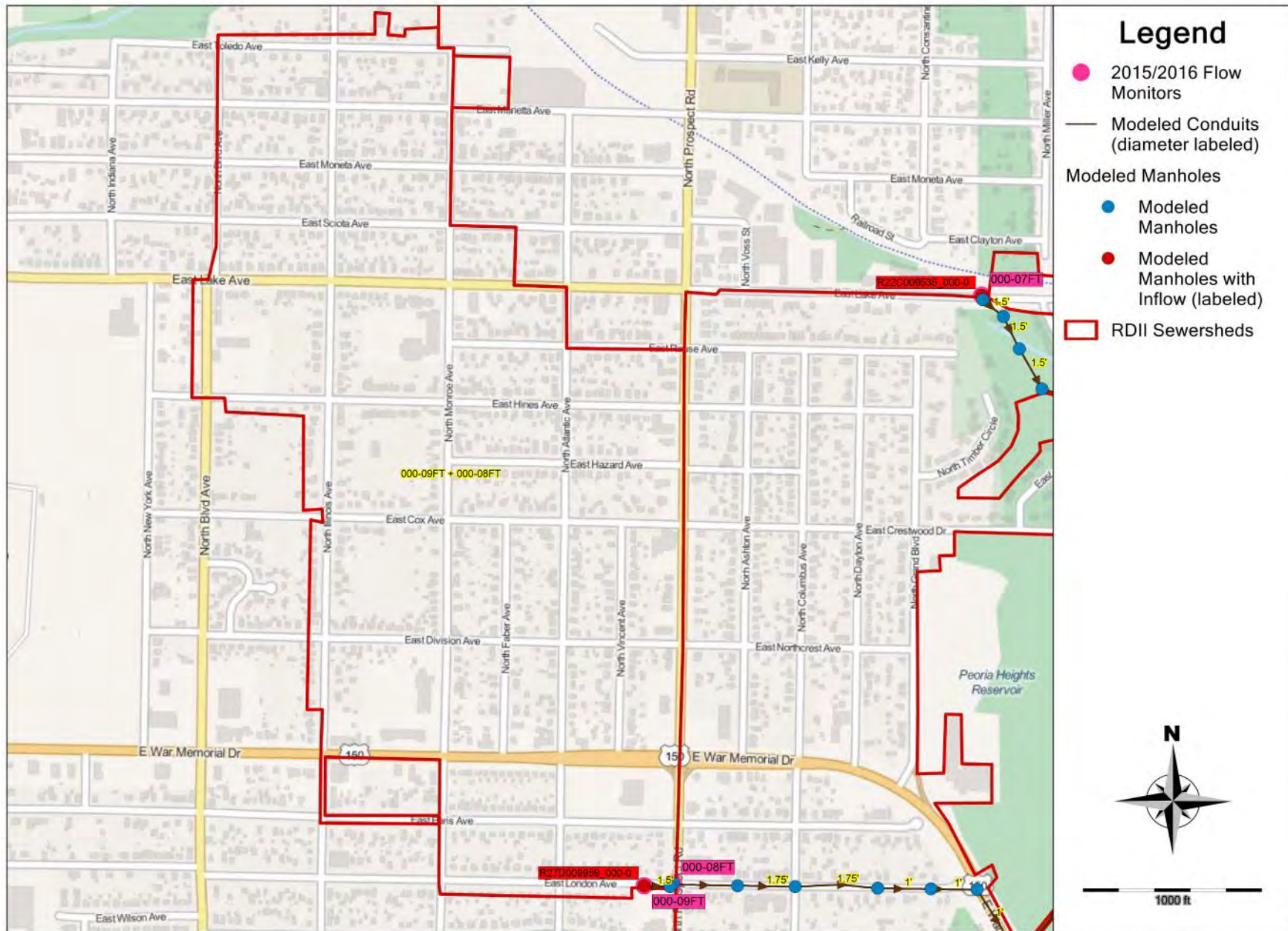
Event of August 18, 2015

Duration: 35.42 h, Total Rainfall: 0.52 (in)



Flow Monitor 000-08FT+000-09FT Overview Map



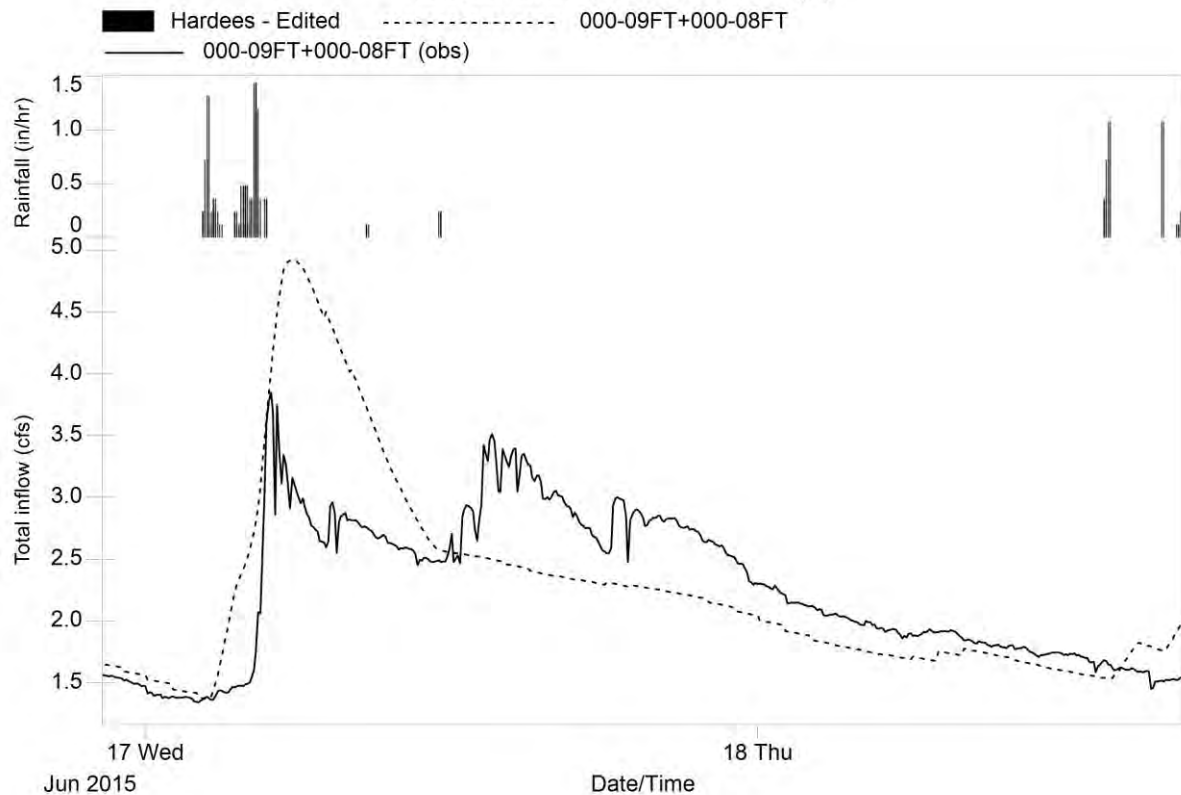


Date	Duration (h)	Rainfall (in)	Maximum Flow (cfs)		Maximum Flow (mgd)		Total Volume (ft³)		Volume (million gallons)		Peak Flow Rate (-15% to +25%)	Flow Volume (-10% to +20%)	Rainfall Variability	
		Hardees Edited	Observed	Modeled	Observed	Modeled	Observed	Modeled	Observed	Modeled				
CALIBRATION EVENTS - FLOW														
6/17/2015 1:50	35.33	0.82	3.848	4.929	2.486	4.926	303500	302800	2.270	2.265	28%	0%	variable	
6/24/2015 4:35	107.67	2.11	3.462	4.165	2.236	4.378	537900	554600	4.023	4.148	20%	3%	possibly uniform	
6/28/2015 13:55	65.67	0.68	2.401	2.539	1.551	3.168	282800	312100	2.115	2.335	6%	10%	relatively uniform	
7/8/2015 4:45	49.92	1.38	2.695	4.226	1.741	4.250	209300	266600	1.566	1.994	57%	27%	relatively uniform	
7/11/2015 8:00	112.58	1.43	6.914	5.973	4.466	5.989	538600	591700	4.029	4.426	-14%	10%	relatively uniform	
7/16/2015 20:15	35.25	0.92	2.476	3.797	1.599	3.291	152200	191100	1.138	1.429	53%	26%	relatively uniform	
7/28/2015 23:50	30.58	0.78	2.561	2.569	1.654	2.536	68410	98320	0.512	0.735	0%	44%	variable	
8/18/2015 2:05	15.17	0.47	0.809	2.225	0.522	1.860	30940	52640	0.231	0.394	175%	70%	possibly uniform	
8/18/2015 15:10	35.42	0.52	1.582	3.237	1.022	2.803	85110	120900	0.637	0.904	105%	42%	relatively uniform	
VERIFICATION EVENTS - FLOW														
9/8/2015 9:45	41.25	0.79	0.699	2.601	0.451	1.680	55310	48100	0.414	0.360	272%	-13%	possibly uniform	
9/18/2015 12:20	43.5	1.61	5.103	5.755	3.297	3.718	126100	238200	0.943	1.782	13%	89%	relatively uniform	
11/5/2015 13:10	37	0.47	0.474	0.896	0.306	0.579	51530	38530	0.385	0.288	89%	-25%	possibly uniform	
11/11/2015 17:35	11.42	0.76	0.946	2.646	0.611	1.709	18240	52020	0.136	0.389	180%	185%	relatively uniform	
11/16/2015 21:00	53.67	2.3	3.822	4.476	2.469	2.891	259300	317100	1.940	2.372	17%	22%	variable	
11/26/2015 18:20	62.42	1.42	4.262	4.146	2.753	2.678	440100	278700	3.292	2.085	-3%	-37%	possibly uniform	
12/13/2015 1:00	70.92	1.7	4.763	3.463	3.077	2.237	499700	216300	3.738	1.618	-27%	-57%	possibly uniform	
12/20/2015 21:25	17.92	0.68	2.120	1.827	1.370	1.180	83490	50680	0.625	0.379	-14%	-39%	possibly uniform	
12/23/2015 5:00	18	0.62	4.248	2.278	2.744	1.472	162700	73090	1.217	0.547	-46%	-55%	variable	
12/28/2015 0:45	44.25	2.28	8.020	7.781	5.181	5.027	664700	616000	4.972	4.608	-3%	-7%	relatively uniform	
								WEIGHTED AVERAGES						
								Calibration - Relatively Uniform				23%	17%	relatively uniform
								Calibration - Possibly Uniform				50%	7%	possibly uniform
								Calibration - Variable				17%	8%	variable
								Calibration Weighted - All Events				26%	13%	
								Verification - Relatively Uniform				15%	12%	relatively uniform
								Verification - Possibly Uniform				5%	-44%	possibly uniform
								Verification - Variable				-16%	-8%	variable
								Verification Weighted - All Events				4%	-18%	
								Weighted Average - All Events				14%	-3%	
								NET AVERAGES						
								Calibration - Relatively Uniform				41%	23%	relatively uniform
								Calibration - Possibly Uniform				98%	37%	possibly uniform
								Calibration - Variable				14%	22%	variable
								Calibration Net - All Events				48%	26%	
								Verification - Relatively Uniform				63%	89%	relatively uniform
								Verification - Possibly Uniform				64%	-34%	possibly uniform
								Verification - Variable				-15%	-16%	variable
								Verification Net - All Events				48%	6%	
								Net Average - All Events				48%	16%	

000-08FT+000-09FT – Calibration Events

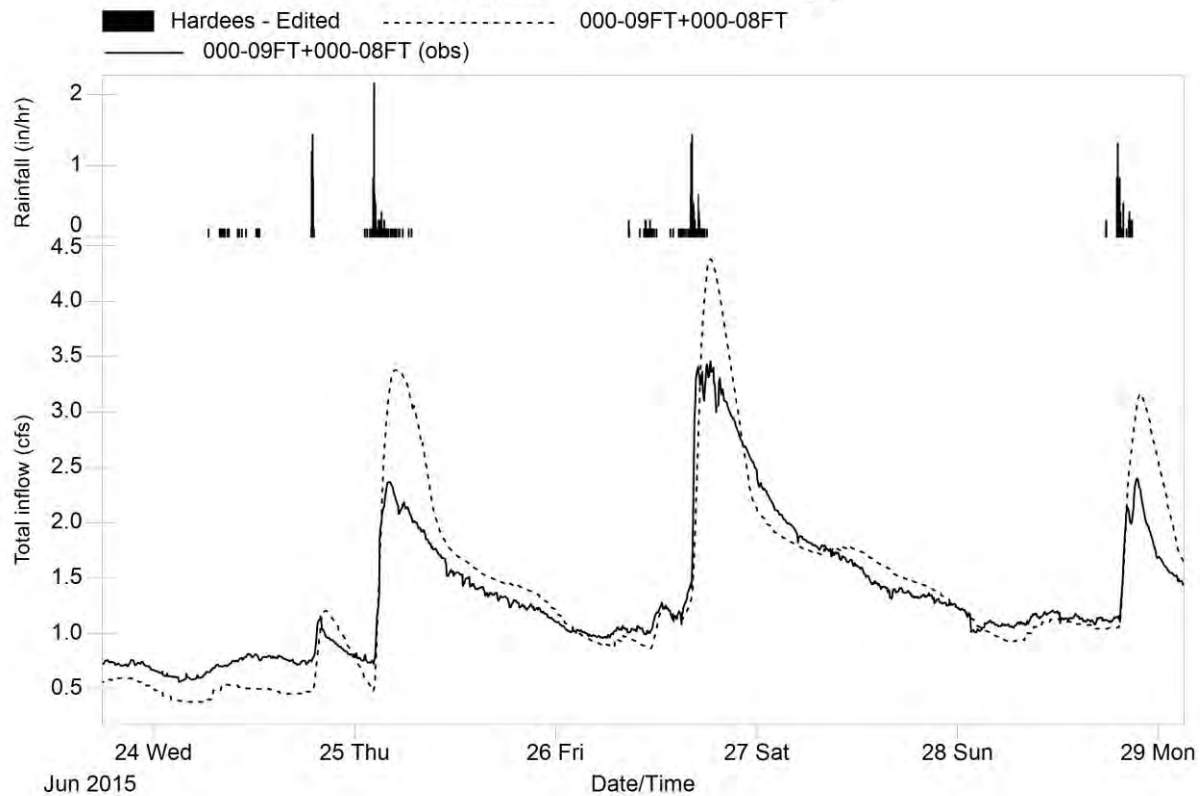
Event of June 17, 2015

Duration: 35.33 h, Total Rainfall: 0.82 (in)



Event of June 24, 2015

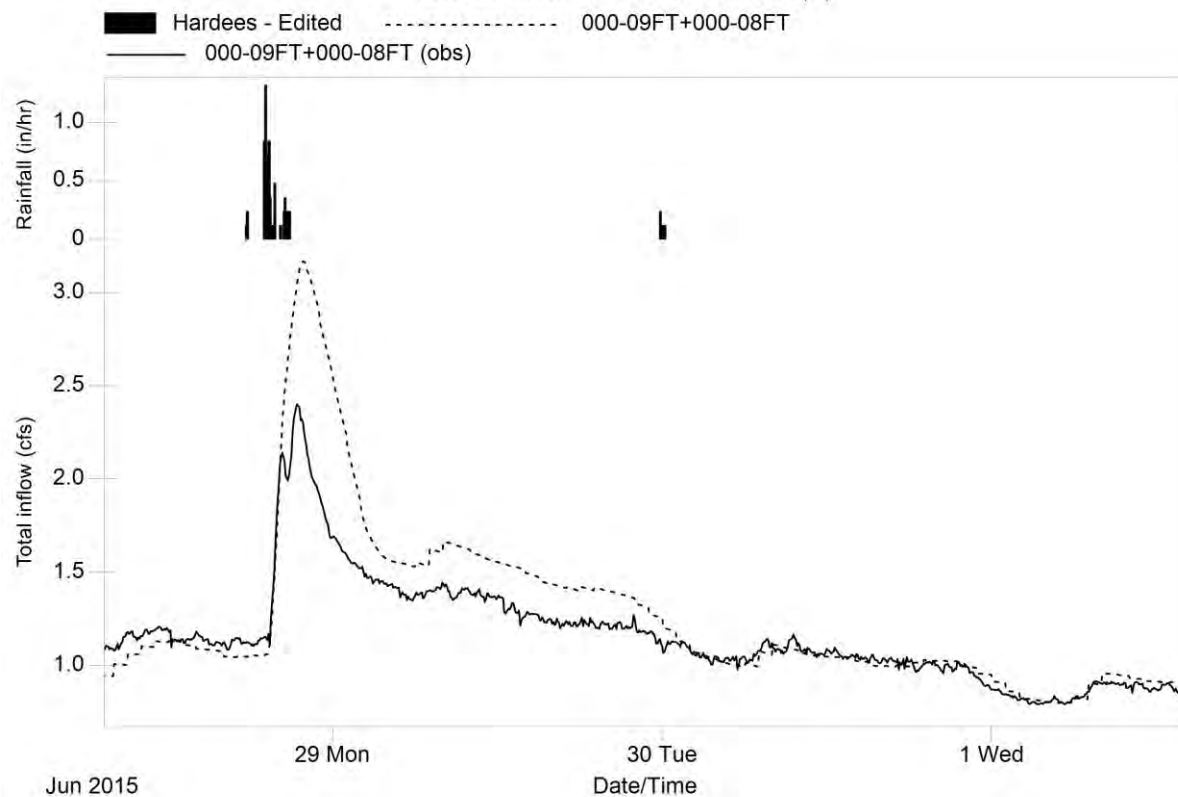
Duration: 107.67 h, Total Rainfall: 2.11 (in)



000-08FT+000-09FT – Calibration Events

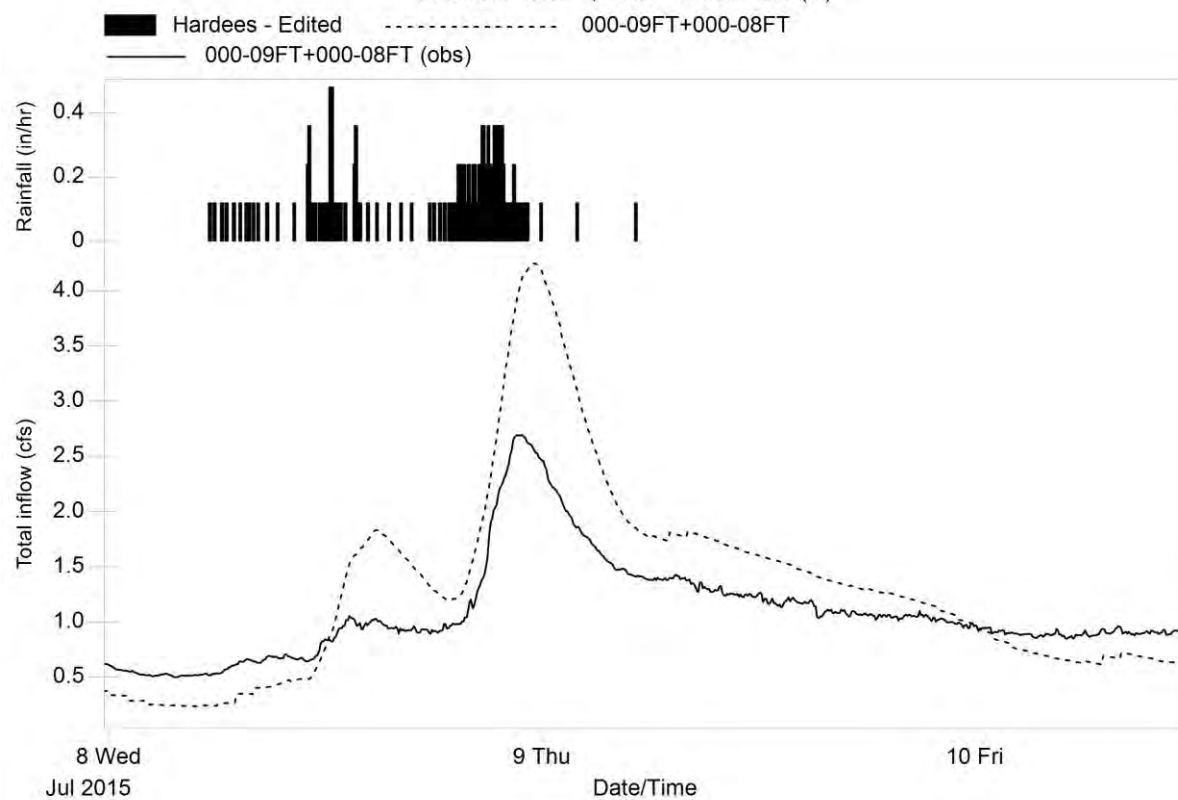
Event of June 28, 2015

Duration: 65.67 h, Total Rainfall: 0.68 (in)



Event of July 8, 2015

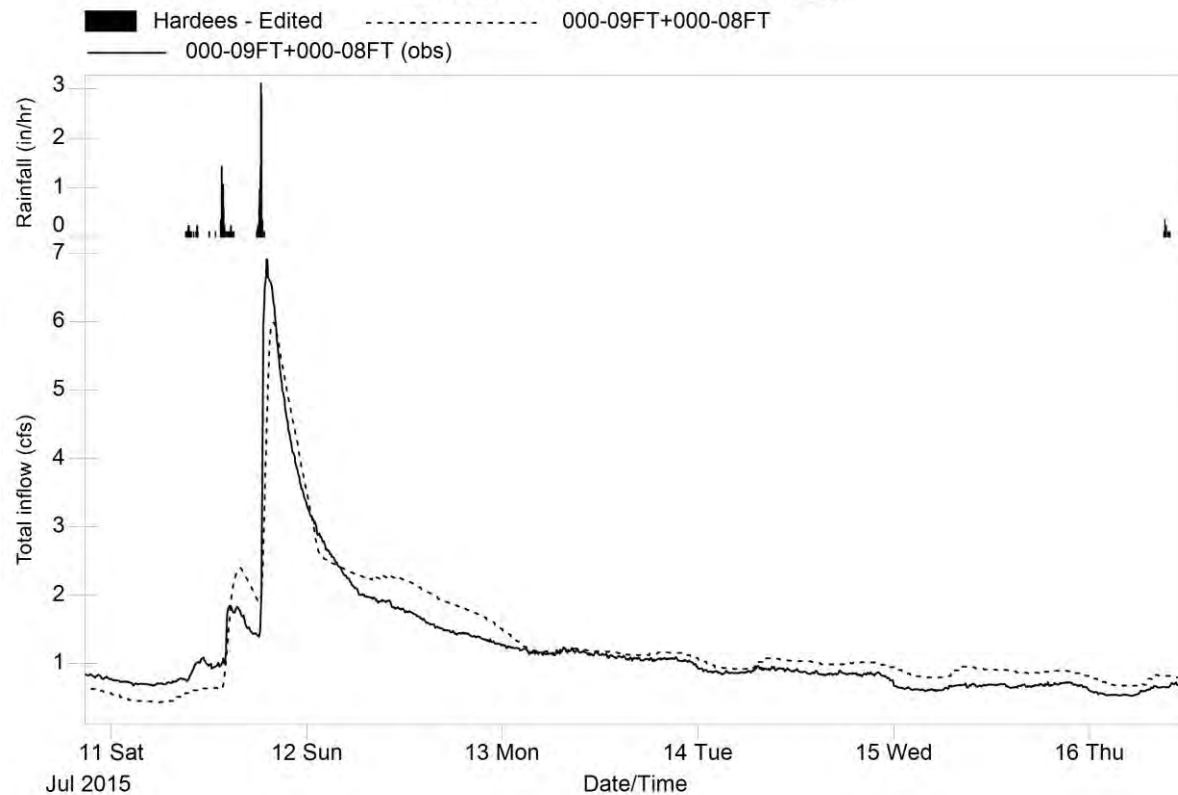
Duration: 49.92 h, Total Rainfall: 1.38 (in)



000-08FT+000-09FT – Calibration Events

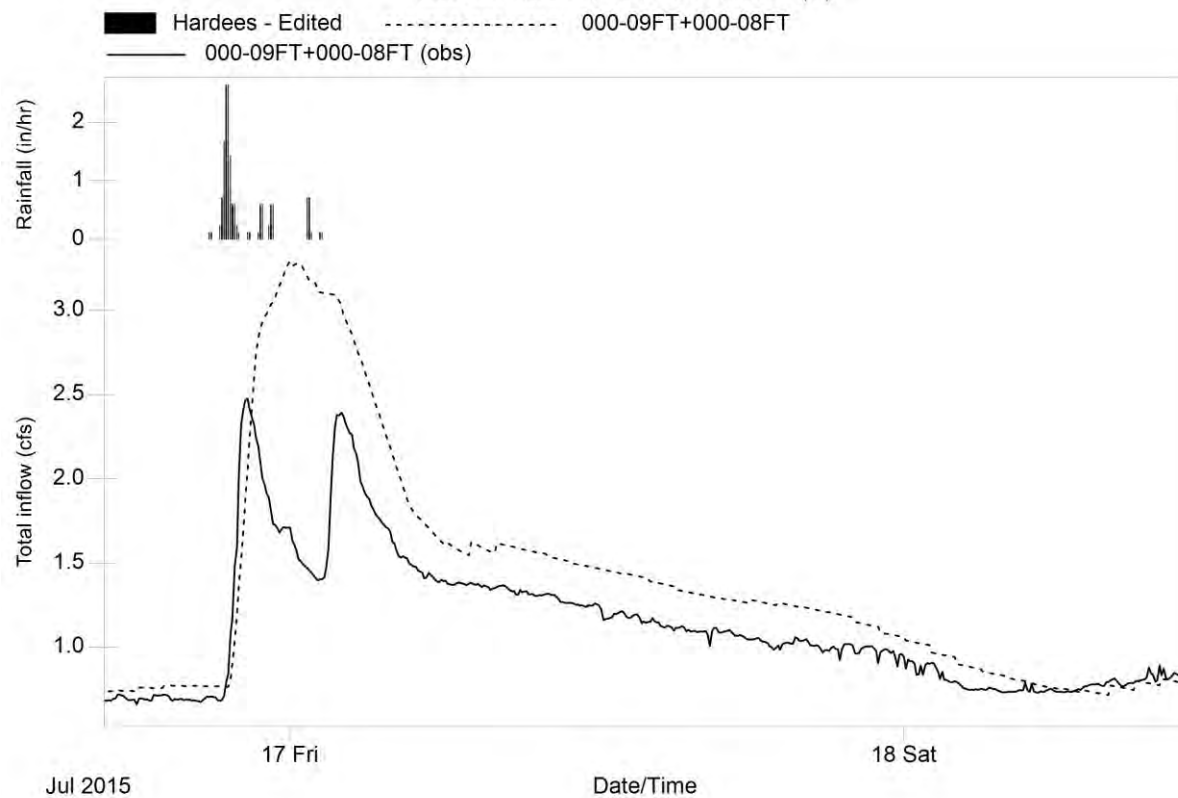
Event of July 11, 2015

Duration: 112.58 h, Total Rainfall: 1.43 (in)



Event of July 16, 2015

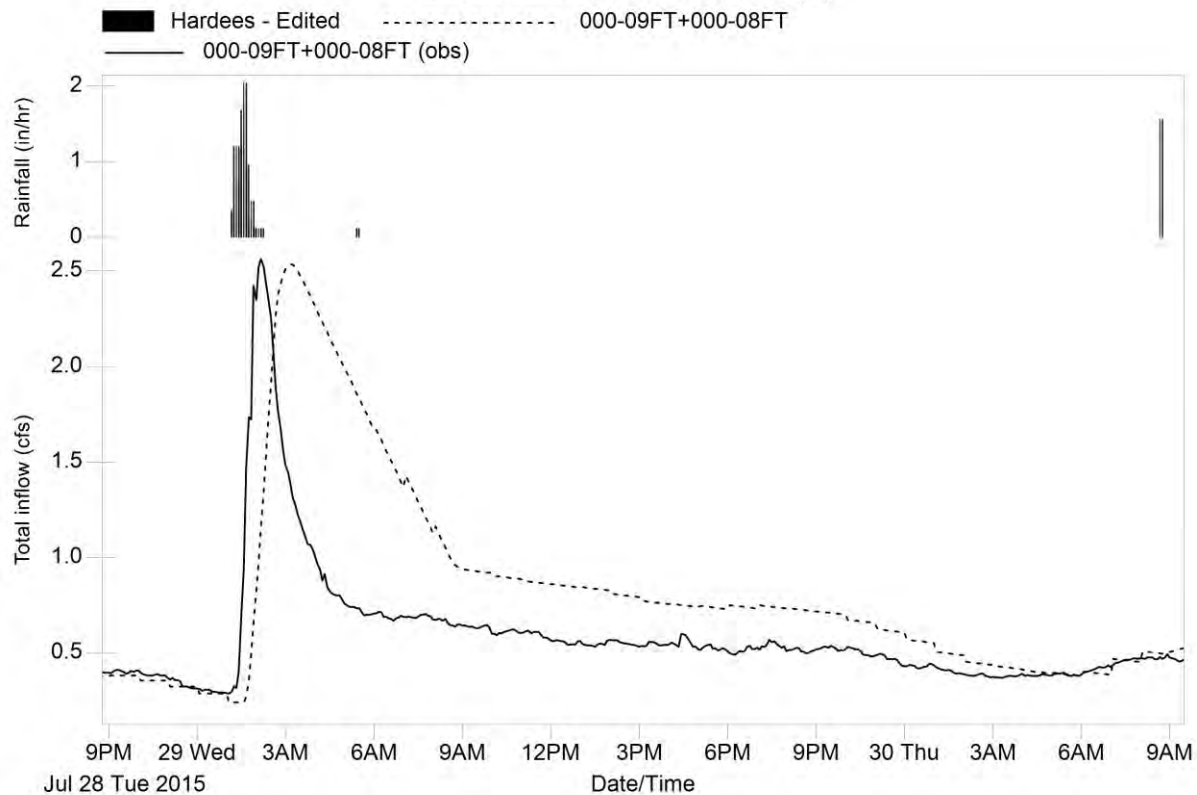
Duration: 35.25 h, Total Rainfall: 0.92 (in)



000-08FT+000-09FT – Calibration Events

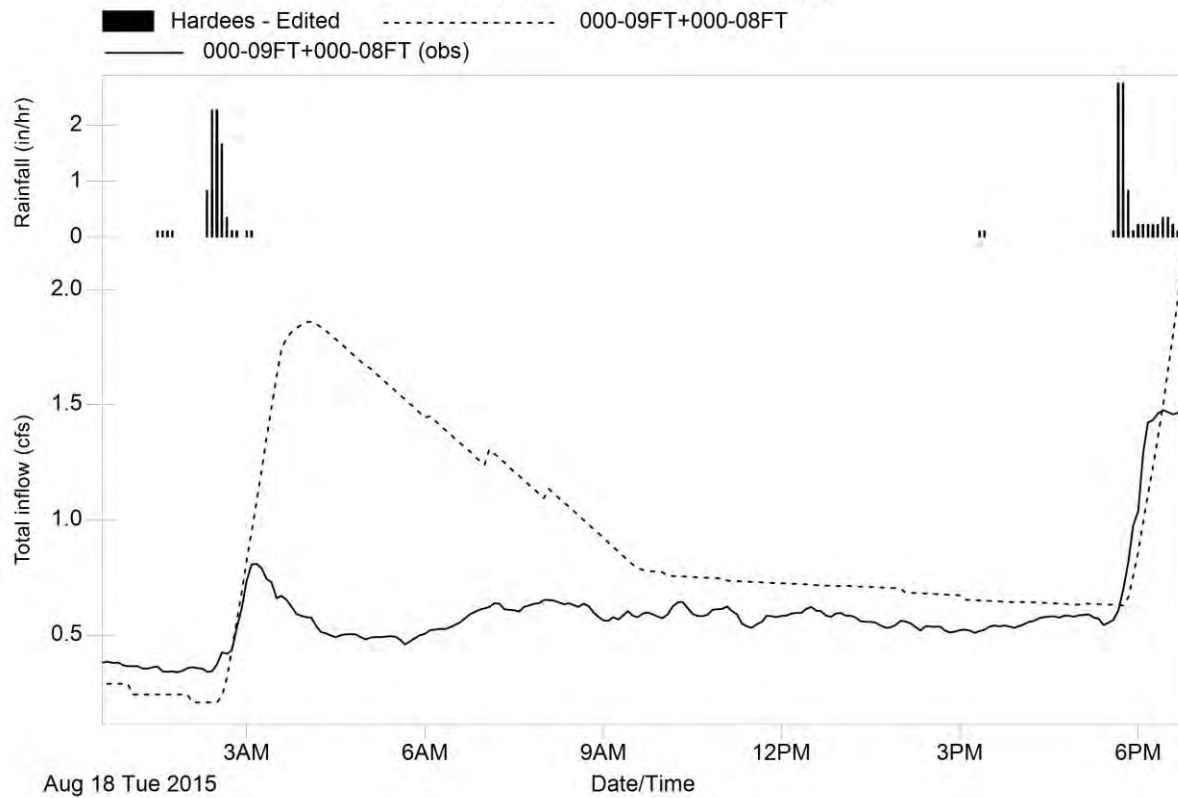
Event of July 28, 2015

Duration: 30.58 h, Total Rainfall: 0.78 (in)

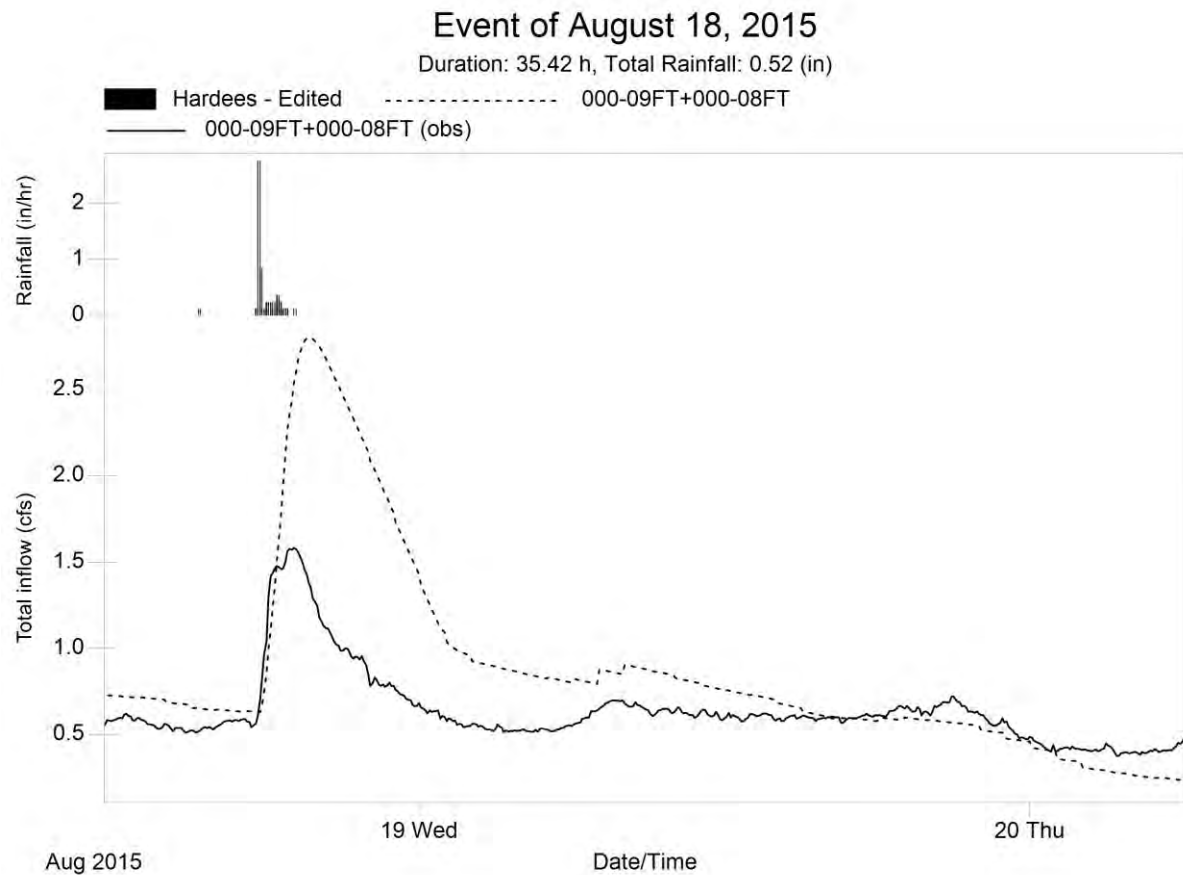


Event of August 18, 2015

Duration: 15.17 h, Total Rainfall: 0.47 (in)



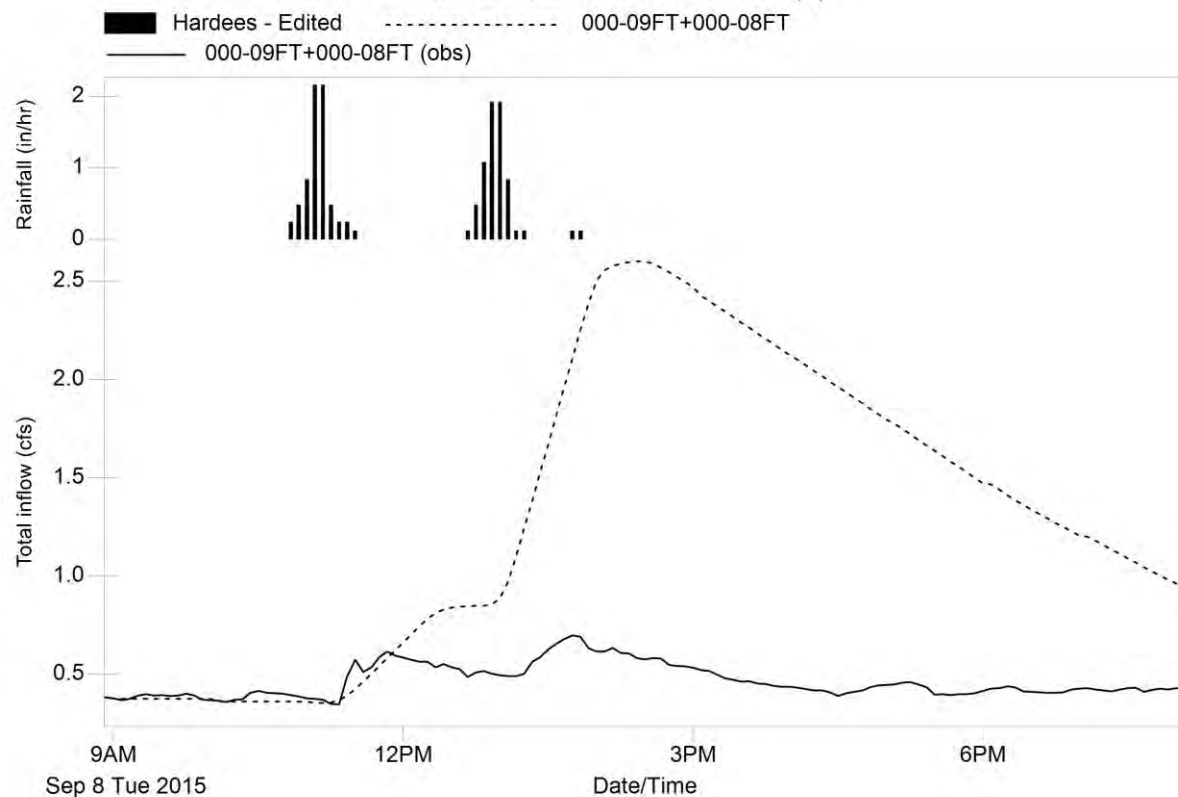
000-08FT+000-09FT – Calibration Events



000-08FT+000-09FT – Verification Events

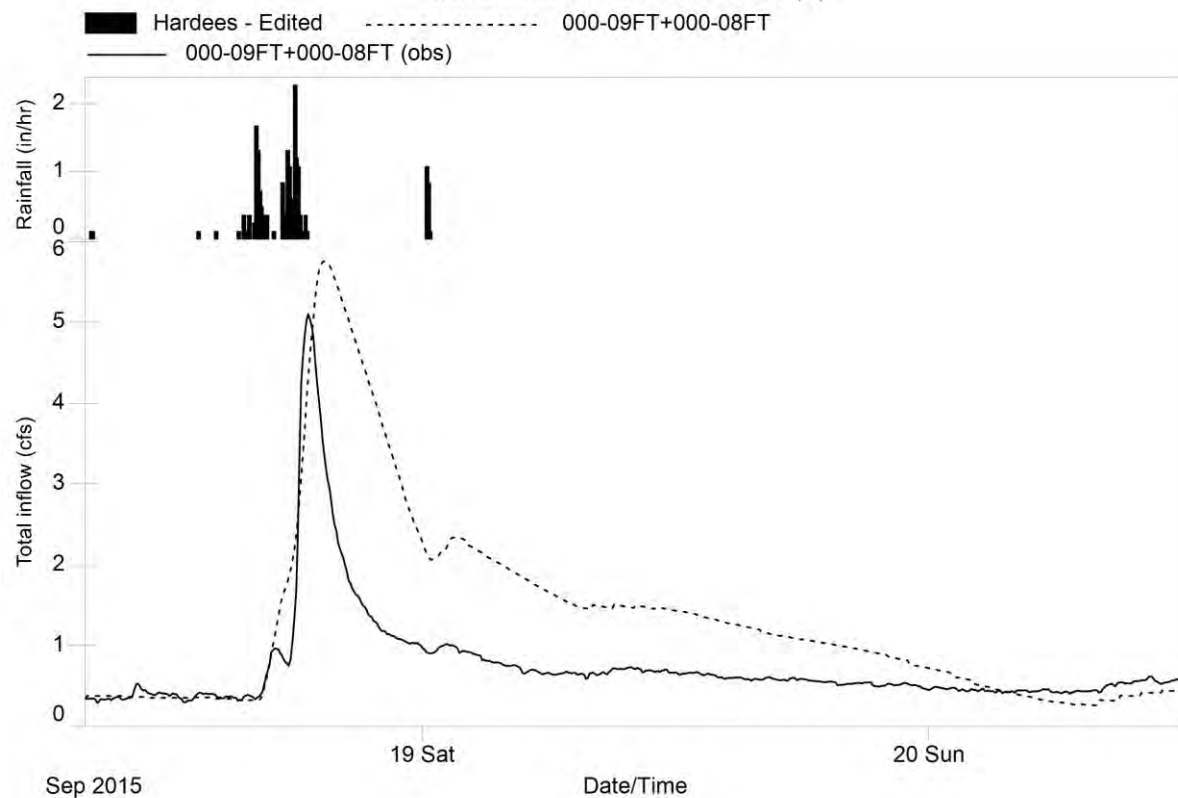
Event of September 8, 2015

Duration: 9.33 h, Total Rainfall: 0.79 (in)



Event of September 18, 2015

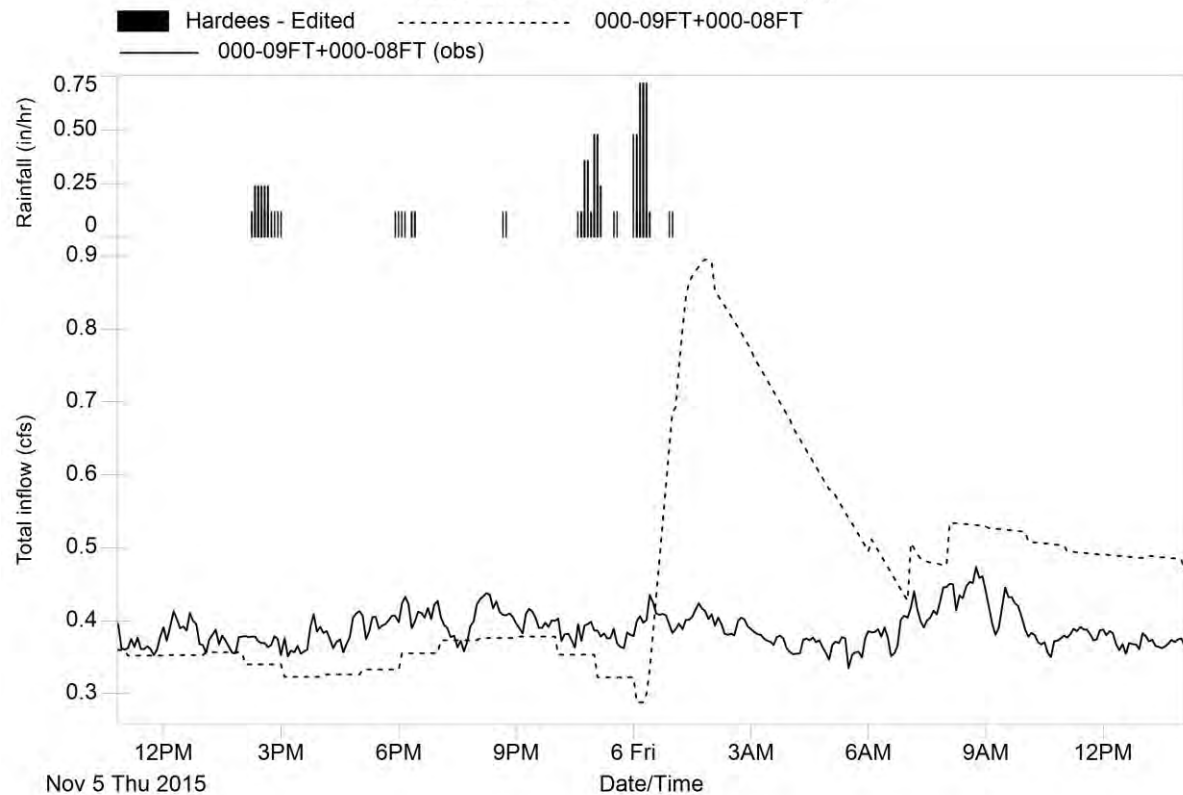
Duration: 43.5 h, Total Rainfall: 1.61 (in)



000-08FT+000-09FT – Verification Events

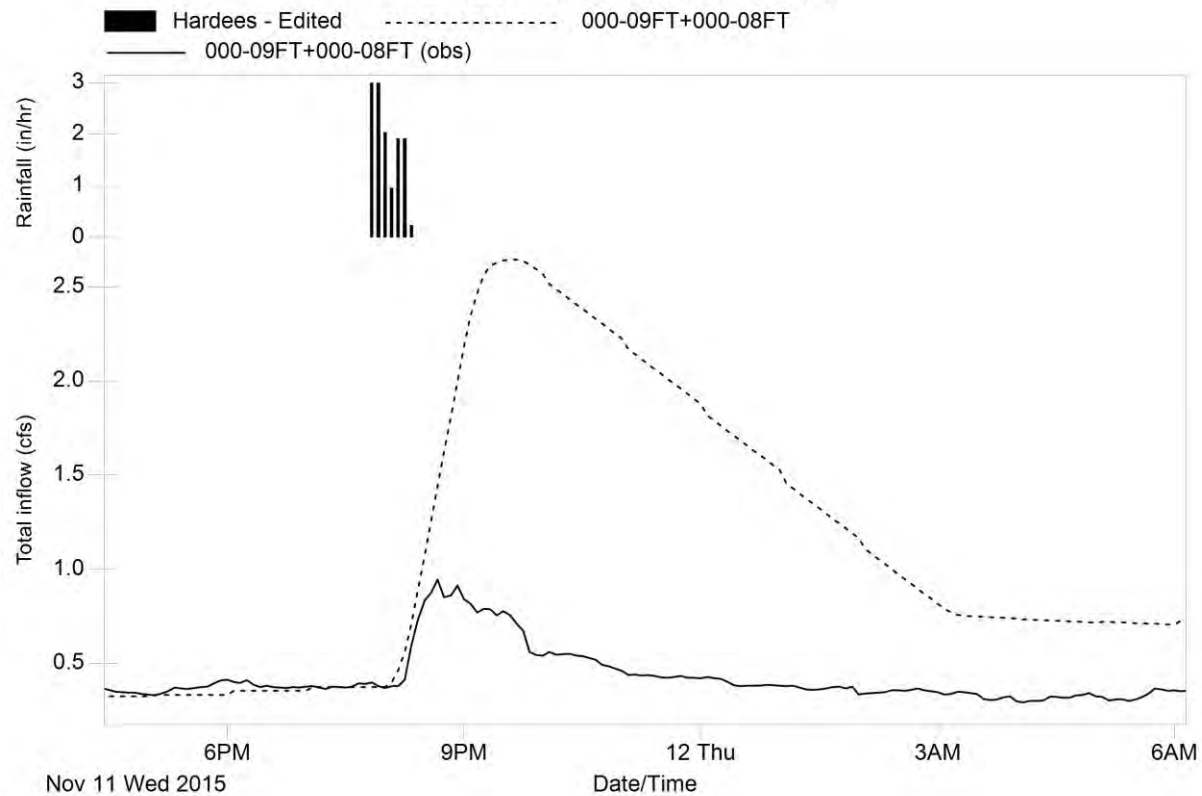
Event of November 5, 2015

Duration: 22.75 h, Total Rainfall: 0.47 (in)



Event of November 11, 2015

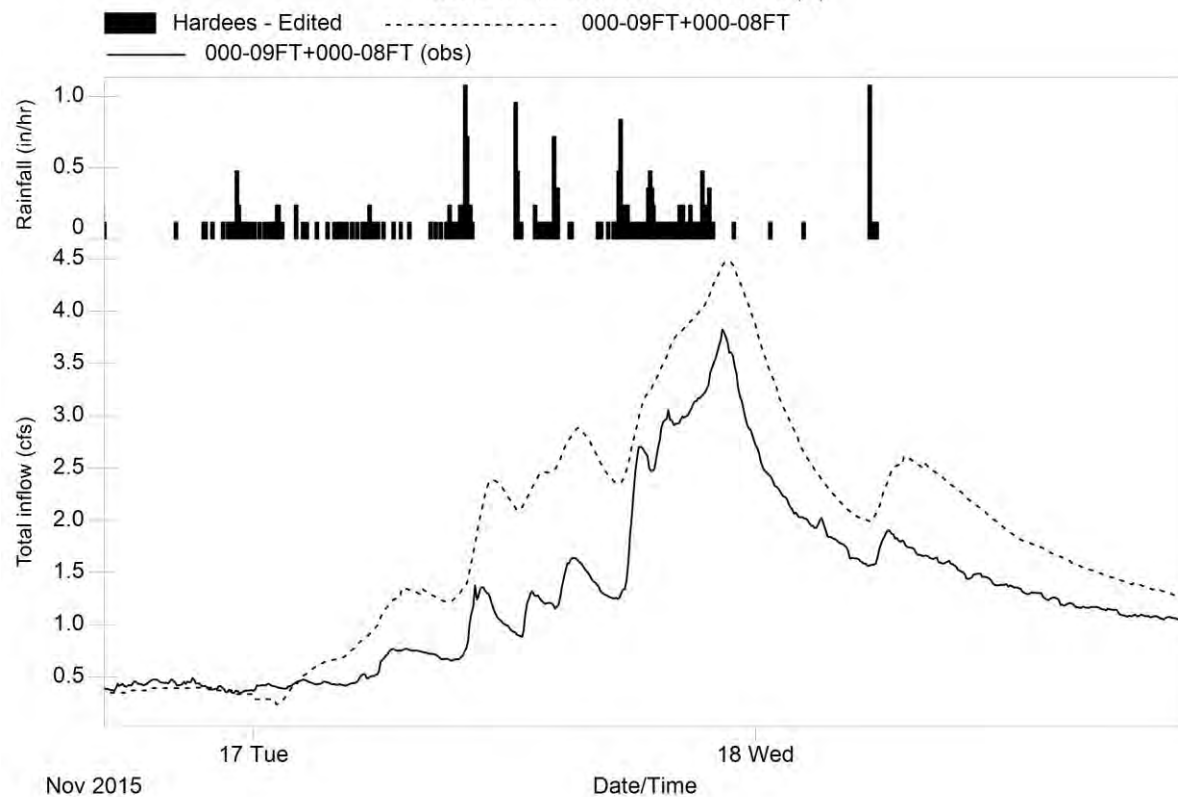
Duration: 11.42 h, Total Rainfall: 0.76 (in)



000-08FT+000-09FT – Verification Events

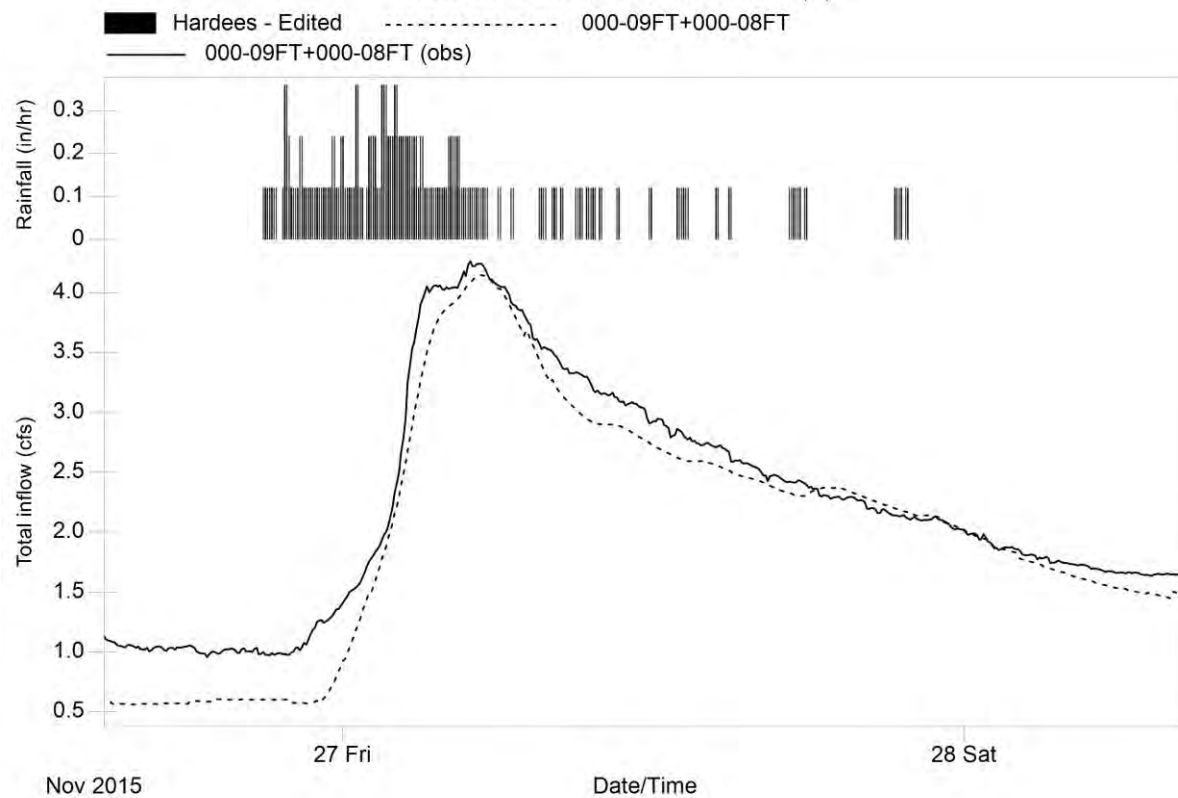
Event of November 16, 2015

Duration: 43.08 h, Total Rainfall: 2.3 (in)



Event of November 26, 2015

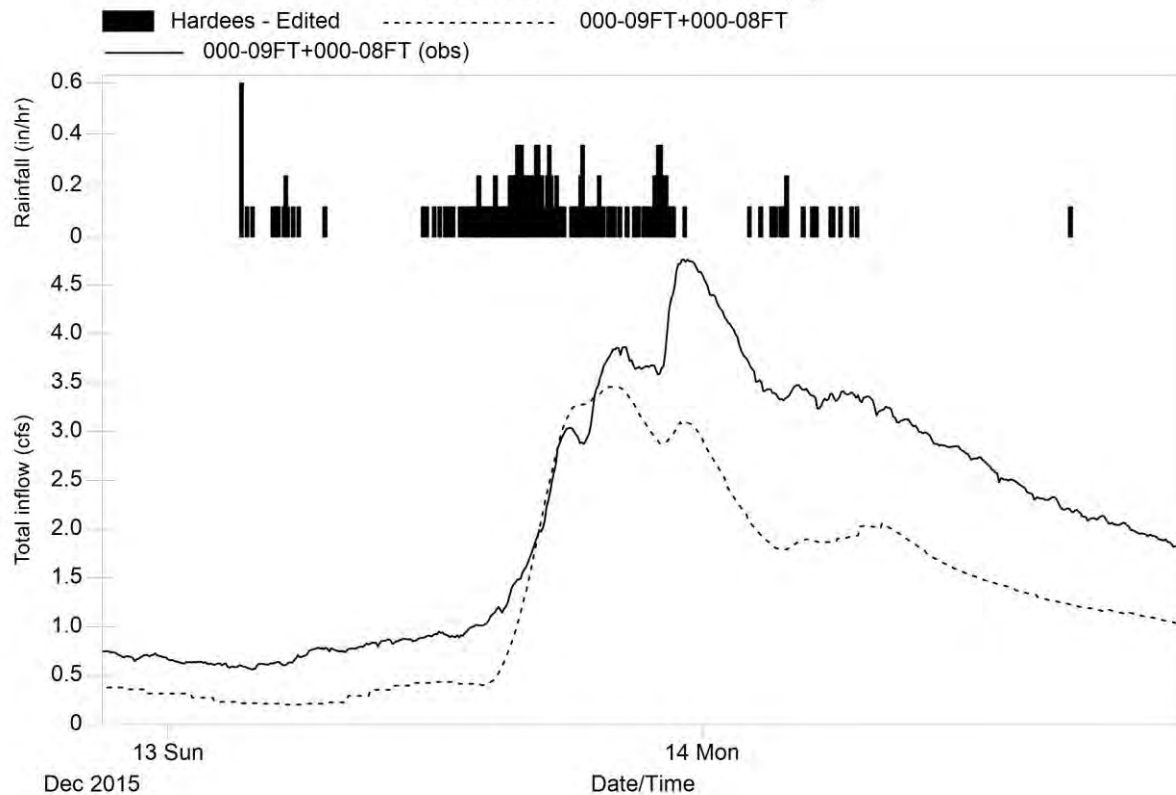
Duration: 34.83 h, Total Rainfall: 1.42 (in)



000-08FT+000-09FT – Verification Events

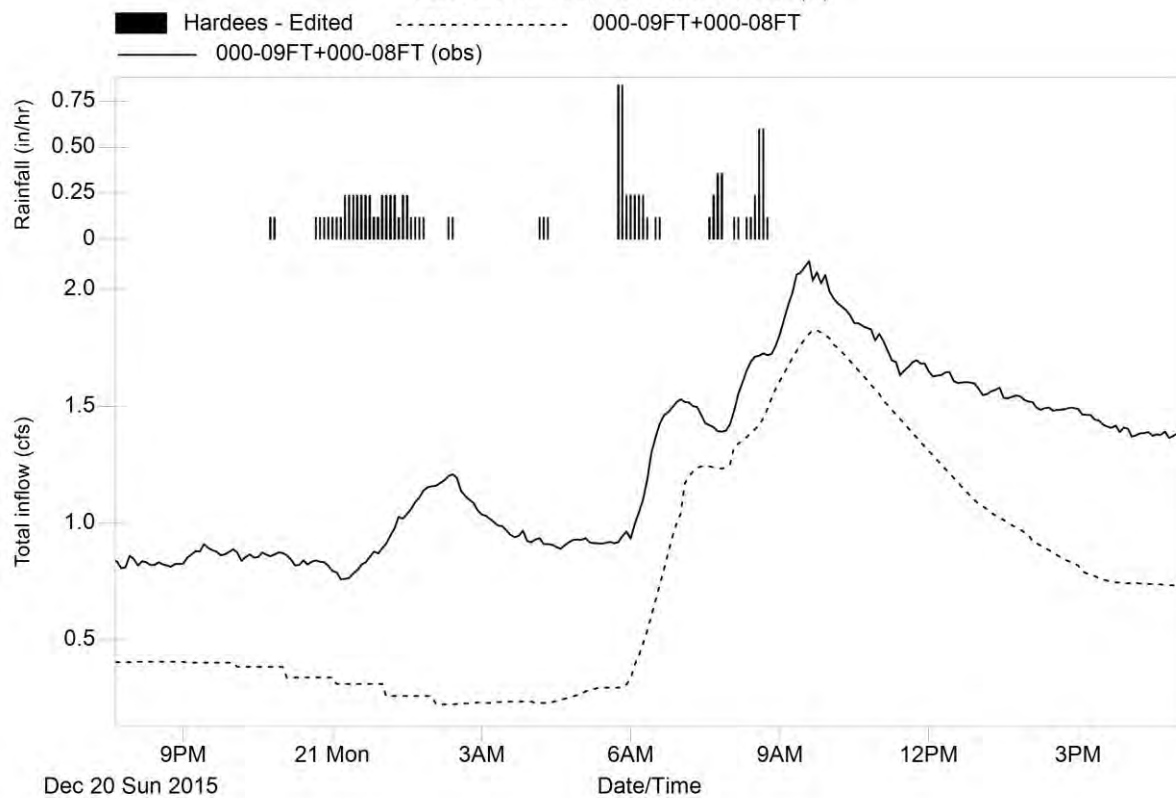
Event of December 13, 2015

Duration: 40.5 h, Total Rainfall: 1.7 (in)



Event of December 20, 2015

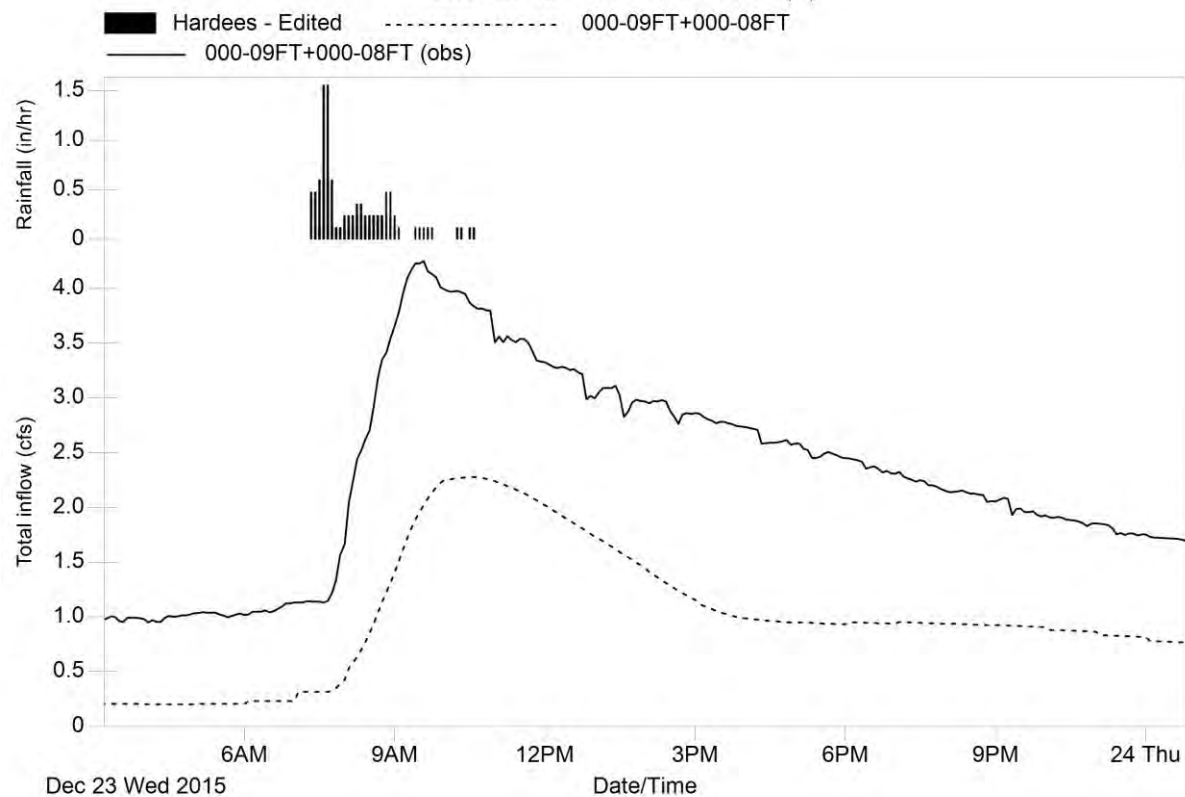
Duration: 17.92 h, Total Rainfall: 0.68 (in)



000-08FT+000-09FT – Verification Events

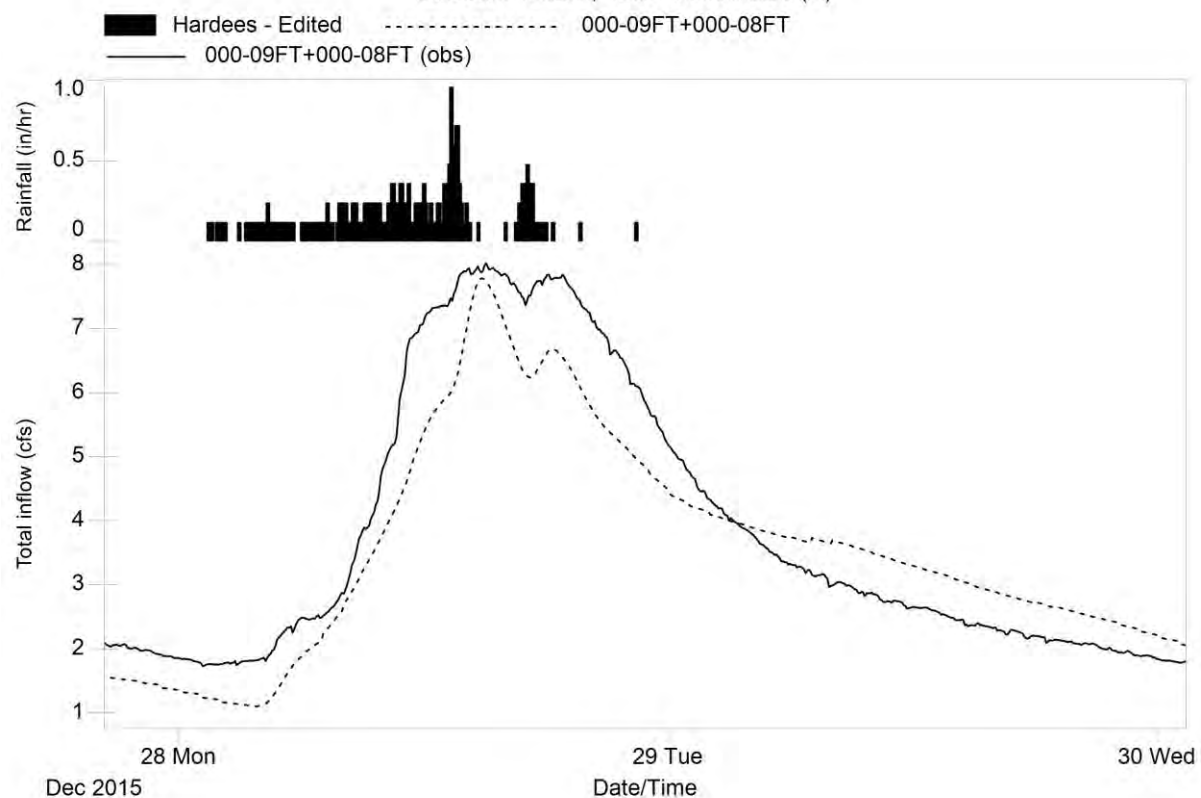
Event of December 23, 2015

Duration: 18 h, Total Rainfall: 0.62 (in)

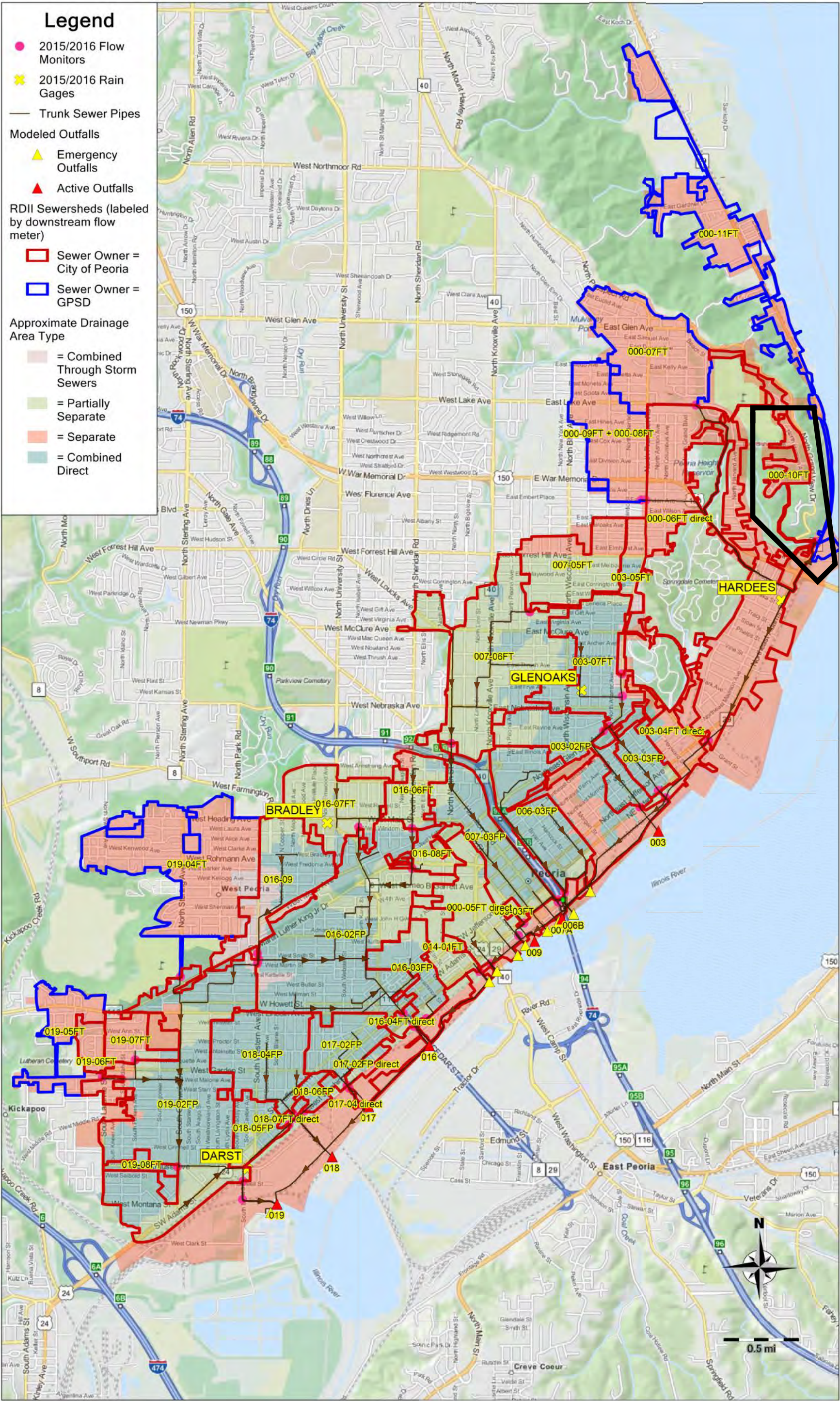


Event of December 28, 2015

Duration: 44.25 h, Total Rainfall: 2.28 (in)



Flow Monitor 000-10FT Overview Map



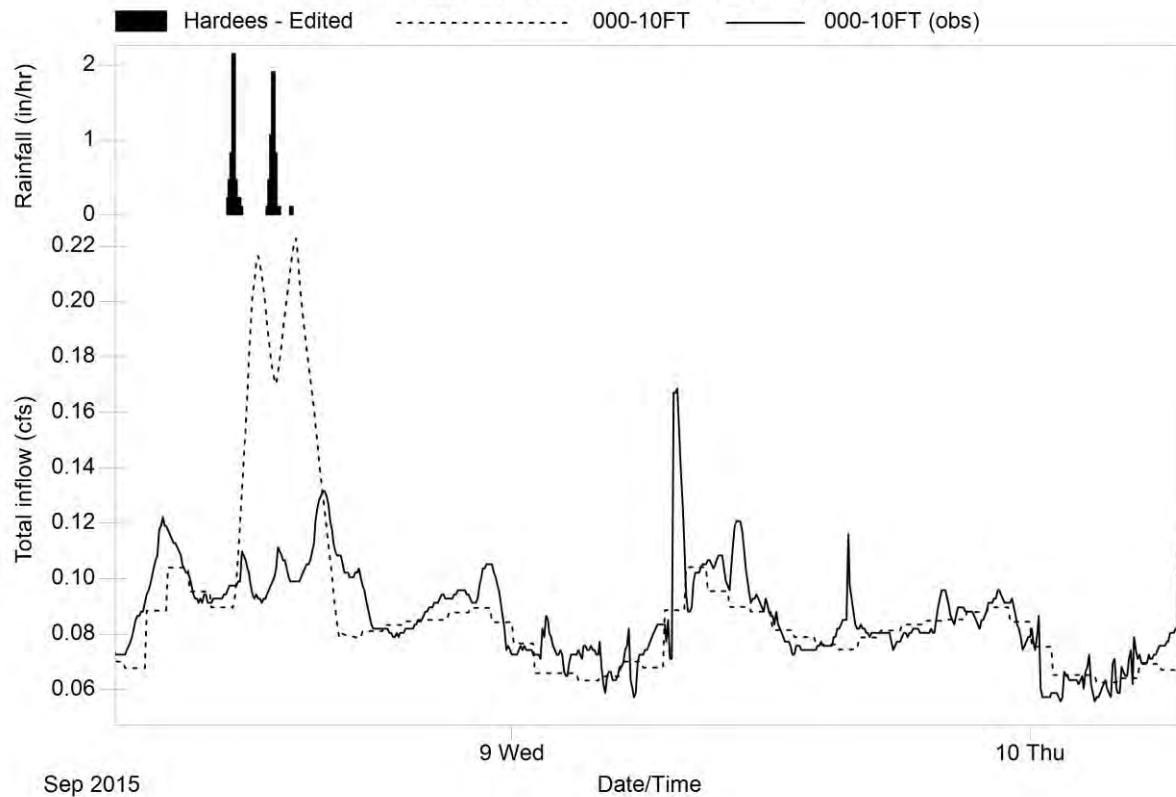


Date	Duration (h)	Rainfall (in)	Maximum Flow (cfs)		Maximum Flow (mgd)		Total Volume (ft³)		Volume (million gallons)		Peak Flow Rate (+/- 0.1 mgd)	Flow Volume (+/-0.1 MG) OF1 (MG)	Rainfall Variability	
		Hardees Edited	Observed	Modeled	Observed	Modeled	Observed	Modeled	Observed	Modeled				
CALIBRATION EVENTS - FLOW														
9/8/2015 9:45	41.25	0.79	0.169	0.223	0.109	0.144	12940	13510	0.097	0.101	0.035	0.004	variable	
9/18/2015 12:45	15.67	1.61	0.381	0.382	0.246	0.247	6410	7694	0.048	0.058	0.001	0.010	possibly uniform	
11/5/2015 13:35	24.67	0.47	0.138	0.150	0.089	0.097	7850	8102	0.059	0.061	0.008	0.002	relatively uniform	
11/11/2015 19:40	4.17	0.76	0.105	0.339	0.068	0.219	1455	2786	0.011	0.021	0.151	0.010	relatively uniform	
11/16/2015 21:00	53.67	2.3	0.245	0.184	0.158	0.119	27740	20040	0.207	0.150	-0.039	-0.058	relatively uniform	
11/26/2015 18:20	62.42	1.42	0.217	0.285	0.140	0.184	34810	43670	0.260	0.327	0.044	0.066	relatively uniform	
12/13/2015 1:00	70.92	1.71	0.251	0.248	0.162	0.160	41380	36180	0.310	0.271	-0.002	-0.039	variable	
12/20/2015 21:25	17.92	0.68	0.212	0.181	0.137	0.117	9847	7400	0.074	0.055	-0.020	-0.018	variable	
12/23/2015 5:00	18	0.62	0.291	0.319	0.188	0.206	13720	11610	0.103	0.087	0.018	-0.016	possibly uniform	
12/28/2015 0:25	89	2.37	0.676	0.731	0.437	0.472	91100	100700	0.681	0.753	0.035	0.072	relatively uniform	
VERIFICATION EVENTS - FLOW														
6/24/2015 4:35	107.58	2.11	0.396	0.467	0.256	0.302	73250	73930	0.548	0.553	0.046	0.005	possibly uniform	
6/28/2015 16:50	92.25	0.68	0.218	0.371	0.141	0.240	52890	51130	0.396	0.382	0.099	-0.013	relatively uniform	
7/8/2015 5:10	69.42	1.38	0.251	0.391	0.162	0.253	42360	41310	0.317	0.309	0.091	-0.008	possibly uniform	
7/11/2015 7:35	92.08	1.43	0.486	0.669	0.314	0.432	65970	69170	0.493	0.517	0.118	0.024	relatively uniform	
7/16/2015 20:15	50.17	0.92	0.232	0.390	0.150	0.252	33960	27810	0.254	0.208	0.102	-0.046	variable	
7/29/2015 0:45	8.58	0.78	0.224	0.314	0.145	0.203	4582	3833	0.034	0.029	0.058	-0.006	possibly uniform	
8/18/2015 2:10	5.25	0.46	0.102	0.224	0.066	0.144	1543	2222	0.012	0.017	0.078	0.005	possibly uniform	
8/18/2015 17:20	9.25	0.51	0.116	0.227	0.075	0.146	3218	3703	0.024	0.028	0.071	0.004	possibly uniform	
								WEIGHTED AVERAGES						
								Calibration - Relatively Uniform				0.030	0.045	relatively uniform
								Calibration - Possibly Uniform				0.009	-0.008	possibly uniform
								Calibration - Variable				0.002	-0.027	variable
								Calibration Weighted - All Events				0.018	0.022	
								Verification - Relatively Uniform				0.112	0.007	relatively uniform
								Verification - Possibly Uniform				0.064	0.000	possibly uniform
								Verification - Variable				0.102	-0.046	variable
								Verification Weighted - All Events				0.085	-0.002	
								Weighted Average - All Events				0.047	0.009	
								NET AVERAGES						
								Calibration - Relatively Uniform				0.040	0.018	relatively uniform
								Calibration - Possibly Uniform				0.010	-0.003	possibly uniform
								Calibration - Variable				0.004	-0.018	variable
								Calibration Net - All Events				0.023	0.003	
								Verification - Relatively Uniform				0.109	0.005	relatively uniform
								Verification - Possibly Uniform				0.069	0.000	possibly uniform
								Verification - Variable				0.102	-0.046	variable
								Verification Net - All Events				0.083	-0.004	
								Net Average - All Events				0.050	0.000	

000-10FT – Calibration Events

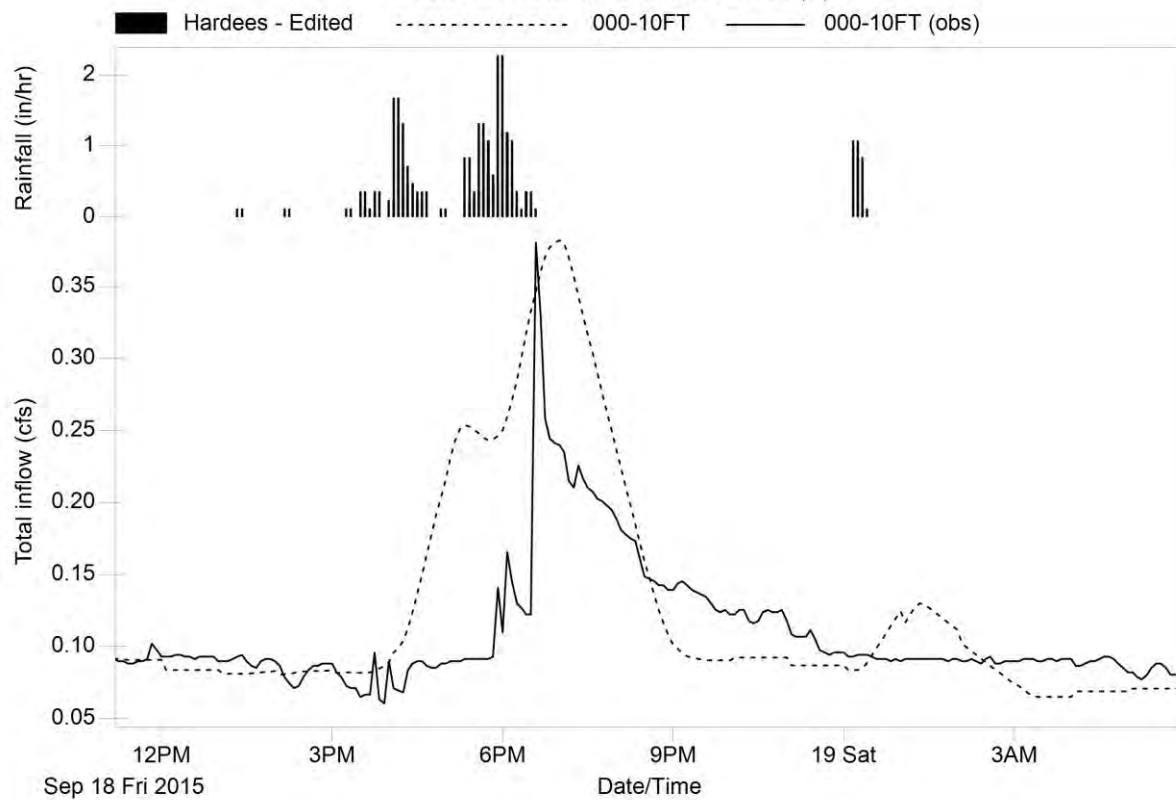
Event of September 8, 2015

Duration: 41.25 h, Total Rainfall: 0.79 (in)



Event of September 18, 2015

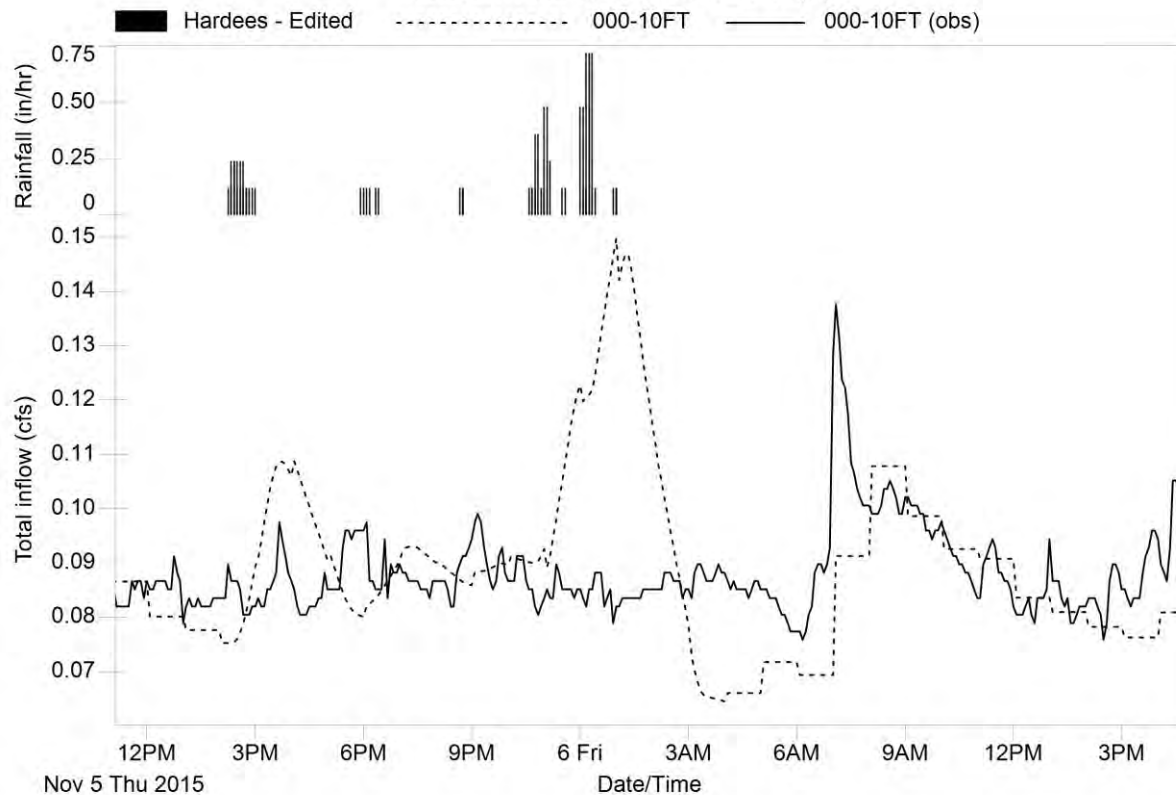
Duration: 15.67 h, Total Rainfall: 1.61 (in)



000-10FT – Calibration Events

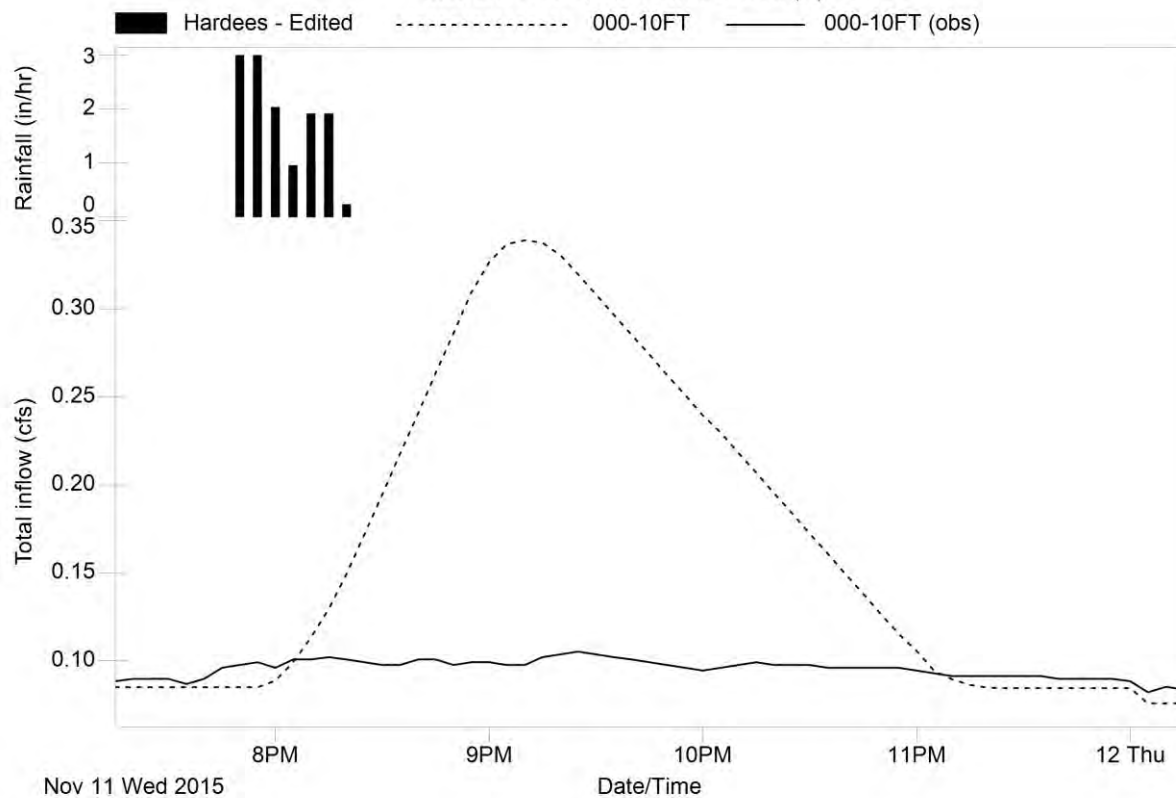
Event of November 5, 2015

Duration: 24.67 h, Total Rainfall: 0.47 (in)



Event of November 11, 2015

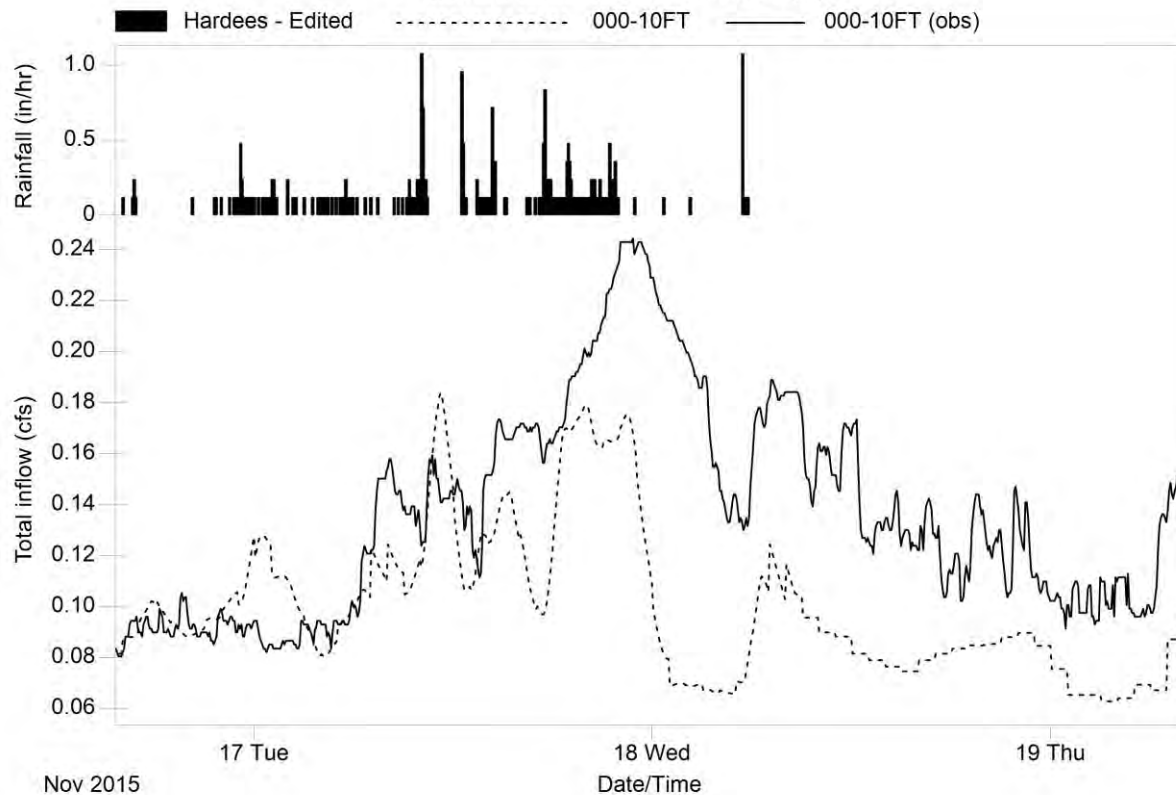
Duration: 4.17 h, Total Rainfall: 0.76 (in)



000-10FT – Calibration Events

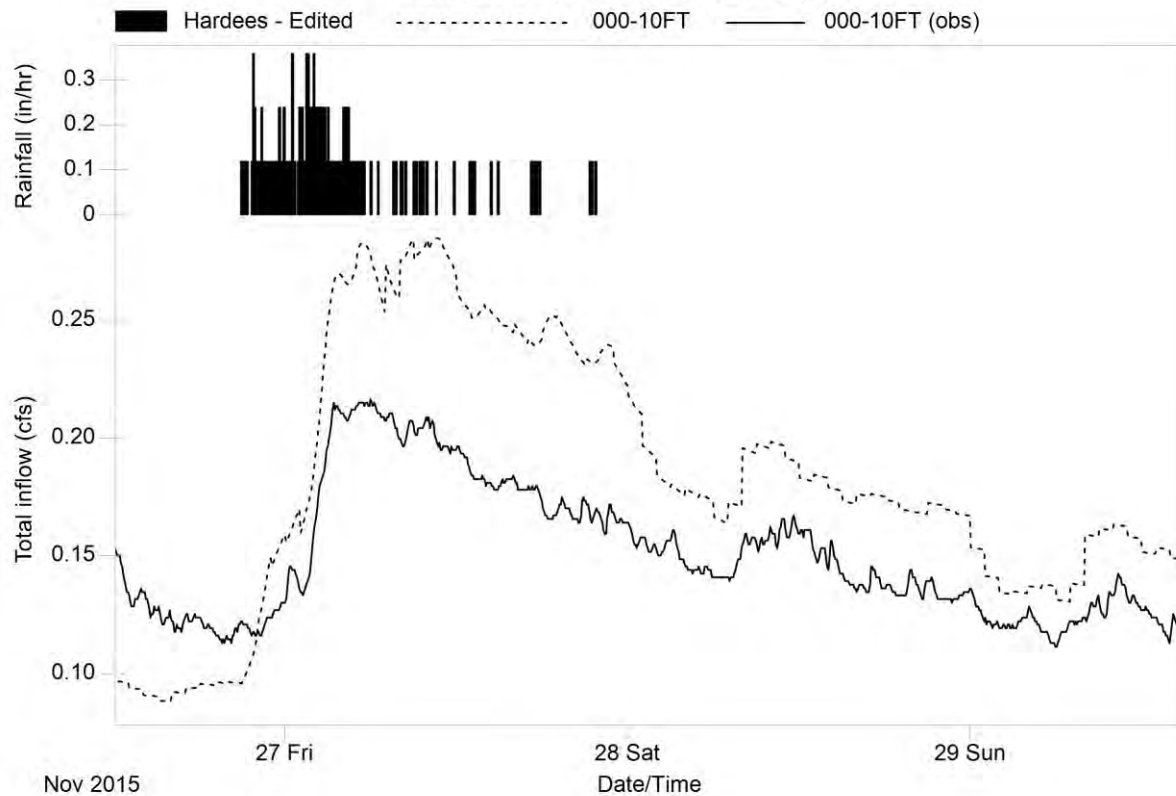
Event of November 16, 2015

Duration: 53.67 h, Total Rainfall: 2.3 (in)



Event of November 26, 2015

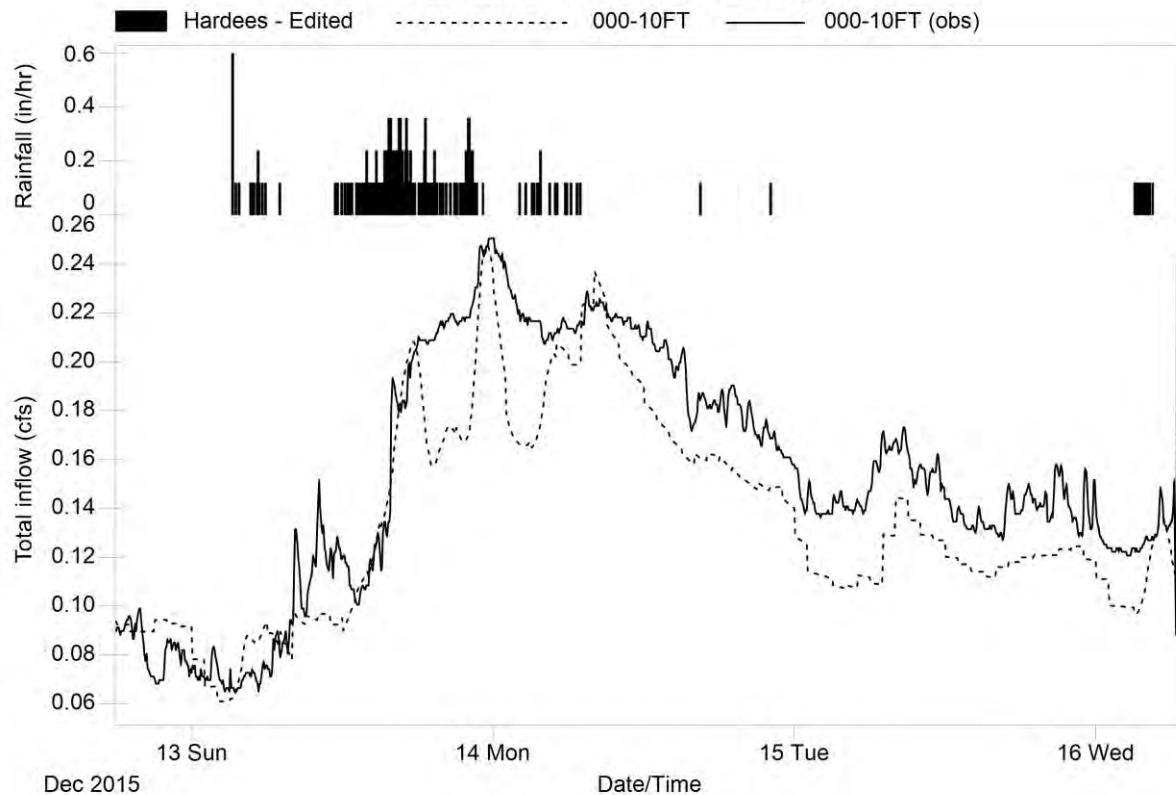
Duration: 62.42 h, Total Rainfall: 1.42 (in)



000-10FT – Calibration Events

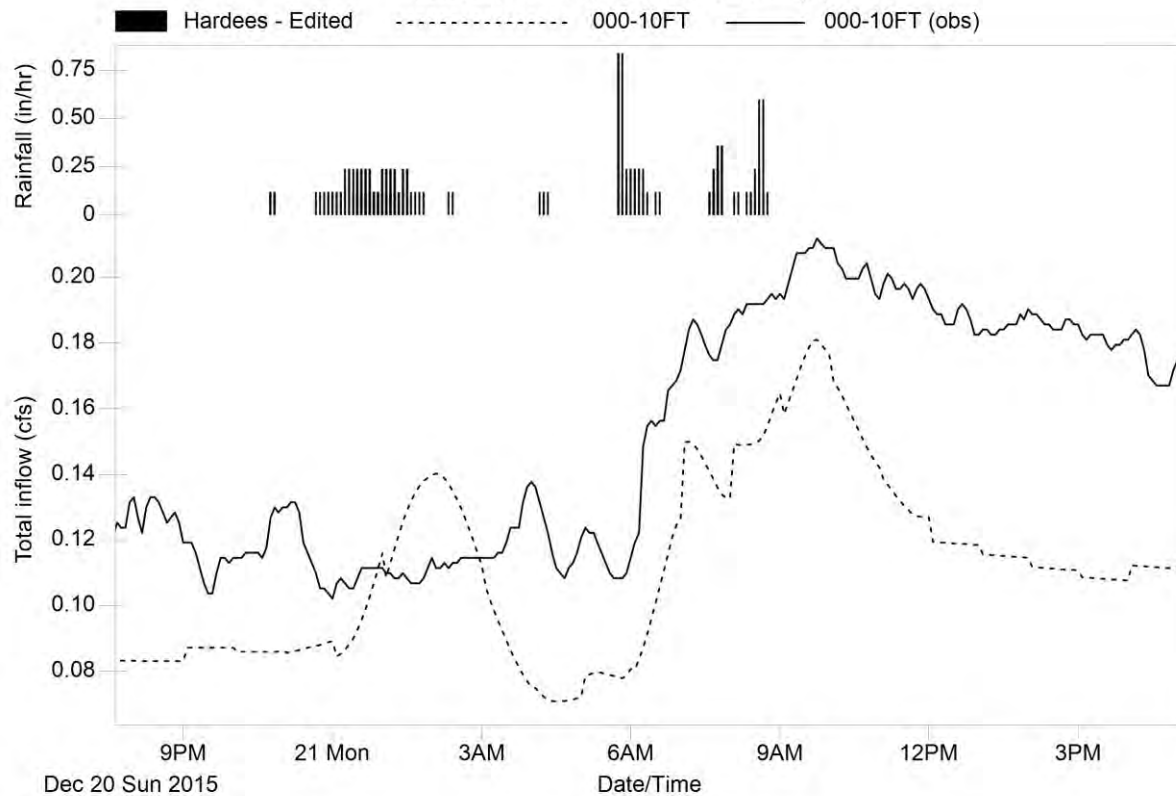
Event of December 13, 2015

Duration: 70.92 h, Total Rainfall: 1.71 (in)



Event of December 20, 2015

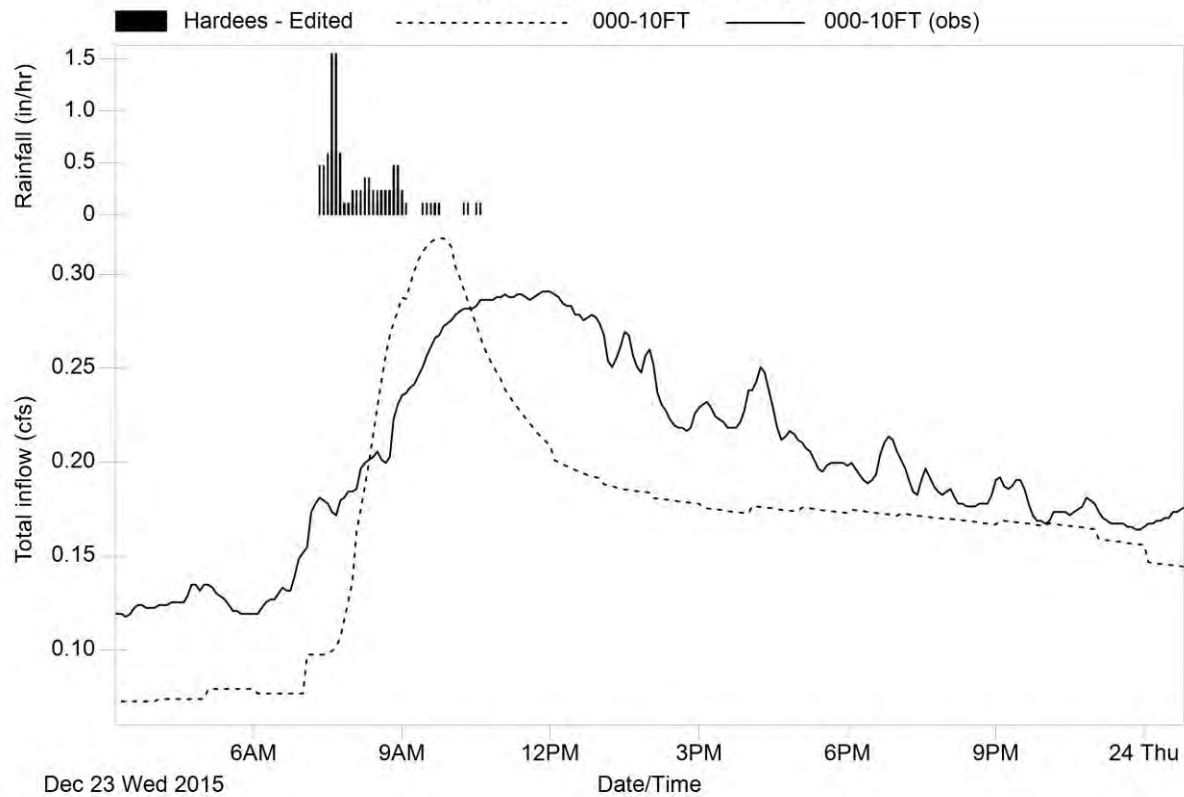
Duration: 17.92 h, Total Rainfall: 0.68 (in)



000-10FT – Calibration Events

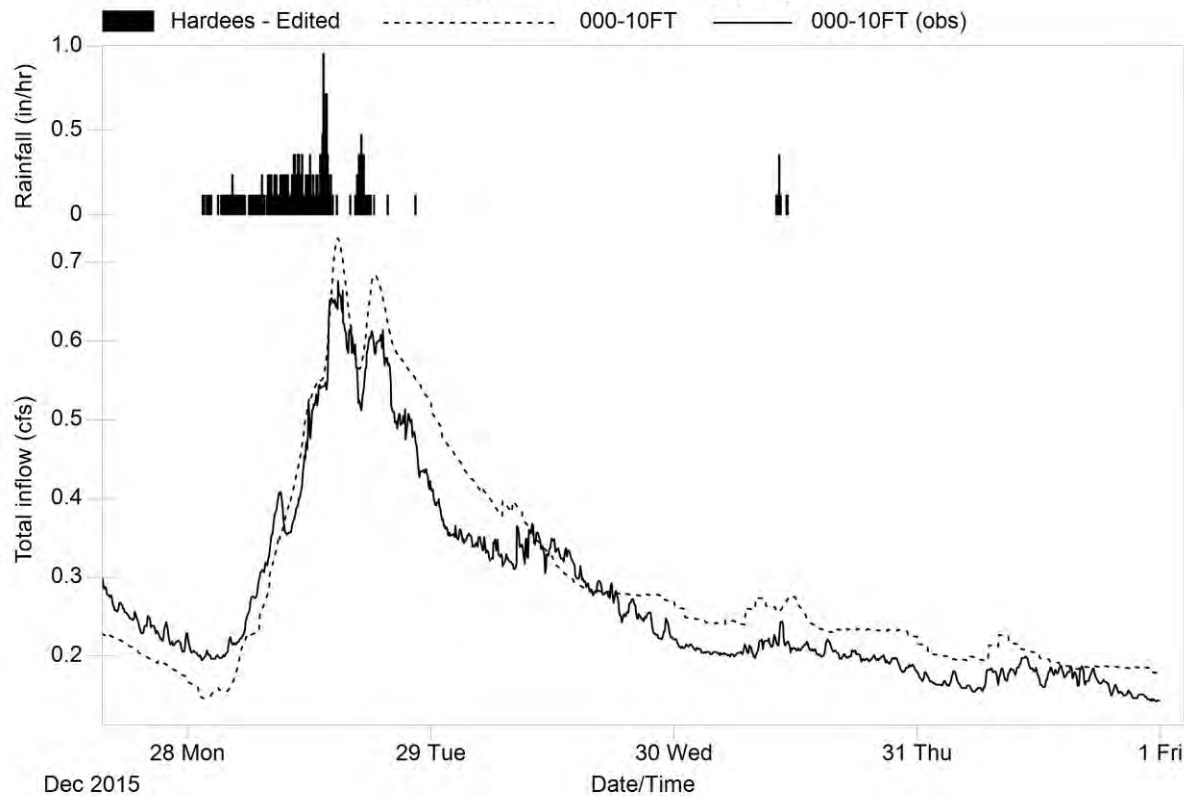
Event of December 23, 2015

Duration: 18 h, Total Rainfall: 0.62 (in)



Event of December 28, 2015

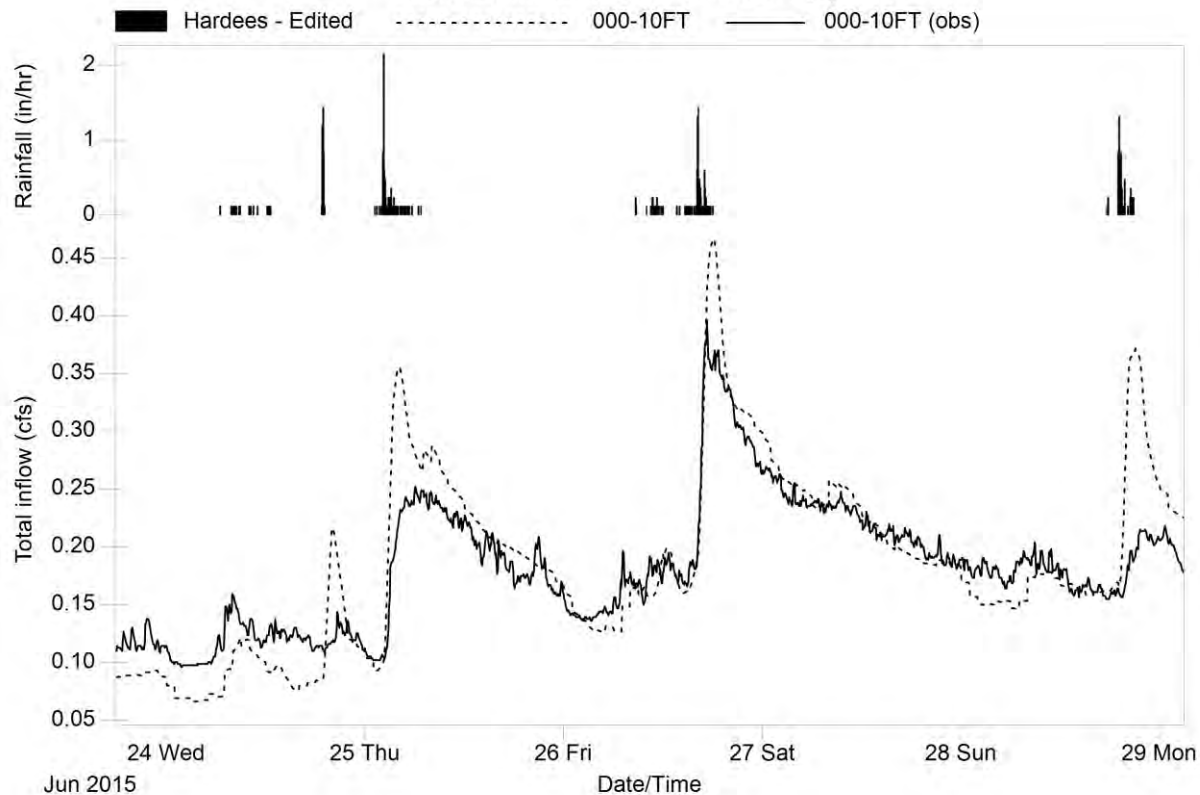
Duration: 89 h, Total Rainfall: 2.37 (in)



000-10FT – Verification Events

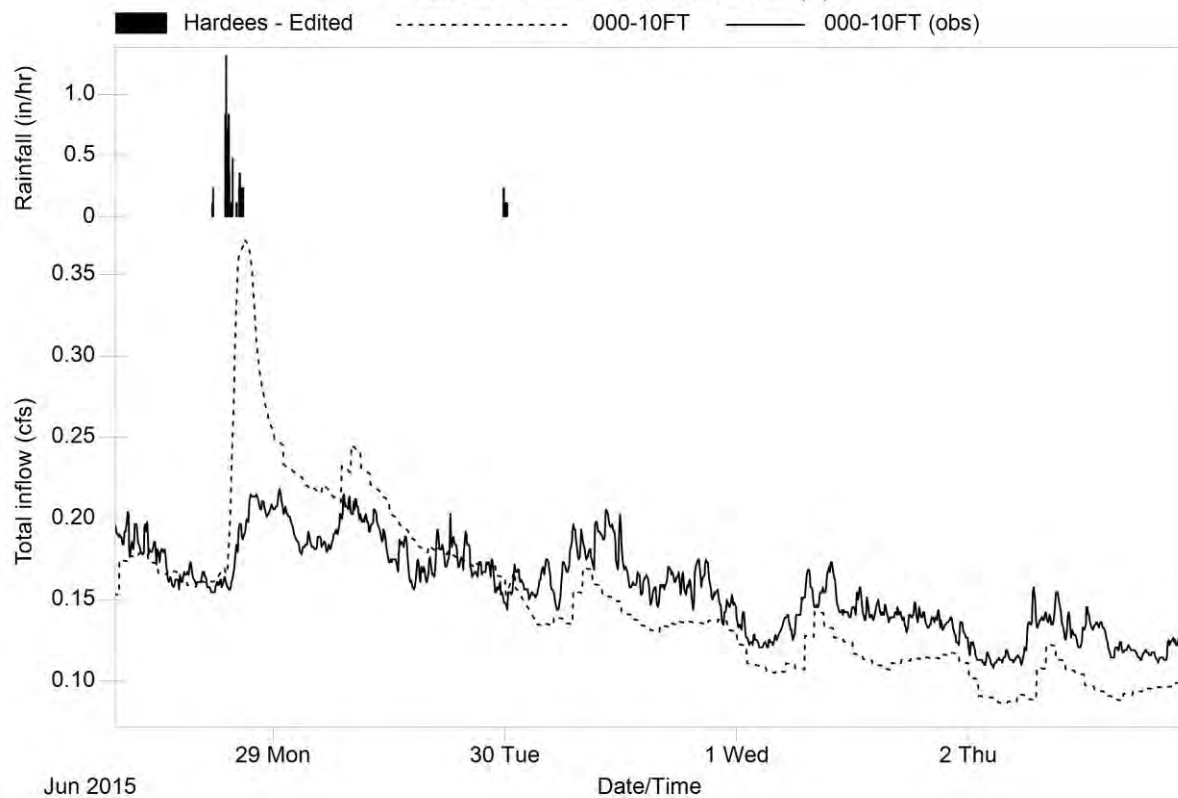
Event of June 24, 2015

Duration: 107.58 h, Total Rainfall: 2.11 (in)



Event of June 28, 2015

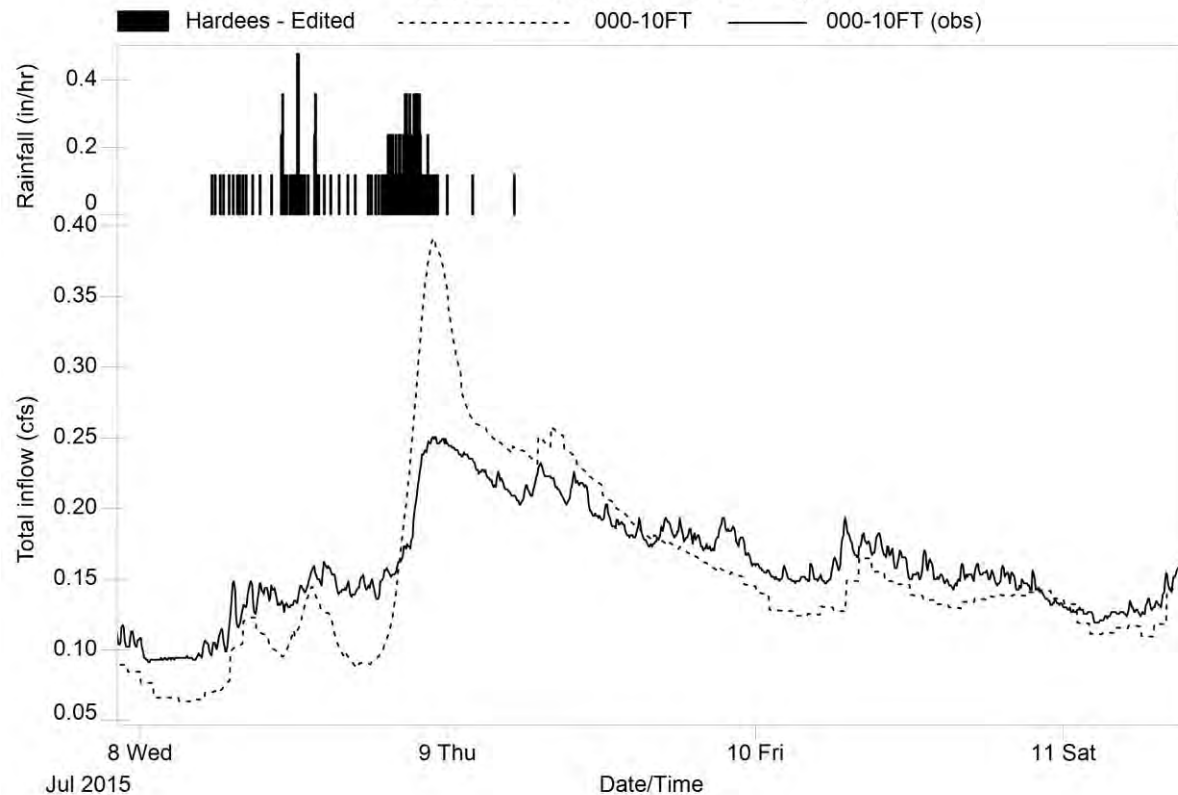
Duration: 92.25 h, Total Rainfall: 0.68 (in)



000-10FT – Verification Events

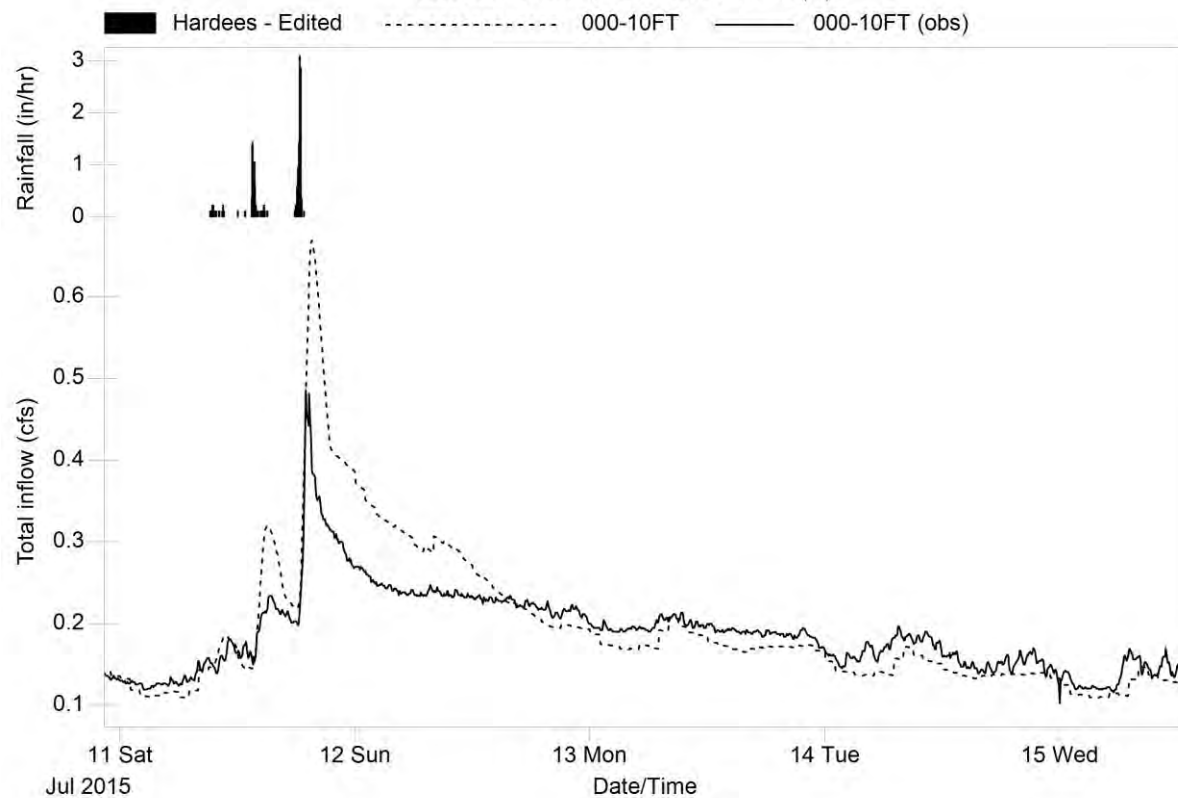
Event of July 8, 2015

Duration: 69.42 h, Total Rainfall: 1.38 (in)



Event of July 11, 2015

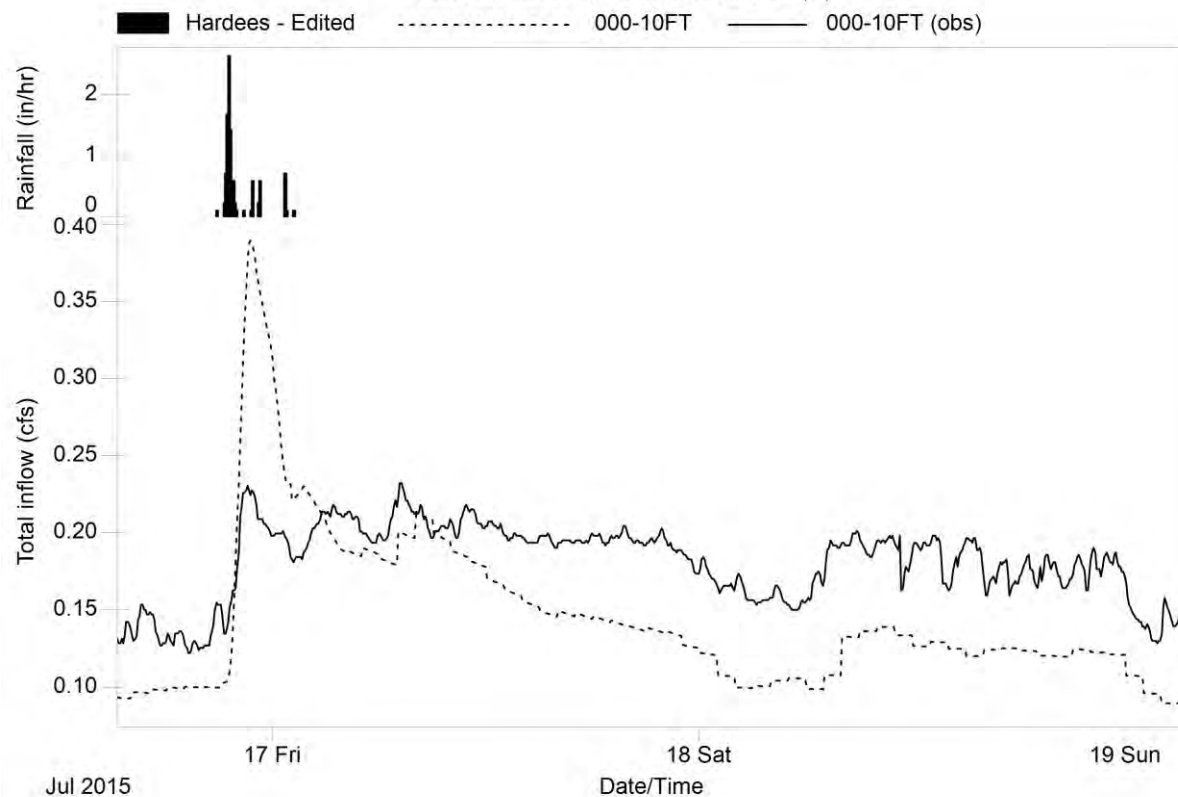
Duration: 92.08 h, Total Rainfall: 1.43 (in)



000-10FT – Verification Events

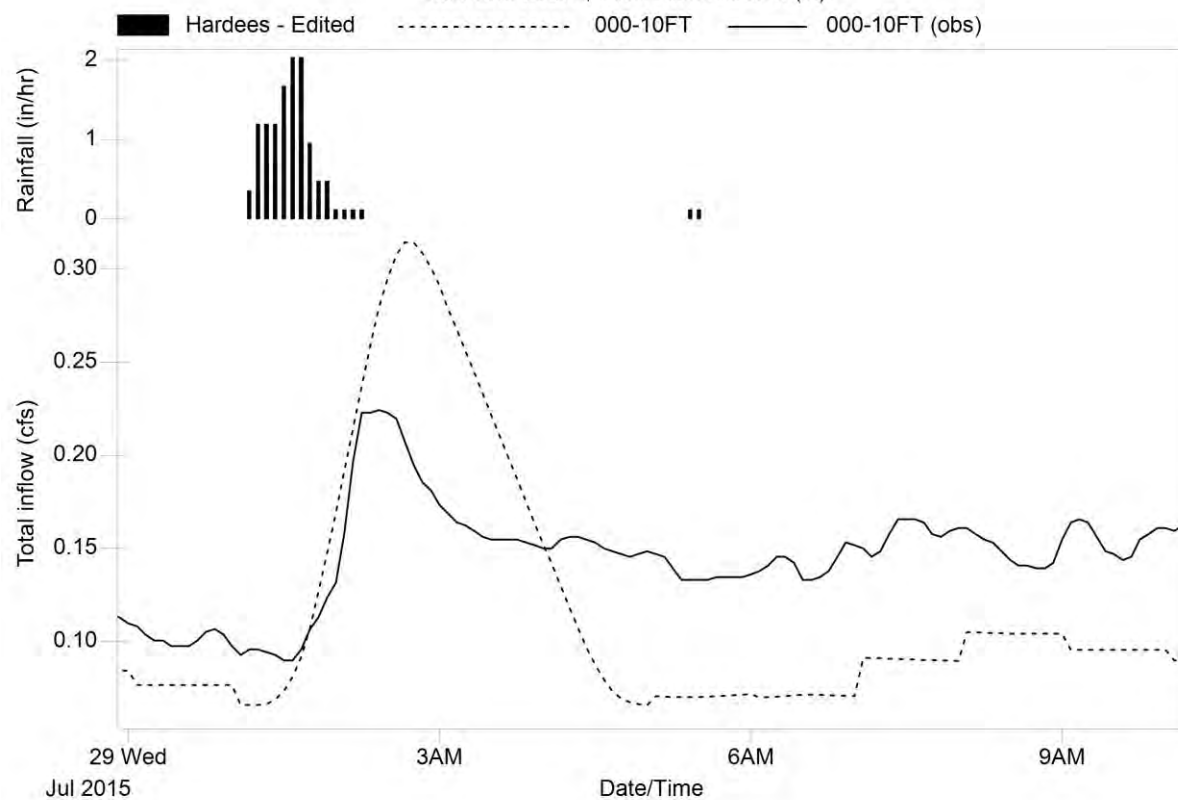
Event of July 16, 2015

Duration: 50.17 h, Total Rainfall: 0.92 (in)



Event of July 29, 2015

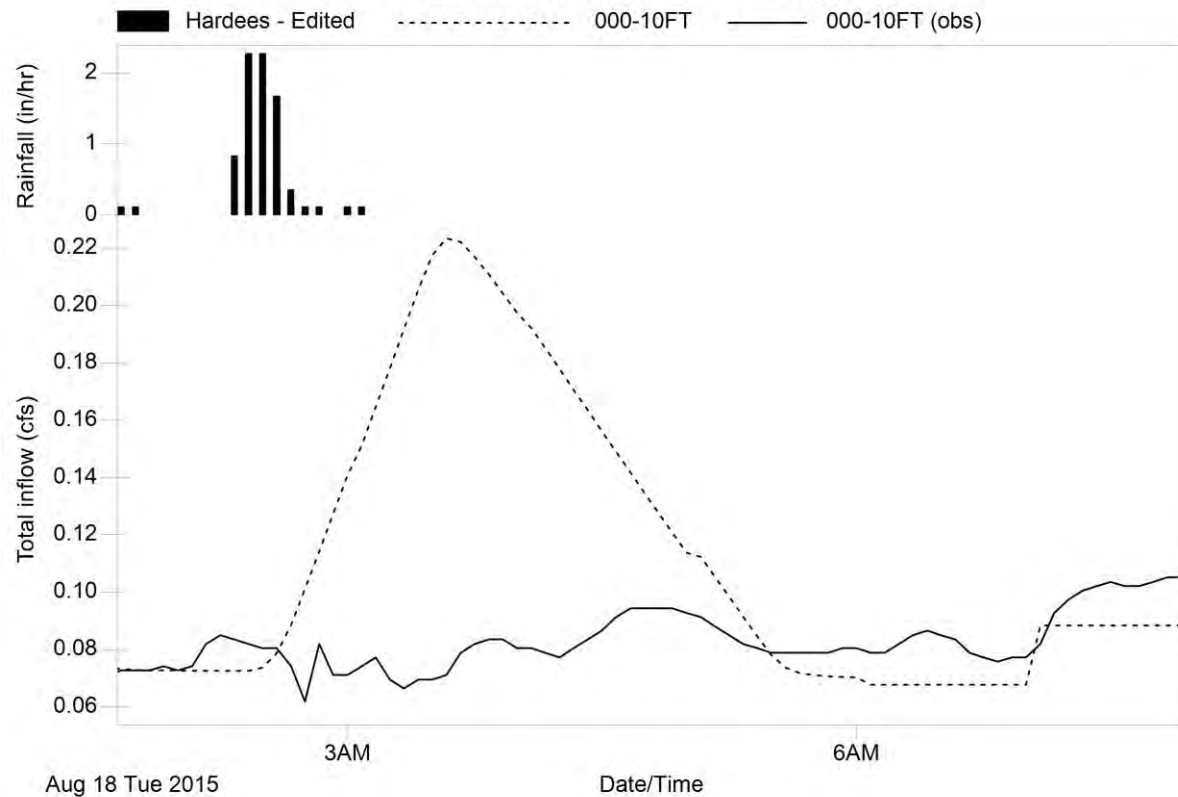
Duration: 8.58 h, Total Rainfall: 0.78 (in)



000-10FT – Verification Events

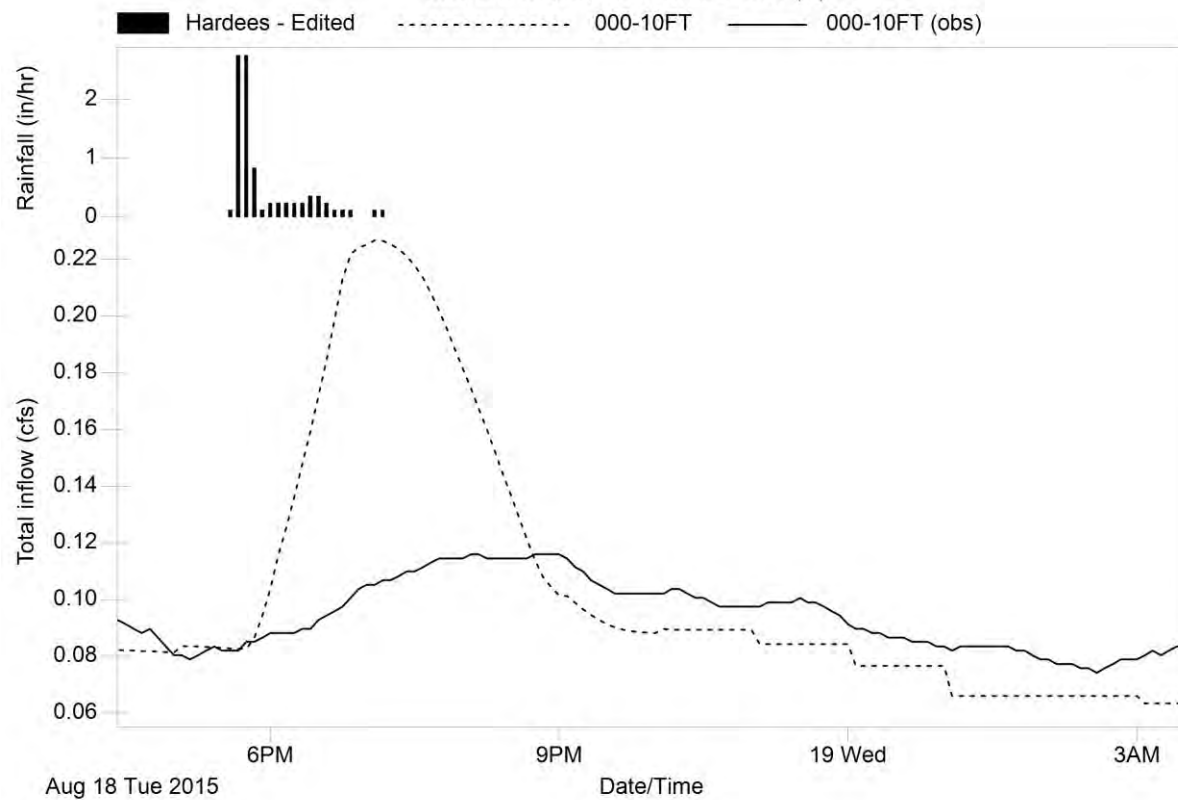
Event of August 18, 2015

Duration: 5.25 h, Total Rainfall: 0.46 (in)

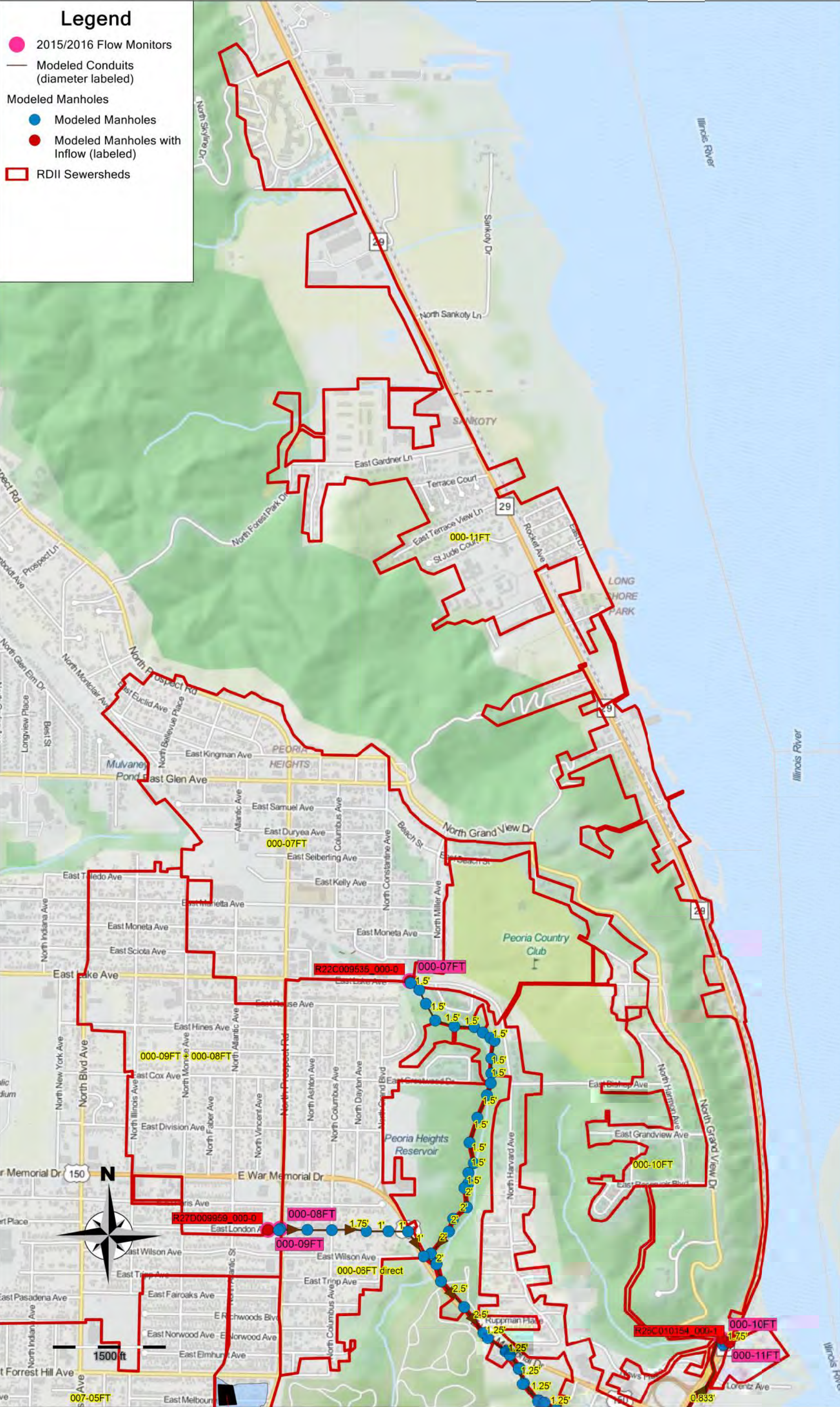


Event of August 18, 2015

Duration: 9.25 h, Total Rainfall: 0.51 (in)



[illegible]

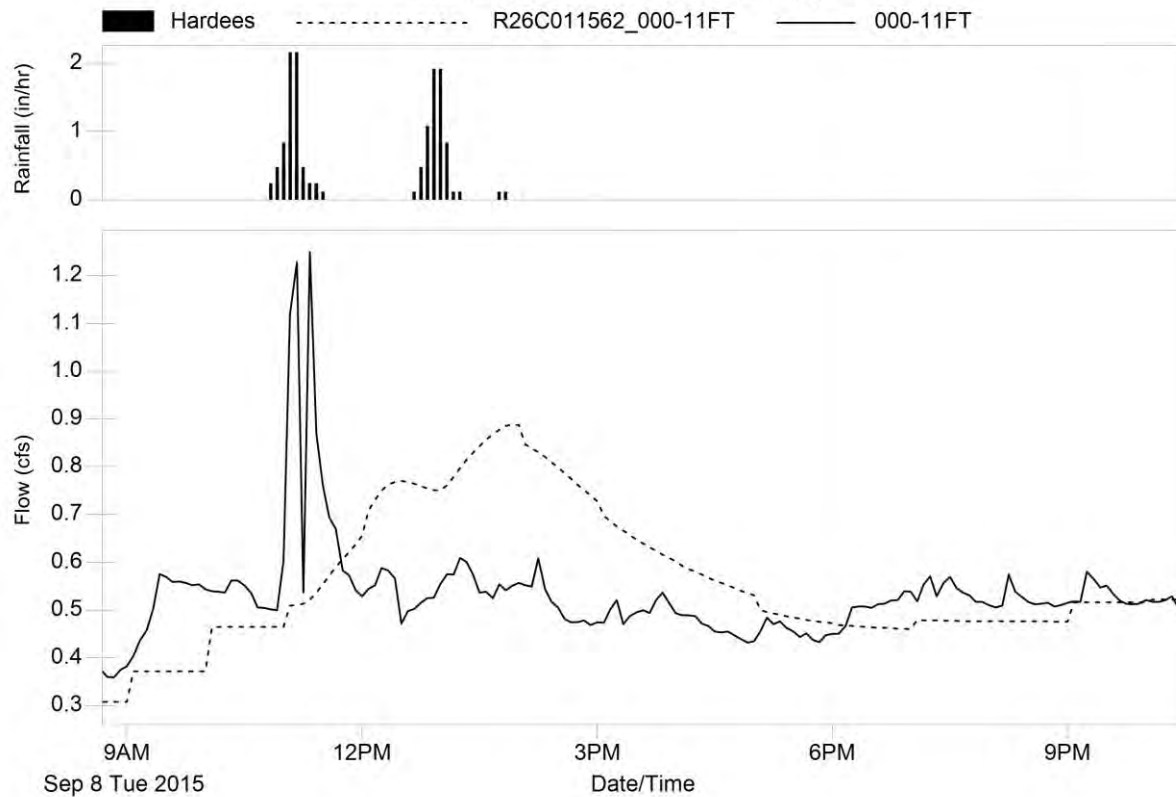


Date	Duration (h)	Rainfall (in)	Maximum Flow (cfs)		Maximum Flow (mgd)		Total Volume (ft³)		Volume (million gallons)		Peak Flow Rate (-15% to +25%)	Flow Volume (-10% to +20%)	Rainfall Variability			
		Hardees Edited	Observed	Modeled	Observed	Modeled	Observed	Modeled	Observed	Modeled						
CALIBRATION EVENTS - FLOW																
9/8/2015 9:50	11.5	0.79	1.249	0.888	0.807	0.574	22250	24320	0.166	0.182	-29%	9%	possibly uniform			
9/18/2015 12:35	18.08	1.61	1.134	1.190	0.733	0.769	36780	39400	0.275	0.295	5%	7%	relatively uniform			
11/5/2015 13:30	15.17	0.47	0.648	0.539	0.419	0.348	27220	25710	0.204	0.192	-17%	-6%	possibly uniform			
11/11/2015 19:00	7.67	0.76	0.720	0.943	0.465	0.609	14250	15630	0.107	0.117	31%	10%	relatively uniform			
11/16/2015 12:30	44.5	2.39	1.934	0.971	1.249	0.627	74790	93530	0.559	0.700	-50%	25%	variable			
11/26/2015 19:15	35.17	1.42	0.712	0.809	0.460	0.523	60950	81530	0.456	0.610	14%	34%	possibly uniform			
12/13/2015 2:55	31.17	1.69	0.726	0.772	0.469	0.498	52040	60280	0.389	0.451	6%	16%	possibly uniform			
12/20/2015 22:20	17.67	0.68	1.379	0.658	0.891	0.425	31030	31590	0.232	0.236	-52%	2%	possibly uniform			
12/23/2015 6:20	8.75	0.62	1.009	0.801	0.652	0.517	20850	18700	0.156	0.140	-21%	-10%	variable			
12/28/2015 1:00	25	2.28	2.234	1.364	1.443	0.881	82730	81800	0.619	0.612	-39%	-1%	relatively uniform			
VERIFICATION EVENTS - FLOW																
6/24/2015 4:55	70.33	2.11	2.528	2.309	1.633	1.492	489800	452800	3.664	3.387	-9%	-8%	possibly uniform			
6/28/2015 18:40	3.58	0.6	1.917	2.346	1.238	1.516	23910	28420	0.179	0.213	22%	19%	relatively uniform			
7/8/2015 4:45	25.08	1.38	3.014	1.415	1.947	0.914	113300	92520	0.847	0.692	-53%	-18%	possibly uniform			
7/11/2015 8:25	23.33	1.43	1.801	1.651	1.163	1.067	98570	98350	0.737	0.736	-8%	0%	relatively uniform			
7/16/2015 20:45	5.25	0.92	1.273	1.770	0.822	1.143	23030	29090	0.172	0.218	39%	26%	variable			
7/29/2015 1:05	4.5	0.78	0.690	0.777	0.446	0.502	7667	8712	0.057	0.065	13%	14%	relatively uniform			
8/18/2015 1:15	6.08	0.48	0.467	0.580	0.302	0.375	7448	9332	0.056	0.070	24%	25%	variable			
8/18/2015 17:15	8.25	0.51	0.672	0.799	0.434	0.516	16350	18390	0.122	0.138	19%	12%	variable			
									WEIGHTED AVERAGES							
									Calibration - Relatively Uniform					-14%	2%	relatively uniform
									Calibration - Possibly Uniform					-22%	15%	possibly uniform
									Calibration - Variable					-40%	17%	variable
									Calibration Weighted - All Events					-24%	12%	
									Verification - Relatively Uniform					8%	4%	relatively uniform
									Verification - Possibly Uniform					-33%	-10%	possibly uniform
									Verification - Variable					31%	21%	variable
									Verification Weighted - All Events					-6%	-5%	
									Weighted Average - All Events					-15%	1%	
									NET AVERAGES							
									Calibration - Relatively Uniform					-1%	5%	relatively uniform
									Calibration - Possibly Uniform					-16%	11%	possibly uniform
									Calibration - Variable					-35%	7%	variable
									Calibration Net - All Events					-15%	9%	
									Verification - Relatively Uniform					9%	11%	relatively uniform
									Verification - Possibly Uniform					-31%	-13%	possibly uniform
									Verification - Variable					27%	21%	variable
									Verification Net - All Events					6%	9%	
									Net Average - All Events					-6%	9%	

RFI 000-11FT – Calibration Events

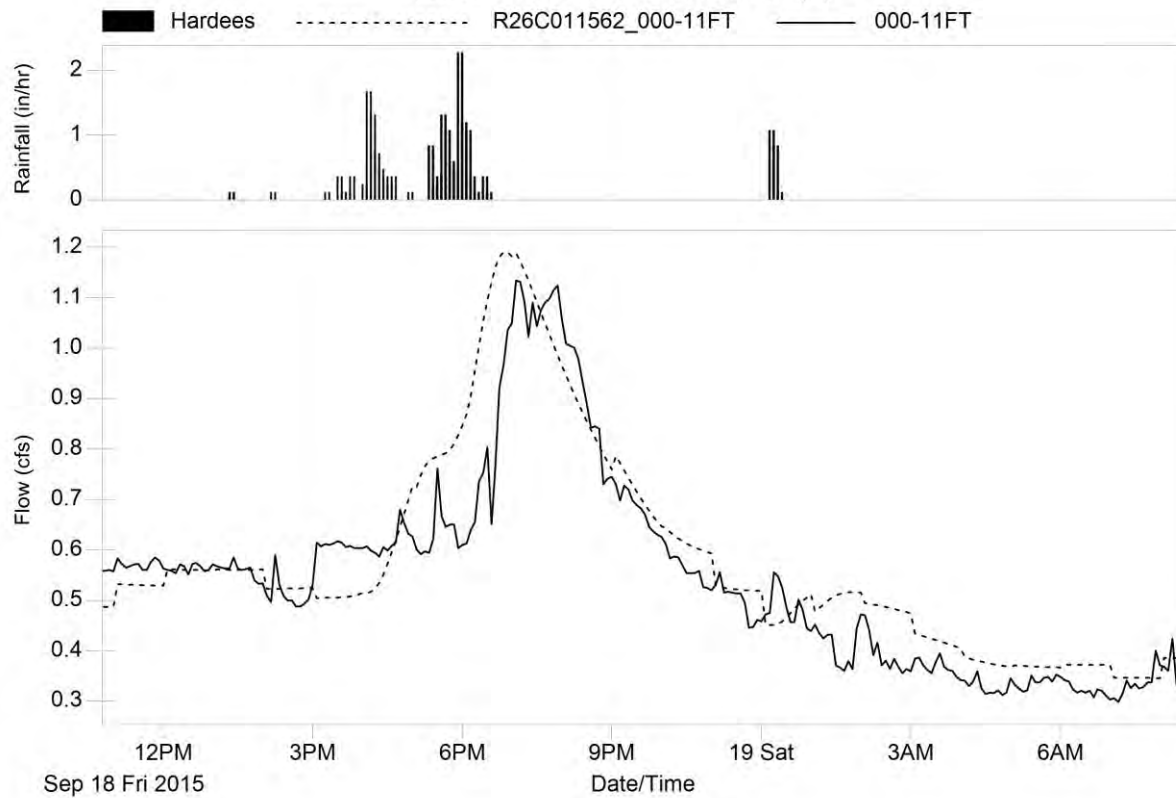
Event of September 8, 2015

Duration: 11.5 h, Total Rainfall: 0.79 (in)



Event of September 18, 2015

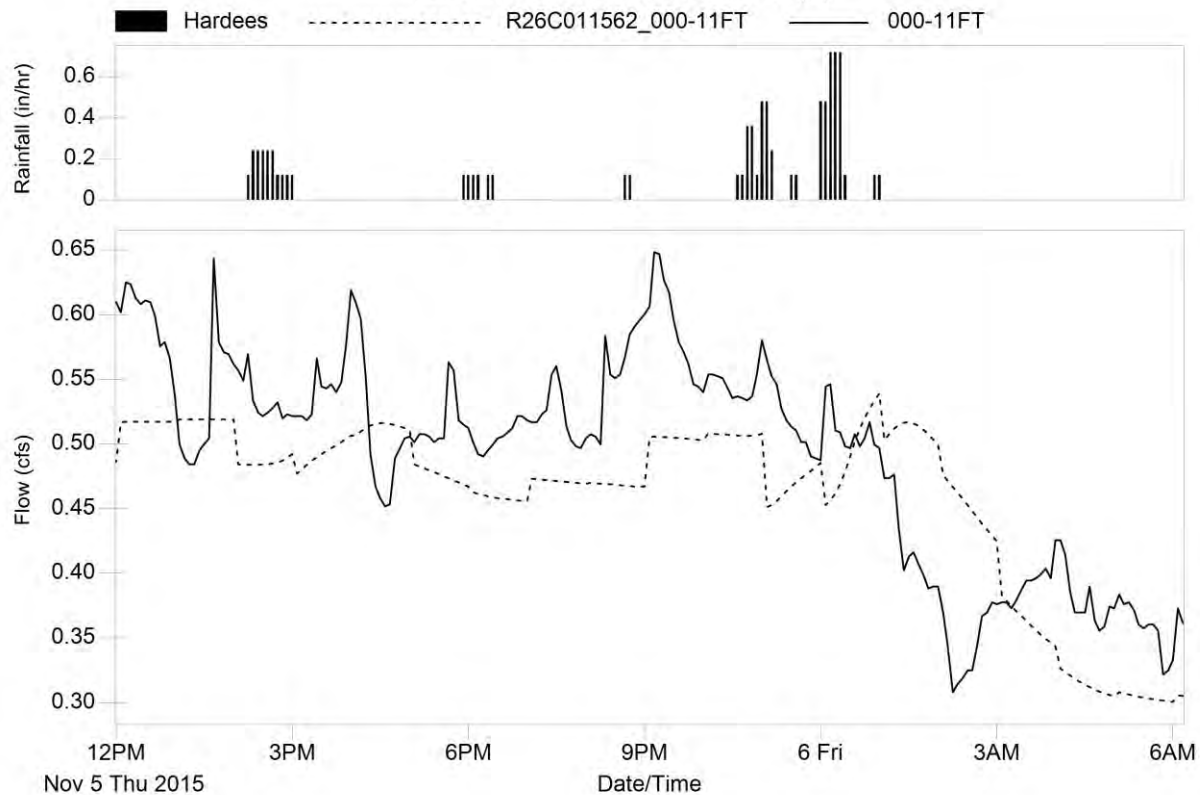
Duration: 18.08 h, Total Rainfall: 1.61 (in)



RFI 000-11FT – Calibration Events

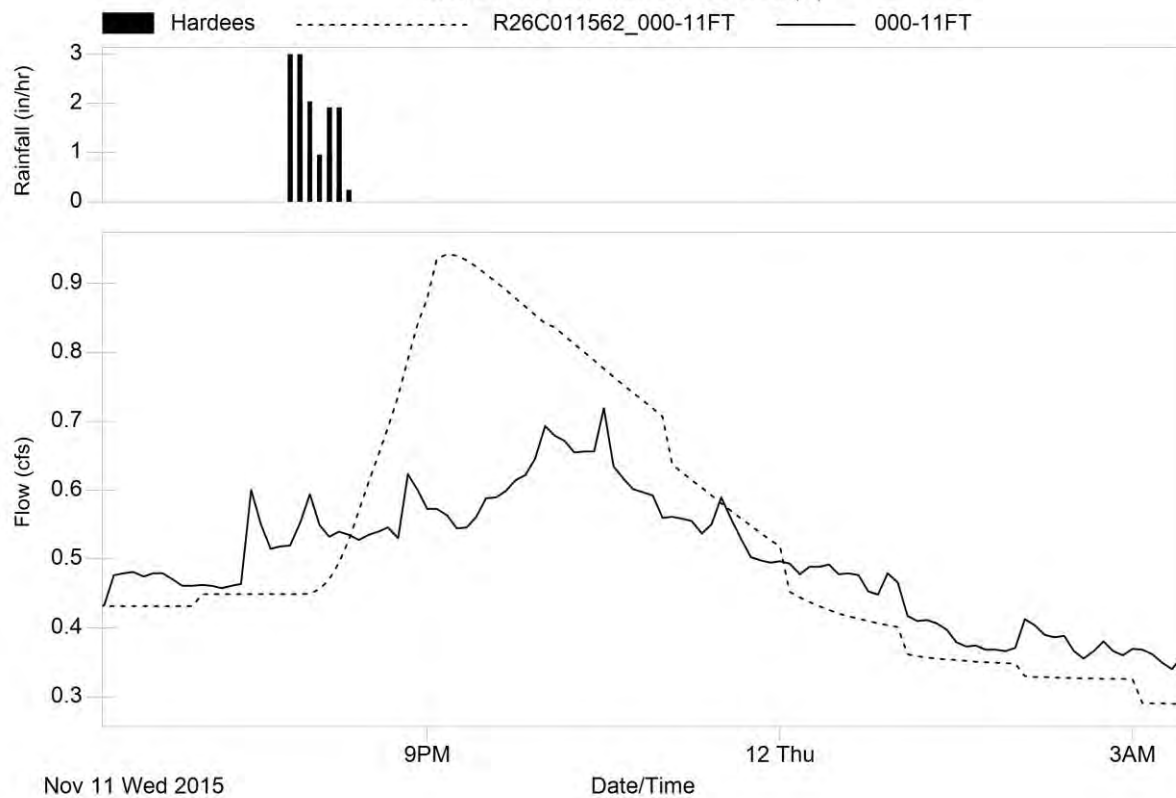
Event of November 5, 2015

Duration: 15.17 h, Total Rainfall: 0.47 (in)



Event of November 11, 2015

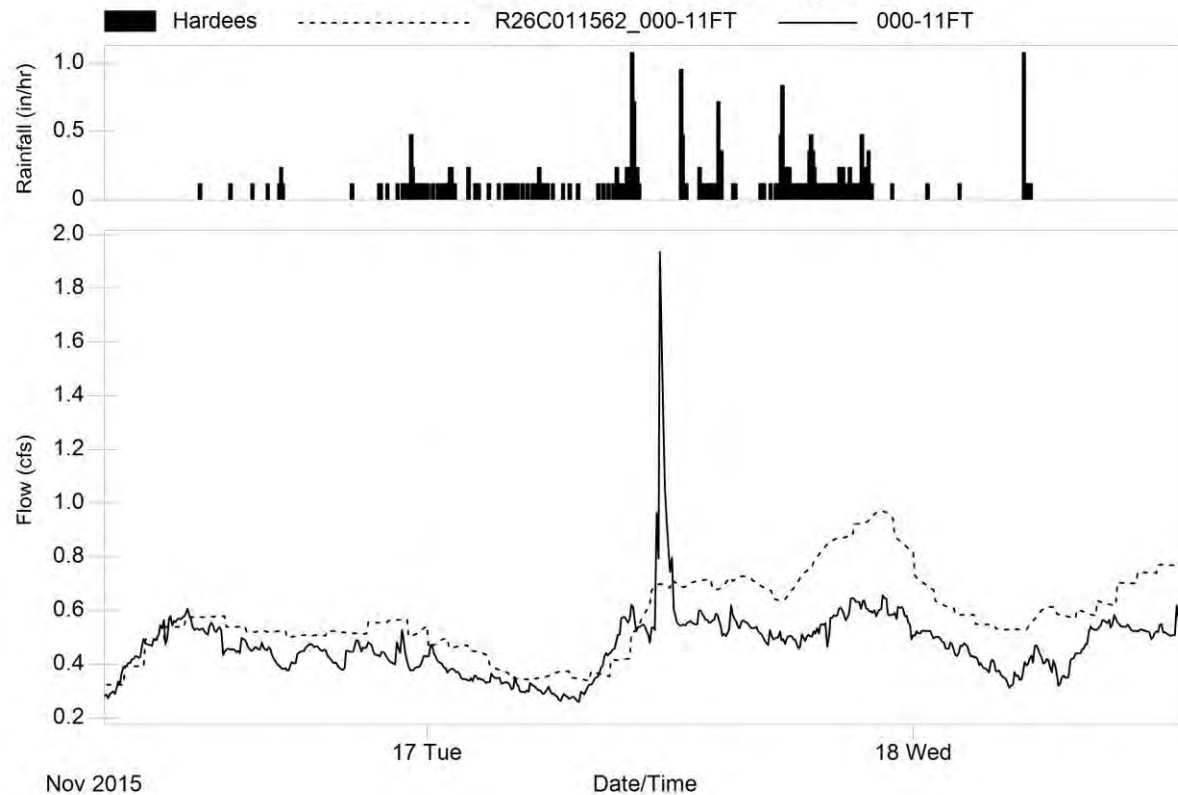
Duration: 7.67 h, Total Rainfall: 0.76 (in)



RFI 000-11FT – Calibration Events

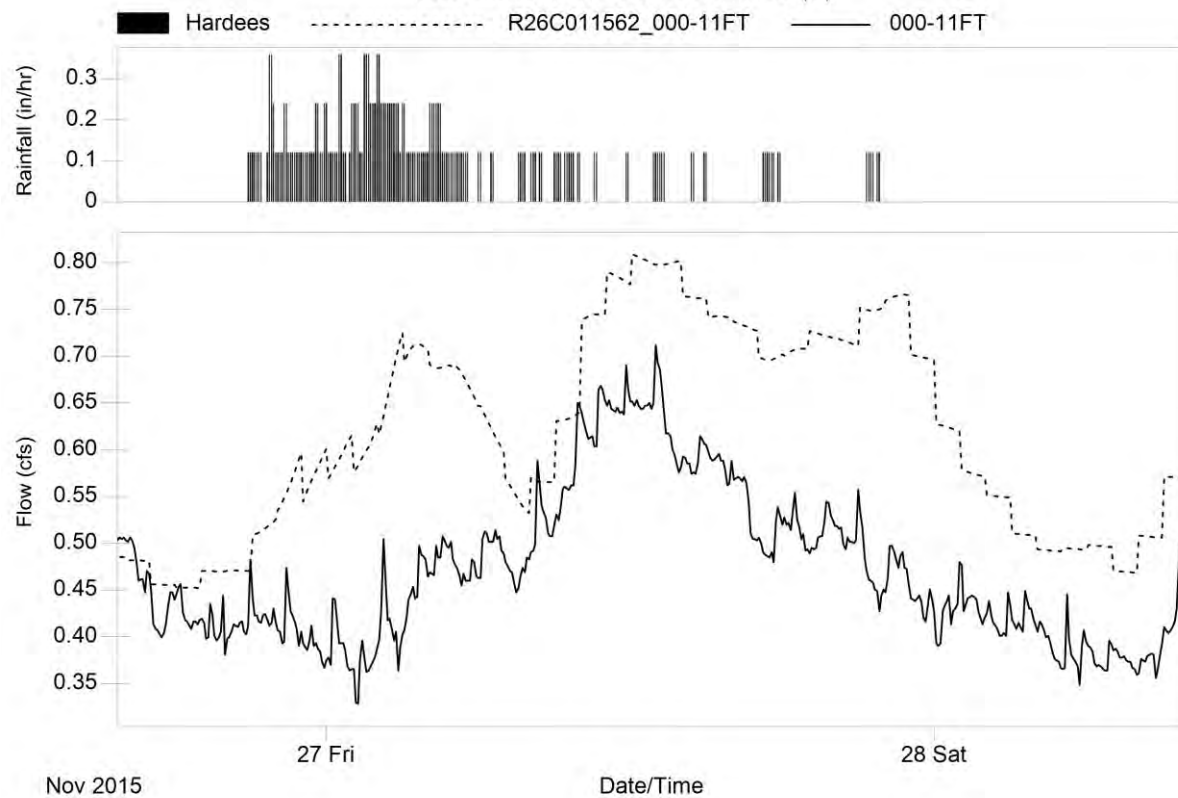
Event of November 16, 2015

Duration: 44.5 h, Total Rainfall: 2.39 (in)



Event of November 26, 2015

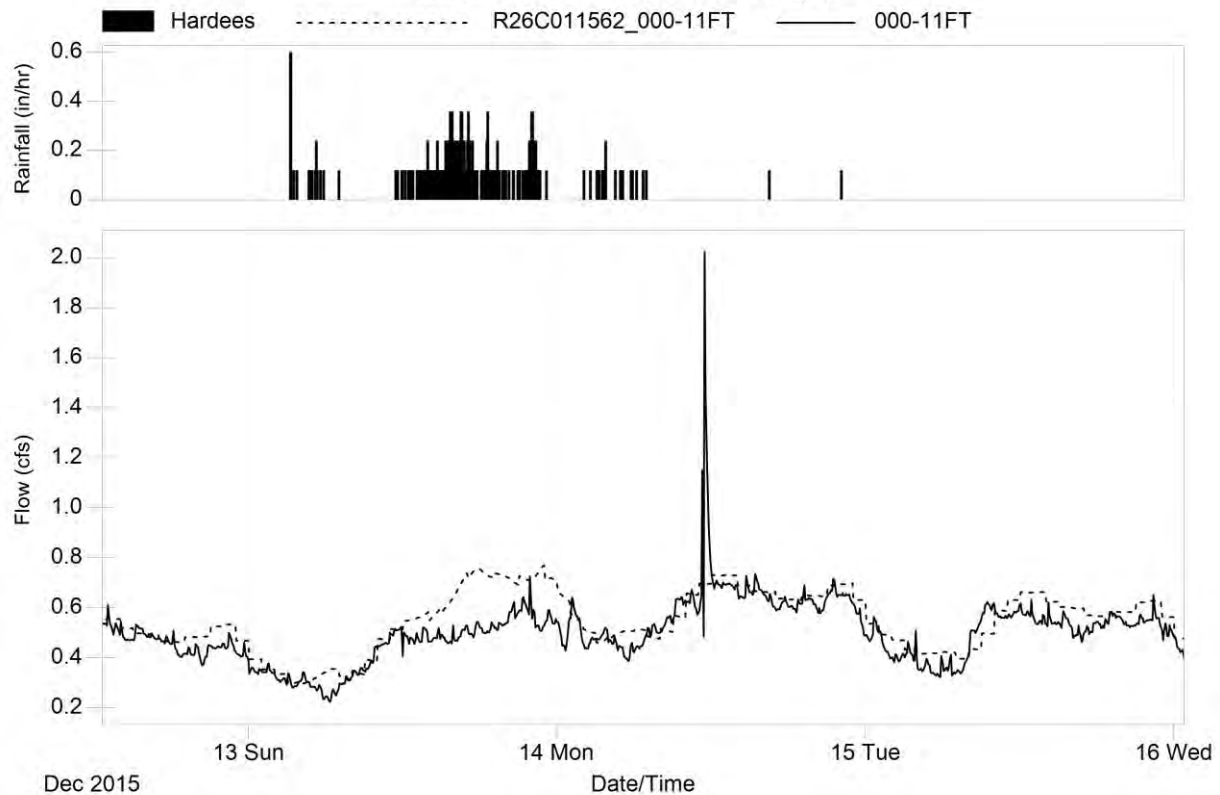
Duration: 35.17 h, Total Rainfall: 1.42 (in)



RFI 000-11FT – Calibration Events

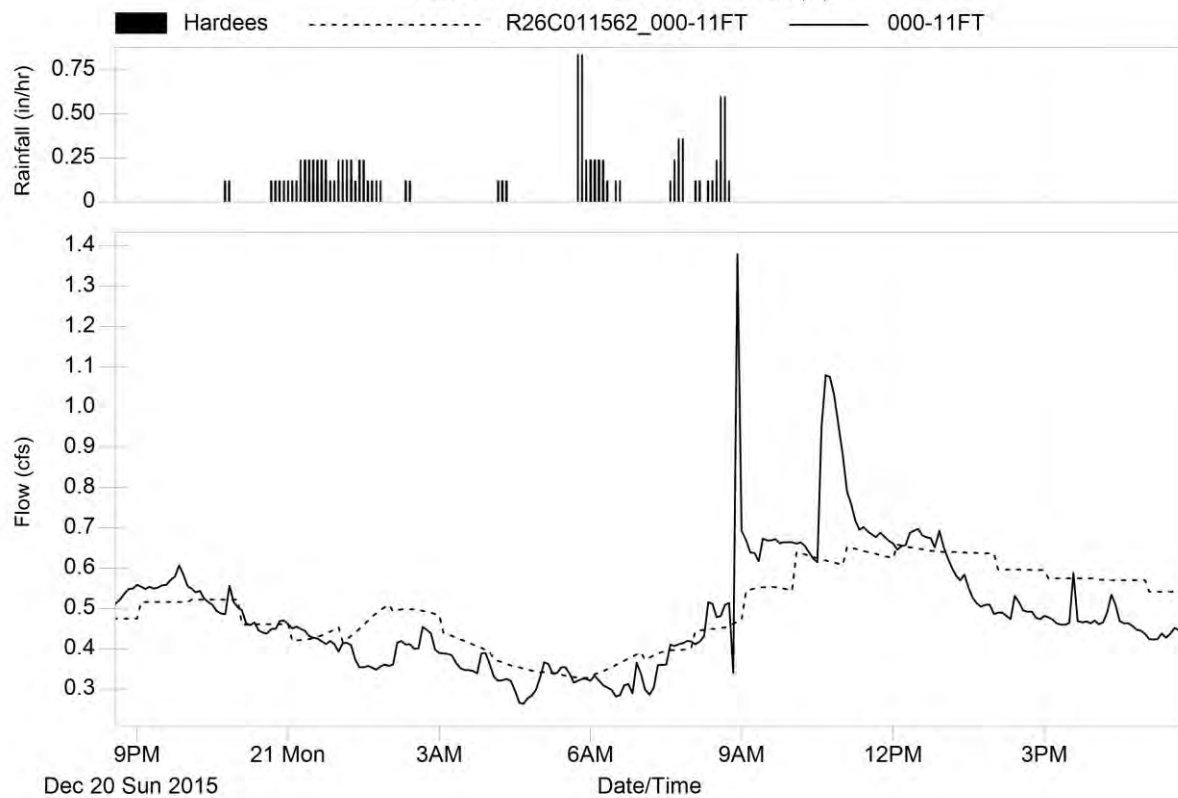
Event of December 13, 2015

Duration: 31.17 h, Total Rainfall: 1.69 (in)



Event of December 20, 2015

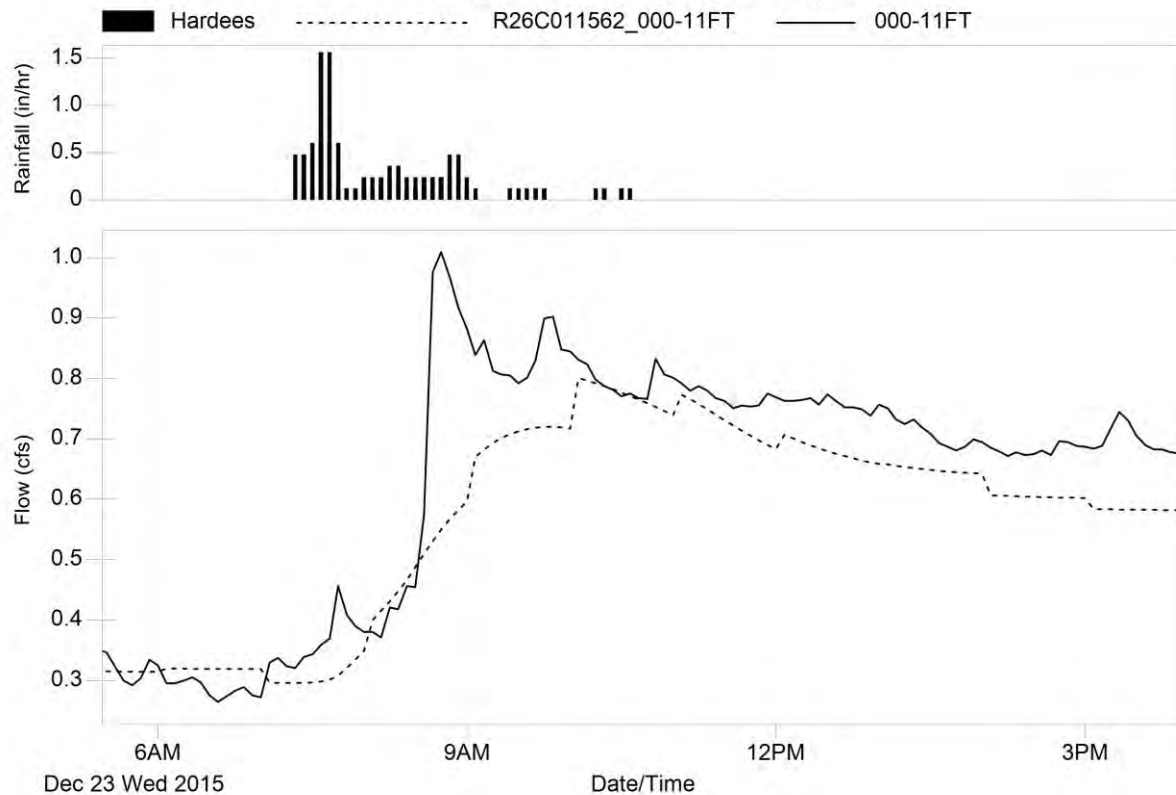
Duration: 17.67 h, Total Rainfall: 0.68 (in)



RFI 000-11FT – Calibration Events

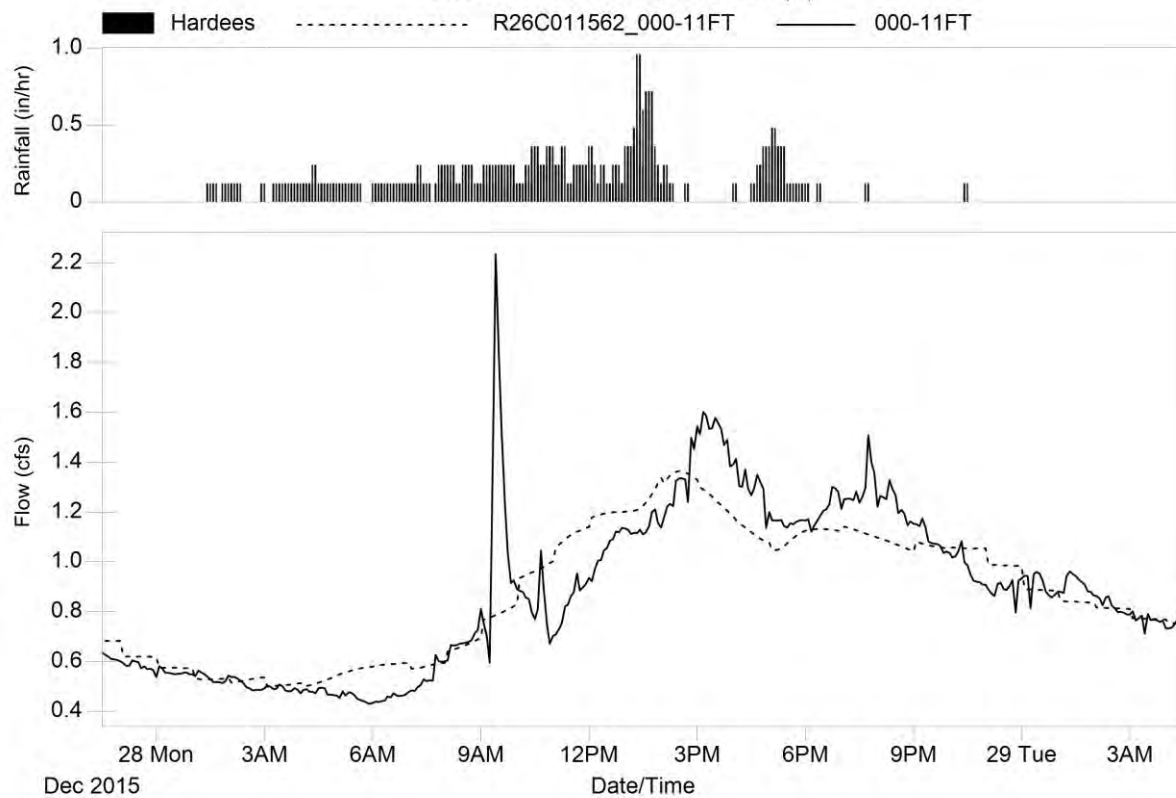
Event of December 23, 2015

Duration: 8.75 h, Total Rainfall: 0.62 (in)



Event of December 28, 2015

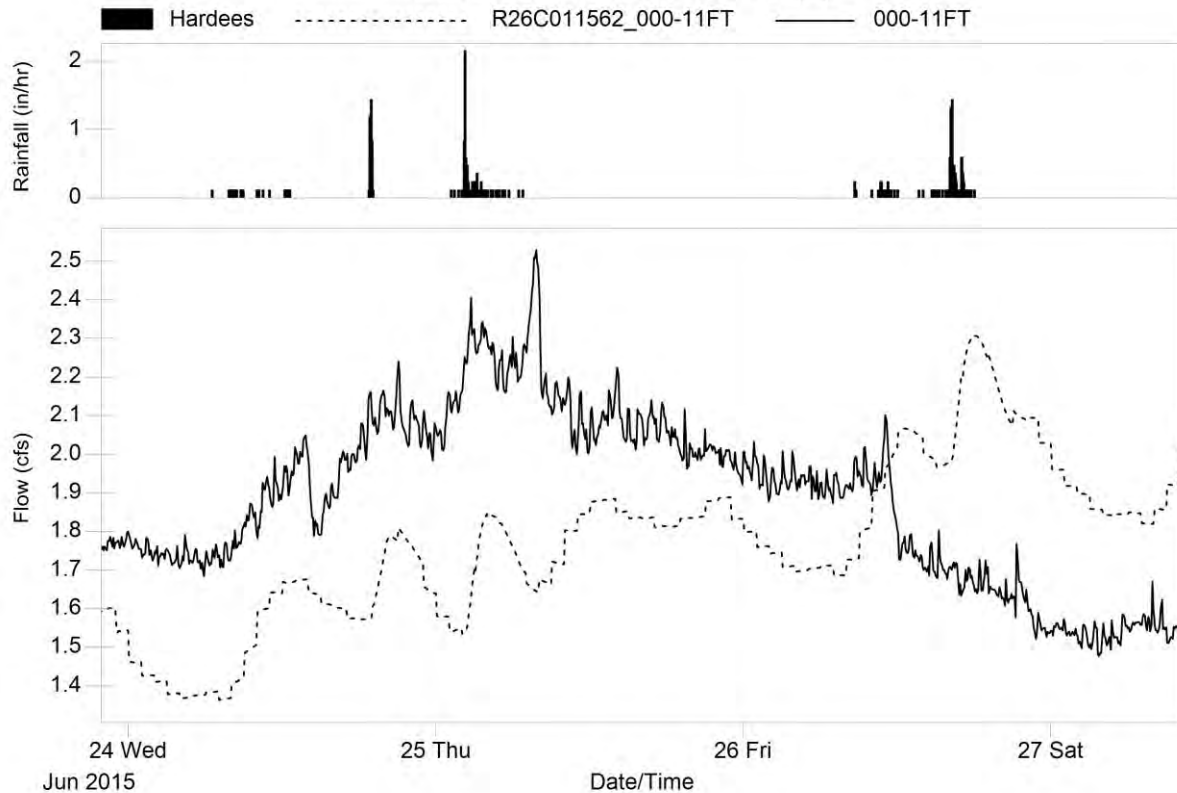
Duration: 25 h, Total Rainfall: 2.28 (in)



RFI 000-11FT – Verification Events

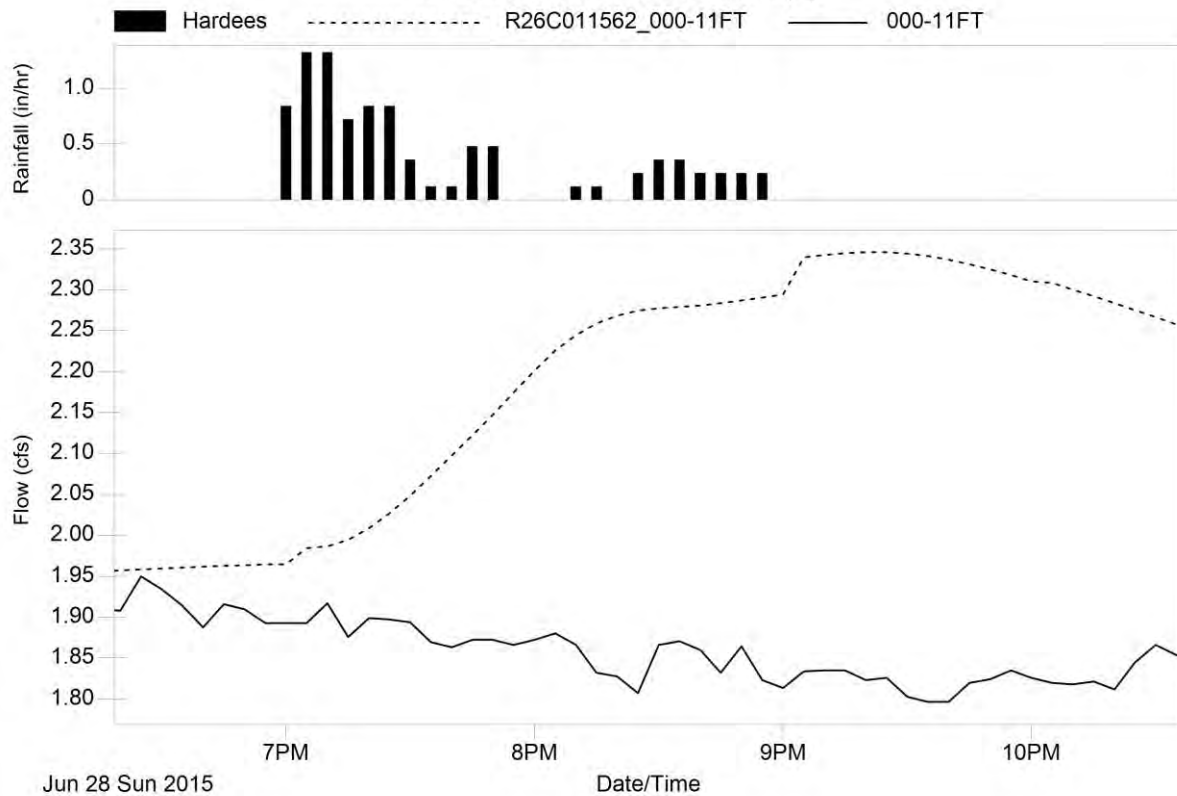
Event of June 24, 2015

Duration: 70.33 h, Total Rainfall: 2.11 (in)



Event of June 28, 2015

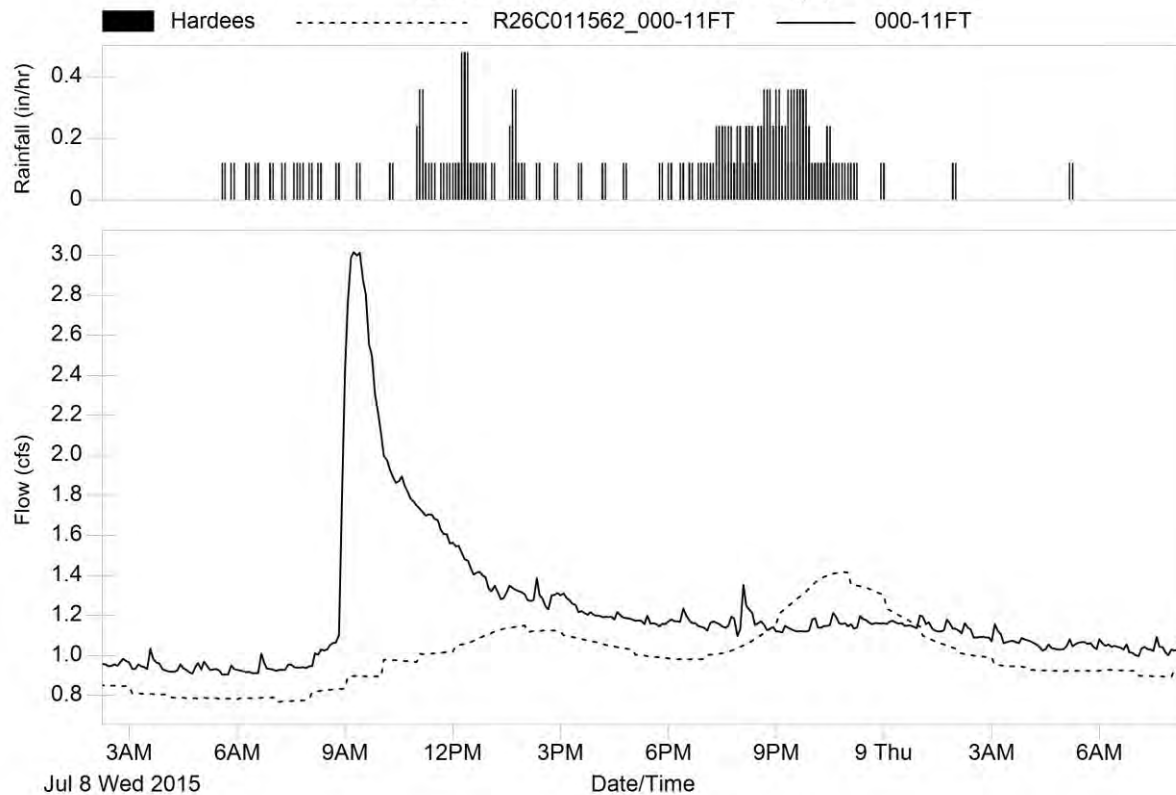
Duration: 3.58 h, Total Rainfall: 0.6 (in)



RFI 000-11FT – Verification Events

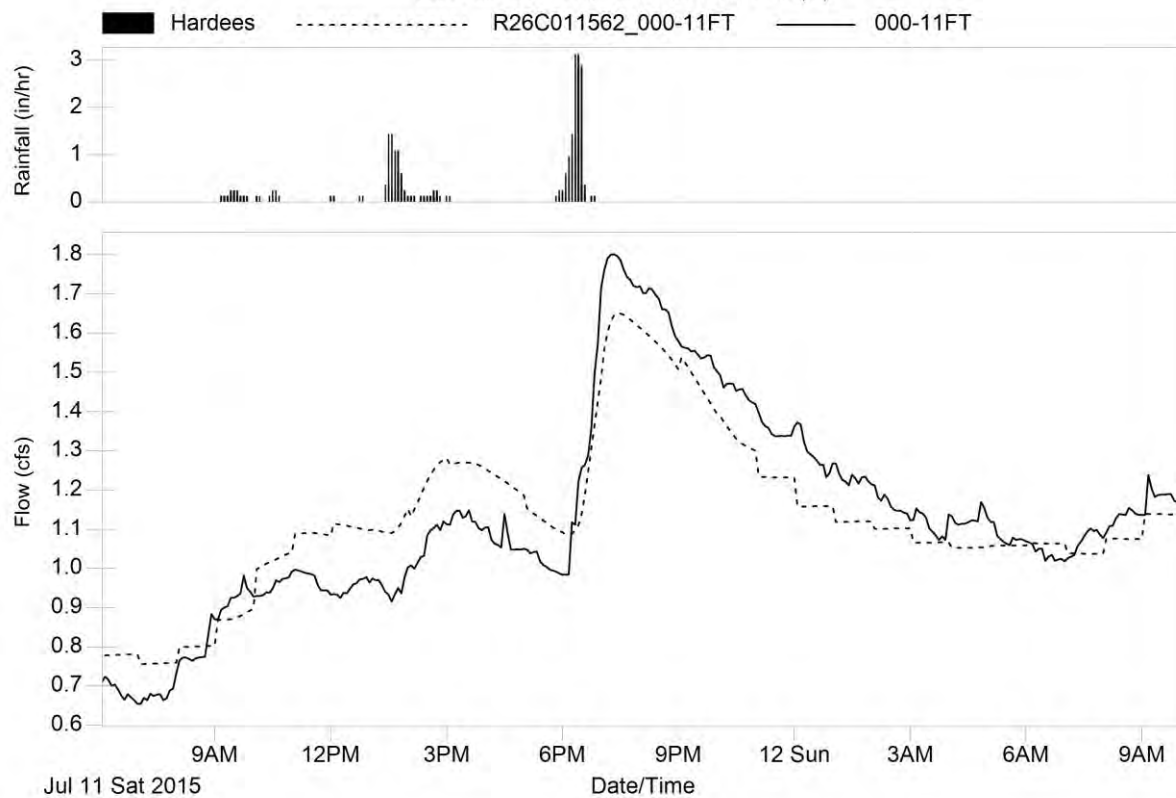
Event of July 8, 2015

Duration: 25.08 h, Total Rainfall: 1.38 (in)



Event of July 11, 2015

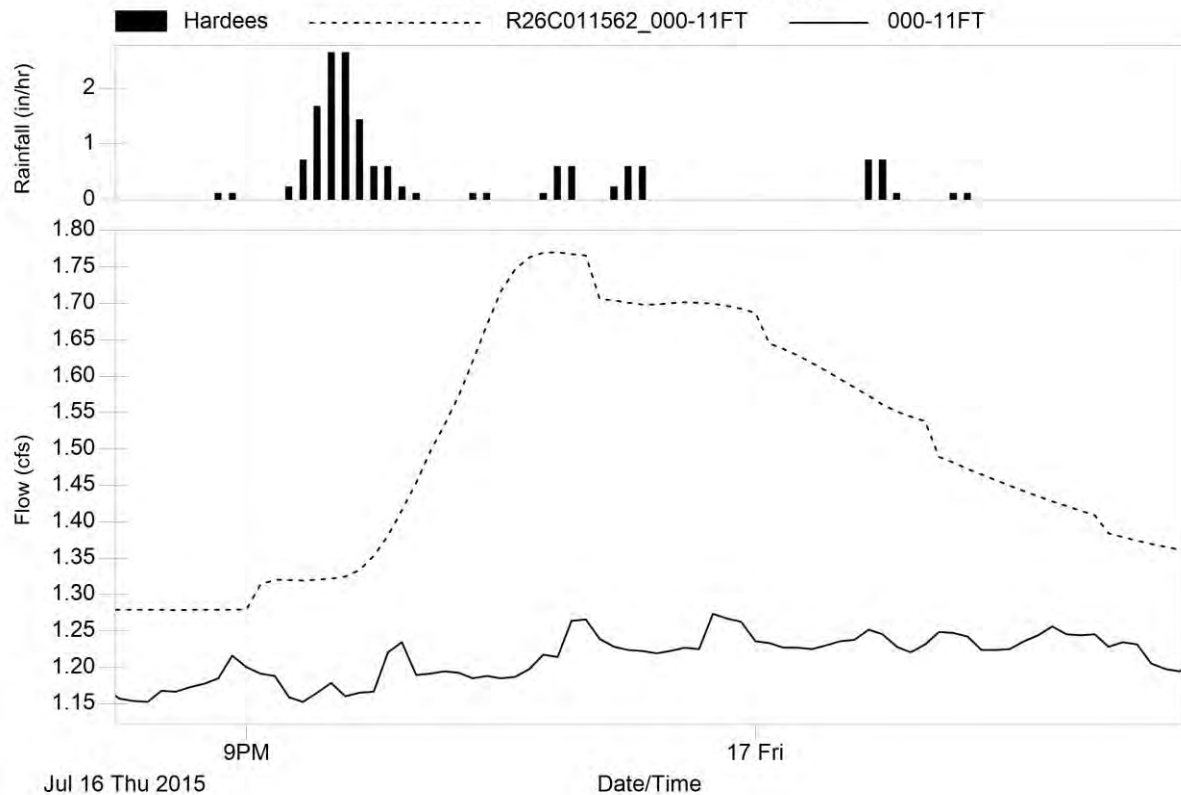
Duration: 23.33 h, Total Rainfall: 1.43 (in)



RFI 000-11FT – Verification Events

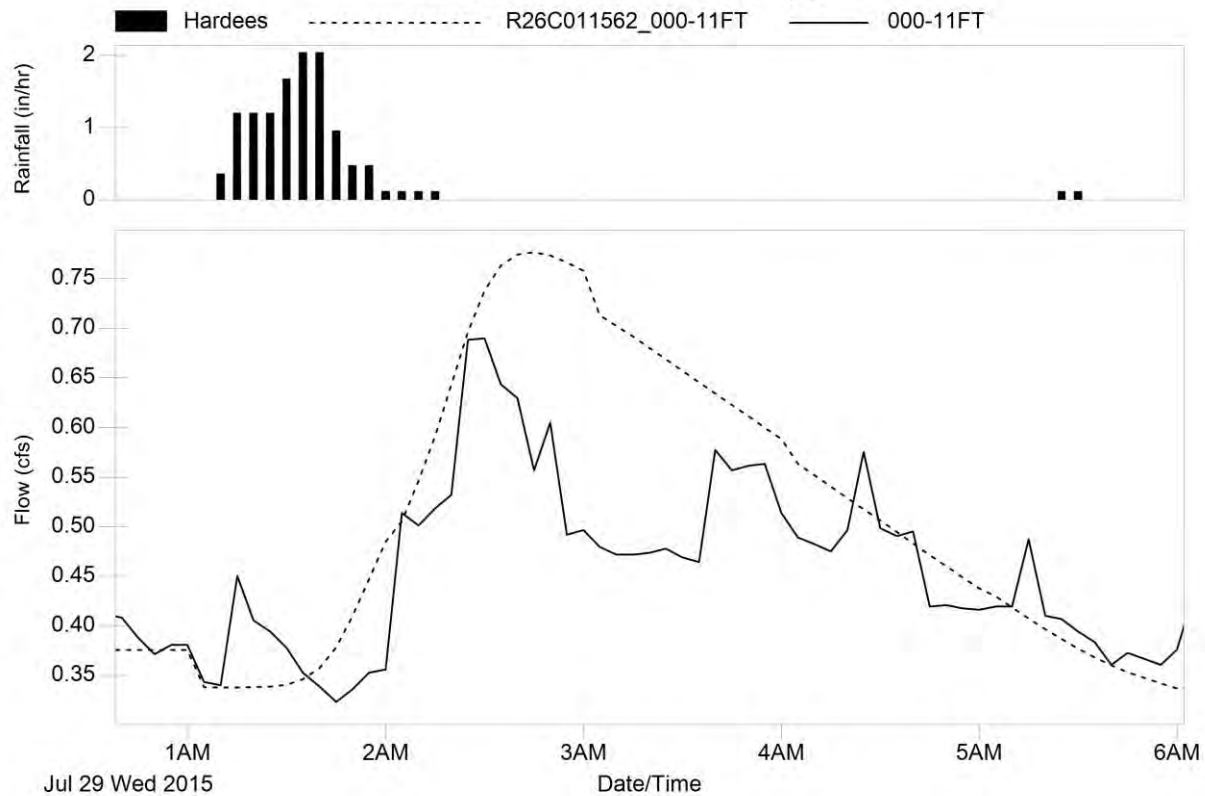
Event of July 16, 2015

Duration: 5.25 h, Total Rainfall: 0.92 (in)



Event of July 29, 2015

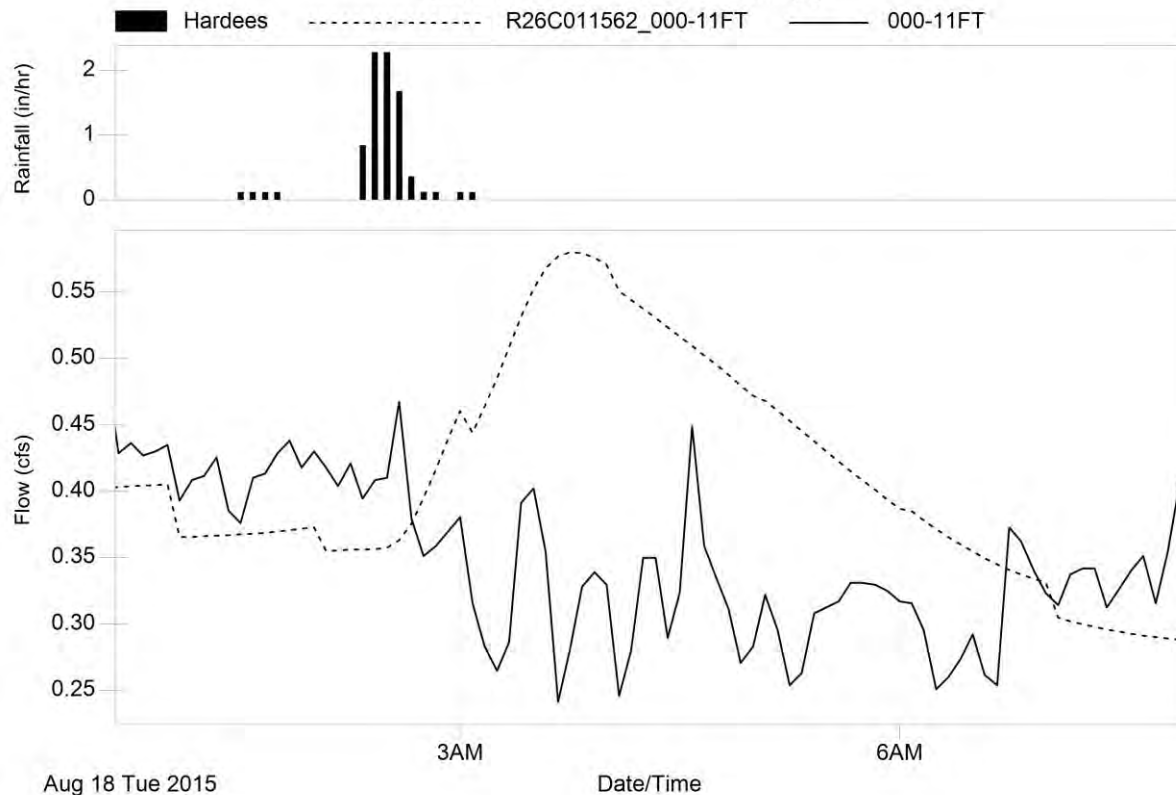
Duration: 4.5 h, Total Rainfall: 0.78 (in)



RFI 000-11FT – Verification Events

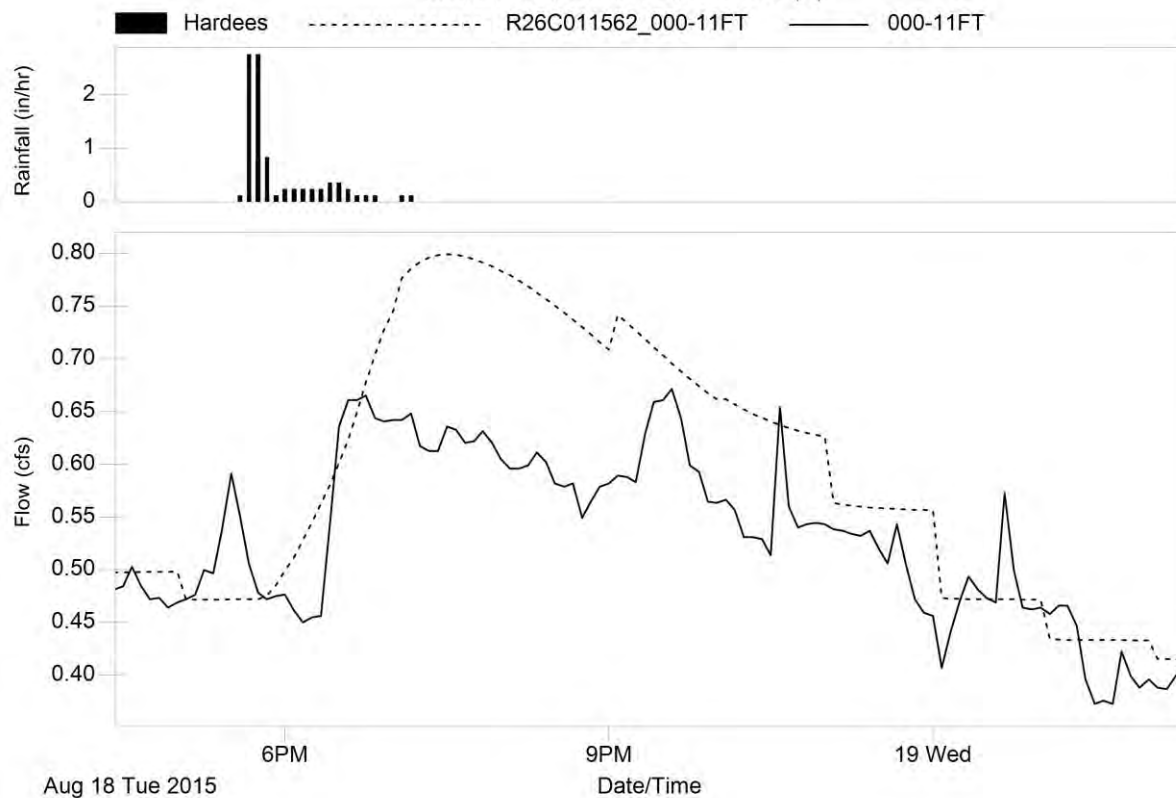
Event of August 18, 2015

Duration: 6.08 h, Total Rainfall: 0.48 (in)

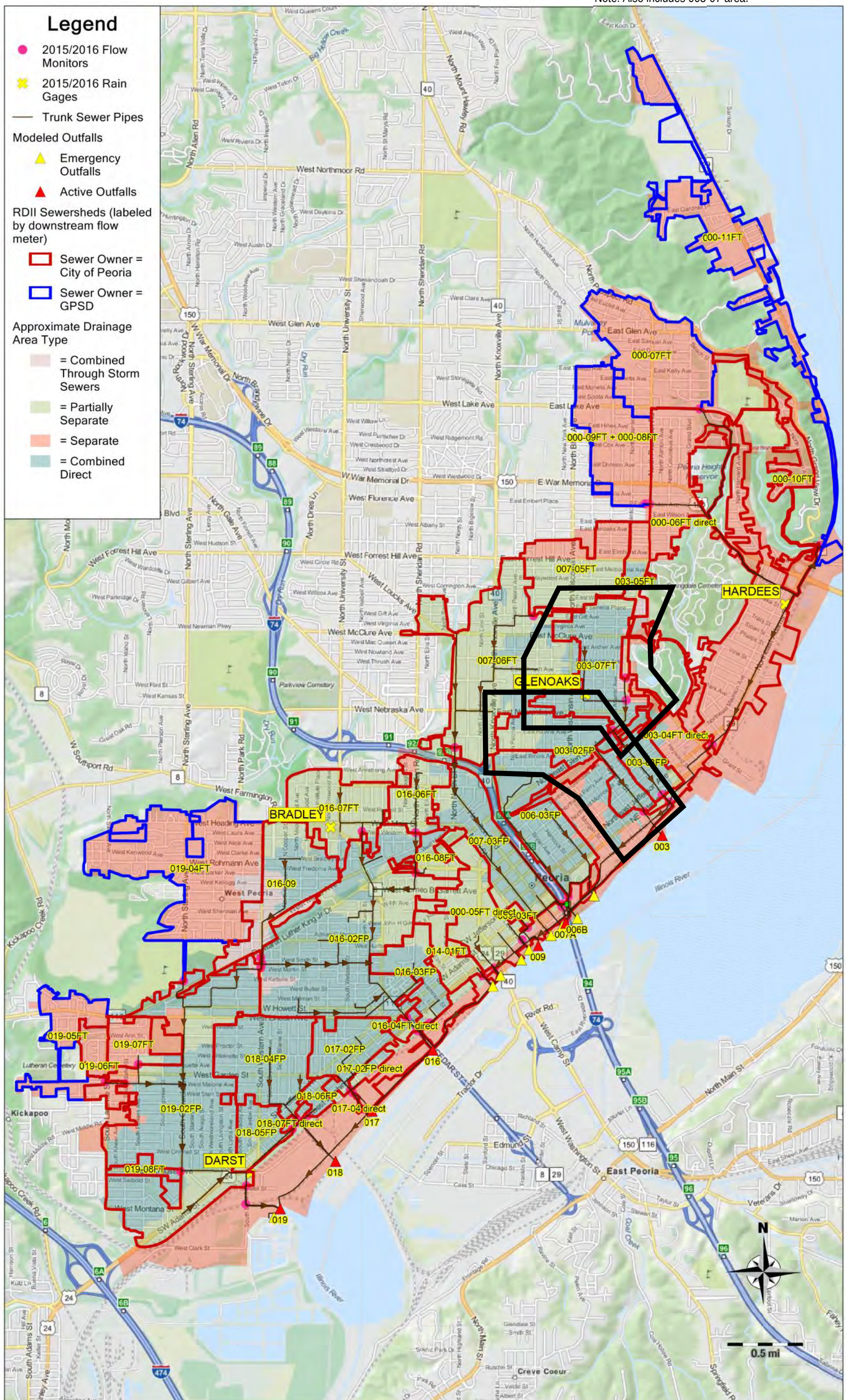


Event of August 18, 2015

Duration: 8.25 h, Total Rainfall: 0.51 (in)



Note: Also includes 003-07 area.



Legend

- 2015/2016 Rain Gages
- Modeled Conduits
- Modeled Outlets
- Modeled Junctions
 - Modeled Manholes
 - Modeled Manholes with Inflow (labeled)
- Modeled Outfalls
 - Emergency Outfalls
 - Active Outfalls
 - OverlandToStormSewer
- Modeled Subcatchments
 - DCIA
 - PERVIOUS
 - ROOFS
 - DIA
- 2015/2016 Flow Monitors
 - Active Meters
 - Existing Meters
 - Removed Meters
- RDII Sewersheds
- Subcatchments

Map Labels:

W Republic St, W Richmond Ave, N Kinnville Ave, N Calhoun Ave, N Glendale Ave, N Madison Ave, E Frye Ave, E Hillcrest Pl, N 03rd St, N 04th St, N 05th St, N 06th St, N 07th St, N 08th St, N 09th St, N 10th St, N 11th St, N 12th St, N 13th St, N 14th St, N 15th St, N 16th St, N 17th St, N 18th St, N 19th St, N 20th St, N 21st St, N 22nd St, N 23rd St, N 24th St, N 25th St, N 26th St, N 27th St, N 28th St, N 29th St, N 30th St, N 31st St, N 32nd St, N 33rd St, N 34th St, N 35th St, N 36th St, N 37th St, N 38th St, N 39th St, N 40th St, N 41st St, N 42nd St, N 43rd St, N 44th St, N 45th St, N 46th St, N 47th St, N 48th St, N 49th St, N 50th St, N 51st St, N 52nd St, N 53rd St, N 54th St, N 55th St, N 56th St, N 57th St, N 58th St, N 59th St, N 60th St, N 61st St, N 62nd St, N 63rd St, N 64th St, N 65th St, N 66th St, N 67th St, N 68th St, N 69th St, N 70th St, N 71st St, N 72nd St, N 73rd St, N 74th St, N 75th St, N 76th St, N 77th St, N 78th St, N 79th St, N 80th St, N 81st St, N 82nd St, N 83rd St, N 84th St, N 85th St, N 86th St, N 87th St, N 88th St, N 89th St, N 90th St, N 91st St, N 92nd St, N 93rd St, N 94th St, N 95th St, N 96th St, N 97th St, N 98th St, N 99th St, N 100th St, N 101st St, N 102nd St, N 103rd St, N 104th St, N 105th St, N 106th St, N 107th St, N 108th St, N 109th St, N 110th St, N 111th St, N 112th St, N 113th St, N 114th St, N 115th St, N 116th St, N 117th St, N 118th St, N 119th St, N 120th St, N 121st St, N 122nd St, N 123rd St, N 124th St, N 125th St, N 126th St, N 127th St, N 128th St, N 129th St, N 130th St, N 131st St, N 132nd St, N 133rd St, N 134th St, N 135th St, N 136th St, N 137th St, N 138th St, N 139th St, N 140th St, N 141st St, N 142nd St, N 143rd St, N 144th St, N 145th St, N 146th St, N 147th St, N 148th St, N 149th St, N 150th St, N 151st St, N 152nd St, N 153rd St, N 154th St, N 155th St, N 156th St, N 157th St, N 158th St, N 159th St, N 160th St, N 161st St, N 162nd St, N 163rd St, N 164th St, N 165th St, N 166th St, N 167th St, N 168th St, N 169th St, N 170th St, N 171st St, N 172nd St, N 173rd St, N 174th St, N 175th St, N 176th St, N 177th St, N 178th St, N 179th St, N 180th St, N 181st St, N 182nd St, N 183rd St, N 184th St, N 185th St, N 186th St, N 187th St, N 188th St, N 189th St, N 190th St, N 191st St, N 192nd St, N 193rd St, N 194th St, N 195th St, N 196th St, N 197th St, N 198th St, N 199th St, N 200th St, N 201st St, N 202nd St, N 203rd St, N 204th St, N 205th St, N 206th St, N 207th St, N 208th St, N 209th St, N 210th St, N 211st St, N 212nd St, N 213rd St, N 214th St, N 215th St, N 216th St, N 217th St, N 218th St, N 219th St, N 220th St, N 221st St, N 222nd St, N 223rd St, N 224th St, N 225th St, N 226th St, N 227th St, N 228th St, N 229th St, N 230th St, N 231st St, N 232nd St, N 233rd St, N 234th St, N 235th St, N 236th St, N 237th St, N 238th St, N 239th St, N 240th St, N 241st St, N 242nd St, N 243rd St, N 244th St, N 245th St, N 246th St, N 247th St, N 248th St, N 249th St, N 250th St, N 251st St, N 252nd St, N 253rd St, N 254th St, N 255th St, N 256th St, N 257th St, N 258th St, N 259th St, N 260th St, N 261st St, N 262nd St, N 263rd St, N 264th St, N 265th St, N 266th St, N 267th St, N 268th St, N 269th St, N 270th St, N 271st St, N 272nd St, N 273rd St, N 274th St, N 275th St, N 276th St, N 277th St, N 278th St, N 279th St, N 280th St, N 281st St, N 282nd St, N 283rd St, N 284th St, N 285th St, N 286th St, N 287th St, N 288th St, N 289th St, N 290th St, N 291st St, N 292nd St, N 293rd St, N 294th St, N 295th St, N 296th St, N 297th St, N 298th St, N 299th St, N 300th St, N 301st St, N 302nd St, N 303rd St, N 304th St, N 305th St, N 306th St, N 307th St, N 308th St, N 309th St, N 310th St, N 311st St, N 312nd St, N 313rd St, N 314th St, N 315th St, N 316th St, N 317th St, N 318th St, N 319th St, N 320th St, N 321st St, N 322nd St, N 323rd St, N 324th St, N 325th St, N 326th St, N 327th St, N 328th St, N 329th St, N 330th St, N 331st St, N 332nd St, N 333rd St, N 334th St, N 335th St, N 336th St, N 337th St, N 338th St, N 339th St, N 340th St, N 341st St, N 342nd St, N 343rd St, N 344th St, N 345th St, N 346th St, N 347th St, N 348th St, N 349th St, N 350th St, N 351st St, N 352nd St, N 353rd St, N 354th St, N 355th St, N 356th St, N 357th St, N 358th St, N 359th St, N 360th St, N 361st St, N 362nd St, N 363rd St, N 364th St, N 365th St, N 366th St, N 367th St, N 368th St, N 369th St, N 370th St, N 371st St, N 372nd St, N 373rd St, N 374th St, N 375th St, N 376th St, N 377th St, N 378th St, N 379th St, N 380th St, N 381st St, N 382nd St, N 383rd St, N 384th St, N 385th St, N 386th St, N 387th St, N 388th St, N 389th St, N 390th St, N 391st St, N 392nd St, N 393rd St, N 394th St, N 395th St, N 396th St, N 397th St, N 398th St, N 399th St, N 400th St, N 401st St, N 402nd St, N 403rd St, N 404th St, N 405th St, N 406th St, N 407th St, N 408th St, N 409th St, N 410th St, N 411st St, N 412nd St, N 413rd St, N 414th St, N 415th St, N 416th St, N 417th St, N 418th St, N 419th St, N 420th St, N 421st St, N 422nd St, N 423rd St, N 424th St, N 425th St, N 426th St, N 427th St, N 428th St, N 429th St, N 430th St, N 431st St, N 432nd St, N 433rd St, N 434th St, N 435th St, N 436th St, N 437th St, N 438th St, N 439th St, N 440th St, N 441st St, N 442nd St, N 443rd St, N 444th St, N 445th St, N 446th St, N 447th St, N 448th St, N 449th St, N 450th St, N 451st St, N 452nd St, N 453rd St, N 454th St, N 455th St, N 456th St, N 457th St, N 458th St, N 459th St, N 460th St, N 461st St, N 462nd St, N 463rd St, N 464th St, N 465th St, N 466th St, N 467th St, N 468th St, N 469th St, N 470th St, N 471st St, N 472nd St, N 473rd St,

Spring-Caroline 003-02FP Flow

Date	Duration (h)	Rainfall (in) RG006	Maximum Flow (cfs) Observed Modeled	Maximum Flow (mgd) Observed Modeled	Total Volume (ft³) Observed Modeled	Volume (million gallons) Observed Modeled	Peak Flow Rate (-15% to +25%)	Flow Volume (-10% to +20%)	Rainfall Variability
CALIBRATION EVENTS - FLOW									
6/17/2015 2:10	5.00	0.80	99.590 95.740	64.335 61.848	333600 335600	2.4953 2.5103	-4%	1%	Variable
6/26/2015 9:00	13.00	0.88	87.820 76.700	56.732 49.548	507400 428500	3.7954 3.2052	-13%	-16%	Possibly Uniform
7/8/2015 5:15	23.30	1.35	52.040 34.060	33.618 22.003	680500 645500	5.0901 4.8283	-35%	-5%	Possibly Uniform
7/11/2015 9:10	12.10	1.31	251.600 138.300	162.534 89.342	853200 553400	6.3819 4.1394	-45%	-35%	Variable
7/16/2015 21:05	2.80	0.91	302.300 126.700	195.286 81.848	602300 304900	4.5052 2.2807	-58%	-49%	Variable
5/10/2017 18:45	4.25	0.38	26.290 32.520	16.983 21.008	69290 129700	0.5183 0.9702	24%	87%	Variable
5/19/2017 22:35	4.50	0.20	5.626 10.080	3.634 6.512	29400 75700	0.2199 0.5662	79%	157%	Variable
5/20/2017 6:55	4.08	0.53	32.180 29.450	20.788 19.025	126500 209800	0.9462 1.5693	-8%	66%	Variable
5/26/2017 14:50	0.92	0.39	63.700 68.030	41.150 43.947	80300 108400	0.6006 0.8108	7%	35%	Relatively Uniform
6/15/2017 1:50	1.17	0.51	38.510 75.140	24.877 48.540	57820 144100	0.4325 1.0779	95%	149%	Possibly Uniform
7/10/2017 8:30	2.00	0.45	43.450 75.730	28.069 48.922	57570 161100	0.4306 1.2050	74%	180%	Variable
7/10/2017 18:15	2.50	0.69	110.000 84.330	71.060 54.477	140300 237700	1.0494 1.7780	-23%	69%	Variable
7/26/2017 20:00	2.50	0.66	53.520 65.610	34.574 42.384	93390 210100	0.6986 1.5715	23%	125%	Relatively Uniform
8/22/2017 2:00	3.25	0.32	12.510 22.400	8.081 14.470	34430 122400	0.2575 0.9156	79%	256%	Relatively Uniform
10/14/2017 13:00	1.33	0.38	44.350 57.240	28.650 36.977	91440 105400	0.6840 0.7884	29%	15%	Possibly Uniform
10/14/2017 18:35	12.25	1.75	93.090 117.100	60.136 75.647	659800 854500	4.9353 6.3917	26%	30%	Relatively Uniform
VERIFICATION EVENTS - FLOW									
6/24/2015 18:45	0.90	0.39	68.890 70.680	44.503 45.659	118700 103400	0.8879 0.7734	3%	-13%	Variable
6/25/2015 1:05	9.00	0.64	65.320 52.380	42.197 33.837	382300 316200	2.8596 2.3652	-20%	-17%	Variable
6/28/2015 17:25	5.50	0.51	82.180 53.350	53.088 34.464	313300 205700	2.3435 1.5386	-35%	-34%	Variable
4/27/2017 0:00	7.25	0.55	16.770 20.300	10.833 13.114	140900 263500	1.0539 1.9710	21%	87%	Relatively Uniform
4/29/2017 11:00	13.00	3.12	160.800 126.500	103.877 81.719	1397000 1454000	10.4496 10.8759	-21%	4%	Relatively Uniform
5/19/2017 7:00	5.50	0.43	20.860 35.130	13.476 22.694	71880 154900	0.5377 1.1587	68%	115%	Variable
6/17/2017 20:40	1.58	1.16	141.800 122.000	91.603 78.812	315500 374600	2.3599 2.8020	-14%	19%	Possibly Uniform
7/22/2017 5:55	2.33	0.67	40.540 84.280	26.189 54.445	75350 200200	0.5636 1.4975	108%	166%	Variable
8/21/2017 8:45	1.92	0.43	27.190 55.010	17.565 35.536	40920 106300	0.3061 0.7951	102%	160%	Relatively Uniform
9/18/2017 21:30	2.50	1.03	31.230 142.400	20.175 91.990	70120 372900	0.5245 2.7893	356%	432%	Relatively Uniform
10/10/2017 13:10	3.33	0.69	41.270 47.810	26.660 30.885	143400 229300	1.0726 1.7152	16%	60%	Relatively Uniform
10/10/2017 20:00	5.17	0.86	62.440 81.730	40.336 52.798	273100 368700	2.0428 2.7579	31%	35%	Relatively Uniform
10/22/2017 7:10	2.67	0.56	59.840 67.130	38.657 43.366	170400 200200	1.2746 1.4975	12%	17%	Variable
WEIGHTED AVERAGES									
Calibration - Relatively Uniform							23%	49%	
Calibration - Possibly Uniform							9%	-1%	
Calibration - Variable							-32%	-9%	
Calibration - All Events							-16%	5%	
Verification - Relatively Uniform							39%	35%	
Verification - Possibly Uniform							-14%	19%	
Verification - Variable							7%	4%	
Verification - All Events							17%	24%	
Weighted Average - All Events							-3%	13%	All Events
NET AVERAGES									
Calibration - Relatively Uniform							34%	34%	
Calibration - Possibly Uniform							19%	19%	
Calibration - Variable							5%	5%	
Calibration- All Events							16%	16%	
Verification - Relatively Uniform							84%	84%	
Verification - Possibly Uniform							-14%	-14%	
Verification - Variable							23%	23%	
Verification- All Events							48%	48%	
Net Average - All Events							30%	72%	All Events

Notes:

Data in later part of 2015 appears to be bad (inconsistent with upstream meters).

The model was calibrated using 2015 meter data (higher metered flows) and 2017 meter data (lower metered flows) as both sets of data were questionable given the challenging hydraulics of this metering location. The modeled flow calibration is in between data sets (low compared to 2015 flows and high compared to 2017 flows) and results in a good calibration for the downstream Storage Sewer (at meter 003-01LE).

Spring-Caroline 003-02FP Depth

Date	Duration (h)	Maximum Depth (ft)		Minimum Depth (ft)		Average Depth (ft)		Maximum Depth (ft)	Minimum Depth (ft)	Average Depth (ft)	Rainfall Variability
		metered	modeled	metered	modeled	metered	modeled	Surcharged: -0.33 ft to +1.67 ft			
CALIBRATION EVENTS - DEPTH								Non-Surcharged: -0.33 ft to +0.33 ft			
6/17/2015 2:10	5.0	1.9	1.2	0.1	0.2	0.6	0.5	-0.66	0.13	-0.12	Variable
6/26/2015 9:00	13.0	1.8	1.1	0.0	0.2	0.4	0.3	-0.66	0.15	-0.10	Possibly Uniform
7/8/2015 5:15	23.3	1.4	0.7	0.1	0.1	0.4	0.3	-0.68	0.01	-0.05	Possibly Uniform
7/11/2015 9:10	12.1	3.7	1.5	0.2	0.2	0.6	0.4	-2.26	0.00	-0.21	Variable
7/16/2015 21:05	2.8	5.0	1.4	0.2	0.2	1.4	0.6	-3.59	0.03	-0.75	Variable
5/10/2017 18:45	4.3	1.4	0.8	0.1	0.2	0.3	0.3	-0.64	0.02	0.00	Variable
5/19/2017 22:35	4.5	0.3	0.4	0.1	0.2	0.2	0.3	0.05	0.04	0.08	Variable
5/20/2017 6:55	4.1	1.2	0.7	0.1	0.2	0.5	0.4	-0.51	0.03	-0.01	Variable
5/26/2017 14:50	0.9	2.0	1.1	0.1	0.2	1.0	0.7	-0.90	0.02	-0.36	Relatively Uniform
6/15/2017 1:50	1.2	1.4	1.1	0.1	0.1	0.8	0.7	-0.36	0.04	-0.08	Possibly Uniform
7/10/2017 8:30	2.0	1.6	1.1	0.1	0.2	0.5	0.5	-0.53	0.14	0.07	Variable
7/10/2017 18:15	2.5	2.8	1.2	0.1	0.2	0.6	0.6	-1.64	0.08	-0.03	Variable
7/26/2017 20:00	2.5	1.7	1.0	0.1	0.2	0.5	0.6	-0.65	0.05	0.10	Relatively Uniform
8/22/2017 2:00	3.3	0.7	0.6	0.1	0.2	0.2	0.4	-0.07	0.09	0.15	Relatively Uniform
10/14/2017 13:00	1.3	1.9	1.0	0.2	0.2	1.0	0.5	-0.95	-0.03	-0.43	Possibly Uniform
10/14/2017 18:35	12.3	2.7	1.4	0.1	0.2	0.7	0.5	-1.37	0.07	-0.21	Relatively Uniform
VERIFICATION EVENTS - DEPTH											
6/24/2015 18:45	0.9	1.7	1.1	0.2	0.2	1.1	0.7	-0.62	-0.03	-0.43	Variable
6/25/2015 1:05	9.0	1.6	0.9	0.1	0.2	0.5	0.4	-0.67	0.07	-0.13	Variable
6/28/2015 17:25	5.5	1.8	0.9	0.1	0.2	0.5	0.4	-0.85	0.10	-0.17	Variable
4/27/2017 0:00	7.3	0.8	0.6	0.1	0.2	0.4	0.4	-0.23	0.10	0.03	Relatively Uniform
4/29/2017 11:00	13.0	3.7	1.4	0.1	0.2	1.0	0.6	-2.25	0.03	-0.36	Relatively Uniform
5/19/2017 7:00	5.5	1.1	0.8	0.1	0.2	0.3	0.3	-0.33	0.06	0.05	Variable
6/17/2017 20:40	1.6	4.3	1.4	0.5	0.2	1.9	1.0	-2.96	-0.33	-0.89	Possibly Uniform
7/22/2017 5:55	2.3	1.4	1.2	0.1	0.1	0.5	0.5	-0.29	0.02	0.07	Variable
8/21/2017 8:45	1.9	1.3	1.0	0.1	0.1	0.4	0.4	-0.29	0.02	0.07	Relatively Uniform
9/18/2017 21:30	2.5	1.6	1.5	0.1	0.3	0.5	0.7	-0.17	0.14	0.22	Relatively Uniform
10/10/2017 13:10	3.3	1.5	0.9	0.1	0.2	0.6	0.5	-0.60	0.02	-0.12	Relatively Uniform
10/10/2017 20:00	5.2	2.2	1.1	0.1	0.2	0.7	0.5	-1.04	0.13	-0.21	Relatively Uniform
10/22/2017 7:10	2.7	2.1	1.0	0.2	0.2	0.9	0.5	-1.05	-0.05	-0.31	Variable
Notes: Surcharge Depth = 4.8 feet Modeled depth obtained from node upstream of meter location due to steep pipe. Depth at meter is higher than depth at this node. Data in later part of 2015 appears to be bad (inconsistent with upstream meters). The model was calibrated using 2015 meter data (higher metered data) and 2017 meter data (lower metered data) as both sets of data were questionable given the challenging hydraulics of this metering location. The modeled flow calibration is in between data sets (low compared to 2015 flows and high compared to 2017 flows) and results in a good calibration for the downstream Storage Sewer (at meter 003-01LE).						WEIGHTED AVERAGES					
						Calibration - Relatively Uniform					
						Calibration - Possibly Uniform					
						Calibration - Variable					
						Calibration - All Events					
						Verification - Relatively Uniform					
						Verification - Possibly Uniform					
						Verification - Variable					
						Verification - All Events					
						Weighted Average - All Events					
						NET AVERAGES					
						Calibration - Relatively Uniform					
						Calibration - Possibly Uniform					
						Calibration - Variable					
						Calibration- All Events					
						Verification - Relatively Uniform					
						Verification - Possibly Uniform					
						Verification - Variable					
						Verification- All Events					
						Net Average - All Events					

Notes:

Surcharge Depth = 4.8 feet

Modeled depth obtained from node upstream of meter location due to steep pipe. Depth at meter is higher than depth at this node.

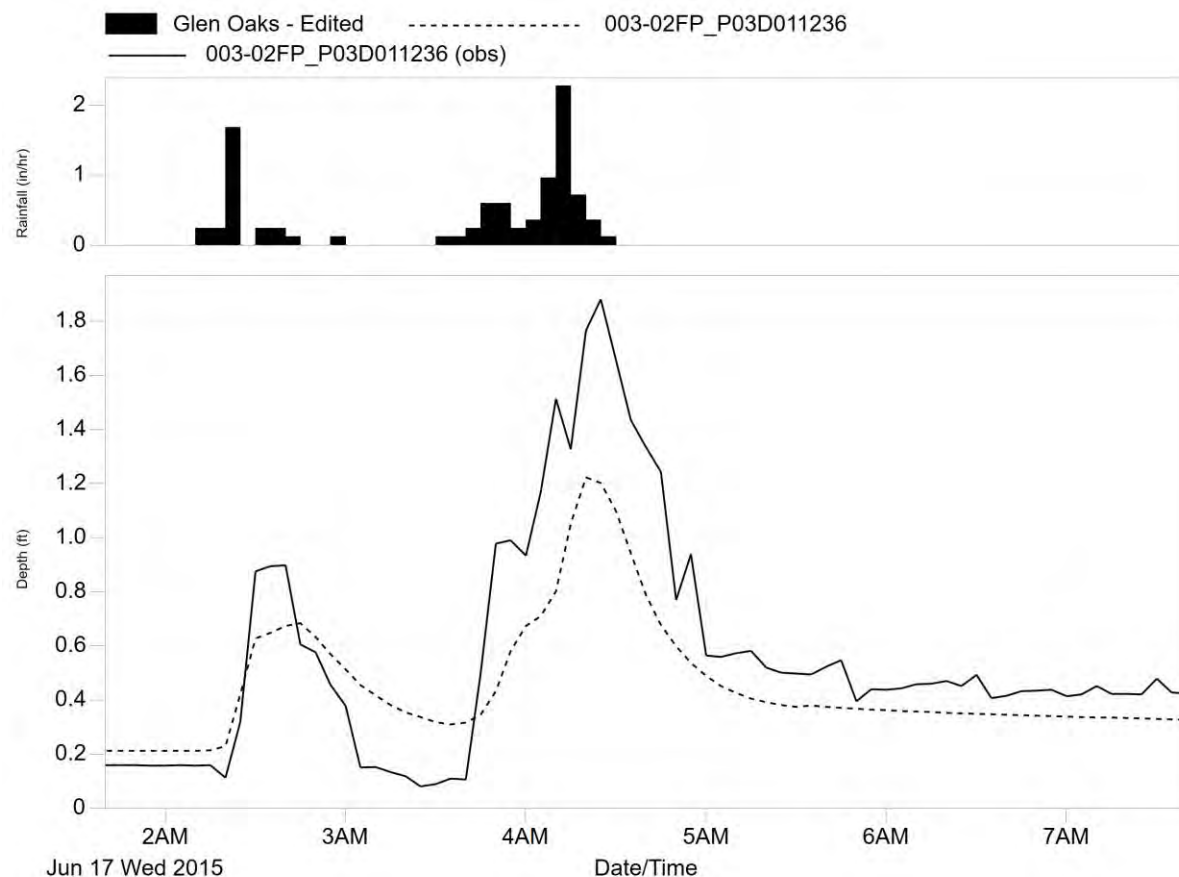
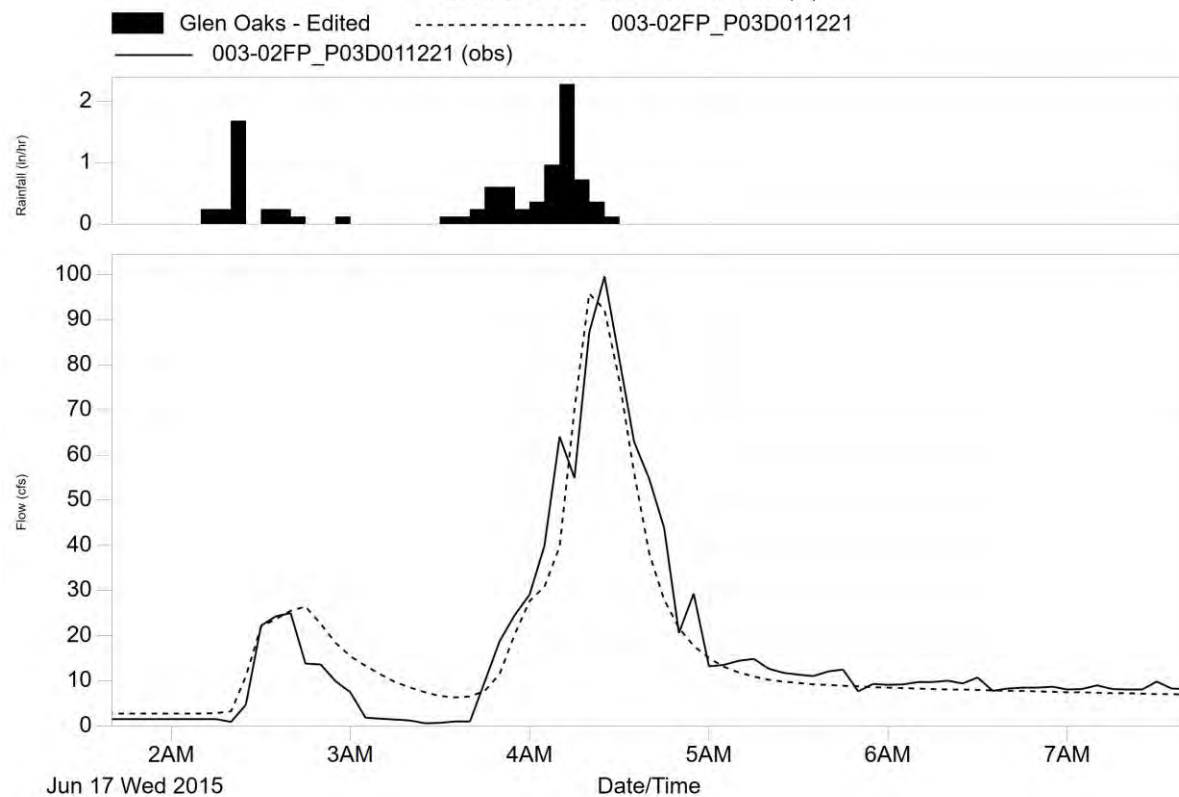
Data in later part of 2015 appears to be bad (inconsistent with upstream meters).

The model was calibrated using 2015 meter data (higher metered data) and 2017 meter data (lower metered data) as both sets of data were questionable given the challenging hydraulics of this metering location. The modeled flow calibration is in between data sets (low compared to 2015 flows and high compared to 2017 flows) and results in a good calibration for the downstream Storage Sewer (at meter 003-01LE).

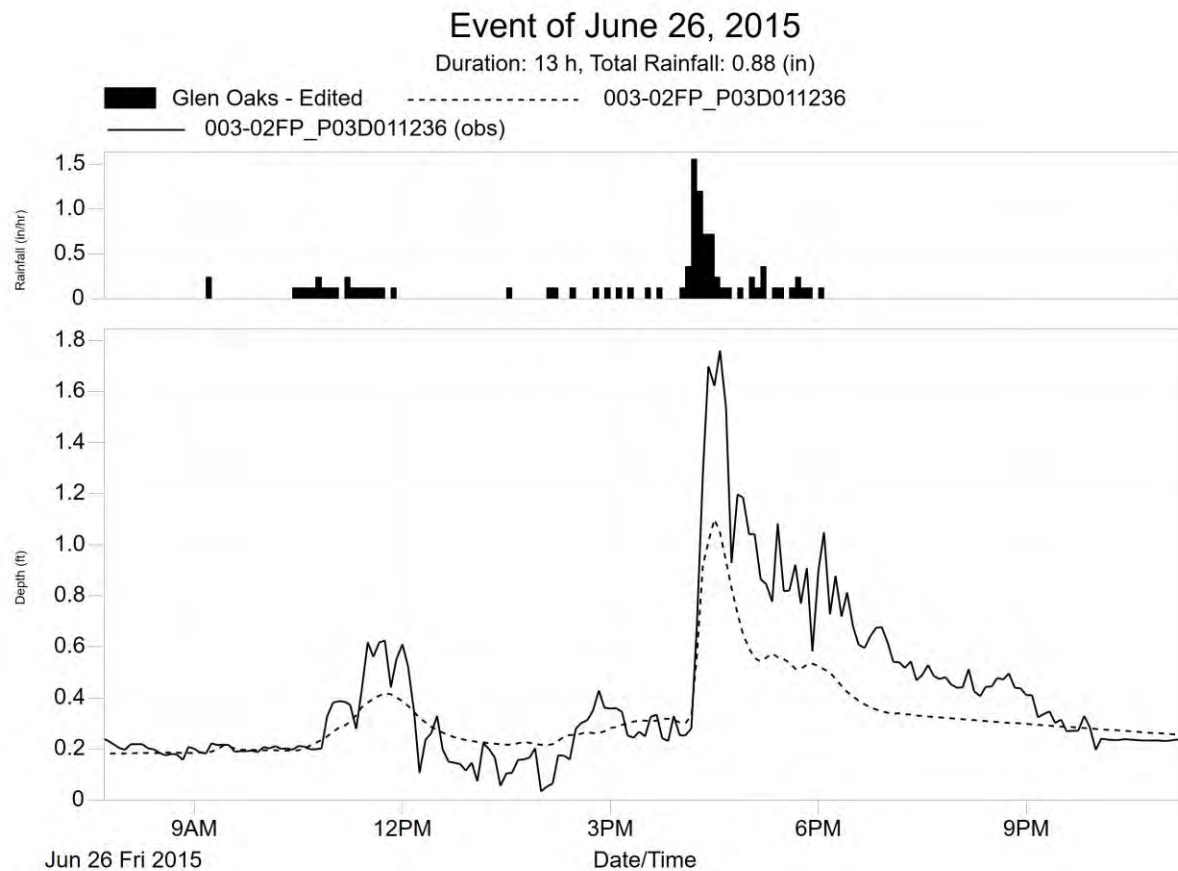
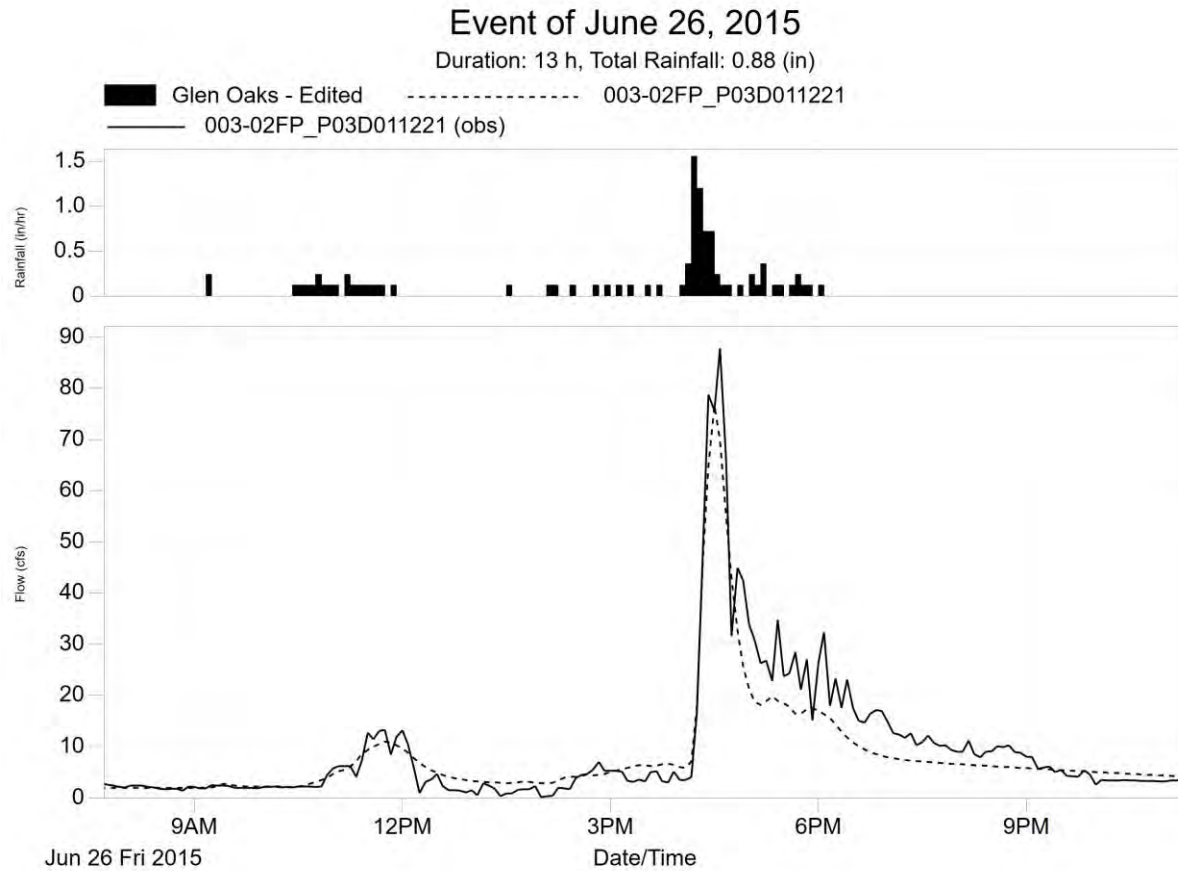
Spring-Caroline 003-02FP – Calibration Events

Event of July 16, 2015

Duration: 2.8 h, Total Rainfall: 0.91 (in)



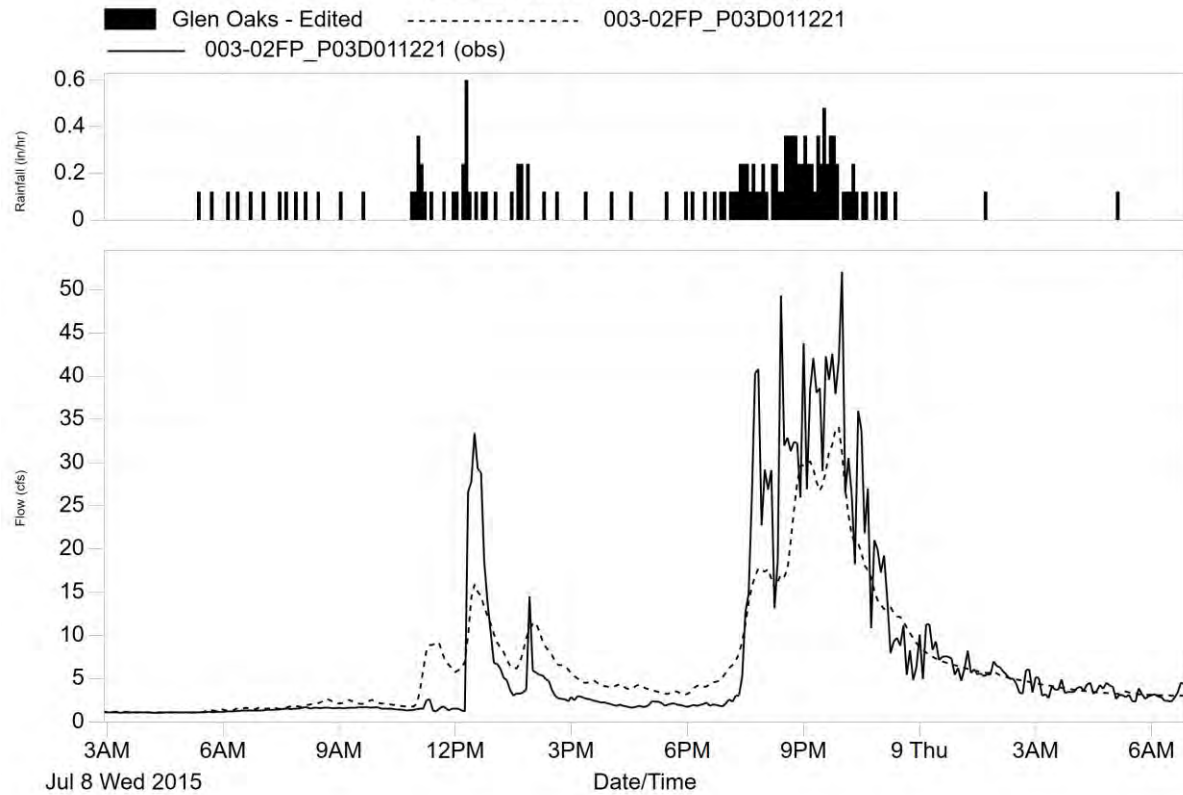
Spring-Caroline 003-02FP – Calibration Events



Spring-Caroline 003-02FP – Calibration Events

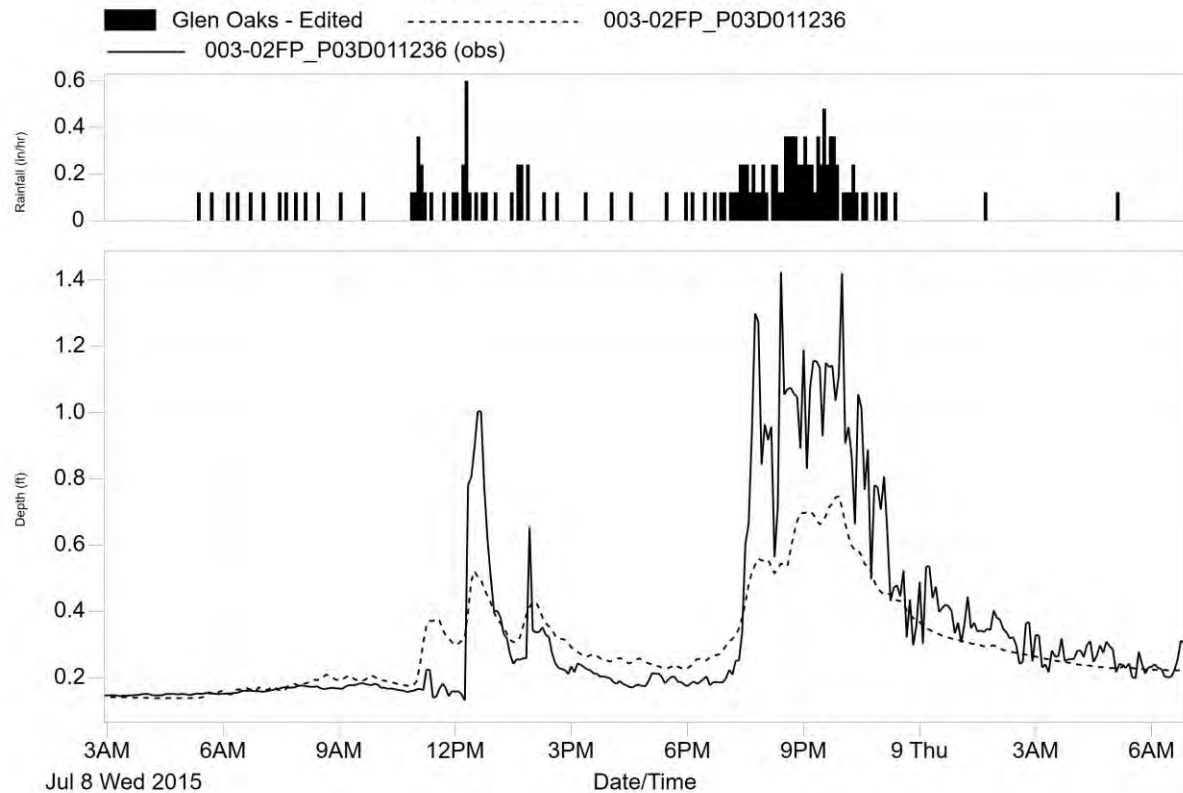
Event of July 8, 2015

Duration: 23.3 h, Total Rainfall: 1.35 (in)



Event of July 8, 2015

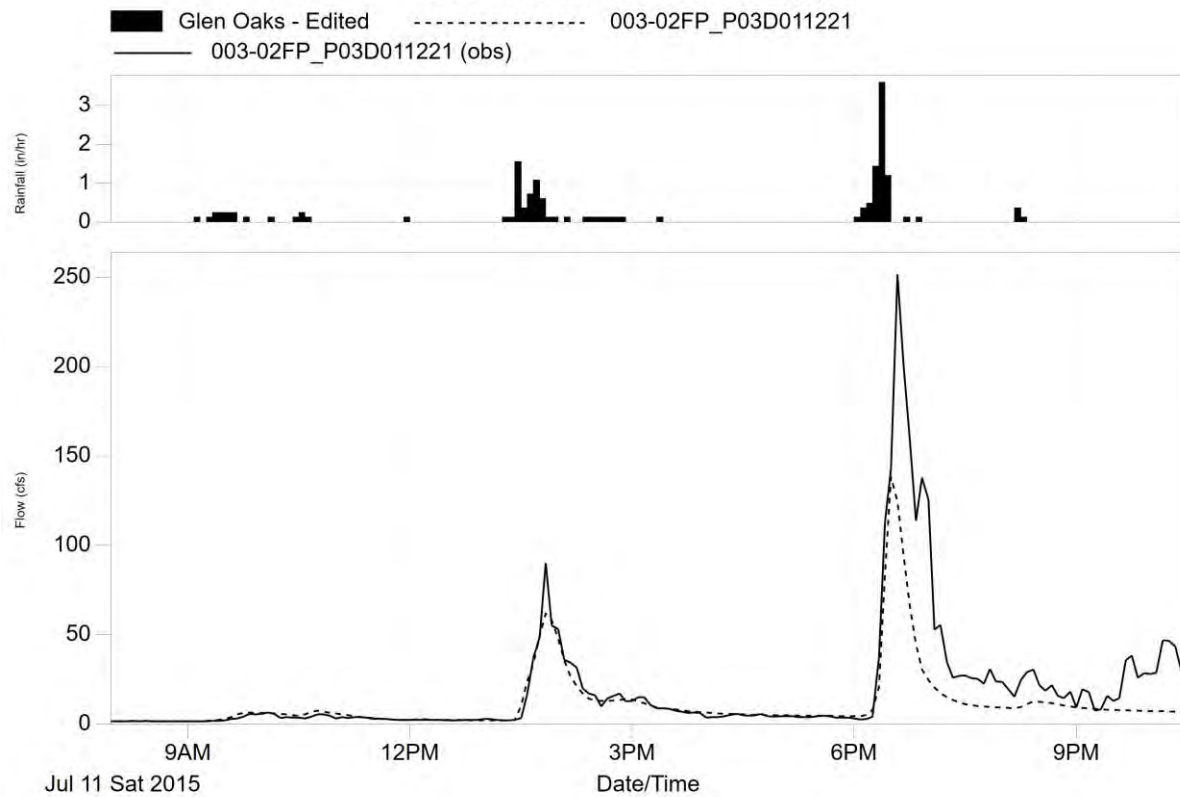
Duration: 23.3 h, Total Rainfall: 1.35 (in)



Spring-Caroline 003-02FP – Calibration Events

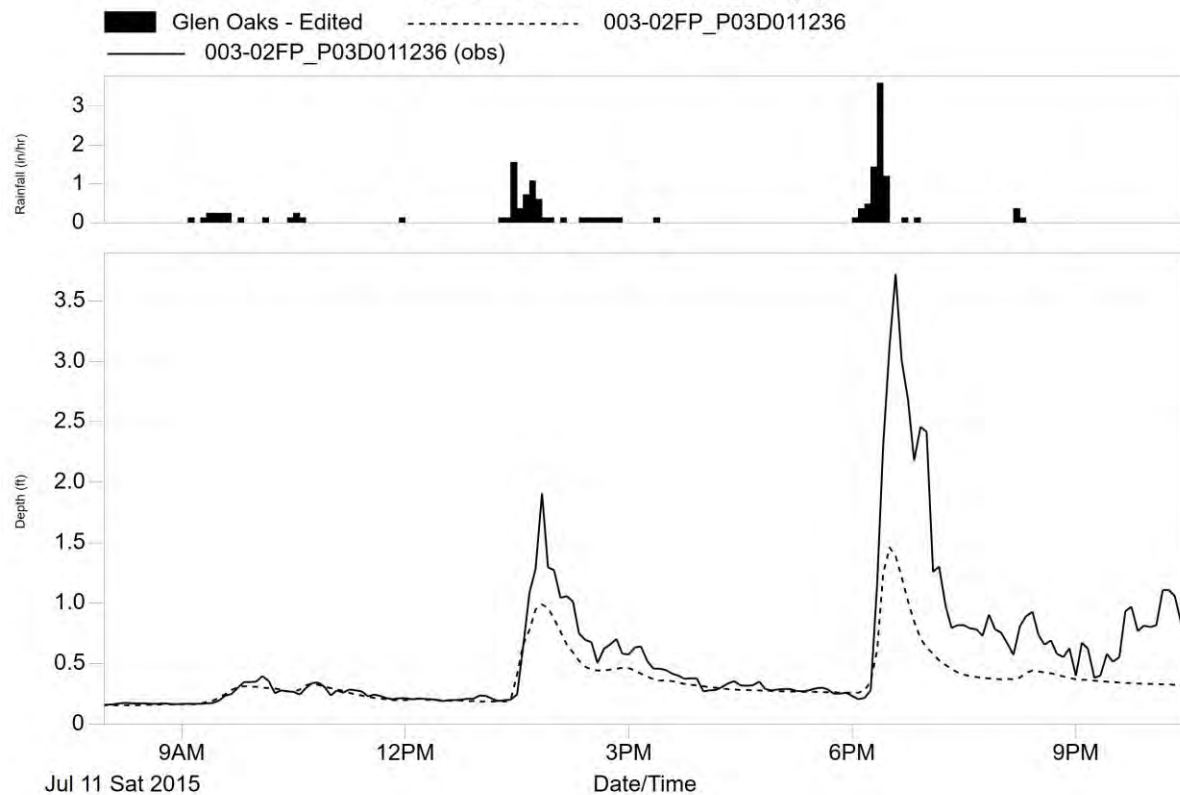
Event of July 11, 2015

Duration: 12.1 h, Total Rainfall: 1.31 (in)



Event of July 11, 2015

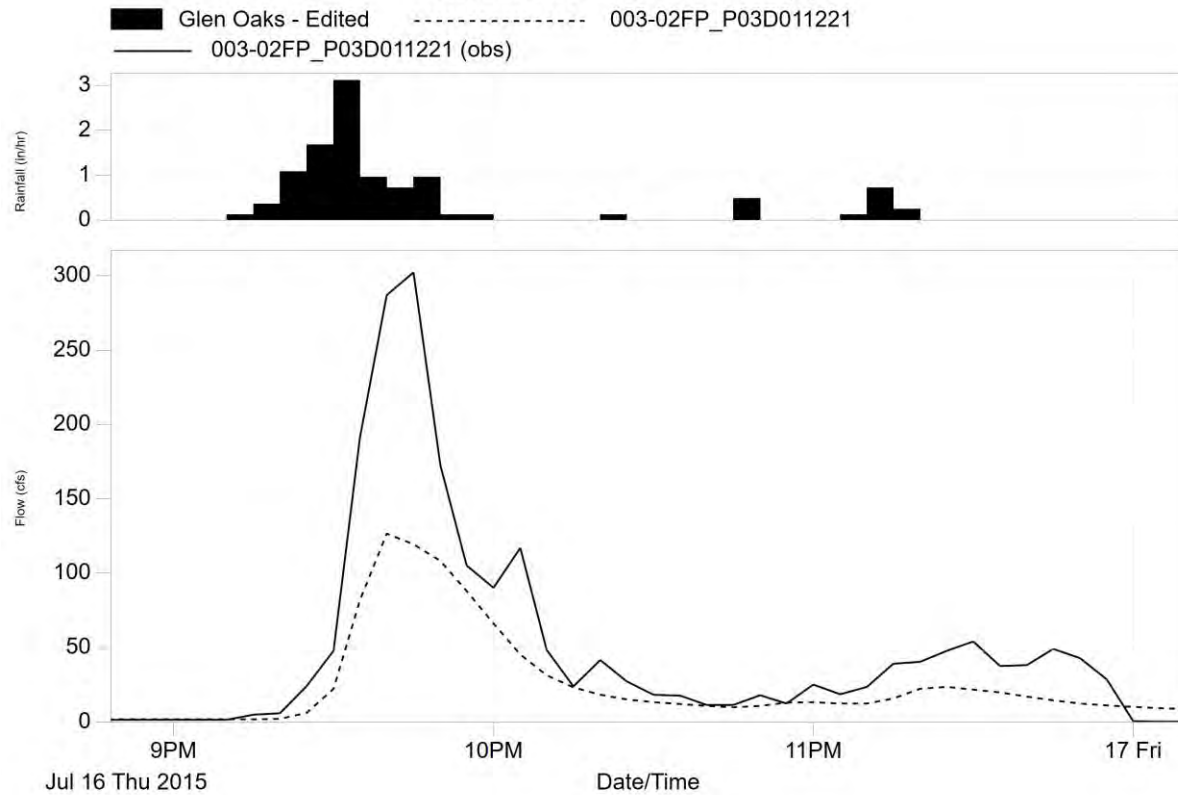
Duration: 12.1 h, Total Rainfall: 1.31 (in)



Spring-Caroline 003-02FP – Calibration Events

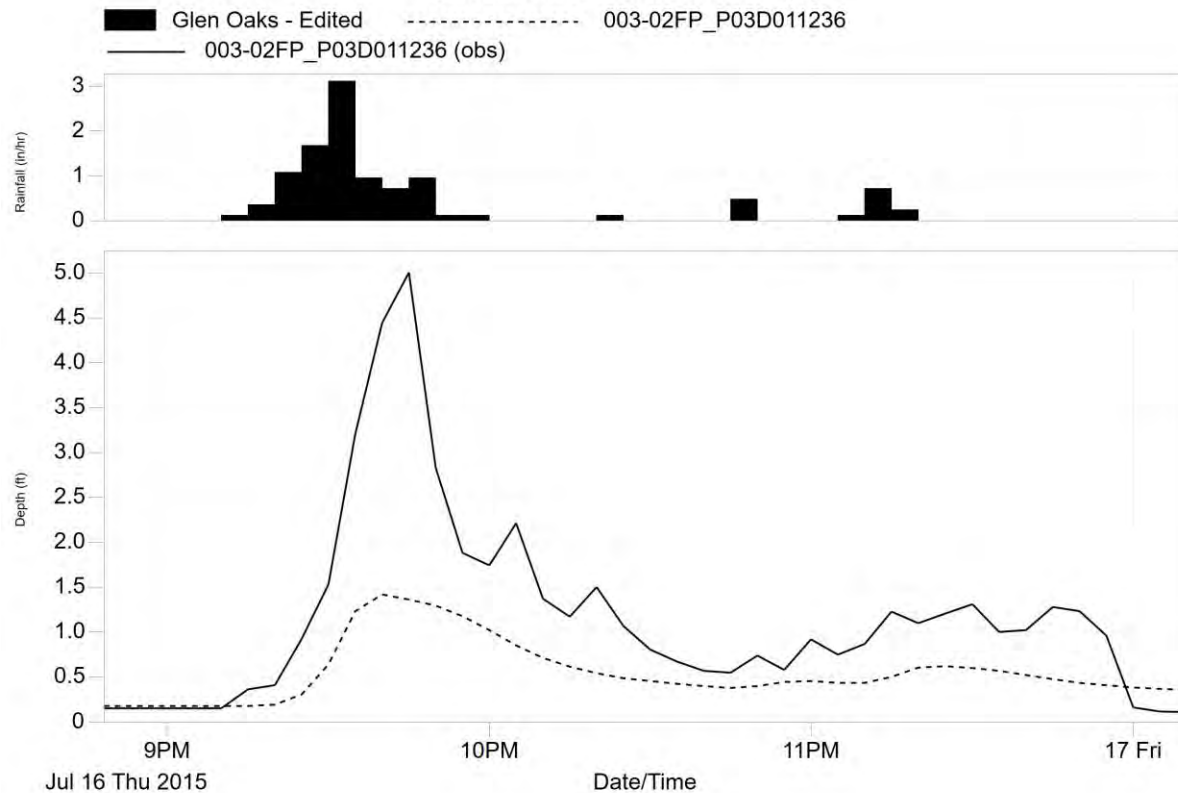
Event of July 16, 2015

Duration: 2.8 h, Total Rainfall: 0.91 (in)



Event of July 16, 2015

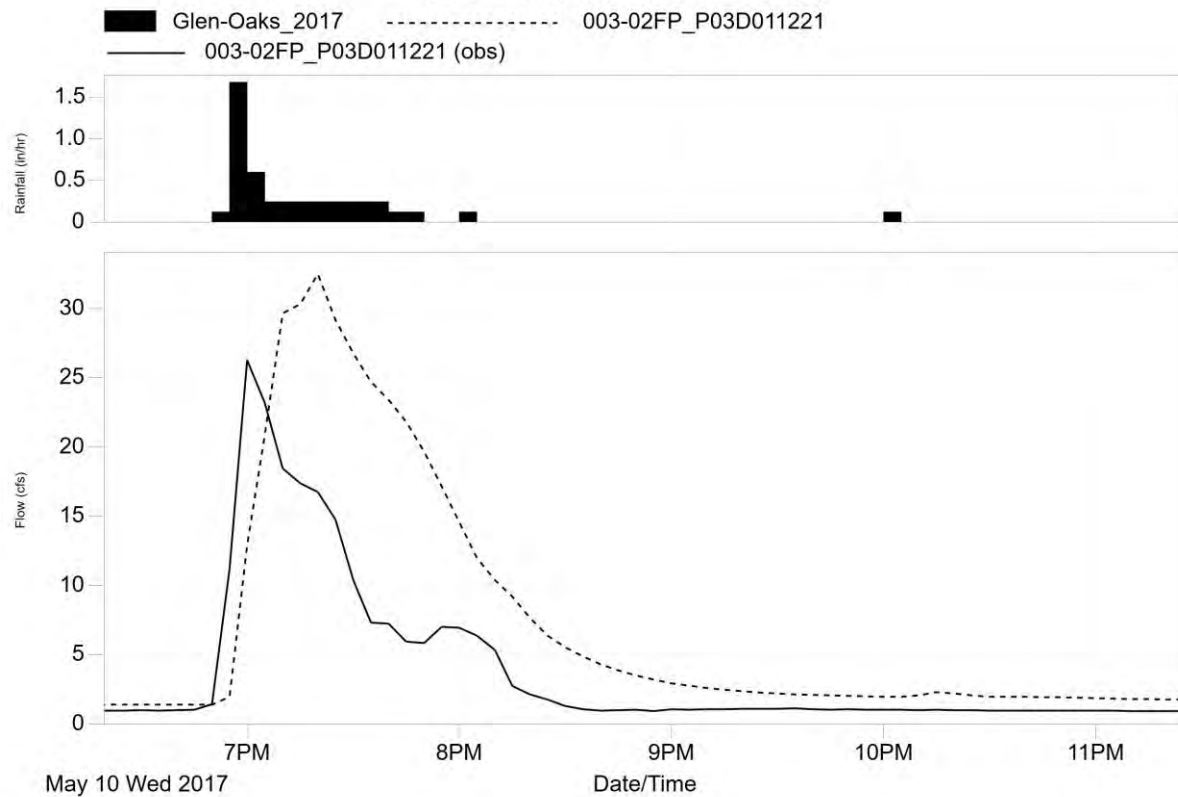
Duration: 2.8 h, Total Rainfall: 0.91 (in)



Spring-Caroline 003-02FP – Calibration Events

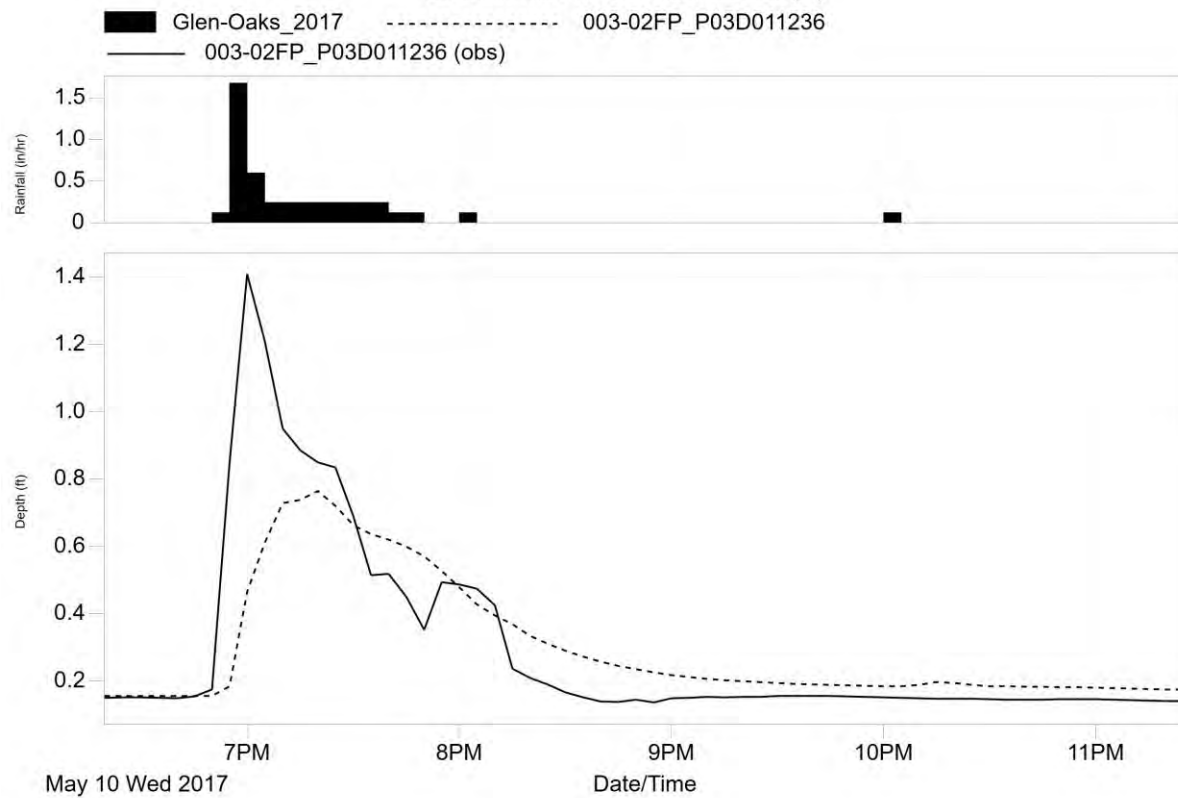
Event of May 10, 2017

Duration: 4.25 h, Total Rainfall: 0.38 (in)

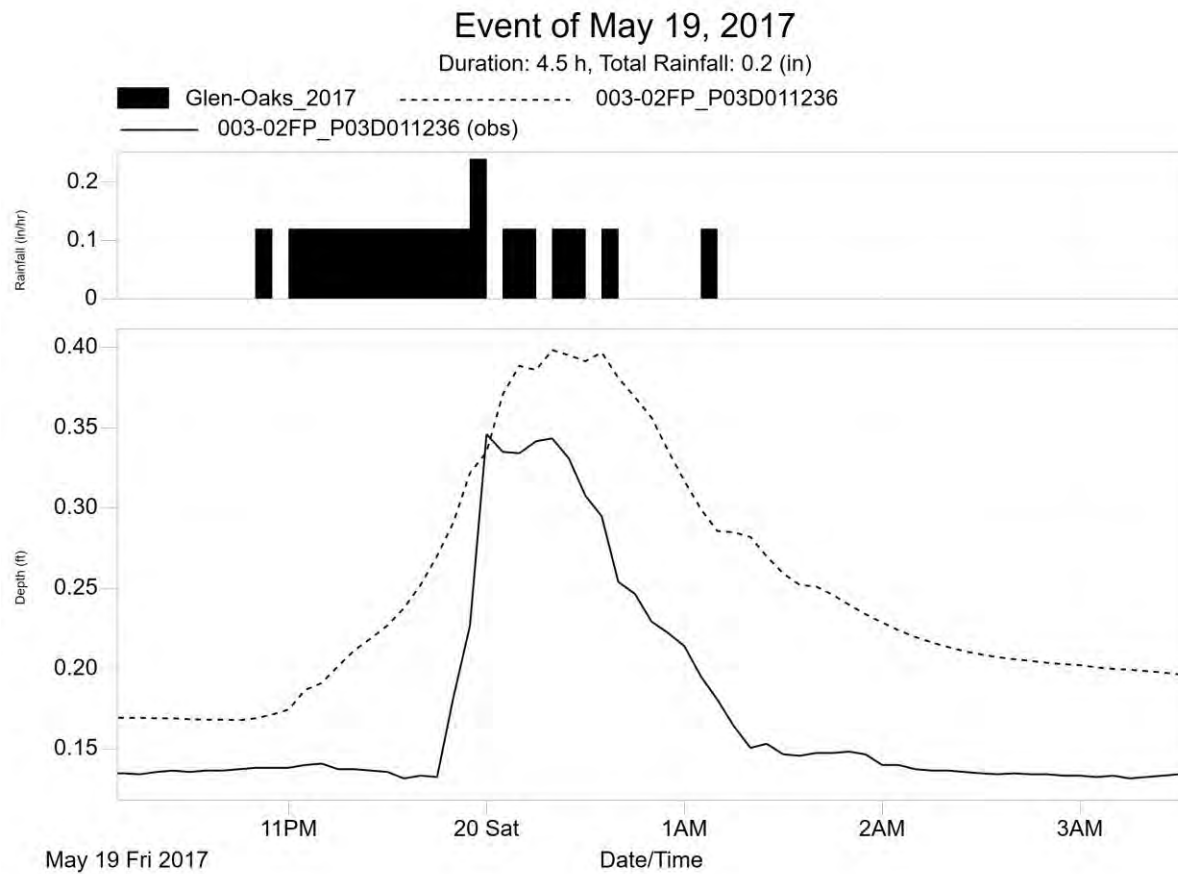
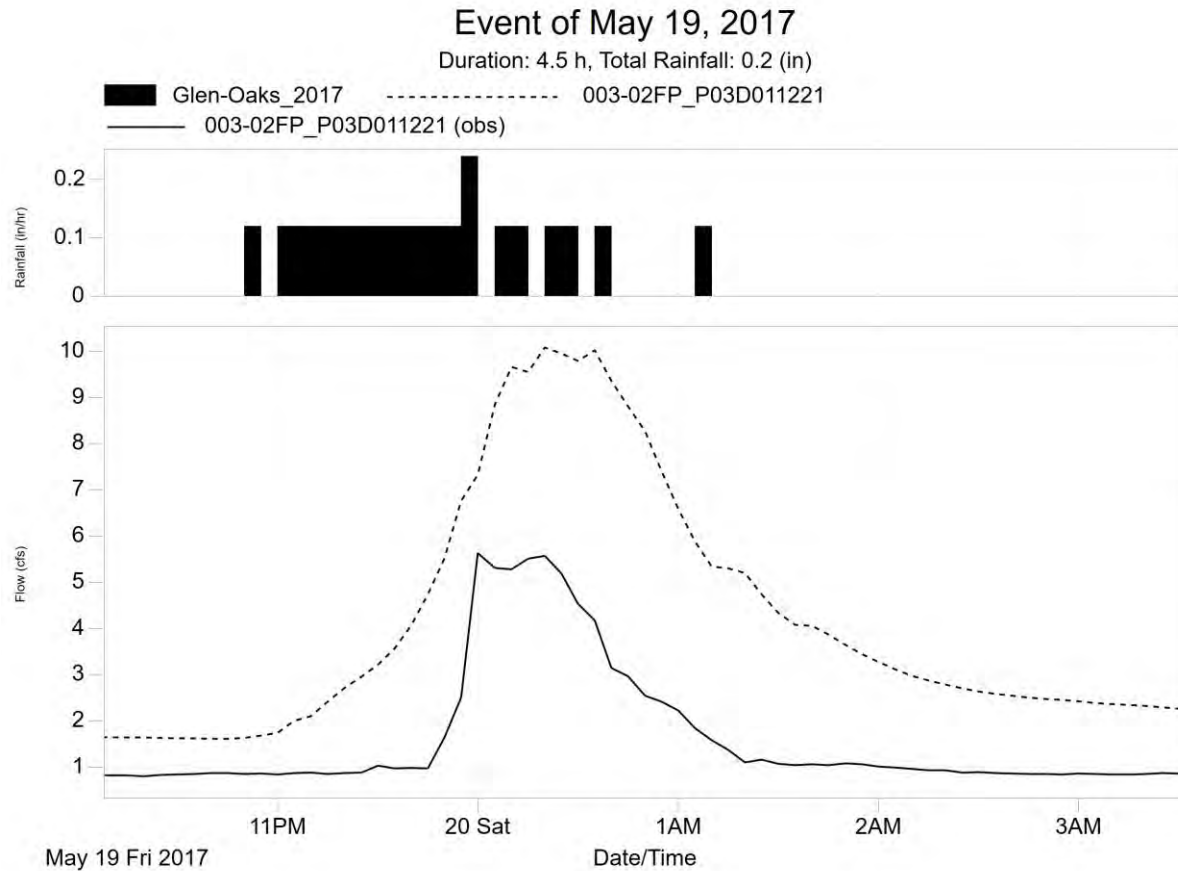


Event of May 10, 2017

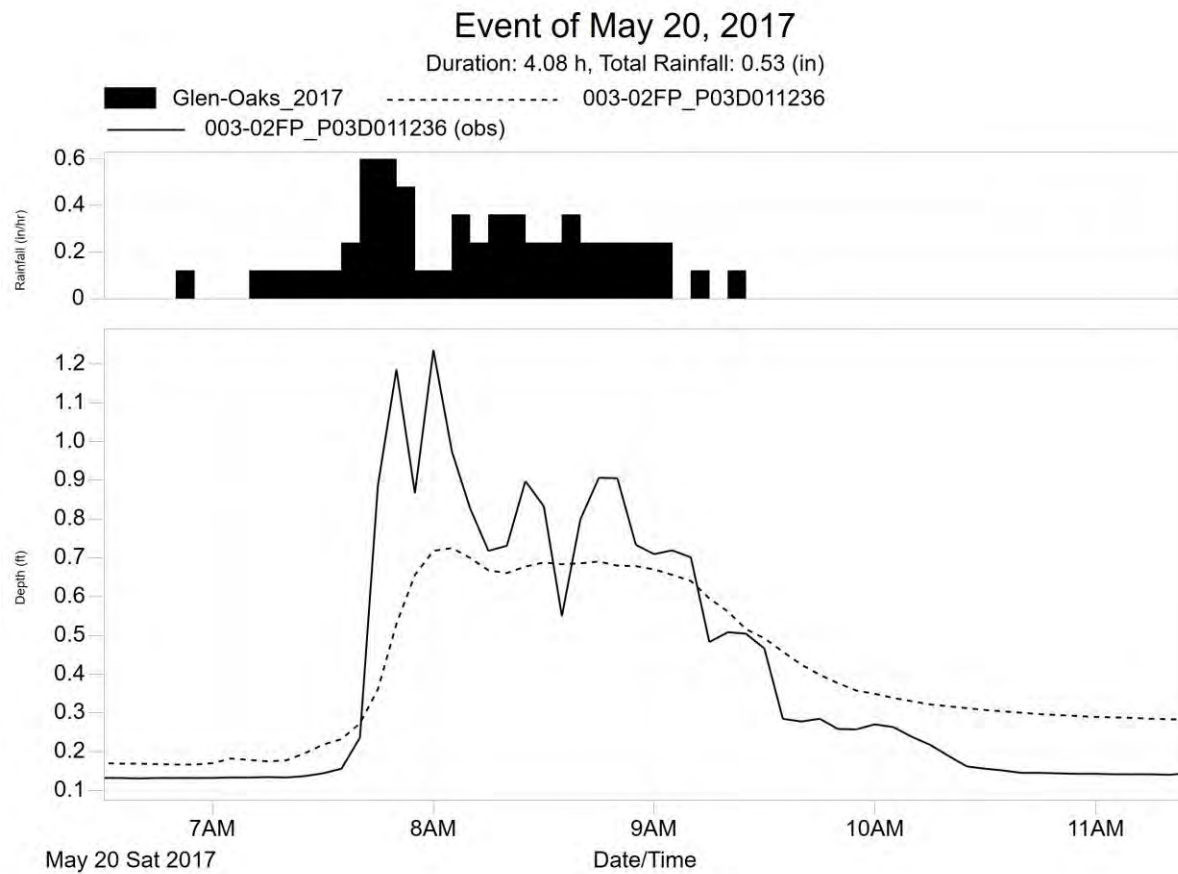
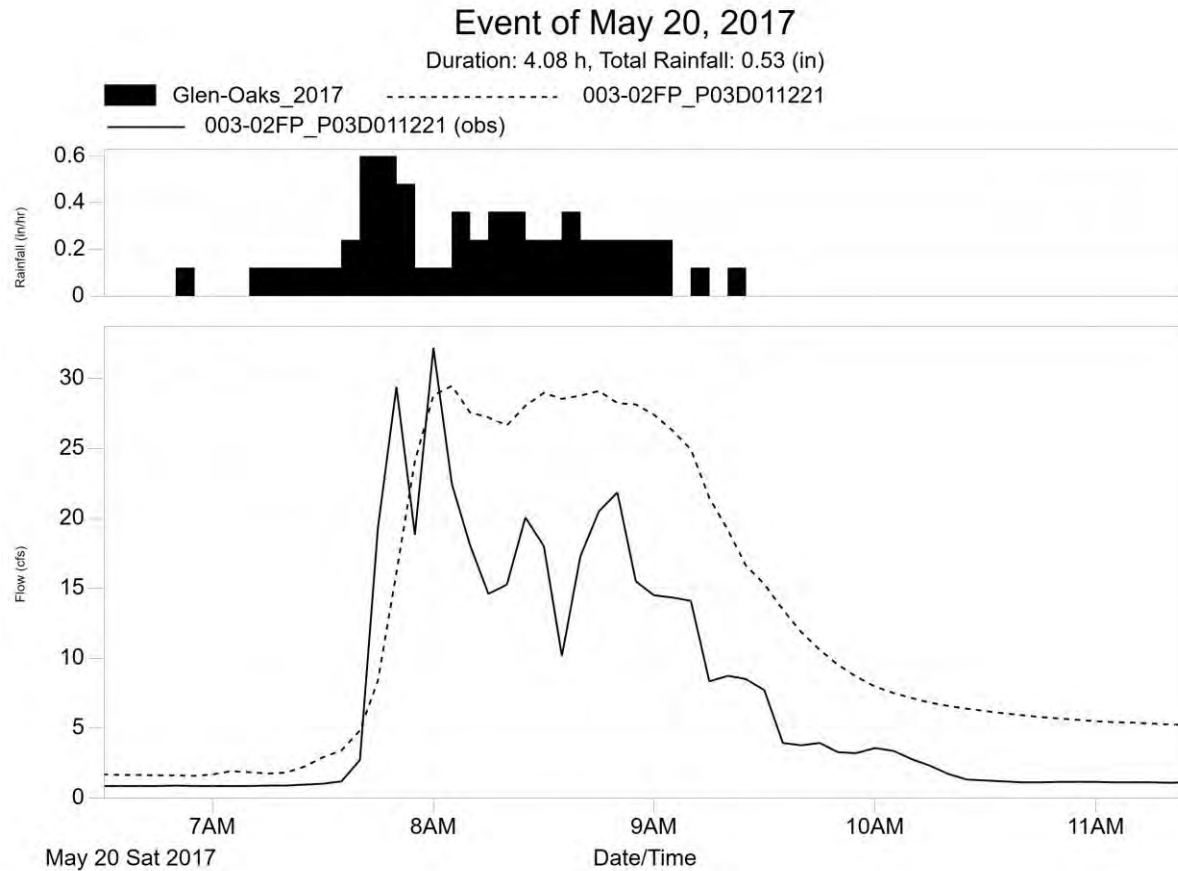
Duration: 4.25 h, Total Rainfall: 0.38 (in)



Spring-Caroline 003-02FP – Calibration Events



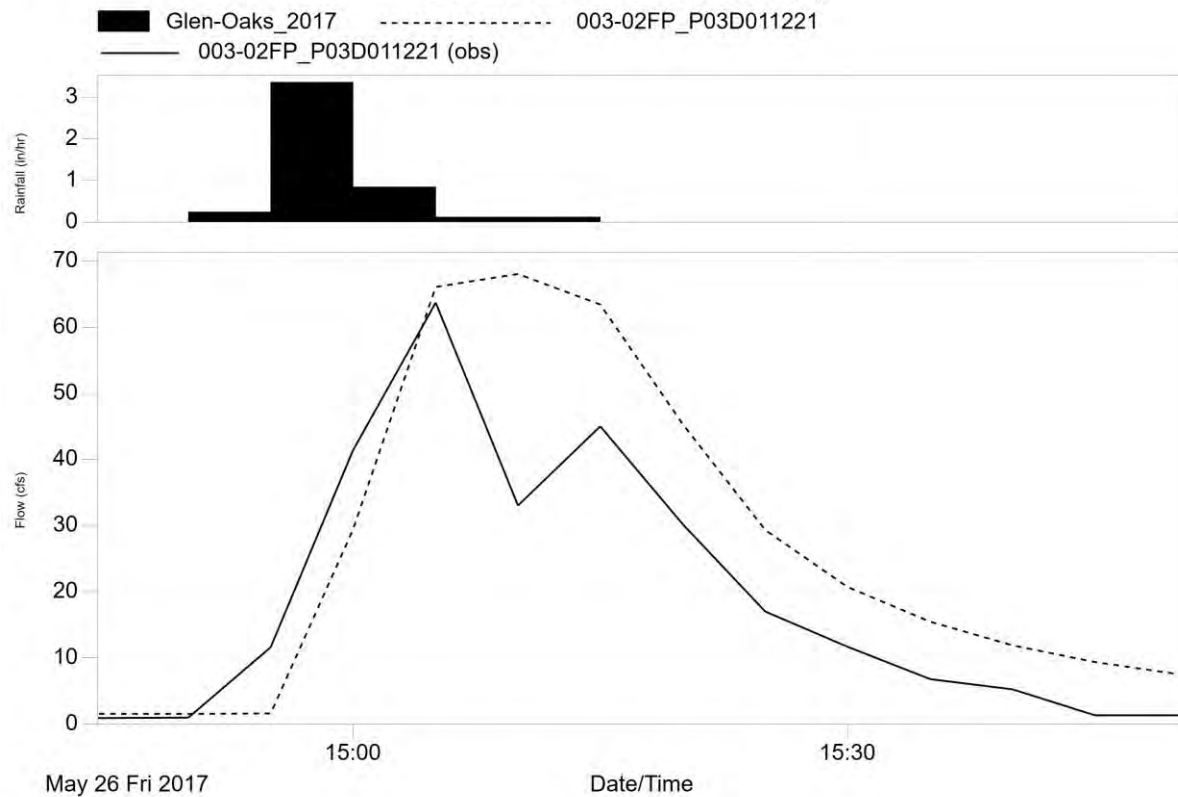
Spring-Caroline 003-02FP – Calibration Events



Spring-Caroline 003-02FP – Calibration Events

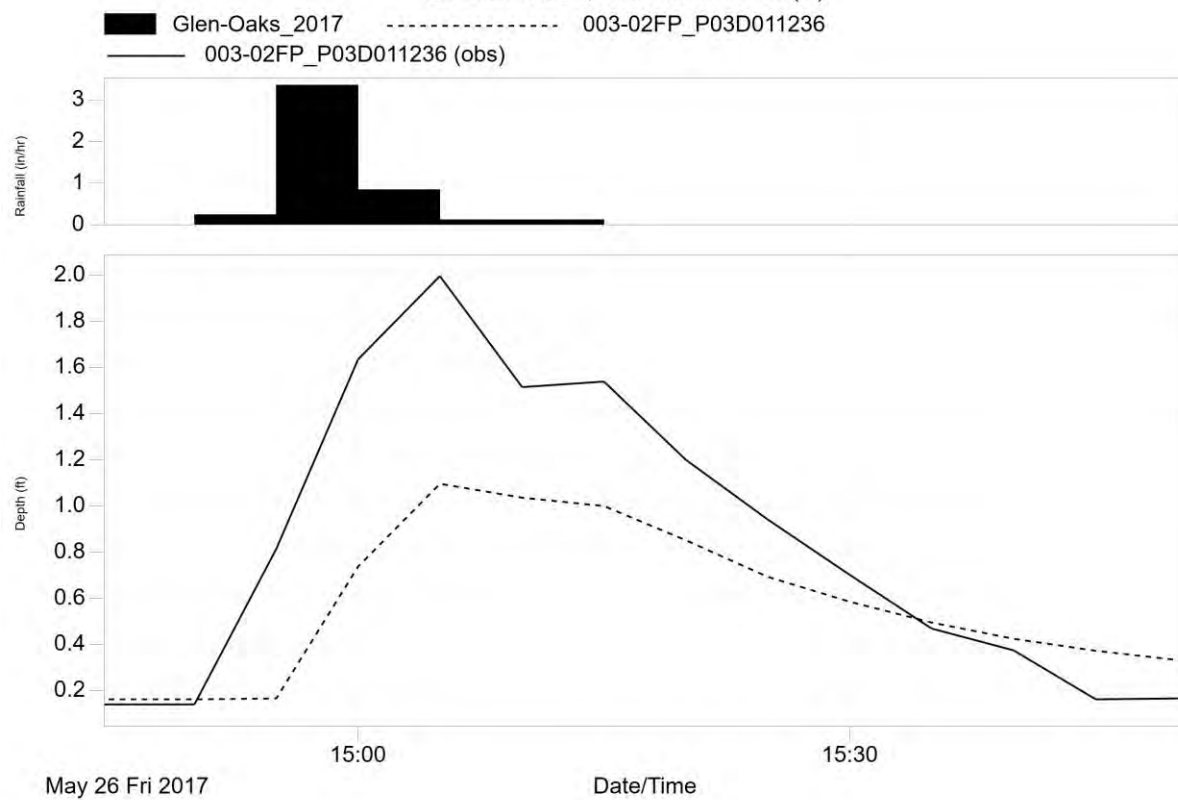
Event of May 26, 2017

Duration: 0.92 h, Total Rainfall: 0.39 (in)

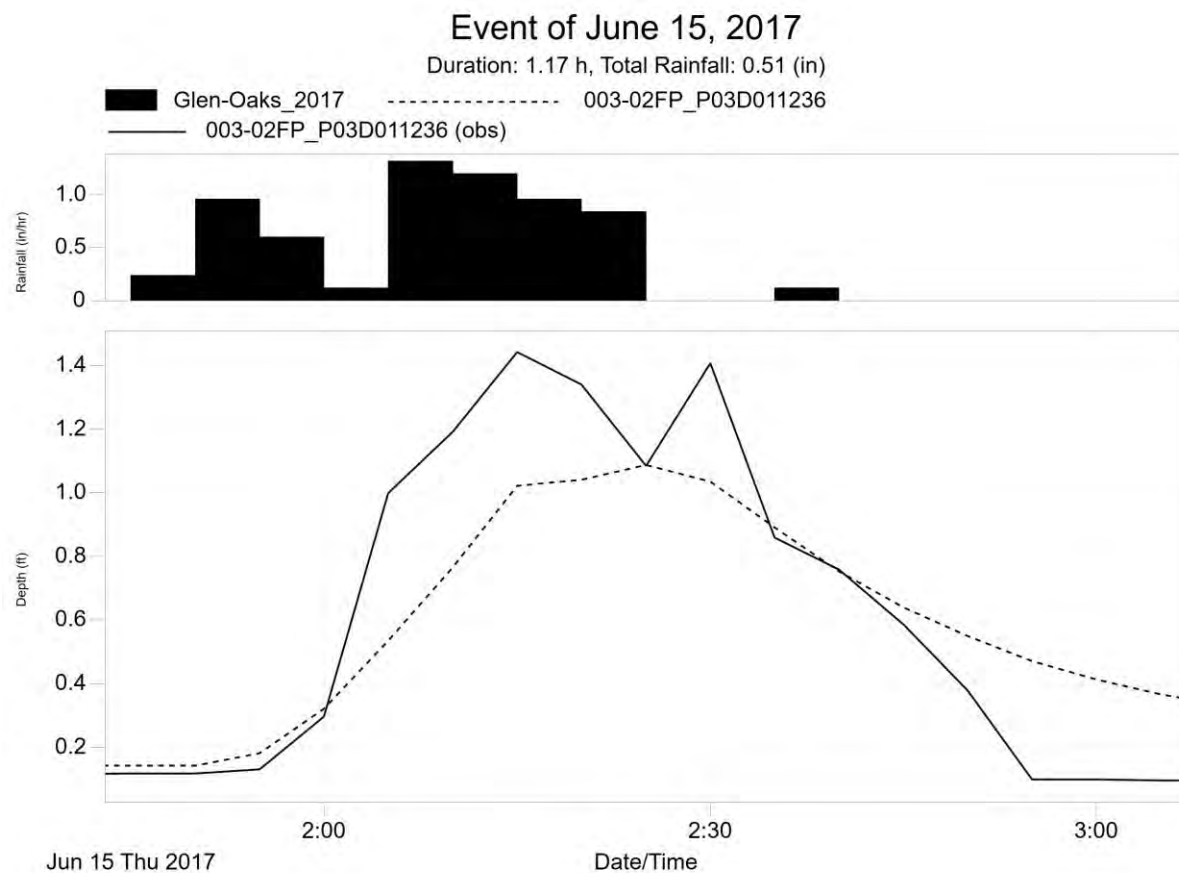
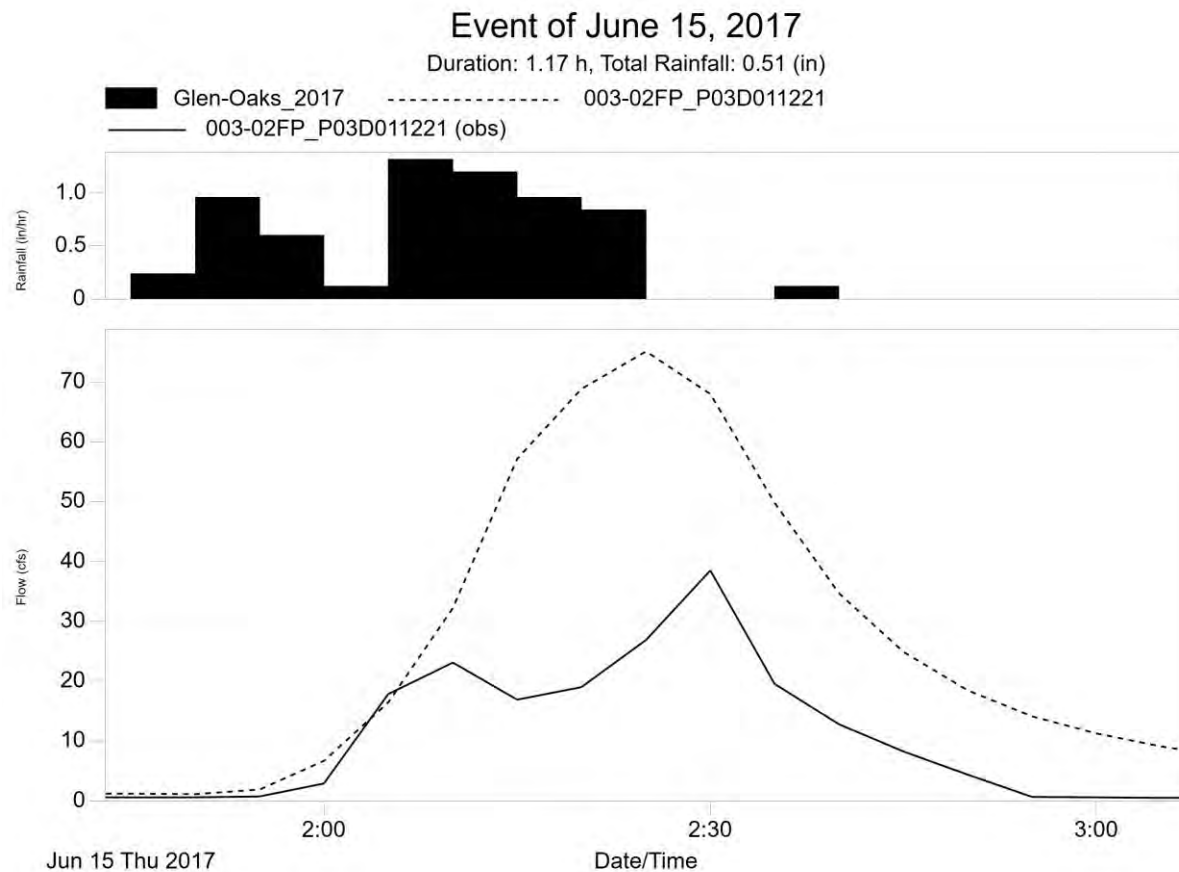


Event of May 26, 2017

Duration: 0.92 h, Total Rainfall: 0.39 (in)



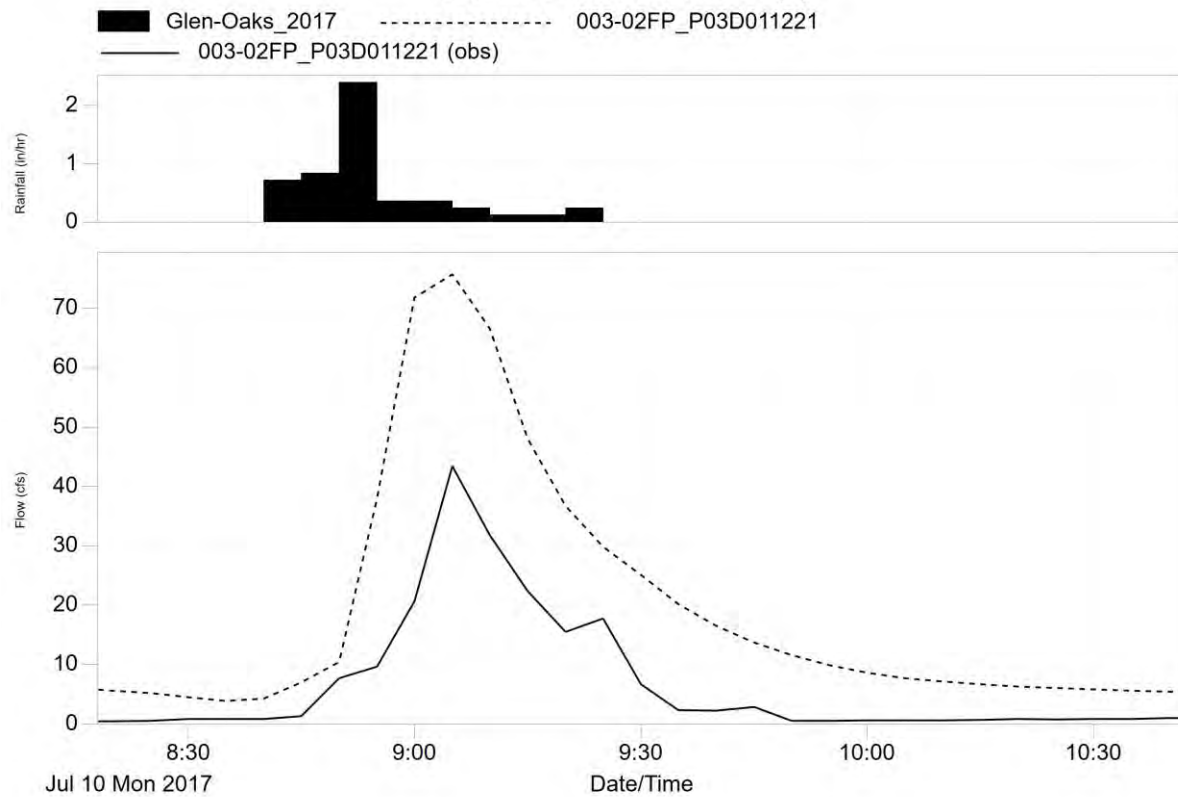
Spring-Caroline 003-02FP – Calibration Events



Spring-Caroline 003-02FP – Calibration Events

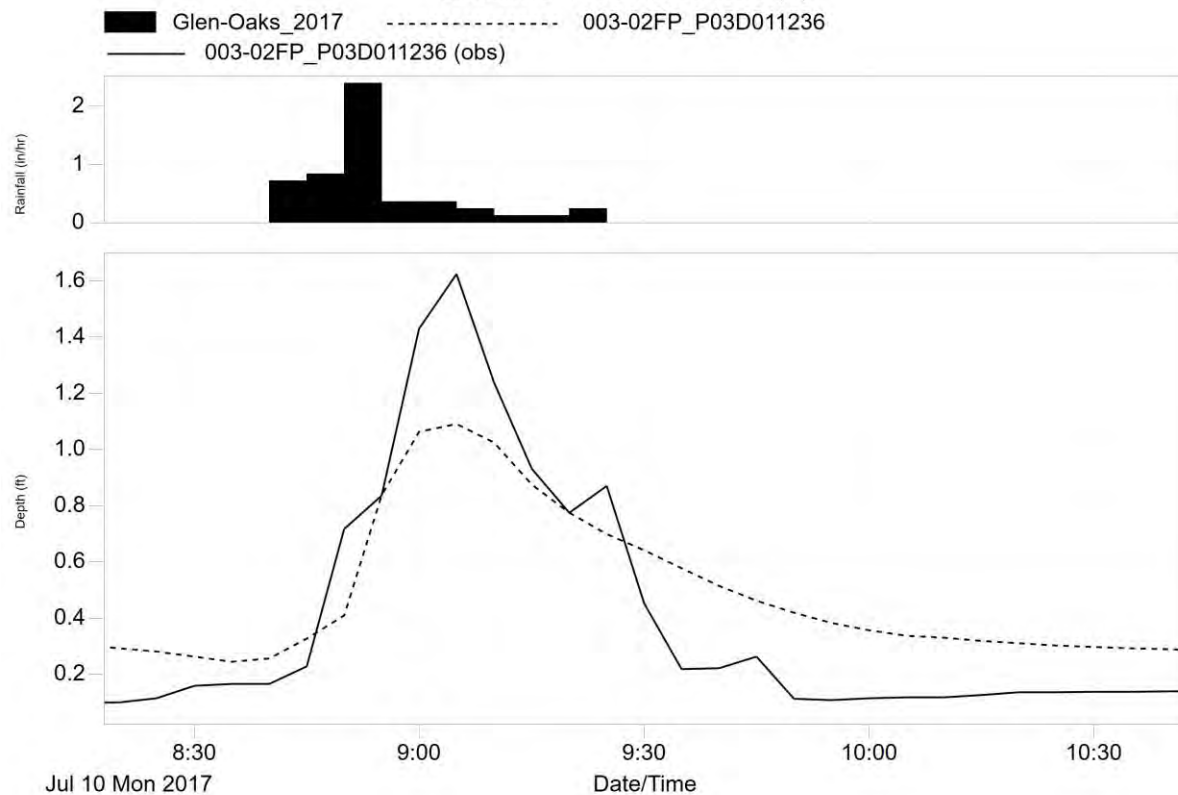
Event of July 10, 2017

Duration: 2 h, Total Rainfall: 0.45 (in)

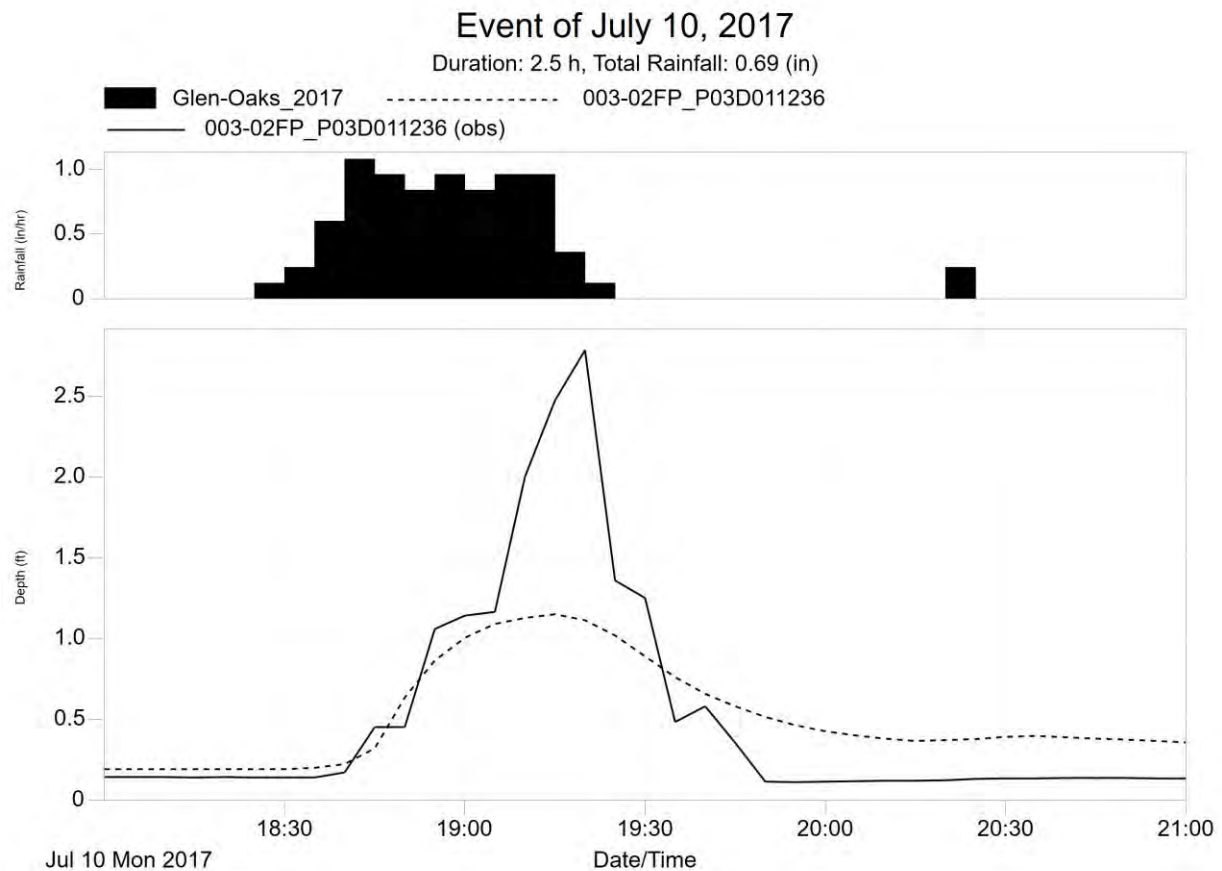
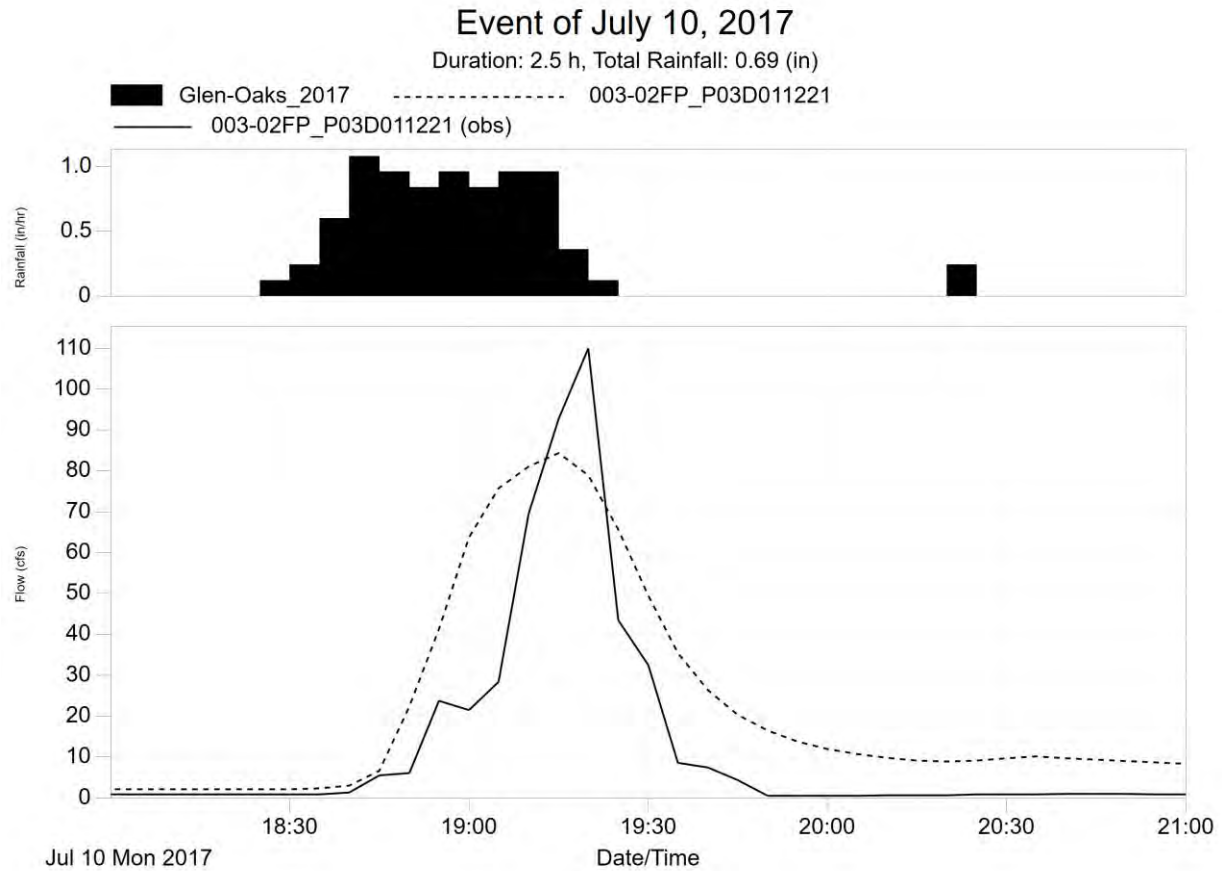


Event of July 10, 2017

Duration: 2 h, Total Rainfall: 0.45 (in)



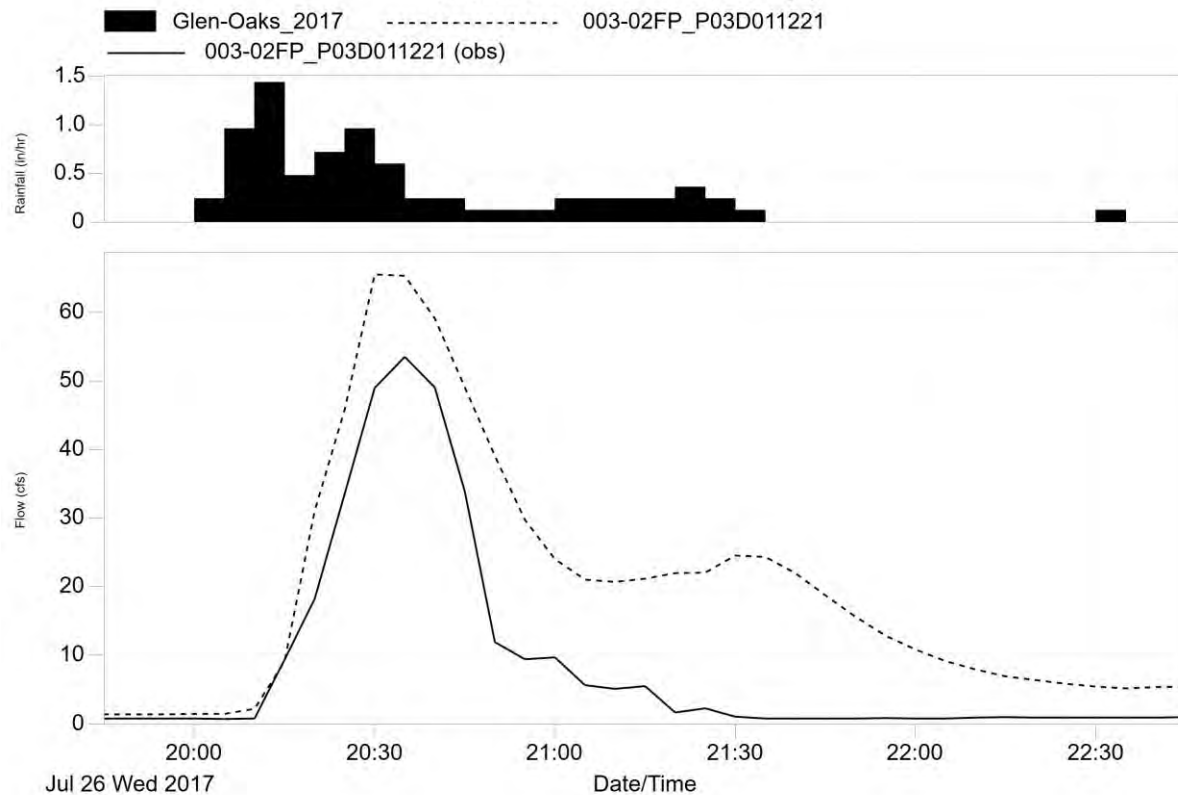
Spring-Caroline 003-02FP – Calibration Events



Spring-Caroline 003-02FP – Calibration Events

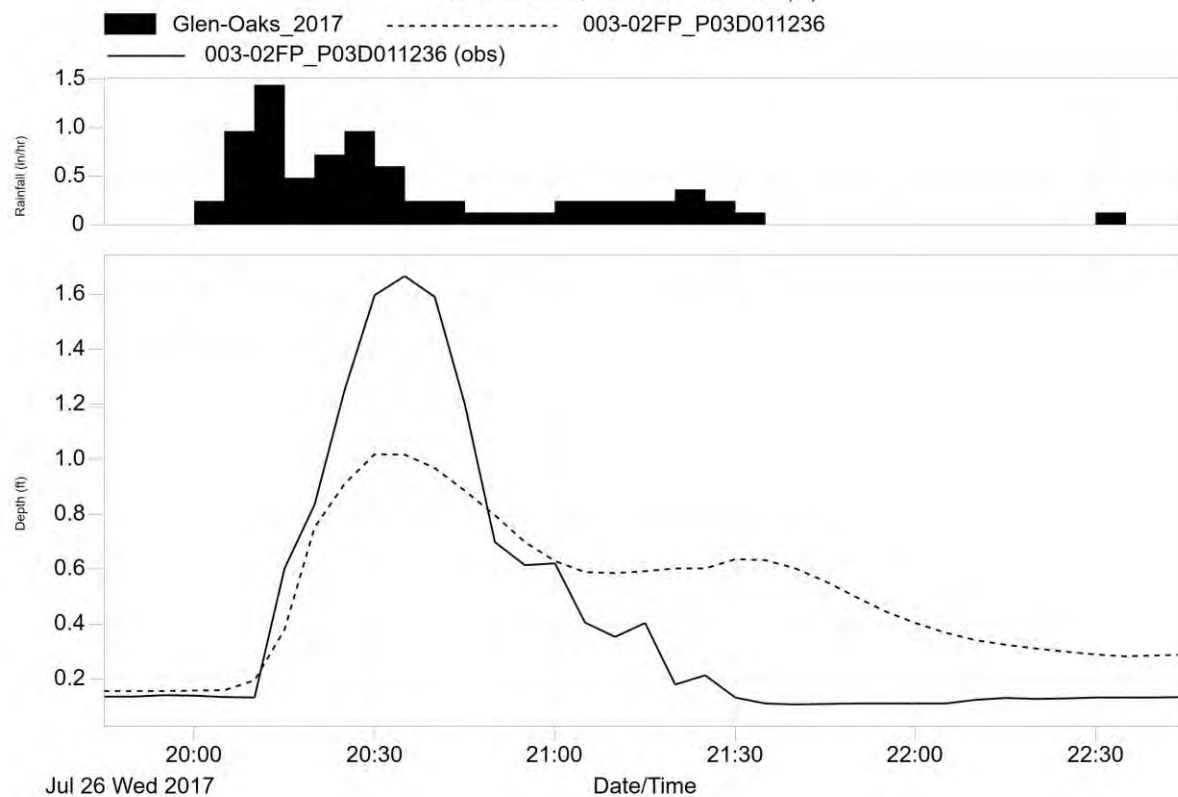
Event of July 26, 2017

Duration: 2.5 h, Total Rainfall: 0.66 (in)

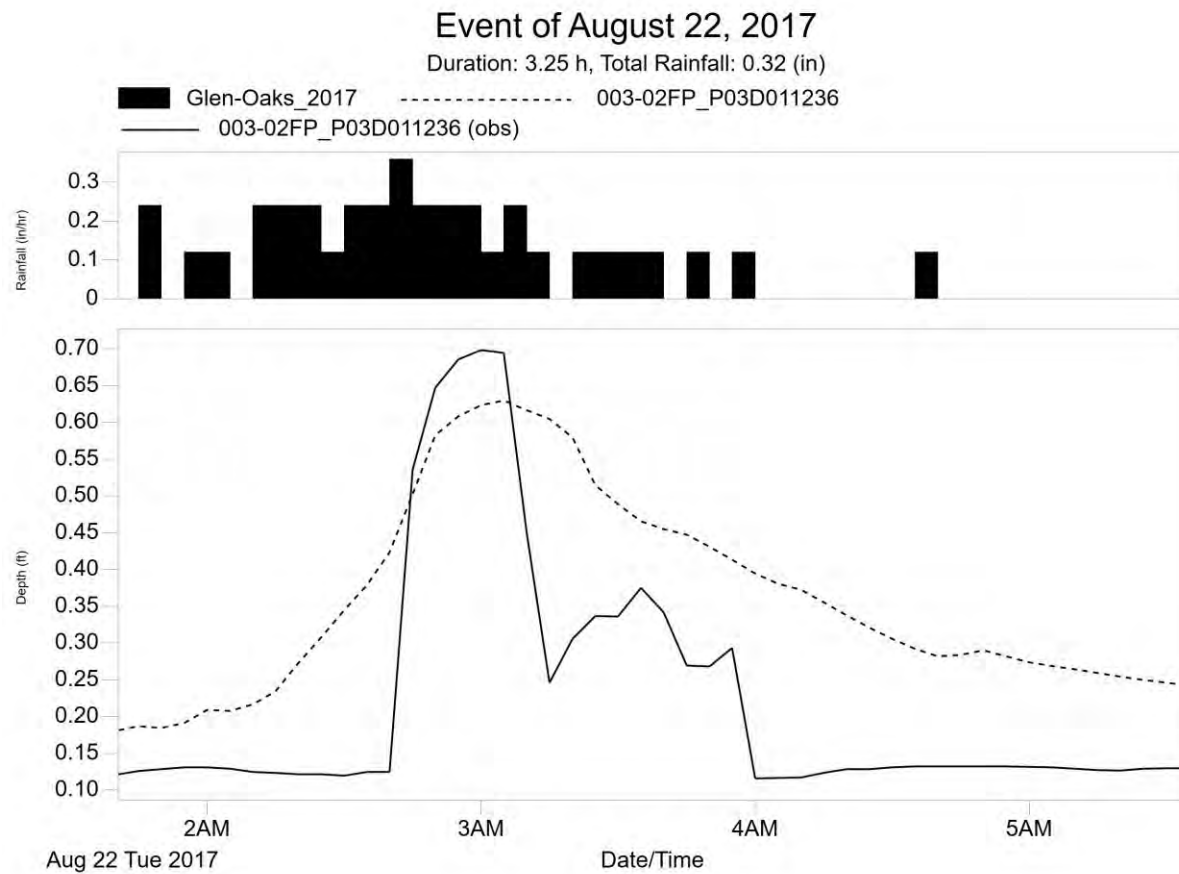
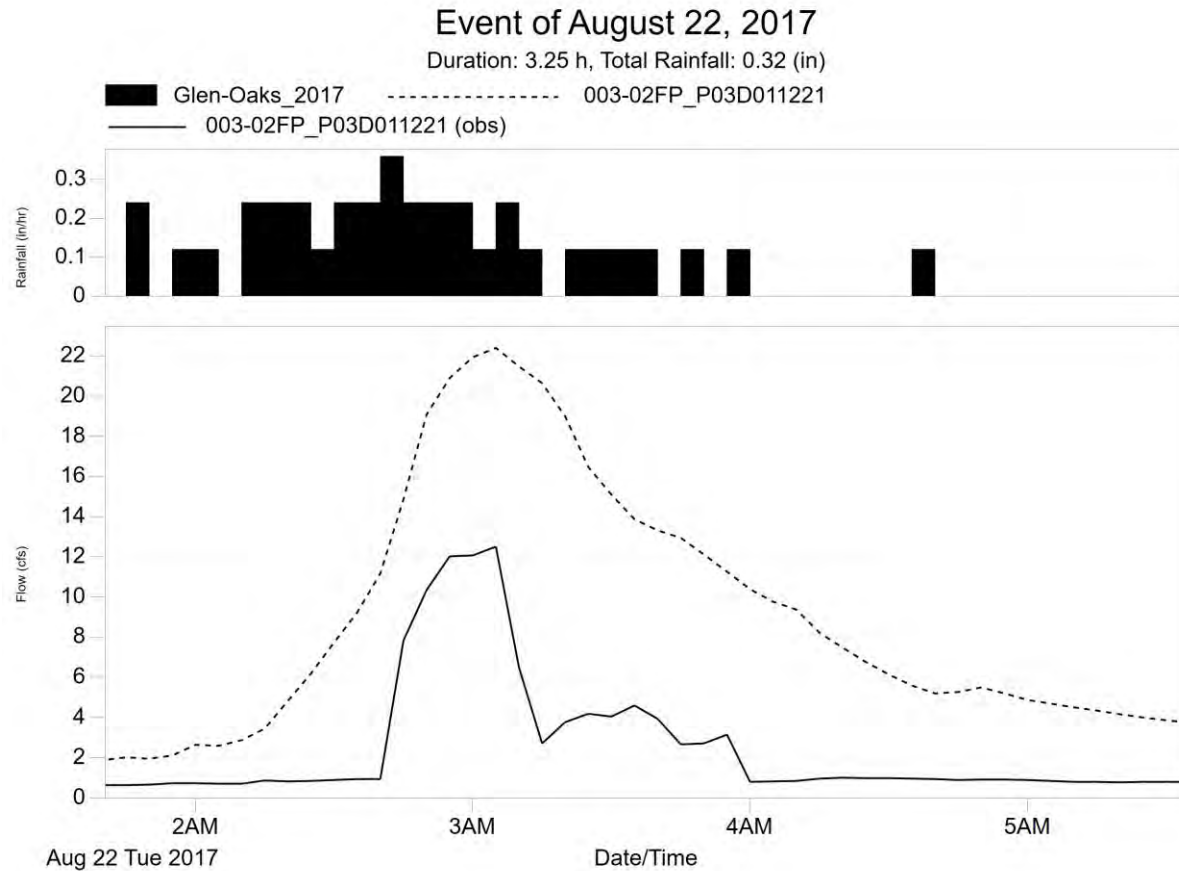


Event of July 26, 2017

Duration: 2.5 h, Total Rainfall: 0.66 (in)



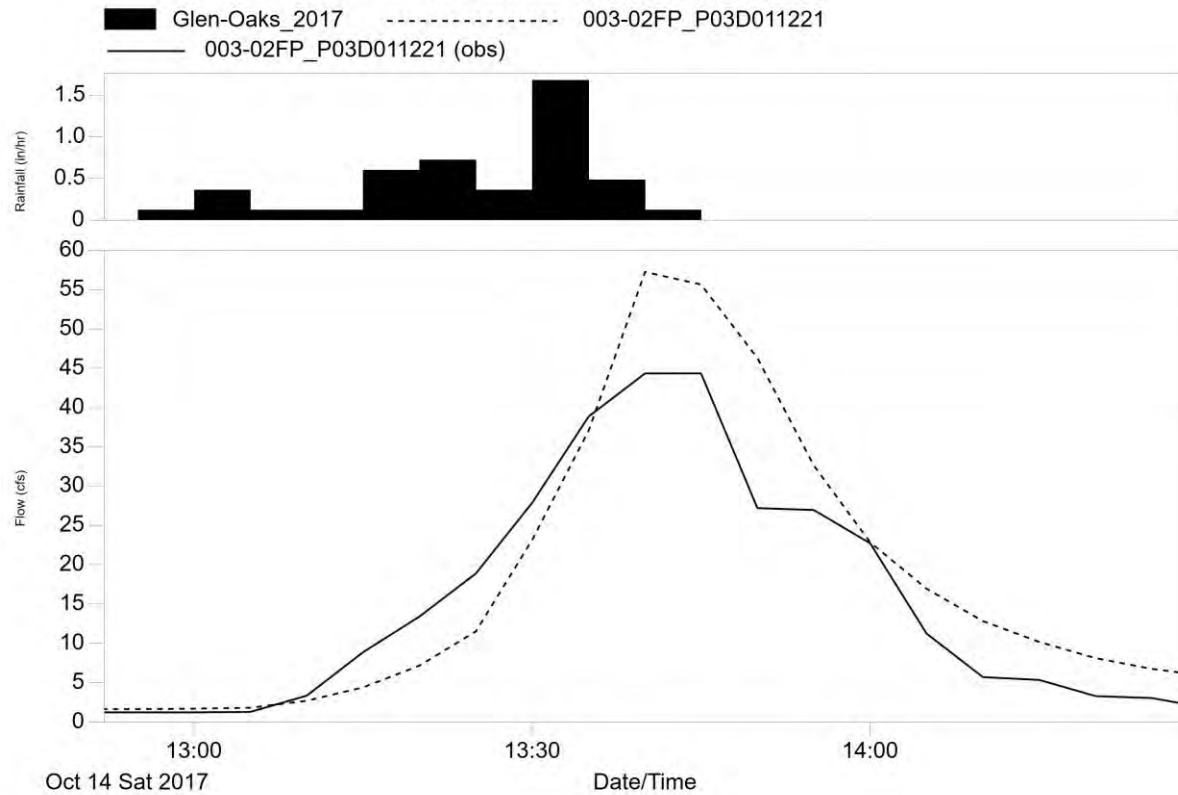
Spring-Caroline 003-02FP – Calibration Events



Spring-Caroline 003-02FP – Calibration Events

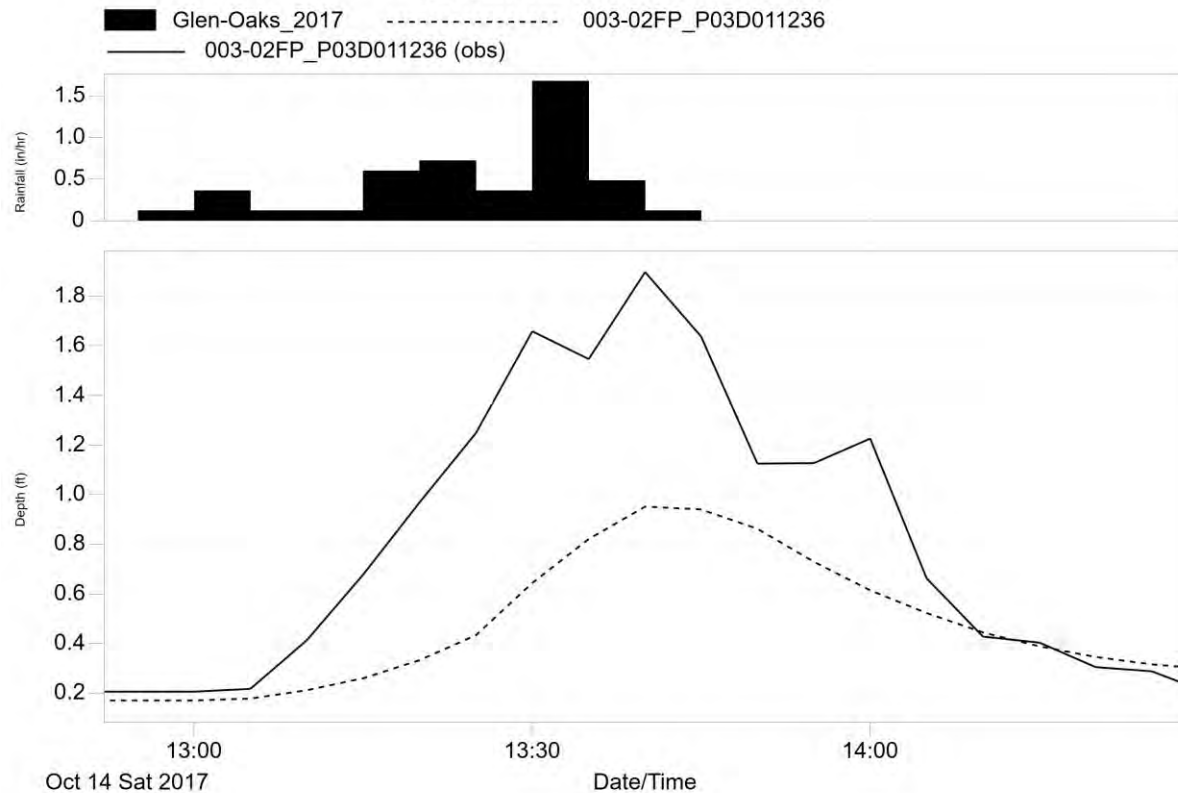
Event of October 14, 2017

Duration: 1.33 h, Total Rainfall: 0.38 (in)



Event of October 14, 2017

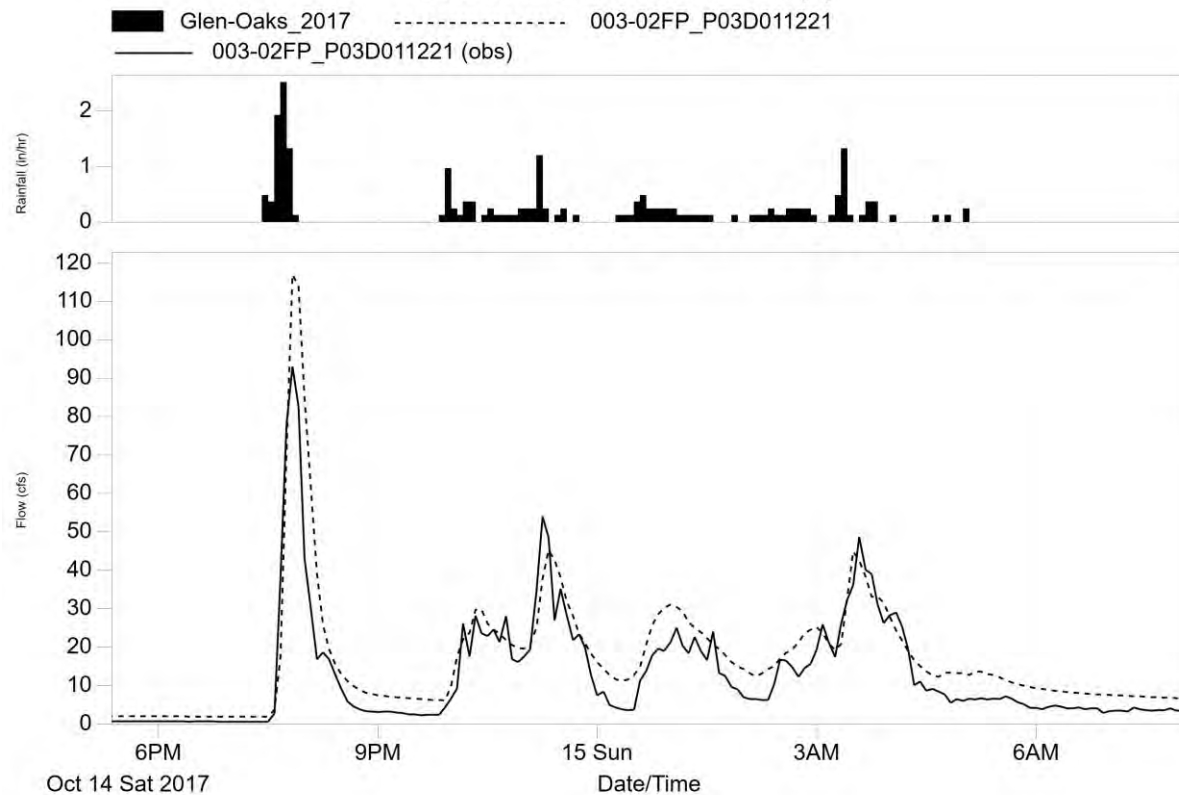
Duration: 1.33 h, Total Rainfall: 0.38 (in)



Spring-Caroline 003-02FP – Calibration Events

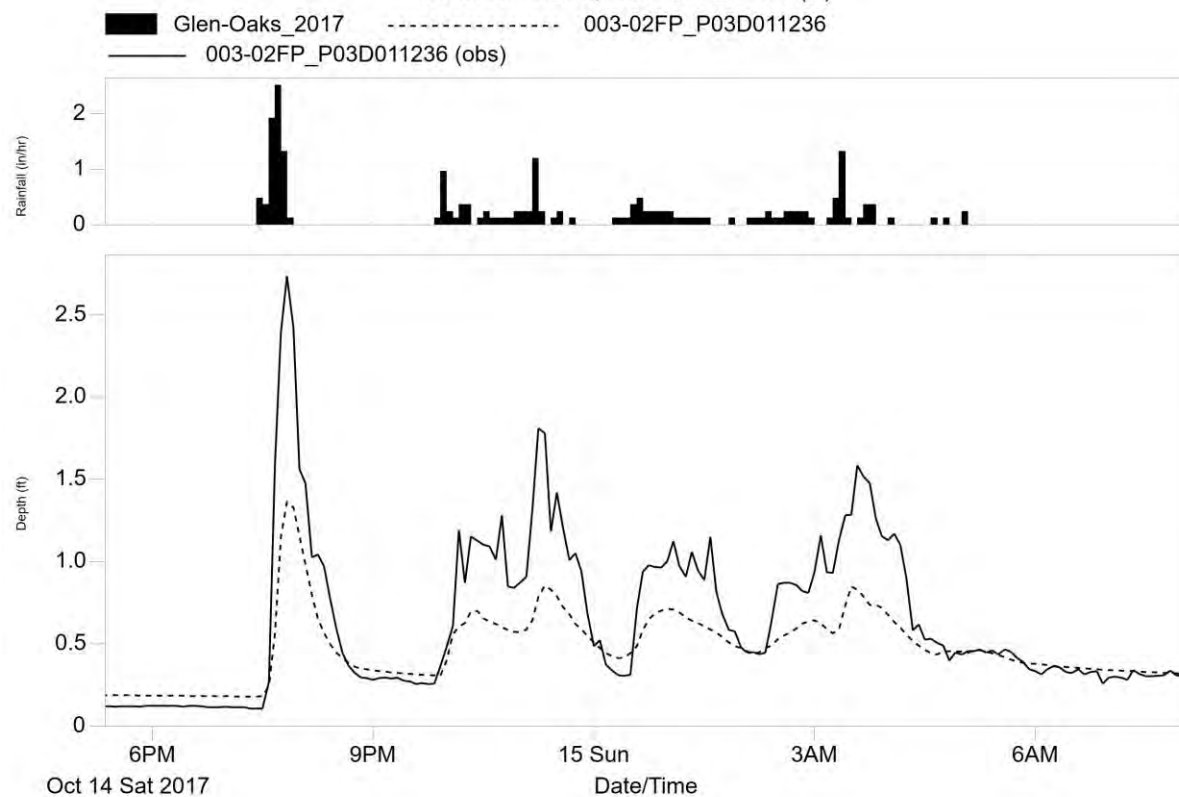
Event of October 14, 2017

Duration: 12.25 h, Total Rainfall: 1.75 (in)

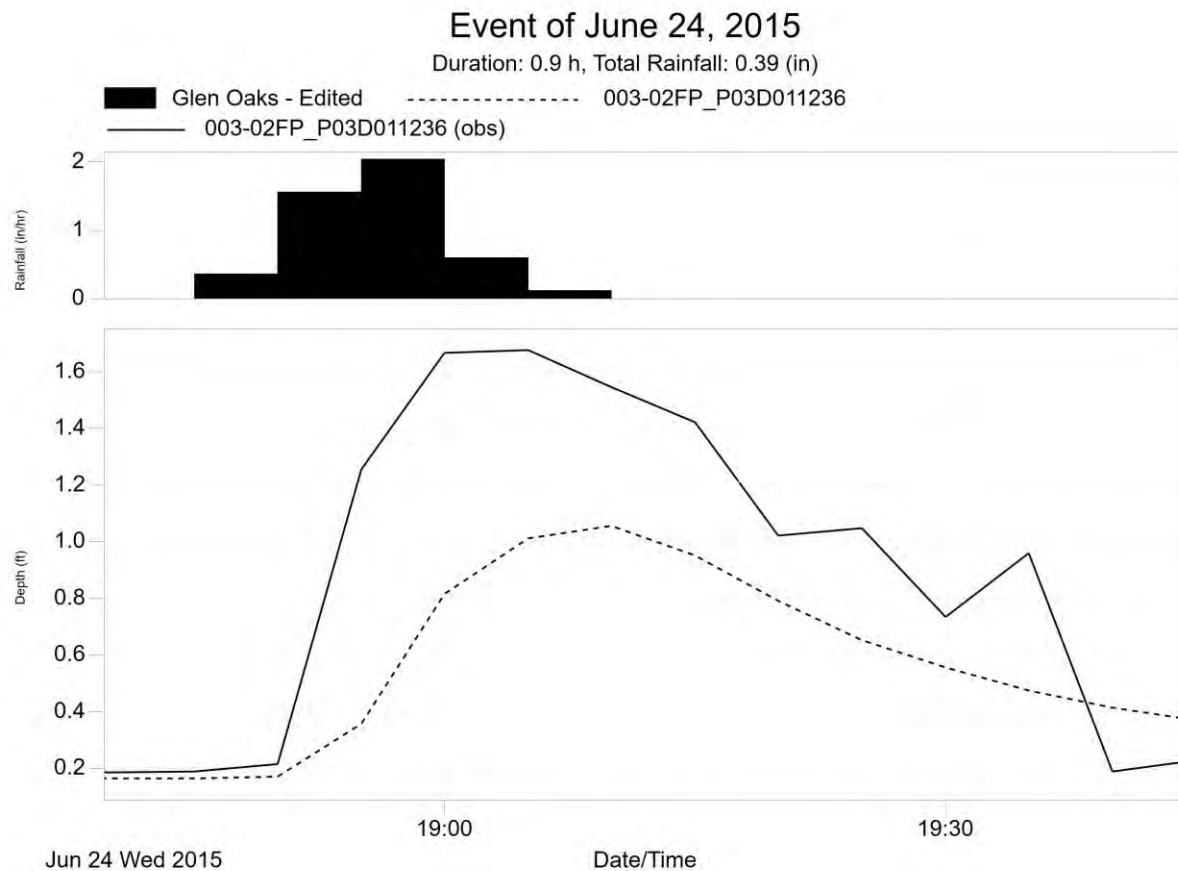
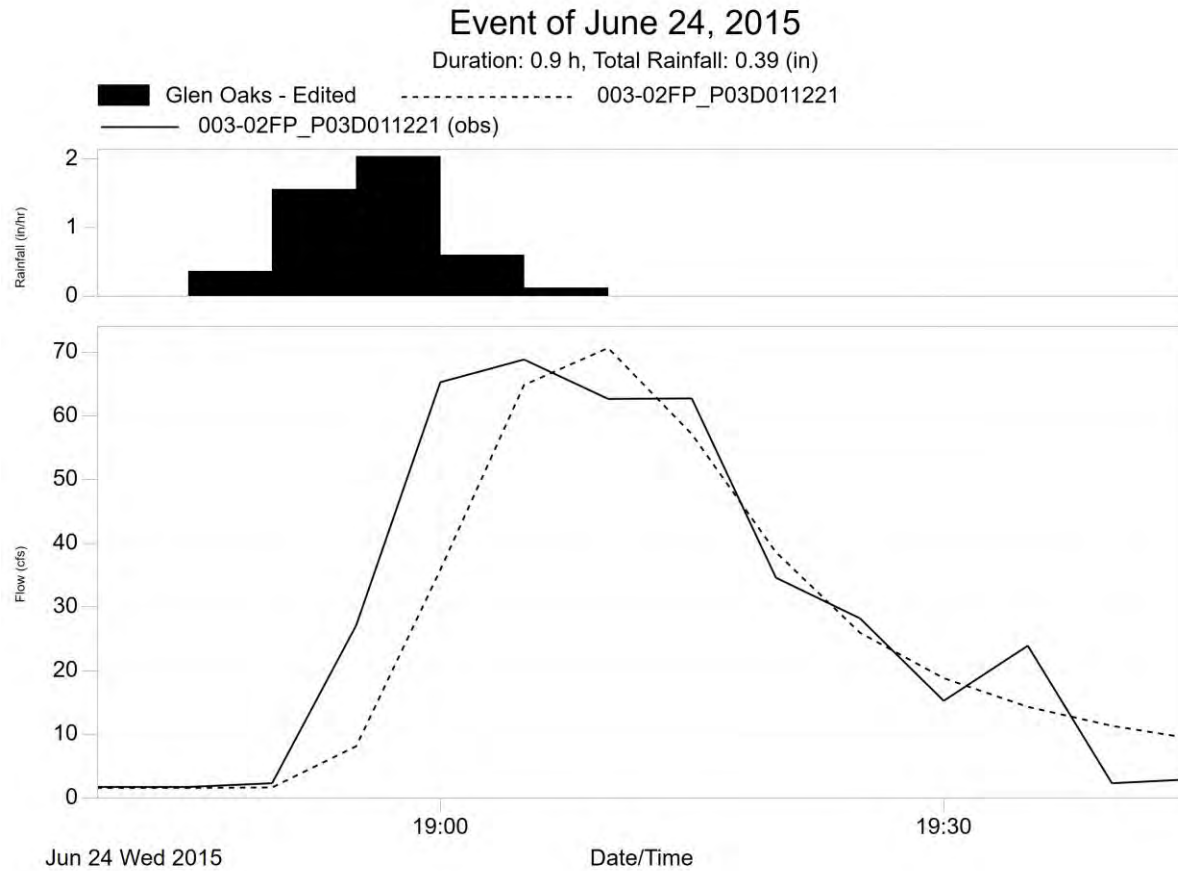


Event of October 14, 2017

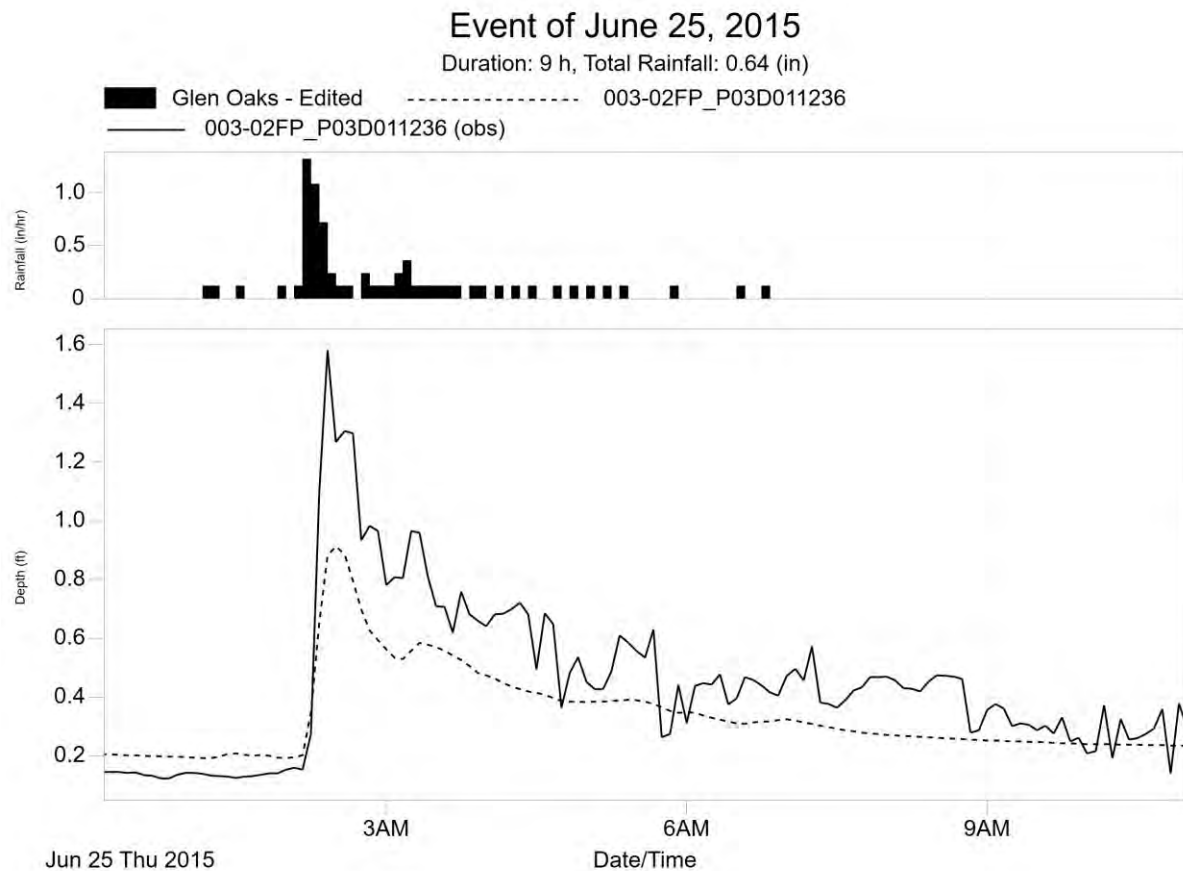
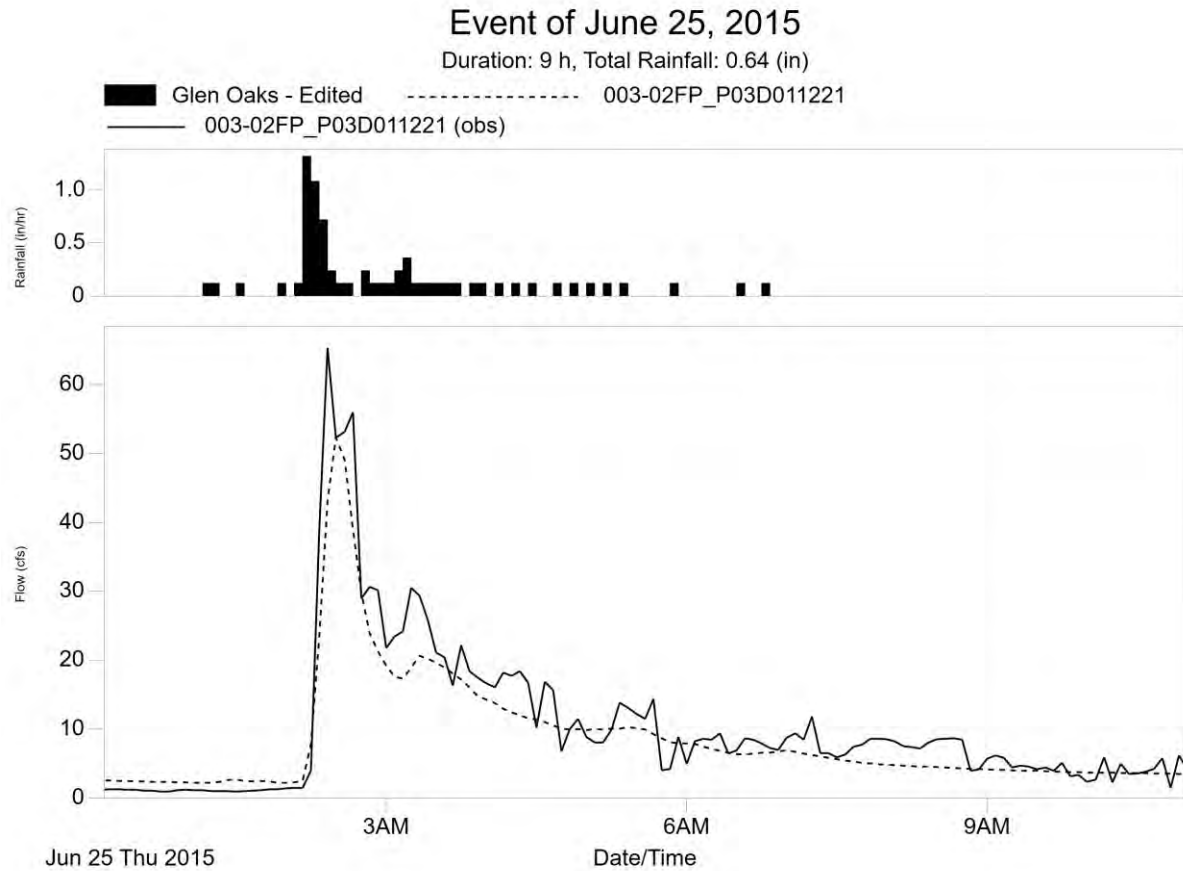
Duration: 12.25 h, Total Rainfall: 1.75 (in)



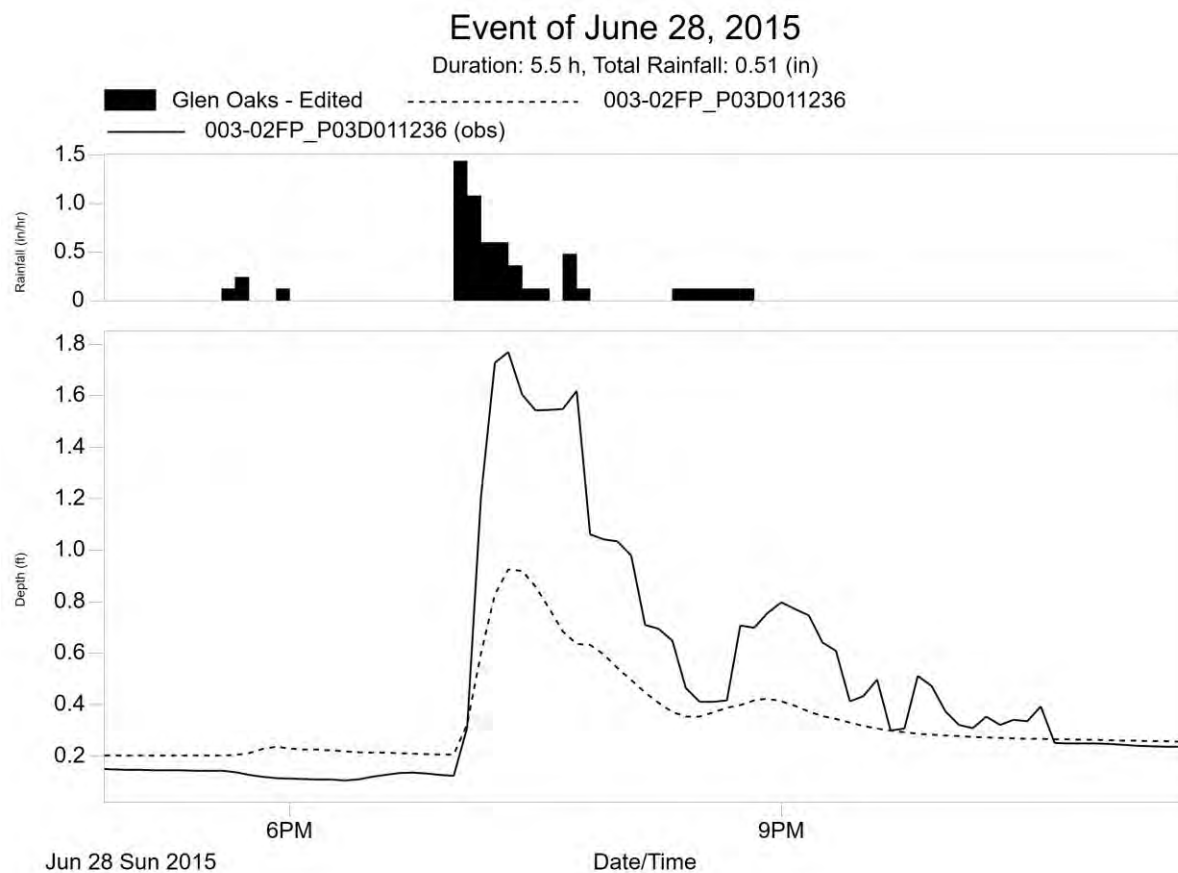
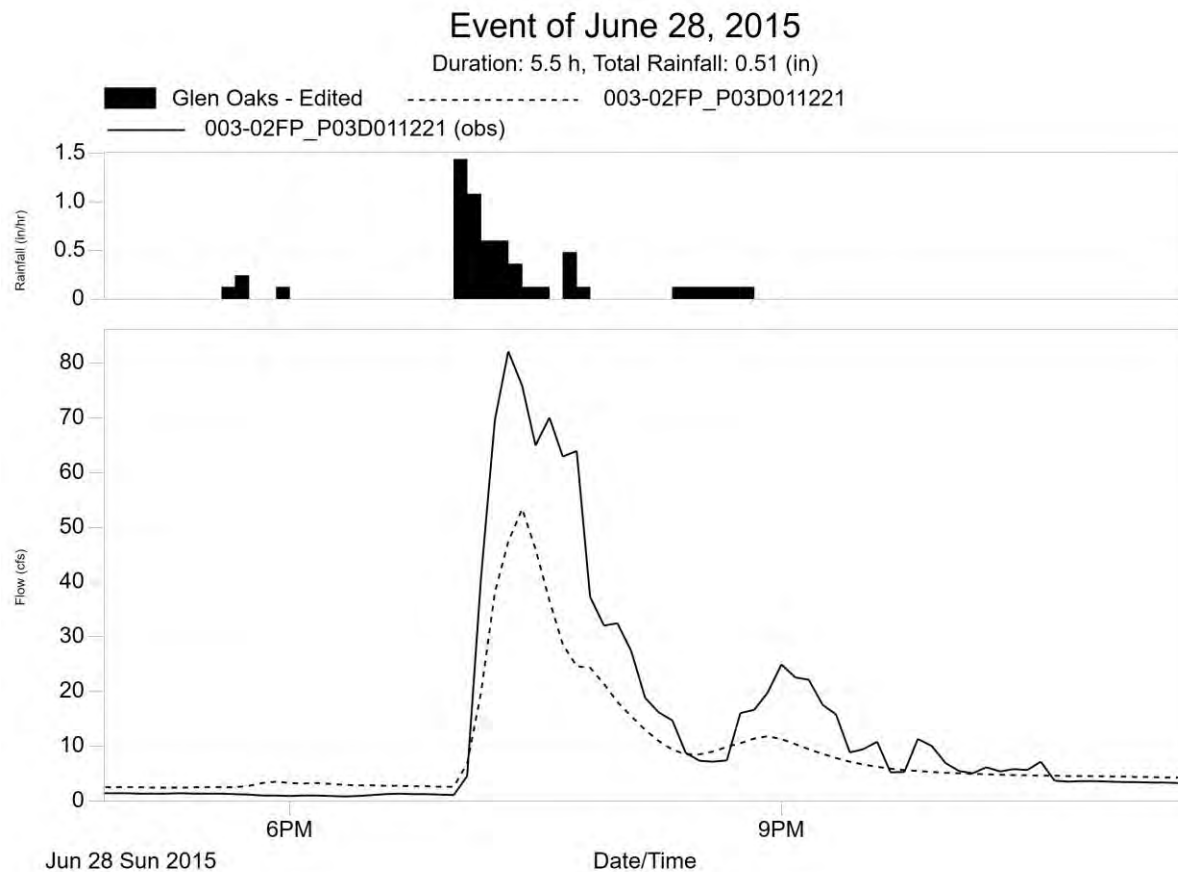
Spring-Caroline 003-02FP – Verification Events



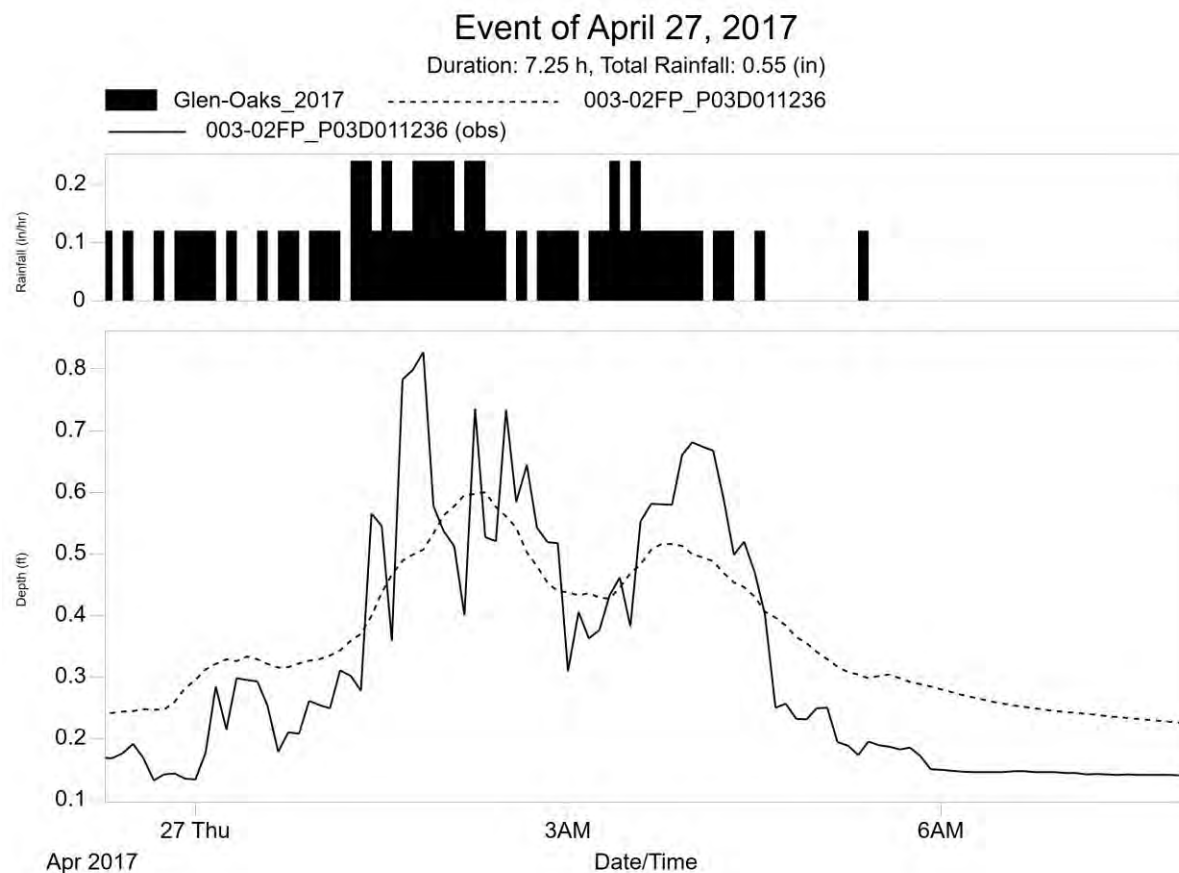
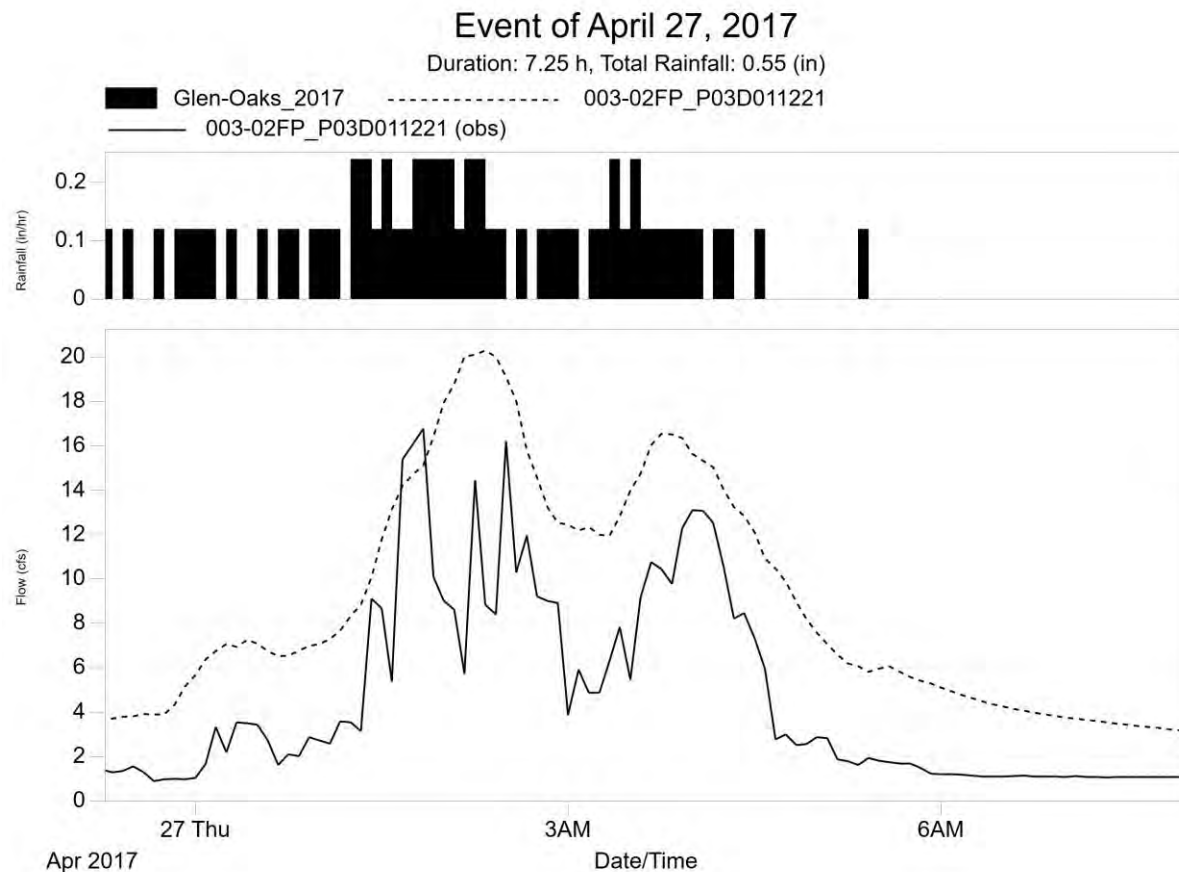
Spring-Caroline 003-02FP – Verification Events



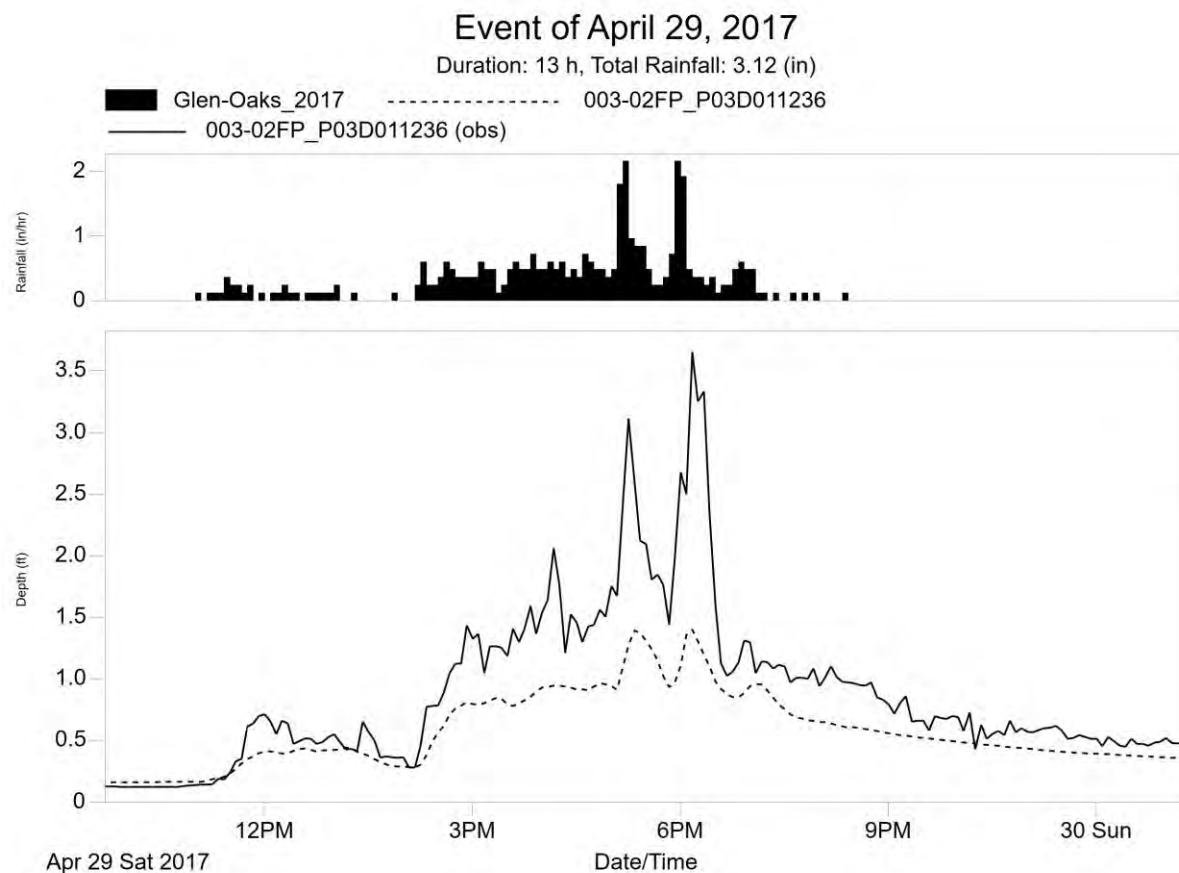
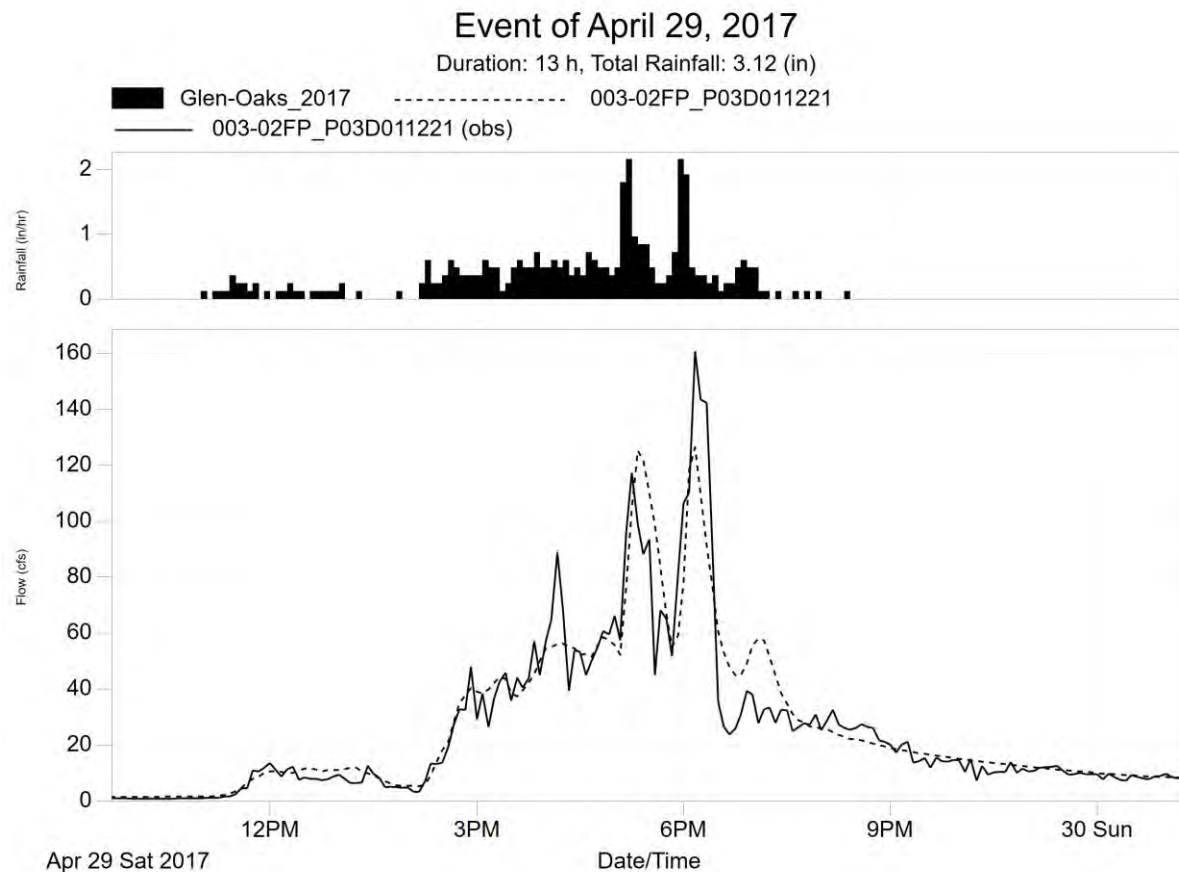
Spring-Caroline 003-02FP – Verification Events



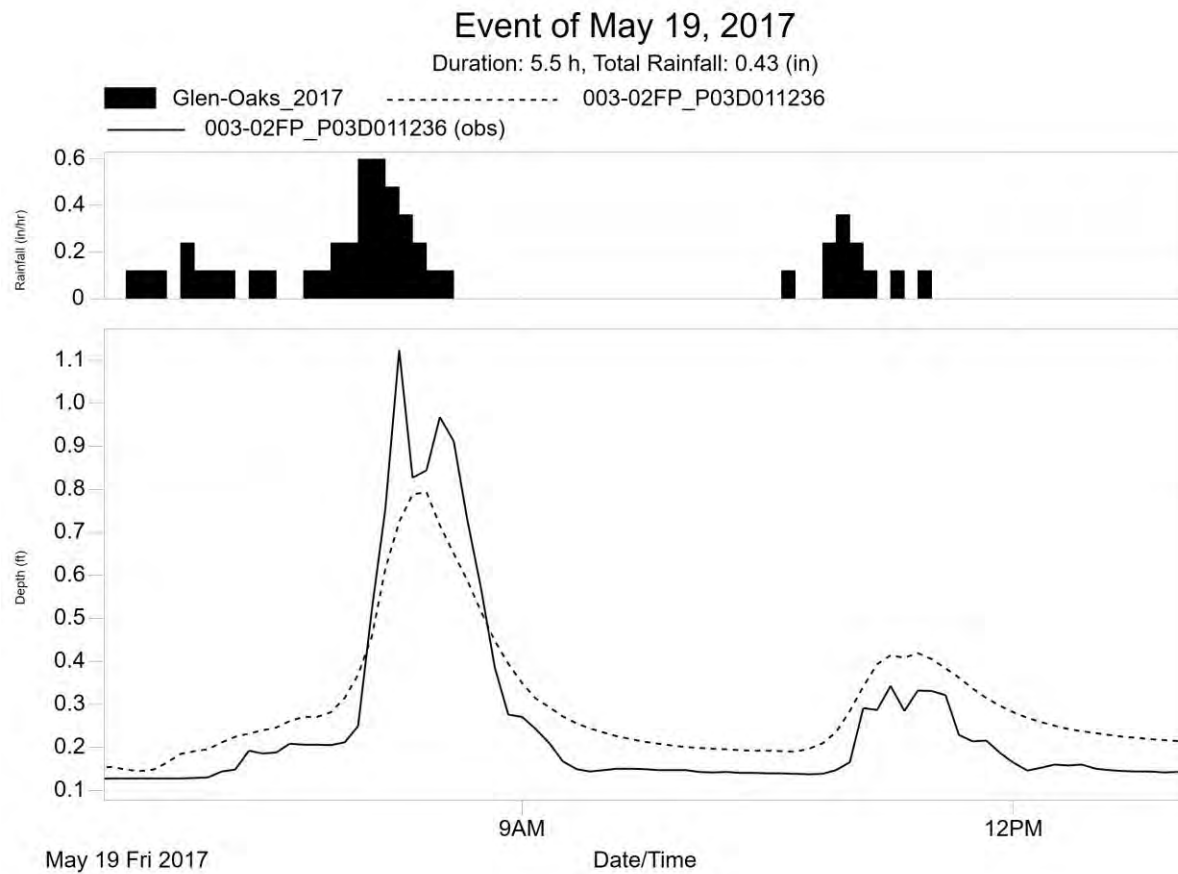
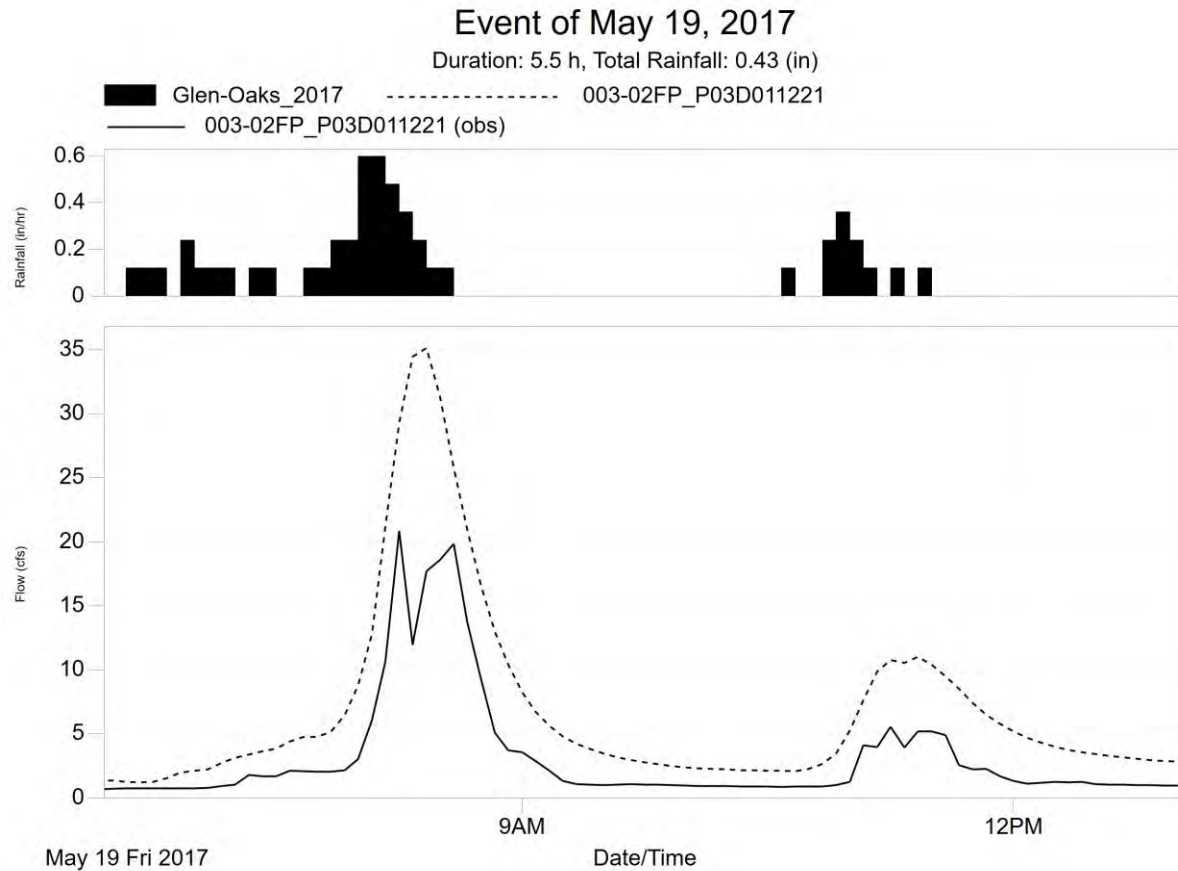
Spring-Caroline 003-02FP – Verification Events



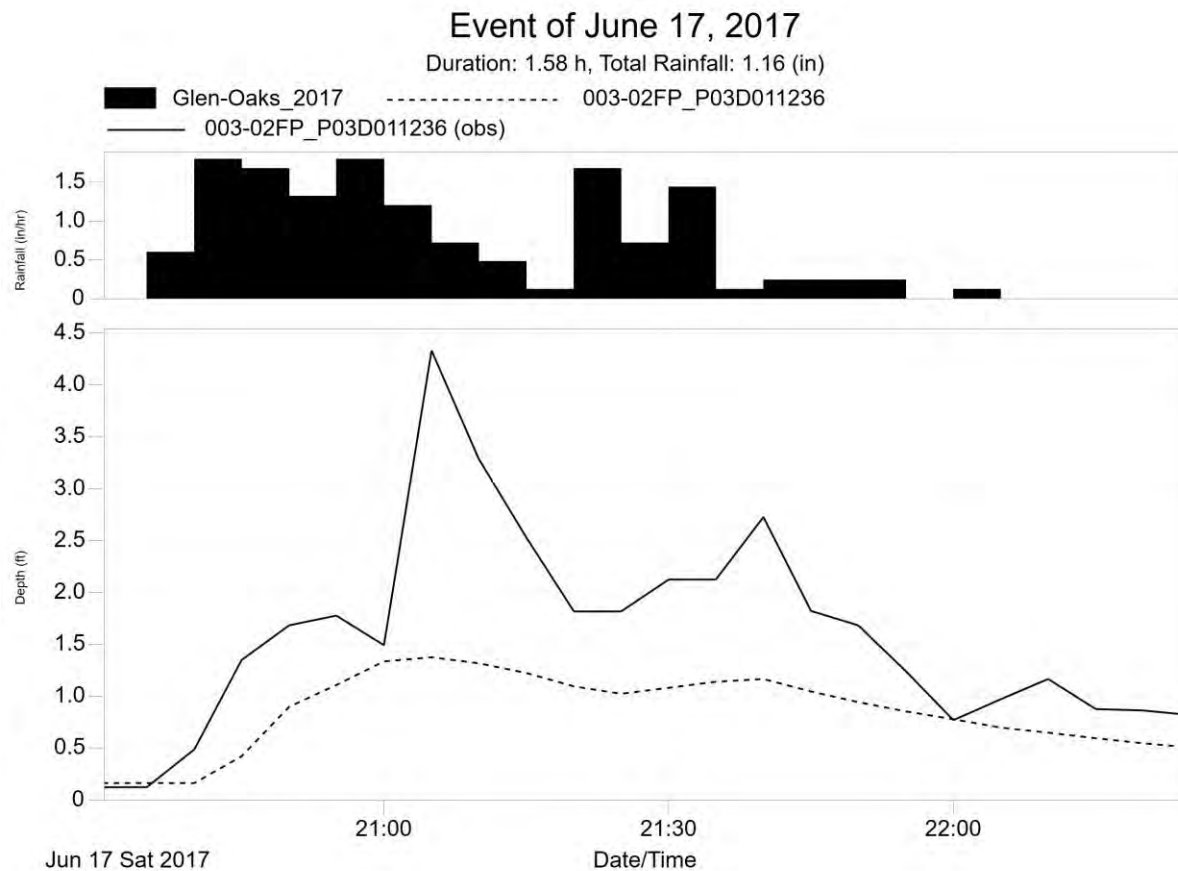
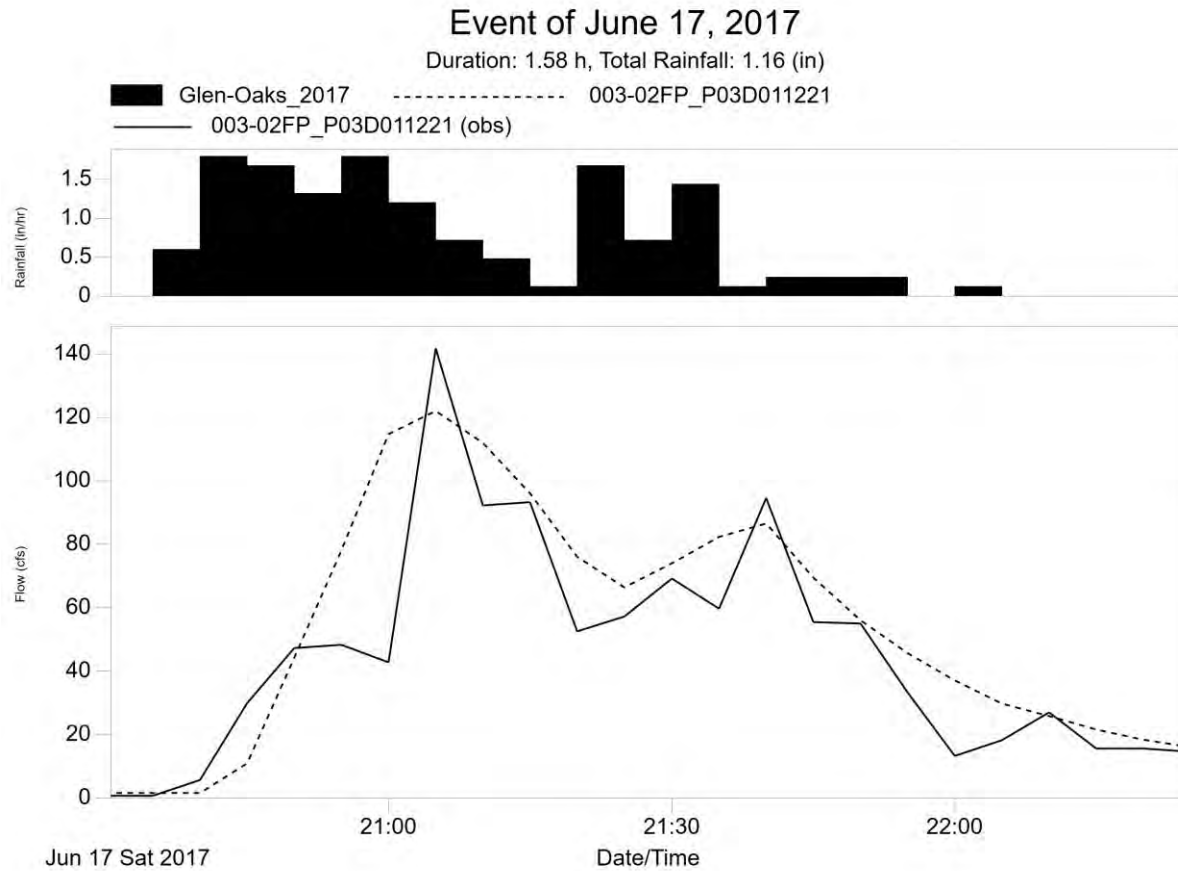
Spring-Caroline 003-02FP – Verification Events



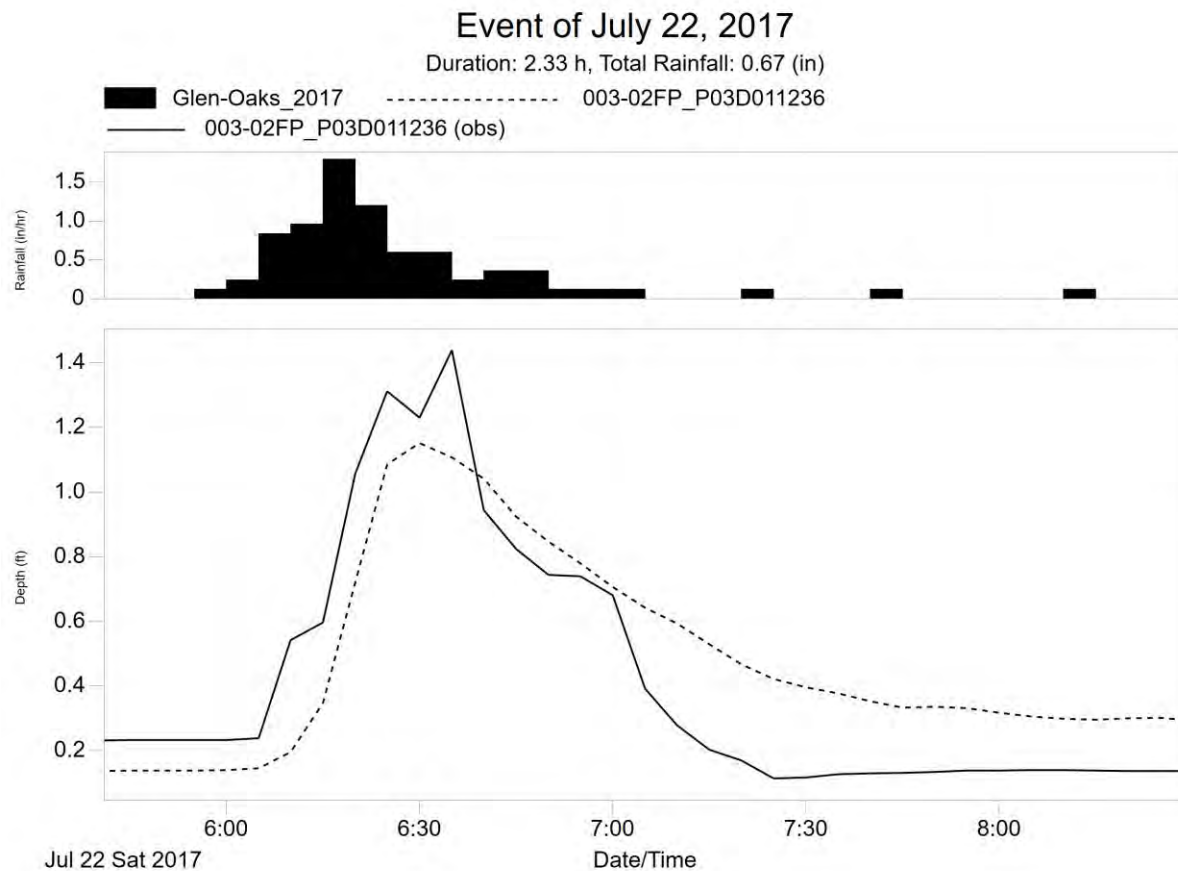
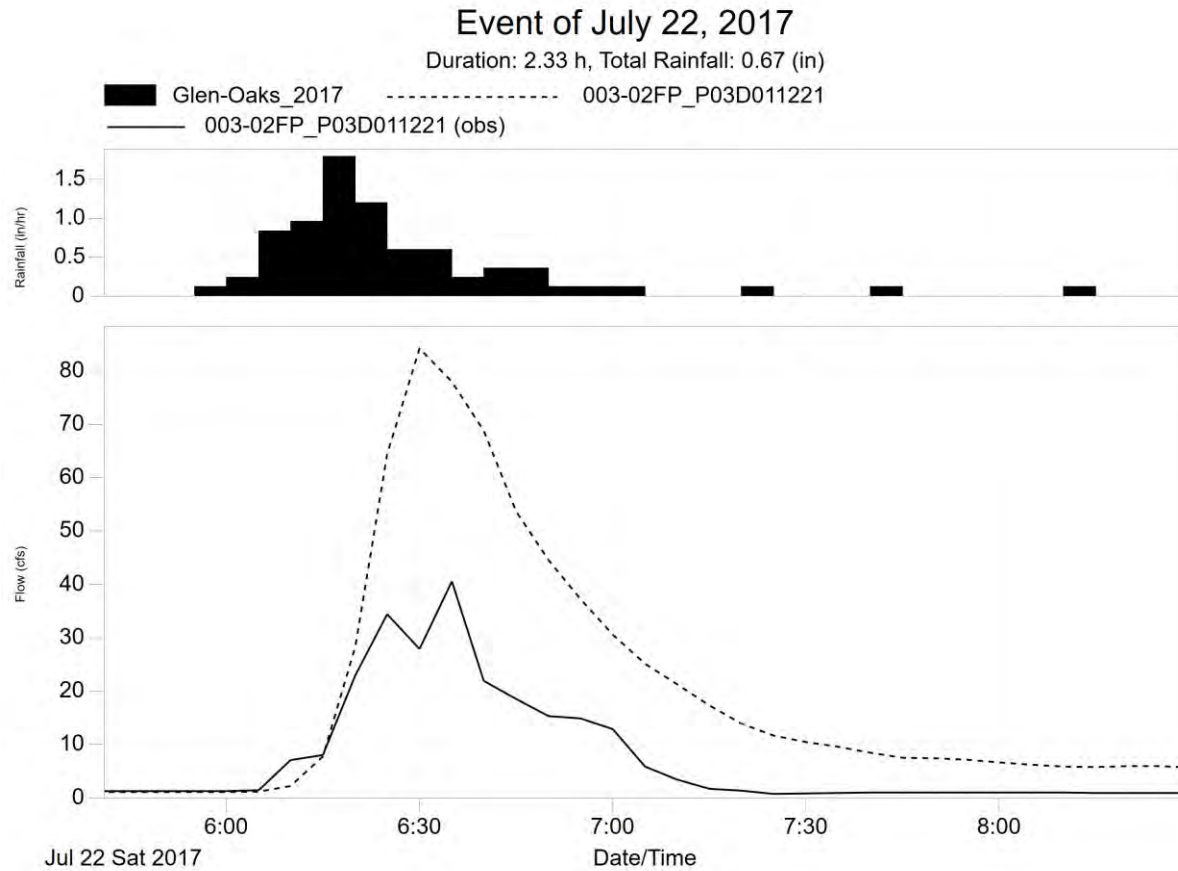
Spring-Caroline 003-02FP – Verification Events



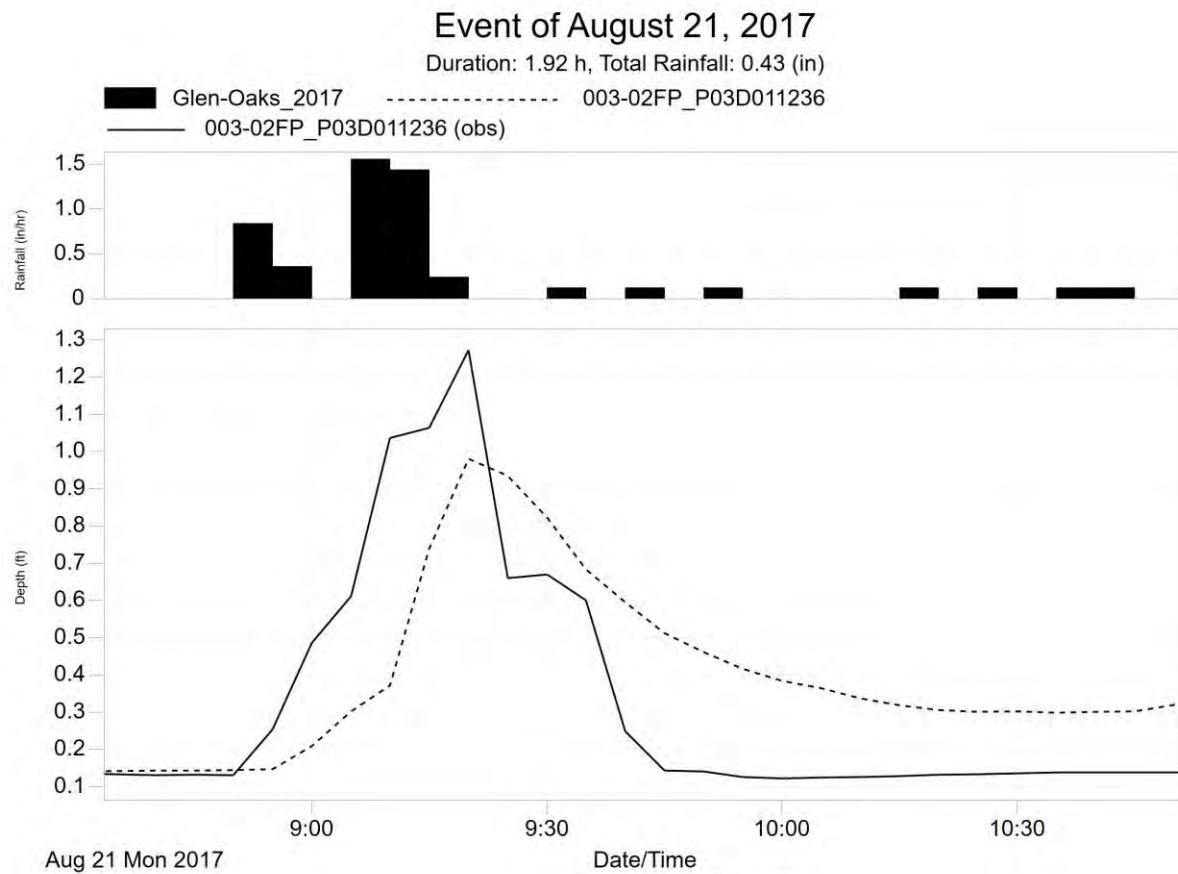
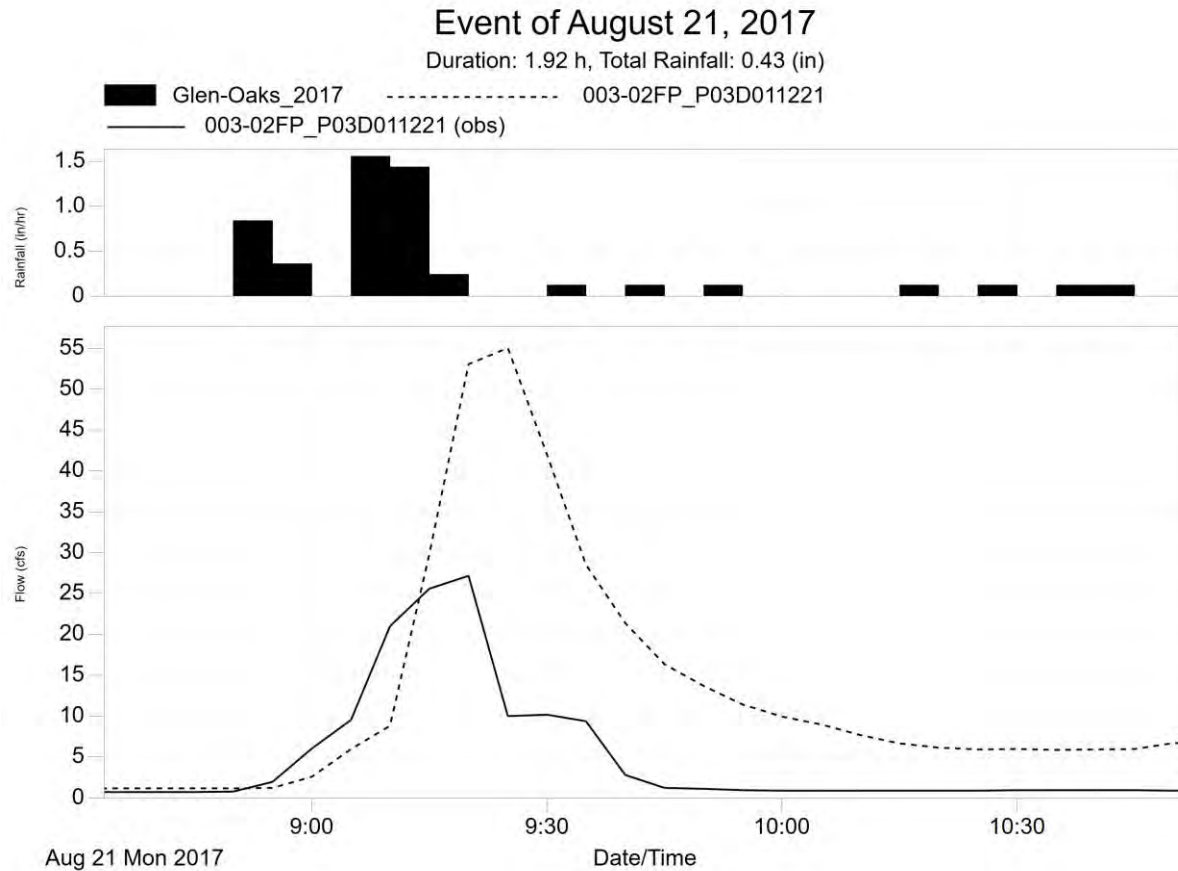
Spring-Caroline 003-02FP – Verification Events



Spring-Caroline 003-02FP – Verification Events



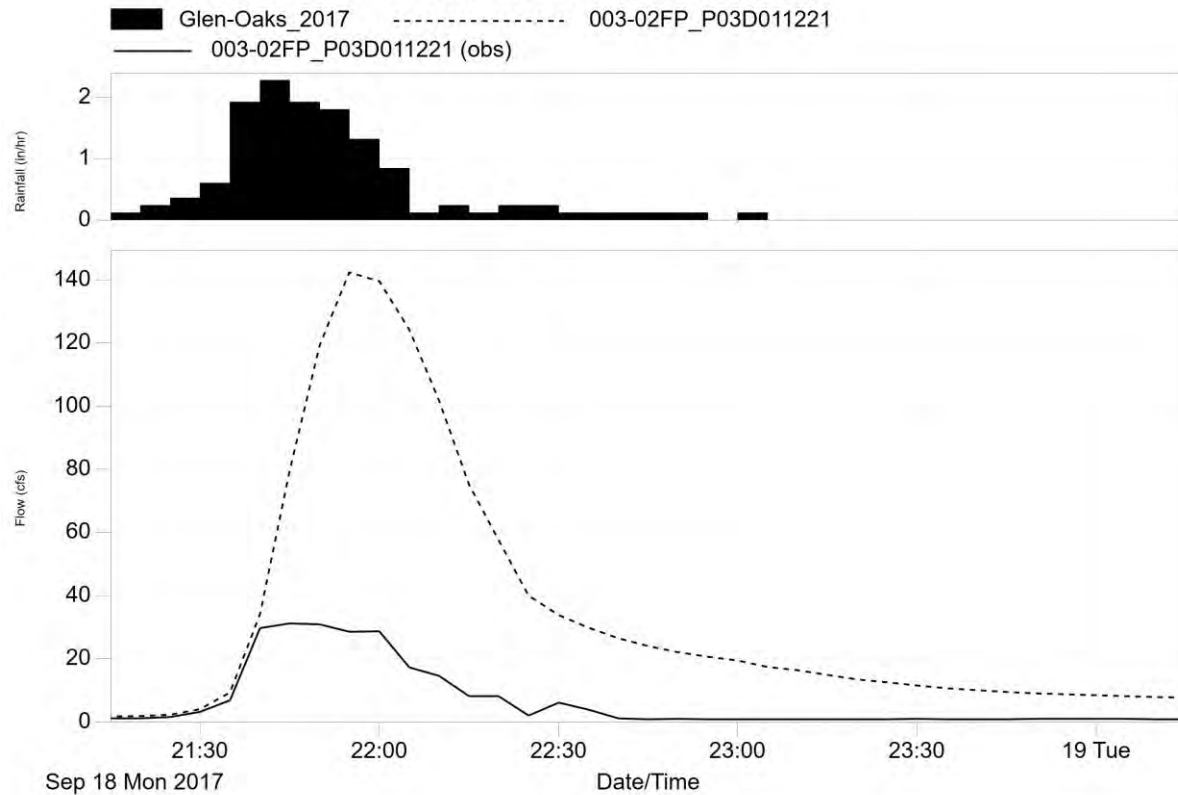
Spring-Caroline 003-02FP – Verification Events



Spring-Caroline 003-02FP – Verification Events

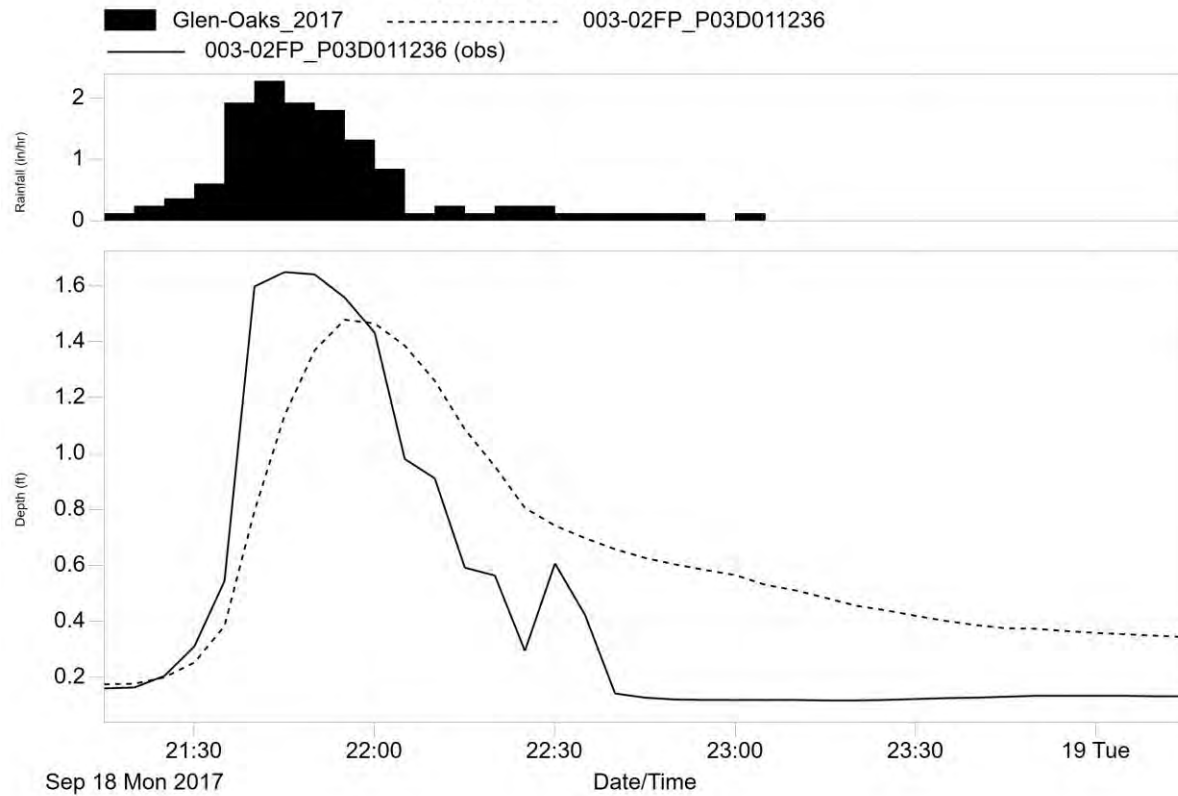
Event of September 18, 2017

Duration: 2.5 h, Total Rainfall: 1.03 (in)



Event of September 18, 2017

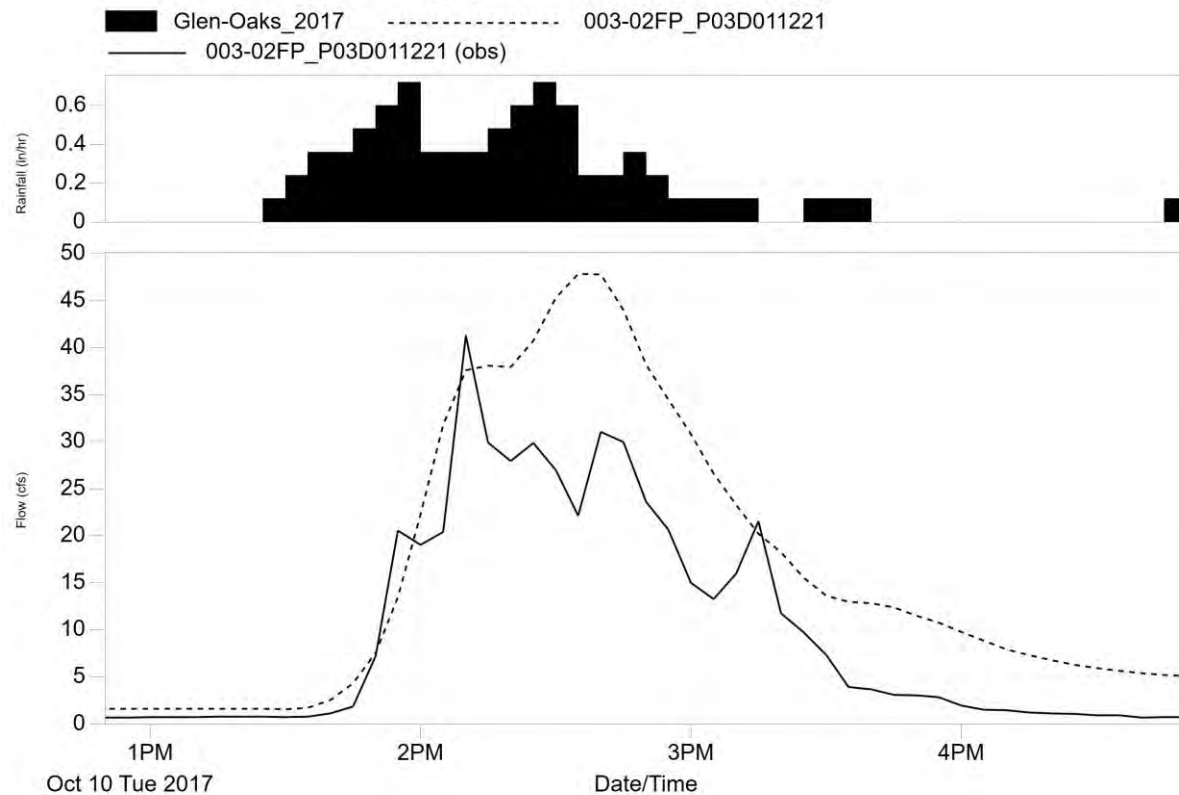
Duration: 2.5 h, Total Rainfall: 1.03 (in)



Spring-Caroline 003-02FP – Verification Events

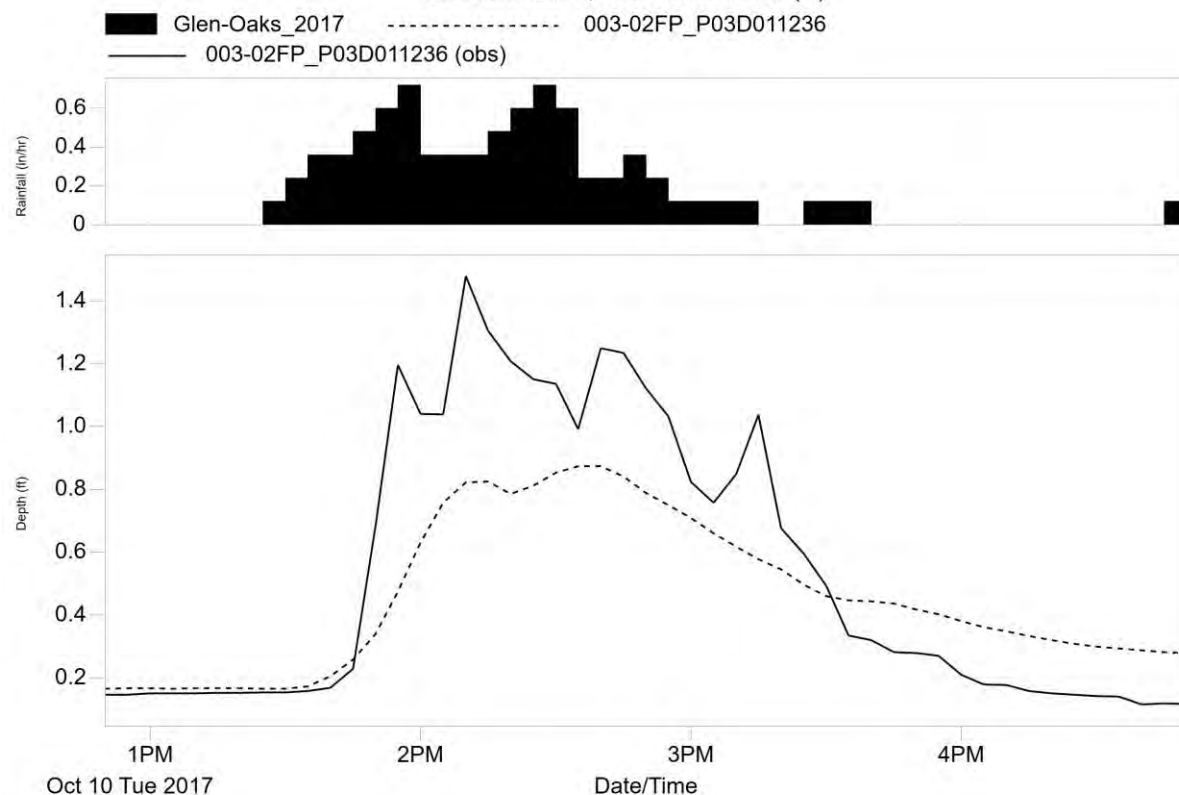
Event of October 10, 2017

Duration: 3.33 h, Total Rainfall: 0.69 (in)



Event of October 10, 2017

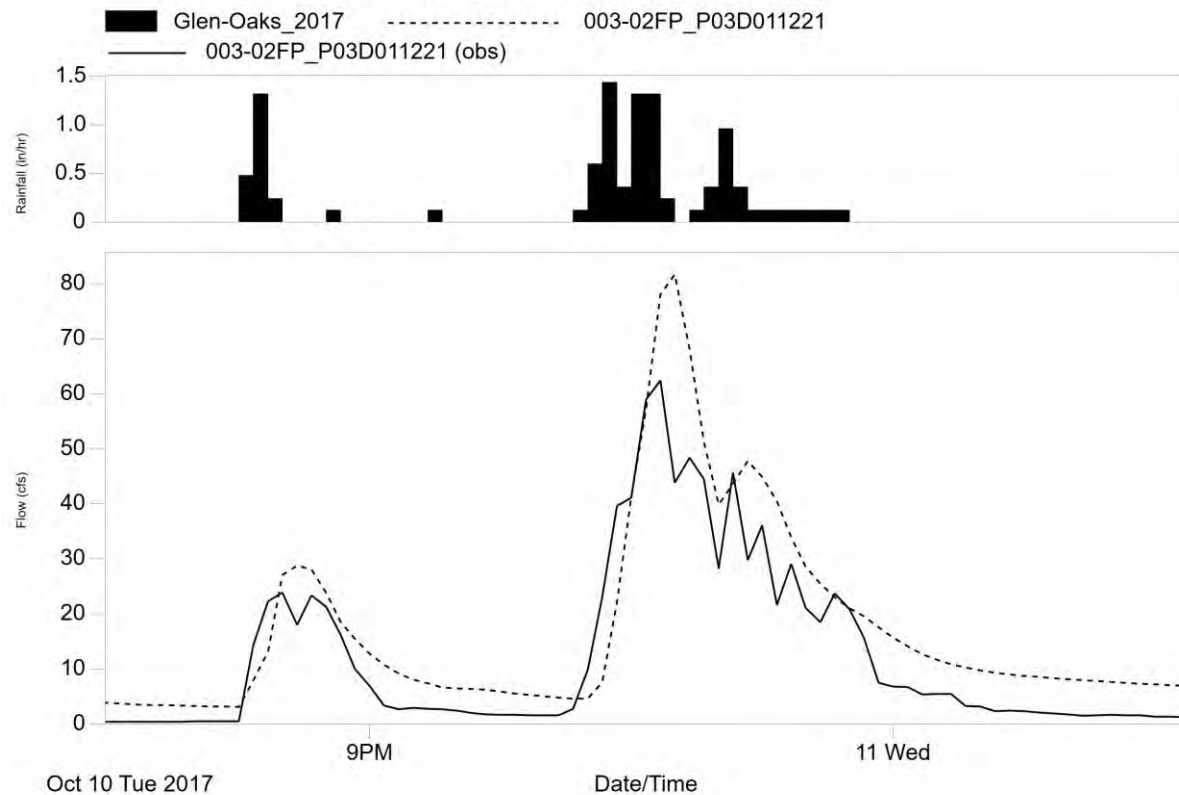
Duration: 3.33 h, Total Rainfall: 0.69 (in)



Spring-Caroline 003-02FP – Verification Events

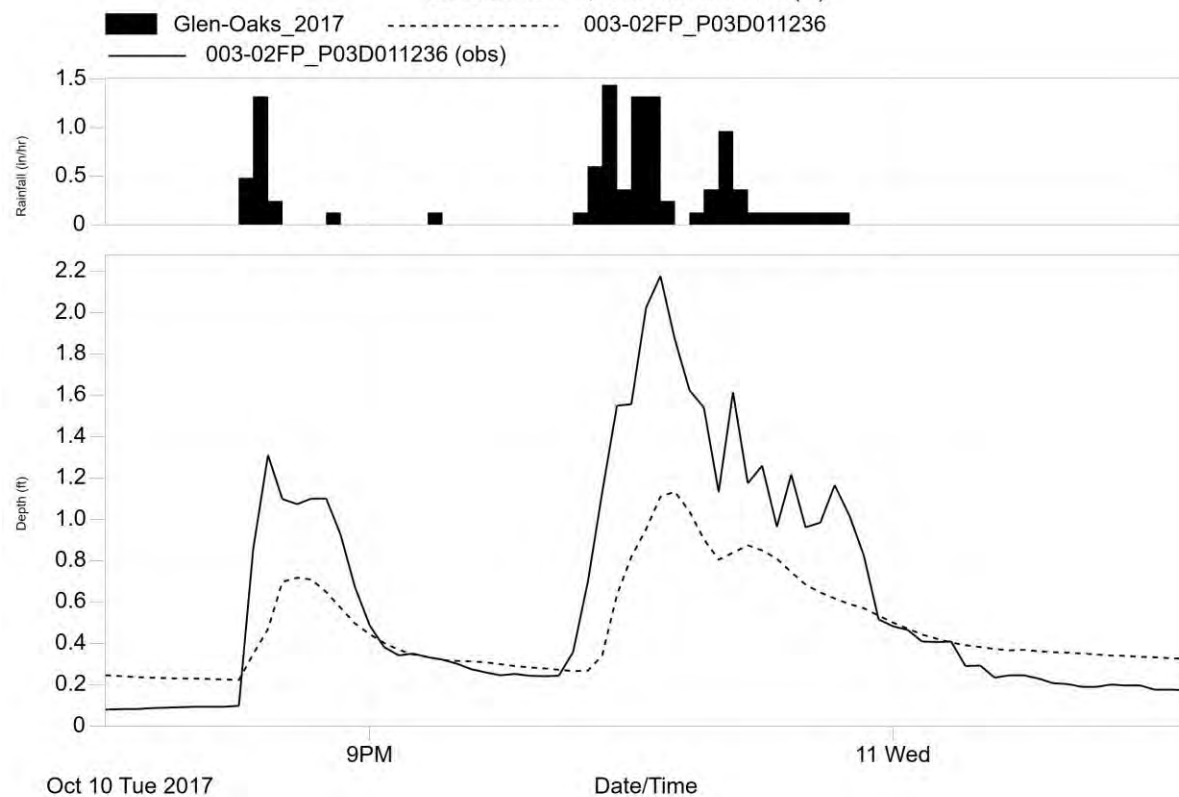
Event of October 10, 2017

Duration: 5.17 h, Total Rainfall: 0.86 (in)

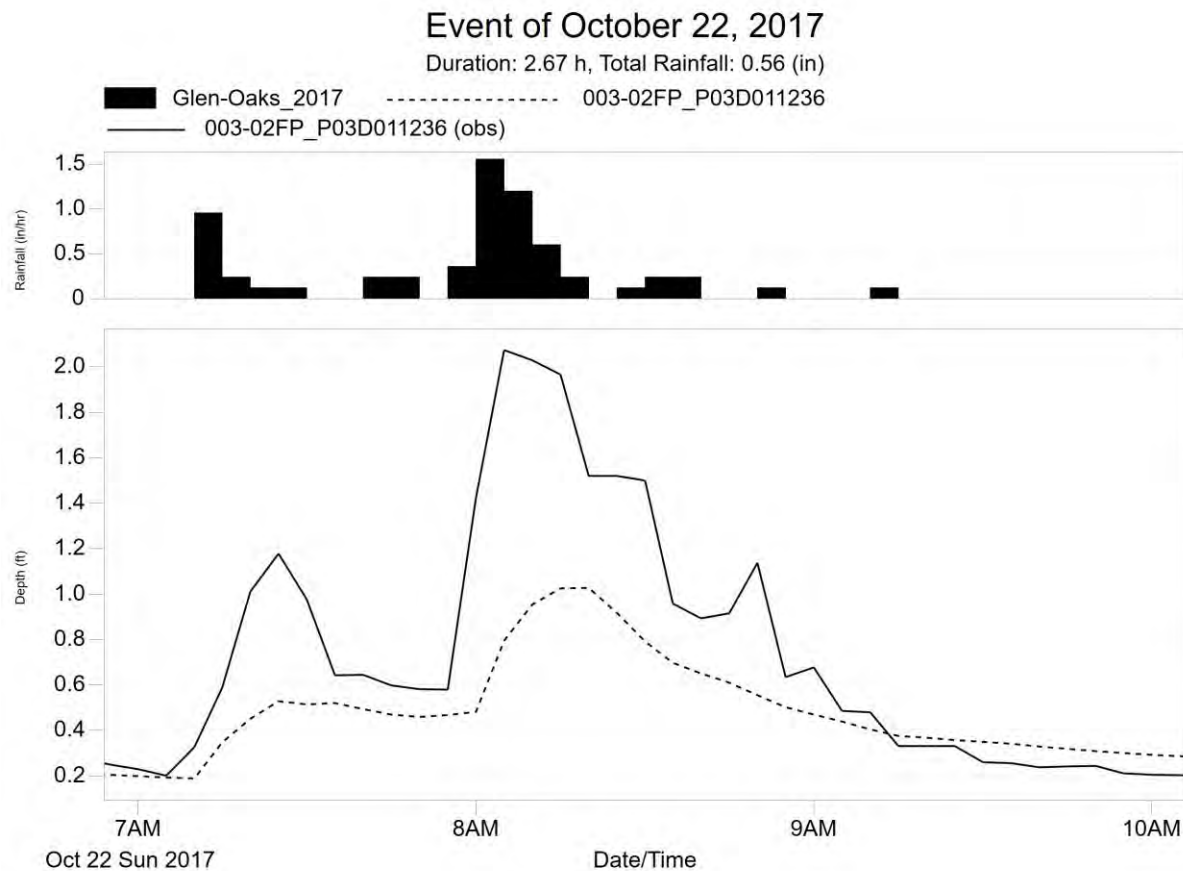
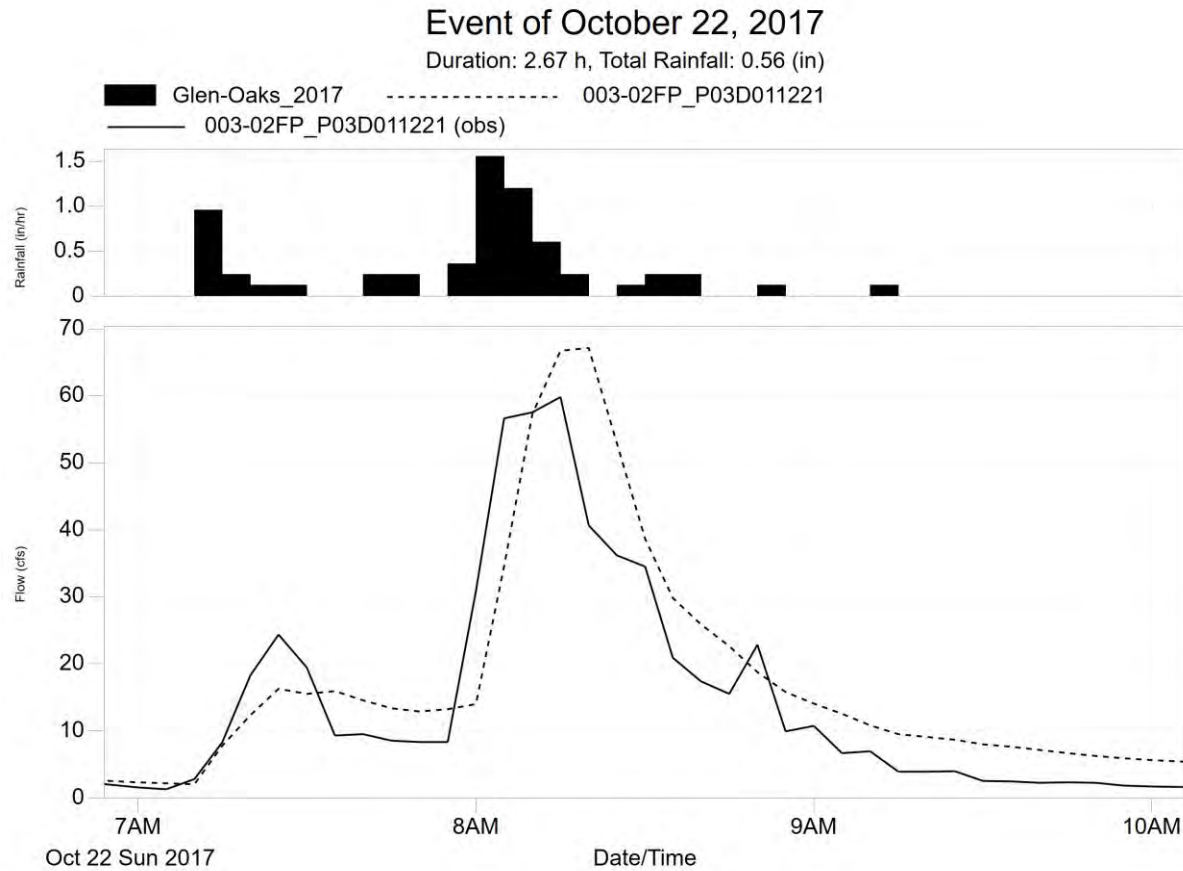


Event of October 10, 2017

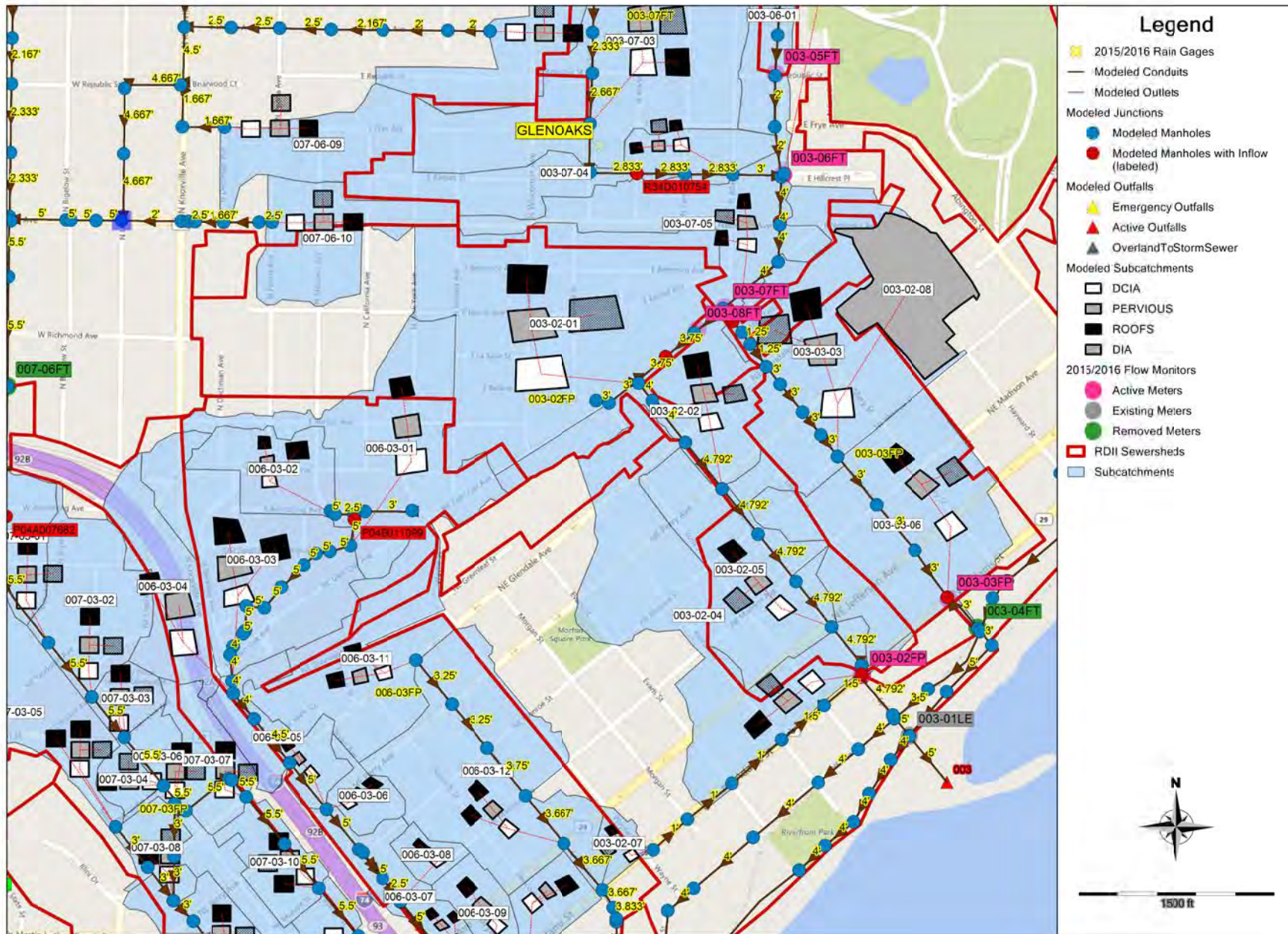
Duration: 5.17 h, Total Rainfall: 0.86 (in)



Spring-Caroline 003-02FP – Verification Events



003-01LE - Spring-Caroline Storage Sewer Depth



Spring-Caroline 003-01LE Depth

Date	Duration (h)	Maximum Depth (ft)		Minimum Depth (ft)		Average Depth (ft)		Maximum Depth (ft)	Minimum Depth (ft)	Average Depth (ft)	Rainfall Variability
		metered	modeled	metered	modeled	metered	modeled	Surcharged: -0.33 ft to +1.67 ft			
CALIBRATION EVENTS - DEPTH								Non-Surcharged: -0.33 ft to +0.33 ft			
5/10/2017 18:45	4.3	7.6	7.5	0.7	1.1	3.9	3.6	-0.11	0.39	-0.31	Variable
5/19/2017 22:35	5.3	2.4	2.1	0.8	1.1	1.7	1.4	-0.26	0.31	-0.24	Variable
5/20/2017 6:55	8.1	7.7	7.6	0.8	1.1	3.0	3.4	-0.15	0.31	0.37	Variable
5/26/2017 14:50	3.7	7.8	7.8	0.8	1.1	4.0	3.7	-0.01	0.30	-0.30	Relatively Uniform
6/15/2017 1:50	3.7	7.9	8.0	0.7	1.1	3.9	4.0	0.11	0.37	0.04	Possibly Uniform
7/10/2017 6:15	6.1	8.2	8.0	1.1	1.2	3.6	3.6	-0.24	0.13	-0.02	Variable
7/10/2017 18:45	5.2	8.5	8.1	1.5	1.3	4.1	4.6	-0.44	-0.16	0.49	Variable
7/26/2017 20:20	5.2	8.3	7.8	1.8	1.4	4.6	4.3	-0.46	-0.44	-0.26	Relatively Uniform
8/22/2017 2:00	4.4	5.4	6.8	1.6	1.2	3.4	3.6	1.36	-0.43	0.15	Relatively Uniform
10/14/2017 13:20	4.2	8.1	7.8	1.7	1.2	3.8	3.4	-0.27	-0.51	-0.46	Possibly Uniform
10/14/2017 19:35	13.6	8.6	8.2	1.3	1.2	6.1	6.1	-0.40	-0.10	0.05	Relatively Uniform
VERIFICATION EVENTS - DEPTH											
4/26/2017 22:30	9.5	3.7	7.3	0.8	1.3	2.0	3.6	3.63	0.55	1.58	Relatively Uniform
4/29/2017 11:00	37.9	9.1	8.4	0.5	1.1	6.1	4.9	-0.69	0.61	-1.14	Relatively Uniform
5/19/2017 7:00	8.0	5.2	7.5	0.8	1.1	2.1	2.4	2.33	0.35	0.33	Variable
6/17/2017 21:00	8.5	8.3	8.3	0.8	1.2	3.1	4.1	0.01	0.41	0.97	Variable
7/22/2017 6:15	5.8	8.3	8.0	1.2	1.2	3.6	3.7	-0.30	0.04	0.02	Possibly Uniform
9/18/2017 21:30	5.5	8.7	8.4	1.4	1.3	4.5	4.9	-0.27	-0.19	0.36	Variable
10/10/2017 13:10	5.8	8.2	7.8	1.2	1.1	3.8	4.2	-0.43	-0.09	0.45	Relatively Uniform
10/10/2017 19:00	9.2	8.5	8.0	1.3	1.3	3.6	4.3	-0.45	-0.03	0.63	Relatively Uniform
10/22/2017 5:30	10.4	8.3	7.9	1.2	1.1	3.5	2.8	-0.37	-0.11	-0.69	Relatively Uniform

Notes:

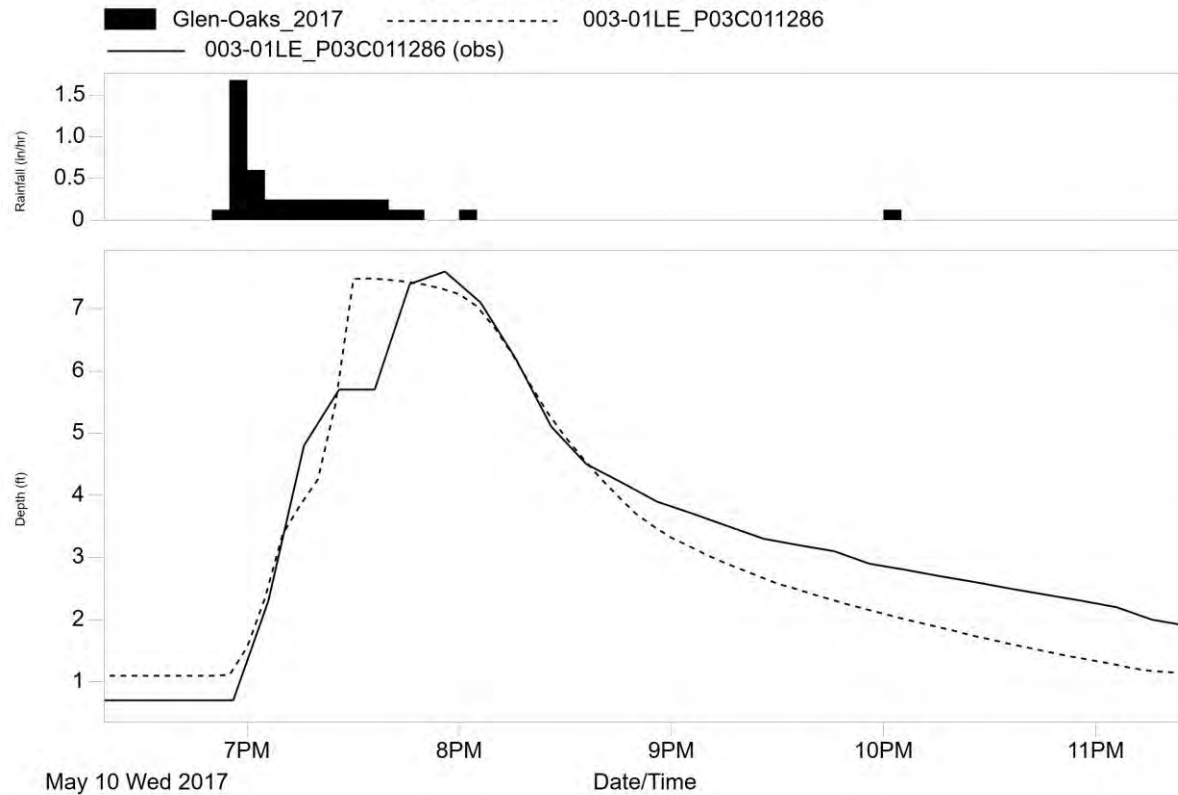
Surcharge Depth = 5.0 feet

WEIGHTED AVERAGES				
Calibration - Relatively Uniform	0.00	-0.25	-0.09	
Calibration - Possibly Uniform	-0.08	-0.25	-0.21	
Calibration - Variable	-0.24	0.14	0.09	
Calibration - All Events	-0.12	-0.10	-0.04	
Verification - Relatively Uniform	-0.09	0.09	-0.12	
Verification - Possibly Uniform	-0.30	0.04	0.02	
Verification - Variable	0.44	0.11	0.55	
Verification - All Events	0.06	0.09	0.10	
Weighted Average - All Events	-0.04	-0.02	0.02	All Events
NET AVERAGES				
Calibration - Relatively Uniform	0.12	-0.17	-0.09	
Calibration - Possibly Uniform	-0.08	-0.07	-0.21	
Calibration - Variable	-0.24	0.20	0.06	
Calibration- All Events	-0.08	0.02	-0.05	
Verification - Relatively Uniform	0.34	0.19	0.17	
Verification - Possibly Uniform	-0.30	0.04	0.02	
Verification - Variable	0.69	0.19	0.55	
Verification- All Events	0.38	0.17	0.28	
Net Average - All Events	0.14	0.07	0.12	All Events

Spring-Caroline 003-01LE – Calibration Events

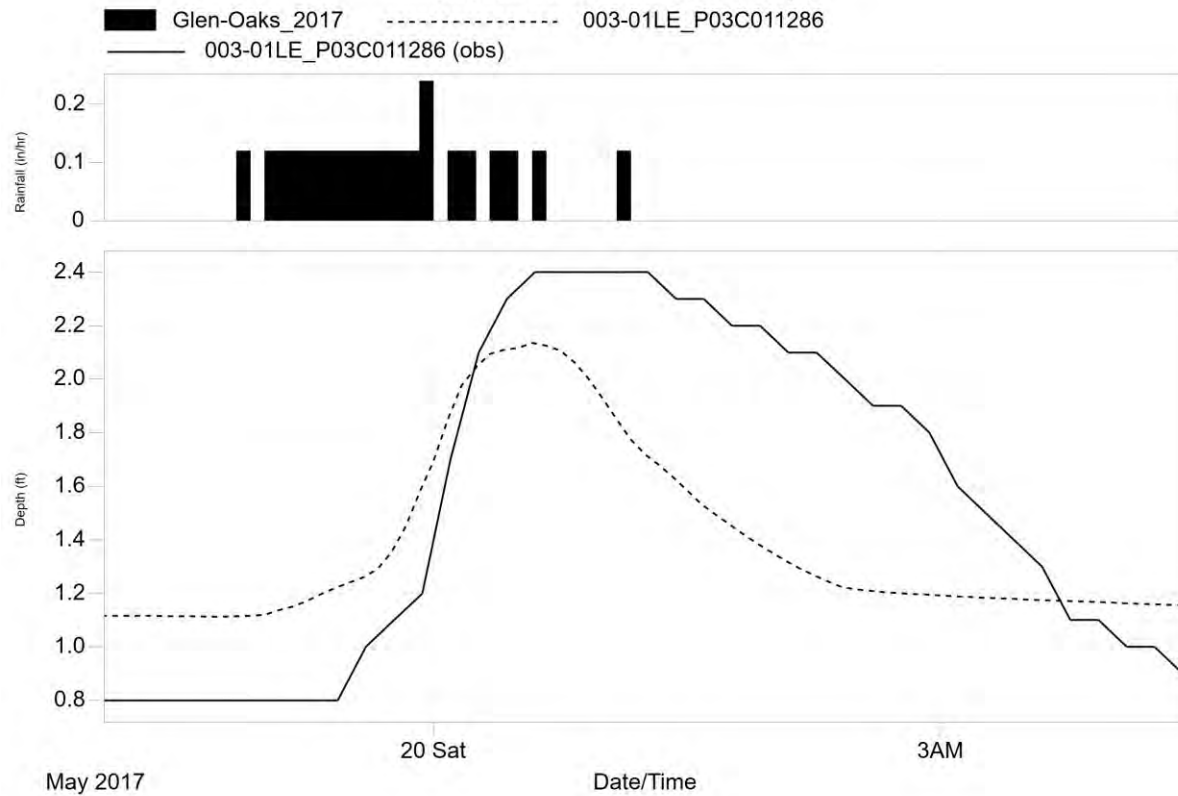
Event of May 10, 2017

Duration: 4.25 h, Total Rainfall: 0.38 (in)



Event of May 19, 2017

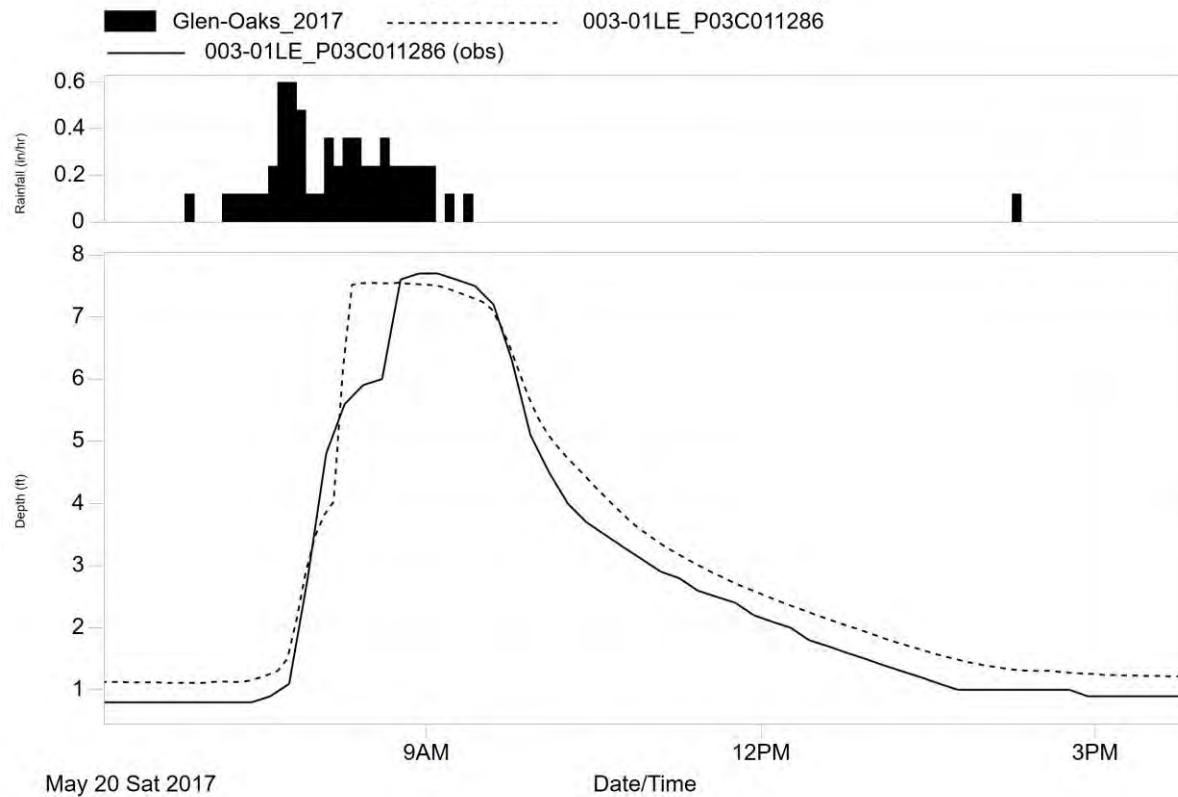
Duration: 5.33 h, Total Rainfall: 0.2 (in)



Spring-Caroline 003-01LE – Calibration Events

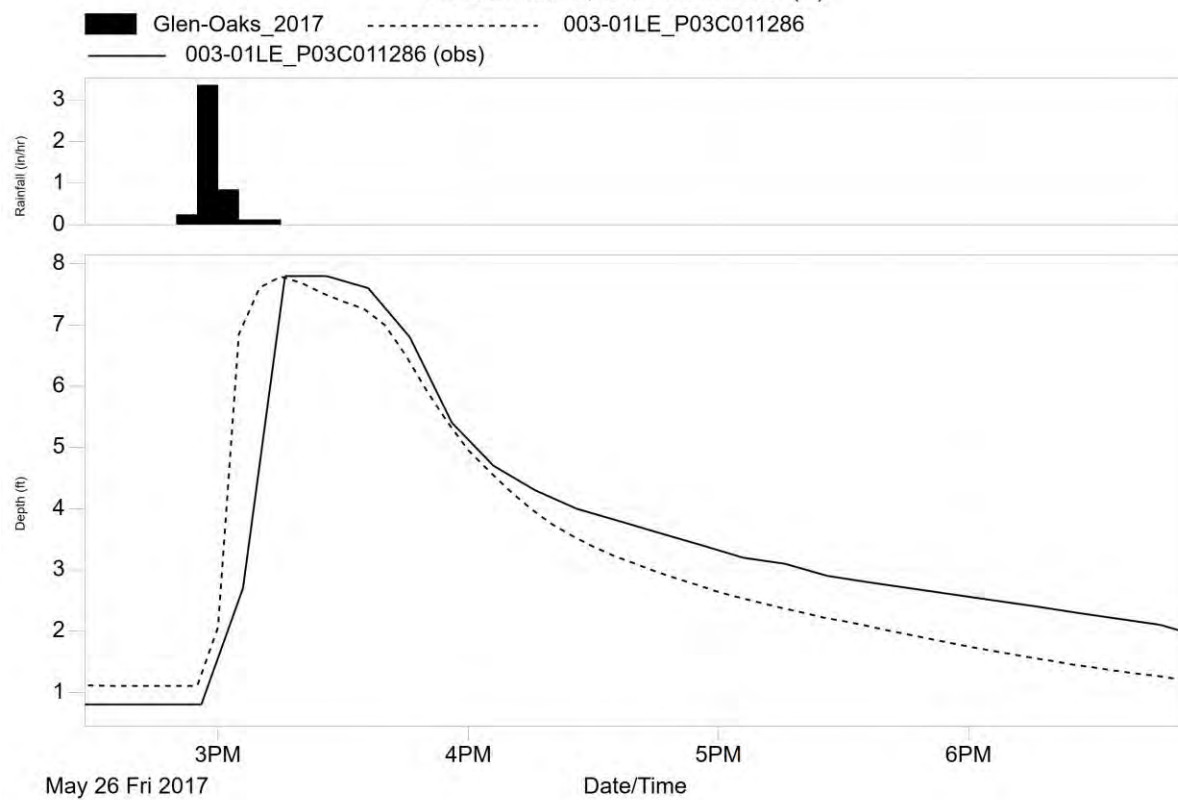
Event of May 20, 2017

Duration: 8.08 h, Total Rainfall: 0.54 (in)



Event of May 26, 2017

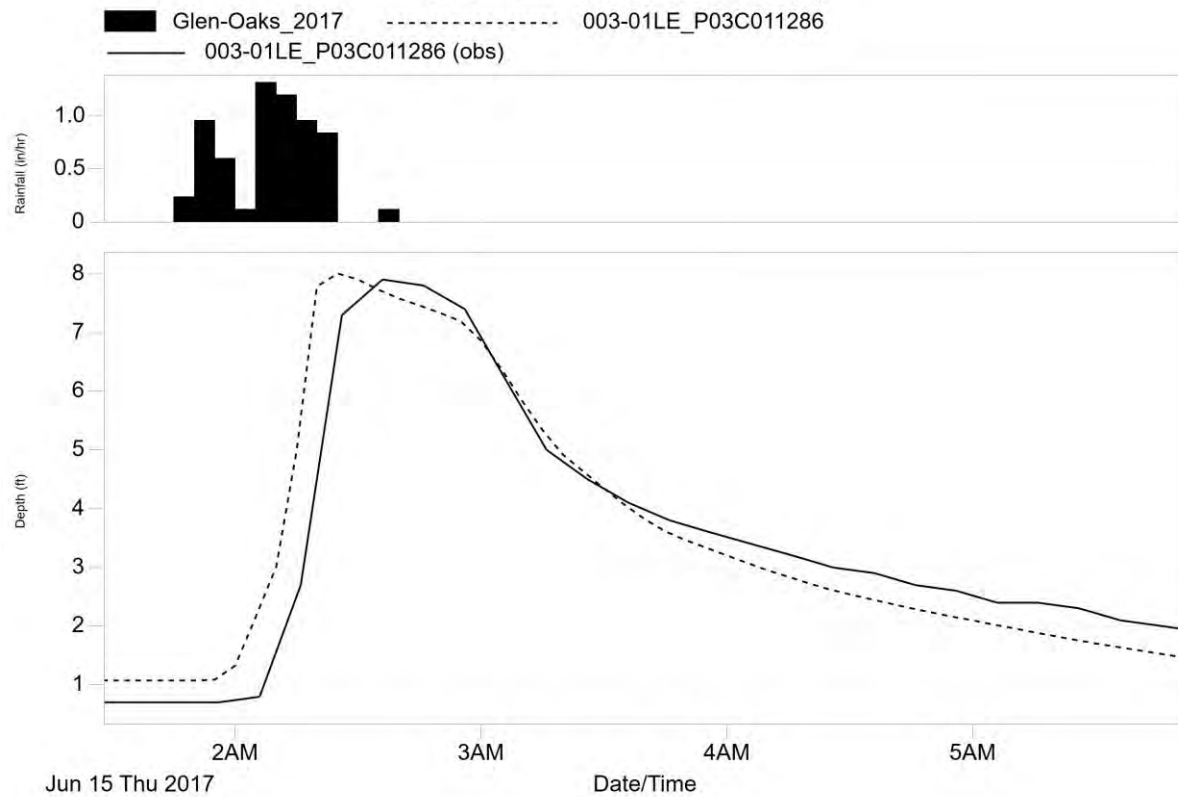
Duration: 3.67 h, Total Rainfall: 0.39 (in)



Spring-Caroline 003-01LE – Calibration Events

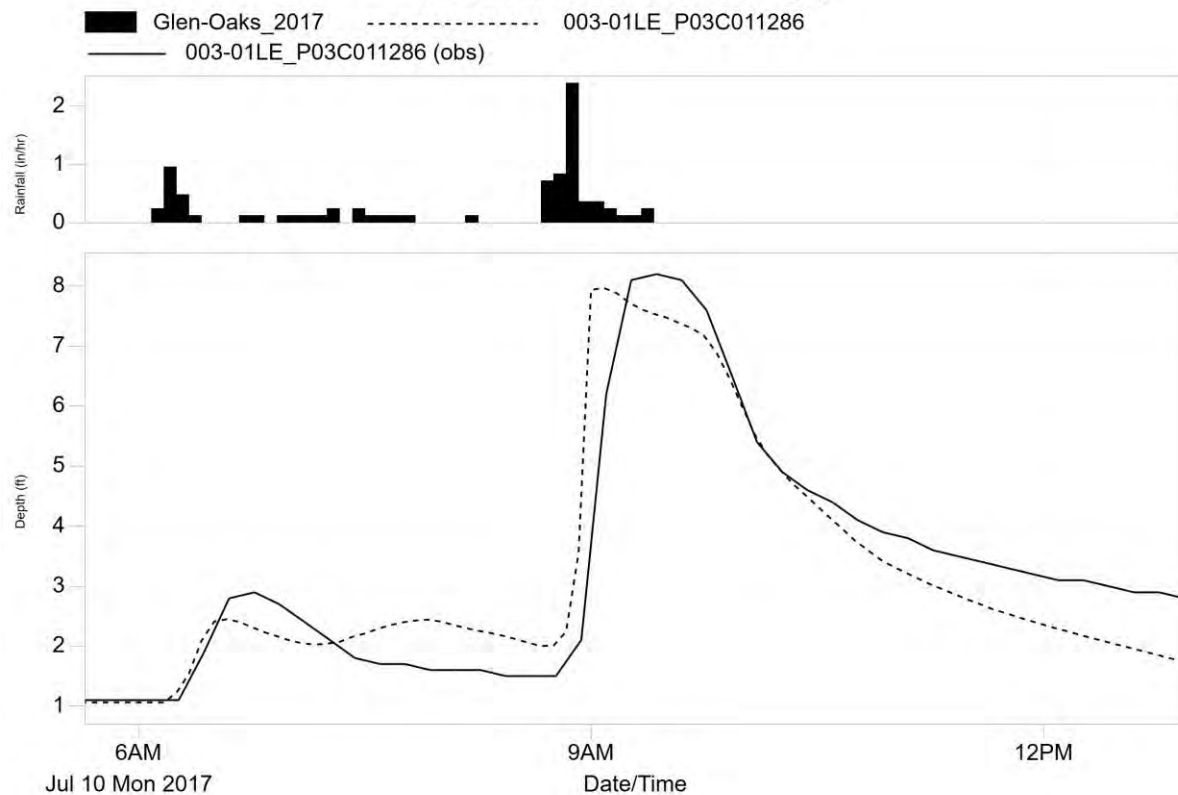
Event of June 15, 2017

Duration: 3.67 h, Total Rainfall: 0.51 (in)



Event of July 10, 2017

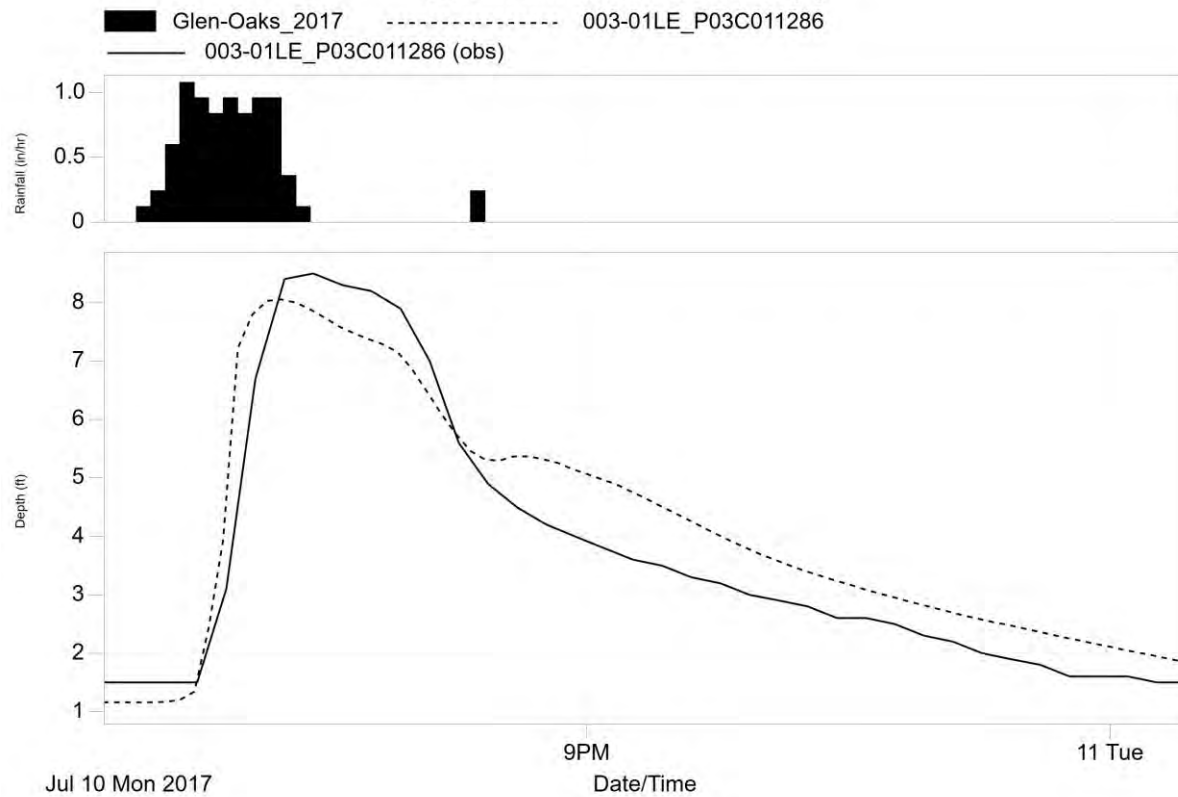
Duration: 6.08 h, Total Rainfall: 0.65 (in)



Spring-Caroline 003-01LE – Calibration Events

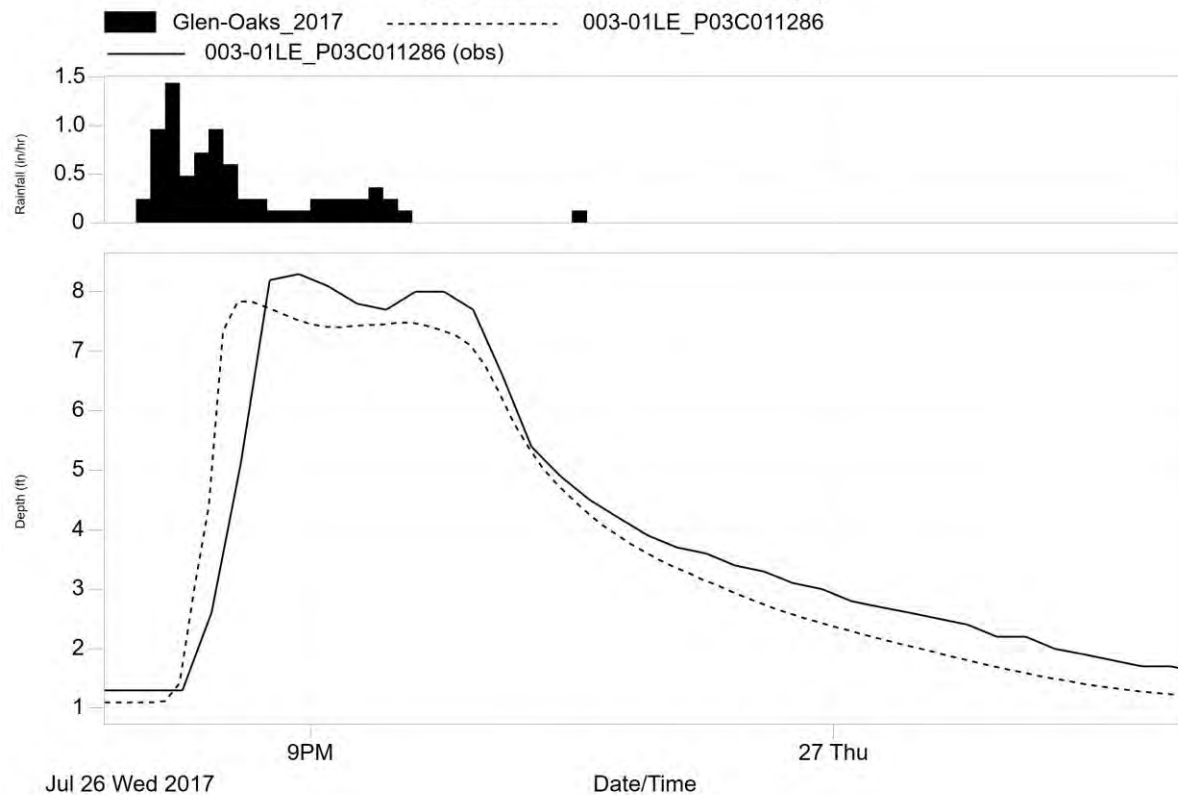
Event of July 10, 2017

Duration: 5.17 h, Total Rainfall: 0.52 (in)



Event of July 26, 2017

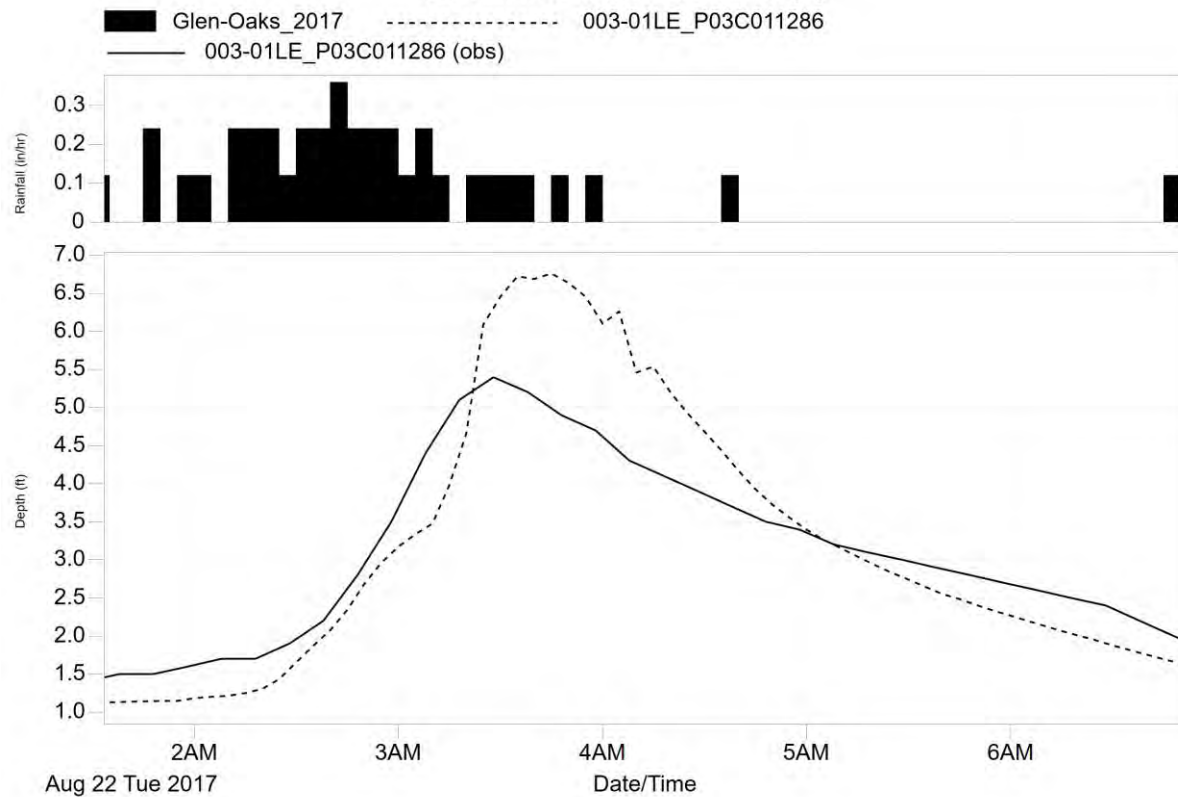
Duration: 5.17 h, Total Rainfall: 0.41 (in)



Spring-Caroline 003-01LE – Calibration Events

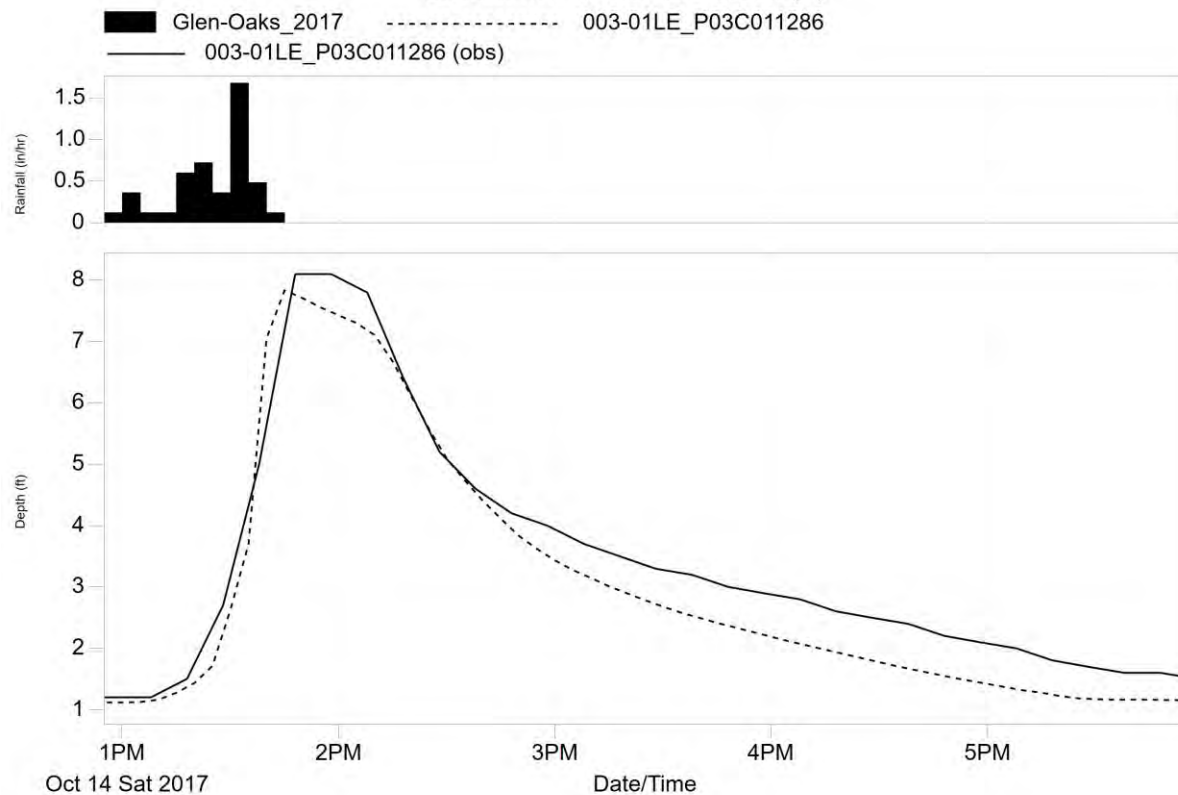
Event of August 22, 2017

Duration: 4.42 h, Total Rainfall: 0.32 (in)



Event of October 14, 2017

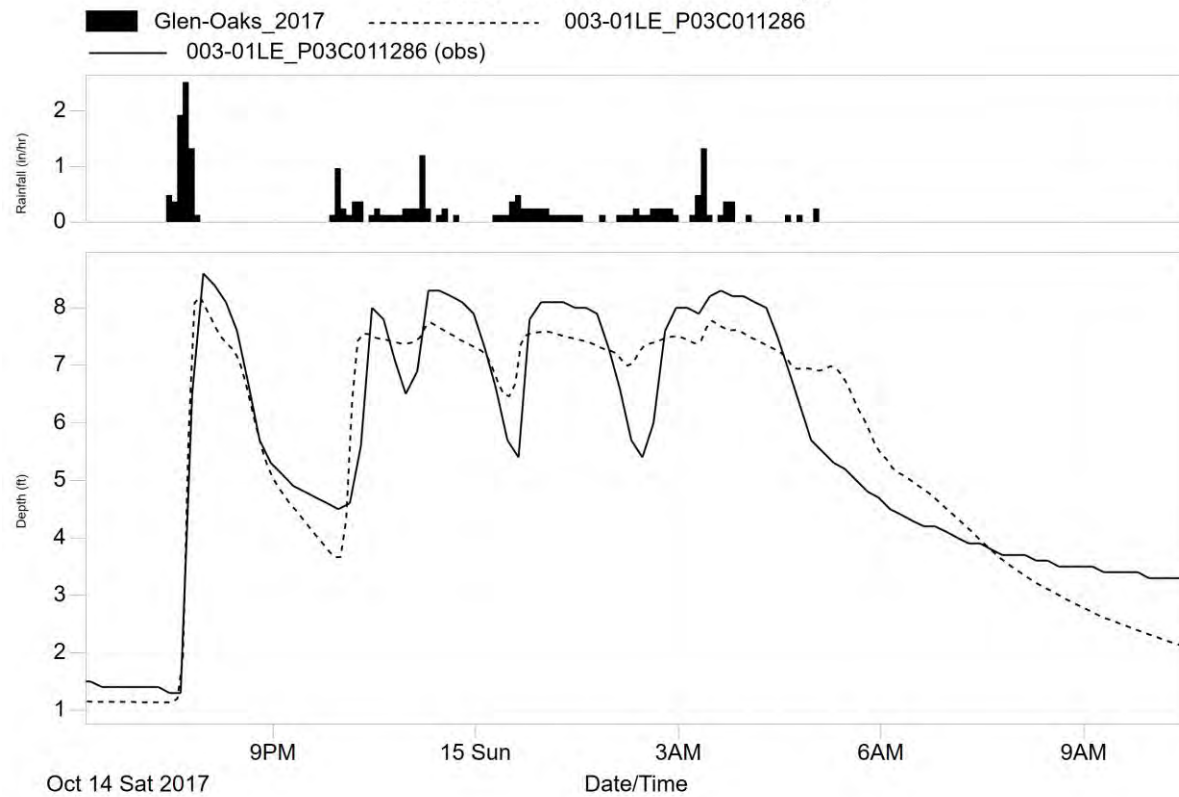
Duration: 4.17 h, Total Rainfall: 0.28 (in)



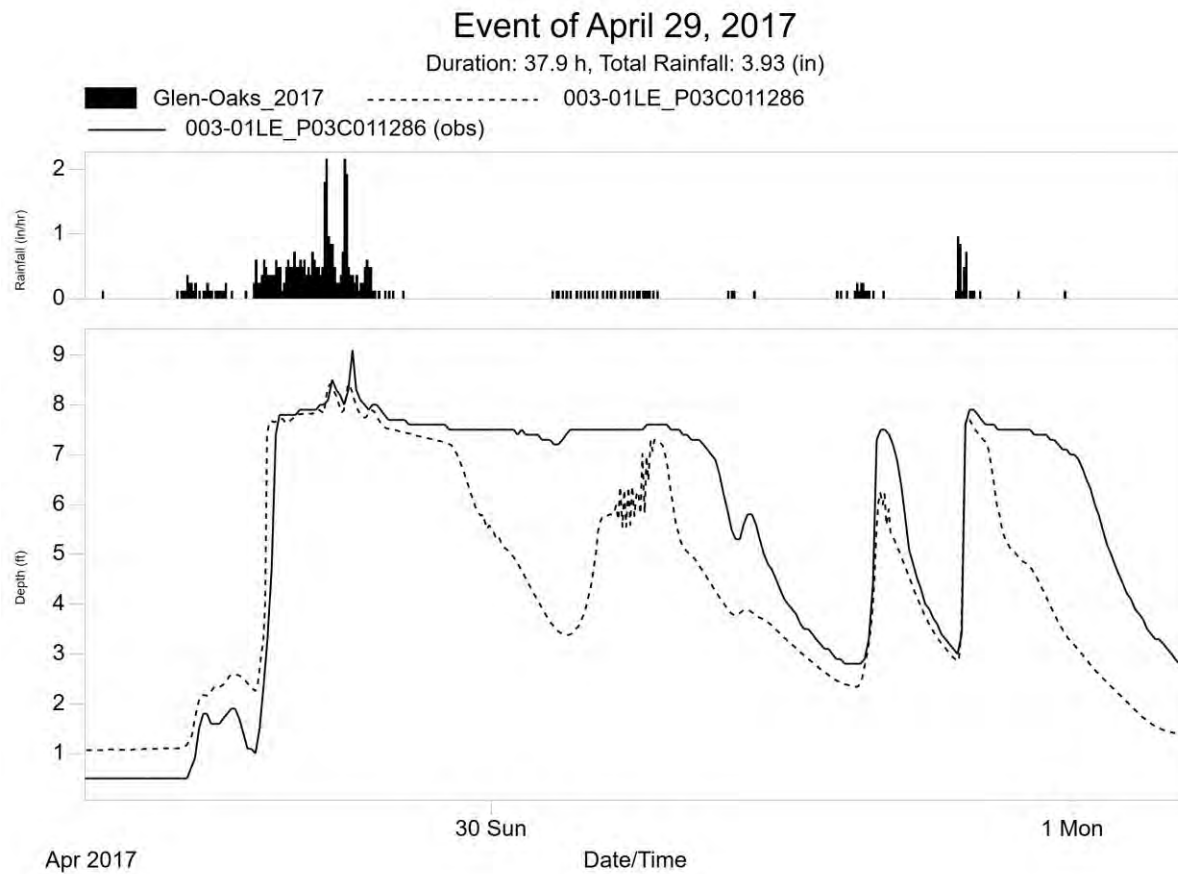
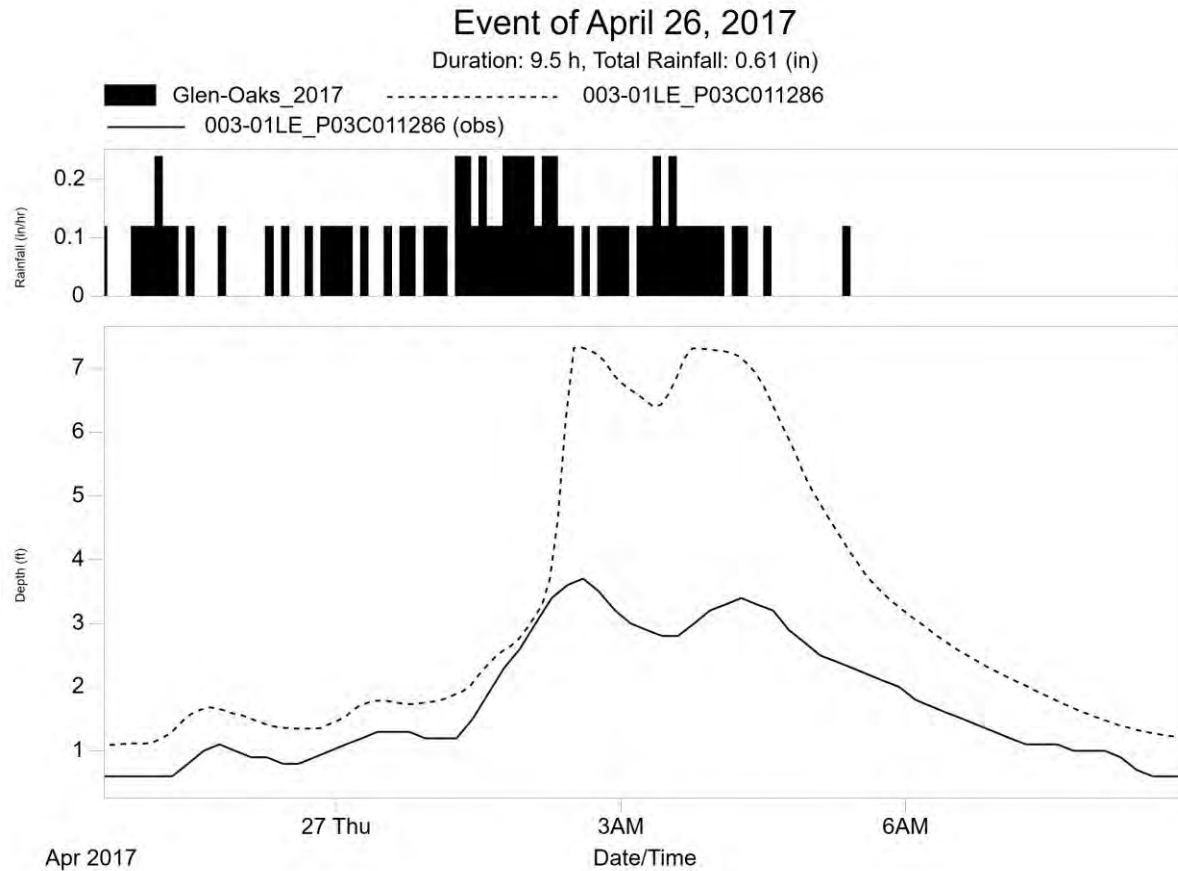
Spring-Caroline 003-01LE – Calibration Events

Event of October 14, 2017

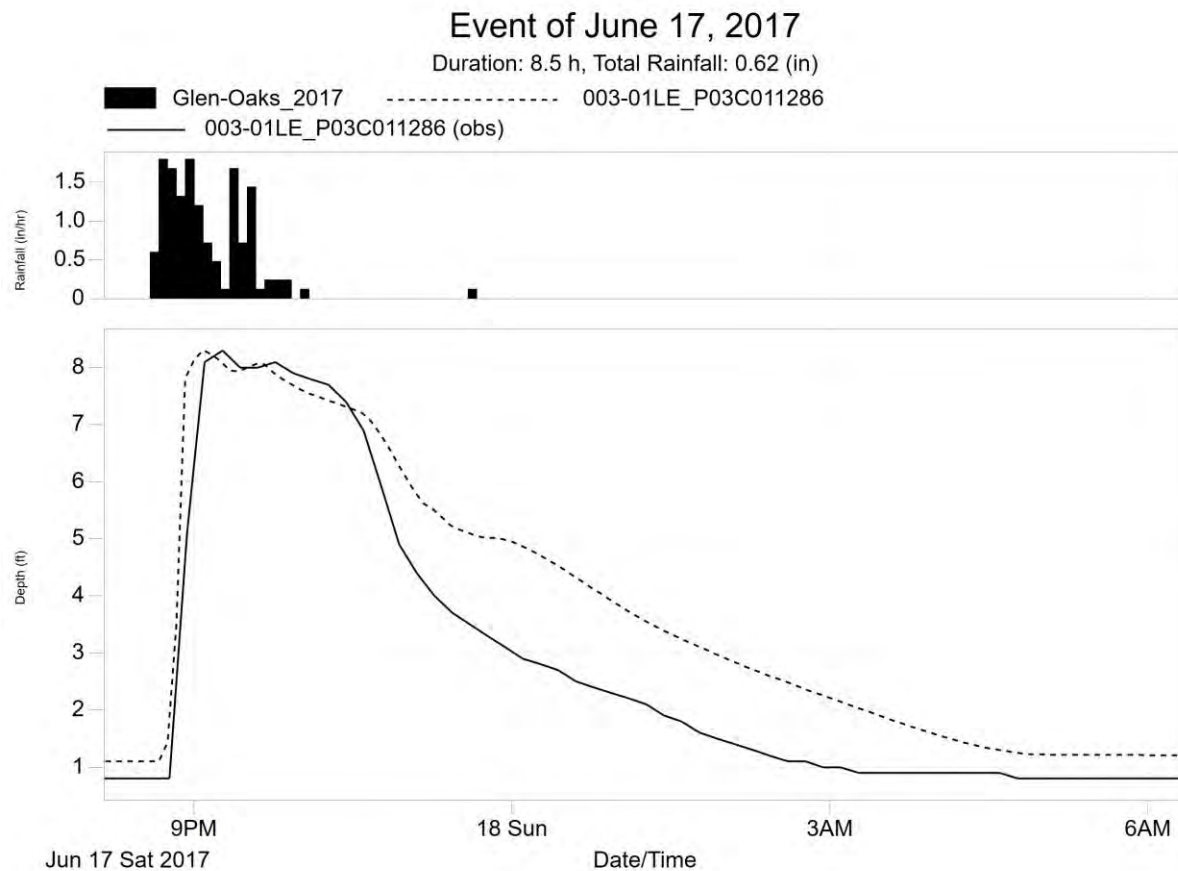
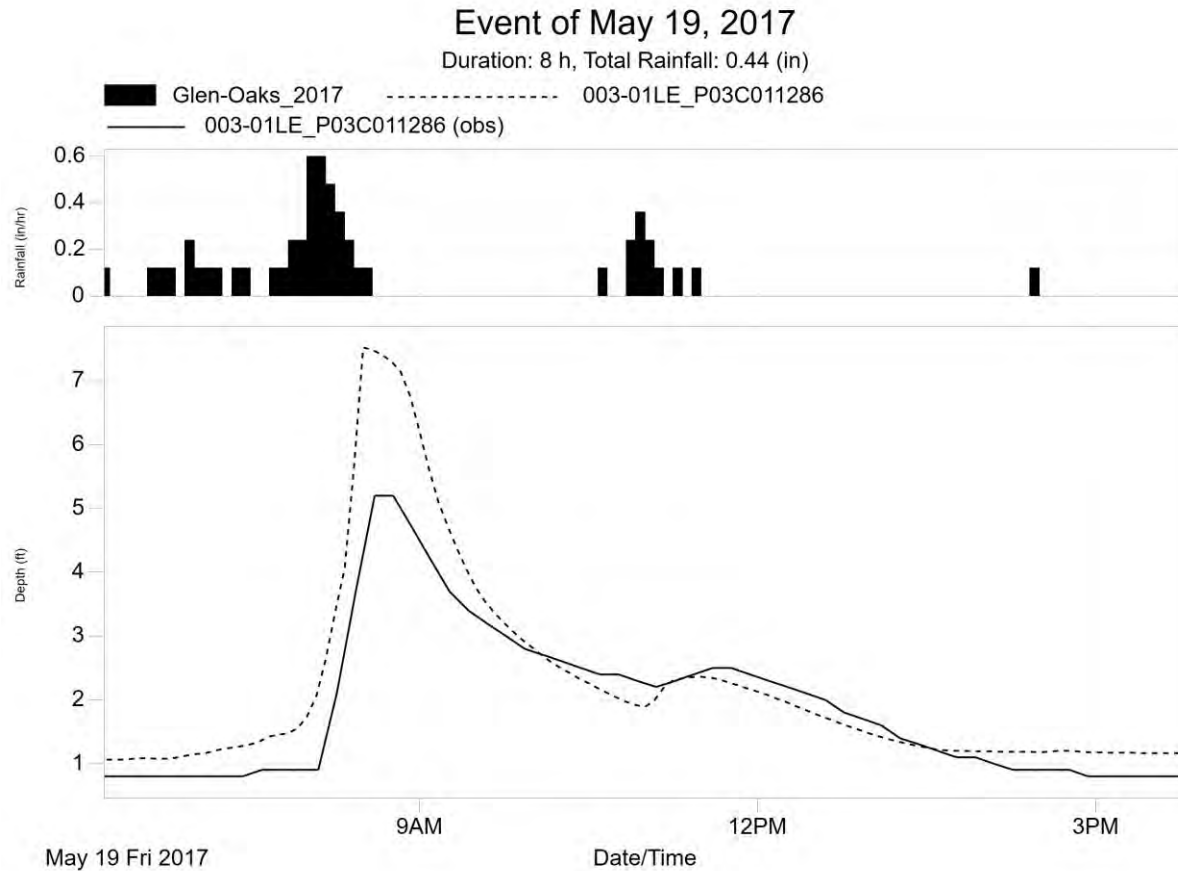
Duration: 13.58 h, Total Rainfall: 1.68 (in)



Spring-Caroline 003-01LE – Verification Events



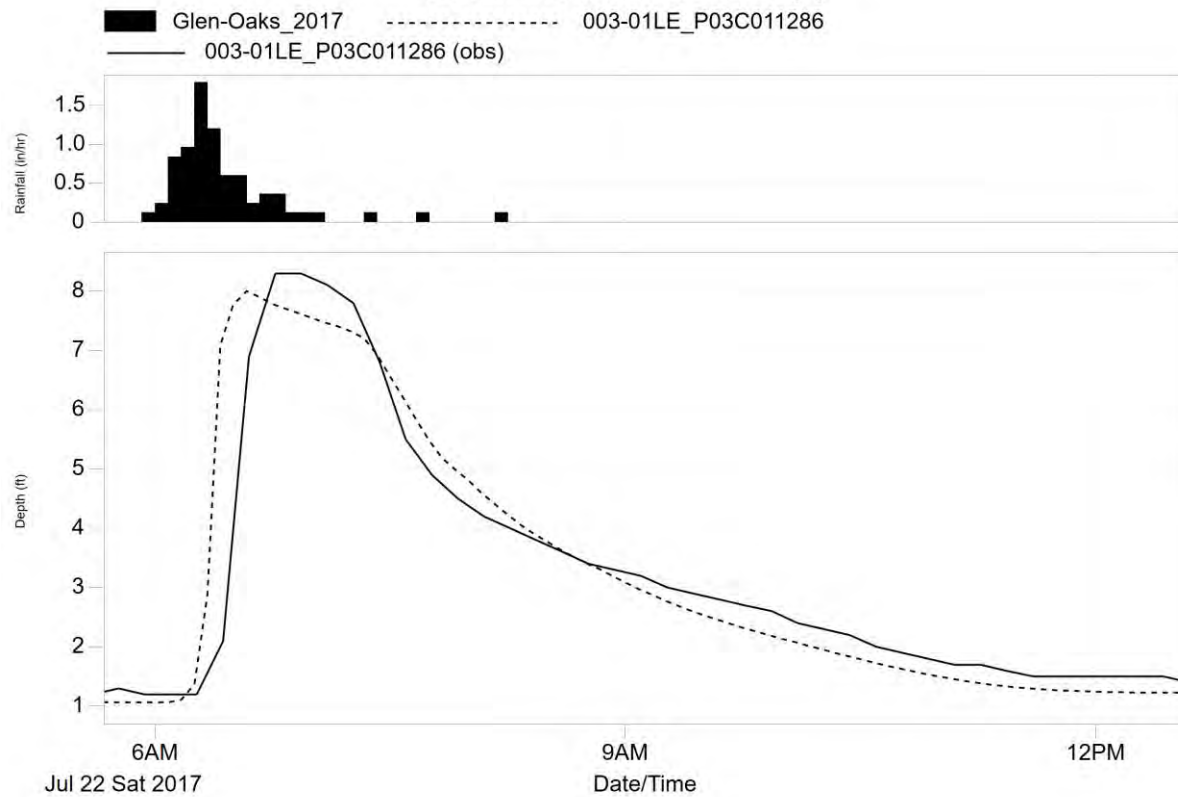
Spring-Caroline 003-01LE – Verification Events



Spring-Caroline 003-01LE – Verification Events

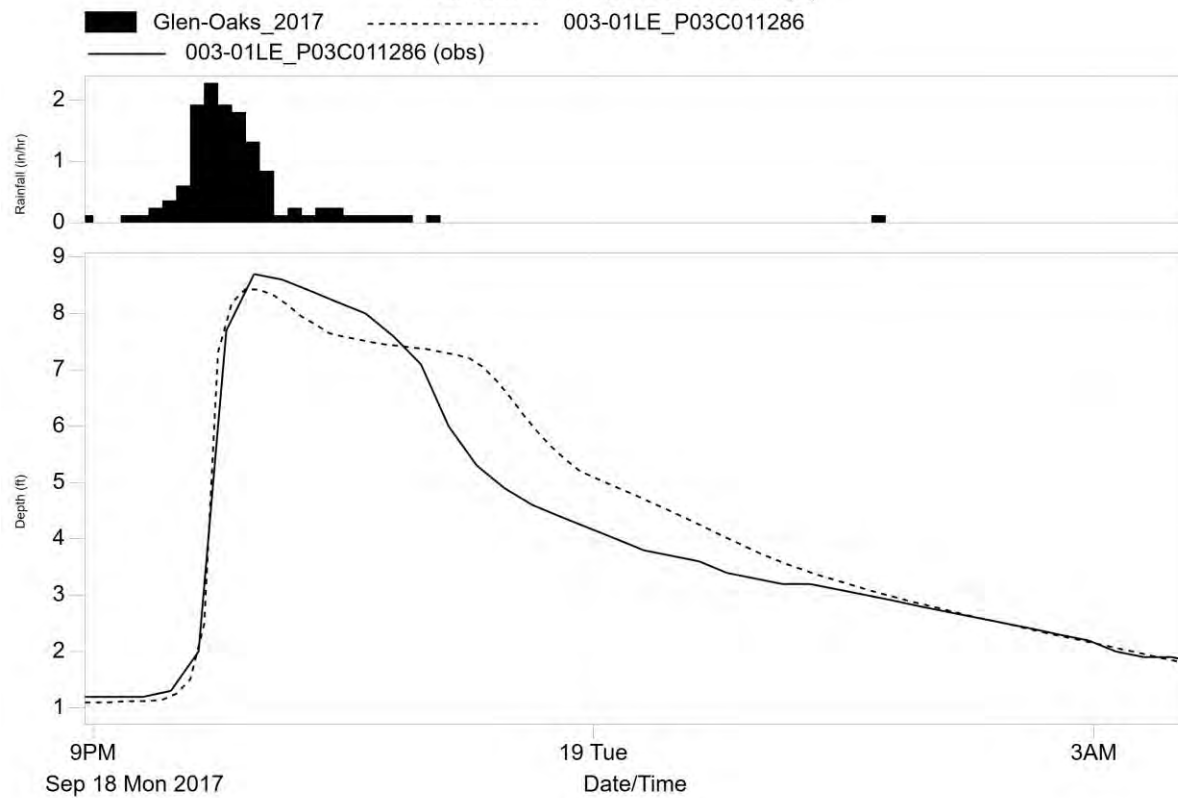
Event of July 22, 2017

Duration: 5.75 h, Total Rainfall: 0.49 (in)

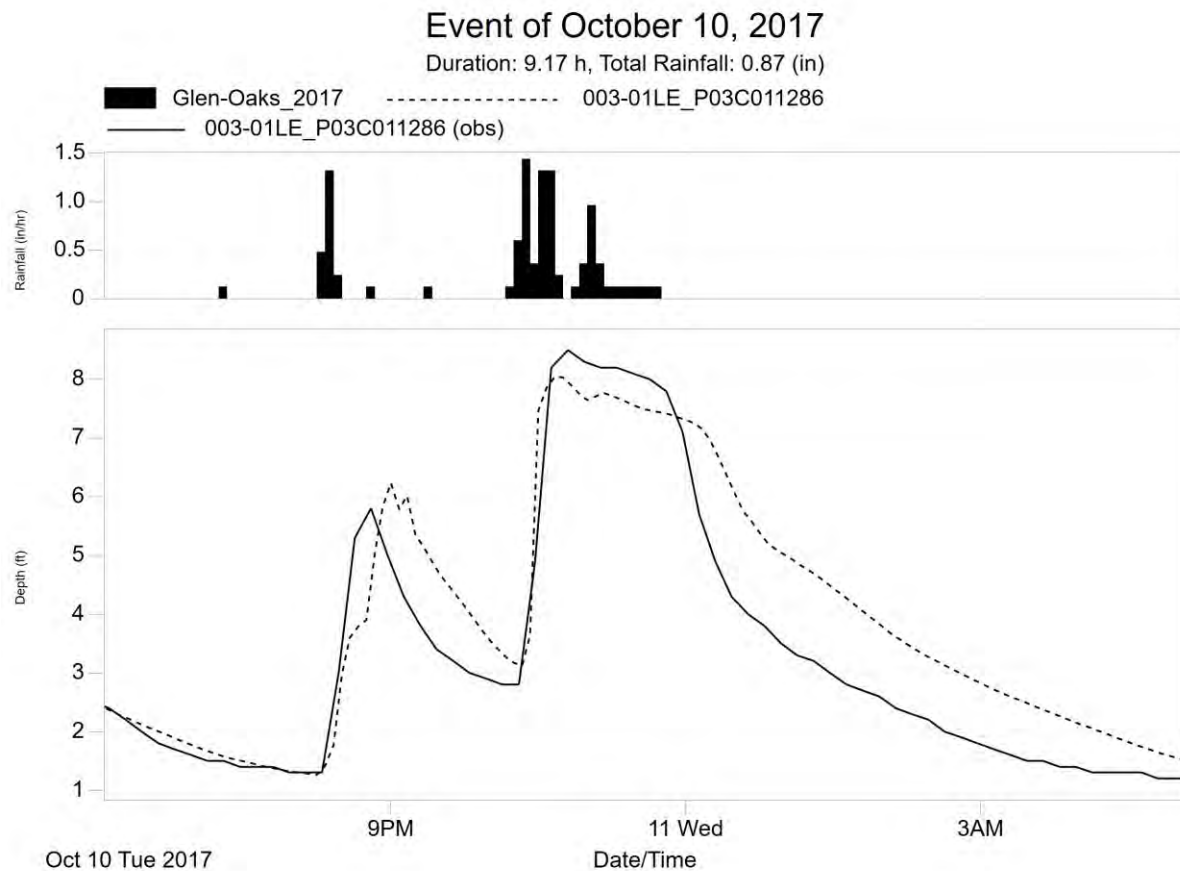
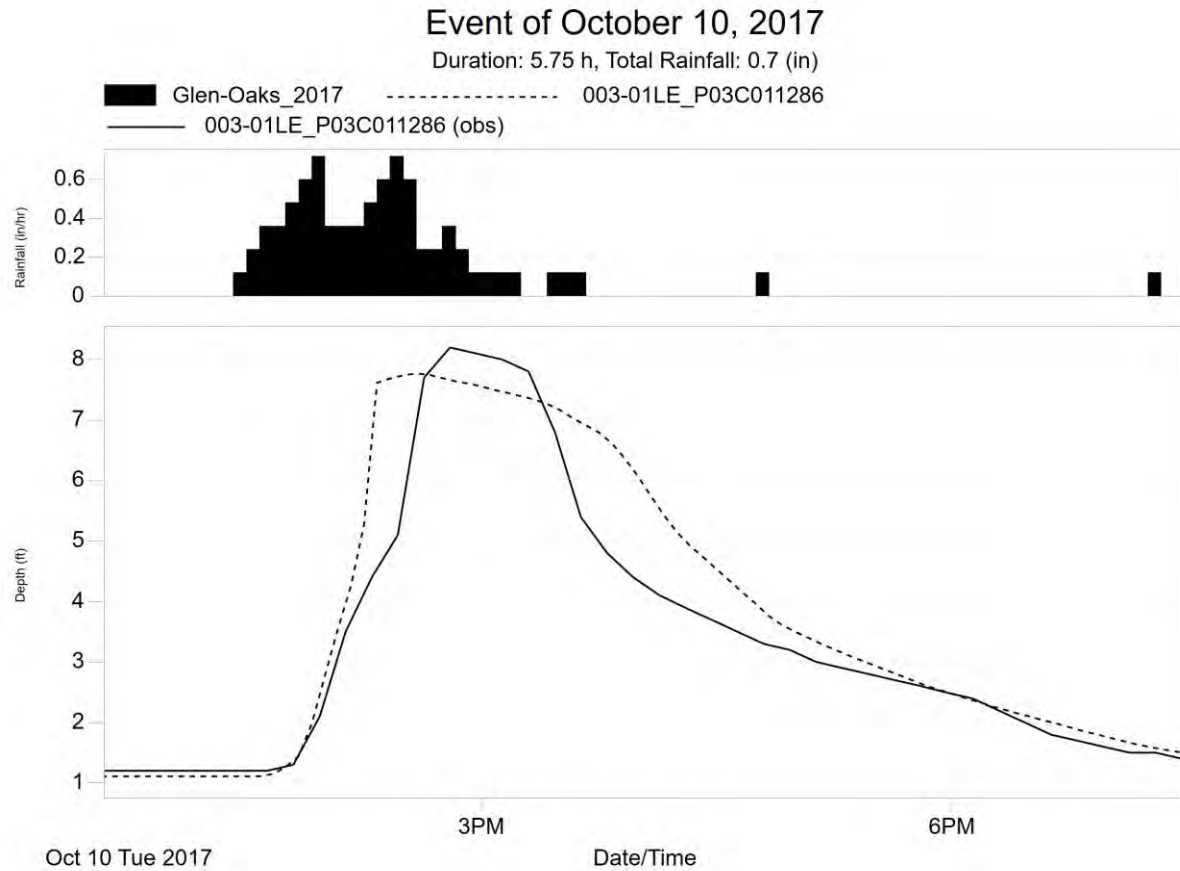


Event of September 18, 2017

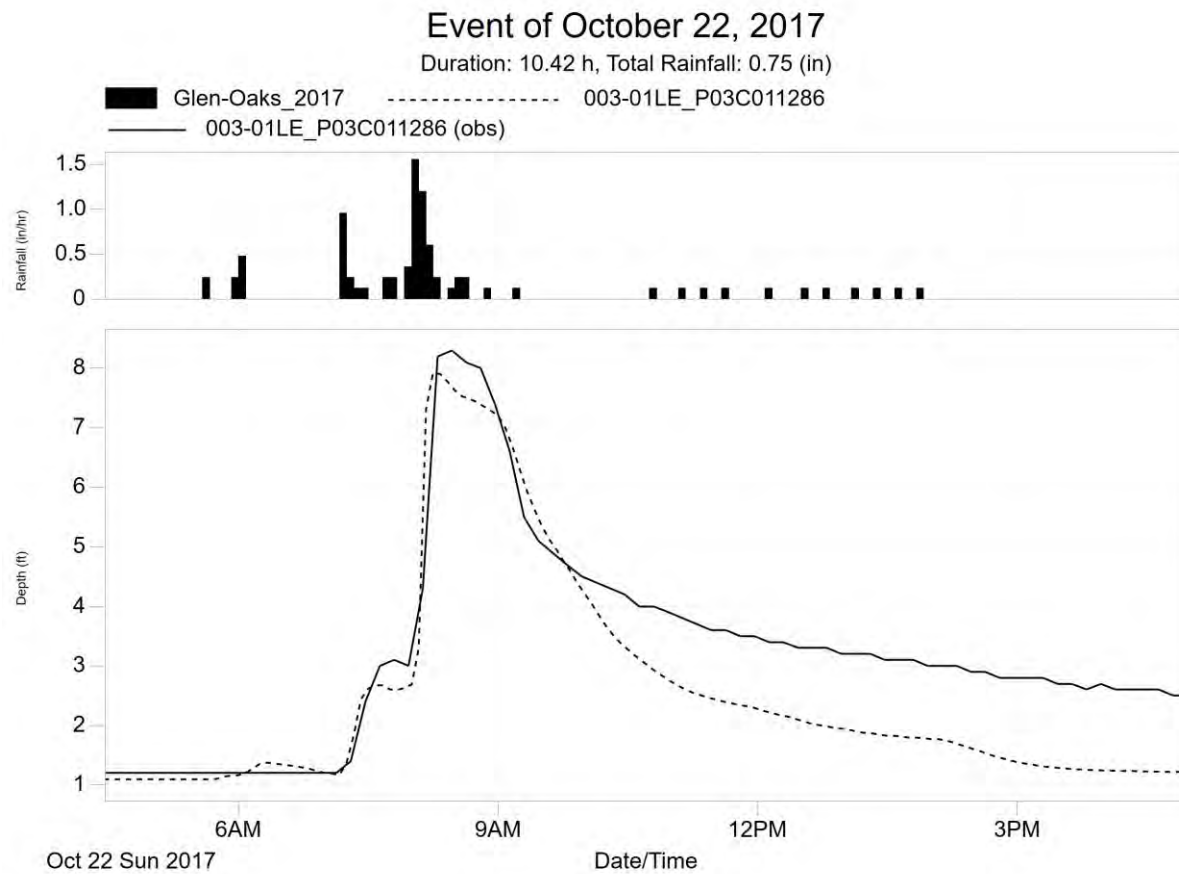
Duration: 5.5 h, Total Rainfall: 1.04 (in)



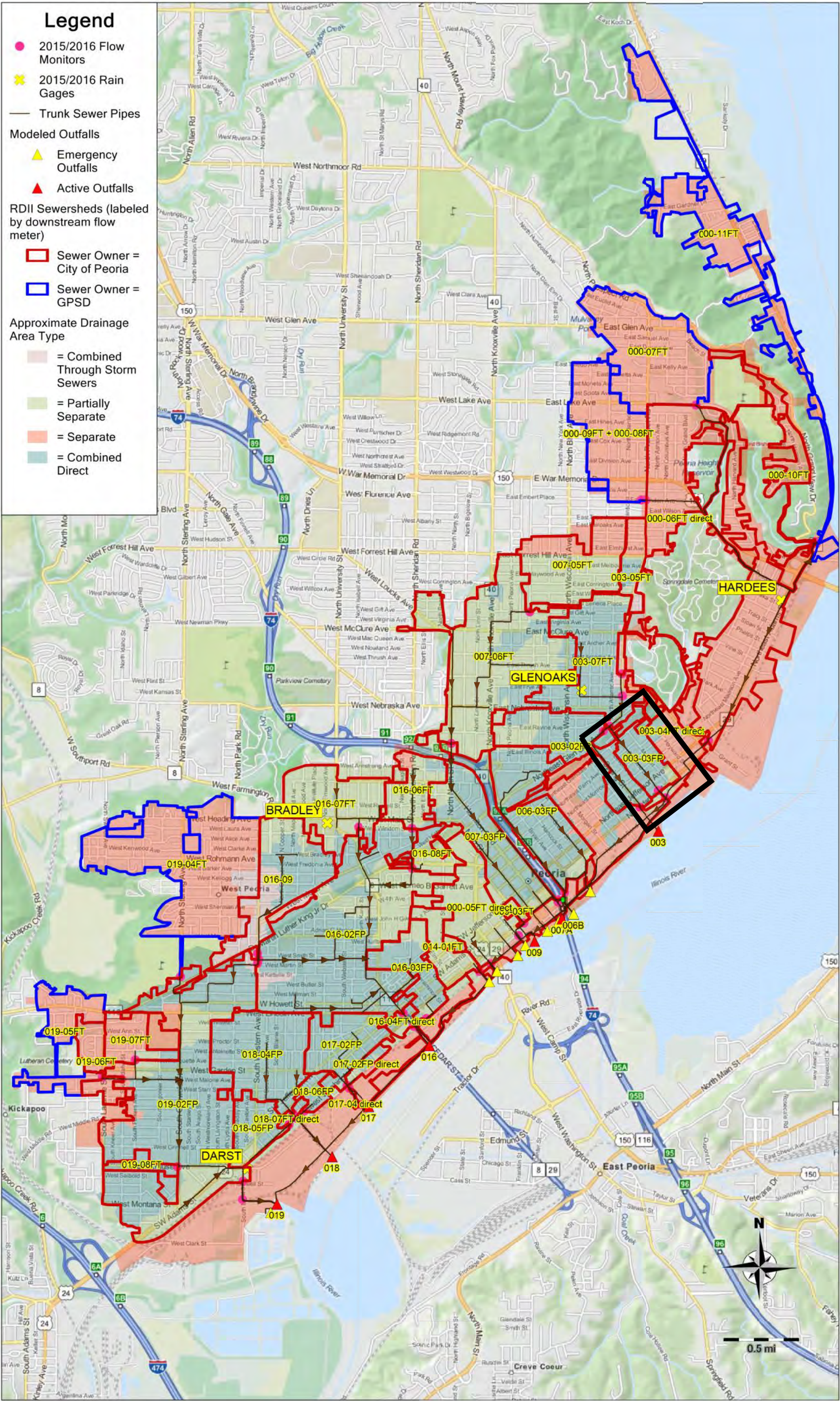
Spring-Caroline 003-01LE – Verification Events



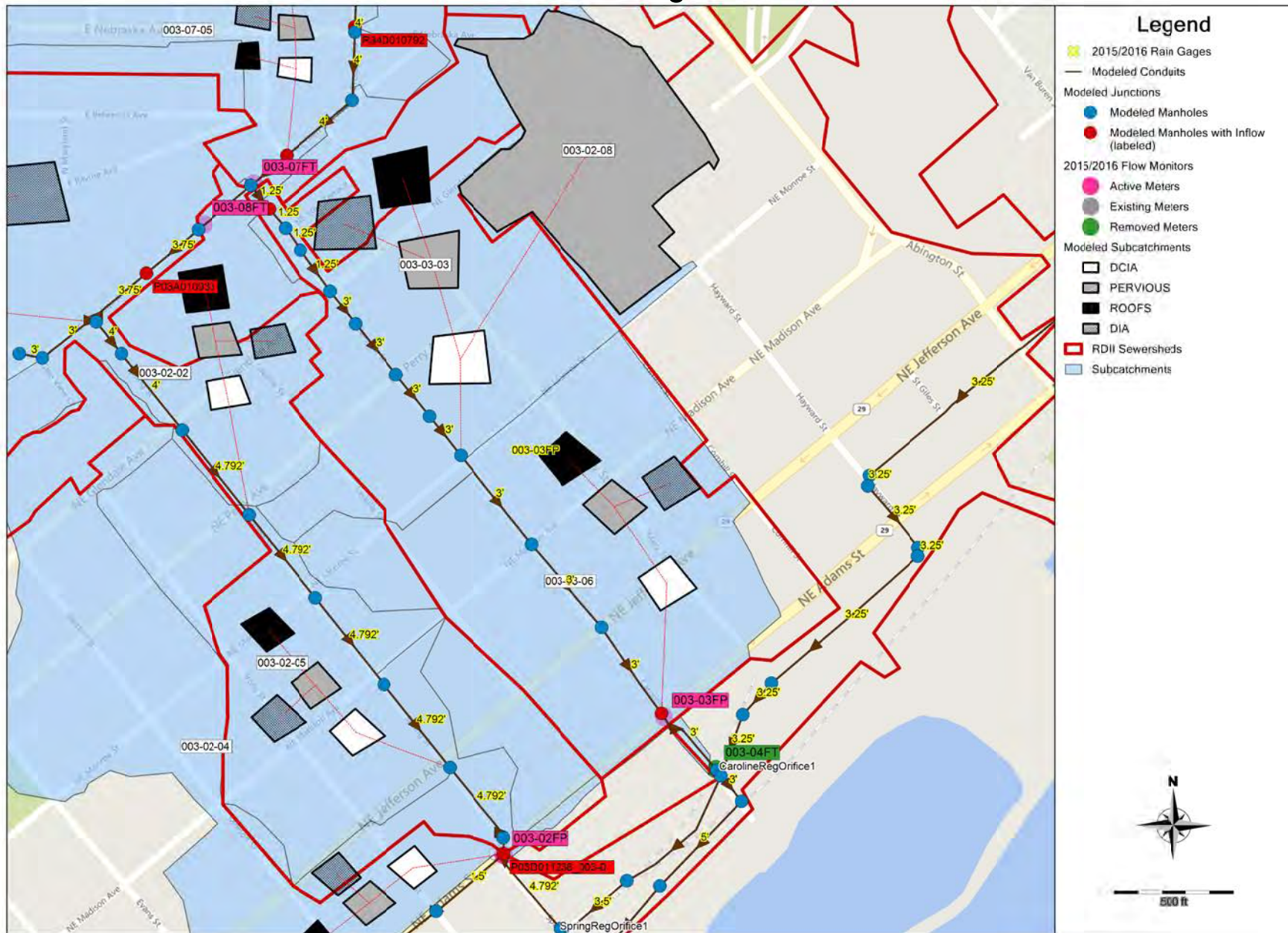
Spring-Caroline 003-01LE – Verification Events



Flow Monitor 003-03FP Overview Map



003-03 - Caroline Regulator Influent Flow



Spring Caroline 003-03FT

Date	Duration (h)	Rainfall (in) Glen Oaks	Maximum Flow (cfs) Observed Modeled		Maximum Flow (mgd) Observed Modeled		Total Volume (ft³) Observed Modeled		Volume (million gallons) Observed Modeled		Peak Flow Rate (-15% to +25%)	Flow Volume (-10% to +20%)	Rainfall Variability
CALIBRATION EVENTS													
7/11/2015 9:00	12.2	1.32	57.5	61.6	37.1	39.8	112600	130400	0.8	1.0	7%	16%	relatively uniform
7/16/2015 21:05	4.4	1.05	61.1	57.5	39.4	37.2	123800	109100	0.9	0.8	-6%	-12%	relatively uniform
9/8/2015 10:40	3.3	0.87	23.7	44.5	15.3	28.8	52390	77940	0.4	0.6	88%	49%	possibly uniform
9/18/2015 14:50	4.3	1.46	49.9	35.0	32.2	22.6	154400	143600	1.2	1.1	-30%	-7%	relatively uniform
11/5/2015 22:25	3.1	0.31	4.3	14.3	2.8	9.2	17270	28150	0.1	0.2	229%	63%	possibly uniform
11/11/2015 19:40	0.9	0.65	50.2	36.0	32.4	23.3	74240	60310	0.6	0.5	-28%	-19%	relatively uniform
11/16/2015 21:05	29.1	2.18	7.5	15.7	4.8	10.2	165200	218400	1.2	1.6	110%	32%	variable
11/26/2015 20:45	26.2	1.27	3.6	6.7	2.3	4.3	106100	125800	0.8	0.9	85%	19%	possibly uniform
12/13/2015 3:05	28.5	1.69	5.6	8.1	3.6	5.2	137200	167500	1.0	1.3	43%	22%	possibly uniform
12/20/2015 23:10	12.9	0.67	6.1	7.8	3.9	5.1	57370	62770	0.4	0.5	29%	9%	possibly uniform
12/23/2015 7:05	4.0	0.7	22.8	23.7	14.7	15.3	63510	63460	0.5	0.5	4%	0%	variable
12/28/2015 1:15	19.0	2.05	33.3	19.6	21.5	12.7	280700	204800	2.1	1.5	-41%	-27%	possibly uniform
VERIFICATION EVENTS													
6/15/2015 19:30	6.5	0.63	25.6	18.4	16.6	11.9	52360	55270	0.4	0.4	-28%	6%	variable
6/17/2015 2:05	2.9	0.8	42.3	39.1	27.3	25.3	77340	71720	0.6	0.5	-7%	-7%	variable
6/18/2015 13:20	4.8	0.21	5.5	12.4	3.6	8.0	15650	16290	0.1	0.1	125%	4%	variable
6/25/2015 0:55	6.8	0.64	16.9	21.6	10.9	13.9	51200	56700	0.4	0.4	28%	11%	possibly uniform
6/26/2015 8:50	10.0	0.88	33.8	27.2	21.8	17.6	80390	78280	0.6	0.6	-19%	-3%	possibly uniform
6/28/2015 18:55	2.6	0.47	48.7	18.7	31.5	12.1	69400	40710	0.5	0.3	-62%	-41%	possibly uniform
7/8/2015 5:10	19.6	1.34	9.9	9.1	6.4	5.8	105900	119900	0.8	0.9	-8%	13%	relatively uniform
7/29/2015 1:05	1.6	0.77	59.3	44.1	38.3	28.5	58830	76180	0.4	0.6	-26%	29%	variable
8/18/2015 2:10	0.9	0.4	17.5	32.5	11.3	21.0	22910	33230	0.2	0.2	85%	45%	possibly uniform
8/18/2015 17:30	1.6	0.55	17.3	41.9	11.2	27.0	24530	49260	0.2	0.4	142%	101%	relatively uniform
3/15/2016 20:10	1.2	0.68	64.5	58.8	41.7	38.0	74070	73340	0.6	0.5	-9%	-1%	relatively uniform
Notes: Should match 003-04 data. Difference illustrates flow meter variability. Difficult monitoring location due to steep pipe slope.								WEIGHTED AVERAGES					
								Calibration - Relatively Uniform		-13%	-5%	relatively uniform	
								Calibration - Possibly Uniform		32%	2%	possibly uniform	
								Calibration - Variable		30%	23%	variable	
								Calibration Weighted - All Events		2%	4%		
								Verification - Relatively Uniform		20%	19%	relatively uniform	
								Verification - Possibly Uniform		-15%	-7%	possibly uniform	
								Verification - Variable		-14%	7%	variable	
								Verification Weighted - All Events		-5%	6%		
								Weighted Average - All Events		-2%	4%		
								NET AVERAGES					
								Calibration - Relatively Uniform		-14%	-5%	relatively uniform	
								Calibration - Possibly Uniform		72%	22%	possibly uniform	
								Calibration - Variable		57%	16%	variable	
								Calibration Net - All Events		41%	12%		
								Verification - Relatively Uniform		42%	38%	relatively uniform	
								Verification - Possibly Uniform		8%	3%	possibly uniform	
								Verification - Variable		16%	8%	variable	
								Verification Net - All Events		20%	14%		
								Net Average - All Events		31%	13%		

Notes:

Should match 003-04 data. Difference illustrates flow meter variability.

Difficult monitoring location due to steep pipe slope.

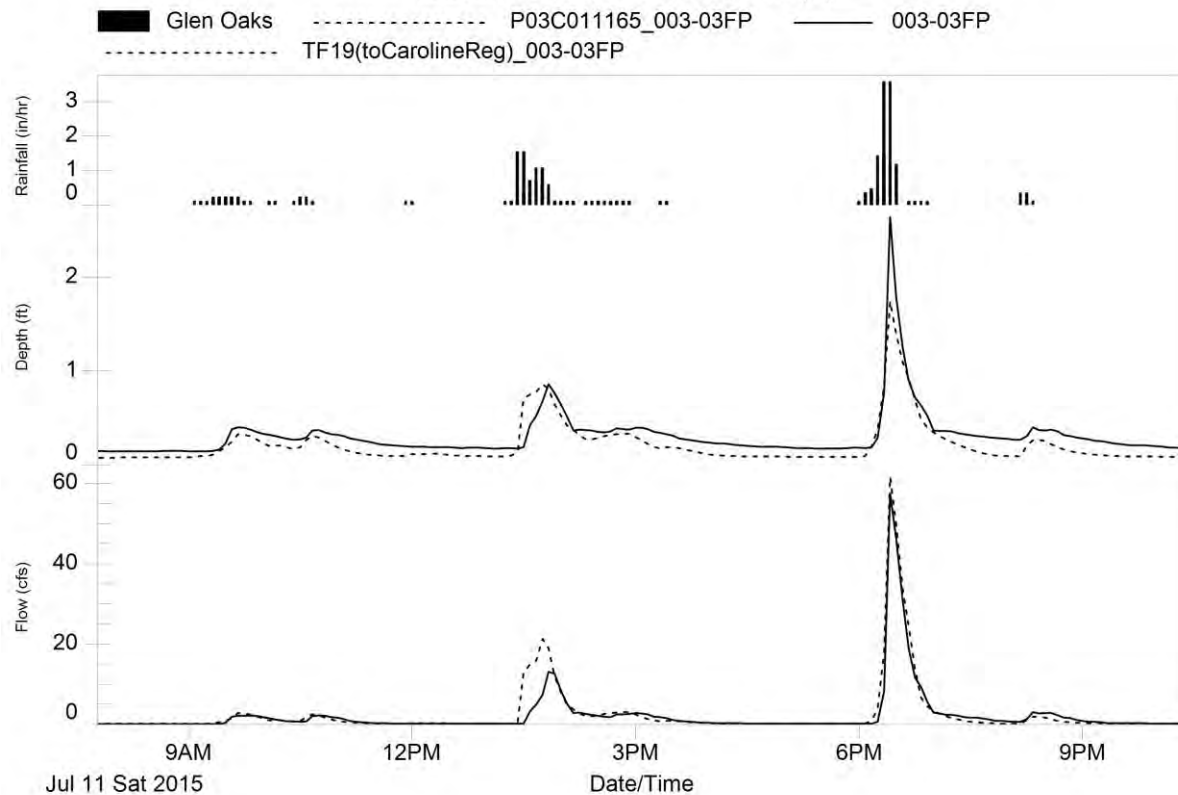
Spring Caroline 003-03FT Depth

Date	Duration (h)	Maximum Depth (ft)		Minimum Depth (ft)		Average Depth (ft)		Maximum Depth (ft)	Minimum Depth (ft)	Average Depth (ft)	Rainfall Variability
		metered	modeled	metered	modeled	metered	modeled	Surcharged: -0.33 ft to +1.67 ft			
CALIBRATION EVENTS - DEPTH								Non-Surcharged: -0.33 ft to +0.33 ft			
7/11/2015 8:50:00	12.0	2.6	1.7	0.1	0.1	0.3	0.2	-0.9	-0.1	-0.1	possibly uniform
7/16/2015 21:10:00	4.3	2.9	1.6	0.2	0.1	0.6	0.4	-1.3	-0.1	-0.2	relatively uniform
9/8/2015 10:40:00	3.8	1.4	1.3	0.2	0.1	0.5	0.4	-0.2	-0.1	-0.1	variable
9/18/2015 14:50:00	10.1	2.3	1.1	0.2	0.1	0.4	0.5	-1.2	-0.1	0.1	relatively uniform
11/5/2015 13:55:00	14.2	0.5	0.7	0.2	0.1	0.2	0.3	0.2	-0.1	0.1	possibly uniform
11/11/2015 19:40:00	2.9	2.5	1.2	0.2	0.1	0.6	0.7	-1.2	-0.1	0.2	relatively uniform
11/16/2015 21:05:00	29.1	0.7	0.7	0.2	0.1	0.3	0.2	0.0	-0.1	-0.1	variable
11/26/2015 20:45:00	26.2	0.5	0.5	0.1	0.1	0.3	0.2	0.0	-0.1	-0.1	possibly uniform
12/13/2015 3:05:00	28.5	0.6	0.5	0.2	0.1	0.3	0.2	-0.1	-0.1	-0.1	possibly uniform
12/20/2015 23:10:00	12.9	0.7	0.5	0.2	0.1	0.3	0.2	-0.1	-0.1	-0.1	relatively uniform
12/23/2015 7:05:00	4.0	1.2	1.0	0.2	0.1	0.5	0.4	-0.2	-0.1	-0.1	variable
12/28/2015 1:05:00	19.8	1.4	0.8	0.2	0.1	0.4	0.3	-0.6	-0.1	-0.1	variable
VERIFICATION EVENTS - DEPTH											
6/15/2015 19:30:00	6.5	1.4	0.8	0.2	0.1	0.4	0.2	-0.6	-0.1	-0.1	variable
6/17/2015 2:05:00	2.9	1.9	1.2	0.1	0.1	0.6	0.4	-0.7	-0.1	-0.2	variable
6/18/2015 13:20:00	4.8	0.5	0.7	0.2	0.1	0.3	0.1	0.2	-0.1	-0.1	variable
6/25/2015 0:55:00	6.8	0.9	0.9	0.1	0.1	0.3	0.2	-0.1	-0.1	-0.1	possibly uniform
6/26/2015 8:50:00	10.0	1.5	1.0	0.2	0.1	0.3	0.2	-0.5	-0.1	-0.1	possibly uniform
6/28/2015 18:55:00	2.6	2.0	0.8	0.2	0.1	0.6	0.3	-1.2	-0.1	-0.2	possibly uniform
7/8/2015 5:10:00	19.6	0.8	0.6	0.1	0.1	0.3	0.2	-0.2	-0.1	-0.1	relatively uniform
7/29/2015 1:05:00	1.6	2.7	1.3	0.1	0.1	0.8	0.6	-1.4	-0.1	-0.3	variable
8/18/2015 2:10:00	0.9	1.2	1.2	0.1	0.1	0.7	0.5	0.0	0.0	-0.2	possibly uniform
8/18/2015 17:30:00	1.6	1.3	1.4	0.2	0.1	0.5	0.5	0.1	-0.1	0.0	relatively uniform
3/15/2016 20:10:00	1.2	3.5	1.6	0.2	0.1	1.2	0.7	-1.9	-0.1	-0.5	relatively uniform
Modeled depth obtained from node upstream of meter due to steep pipe slope. Depth at meter is higher than depth at this node.				WEIGHTED AVERAGES							
				Calibration - Relatively Uniform				-1.1	-0.1	0.0	relatively uniform
				Calibration - Possibly Uniform				-0.5	-0.1	-0.1	possibly uniform
				Calibration - Variable				-0.3	-0.1	-0.1	variable
				Calibration Weighted - All Events				-0.8	-0.1	-0.1	
				Verification - Relatively Uniform				-1.2	-0.1	-0.3	relatively uniform
				Verification - Possibly Uniform				-0.6	-0.1	-0.2	possibly uniform
				Verification - Variable				-0.9	-0.1	-0.2	variable
				Verification Weighted - All Events				-0.9	-0.1	-0.2	
				Weighted Average - All Events				-0.8	-0.1	-0.1	
				NET AVERAGES							
				Calibration - Relatively Uniform				-1.0	-0.1	0.0	relatively uniform
				Calibration - Possibly Uniform				-0.2	-0.1	0.0	possibly uniform
				Calibration - Variable				-0.2	-0.1	-0.1	variable
				Calibration Net - All Events				-0.5	-0.1	-0.1	
				Verification - Relatively Uniform				-0.7	-0.1	-0.2	relatively uniform
				Verification - Possibly Uniform				-0.5	-0.1	-0.1	possibly uniform
				Verification - Variable				-0.6	-0.1	-0.2	variable
				Verification Net - All Events				-0.6	-0.1	-0.2	
				Net Average - All Events				-0.5	-0.1	-0.1	

Spring-Caroline 003-03FT – Calibration Events

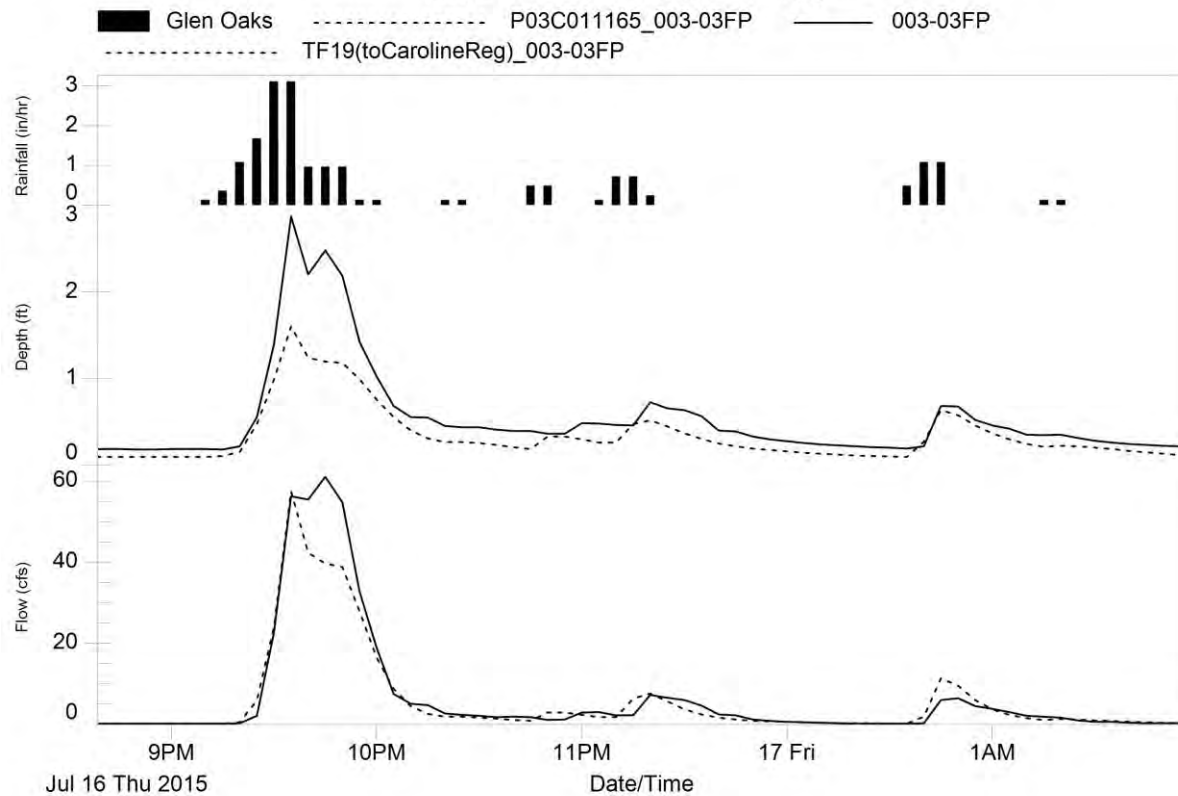
Event of July 11, 2015

Duration: 12.17 h, Total Rainfall: 1.32 (in)



Event of July 16, 2015

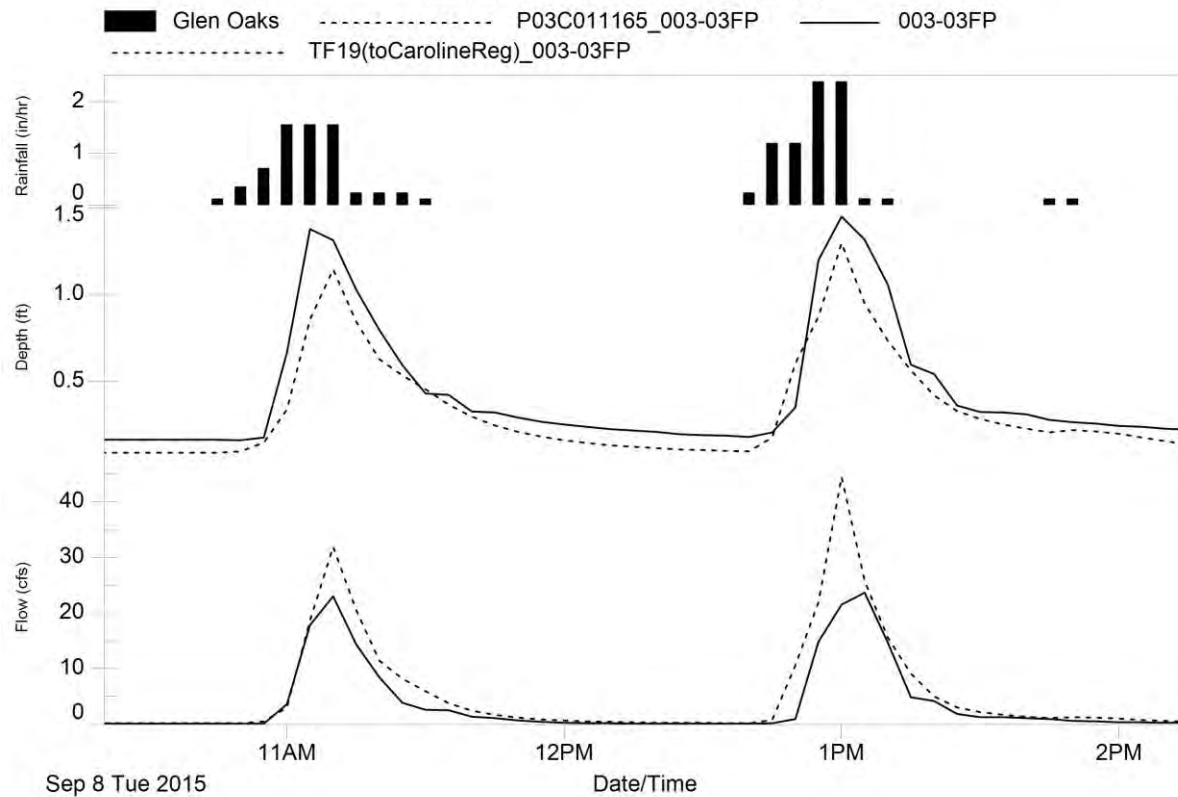
Duration: 4.42 h, Total Rainfall: 1.05 (in)



Spring-Caroline 003-03FT – Calibration Events

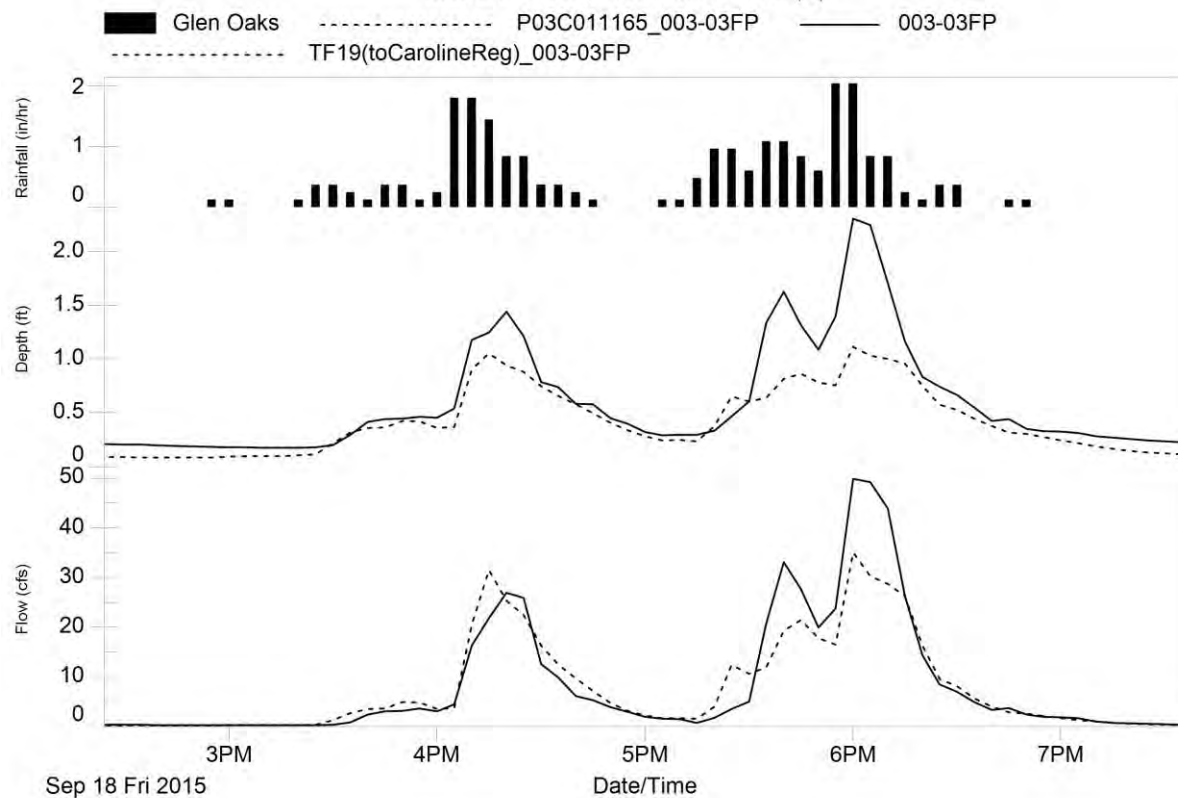
Event of September 8, 2015

Duration: 3.25 h, Total Rainfall: 0.87 (in)



Event of September 18, 2015

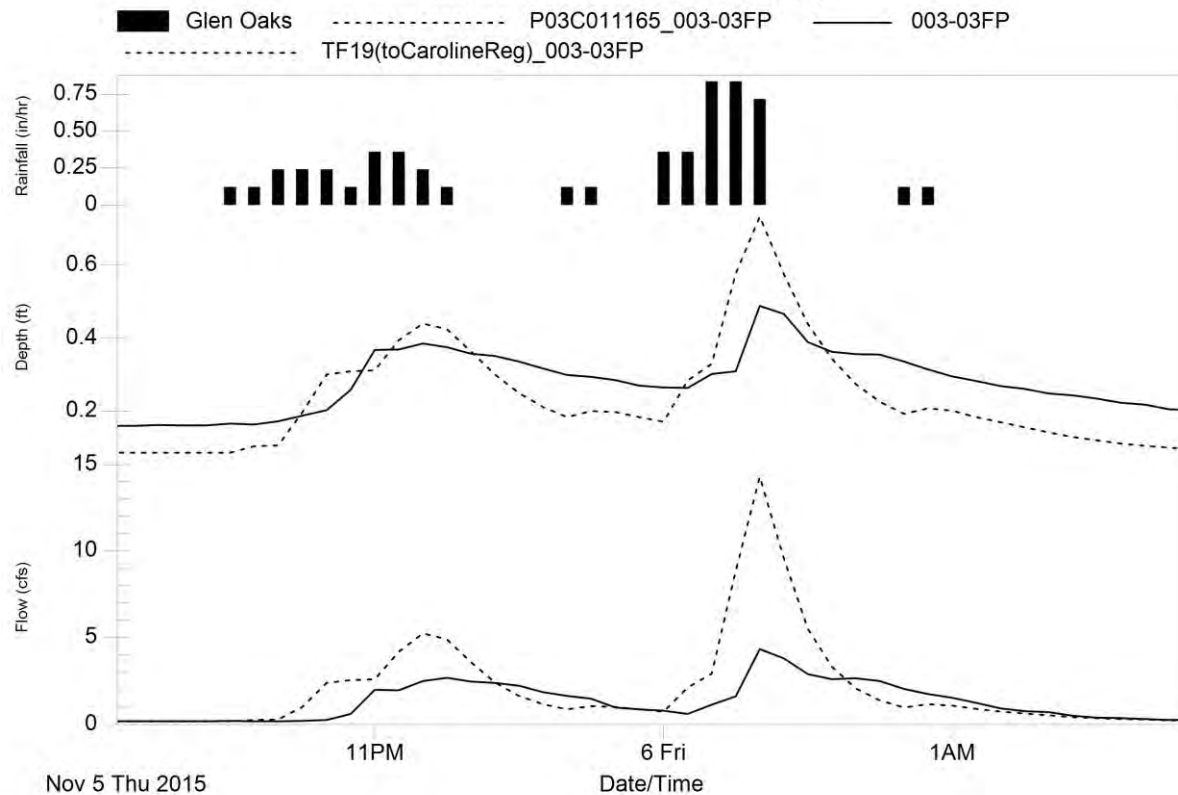
Duration: 4.33 h, Total Rainfall: 1.46 (in)



Spring-Caroline 003-03FT – Calibration Events

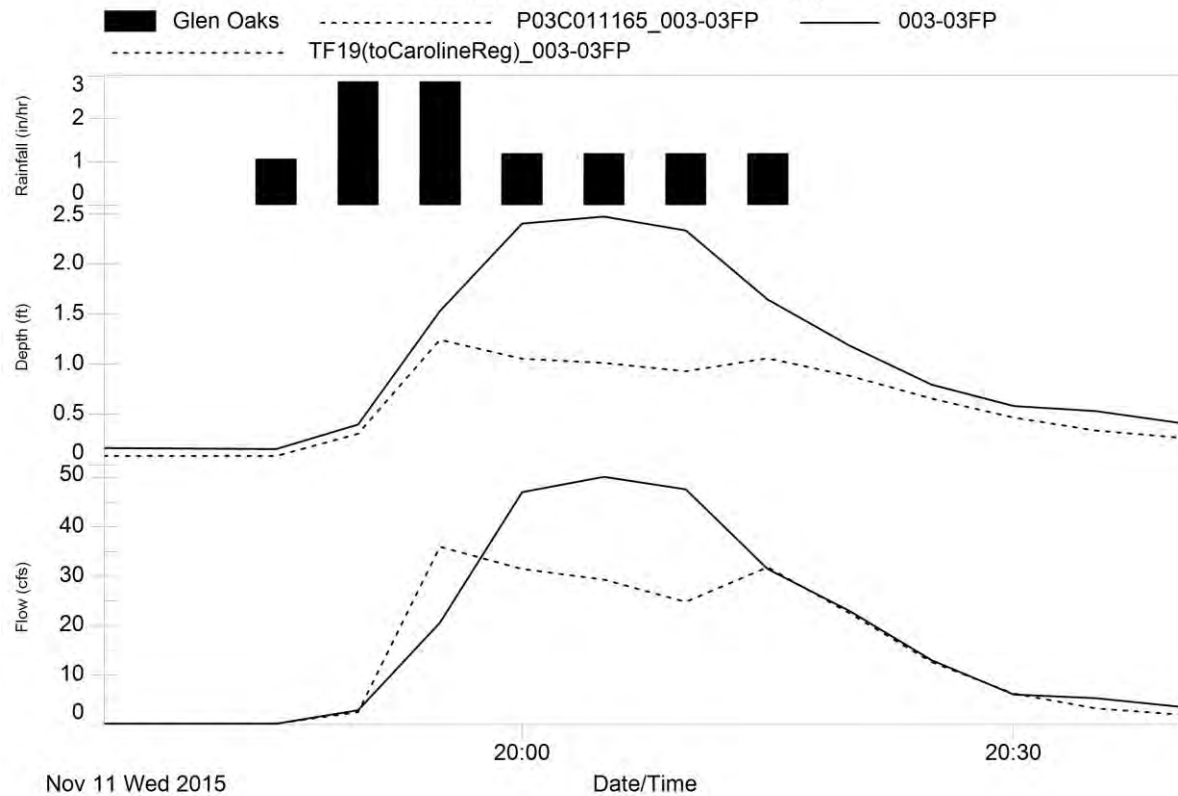
Event of November 5, 2015

Duration: 3.08 h, Total Rainfall: 0.31 (in)



Event of November 11, 2015

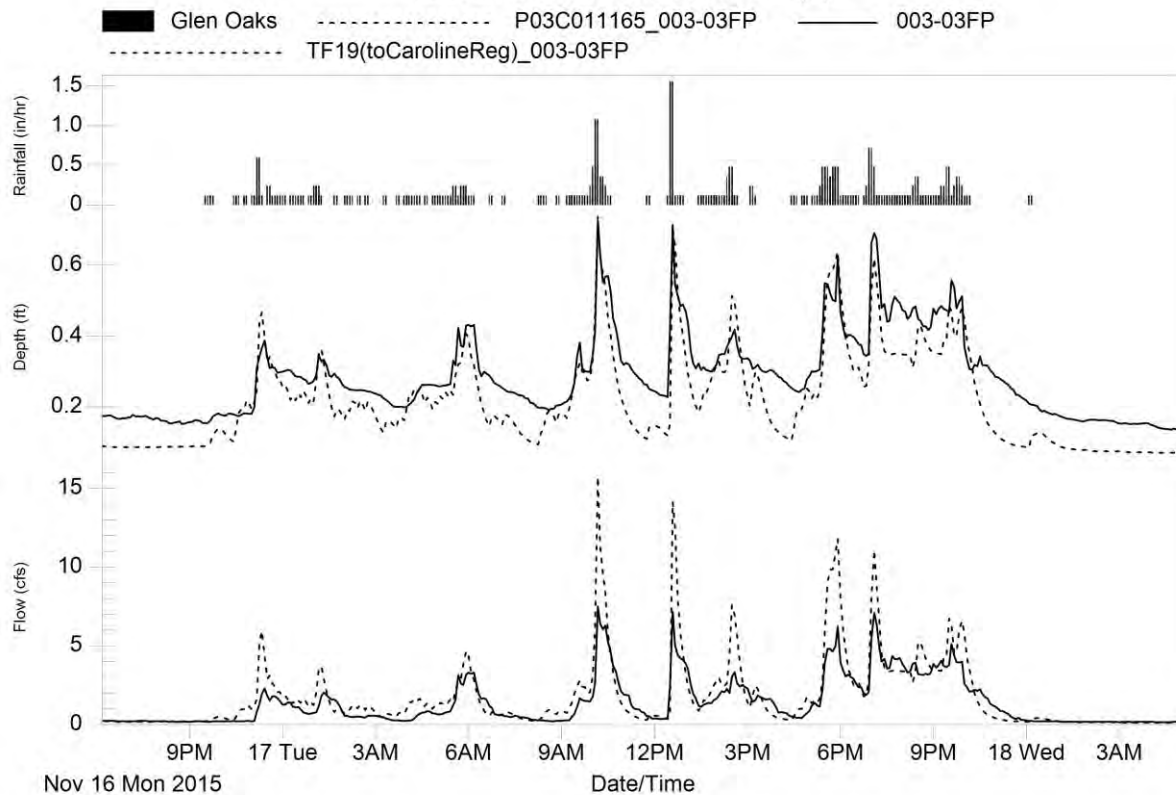
Duration: 0.92 h, Total Rainfall: 0.65 (in)



Spring-Caroline 003-03FT – Calibration Events

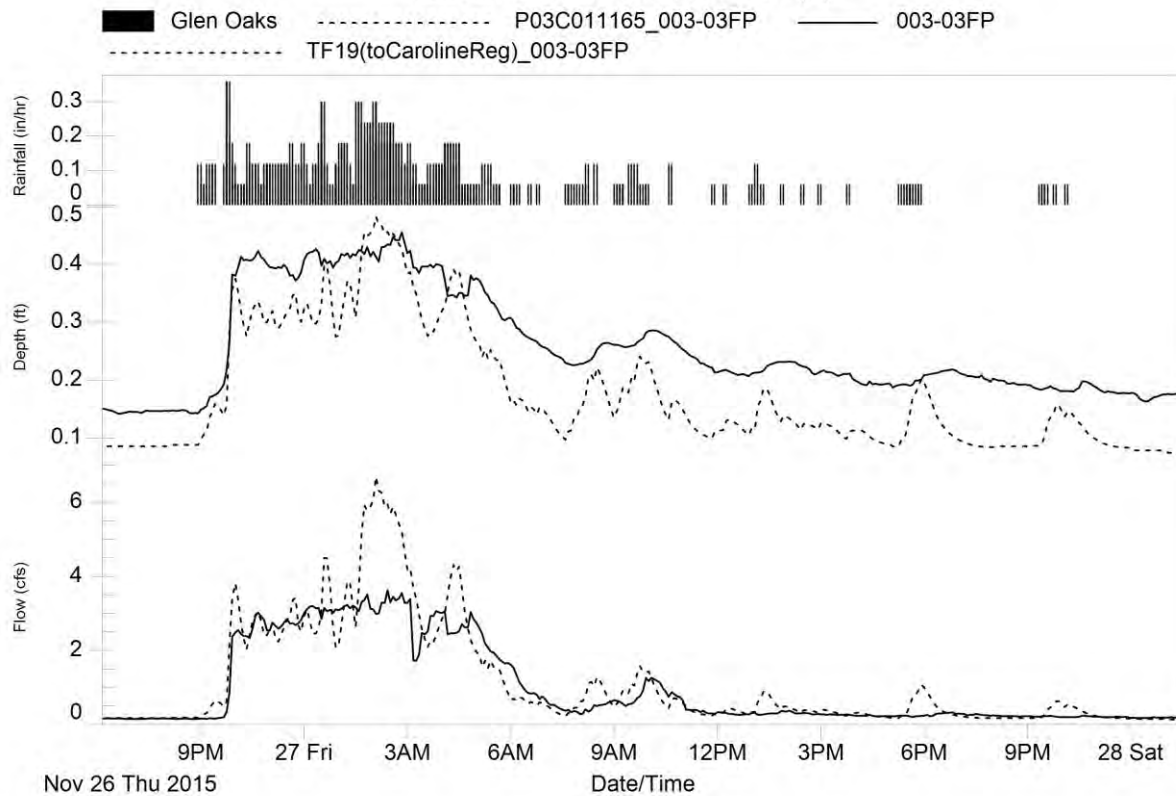
Event of November 16, 2015

Duration: 29.08 h, Total Rainfall: 2.18 (in)



Event of November 26, 2015

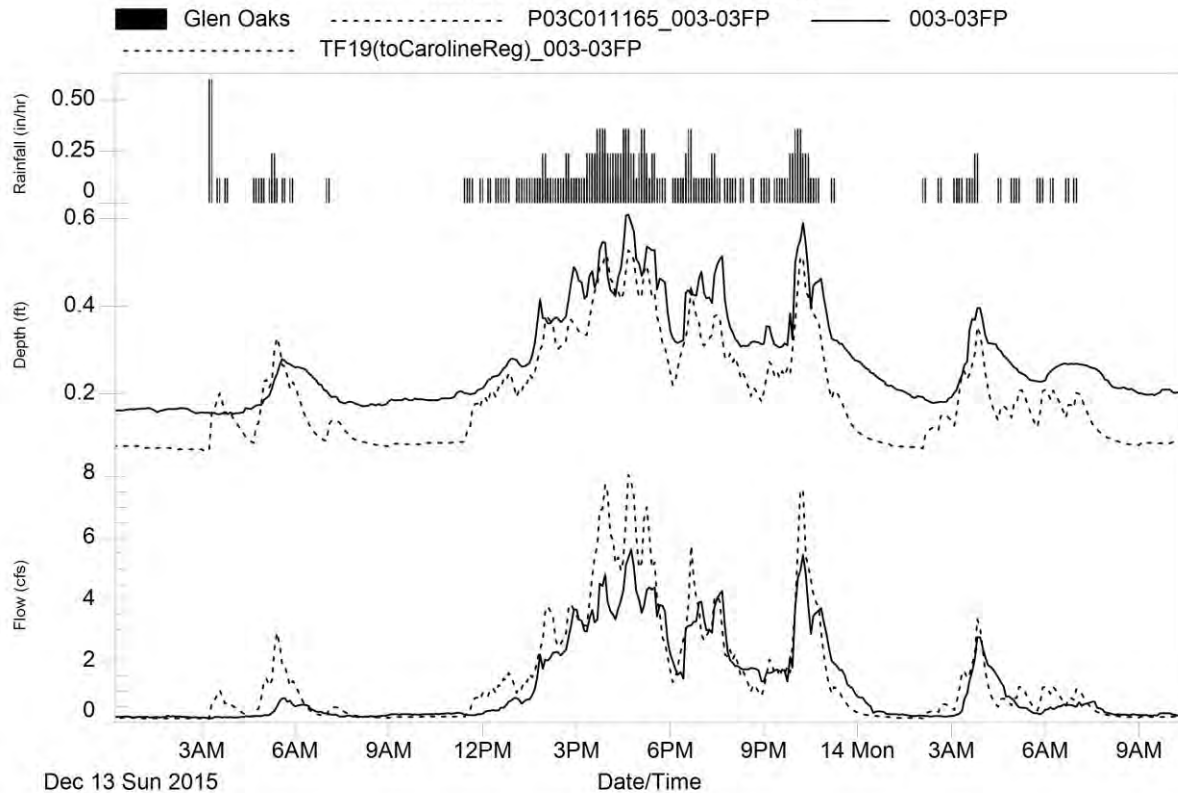
Duration: 26.17 h, Total Rainfall: 1.27 (in)



Spring-Caroline 003-03FT – Calibration Events

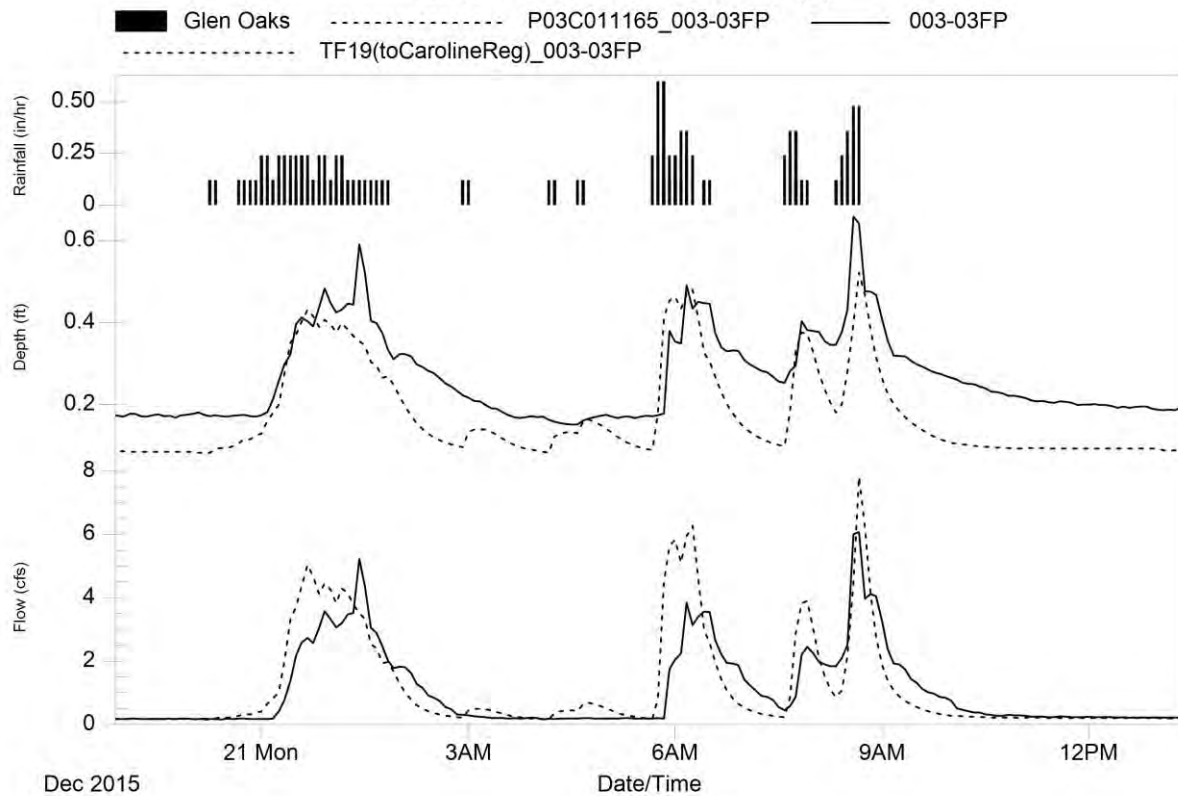
Event of December 13, 2015

Duration: 28.5 h, Total Rainfall: 1.69 (in)



Event of December 20, 2015

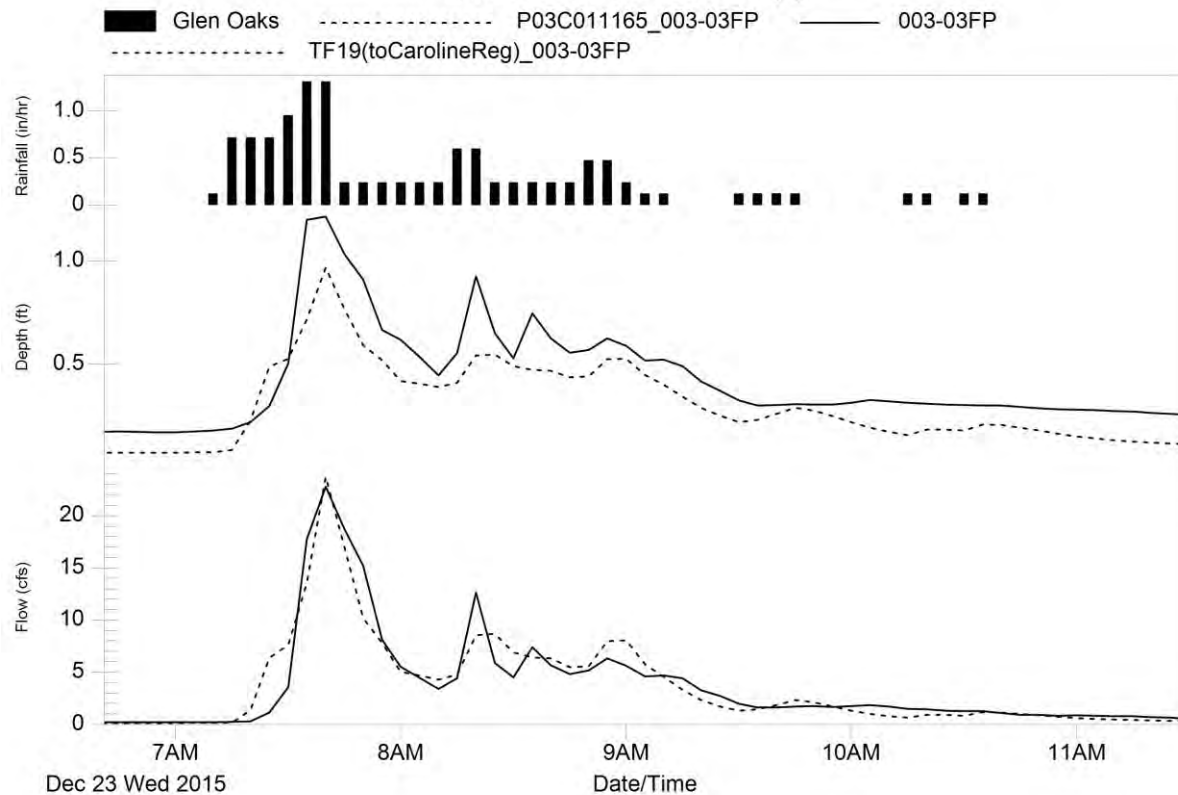
Duration: 12.92 h, Total Rainfall: 0.67 (in)



Spring-Caroline 003-03FT – Calibration Events

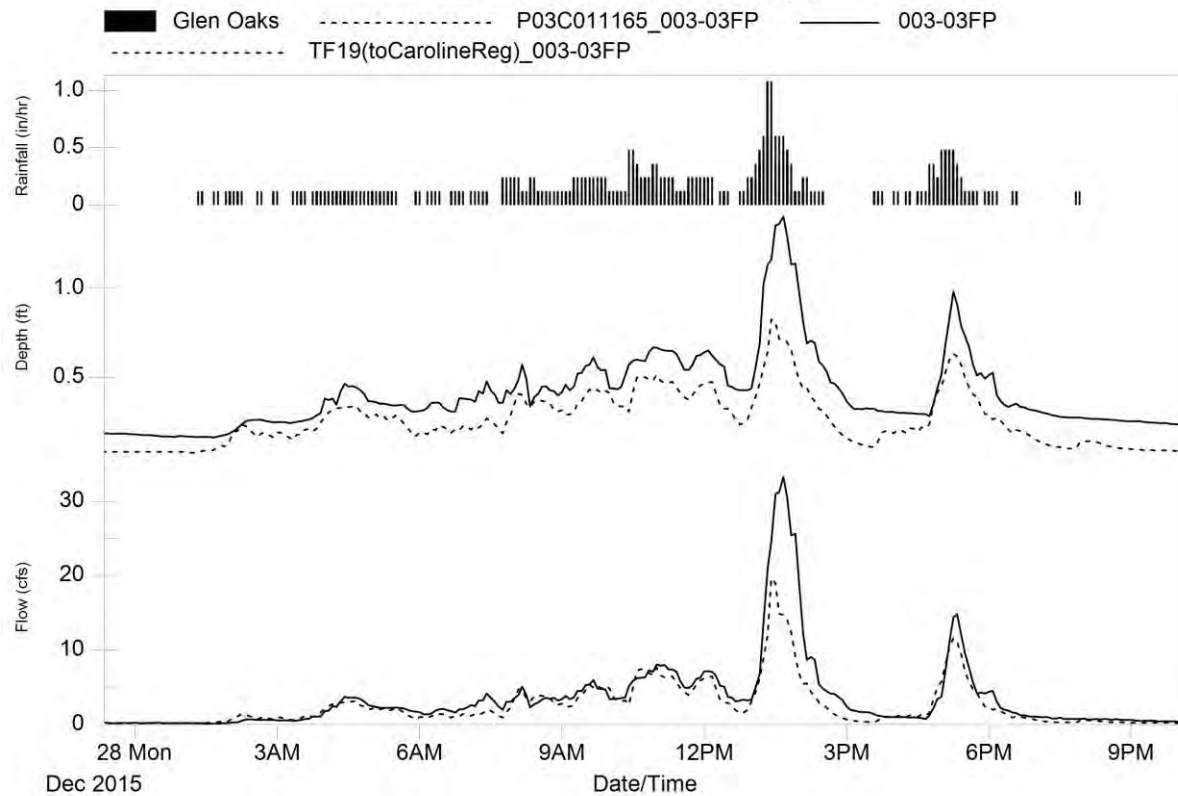
Event of December 23, 2015

Duration: 4 h, Total Rainfall: 0.7 (in)



Event of December 28, 2015

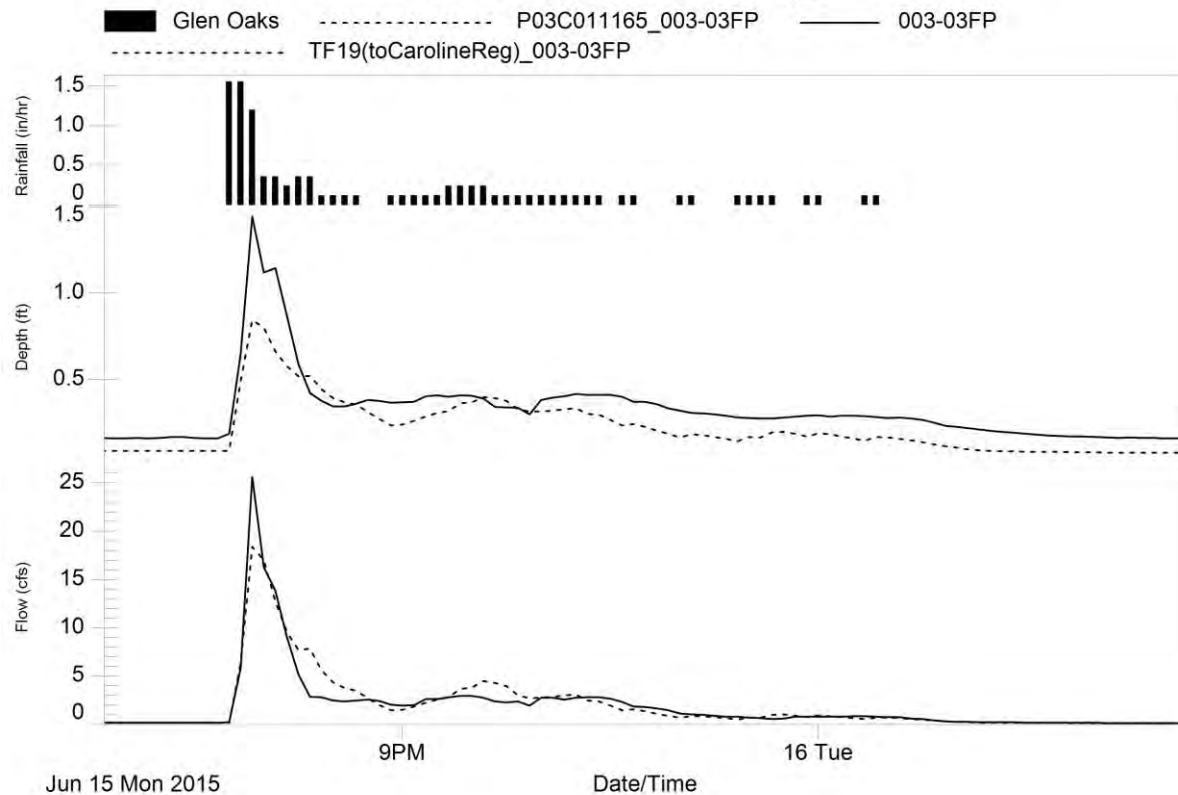
Duration: 19 h, Total Rainfall: 2.05 (in)



Spring-Caroline 003-03FT – Verification Events

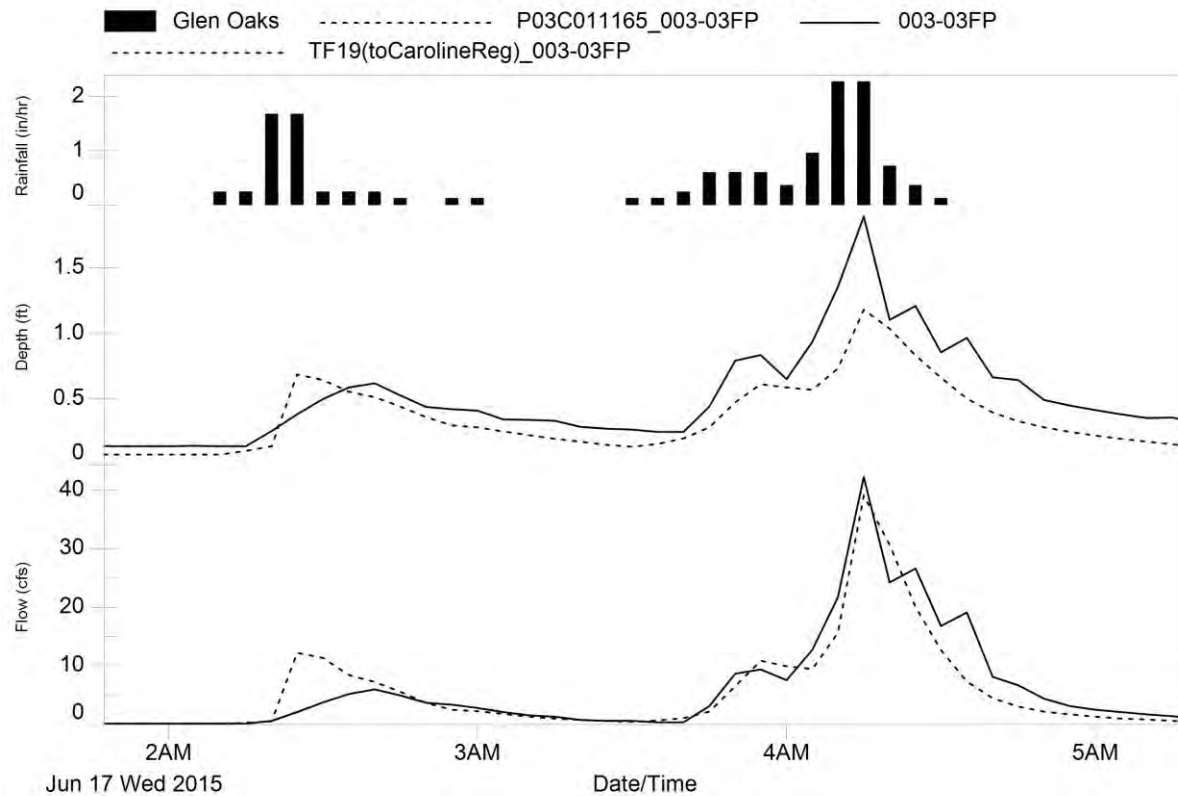
Event of June 15, 2015

Duration: 6.5 h, Total Rainfall: 0.63 (in)



Event of June 17, 2015

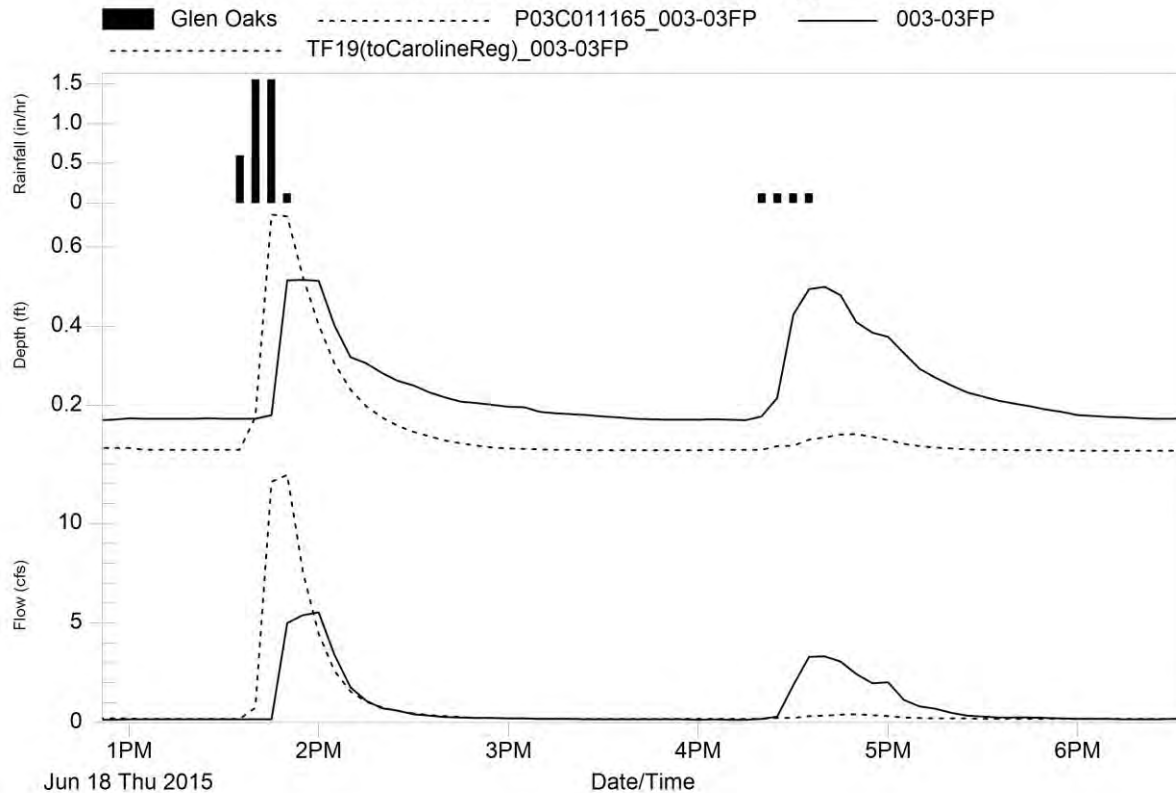
Duration: 2.92 h, Total Rainfall: 0.8 (in)



Spring-Caroline 003-03FT – Verification Events

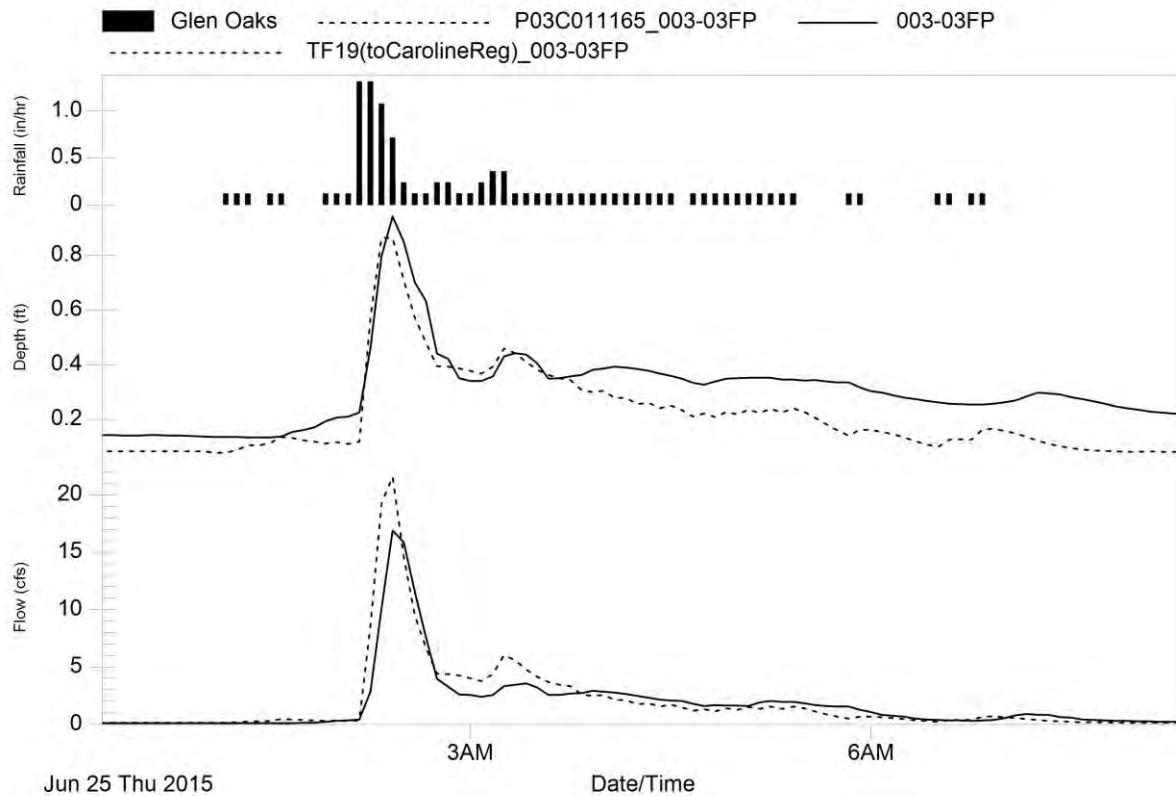
Event of June 18, 2015

Duration: 4.75 h, Total Rainfall: 0.21 (in)



Event of June 25, 2015

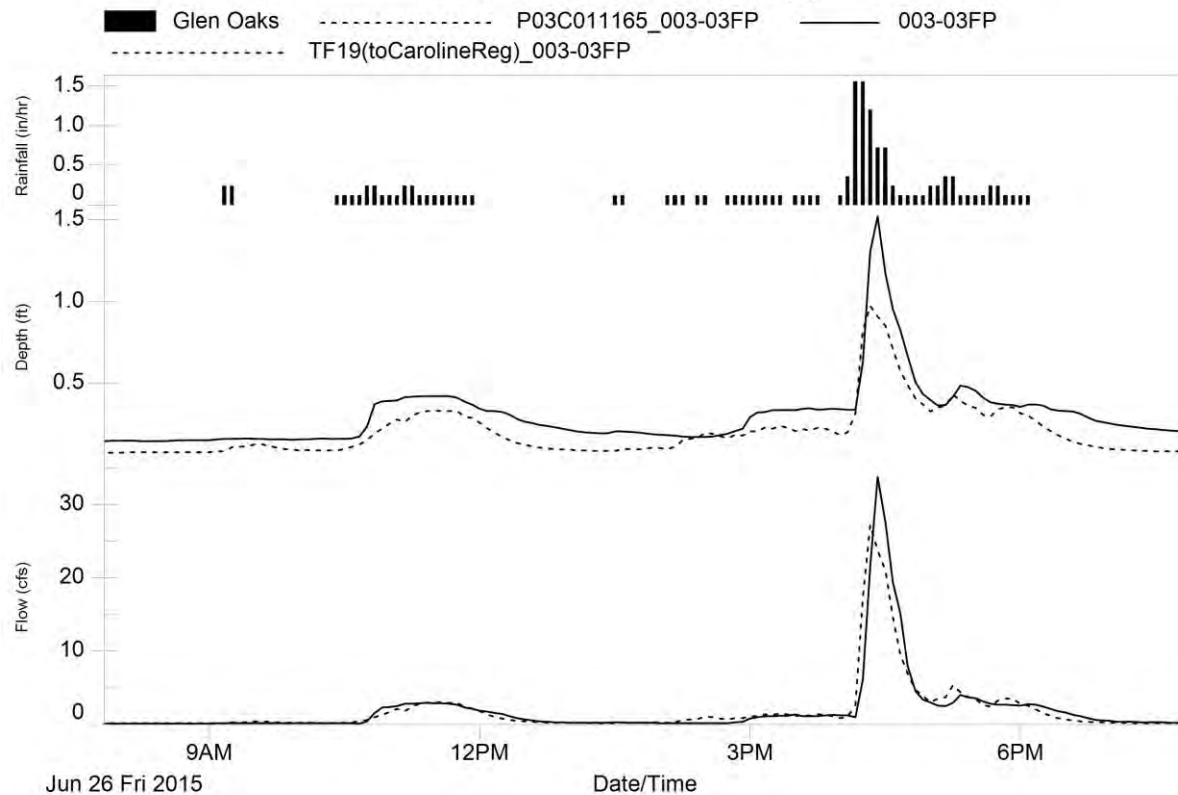
Duration: 6.75 h, Total Rainfall: 0.64 (in)



Spring-Caroline 003-03FT – Verification Events

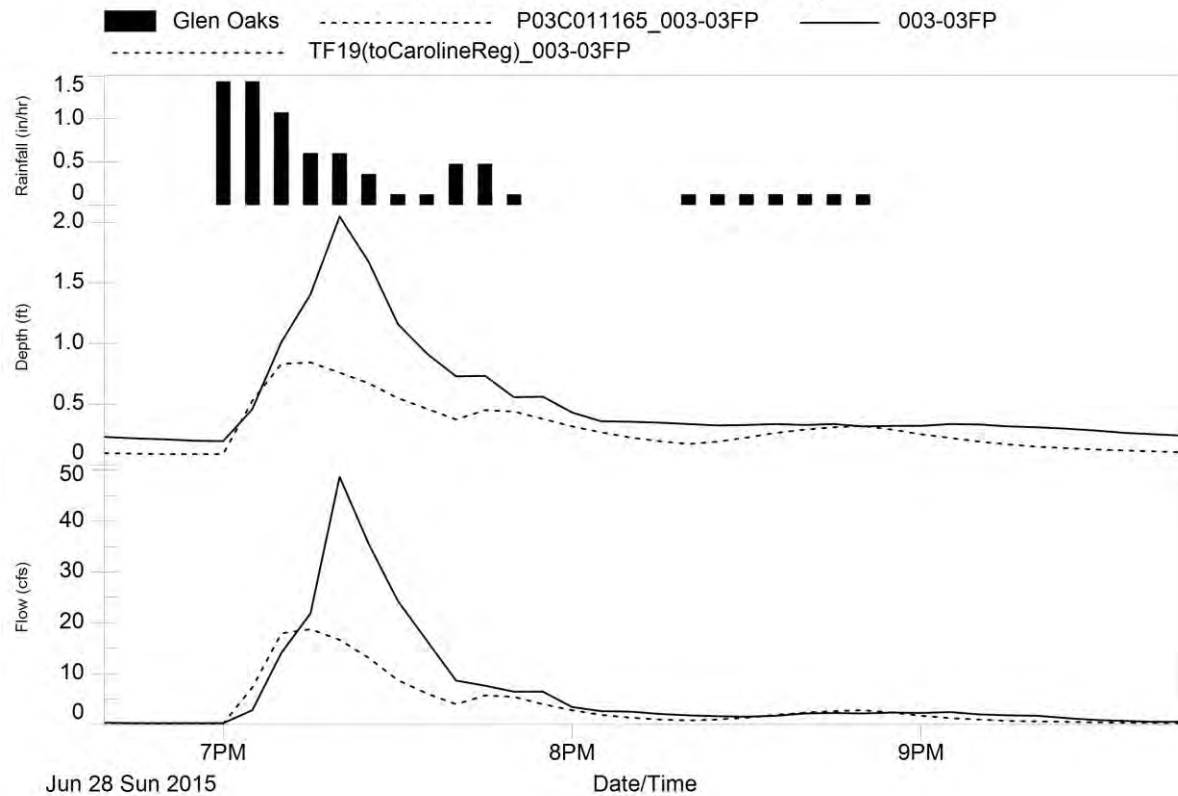
Event of June 26, 2015

Duration: 10 h, Total Rainfall: 0.88 (in)



Event of June 28, 2015

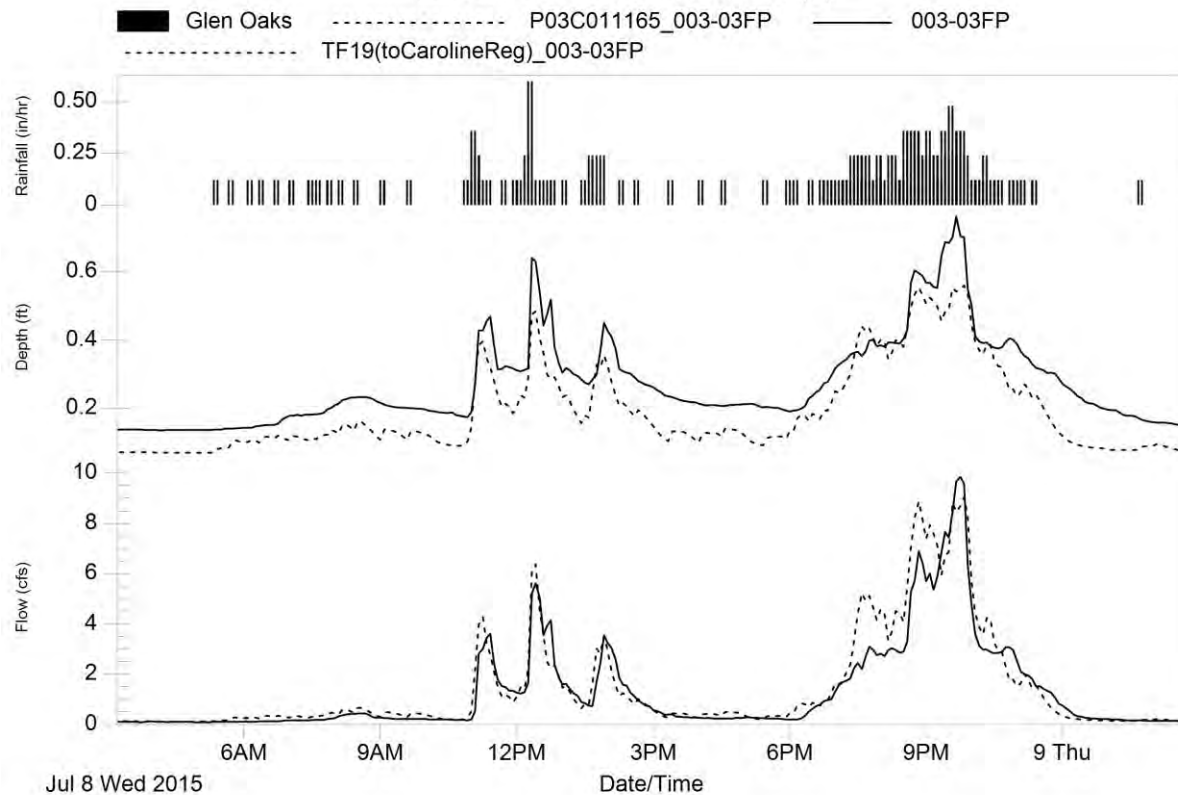
Duration: 2.58 h, Total Rainfall: 0.47 (in)



Spring-Caroline 003-03FT – Verification Events

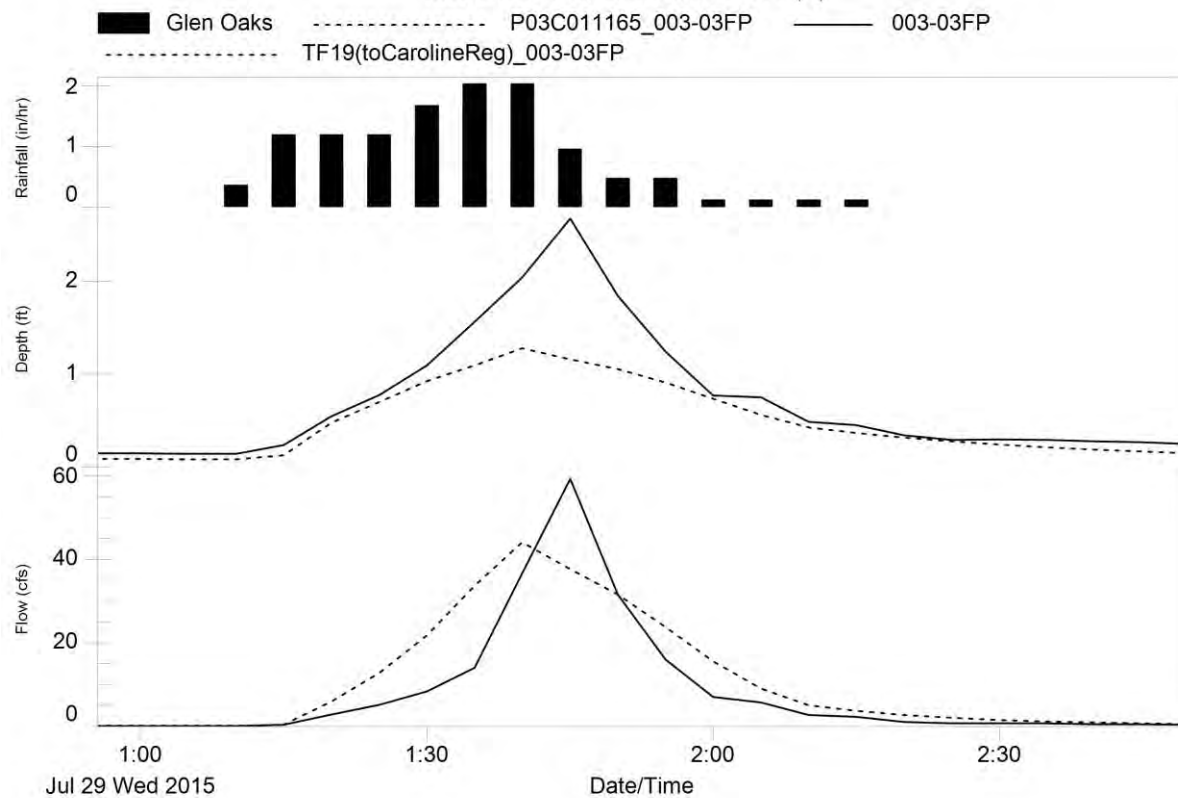
Event of July 8, 2015

Duration: 19.58 h, Total Rainfall: 1.34 (in)

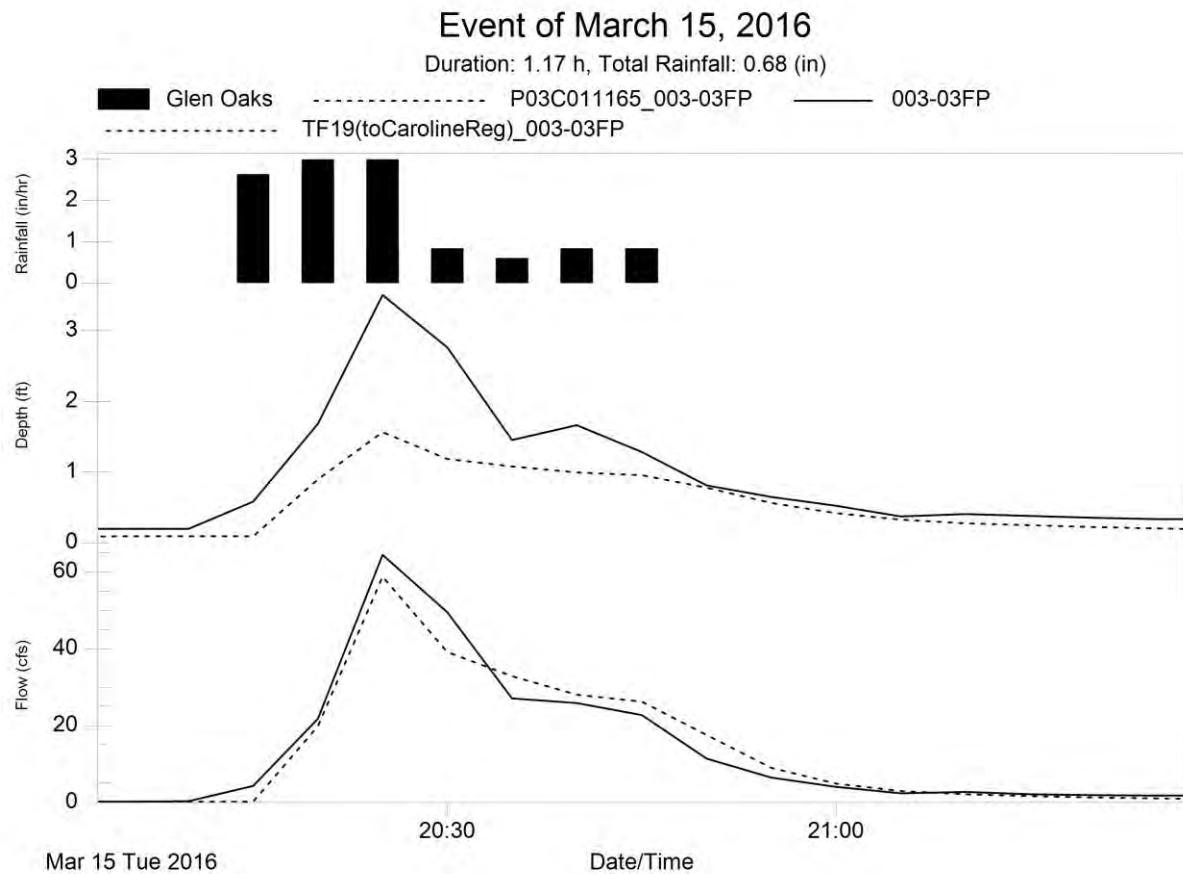
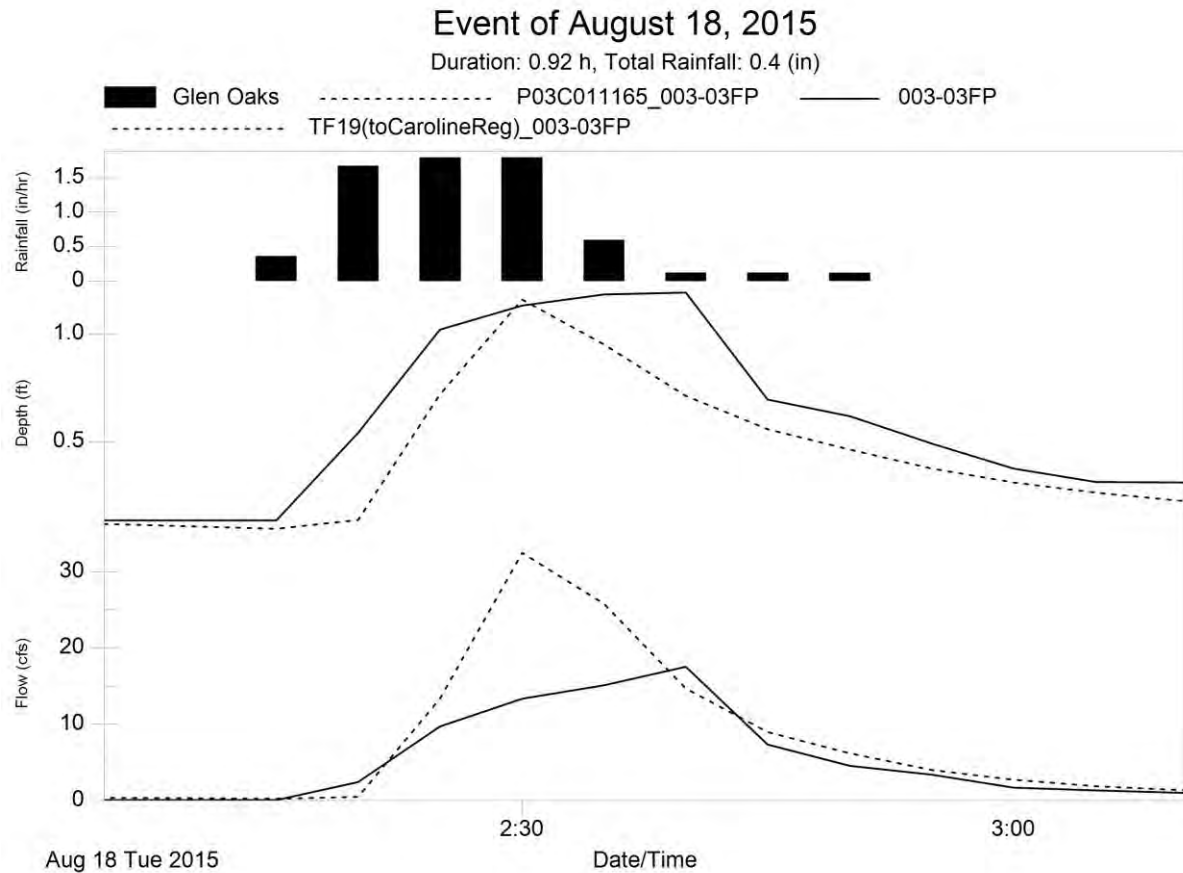


Event of July 29, 2015

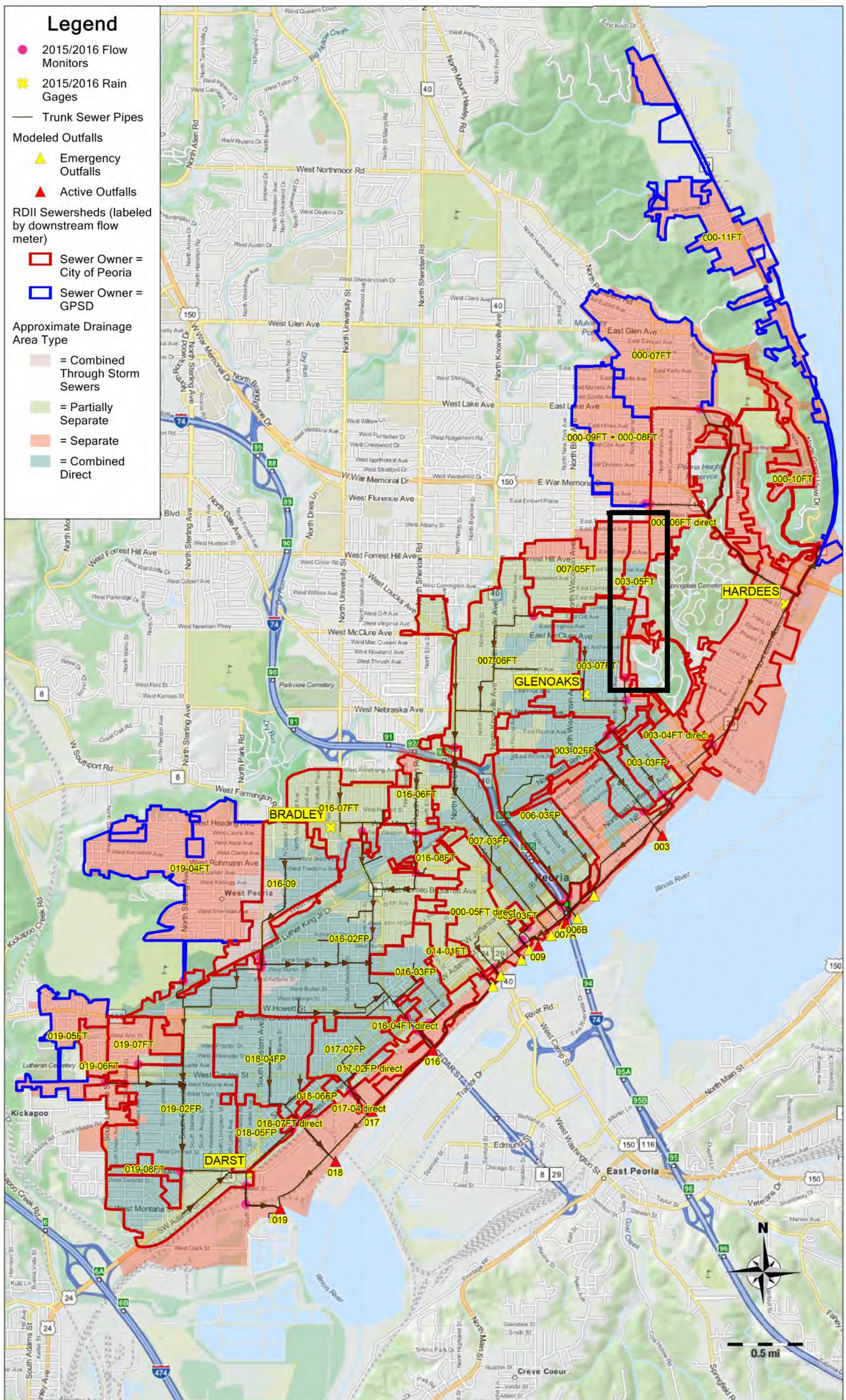
Duration: 1.58 h, Total Rainfall: 0.77 (in)



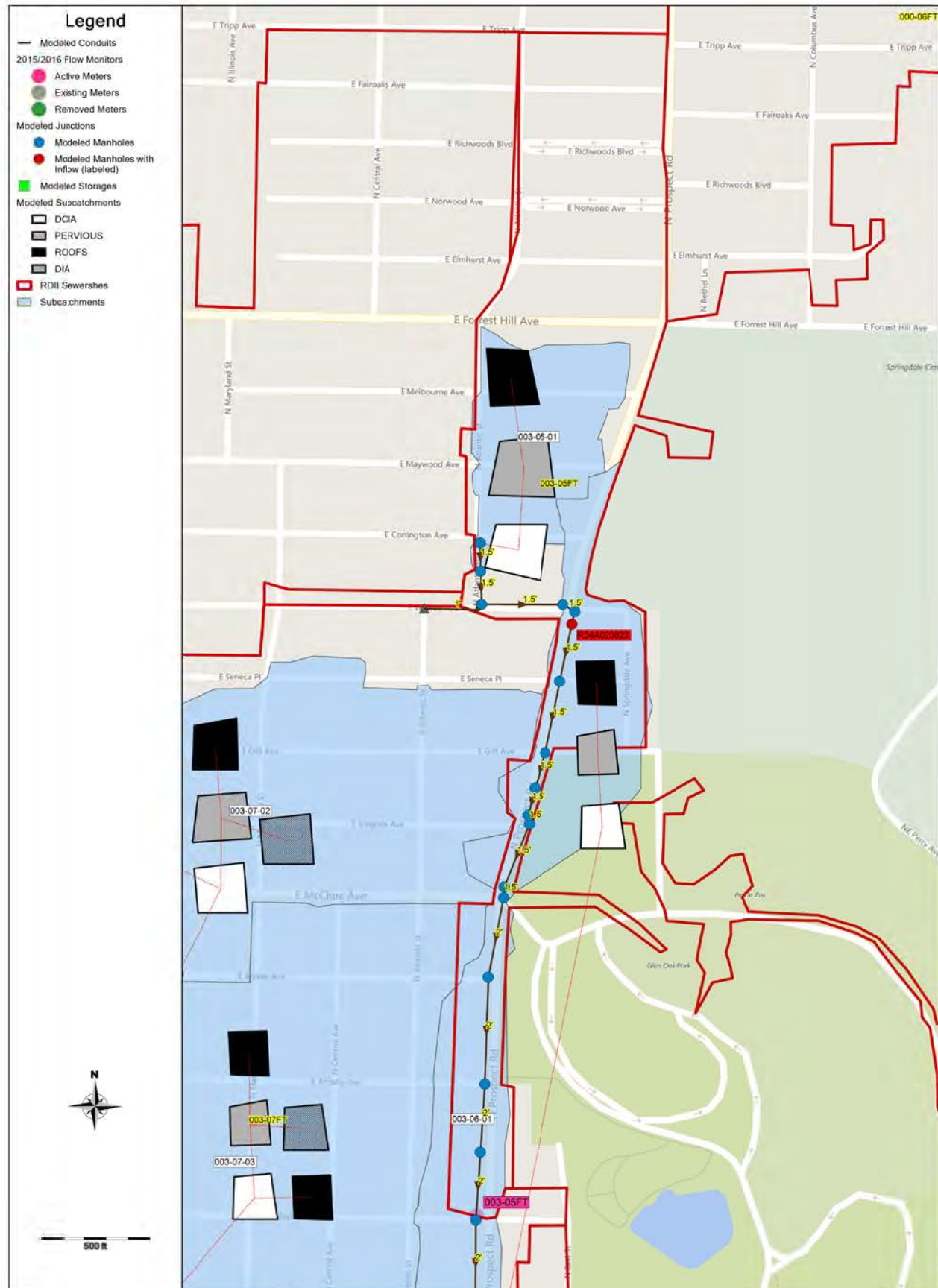
Spring-Caroline 003-03FT – Verification Events



Flow Monitor 003-05FT Overview Map



003-05 - Combined Sewer Flow Meter



Spring Caroline 003-05FT

Date	Duration (h)	Rainfall (in) Glen Oaks	Maximum Flow (cfs)		Maximum Flow (mgd)		Total Volume (ft³)		Volume (million gallons)		Peak Flow Rate (-15% to +25%)	Flow Volume (-10% to +20%)	Rainfall Variability			
CALIBRATION EVENTS - FLOW																
12/13/2015 2:55	54.4	1.71	2.0	2.6	1.3	1.7	152900	169700	1.1	1.3	28%	11%	possibly uniform			
12/20/2015 22:55	16.8	0.67	1.1	1.4	0.7	0.9	36570	41610	0.3	0.3	29%	14%	possibly uniform			
12/28/2015 0:30	31.9	2.05	5.8	4.5	3.7	2.9	248100	208000	1.9	1.6	-21%	-16%	relatively uniform			
VERIFICATION EVENTS - FLOW																
12/23/2015 7:00	9.2	0.70	2.2	2.1	1.4	1.4	39730	40850	0.3	0.3	-2%	3%	variable			
12/26/2015 8:30	29.5	1.06	1.9	2.1	1.2	1.3	99900	99880	0.7	0.7	8%	0%	variable			
2/2/2016 8:05	Bad Meter Data															
Notes: Combined sewer with a parallel storm sewer that eventually discharges into combined sewer. Meter not installed until December 2015									WEIGHTED AVERAGES							
									Calibration - Relatively Uniform					-21%	-16%	relatively uniform
									Calibration - Possibly Uniform					29%	12%	possibly uniform
									Calibration Weighted - All Events					-4%	-4%	variable
									Verification - Variable					3%	1%	
									Verification Weighted - All Events					3%	1%	
									Weighted Average - All Events					-2%	-3%	
									NET AVERAGES							
									Calibration - Relatively Uniform					-21%	-16%	relatively uniform
									Calibration - Possibly Uniform					29%	12%	possibly uniform
									Calibration Net - All Events					12%	3%	variable
									Verification - Variable					3%	1%	
									Verification Net - All Events					3%	1%	
Net Average - All Events					9%	2%										

Notes:

Combined sewer with a parallel storm sewer that eventually discharges into combined sewer.
Meter not installed until December 2015

Spring Caroline 003-05FT Depth

Date	Duration (h)	Maximum Depth (ft)		Minimum Depth (ft)		Average Depth (ft)		Maximum Depth (ft)	Minimum Depth (ft)	Average Depth (ft)	Rainfall Variability
		metered	modeled	metered	modeled	metered	modeled	Surcharged: -0.33 ft to +1.67 ft			
CALIBRATION EVENTS - DEPTH								Non-Surcharged: -0.33 ft to +0.33 ft			
12/13/2015 2:55	54.4	0.5	0.5	0.1	0.2	0.3	0.3	0.0	0.0	0.0	possibly uniform possibly uniform relatively uniform
12/20/2015 22:55		16.8	0.4	0.4	0.2	0.2	0.2	-0.1	0.0	0.0	
12/28/2015 0:30		31.9	1.3	0.6	0.3	0.2	0.5	0.4	-0.6	0.0	
VERIFICATION EVENTS - DEPTH											
12/23/2015 7:00	9.2	0.7	0.4	0.2	0.1	0.4	0.3	-0.3	-0.1	0.0	variable
12/26/2015 8:30		29.5	0.5	0.4	0.2	0.2	0.3	0.3	-0.1	0.0	0.0
2/2/2016 8:05	Bad Meter Data										

Notes:

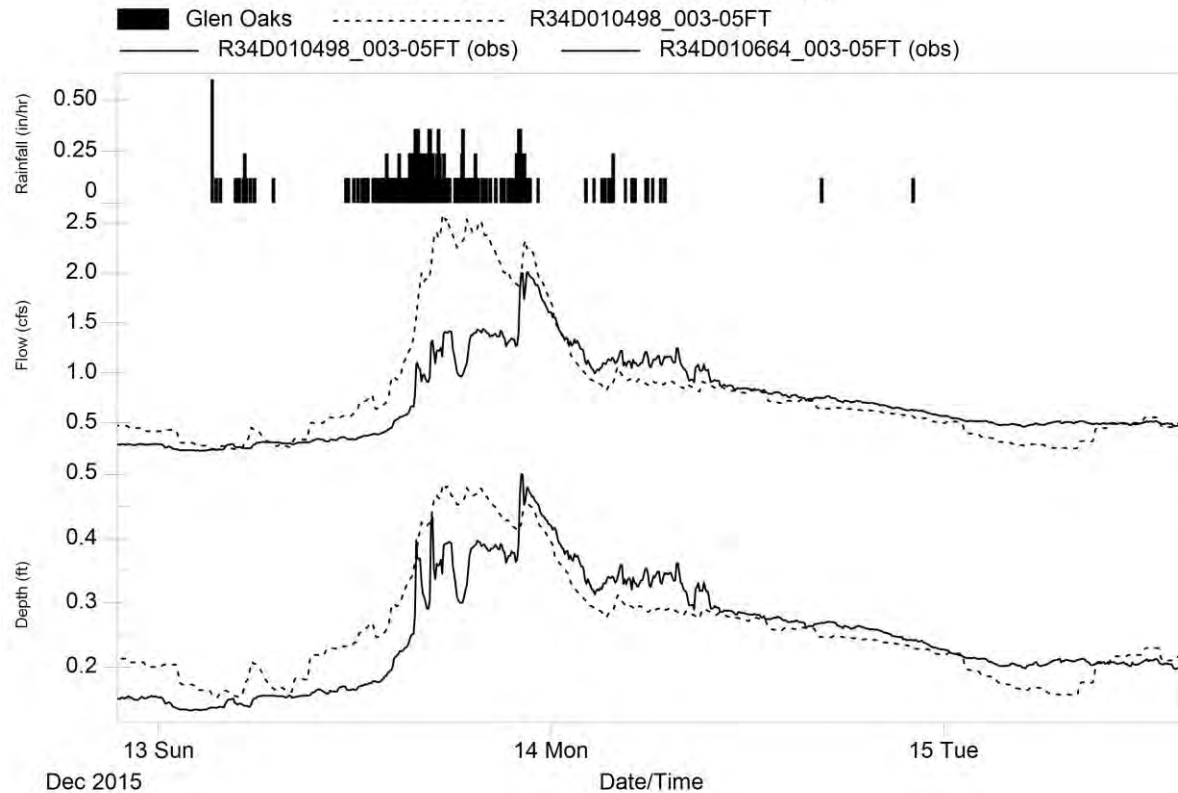
Meter not installed until December 2015

WEIGHTED AVERAGES							
Calibration - Relatively Uniform		-0.6	0.0	-0.1	relatively uniform		
Calibration - Possibly Uniform		0.0	0.0	0.0	possibly uniform		
Calibration Weighted - All Events		-0.4	0.0	-0.1			
Verification - Variable		-0.2	0.0	0.0	variable		
Verification Weighted - All Events		-0.2	0.0	0.0			
Weighted Average - All Events		-0.3	0.0	0.0			
NET AVERAGES							
Calibration - Relatively Uniform		-0.6	0.0	-0.1	relatively uniform		
Calibration - Possibly Uniform		0.0	0.0	0.0	possibly uniform		
Calibration Net - All Events		-0.2	0.0	0.0			
Verification - Variable		-0.2	0.0	0.0	variable		
Verification Net - All Events		-0.2	0.0	0.0			
Net Average - All Events		-0.2	0.0	0.0			

Spring-Caroline 003-05FT – Calibration Events

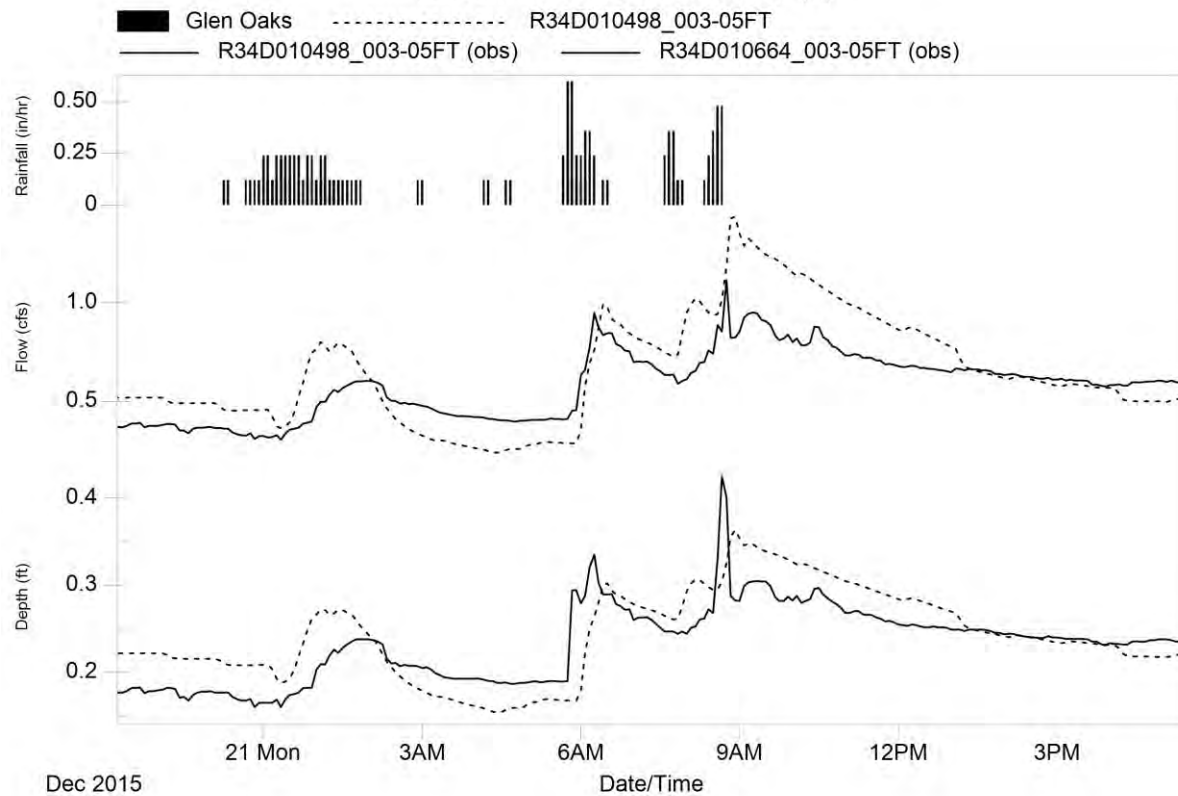
Event of December 13, 2015

Duration: 54.42 h, Total Rainfall: 1.71 (in)



Event of December 20, 2015

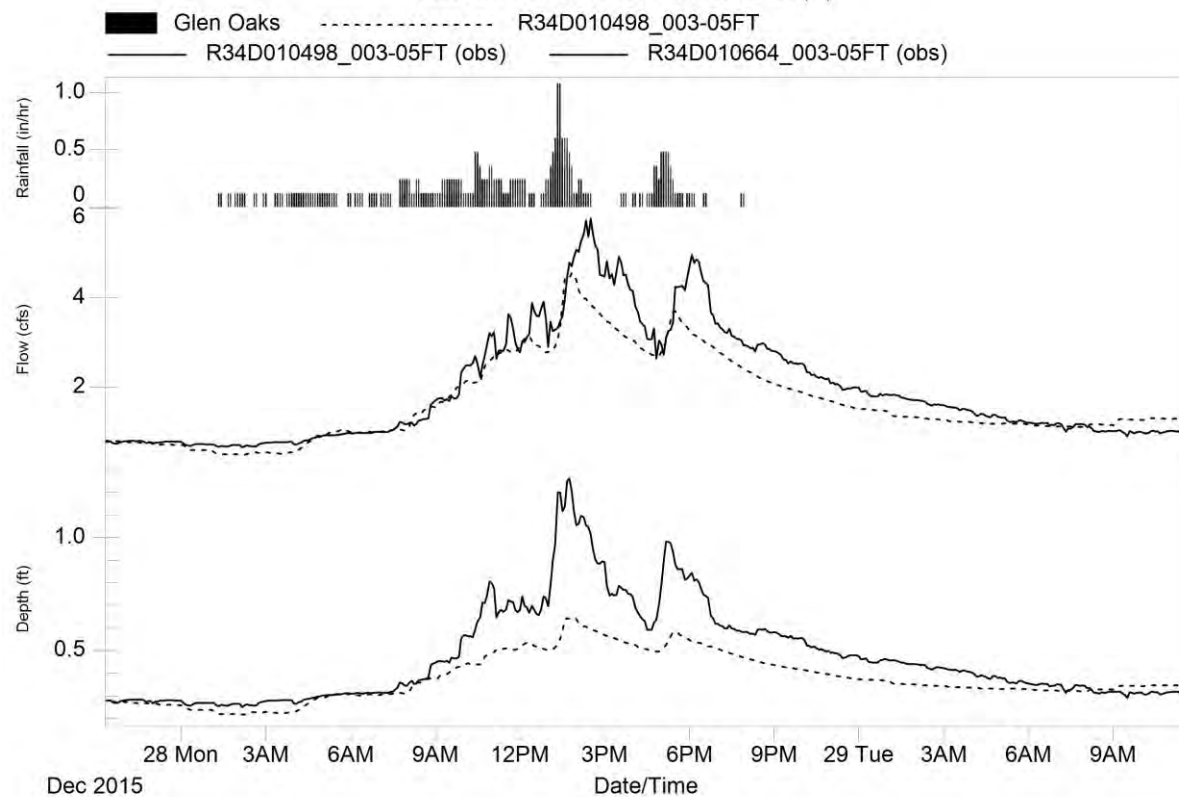
Duration: 16.83 h, Total Rainfall: 0.67 (in)



Spring-Caroline 003-05FT – Calibration Events

Event of December 28, 2015

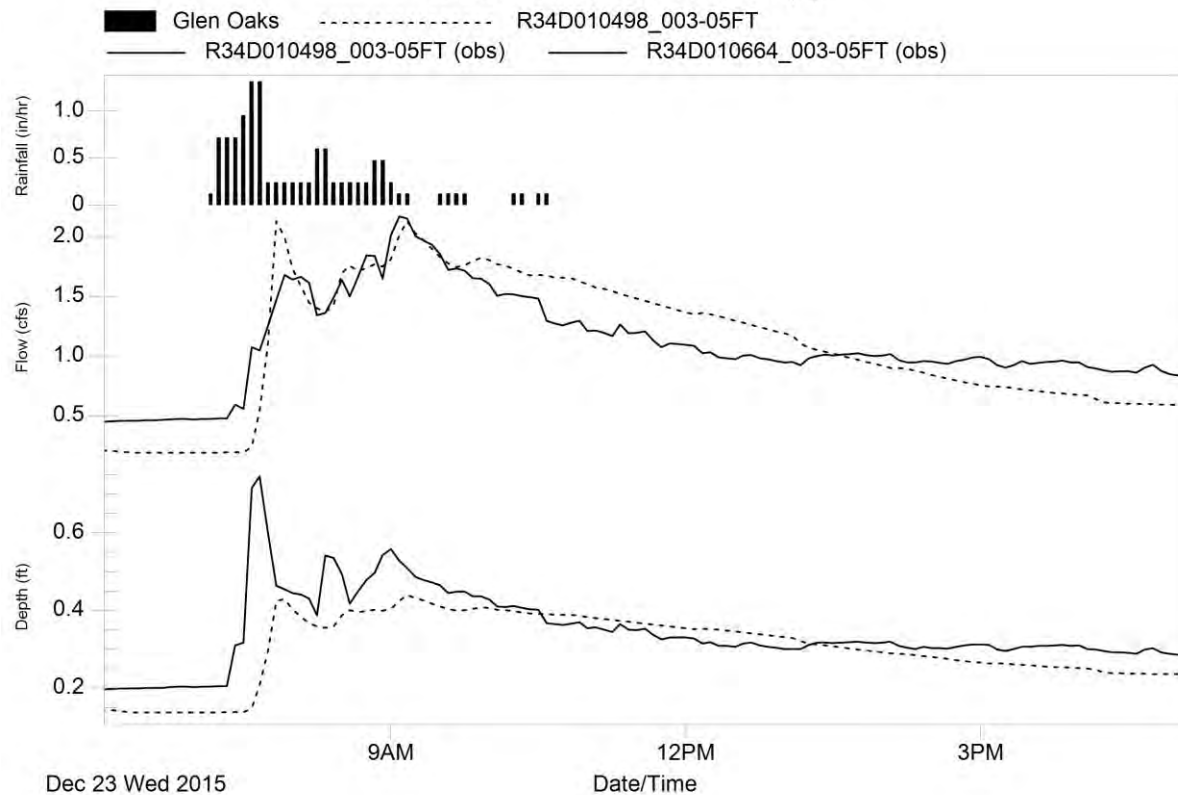
Duration: 31.92 h, Total Rainfall: 2.05 (in)



Spring-Caroline 003-05FT – Verification Events

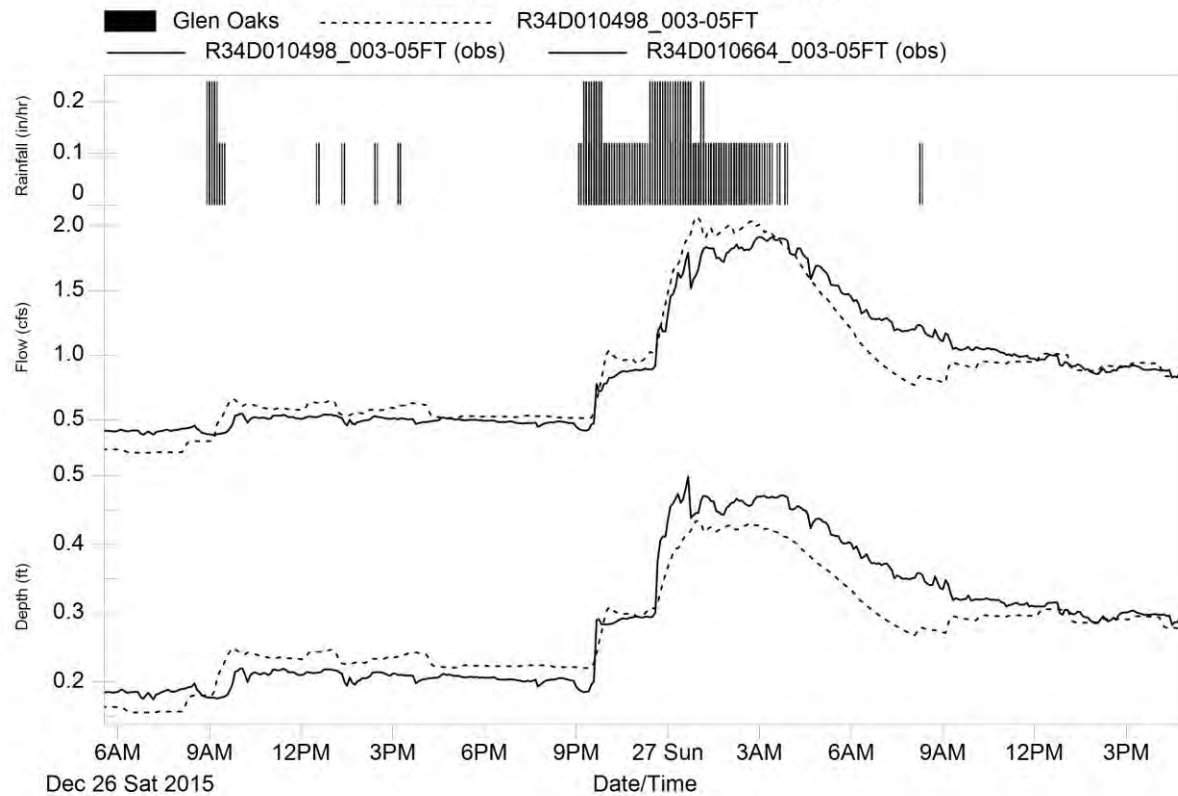
Event of December 23, 2015

Duration: 9.17 h, Total Rainfall: 0.7 (in)



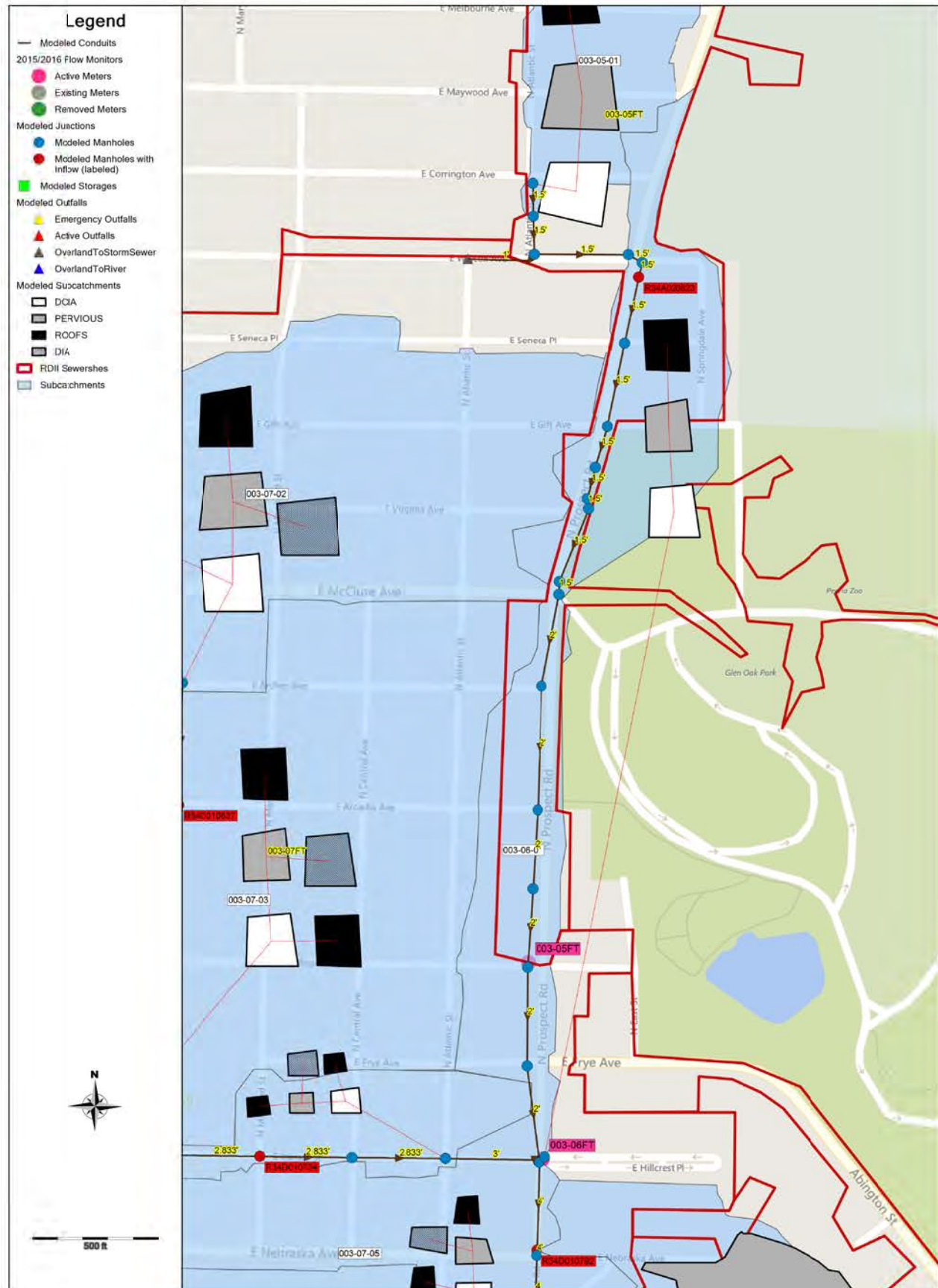
Event of December 26, 2015

Duration: 29.5 h, Total Rainfall: 1.06 (in)



[illegible]

003-06 - Storm Sewer Flow Meter



Spring Caroline 003-06FT

Date	Duration (h)	Rainfall (in)	Maximum Flow (cfs)		Maximum Flow (mgd)		Total Volume (ft³)		Volume (million gallons)		Peak Flow Rate (-15% to +25%)	Flow Volume (-10% to +20%)	Rainfall Variability
		Glen Oaks	Observed	Modeled	Observed	Modeled	Observed	Modeled	Observed	Modeled			
CALIBRATION EVENTS - FLOW													
12/13/2015 2:50	30.1	1.69	4.5	3.5	2.9	2.2	70290	67100	0.5	0.5	-24%	-5%	possibly uniform
12/20/2015 23:10	11.0	0.67	4.0	3.4	2.6	2.2	27720	25320	0.2	0.2	-15%	-9%	possibly uniform
12/28/2015 1:05	18.5	2.04	10.5	8.8	6.8	5.7	148300	83540	1.1	0.6	-16%	-44%	relatively uniform
3/15/2016 20:05	1.2	0.68	27.5	25.8	17.8	16.7	27220	28680	0.2	0.2	-6%	5%	relatively uniform
VERIFICATION EVENTS - FLOW													
12/23/2015 7:00	3.8	0.70	8.4	11.0	5.4	7.1	32020	26940	0.2	0.2	30%	-16%	variable
12/26/2015 20:55	9.1	0.90	4.4	2.7	2.8	1.8	53890	36930	0.4	0.3	-38%	-31%	variable
2/2/2016 8:10	6.6	0.48	3.4	6.1	2.2	3.9	15870	17370	0.1	0.1	81%	9%	variable
4/28/2016 0:15	2.8	0.49	8.0	9.9	5.2	6.4	16340	17790	0.1	0.1	24%	9%	variable

Notes:

Storm sewer that parallels a combined sewer and discharges into combined sewer system.

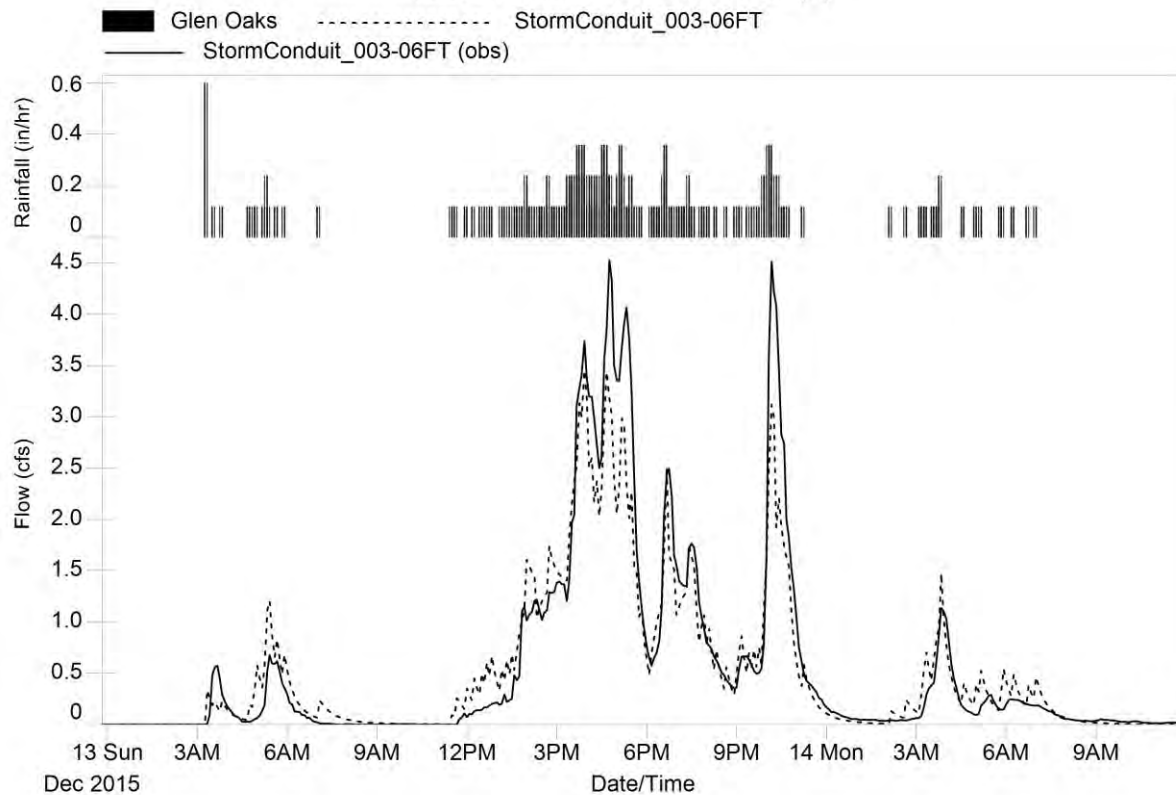
Meter not installed until December 2015

WEIGHTED AVERAGES			
Calibration - Relatively Uniform	-9%	-36%	relatively uniform
Calibration - Possibly Uniform	-20%	-6%	possibly uniform
Calibration Weighted - All Events	-11%	-25%	
Verification - Variable	23%	-16%	variable
Verification Weighted - All Events	23%	-16%	
Weighted Average - All Events	1%	-22%	
NET AVERAGES			
Calibration - Relatively Uniform	-11%	-19%	relatively uniform
Calibration - Possibly Uniform	-19%	-7%	possibly uniform
Calibration Net - All Events	-15%	-13%	
Verification - Variable	24%	-7%	variable
Verification Net - All Events	24%	-7%	
Net Average - All Events	4%	-10%	

Spring-Caroline 003-06FT – Calibration Events

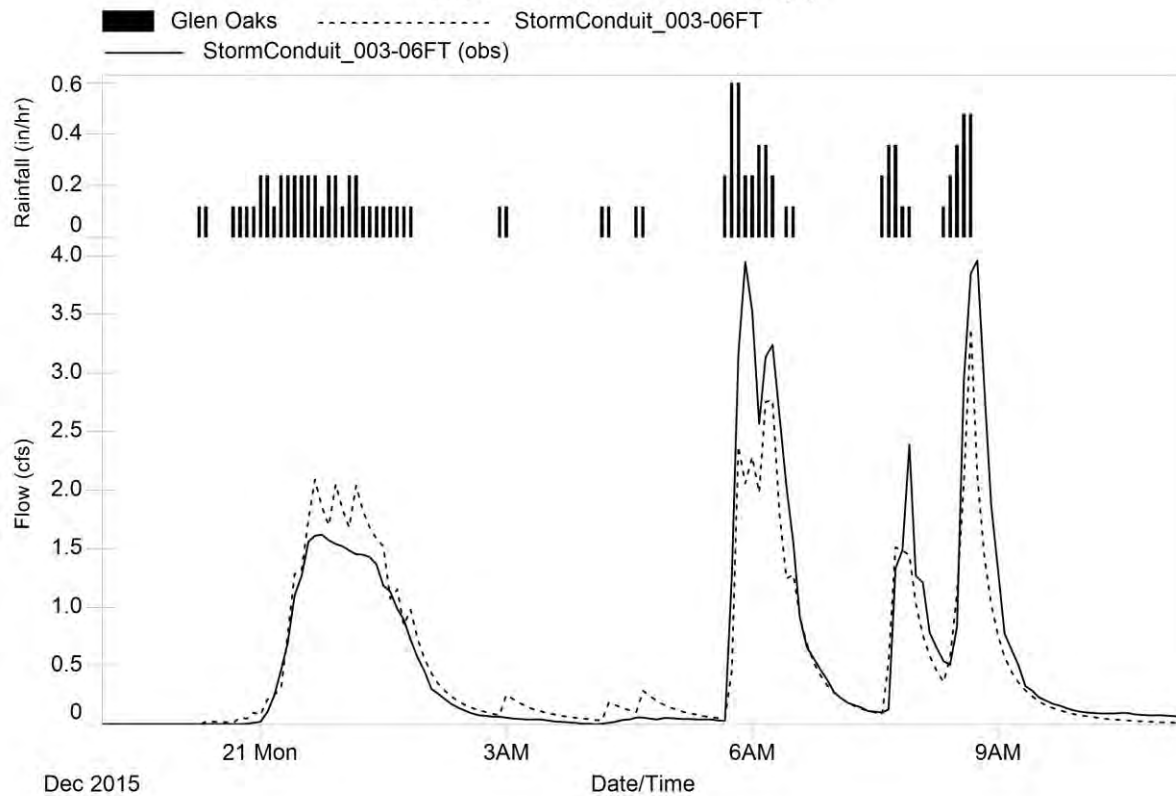
Event of December 13, 2015

Duration: 30.08 h, Total Rainfall: 1.69 (in)



Event of December 20, 2015

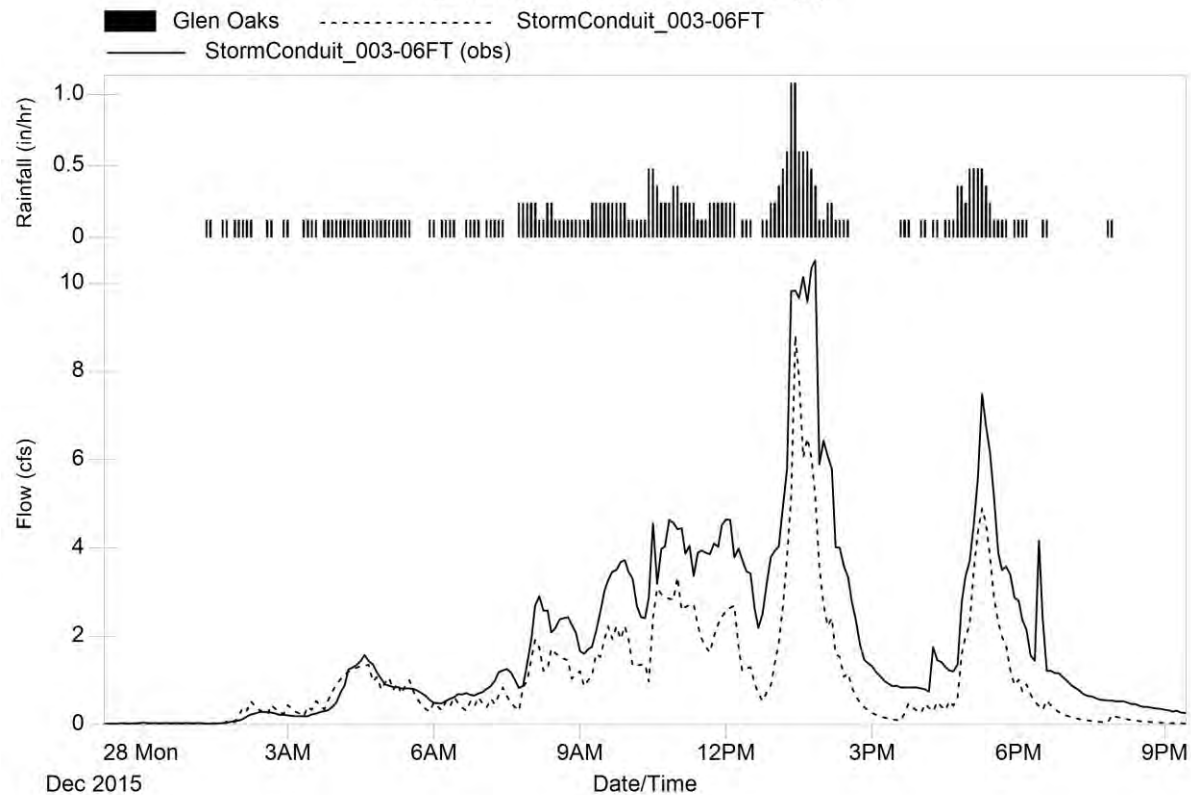
Duration: 11 h, Total Rainfall: 0.67 (in)



Spring-Caroline 003-06FT – Calibration Events

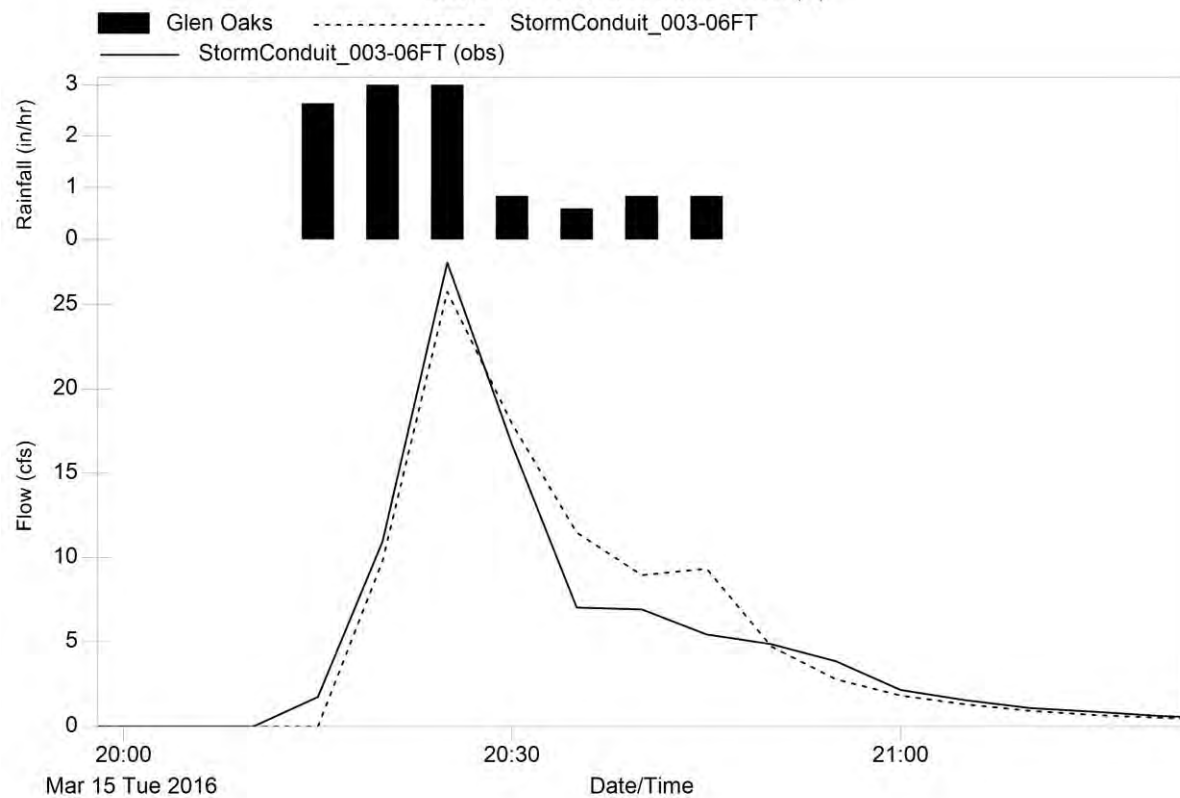
Event of December 28, 2015

Duration: 18.5 h, Total Rainfall: 2.04 (in)



Event of March 15, 2016

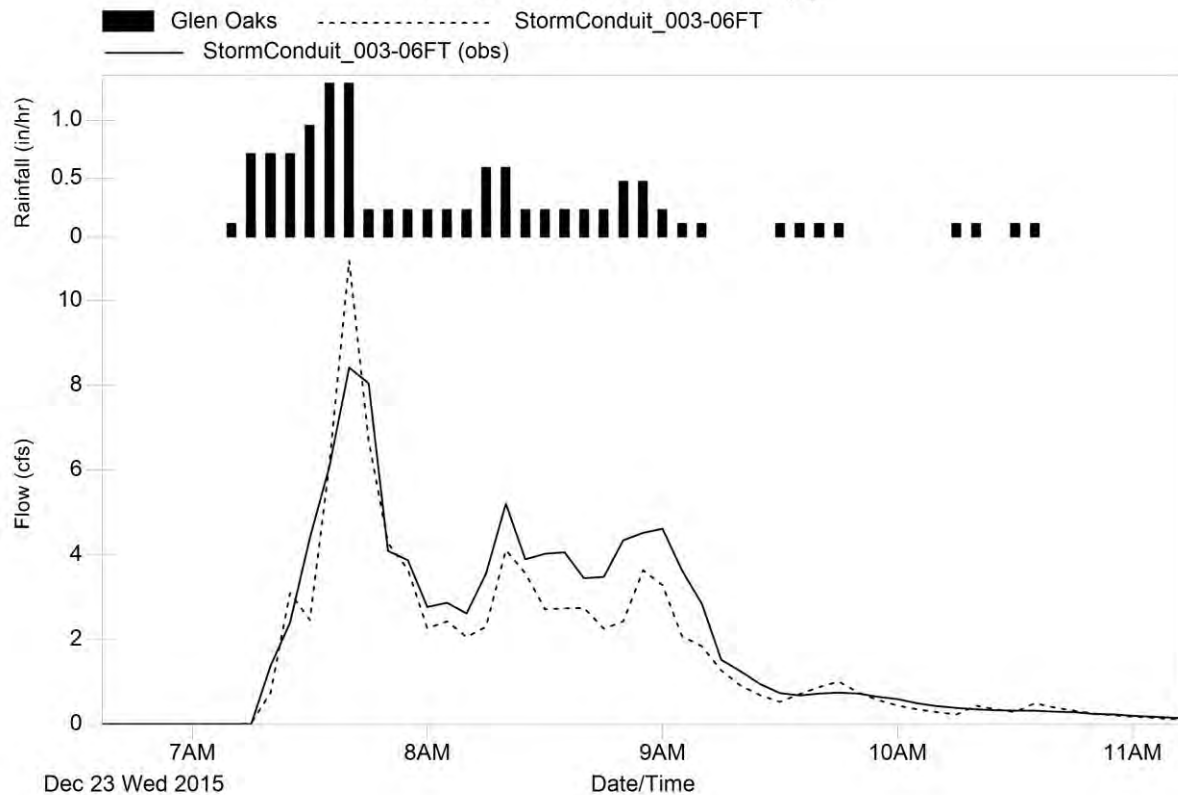
Duration: 1.17 h, Total Rainfall: 0.68 (in)



Spring-Caroline 003-06FT – Verification Events

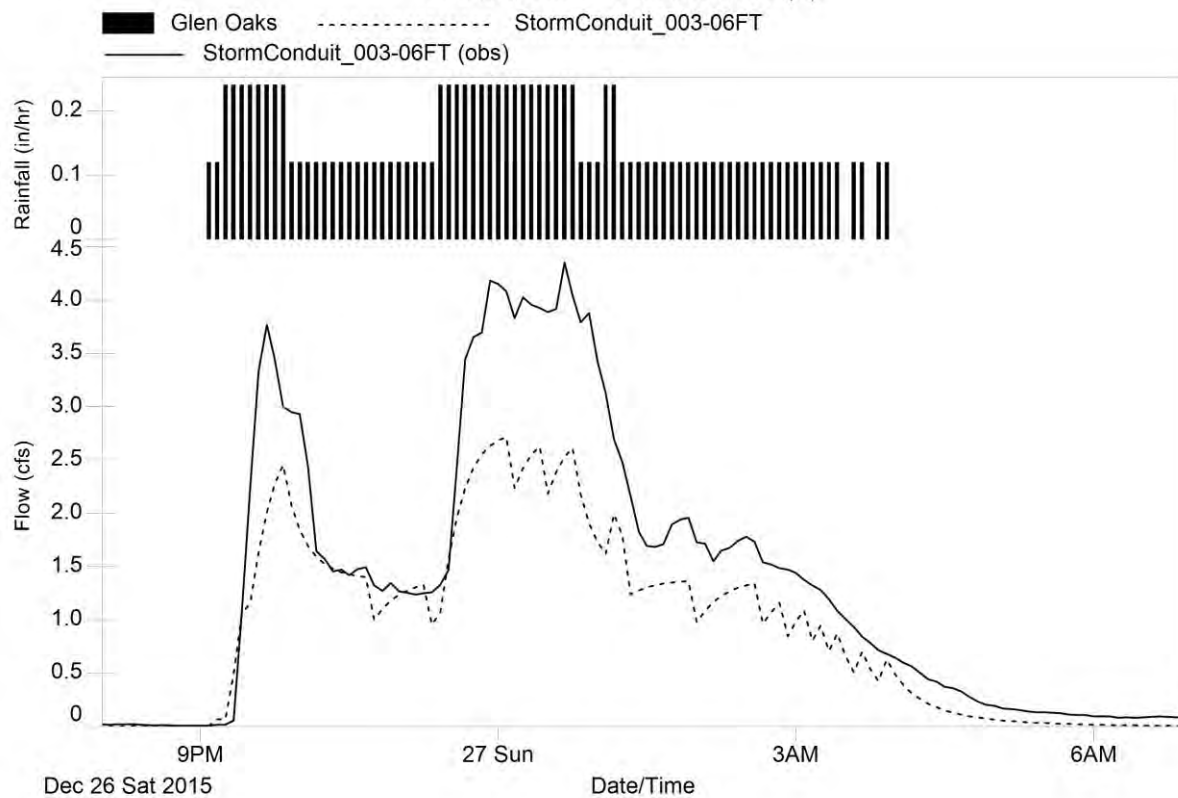
Event of December 23, 2015

Duration: 3.83 h, Total Rainfall: 0.7 (in)

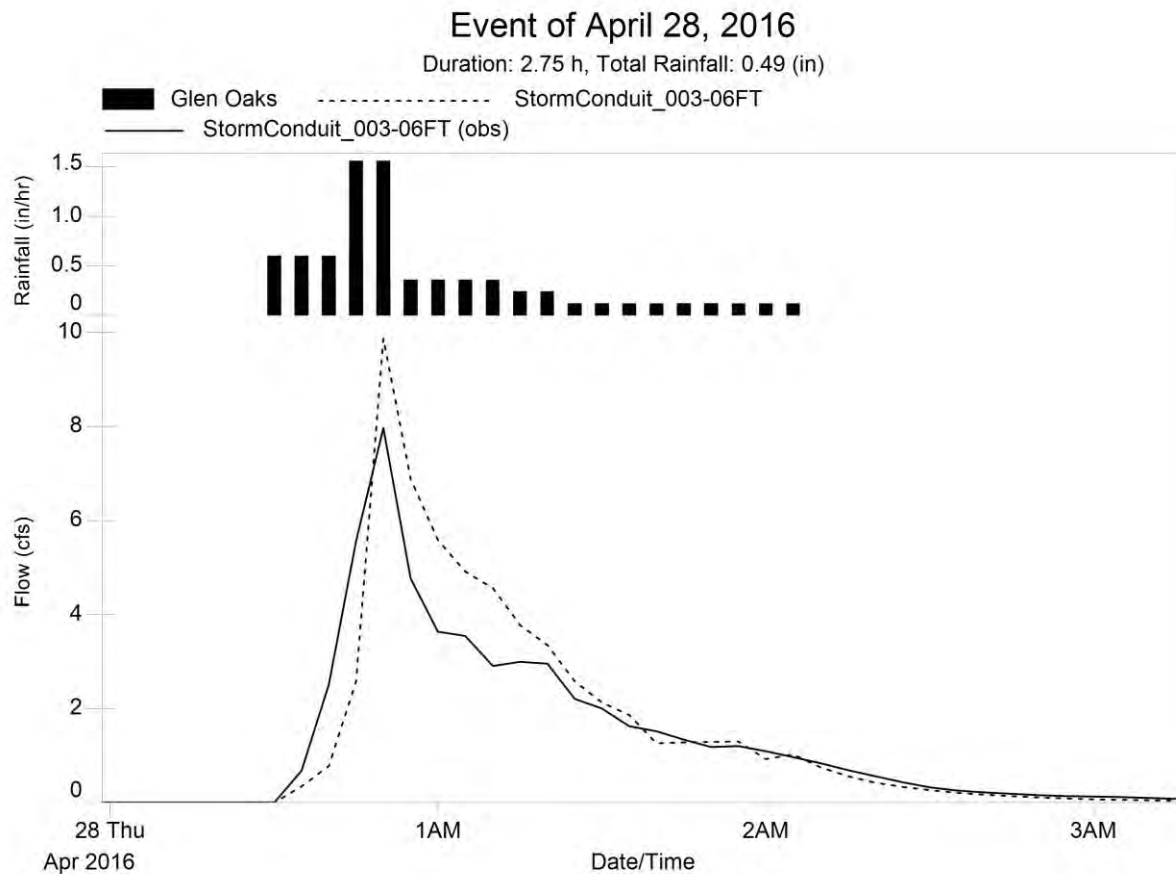
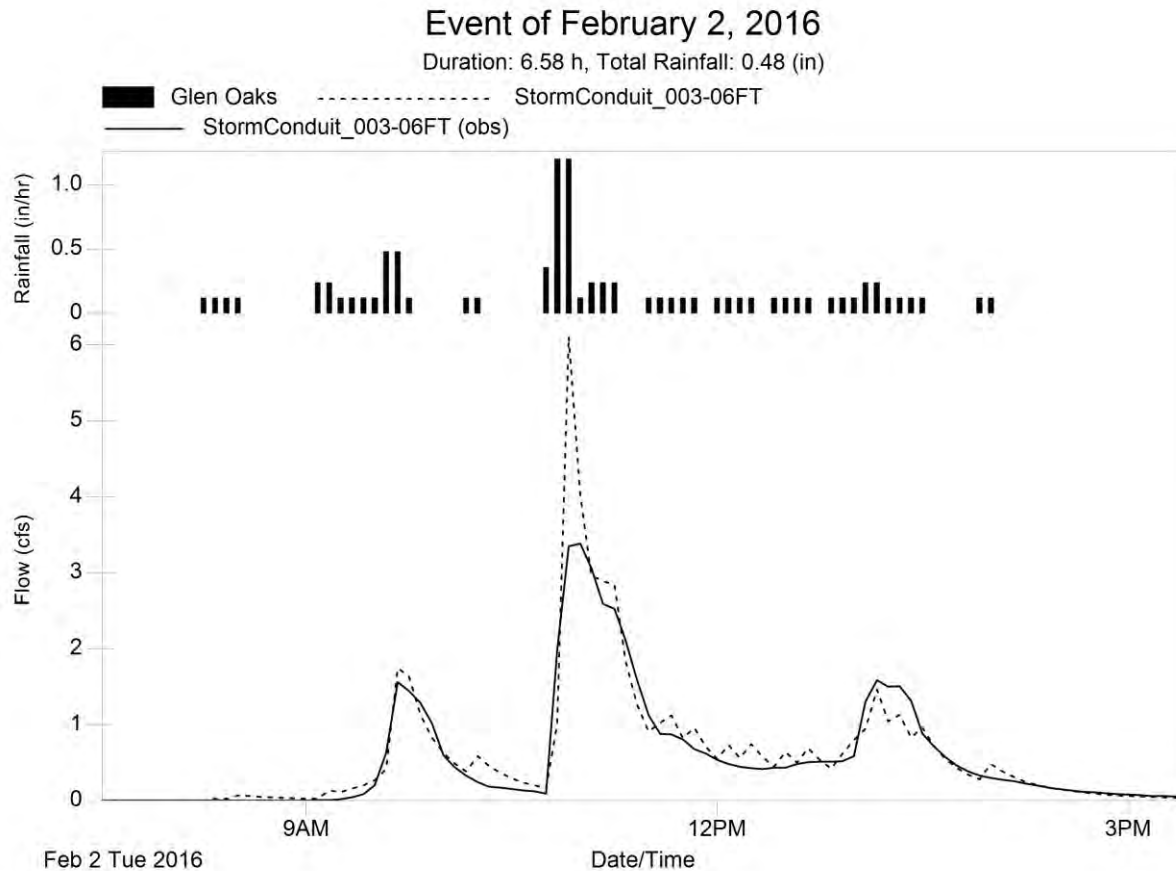


Event of December 26, 2015

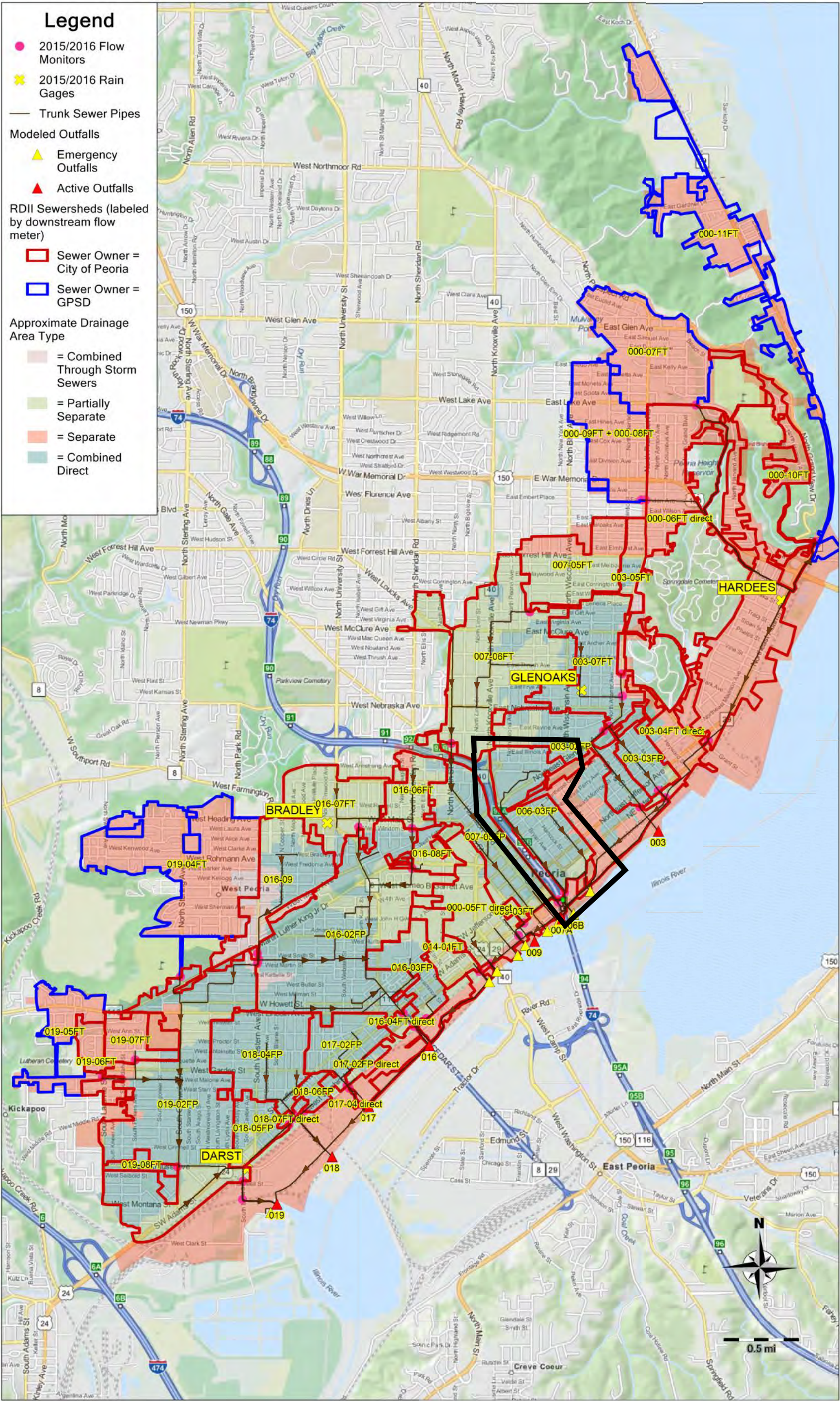
Duration: 9.08 h, Total Rainfall: 0.9 (in)



Spring-Caroline 003-06FT – Verification Events



Flow Monitor 006-03FP Overview Map



Eaton 006-03FP

Date	Duration (h)	Rainfall (in) Glen Oaks	Maximum Flow (cfs) Observed Modeled		Maximum Flow (mgd) Observed Modeled		Total Volume (ft³) Observed Modeled		Volume (million gallons) Observed Modeled		Peak Flow Rate (-15% to +25%)	Flow Volume (-10% to +20%)	Rainfall Variability							
CALIBRATION EVENTS - FLOW																				
9/8/2015 10:40	5.0	0.87	95.3	148.8	61.6	96.1	277800	302000	2.1	2.3	56%	9%	variable							
9/18/2015 14:45	13.4	1.66	156.4	126.4	101.0	81.7	672200	621300	5.0	4.6	-19%	-8%	relatively uniform							
11/5/2015 12:55	20.3	0.48	28.6	54.0	18.5	34.9	216000	251500	1.6	1.9	88%	16%	possibly uniform							
11/11/2015 18:45	6.3	0.66	113.4	145.5	73.3	94.0	222300	252400	1.7	1.9	28%	14%	relatively uniform							
11/16/2015 11:40	69.3	2.25	56.0	53.4	36.1	34.5	1163000	1102000	8.7	8.2	-4%	-5%	variable							
11/26/2015 20:25	56.8	1.27	Bad Meter Data																	
12/13/2015 1:35	62.4	1.71	39.7	29.5	25.6	19.1	872800	887300	6.5	6.6	-26%	2%	possibly uniform							
12/20/2015 22:50	13.2	0.67	34.8	28.7	22.5	18.6	259500	276600	1.9	2.1	-17%	7%	relatively uniform							
12/23/2015 6:55	7.3	0.70	87.3	88.9	56.4	57.4	283600	265900	2.1	2.0	2%	-6%	variable							
12/28/2015 0:40	28.7	2.05	95.7	77.6	61.8	50.1	981000	863900	7.3	6.5	-19%	-12%	variable							
6/15/2015 19:10	71.3	1.70	137.1	139.3	88.6	90.0	976200	932400	7.3	7.0	2%	-4%	variable							
6/24/2015 16:55	76.6	1.91	250.6	127.5	161.9	82.4	1080000	999900	8.1	7.5	-49%	-7%	variable							
6/28/2015 17:20	8.1	0.51	Bad Meter Data																	
7/8/2015 5:20	24.5	1.36	40.7	32.2	26.3	20.8	550300	529200	4.1	4.0	-21%	-4%	relatively uniform							
7/11/2015 7:55	37.8	1.32	155.9	222.7	100.7	143.9	556700	608000	4.2	4.5	43%	9%	possibly uniform							
7/16/2015 20:30	11.7	1.05	172.4	202.1	111.4	130.6	381200	391900	2.9	2.9	17%	3%	relatively uniform							
7/29/2015 0:50	3.8	0.77	125.5	151.2	81.1	97.7	202900	253200	1.5	1.9	20%	25%	variable							
8/18/2015 1:25	6.3	0.43	101.4	121.0	65.5	78.2	164000	159600	1.2	1.2	19%	-3%	possibly uniform							
8/18/2015 17:20	8.2	0.55	135.9	166.4	87.8	107.5	229800	237500	1.7	1.8	22%	3%	relatively uniform							
Questionable meter data on 11/5							WEIGHTED AVERAGES													
							Calibration - Relatively Uniform							-1%		0%		relatively uniform		
							Calibration - Possibly Uniform							22%		5%		possibly uniform		
							Calibration - Variable							10%		-6%		variable		
							Calibration Weighted - All Events							6%		-3%				
							Verification - Relatively Uniform							15%		0%		relatively uniform		
							Verification - Possibly Uniform							34%		7%		possibly uniform		
							Verification - Variable							-19%		-3%		variable		
							Verification Weighted - All Events							4%		-1%				
							Weighted Average - All Events							5%		-2%				
							NET AVERAGES													
							Calibration - Relatively Uniform							-3%		4%		relatively uniform		
							Calibration - Possibly Uniform							31%		9%		possibly uniform		
							Calibration - Variable							9%		-4%		variable		
							Calibration Net - All Events							10%		2%				
							Verification - Relatively Uniform							6%		1%		relatively uniform		
							Verification - Possibly Uniform							31%		3%		possibly uniform		
							Verification - Variable							-9%		4%		variable		
							Verification Net - All Events							7%		3%				
Net Average - All Events							8%		2%											

Questionable meter data on 11/5

Date	Duration (h)	Maximum Depth (ft)		Minimum Depth (ft)		Average Depth (ft)		Maximum Depth (ft)	Minimum Depth (ft)	Average Depth (ft)	Rainfall Variability
								Surcharged: -0.33 ft to +1.67 ft	Surcharged: -0.33 ft to +1.67 ft	Surcharged: -0.33 ft to +1.67 ft	
CALIBRATION EVENTS - DEPTH								Non-Surcharged: -0.33 ft to +0.33 ft	Non-Surcharged: -0.33 ft to +0.33 ft	Non-Surcharged: -0.33 ft to +0.33 ft	
9/8/2015 10:40:00	5.00	4.232	4.568	0.288	0.264	2.071	2.471	0.336	-0.025	0.400	variable
9/18/2015 14:45:00	13.42	5.023	5.628	0.233	0.195	1.333	1.677	0.605	-0.039	0.344	relatively uniform
11/5/2015 12:55:00	20.25	1.771	3.905	0.227	0.184	0.373	0.430	2.134	-0.043	0.058	possibly uniform
11/11/2015 18:45:00	6.25	5.009	4.799	0.214	0.198	1.233	1.326	-0.210	-0.016	0.093	relatively uniform
11/16/2015 11:40:00	69.25	3.993	4.196	0.218	0.179	0.704	0.919	0.203	-0.040	0.215	variable
11/26/2015 20:25:00	56.75	3.873	3.990	0.224	0.176	0.558	0.744	0.117	-0.048	0.186	possibly uniform
12/13/2015 1:35:00	62.42	3.915	4.037	0.234	0.191	0.818	0.789	0.122	-0.043	-0.029	possibly uniform
12/20/2015 22:50:00	13.17	2.633	3.991	0.238	0.197	0.521	1.098	1.358	-0.042	0.577	relatively uniform
12/23/2015 6:55:00	7.25	4.178	4.499	0.243	0.199	1.919	2.265	0.321	-0.043	0.346	variable
12/28/2015 0:40:00	28.67	4.187	4.582	0.242	0.196	1.684	1.980	0.395	-0.046	0.296	variable
VERIFICATION EVENTS - DEPTH											
6/15/2015 19:10:00	71.33	4.551	5.232	0.205	0.177	0.596	0.612	0.681	-0.028	0.016	variable
6/24/2015 16:55:00	76.58	5.543	7.363	0.208	0.181	0.647	0.664	1.820	-0.027	0.017	variable
6/28/2015 17:20:00	8.08	4.689	5.242	0.239	0.213	1.478	1.762	0.553	-0.027	0.284	variable
7/8/2015 5:20:00	24.50	3.938	4.039	0.213	0.183	0.889	1.307	0.101	-0.031	0.418	relatively uniform
7/11/2015 7:55:00	37.75	4.343	5.448	0.209	0.186	0.676	0.803	1.105	-0.023	0.127	possibly uniform
7/16/2015 20:30:00	11.67	5.102	6.131	0.248	0.217	1.174	1.339	1.029	-0.031	0.165	relatively uniform
7/29/2015 0:50:00	3.83	4.584	5.037	0.233	0.198	1.593	1.873	0.453	-0.034	0.280	variable
8/18/2015 1:25:00	6.33	4.153	4.722	0.284	0.219	1.029	1.055	0.569	-0.065	0.026	possibly uniform
8/18/2015 17:20:00	8.17	4.117	5.622	0.261	0.211	1.248	1.280	1.505	-0.050	0.032	relatively uniform
Notes: Results from interceptor only model using flow meter data as influent flow to regulate Surcharge depth = 5 ft				WEIGHTED AVERAGES							
				Calibration - Relatively Uniform				0.439	-0.033	0.283	relatively uniform
				Calibration - Possibly Uniform				0.493	-0.045	0.058	possibly uniform
				Calibration - Variable				0.315	-0.038	0.336	variable
				Calibration Weighted - All Events				0.399	-0.038	0.278	All Events
				Verification - Relatively Uniform				0.900	-0.038	0.183	relatively uniform
				Verification - Possibly Uniform				0.843	-0.047	0.066	possibly uniform
				Verification - Variable				0.922	-0.029	0.206	variable
				Verification Weighted - All Events				0.899	-0.036	0.172	All Events
				Weighted Average - All Events				0.656	-0.037	0.230	
				NET AVERAGES							
				Calibration - Relatively Uniform				0.584	-0.032	0.338	relatively uniform
				Calibration - Possibly Uniform				0.791	-0.045	0.072	possibly uniform
				Calibration - Variable				0.314	-0.038	0.314	variable
				Calibration Net - All Events				0.538	-0.038	0.249	All Events
				Verification - Relatively Uniform				0.878	-0.037	0.205	relatively uniform
				Verification - Possibly Uniform				0.837	-0.044	0.077	possibly uniform
				Verification - Variable				0.877	-0.029	0.149	variable
				Verification Net - All Events				0.868	-0.035	0.152	All Events
Net Average - All Events				0.695	-0.037	0.203					

Notes:

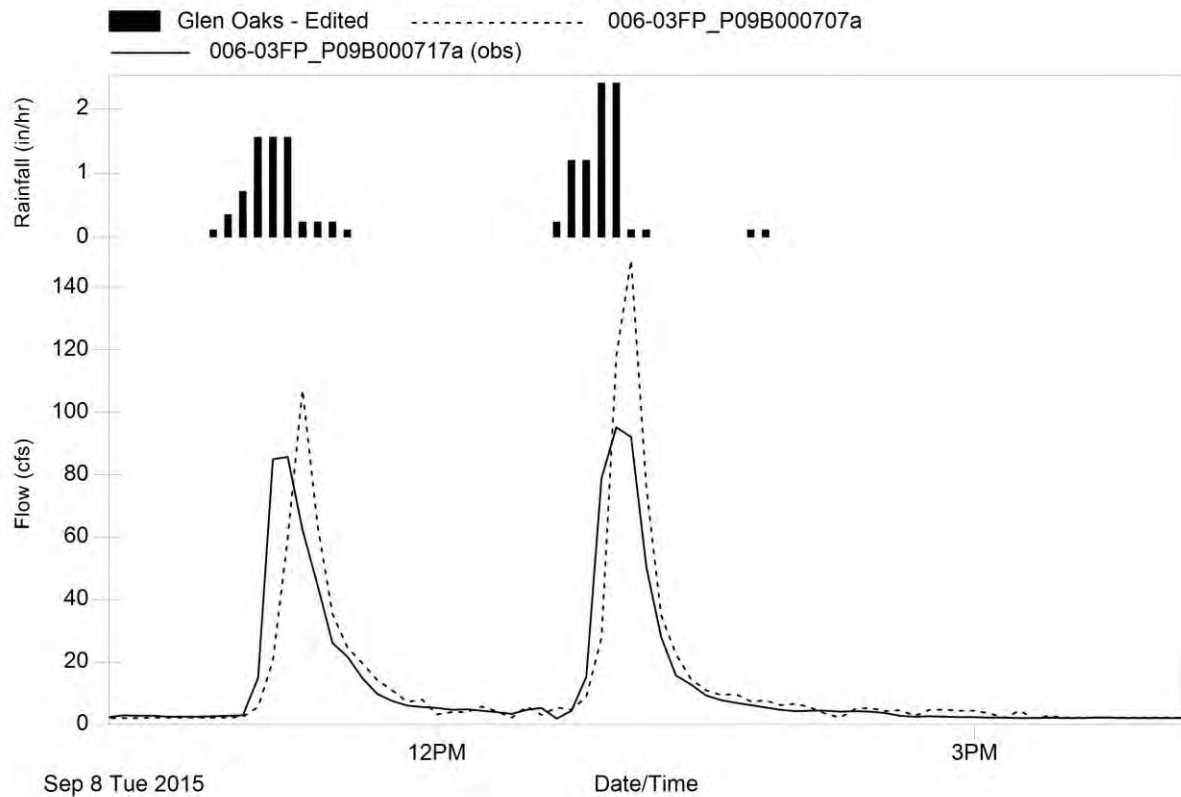
Results from interceptor only model using flow meter data as influent flow to regulat

Surcharge depth = 5 ft

Eaton 006-03FP – Calibration Events

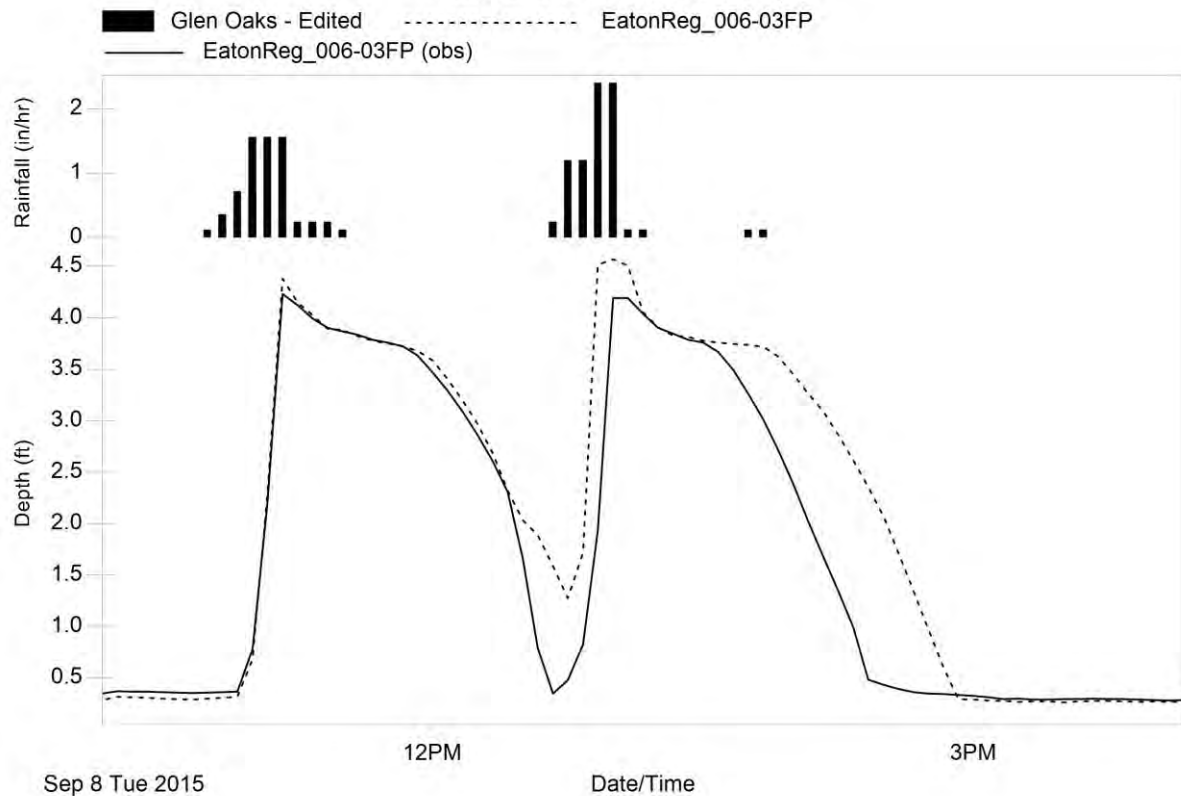
Event of September 8, 2015

Duration: 5 h, Total Rainfall: 0.87 (in)



Event of September 8, 2015

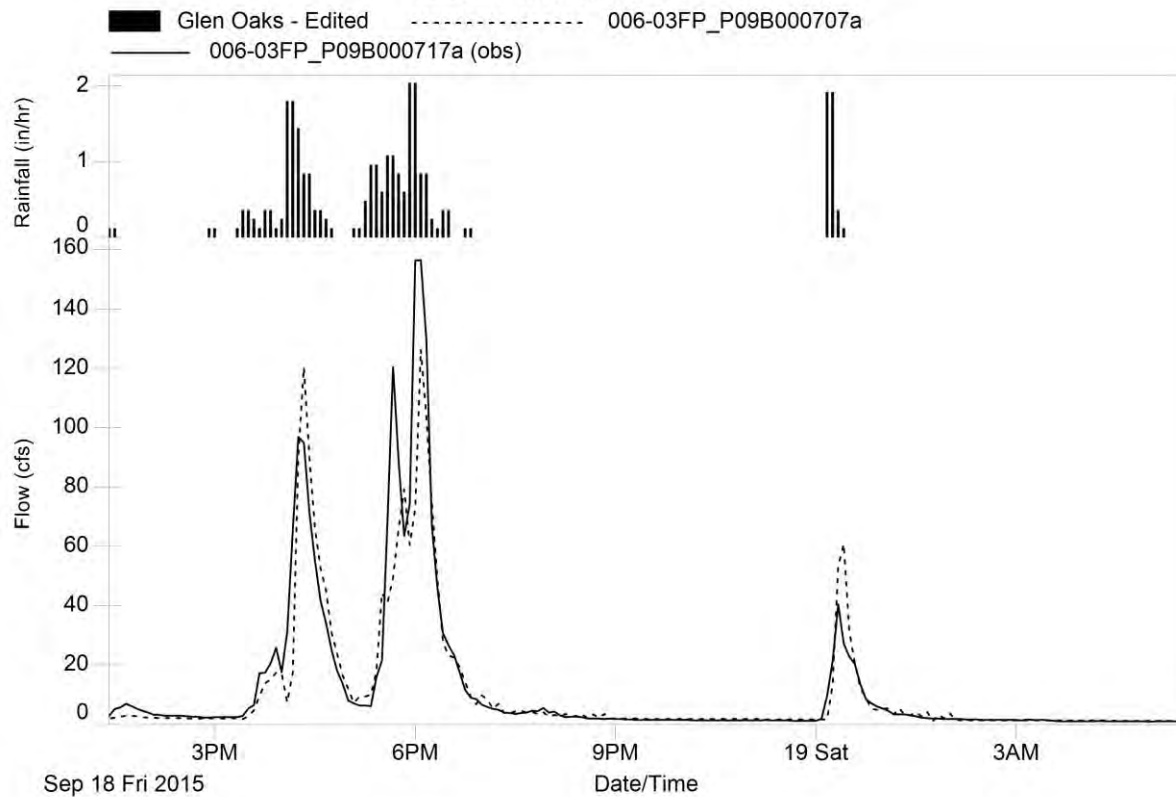
Duration: 5 h, Total Rainfall: 0.87 (in)



Eaton 006-03FP – Calibration Events

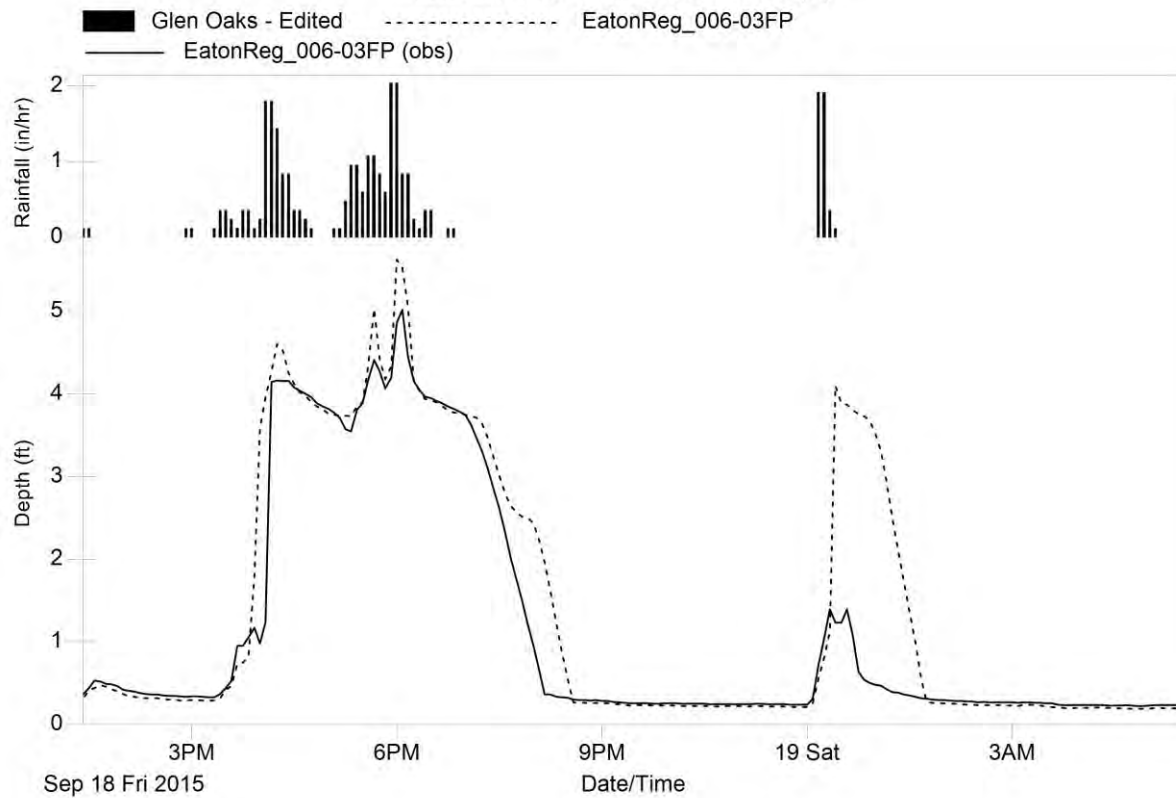
Event of September 18, 2015

Duration: 13.42 h, Total Rainfall: 1.66 (in)



Event of September 18, 2015

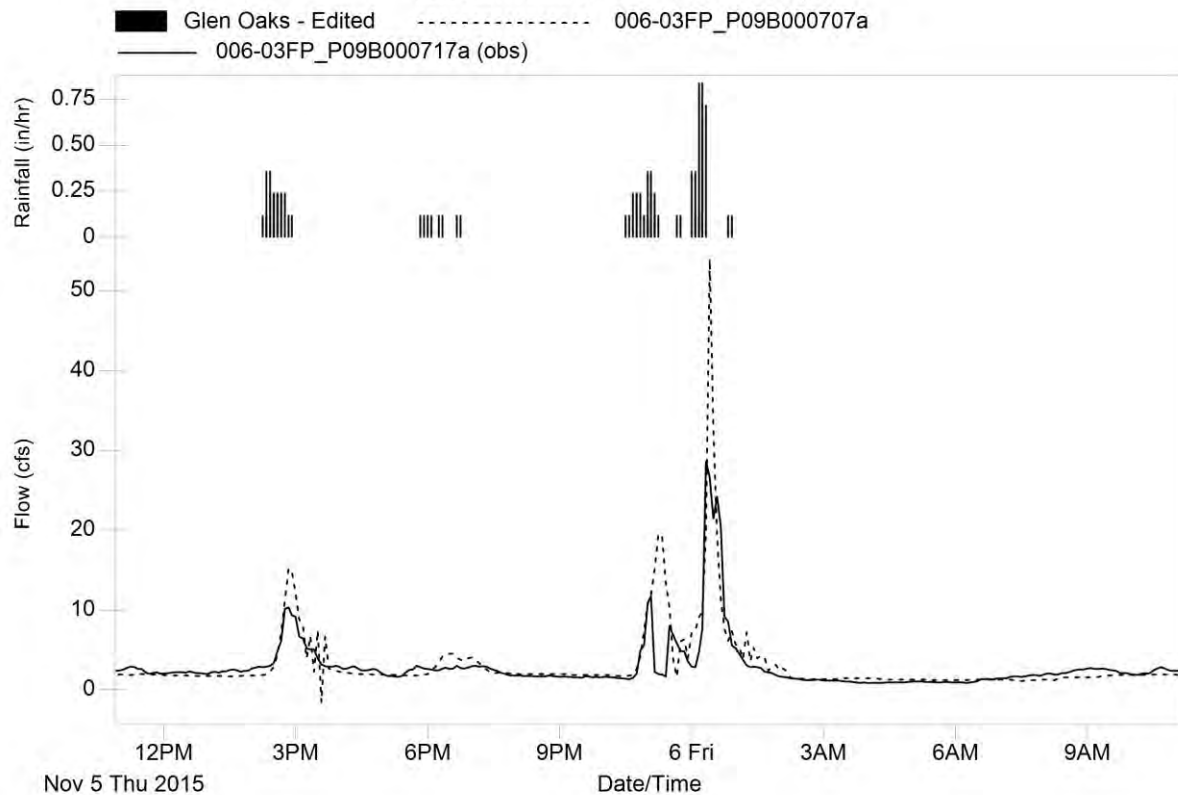
Duration: 13.42 h, Total Rainfall: 1.66 (in)



Eaton 006-03FP – Calibration Events

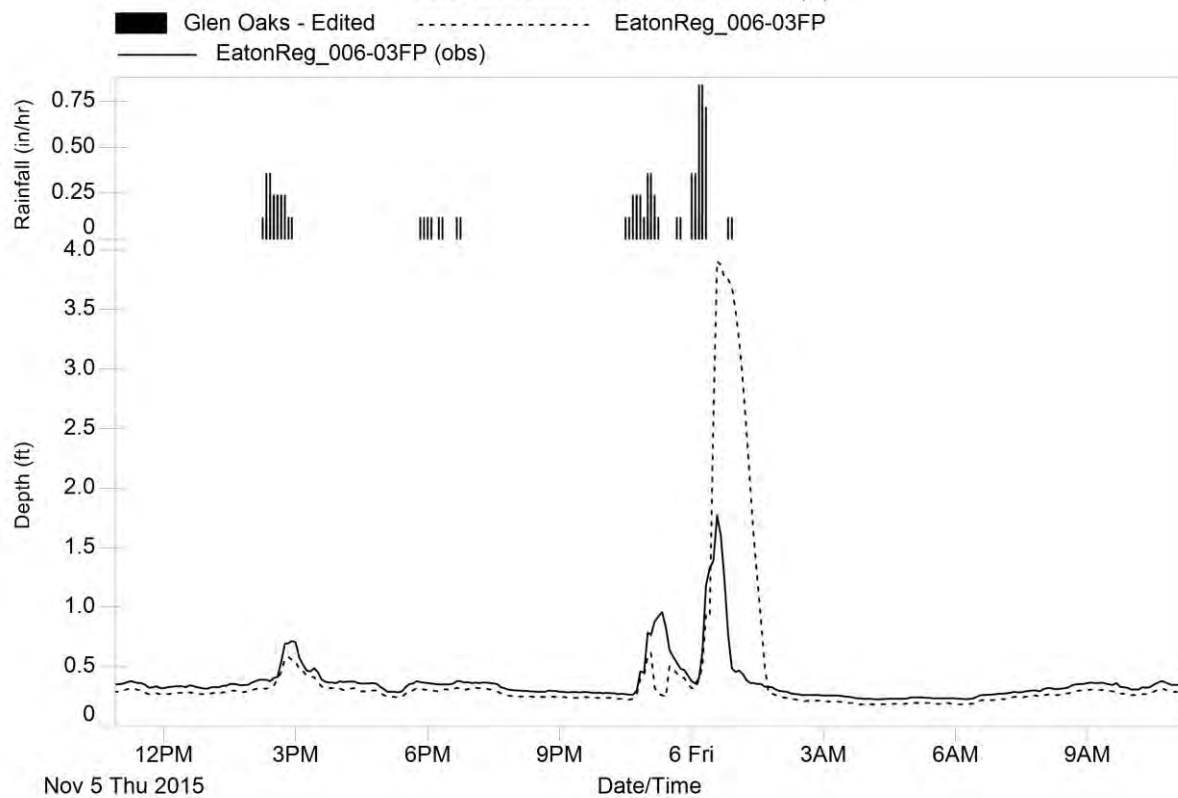
Event of November 5, 2015

Duration: 20.25 h, Total Rainfall: 0.48 (in)



Event of November 5, 2015

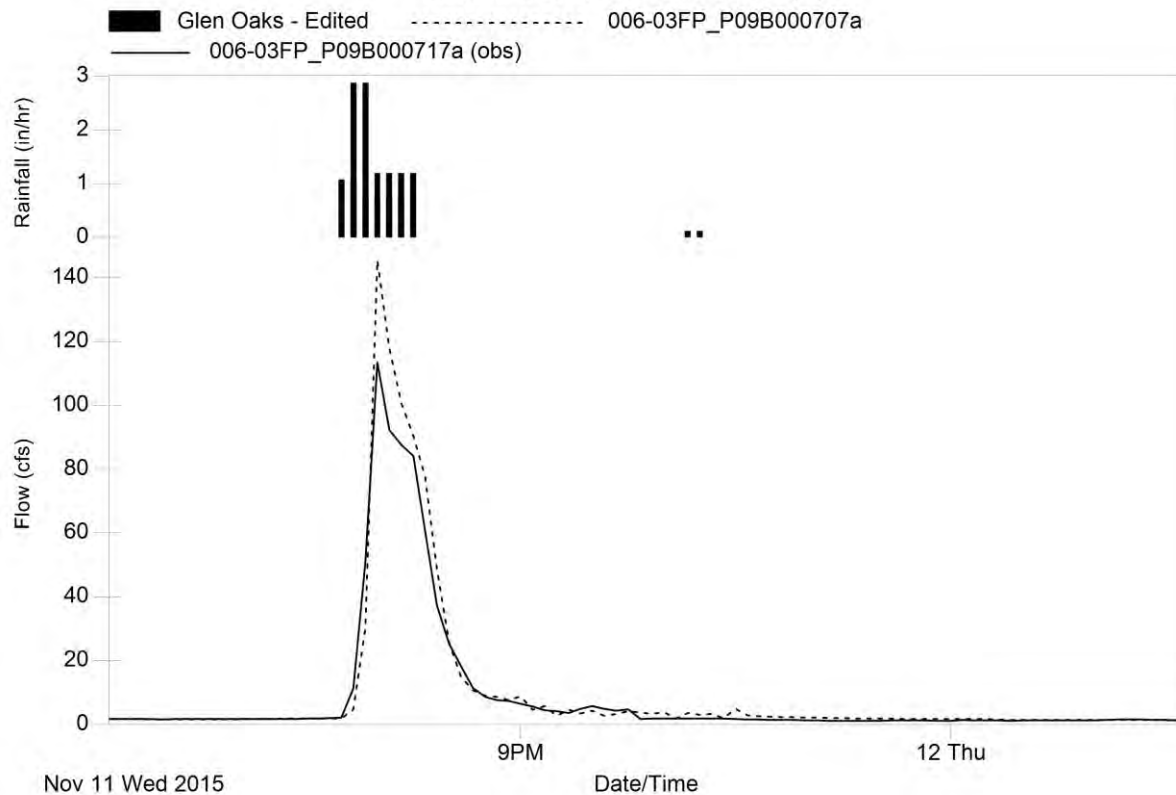
Duration: 20.25 h, Total Rainfall: 0.48 (in)



Eaton 006-03FP – Calibration Events

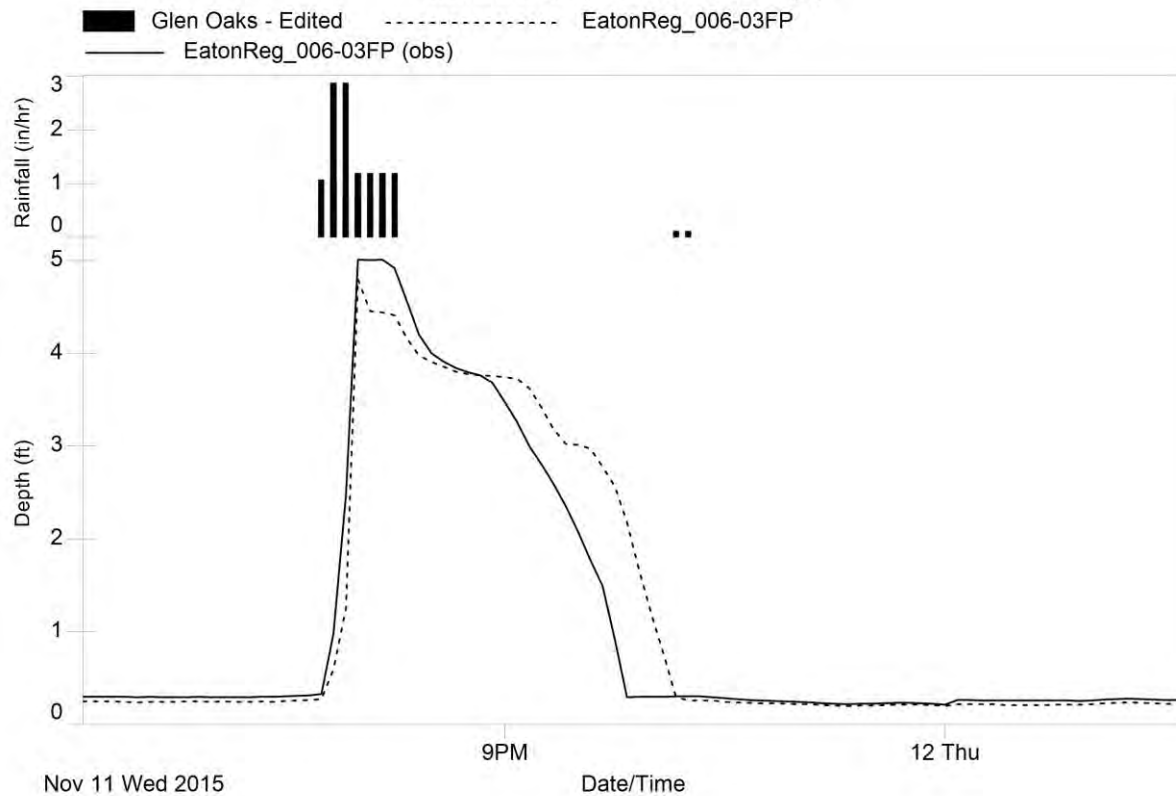
Event of November 11, 2015

Duration: 6.25 h, Total Rainfall: 0.66 (in)



Event of November 11, 2015

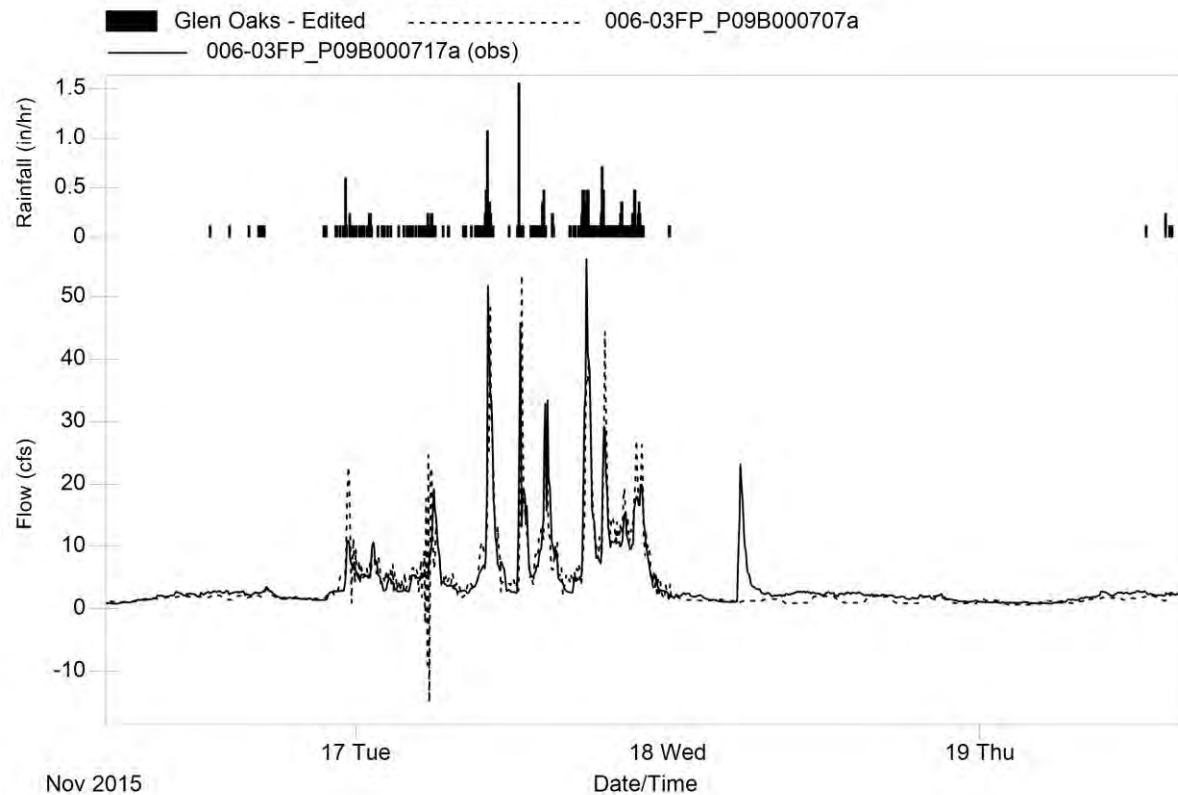
Duration: 6.25 h, Total Rainfall: 0.66 (in)



Eaton 006-03FP – Calibration Events

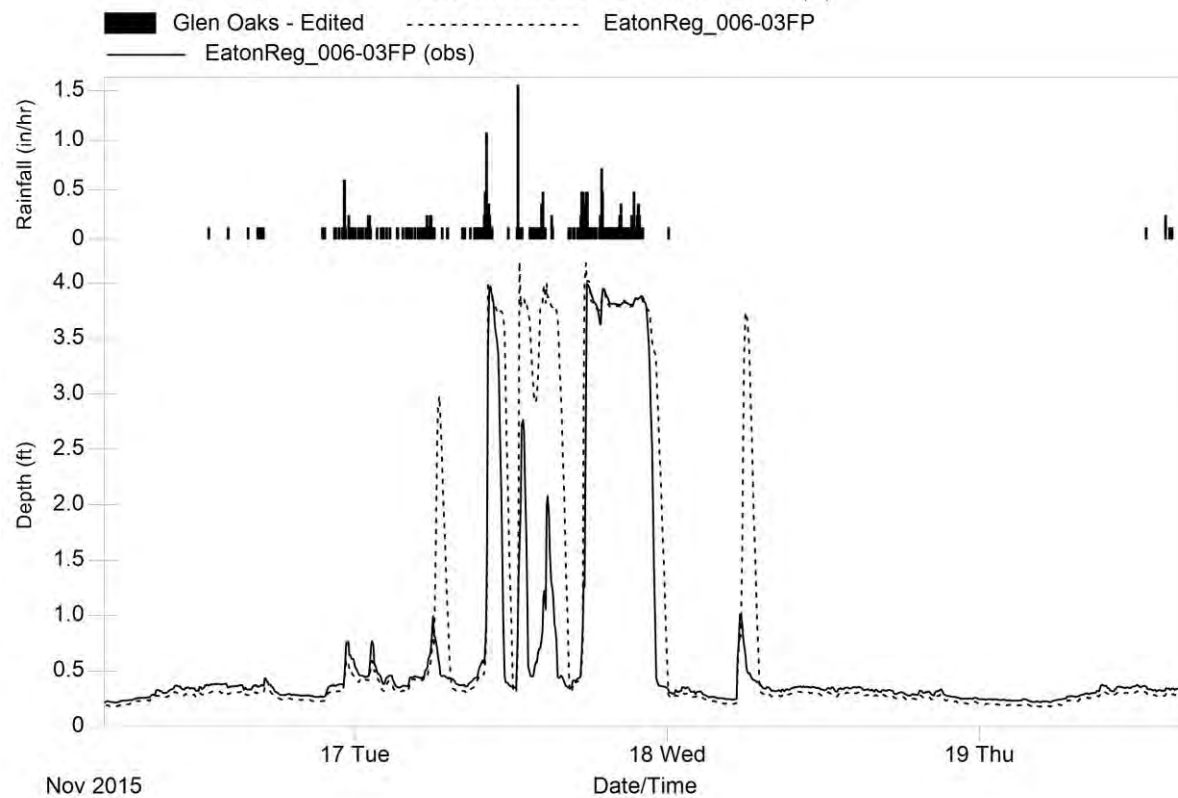
Event of November 16, 2015

Duration: 69.25 h, Total Rainfall: 2.25 (in)



Event of November 16, 2015

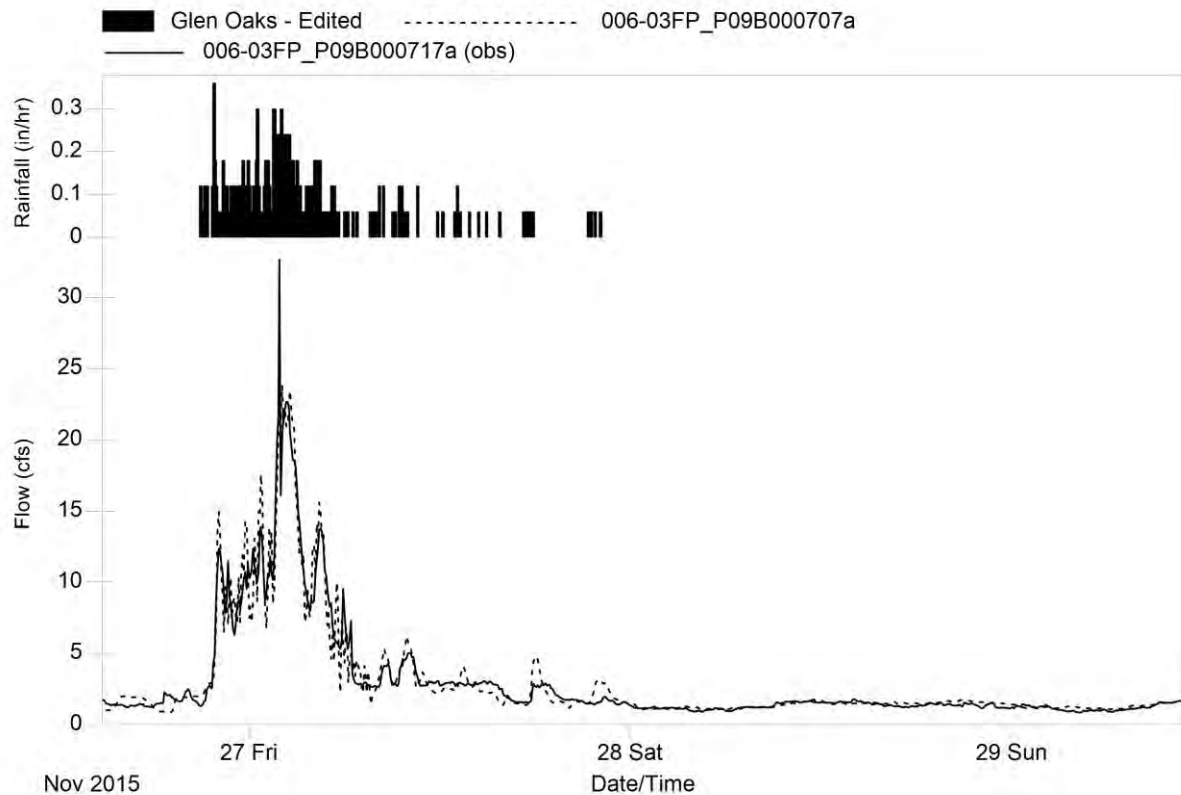
Duration: 69.25 h, Total Rainfall: 2.25 (in)



Eaton 006-03FP – Calibration Events

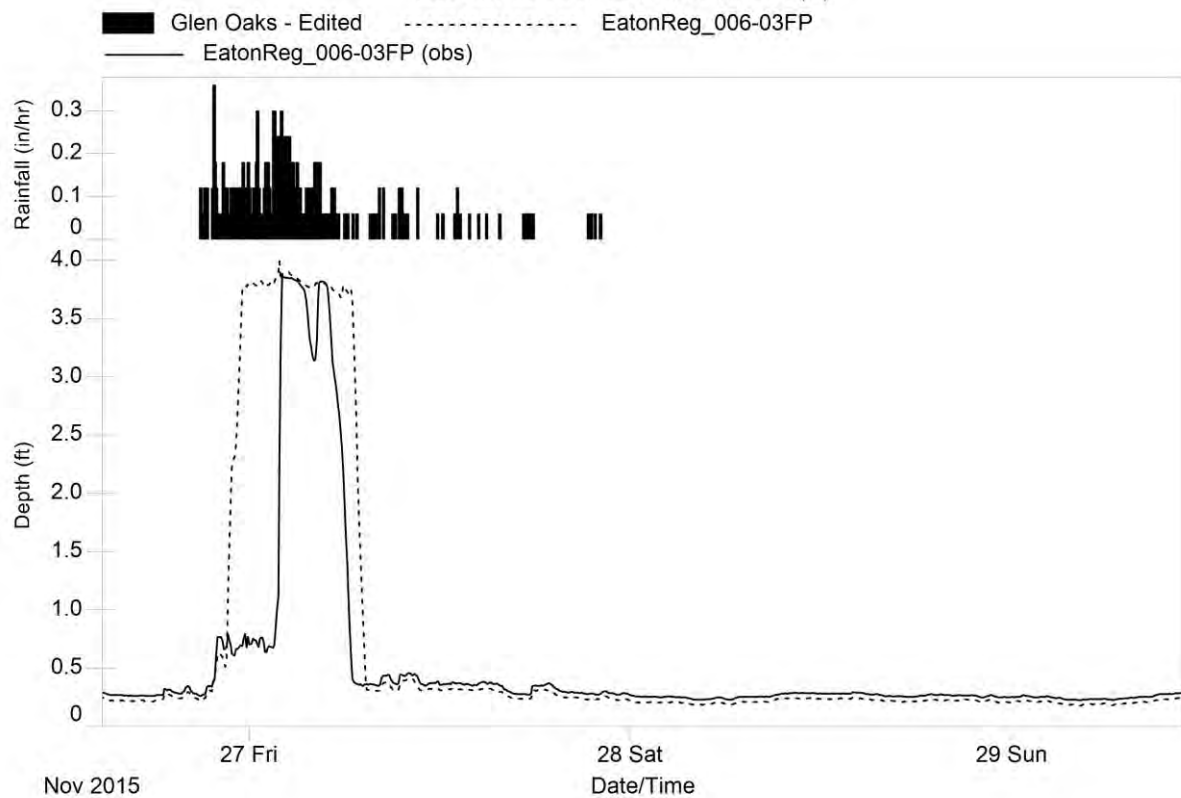
Event of November 26, 2015

Duration: 56.75 h, Total Rainfall: 1.27 (in)



Event of November 26, 2015

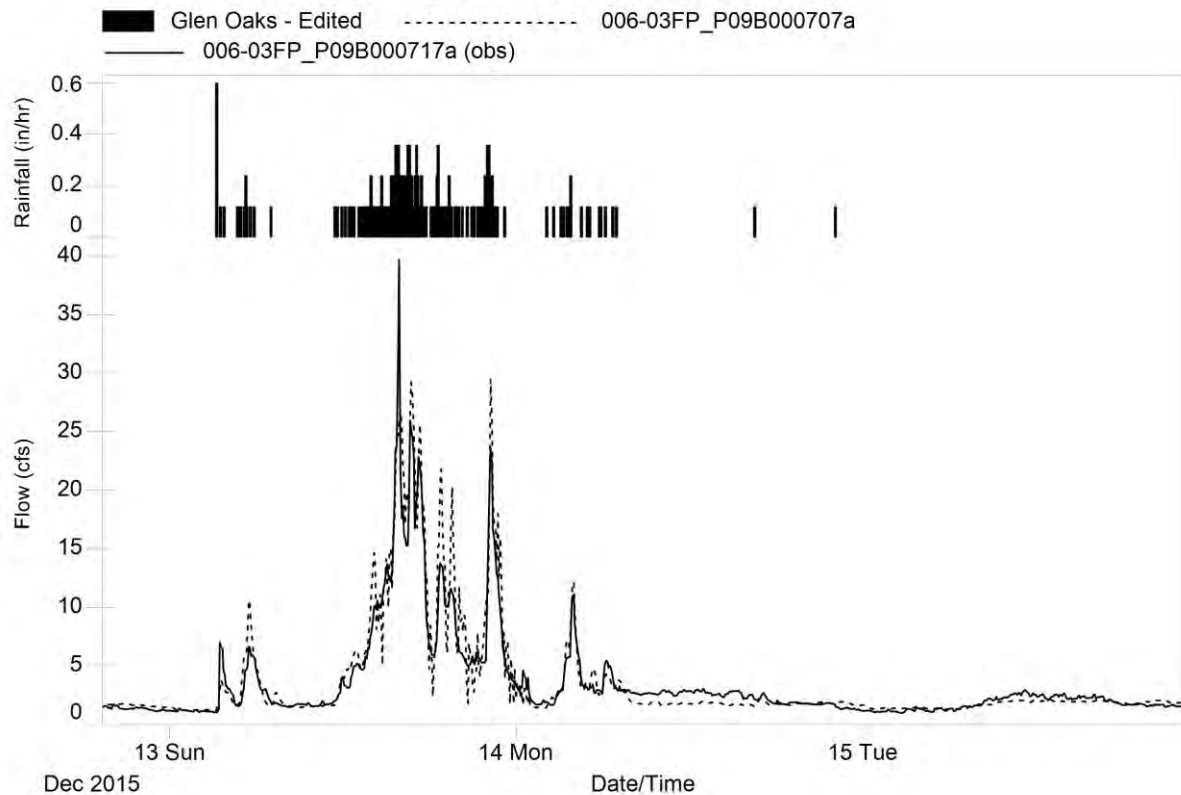
Duration: 56.75 h, Total Rainfall: 1.27 (in)



Eaton 006-03FP – Calibration Events

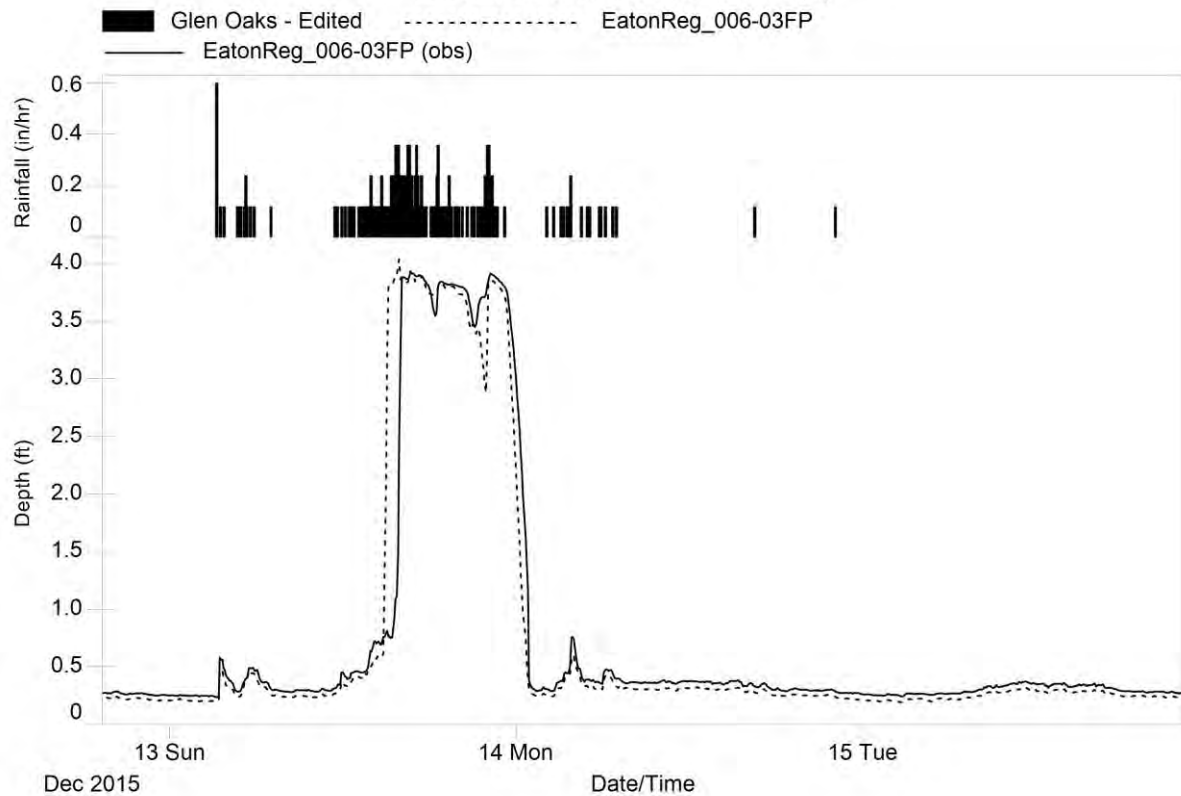
Event of December 13, 2015

Duration: 62.42 h, Total Rainfall: 1.71 (in)



Event of December 13, 2015

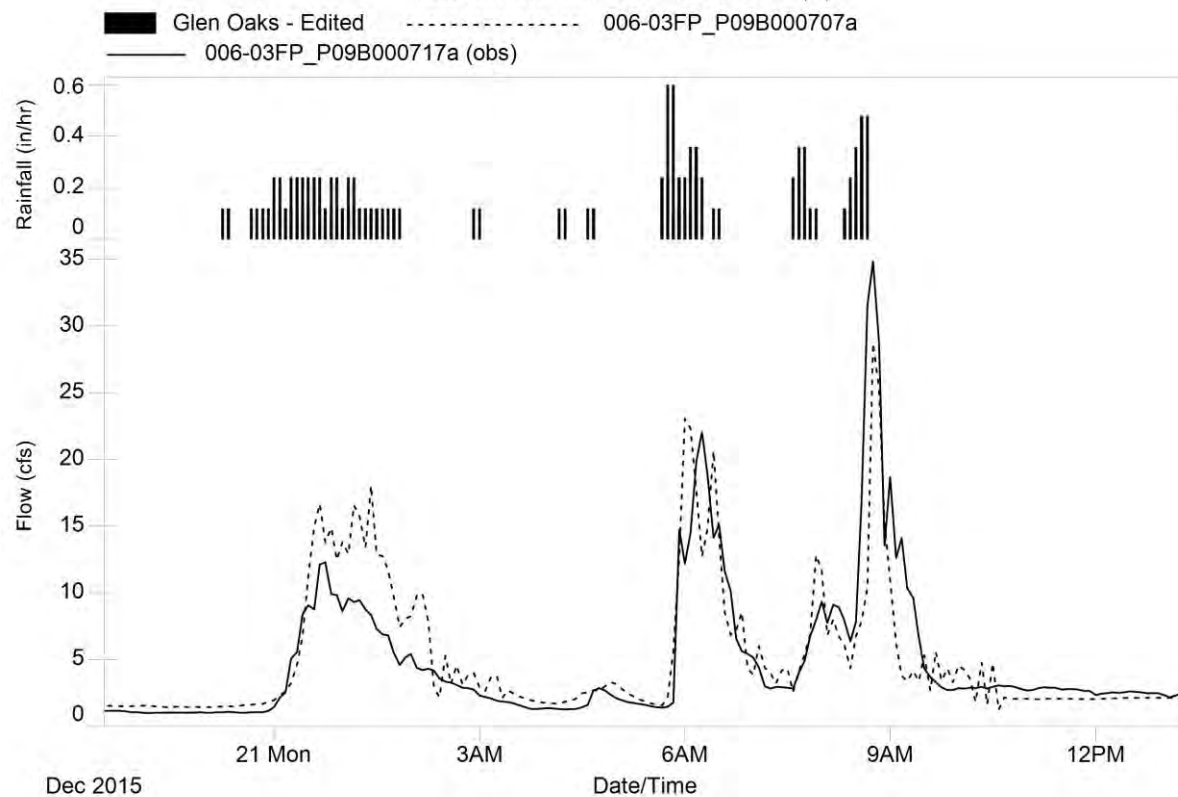
Duration: 62.42 h, Total Rainfall: 1.71 (in)



Eaton 006-03FP – Calibration Events

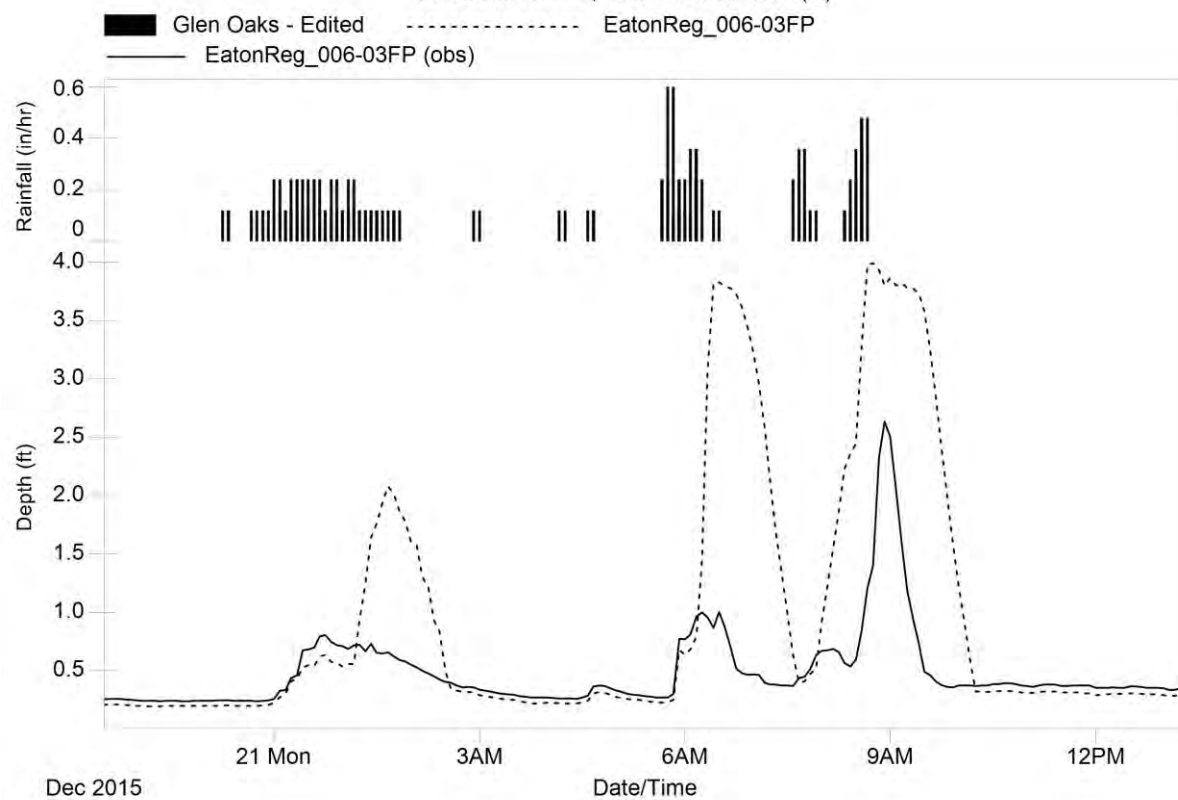
Event of December 20, 2015

Duration: 13.17 h, Total Rainfall: 0.67 (in)



Event of December 20, 2015

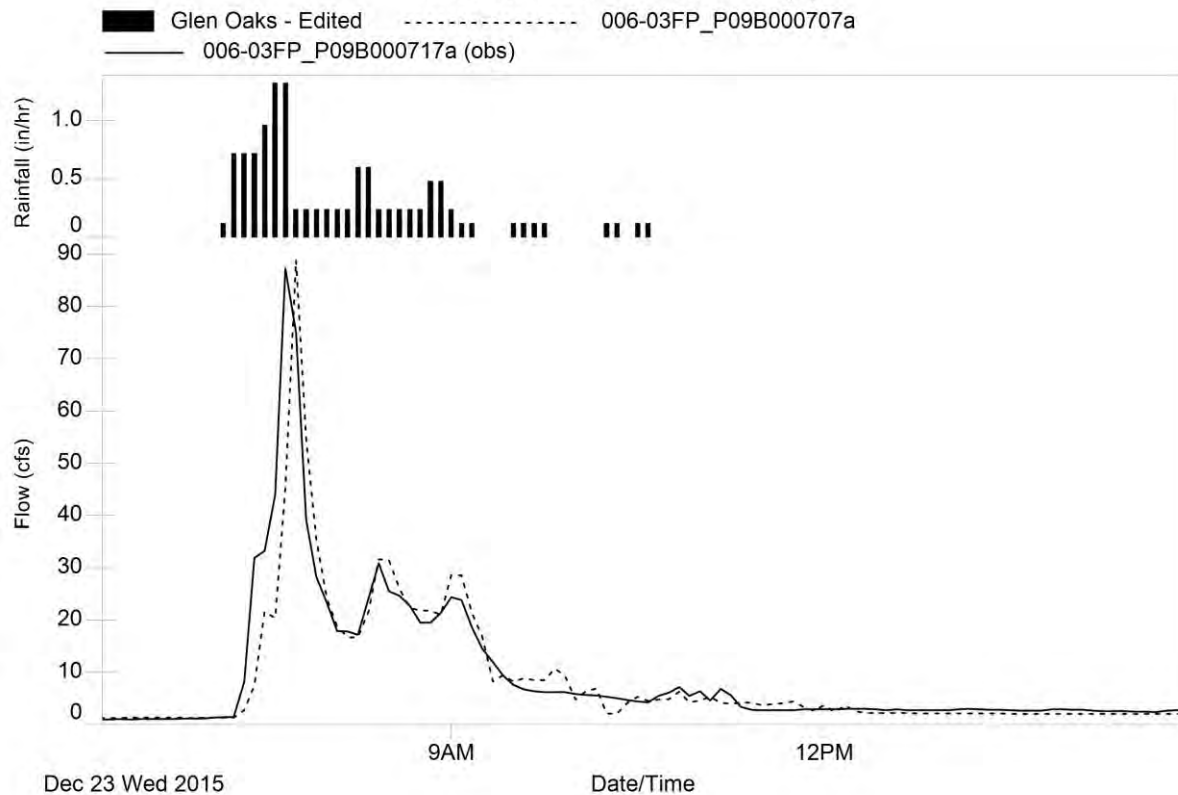
Duration: 13.17 h, Total Rainfall: 0.67 (in)



Eaton 006-03FP – Calibration Events

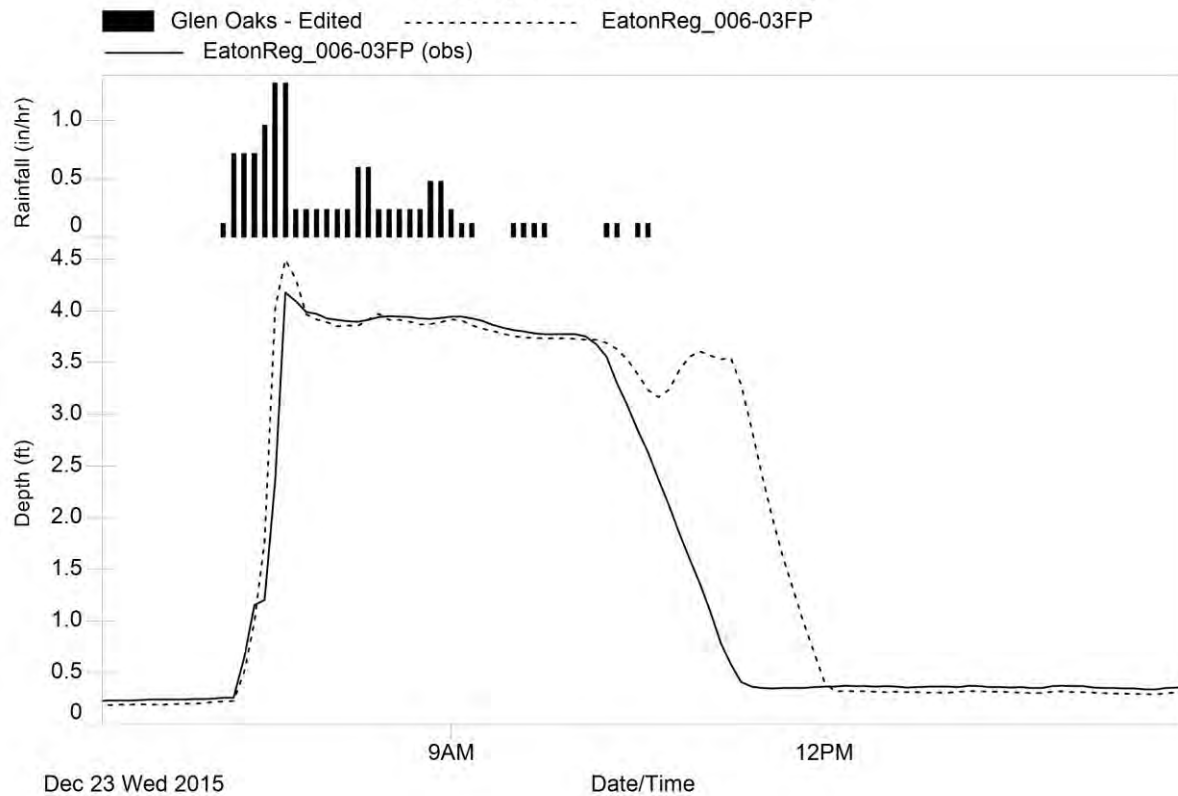
Event of December 23, 2015

Duration: 7.25 h, Total Rainfall: 0.7 (in)



Event of December 23, 2015

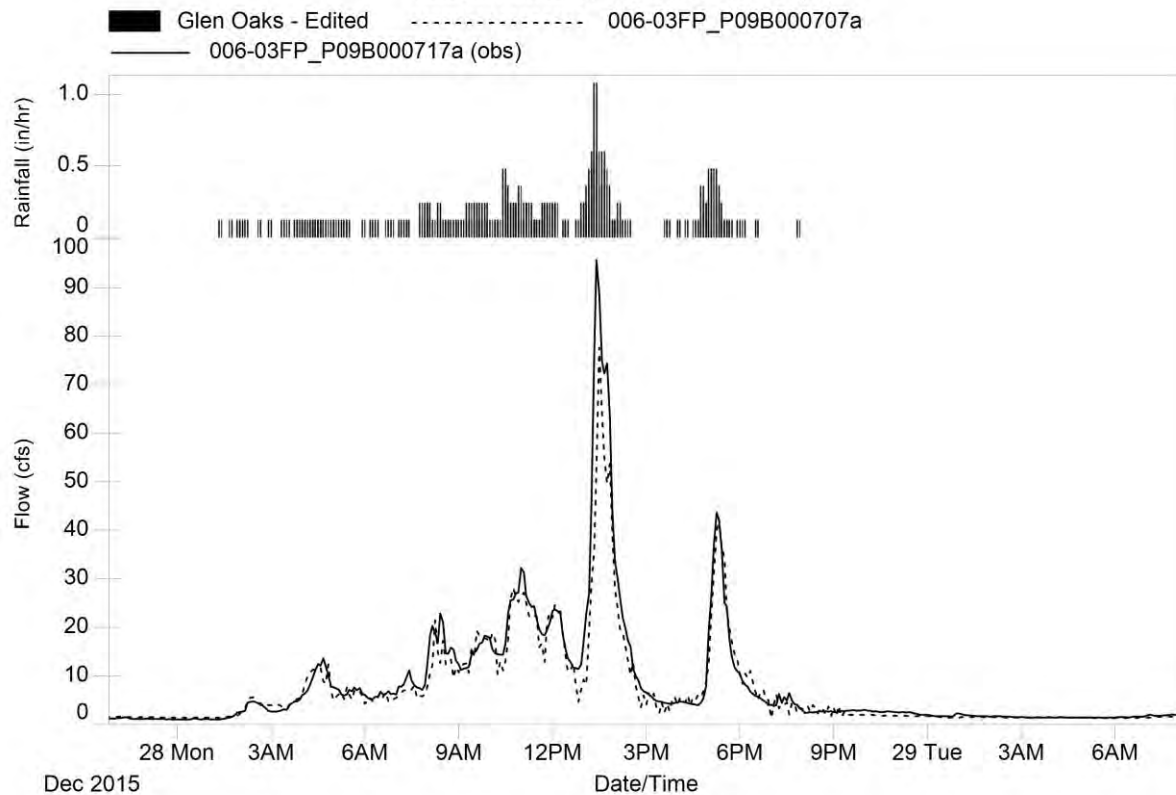
Duration: 7.25 h, Total Rainfall: 0.7 (in)



Eaton 006-03FP – Calibration Events

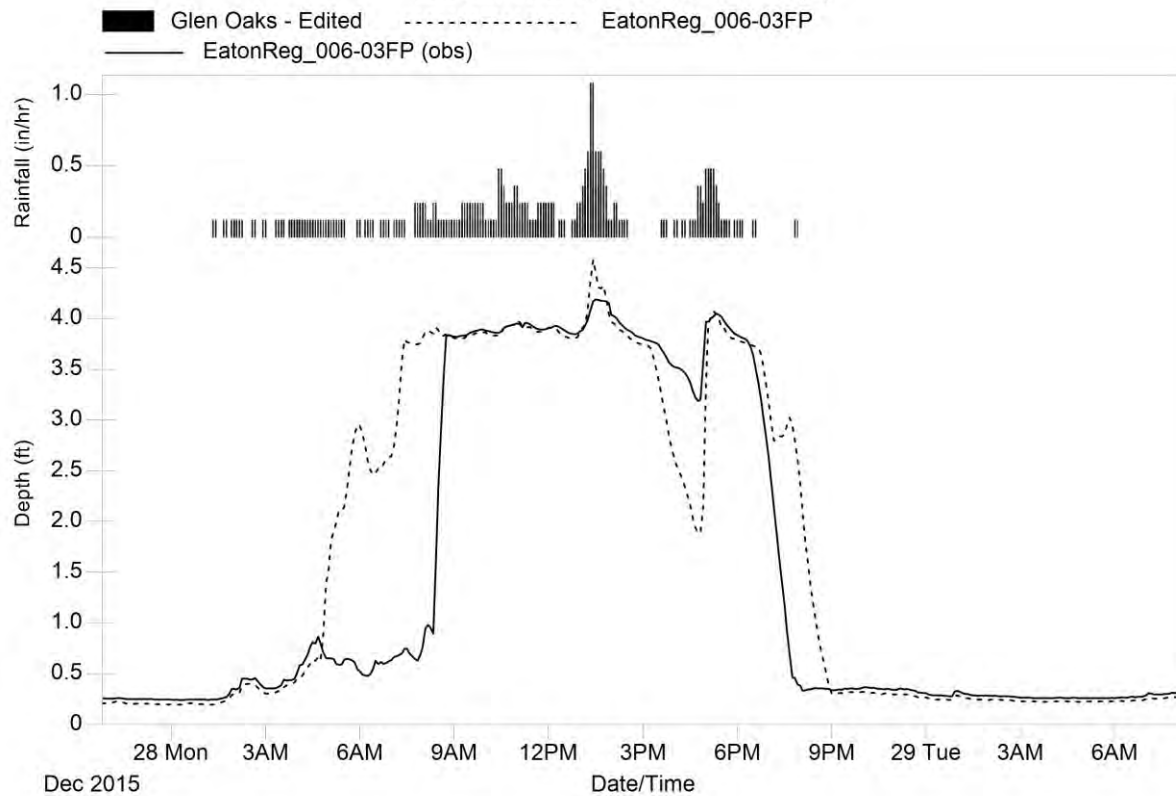
Event of December 28, 2015

Duration: 28.67 h, Total Rainfall: 2.05 (in)



Event of December 28, 2015

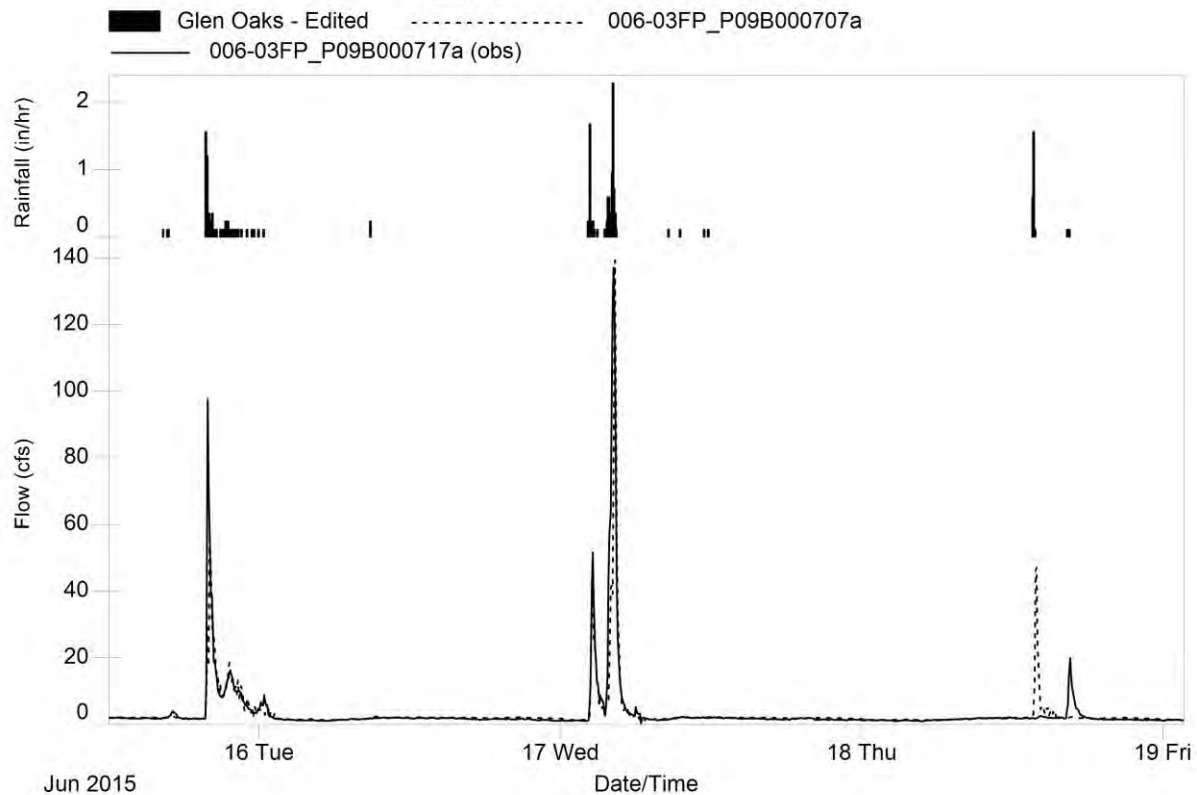
Duration: 28.67 h, Total Rainfall: 2.05 (in)



Eaton 006-03FP – Verification Events

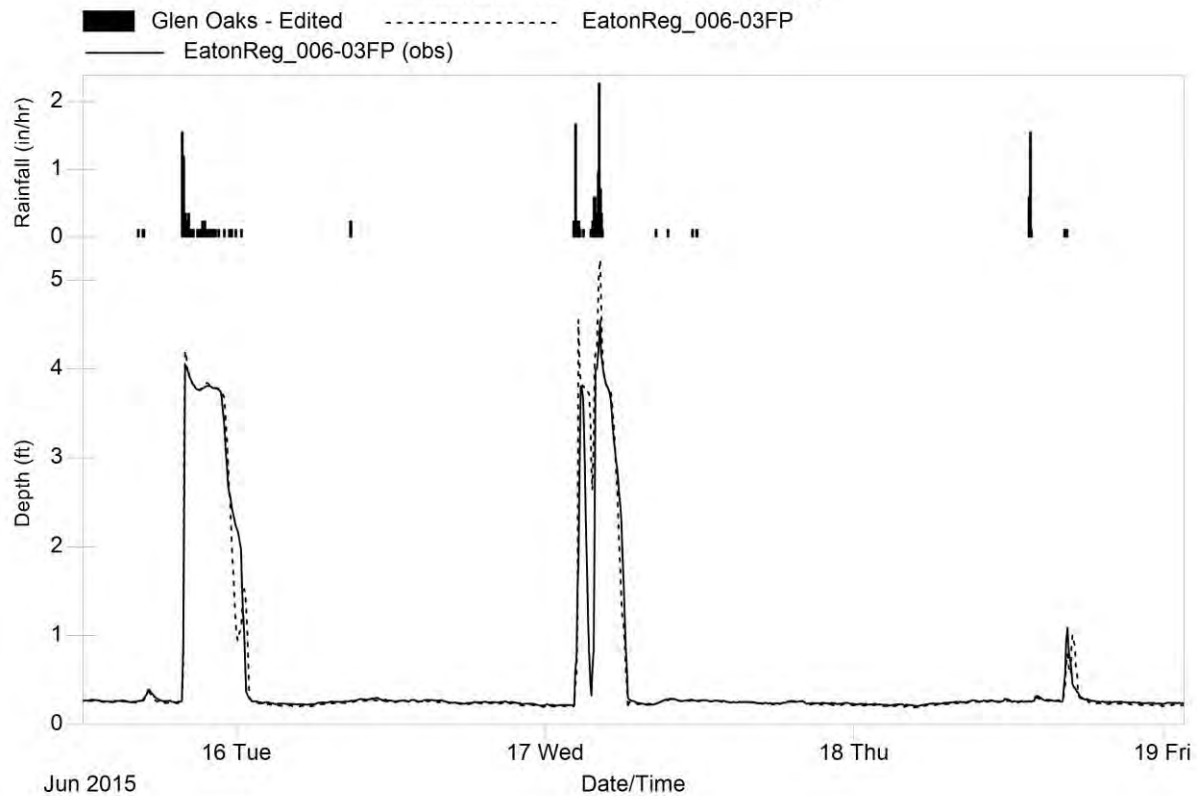
Event of June 15, 2015

Duration: 71.33 h, Total Rainfall: 1.7 (in)



Event of June 15, 2015

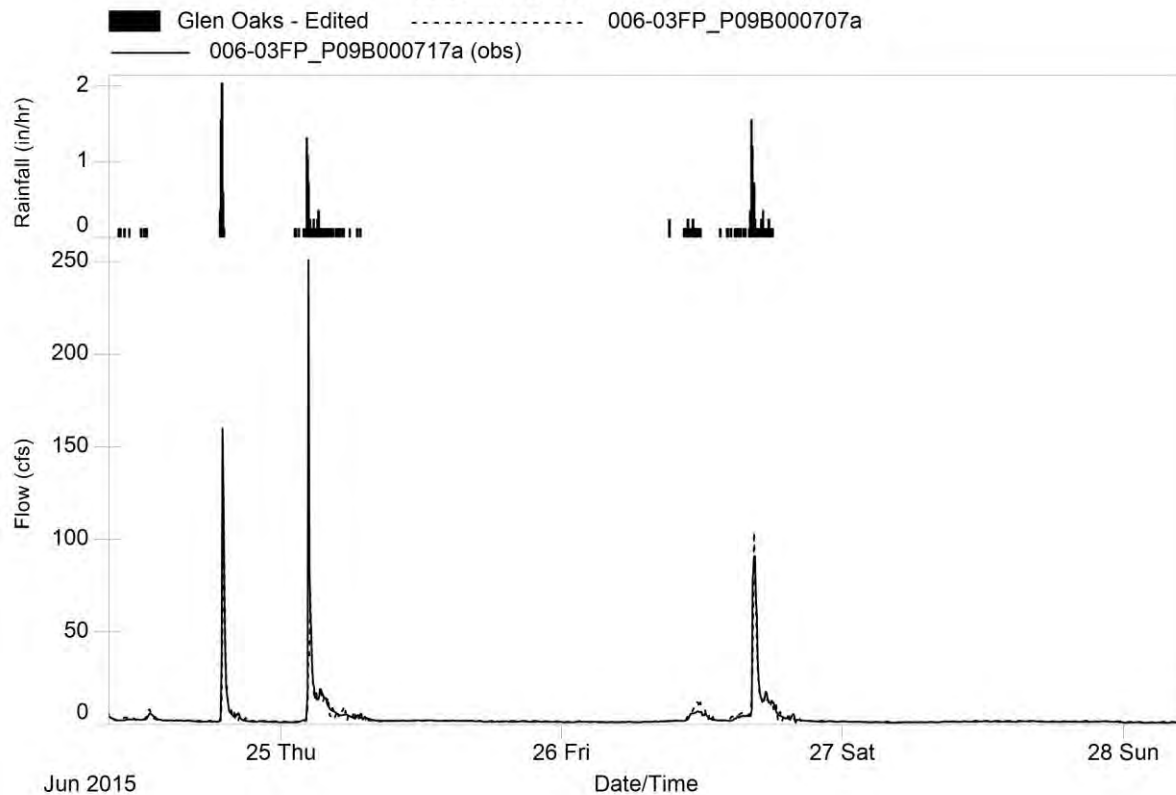
Duration: 71.33 h, Total Rainfall: 1.7 (in)



Eaton 006-03FP – Verification Events

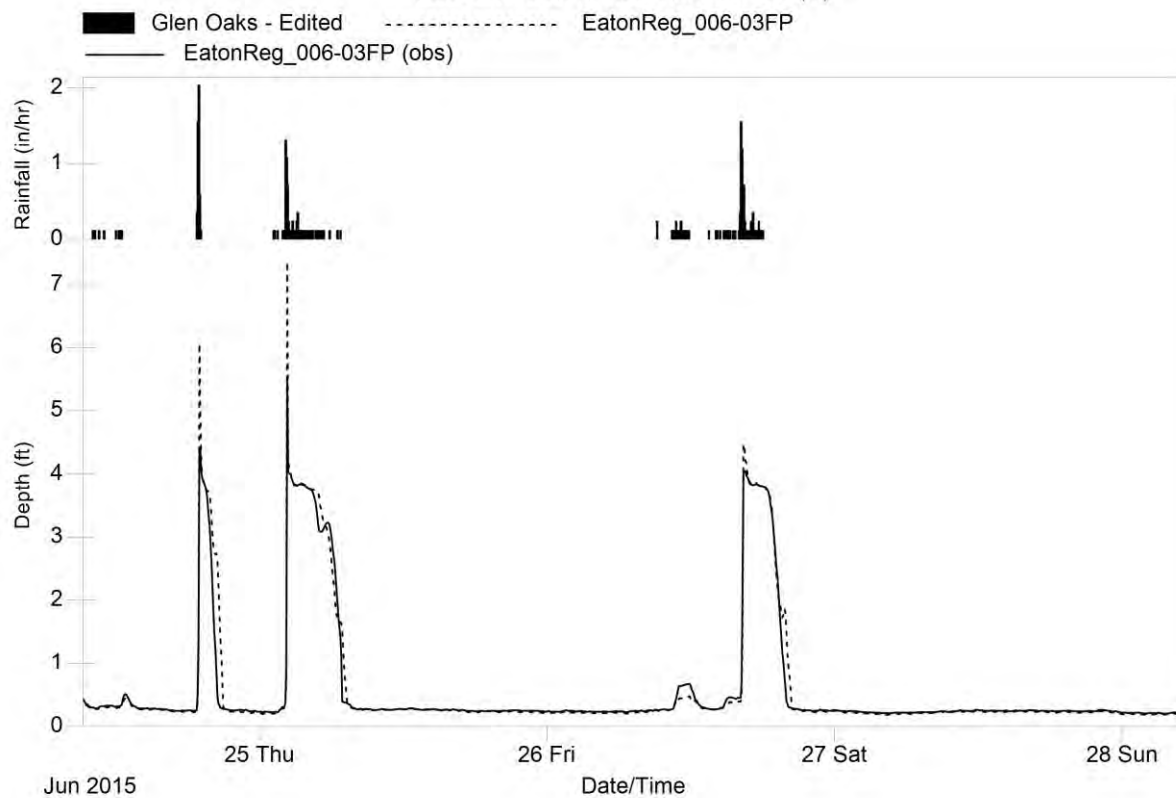
Event of June 24, 2015

Duration: 76.58 h, Total Rainfall: 1.91 (in)

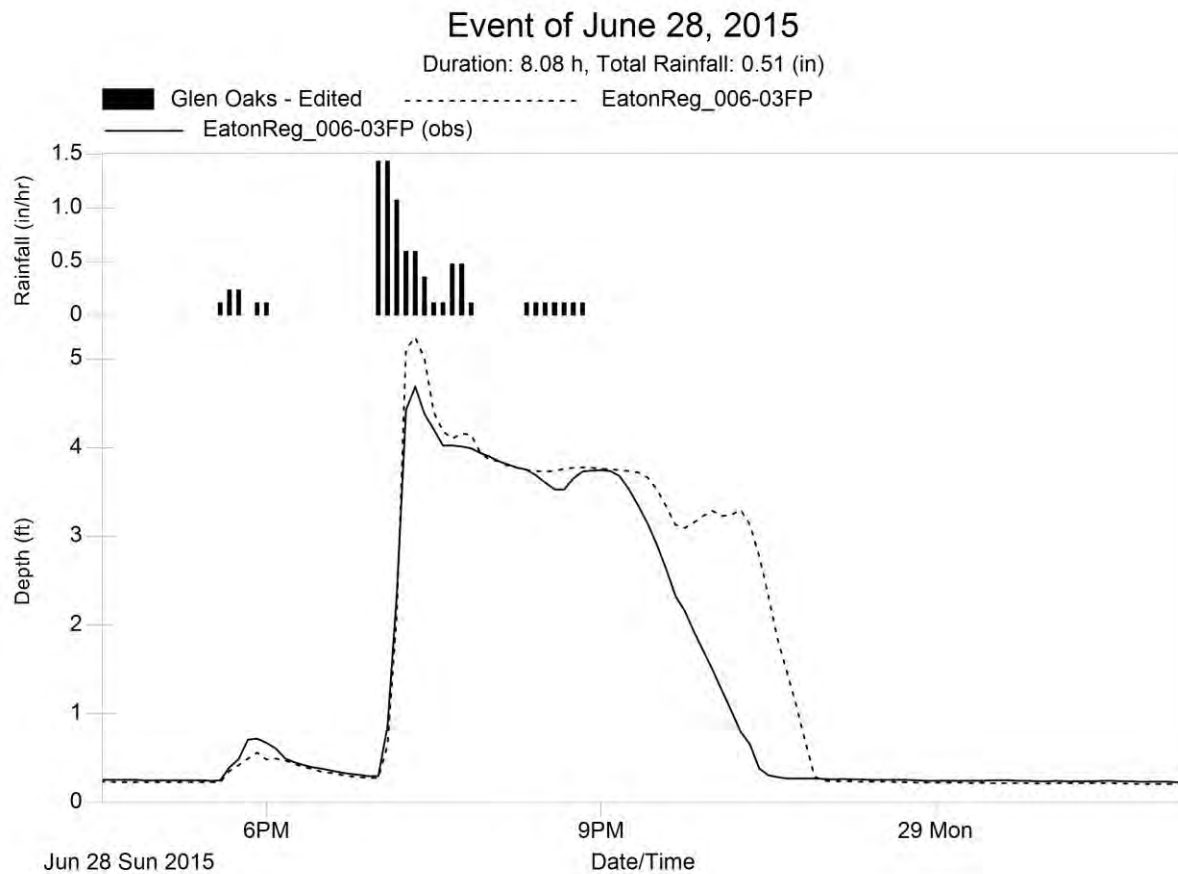
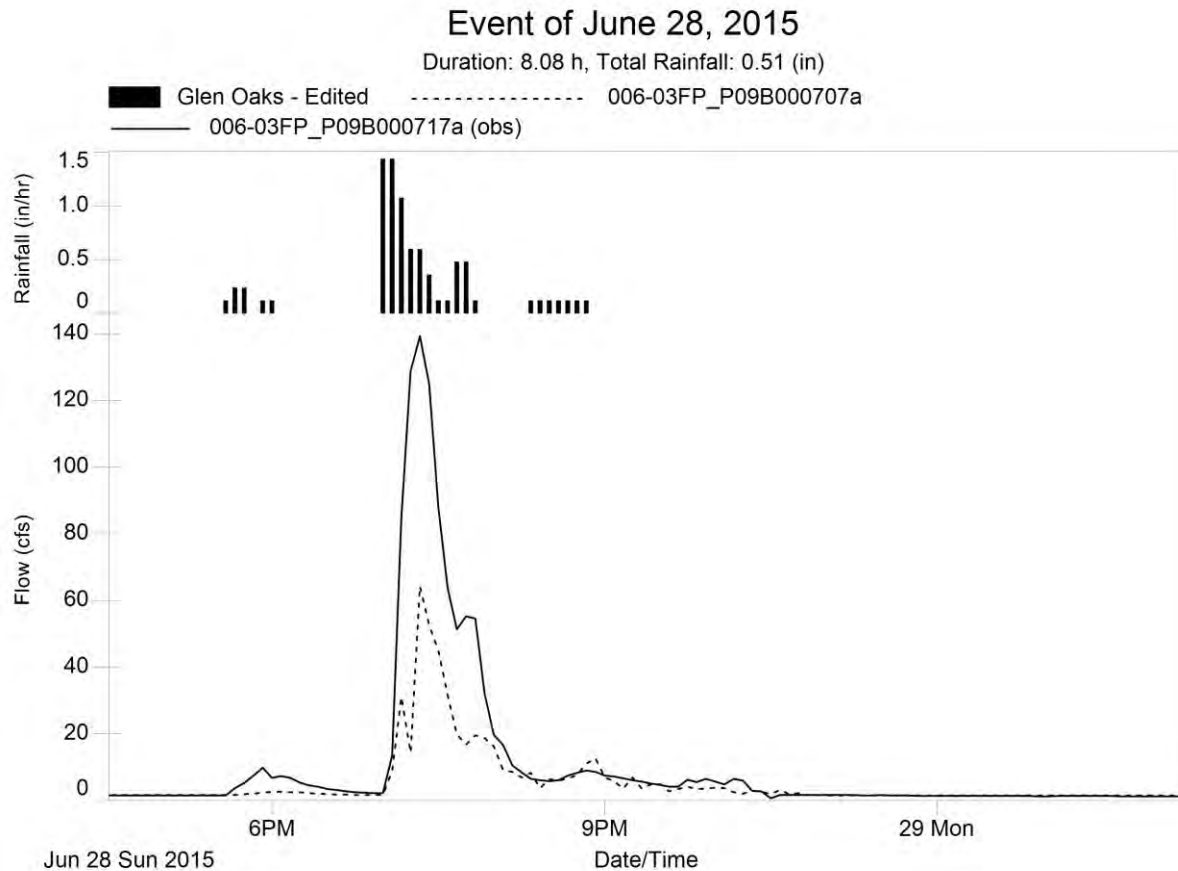


Event of June 24, 2015

Duration: 76.58 h, Total Rainfall: 1.91 (in)



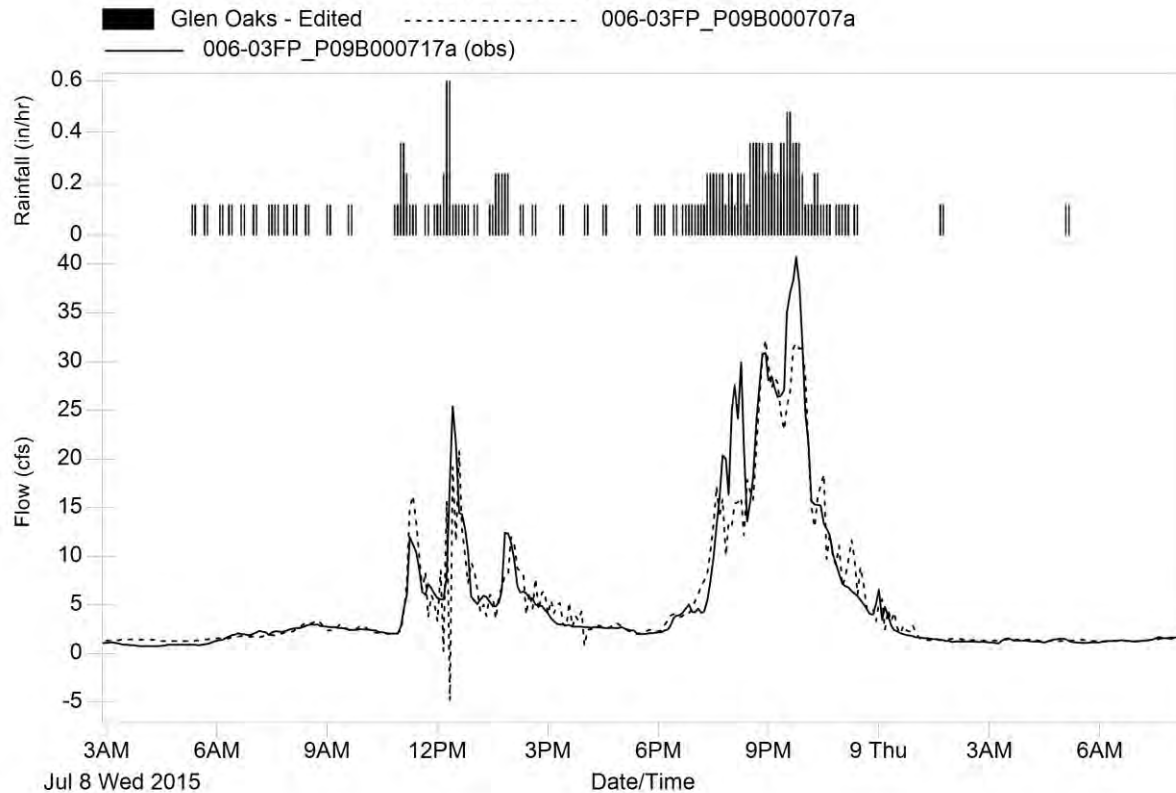
Eaton 006-03FP – Verification Events



Eaton 006-03FP – Verification Events

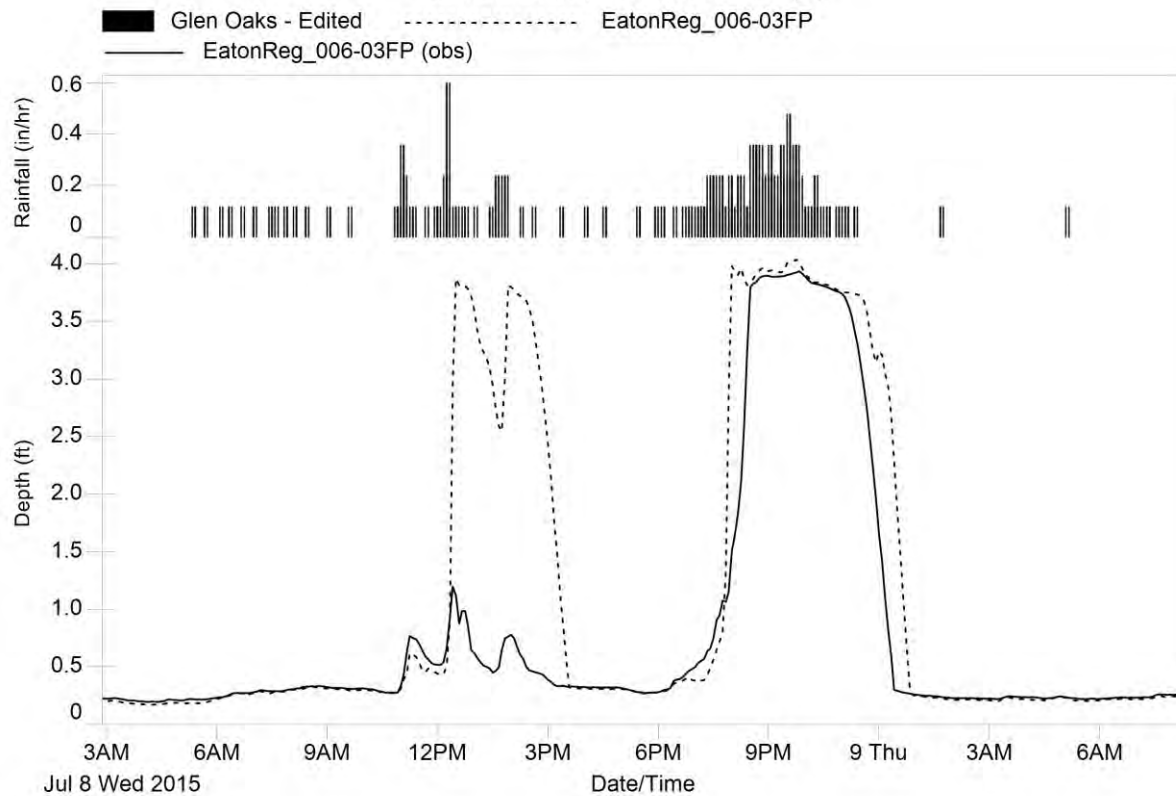
Event of July 8, 2015

Duration: 24.5 h, Total Rainfall: 1.36 (in)

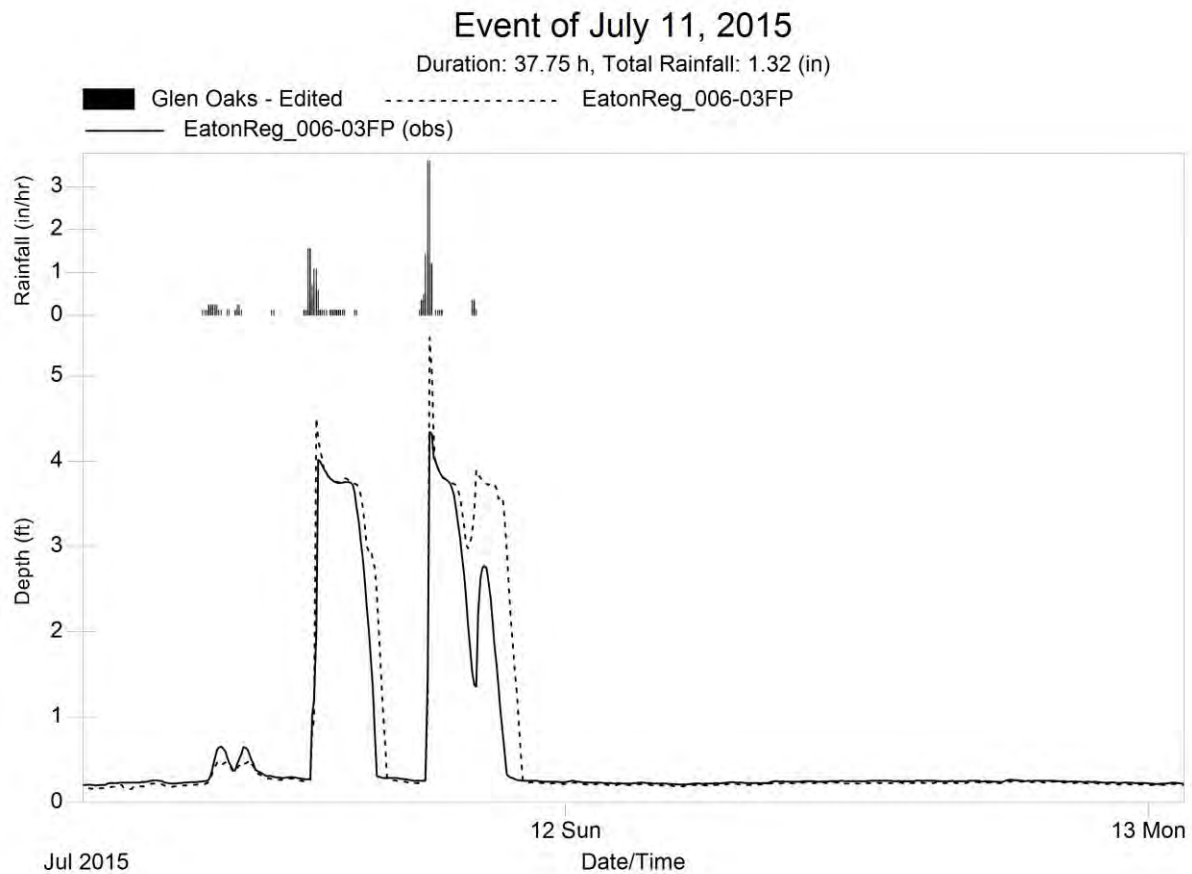
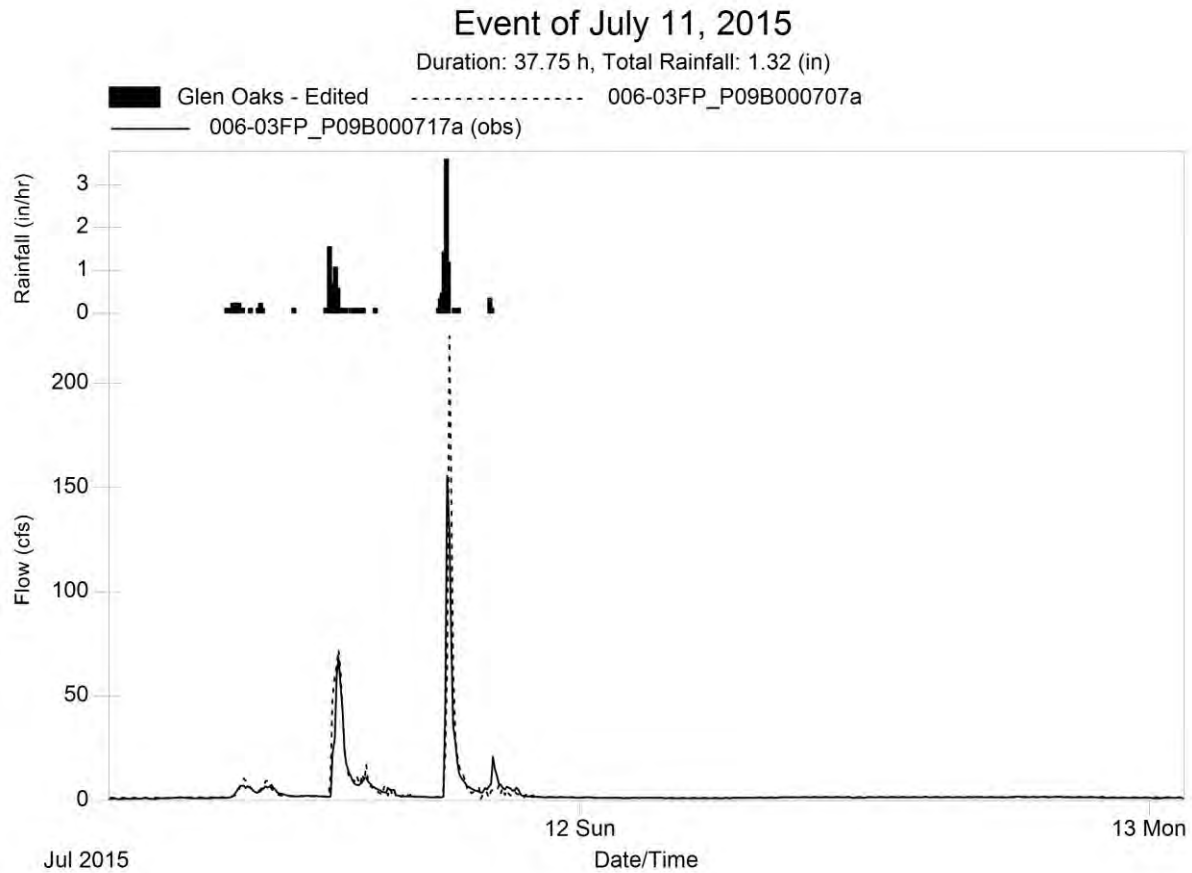


Event of July 8, 2015

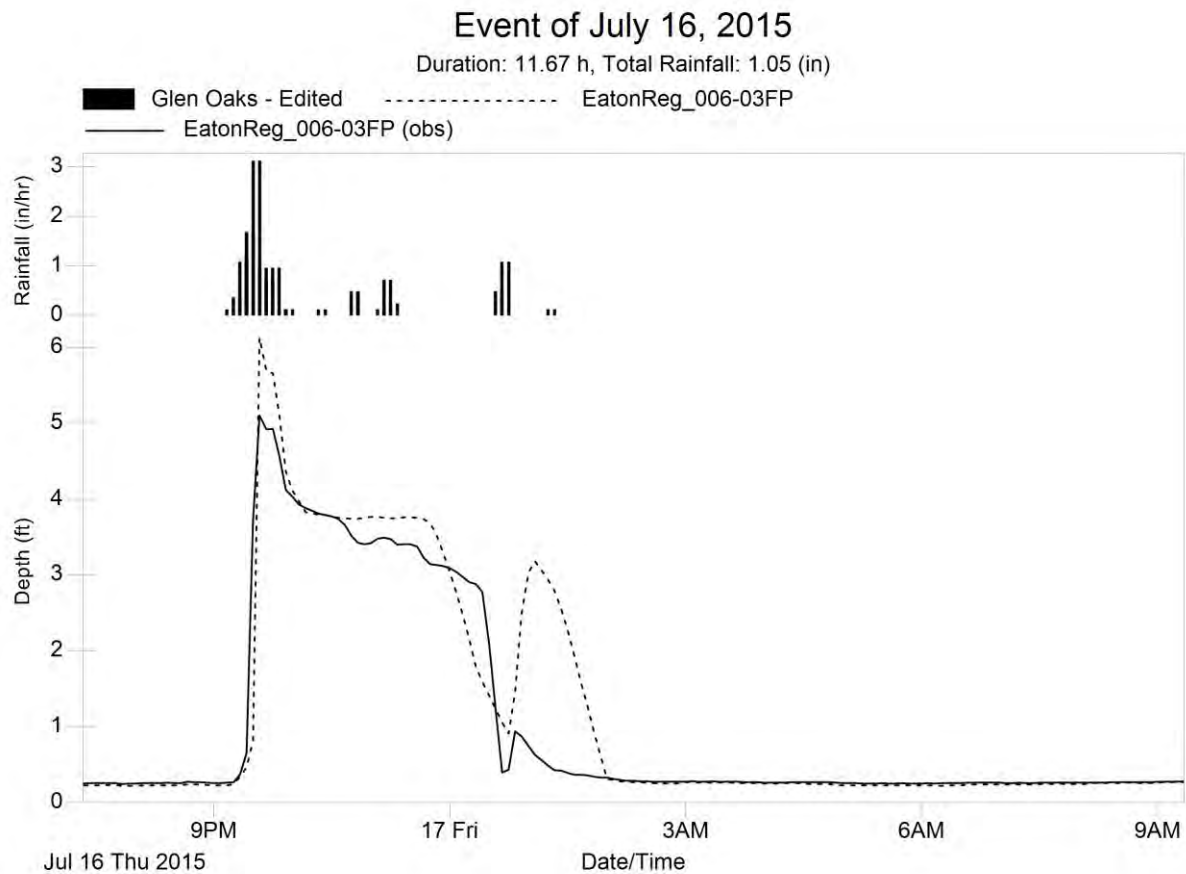
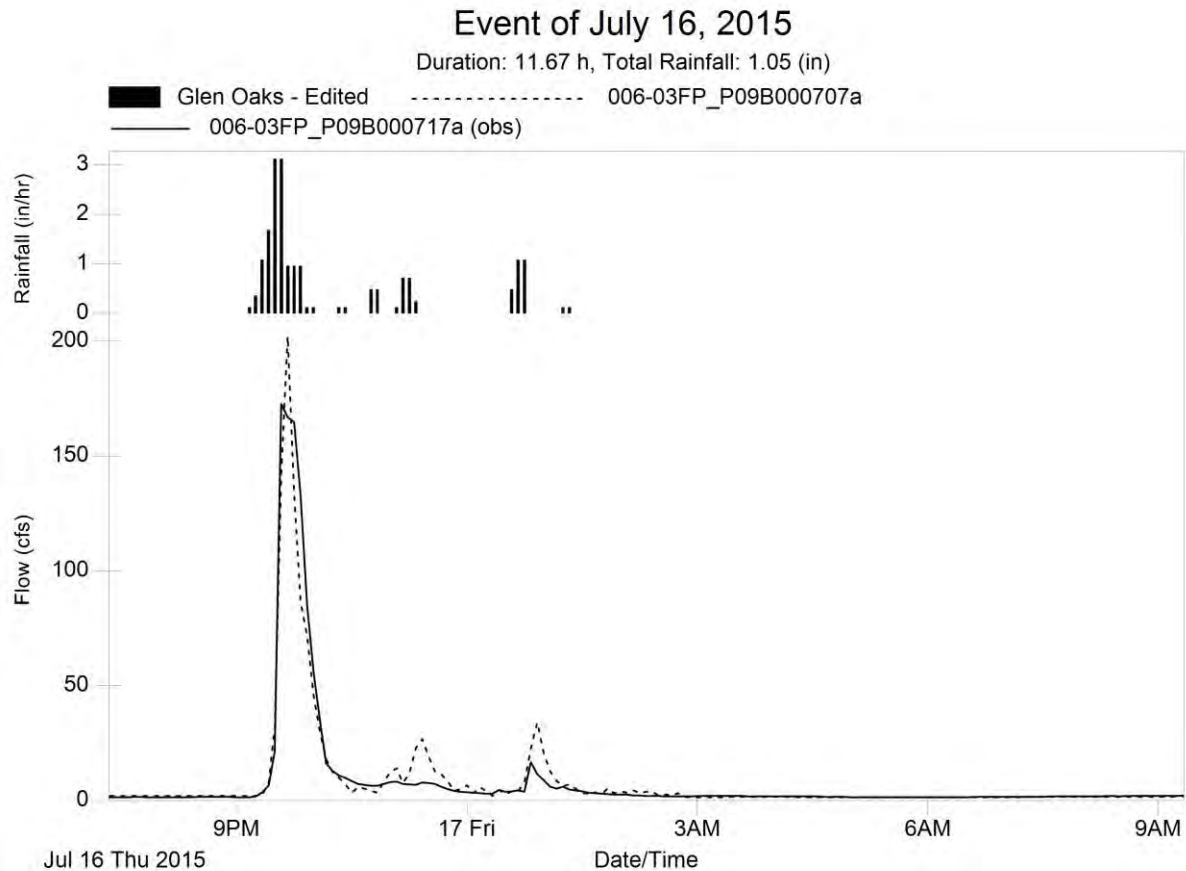
Duration: 24.5 h, Total Rainfall: 1.36 (in)



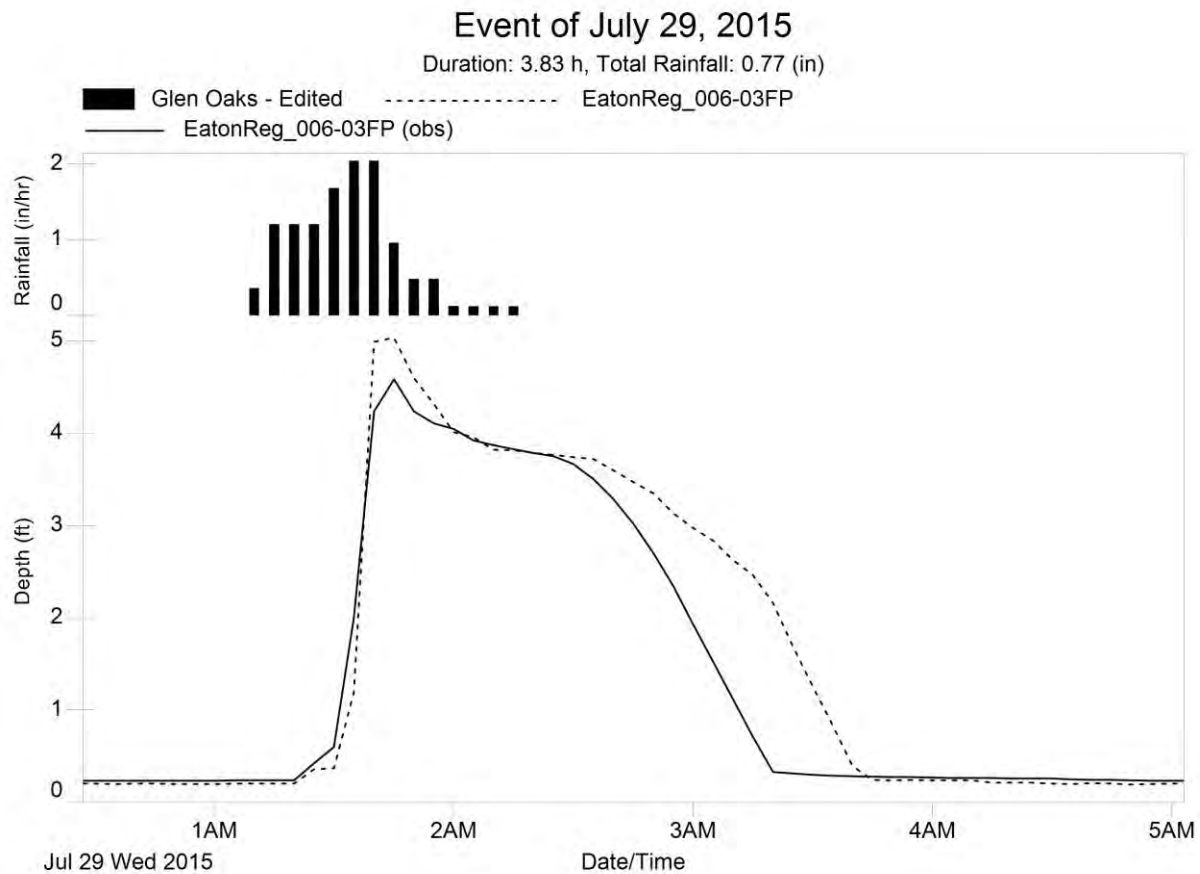
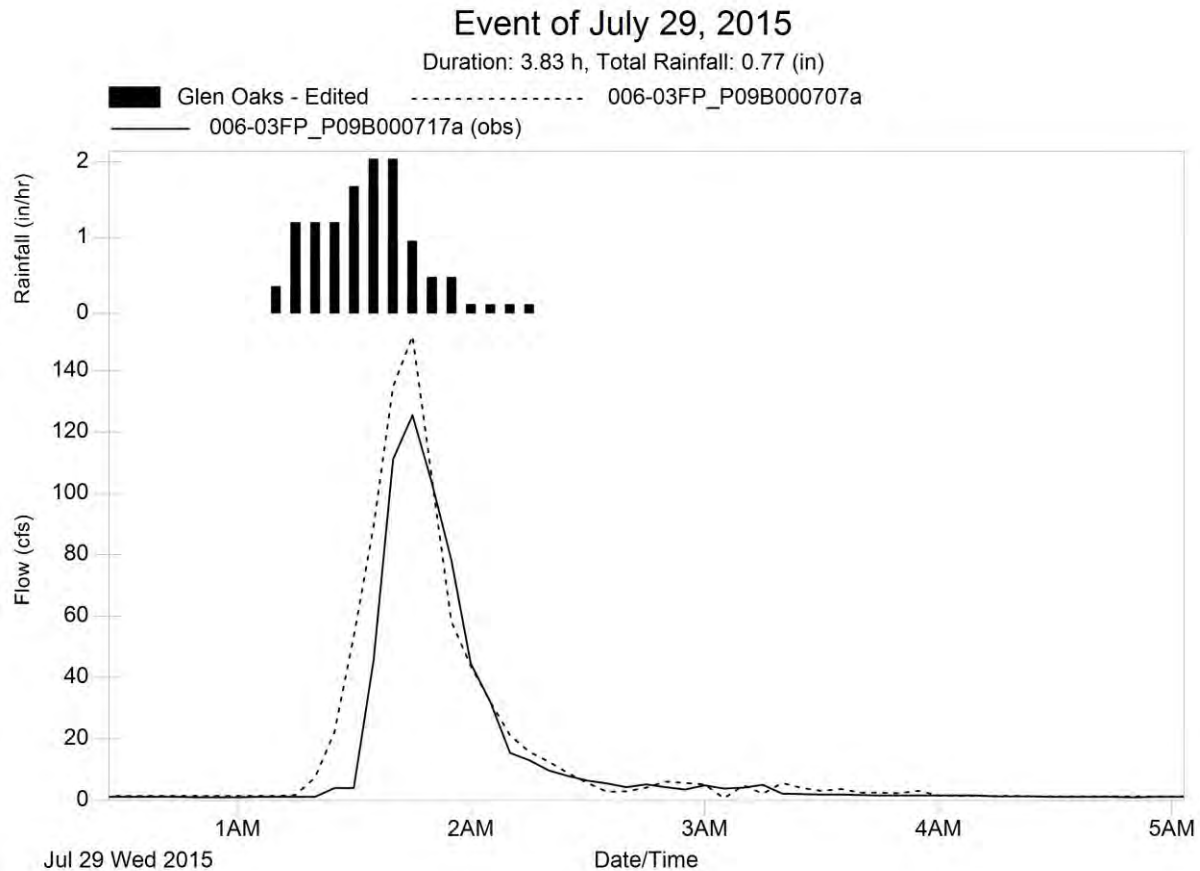
Eaton 006-03FP – Verification Events



Eaton 006-03FP – Verification Events



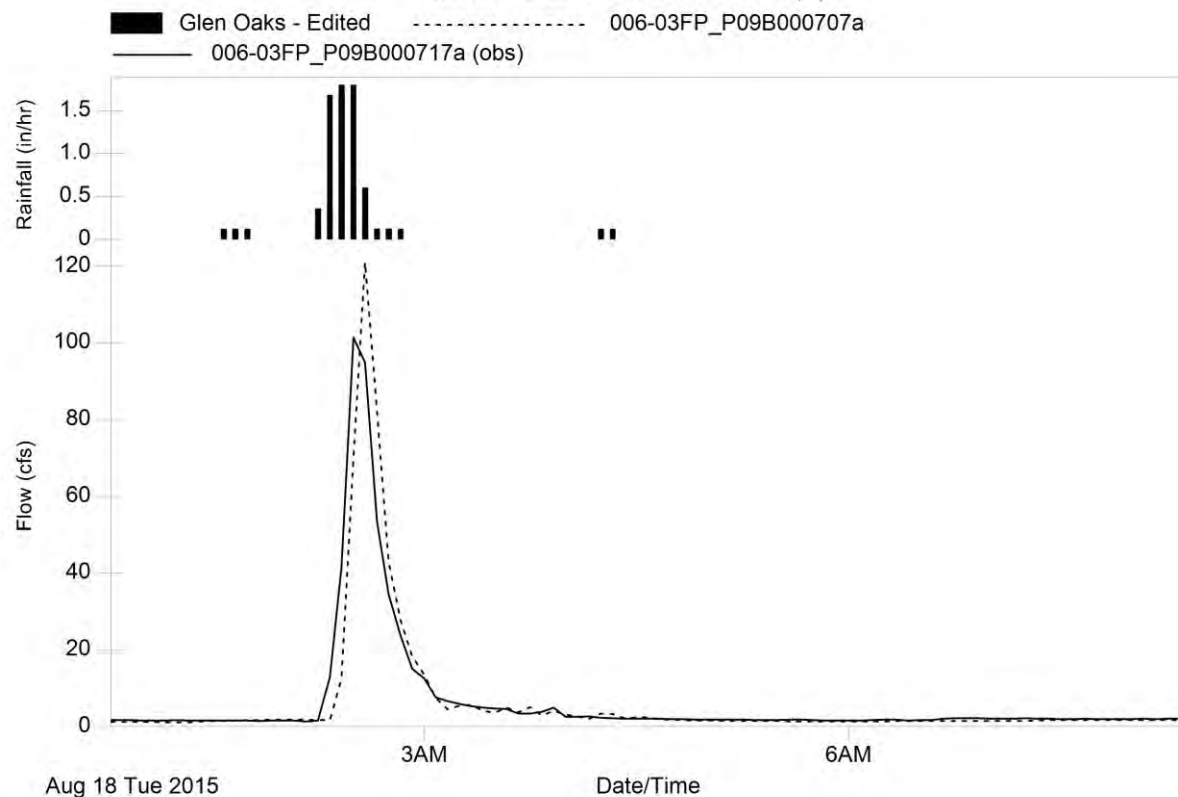
Eaton 006-03FP – Verification Events



Eaton 006-03FP – Verification Events

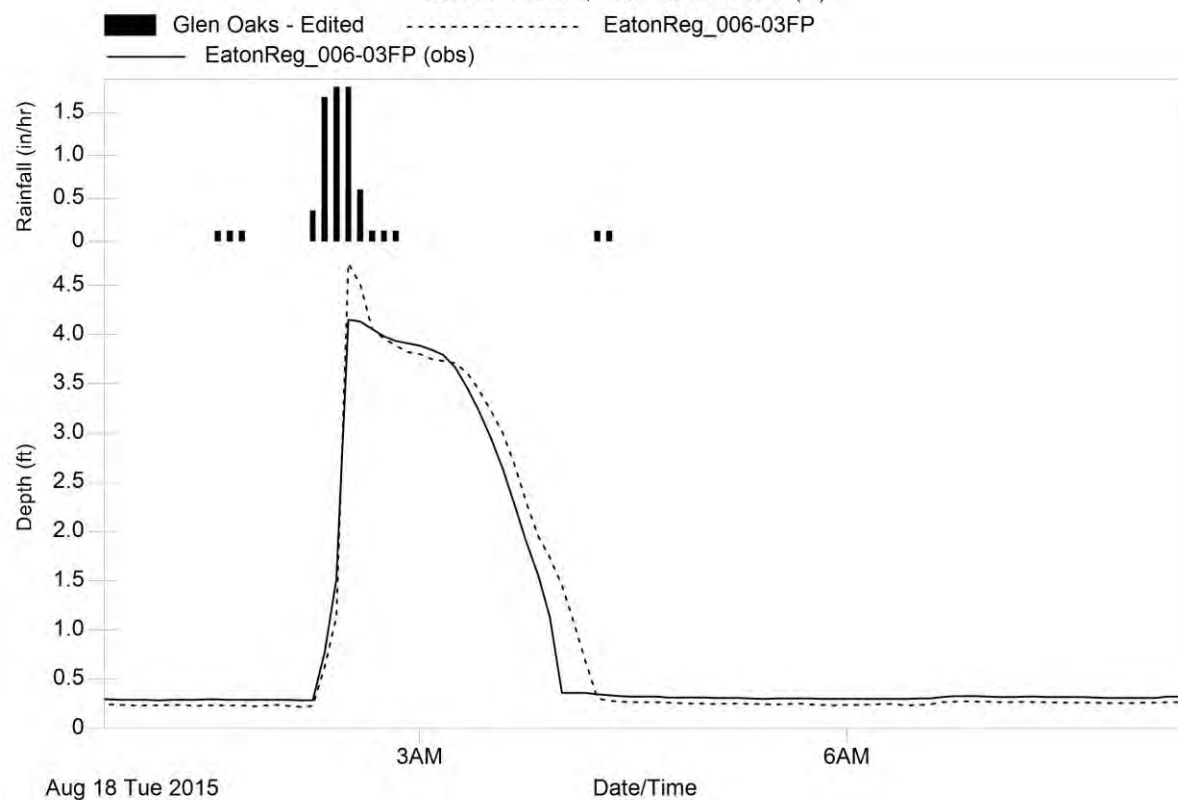
Event of August 18, 2015

Duration: 6.33 h, Total Rainfall: 0.43 (in)

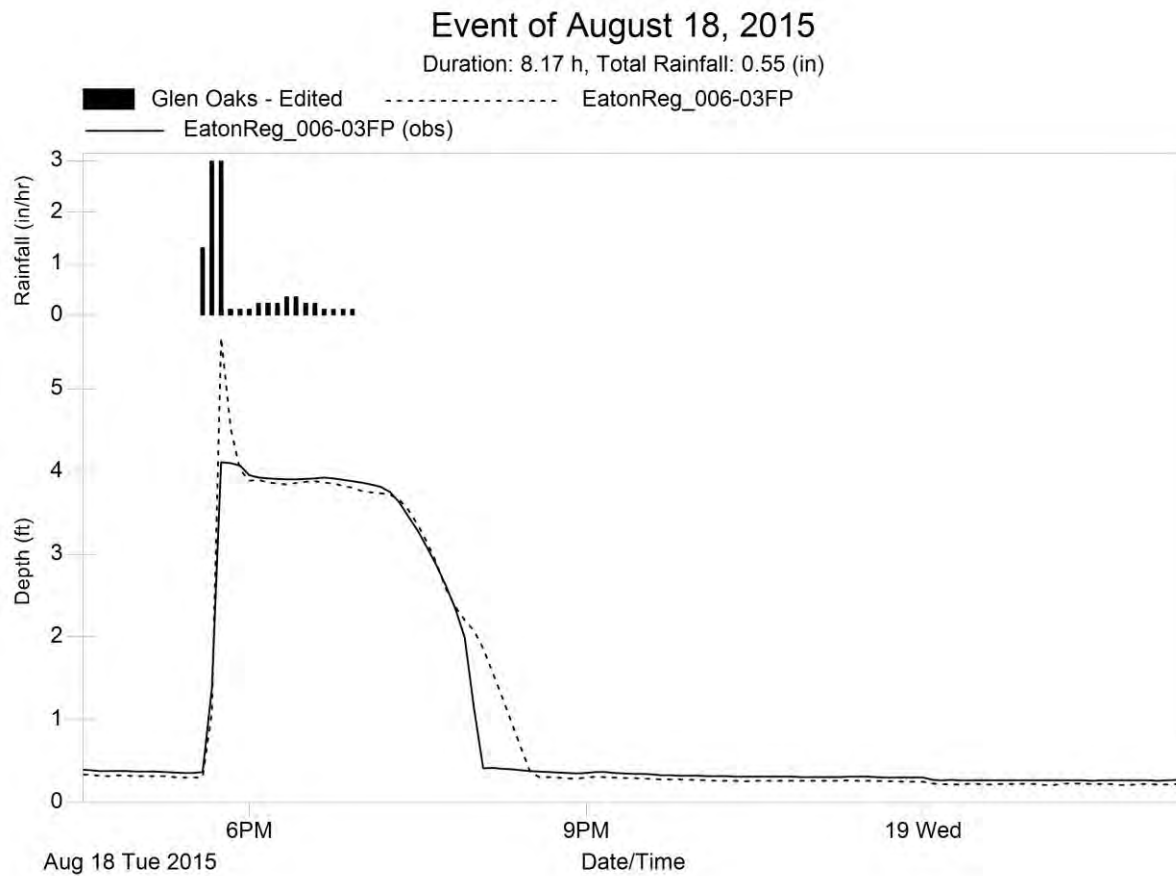
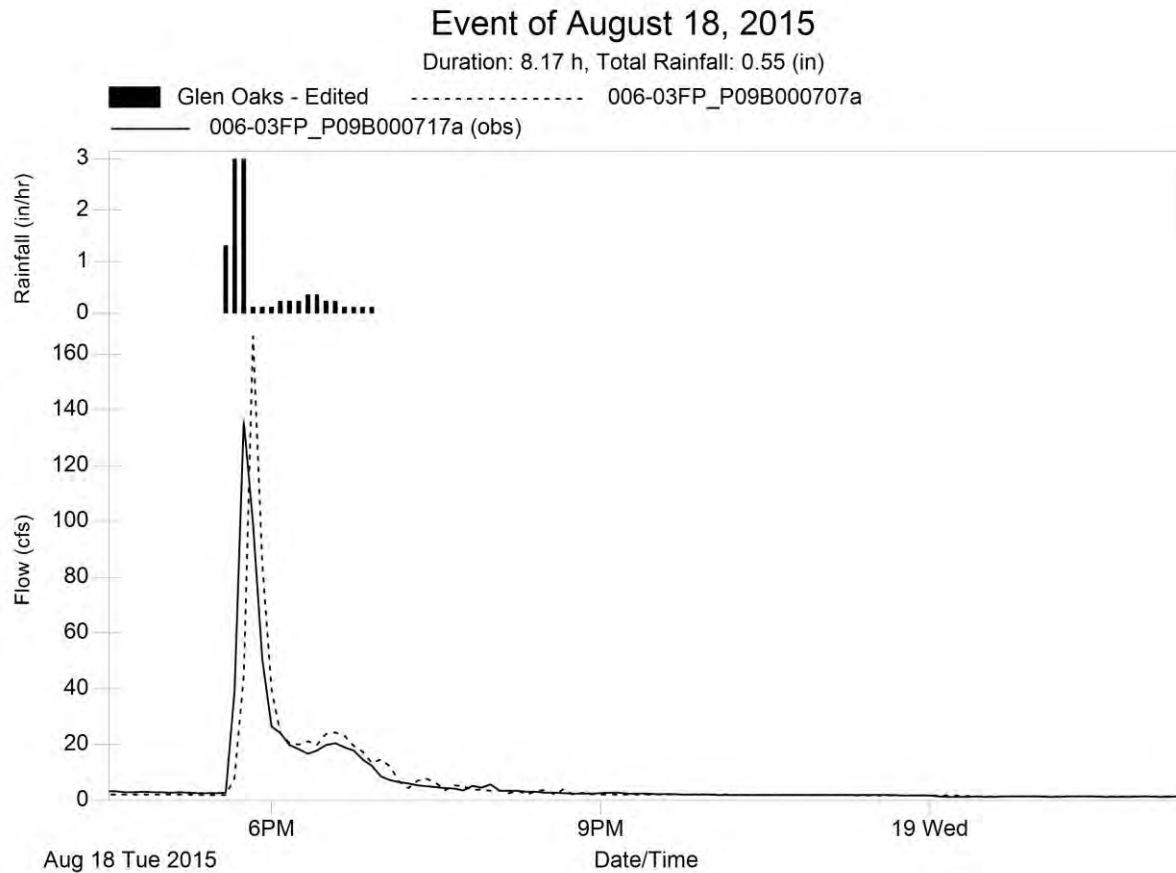


Event of August 18, 2015

Duration: 6.33 h, Total Rainfall: 0.43 (in)



Eaton 006-03FP – Verification Events



006-01LE - Eaton Swirl Depth



Date	Duration (h)	Maximum Depth (ft)		Minimum Depth (ft)		Average Depth (ft)		Maximum Depth (ft)	Average Depth (ft)	Rainfall Variability
		metered	modeled	metered	modeled	metered	modeled	Surcharged: -0.33 ft to +1.67 ft	Surcharged: -0.33 ft to +1.67 ft	
CALIBRATION EVENTS - DEPTH								Non-Surcharged: -0.33 ft to +0.33 ft	Non-Surcharged: -0.33 ft to +0.33 ft	
9/8/2015 10:40:00	5.00	6.000	5.755	0.000	0.000	3.060	3.639	-0.245	0.579	variable
9/18/2015 14:45:00	13.42	7.200	5.971	0.000	0.000	1.831	2.250	-1.229	0.419	relatively uniform
11/5/2015 12:55:00	20.25	5.900	5.396	0.000	0.000	0.164	0.284	-0.504	0.120	possibly uniform
11/11/2015 18:45:00	6.25	6.300	5.786	0.000	0.000	1.533	1.753	-0.514	0.220	relatively uniform
11/16/2015 11:40:00	69.25	5.700	5.588	0.000	0.000	0.641	1.071	-0.112	0.430	variable
11/26/2015 20:25:00	56.75	5.600	5.476	0.000	0.000	0.461	0.784	-0.124	0.324	possibly uniform
12/13/2015 1:35:00	62.42	5.700	5.512	0.000	0.000	0.790	0.806	-0.188	0.016	possibly uniform
12/20/2015 22:30:00	40.75	4.300	5.484	0.000	0.000	0.157	0.529	1.184	0.372	relatively uniform
12/23/2015 6:20:00	26.58	5.900	5.706	0.000	0.000	0.737	0.864	-0.194	0.128	variable
12/28/2015 0:35:00	40.42	5.900	5.760	0.000	0.000	1.556	1.980	-0.140	0.424	variable
VERIFICATION EVENTS - DEPTH										
6/15/2015 19:10:00	71.33	6.300	5.907	0.000	0.000	0.604	0.621	-0.393	0.017	variable
6/24/2015 16:55:00	76.58	6.000	6.174	0.000	0.000	0.665	0.689	0.174	0.024	variable
6/28/2015 18:25:00	22.17	6.300	5.894	0.000	0.000	0.756	0.855	-0.406	0.099	variable
7/8/2015 5:20:00	24.50	5.700	5.521	0.000	0.000	1.072	1.687	-0.179	0.615	relatively uniform
7/11/2015 7:55:00	37.75	6.100	5.939	0.000	0.000	0.740	0.895	-0.161	0.155	possibly uniform
7/16/2015 20:30:00	11.67	6.600	5.986	0.000	0.000	1.524	1.761	-0.614	0.237	relatively uniform
7/29/2015 0:50:00	3.83	6.300	5.843	-2.200	0.000	0.448	2.614	-0.457	2.166	variable
8/18/2015 1:25:00	6.33	No meter data								possibly uniform
8/18/2015 17:20:00	8.17	No meter data								relatively uniform
Notes: Results from interceptor only model using flow meter data as influent flow to regulator. 4.25 feet subtracted from modeled flow depth to account for difference between modeled swirl concentrator invert (449.56 ft) and the invert at the meter location (453.81 ft)						WEIGHTED AVERAGES				
						Calibration - Relatively Uniform	-0.393	0.330	relatively uniform	
						Calibration - Possibly Uniform	-0.276	0.128	possibly uniform	
						Calibration - Variable	-0.174	0.467	variable	
						Calibration Weighted - All Events	-0.270	0.379	All Events	
						Verification - Relatively Uniform	-0.412	0.393	relatively uniform	
						Verification - Possibly Uniform	-0.161	0.155	possibly uniform	
						Verification - Variable	-0.276	0.433	variable	
						Verification Weighted - All Events	-0.298	0.380	All Events	
						Weighted Average - All Events	-0.282	0.380		
						NET AVERAGES				
						Calibration - Relatively Uniform	-0.186	0.337	relatively uniform	
						Calibration - Possibly Uniform	-0.272	0.153	possibly uniform	
						Calibration - Variable	-0.173	0.390	variable	
						Calibration Net - All Events	-0.207	0.303	All Events	
						Verification - Relatively Uniform	-0.397	0.426	relatively uniform	
						Verification - Possibly Uniform	-0.161	0.155	possibly uniform	
						Verification - Variable	-0.271	0.577	variable	
						Verification Net - All Events	-0.291	0.473	All Events	
						Net Average - All Events	-0.241	0.373		

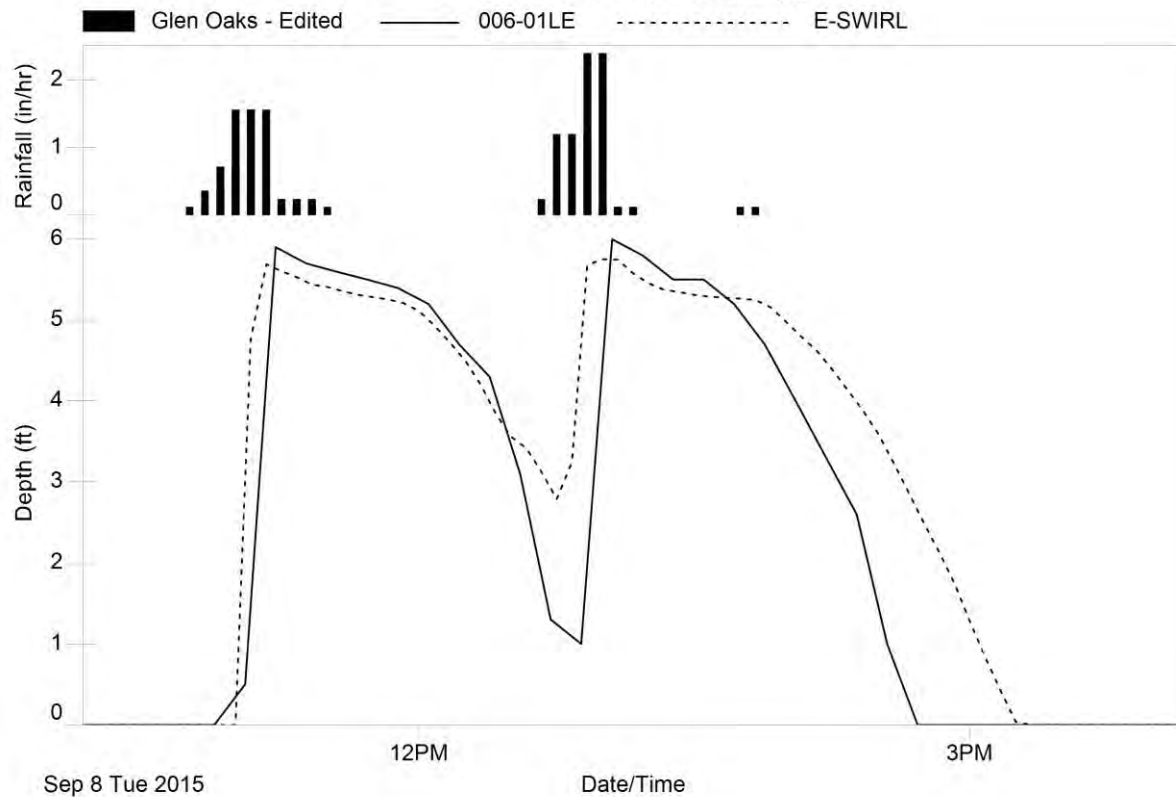
Notes:

Results from interceptor only model using flow meter data as influent flow to regulator.
4.25 feet subtracted from modeled flow depth to account for difference between modeled swirl
concentrator invert (449.56 ft) and the invert at the meter location (453.81 ft)

Eaton 006-01LE – Calibration Events

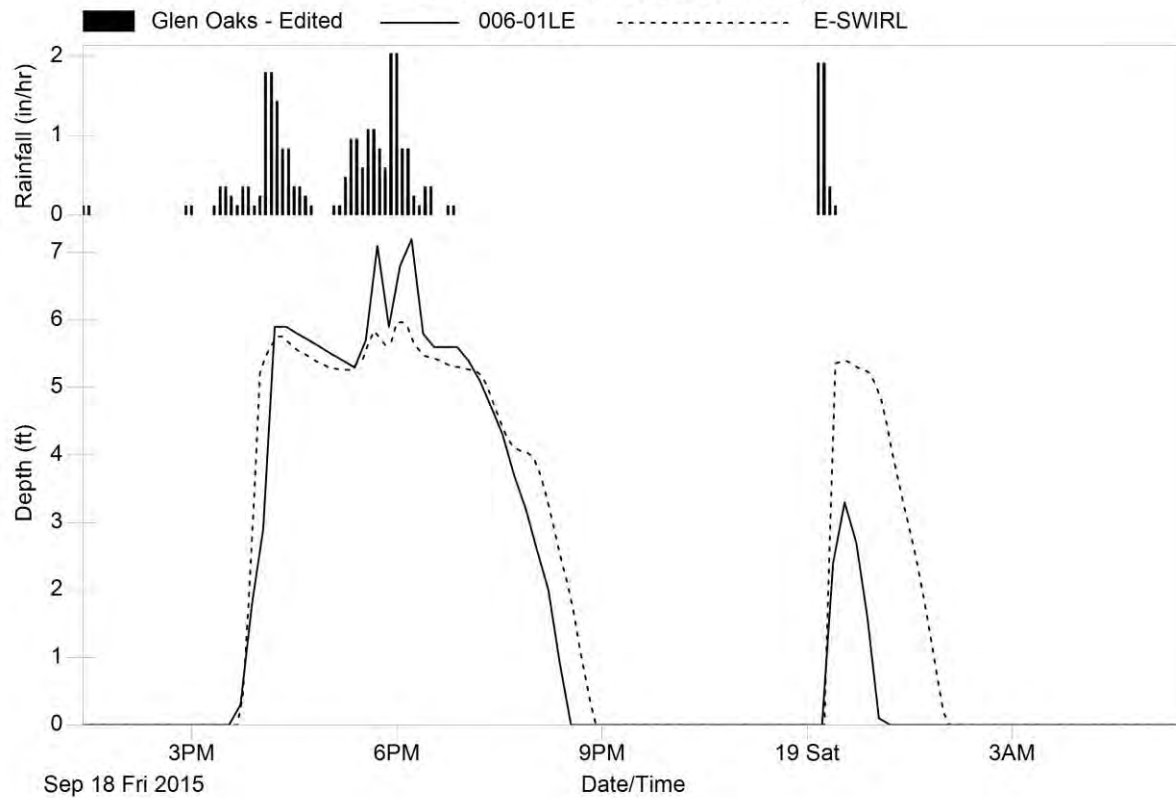
Event of September 8, 2015

Duration: 5 h, Total Rainfall: 0.87 (in)



Event of September 18, 2015

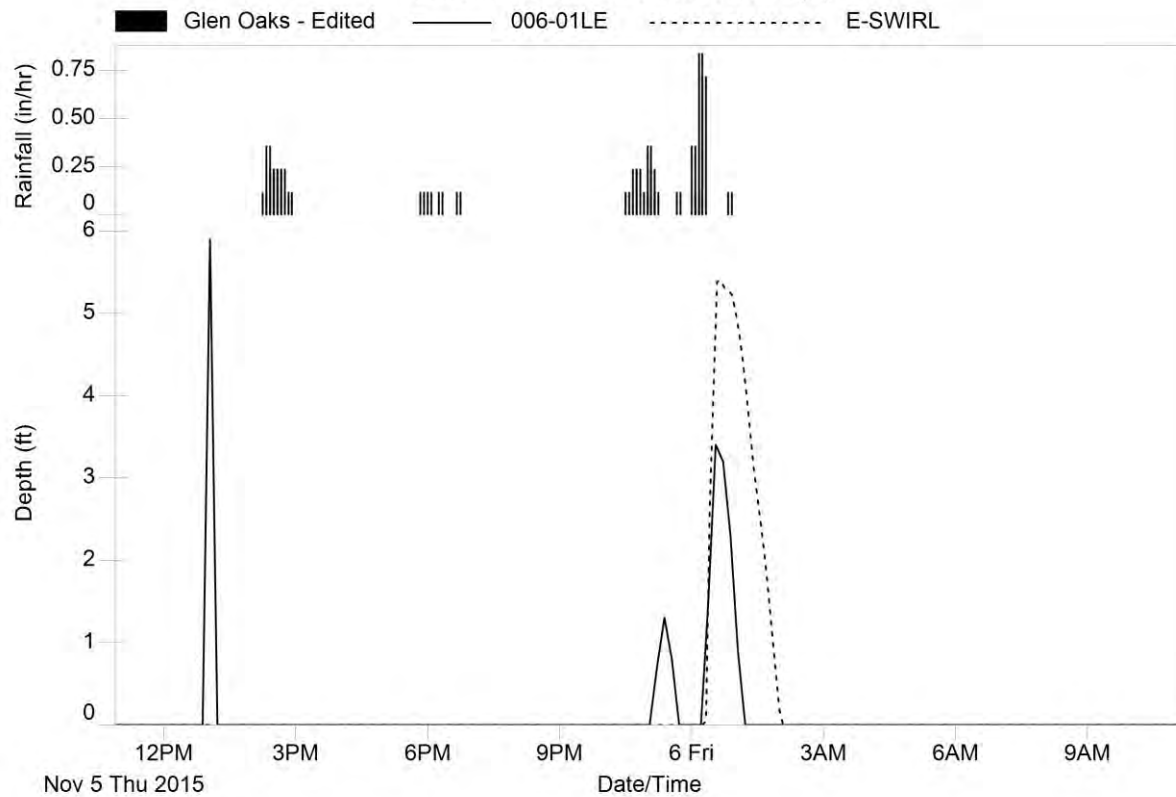
Duration: 13.42 h, Total Rainfall: 1.66 (in)



Eaton 006-01LE – Calibration Events

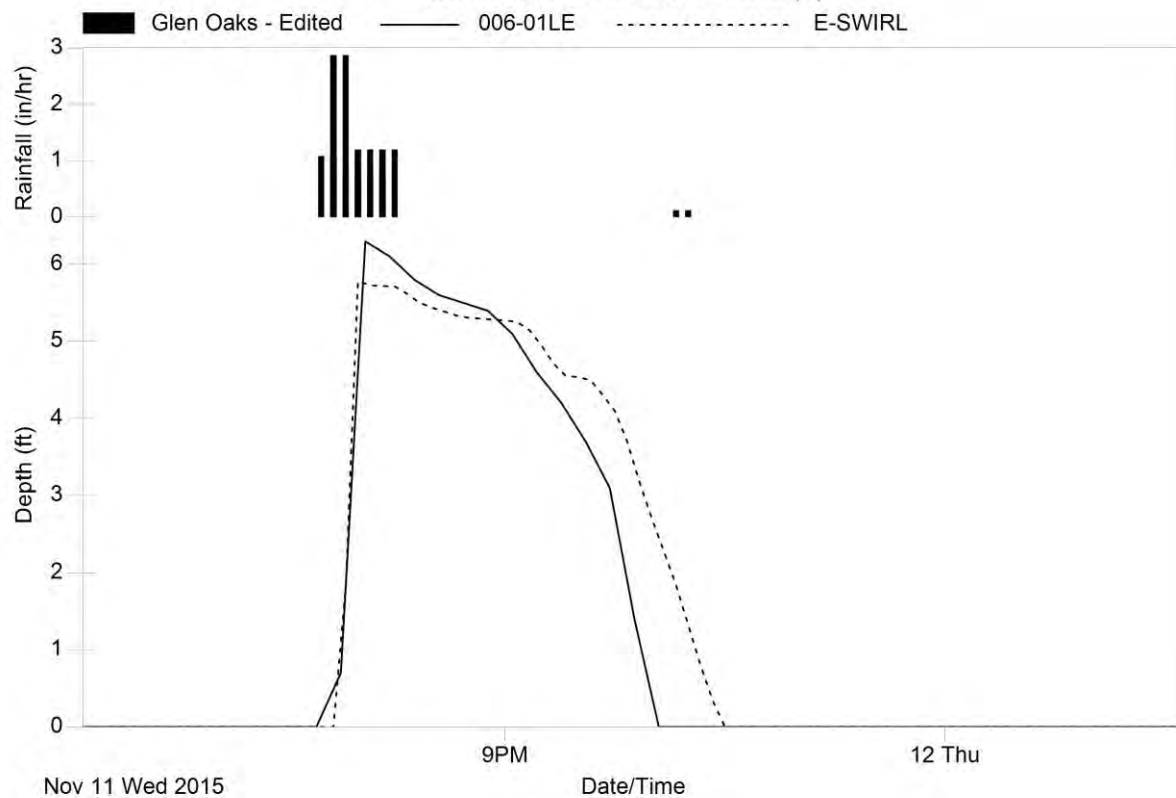
Event of November 5, 2015

Duration: 20.25 h, Total Rainfall: 0.48 (in)



Event of November 11, 2015

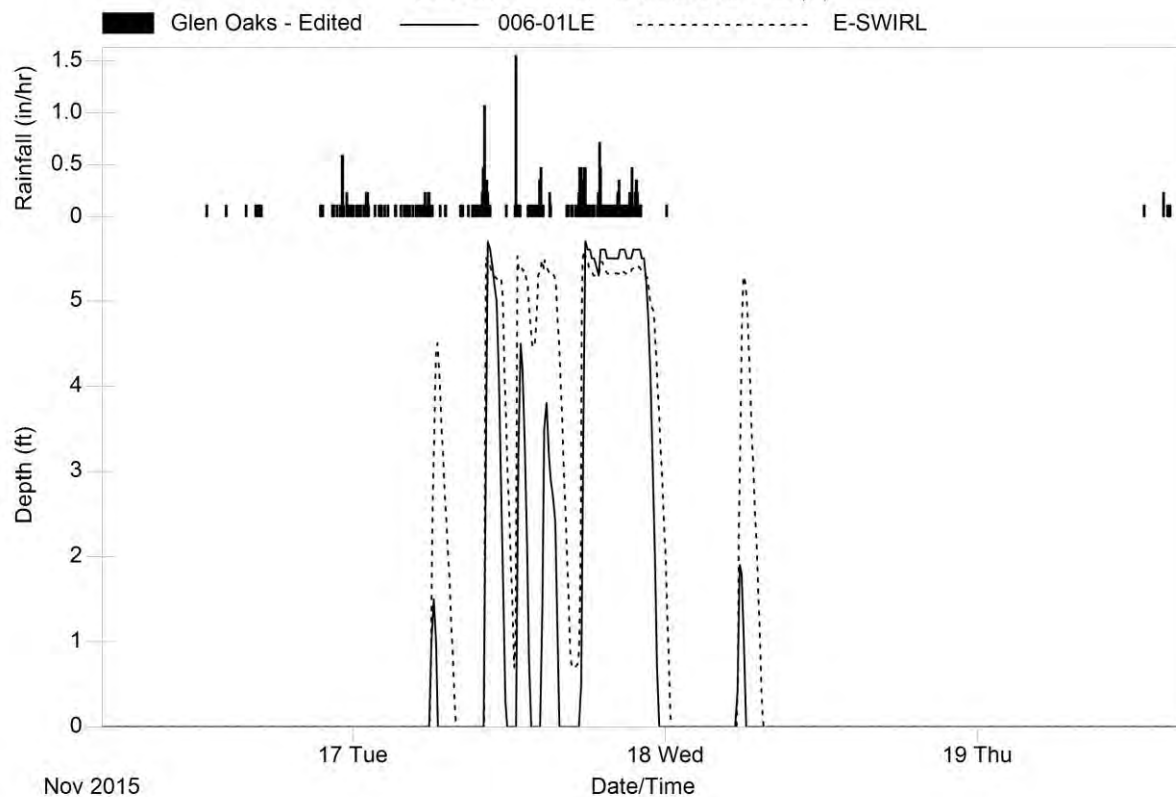
Duration: 6.25 h, Total Rainfall: 0.66 (in)



Eaton 006-01LE – Calibration Events

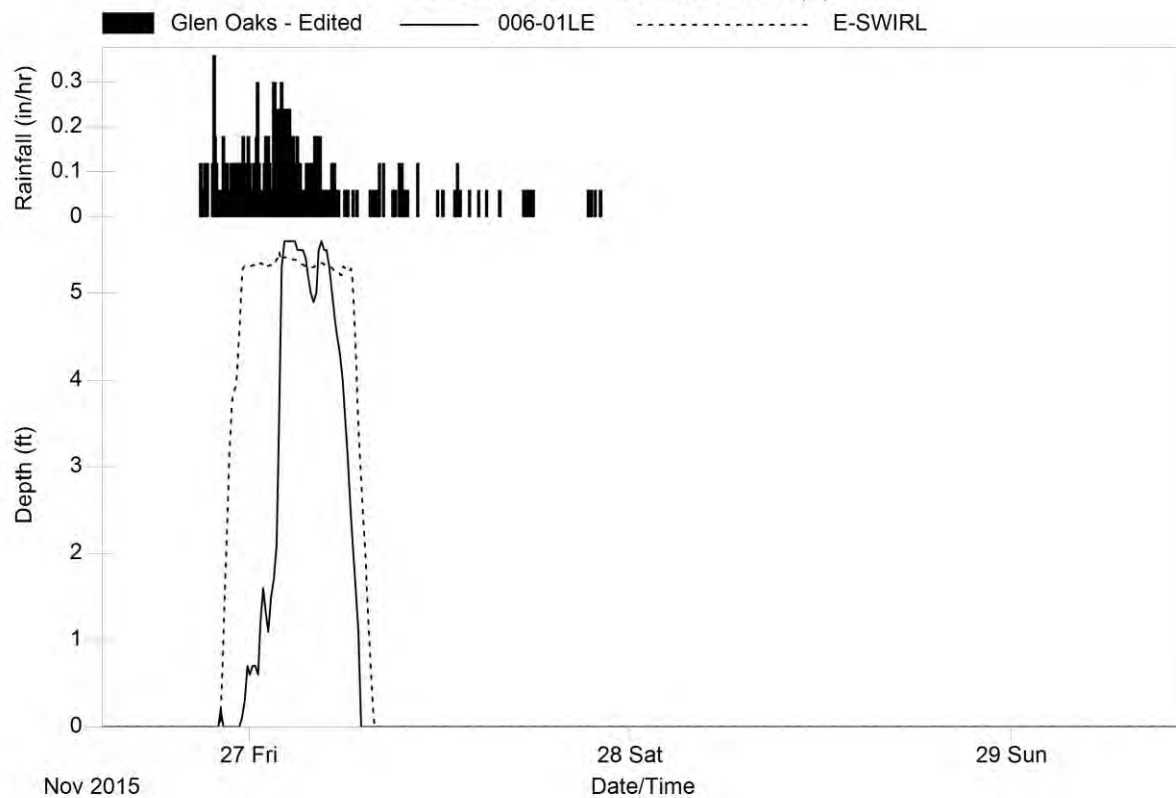
Event of November 16, 2015

Duration: 69.25 h, Total Rainfall: 2.25 (in)

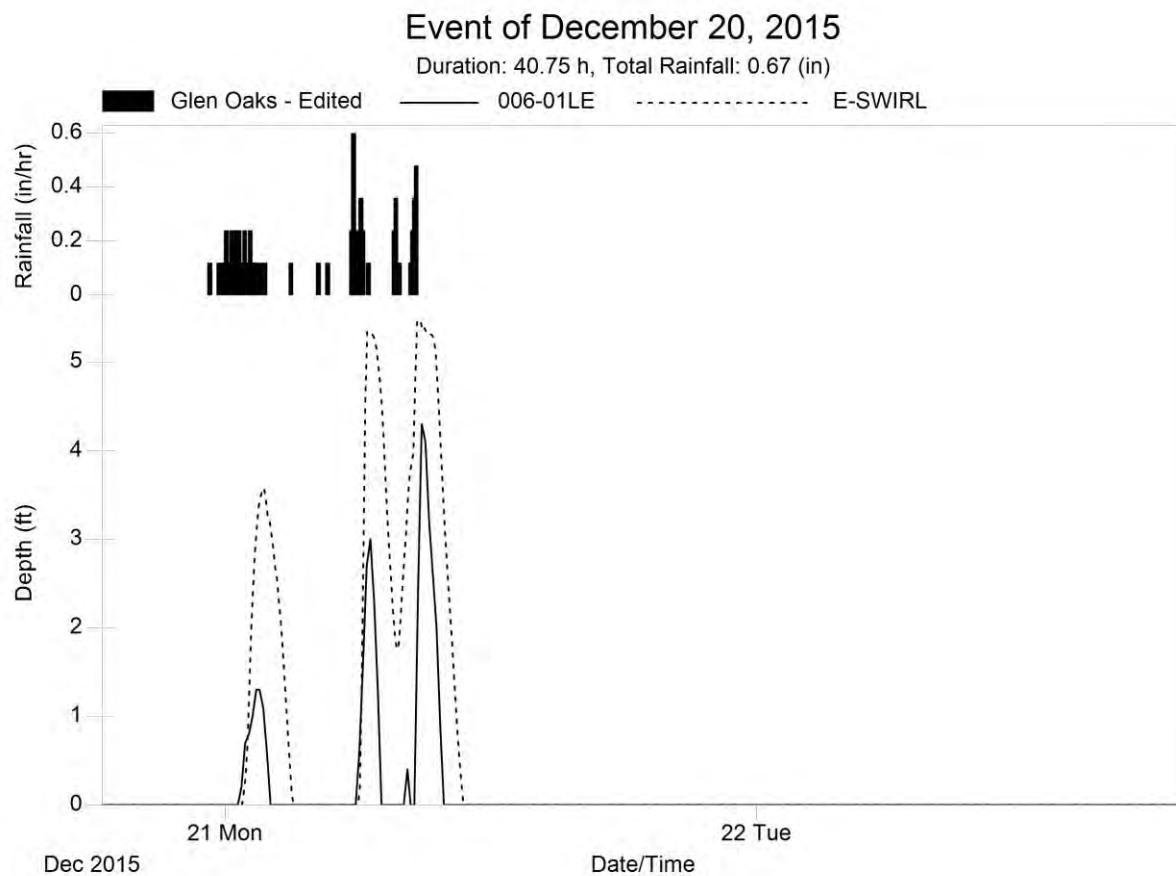
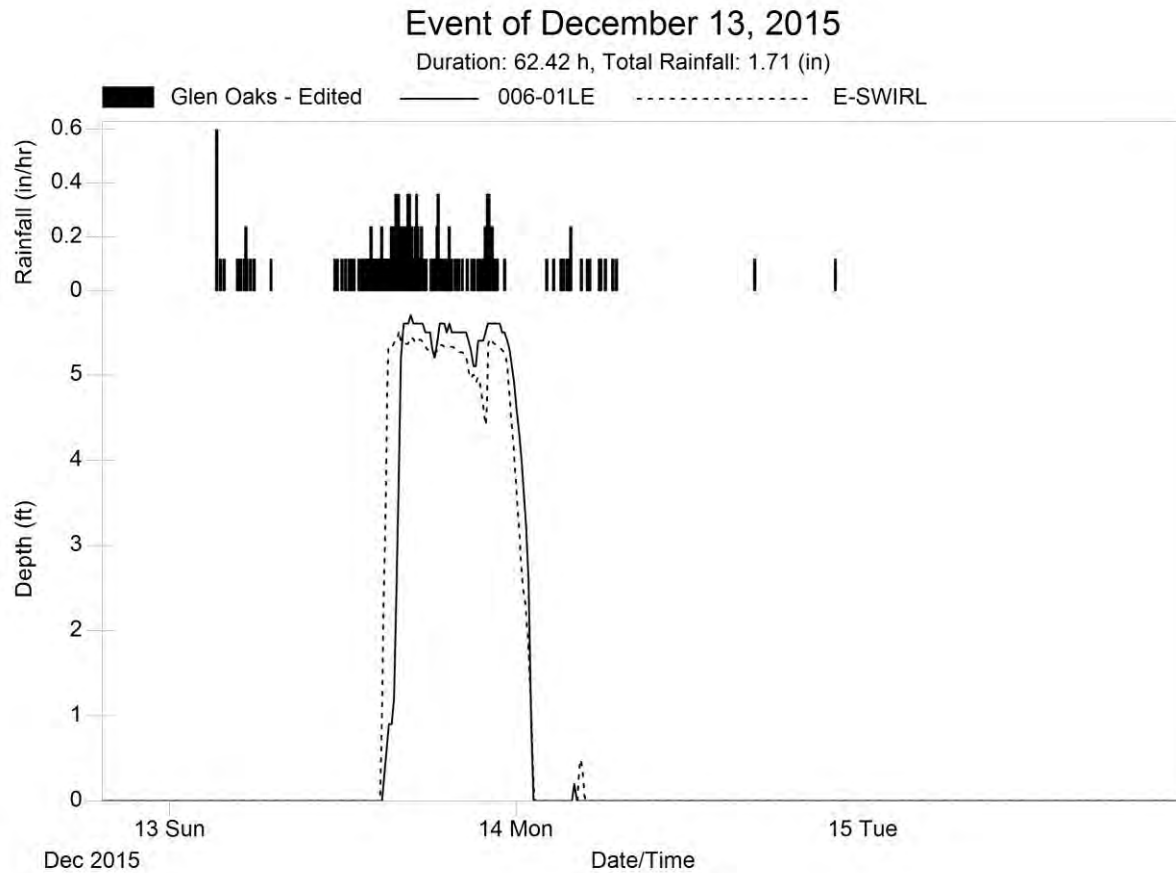


Event of November 26, 2015

Duration: 56.75 h, Total Rainfall: 1.27 (in)



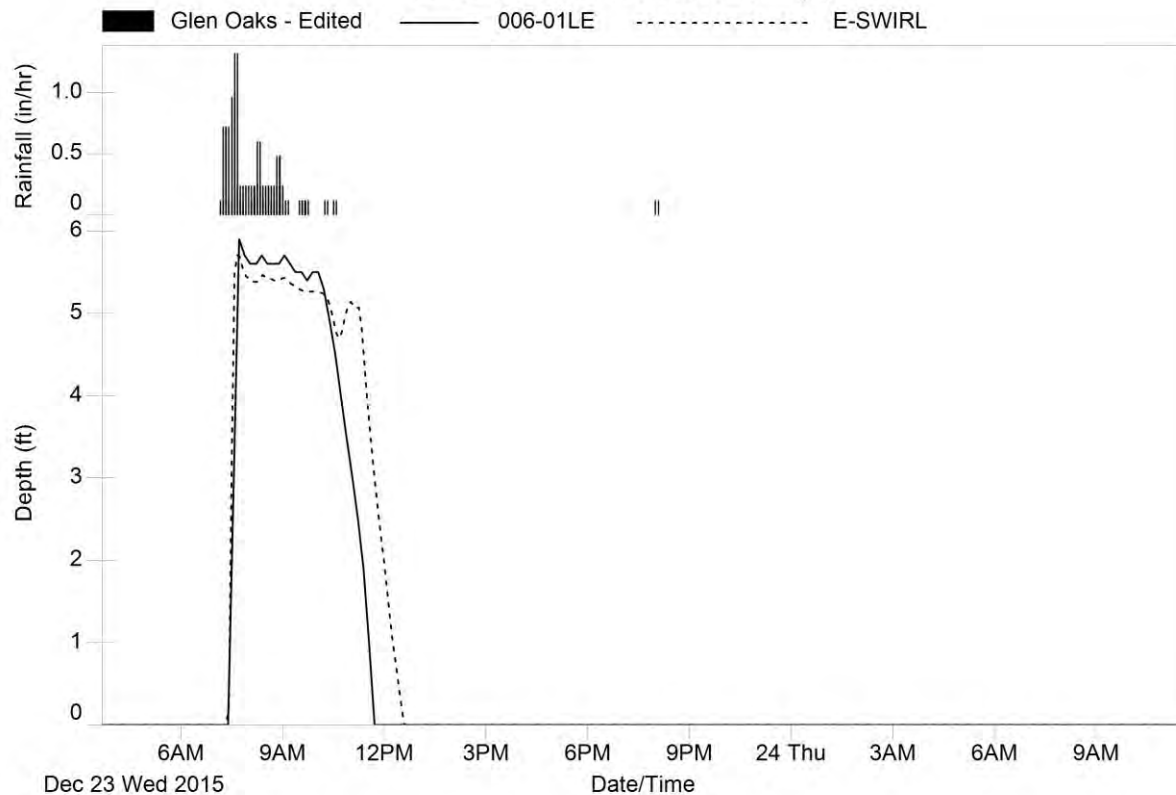
Eaton 006-01LE – Calibration Events



Eaton 006-01LE – Calibration Events

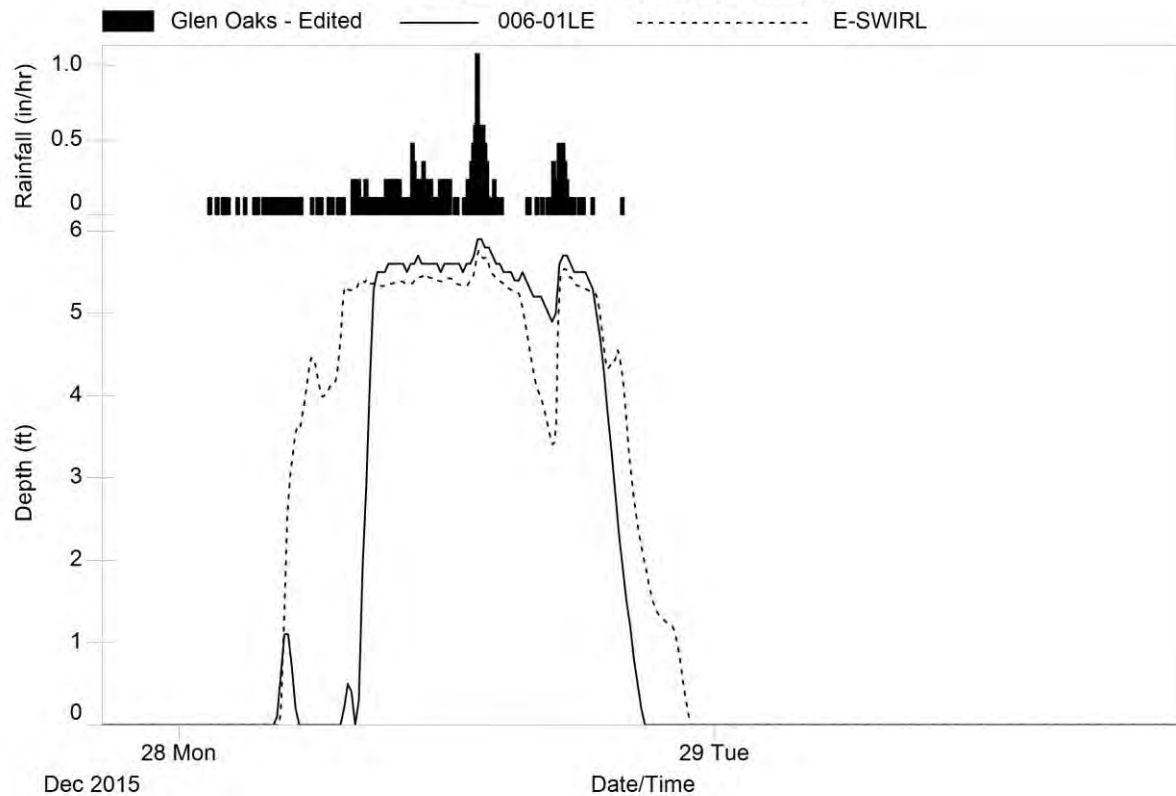
Event of December 23, 2015

Duration: 26.58 h, Total Rainfall: 0.71 (in)

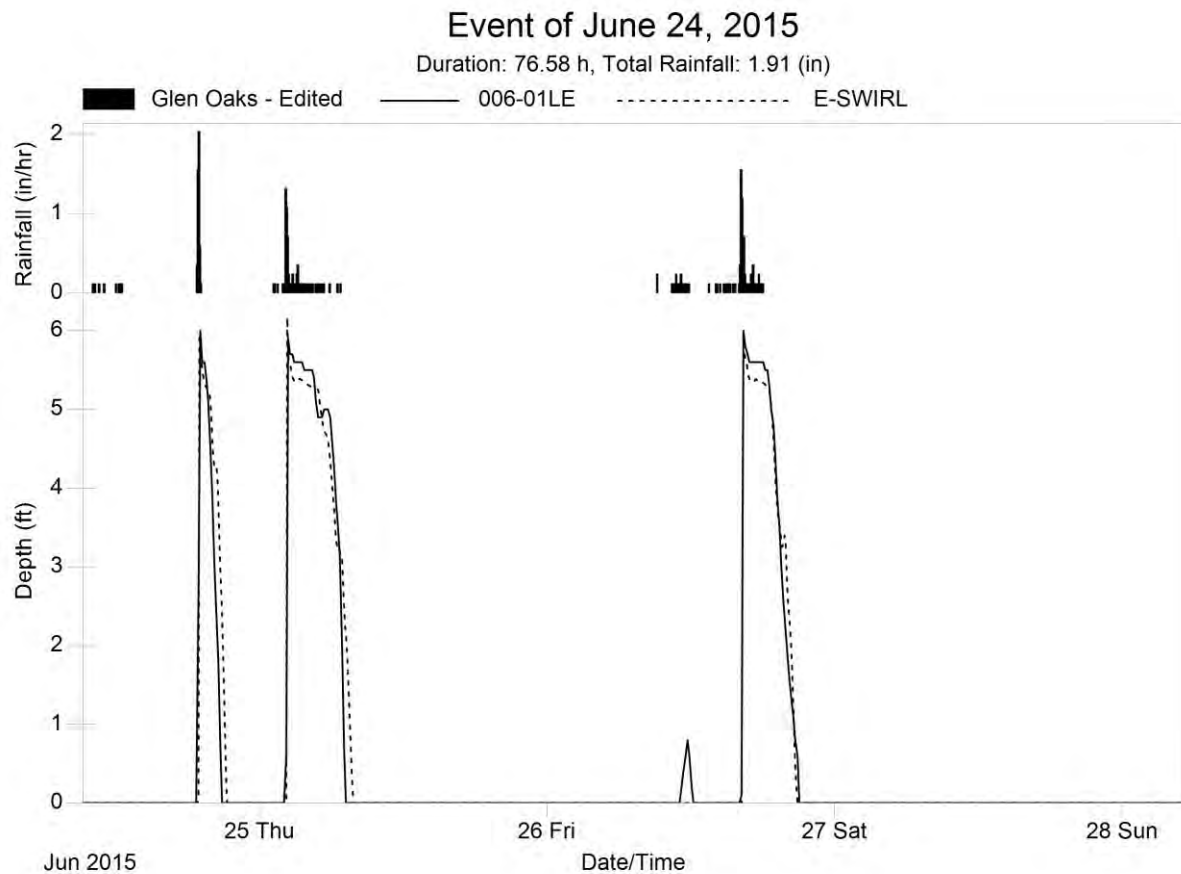
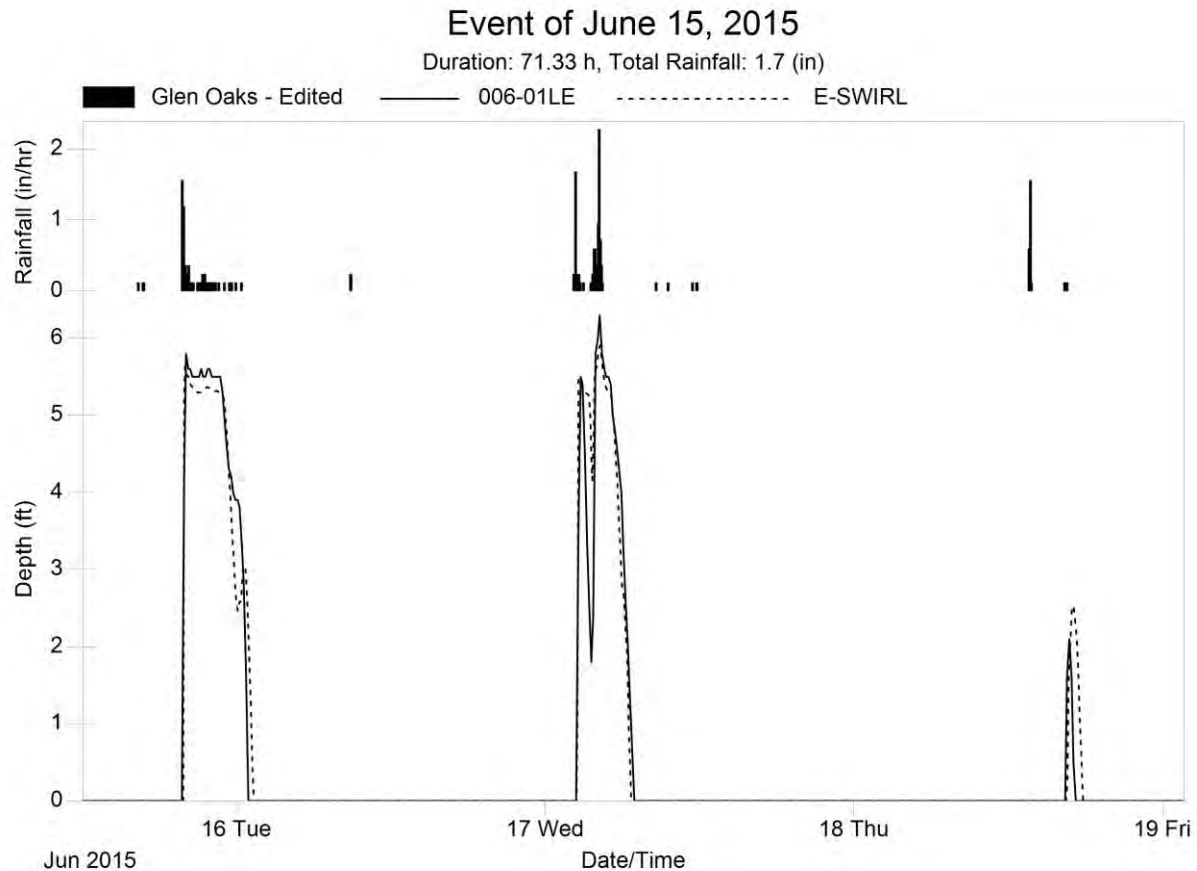


Event of December 28, 2015

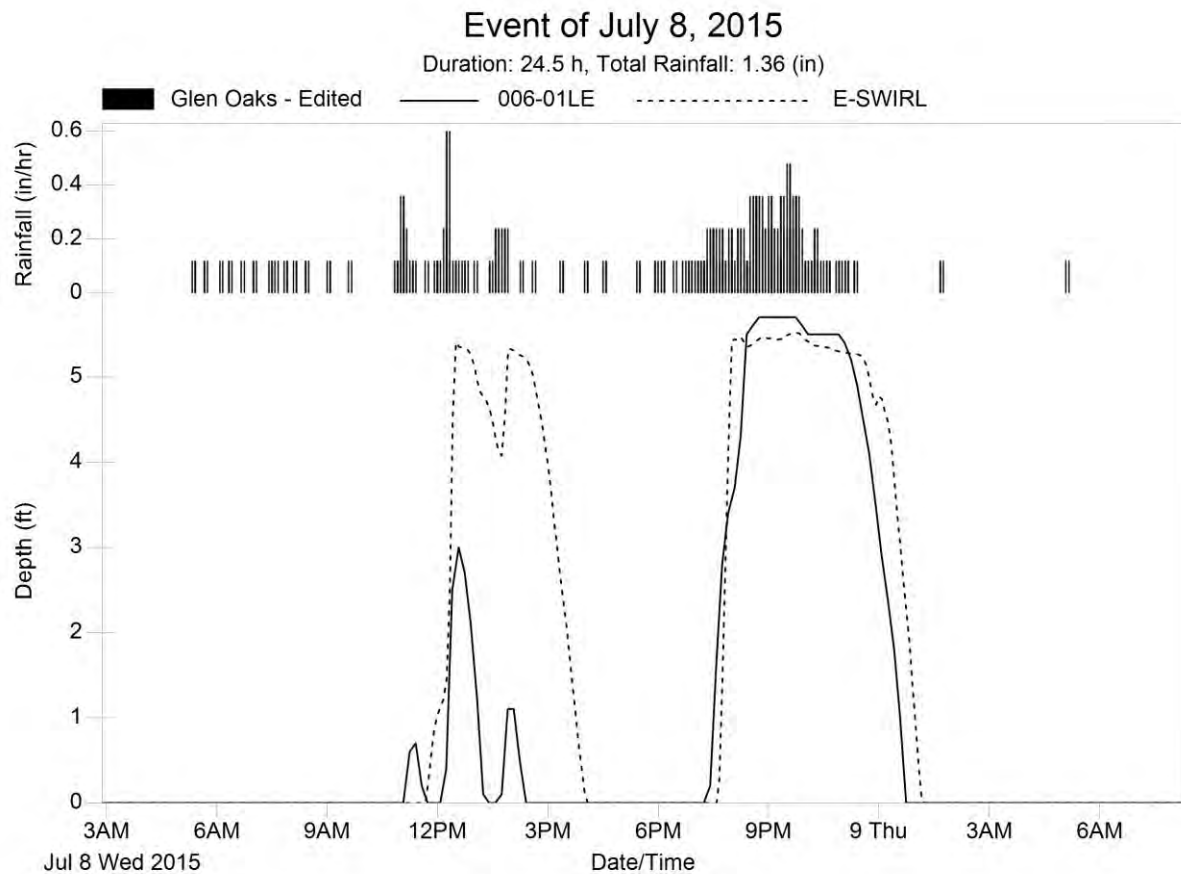
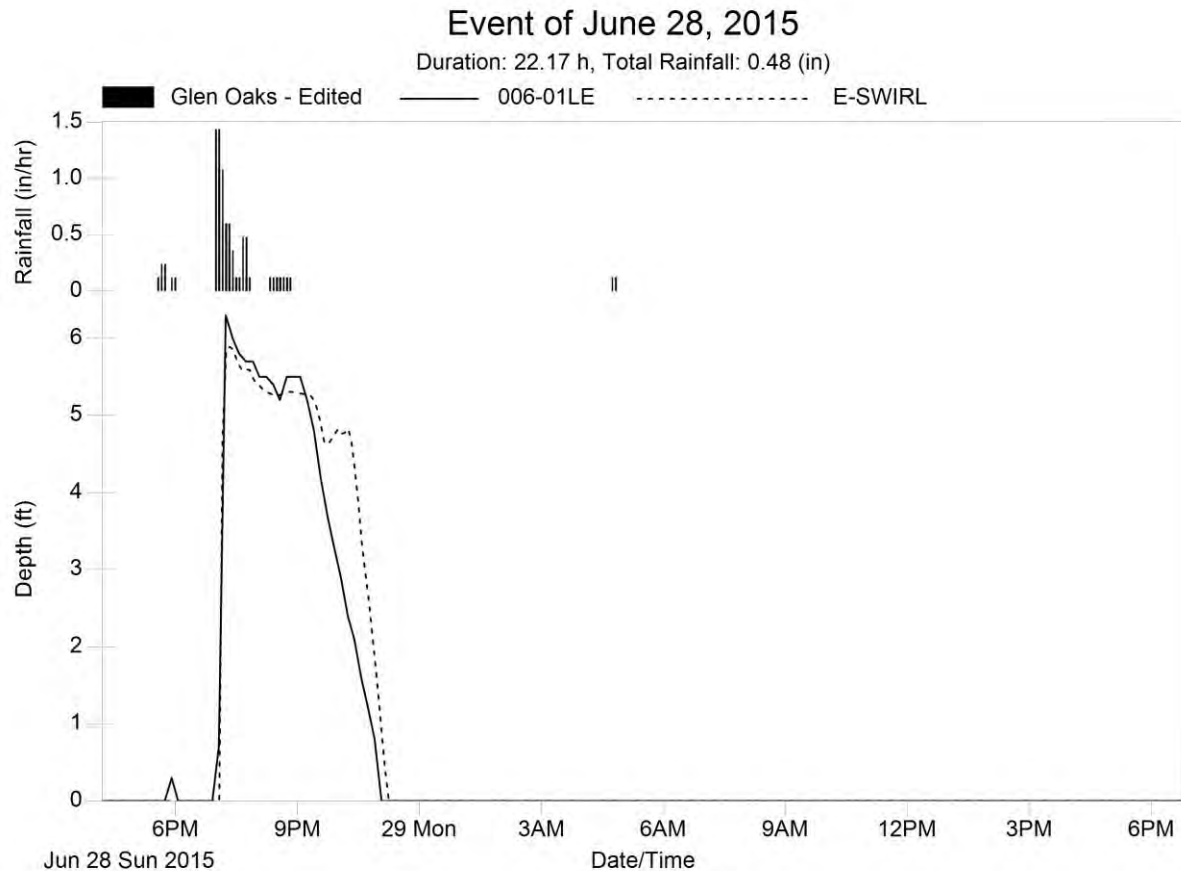
Duration: 40.42 h, Total Rainfall: 2.05 (in)



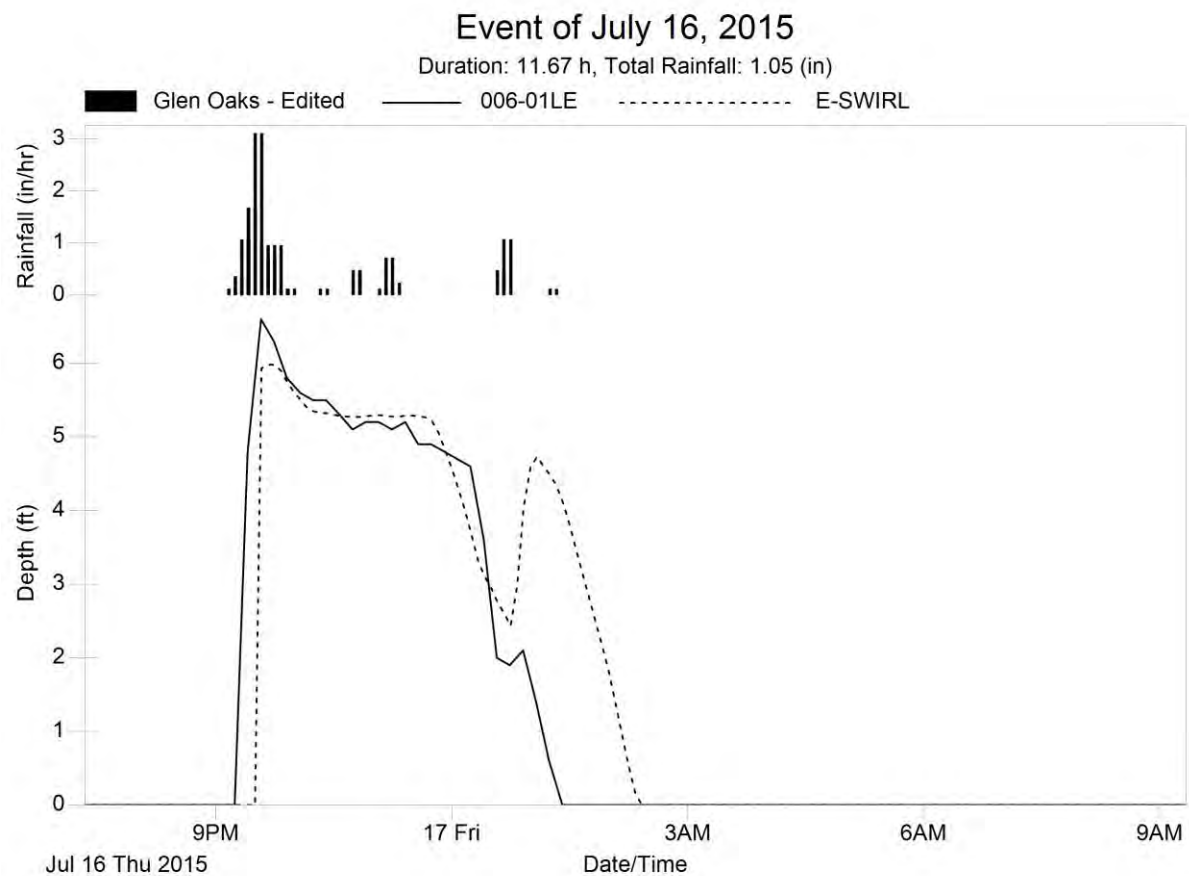
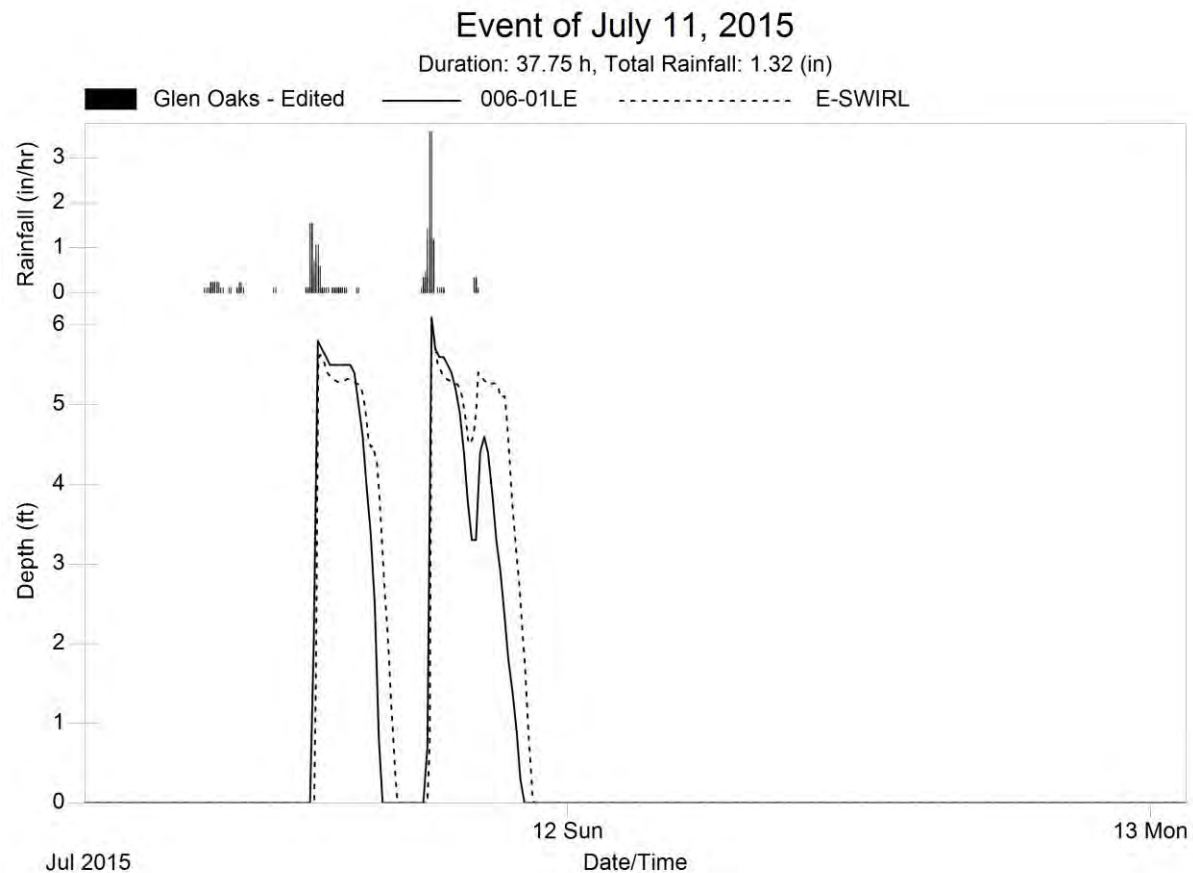
Eaton 006-01LE – Calibration Events



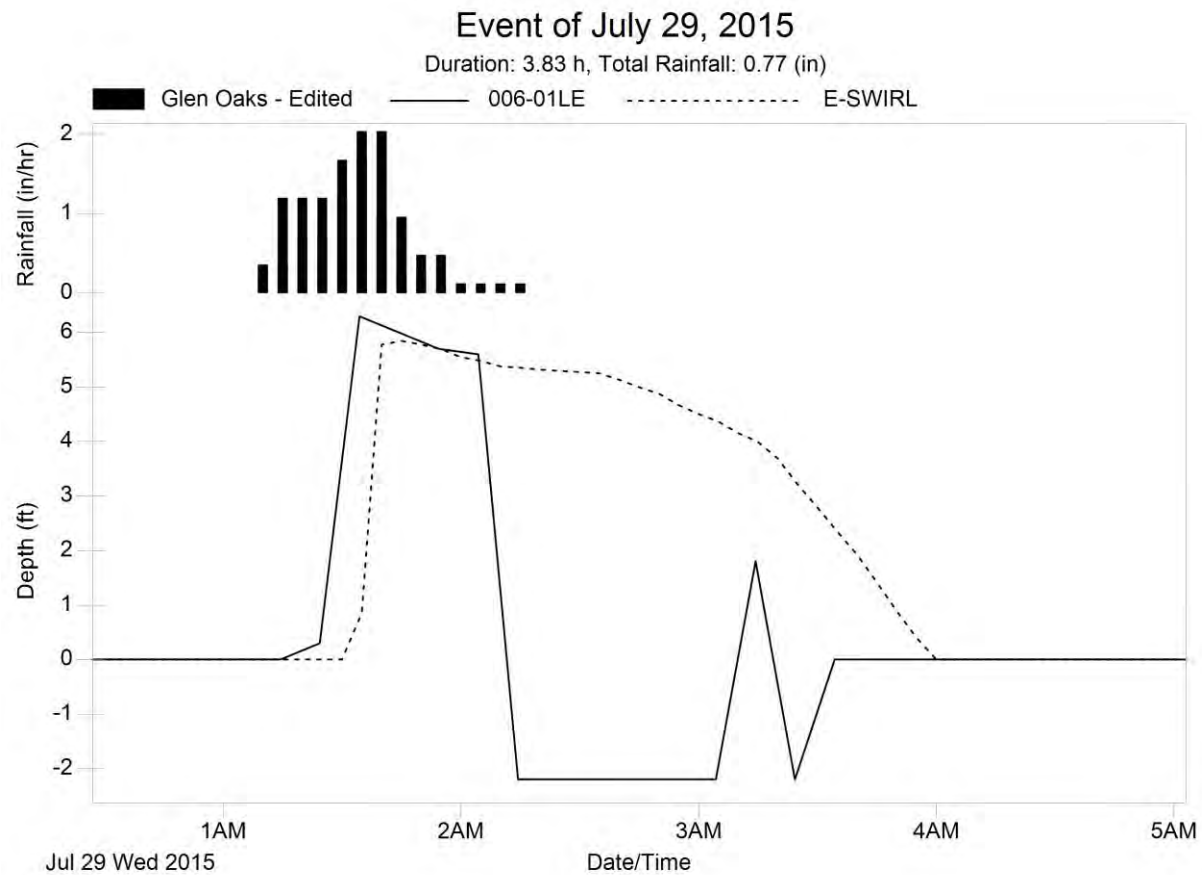
Eaton 006-01LE – Calibration Events



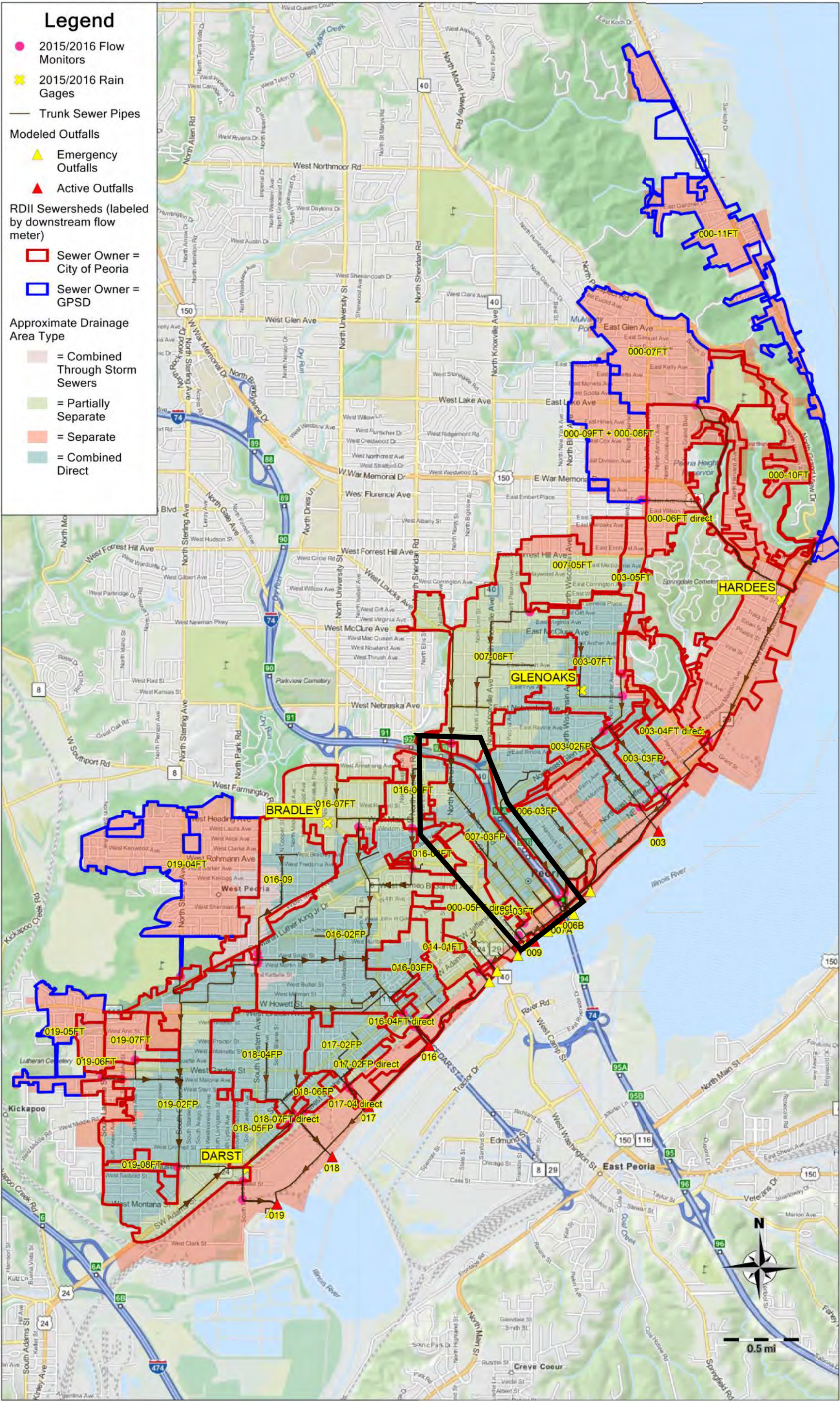
Eaton 006-01LE – Calibration Events



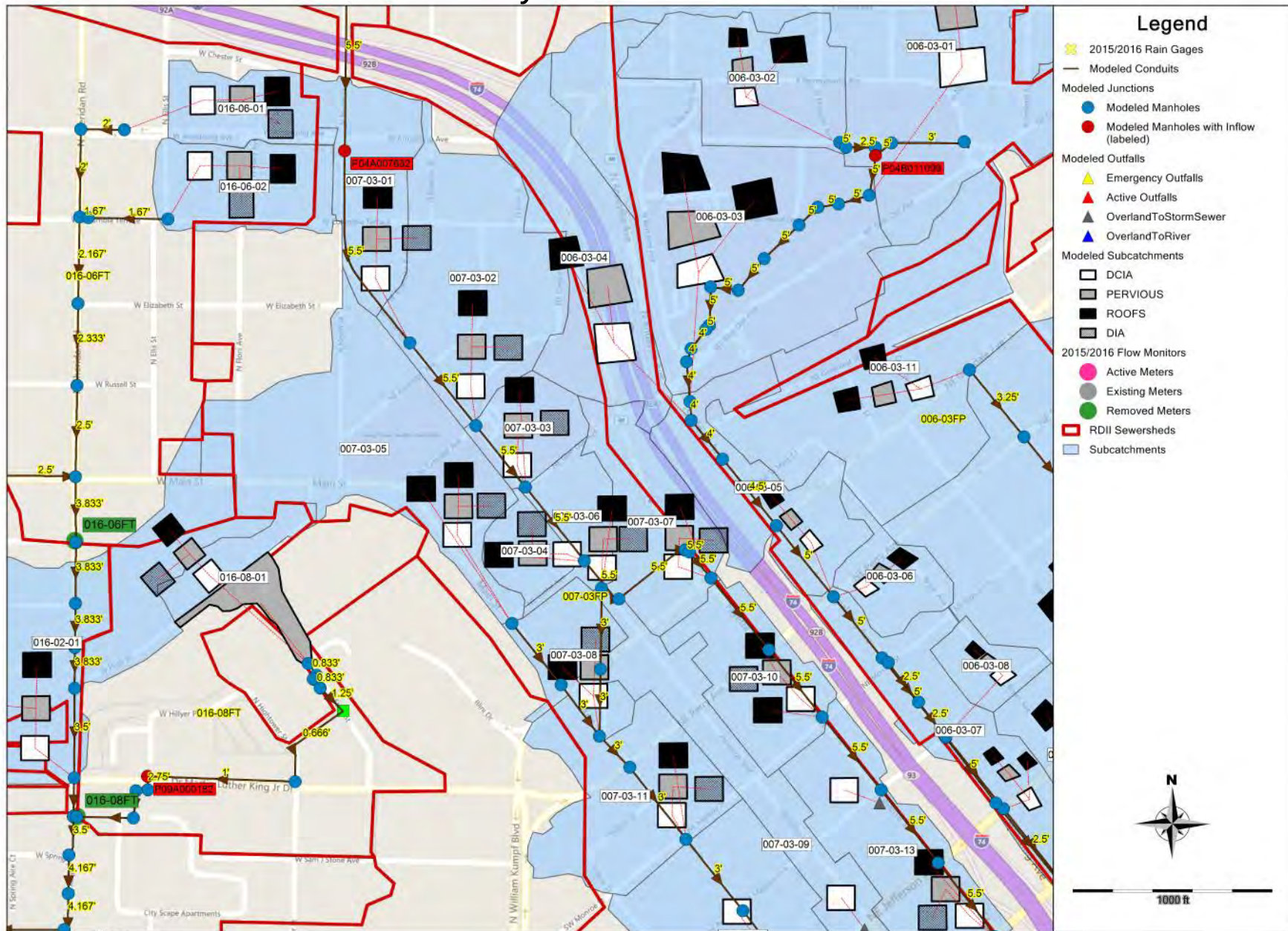
Eaton 006-01LE – Verification Events



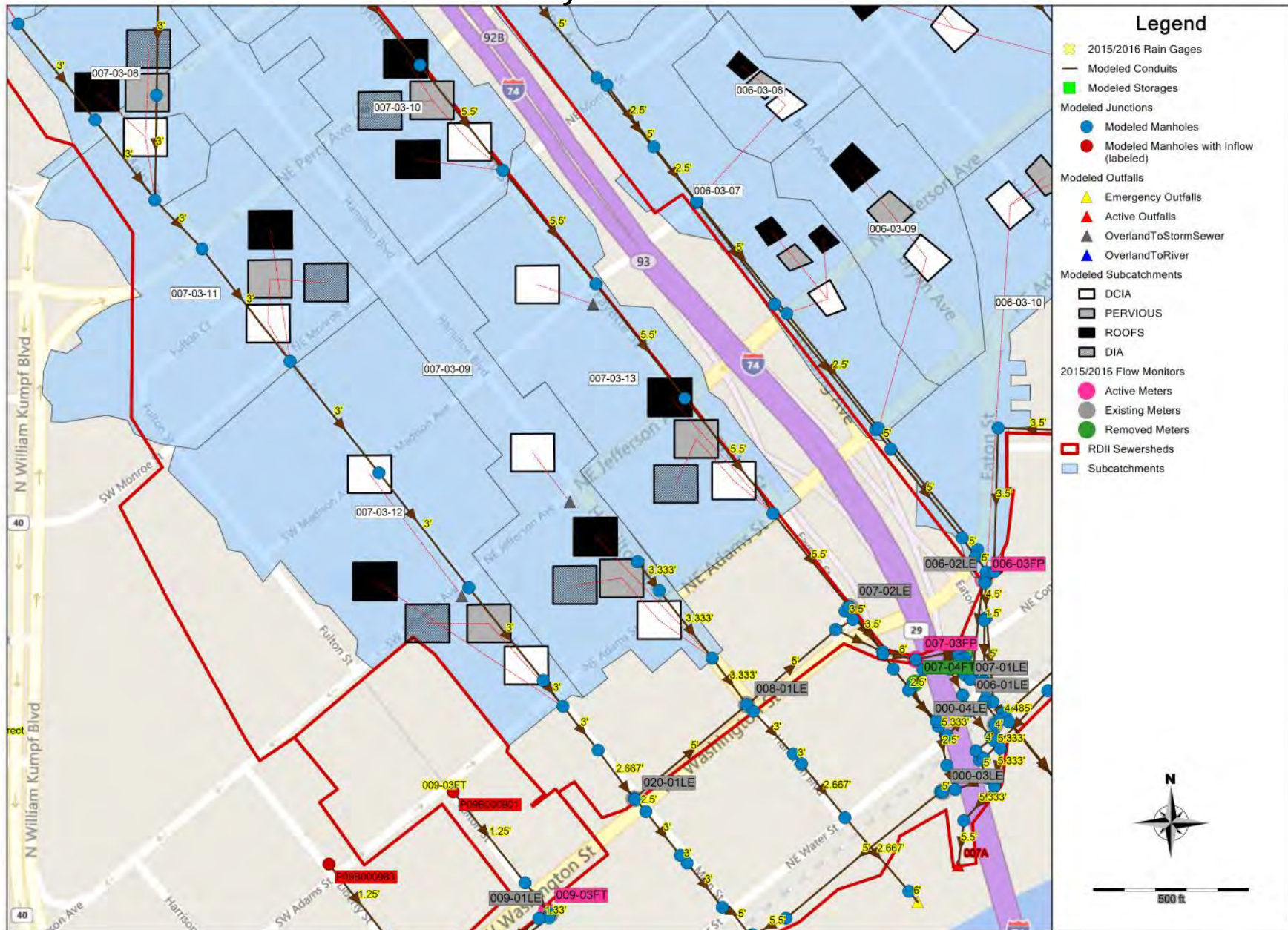
Flow Monitor 007-03FP Overview Map



007-03 - Fayette Swirl Influent Flow



007-03 - Fayette Swirl Influent Flow



Fayette 007-03FP

Date	Duration (h)	Rainfall (in)	Maximum Flow (cfs)		Maximum Flow (mgd)		Total Volume (ft³)		Volume (million gallons)		Peak Flow Rate (-15% to +25%)	Flow Volume (-10% to +20%)	Rainfall Variability
		Bradley - Edited	Observed	Modeled	Observed	Modeled	Observed	Modeled	Observed	Modeled			
CALIBRATION EVENTS - FLOW													
7/16/2015 21:05	4.58	0.99	152.2	158.3	98.321	102.262	474800	523000	3.552	3.912	4%	10%	relatively uniform
9/8/2015 10:40	4.17	0.86	109.7	124.7	70.866	80.556	322900	372600	2.415	2.787	14%	15%	variable
9/18/2015 14:40	11.58	1.56	147.2	131.5	95.091	84.949	852600	870700	6.377	6.513	-11%	2%	relatively uniform
11/5/2015 13:40	17.92	0.43	27.77	28.0	17.939	18.101	238700	306900	1.785	2.296	1%	29%	possibly uniform
11/11/2015 19:35	2.75	0.6	91.51	105.7	59.115	68.282	248100	285700	1.856	2.137	16%	15%	relatively uniform
11/16/2015 11:40	51.58	2.45	41.91	54.4	27.074	35.129	1526000	1922000	11.414	14.377	30%	26%	variable
11/26/2015 20:15	37	1.12	32.65	33.6	21.092	21.725	1161000	1294000	8.684	9.679	3%	11%	possibly uniform
12/13/2015 2:10	50.58	1.77	37.59	38.2	24.283	24.684	1528000	1682000	11.429	12.581	2%	10%	possibly uniform
12/20/2015 22:15	18.58	0.7	33.56	30.2	21.680	19.477	474300	535700	3.548	4.007	-10%	13%	relatively uniform
12/23/2015 6:30	9.58	0.73	63.55	66.3	41.053	42.804	520800	546300	3.896	4.086	4%	5%	variable
12/28/2015 0:40	27.83	1.64	117.4	91.0	75.840	58.780	2469000	2024000	18.468	15.140	-22%	-18%	variable
VERIFICATION EVENTS - FLOW													
6/15/2015 19:10	71.33	Bad Meter Data											
6/24/2015 18:00	62.75	Bad Meter Data											
6/28/2015 18:45	5.17	Bad Meter Data											
7/8/2015 5:20	24.5	1.39	49.21	51.72	31.790	33.411	915700	851600	6.849	6.370	5%	-7%	relatively uniform
7/11/2015 8:45	14	1.07	126.9	76.02	81.977	49.109	769800	812200	5.758	6.075	-40%	6%	possibly uniform
7/29/2015 1:15	1.75	0.51	125.5	109.4	81.073	70.672	257200	212300	1.924	1.588	-13%	-17%	variable
8/18/2015 2:05	2.17	0.45	67.51	117.9	43.611	76.163	165000	195200	1.234	1.460	75%	18%	possibly uniform
8/18/2015 17:15	2.75	0.52	118.7	125.6	76.680	81.138	252000	282300	1.885	2.112	6%	12%	relatively uniform
WEIGHTED AVERAGES													
Calibration - Relatively Uniform											0%	8%	relatively uniform
Calibration - Possibly Uniform											2%	12%	possibly uniform
Calibration - Variable											1%	1%	variable
Calibration Weighted - All Events											1%	6%	
Verification - Relatively Uniform											6%	-3%	relatively uniform
Verification - Possibly Uniform											0%	8%	possibly uniform
Verification - Variable											-13%	-17%	variable
Verification Weighted - All Events											-1%	0%	
Weighted Average - All Events											0%	4%	
NET AVERAGES													
Calibration - Relatively Uniform											0%	10%	relatively uniform
Calibration - Possibly Uniform											2%	17%	possibly uniform
Calibration - Variable											6%	7%	variable
Calibration Net - All Events											3%	11%	
Verification - Relatively Uniform											5%	3%	relatively uniform
Verification - Possibly Uniform											17%	12%	possibly uniform
Verification - Variable											-13%	-17%	variable
Verification Net - All Events											7%	2%	
Net Average - All Events											4%	8%	

Fayette 007-03FP Depth

Date	Duration (h)	Maximum Depth (ft)		Minimum Depth (ft)		Average Depth (ft)		Maximum Depth (ft)	Minimum Depth (ft)	Average Depth (ft)	Rainfall Variability
		metered	modeled	metered	modeled	metered	modeled	Surcharged: -0.33 ft to +1.67 ft Non-Surcharged: -0.33 ft to +0.33 ft	Surcharged: -0.33 ft to +1.67 ft Non-Surcharged: -0.33 ft to +0.33 ft	Surcharged: -0.33 ft to +1.67 ft Non-Surcharged: -0.33 ft to +0.33 ft	
CALIBRATION EVENTS - DEPTH											
7/16/2015 21:05	4.58	6.685	6.499	0.517	0.461	3.091	3.405	-0.186	-0.056	0.314	relatively uniform
9/8/2015 10:40	4.17	5.504	6.366	0.448	0.391	2.898	2.657	0.862	-0.058	-0.241	variable
9/18/2015 14:40	11.58	6.701	6.563	0.458	0.401	2.044	2.205	-0.138	-0.058	0.161	relatively uniform
11/5/2015 13:40	17.92	1.732	1.323	0.353	0.293	0.546	0.463	-0.409	-0.060	-0.082	possibly uniform
11/11/2015 19:35	2.75	5.961	6.124	0.440	0.359	3.084	3.231	0.163	-0.081	0.147	relatively uniform
11/16/2015 11:40	51.58	4.802	5.939	0.421	0.358	1.214	1.164	1.137	-0.063	-0.050	variable
11/26/2015 20:15	37	4.727	5.879	0.499	0.415	1.215	1.249	1.152	-0.085	0.034	possibly uniform
12/13/2015 2:10	50.58	4.759	5.894	0.424	0.343	1.218	1.238	1.135	-0.081	0.020	possibly uniform
12/20/2015 22:15	18.58	2.547	1.456	0.487	0.412	0.792	0.648	-1.091	-0.074	-0.144	relatively uniform
12/23/2015 6:30	9.58	4.980	5.940	0.526	0.438	2.051	2.371	0.960	-0.088	0.320	variable
12/28/2015 0:40	27.83	6.232	6.399	0.654	0.548	2.888	3.275	0.167	-0.107	0.387	variable
VERIFICATION EVENTS - DEPTH											
6/15/2015 19:10	24.5	bad meter data									
6/24/2015 18:00		bad meter data									
6/28/2015 18:45		bad meter data									
7/8/2015 5:20		4.868	5.994	0.485	0.442	1.311	1.331	1.126	-0.043	0.020	relatively uniform
7/11/2015 8:45	14	5.564	6.341	0.521	0.463	2.219	2.376	0.777	-0.058	0.157	possibly uniform
7/29/2015 1:15	1.75	6.190	6.422	0.428	0.389	3.995	4.592	0.232	-0.039	0.597	variable
8/18/2015 2:05	2.17	5.287	5.830	0.397	0.354	2.839	2.205	0.543	-0.043	-0.634	possibly uniform
8/18/2015 17:15	2.75	5.528	6.297	0.471	0.437	3.430	3.232	0.769	-0.034	-0.198	relatively uniform
WEIGHTED AVERAGES											
Calibration - Relatively Uniform						-0.182		-0.067		0.182	relatively uniform
Calibration - Possibly Uniform						0.904		-0.077		0.007	possibly uniform
Calibration - Variable						0.745		-0.082		0.112	variable
Calibration Weighted - All Events						0.406		-0.075		0.127	All Events
Verification - Relatively Uniform						0.936		-0.039		-0.138	relatively uniform
Verification - Possibly Uniform						0.663		-0.051		-0.287	possibly uniform
Verification - Variable						0.232		-0.039		0.597	variable
Verification Weighted - All Events						0.669		-0.044		0.020	All Events
Weighted Average - All Events						0.494		-0.066		0.085	
NET AVERAGES											
Calibration - Relatively Uniform						-0.313		-0.067		0.120	relatively uniform
Calibration - Possibly Uniform						0.626		-0.075		-0.009	possibly uniform
Calibration - Variable						0.782		-0.079		0.104	variable
Calibration Net - All Events						0.341		-0.074		0.079	All Events
Verification - Relatively Uniform						0.948		-0.039		-0.089	relatively uniform
Verification - Possibly Uniform						0.660		-0.050		-0.239	possibly uniform
Verification - Variable						0.232		-0.039		0.597	variable
Verification Net - All Events						0.689		-0.043		-0.012	All Events
Net Average - All Events						0.450		-0.064		0.051	
Notes:											
Results from interceptor only model using flow meter data as influent flow to regulator.											

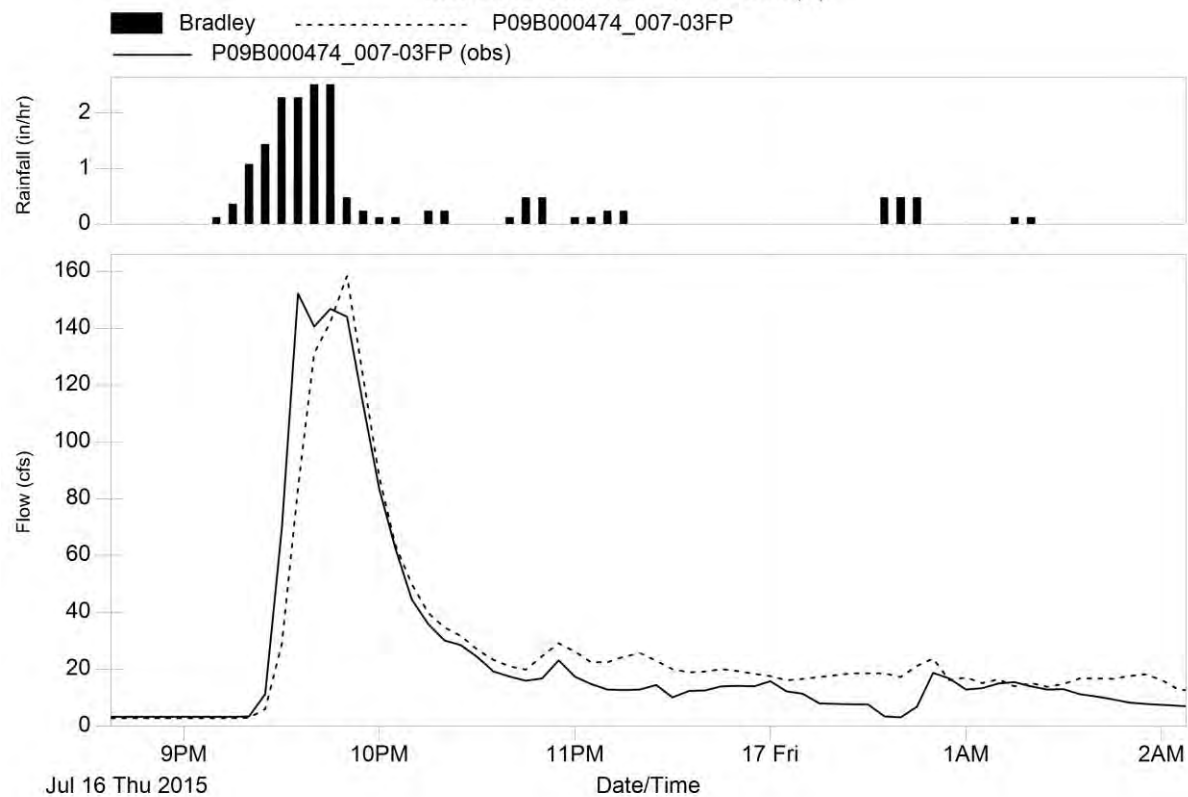
Notes:

Results from interceptor only model using flow meter data as influent flow to regulator.

Fayette 007-03FP – Calibration Events

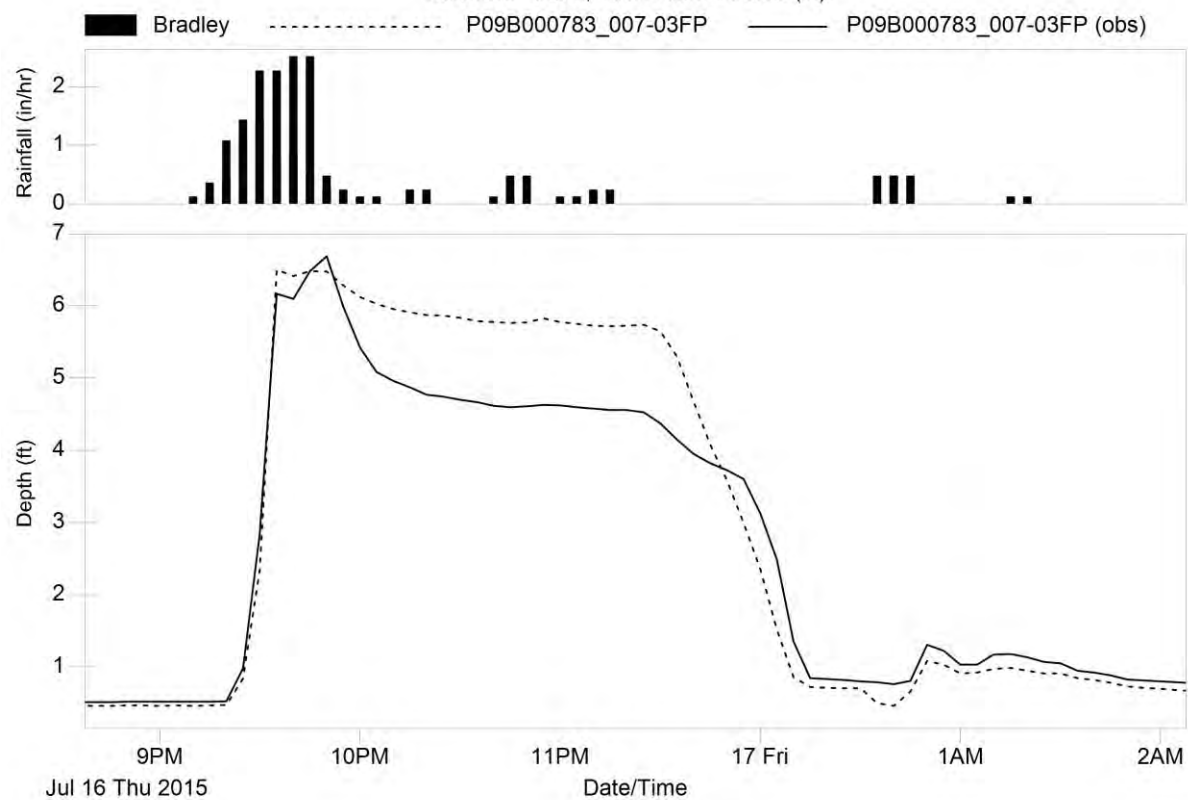
Event of July 16, 2015

Duration: 4.58 h, Total Rainfall: 0.99 (in)



Event of July 16, 2015

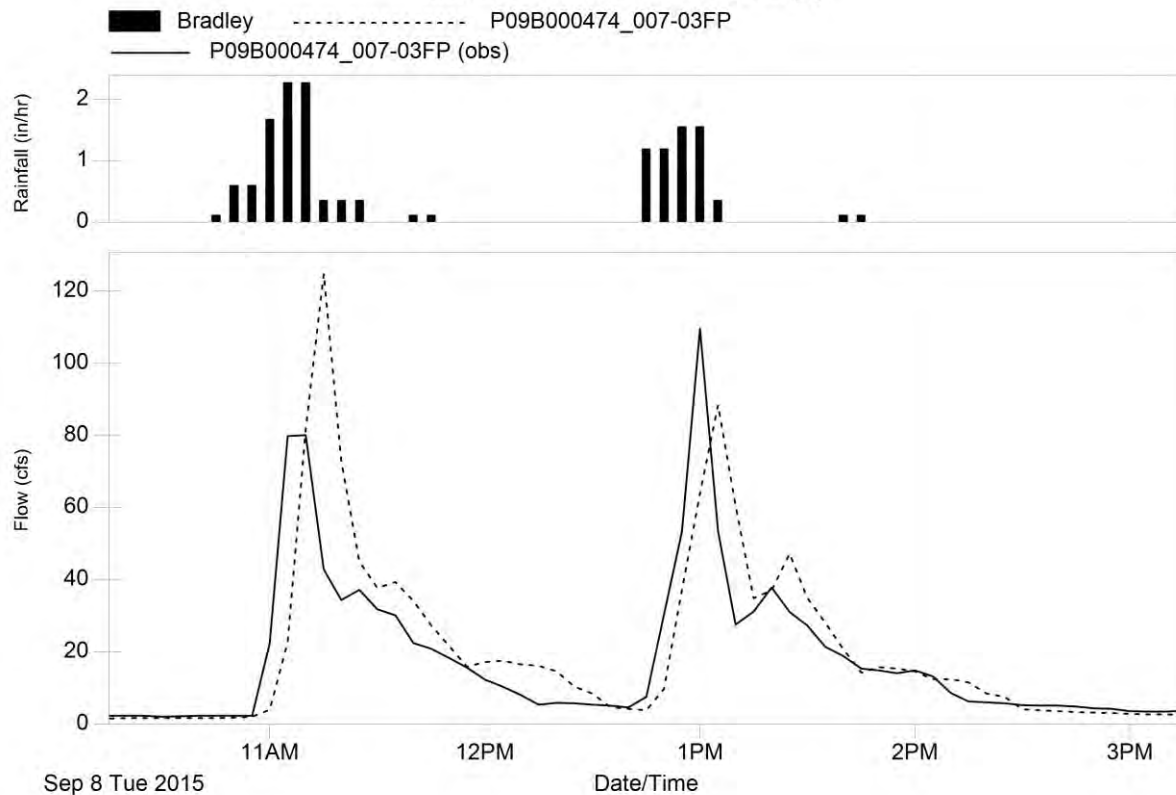
Duration: 4.58 h, Total Rainfall: 0.99 (in)



Fayette 007-03FP – Calibration Events

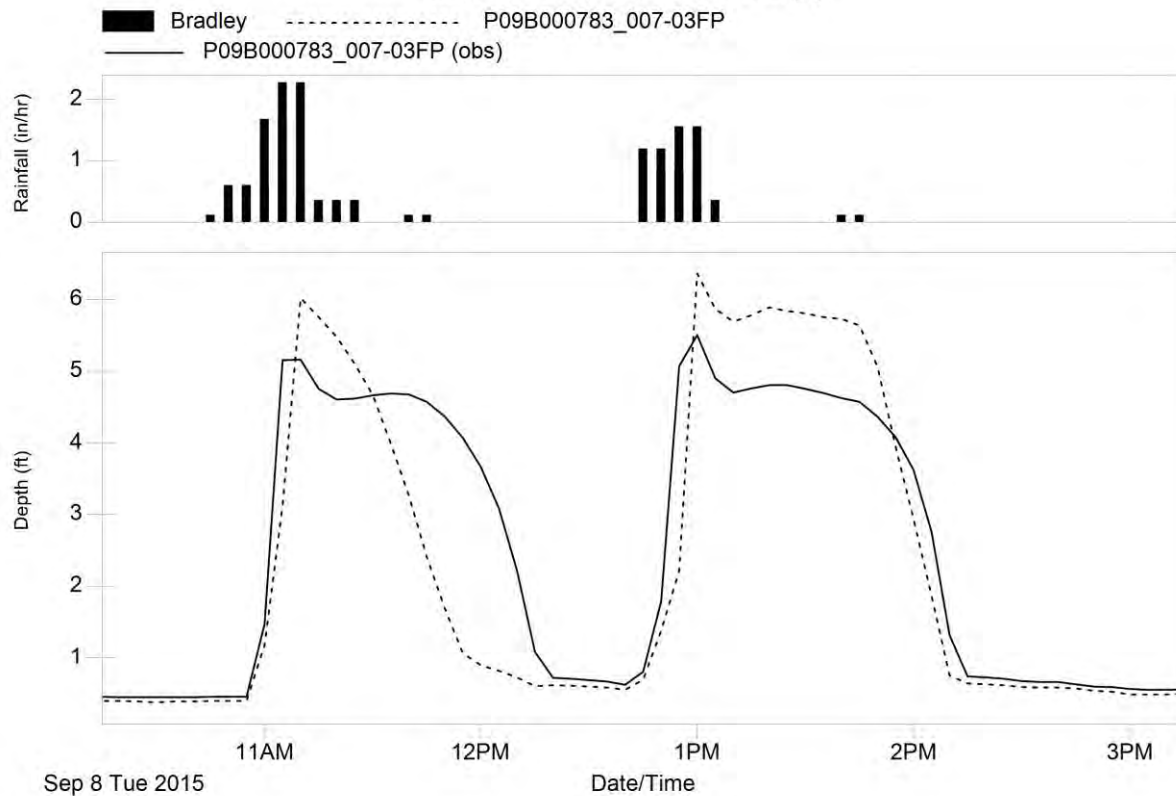
Event of September 8, 2015

Duration: 4.17 h, Total Rainfall: 0.86 (in)



Event of September 8, 2015

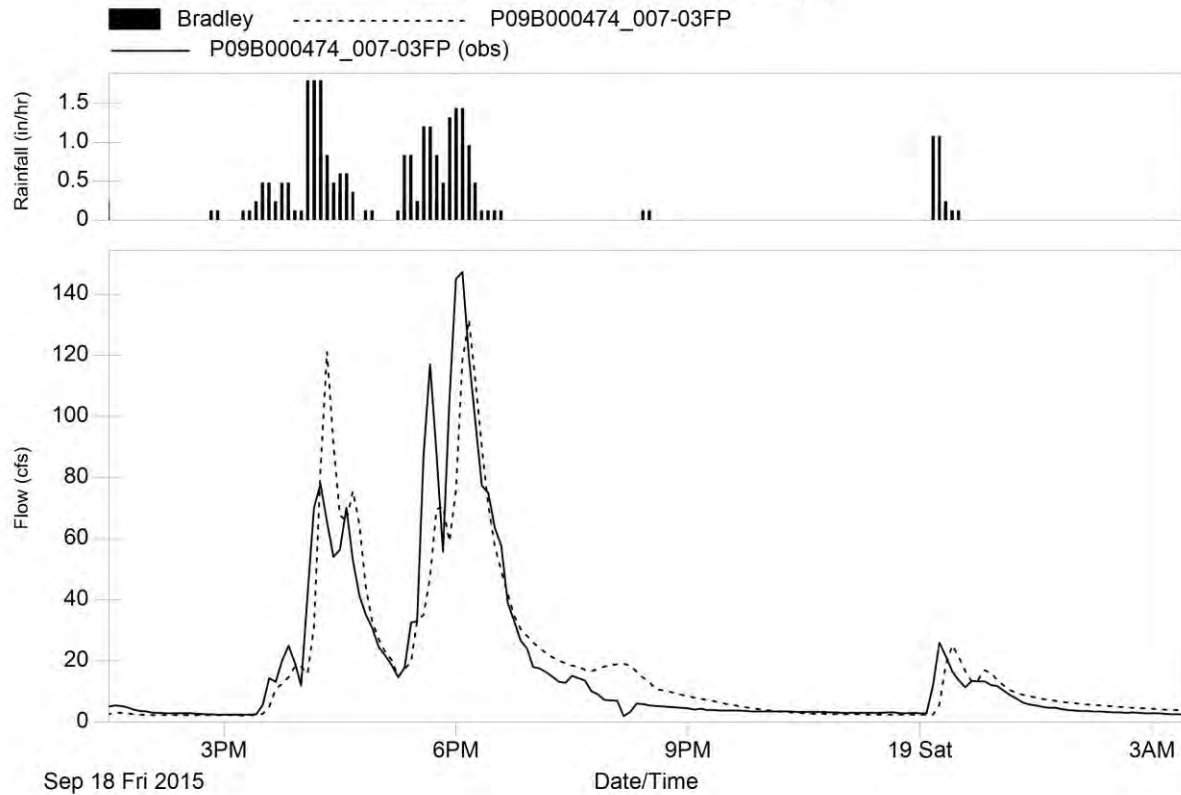
Duration: 4.17 h, Total Rainfall: 0.86 (in)



Fayette 007-03FP – Calibration Events

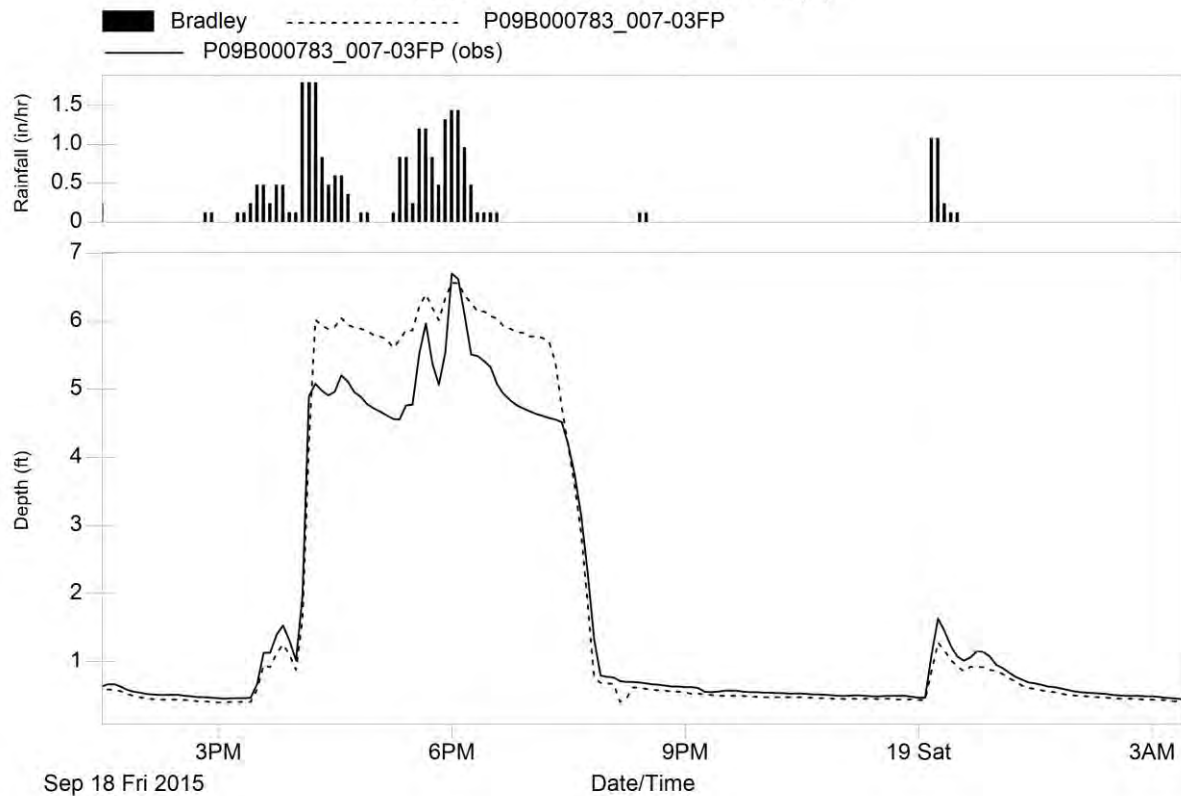
Event of September 18, 2015

Duration: 11.58 h, Total Rainfall: 1.56 (in)



Event of September 18, 2015

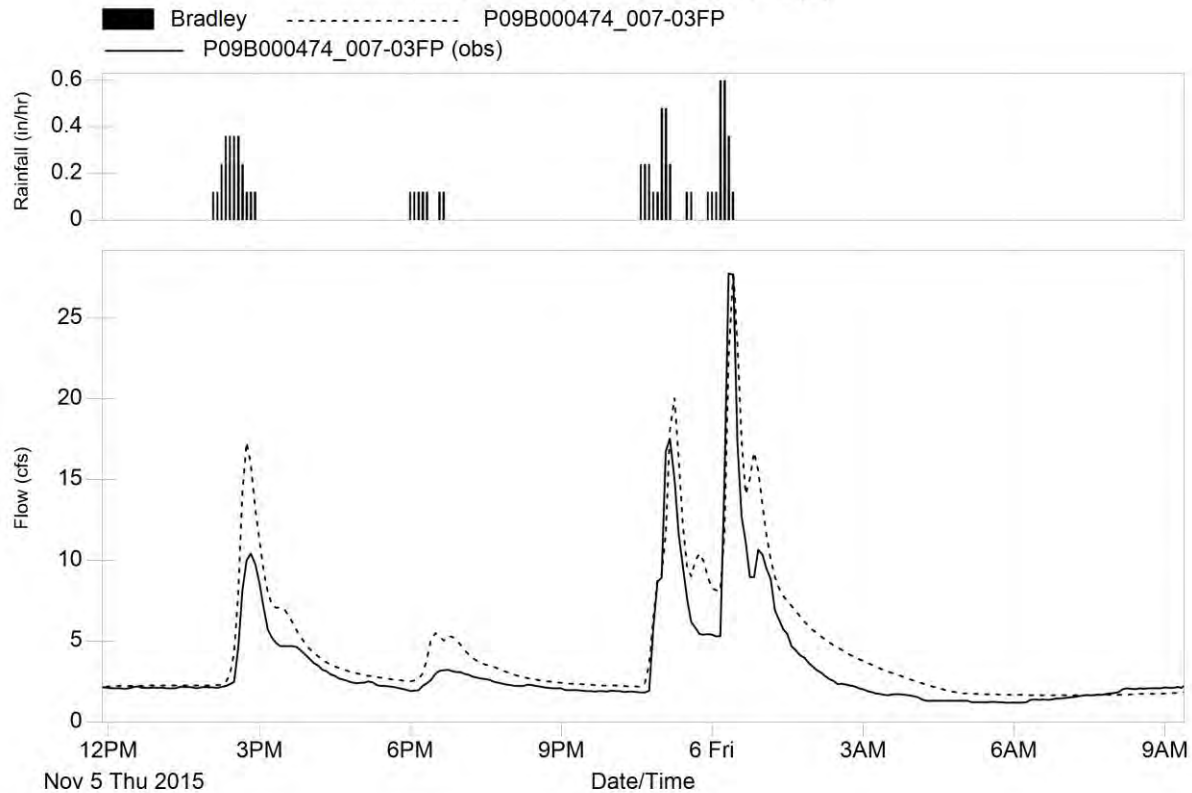
Duration: 11.58 h, Total Rainfall: 1.56 (in)



Fayette 007-03FP – Calibration Events

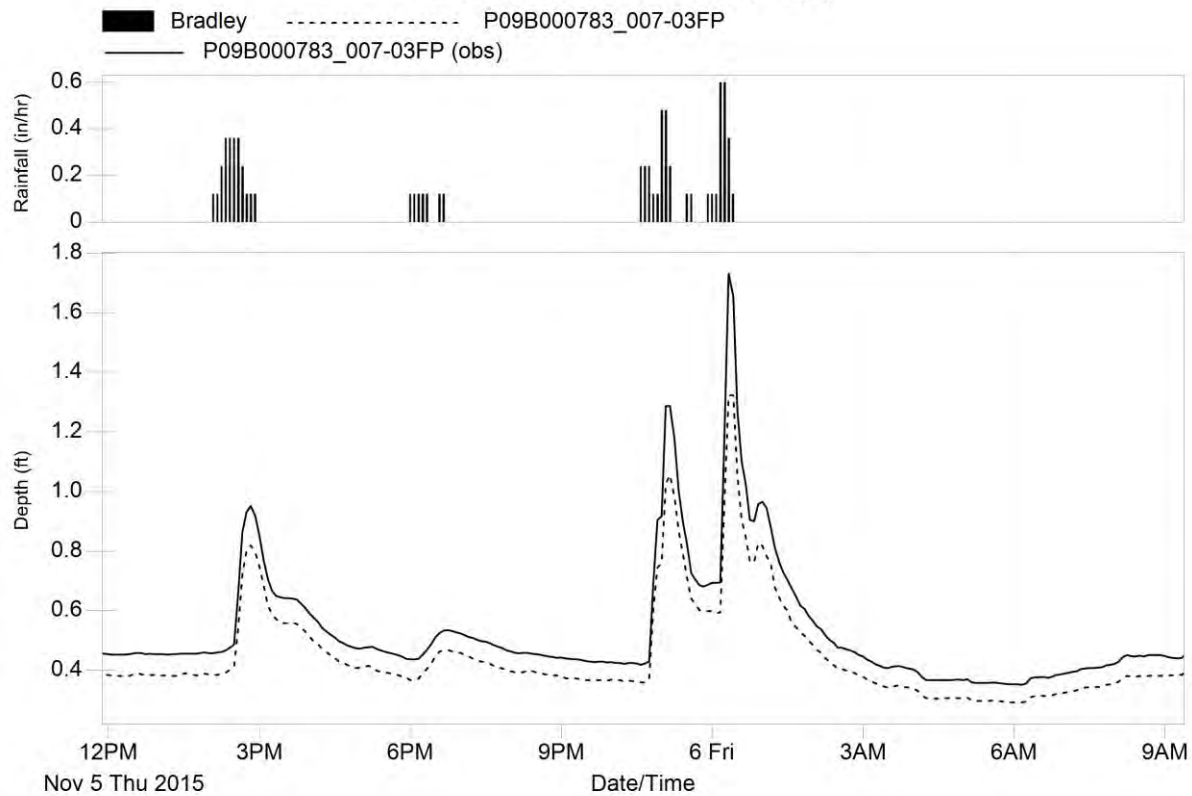
Event of November 5, 2015

Duration: 17.92 h, Total Rainfall: 0.43 (in)



Event of November 5, 2015

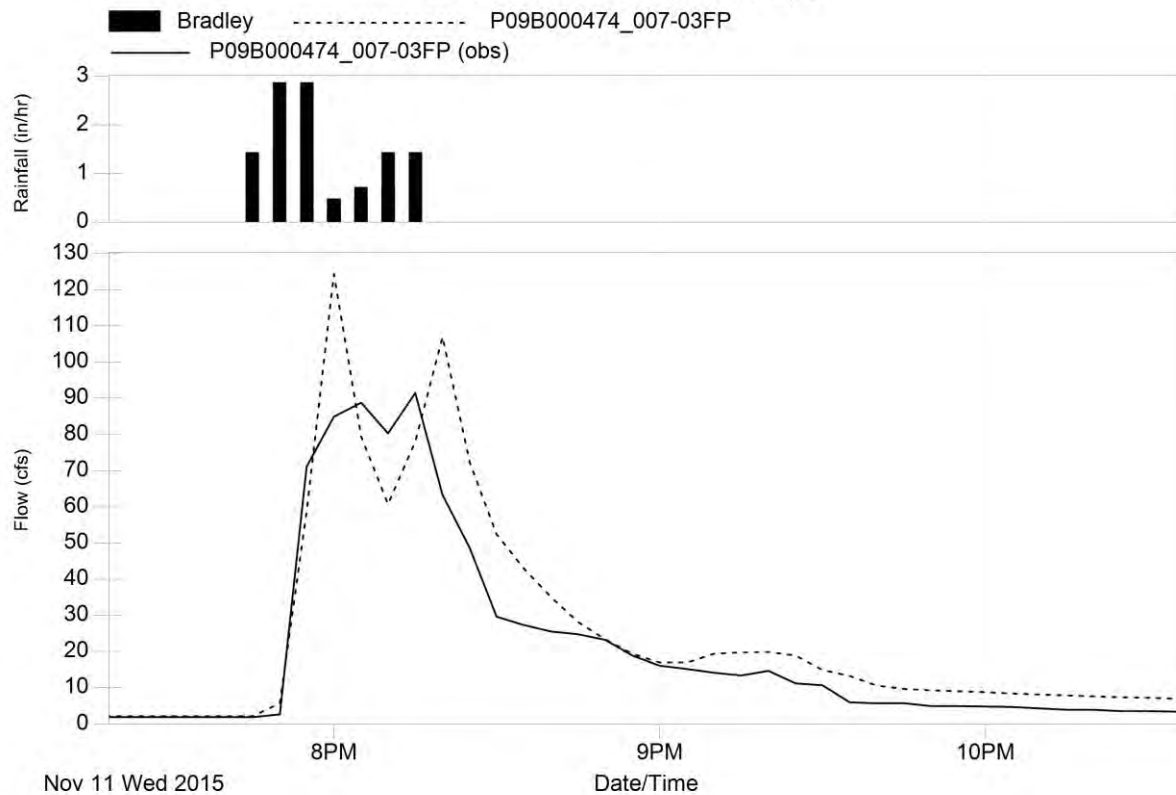
Duration: 17.92 h, Total Rainfall: 0.43 (in)



Fayette 007-03FP – Calibration Events

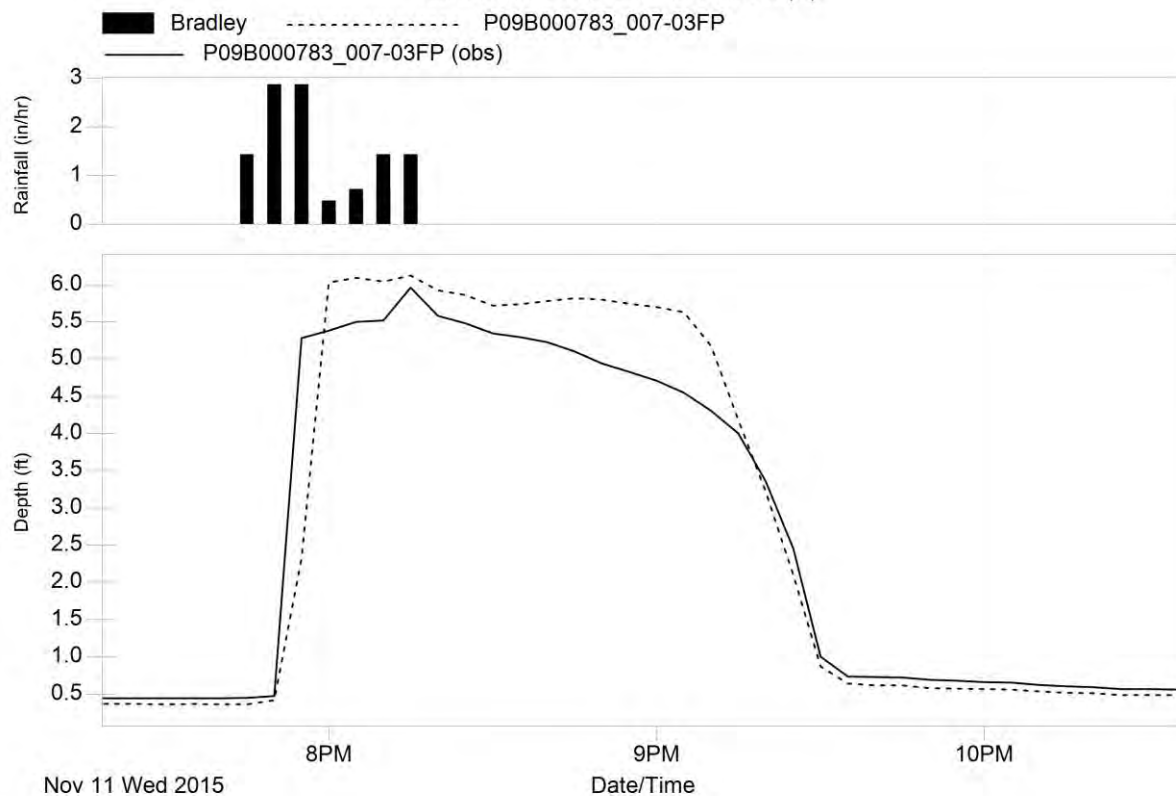
Event of November 11, 2015

Duration: 2.75 h, Total Rainfall: 0.6 (in)



Event of November 11, 2015

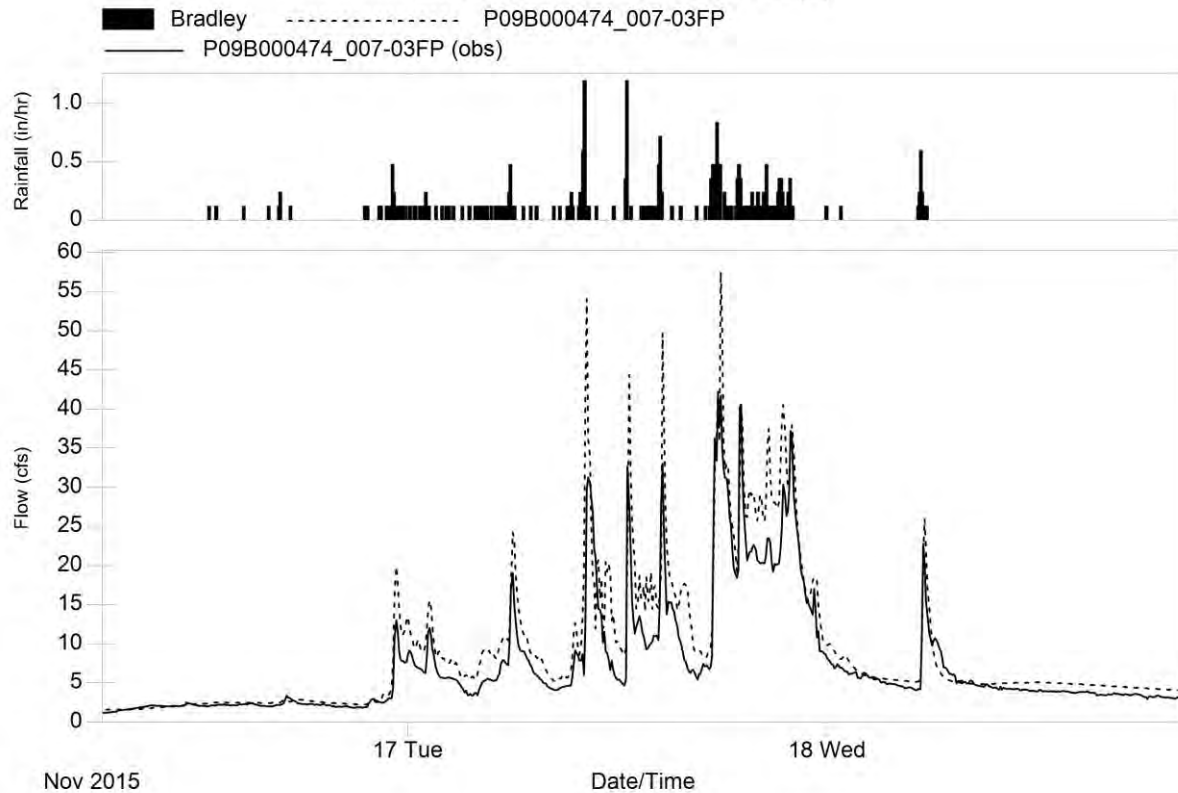
Duration: 2.75 h, Total Rainfall: 0.6 (in)



Fayette 007-03FP – Calibration Events

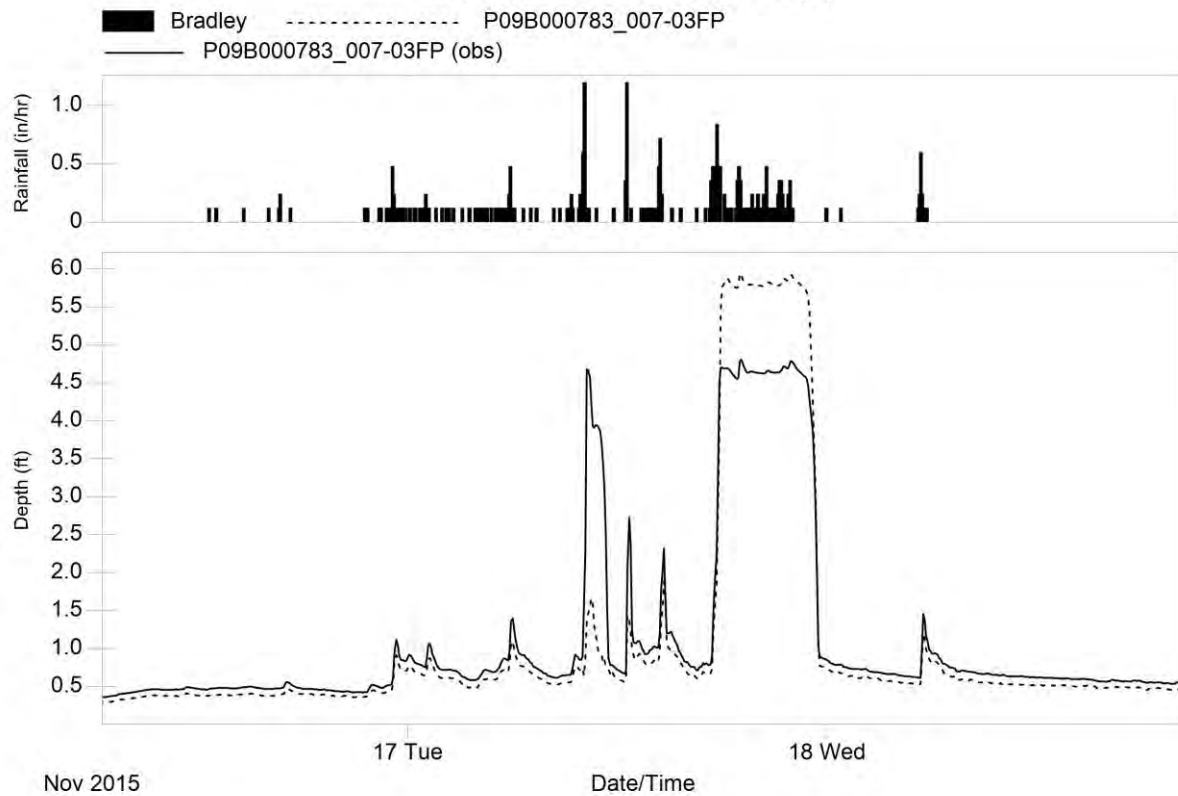
Event of November 16, 2015

Duration: 51.58 h, Total Rainfall: 2.45 (in)



Event of November 16, 2015

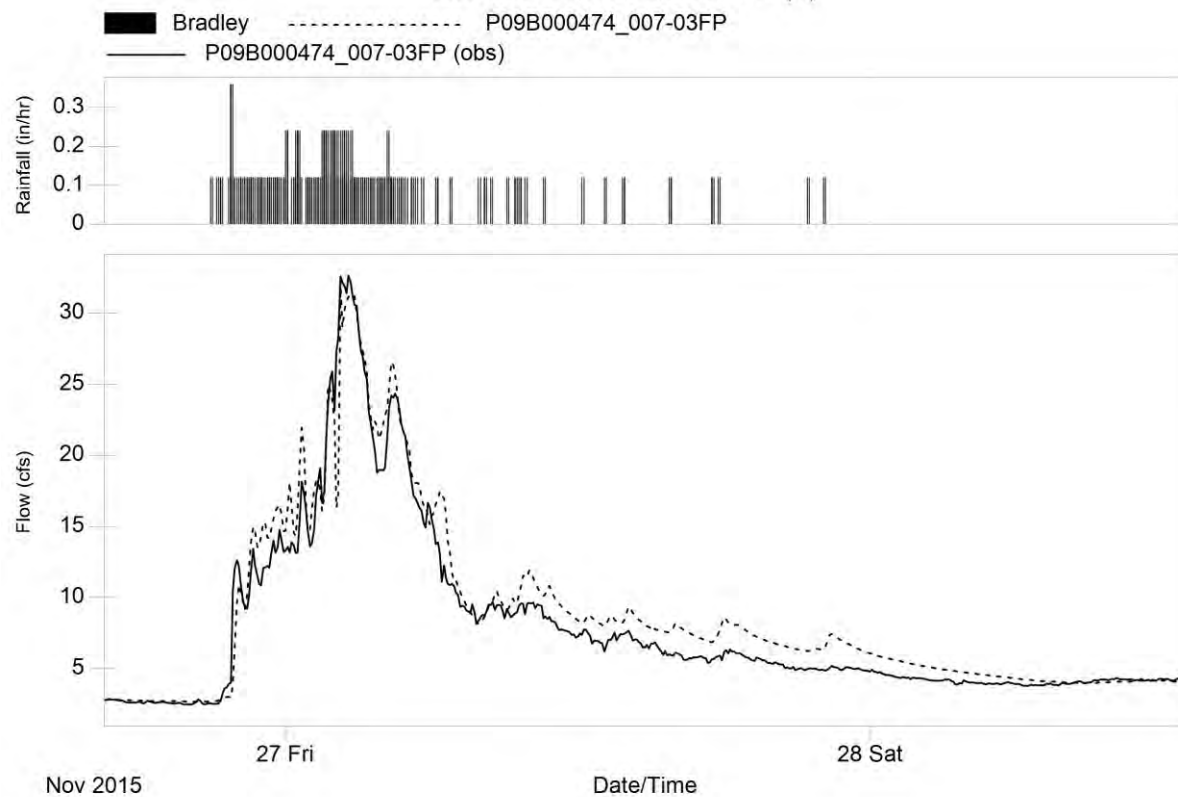
Duration: 51.58 h, Total Rainfall: 2.45 (in)



Fayette 007-03FP – Calibration Events

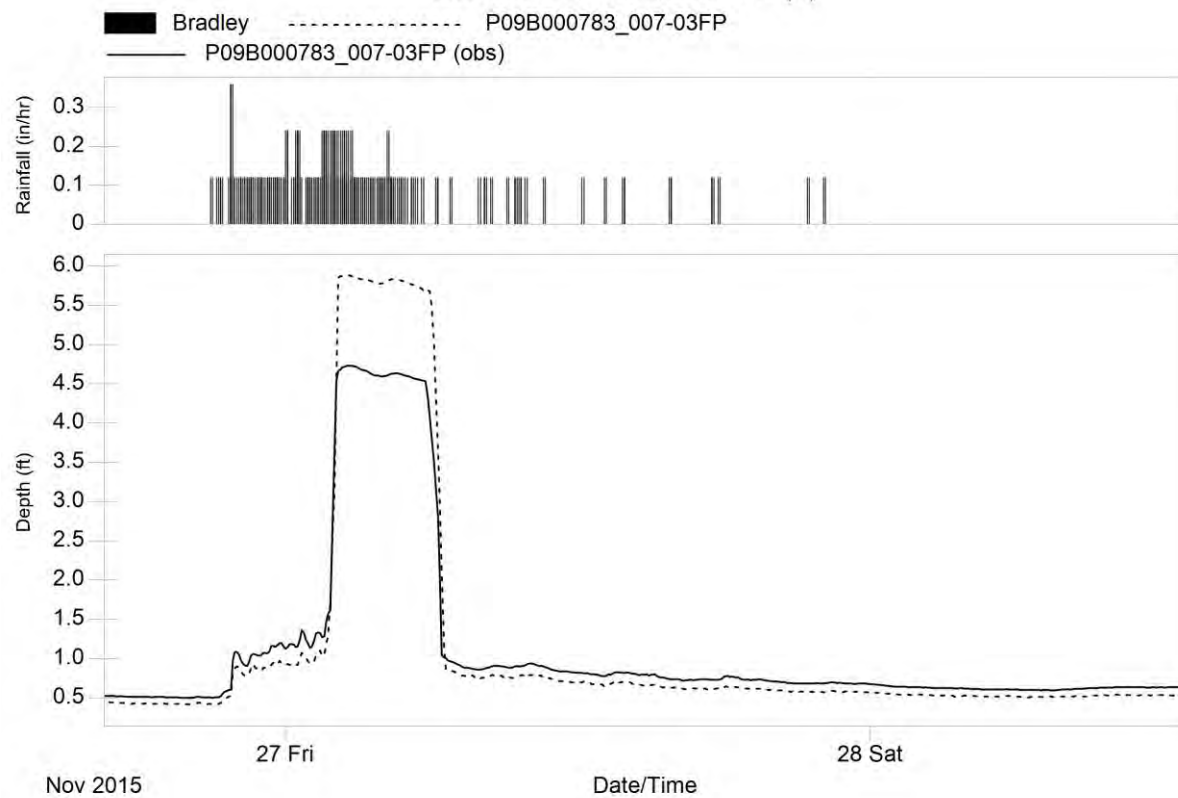
Event of November 26, 2015

Duration: 37 h, Total Rainfall: 1.12 (in)



Event of November 26, 2015

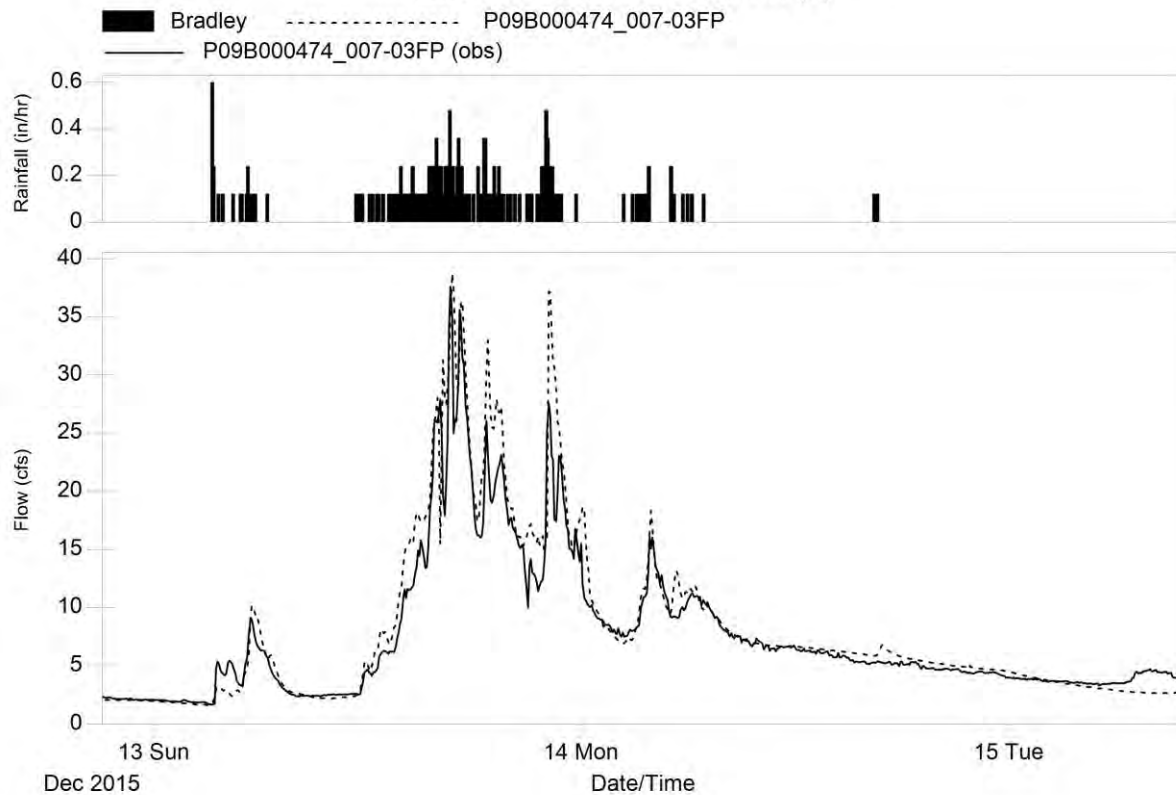
Duration: 37 h, Total Rainfall: 1.12 (in)



Fayette 007-03FP – Calibration Events

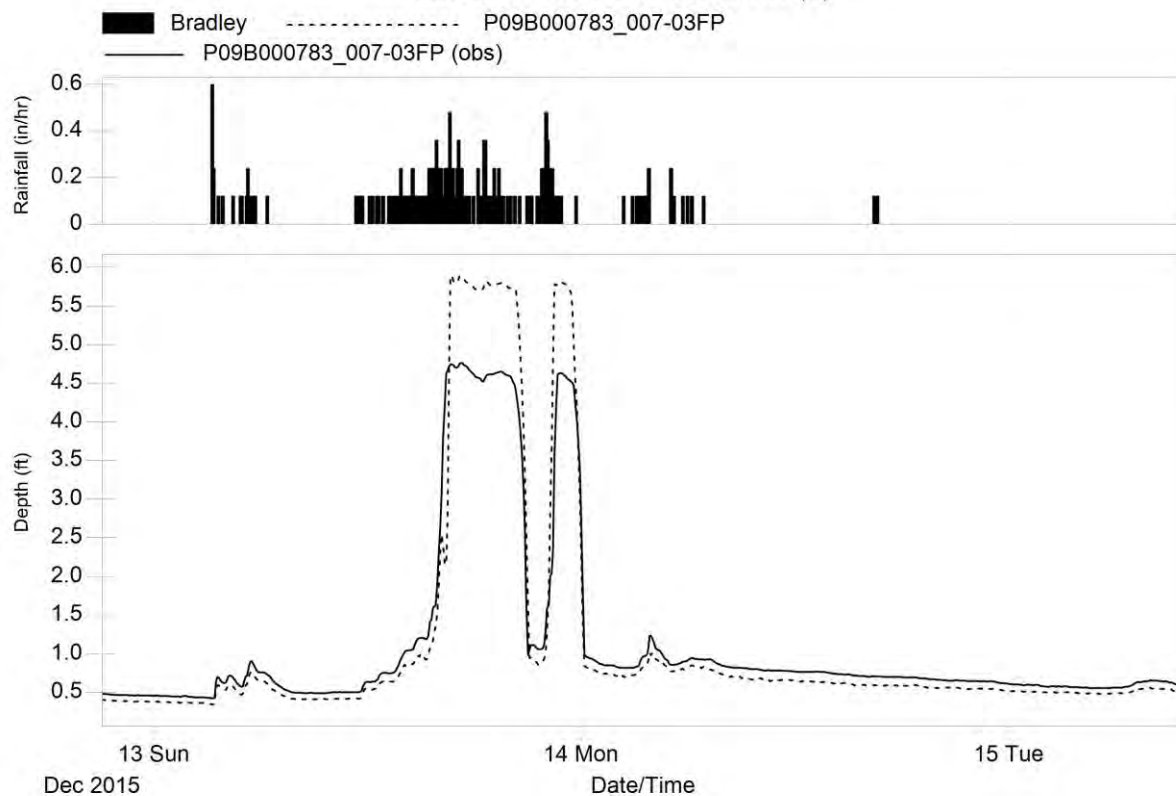
Event of December 13, 2015

Duration: 50.58 h, Total Rainfall: 1.77 (in)



Event of December 13, 2015

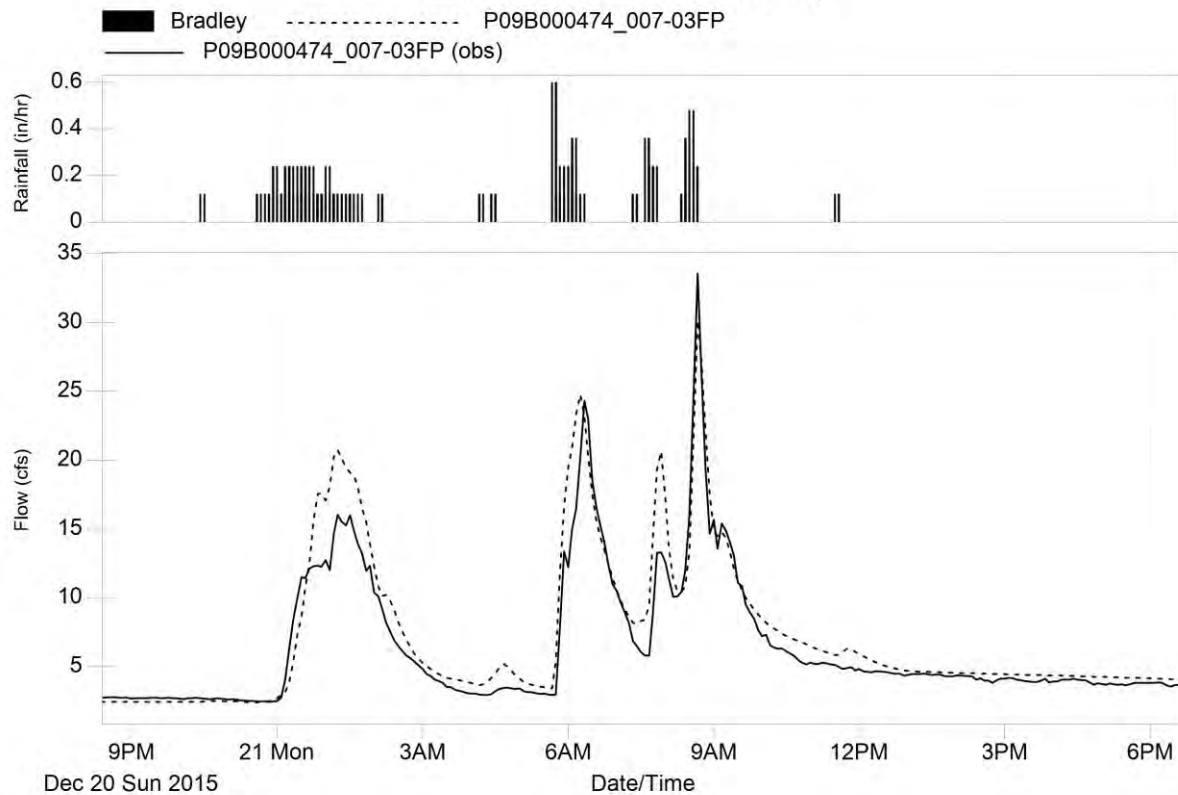
Duration: 50.58 h, Total Rainfall: 1.77 (in)



Fayette 007-03FP – Calibration Events

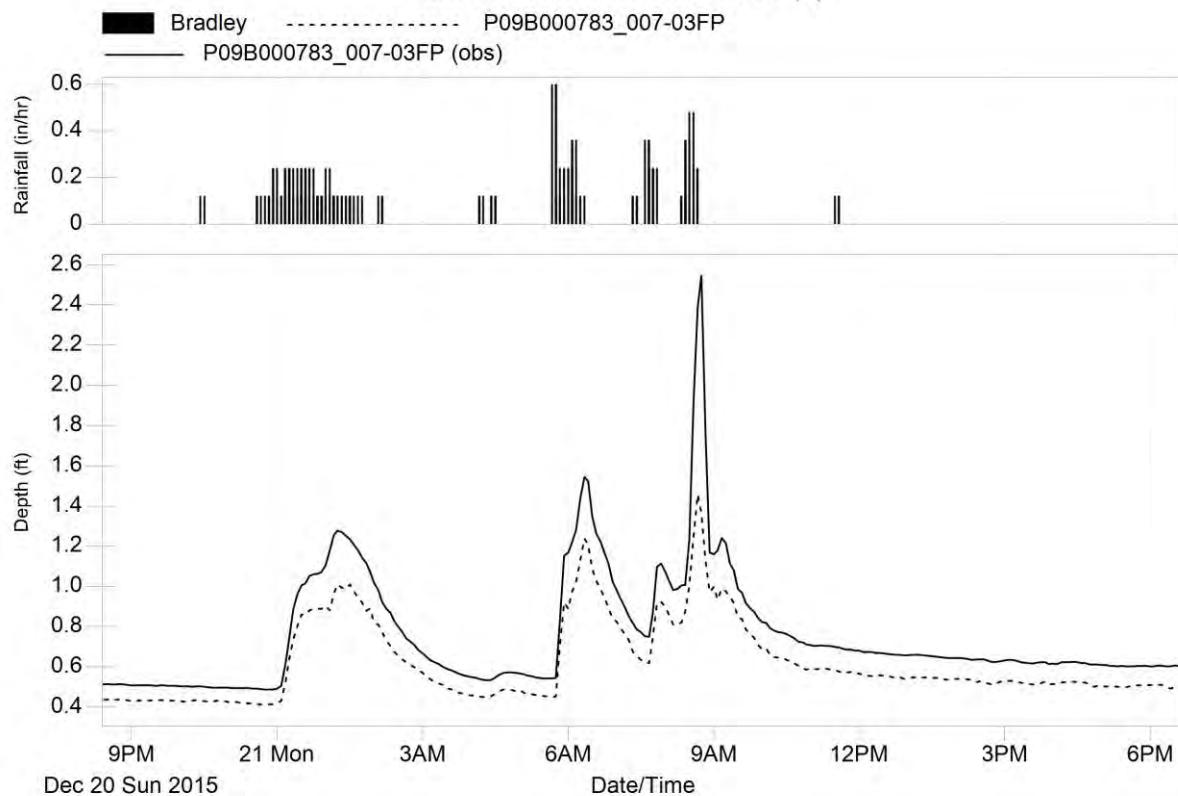
Event of December 20, 2015

Duration: 18.58 h, Total Rainfall: 0.7 (in)



Event of December 20, 2015

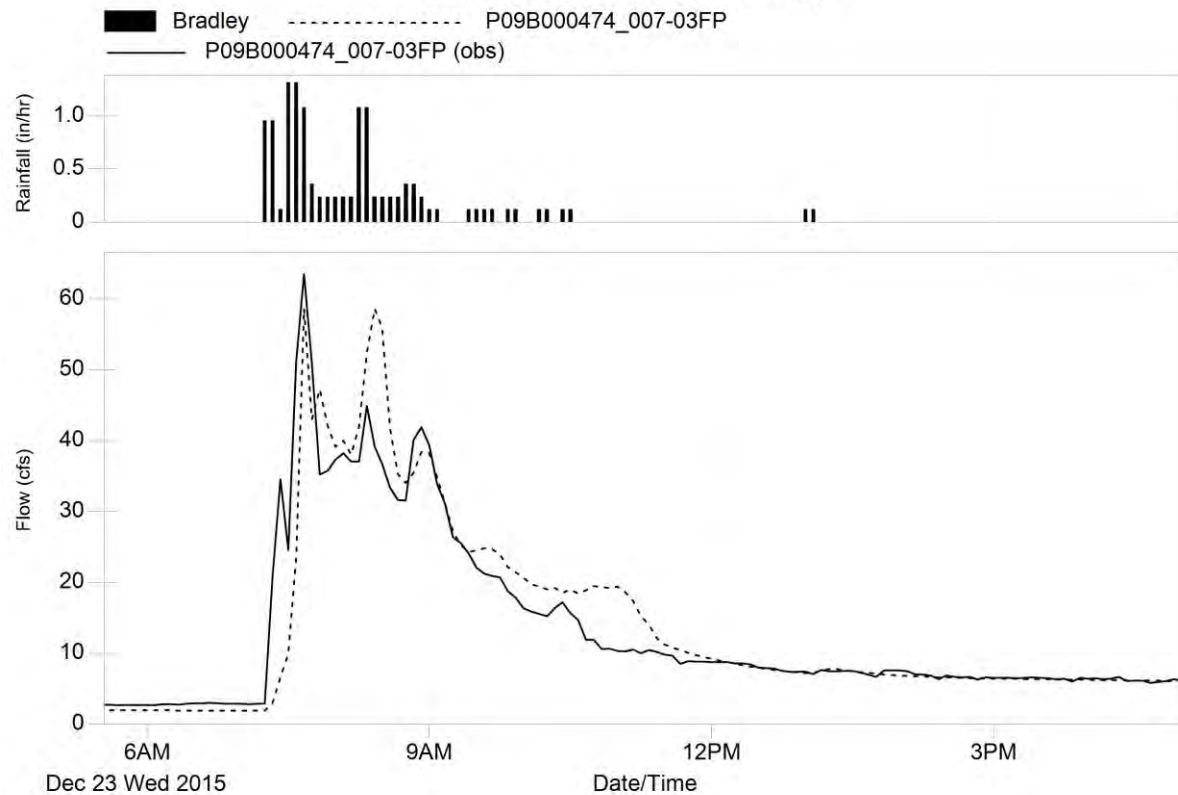
Duration: 18.58 h, Total Rainfall: 0.7 (in)



Fayette 007-03FP – Calibration Events

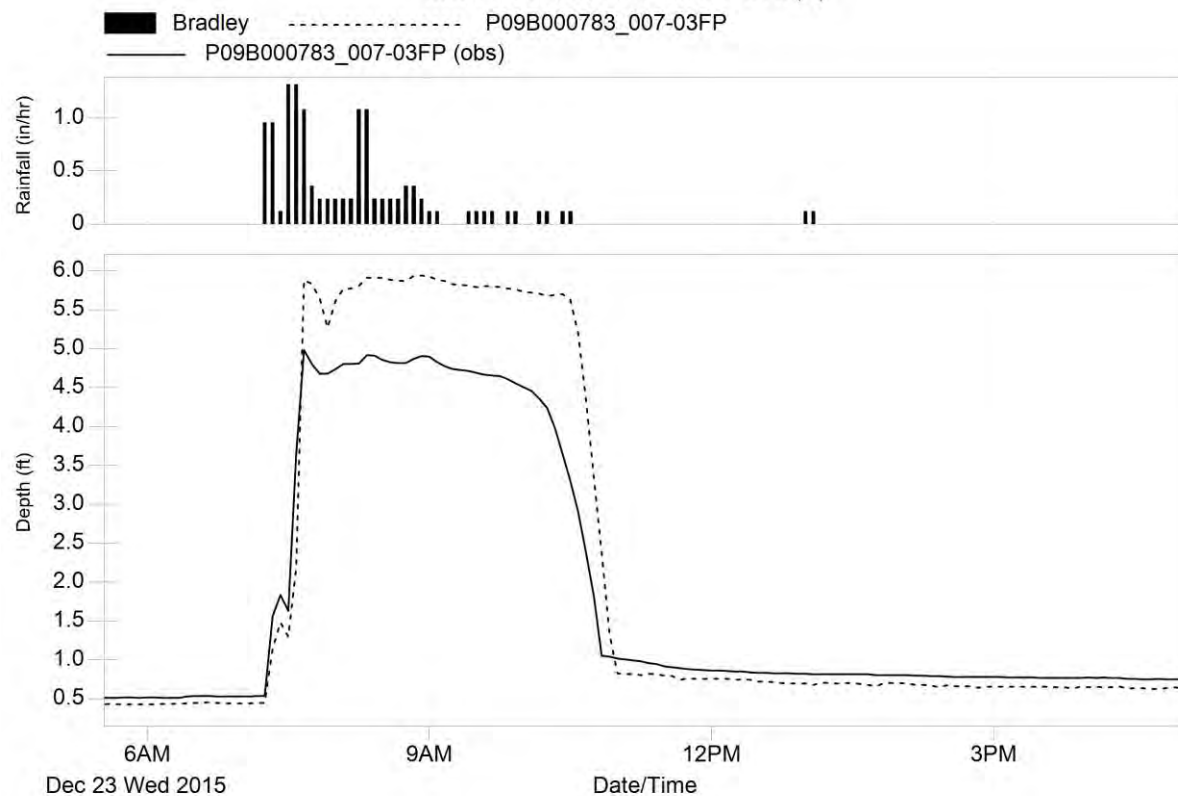
Event of December 23, 2015

Duration: 9.58 h, Total Rainfall: 0.73 (in)



Event of December 23, 2015

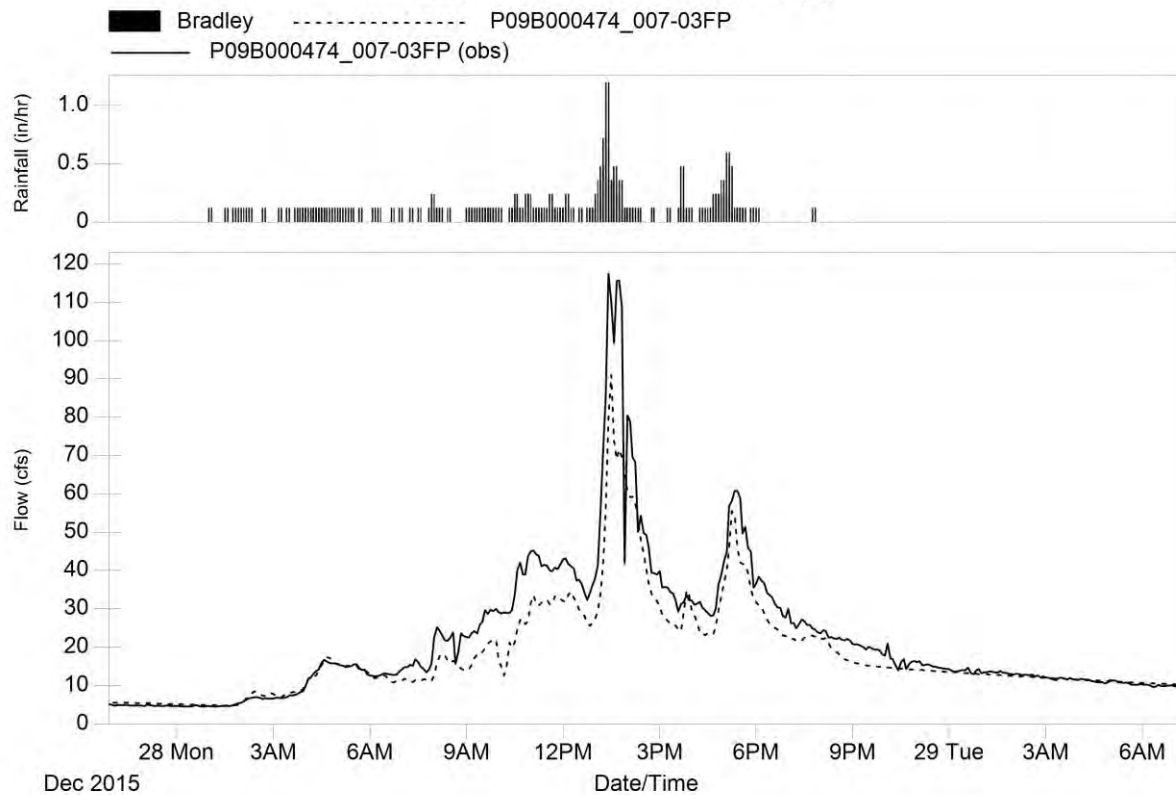
Duration: 9.58 h, Total Rainfall: 0.73 (in)



Fayette 007-03FP – Calibration Events

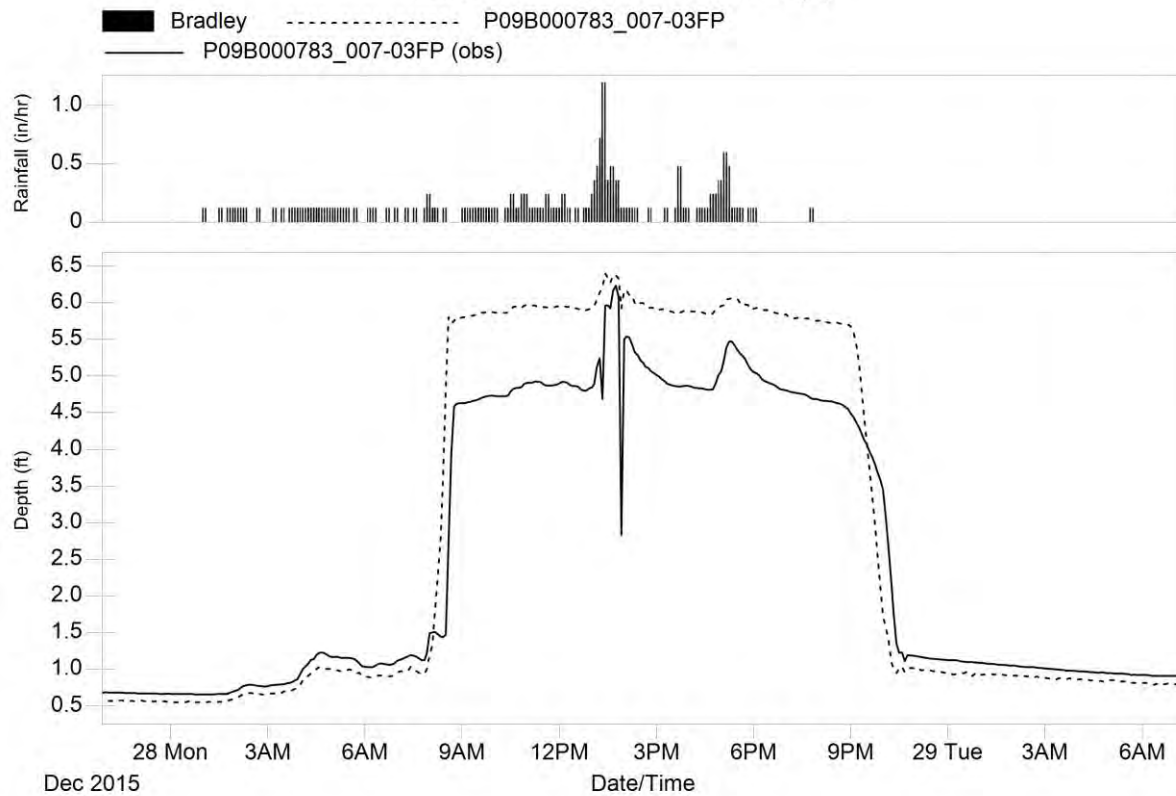
Event of December 28, 2015

Duration: 27.83 h, Total Rainfall: 1.64 (in)



Event of December 28, 2015

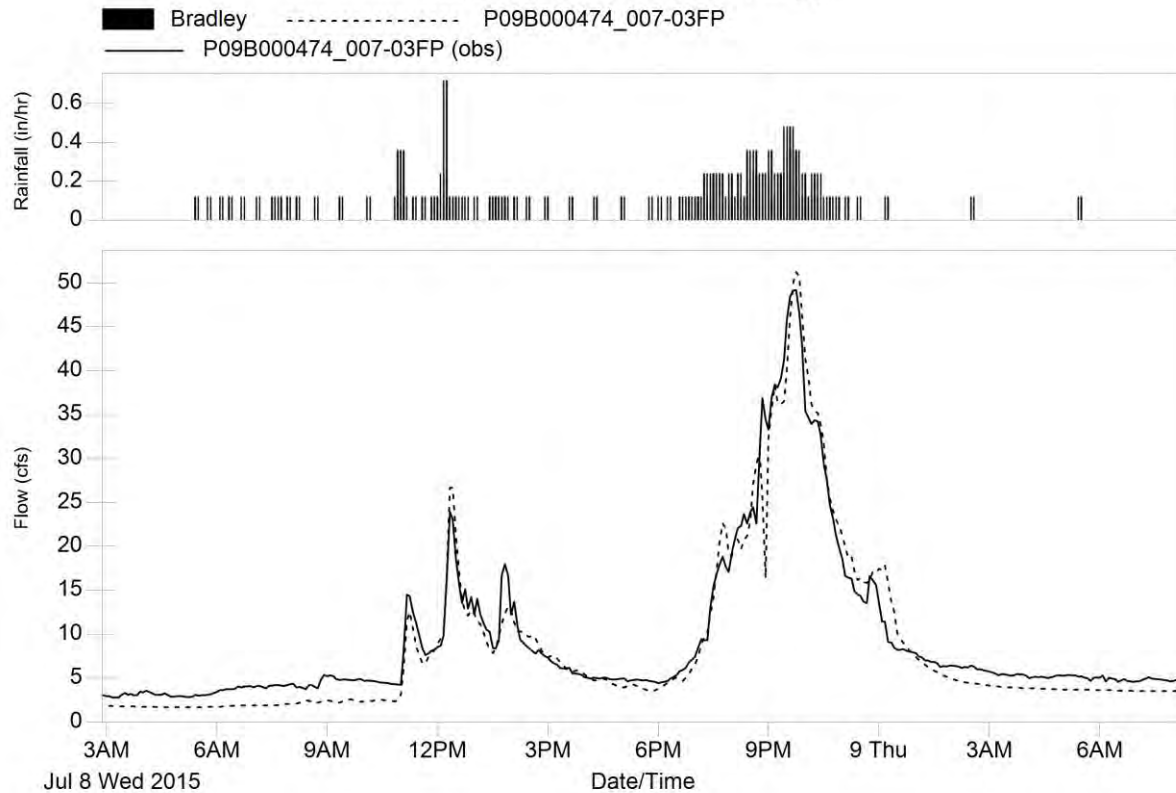
Duration: 27.83 h, Total Rainfall: 1.64 (in)



Fayette 007-03FP – Verification Events

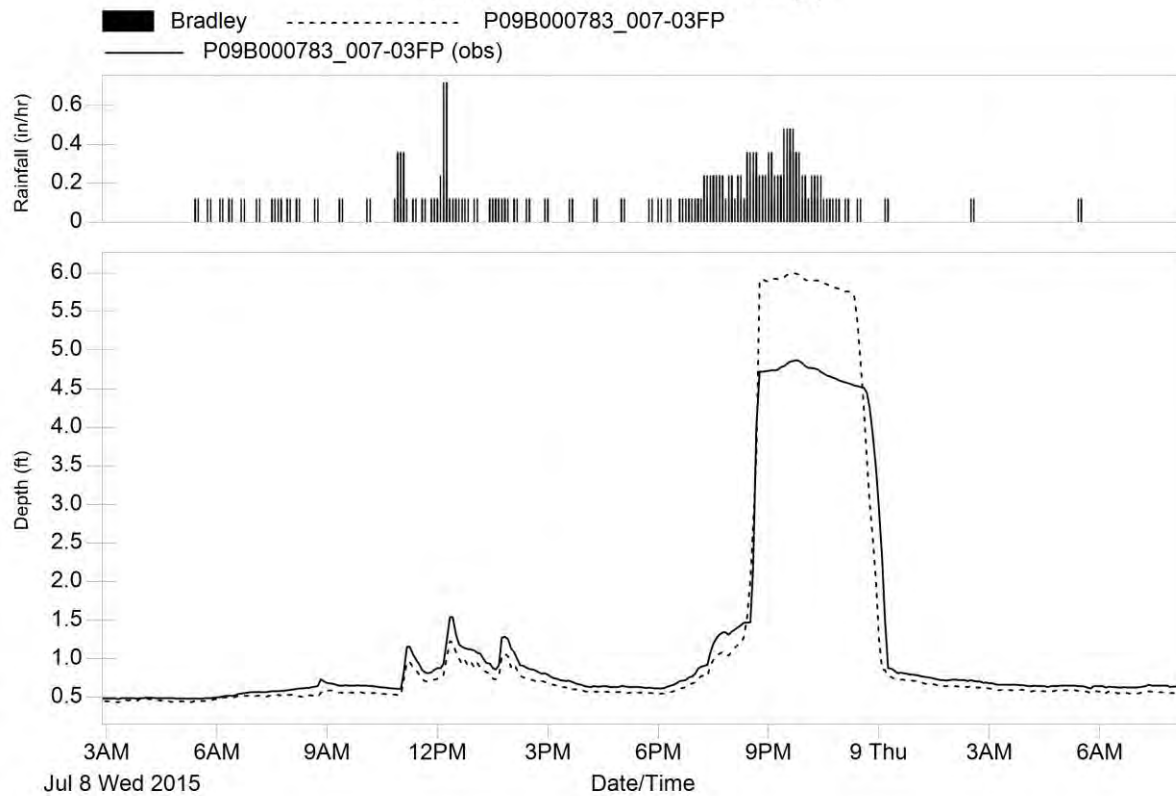
Event of July 8, 2015

Duration: 24.5 h, Total Rainfall: 1.39 (in)



Event of July 8, 2015

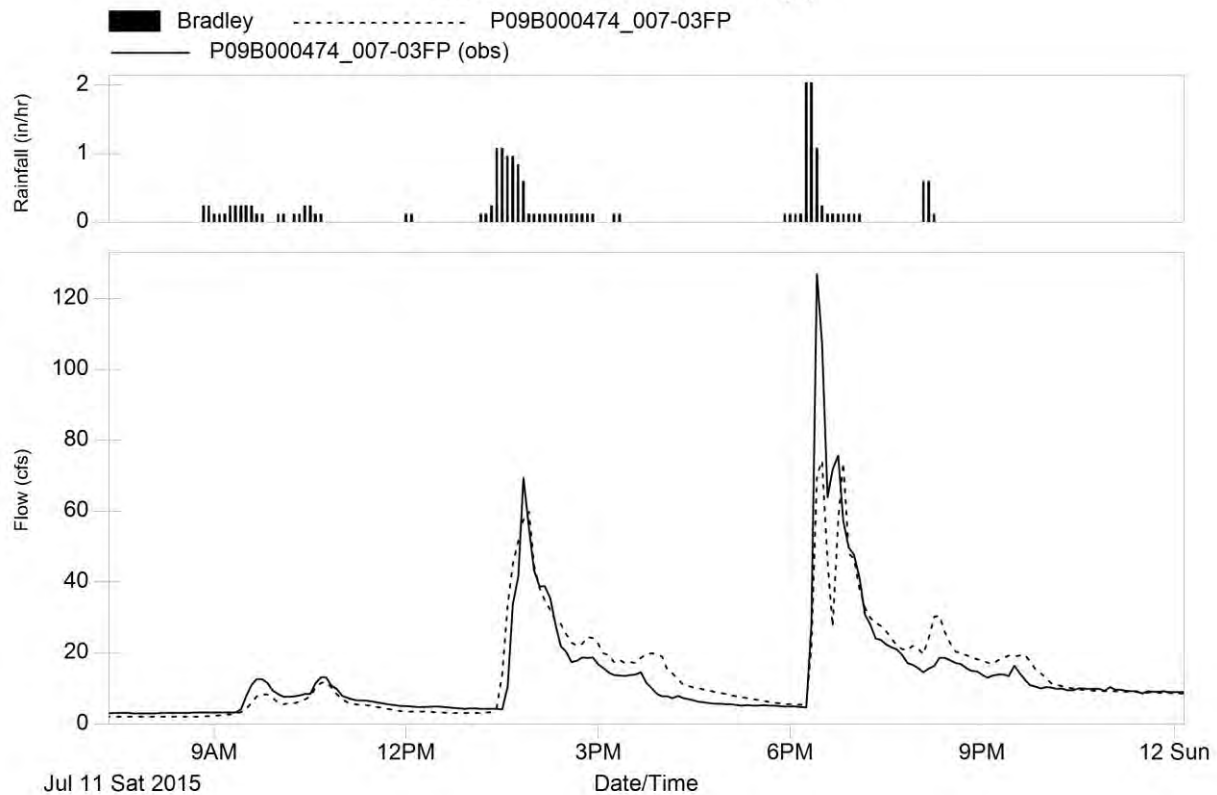
Duration: 24.5 h, Total Rainfall: 1.39 (in)



Fayette 007-03FP – Verification Events

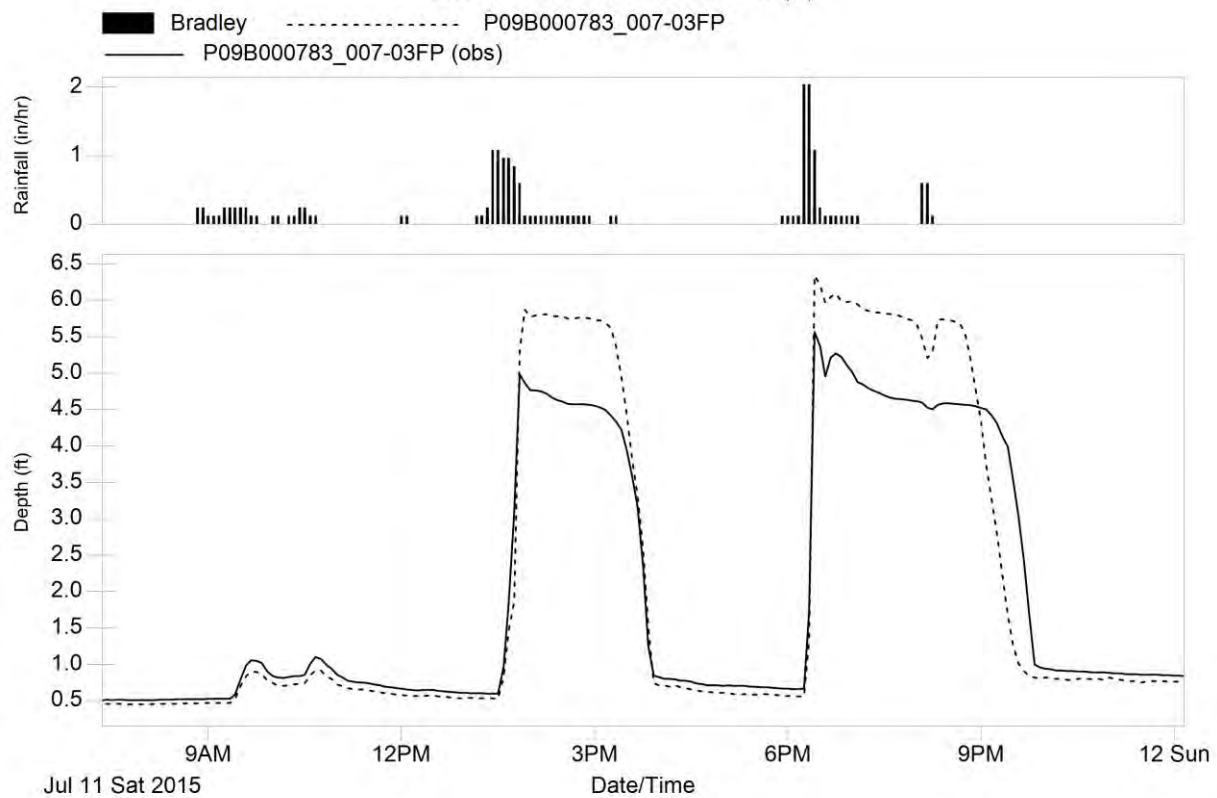
Event of July 11, 2015

Duration: 14 h, Total Rainfall: 1.07 (in)



Event of July 11, 2015

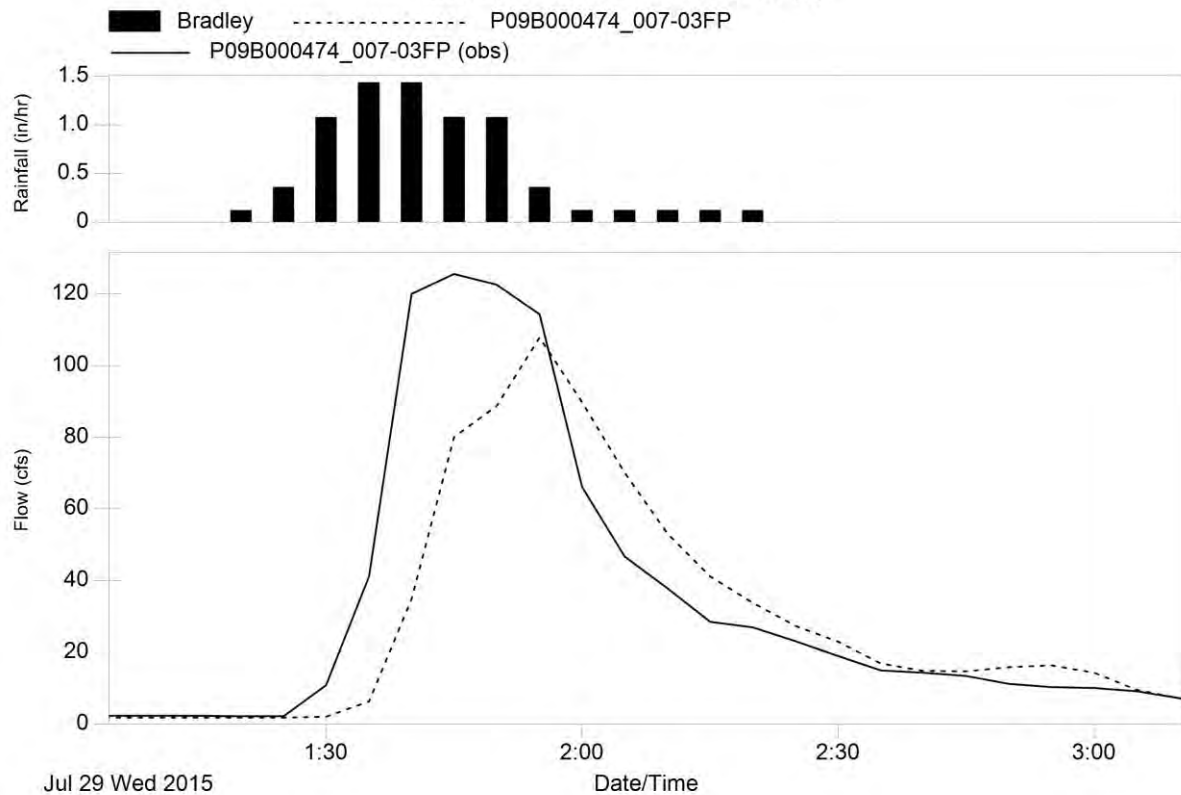
Duration: 14 h, Total Rainfall: 1.07 (in)



Fayette 007-03FP – Verification Events

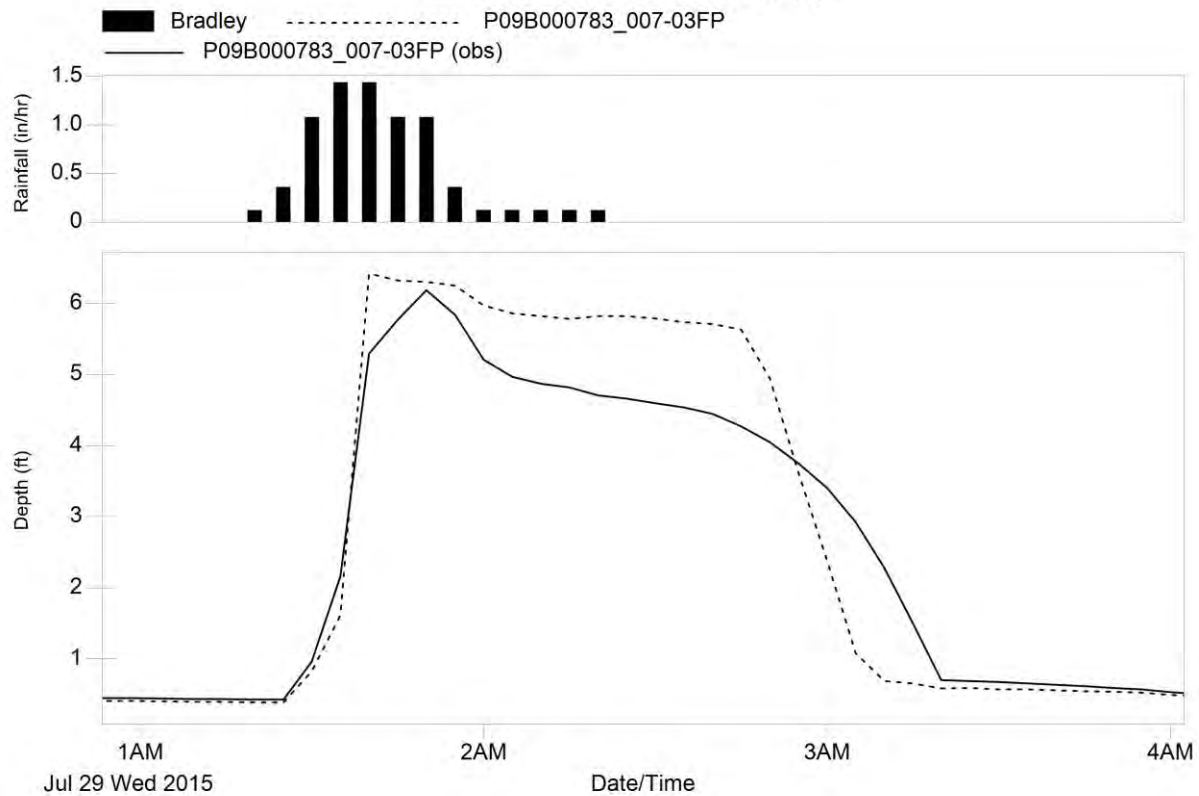
Event of July 29, 2015

Duration: 1.75 h, Total Rainfall: 0.51 (in)

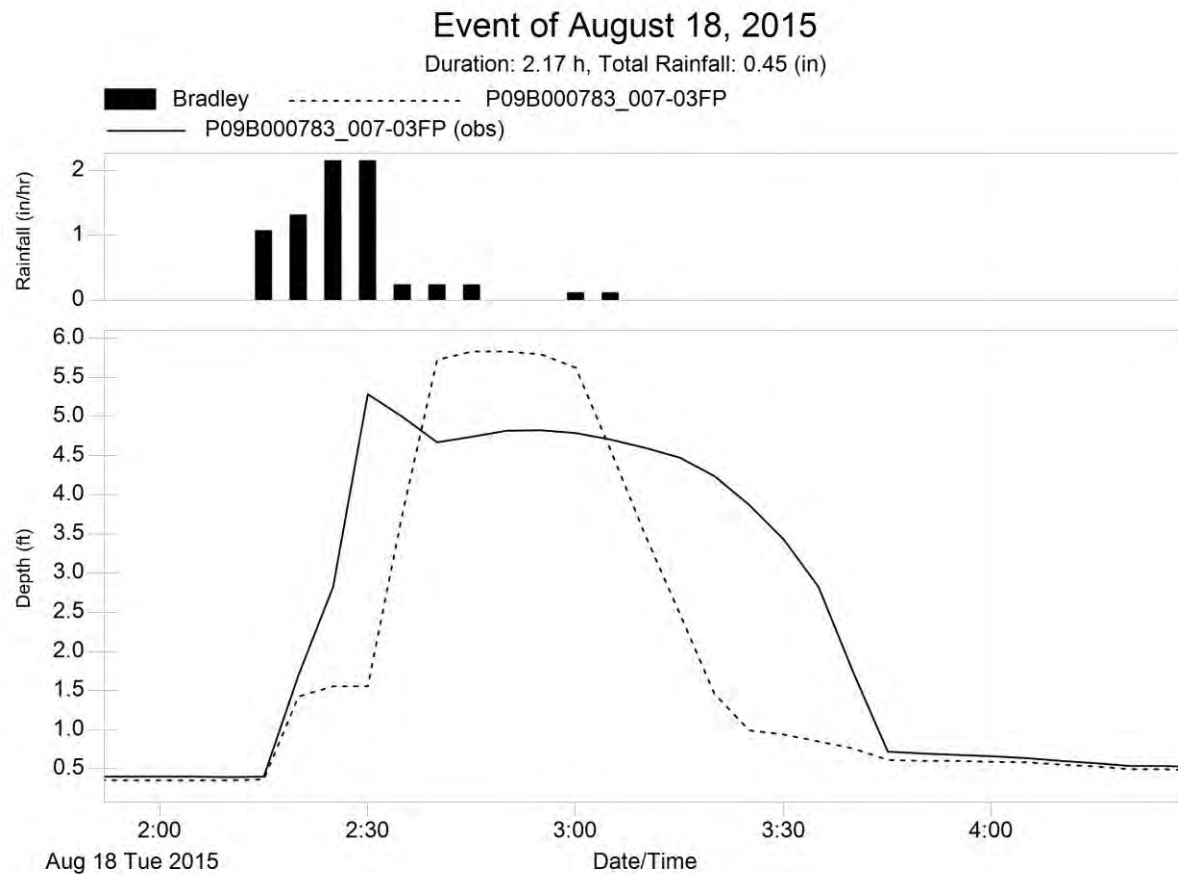
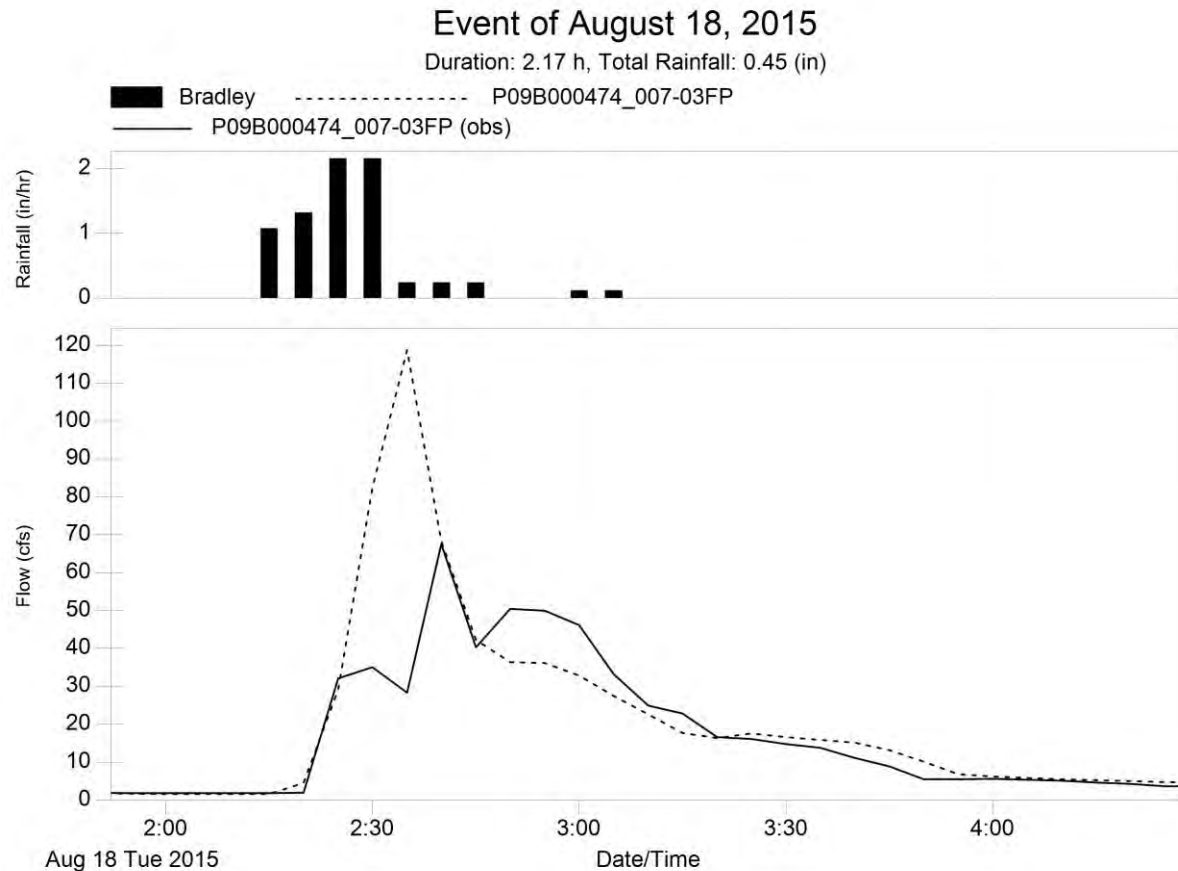


Event of July 29, 2015

Duration: 1.75 h, Total Rainfall: 0.51 (in)



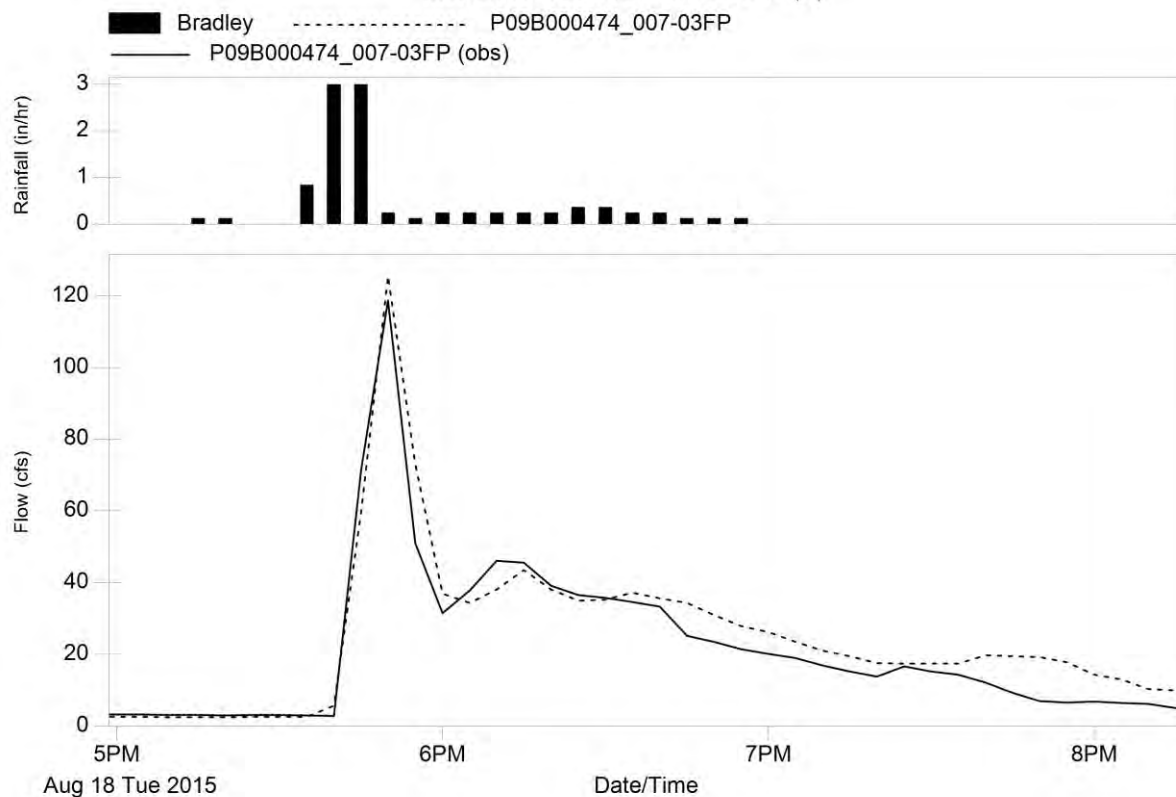
Fayette 007-03FP – Verification Events



Fayette 007-03FP – Verification Events

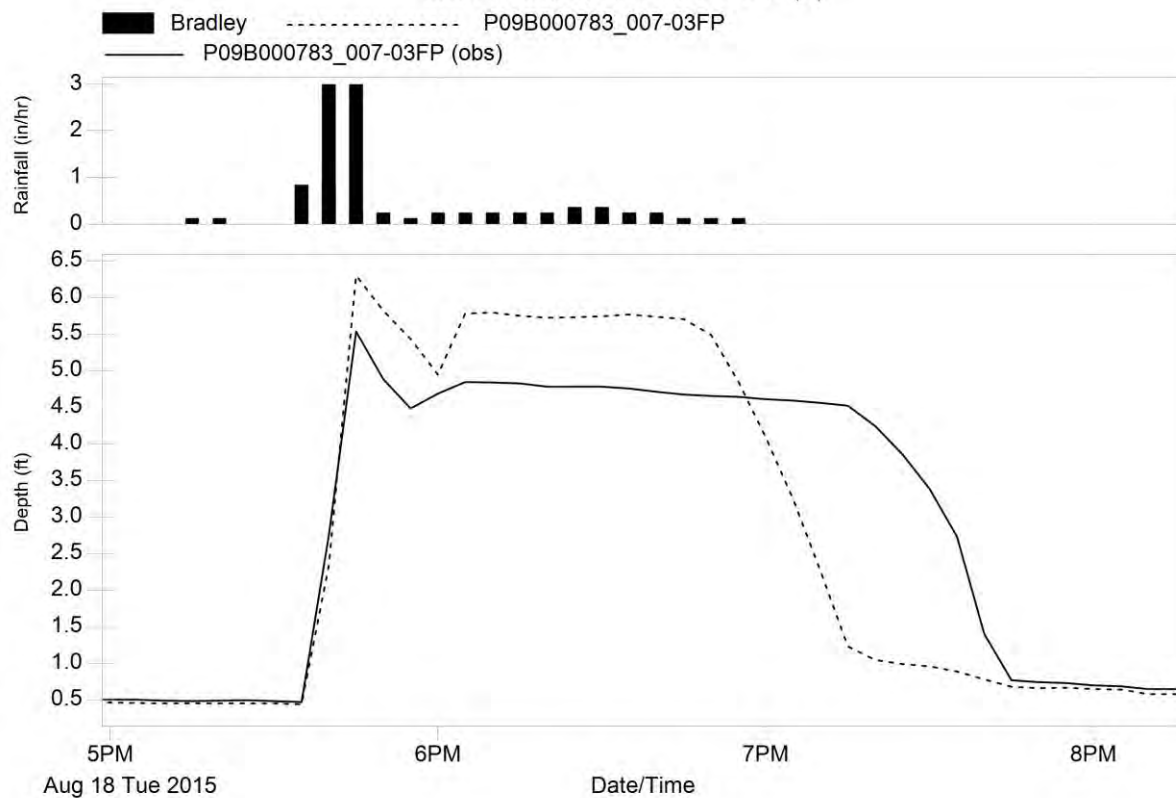
Event of August 18, 2015

Duration: 2.75 h, Total Rainfall: 0.52 (in)



Event of August 18, 2015

Duration: 2.75 h, Total Rainfall: 0.52 (in)



Legend

- Modeled Outfalls**
 - Emergency Outfalls (Yellow triangle)
 - Active Outfalls (Red triangle)
 - to Storm Sewer (Black triangle)
- Modeled Manholes**
 - Modeled Manholes (Grey circle)
 - Modeled Manholes with Inflow (labeled) (Grey circle with label)
- Modeled Conduits (diameter labeled)** (Yellow line)
- Modeled Subcatchments**
 - DCIA (White box)
 - PERVIOUS (Light grey box)
 - ROOFS (Dark grey box)
- 2015/2016 Flow Monitors**
 - Active Meters (Pink circle)
 - Existing Meters (Grey circle)
 - Removed Meters (Green circle)
- Subcatchments** (Blue outline)
- RDII Sewersheds** (Red outline)
- 2015/2016 Rain Gages** (Yellow square)

Map Labels: WASHINGTON, COMMERCIAL, EATON, FAYETTE, HAMILTON, WATER, S-StoreHydrobrake, 007-01LE, 007-03FP, 007-04FT, 006-01LE, 000-04LE, 000-03LE, 006A, 007A.

Scale: 50 m

North Arrow: N

Date	Duration (h)	Maximum Depth (ft)		Minimum Depth (ft)		Average Depth (ft)		Maximum Depth (ft)	Average Depth (ft)	Rainfall Variability
		metered	modeled	metered	modeled	metered	modeled	Surcharged: -0.33 ft to +1.67 ft	Surcharged: -0.33 ft to +1.67 ft	
CALIBRATION EVENTS - DEPTH								Non-Surcharged: -0.33 ft to +0.33 ft	Non-Surcharged: -0.33 ft to +0.33 ft	
9/8/2015 10:45:00	4.92	6.100	5.996	0.000	0.000	2.614	1.938	-0.104	-0.676	variable
9/18/2015 15:25:00	10.25	6.800	6.236	0.000	0.000	2.104	2.048	-0.564	-0.056	relatively uniform
11/5/2015 22:55:00	1.92	2.000	0.308	0.000	0.000	0.348	0.013	-1.692	-0.334	possibly uniform
11/11/2015 19:35:00	3.25	6.000	5.916	0.000	0.000	2.528	2.461	-0.084	-0.067	relatively uniform
11/16/2015 22:35:00	37.17	5.700	5.804	0.000	0.000	1.094	0.899	0.104	-0.195	variable
11/26/2015 22:05:00	19.58	5.600	5.748	0.000	0.000	1.283	1.290	0.148	0.007	possibly uniform
12/13/2015 13:35:00	26.67	5.700	5.760	0.000	0.000	1.397	1.311	0.060	-0.086	possibly uniform
12/21/2015 0:35:00	11.92	3.400	0.956	0.000	0.000	0.165	0.013	-2.444	-0.152	relatively uniform
12/23/2015 6:55:00	12.25	5.800	5.808	0.000	0.000	1.442	1.496	0.008	0.054	variable
12/28/2015 2:00:00	45.00	6.400	6.134	0.000	0.000	1.738	1.732	-0.266	-0.006	variable
VERIFICATION EVENTS - DEPTH										
6/17/2015 2:00:00	15.42	6.300	5.838	0.000	0.000	1.009	0.557	-0.462	-0.452	variable
6/24/2015 16:40:00	61.25	5.900	5.696	0.000	0.000	0.819	0.610	-0.204	-0.210	variable
6/28/2015 18:35:00	7.25	6.400	5.721	0.000	0.000	2.572	1.672	-0.679	-0.900	variable
7/8/2015 11:25:00	17.75	5.800	5.850	0.000	0.000	1.206	1.131	0.050	-0.075	relatively uniform
7/11/2015 12:35:00	22.25	6.000	6.054	0.000	0.000	1.328	1.349	0.054	0.021	possibly uniform
7/16/2015 20:55:00	2.33	6.900	6.161	0.000	0.000	1.957	1.760	-0.739	-0.197	relatively uniform
7/29/2015 1:15:00	3.33	6.500	6.056	-2.100	0.000	0.525	2.329	-0.444	1.804	variable
8/18/2015 1:35:00	3.92	No meter data								
8/18/2015 17:25:00	3.75	No meter data								
Notes: Results from interceptor only model using flow meter data as influent flow to regulator. 3.5 feet subtracted from modeled flow depth to account for difference between modeled swirl concentrator invert (450.06 ft) and the invert at the meter location (453.56 ft)						WEIGHTED AVERAGES				
						Calibration - Relatively Uniform		-0.781	-0.065	relatively uniform
						Calibration - Possibly Uniform		-0.166	-0.075	possibly uniform
						Calibration - Variable		-0.071	-0.278	variable
						Calibration Weighted - All Events		-0.310	-0.167	All Events
						Verification - Relatively Uniform		-0.379	-0.150	relatively uniform
						Verification - Possibly Uniform		0.054	0.021	possibly uniform
						Verification - Variable		-0.452	-0.405	variable
						Verification Weighted - All Events		-0.361	-0.259	All Events
						Weighted Average - All Events		-0.333	-0.203	
						NET AVERAGES				
						Calibration - Relatively Uniform		-1.031	-0.092	relatively uniform
						Calibration - Possibly Uniform		-0.495	-0.138	possibly uniform
						Calibration - Variable		-0.064	-0.206	variable
						Calibration Net - All Events		-0.483	-0.151	All Events
						Verification - Relatively Uniform		-0.345	-0.136	relatively uniform
						Verification - Possibly Uniform		0.054	0.021	possibly uniform
						Verification - Variable		-0.447	0.061	variable
						Verification Net - All Events		-0.346	-0.001	All Events
						Net Average - All Events		-0.427	-0.089	

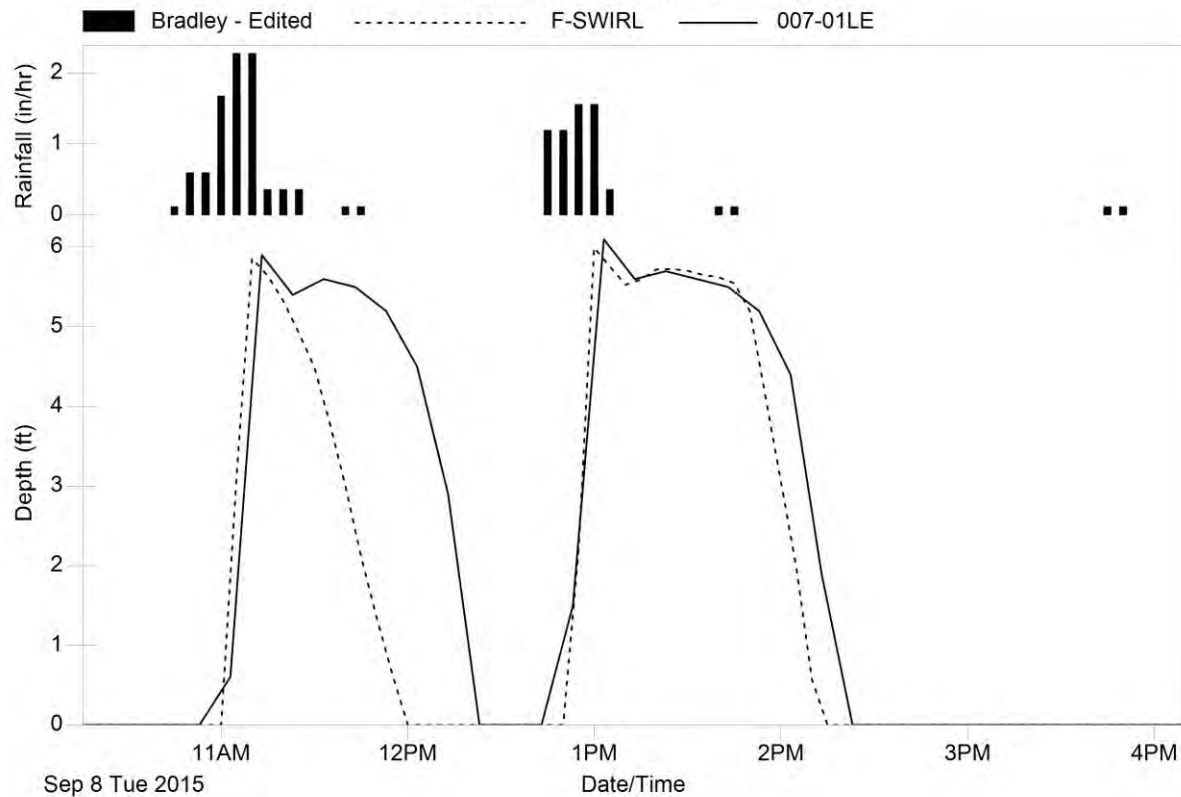
Notes:

Results from interceptor only model using flow meter data as influent flow to regulator.
3.5 feet subtracted from modeled flow depth to account for difference between modeled swirl concentrator invert (450.06 ft) and the invert at the meter location (453.56 ft)

Fayette 007-01LE – Calibration Events

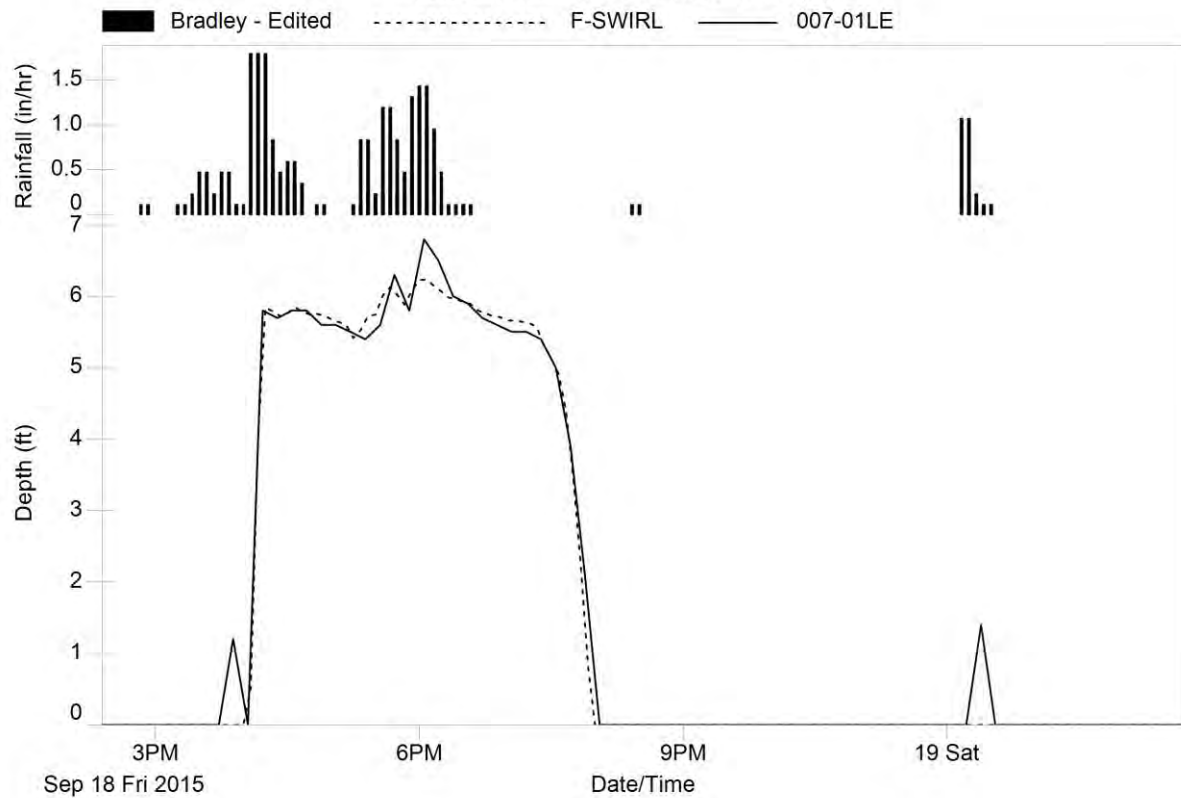
Event of September 8, 2015

Duration: 4.92 h, Total Rainfall: 0.86 (in)

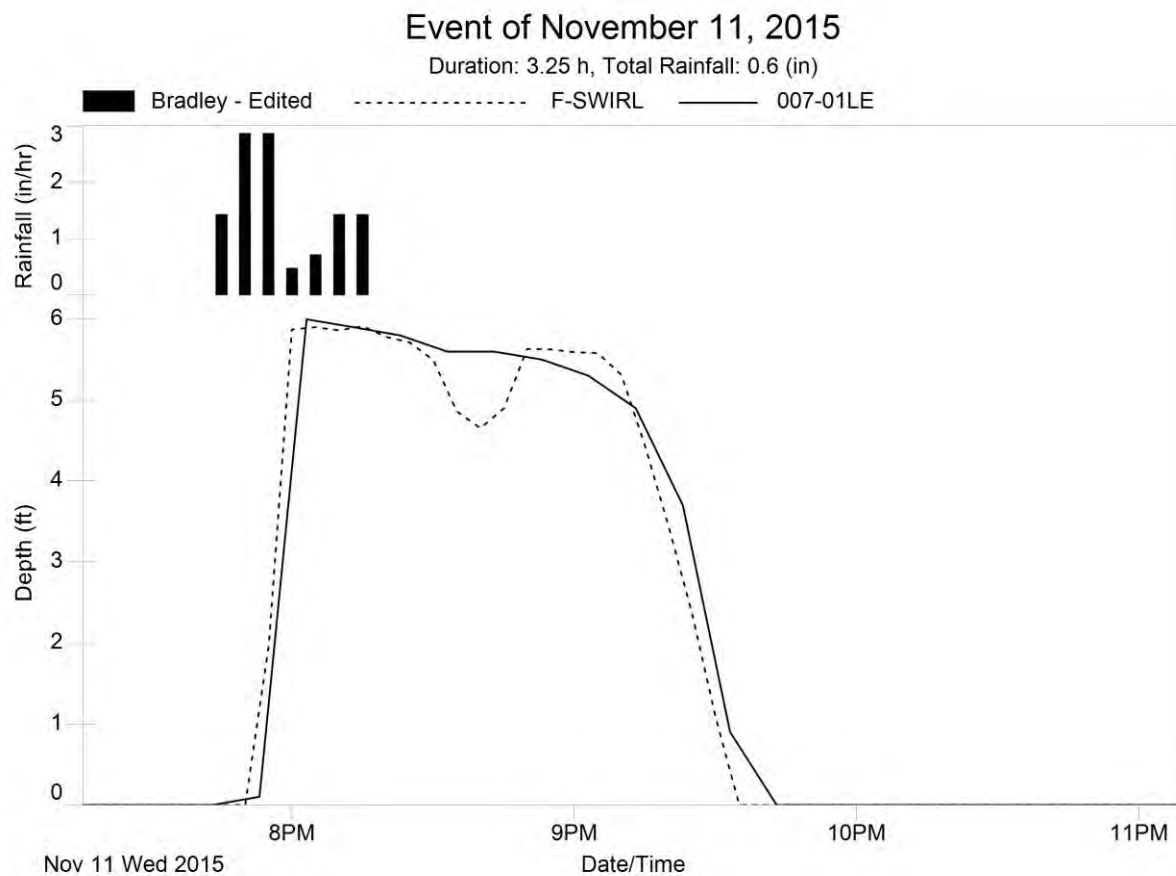
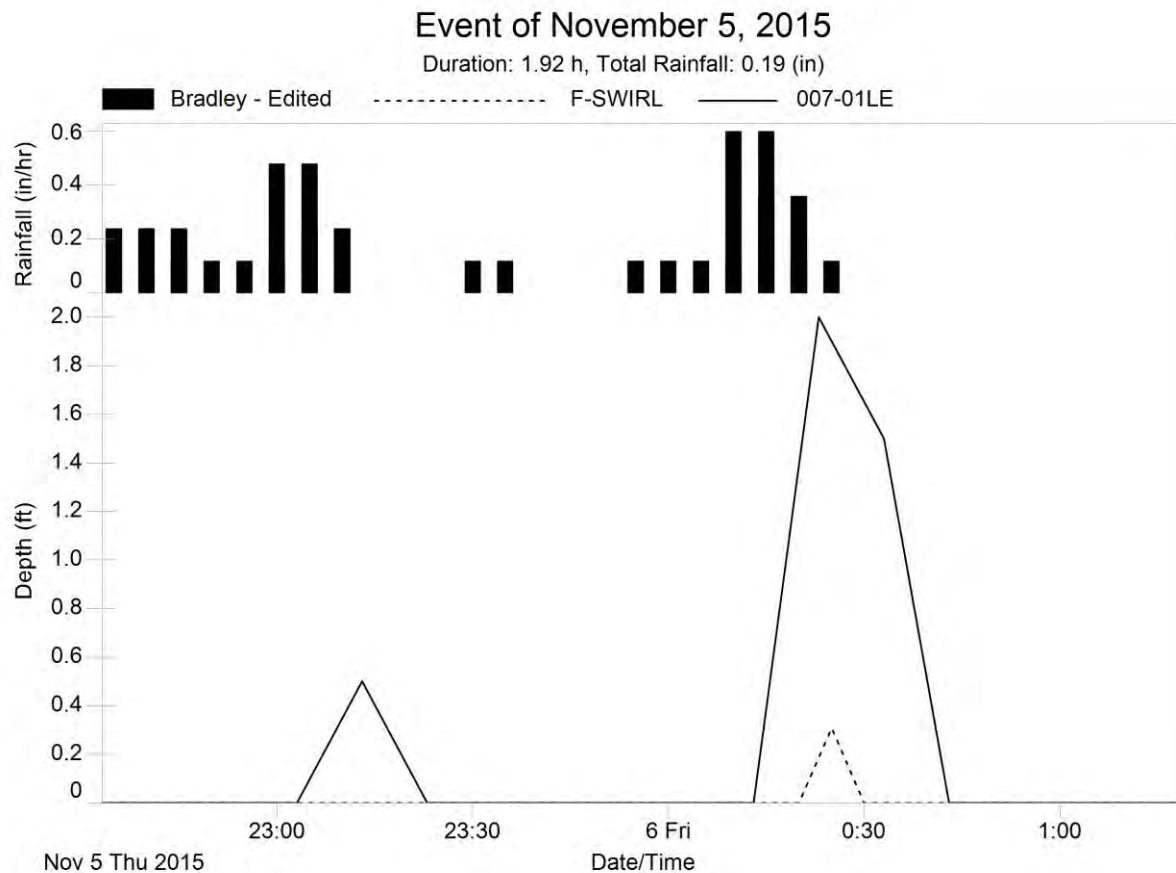


Event of September 18, 2015

Duration: 10.25 h, Total Rainfall: 1.54 (in)



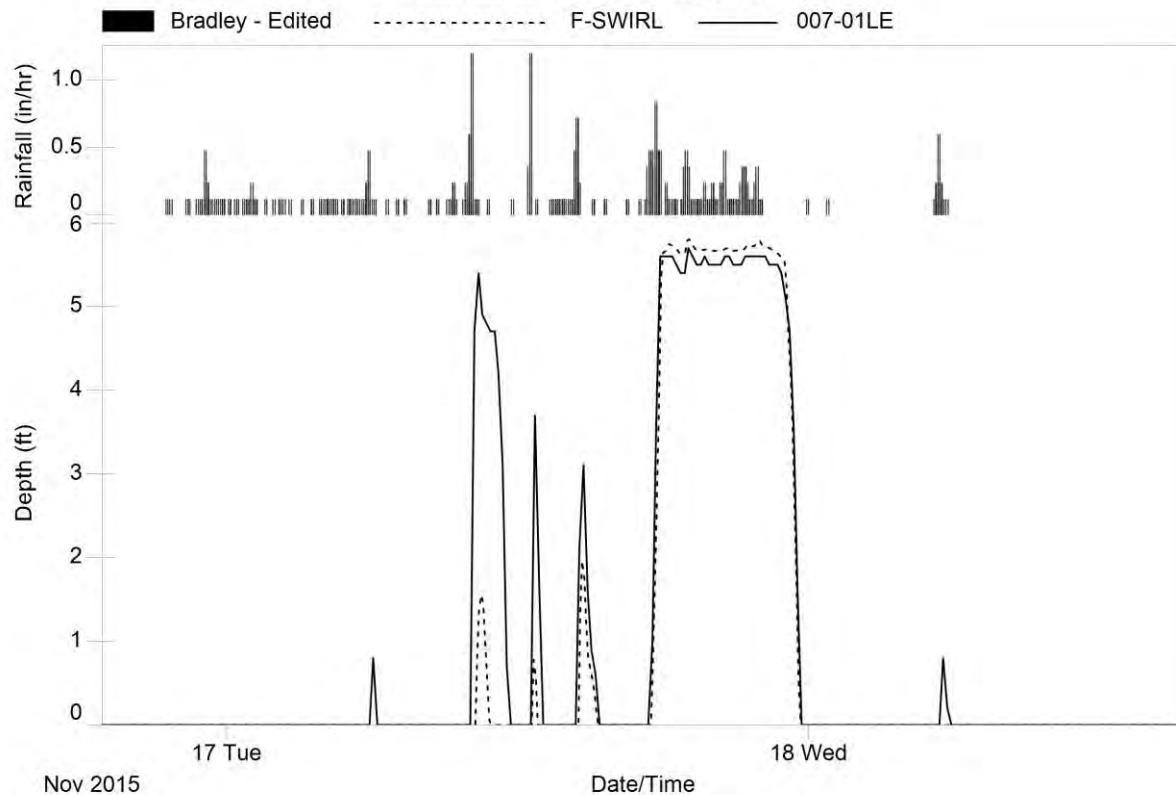
Fayette 007-01LE – Calibration Events



Fayette 007-01LE – Calibration Events

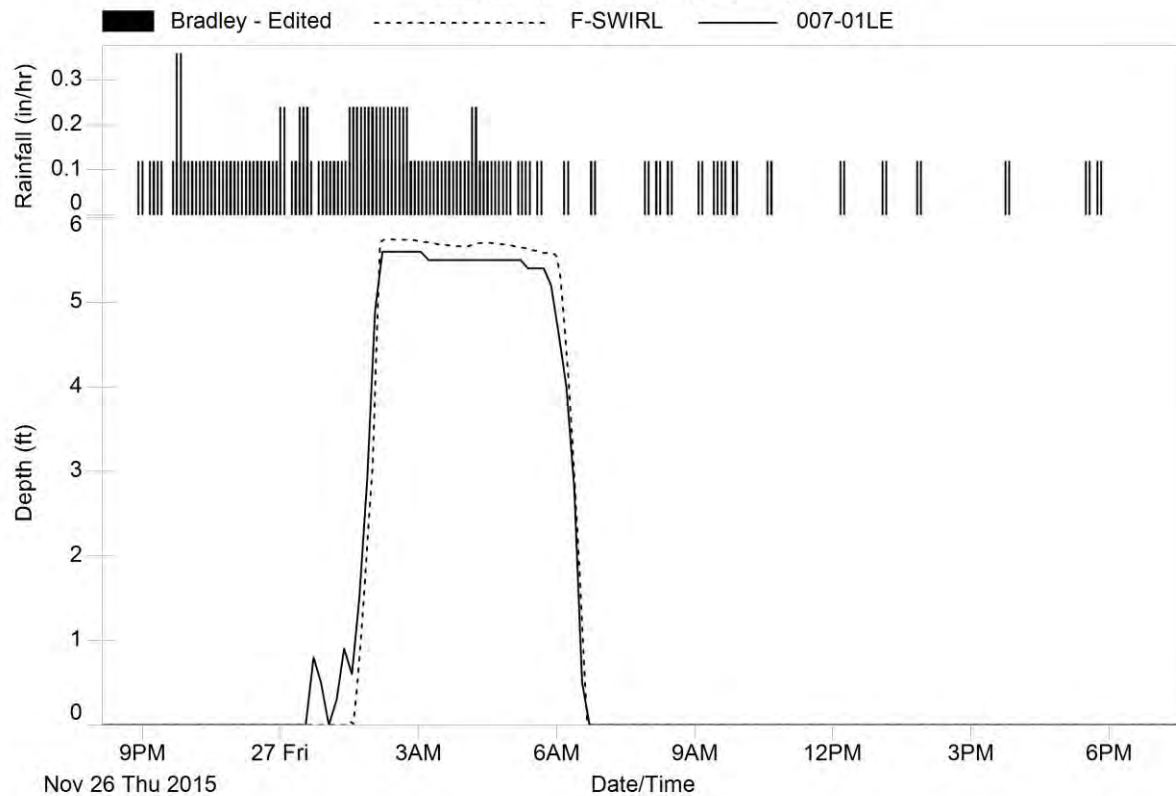
Event of November 16, 2015

Duration: 37.17 h, Total Rainfall: 2.33 (in)



Event of November 26, 2015

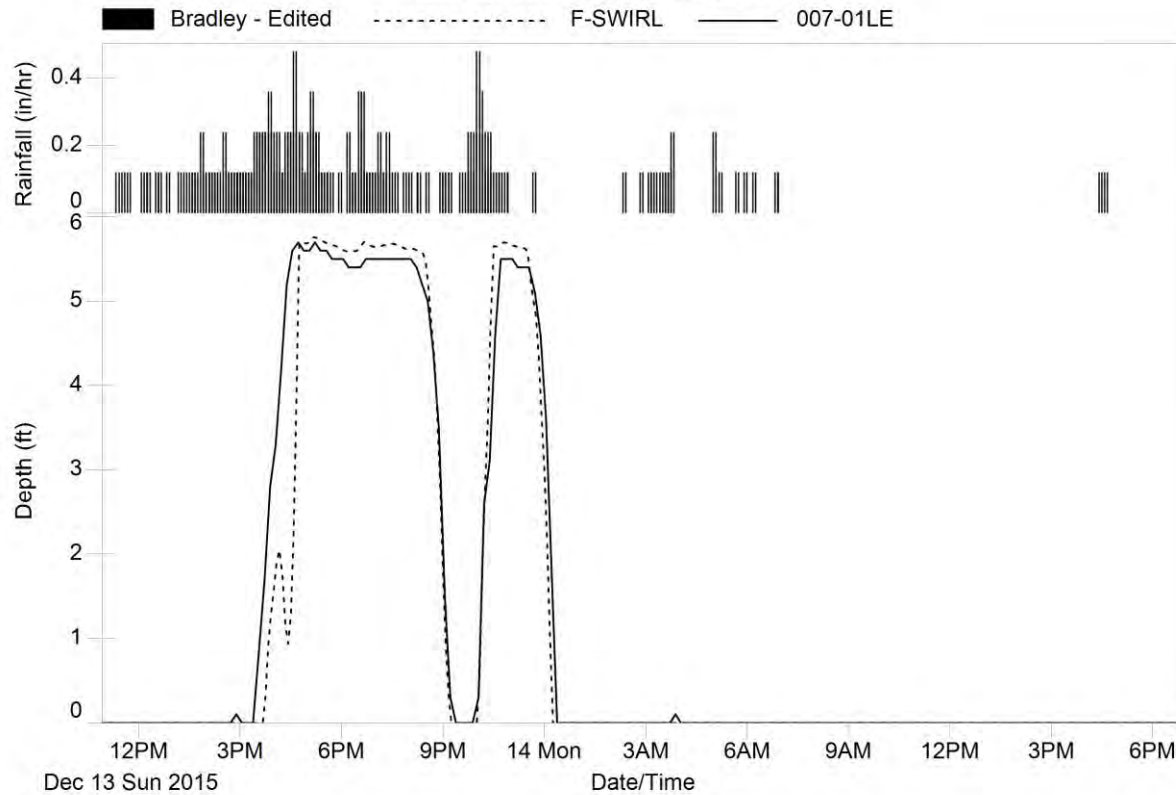
Duration: 19.58 h, Total Rainfall: 1 (in)



Fayette 007-01LE – Calibration Events

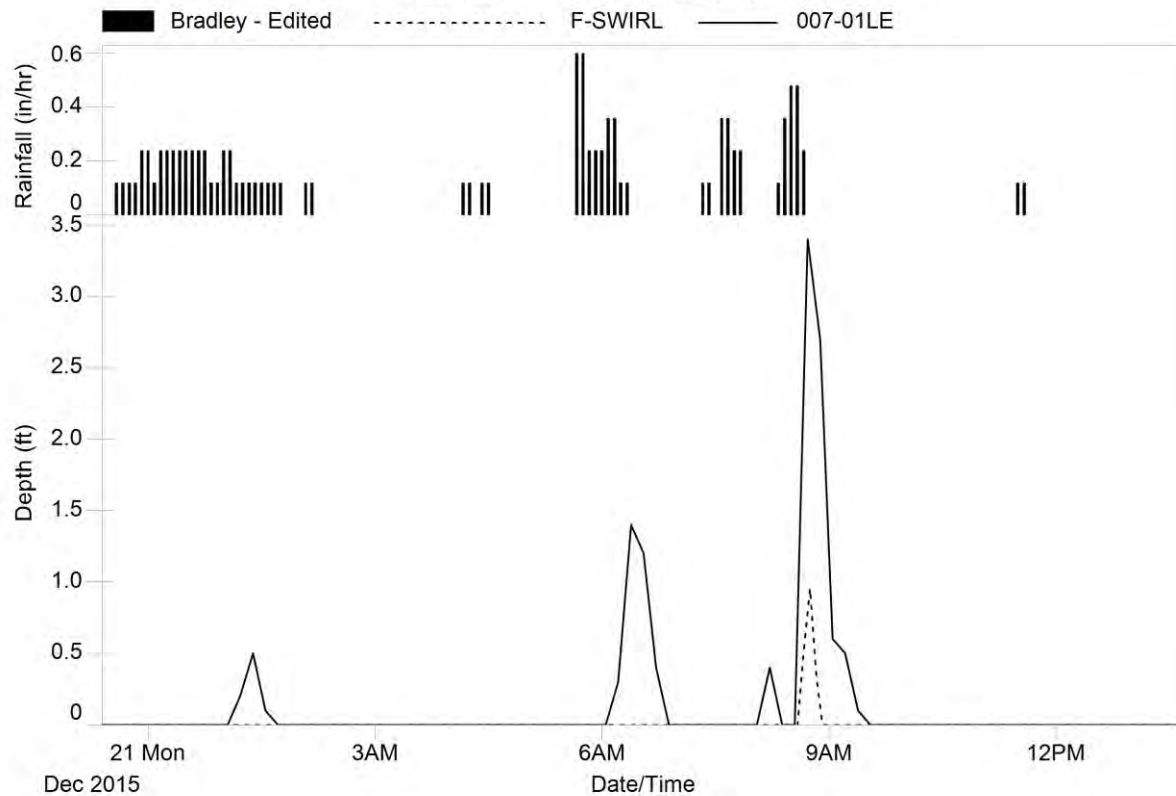
Event of December 13, 2015

Duration: 26.67 h, Total Rainfall: 1.45 (in)



Event of December 21, 2015

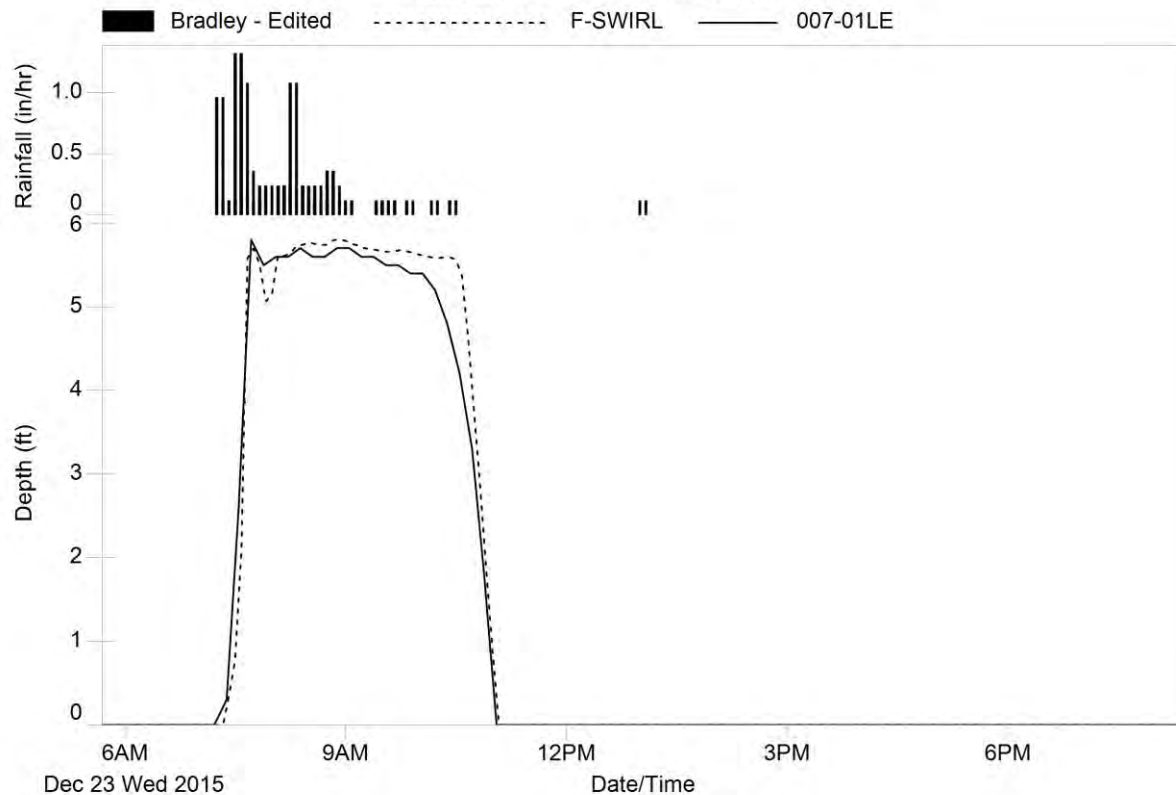
Duration: 11.92 h, Total Rainfall: 0.55 (in)



Fayette 007-01LE – Calibration Events

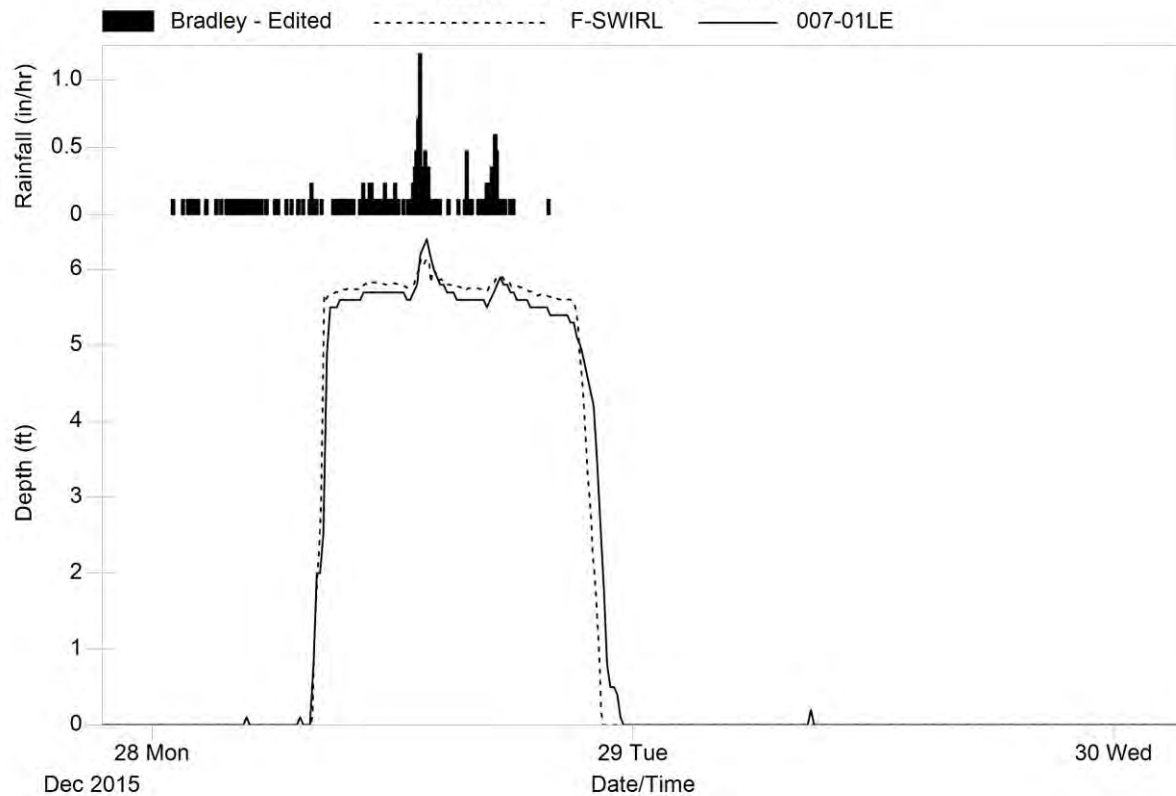
Event of December 23, 2015

Duration: 12.25 h, Total Rainfall: 0.73 (in)



Event of December 28, 2015

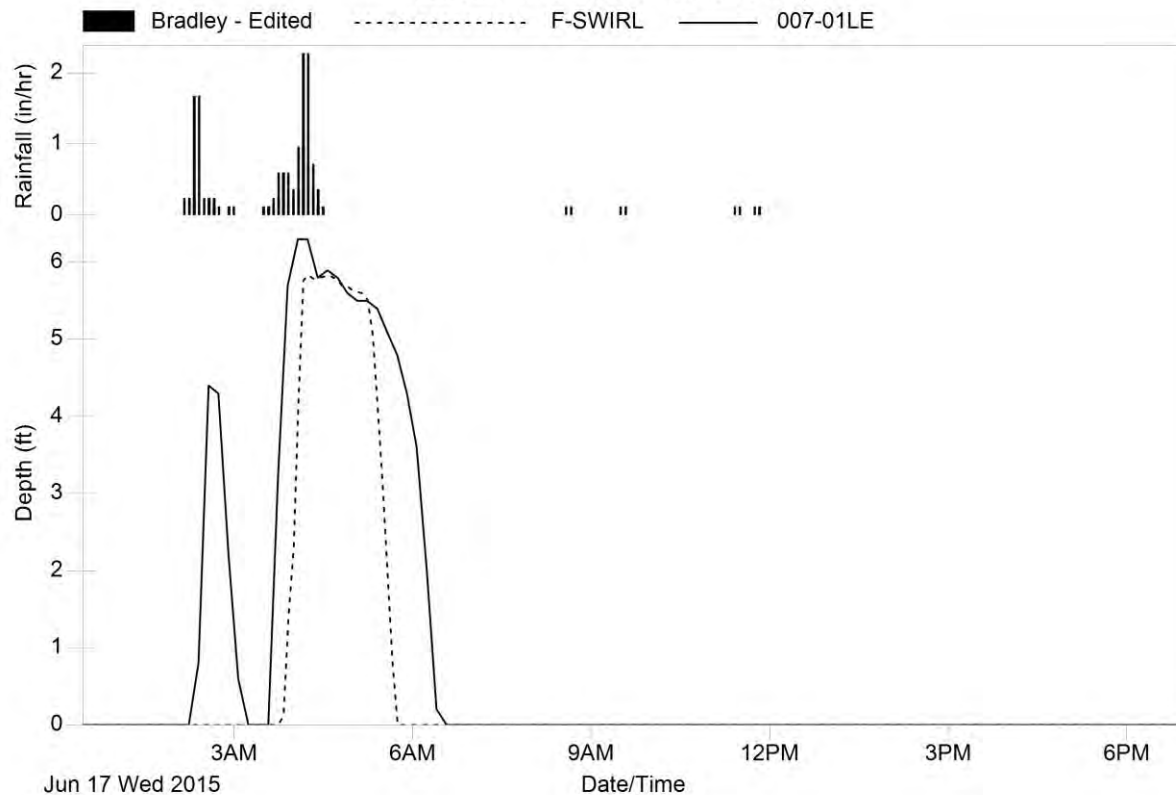
Duration: 45 h, Total Rainfall: 1.6 (in)



Fayette 007-01LE – Verification Events

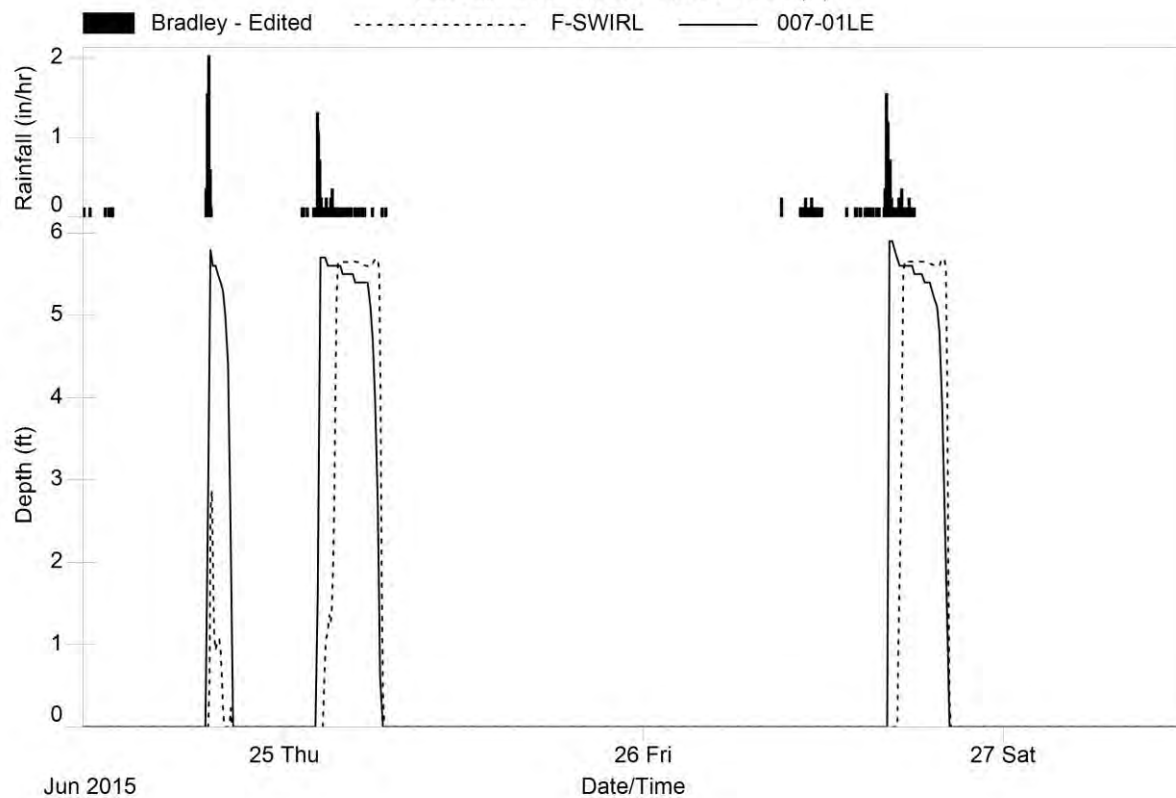
Event of June 17, 2015

Duration: 15.42 h, Total Rainfall: 0.84 (in)



Event of June 24, 2015

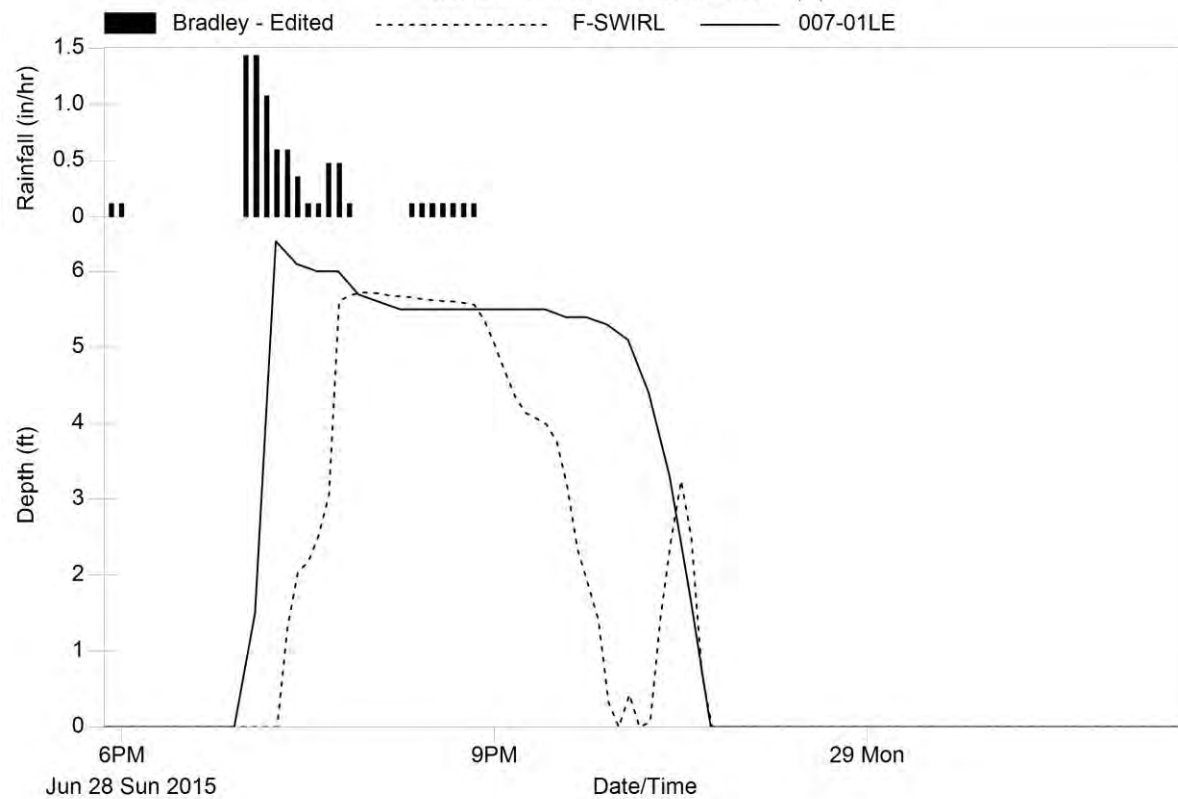
Duration: 61.25 h, Total Rainfall: 1.91 (in)



Fayette 007-01LE – Verification Events

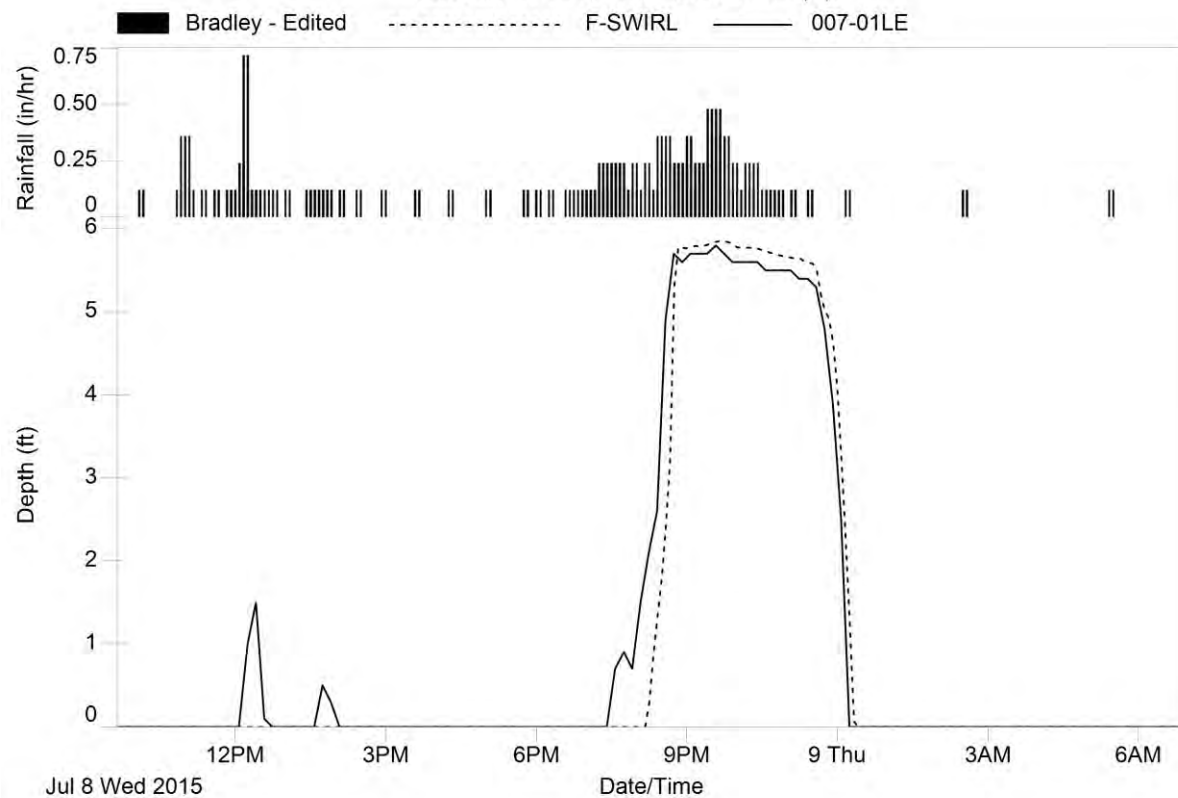
Event of June 28, 2015

Duration: 7.25 h, Total Rainfall: 0.47 (in)



Event of July 8, 2015

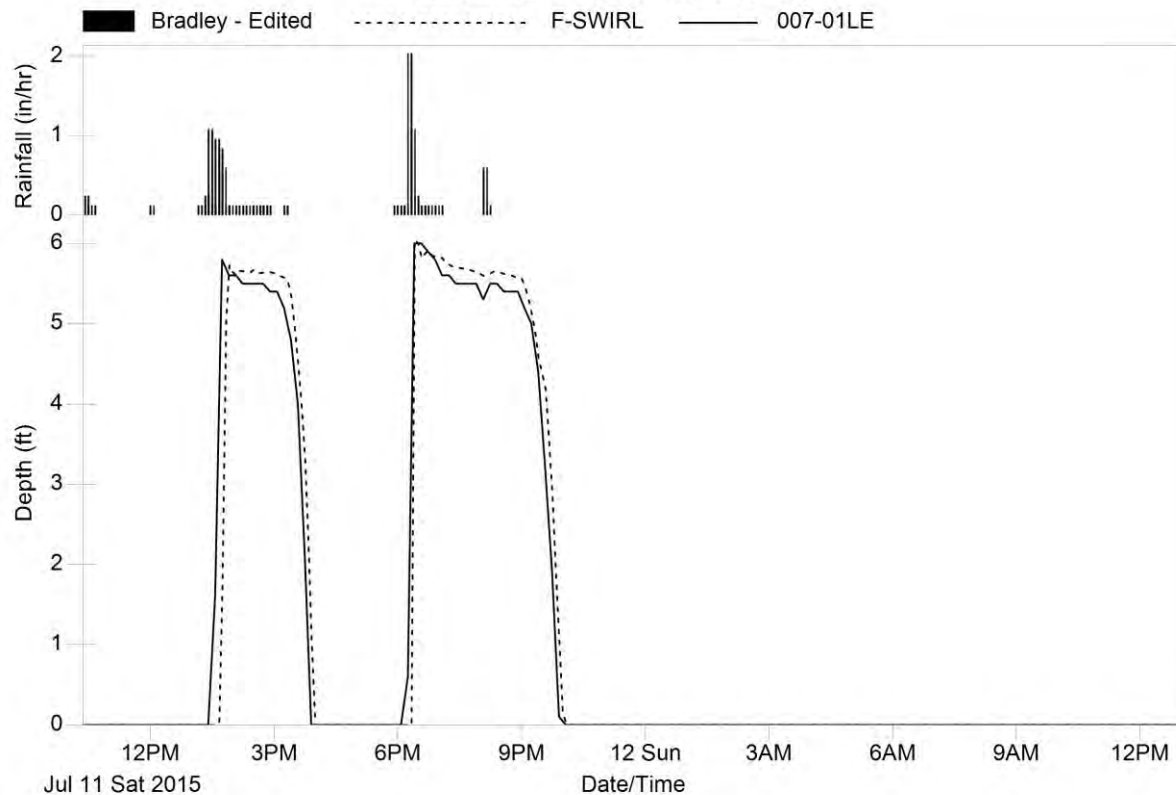
Duration: 17.75 h, Total Rainfall: 1.16 (in)



Fayette 007-01LE – Verification Events

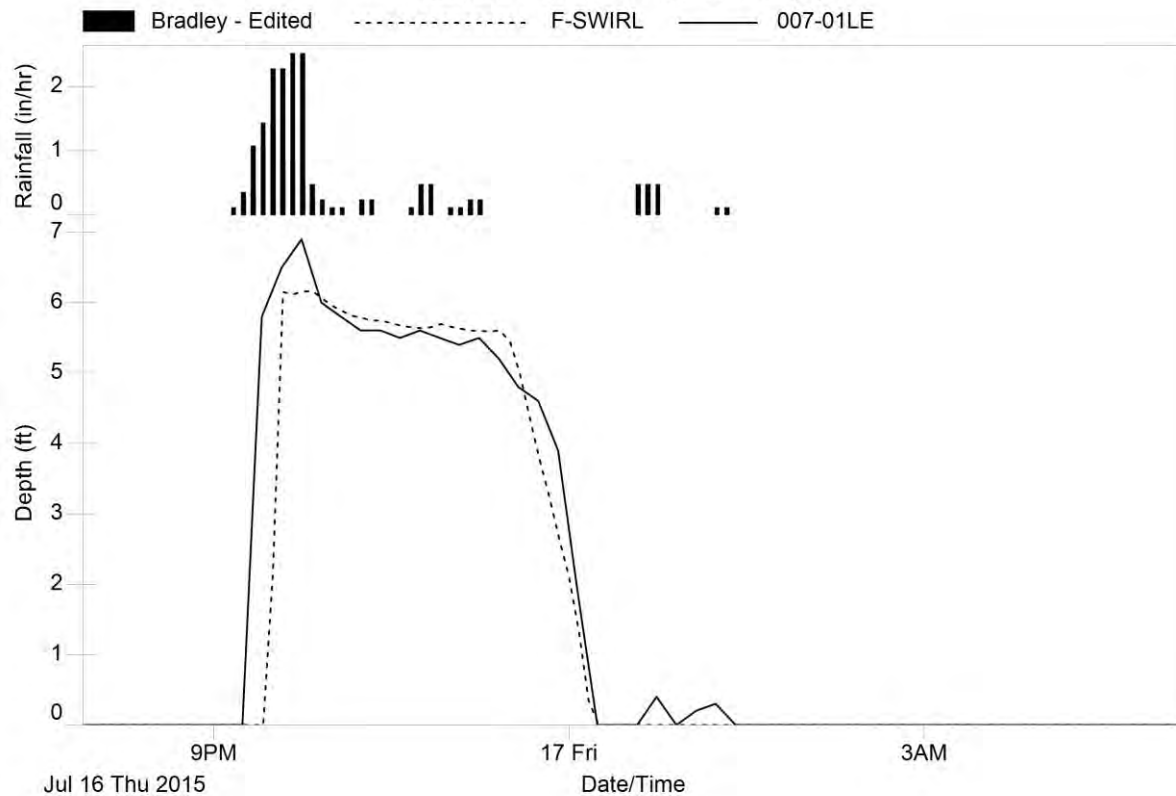
Event of July 11, 2015

Duration: 22.25 h, Total Rainfall: 0.86 (in)

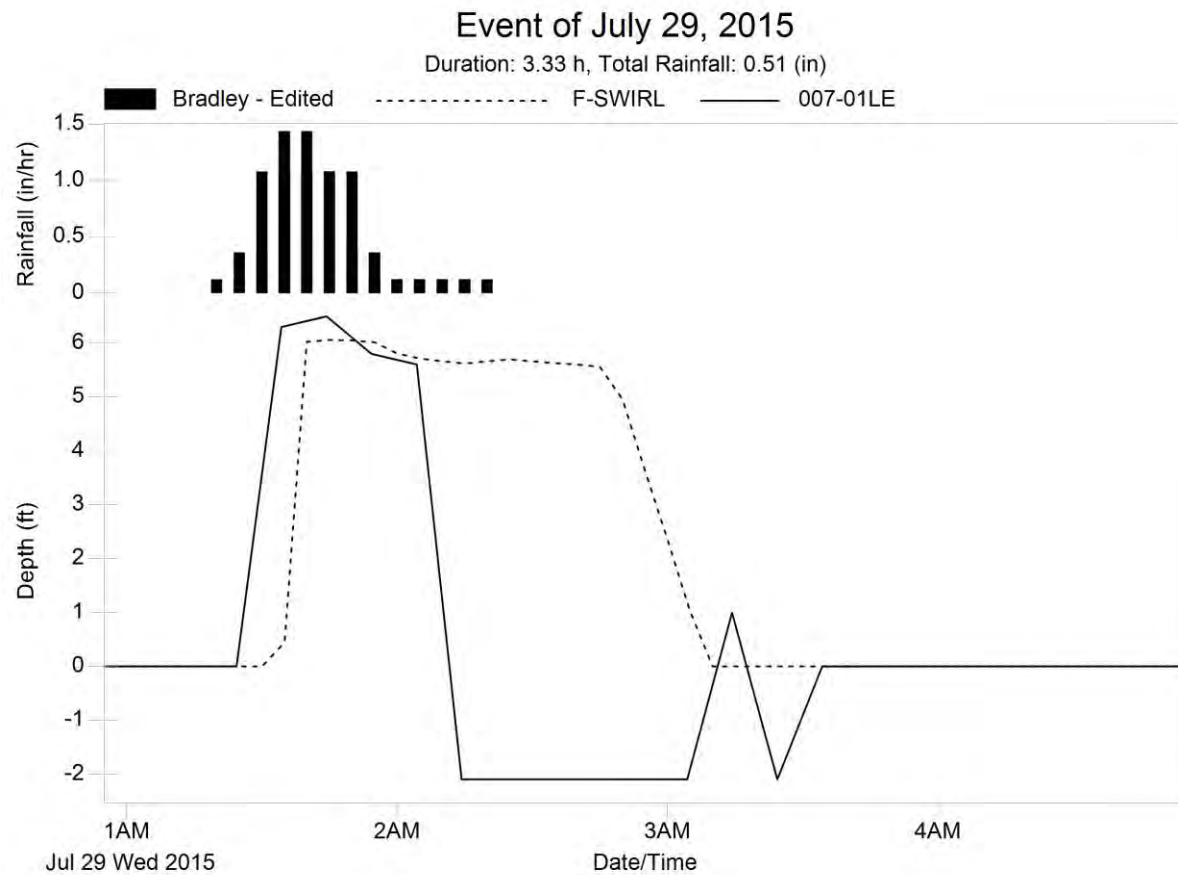


Event of July 16, 2015

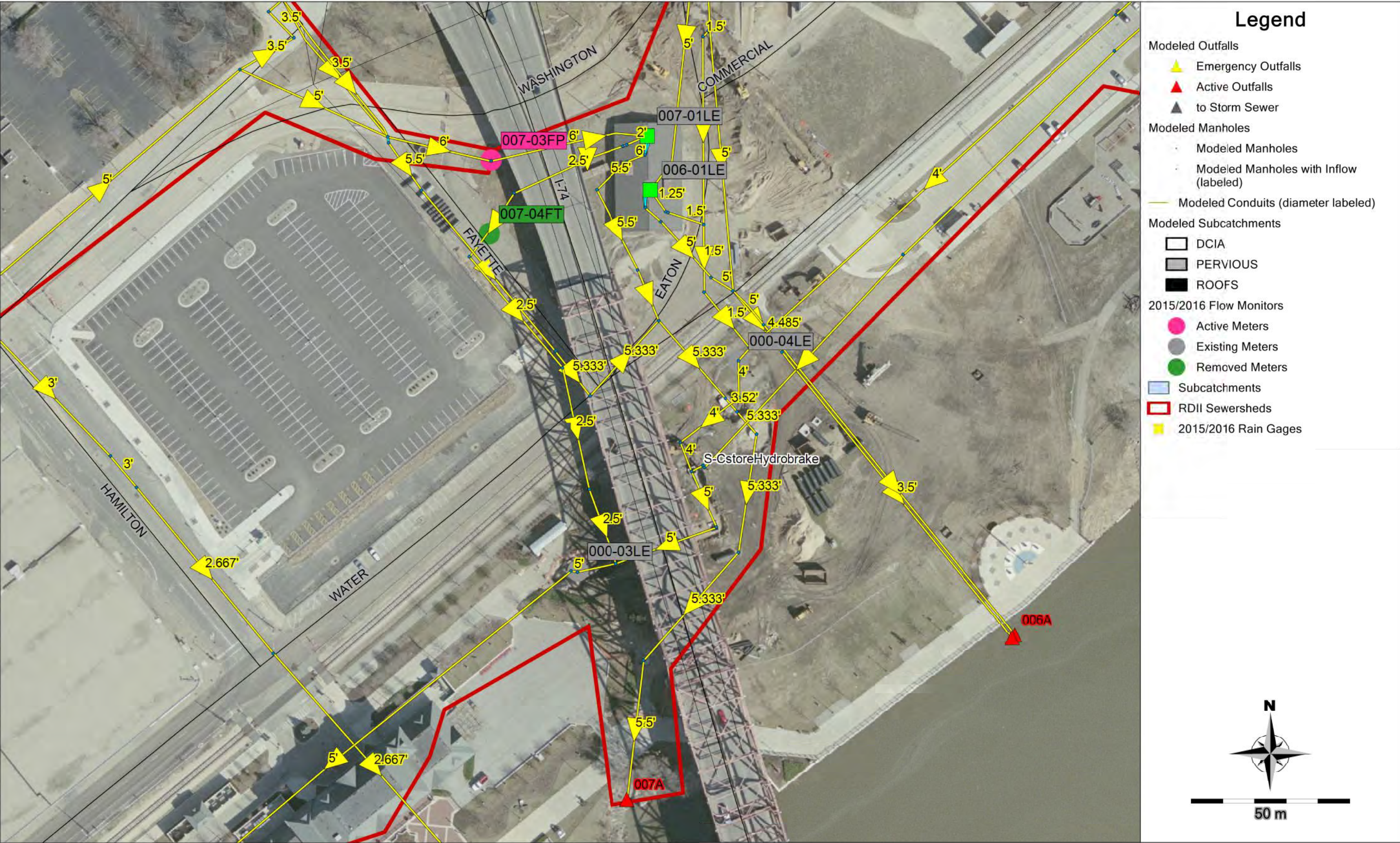
Duration: 7.75 h, Total Rainfall: 0.99 (in)



Fayette 007-01LE – Verification Events



007-04FT - Fayette Throttle Pipe



Date	Duration (h)	Rainfall (in)	Maximum Flow (cfs)		Maximum Flow (mgd)		Total Volume (ft³)		Volume (million gallons)		Peak Flow Rate (-15% to +25%)	Flow Volume (-10% to +20%)	Rainfall Variability
		Bradley - Edited	Observed	Modeled	Observed	Modeled	Observed	Modeled	Observed	Modeled			
CALIBRATION EVENTS - FLOW													
9/8/2015 10:40	4.17	0.86	33.88	39.88	21.886	25.762	220500	265400	1.649	1.985	18%	20%	variable
9/18/2015 14:40	11.58	1.56	33.72	39.92	21.783	25.788	348700	403800	2.608	3.020	18%	16%	relatively uniform
11/5/2015 13:40	17.92	0.43	25.99	26.01	16.790	16.802	204000	239400	1.526	1.791	0%	17%	possibly uniform
11/11/2015 19:35	2.75	0.6	30.62	39.98	19.781	25.827	139000	176900	1.040	1.323	31%	27%	relatively uniform
11/16/2015 11:40	51.58	2.45	33.55	31.57	21.673	20.394	1212000	1309000	9.066	9.791	-6%	8%	variable
11/26/2015 20:15	37	1.12	23.19	20.23	14.981	13.069	936200	1004000	7.003	7.510	-13%	7%	possibly uniform
12/13/2015 2:10	50.58	1.77	25.9	25.38	16.731	16.395	1255000	1392000	9.387	10.412	-2%	11%	possibly uniform
12/20/2015 22:15	18.58	0.7	28.35	27.87	18.314	18.004	434700	473900	3.252	3.545	-2%	9%	relatively uniform
12/23/2015 6:30	9.58	0.73	34.73	38.86	22.436	25.104	343300	408900	2.568	3.059	12%	19%	variable
12/28/2015 0:40	27.83	1.64	23.23	22.21	15.007	14.348	1260000	1253000	9.425	9.372	-4%	-1%	variable
VERIFICATION EVENTS - FLOW													
6/15/2015 19:10	71.33	1.7	32.72	27.12	21.137	17.520	1800000	1545000	13.464	11.557	-17%	-14%	variable
6/24/2015 18:00	62.75	1.91	33.81	31.94	21.841	20.633	1446000	1329000	10.816	9.941	-6%	-8%	variable
6/28/2015 18:45	5.17	0.47	33.84	29.53	21.861	19.076	209200	217600	1.565	1.628	-13%	4%	variable
7/8/2015 5:20	24.5	1.39	24.16	23.37	15.607	15.097	670300	709400	5.014	5.306	-3%	6%	relatively uniform
7/11/2015 8:45	14	1.07	34.16	39.19	22.067	25.317	515600	571000	3.857	4.271	15%	11%	possibly uniform
7/16/2015 21:05	4.58	0.99	34.57	40.12	22.332	25.918	204200	236000	1.527	1.765	16%	16%	relatively uniform
7/29/2015 1:15	1.75	0.51	30.99	40.3	20.020	26.034	87860	134000	0.657	1.002	30%	53%	variable
8/18/2015 2:05	2.17	0.45	33.34	39.46	21.538	25.491	121000	156200	0.905	1.168	18%	29%	possibly uniform
8/18/2015 17:15	2.75	0.52	34.86	40.28	22.520	26.021	152100	223600	1.138	1.673	16%	47%	relatively uniform

Notes:

Results from interceptor only model using flow meter data as influent flow to regulator.

WEIGHTED AVERAGES

Calibration - Relatively Uniform	16%	14%	relatively uniform
Calibration - Possibly Uniform	-5%	10%	possibly uniform
Calibration - Variable	6%	7%	variable
Calibration Weighted - All Events	6%	9%	
Verification - Relatively Uniform	11%	14%	relatively uniform
Verification - Possibly Uniform	17%	14%	possibly uniform
Verification - Variable	-2%	-9%	variable
Verification Weighted - All Events	6%	-2%	
Weighted Average - All Events	6%	4%	
NET AVERAGES			
Calibration - Relatively Uniform	16%	17%	relatively uniform
Calibration - Possibly Uniform	-5%	12%	possibly uniform
Calibration - Variable	5%	12%	variable
Calibration Net - All Events	5%	13%	
Verification - Relatively Uniform	9%	23%	relatively uniform
Verification - Possibly Uniform	17%	20%	possibly uniform
Verification - Variable	-1%	9%	variable
Verification Net - All Events	6%	16%	
Net Average - All Events	6%	15%	

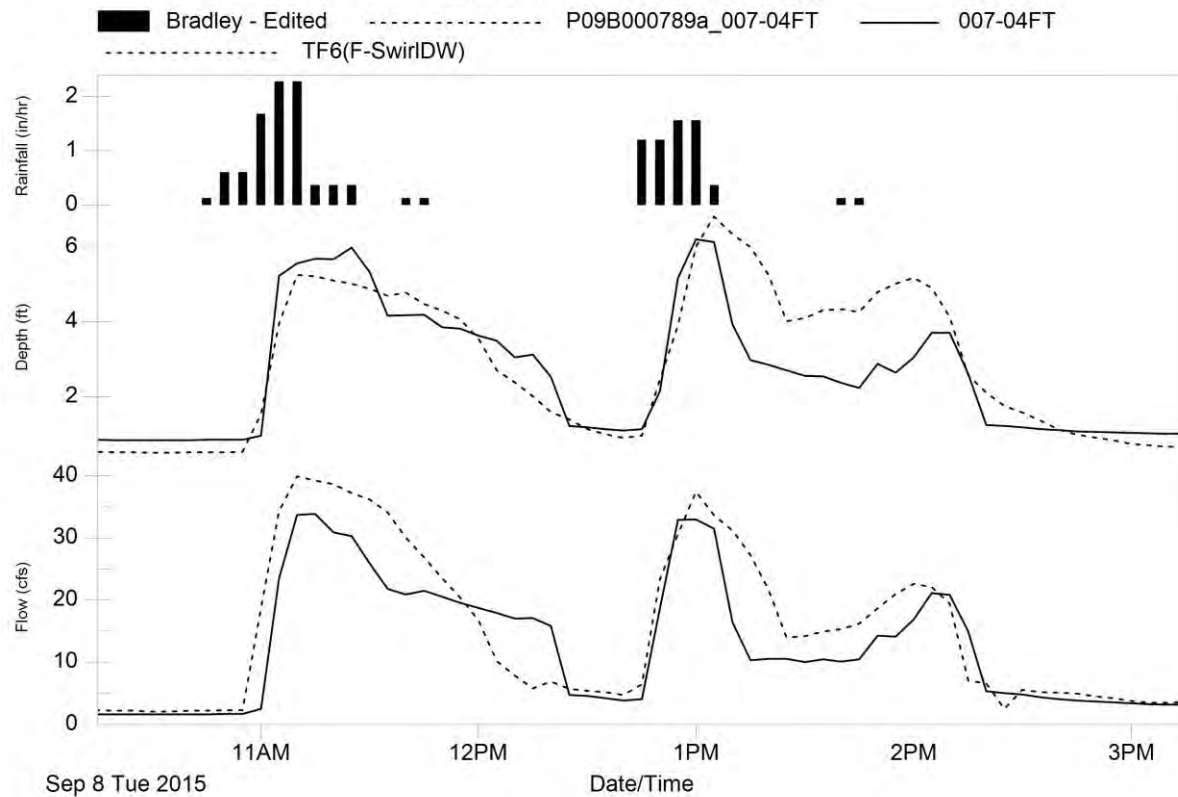
Date	Duration (h)	Maximum Depth (ft)		Minimum Depth (ft)		Average Depth (ft)		Maximum Depth (ft)	Minimum Depth (ft)	Average Depth (ft)	
		metered	modeled	metered	modeled	metered	modeled	Surcharged: -0.33 ft to +1.67 ft	Surcharged: -0.33 ft to +1.67 ft	Surcharged: -0.33 ft to +1.67 ft	Rainfall Variability
CALIBRATION EVENTS - DEPTH								Non-Surcharged: -0.33 ft to +0.33 ft	Non-Surcharged: -0.33 ft to +0.33 ft	Non-Surcharged: -0.33 ft to +0.33 ft	
9/8/2015 10:40:00	4.17	6.207	6.818	0.834	0.513	2.943	3.331	0.611	-0.321	0.388	variable
9/18/2015 14:40:00	11.58	6.307	6.575	0.800	0.530	1.908	2.193	0.268	-0.271	0.285	relatively uniform
11/5/2015 13:40:00	17.92	3.698	2.710	0.595	0.382	0.924	0.633	-0.988	-0.213	-0.291	possibly uniform
11/11/2015 19:35:00	2.75	6.292	6.654	0.713	0.471	2.881	3.660	0.362	-0.242	0.779	relatively uniform
11/16/2015 11:40:00	51.58	6.027	6.643	0.695	0.468	1.435	1.397	0.616	-0.227	-0.038	variable
11/26/2015 20:15:00	37.00	4.553	4.998	0.808	0.549	1.520	1.466	0.445	-0.260	-0.054	possibly uniform
12/13/2015 2:10:00	50.58	5.070	5.497	0.684	0.450	1.493	1.469	0.427	-0.235	-0.024	possibly uniform
12/20/2015 22:15:00	18.58	4.636	3.174	0.821	0.545	1.342	0.992	-1.462	-0.276	-0.350	relatively uniform
12/23/2015 6:30:00	9.58	6.186	6.374	0.846	0.579	1.988	2.534	0.188	-0.266	0.546	variable
12/28/2015 0:40:00	27.83	4.250	5.681	1.115	0.735	2.496	3.320	1.431	-0.380	0.824	variable
VERIFICATION EVENTS - DEPTH											
6/15/2015 19:10:00	71.33	6.539	6.231	1.051	0.626	1.550	1.075	-0.308	-0.425	-0.475	variable
6/24/2015 18:00:00	62.75	6.483	5.445	0.935	0.604	1.559	1.347	-1.038	-0.331	-0.212	variable
6/28/2015 18:45:00	5.17	6.414	6.769	1.133	0.702	2.967	3.518	0.355	-0.432	0.551	variable
7/8/2015 5:20:00	24.50	4.612	5.071	0.794	0.582	1.664	1.662	0.459	-0.212	-0.002	relatively uniform
7/11/2015 8:45:00	14.00	6.644	7.892	0.989	0.613	2.140	2.748	1.248	-0.376	0.608	possibly uniform
7/16/2015 21:05:00	4.58	7.069	8.118	1.001	0.615	2.551	3.584	1.049	-0.386	1.033	relatively uniform
7/29/2015 1:15:00	1.75	6.806	6.890	0.823	0.512	3.151	4.292	0.084	-0.312	1.141	variable
8/18/2015 2:05:00	2.17	6.084	5.459	0.743	0.462	3.078	2.922	-0.625	-0.281	-0.156	possibly uniform
8/18/2015 17:15:00	2.75	6.155	6.316	0.878	0.583	2.998	3.802	0.161	-0.295	0.804	relatively uniform
Notes: Results from interceptor only model using flow meter data as influent flow to regulator. Surcharge Depth = 2.5 ft						WEIGHTED AVERAGES					
						Calibration - Relatively Uniform		-0.163	-0.264	0.378	relatively uniform
						Calibration - Possibly Uniform		0.040	-0.238	-0.098	possibly uniform
						Calibration - Variable		0.651	-0.308	0.477	variable
						Calibration Weighted - All Events		0.234	-0.277	0.325	All Events
						Verification - Relatively Uniform		0.590	-0.304	0.699	relatively uniform
						Verification - Possibly Uniform		0.353	-0.335	0.157	possibly uniform
						Verification - Variable		-0.225	-0.381	0.451	variable
						Verification Weighted - All Events		0.161	-0.347	0.463	All Events
						Weighted Average - All Events		0.196	-0.313	0.399	
						NET AVERAGES					
						Calibration - Relatively Uniform		-0.277	-0.263	0.238	relatively uniform
						Calibration - Possibly Uniform		-0.039	-0.236	-0.123	possibly uniform
						Calibration - Variable		0.712	-0.299	0.430	variable
						Calibration Net - All Events		0.190	-0.269	0.206	All Events
						Verification - Relatively Uniform		0.556	-0.298	0.612	relatively uniform
						Verification - Possibly Uniform		0.312	-0.328	0.226	possibly uniform
						Verification - Variable		-0.227	-0.375	0.251	variable
						Verification Net - All Events		0.154	-0.339	0.366	All Events
						Net Average - All Events		0.173	-0.302	0.282	

Notes:
Results from interceptor only model using flow meter data as influent flow to regulator.
Surcharge Depth = 2.5 ft

Fayette 007-04FT – Calibration Events

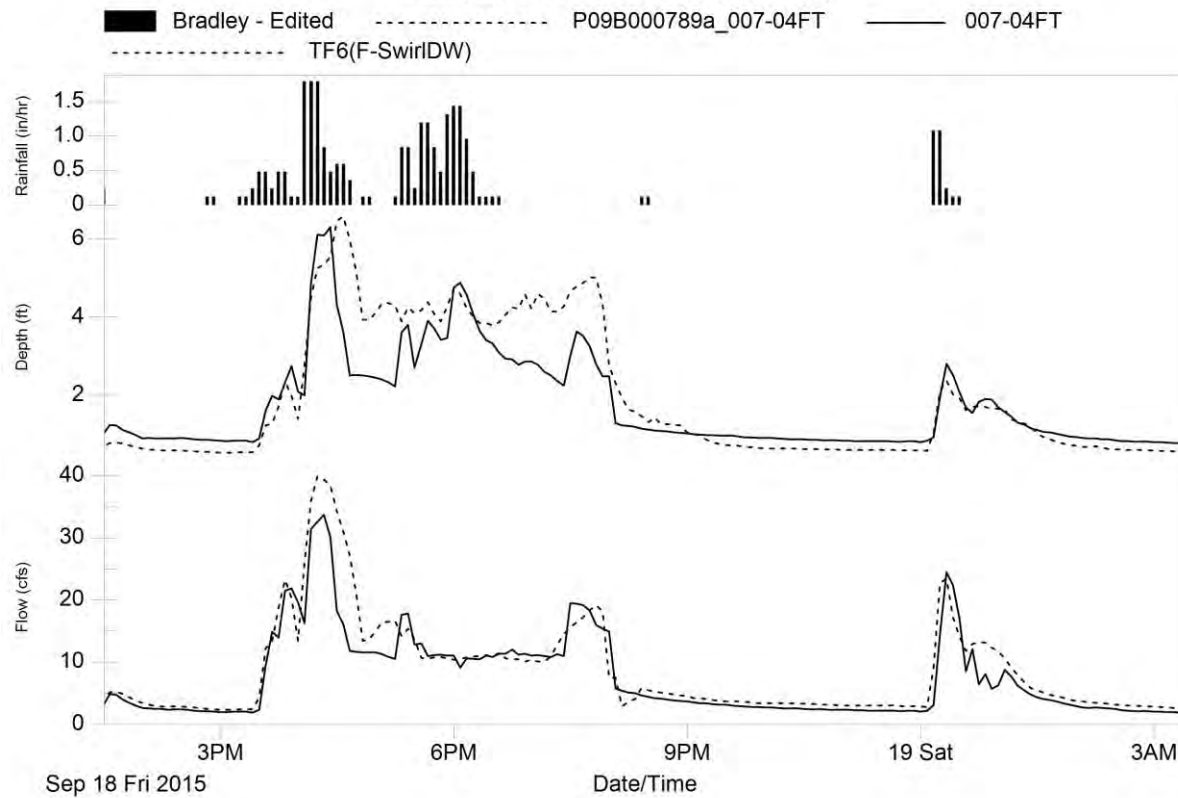
Event of September 8, 2015

Duration: 4.17 h, Total Rainfall: 0.86 (in)



Event of September 18, 2015

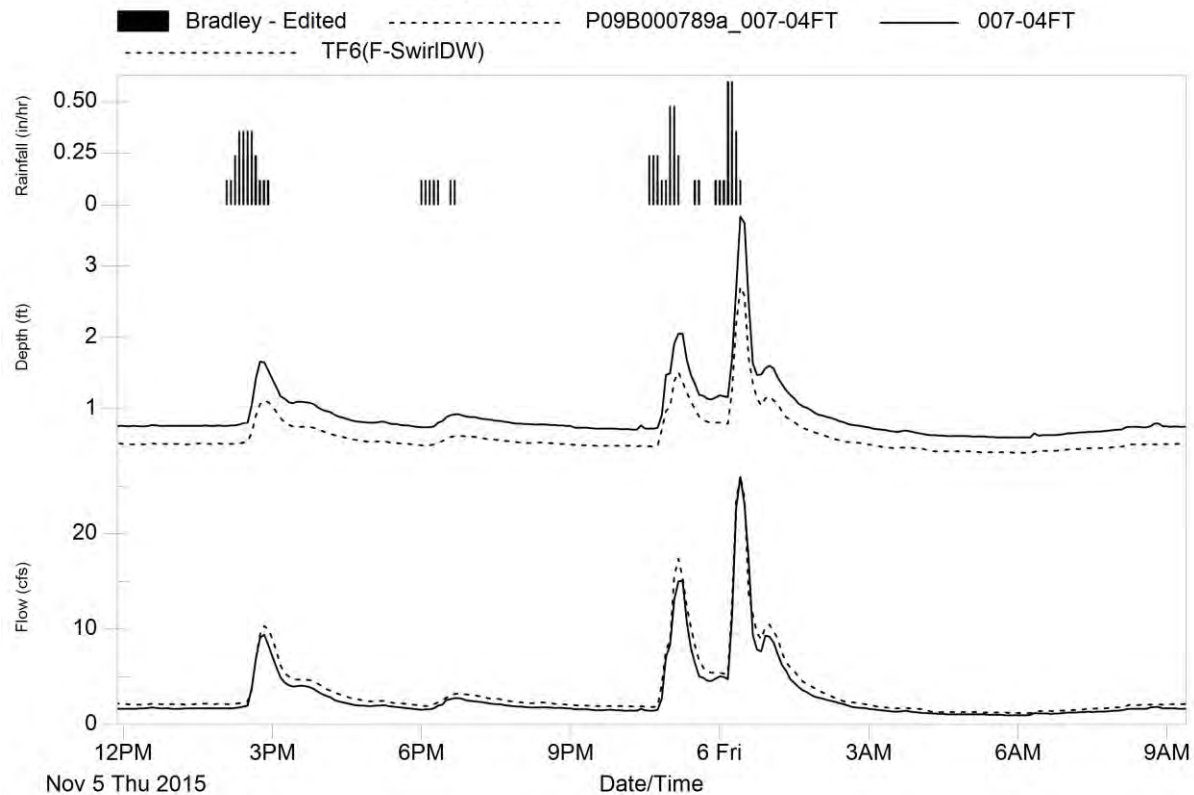
Duration: 11.58 h, Total Rainfall: 1.56 (in)



Fayette 007-04FT – Calibration Events

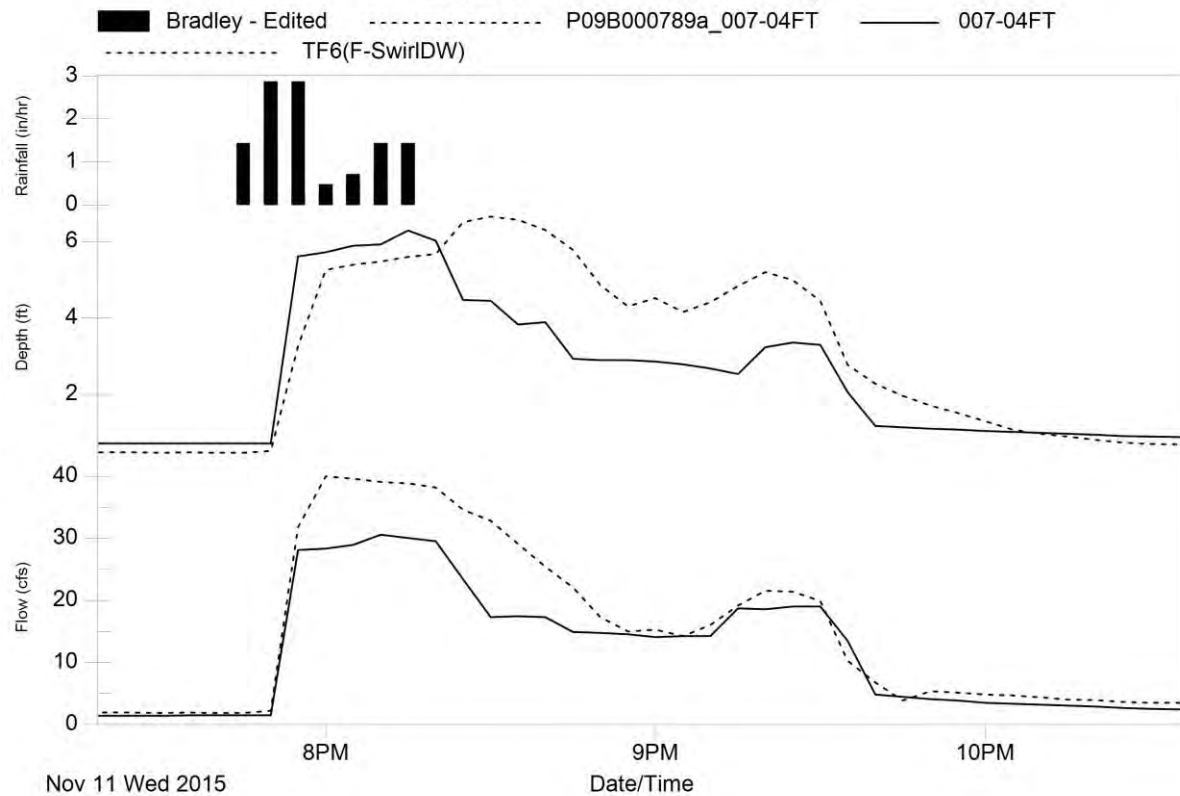
Event of November 5, 2015

Duration: 17.92 h, Total Rainfall: 0.43 (in)



Event of November 11, 2015

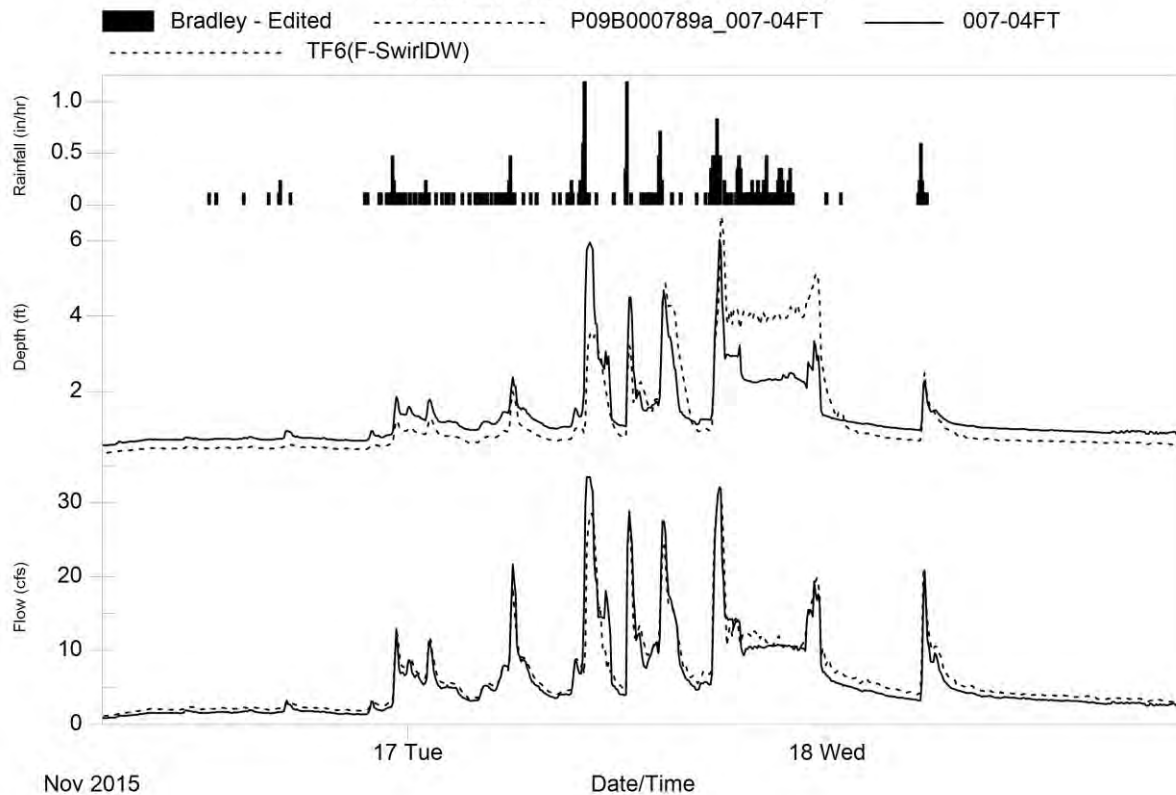
Duration: 2.75 h, Total Rainfall: 0.6 (in)



Fayette 007-04FT – Calibration Events

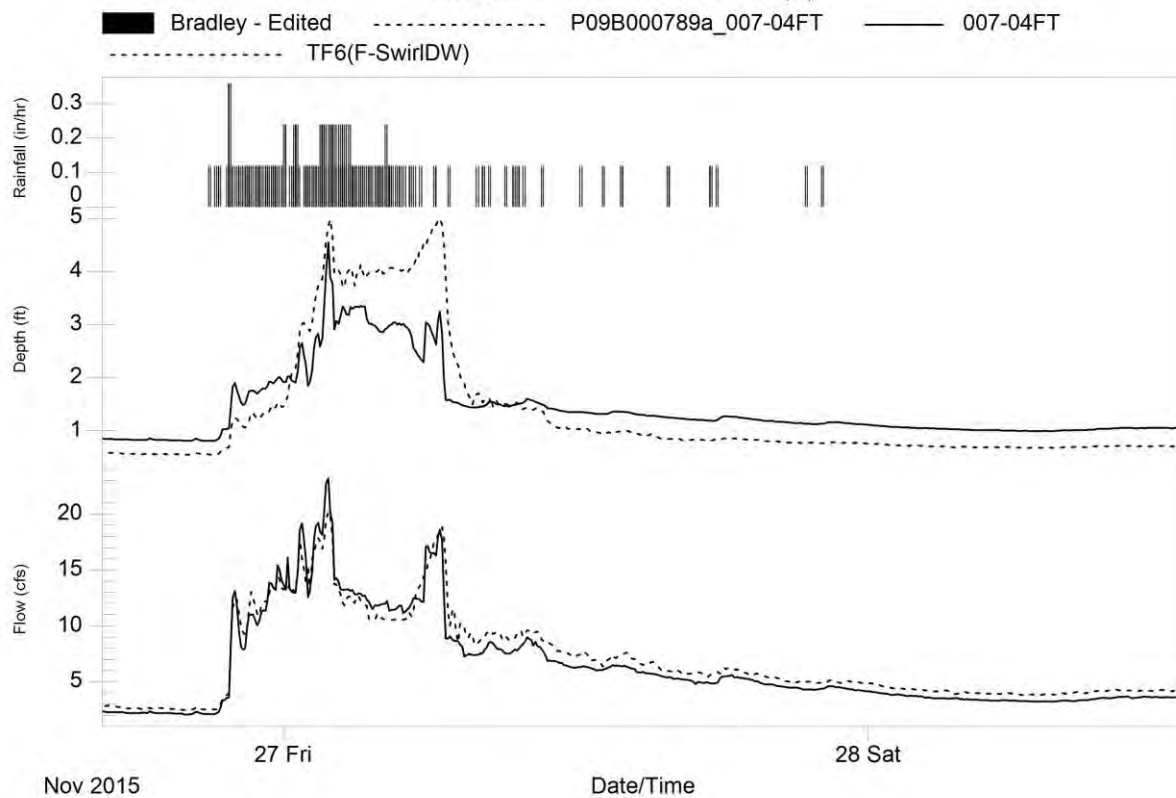
Event of November 16, 2015

Duration: 51.58 h, Total Rainfall: 2.45 (in)



Event of November 26, 2015

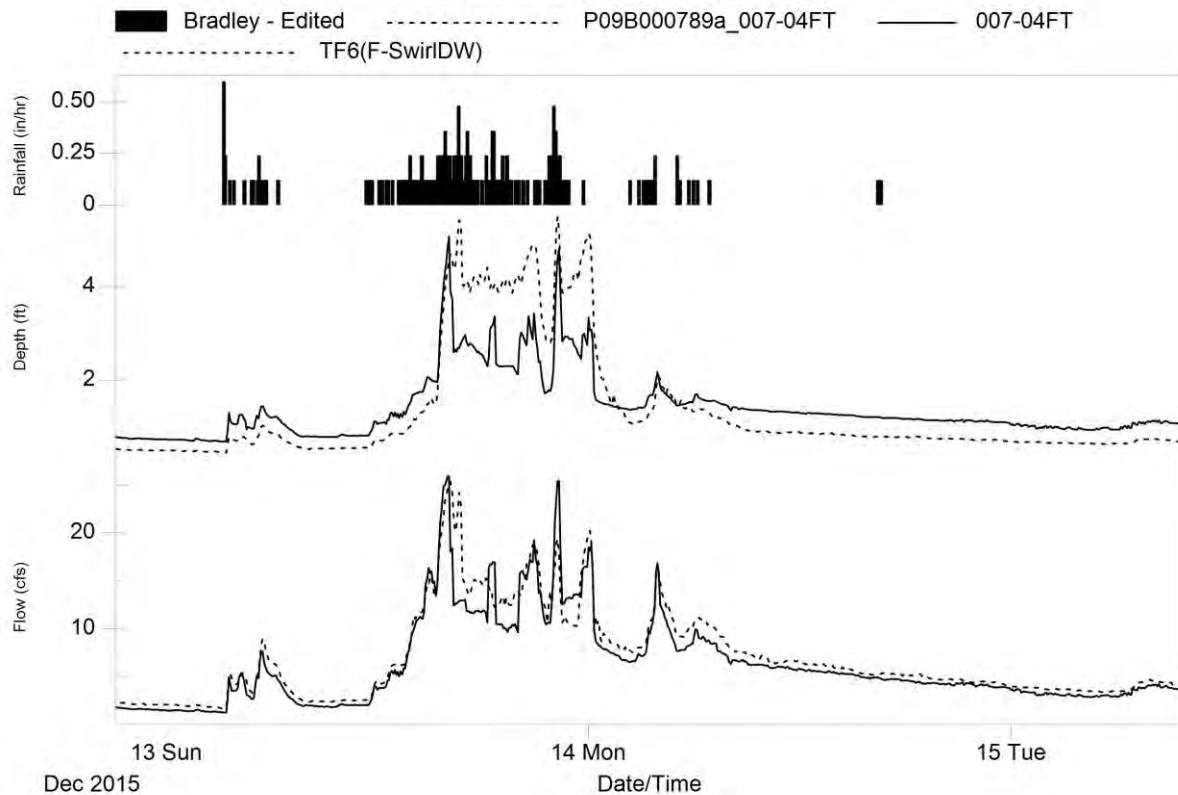
Duration: 37 h, Total Rainfall: 1.12 (in)



Fayette 007-04FT – Calibration Events

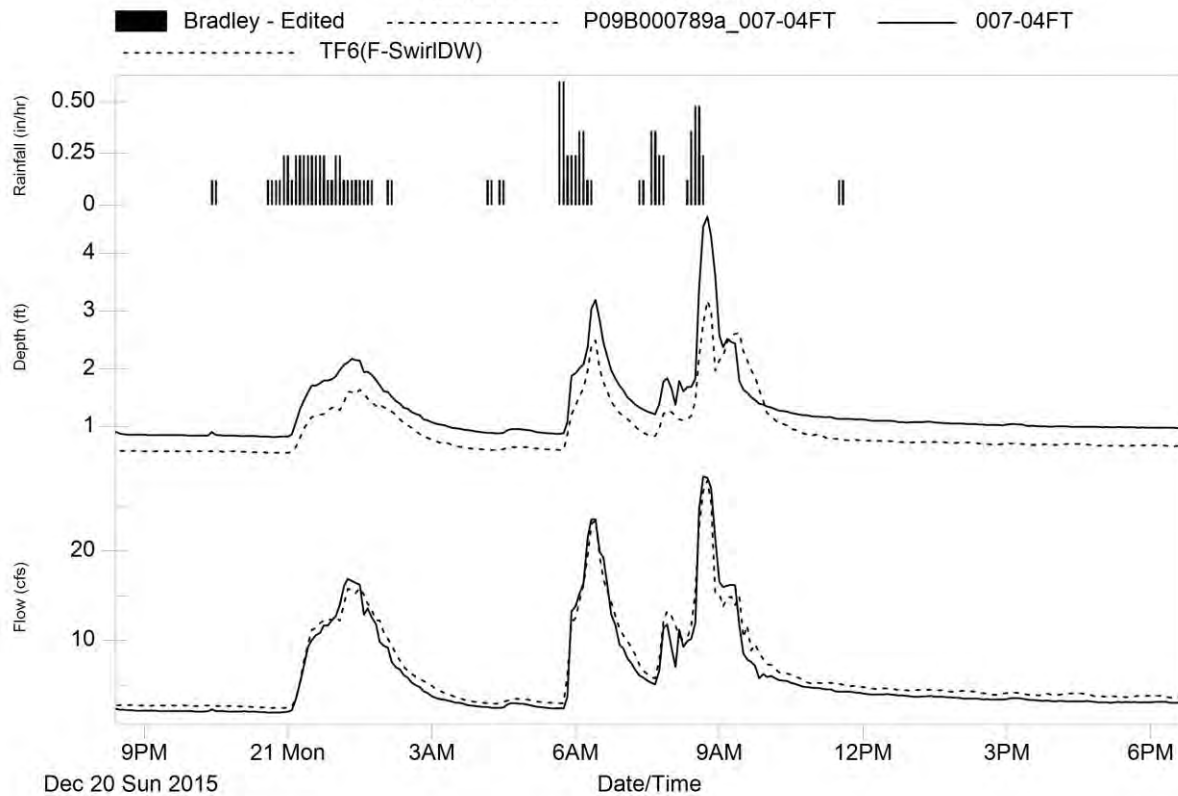
Event of December 13, 2015

Duration: 50.58 h, Total Rainfall: 1.77 (in)



Event of December 20, 2015

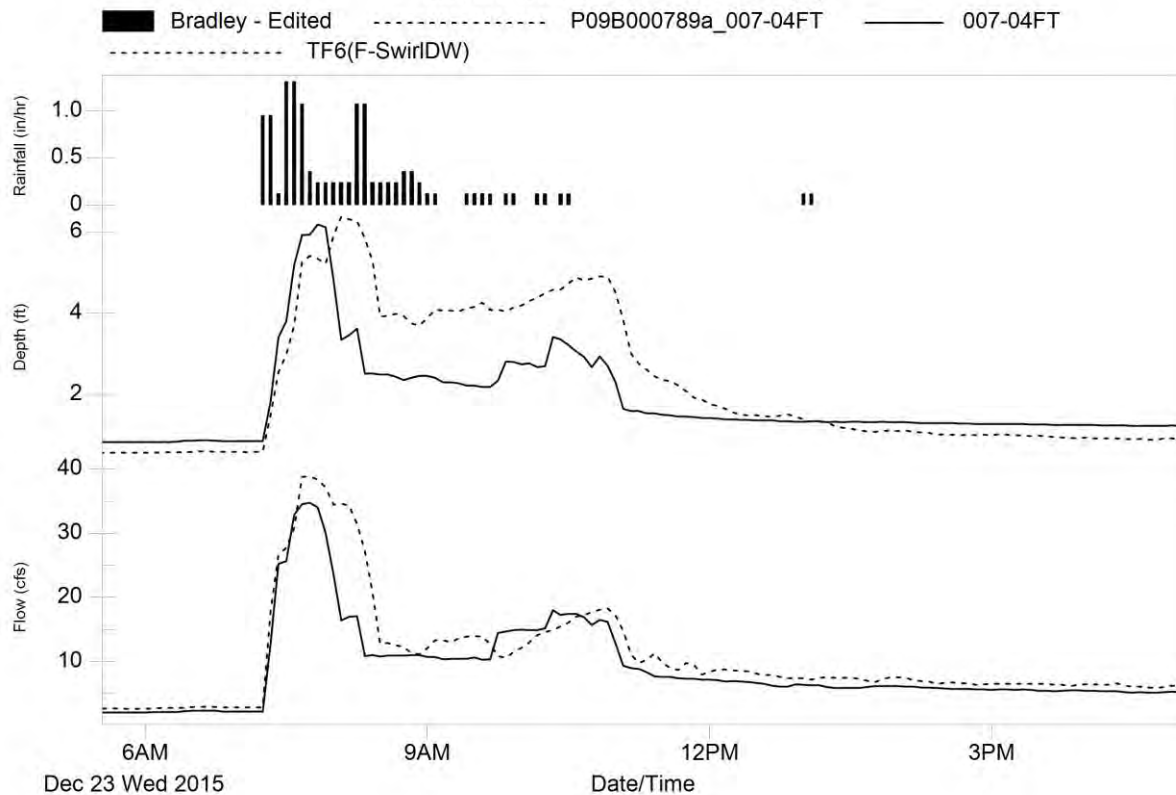
Duration: 18.58 h, Total Rainfall: 0.7 (in)



Fayette 007-04FT – Calibration Events

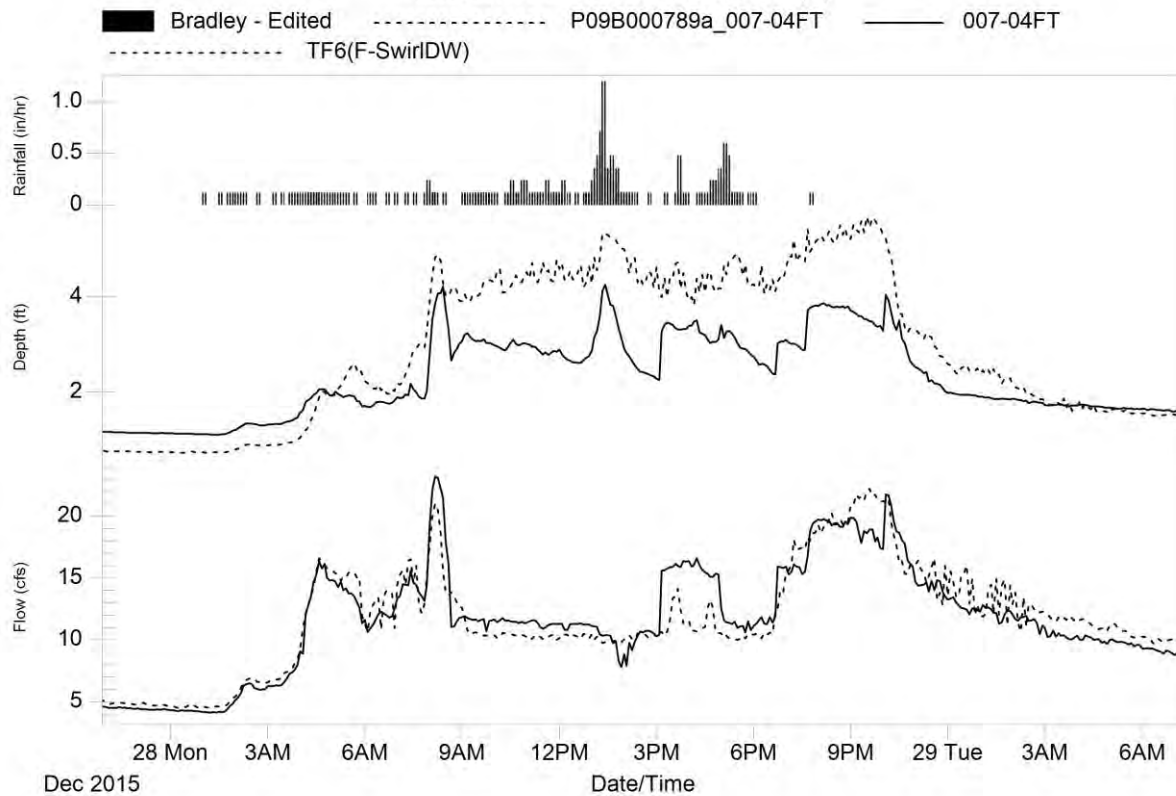
Event of December 23, 2015

Duration: 9.58 h, Total Rainfall: 0.73 (in)



Event of December 28, 2015

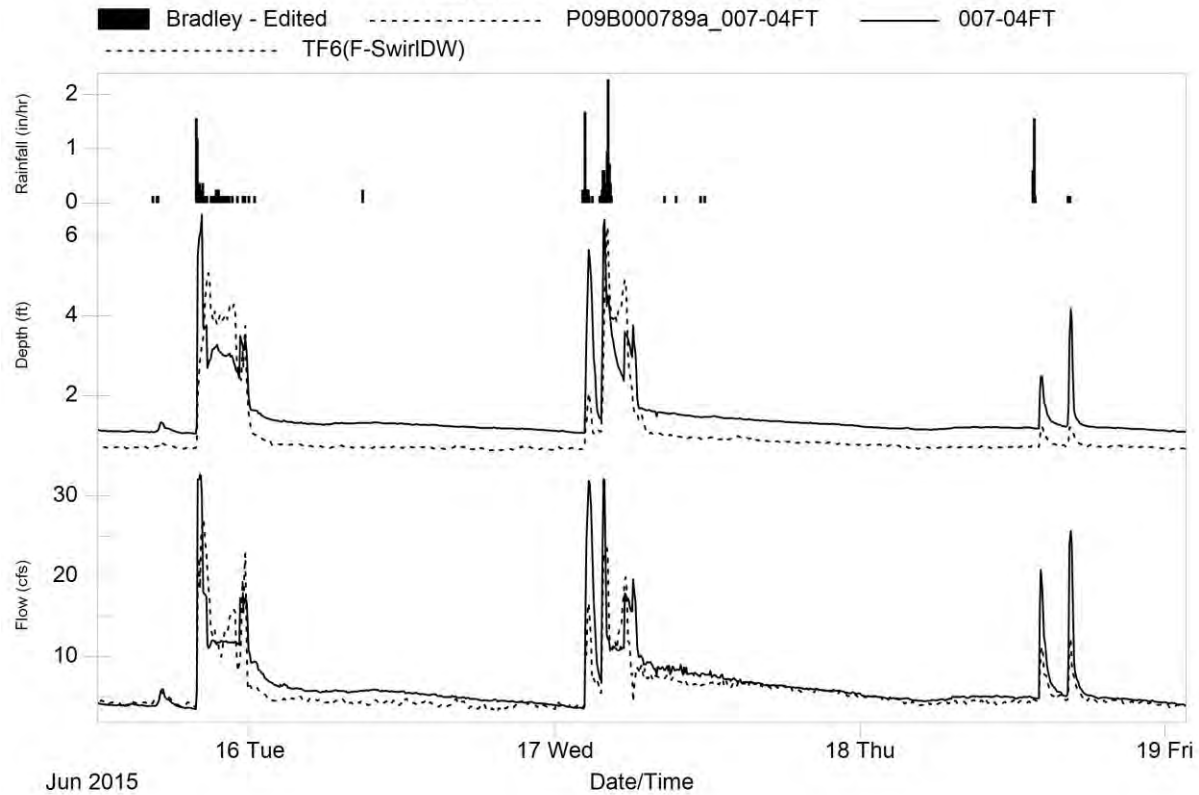
Duration: 27.83 h, Total Rainfall: 1.64 (in)



Fayette 007-04FT – Verification Events

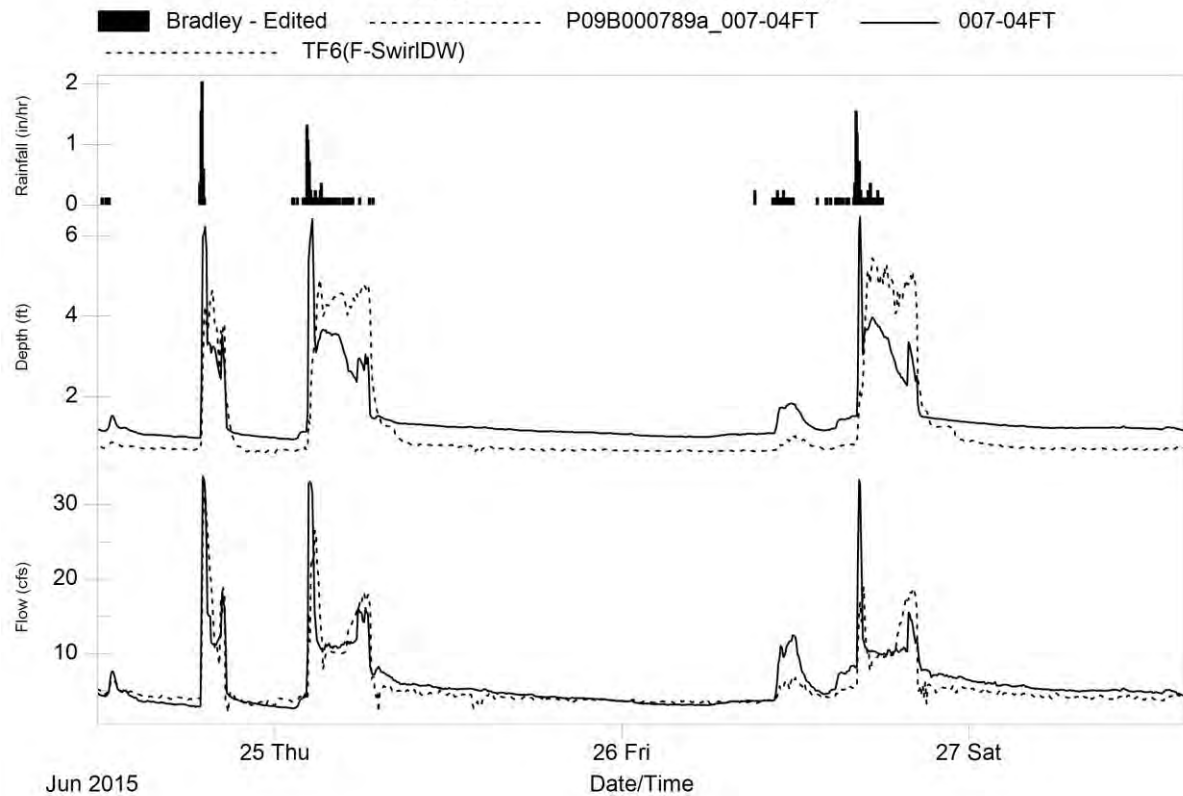
Event of June 15, 2015

Duration: 71.33 h, Total Rainfall: 1.7 (in)



Event of June 24, 2015

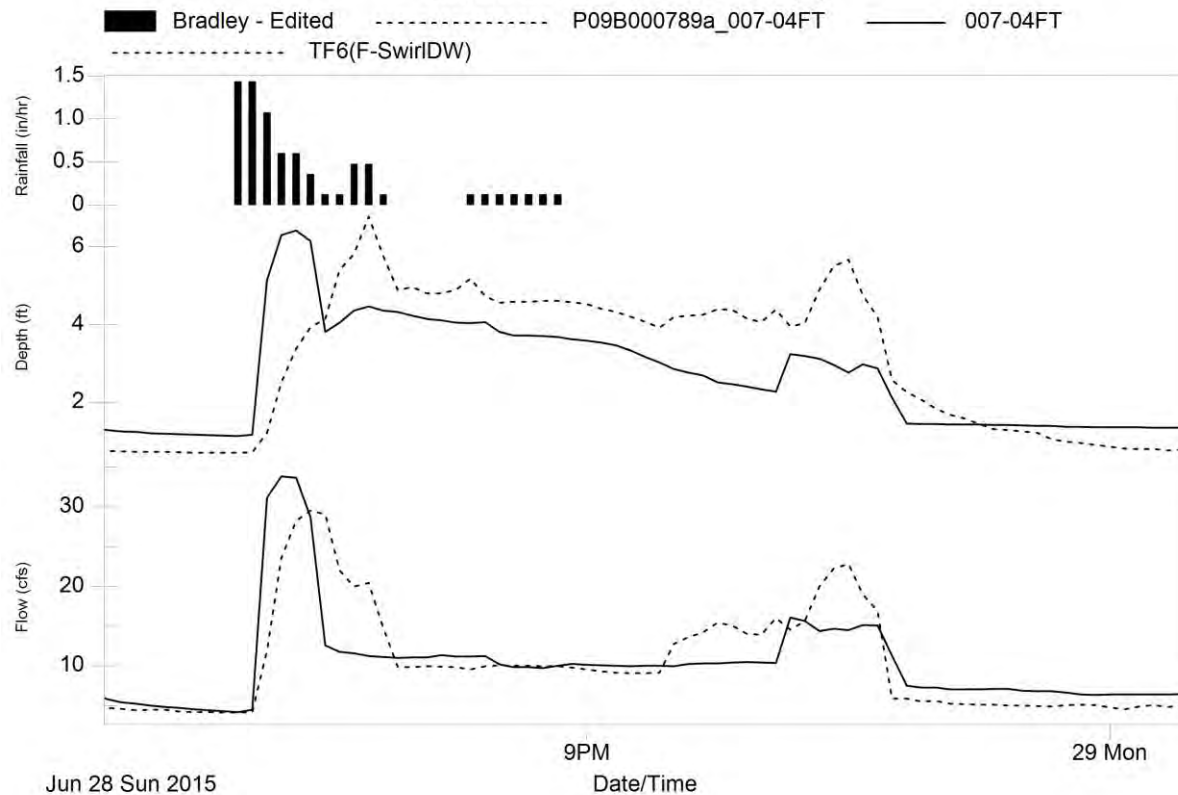
Duration: 62.75 h, Total Rainfall: 1.91 (in)



Fayette 007-04FT – Verification Events

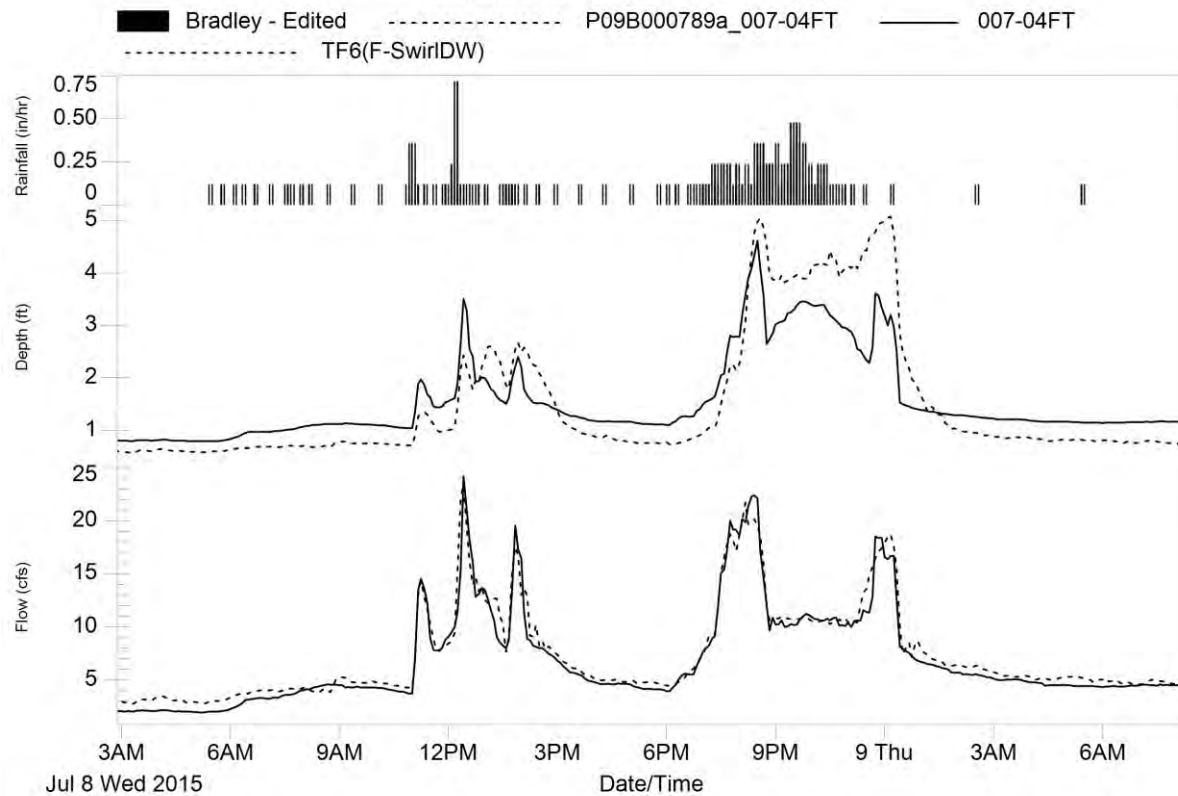
Event of June 28, 2015

Duration: 5.17 h, Total Rainfall: 0.47 (in)

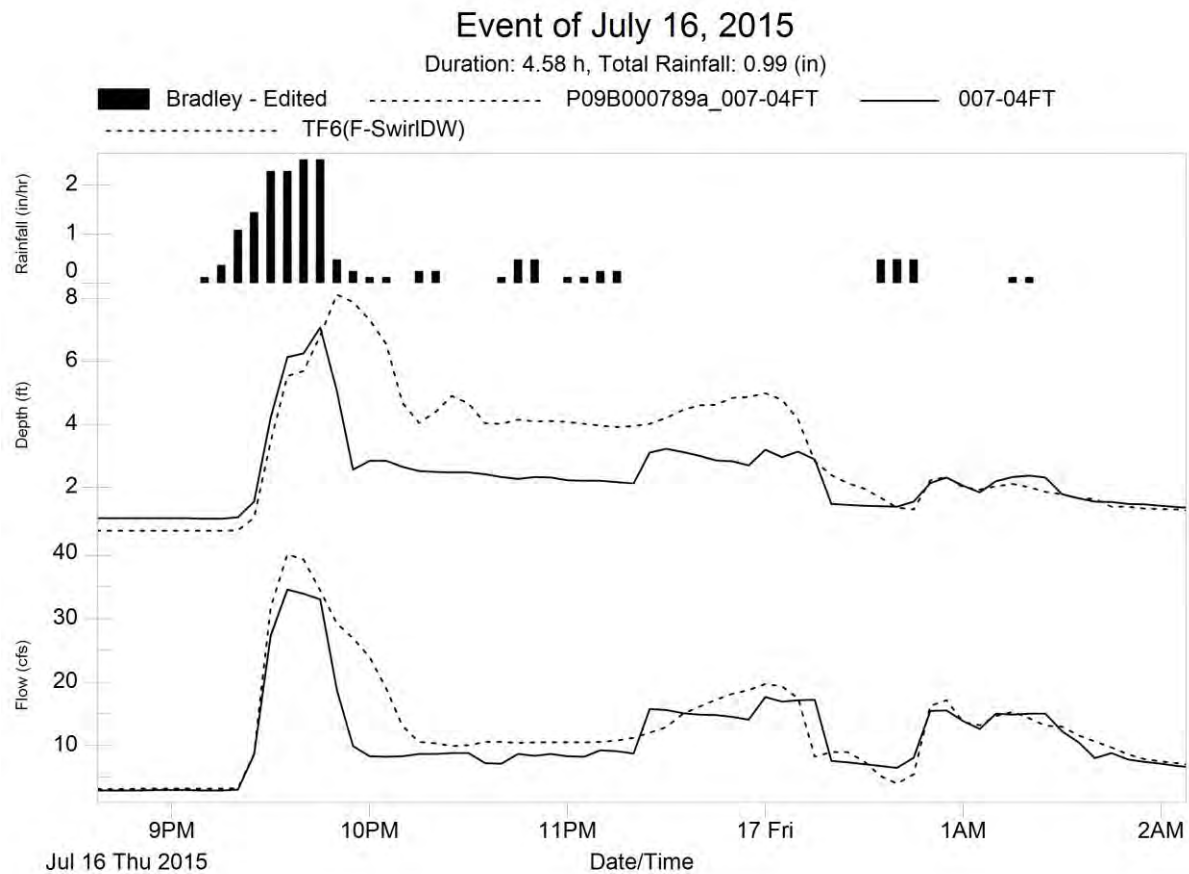
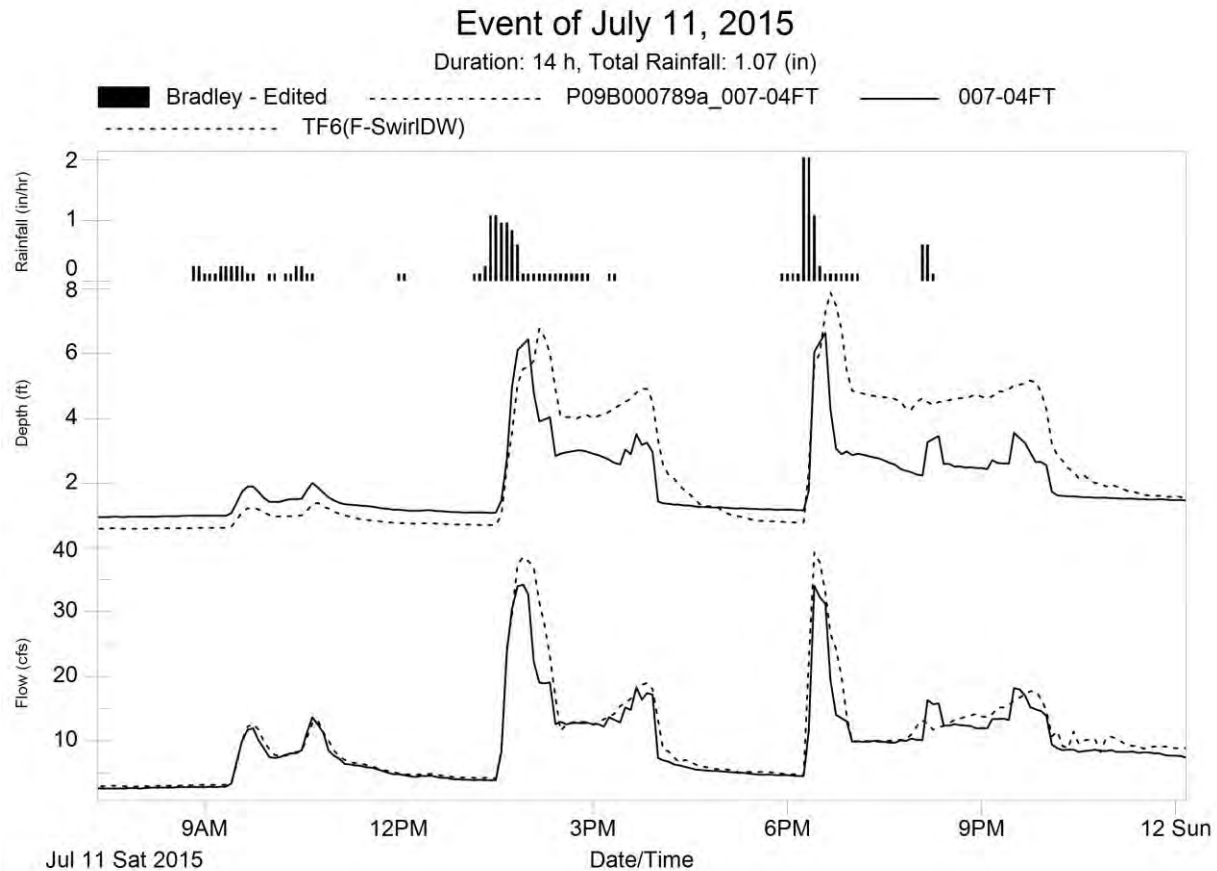


Event of July 8, 2015

Duration: 24.5 h, Total Rainfall: 1.39 (in)



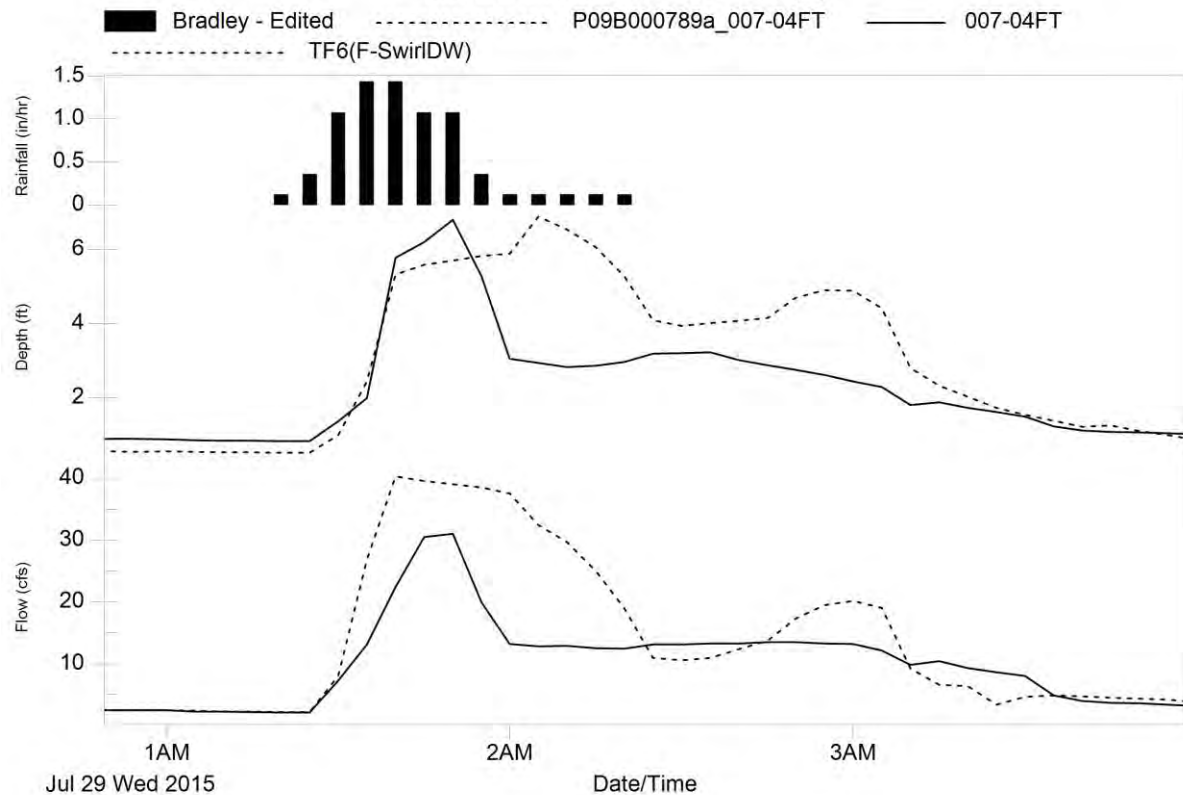
Fayette 007-04FT – Verification Events



Fayette 007-04FT – Verification Events

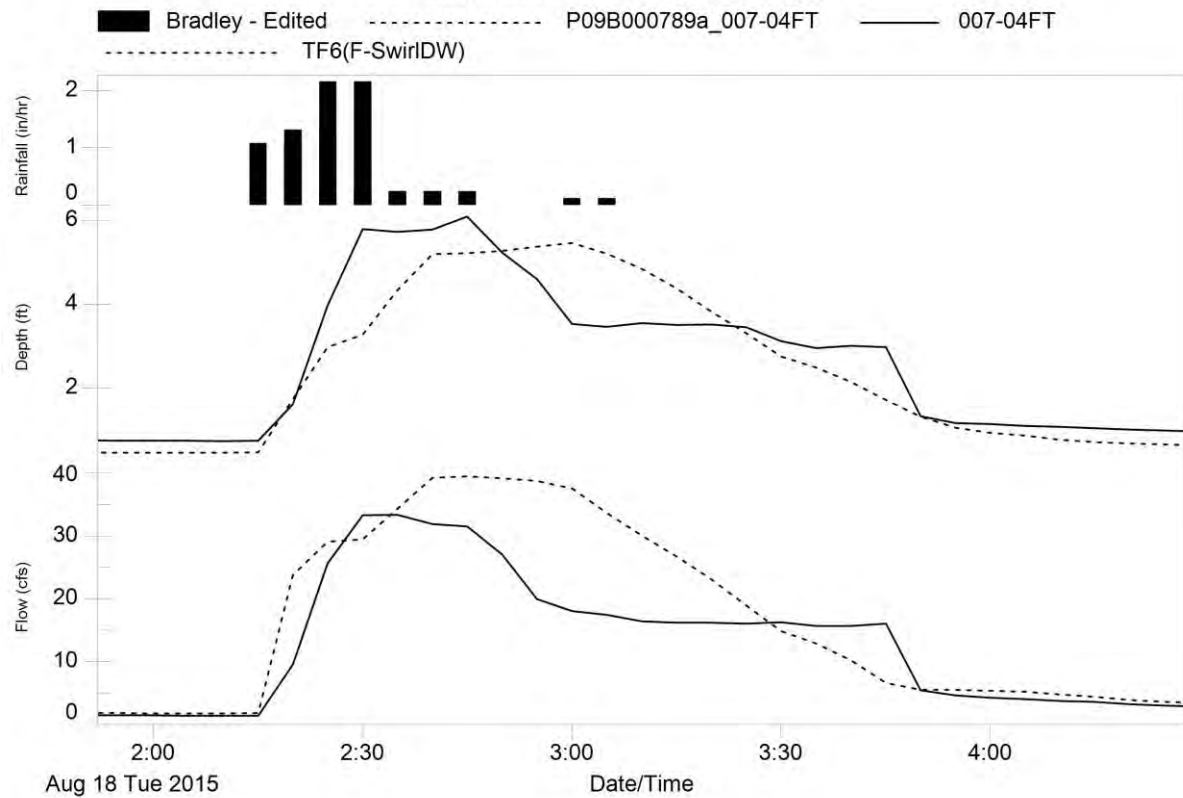
Event of July 29, 2015

Duration: 1.75 h, Total Rainfall: 0.51 (in)

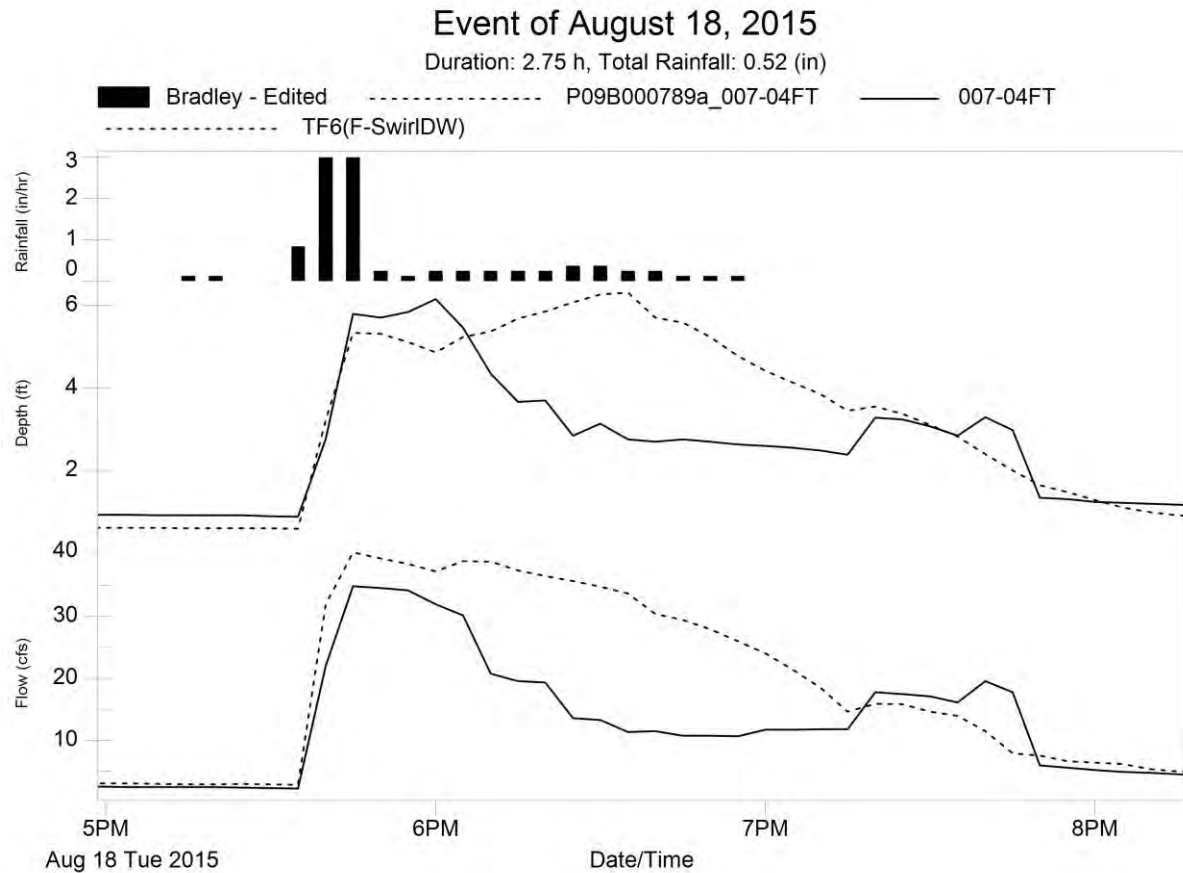


Event of August 18, 2015

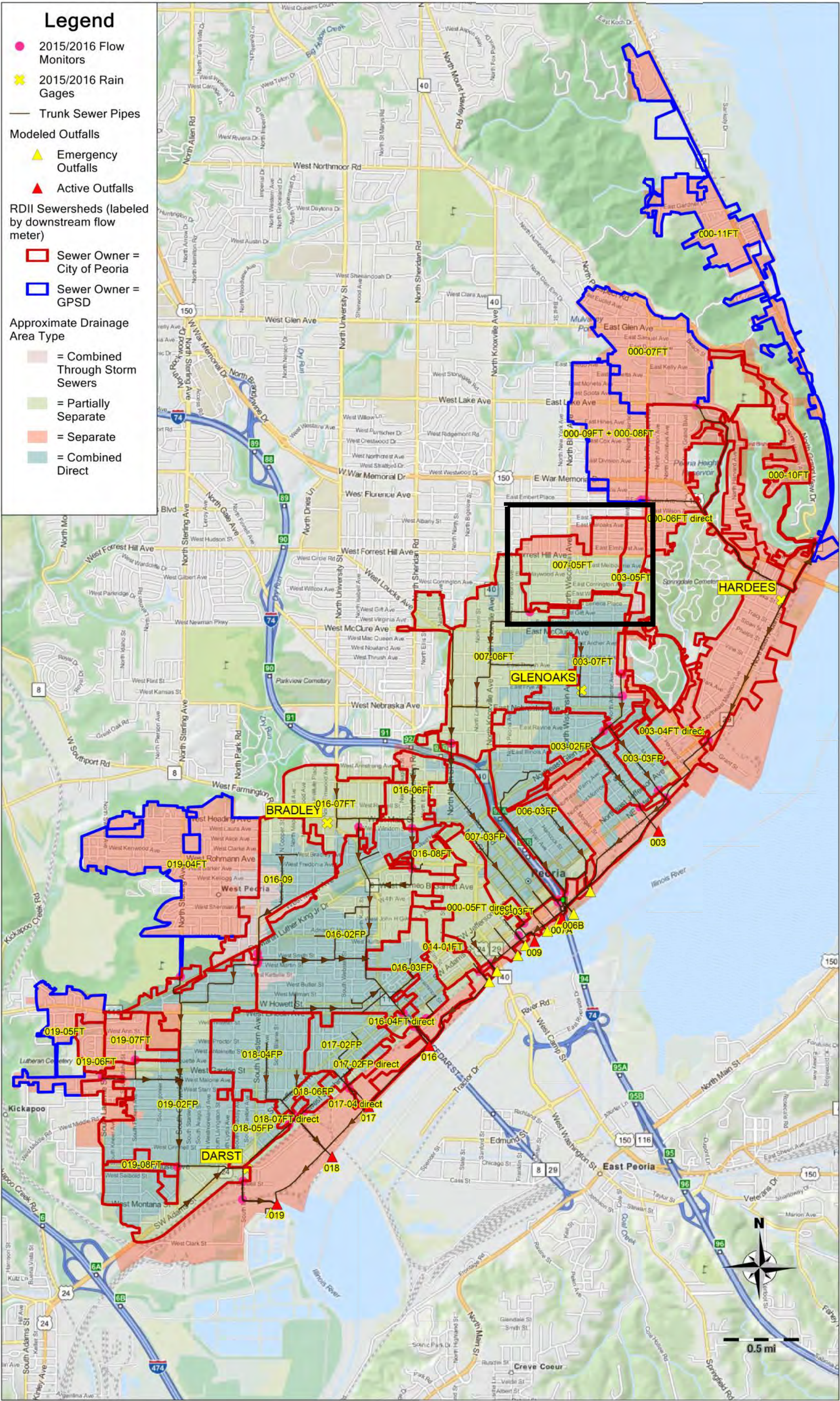
Duration: 2.17 h, Total Rainfall: 0.45 (in)



Fayette 007-04FT – Verification Events



Flow Monitor 007-05FT Overview Map



[illegible]

Date	Duration (h)	Rainfall (in)	Maximum Flow (cfs)		Maximum Flow (mgd)		Total Volume (ft³)		Volume (million gallons)		Peak Flow Rate (-15% to +25%)	Flow Volume (-10% to +20%)	Rainfall Variability
		Glen Oaks - Edite	Observed	Modeled	Observed	Modeled	Observed	Modeled	Observed	Modeled			
CALIBRATION EVENTS - FLOW													
9/8/2015 10:40	5	0.87	1.006	0.2949	0.650	0.191	8761	5145	0.066	0.038	-71%	-41%	variable
9/18/2015 14:45	13.42	1.66	5.071	5.554	3.276	3.588	54620	73980	0.409	0.553	10%	35%	relatively uniform
11/5/2015 13:05	20.25	0.48	0.4704	1.938	0.304	1.252	24250	50600	0.181	0.378	312%	109%	possibly uniform
11/11/2015 18:45	6.25	0.66	1.208	4.142	0.780	2.676	12610	36790	0.094	0.275	243%	192%	relatively uniform
11/16/2015 22:35	41.08	2.18	4.865	5.698	3.143	3.681	193200	407500	1.445	3.048	17%	111%	variable
11/26/2015 20:40	25.92	1.27	4.295	4.215	2.775	2.723	219200	253800	1.640	1.898	-2%	16%	possibly uniform
12/13/2015 3:05	56.67	1.71	4.139	4.664	2.674	3.013	382600	419300	2.862	3.136	13%	10%	possibly uniform
12/20/2015 23:10	19.33	0.67	1.926	2.862	1.244	1.849	78790	120600	0.589	0.902	49%	53%	relatively uniform
12/23/2015 6:10	16.67	0.71	3.884	4.72	2.509	3.049	143400	135100	1.073	1.011	22%	-6%	variable
12/28/2015 1:05	40.42	2.05	12.84	7.283	8.295	4.705	681900	524700	5.101	3.925	-43%	-23%	variable
6/15/2015 19:10	71.33	1.7	6.152	6.017	3.974	3.887	587500	530500	4.395	3.968	-2%	-10%	variable
6/24/2015 16:55	76.58	1.91	4.504	4.71	2.910	3.043	498100	475200	3.726	3.554	5%	-5%	variable
6/28/2015 18:25	22.17	0.48	3.361	2.846	2.171	1.839	154900	107500	1.159	0.804	-15%	-31%	variable
7/8/2015 5:20	24.5	1.36	3.276	3.532	2.116	2.282	120100	100900	0.898	0.755	8%	-16%	relatively uniform
7/11/2015 7:55	37.75	1.32	7.588	5.8	4.902	3.747	302400	273800	2.262	2.048	-24%	-9%	possibly uniform
7/16/2015 20:30	11.67	1.05	3.059	3.962	1.976	2.559	71780	83610	0.537	0.625	30%	16%	relatively uniform
7/29/2015 0:50	3.83	0.77	2.293	0.2885	1.481	0.186	15290	3627	0.114	0.027	-87%	-76%	variable
8/18/2015 1:25	6.33	0.43	1.143	1.715	0.738	1.108	10780	15860	0.081	0.119	50%	47%	possibly uniform
8/18/2015 17:20	8.17	0.55	1.458	3.157	0.942	2.039	23310	36290	0.174	0.271	117%	56%	relatively uniform

Notes:

- For calibration long term RDII values try to balance high November flows and low December flows.
- Individual events show significant variability, but flows peaks and volumes are low relative to other areas, so should not have a significant impact on the model as a whole.

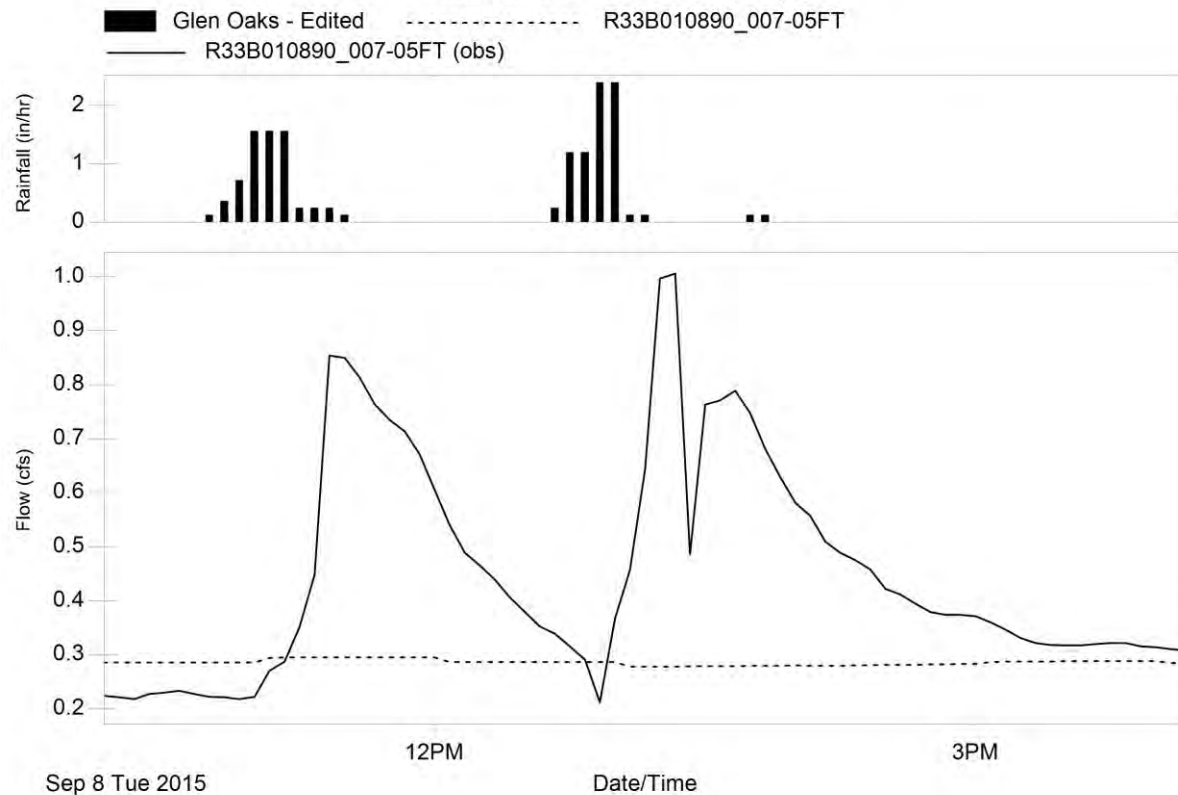
WEIGHTED AVERAGES

Calibration - Relatively Uniform	53%	58%	relatively uniform
Calibration - Possibly Uniform	21%	16%	possibly uniform
Calibration - Variable	-20%	4%	variable
Calibration Weighted - All Events	4%	13%	
Verification - Relatively Uniform	37%	3%	relatively uniform
Verification - Possibly Uniform	-14%	-8%	possibly uniform
Verification - Variable	-15%	-11%	variable
Verification Weighted - All Events	-2%	-9%	
Weighted Average - All Events	1%	2%	
NET AVERAGES			
Calibration - Relatively Uniform	100%	93%	relatively uniform
Calibration - Possibly Uniform	108%	45%	possibly uniform
Calibration - Variable	-19%	10%	variable
Calibration Net - All Events	55%	46%	
Verification - Relatively Uniform	51%	19%	relatively uniform
Verification - Possibly Uniform	13%	19%	possibly uniform
Verification - Variable	-25%	-30%	variable
Verification Net - All Events	9%	-3%	
Net Average - All Events	33%	23%	

Fayette 007-05FT – Calibration Events

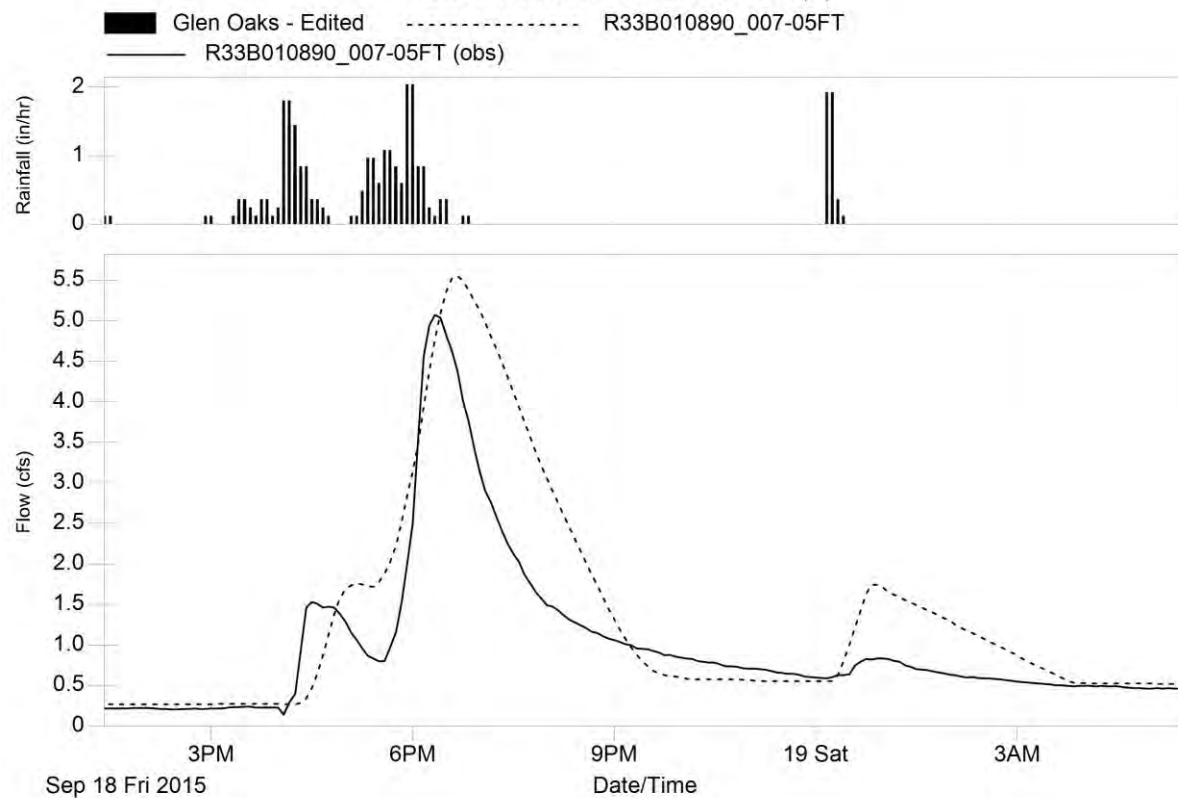
Event of September 8, 2015

Duration: 5 h, Total Rainfall: 0.87 (in)



Event of September 18, 2015

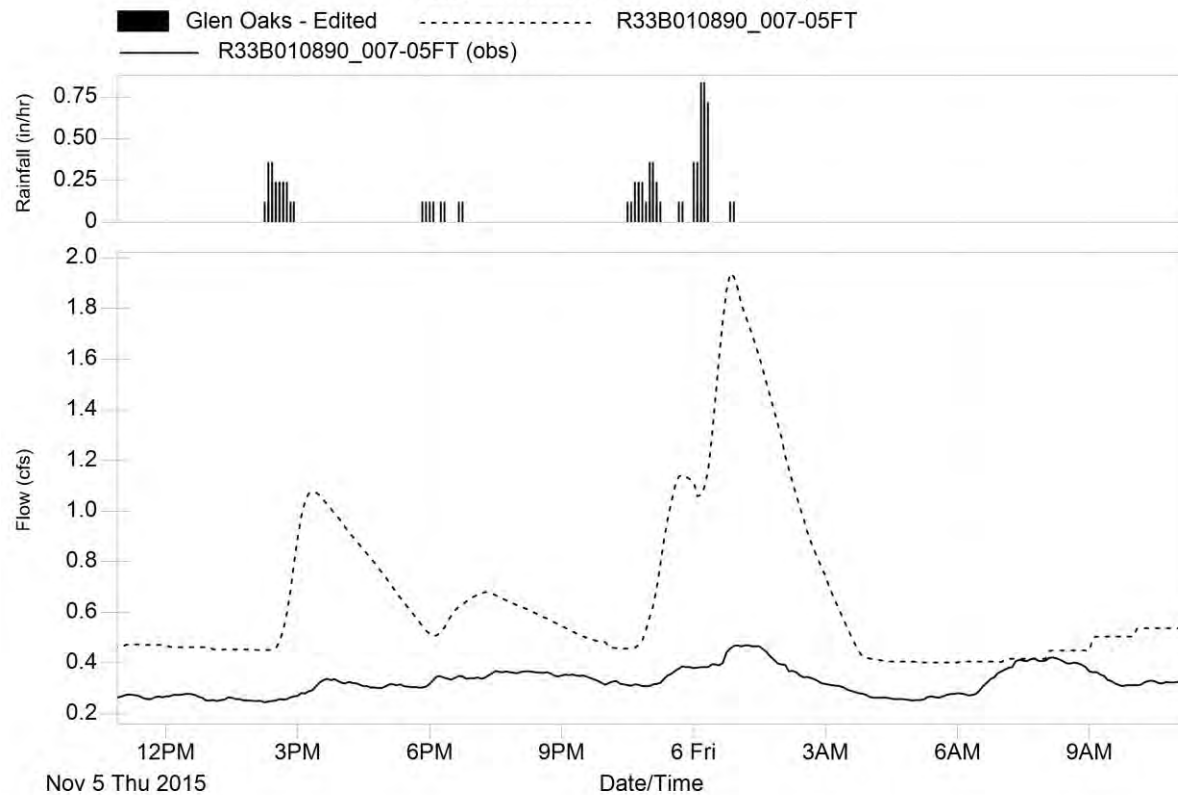
Duration: 13.42 h, Total Rainfall: 1.66 (in)



Fayette 007-05FT – Calibration Events

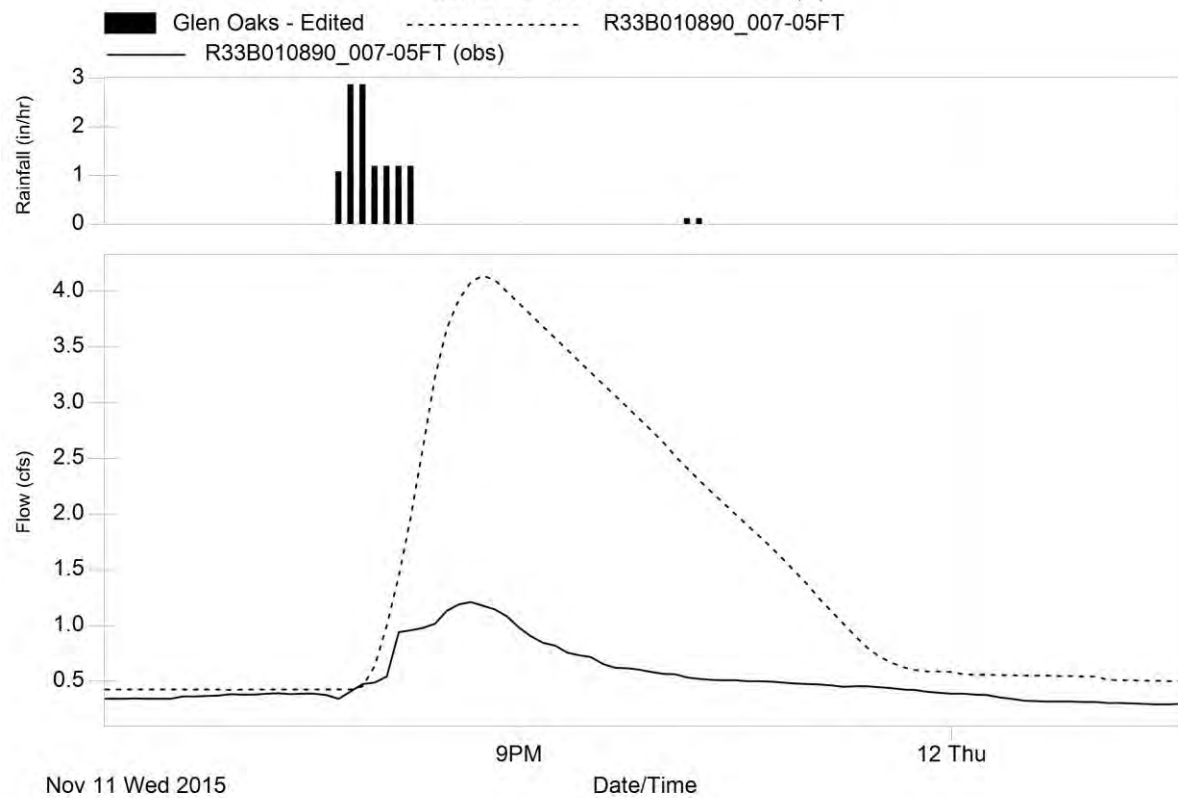
Event of November 5, 2015

Duration: 20.25 h, Total Rainfall: 0.48 (in)



Event of November 11, 2015

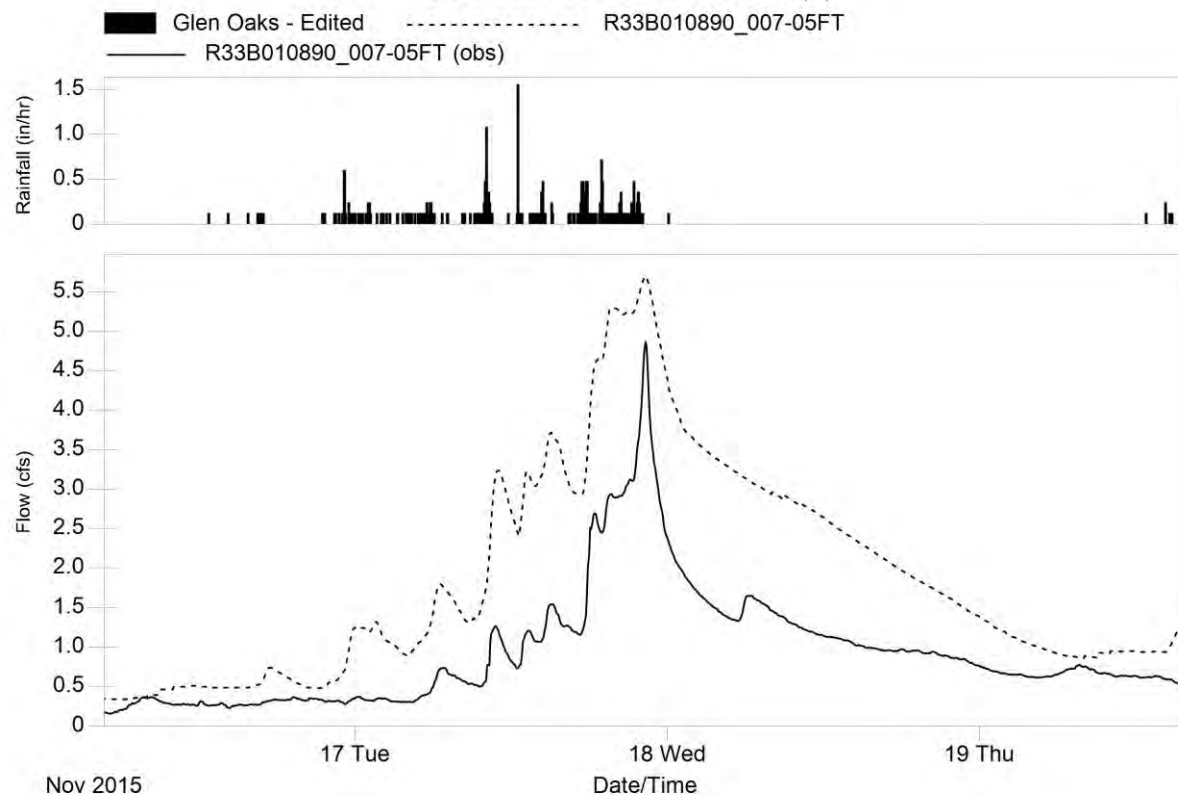
Duration: 6.25 h, Total Rainfall: 0.66 (in)



Fayette 007-05FT – Calibration Events

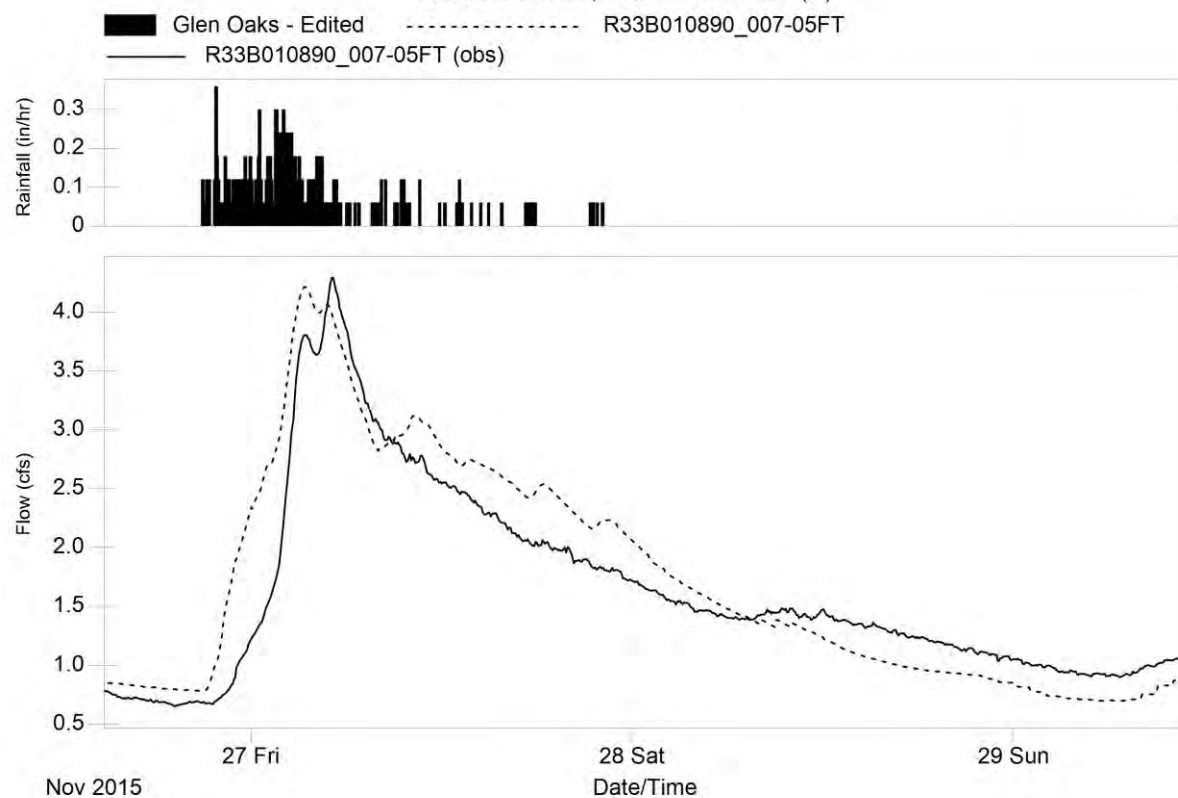
Event of November 16, 2015

Duration: 69.25 h, Total Rainfall: 2.25 (in)



Event of November 26, 2015

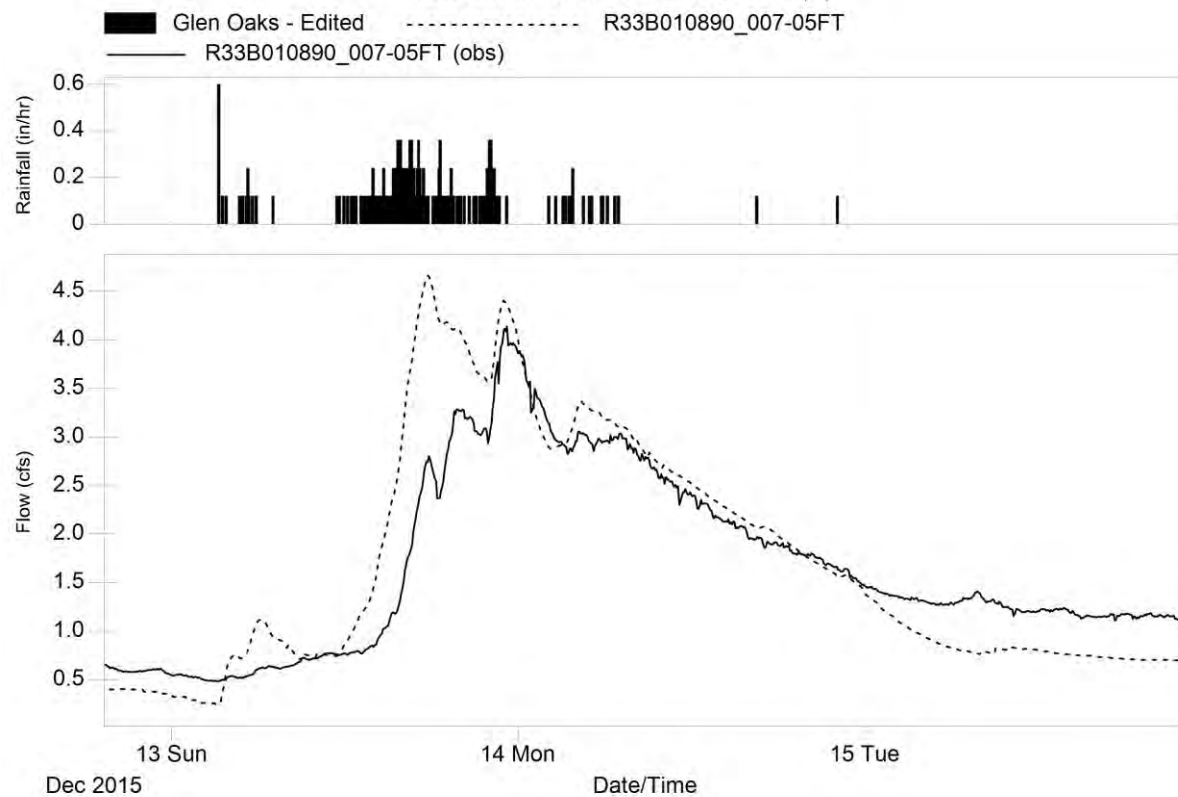
Duration: 56.75 h, Total Rainfall: 1.27 (in)



Fayette 007-05FT – Calibration Events

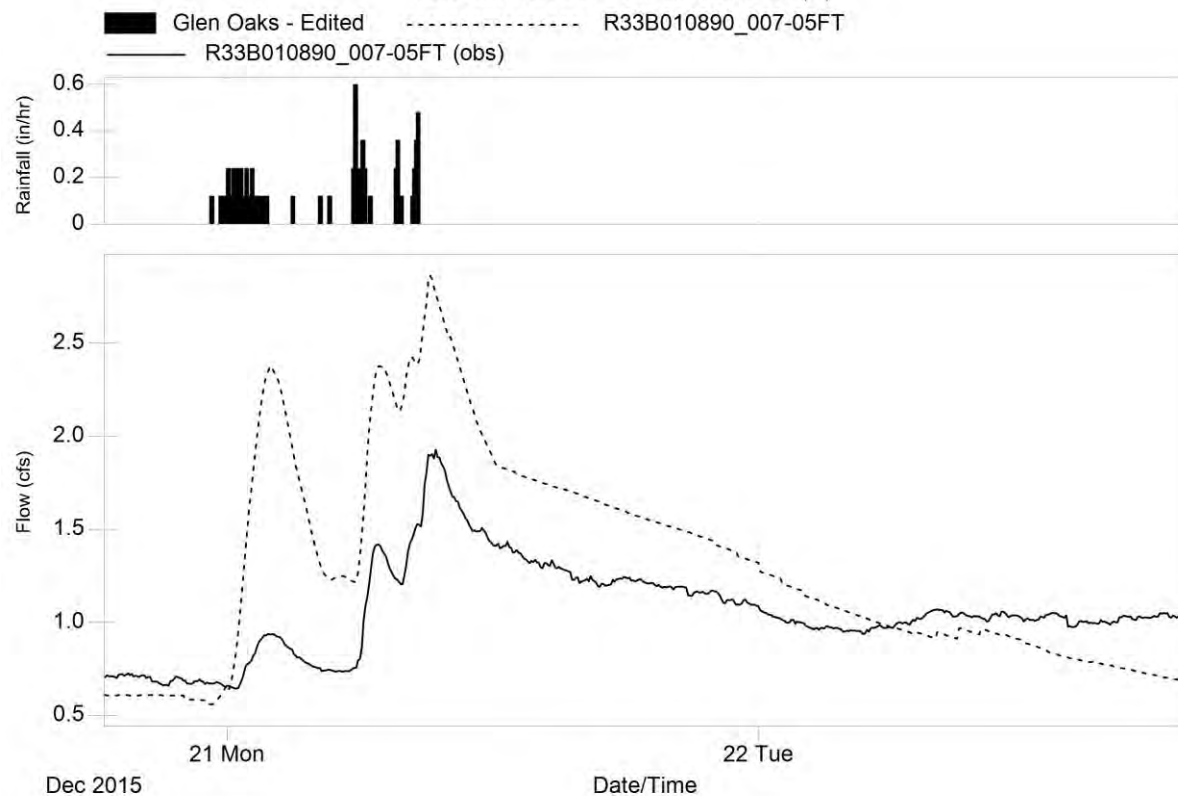
Event of December 13, 2015

Duration: 62.42 h, Total Rainfall: 1.71 (in)



Event of December 20, 2015

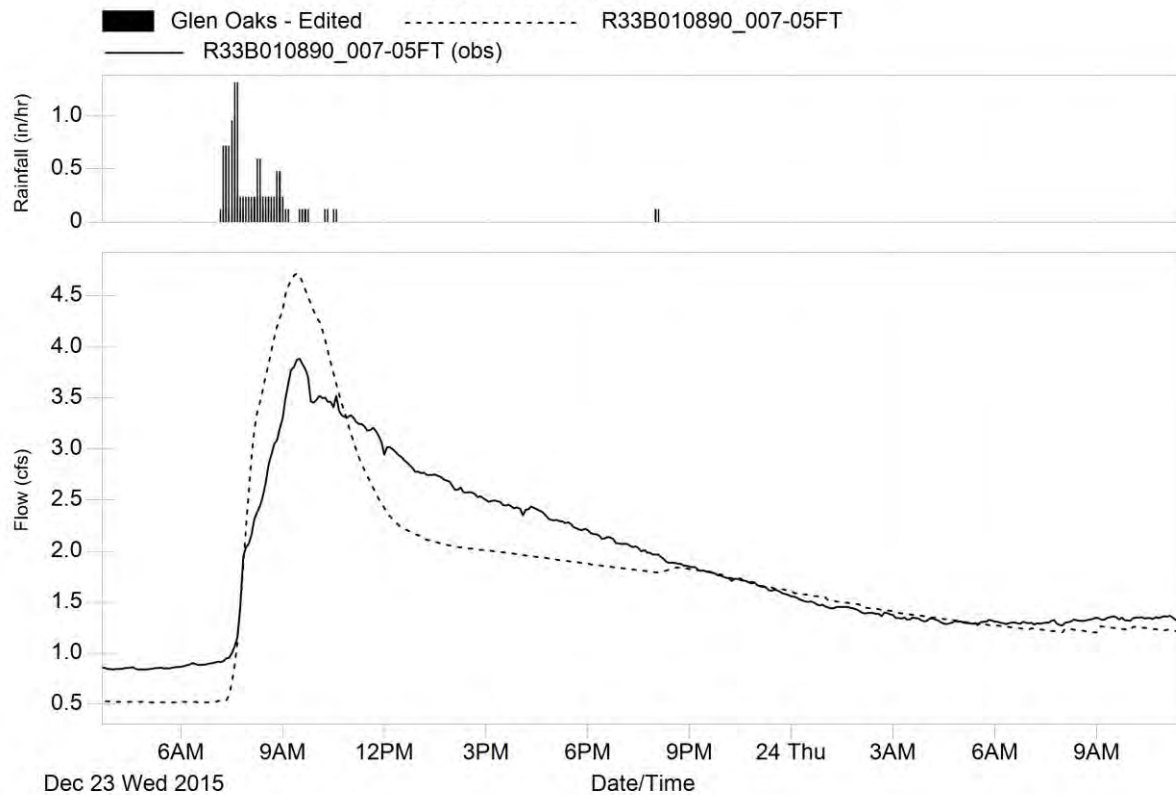
Duration: 40.75 h, Total Rainfall: 0.67 (in)



Fayette 007-05FT – Calibration Events

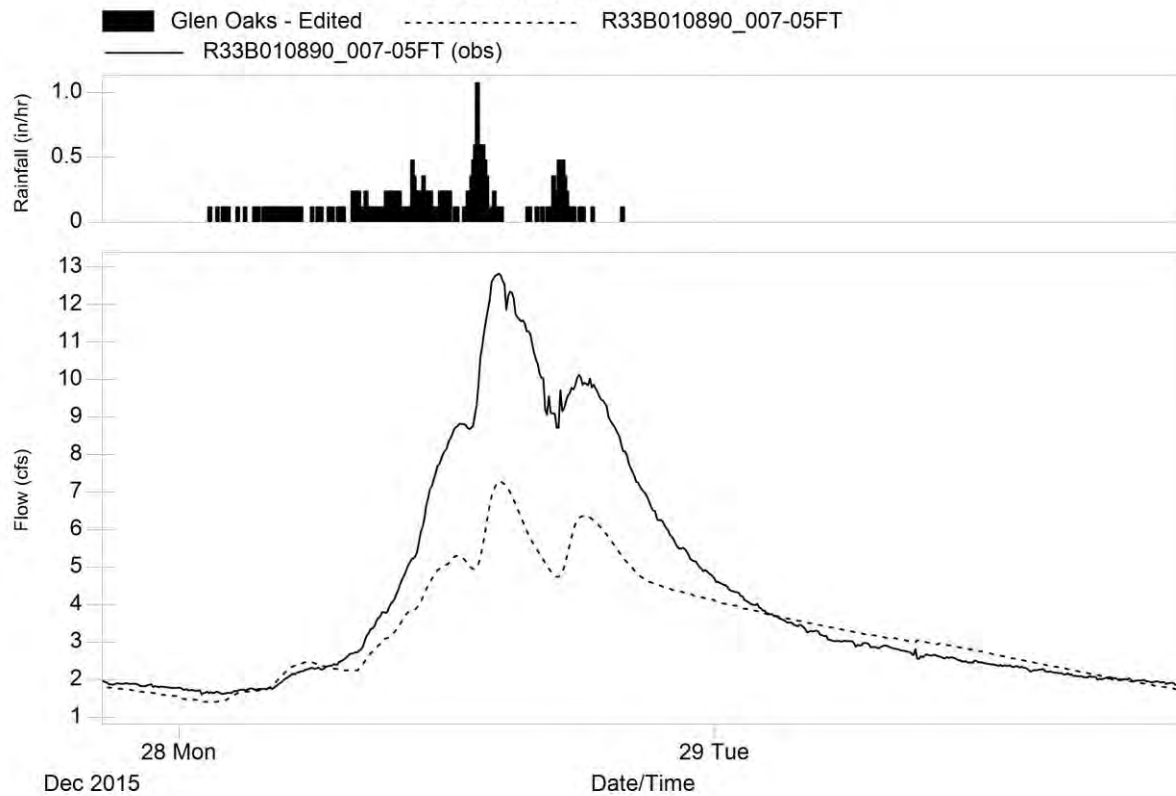
Event of December 23, 2015

Duration: 26.58 h, Total Rainfall: 0.71 (in)



Event of December 28, 2015

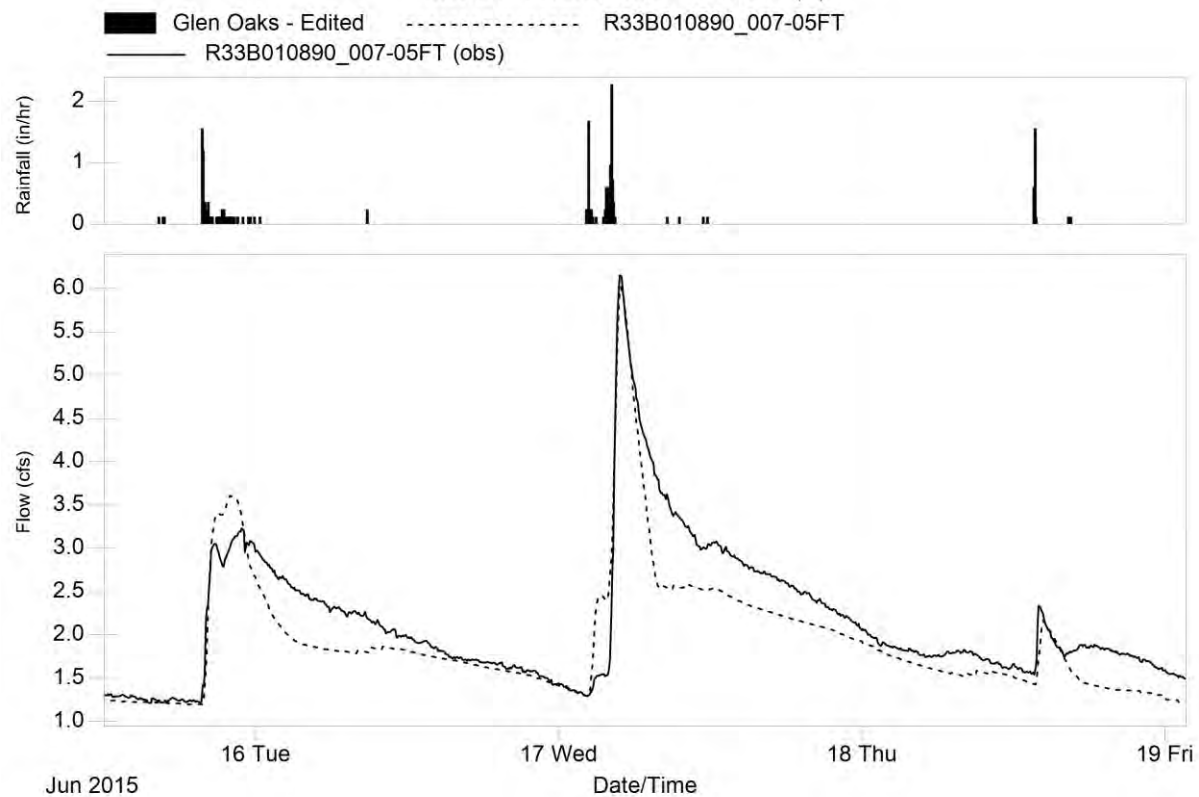
Duration: 40.42 h, Total Rainfall: 2.05 (in)



Fayette 007-05FT – Verification Events

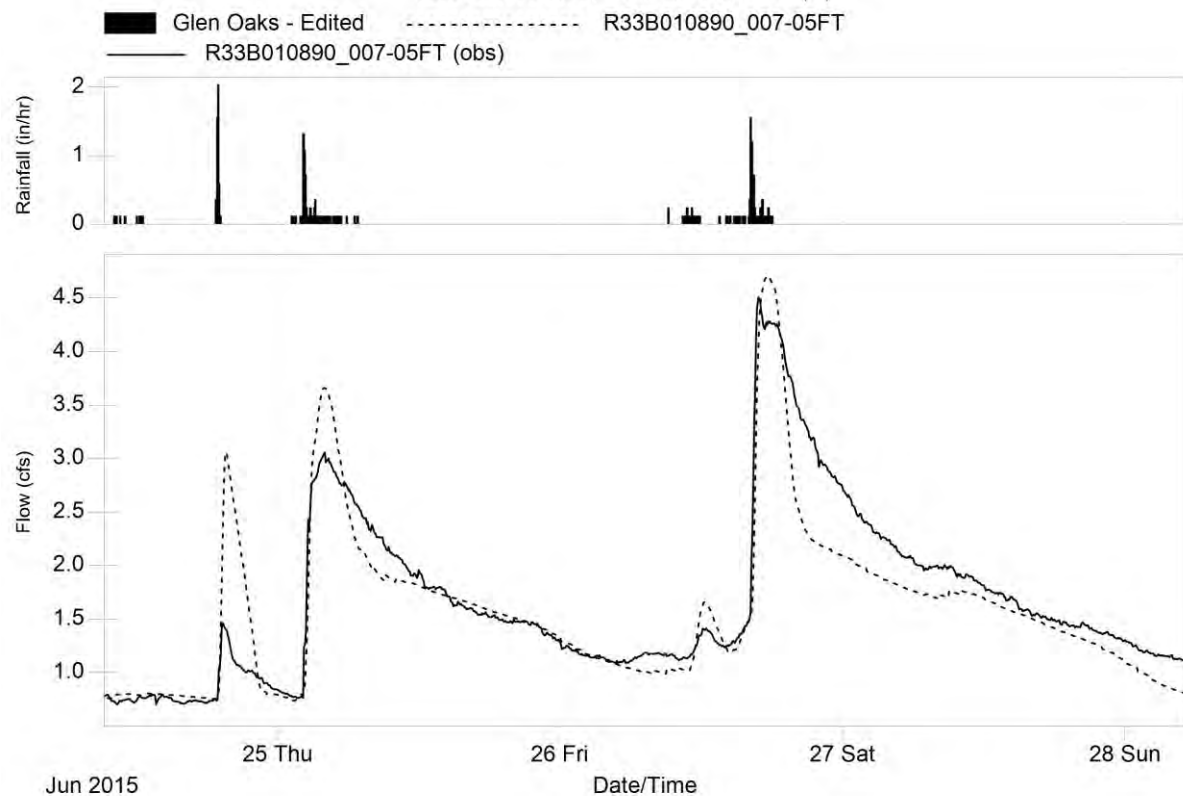
Event of June 15, 2015

Duration: 71.33 h, Total Rainfall: 1.7 (in)



Event of June 24, 2015

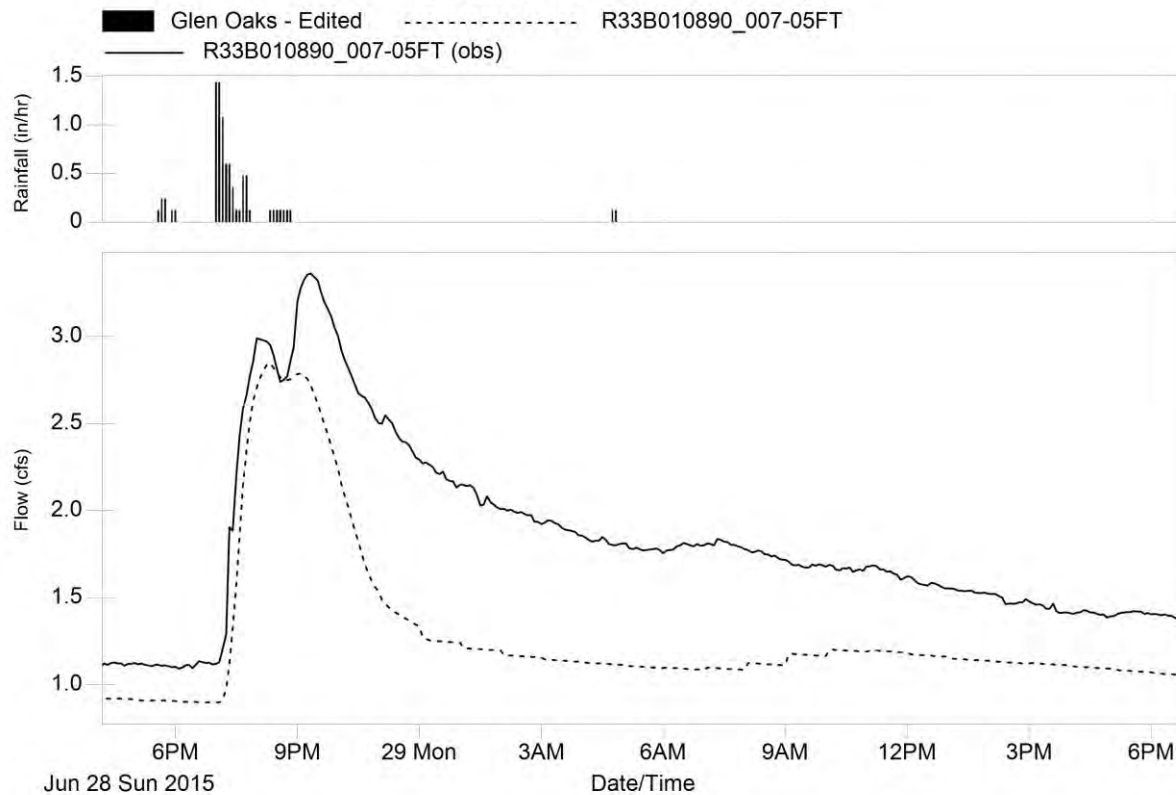
Duration: 76.58 h, Total Rainfall: 1.91 (in)



Fayette 007-05FT – Verification Events

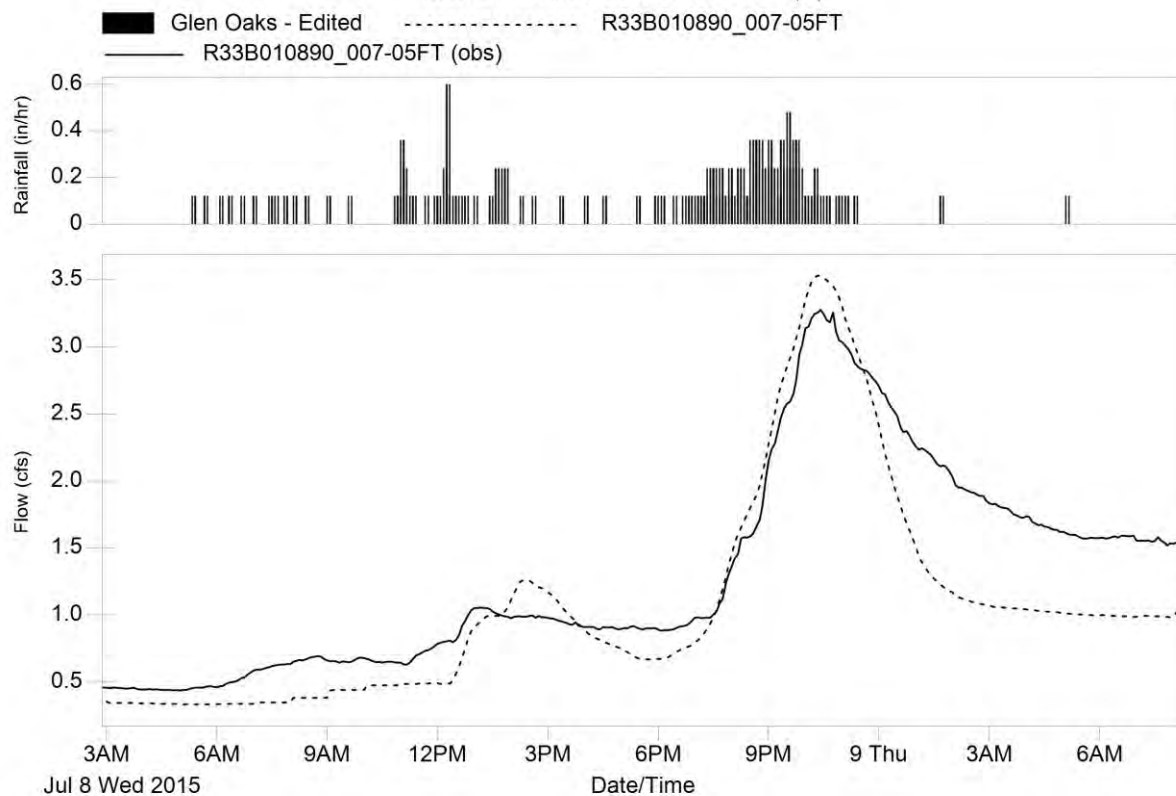
Event of June 28, 2015

Duration: 22.17 h, Total Rainfall: 0.48 (in)



Event of July 8, 2015

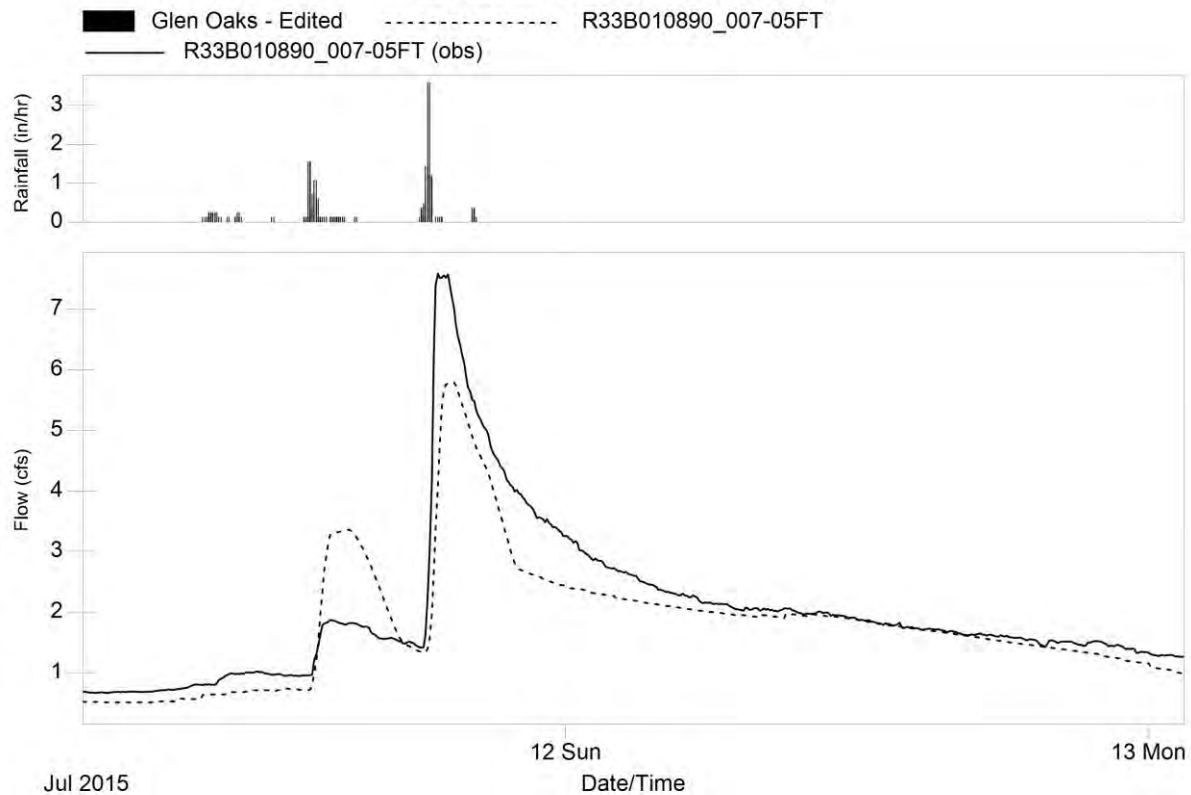
Duration: 24.5 h, Total Rainfall: 1.36 (in)



Fayette 007-05FT – Verification Events

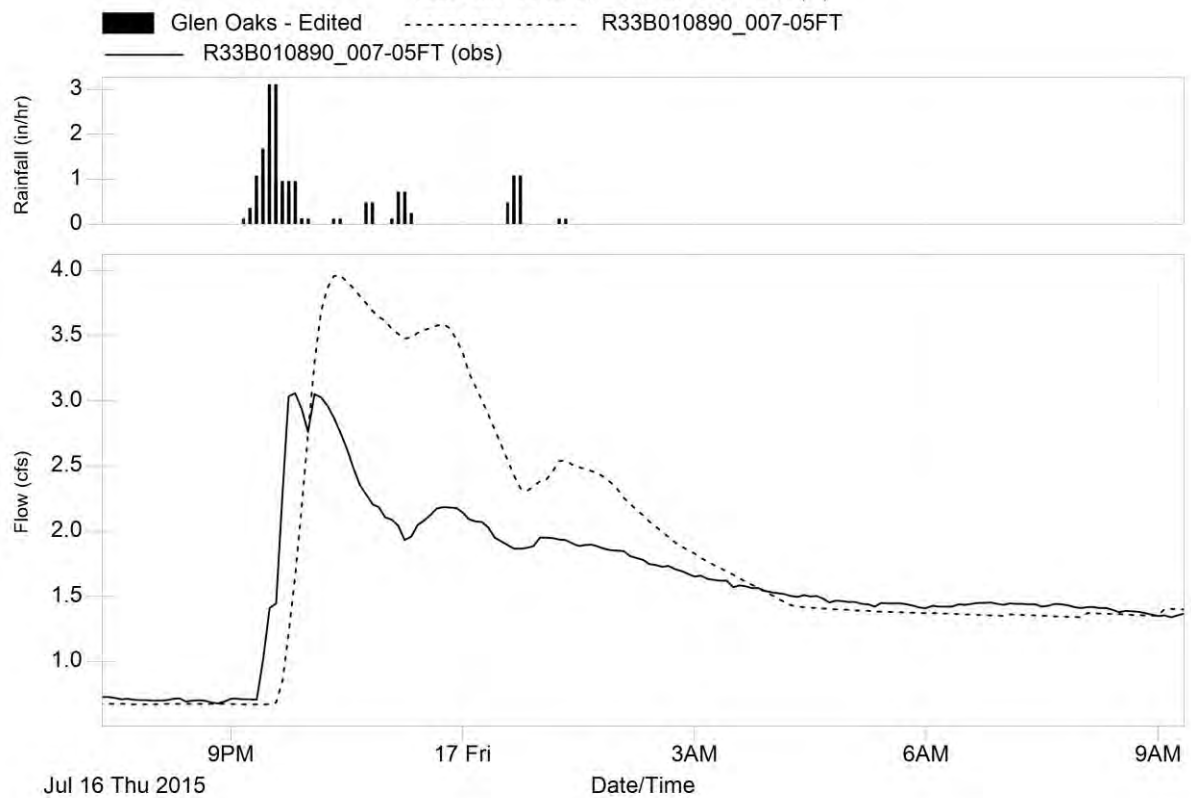
Event of July 11, 2015

Duration: 37.75 h, Total Rainfall: 1.32 (in)

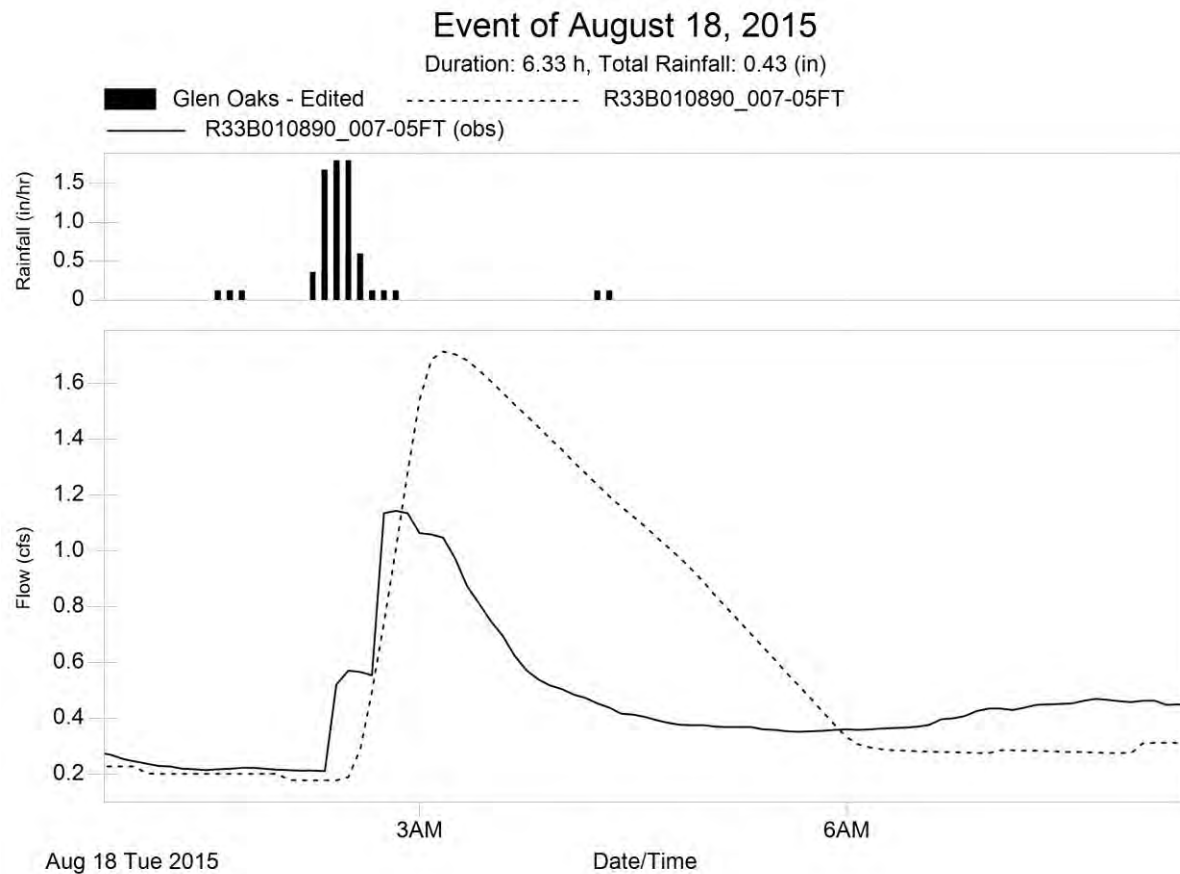
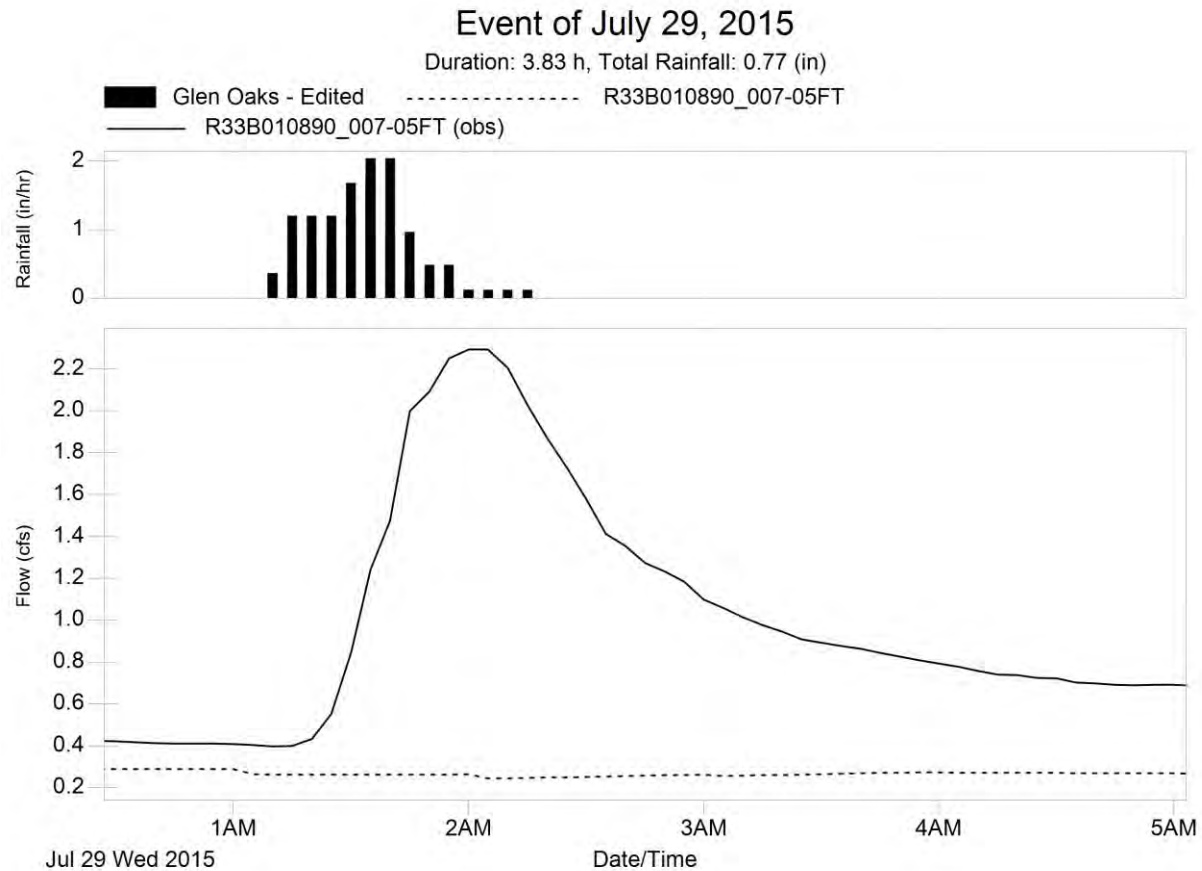


Event of July 16, 2015

Duration: 11.67 h, Total Rainfall: 1.05 (in)



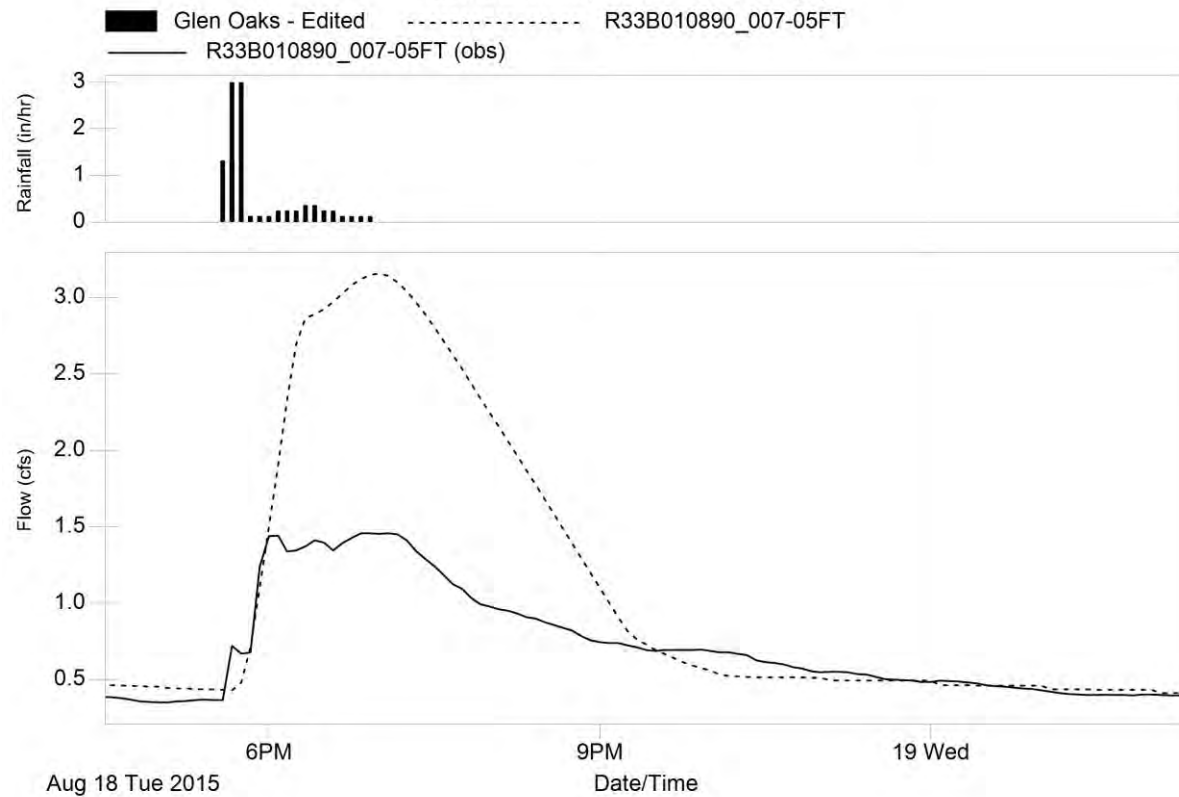
Fayette 007-05FT – Verification Events



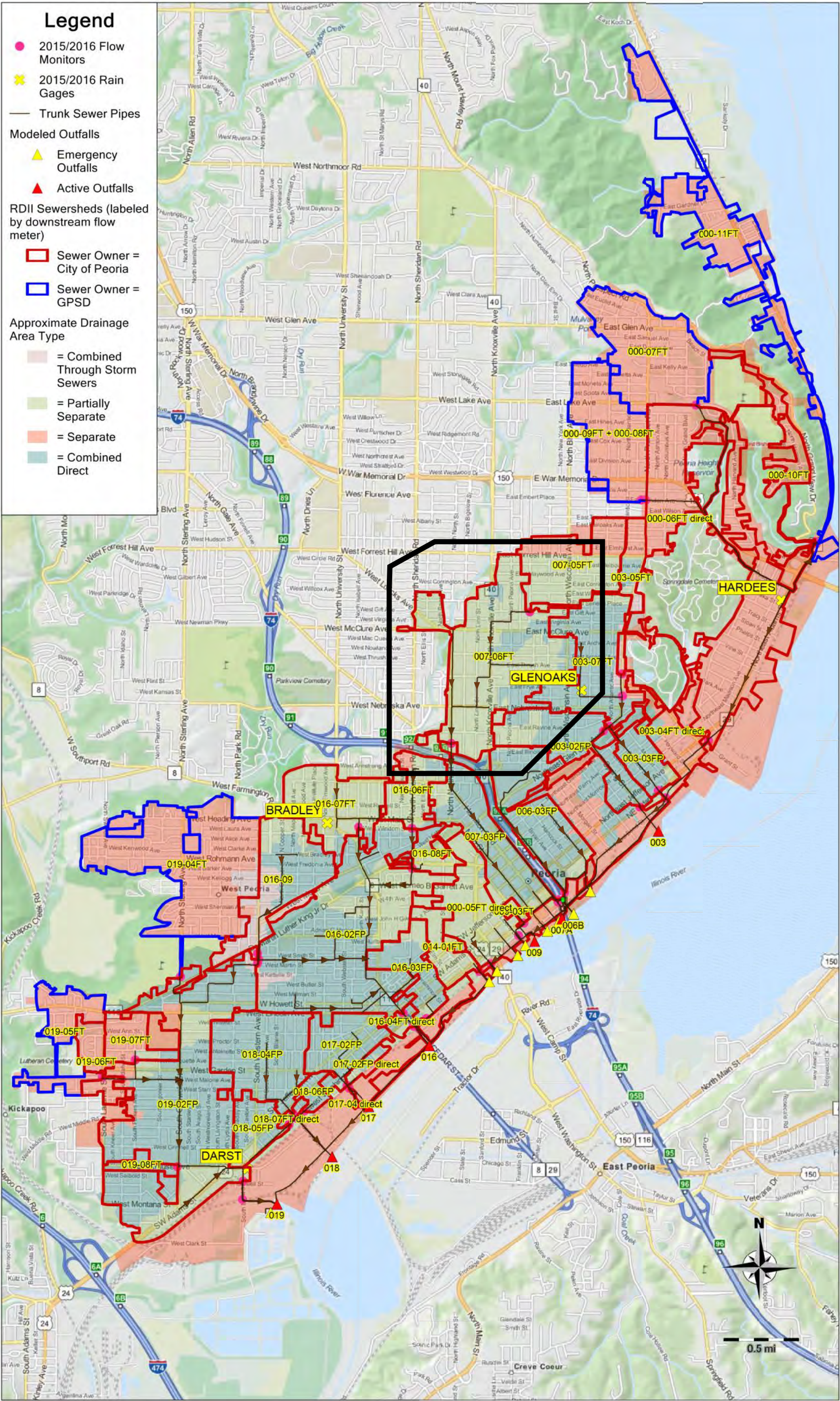
Fayette 007-05FT – Verification Events

Event of August 18, 2015

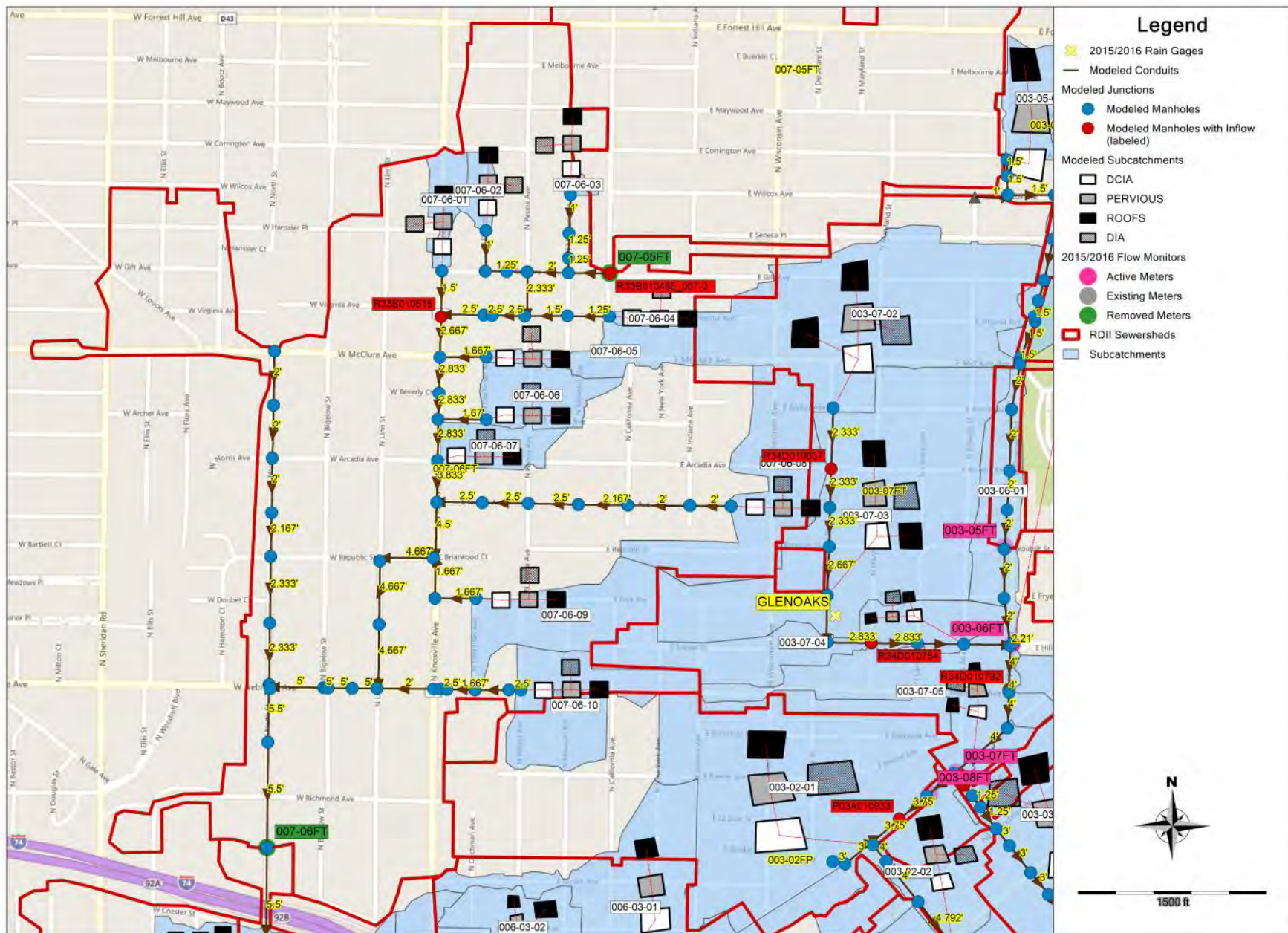
Duration: 8.17 h, Total Rainfall: 0.55 (in)



Flow Monitor 007-06FT Overview Map



007-06 - Combined Sewer Flow Meter



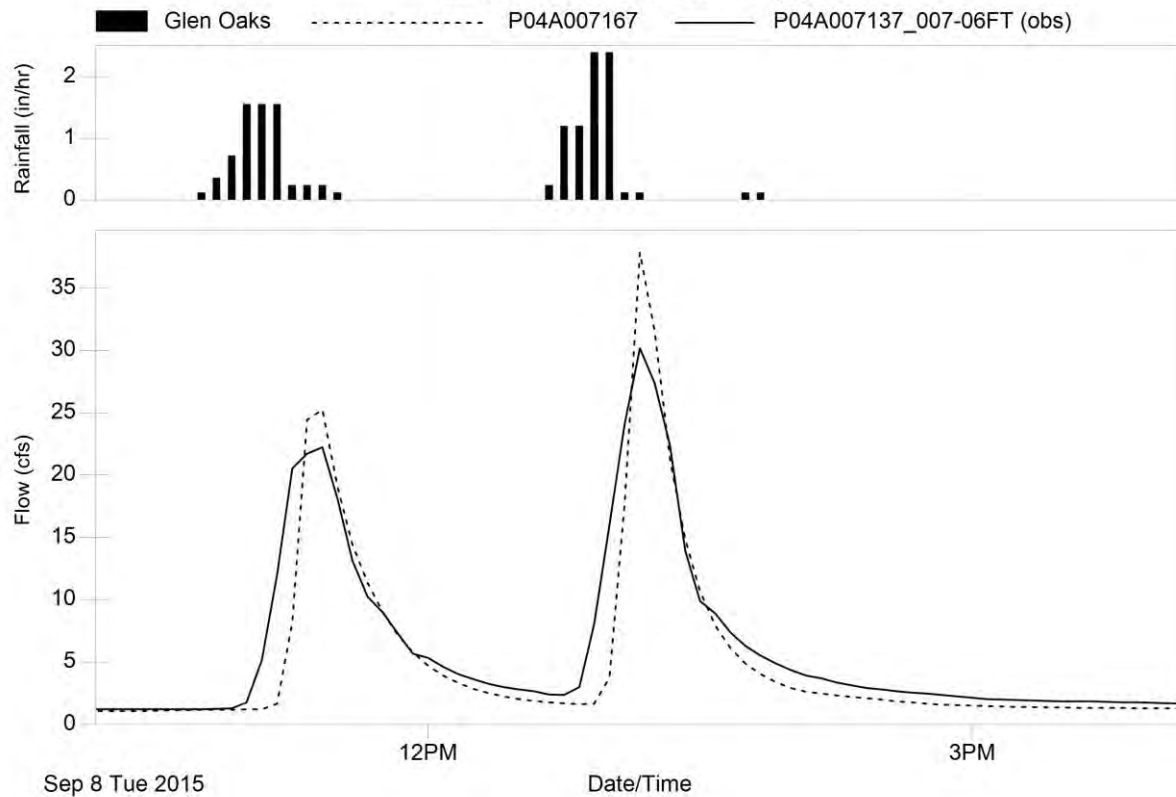
Fayette 007-06FT

Date	Duration (h)	Rainfall (in)	Maximum Flow (cfs)		Maximum Flow (mgd)		Total Volume (ft³)		Volume (million gallons)		Peak Flow Rate (-15% to +25%)	Flow Volume (-10% to +20%)	Rainfall Variability
		Glen Oaks - Edited	Observed	Modeled	Observed	Modeled	Observed	Modeled	Observed	Modeled			
CALIBRATION EVENTS - FLOW													
9/8/2015	5.0	0.87	30.19	37.84	19.503	24.445	96660	109200	0.723	0.817	25%	13%	variable
9/18/2015	13.4	1.66	42.25	42.09	27.294	27.190	338000	392200	2.528	2.934	0%	16%	relatively uniform
11/5/2015	20.3	0.48	6.132	13.36	3.961	8.631	120400	178000	0.901	1.331	118%	48%	possibly uniform
11/11/2015	6.3	0.66	25.68	34.93	16.589	22.565	102800	150900	0.769	1.129	36%	47%	relatively uniform
11/16/2015	69.3	2.25	20.93	19.79	13.521	12.784	978300	1275000	7.318	9.537	-5%	30%	variable
11/26/2015 20:25	56.8	1.27	15.65	15.5	10.110	10.013	1028000	1092000	7.689	8.168	-1%	6%	possibly uniform
12/13/2015 1:35	62.4	1.71	16.4	14.98	10.594	9.677	1180000	1149000	8.826	8.595	-9%	-3%	possibly uniform
12/20/2015 22:30	40.8	0.67	13.85	11.49	8.947	7.423	521700	526100	3.902	3.935	-17%	1%	relatively uniform
12/23/2015	26.6	0.71	29.2	22.15	18.863	14.309	556100	578700	4.160	4.329	-24%	4%	variable
12/28/2015	40.4	2.05	54.98	44.87	35.517	28.986	2046000	1851000	15.304	13.845	-18%	-10%	variable
VERIFICATION EVENTS - FLOW													
6/15/2015 19:10	71.3	1.7	46.52	44.45	30.052	28.715	1536000	1705000	11.489	12.753	-4%	11%	variable
6/24/2015 18:00	65.1	1.91	35.54	31.75	22.959	20.511	1298000	1472000	9.709	11.011	-11%	13%	variable
6/28/2015 18:40	9.6	0.47	36.96	21.17	23.876	13.676	306500	217900	2.293	1.630	-43%	-29%	variable
7/8/2015 5:20	24.5	1.36	21.84	19.84	14.109	12.817	488100	452600	3.651	3.385	-9%	-7%	relatively uniform
7/11/2015 8:45	23.5	1.32	54.61	60.66	35.278	39.186	659300	745800	4.932	5.579	11%	13%	possibly uniform
7/16/2015 20:45	8.5	1.05	48.58	52.77	31.383	34.089	259400	325800	1.940	2.437	9%	26%	relatively uniform
7/29/2015 1:05	2.8	0.77	39.75	45.76	25.679	29.561	93400	86670	0.699	0.648	15%	-7%	variable
8/18/2015 1:30	5.1	0.43	33.14	27.72	21.408	17.907	87680	80430	0.656	0.602	-16%	-8%	possibly uniform
8/18/2015 17:25	5.2	0.55	30.83	31.55	19.916	20.381	126900	162000	0.949	1.212	2%	28%	relatively uniform
WEIGHTED AVERAGES													
Calibration - Relatively Uniform											8%	11%	relatively uniform
Calibration - Possibly Uniform											15%	4%	possibly uniform
Calibration - Variable											-8%	4%	variable
Calibration Weighted - All Events											1%	5%	
Verification - Relatively Uniform											3%	8%	relatively uniform
Verification - Possibly Uniform											1%	11%	possibly uniform
Verification - Variable											-10%	8%	variable
Verification Weighted - All Events											-3%	8%	
Weighted Average - All Events											-2%	6%	
NET AVERAGES													
Calibration - Relatively Uniform											6%	21%	relatively uniform
Calibration - Possibly Uniform											36%	17%	possibly uniform
Calibration - Variable											-6%	9%	variable
Calibration Net - All Events											10%	15%	
Verification - Relatively Uniform											1%	15%	relatively uniform
Verification - Possibly Uniform											-3%	2%	possibly uniform
Verification - Variable											-11%	-3%	variable
Verification Net - All Events											-5%	4%	
Net Average - All Events											3%	10%	

Fayette 007-06FT – Calibration Events

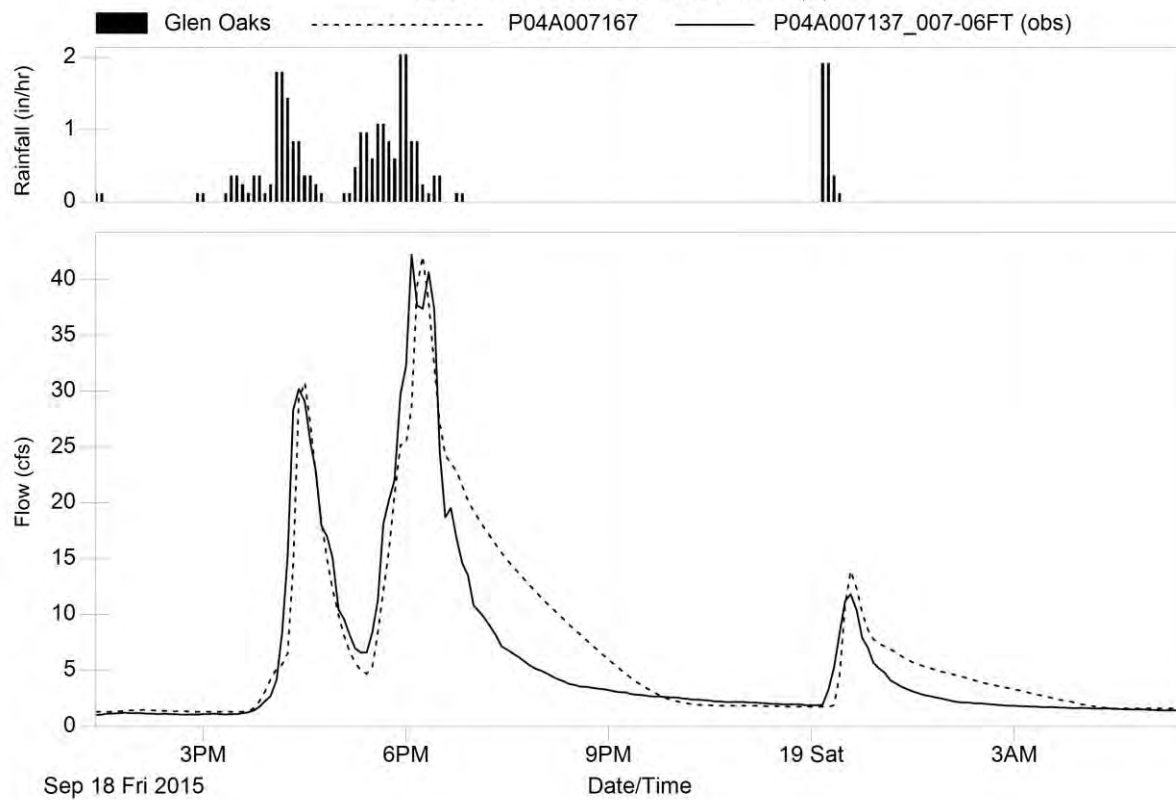
Event of September 8, 2015

Duration: 5 h, Total Rainfall: 0.87 (in)



Event of September 18, 2015

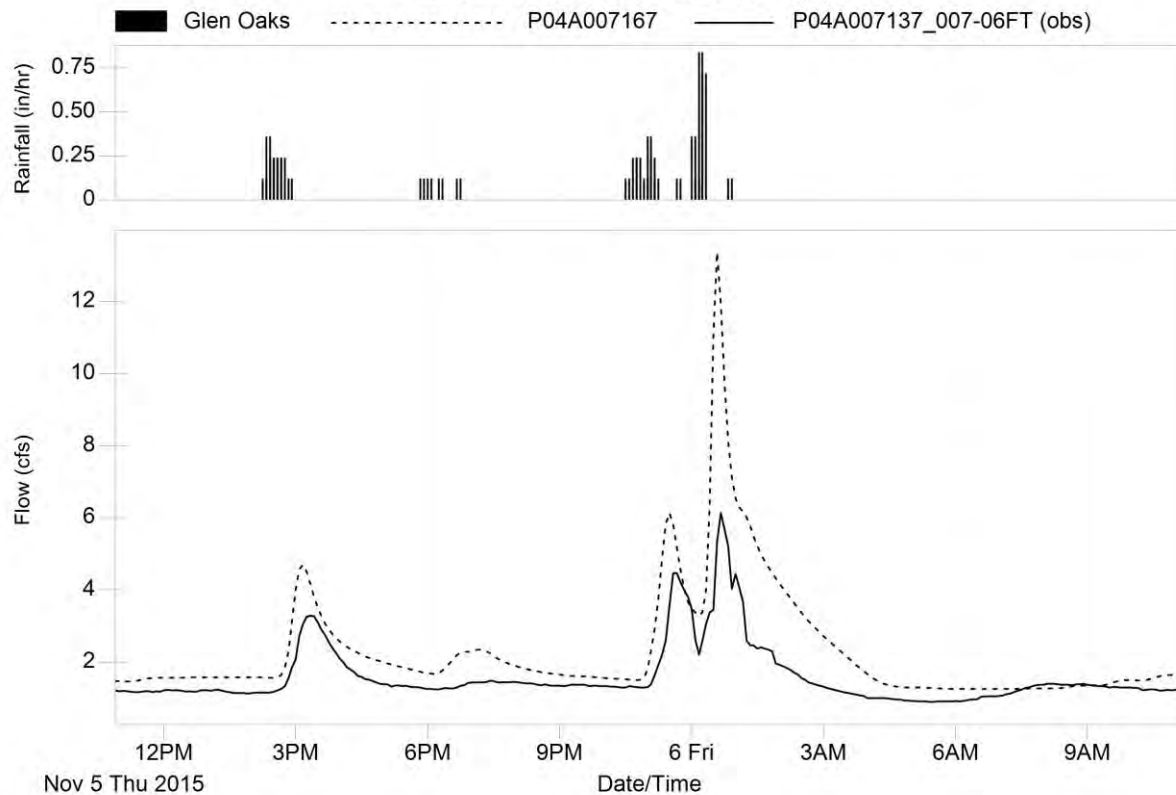
Duration: 13.42 h, Total Rainfall: 1.66 (in)



Fayette 007-06FT – Calibration Events

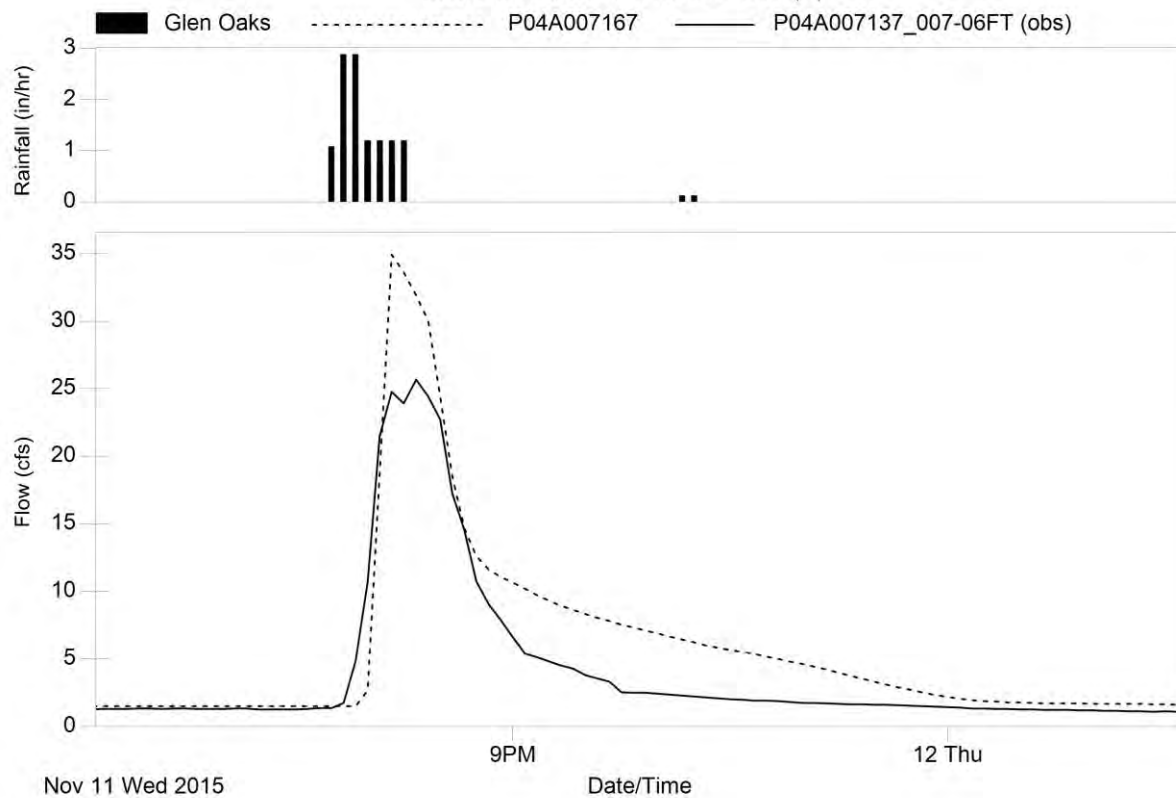
Event of November 5, 2015

Duration: 20.25 h, Total Rainfall: 0.48 (in)



Event of November 11, 2015

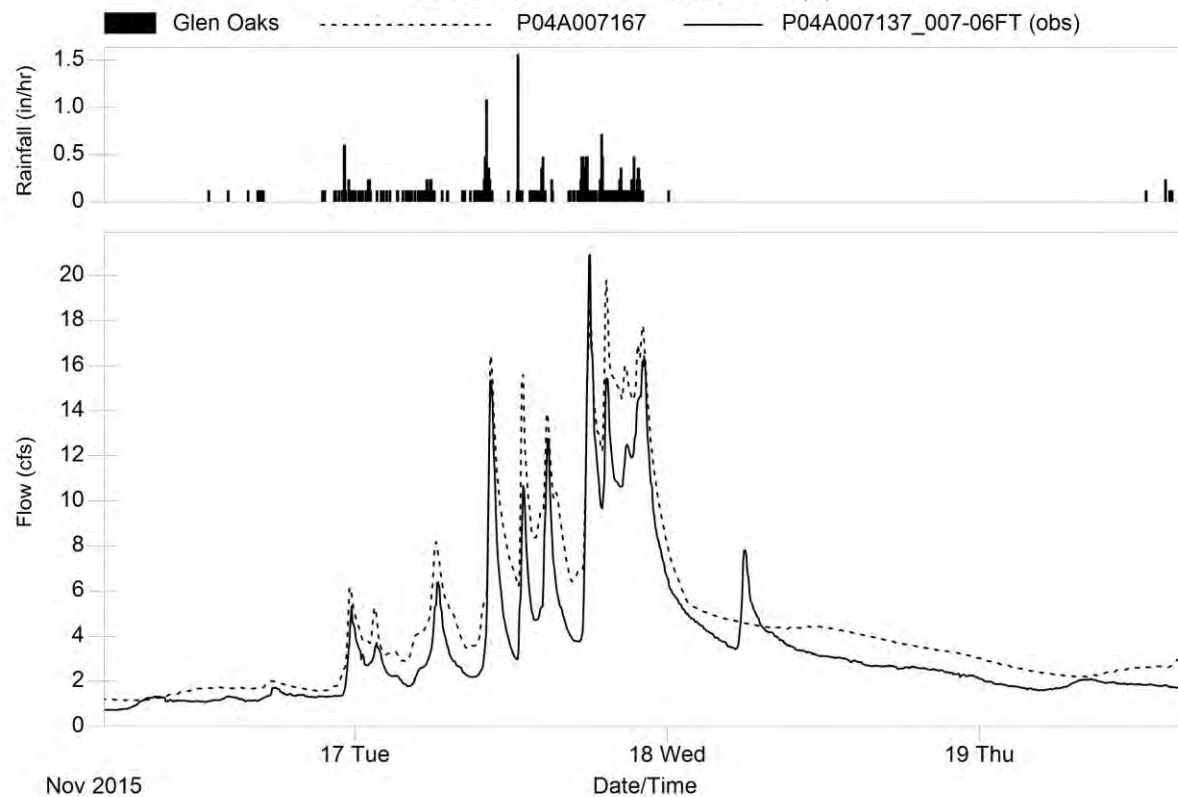
Duration: 6.25 h, Total Rainfall: 0.66 (in)



Fayette 007-06FT – Calibration Events

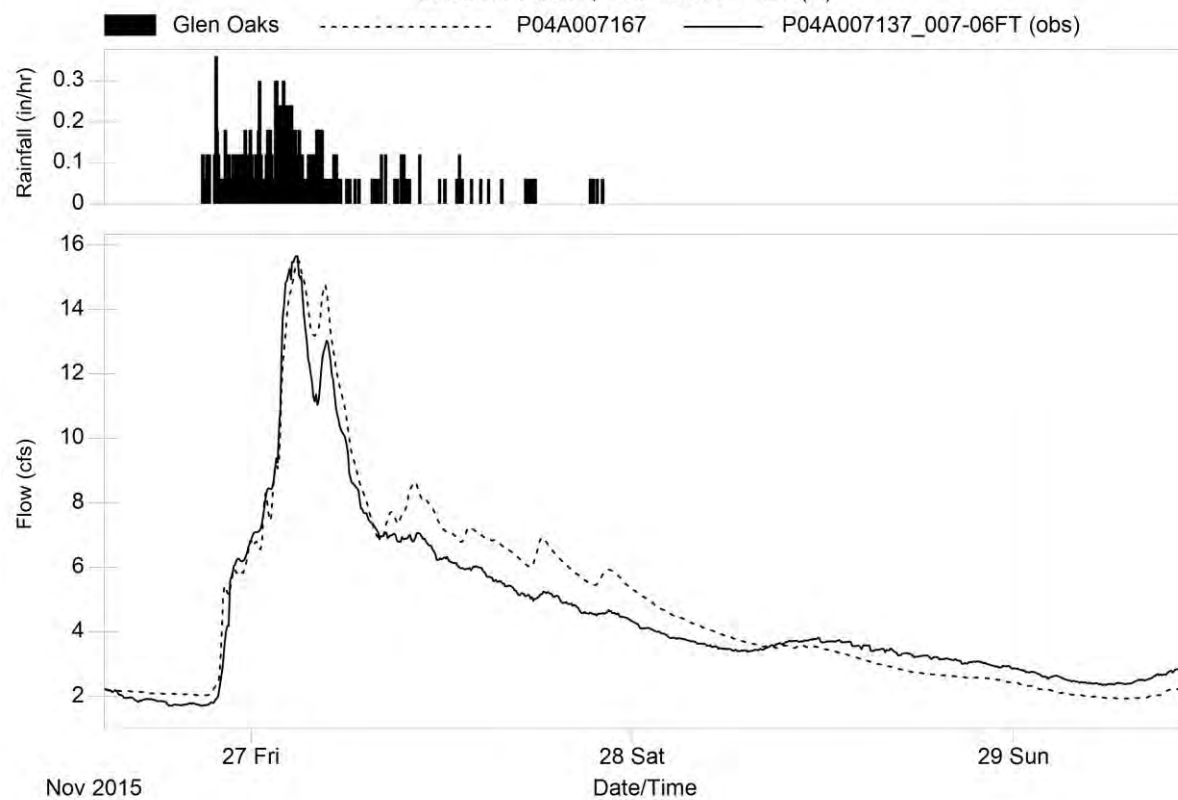
Event of November 16, 2015

Duration: 69.25 h, Total Rainfall: 2.25 (in)



Event of November 26, 2015

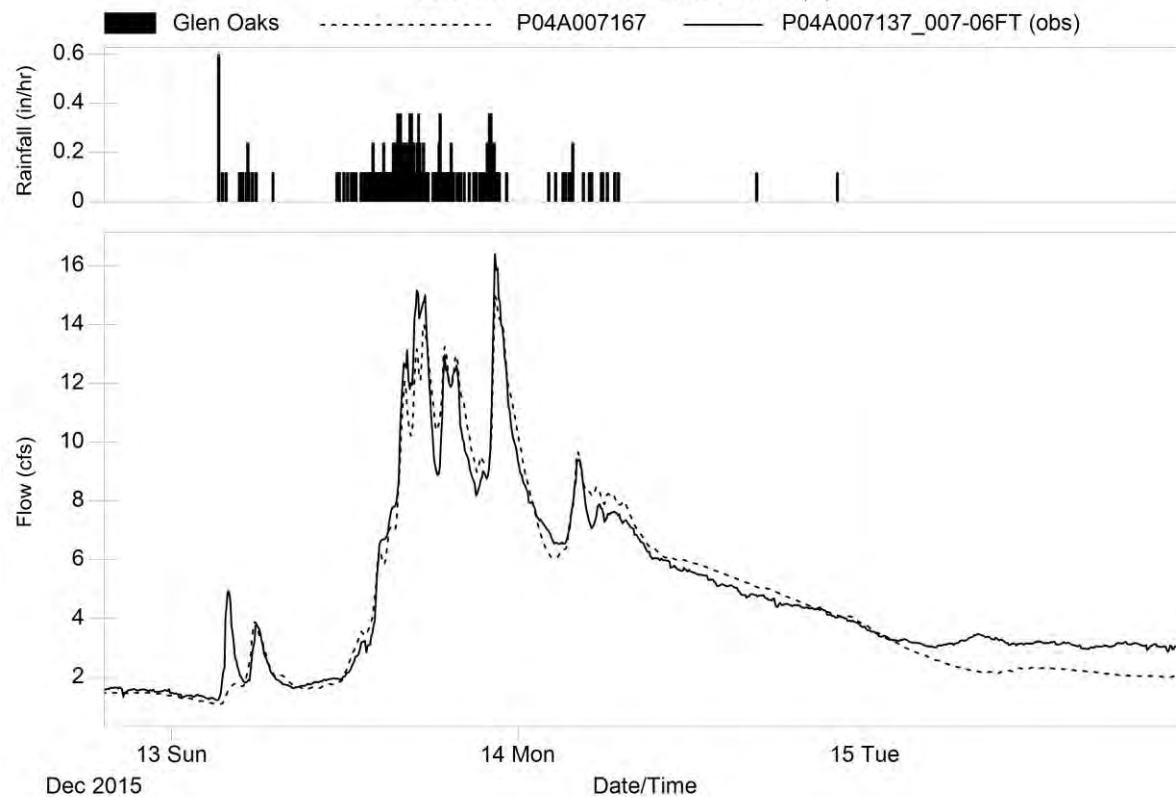
Duration: 56.75 h, Total Rainfall: 1.27 (in)



Fayette 007-06FT – Calibration Events

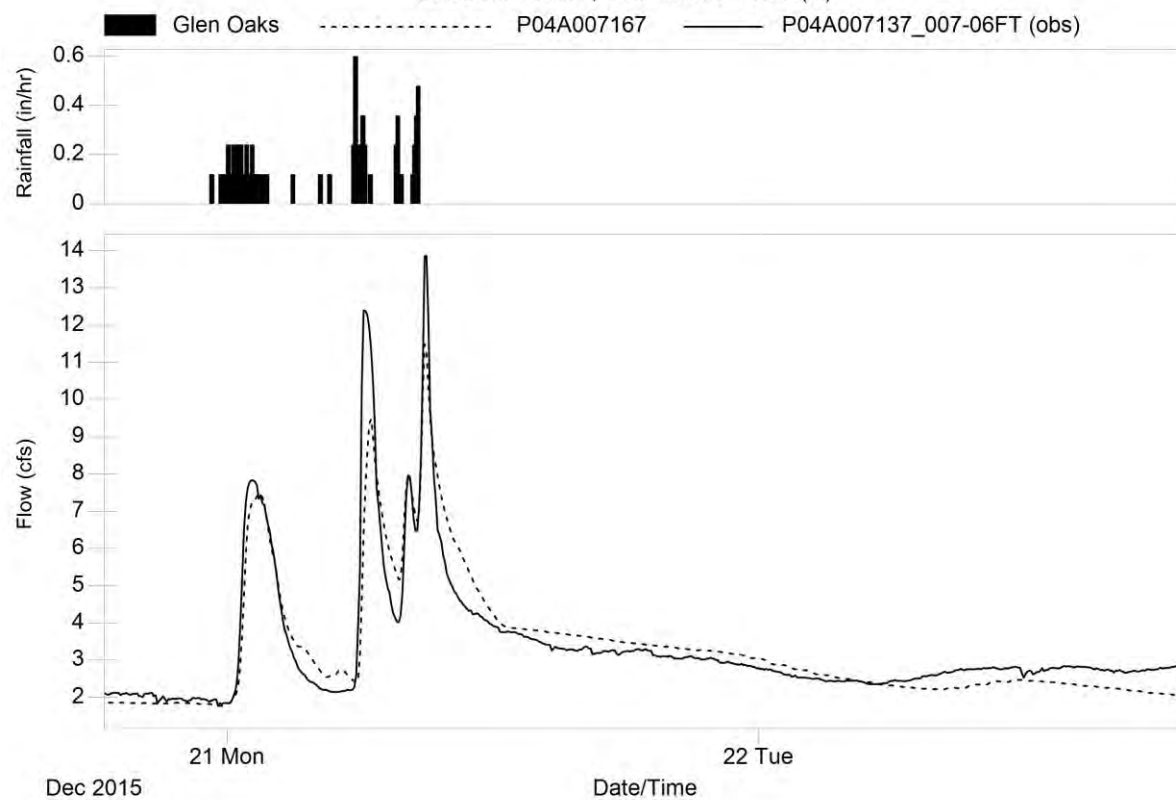
Event of December 13, 2015

Duration: 62.42 h, Total Rainfall: 1.71 (in)



Event of December 20, 2015

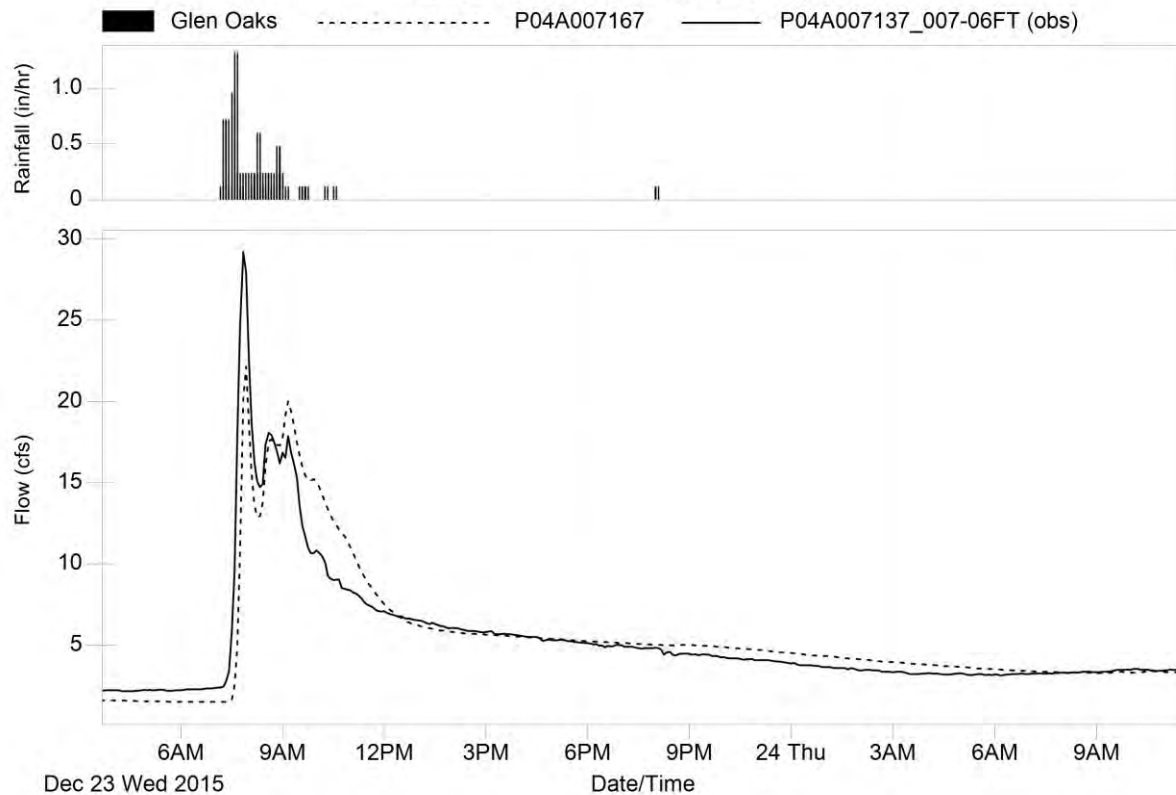
Duration: 40.75 h, Total Rainfall: 0.67 (in)



Fayette 007-06FT – Calibration Events

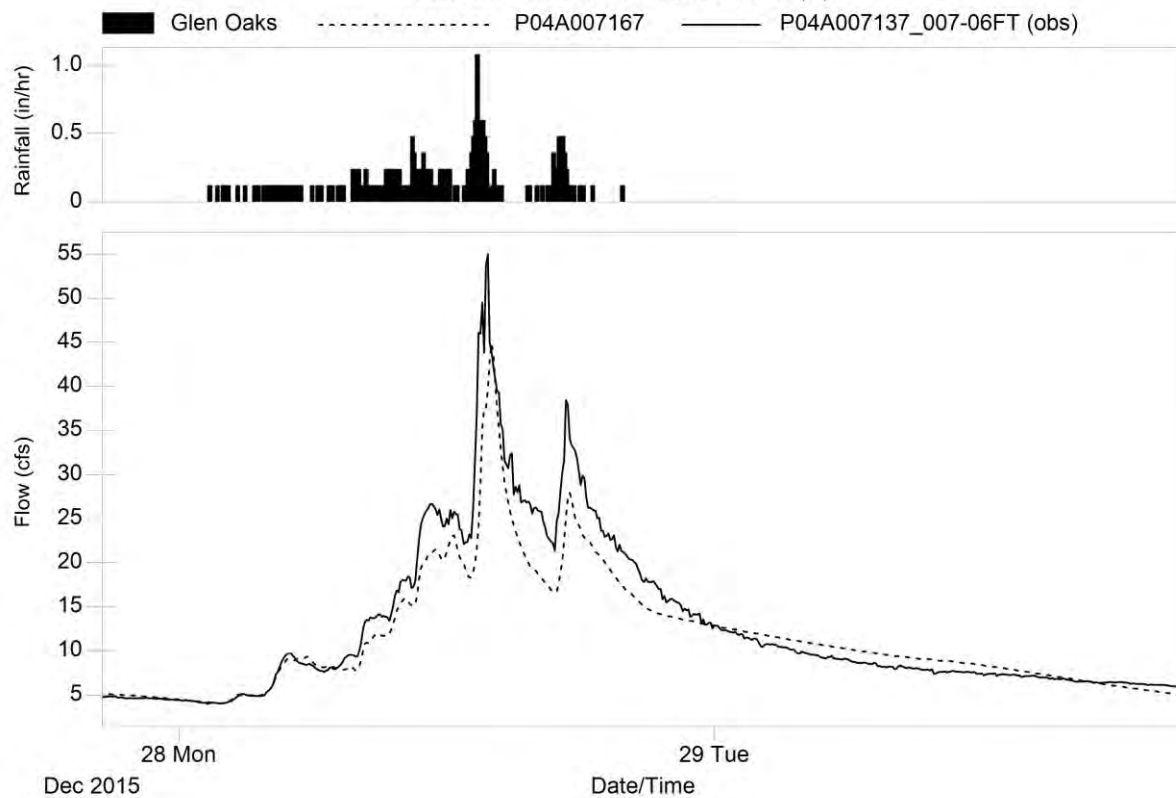
Event of December 23, 2015

Duration: 26.58 h, Total Rainfall: 0.71 (in)



Event of December 28, 2015

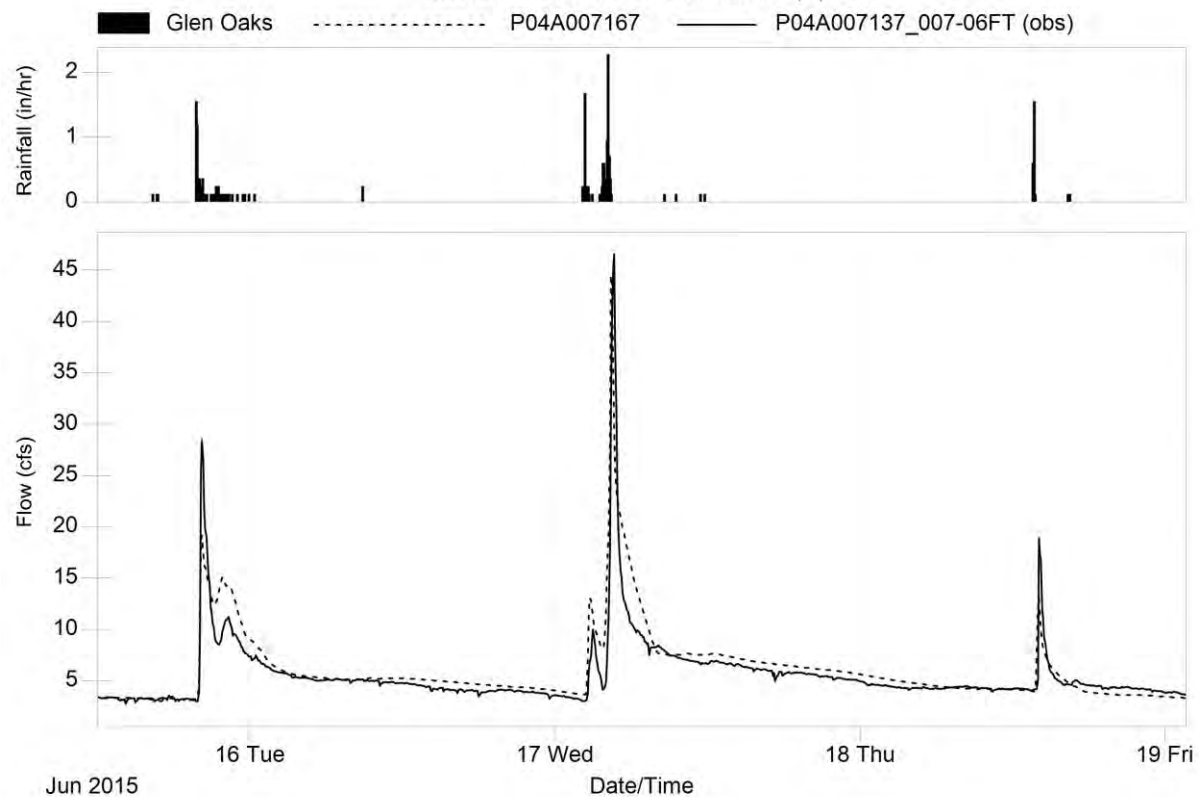
Duration: 40.42 h, Total Rainfall: 2.05 (in)



Fayette 007-06FT – Verification Events

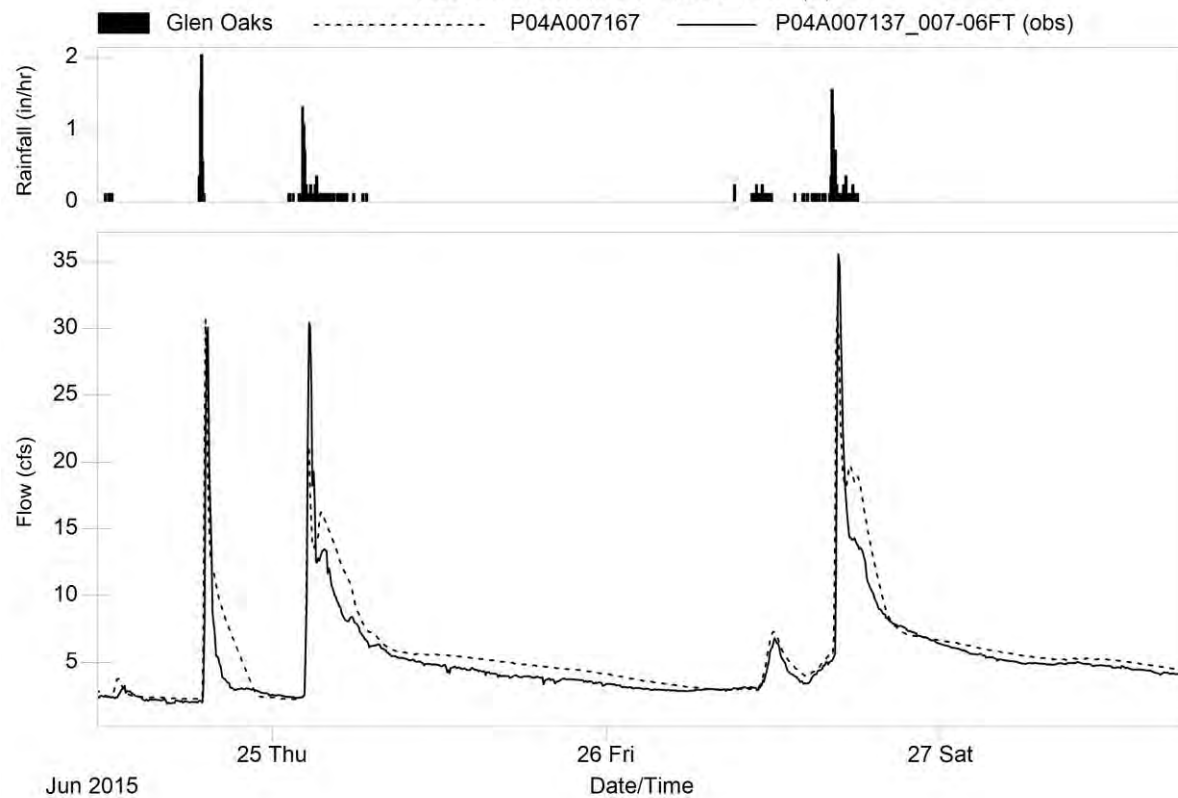
Event of June 15, 2015

Duration: 71.33 h, Total Rainfall: 1.7 (in)



Event of June 24, 2015

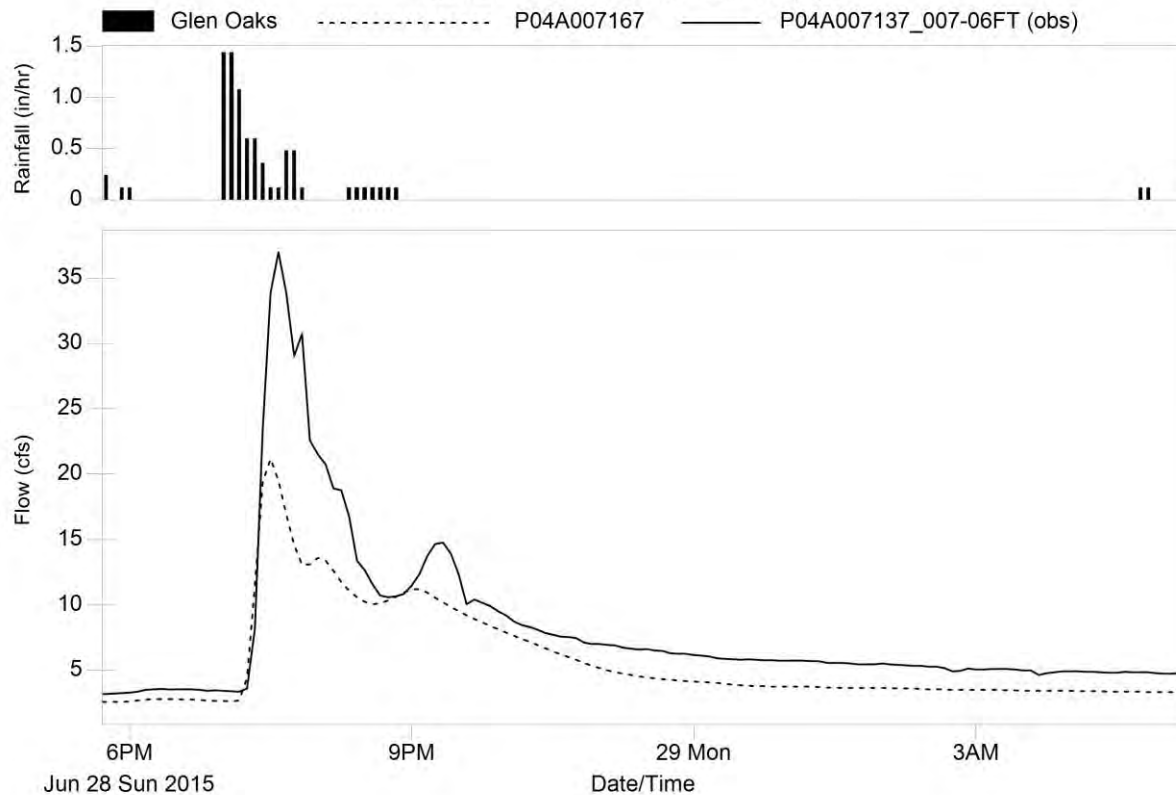
Duration: 65.08 h, Total Rainfall: 1.91 (in)



Fayette 007-06FT – Verification Events

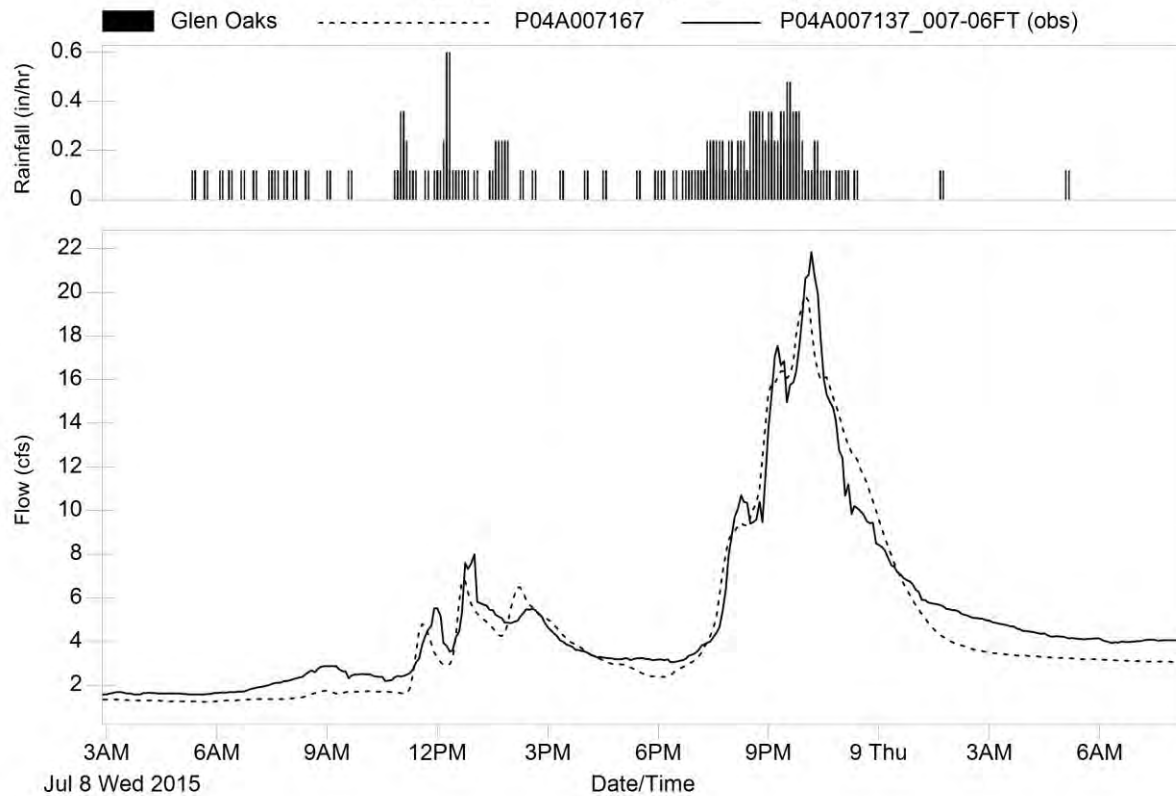
Event of June 28, 2015

Duration: 9.58 h, Total Rainfall: 0.47 (in)



Event of July 8, 2015

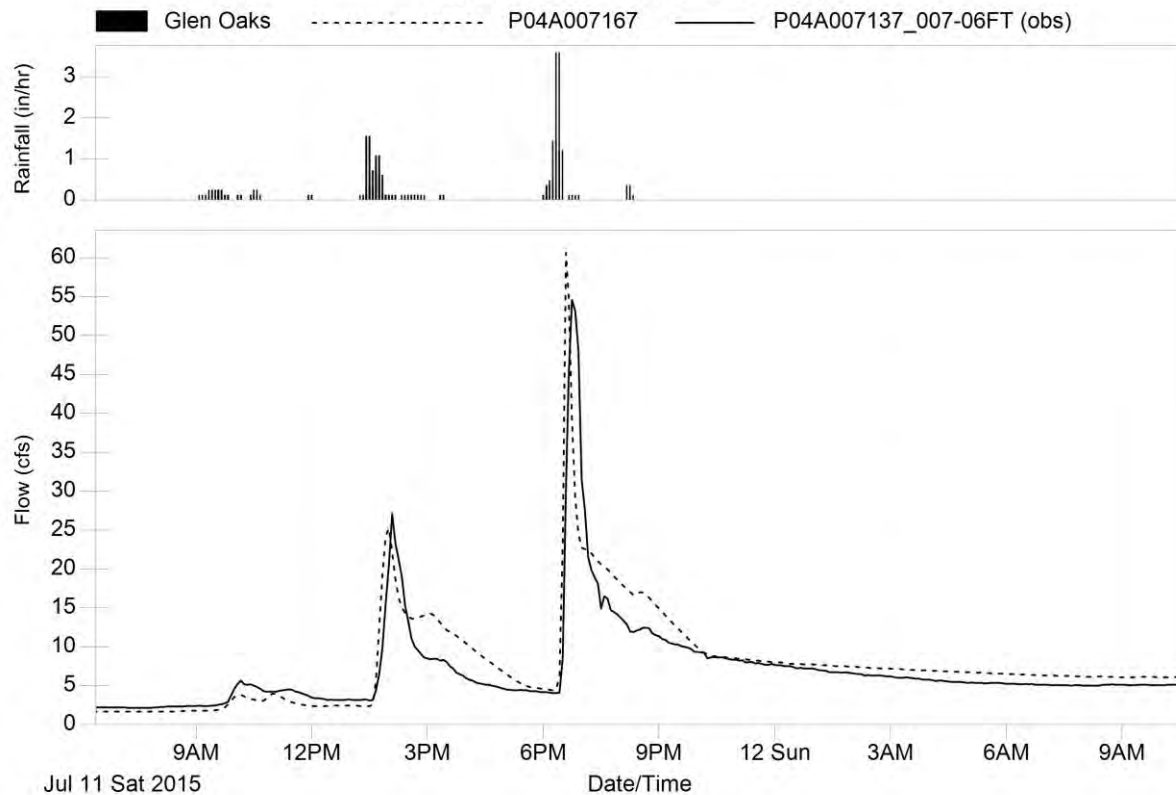
Duration: 24.5 h, Total Rainfall: 1.36 (in)



Fayette 007-06FT – Verification Events

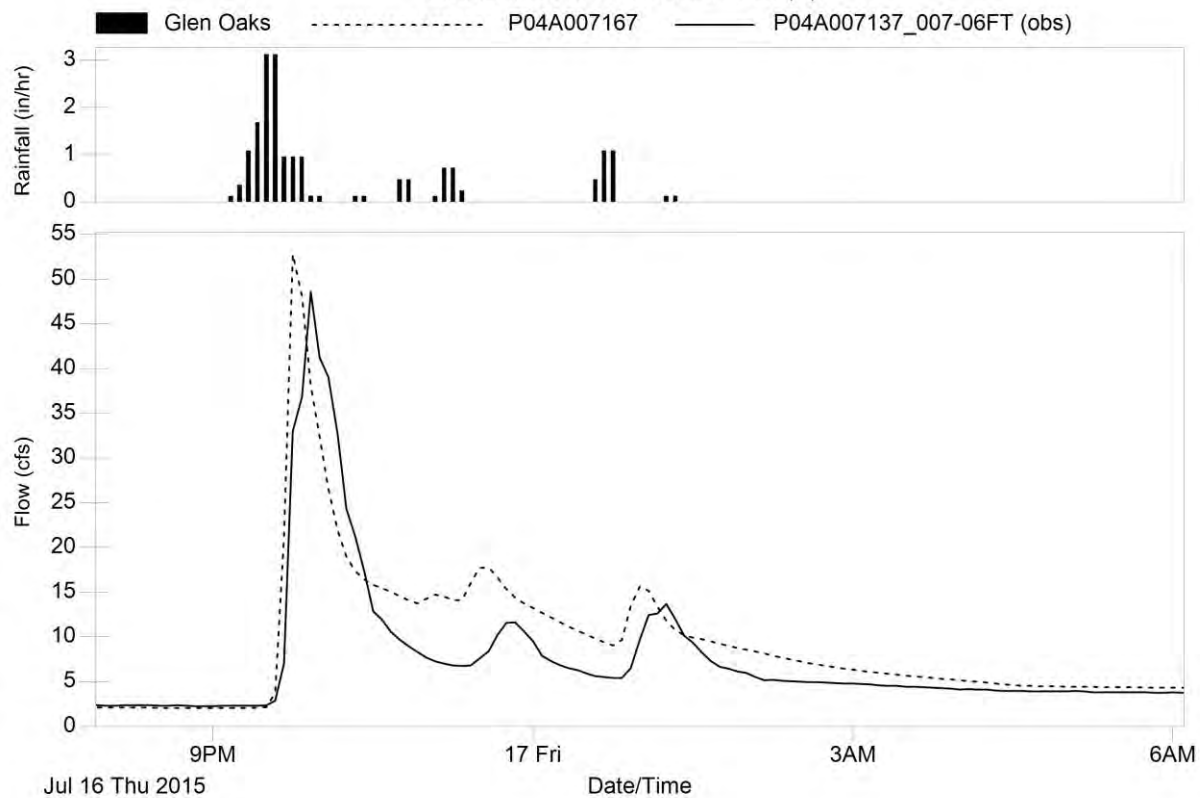
Event of July 11, 2015

Duration: 23.5 h, Total Rainfall: 1.32 (in)



Event of July 16, 2015

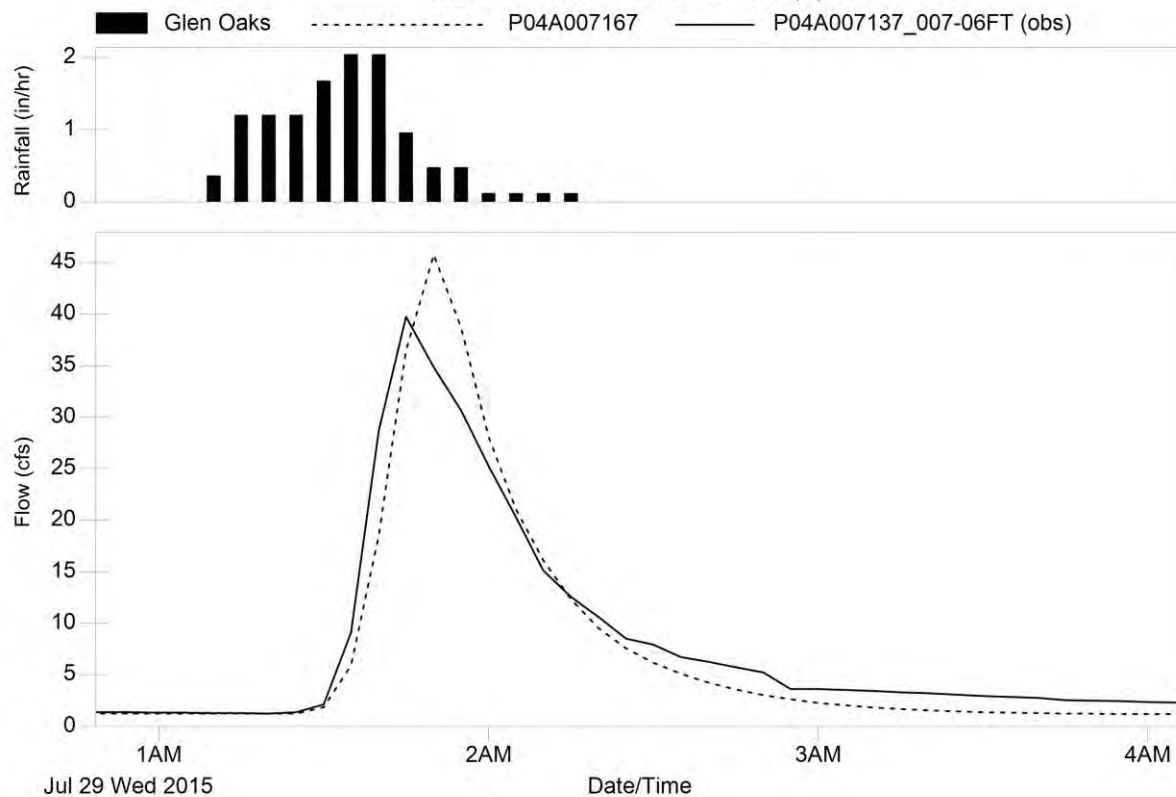
Duration: 8.5 h, Total Rainfall: 1.05 (in)



Fayette 007-06FT – Verification Events

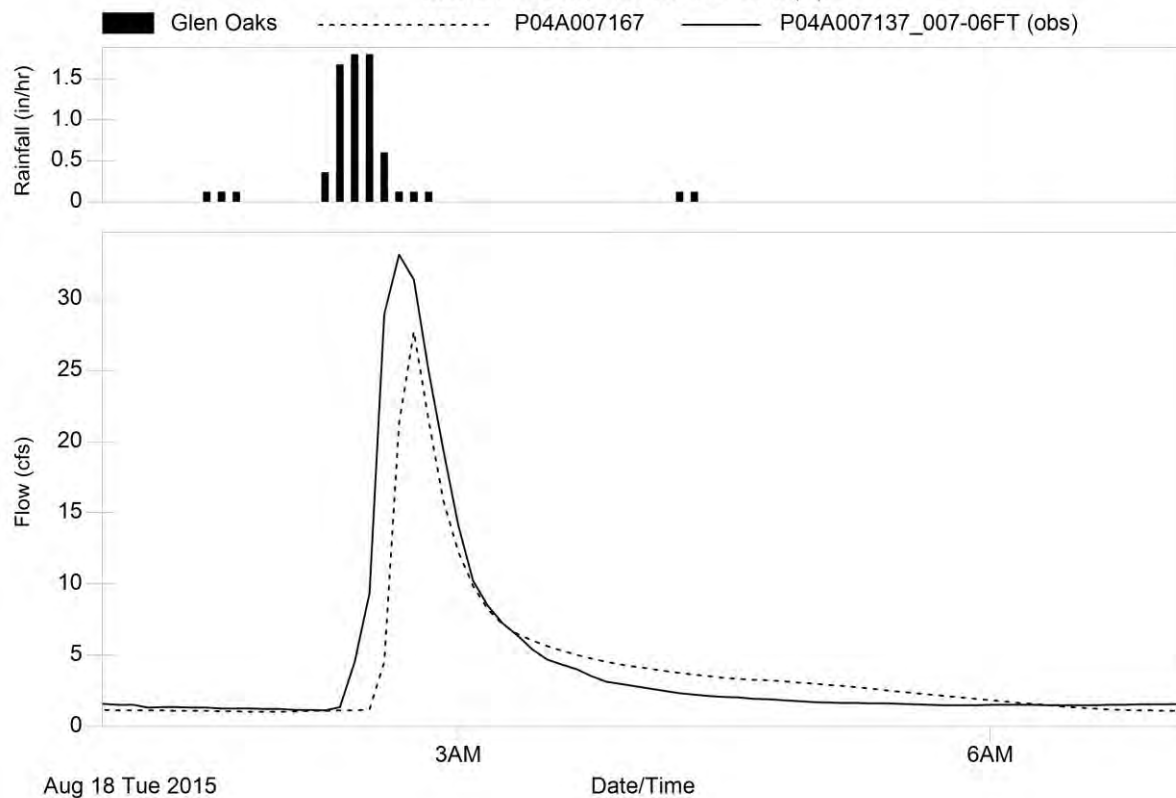
Event of July 29, 2015

Duration: 2.75 h, Total Rainfall: 0.77 (in)

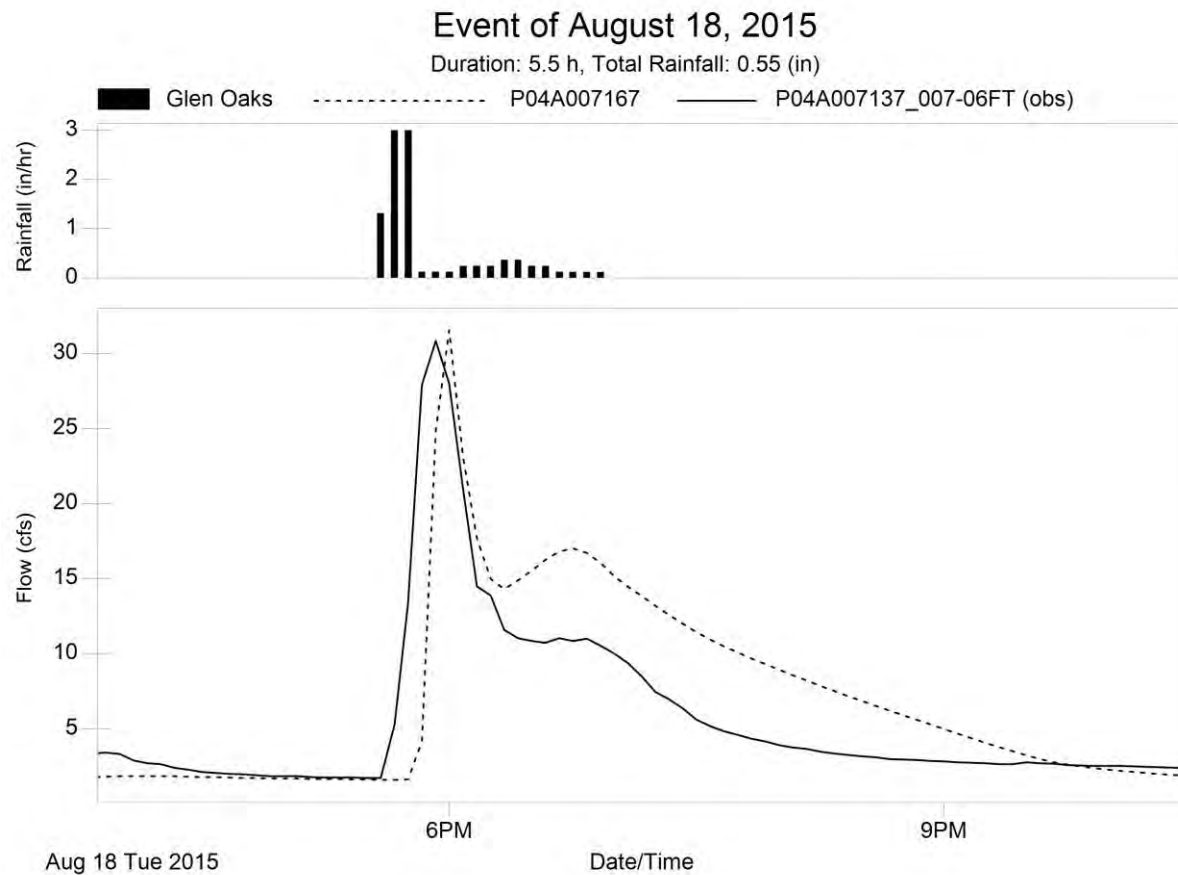


Event of August 18, 2015

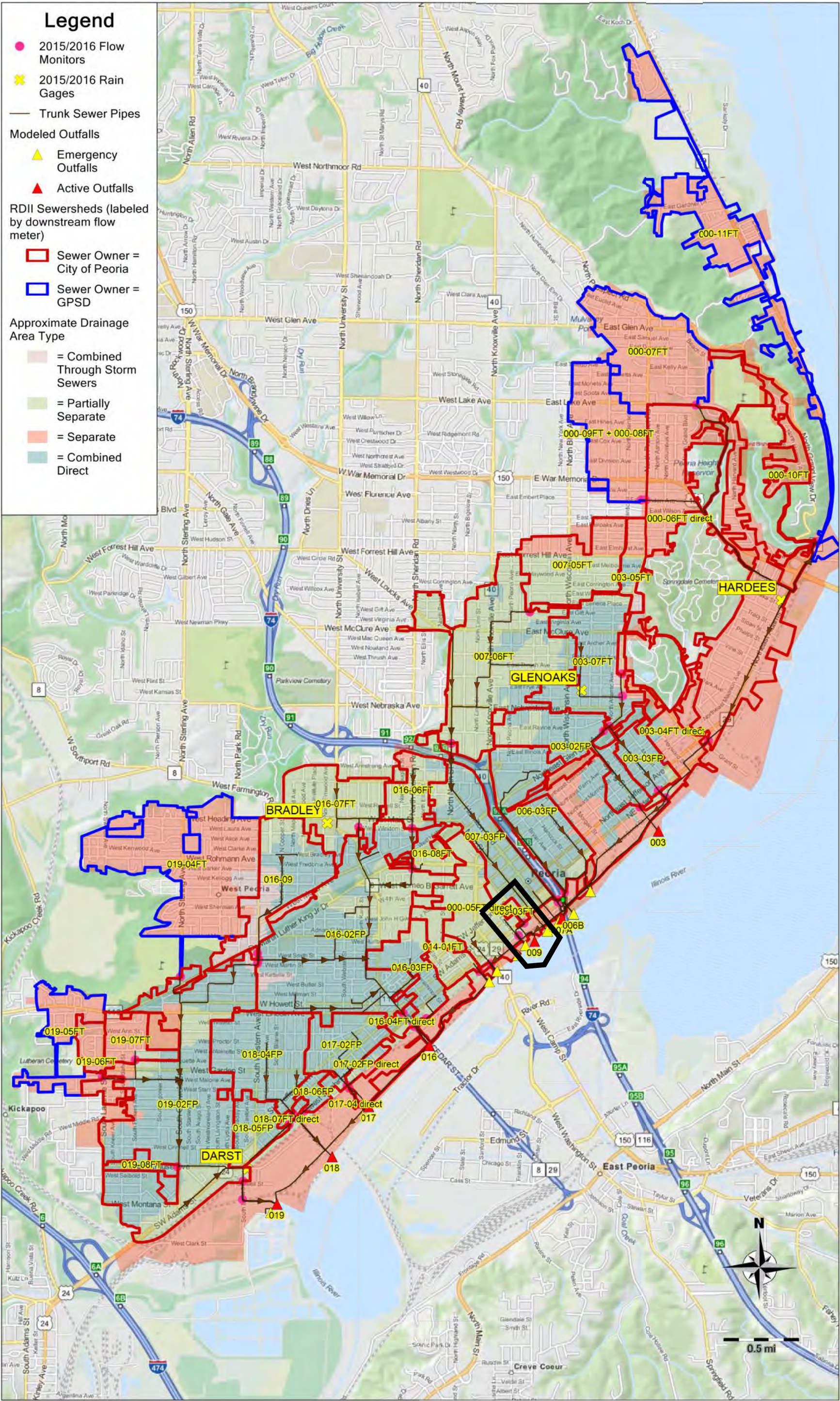
Duration: 5.08 h, Total Rainfall: 0.43 (in)



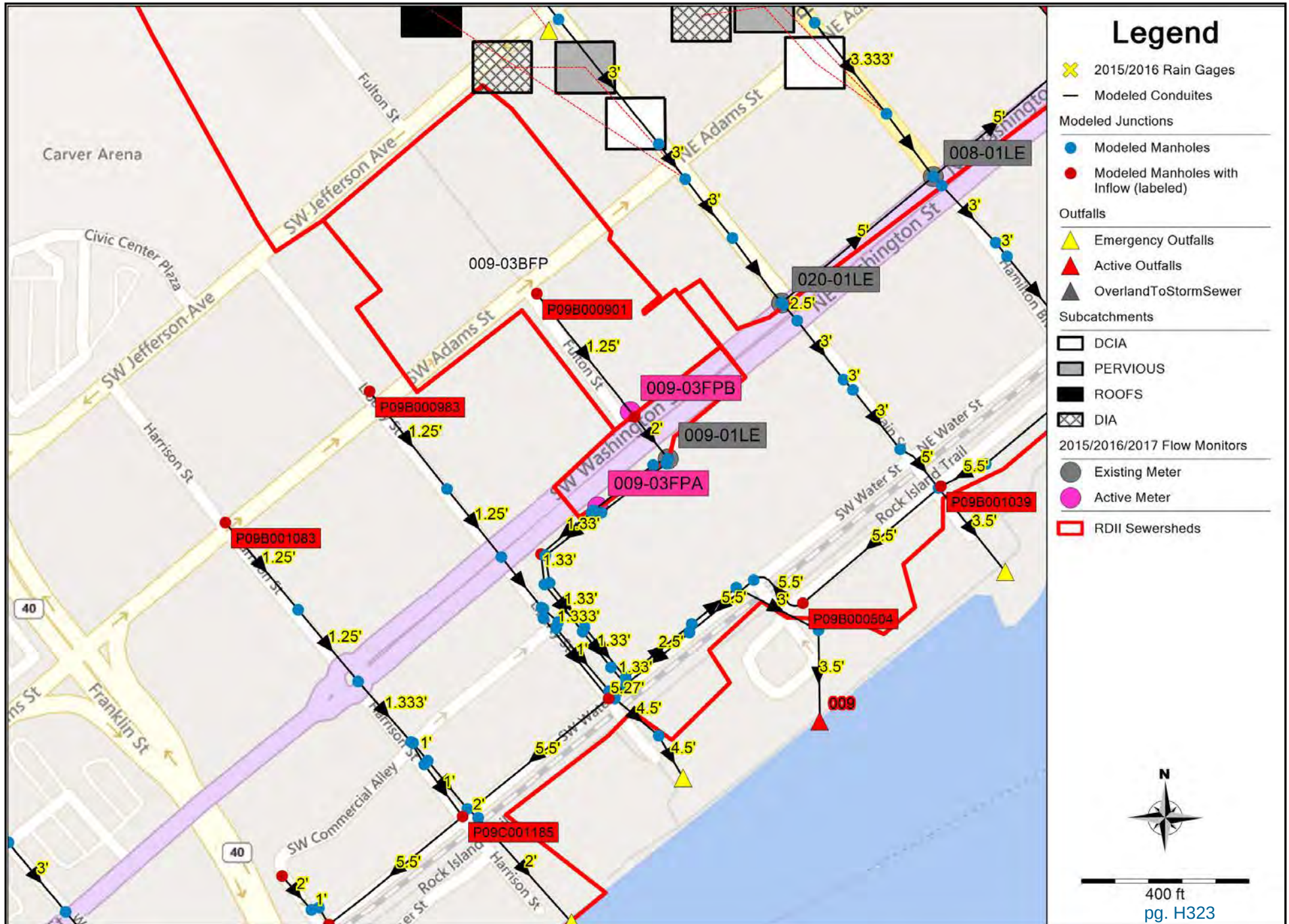
Fayette 007-06FT – Verification Events



Flow Monitor 009-03FPA and 019-03FPB Overview Map



Flow Meter 009-03FPA Location Map



Fulton 009-03FPA Flow

Date	Duration (h)	Rainfall (in) RG006	Maximum Flow (cfs)		Maximum Flow (mgd)		Total Volume (ft³)		Volume (million gallons)		Peak Flow Rate (-15% to +25%)	Flow Volume (-10% to +20%)	Rainfall Variability			
CALIBRATION EVENTS - FLOW																
5/10/2017 18:45	1.92	0.51	0.962	1.041	0.622	0.672	2450	3024	0.0183	0.0226	8%	23%	Variable			
5/20/2017 6:55	3.08	0.56	0.927	0.843	0.599	0.545	4097	3567	0.0306	0.0267	-9%	-13%	Variable			
5/26/2017 14:50	0.67	0.44	1.530	1.347	0.988	0.870	2545	2093	0.0190	0.0157	-12%	-18%	Variable			
6/15/2017 1:50	1.58	0.59	1.300	1.401	0.840	0.905	2875	3344	0.0215	0.0250	8%	16%	Variable			
7/10/2017 6:00	4.33	0.72	0.789	1.033	0.510	0.667	4542	4470	0.0340	0.0334	31%	-2%	Variable			
7/10/2017 18:30	2.17	0.71	1.332	1.336	0.860	0.863	3819	4321	0.0286	0.0323	0%	13%	Variable			
7/26/2017 19:55	2.58	0.75	1.253	1.312	0.809	0.848	3773	4551	0.0282	0.0340	5%	21%	Relatively Uniform			
8/22/2017 1:05	4.33	0.43	0.370	0.486	0.239	0.314	2101	2563	0.0157	0.0192	31%	22%	Possibly Uniform			
10/14/2017 12:55	1.58	0.42	1.300	1.105	0.840	0.714	2129	2462	0.0159	0.0184	-15%	16%	Relatively Uniform			
10/14/2017 19:20	10.25	1.94	1.493	1.478	0.964	0.955	11150	12780	0.0834	0.0956	-1%	15%	Possibly Uniform			
VERIFICATION EVENTS - FLOW																
4/26/2017 21:25	8.00	0.67	0.311	0.380	0.201	0.245	5374	3942	0.0402	0.0295	22%	-27%	Relatively Uniform			
4/29/2017 11:00	8.92	3.28	1.417	1.306	0.915	0.844	17240	19640	0.1290	0.1469	-8%	14%	Relatively Uniform			
4/30/2017 18:55	1.92	0.32	0.882	0.891	0.570	0.576	1998	1909	0.0149	0.0143	1%	-4%	Relatively Uniform			
5/19/2017 6:20	5.58	0.51	0.727	0.803	0.470	0.519	4291	3758	0.0321	0.0281	10%	-12%	Relatively Uniform			
6/17/2017 20:35	2.67	1.20	1.434	1.484	0.926	0.959	5152	6603	0.0385	0.0494	3%	28%	Variable			
7/22/2017 5:50	2.67	0.62	1.009	1.148	0.652	0.742	3169	3668	0.0237	0.0274	14%	16%	Relatively Uniform			
9/18/2017 20:40	2.83	1.12	1.368	1.481	0.884	0.957	4312	5760	0.0323	0.0431	8%	34%	Variable			
10/10/2017 13:10	10.83	1.72	1.300	1.217	0.840	0.786	10040	12250	0.0751	0.0916	-6%	22%	Possibly Uniform			
10/22/2017 5:30	8.42	0.89	1.468	1.227	0.948	0.793	5051	5689	0.0378	0.0426	-16%	13%	Variable			
									WEIGHTED AVERAGES							
									Calibration - Relatively Uniform					-5%	19%	
									Calibration - Possibly Uniform					5%	16%	
									Calibration - Variable					2%	2%	
									Calibration - All Events					1%	9%	
									Verification - Relatively Uniform					4%	3%	
									Verification - Possibly Uniform					-6%	22%	
									Verification - Variable					-2%	24%	
									Verification - All Events					0%	12%	
									Weighted Average - All Events					1%	11%	All Events
									NET AVERAGES							
									Calibration - Relatively Uniform					-5%	-5%	
									Calibration - Possibly Uniform					15%	15%	
									Calibration - Variable					4%	4%	
									Calibration- All Events					5%	5%	
									Verification - Relatively Uniform					8%	8%	
									Verification - Possibly Uniform					-6%	-6%	
									Verification - Variable					-2%	-2%	
									Verification- All Events					3%	3%	
									Net Average - All Events					4%	9%	All Events

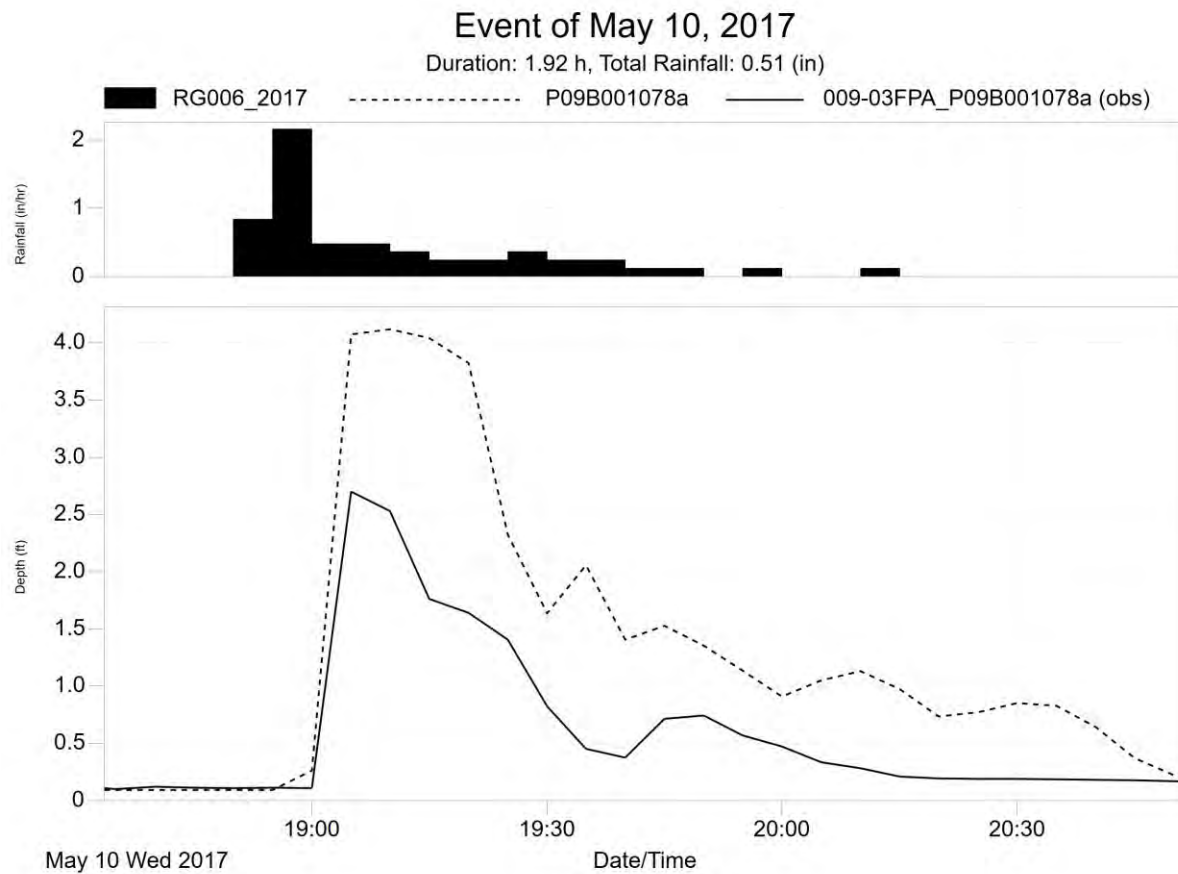
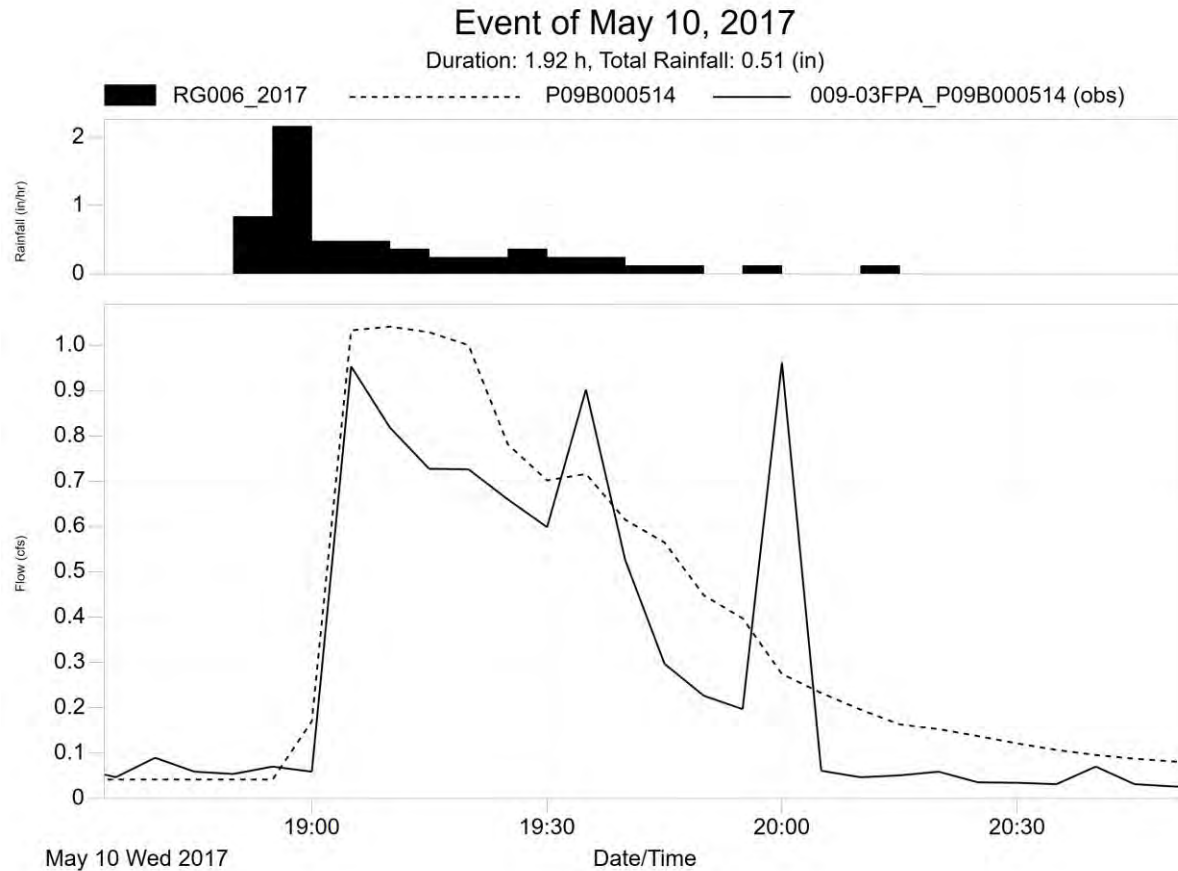
Fulton 009-03FPA Depth

Date	Duration (h)	Maximum Depth (ft)		Minimum Depth (ft)		Average Depth (ft)		Maximum Depth (ft)	Minimum Depth (ft)	Average Depth (ft)	Rainfall Variability
		metered	modeled	metered	modeled	metered	modeled	Surcharged: -0.33 ft to +1.67 ft			
CALIBRATION EVENTS - DEPTH								Non-Surcharged: -0.33 ft to +0.33 ft			
5/10/2017 18:45	1.9	2.7	4.1	0.1	0.1	0.7	1.5	1.42	-0.02	0.83	Variable
5/20/2017 6:55	3.1	1.4	1.6	0.1	0.1	0.4	0.8	0.23	-0.01	0.37	Variable
5/26/2017 14:50	0.7	6.3	6.8	0.1	0.1	2.8	3.8	0.51	-0.03	1.06	Variable
6/15/2017 1:50	1.6	6.5	7.4	0.1	0.1	1.5	2.6	0.91	-0.03	1.10	Variable
7/10/2017 6:00	4.3	1.6	4.1	0.1	0.1	0.3	0.8	2.52	-0.04	0.51	Variable
7/10/2017 18:30	2.2	6.5	7.6	0.1	0.1	1.7	2.6	1.13	0.02	0.89	Variable
7/26/2017 19:55	2.6	5.4	6.4	0.1	0.1	1.1	1.9	1.08	0.00	0.83	Relatively Uniform
8/22/2017 1:05	4.3	0.2	0.7	0.1	0.1	0.1	0.3	0.52	0.00	0.21	Possibly Uniform
10/14/2017 12:55	1.6	5.5	4.6	0.1	0.1	1.0	1.4	-0.87	-0.01	0.46	Relatively Uniform
10/14/2017 19:20	10.3	6.7	8.1	0.1	0.1	0.7	1.5	1.46	0.02	0.75	Possibly Uniform
VERIFICATION EVENTS - DEPTH											
4/26/2017 21:25	8.0	0.2	0.9	0.1	0.1	0.2	0.4	0.68	0.00	0.21	Relatively Uniform
4/29/2017 11:00	8.9	7.0	8.2	0.1	0.1	1.9	2.9	1.25	0.00	0.94	Relatively Uniform
4/30/2017 18:55	1.9	2.0	3.7	0.1	0.1	0.6	0.8	1.70	-0.03	0.25	Relatively Uniform
5/19/2017 6:20	5.6	1.9	2.5	0.1	0.1	0.3	0.4	0.53	-0.04	0.16	Relatively Uniform
6/17/2017 20:35	2.7	6.7	8.1	0.1	0.1	1.9	3.5	1.44	-0.01	1.59	Variable
7/22/2017 5:50	2.7	4.1	5.0	0.1	0.0	0.7	1.5	0.90	-0.04	0.89	Relatively Uniform
9/18/2017 20:40	2.8	6.7	8.2	0.1	0.1	1.4	2.7	1.49	0.01	1.24	Variable
10/10/2017 13:10	10.8	5.9	6.1	0.1	0.2	0.6	1.1	0.17	0.10	0.47	Possibly Uniform
10/22/2017 5:30	8.4	6.5	6.0	0.1	0.0	0.3	0.6	-0.46	-0.01	0.28	Variable
Notes: Surcharge Depth = 1.33 feet						WEIGHTED AVERAGES					
						Calibration - Relatively Uniform		0.09	-0.01	0.65	
						Calibration - Possibly Uniform		1.44	0.01	0.67	
						Calibration - Variable		0.99	-0.02	0.94	
						Calibration - All Events		0.83	-0.01	0.86	
						Verification - Relatively Uniform		1.12	-0.02	0.73	
						Verification - Possibly Uniform		0.17	0.10	0.47	
						Verification - Variable		0.84	-0.01	1.33	
						Verification - All Events		0.84	-0.01	0.99	
						Weighted Average - All Events		0.84	-0.01	0.92	All Events
						NET AVERAGES					
						Calibration - Relatively Uniform		0.11	-0.01	0.64	
						Calibration - Possibly Uniform		0.99	0.01	0.48	
						Calibration - Variable		1.12	-0.02	0.79	
						Calibration- All Events		0.89	-0.01	0.70	
						Verification - Relatively Uniform		1.01	-0.02	0.49	
						Verification - Possibly Uniform		0.17	0.10	0.47	
						Verification - Variable		0.83	0.00	1.04	
						Verification- All Events		0.86	0.00	0.67	
Net Average - All Events		0.84	-0.01	0.68	All Events						

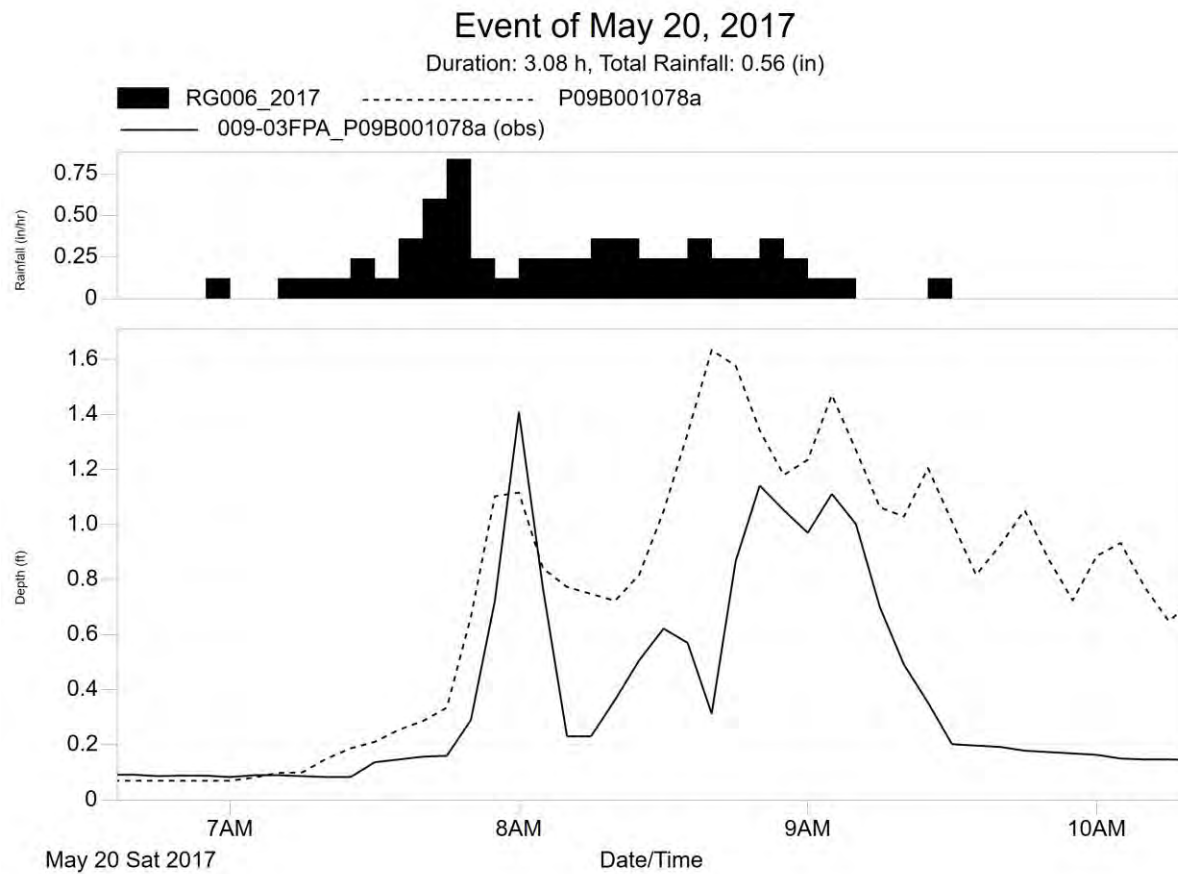
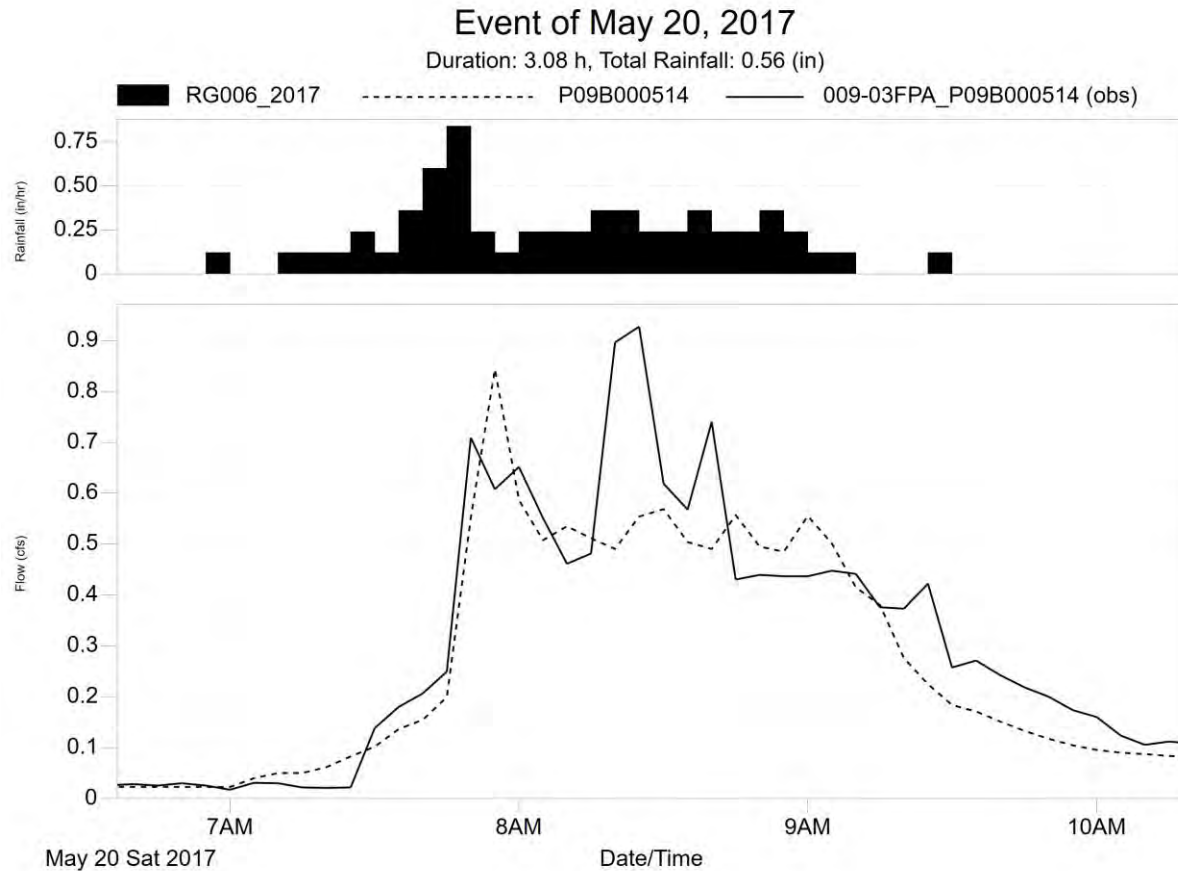
Notes:

Surcharge Depth = 1.33 feet

Fulton 009-03FPA – Calibration Events



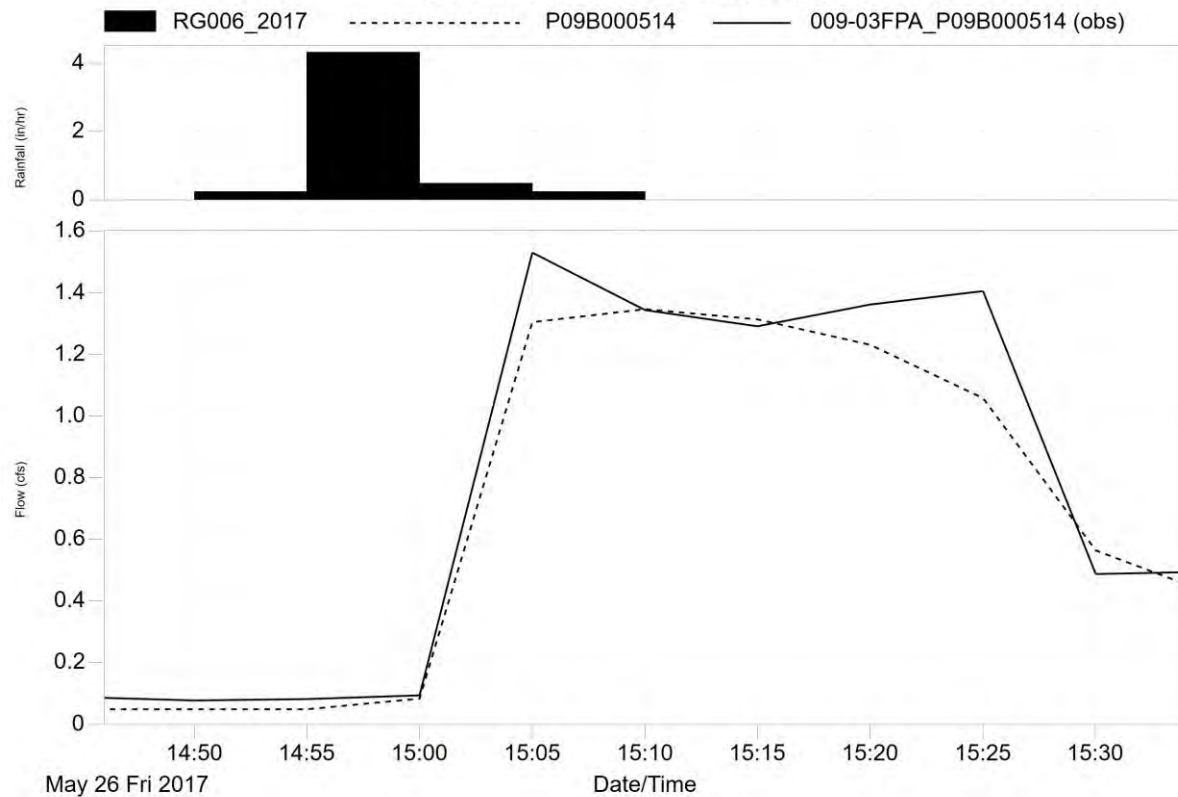
Fulton 009-03FPA – Calibration Events



Fulton 009-03FPA – Calibration Events

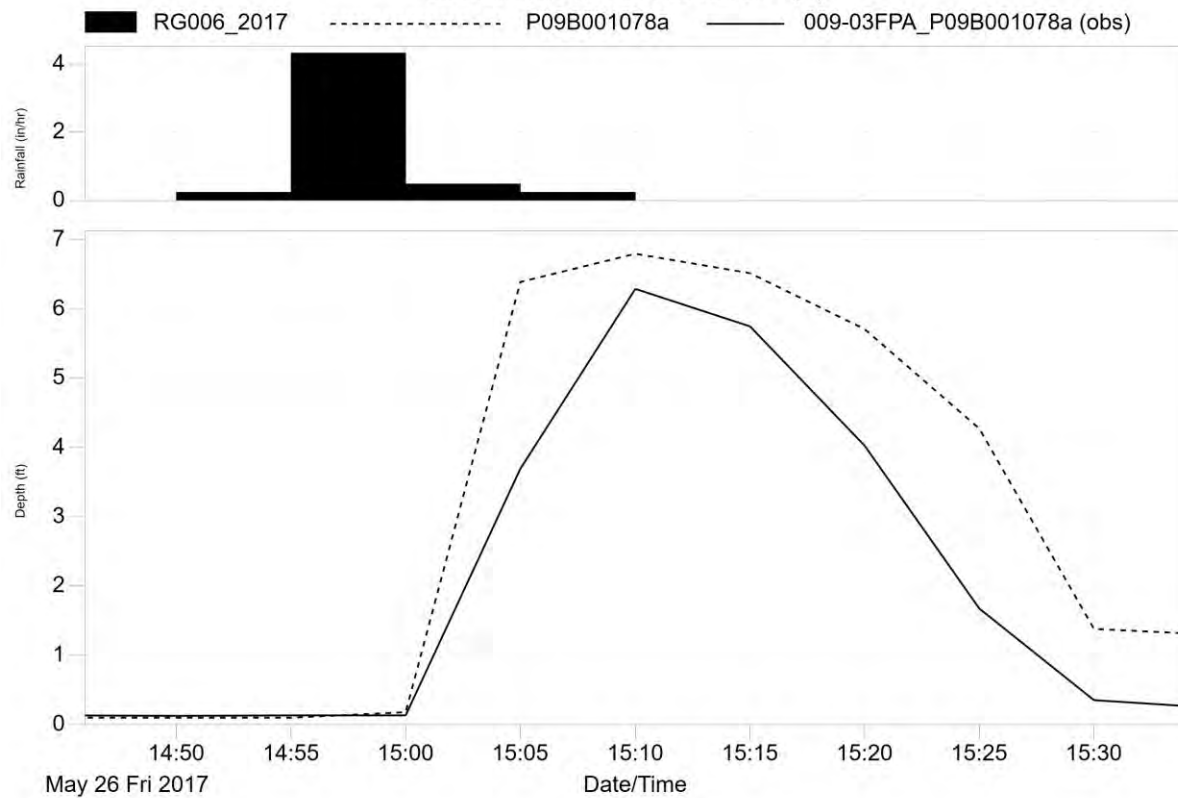
Event of May 26, 2017

Duration: 0.67 h, Total Rainfall: 0.44 (in)

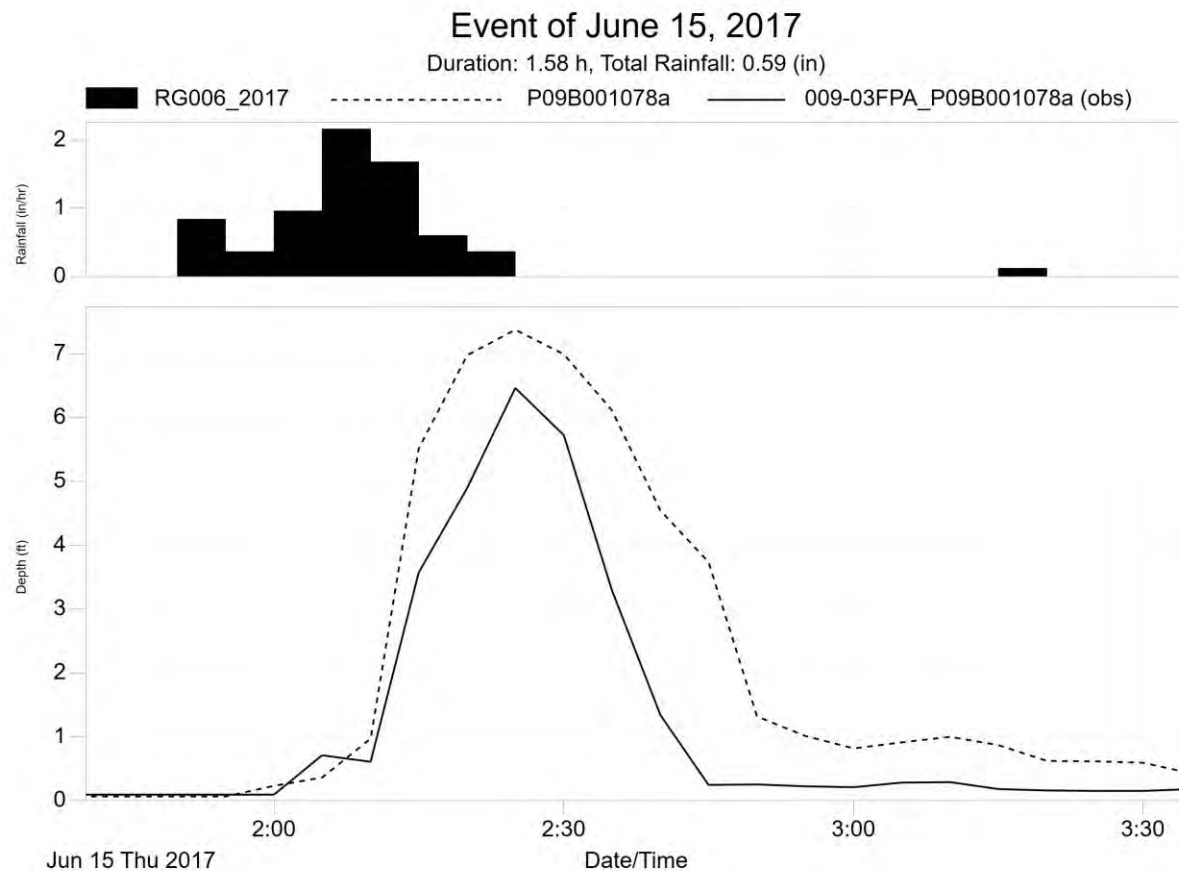
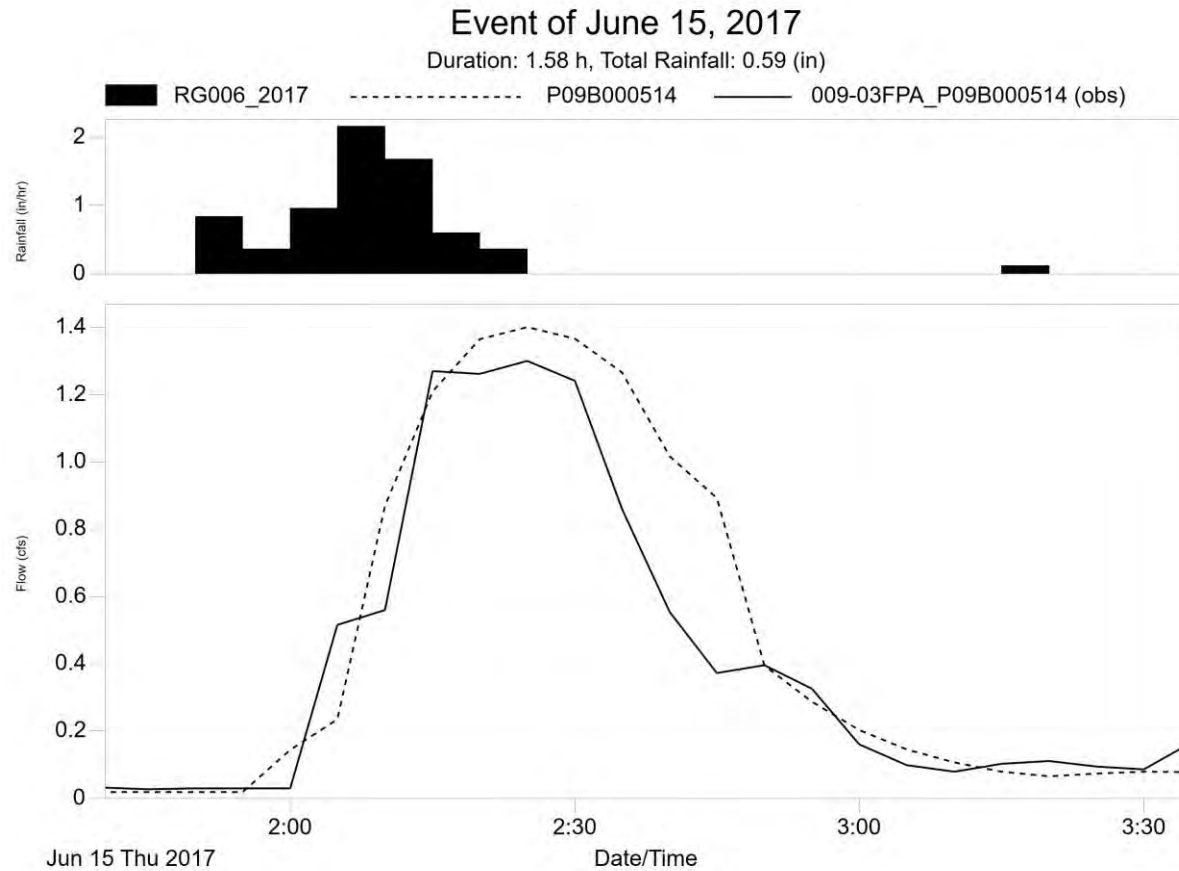


Event of May 26, 2017

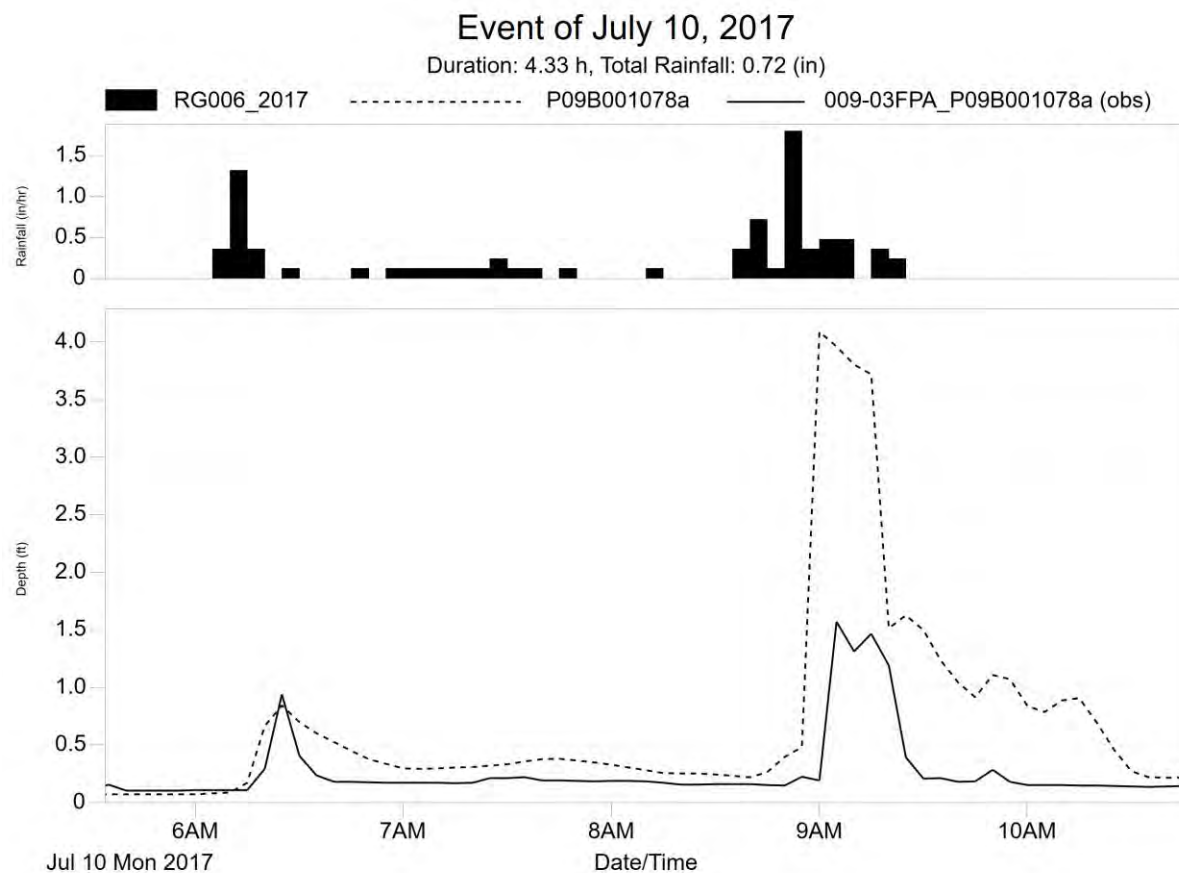
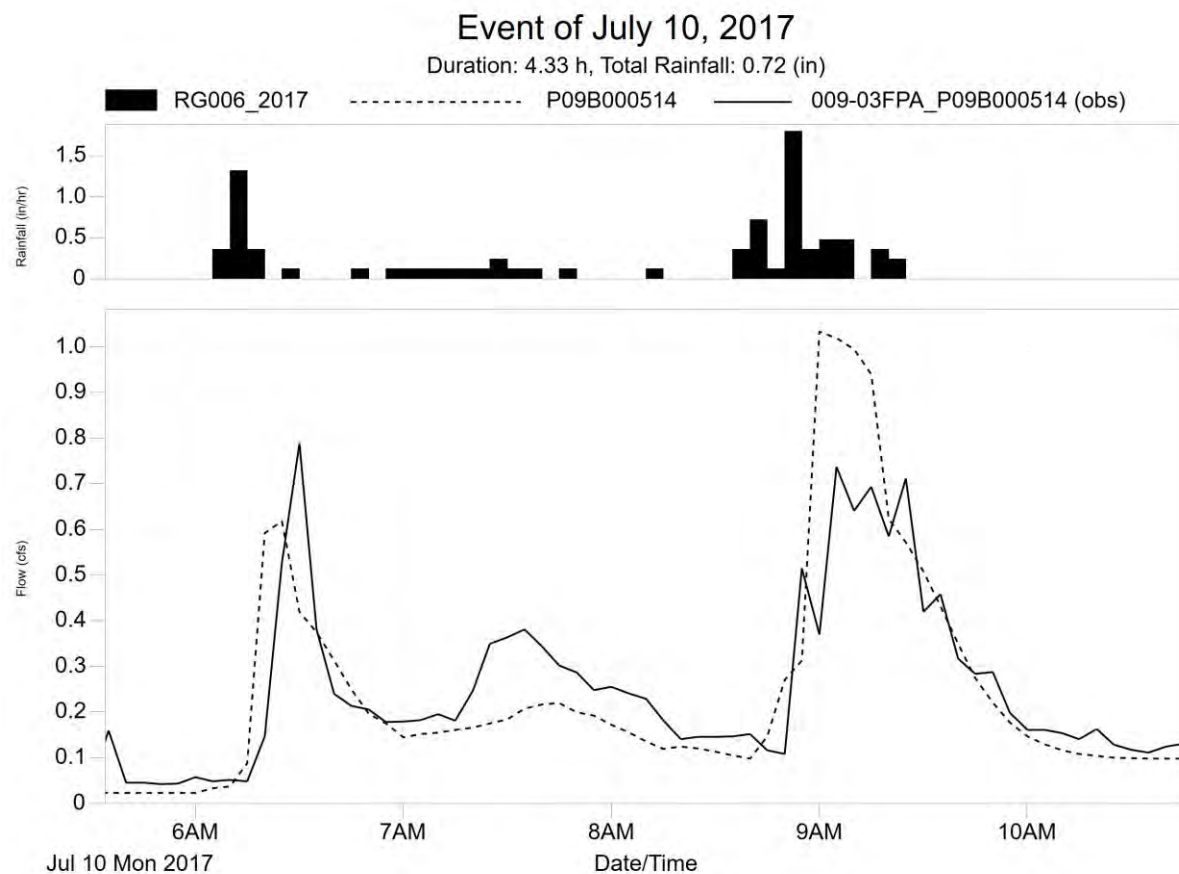
Duration: 0.67 h, Total Rainfall: 0.44 (in)



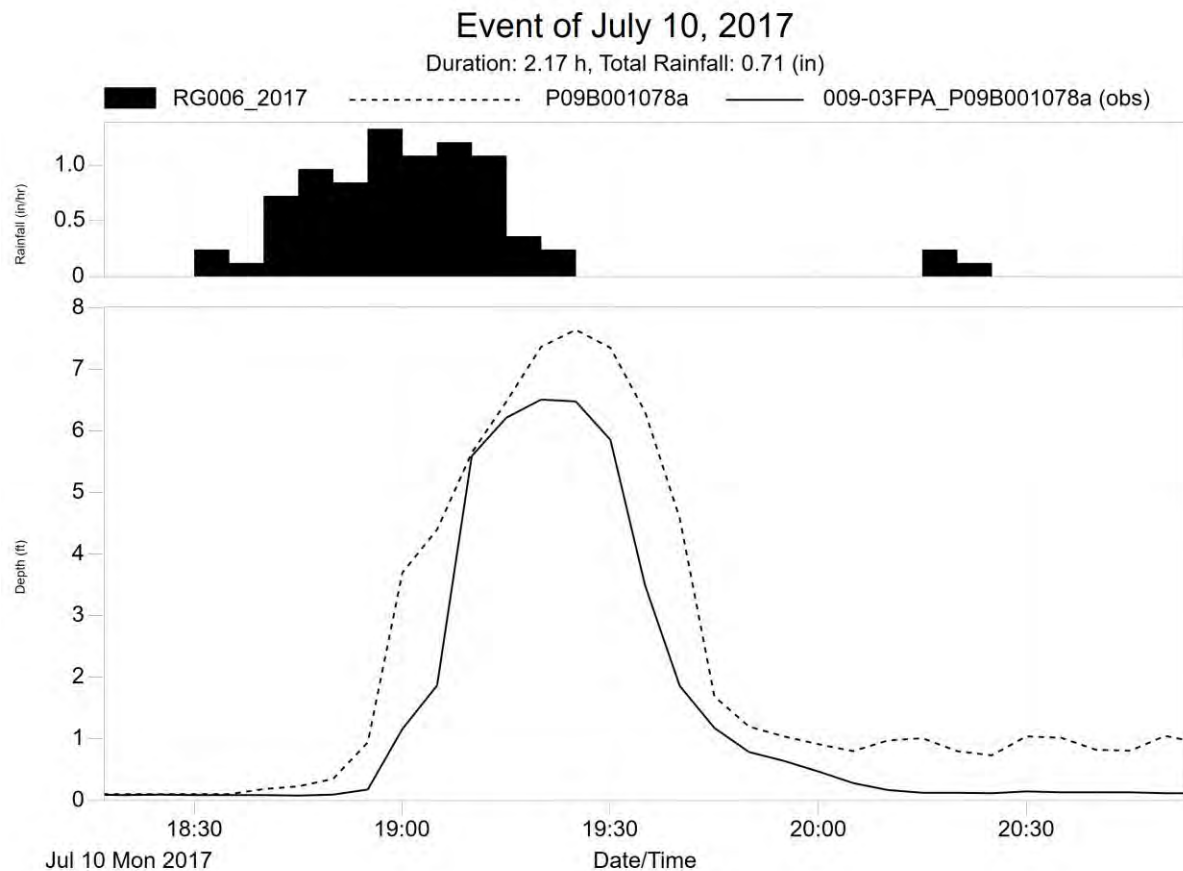
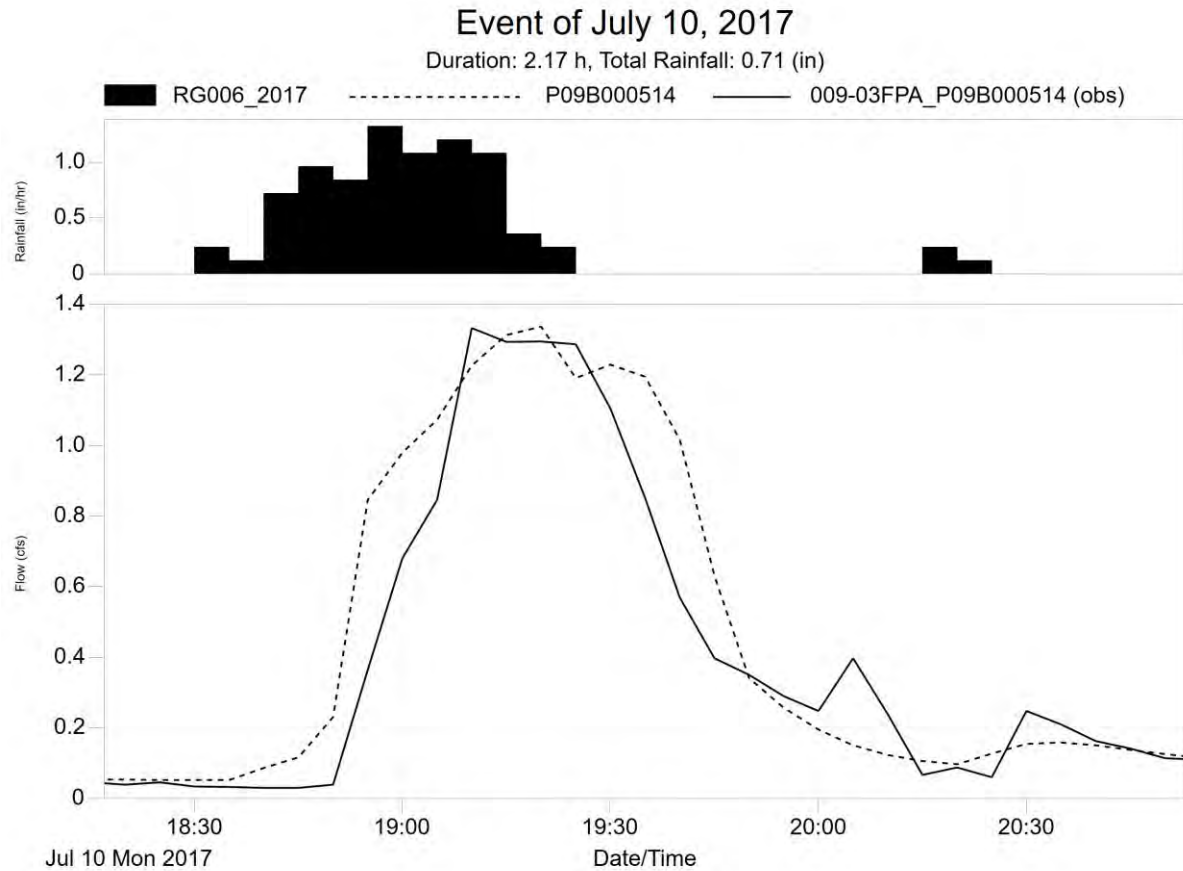
Fulton 009-03FPA – Calibration Events



Fulton 009-03FPA – Calibration Events



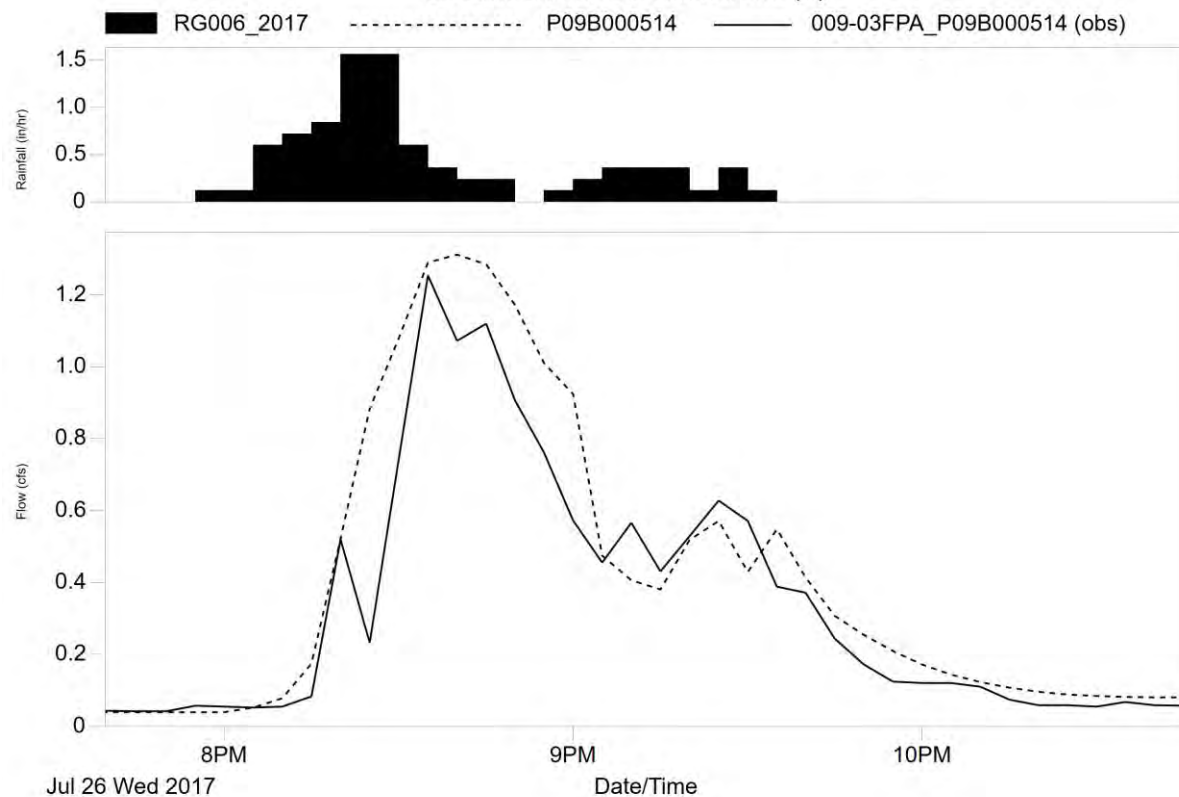
Fulton 009-03FPA – Calibration Events



Fulton 009-03FPA – Calibration Events

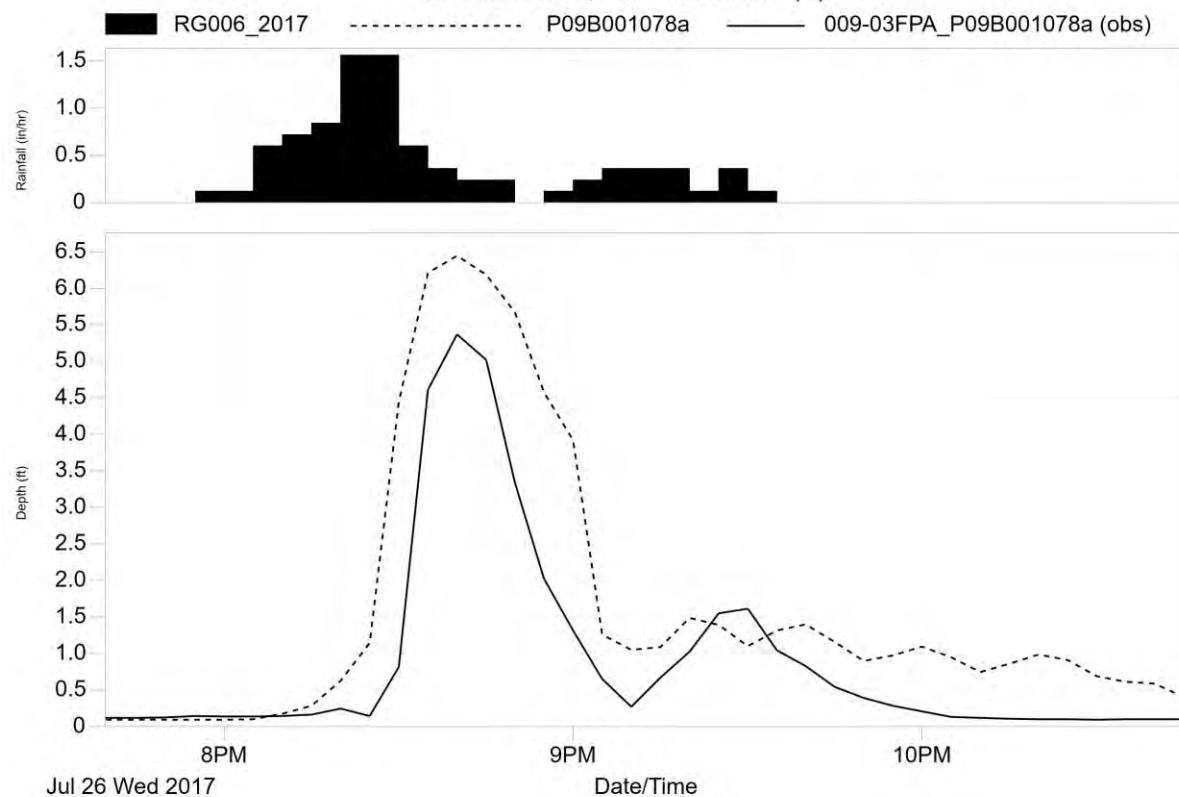
Event of July 26, 2017

Duration: 2.58 h, Total Rainfall: 0.75 (in)

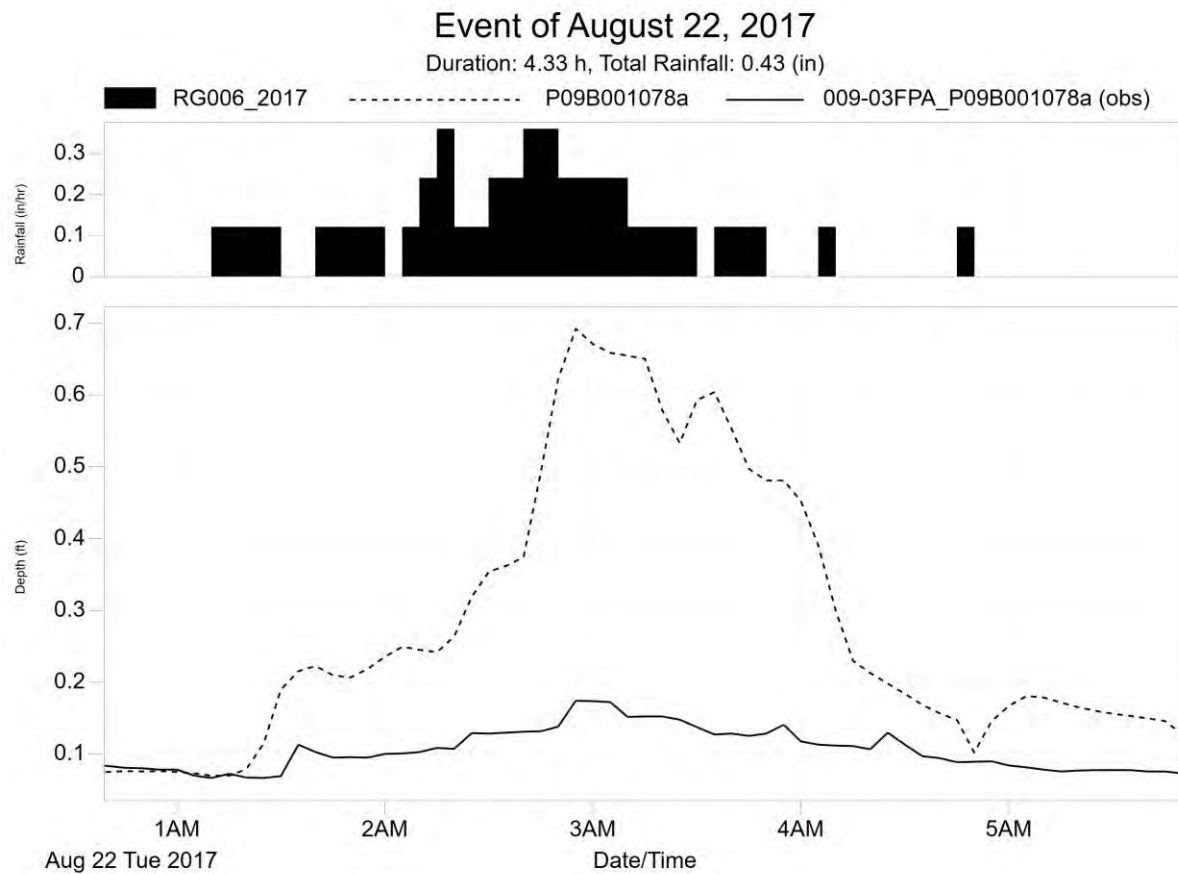
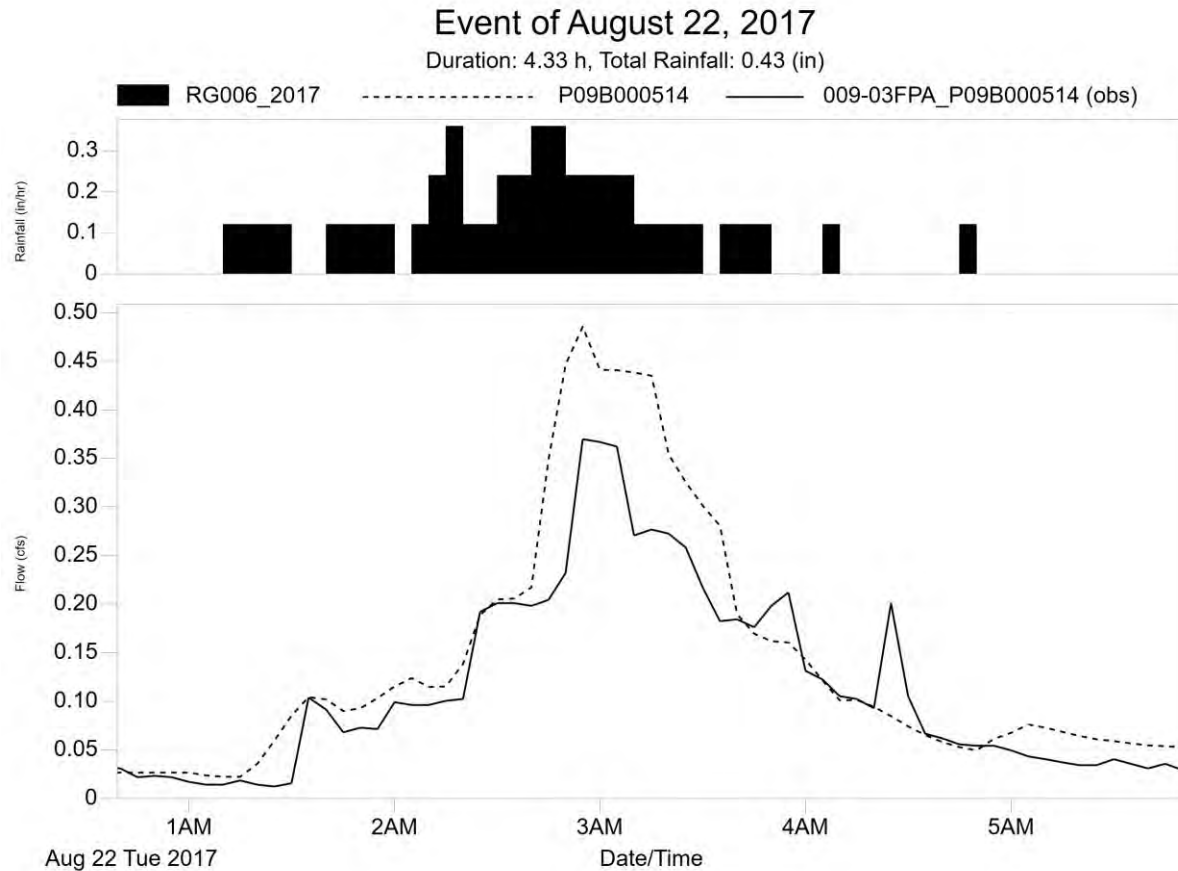


Event of July 26, 2017

Duration: 2.58 h, Total Rainfall: 0.75 (in)



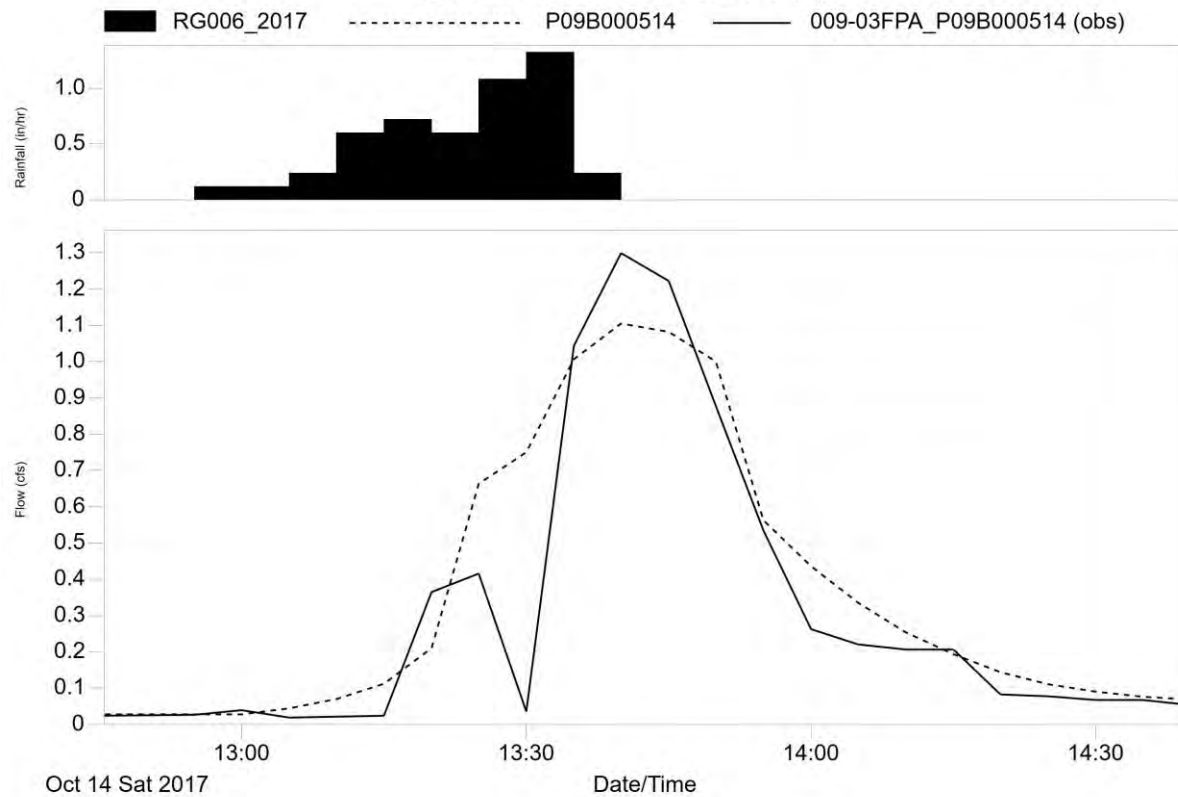
Fulton 009-03FPA – Calibration Events



Fulton 009-03FPA – Calibration Events

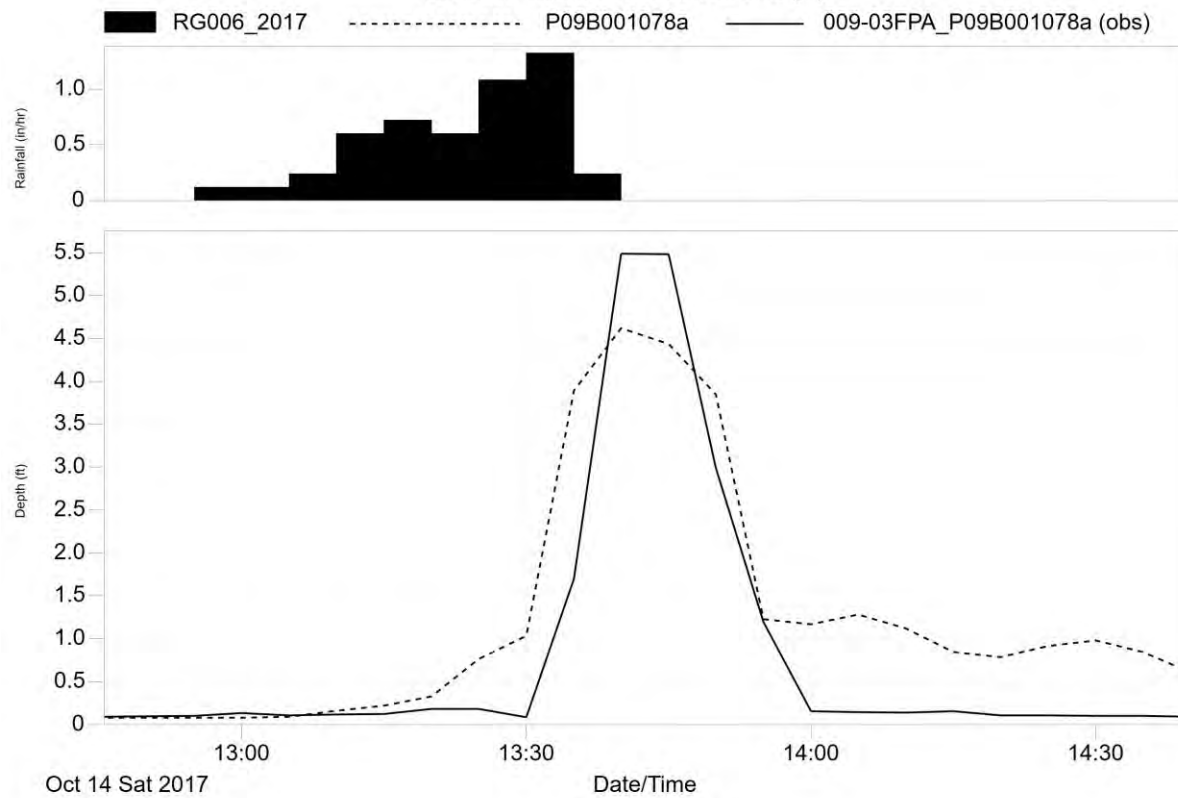
Event of October 14, 2017

Duration: 1.58 h, Total Rainfall: 0.42 (in)



Event of October 14, 2017

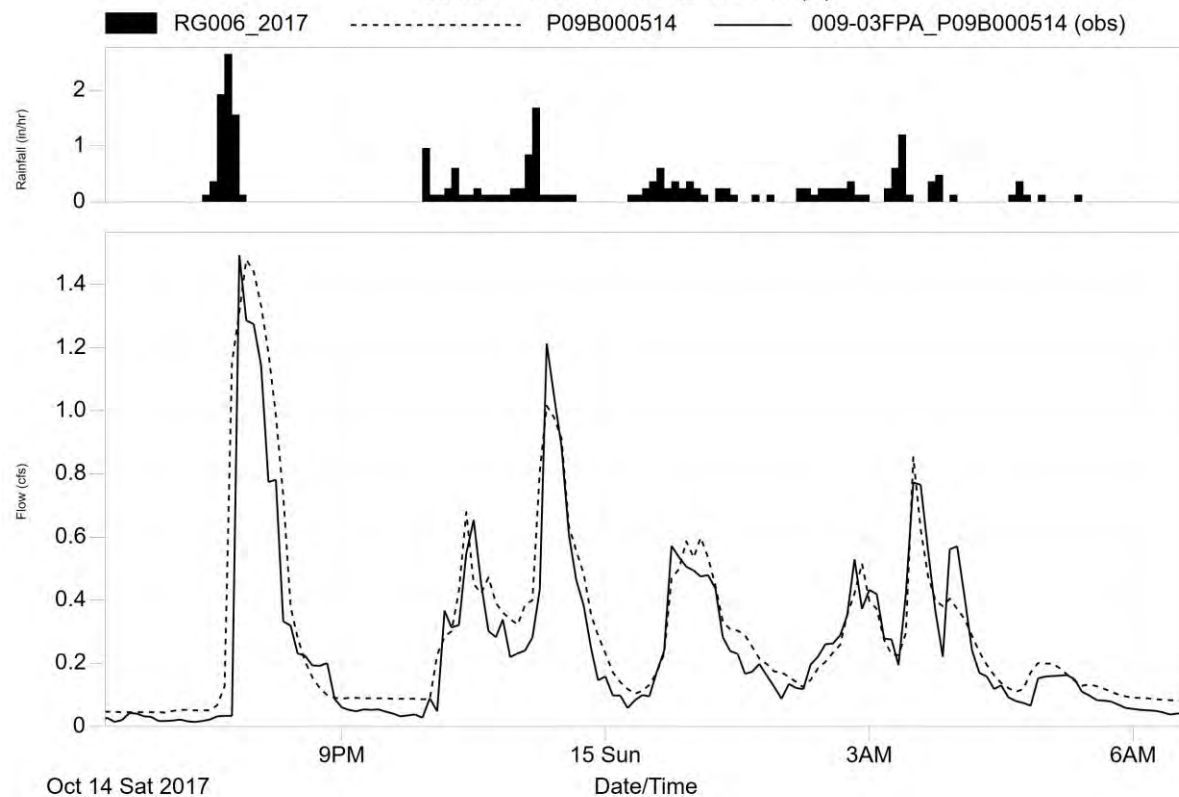
Duration: 1.58 h, Total Rainfall: 0.42 (in)



Fulton 009-03FPA – Calibration Events

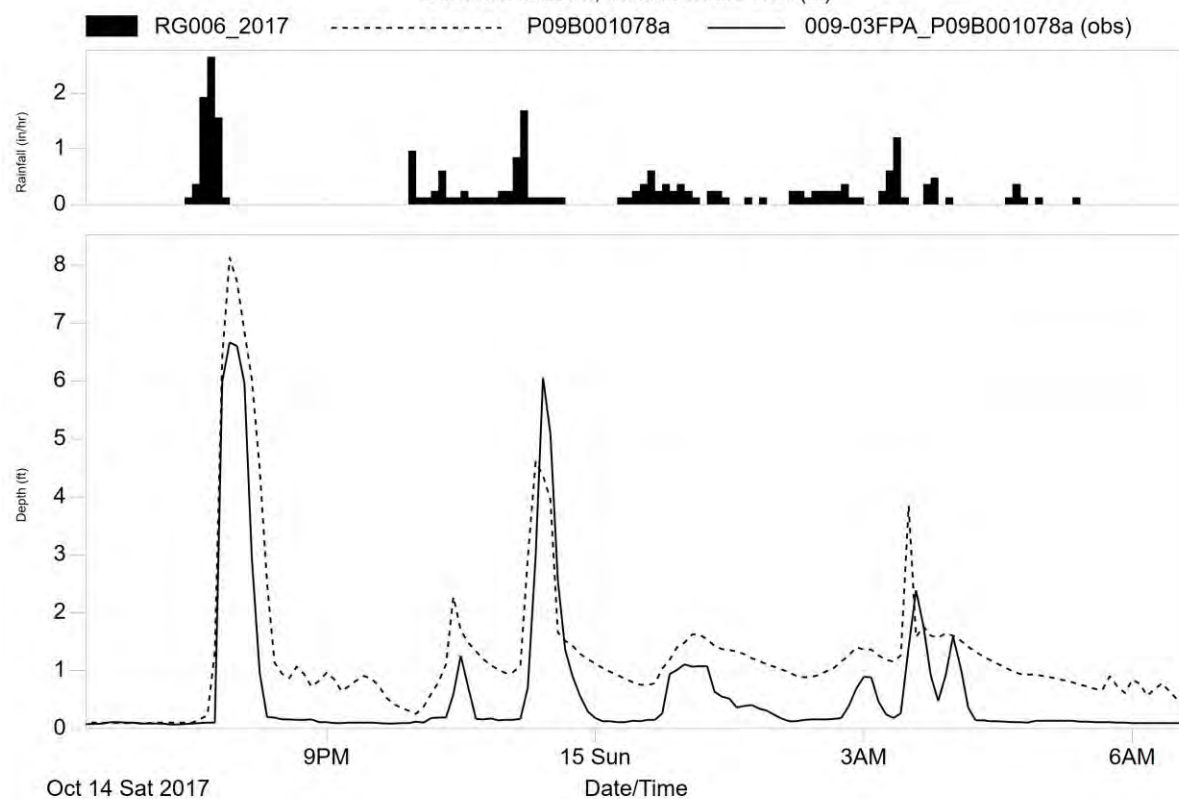
Event of October 14, 2017

Duration: 10.25 h, Total Rainfall: 1.94 (in)

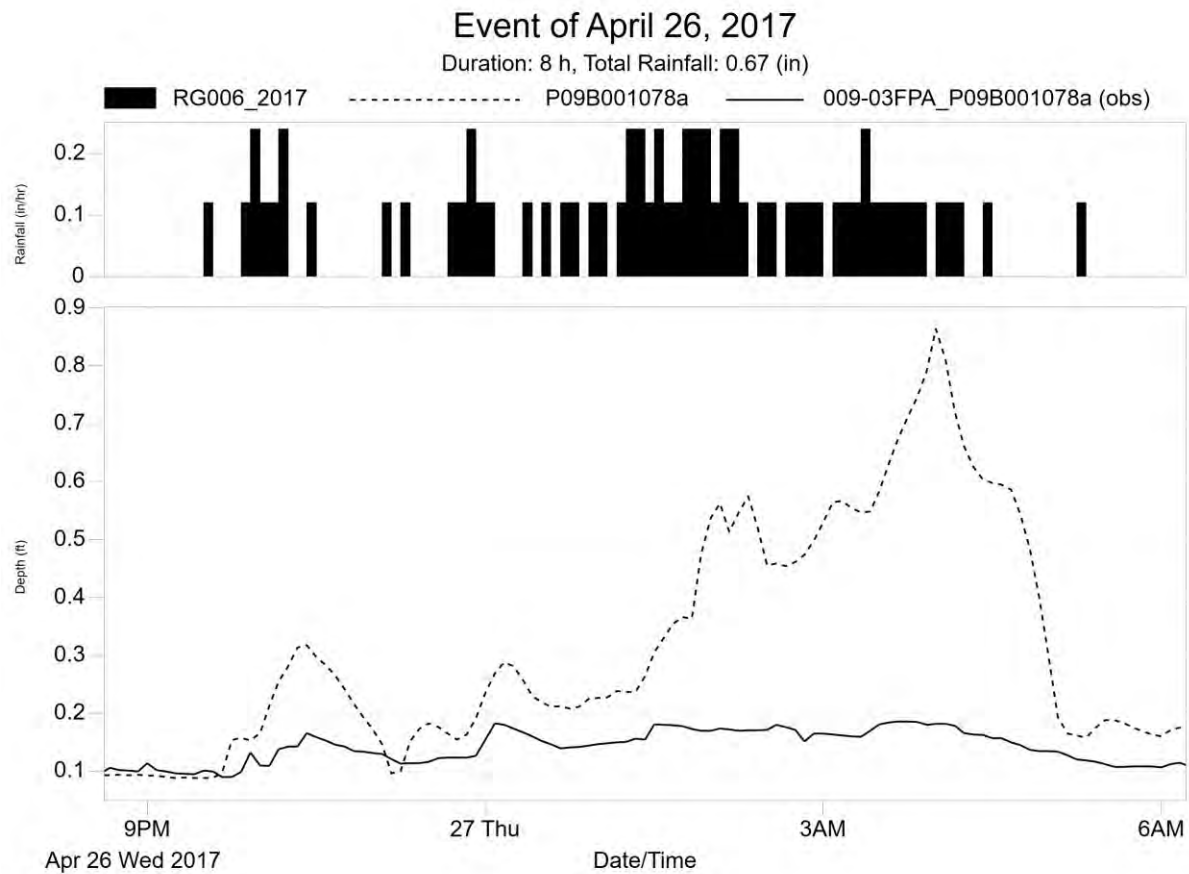
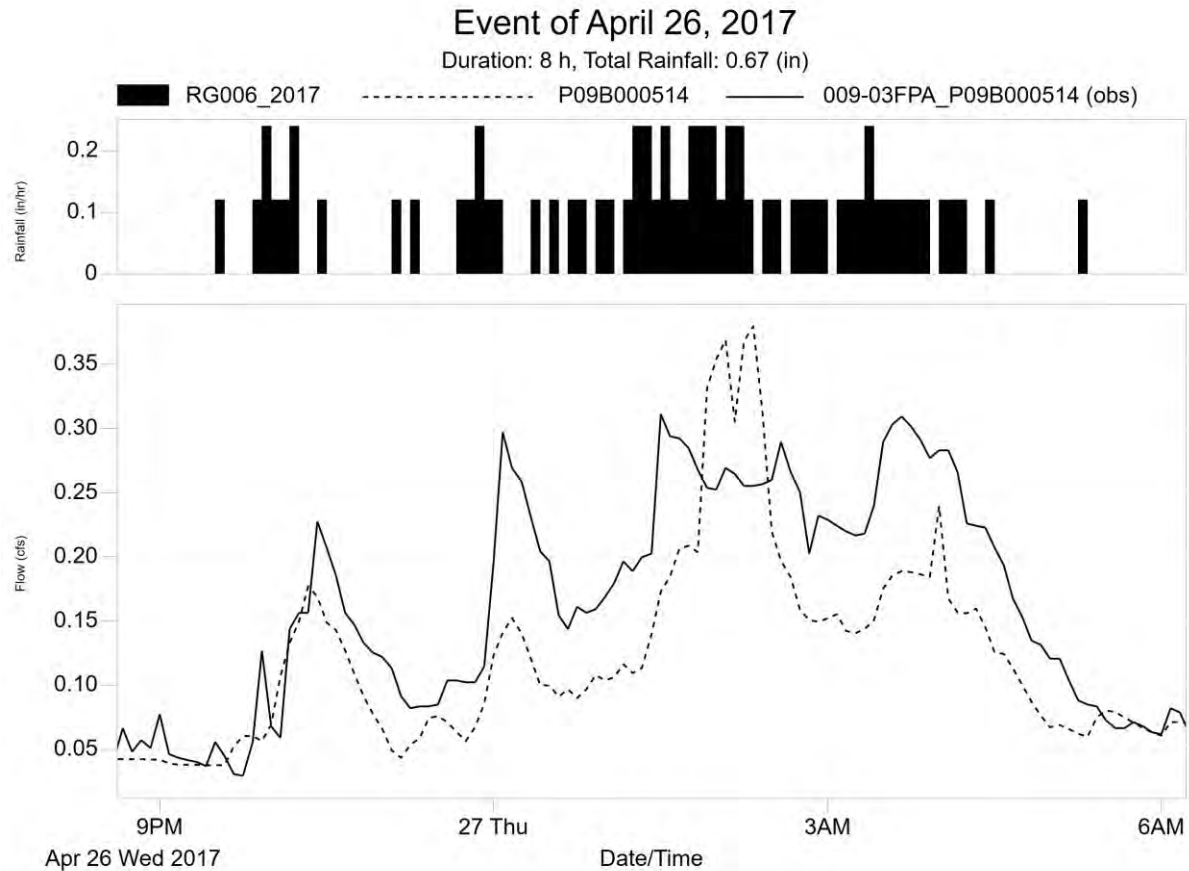


Event of October 14, 2017

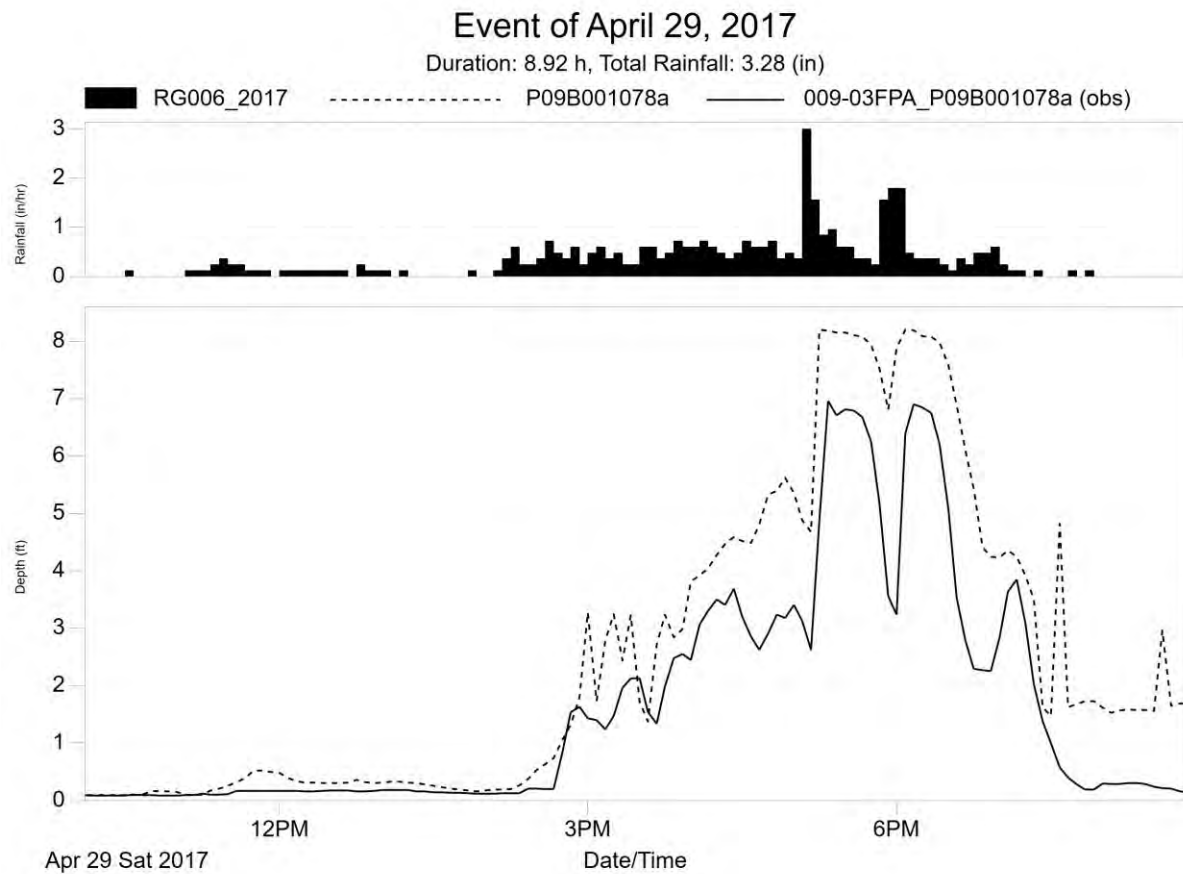
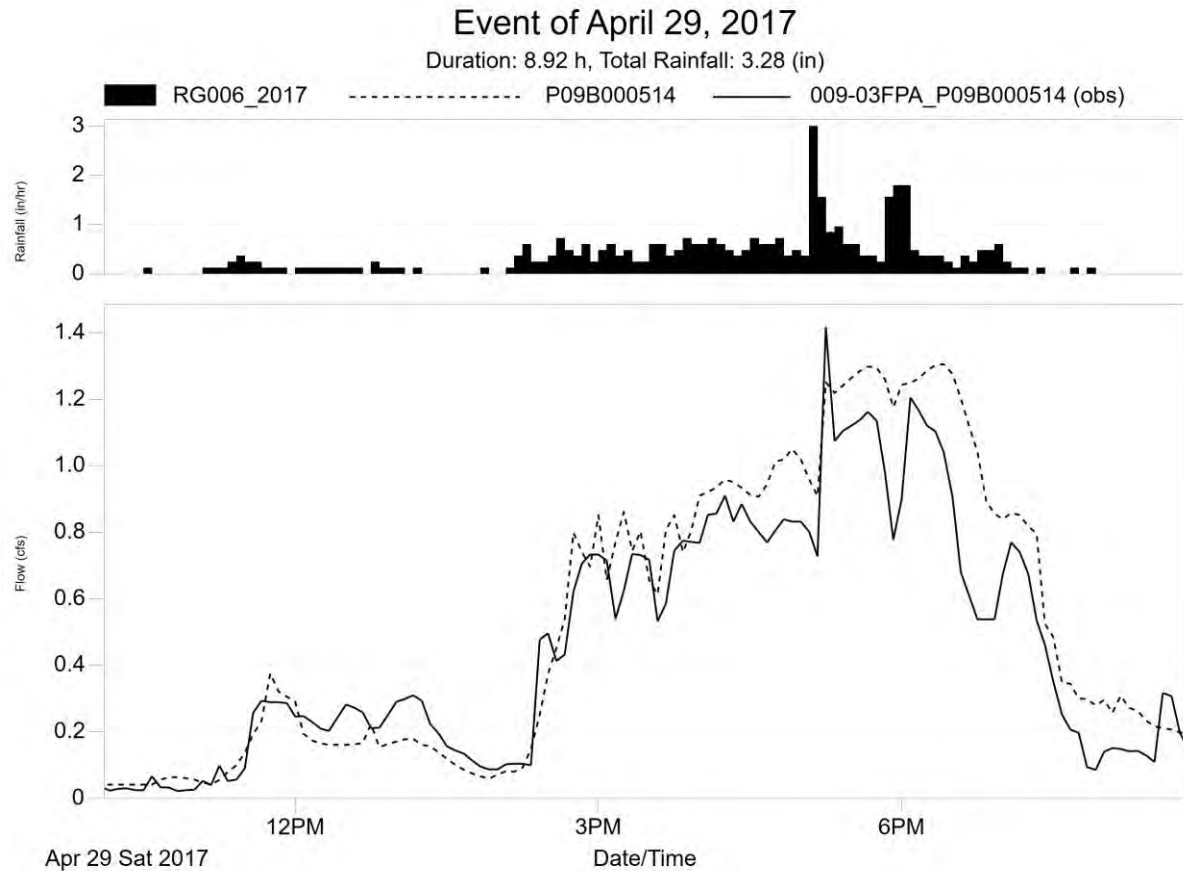
Duration: 10.25 h, Total Rainfall: 1.94 (in)



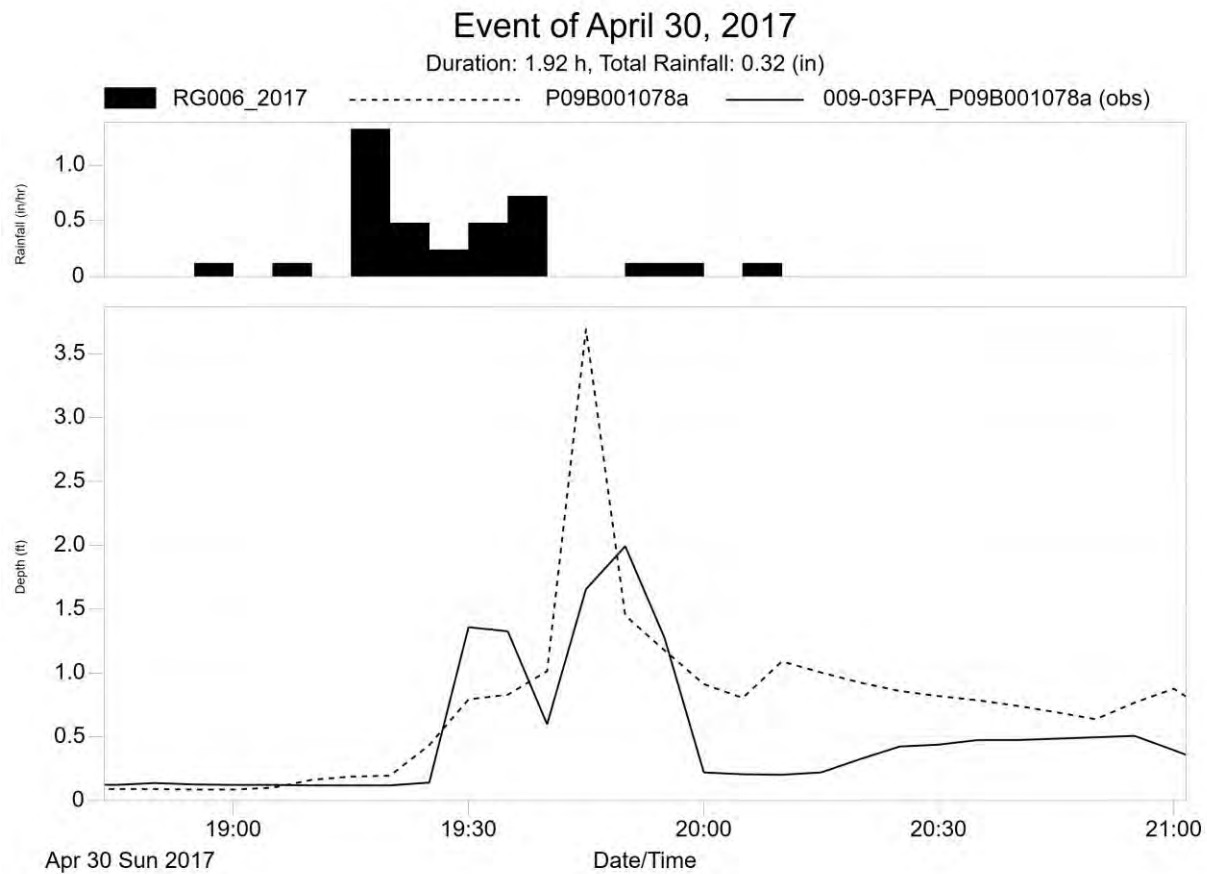
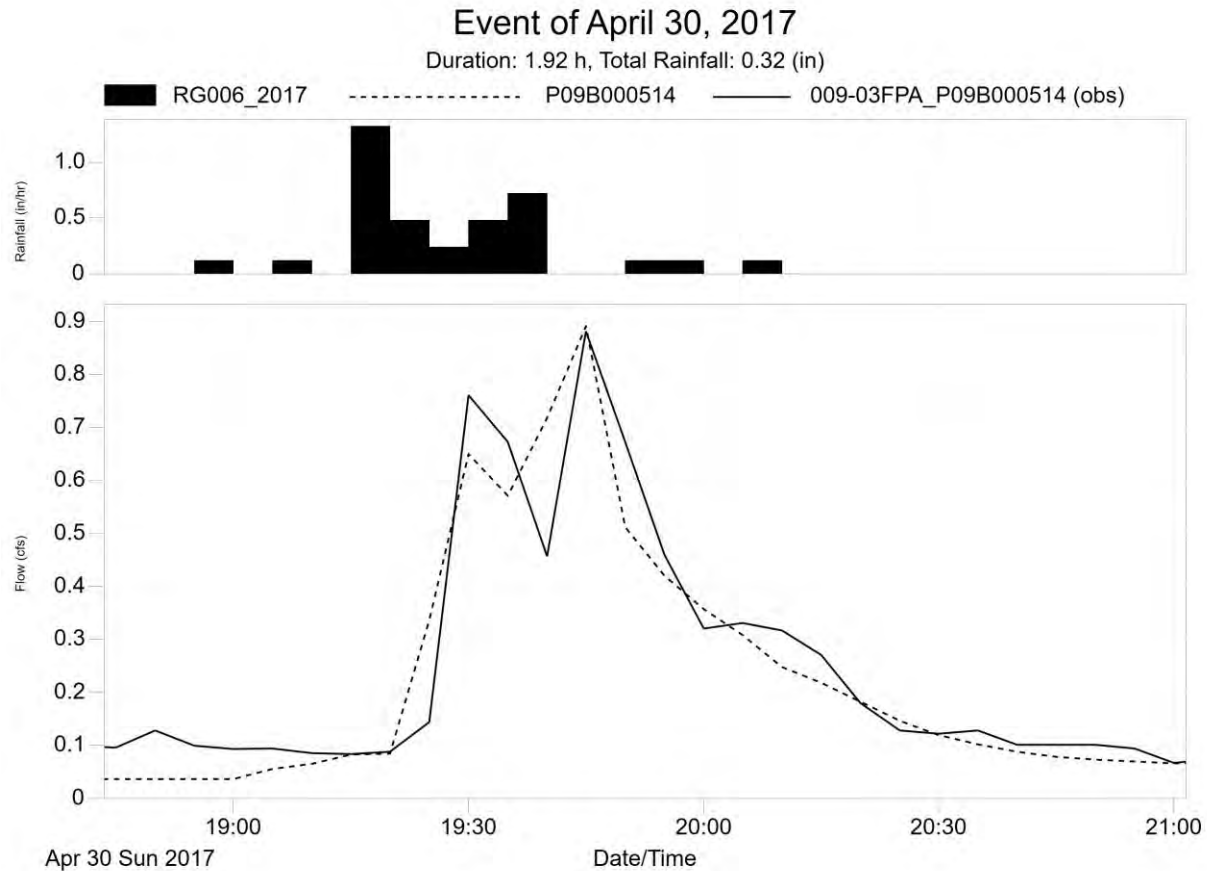
Fulton 009-03FPA – Verification Events



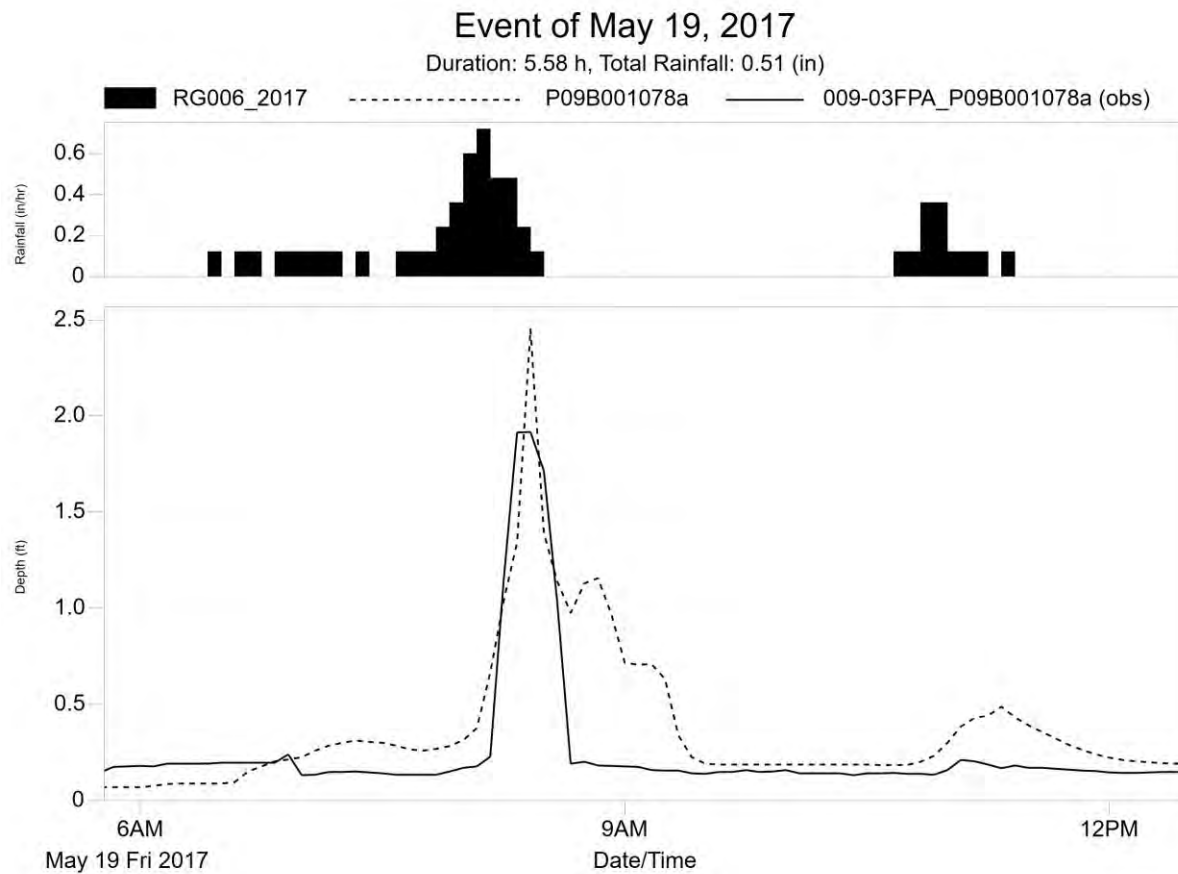
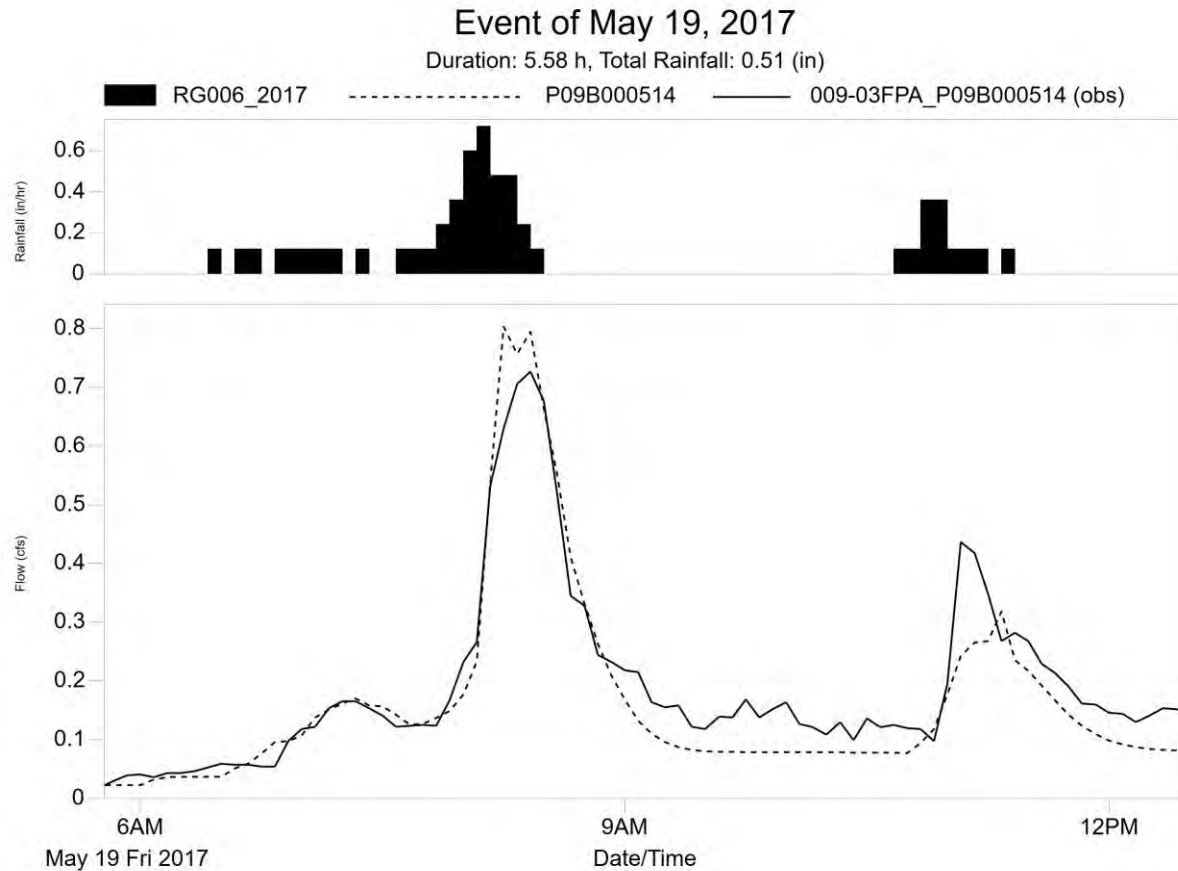
Fulton 009-03FPA – Verification Events



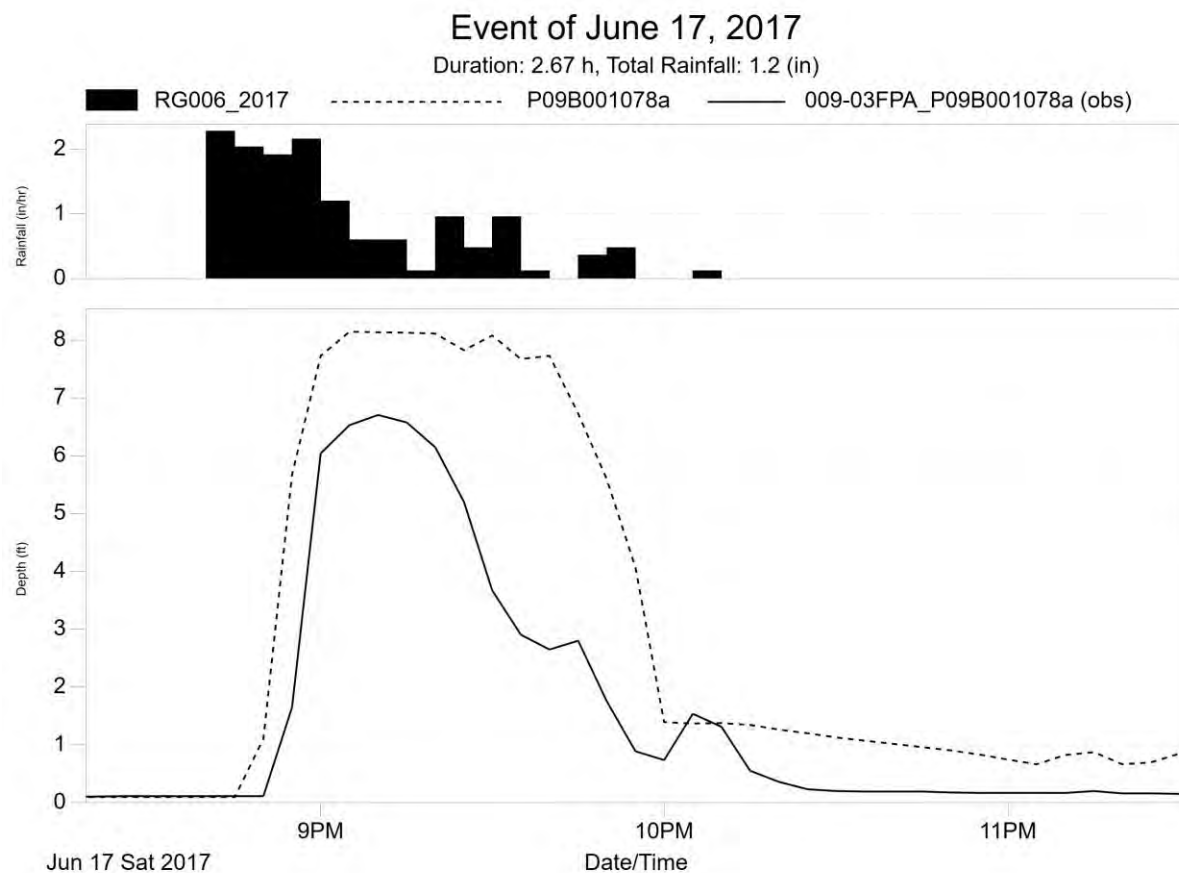
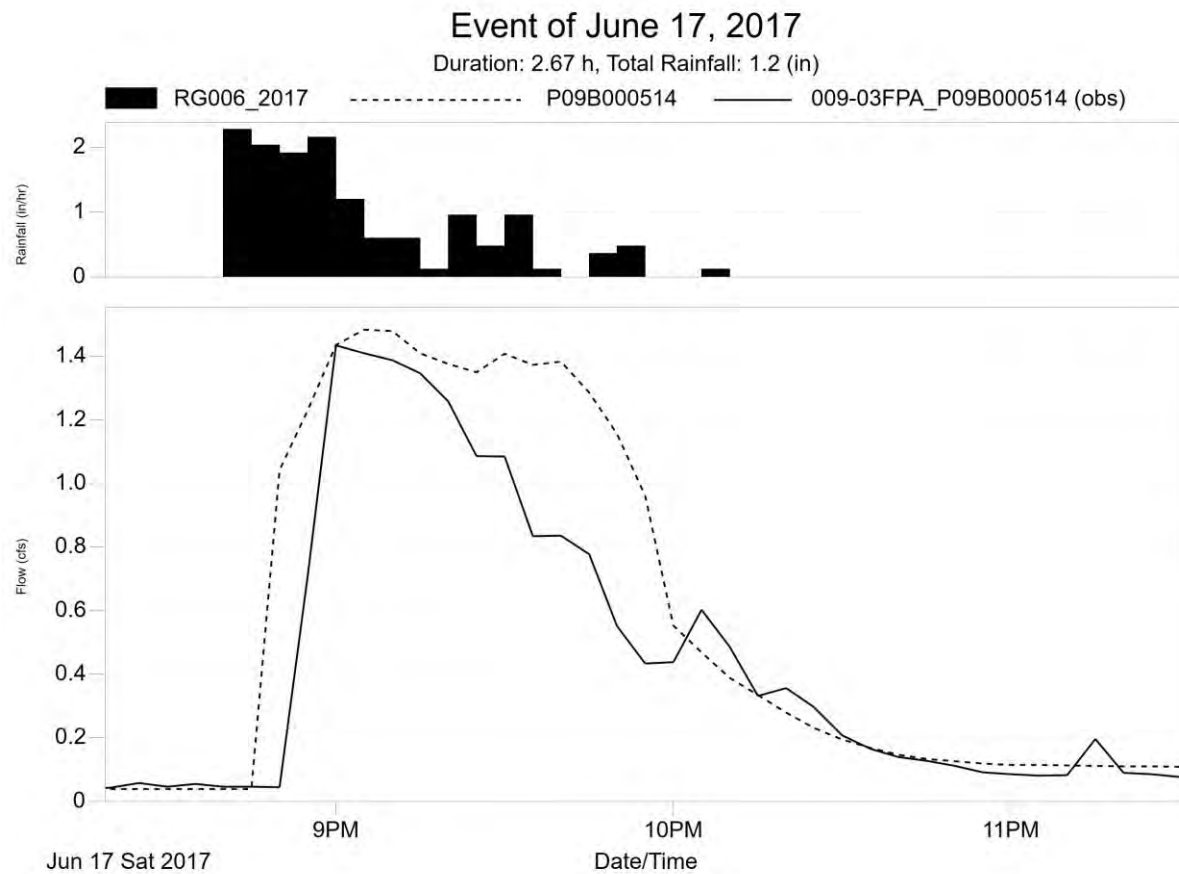
Fulton 009-03FPA – Verification Events



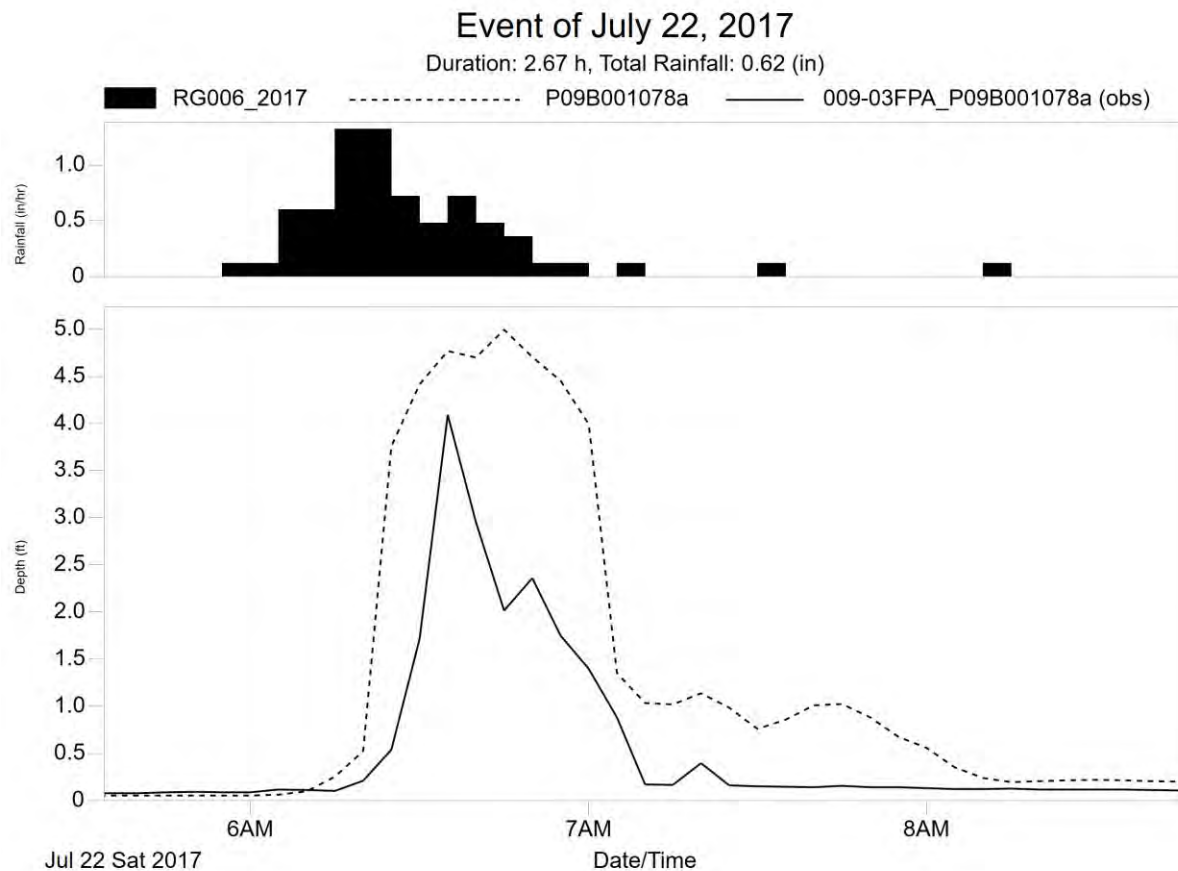
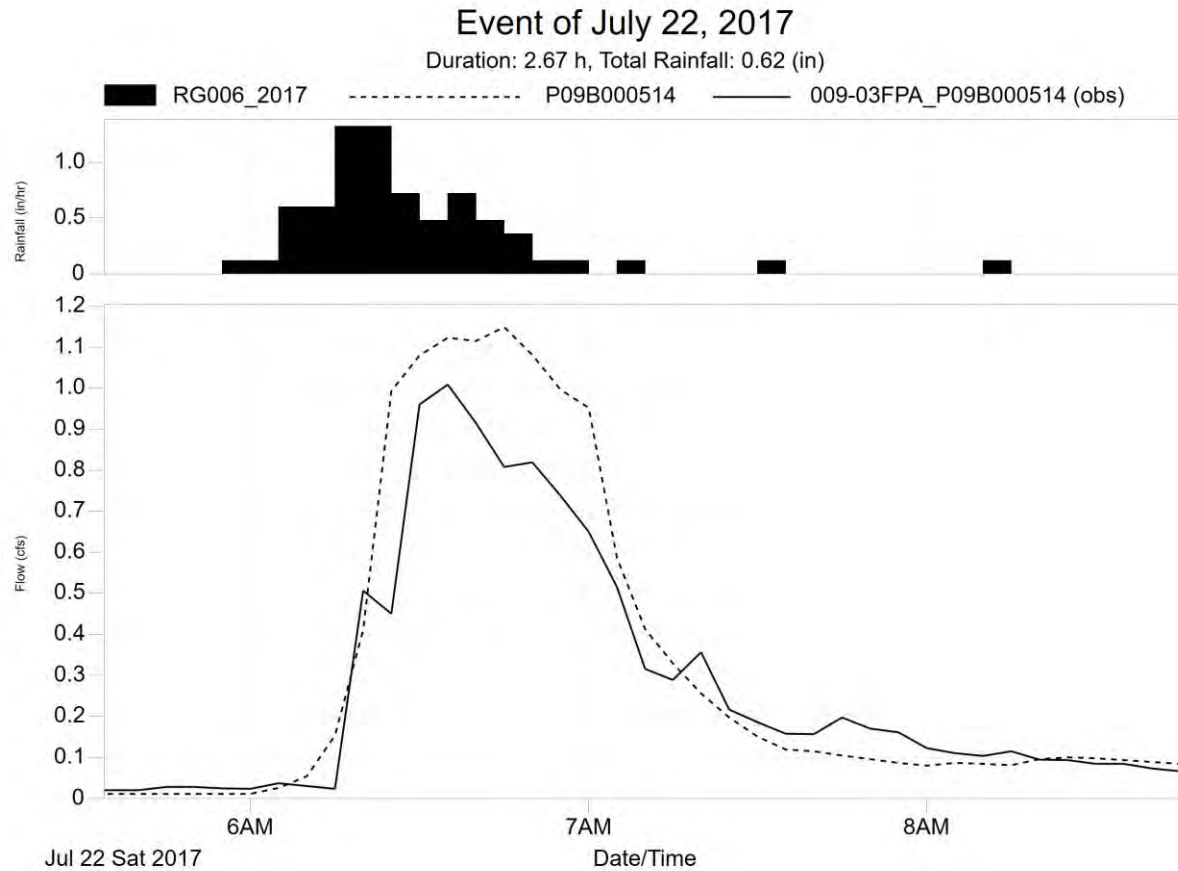
Fulton 009-03FPA – Verification Events



Fulton 009-03FPA – Verification Events



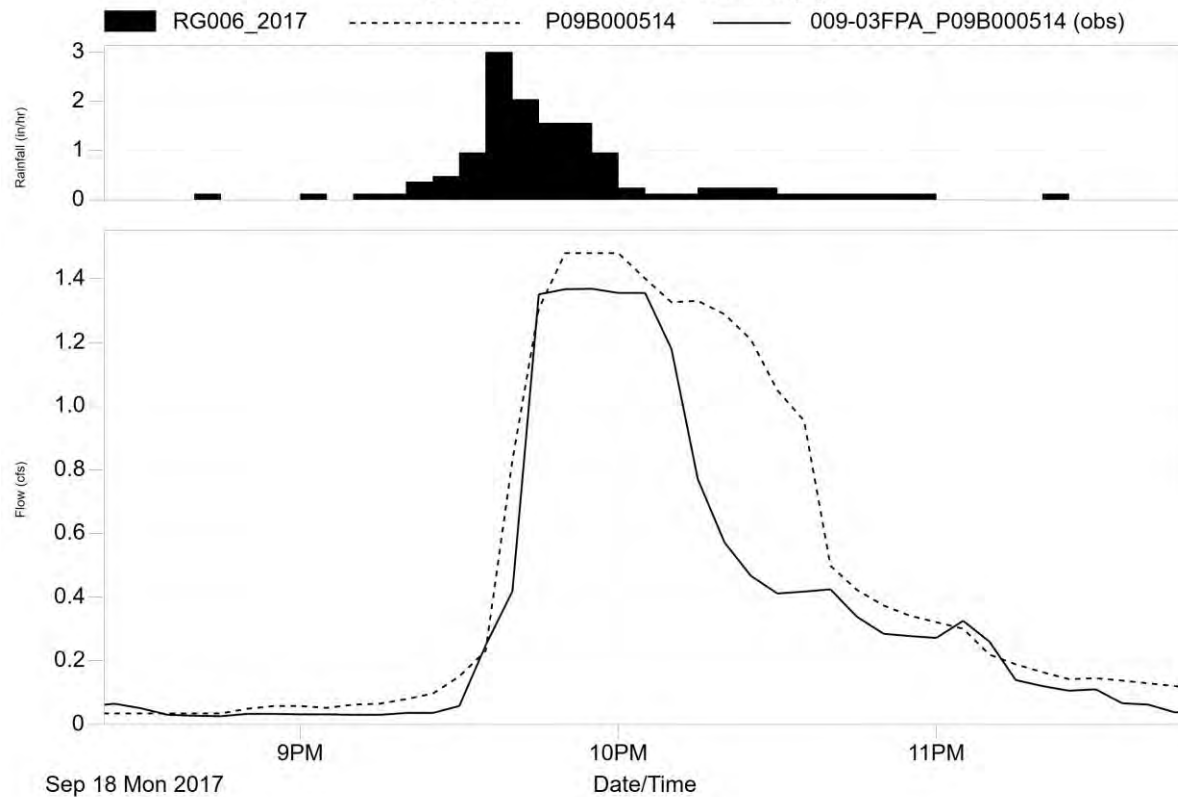
Fulton 009-03FPA – Verification Events



Fulton 009-03FPA – Verification Events

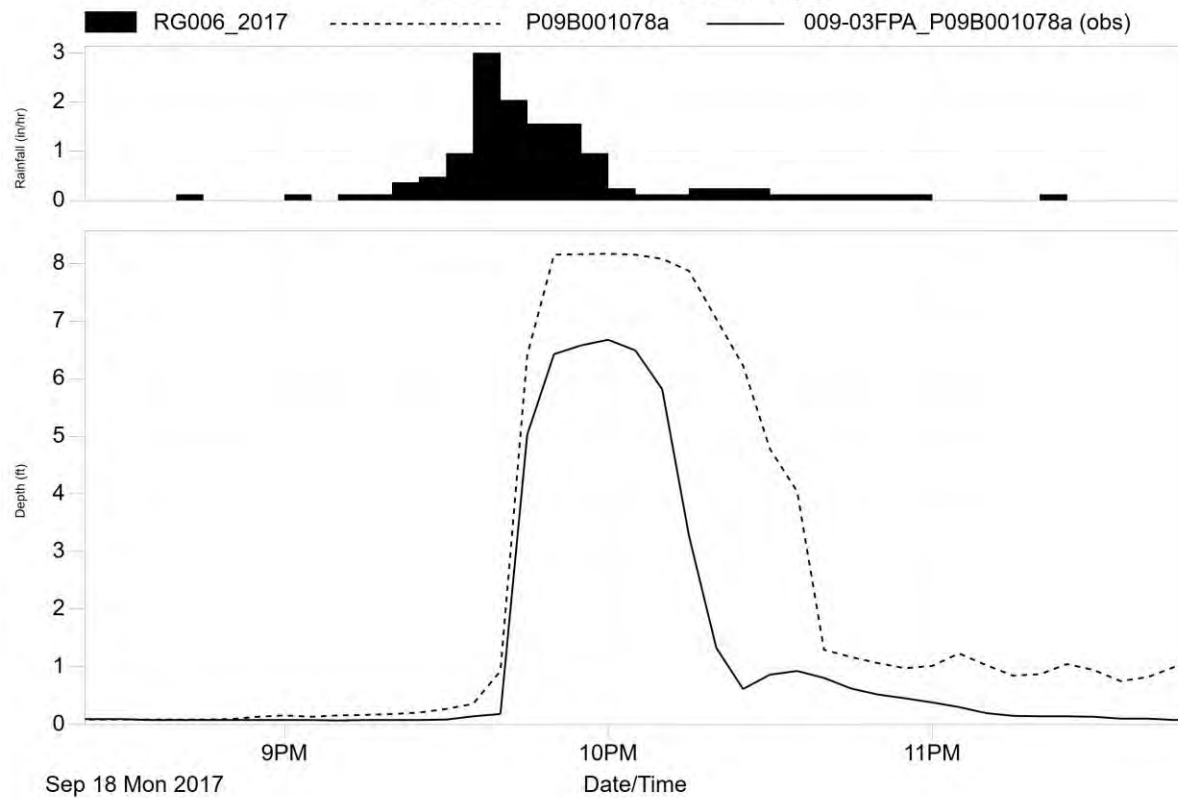
Event of September 18, 2017

Duration: 2.83 h, Total Rainfall: 1.12 (in)



Event of September 18, 2017

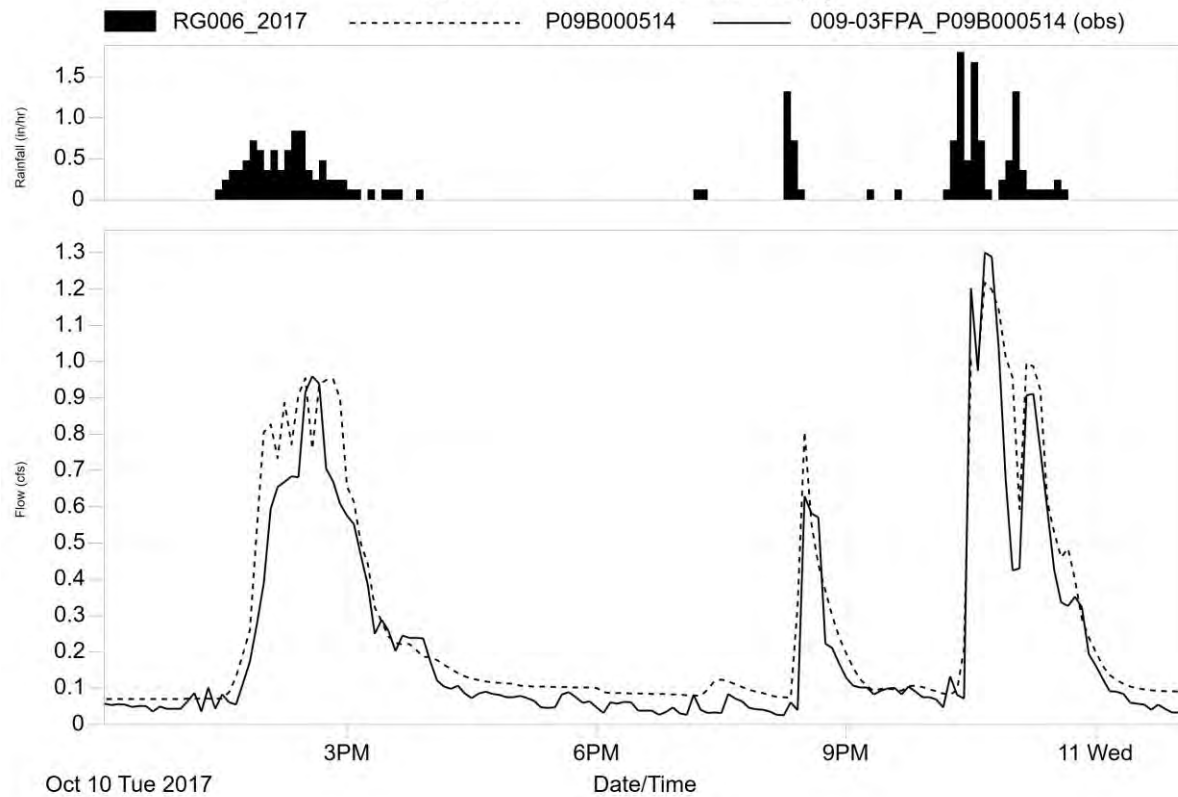
Duration: 2.83 h, Total Rainfall: 1.12 (in)



Fulton 009-03FPA – Verification Events

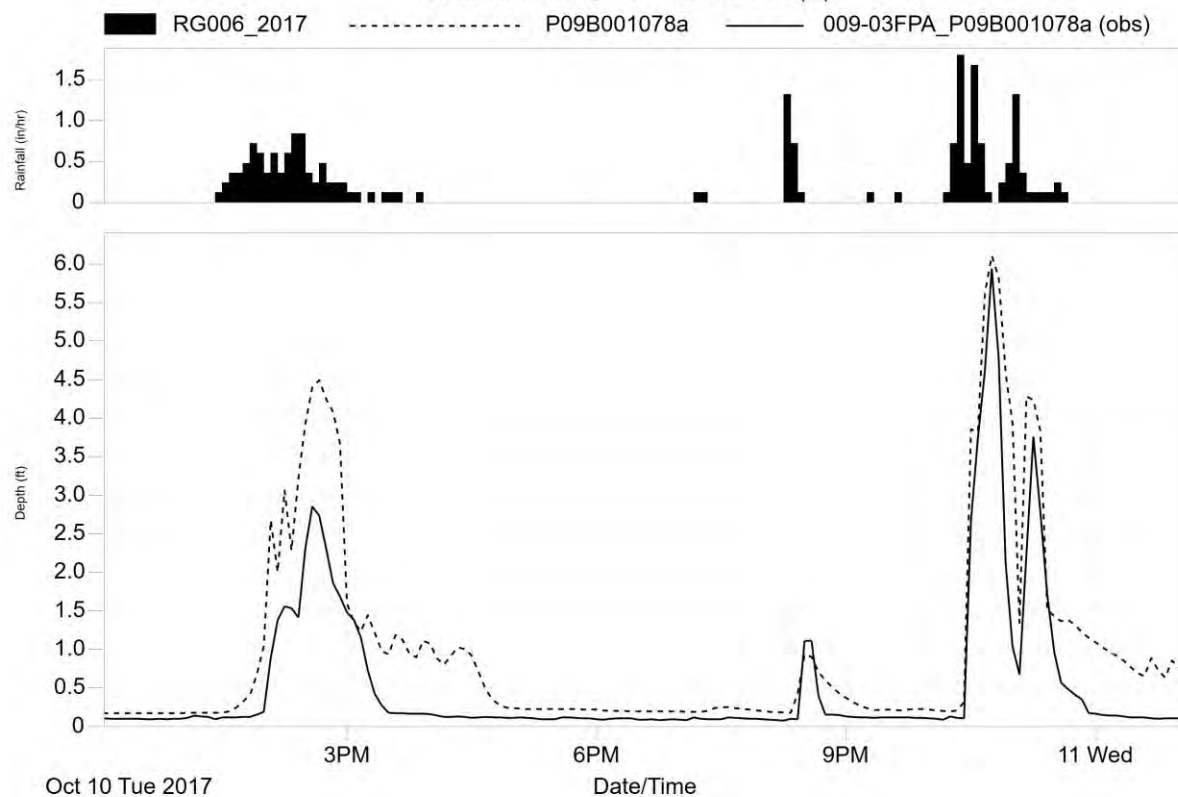
Event of October 10, 2017

Duration: 10.83 h, Total Rainfall: 1.72 (in)

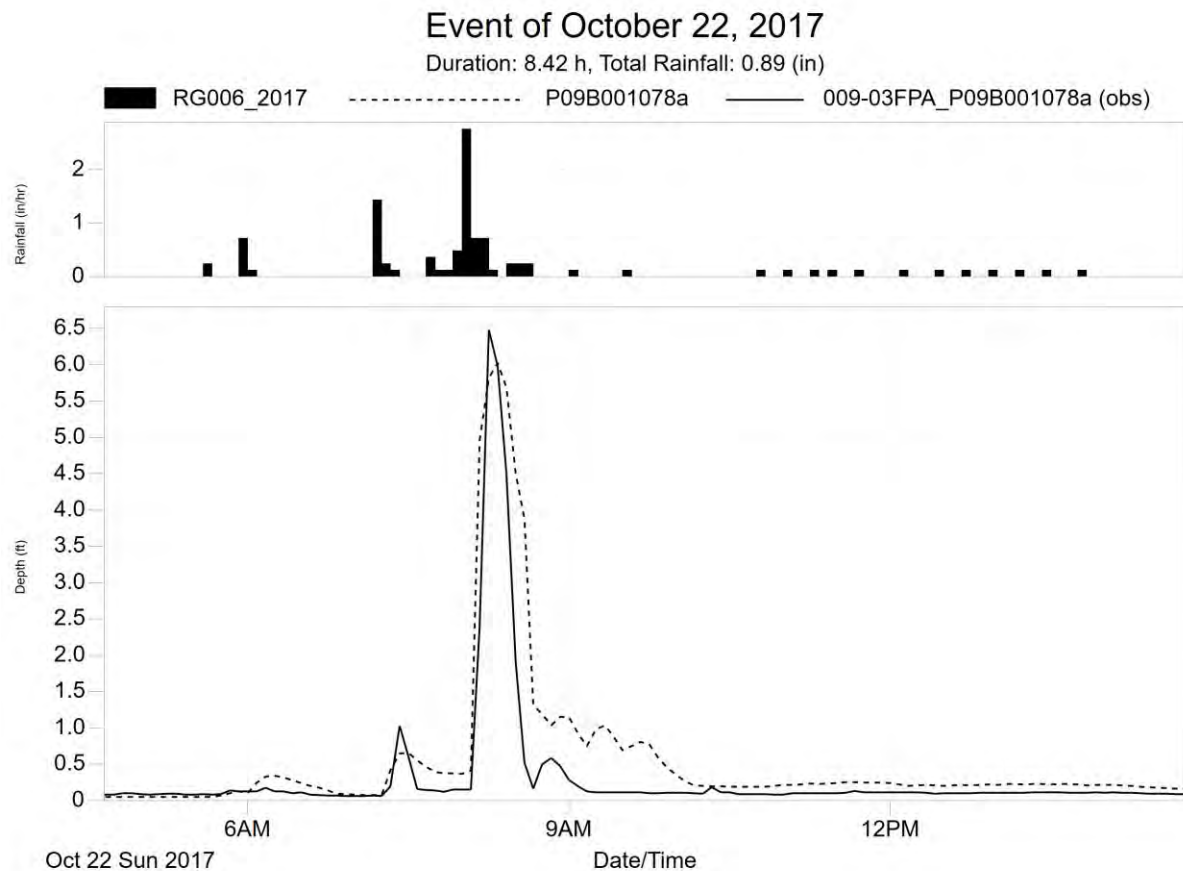
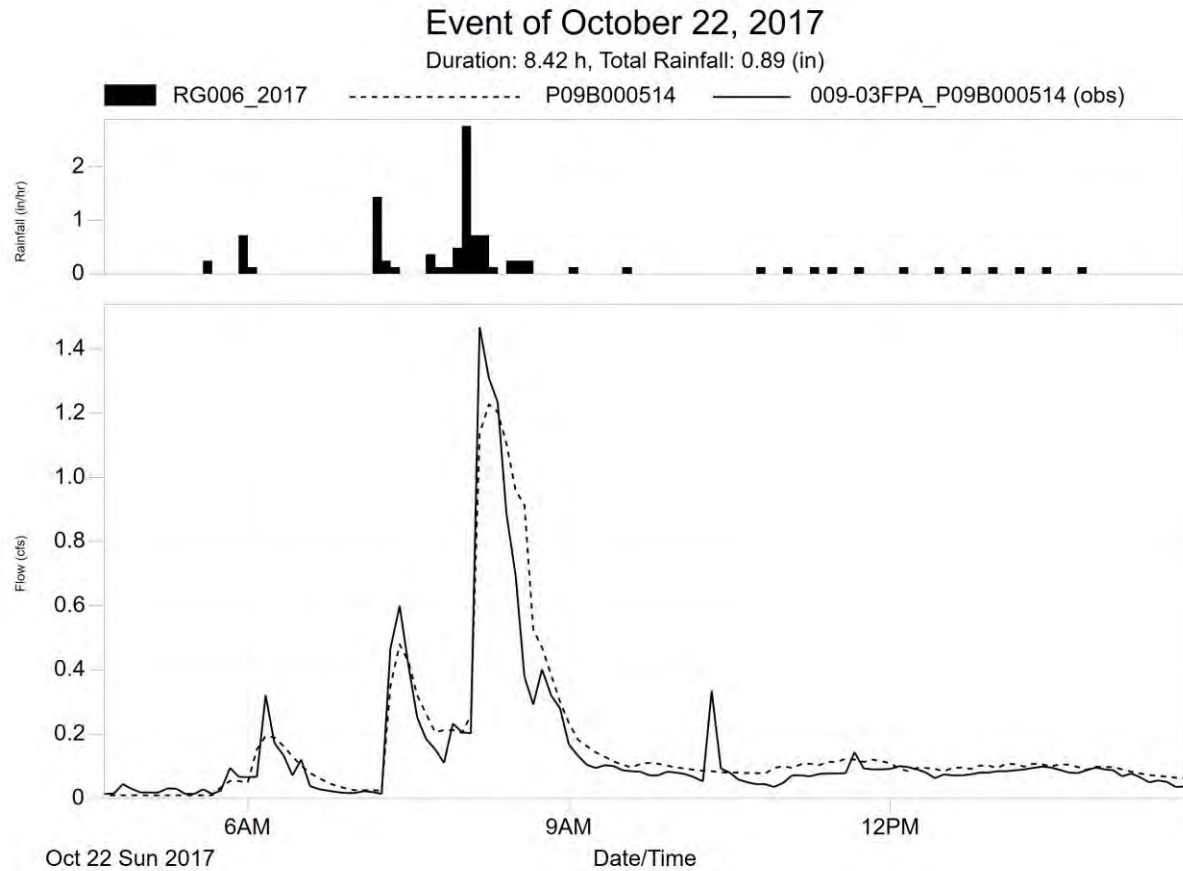


Event of October 10, 2017

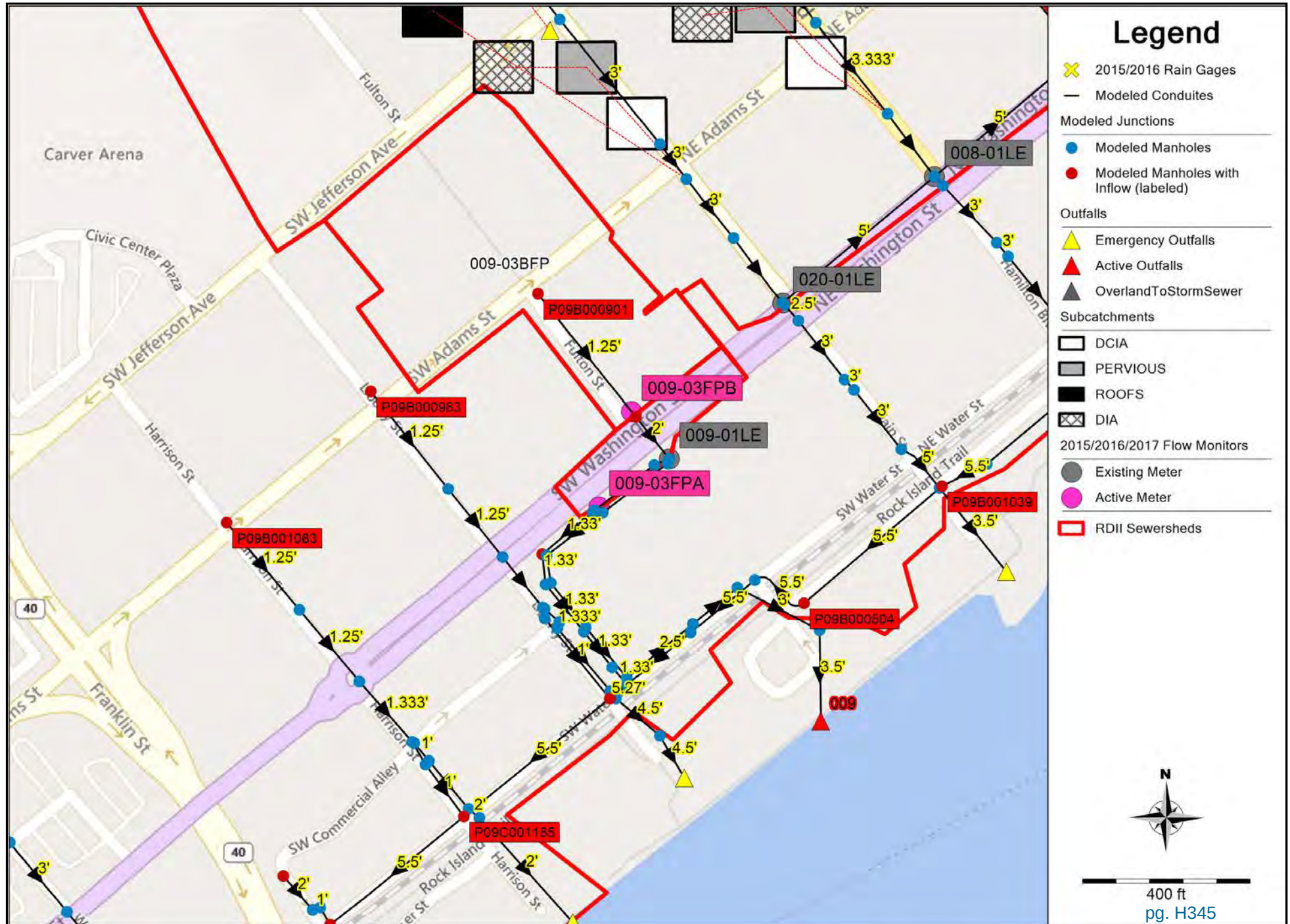
Duration: 10.83 h, Total Rainfall: 1.72 (in)



Fulton 009-03FPA – Verification Events



Flow Meter 009-03FPB Location Map



Fulton 009-03FPB Flow

Date	Duration (h)	Rainfall (in) RG006	Maximum Flow (cfs)		Maximum Flow (mgd)		Total Volume (ft³)		Volume (million gallons)		Peak Flow Rate (-15% to +25%)	Flow Volume (-10% to +20%)	Rainfall Variability
CALIBRATION EVENTS - FLOW													
5/10/2017 18:45	1.92	0.51	0.853	1.434	0.551	0.926	1908	2566	0.0143	0.0192	68%	34%	Variable
5/20/2017 6:55	3.08	0.56	0.430	0.751	0.278	0.485	2387	2878	0.0179	0.0215	75%	21%	Variable
5/26/2017 14:50	0.67	0.44	2.842	2.560	1.836	1.654	1863	1889	0.0139	0.0141	-10%	1%	Variable
6/15/2017 1:50	1.58	0.59	1.756	1.670	1.134	1.079	2318	2747	0.0173	0.0205	-5%	19%	Variable
7/10/2017 6:00	4.33	0.72	0.531	1.350	0.343	0.872	3167	3646	0.0237	0.0273	154%	15%	Variable
7/10/2017 18:30	2.17	0.71	1.795	1.396	1.160	0.902	3481	3495	0.0260	0.0261	-22%	0%	Variable
7/26/2017 19:55	2.58	0.75	1.349	1.527	0.871	0.986	2980	3712	0.0223	0.0278	13%	25%	Relatively Uniform
8/22/2017 1:05	4.33	0.43	0.392	0.417	0.253	0.269	1954	1976	0.0146	0.0148	6%	1%	Possibly Uniform
10/14/2017 12:55	1.58	0.42	1.595	1.277	1.030	0.825	1710	2067	0.0128	0.0155	-20%	21%	Relatively Uniform
10/14/2017 19:20	10.25	1.94	2.632	2.068	1.700	1.336	8588	9096	0.0642	0.0680	-21%	6%	Possibly Uniform
VERIFICATION EVENTS - FLOW													
4/26/2017 21:25	8.00	0.67	0.246	0.311	0.159	0.201	3885	2867	0.0291	0.0214	27%	-26%	Relatively Uniform
4/29/2017 11:00	8.92	3.28	2.784	2.295	1.798	1.483	13460	16350	0.1007	0.1223	-18%	21%	Relatively Uniform
4/30/2017 18:55	1.92	0.32	0.628	0.778	0.406	0.502	1417	1508	0.0106	0.0113	24%	6%	Relatively Uniform
5/19/2017 6:20	5.58	0.51	0.501	0.712	0.324	0.460	3041	3027	0.0227	0.0226	42%	0%	Relatively Uniform
6/17/2017 20:35	2.67	1.20	2.039	2.216	1.317	1.432	4673	5955	0.0350	0.0445	9%	27%	Variable
7/22/2017 5:50	2.67	0.62	1.001	1.221	0.647	0.789	2471	2996	0.0185	0.0224	22%	21%	Relatively Uniform
9/18/2017 20:40	2.83	1.12	1.728	2.207	1.116	1.426	3391	5525	0.0254	0.0413	28%	63%	Variable
10/10/2017 13:10	10.83	1.72	1.413	1.493	0.913	0.964	7651	9595	0.0572	0.0718	6%	25%	Possibly Uniform
10/22/2017 5:30	8.42	0.89	1.783	1.898	1.152	1.226	3720	4193	0.0278	0.0314	6%	13%	Variable
WEIGHTED AVERAGES													
Calibration - Relatively Uniform											-5%	23%	
Calibration - Possibly Uniform											-18%	5%	
Calibration - Variable											12%	14%	
Calibration - All Events											2%	12%	
Verification - Relatively Uniform											3%	10%	
Verification - Possibly Uniform											6%	25%	
Verification - Variable											14%	33%	
Verification - All Events											8%	19%	
Weighted Average - All Events											5%	16%	All Events
NET AVERAGES													
Calibration - Relatively Uniform											-3%	-3%	
Calibration - Possibly Uniform											-7%	-7%	
Calibration - Variable											43%	43%	
Calibration- All Events											24%	24%	
Verification - Relatively Uniform											19%	19%	
Verification - Possibly Uniform											6%	6%	
Verification - Variable											14%	14%	
Verification- All Events											16%	16%	
Net Average - All Events											20%	15%	All Events

Fulton 009-03FPB Depth

Date	Duration (h)	Maximum Depth (ft)		Minimum Depth (ft)		Average Depth (ft)		Maximum Depth (ft)	Minimum Depth (ft)	Average Depth (ft)	Rainfall Variability				
		metered	modeled	metered	modeled	metered	modeled	Surcharged: -0.33 ft to +1.67 ft							
CALIBRATION EVENTS - DEPTH								Non-Surcharged: -0.33 ft to +0.33 ft							
5/10/2017 18:45	1.9	0.2	0.3	0.1	0.1	0.1	0.1	0.10	0.00	0.03	Variable				
5/20/2017 6:55	3.1	0.1	0.2	0.0	0.0	0.1	0.1	0.08	0.00	0.03	Variable				
5/26/2017 14:50	0.7	0.3	0.4	0.1	0.1	0.2	0.2	0.03	0.00	0.03	Variable				
6/15/2017 1:50	1.6	0.3	0.3	0.0	0.0	0.1	0.1	0.04	-0.01	0.03	Variable				
7/10/2017 6:00	4.3	0.2	0.3	0.1	0.0	0.1	0.1	0.12	-0.02	0.02	Variable				
7/10/2017 18:30	2.2	0.3	0.3	0.1	0.1	0.1	0.1	0.01	0.00	0.03	Variable				
7/26/2017 19:55	2.6	0.2	0.3	0.1	0.0	0.1	0.1	0.06	0.00	0.04	Relatively Uniform				
8/22/2017 1:05	4.3	0.1	0.2	0.0	0.0	0.1	0.1	0.04	-0.01	0.01	Possibly Uniform				
10/14/2017 12:55	1.6	0.2	0.3	0.1	0.0	0.1	0.1	0.02	-0.01	0.03	Relatively Uniform				
10/14/2017 19:20	10.3	0.3	0.3	0.1	0.1	0.1	0.1	0.00	0.00	0.03	Possibly Uniform				
VERIFICATION EVENTS - DEPTH															
4/26/2017 21:25	8.0	0.1	0.1	0.1	0.0	0.1	0.1	0.04	-0.01	0.01	Relatively Uniform				
4/29/2017 11:00	8.9	0.3	0.4	0.0	0.1	0.1	0.2	0.01	0.00	0.04	Relatively Uniform				
4/30/2017 18:55	1.9	0.1	0.2	0.1	0.0	0.1	0.1	0.06	-0.01	0.02	Relatively Uniform				
5/19/2017 6:20	5.6	0.1	0.2	0.1	0.0	0.1	0.1	0.06	-0.01	0.02	Relatively Uniform				
6/17/2017 20:35	2.7	0.3	0.4	0.1	0.0	0.1	0.2	0.07	-0.01	0.04	Variable				
7/22/2017 5:50	2.7	0.2	0.3	0.1	0.0	0.1	0.1	0.07	-0.03	0.02	Relatively Uniform				
9/18/2017 20:40	2.8	0.3	0.3	0.1	0.0	0.1	0.1	0.08	0.00	0.05	Variable				
10/10/2017 13:10	10.8	0.2	0.3	0.1	0.1	0.1	0.1	0.06	0.01	0.03	Possibly Uniform				
10/22/2017 5:30	8.4	0.3	0.3	0.0	0.0	0.1	0.1	0.05	-0.02	0.01	Variable				
Notes: Surcharge Depth = 2.0 feet						WEIGHTED AVERAGES									
						Calibration - Relatively Uniform						0.04	-0.01	0.03	
						Calibration - Possibly Uniform						0.01	0.00	0.02	
						Calibration - Variable						0.05	-0.01	0.03	
						Calibration - All Events						0.04	-0.01	0.03	
						Verification - Relatively Uniform						0.04	-0.01	0.02	
						Verification - Possibly Uniform						0.06	0.01	0.03	
						Verification - Variable						0.07	-0.01	0.04	
						Verification - All Events						0.05	-0.01	0.03	
						Weighted Average - All Events						0.05	-0.01	0.03	All Events
						NET AVERAGES									
						Calibration - Relatively Uniform						0.04	-0.01	0.03	
						Calibration - Possibly Uniform						0.02	0.00	0.02	
						Calibration - Variable						0.06	-0.01	0.03	
						Calibration- All Events						0.05	-0.01	0.03	
						Verification - Relatively Uniform						0.05	-0.01	0.02	
						Verification - Possibly Uniform						0.06	0.01	0.03	
						Verification - Variable						0.07	-0.01	0.03	
Verification- All Events						0.06	-0.01	0.03							
Net Average - All Events						0.05	-0.01	0.03	All Events						

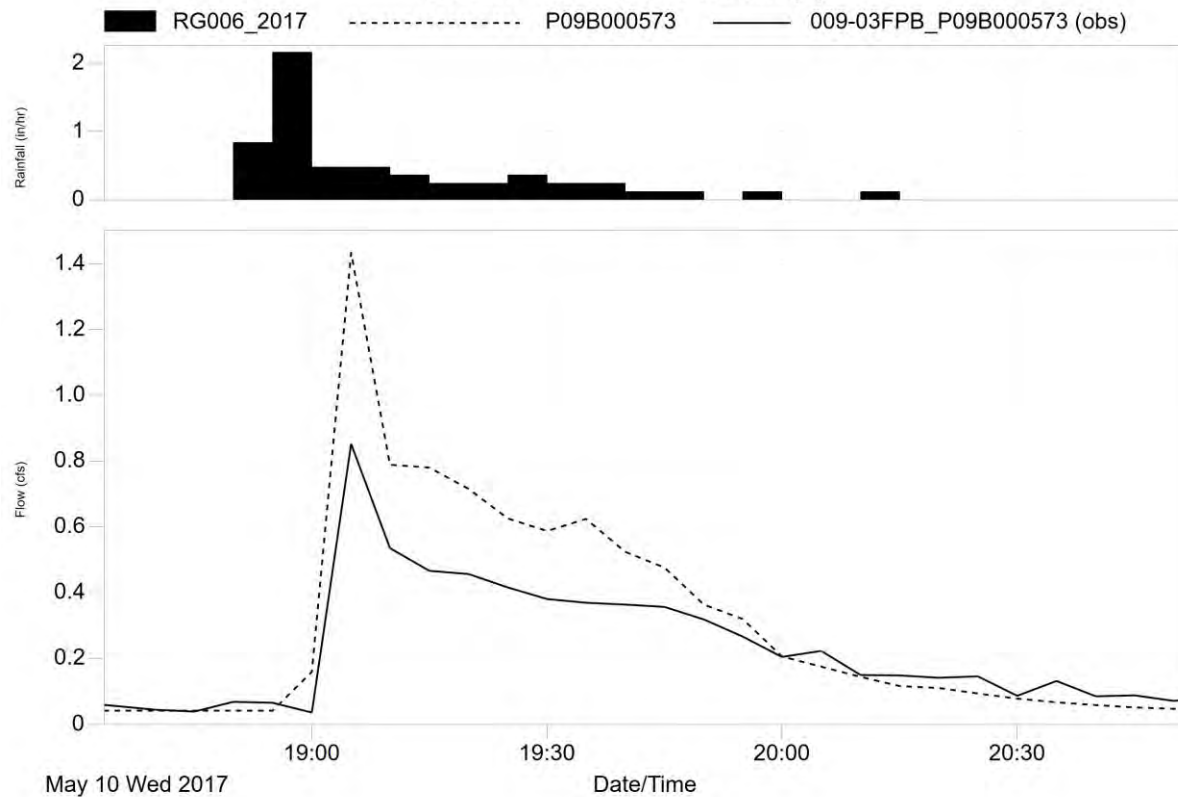
Notes:

Surcharge Depth = 2.0 feet

Fulton 009-03FPB – Calibration Events

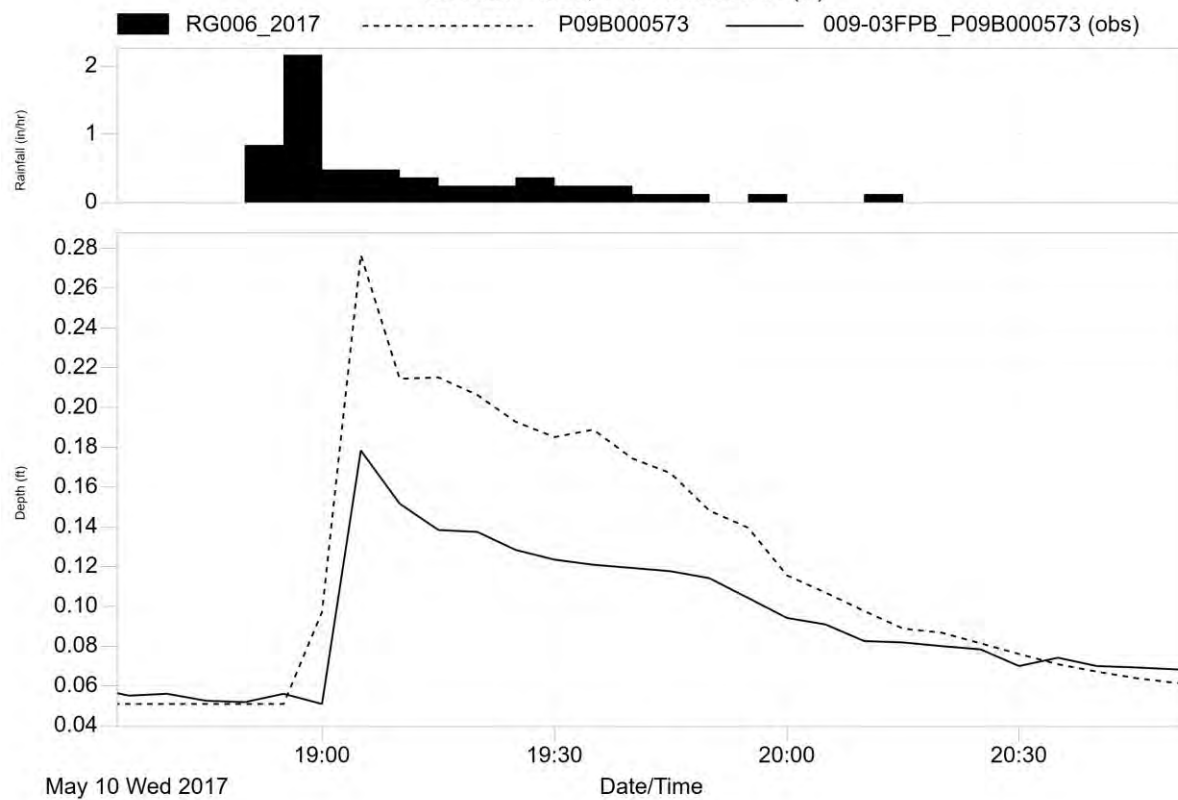
Event of May 10, 2017

Duration: 1.92 h, Total Rainfall: 0.51 (in)

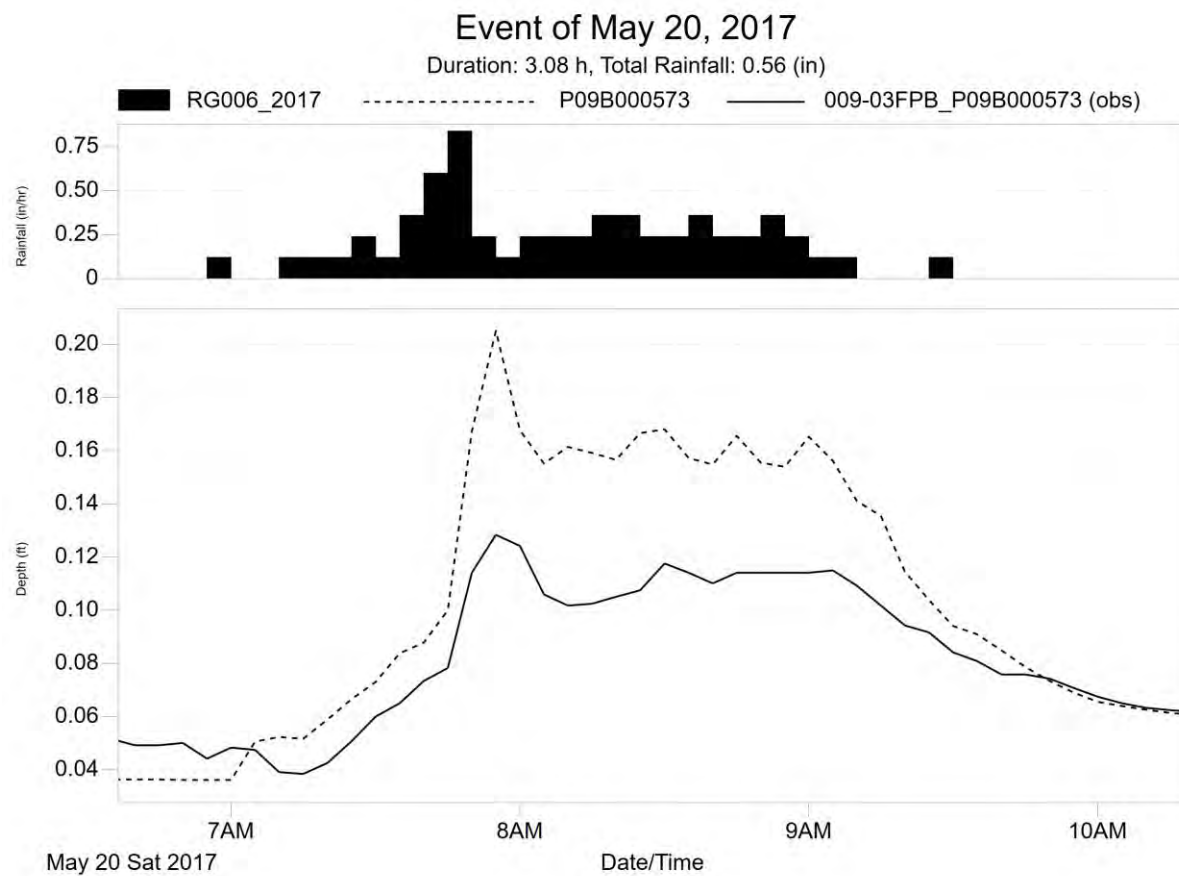
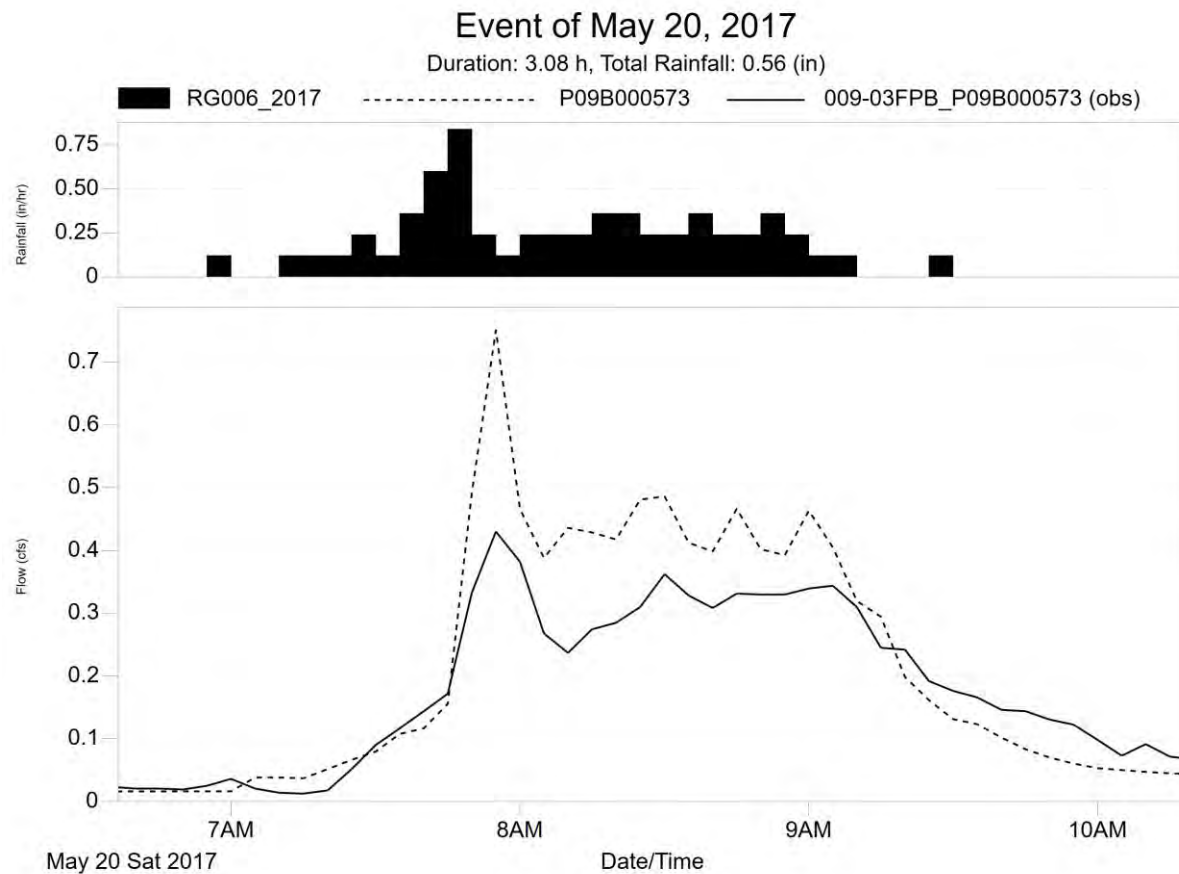


Event of May 10, 2017

Duration: 1.92 h, Total Rainfall: 0.51 (in)



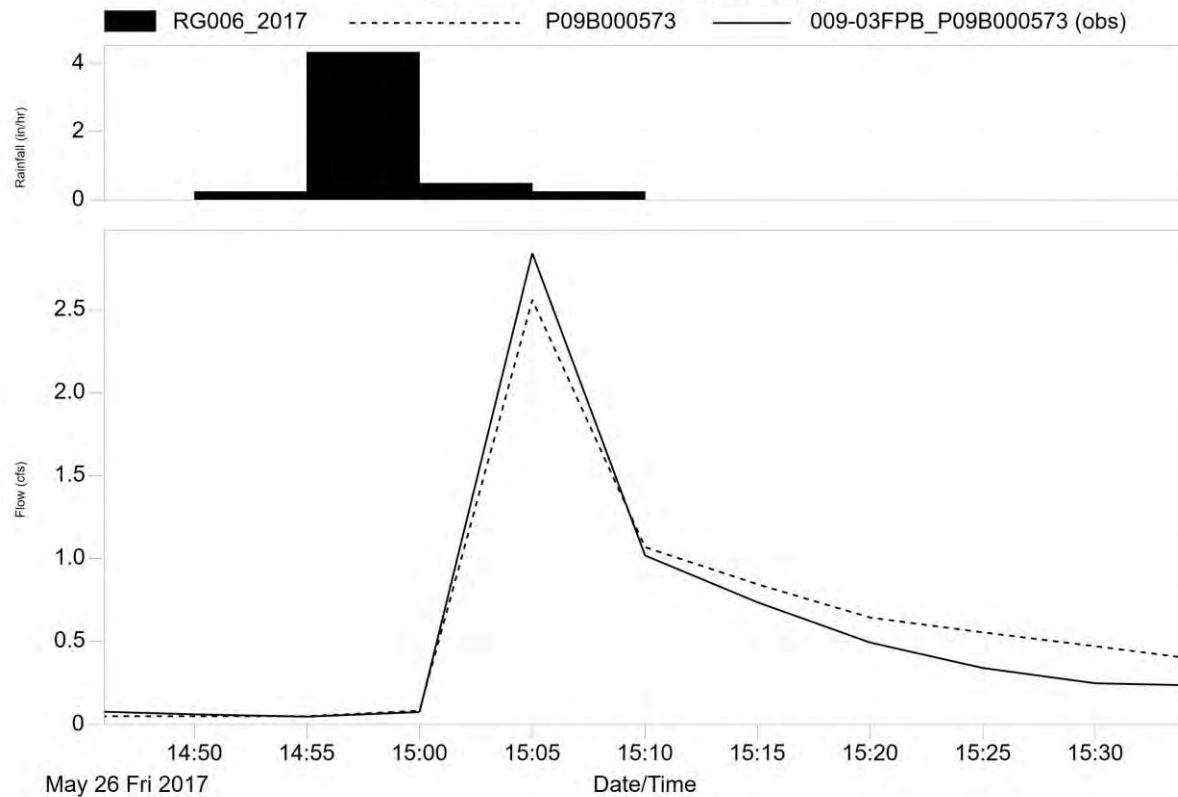
Fulton 009-03FPB – Calibration Events



Fulton 009-03FPB – Calibration Events

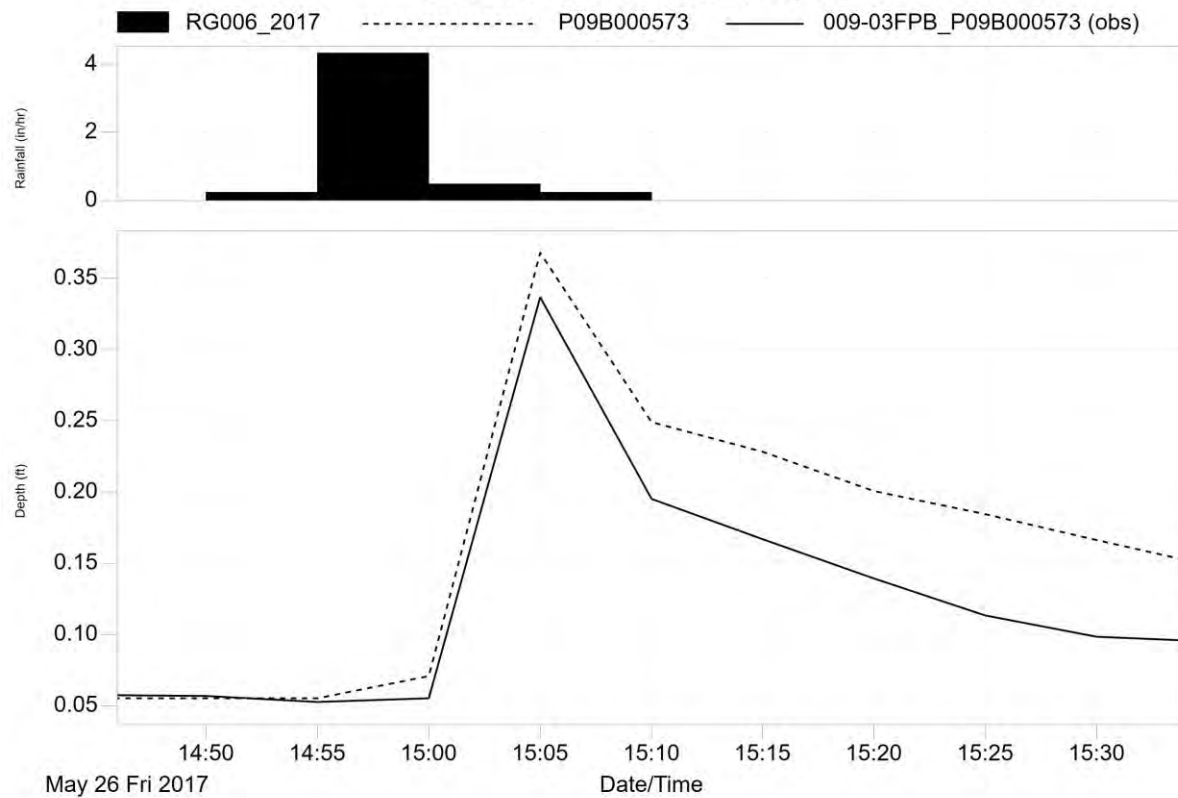
Event of May 26, 2017

Duration: 0.67 h, Total Rainfall: 0.44 (in)

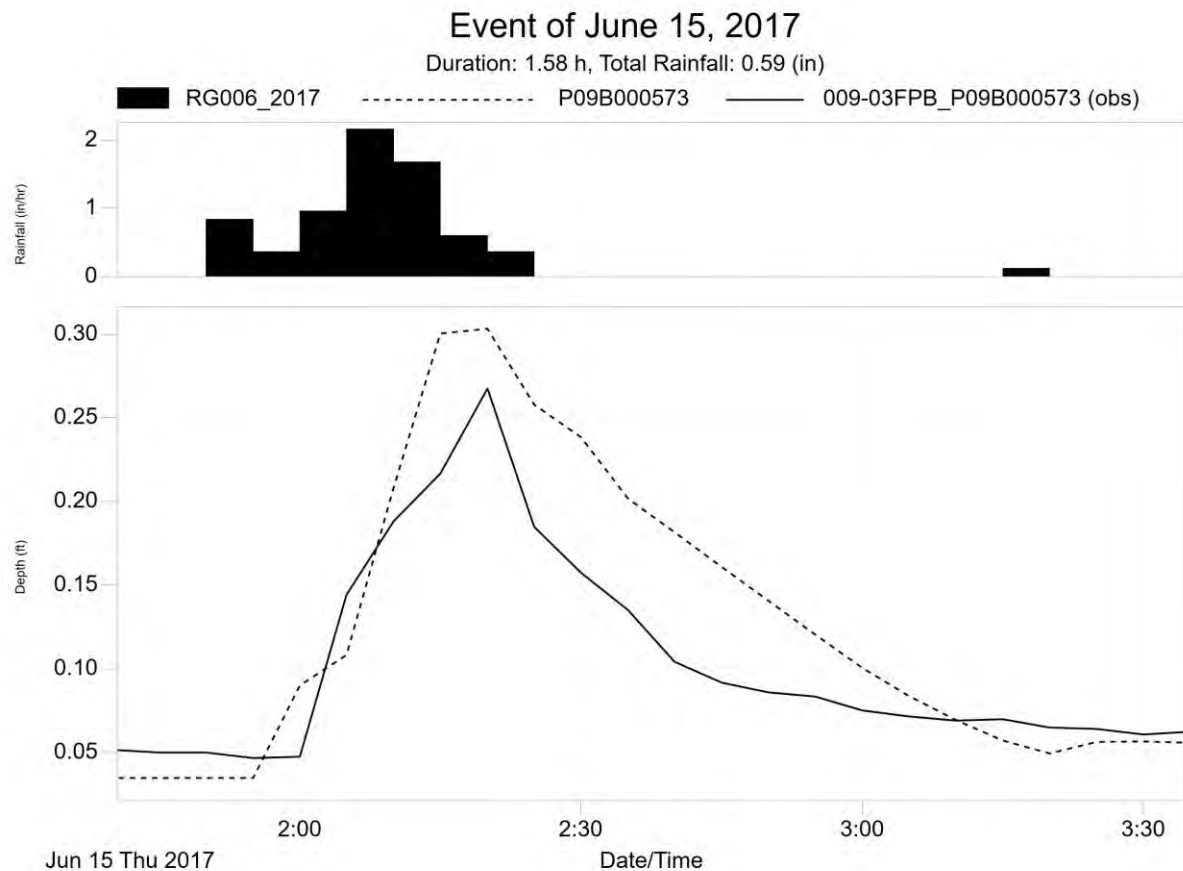
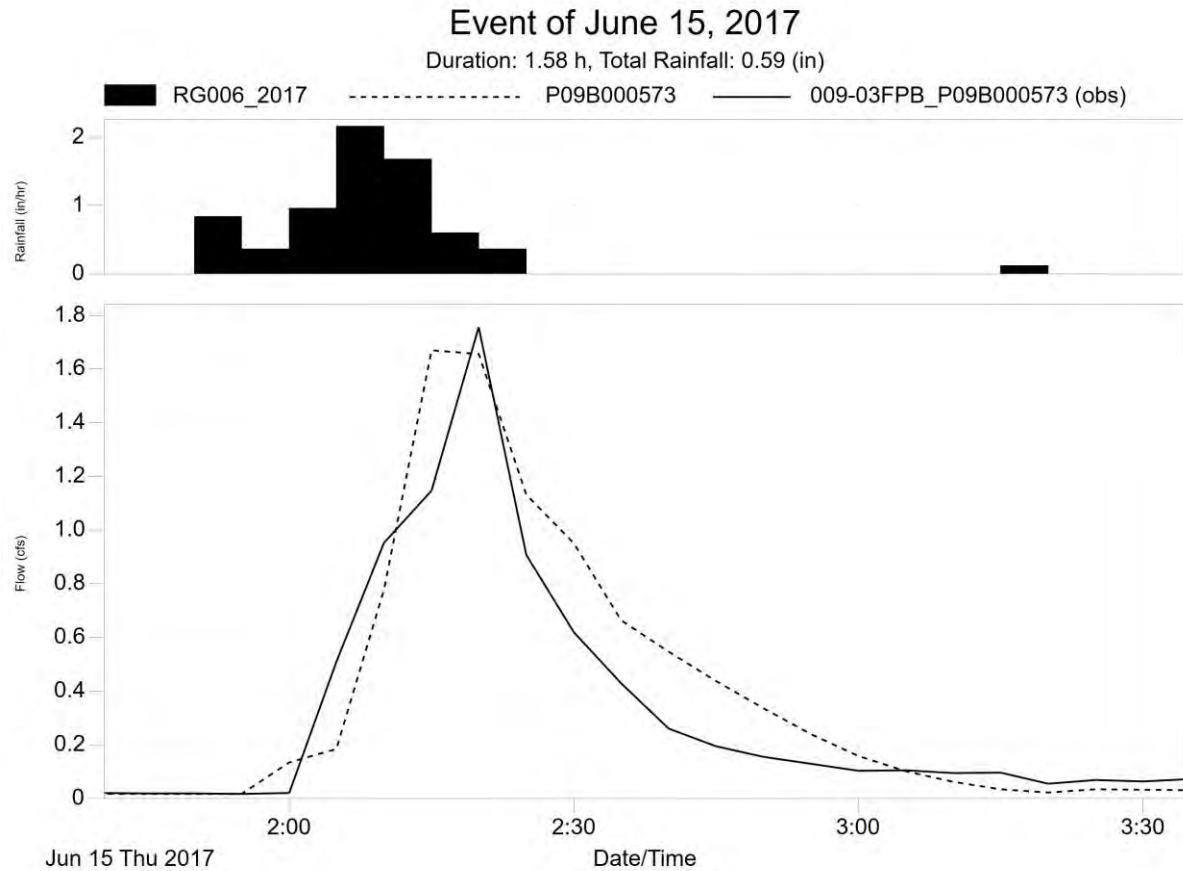


Event of May 26, 2017

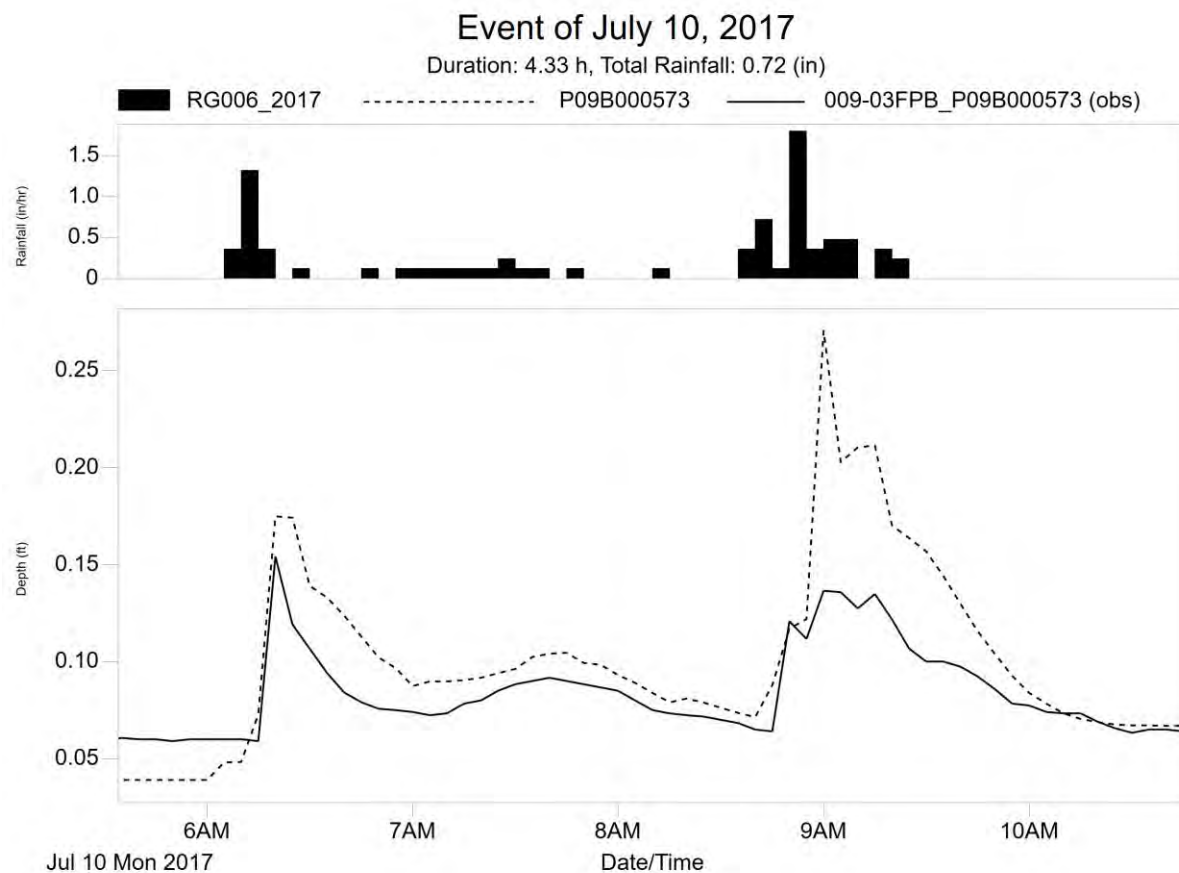
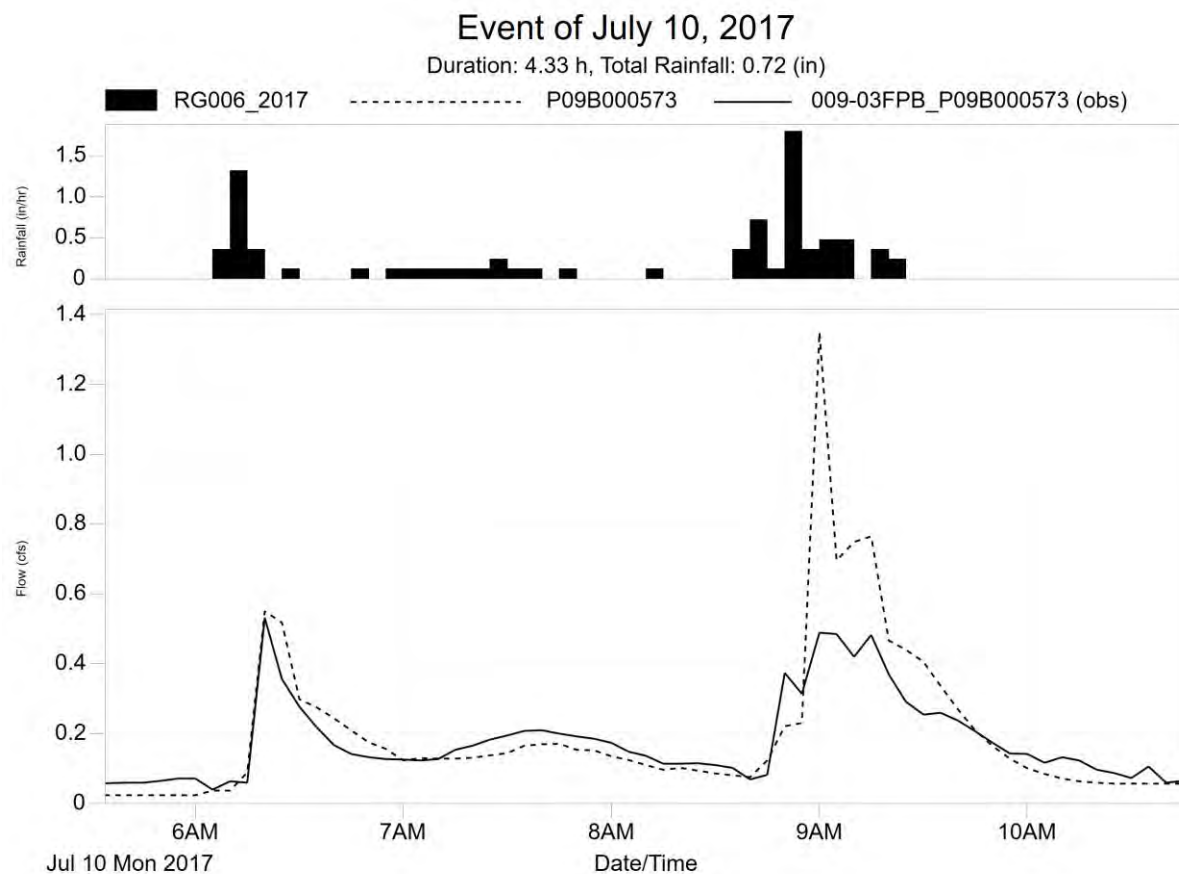
Duration: 0.67 h, Total Rainfall: 0.44 (in)



Fulton 009-03FPB – Calibration Events



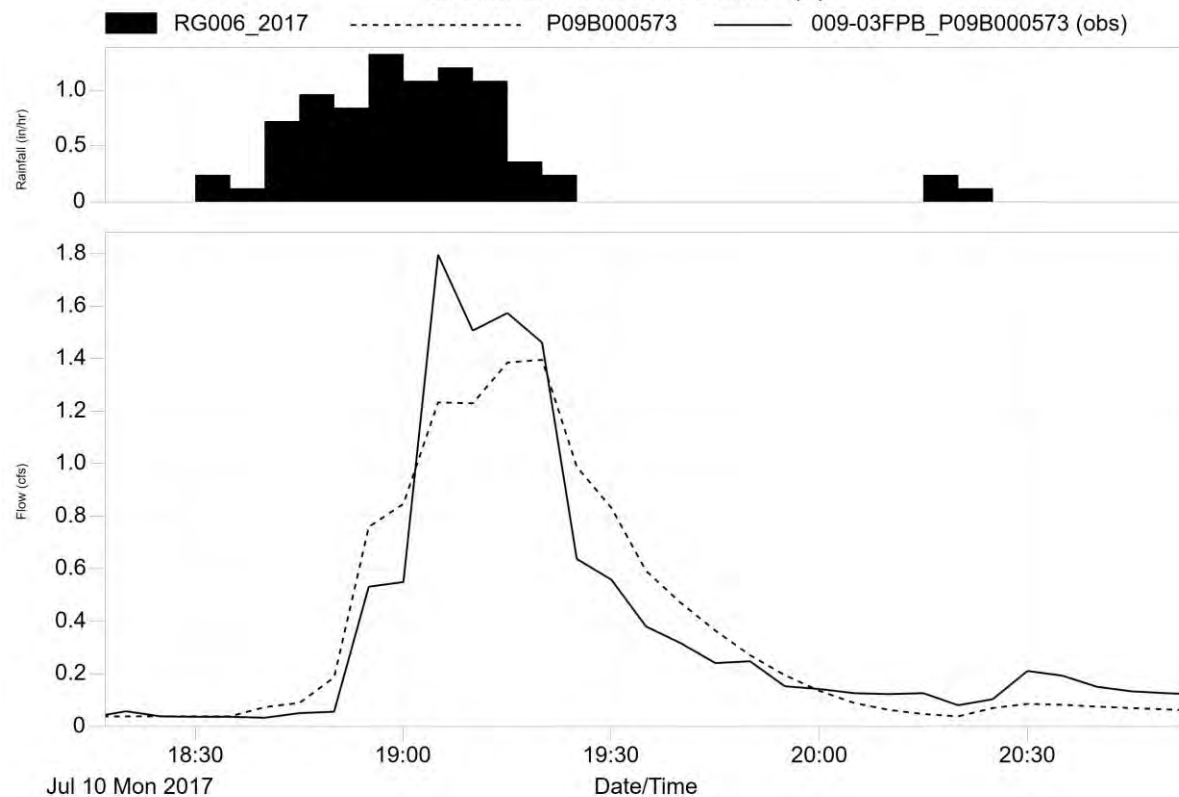
Fulton 009-03FPB – Calibration Events



Fulton 009-03FPB – Calibration Events

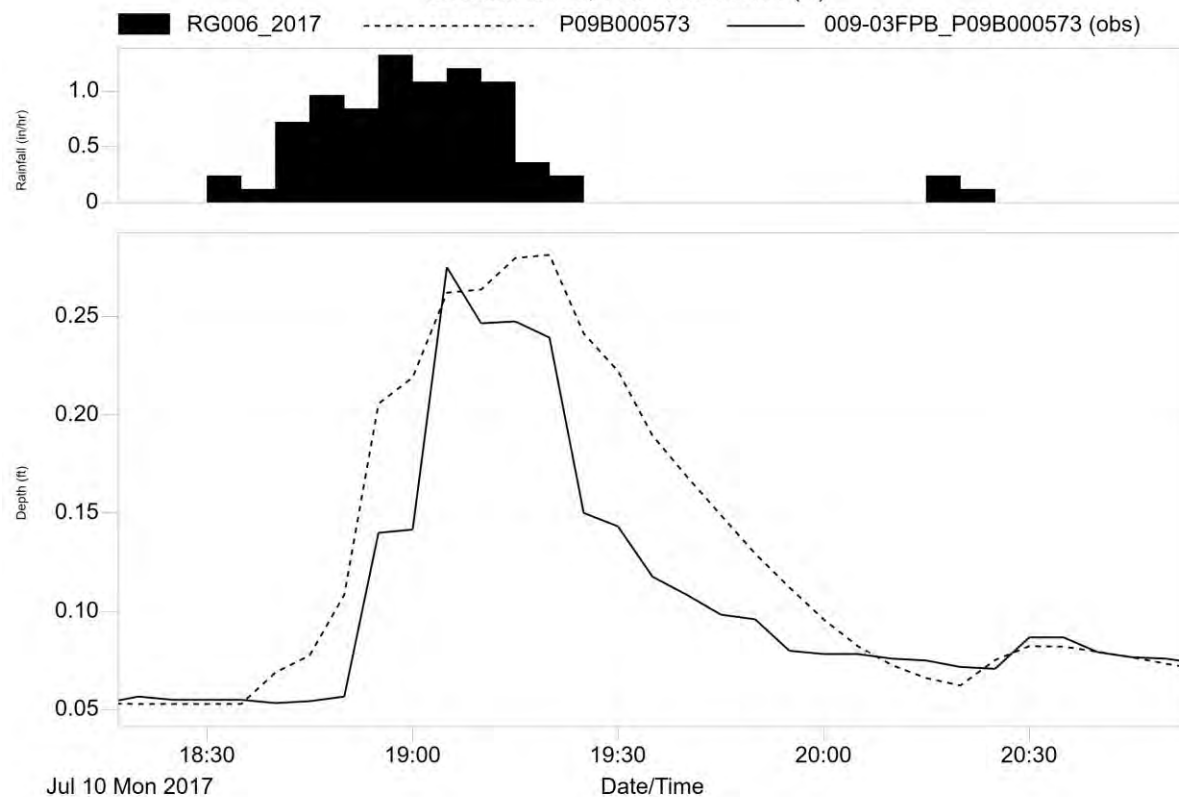
Event of July 10, 2017

Duration: 2.17 h, Total Rainfall: 0.71 (in)

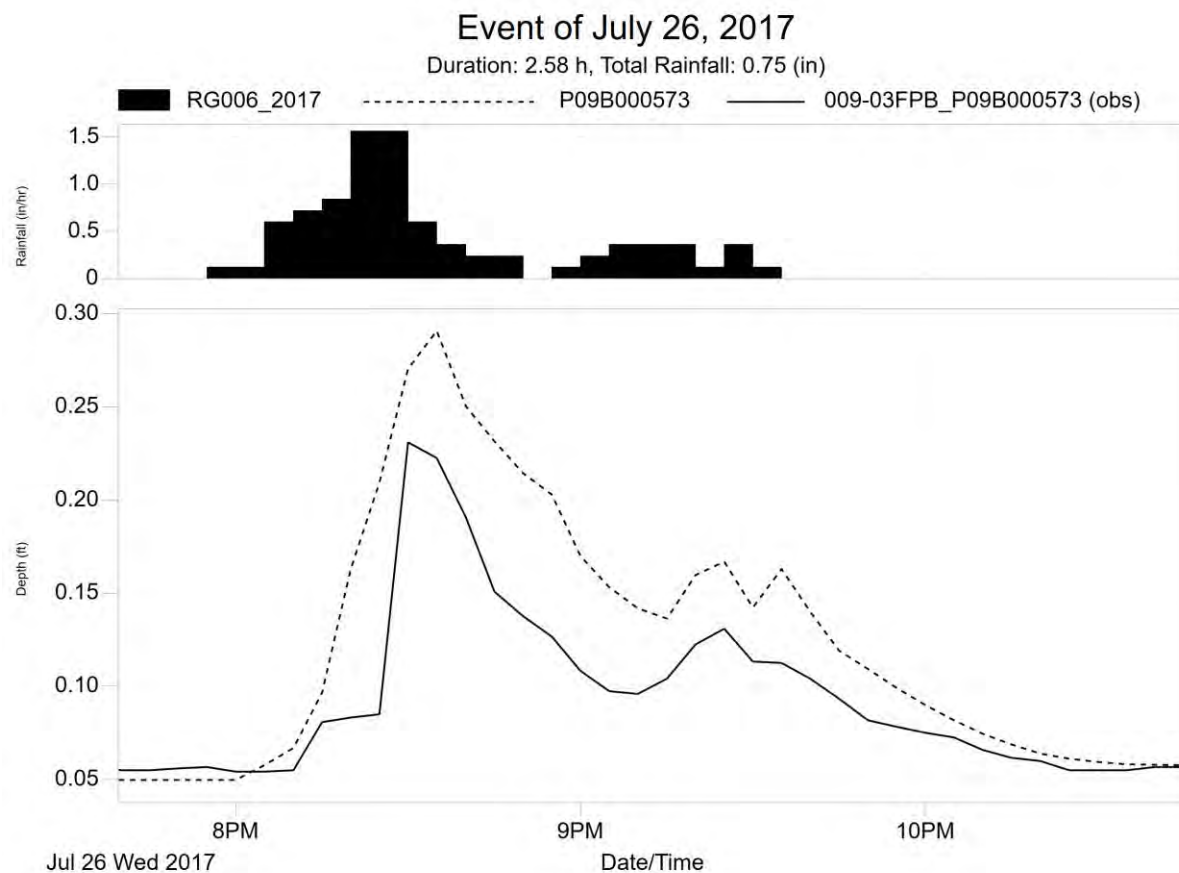
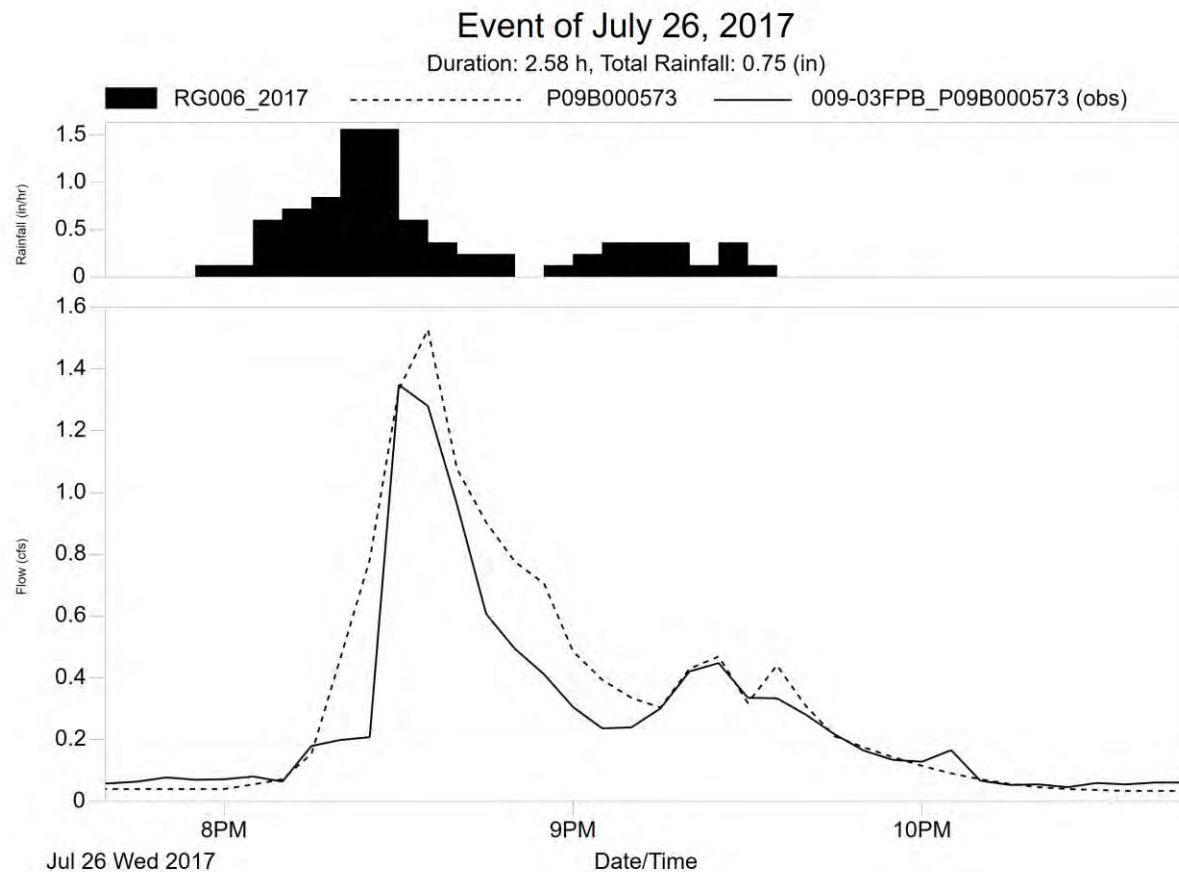


Event of July 10, 2017

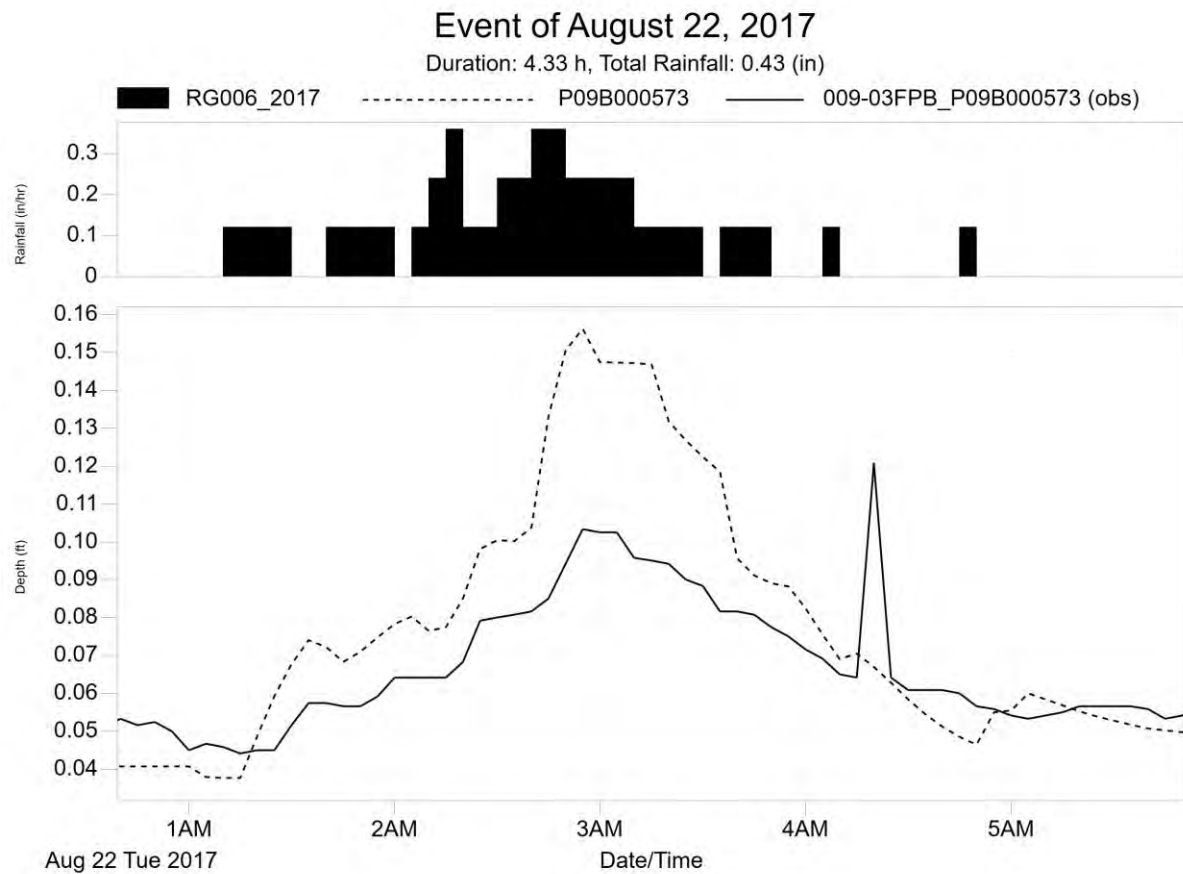
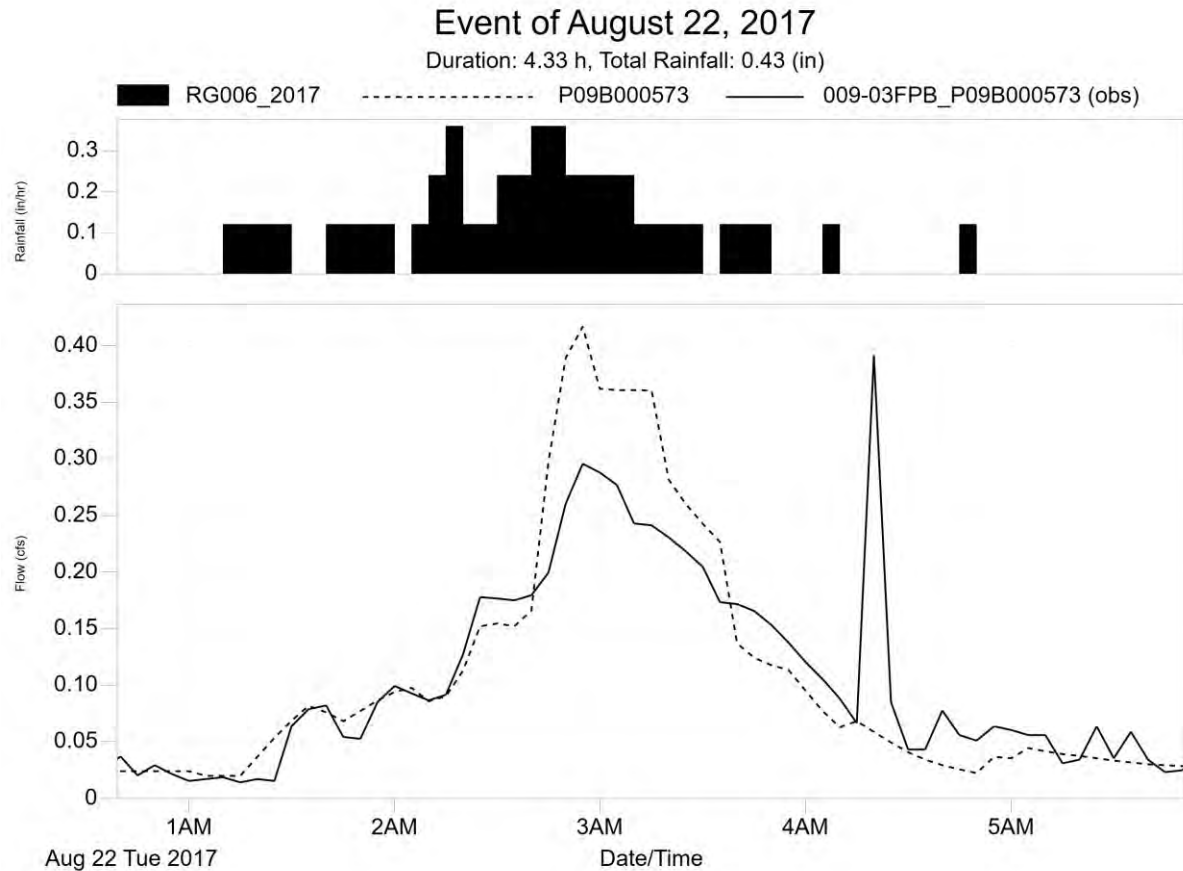
Duration: 2.17 h, Total Rainfall: 0.71 (in)



Fulton 009-03FPB – Calibration Events



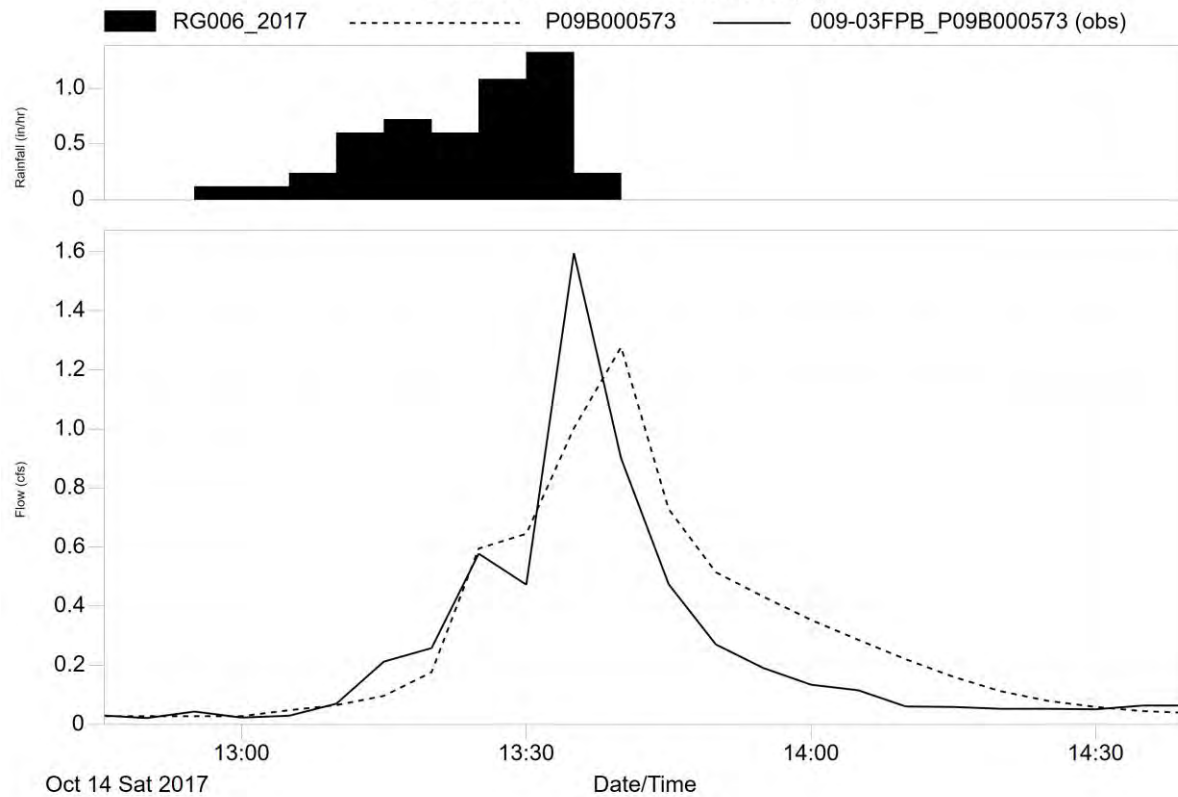
Fulton 009-03FPB – Calibration Events



Fulton 009-03FPB – Calibration Events

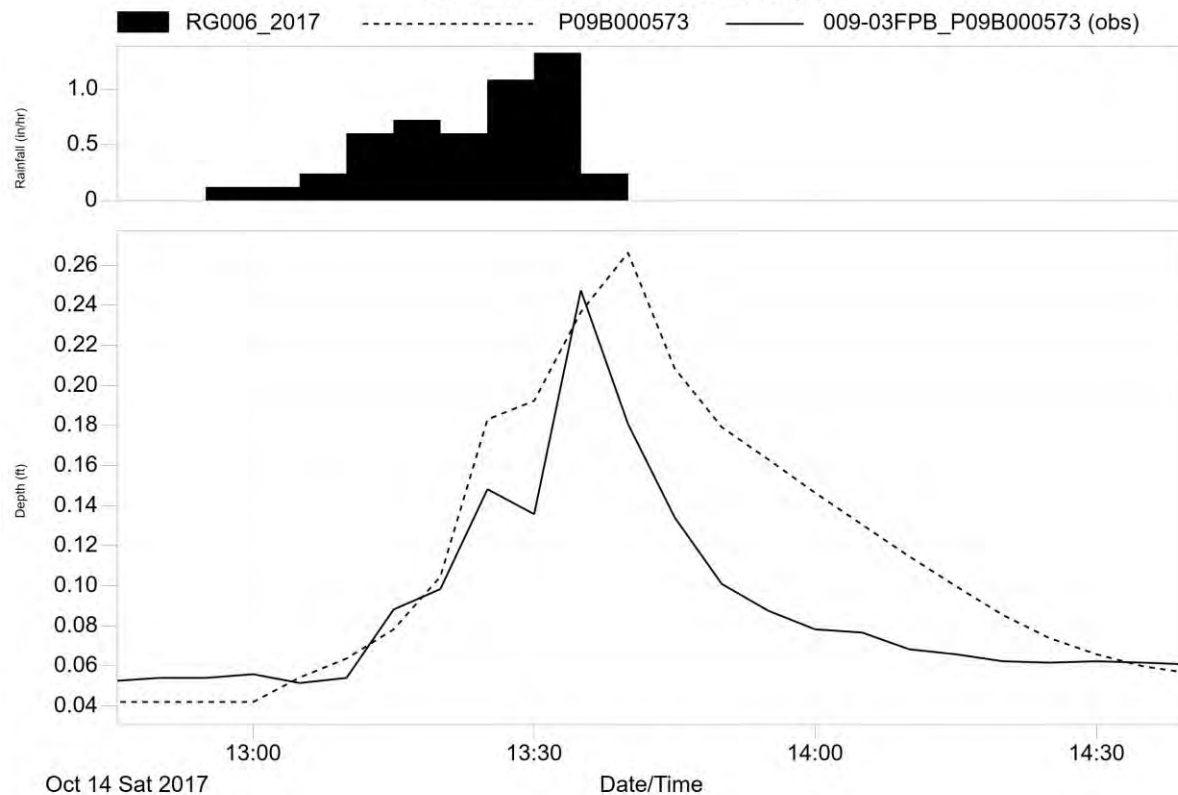
Event of October 14, 2017

Duration: 1.58 h, Total Rainfall: 0.42 (in)



Event of October 14, 2017

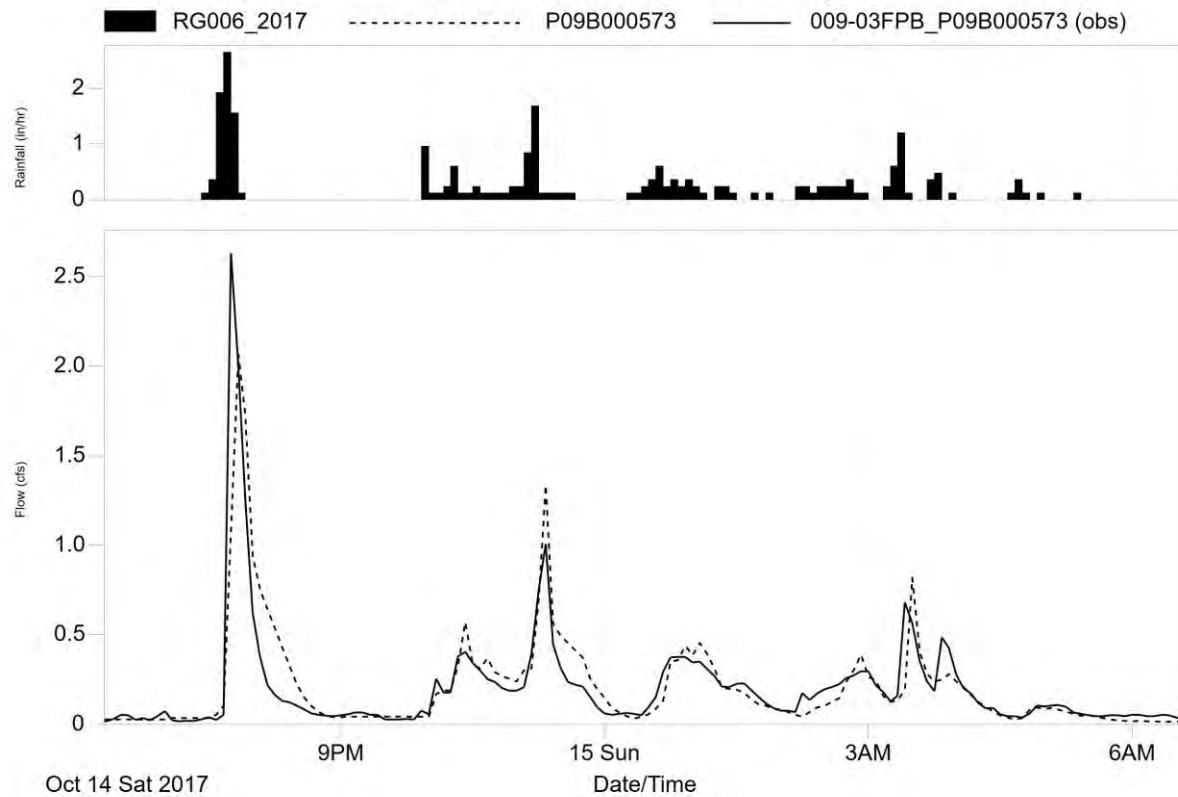
Duration: 1.58 h, Total Rainfall: 0.42 (in)



Fulton 009-03FPB – Calibration Events

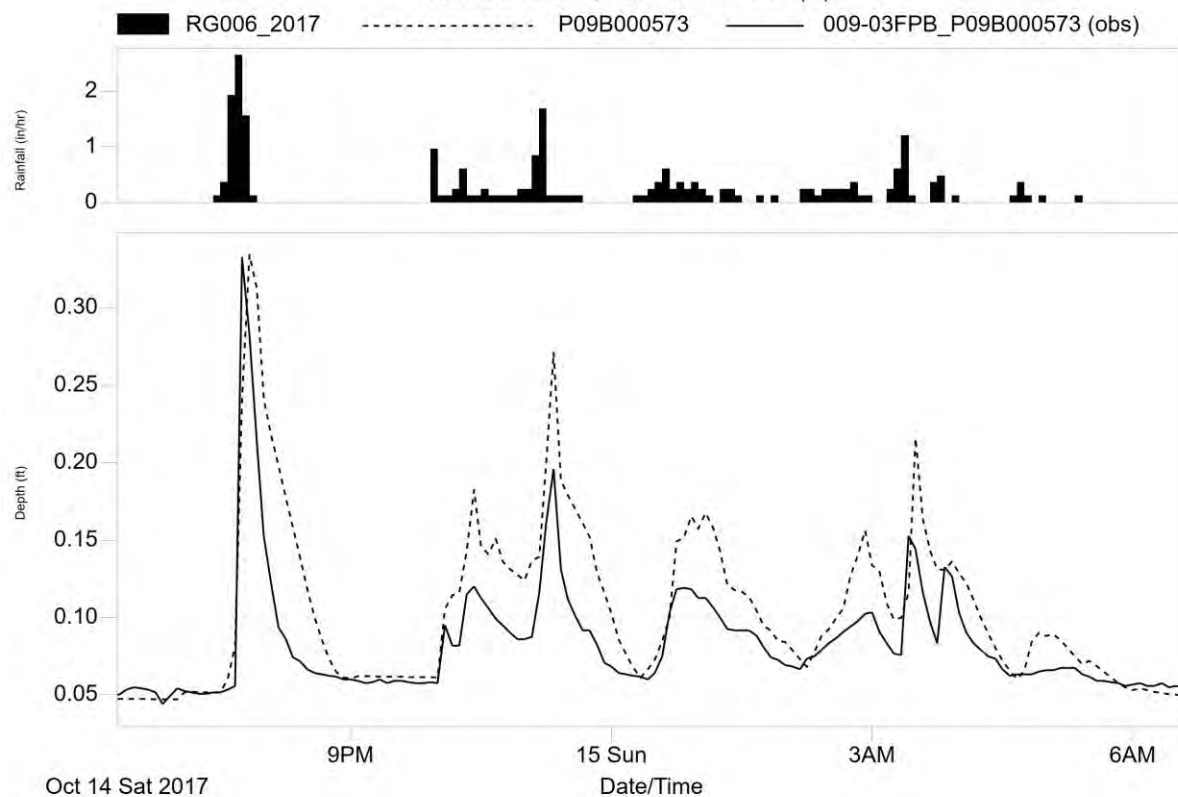
Event of October 14, 2017

Duration: 10.25 h, Total Rainfall: 1.94 (in)

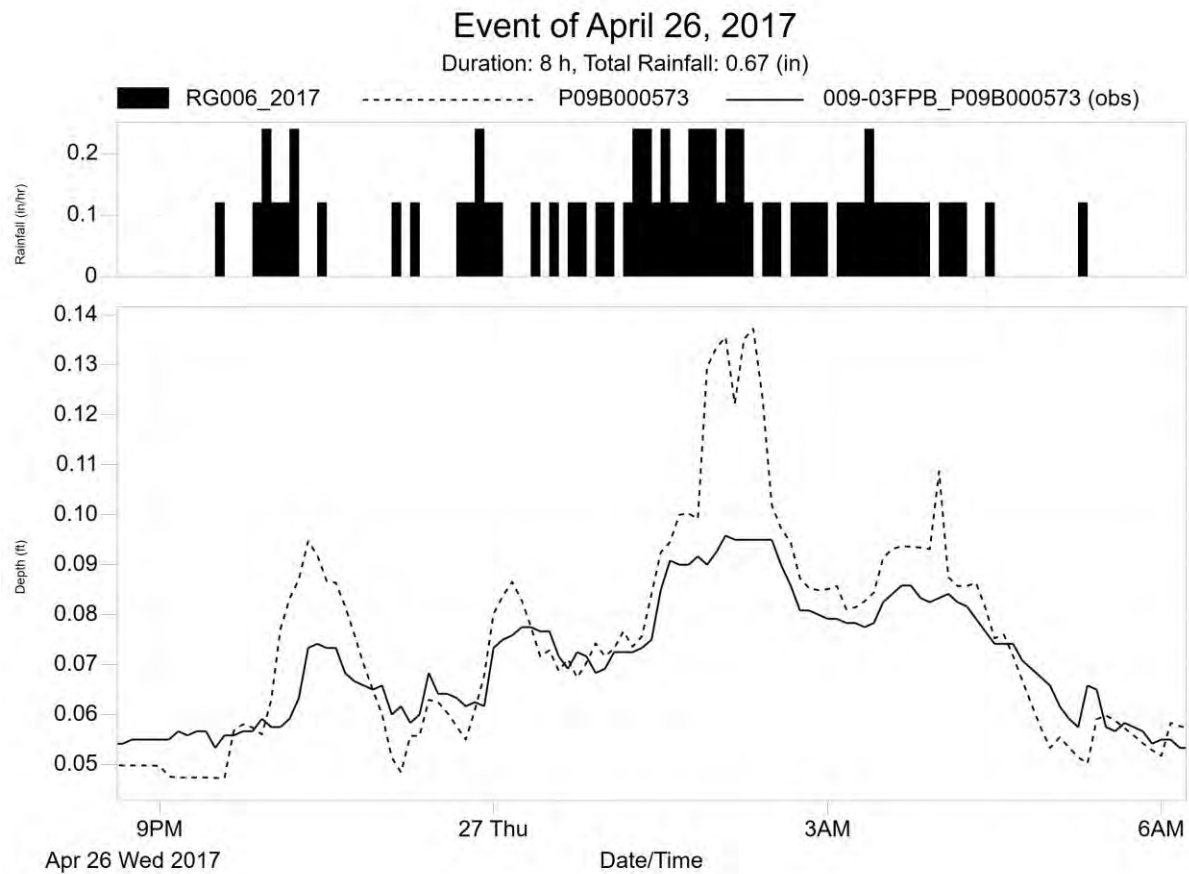
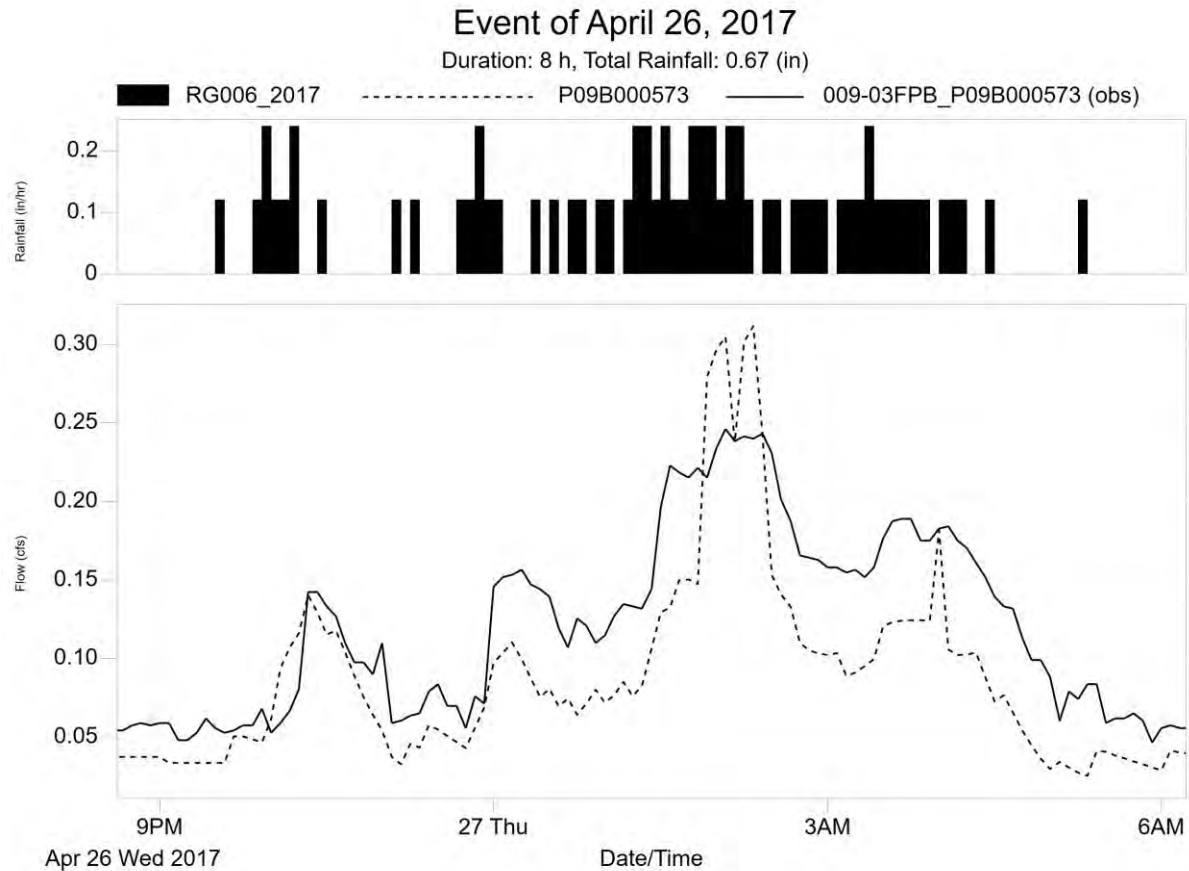


Event of October 14, 2017

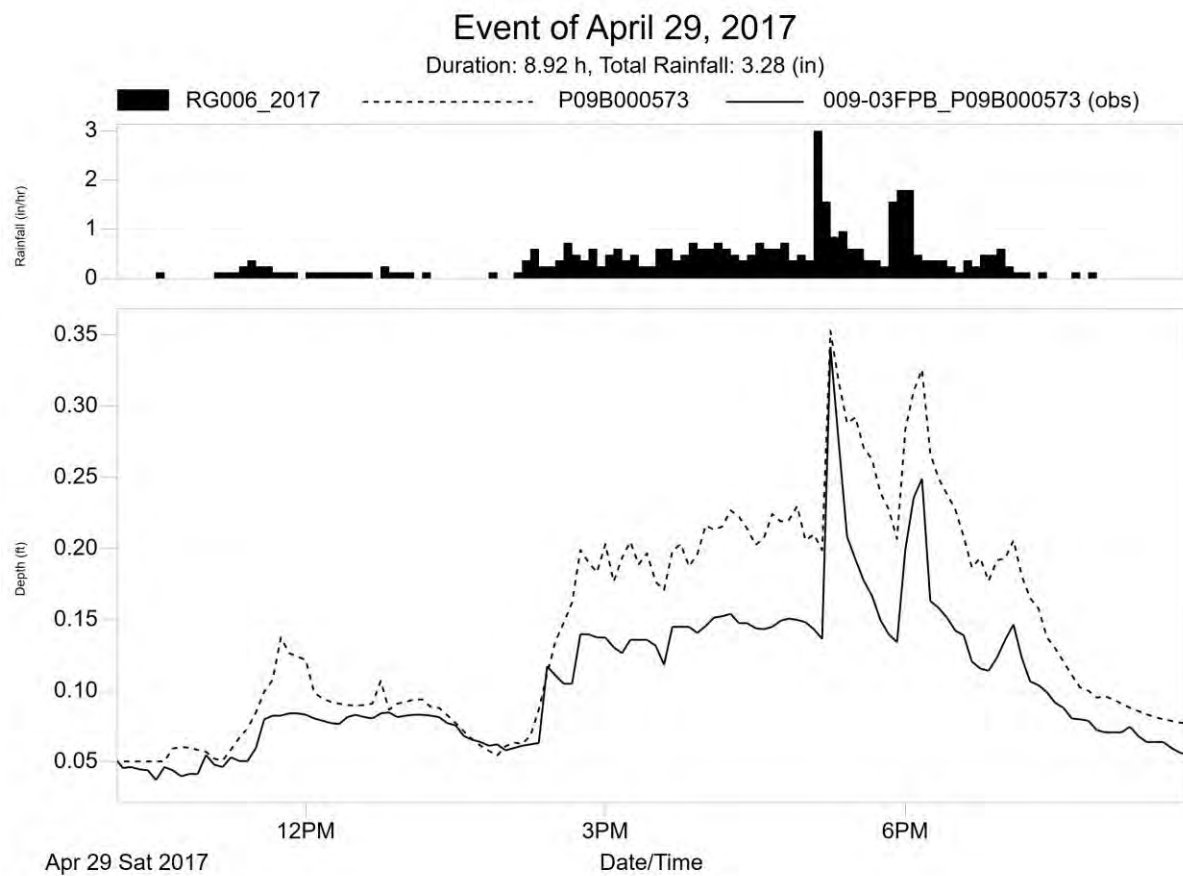
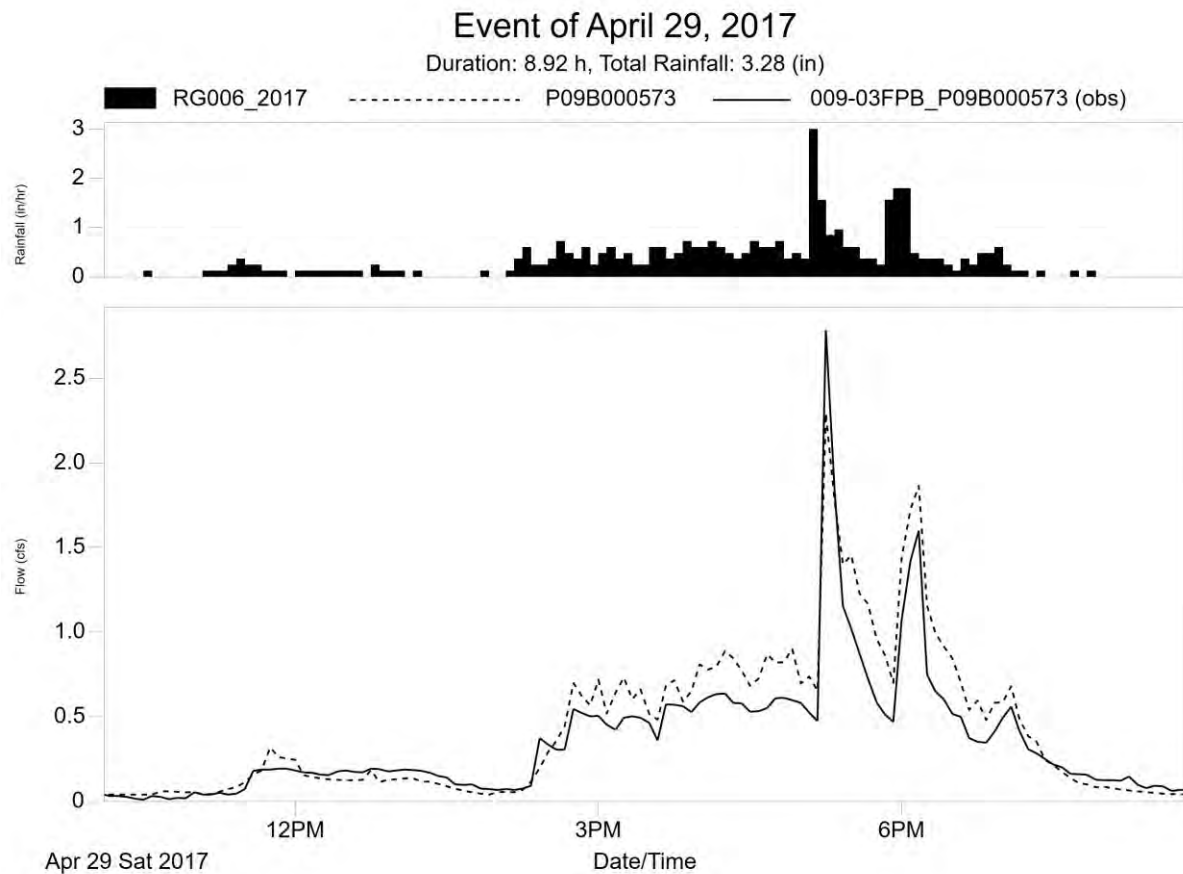
Duration: 10.25 h, Total Rainfall: 1.94 (in)



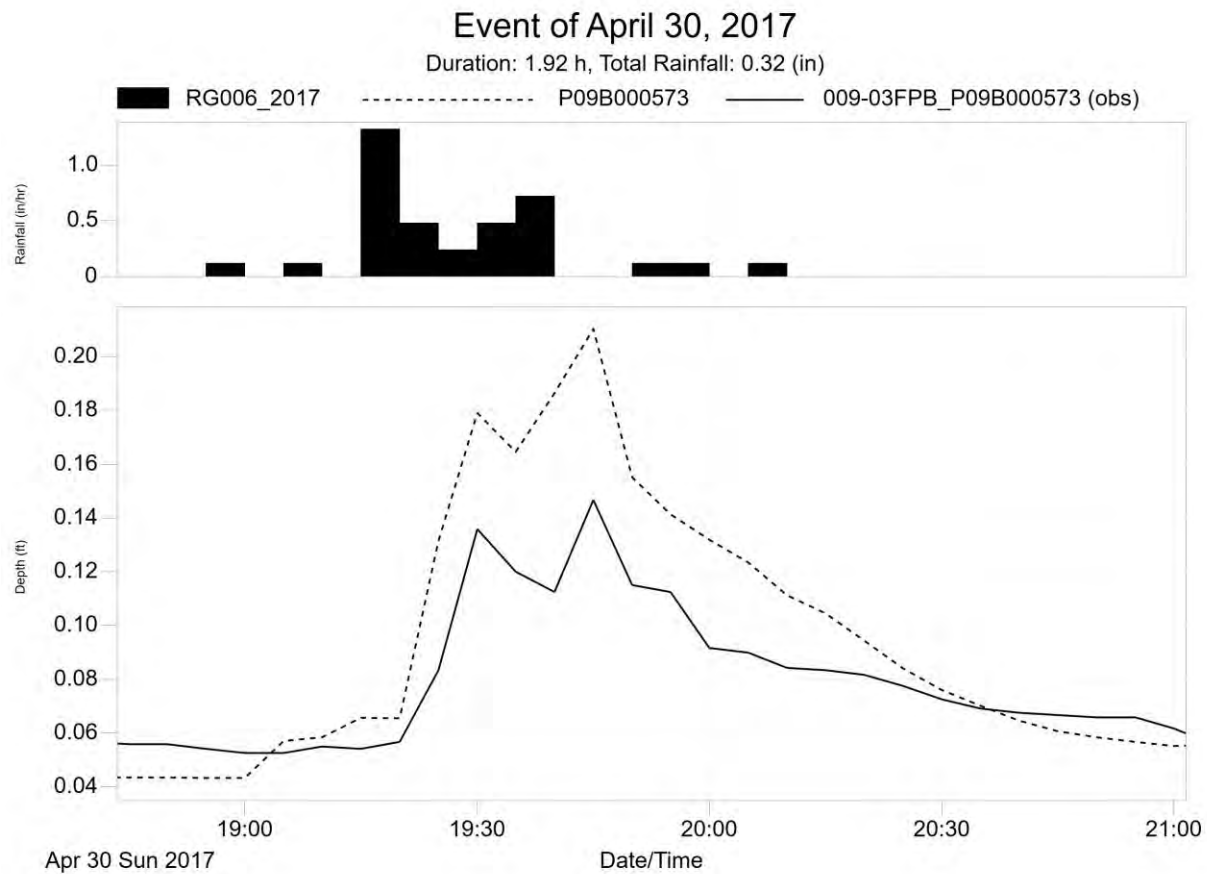
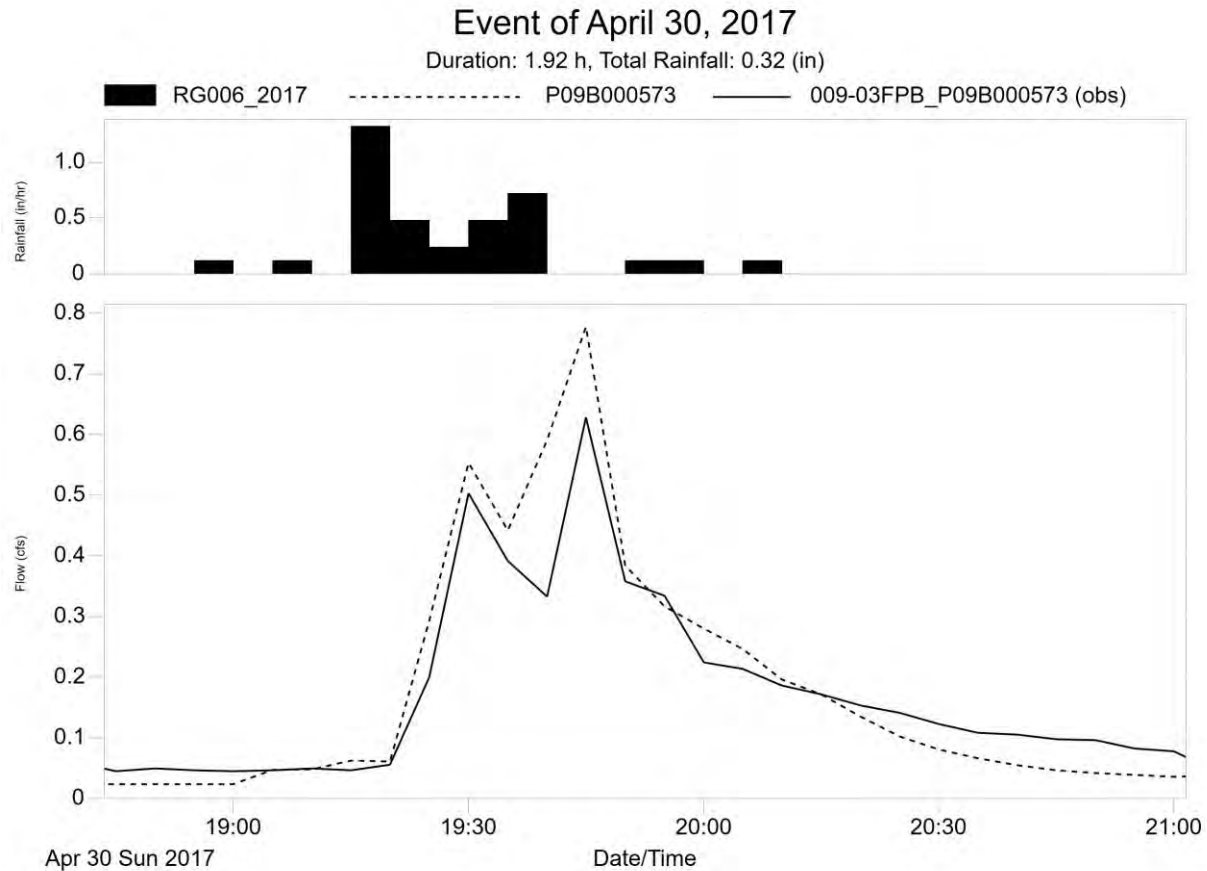
Fulton 009-03FPB – Verification Events



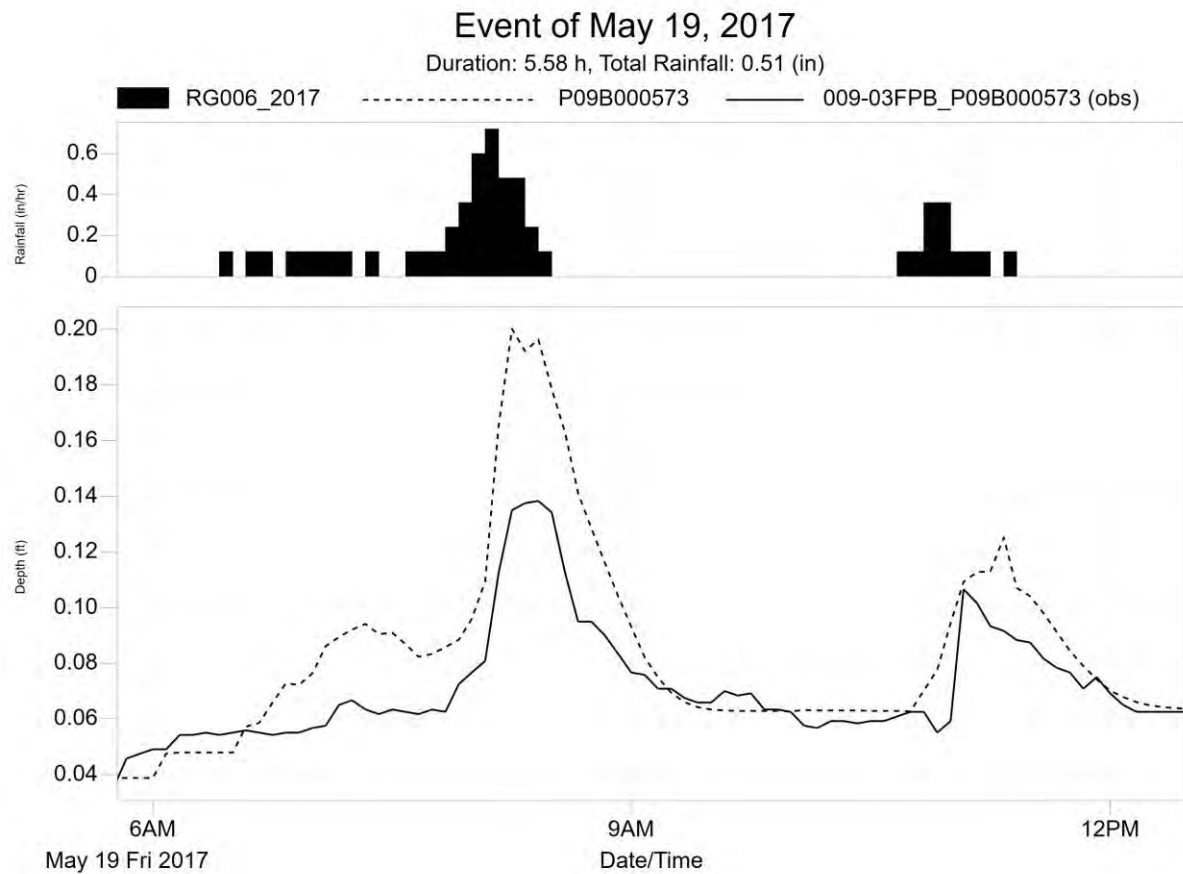
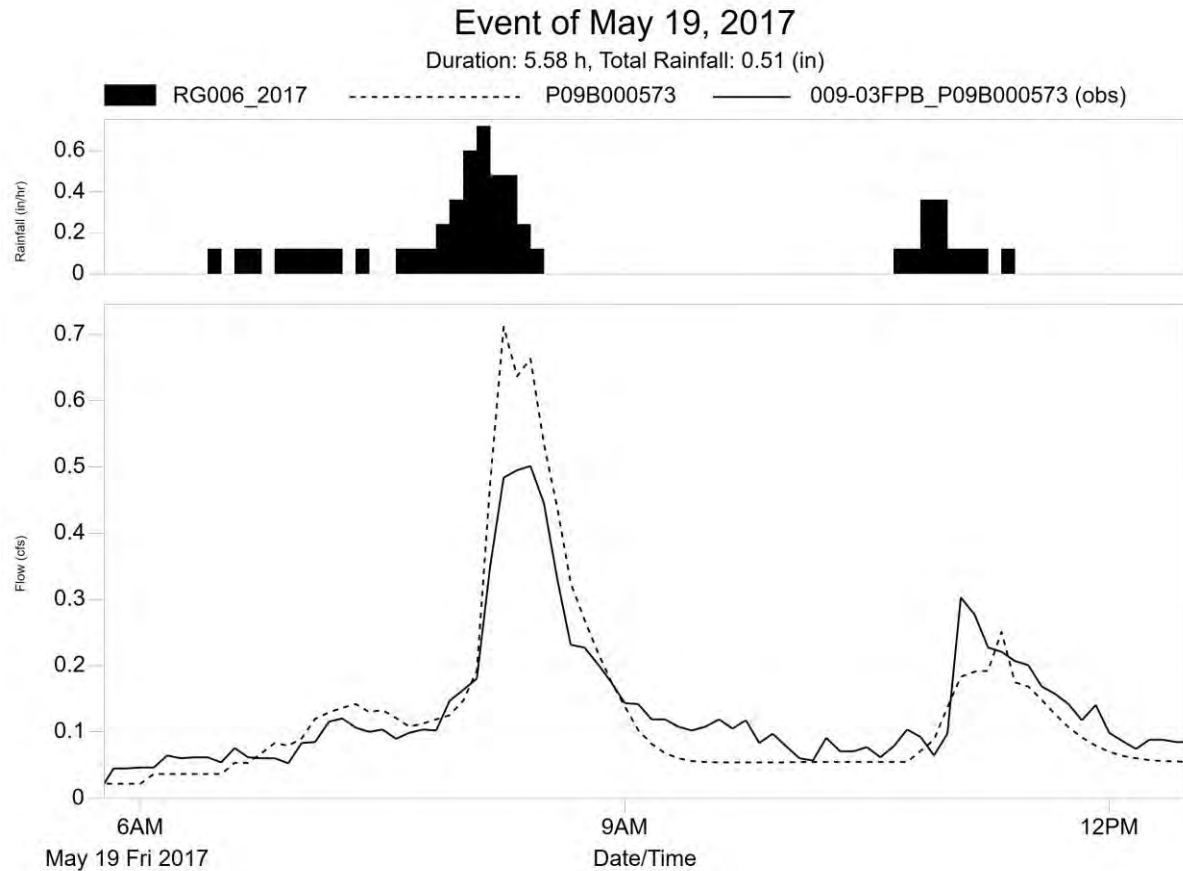
Fulton 009-03FPB – Verification Events



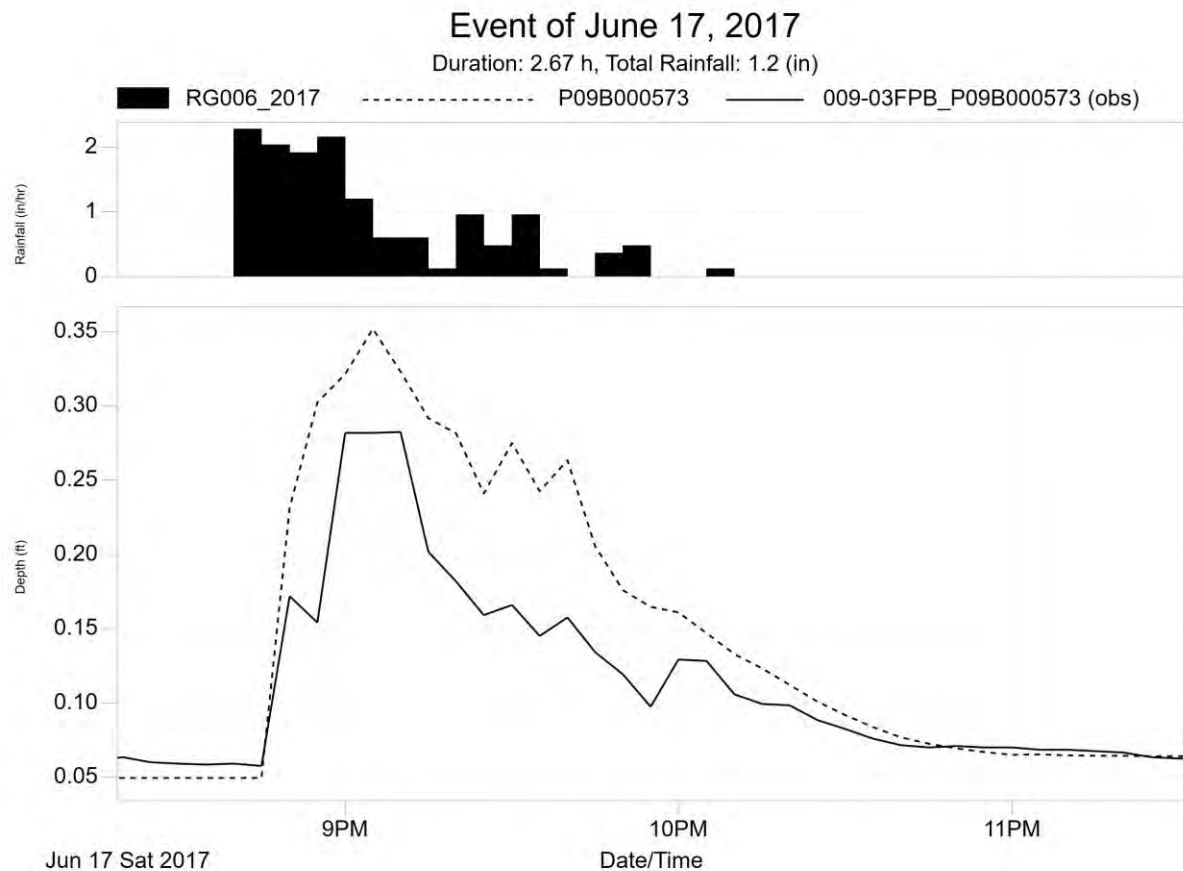
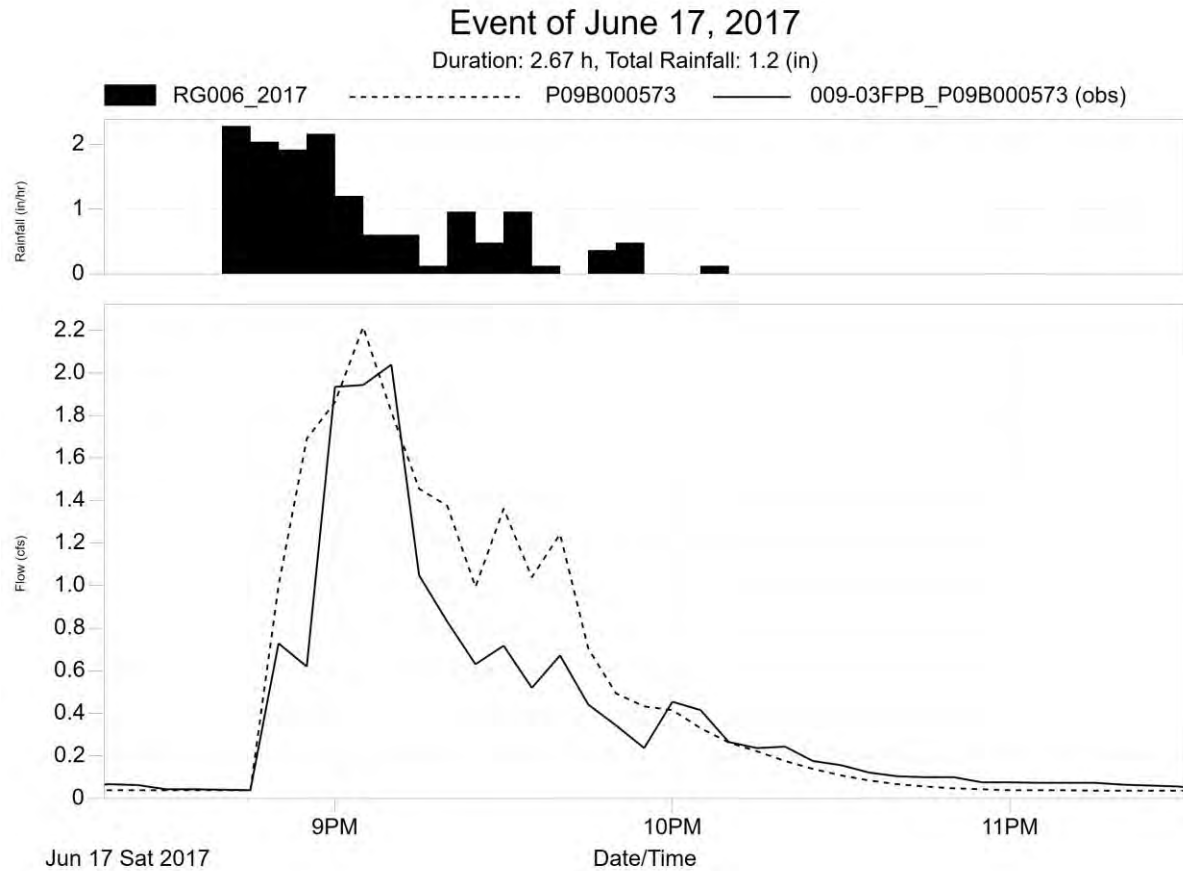
Fulton 009-03FPB – Verification Events



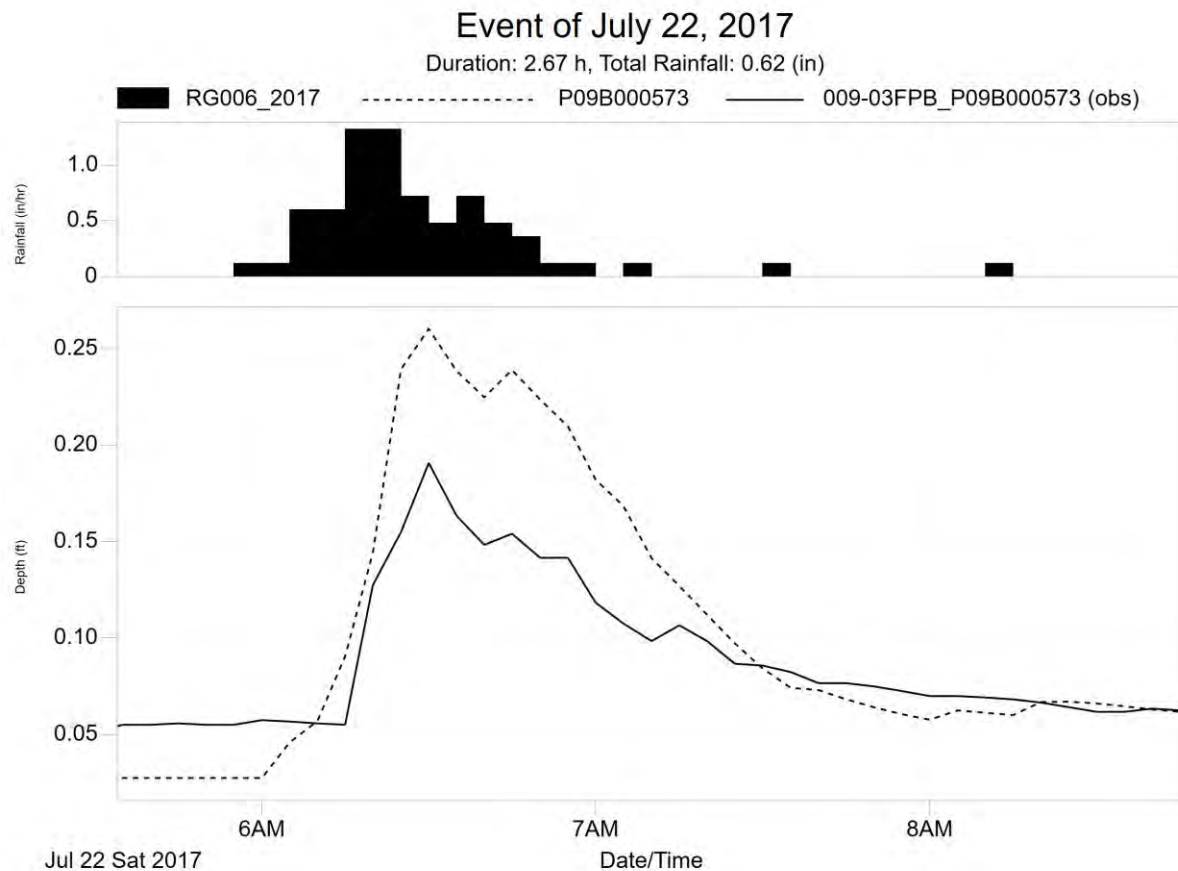
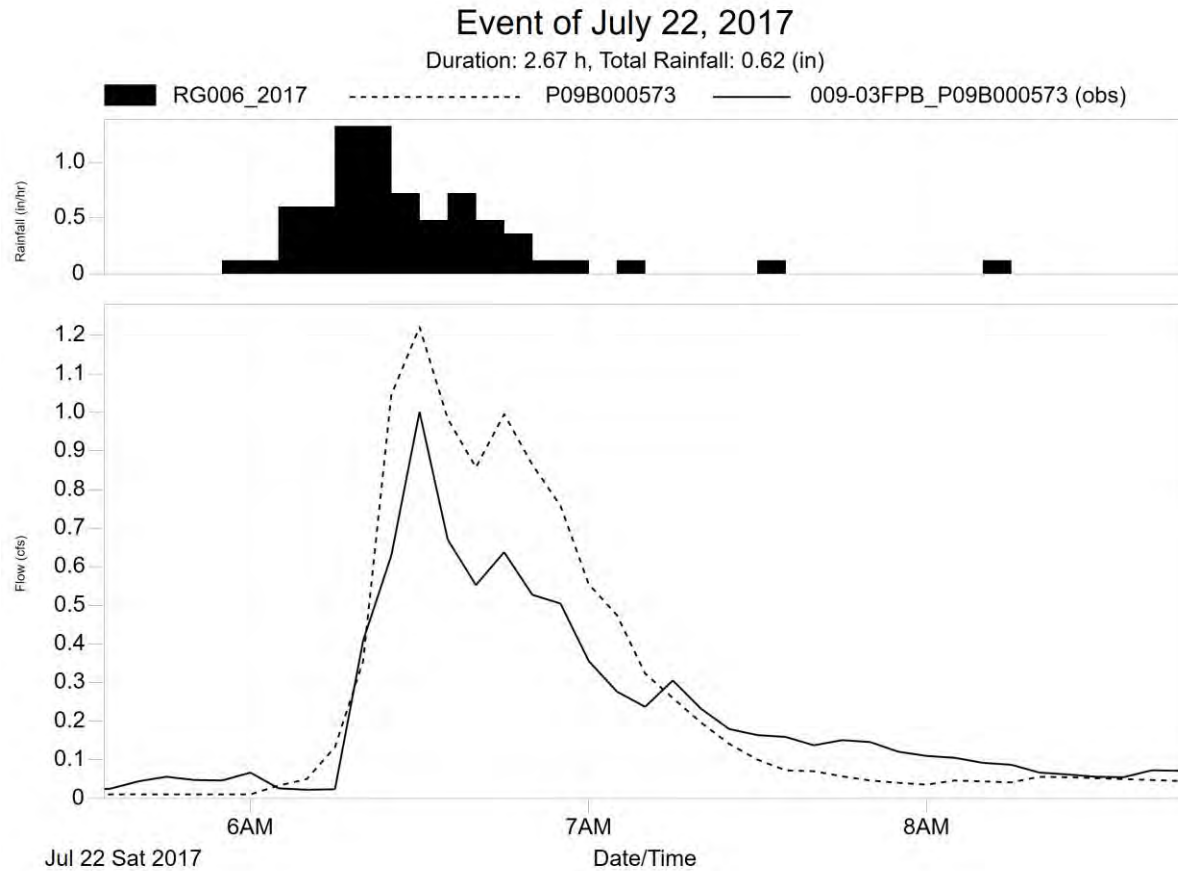
Fulton 009-03FPB – Verification Events



Fulton 009-03FPB – Verification Events



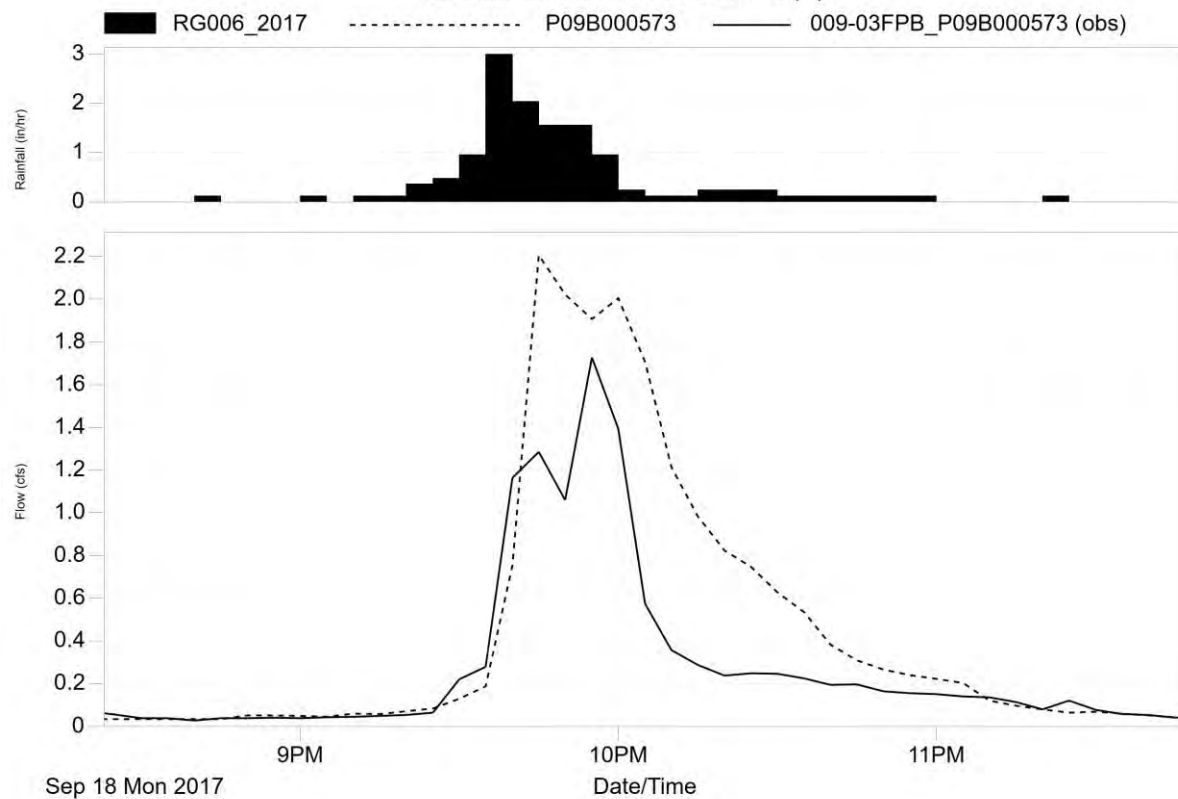
Fulton 009-03FPB – Verification Events



Fulton 009-03FPB – Verification Events

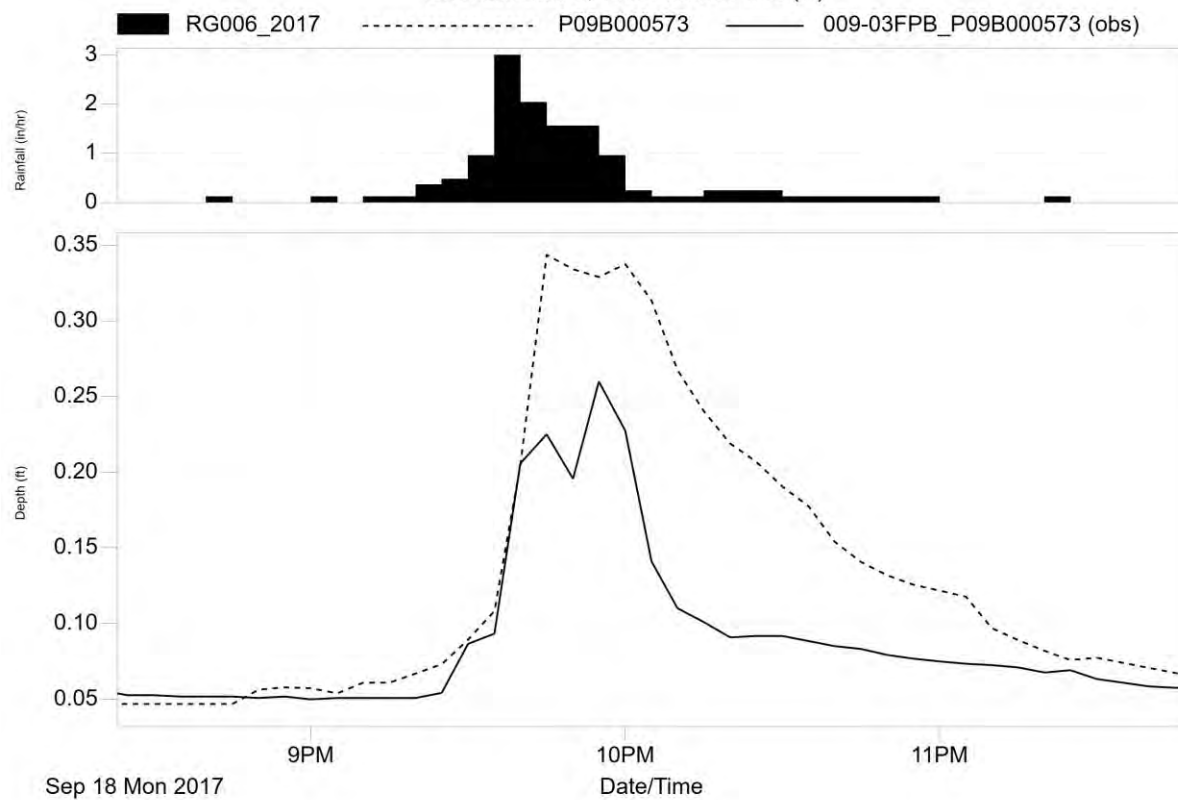
Event of September 18, 2017

Duration: 2.83 h, Total Rainfall: 1.12 (in)



Event of September 18, 2017

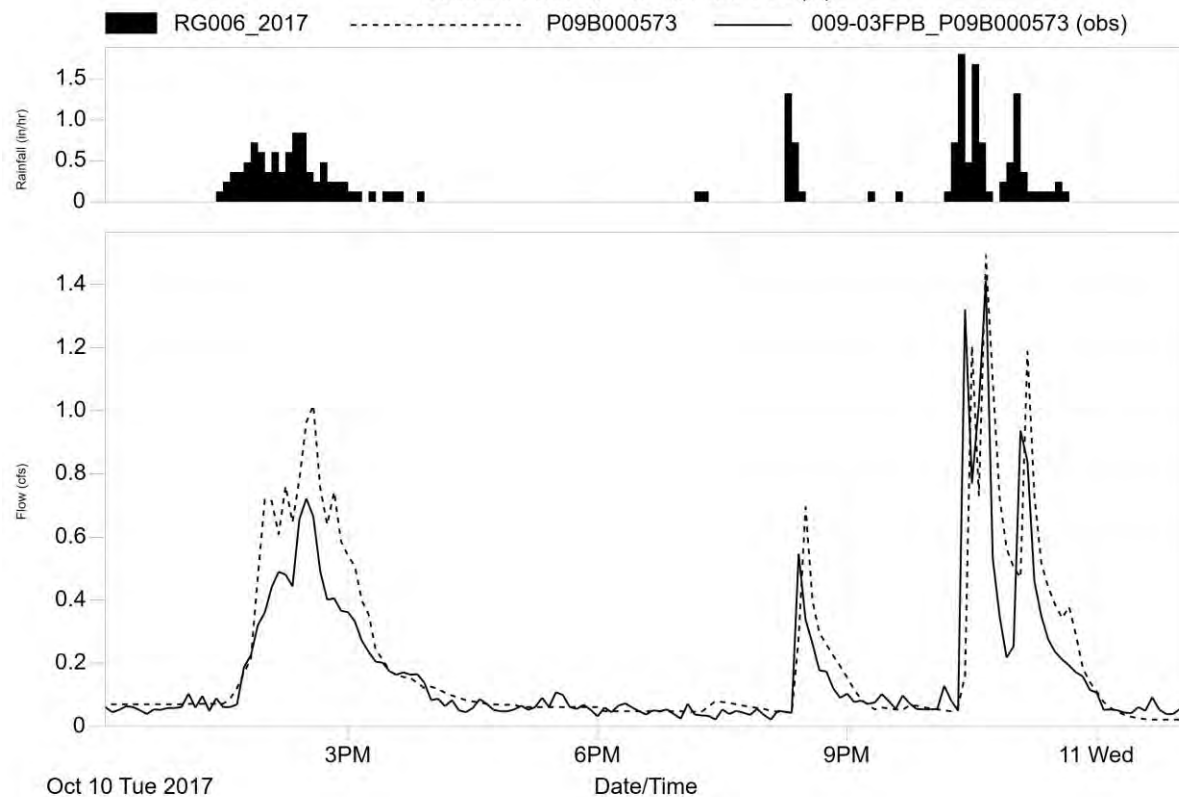
Duration: 2.83 h, Total Rainfall: 1.12 (in)



Fulton 009-03FPB – Verification Events

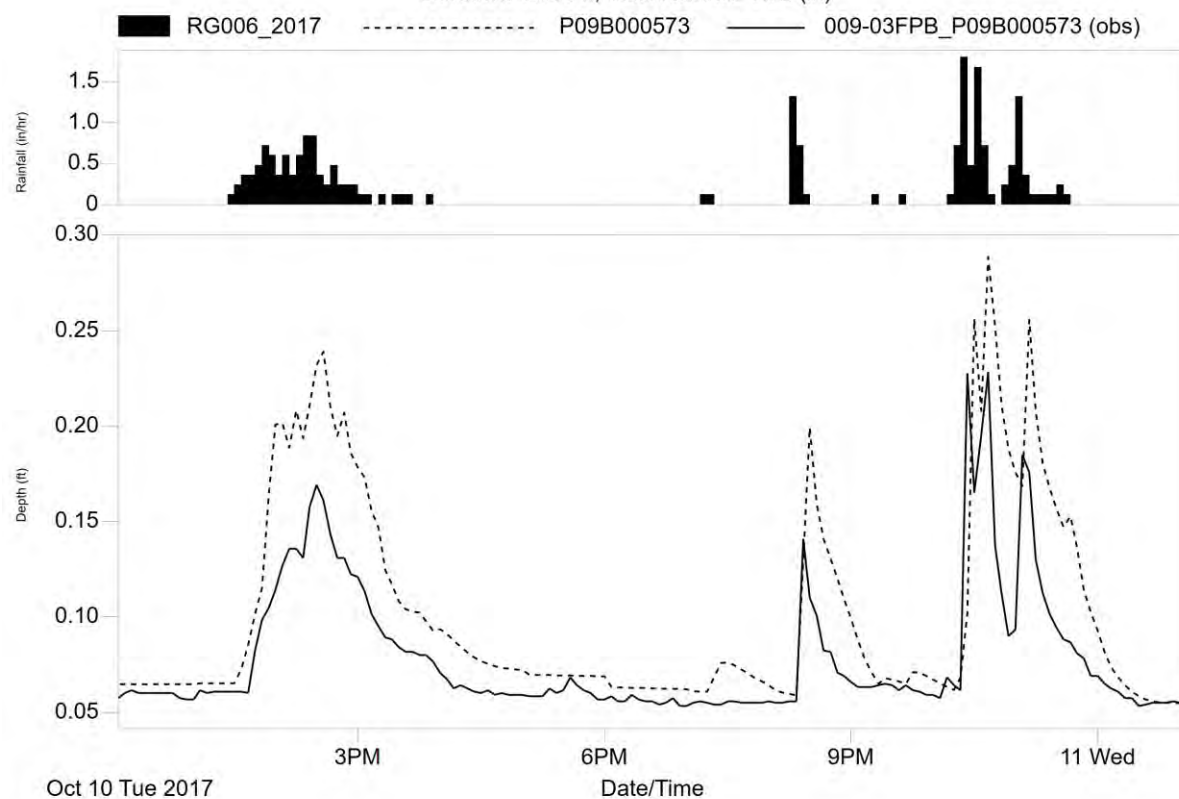
Event of October 10, 2017

Duration: 10.83 h, Total Rainfall: 1.72 (in)

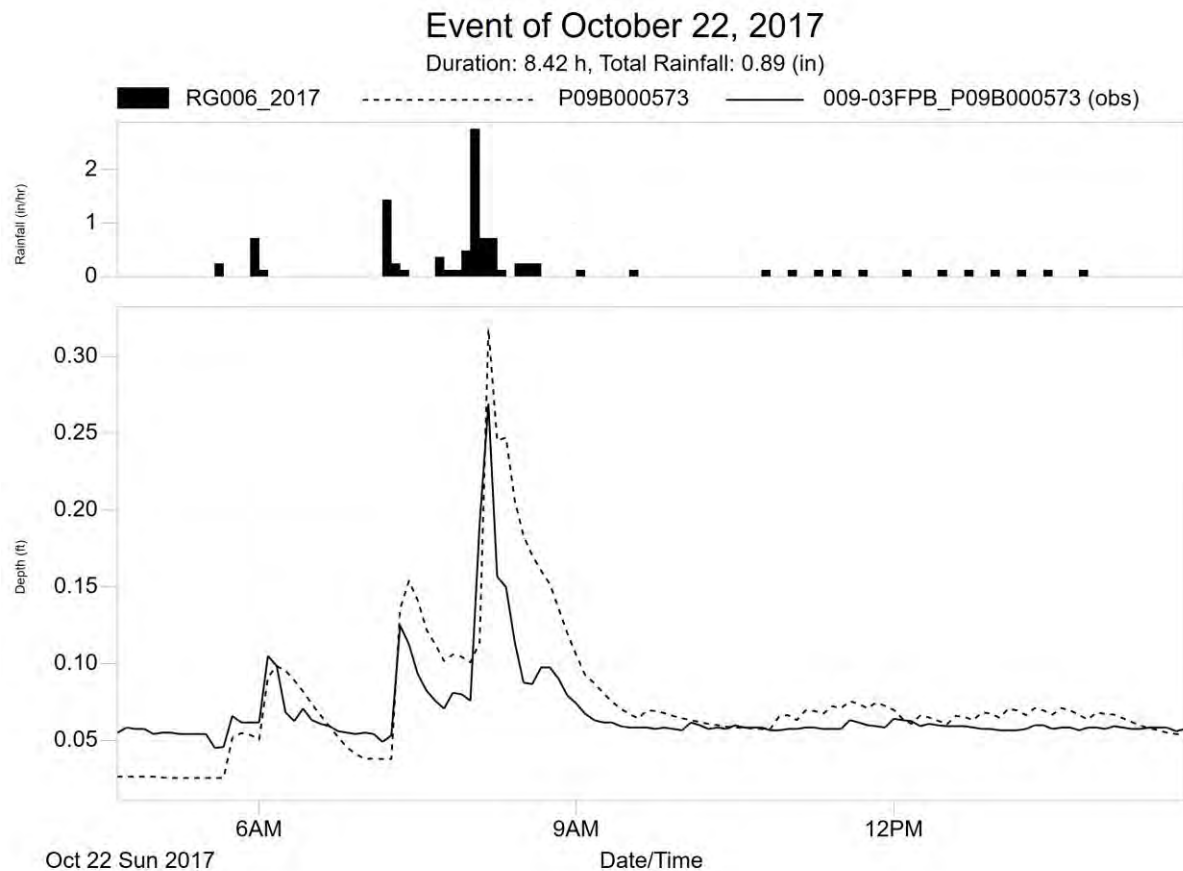
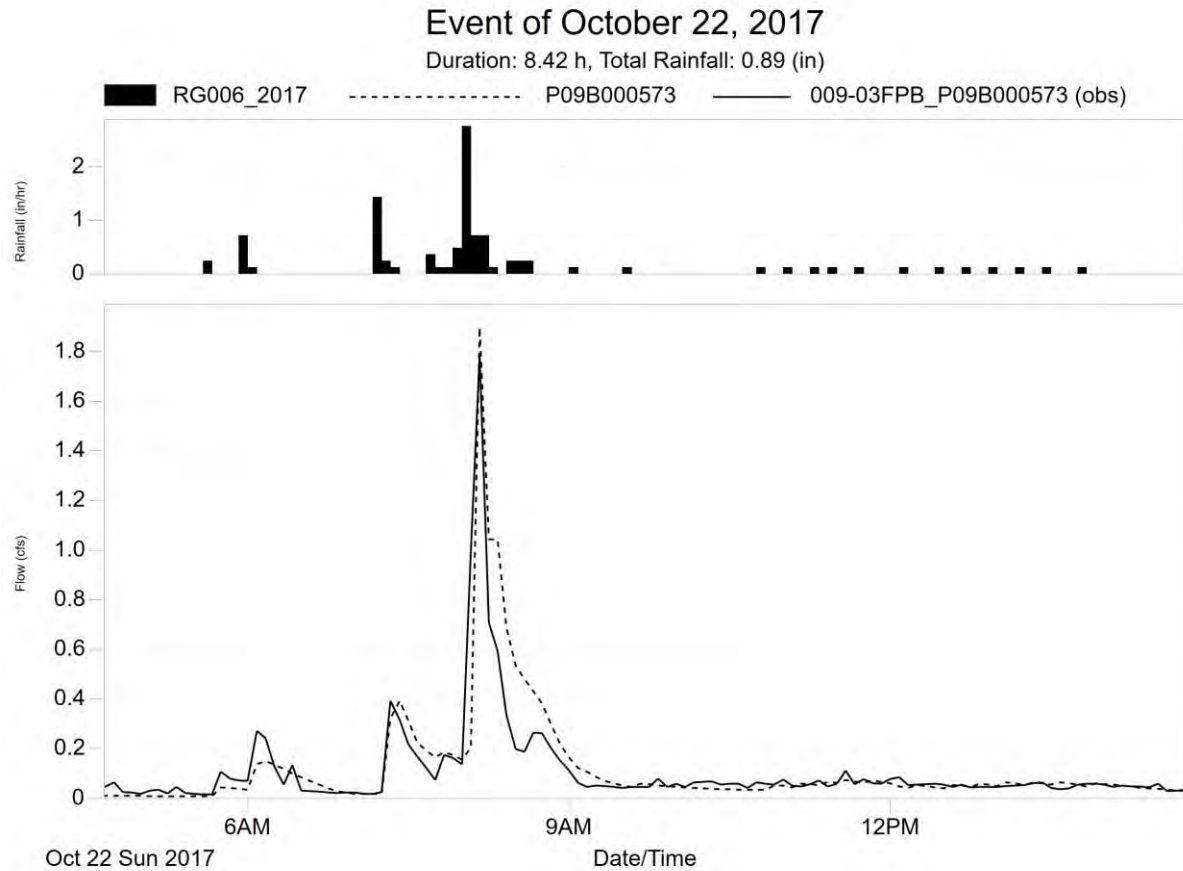


Event of October 10, 2017

Duration: 10.83 h, Total Rainfall: 1.72 (in)



Fulton 009-03FPB – Verification Events



[illegible]

Legend

- 2015/2016 Flow Monitors
- Modeled Pipes (diameter labeled)
- ▲ Outfall active outfalls
 - ▲ Emergency Outfalls
 - ▲ Active Outfalls
 - ▲ to Storm Sewer
- Modeled Manholes
 - Modeled Manholes
 - Modeled Manholes with Inflow (labeled)
- RDII Sewersheds

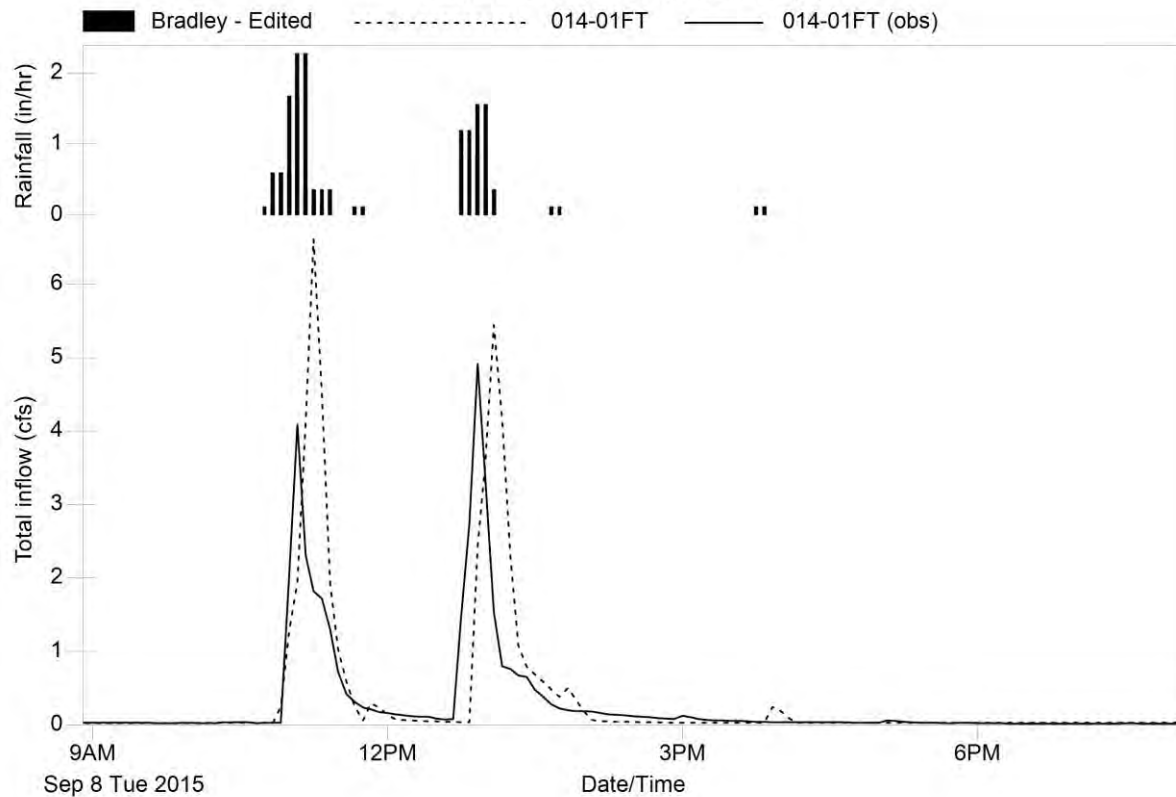
North Arrow
Scale: 0 to 500 ft

Date	Duration (h)	Rainfall (in)	Maximum Flow (cfs)		Maximum Flow (mgd)		Total Volume (ft³)		Volume (million gallons)		Peak Flow Rate (-15% to +25%)	Peak Flow Rate (+/- 0.1 mgd)	Flow Volume (-10% to +20%)	Flow Volume (+/-0.1 MG) OF1 (MG)	Rainfall Variability	
		Bradley Edited	Observed	Modeled	Observed	Modeled	Observed	Modeled	Observed	Modeled						
CALIBRATION EVENTS - FLOW																
9/8/2015 9:50	9.33	0.87	4.914	6.612	3.174	4.271	11590	14780	0.087	0.111	35%	1.097	28%	0.024	variable	
9/18/2015 12:25	16.42	1.62	6.217	6.038	4.016	3.901	27110	30470	0.203	0.228	-3%	-0.116	12%	0.025	relatively uniform	
11/5/2015 13:05	22.75	0.43	1.639	1.509	1.059	0.975	8111	7627	0.061	0.057	-8%	-0.084	-6%	-0.004	possibly uniform	
11/11/2015 17:35	11.42	0.61	4.729	7.063	3.055	4.563	8913	9542	0.067	0.071	49%	1.508	7%	0.005	relatively uniform	
11/16/2015 21:10	43.08	2.37	2.767	3.614	1.787	2.335	38870	47140	0.291	0.353	31%	0.547	21%	0.062	variable	
11/26/2015 18:15	34.83	1.12	1.405	1.279	0.908	0.826	24590	22390	0.184	0.167	-9%	-0.081	-9%	-0.016	possibly uniform	
12/13/2015 1:05	40.5	1.77	1.433	1.824	0.926	1.178	31010	34920	0.232	0.261	27%	0.253	13%	0.029	possibly uniform	
12/20/2015 21:25	17.92	0.7	1.911	1.681	1.235	1.086	11380	11750	0.085	0.088	-12%	-0.149	3%	0.003	relatively uniform	
12/23/2015 5:00	18	0.73	3.279	3.726	2.118	2.407	12670	13850	0.095	0.104	14%	0.289	9%	0.009	variable	
12/28/2015 0:45	44.25	1.64	3.707	4.174	2.395	2.696	42500	35660	0.318	0.267	13%	0.302	-16%	-0.051	variable	
VERIFICATION EVENTS - FLOW																
6/17/2015 1:00	12.17	0.84	5.069	6.793	3.275	4.388	18040	16430	0.135	0.123	34%	1.114	-9%	-0.012	variable	
6/24/2015 4:20	67.42	2.15	3.94	5.894	2.545	3.808	32090	43230	0.240	0.323	50%	1.262	35%	0.083	variable	
6/28/2015 17:00	13.42	0.52	4.523	3.823	2.922	2.470	11270	9159	0.084	0.069	-15%	-0.452	-19%	-0.016	variable	
7/8/2015 4:10	31.5	1.39	1.684	2.231	1.088	1.441	24650	27410	0.184	0.205	32%	0.353	11%	0.021	relatively uniform	
7/11/2015 7:00	25.17	1.07	4.631	5.534	2.992	3.575	18660	20990	0.140	0.157	19%	0.583	12%	0.017	possibly uniform	
7/16/2015 6:05	24.75	1.16	5.31	7.748	3.430	5.005	17050	21250	0.128	0.159	46%	1.575	25%	0.031	relatively uniform	
7/28/2015 23:55	11.5	0.51	5.546	4.387	3.583	2.834	9703	7549	0.073	0.056	-21%	-0.749	-22%	-0.016	variable	
8/17/2015 23:15	9.92	0.49	3.192	6.201	2.062	4.006	8679	7865	0.065	0.059	94%	1.944	-9%	-0.006	possibly uniform	
8/18/2015 14:15	12.25	0.66	5.587	7.399	3.609	4.780	9297	13720	0.070	0.103	32%	1.171	48%	0.033	relatively uniform	
WEIGHTED AVERAGES																
Calibration - Relatively Uniform												15%	0.477	9%	0.016	relatively uniform
Calibration - Possibly Uniform												3%	0.025	2%	0.007	possibly uniform
Calibration - Variable												24%	0.612	5%	0.006	variable
Calibration Weighted - All Events												17%	0.475	5%	0.009	
Verification - Relatively Uniform												38%	1.232	22%	0.027	relatively uniform
Verification - Possibly Uniform												50%	1.138	6%	0.010	possibly uniform
Verification - Variable												10%	0.232	7%	0.030	variable
Verification Weighted - All Events												27%	0.730	12%	0.025	
Weighted Average - All Events												22%	0.616	8%	0.015	
NET AVERAGES																
Calibration - Relatively Uniform												11%	0.415	8%	0.011	relatively uniform
Calibration - Possibly Uniform												3%	0.029	-1%	0.003	possibly uniform
Calibration - Variable												23%	0.559	11%	0.011	variable
Calibration Net - All Events												14%	0.357	6%	0.009	
Verification - Relatively Uniform												37%	1.033	28%	0.028	relatively uniform
Verification - Possibly Uniform												57%	1.264	2%	0.006	possibly uniform
Verification - Variable												12%	0.294	-4%	0.010	variable
Verification Net - All Events												30%	0.756	8%	0.015	
Net Average - All Events												21%	0.546	7%	0.012	

State 014-01FT – Calibration Events

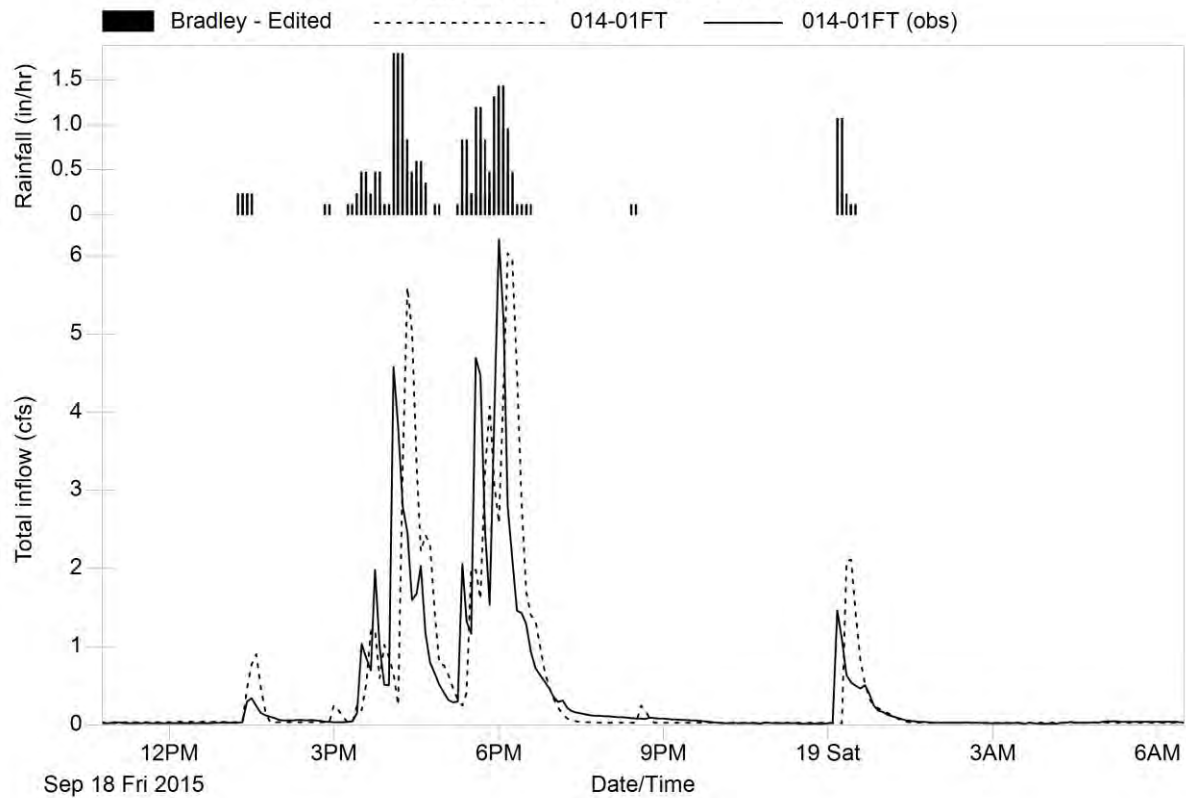
Event of September 8, 2015

Duration: 9.33 h, Total Rainfall: 0.87 (in)



Event of September 18, 2015

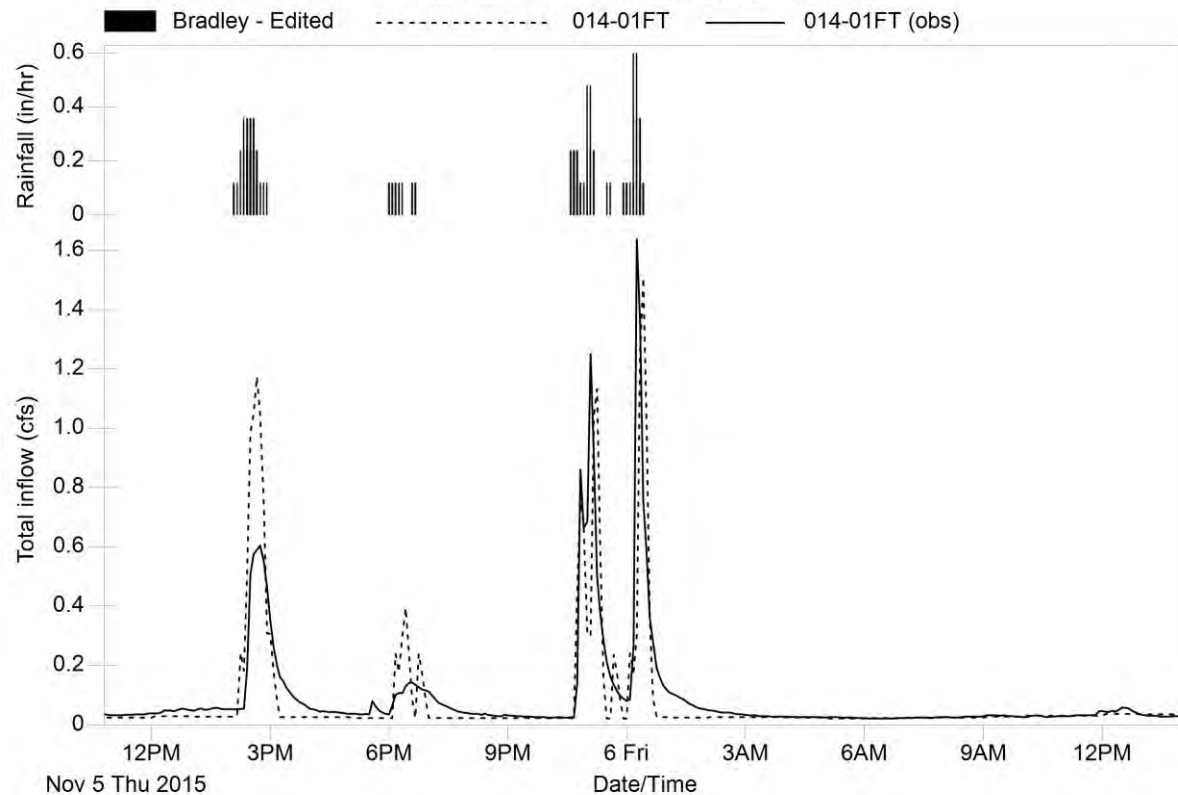
Duration: 16.42 h, Total Rainfall: 1.62 (in)



State 014-01FT – Calibration Events

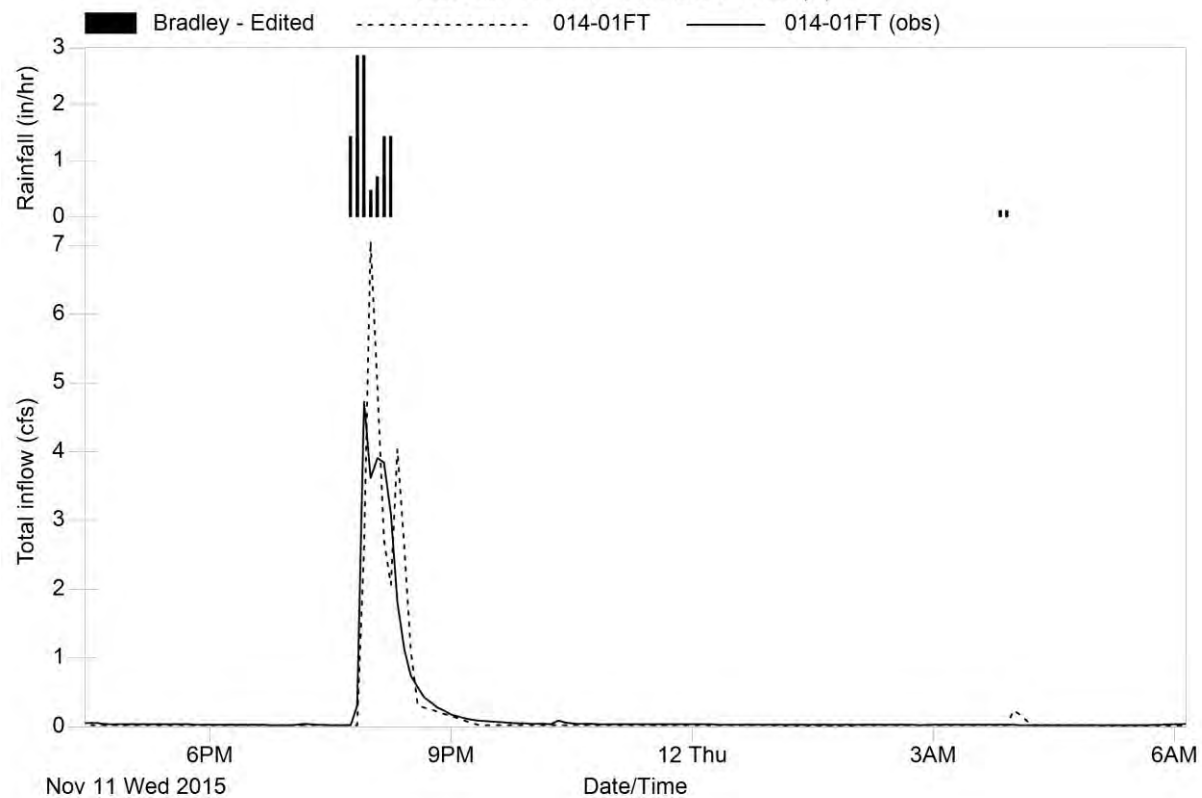
Event of November 5, 2015

Duration: 22.75 h, Total Rainfall: 0.43 (in)



Event of November 11, 2015

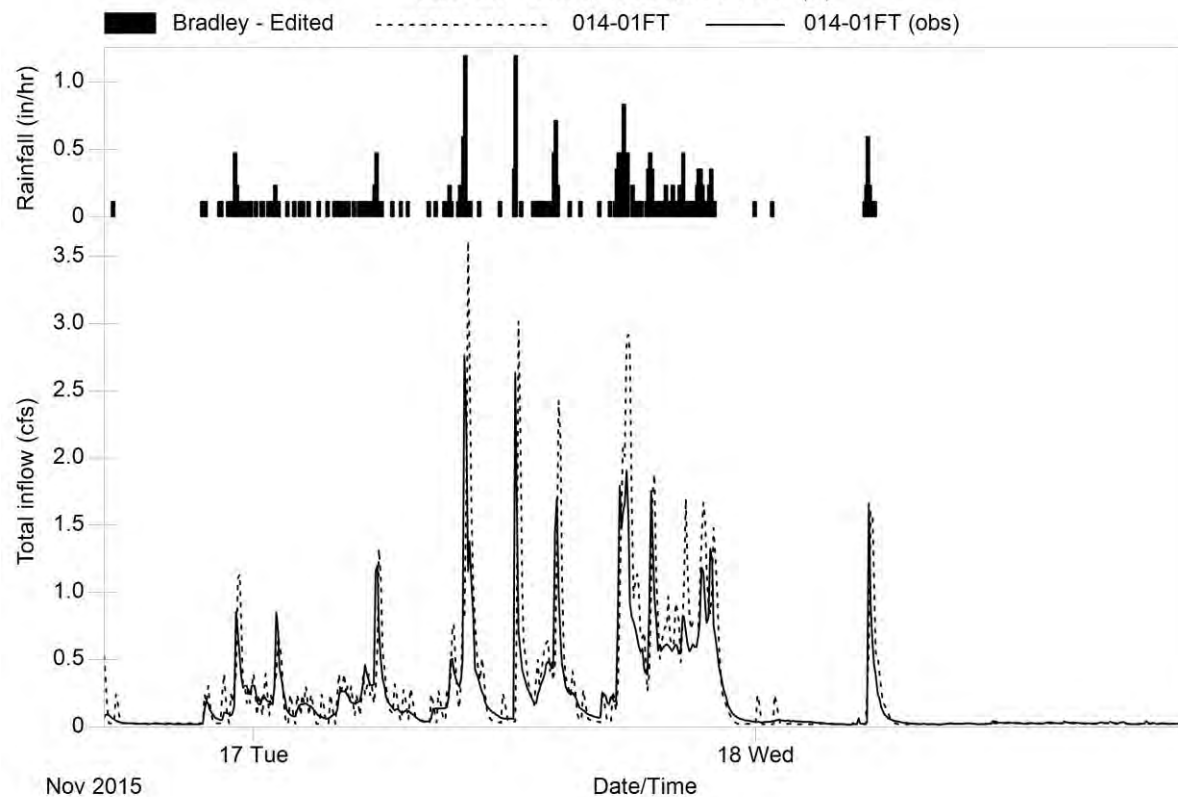
Duration: 11.42 h, Total Rainfall: 0.61 (in)



State 014-01FT – Calibration Events

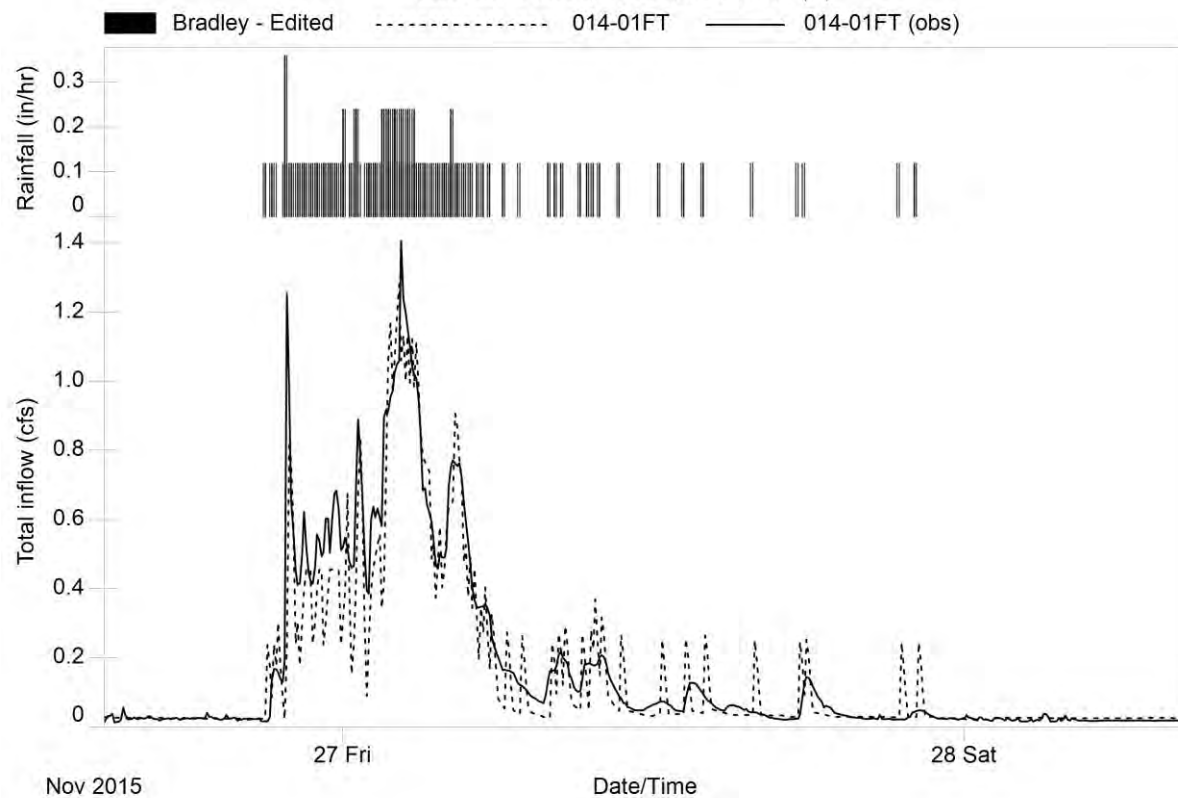
Event of November 16, 2015

Duration: 43.08 h, Total Rainfall: 2.37 (in)



Event of November 26, 2015

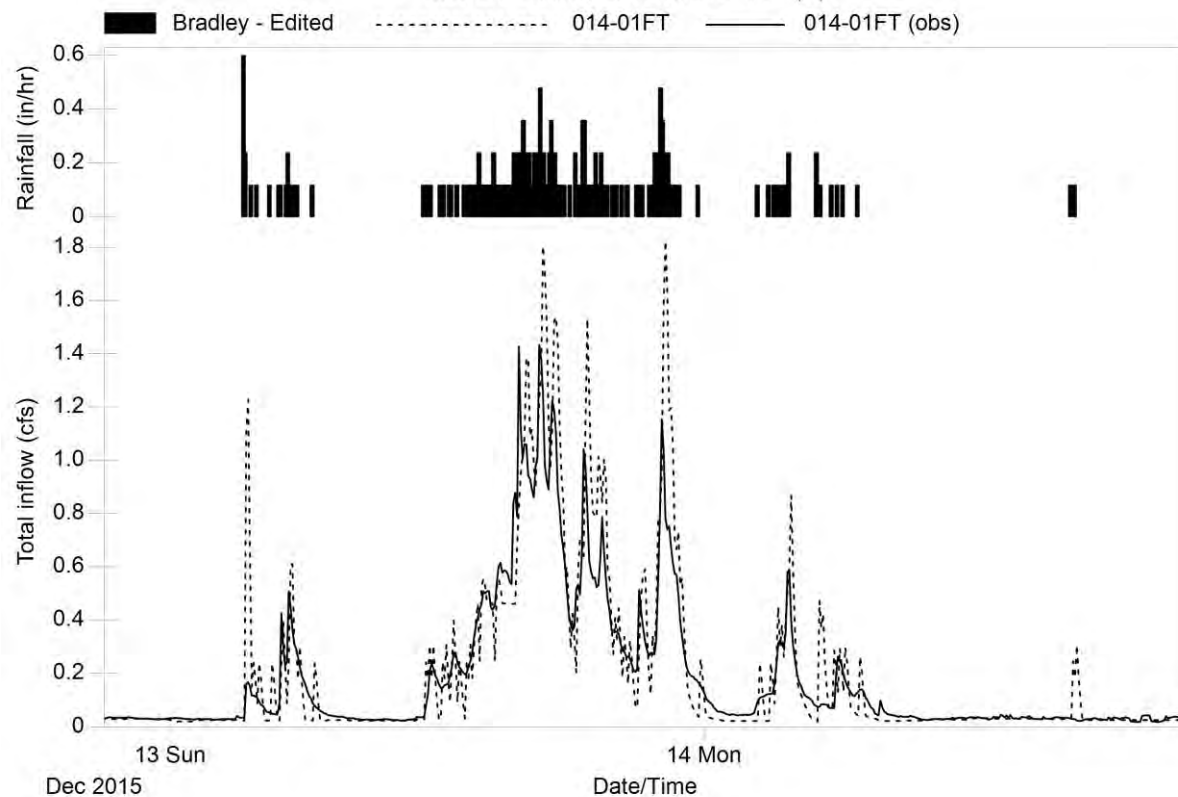
Duration: 34.83 h, Total Rainfall: 1.12 (in)



State 014-01FT – Calibration Events

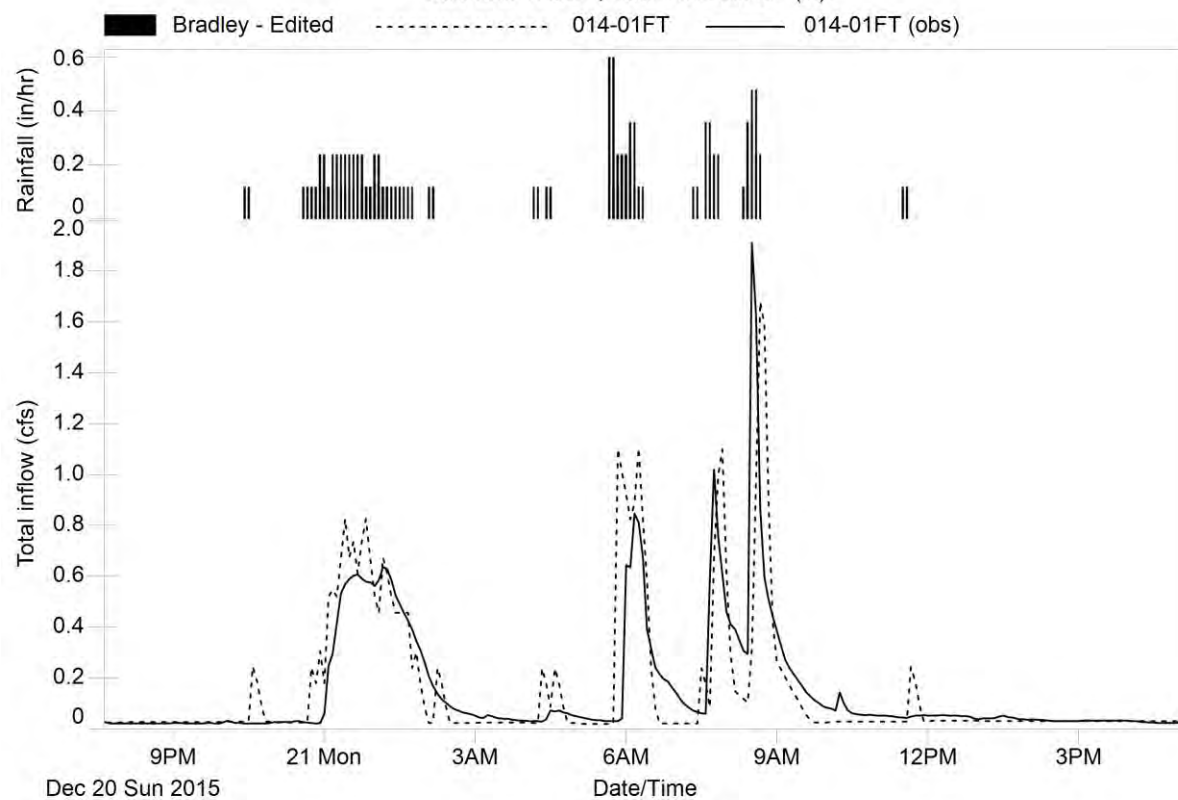
Event of December 13, 2015

Duration: 40.5 h, Total Rainfall: 1.77 (in)



Event of December 20, 2015

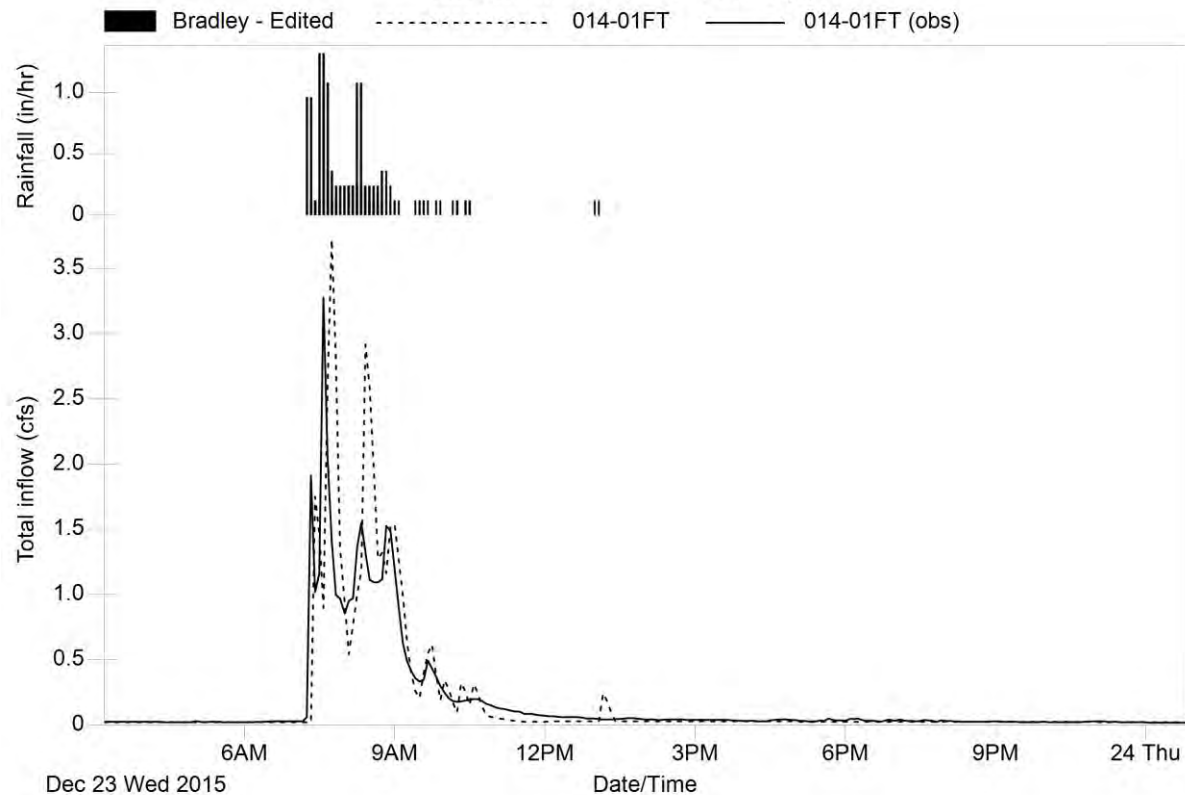
Duration: 17.92 h, Total Rainfall: 0.7 (in)



State 014-01FT – Calibration Events

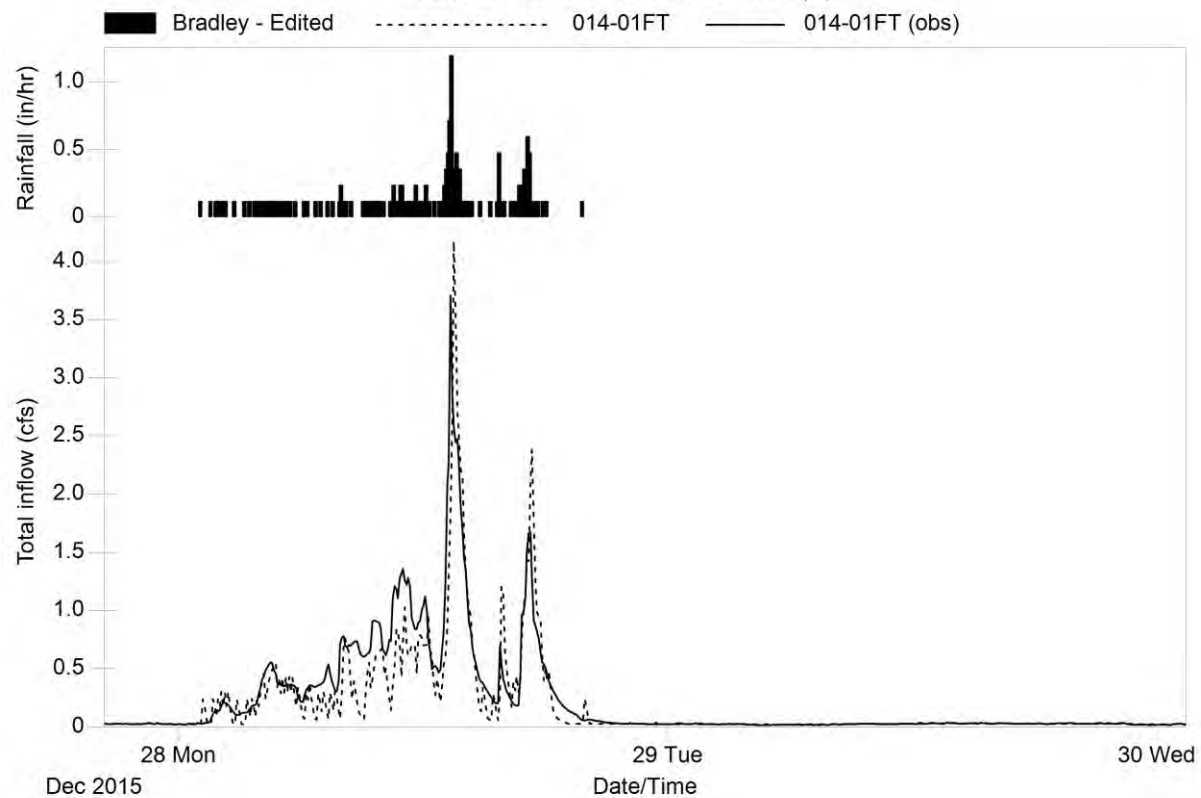
Event of December 23, 2015

Duration: 18 h, Total Rainfall: 0.73 (in)



Event of December 28, 2015

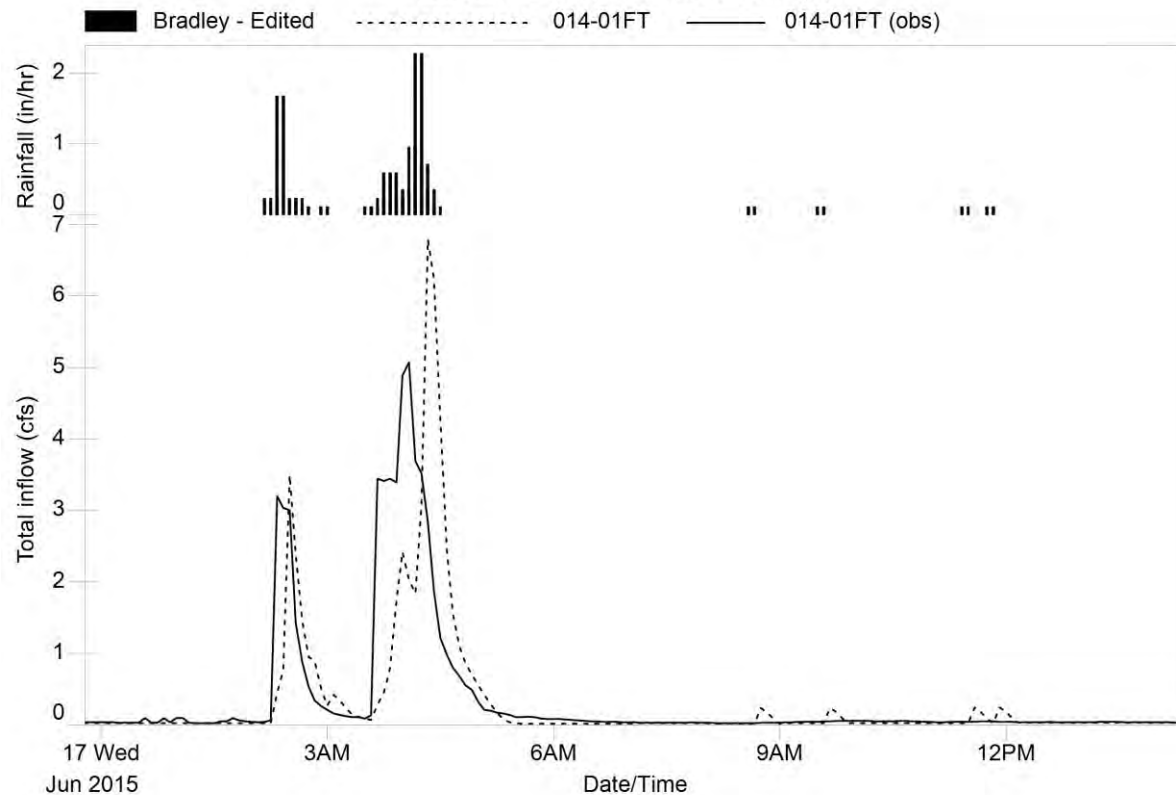
Duration: 44.25 h, Total Rainfall: 1.64 (in)



State 014-01FT – Verification Events

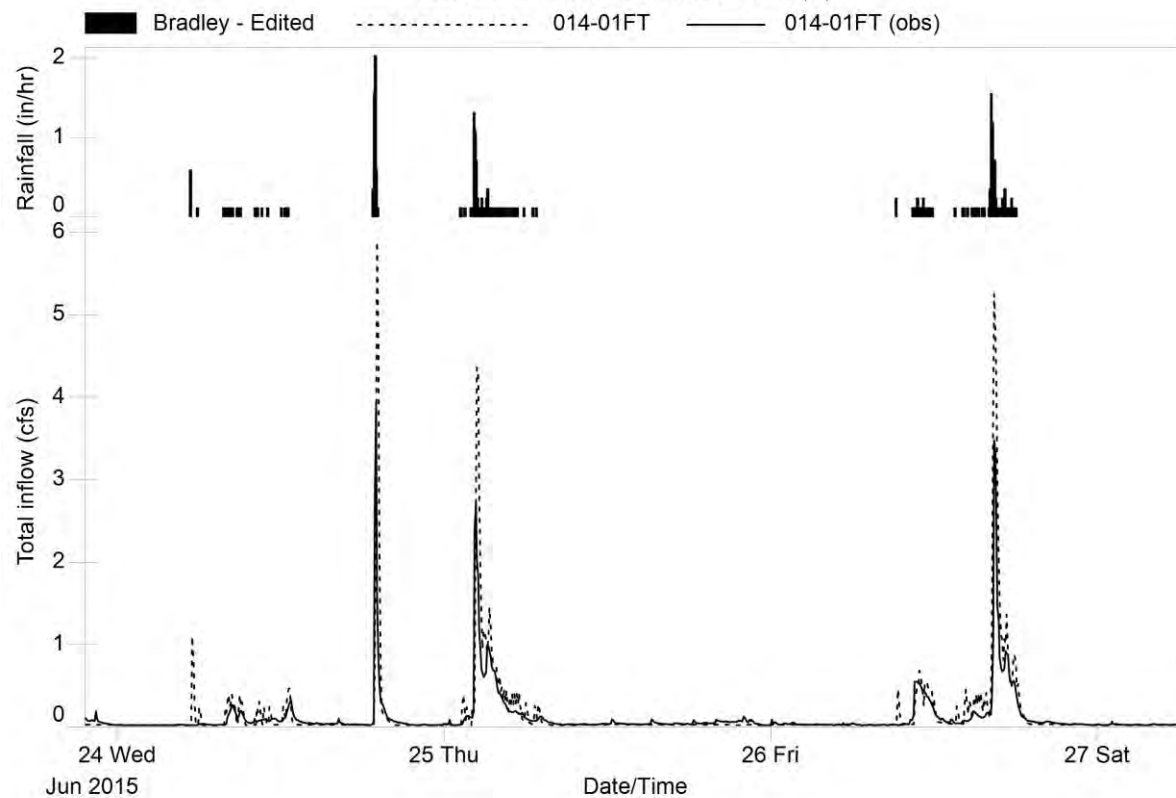
Event of June 17, 2015

Duration: 12.17 h, Total Rainfall: 0.84 (in)



Event of June 24, 2015

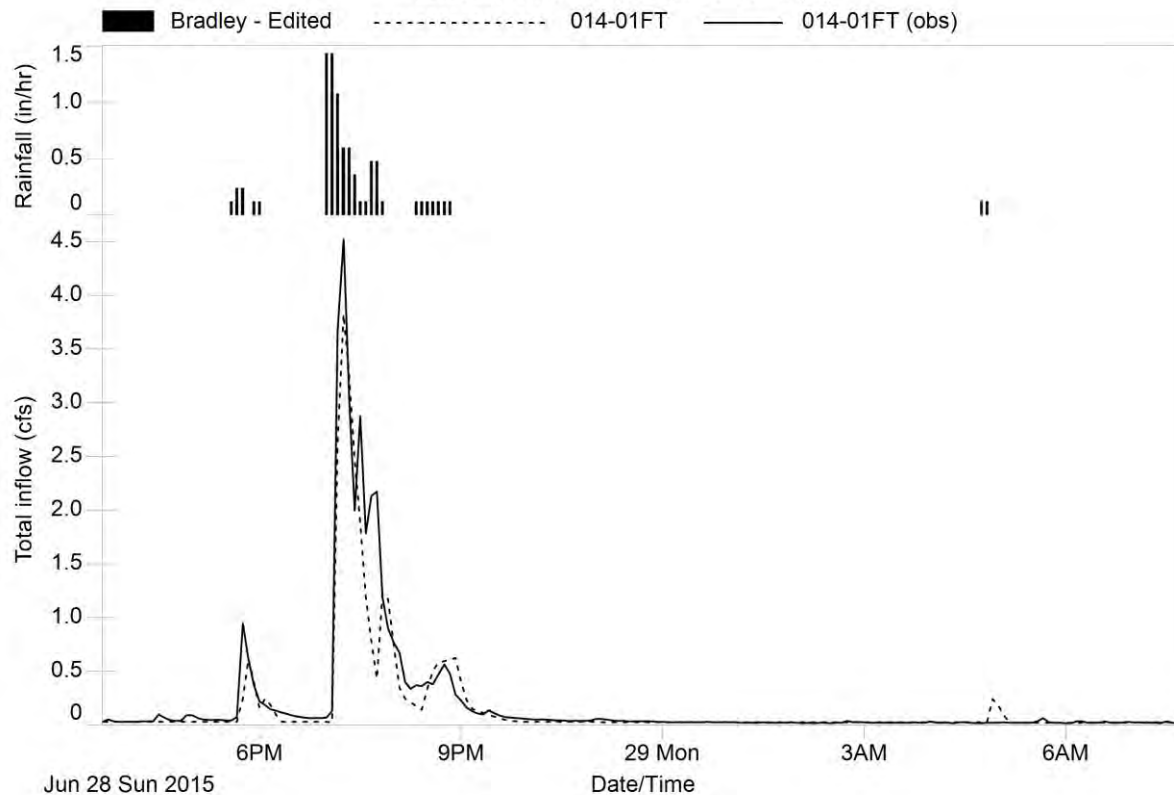
Duration: 67.42 h, Total Rainfall: 2.15 (in)



State 014-01FT – Verification Events

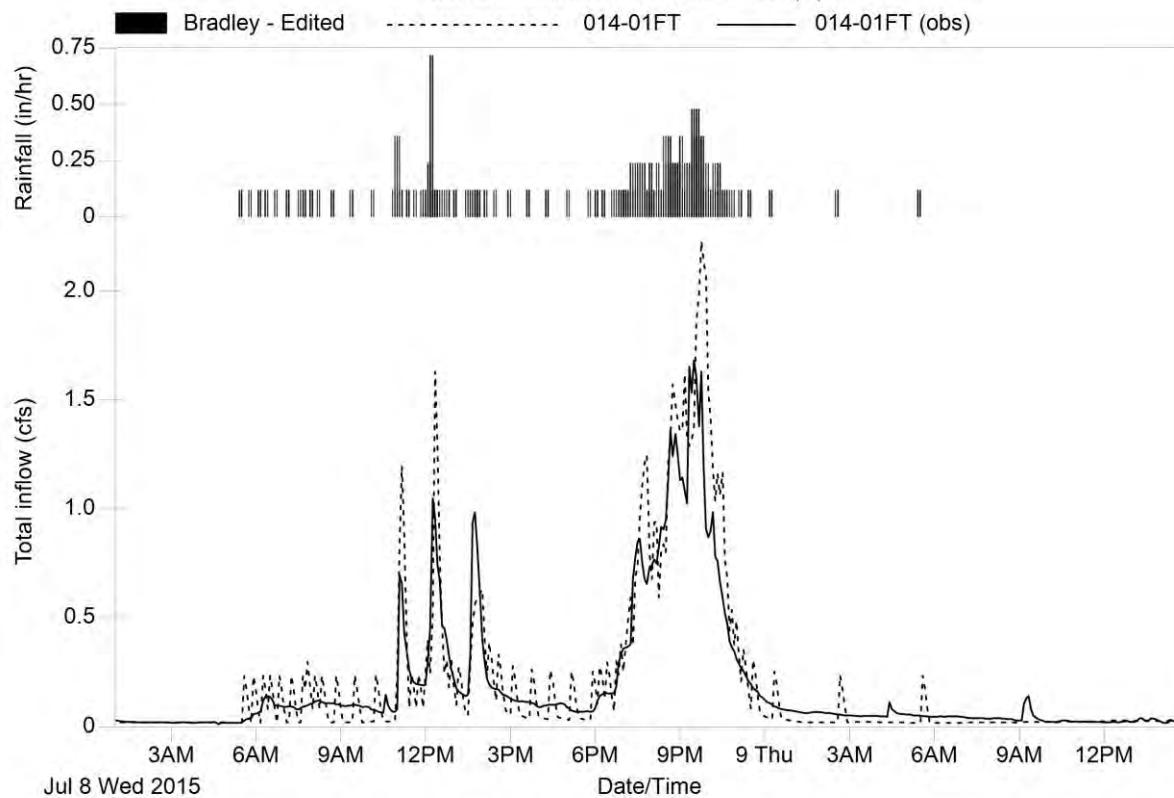
Event of June 28, 2015

Duration: 13.42 h, Total Rainfall: 0.52 (in)



Event of July 8, 2015

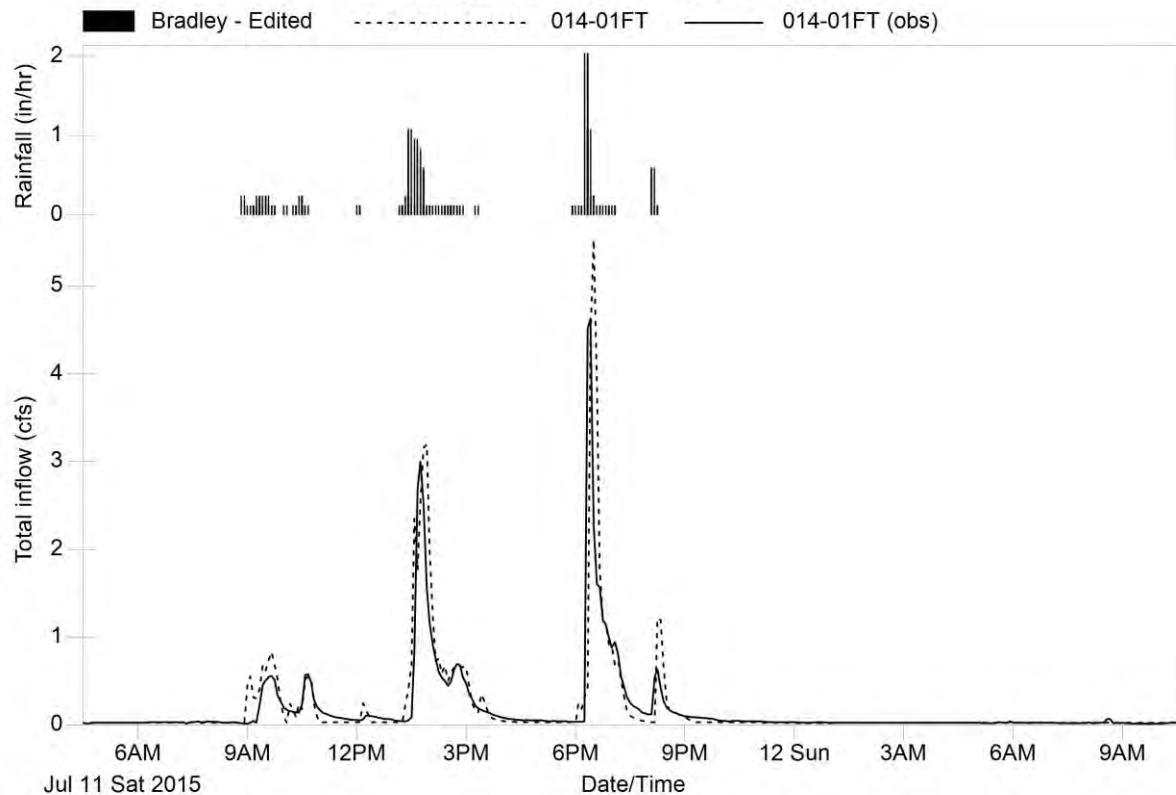
Duration: 31.5 h, Total Rainfall: 1.39 (in)



State 014-01FT – Verification Events

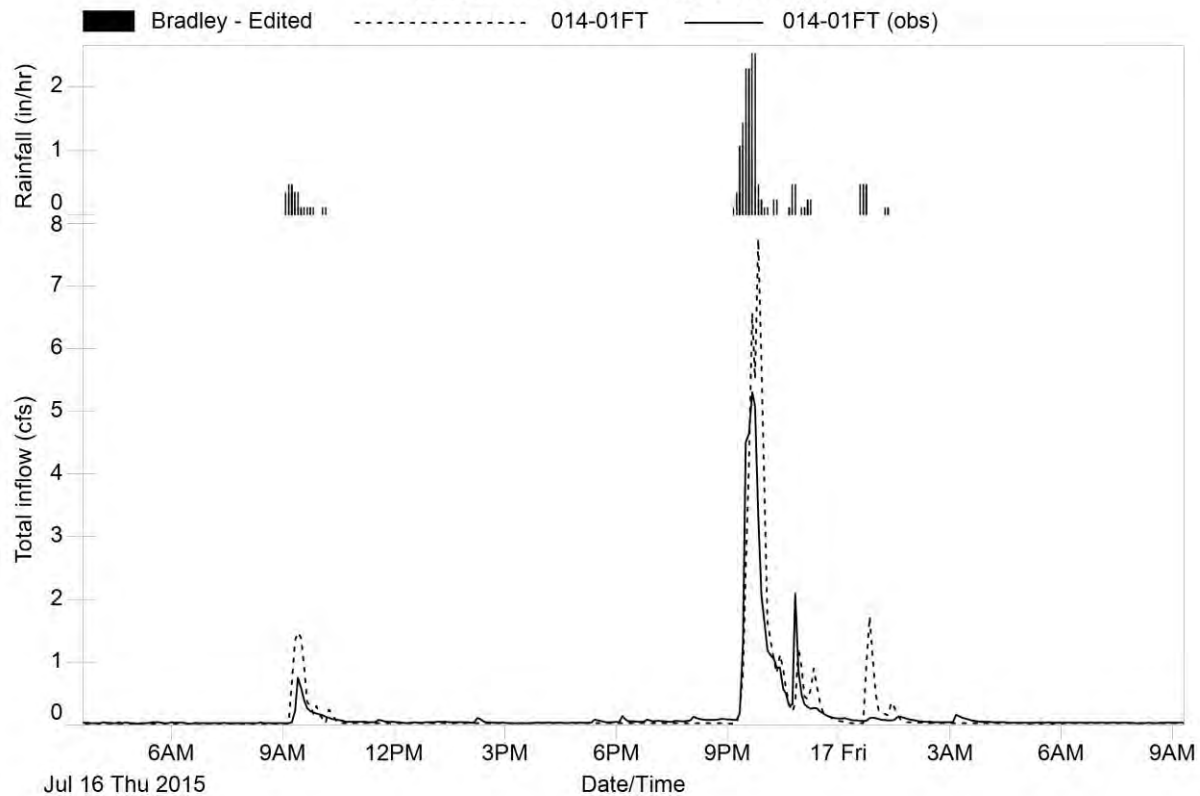
Event of July 11, 2015

Duration: 25.17 h, Total Rainfall: 1.07 (in)



Event of July 16, 2015

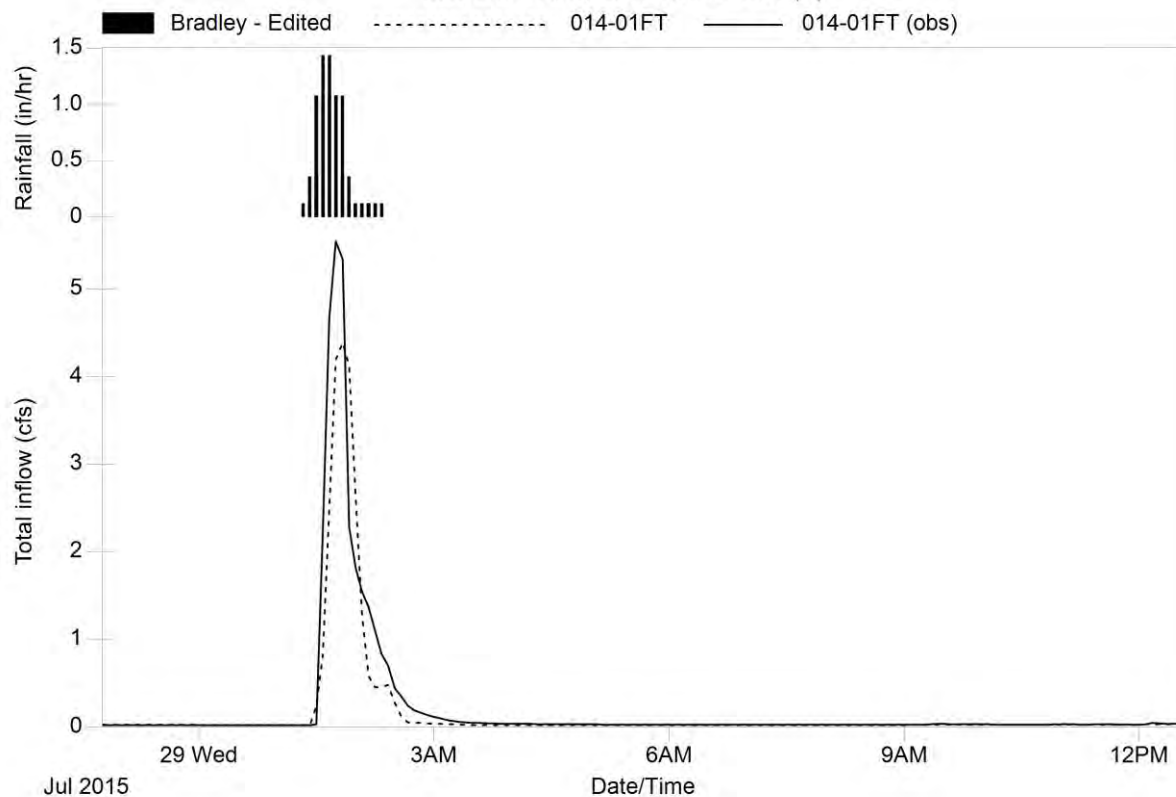
Duration: 24.75 h, Total Rainfall: 1.16 (in)



State 014-01FT – Verification Events

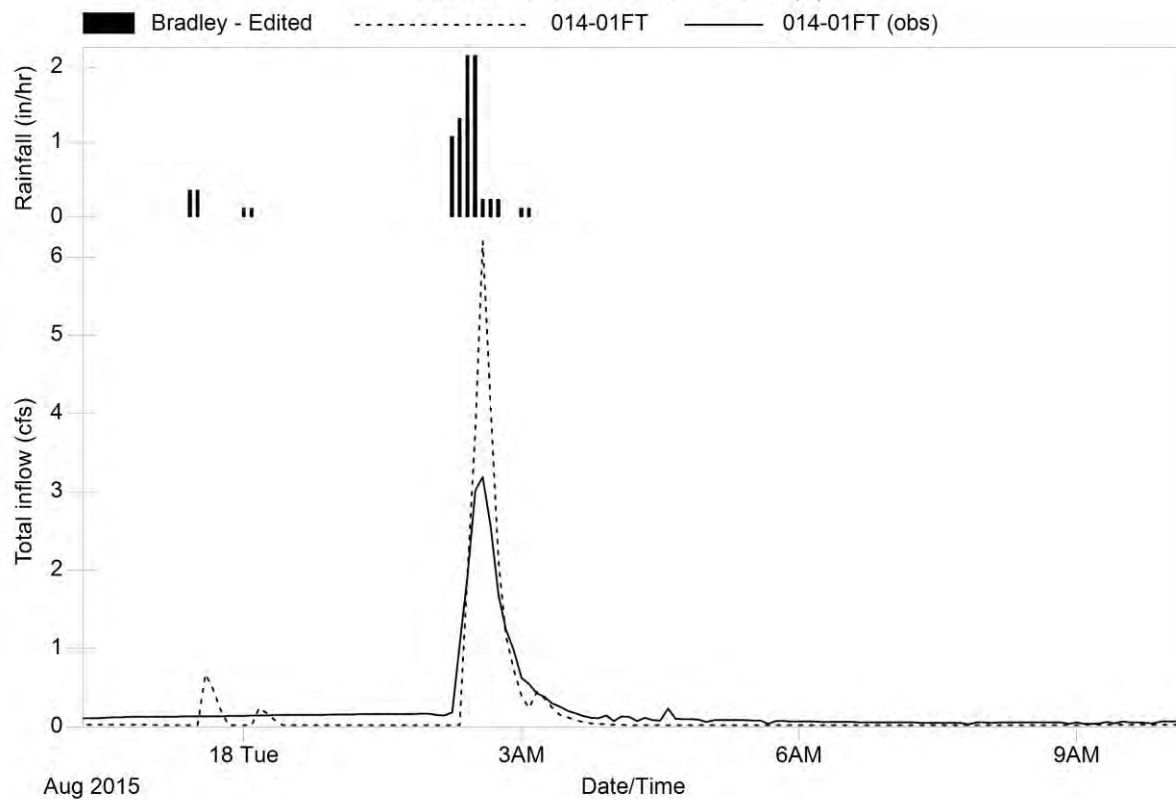
Event of July 28, 2015

Duration: 11.5 h, Total Rainfall: 0.51 (in)

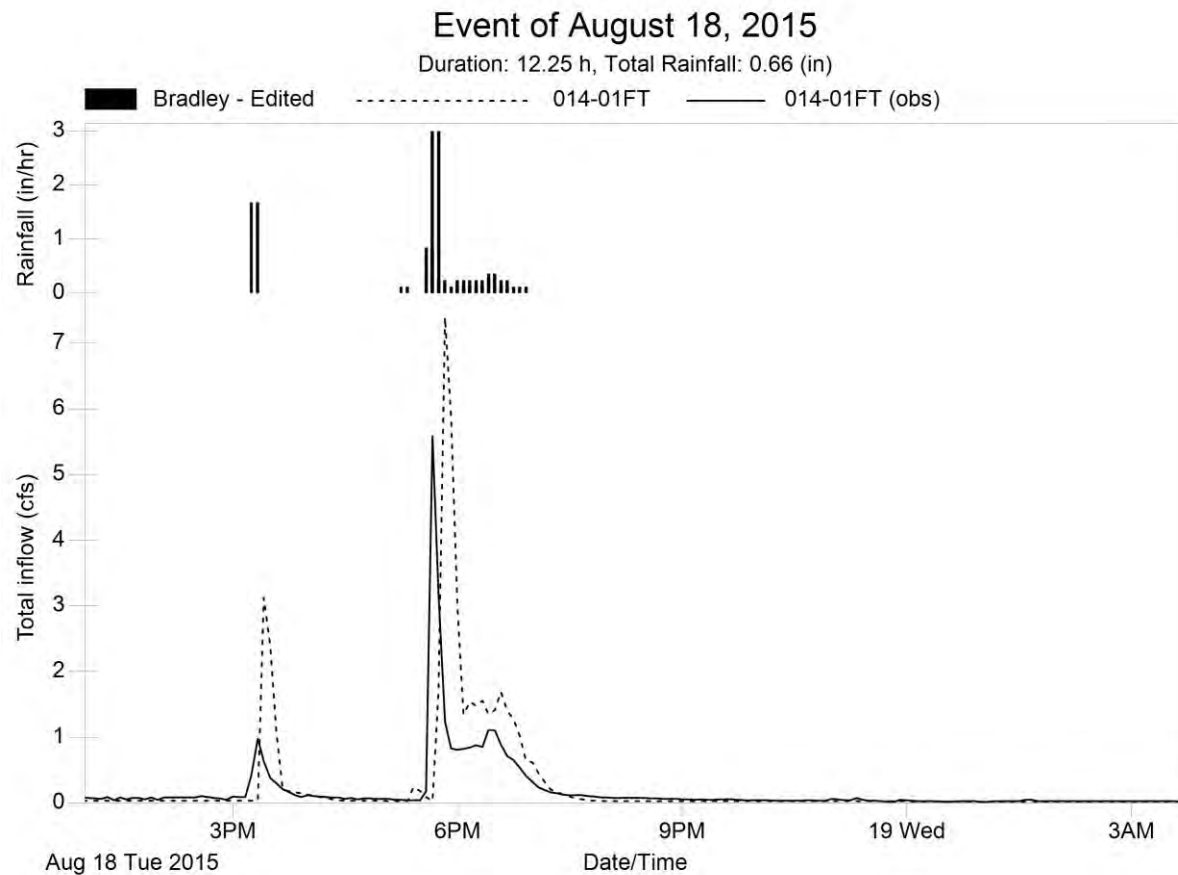


Event of August 17, 2015

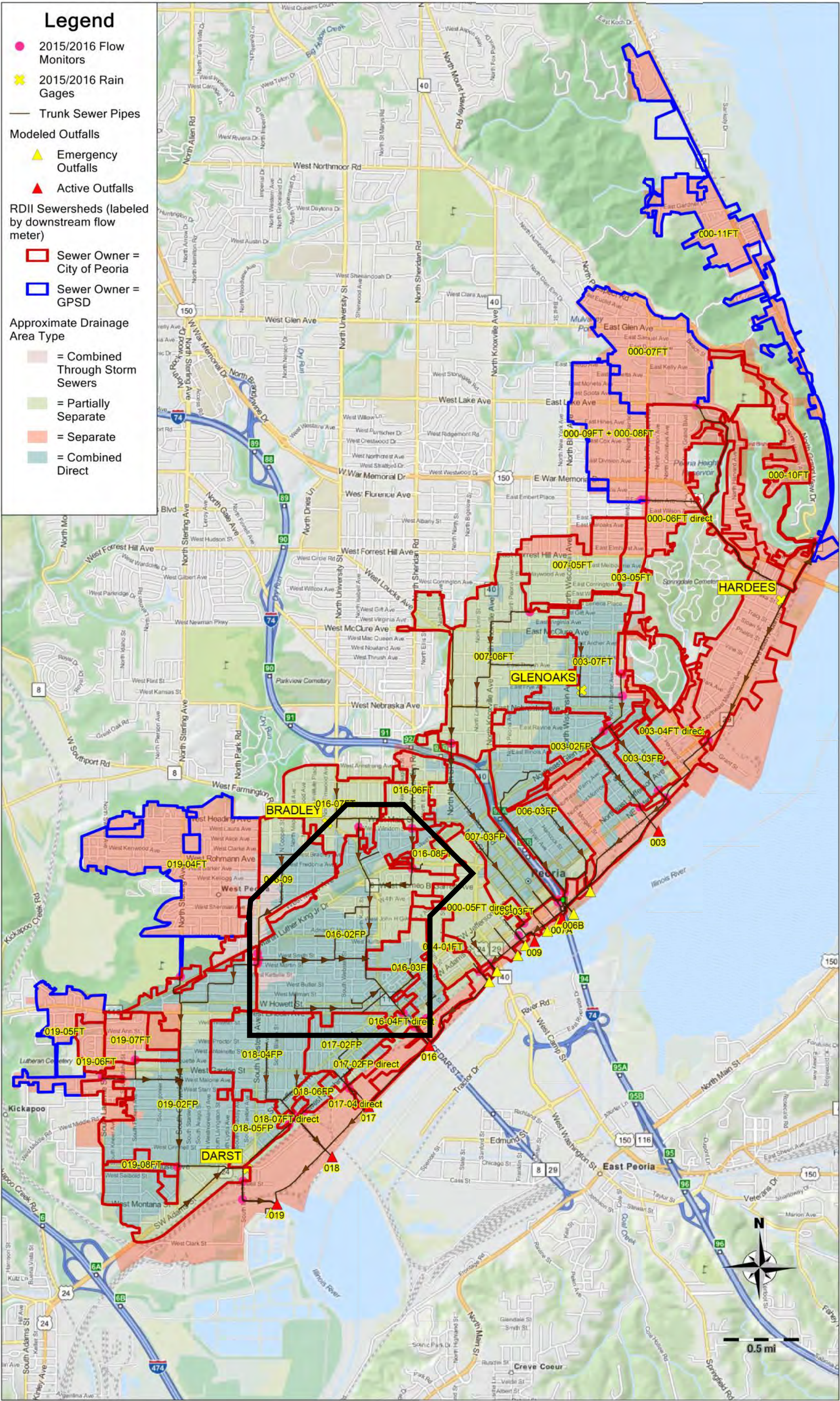
Duration: 9.92 h, Total Rainfall: 0.49 (in)



State 014-01FT – Verification Events

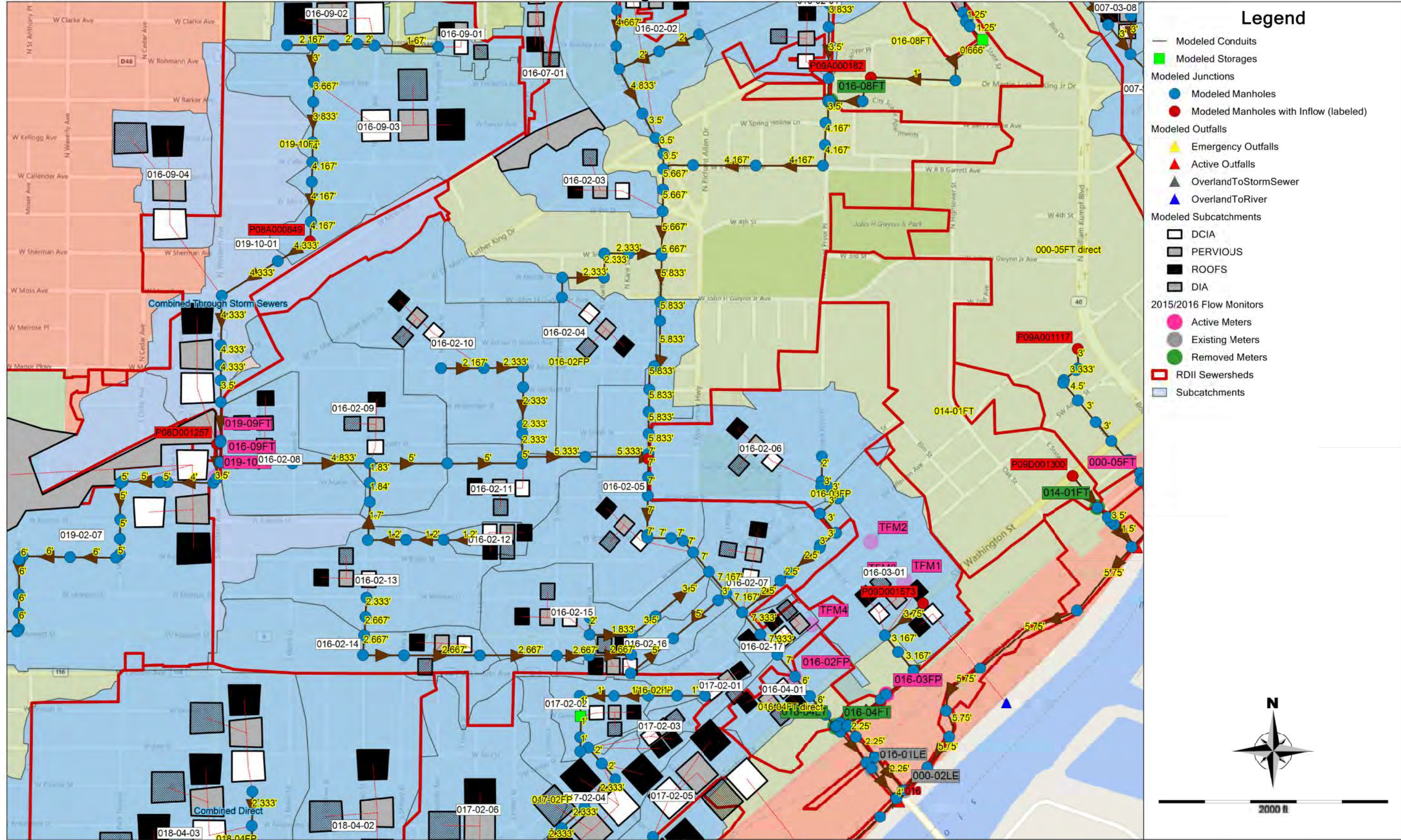


Flow Monitor 016-02FP Overview Map



[illegible]

016-02 - Cedar Regulator Influent Flow Meter



Cedar 016-02FP

Date	Duration (h)	Rainfall (in)	Maximum Flow (cfs)		Maximum Flow (mgd)		Total Volume (ft³)		Volume (million gallons)		Peak Flow Rate (-15% to +25%)	Flow Volume (-10% to +20%)	Rainfall Variability
CALIBRATION EVENTS - FLOW													
9/8/2015 10:20	5.0	0.86	101.6	122.5	65.6	79.1	422700	531100	3.2	4.0	21%	26%	variable
9/18/2015 12:45	13.3	1.62	180.0	175.9	116.3	113.6	1046000	1136000	7.8	8.5	-2%	9%	relatively uniform
11/5/2015 13:15	18.0	0.43	18.6	33.9	12.0	21.9	302900	395100	2.3	3.0	82%	30%	possibly uniform
11/11/2015 19:10		Bad meter data											
11/16/2015 21:00	37.4	2.37	85.2	83.4	55.0	53.9	1594000	1916000	11.9	14.3	-2%	20%	variable
11/26/2015 18:15	34.8	1.12	49.5	38.2	32.0	24.7	1057000	1128000	7.9	8.4	-23%	7%	possibly uniform
12/13/2015 1:05	40.5	1.77	45.3	50.3	29.3	32.5	1466000	1520000	11.0	11.4	11%	4%	possibly uniform
12/20/2015 21:25	17.9	0.70	36.7	36.0	23.7	23.3	552800	598700	4.1	4.5	-2%	8%	relatively uniform
12/23/2015 6:25	14.3	0.73	88.5	95.1	57.2	61.4	611400	646700	4.6	4.8	7%	6%	variable
12/28/2015 0:25	33.8	1.64	163.4	101.6	105.6	65.6	2105000	1497000	15.7	11.2	-38%	-29%	variable
VERIFICATION EVENTS - FLOW													
6/17/2015 2:05	3.8	0.80	178.9	171.7	115.6	110.9	567700	465800	4.2	3.5	-4%	-18%	variable
6/24/2015 4:20	67.4	2.15	125.1	127.4	80.8	82.3	1859000	1915000	13.9	14.3	2%	3%	variable
6/28/2015 17:25	4.4	0.51	160.3	76.2	103.6	49.2	528800	289300	4.0	2.2	-52%	-45%	variable
7/8/2015 5:05	26.0	1.39	64.7	66.7	41.8	43.1	937300	1046000	7.0	7.8	3%	12%	relatively uniform
7/11/2015 8:35	13.9	1.07	118.5	98.5	76.6	63.7	797300	761000	6.0	5.7	-17%	-5%	possibly uniform
7/16/2015 9:00	17.3	Bad meter data											
7/29/2015 1:15	2.0	0.51	125.9	114.4	81.3	73.9	257800	244000	1.9	1.8	-9%	-5%	variable
8/18/2015 2:05	1.7	0.45	91.2	130.3	58.9	84.2	205200	259800	1.5	1.9	43%	27%	possibly uniform
8/18/2015 15:00	5.2	0.66	98.5	140.6	63.7	90.8	389600	480300	2.9	3.6	43%	23%	relatively uniform

Notes:

Peak values listed for 6/24, 6/28, 7/8, 7/11 event do not include random spikes.

7/16 was determined to have bad meter data.

WEIGHTED AVERAGES			
Calibration - Relatively Uniform	-2%	9%	relatively uniform
Calibration - Possibly Uniform	8%	8%	possibly uniform
Calibration - Variable	-8%	-3%	variable
Calibration Weighted - All Events	-4%	2%	
Verification - Relatively Uniform	27%	15%	relatively uniform
Verification - Possibly Uniform	9%	2%	possibly uniform
Verification - Variable	-17%	-9%	variable
Verification Weighted - All Events	-4%	-1%	
Weighted Average - All Events	-4%	1%	
NET AVERAGES			
Calibration - Relatively Uniform	-2%	8%	relatively uniform
Calibration - Possibly Uniform	24%	14%	possibly uniform
Calibration - Variable	-3%	6%	variable
Calibration Net - All Events	6%	9%	
Verification - Relatively Uniform	23%	17%	relatively uniform
Verification - Possibly Uniform	13%	11%	possibly uniform
Verification - Variable	-16%	-16%	variable
Verification Net - All Events	1%	-1%	
Net Average - All Events	4%	4%	

Cedar 016-02FP Depth

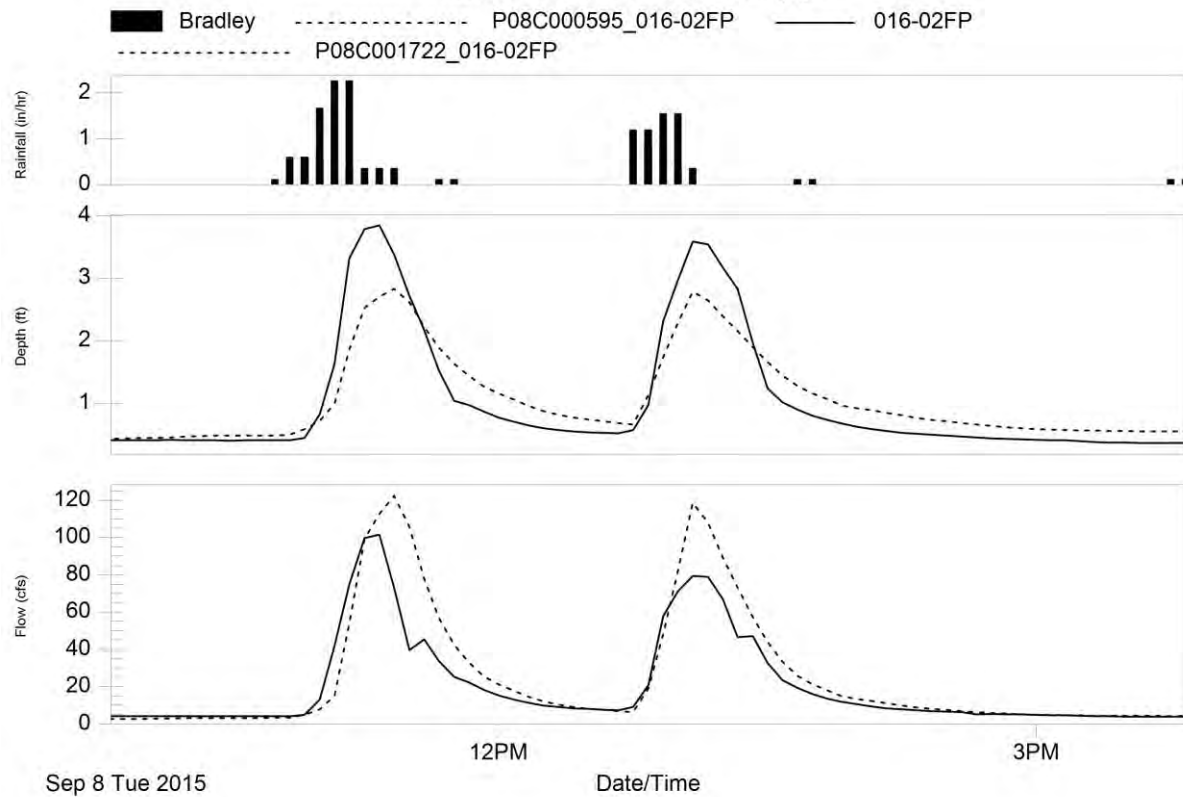
Date	Duration (h)	Maximum Depth (ft)		Minimum Depth (ft)		Average Depth (ft)		Maximum Depth (ft)	Minimum Depth (ft)	Average Depth (ft)	Rainfall Variability						
								Surcharged: -0.33 ft to +1.67 ft	Surcharged: -0.33 ft to +1.67 ft	Surcharged: -0.33 ft to +1.67 ft							
								Non-Surcharged: -0.33 ft to +0.33 ft	Non-Surcharged: -0.33 ft to +0.33 ft	Non-Surcharged: -0.33 ft to +0.33 ft							
CALIBRATION EVENTS - DEPTH																	
9/8/2015 10:20:00	5.0	3.8	2.8	0.4	0.5	1.2	1.2	-1.01	0.10	0.02	variable						
9/18/2015 12:45:00	13.3	6.1	3.5	0.3	0.5	1.0	1.0	-2.62	0.16	-0.03	relatively uniform						
11/5/2015 13:15:00	18.0	0.9	1.5	0.3	0.4	0.4	0.6	0.56	0.05	0.17	possibly uniform						
11/11/2015 19:10:00	4.1	4.7	3.2	0.4	0.5	1.2	1.0	-1.54	0.12	-0.12	relatively uniform						
11/16/2015 21:00:00	37.4	2.9	2.3	0.4	0.4	0.7	0.9	-0.63	0.08	0.21	variable						
11/26/2015 18:15:00	34.8	1.7	1.5	0.3	0.4	0.5	0.7	-0.14	0.12	0.17	possibly uniform						
12/13/2015 1:05:00	40.5	1.7	1.8	0.3	0.4	0.6	0.7	0.06	0.07	0.12	possibly uniform						
12/20/2015 21:25:00	17.9	1.5	1.5	0.4	0.5	0.6	0.7	-0.01	0.08	0.14	relatively uniform						
12/23/2015 6:25:00	14.3	3.5	2.5	0.3	0.4	0.7	0.8	-1.04	0.06	0.06	variable						
12/28/2015 0:25:00	33.8	5.4	2.6	0.3	0.4	0.9	0.8	-2.85	0.09	-0.05	variable						
VERIFICATION EVENTS - DEPTH																	
6/17/2015 2:05:00	3.8	5.6	3.4	0.3	0.5	1.8	1.3	-2.15	0.20	-0.51	variable						
6/24/2015 4:20:00	67.4	4.1	2.9	0.3	0.4	0.5	0.6	-1.22	0.11	0.13	variable						
6/28/2015 17:25:00	4.4	5.3	2.2	0.4	0.5	1.5	1.0	-3.13	0.17	-0.56	variable						
7/8/2015 5:05:00	26.0	2.5	2.1	0.3	0.4	0.7	0.8	-0.41	0.10	0.08	relatively uniform						
7/11/2015 8:35:00	13.9	4.4	2.5	0.3	0.4	0.8	0.9	-1.89	0.07	0.04	possibly uniform						
7/16/2015 9:00:00	17.3	Bad meter data															
7/29/2015 1:15:00	2.0	4.7	2.7	0.3	0.5	1.6	1.3	-1.94	0.14	-0.25	variable						
8/18/2015 2:05:00	1.7	4.0	2.9	0.4	0.5	1.5	1.5	-1.11	0.10	-0.06	possibly uniform						
8/18/2015 15:00:00	5.2	4.2	3.1	0.4	0.5	1.0	1.1	-1.11	0.14	0.11	relatively uniform						
Notes: Peak values listed for 6/24, 6/28, 7/8, 7/11 event do not include random spikes. 7/16 was determined to have bad meter data.						WEIGHTED AVERAGES											
						Calibration - Relatively Uniform						-1.89	0.12	-0.03	relatively uniform		
						Calibration - Possibly Uniform						0.08	0.08	0.15	possibly uniform		
						Calibration - Variable						-1.58	0.08	0.05	variable		
						Calibration Weighted - All Events						-1.47	0.09	0.04	All Events		
						Verification - Relatively Uniform						-0.85	0.13	0.09	relatively uniform		
						Verification - Possibly Uniform						-1.51	0.09	-0.02	possibly uniform		
						Verification - Variable						-2.17	0.16	-0.39	variable		
						Verification Weighted - All Events						-1.76	0.13	-0.21	All Events		
						Weighted Average - All Events						-1.62	0.11	-0.10			
						NET AVERAGES											
						Calibration - Relatively Uniform						-1.39	0.12	0.00	relatively uniform		
						Calibration - Possibly Uniform						0.16	0.08	0.15	possibly uniform		
						Calibration - Variable						-1.38	0.08	0.06	variable		
						Calibration Net - All Events						-0.92	0.09	0.07	All Events		
						Verification - Relatively Uniform						-0.76	0.12	0.09	relatively uniform		
						Verification - Possibly Uniform						-1.50	0.09	-0.01	possibly uniform		
						Verification - Variable						-2.11	0.16	-0.30	variable		
						Verification Net - All Events						-1.62	0.13	-0.13	All Events		
						Net Average - All Events						-1.23	0.11	-0.02			

Notes:
Peak values listed for 6/24, 6/28, 7/8, 7/11 event do not include random spikes.
7/16 was determined to have bad meter data.

Cedar 016-02FP – Calibration Events

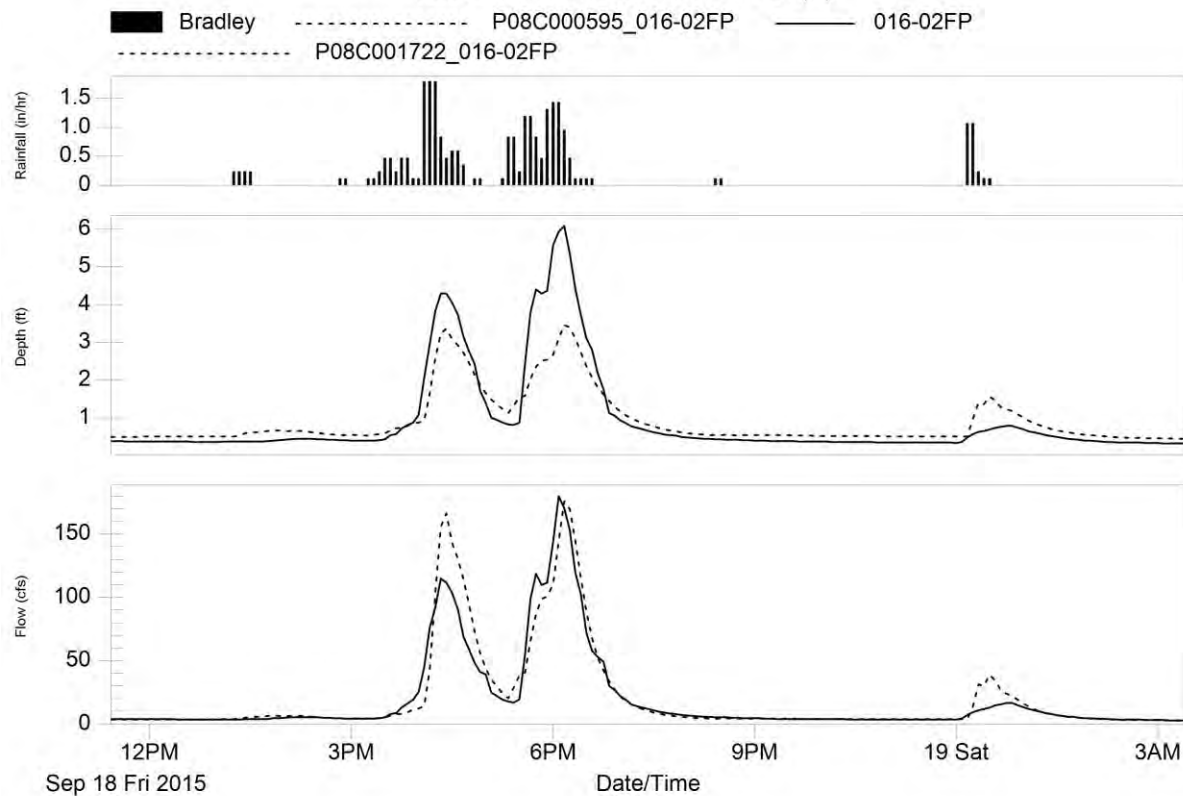
Event of September 8, 2015

Duration: 5 h, Total Rainfall: 0.86 (in)



Event of September 18, 2015

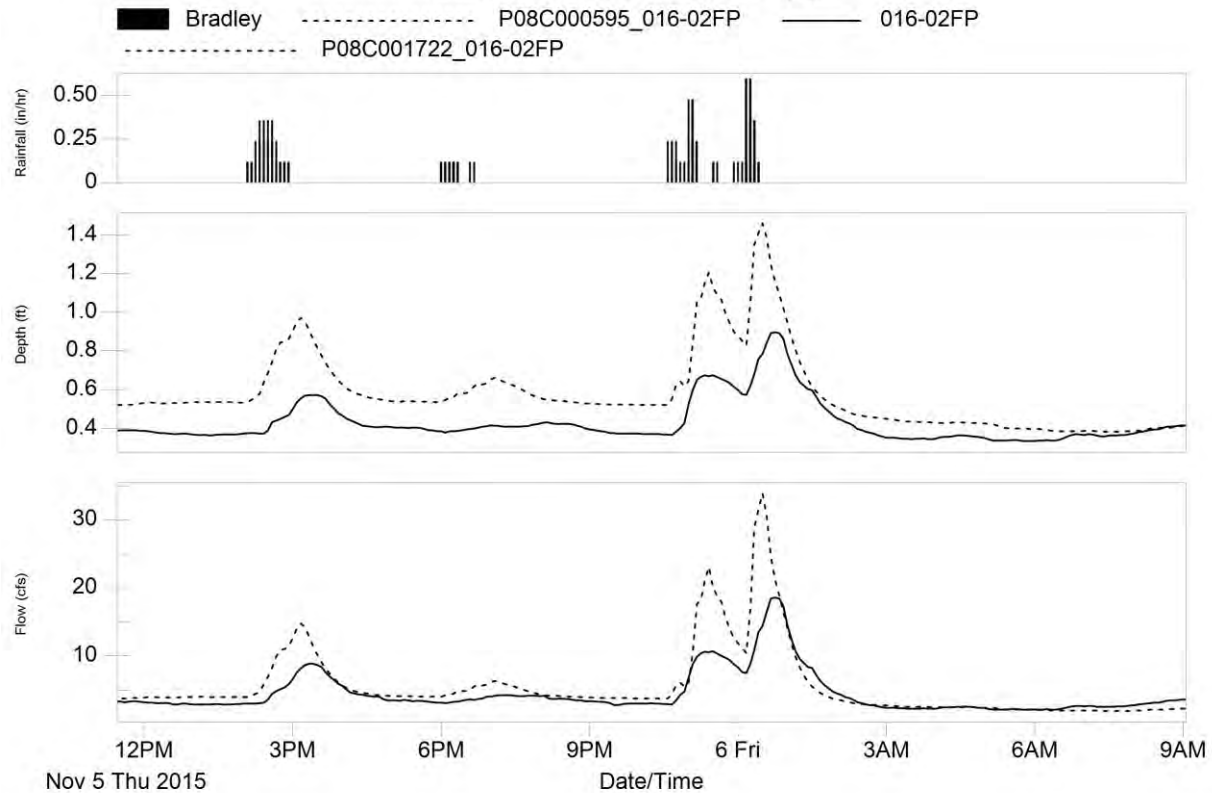
Duration: 13.33 h, Total Rainfall: 1.62 (in)



Cedar 016-02FP – Calibration Events

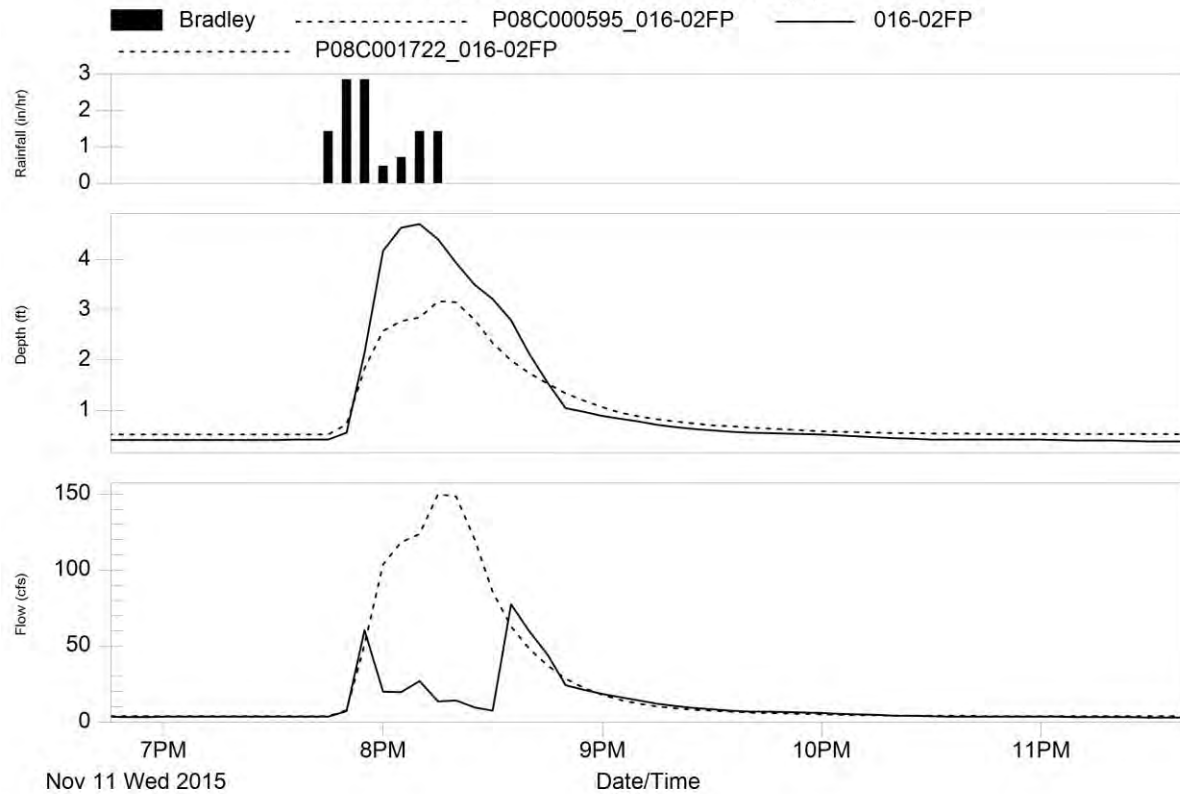
Event of November 5, 2015

Duration: 18 h, Total Rainfall: 0.43 (in)



Event of November 11, 2015

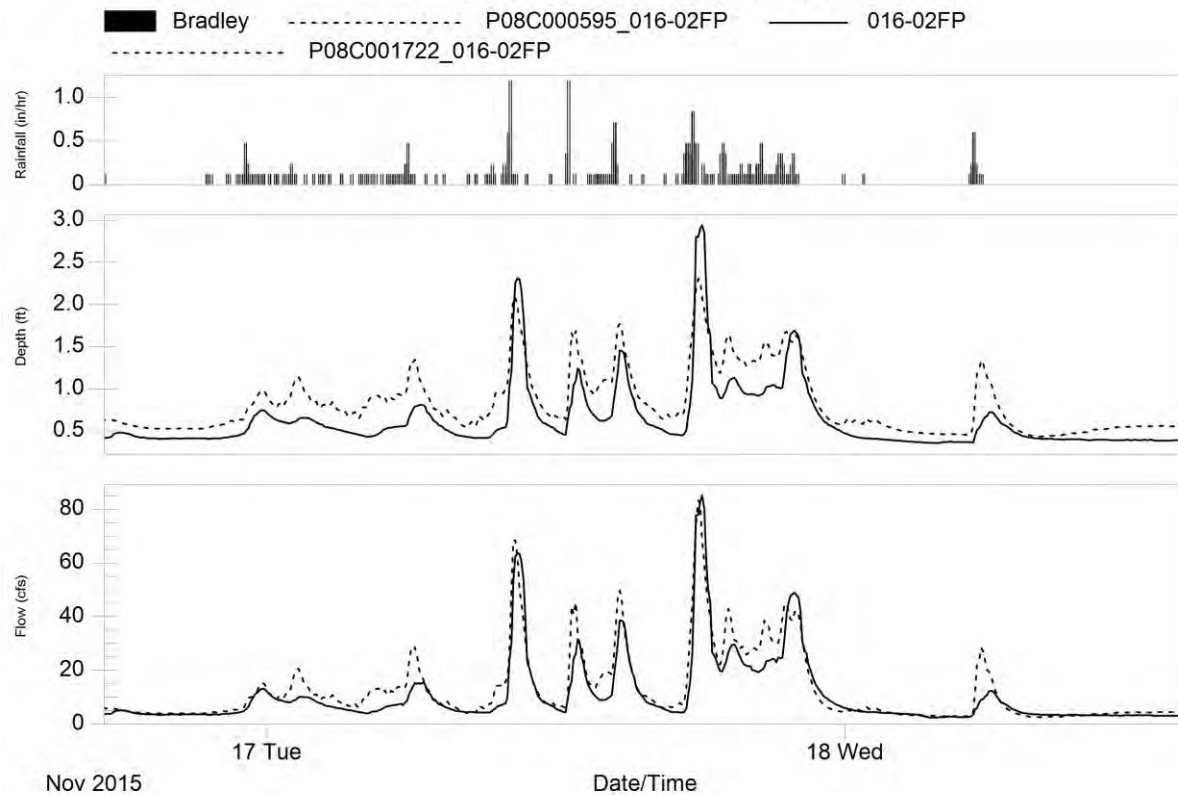
Duration: 4.08 h, Total Rainfall: 0.6 (in)



Cedar 016-02FP – Calibration Events

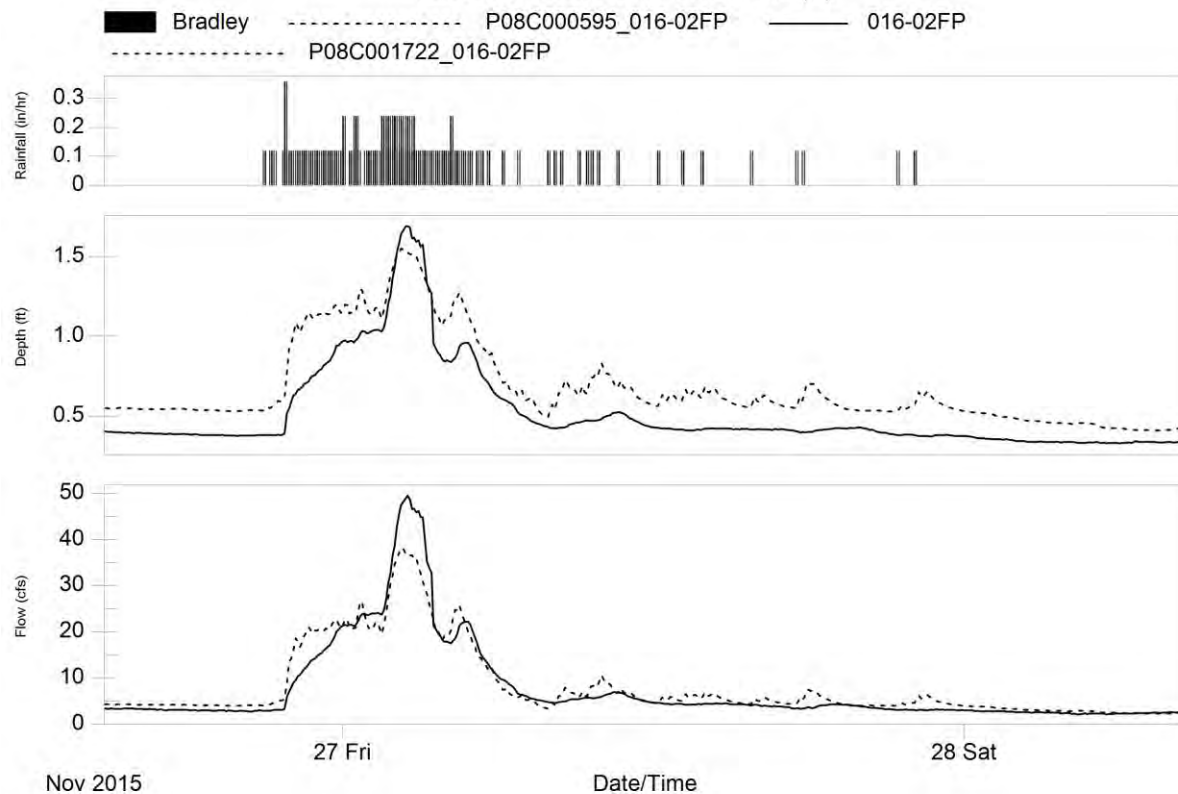
Event of November 16, 2015

Duration: 37.42 h, Total Rainfall: 2.37 (in)



Event of November 26, 2015

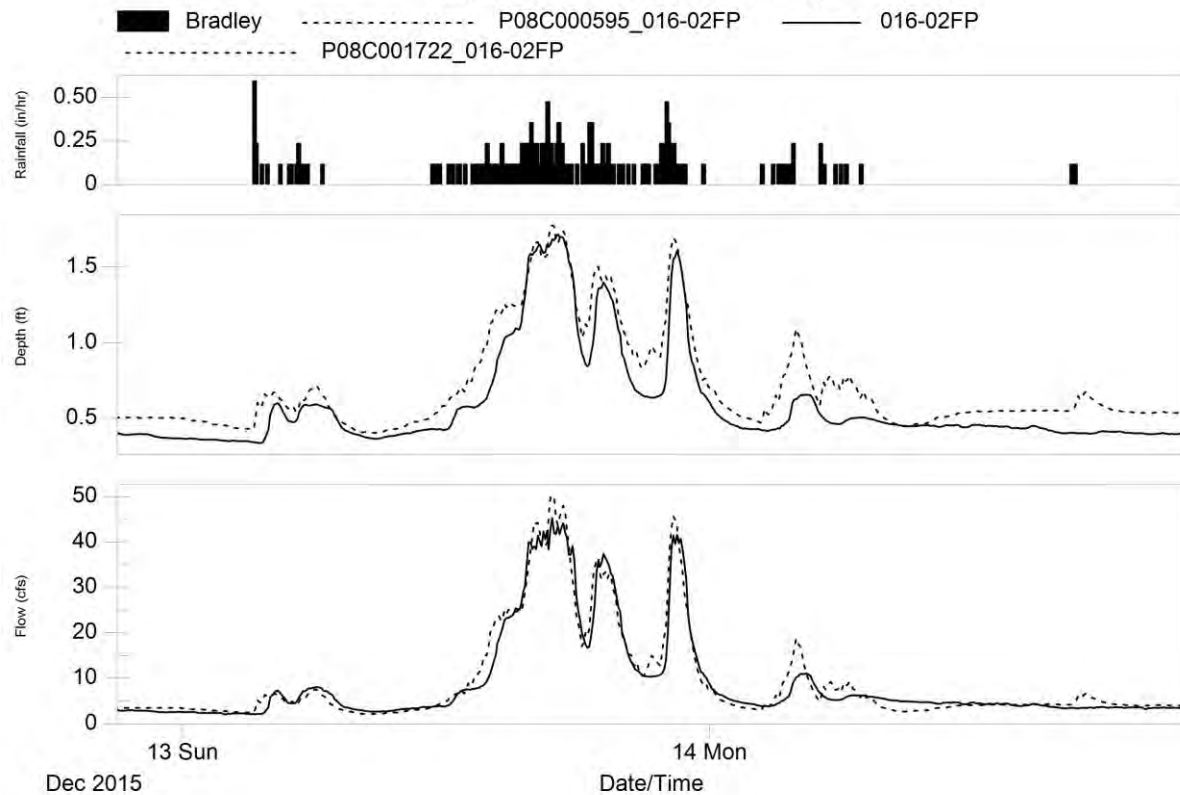
Duration: 34.83 h, Total Rainfall: 1.12 (in)



Cedar 016-02FP – Calibration Events

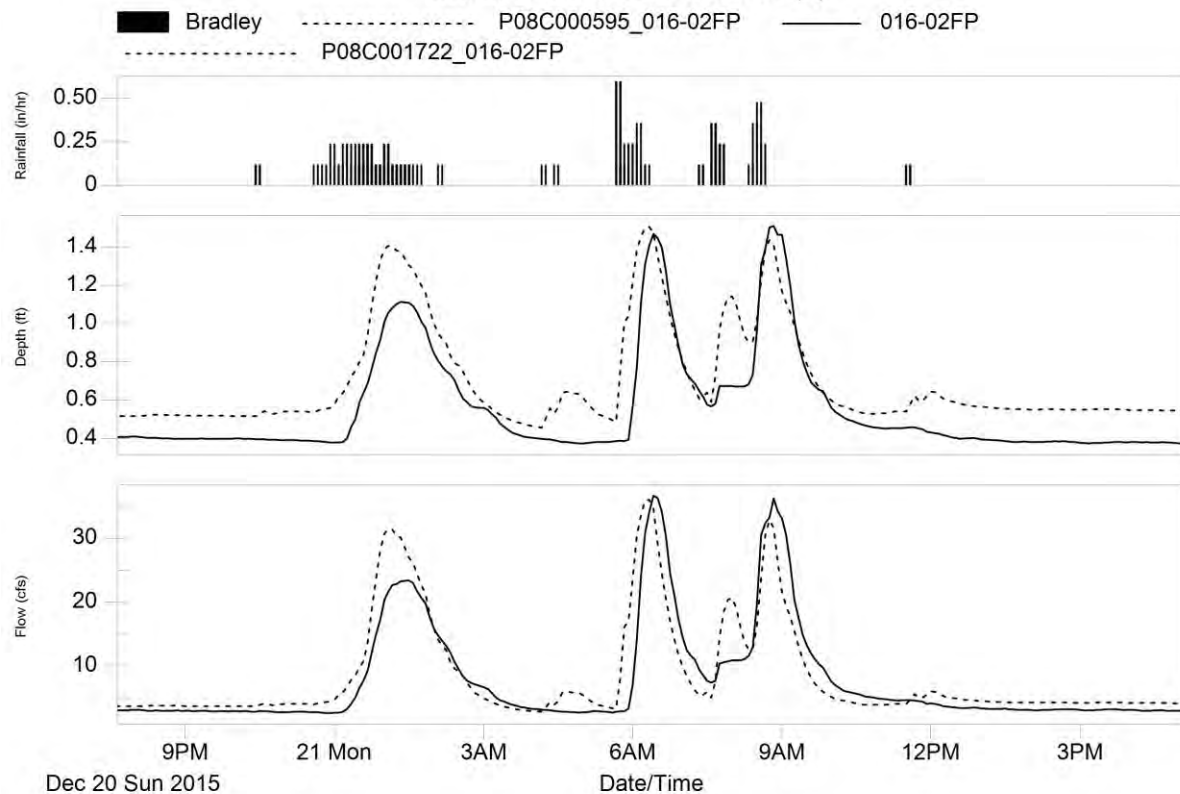
Event of December 13, 2015

Duration: 40.5 h, Total Rainfall: 1.77 (in)



Event of December 20, 2015

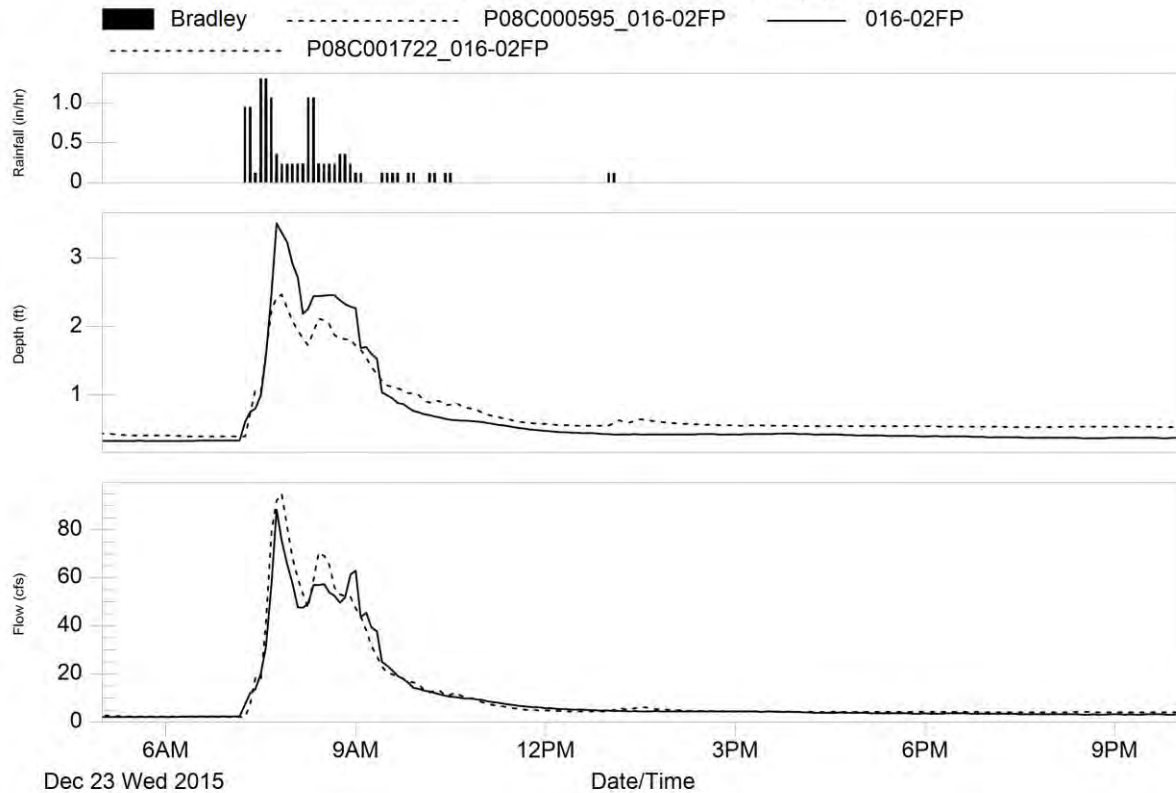
Duration: 17.92 h, Total Rainfall: 0.7 (in)



Cedar 016-02FP – Calibration Events

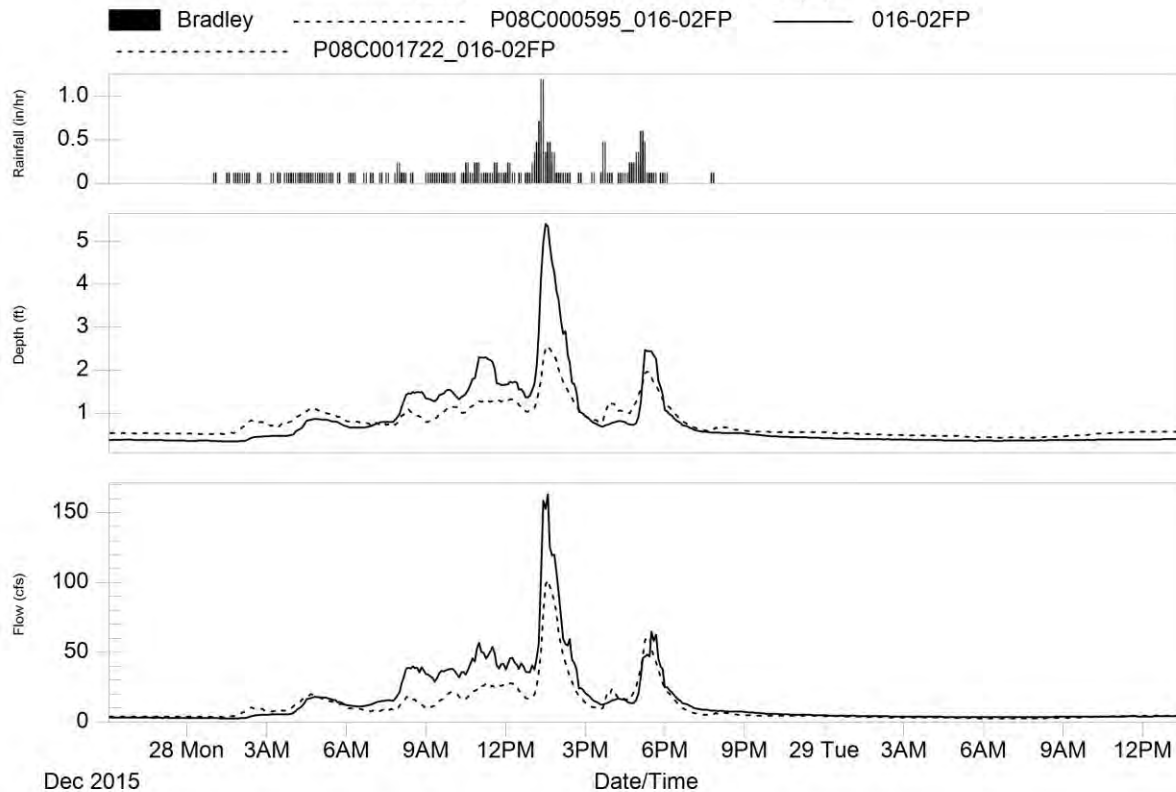
Event of December 23, 2015

Duration: 14.25 h, Total Rainfall: 0.73 (in)



Event of December 28, 2015

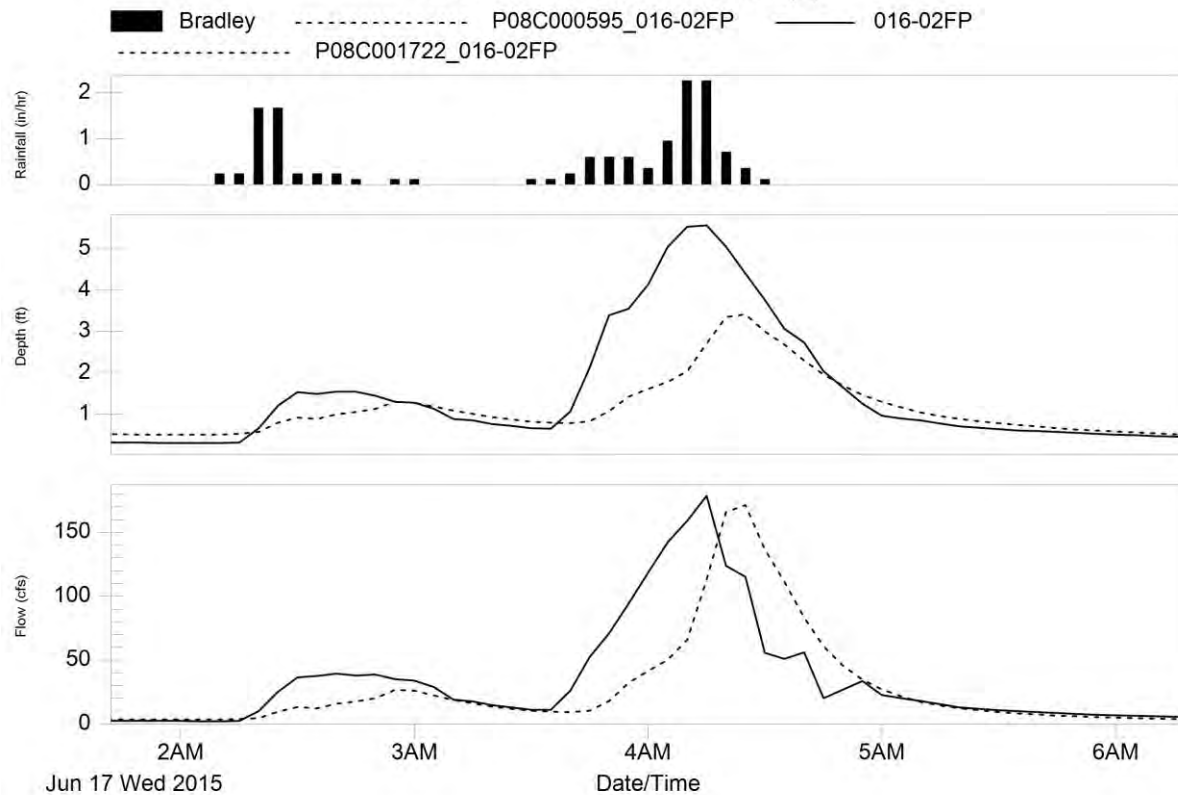
Duration: 33.75 h, Total Rainfall: 1.64 (in)



Cedar 016-02FP – Verification Events

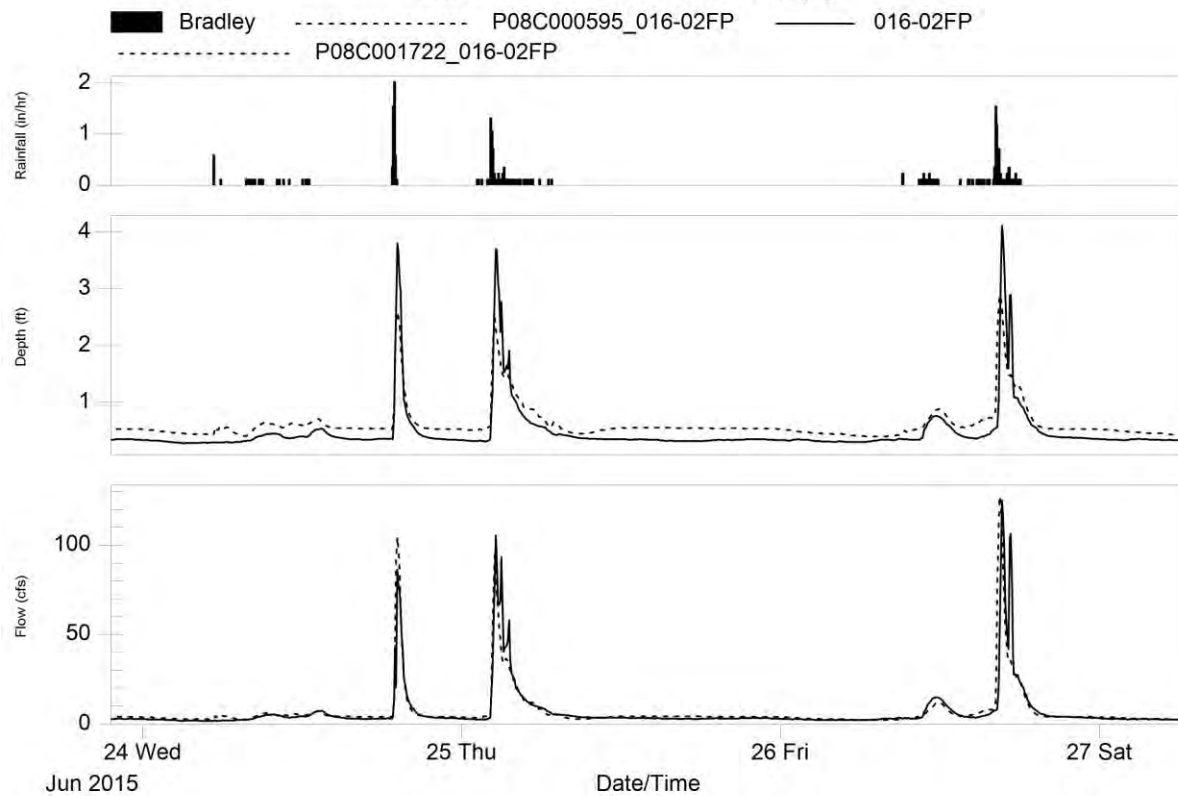
Event of June 17, 2015

Duration: 3.83 h, Total Rainfall: 0.8 (in)



Event of June 24, 2015

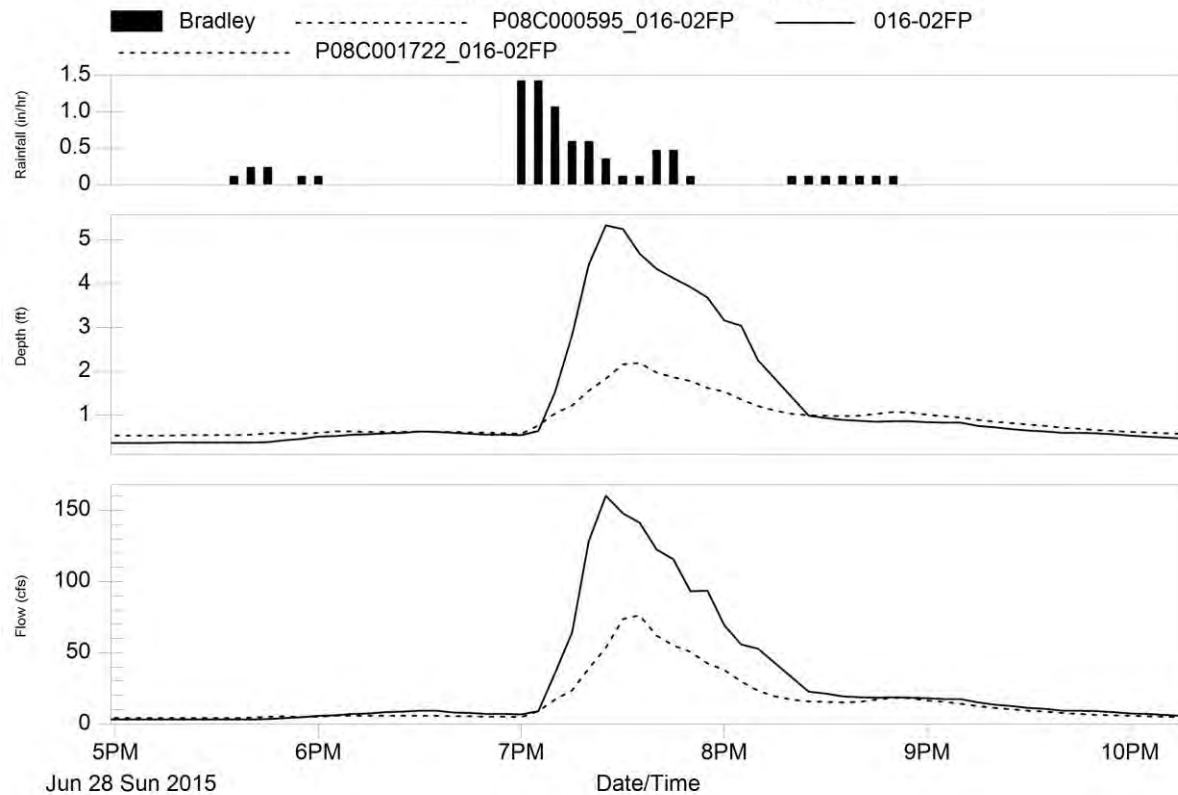
Duration: 67.42 h, Total Rainfall: 2.15 (in)



Cedar 016-02FP – Verification Events

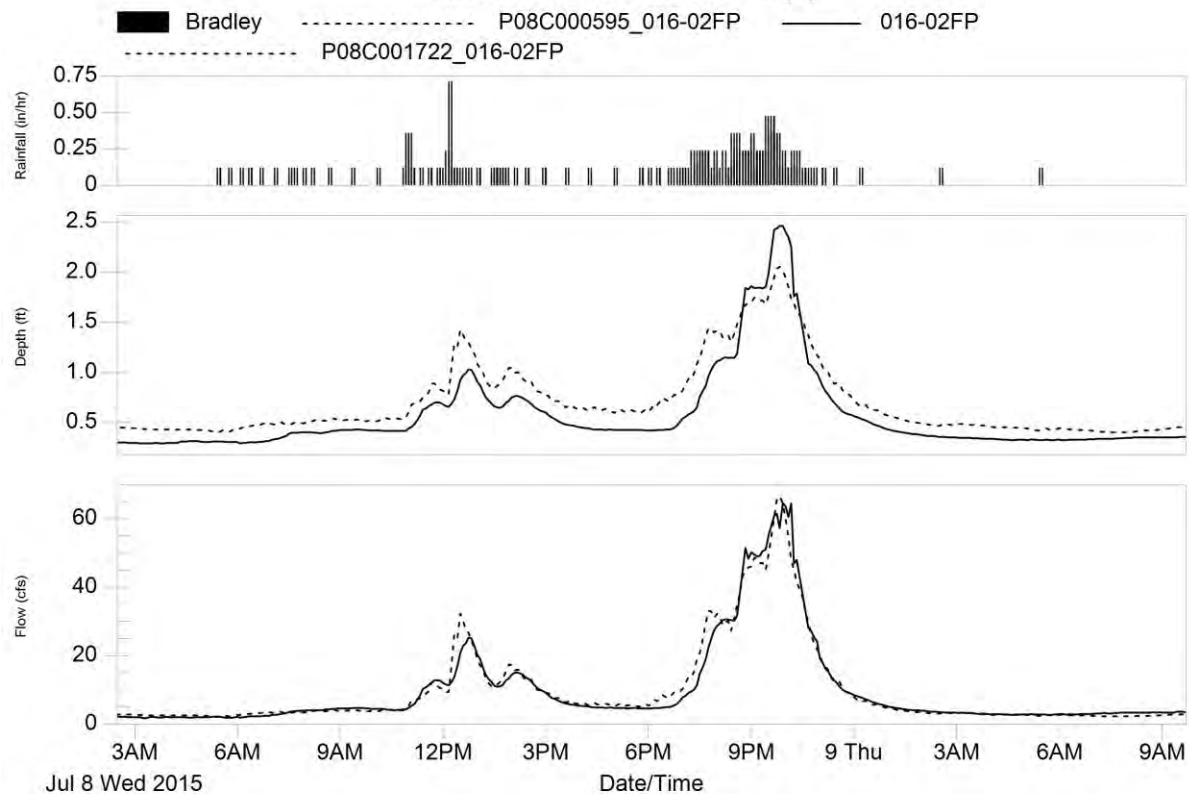
Event of June 28, 2015

Duration: 4.42 h, Total Rainfall: 0.51 (in)



Event of July 8, 2015

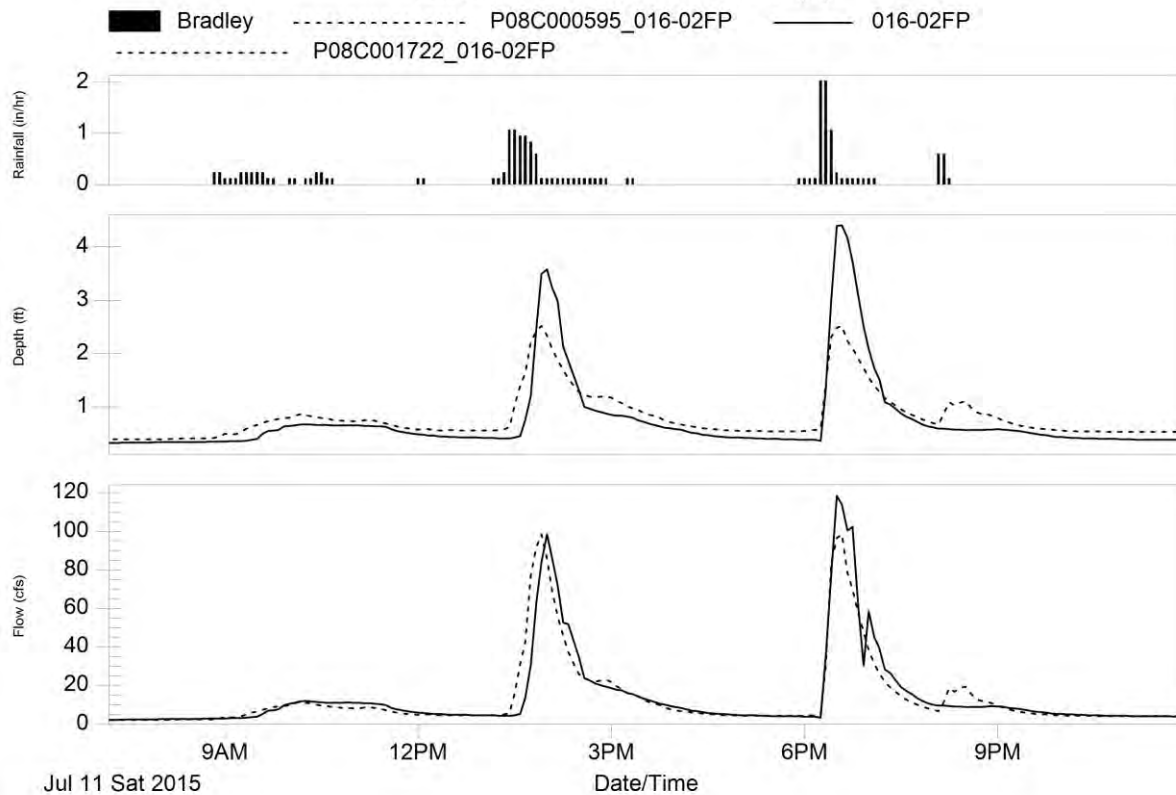
Duration: 26 h, Total Rainfall: 1.39 (in)



Cedar 016-02FP – Verification Events

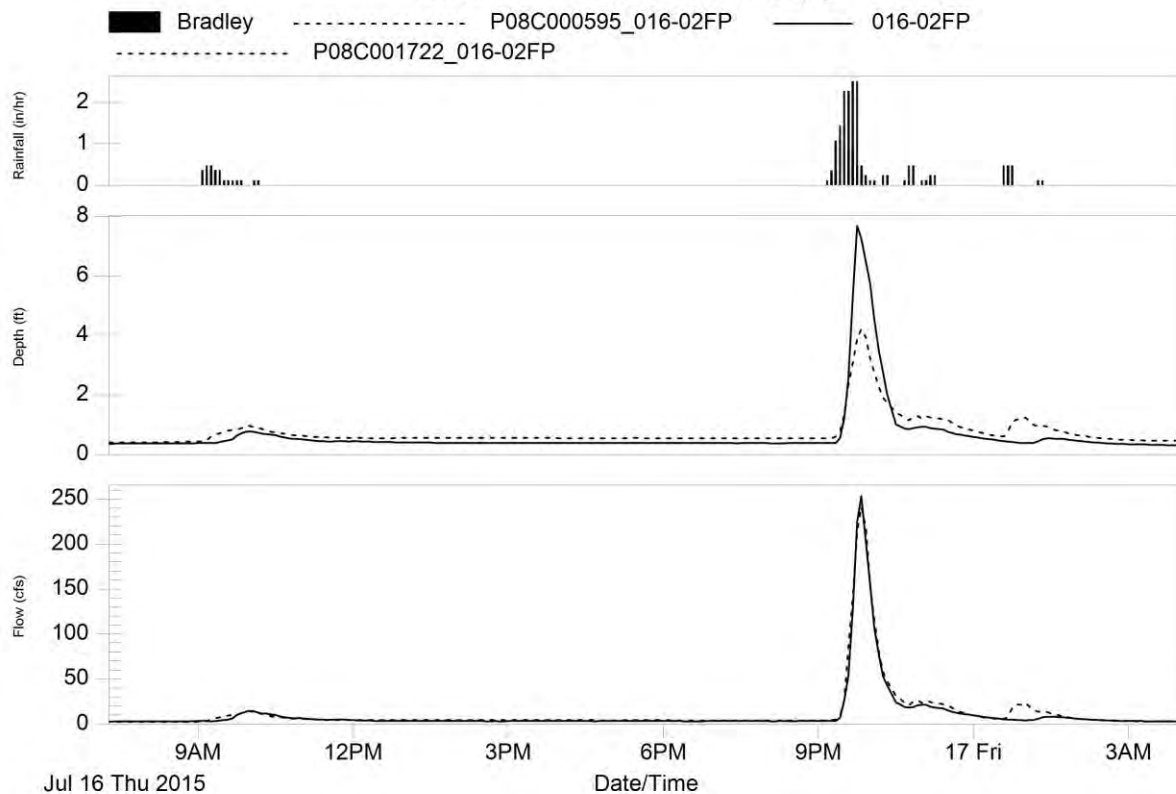
Event of July 11, 2015

Duration: 13.92 h, Total Rainfall: 1.07 (in)



Event of July 16, 2015

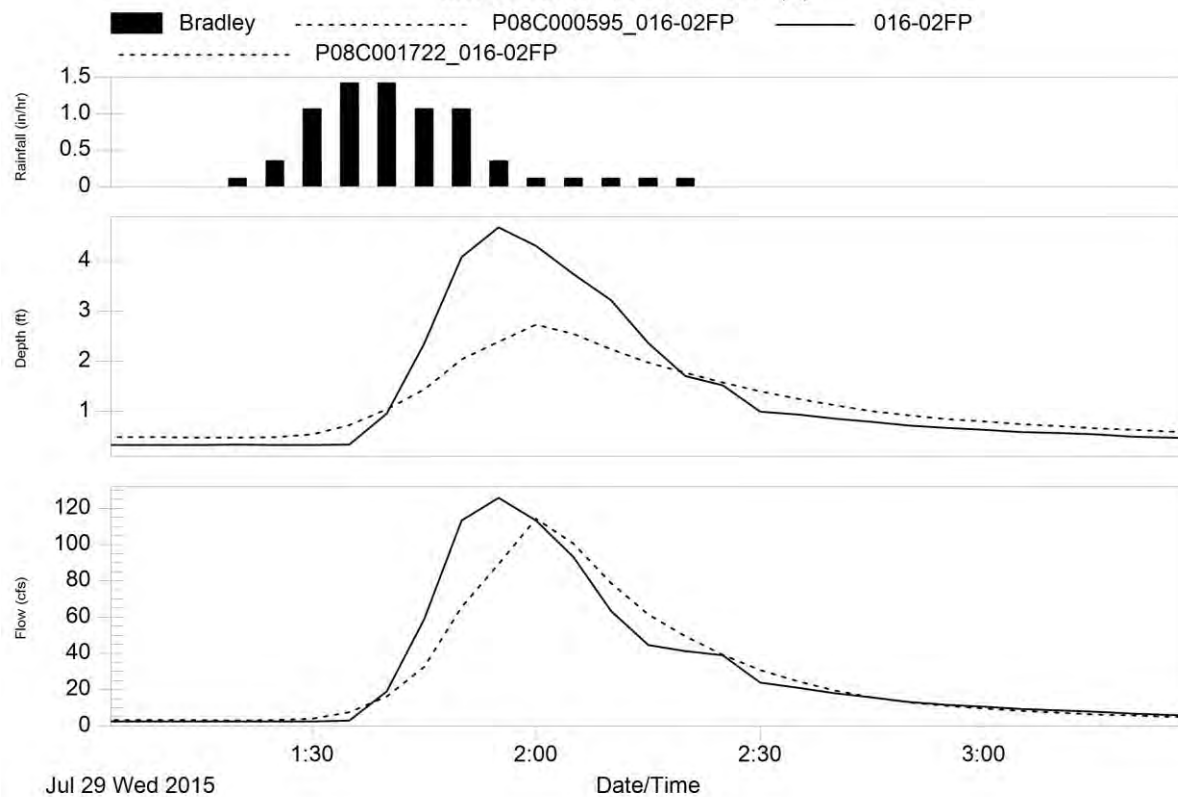
Duration: 17.33 h, Total Rainfall: 1.16 (in)



Cedar 016-02FP – Verification Events

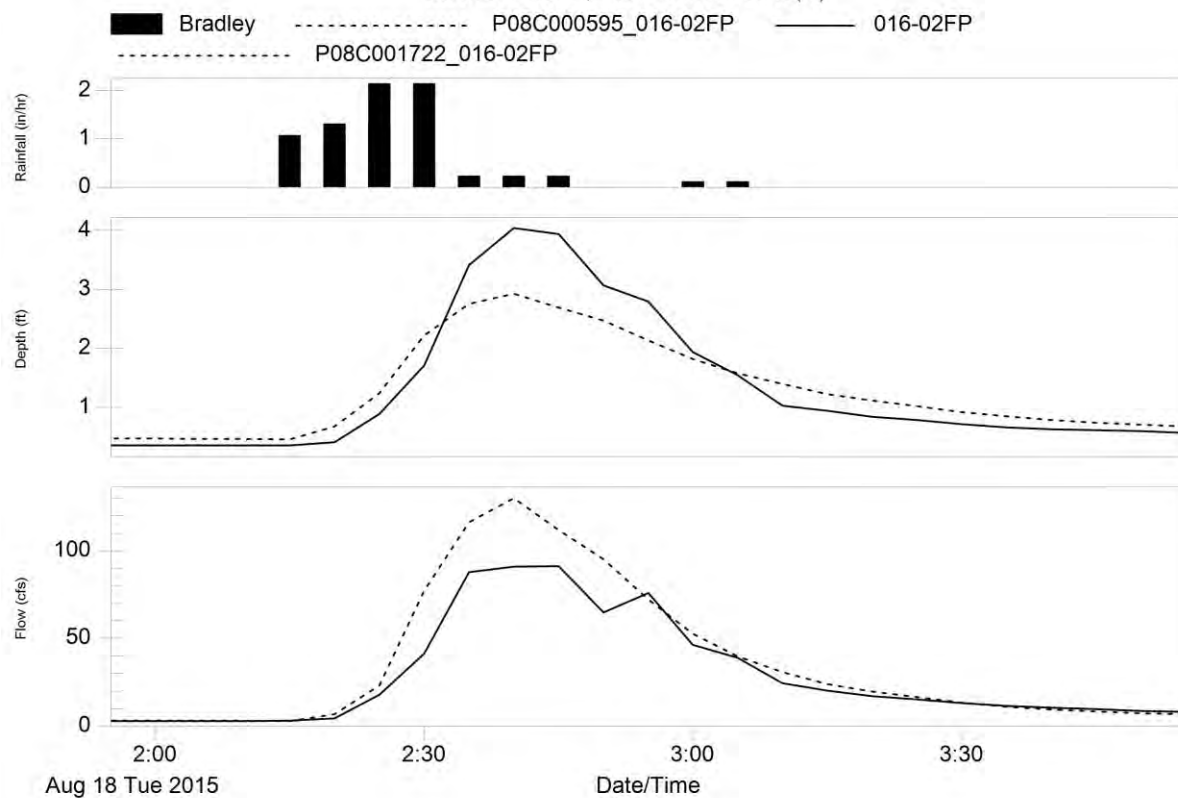
Event of July 29, 2015

Duration: 2 h, Total Rainfall: 0.51 (in)

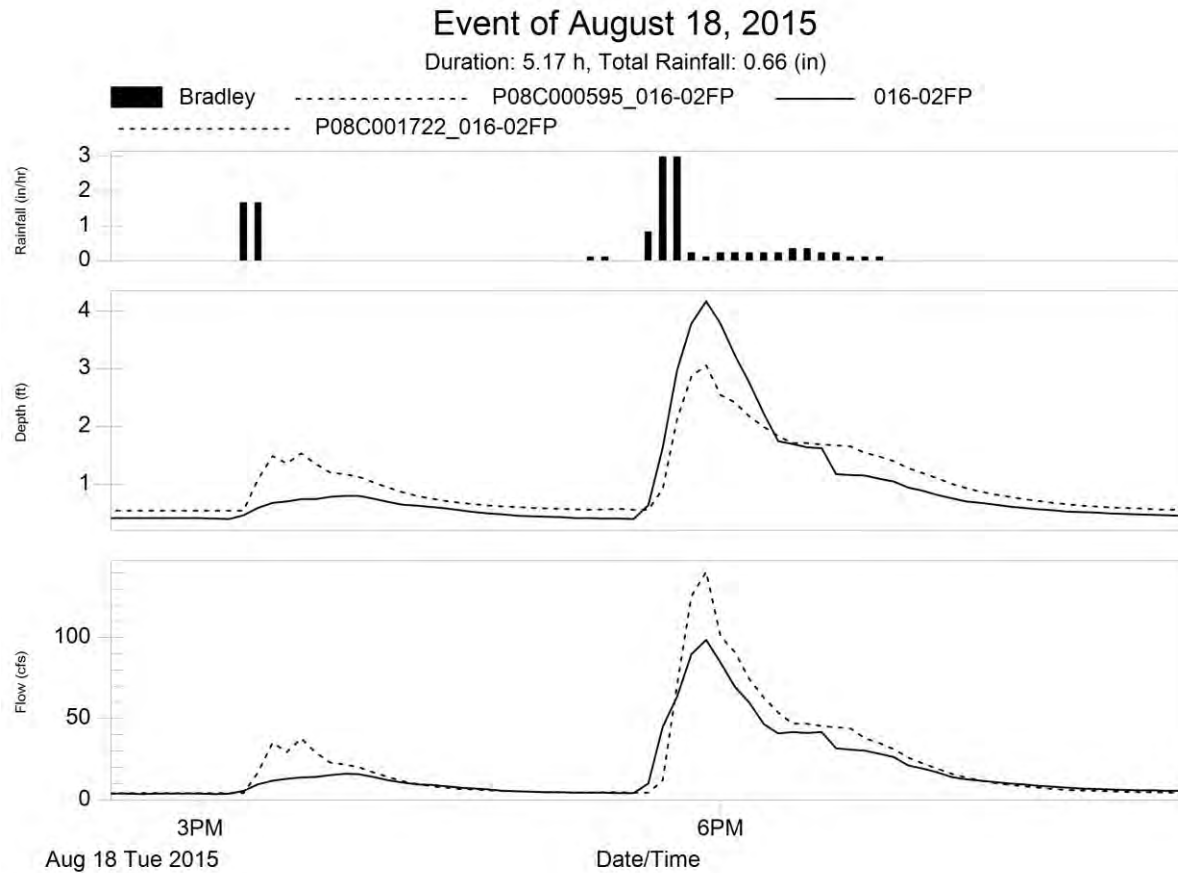


Event of August 18, 2015

Duration: 1.67 h, Total Rainfall: 0.45 (in)



Cedar 016-02FP – Verification Events



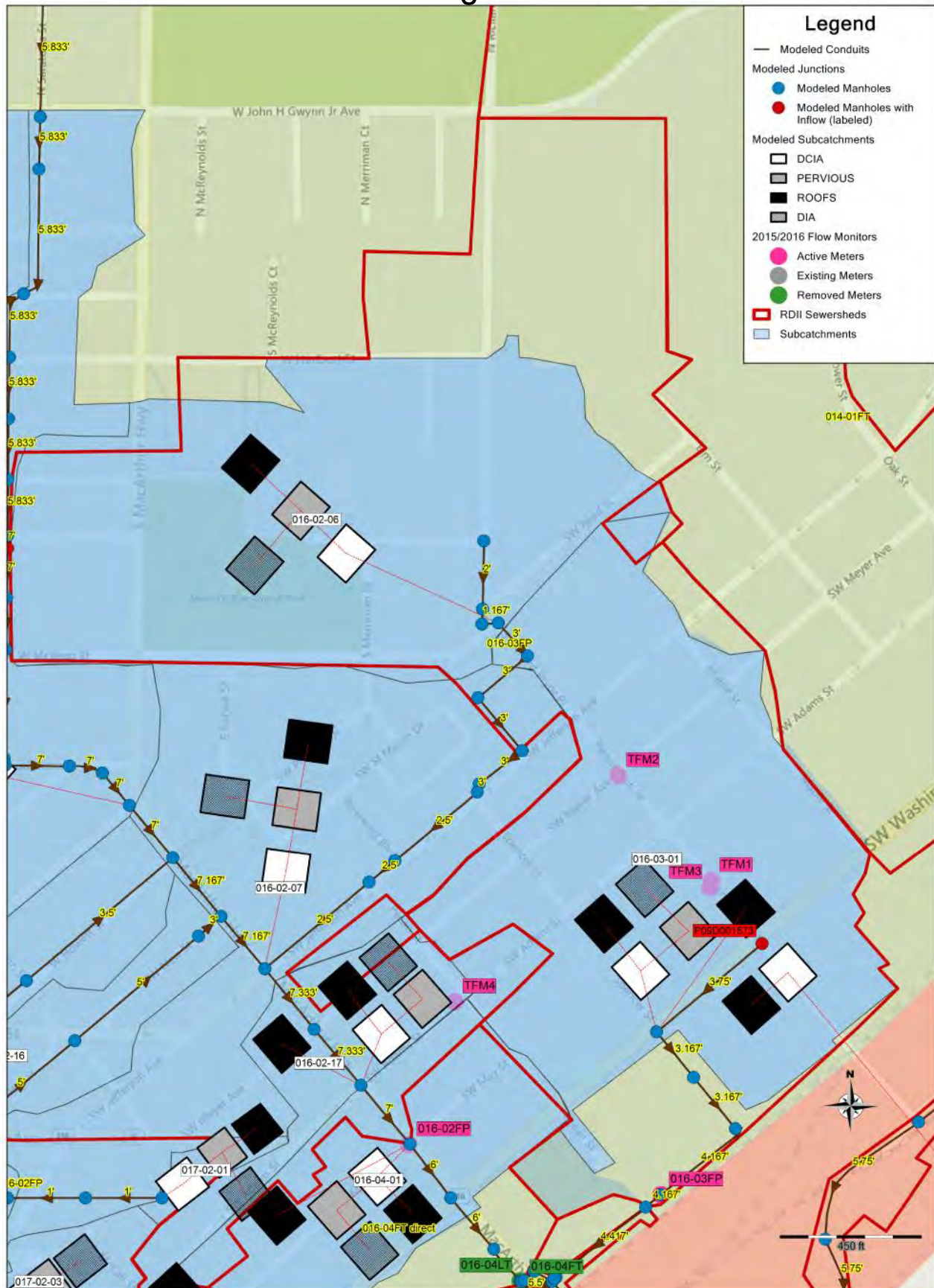
Legend

- 2015/2016 Flow Monitors
- 2015/2016 Rain Gauges
- Trunk Sewer Pipes
- Modeled Outfalls
 - Emergency Outfalls
 - Active Outfalls
- RDII Sewersheds (labeled by downstream flow meter)
 - Sewer Owner = City of Peoria
 - Sewer Owner = GPSD
- Approximate Drainage Area Type
 - = Combined Through Storm Sewers
 - = Partially Separate
 - = Separate
 - = Combined Direct

Map Labels: BRADLEY, GLENOAKS, HARDEES, DARST, 000-11FT, 000-07FT, 000-09FT + 000-08FT, 000-10FT, 000-06FT direct, 007-05FT, 003-05FT, 007-06FT, 003-07FT, 003-02FP, 006-03FP, 007-03FP, 016-06FT, 016-08FT, 016-09, 016-02FP, 016-03FP, 016-05FT direct, 017-02FP, 017-02FP direct, 018-04FP, 018-06FP, 018-07FT direct, 018-05FP, 019-04FT, 019-05FT, 019-07FT, 019-06FT, 019-02FP, 019-08FT, 019-08FT, 000-05FT direct, 003-03FP, 003-04FT direct, 003, 009, 006B, 014-01FT, 016, 017, 018, 019.

Scale: 0.5 mi

016-03 - Water Street Regulator Influent Flow Meter



Cedar 016-03FP

Date	Duration (h)	Rainfall (in)	Maximum Flow (cfs)		Maximum Flow (mgd)		Total Volume (ft³)		Volume (million gallons)		Peak Flow Rate (-15% to +25%)	Flow Volume (-10% to +20%)	Rainfall Variability
		Bradley Edited	Observed	Modeled	Observed	Modeled	Observed	Modeled	Observed	Modeled			
CALIBRATION EVENTS - FLOW													
9/8/2015 10:20	5.0	0.86	29.3	25.9	18.9	16.7	49070	51430	0.4	0.4	-12%	5%	variable
9/18/2015 12:45	13.3	1.62	35.5	28.1	22.9	18.2	120800	111800	0.9	0.8	-21%	-7%	relatively uniform
11/5/2015 13:15	18.0	0.43	4.7	7.8	3.0	5.0	12430	22010	0.1	0.2	67%	77%	possibly uniform
11/11/2015 19:10	4.1	0.60	19.9	22.8	12.8	14.7	27480	37790	0.2	0.3	15%	38%	relatively uniform
11/16/2015 21:00	37.4	2.37	13.2	16.9	8.5	10.9	139500	183200	1.0	1.4	28%	31%	variable
11/26/2015 18:15	34.8	1.12	5.6	5.1	3.6	3.3	76500	85240	0.6	0.6	-8%	11%	possibly uniform
12/13/2015 1:05	40.5	1.77	6.4	7.9	4.1	5.1	100800	130800	0.8	1.0	23%	30%	possibly uniform
12/20/2015 21:25	17.9	0.70	7.3	6.9	4.7	4.4	35970	50260	0.3	0.4	-6%	40%	relatively uniform
12/23/2015 6:25	14.3	0.73	15.1	22.3	9.7	14.4	51620	57650	0.4	0.4	48%	12%	variable
12/28/2015 0:25	33.8	1.64	22.6	19.8	14.6	12.8	184800	131600	1.4	1.0	-12%	-29%	variable
VERIFICATION EVENTS - FLOW													
6/17/2015 2:05	3.8	0.80	33.4	33.8	21.6	21.8	77310	54770	0.6	0.4	1%	-29%	variable
6/24/2015 4:20	67.4	2.15	21.0	25.8	13.6	16.7	102000	124800	0.8	0.9	23%	22%	variable
6/28/2015 17:25	4.4	0.51	28.4	10.2	18.3	6.6	46260	22180	0.3	0.2	-64%	-52%	variable
7/8/2015 5:05	26.0	1.39	7.9	9.1	5.1	5.9	58920	84530	0.4	0.6	16%	43%	relatively uniform
7/11/2015 8:35	13.9	1.07	16.3	27.5	10.5	17.8	48890	62540	0.4	0.5	69%	28%	possibly uniform
7/16/2015 9:00	17.3	1.16	27.5	35.3	17.8	22.8	52200	71460	0.4	0.5	28%	37%	relatively uniform
7/29/2015 1:15	2.0	0.51	33.3	11.6	21.5	7.5	39470	22790	0.3	0.2	-65%	-42%	variable
8/18/2015 2:05	1.7	0.45	17.1	23.4	11.0	15.1	19420	26000	0.1	0.2	37%	34%	possibly uniform
8/18/2015 15:00	5.2	0.66	27.7	38.1	17.9	24.6	35710	49620	0.3	0.4	38%	39%	relatively uniform
WEIGHTED AVERAGES													
Calibration - Relatively Uniform											-8%	8%	relatively uniform
Calibration - Possibly Uniform											25%	25%	possibly uniform
Calibration - Variable											6%	0%	variable
Calibration Weighted - All Events											3%	8%	
Verification - Relatively Uniform											31%	40%	relatively uniform
Verification - Possibly Uniform											52%	30%	possibly uniform
Verification - Variable											-30%	-15%	variable
Verification Weighted - All Events											1%	8%	
Weighted Average - All Events											2%	8%	
NET AVERAGES													
Calibration - Relatively Uniform											-4%	23%	relatively uniform
Calibration - Possibly Uniform											27%	39%	possibly uniform
Calibration - Variable											13%	5%	variable
Calibration Net - All Events											12%	21%	
Verification - Relatively Uniform											27%	40%	relatively uniform
Verification - Possibly Uniform											53%	31%	possibly uniform
Verification - Variable											-26%	-25%	variable
Verification Net - All Events											9%	9%	
Net Average - All Events											11%	15%	

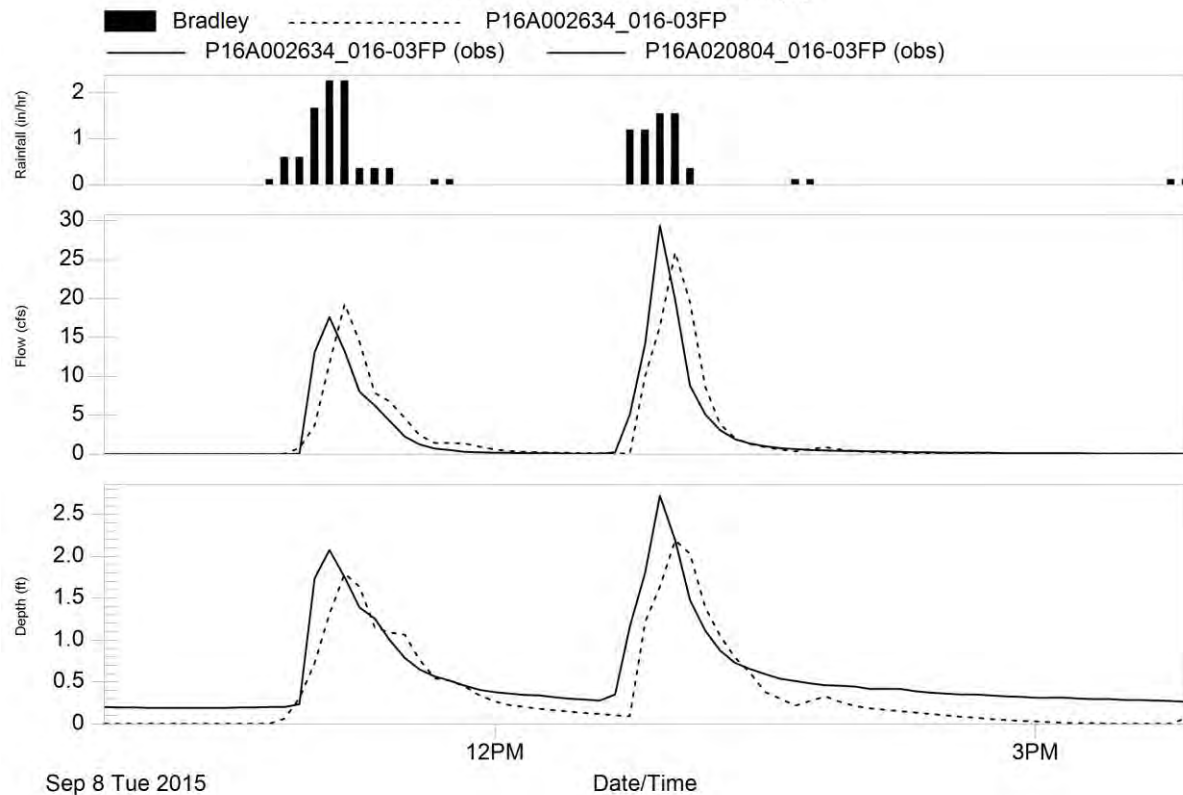
Cedar 016-03FP Depth

Date	Duration (h)	Maximum Depth (ft)		Minimum Depth (ft)		Average Depth (ft)		Maximum Depth (ft)	Minimum Depth (ft)	Average Depth (ft)	Rainfall Variability
		metered	modeled	metered	modeled	metered	modeled	Surcharged: -0.33 ft to +1.67 ft Non-Surcharged: -0.33 ft to +0.33 ft	Surcharged: -0.33 ft to +1.67 ft Non-Surcharged: -0.33 ft to +0.33 ft	Surcharged: -0.33 ft to +1.67 ft Non-Surcharged: -0.33 ft to +0.33 ft	
CALIBRATION EVENTS - DEPTH											
9/8/2015 10:20:00	5.0	2.7	2.2	0.2	0.00	0.6	0.5	-0.53	-0.2	-0.2	variable
9/18/2015 12:45:00	13.3	2.9	2.5	0.2	0.00	0.6	0.4	-0.40	-0.2	-0.3	relatively uniform
11/5/2015 13:15:00	18.0	1.1	1.1	0.2	0.00	0.3	0.1	0.01	-0.2	-0.2	possibly uniform
11/11/2015 19:10:00	4.1	2.4	2.1	0.2	0.00	0.6	0.4	-0.30	-0.2	-0.2	relatively uniform
11/16/2015 21:00:00	37.4	1.7	1.6	0.2	0.00	0.5	0.3	-0.09	-0.2	-0.2	variable
11/26/2015 18:15:00	34.8	1.1	0.9	0.2	0.00	0.4	0.2	-0.28	-0.2	-0.2	possibly uniform
12/13/2015 1:05:00	40.5	1.2	1.1	0.2	0.00	0.4	0.2	-0.07	-0.2	-0.2	possibly uniform
12/20/2015 21:25:00	17.9	1.3	1.0	0.2	0.00	0.4	0.2	-0.25	-0.2	-0.2	relatively uniform
12/23/2015 6:25:00	14.3	1.8	2.0	0.2	0.00	0.4	0.2	0.17	-0.2	-0.2	variable
12/28/2015 0:25:00	33.8	2.3	1.9	0.2	0.00	0.5	0.3	-0.45	-0.2	-0.2	variable
VERIFICATION EVENTS - DEPTH											
6/17/2015 2:05:00	3.8	3.0	2.8	0.2	0.00	1.0	0.6	-0.21	-0.2	-0.4	variable
6/24/2015 4:20:00	67.4	2.7	3.6	0.1	0.00	0.3	0.2	0.82	-0.1	-0.2	variable
6/28/2015 17:25:00	4.4	5.7	1.5	0.1	0.00	1.1	0.6	-4.14	-0.1	-0.6	variable
7/8/2015 5:05:00	26.0	1.3	1.2	0.1	0.00	0.4	0.2	-0.07	-0.1	-0.2	relatively uniform
7/11/2015 8:35:00	13.9	2.8	2.3	0.2	0.00	0.5	0.3	-0.53	-0.2	-0.2	possibly uniform
7/16/2015 9:00:00	17.3	8.5	4.2	0.1	0.00	0.5	0.2	-4.33	-0.1	-0.2	relatively uniform
7/29/2015 1:15:00	2.0	3.0	1.4	0.2	0.00	0.9	0.6	-1.66	-0.2	-0.3	variable
8/18/2015 2:05:00	1.7	2.0	2.0	0.2	0.00	0.8	0.7	-0.01	-0.2	-0.1	possibly uniform
8/18/2015 15:00:00	5.2	2.6	2.7	0.2	0.00	0.6	0.4	0.08	-0.2	-0.2	relatively uniform
				WEIGHTED AVERAGES							
				Calibration - Relatively Uniform				-0.33		-0.2	
				Calibration - Possibly Uniform				-0.12		-0.2	
				Calibration - Variable				-0.27		-0.2	
				Calibration Weighted - All Events				-0.26		-0.2	
				Verification - Relatively Uniform				-2.97		-0.2	
				Verification - Possibly Uniform				-0.32		-0.2	
				Verification - Variable				-1.86		-0.1	
				Verification Weighted - All Events				-2.06		-0.2	
				Weighted Average - All Events				-1.40		-0.2	
				NET AVERAGES							
				Calibration - Relatively Uniform				-0.32		-0.2	
				Calibration - Possibly Uniform				-0.11		-0.2	
				Calibration - Variable				-0.22		-0.2	
				Calibration Net - All Events				-0.22		-0.2	
				Verification - Relatively Uniform				-1.44		-0.2	
				Verification - Possibly Uniform				-0.27		-0.2	
				Verification - Variable				-1.30		-0.1	
				Verification Net - All Events				-1.12		-0.2	
				Net Average - All Events				-0.64		-0.2	

Cedar 016-03FP – Calibration Events

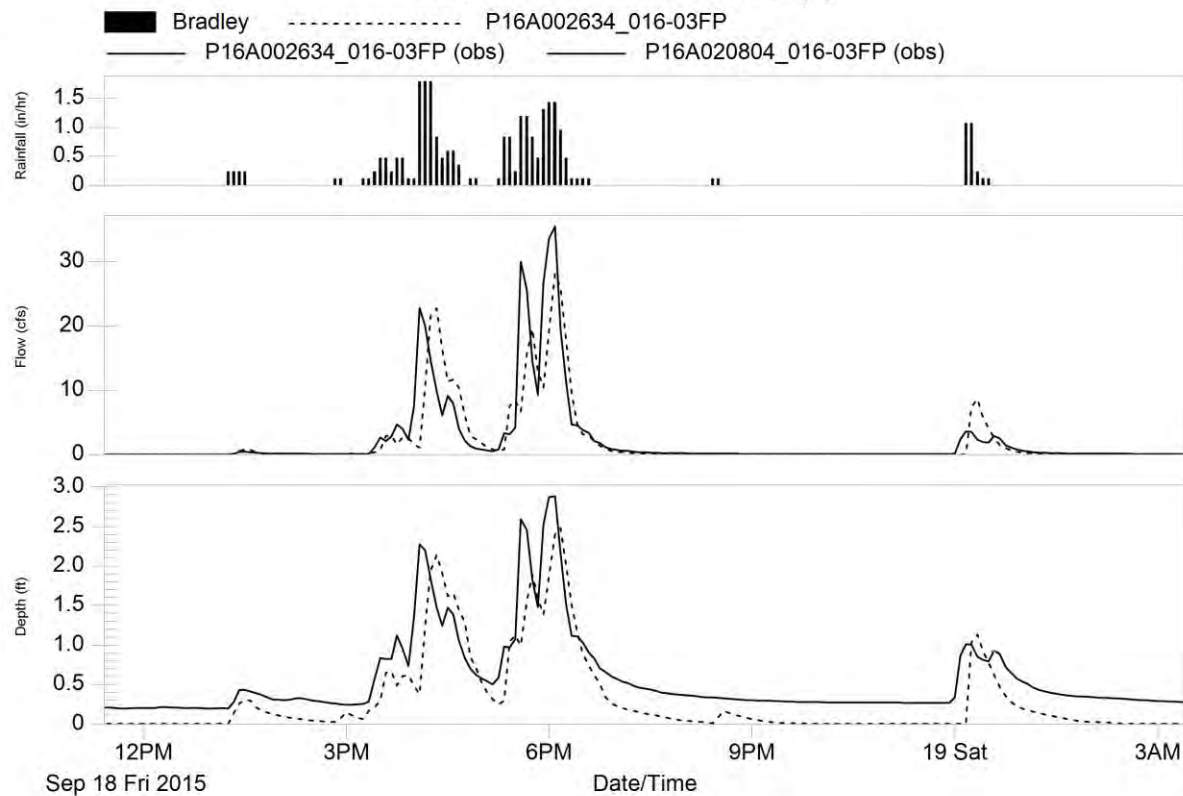
Event of September 8, 2015

Duration: 5 h, Total Rainfall: 0.86 (in)



Event of September 18, 2015

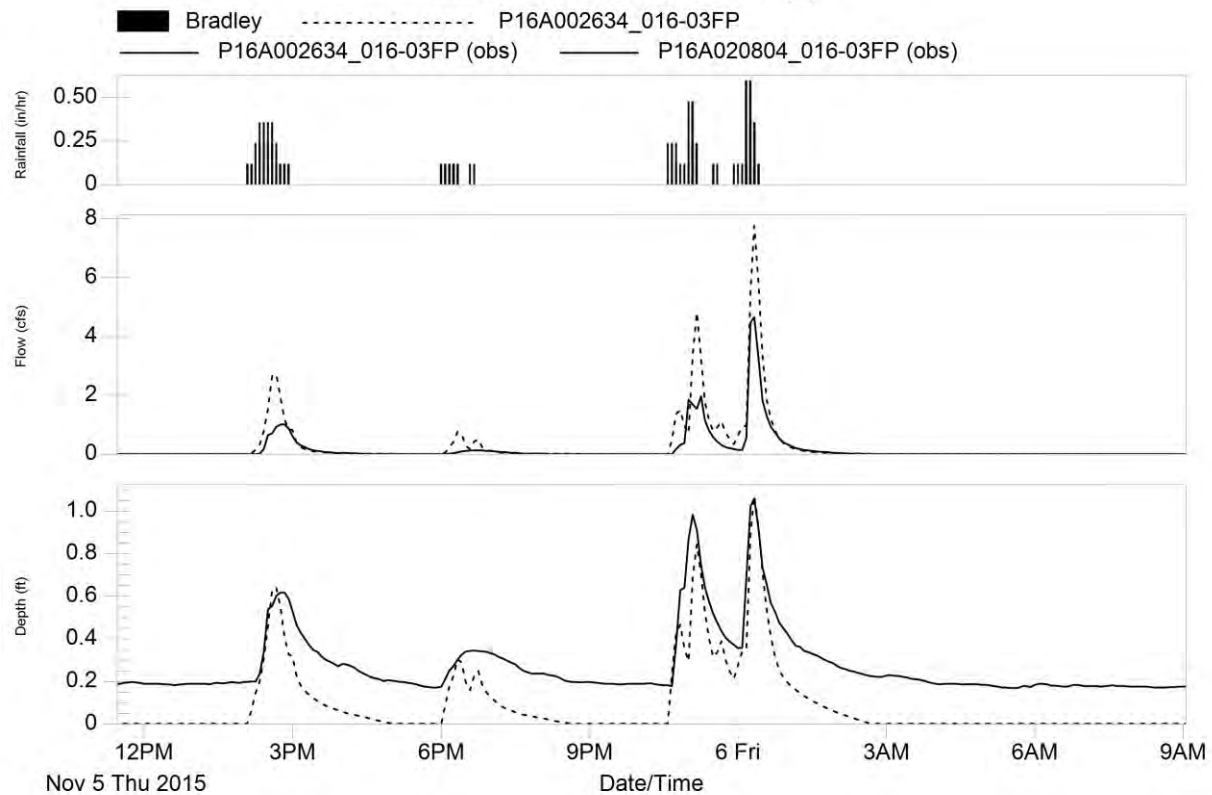
Duration: 13.33 h, Total Rainfall: 1.62 (in)



Cedar 016-03FP – Calibration Events

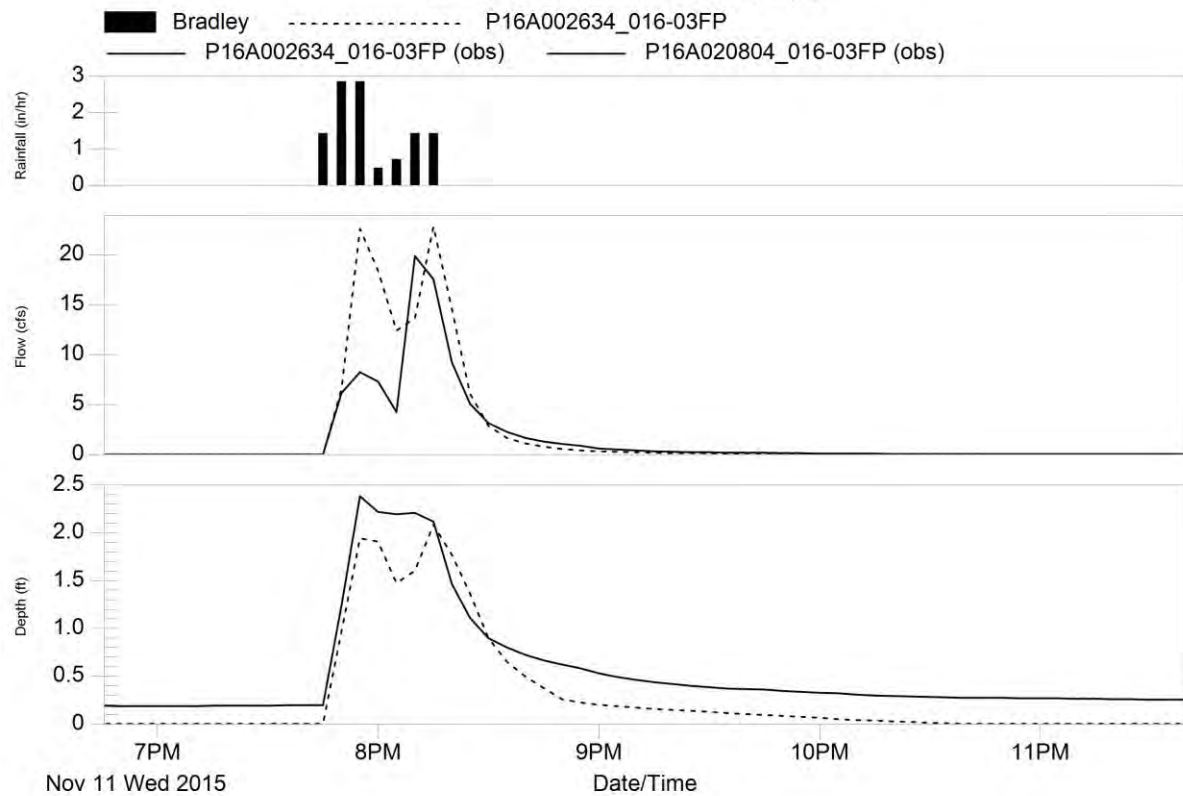
Event of November 5, 2015

Duration: 18 h, Total Rainfall: 0.43 (in)



Event of November 11, 2015

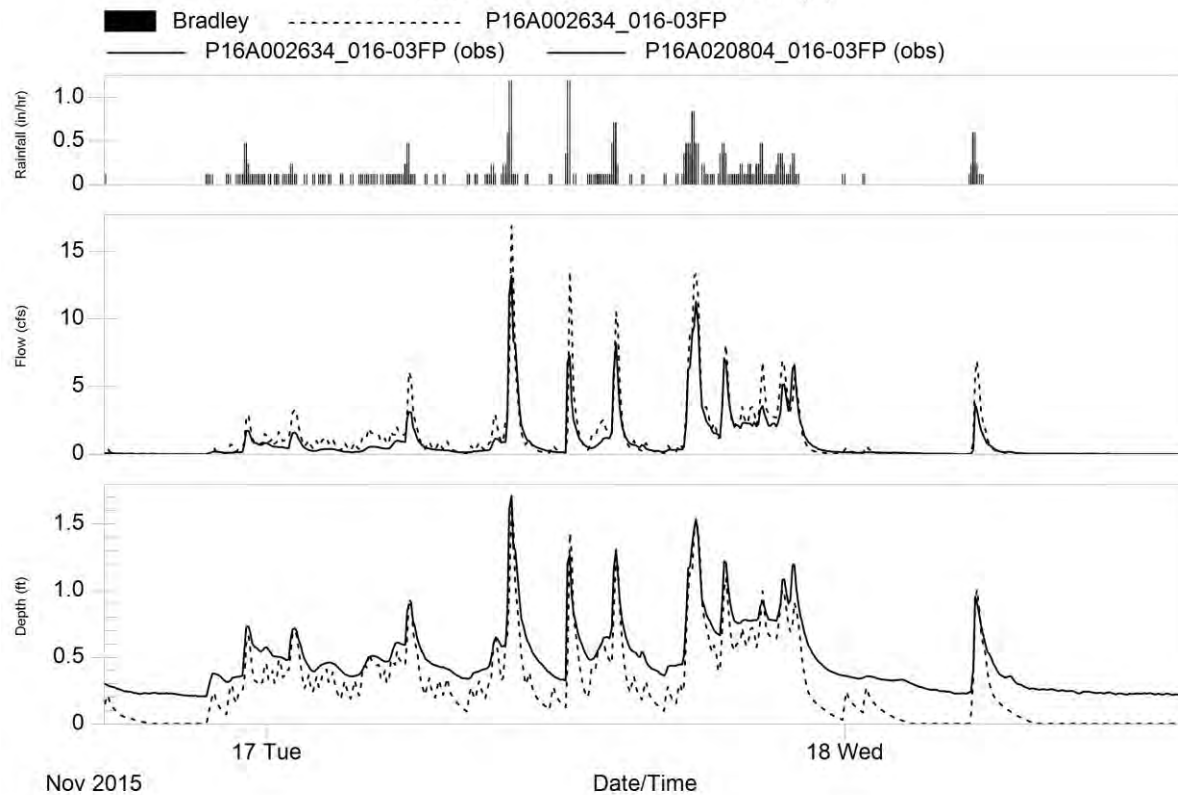
Duration: 4.08 h, Total Rainfall: 0.6 (in)



Cedar 016-03FP – Calibration Events

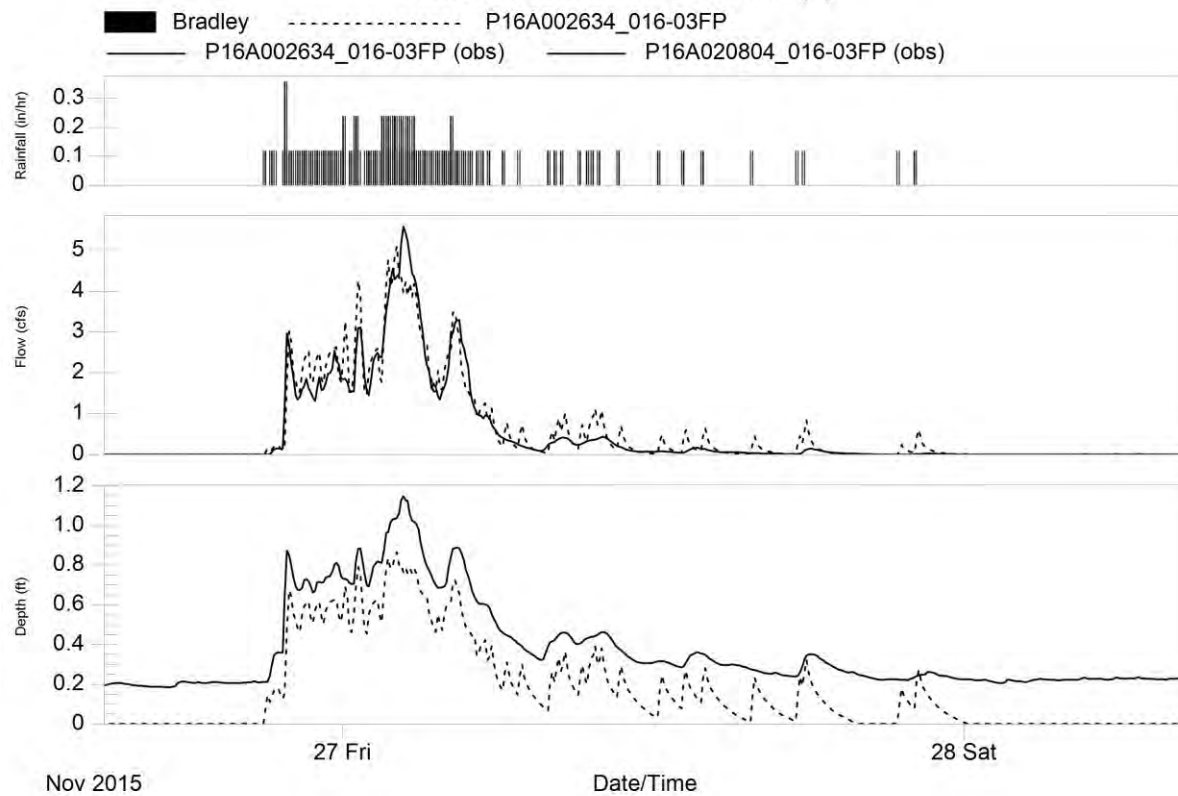
Event of November 16, 2015

Duration: 37.42 h, Total Rainfall: 2.37 (in)



Event of November 26, 2015

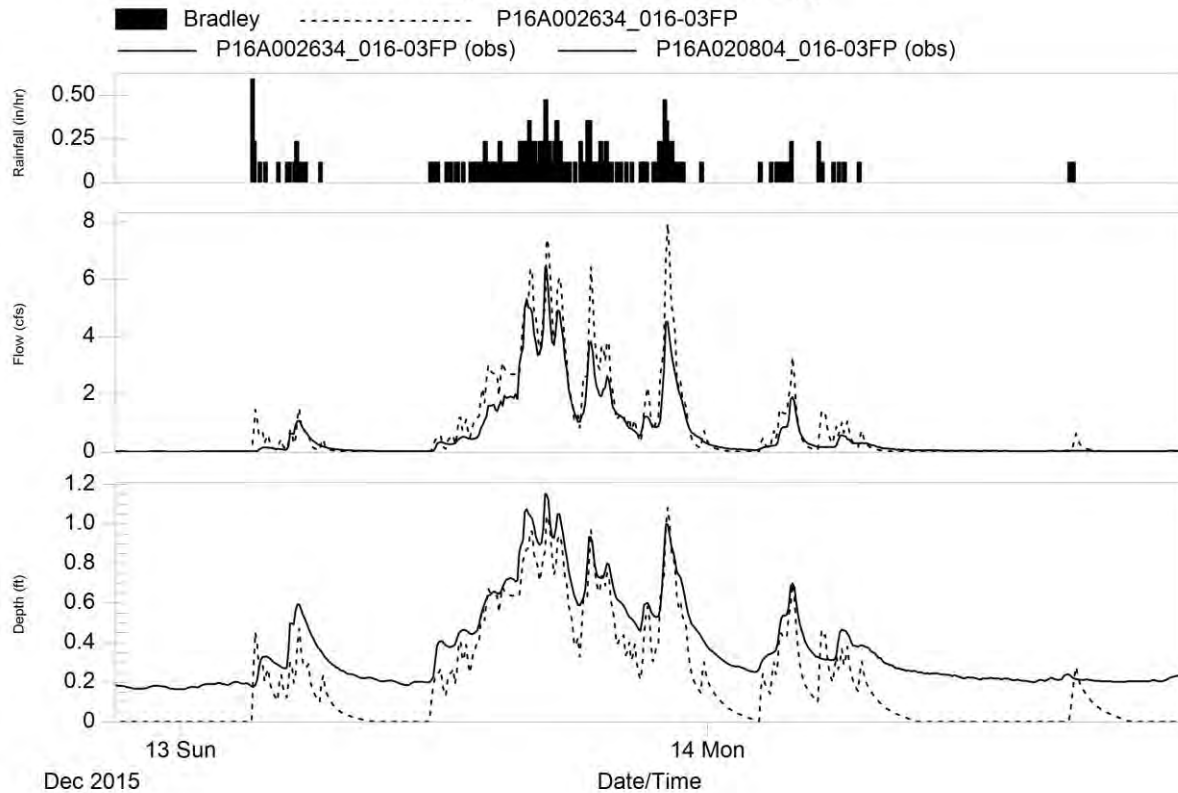
Duration: 34.83 h, Total Rainfall: 1.12 (in)



Cedar 016-03FP – Calibration Events

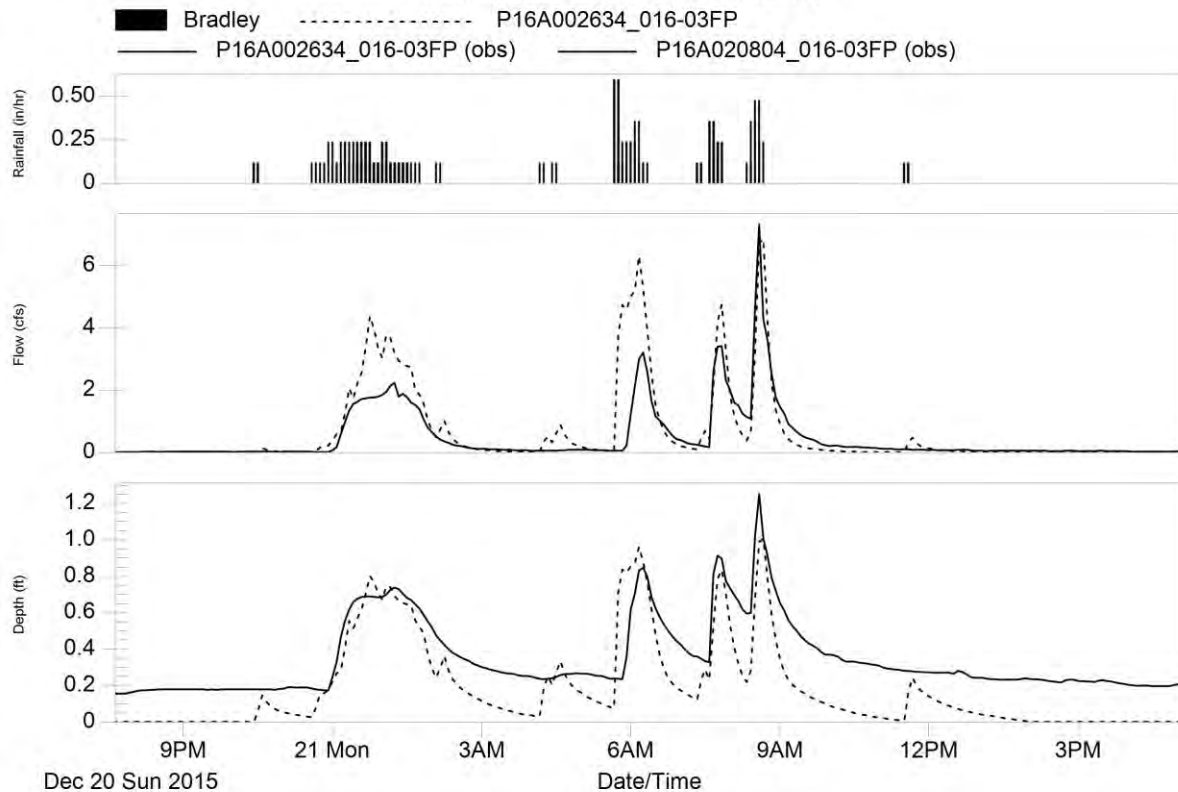
Event of December 13, 2015

Duration: 40.5 h, Total Rainfall: 1.77 (in)



Event of December 20, 2015

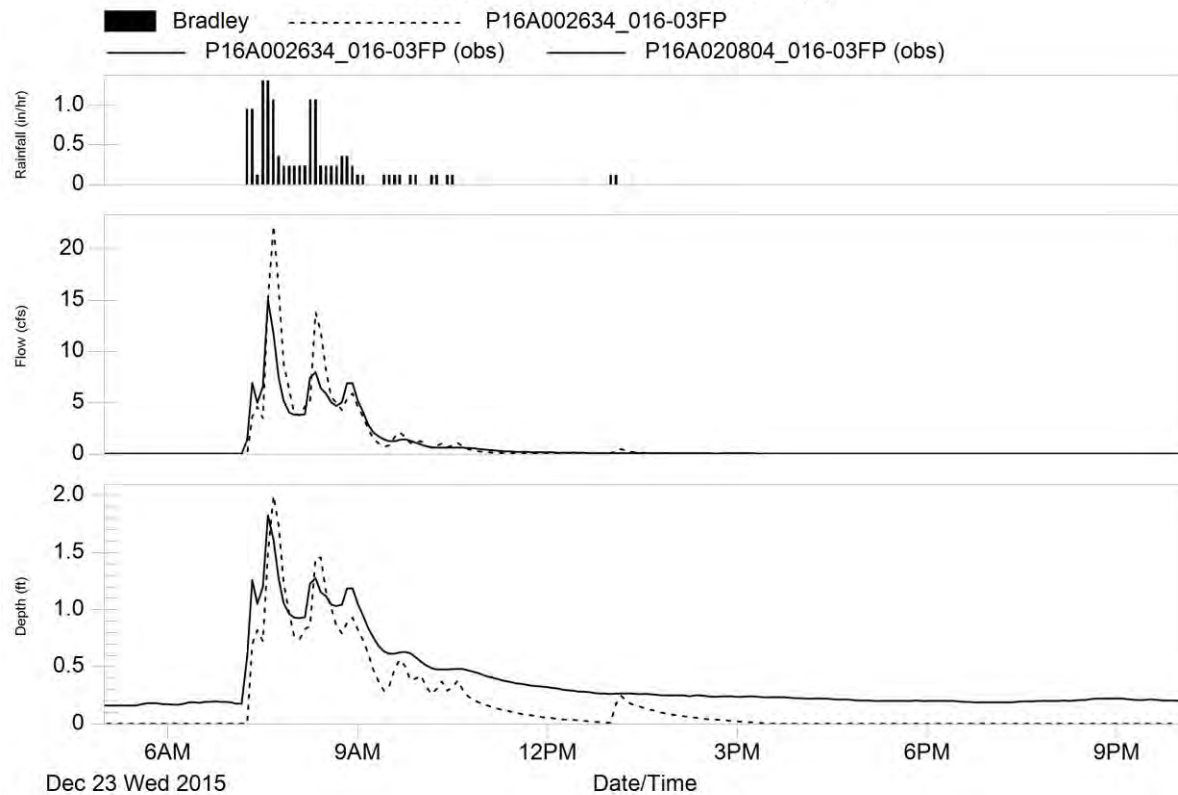
Duration: 17.92 h, Total Rainfall: 0.7 (in)



Cedar 016-03FP – Calibration Events

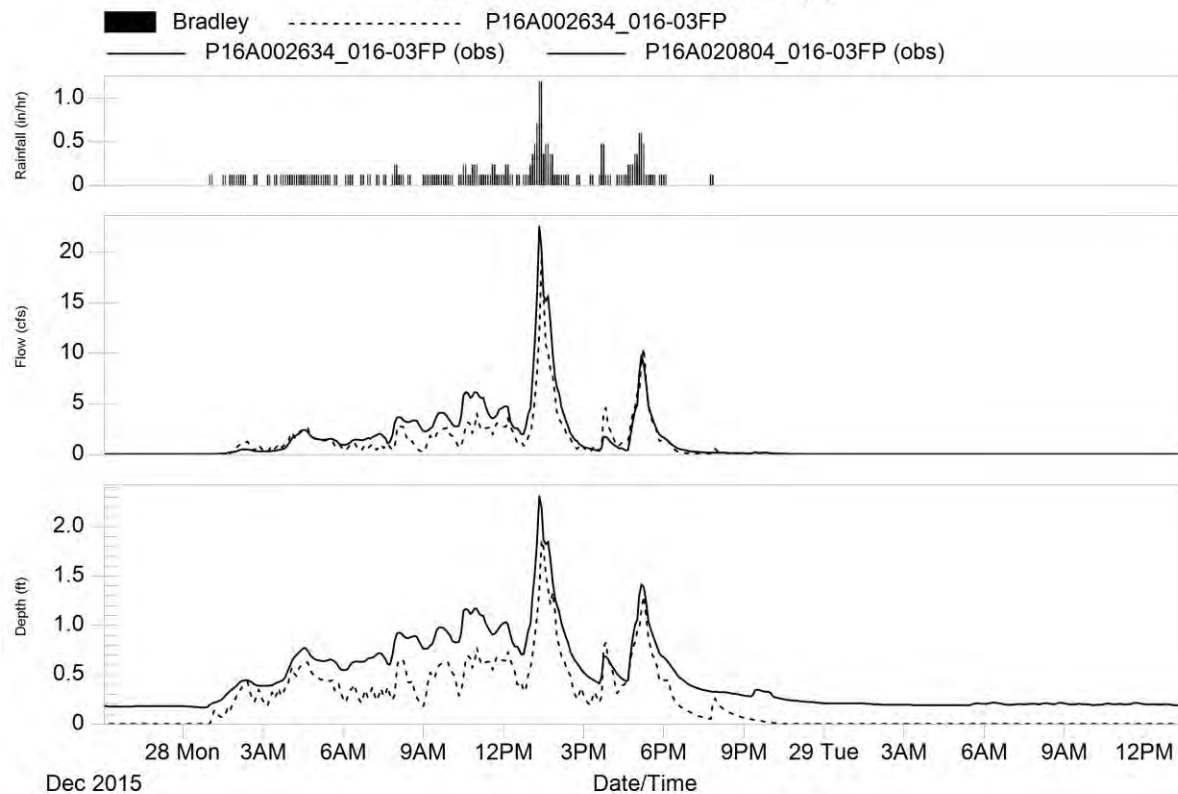
Event of December 23, 2015

Duration: 14.25 h, Total Rainfall: 0.73 (in)

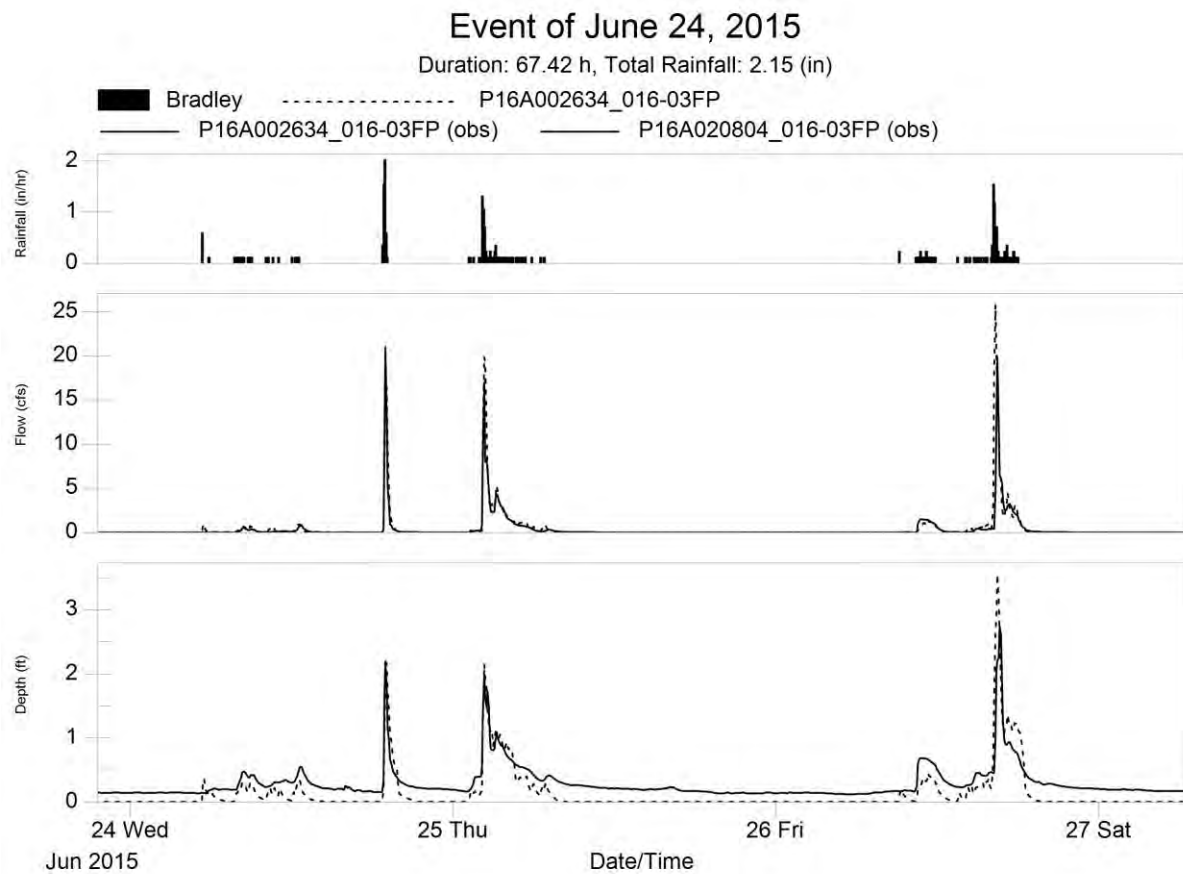
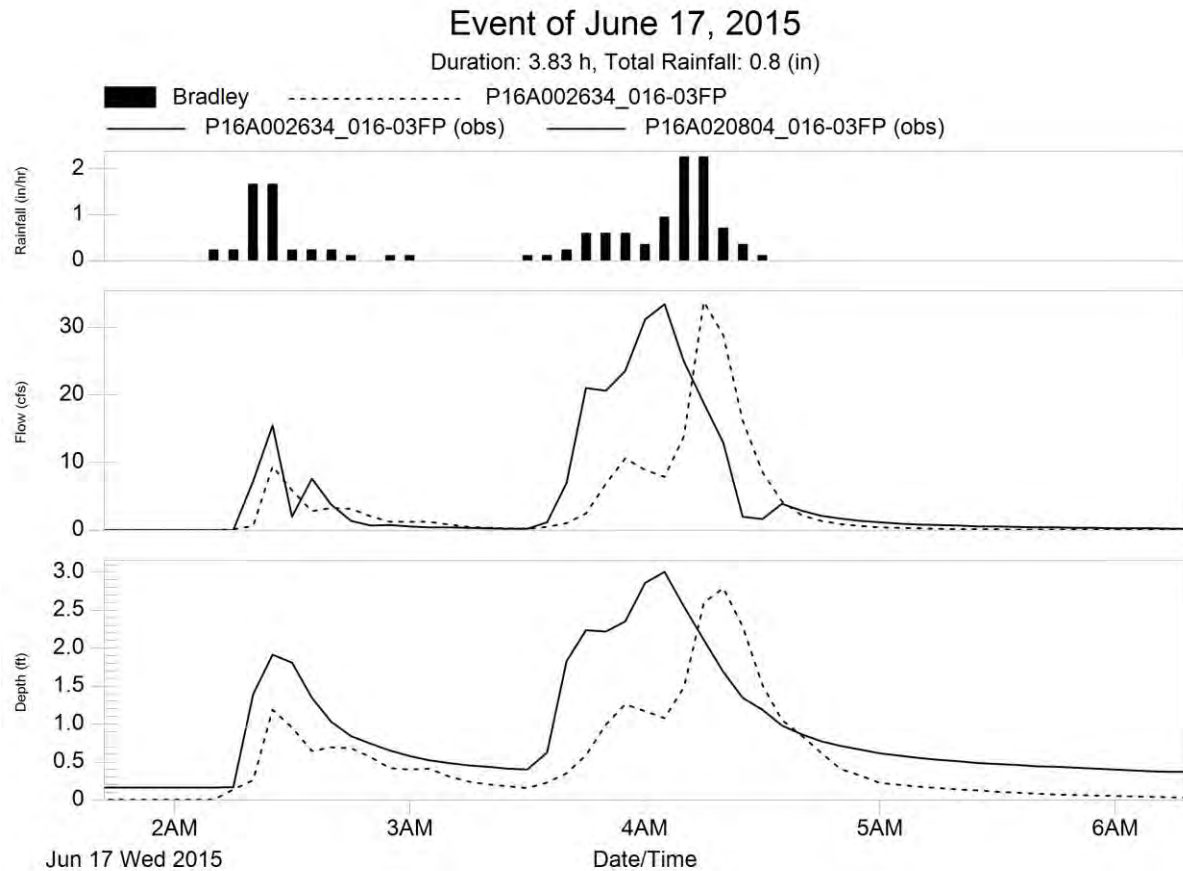


Event of December 28, 2015

Duration: 33.75 h, Total Rainfall: 1.64 (in)



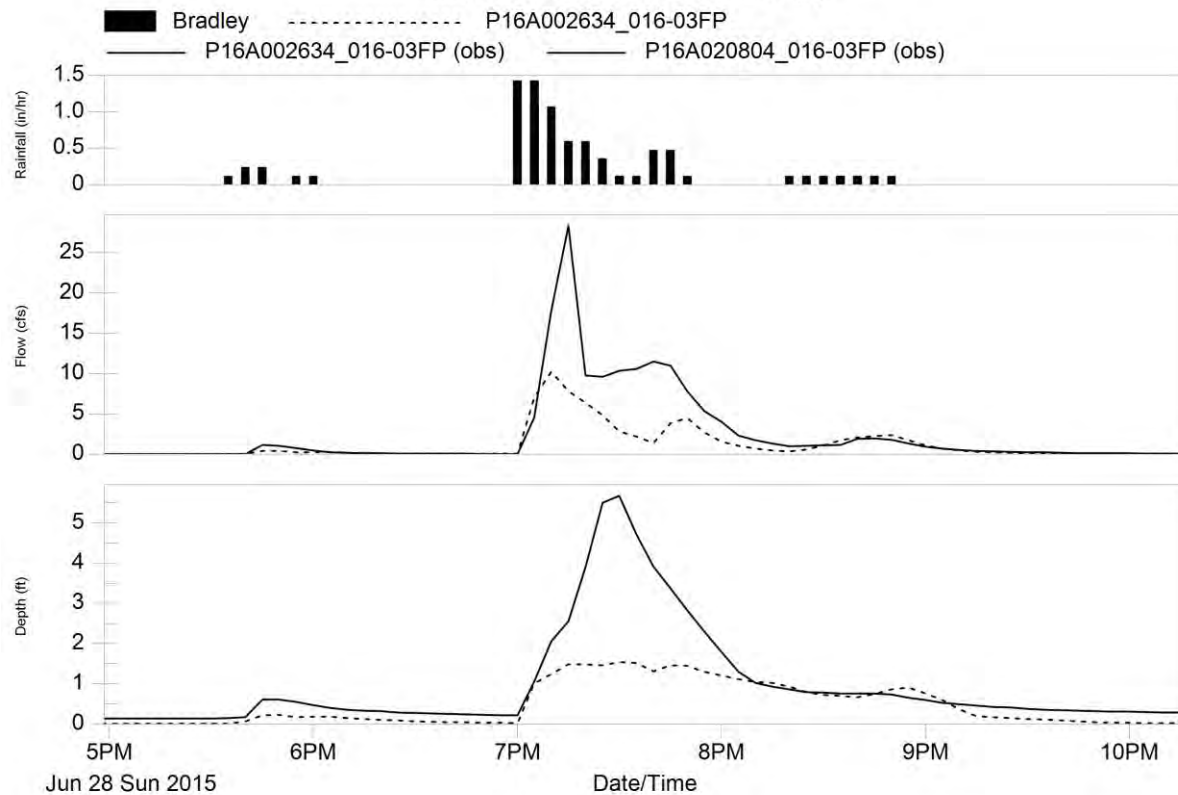
Cedar 016-03FP – Verification Events



Cedar 016-03FP – Verification Events

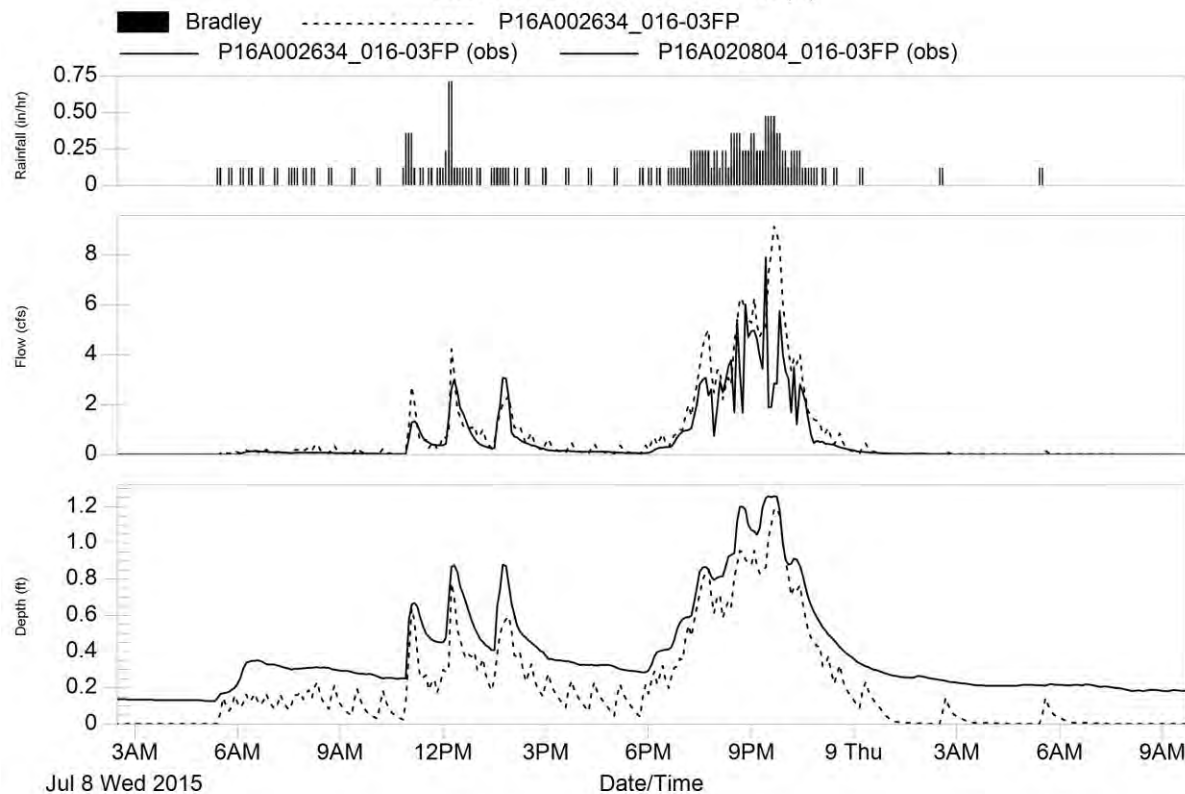
Event of June 28, 2015

Duration: 4.42 h, Total Rainfall: 0.51 (in)



Event of July 8, 2015

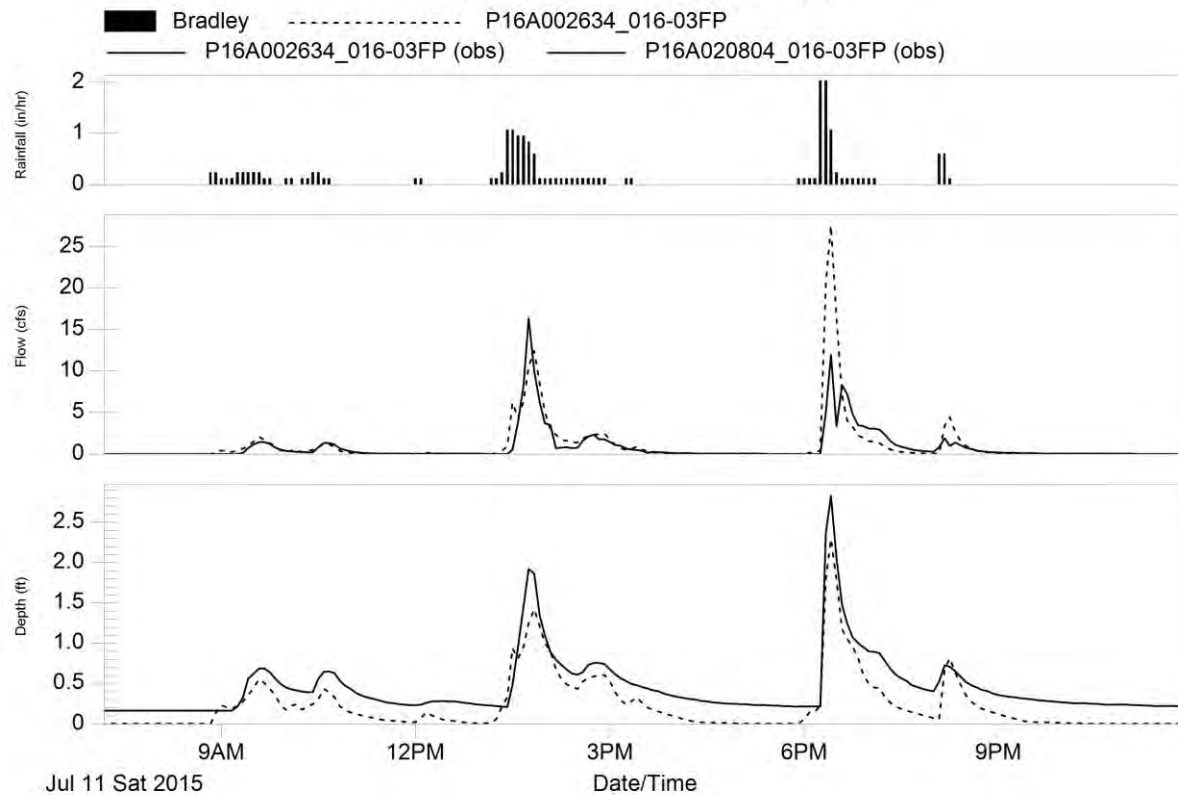
Duration: 26 h, Total Rainfall: 1.39 (in)



Cedar 016-03FP – Verification Events

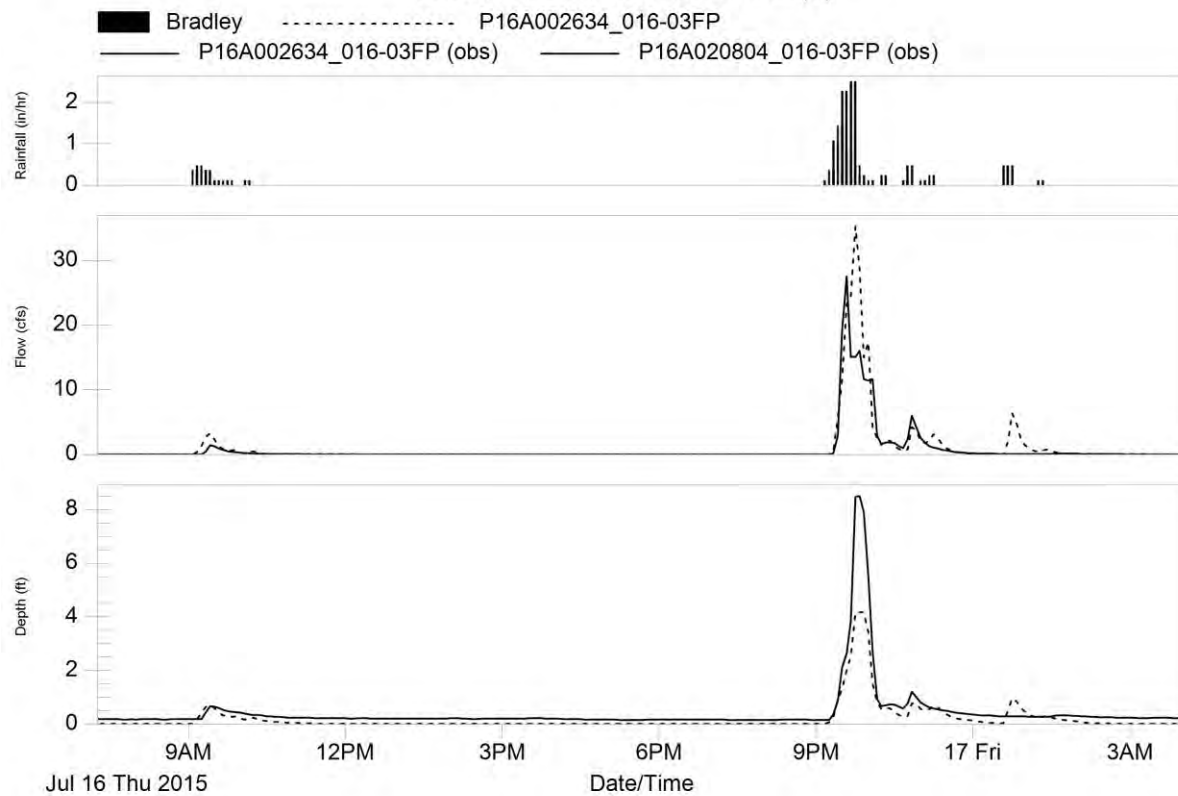
Event of July 11, 2015

Duration: 13.92 h, Total Rainfall: 1.07 (in)



Event of July 16, 2015

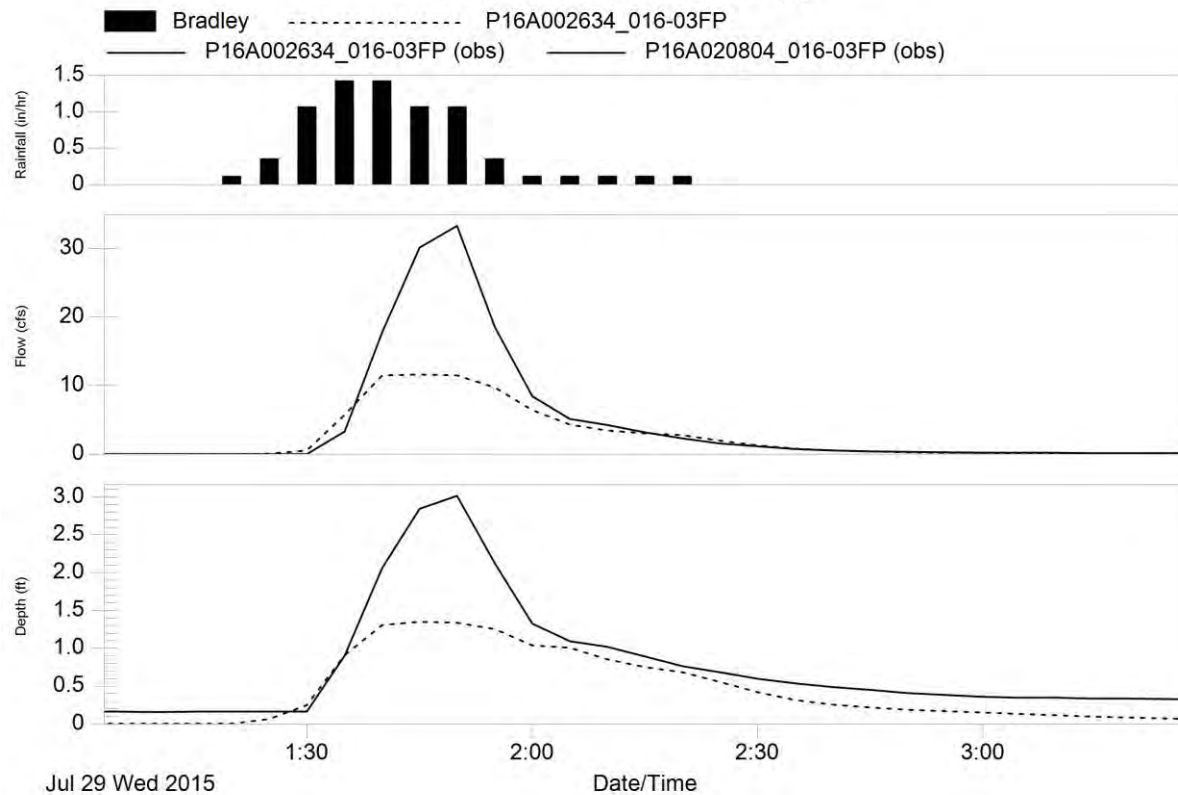
Duration: 17.33 h, Total Rainfall: 1.16 (in)



Cedar 016-03FP – Verification Events

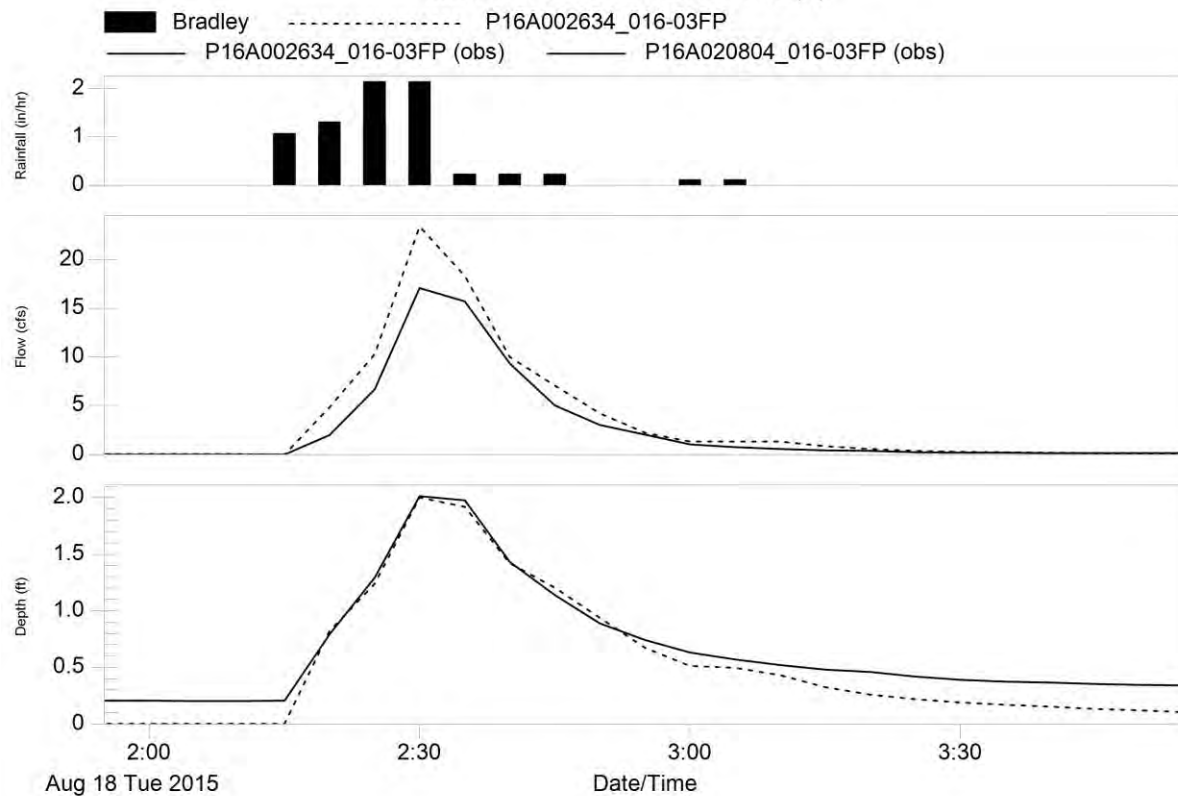
Event of July 29, 2015

Duration: 2 h, Total Rainfall: 0.51 (in)

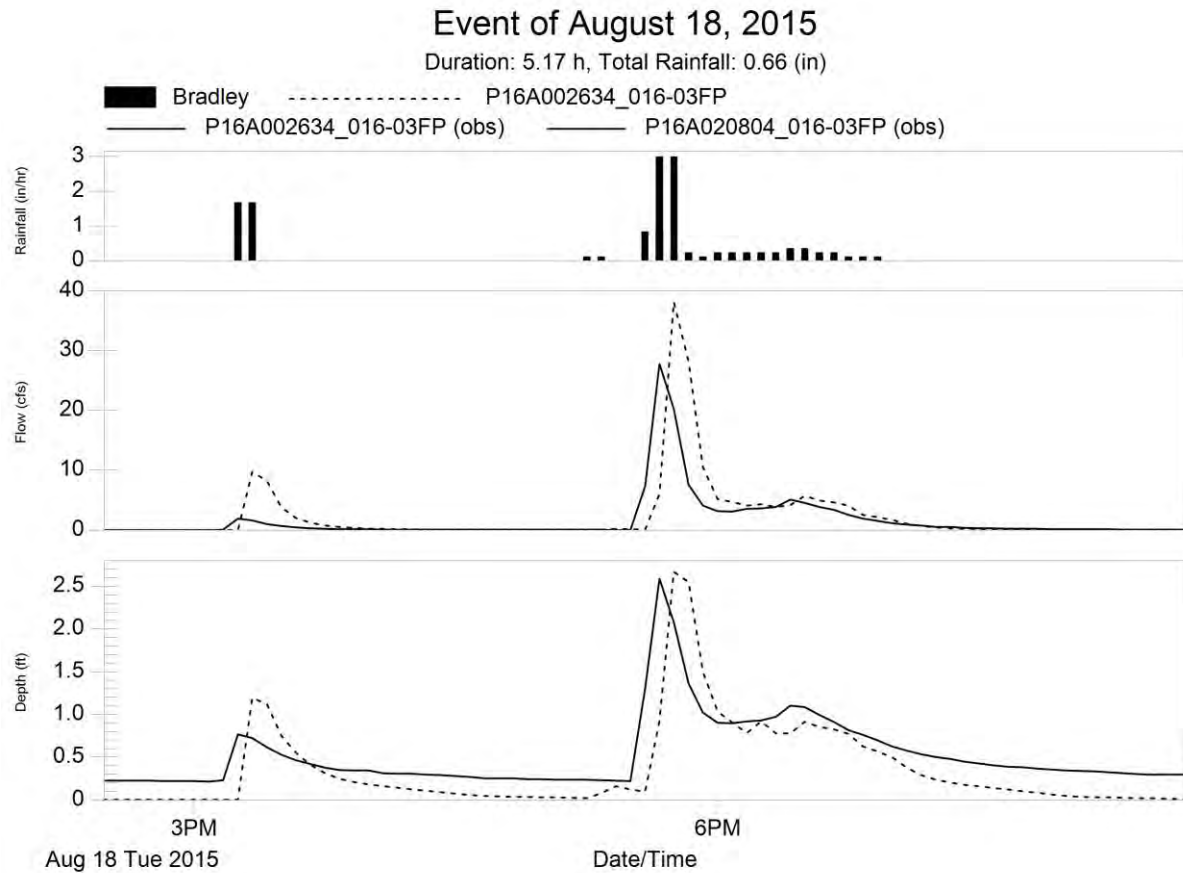


Event of August 18, 2015

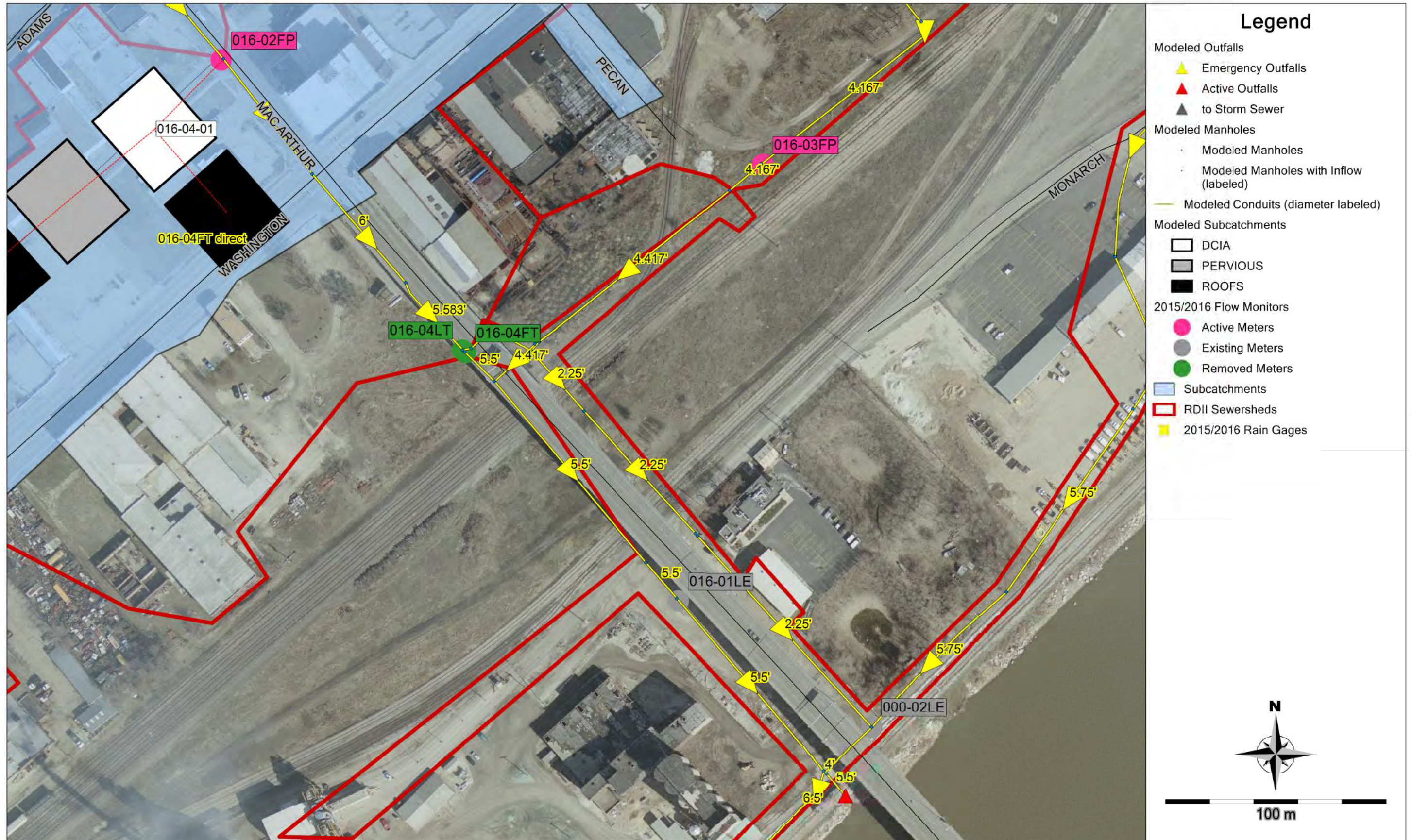
Duration: 1.67 h, Total Rainfall: 0.45 (in)



Cedar 016-03FP – Verification Events



016-04FT - Cedar Outfall Meter



Cedar 016-04FT

Date	Duration (h)	Rainfall (in)	Maximum Flow (cfs)		Maximum Flow (mgd)		Total Volume (ft³)		Volume (million gallons)		Peak Flow Rate (-15% to +25%)	Flow Volume (-10% to +20%)	Rainfall Variability	
		Bradley Edited	Observed	Modeled	Observed	Modeled	Observed	Modeled	Observed	Modeled				
CALIBRATION EVENTS - FLOW														
9/8/2015 10:20	5.0	0.86	Bad meter data										relatively uniform variable possibly uniform	
9/18/2015 12:45	13.3	1.62	Bad meter data											
11/5/2015 13:15	18.0	0.43	Event not observed in overflow											
11/11/2015 19:10	4.1	0.60	30.15	136.30	19.477	88.050	61420	264100	0.459	1.975	352%	330%		
11/16/2015 21:00	37.4	2.37	57.37	68.80	37.061	44.445	279600	571800	2.091	4.277	20%	105%		
11/26/2015 18:15	34.8	1.12	34.59	21.09	22.345	13.624	110100	161800	0.824	1.210	-39%	47%		
12/13/2015 1:05	40.5	1.77	Bad meter data											
12/20/2015 21:25	17.9	0.70	Bad meter data											
12/23/2015 6:25	14.3	0.73	Bad meter data											
12/28/2015 0:25	33.8	1.64	Bad meter data											
VERIFICATION EVENTS - FLOW														
6/17/2015 2:05	3.8	0.80	290.1	159.9	187.405	103.295	522500	285200	3.908	2.133	-45%	-45%	variable	
6/24/2015 4:20	67.4	2.15	Bad meter data										possibly uniform possibly uniform <i>possibly uniform</i>	
6/28/2015 17:25	4.4	0.51	Bad meter data											
7/8/2015 5:05	26.0	1.39	Bad meter data											
7/11/2015 8:35	13.9	1.07	284.6	79.79	183.852	51.544	476000	296500	3.560	2.218	-72%	-38%		
7/16/2015 9:00	17.3	1.16	Bad meter data											
7/29/2015 1:15	2.0	0.51	Bad meter data											
8/18/2015 2:05	1.7	0.45	256.9	107.2									165.957	69.251
8/18/2015 15:00	5.2	0.66	Bad meter data											
									WEIGHTED AVERAGES					
									Calibration - Relatively Uniform		0%	0%	relatively uniform	
									Calibration - Possibly Uniform		-39%	47%	<i>possibly uniform</i>	
									Calibration - Variable		20%	105%	variable	
									Calibration Weighted - All Events		-2%	76%		
									Verification - Relatively Uniform		N/A	N/A	relatively uniform	
									Verification - Possibly Uniform		-65%	-32%	<i>possibly uniform</i>	
									Verification - Variable		-45%	-45%	variable	
									Verification Weighted - All Events		-58%	-38%		
									Weighted Average - All Events		-51%	-7%		
									NET AVERAGES					
									Calibration - Relatively Uniform		352%	330%	relatively uniform	
									Calibration - Possibly Uniform		-39%	47%	<i>possibly uniform</i>	
									Calibration - Variable		20%	105%	variable	
									Calibration Net - All Events		111%	160%		
									Verification - Relatively Uniform		#DIV/0!	#DIV/0!	relatively uniform	
									Verification - Possibly Uniform		-65%	-29%	<i>possibly uniform</i>	
									Verification - Variable		-45%	-45%	variable	
									Verification Net - All Events		-58%	-35%		
									Net Average - All Events		26%	63%		

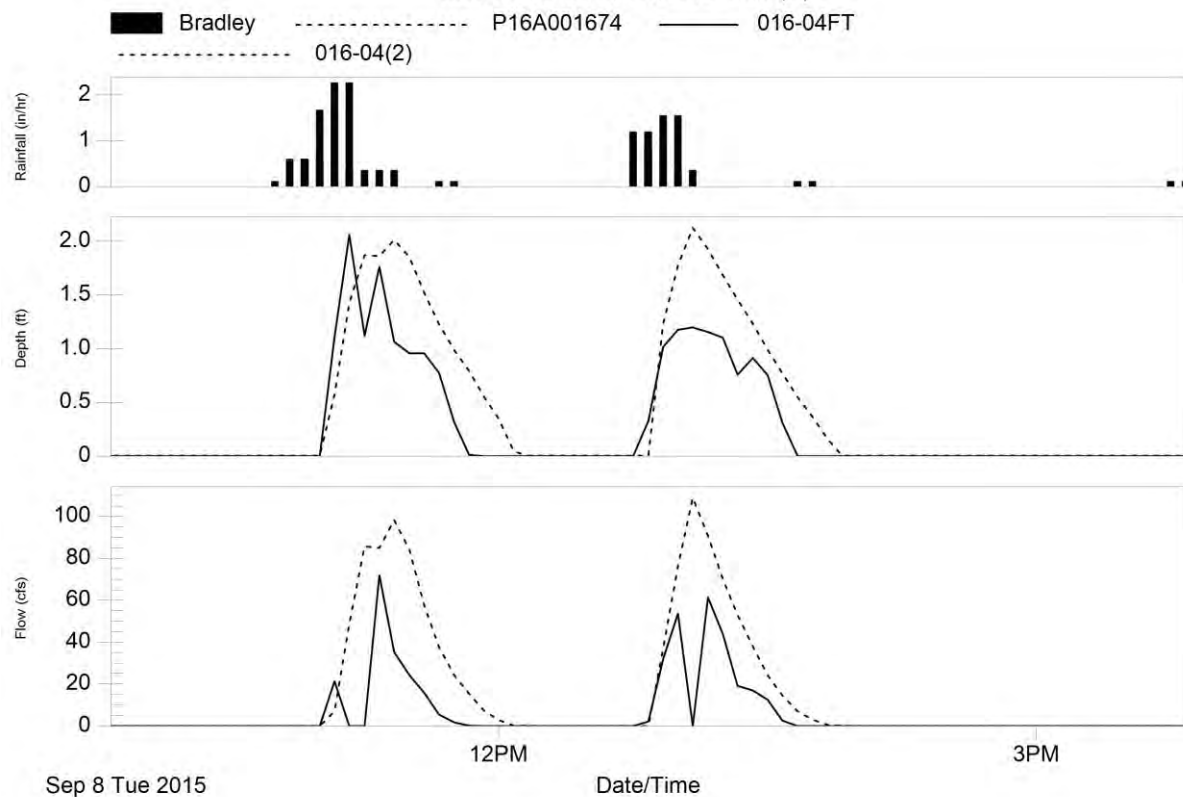
Cedar 016-04FT Depth

Date	Duration (h)	Maximum Depth (ft)		Minimum Depth (ft)		Average Depth (ft)		Maximum Depth (ft)	Average Depth (ft)	Rainfall Variability
		metered	modeled	metered	modeled	metered	modeled	Surcharged: -0.33 ft to +1.67 ft	Surcharged: -0.33 ft to +1.67 ft	
CALIBRATION EVENTS - DEPTH								Non-Surcharged: -0.33 ft to +0.33 ft	Non-Surcharged: -0.33 ft to +0.33 ft	
9/8/2015 10:20:00	5.0	2.1	2.1	0.00	0.00	0.31	0.49	0.1	0.18	variable
9/18/2015 12:45:00	13.3	3.4	2.7	0.00	0.00	0.34	0.36	-0.7	0.01	relatively uniform
11/5/2015 13:15:00	18.0	Event not observed in overflow								
11/11/2015 19:10:00	4.1	Bad meter data								
11/16/2015 21:00:00	37.4	1.9	1.7	0.00	0.00	0.13	0.19	-0.2	0.06	variable
11/26/2015 18:15:00	34.8	1.3	0.9	0.00	0.00	0.05	0.09	-0.4	0.04	possibly uniform
12/13/2015 1:05:00	40.5	Bad meter data								
12/20/2015 21:25:00	17.9	Bad meter data								
12/23/2015 6:25:00	14.3	Bad meter data								
12/28/2015 0:25:00	33.8	Bad meter data								
VERIFICATION EVENTS - DEPTH										
6/17/2015 2:05:00	3.8	3.5	3.3	0.00	0.00	0.83	0.54	-0.2	-0.28	variable
6/24/2015 4:20:00	67.4	3.6	4.6	0.00	0.00	0.12	0.23	1.0	0.11	variable
6/28/2015 17:25:00	4.4	5.9	2.5	0.00	0.11	1.11	0.94	-3.3	-0.17	variable
7/8/2015 5:05:00	26.0	2.2	1.4	0.00	0.00	0.17	0.14	-0.8	-0.03	relatively uniform
7/11/2015 8:35:00	13.9	3.4	1.8	0.00	0.00	0.24	0.20	-1.6	-0.05	possibly uniform
7/16/2015 9:00:00	17.3	11.3	10.8	0.15	0.00	0.44	0.28	-0.5	-0.16	relatively uniform
7/29/2015 1:15:00	2.0	1.8	1.9	0.48	0.00	0.89	0.62	0.1	-0.27	variable
8/18/2015 2:05:00	1.7	3.3	2.1	0.00	0.00	0.77	0.76	-1.2	-0.01	possibly uniform
8/18/2015 15:00:00	5.2	3.7	2.2	0.00	0.00	0.44	0.41	-1.4	-0.03	relatively uniform
WEIGHTED AVERAGES										
Verification - Relatively Uniform								-0.7	-0.08	relatively uniform
Verification - Variable								-1.1	-0.22	variable
Verification Weighted - All Events								-1.0	-0.15	All Events
Weighted Average - All Events								-0.9	-0.12	
NET AVERAGES										
Calibration - Relatively Uniform								-0.7	0.01	relatively uniform
Calibration - Possibly Uniform								-0.4	0.04	possibly uniform
Calibration - Variable								-0.1	0.12	variable
Calibration Net - All Events								-0.3	0.07	All Events
Verification - Relatively Uniform								-0.9	-0.07	relatively uniform
Verification - Possibly Uniform								-1.4	-0.03	possibly uniform
Verification - Variable								-0.6	-0.15	variable
Verification Net - All Events								-0.9	-0.10	All Events
Net Average - All Events								-0.7	-0.05	

Cedar 016-04FT – Calibration Events

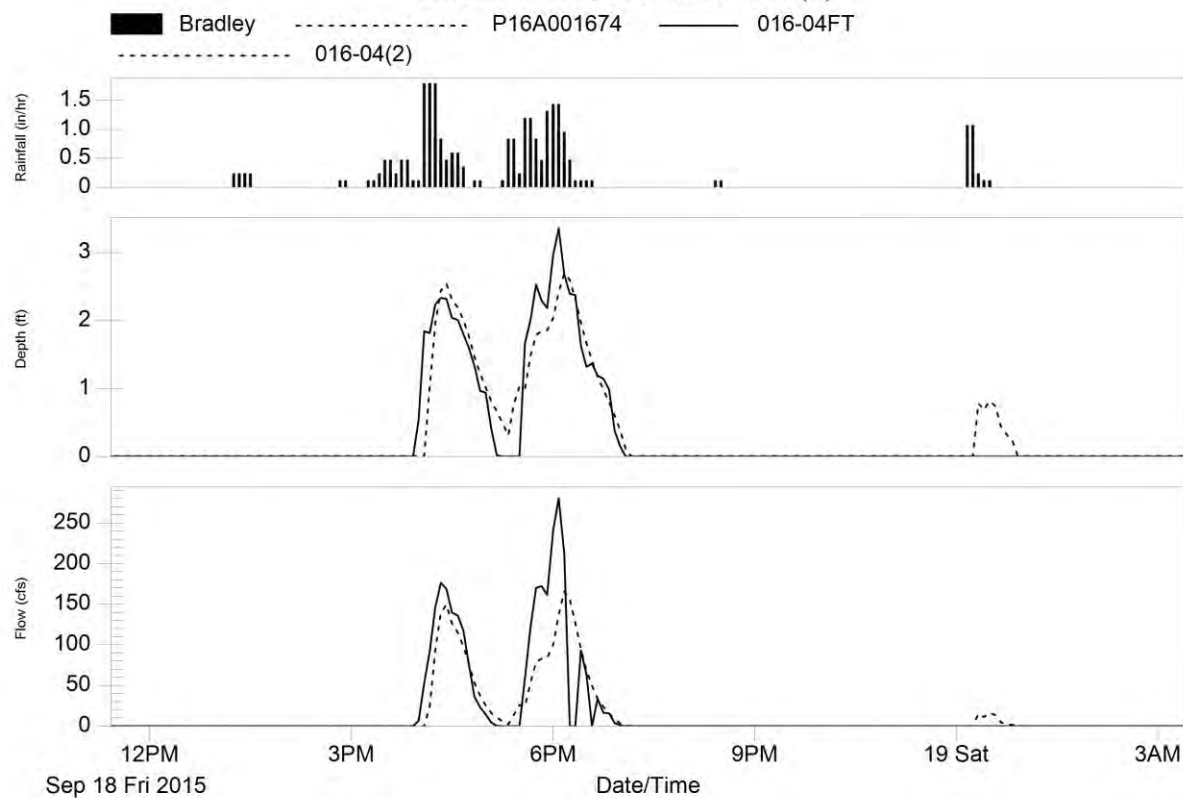
Event of September 8, 2015

Duration: 5 h, Total Rainfall: 0.86 (in)



Event of September 18, 2015

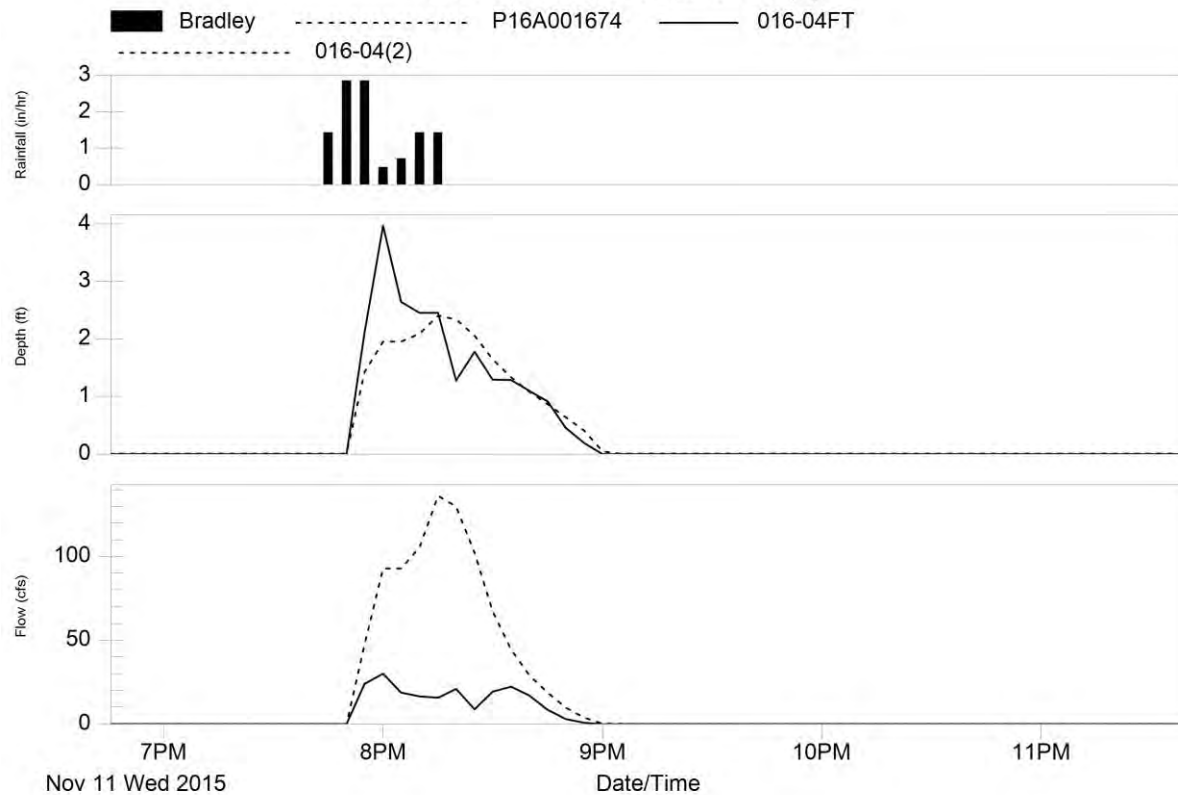
Duration: 13.33 h, Total Rainfall: 1.62 (in)



Cedar 016-04FT – Calibration Events

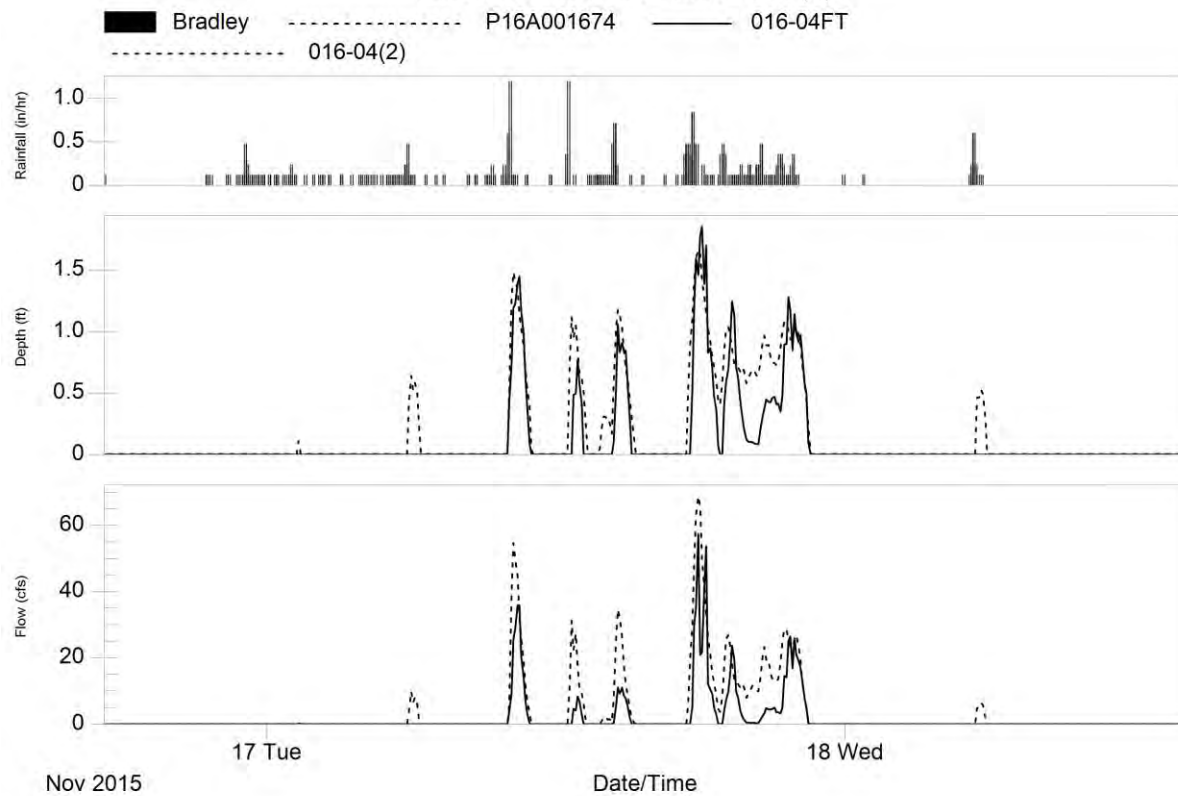
Event of November 11, 2015

Duration: 4.08 h, Total Rainfall: 0.6 (in)



Event of November 16, 2015

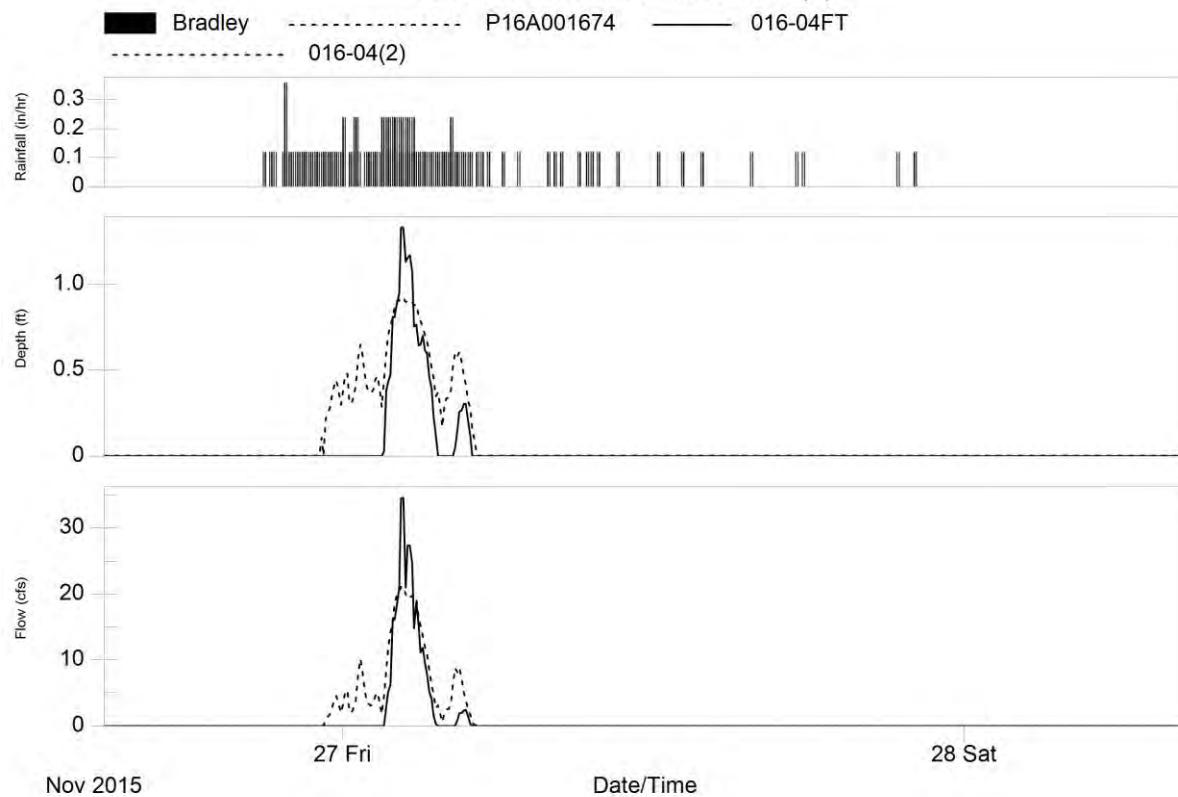
Duration: 37.42 h, Total Rainfall: 2.37 (in)



Cedar 016-04FT – Calibration Events

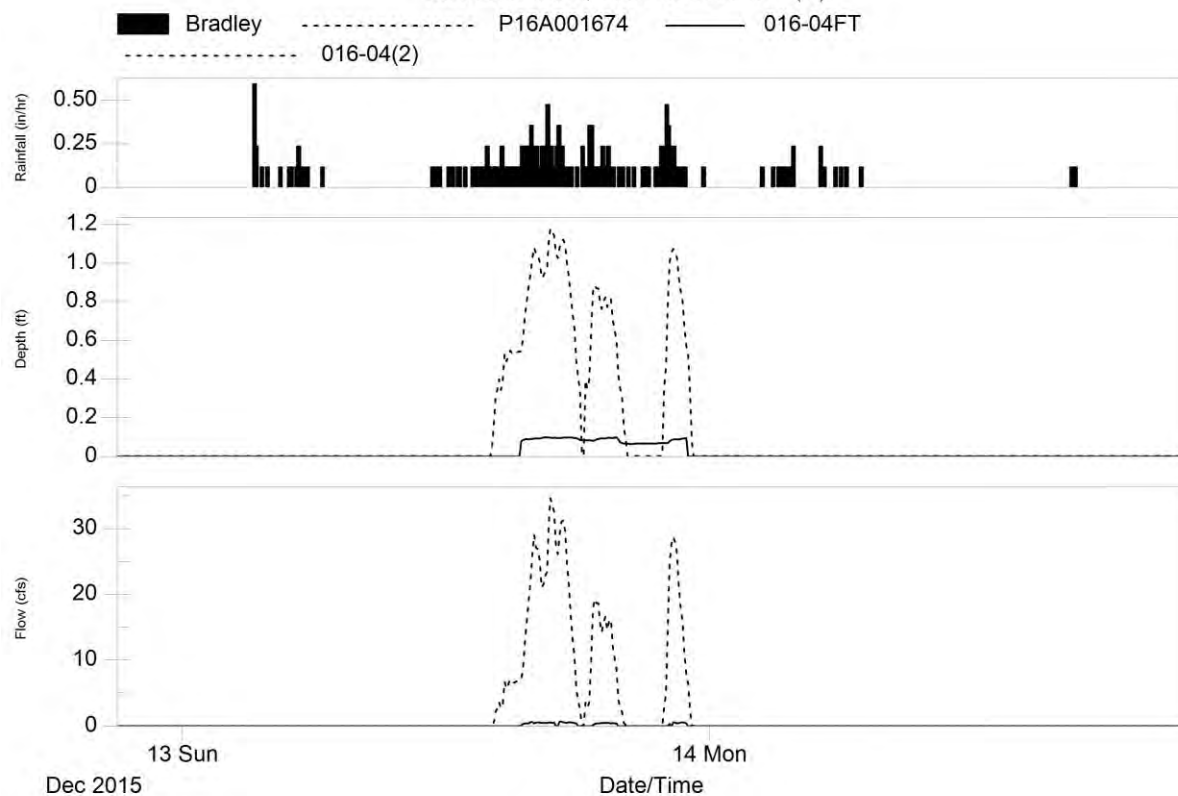
Event of November 26, 2015

Duration: 34.83 h, Total Rainfall: 1.12 (in)



Event of December 13, 2015

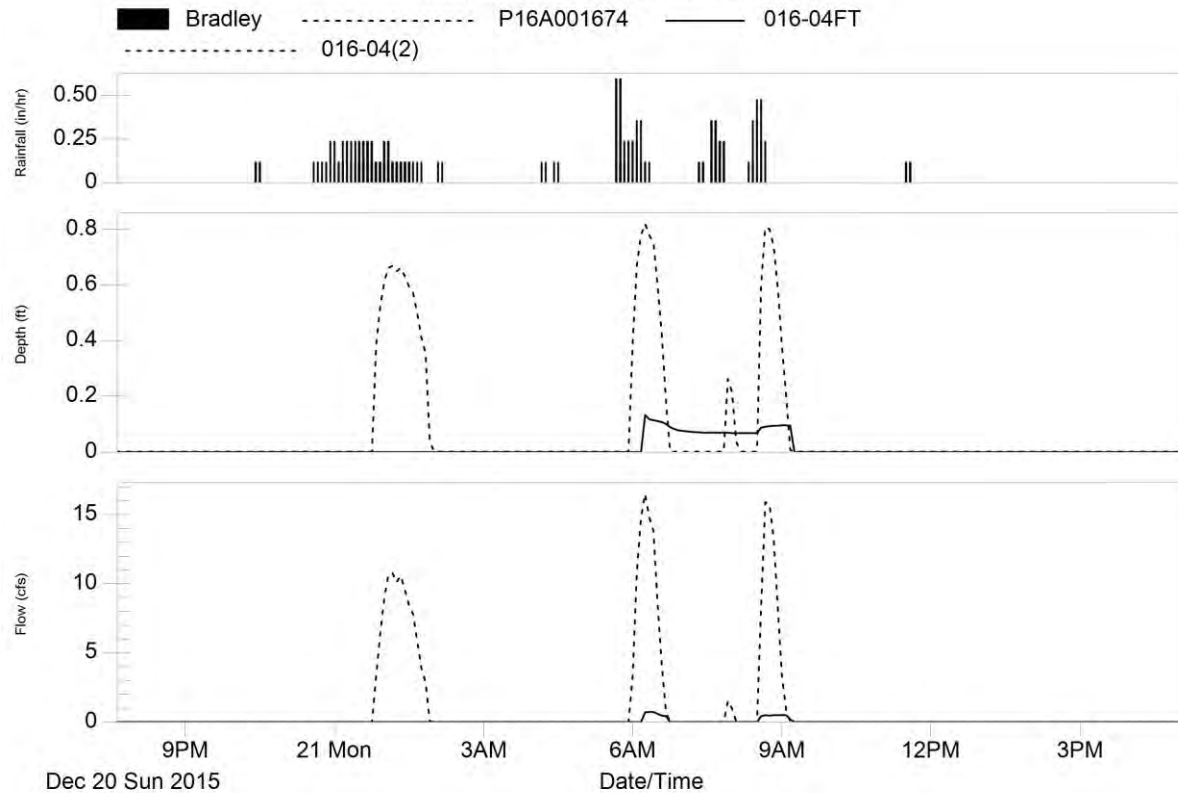
Duration: 40.5 h, Total Rainfall: 1.77 (in)



Cedar 016-04FT – Calibration Events

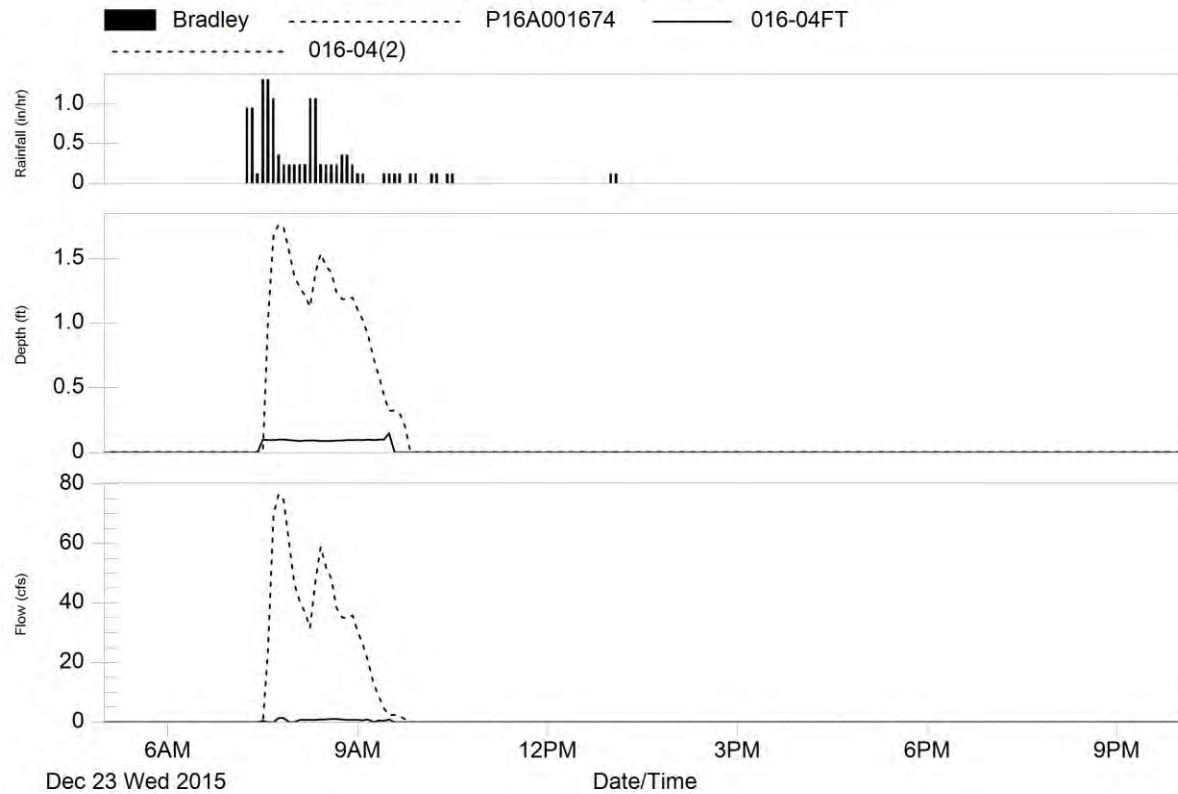
Event of December 20, 2015

Duration: 17.92 h, Total Rainfall: 0.7 (in)



Event of December 23, 2015

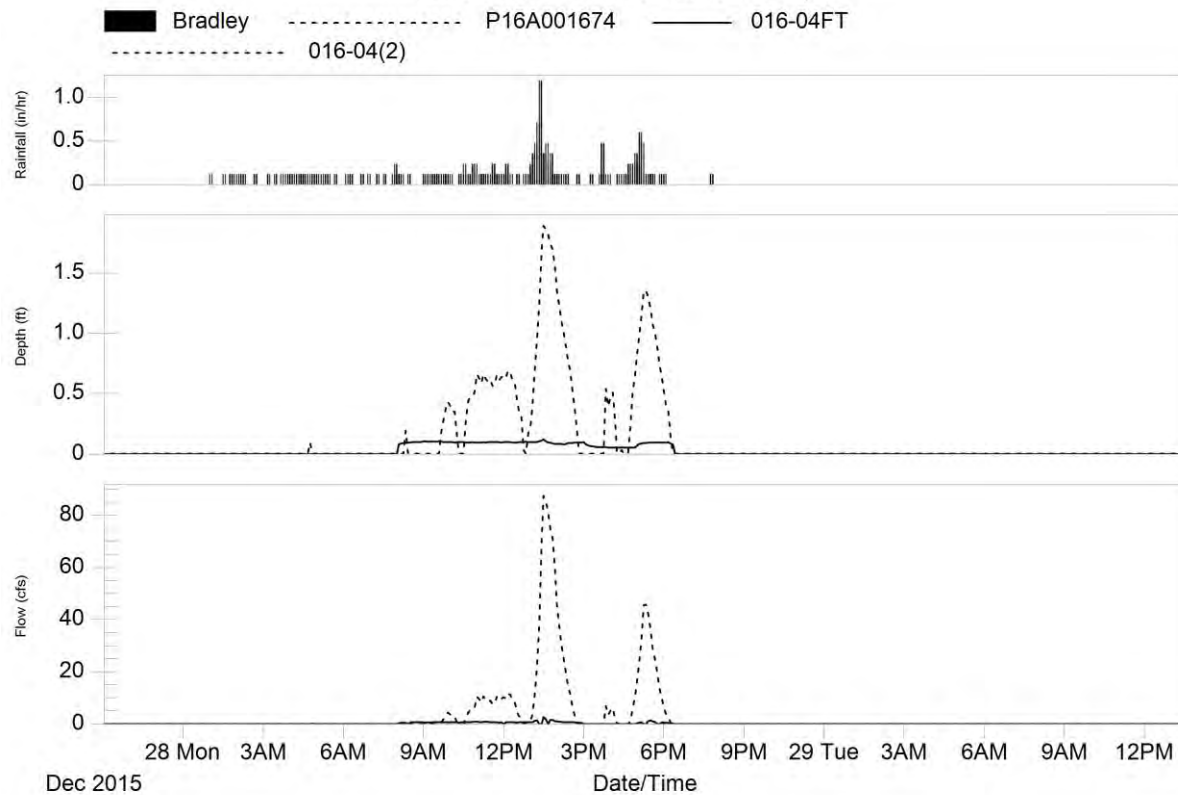
Duration: 14.25 h, Total Rainfall: 0.73 (in)



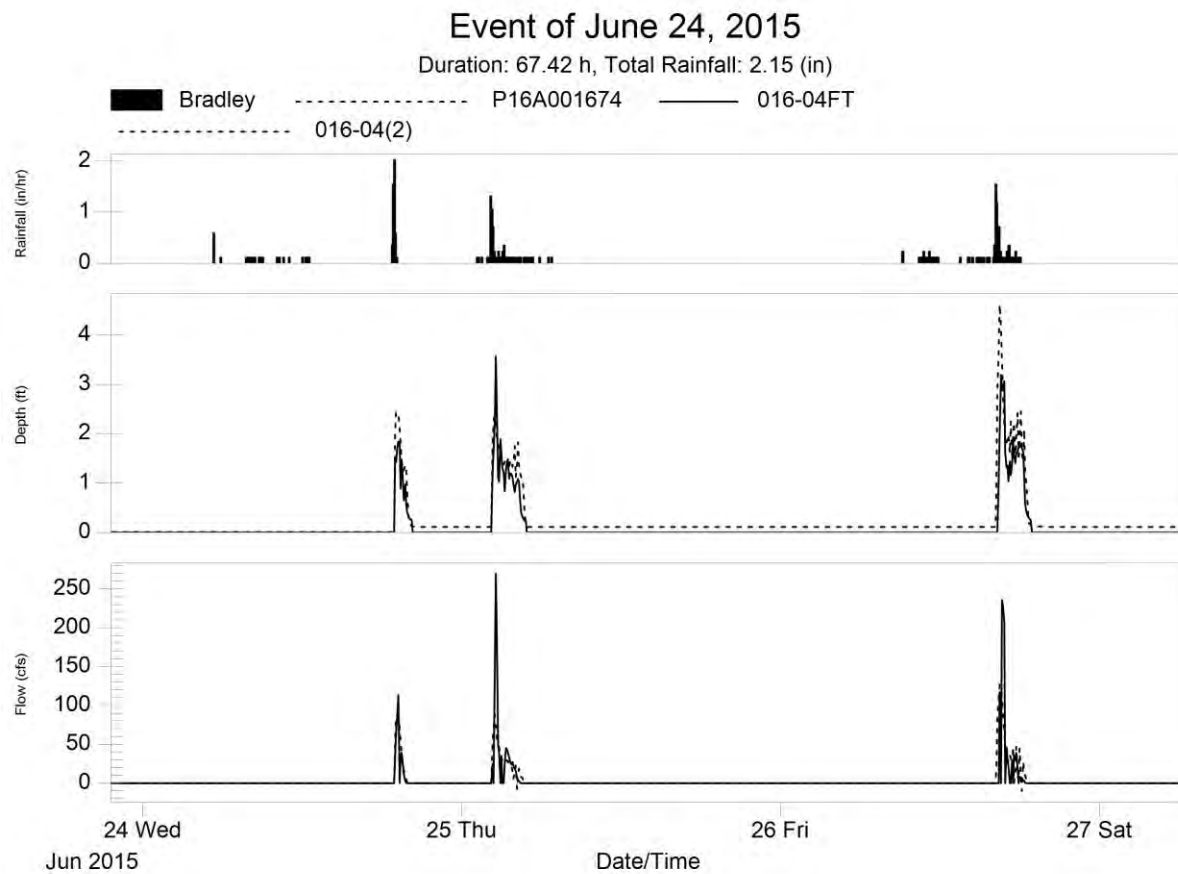
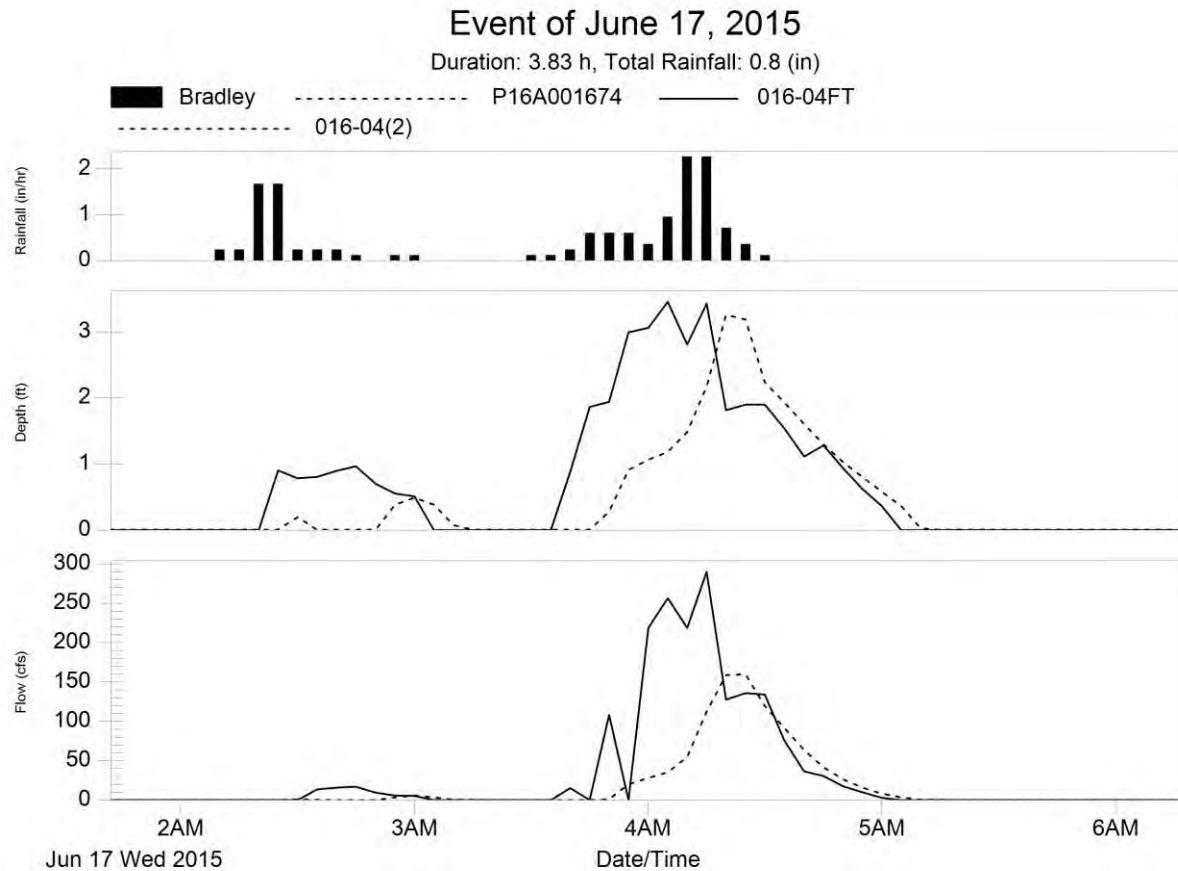
Cedar 016-04FT – Calibration Events

Event of December 28, 2015

Duration: 33.75 h, Total Rainfall: 1.64 (in)



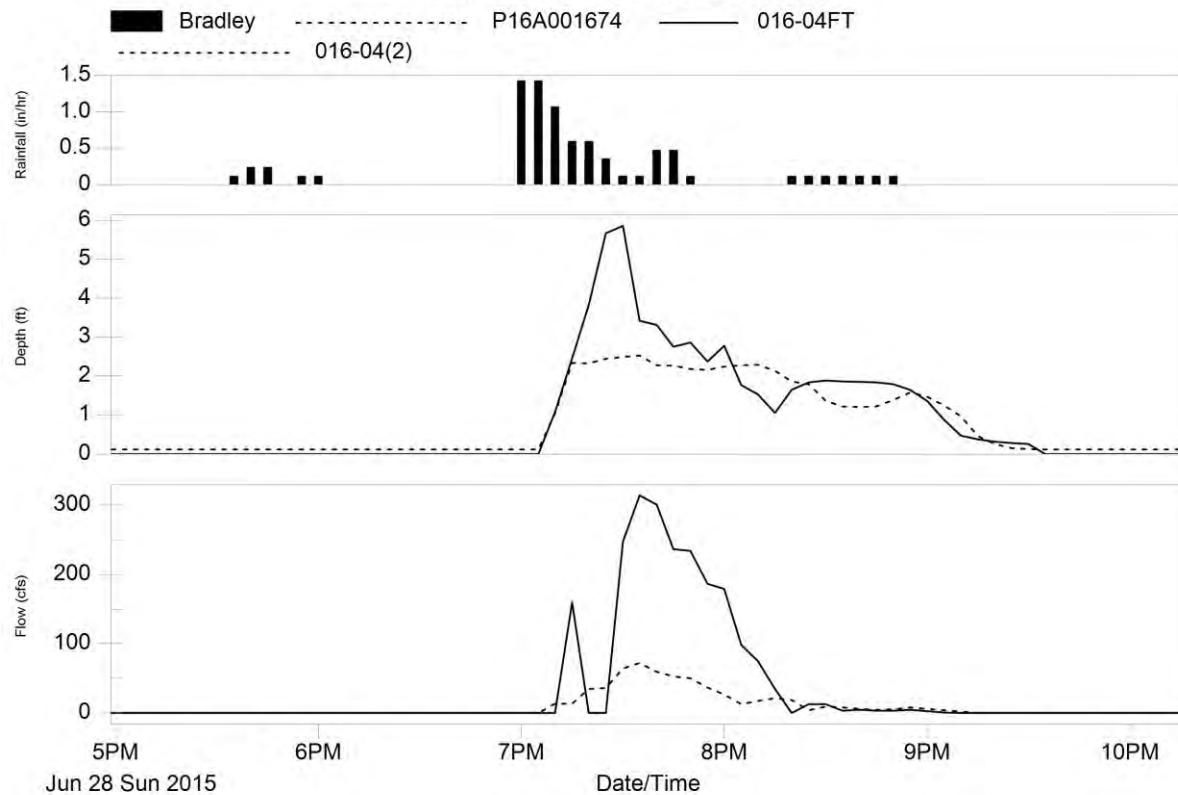
Cedar 016-04FT – Verification Events



Cedar 016-04FT – Verification Events

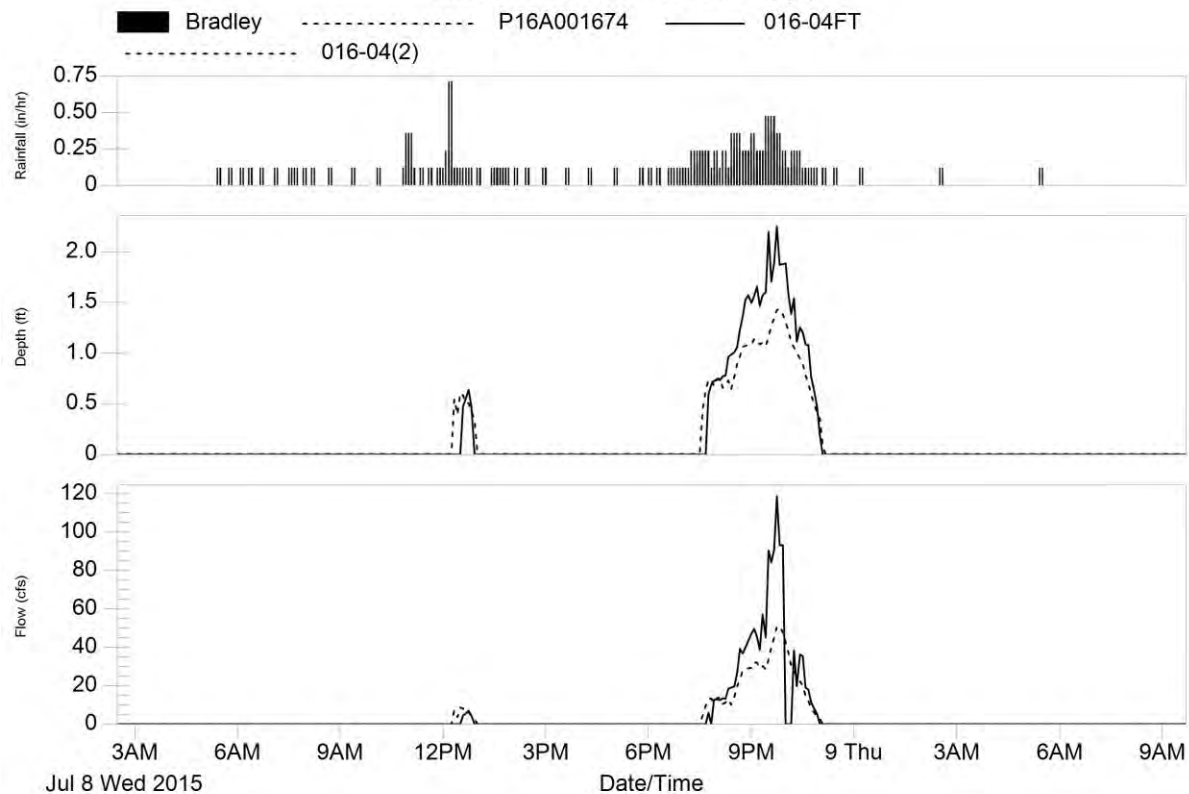
Event of June 28, 2015

Duration: 4.42 h, Total Rainfall: 0.51 (in)



Event of July 8, 2015

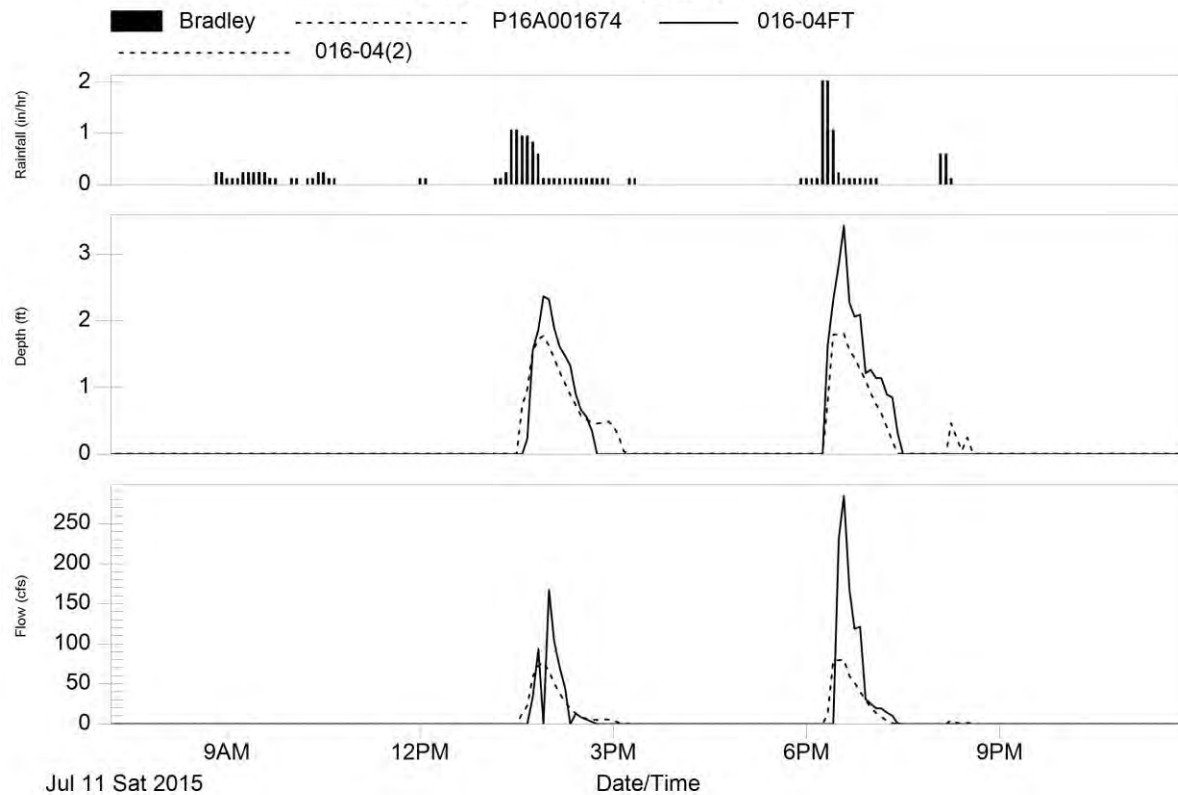
Duration: 26 h, Total Rainfall: 1.39 (in)



Cedar 016-04FT – Verification Events

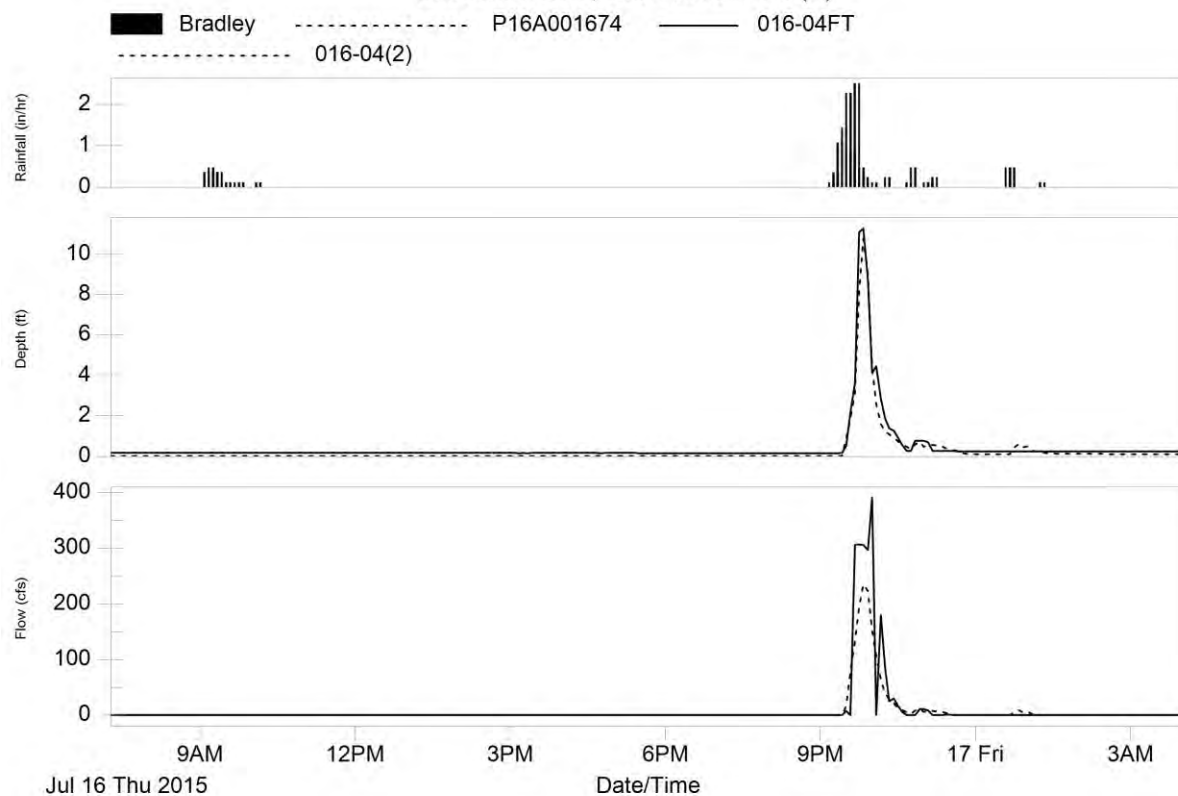
Event of July 11, 2015

Duration: 13.92 h, Total Rainfall: 1.07 (in)

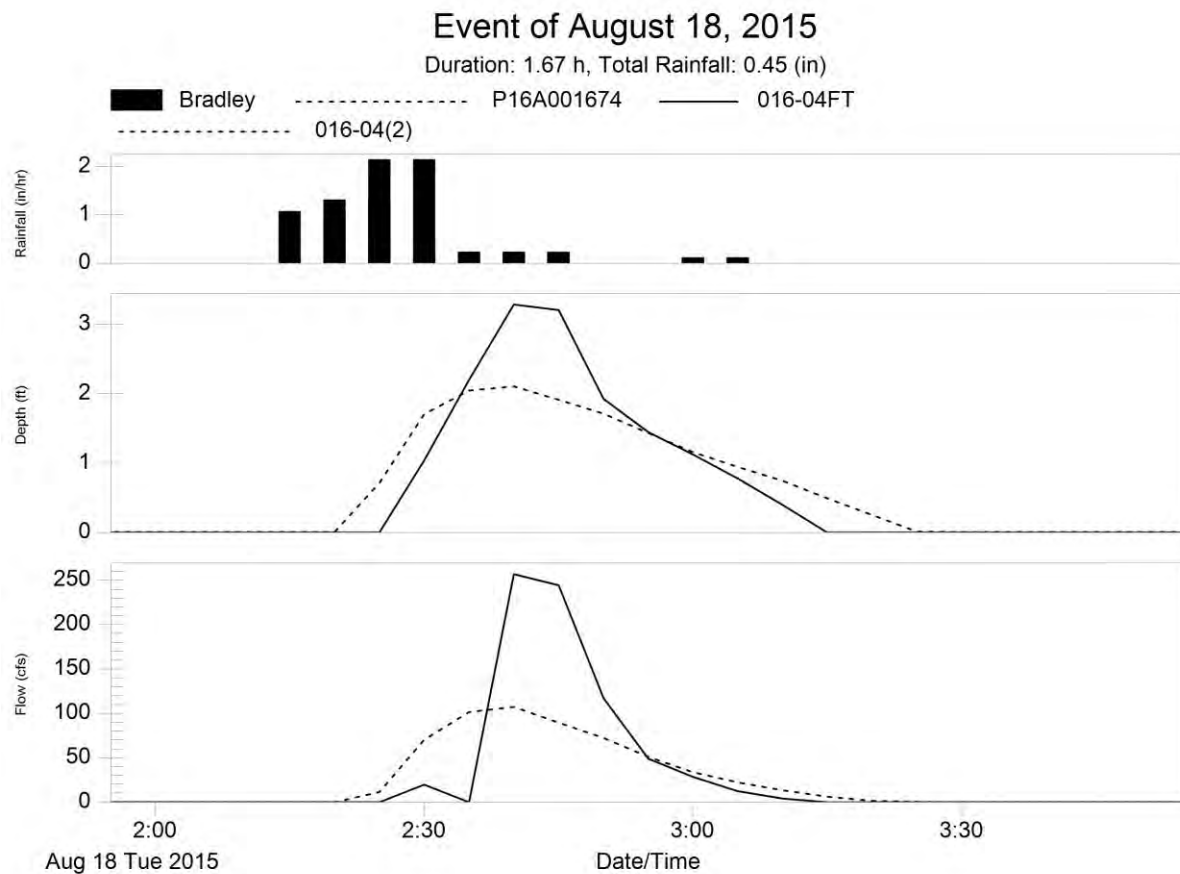
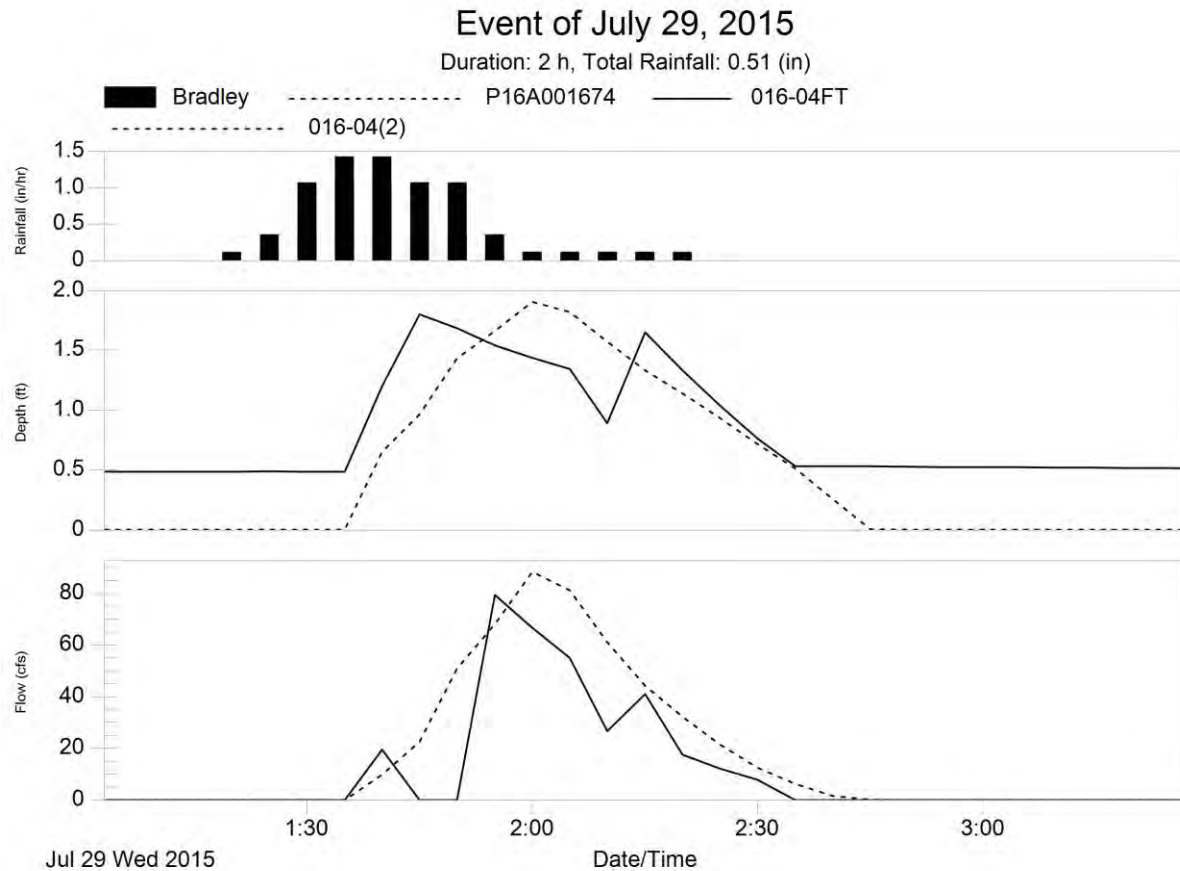


Event of July 16, 2015

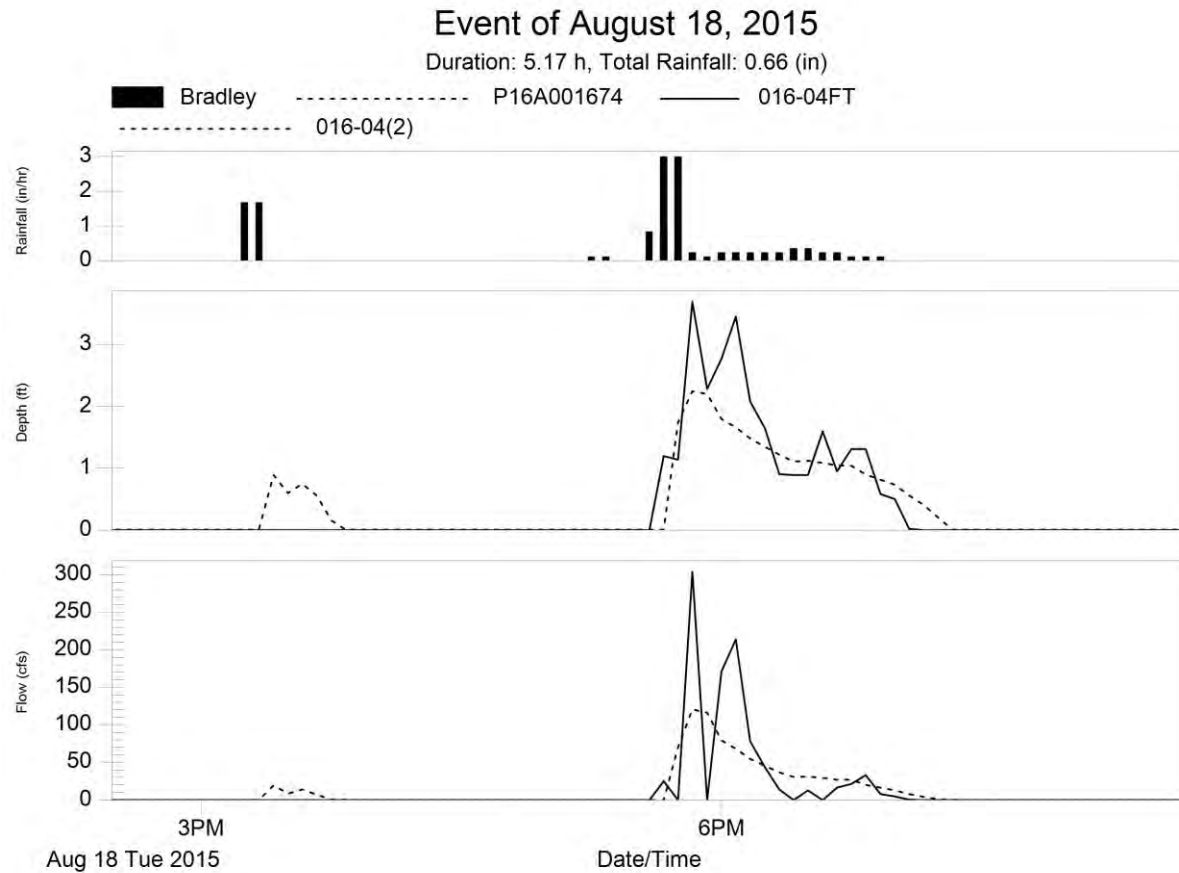
Duration: 17.33 h, Total Rainfall: 1.16 (in)



Cedar 016-04FT – Verification Events



Cedar 016-04FT – Verification Events



016-04LT - Cedar Regulator Level



Cedar 016-04LT Depth

New Model Calibration

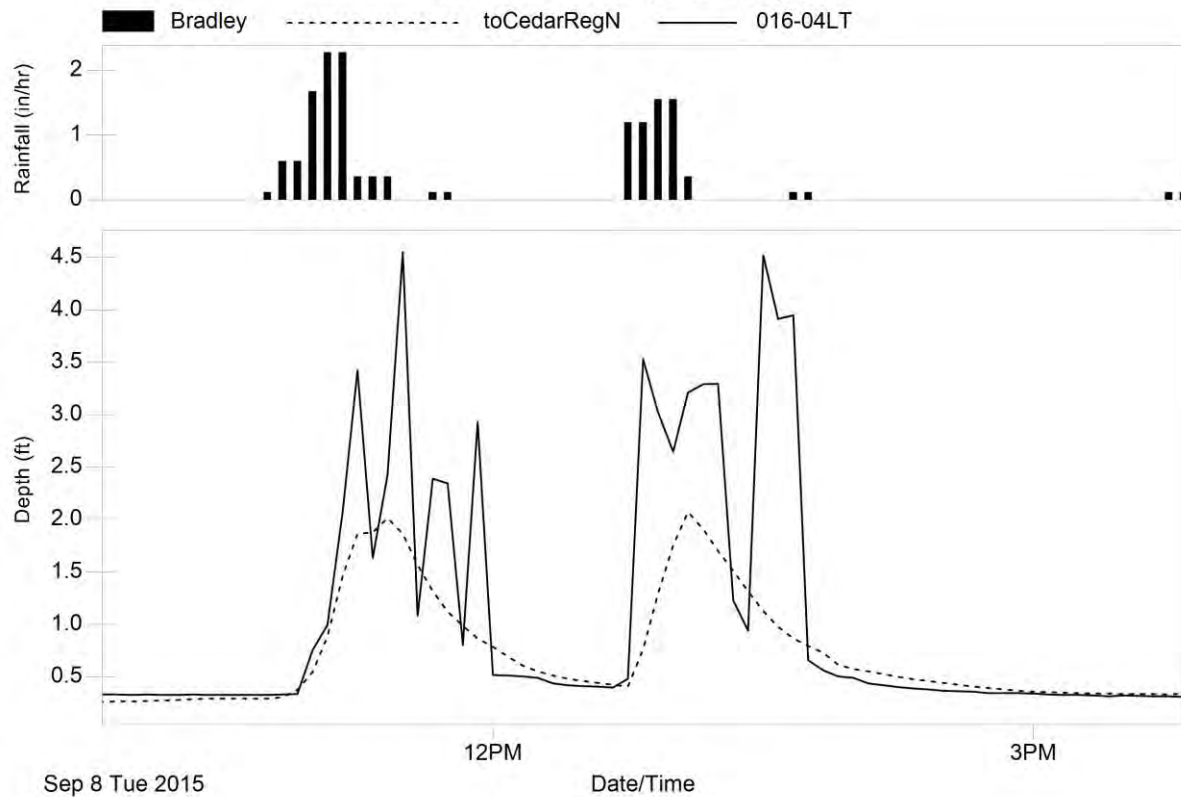
Date	Duration (h)	Maximum Depth (ft)		Minimum Depth (ft)		Average Depth (ft)		Maximum Depth (ft)	Minimum Depth (ft)	Average Depth (ft)	Rainfall Variability						
		metered	modeled	metered	modeled	metered	modeled	Surcharged: -0.33 ft to +1.67 ft Non-Surcharged: -0.33 ft to +0.33 ft	Surcharged: -0.33 ft to +1.67 ft Non-Surcharged: -0.33 ft to +0.33 ft	Surcharged: -0.33 ft to +1.67 ft Non-Surcharged: -0.33 ft to +0.33 ft							
CALIBRATION EVENTS - DEPTH																	
9/8/2015 10:20:00	5.0	Bad Meter Data									possibly uniform						
9/18/2015 12:45:00	13.3	Bad Meter Data															
11/5/2015 13:15:00	18.0	0.7	1.0	0.2	0.2	0.3	0.4	0.21	0.01	0.03							
11/11/2015 19:10:00	4.1	Bad Meter Data															
11/16/2015 21:00:00	37.4	1.5	1.7	0.2	0.3	0.5	0.6	0.21	0.01	0.06	variable						
11/26/2015 18:15:00	34.8	1.1	1.1	0.3	0.3	0.4	0.5	-0.03	0.01	0.03	possibly uniform						
12/13/2015 1:05:00	40.5	1.0	1.3	0.3	0.2	0.4	0.5	0.22	-0.03	0.05	possibly uniform						
12/20/2015 21:25:00	17.9	1.0	1.0	0.3	0.3	0.4	0.5	0.02	0.01	0.03	relatively uniform						
12/23/2015 6:25:00	14.3	1.7	1.8	0.2	0.2	0.5	0.5	0.08	0.00	0.03	variable						
12/28/2015 0:25:00	33.8	2.3	1.9	0.3	0.3	0.6	0.5	-0.39	0.01	-0.06	variable						
VERIFICATION EVENTS - DEPTH																	
6/17/2015 2:05:00	3.8	2.3	2.8	0.1	0.3	0.9	0.9	0.48	0.17	-0.01	variable						
6/24/2015 4:20:00	67.4	1.6	3.3	0.1	0.2	0.3	0.4	1.65	0.14	0.18	variable						
6/28/2015 17:25:00	4.4	2.1	2.0	0.2	0.3	0.7	0.9	-0.12	0.18	0.15	variable						
7/8/2015 5:05:00	26.0	1.3	1.5	0.1	0.2	0.4	0.5	0.15	0.11	0.11	relatively uniform						
7/11/2015 8:35:00	13.9	1.8	1.8	0.2	0.2	0.5	0.6	0.00	0.10	0.11	possibly uniform						
7/16/2015 9:00:00	17.3	Bad meter data															
7/29/2015 1:15:00	2.0	1.9	1.9	0.2	0.3	0.8	0.9	-0.01	0.10	0.09	variable						
8/18/2015 2:05:00	1.7	1.7	2.1	0.3	0.3	0.9	1.0	0.35	0.00	0.15	possibly uniform						
8/18/2015 15:00:00	5.2	1.7	2.2	0.3	0.3	0.7	0.8	0.50	0.05	0.11	relatively uniform						
Notes:						WEIGHTED AVERAGES											
						Calibration - Relatively Uniform						0.02	0.01	0.03	relatively uniform		
						Calibration - Possibly Uniform						0.12	0.00	0.03	possibly uniform		
						Calibration - Variable						-0.08	0.01	0.00	variable		
						Calibration Weighted - All Events						-0.01	0.00	0.02	All Events		
						Verification - Relatively Uniform						0.34	0.07	0.11	relatively uniform		
						Verification - Possibly Uniform						0.17	0.04	0.13	possibly uniform		
						Verification - Variable						0.44	0.14	0.08	variable		
						Verification Weighted - All Events						0.36	0.09	0.10	All Events		
						Weighted Average - All Events						0.21	0.04	0.07			
						NET AVERAGES											
						Calibration - Relatively Uniform						0.02	0.01	0.03	relatively uniform		
						Calibration - Possibly Uniform						0.14	0.00	0.03	possibly uniform		
						Calibration - Variable						-0.03	0.01	0.01	variable		
						Calibration Net - All Events						0.05	0.00	0.02	All Events		
						Verification - Relatively Uniform						0.32	0.08	0.11	relatively uniform		
						Verification - Possibly Uniform						0.17	0.05	0.13	possibly uniform		
						Verification - Variable						0.50	0.15	0.10	variable		
						Verification Net - All Events						0.38	0.10	0.11	All Events		
						Net Average - All Events						0.22	0.06	0.07			

Notes:

Cedar 016-04LT – Calibration Events

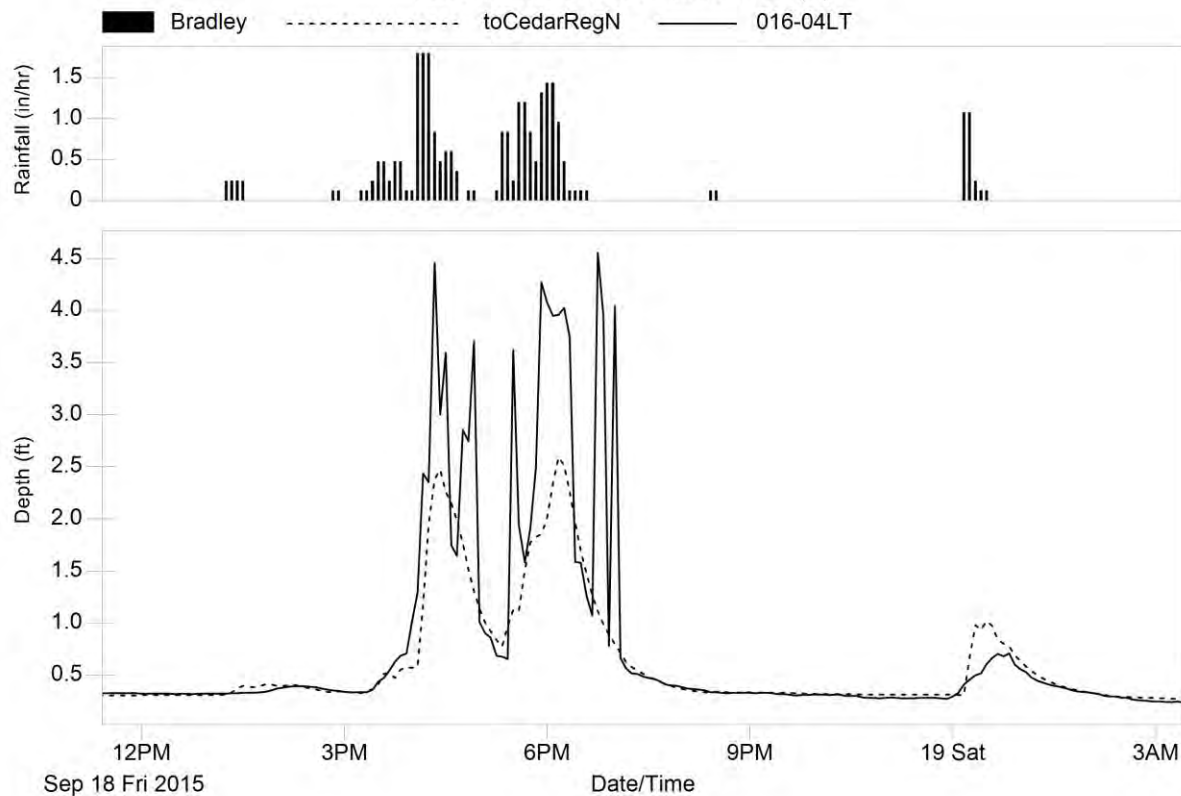
Event of September 8, 2015

Duration: 5 h, Total Rainfall: 0.86 (in)



Event of September 18, 2015

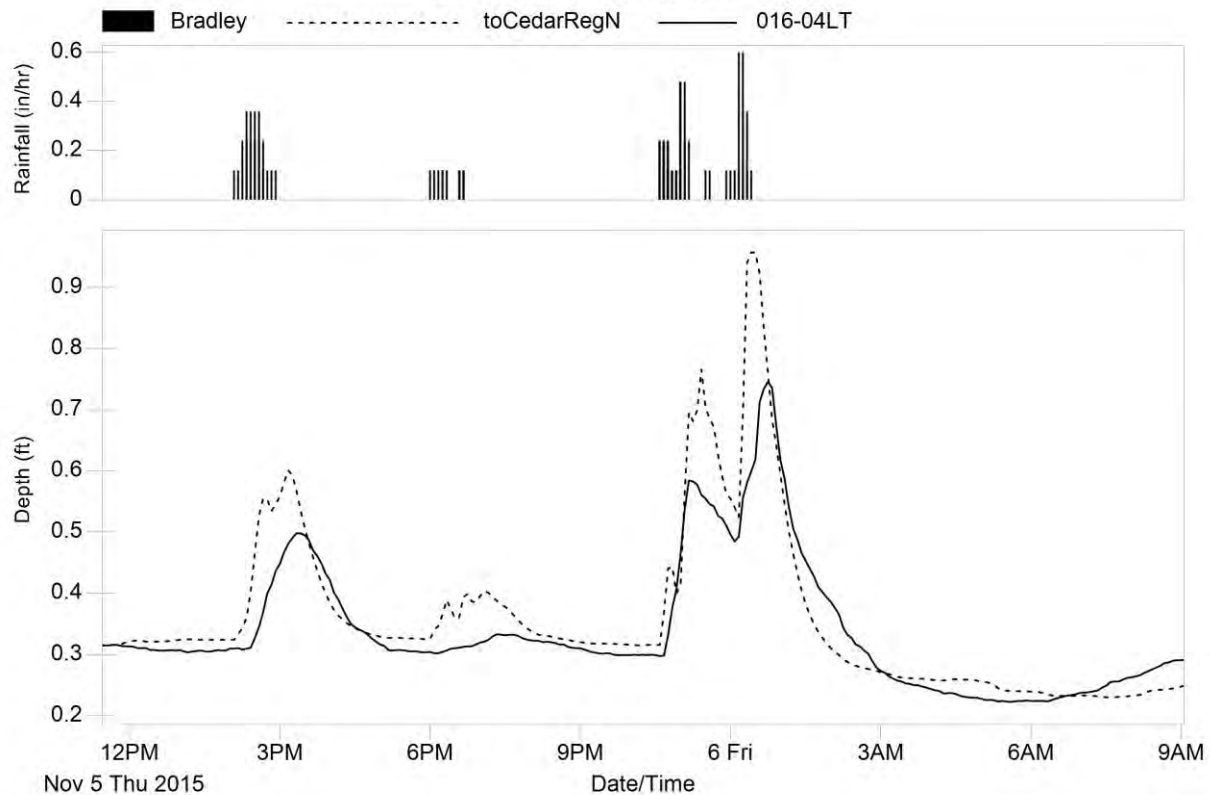
Duration: 13.33 h, Total Rainfall: 1.62 (in)



Cedar 016-04LT – Calibration Events

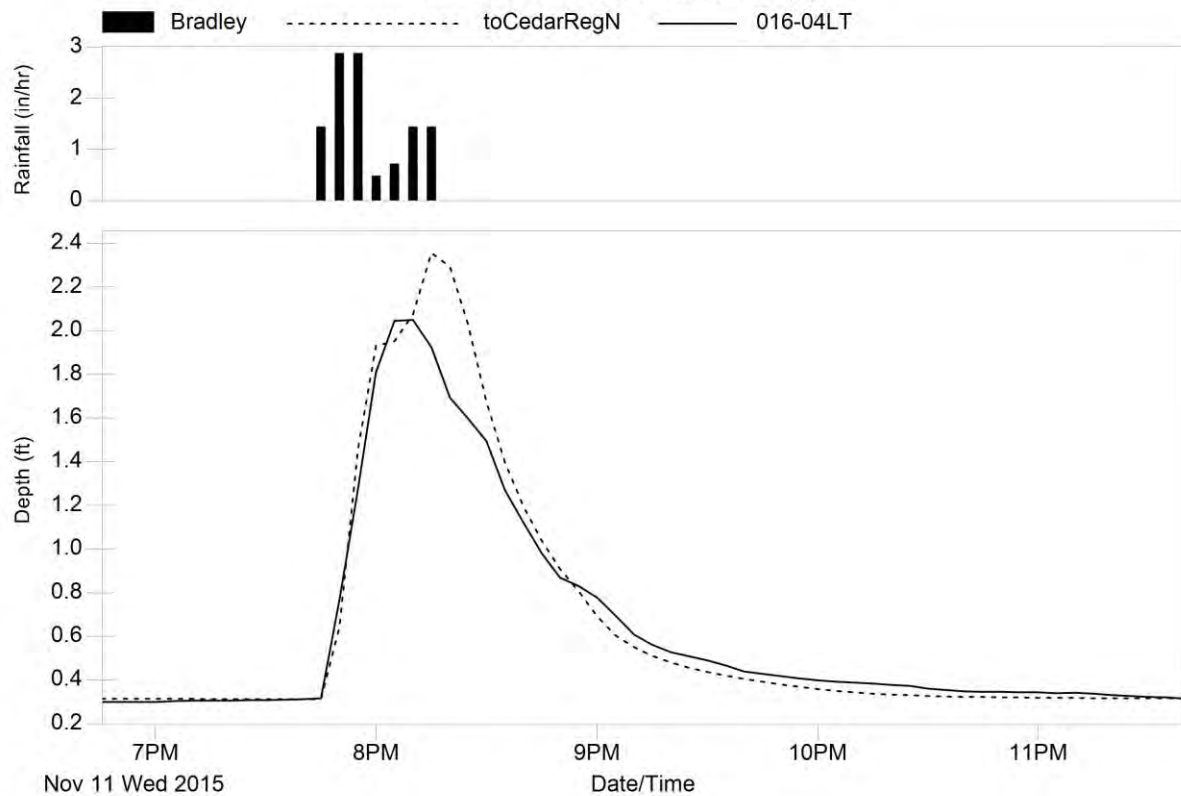
Event of November 5, 2015

Duration: 18 h, Total Rainfall: 0.43 (in)



Event of November 11, 2015

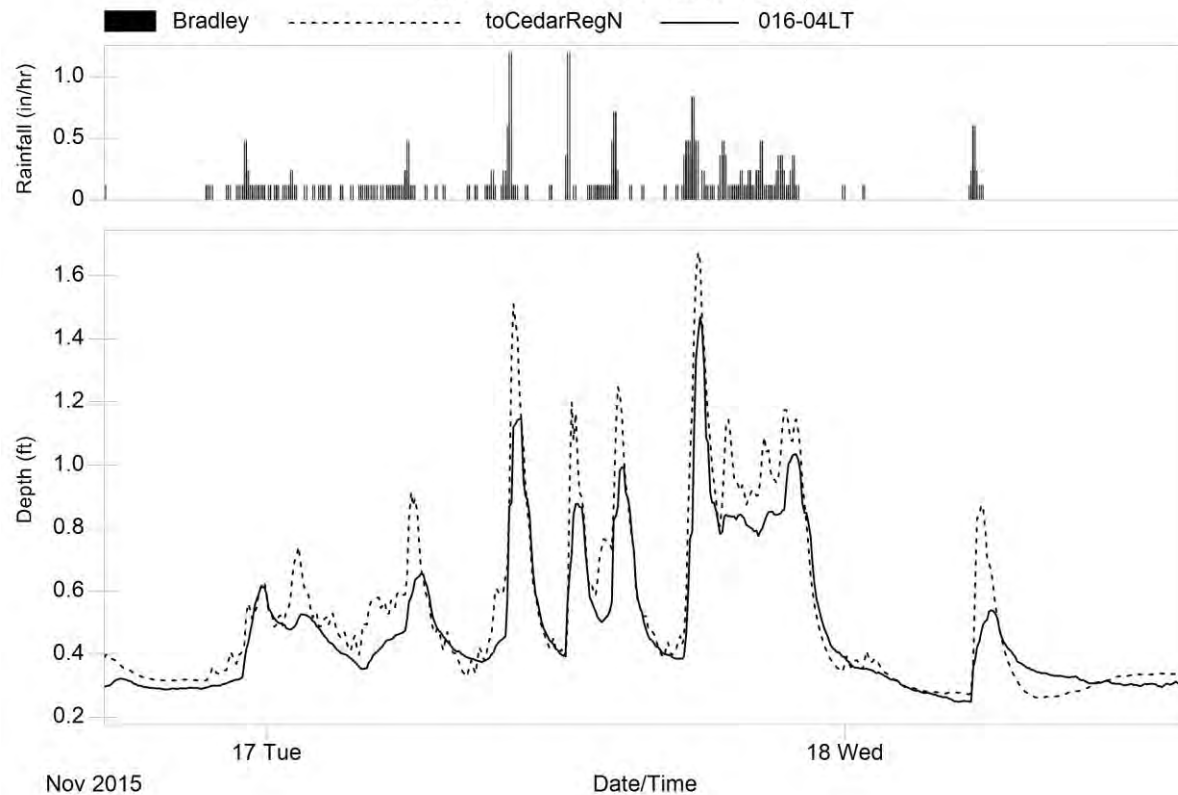
Duration: 4.08 h, Total Rainfall: 0.6 (in)



Cedar 016-04LT – Calibration Events

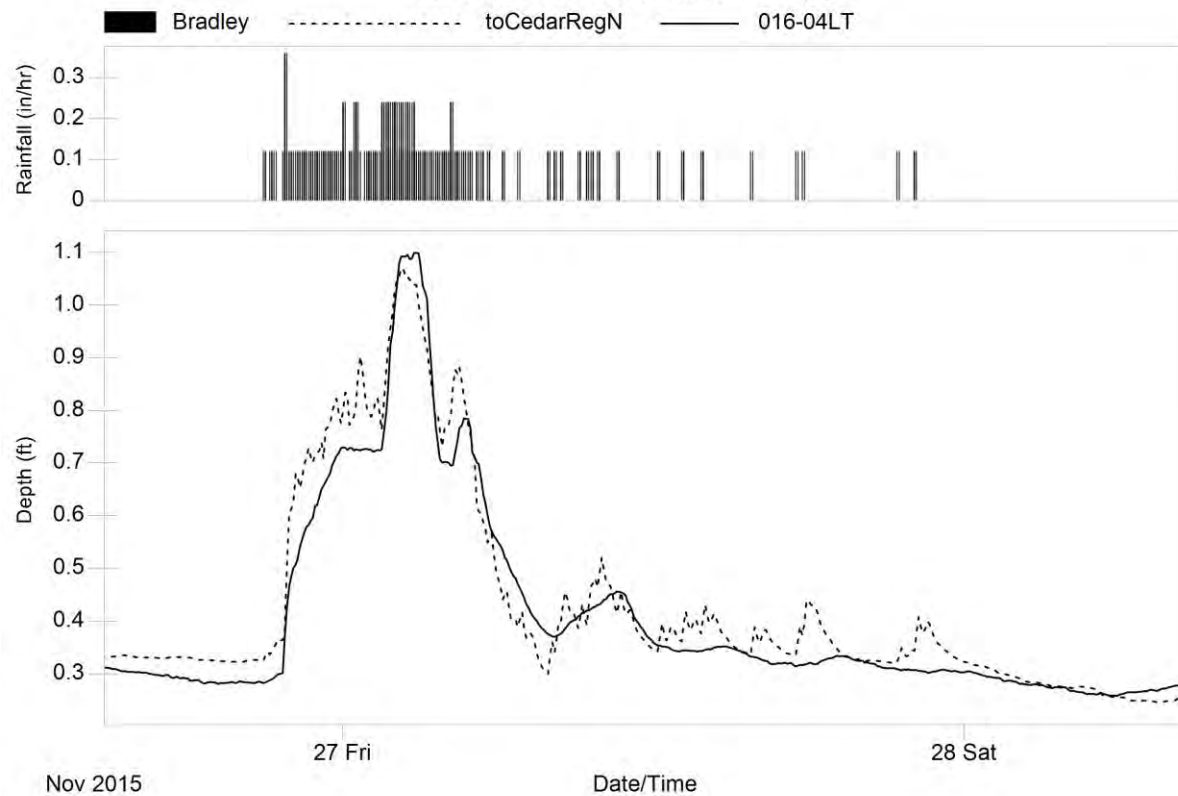
Event of November 16, 2015

Duration: 37.42 h, Total Rainfall: 2.37 (in)



Event of November 26, 2015

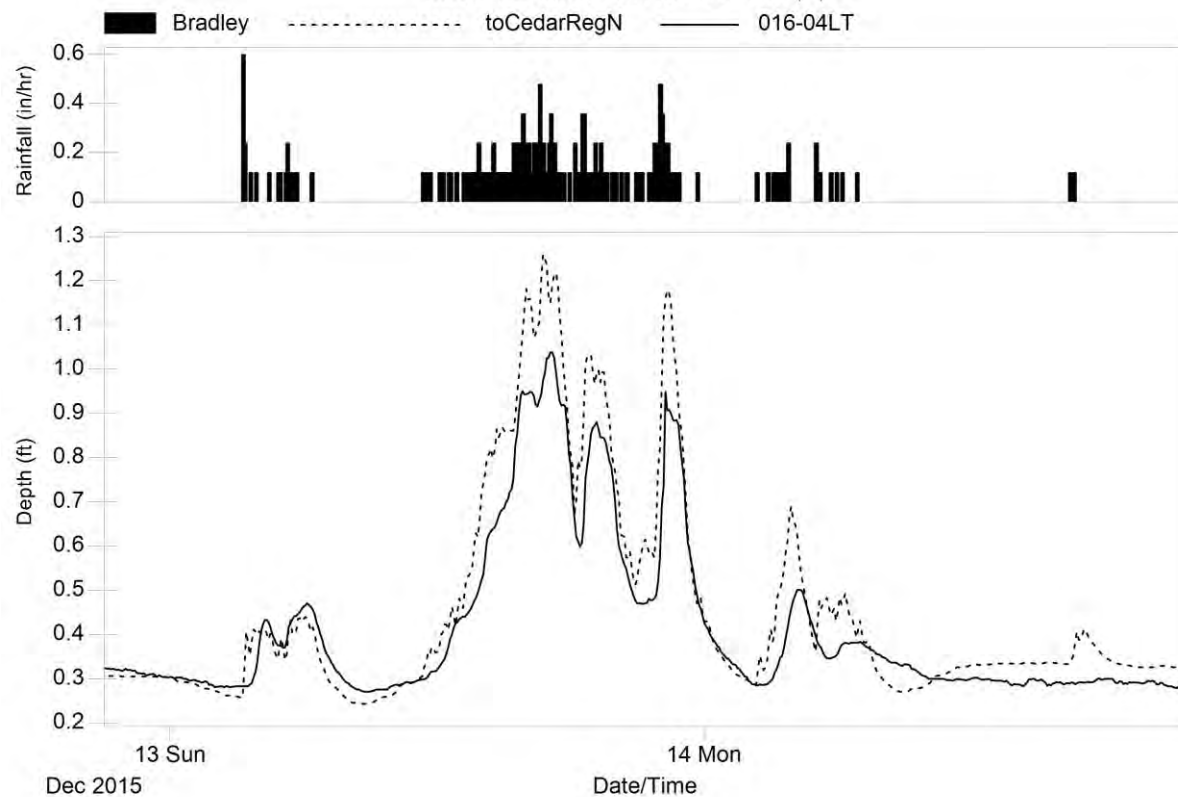
Duration: 34.83 h, Total Rainfall: 1.12 (in)



Cedar 016-04LT – Calibration Events

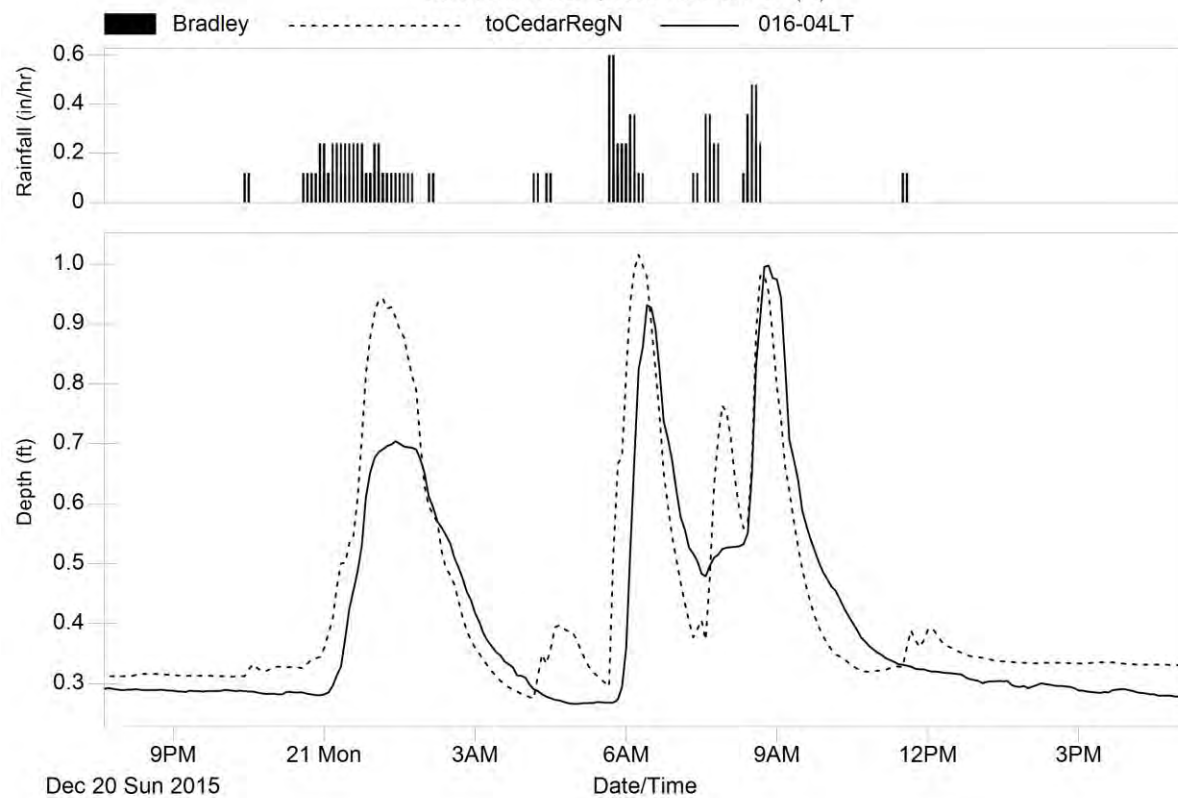
Event of December 13, 2015

Duration: 40.5 h, Total Rainfall: 1.77 (in)



Event of December 20, 2015

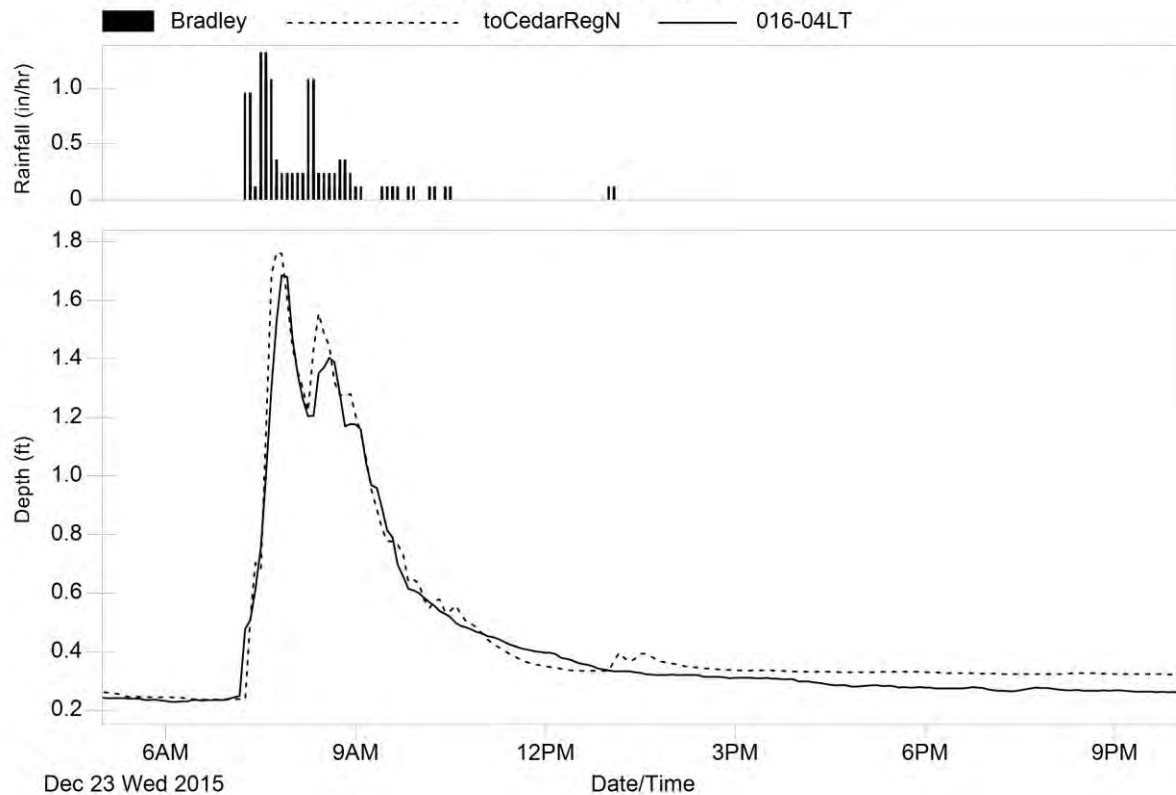
Duration: 17.92 h, Total Rainfall: 0.7 (in)



Cedar 016-04LT – Calibration Events

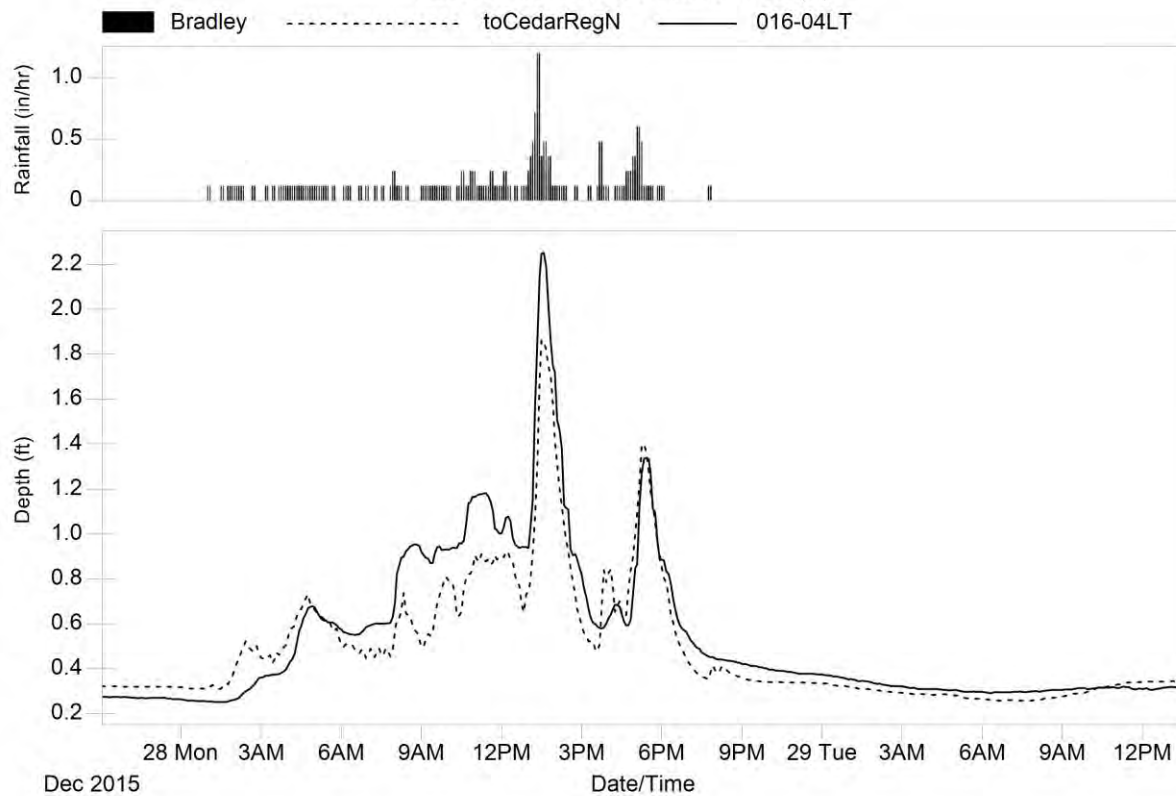
Event of December 23, 2015

Duration: 14.25 h, Total Rainfall: 0.73 (in)

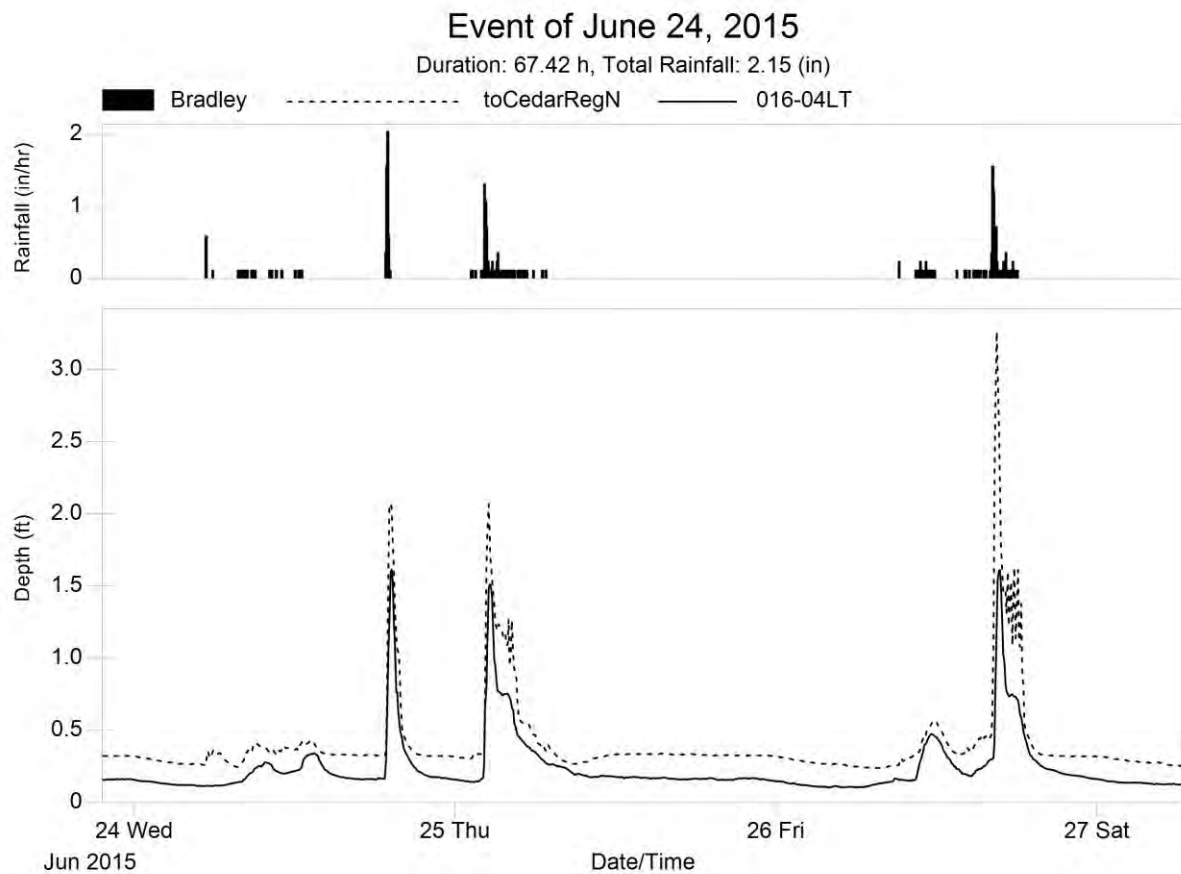
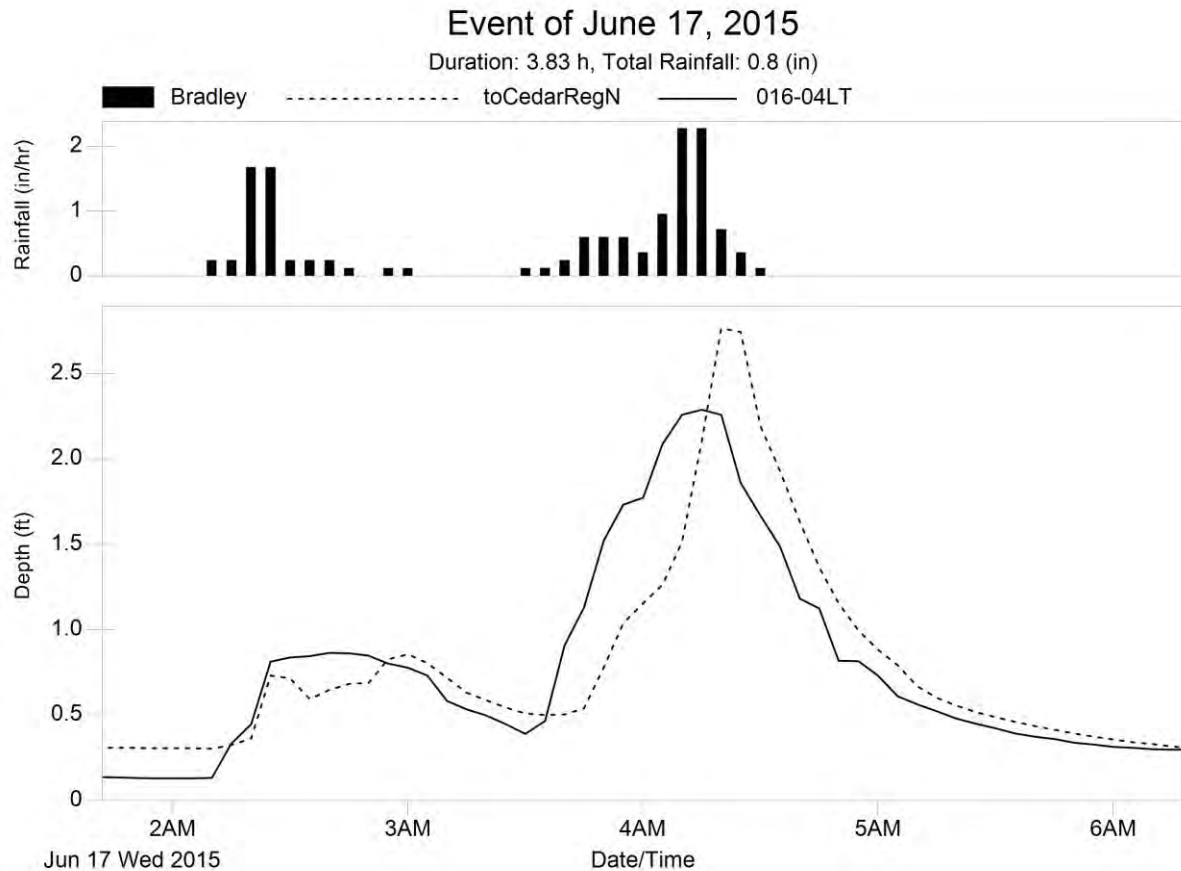


Event of December 28, 2015

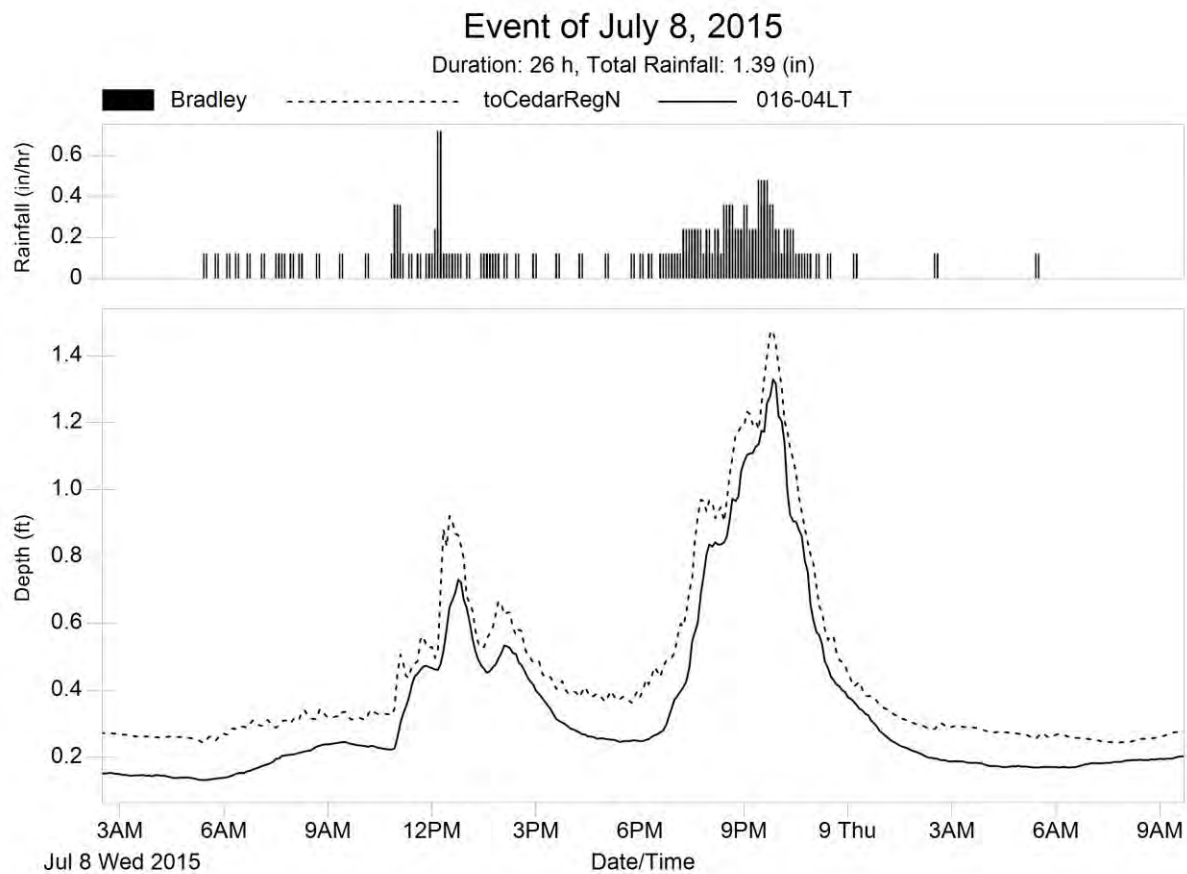
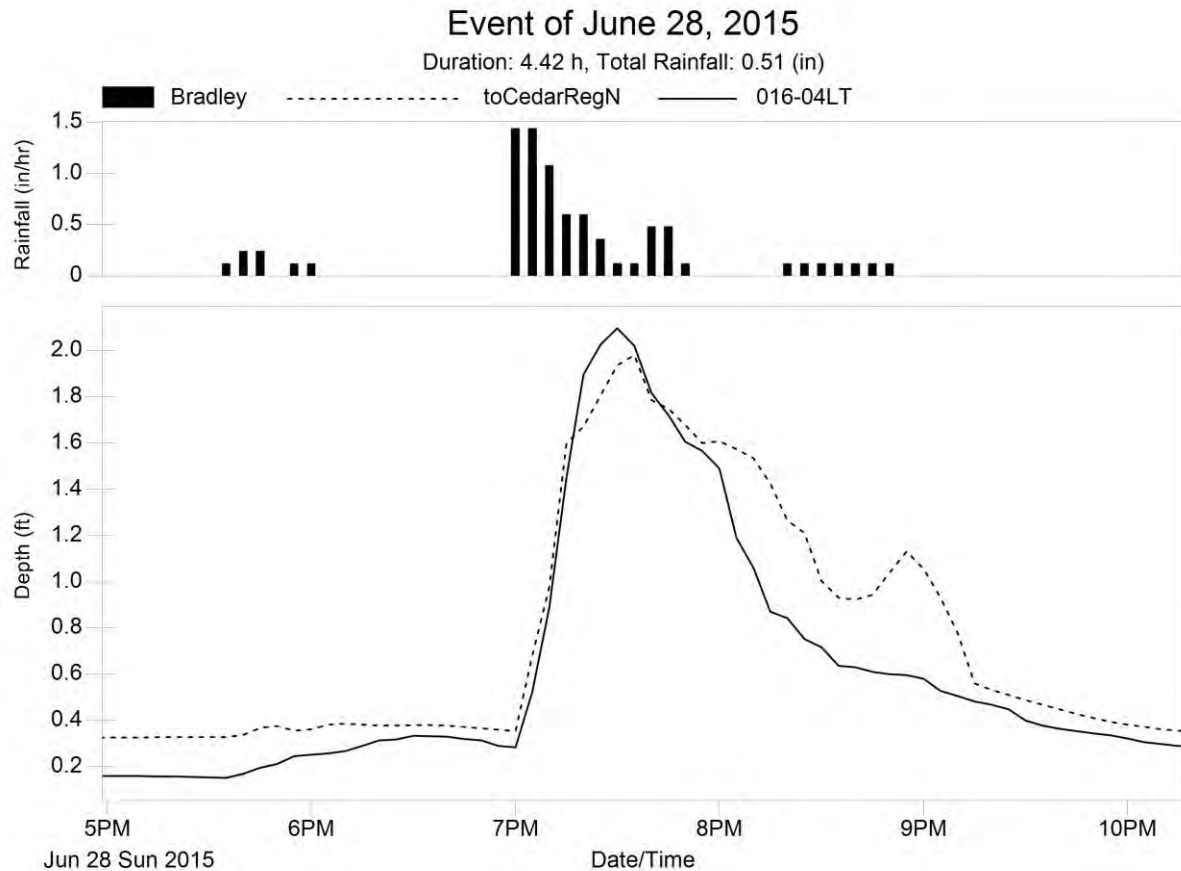
Duration: 33.75 h, Total Rainfall: 1.64 (in)



Cedar 016-04LT – Verification Events



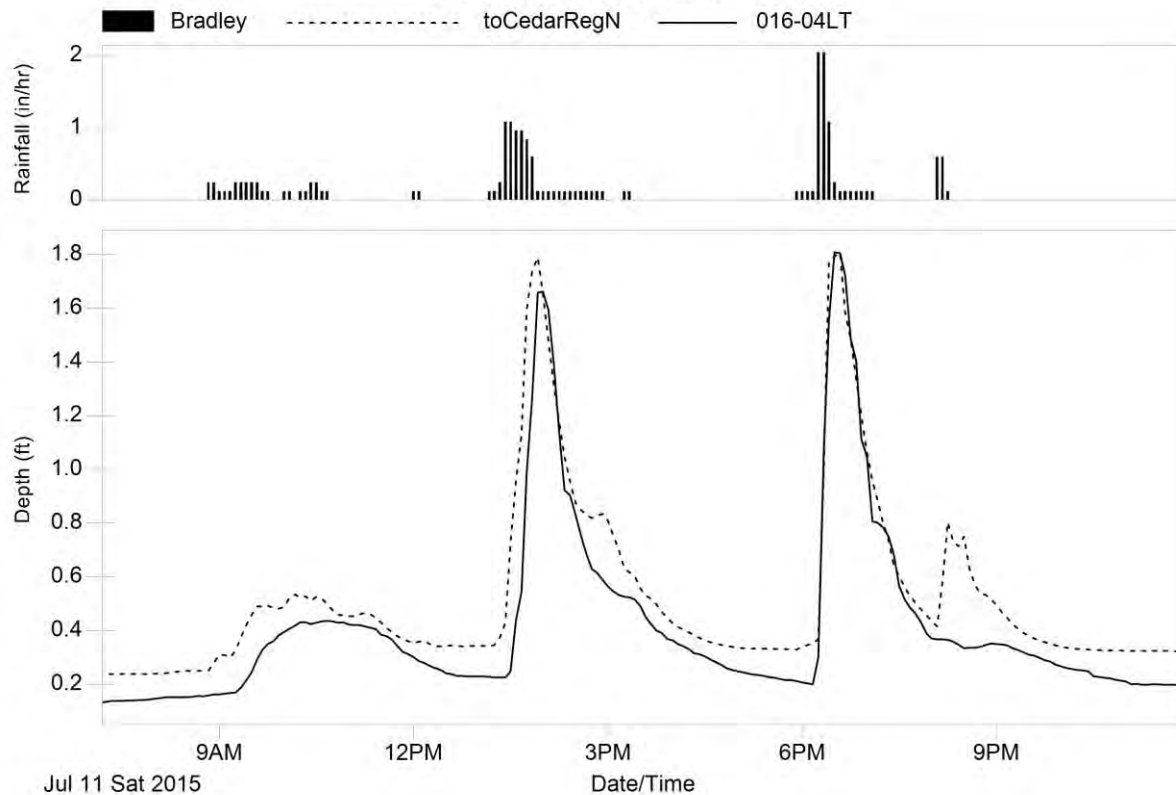
Cedar 016-04LT – Verification Events



Cedar 016-04LT – Verification Events

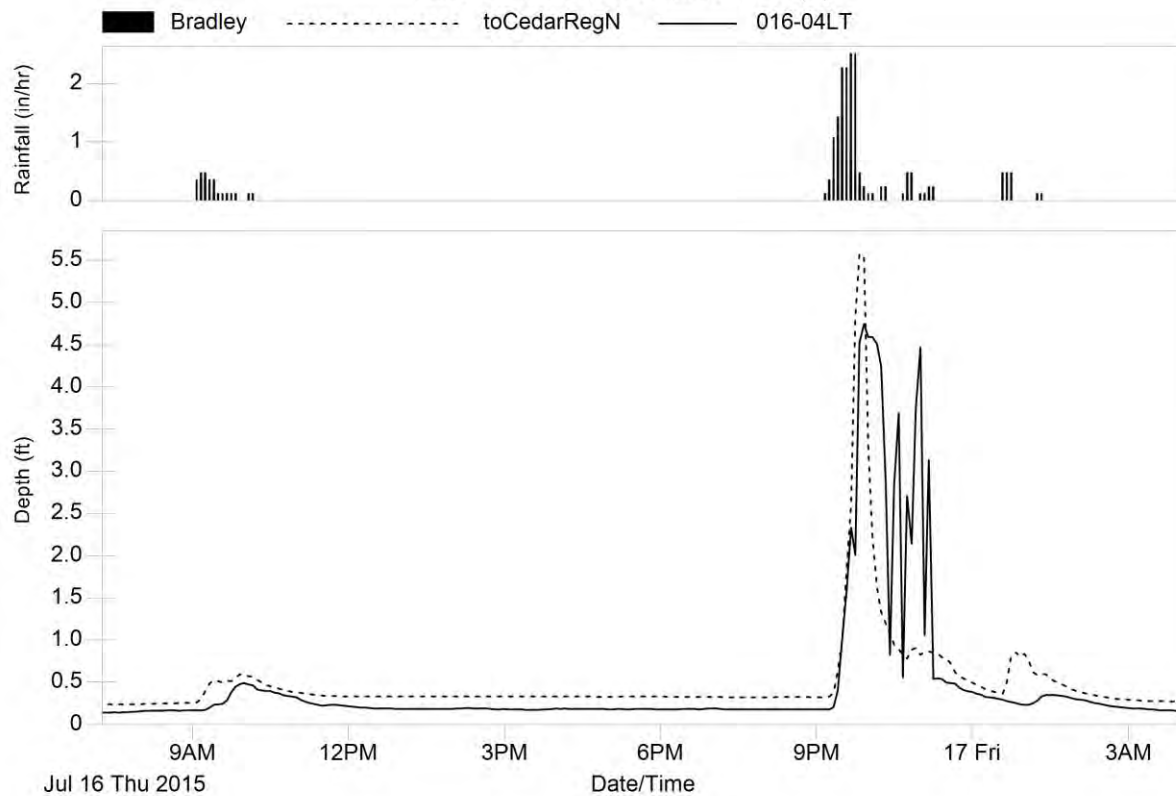
Event of July 11, 2015

Duration: 13.92 h, Total Rainfall: 1.07 (in)

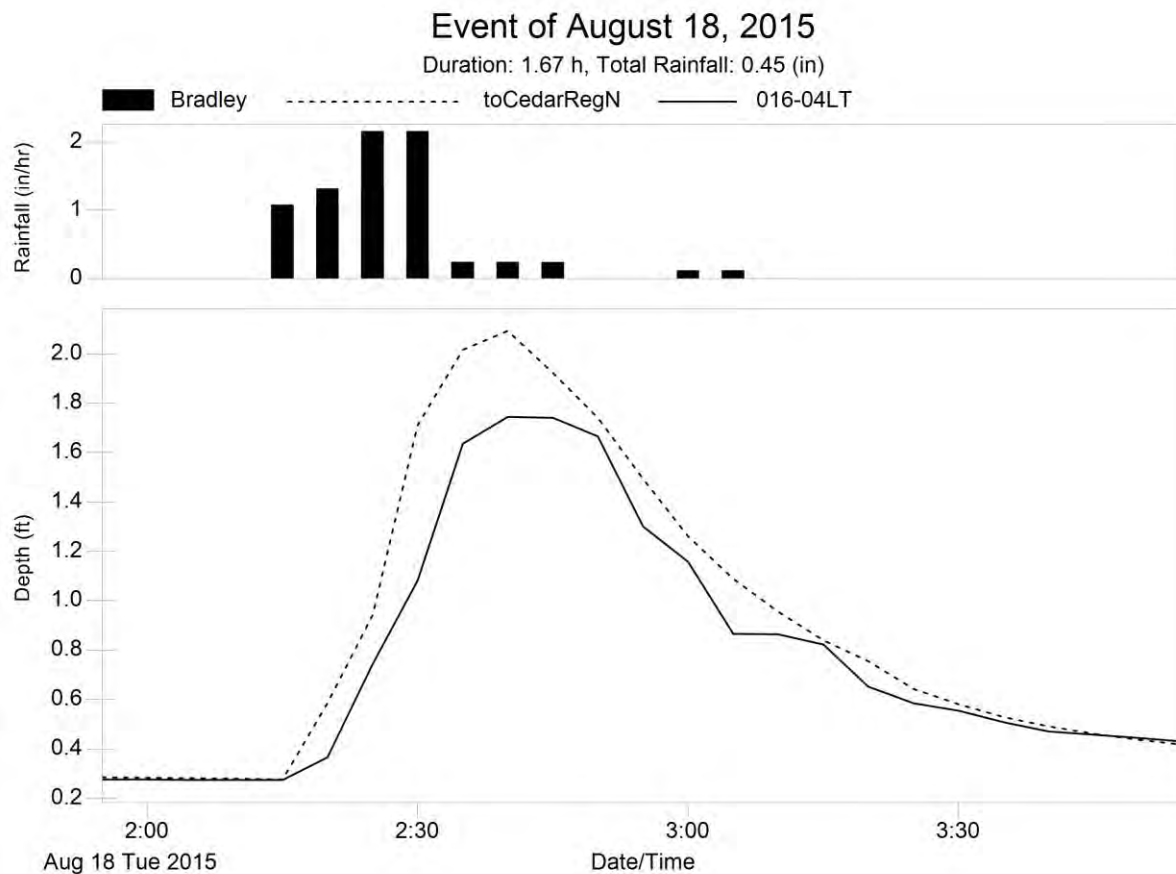
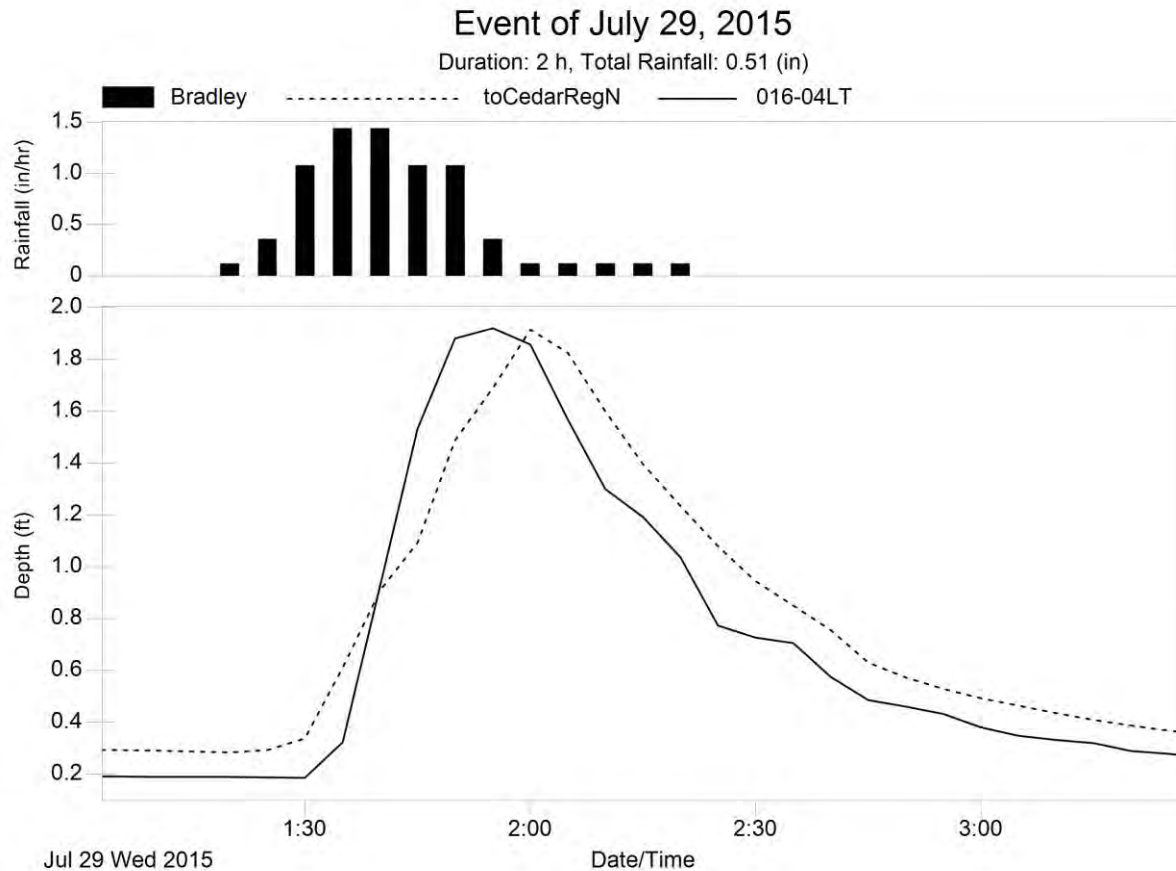


Event of July 16, 2015

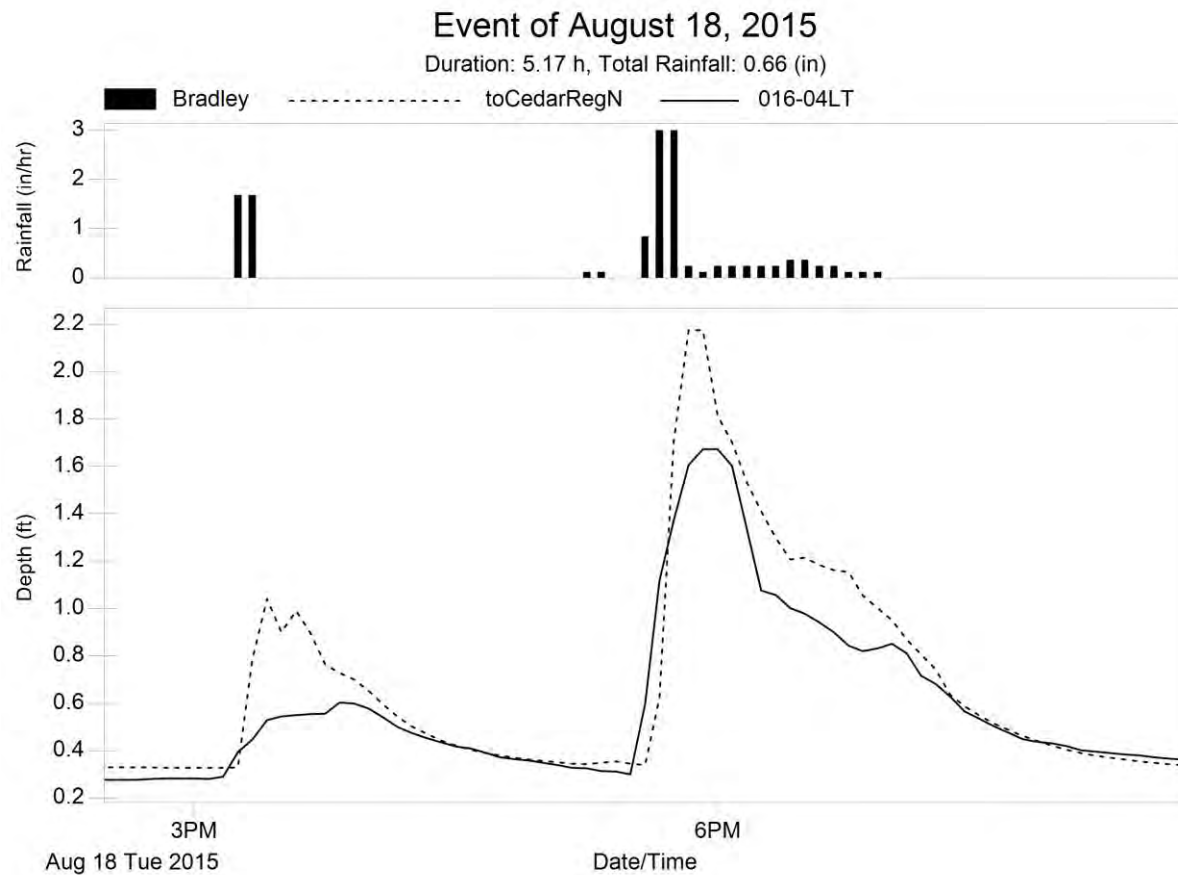
Duration: 17.33 h, Total Rainfall: 1.16 (in)



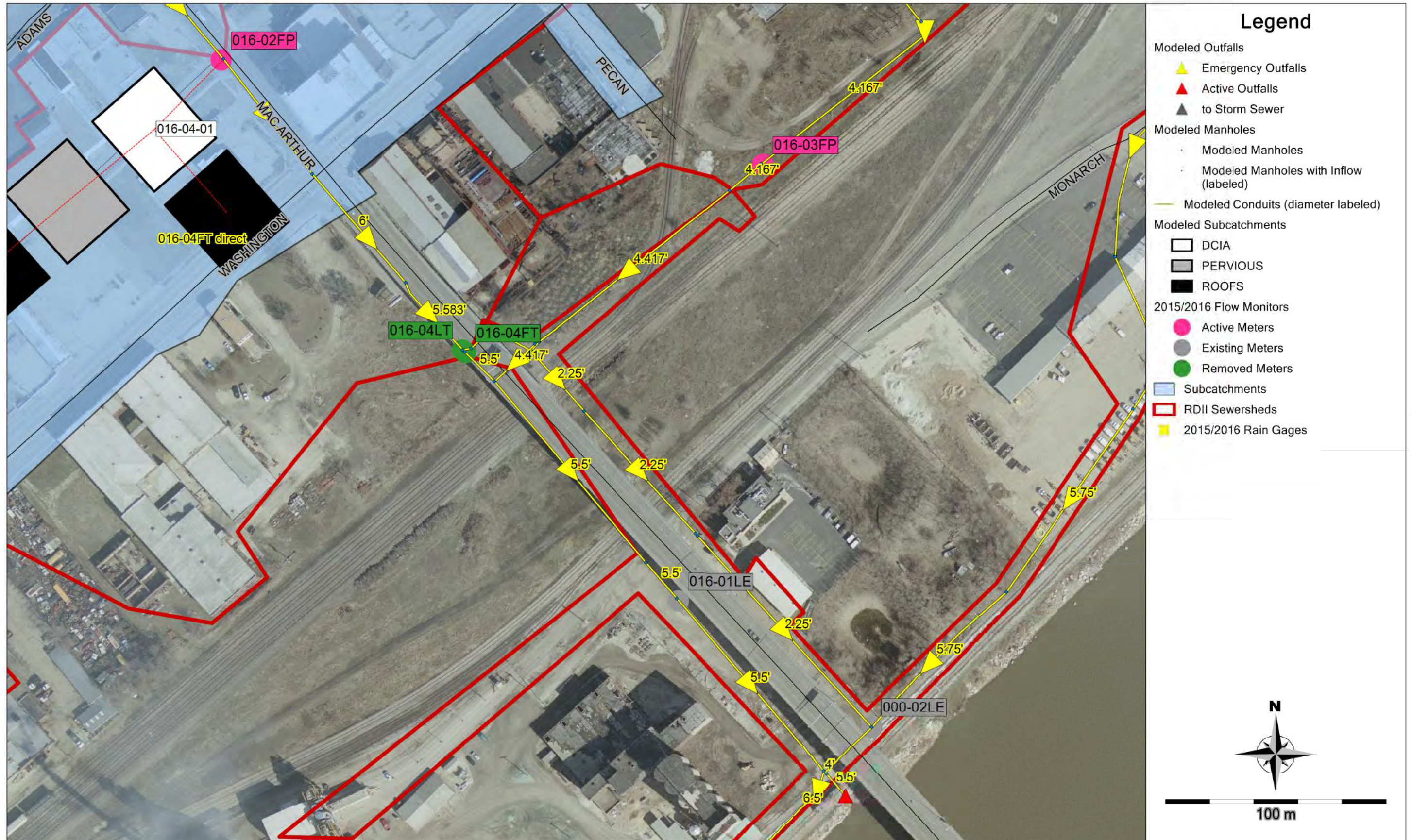
Cedar 016-04LT – Verification Events



Cedar 016-04LT – Verification Events



016-01LE - Cedar Outfall Pipe



		Maximum Depth (ft)		Minimum Depth (ft)		Average Depth (ft)		Maximum Depth (ft)	Minimum Depth (ft)	Average Depth (ft)	
Date	Duration (h)	metered	modeled	metered	modeled	metered	modeled	Surcharged: -0.33 ft to +1.67 ft	Surcharged: -0.33 ft to +1.67 ft	Surcharged: -0.33 ft to +1.67 ft	Rainfall Variability
CALIBRATION EVENTS - DEPTH								Non-Surcharged: -0.33 ft to +0.33 ft	Non-Surcharged: -0.33 ft to +0.33 ft	Non-Surcharged: -0.33 ft to +0.33 ft	
9/8/2015 10:20:00	5.00	2.600	1.916	-0.330	0.000	0.383	0.423	-0.684	0.330	0.040	variable
9/18/2015 12:45:00	13.33	4.300	3.330	-0.200	0.000	0.275	0.357	-0.970	0.200	0.082	relatively uniform
11/5/2015 13:15:00	18.00	-0.700	0.000	-0.900	0.000	-0.759	0.000				possibly uniform
11/11/2015 19:10:00	4.08	1.900	1.453	-1.000	0.000	-0.463	0.206				relatively uniform
11/16/2015 21:00:00	37.42	1.600	1.762	-1.000	0.000	-0.708	0.154				variable
11/26/2015 18:15:00	34.83	1.400	1.225	-0.100	0.000	0.156	0.097	-0.175	0.100	-0.058	possibly uniform
12/13/2015 1:05:00	40.50	2.000	1.098	0.100	0.000	0.627	0.124	-0.902	-0.100	-0.503	possibly uniform
12/20/2015 21:25:00	17.92	1.600	0.774	0.600	0.190	0.739	0.268	-0.826	-0.410	-0.471	relatively uniform
12/23/2015 6:25:00	14.25	3.400	1.580	0.700	0.329	1.073	0.538	-1.820	-0.371	-0.535	variable
12/28/2015 0:25:00	33.75	6.400	6.430	2.900	2.762	3.875	3.716	0.030	-0.138	-0.159	variable
VERIFICATION EVENTS - DEPTH											
6/17/2015 2:05:00	3.83	9.500	10.000	5.700	6.171	6.232	6.735	0.500	0.471	0.503	variable
6/24/2015 4:20:00	67.42	11.500	13.320	9.300	9.660	9.897	10.110	1.820	0.360	0.213	variable
6/28/2015 17:25:00	4.42	13.200	12.860	10.400	10.580	10.790	10.940	-0.340	0.180	0.150	variable
7/8/2015 5:05:00	26.00	7.700	10.890	7.400	7.381	7.549	7.573	3.190	-0.019	0.024	relatively uniform
7/11/2015 8:35:00	13.92	9.600	8.577	7.100	7.175	7.395	7.357	-1.023	0.075	-0.038	possibly uniform
7/16/2015 9:00:00	17.33	14.900	14.930	8.700	8.448	8.874	8.816	0.030	-0.252	-0.058	relatively uniform
7/29/2015 1:15:00	2.00	6.000	5.099	3.400	3.309	3.900	3.856	-0.901	-0.091	-0.044	variable
8/18/2015 2:05:00	1.67	2.600	1.834	-0.200	0.000	0.740	0.639	-0.766	0.200	-0.101	possibly uniform
8/18/2015 15:00:00	5.17	2.500	1.838	-0.200	0.000	0.358	0.340	-0.662	0.200	-0.018	relatively uniform

Notes:

11/5/2015 event not observed at outfall

Bad meter data during 11/11 and 11/16 due to meter drift

Results from interceptor only model using flow meter data as influent flow to regulator.

WEIGHTED AVERAGES

Calibration - Relatively Uniform	-0.704	0.477	-0.591	relatively uniform
Calibration - Possibly Uniform	-0.759	0.022	-14.158	possibly uniform
Calibration - Variable	-0.555	-0.339	-0.254	variable
Calibration Weighted - All Events	-0.625	-1.396	-0.351	All Events
Verification - Relatively Uniform	0.930	-0.149	-0.020	relatively uniform
Verification - Possibly Uniform	-0.968	0.071	-0.044	possibly uniform
Verification - Variable	0.393	0.264	0.217	variable
Verification Weighted - All Events	0.353	0.111	0.108	All Events
Weighted Average - All Events	0.118	0.089	0.068	

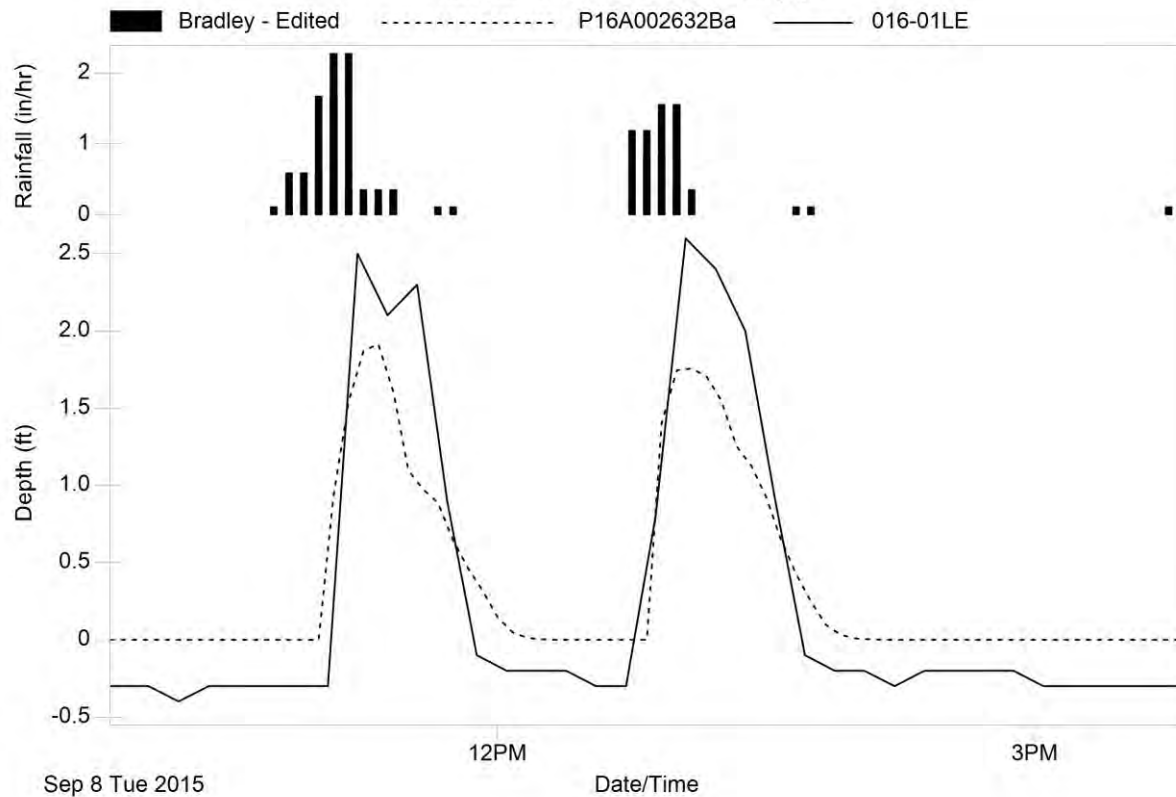
NET AVERAGES

Calibration - Relatively Uniform	-0.898	-0.105	-0.195	relatively uniform
Calibration - Possibly Uniform	-0.539	0.000	-0.281	possibly uniform
Calibration - Variable	-0.825	-0.060	-0.218	variable
Calibration Net - All Events	-0.764	-0.055	-0.229	All Events
Verification - Relatively Uniform	0.853	-0.024	-0.017	relatively uniform
Verification - Possibly Uniform	-0.895	0.138	-0.070	possibly uniform
Verification - Variable	0.270	0.230	0.206	variable
Verification Net - All Events	0.205	0.125	0.070	All Events
Net Average - All Events	-0.219	0.046	-0.061	

Cedar 016-01LE – Calibration Events

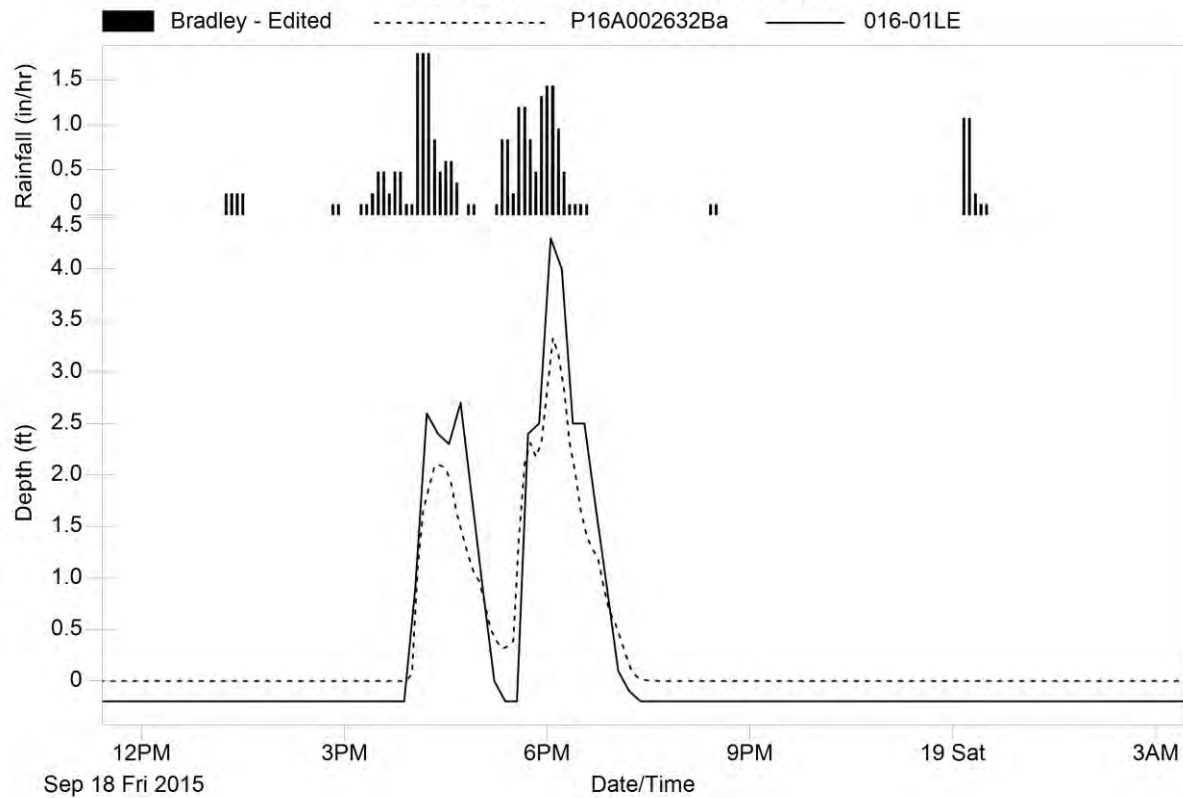
Event of September 8, 2015

Duration: 5 h, Total Rainfall: 0.86 (in)

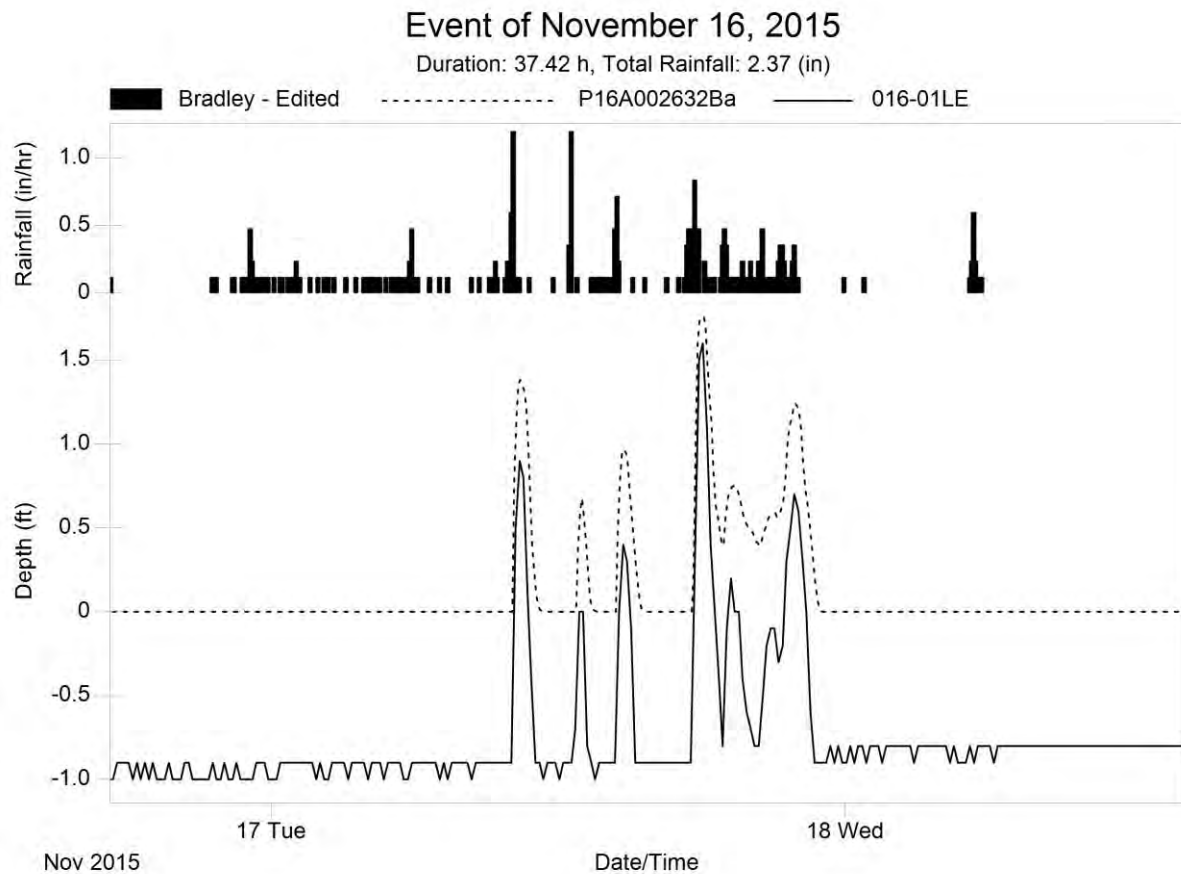
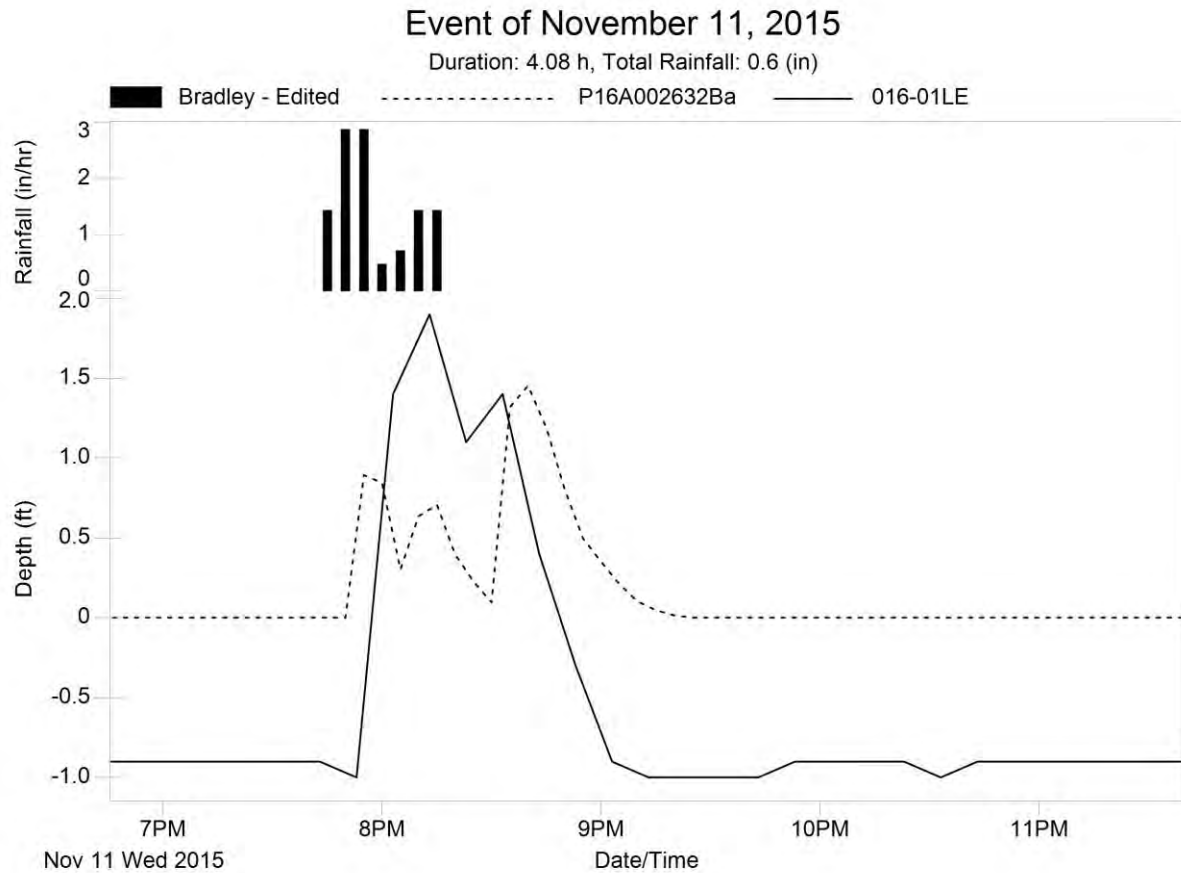


Event of September 18, 2015

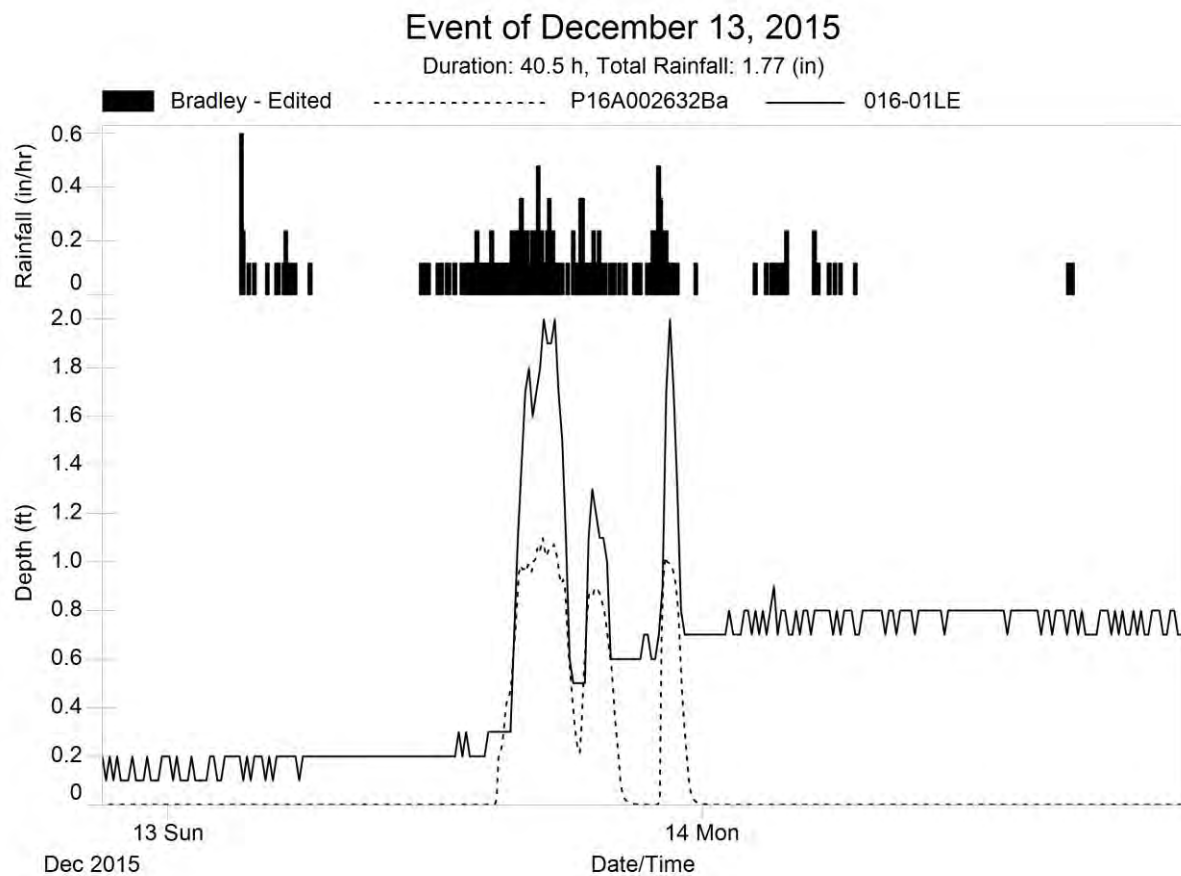
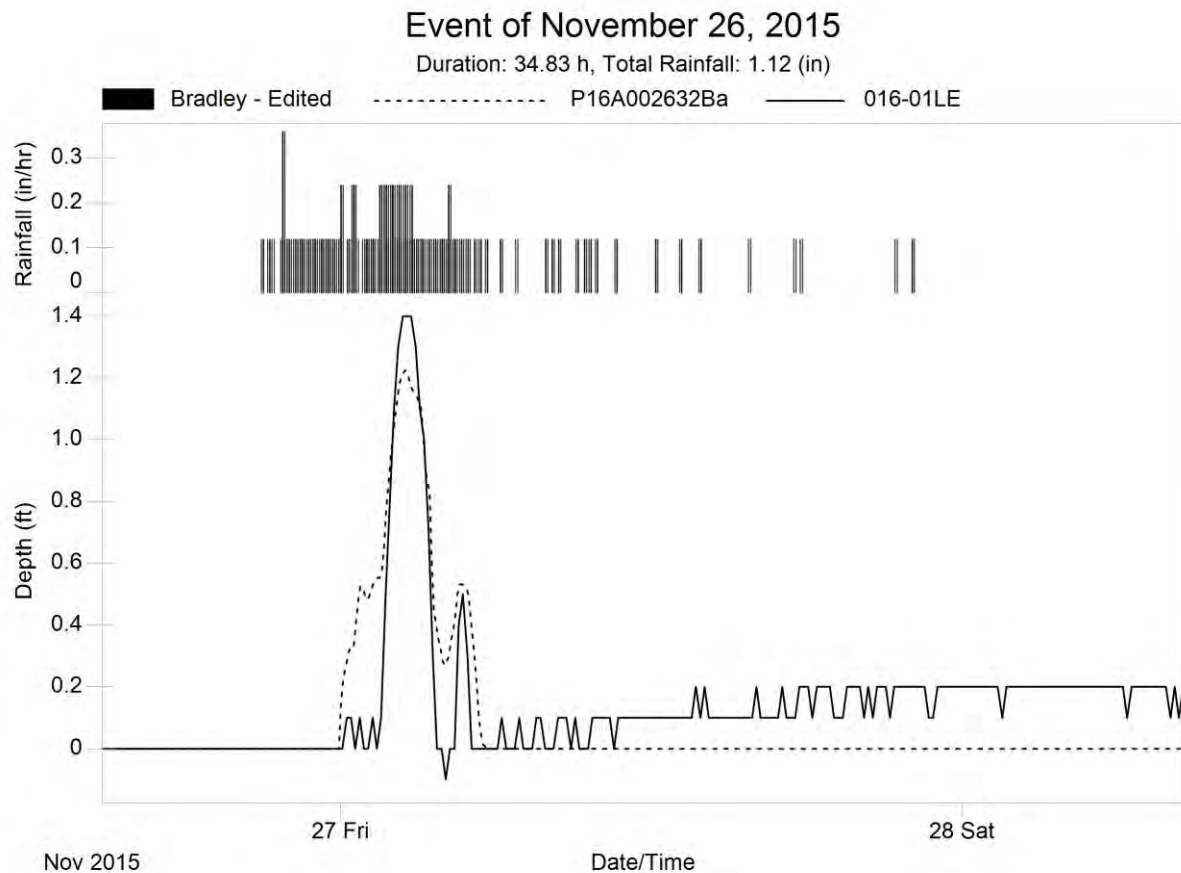
Duration: 13.33 h, Total Rainfall: 1.62 (in)



Cedar 016-01LE – Calibration Events



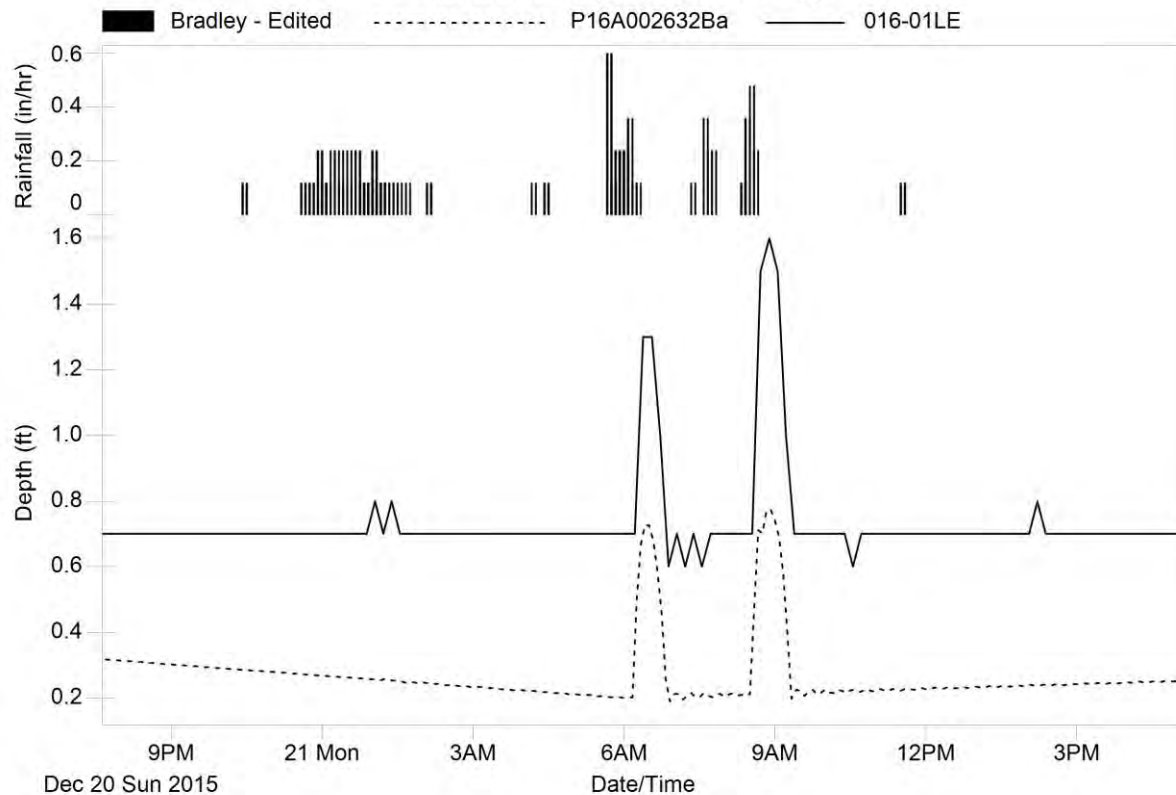
Cedar 016-01LE – Calibration Events



Cedar 016-01LE – Calibration Events

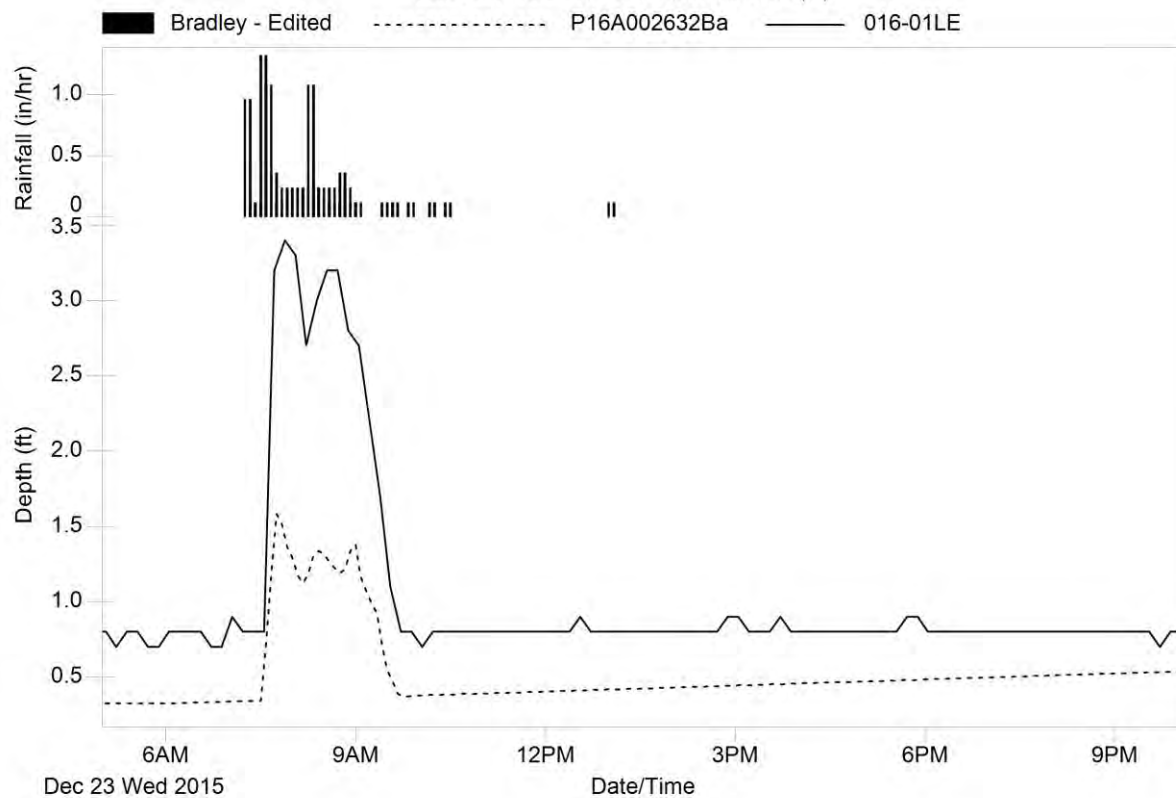
Event of December 20, 2015

Duration: 17.92 h, Total Rainfall: 0.7 (in)

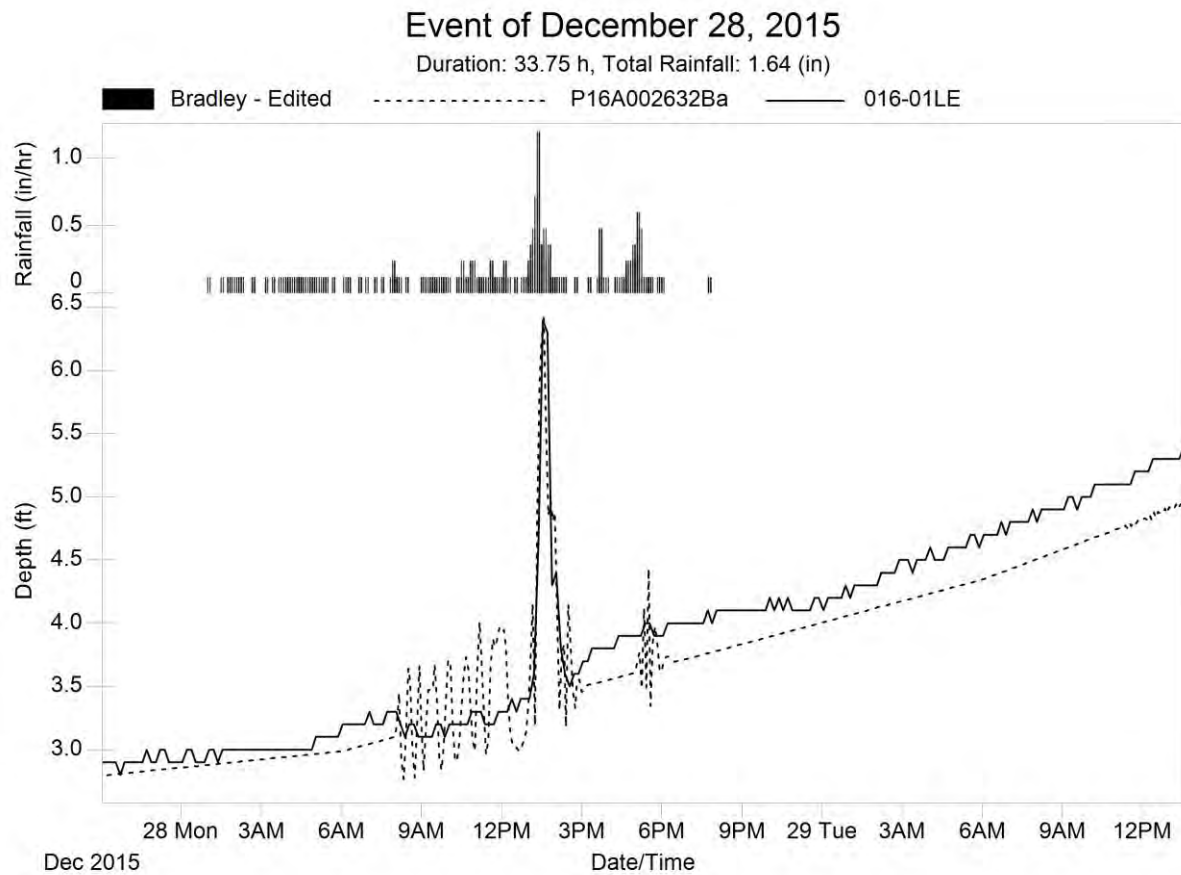


Event of December 23, 2015

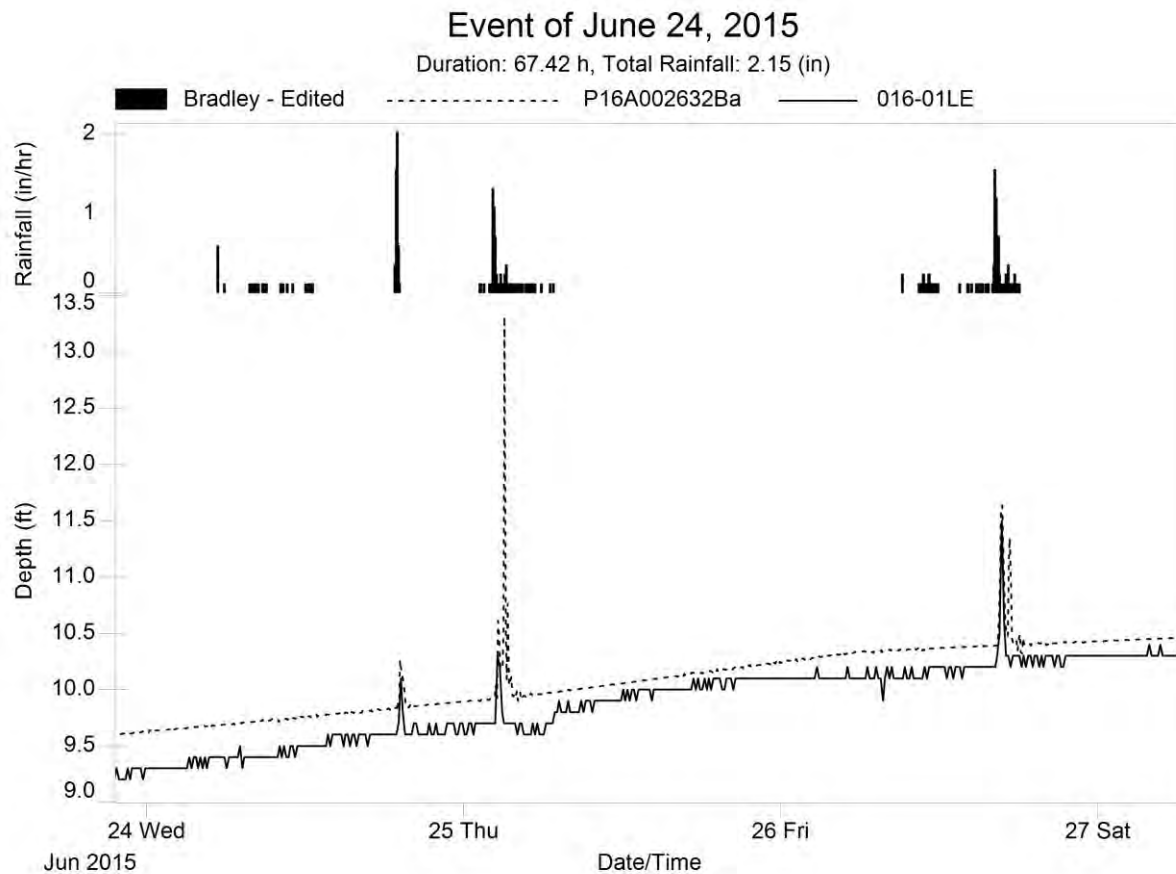
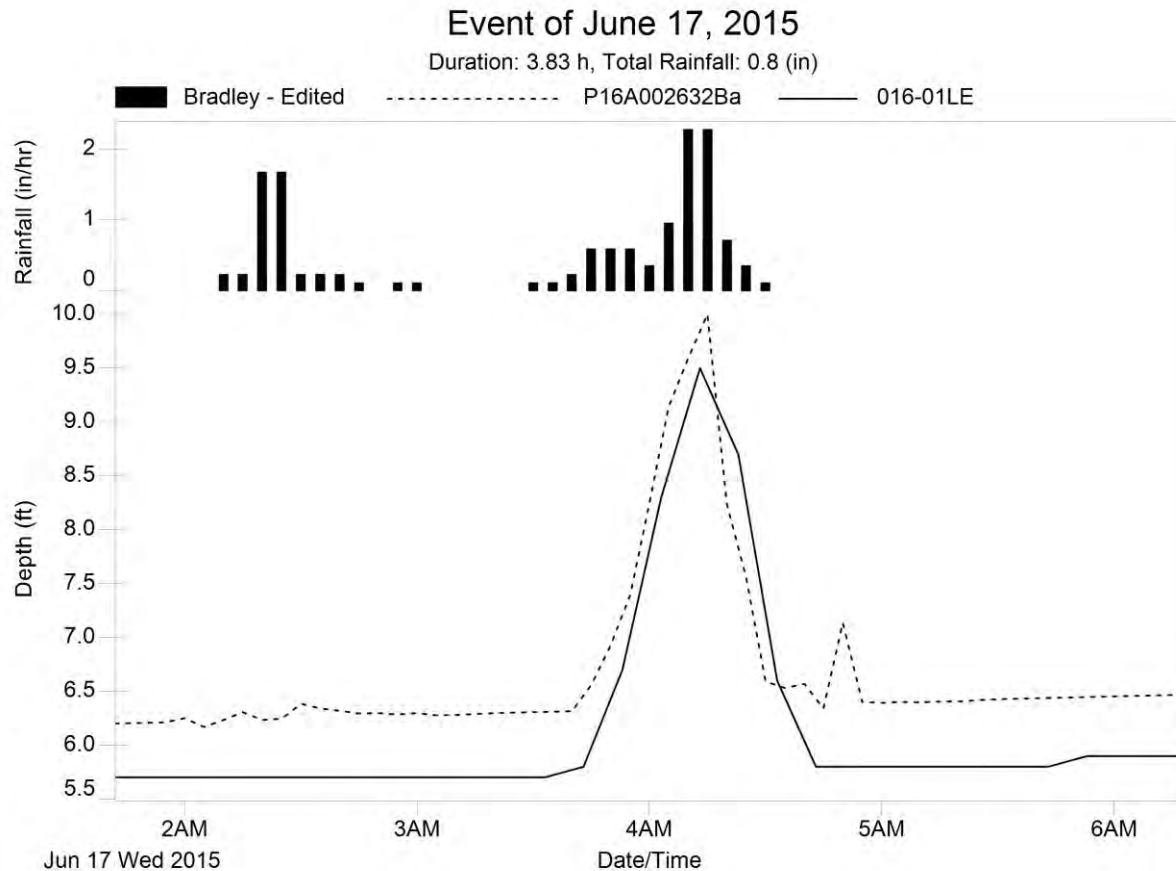
Duration: 14.25 h, Total Rainfall: 0.73 (in)



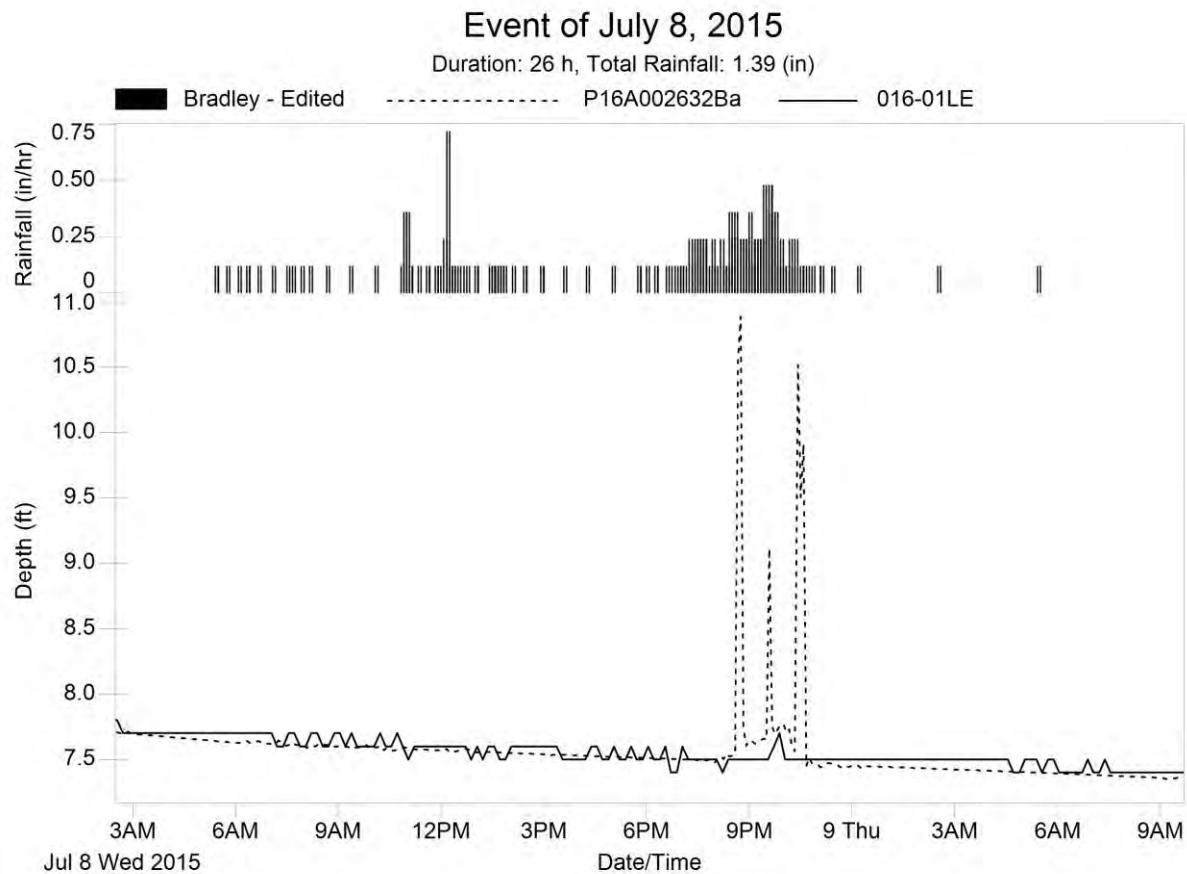
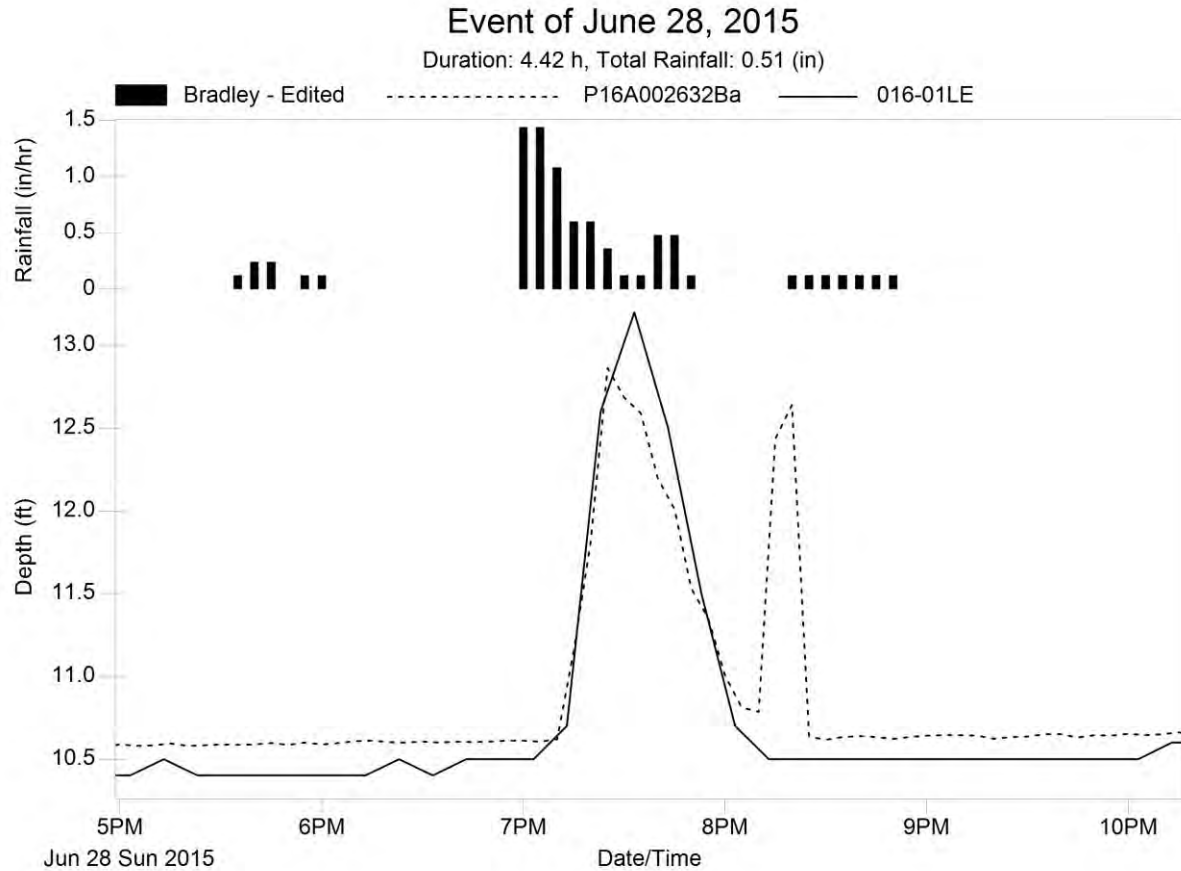
Cedar 016-01LE – Calibration Events



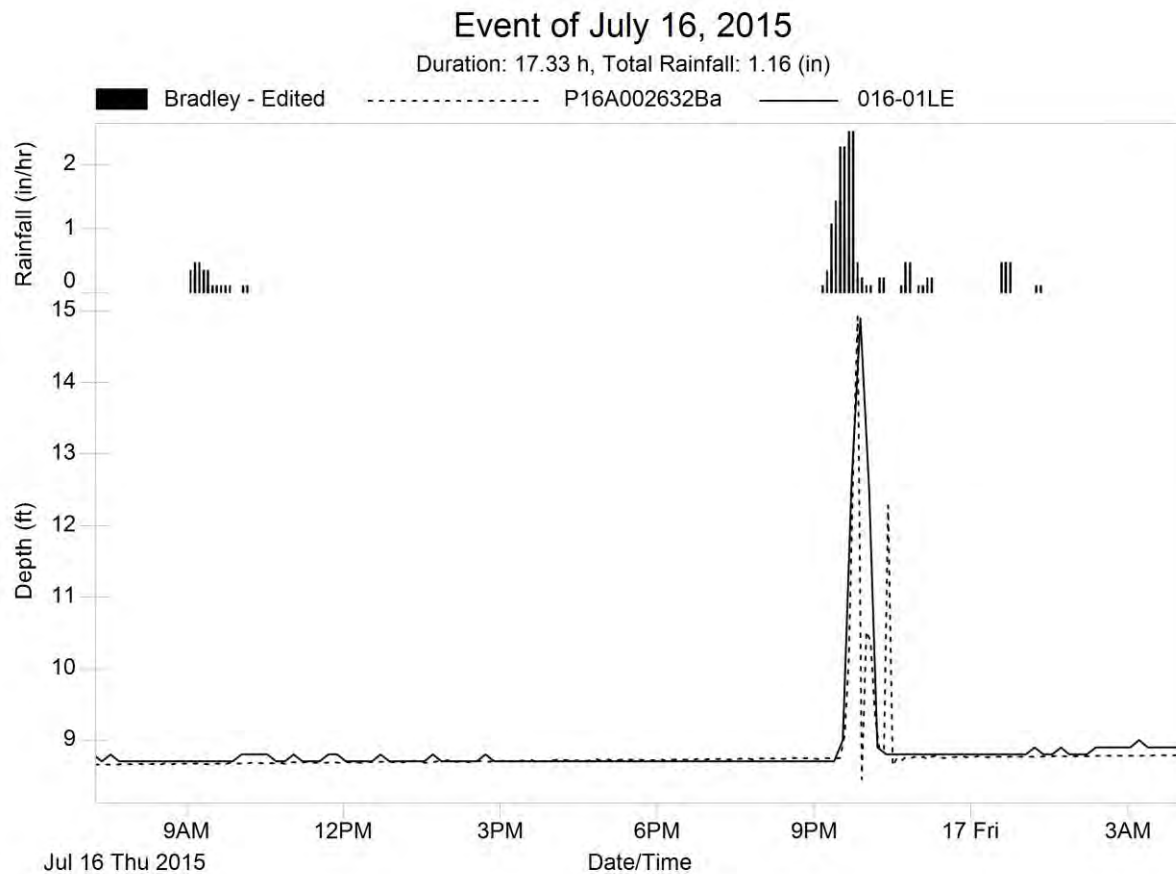
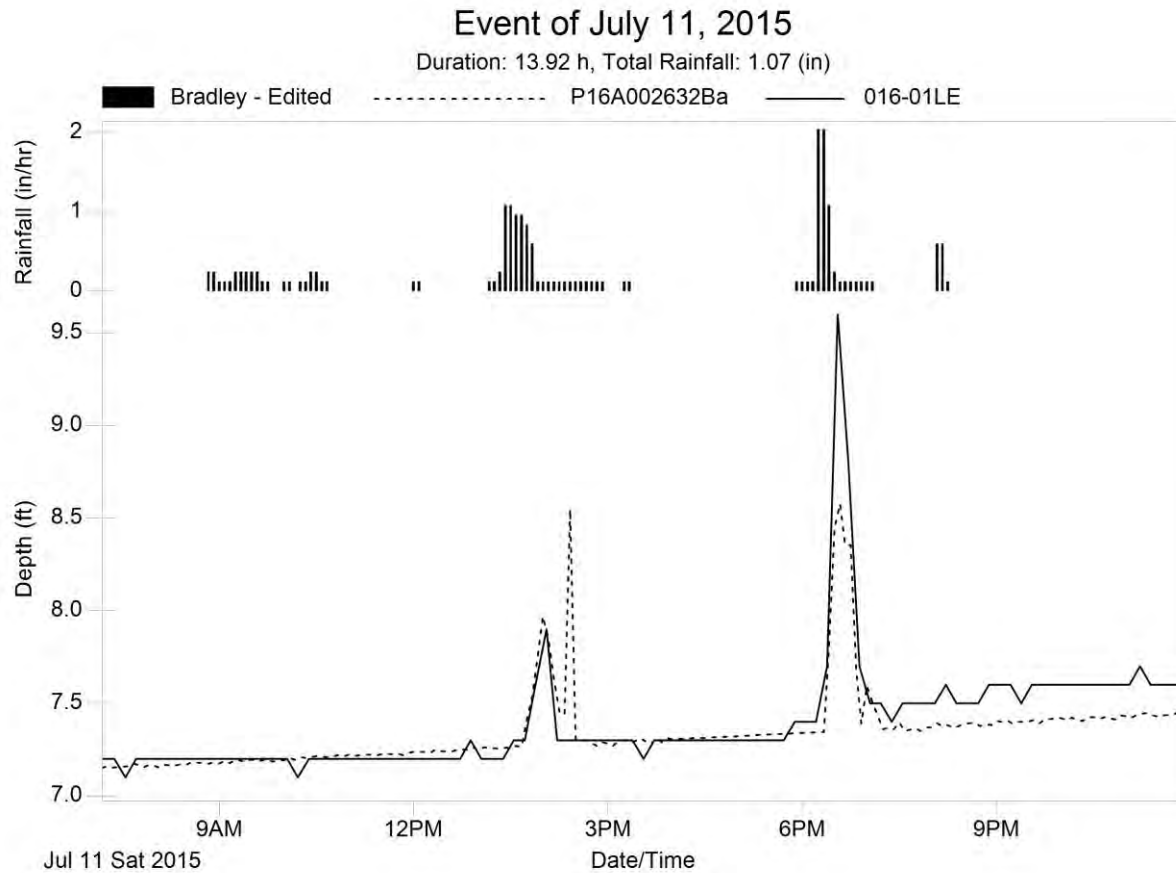
Cedar 016-01LE – Verification Events



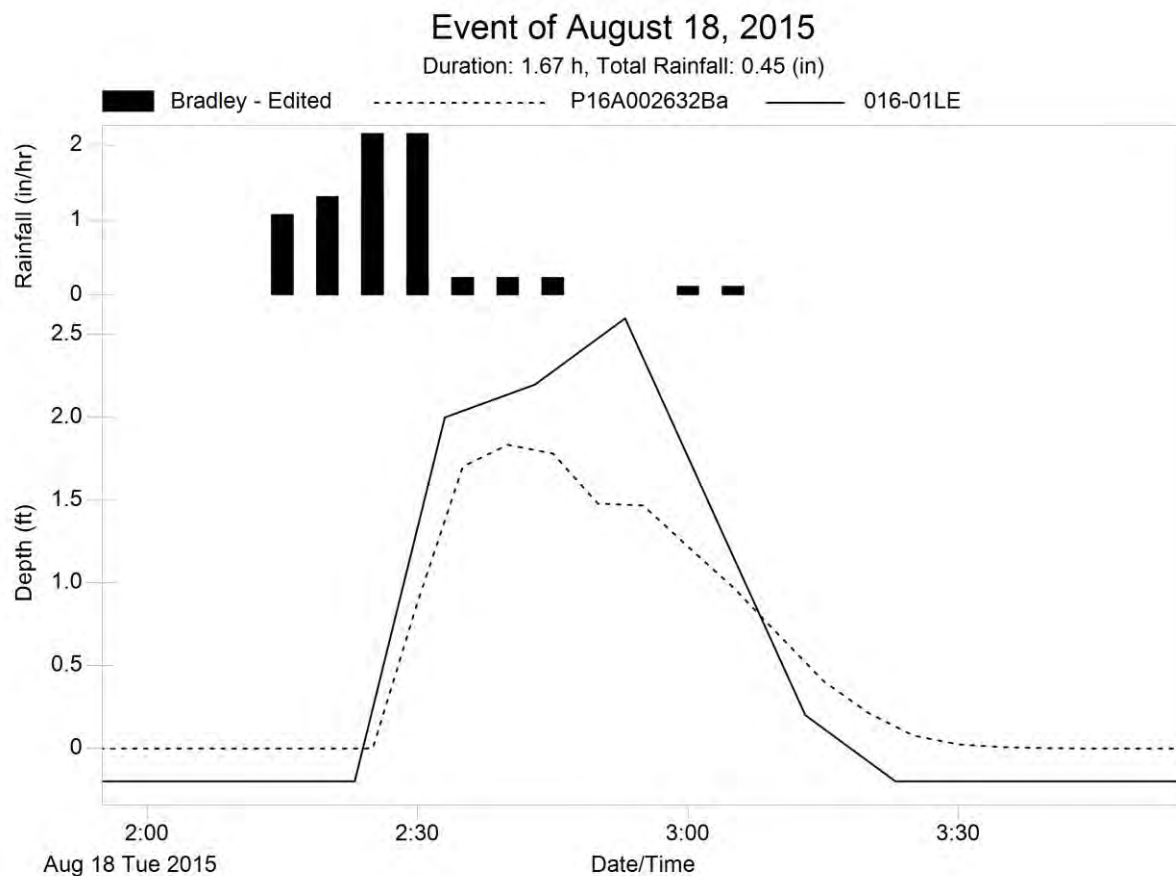
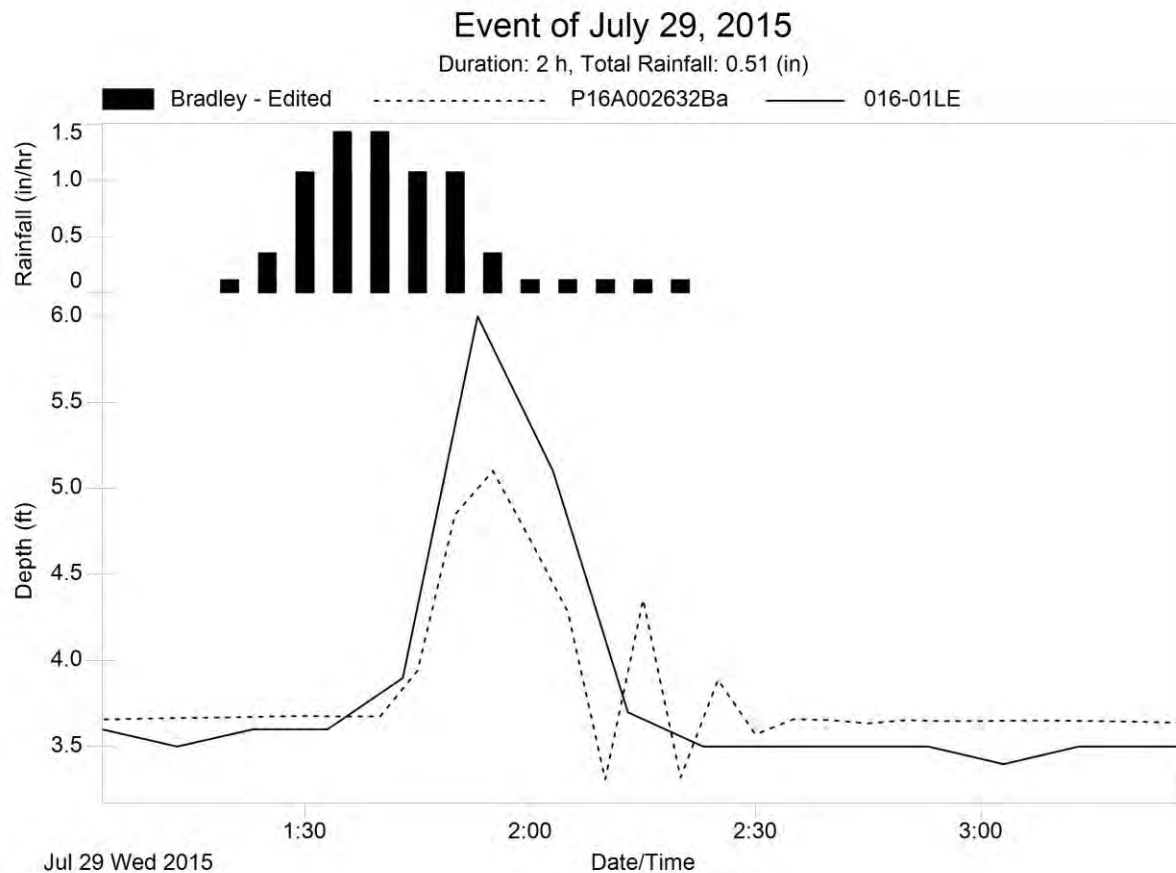
Cedar 016-01LE – Verification Events



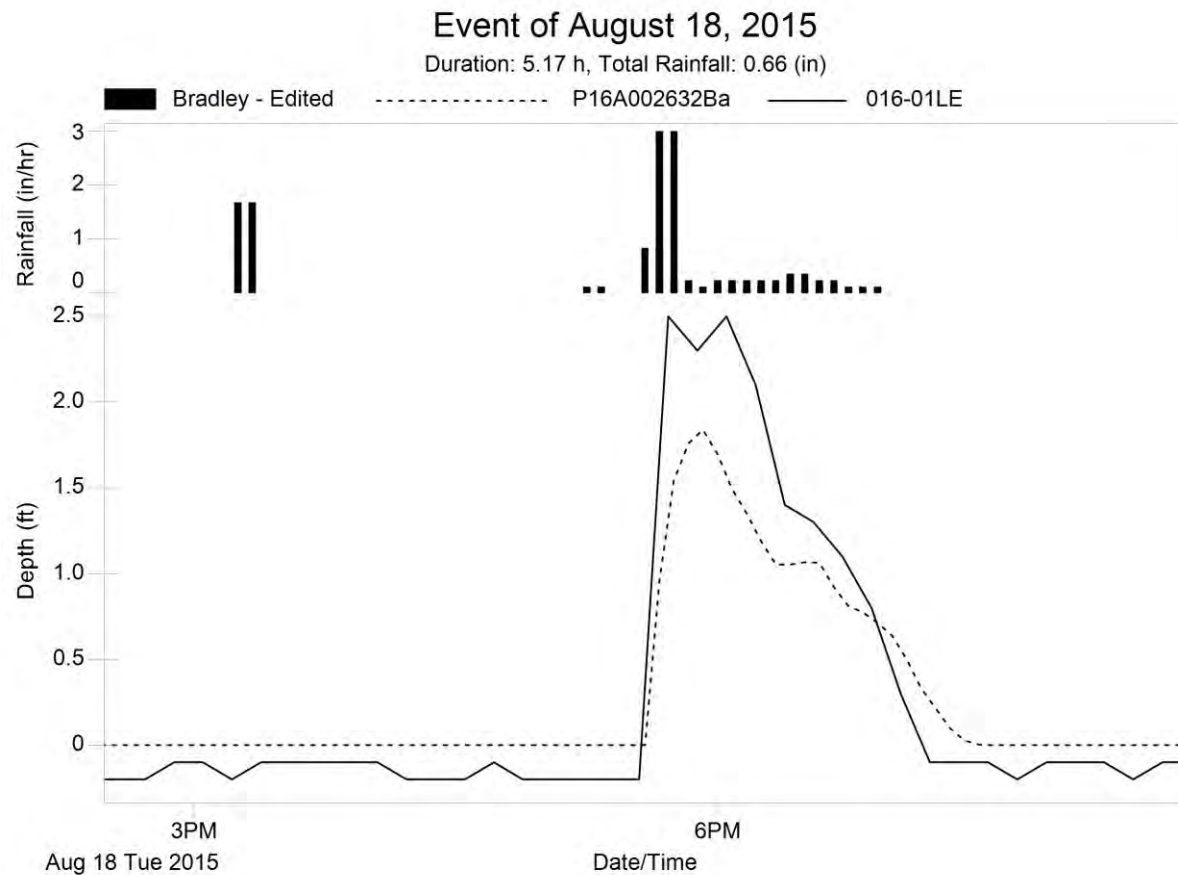
Cedar 016-01LE – Verification Events



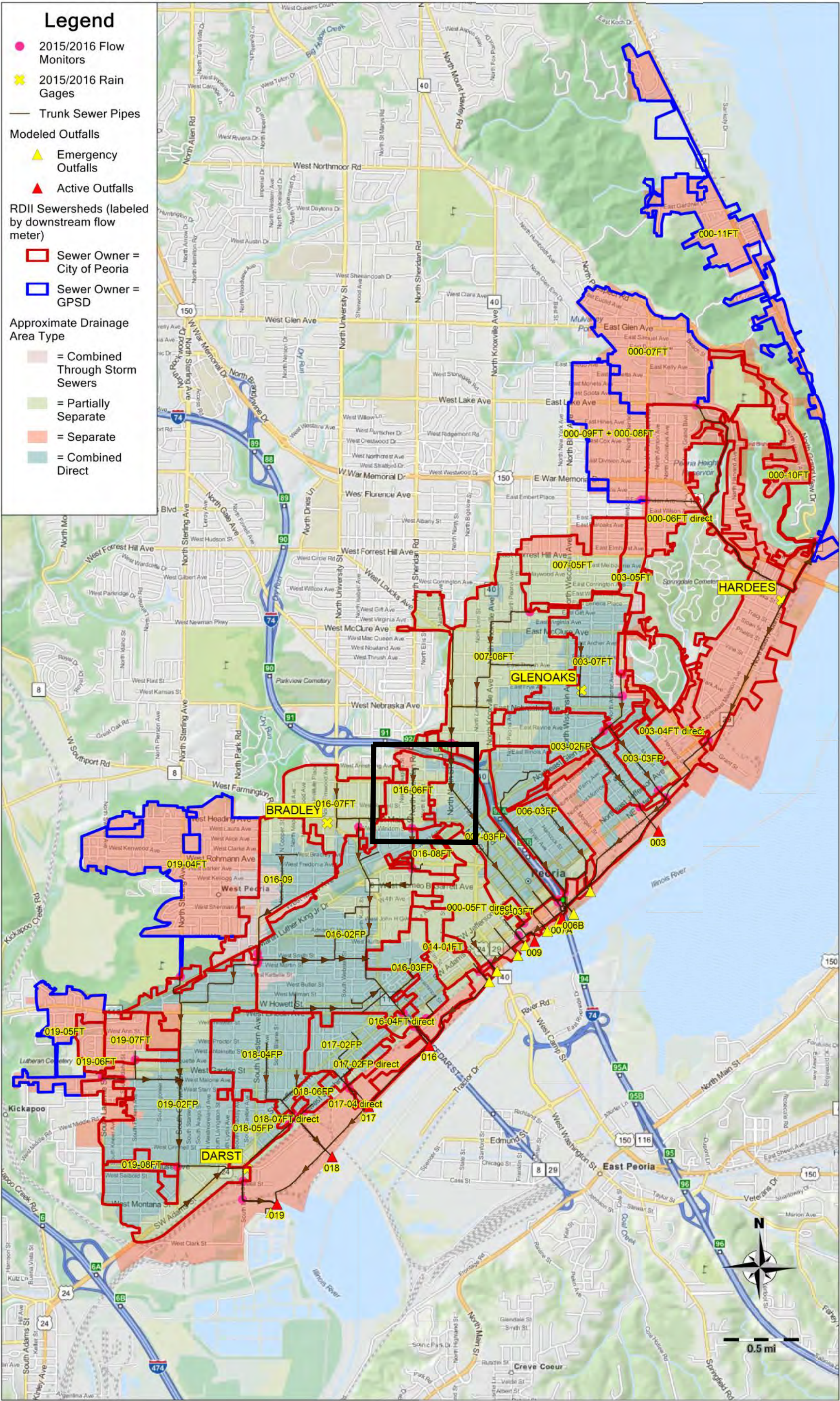
Cedar 016-01LE – Verification Events



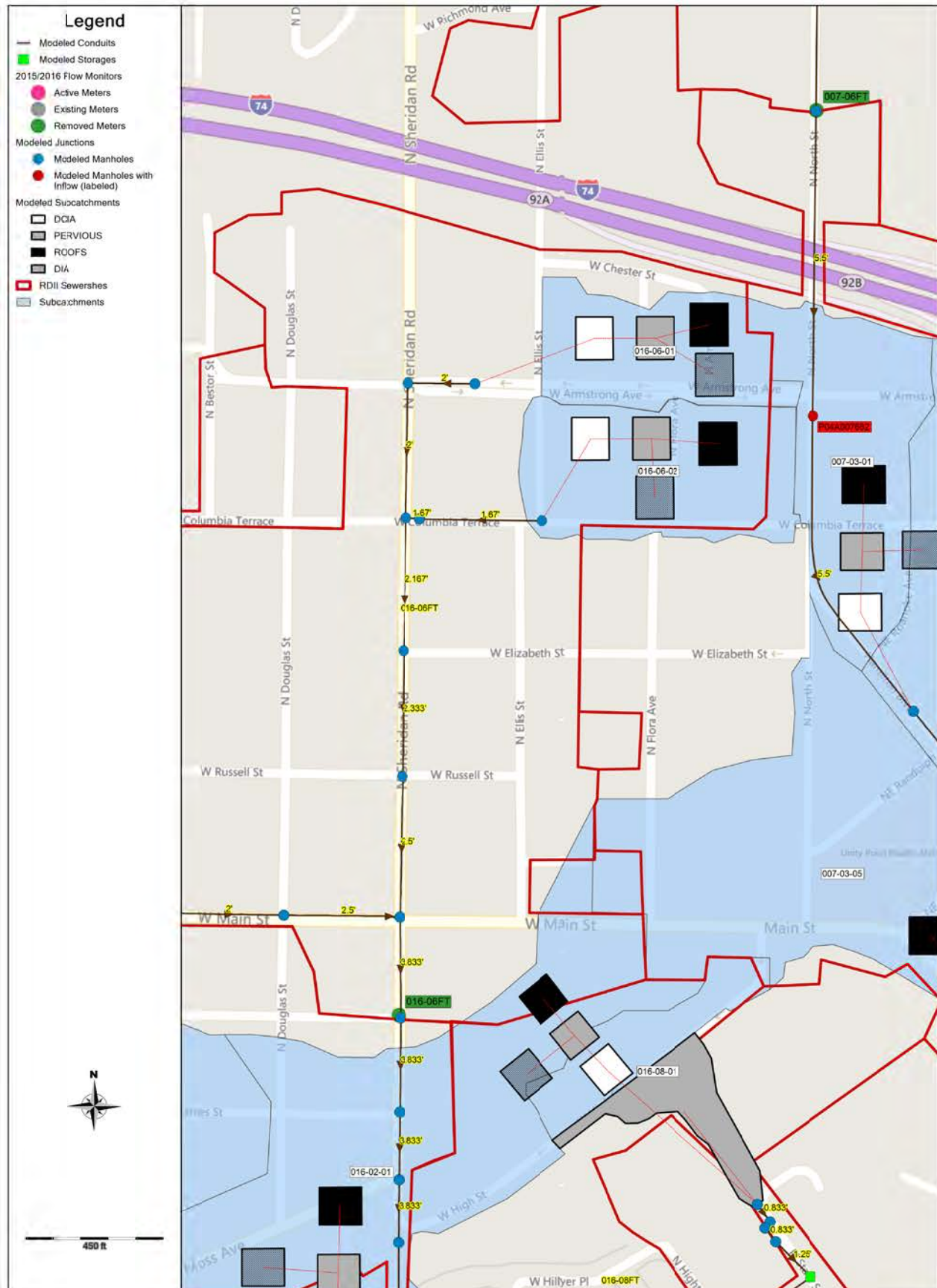
Cedar 016-01LE – Verification Events



Flow Monitor 016-06FT Overview Map



016-06 - Combined Sewer Flow Meter



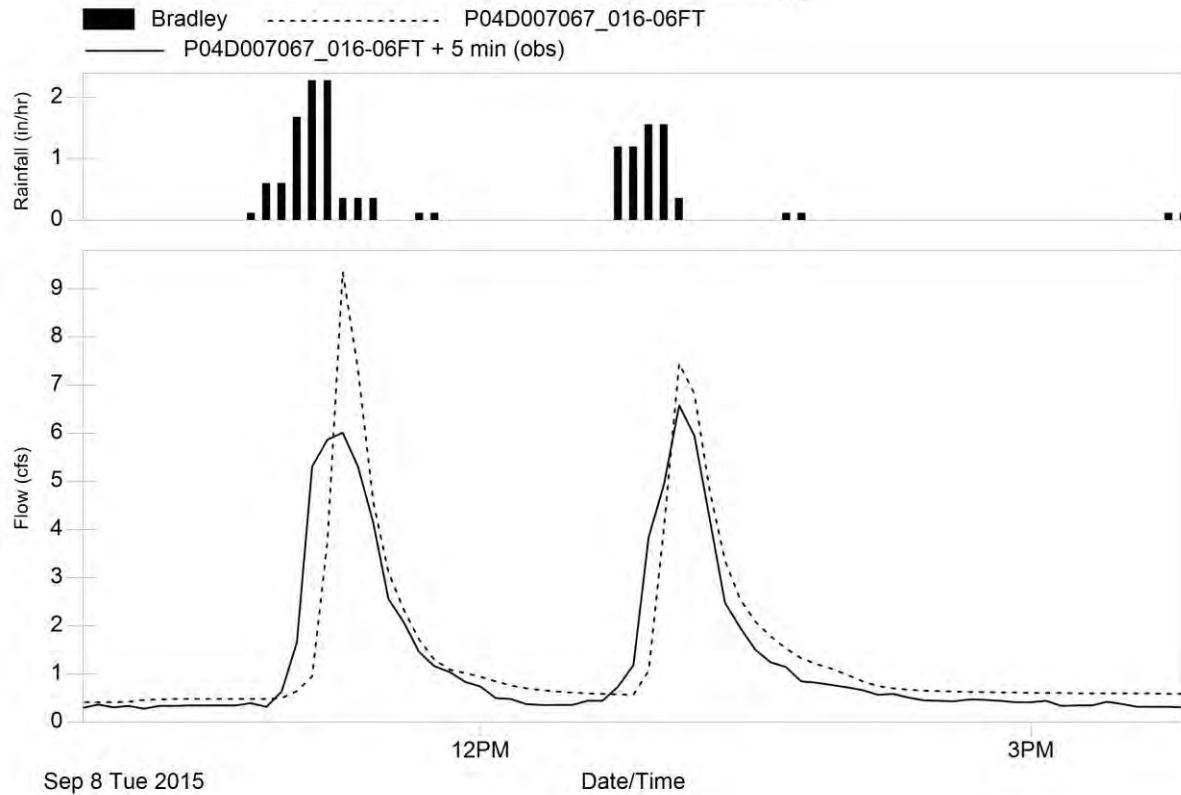
Cedar 016-06FT

Date	Duration (h)	Rainfall (in)	Maximum Flow (cfs)		Maximum Flow (mgd)		Total Volume (ft³)		Volume (million gallons)		Peak Flow Rate (-15% to +25%)	Flow Volume (-10% to +20%)	Rainfall Variability	
		Bradley Edited	Observed	Modeled	Observed	Modeled	Observed	Modeled	Observed	Modeled				
CALIBRATION EVENTS - FLOW														
9/8/2015 10:20	5.0	0.86	6.6	9.4	4.3	6.0	27090	29580	0.2	0.2	42%	9%	variable	
9/18/2015 12:45	13.3	1.62	9.8	9.1	6.3	5.9	62890	71590	0.5	0.5	-7%	14%	relatively uniform	
11/5/2015 13:15	18.0	0.43	1.9	2.1	1.2	1.4	32020	42500	0.2	0.3	12%	33%	possibly uniform	
11/11/2015 19:10	4.1	0.6	7.8	7.9	5.1	5.1	21510	20970	0.2	0.2	0%	-3%	relatively uniform	
11/16/2015 21:00	37.4	2.37	4.5	5.0	2.9	3.2	142400	159400	1.1	1.2	9%	12%	variable	
11/26/2015 18:15	34.8	1.12	2.5	2.4	1.6	1.6	113700	130200	0.9	1.0	-2%	15%	possibly uniform	
12/13/2015 1:05	40.5	1.77	2.5	3.0	1.6	1.9	136200	128000	1.0	1.0	20%	-6%	possibly uniform	
12/20/2015 21:25	17.9	0.7	2.0	2.5	1.3	1.6	49170	54390	0.4	0.4	23%	11%	relatively uniform	
12/23/2015 6:25	14.3	0.73	5.6	5.2	3.6	3.4	62790	56790	0.5	0.4	-6%	-10%	variable	
12/28/2015 0:25	33.8	1.64	10.1	6.2	6.5	4.0	272400	157500	2.0	1.2	-38%	-42%	variable	
VERIFICATION EVENTS - FLOW														
6/17/2015 2:05	3.8	0.8	7.4	10.3	4.8	6.6	25420	36050	0.2	0.3	38%	42%	variable	
6/24/2015 4:20	67.4	2.15	5.9	7.6	3.8	4.9	185700	232600	1.4	1.7	28%	25%	variable	
6/28/2015 17:25	4.4	0.51	7.5	5.2	4.8	3.3	32170	24220	0.2	0.2	-31%	-25%	variable	
7/8/2015 5:05	26.0	1.39	3.4	3.8	2.2	2.5	84650	91830	0.6	0.7	12%	8%	relatively uniform	
7/11/2015 8:35	13.9	1.07	7.7	7.8	4.9	5.1	59090	65330	0.4	0.5	2%	11%	possibly uniform	
7/16/2015 9:00	17.3	1.16	12.4	12.0	8.0	7.7	54030	73210	0.4	0.5	-3%	35%	relatively uniform	
7/29/2015 1:15	2.0	0.51	7.1	6.4	4.6	4.1	14790	12260	0.1	0.1	-11%	-17%	variable	
8/18/2015 2:05	1.7	0.45	7.5	8.4	4.9	5.4	12770	12250	0.1	0.1	12%	-4%	possibly uniform	
8/18/2015 15:00	5.2	0.66	9.9	9.0	6.4	5.8	26290	29800	0.2	0.2	-9%	13%	relatively uniform	
WEIGHTED AVERAGES														
Calibration - Relatively Uniform										-1%		10%		relatively uniform
Calibration - Possibly Uniform										10%		7%		possibly uniform
Calibration - Variable										-4%		-20%		variable
Calibration Weighted - All Events										-1%		-8%		
Verification - Relatively Uniform										-4%		18%		relatively uniform
Verification - Possibly Uniform										7%		8%		possibly uniform
Verification - Variable										5%		18%		variable
Verification Weighted - All Events										2%		17%		
Weighted Average - All Events										1%		1%		
NET AVERAGES														
Calibration - Relatively Uniform										5%		7%		relatively uniform
Calibration - Possibly Uniform										10%		14%		possibly uniform
Calibration - Variable										2%		-8%		variable
Calibration Net - All Events										5%		3%		
Verification - Relatively Uniform										0%		19%		relatively uniform
Verification - Possibly Uniform										7%		3%		possibly uniform
Verification - Variable										6%		6%		variable
Verification Net - All Events										4%		10%		
Net Average - All Events										5%		6%		

Cedar 016-06FT – Calibration Events

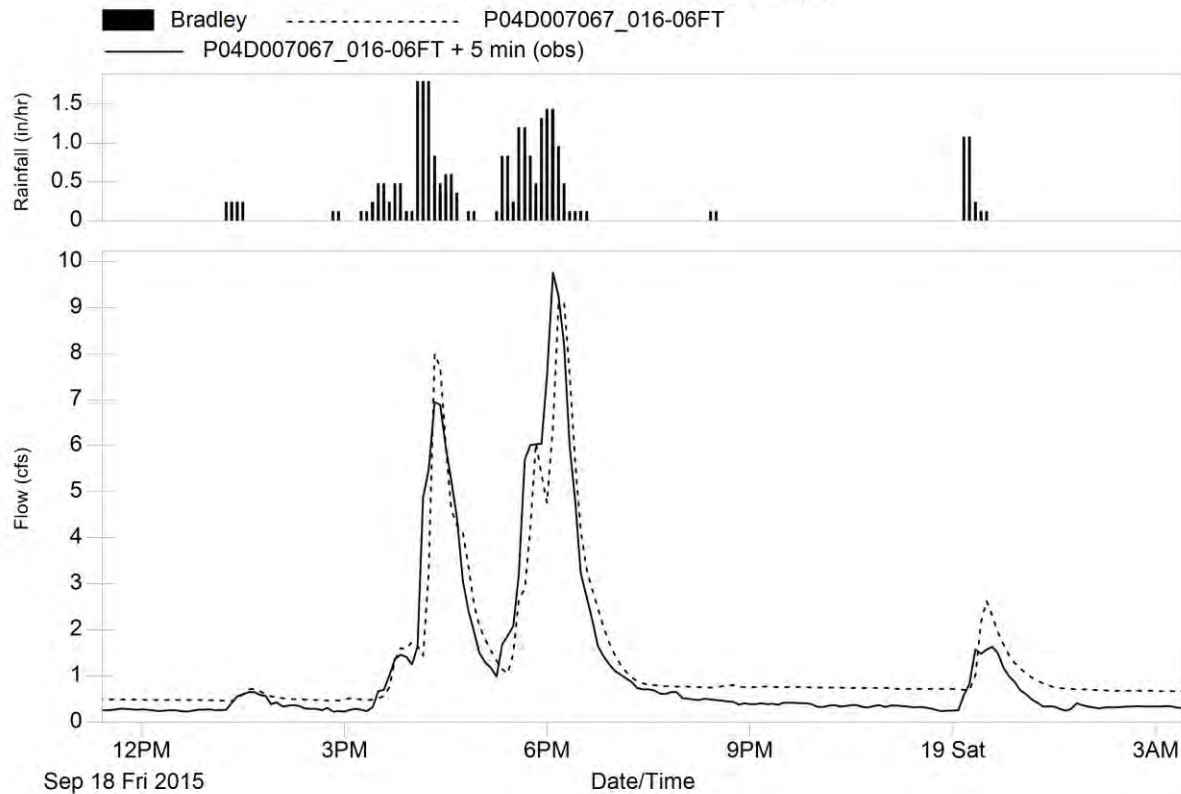
Event of September 8, 2015

Duration: 5 h, Total Rainfall: 0.86 (in)



Event of September 18, 2015

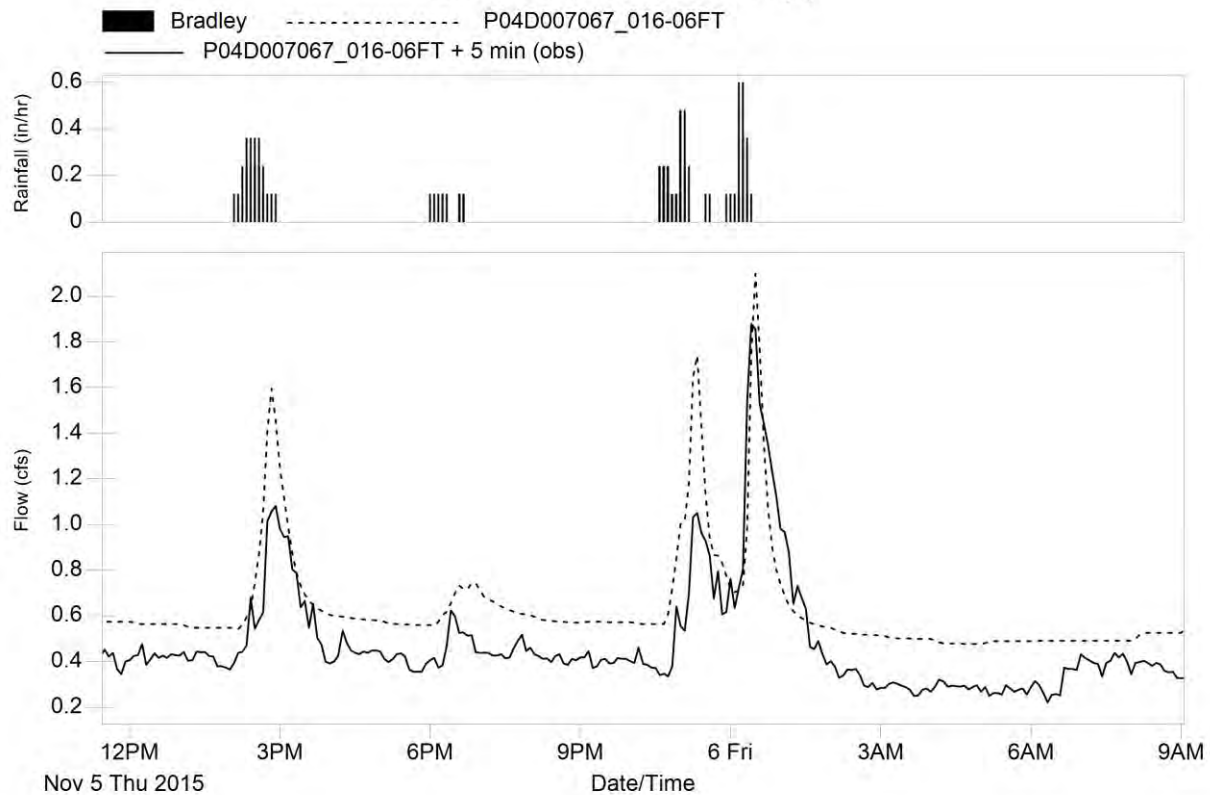
Duration: 13.33 h, Total Rainfall: 1.62 (in)



Cedar 016-06FT – Calibration Events

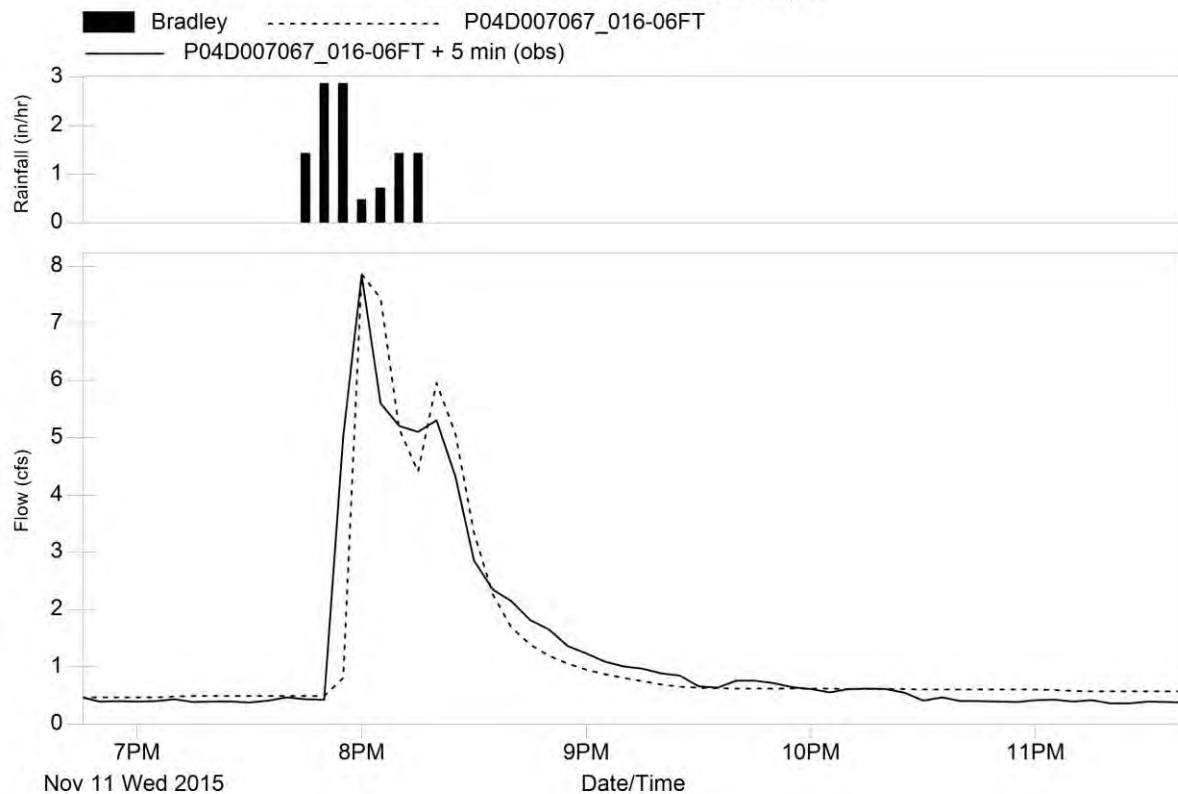
Event of November 5, 2015

Duration: 18 h, Total Rainfall: 0.43 (in)



Event of November 11, 2015

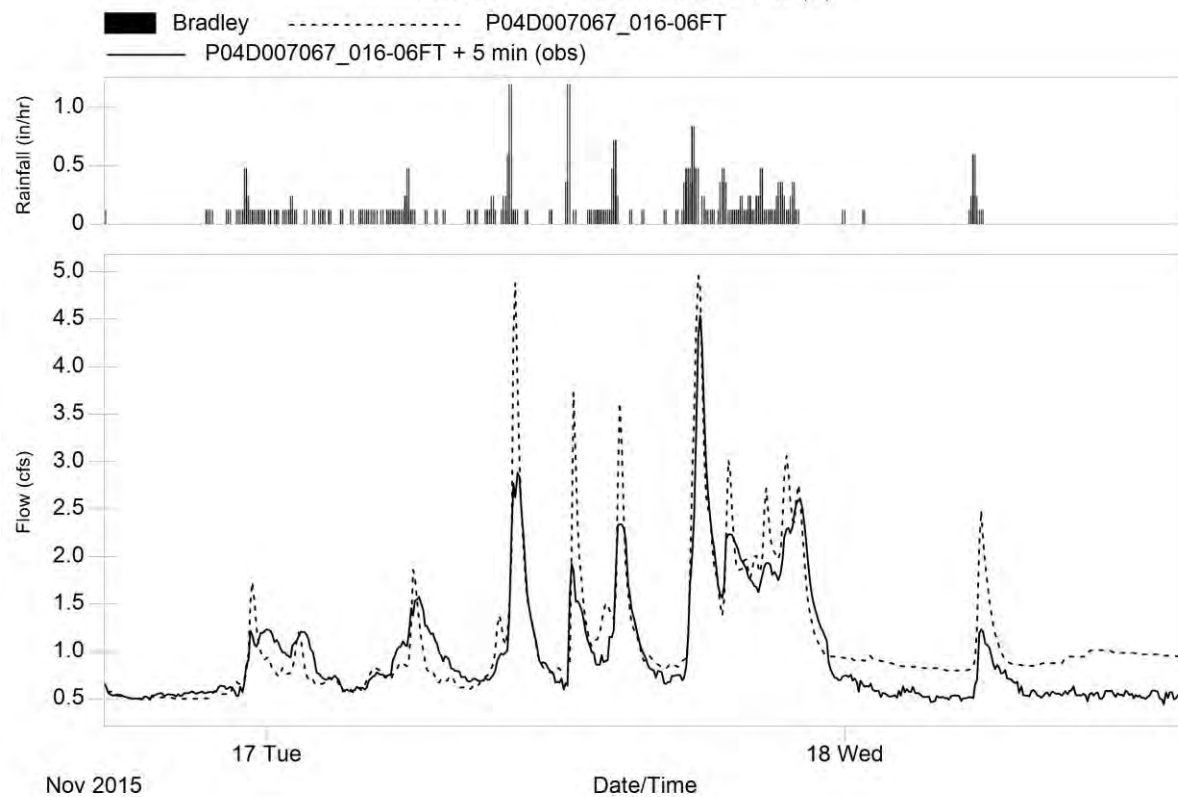
Duration: 4.08 h, Total Rainfall: 0.6 (in)



Cedar 016-06FT – Calibration Events

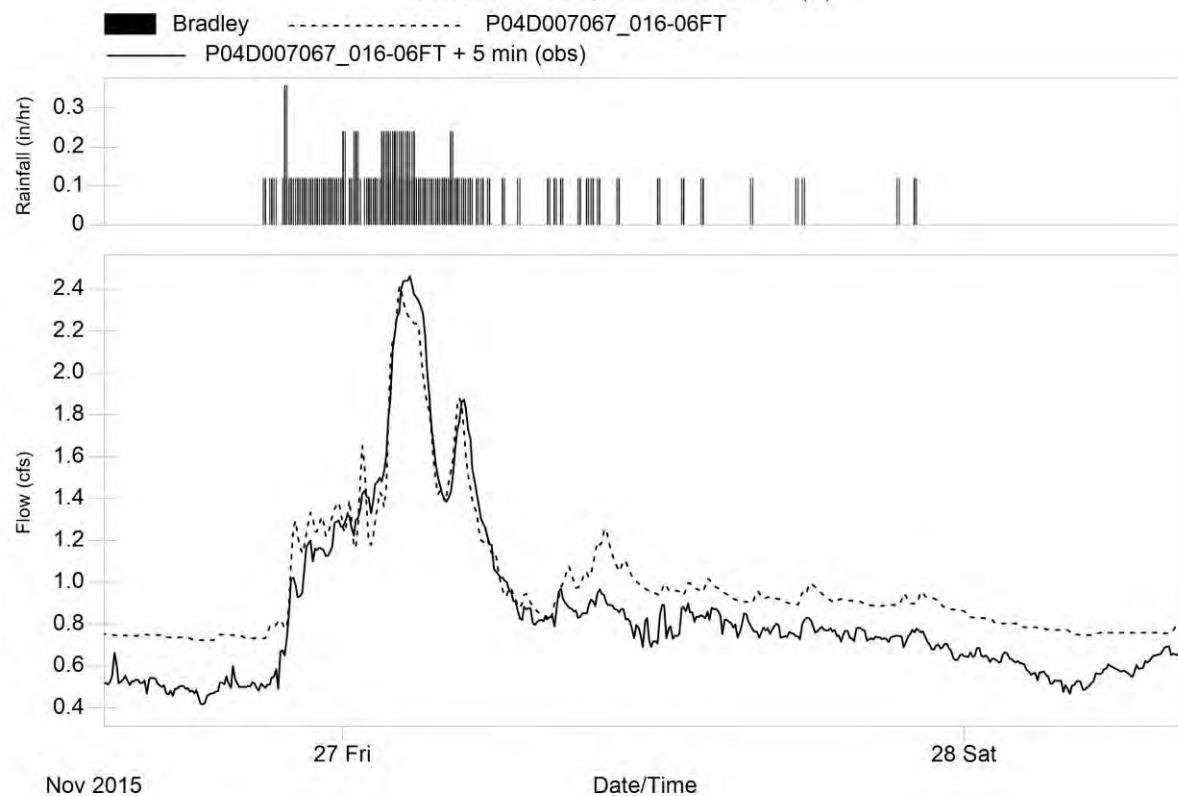
Event of November 16, 2015

Duration: 37.42 h, Total Rainfall: 2.37 (in)



Event of November 26, 2015

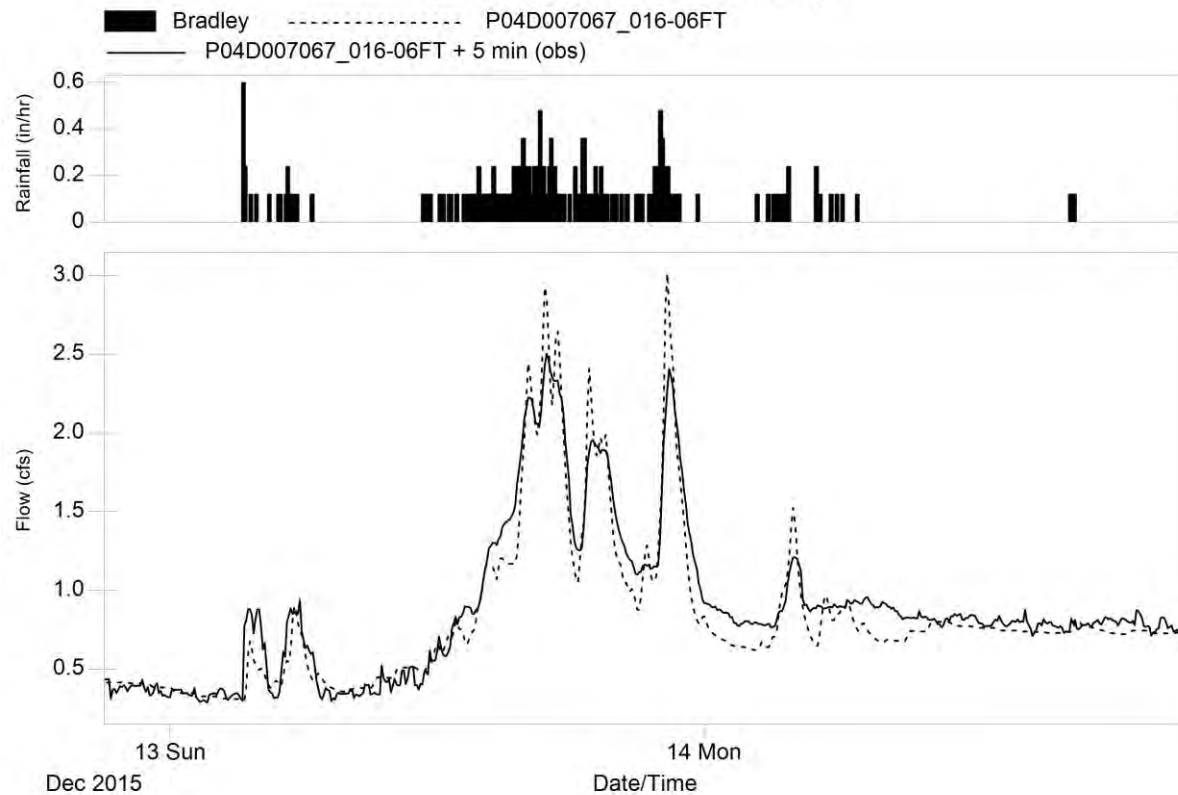
Duration: 34.83 h, Total Rainfall: 1.12 (in)



Cedar 016-06FT – Calibration Events

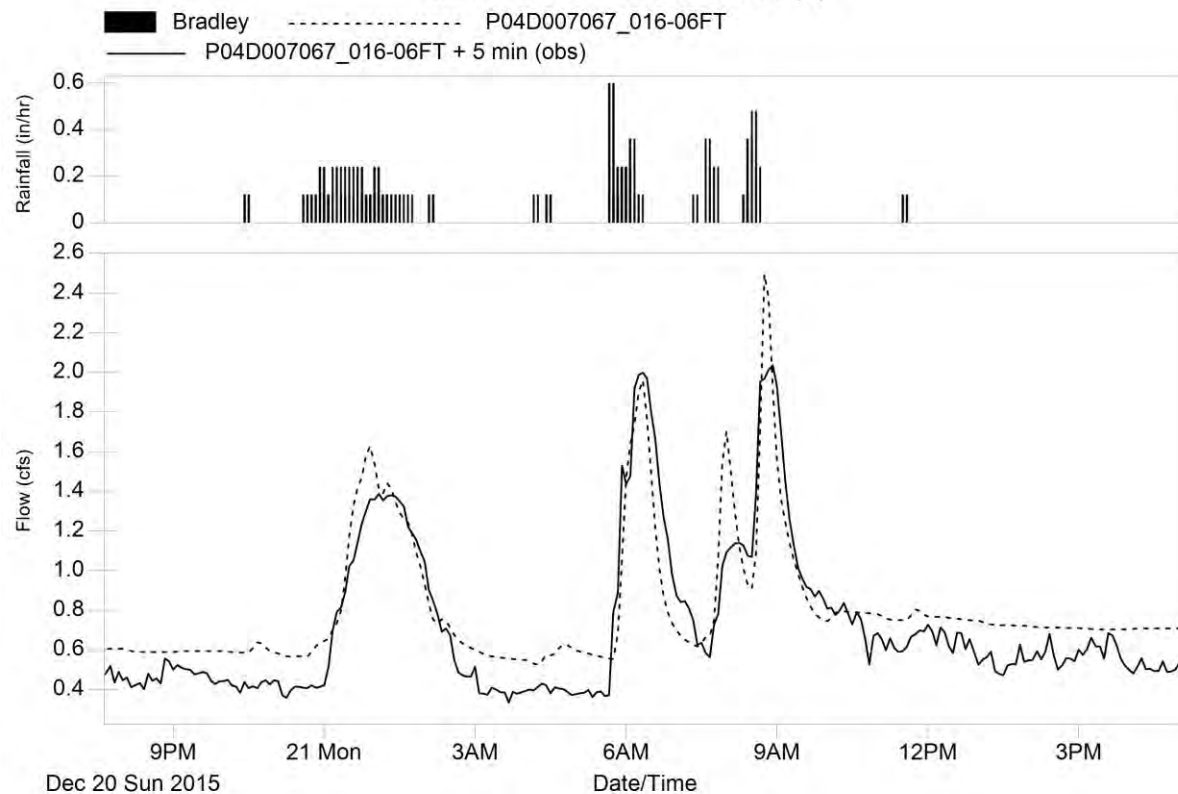
Event of December 13, 2015

Duration: 40.5 h, Total Rainfall: 1.77 (in)



Event of December 20, 2015

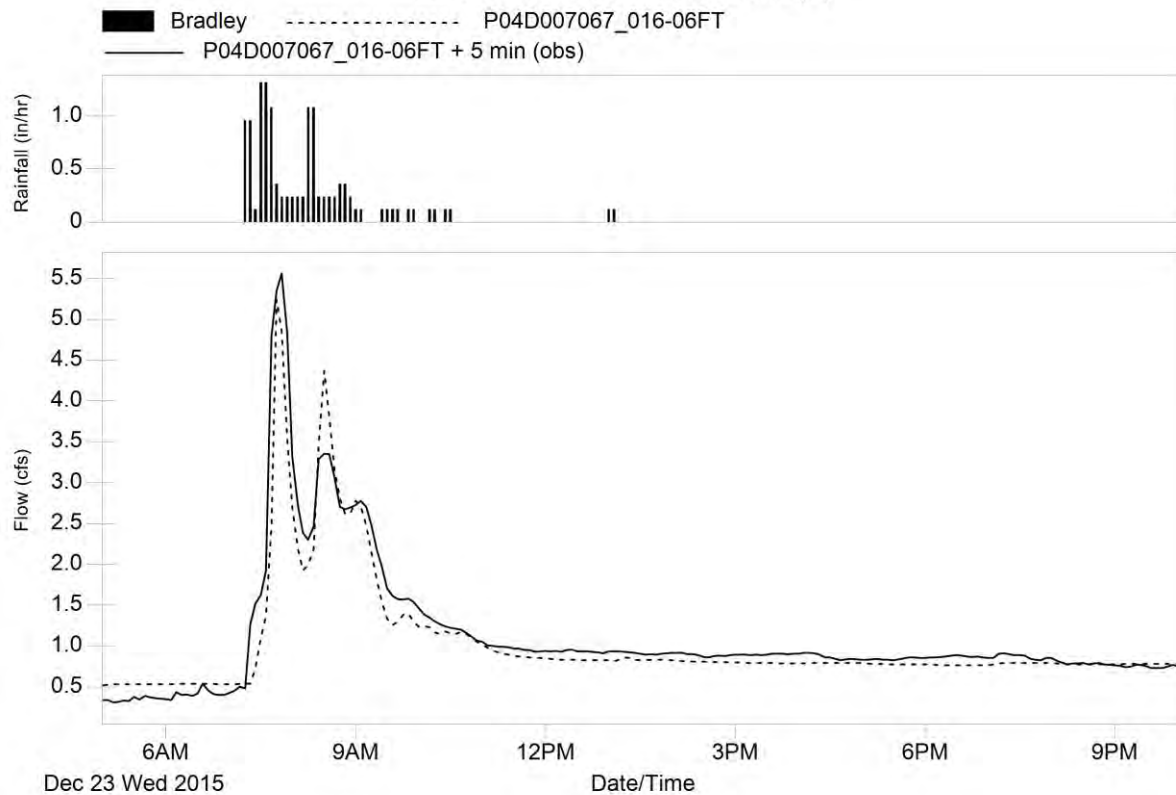
Duration: 17.92 h, Total Rainfall: 0.7 (in)



Cedar 016-06FT – Calibration Events

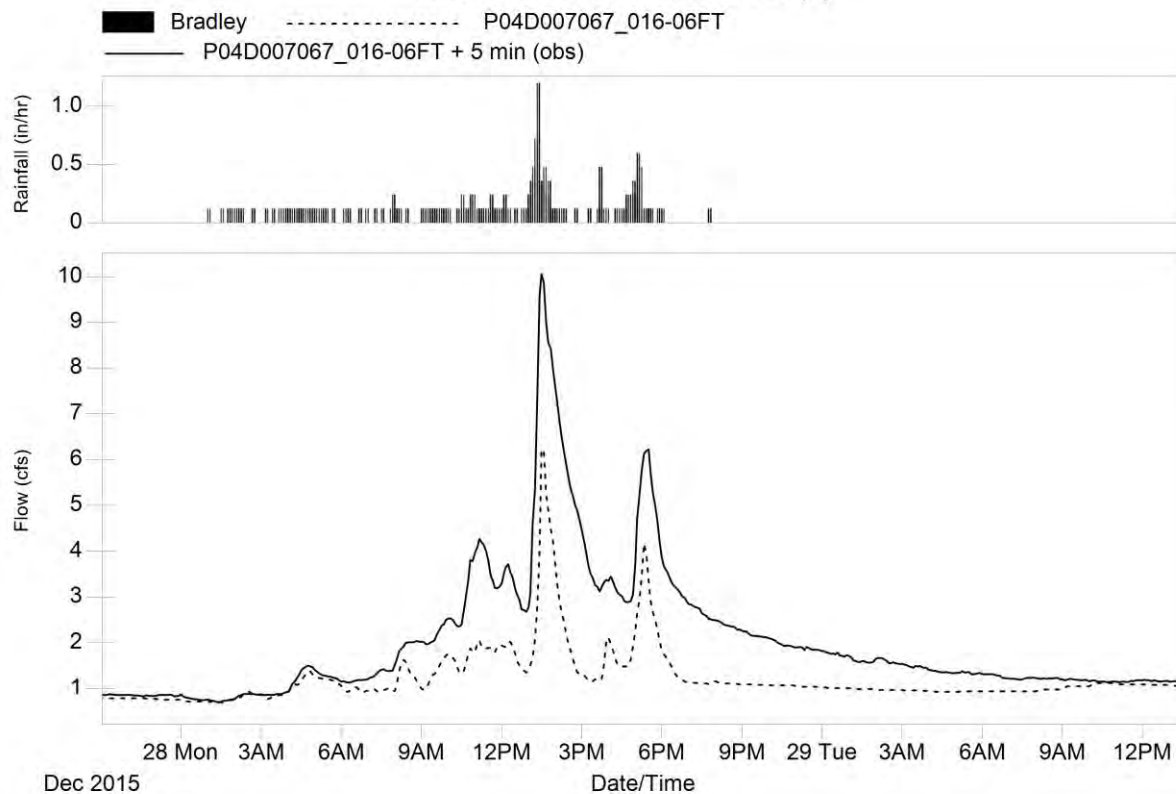
Event of December 23, 2015

Duration: 14.25 h, Total Rainfall: 0.73 (in)



Event of December 28, 2015

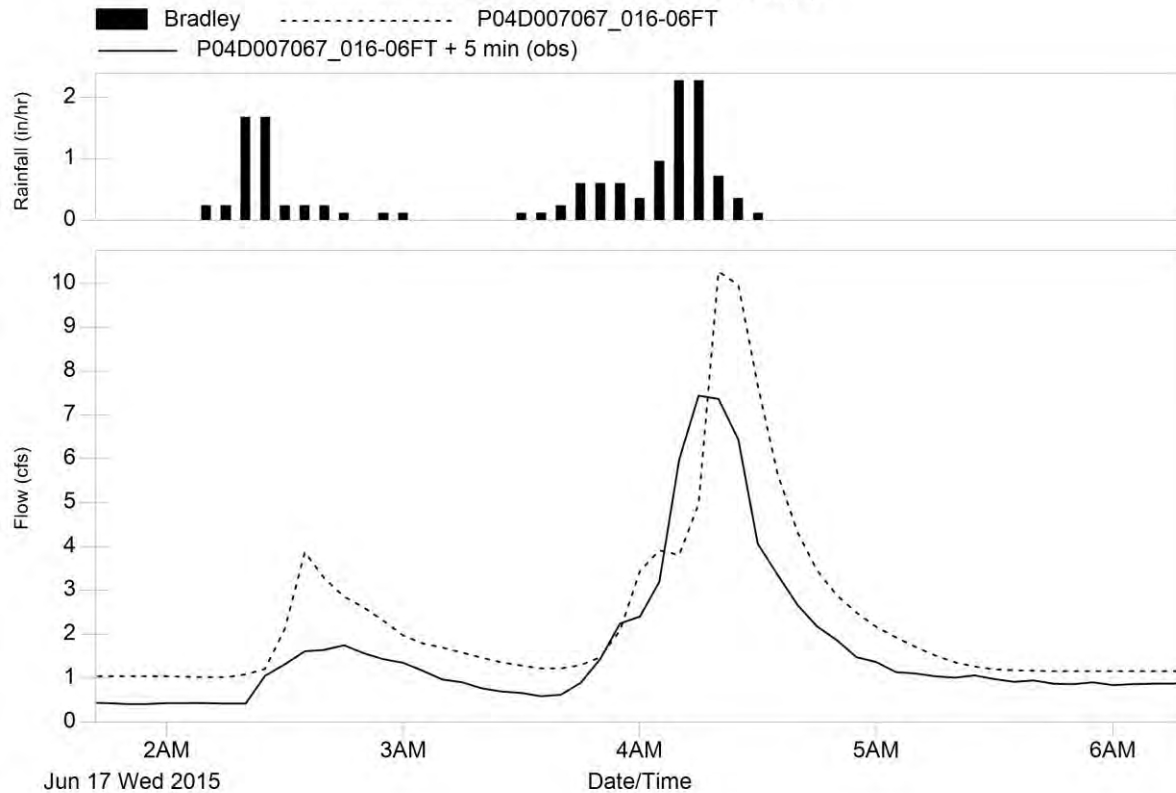
Duration: 33.75 h, Total Rainfall: 1.64 (in)



Cedar 016-06FT – Verification Events

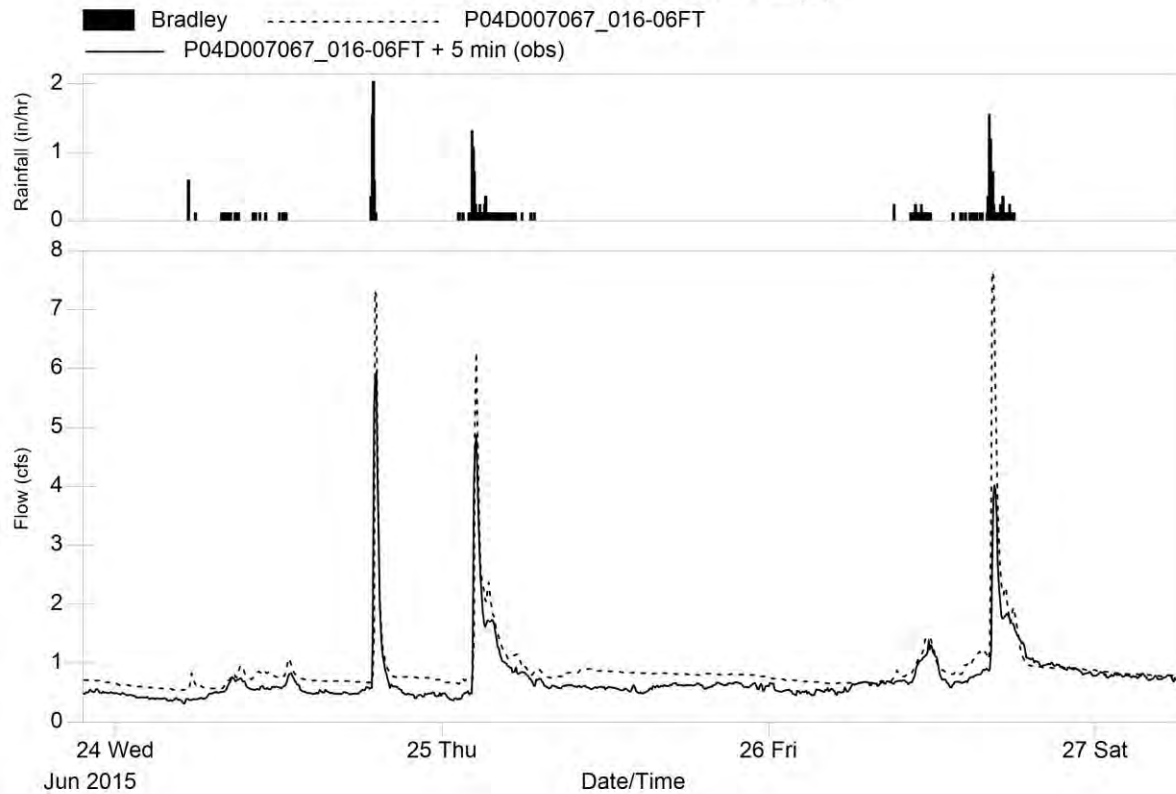
Event of June 17, 2015

Duration: 3.83 h, Total Rainfall: 0.8 (in)



Event of June 24, 2015

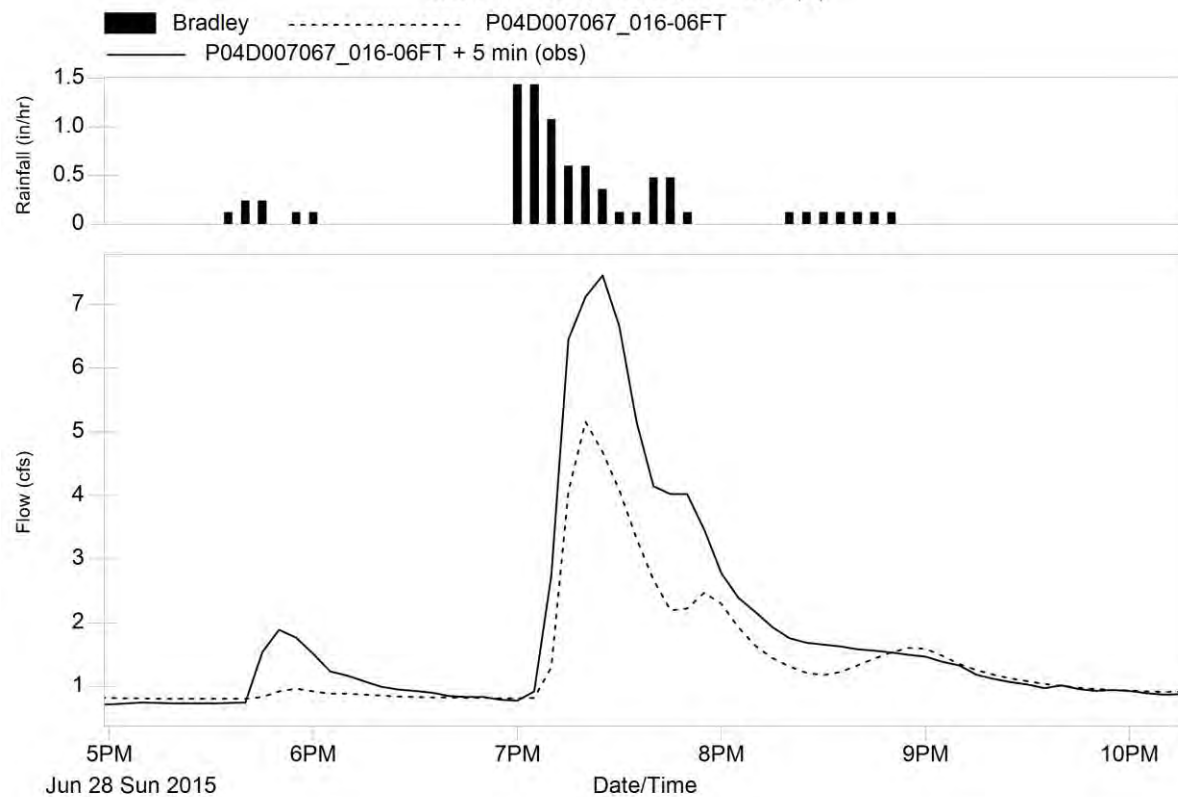
Duration: 67.42 h, Total Rainfall: 2.15 (in)



Cedar 016-06FT – Verification Events

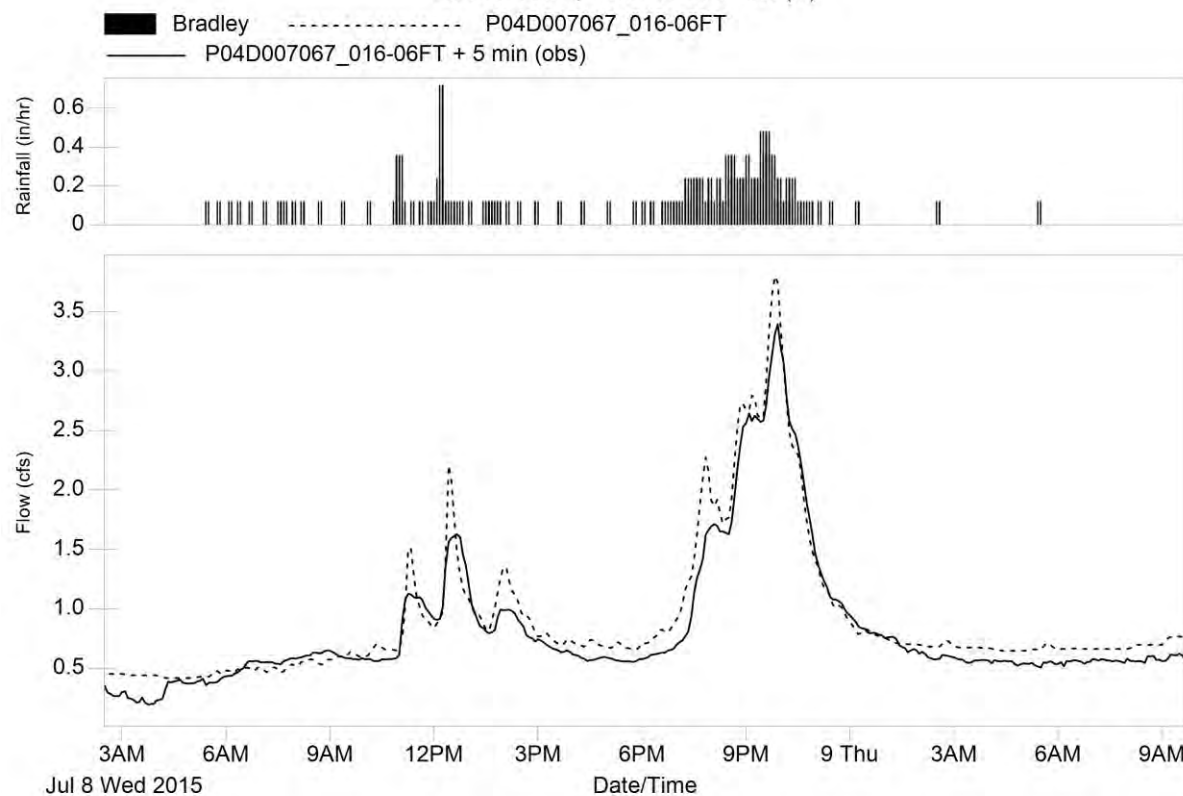
Event of June 28, 2015

Duration: 4.42 h, Total Rainfall: 0.51 (in)



Event of July 8, 2015

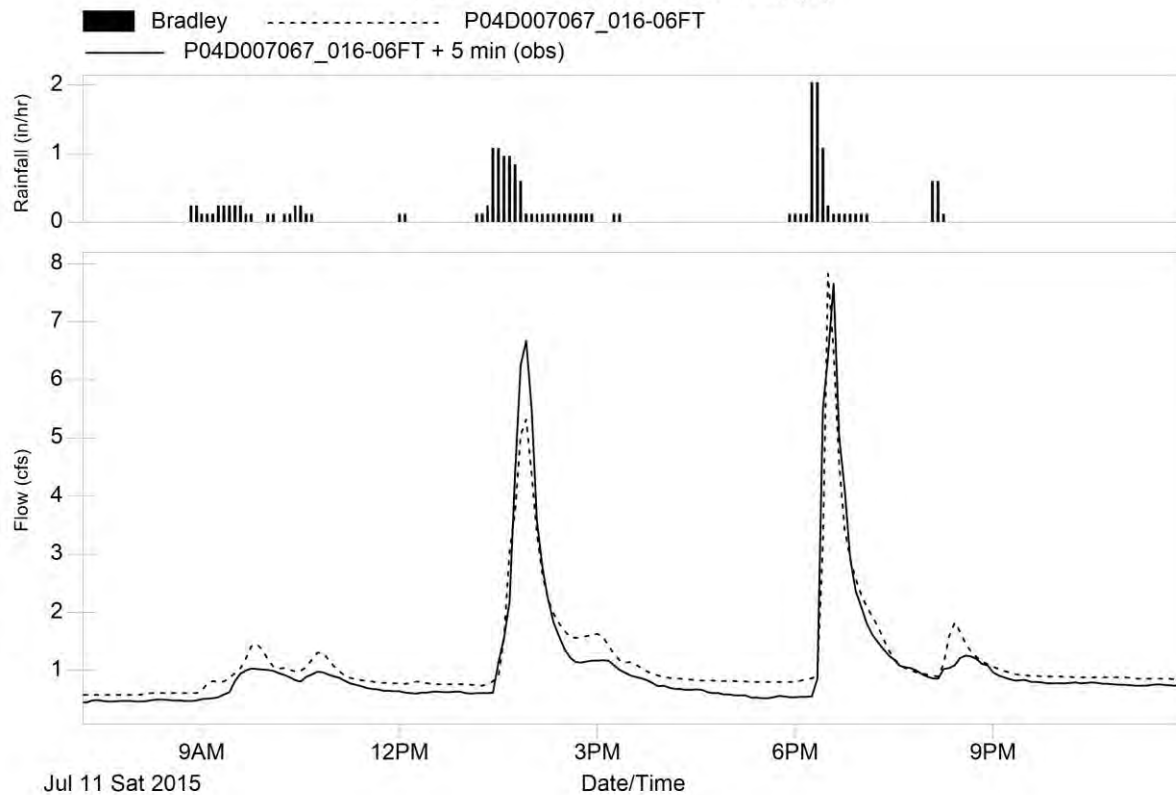
Duration: 26 h, Total Rainfall: 1.39 (in)



Cedar 016-06FT – Verification Events

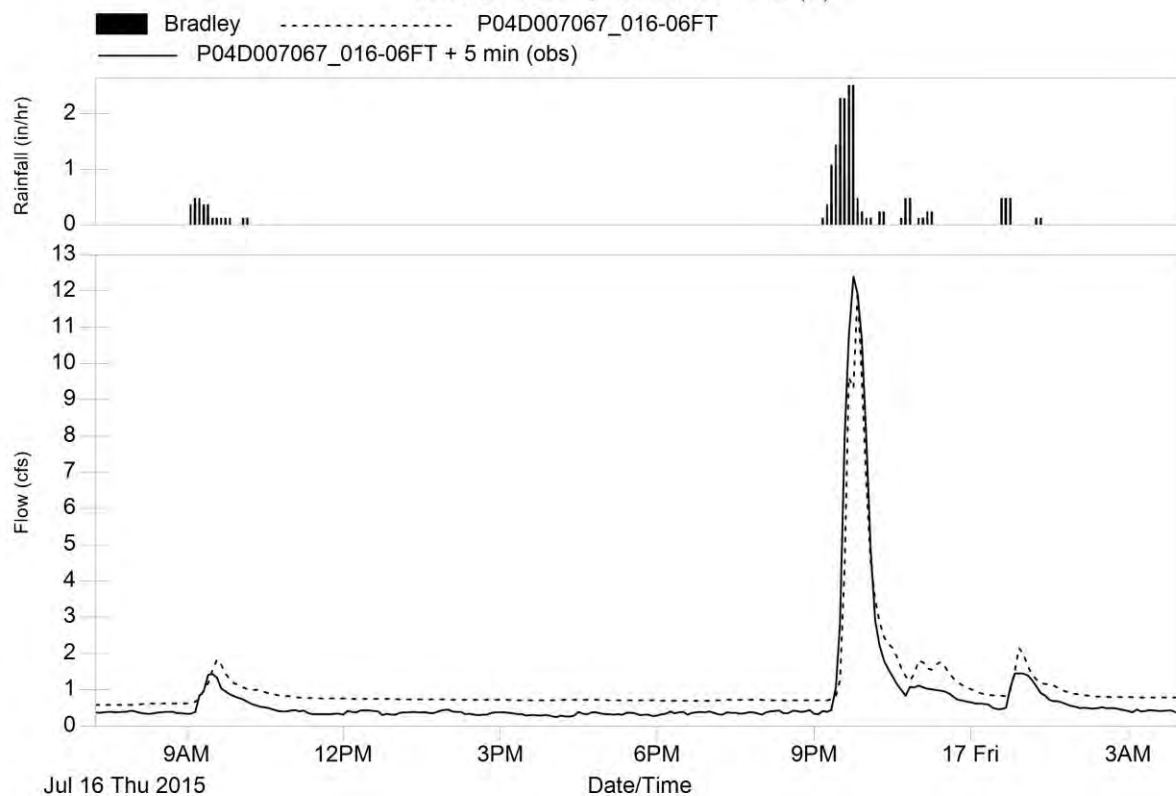
Event of July 11, 2015

Duration: 13.92 h, Total Rainfall: 1.07 (in)



Event of July 16, 2015

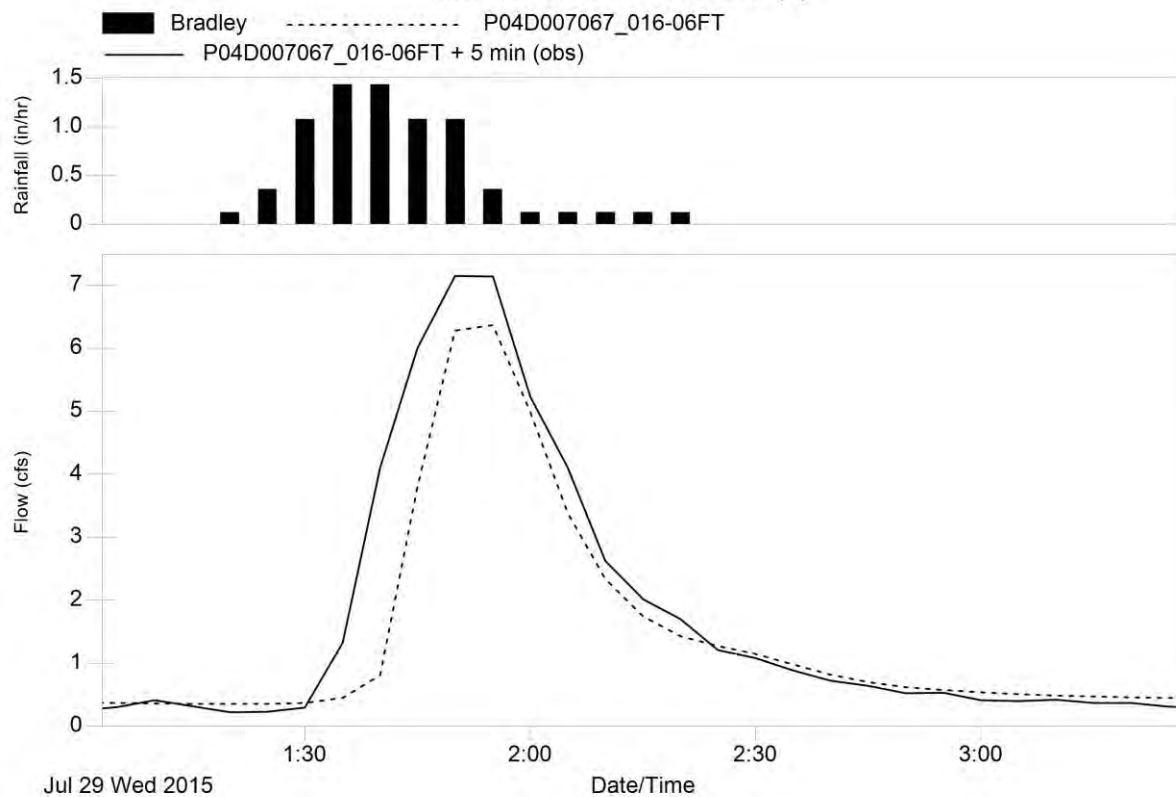
Duration: 17.33 h, Total Rainfall: 1.16 (in)



Cedar 016-06FT – Verification Events

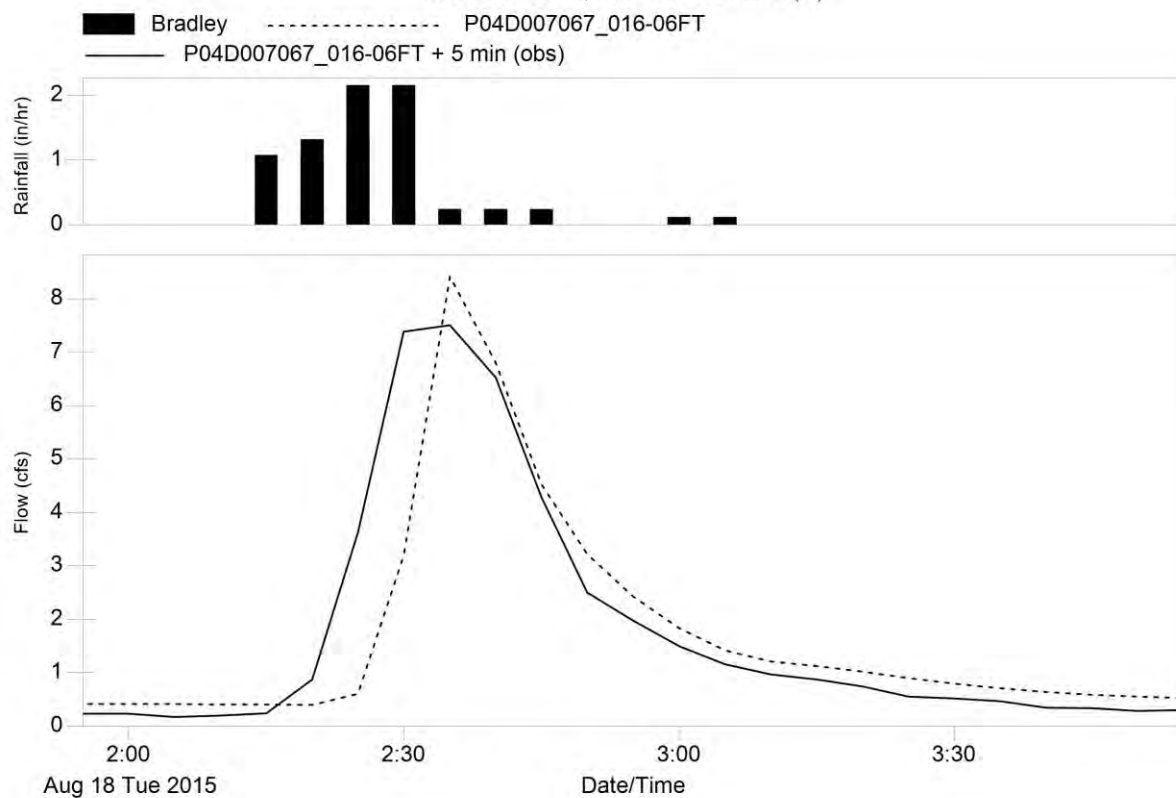
Event of July 29, 2015

Duration: 2 h, Total Rainfall: 0.51 (in)

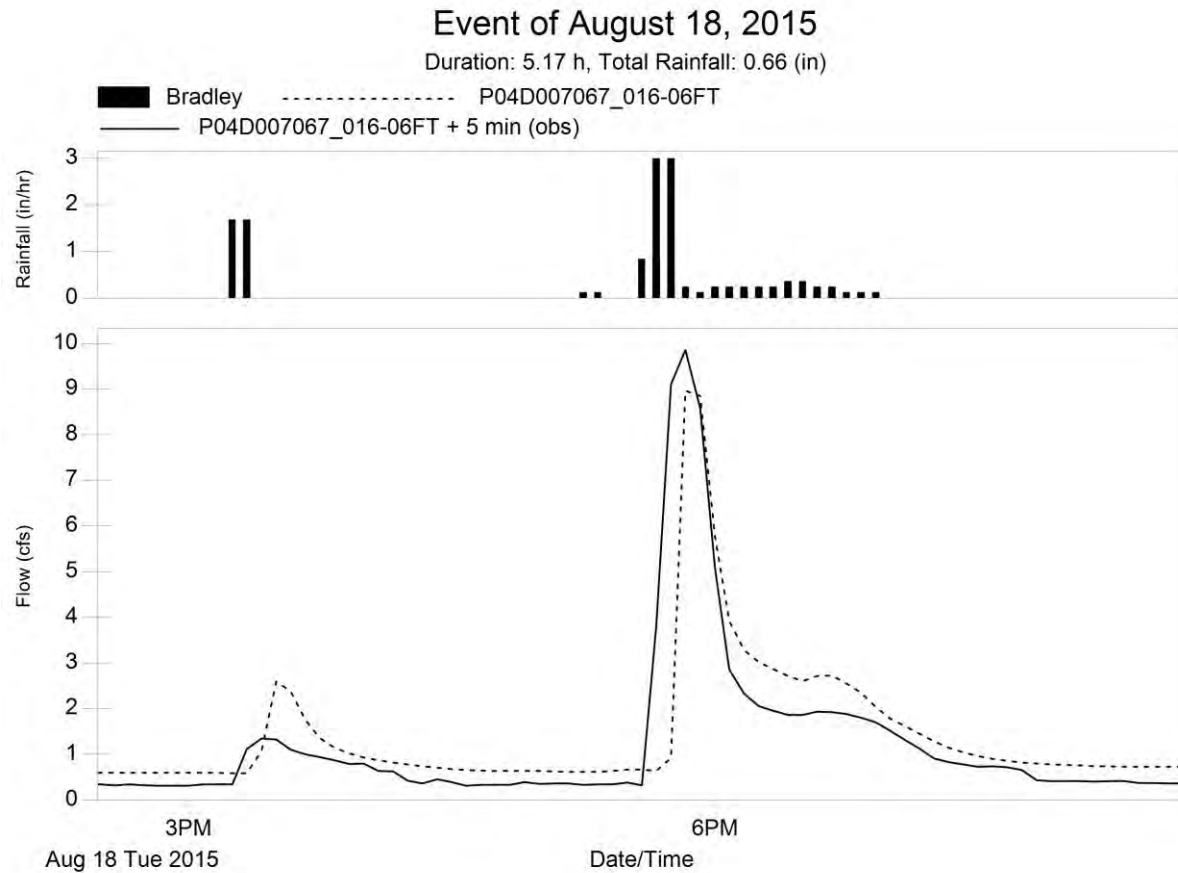


Event of August 18, 2015

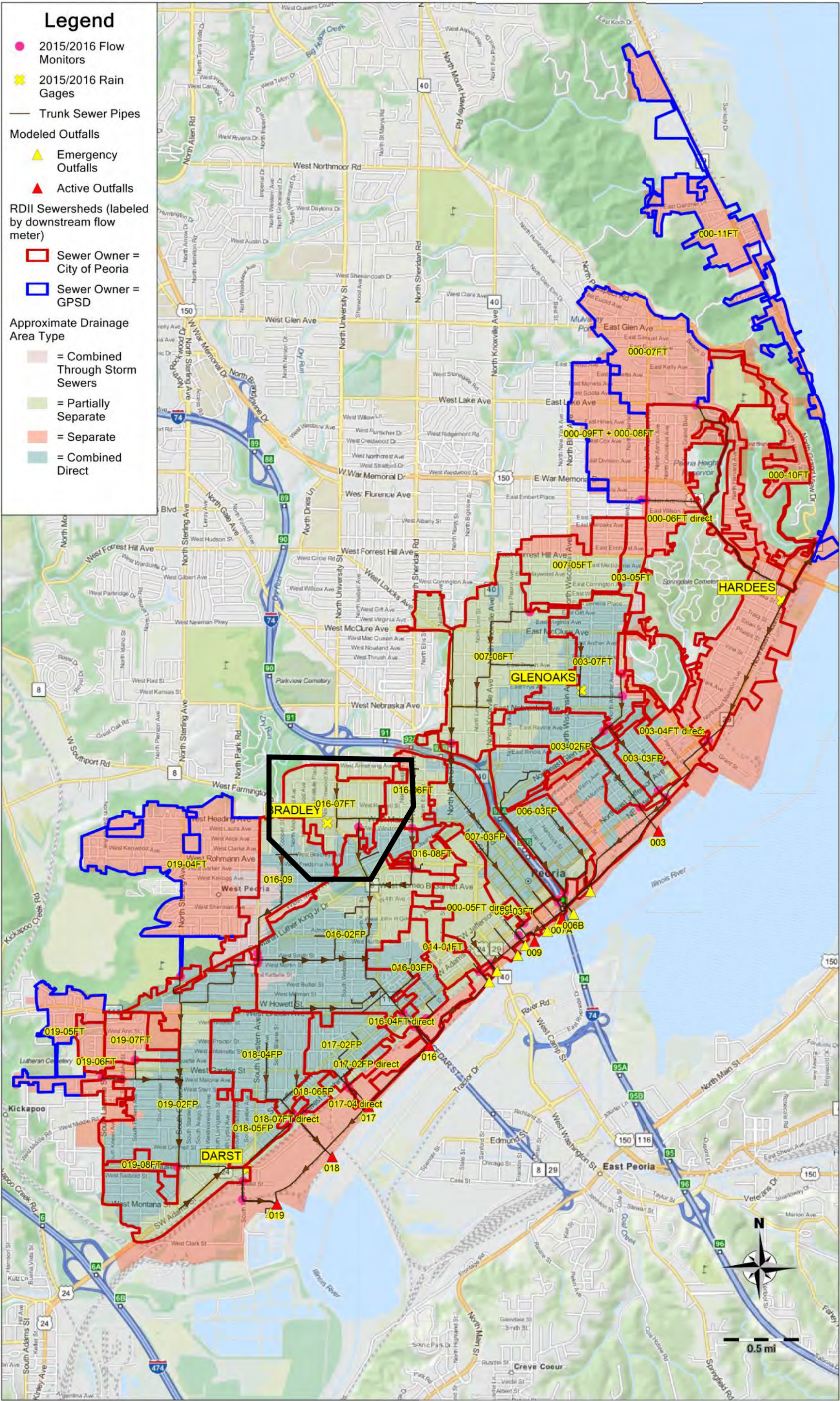
Duration: 1.67 h, Total Rainfall: 0.45 (in)



Cedar 016-06FT – Verification Events



Flow Monitor 016-07FT Overview Map



[illegible]

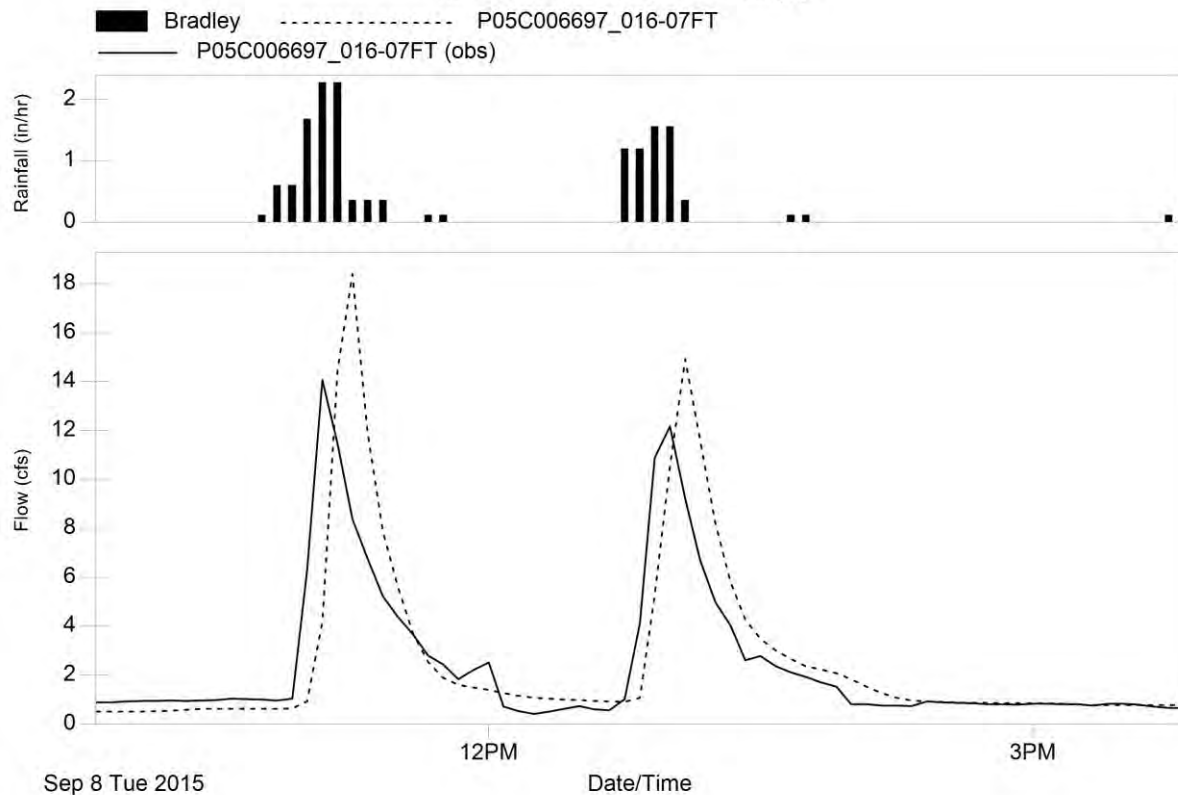
Cedar 016-07FT

Date	Duration (h)	Rainfall (in)	Maximum Flow (cfs)		Maximum Flow (mgd)		Total Volume (ft³)		Volume (million gallons)		Peak Flow Rate (-15% to +25%)	Flow Volume (-10% to +20%)	Rainfall Variability	
		Bradley Edited	Observed	Modeled	Observed	Modeled	Observed	Modeled	Observed	Modeled				
CALIBRATION EVENTS - FLOW														
9/8/2015 10:20	5.0	0.86	14.1	18.4	9.1	11.9	49630	55250	0.4	0.4	31%	11%	variable	
9/18/2015 12:45	13.3	1.62	17.5	17.7	11.3	11.5	115500	117800	0.9	0.9	1%	2%	relatively uniform	
11/5/2015 13:15	18.0	0.43	3.7	3.9	2.4	2.5	54100	56010	0.4	0.4	6%	4%	possibly uniform	
11/11/2015 19:10	4.1	0.60	20.4	18.4	13.1	11.9	30680	35710	0.2	0.3	-10%	16%	relatively uniform	
11/16/2015 21:00	37.4	2.37	8.5	9.1	5.5	5.9	211900	202200	1.6	1.5	8%	-5%	variable	
11/26/2015 18:15	34.8	1.12	3.8	3.9	2.5	2.5	121500	127400	0.9	1.0	1%	5%	possibly uniform	
12/13/2015 1:05	40.5	1.77	4.8	5.5	3.1	3.6	179000	175100	1.3	1.3	16%	-2%	possibly uniform	
12/20/2015 21:25	17.9	0.70	4.9	4.3	3.2	2.8	57570	64880	0.4	0.5	-13%	13%	relatively uniform	
12/23/2015 6:25	14.3	0.73	12.0	9.8	7.8	6.3	66730	70040	0.5	0.5	-19%	5%	variable	
12/28/2015 0:25	33.8	1.64	18.7	11.8	12.1	7.6	217300	158700	1.6	1.2	-37%	-27%	variable	
VERIFICATION EVENTS - FLOW														
6/17/2015 2:05	3.8	0.80	16.5	19.1	10.6	12.4	45770	48720	0.3	0.4	16%	6%	variable	
6/24/2015 4:20	67.4	2.15	14.6	15.9	9.4	10.3	232700	248000	1.7	1.9	9%	7%	variable	
6/28/2015 17:25	4.4	0.51	15.3	9.7	9.9	6.2	54300	33380	0.4	0.2	-37%	-39%	variable	
7/8/2015 5:05	26.0	1.39	6.4	6.9	4.1	4.4	110100	122000	0.8	0.9	7%	11%	relatively uniform	
7/11/2015 8:35	13.9	1.07	10.7	13.6	6.9	8.8	84290	87020	0.6	0.7	27%	3%	possibly uniform	
7/16/2015 9:00	17.3	1.16	24.0	22.1	15.5	14.2	96530	101400	0.7	0.8	-8%	5%	relatively uniform	
7/29/2015 1:15	2.0	0.51	10.5	13.1	6.8	8.4	22870	23170	0.2	0.2	25%	1%	variable	
8/18/2015 2:05	1.7	0.45	13.0	16.5	8.4	10.7	22050	22380	0.2	0.2	27%	1%	possibly uniform	
8/18/2015 15:00	5.2	0.66	13.2	19.2	8.5	12.4	41040	50650	0.3	0.4	46%	23%	relatively uniform	
WEIGHTED AVERAGES														
Calibration - Relatively Uniform										-6%		7%		relatively uniform
Calibration - Possibly Uniform										9%		1%		possibly uniform
Calibration - Variable										-8%		-11%		variable
Calibration Weighted - All Events										-5%		-4%		
Verification - Relatively Uniform										11%		11%		relatively uniform
Verification - Possibly Uniform										27%		3%		possibly uniform
Verification - Variable										2%		-1%		variable
Verification Weighted - All Events										10%		4%		
Weighted Average - All Events										3%		-1%		
NET AVERAGES														
Calibration - Relatively Uniform										-7%		10%		relatively uniform
Calibration - Possibly Uniform										8%		2%		possibly uniform
Calibration - Variable										-4%		-4%		variable
Calibration Net - All Events										-1%		2%		
Verification - Relatively Uniform										15%		13%		relatively uniform
Verification - Possibly Uniform										27%		2%		possibly uniform
Verification - Variable										3%		-6%		variable
Verification Net - All Events										13%		2%		
Net Average - All Events										5%		2%		

Cedar 016-07FT – Verification Events

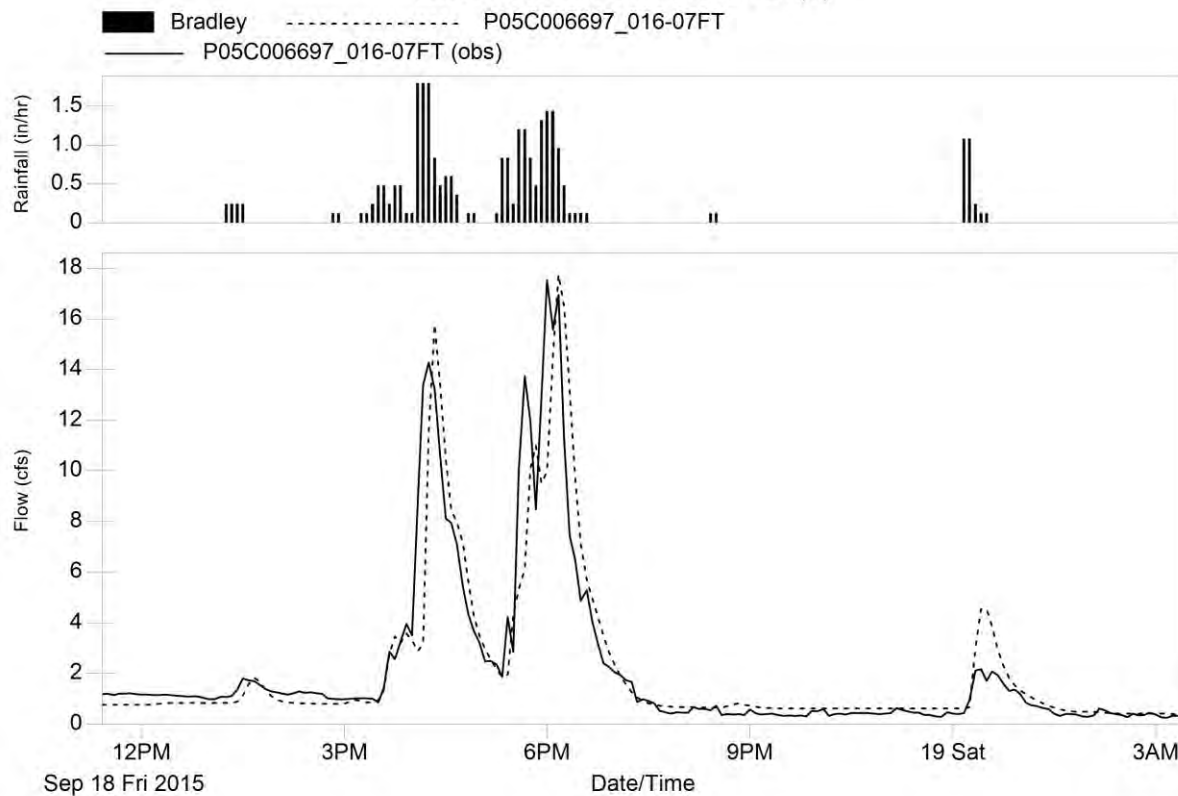
Event of September 8, 2015

Duration: 5 h, Total Rainfall: 0.86 (in)



Event of September 18, 2015

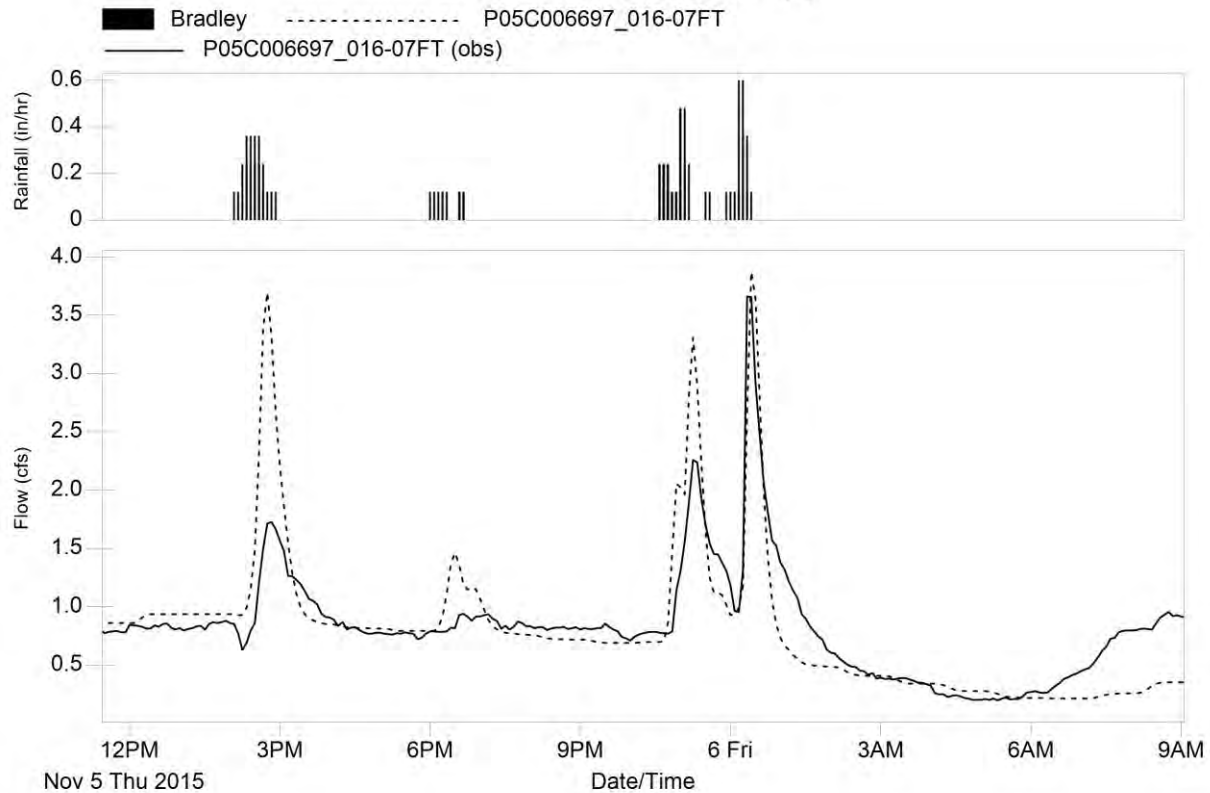
Duration: 13.33 h, Total Rainfall: 1.62 (in)



Cedar 016-07FT – Verification Events

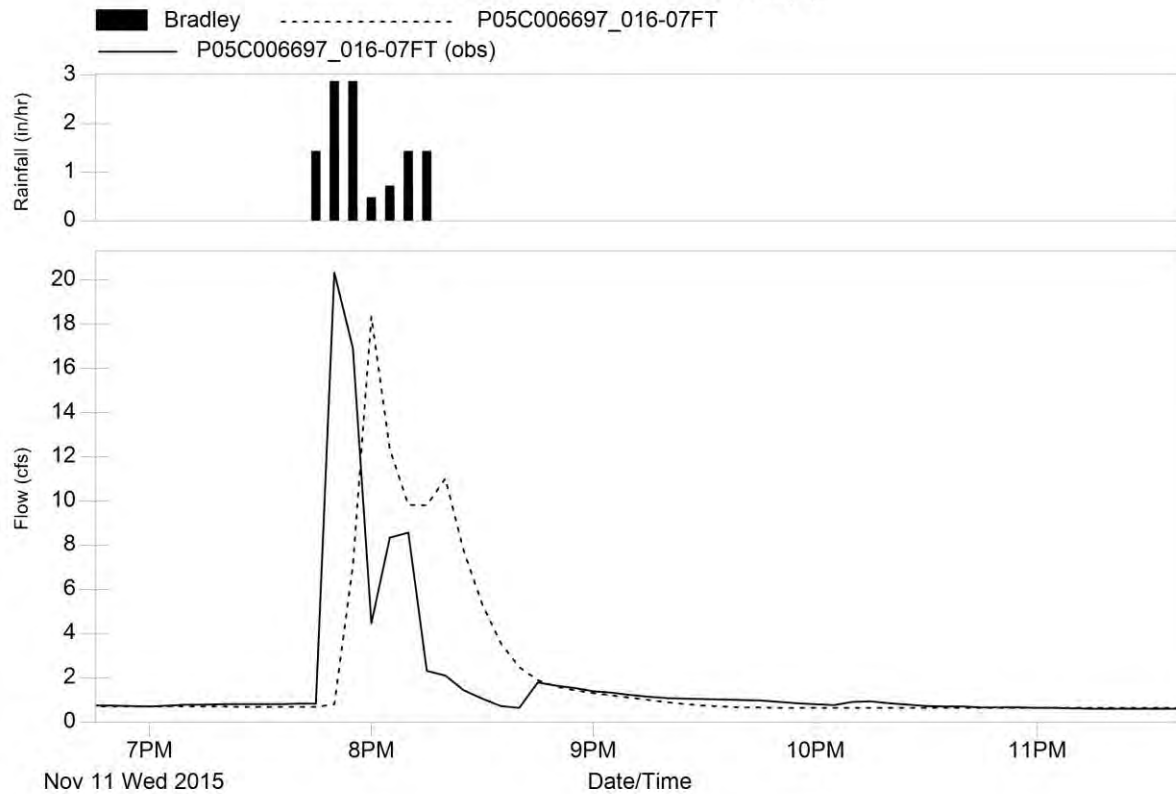
Event of November 5, 2015

Duration: 18 h, Total Rainfall: 0.43 (in)



Event of November 11, 2015

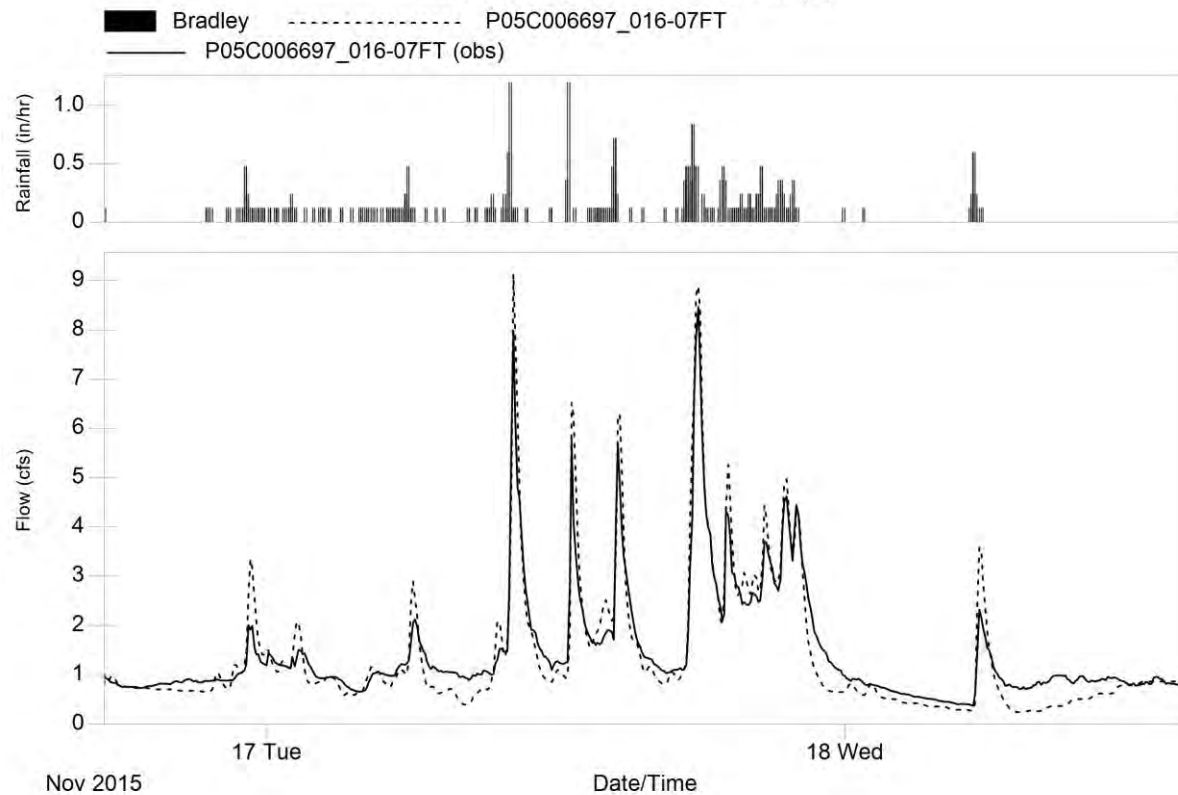
Duration: 4.08 h, Total Rainfall: 0.6 (in)



Cedar 016-07FT – Verification Events

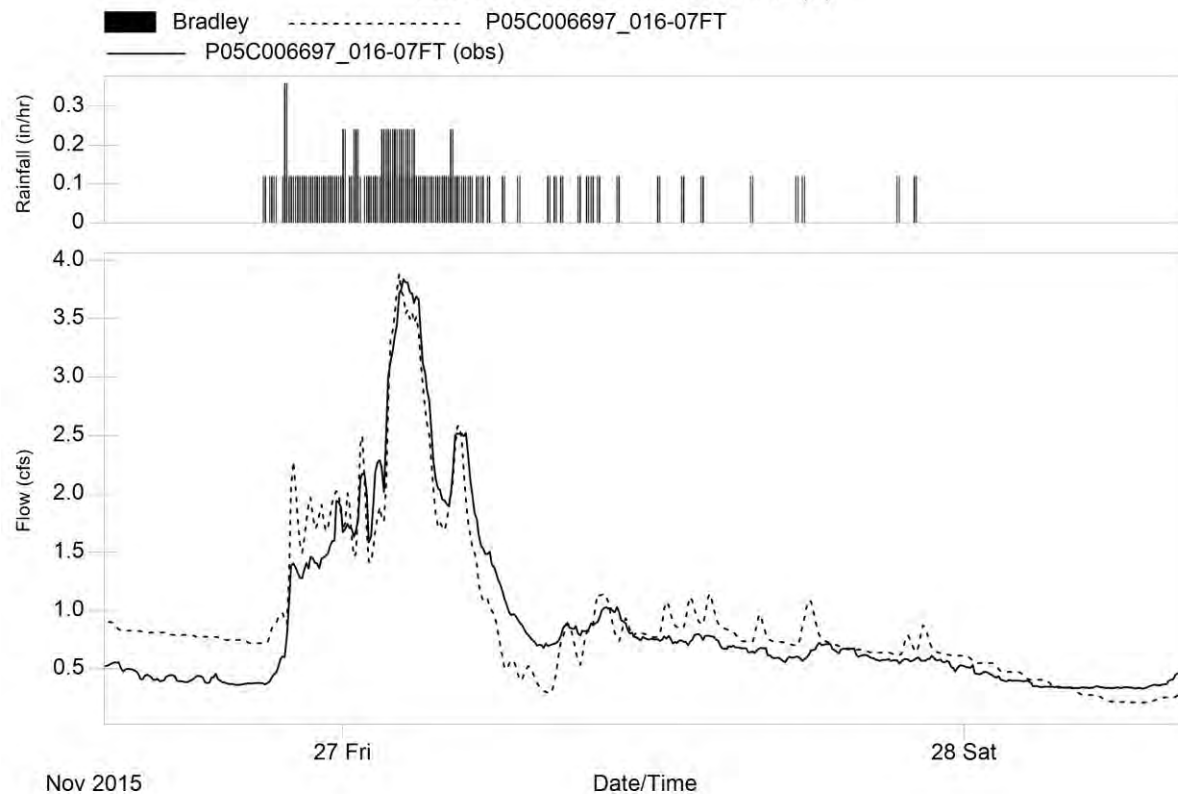
Event of November 16, 2015

Duration: 37.42 h, Total Rainfall: 2.37 (in)



Event of November 26, 2015

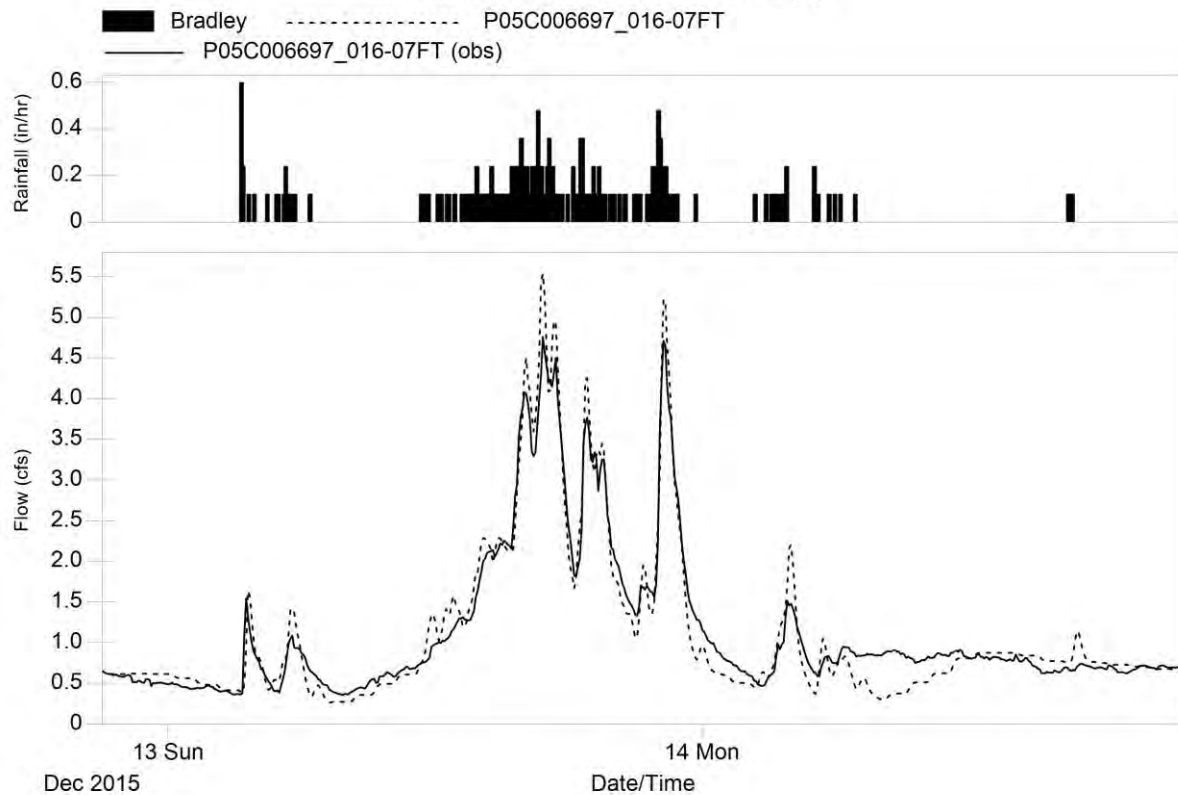
Duration: 34.83 h, Total Rainfall: 1.12 (in)



Cedar 016-07FT – Verification Events

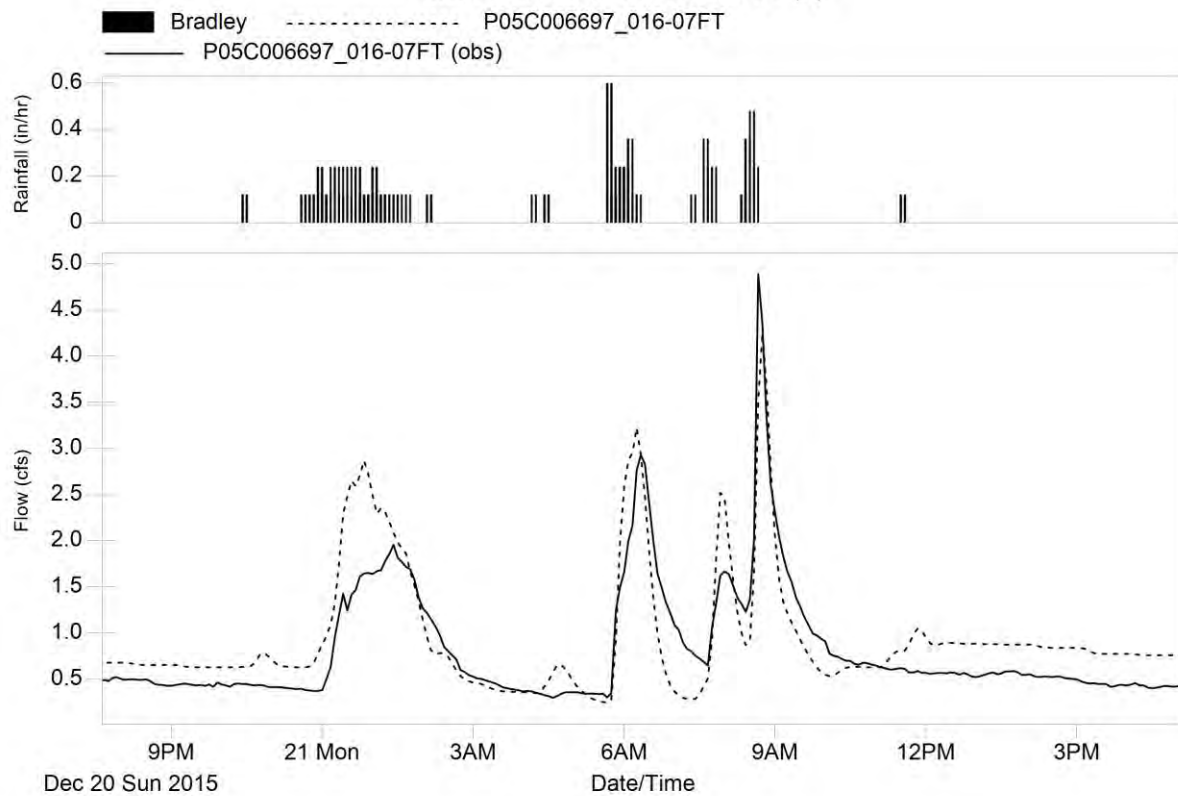
Event of December 13, 2015

Duration: 40.5 h, Total Rainfall: 1.77 (in)



Event of December 20, 2015

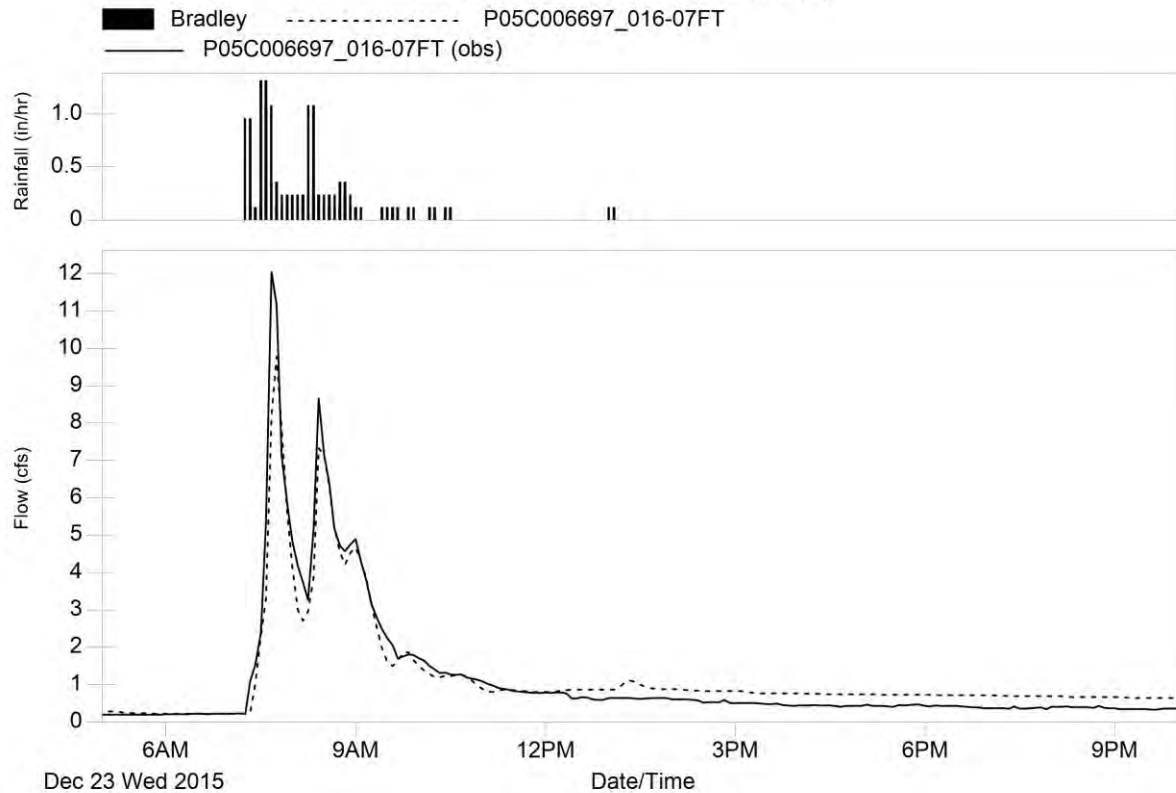
Duration: 17.92 h, Total Rainfall: 0.7 (in)



Cedar 016-07FT – Verification Events

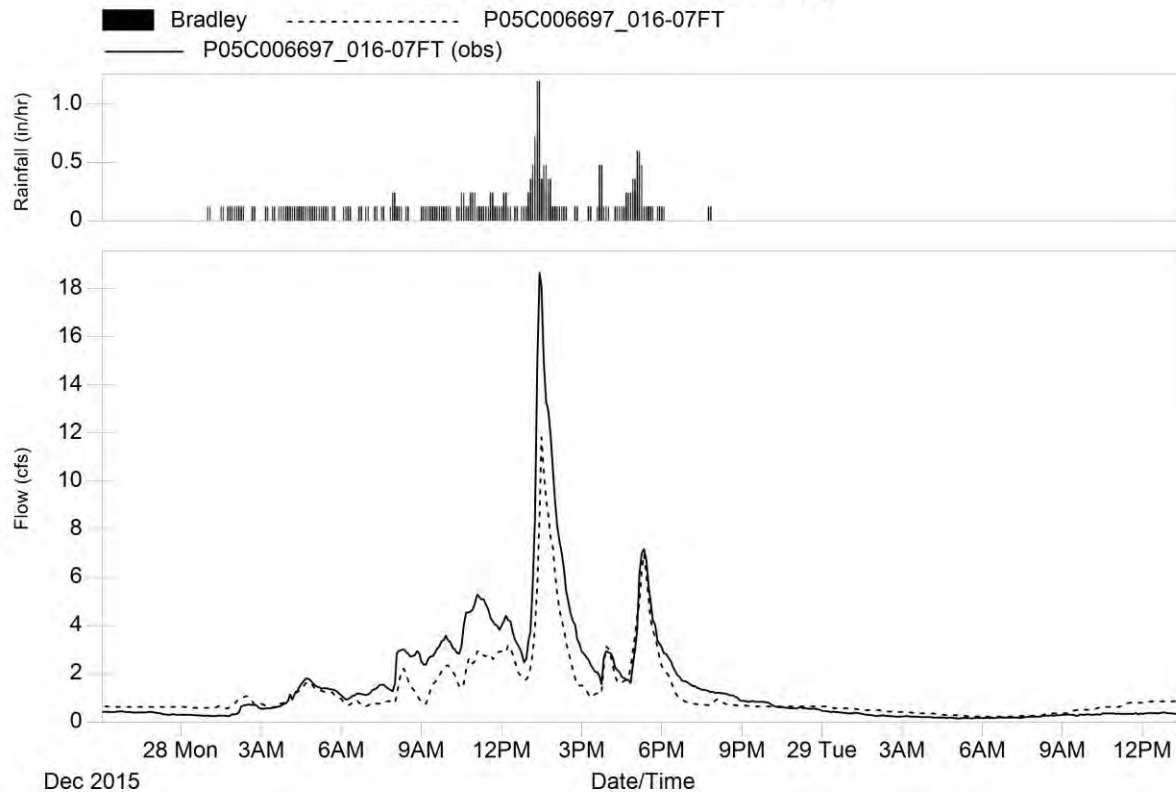
Event of December 23, 2015

Duration: 14.25 h, Total Rainfall: 0.73 (in)



Event of December 28, 2015

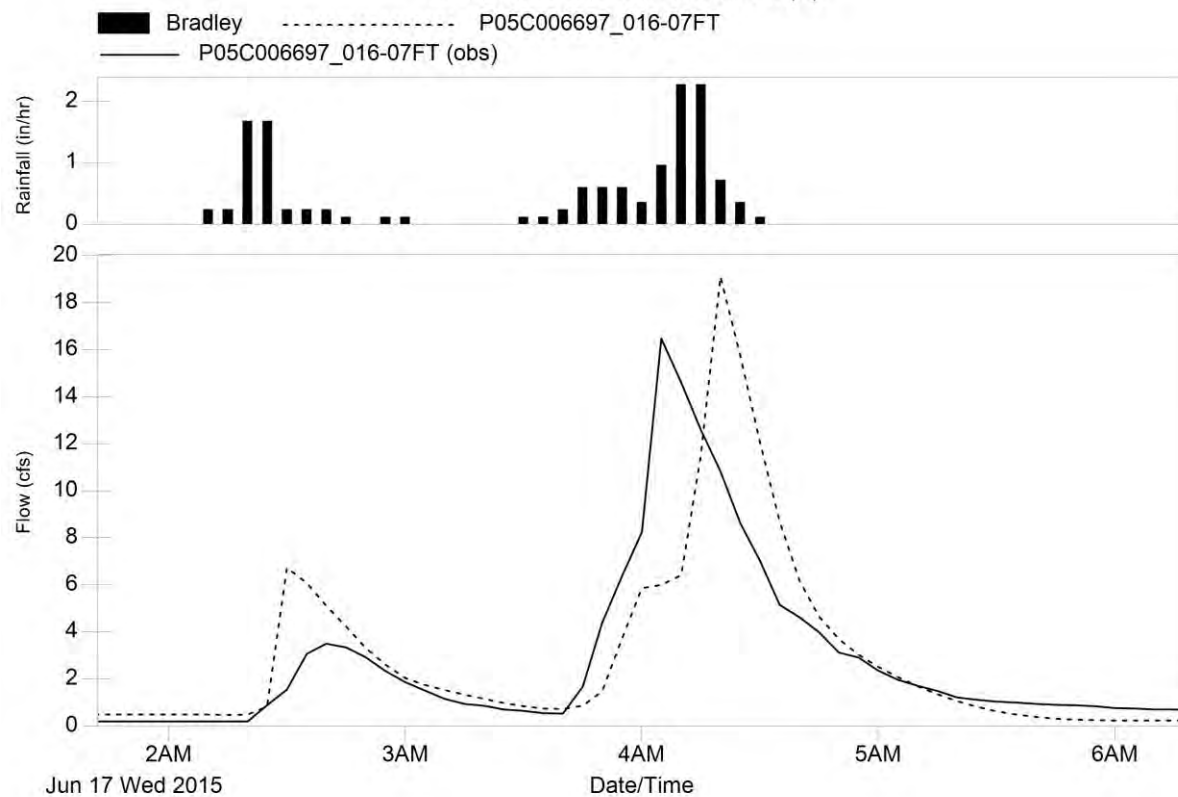
Duration: 33.75 h, Total Rainfall: 1.64 (in)



Cedar 016-07FT – Verification Events

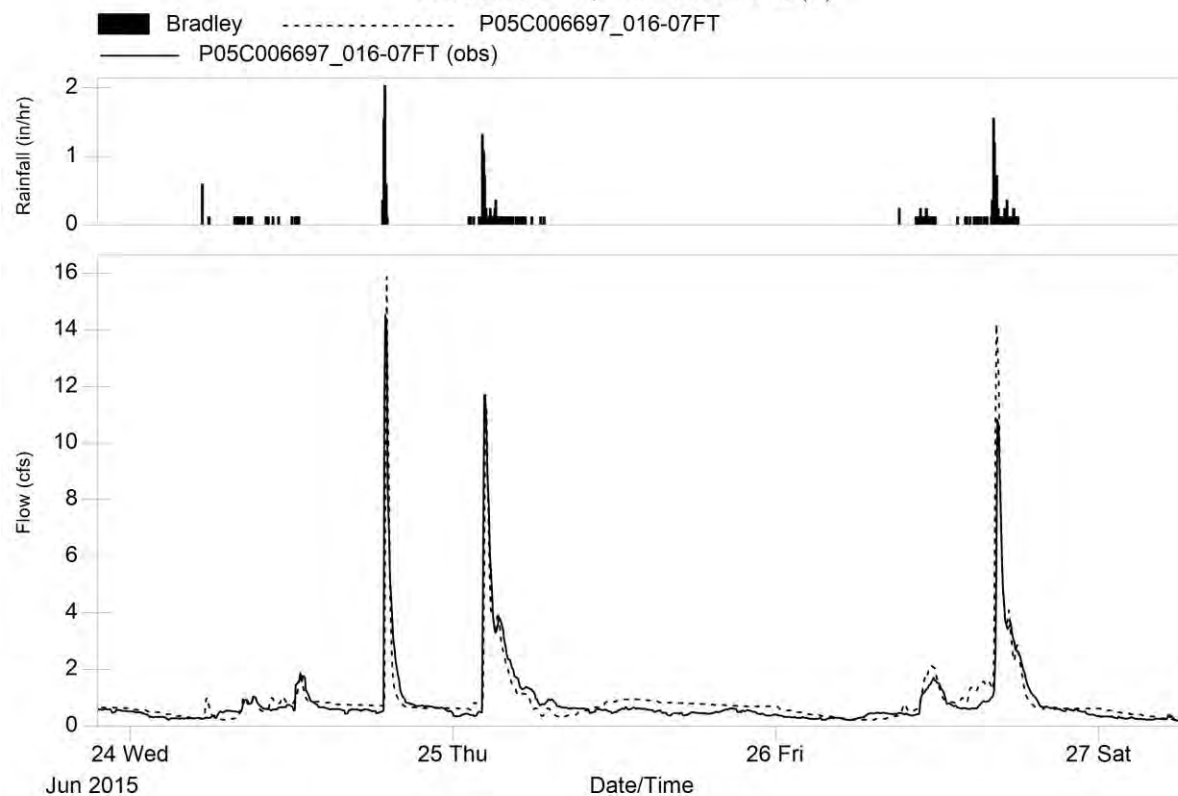
Event of June 17, 2015

Duration: 3.83 h, Total Rainfall: 0.8 (in)



Event of June 24, 2015

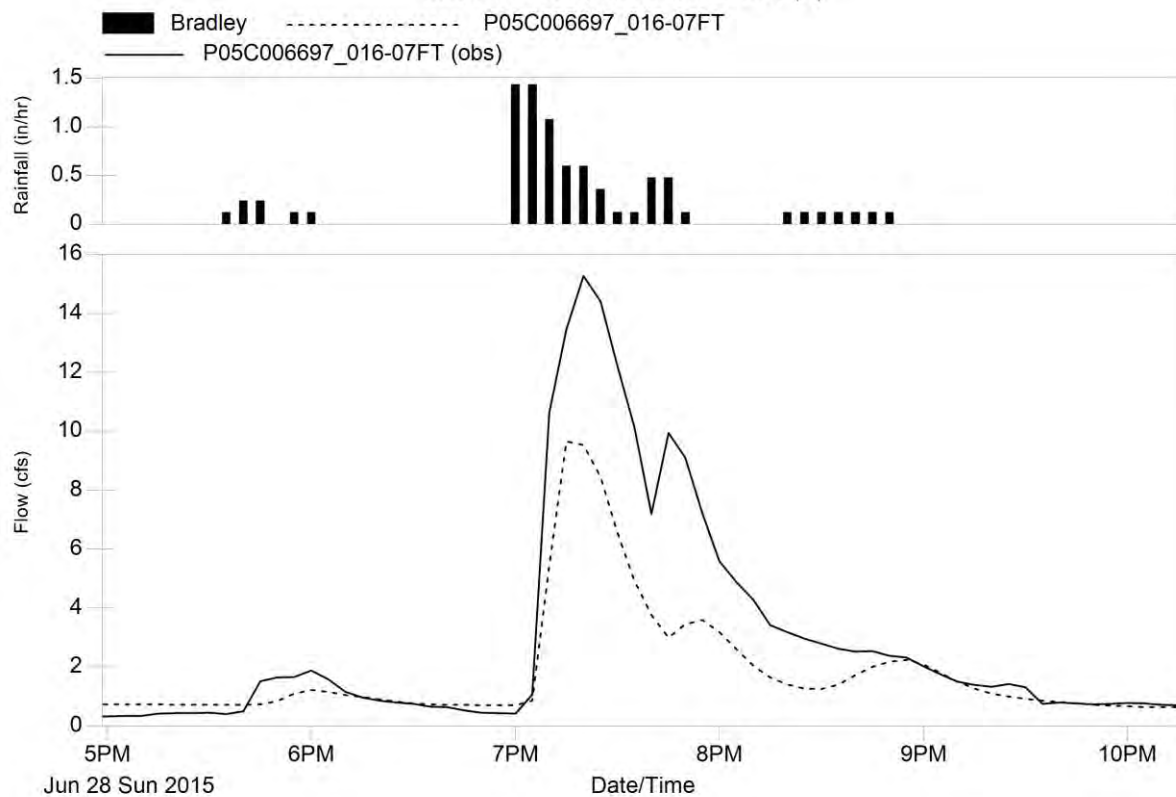
Duration: 67.42 h, Total Rainfall: 2.15 (in)



Cedar 016-07FT – Verification Events

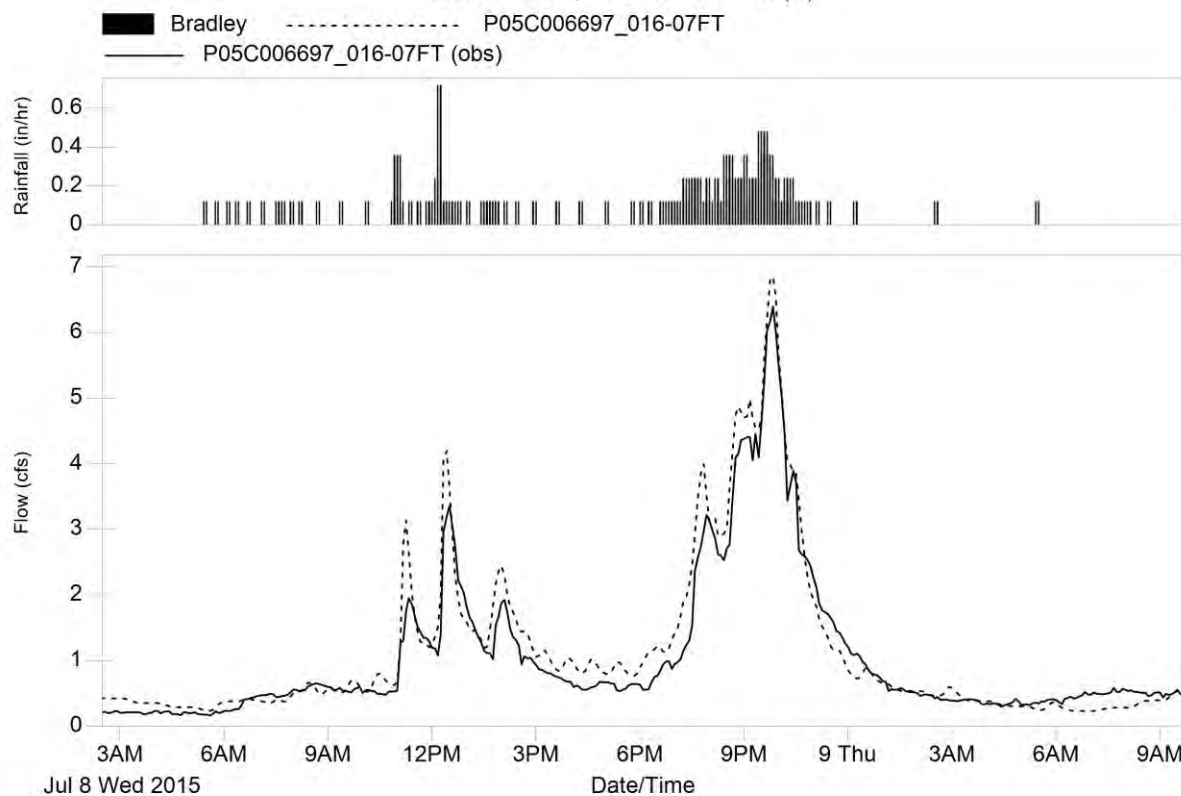
Event of June 28, 2015

Duration: 4.42 h, Total Rainfall: 0.51 (in)



Event of July 8, 2015

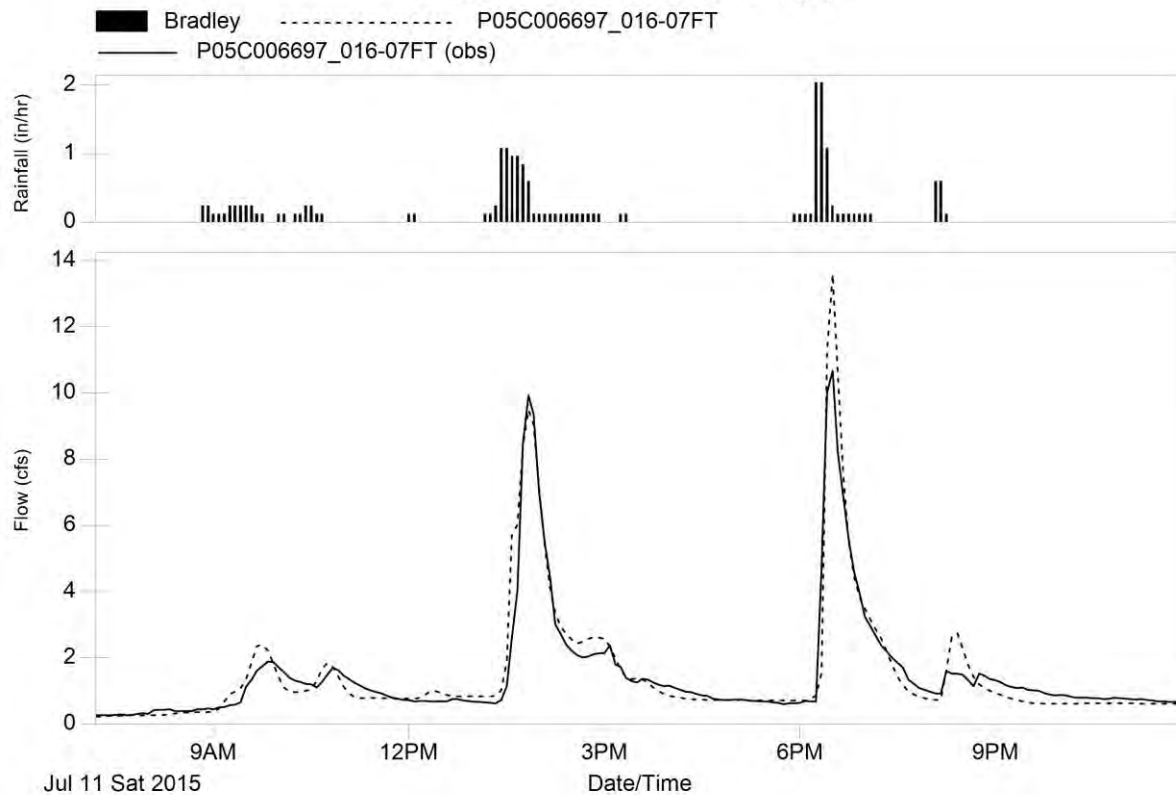
Duration: 26 h, Total Rainfall: 1.39 (in)



Cedar 016-07FT – Verification Events

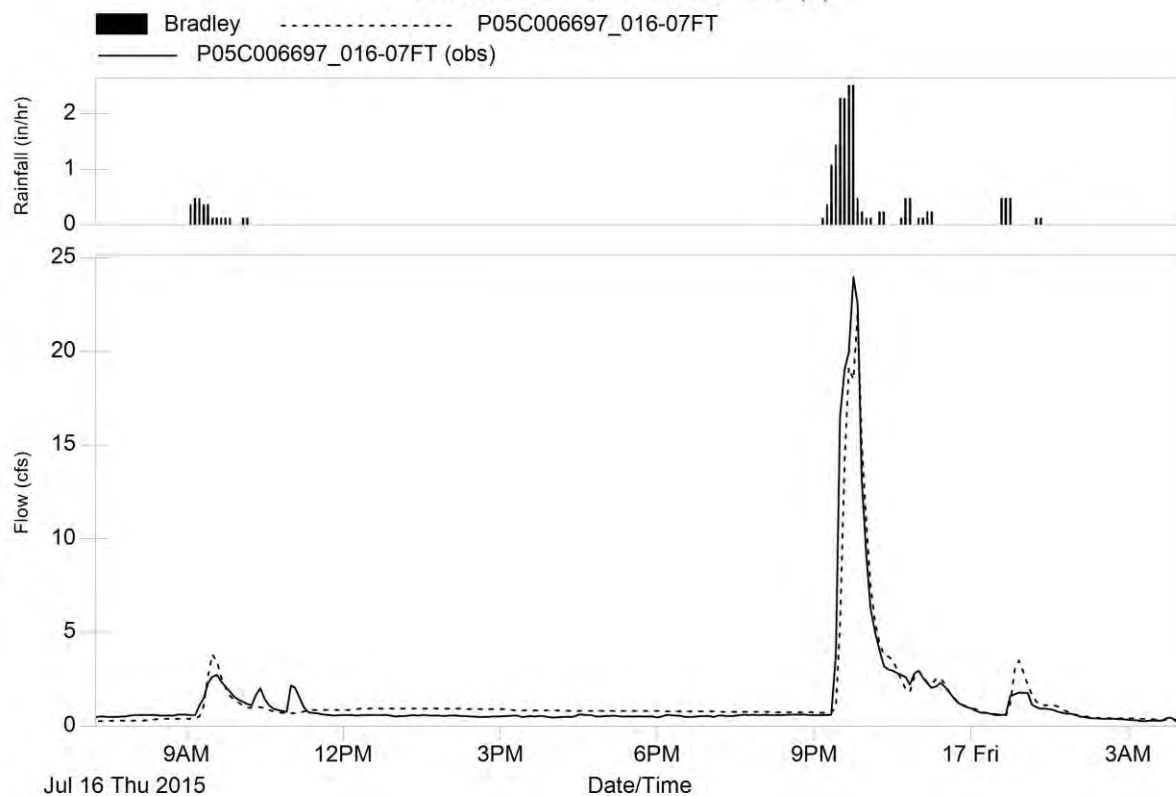
Event of July 11, 2015

Duration: 13.92 h, Total Rainfall: 1.07 (in)

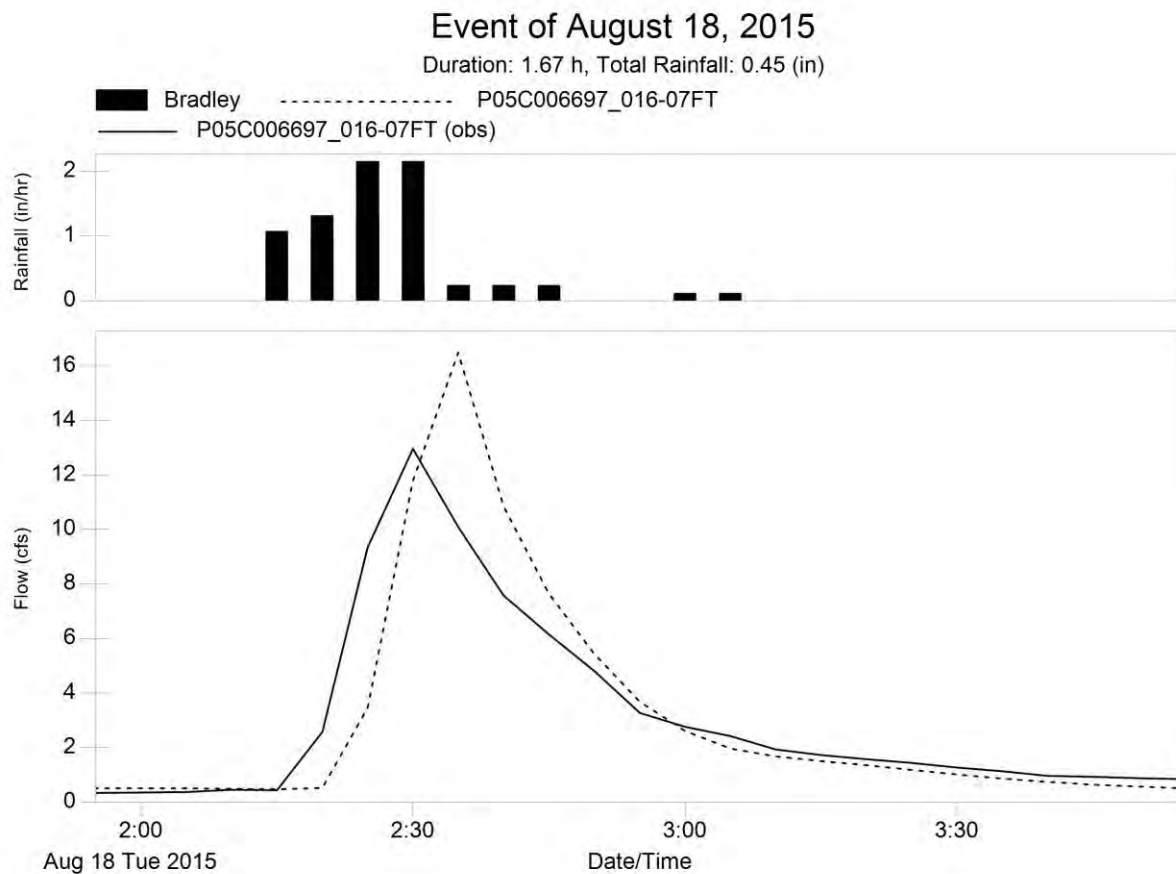
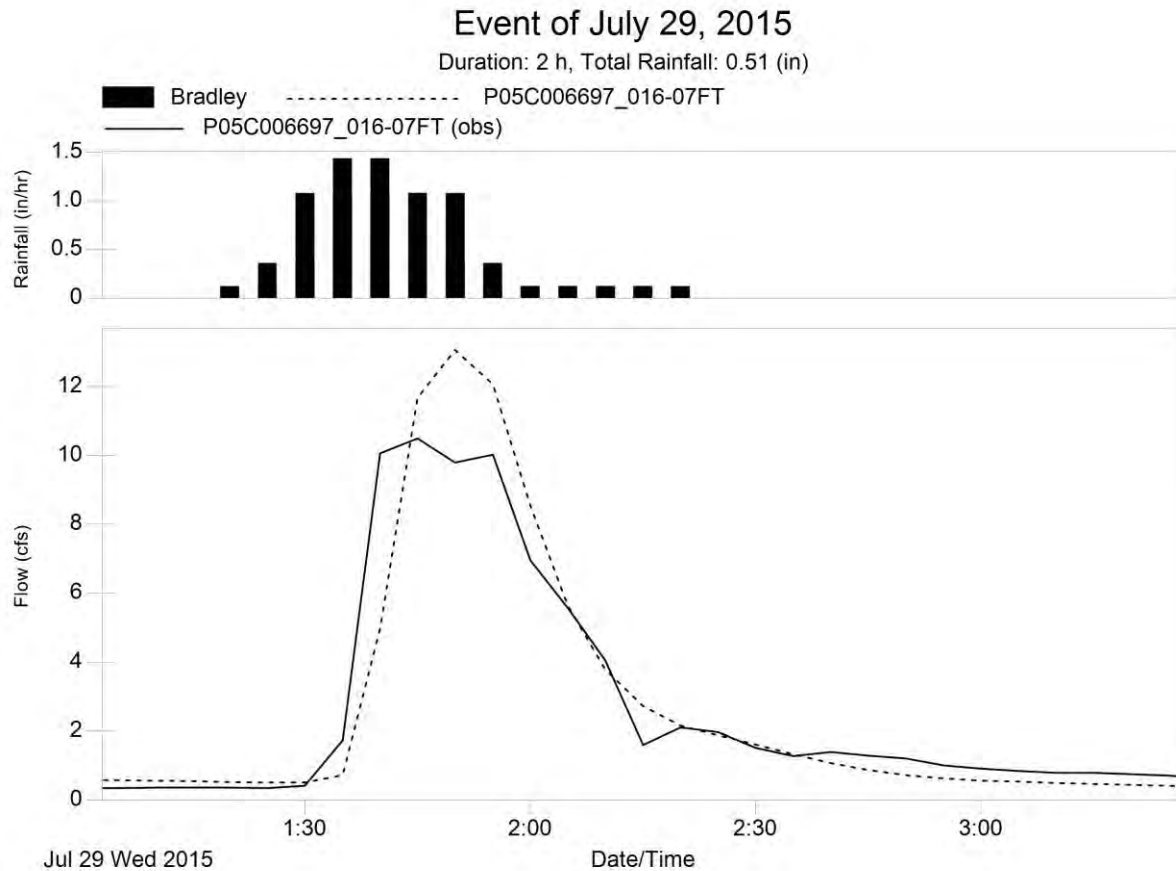


Event of July 16, 2015

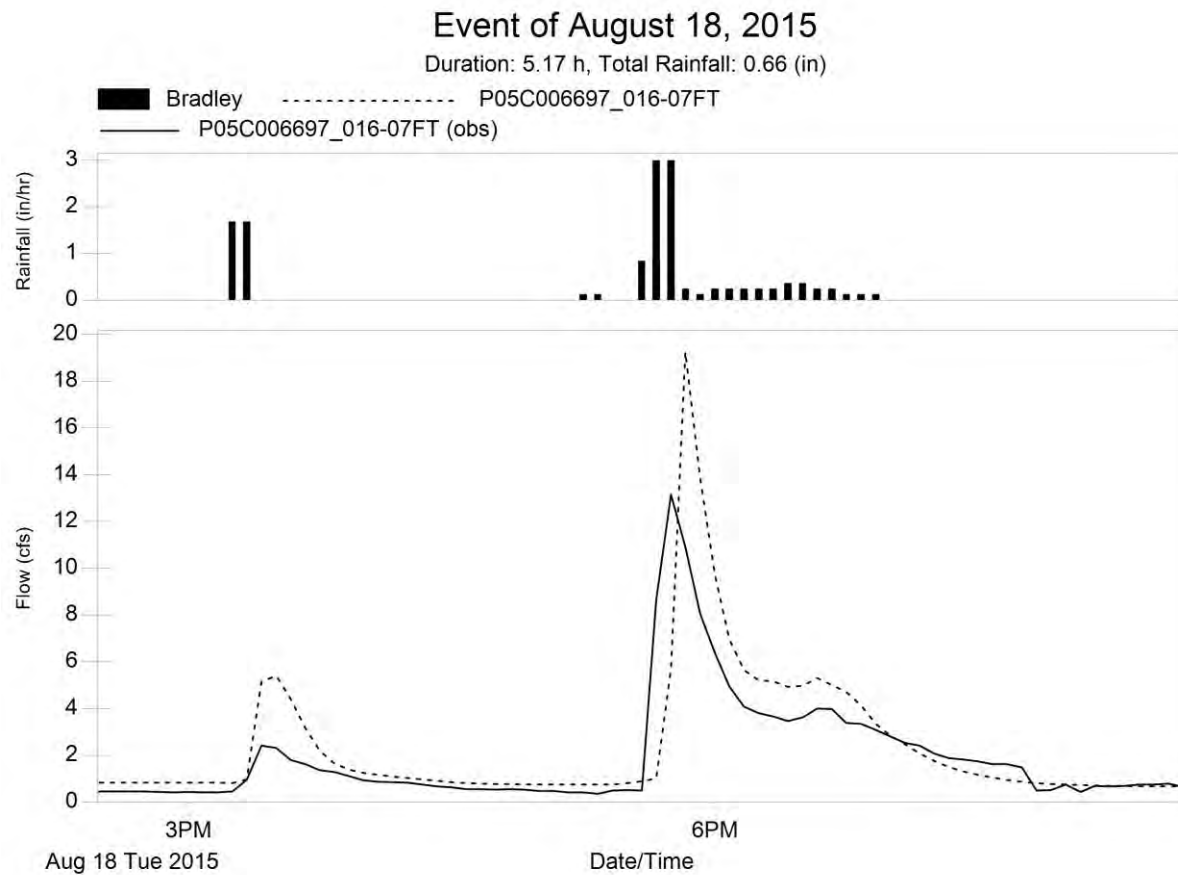
Duration: 17.33 h, Total Rainfall: 1.16 (in)



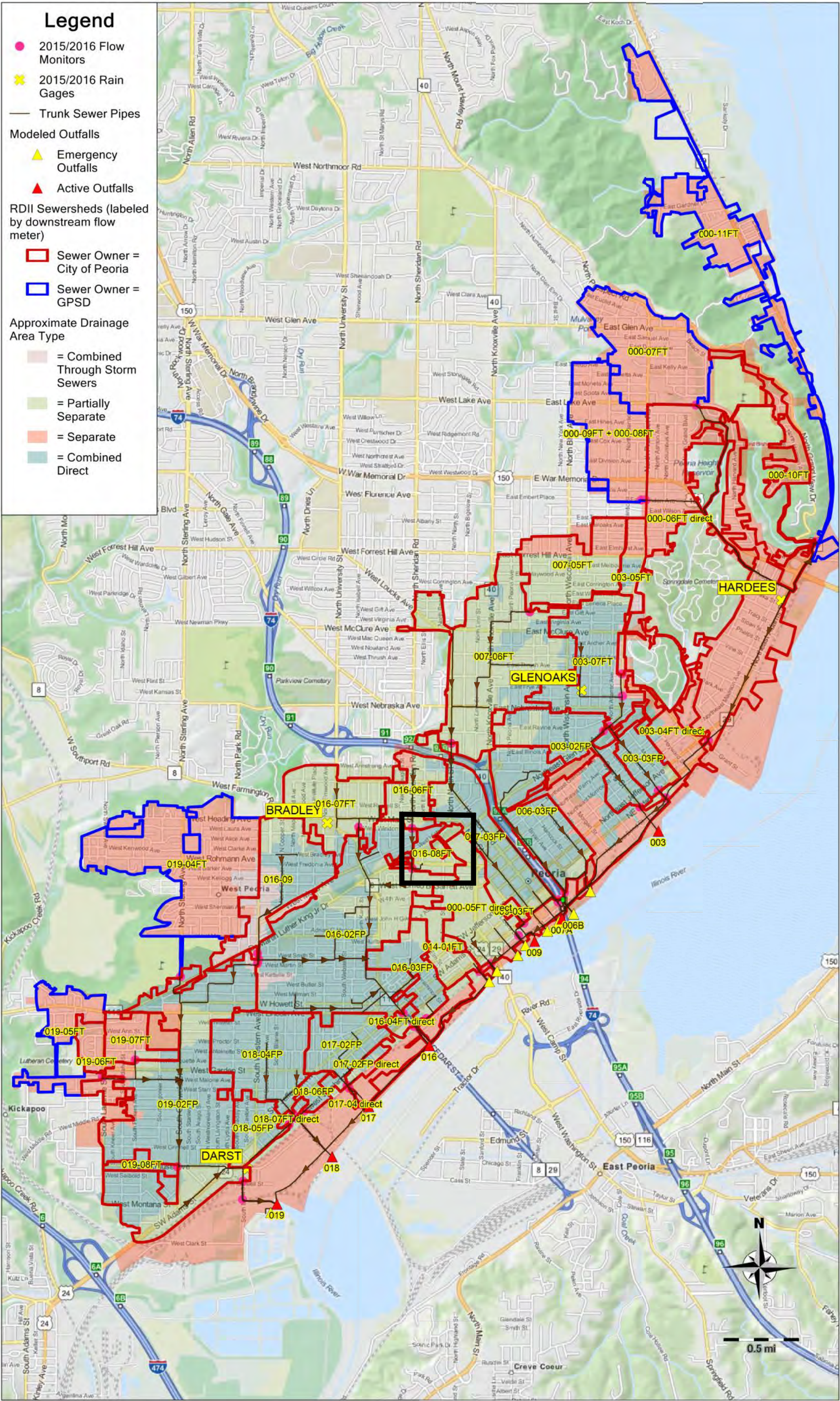
Cedar 016-07FT – Verification Events



Cedar 016-07FT – Verification Events



Flow Monitor 016-08FT Overview Map



Legend

- Modeled Conduits
- Modeled Storages
- Modeled Junctions
 - Modeled Manholes
 - Modeled Manholes with Inflow (labeled)
- Modeled Subcatchments
 - DCIA
 - PERVIOUS
 - ROOFS
 - DIA
- 2015/2016 Flow Monitors
 - Active Meters
 - Existing Meters
 - Removed Meters
- RDII Sewersheds
- Subcatchments

The map displays a network of sewer conduits (red lines) and manholes (blue dots). Key features include:

- Streets:** W Hillier Pl, N Shipman St, Dr Martin Luther King Jr Dr, W Sam J Strine Ave, W Spring St.
- Buildings:** Various structures represented by different shades of gray and black, indicating different roof types or perviousness.
- Flow Monitors:** Labeled points along the conduits, such as 016-06FT, 016-08-01, 016-08FT, and 016-08FT.
- Elevation Data:** Numerous elevation values are provided at specific points along the conduits, ranging from 0.666' to 4.167'.
- Scale and Orientation:** A north arrow and a scale bar (0 to 450 ft) are located in the bottom right corner.

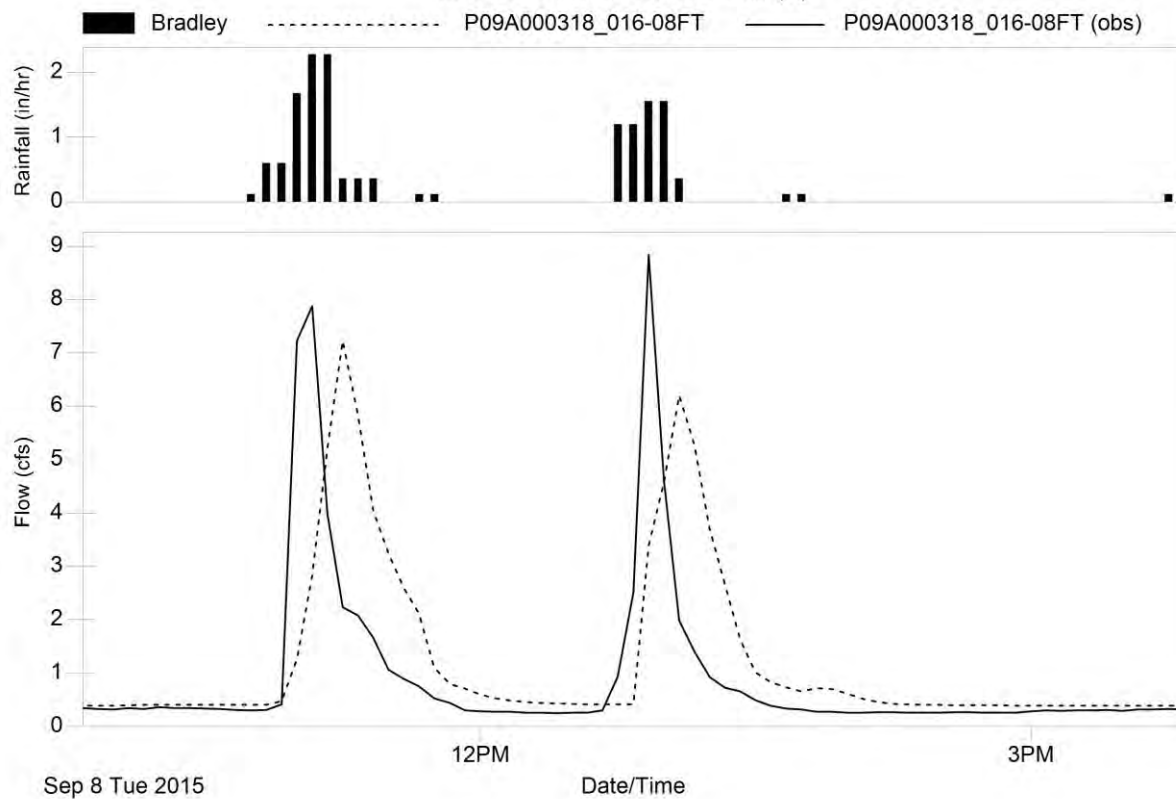
Cedar 016-08FT

Date	Duration (h)	Rainfall (in)	Maximum Flow (cfs)		Maximum Flow (mgd)		Total Volume (ft³)		Volume (million gallons)		Peak Flow Rate (-15% to +25%)	Flow Volume (-10% to +20%)	Rainfall Variability
		Bradley Edited	Observed	Modeled	Observed	Modeled	Observed	Modeled	Observed	Modeled			
CALIBRATION EVENTS - FLOW													
9/8/2015 10:20	5.0	0.86	8.8	7.2	5.7	4.7	18910	25280	0.1	0.2	-18%	34%	variable
9/18/2015 12:45	13.3	1.62	8.4	6.7	5.4	4.3	46180	52230	0.3	0.4	-20%	13%	relatively uniform
11/5/2015 13:15	18.0	0.43	3.0	2.5	1.9	1.6	26840	29260	0.2	0.2	-15%	9%	possibly uniform
11/11/2015 19:10	4.1	0.60	8.6	7.5	5.5	4.8	23910	17330	0.2	0.1	-13%	-28%	relatively uniform
11/16/2015 21:00	37.4	2.37	4.5	4.5	2.9	2.9	96950	100100	0.7	0.7	0%	3%	variable
11/26/2015 18:15	34.8	1.12	1.7	1.8	1.1	1.1	69260	64840	0.5	0.5	5%	-6%	possibly uniform
VERIFICATION EVENTS - FLOW													
6/17/2015 2:05	3.8	0.8	10.5	7.1	6.8	4.6	21800	21730	0.2	0.2	-32%	0%	variable
6/24/2015 4:20	67.4	2.15	8.2	6.7	5.3	4.3	111100	124700	0.8	0.9	-18%	12%	variable
6/28/2015 17:25	4.4	0.51	9.4	4.8	6.1	3.1	24350	15850	0.2	0.1	-49%	-35%	variable
7/8/2015 5:05	26.0	1.39	3.7	3.1	2.4	2.0	63090	58950	0.5	0.4	-16%	-7%	relatively uniform
7/11/2015 8:35	13.9	1.07	11.6	6.3	7.5	4.0	42120	40320	0.3	0.3	-46%	-4%	possibly uniform
7/16/2015 9:00	17.3	1.16	13.2	7.9	8.5	5.1	49510	46370	0.4	0.3	-40%	-6%	relatively uniform
7/29/2015 1:15	2.0	0.51	9.2	5.5	5.9	3.5	13090	11580	0.1	0.1	-40%	-12%	variable
8/18/2015 2:05	1.7	0.45	8.5	6.8	5.5	4.4	9385	11060	0.1	0.1	-19%	18%	possibly uniform
8/18/2015 15:00	5.2	0.66	10.5	7.7	6.8	4.9	16070	22660	0.1	0.2	-27%	41%	relatively uniform
WEIGHTED AVERAGES													
Calibration - Relatively Uniform										-16%	-1%	relatively uniform	
Calibration - Possibly Uniform										-8%	-2%	possibly uniform	
Calibration - Variable										-12%	8%	variable	
Calibration Weighted - All Events										-14%	2%		
Verification - Relatively Uniform										-32%	-1%	relatively uniform	
Verification - Possibly Uniform										-35%	0%	possibly uniform	
Verification - Variable										-35%	2%	variable	
Verification Weighted - All Events										-34%	1%		
Weighted Average - All Events										-28%	2%		
NET AVERAGES													
Calibration - Relatively Uniform										-17%	-7%	relatively uniform	
Calibration - Possibly Uniform										-5%	1%	possibly uniform	
Calibration - Variable										-9%	18%	variable	
Calibration Net - All Events										-10%	4%		
Verification - Relatively Uniform										-28%	9%	relatively uniform	
Verification - Possibly Uniform										-32%	7%	possibly uniform	
Verification - Variable										-35%	-9%	variable	
Verification Net - All Events										-32%	1%		
Net Average - All Events										-23%	2%		

Cedar 016-08FT – Calibration Events

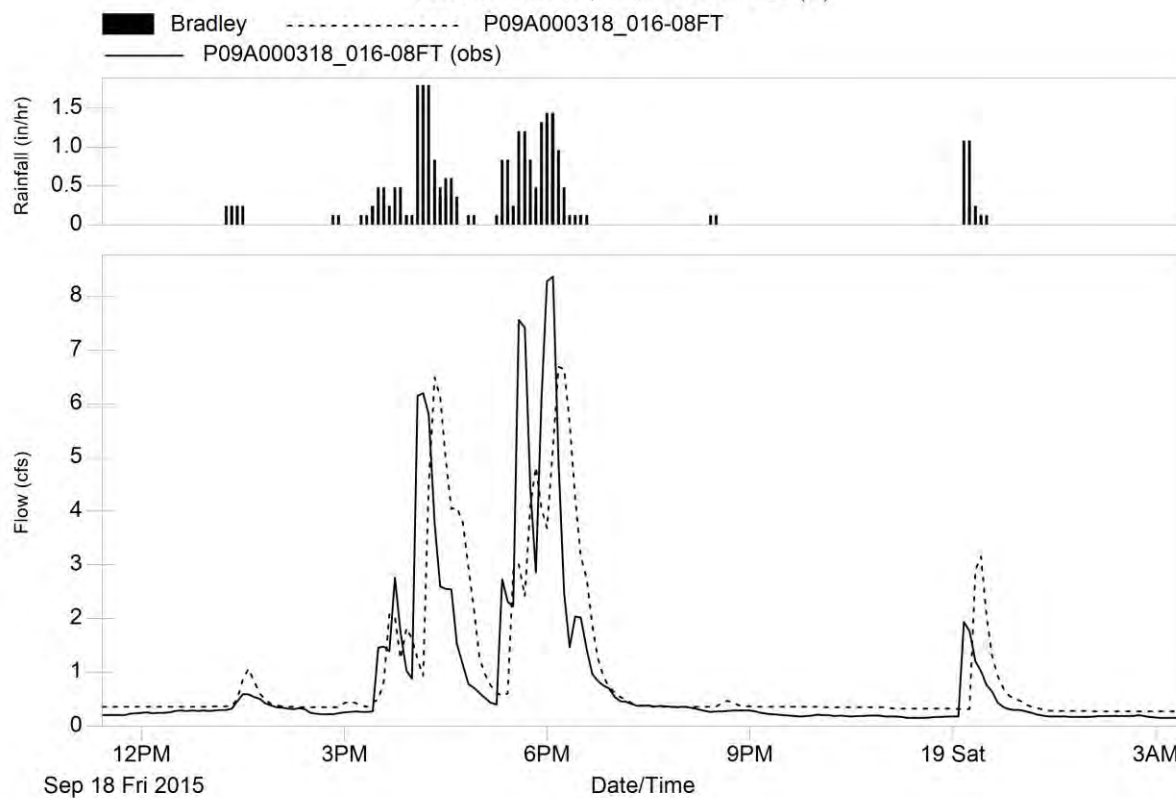
Event of September 8, 2015

Duration: 5 h, Total Rainfall: 0.86 (in)



Event of September 18, 2015

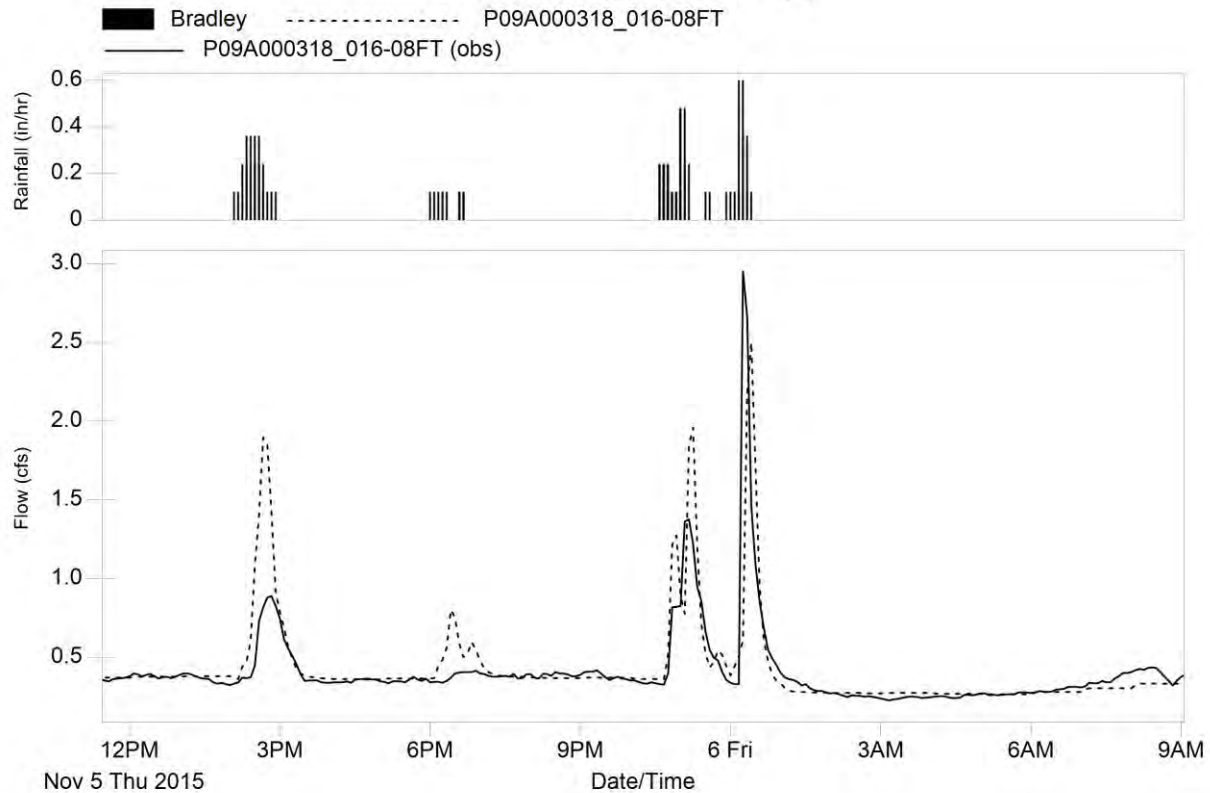
Duration: 13.33 h, Total Rainfall: 1.62 (in)



Cedar 016-08FT – Calibration Events

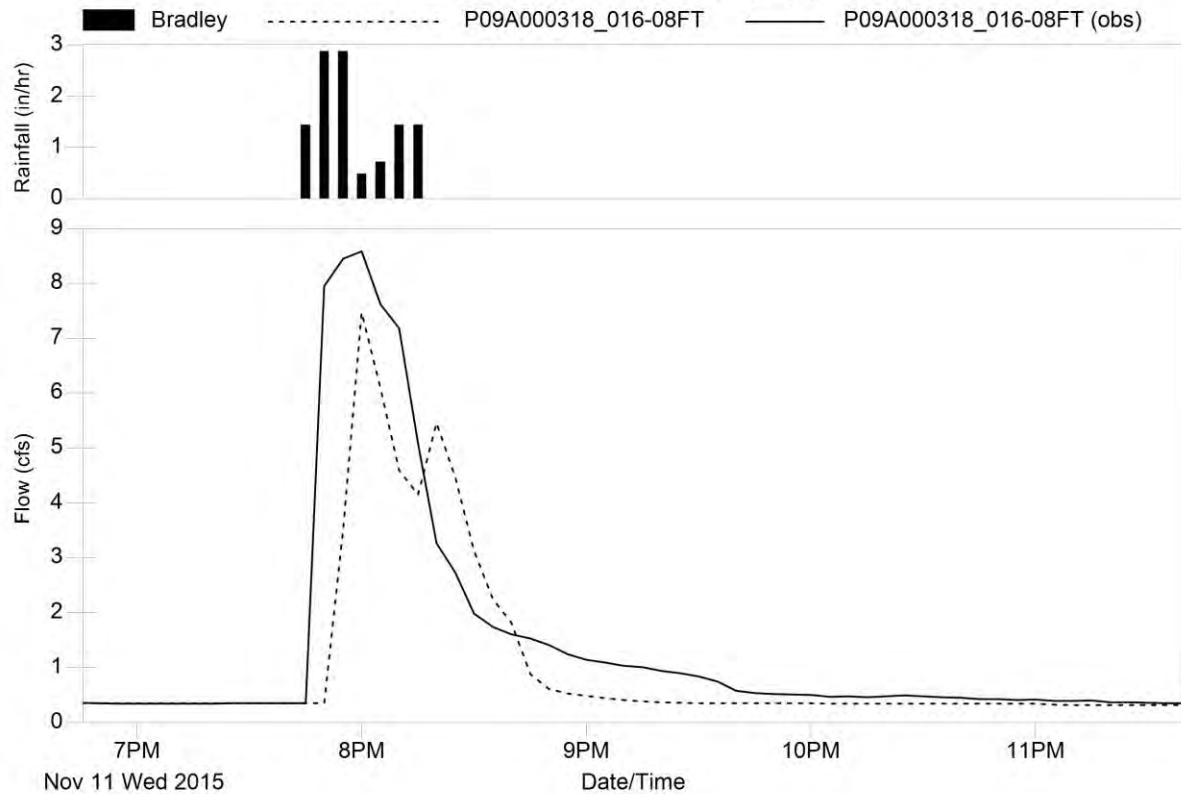
Event of November 5, 2015

Duration: 18 h, Total Rainfall: 0.43 (in)



Event of November 11, 2015

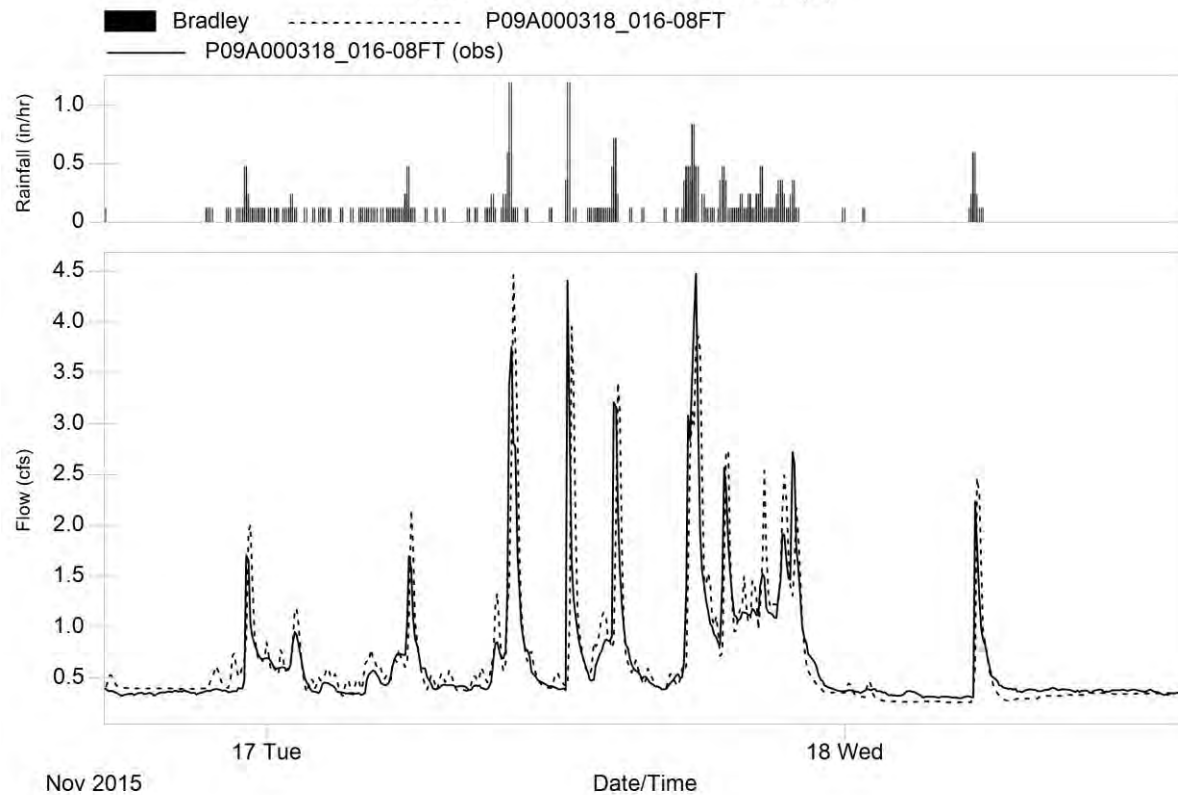
Duration: 4.08 h, Total Rainfall: 0.6 (in)



Cedar 016-08FT – Calibration Events

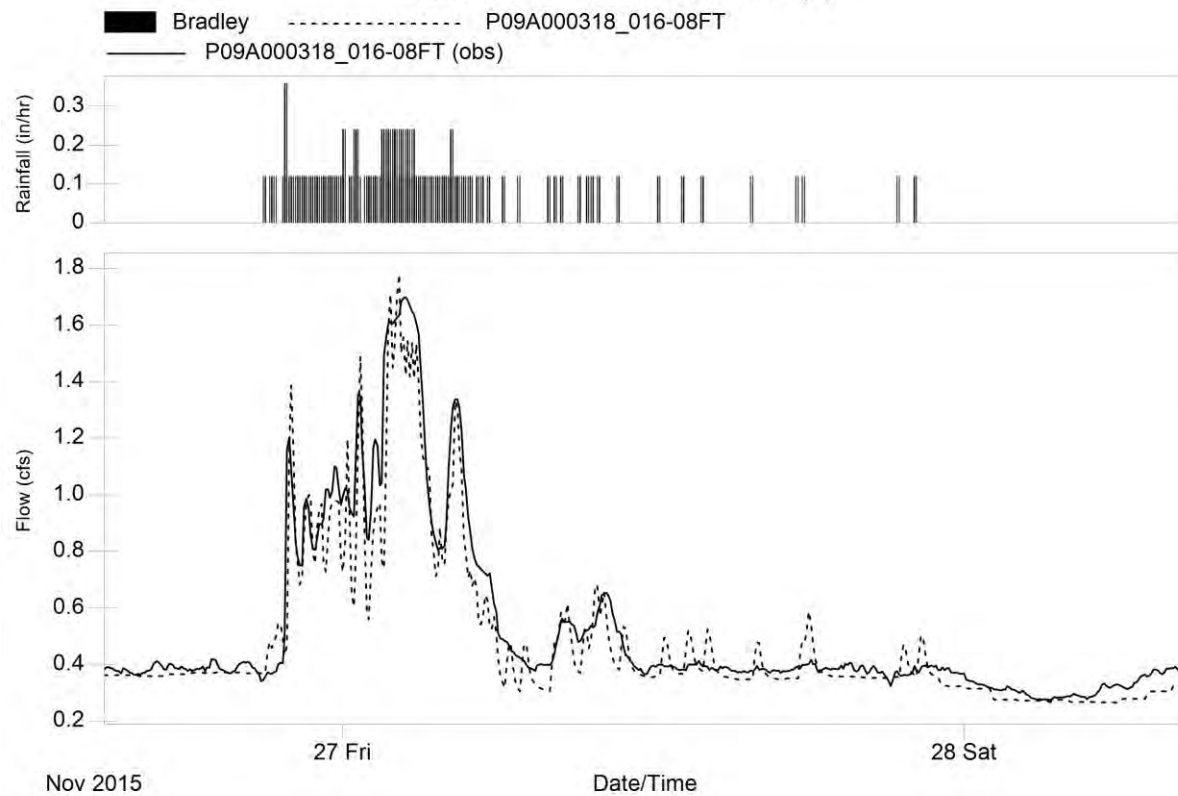
Event of November 16, 2015

Duration: 37.42 h, Total Rainfall: 2.37 (in)

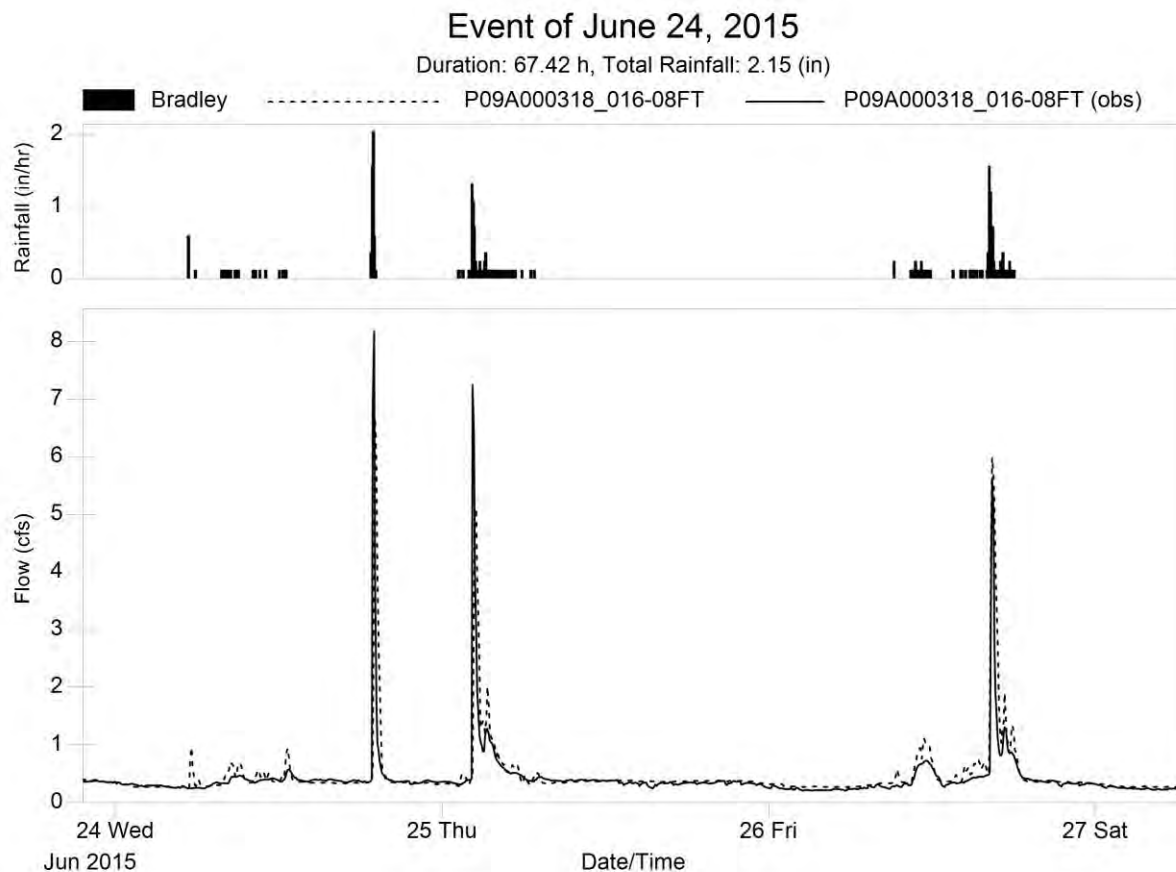
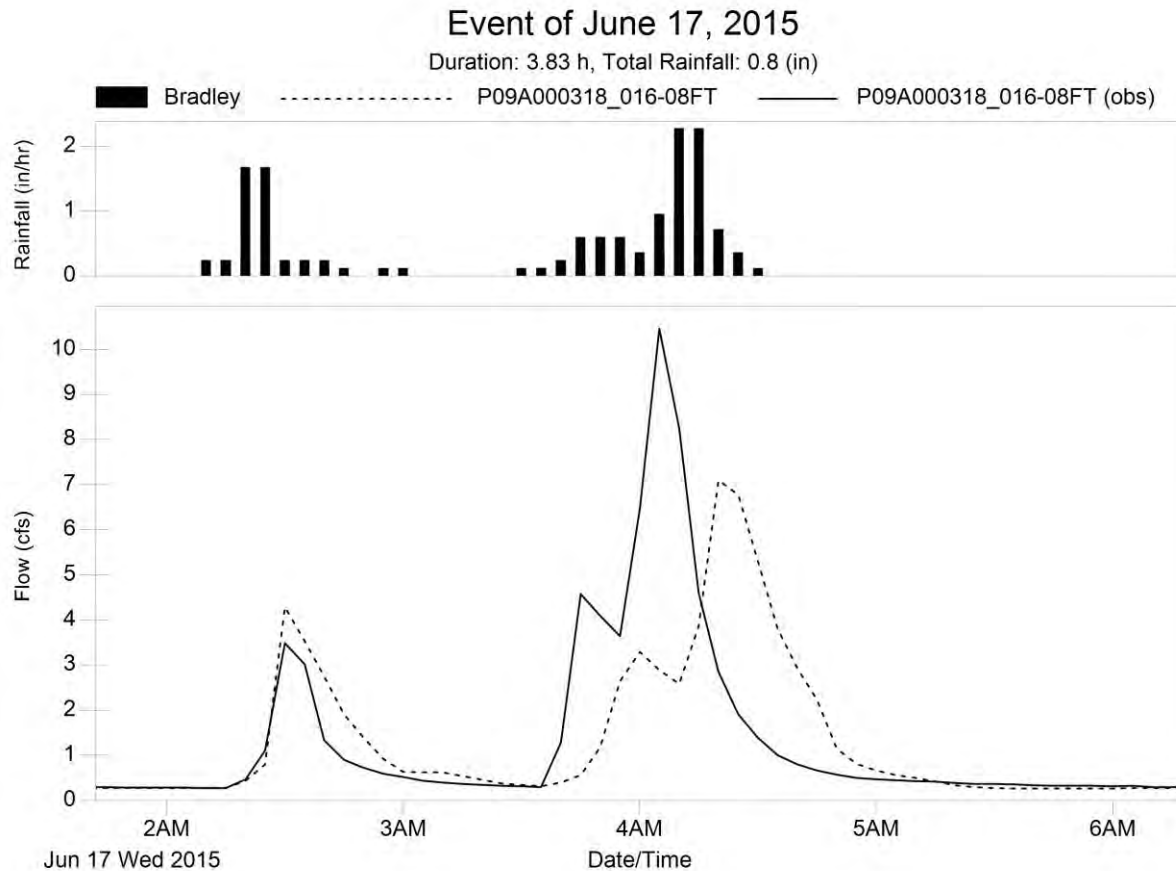


Event of November 26, 2015

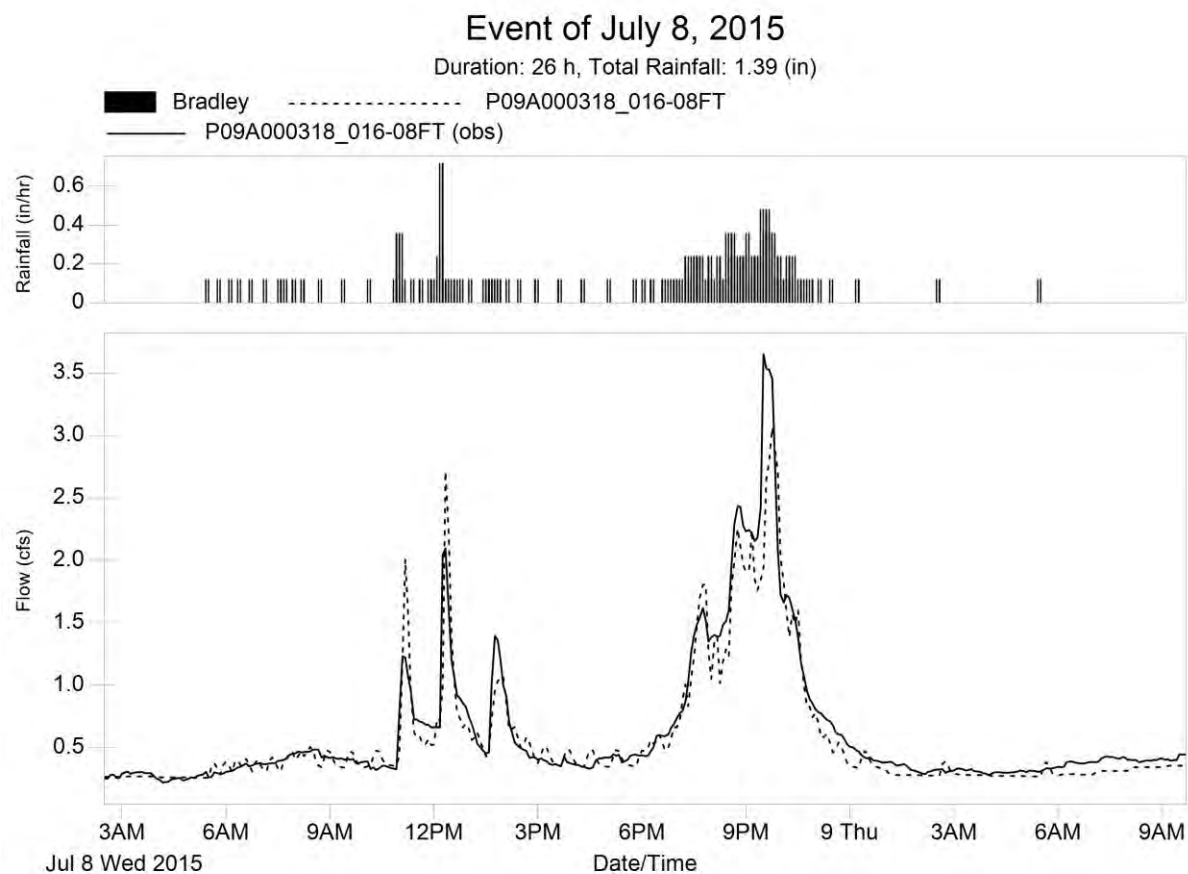
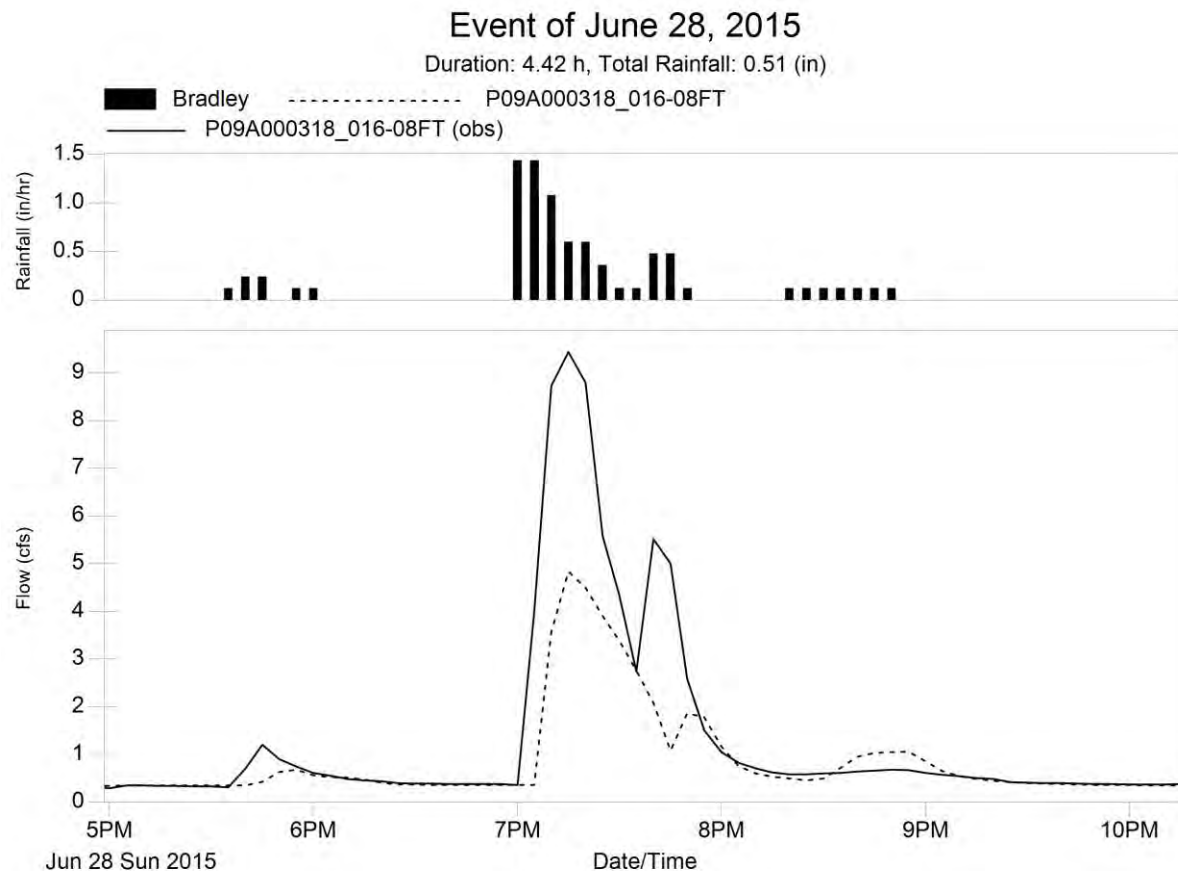
Duration: 34.83 h, Total Rainfall: 1.12 (in)



Cedar 016-08FT – Verification Events



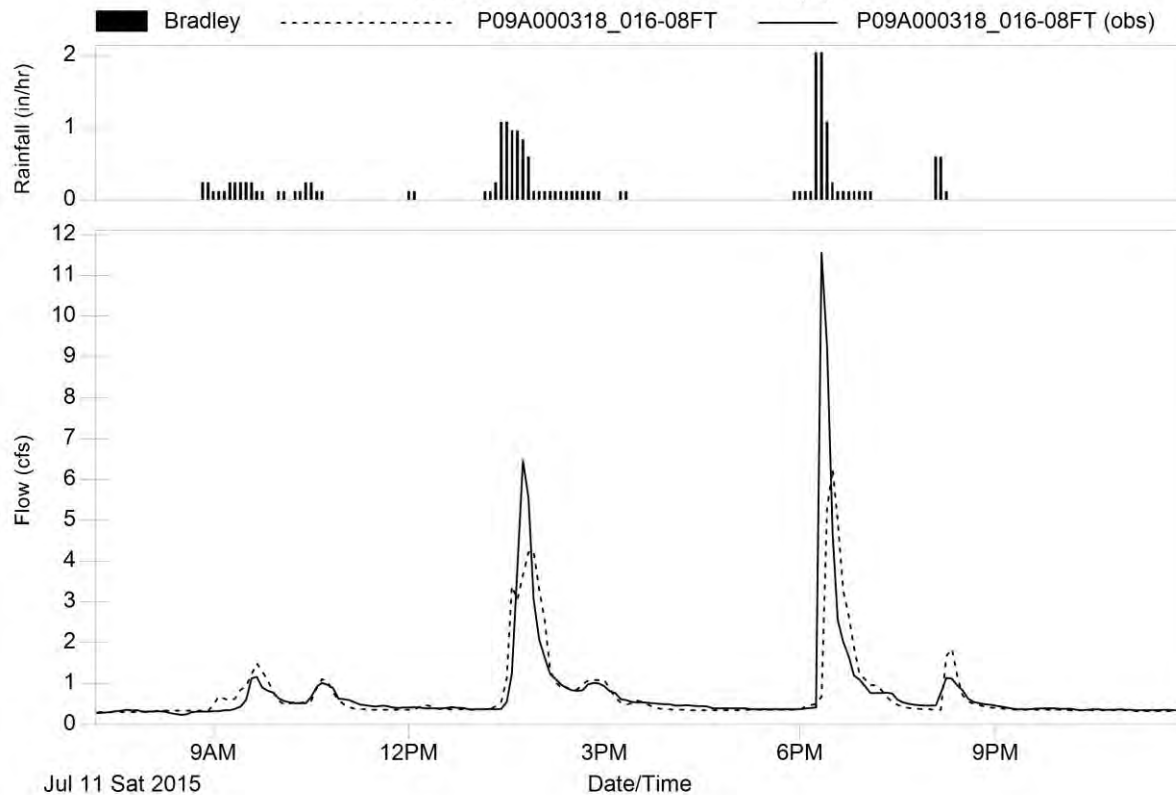
Cedar 016-08FT – Verification Events



Cedar 016-08FT – Verification Events

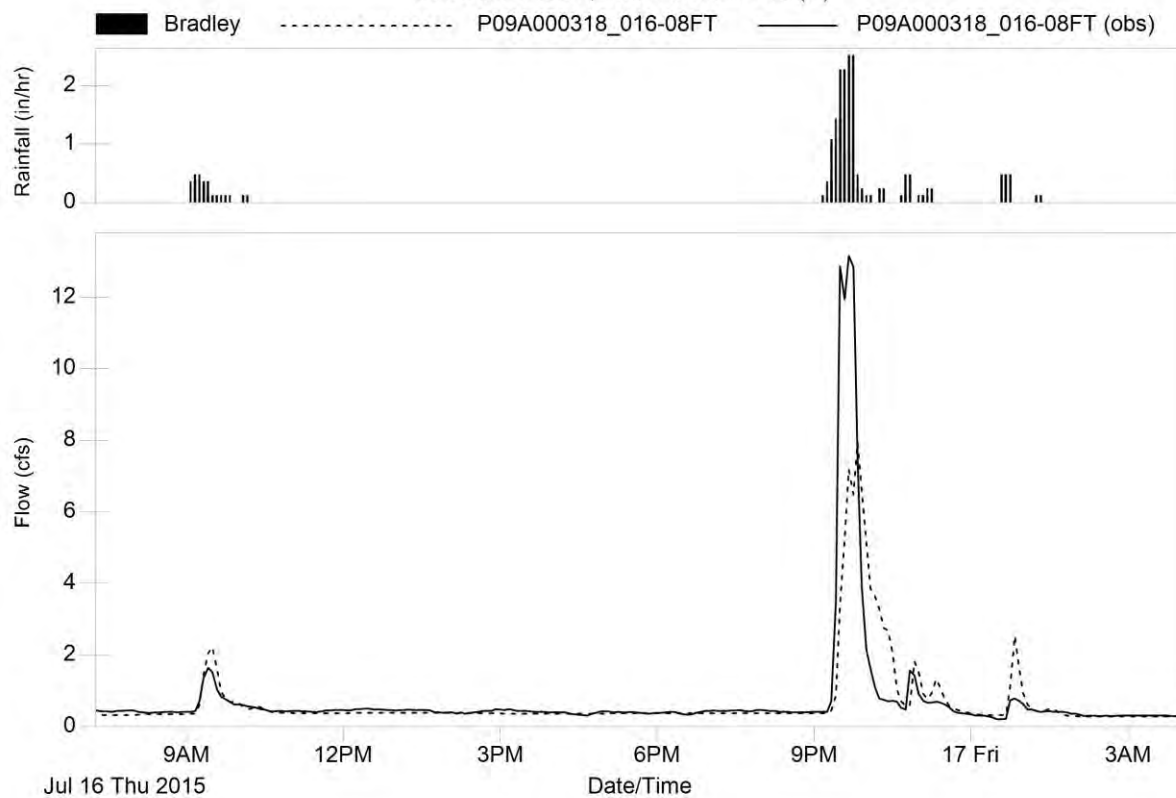
Event of July 11, 2015

Duration: 13.92 h, Total Rainfall: 1.07 (in)

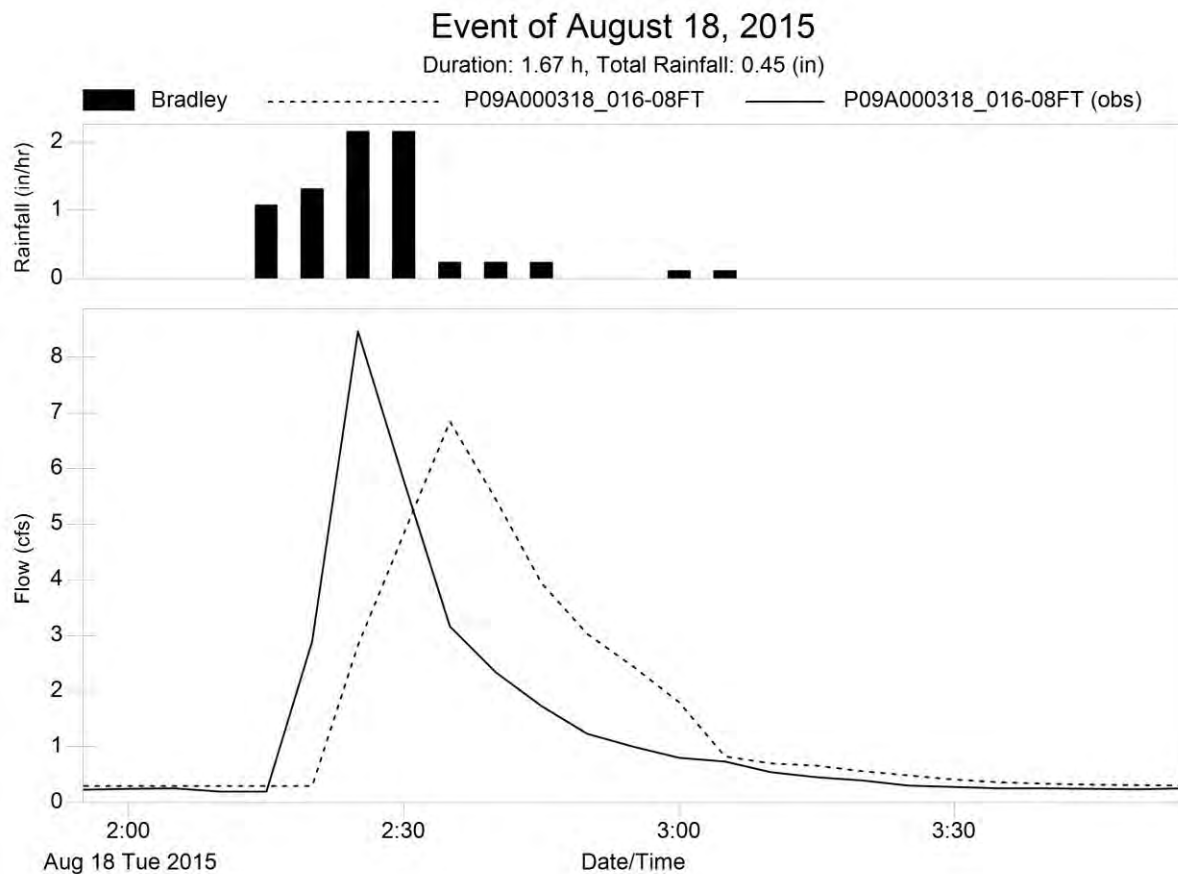
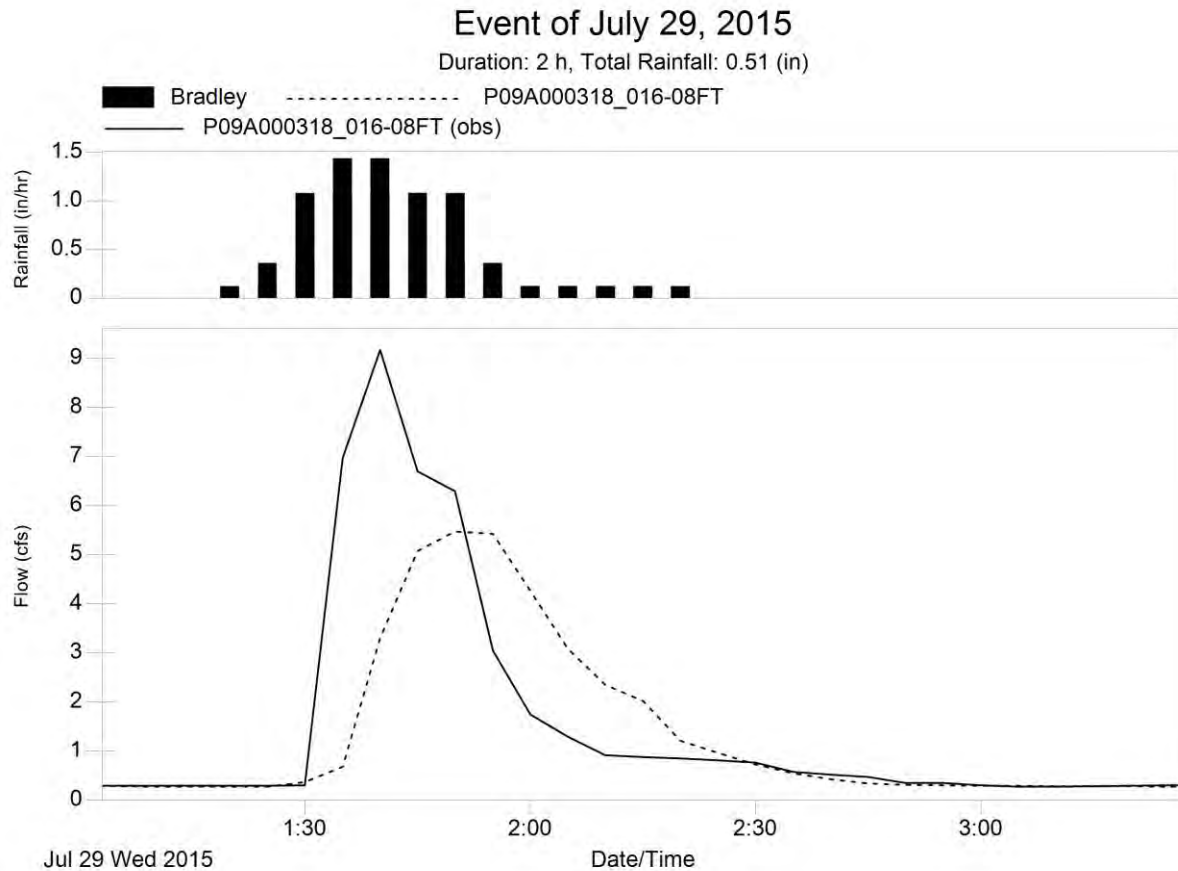


Event of July 16, 2015

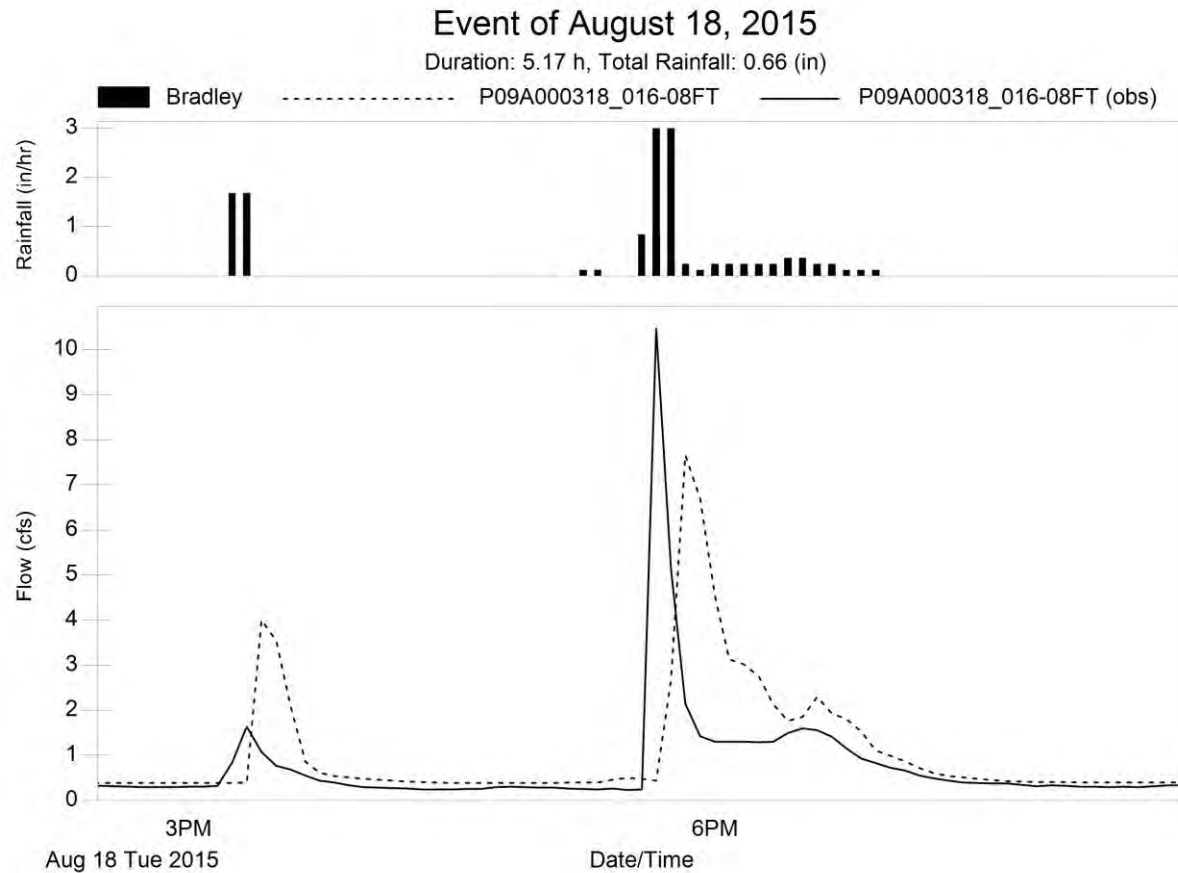
Duration: 17.33 h, Total Rainfall: 1.16 (in)



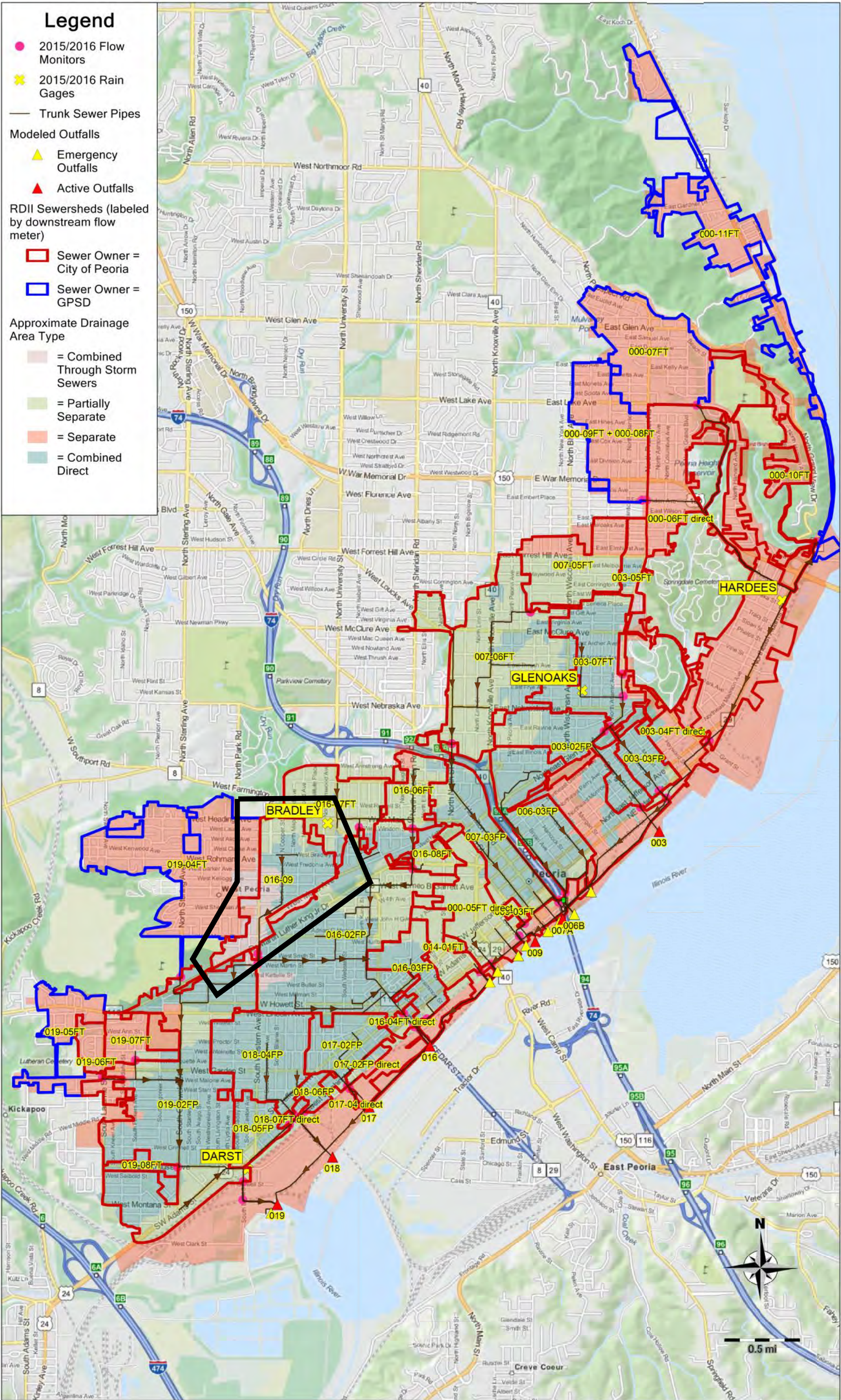
Cedar 016-08FT – Verification Events



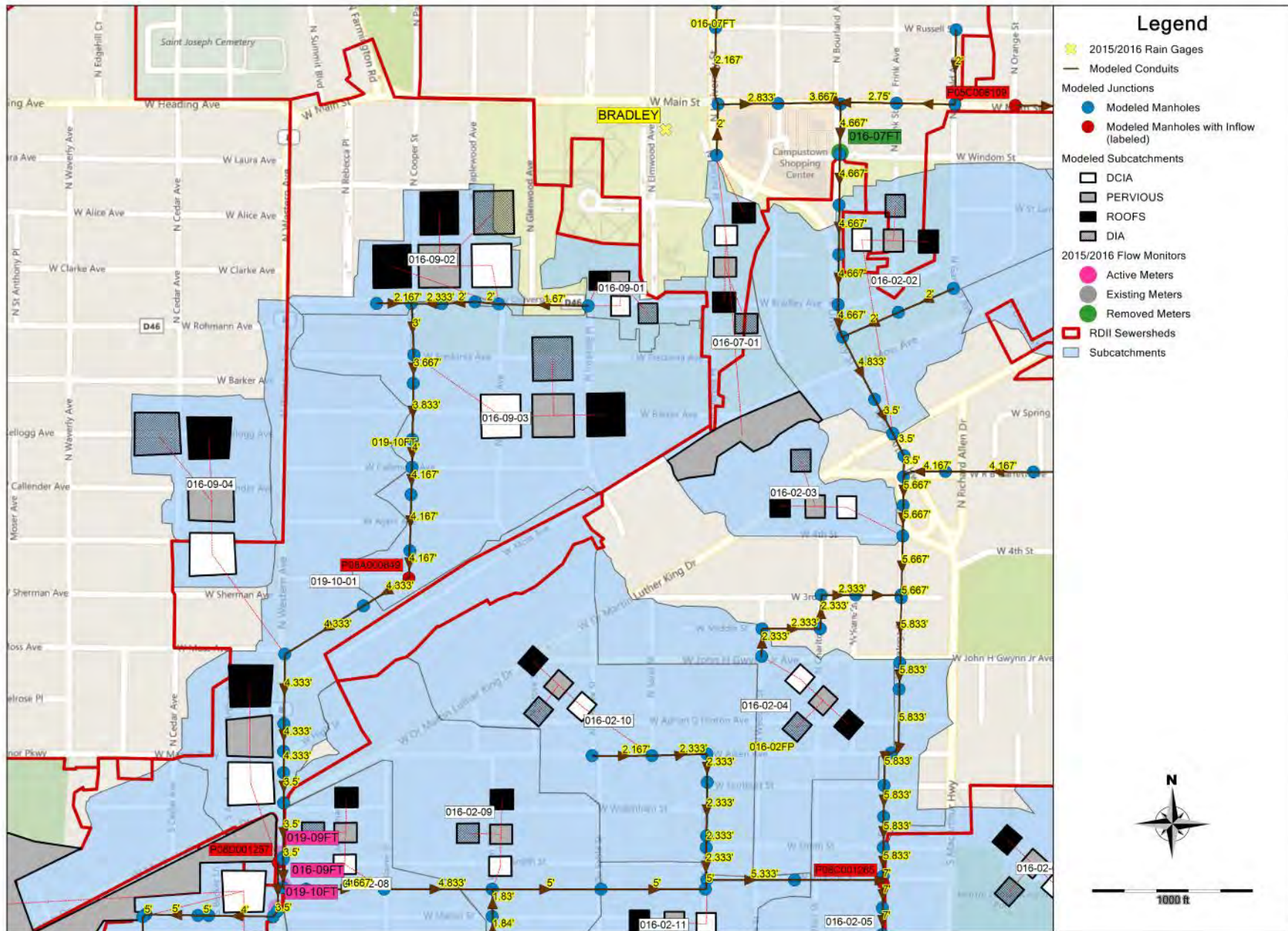
Cedar 016-08FT – Verification Events



Flow Monitor 016-09 Overview Map



016-09 - Combined Sewer Flow Meter



Cedar 016-09FT

Date	Duration (h)	Rainfall (in)	Maximum Flow (cfs)		Maximum Flow (mgd)		Total Volume (ft³)		Volume (million gallons)		Peak Flow Rate (-15% to +25%)	Flow Volume (-10% to +20%)	Rainfall Variability
		Bradley Edited	Observed	Modeled	Observed	Modeled	Observed	Modeled	Observed	Modeled			
CALIBRATION EVENTS - FLOW													
9/8/2015 10:20	5.0	0.86	101.2	45.3	65.4	29.3	188100	89870	1.4	0.7	-55%	-52%	variable
9/18/2015 12:45	13.3	1.62	110.5	34.2	71.4	22.1	477100	169600	3.6	1.3	-69%	-64%	relatively uniform
11/5/2015 13:15	18.0	0.43	5.6	7.7	3.6	5.0	43340	76470	0.3	0.6	38%	76%	possibly uniform
11/11/2015 19:10	4.1	0.60	39.9	51.4	25.8	33.2	94240	66410	0.7	0.5	29%	-30%	relatively uniform
11/16/2015 21:00	37.4	2.37	16.6	15.7	10.7	10.1	284900	294700	2.1	2.2	-5%	3%	variable
11/26/2015 18:15	34.8	1.12	7.8	5.7	5.1	3.7	147400	172100	1.1	1.3	-27%	17%	possibly uniform
12/13/2015 1:05	40.5	1.77	8.3	8.6	5.3	5.5	243800	245500	1.8	1.8	4%	1%	possibly uniform
12/20/2015 21:25	17.9	0.70	8.3	7.1	5.4	4.6	79550	98780	0.6	0.7	-15%	24%	relatively uniform
12/23/2015 6:25	14.3	0.73	20.7	22.5	13.4	14.6	109200	102300	0.8	0.8	9%	-6%	variable
12/28/2015 0:25	33.8	1.64	98.7	19.4	63.8	12.5	394700	220400	3.0	1.6	-80%	-44%	variable
VERIFICATION EVENTS - FLOW													
6/17/2015 2:05	3.8	0.80	43.7	39.3	28.2	25.4	103800	72640	0.8	0.5	-10%	-30%	variable
6/24/2015 4:20	67.4	2.15	37.5	35.3	24.3	22.8	331400	324500	2.5	2.4	-6%	-2%	variable
6/28/2015 17:25	4.4	0.51	91.3	19.1	59.0	12.3	143600	52060	1.1	0.4	-79%	-64%	variable
7/8/2015 5:05	26.0	1.39	16.3	10.5	10.5	6.8	177200	166400	1.3	1.2	-36%	-6%	relatively uniform
7/11/2015 8:35	13.9	1.07	98.9	26.8	63.9	17.3	214100	120100	1.6	0.9	-73%	-44%	possibly uniform
7/16/2015 9:00	17.3	1.16	123.5	46.4	79.8	30.0	278600	142600	2.1	1.1	-62%	-49%	relatively uniform
7/29/2015 1:15	2.0	0.51	15.2	26.3	9.8	17.0	29250	44700	0.2	0.3	74%	53%	variable
8/18/2015 2:05	1.7	0.45	120.1	39.5	77.6	25.5	68130	41060	0.5	0.3	-67%	-40%	possibly uniform
8/18/2015 15:00	5.2	0.66	94.6	47.6	61.1	30.7	129100	74030	1.0	0.6	-50%	-43%	relatively uniform

Notes:

Not a great metering location due to steep slope. Values sometimes erratic.

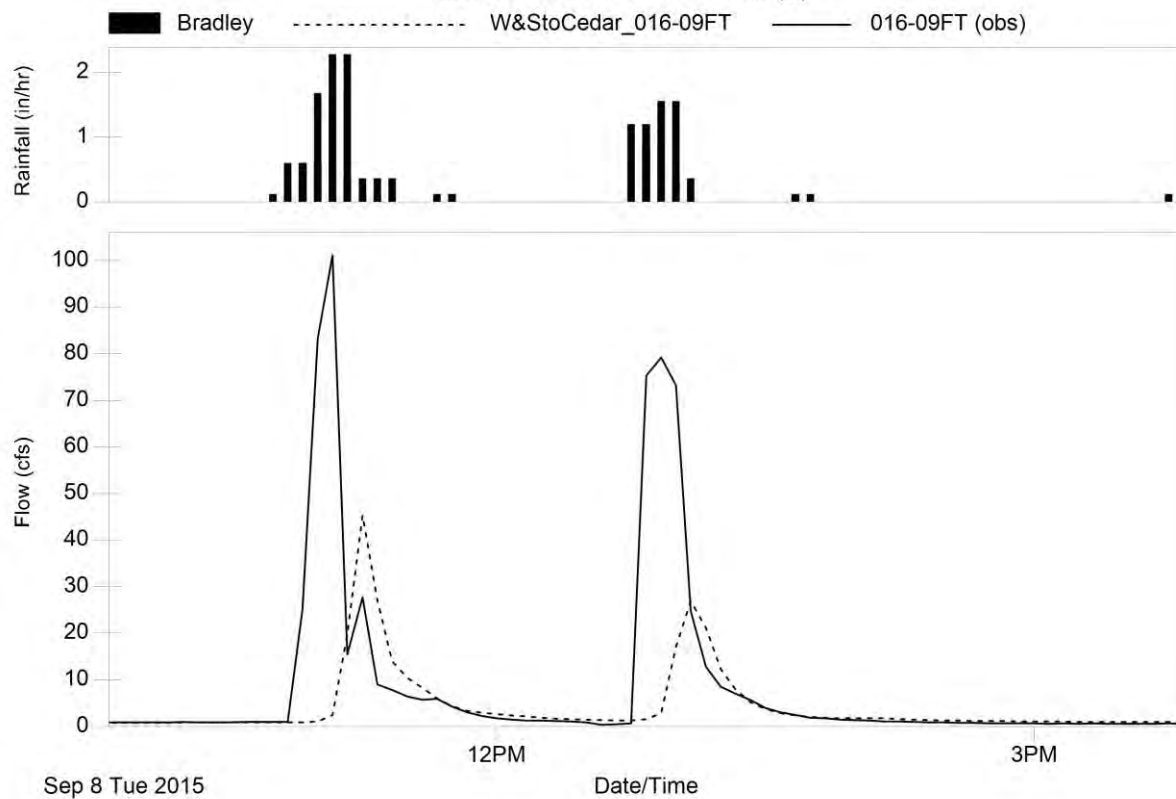
Calibrated to smaller events due to inconsistent and likely erroneous depths at higher flow rates.

WEIGHTED AVERAGES			
Calibration - Relatively Uniform	-42%	-49%	relatively uniform
Calibration - Possibly Uniform	2%	14%	possibly uniform
Calibration - Variable	-57%	-28%	variable
Calibration Weighted - All Events	-48%	-26%	
Verification - Relatively Uniform	-55%	-35%	relatively uniform
Verification - Possibly Uniform	-70%	-43%	possibly uniform
Verification - Variable	-36%	-19%	variable
Verification Weighted - All Events	-55%	-30%	
Weighted Average - All Events	-52%	-27%	
NET AVERAGES			
Calibration - Relatively Uniform	-18%	-23%	relatively uniform
Calibration - Possibly Uniform	5%	31%	possibly uniform
Calibration - Variable	-33%	-25%	variable
Calibration Net - All Events	-17%	-8%	
Verification - Relatively Uniform	-49%	-33%	relatively uniform
Verification - Possibly Uniform	-70%	-42%	possibly uniform
Verification - Variable	-5%	-11%	variable
Verification Net - All Events	-34%	-25%	
Net Average - All Events	-25%	-16%	

Cedar 016-09FT – Calibration Events

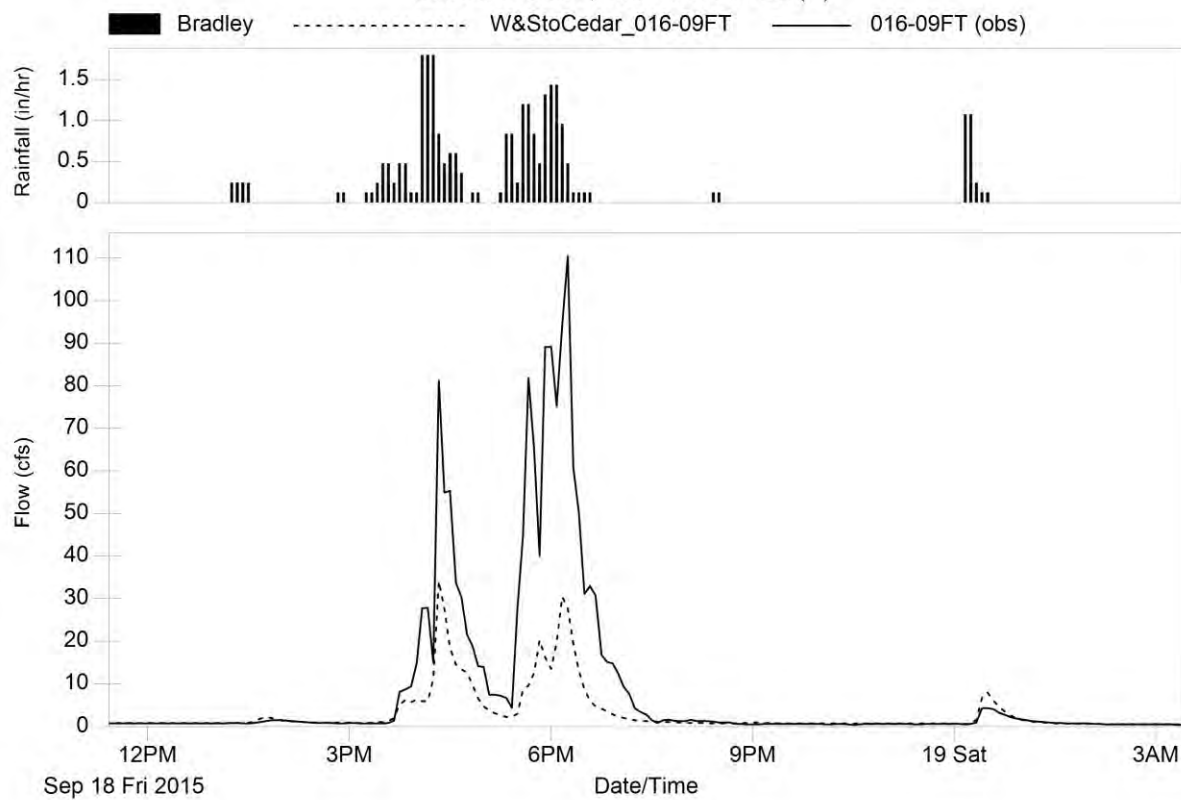
Event of September 8, 2015

Duration: 5 h, Total Rainfall: 0.86 (in)



Event of September 18, 2015

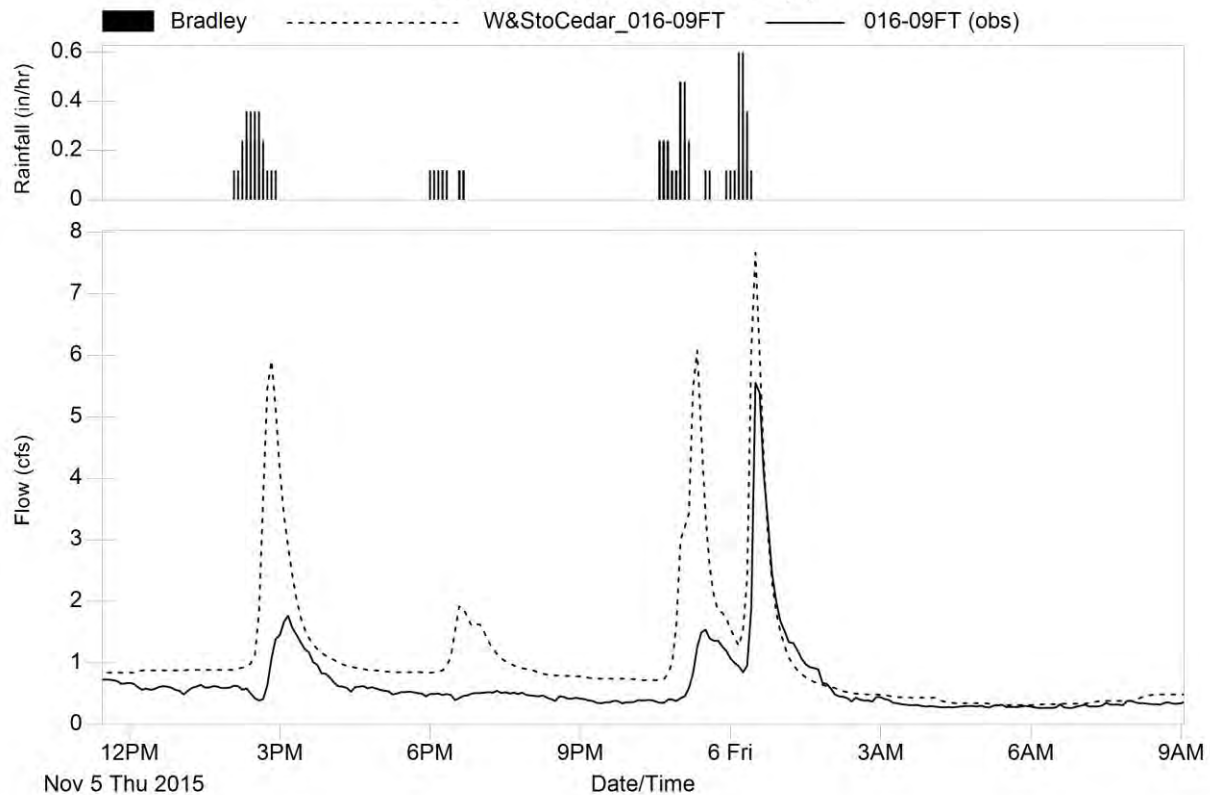
Duration: 13.33 h, Total Rainfall: 1.62 (in)



Cedar 016-09FT – Calibration Events

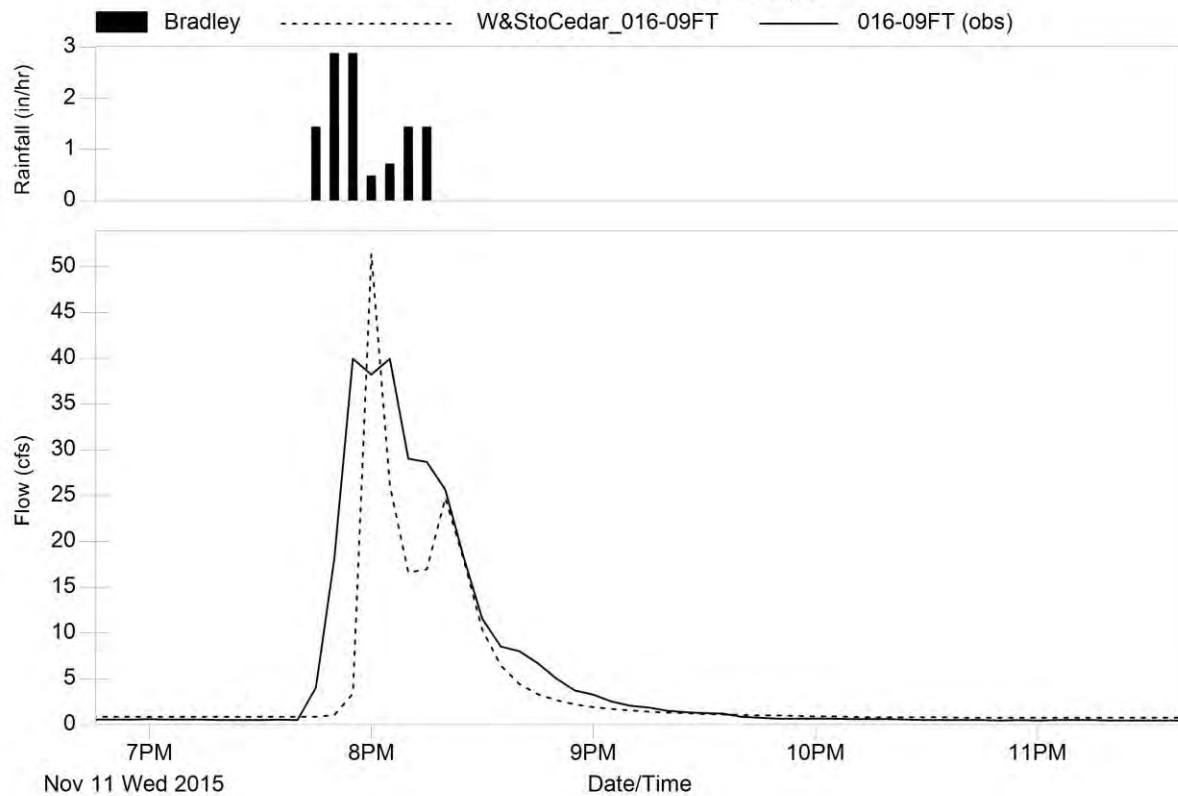
Event of November 5, 2015

Duration: 18 h, Total Rainfall: 0.43 (in)



Event of November 11, 2015

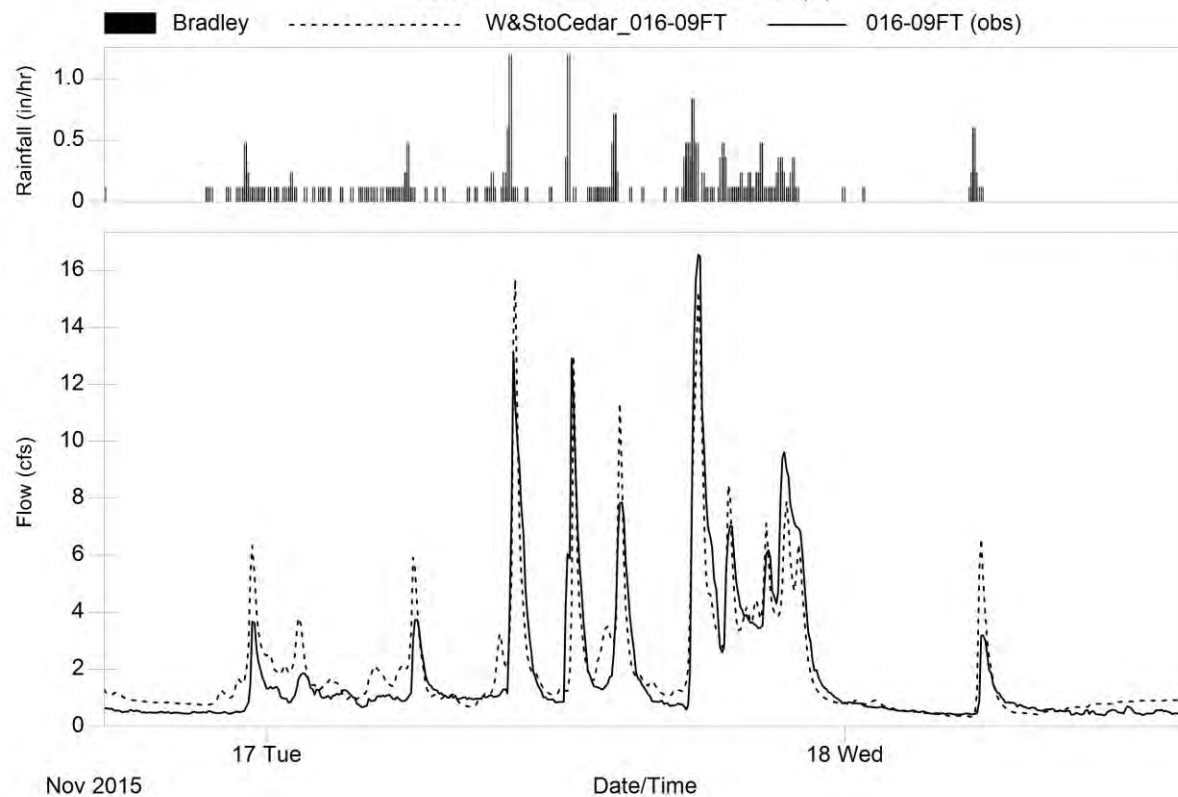
Duration: 4.08 h, Total Rainfall: 0.6 (in)



Cedar 016-09FT – Calibration Events

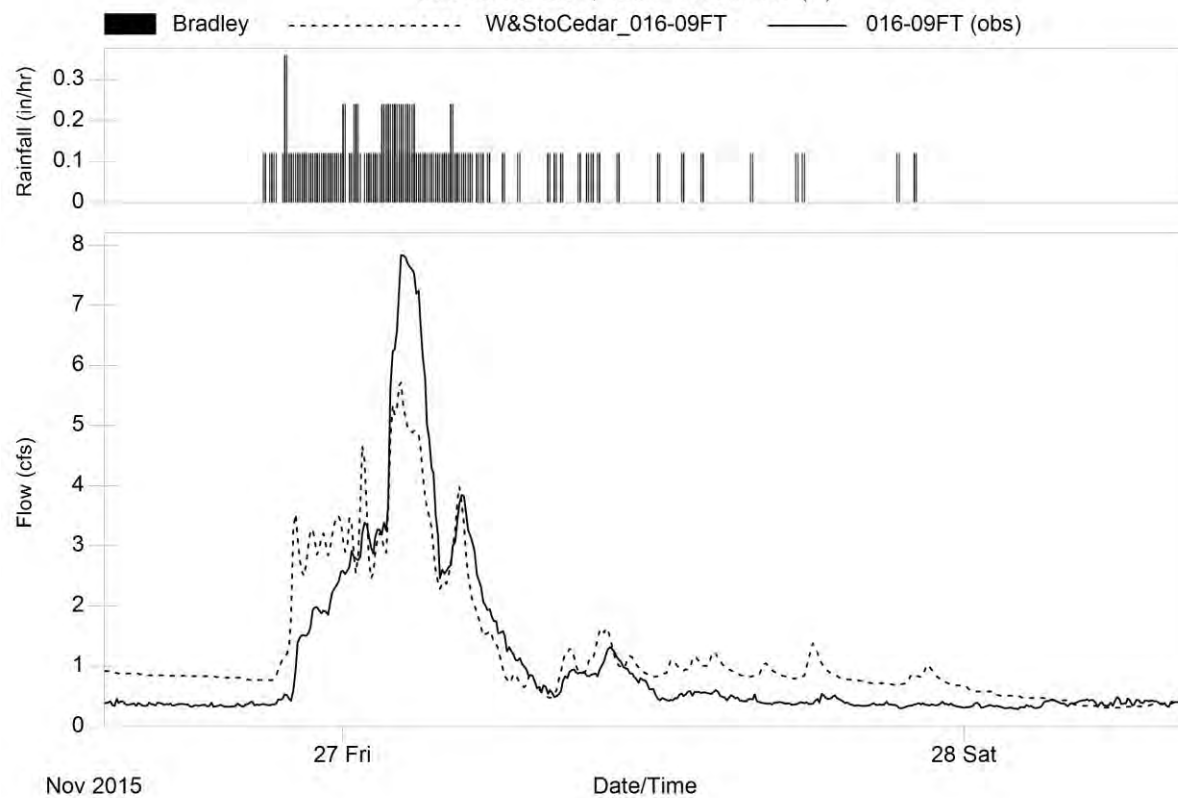
Event of November 16, 2015

Duration: 37.42 h, Total Rainfall: 2.37 (in)



Event of November 26, 2015

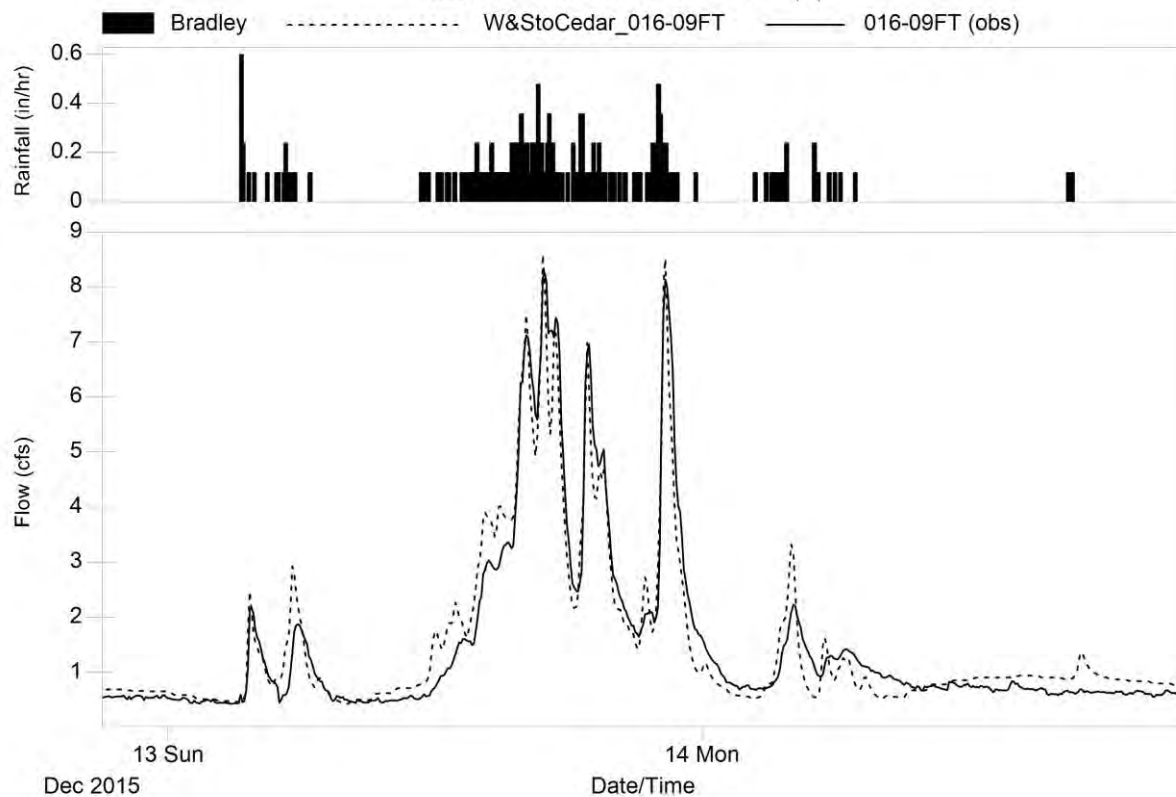
Duration: 34.83 h, Total Rainfall: 1.12 (in)



Cedar 016-09FT – Calibration Events

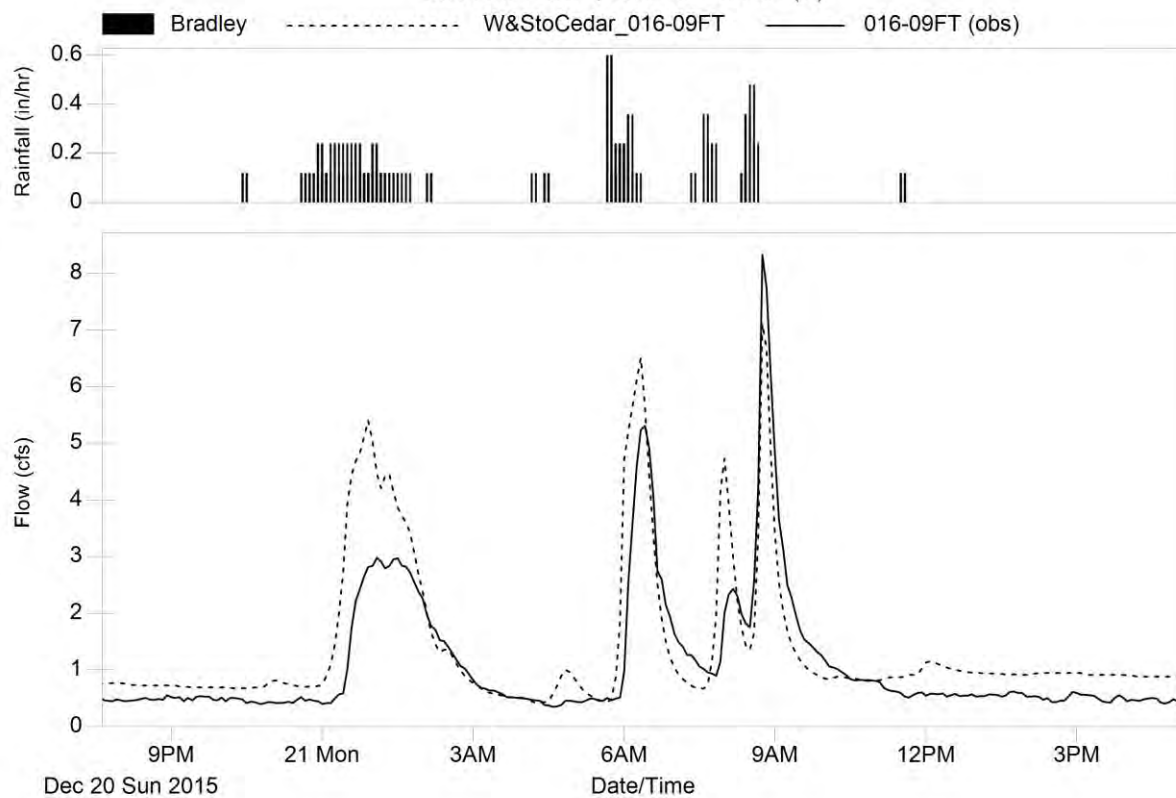
Event of December 13, 2015

Duration: 40.5 h, Total Rainfall: 1.77 (in)



Event of December 20, 2015

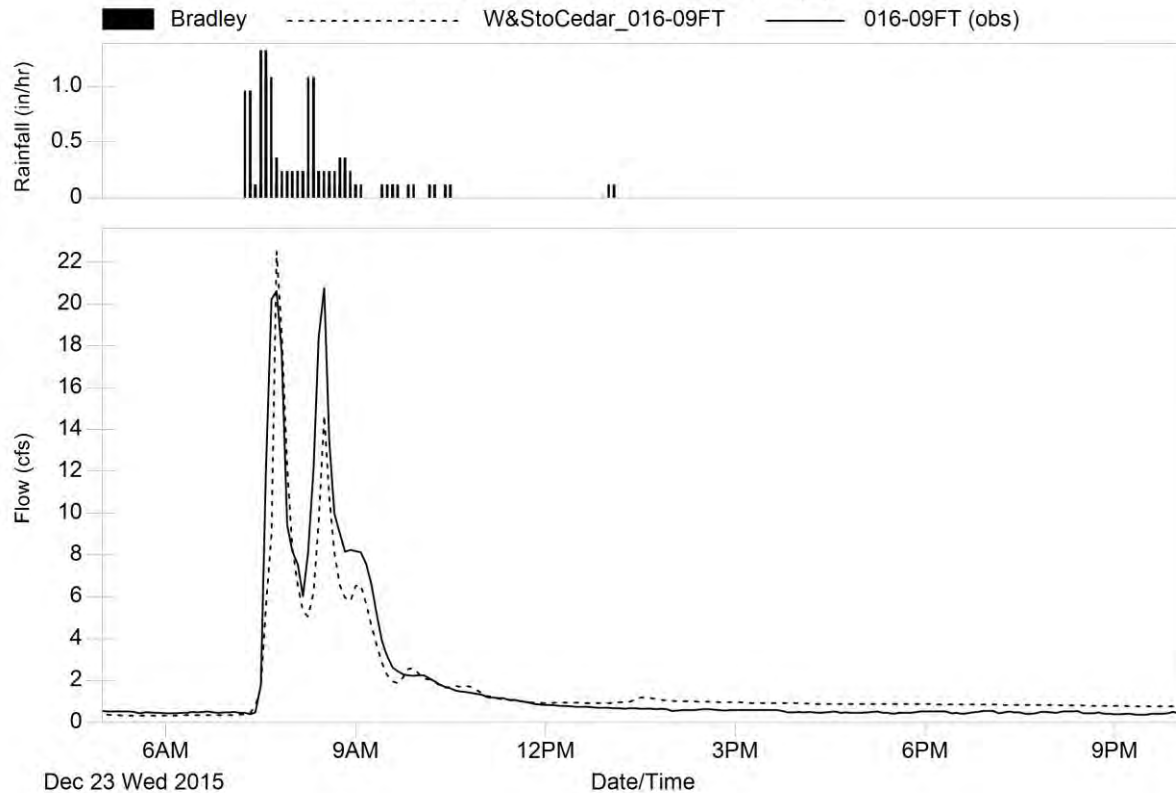
Duration: 17.92 h, Total Rainfall: 0.7 (in)



Cedar 016-09FT – Calibration Events

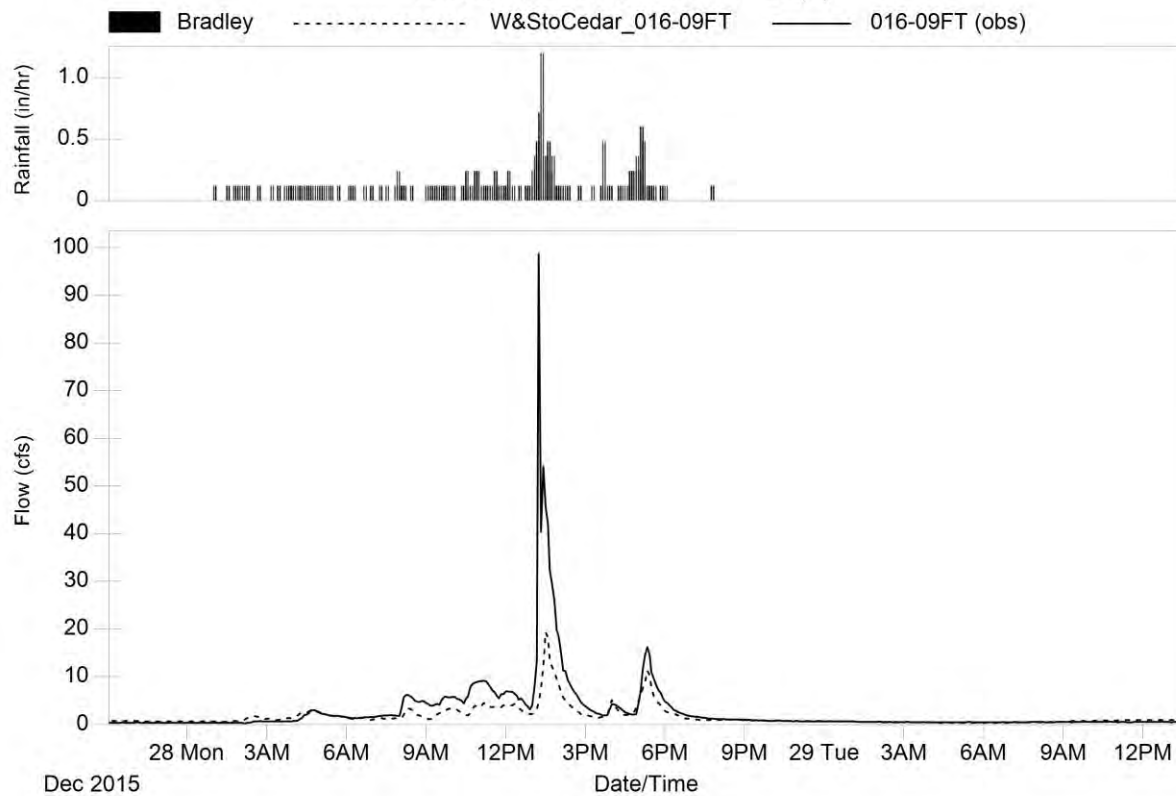
Event of December 23, 2015

Duration: 14.25 h, Total Rainfall: 0.73 (in)

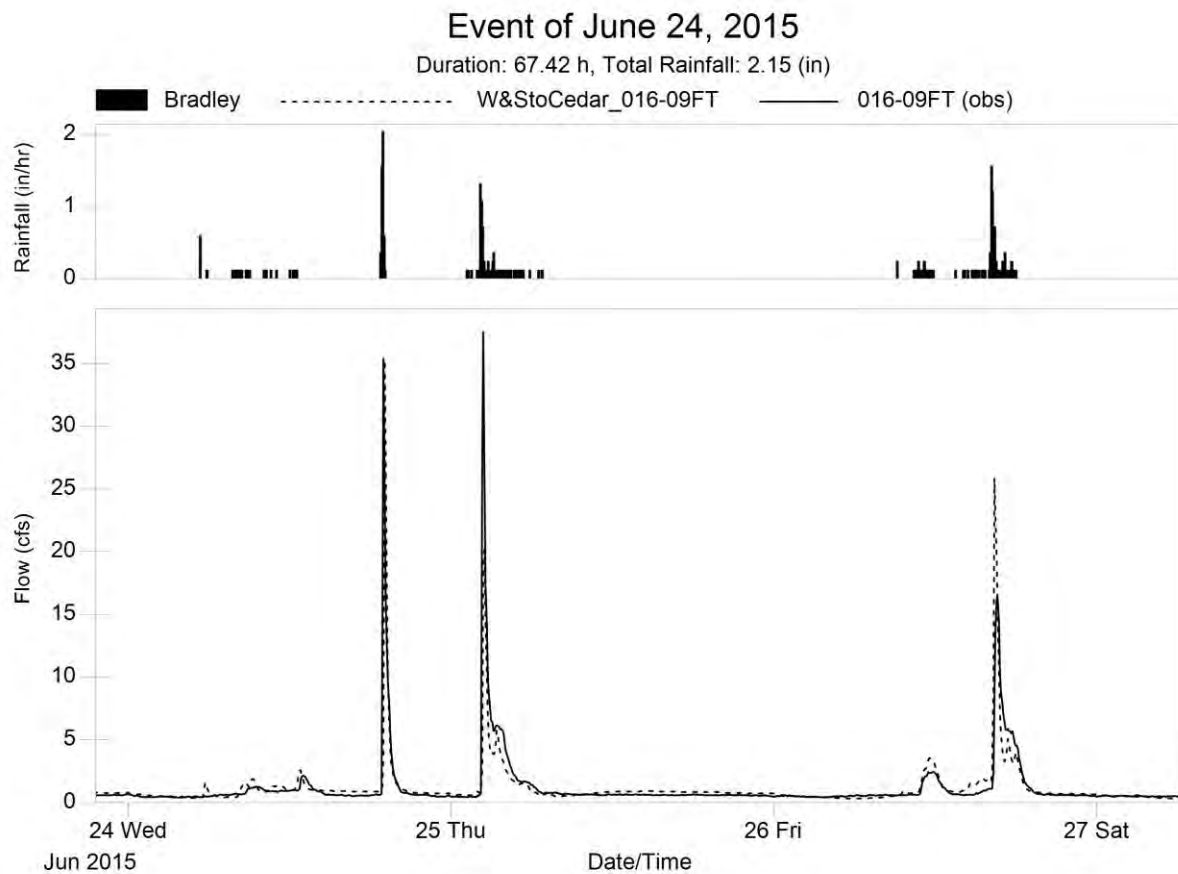
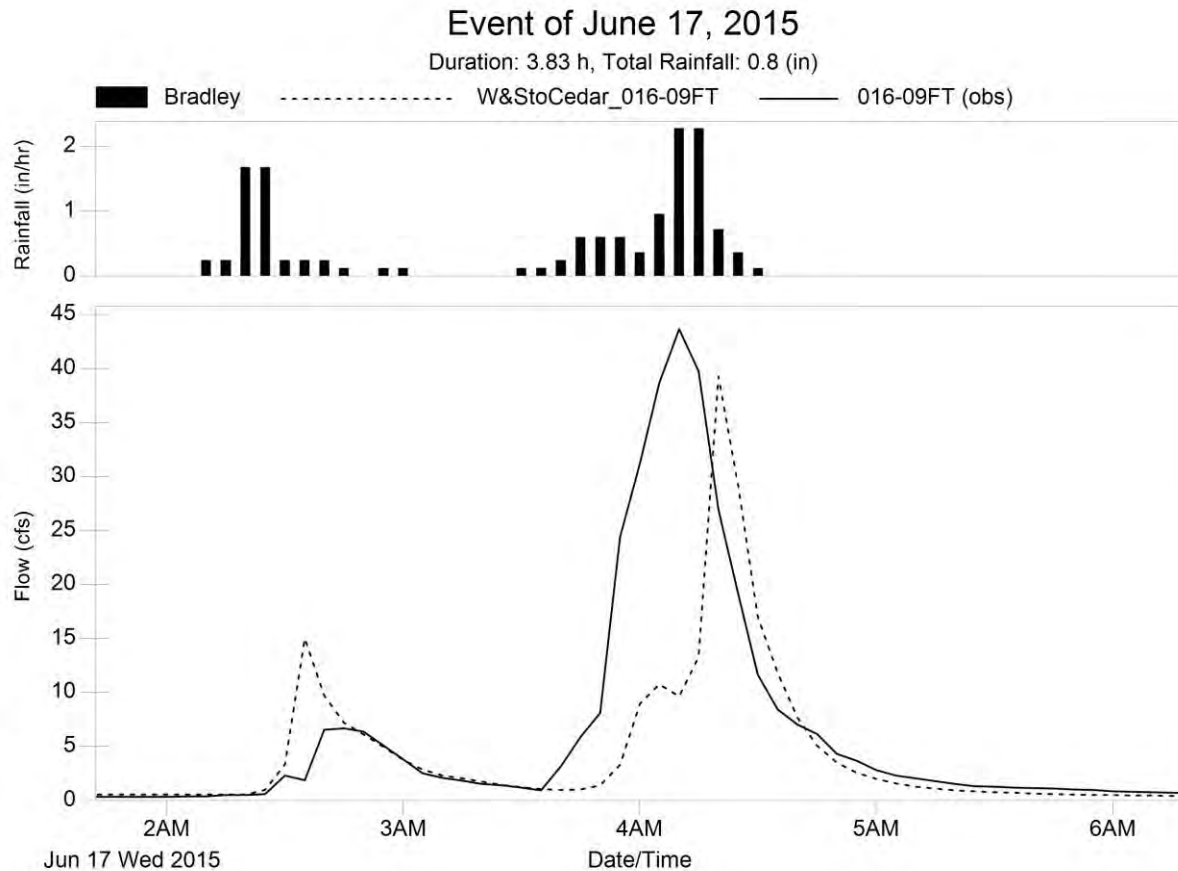


Event of December 28, 2015

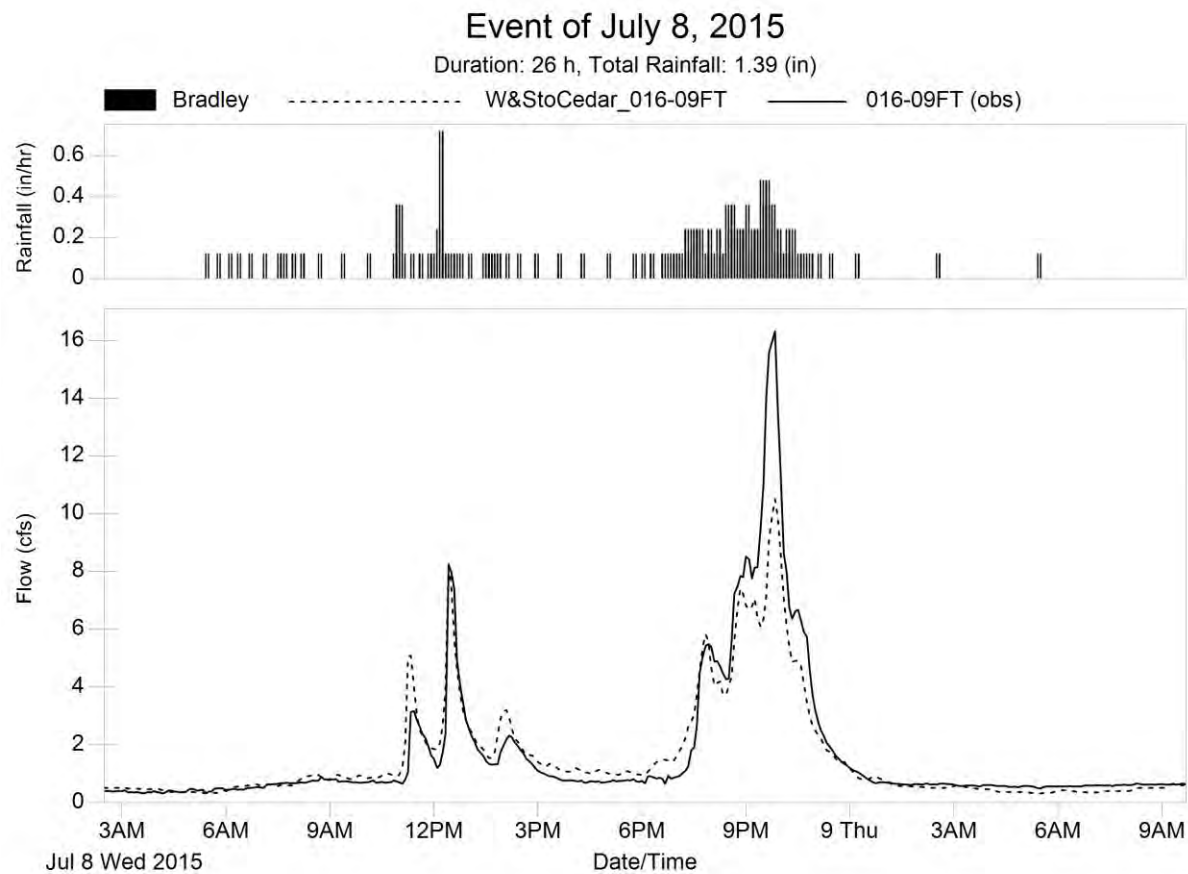
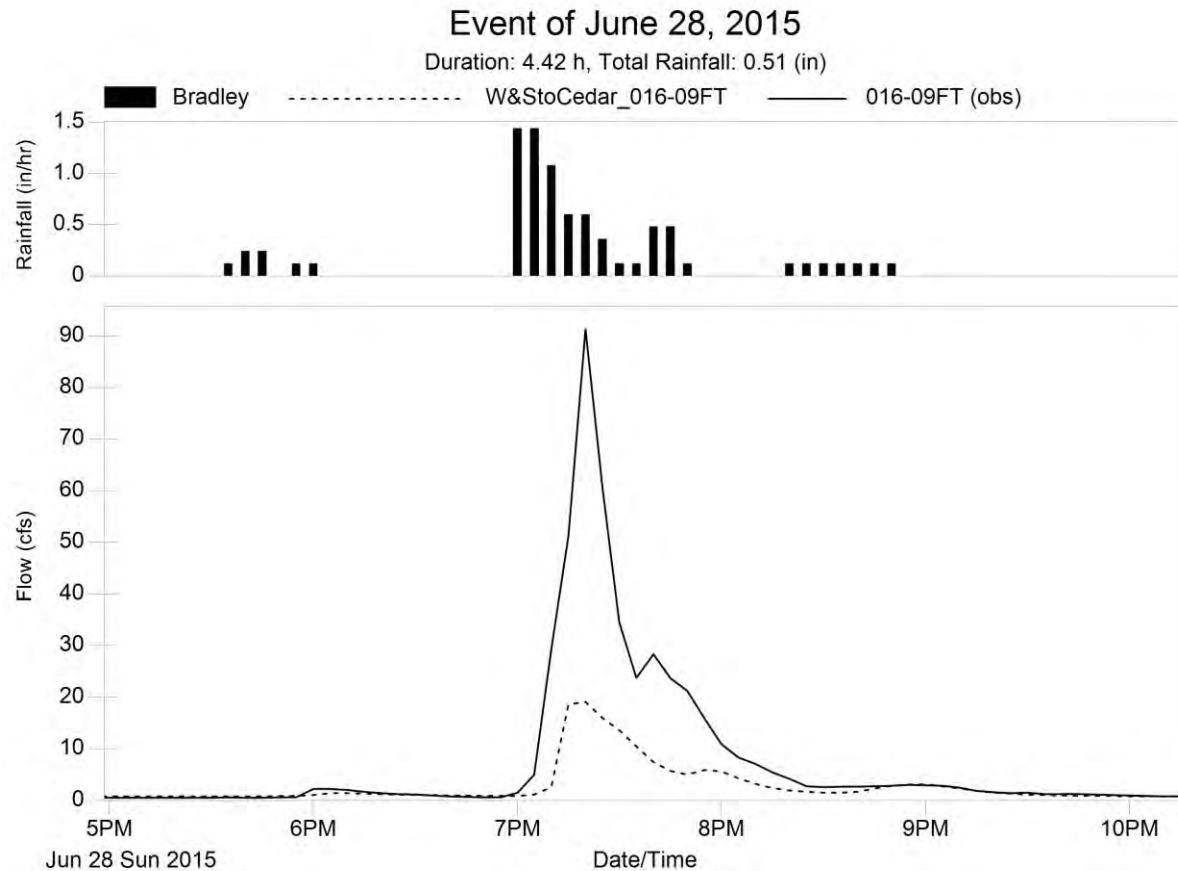
Duration: 33.75 h, Total Rainfall: 1.64 (in)



Cedar 016-09FT – Verification Events



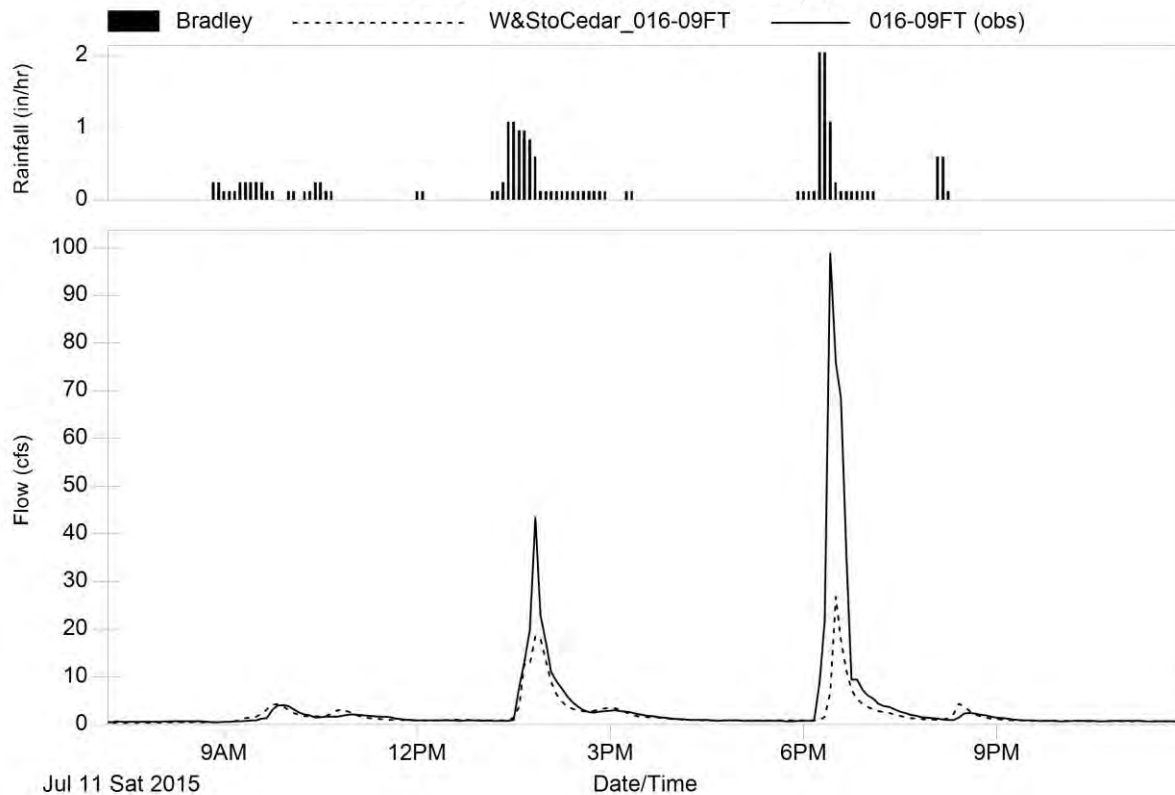
Cedar 016-09FT – Verification Events



Cedar 016-09FT – Verification Events

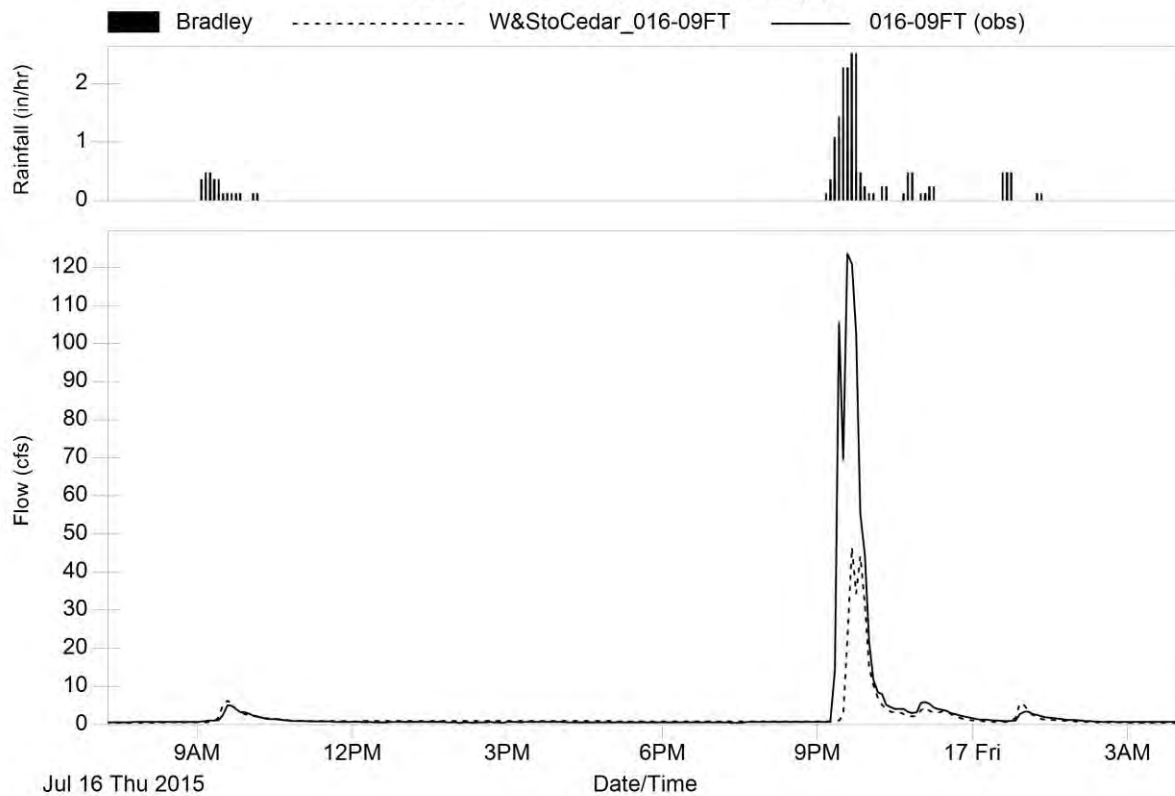
Event of July 11, 2015

Duration: 13.92 h, Total Rainfall: 1.07 (in)

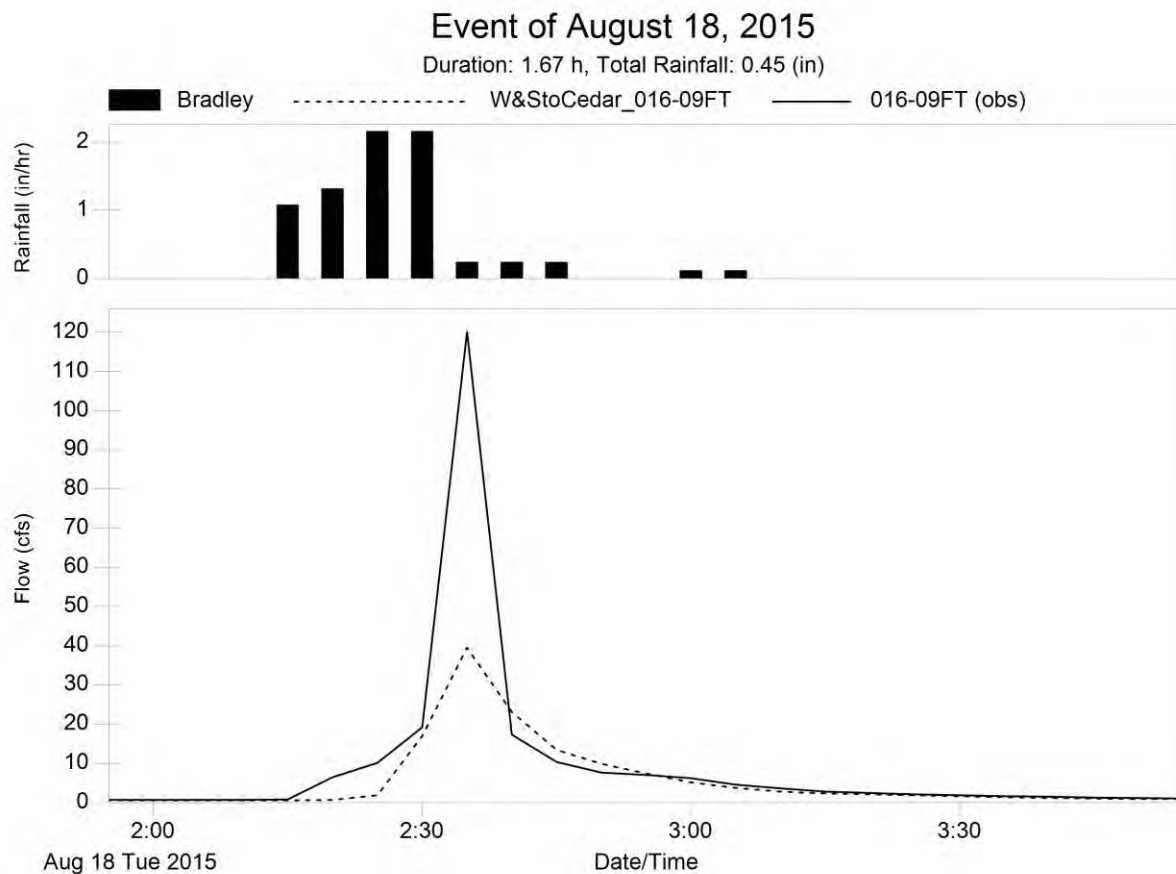
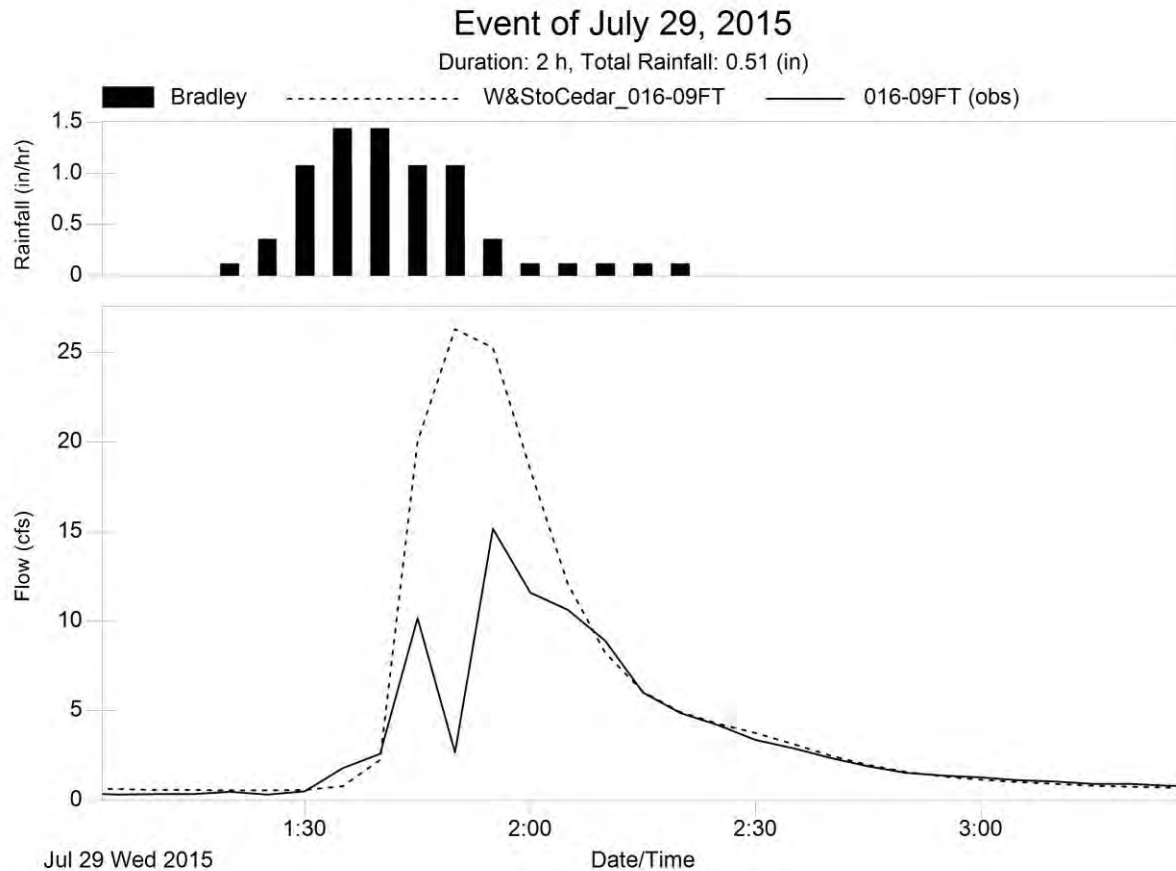


Event of July 16, 2015

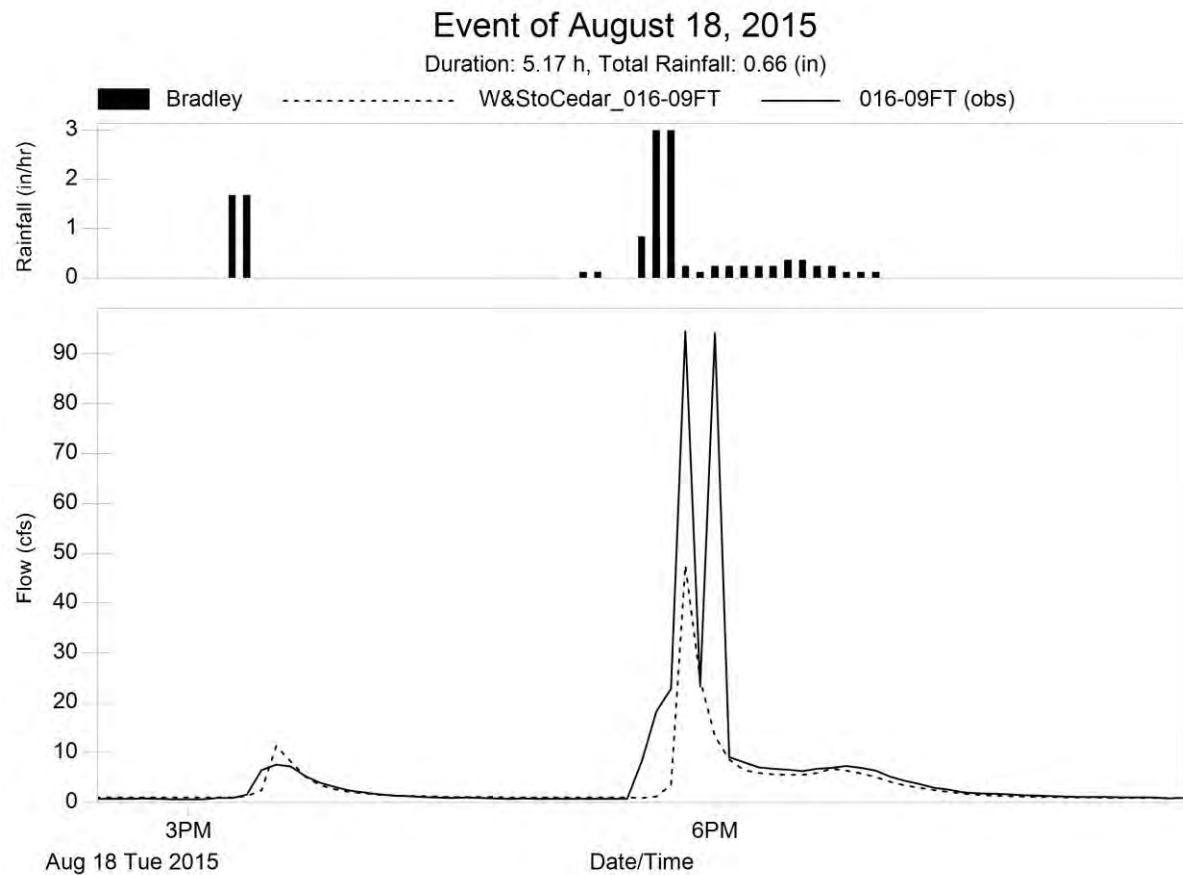
Duration: 17.33 h, Total Rainfall: 1.16 (in)



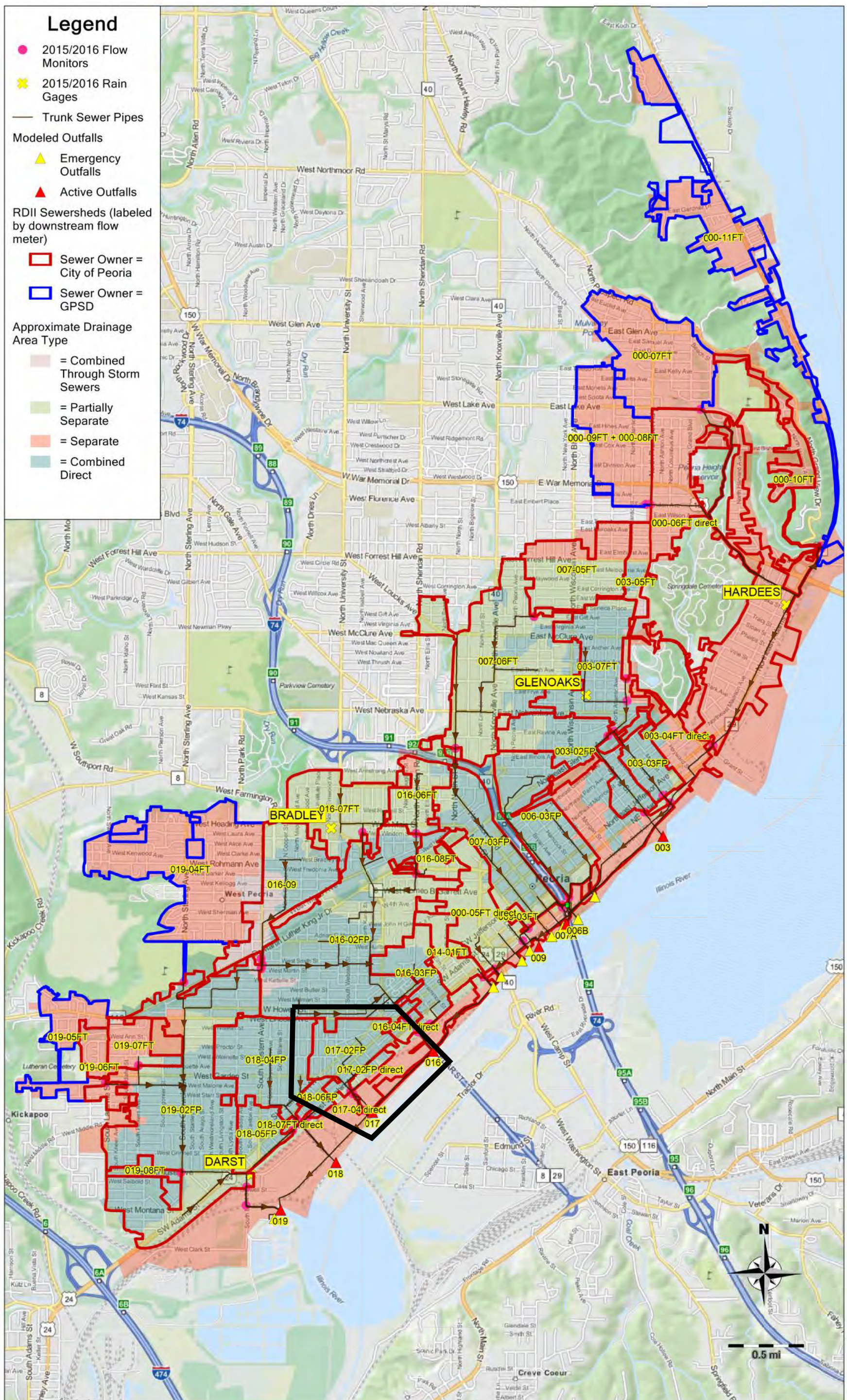
Cedar 016-09FT – Verification Events



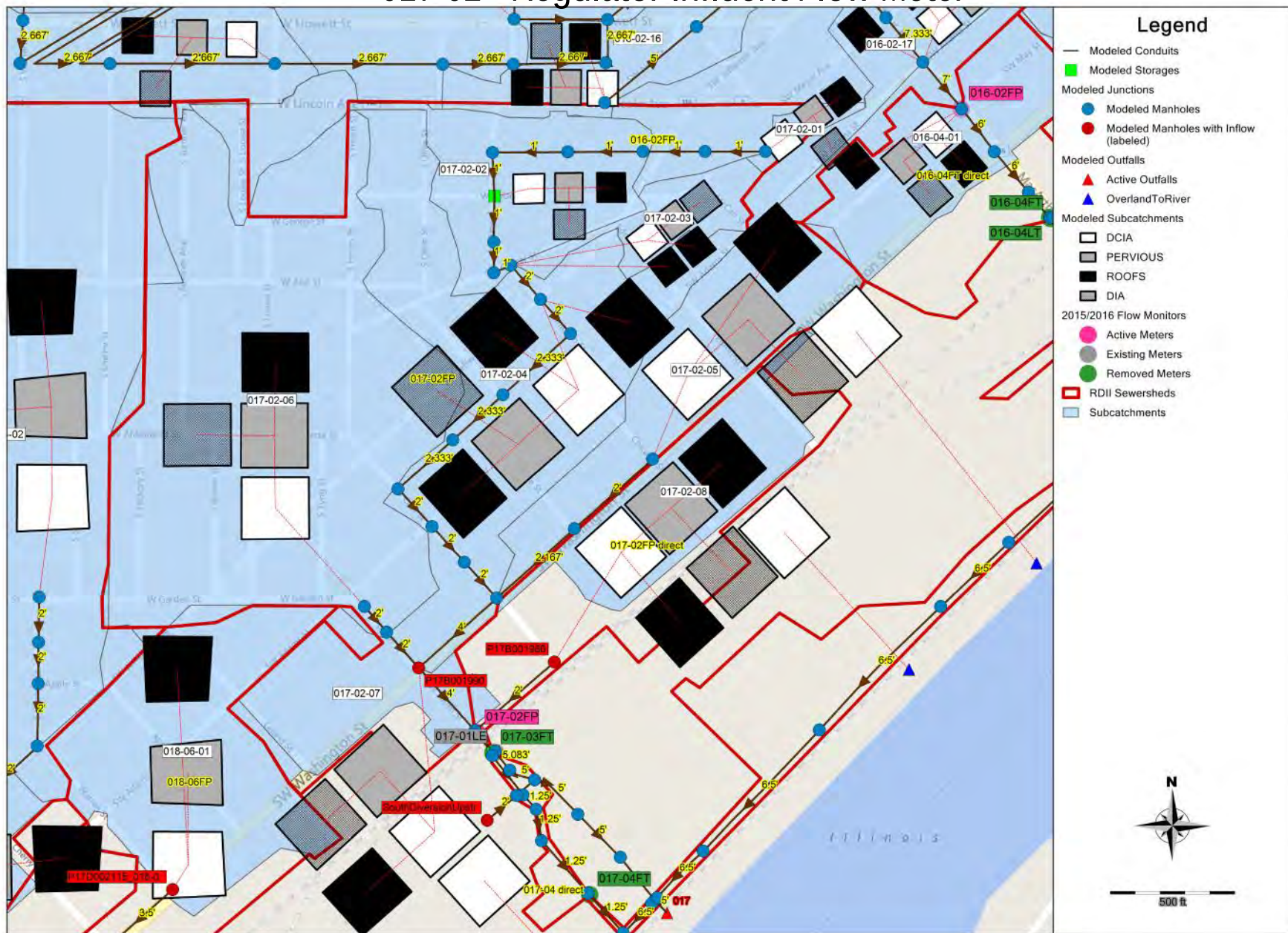
Cedar 016-09FT – Verification Events



Flow Monitor 017-02FP Overview Map



017-02 - Regulator Influent Flow Meter



South 017-02FP

Date	Duration (h)	Rainfall (in)	Maximum Flow (cfs)		Maximum Flow (mgd)		Total Volume (ft³)		Volume (million gallons)		Peak Flow Rate (-15% to +25%)	Flow Volume (-10% to +20%)	Rainfall Variability	
		Darst	Observed	Modeled	Observed	Modeled	Observed	Modeled	Observed	Modeled				
CALIBRATION EVENTS - FLOW														
7/16/2015 8:55	18.0	Event not included due to rainfall variability												
9/8/2015 10:45	4.0	0.81	64.9	63.5	41.9	41.0	148800	170300	1.1	1.3	-2%	14%	variable	
9/18/2015 13:10	13.4	1.62	102.8	78.4	66.4	50.6	371200	350600	2.8	2.6	-24%	-6%	possibly uniform	
11/5/2015 22:45	3.8	0.23	14.7	16.9	9.5	10.9	47240	47130	0.4	0.4	15%	0%	possibly uniform	
11/11/2015 19:40	2.3	0.60	55.4	84.3	35.8	54.4	101900	125000	0.8	0.9	52%	23%	variable	
11/16/2015 21:05	39.8	1.59	39.4	37.2	25.4	24.0	512700	349900	3.8	2.6	-6%	-32%	variable	
11/26/2015 21:15	11.2	1.01	15.0	16.9	9.7	10.9	229800	214200	1.7	1.6	13%	-7%	possibly uniform	
12/13/2015 11:15	14.4	1.39	17.3	19.5	11.2	12.6	273200	315600	2.0	2.4	13%	16%	variable	
12/20/2015 23:45	14.8	0.68	12.3	15.4	7.9	9.9	118900	145500	0.9	1.1	25%	22%	variable	
12/23/2015 7:10	4.1	0.67	36.8	41.6	23.7	26.9	150400	142500	1.1	1.1	13%	-5%	variable	
12/28/2015 3:40	17.4	2.54	71.4	82.0	46.2	53.0	573500	578900	4.3	4.3	15%	1%	variable	
VERIFICATION EVENTS - FLOW														
6/17/2015 1:00	11.3	0.84	84.9	83.3	54.9	53.8	243200	174100	1.8	1.3	-2%	-28%	variable	
6/24/2015 4:20	67.4	2.15	65.6	73.9	42.4	47.7	391800	432300	2.9	3.2	13%	10%	variable	
6/28/2015 17:00	13.4	0.52	66.3	44.7	42.8	28.9	132300	102300	1.0	0.8	-33%	-23%	variable	
7/8/2015 4:10	31.5	1.39	22.1	24.6	14.3	15.9	236200	279000	1.8	2.1	11%	18%	variable	
7/11/2015 8:25	15.6	1.07	80.3	56.5	51.9	36.5	256700	219400	1.9	1.6	-30%	-15%	variable	
7/29/2015 1:25	4.6	0.57	103.4	80.5	66.8	52.0	117200	116300	0.9	0.9	-22%	-1%	possibly uniform	
8/18/2015 2:10	4.3	0.40	51.4	61.5	33.2	39.7	62720	76870	0.5	0.6	20%	23%	possibly uniform	
8/18/2015 14:55	7.9	0.66	73.4	85.5	47.4	55.2	138300	140900	1.0	1.1	16%	2%	variable	
For some events, the modeled peaks occur later than the metered peaks. We believe this may be associated with rainfall variability for some instances. It appears that the 7/16 event is modeled significantly high due to rainfall variability								WEIGHTED AVERAGES						
								Calibration - Possibly Uniform		-15%		-6%		possibly uniform
								Calibration - Variable		15%		-3%		variable
								Calibration Weighted - All Events		6%		-3%		
								Verification - Possibly Uniform		-8%		7%		possibly uniform
								Verification - Variable		-6%		-4%		variable
								Verification Weighted - All Events		-7%		-2%		
								Weighted Average - All Events		-1%		-3%		
								NET AVERAGES						
								Calibration - Possibly Uniform		1%		-4%		possibly uniform
								Calibration - Variable		16%		6%		variable
								Calibration Net - All Events		11%		3%		
								Verification - Possibly Uniform		-1%		11%		possibly uniform
								Verification - Variable		-4%		-6%		variable
								Verification Net - All Events		-3%		-2%		
Net Average - All Events		5%		1%										

For some events, the modeled peaks occur later than the metered peaks.
We believe this may be associated with rainfall variability for some instances.
It appears that the 7/16 event is modeled significantly high due to rainfall variability

South 017-02FP Depth

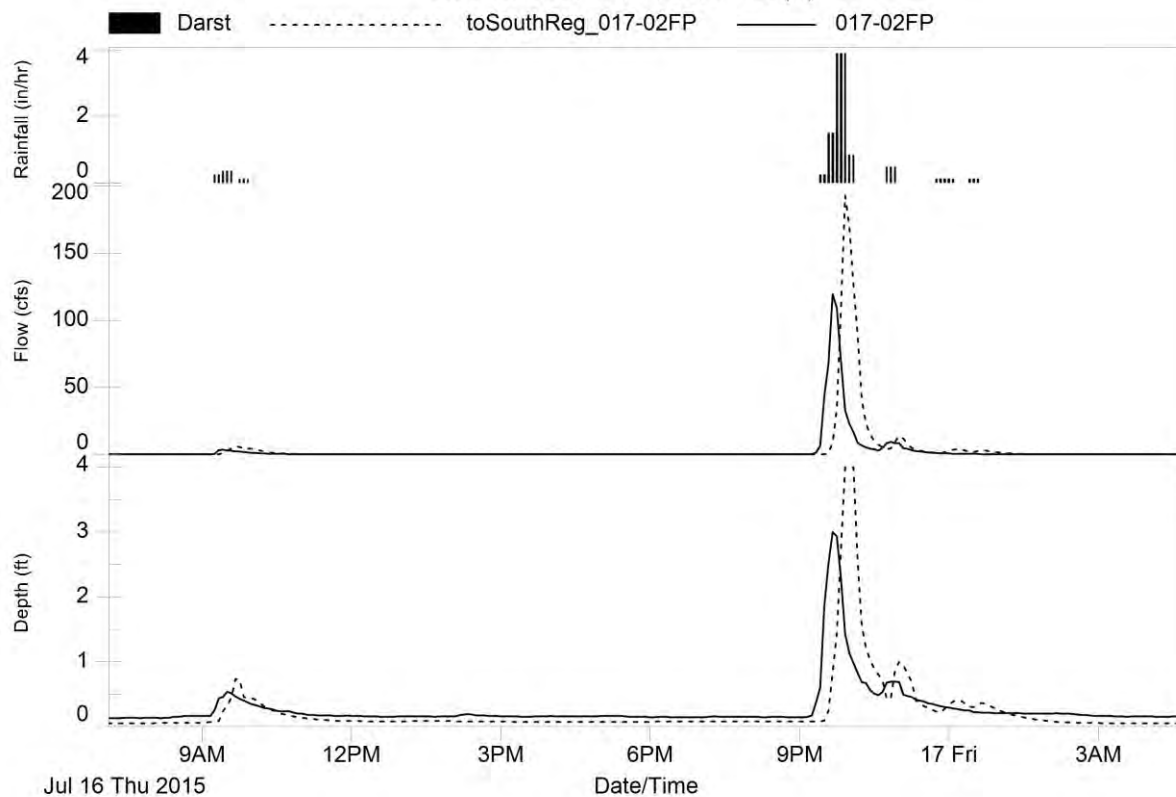
Date	Duration (h)	Maximum Depth (ft)		Minimum Depth (ft)		Average Depth (ft)		Maximum Depth (ft)	Minimum Depth (ft)	Average Depth (ft)	Rainfall Variability			
		metered	modeled	metered	modeled	metered	modeled	Surcharged: -0.33 ft to +1.67 ft						
CALIBRATION EVENTS - DEPTH								Non-Surcharged: -0.33 ft to +0.33 ft						
7/16/2015 8:55:00	18.0	Event not included due to rainfall variability												
9/8/2015 10:45:00	4.0	2.4	2.0	0.2	0.1	0.7	0.6	-0.5	-0.1	-0.04	variable			
9/18/2015 13:10:00	13.4	2.9	2.2	0.1	0.1	0.5	0.4	-0.7	-0.1	-0.1	possibly uniform			
11/5/2015 22:45:00	3.8	0.9	1.1	0.2	0.1	0.4	0.4	0.2	-0.1	-0.04	possibly uniform			
11/11/2015 19:40:00	2.3	2.2	2.3	0.2	0.1	0.7	0.7	0.1	-0.1	-0.05	variable			
11/16/2015 21:05:00	39.8	1.6	1.5	0.2	0.0	0.4	0.3	-0.1	-0.1	-0.1	variable			
11/26/2015 21:15:00	11.2	0.9	1.1	0.2	0.1	0.5	0.5	0.1	-0.1	0.00	possibly uniform			
12/13/2015 11:15:00	14.4	1.0	1.1	0.2	0.1	0.5	0.6	0.2	-0.1	0.1	variable			
12/20/2015 23:45:00	14.8	0.8	1.0	0.2	0.1	0.3	0.3	0.2	-0.1	0.00	variable			
12/23/2015 7:10:00	4.1	1.7	1.6	0.2	0.1	0.7	0.6	-0.1	-0.1	-0.1	variable			
12/28/2015 3:40:00	17.4	2.5	2.3	0.2	0.05	0.6	0.6	-0.3	-0.2	0.00	variable			
VERIFICATION EVENTS - DEPTH														
6/17/2015 1:00:00	11.3	2.5	2.3	0.1	0.05	0.4	0.3	-0.3	-0.1	-0.1	variable			
6/24/2015 4:20:00	67.4	2.4	2.2	0.1	0.04	0.2	0.2	-0.2	-0.1	-0.1	variable			
6/28/2015 17:00:00	13.4	2.4	1.6	0.1	0.04	0.3	0.2	-0.8	-0.1	-0.1	variable			
7/8/2015 4:10:00	31.5	1.1	1.2	0.1	0.04	0.3	0.3	0.1	-0.1	-0.03	variable			
7/11/2015 8:25:00	15.6	2.6	1.8	0.1	0.1	0.4	0.3	-0.8	-0.1	-0.1	variable			
7/29/2015 1:25:00	4.6	2.9	2.2	0.1	0.05	0.4	0.4	-0.7	-0.1	-0.1	possibly uniform			
8/18/2015 2:10:00	4.3	2.1	1.9	0.1	0.04	0.4	0.3	-0.1	-0.1	-0.1	possibly uniform			
8/18/2015 14:55:00	7.9	2.4	2.3	0.1	0.1	0.4	0.4	-0.1	-0.1	-0.1	variable			
Surcharge depth = 4 ft				WEIGHTED AVERAGES										
				Calibration - Possibly Uniform				-0.4		-0.1		-0.05		possibly uniform
				Calibration - Variable				-0.1		-0.1		-0.03		variable
				Calibration Weighted - All Events				-0.2		-0.1		-0.03		
				Verification - Possibly Uniform				-0.5		-0.1		-0.1		possibly uniform
				Verification - Variable				-0.4		-0.1		-0.1		variable
				Verification Weighted - All Events				-0.4		-0.1		-0.1		
				Weighted Average - All Events				-0.3		-0.1		-0.05		
				NET AVERAGES										
				Calibration - Possibly Uniform				-0.1		-0.1		-0.05		possibly uniform
				Calibration - Variable				-0.1		-0.1		-0.03		variable
				Calibration Net - All Events				-0.1		-0.1		-0.03		
				Verification - Possibly Uniform				-0.4		-0.1		-0.1		possibly uniform
				Verification - Variable				-0.3		-0.1		-0.1		variable
				Verification Net - All Events				-0.4		-0.1		-0.1		
Net Average - All Events				-0.2		-0.1		-0.1						

Surcharge depth = 4 ft

South 017-02FP – Calibration Events

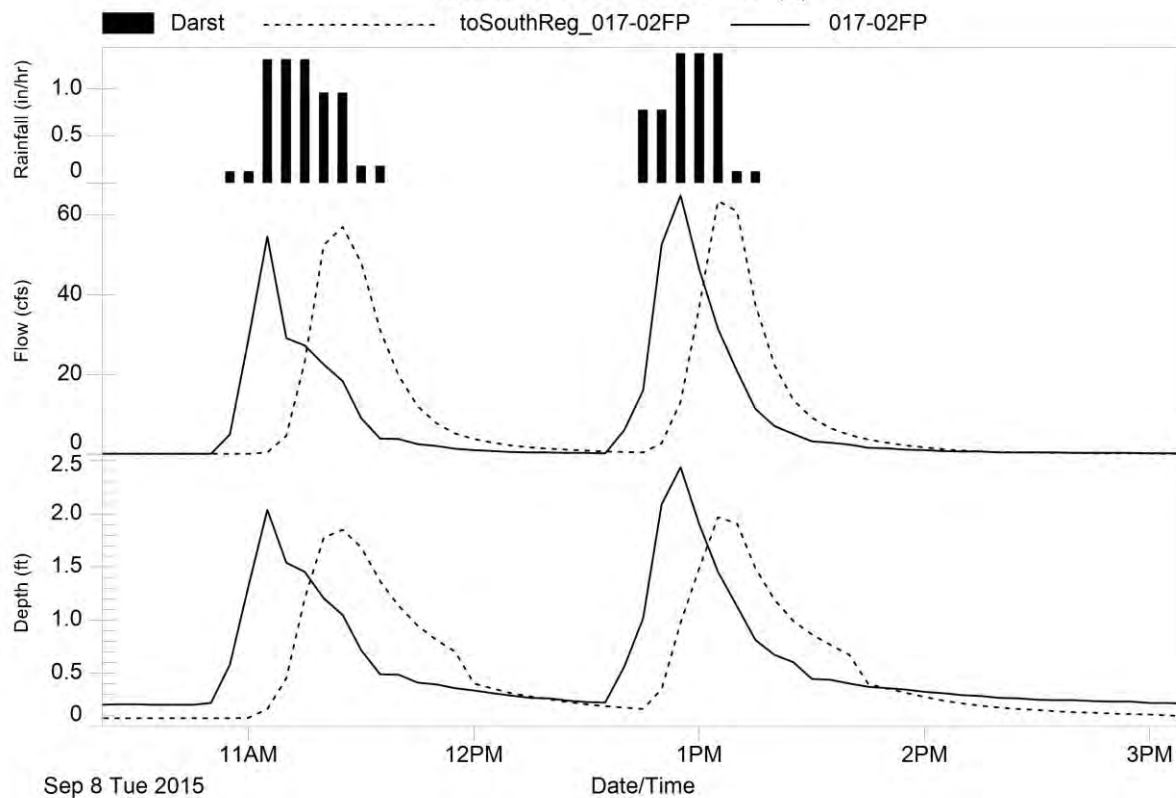
Event of July 16, 2015

Duration: 18 h, Total Rainfall: 1.34 (in)



Event of September 8, 2015

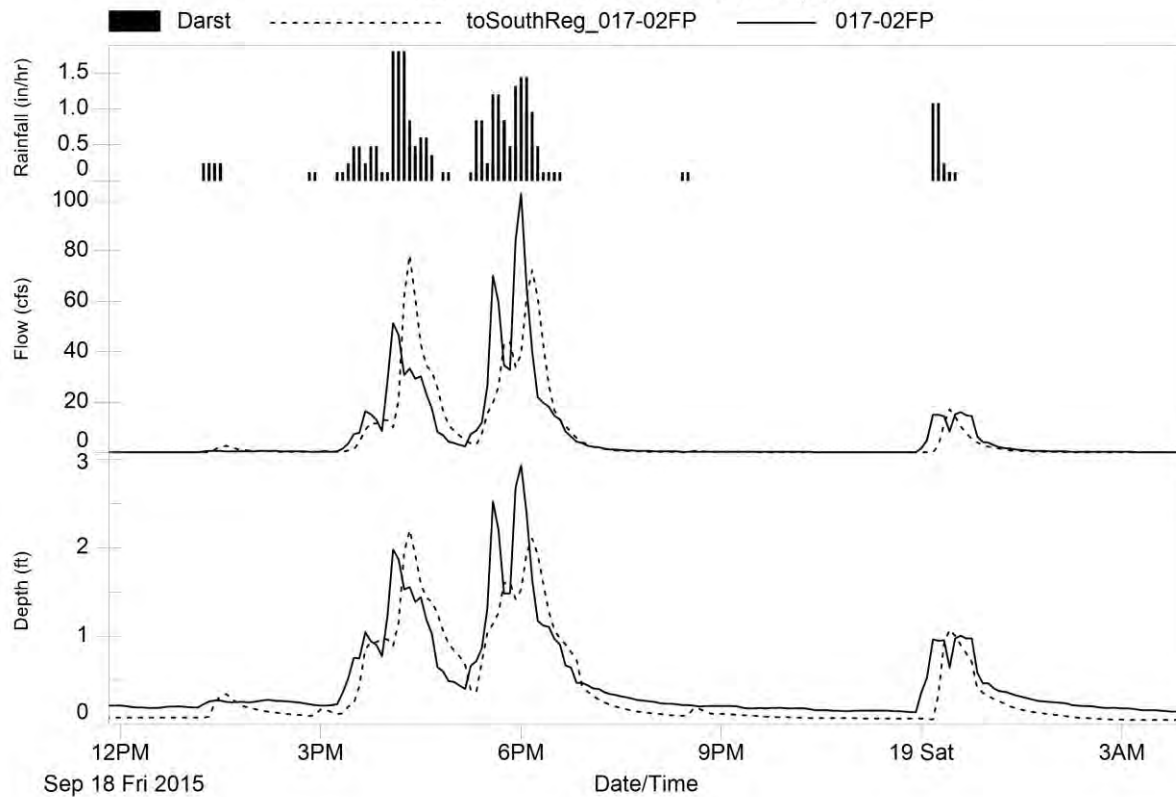
Duration: 4 h, Total Rainfall: 0.81 (in)



South 017-02FP – Calibration Events

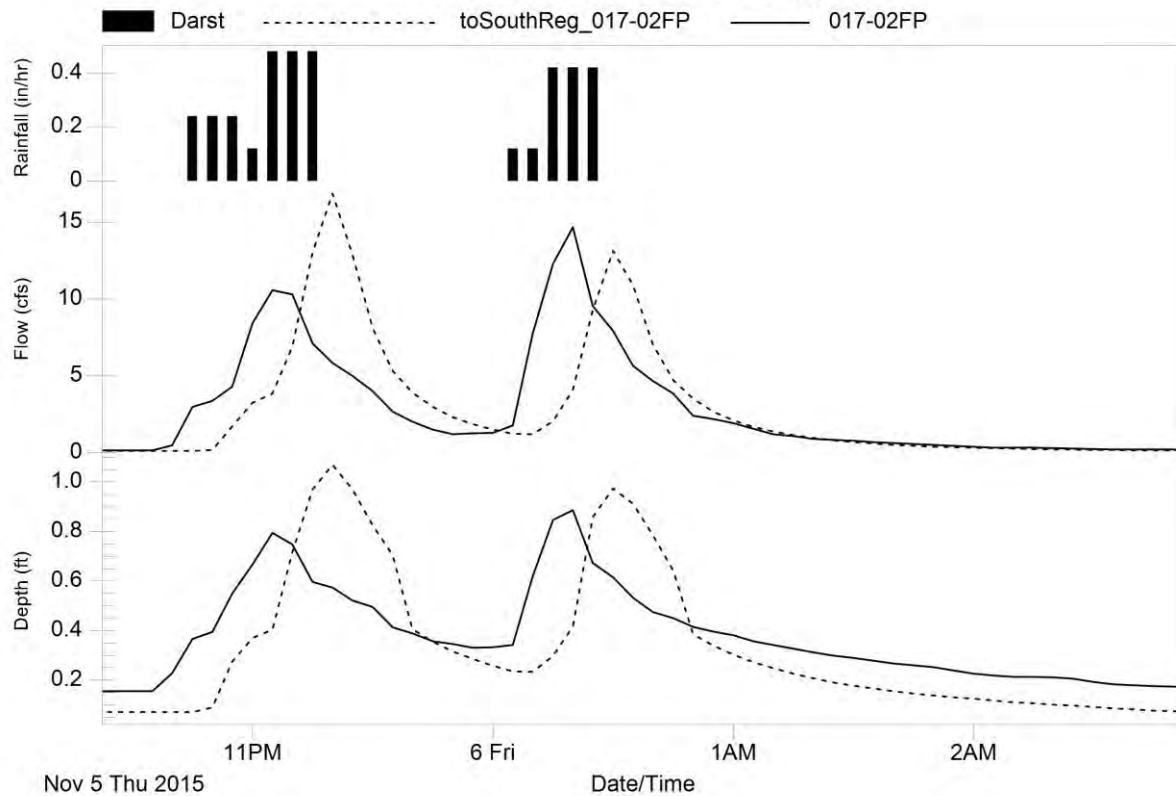
Event of September 18, 2015

Duration: 13.42 h, Total Rainfall: 1.62 (in)



Event of November 5, 2015

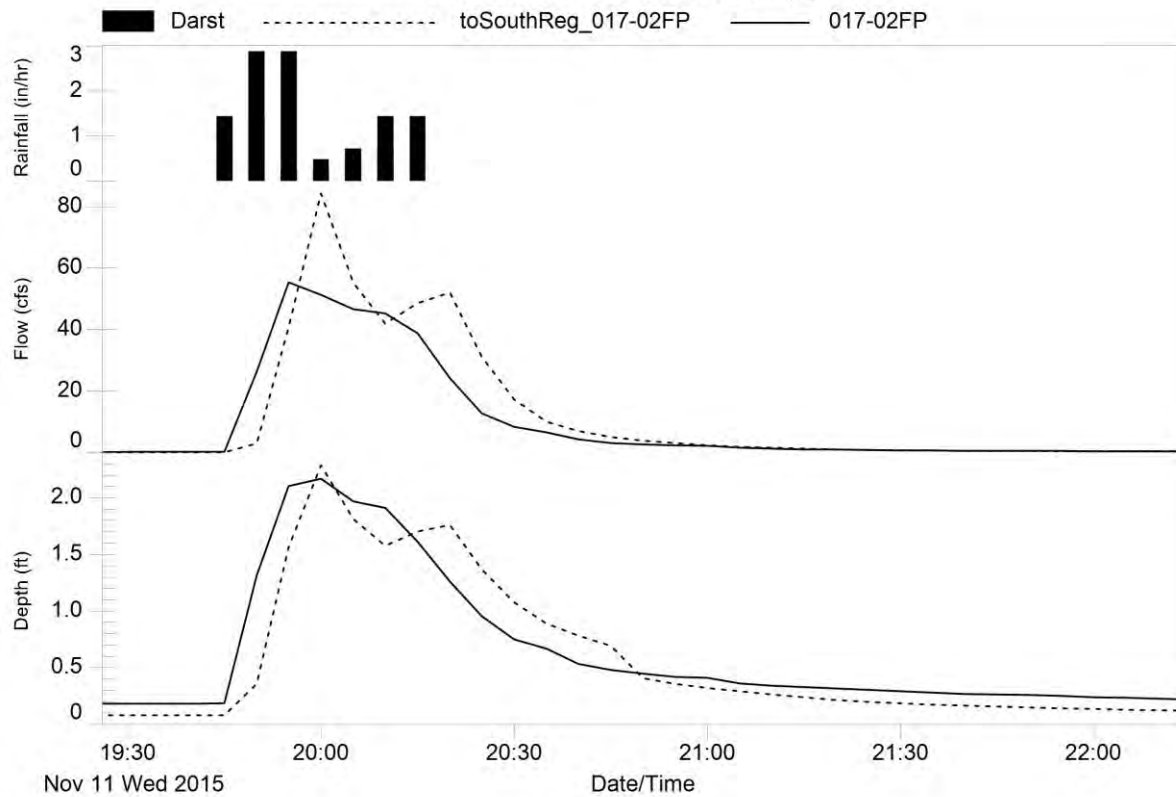
Duration: 3.75 h, Total Rainfall: 0.23 (in)



South 017-02FP – Calibration Events

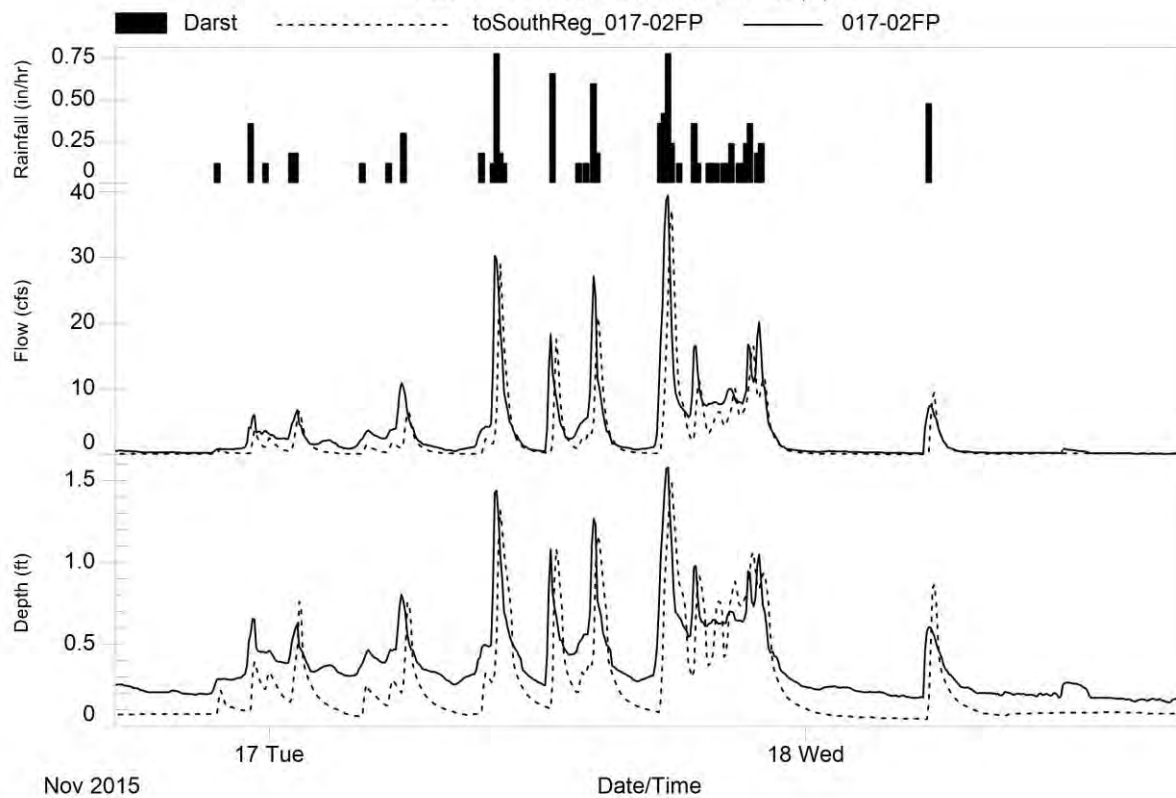
Event of November 11, 2015

Duration: 2.33 h, Total Rainfall: 0.6 (in)



Event of November 16, 2015

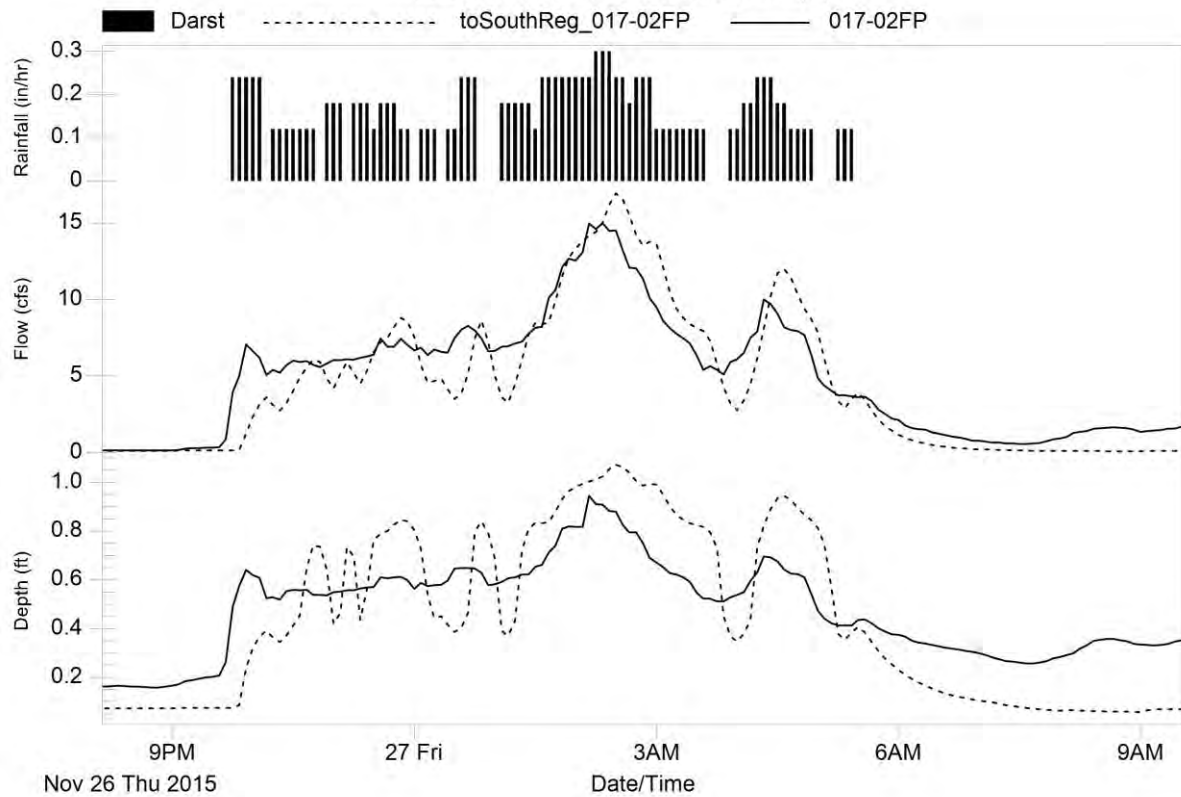
Duration: 39.83 h, Total Rainfall: 1.59 (in)



South 017-02FP – Calibration Events

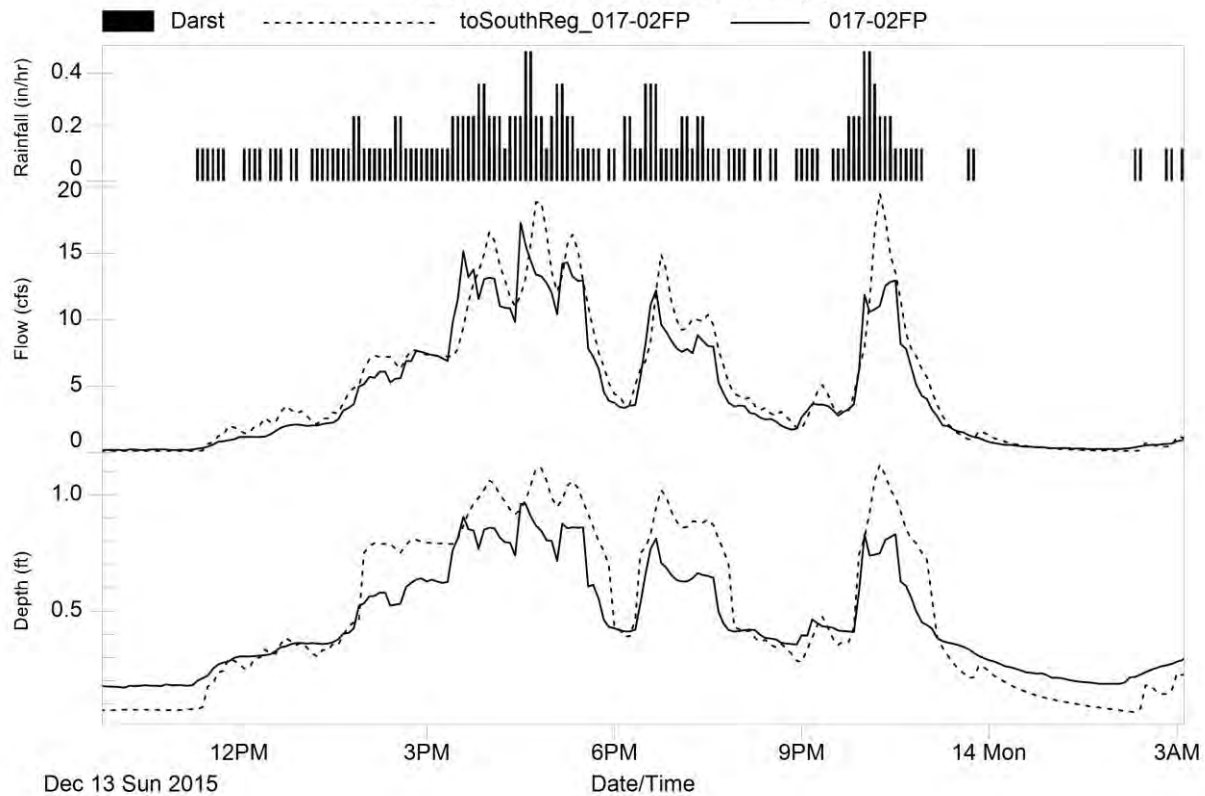
Event of November 26, 2015

Duration: 11.17 h, Total Rainfall: 1.01 (in)



Event of December 13, 2015

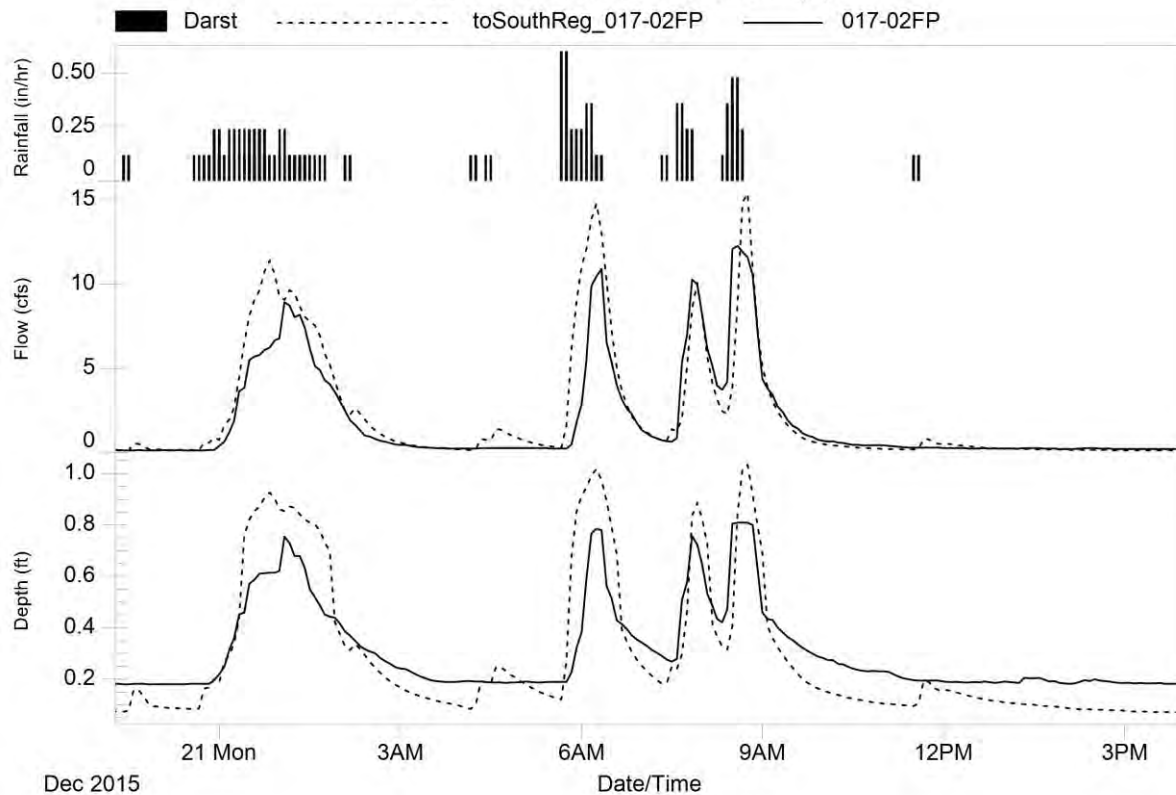
Duration: 14.42 h, Total Rainfall: 1.39 (in)



South 017-02FP – Calibration Events

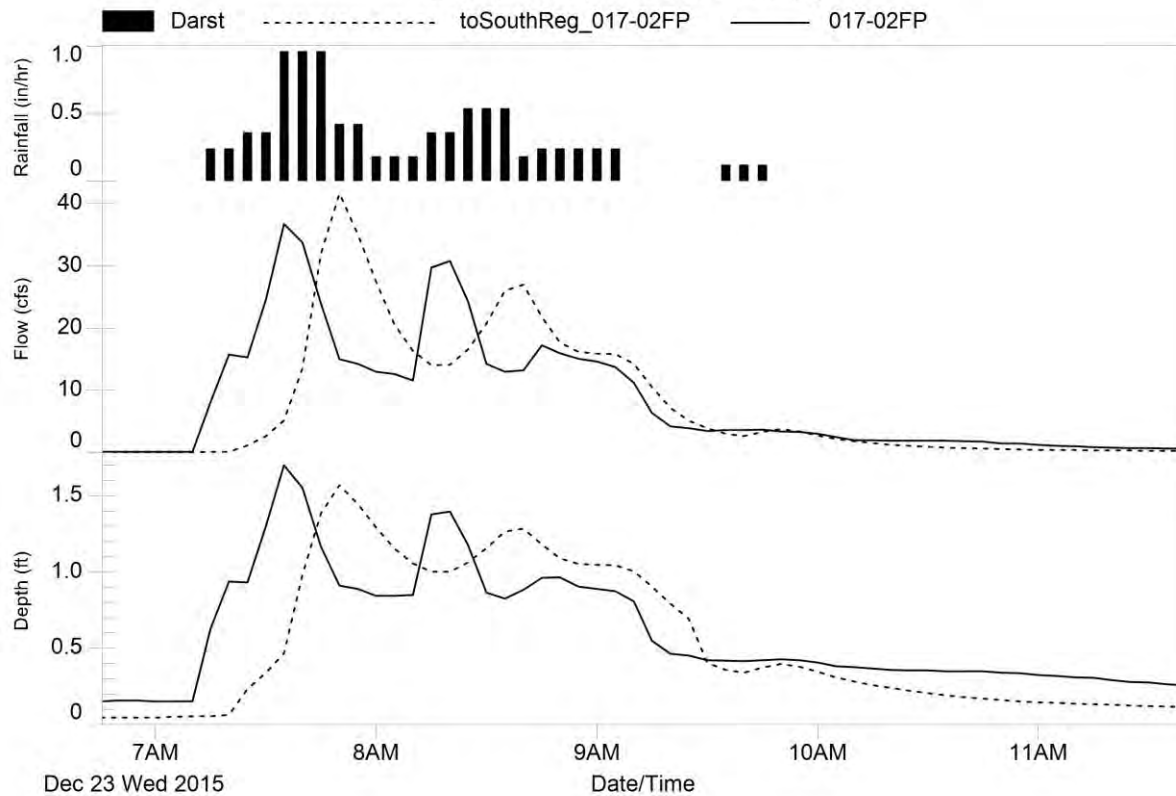
Event of December 20, 2015

Duration: 14.75 h, Total Rainfall: 0.68 (in)



Event of December 23, 2015

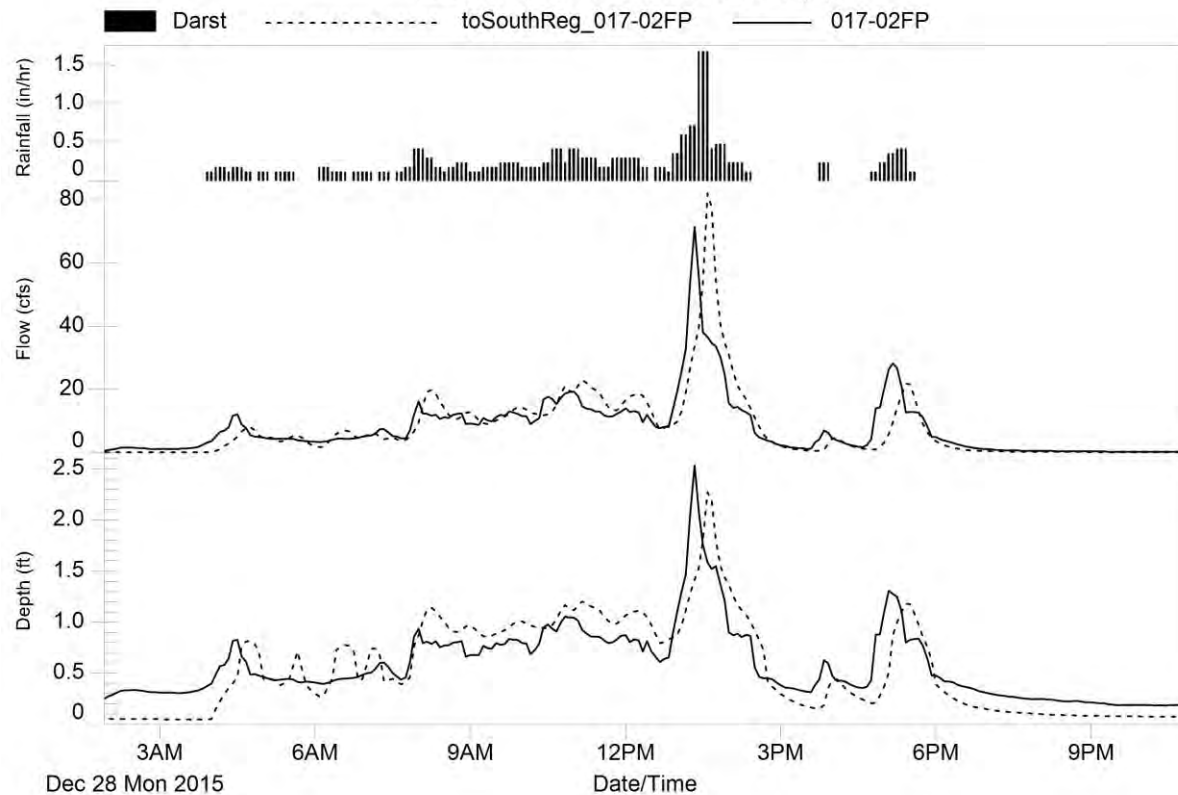
Duration: 4.08 h, Total Rainfall: 0.67 (in)



South 017-02FP – Calibration Events

Event of December 28, 2015

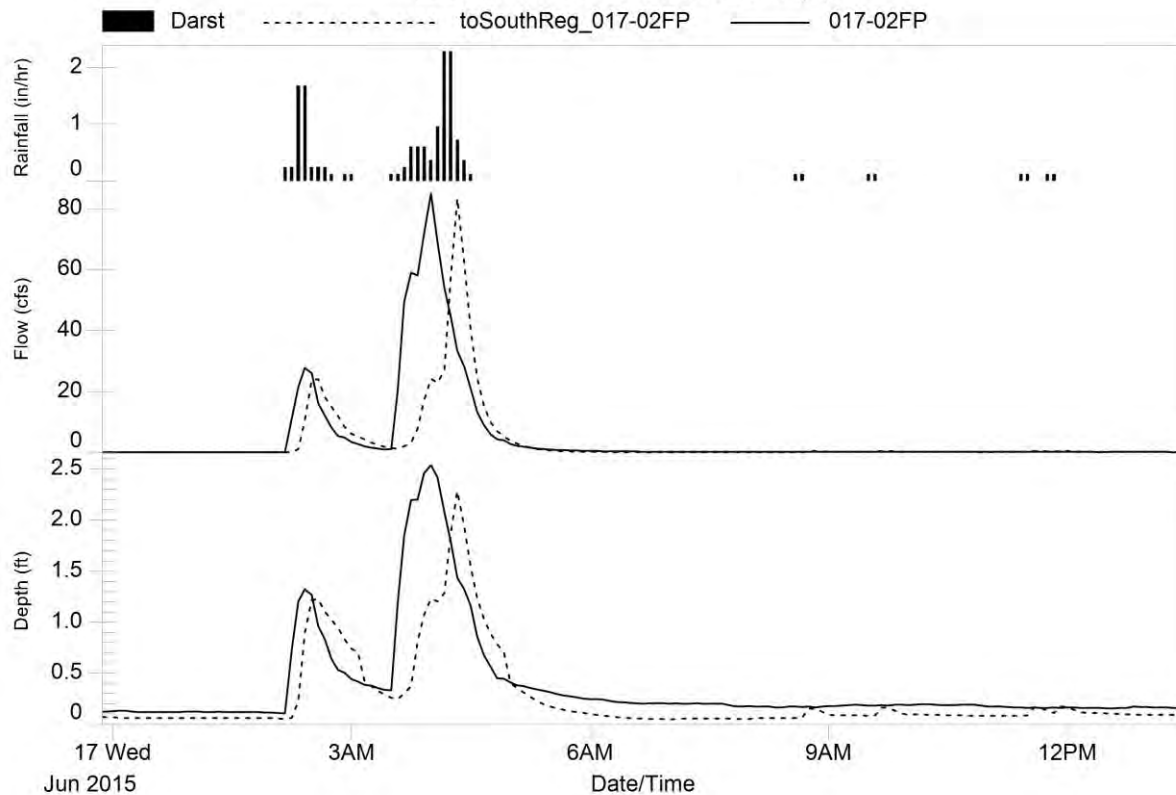
Duration: 17.42 h, Total Rainfall: 2.54 (in)



South 017-02FP – Verification Events

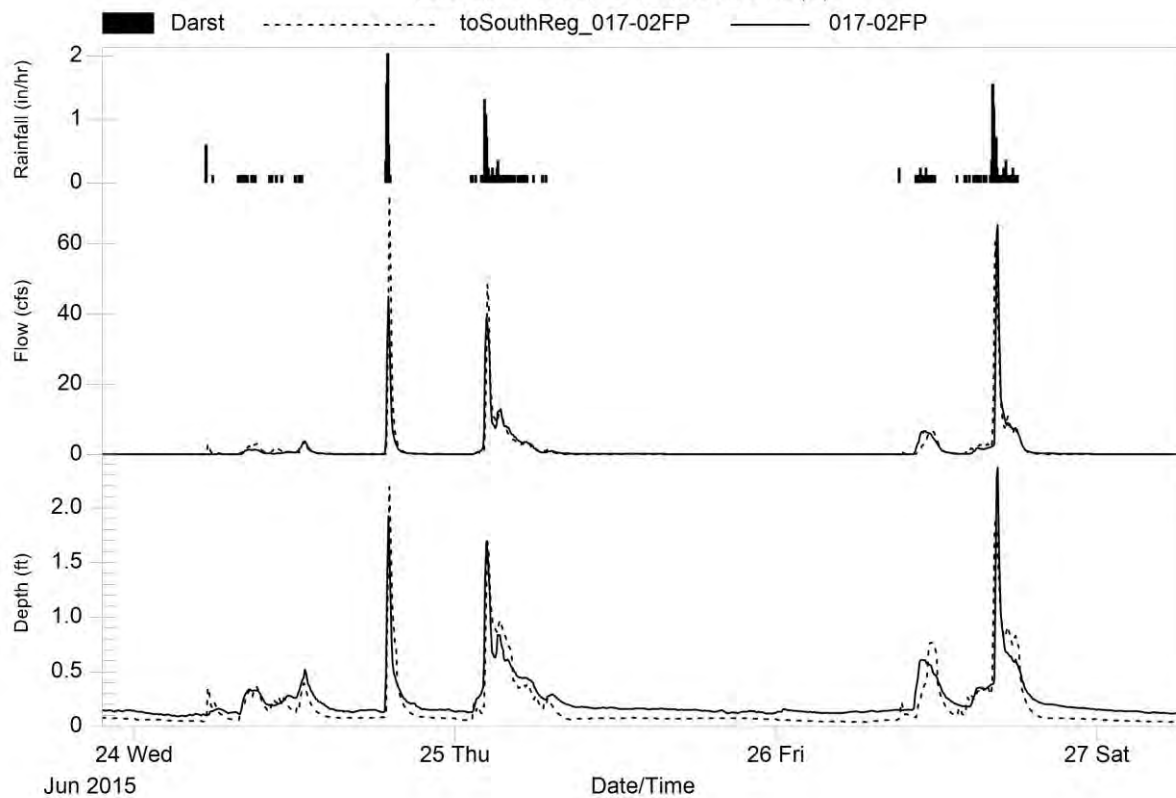
Event of June 17, 2015

Duration: 11.33 h, Total Rainfall: 0.84 (in)



Event of June 24, 2015

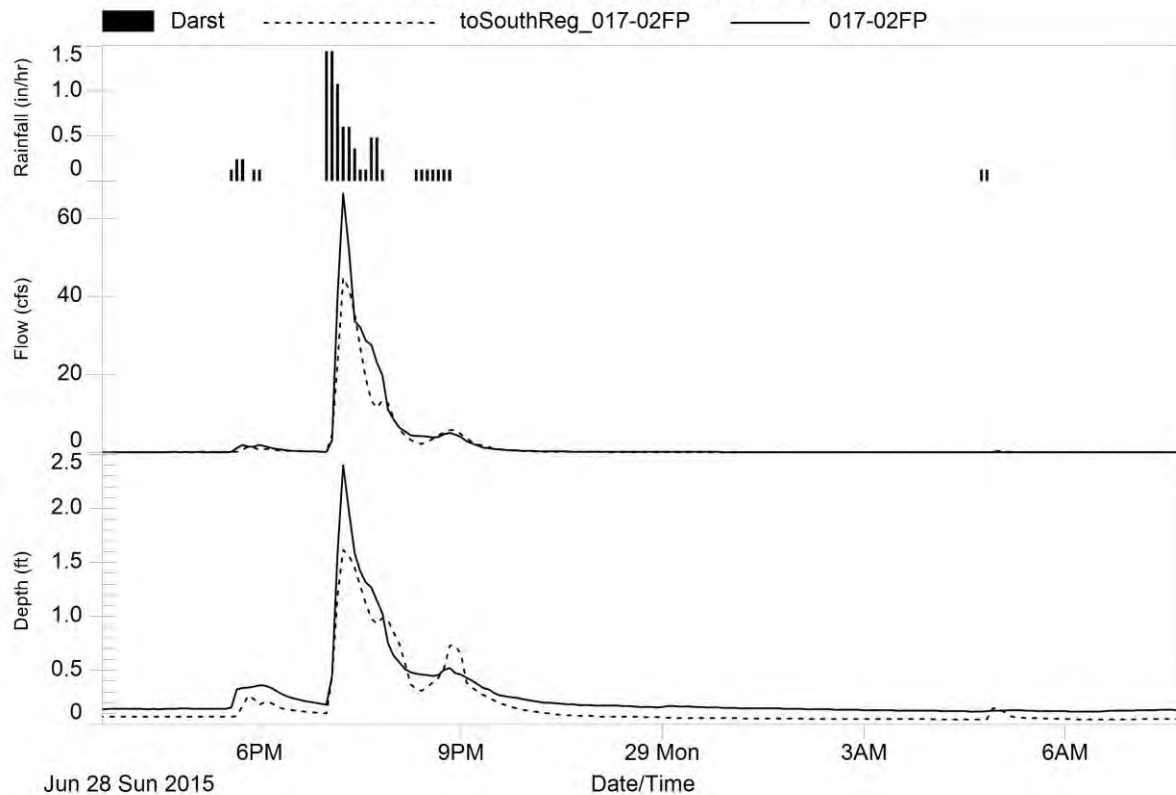
Duration: 67.42 h, Total Rainfall: 2.15 (in)



South 017-02FP – Verification Events

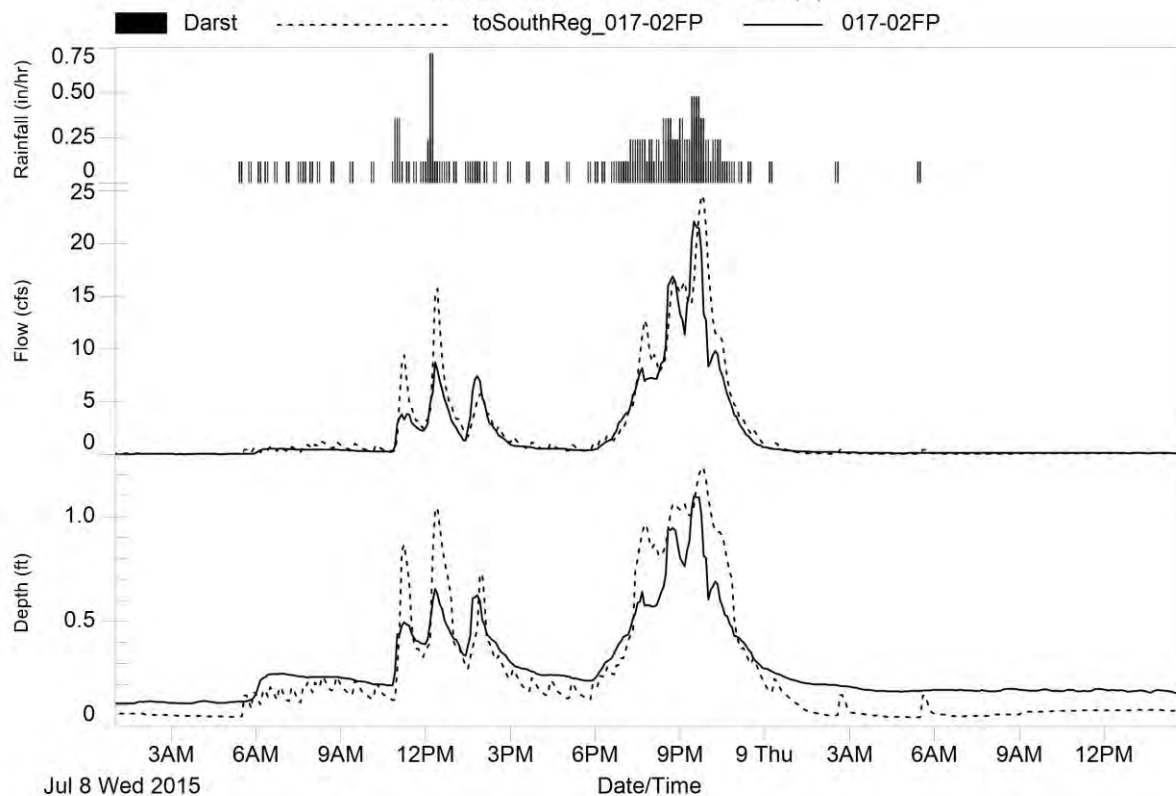
Event of June 28, 2015

Duration: 13.42 h, Total Rainfall: 0.52 (in)



Event of July 8, 2015

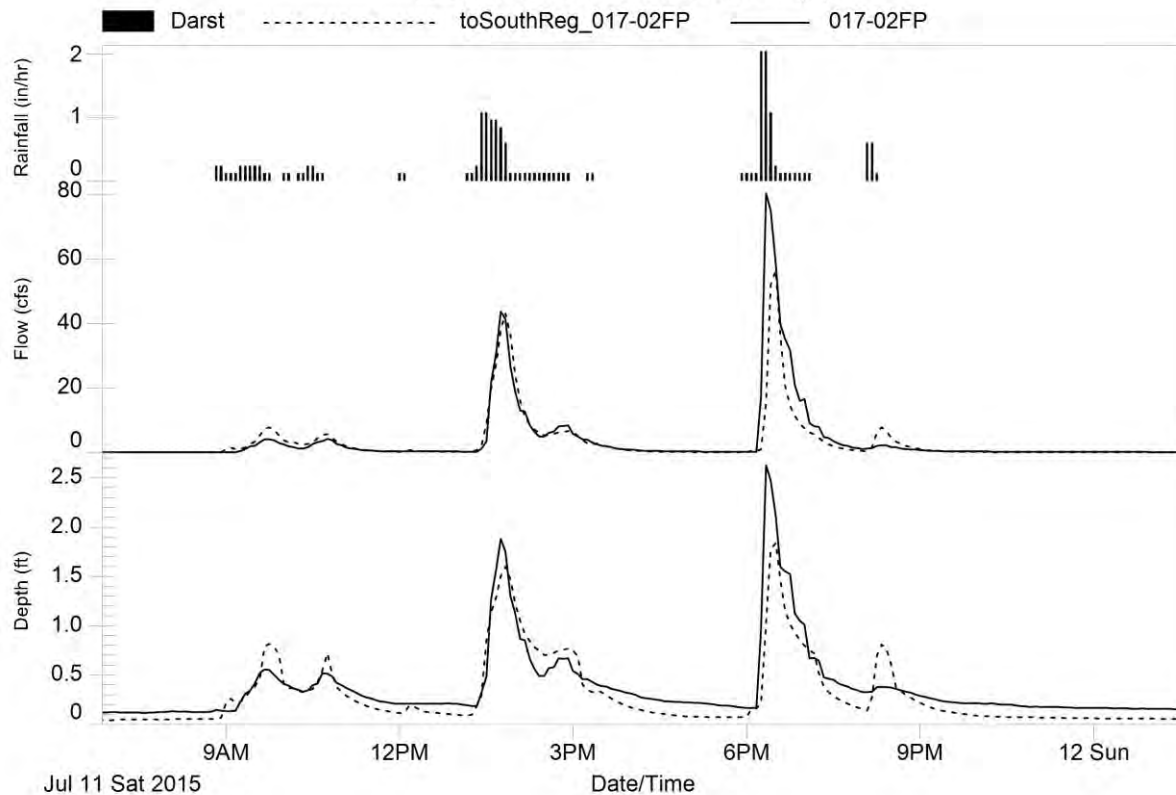
Duration: 31.5 h, Total Rainfall: 1.39 (in)



South 017-02FP – Verification Events

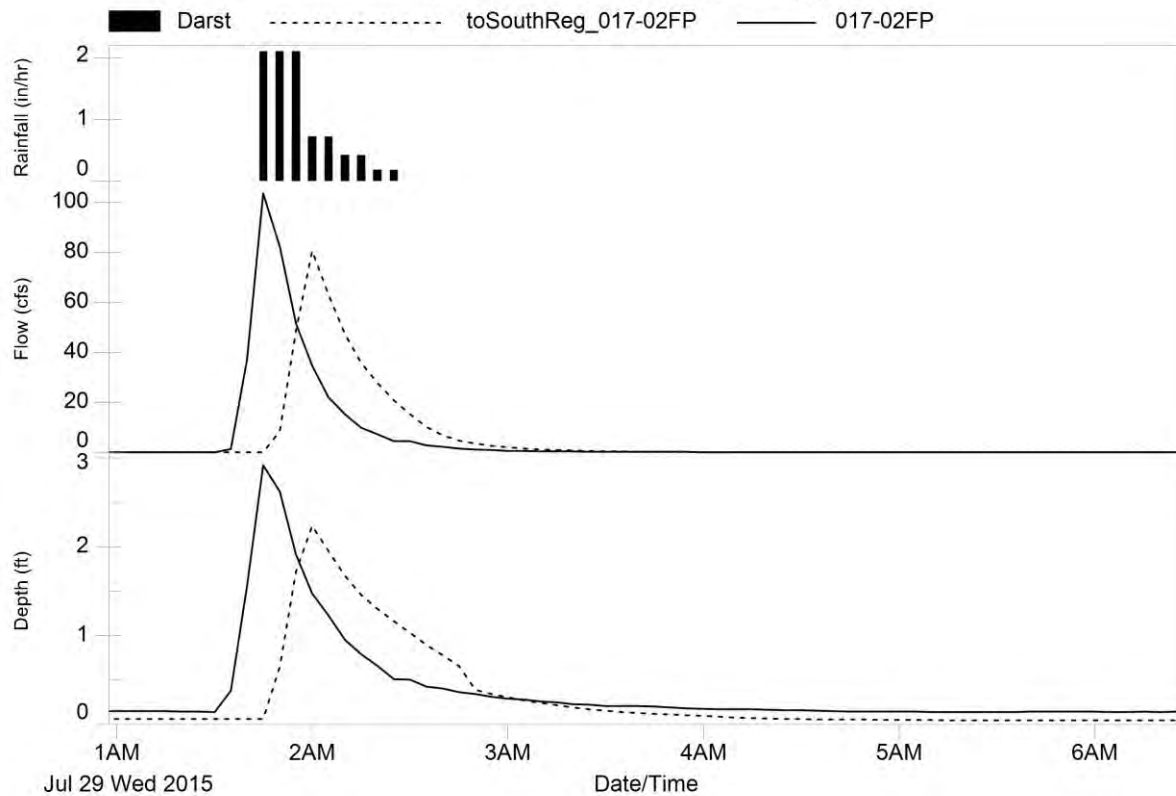
Event of July 11, 2015

Duration: 15.58 h, Total Rainfall: 1.07 (in)



Event of July 29, 2015

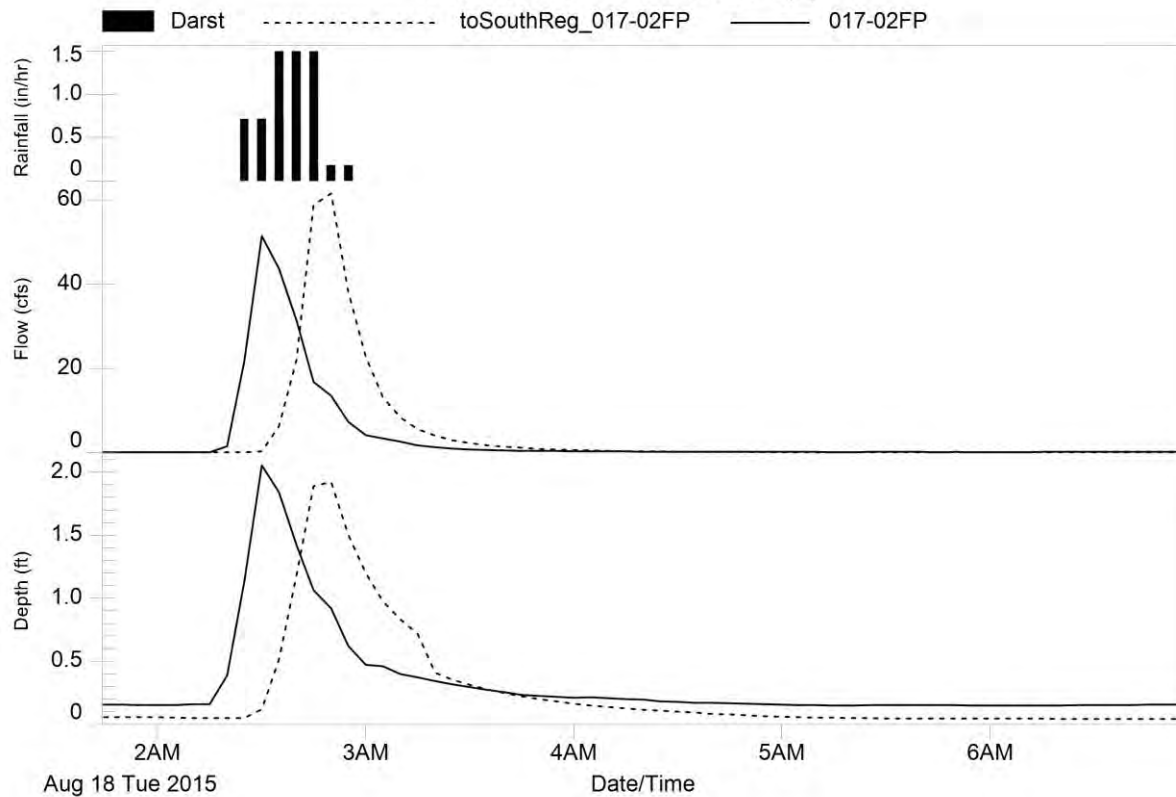
Duration: 4.58 h, Total Rainfall: 0.57 (in)



South 017-02FP – Verification Events

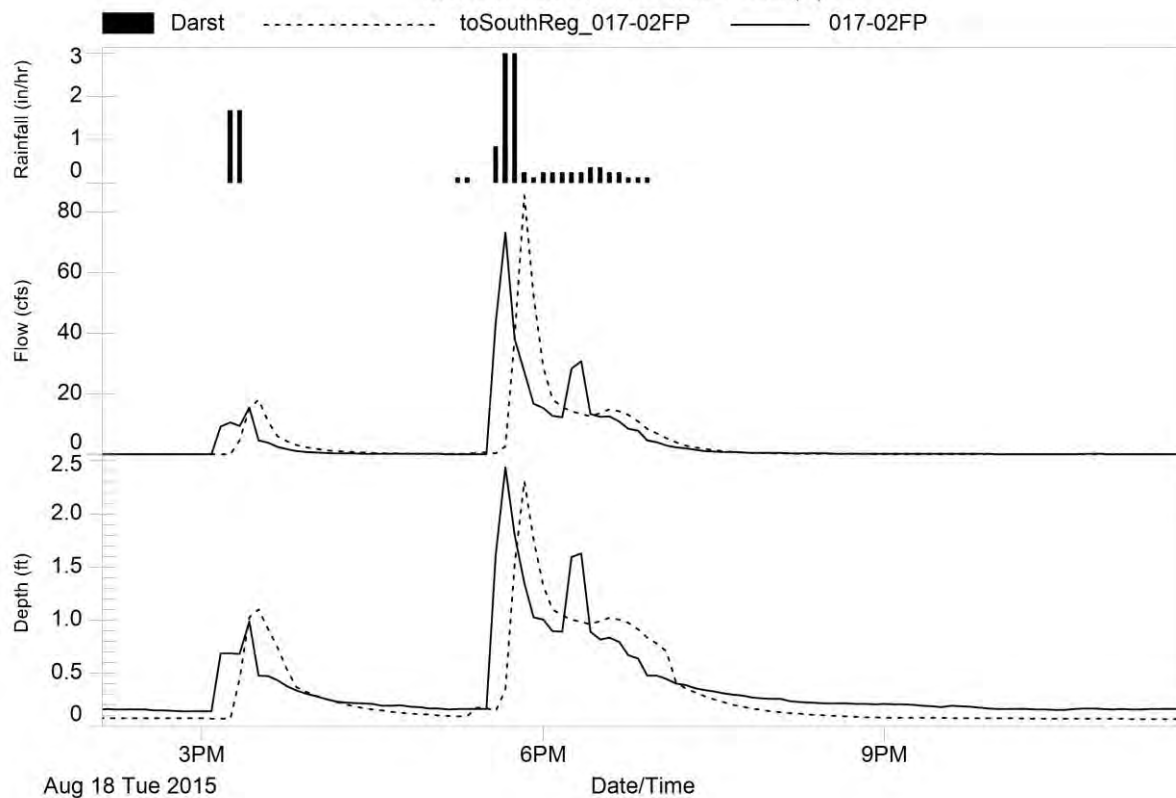
Event of August 18, 2015

Duration: 4.33 h, Total Rainfall: 0.4 (in)



Event of August 18, 2015

Duration: 7.92 h, Total Rainfall: 0.66 (in)



017-01LE - South Outfall Pipe



Date	Duration (h)	Maximum Depth (ft)		Minimum Depth (ft)		Average Depth (ft)		Maximum Depth (ft)	Minimum Depth (ft)	Average Depth (ft)	Rainfall Variability						
		metered	modeled	metered	modeled	metered	modeled	Surcharged: -0.33 ft to +1.67 ft Non-Surcharged: -0.33 ft to +0.33 ft	Surcharged: -0.33 ft to +1.67 ft Non-Surcharged: -0.33 ft to +0.33 ft	Surcharged: -0.33 ft to +1.67 ft Non-Surcharged: -0.33 ft to +0.33 ft							
CALIBRATION EVENTS - DEPTH																	
9/8/2015 10:50:00	3.08	2.208	1.610	0.000	0.000	0.434	0.374	-0.598	0.000	-0.060	variable						
9/18/2015 15:10:0	10.33	2.817	2.074	0.000	0.000	0.323	0.282	-0.743	0.000	-0.042	possibly uniform						
11/5/2015 22:45:0	3.75	0.400	0.571	0.000	0.000	0.105	0.077	0.171	0.000	-0.027	possibly uniform						
11/11/2015 19:40:	2.00	1.892	1.466	0.000	0.000	0.520	0.397	-0.426	0.000	-0.124	variable						
11/16/2015 22:35:	37.17	1.300	1.189	0.000	0.000	0.086	0.095	-0.111	0.000	0.009	variable						
11/26/2015 21:20:	9.42	0.567	0.597	-0.008	0.000	0.130	0.210	0.030	0.008	0.080	possibly uniform						
12/13/2015 13:15:	11.08	0.625	0.663	0.000	0.000	0.132	0.196	0.038	0.000	0.064	variable						
12/21/2015 0:20:0	16.17	0.475	0.472	0.000	0.000	0.047	0.043	-0.003	0.000	-0.004	variable						
12/23/2015 6:55:0	6.58	0.608	1.132	0.000	0.000	0.070	0.203	0.524	0.000	0.133	variable						
12/28/2015 3:30:0	19.67	2.075	1.703	-0.008	0.000	0.154	0.251	-0.372	0.008	0.097	variable						
VERIFICATION EVENTS - DEPTH																	
6/17/2015 1:10:00	5.67	2.592	1.872	0.033	0.000	0.428	0.318	-0.720	-0.033	-0.111	variable						
6/24/2015 17:15:0	53.08	2.450	1.632	1.042	0.833	1.349	0.933				variable						
6/28/2015 18:30:0	3.75	2.625	1.662	1.300	0.888	1.568	0.956				variable						
7/8/2015 11:15:00	13.83	0.617	0.804	0.000	0.000	0.144	0.117	0.187	0.000	-0.027	variable						
7/11/2015 12:50:0	7.08	2.542	1.810	0.000	0.000	0.278	0.253	-0.732	0.000	-0.025	variable						
7/16/2015 20:55:0	2.33	3.667	2.996	0.050	0.237	0.690	0.661	-0.671	0.187	-0.028	possibly uniform						
7/29/2015 1:30:00	1.00	3.025	2.071	0.000	0.000	0.953	0.808	-0.954	0.000	-0.145	possibly uniform						
8/18/2015 2:15:00	1.00	1.800	1.400	0.000	0.000	0.502	0.496	-0.400	0.000	-0.006	possibly uniform						
8/18/2015 15:00:0	4.67	1.842	1.725	0.042	0.000	0.266	0.247	-0.117	-0.042	-0.019	variable						
Notes: Meter data appears to be unusually high during 6/24 and 6/28. Values tabulated above but not included in averages. Considered to be the least reliable of the regulator meters and thus does not match as well as 017-03 and 017-04 Results from interceptor only model using flow meter data as influent flow to regulator.						WEIGHTED AVERAGES											
						Calibration - Relatively Uniform		N/A		N/A		N/A		relatively uniform			
						Calibration - Possibly Uniform		-0.531		0.008		-0.011		possibly uniform			
						Calibration - Variable		-0.294		0.008		-0.039		variable			
						Calibration Weighted - All Events		-0.363		0.008		-0.031		All Events			
						Verification - Relatively Uniform		N/A		N/A		N/A		relatively uniform			
						Verification - Possibly Uniform		-0.714		0.187		-0.075		possibly uniform			
						Verification - Variable		-0.302		-0.001		-0.016		variable			
						Verification Weighted - All Events		-0.468		0.003		-0.036		All Events			
						Weighted Average - All Events		-0.428		0.003		-0.035					
						NET AVERAGES											
						Calibration - Relatively Uniform		N/A		N/A		N/A		relatively uniform			
						Calibration - Possibly Uniform		-0.181		0.003		0.004		possibly uniform			
						Calibration - Variable		-0.136		0.001		0.017		variable			
						Calibration Net - All Events		-0.149		0.002		0.013		All Events			
						Verification - Relatively Uniform		N/A		N/A		N/A		relatively uniform			
						Verification - Possibly Uniform		-0.675		0.062		-0.060		possibly uniform			
						Verification - Variable		-0.346		-0.019		-0.045		variable			
Verification Net - All Events		-0.487		0.016		-0.052		All Events									
Net Average - All Events		-0.288		0.008		-0.014											

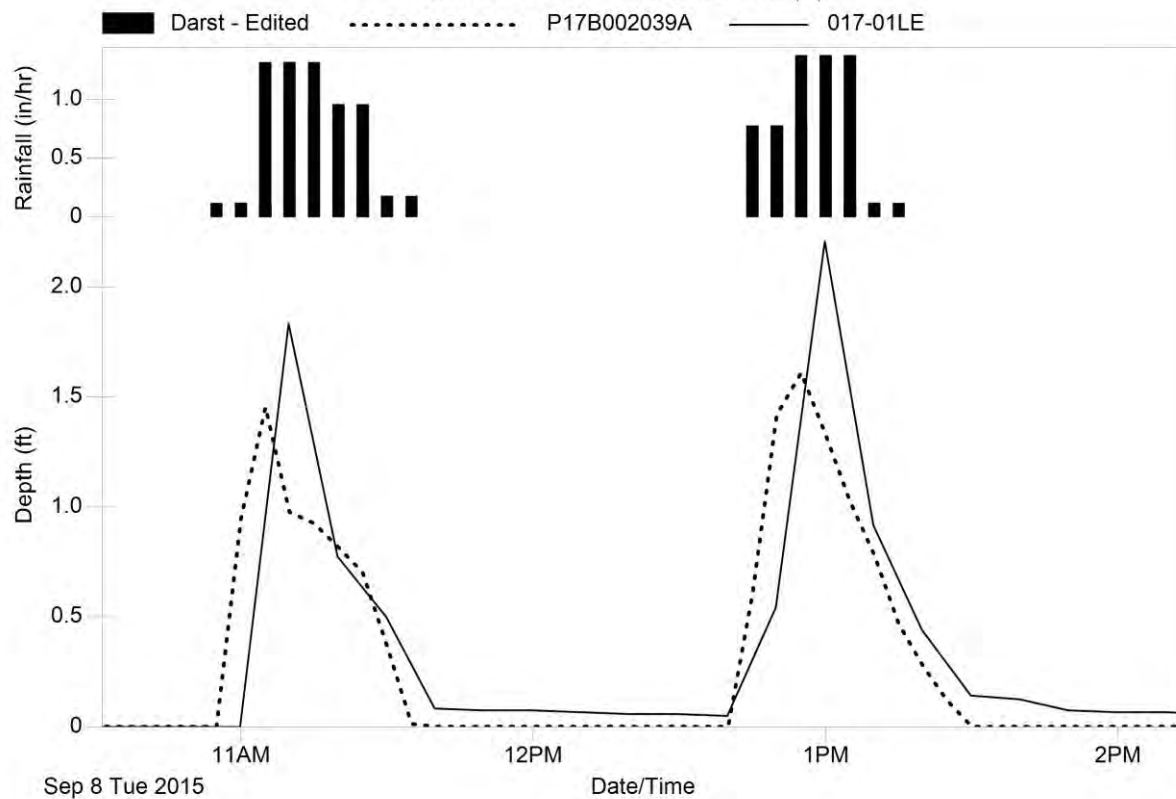
Notes:

Meter data appears to be unusually high during 6/24 and 6/28. Values tabulated above but not included in averages.
Considered to be the least reliable of the regulator meters and thus does not match as well as 017-03 and 017-04
Results from interceptor only model using flow meter data as influent flow to regulator.

South 017-01LE – Calibration Events

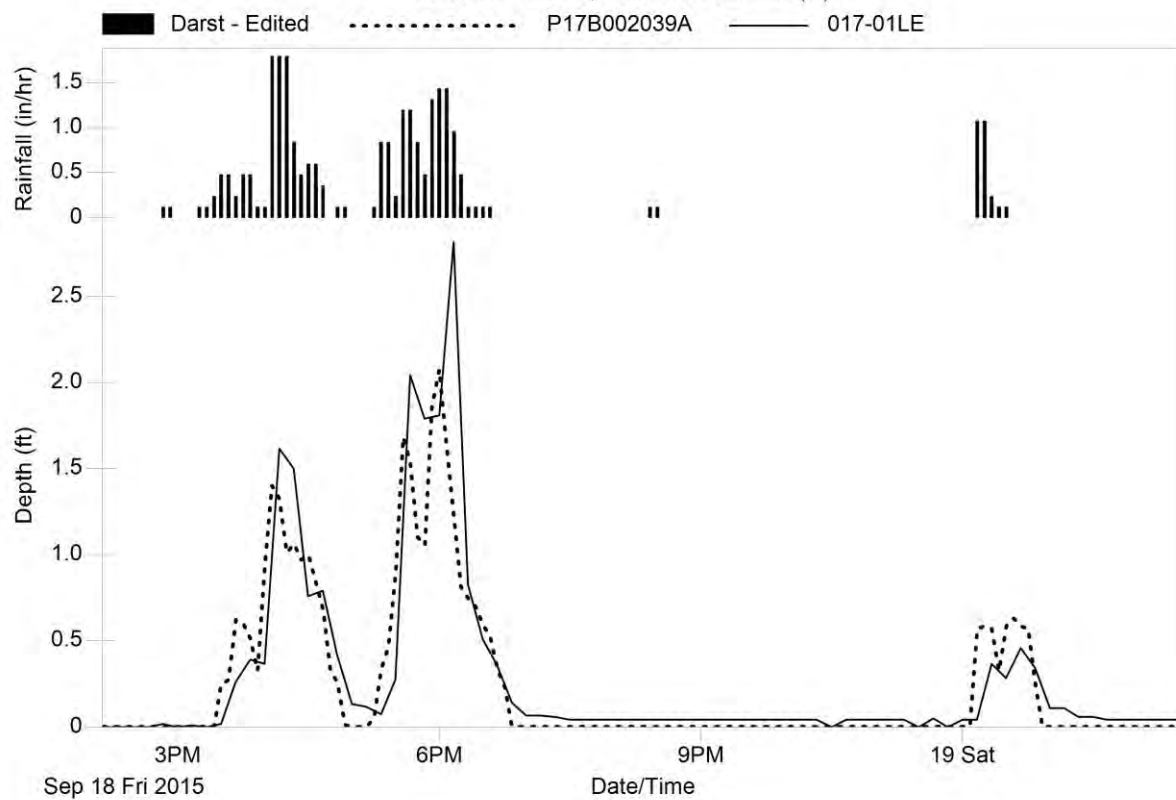
Event of September 8, 2015

Duration: 3.08 h, Total Rainfall: 0.81 (in)

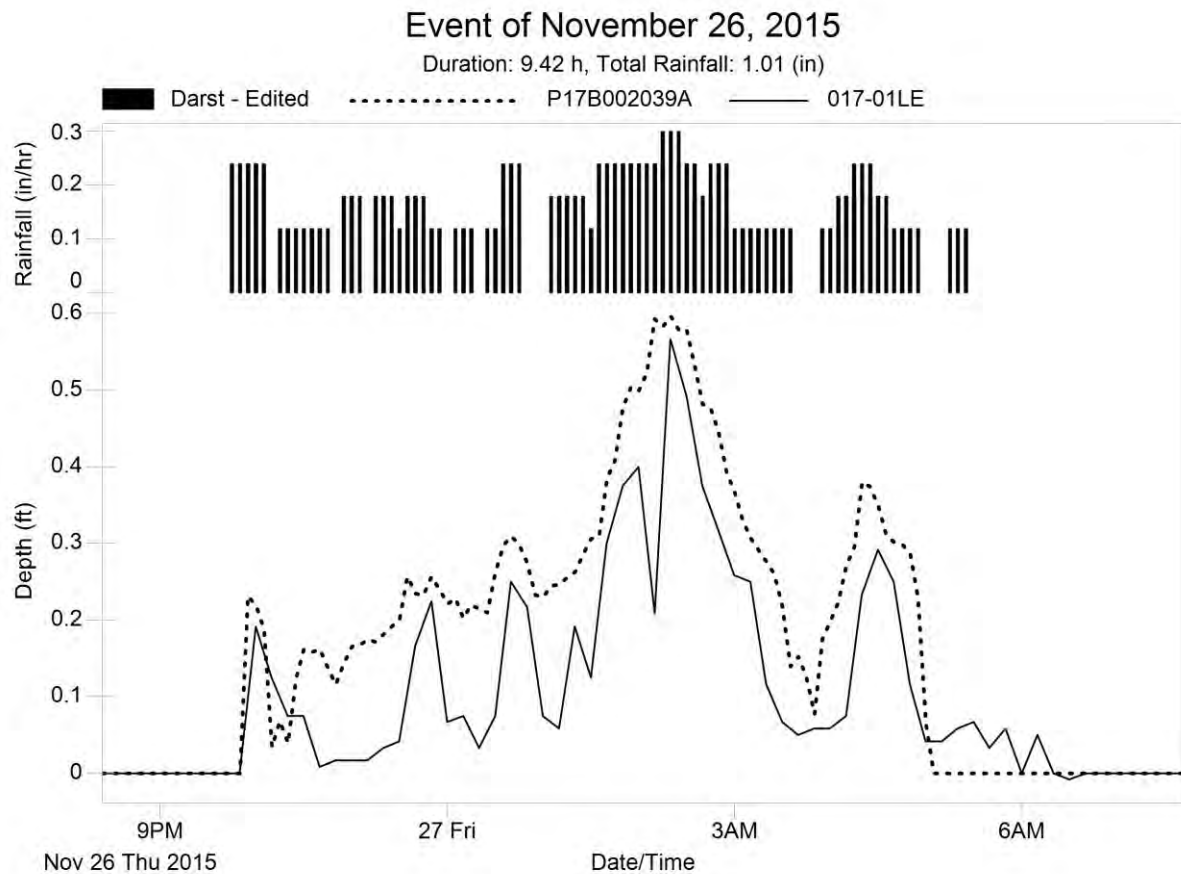
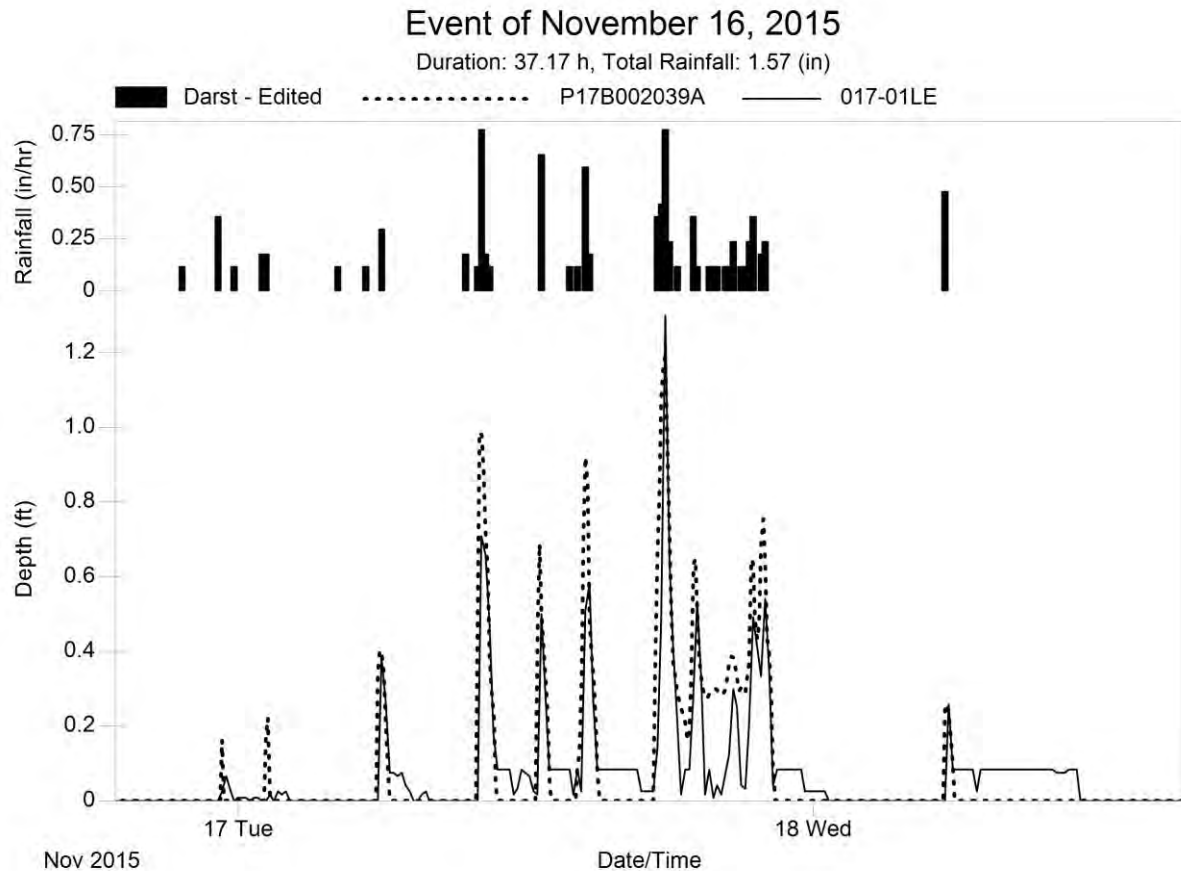


Event of September 18, 2015

Duration: 10.33 h, Total Rainfall: 1.55 (in)



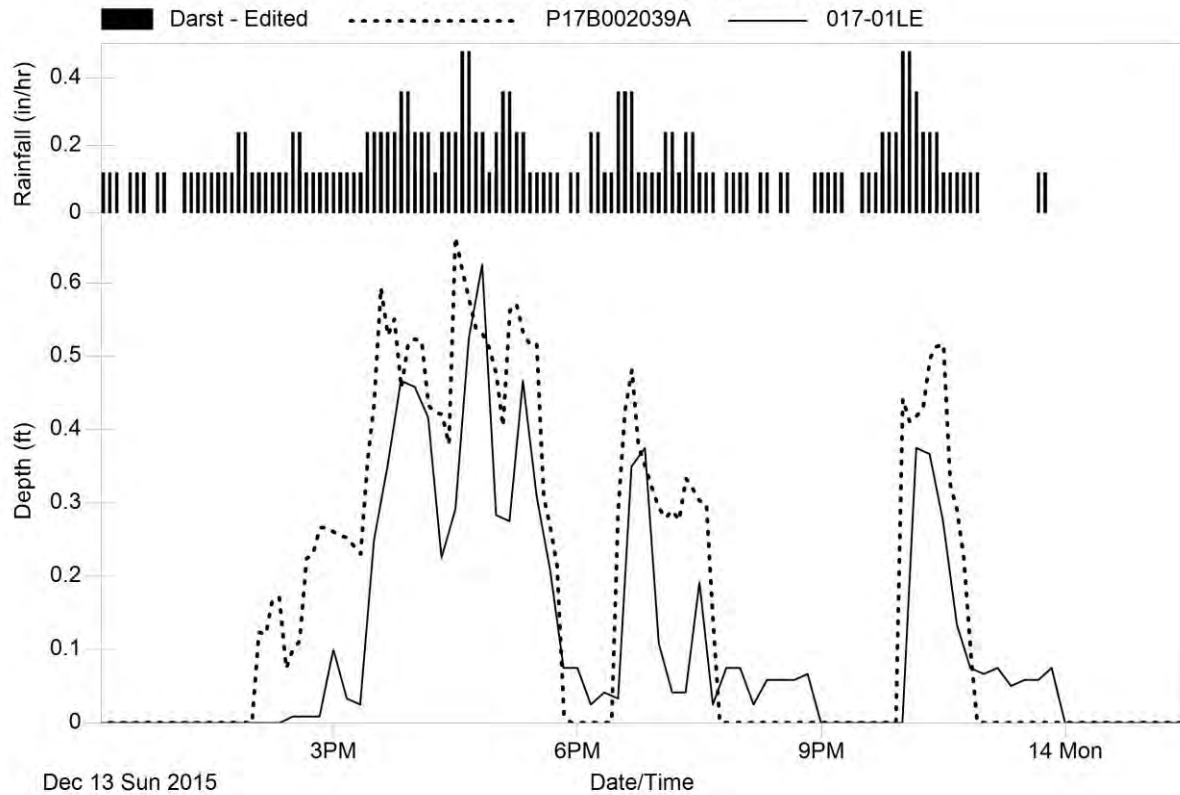
South 017-01LE – Verification Events



South 017-01LE – Verification Events

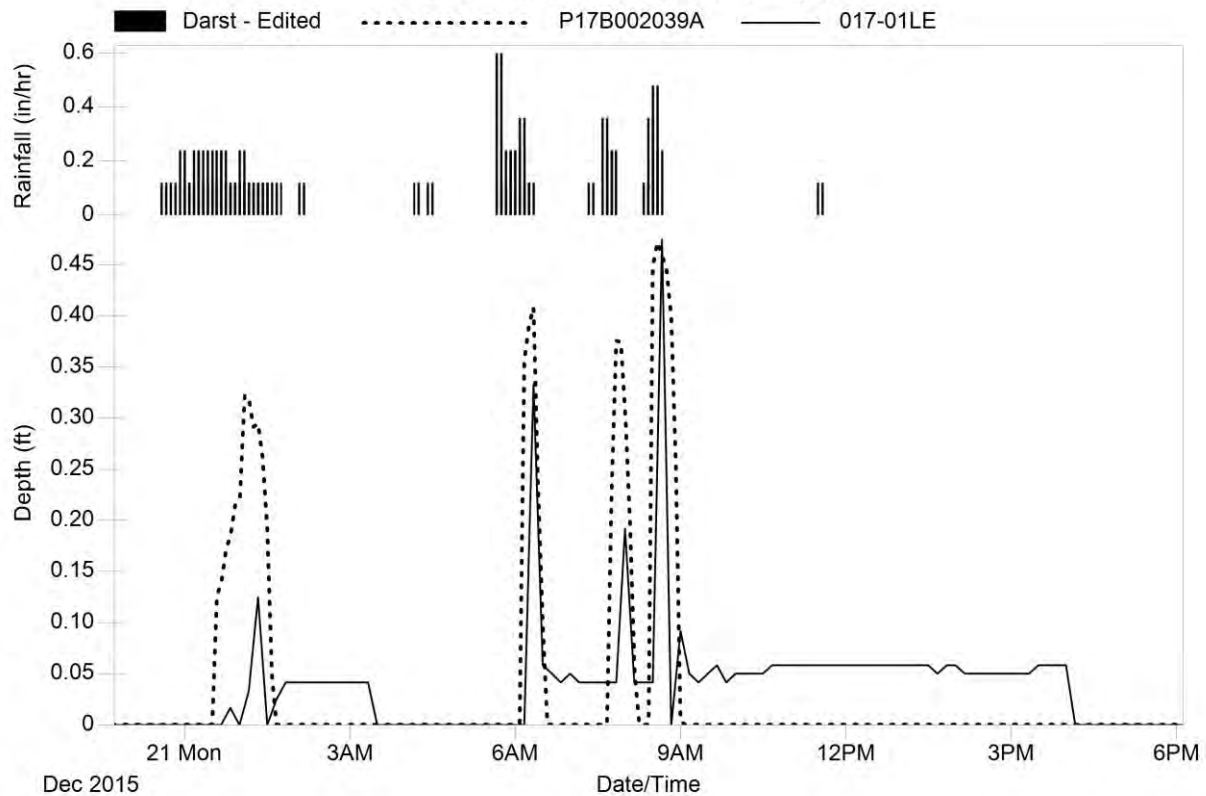
Event of December 13, 2015

Duration: 11.08 h, Total Rainfall: 1.3 (in)

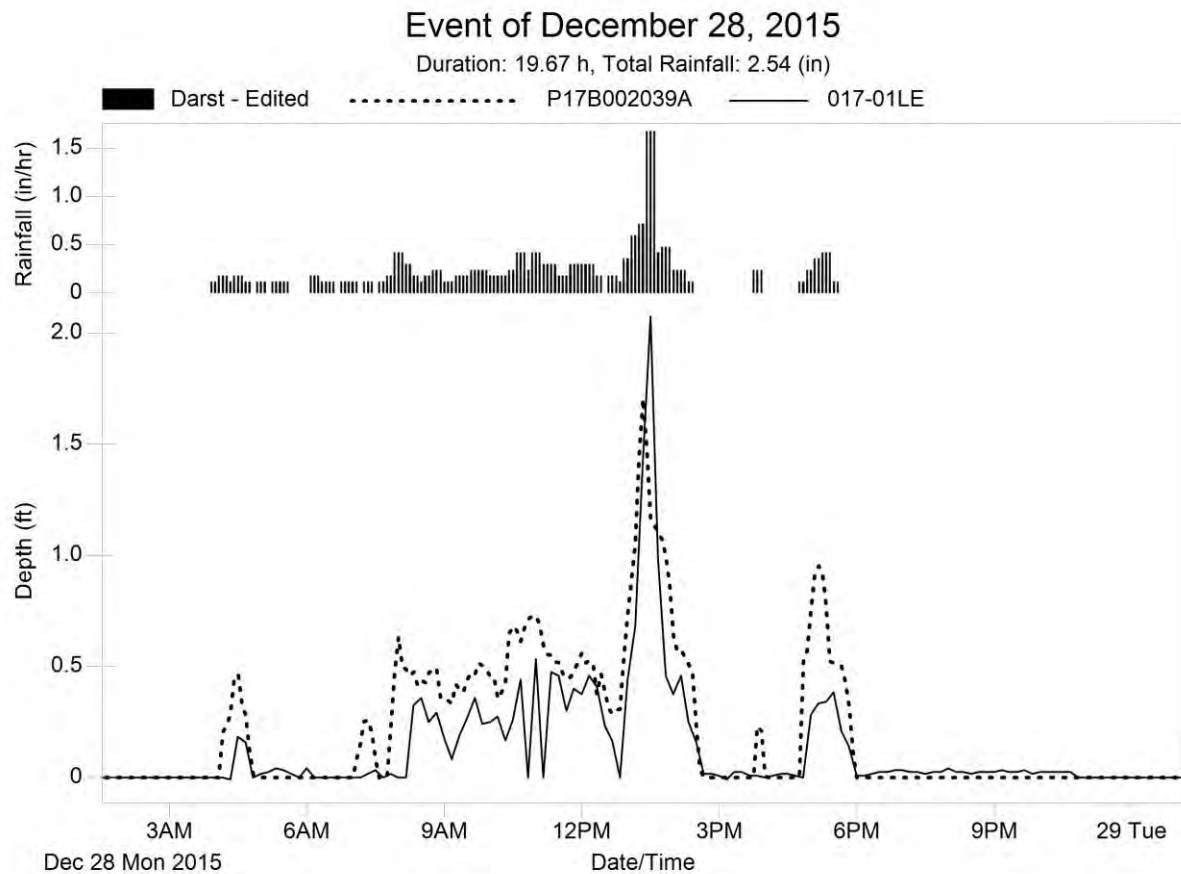
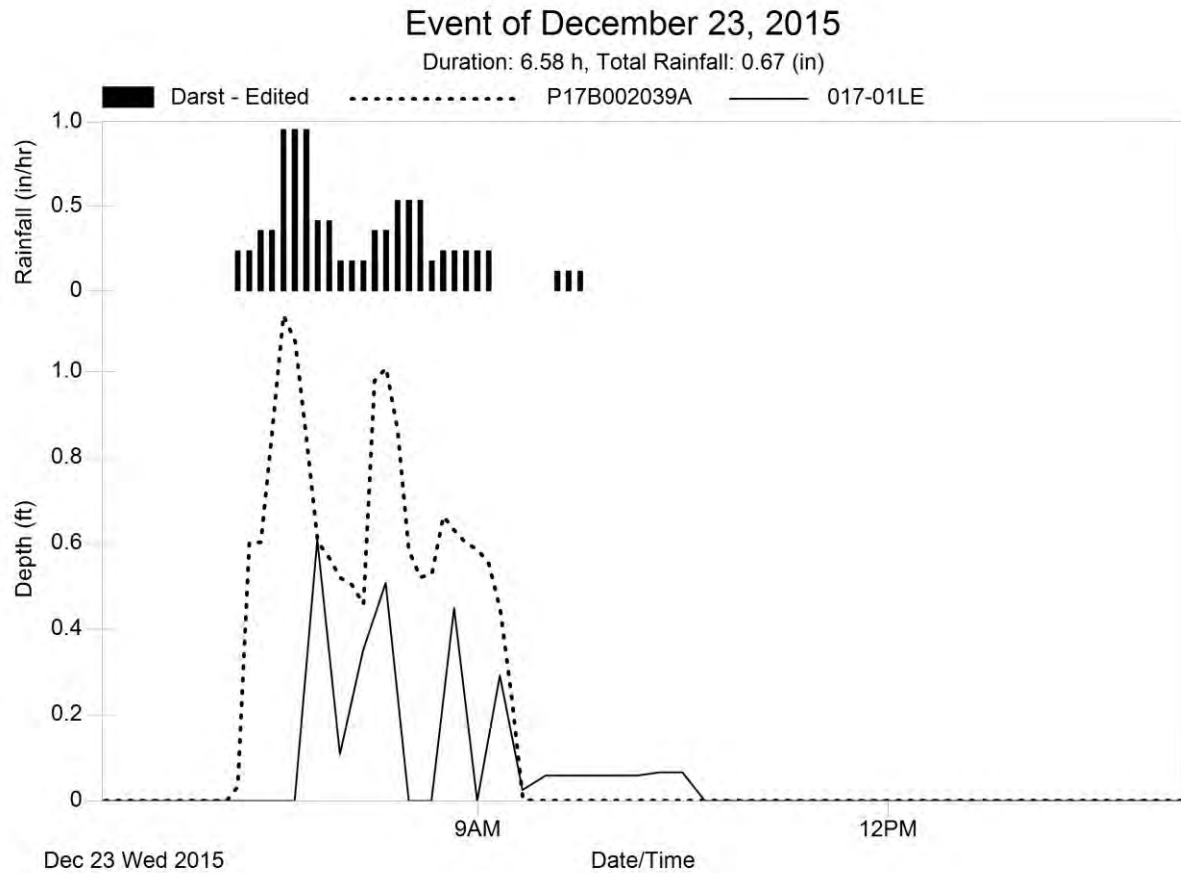


Event of December 21, 2015

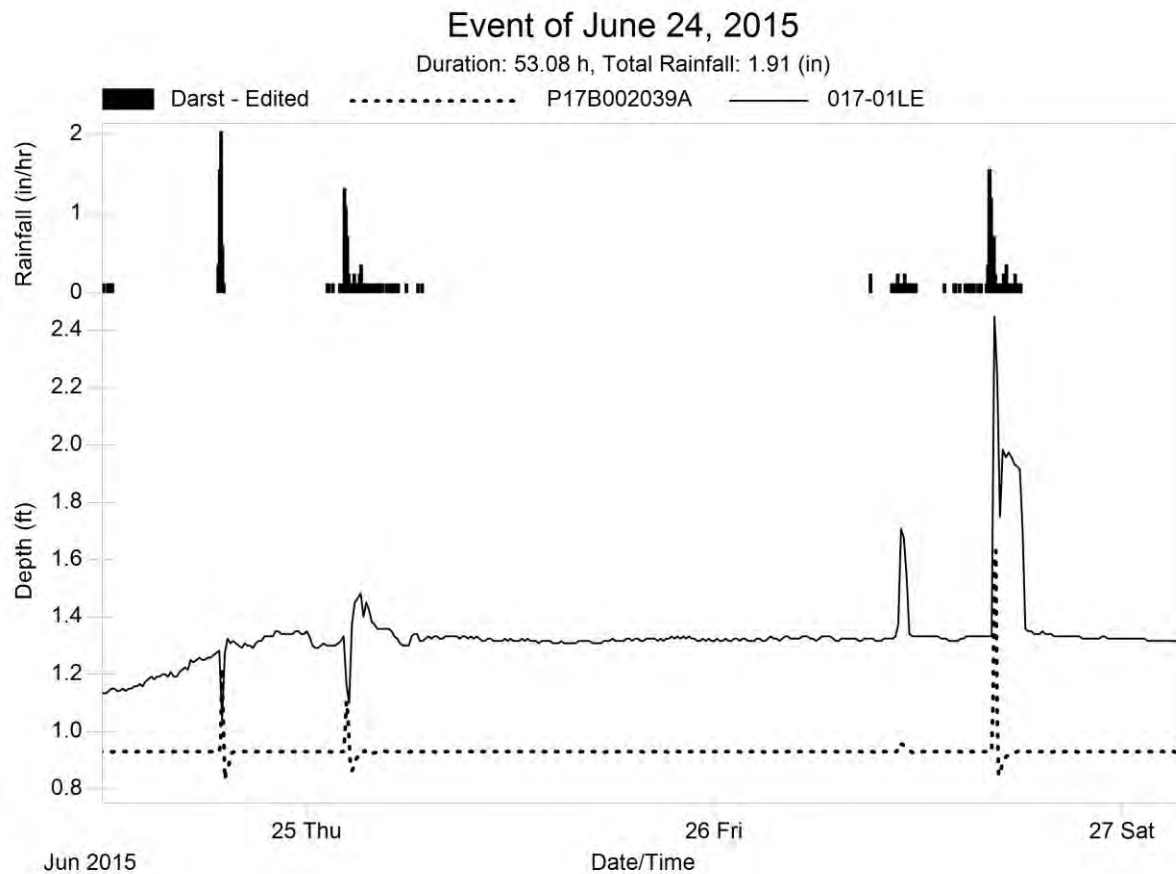
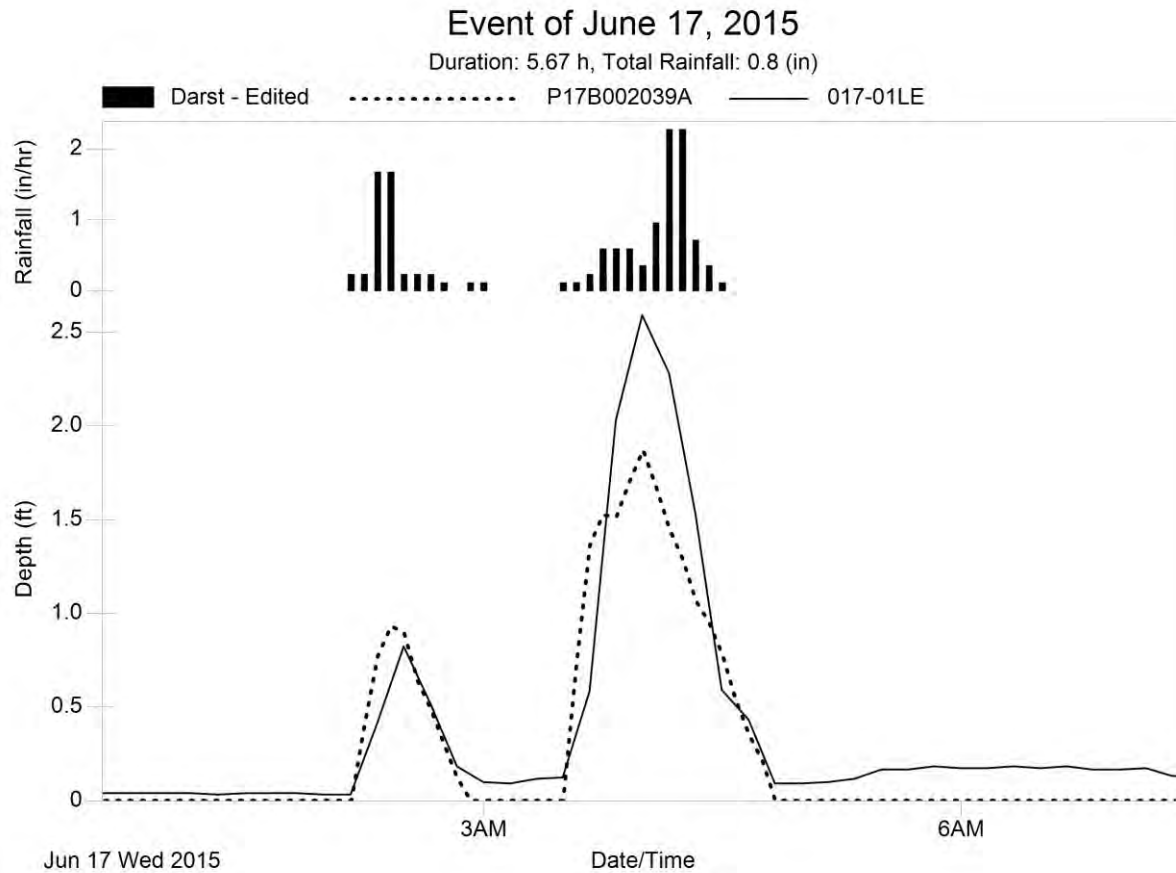
Duration: 16.17 h, Total Rainfall: 0.59 (in)



South 017-01LE – Verification Events



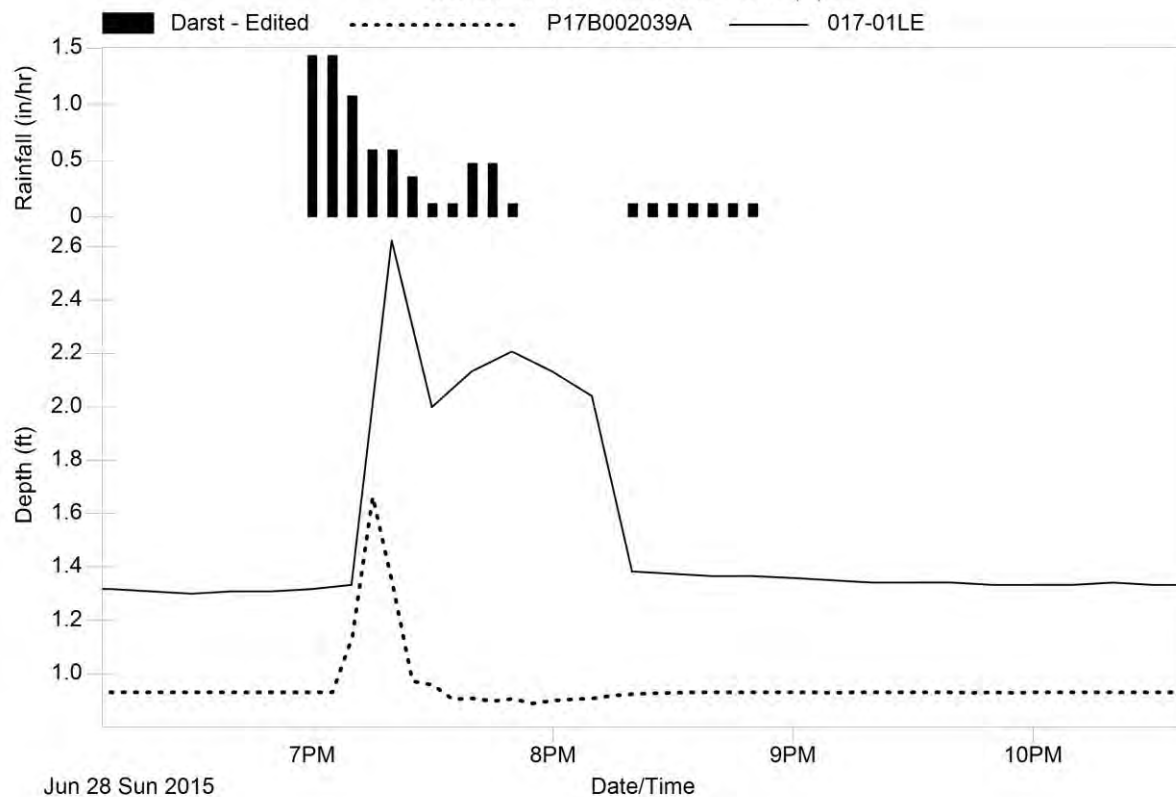
South 017-01LE – Verification Events



South 017-01LE – Verification Events

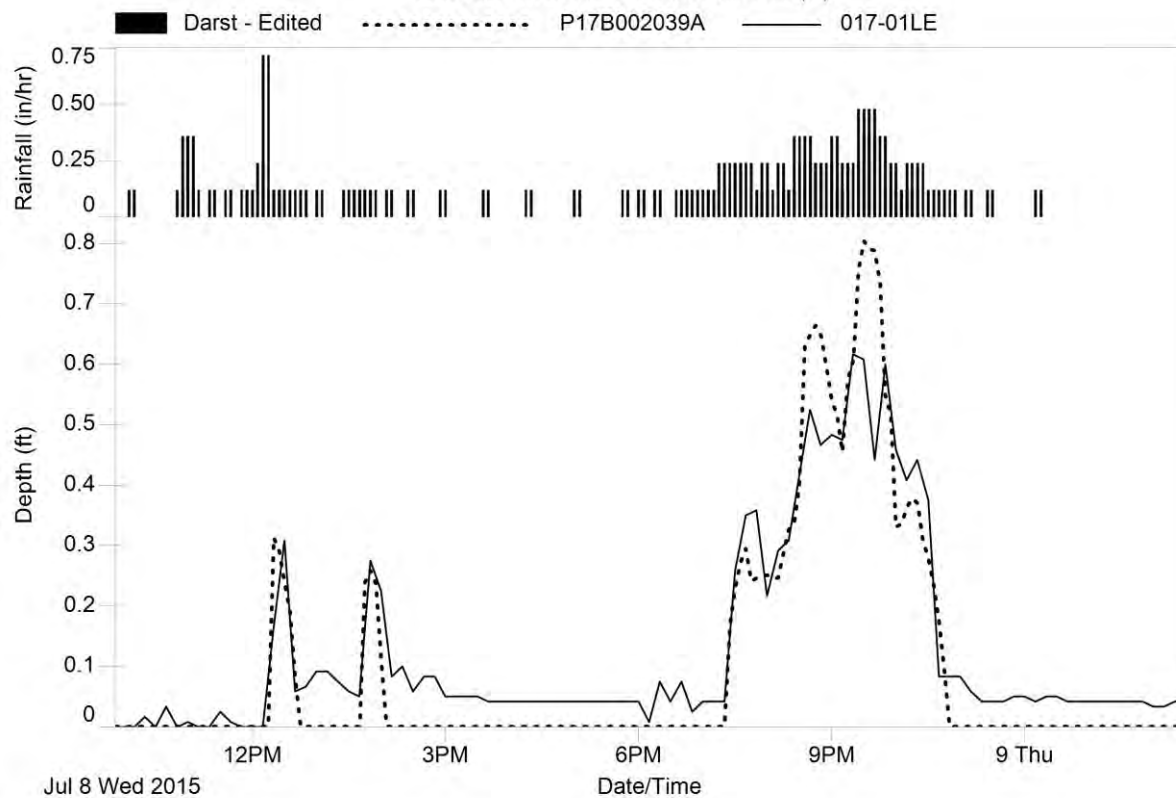
Event of June 28, 2015

Duration: 3.75 h, Total Rainfall: 0.47 (in)

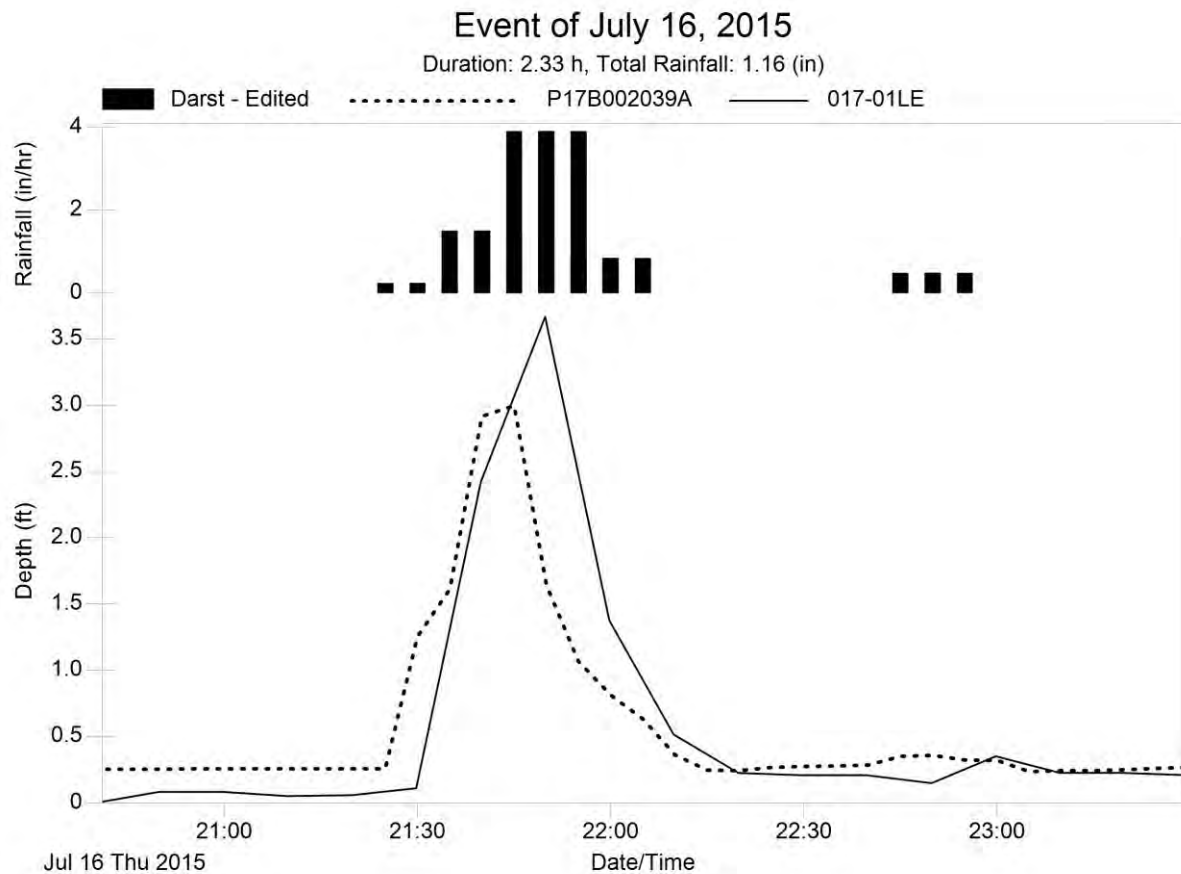
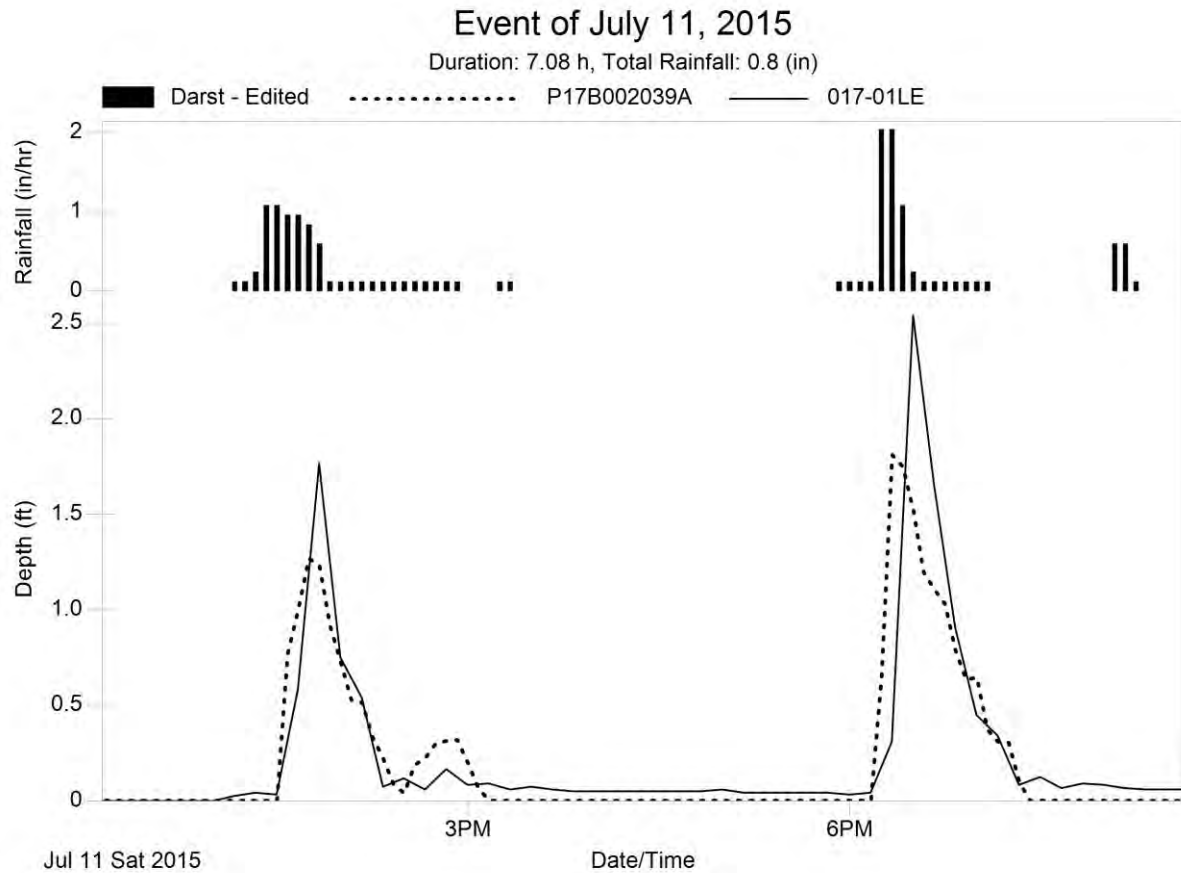


Event of July 8, 2015

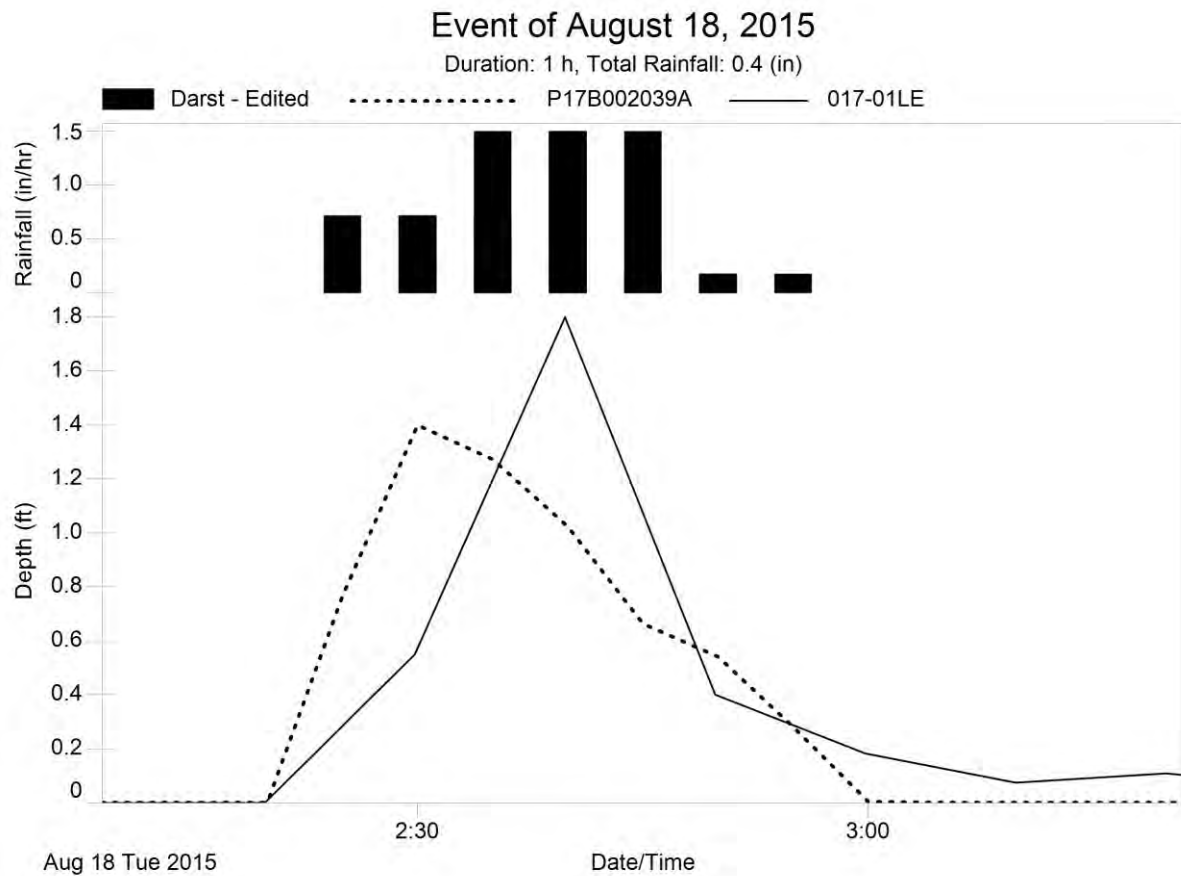
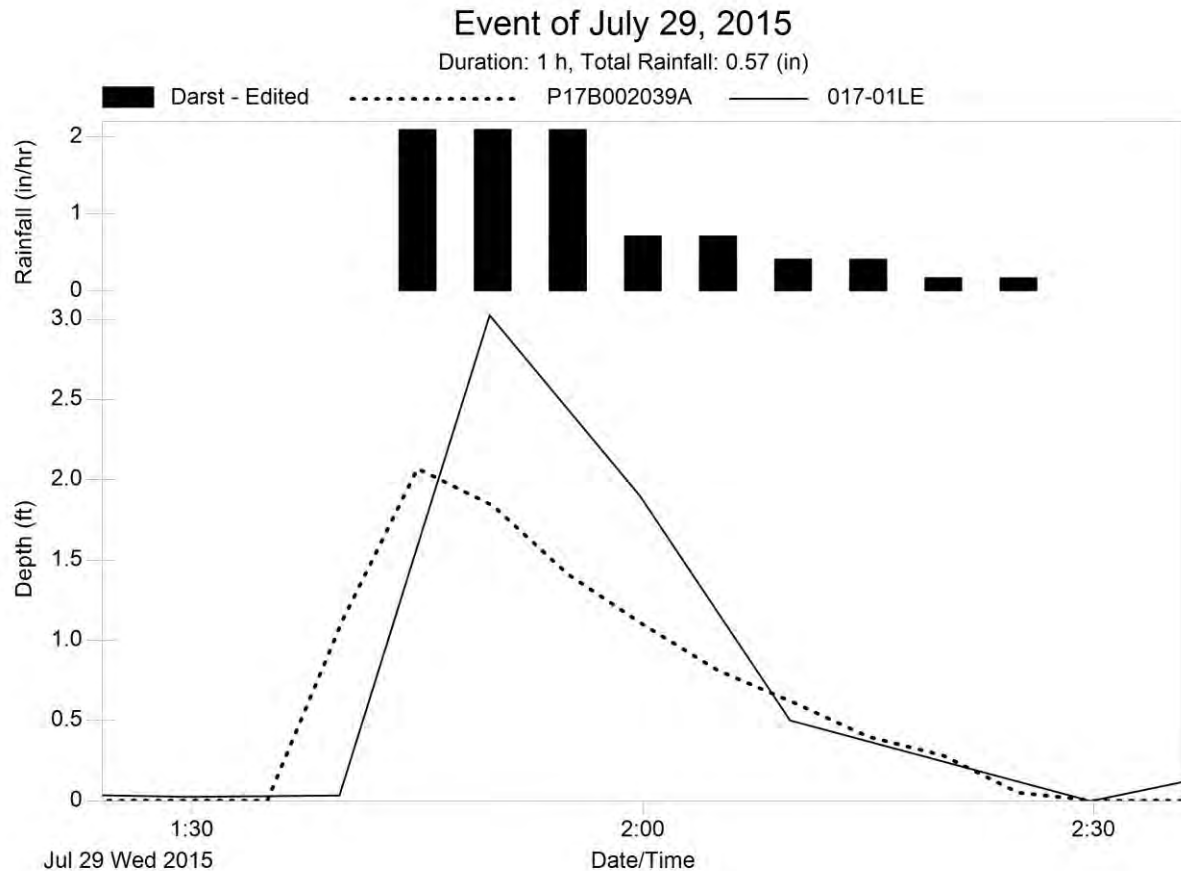
Duration: 13.83 h, Total Rainfall: 1.16 (in)



South 017-01LE – Verification Events



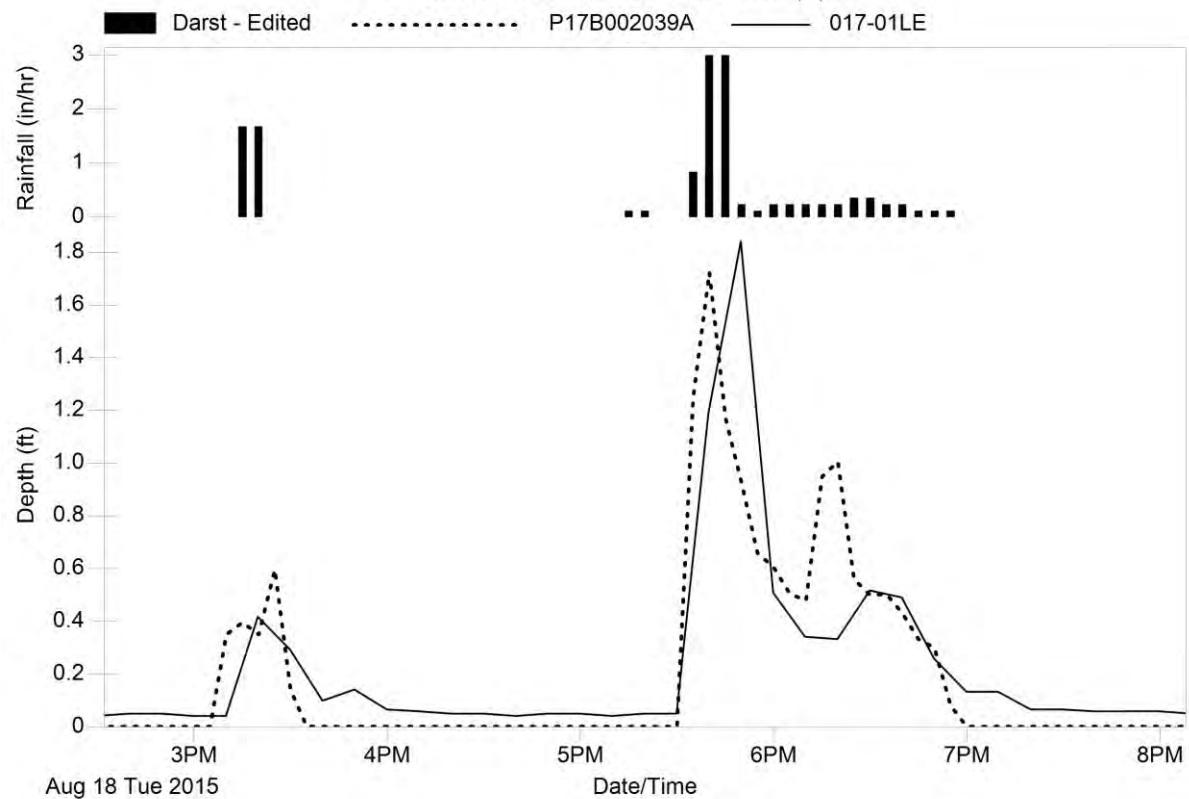
South 017-01LE – Verification Events



South 017-01LE – Verification Events

Event of August 18, 2015

Duration: 4.67 h, Total Rainfall: 0.66 (in)



017-03FT - South Regulator Influent



Date	Duration (h)	Maximum Depth (ft)		Minimum Depth (ft)		Average Depth (ft)		Maximum Depth (ft)	Minimum Depth (ft)	Average Depth (ft)	Rainfall Variability						
		metered	modeled	metered	modeled	metered	modeled	Surcharged: -0.33 ft to +1.67 ft	Surcharged: -0.33 ft to +1.67 ft	Surcharged: -0.33 ft to +1.67 ft							
CALIBRATION EVENTS - DEPTH								Non-Surcharged: -0.33 ft to +0.33 ft	Non-Surcharged: -0.33 ft to +0.33 ft	Non-Surcharged: -0.33 ft to +0.33 ft							
9/8/2015 10:45:00	4.00	1.857	2.509	0.124	0.085	0.665	0.748	0.652	-0.040	0.083	variable						
9/18/2015 13:10:00	13.42	4.206	3.130	0.083	0.067	0.532	0.596				variable						
11/5/2015 22:45:00	3.75	1.486	1.494	0.136	0.093	0.471	0.524	0.008	-0.043	0.053	possibly uniform						
11/11/2015 19:40:00	2.33	2.214	2.329	0.140	0.078	0.778	0.812	0.115	-0.062	0.034	variable						
11/16/2015 21:05:00	39.83	1.830	2.022	0.125	0.085	0.405	0.466	0.192	-0.040	0.061	variable						
11/26/2015 21:15:00	11.17	1.484	1.512	0.138	0.101	0.732	0.917	0.028	-0.037	0.185	possibly uniform						
12/13/2015 11:15:00	14.42	1.509	1.559	0.137	0.090	0.625	0.726	0.050	-0.047	0.101	variable						
12/20/2015 23:45:00	14.75	1.427	1.434	0.126	0.072	0.333	0.368	0.007	-0.054	0.035	variable						
12/23/2015 7:10:00	4.08	1.832	1.962	0.125	0.071	0.860	0.948	0.130	-0.054	0.087	variable						
12/28/2015 3:40:00	17.42	2.158	2.627	0.133	0.111	0.825	0.957	0.469	-0.022	0.133	variable						
VERIFICATION EVENTS - DEPTH																	
6/17/2015 1:00:00	11.33	2.322	2.852	0.095	0.041	0.391	0.421	0.530	-0.054	0.029	variable						
6/24/2015 4:20:00	67.42	2.568	2.529	0.042	0.076	0.250	0.245	-0.039	0.035	-0.005	variable						
6/28/2015 17:00:00	13.42	3.161	2.543	0.081	0.082	0.309	0.276	-0.618	0.001	-0.033	variable						
7/8/2015 4:10:00	31.50	1.519	1.668	0.093	0.043	0.307	0.314	0.149	-0.050	0.007	variable						
7/11/2015 8:25:00	15.58	2.265	2.761	0.069	0.046	0.353	0.422	0.496	-0.023	0.069	variable						
7/16/2015 8:55:00	18.00	2.777	3.705	0.060	0.057	0.226	0.245	0.928	-0.003	0.019	possibly uniform						
7/29/2015 1:25:00	4.58	3.799	3.124	0.078	0.057	0.433	0.444	-0.675	-0.021	0.011	possibly uniform						
8/18/2015 2:10:00	4.33	1.958	2.252	0.083	0.060	0.304	0.344	0.294	-0.023	0.041	possibly uniform						
8/18/2015 14:55:00	7.92	2.145	2.653	0.080	0.062	0.401	0.461	0.508	-0.018	0.060	variable						
Notes: Results from interceptor only model using flow meter data as influent flow to regulator. Meter spikes during 9/18 event. Values tabulated above but not included in averages. Surcharge depth = 1.25 ft						WEIGHTED AVERAGES											
						Calibration - Relatively Uniform		N/A		N/A		N/A		relatively uniform			
						Calibration - Possibly Uniform		0.018		-0.040		0.133		possibly uniform			
						Calibration - Variable		0.185		-0.042		0.073		variable			
						Calibration Weighted - All Events		0.160		-0.041		0.084		All Events			
						Verification - Relatively Uniform		N/A		N/A		N/A		relatively uniform			
						Verification - Possibly Uniform		0.069		-0.017		0.022		possibly uniform			
						Verification - Variable		0.116		-0.025		0.025		variable			
						Verification Weighted - All Events		0.098		-0.022		0.024		All Events			
						Weighted Average - All Events		0.127		-0.035		0.065					
						NET AVERAGES											
						Calibration - Relatively Uniform		N/A		N/A		N/A		relatively uniform			
						Calibration - Possibly Uniform		0.018		-0.040		0.119		possibly uniform			
						Calibration - Variable		0.231		-0.046		0.076		variable			
						Calibration Net - All Events		0.183		-0.044		0.086		All Events			
						Verification - Relatively Uniform		N/A		N/A		N/A		relatively uniform			
						Verification - Possibly Uniform		0.182		-0.016		0.024		possibly uniform			
						Verification - Variable		0.171		-0.018		0.021		variable			
						Verification Net - All Events		0.175		-0.017		0.022		All Events			
						Net Average - All Events		0.179		-0.031		0.054					

Notes:

Results from interceptor only model using flow meter data as influent flow to regulator.

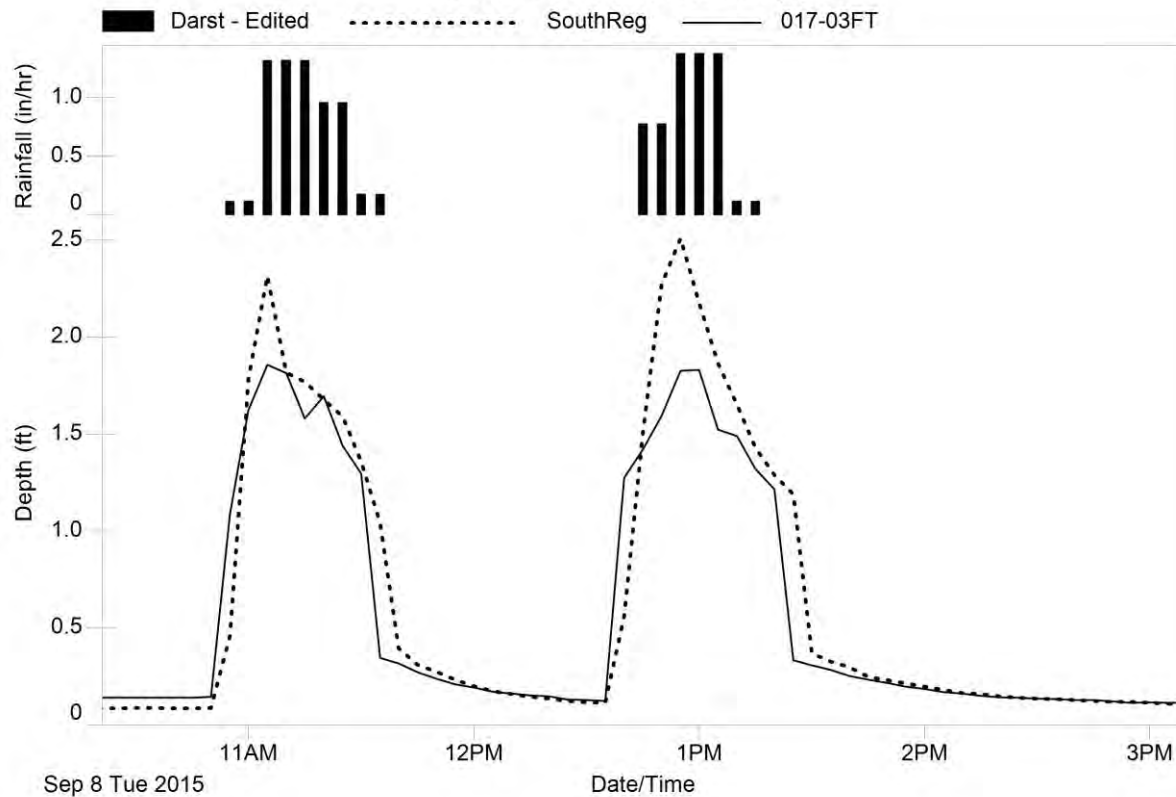
Meter spikes during 9/18 event. Values tabulated above but not included in averages.

Surcharge depth = 1.25 ft

South 017-03FT – Calibration Events

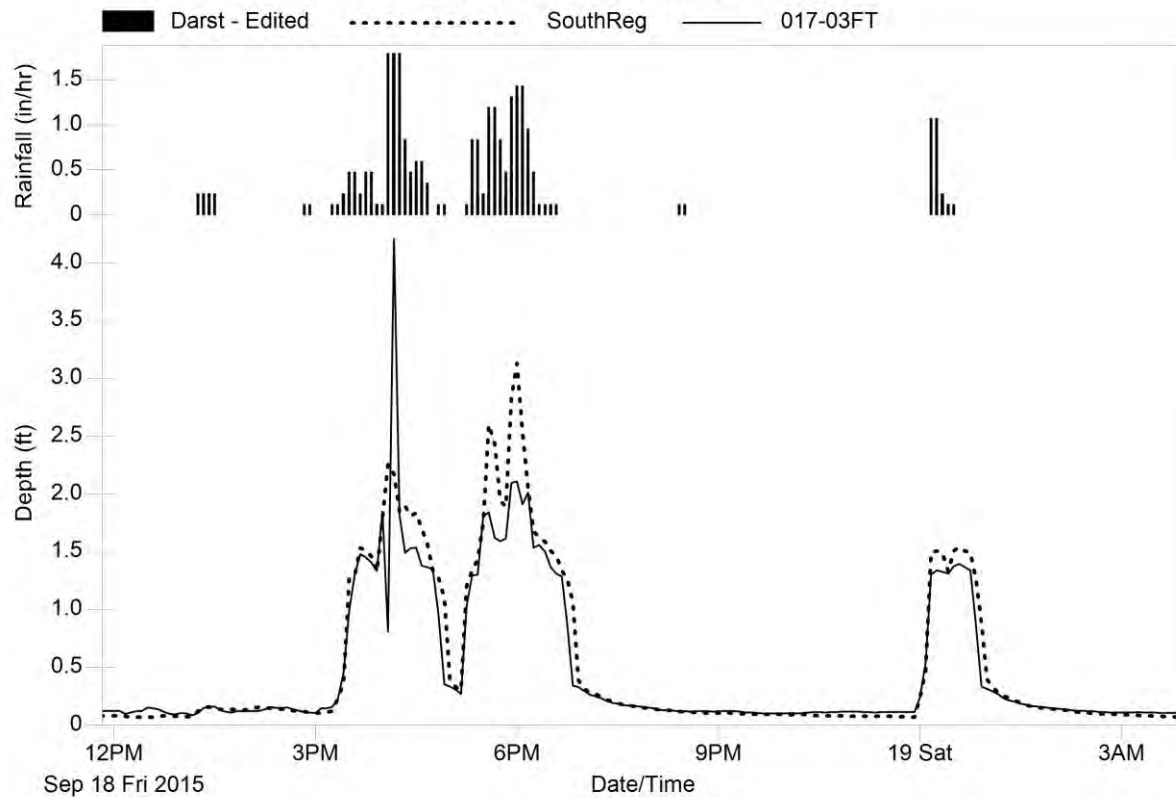
Event of September 8, 2015

Duration: 4 h, Total Rainfall: 0.81 (in)



Event of September 18, 2015

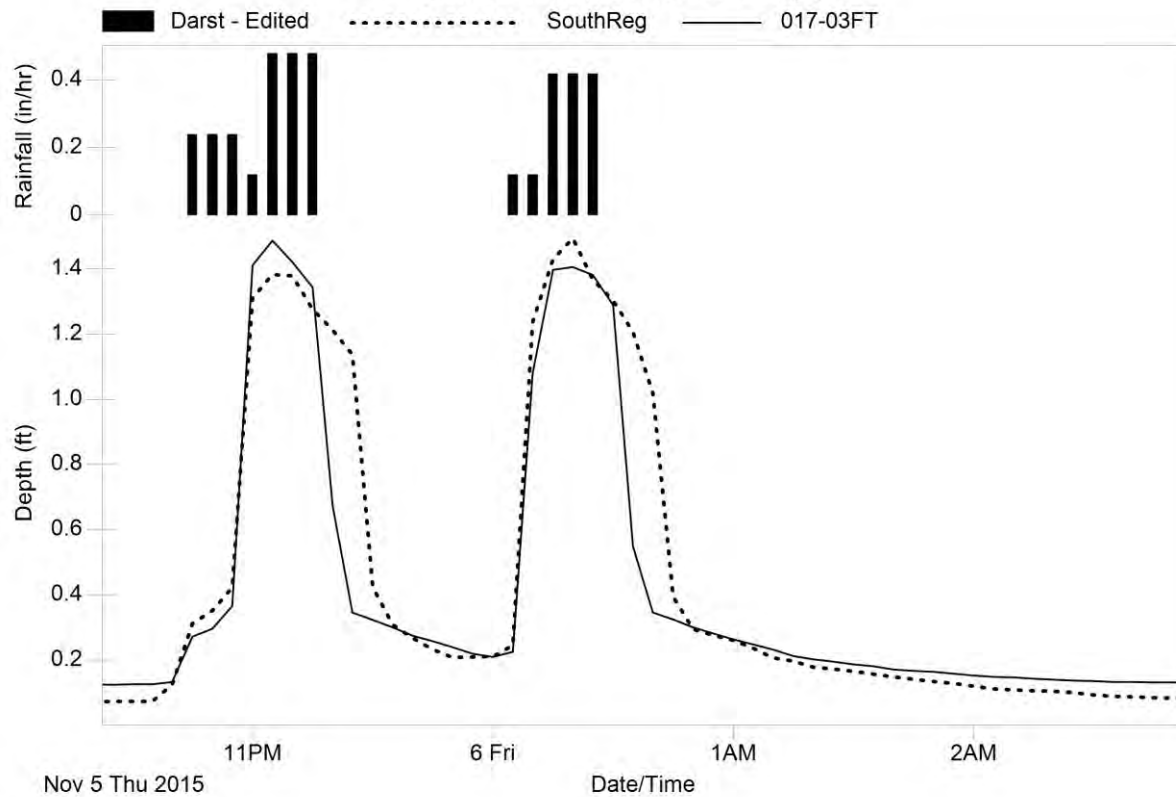
Duration: 13.42 h, Total Rainfall: 1.62 (in)



South 017-03FT – Calibration Events

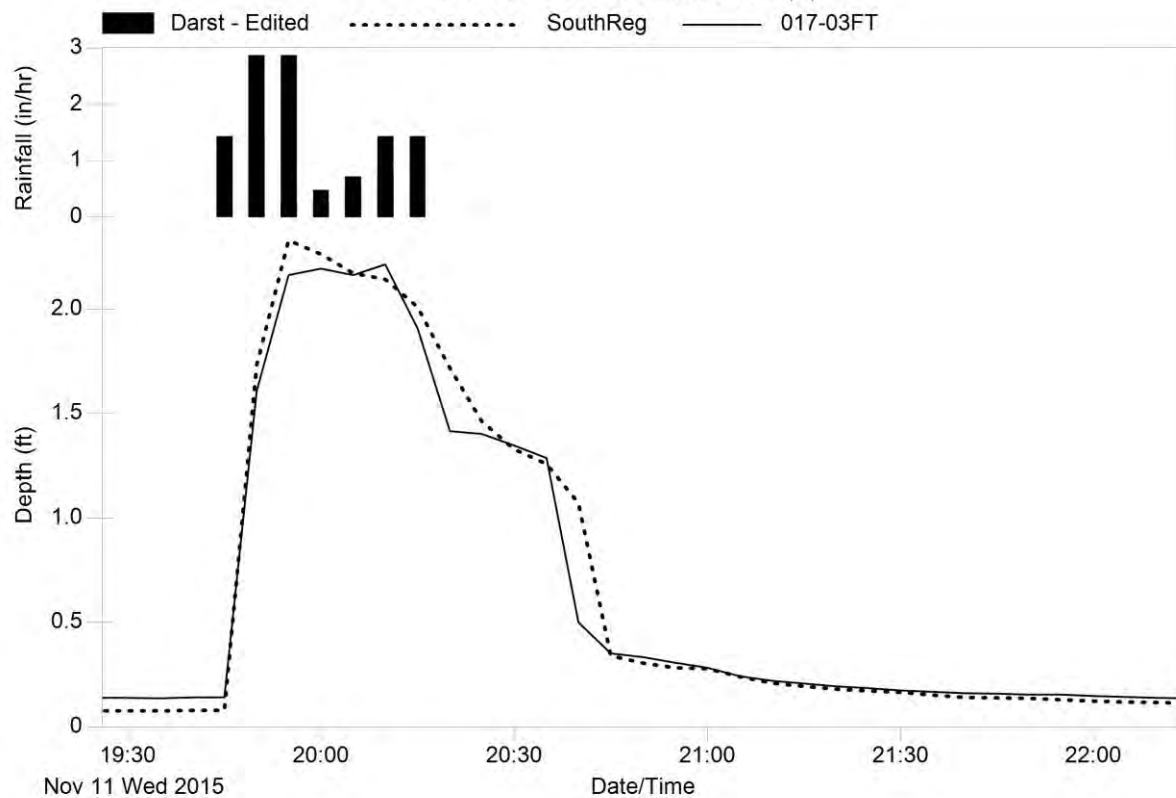
Event of November 5, 2015

Duration: 3.75 h, Total Rainfall: 0.23 (in)

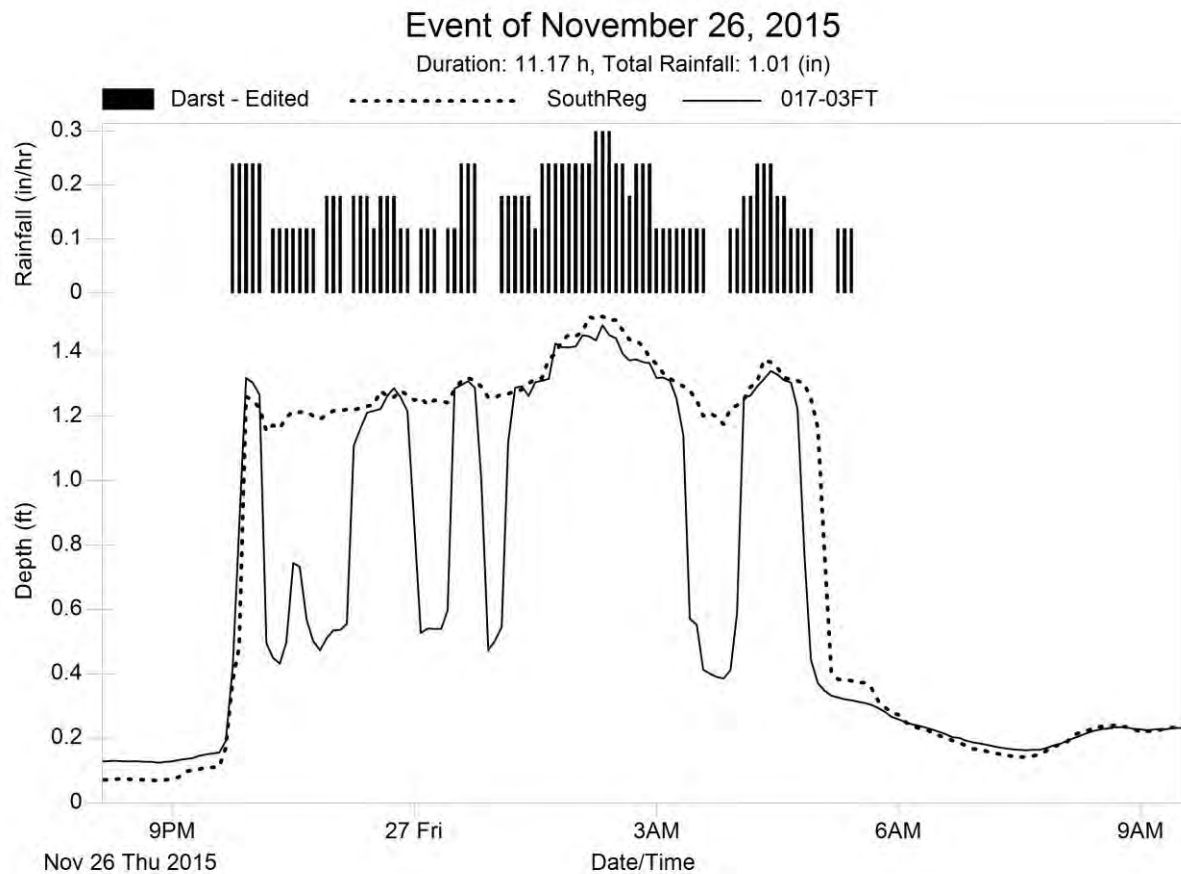
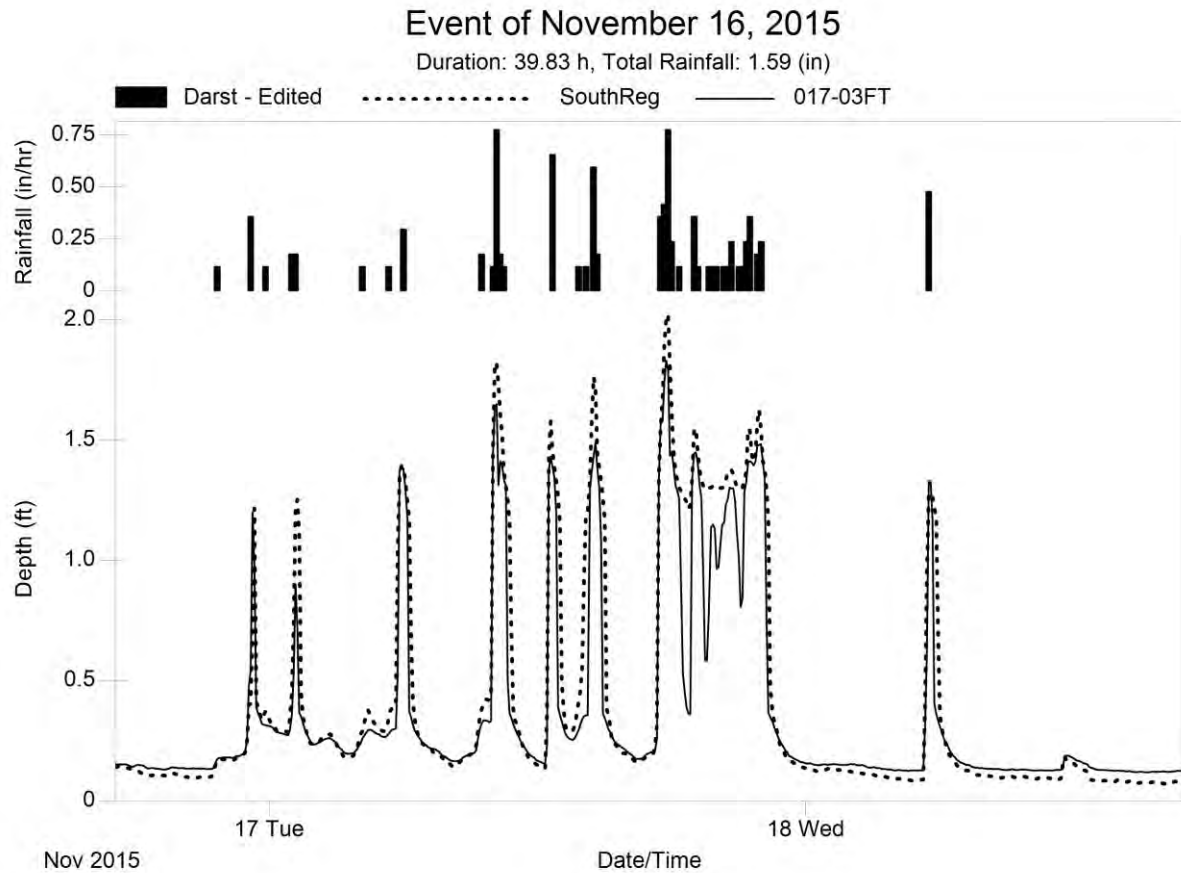


Event of November 11, 2015

Duration: 2.33 h, Total Rainfall: 0.6 (in)



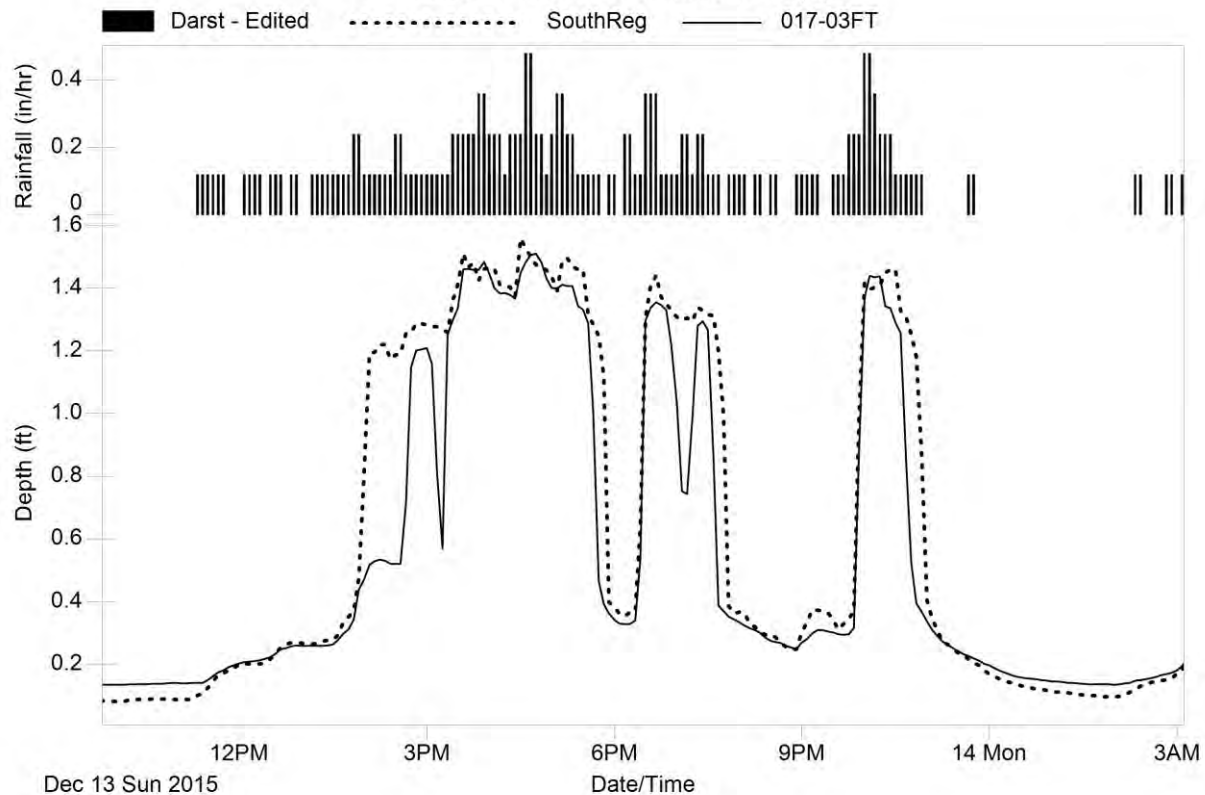
South 017-03FT – Calibration Events



South 017-03FT – Calibration Events

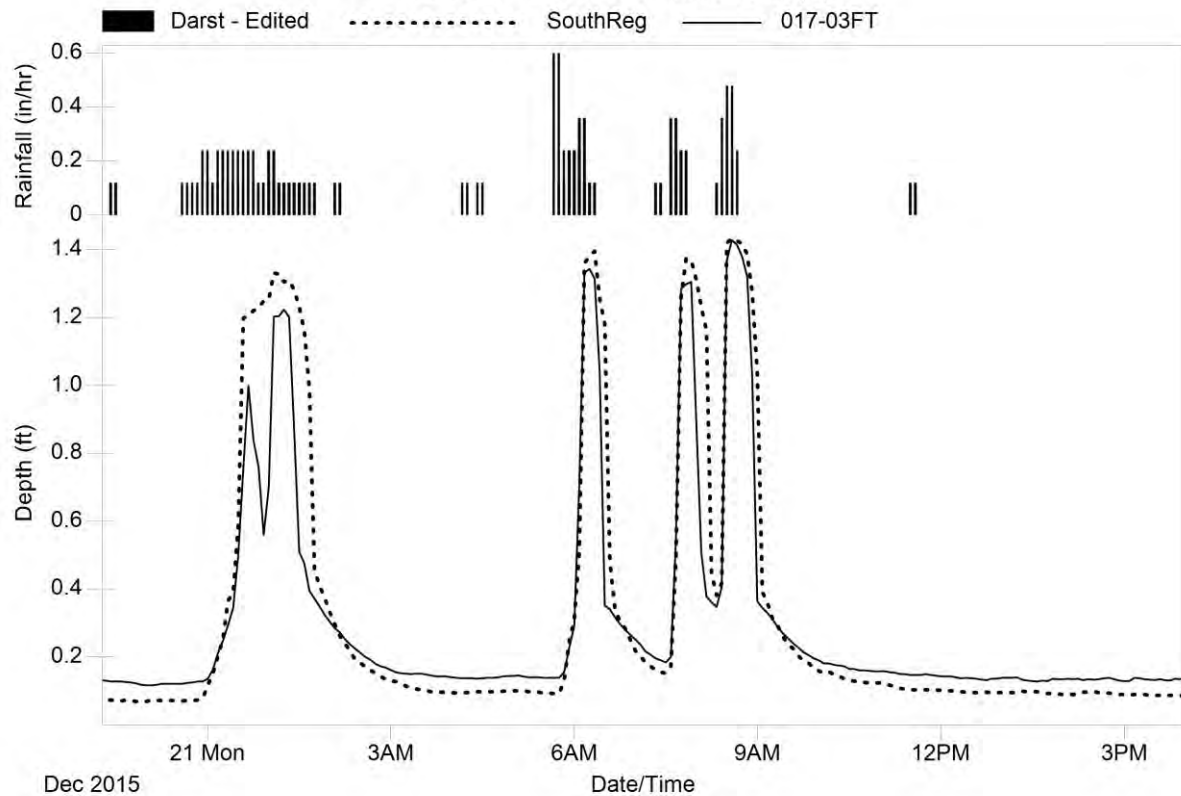
Event of December 13, 2015

Duration: 14.42 h, Total Rainfall: 1.39 (in)

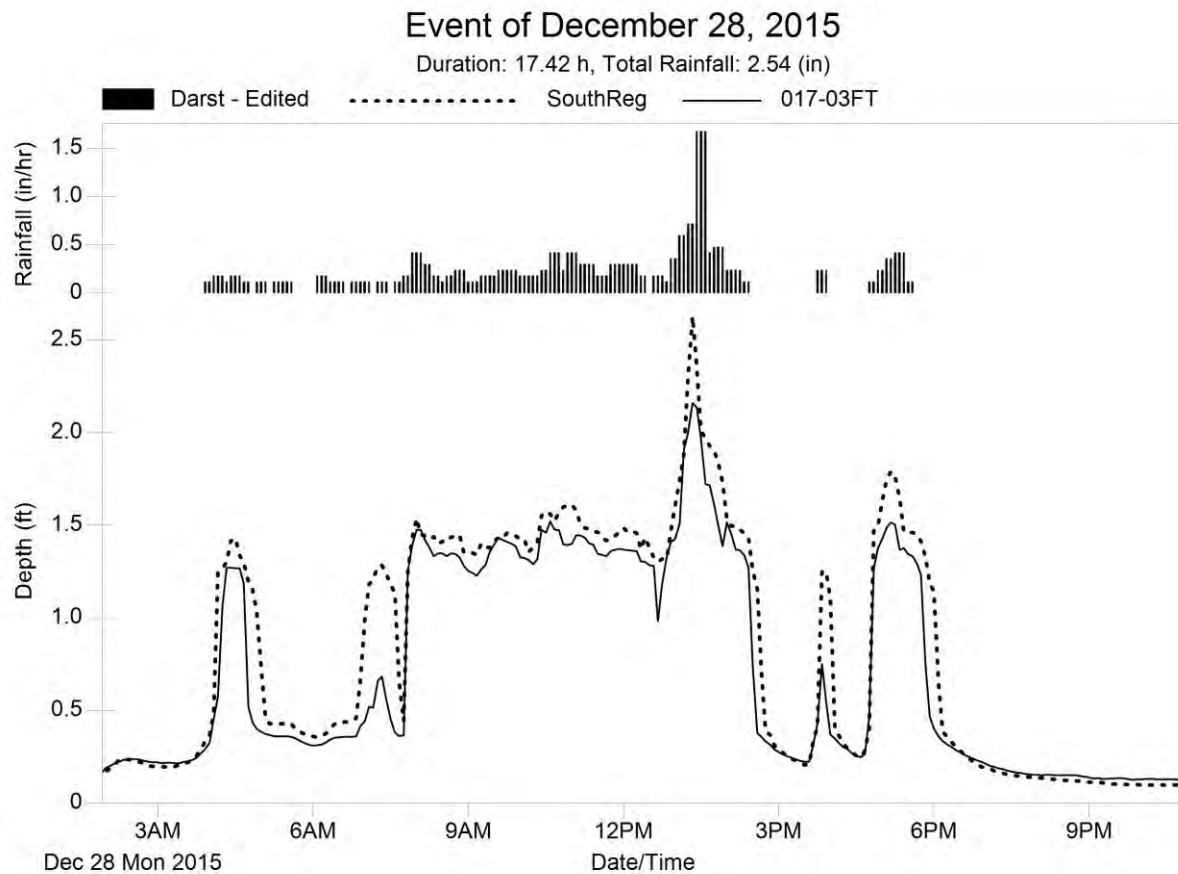
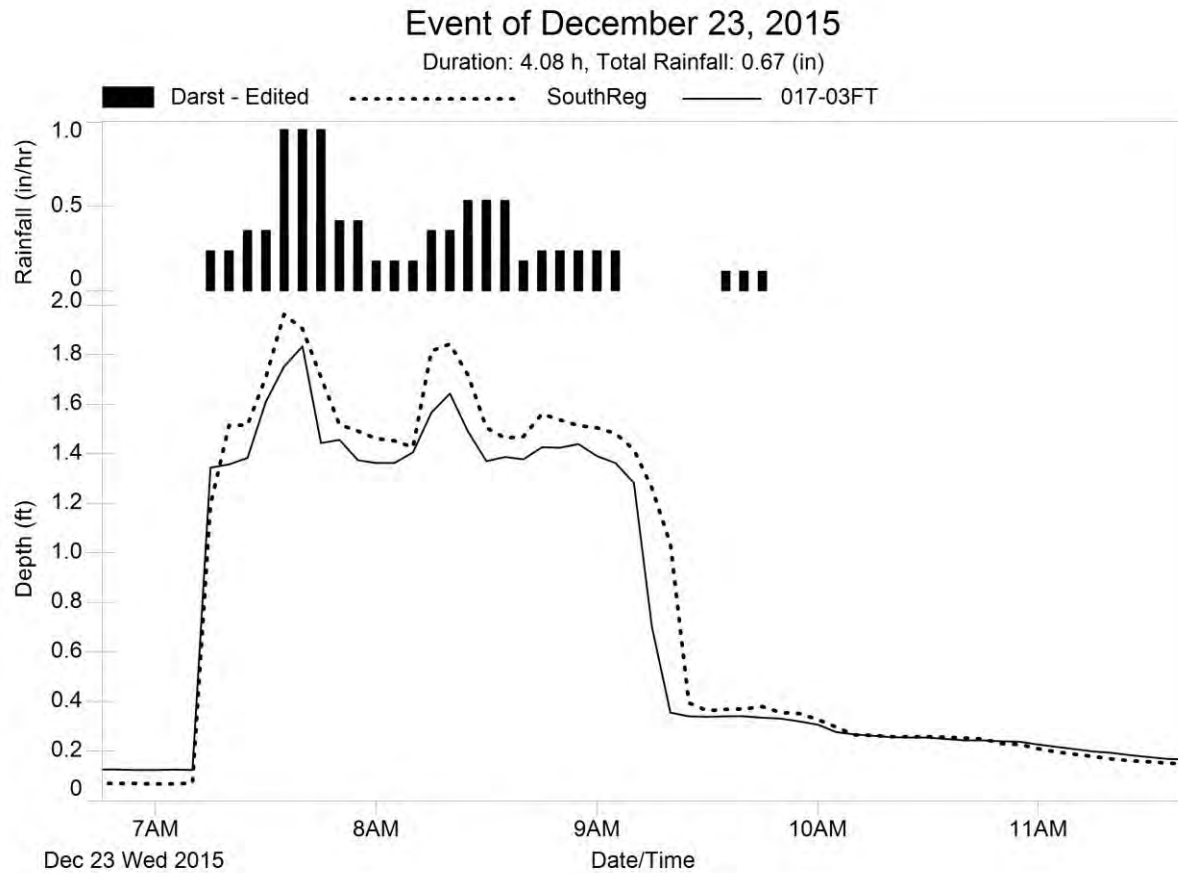


Event of December 20, 2015

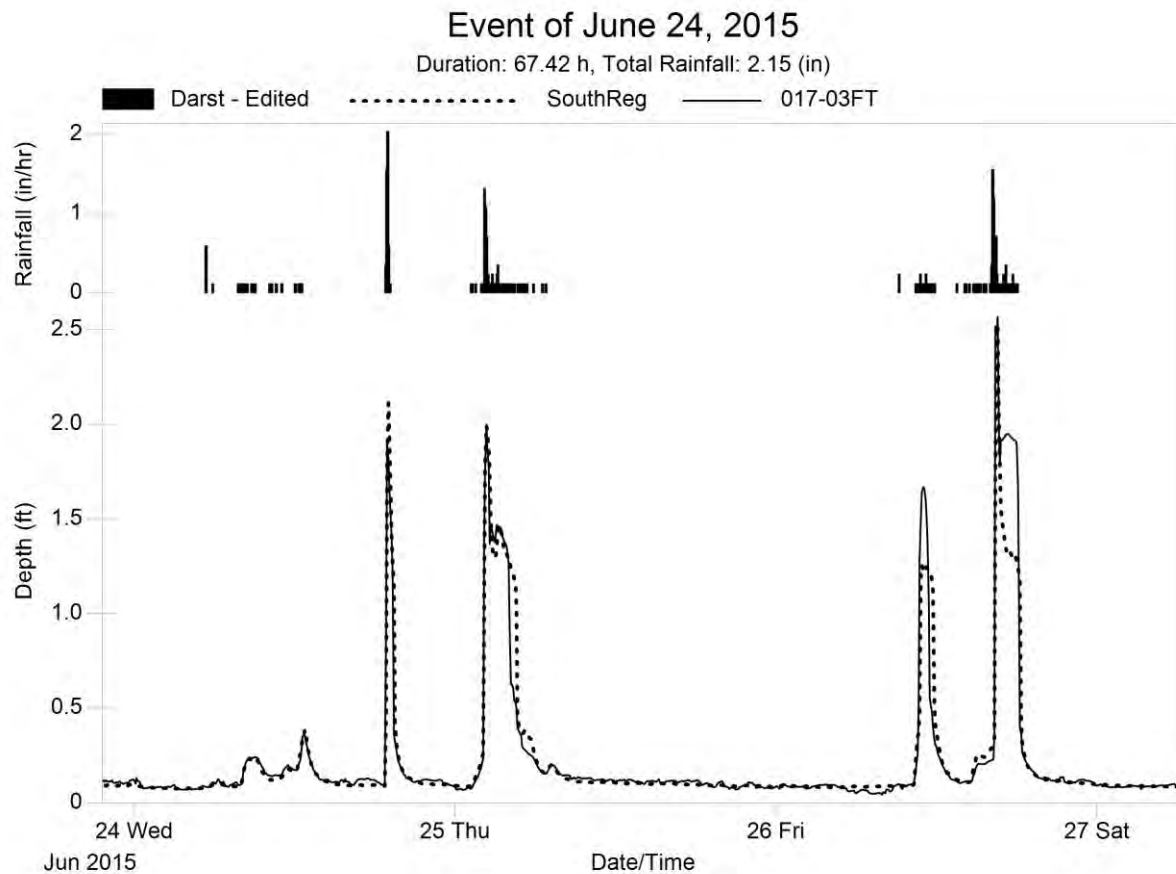
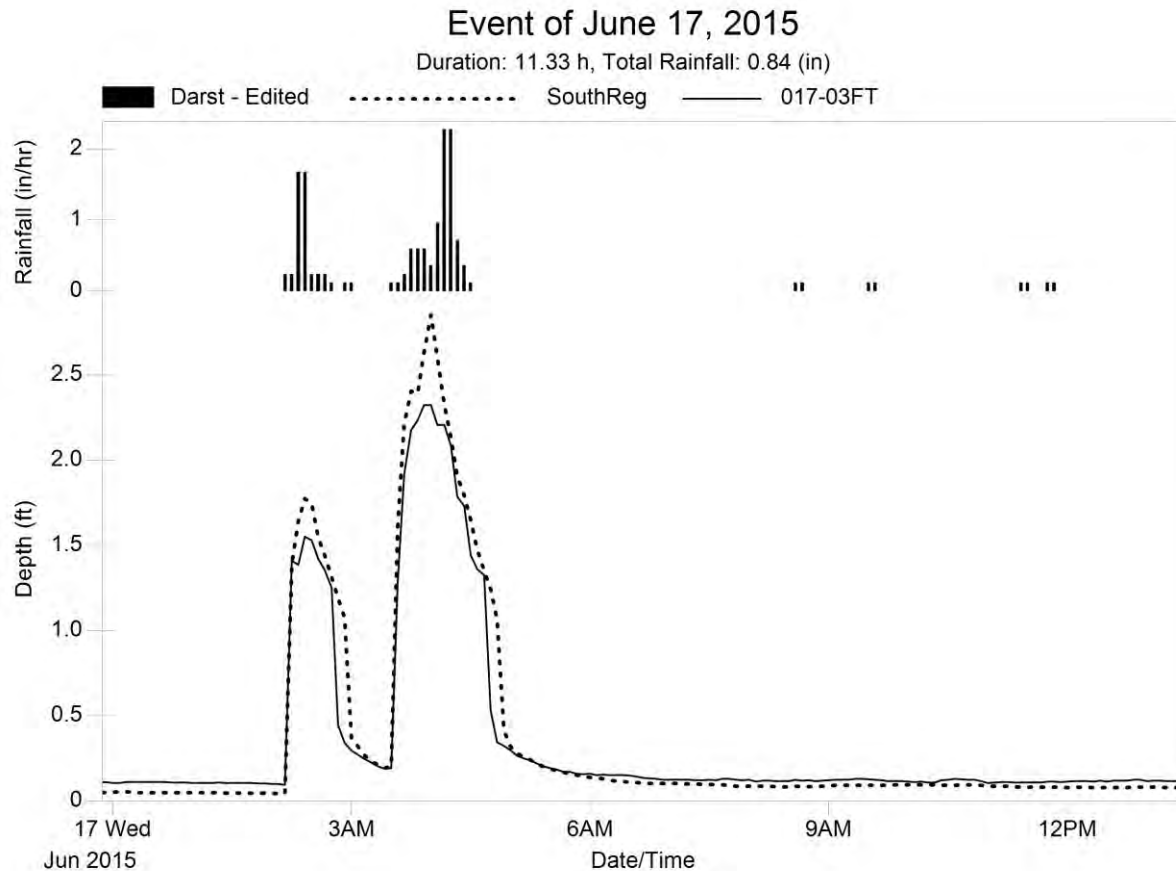
Duration: 14.75 h, Total Rainfall: 0.68 (in)



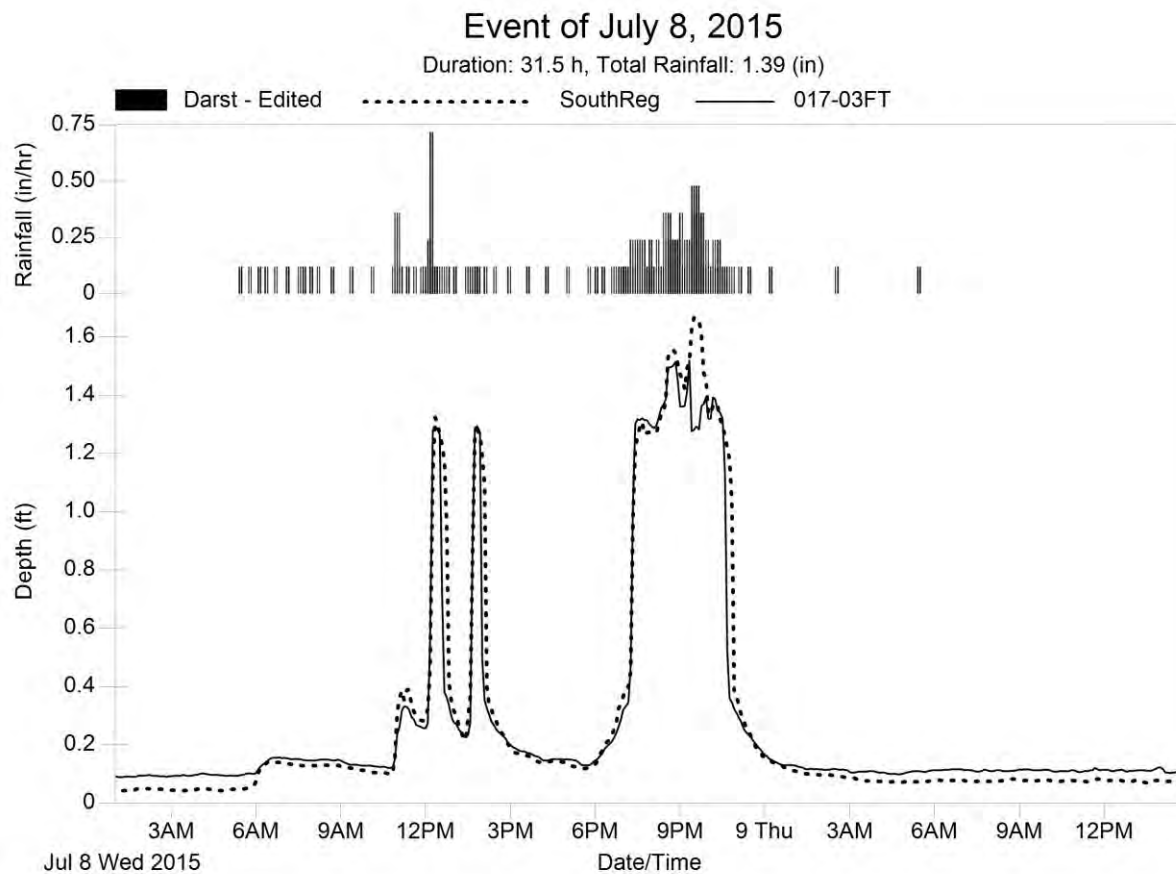
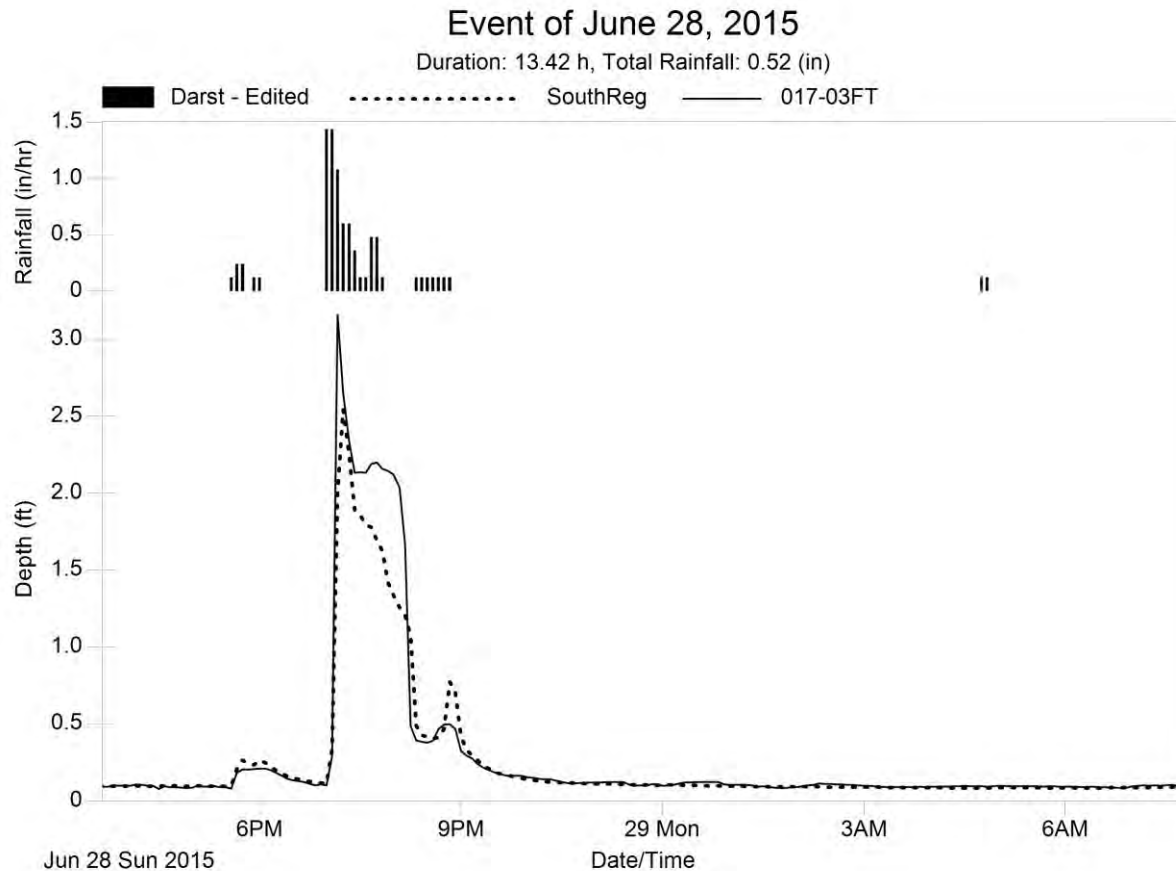
South 017-03FT – Calibration Events



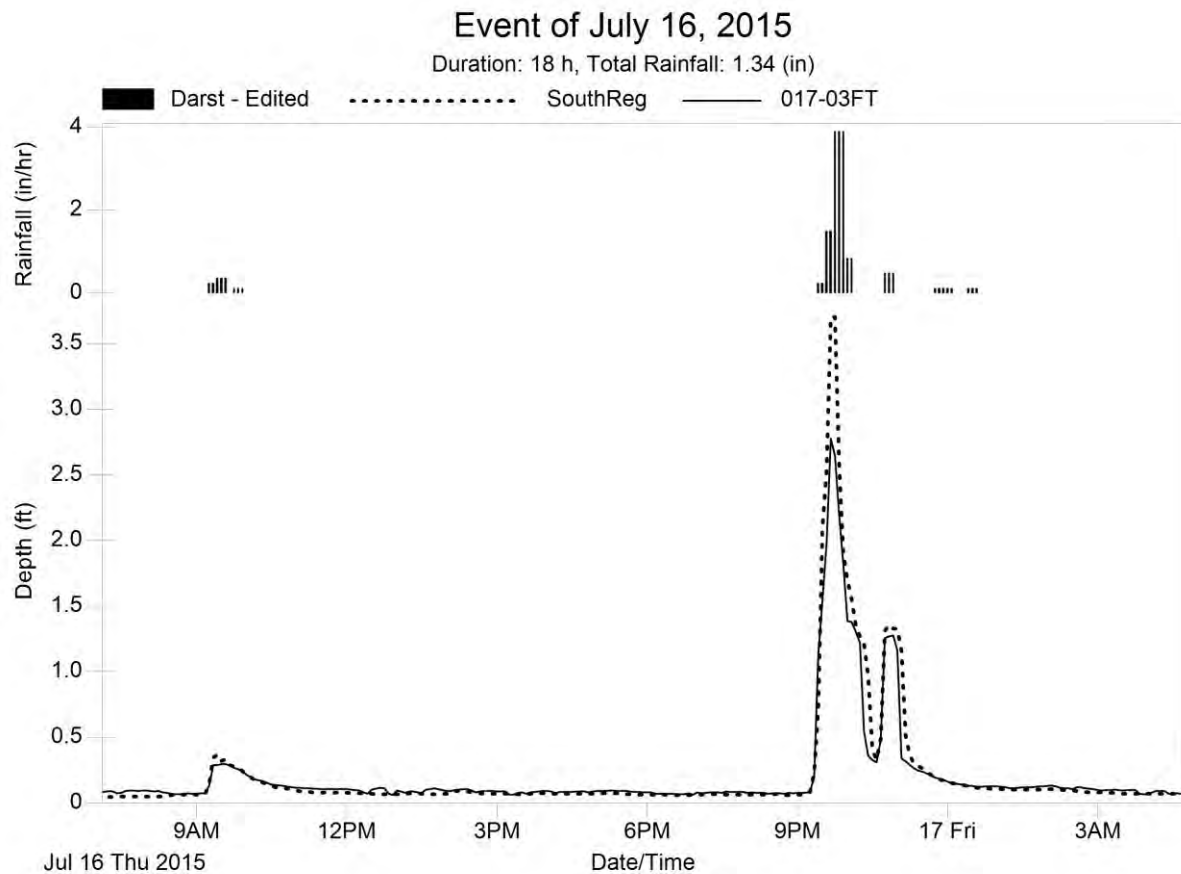
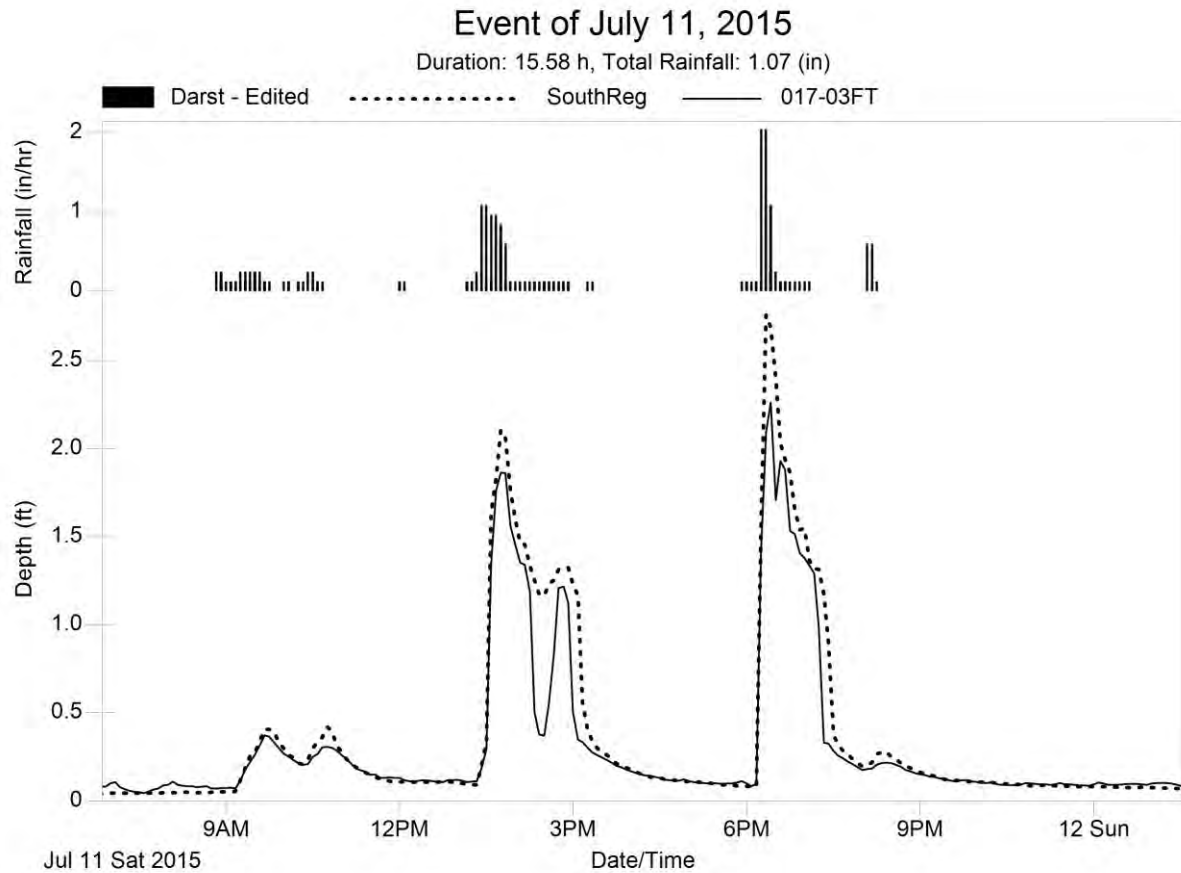
South 017-03FT – Verification Events



South 017-03FT – Verification Events



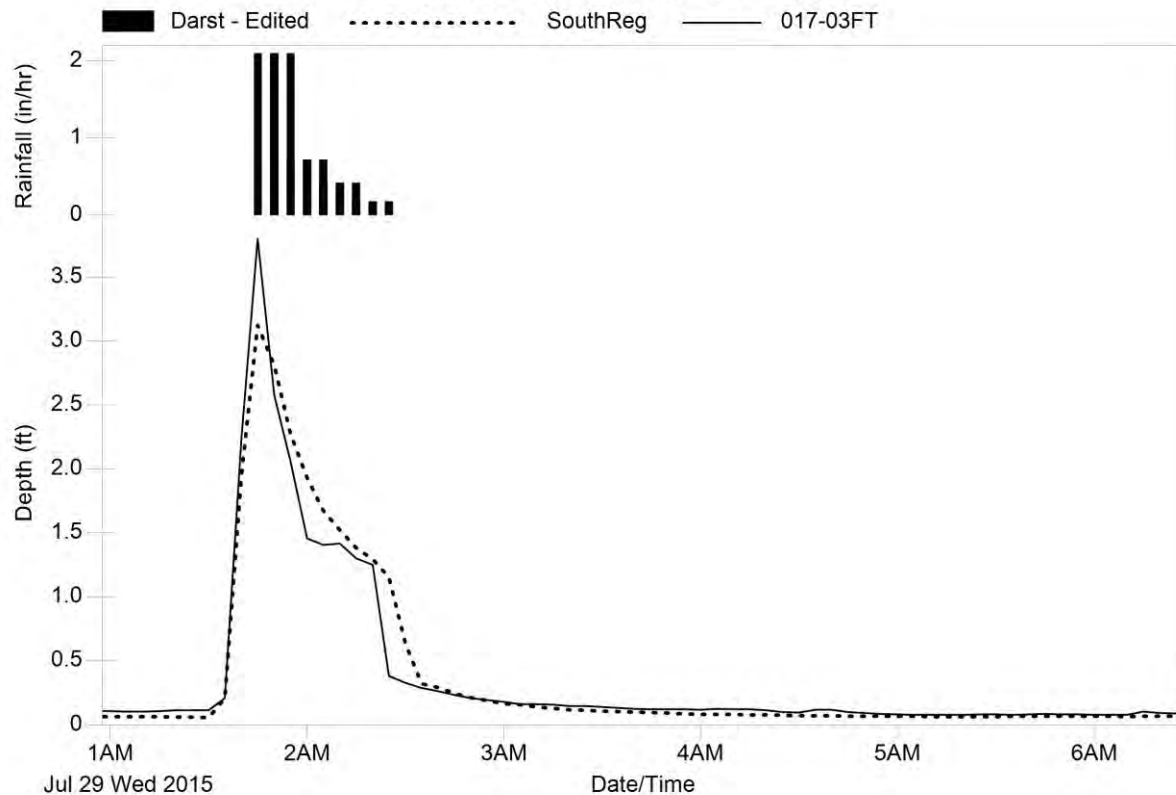
South 017-03FT – Verification Events



South 017-03FT – Verification Events

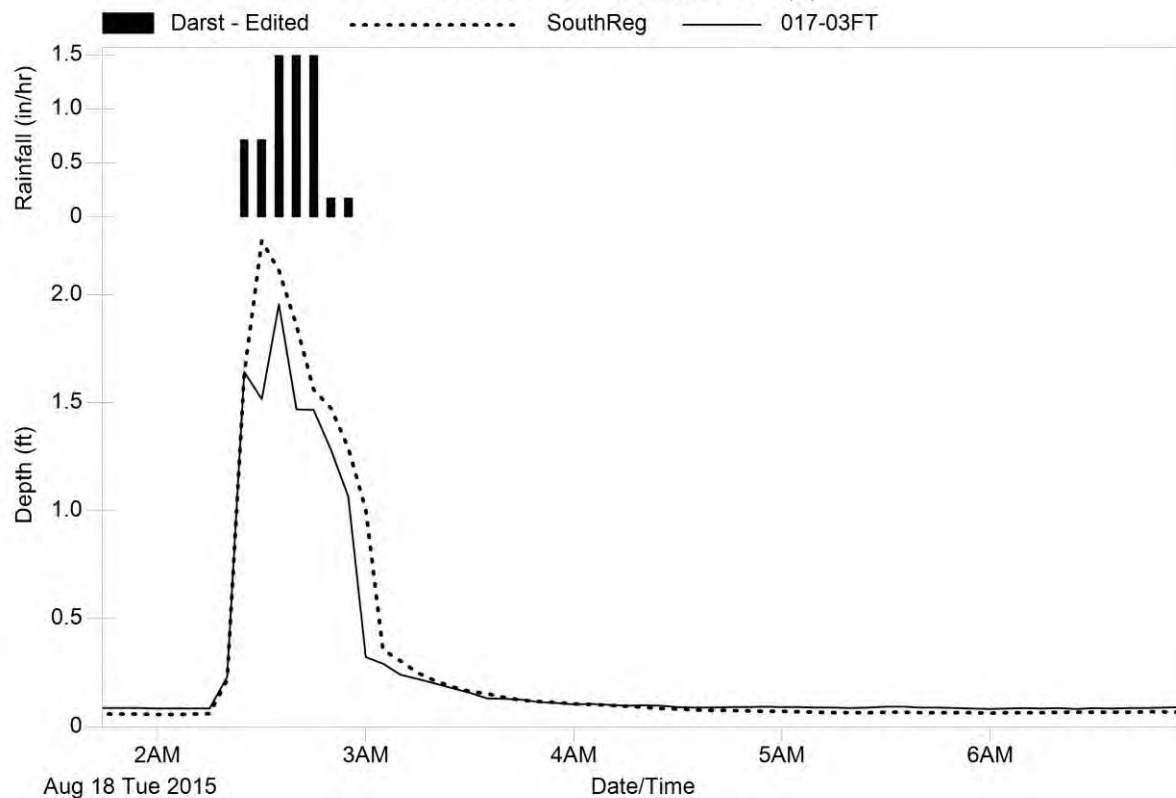
Event of July 29, 2015

Duration: 4.58 h, Total Rainfall: 0.57 (in)

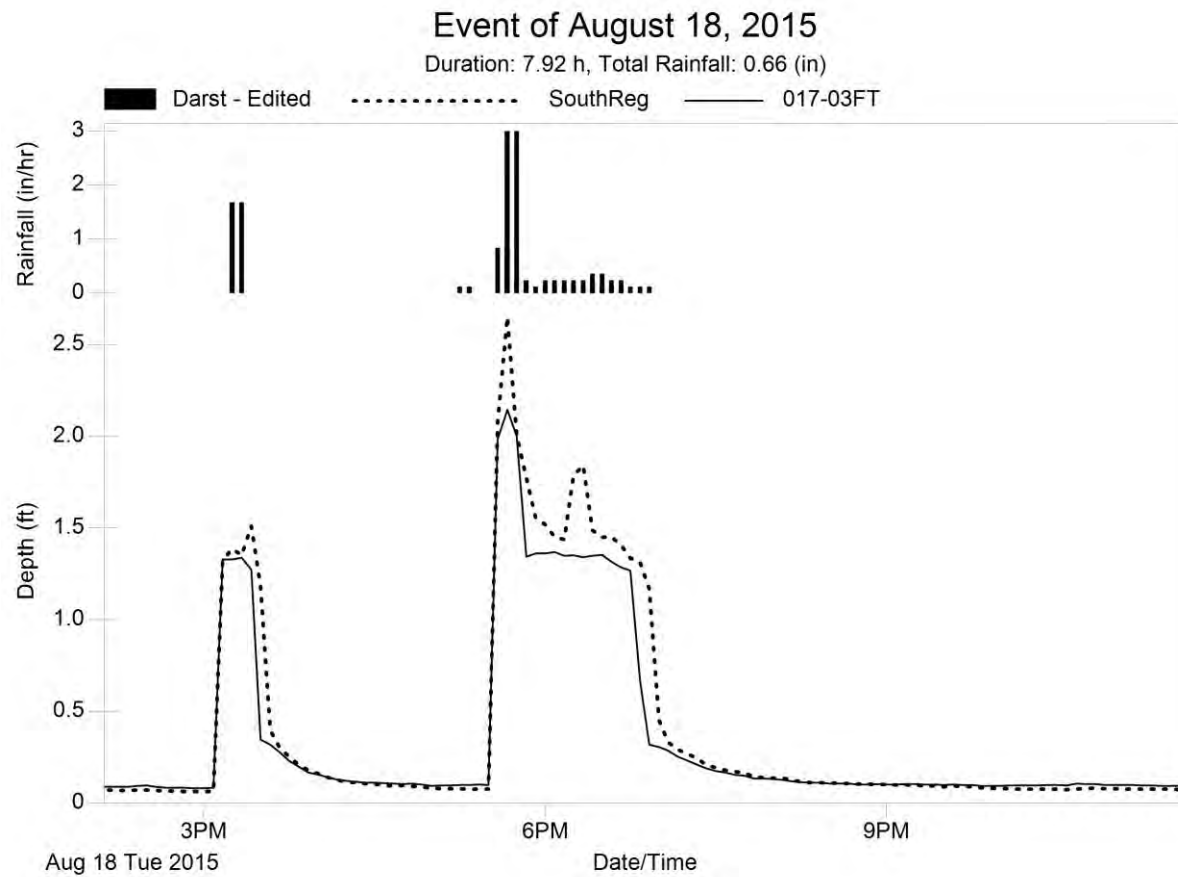


Event of August 18, 2015

Duration: 4.33 h, Total Rainfall: 0.4 (in)



South 017-03FT – Verification Events



017-04FT - South Regulator Throttle



Date	Duration (h)	Rainfall (in)	Maximum Flow (cfs)		Maximum Flow (mgd)		Total Volume (ft³)		Volume (million gallons)		Peak Flow Rate (-15% to +25%)	Flow Volume (-10% to +20%)	Rainfall Variability
		Darst	Observed	Modeled	Observed	Modeled	Observed	Modeled	Observed	Modeled			
CALIBRATION EVENTS - FLOW													
9/8/2015 10:40	4.17	0.81	6.431	5.537	4.154	3.577	37170	40480	0.278	0.303	-14%	9%	variable
9/18/2015 14:40	11.58	1.56	6.918	5.519	4.469	3.565	95070	97090	0.711	0.726	-20%	2%	possibly uniform
11/5/2015 14:05	13	0.34	5.519	5.311	3.565	3.431	41510	52870	0.310	0.395	-4%	27%	possibly uniform
11/11/2015 19:35	2.75	0.6	6.199	5.453	4.005	3.523	24280	24520	0.182	0.183	-12%	1%	variable
11/16/2015 15:50	46.25	1.59	5.849	5.365	3.778	3.466	261600	324500	1.957	2.427	-8%	24%	variable
11/26/2015 20:15	37	1.01	5.671	5.261	3.663	3.399	170100	191400	1.272	1.432	-7%	13%	possibly uniform
VERIFICATION EVENTS - FLOW													
6/24/2015 18:00	60.5	1.91	6.298	5.52	4.069	3.566	215400	218400	1.611	1.634	-12%	1%	variable
6/28/2015 17:00	13.42	0.52	6.106	5.521	3.944	3.567	51980	53140	0.389	0.397	-10%	2%	variable
7/8/2015 4:10	31.5	1.39	5.872	5.281	3.793	3.412	138800	155900	1.038	1.166	-10%	12%	variable
7/11/2015 8:25	15.58	1.07	6.377	5.584	4.120	3.607	84020	98270	0.628	0.735	-12%	17%	variable
7/16/2015 8:55	18	1.34	7.04	6.124	4.548	3.956	50510	56100	0.378	0.420	-13%	11%	possibly uniform
7/29/2015 1:25	4.58	0.57	6.579	5.693	4.250	3.678	22370	23560	0.167	0.176	-13%	5%	possibly uniform
8/18/2015 2:10	4.33	0.4	6.179	5.429	3.992	3.507	17690	19100	0.132	0.143	-12%	8%	possibly uniform
8/18/2015 14:55	7.92	0.66	6.197	5.555	4.003	3.589	43180	48840	0.323	0.365	-10%	13%	variable
Notes: Results from interceptor only model using flow meter data as influent flow to regulator.									WEIGHTED AVERAGES				relatively uniform possibly uniform variable relatively uniform possibly uniform variable relatively uniform possibly uniform variable variable variable variable
									Calibration - Relatively Uniform		N/A		
									Calibration - Possibly Uniform		-11%		
									Calibration - Variable		-11%		
									Calibration Weighted - All Events		-11%		
									Verification - Relatively Uniform		N/A		
									Verification - Possibly Uniform		-13%		
									Verification - Variable		-11%		
									Verification Weighted - All Events		-12%		
									Weighted Average - All Events		-12%		
									NET AVERAGES				
									Calibration - Relatively Uniform		N/A		
									Calibration - Possibly Uniform		-10%		
									Calibration - Variable		-11%		
									Calibration Net - All Events		-11%		
									Verification - Relatively Uniform		N/A		
									Verification - Possibly Uniform		-13%		
									Verification - Variable		-11%		
Verification Net - All Events		-12%											
Net Average - All Events		-11%											

Notes:

Results from interceptor only model using flow meter data as influent flow to regulator.

Date	Duration (h)	Maximum Depth (ft)		Minimum Depth (ft)		Average Depth (ft)		Maximum Depth (ft)	Minimum Depth (ft)	Average Depth (ft)	Rainfall Variability	
		metered	modeled	metered	modeled	metered	modeled	Surcharged: -0.33 ft to +1.67 ft	Surcharged: -0.33 ft to +1.67 ft	Surcharged: -0.33 ft to +1.67 ft		
CALIBRATION EVENTS - DEPTH												
9/8/2015 10:40:00	4.17	1.726	1.722	0.578	0.175	1.002	0.795	-0.004	-0.402	-0.207	variable	
9/18/2015 14:40:00	11.58	2.000	2.173	0.548	0.143	0.949	0.741	0.173	-0.406	-0.208	variable	
11/5/2015 14:05:00	13.00	1.673	1.386	0.545	0.129	0.731	0.383	-0.287	-0.416	-0.348	possibly uniform	
11/11/2015 19:35:00	2.75	1.808	1.618	0.598	0.159	1.038	0.744	-0.190	-0.439	-0.294	variable	
11/16/2015 15:50:00	46.25	1.600	1.727	0.575	0.168	0.866	0.603	0.127	-0.407	-0.262	variable	
11/26/2015 20:15:00	37.00	1.623	1.651	0.558	0.135	0.805	0.492	0.028	-0.422	-0.313	possibly uniform	
VERIFICATION EVENTS - DEPTH												
6/24/2015 18:00:00	60.50	1.825	1.782	0.540	0.169	0.750	0.385	-0.043	-0.371	-0.365	variable	
6/28/2015 17:00:00	13.42	1.886	1.885	0.597	0.171	0.771	0.427	-0.001	-0.426	-0.344	variable	
7/8/2015 4:10:00	31.50	1.633	1.726	0.493	0.098	0.768	0.467	0.093	-0.394	-0.301	variable	
7/11/2015 8:25:00	15.58	1.811	1.898	0.522	0.104	0.831	0.573	0.087	-0.418	-0.258	variable	
7/16/2015 8:55:00	18.00	2.353	2.017	0.517	0.125	0.692	0.347	-0.336	-0.392	-0.345	possibly uniform	
7/29/2015 1:25:00	4.58	1.928	1.677	0.518	0.128	0.782	0.495	-0.251	-0.391	-0.287	possibly uniform	
8/18/2015 2:10:00	4.33	1.681	1.478	0.498	0.125	0.727	0.399	-0.203	-0.374	-0.328	possibly uniform	
8/18/2015 14:55:00	7.92	1.773	1.632	0.525	0.132	0.802	0.550	-0.141	-0.393	-0.252	variable	
WEIGHTED AVERAGES												
Calibration - Relatively Uniform								N/A		N/A		relatively uniform
Calibration - Possibly Uniform								-0.132		-0.419		possibly uniform
Calibration - Variable								0.028		-0.414		variable
Calibration Weighted - All Events								-0.023		-0.416		All Events
Verification - Relatively Uniform								N/A		N/A		relatively uniform
Verification - Possibly Uniform								-0.271		-0.386		possibly uniform
Verification - Variable								-0.002		-0.401		variable
Verification Weighted - All Events								-0.110		-0.395		All Events
Weighted Average - All Events								-0.074		-0.404		
NET AVERAGES												
Calibration - Relatively Uniform								N/A		N/A		relatively uniform
Calibration - Possibly Uniform								-0.130		-0.419		possibly uniform
Calibration - Variable								0.027		-0.414		variable
Calibration Net - All Events								-0.026		-0.416		All Events
Verification - Relatively Uniform								N/A		N/A		relatively uniform
Verification - Possibly Uniform								-0.263		-0.385		possibly uniform
Verification - Variable								-0.001		-0.400		variable
Verification Net - All Events								-0.099		-0.395		All Events
Net Average - All Events								-0.068		-0.404		

Notes:

Results from interceptor only model using flow meter data as influent flow to regulator.

Surcharge depth = 1.25 ft

Notes:

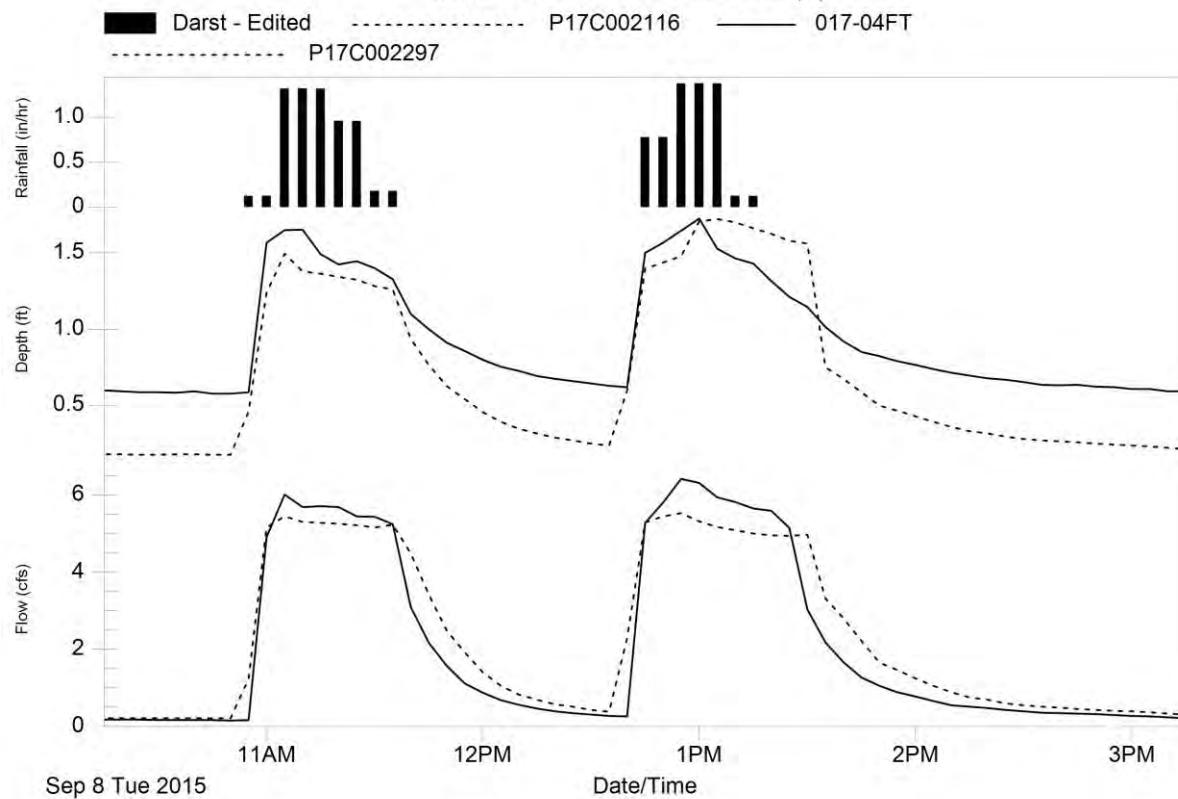
Results from interceptor only model using flow meter data as influent flow to regulator.

Surcharge depth = 1.25 ft

South 017-04FT – Calibration Events

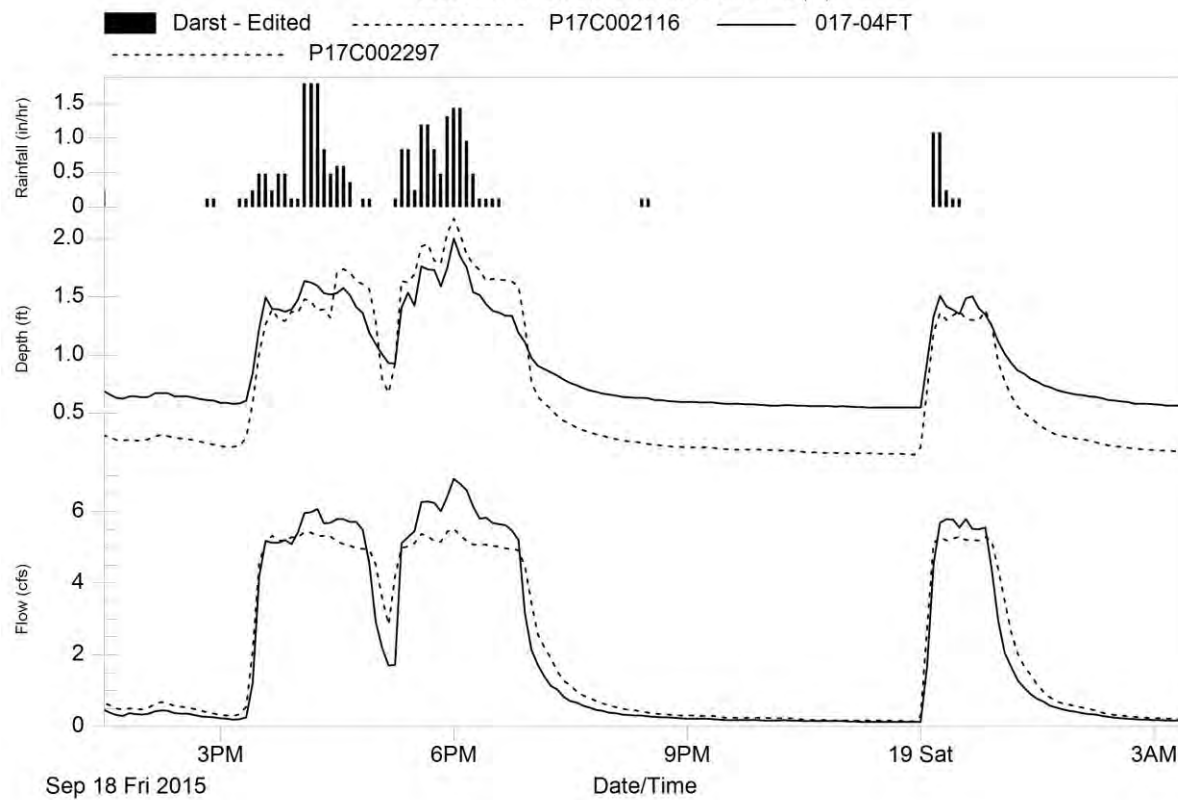
Event of September 8, 2015

Duration: 4.17 h, Total Rainfall: 0.81 (in)



Event of September 18, 2015

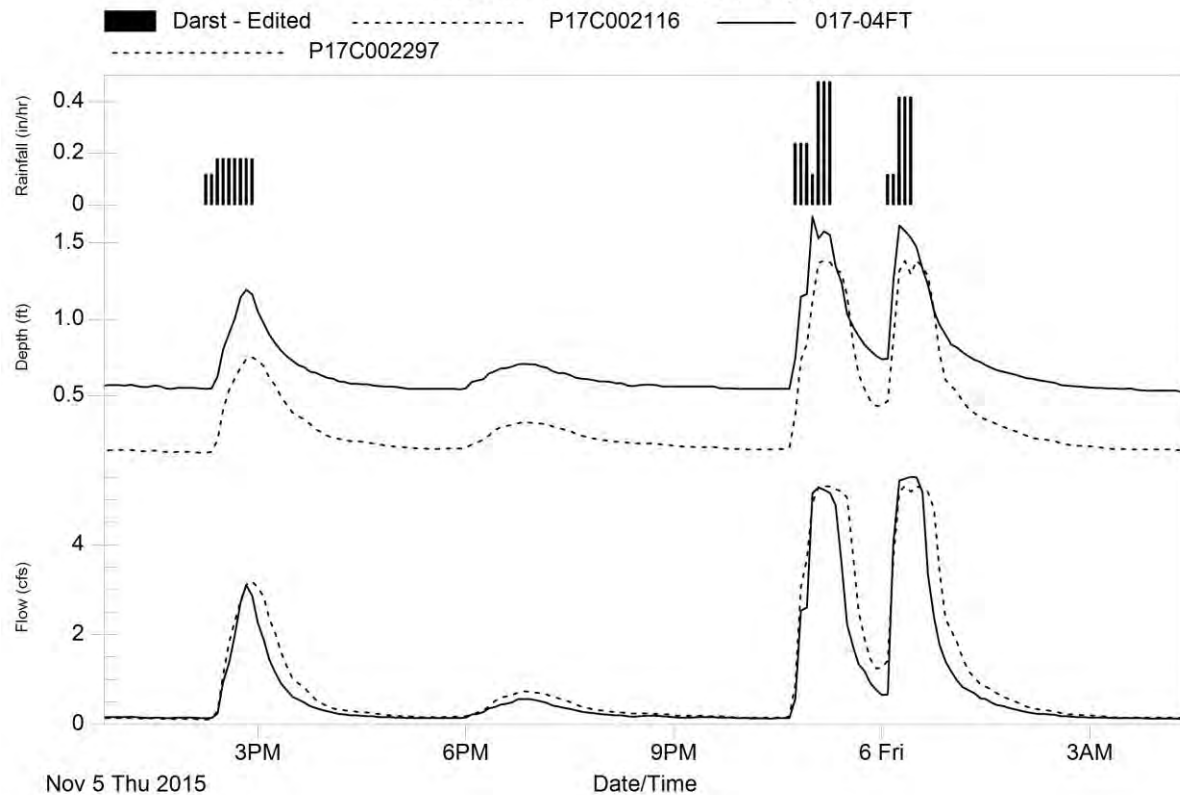
Duration: 11.58 h, Total Rainfall: 1.56 (in)



South 017-04FT – Calibration Events

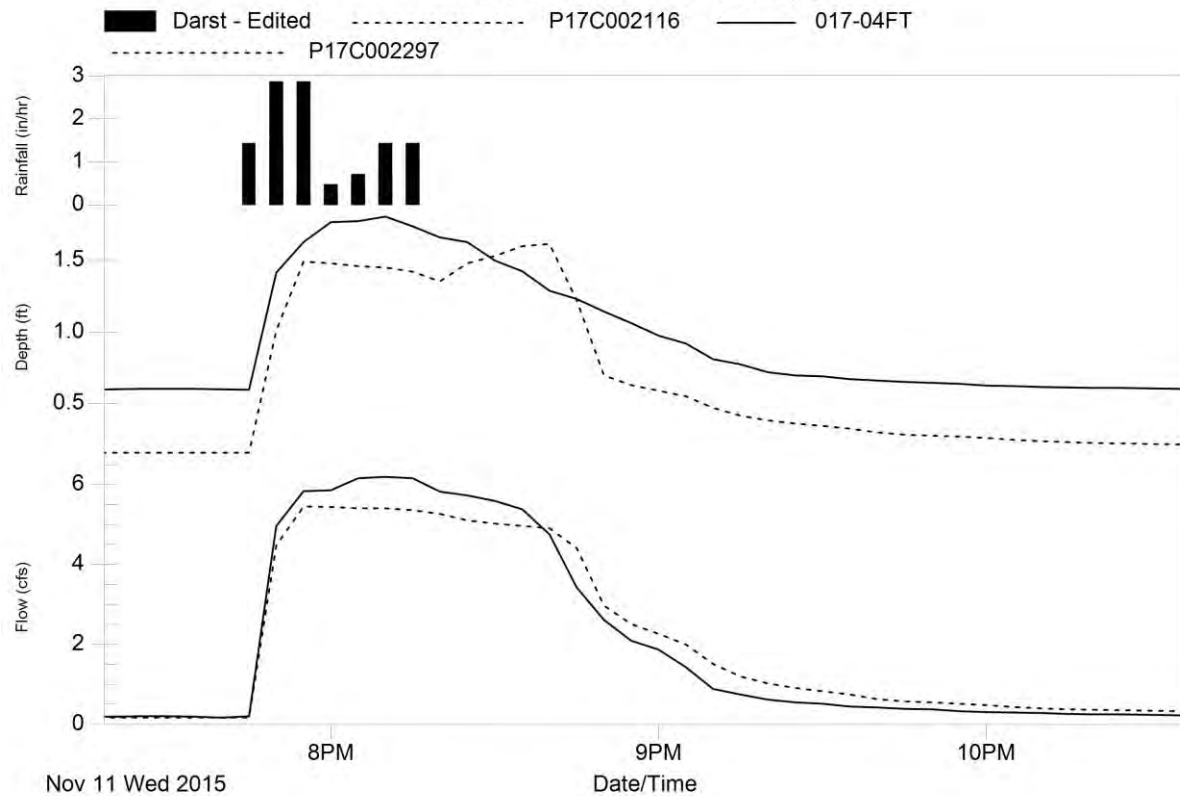
Event of November 5, 2015

Duration: 13 h, Total Rainfall: 0.34 (in)



Event of November 11, 2015

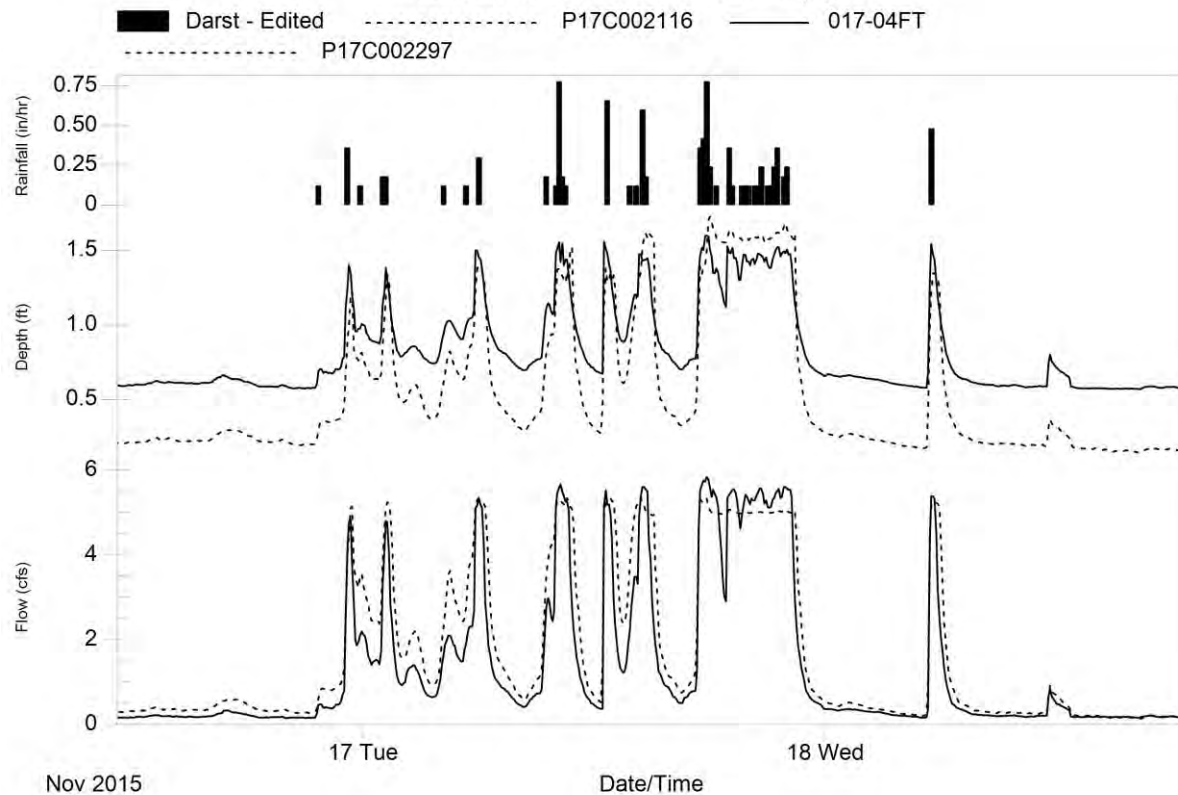
Duration: 2.75 h, Total Rainfall: 0.6 (in)



South 017-04FT – Calibration Events

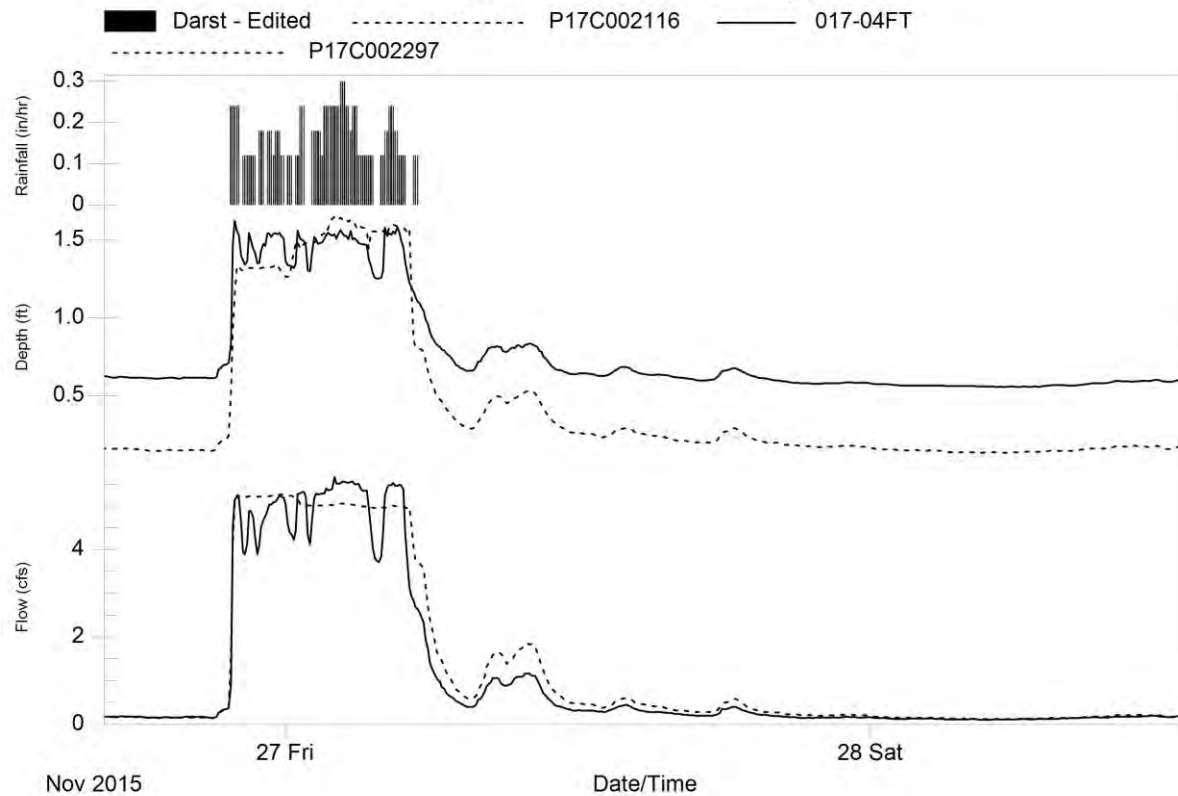
Event of November 16, 2015

Duration: 46.25 h, Total Rainfall: 1.59 (in)



Event of November 26, 2015

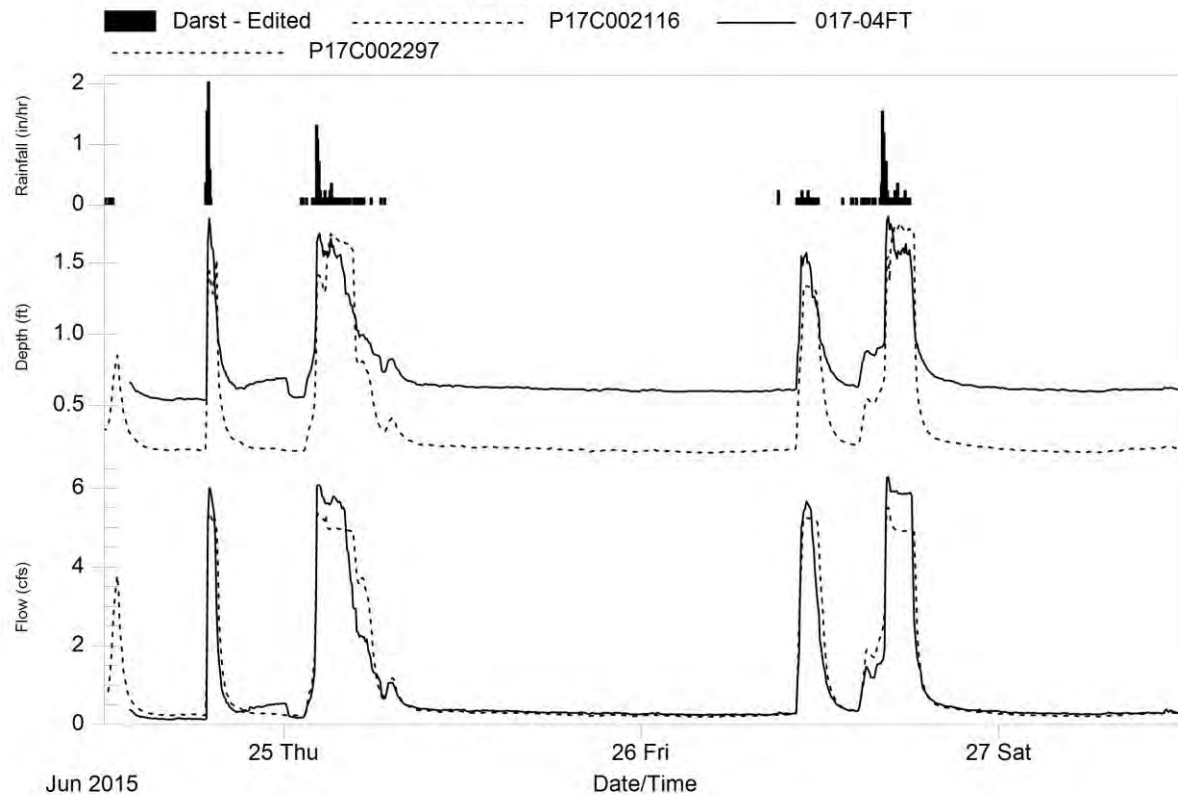
Duration: 37 h, Total Rainfall: 1.01 (in)



South 017-04FT – Verification Events

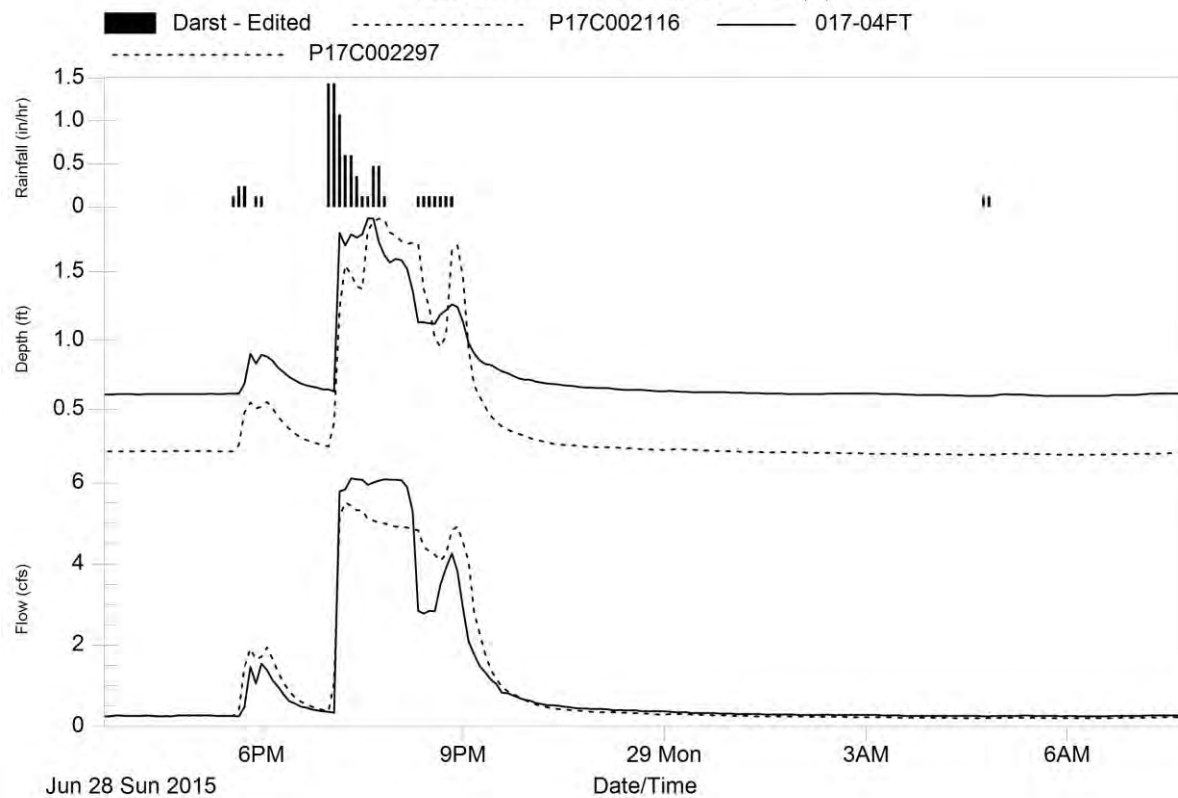
Event of June 24, 2015

Duration: 60.5 h, Total Rainfall: 1.91 (in)



Event of June 28, 2015

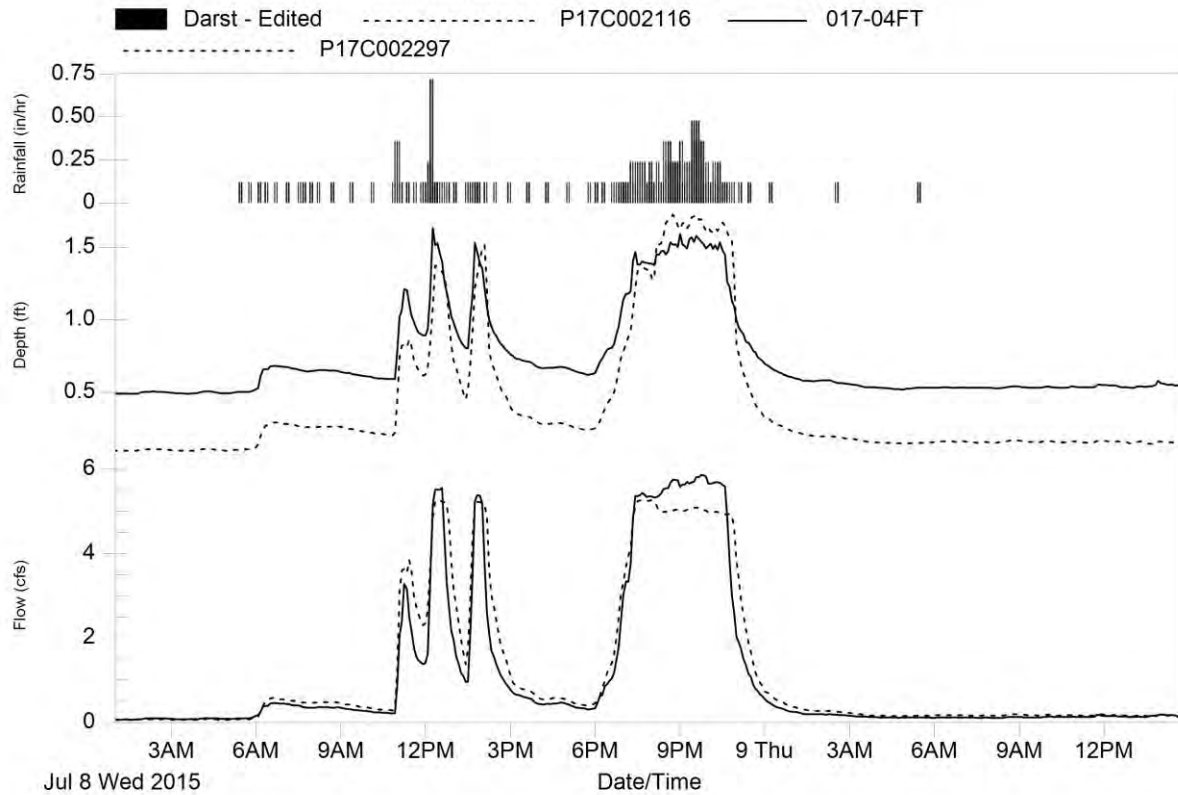
Duration: 13.42 h, Total Rainfall: 0.52 (in)



South 017-04FT – Verification Events

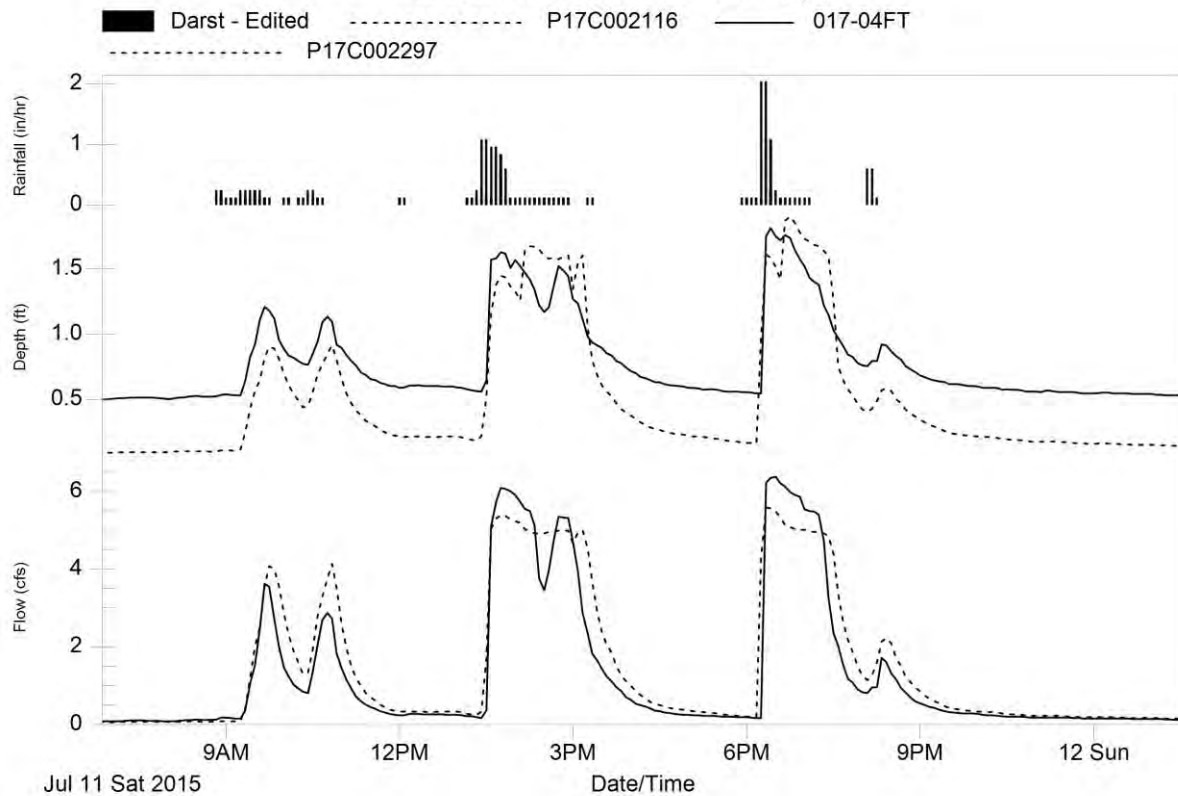
Event of July 8, 2015

Duration: 31.5 h, Total Rainfall: 1.39 (in)



Event of July 11, 2015

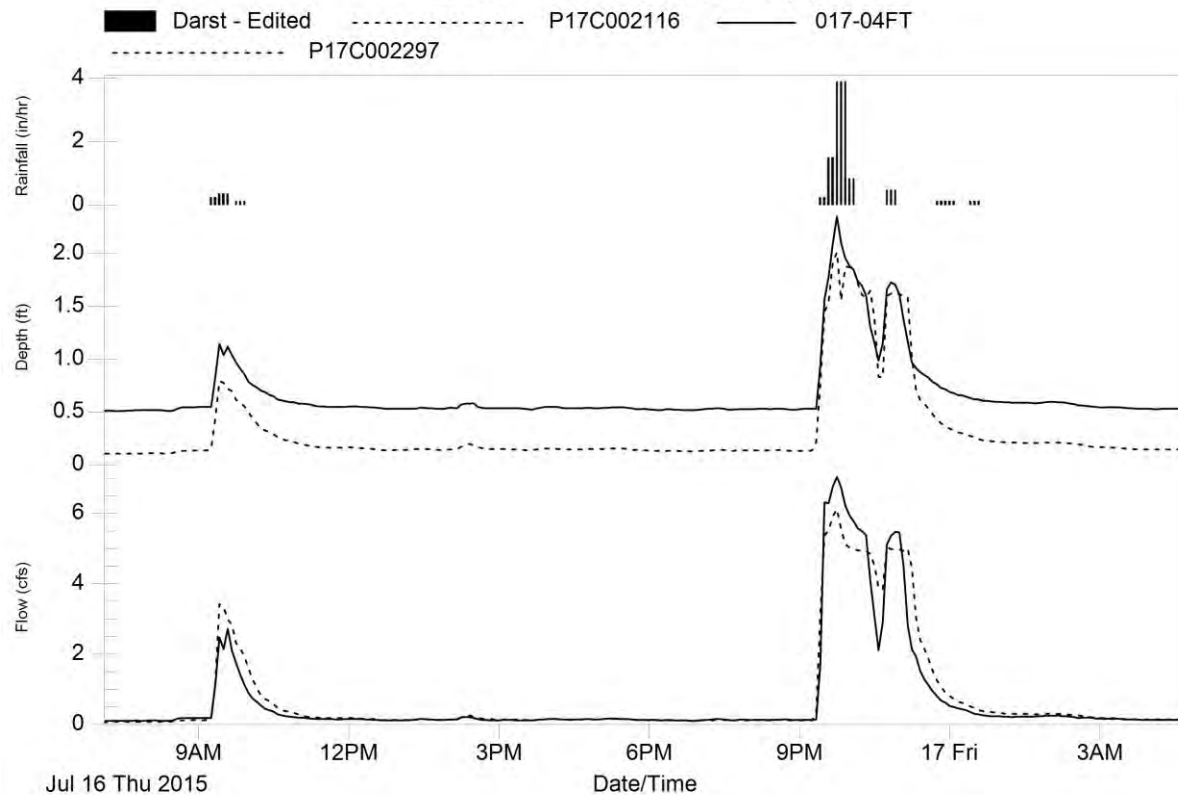
Duration: 15.58 h, Total Rainfall: 1.07 (in)



South 017-04FT – Verification Events

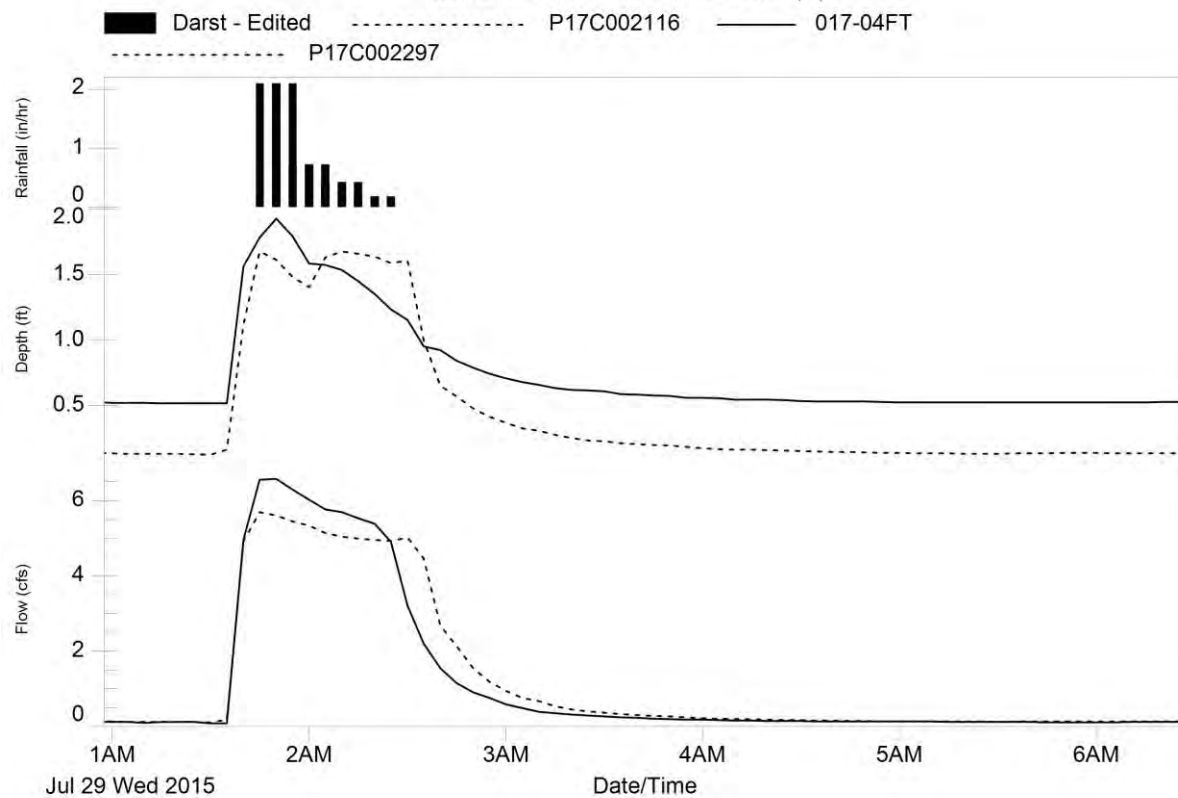
Event of July 16, 2015

Duration: 18 h, Total Rainfall: 1.34 (in)



Event of July 29, 2015

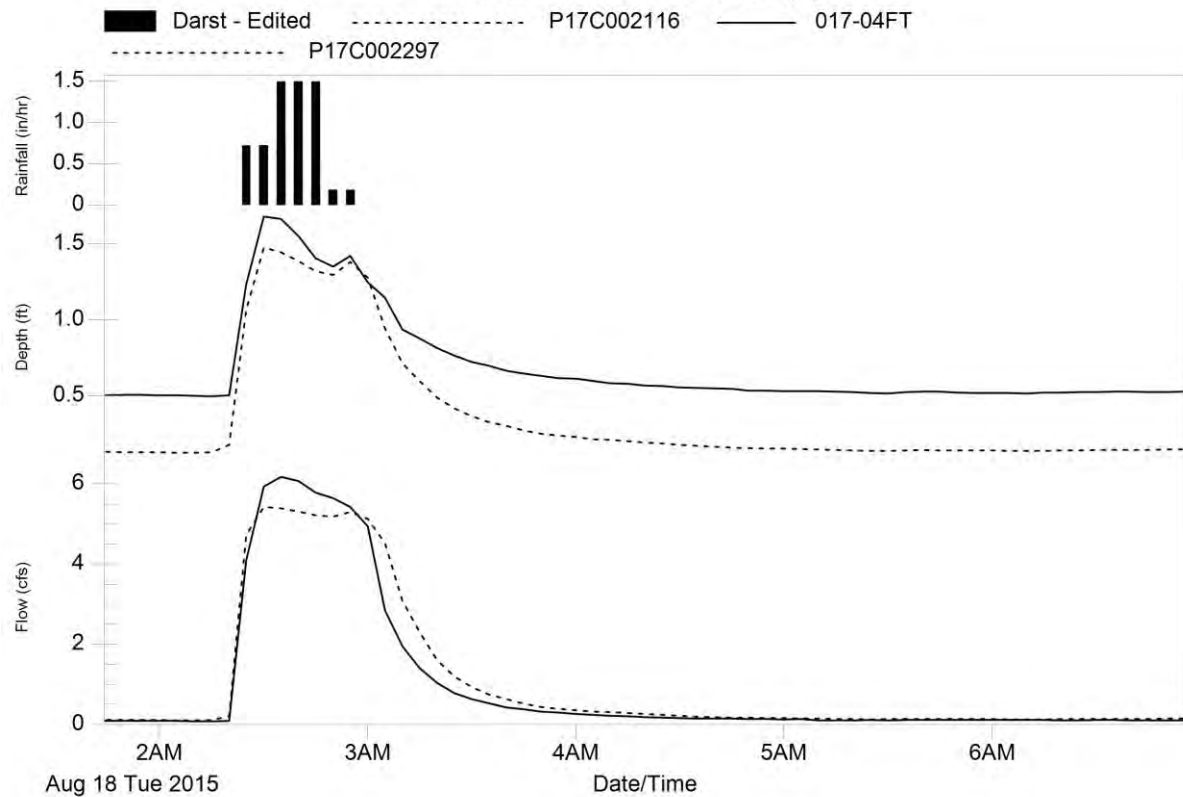
Duration: 4.58 h, Total Rainfall: 0.57 (in)



South 017-04FT – Verification Events

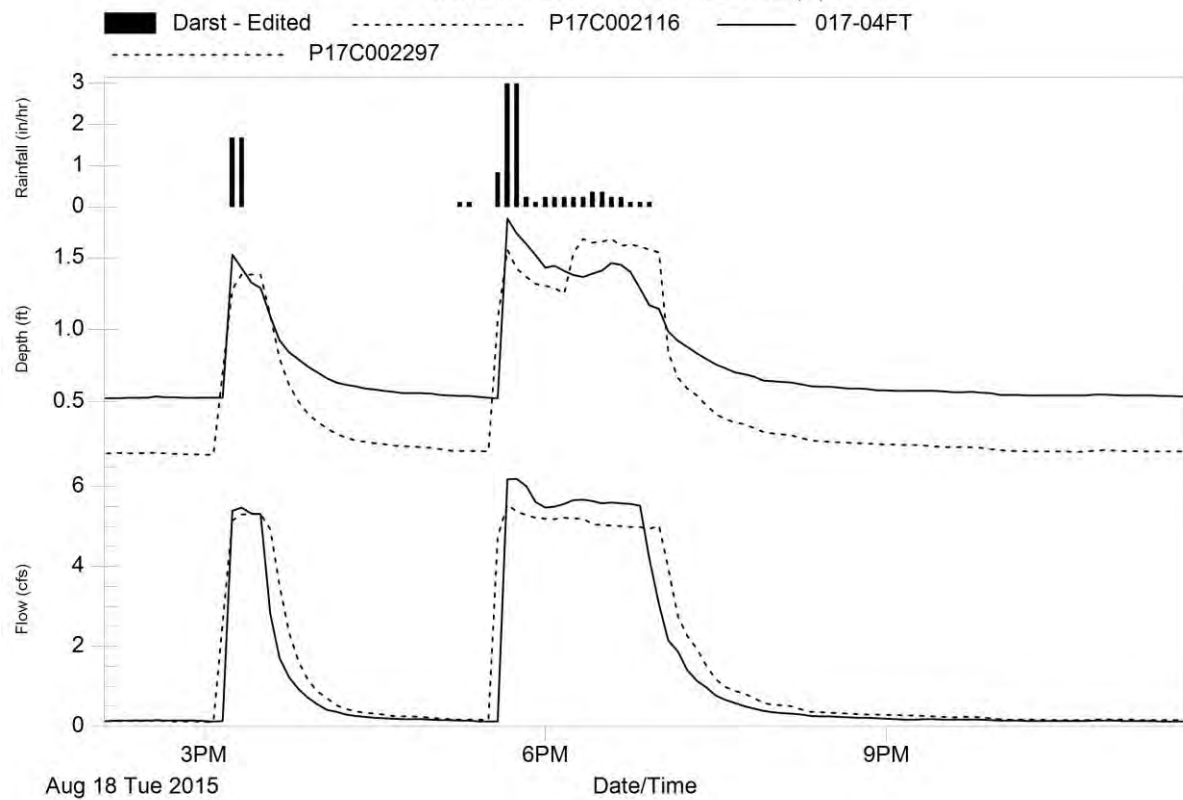
Event of August 18, 2015

Duration: 4.33 h, Total Rainfall: 0.4 (in)

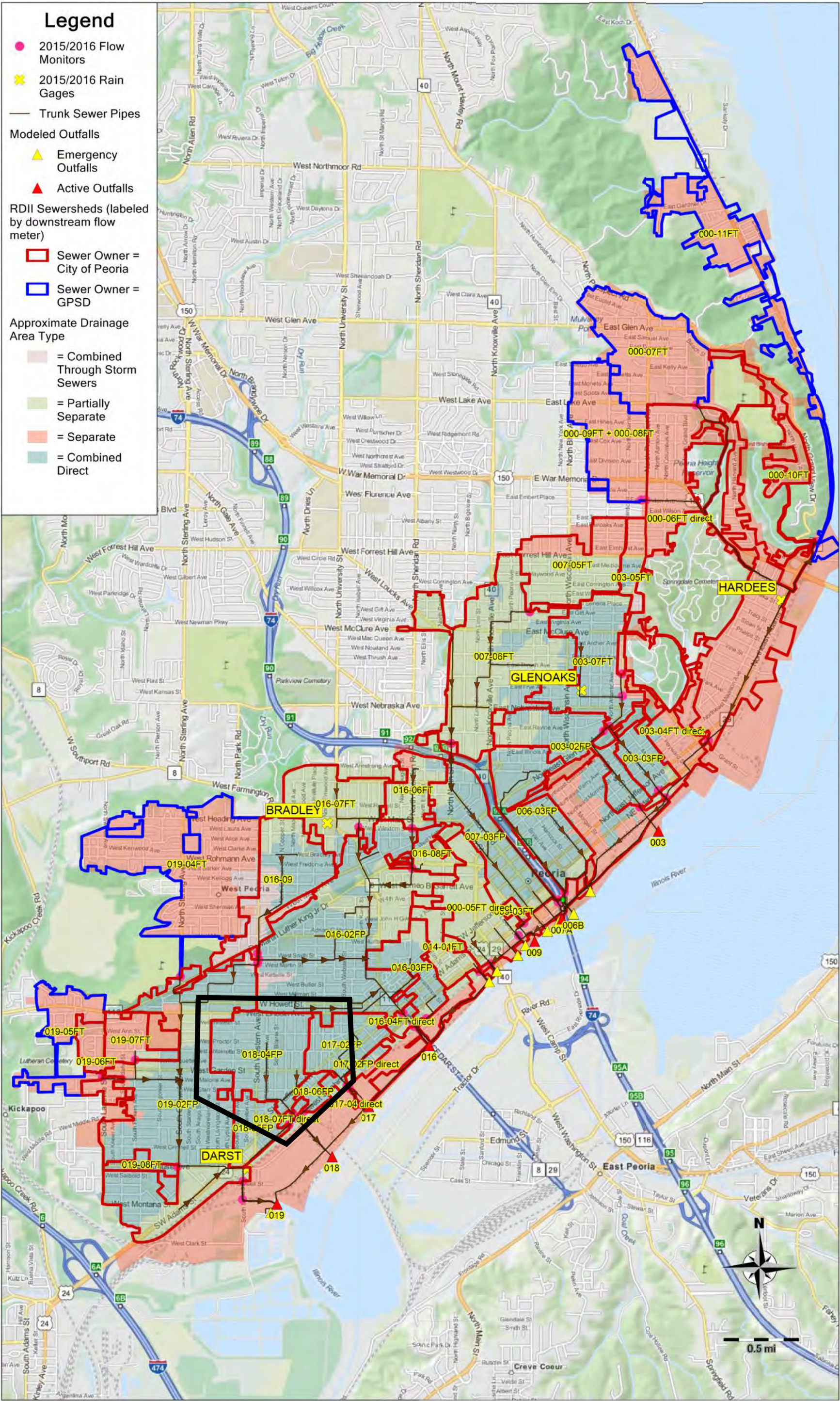


Event of August 18, 2015

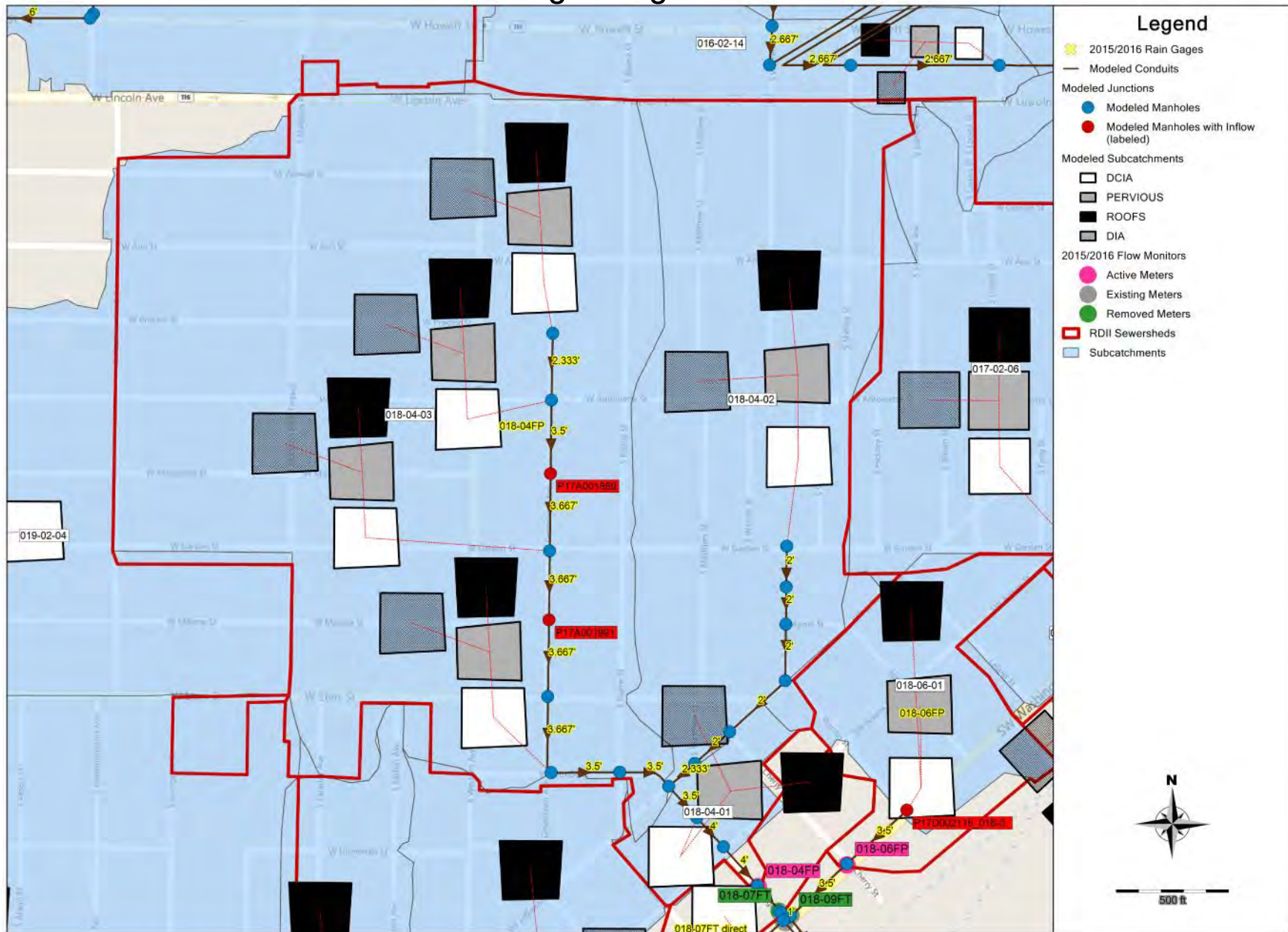
Duration: 7.92 h, Total Rainfall: 0.66 (in)



Flow Monitor 018-04FP Overview Map



018-04 - Sanger Regulator Influent Flow Meter



Sanger 018-04FP

Date	Duration (h)	Rainfall (in)	Maximum Flow (cfs)		Maximum Flow (mgd)		Total Volume (ft³)		Volume (million gallons)		Peak Flow Rate (-15% to +25%)	Flow Volume (-10% to +20%)	Rainfall Variability	
		Thiessen Polygon	Observed	Modeled	Observed	Modeled	Observed	Modeled	Observed	Modeled				
CALIBRATION EVENTS - FLOW														
7/11/2015 8:30	13.08	1.07	85.8	70.0	55.4	45.2	309200	256500	2.3	1.9	-18%	-17%	Possibly uniform	
9/8/2015 10:50	3.83	0.81	57.7	71.3	37.3	46.0	148900	185100	1.1	1.4	24%	24%	Variable	
9/18/2015 13:10	13.25	1.62	108.9	82.5	70.3	53.3	403200	391000	3.0	2.9	-24%	-3%	possibly uniform	
11/5/2015 14:05	13.42	0.34	Bad Meter Data											
11/11/2015 19:40	1.83	0.6	70.2	92.7	45.4	59.9	112600	130600	0.8	1.0	32%	16%	variable	
11/16/2015 20:45	30.33	1.51	30.3	40.3	19.5	26.0	518000	400100	3.9	3.0	33%	-23%	variable	
11/26/2015 21:30	9.83	1.01	15.7	18.4	10.2	11.9	229600	238500	1.7	1.8	17%	4%	possibly uniform	
12/13/2015 2:45	30.5	1.75	15.6	22.1	10.1	14.3	366100	461300	2.7	3.5	41%	26%	variable	
12/20/2015 23:25	10.83	0.68	16.4	19.4	10.6	12.5	131200	163400	1.0	1.2	18%	25%	variable	
12/23/2015 7:05	4.08	0.67	43.4	45.0	28.1	29.1	168200	156400	1.3	1.2	4%	-7%	variable	
12/28/2015 3:20	16.17	2.54	84.0	90.1	54.2	58.2	623500	640800	4.7	4.8	7%	3%	variable	
6/15/2015 16:10	38.33	1.48	84.8	90.6	54.8	58.6	475400	393900	3.6	2.9	7%	-17%	Variable	
6/24/2015 4:20	67.42	2.15	44.6	80.5	28.8	52.0	531700	572800	4.0	4.3	80%	8%	Variable	
6/28/2015 17:30	4.75	0.51	66.5	50.0	42.9	32.3	147900	114400	1.1	0.9	-25%	-23%	Variable	
7/8/2015 5:15	25.83	1.39	28.3	27.2	18.3	17.6	302900	337100	2.3	2.5	-4%	11%	Variable	
7/16/2015 9:05	17.08	1.34	Bad Meter Data											
7/29/2015 1:25	2.67	0.57	79.4	86.1	51.3	55.6	103800	123700	0.8	0.9	8%	19%	possibly uniform	
8/18/2015 2:10	2.33	0.4	52.6	69.3	34.0	44.8	69670	81510	0.5	0.6	32%	17%	possibly uniform	
8/18/2015 14:55	6.33	0.66	63.0	95.1	40.7	61.4	138000	159100	1.0	1.2	51%	15%	variable	
								WEIGHTED AVERAGES						
								Calibration - Possibly Uniform		-19%	-6%	possibly uniform variable		
								Calibration - Variable		20%	3%			
								Calibration Weighted - All Events		5%	0%	possibly uniform variable		
								Verification - Possibly Uniform		18%	18%			
								Verification - Variable		20%	-1%			
								Verification Weighted - All Events		19%	1%			
								Weighted Average - All Events		11%	1%			
								NET AVERAGES						possibly uniform variable
								Calibration - Possibly Uniform		-9%	-5%			
								Calibration - Variable		23%	9%			
								Calibration Net - All Events		13%	5%			
								Verification - Possibly Uniform		20%	18%			
								Verification - Variable		22%	-1%	possibly uniform variable		
								Verification Net - All Events		21%	4%			
Net Average - All Events		17%	5%											

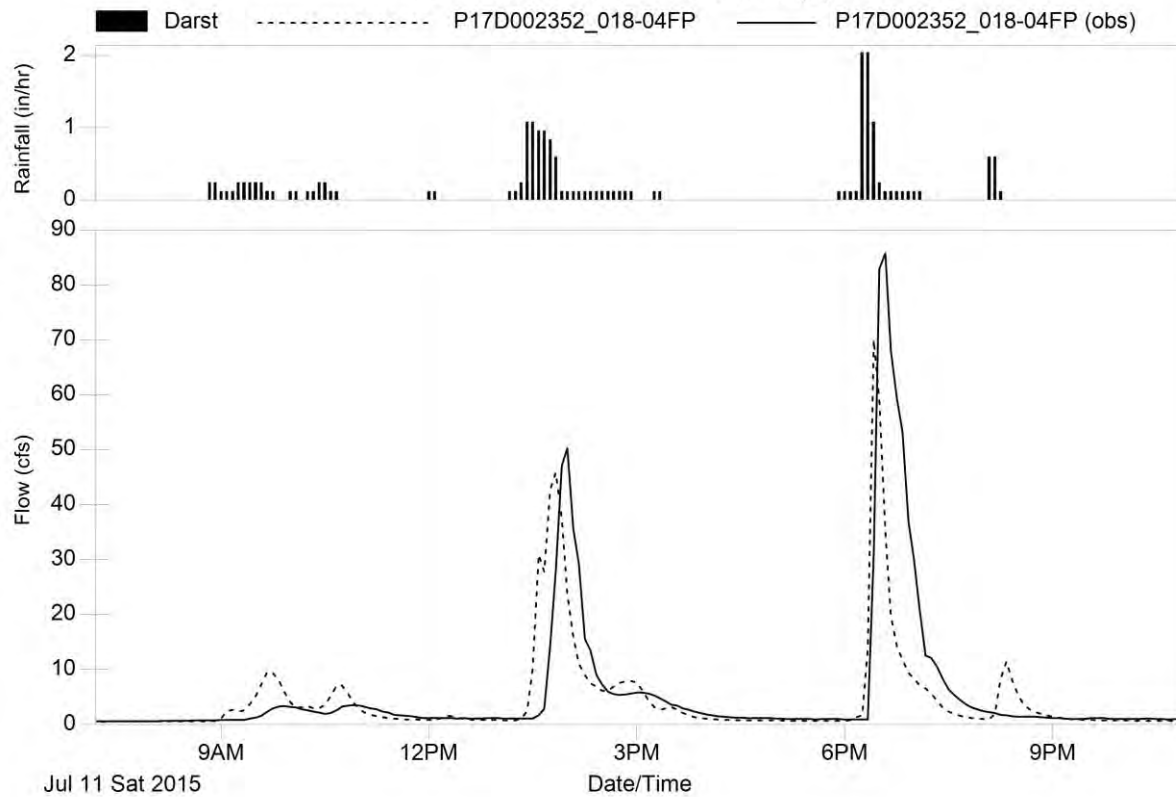
Sanger 018-04 Depth

Date	Duration (h)	Maximum Depth (ft)		Minimum Depth (ft)		Average Depth (ft)		Maximum Depth (ft)	Minimum Depth (ft)	Average Depth (ft)	Rainfall Variability
		metered	modeled	metered	modeled	metered	modeled	Surcharged: -0.33 ft to +1.67 ft	Surcharged: -0.33 ft to +1.67 ft	Surcharged: -0.33 ft to +1.67 ft	
CALIBRATION EVENTS - DEPTH								Non-Surcharged: -0.33 ft to +0.33 ft	Non-Surcharged: -0.33 ft to +0.33 ft	Non-Surcharged: -0.33 ft to +0.33 ft	
7/11/2015 8:30:00	13.08	1.8	1.4	0.2	0.1	0.4	0.3	-0.4	-0.1	-0.02	variable
9/8/2015 10:50:00	3.83	1.5	1.1	0.2	0.1	0.5	0.5	-0.3	-0.02	0.00	variable
9/18/2015 13:10:00	13.25	2.0	1.6	0.2	0.1	0.4	0.3	-0.5	-0.02	-0.02	possibly uniform
11/5/2015 14:05:00	13.42	0.5	0.6	0.1	0.1	0.2	0.2	0.1	-0.03	0.00	possibly uniform
11/11/2015 19:40:00	1.83	1.6	1.2	0.2	0.1	0.6	0.6	-0.3	-0.03	-0.03	variable
11/16/2015 20:45:00	30.33	1.0	0.8	0.2	0.1	0.3	0.3	-0.1	-0.03	0.02	variable
11/26/2015 21:30:00	9.83	0.7	0.7	0.2	0.1	0.4	0.5	0.01	-0.02	0.1	possibly uniform
12/13/2015 2:45:00	30.50	0.6	0.7	0.2	0.1	0.3	0.3	0.03	-0.05	0.02	variable
12/20/2015 23:25:00	10.83	0.7	0.7	0.2	0.1	0.3	0.3	0.01	-0.05	0.02	variable
12/23/2015 7:05:00	4.08	1.2	1.0	0.2	0.1	0.5	0.5	-0.2	-0.1	0.01	variable
12/28/2015 3:20:00	16.17	1.7	1.4	0.2	0.2	0.5	0.5	-0.3	-0.01	0.04	variable
VERIFICATION EVENTS - DEPTH											
6/15/2015 16:10:00	38.33	1.8	1.4	0.2	0.1	0.3	0.2	-0.4	-0.1	-0.05	variable
6/24/2015 4:20:00	67.42	1.2	1.5	0.2	0.1	0.3	0.2	0.2	-0.1	-0.01	variable
6/28/2015 17:30:00	4.75	1.6	2.1	0.2	0.2	0.4	0.5	0.5	-0.1	0.1	variable
7/8/2015 5:15:00	25.83	0.9	0.8	0.2	0.1	0.3	0.3	-0.1	-0.1	-0.02	variable
7/16/2015 9:05:00	17.08	2.5	3.6	0.2	0.1	0.3	0.3	1.2	-0.1	-0.01	variable
7/29/2015 1:25:00	2.67	1.8	1.3	0.2	0.1	0.5	0.4	-0.5	-0.1	-0.05	possibly uniform
8/18/2015 2:10:00	2.33	1.4	1.1	0.2	0.1	0.4	0.4	-0.4	-0.1	-0.04	possibly uniform
8/18/2015 14:55:00	6.33	1.6	1.2	0.2	0.2	0.4	0.4	-0.4	-0.05	-0.01	variable
				WEIGHTED AVERAGES							
				Calibration - Possibly Uniform				-0.3	-0.03	0.02	possibly uniform
				Calibration - Variable				-0.3	-0.04	0.01	variable
				Calibration Weighted - All Events				-0.3	-0.04	0.01	All Events
				Verification - Possibly Uniform				-0.4	-0.1	-0.04	possibly uniform
				Verification - Variable				0.3	-0.1	0.01	variable
				Verification Weighted - All Events				0.1	-0.1	-0.01	All Events
				Weighted Average - All Events				-0.1	-0.1	0.00	
				NET AVERAGES							
				Calibration - Possibly Uniform				-0.1	-0.03	0.01	possibly uniform
				Calibration - Variable				-0.2	-0.04	0.01	variable
				Calibration Net - All Events				-0.2	-0.03	0.01	All Events
				Verification - Possibly Uniform				-0.4	-0.1	-0.04	possibly uniform
				Verification - Variable				0.2	-0.1	0.00	variable
				Verification Net - All Events				0.03	-0.1	-0.01	All Events
				Net Average - All Events				-0.1	-0.05	0.00	

018-04FP Graphs – Calibration Events

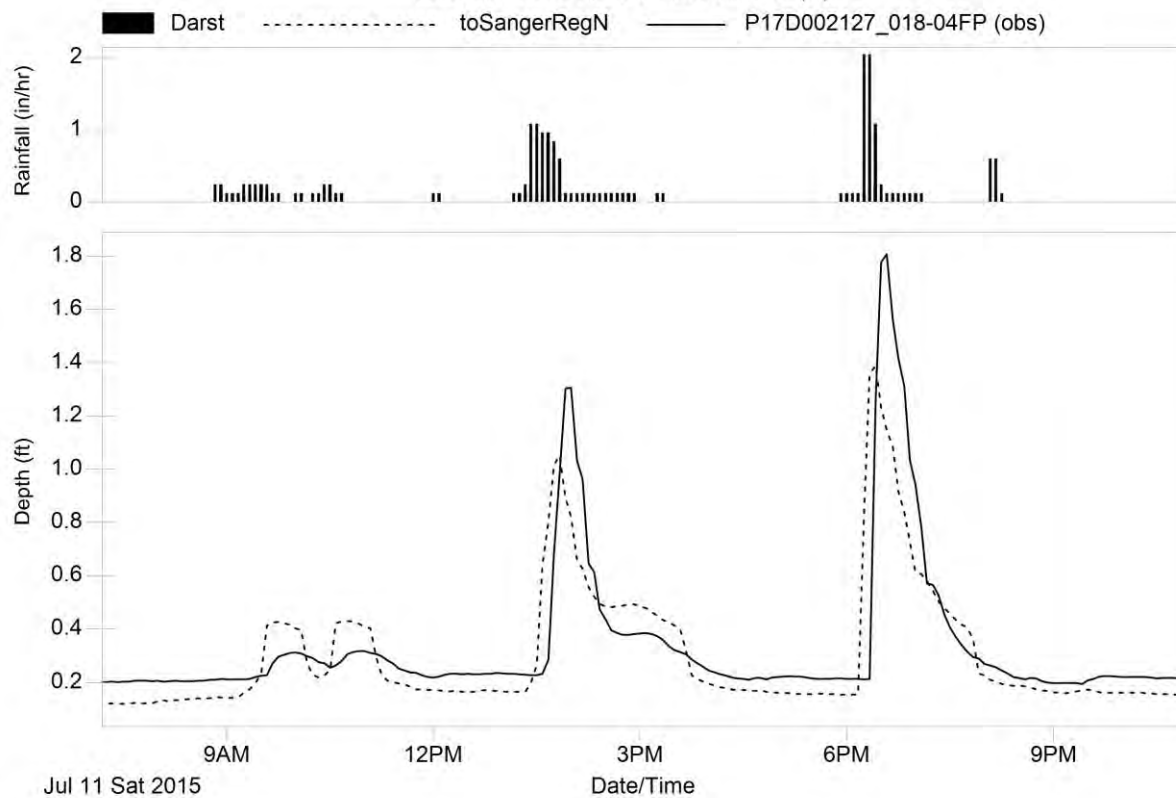
Event of July 11, 2015

Duration: 13.08 h, Total Rainfall: 1.07 (in)



Event of July 11, 2015

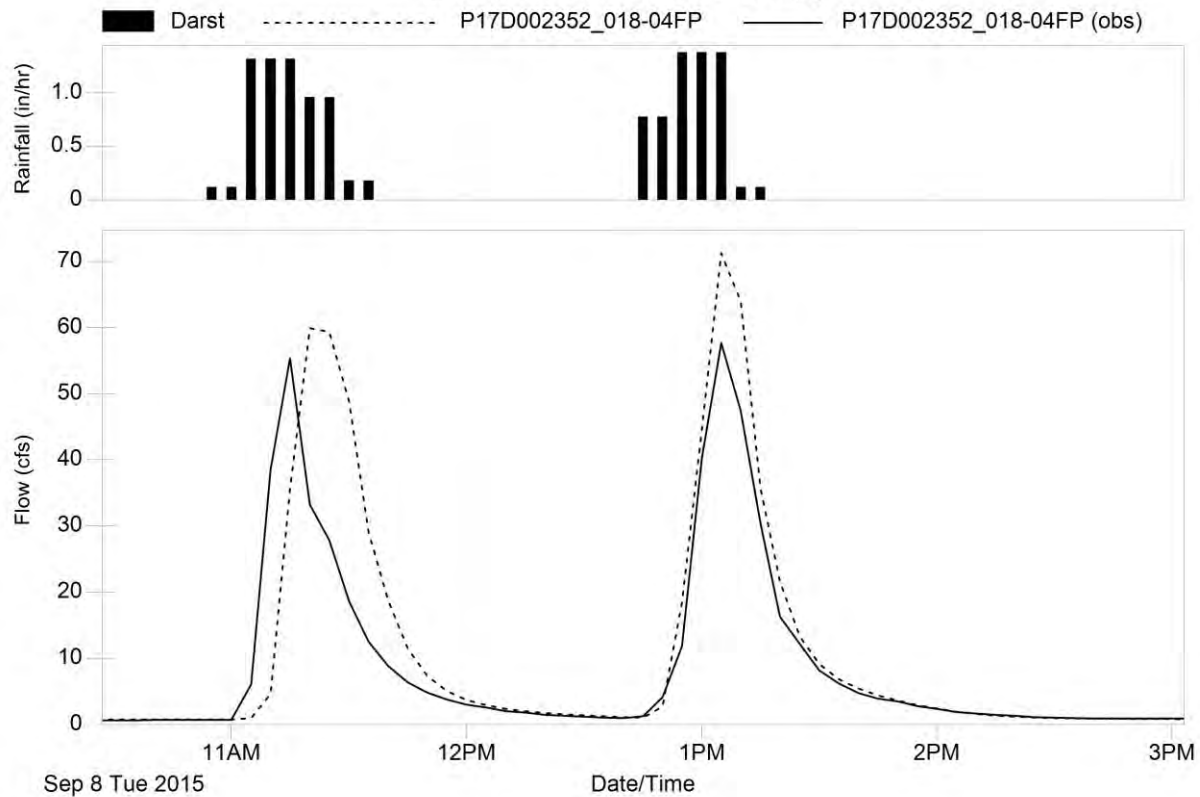
Duration: 13.08 h, Total Rainfall: 1.07 (in)



018-04FP Graphs – Calibration Events

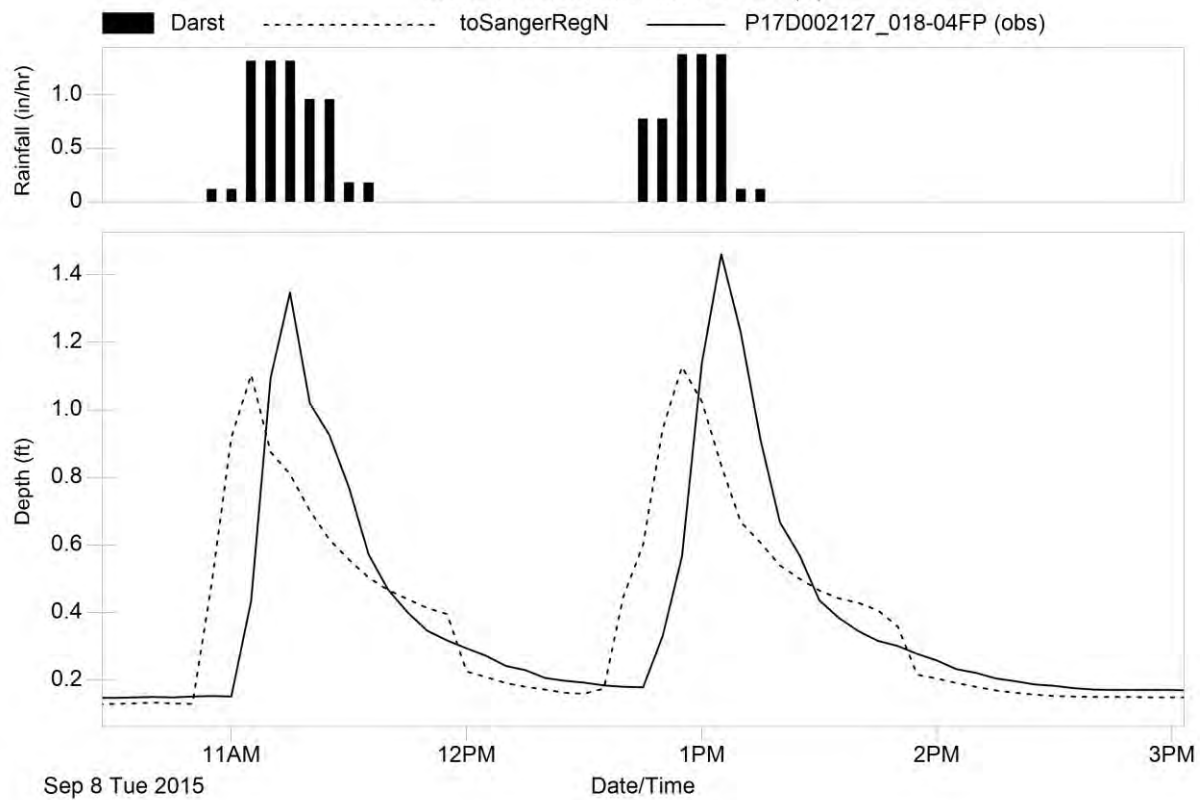
Event of September 8, 2015

Duration: 3.83 h, Total Rainfall: 0.81 (in)



Event of September 8, 2015

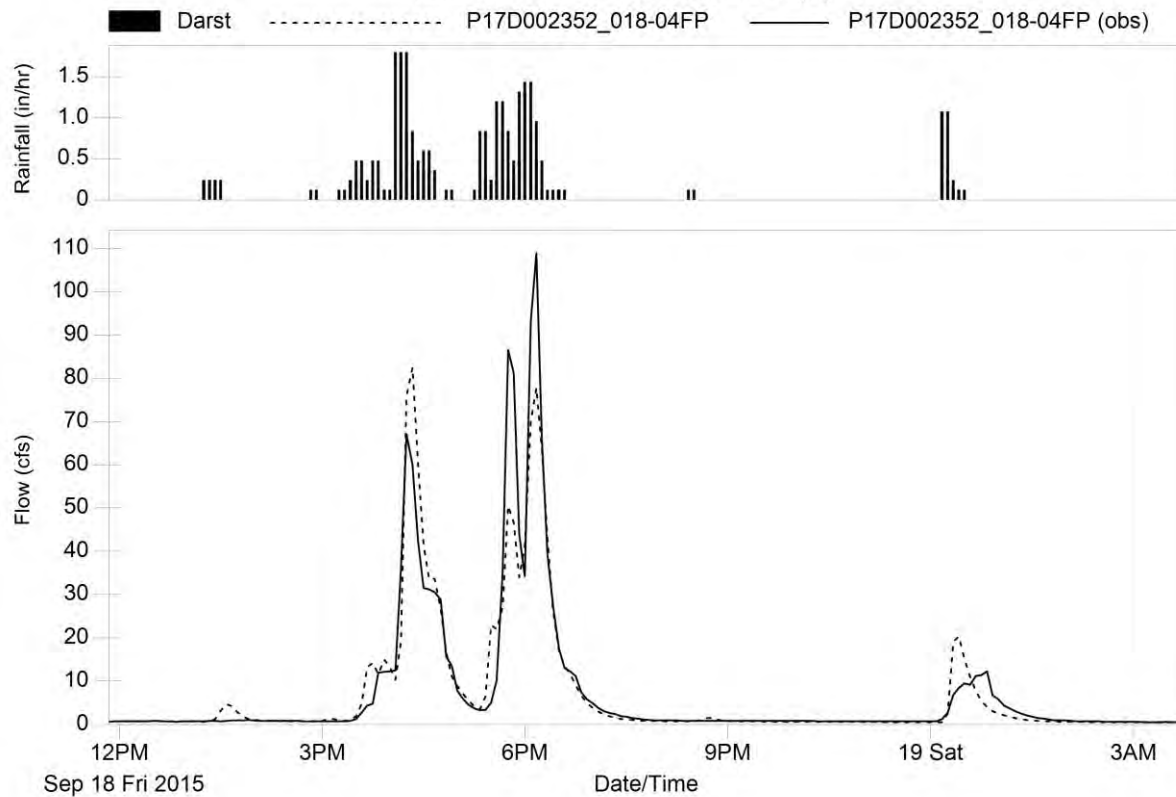
Duration: 3.83 h, Total Rainfall: 0.81 (in)



018-04FP Graphs – Calibration Events

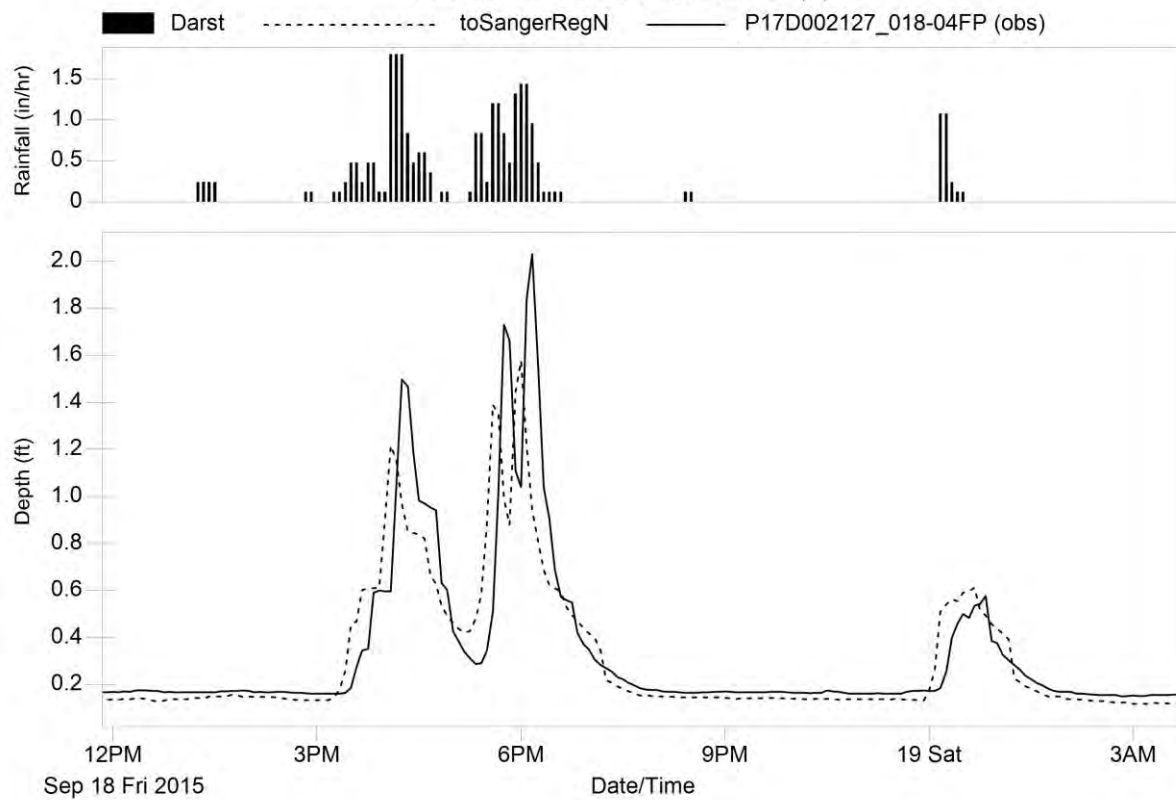
Event of September 18, 2015

Duration: 13.25 h, Total Rainfall: 1.62 (in)



Event of September 18, 2015

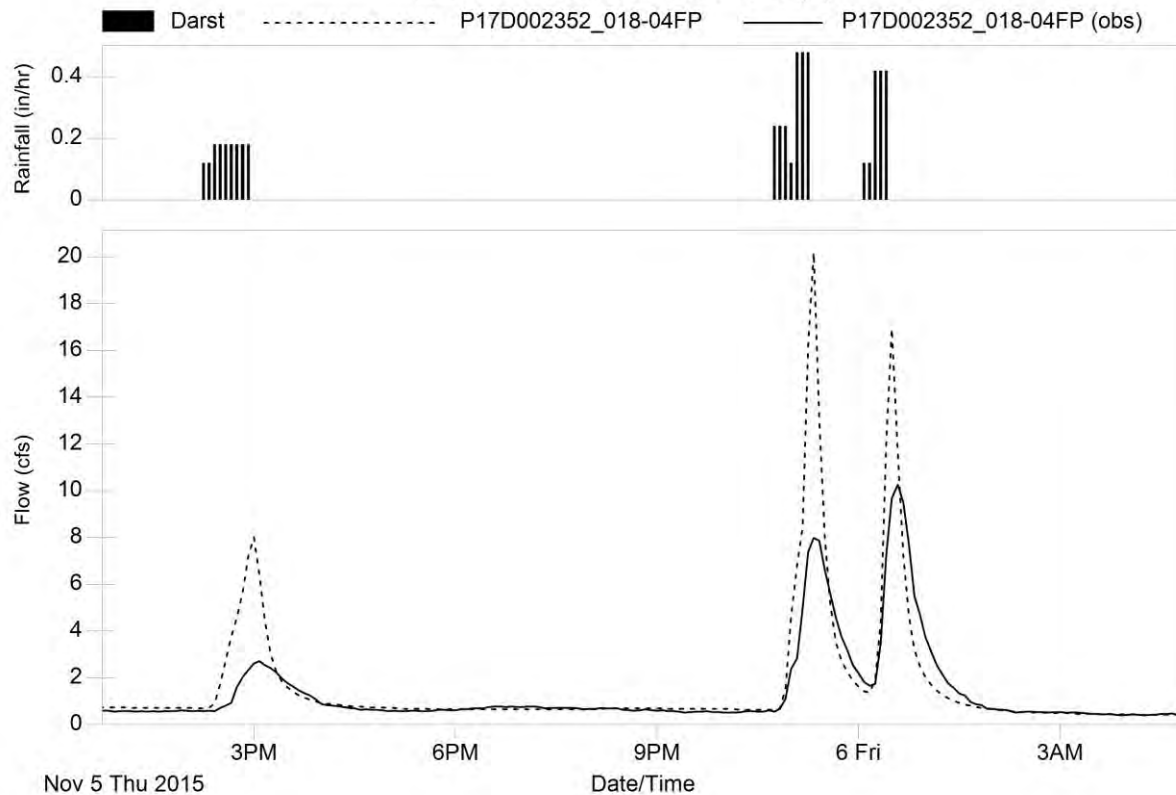
Duration: 13.25 h, Total Rainfall: 1.62 (in)



018-04FP Graphs – Calibration Events

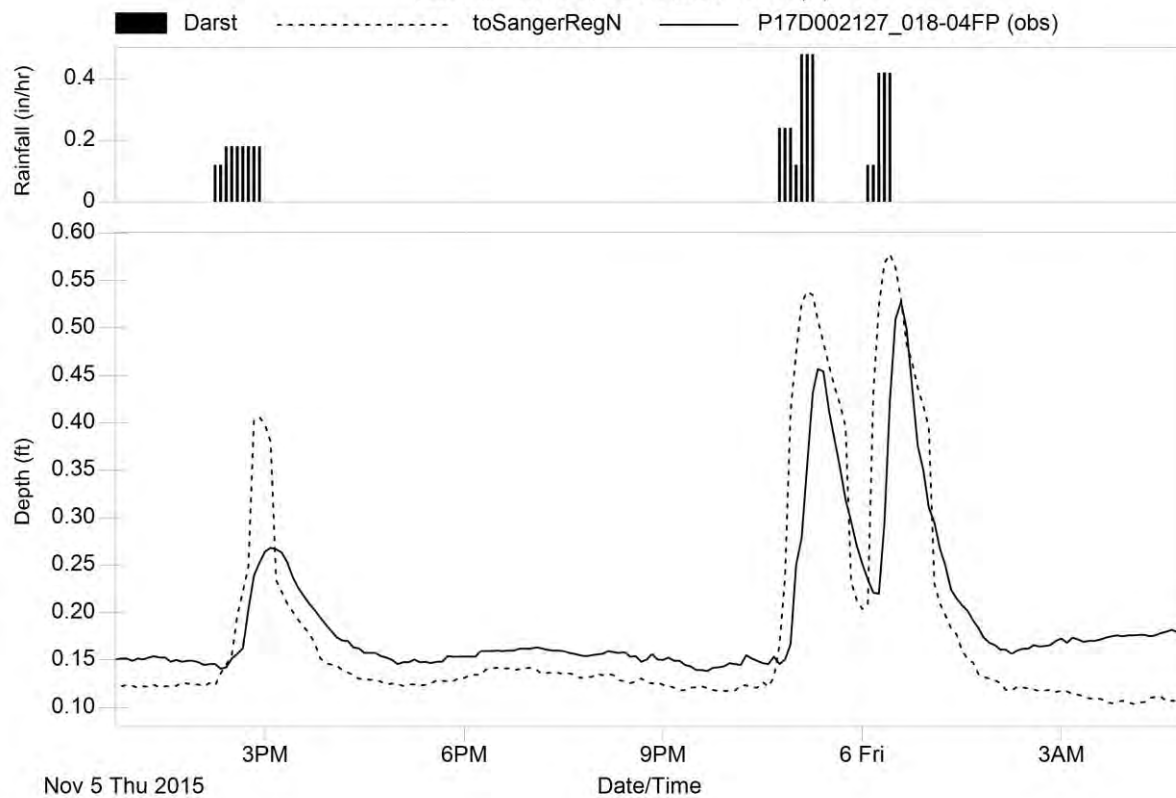
Event of November 5, 2015

Duration: 13.42 h, Total Rainfall: 0.34 (in)



Event of November 5, 2015

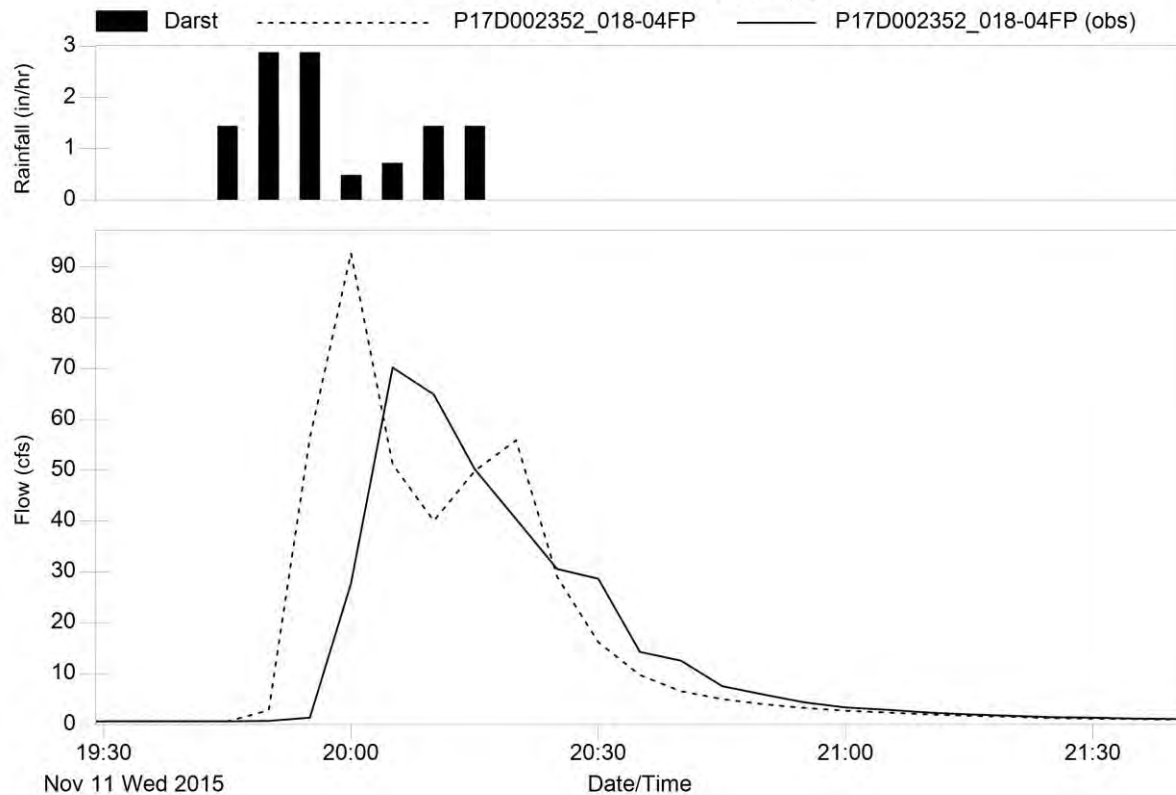
Duration: 13.42 h, Total Rainfall: 0.34 (in)



018-04FP Graphs – Calibration Events

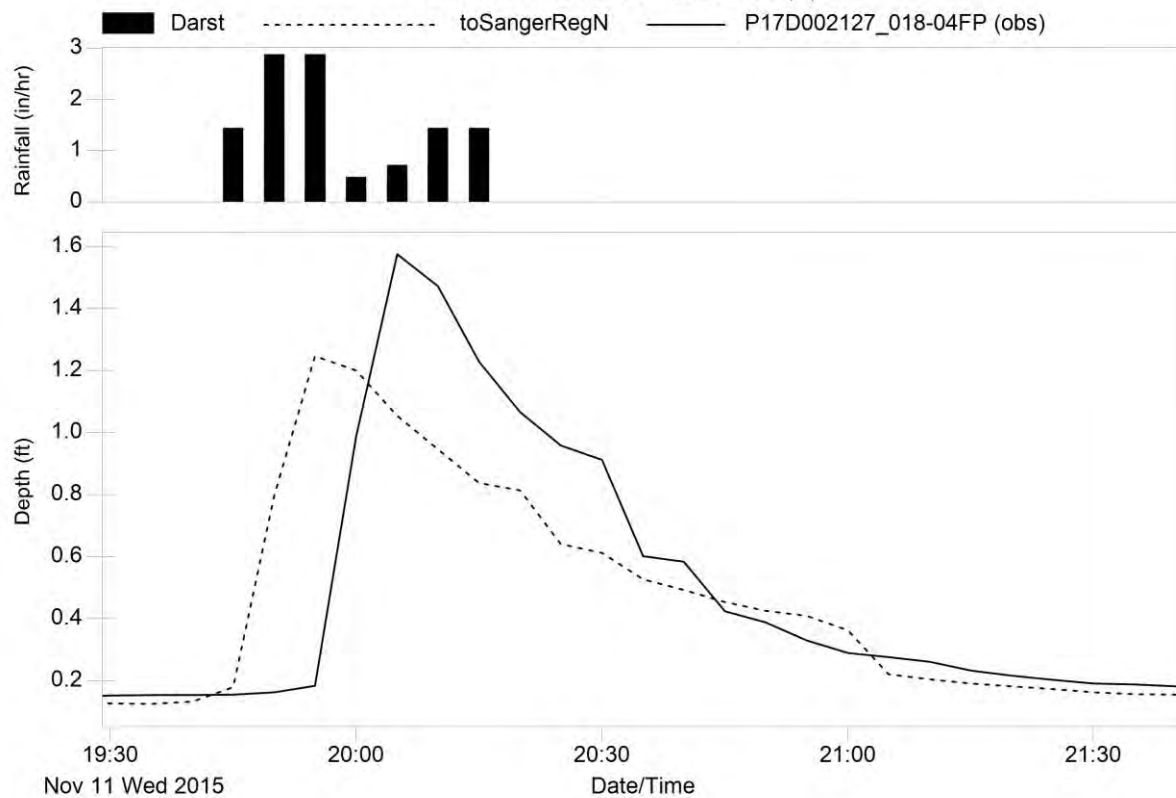
Event of November 11, 2015

Duration: 1.83 h, Total Rainfall: 0.6 (in)



Event of November 11, 2015

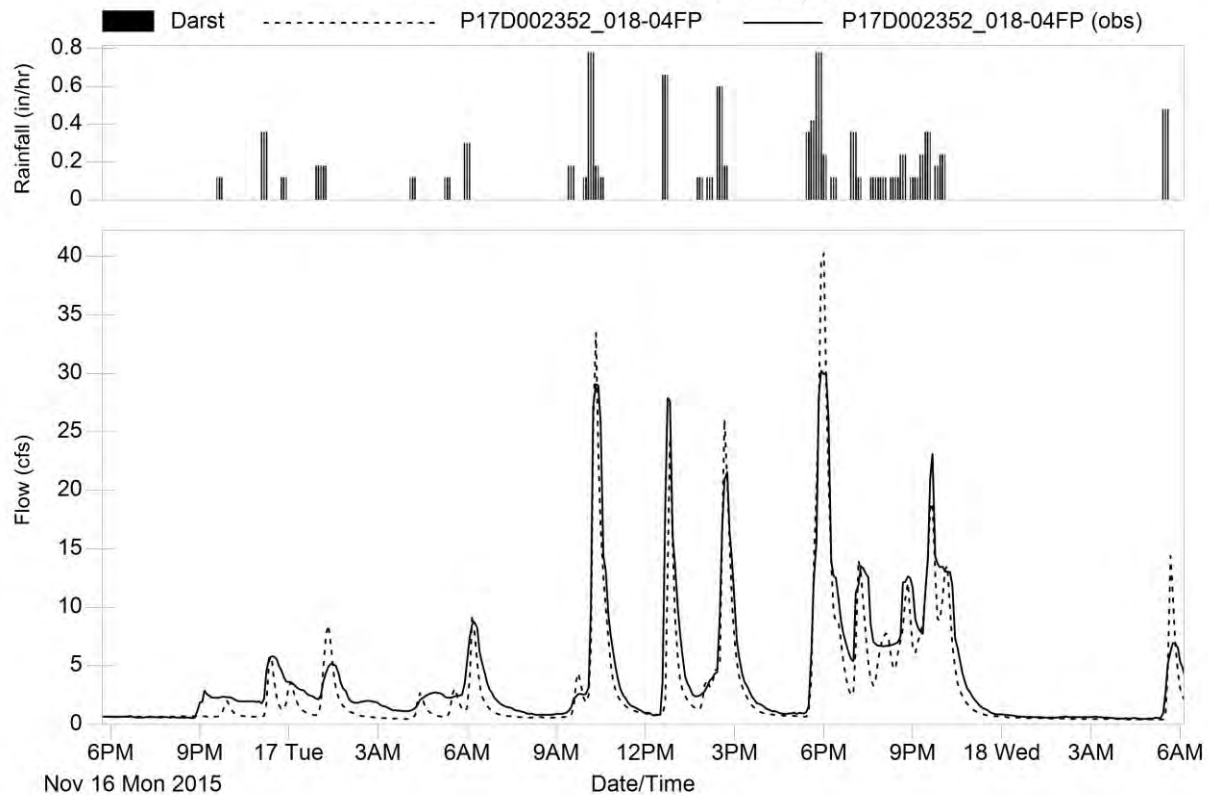
Duration: 1.83 h, Total Rainfall: 0.6 (in)



018-04FP Graphs – Calibration Events

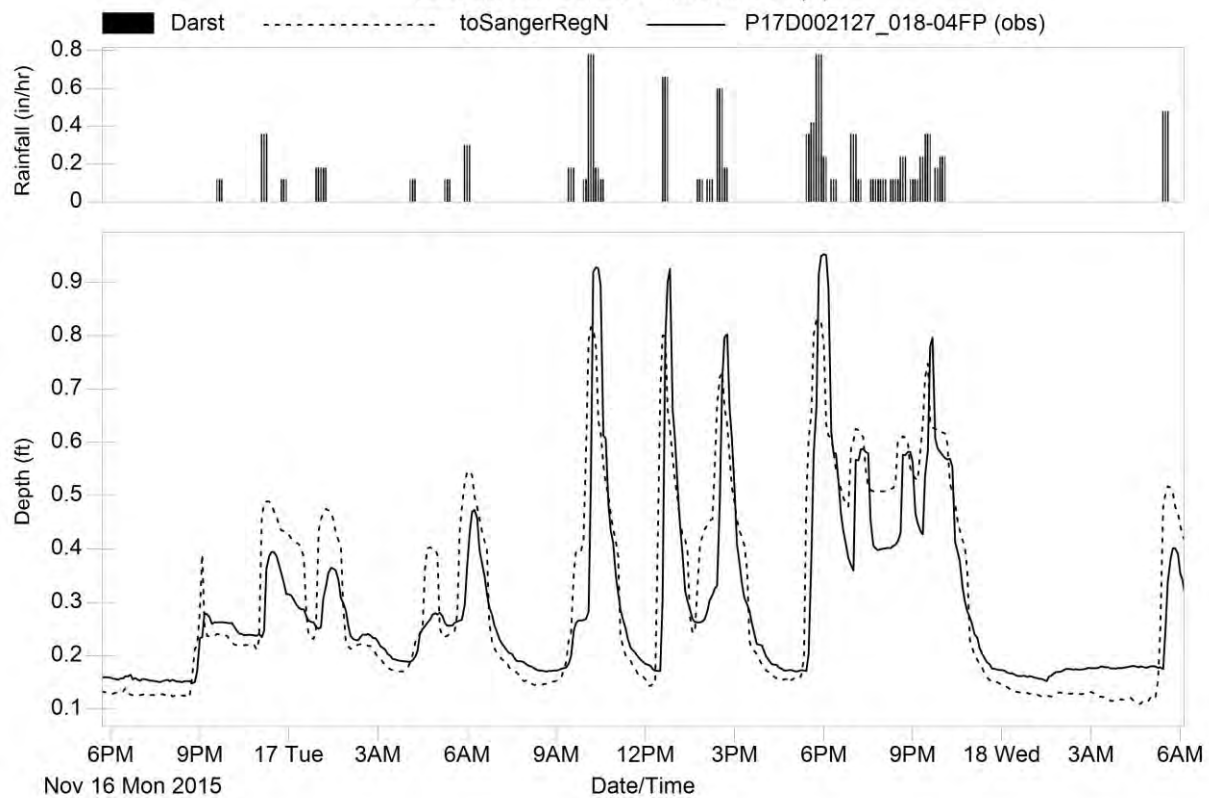
Event of November 16, 2015

Duration: 30.33 h, Total Rainfall: 1.51 (in)



Event of November 16, 2015

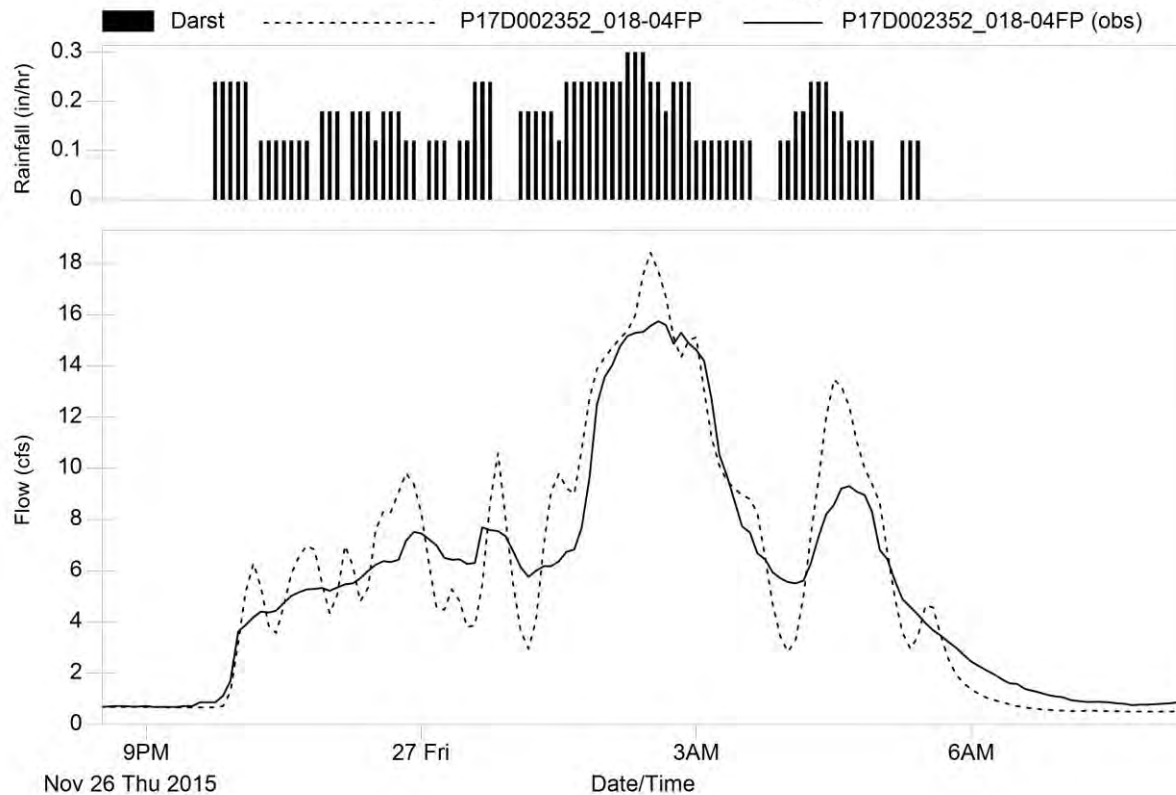
Duration: 30.33 h, Total Rainfall: 1.51 (in)



018-04FP Graphs – Calibration Events

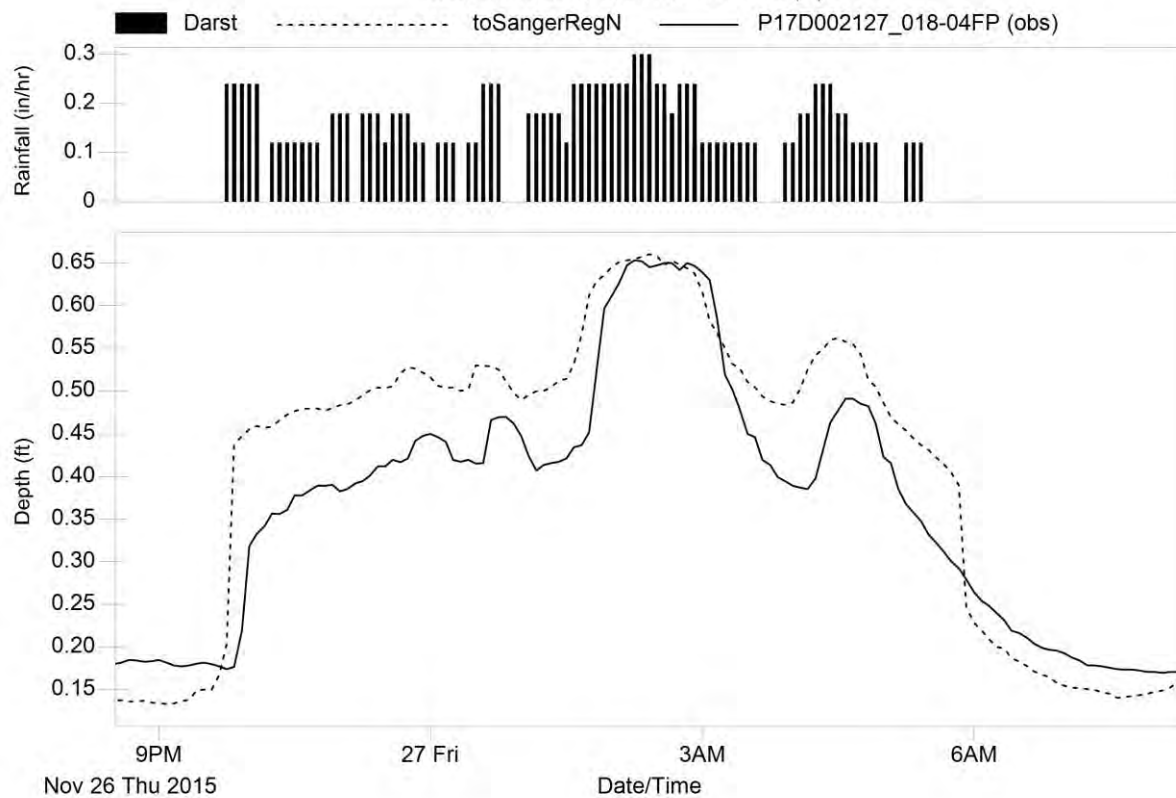
Event of November 26, 2015

Duration: 9.83 h, Total Rainfall: 1.01 (in)



Event of November 26, 2015

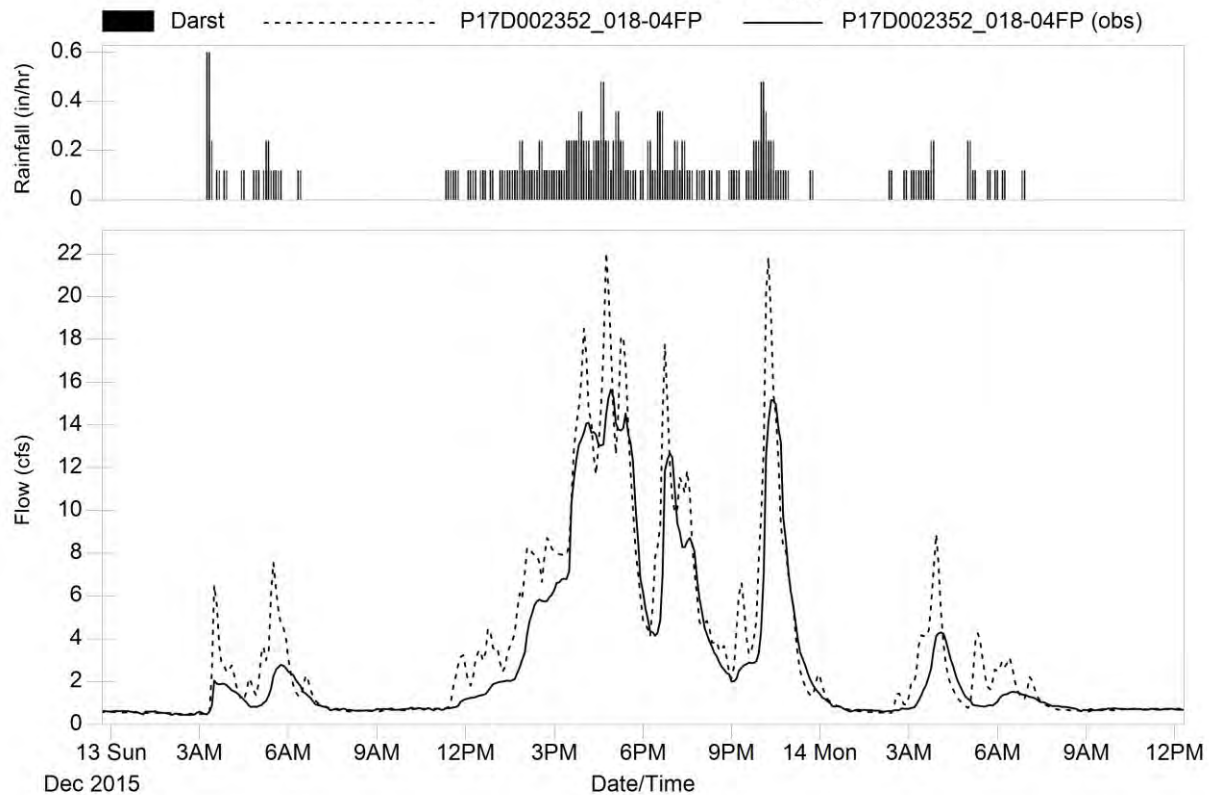
Duration: 9.83 h, Total Rainfall: 1.01 (in)



018-04FP Graphs – Calibration Events

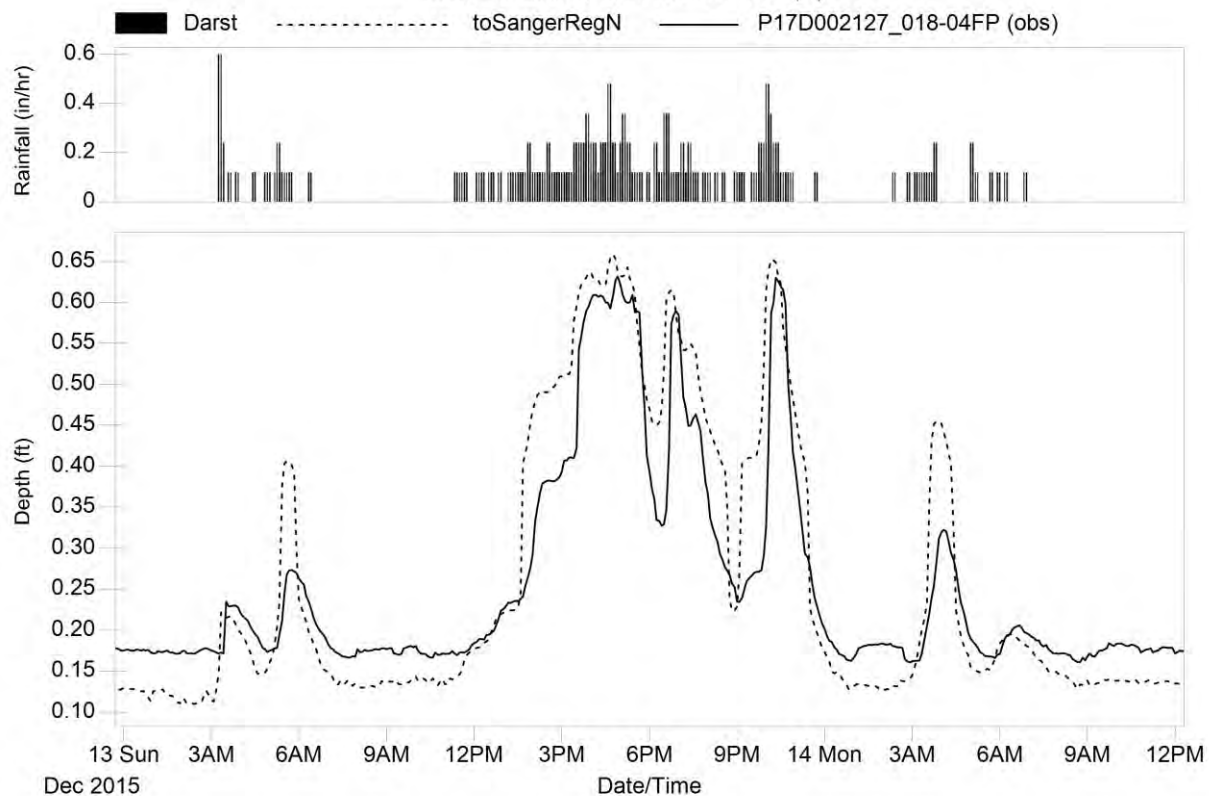
Event of December 13, 2015

Duration: 30.5 h, Total Rainfall: 1.75 (in)



Event of December 13, 2015

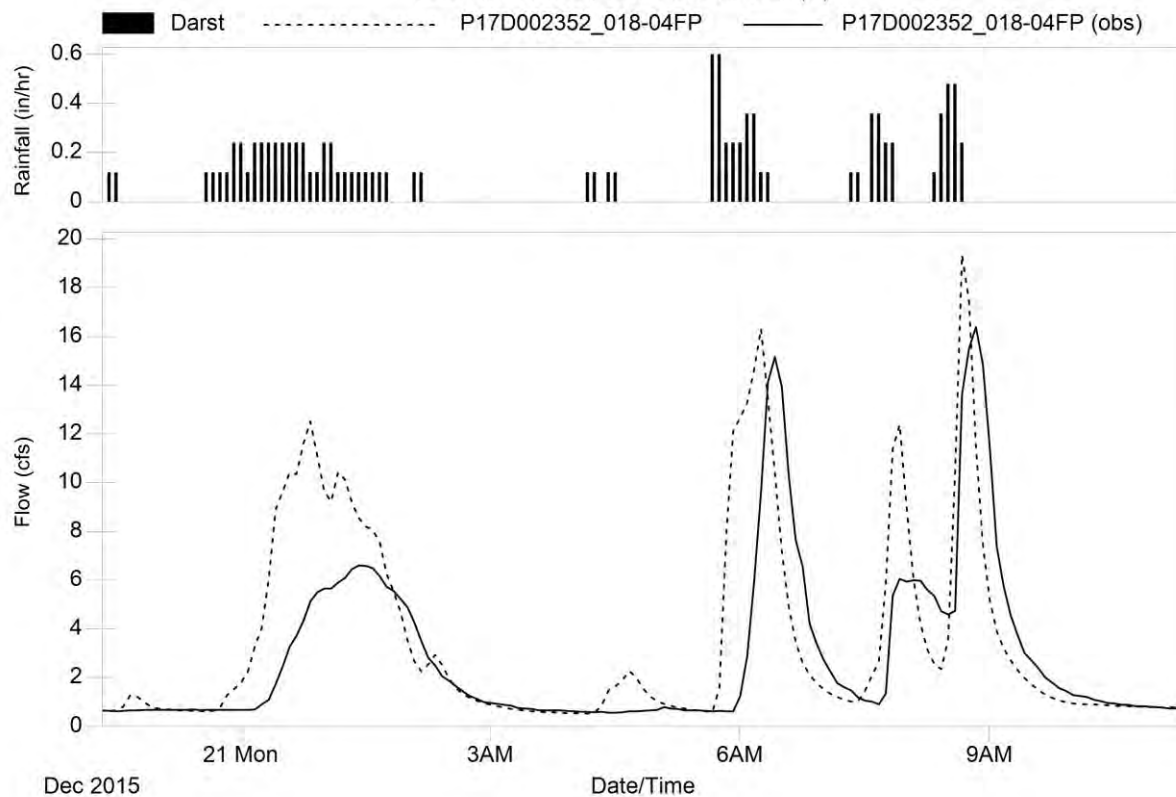
Duration: 30.5 h, Total Rainfall: 1.75 (in)



018-04FP Graphs – Calibration Events

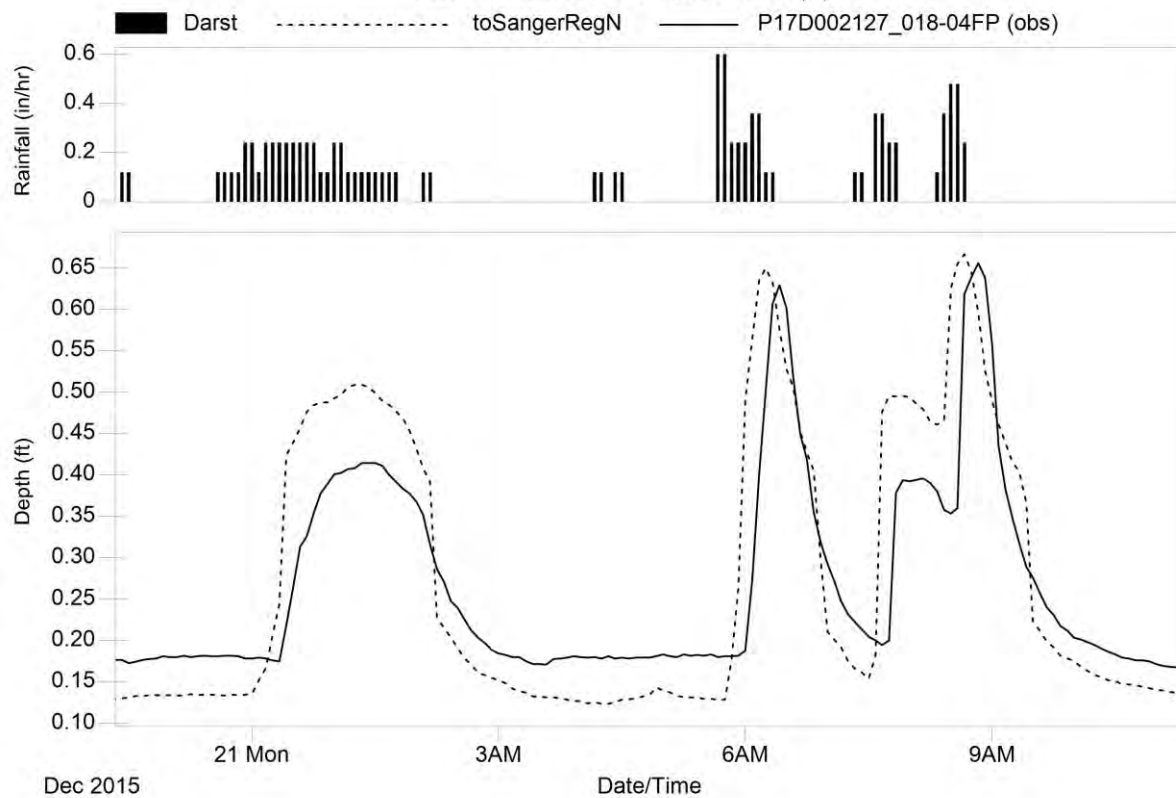
Event of December 20, 2015

Duration: 10.83 h, Total Rainfall: 0.68 (in)



Event of December 20, 2015

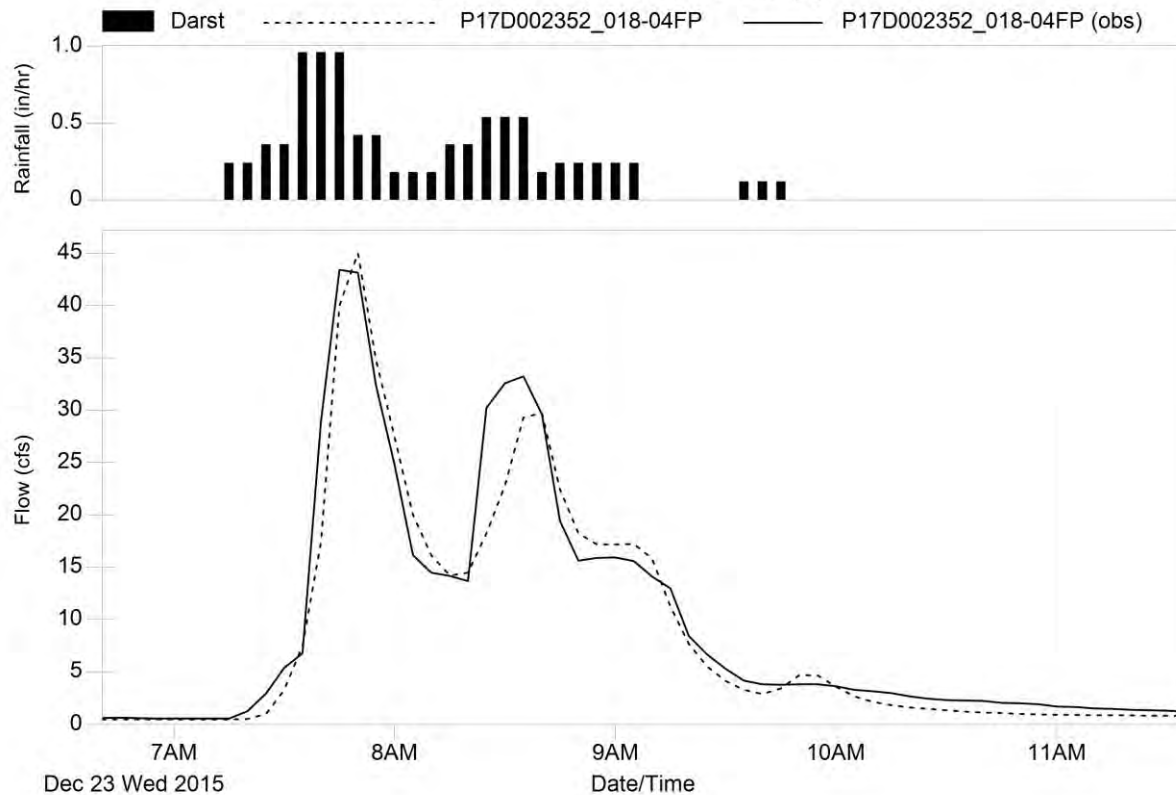
Duration: 10.83 h, Total Rainfall: 0.68 (in)



018-04FP Graphs – Calibration Events

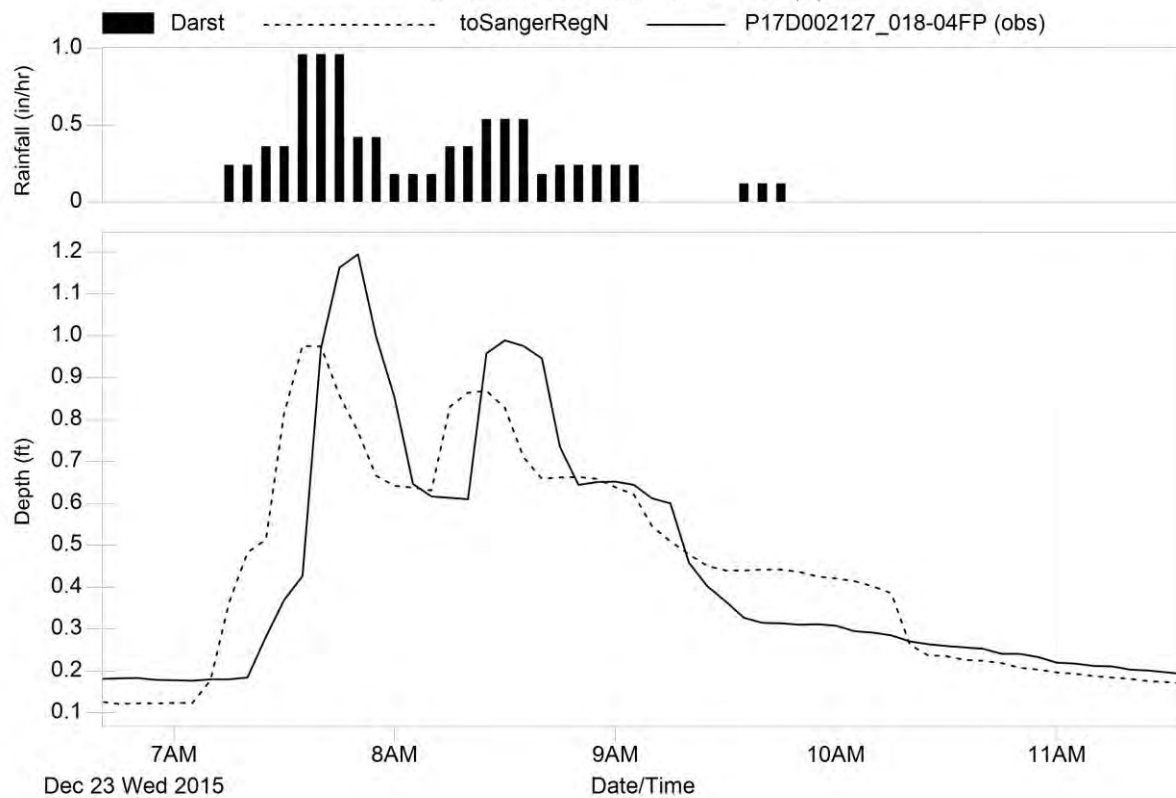
Event of December 23, 2015

Duration: 4.08 h, Total Rainfall: 0.67 (in)



Event of December 23, 2015

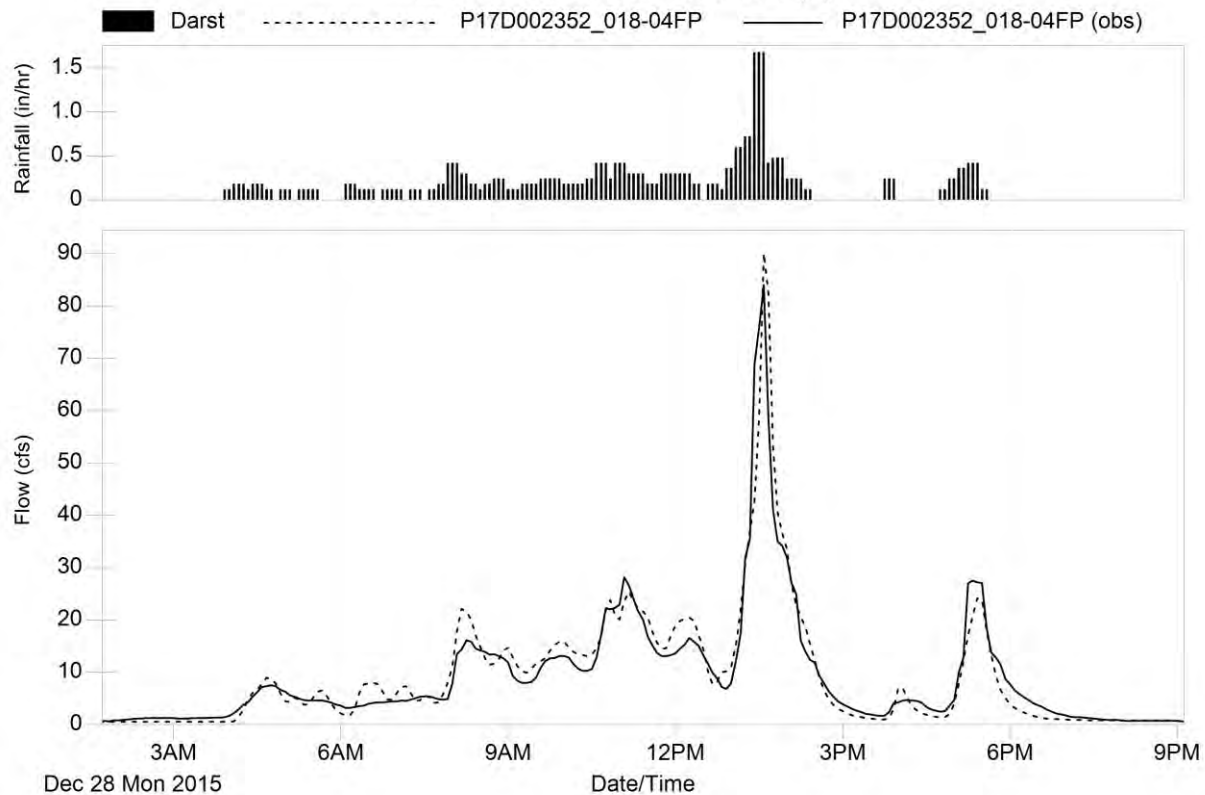
Duration: 4.08 h, Total Rainfall: 0.67 (in)



018-04FP Graphs – Calibration Events

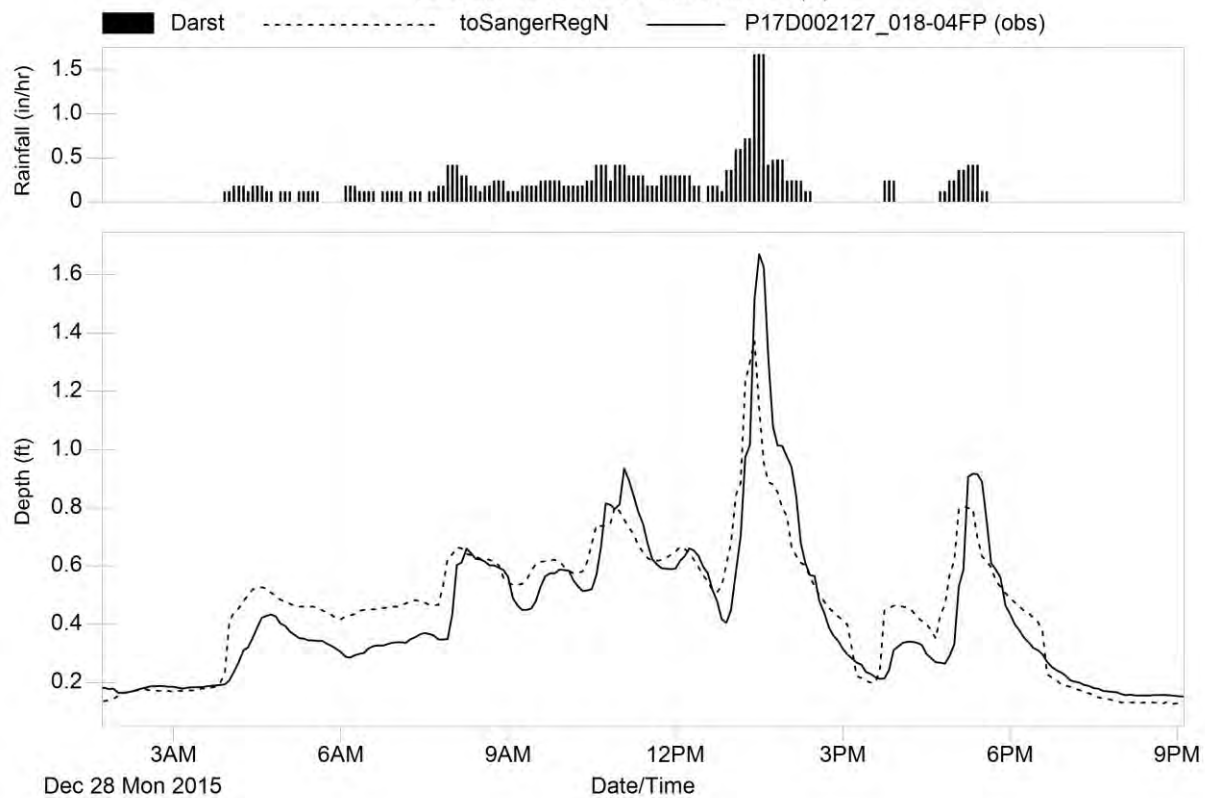
Event of December 28, 2015

Duration: 16.17 h, Total Rainfall: 2.54 (in)



Event of December 28, 2015

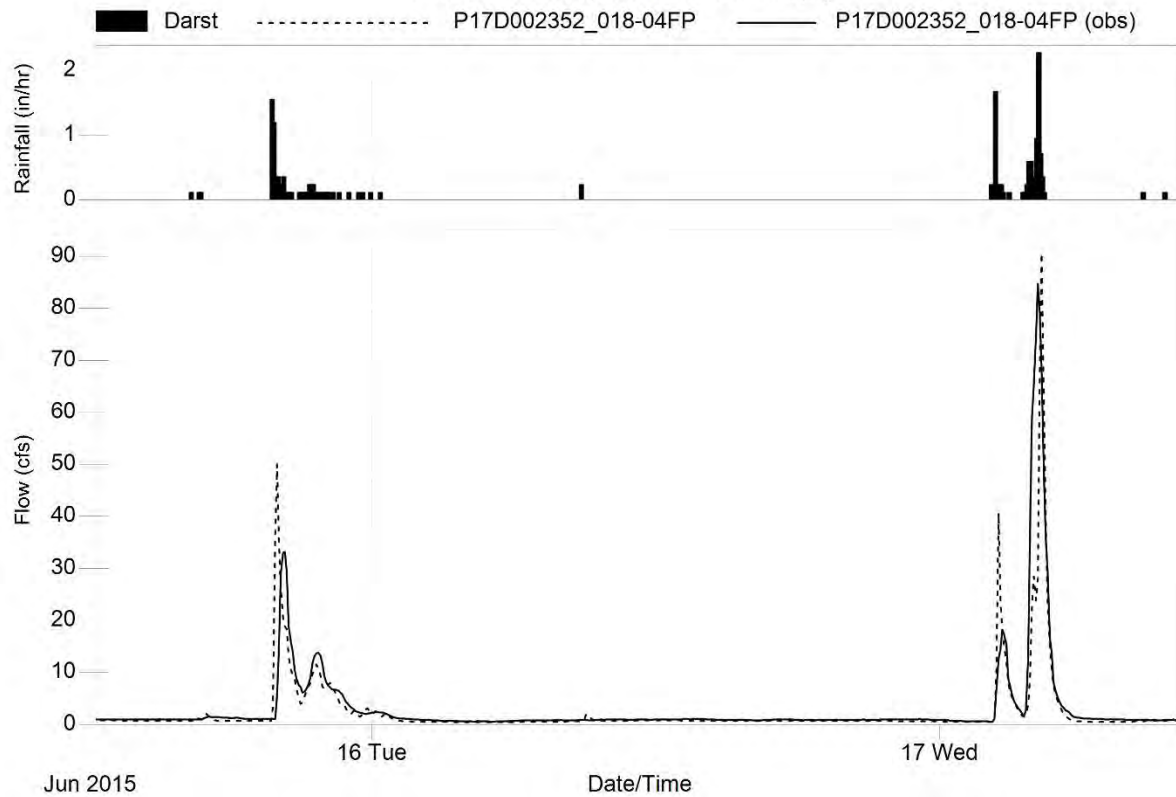
Duration: 16.17 h, Total Rainfall: 2.54 (in)



018-04FP Graphs – Verification Events

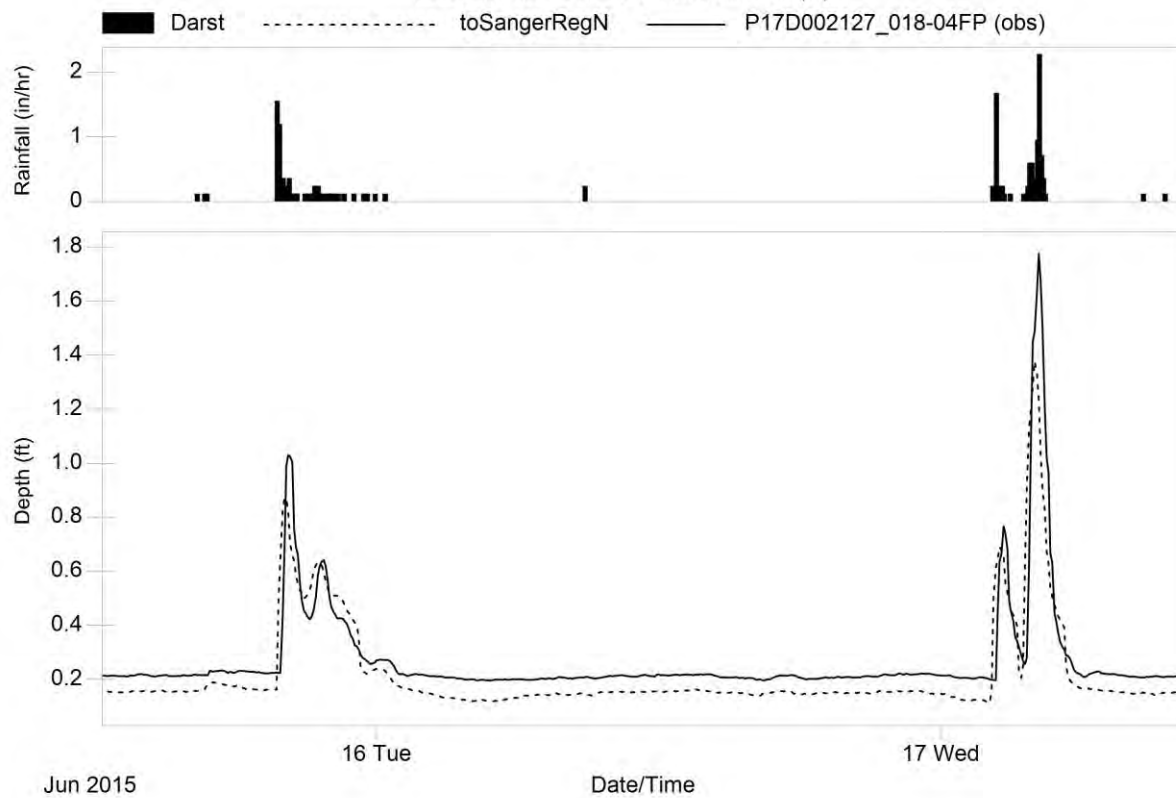
Event of June 15, 2015

Duration: 38.33 h, Total Rainfall: 1.48 (in)



Event of June 15, 2015

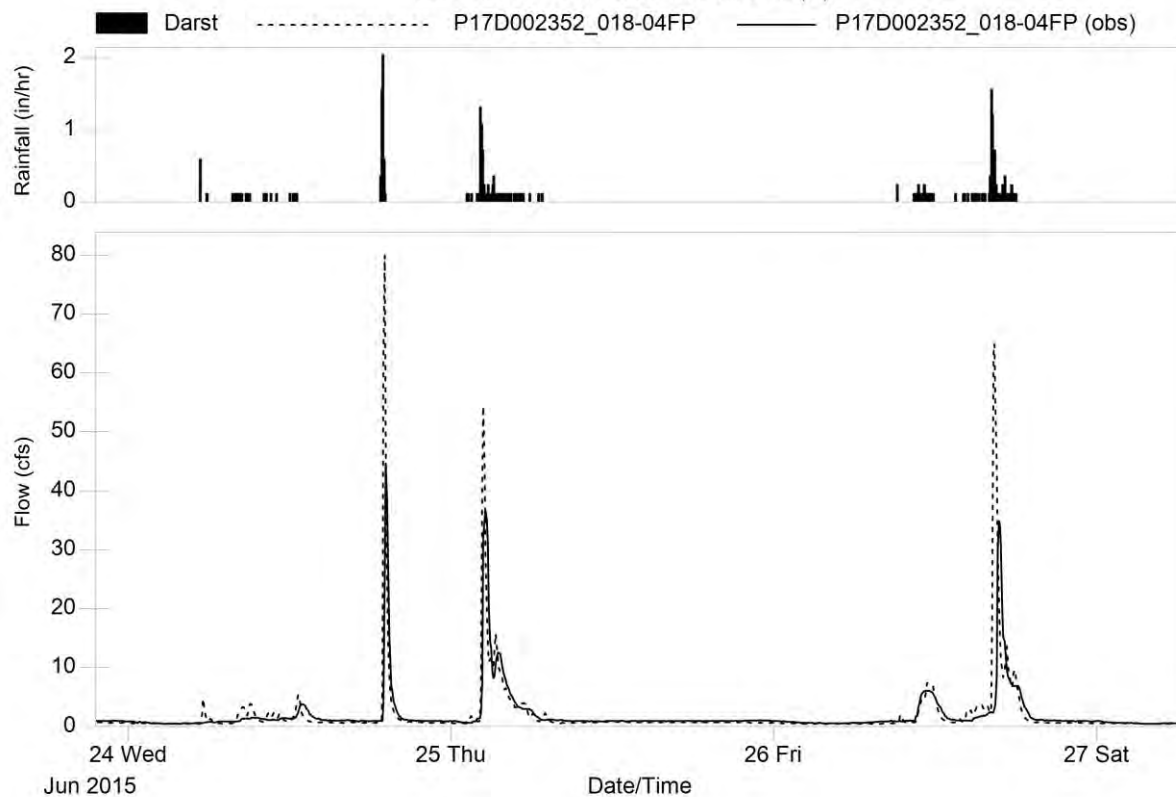
Duration: 38.33 h, Total Rainfall: 1.48 (in)



018-04FP Graphs – Verification Events

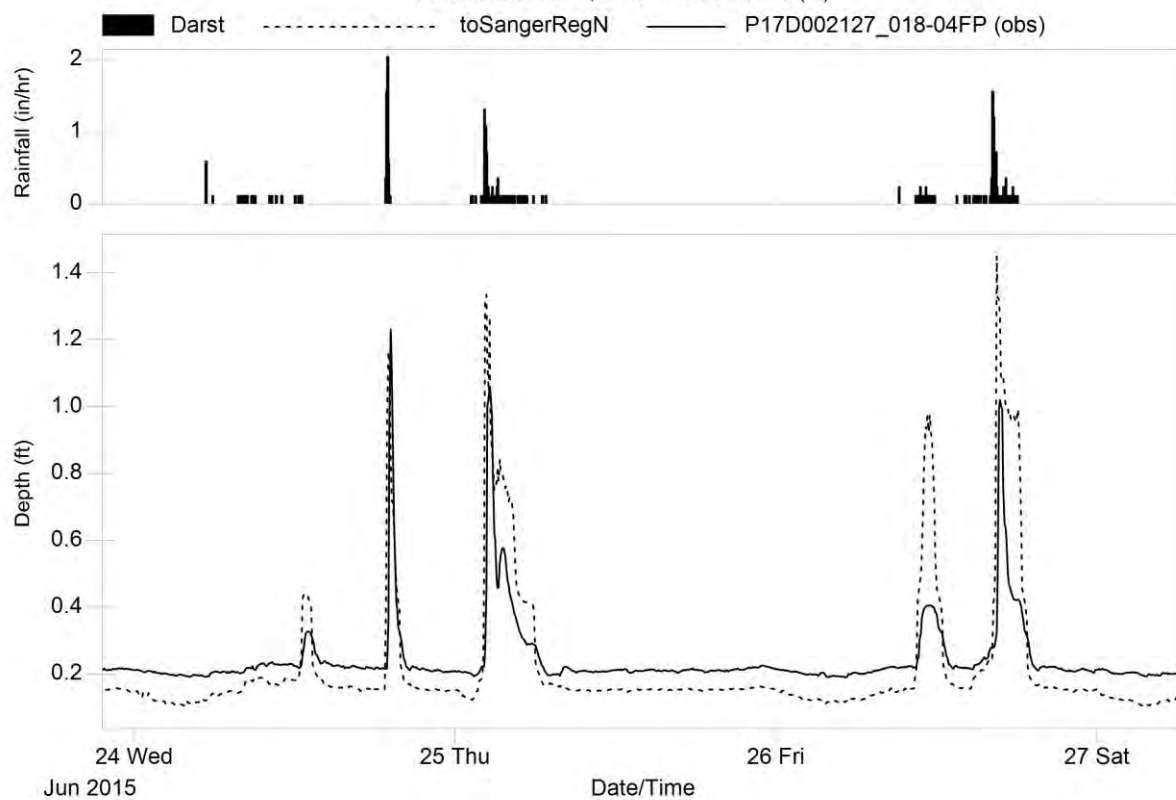
Event of June 24, 2015

Duration: 67.42 h, Total Rainfall: 2.15 (in)



Event of June 24, 2015

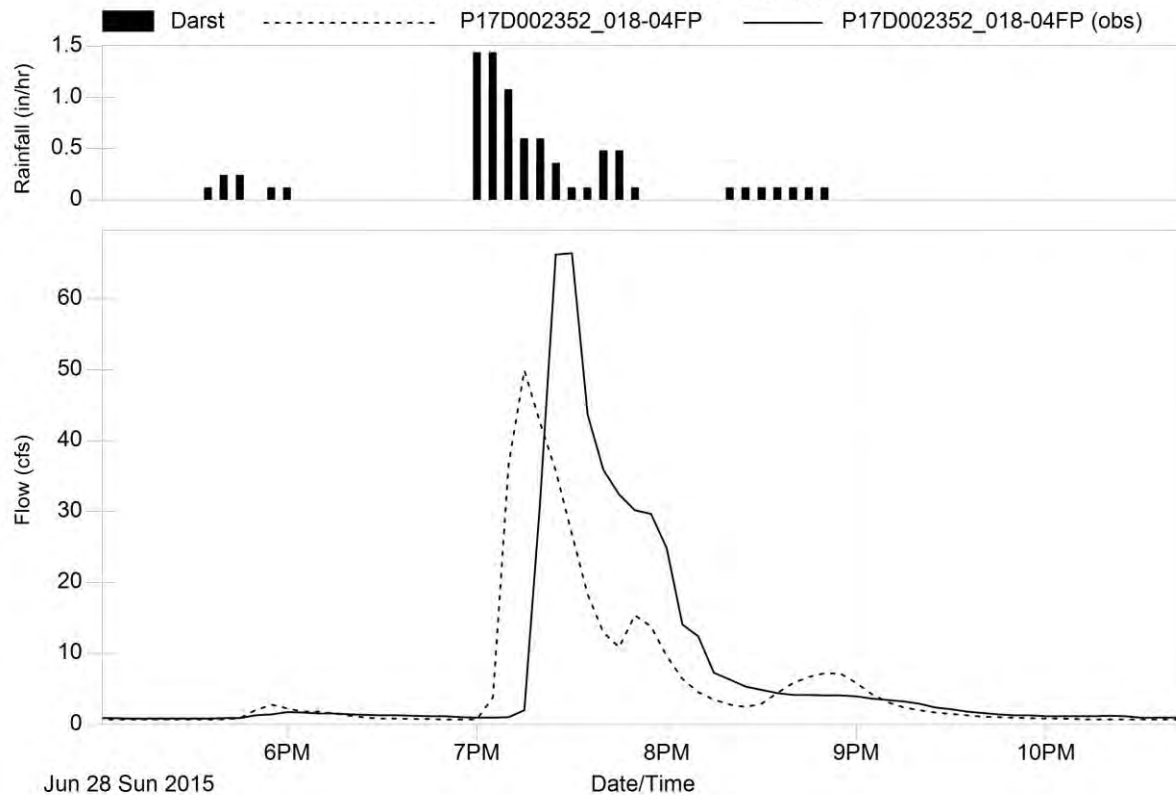
Duration: 67.42 h, Total Rainfall: 2.15 (in)



018-04FP Graphs – Verification Events

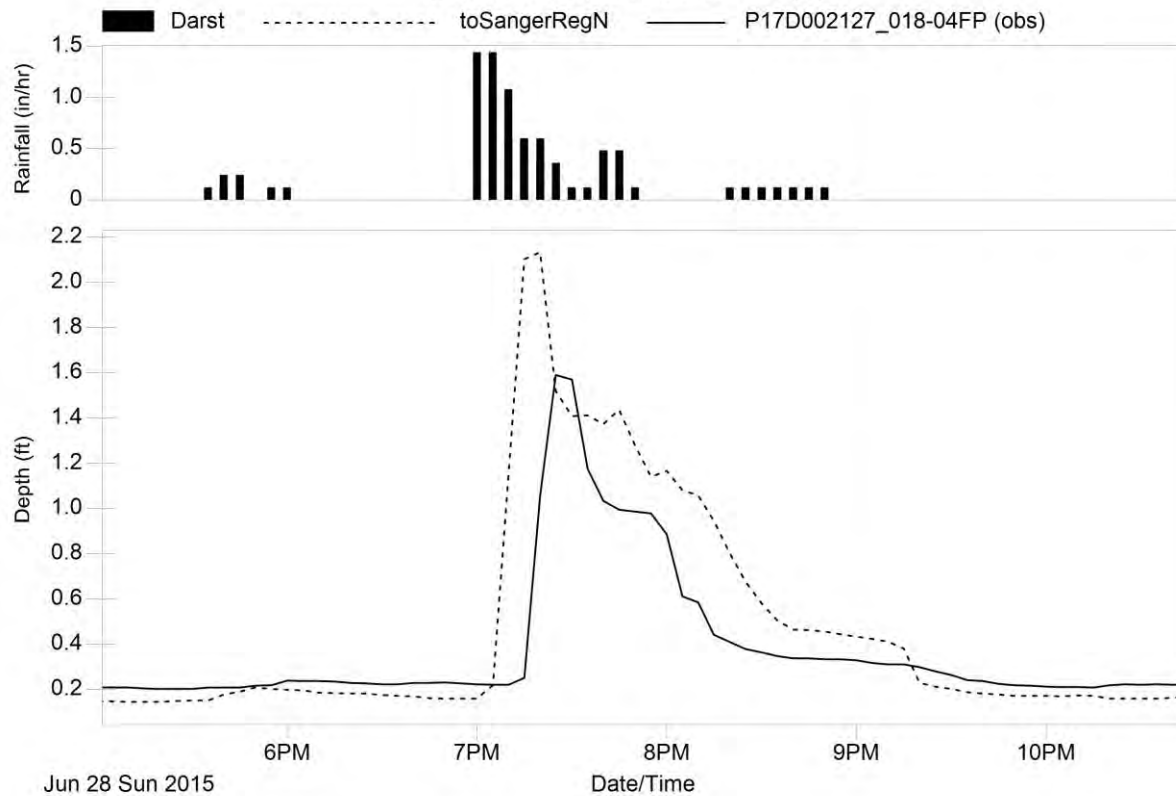
Event of June 28, 2015

Duration: 4.75 h, Total Rainfall: 0.51 (in)



Event of June 28, 2015

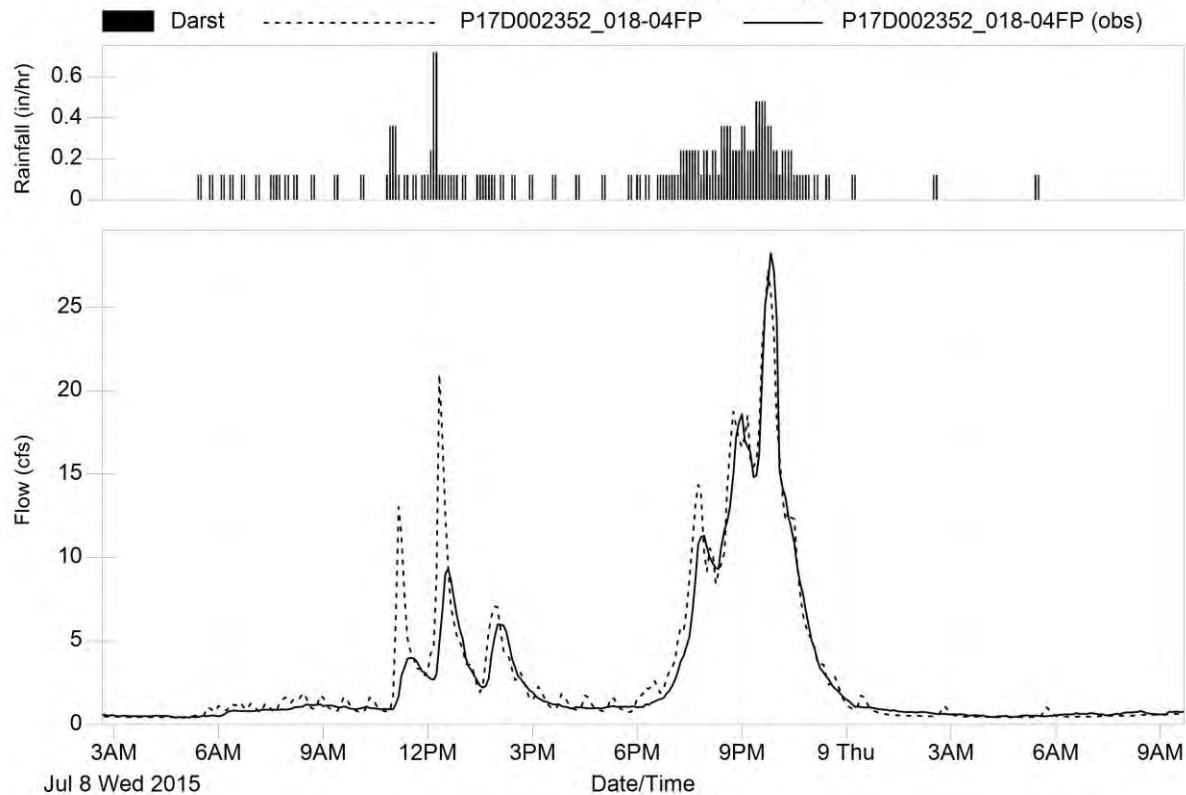
Duration: 4.75 h, Total Rainfall: 0.51 (in)



018-04FP Graphs – Verification Events

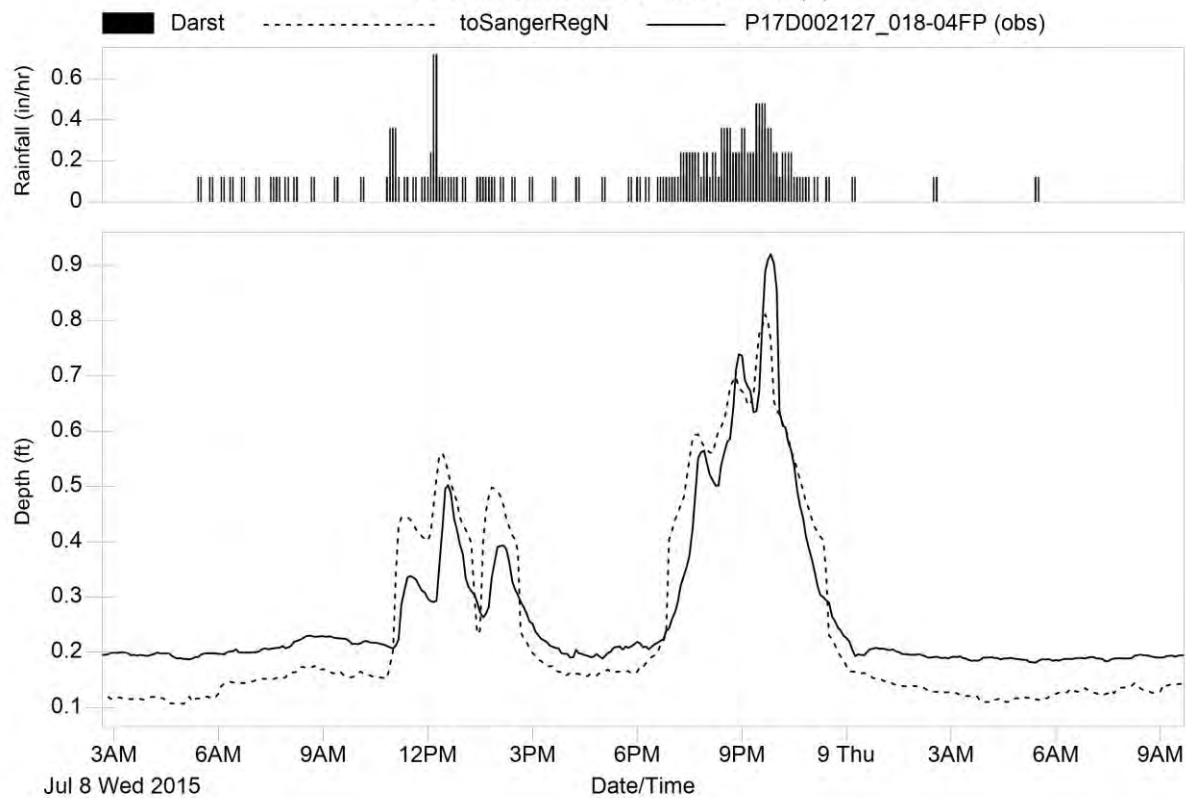
Event of July 8, 2015

Duration: 25.83 h, Total Rainfall: 1.39 (in)



Event of July 8, 2015

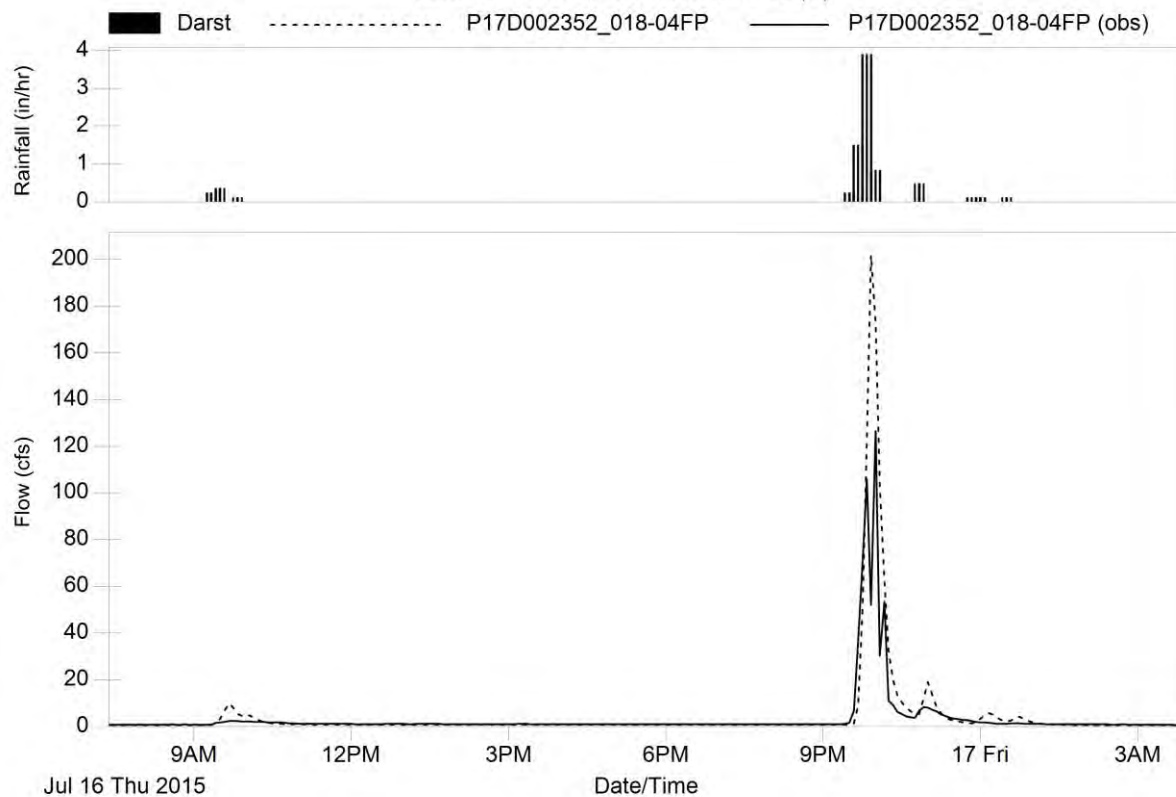
Duration: 25.83 h, Total Rainfall: 1.39 (in)



018-04FP Graphs – Verification Events

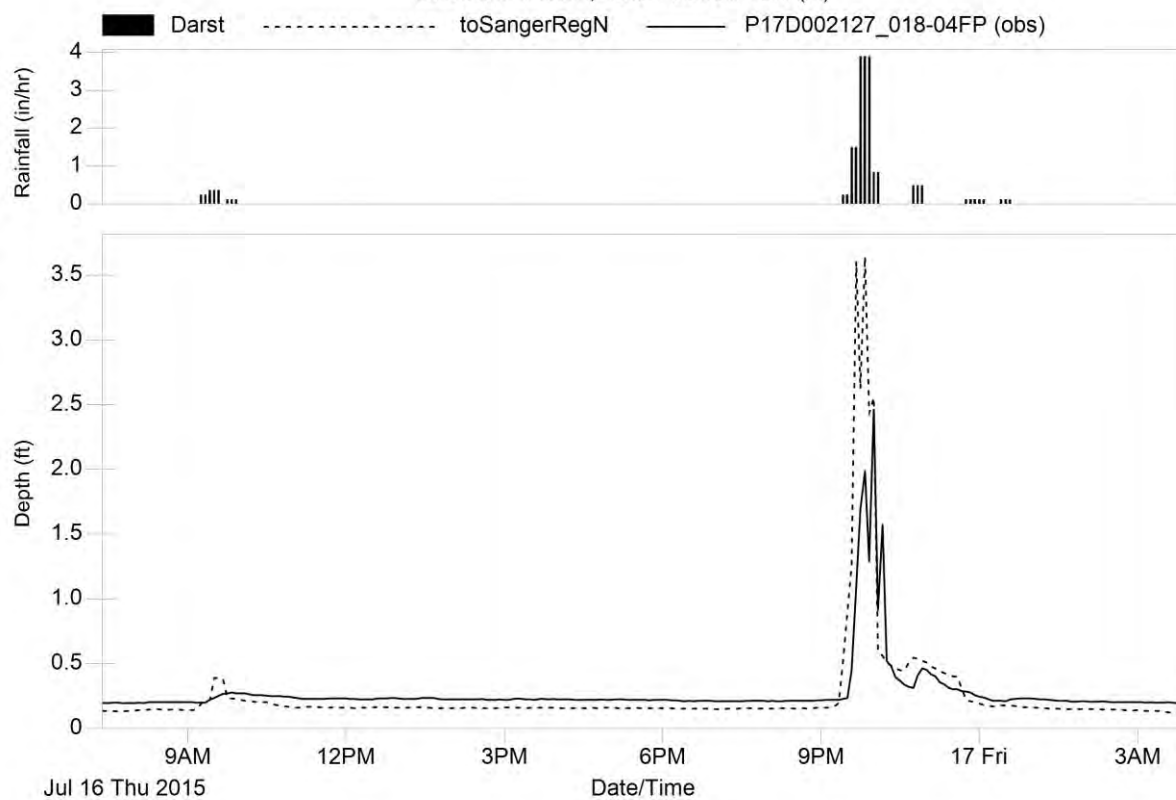
Event of July 16, 2015

Duration: 17.08 h, Total Rainfall: 1.34 (in)



Event of July 16, 2015

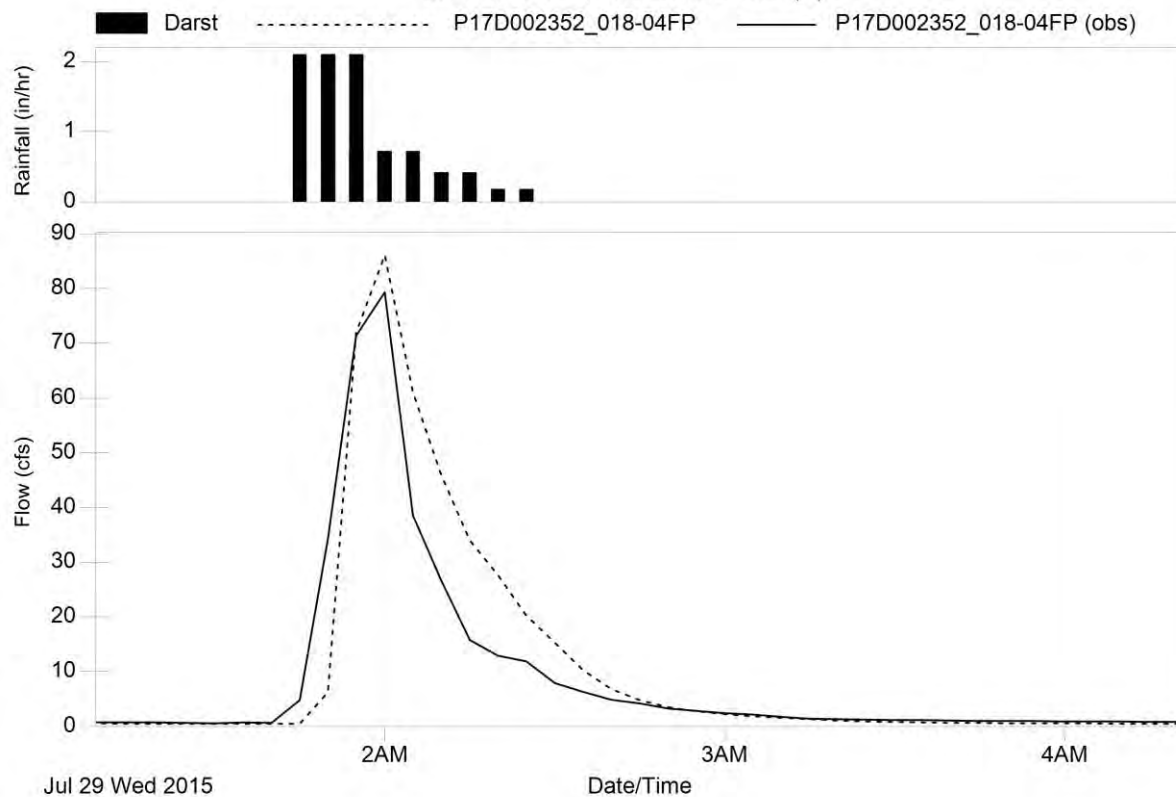
Duration: 17.08 h, Total Rainfall: 1.34 (in)



018-04FP Graphs – Verification Events

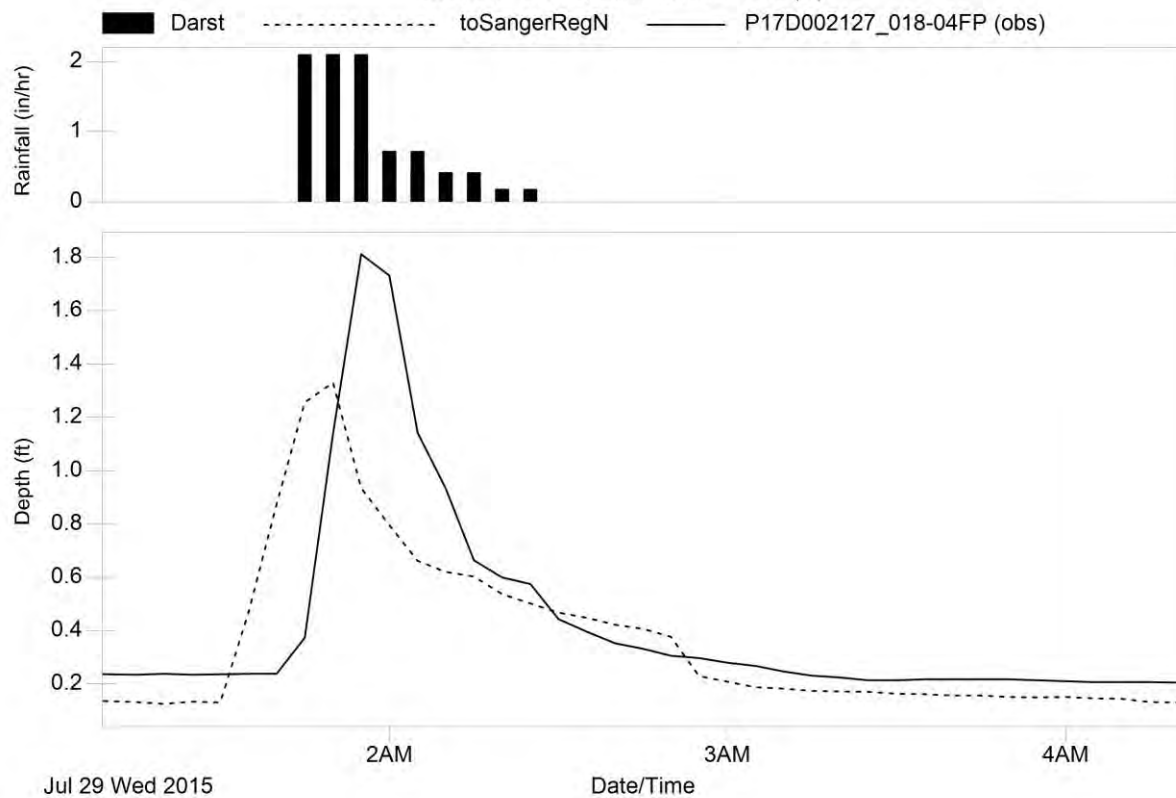
Event of July 29, 2015

Duration: 2.67 h, Total Rainfall: 0.57 (in)

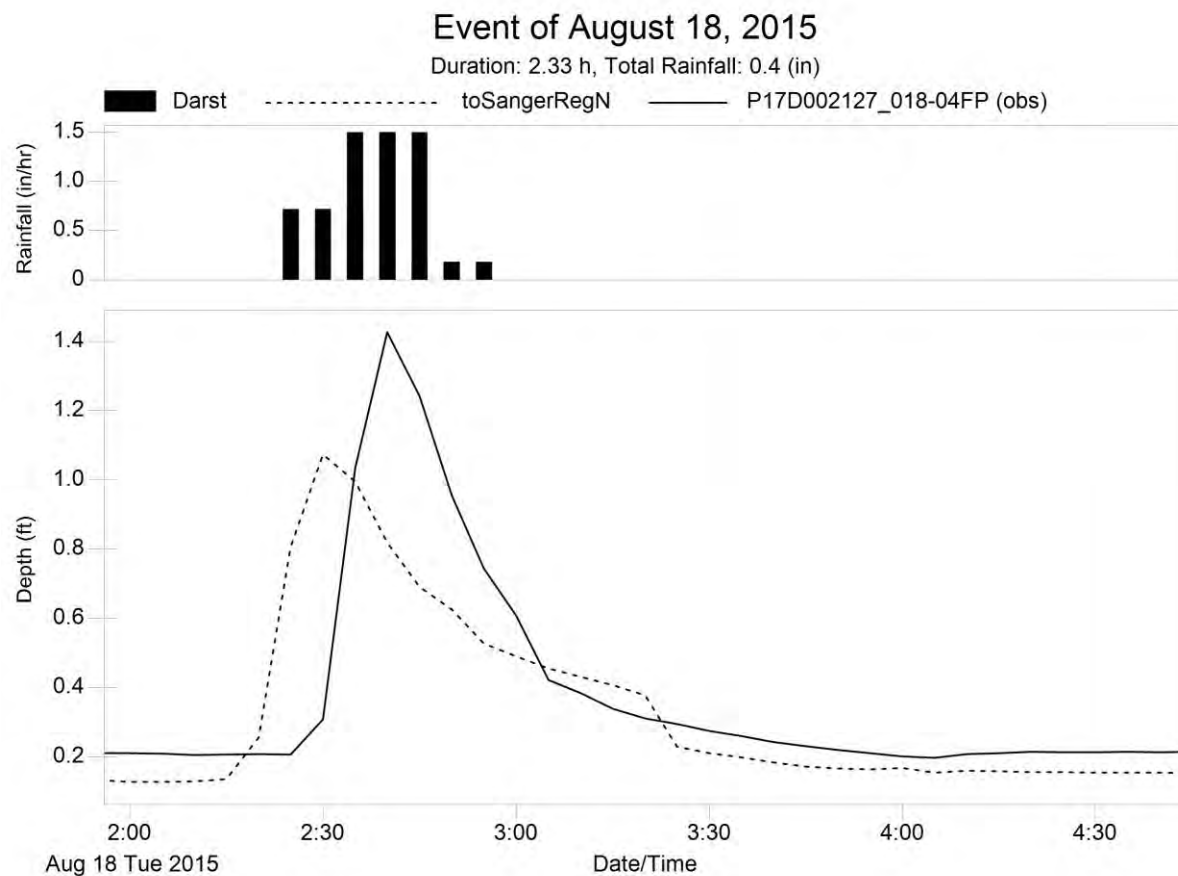
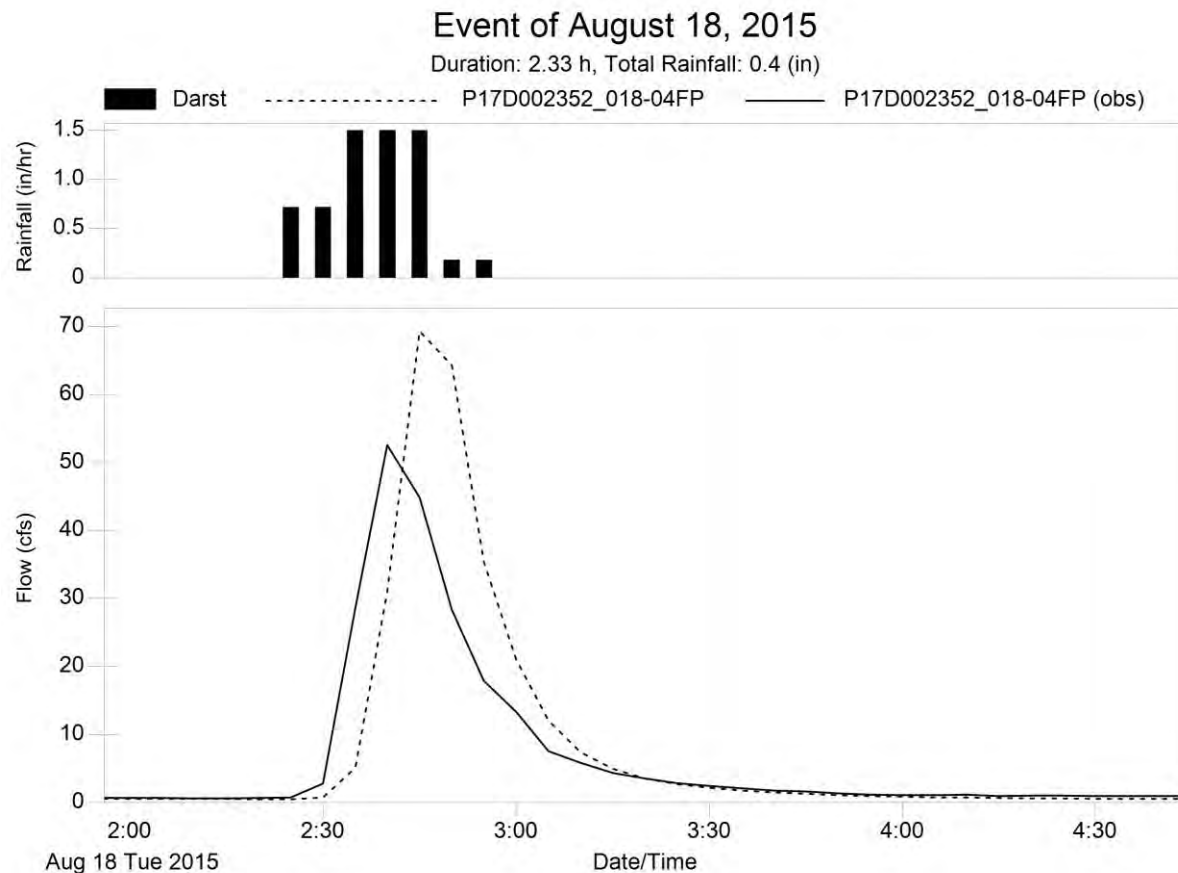


Event of July 29, 2015

Duration: 2.67 h, Total Rainfall: 0.57 (in)



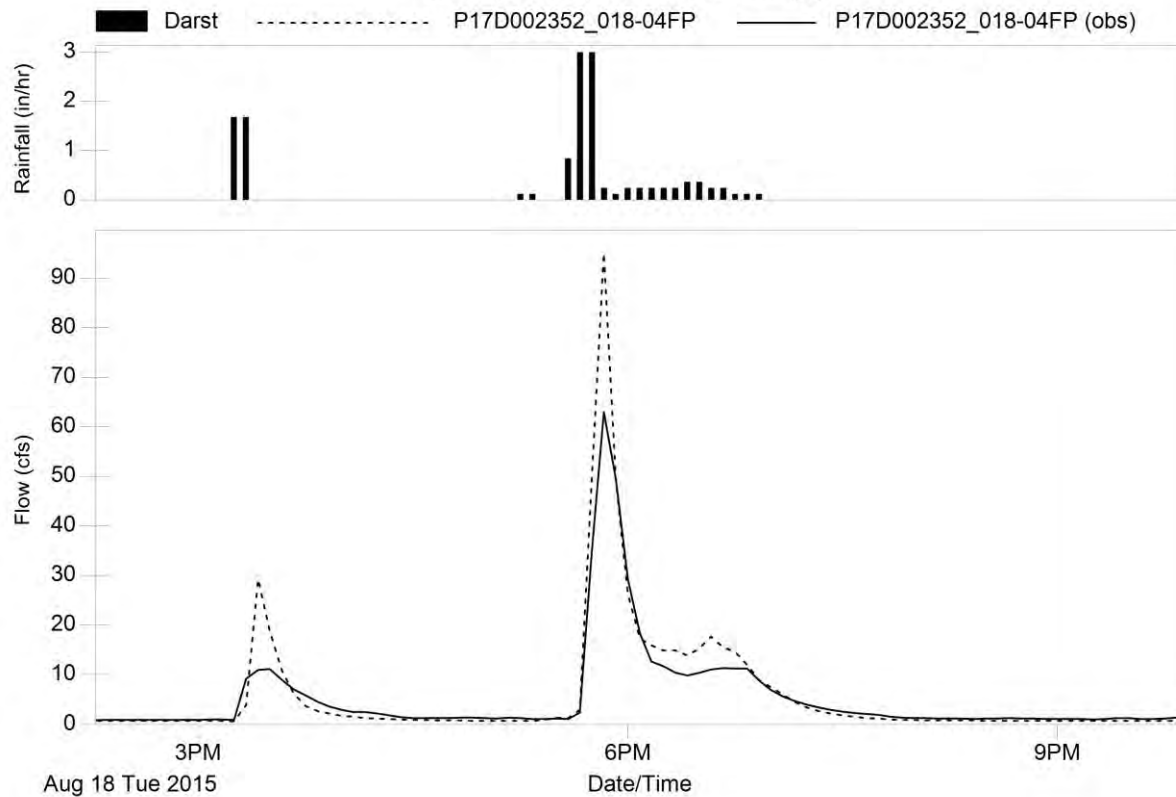
018-04FP Graphs – Verification Events



018-04FP Graphs – Verification Events

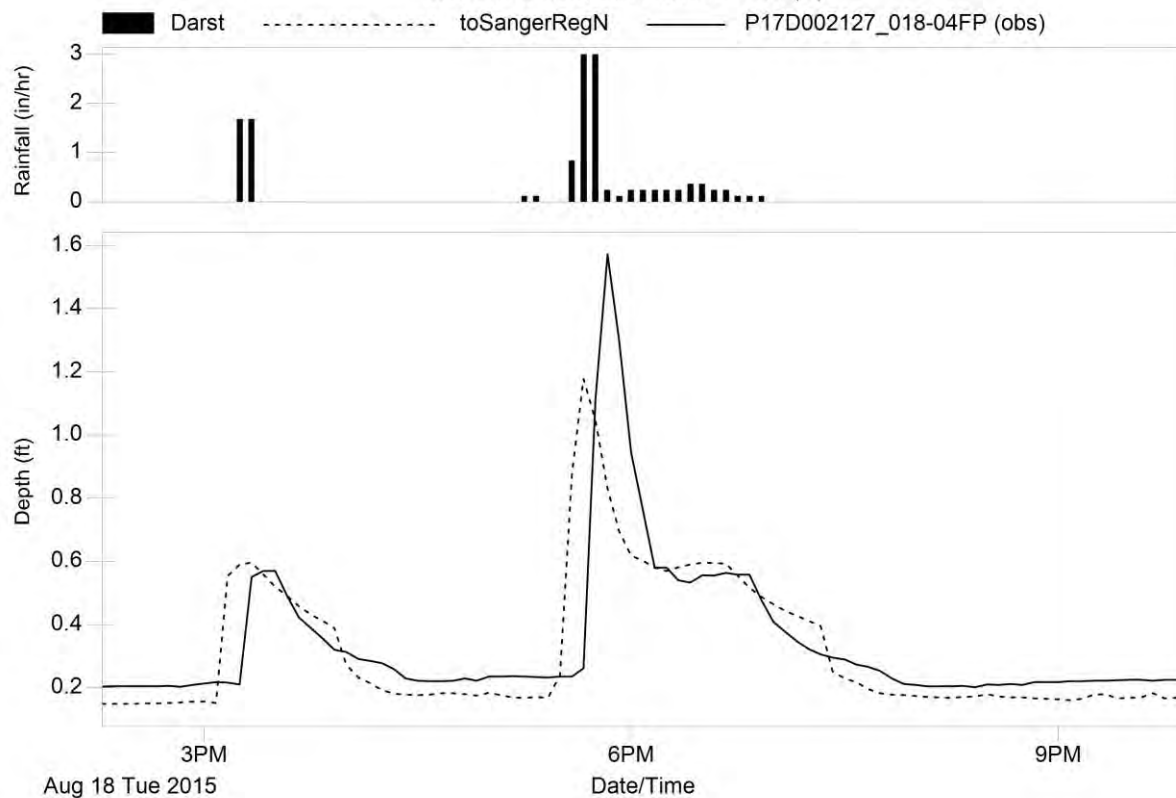
Event of August 18, 2015

Duration: 6.33 h, Total Rainfall: 0.66 (in)

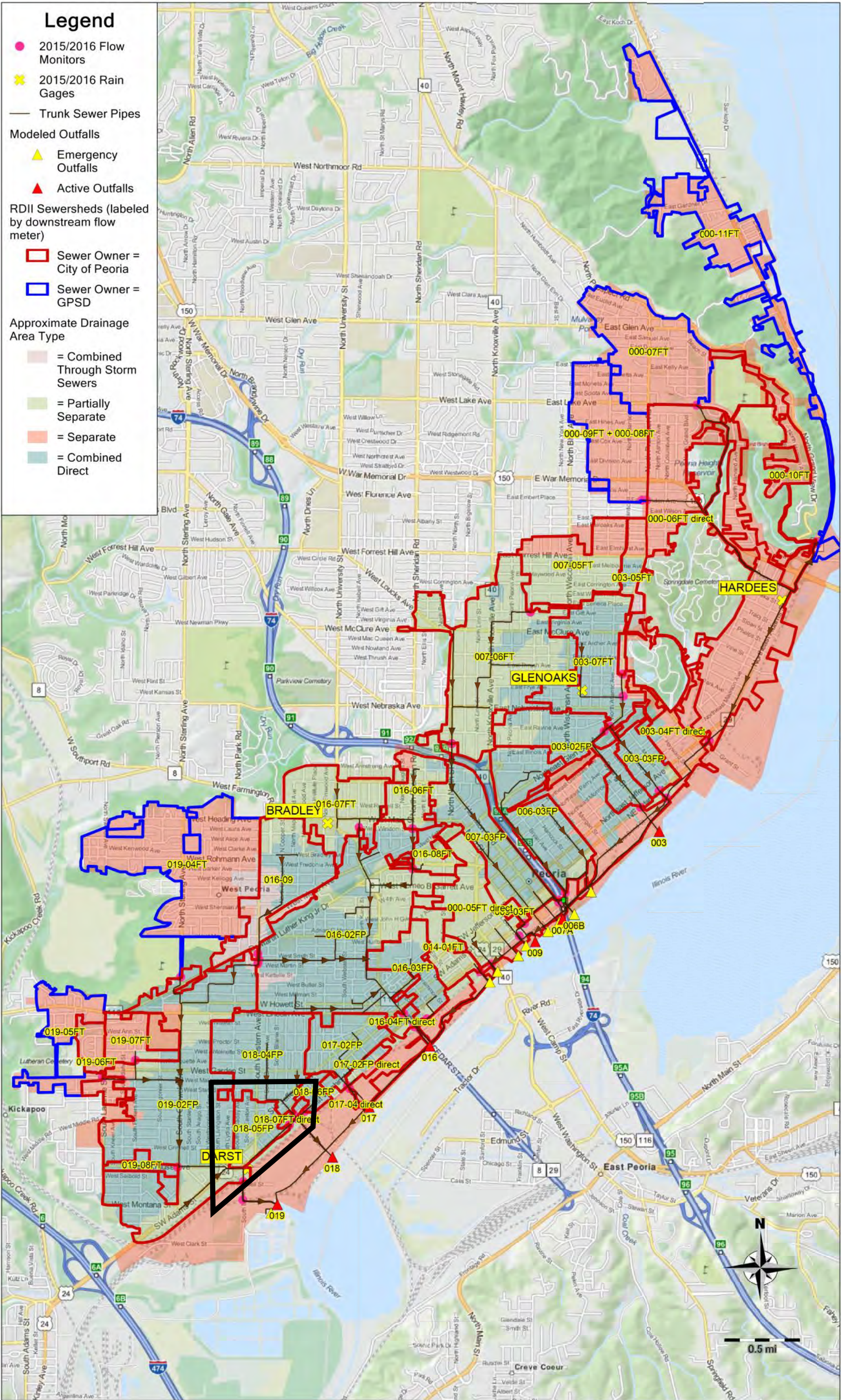


Event of August 18, 2015

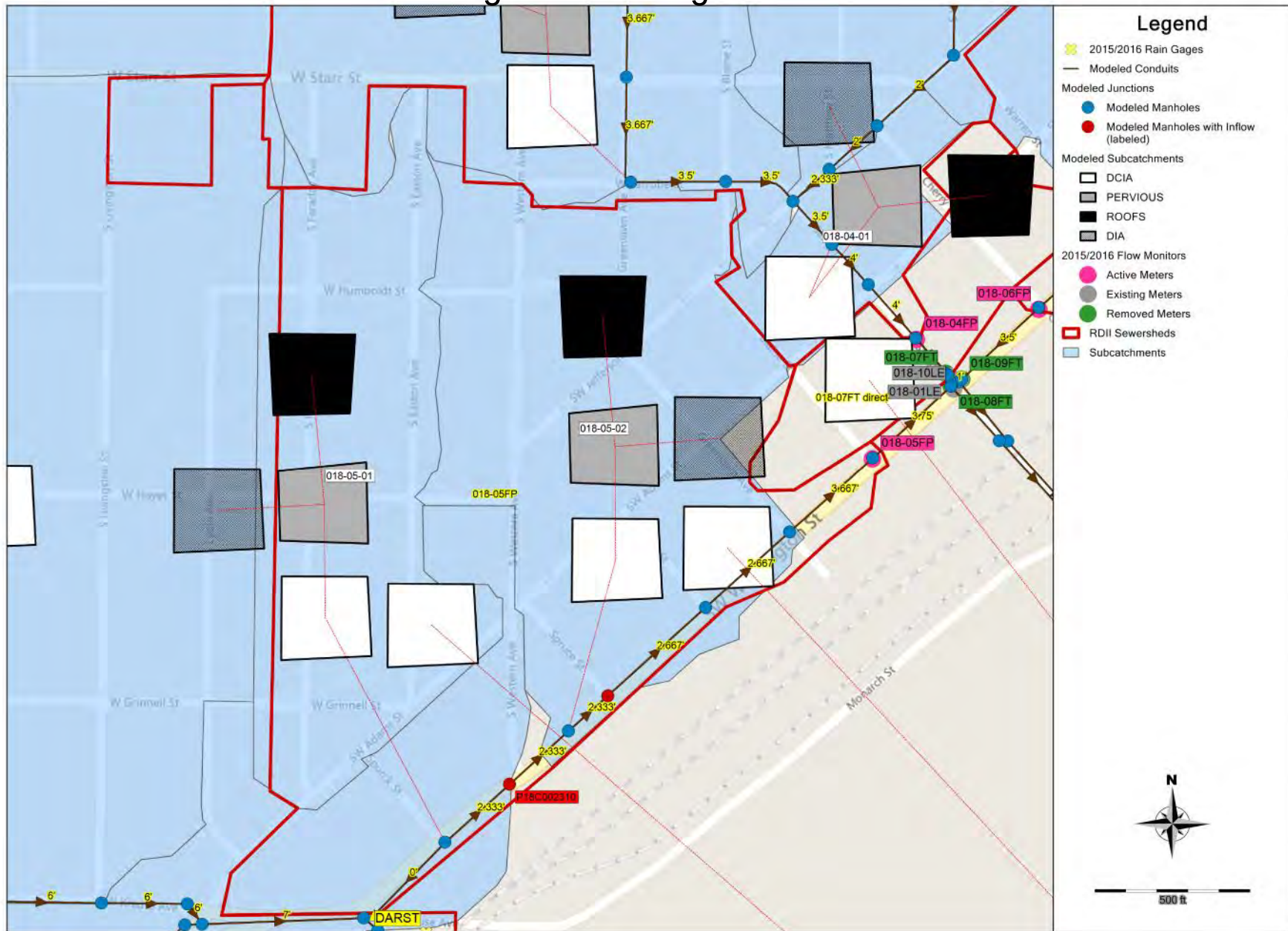
Duration: 6.33 h, Total Rainfall: 0.66 (in)



Flow Monitor 018-05FP Overview Map



018-05 - Washington West Regulator Influent Flow Meter



Sanger 018-05FP

Date	Duration (h)	Rainfall (in)	Maximum Flow (cfs)		Maximum Flow (mgd)		Total Volume (ft³)		Volume (million gallons)		Peak Flow Rate (-15% to +25%)	Flow Volume (-10% to +20%)	Rainfall Variability	
		Thiessen Polygon	Observed	Modeled	Observed	Modeled	Observed	Modeled	Observed	Modeled				
CALIBRATION EVENTS - FLOW														
7/16/2015 9:00	16	1.34	49.2	48.1	31.8	31.0	74160	90870	0.6	0.7	-2%	23%	Possibly uniform	
9/8/2015 10:50	4.5	0.81	31.7	25.4	20.5	16.4	42520	64370	0.3	0.5	-20%	51%	Variable	
9/18/2015 13:10	13.25	1.62	45.2	29.7	29.2	19.2	142200	133200	1.1	1.0	-34%	-6%	possibly uniform	
11/5/2015 13:40	15.08	0.34	5.7	7.3	3.7	4.7	24560	25410	0.2	0.2	27%	3%	possibly uniform	
11/11/2015 19:40	2.92	0.6	25.8	33.4	16.7	21.6	29580	46740	0.2	0.3	30%	58%	Variable	
11/16/2015 20:45	37.67	1.59	Bad Meter Data											
11/26/2015 21:15	19.17	1.01	6.9	6.5	4.4	4.2	104800	82870	0.8	0.6	-5%	-21%	possibly uniform	
12/13/2015 1:55	33	1.75	7.6	7.8	4.9	5.0	136800	148400	1.0	1.1	3%	8%	variable	
12/20/2015 23:40	12.42	0.68	4.6	6.5	3.0	4.2	37880	53990	0.3	0.4	41%	43%	variable	
12/23/2015 7:05	4.08	0.67	Bad Meter Data											
12/28/2015 1:45	18.5	2.54	Bad Meter Data											
6/17/2015 2:05	3.92	0.8	35.6	33.1	23.0	21.4	81330	64510	0.6	0.5	-7%	-21%	Variable	
6/24/2015 4:20	67.42	2.15	19.0	31.3	12.3	20.2	134200	168600	1.0	1.3	65%	26%	variable	
6/28/2015 17:25	4.5	0.51	19.5	18.7	12.6	12.1	40470	38640	0.3	0.3	-4%	-5%	Variable	
7/8/2015 5:15	25.83	1.39	9.8	9.6	6.3	6.2	98360	106400	0.7	0.8	-1%	8%	Variable	
7/11/2015 8:30	13.08	1.07	Bad Meter Data											
7/29/2015 1:40	1.33	0.57	38.8	31.4	25.1	20.3	35770	42780	0.3	0.3	-19%	20%	possibly uniform	
8/18/2015 2:20	1.42	0.4	27.1	24.6	17.5	15.9	18760	27970	0.1	0.2	-9%	49%	possibly uniform	
8/18/2015 15:10	5.08	0.66	35.9	34.3	23.2	22.2	49150	53210	0.4	0.4	-4%	8%	variable	
								WEIGHTED AVERAGES						
								Calibration - Possibly Uniform				-14%	-4%	possibly uniform
								Calibration - Variable				5%	27%	variable
								Calibration Weighted - All Events				-7%	9%	
								Verification - Possibly Uniform				-15%	30%	possibly uniform
								Verification - Variable				6%	7%	variable
								Verification Weighted - All Events				-1%	10%	
								Weighted Average - All Events				-4%	9%	
								NET AVERAGES						
								Calibration - Possibly Uniform				-4%	0%	possibly uniform
								Calibration - Variable				13%	40%	variable
								Calibration Net - All Events				5%	20%	
								Verification - Possibly Uniform				-14%	34%	possibly uniform
								Verification - Variable				10%	3%	variable
								Verification Net - All Events				3%	12%	
								Net Average - All Events				4%	16%	

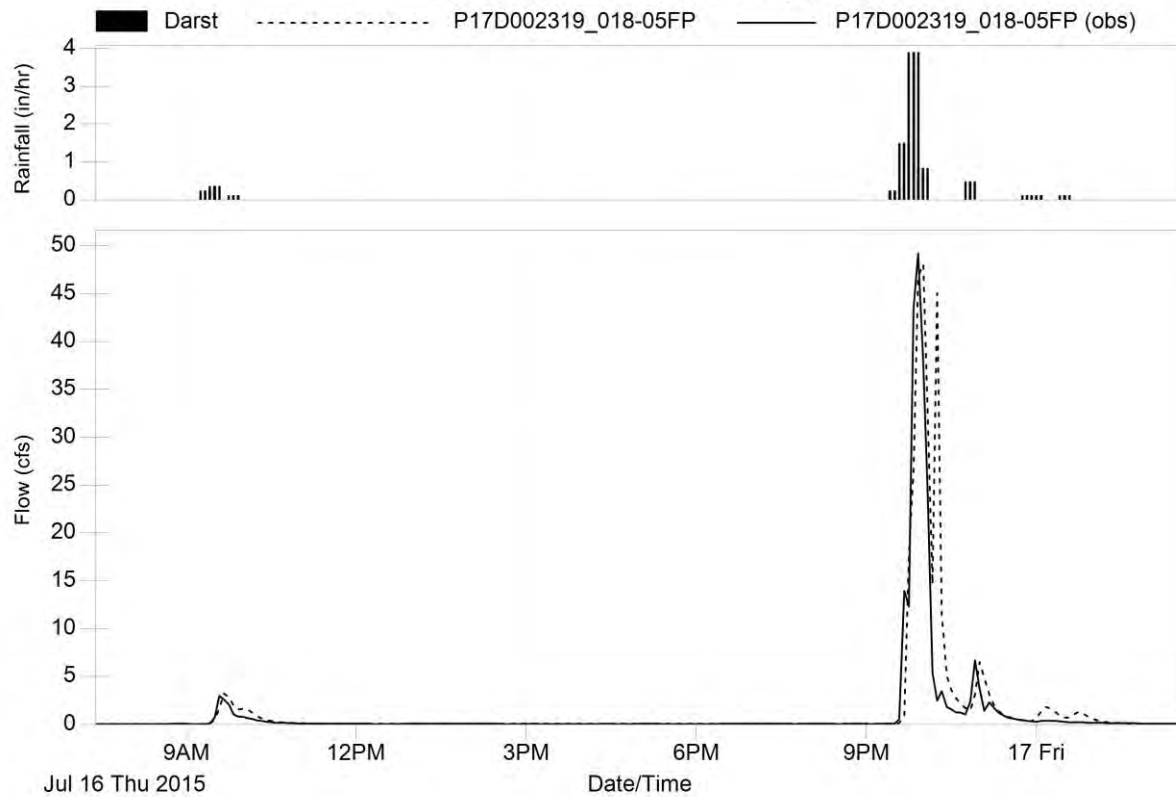
Sanger 018-05 Depth

Date	Duration (h)	Maximum Depth (ft)		Minimum Depth (ft)		Average Depth (ft)		Maximum Depth (ft)	Minimum Depth (ft)	Average Depth (ft)	Rainfall Variability
		metered	modeled	metered	modeled	metered	modeled	Surcharged: -0.33 ft to +1.67 ft Non-Surcharged: -0.33 ft to +0.33 ft	Surcharged: -0.33 ft to +1.67 ft Non-Surcharged: -0.33 ft to +0.33 ft	Surcharged: -0.33 ft to +1.67 ft Non-Surcharged: -0.33 ft to +0.33 ft	
CALIBRATION EVENTS - DEPTH											
7/16/2015 9:00:00	16.00	12.1	3.8	0.1	0.0	0.4	0.3	-8.4	-0.04	-0.1	variable
9/8/2015 10:50:00	4.50	2.7	3.3	0.1	0.1	0.5	0.5	0.6	-0.03	0.01	variable
9/18/2015 13:10:00	13.25	3.3	3.8	0.1	0.1	0.4	0.5	0.4	-0.04	0.1	possibly uniform
11/5/2015 13:40:00	15.08	0.9	1.1	0.1	0.1	0.2	0.2	0.2	-0.04	-0.02	possibly uniform
11/11/2015 19:40:00	2.92	2.3	3.0	0.1	0.1	0.5	0.5	0.7	-0.1	0.01	variable
11/16/2015 20:45:00	37.67	1.6	0.9	0.1	0.0	0.3	0.1	-0.7	-0.1	-0.3	variable
11/26/2015 21:15:00	19.17	0.9	1.3	0.1	0.1	0.3	0.3	0.4	-0.02	0.03	possibly uniform
12/13/2015 1:55:00	33.00	1.0	1.3	0.1	0.1	0.3	0.3	0.3	-0.02	0.02	variable
12/20/2015 23:40:00	12.42	0.7	0.8	0.1	0.1	0.2	0.2	0.1	-0.02	0.00	variable
12/23/2015 7:05:00	4.08	2.0	1.9	0.1	0.1	0.6	0.7	-0.1	-0.02	0.1	variable
12/28/2015 1:45:00	18.50	2.7	3.2	0.1	0.1	0.6	0.5	0.4	-0.04	-0.01	variable
VERIFICATION EVENTS - DEPTH											
6/17/2015 2:05:00	3.92	2.9	3.4	0.0	0.0	0.9	0.9	0.5	0.00	0.00	variable
6/24/2015 4:20:00	67.42	3.1	3.0	0.0	0.0	0.3	0.3	-0.1	0.00	0.00	variable
6/28/2015 17:25:00	4.50	4.9	3.5	0.1	0.1	1.0	1.0	-1.4	0.00	0.00	variable
7/8/2015 5:15:00	25.83	1.2	1.6	0.0	0.0	0.3	0.3	0.4	0.00	0.00	variable
7/11/2015 8:30:00	13.08	6.4	3.8	0.0	0.0	0.4	0.4	-2.6	0.00	0.00	variable
7/29/2015 1:40:00	1.33	3.0	3.8	0.2	0.2	1.1	1.1	0.7	0.00	0.00	possibly uniform
8/18/2015 2:20:00	1.42	2.4	2.5	0.0	0.0	0.6	0.6	0.04	0.00	0.00	possibly uniform
8/18/2015 15:10:00	5.08	2.7	3.1	0.1	0.1	0.5	0.5	0.4	0.00	0.00	variable
WEIGHTED AVERAGES											
Calibration - Possibly Uniform								0.4	-0.03	0.03	possibly uniform
Calibration - Variable								-3.9	-0.05	-0.02	variable
Calibration Weighted - All Events								-3.2	-0.04	-0.01	All Events
Verification - Possibly Uniform								0.4	0.00	0.00	possibly uniform
Verification - Variable								-1.0	0.00	0.00	variable
Verification Weighted - All Events								-0.7	0.00	0.00	All Events
Weighted Average - All Events								-2.0	-0.03	0.00	
NET AVERAGES											
Calibration - Possibly Uniform								0.3	-0.03	0.02	possibly uniform
Calibration - Variable								-0.9	-0.05	-0.03	variable
Calibration Net - All Events								-0.5	-0.04	-0.02	All Events
Verification - Possibly Uniform								0.4	0.00	0.00	possibly uniform
Verification - Variable								-0.5	0.00	0.00	variable
Verification Net - All Events								-0.3	0.00	0.00	All Events
Net Average - All Events								-0.4	-0.02	-0.01	

Sanger 018-05FP – Calibration Events

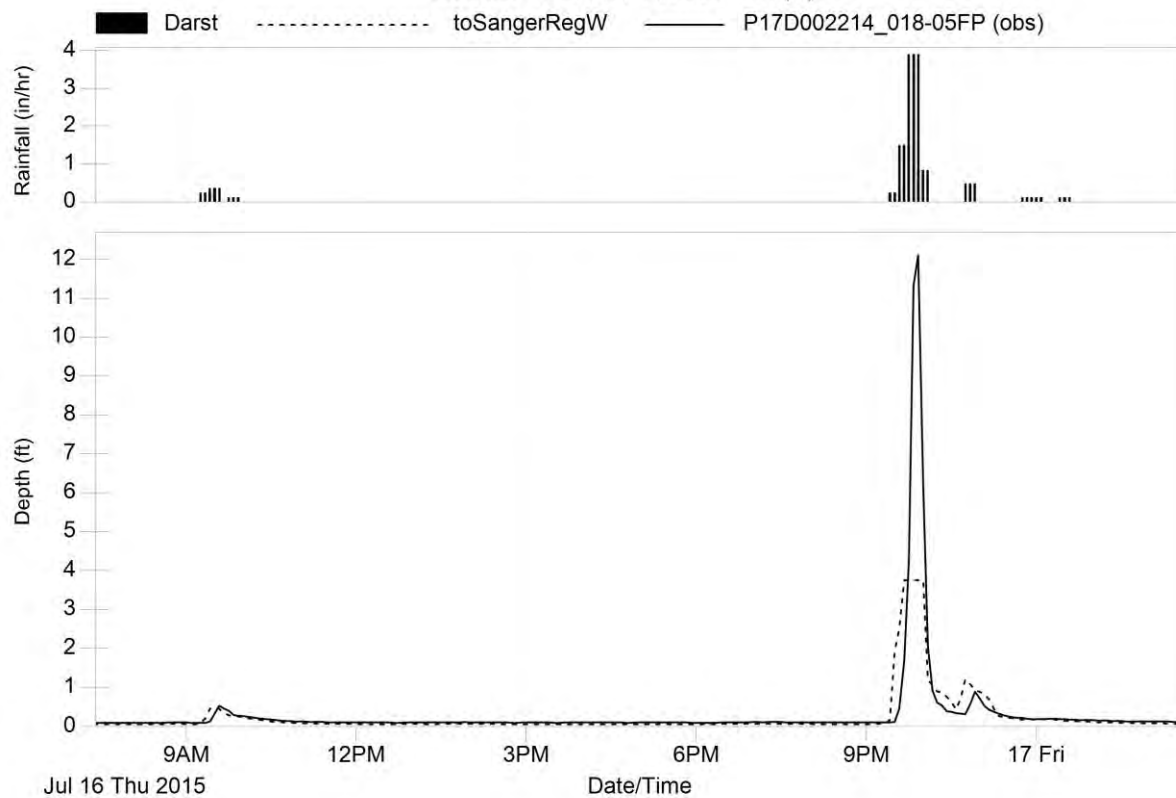
Event of July 16, 2015

Duration: 16 h, Total Rainfall: 1.34 (in)



Event of July 16, 2015

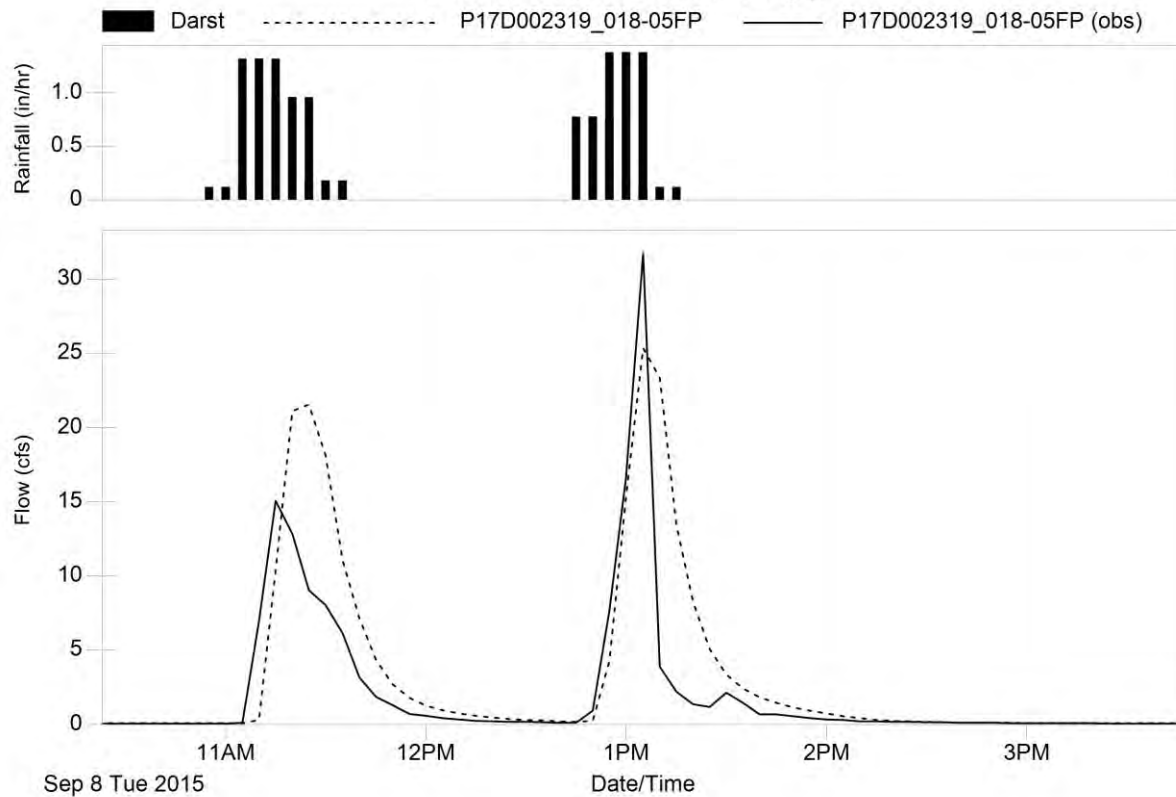
Duration: 16 h, Total Rainfall: 1.34 (in)



Sanger 018-05FP – Calibration Events

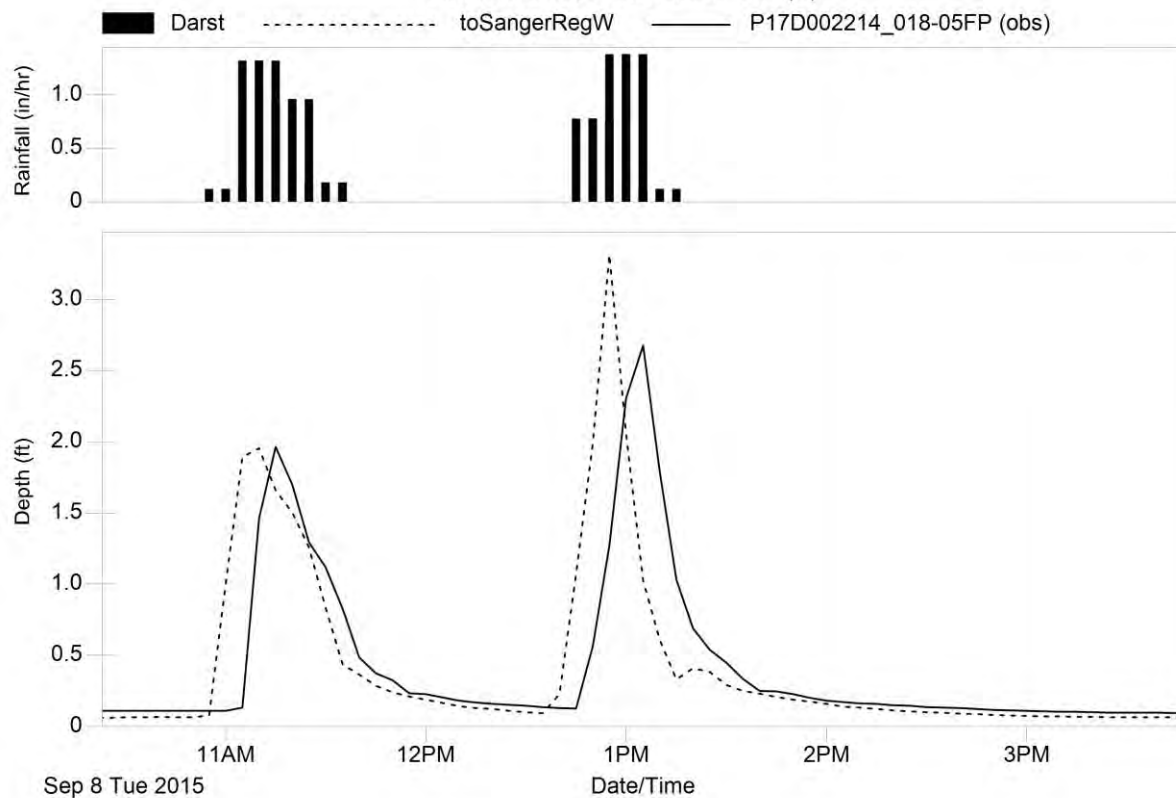
Event of September 8, 2015

Duration: 4.5 h, Total Rainfall: 0.81 (in)



Event of September 8, 2015

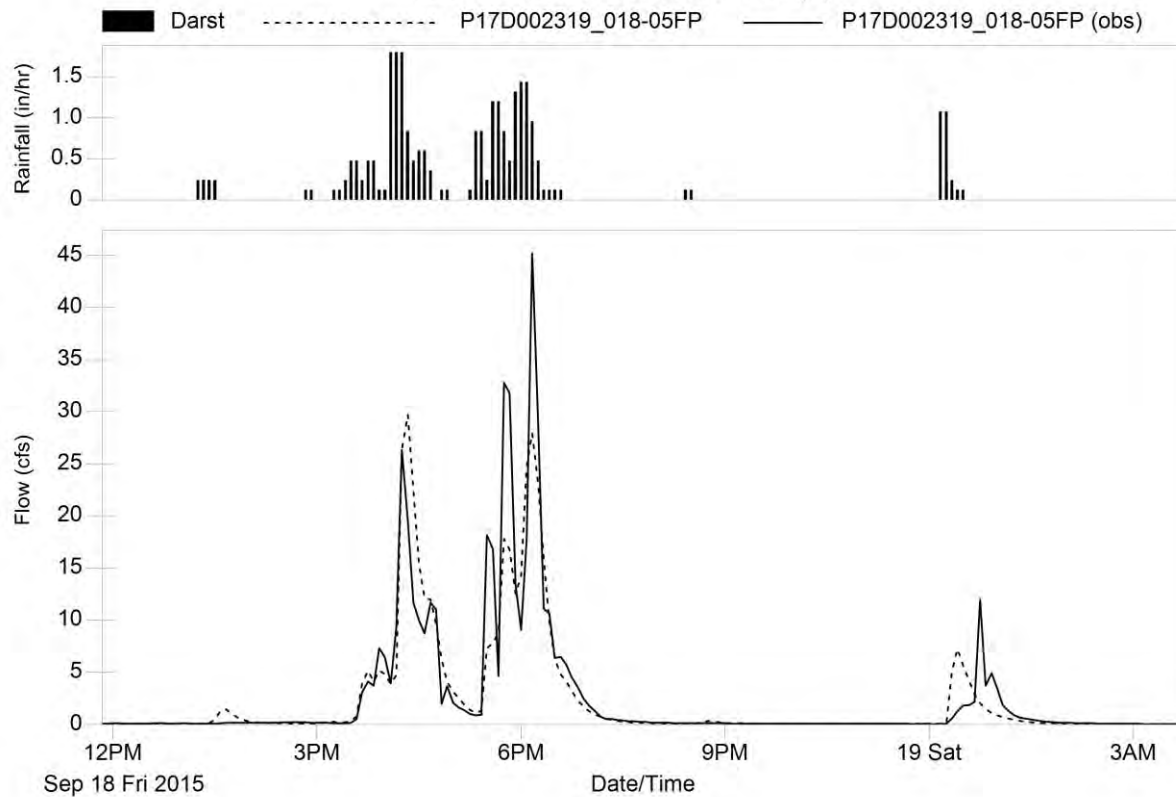
Duration: 4.5 h, Total Rainfall: 0.81 (in)



Sanger 018-05FP – Calibration Events

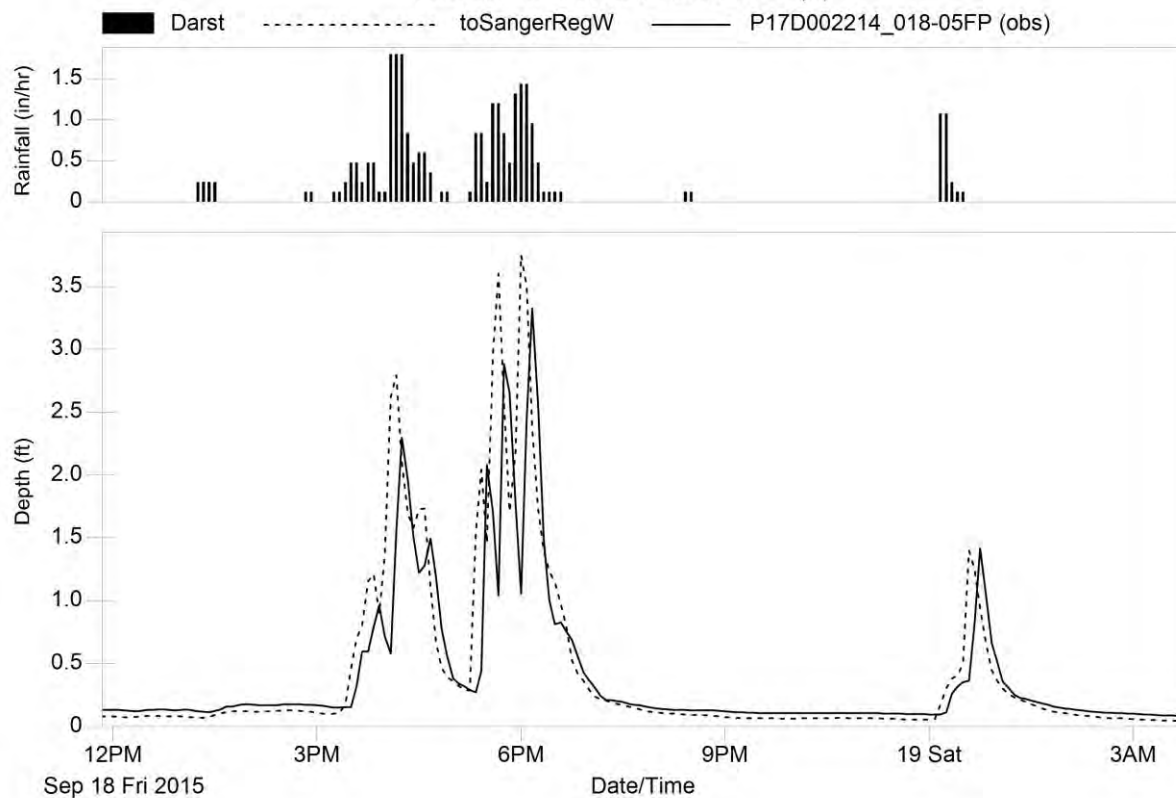
Event of September 18, 2015

Duration: 13.25 h, Total Rainfall: 1.62 (in)



Event of September 18, 2015

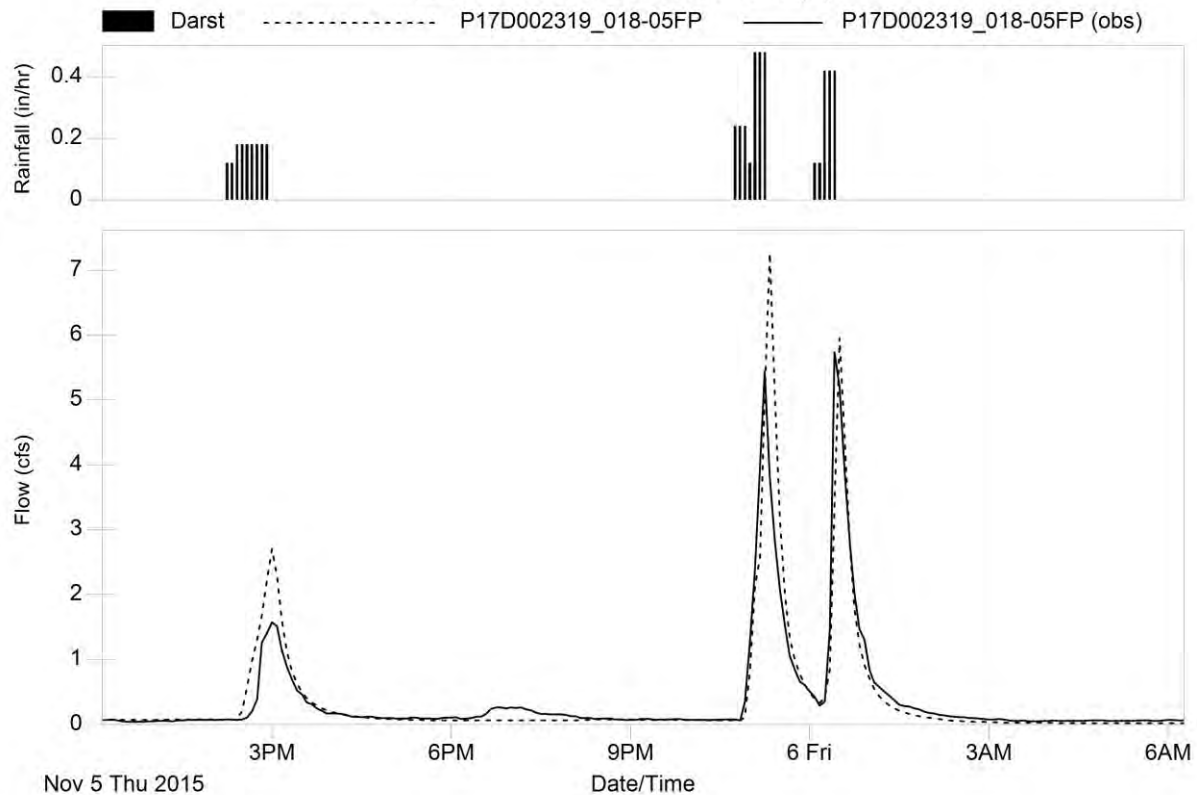
Duration: 13.25 h, Total Rainfall: 1.62 (in)



Sanger 018-05FP – Calibration Events

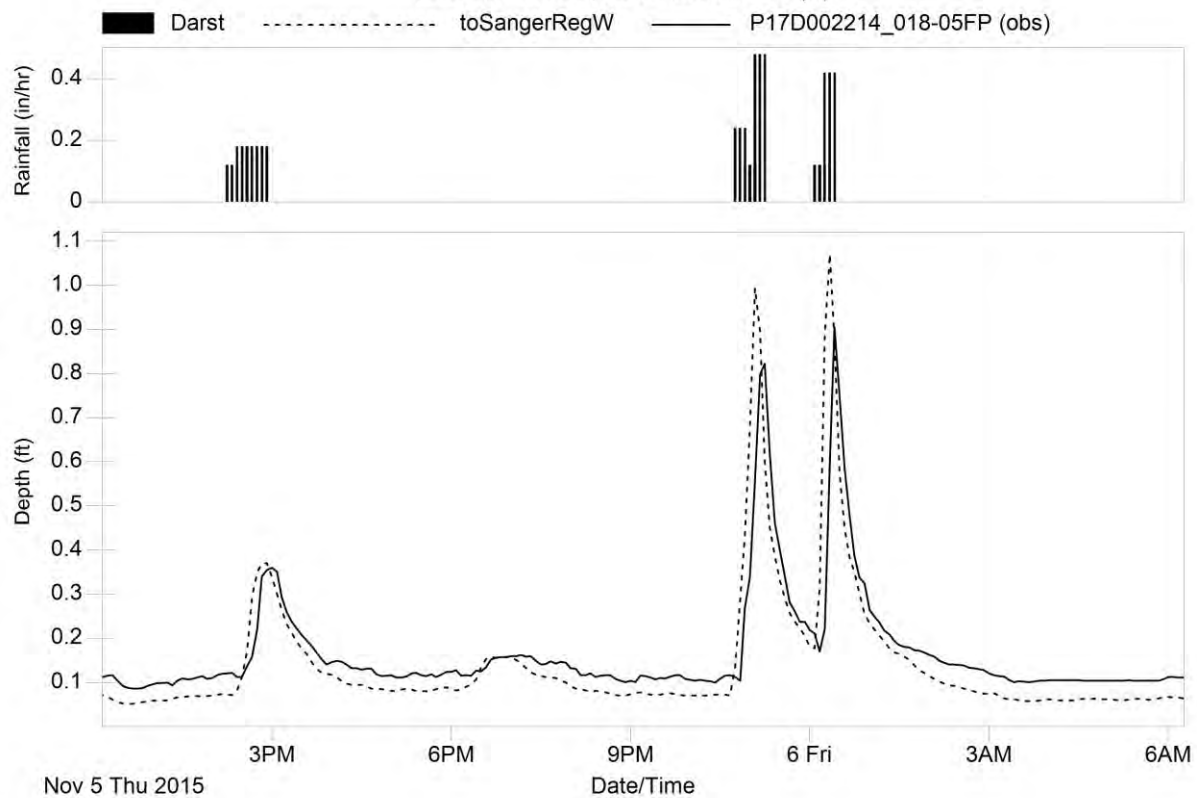
Event of November 5, 2015

Duration: 15.08 h, Total Rainfall: 0.34 (in)



Event of November 5, 2015

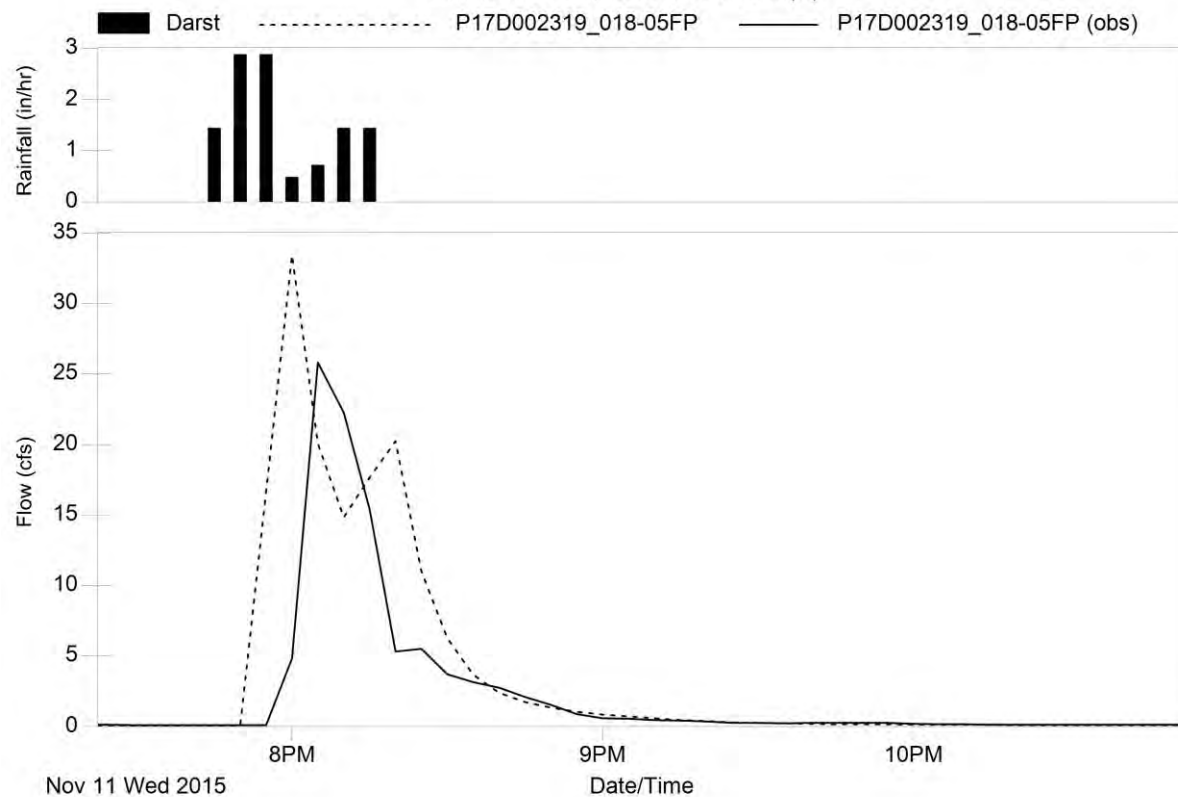
Duration: 15.08 h, Total Rainfall: 0.34 (in)



Sanger 018-05FP – Calibration Events

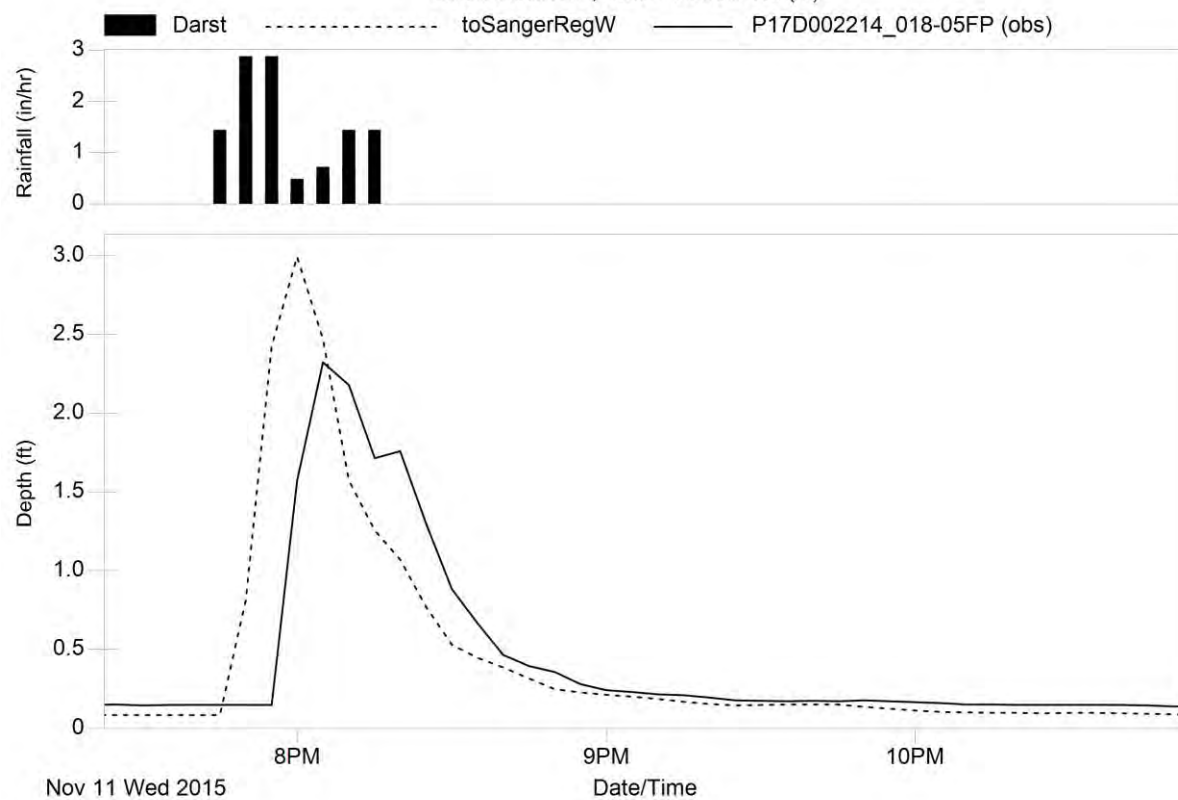
Event of November 11, 2015

Duration: 2.92 h, Total Rainfall: 0.6 (in)



Event of November 11, 2015

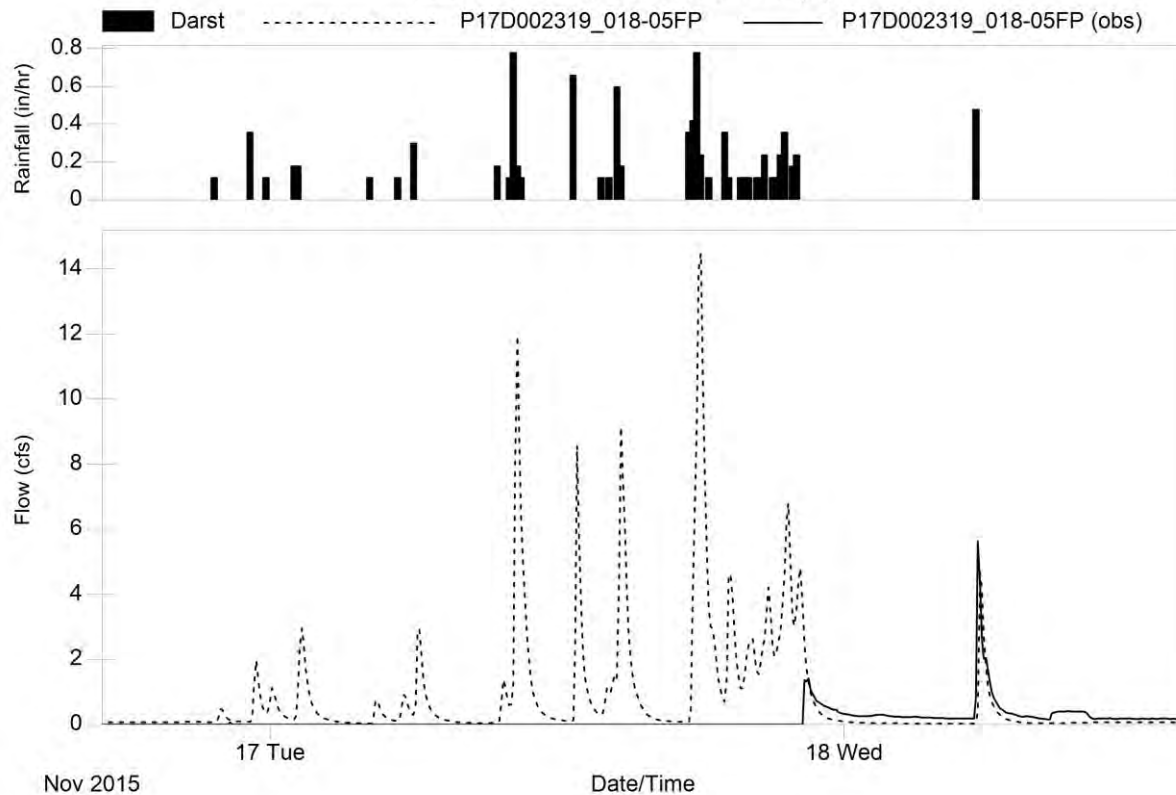
Duration: 2.92 h, Total Rainfall: 0.6 (in)



Sanger 018-05FP – Calibration Events

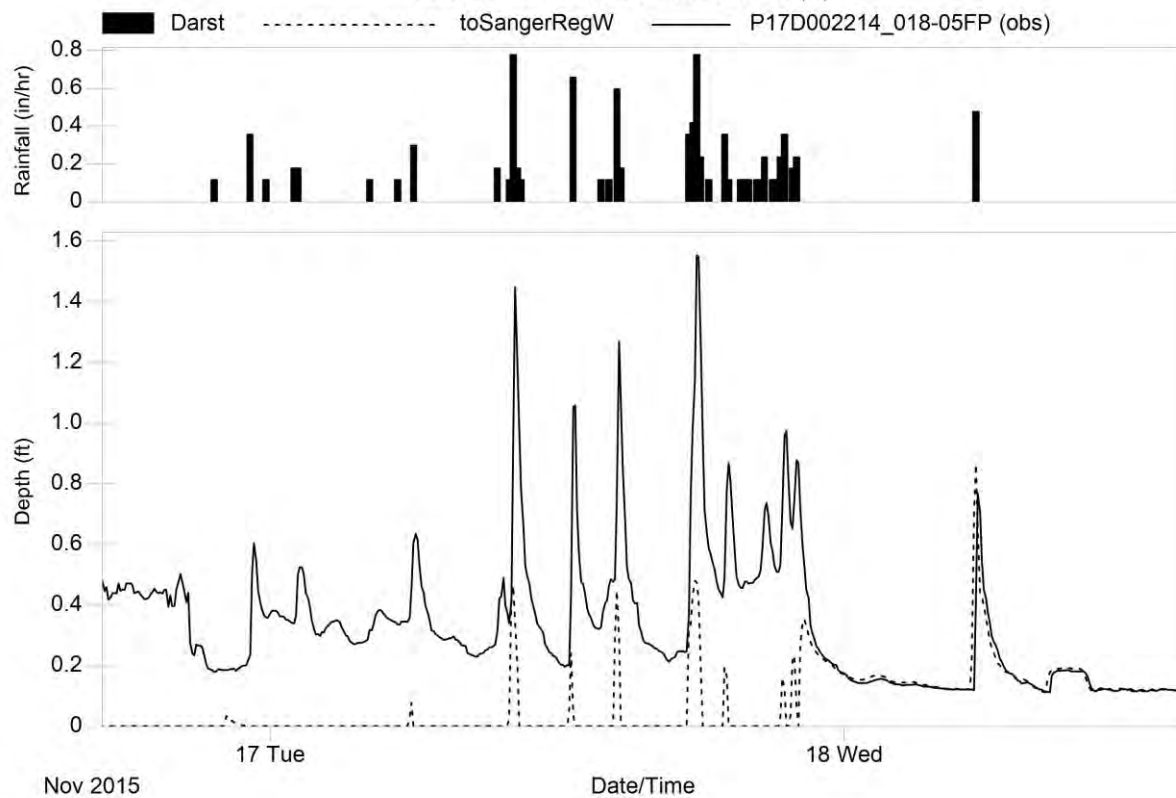
Event of November 16, 2015

Duration: 37.67 h, Total Rainfall: 1.59 (in)



Event of November 16, 2015

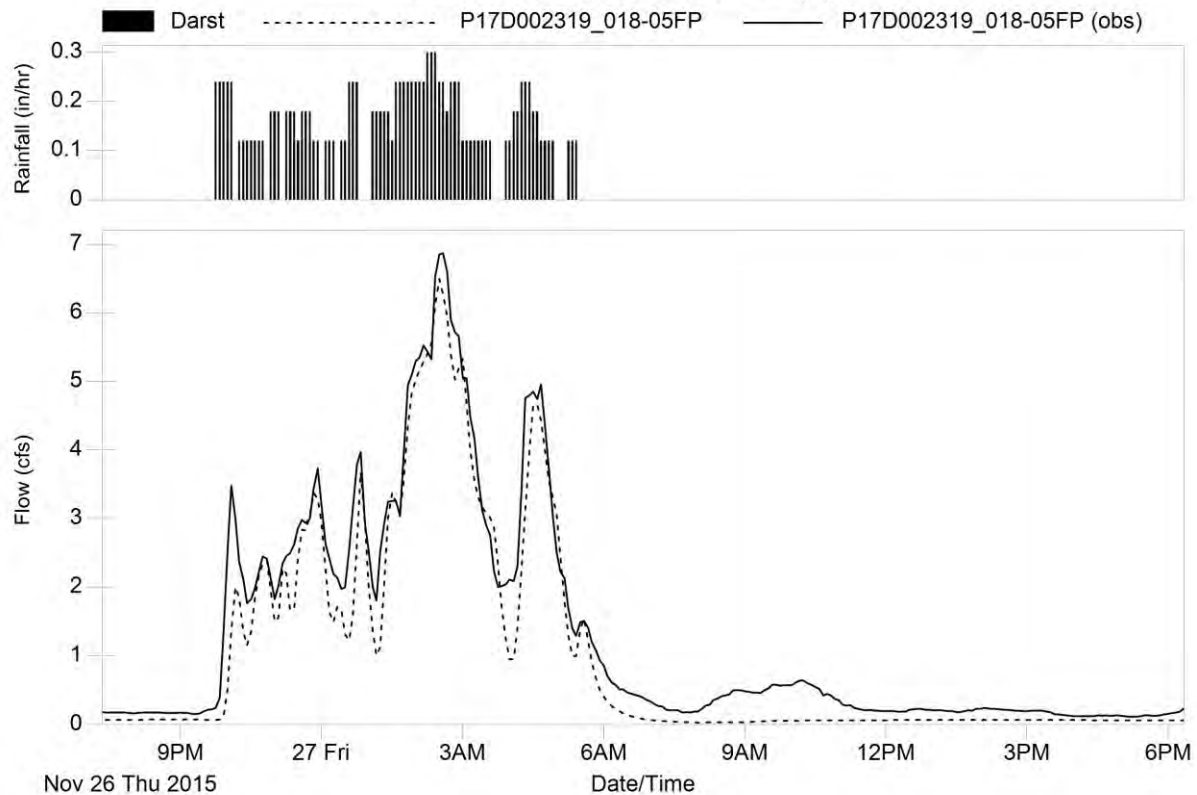
Duration: 37.67 h, Total Rainfall: 1.59 (in)



Sanger 018-05FP – Calibration Events

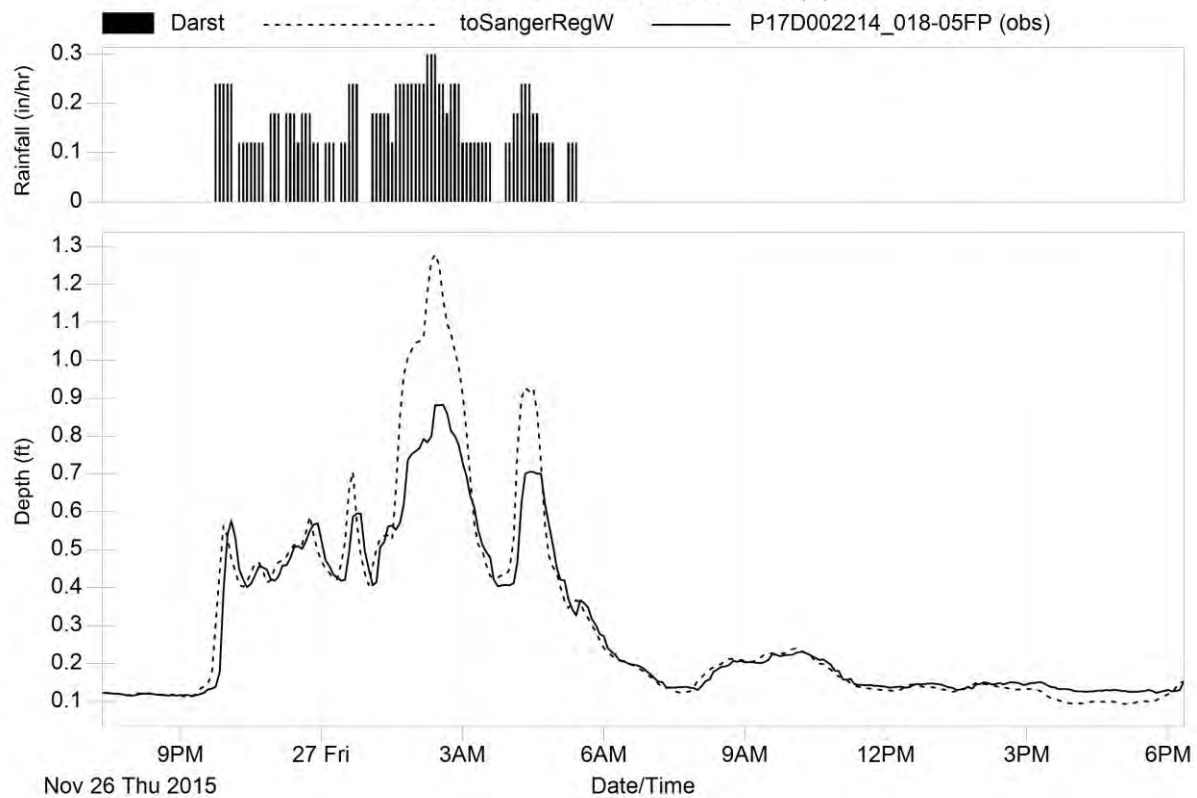
Event of November 26, 2015

Duration: 19.17 h, Total Rainfall: 1.01 (in)



Event of November 26, 2015

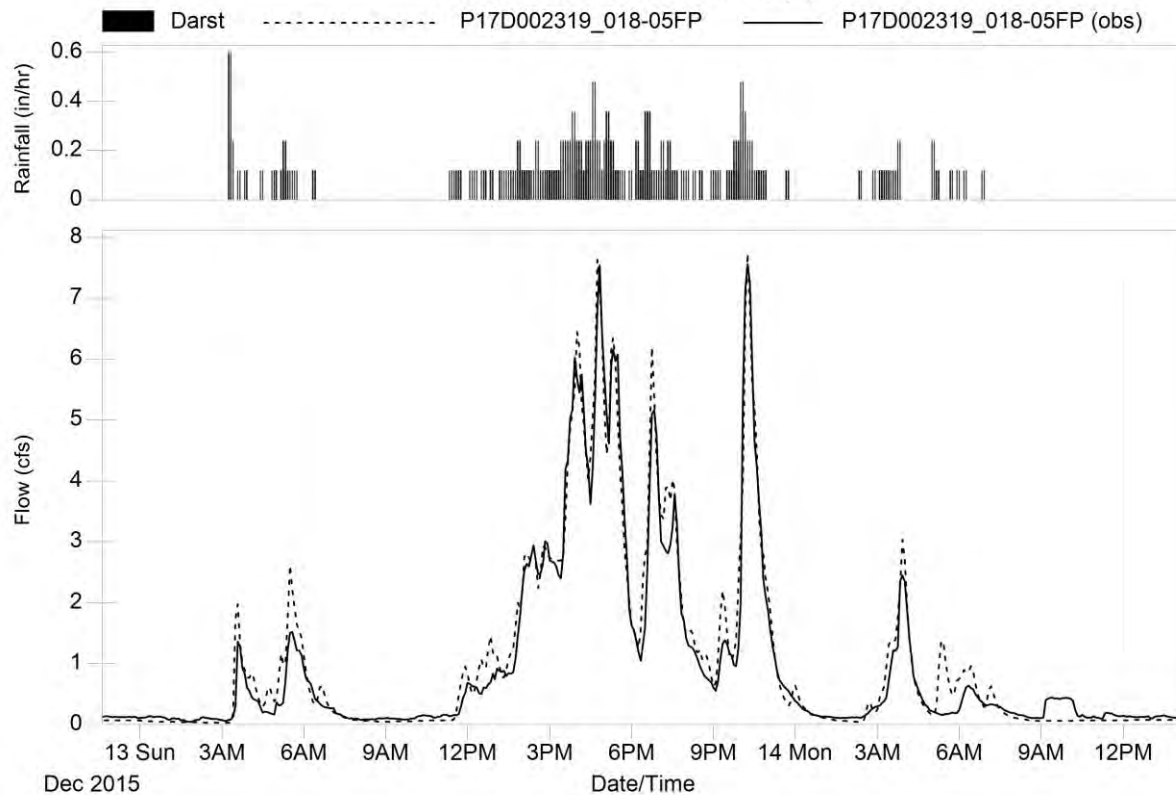
Duration: 19.17 h, Total Rainfall: 1.01 (in)



Sanger 018-05FP – Calibration Events

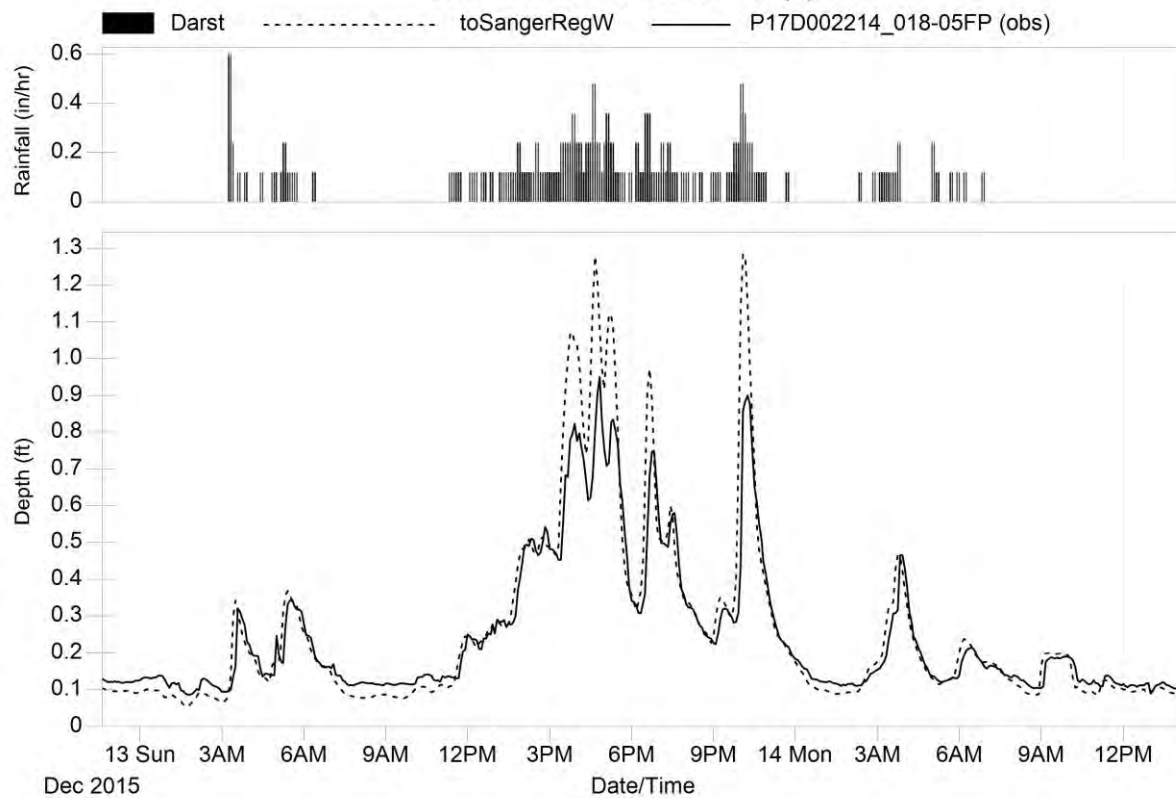
Event of December 13, 2015

Duration: 33 h, Total Rainfall: 1.75 (in)



Event of December 13, 2015

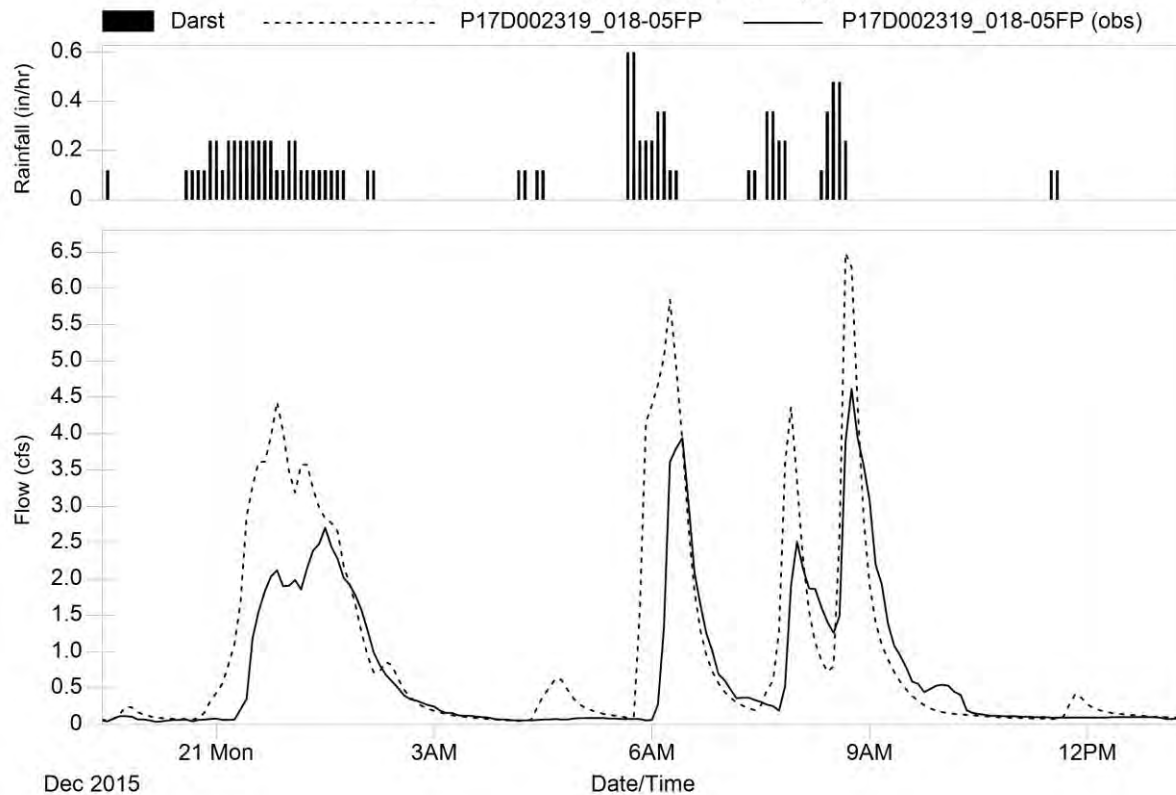
Duration: 33 h, Total Rainfall: 1.75 (in)



Sanger 018-05FP – Calibration Events

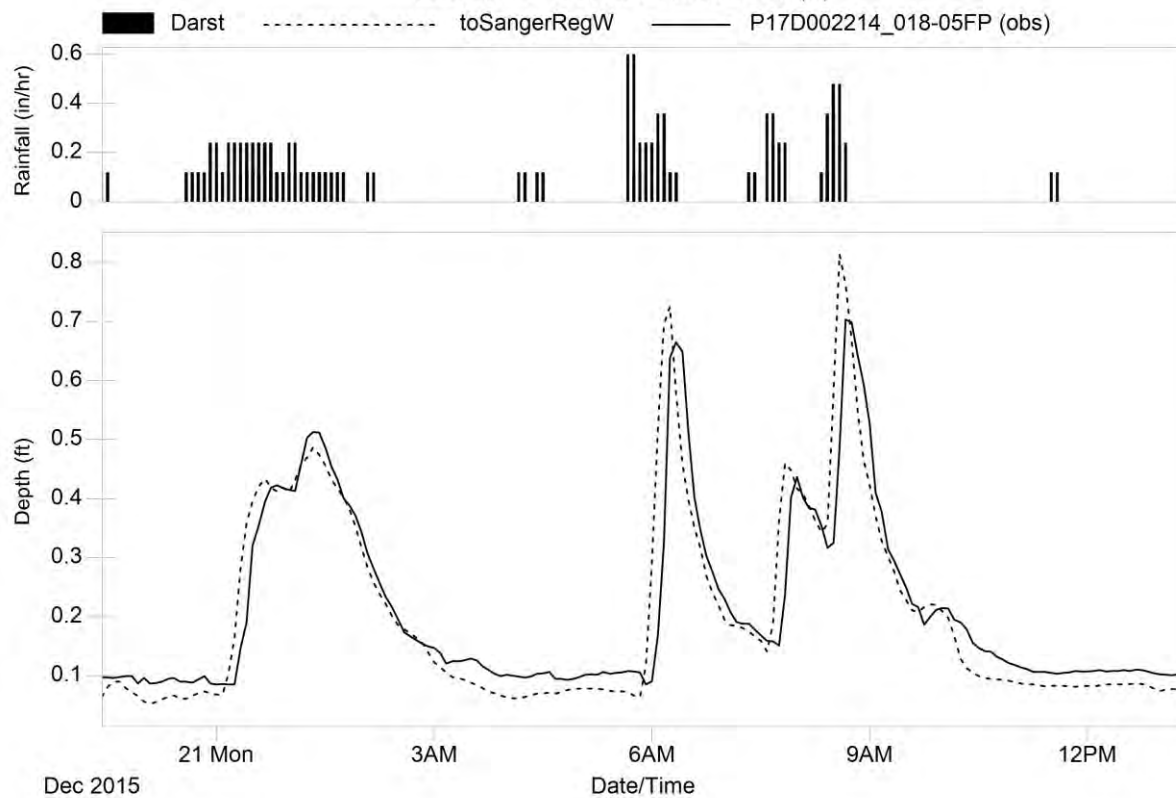
Event of December 20, 2015

Duration: 12.42 h, Total Rainfall: 0.68 (in)



Event of December 20, 2015

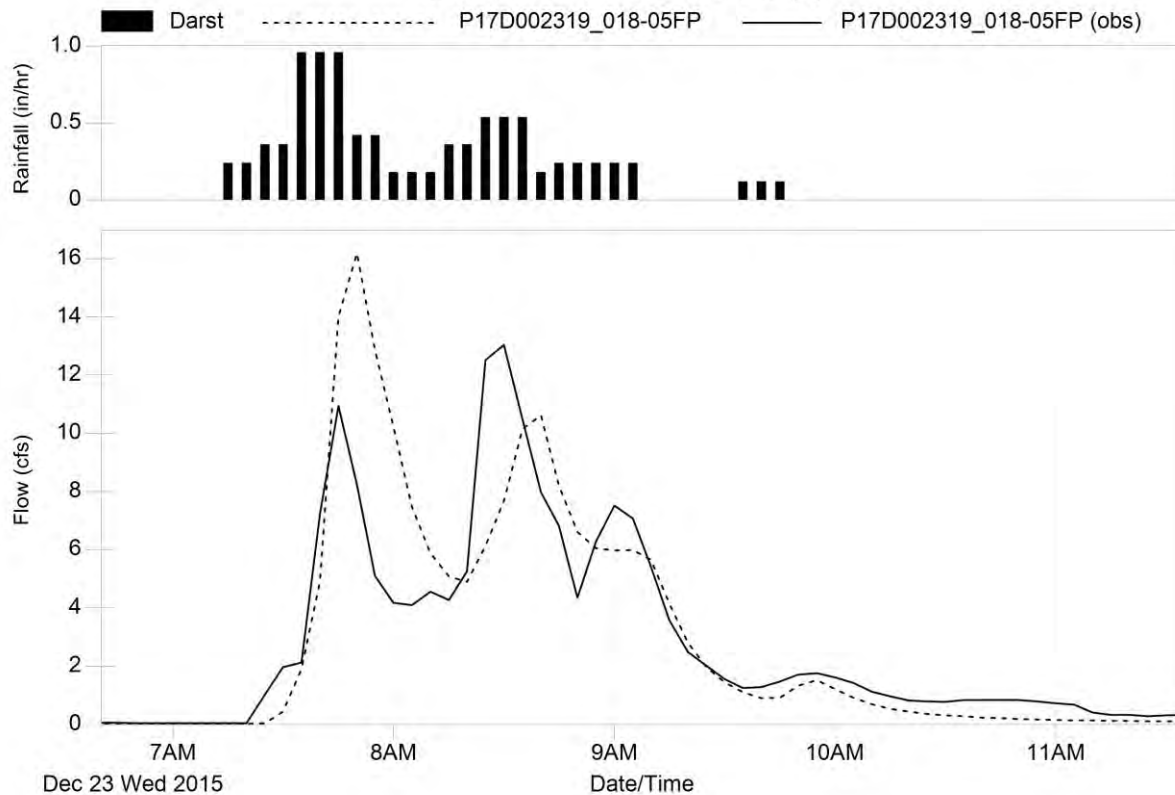
Duration: 12.42 h, Total Rainfall: 0.68 (in)



Sanger 018-05FP – Calibration Events

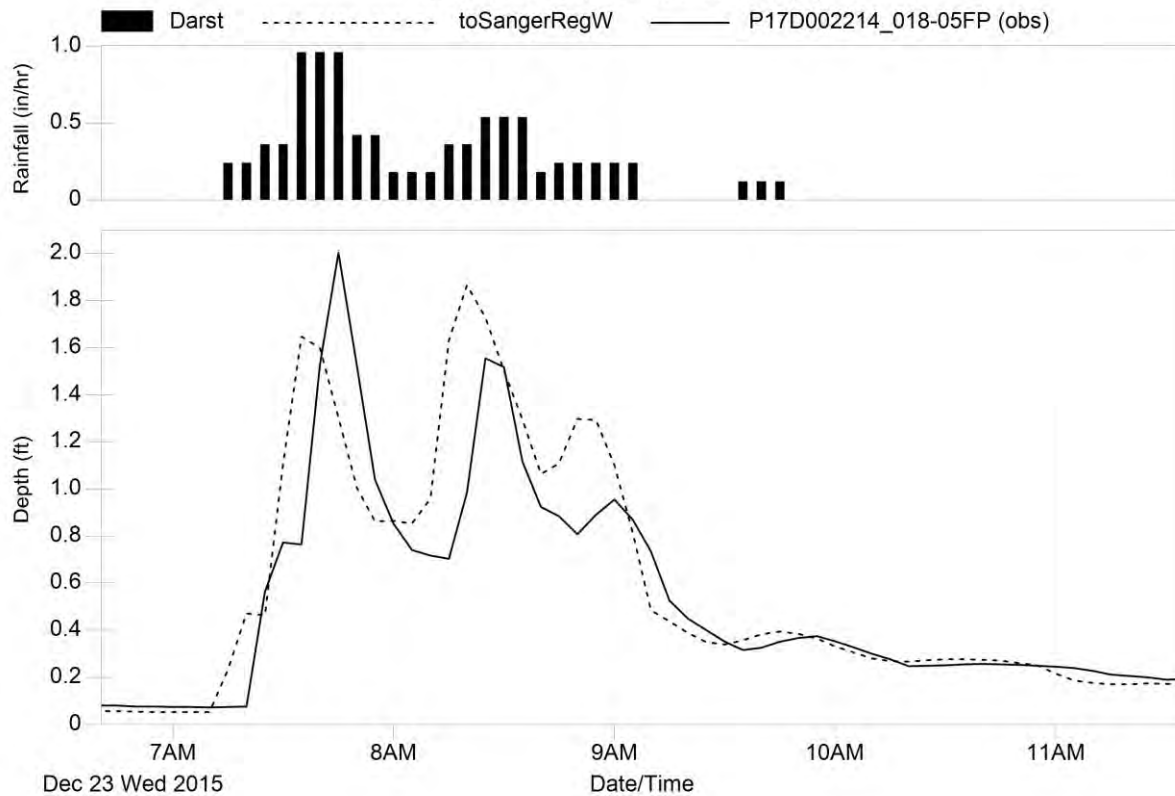
Event of December 23, 2015

Duration: 4.08 h, Total Rainfall: 0.67 (in)



Event of December 23, 2015

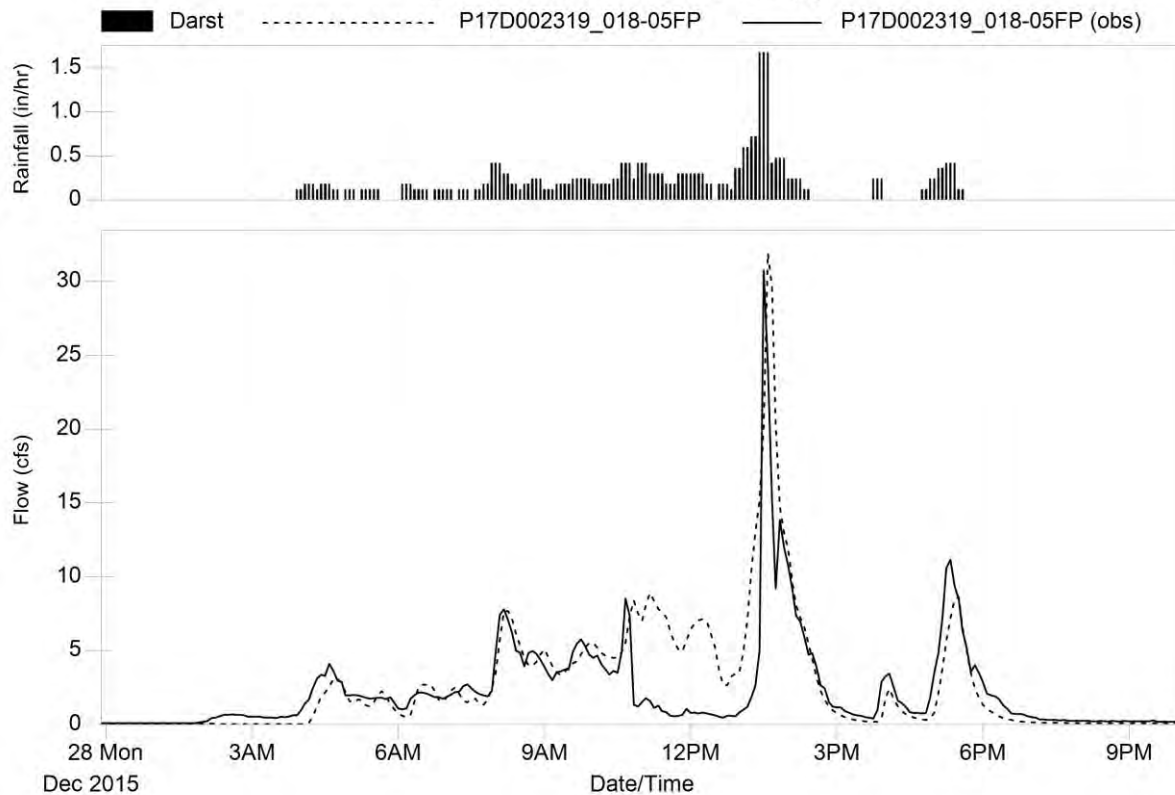
Duration: 4.08 h, Total Rainfall: 0.67 (in)



Sanger 018-05FP – Calibration Events

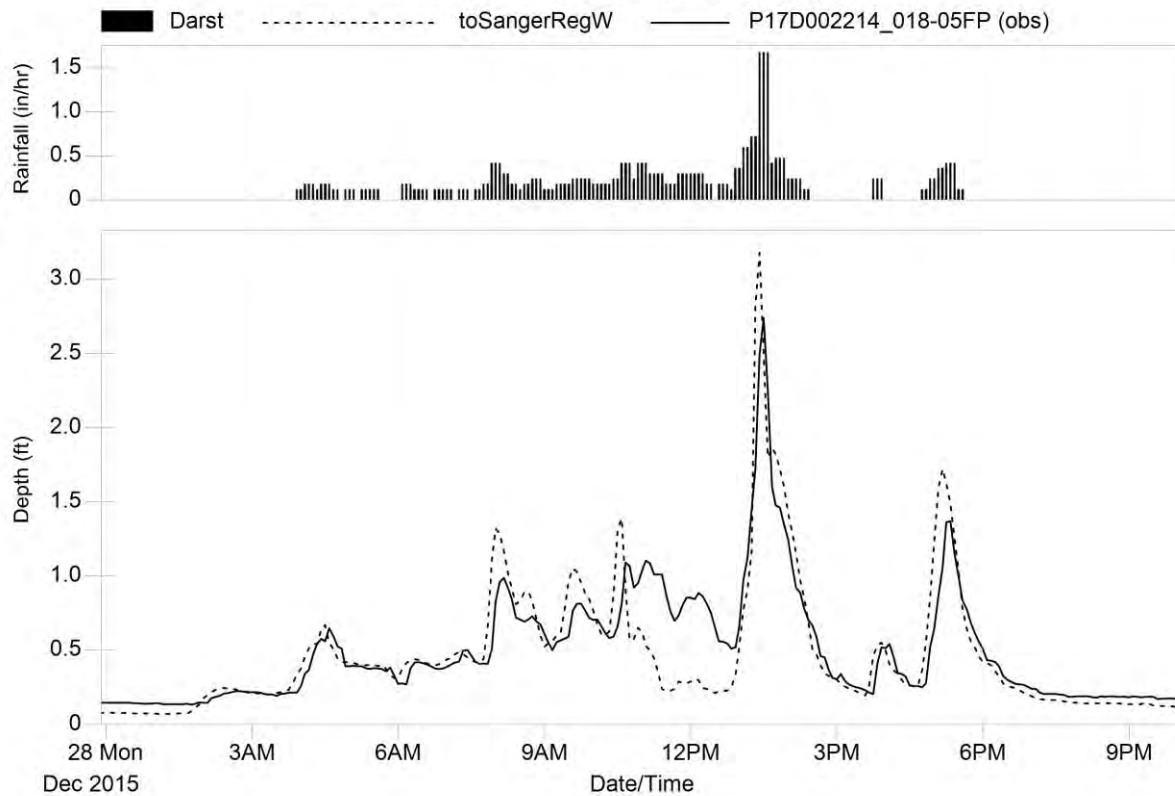
Event of December 28, 2015

Duration: 18.5 h, Total Rainfall: 2.54 (in)

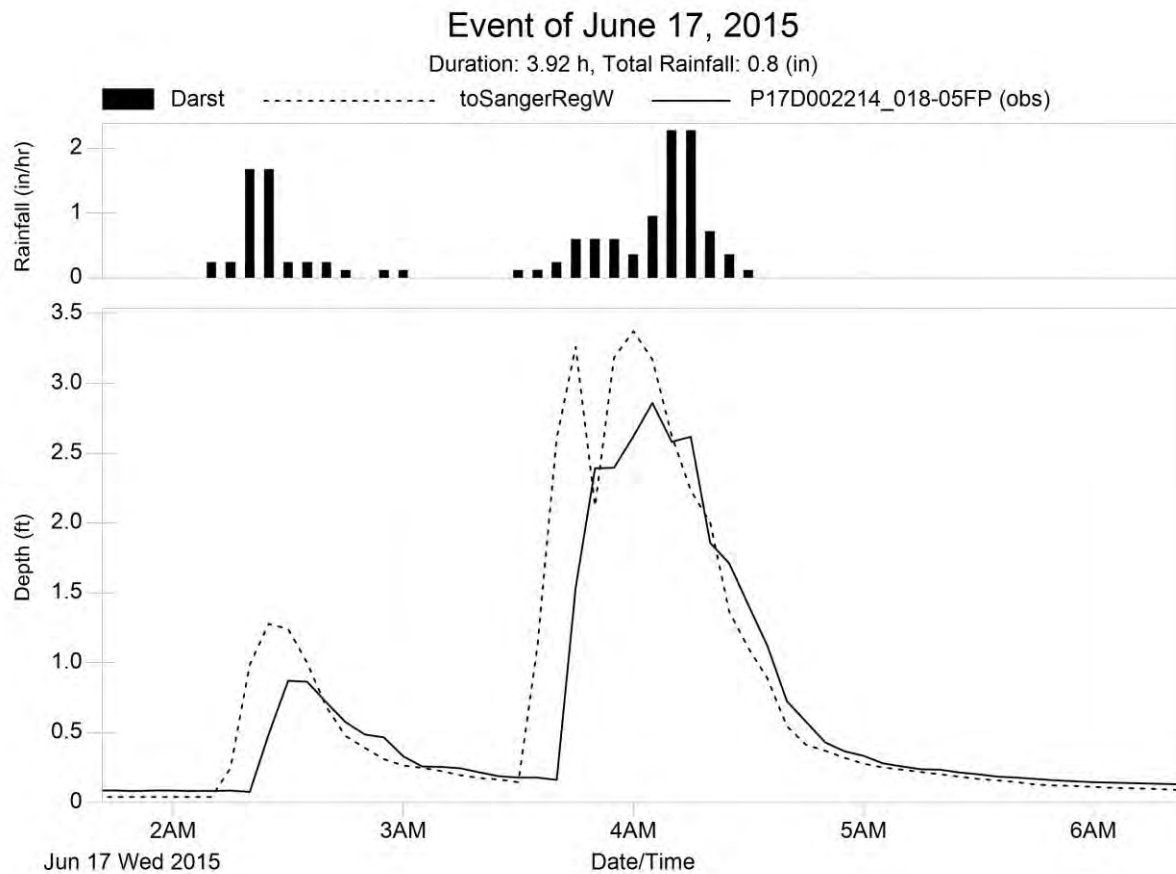
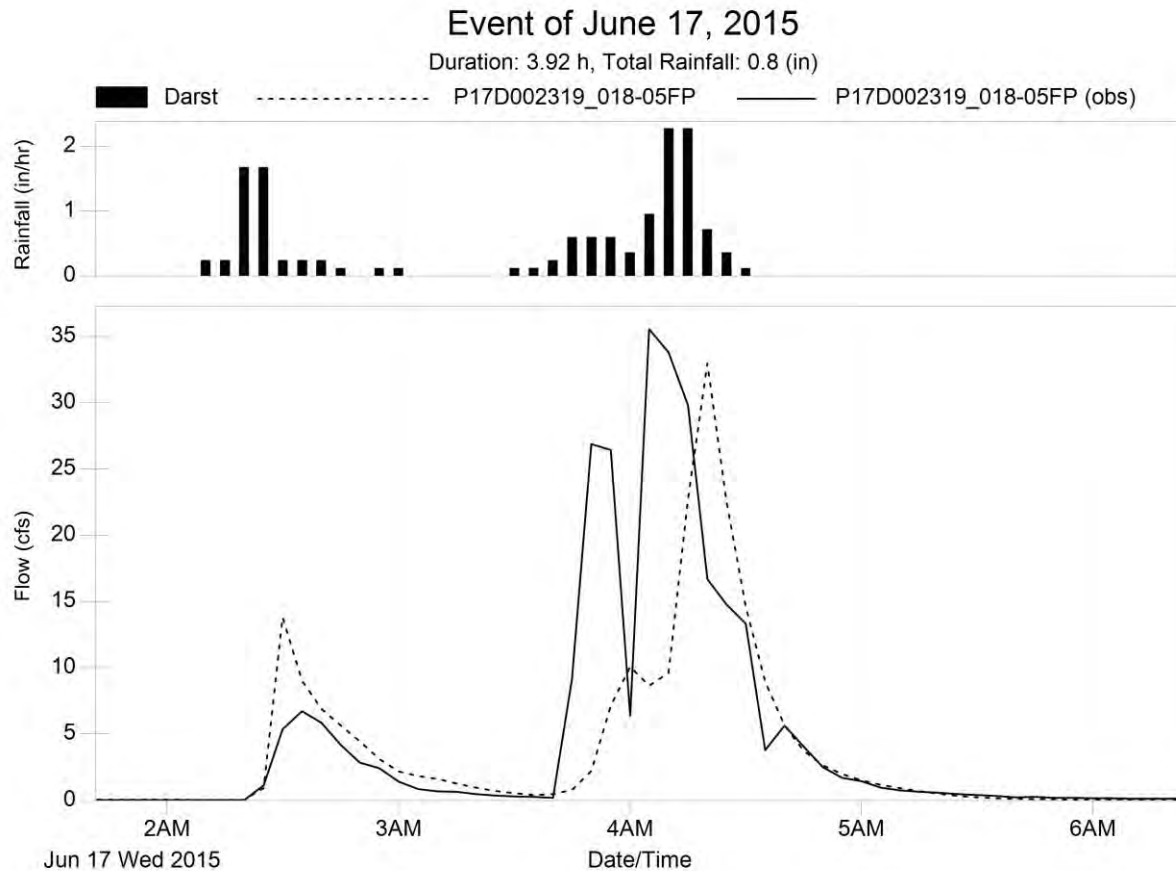


Event of December 28, 2015

Duration: 18.5 h, Total Rainfall: 2.54 (in)



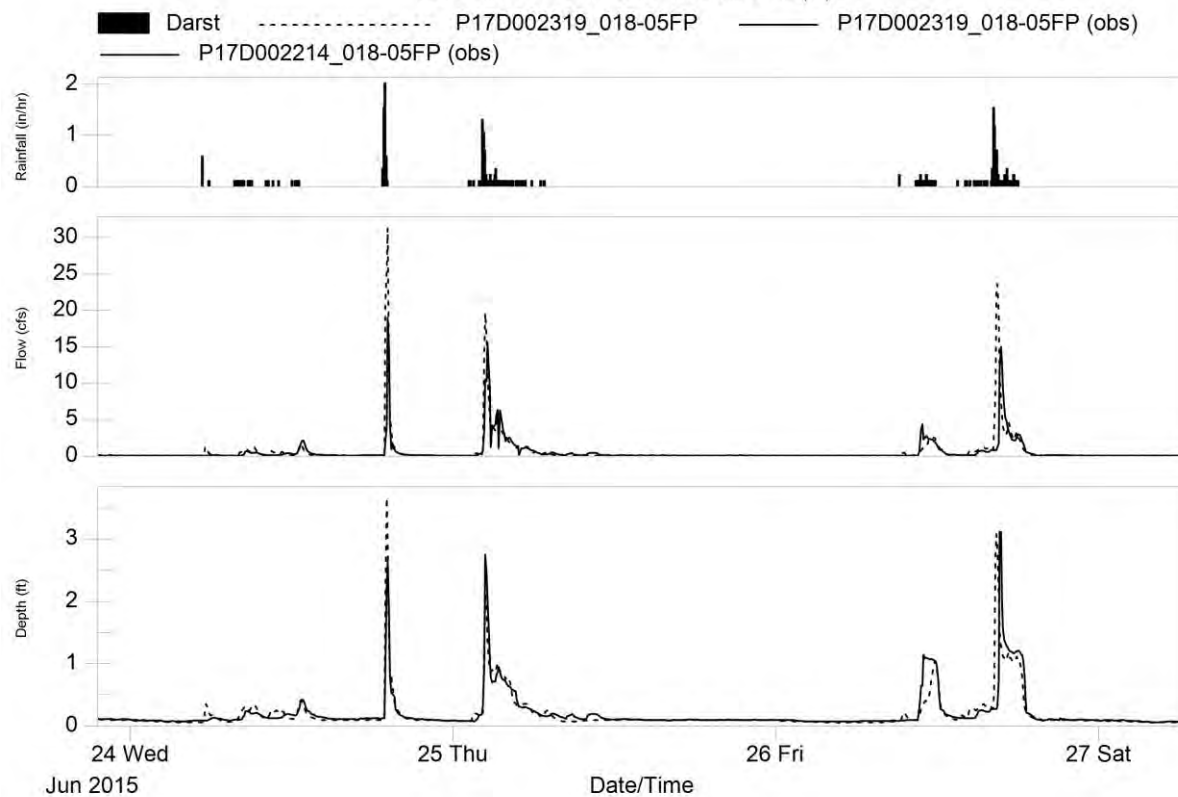
Sanger 018-05FP – Verification Events



Sanger 018-05FP – Verification Events

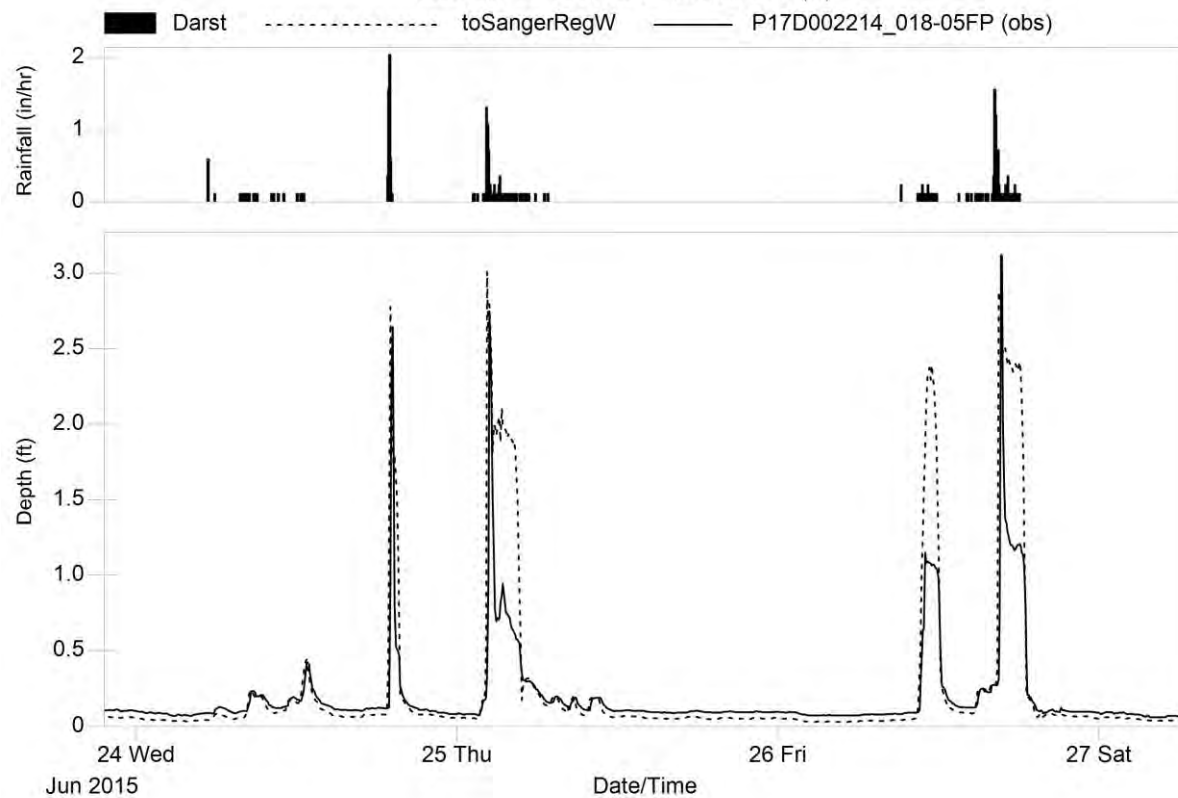
Event of June 24, 2015

Duration: 67.42 h, Total Rainfall: 2.15 (in)

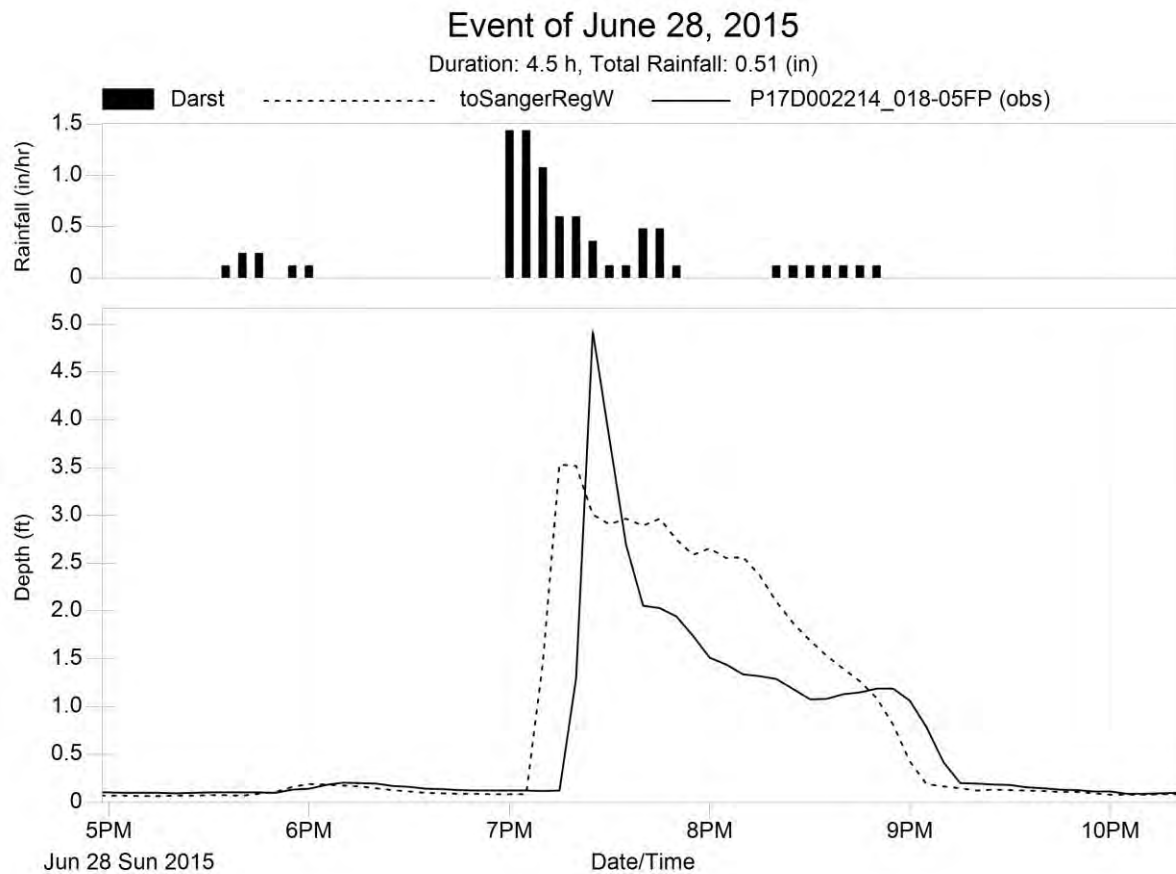
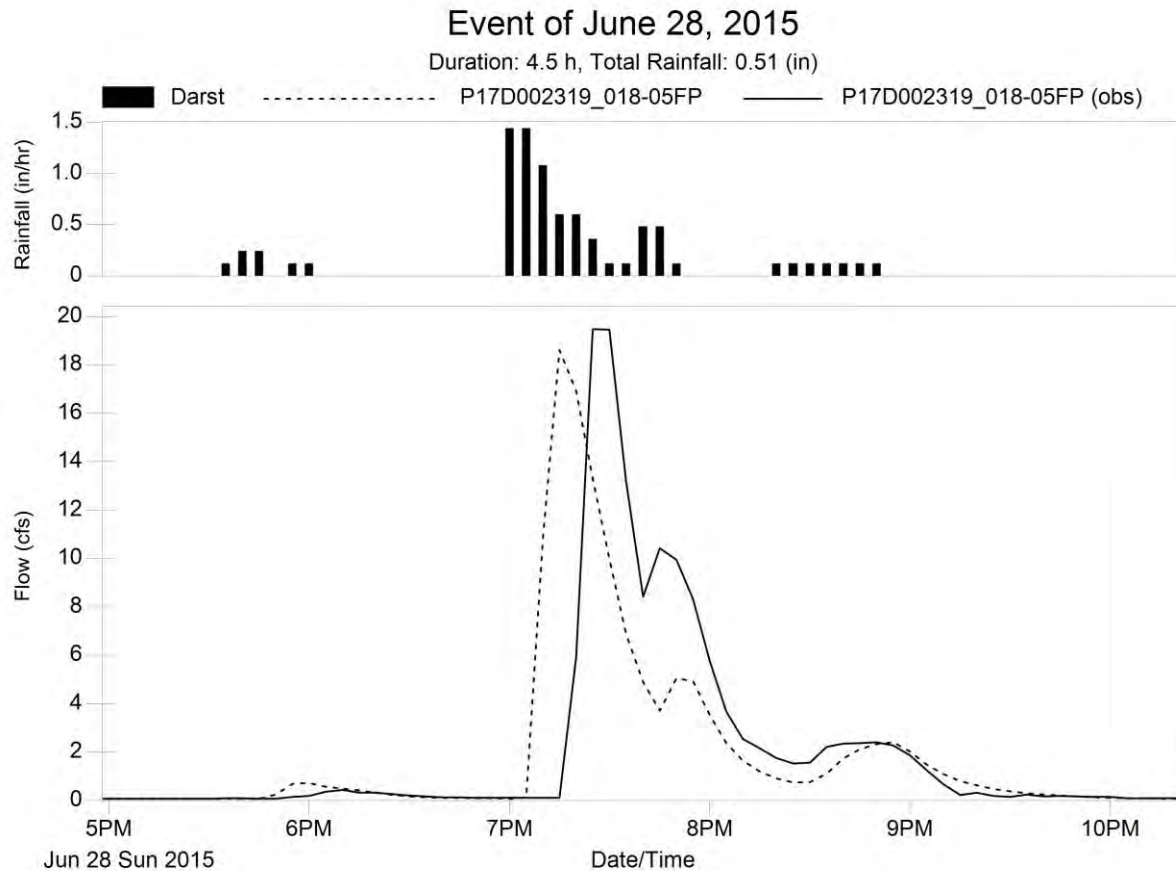


Event of June 24, 2015

Duration: 67.42 h, Total Rainfall: 2.15 (in)



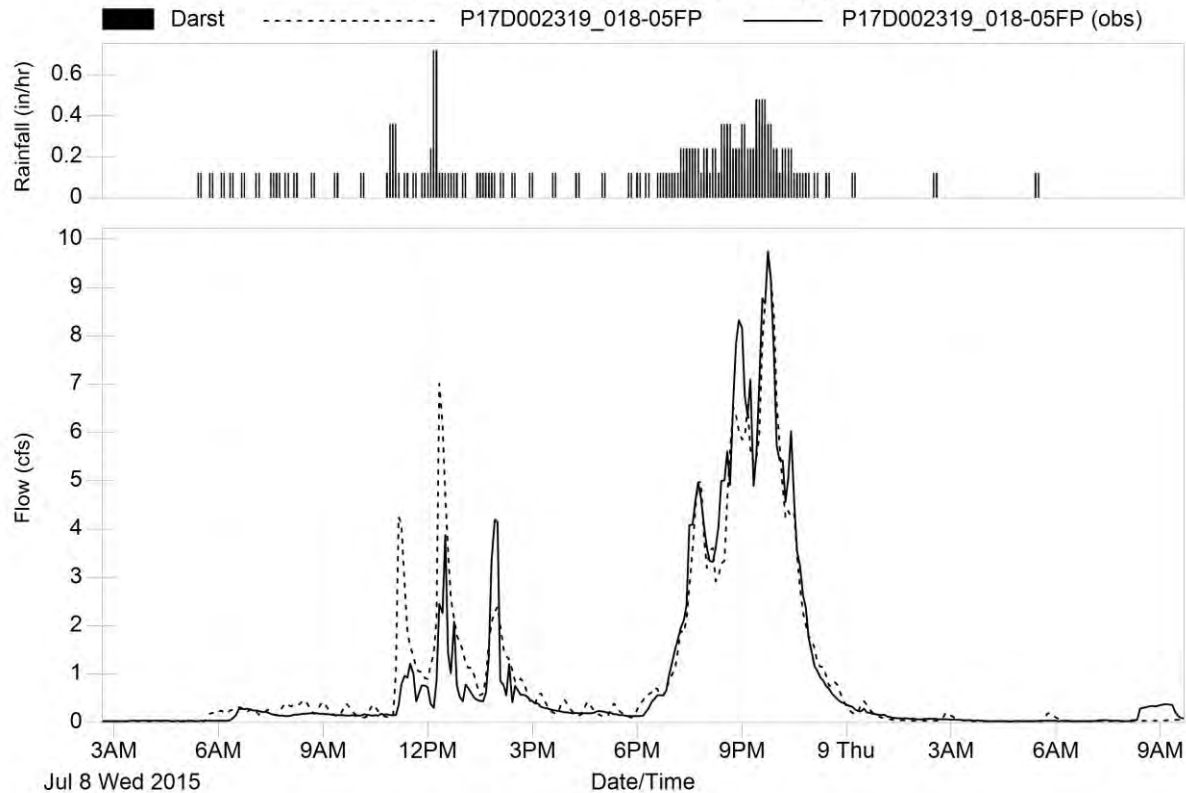
Sanger 018-05FP – Verification Events



Sanger 018-05FP – Verification Events

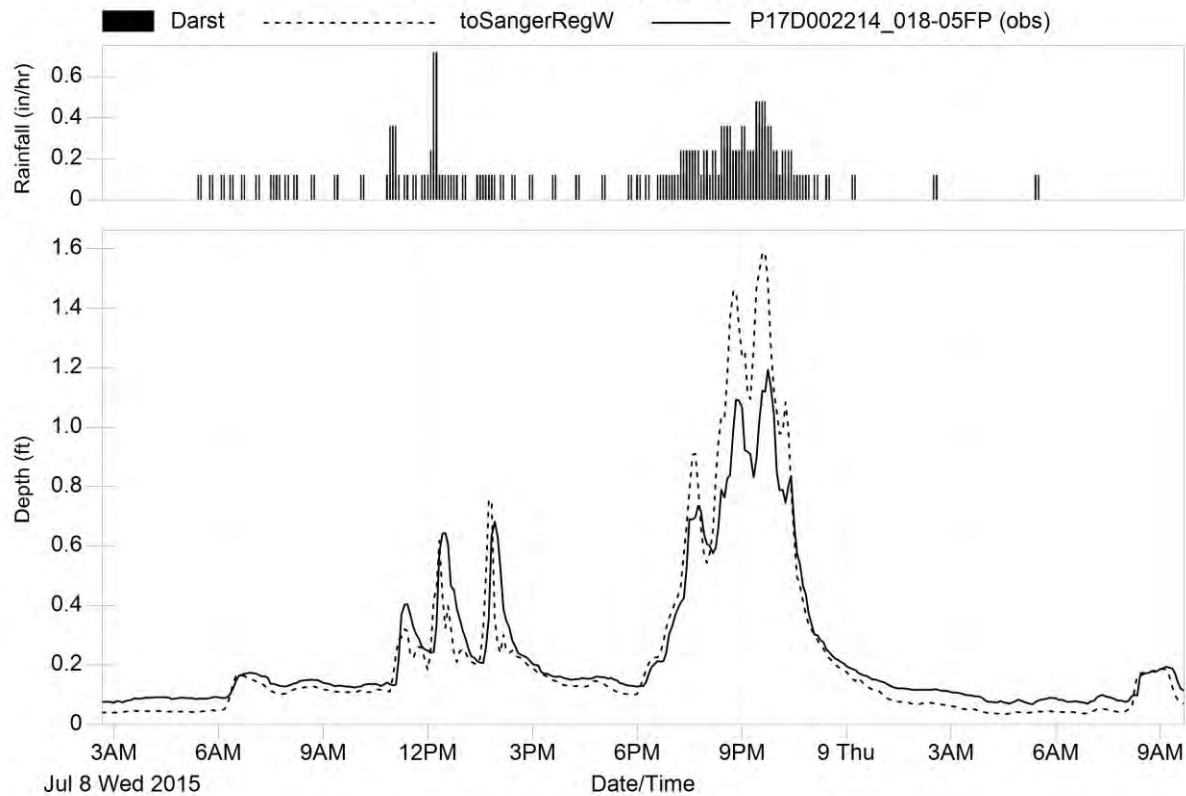
Event of July 8, 2015

Duration: 25.83 h, Total Rainfall: 1.39 (in)



Event of July 8, 2015

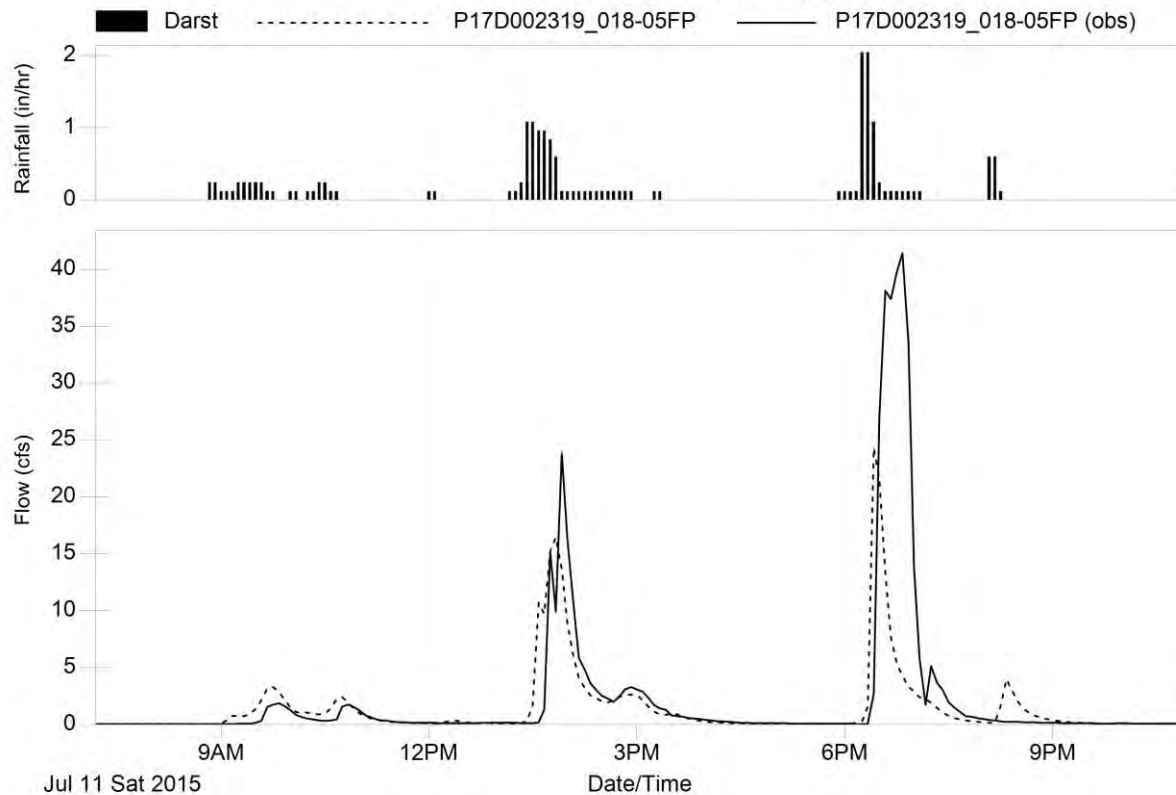
Duration: 25.83 h, Total Rainfall: 1.39 (in)



Sanger 018-05FP – Verification Events

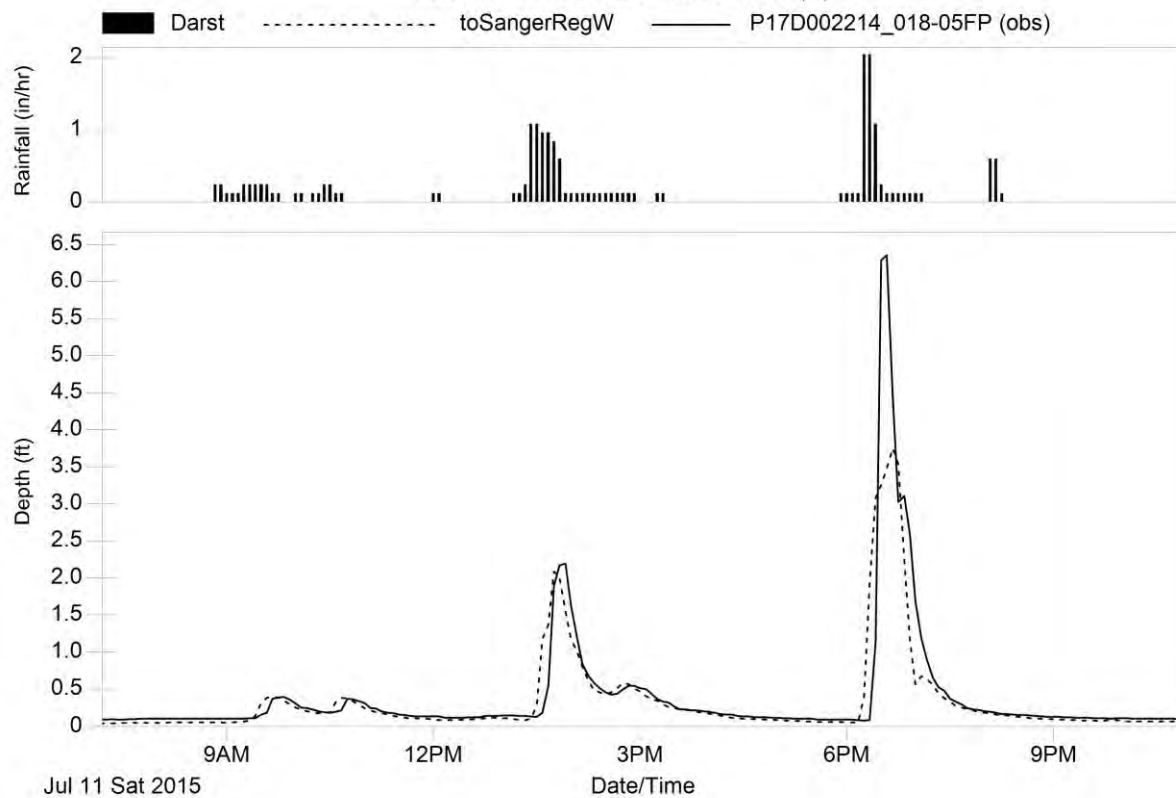
Event of July 11, 2015

Duration: 13.08 h, Total Rainfall: 1.07 (in)



Event of July 11, 2015

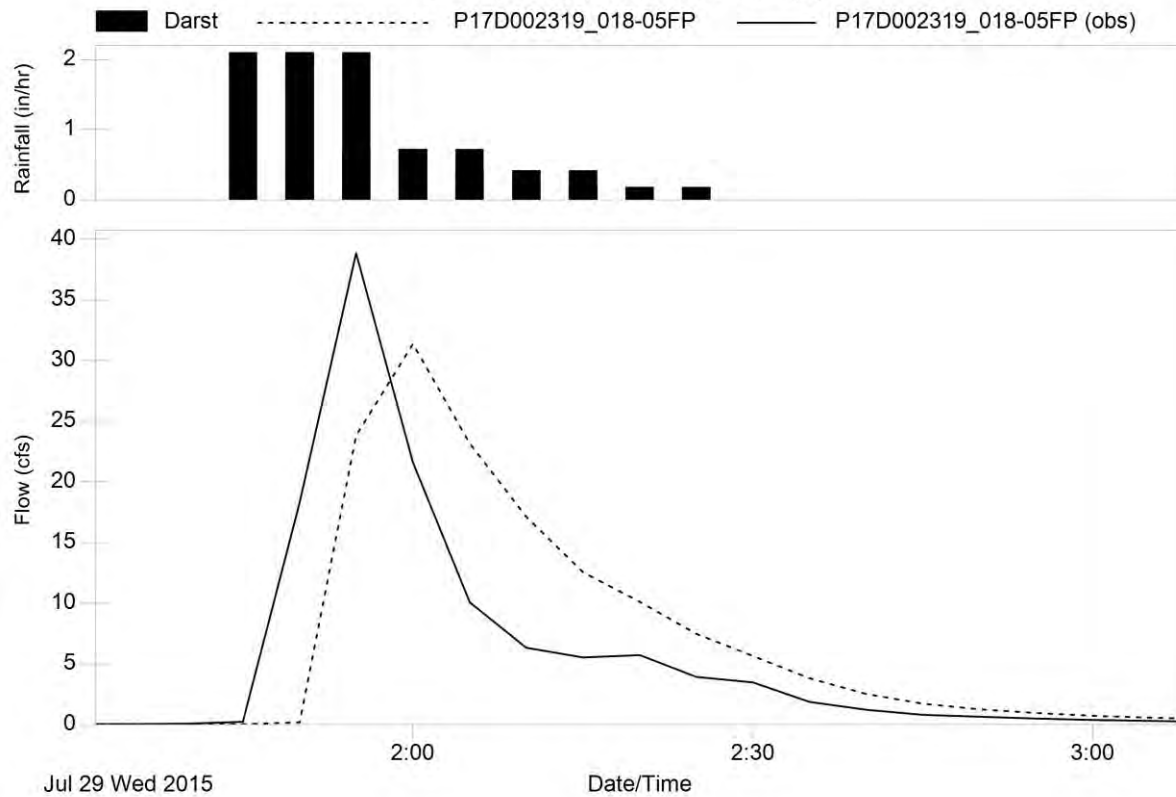
Duration: 13.08 h, Total Rainfall: 1.07 (in)



Sanger 018-05FP – Verification Events

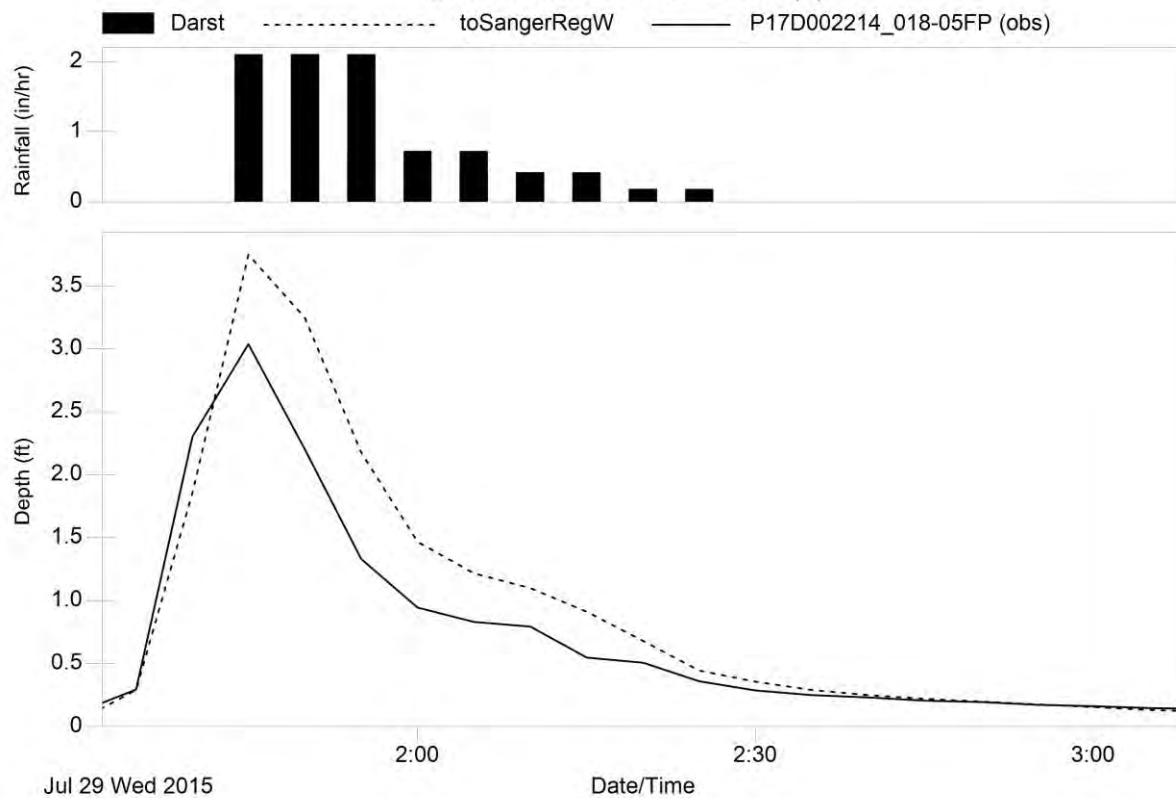
Event of July 29, 2015

Duration: 1.33 h, Total Rainfall: 0.57 (in)

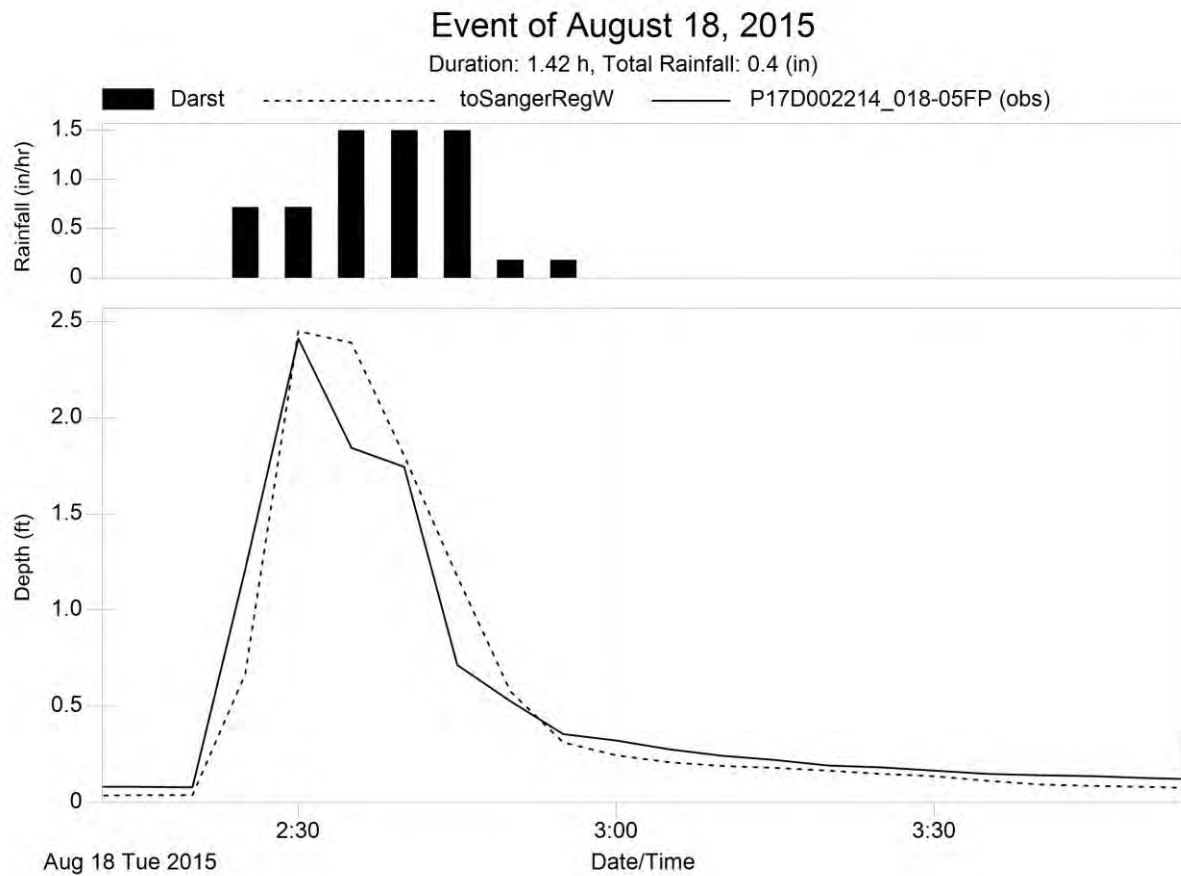
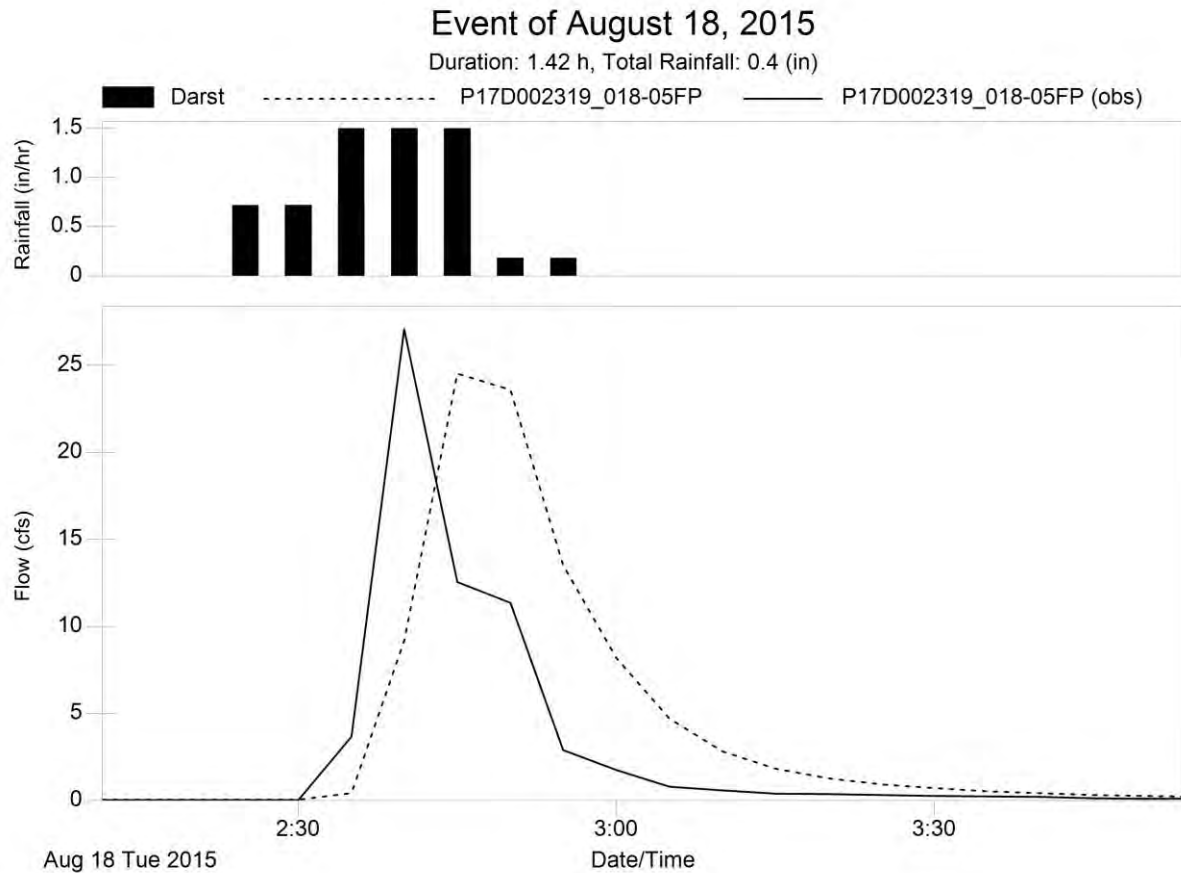


Event of July 29, 2015

Duration: 1.33 h, Total Rainfall: 0.57 (in)



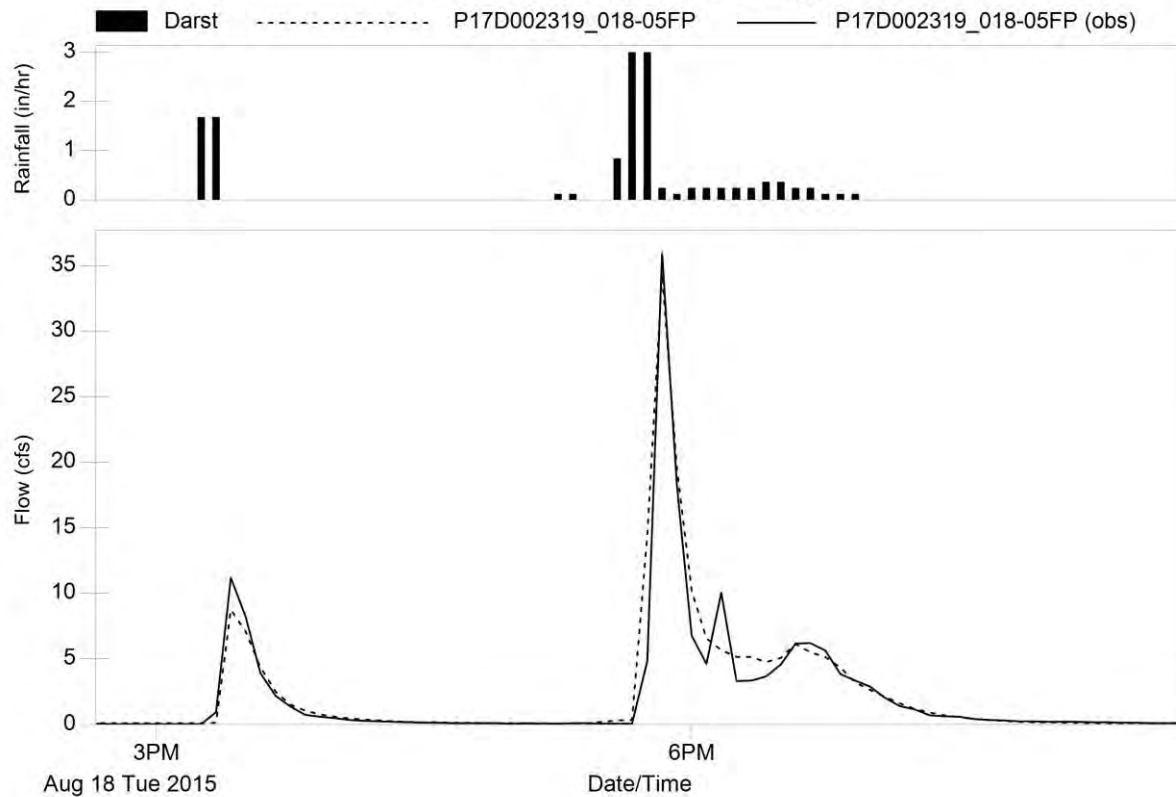
Sanger 018-05FP – Verification Events



Sanger 018-05FP – Verification Events

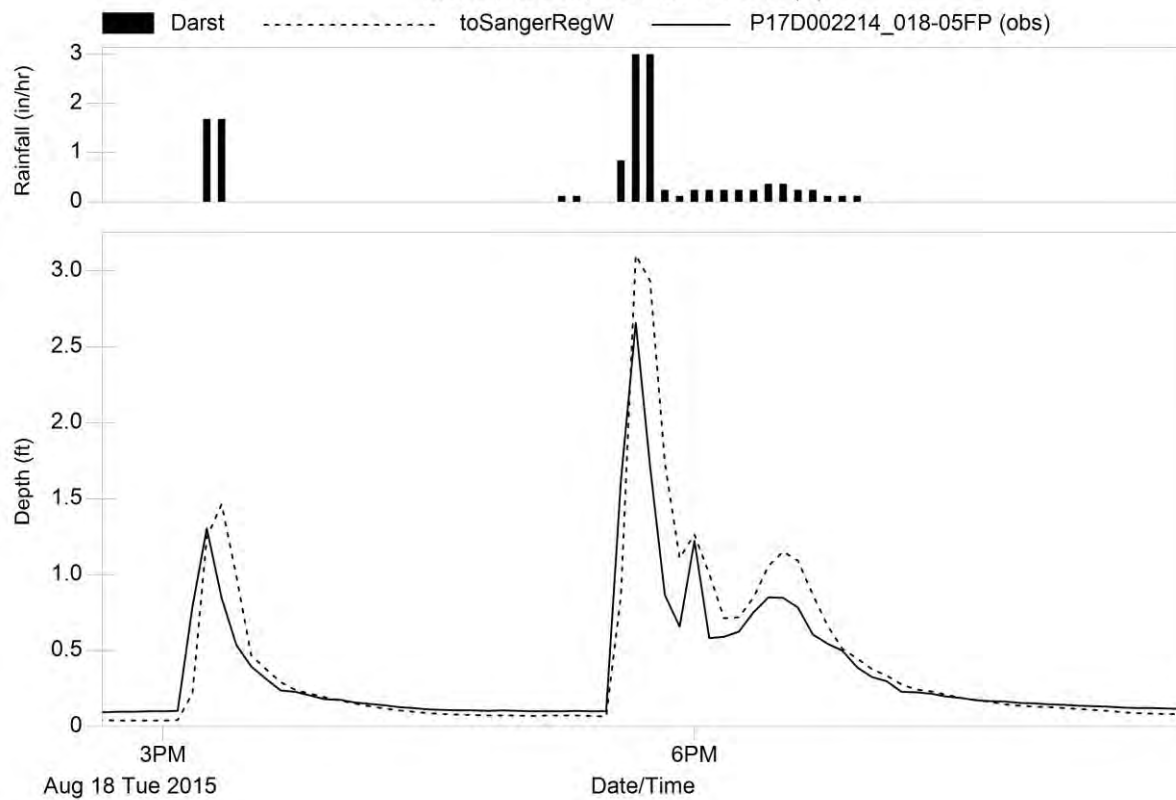
Event of August 18, 2015

Duration: 5.08 h, Total Rainfall: 0.66 (in)

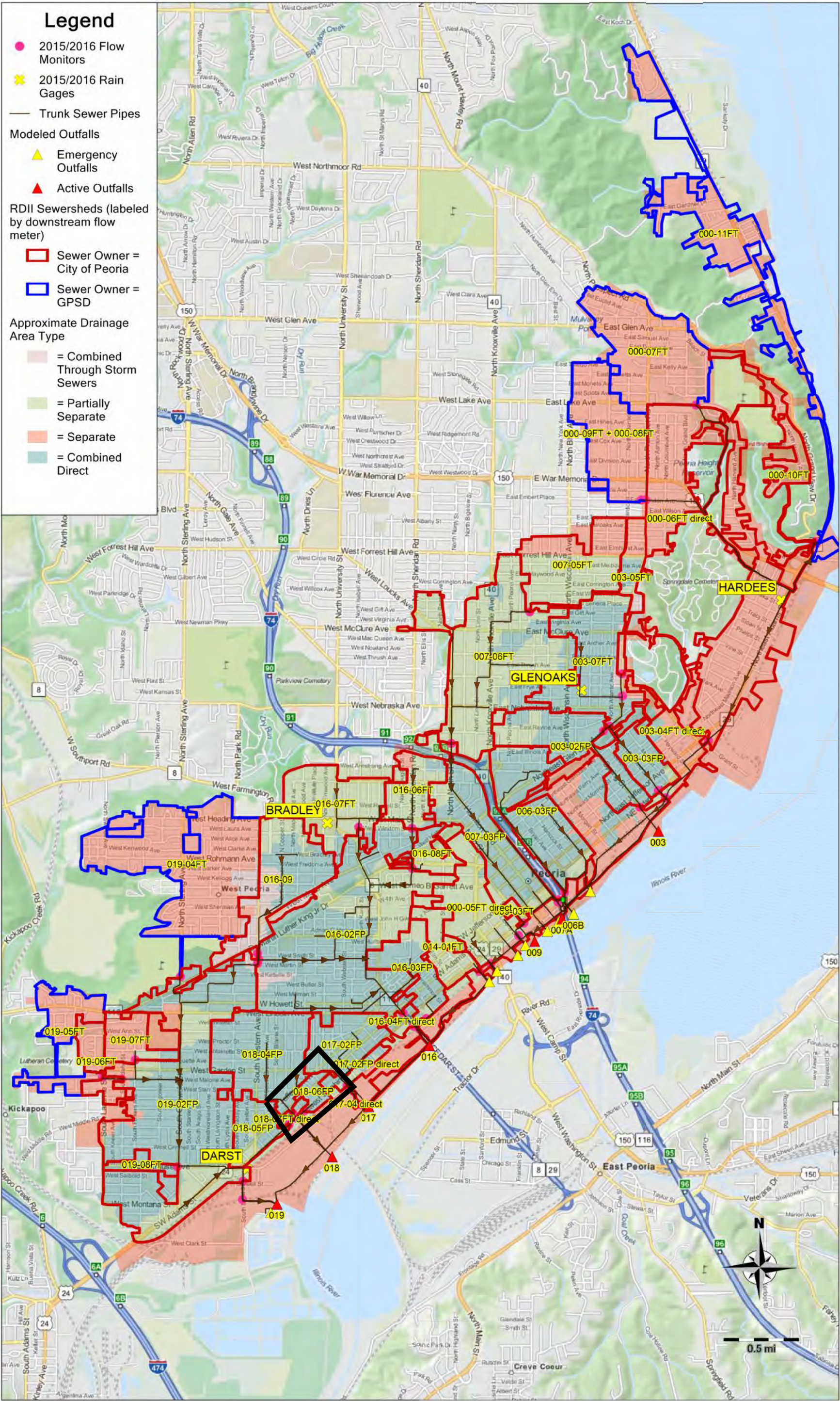


Event of August 18, 2015

Duration: 5.08 h, Total Rainfall: 0.66 (in)



Flow Monitor 018-06FP Overview Map



Legend

- 2015/2016 Rain Gages
- Modeled Conduits
- Modeled Junctions
 - Modeled Manholes
 - Modeled Manholes with Inflow (labeled)
- Modeled Subcatchments
 - DCIA
 - PERVIOUS
 - ROOFS
 - DIA
- 2015/2016 Flow Monitors
 - Active Meters
 - Existing Meters
 - Removed Meters
- RDII Sewersheds
- Subcatchments

Map Labels:

- 017-02-07
- 018-04-01
- 018-06-01
- 018-06FP
- 018-04FP
- 018-07FT
- 018-08FT 0.6
- 018-09FT
- 018-01LE
- 018-02LE
- 018-10LE
- 018-07FT direct
- 017-02FP
- 017-0601990
- 017-02-07
- 018-04-01
- 018-06-01
- 018-06FP
- 018-04FP
- 018-07FT
- 018-08FT 0.6
- 018-09FT
- 018-01LE
- 018-02LE
- 018-10LE
- 018-07FT direct
- 017-02FP
- 017-0601990

Scale: 500 ft

North Arrow: N

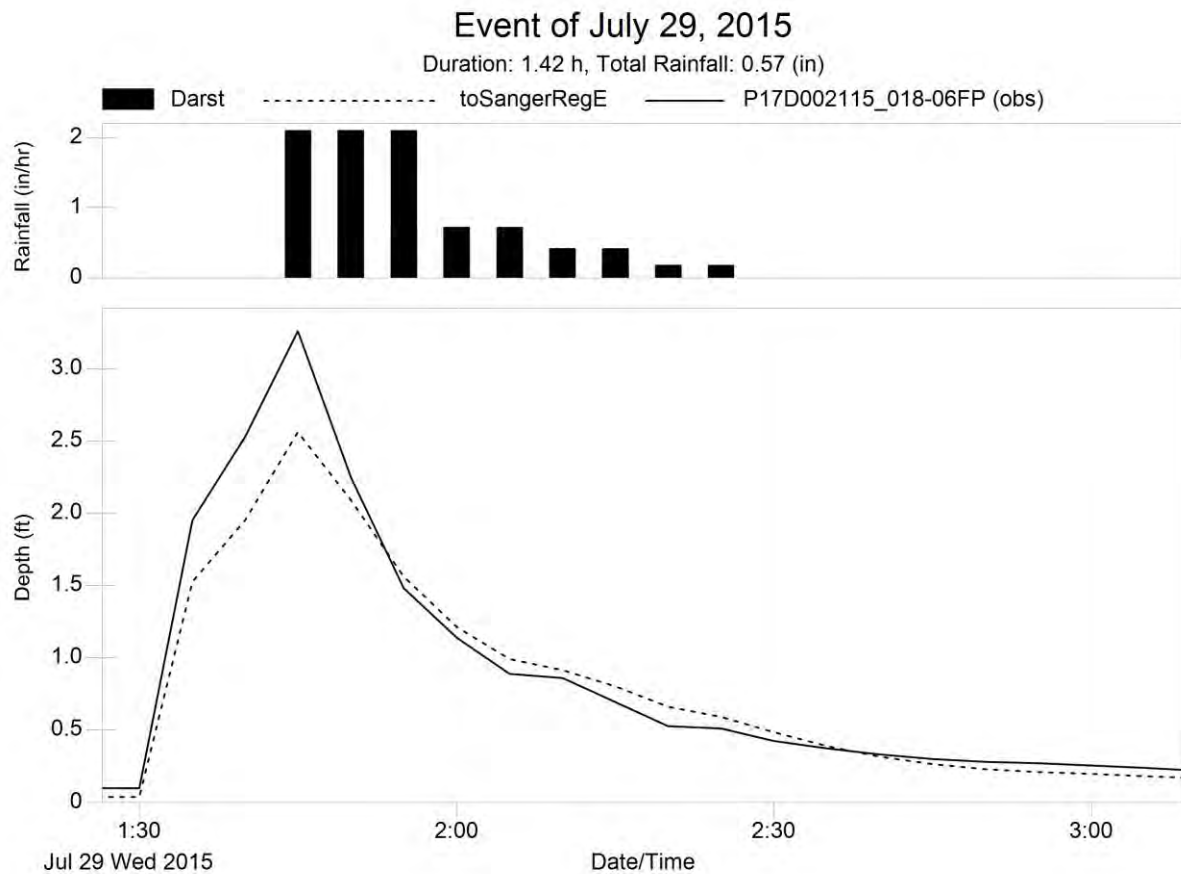
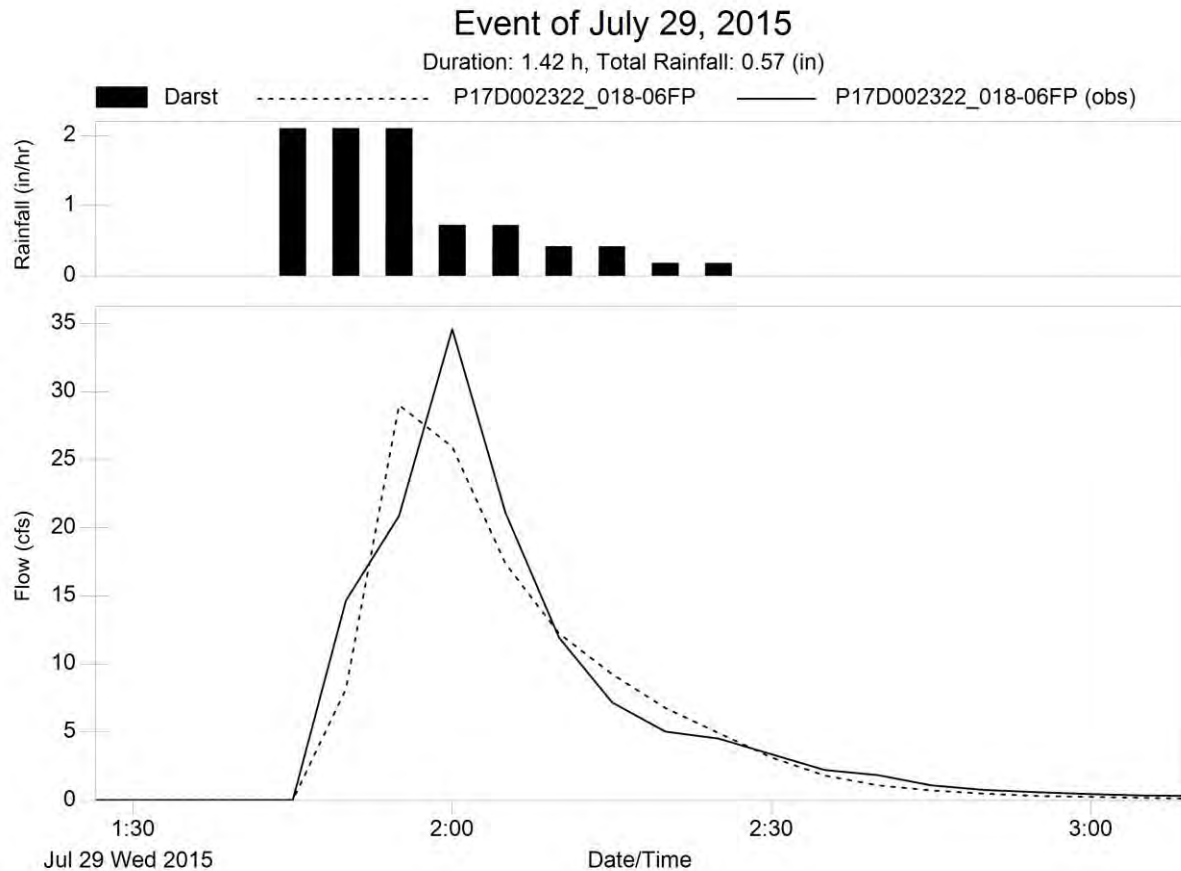
Sanger 018-06FP

Date	Duration (h)	Rainfall (in)	Maximum Flow (cfs)		Maximum Flow (mgd)		Total Volume (ft³)		Volume (million gallons)		Peak Flow Rate (-15% to +25%)	Flow Volume (-10% to +20%)	Rainfall Variability							
		Thiessen Polygon	Observed	Modeled	Observed	Modeled	Observed	Modeled	Observed	Modeled										
CALIBRATION EVENTS - FLOW																				
7/29/2015 1:35	1.42	0.57	34.6	29.0	22.3	18.7	39060	36440	0.3	0.3	-16%	-7%	Possibly uniform							
9/8/2015 10:50	4.5	0.81	22.1	23.2	14.2	15.0	48180	52730	0.4	0.4	5%	9%	Variable							
9/18/2015 13:05	8.08	1.49	30.3	27.1	19.6	17.5	101300	98120	0.8	0.7	-11%	-3%	possibly uniform							
11/5/2015 13:40	15.08	0.34	6.5	6.5	4.2	4.2	24430	20390	0.2	0.2	-1%	-17%	possibly uniform							
11/11/2015 19:45	1.83	0.6	Bad Meter Data																	
11/16/2015 21:10	34.58	1.59	12.2	12.9	7.9	8.3	161700	107100	1.2	0.8	5%	-34%	variable							
11/26/2015 20:55	10.75	1.01	6.0	5.2	3.8	3.4	81380	65780	0.6	0.5	-12%	-19%	possibly uniform							
12/13/2015 1:55	33	1.75	5.3	6.5	3.4	4.2	105300	118000	0.8	0.9	23%	12%	variable							
12/20/2015 23:40	12.42	0.68	4.5	5.9	2.9	3.8	34000	44530	0.3	0.3	29%	31%	variable							
12/23/2015 7:05	4.08	0.67	13.2	14.6	8.5	9.4	48160	43390	0.4	0.3	10%	-10%	variable							
12/28/2015 1:45	18.5	2.54	21.3	28.5	13.7	18.4	178800	174400	1.3	1.3	34%	-2%	variable							
VERIFICATION EVENTS - FLOW																				
6/17/2015 2:05	4.42	0.8	23.9	26.0	15.4	16.8	70480	52110	0.5	0.4	9%	-26%	Variable							
6/24/2015 4:20	67.42	2.15	Bad Meter Data																	
6/28/2015 17:25	4.5	0.51	Bad Meter Data																	
7/8/2015 5:15	25.83	1.39	8.2	7.7	5.3	5.0	93400	83010	0.7	0.6	-6%	-11%	Variable							
7/11/2015 8:30	13.08	1.07	Bad Meter Data																	
7/16/2015 9:00	16.33	1.34	30.8	47.9	19.9	30.9	60580	74490	0.5	0.6	56%	23%	possibly uniform							
8/18/2015 2:15	1.58	0.4	19.2	24.1	12.4	15.5	19080	23850	0.1	0.2	25%	25%	possibly uniform							
8/18/2015 15:00	5.58	0.66	23.4	26.9	15.1	17.4	40220	43310	0.3	0.3	15%	8%	variable							
WEIGHTED AVERAGES								Calibration - Possibly Uniform		-12%	-10%	possibly uniform variable								
								Calibration - Variable		16%	-6%									
								Calibration Weighted - All Events		2%	-7%	possibly uniform variable								
								Verification - Possibly Uniform		44%	23%									
								Verification - Variable		9%	-13%									
								Verification Weighted - All Events		26%	-2%									
								Weighted Average - All Events		12%	-6%									
								NET AVERAGES								Calibration - Possibly Uniform		-10%	-11%	possibly uniform variable
																Calibration - Variable		18%	1%	
								Calibration Net - All Events		7%	-4%	possibly uniform variable								
								Verification - Possibly Uniform		41%	24%									
								Verification - Variable		6%	-10%									
								Verification Net - All Events		20%	4%									
								Net Average - All Events		11%	-1%									

Sanger 018-06 Depth

Date	Duration (h)	Maximum Depth (ft)		Minimum Depth (ft)		Average Depth (ft)		Maximum Depth (ft)	Minimum Depth (ft)	Average Depth (ft)	Rainfall Variability
		metered	modeled	metered	modeled	metered	modeled	Surcharged: -0.33 ft to +1.67 ft Non-Surcharged: -0.33 ft to +0.33 ft	Surcharged: -0.33 ft to +1.67 ft Non-Surcharged: -0.33 ft to +0.33 ft	Surcharged: -0.33 ft to +1.67 ft Non-Surcharged: -0.33 ft to +0.33 ft	
CALIBRATION EVENTS - DEPTH											
7/29/2015 1:35:00	1.42	3.3	2.6	0.3	0.2	1.0	0.9	-0.7	-0.1	-0.1	possibly uniform
9/8/2015 10:50:00	4.50	2.6	2.0	0.2	0.1	0.6	0.5	-0.6	-0.1	-0.1	variable
9/18/2015 13:05:00	8.08	3.1	2.4	0.1	0.1	0.6	0.6	-0.7	-0.1	-0.05	possibly uniform
11/5/2015 13:40:00	15.08	1.0	1.1	0.1	0.0	0.2	0.2	0.1	-0.04	-0.05	possibly uniform
11/11/2015 19:45:00	1.83	2.4	1.8	0.1	0.1	0.8	0.7	-0.6	-0.1	-0.1	variable
11/16/2015 21:10:00	34.58	1.6	1.5	0.1	0.0	0.4	0.4	-0.2	-0.1	-0.04	variable
11/26/2015 20:55:00	10.75	1.0	1.0	0.1	0.0	0.5	0.6	0.1	-0.04	0.01	possibly uniform
12/13/2015 1:55:00	33.00	0.9	1.0	0.1	0.0	0.3	0.3	0.1	-0.1	-0.03	variable
12/20/2015 23:40:00	12.42	0.8	0.9	0.1	0.0	0.3	0.3	0.1	-0.04	-0.03	variable
12/23/2015 7:05:00	4.08	1.7	1.6	0.1	0.1	0.7	0.7	-0.2	-0.1	-0.03	variable
12/28/2015 1:45:00	18.50	2.4	2.0	0.2	0.1	0.6	0.6	-0.4	-0.1	0.00	variable
VERIFICATION EVENTS - DEPTH											
6/17/2015 2:05:00	4.42	2.4	2.1	0.1	0.0	0.7	0.7	-0.3	-0.05	-0.03	variable
6/24/2015 4:20:00	67.42	1.8	1.6	0.1	0.0	0.2	0.2	-0.2	-0.1	-0.04	variable
6/28/2015 17:25:00	4.50	1.0	1.0	0.1	0.0	0.3	0.3	-0.02	-0.1	-0.01	variable
7/8/2015 5:15:00	25.83	1.1	1.2	0.1	0.0	0.3	0.3	0.1	-0.1	-0.03	variable
7/11/2015 8:30:00	13.08	0.8	0.9	0.1	0.0	0.3	0.2	0.02	-0.1	-0.03	variable
7/16/2015 9:00:00	16.33	8.9	3.5	0.1	0.0	0.3	0.2	-5.4	-0.04	-0.1	variable
8/18/2015 2:15:00	1.58	2.2	1.9	0.1	0.1	0.6	0.6	-0.3	-0.1	-0.1	possibly uniform
8/18/2015 15:00:00	5.58	2.6	2.0	0.1	0.1	0.4	0.4	-0.6	-0.05	-0.03	variable
WEIGHTED AVERAGES											
Calibration - Possibly Uniform								-0.5	-0.1	-0.04	possibly uniform
Calibration - Variable								-0.4	-0.1	-0.05	variable
Calibration Weighted - All Events								-0.4	-0.1	-0.05	All Events
Verification - Possibly Uniform								-0.3	-0.1	-0.1	possibly uniform
Verification - Variable								-2.7	-0.1	-0.03	variable
Verification Weighted - All Events								-2.4	-0.1	-0.03	All Events
Weighted Average - All Events								-1.4	-0.1	-0.04	
NET AVERAGES											
Calibration - Possibly Uniform								-0.3	-0.05	-0.04	possibly uniform
Calibration - Variable								-0.3	-0.1	-0.04	variable
Calibration Net - All Events								-0.3	-0.1	-0.04	All Events
Verification - Possibly Uniform								-0.3	-0.1	-0.1	possibly uniform
Verification - Variable								-0.9	-0.1	-0.03	variable
Verification Net - All Events								-0.8	-0.1	-0.03	All Events
Net Average - All Events								-0.5	-0.1	-0.04	

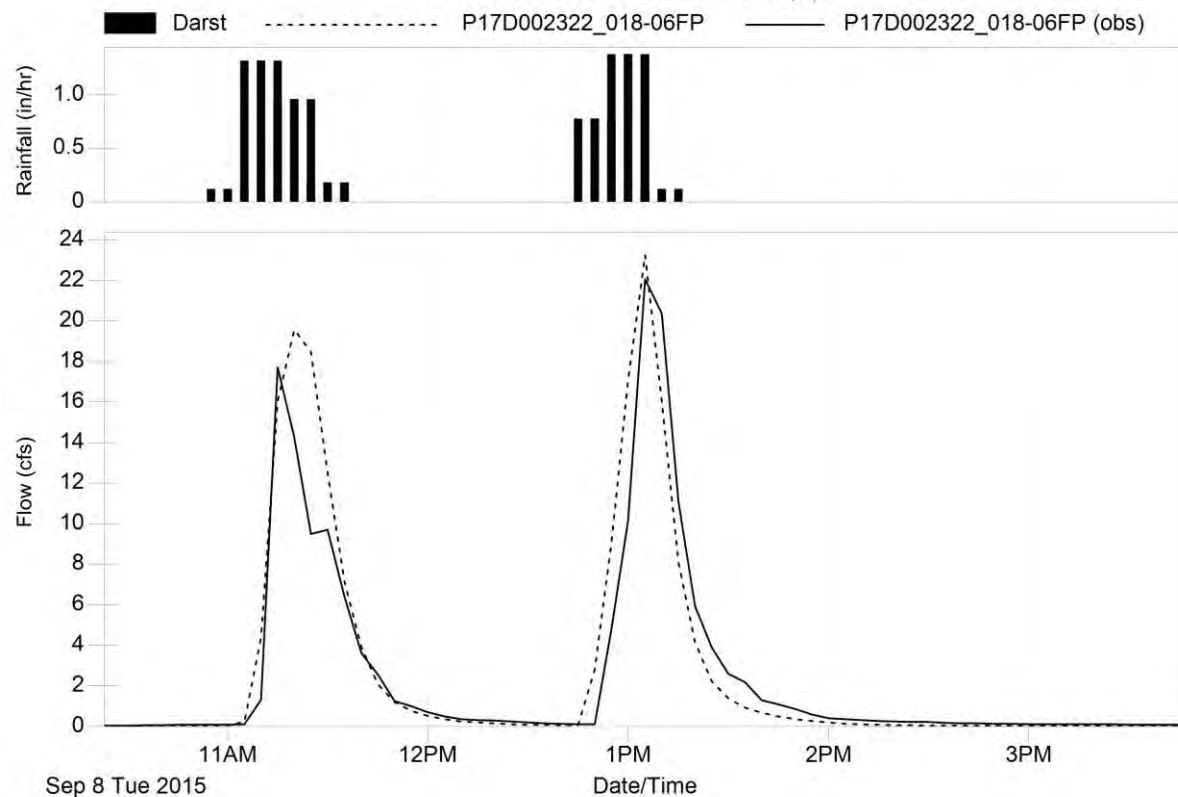
Sanger 018-06FP – Calibration Events



Sanger 018-06FP – Calibration Events

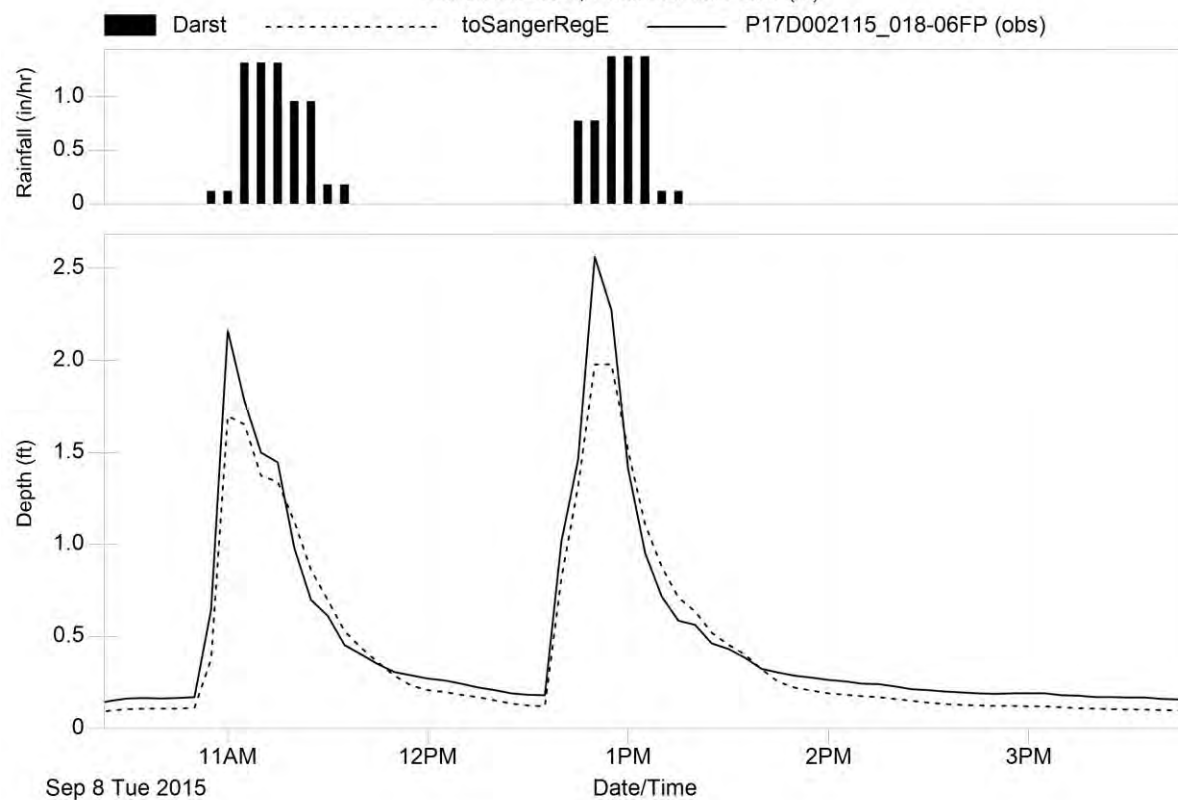
Event of September 8, 2015

Duration: 4.5 h, Total Rainfall: 0.81 (in)



Event of September 8, 2015

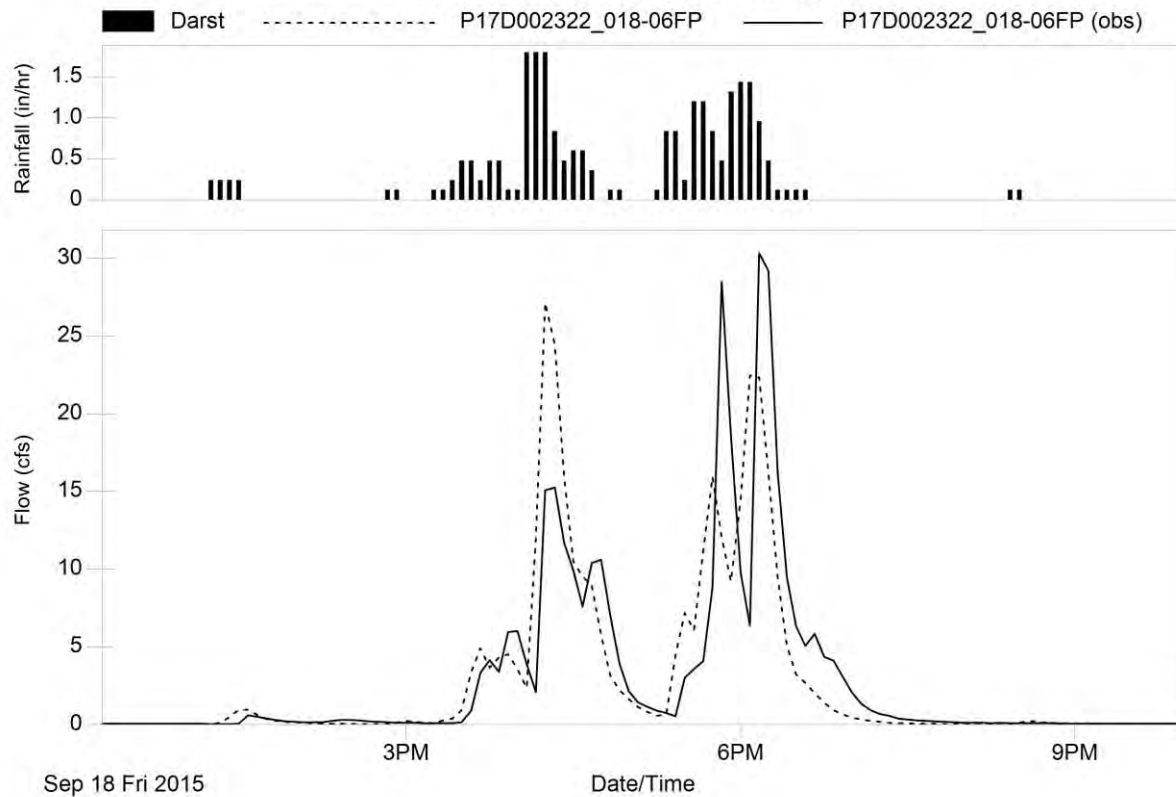
Duration: 4.5 h, Total Rainfall: 0.81 (in)



Sanger 018-06FP – Calibration Events

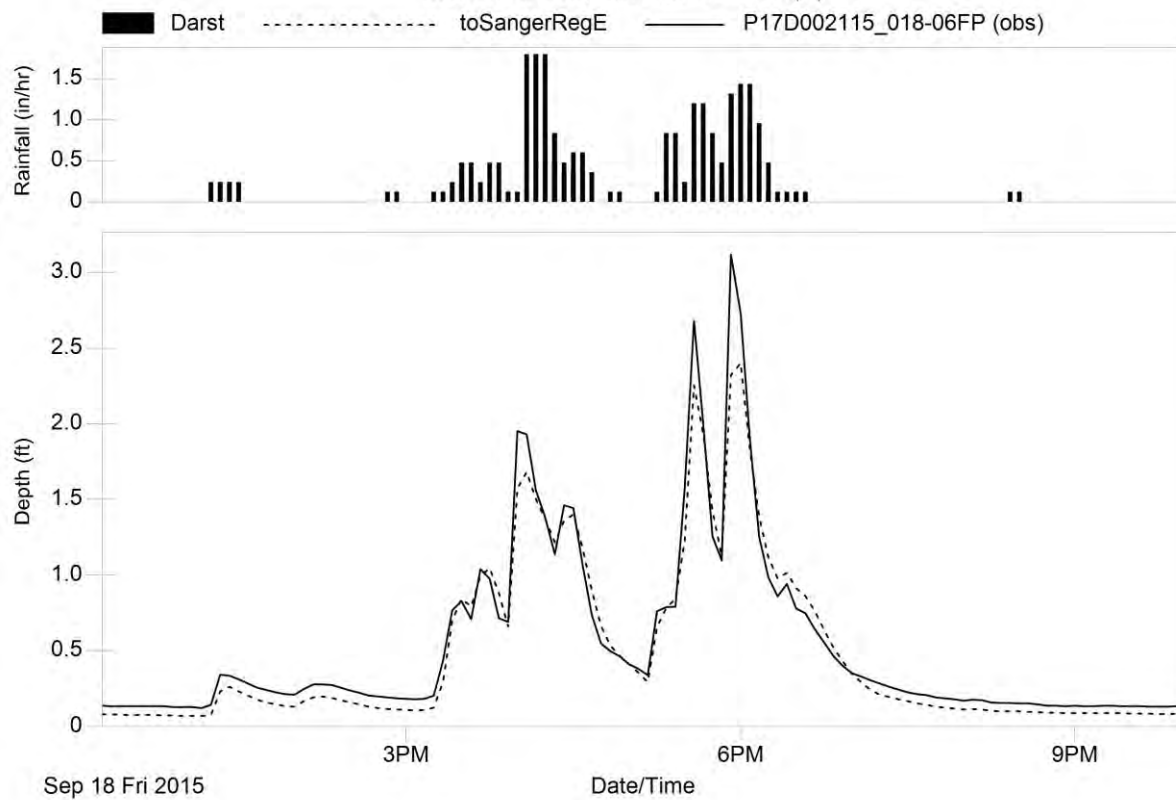
Event of September 18, 2015

Duration: 8.08 h, Total Rainfall: 1.49 (in)



Event of September 18, 2015

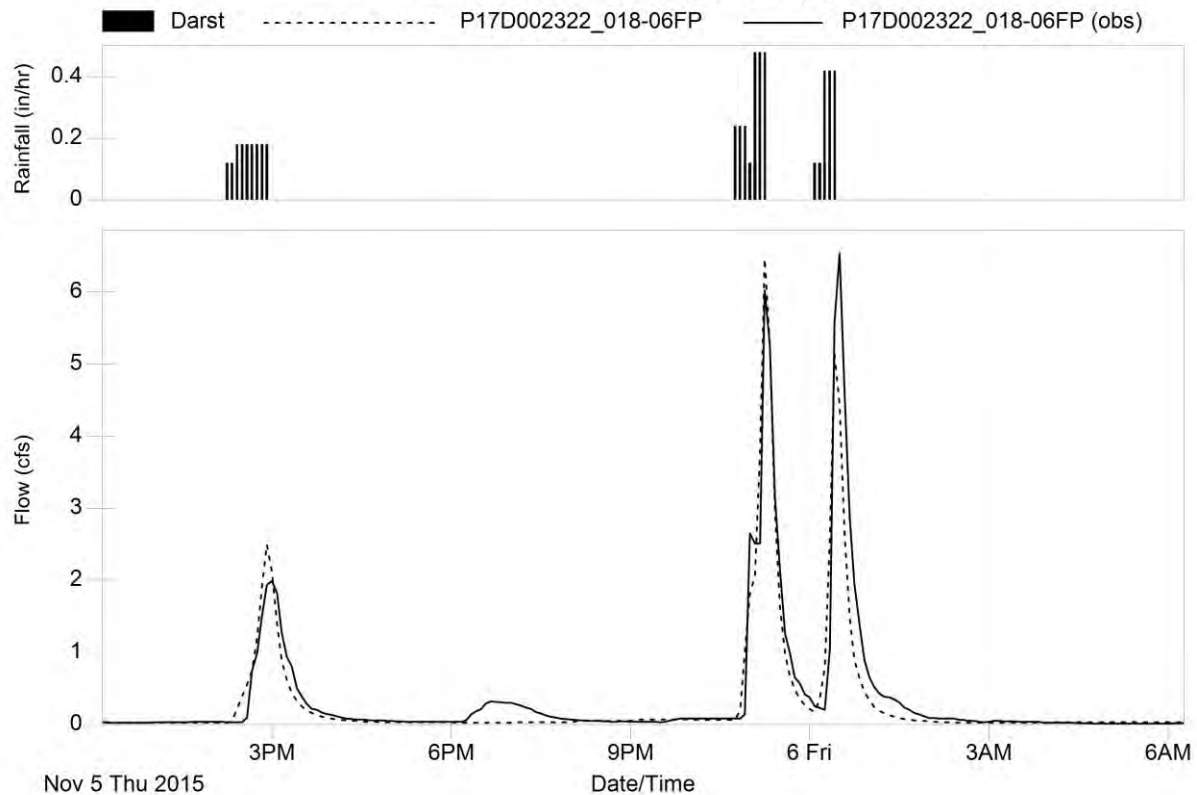
Duration: 8.08 h, Total Rainfall: 1.49 (in)



Sanger 018-06FP – Calibration Events

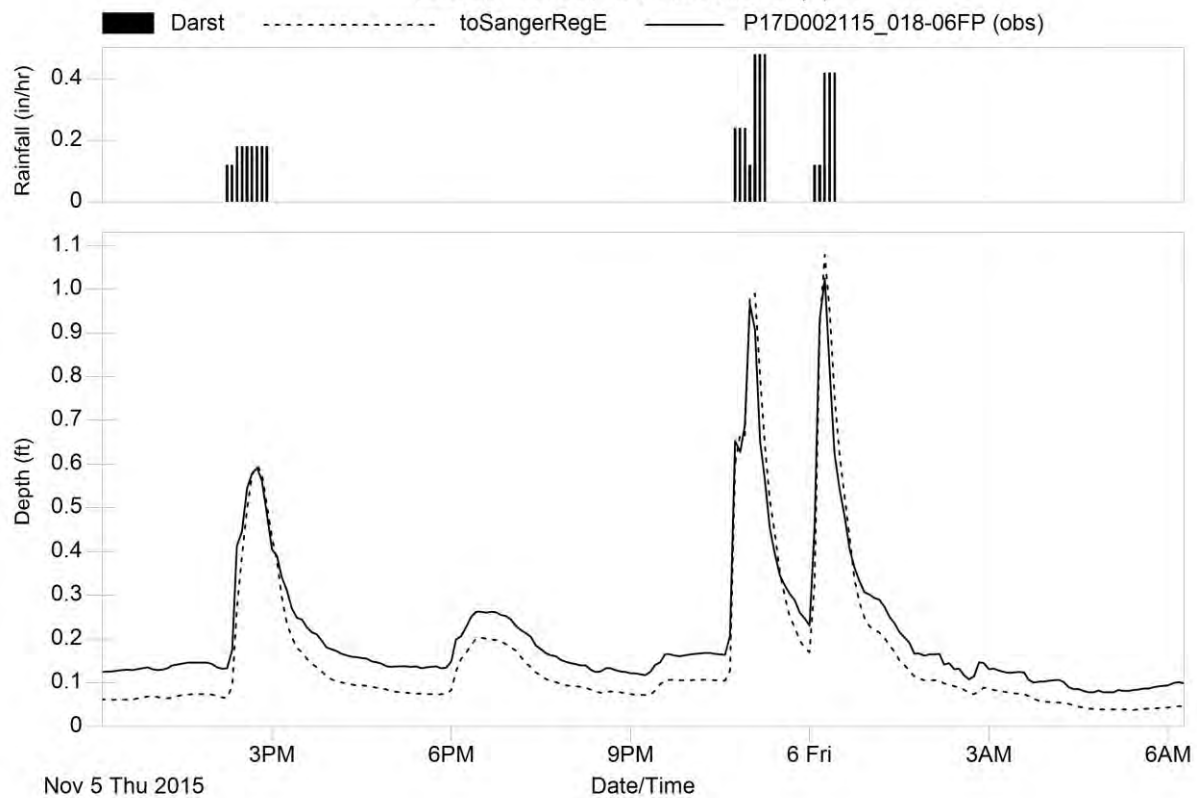
Event of November 5, 2015

Duration: 15.08 h, Total Rainfall: 0.34 (in)



Event of November 5, 2015

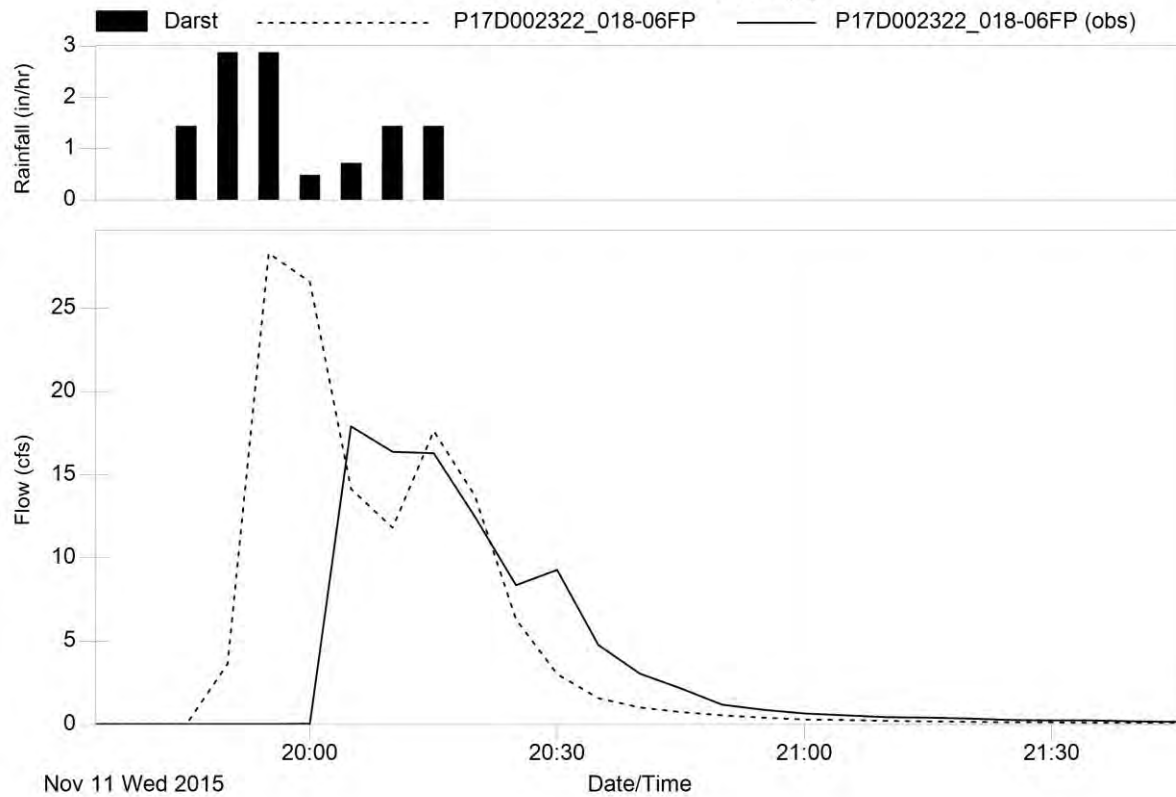
Duration: 15.08 h, Total Rainfall: 0.34 (in)



Sanger 018-06FP – Calibration Events

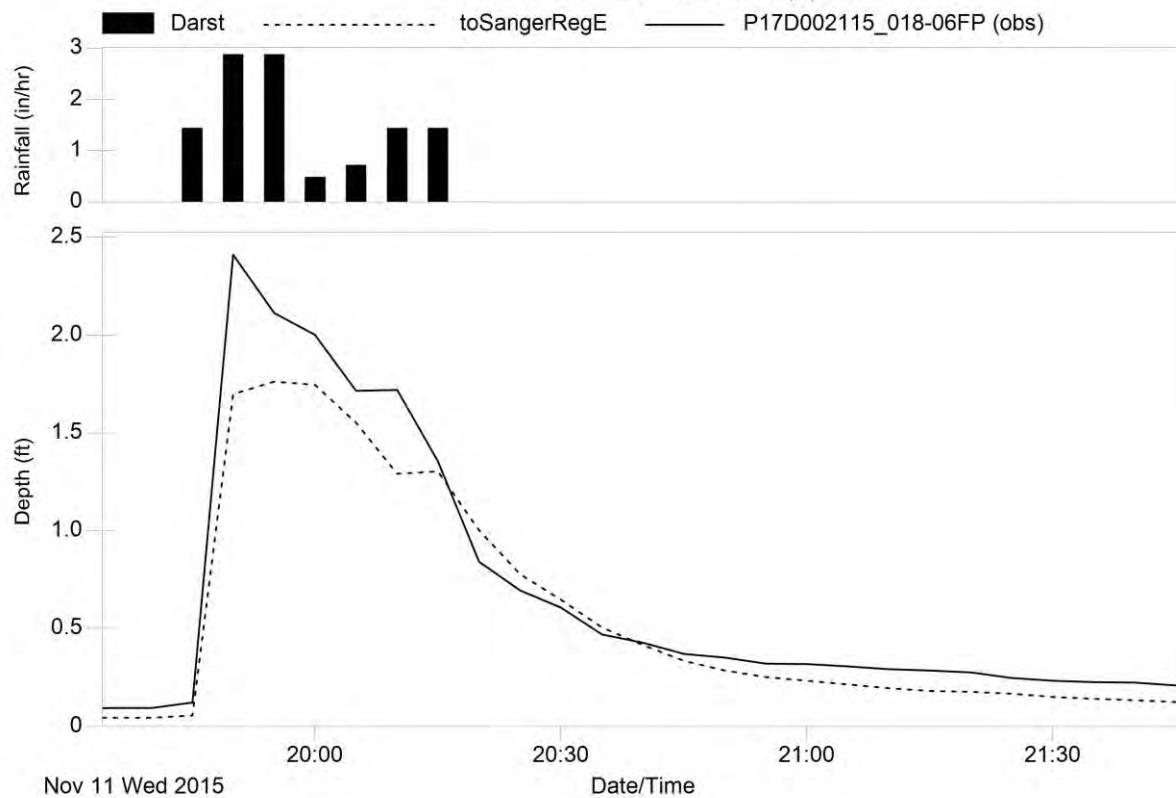
Event of November 11, 2015

Duration: 1.83 h, Total Rainfall: 0.6 (in)



Event of November 11, 2015

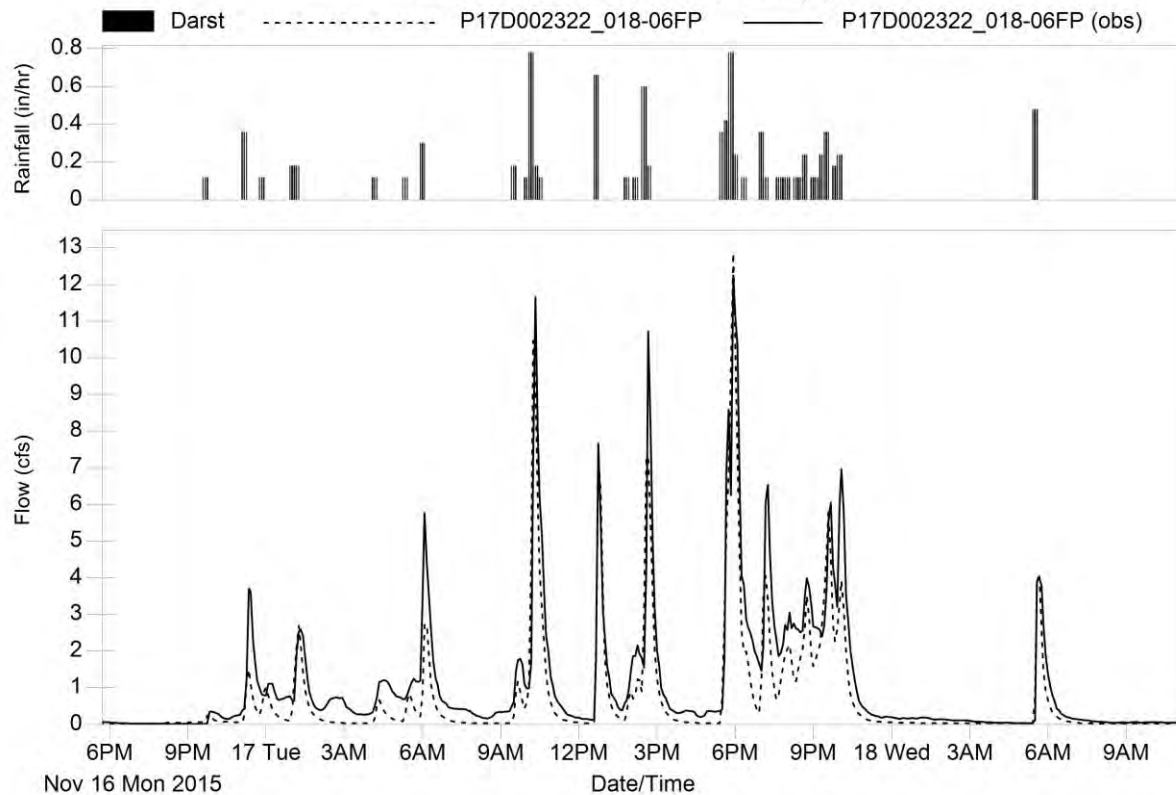
Duration: 1.83 h, Total Rainfall: 0.6 (in)



Sanger 018-06FP – Calibration Events

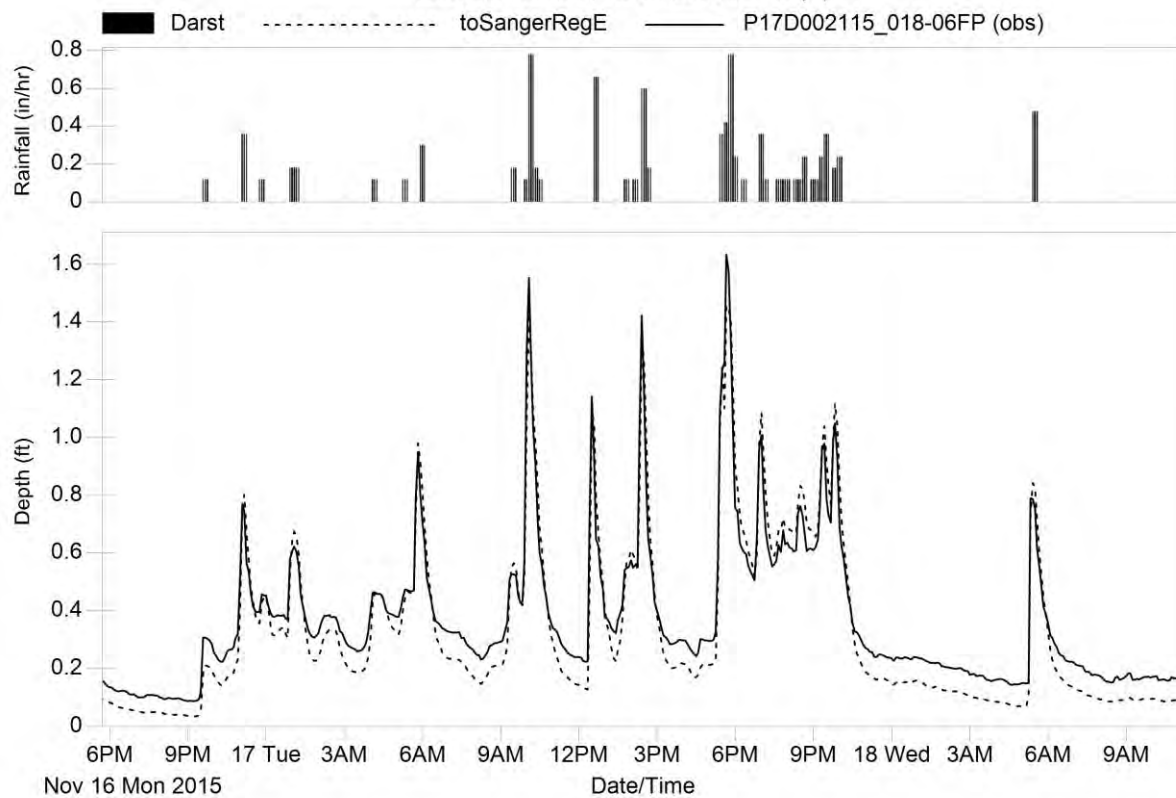
Event of November 16, 2015

Duration: 34.58 h, Total Rainfall: 1.59 (in)



Event of November 16, 2015

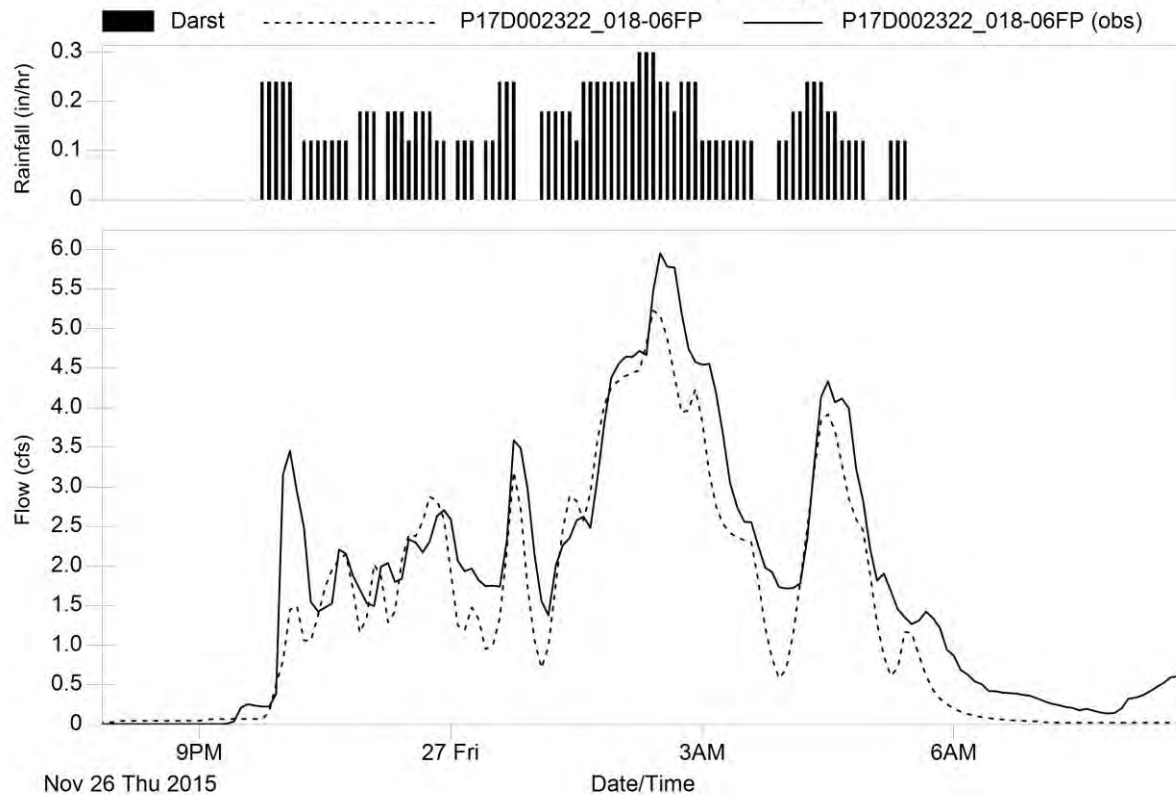
Duration: 34.58 h, Total Rainfall: 1.59 (in)



Sanger 018-06FP – Calibration Events

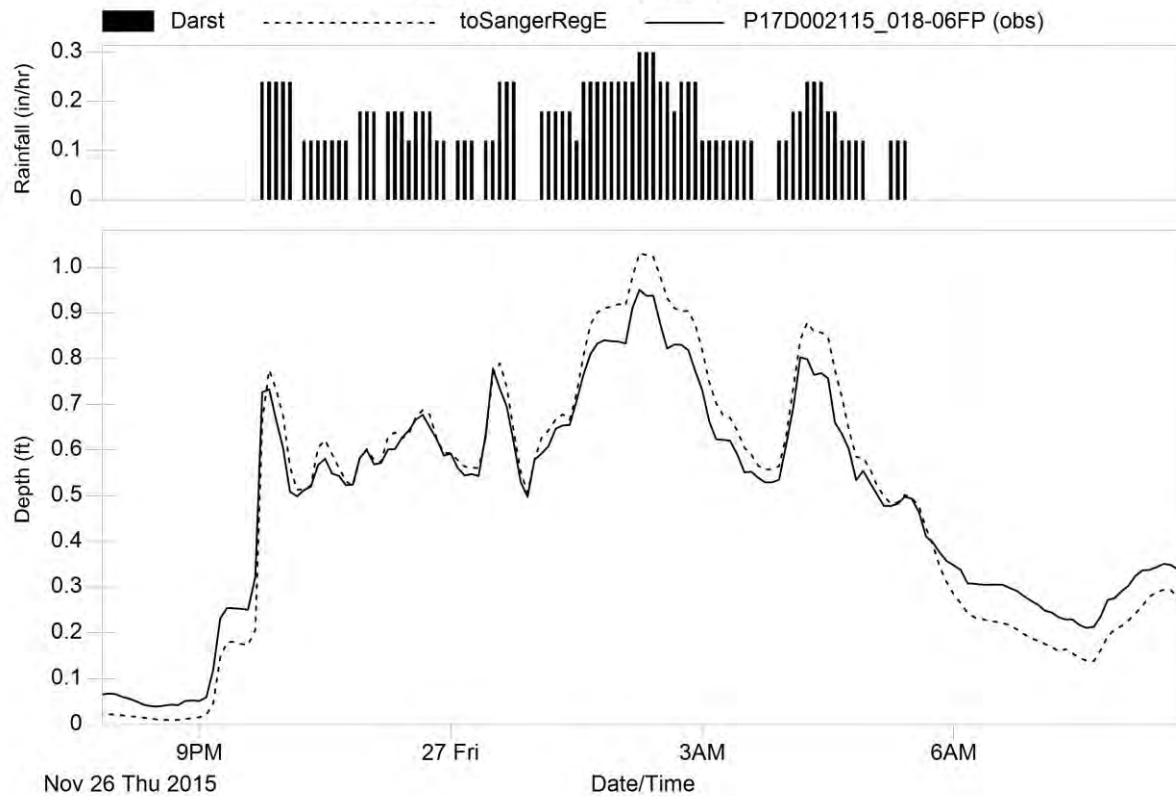
Event of November 26, 2015

Duration: 10.75 h, Total Rainfall: 1.01 (in)



Event of November 26, 2015

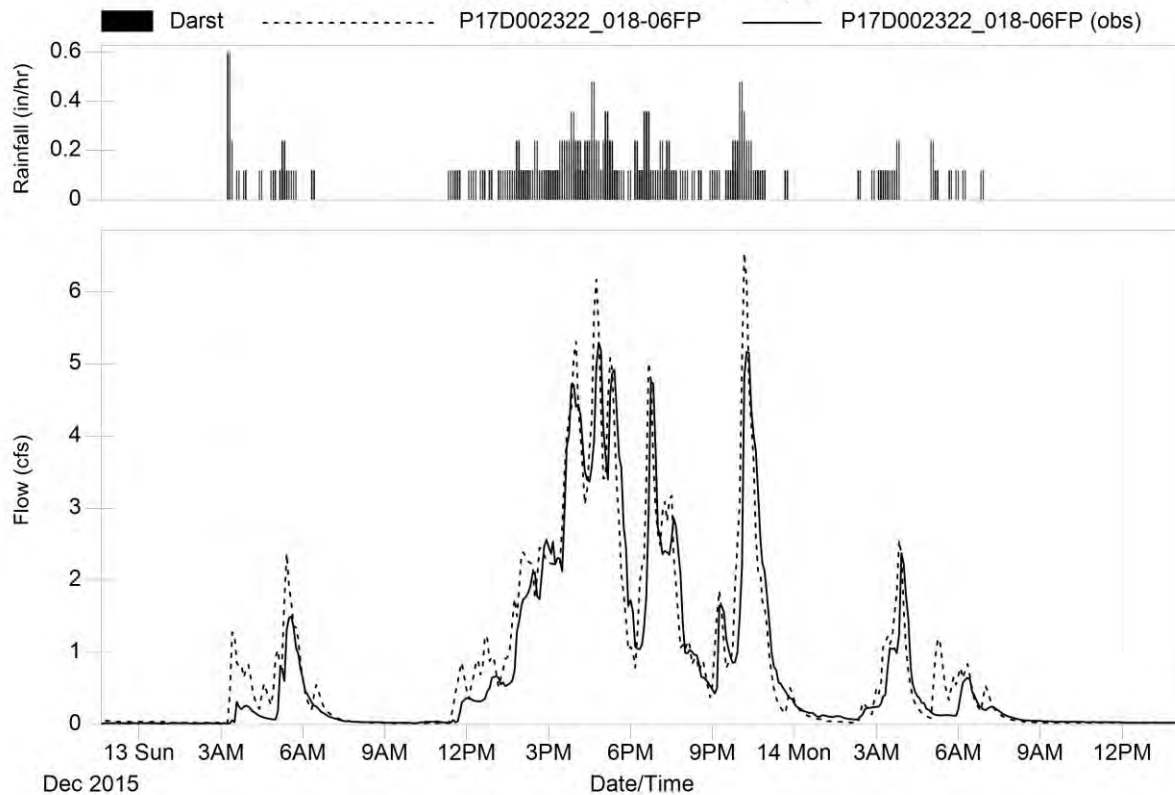
Duration: 10.75 h, Total Rainfall: 1.01 (in)



Sanger 018-06FP – Calibration Events

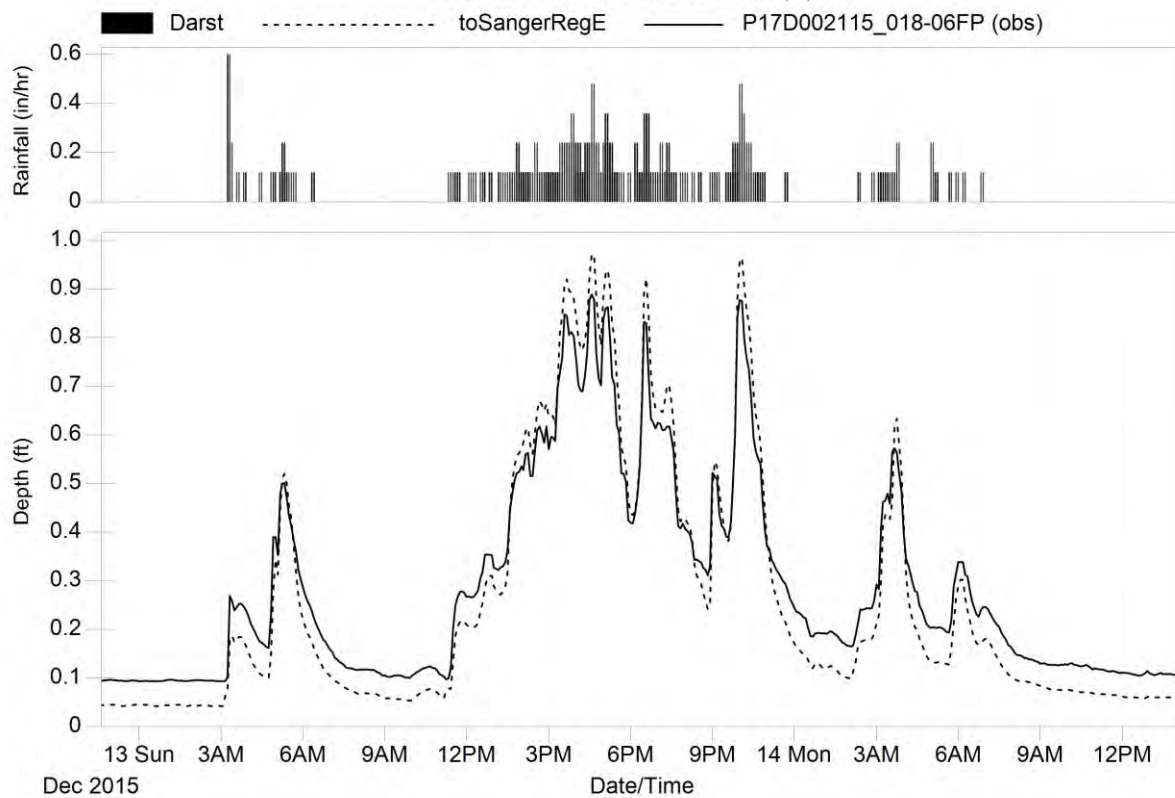
Event of December 13, 2015

Duration: 33 h, Total Rainfall: 1.75 (in)



Event of December 13, 2015

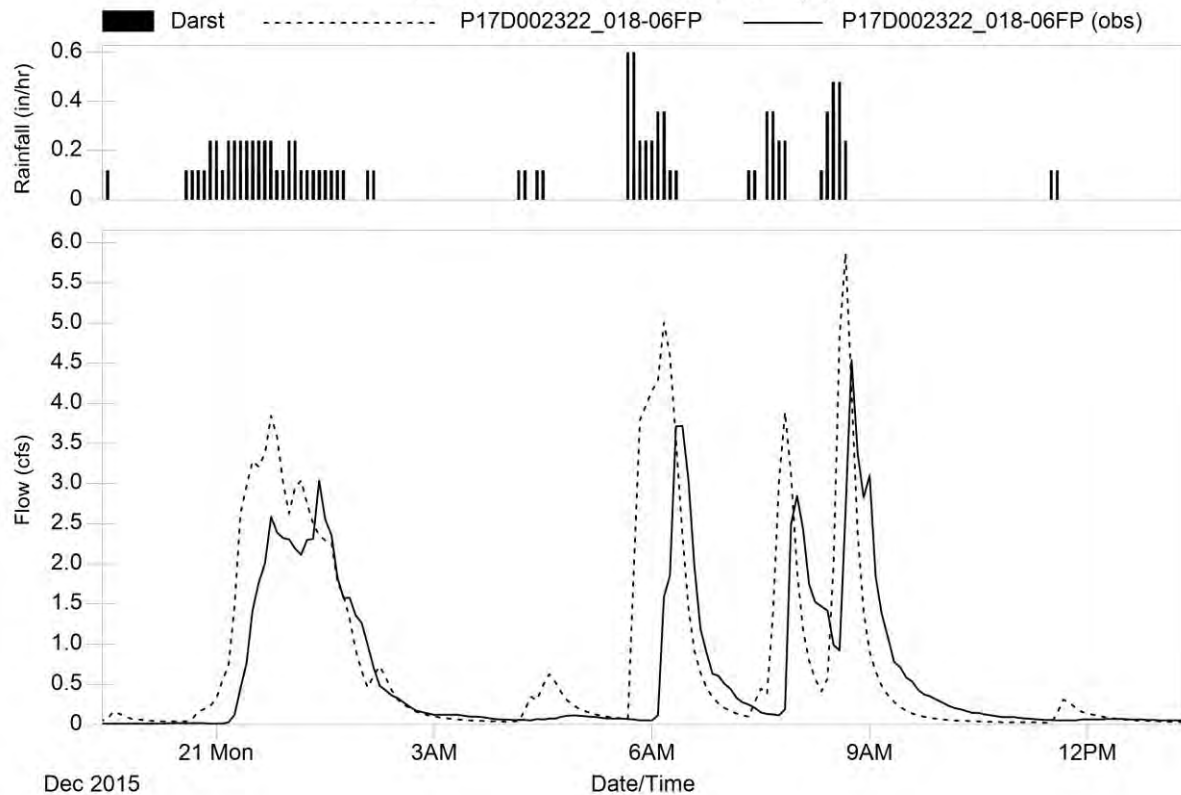
Duration: 33 h, Total Rainfall: 1.75 (in)



Sanger 018-06FP – Calibration Events

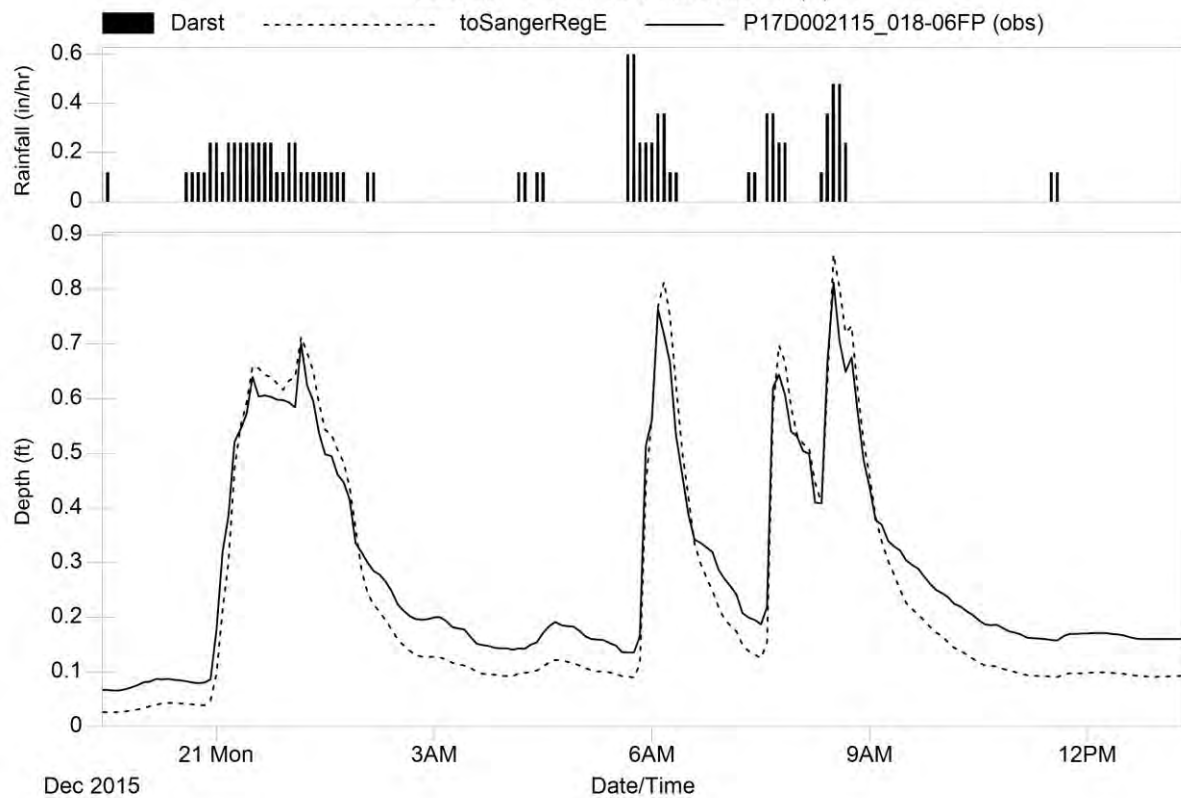
Event of December 20, 2015

Duration: 12.42 h, Total Rainfall: 0.68 (in)



Event of December 20, 2015

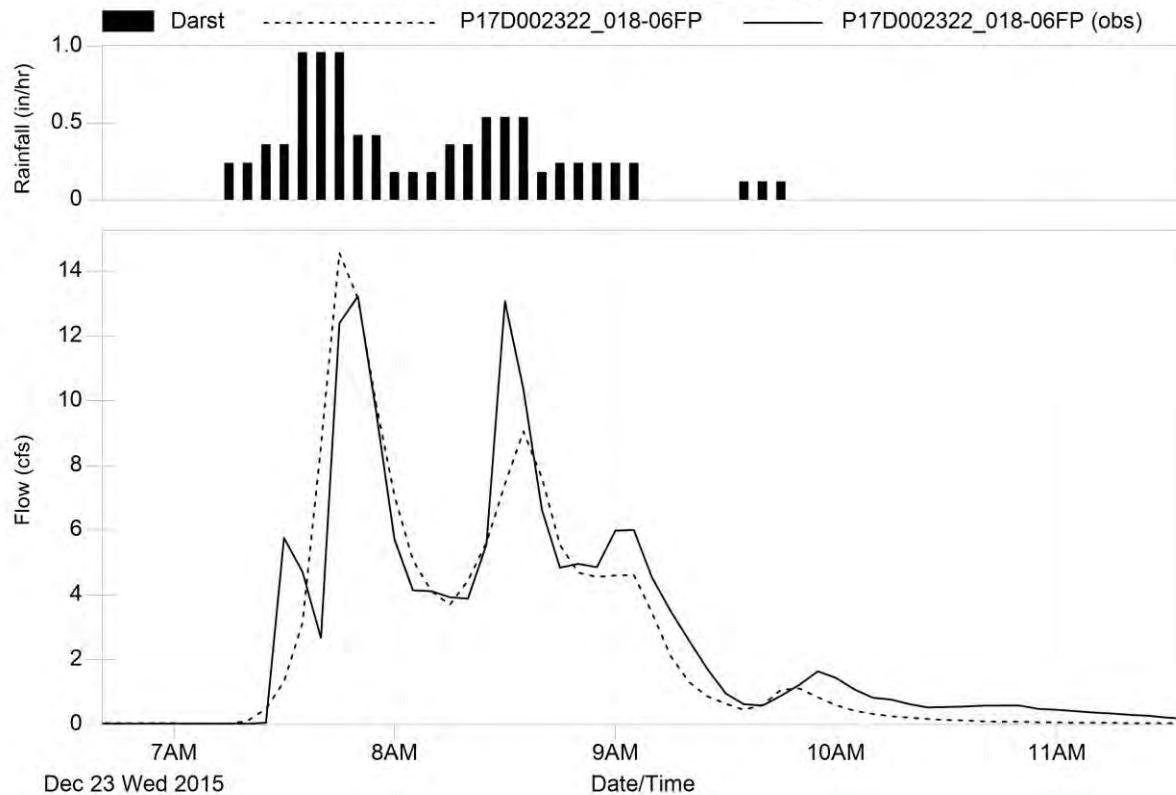
Duration: 12.42 h, Total Rainfall: 0.68 (in)



Sanger 018-06FP – Calibration Events

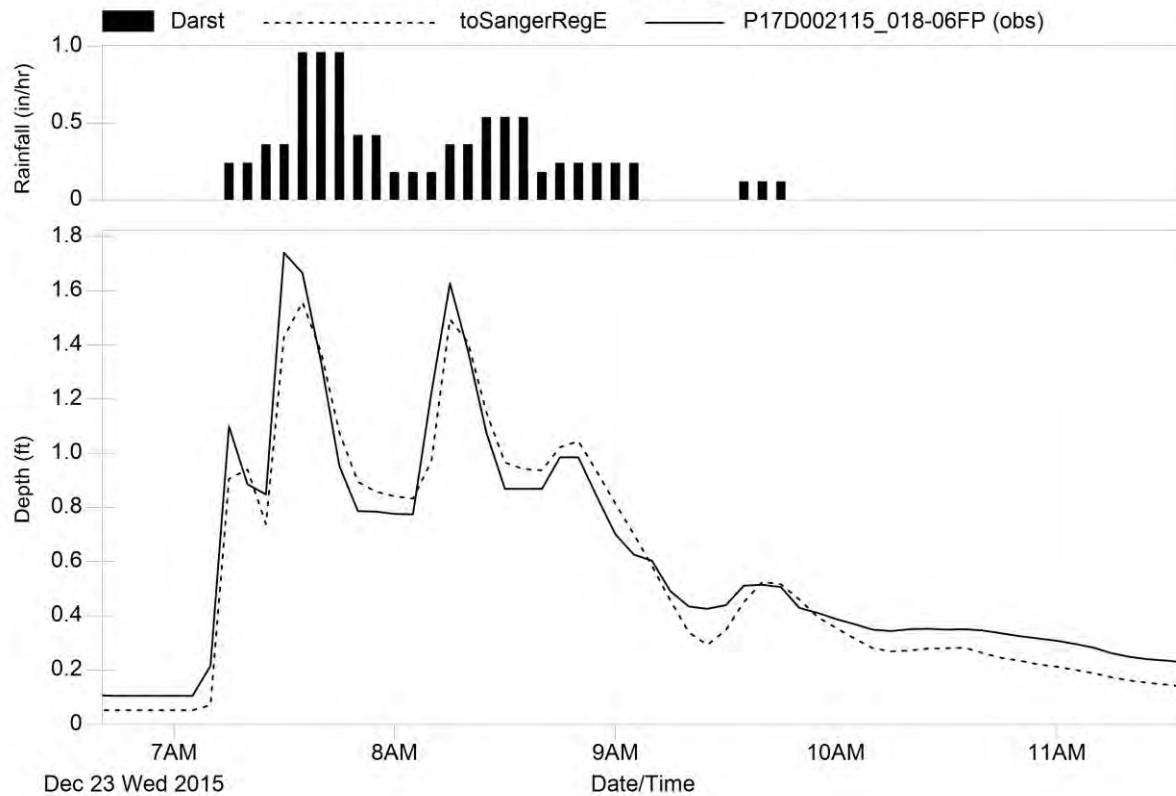
Event of December 23, 2015

Duration: 4.08 h, Total Rainfall: 0.67 (in)



Event of December 23, 2015

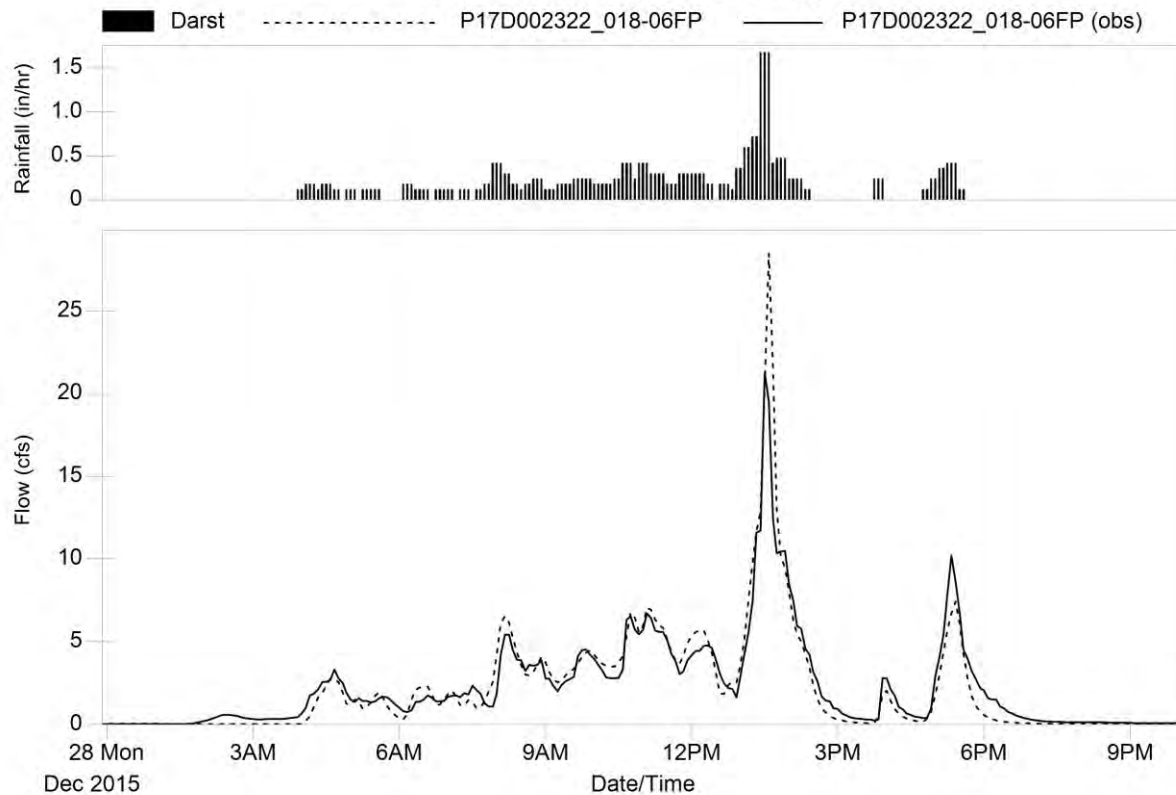
Duration: 4.08 h, Total Rainfall: 0.67 (in)



Sanger 018-06FP – Calibration Events

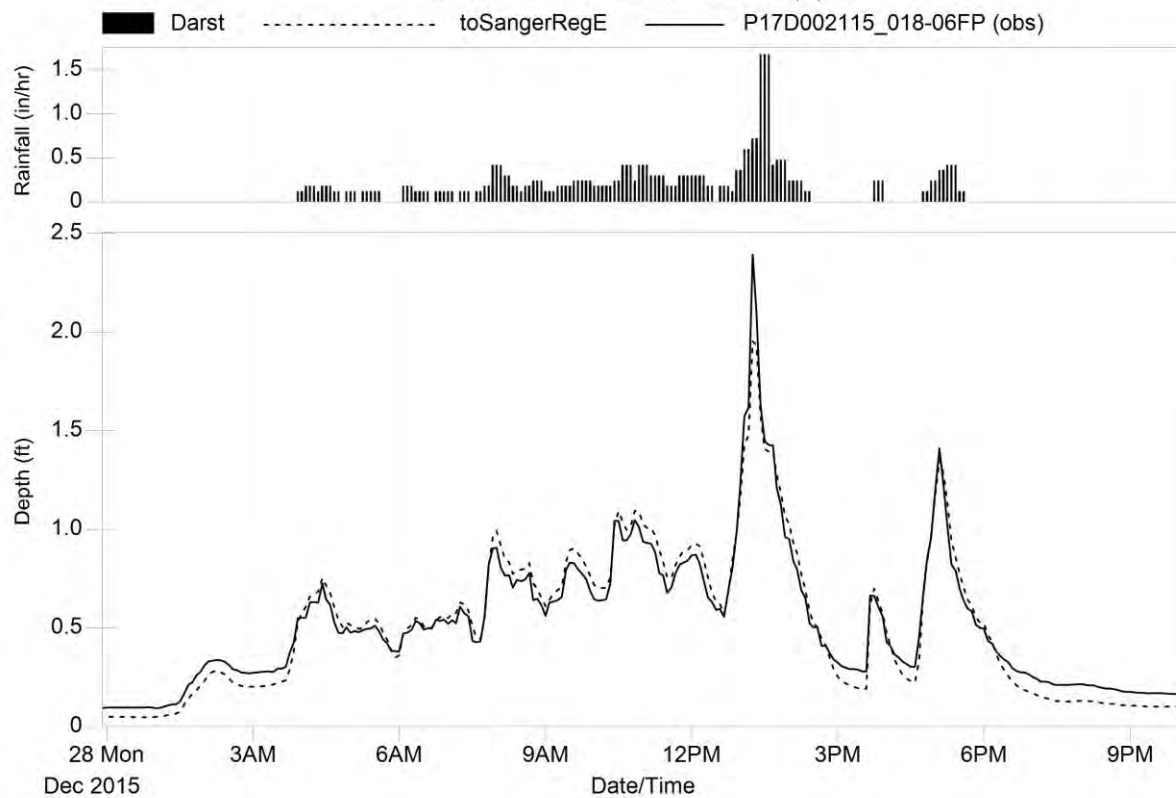
Event of December 28, 2015

Duration: 18.5 h, Total Rainfall: 2.54 (in)



Event of December 28, 2015

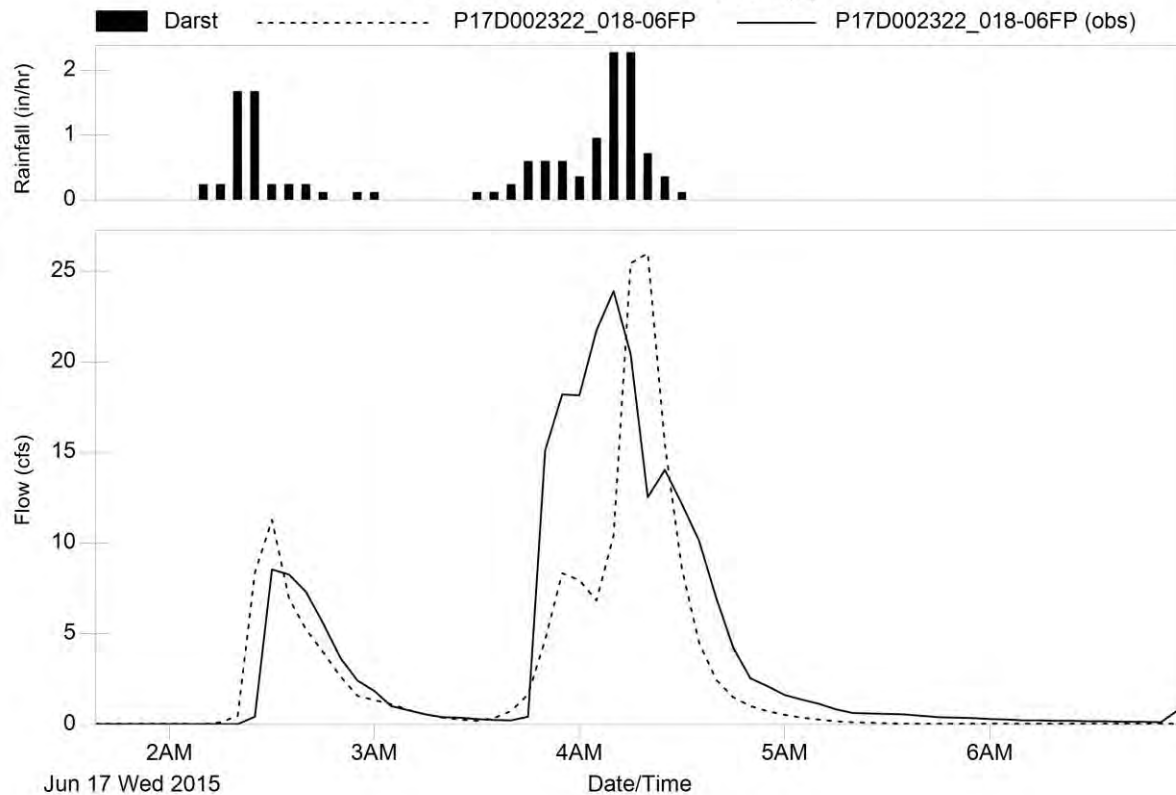
Duration: 18.5 h, Total Rainfall: 2.54 (in)



Sanger 018-06FP – Verification Events

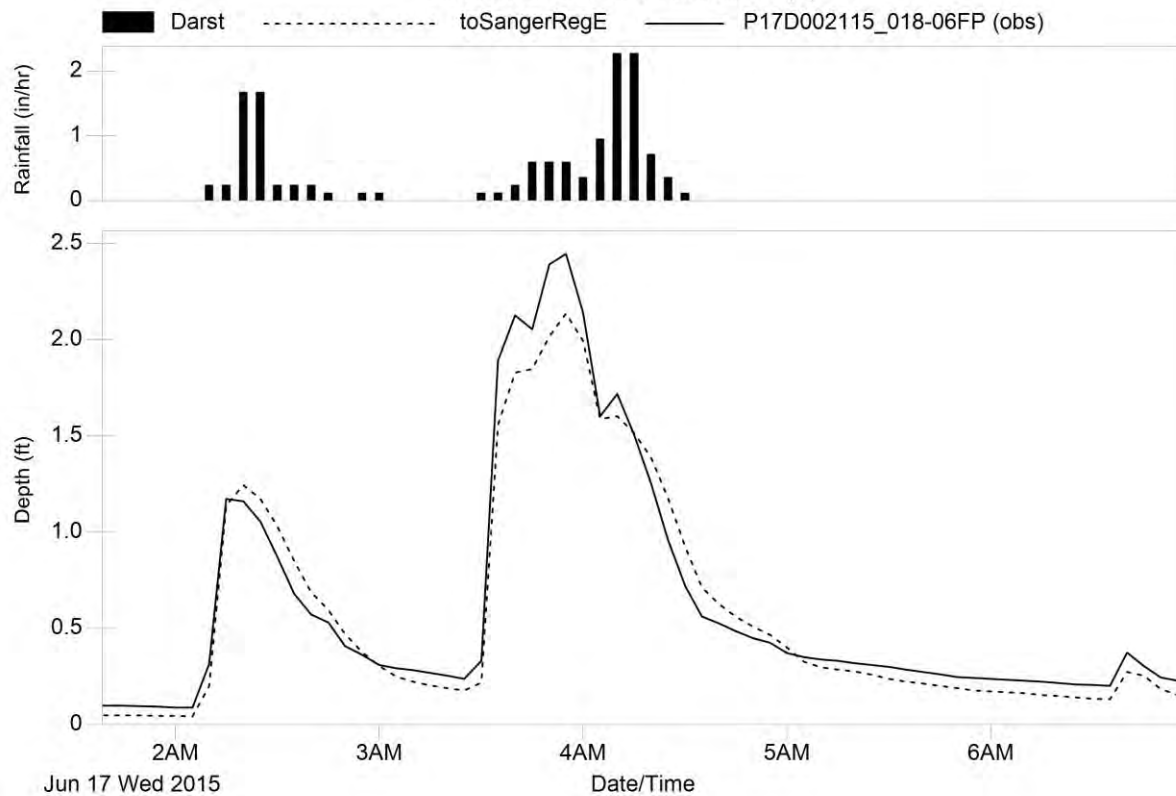
Event of June 17, 2015

Duration: 4.42 h, Total Rainfall: 0.8 (in)



Event of June 17, 2015

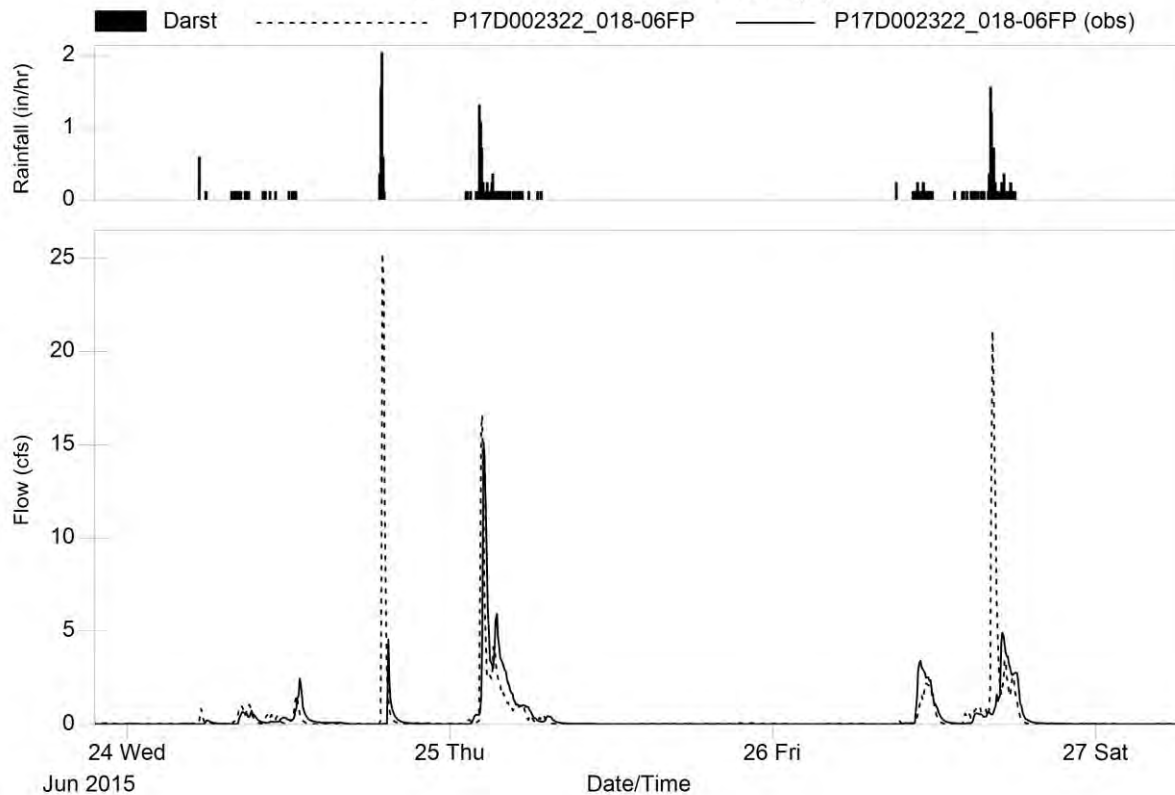
Duration: 4.42 h, Total Rainfall: 0.8 (in)



Sanger 018-06FP – Verification Events

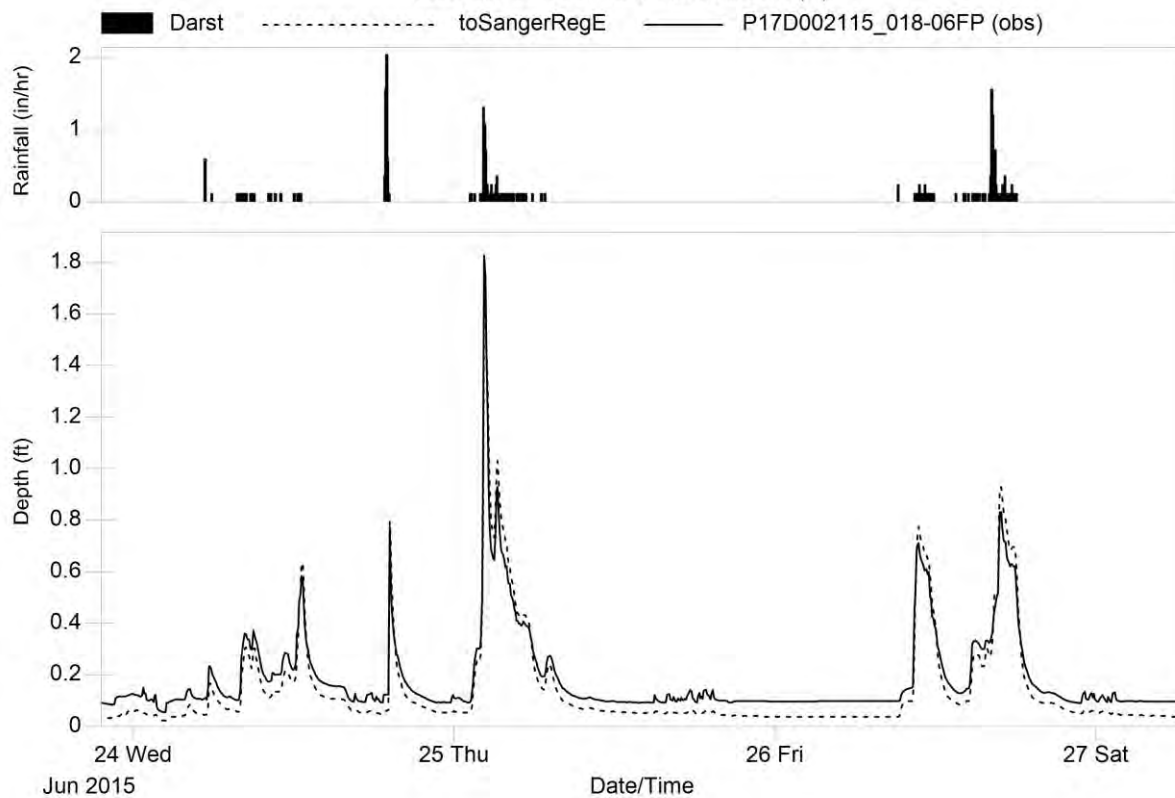
Event of June 24, 2015

Duration: 67.42 h, Total Rainfall: 2.15 (in)

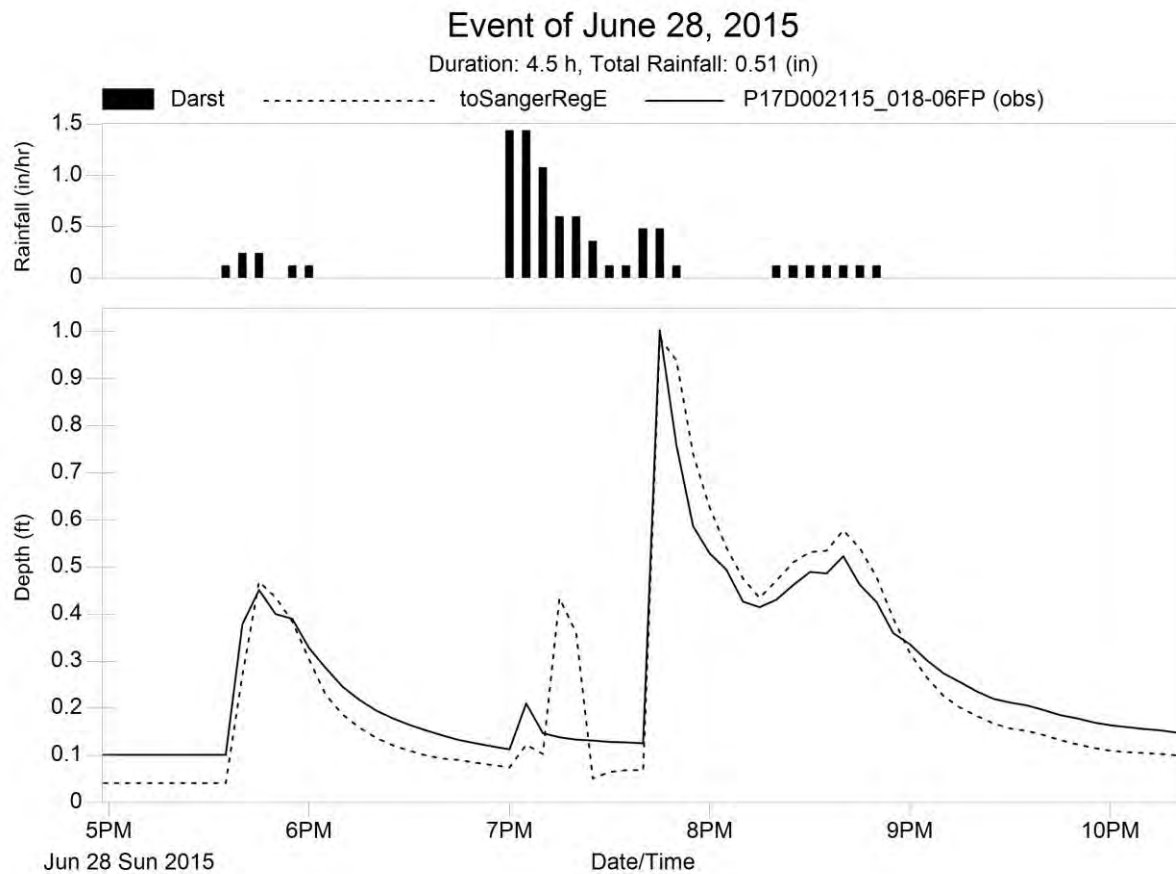
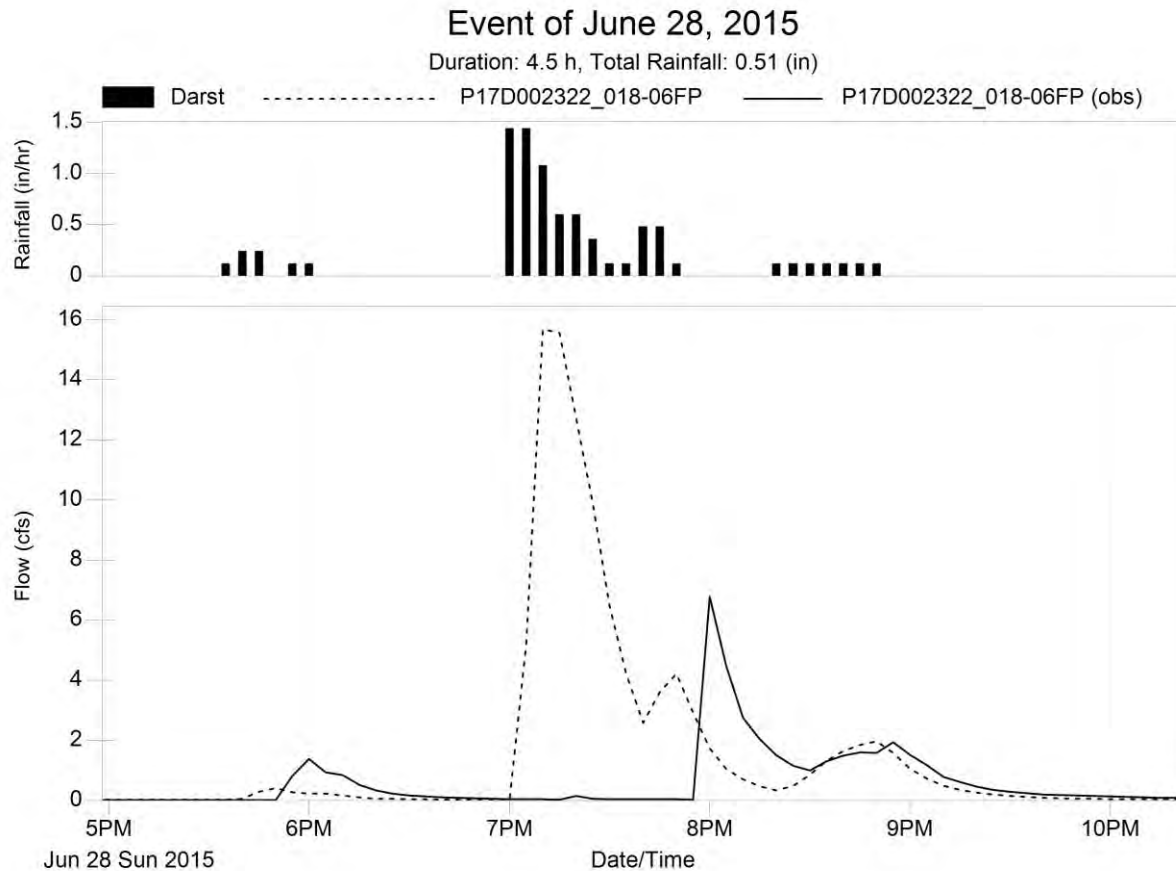


Event of June 24, 2015

Duration: 67.42 h, Total Rainfall: 2.15 (in)



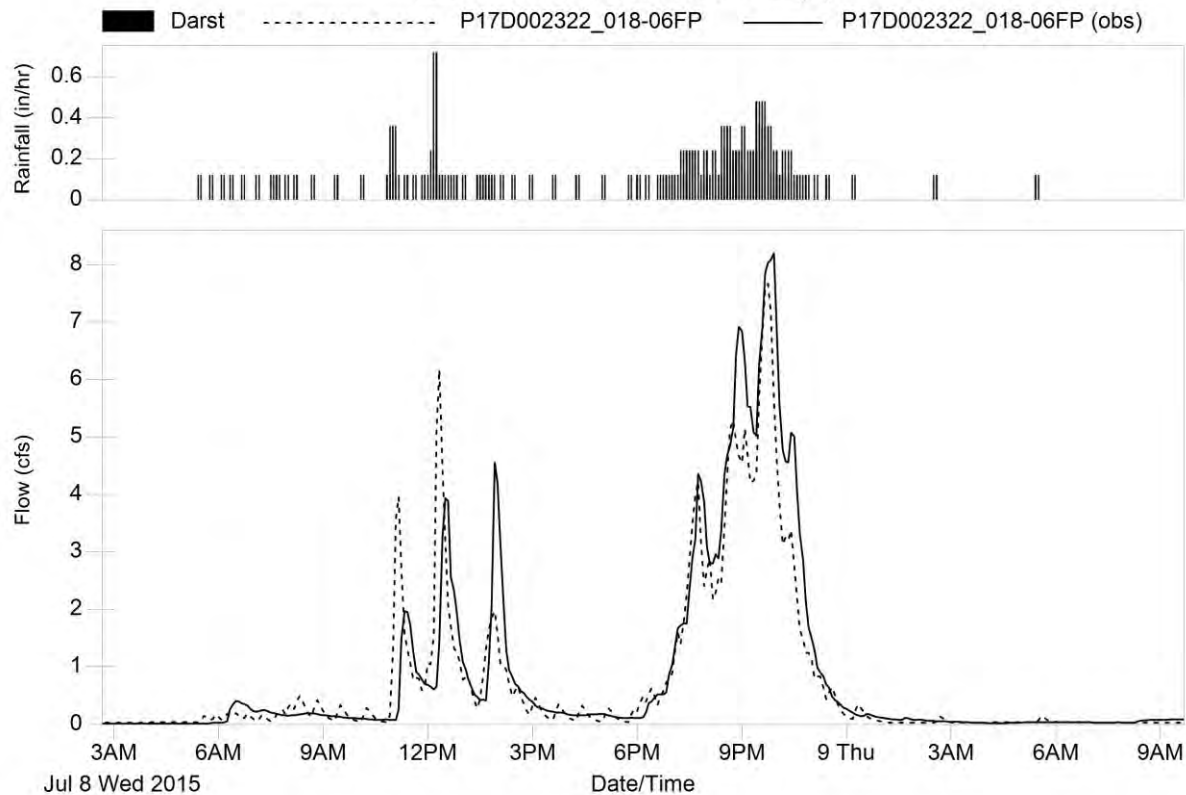
Sanger 018-06FP – Verification Events



Sanger 018-06FP – Verification Events

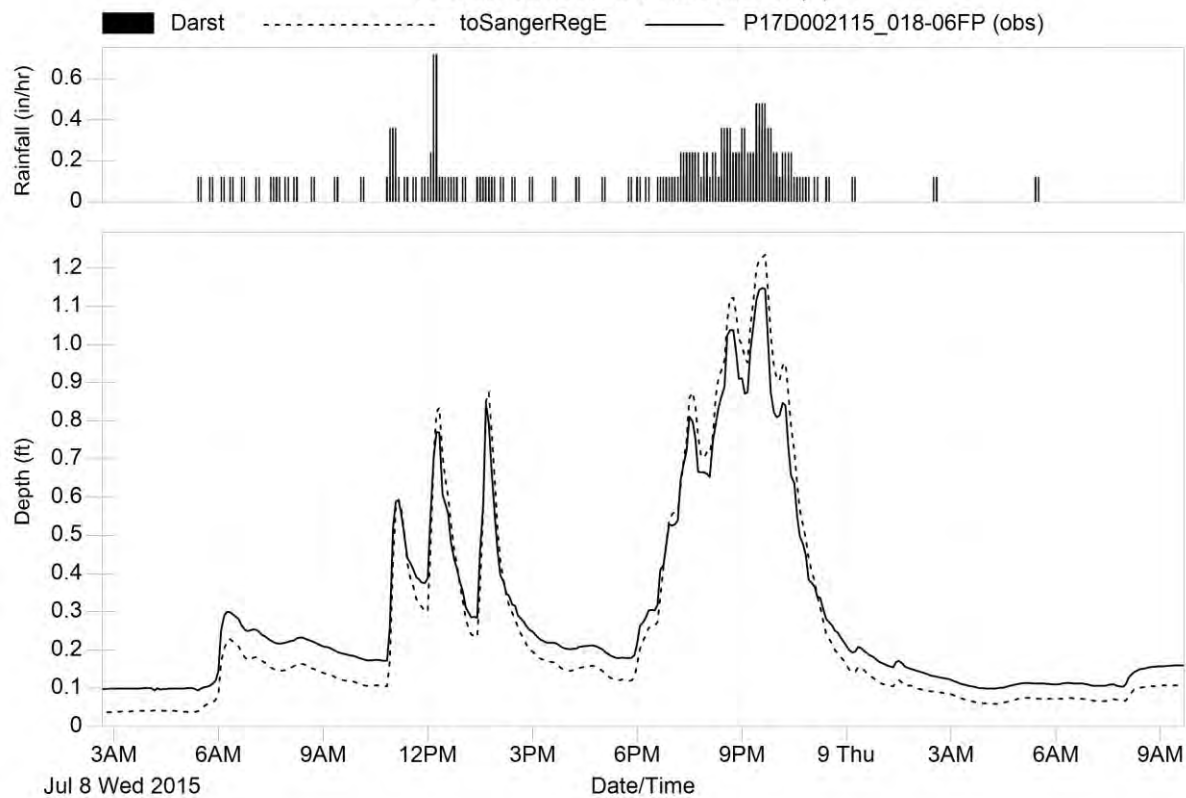
Event of July 8, 2015

Duration: 25.83 h, Total Rainfall: 1.39 (in)



Event of July 8, 2015

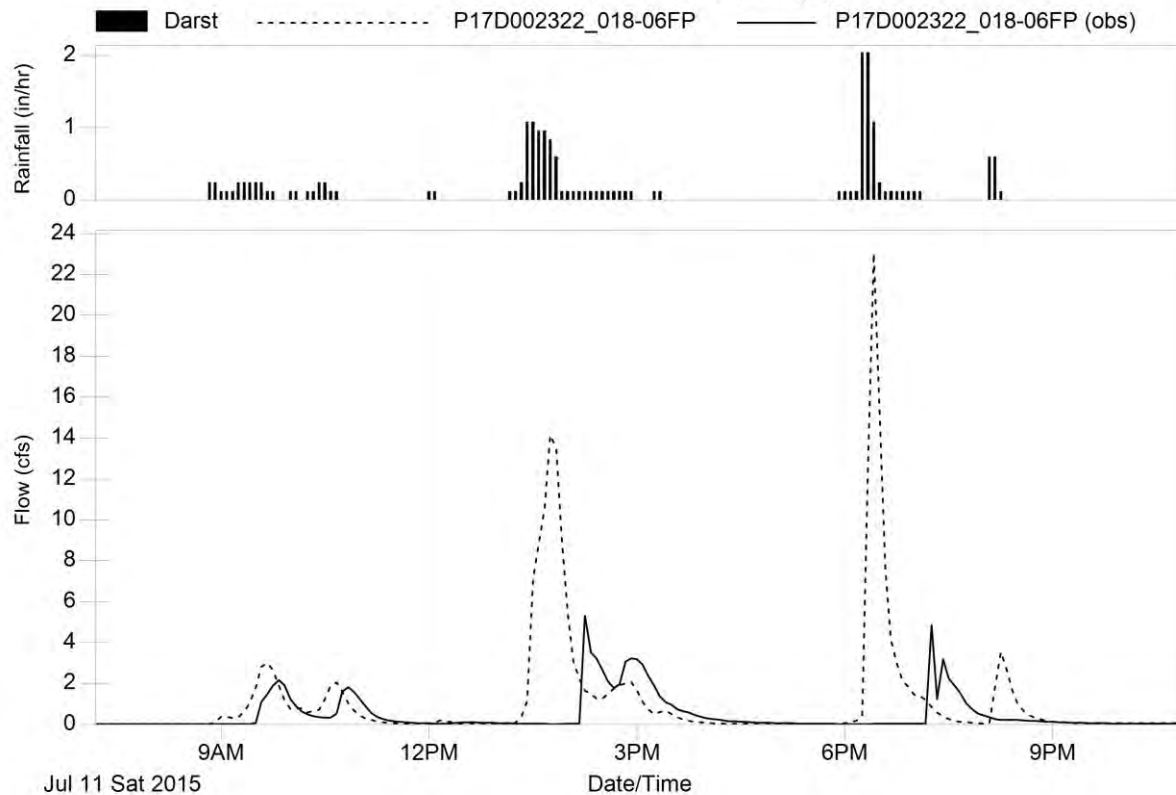
Duration: 25.83 h, Total Rainfall: 1.39 (in)



Sanger 018-06FP – Verification Events

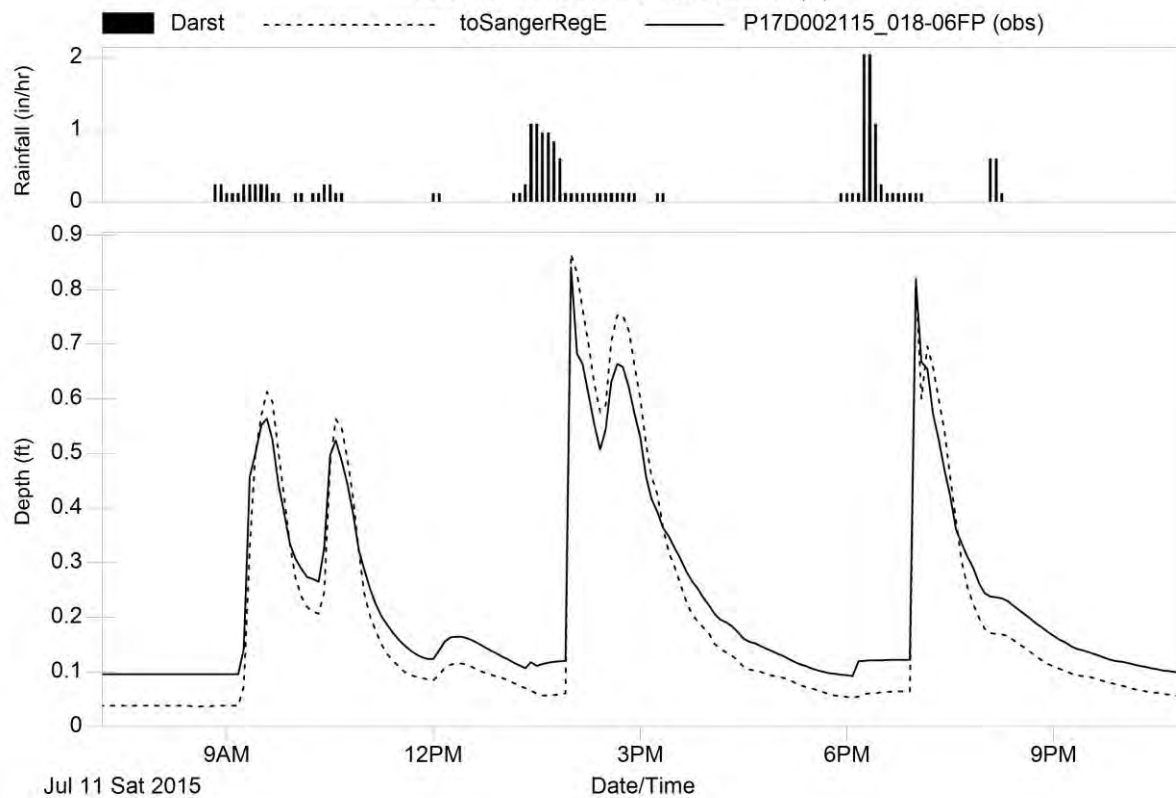
Event of July 11, 2015

Duration: 13.08 h, Total Rainfall: 1.07 (in)



Event of July 11, 2015

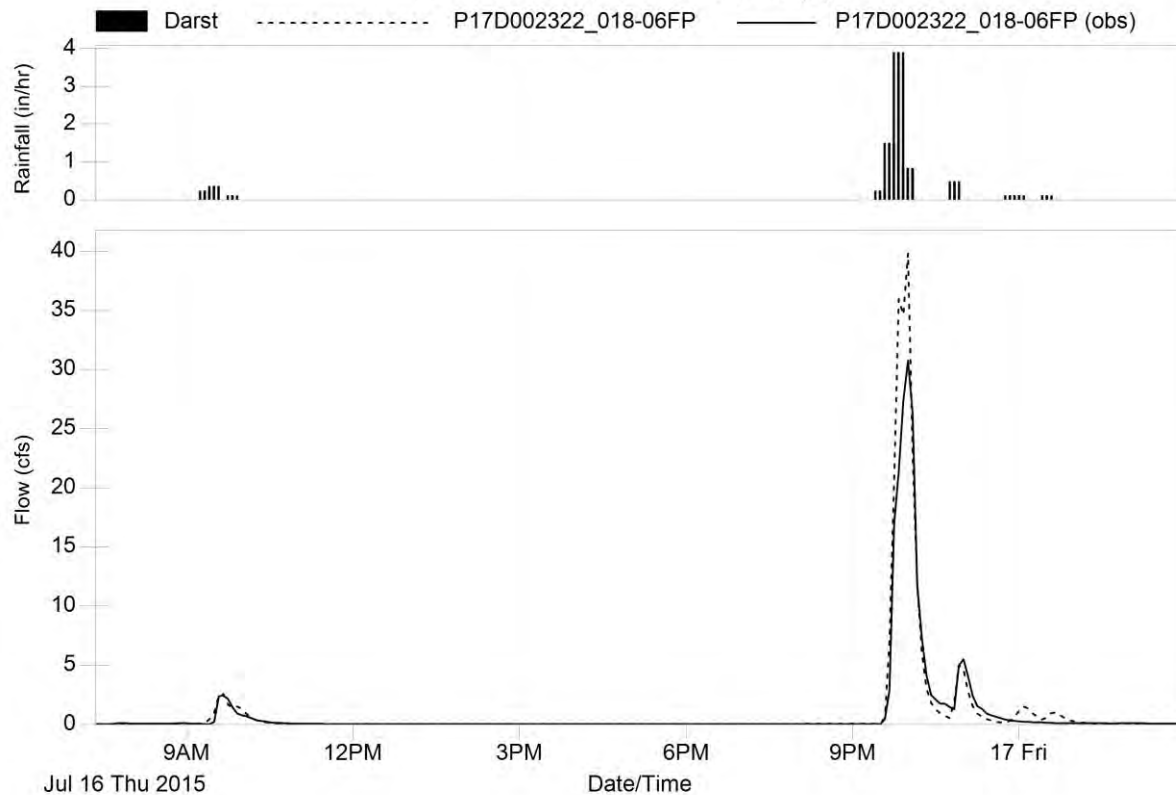
Duration: 13.08 h, Total Rainfall: 1.07 (in)



Sanger 018-06FP – Verification Events

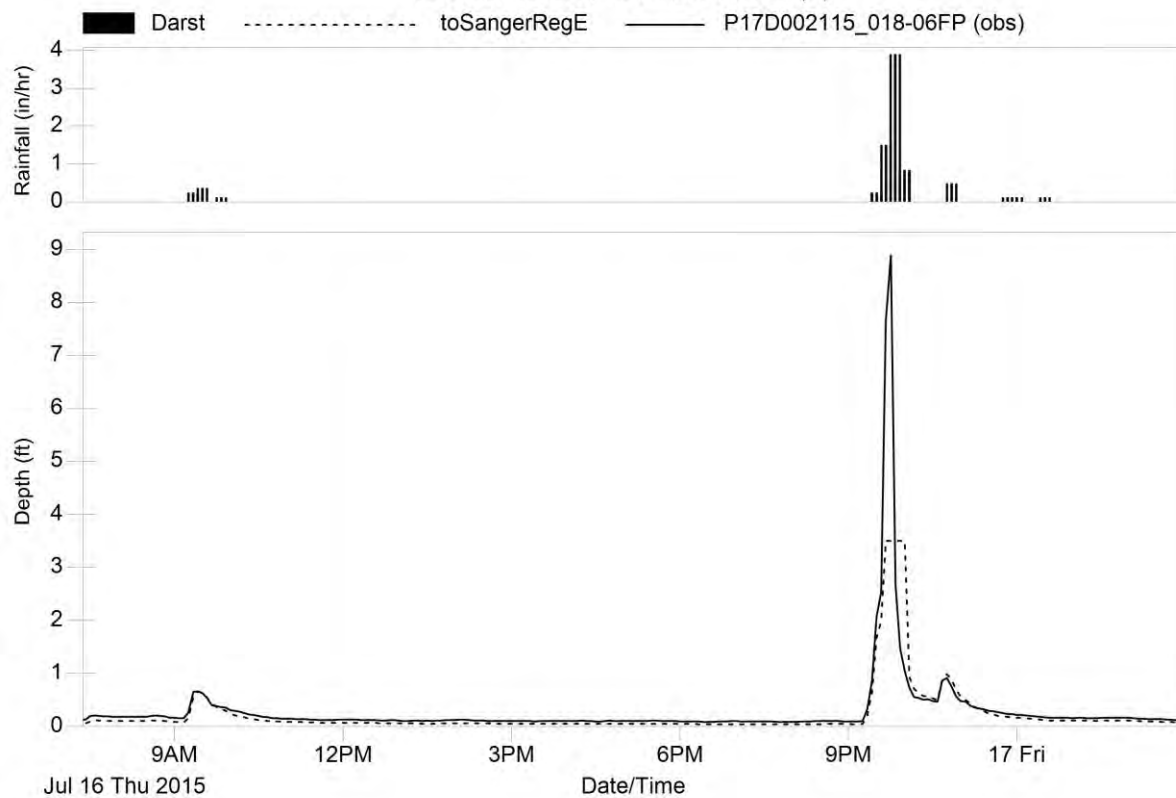
Event of July 16, 2015

Duration: 16.33 h, Total Rainfall: 1.34 (in)

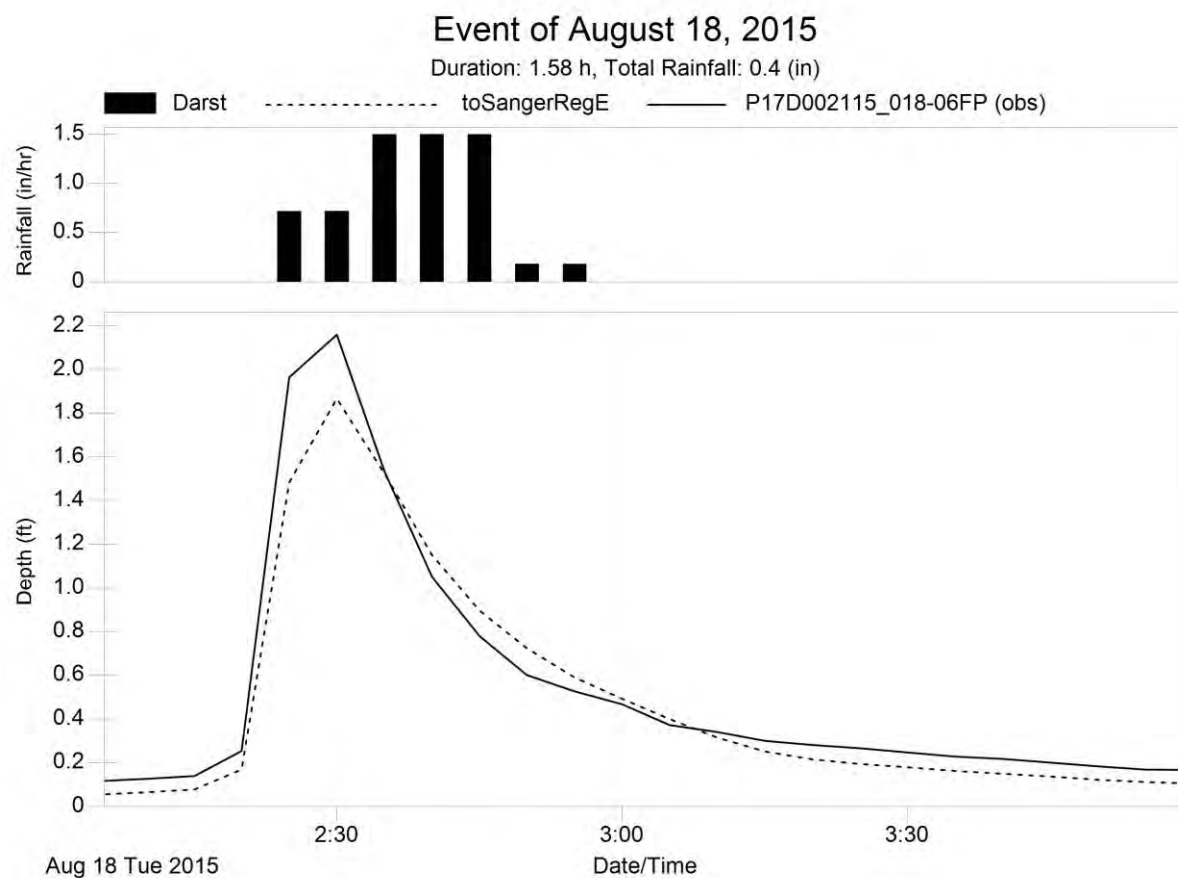
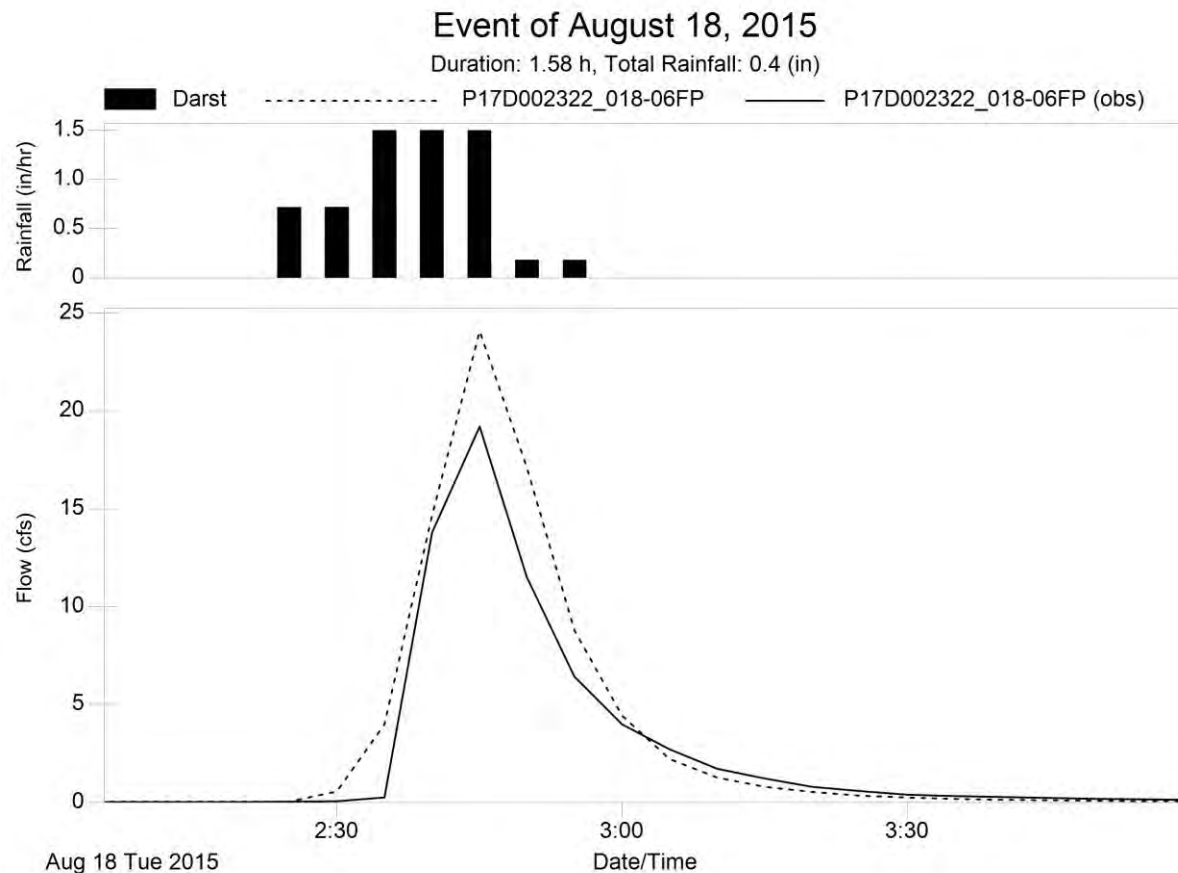


Event of July 16, 2015

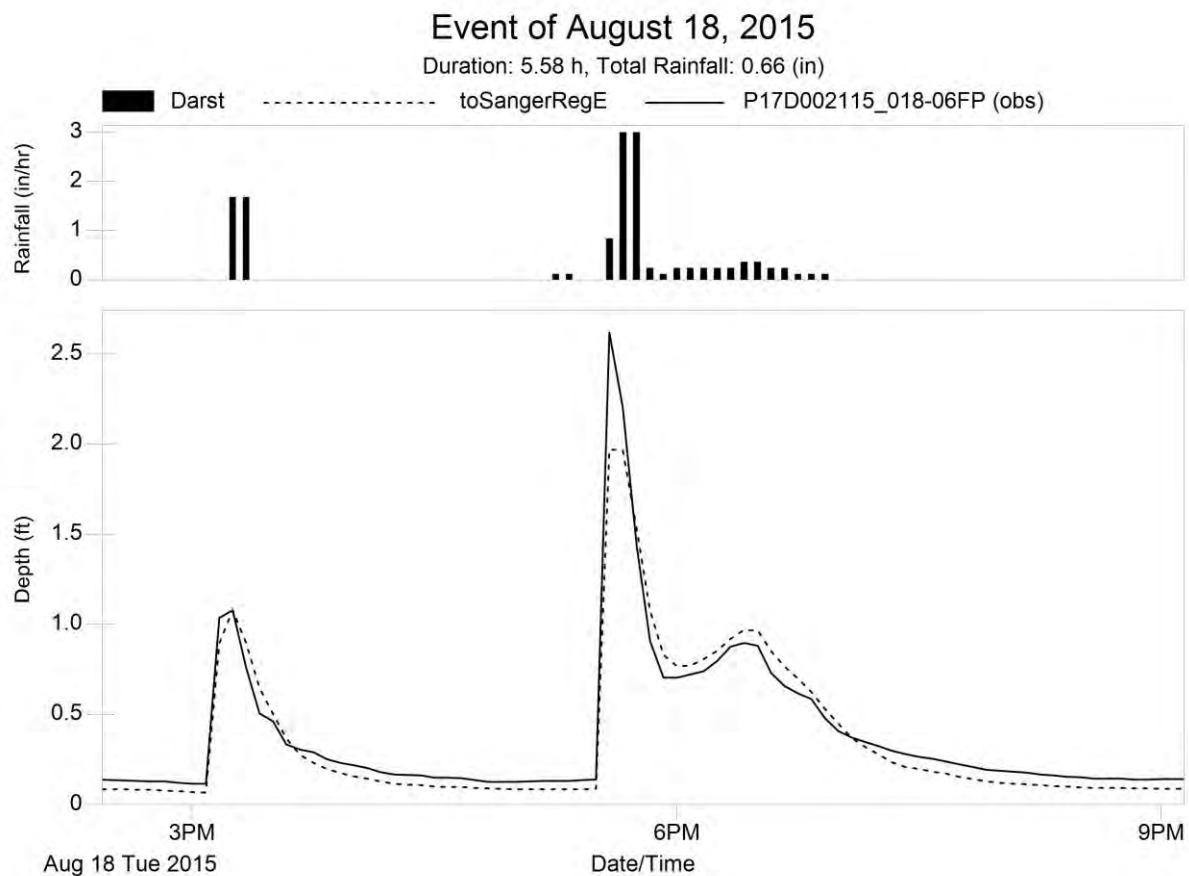
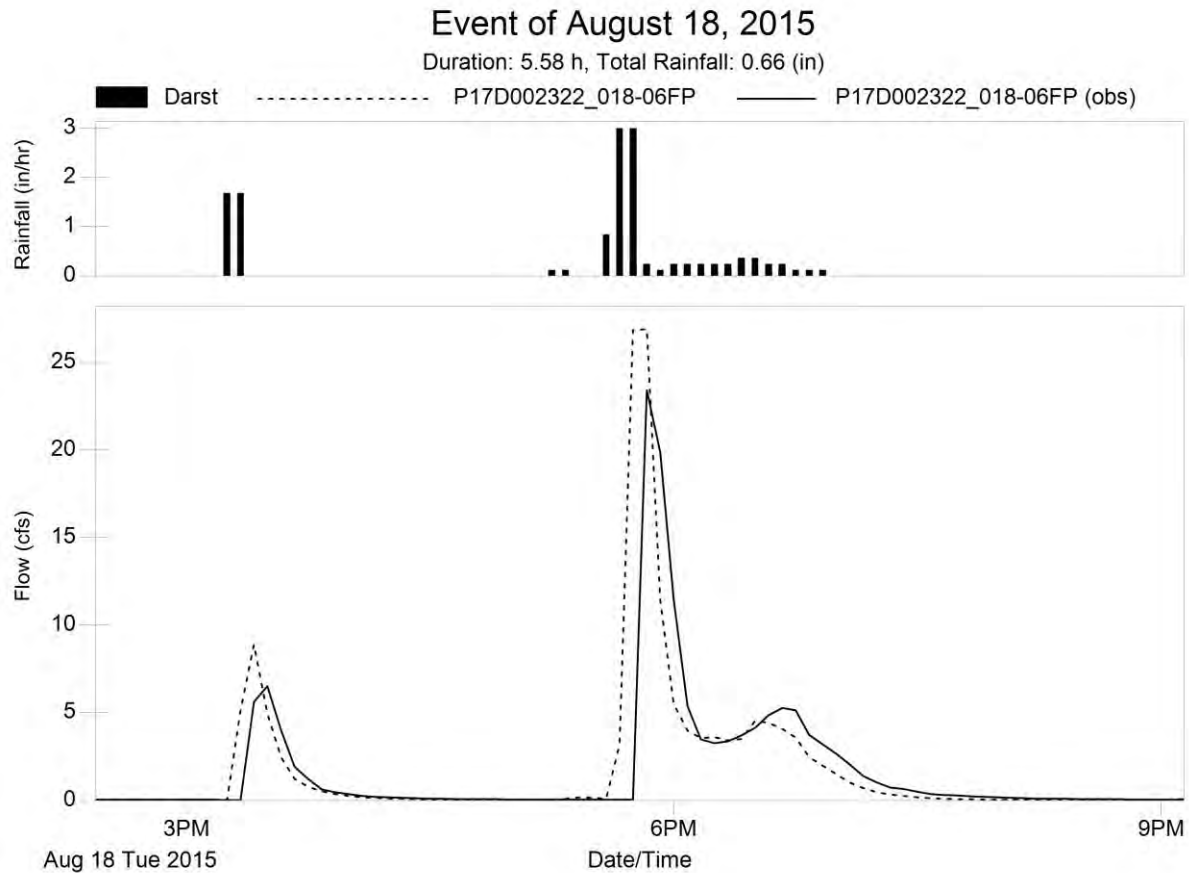
Duration: 16.33 h, Total Rainfall: 1.34 (in)



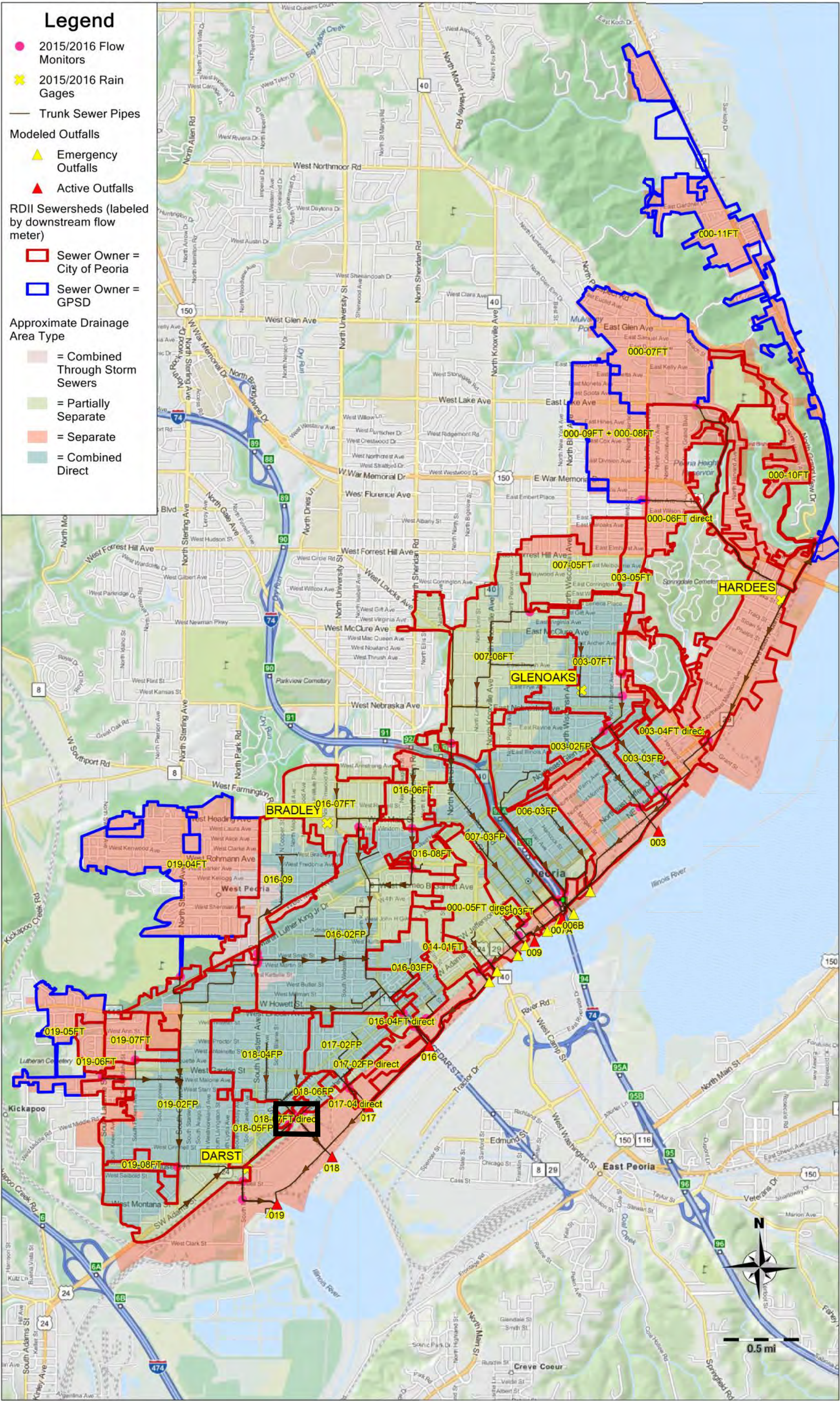
Sanger 018-06FP – Verification Events



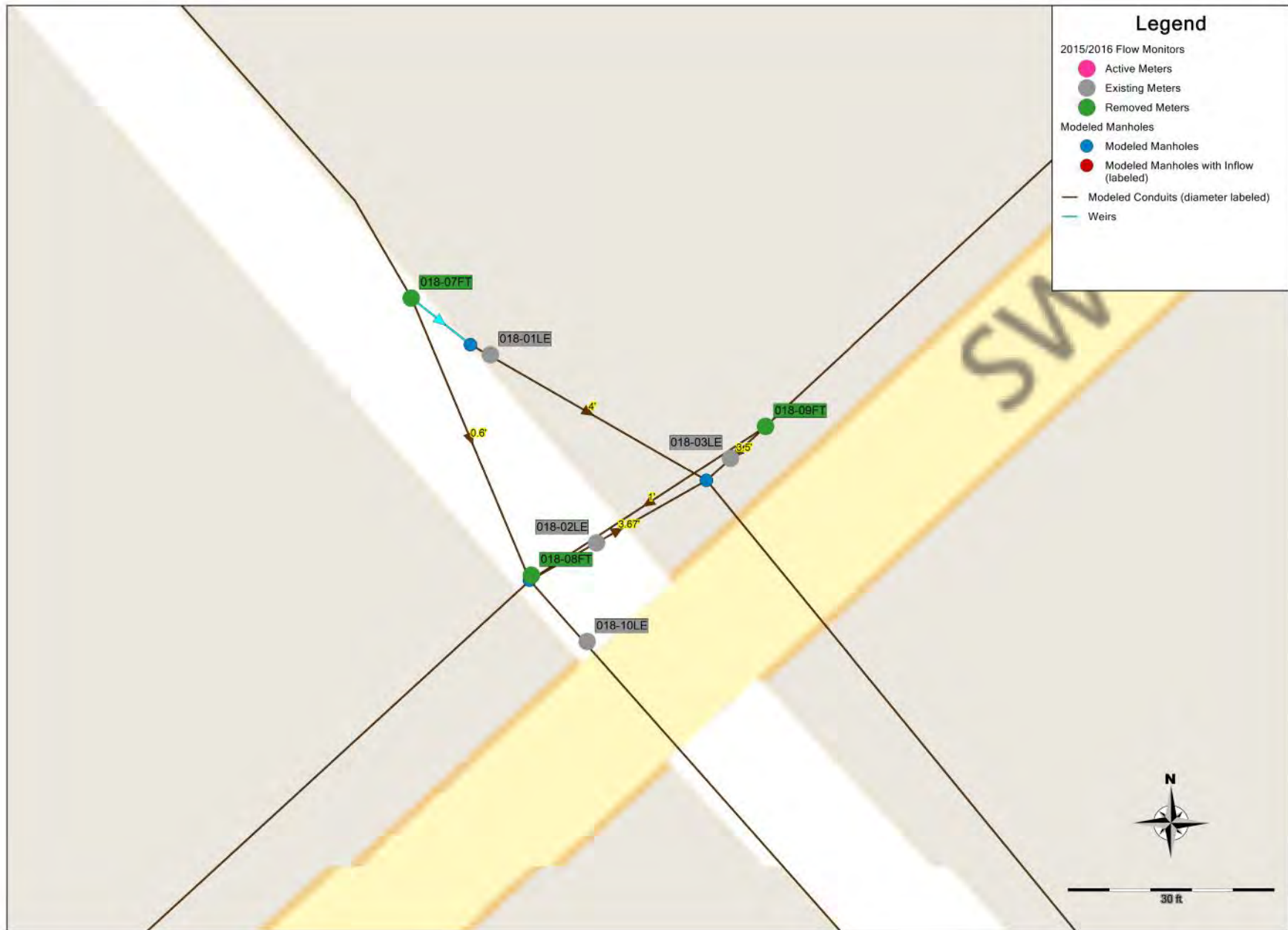
Sanger 018-06FP – Verification Events



Sanger Regulators Location Map



018-01LE - Sanger North Outfall

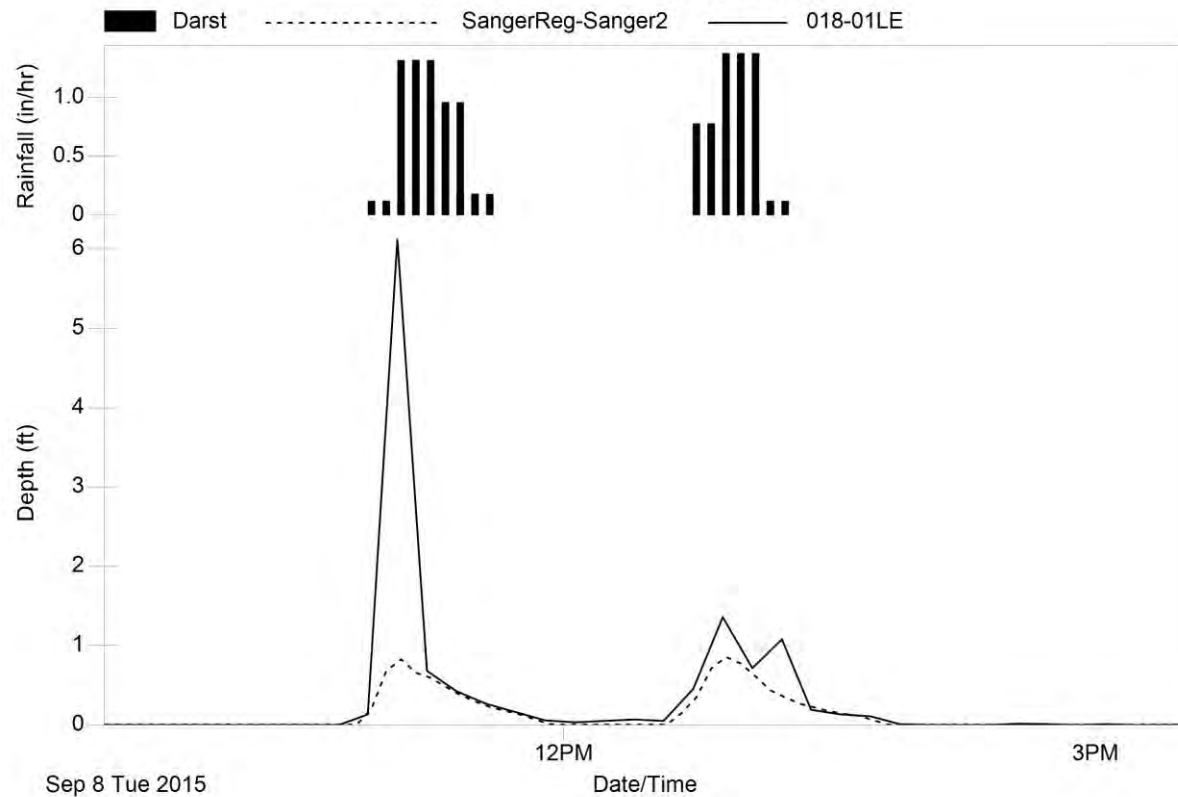


Date	Duration (h)	Maximum Depth (ft)		Minimum Depth (ft)		Average Depth (ft)		Maximum Depth (ft)	Average Depth (ft)	Rainfall Variability
		metered	modeled	metered	modeled	metered	modeled	Surcharged: -0.33 ft to +1.67 ft	Surcharged: -0.33 ft to +1.67 ft	
CALIBRATION EVENTS - DEPTH								Non-Surcharged: -0.33 ft to +0.33 ft	Non-Surcharged: -0.33 ft to +0.33 ft	
9/8/2015 9:55:00	5.08	6.125	0.858	0.000	0.000	0.397	0.163			variable
9/18/2015 13:10:0	13.25	1.942	1.162	0.000	0.000	0.293	0.150	-0.780	-0.143	possibly uniform
11/5/2015 14:05:0	13.42	2.500	0.319	0.000	0.000	0.079	0.026			possibly uniform
11/11/2015 19:40:	1.83	2.458	0.936	0.000	0.000	0.636	0.304	-1.522	-0.332	variable
11/16/2015 20:45:	30.33	2.117	0.605	0.000	0.000	0.202	0.107	-1.512	-0.095	variable
11/26/2015 21:30:	15.67	0.933	0.430	0.000	0.000	0.184	0.128	-0.504	-0.056	possibly uniform
12/13/2015 2:45:0	34.42	0.733	0.427	0.000	0.000	0.085	0.071	-0.307	-0.015	variable
12/20/2015 23:25:	12.58	0.800	0.431	0.000	0.000	0.075	0.076	-0.369	0.001	variable
12/23/2015 7:05:0	6.42	2.475	0.731	0.000	0.000	0.400	0.164	-1.744	-0.236	variable
12/28/2015 3:20:0	19.00	2.100	1.024	0.000	0.000	0.237	0.227	-1.076	-0.009	variable
VERIFICATION EVENTS - DEPTH										
6/17/2015 2:05:00	4.42	1.658	1.027	0.000	0.000	0.349	0.046	-0.631	-0.303	variable
6/24/2015 4:20:00	67.42	6.133	2.134	0.000	0.000	0.142	0.122			variable
6/28/2015 17:25:0	4.50	1.950	3.104	0.000	0.000	0.484	0.461	1.154	-0.023	variable
7/8/2015 5:15:00	25.83	2.392	0.594	0.000	0.000	0.194	0.074	-1.798	-0.120	variable
7/11/2015 8:30:00	13.08	2.158	1.028	0.000	0.000	0.234	0.103	-1.130	-0.131	variable
7/16/2015 9:00:00	16.33	5.233	14.740	0.000	0.000	0.134	0.327	9.507	0.194	variable
7/29/2015 1:35:00	1.42	2.067	0.997	0.000	0.000	0.585	0.195	-1.070	-0.391	possibly uniform
8/18/2015 2:15:00	1.58	1.292	0.814	0.000	0.000	0.408	0.071	-0.478	-0.337	possibly uniform
8/18/2015 15:00:0	5.58	2.200	0.889	0.000	0.000	0.423	0.108	-1.311	-0.316	variable
Notes: Results from interceptor only model using flow meter data as influent flow to regulator. Meter data spike on 9/8, 11/5, and 6/24. These dates are not included in average calculations.						WEIGHTED AVERAGES				
						Calibration - Relatively Uniform		N/A	N/A	relatively uniform
						Calibration - Possibly Uniform		-0.369	-0.094	possibly uniform
						Calibration - Variable		-0.835	-0.162	variable
						Calibration Weighted - All Events		-0.722	-0.147	All Events
						Verification - Relatively Uniform		N/A	N/A	relatively uniform
						Verification - Possibly Uniform		-0.842	-0.369	possibly uniform
						Verification - Variable		1.903	-0.142	variable
						Verification Weighted - All Events		1.535	-0.218	All Events
						Weighted Average - All Events		0.476	-0.185	
						NET AVERAGES				
						Calibration - Relatively Uniform		N/A	N/A	relatively uniform
						Calibration - Possibly Uniform		-0.642	-0.100	possibly uniform
						Calibration - Variable		-1.088	-0.114	variable
						Calibration Net - All Events		-0.977	-0.111	All Events
						Verification - Relatively Uniform		N/A	N/A	relatively uniform
						Verification - Possibly Uniform		-0.774	-0.364	possibly uniform
						Verification - Variable		0.965	-0.116	variable
						Verification Net - All Events		0.530	-0.178	All Events
						Net Average - All Events		-0.223	-0.144	

Sanger 018-01LE – Calibration Events

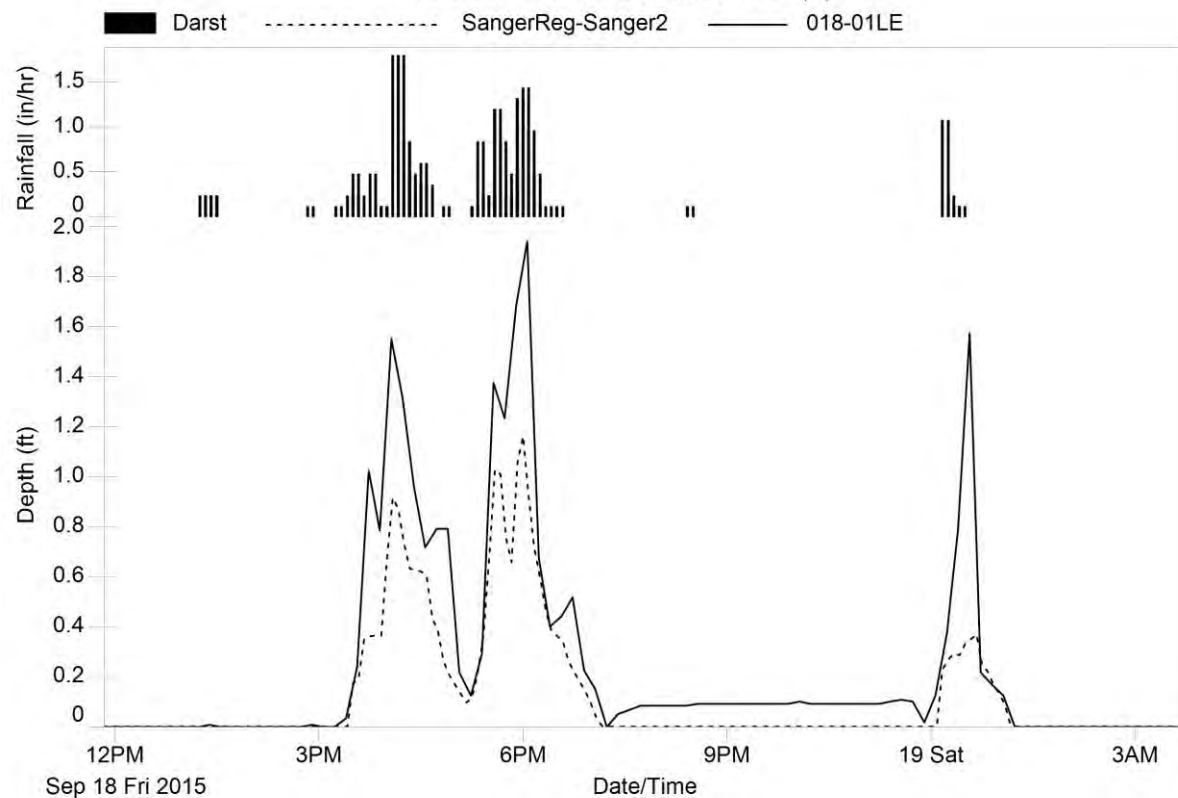
Event of September 8, 2015

Duration: 5.08 h, Total Rainfall: 0.81 (in)



Event of September 18, 2015

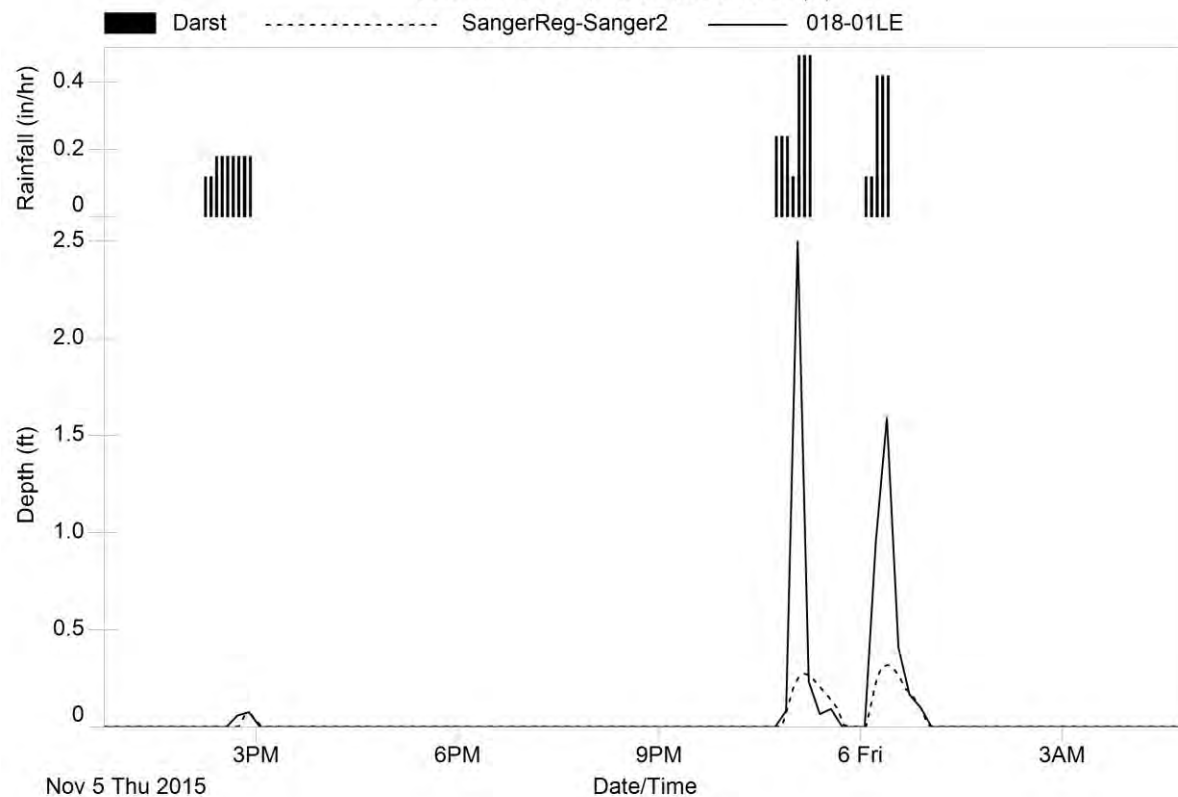
Duration: 13.25 h, Total Rainfall: 1.62 (in)



Sanger 018-01LE – Calibration Events

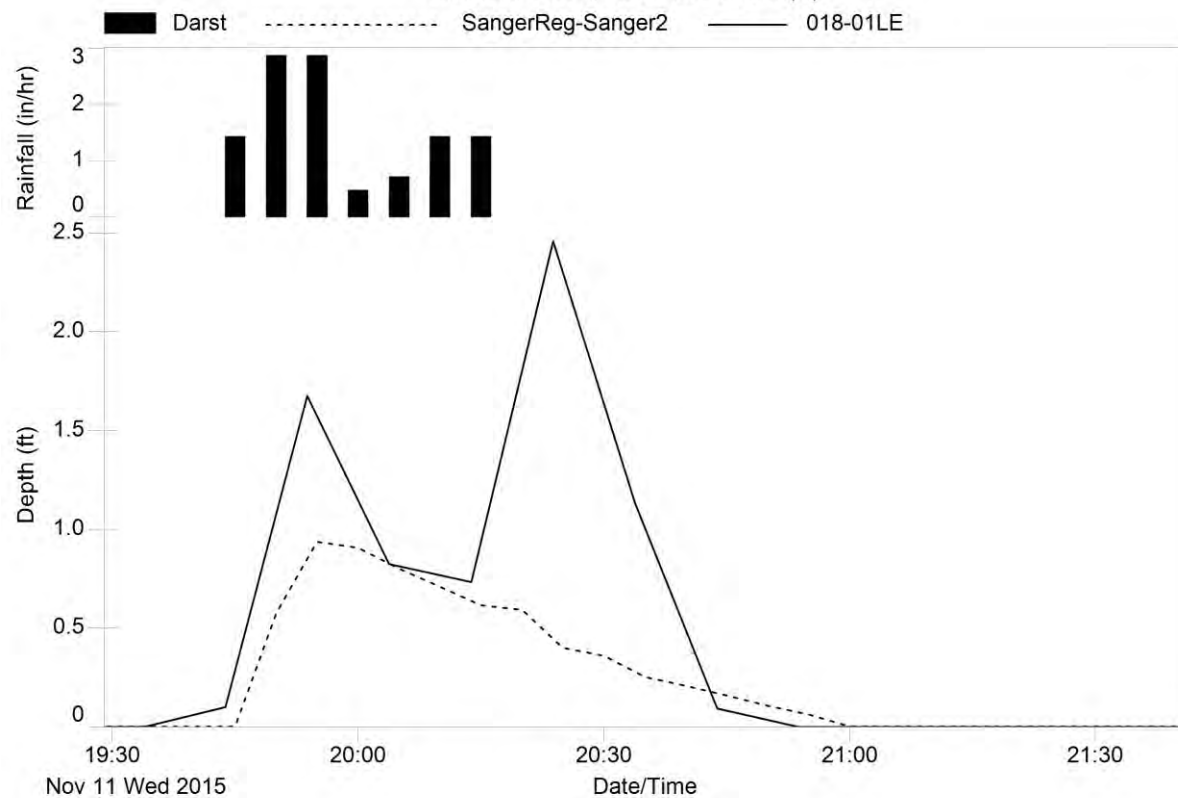
Event of November 5, 2015

Duration: 13.42 h, Total Rainfall: 0.34 (in)



Event of November 11, 2015

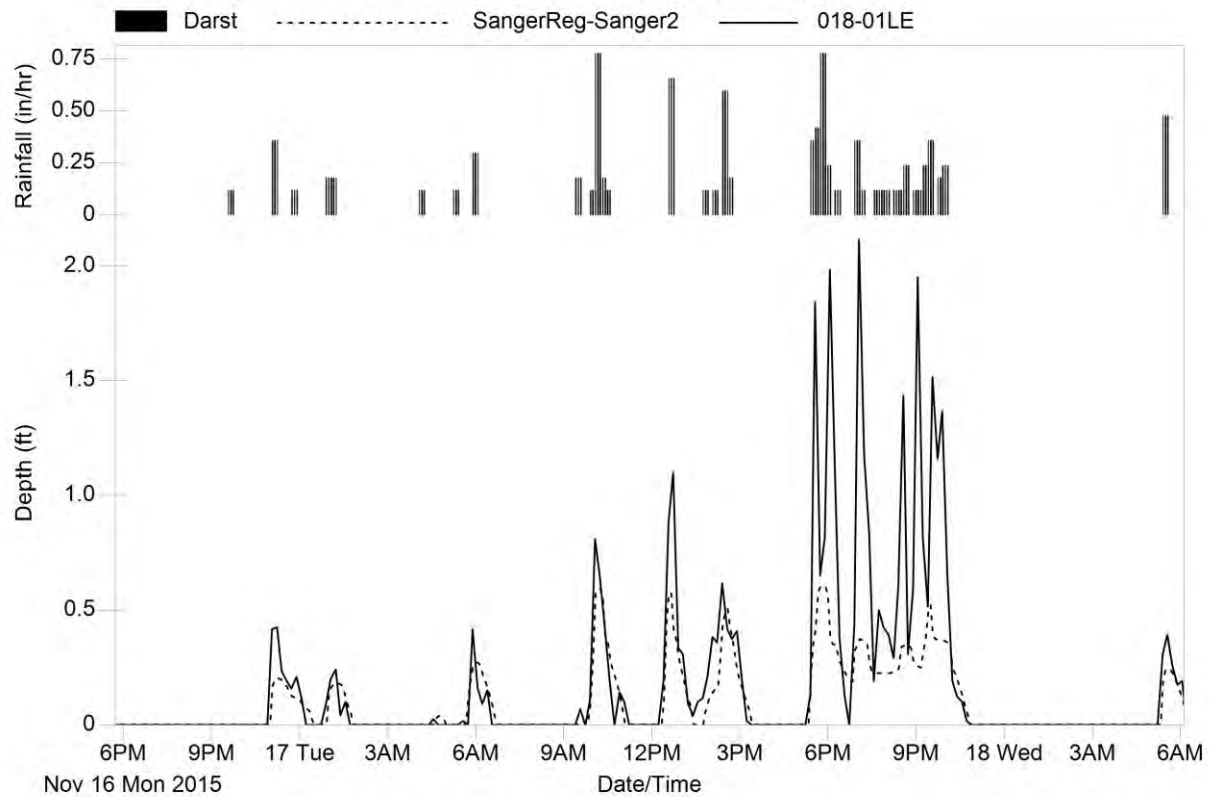
Duration: 1.83 h, Total Rainfall: 0.6 (in)



Sanger 018-01LE – Calibration Events

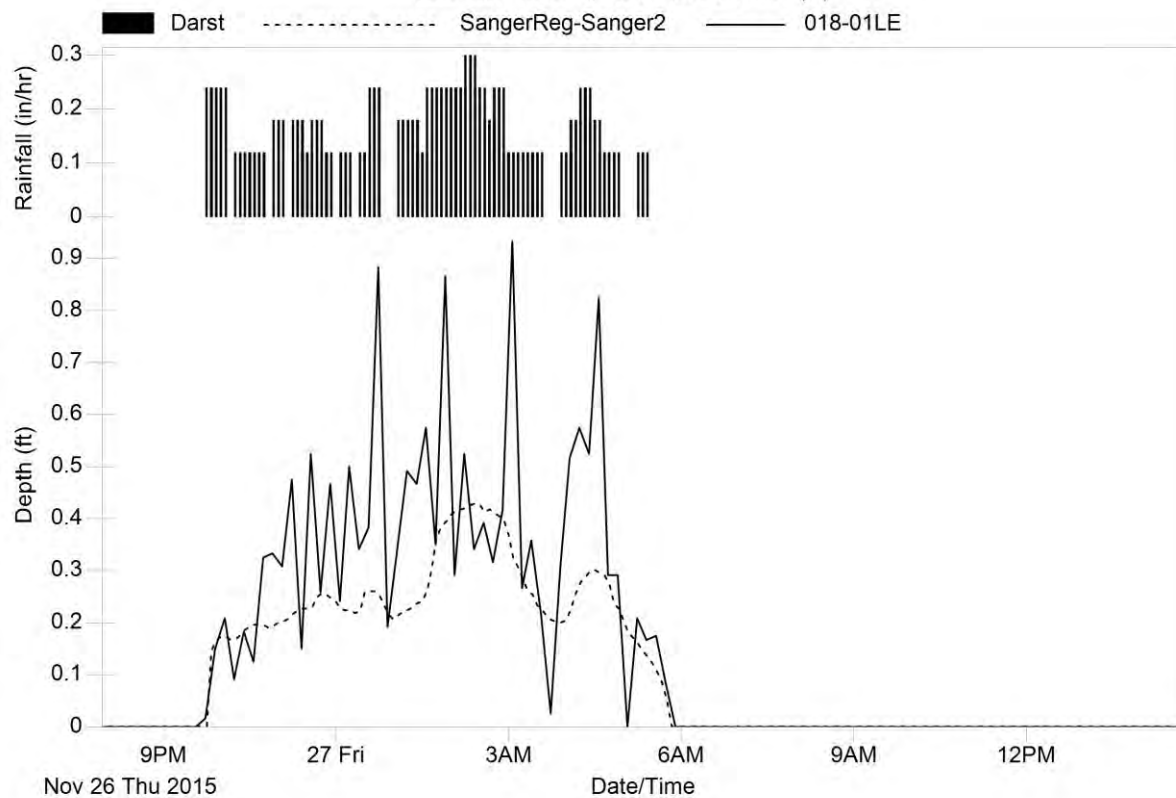
Event of November 16, 2015

Duration: 30.33 h, Total Rainfall: 1.51 (in)



Event of November 26, 2015

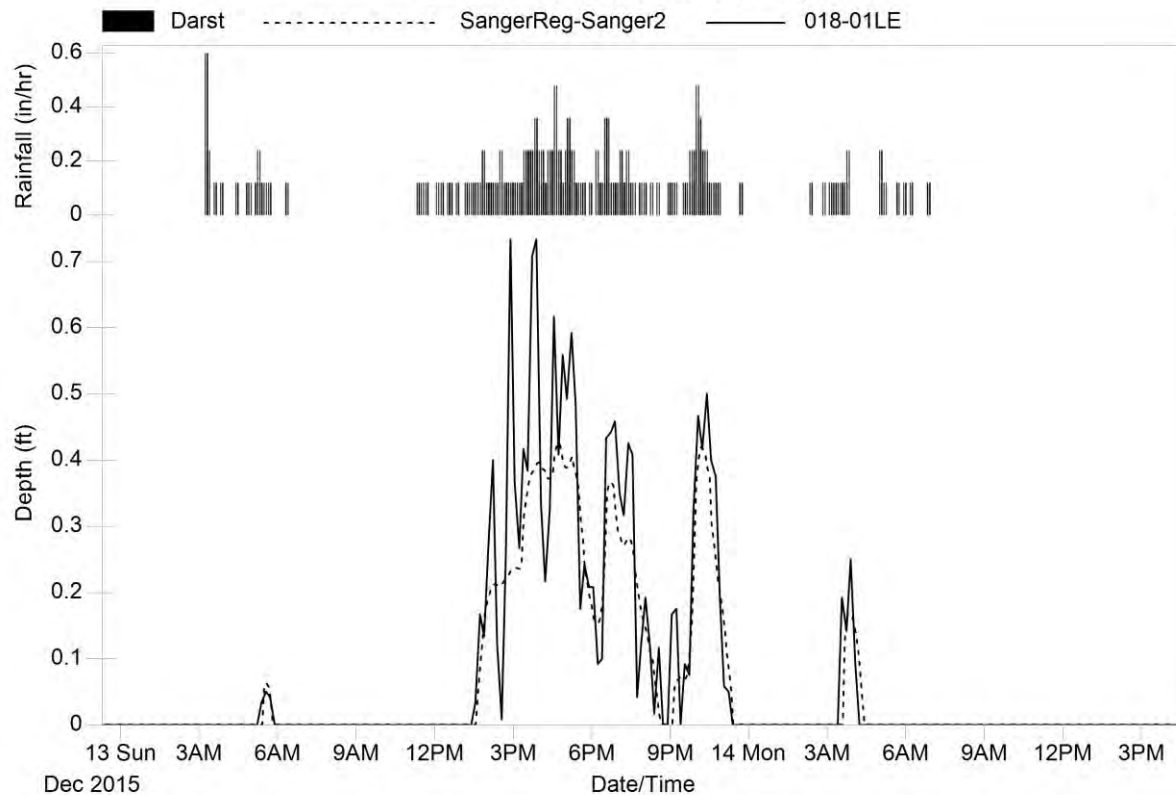
Duration: 15.67 h, Total Rainfall: 1.01 (in)



Sanger 018-01LE – Calibration Events

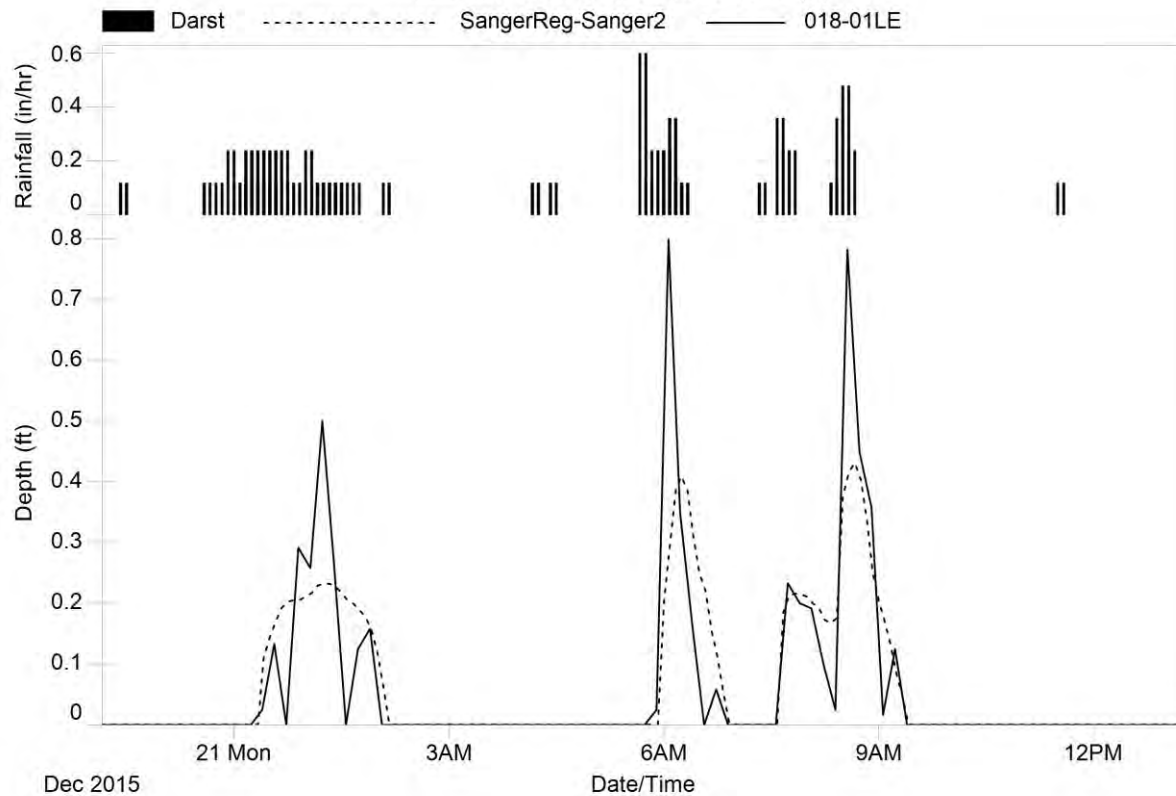
Event of December 13, 2015

Duration: 34.42 h, Total Rainfall: 1.75 (in)



Event of December 20, 2015

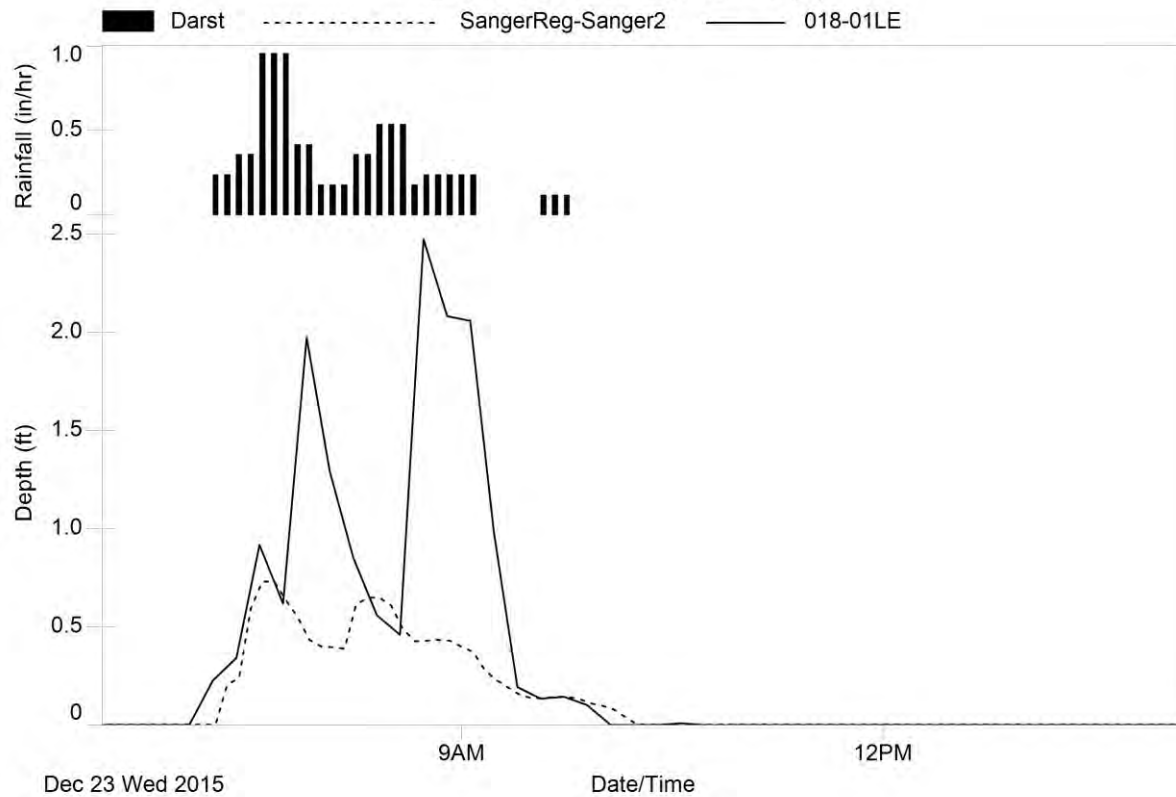
Duration: 12.58 h, Total Rainfall: 0.69 (in)



Sanger 018-01LE – Calibration Events

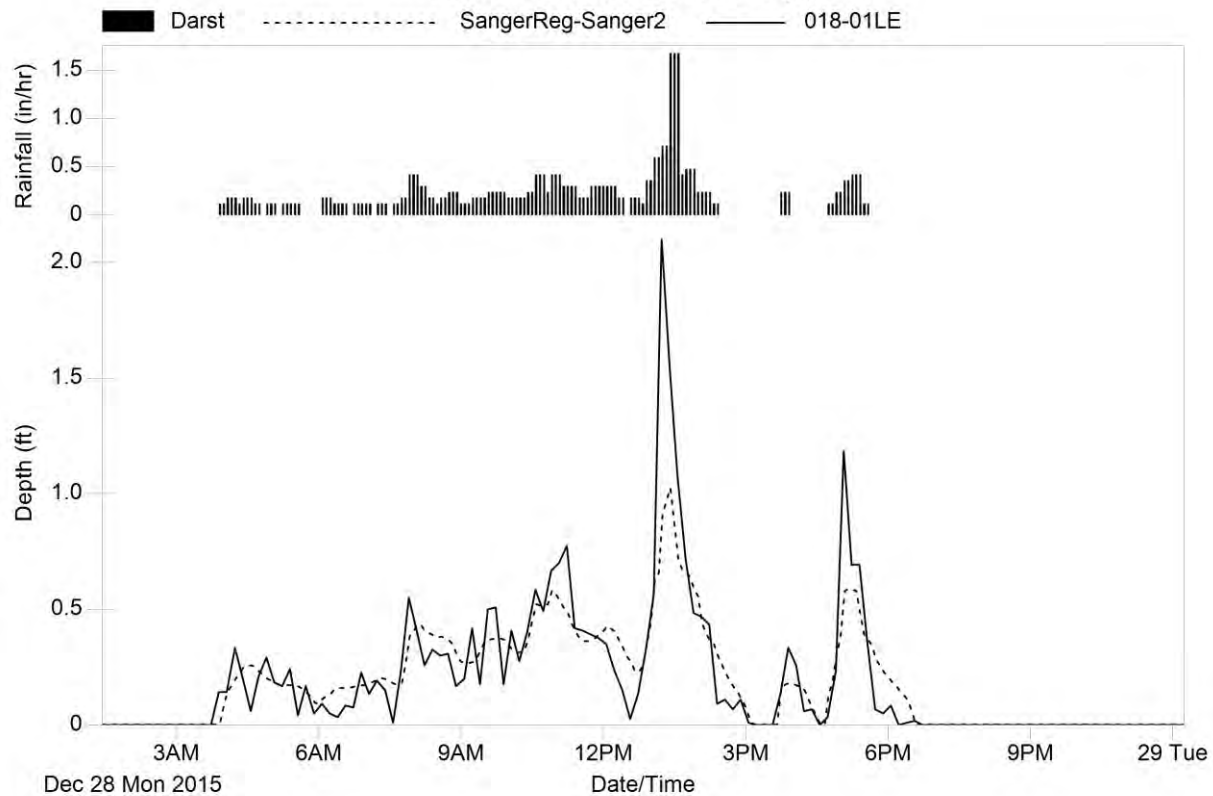
Event of December 23, 2015

Duration: 6.42 h, Total Rainfall: 0.67 (in)



Event of December 28, 2015

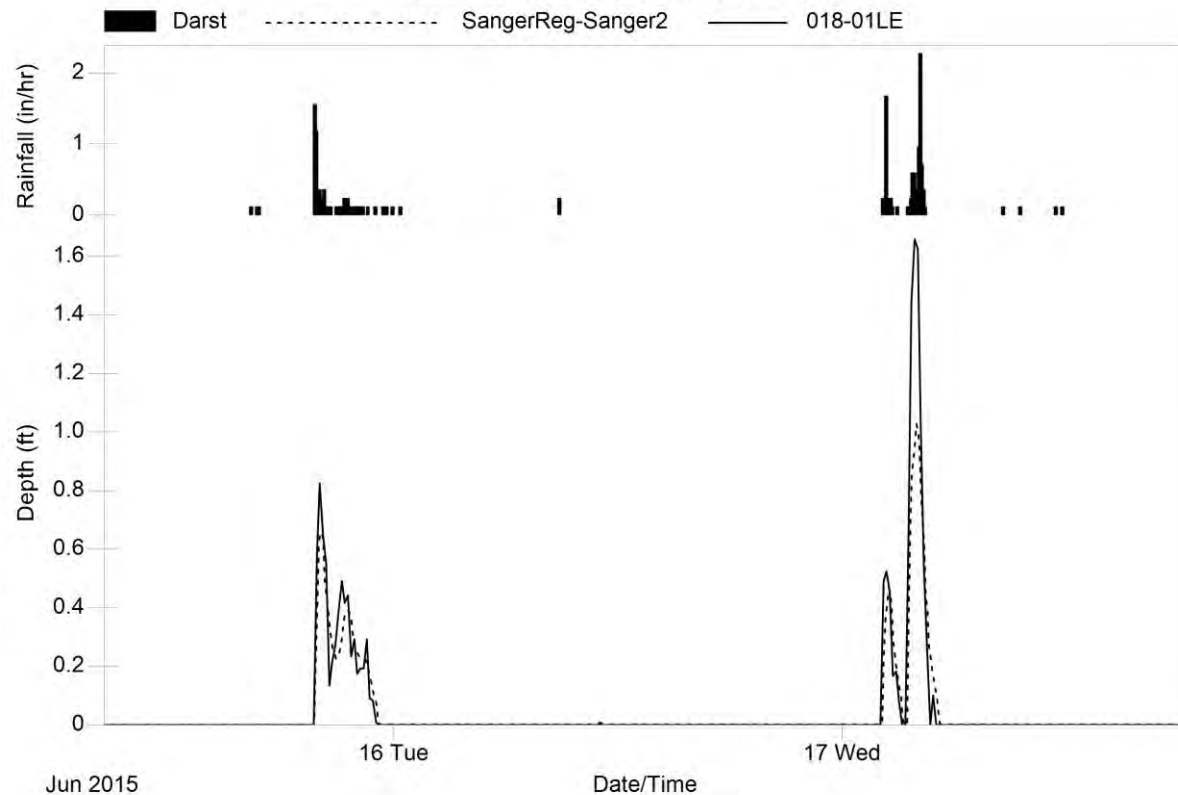
Duration: 19 h, Total Rainfall: 2.54 (in)



Sanger 018-01LE – Verification Events

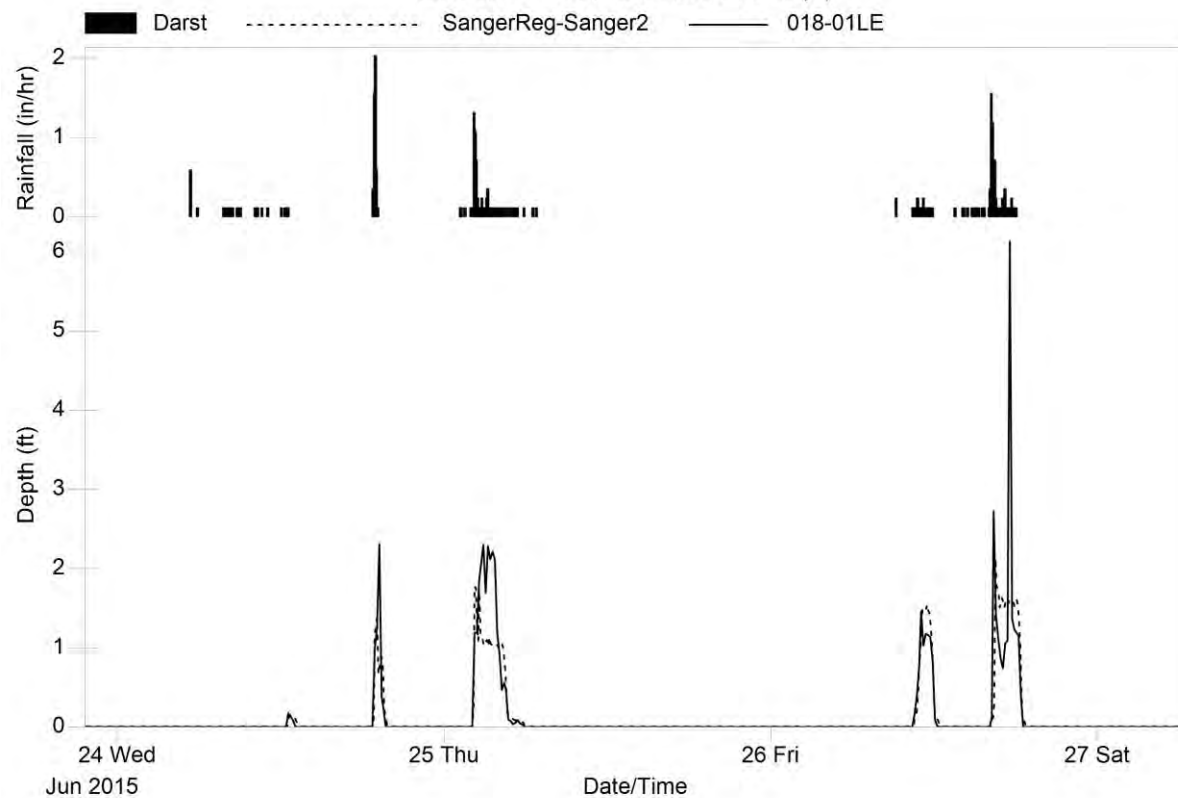
Event of June 15, 2015

Duration: 48.25 h, Total Rainfall: 1.52 (in)

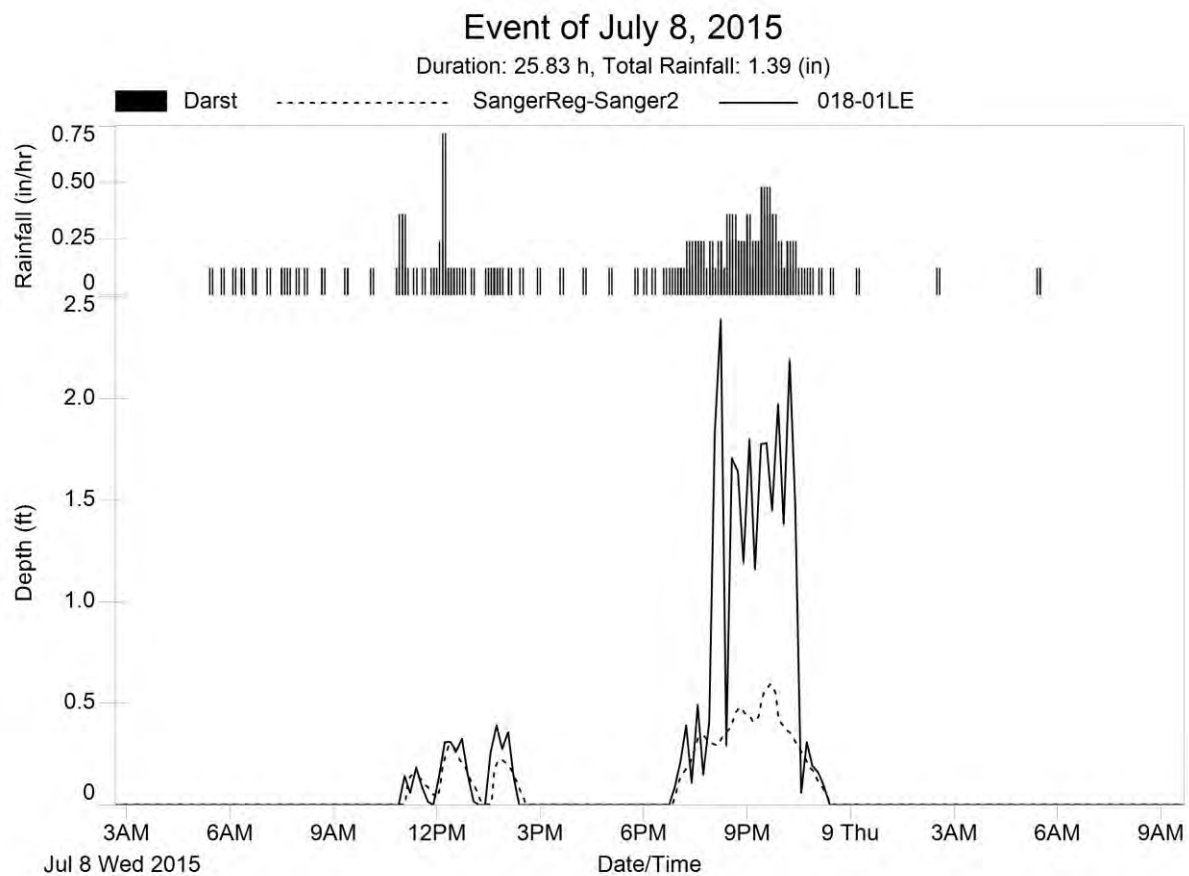
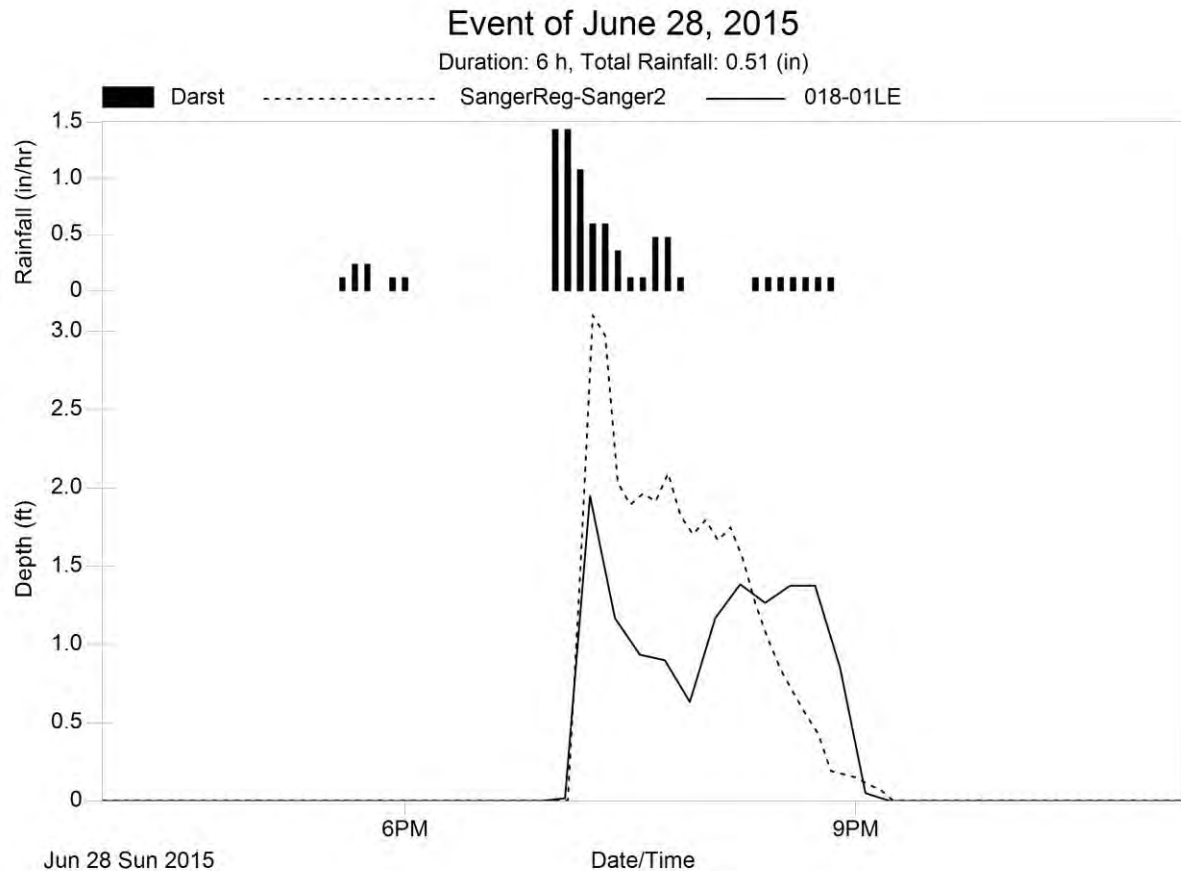


Event of June 24, 2015

Duration: 67.42 h, Total Rainfall: 2.15 (in)



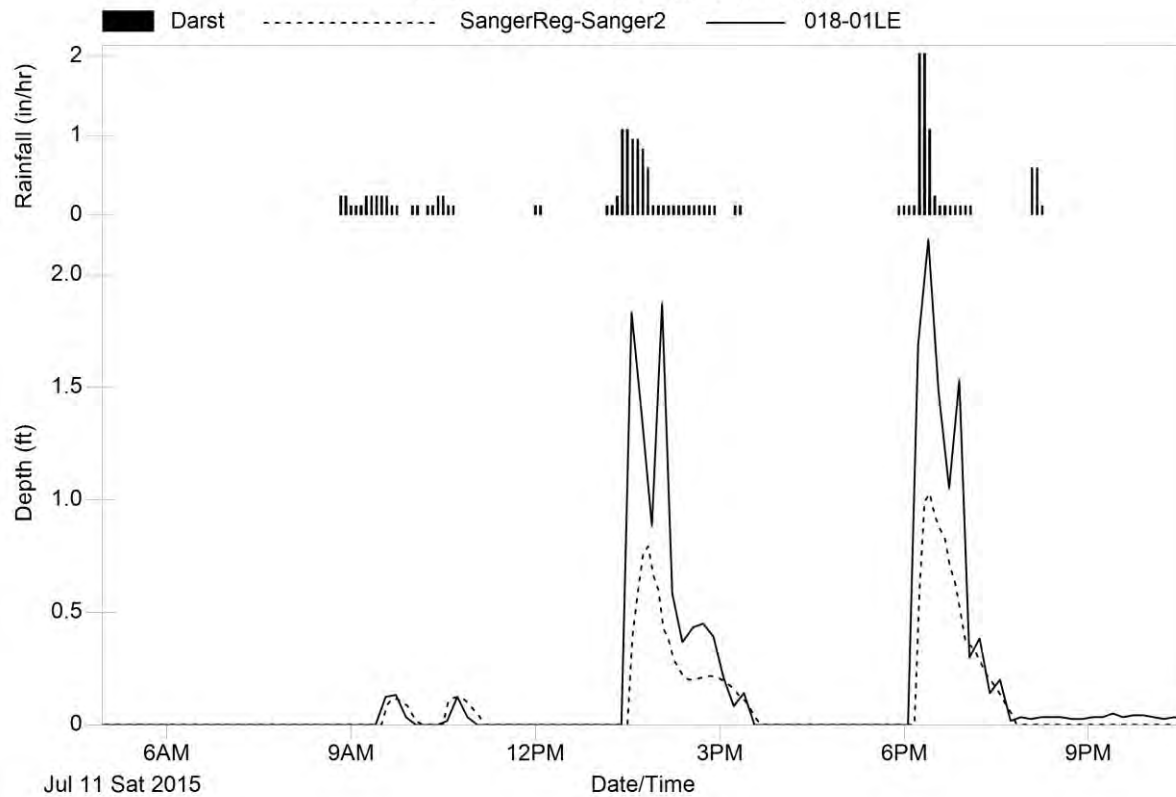
Sanger 018-01LE – Verification Events



Sanger 018-01LE – Verification Events

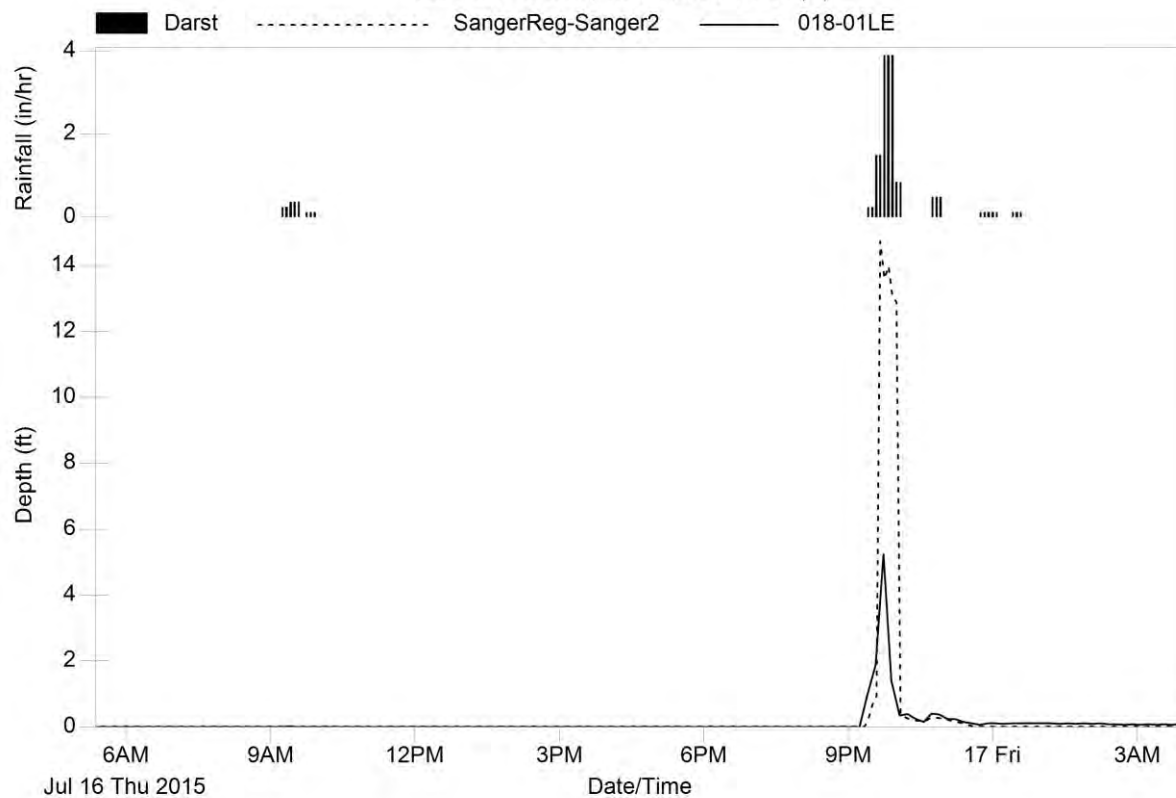
Event of July 11, 2015

Duration: 14.67 h, Total Rainfall: 1.07 (in)

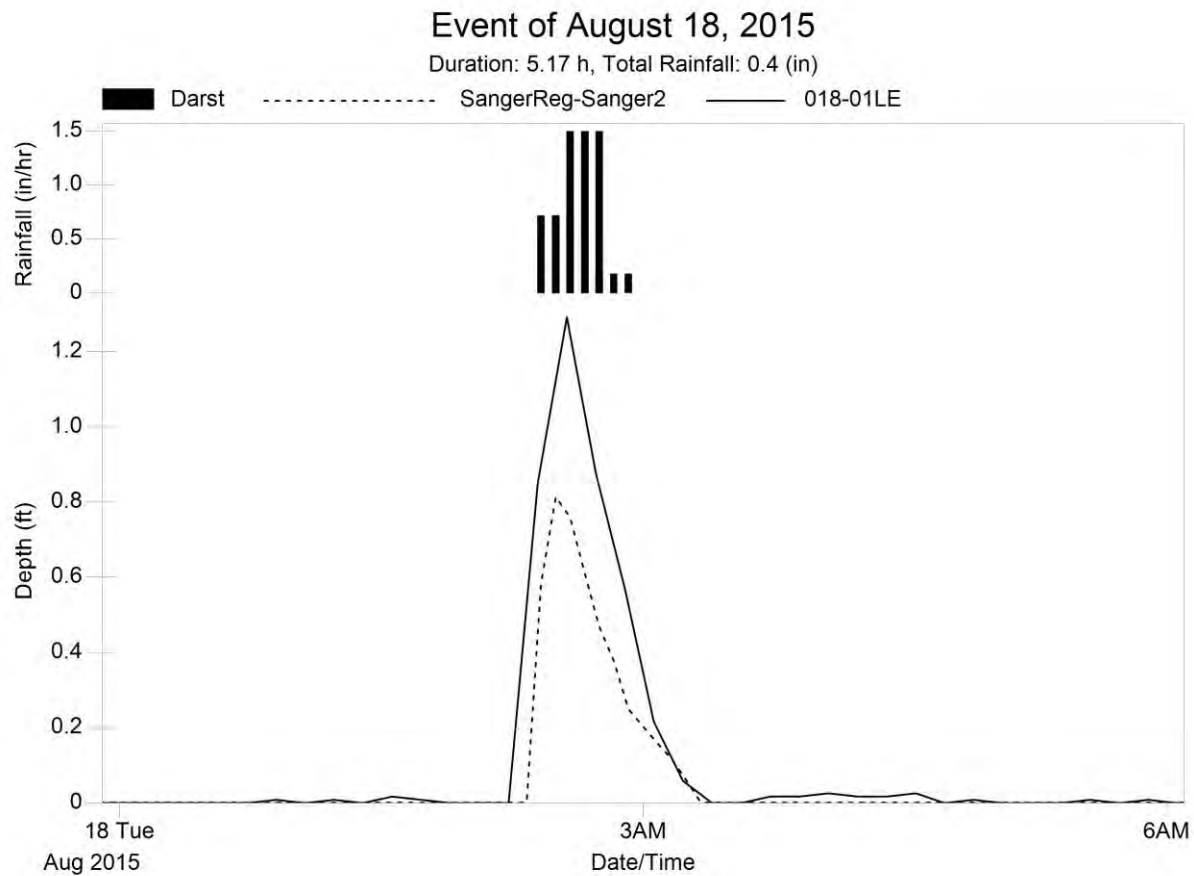
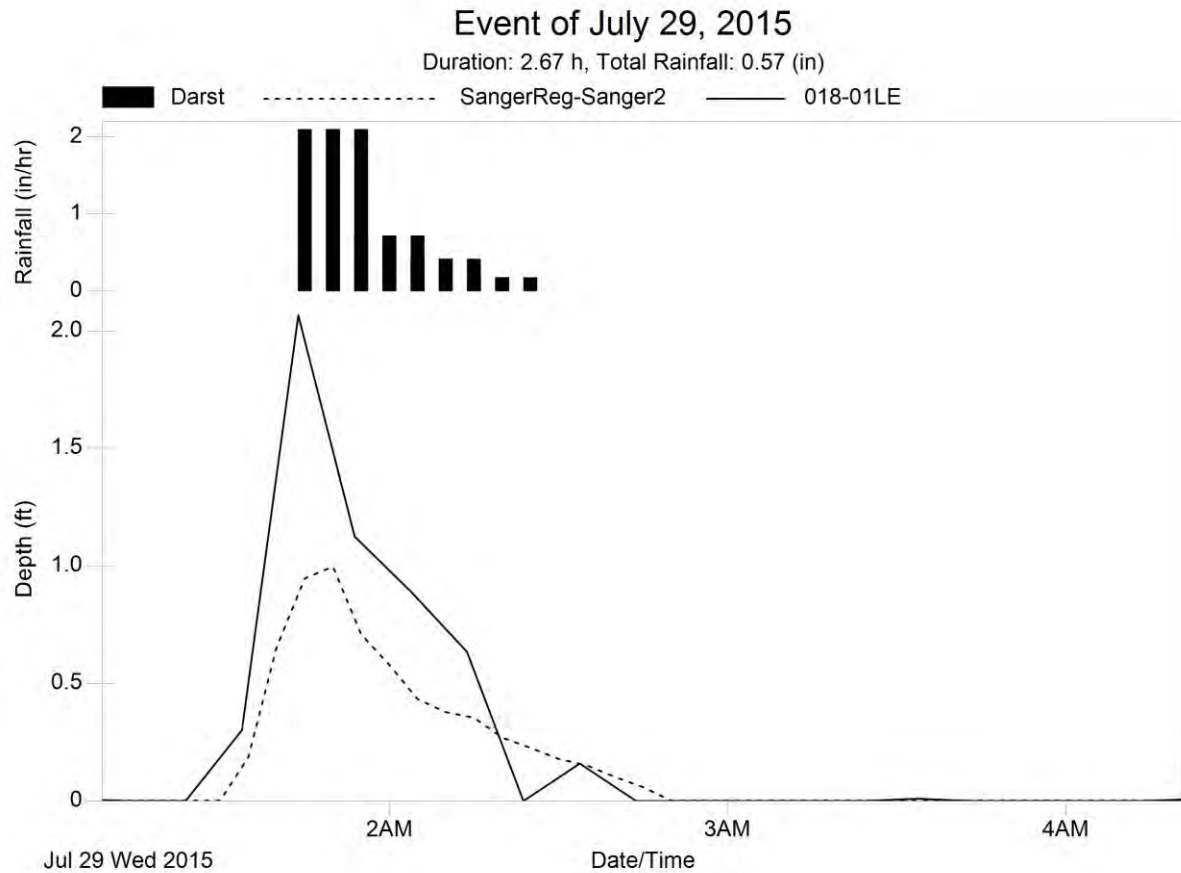


Event of July 16, 2015

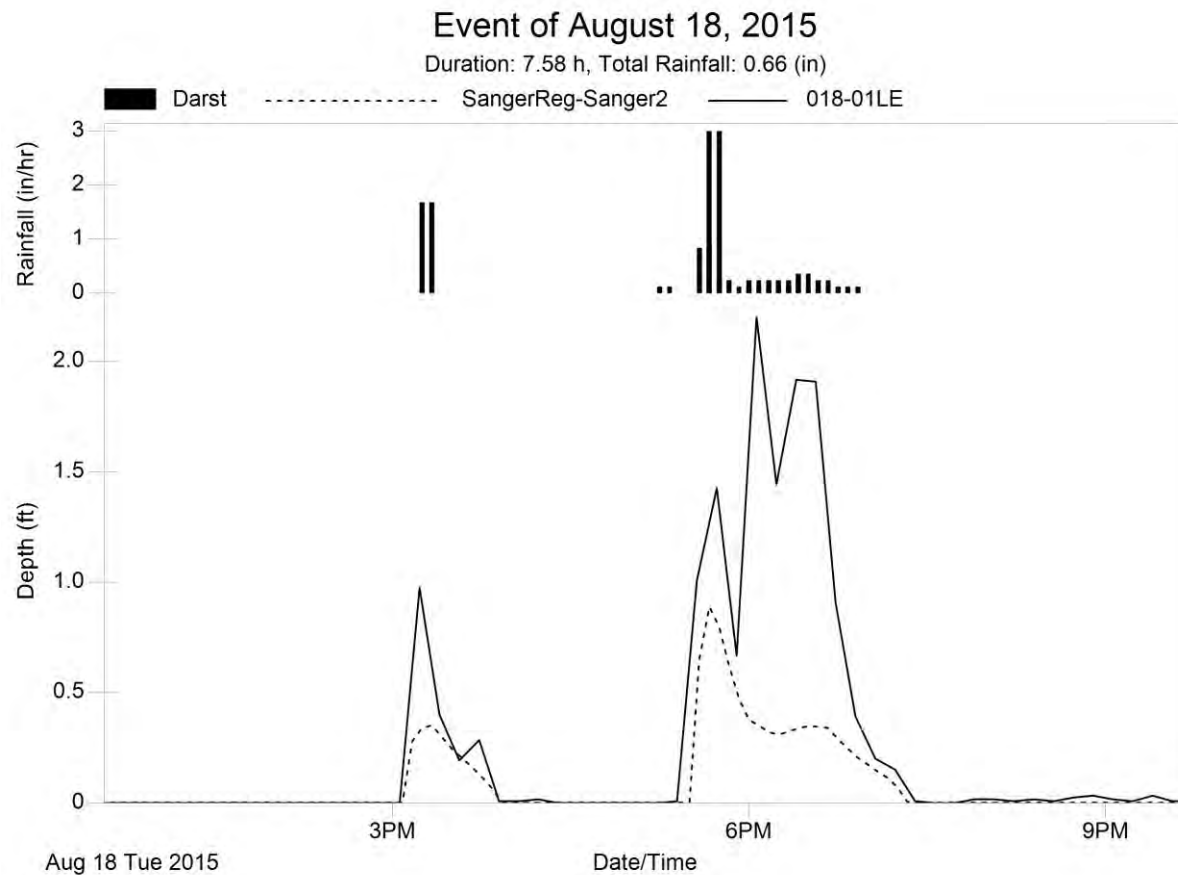
Duration: 18.83 h, Total Rainfall: 1.34 (in)



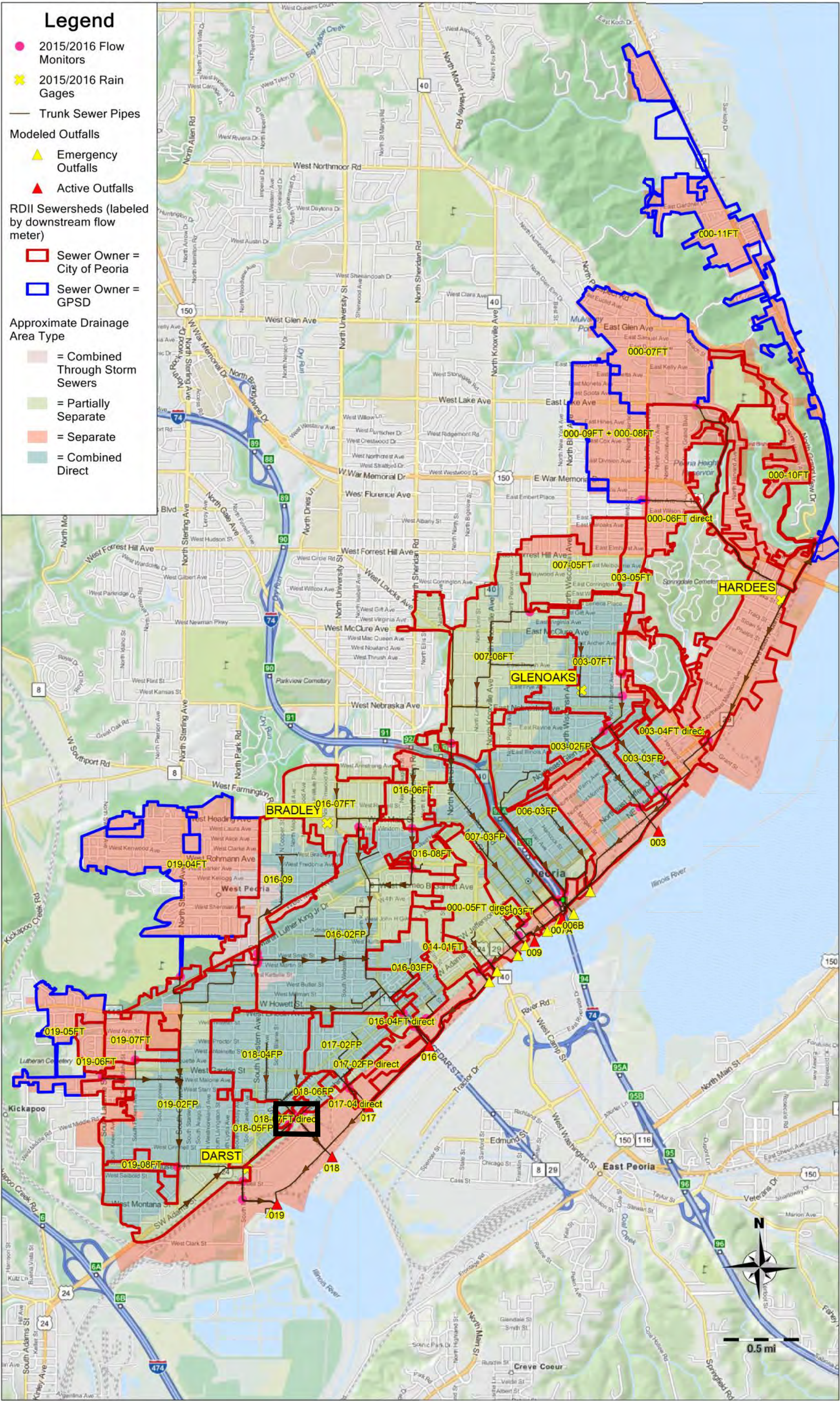
Sanger 018-01LE – Verification Events



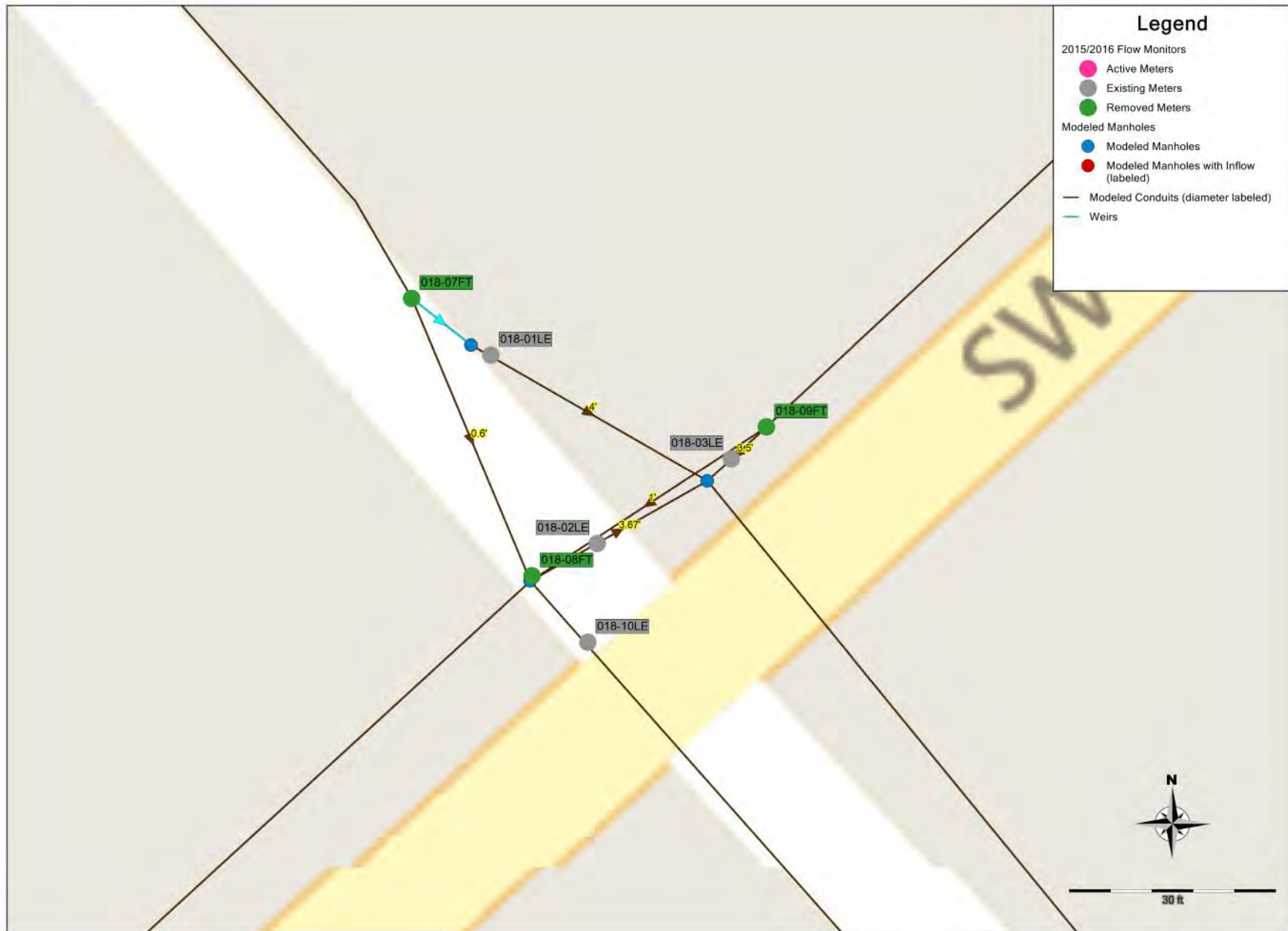
Sanger 018-01LE – Verification Events



Sanger Regulators Location Map



018-02LE - Washington West Outfall



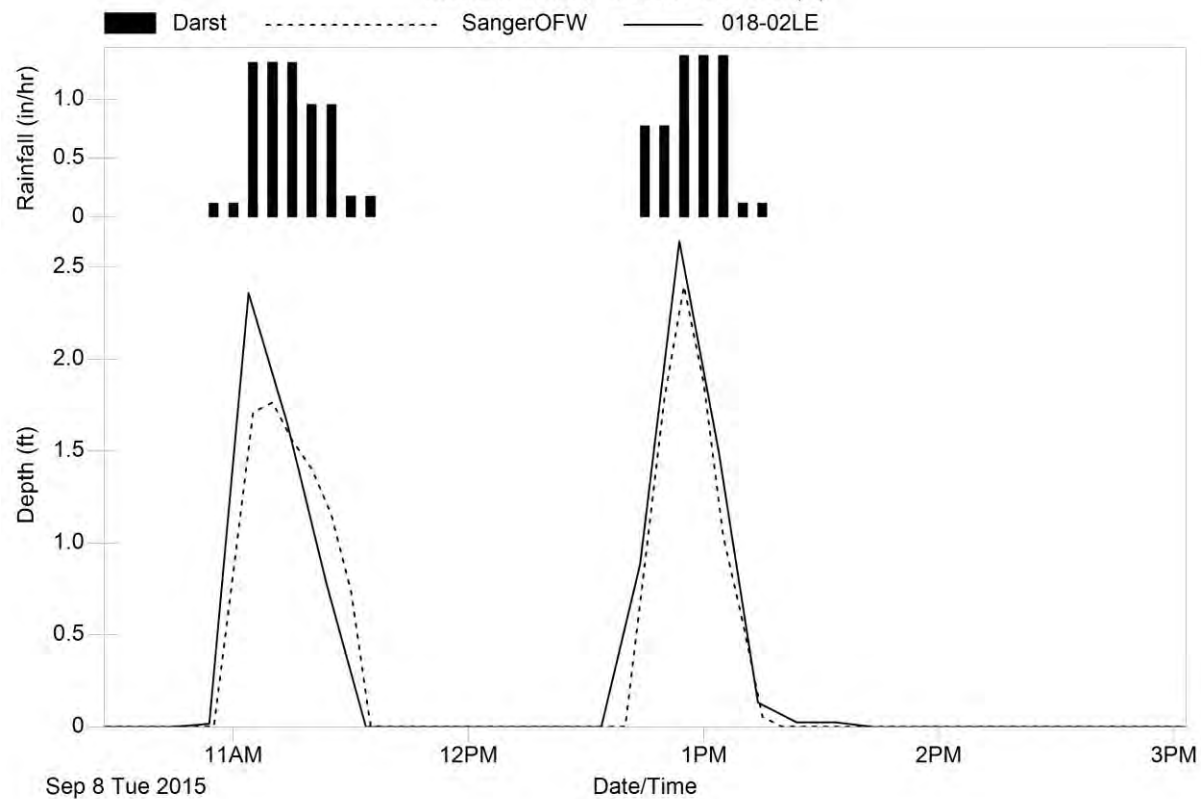
Date	Duration (h)	Maximum Depth (ft)		Minimum Depth (ft)		Average Depth (ft)		Maximum Depth (ft)	Average Depth (ft)	Rainfall Variability	
		metered	modeled	metered	modeled	metered	modeled	Surcharged: -0.33 ft to +1.67 ft	Surcharged: -0.33 ft to +1.67 ft		
CALIBRATION EVENTS - DEPTH								Non-Surcharged: -0.33 ft to +0.33 ft	Non-Surcharged: -0.33 ft to +0.33 ft		
9/8/2015 10:50:00	3.83	2.642	2.398	0.000	0.000	0.189	0.387	-0.244	0.198	variable	
9/18/2015 13:10:0	13.25	3.292	2.542	0.000	0.000	0.125	0.333	-0.750	0.208	possibly uniform	
11/5/2015 14:05:0	13.42	0.508	0.960	0.000	0.000	0.010	0.034	0.452	0.025	possibly uniform	
11/11/2015 19:40:	1.83	2.633	2.364	0.000	0.000	0.246	0.449	-0.269	0.204	variable	
11/16/2015 20:45:	30.33	1.875	0.646	0.000	0.000	0.029	0.025	-1.229	-0.004	variable	
11/26/2015 21:30:	9.83	0.542	1.164	0.000	0.000	0.039	0.134	0.622	0.094	possibly uniform	
12/13/2015 2:45:0	30.50	0.783	1.146	0.000	0.000	0.015	0.103	0.363	0.089	variable	
12/20/2015 23:25:	10.83	0.450	0.663	0.000	0.000	0.005	0.033	0.213	0.028	variable	
12/23/2015 7:05:0	4.08	2.117	1.714	0.000	0.000	0.157	0.479	-0.403	0.321	variable	
12/28/2015 3:20:0	16.17	2.675	2.385	0.000	0.000	0.052	0.354	-0.290	0.302	variable	
VERIFICATION EVENTS - DEPTH											
6/17/2015 2:05:00	4.42	4.000	3.168	0.000	0.000	0.527	0.571	-0.832	0.044	variable	
6/24/2015 4:20:00	67.42	5.108	3.645	0.000	0.098	0.371	0.405	-1.463	0.034	variable	
6/28/2015 17:25:0	4.50	4.700	3.670	0.000	0.098	1.330	1.366	-1.030	0.036	variable	
7/8/2015 5:15:00	25.83	1.733	1.471	0.000	0.055	0.229	0.223	-0.262	-0.006	variable	
7/11/2015 8:30:00	13.08	4.192	3.236	0.000	0.000	0.316	0.224	-0.956	-0.092	variable	
7/16/2015 9:00:00	16.33	5.317	3.670	0.000	0.018	0.184	0.307	-1.647	0.123	variable	
7/29/2015 1:35:00	1.42	4.900	2.489	0.000	0.000	1.242	0.791	-2.411	-0.451	possibly uniform	
8/18/2015 2:15:00	1.58	2.167	2.110	0.000	0.000	0.405	0.422	-0.057	0.018	possibly uniform	
8/18/2015 15:00:0	5.58	2.150	2.388	0.000	0.000	0.236	0.297	0.238	0.061	variable	
Notes: Results from interceptor only model using flow meter data as influent flow to regulator. Surcharge depth = 3.67 ft						WEIGHTED AVERAGES					
						Calibration - Relatively Uniform		N/A		N/A	relatively uniform
						Calibration - Possibly Uniform		-0.438	0.172	possibly uniform	
						Calibration - Variable		-0.372	0.224	variable	
						Calibration Weighted - All Events		-0.389	0.213	All Events	
						Verification - Relatively Uniform		N/A		N/A	relatively uniform
						Verification - Possibly Uniform		-1.689	-0.336	possibly uniform	
						Verification - Variable		-1.042	0.028	variable	
						Verification Weighted - All Events		-1.176	-0.096	All Events	
						Weighted Average - All Events		-0.909	-0.049		
						NET AVERAGES					
						Calibration - Relatively Uniform		N/A		N/A	relatively uniform
						Calibration - Possibly Uniform		0.108	0.109	possibly uniform	
						Calibration - Variable		-0.266	0.163	variable	
						Calibration Net - All Events		-0.154	0.147	All Events	
						Verification - Relatively Uniform		N/A		N/A	relatively uniform
						Verification - Possibly Uniform		-1.234	-0.217	possibly uniform	
						Verification - Variable		-0.850	0.029	variable	
						Verification Net - All Events		-0.936	-0.026	All Events	
						Net Average - All Events		-0.524	0.065		

Notes:
Results from interceptor only model using flow meter data as influent flow to regulator.
Surcharge depth = 3.67 ft

Sanger 018-02LE – Calibration Events

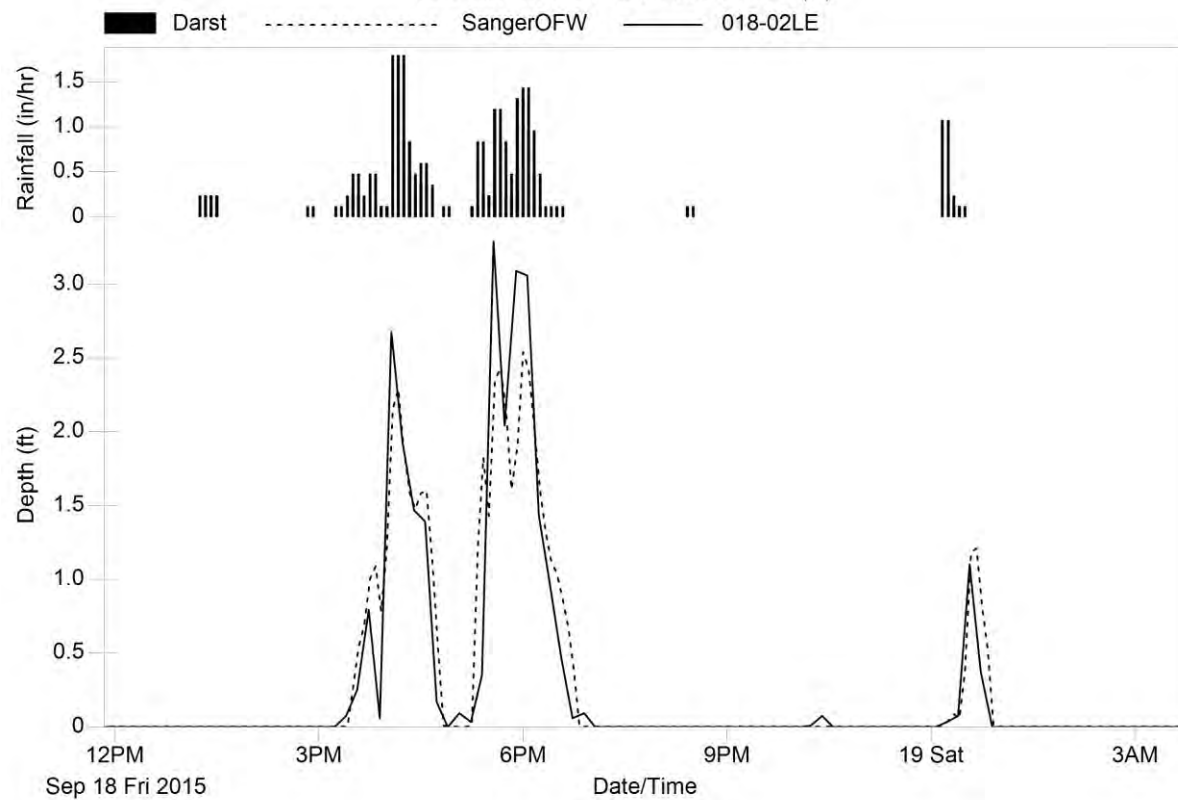
Event of September 8, 2015

Duration: 3.83 h, Total Rainfall: 0.81 (in)



Event of September 18, 2015

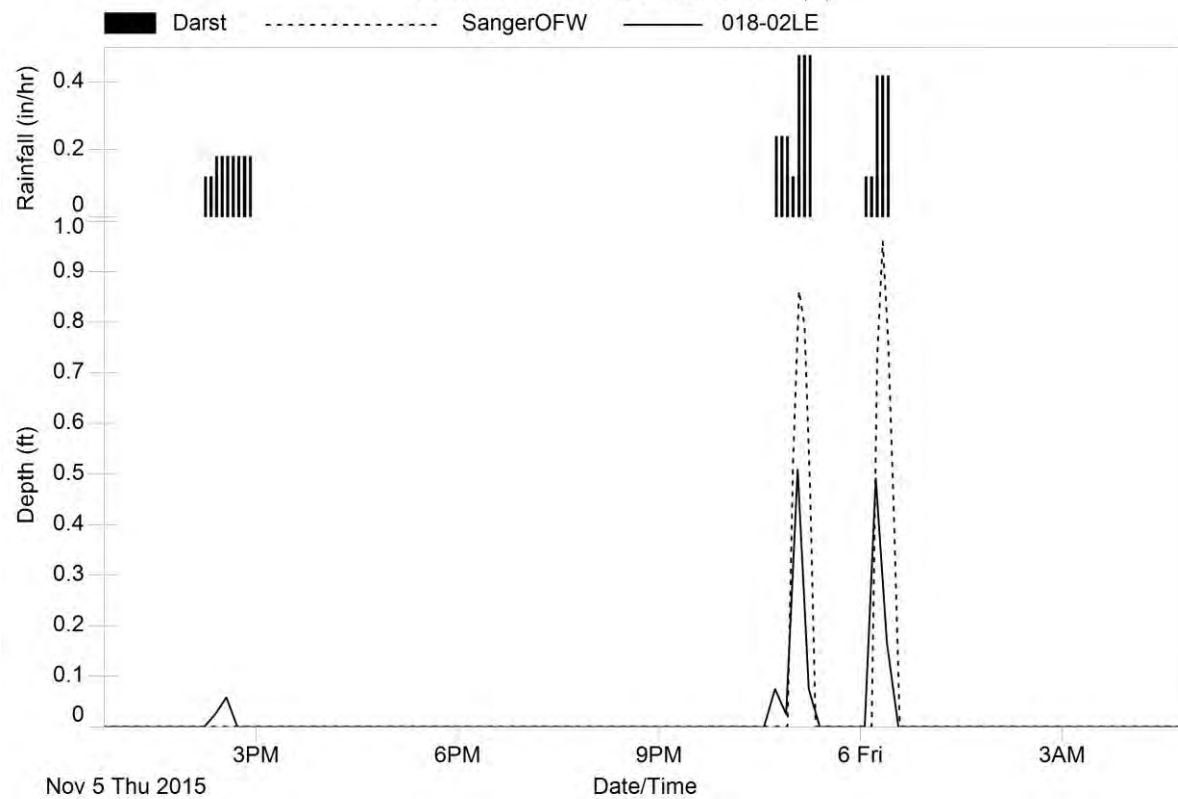
Duration: 13.25 h, Total Rainfall: 1.62 (in)



Sanger 018-02LE – Calibration Events

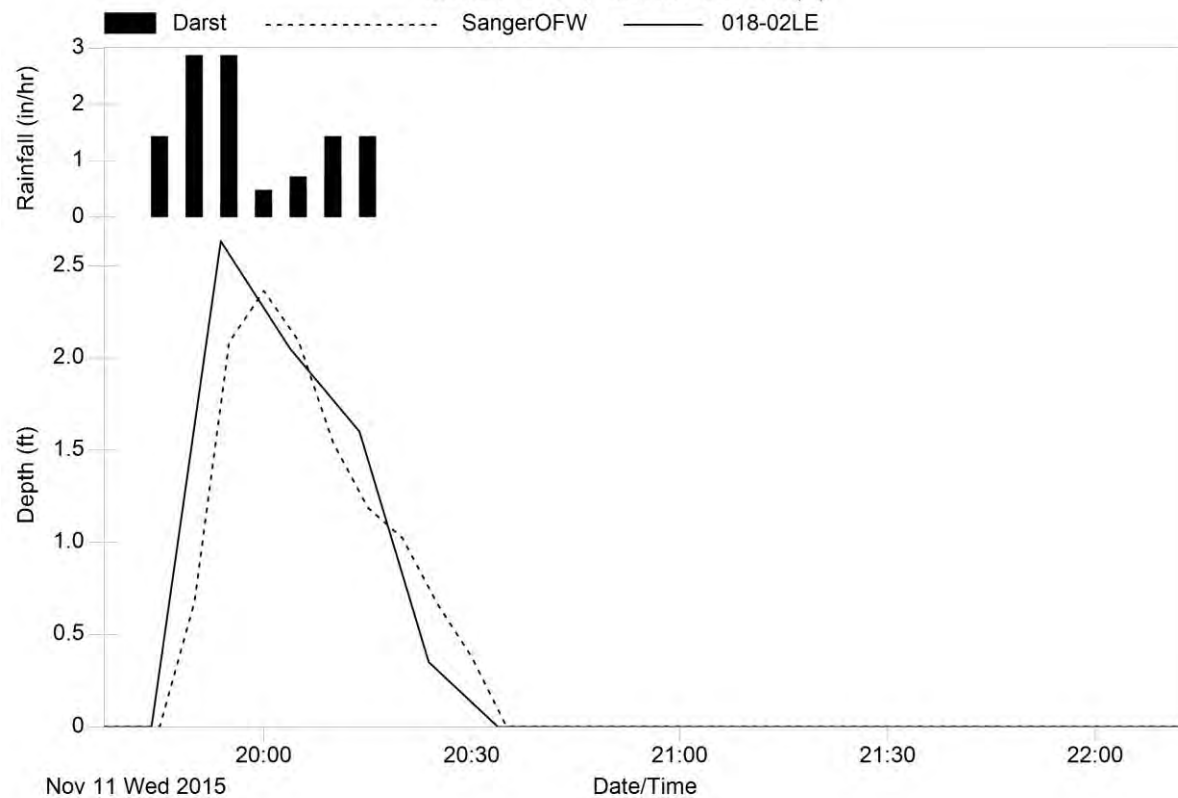
Event of November 5, 2015

Duration: 13.42 h, Total Rainfall: 0.34 (in)

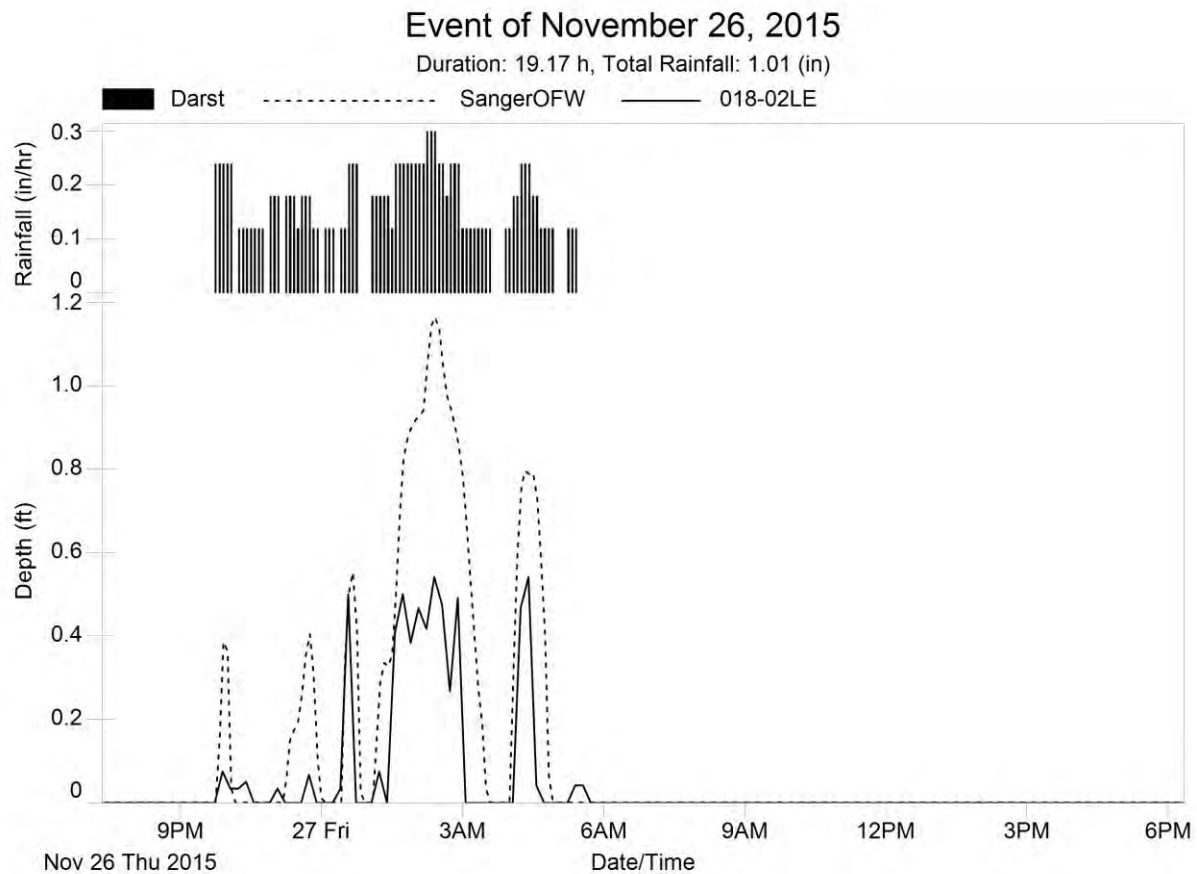
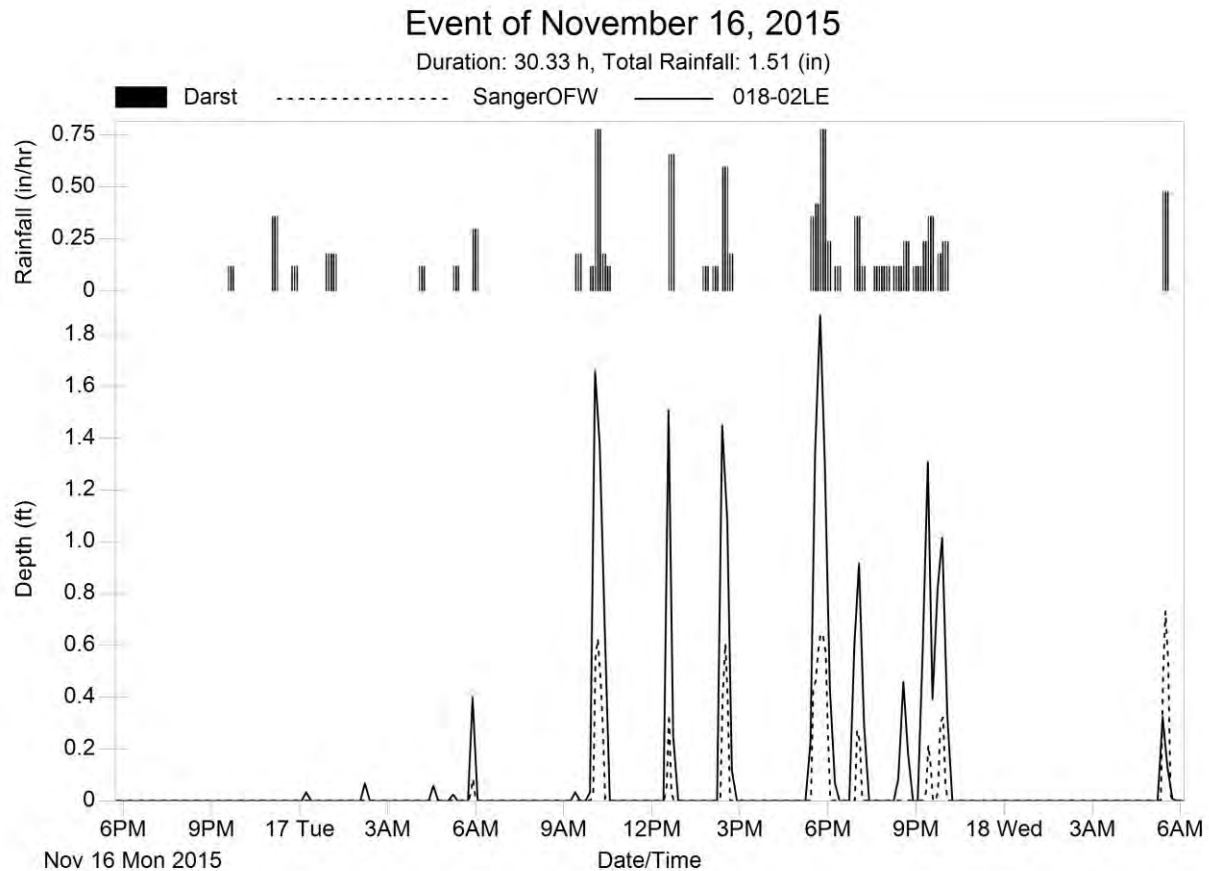


Event of November 11, 2015

Duration: 2.17 h, Total Rainfall: 0.48 (in)



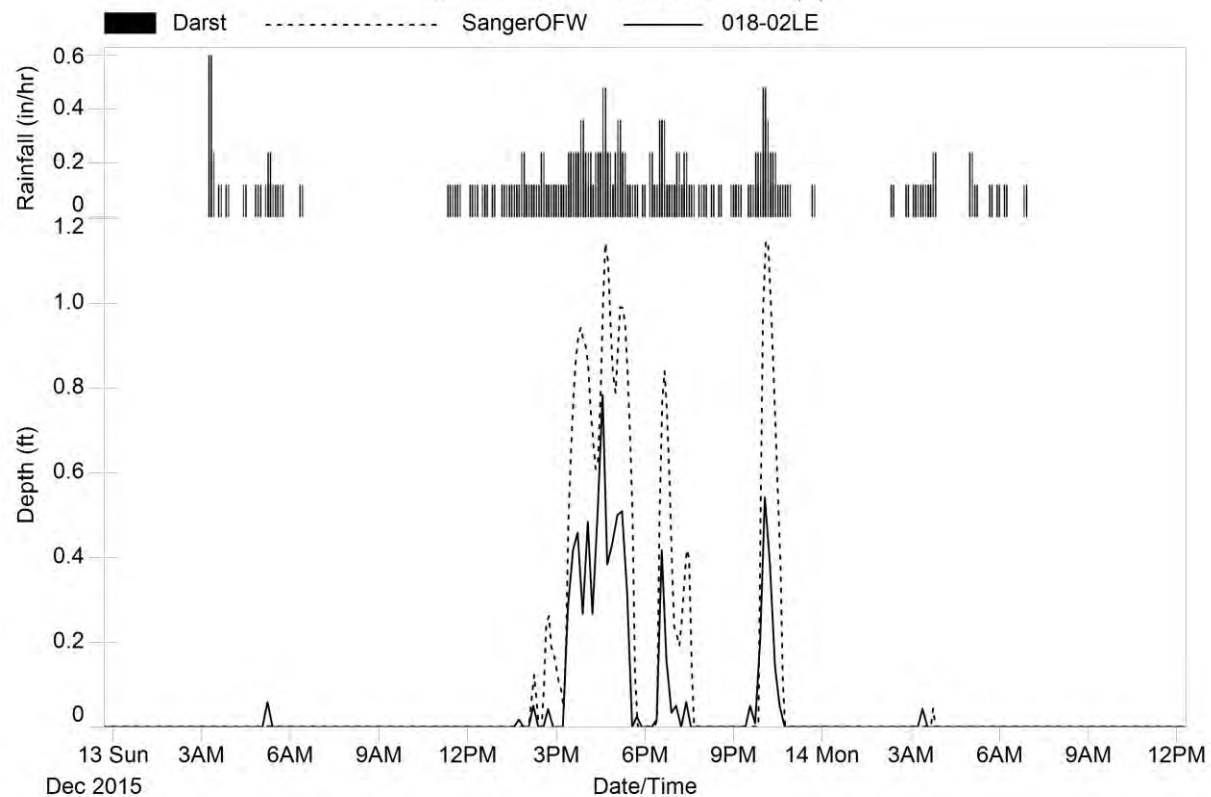
Sanger 018-02LE – Calibration Events



Sanger 018-02LE – Calibration Events

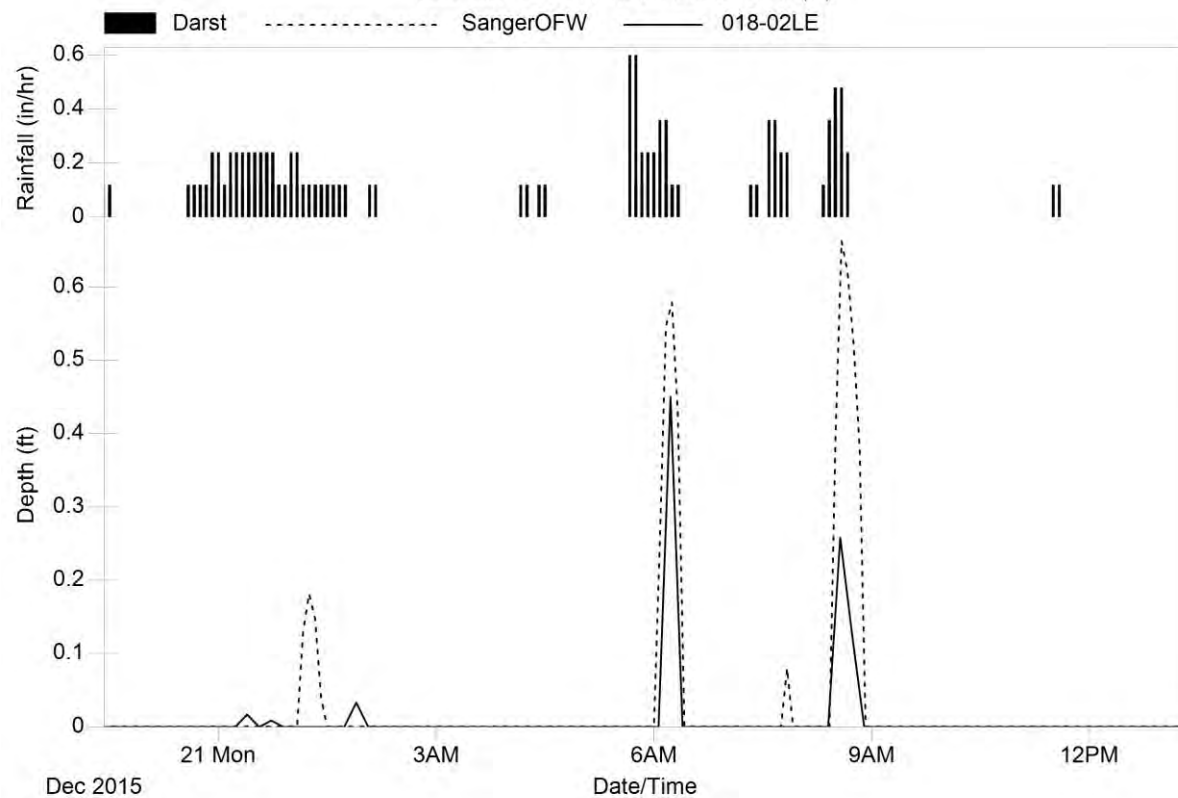
Event of December 13, 2015

Duration: 30.5 h, Total Rainfall: 1.75 (in)

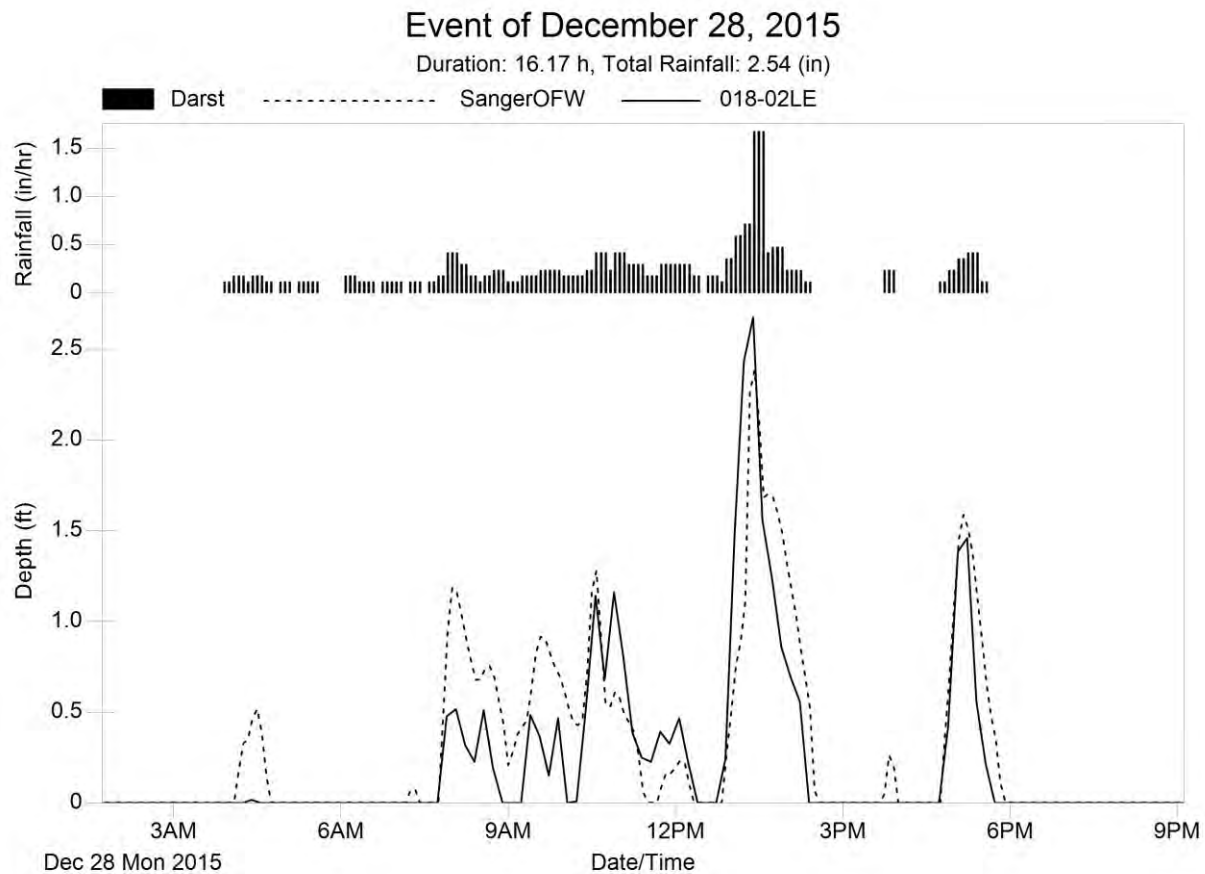
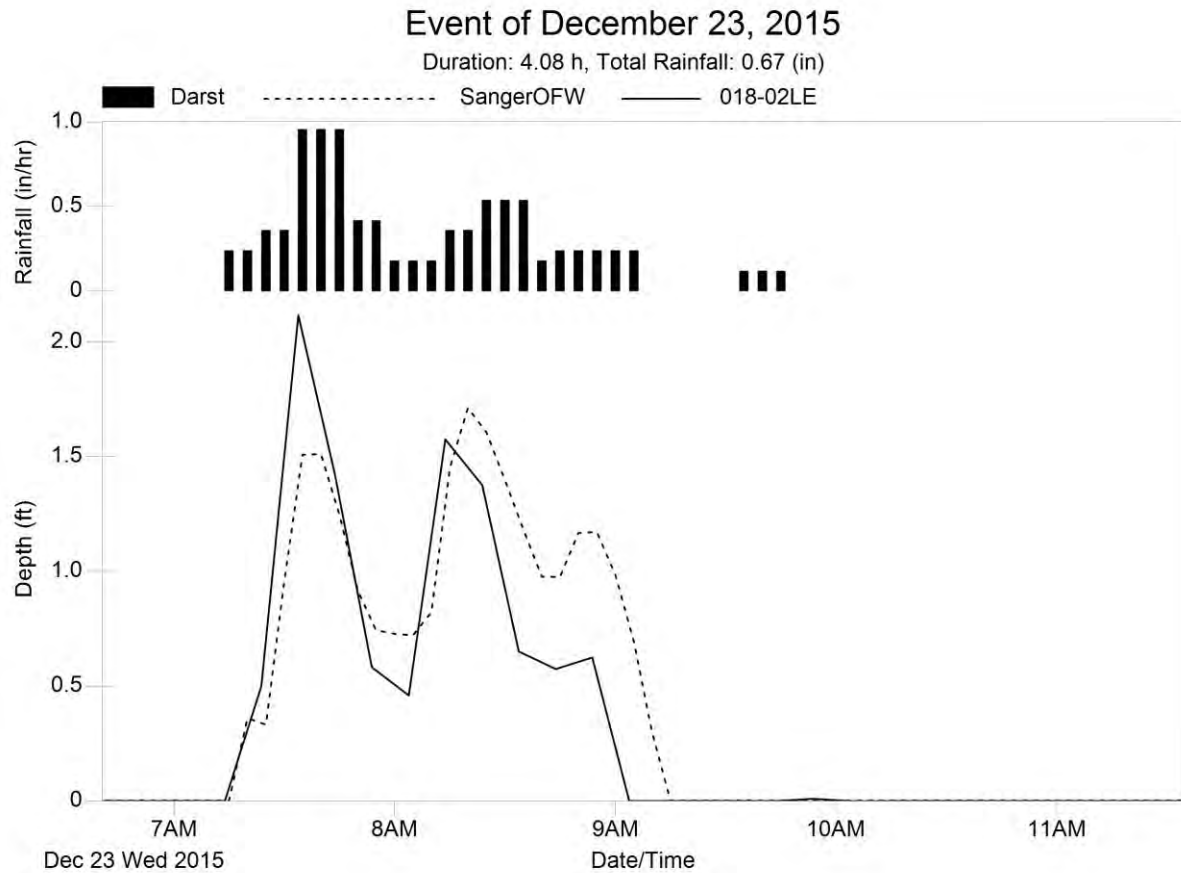


Event of December 20, 2015

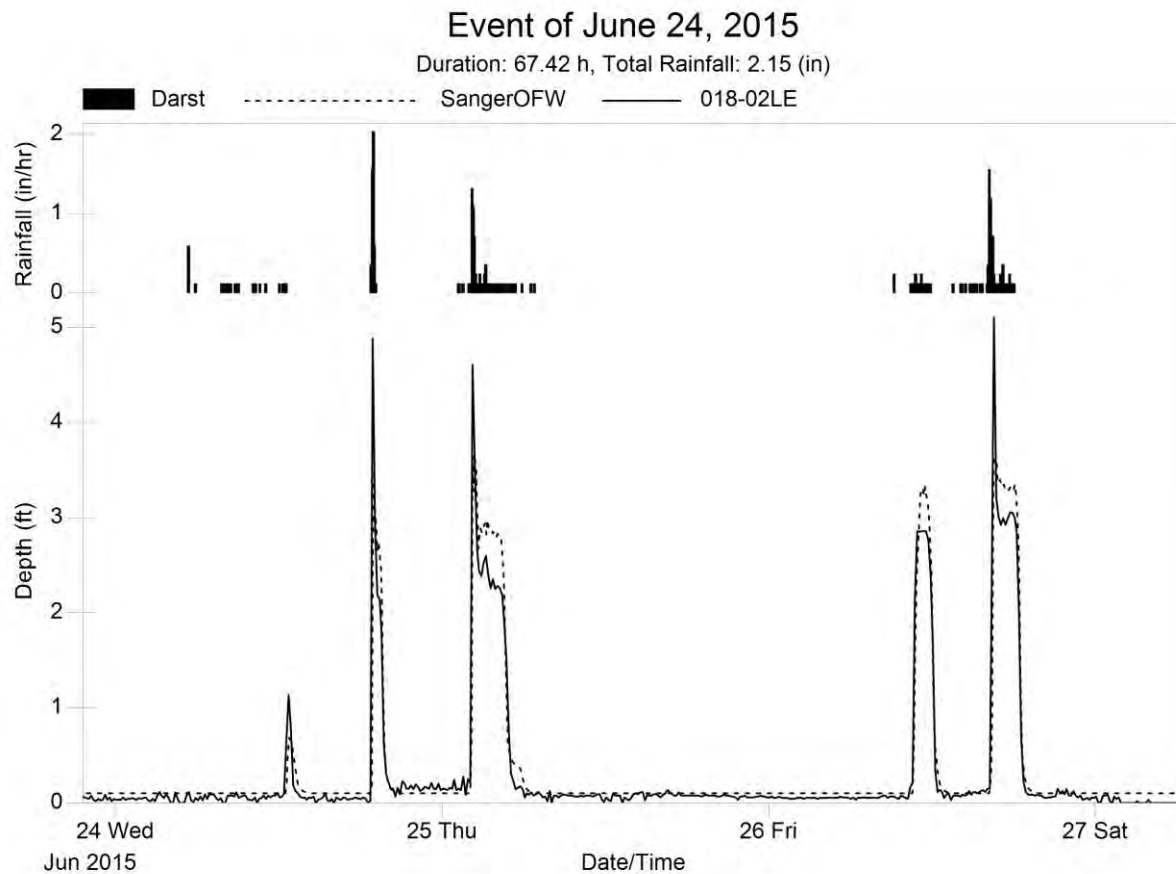
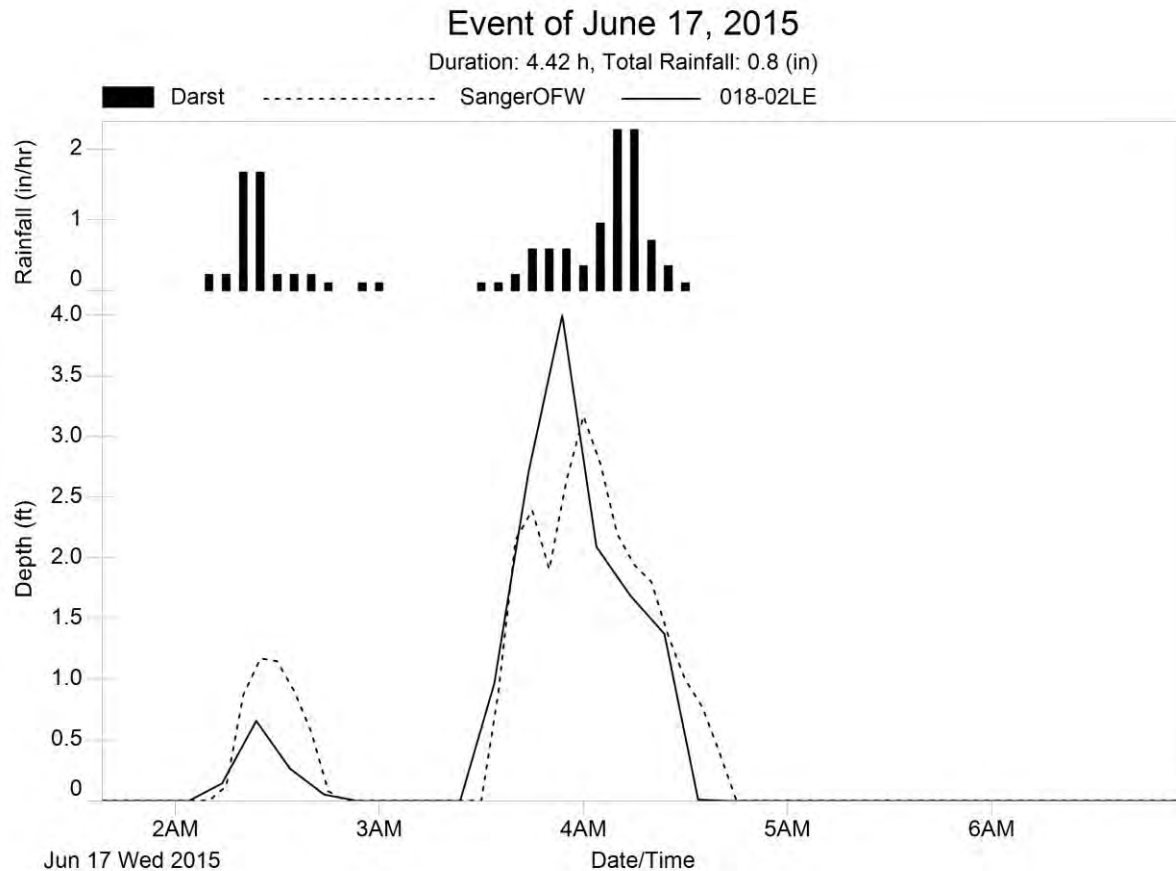
Duration: 12.42 h, Total Rainfall: 0.68 (in)



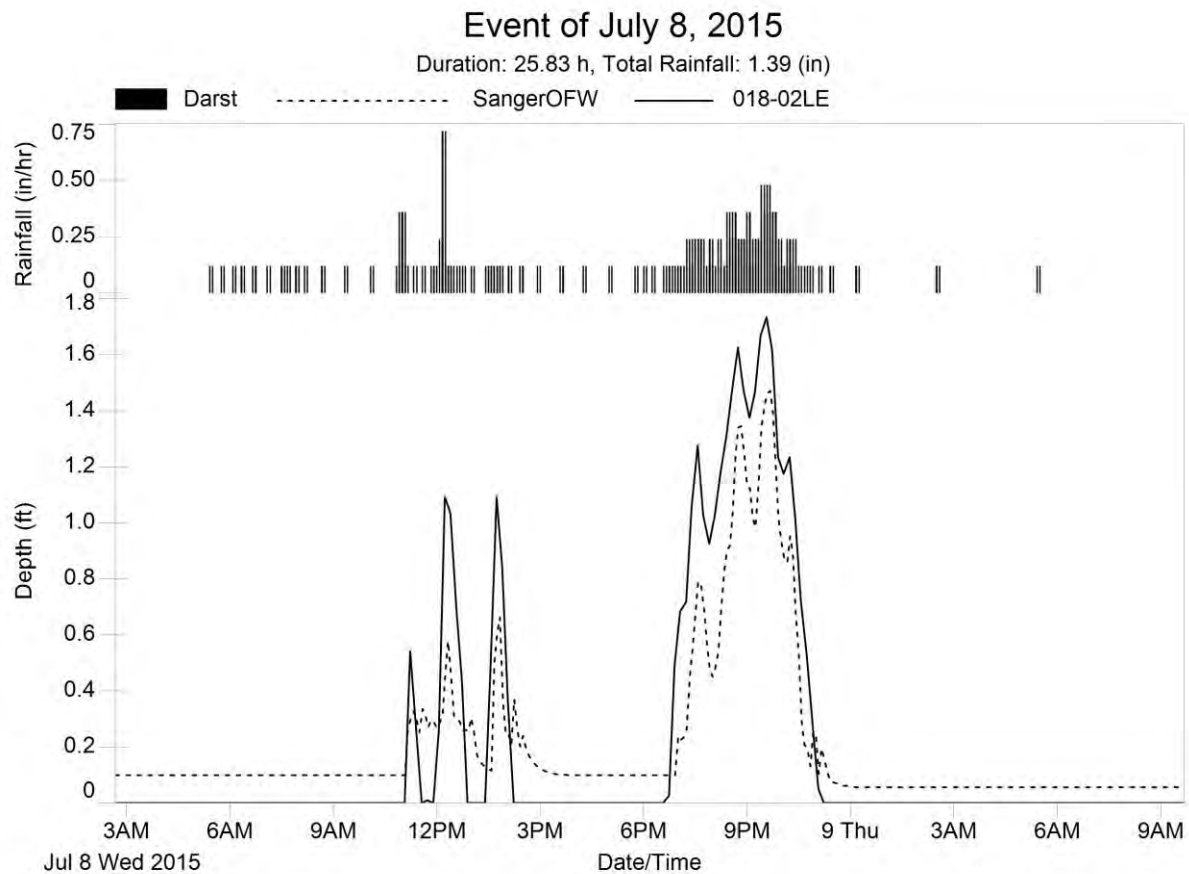
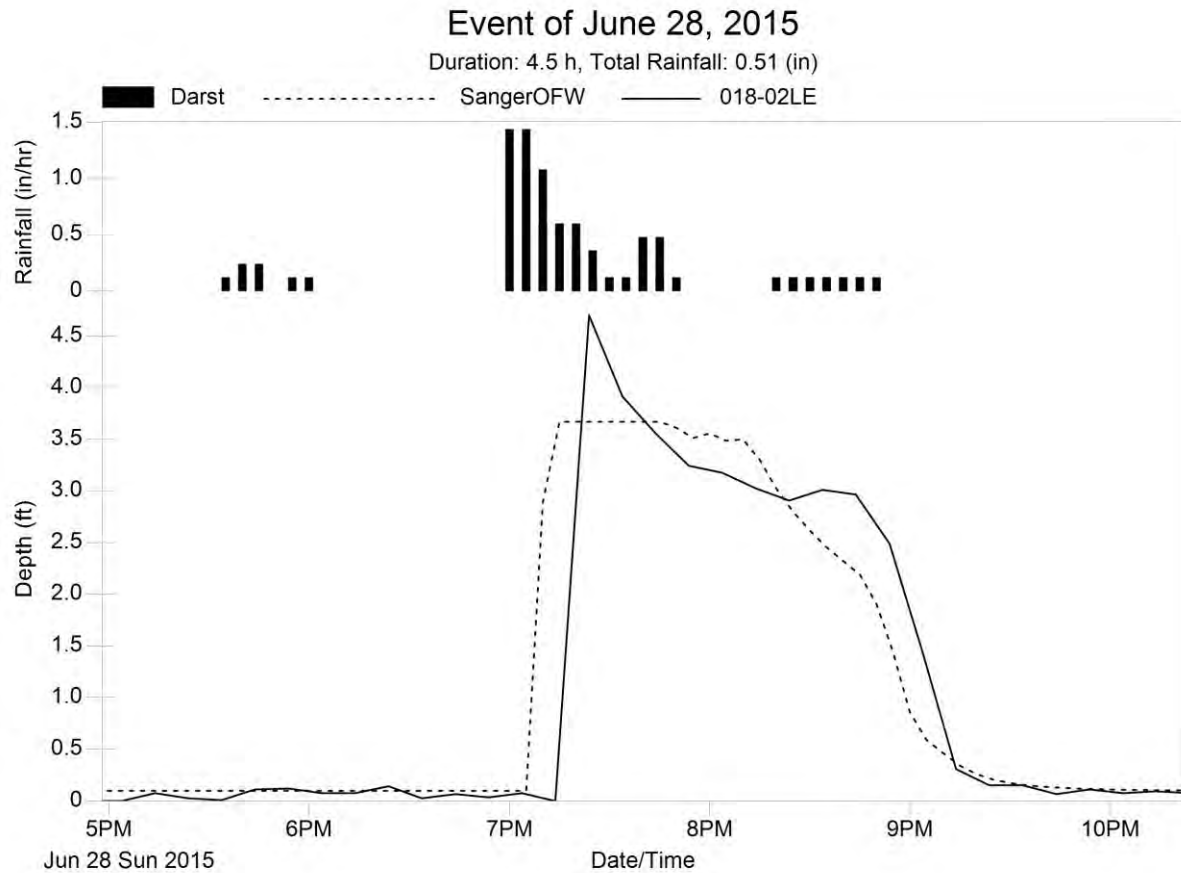
Sanger 018-02LE – Calibration Events



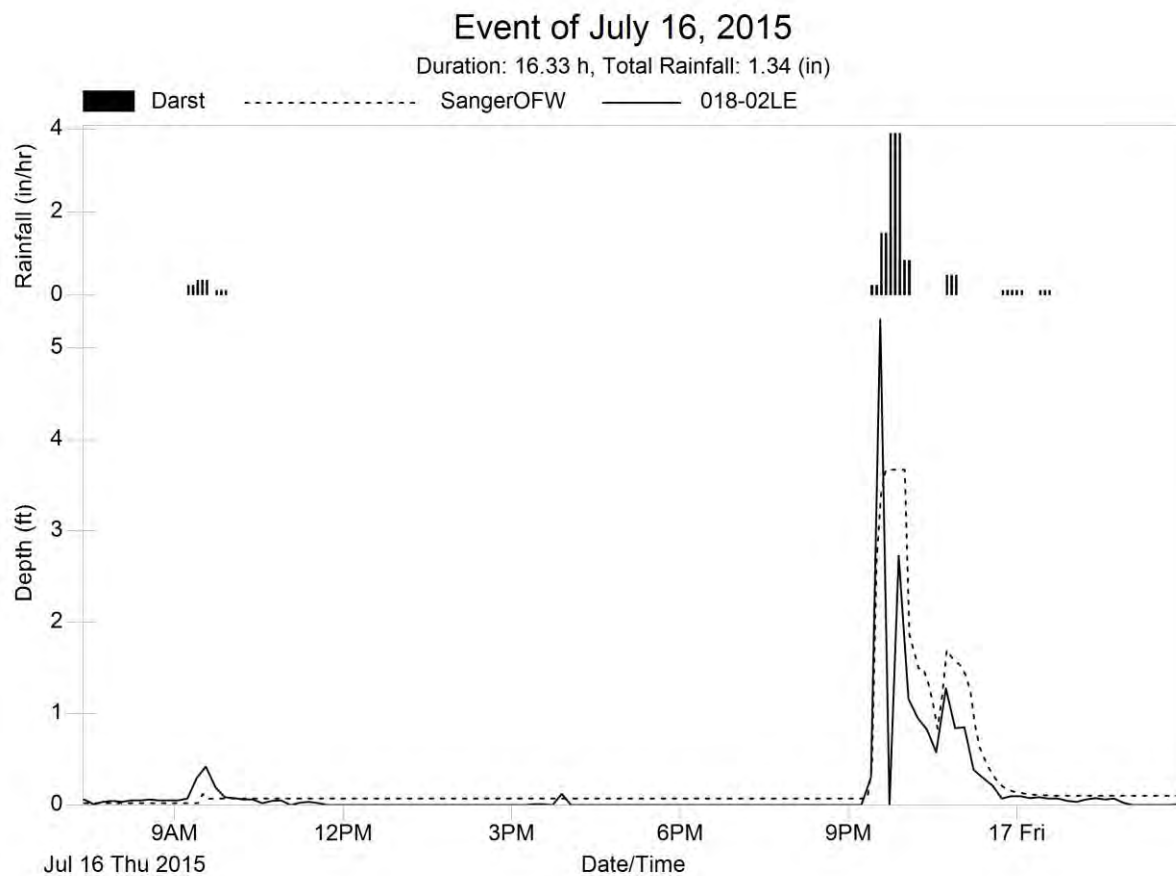
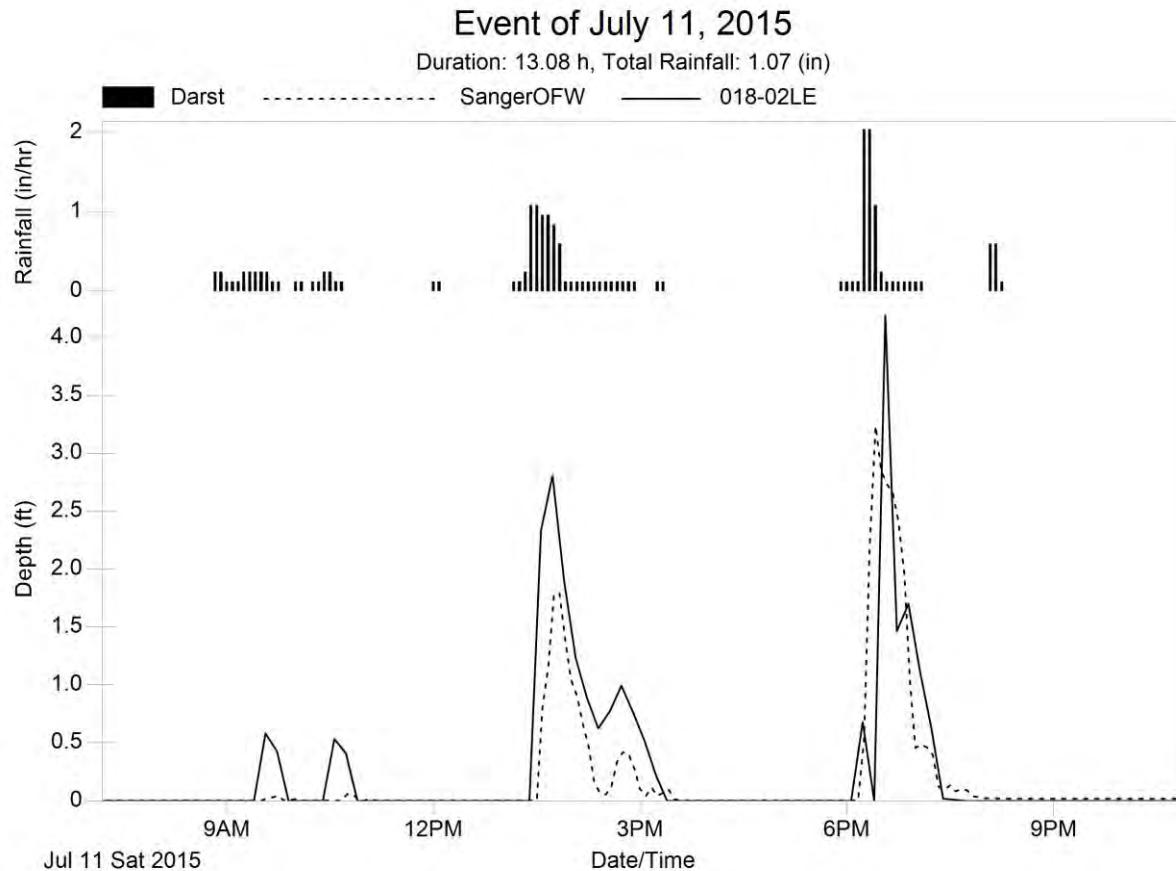
Sanger 018-02LE – Verification Events



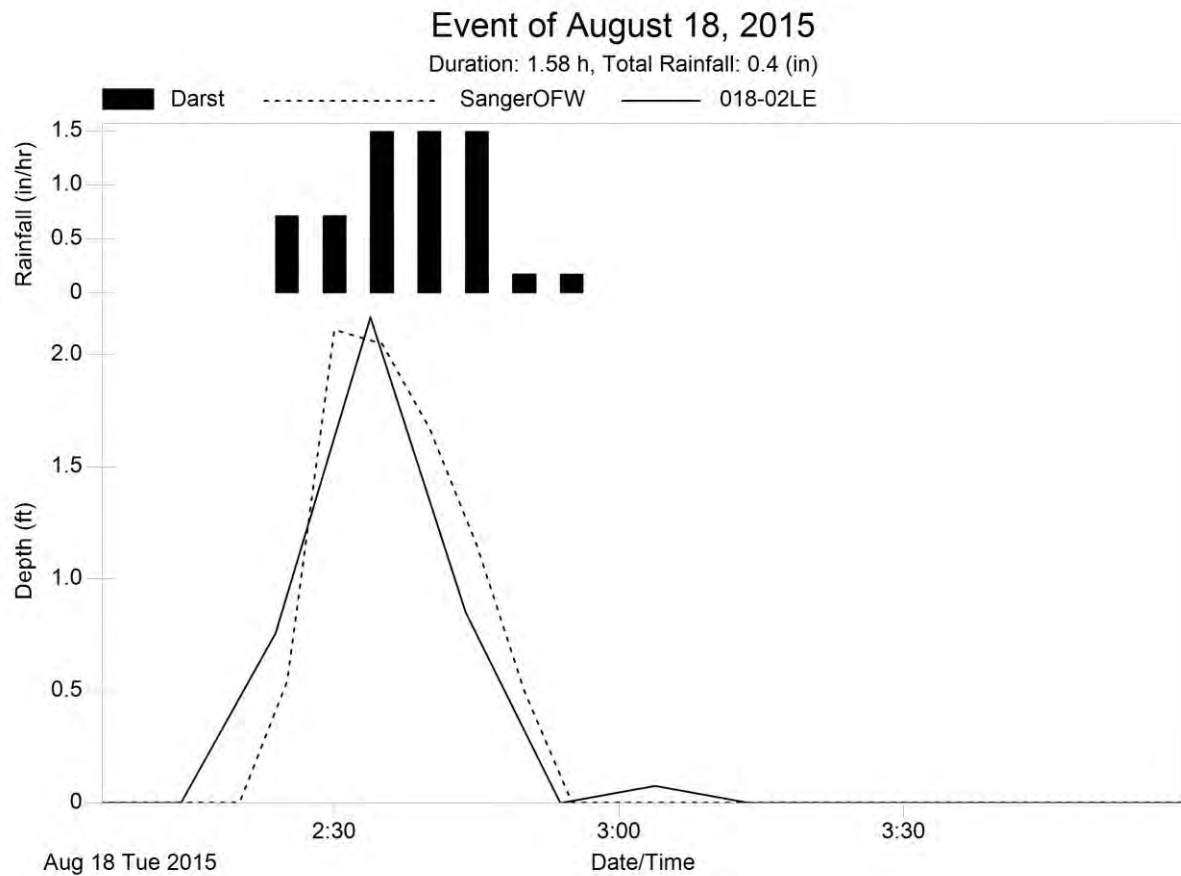
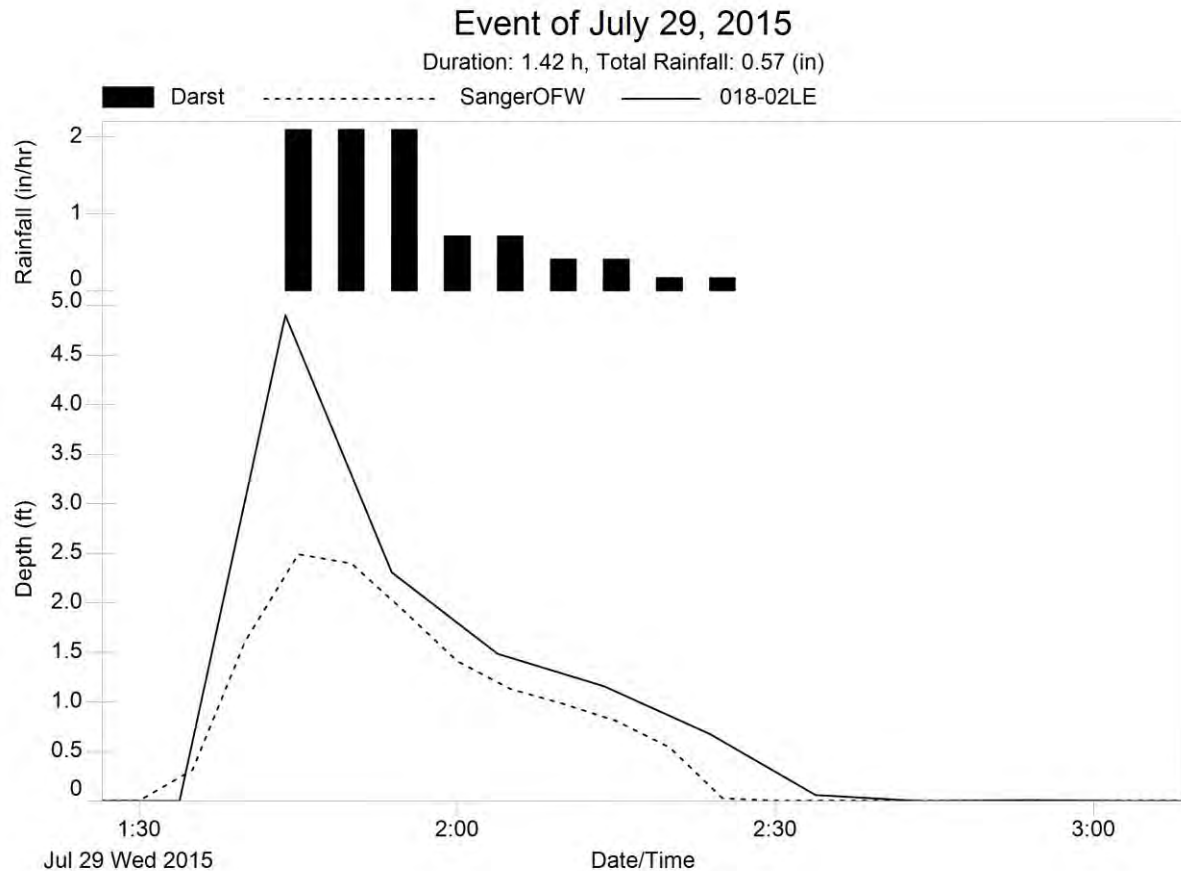
Sanger 018-02LE – Verification Events



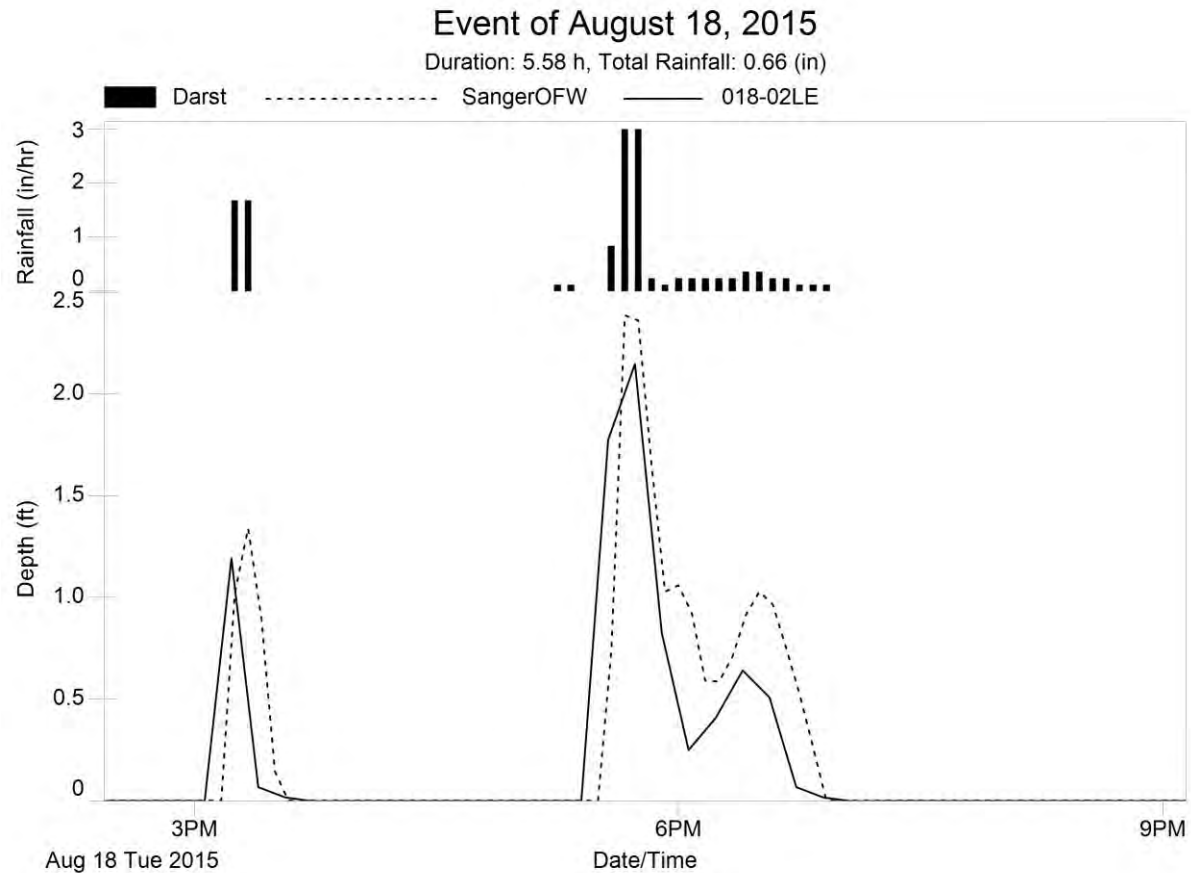
Sanger 018-02LE – Verification Events



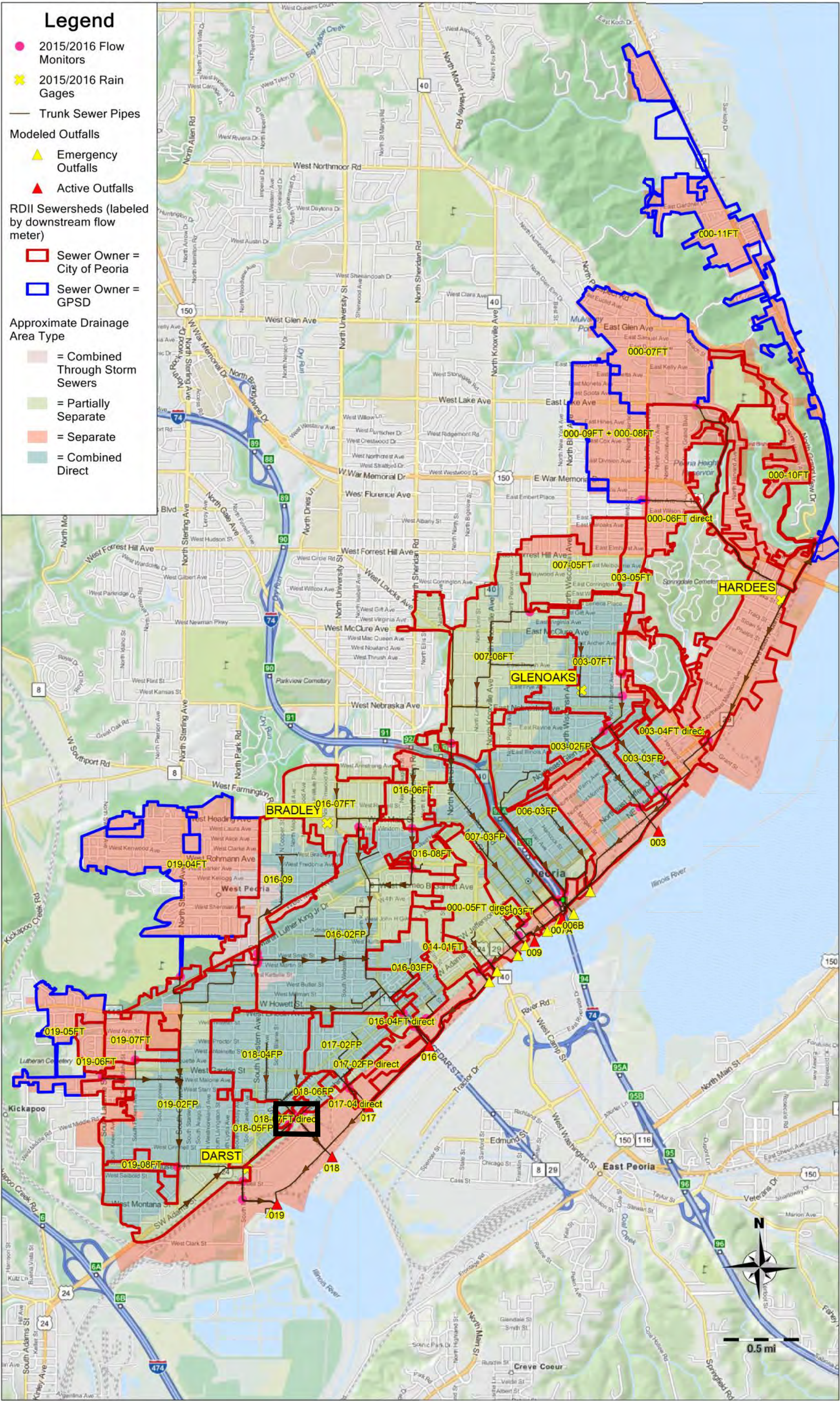
Sanger 018-02LE – Verification Events



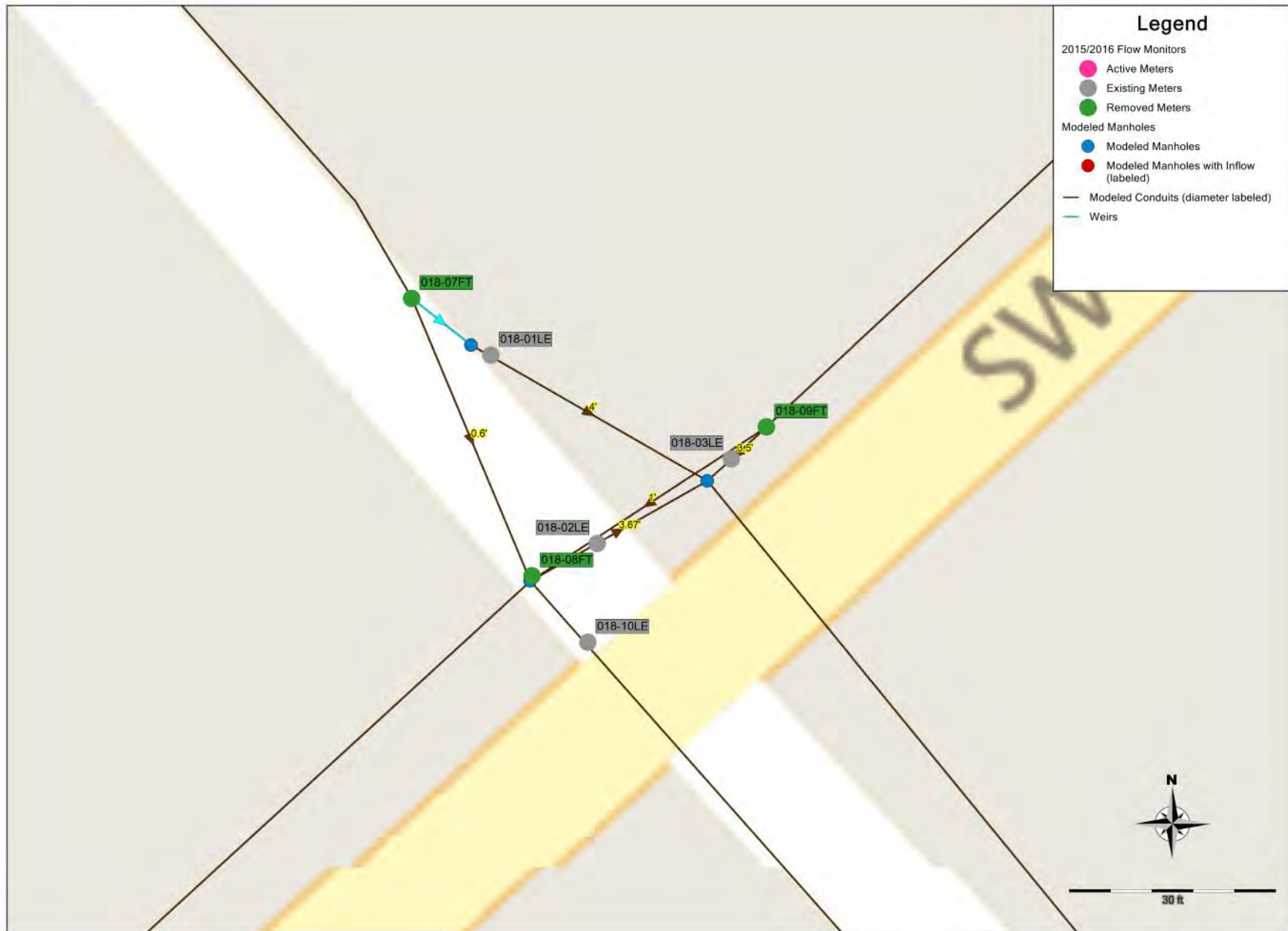
Sanger 018-02LE – Verification Events



Sanger Regulators Location Map



018-03LE - Washington East Outfall



Date	Duration (h)	Maximum Depth (ft)		Minimum Depth (ft)		Average Depth (ft)		Maximum Depth (ft)	Average Depth (ft)	Rainfall Variability
								Surcharged: -0.33 ft to +1.67 ft	Surcharged: -0.33 ft to +1.67 ft	
								Non-Surcharged: -0.33 ft to +0.33 ft	Non-Surcharged: -0.33 ft to +0.33 ft	
CALIBRATION EVENTS - DEPTH										
9/8/2015 10:50:00	3.83	1.700	1.775	0.000	0.000	0.189	0.237	0.075	0.048	variable
9/18/2015 13:10:0	13.25	2.150	2.475	0.000	0.000	0.125	0.169	0.325	0.044	possibly uniform
11/5/2015 14:05:0	13.42	0.342	0.329	0.000	0.000	0.010	0.009	-0.012	-0.001	possibly uniform
11/11/2015 19:40:	1.83	1.275	1.505	0.000	0.000	0.246	0.259	0.230	0.014	variable
11/16/2015 20:45:	30.33	0.700	0.798	0.000	0.000	0.029	0.029	0.098	-0.001	variable
11/26/2015 21:30:	9.83	0.233	0.377	0.000	0.000	0.039	0.026	0.144	-0.014	possibly uniform
12/13/2015 2:45:0	30.50	0.233	0.318	0.000	0.000	0.015	0.019	0.085	0.004	variable
12/20/2015 23:25:	10.83	0.067	0.122	0.000	0.000	0.005	0.004	0.056	-0.001	variable
12/23/2015 7:05:0	4.08	1.100	1.143	0.000	0.000	0.157	0.193	0.043	0.036	variable
12/28/2015 3:20:0	16.17	0.975	1.634	0.000	0.000	0.052	0.128	0.659	0.077	variable
VERIFICATION EVENTS - DEPTH										
6/17/2015 2:05:00	4.42	1.817	1.860	0.000	0.000	0.250	0.326	0.043	0.076	variable
6/24/2015 4:20:00	67.42	1.525	1.349	0.000	0.000	0.017	0.041	-0.176	0.024	variable
6/28/2015 17:25:0	4.50	2.433	2.053	0.000	0.000	0.152	0.269	-0.380	0.118	variable
7/8/2015 5:15:00	25.83	0.408	0.711	0.000	0.000	0.017	0.037	0.302	0.020	variable
7/11/2015 8:30:00	13.08	Bad meter data								
7/16/2015 9:00:00	16.33	2.700	3.500	0.000	0.000	0.041	0.110	0.800	0.070	possibly uniform
7/29/2015 1:35:00	1.42	2.667	2.503	0.000	0.000	0.456	0.528	-0.164	0.073	possibly uniform
8/18/2015 2:15:00	1.58	1.058	1.539	0.000	0.000	0.221	0.240	0.481	0.019	possibly uniform
8/18/2015 15:00:0	5.58	1.783	1.701	0.000	0.000	0.113	0.114	-0.082	0.001	variable
WEIGHTED AVERAGES										
Calibration - Relatively Uniform							N/A		N/A	relatively uniform
Calibration - Possibly Uniform							0.267		0.028	possibly uniform
Calibration - Variable							0.199		0.032	variable
Calibration Weighted - All Events							0.220		0.031	All Events
Verification - Relatively Uniform							N/A		N/A	relatively uniform
Verification - Possibly Uniform							0.347		0.056	possibly uniform
Verification - Variable							-0.143		0.069	variable
Verification Weighted - All Events							0.076		0.061	All Events
Weighted Average - All Events							0.131		0.049	
NET AVERAGES										
Calibration - Relatively Uniform							N/A		N/A	relatively uniform
Calibration - Possibly Uniform							0.152		0.010	possibly uniform
Calibration - Variable							0.178		0.025	variable
Calibration Net - All Events							0.170		0.021	All Events
Verification - Relatively Uniform							N/A		N/A	relatively uniform
Verification - Possibly Uniform							0.372		0.054	possibly uniform
Verification - Variable							-0.059		0.048	variable
Verification Net - All Events							0.103		0.050	All Events
Net Average - All Events							0.140		0.034	

Notes:

Results from interceptor only model using flow meter data as influent flow to regulator.

Meter spikes on 7/11

Notes:

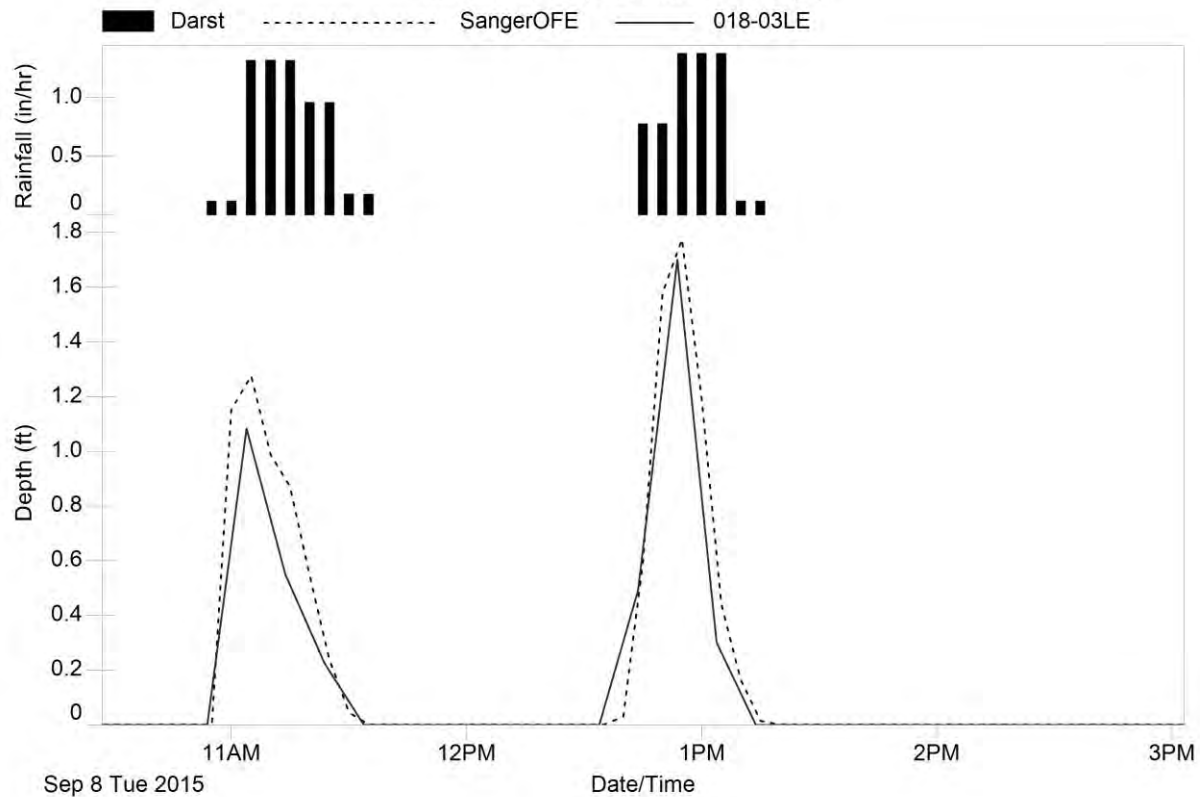
Results from interceptor only model using flow meter data as influent flow to regulator.

Meter spikes on 7/11

Sanger 018-03LE – Calibration Events

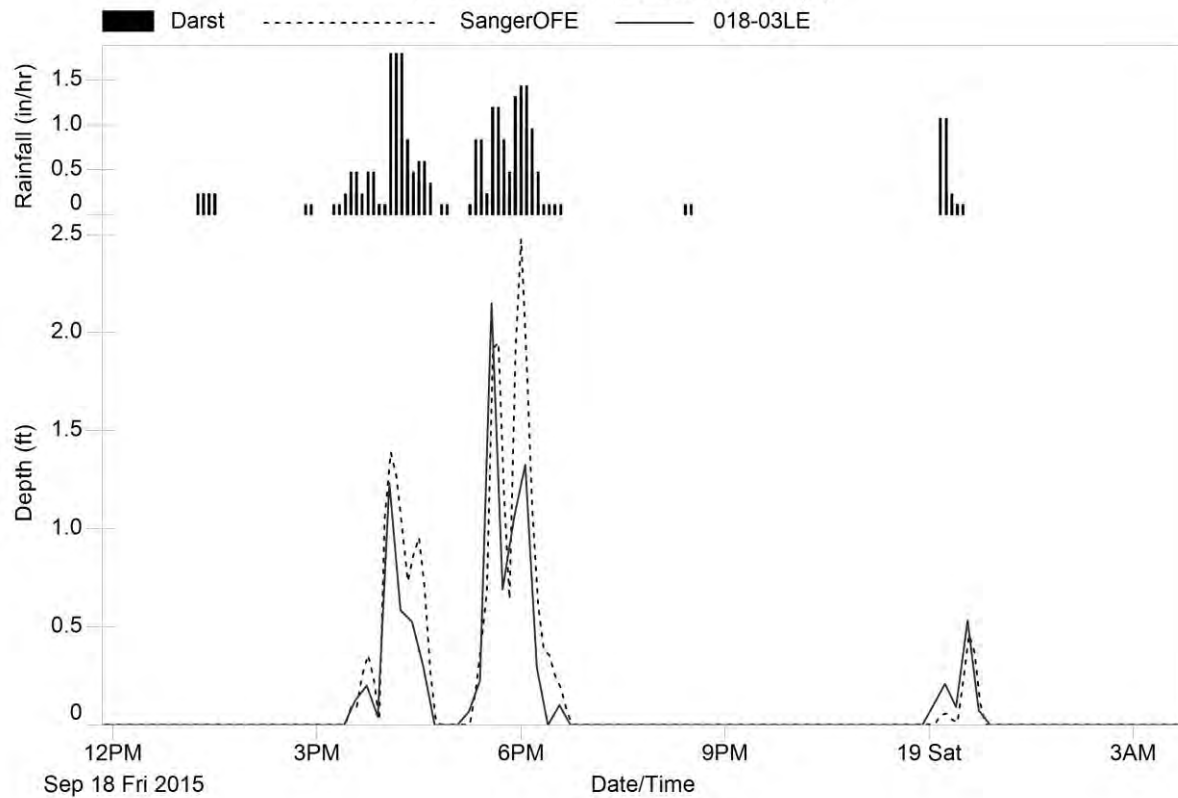
Event of September 8, 2015

Duration: 3.83 h, Total Rainfall: 0.81 (in)



Event of September 18, 2015

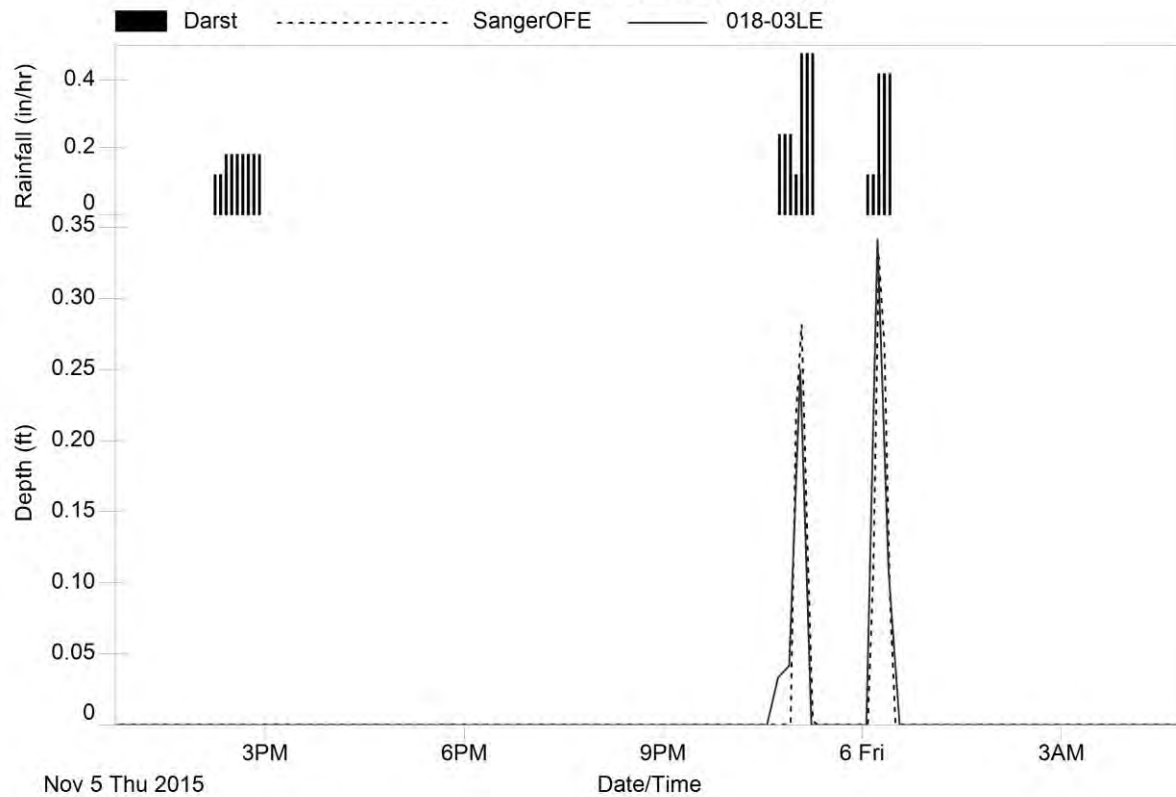
Duration: 13.25 h, Total Rainfall: 1.62 (in)



Sanger 018-03LE – Calibration Events

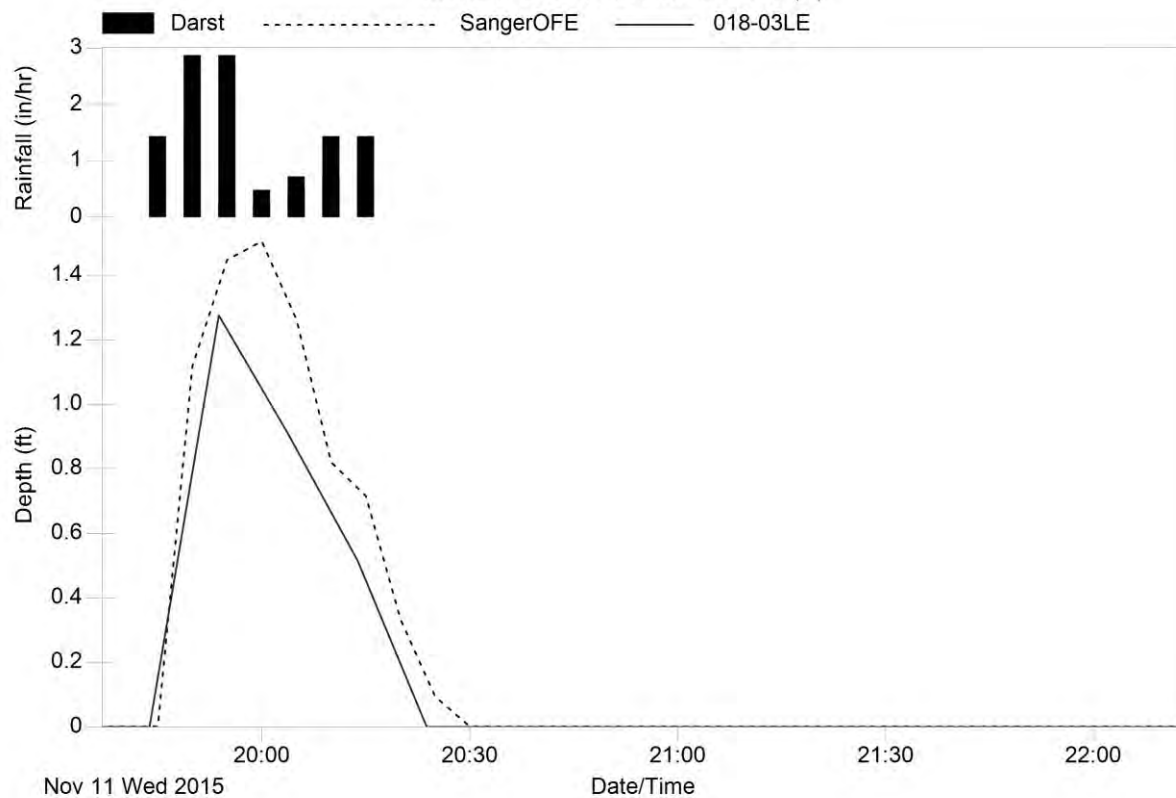
Event of November 5, 2015

Duration: 13.42 h, Total Rainfall: 0.34 (in)



Event of November 11, 2015

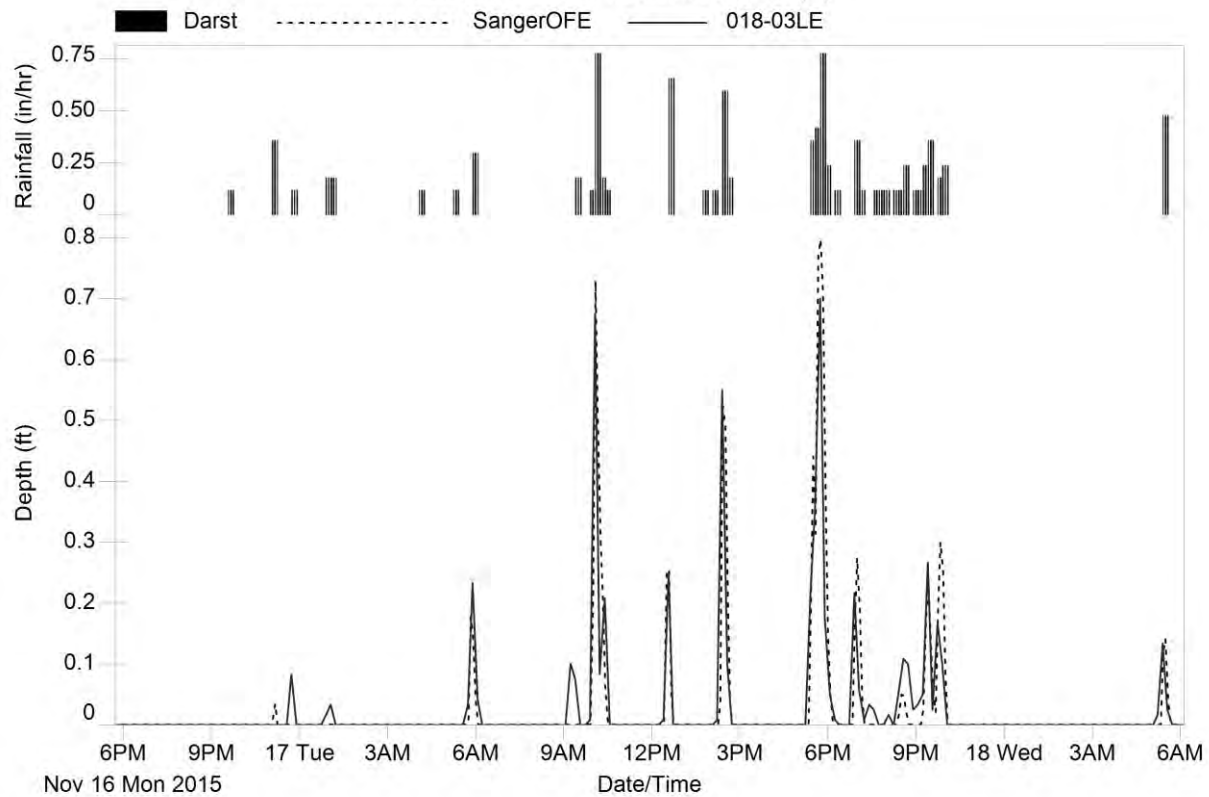
Duration: 2.17 h, Total Rainfall: 0.48 (in)



Sanger 018-03LE – Calibration Events

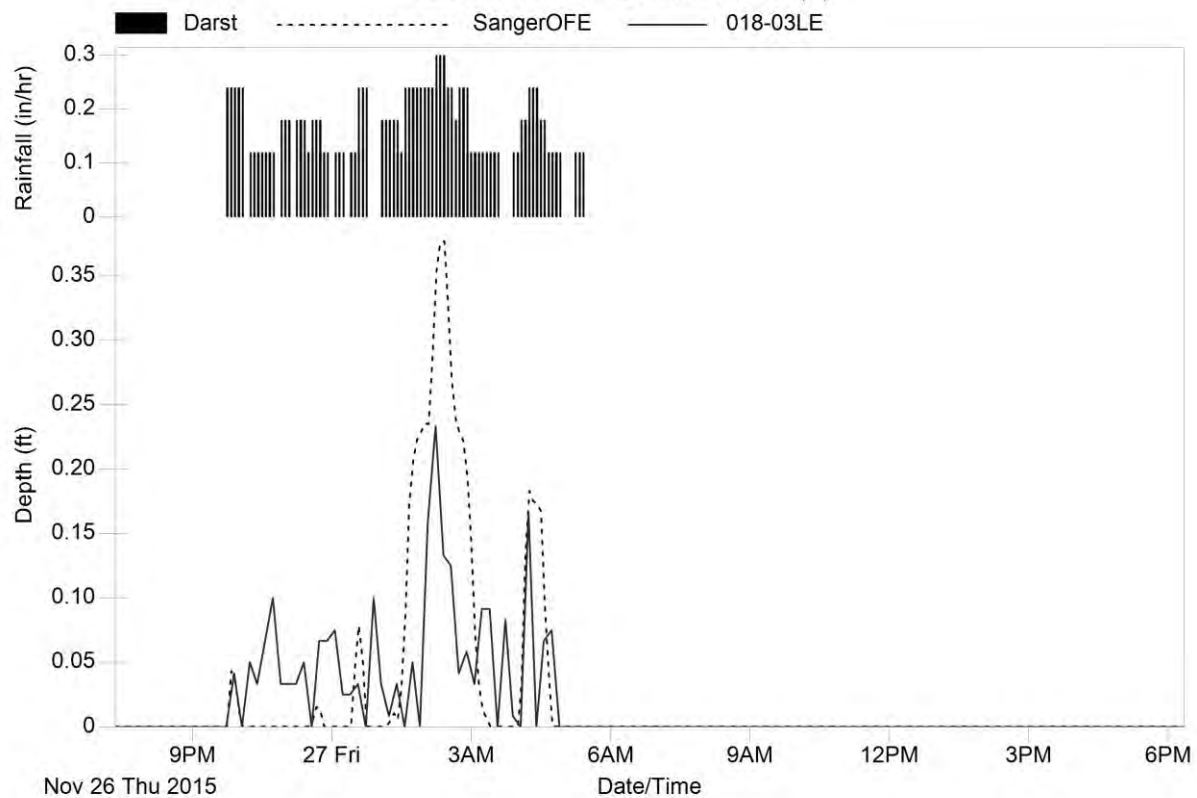
Event of November 16, 2015

Duration: 30.33 h, Total Rainfall: 1.51 (in)



Event of November 26, 2015

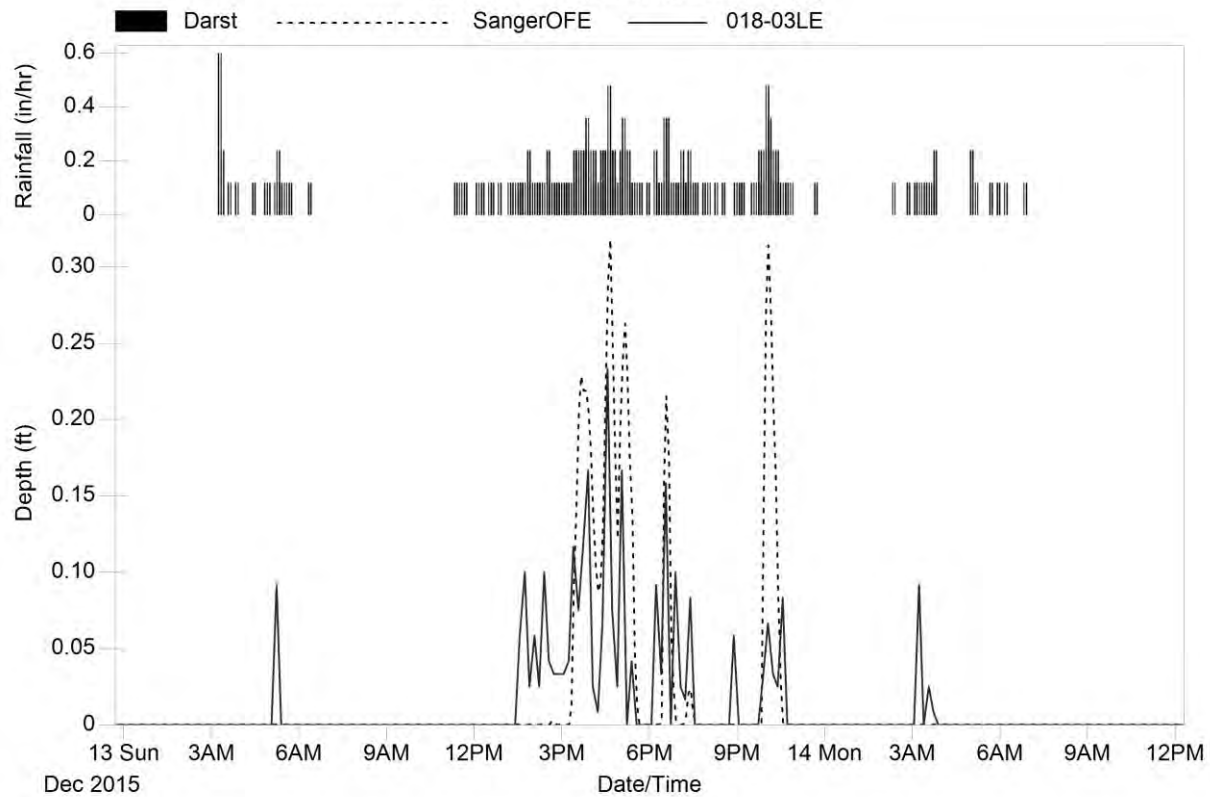
Duration: 19.17 h, Total Rainfall: 1.01 (in)



Sanger 018-03LE – Calibration Events

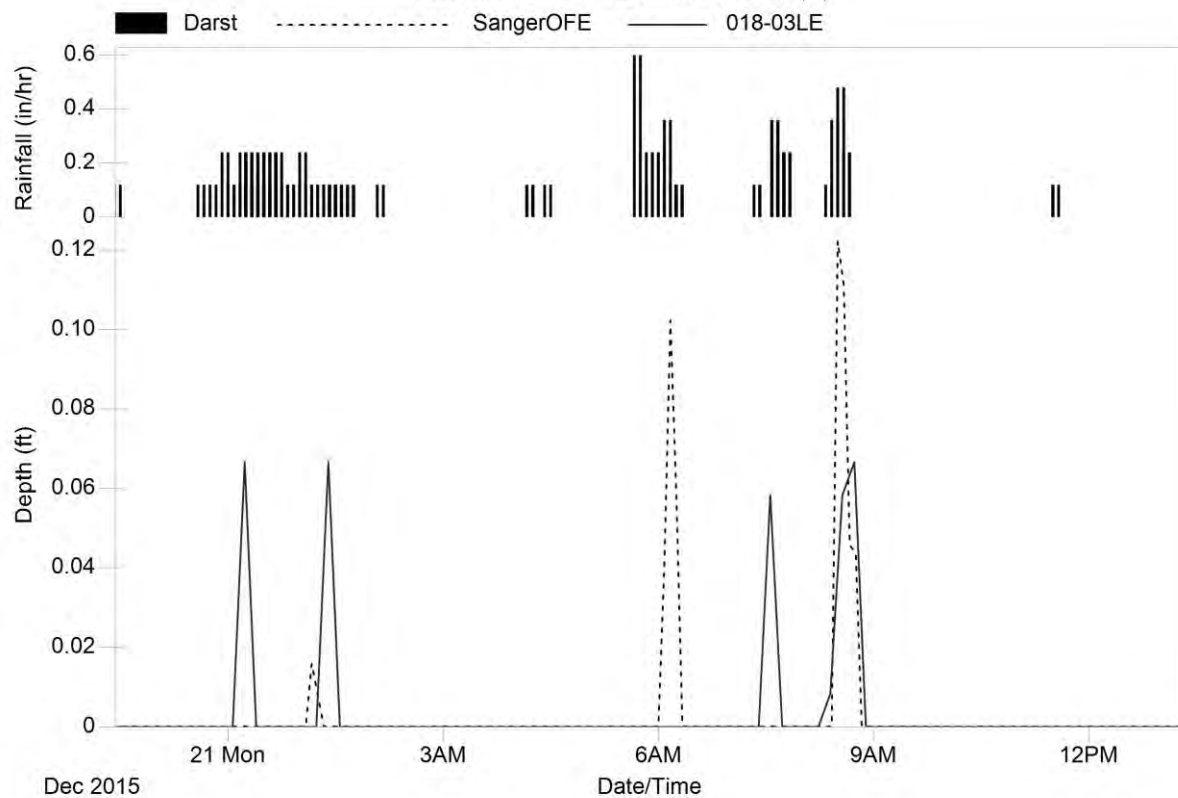
Event of December 13, 2015

Duration: 30.5 h, Total Rainfall: 1.75 (in)



Event of December 20, 2015

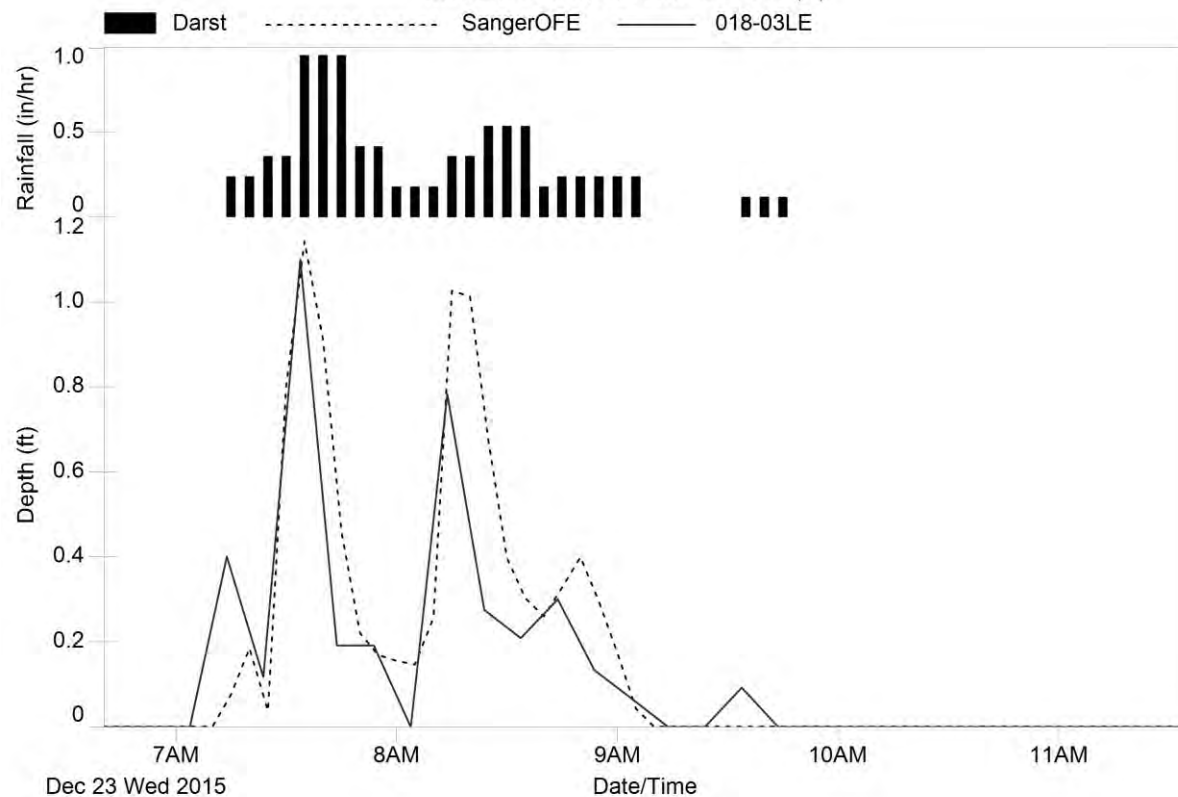
Duration: 12.42 h, Total Rainfall: 0.68 (in)



Sanger 018-03LE – Calibration Events

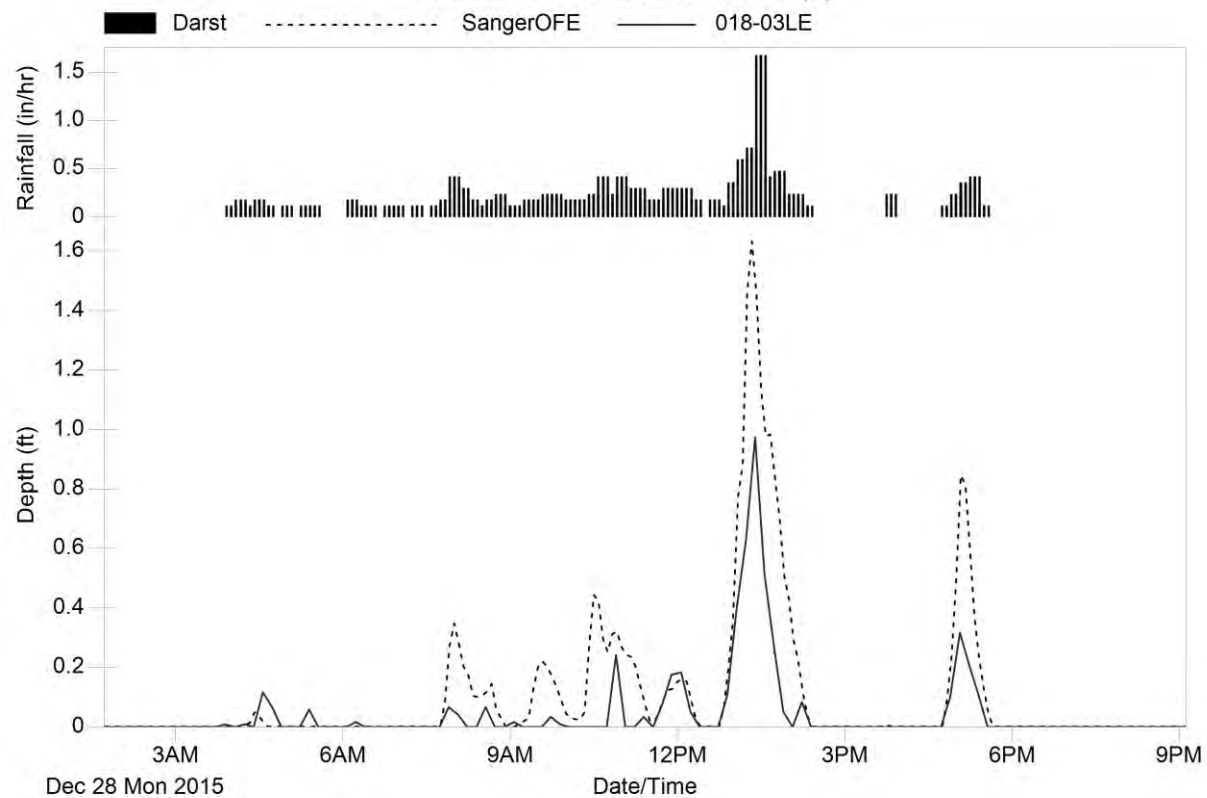
Event of December 23, 2015

Duration: 4.08 h, Total Rainfall: 0.67 (in)

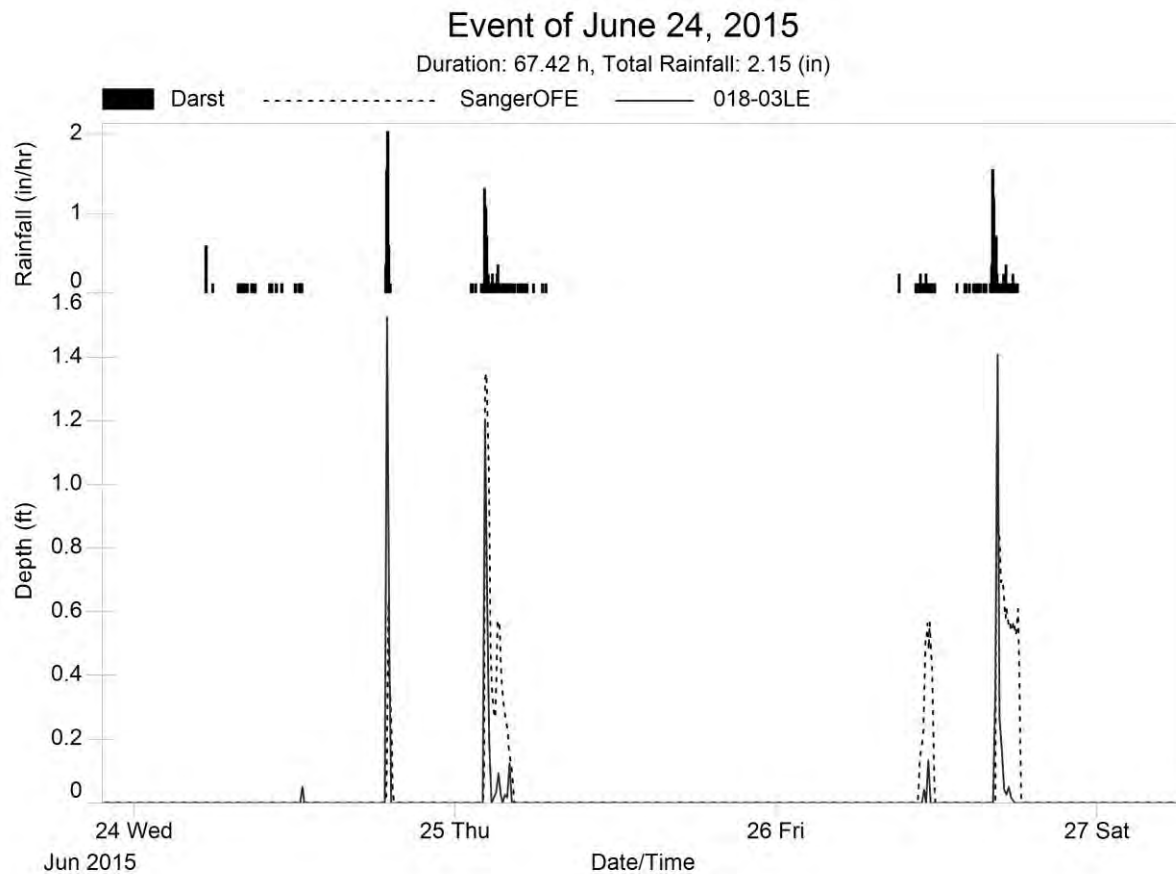
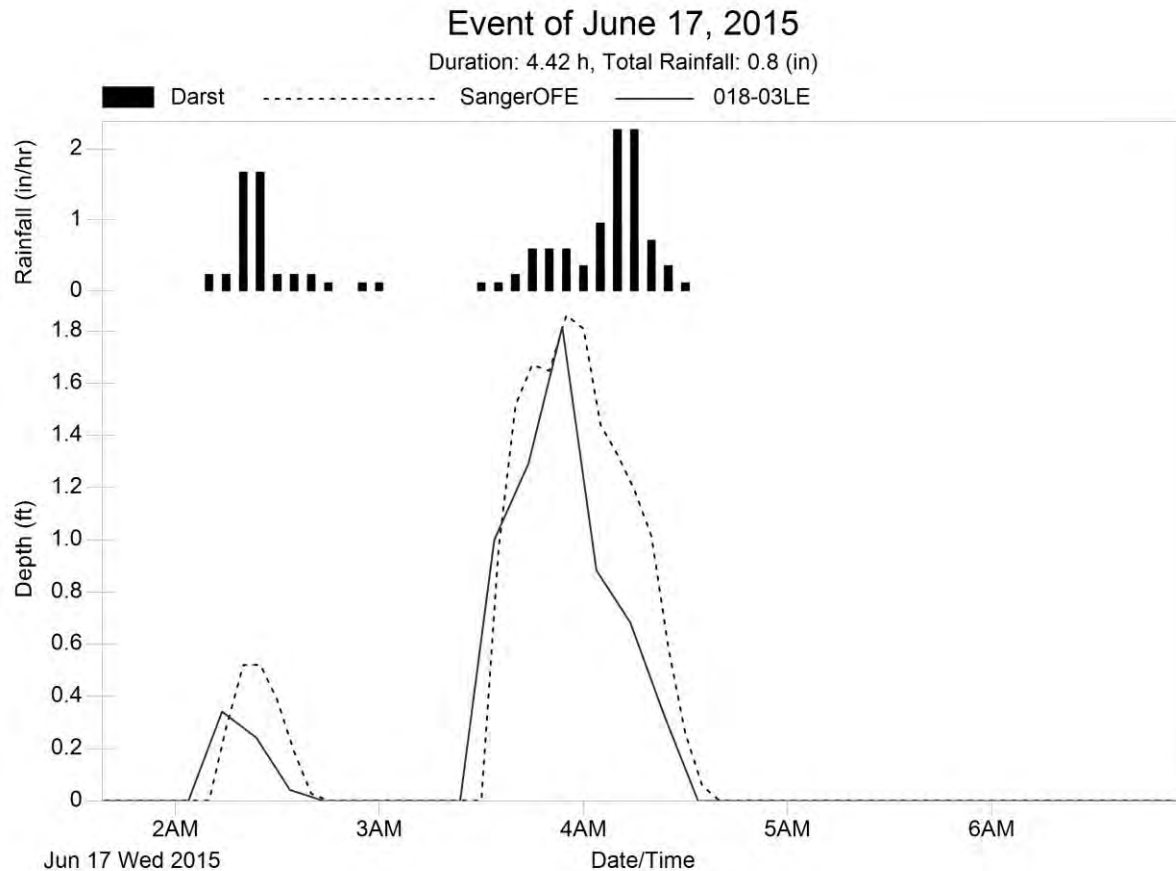


Event of December 28, 2015

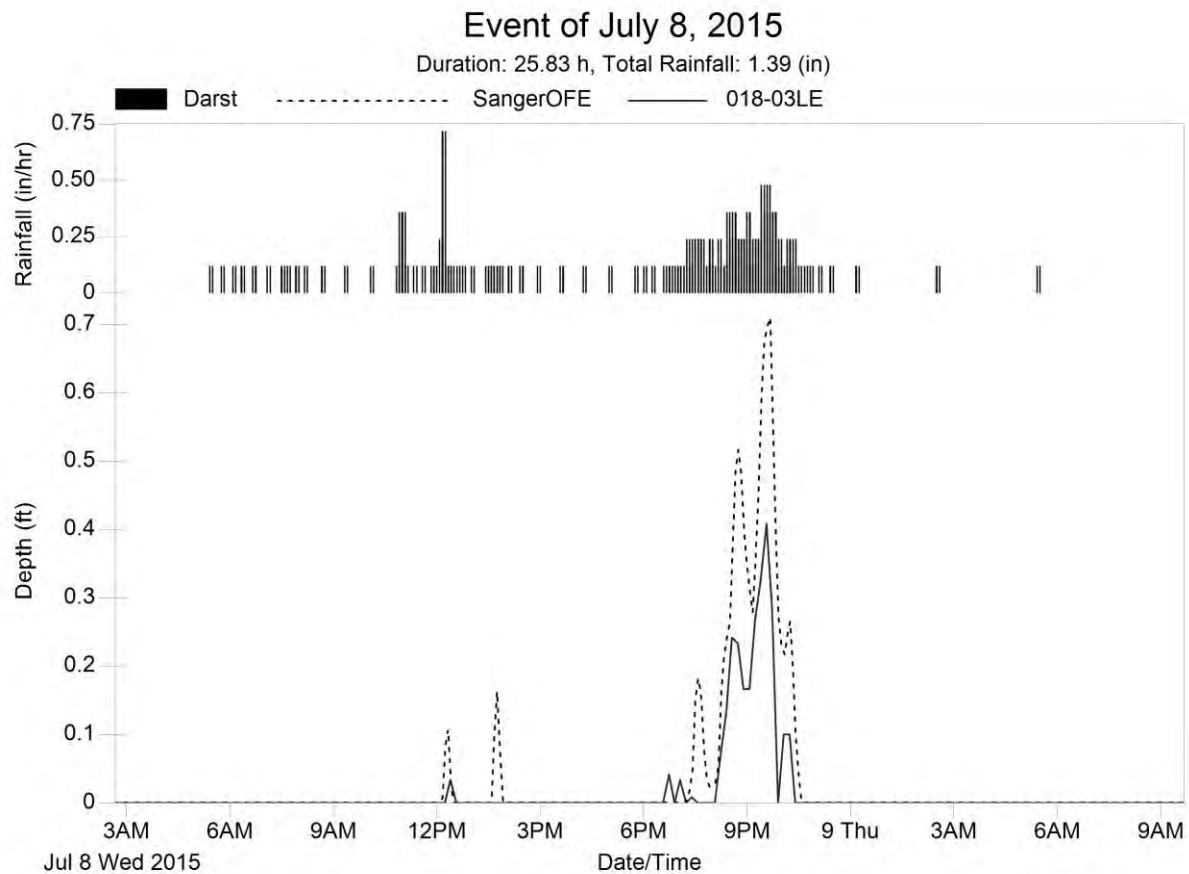
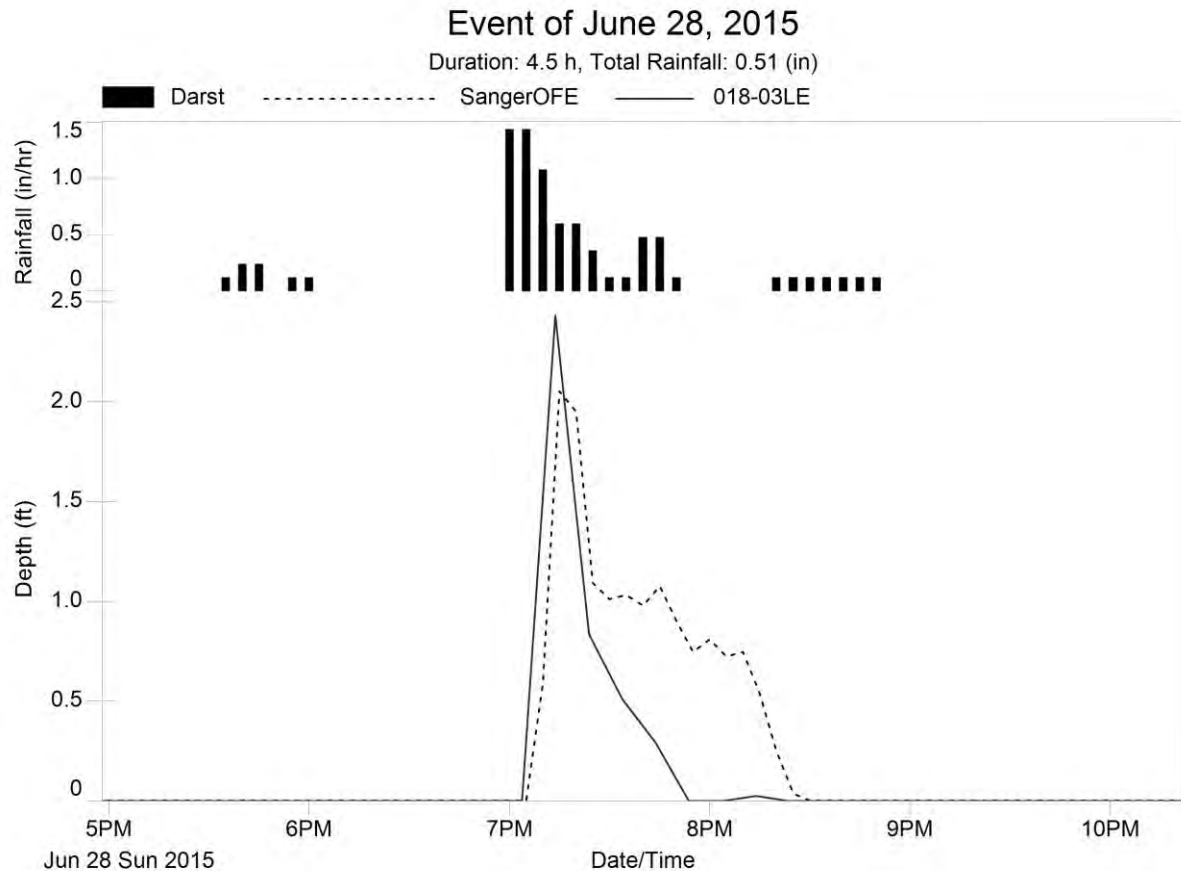
Duration: 16.17 h, Total Rainfall: 2.54 (in)



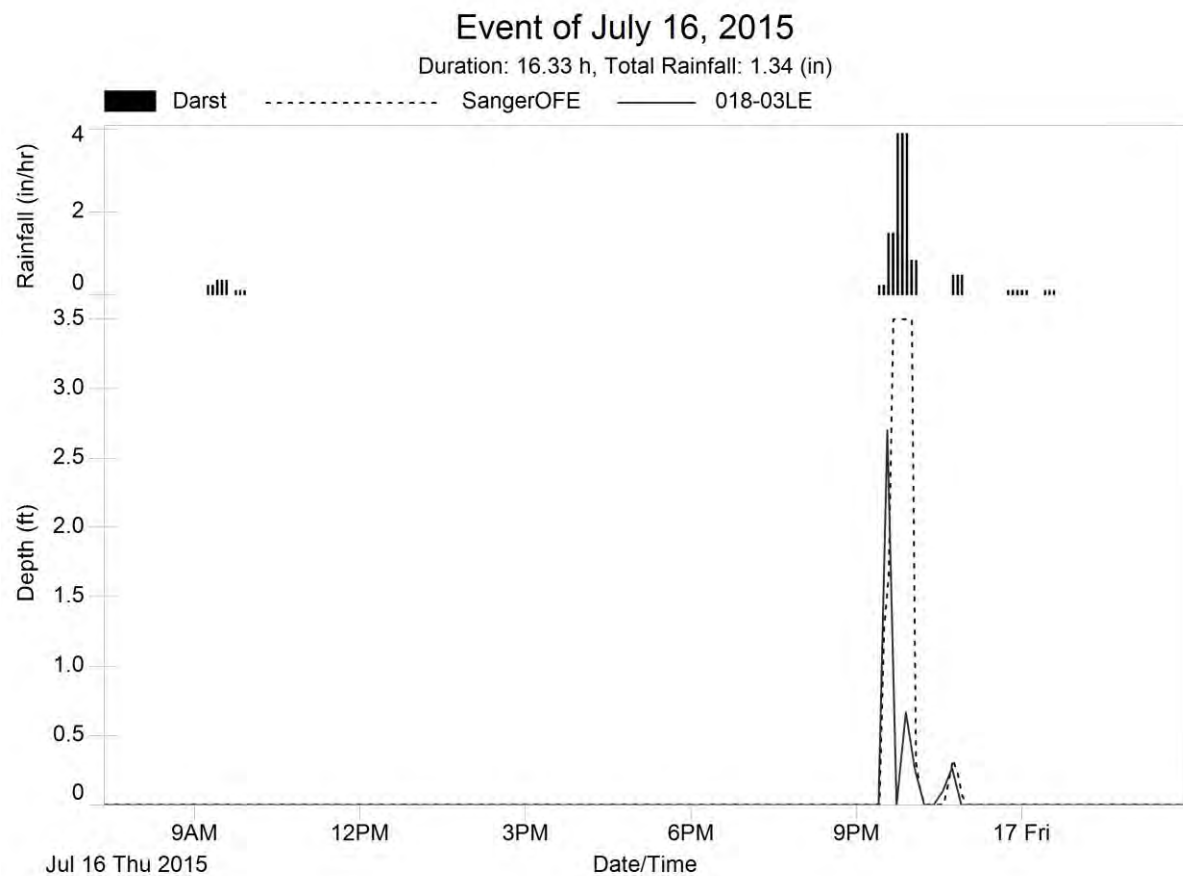
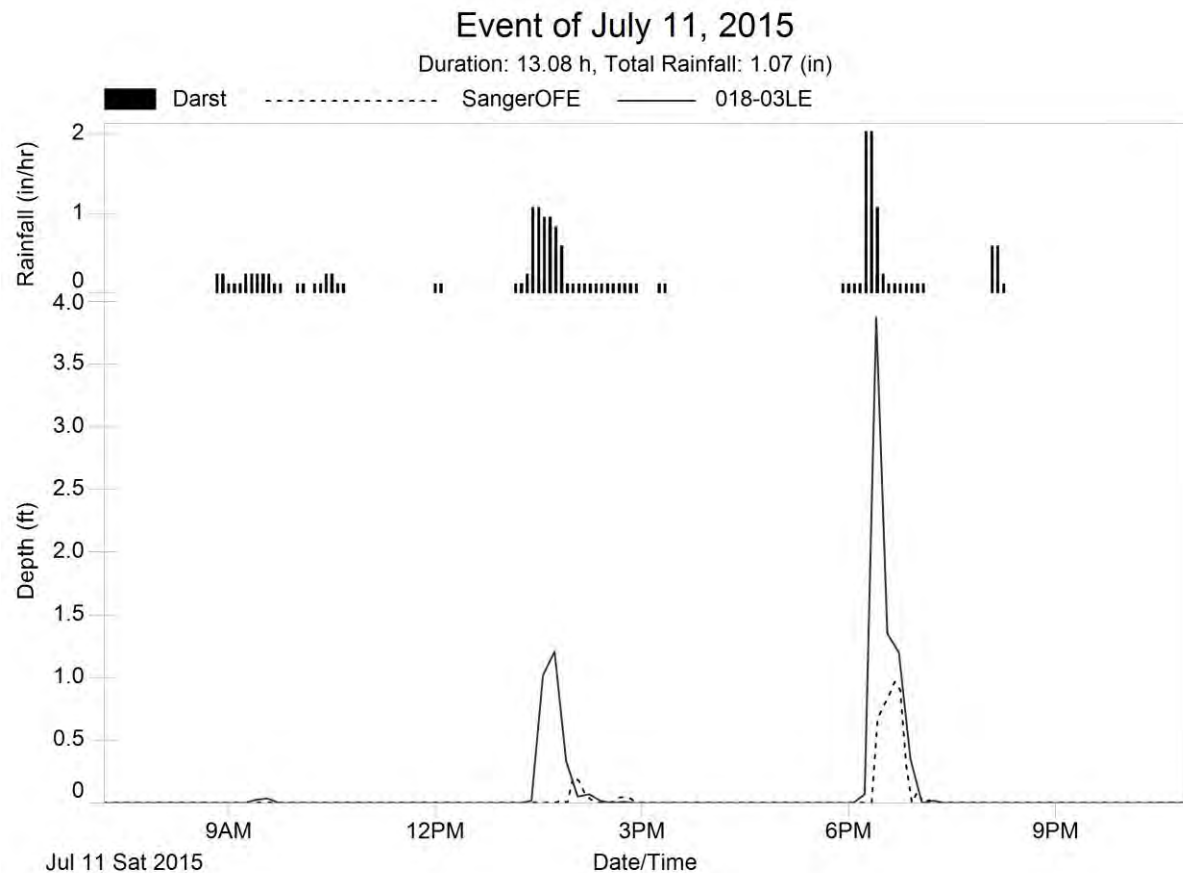
Sanger 018-03LE – Verification Events



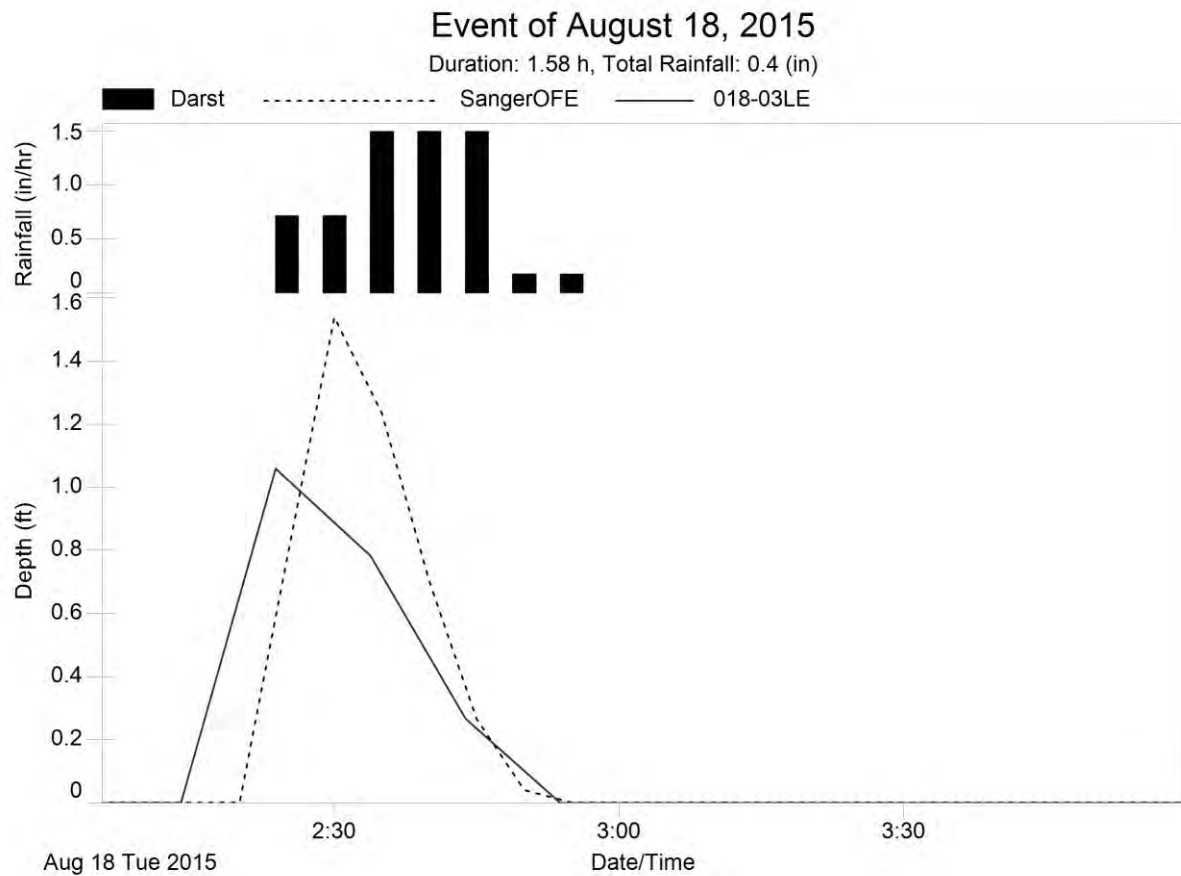
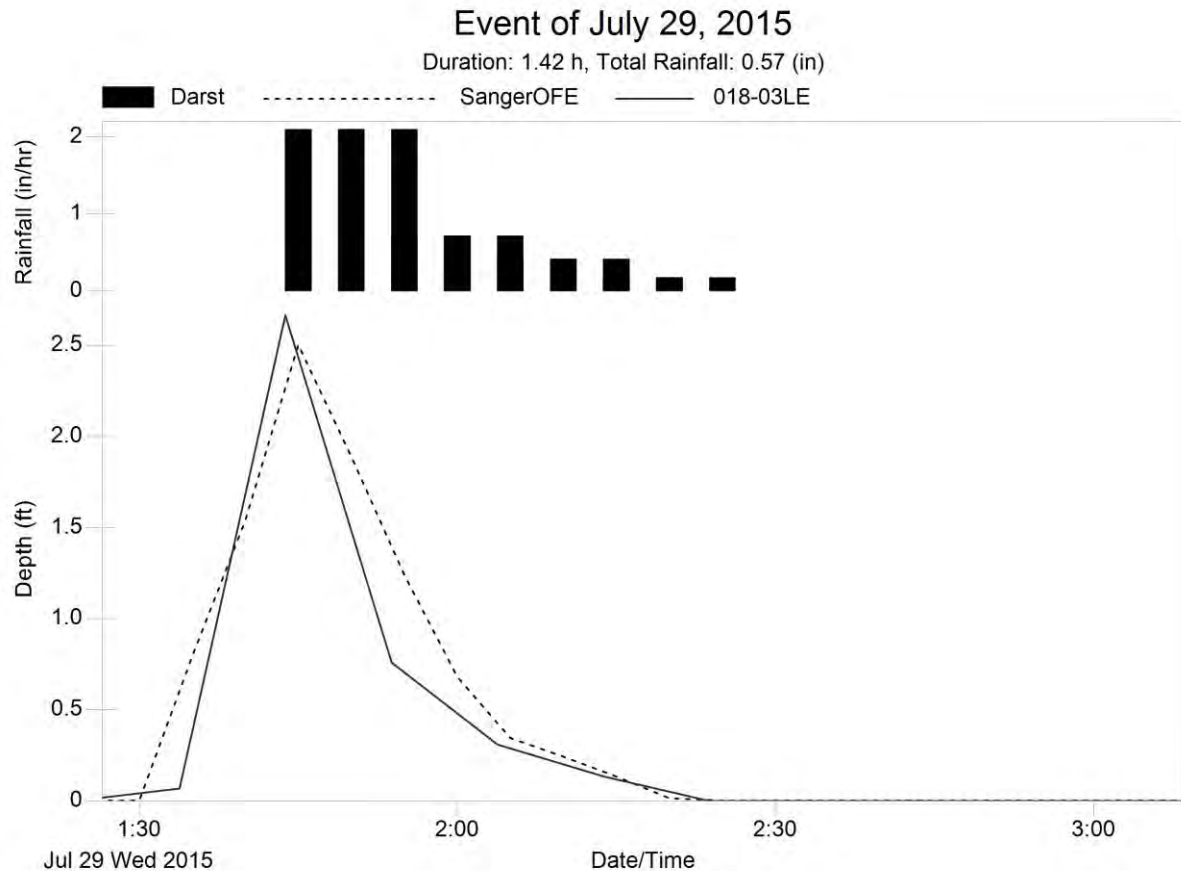
Sanger 018-03LE – Verification Events



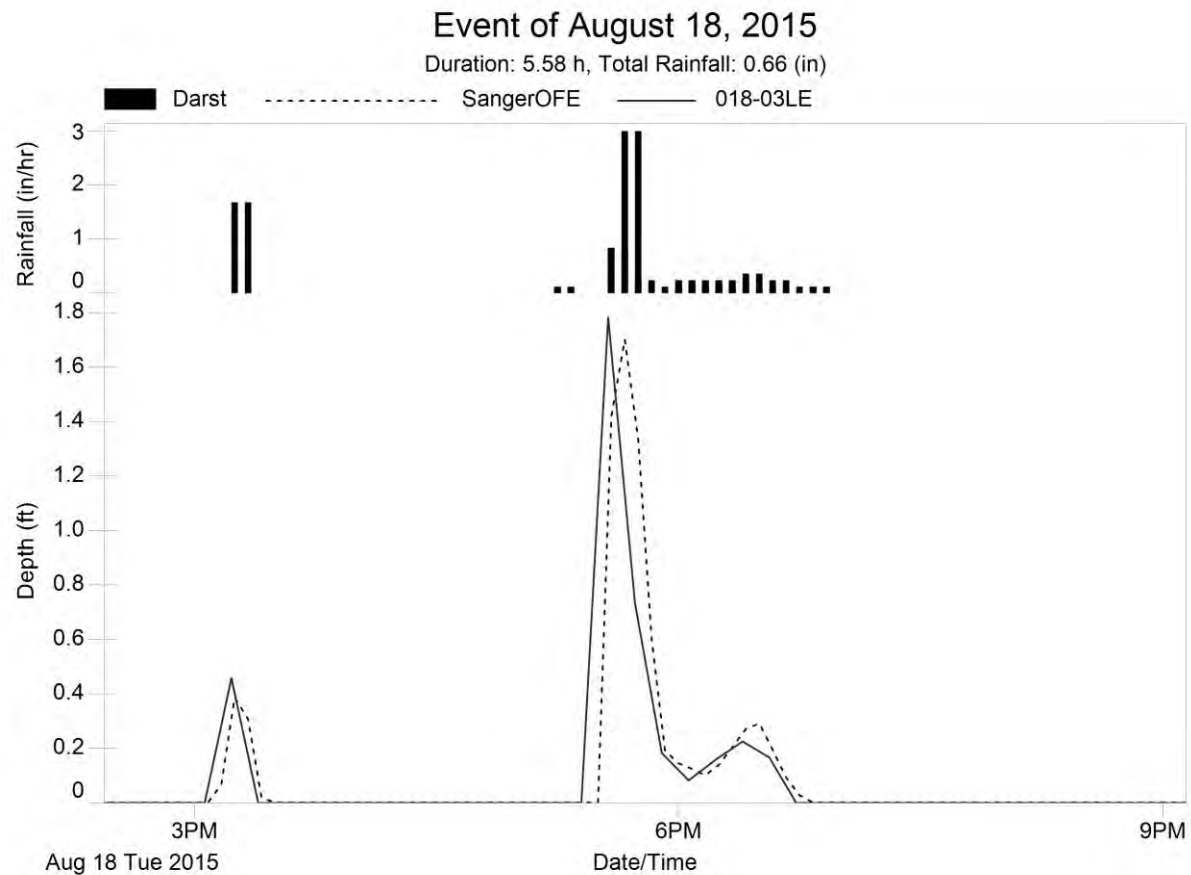
Sanger 018-03LE – Verification Events



Sanger 018-03LE – Verification Events



Sanger 018-03LE – Verification Events



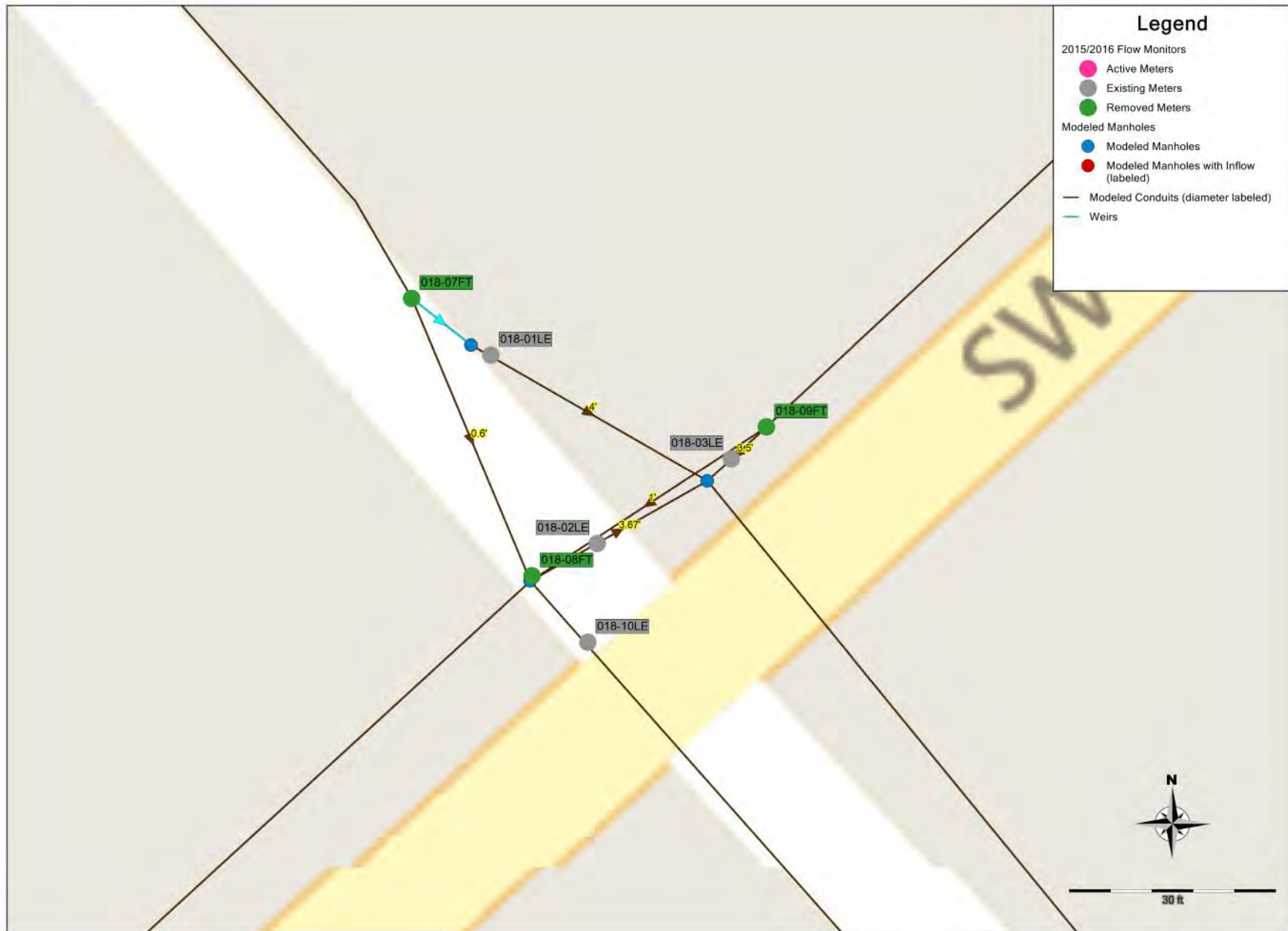
Legend

- 2015/2016 Flow Monitors
- 2015/2016 Rain Gauges
- Trunk Sewer Pipes
- Modeled Outfalls
 - Emergency Outfalls
 - Active Outfalls
- RDII Sewersheds (labeled by downstream flow meter)
 - Sewer Owner = City of Peoria
 - Sewer Owner = GPSD
- Approximate Drainage Area Type
 - = Combined Through Storm Sewers
 - = Partially Separate
 - = Separate
 - = Combined Direct

The map shows the following locations and features:

- Locations:** Bradley, Glen Oaks, Hardees, Peoria, East Peoria, Creve Coeur, Kickapoo, and Peoria Heights.
- Highways:** I-74, I-55, I-24, I-474, I-150, I-116, I-95, I-96, I-97, I-98, I-99, I-100, I-101, I-102, I-103, I-104, I-105, I-106, I-107, I-108, I-109, I-110, I-111, I-112, I-113, I-114, I-115, I-116, I-117, I-118, I-119, I-120, I-121, I-122, I-123, I-124, I-125, I-126, I-127, I-128, I-129, I-130, I-131, I-132, I-133, I-134, I-135, I-136, I-137, I-138, I-139, I-140, I-141, I-142, I-143, I-144, I-145, I-146, I-147, I-148, I-149, I-150, I-151, I-152, I-153, I-154, I-155, I-156, I-157, I-158, I-159, I-160, I-161, I-162, I-163, I-164, I-165, I-166, I-167, I-168, I-169, I-170, I-171, I-172, I-173, I-174, I-175, I-176, I-177, I-178, I-179, I-180, I-181, I-182, I-183, I-184, I-185, I-186, I-187, I-188, I-189, I-190, I-191, I-192, I-193, I-194, I-195, I-196, I-197, I-198, I-199, I-200, I-201, I-202, I-203, I-204, I-205, I-206, I-207, I-208, I-209, I-210, I-211, I-212, I-213, I-214, I-215, I-216, I-217, I-218, I-219, I-220, I-221, I-222, I-223, I-224, I-225, I-226, I-227, I-228, I-229, I-230, I-231, I-232, I-233, I-234, I-235, I-236, I-237, I-238, I-239, I-240, I-241, I-242, I-243, I-244, I-245, I-246, I-247, I-248, I-249, I-250, I-251, I-252, I-253, I-254, I-255, I-256, I-257, I-258, I-259, I-260, I-261, I-262, I-263, I-264, I-265, I-266, I-267, I-268, I-269, I-270, I-271, I-272, I-273, I-274, I-275, I-276, I-277, I-278, I-279, I-280, I-281, I-282, I-283, I-284, I-285, I-286, I-287, I-288, I-289, I-290, I-291, I-292, I-293, I-294, I-295, I-296, I-297, I-298, I-299, I-300, I-301, I-302, I-303, I-304, I-305, I-306, I-307, I-308, I-309, I-310, I-311, I-312, I-313, I-314, I-315, I-316, I-317, I-318, I-319, I-320, I-321, I-322, I-323, I-324, I-325, I-326, I-327, I-328, I-329, I-330, I-331, I-332, I-333, I-334, I-335, I-336, I-337, I-338, I-339, I-340, I-341, I-342, I-343, I-344, I-345, I-346, I-347, I-348, I-349, I-350, I-351, I-352, I-353, I-354, I-355, I-356, I-357, I-358, I-359, I-360, I-361, I-362, I-363, I-364, I-365, I-366, I-367, I-368, I-369, I-370, I-371, I-372, I-373, I-374, I-375, I-376, I-377, I-378, I-379, I-380, I-381, I-382, I-383, I-384, I-385, I-386, I-387, I-388, I-389, I-390, I-391, I-392, I-393, I-394, I-395, I-396, I-397, I-398, I-399, I-400, I-401, I-402, I-403, I-404, I-405, I-406, I-407, I-408, I-409, I-410, I-411, I-412, I-413, I-414, I-415, I-416, I-417, I-418, I-419, I-420, I-421, I-422, I-423, I-424, I-425, I-426, I-427, I-428, I-429, I-430, I-431, I-432, I-433, I-434, I-435, I-436, I-437, I-438, I-439, I-440, I-441, I-442, I-443, I-444, I-445, I-446, I-447, I-448, I-449, I-450, I-451, I-452, I-453, I-454, I-455, I-456, I-457, I-458, I-459, I-460, I-461, I-462, I-463, I-464, I-465, I-466, I-467, I-468, I-469, I-470, I-471, I-472, I-473, I-474, I-475, I-476, I-477, I-478, I-479, I-480, I-481, I-482, I-483, I-484, I-485, I-486, I-487, I-488, I-489, I-490, I-491, I-492, I-493, I-494, I-495, I-496, I-497, I-498, I-499, I-500, I-501, I-502, I-503, I-504, I-505, I-506, I-507, I-508, I-509, I-510, I-511, I-512, I-513, I-514, I-515, I-516, I-517, I-518, I-519, I-520, I-521, I-522, I-523, I-524, I-525, I-526, I-527, I-528, I-529, I-530, I-531, I-532, I-533, I-534, I-535, I-536, I-537, I-538, I-539, I-540, I-541, I-542, I-543, I-544, I-545, I-546, I-547, I-548, I-549, I-550, I-551, I-552, I-553, I-554, I-555, I-556, I-557, I-558, I-559, I-560, I-561, I-562, I-563, I-564, I-565, I-566, I-567, I-568, I-569, I-570, I-571, I-572, I-573, I-574, I-575, I-576, I-577, I-578, I-579, I-580, I-581, I-582, I-583, I-584, I-585, I-586, I-587, I-588, I-589, I-590, I-591, I-592, I-593, I-594, I-595, I-596, I-597, I-598, I-599, I-600, I-601, I-602, I-603, I-604, I-605, I-606, I-607, I-608, I-609, I-610, I-611, I-612, I-613, I-614, I-615, I-616, I-617, I-618, I-619, I-620, I-621, I-622, I-623, I-624, I-625, I-626, I-627, I-628, I-629, I-630, I-631, I-632, I-633, I-634, I-635, I-636, I-637, I-638, I-639, I-640, I-641, I-642, I-643, I-644, I-645, I-646, I-647, I-648, I-649, I-650, I-651, I-652, I-653, I-654, I-655, I-656, I-657, I-658, I-659, I-660, I-661, I-662, I-663, I-664, I-665, I-666, I-667, I-668, I-669, I-670, I-671, I-672, I-673, I-674, I-675, I-676, I-677, I-678, I-679, I-680, I-681, I-682, I-683, I-684, I-685, I-686, I-687, I-688, I-689, I-690, I-691, I-692, I-693, I-694, I-695, I-696, I-697, I-698, I-699, I-700, I-701, I-702, I-703, I-70

018-10FE - Sanger Throttle Pipe



Date	Duration (h)	Rainfall (in)	Maximum Flow (cfs)		Maximum Flow (mgd)		Total Volume (ft³)		Volume (million gallons)		Peak Flow Rate (-15% to +25%)	Flow Volume (-10% to +20%)	Rainfall Variability
		Darst Edited	Observed	Modeled	Observed	Modeled	Observed	Modeled	Observed	Modeled			
CALIBRATION EVENTS - FLOW													
9/8/2015 9:55	5.08	0.81	9.903	10.5	6.397	6.783	55500	69300	0.415	0.518	6%	25%	variable
9/18/2015 13:10	13.25	1.62	10.76	11.8	6.951	7.623	143900	172300	1.076	1.289	10%	20%	relatively uniform
11/5/2015 14:05	13.42	0.34	9.033	8.456	5.835	5.463	78190	93030	0.585	0.696	-6%	19%	possibly uniform
11/11/2015 19:40	1.83	0.6	10.95	10.31	7.074	6.660	39660	36300	0.297	0.272	-6%	-8%	relatively uniform
11/16/2015 20:45	30.33	1.51	9.904	7.884	6.398	5.093	339800	351500	2.542	2.629	-20%	3%	variable
11/26/2015 21:30	15.67	1.01	8.701	8.767	5.621	5.663	215600	251700	1.613	1.883	1%	17%	possibly uniform
12/13/2015 2:45	34.42	1.75	9.547	8.757	6.167	5.657	303900	376300	2.273	2.815	-8%	24%	possibly uniform
12/20/2015 23:25	12.58	0.69	8.549	7.895	5.523	5.100	119300	133600	0.892	0.999	-8%	12%	relatively uniform
12/23/2015 7:05	6.42	0.67	10.65	9.44	6.880	6.098	101000	99850	0.755	0.747	-11%	-1%	variable
12/28/2015 3:20	19	2.54	10.02	10.47	6.473	6.764	366800	374100	2.744	2.798	4%	2%	variable
VERIFICATION EVENTS - FLOW													
6/15/2015 13:20	48.25	1.52	10.92	10.62	7.054	6.861	277800	334900	2.078	2.505	-3%	21%	variable
6/24/2015 4:20	67.42	2.15	5.783	10.19	3.736	6.583	366700	540300	2.743	4.041	76%	47%	variable
6/28/2015 16:35	6	0.51	4.929	10.94	3.184	7.067	53860	91350	0.403	0.683	122%	70%	variable
7/8/2015 5:15	25.83	1.39	4.674	9.105	3.019	5.882	184700	264300	1.382	1.977	95%	43%	relatively uniform
7/11/2015 6:25	14.67	1.07	6.545	10.92	4.228	7.054	110000	165800	0.823	1.240	67%	51%	possibly uniform
7/16/2015 7:15	18.83	1.34	11.03	14.88	7.125	9.612	92940	148900	0.695	1.114	35%	60%	relatively uniform
7/29/2015 1:25	2.67	0.57	4.274	11.56	2.761	7.468	22240	42130	0.166	0.315	170%	89%	variable
8/18/2015 0:25	5.17	0.4	9.825	9.98	6.347	6.447	35400	38930	0.265	0.291	2%	10%	possibly uniform
8/18/2015 13:20	7.58	0.66	10.71	10.33	6.919	6.673	71300	91460	0.533	0.684	-4%	28%	relatively uniform

Notes:

Results from interceptor only model using flow meter data as influent flow to regulator.

Added 0.6 cfs to metered flow at 018-10FE to match the average DWF coming in to regulators

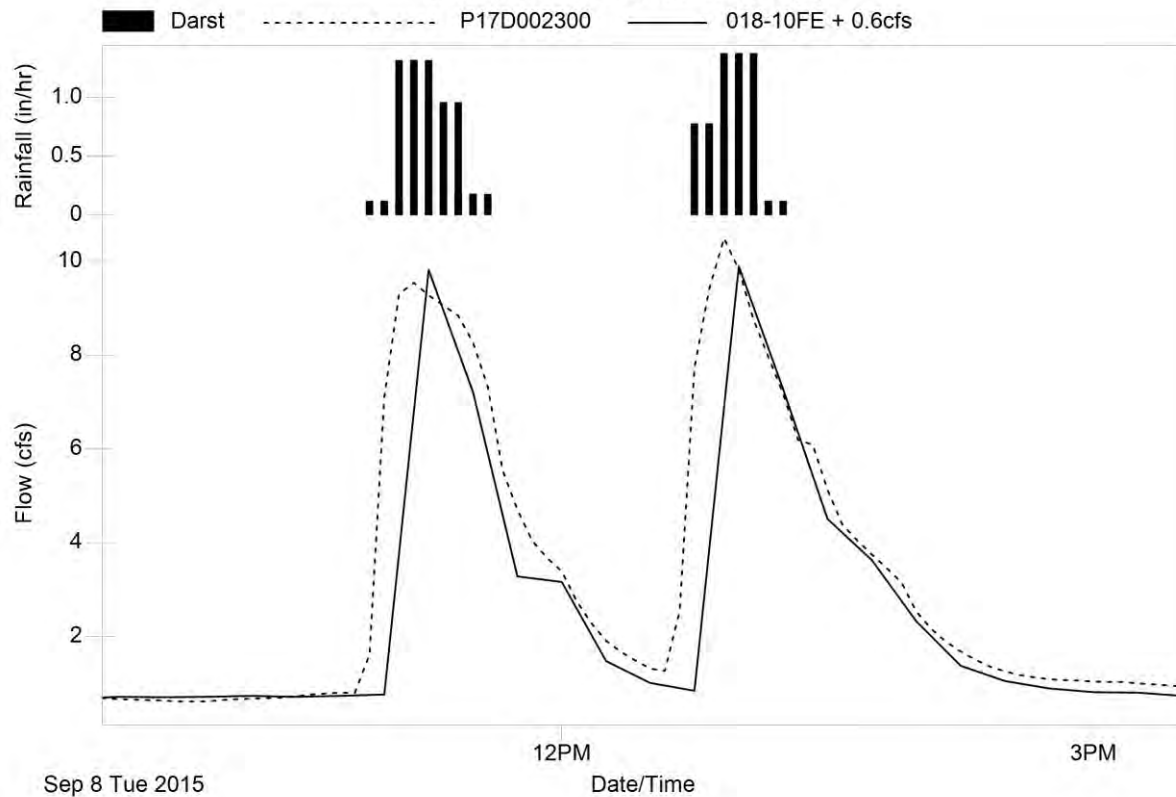
WEIGHTED AVERAGES

Calibration - Relatively Uniform	-1%	13%	relatively uniform
Calibration - Possibly Uniform	-5%	21%	possibly uniform
Calibration - Variable	-5%	4%	variable
Calibration Weighted - All Events	-4%	11%	
Verification - Relatively Uniform	30%	45%	relatively uniform
Verification - Possibly Uniform	28%	41%	possibly uniform
Verification - Variable	67%	40%	variable
Verification Weighted - All Events	43%	41%	
Weighted Average - All Events	16%	23%	
NET AVERAGES			
Calibration - Relatively Uniform	-1%	8%	relatively uniform
Calibration - Possibly Uniform	-5%	20%	possibly uniform
Calibration - Variable	-5%	7%	variable
Calibration Net - All Events	-4%	11%	
Verification - Relatively Uniform	42%	44%	relatively uniform
Verification - Possibly Uniform	34%	30%	possibly uniform
Verification - Variable	91%	57%	variable
Verification Net - All Events	62%	47%	
Net Average - All Events	27%	28%	

Sanger 018-10FE – Calibration Events

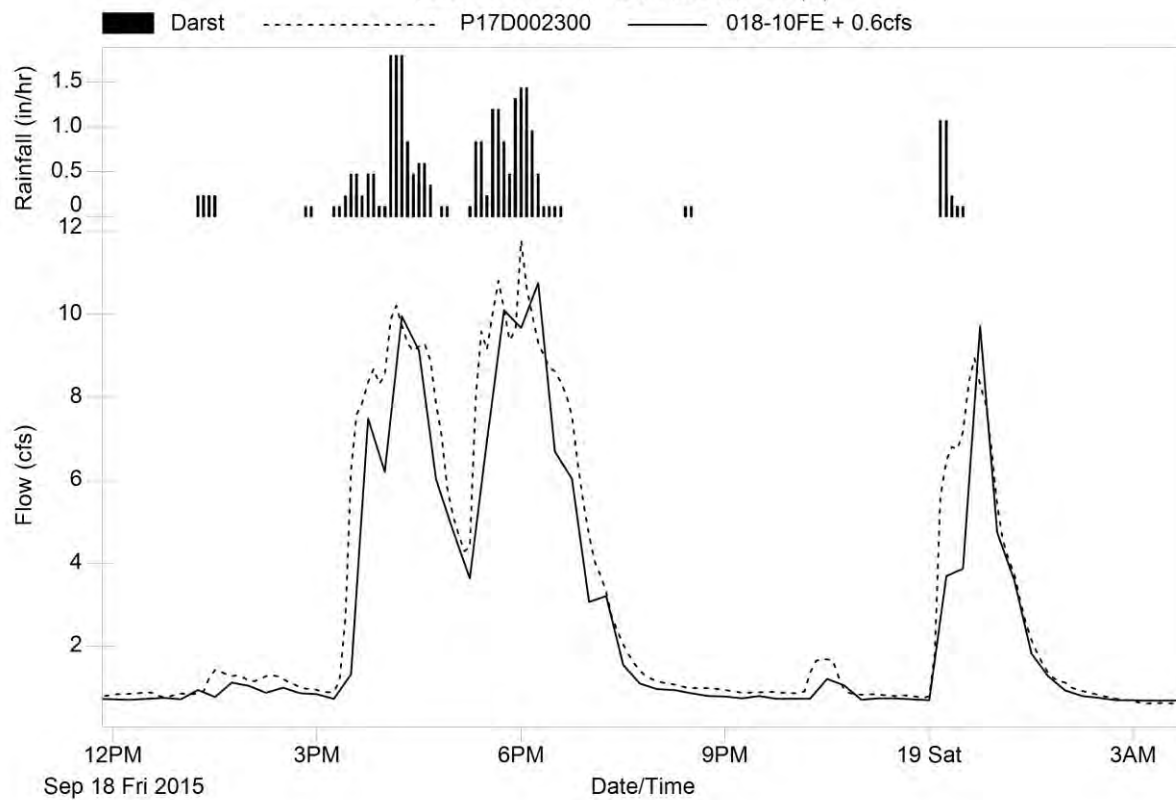
Event of September 8, 2015

Duration: 5.08 h, Total Rainfall: 0.81 (in)



Event of September 18, 2015

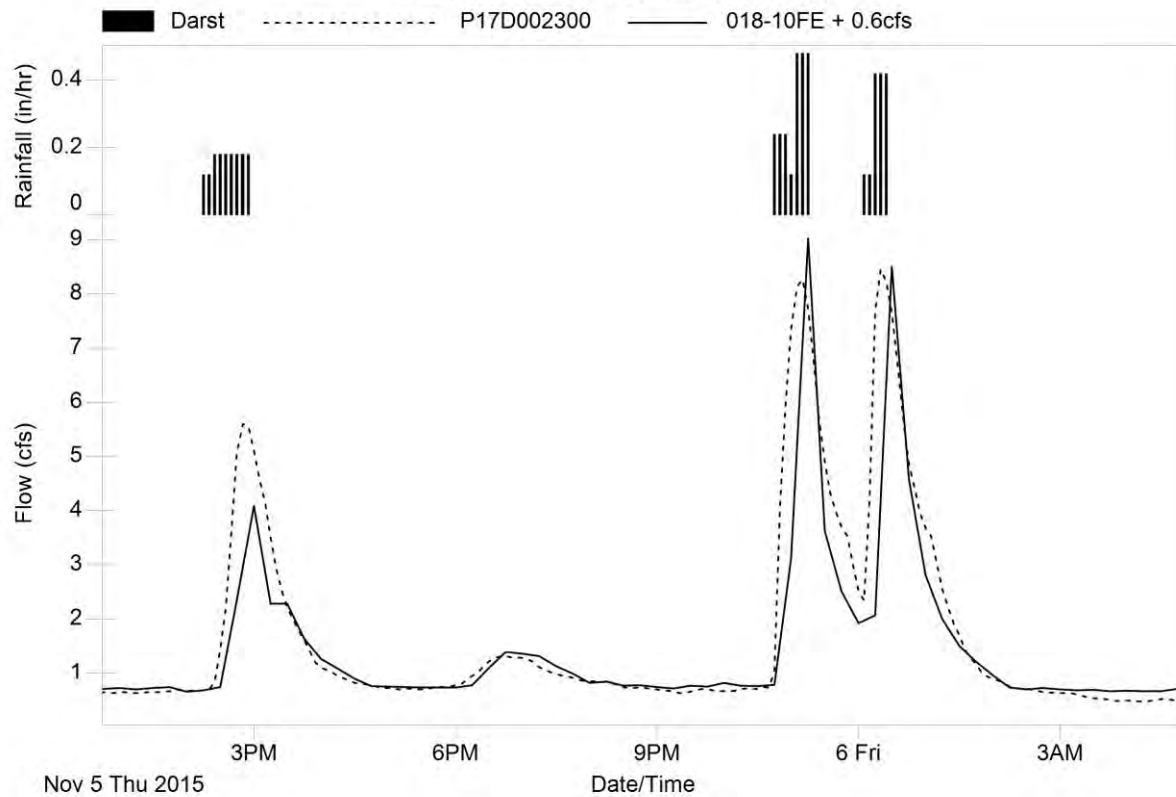
Duration: 13.25 h, Total Rainfall: 1.62 (in)



Sanger 018-10FE – Calibration Events

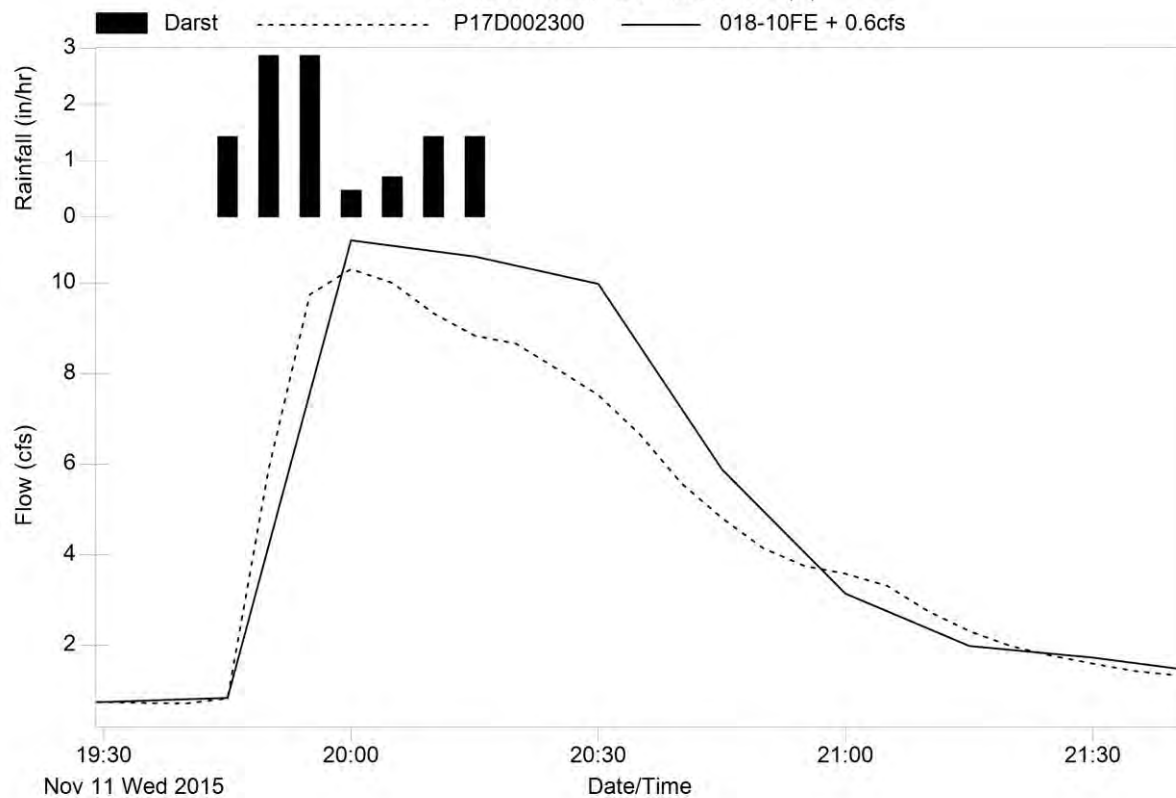
Event of November 5, 2015

Duration: 13.42 h, Total Rainfall: 0.34 (in)



Event of November 11, 2015

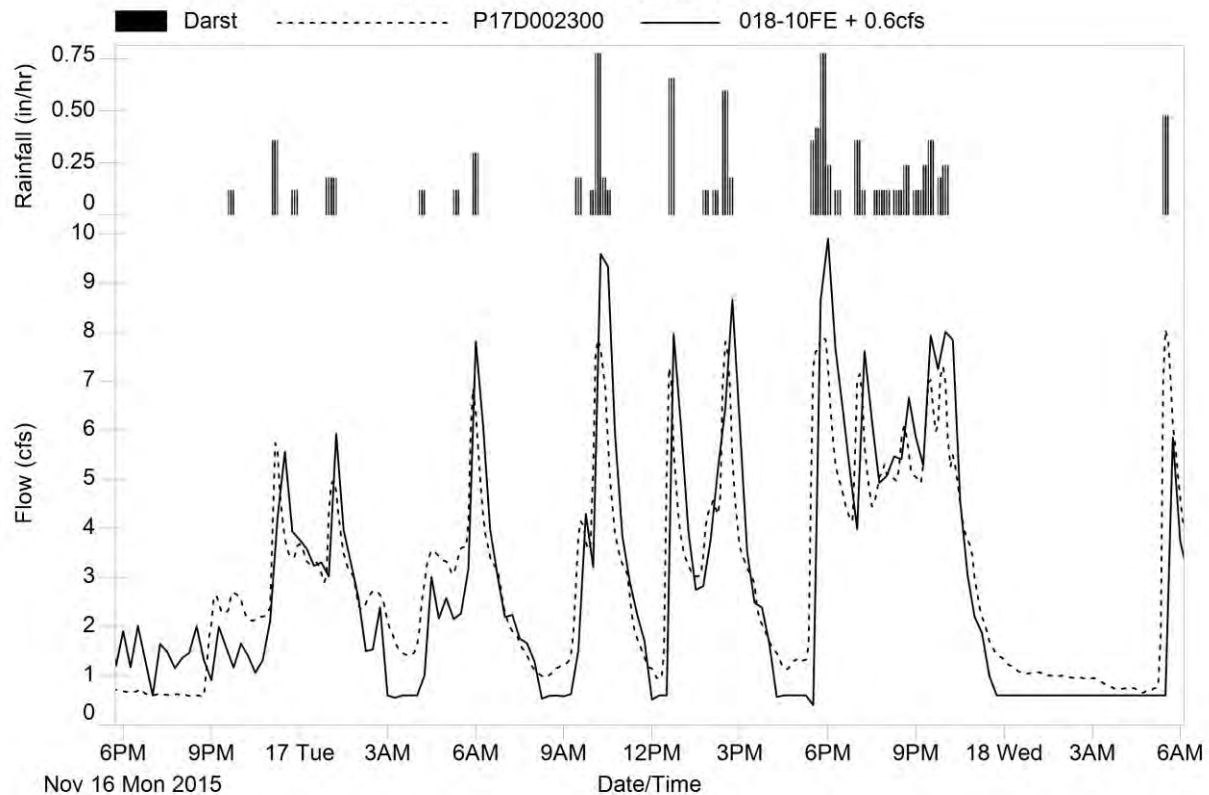
Duration: 1.83 h, Total Rainfall: 0.6 (in)



Sanger 018-10FE – Calibration Events

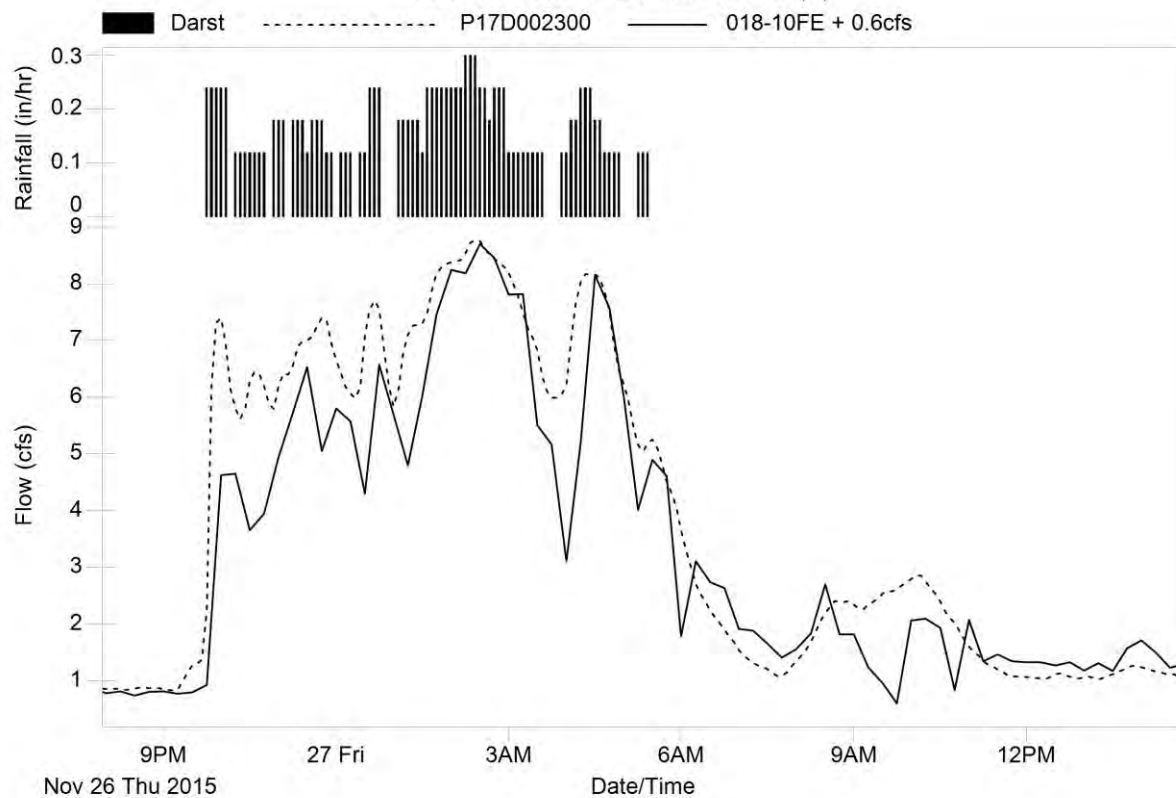
Event of November 16, 2015

Duration: 30.33 h, Total Rainfall: 1.51 (in)



Event of November 26, 2015

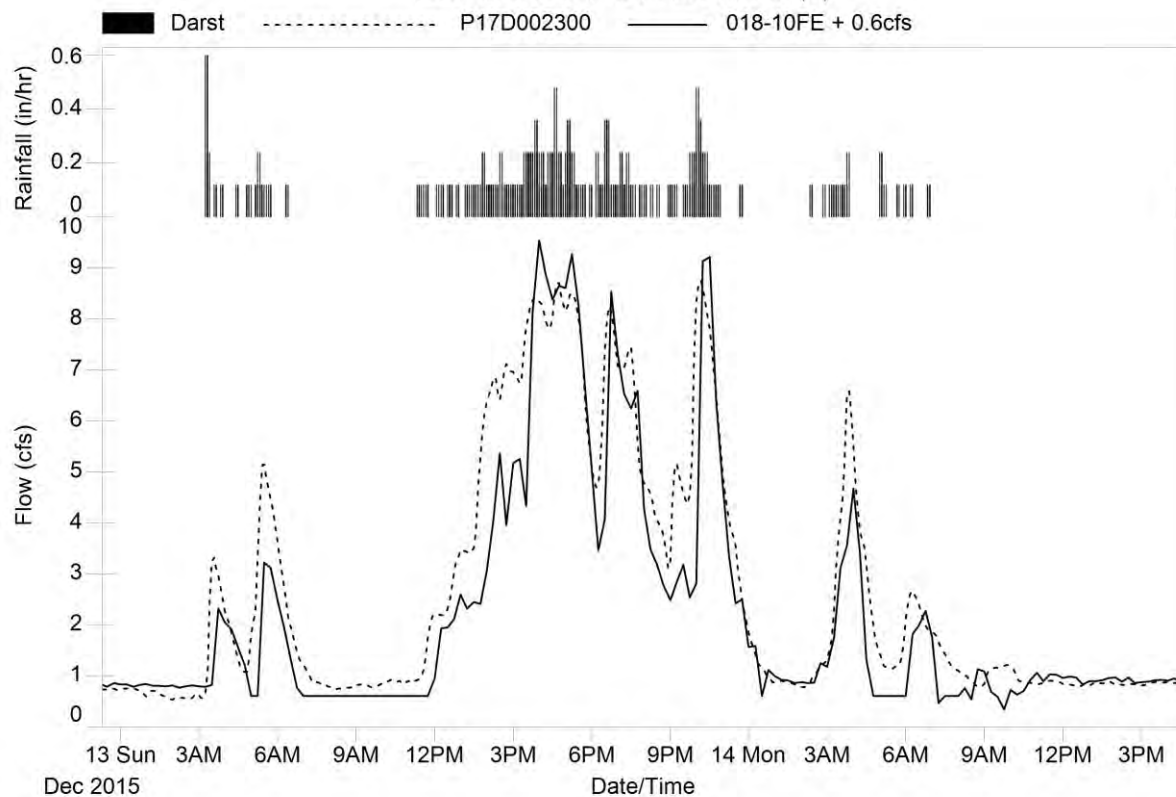
Duration: 15.67 h, Total Rainfall: 1.01 (in)



Sanger 018-10FE – Calibration Events

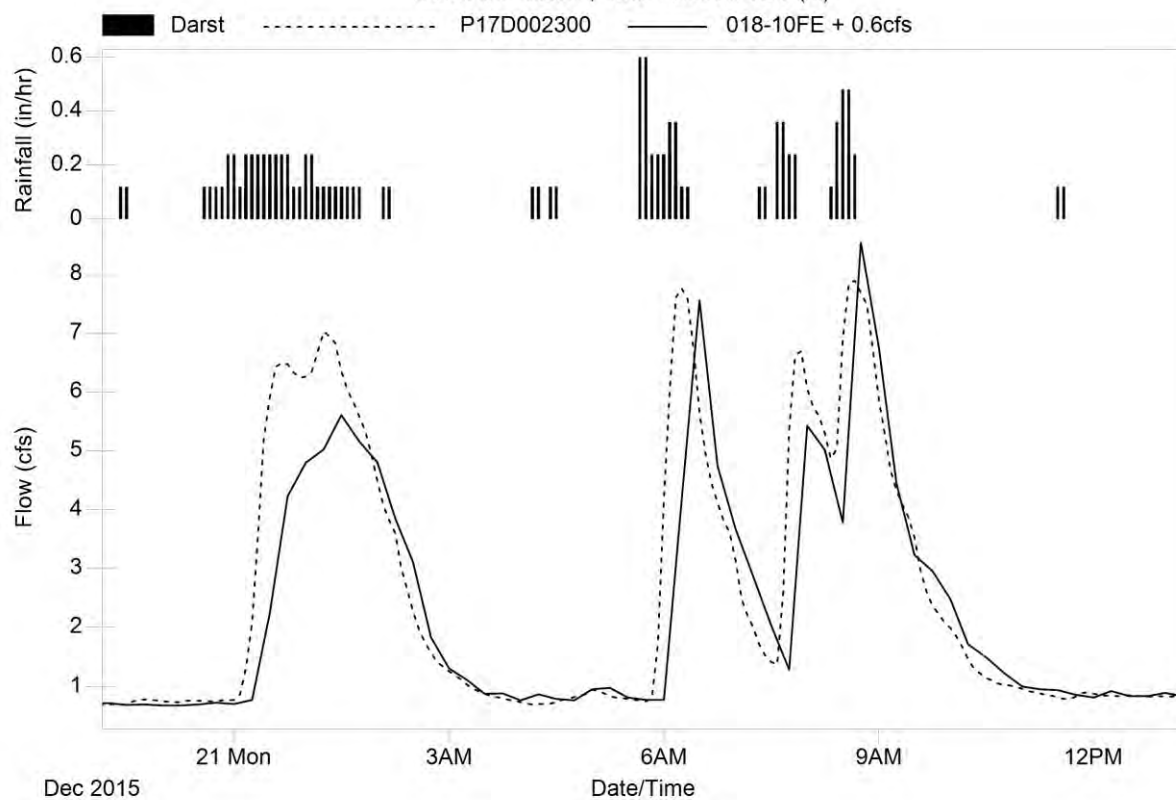
Event of December 13, 2015

Duration: 34.42 h, Total Rainfall: 1.75 (in)



Event of December 20, 2015

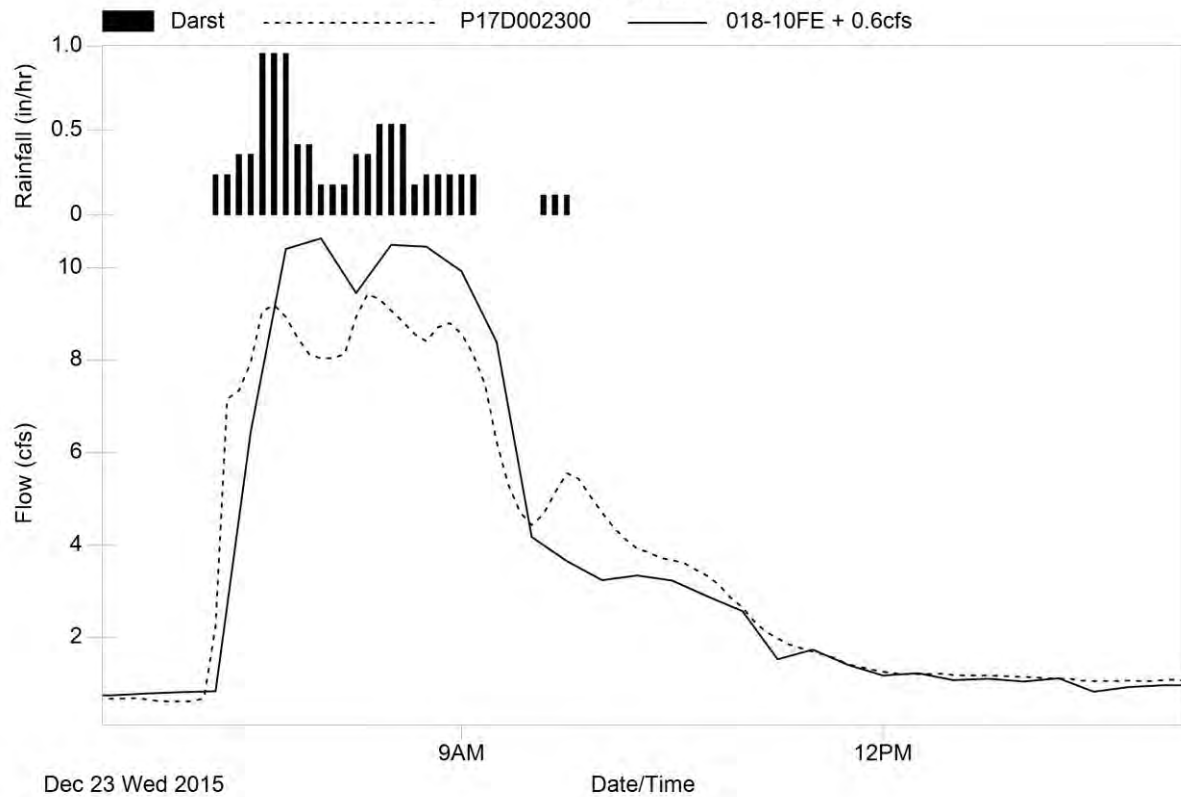
Duration: 12.58 h, Total Rainfall: 0.69 (in)



Sanger 018-10FE – Calibration Events

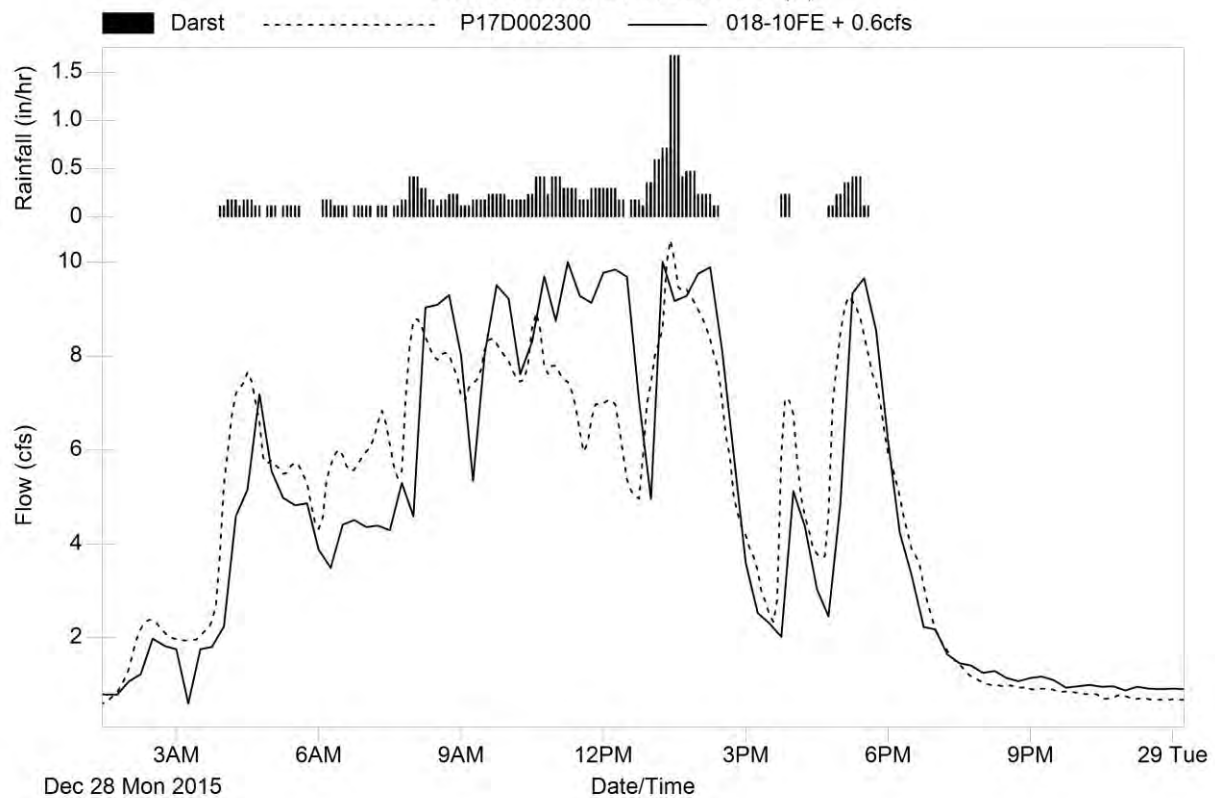
Event of December 23, 2015

Duration: 6.42 h, Total Rainfall: 0.67 (in)



Event of December 28, 2015

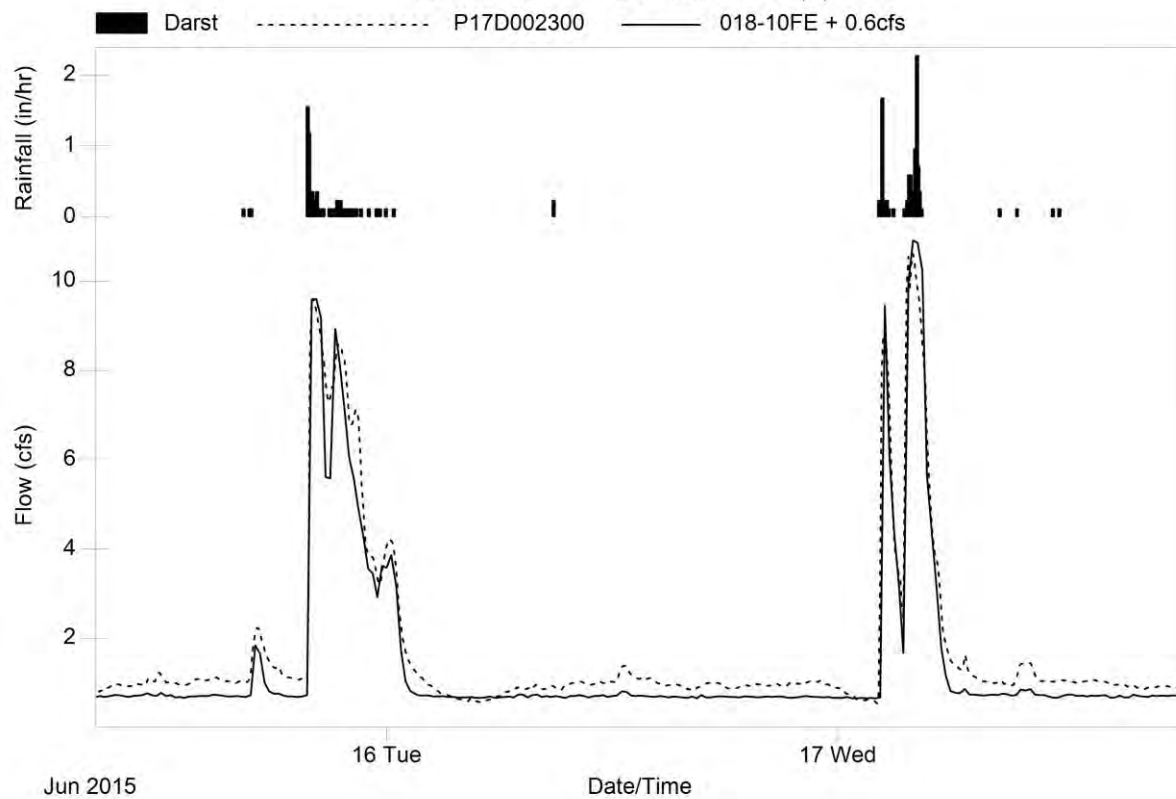
Duration: 19 h, Total Rainfall: 2.54 (in)



Sanger 018-10FE – Verification Events

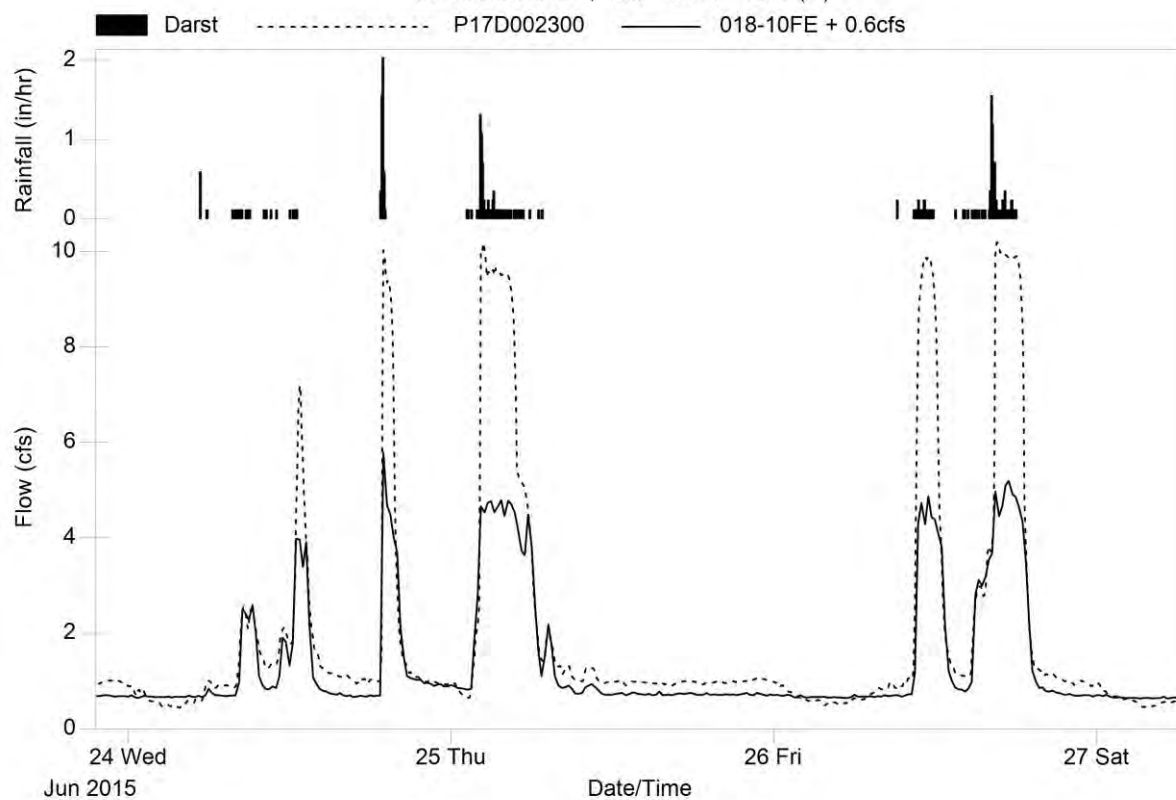
Event of June 15, 2015

Duration: 48.25 h, Total Rainfall: 1.52 (in)

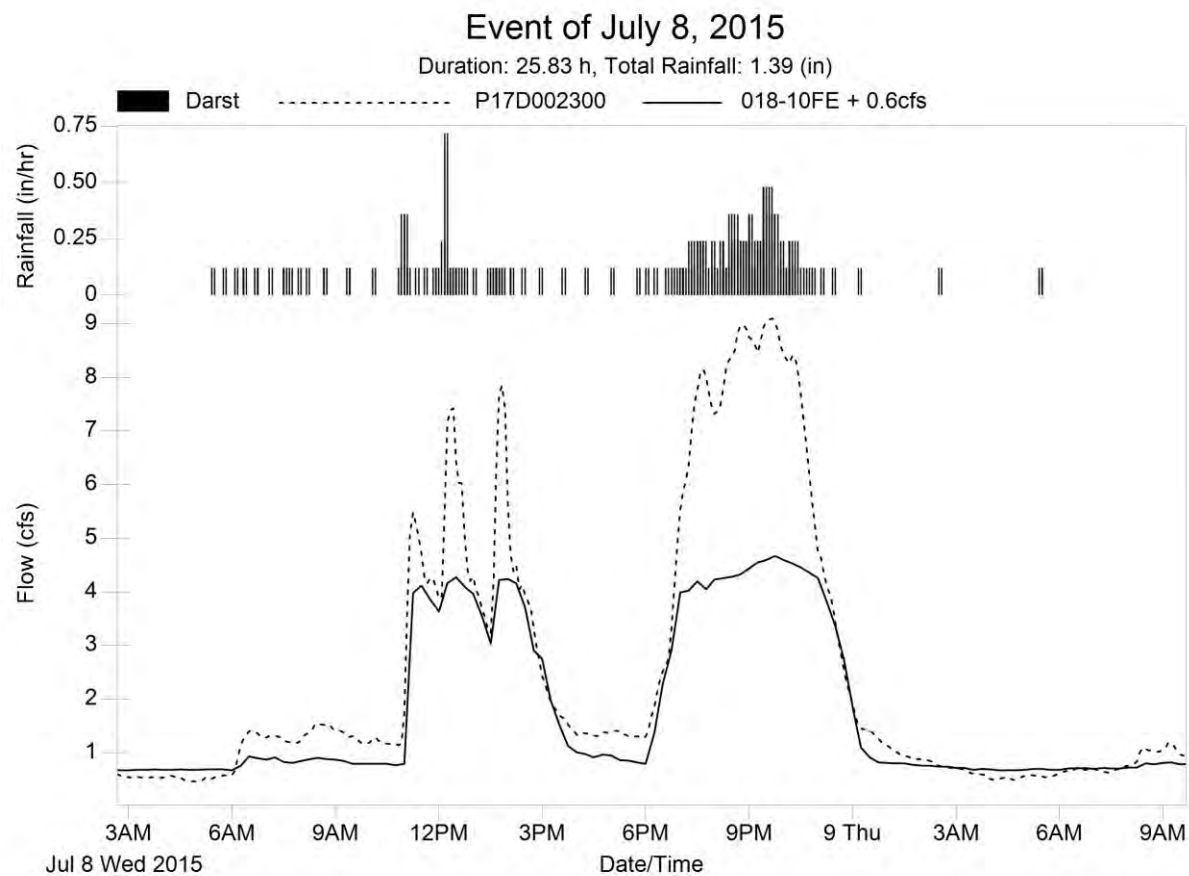
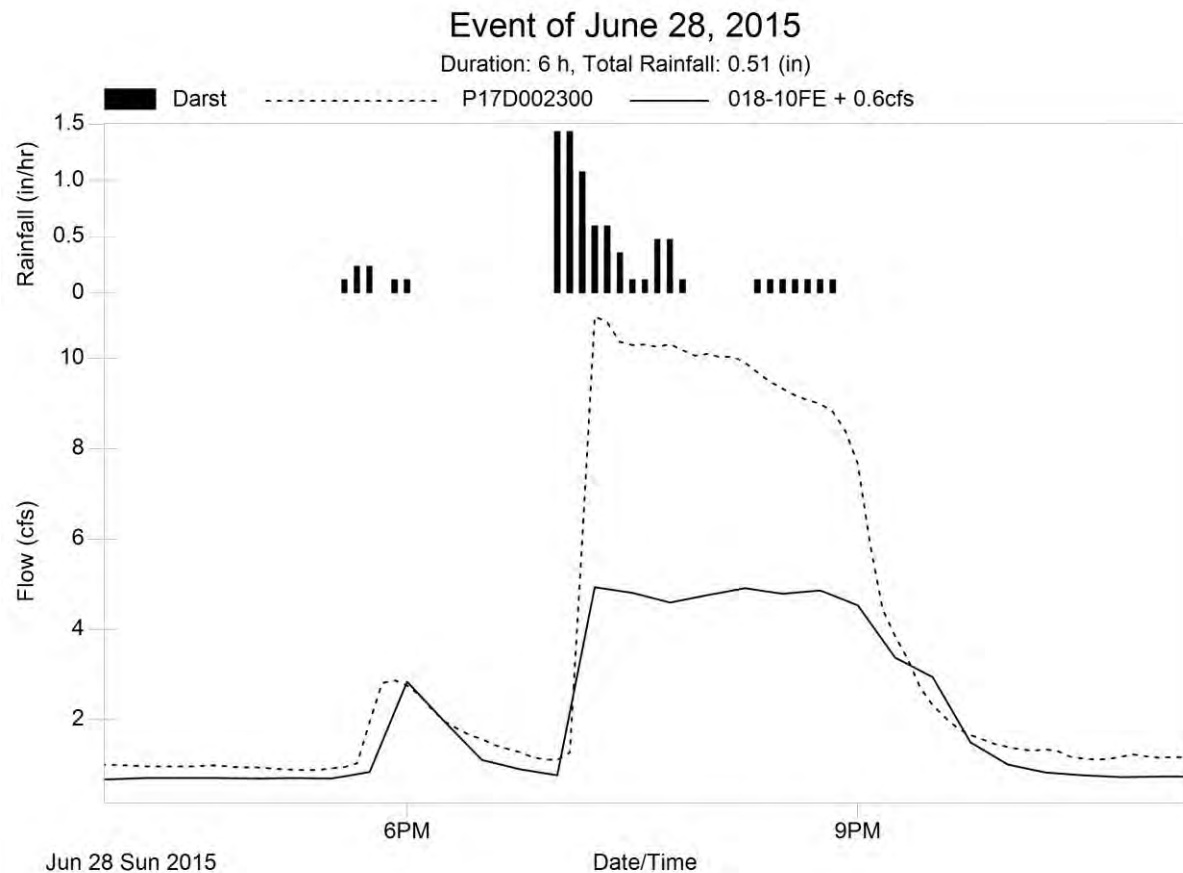


Event of June 24, 2015

Duration: 67.42 h, Total Rainfall: 2.15 (in)



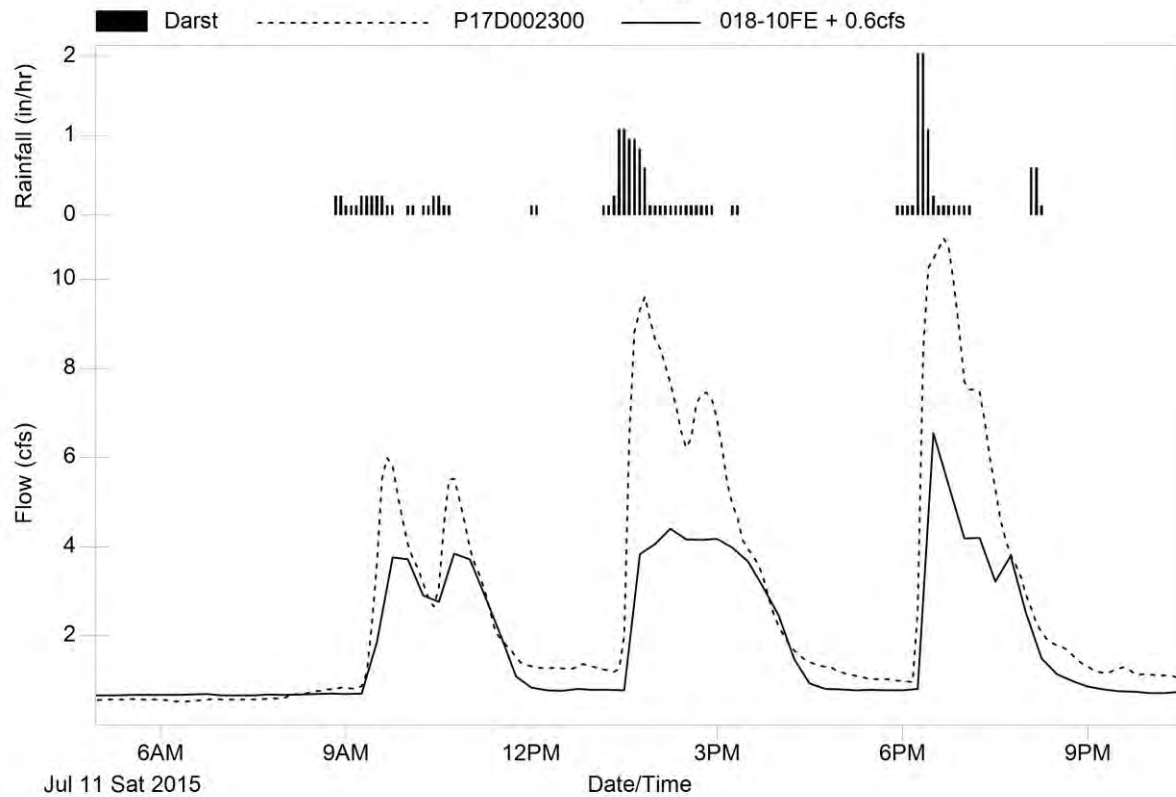
Sanger 018-10FE – Verification Events



Sanger 018-10FE – Verification Events

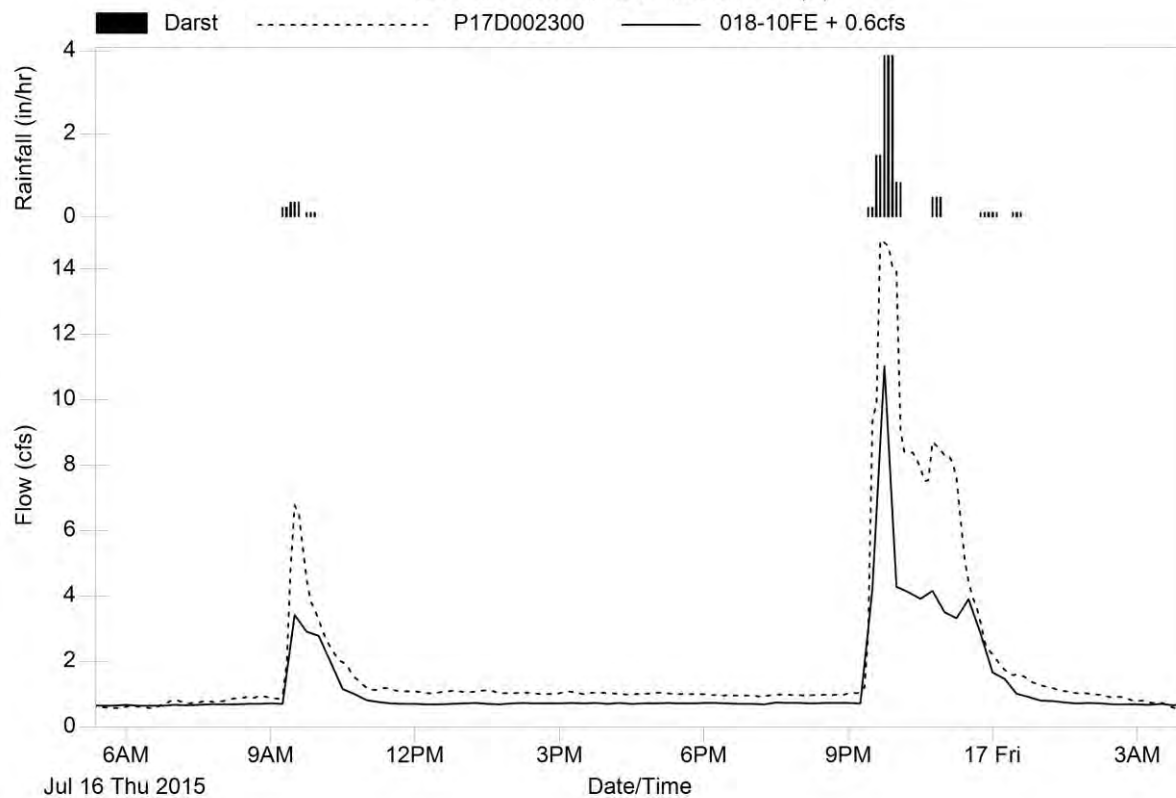
Event of July 11, 2015

Duration: 14.67 h, Total Rainfall: 1.07 (in)

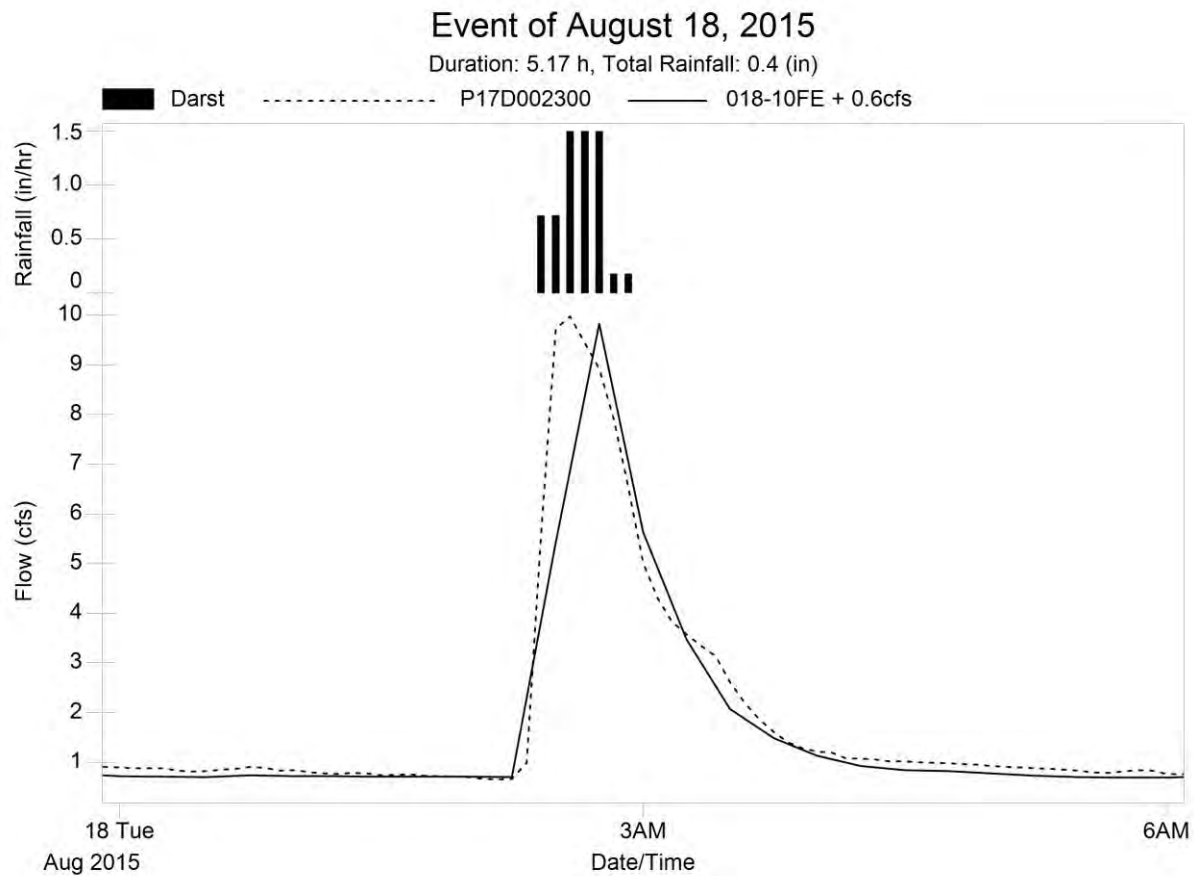
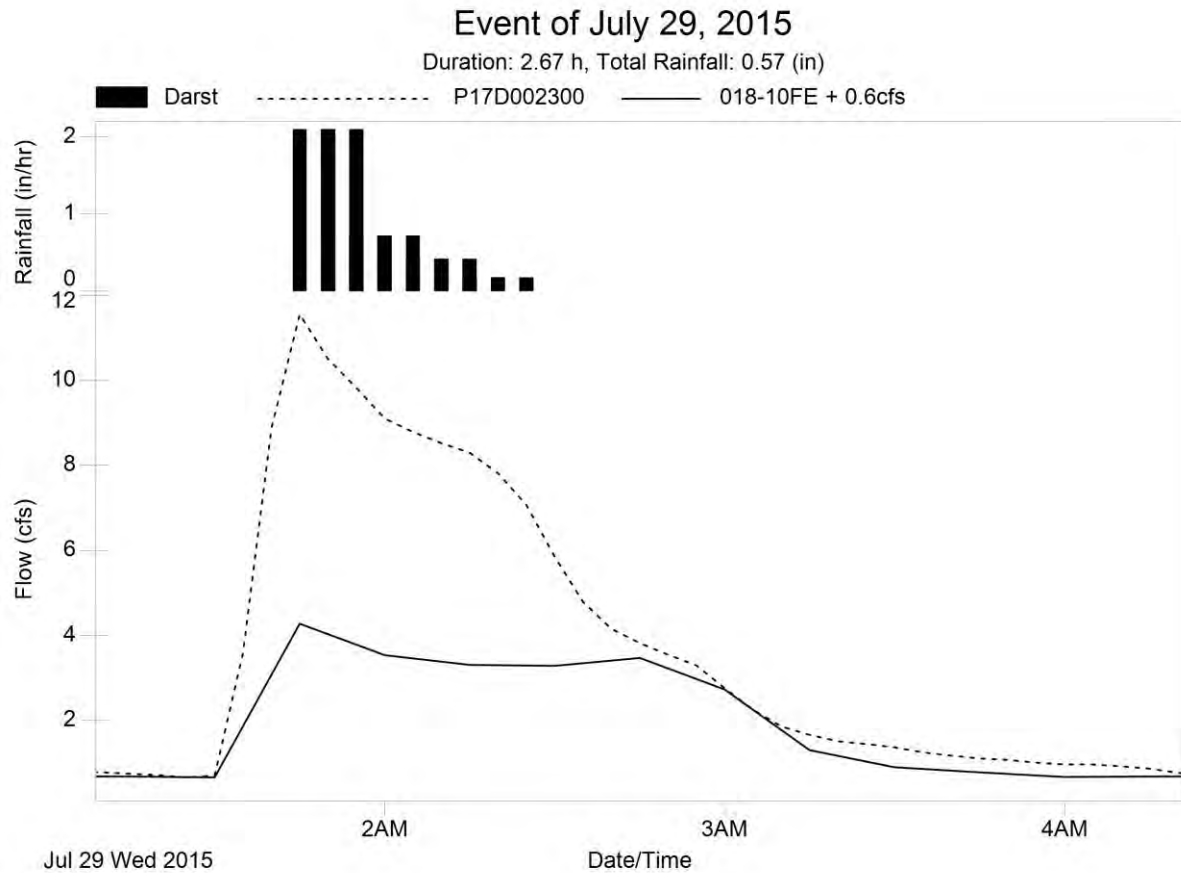


Event of July 16, 2015

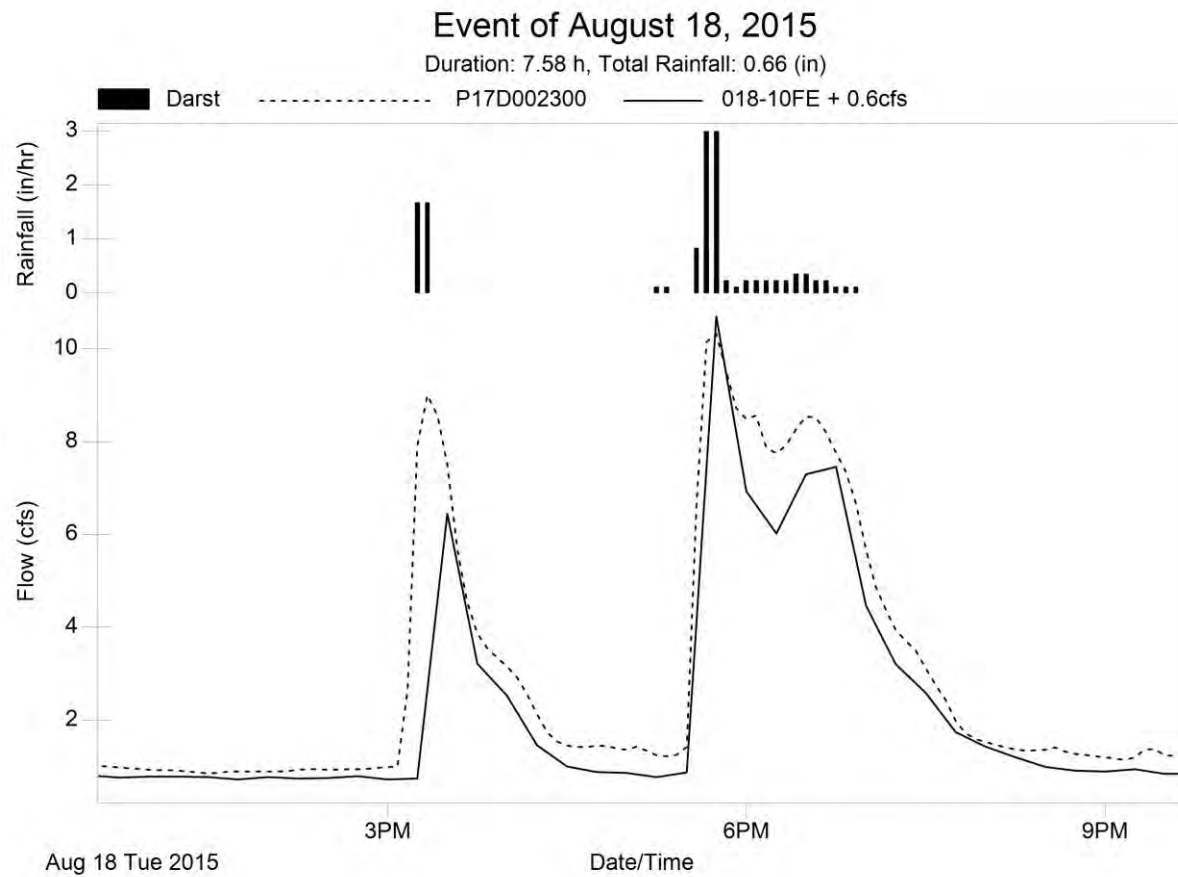
Duration: 18.83 h, Total Rainfall: 1.34 (in)



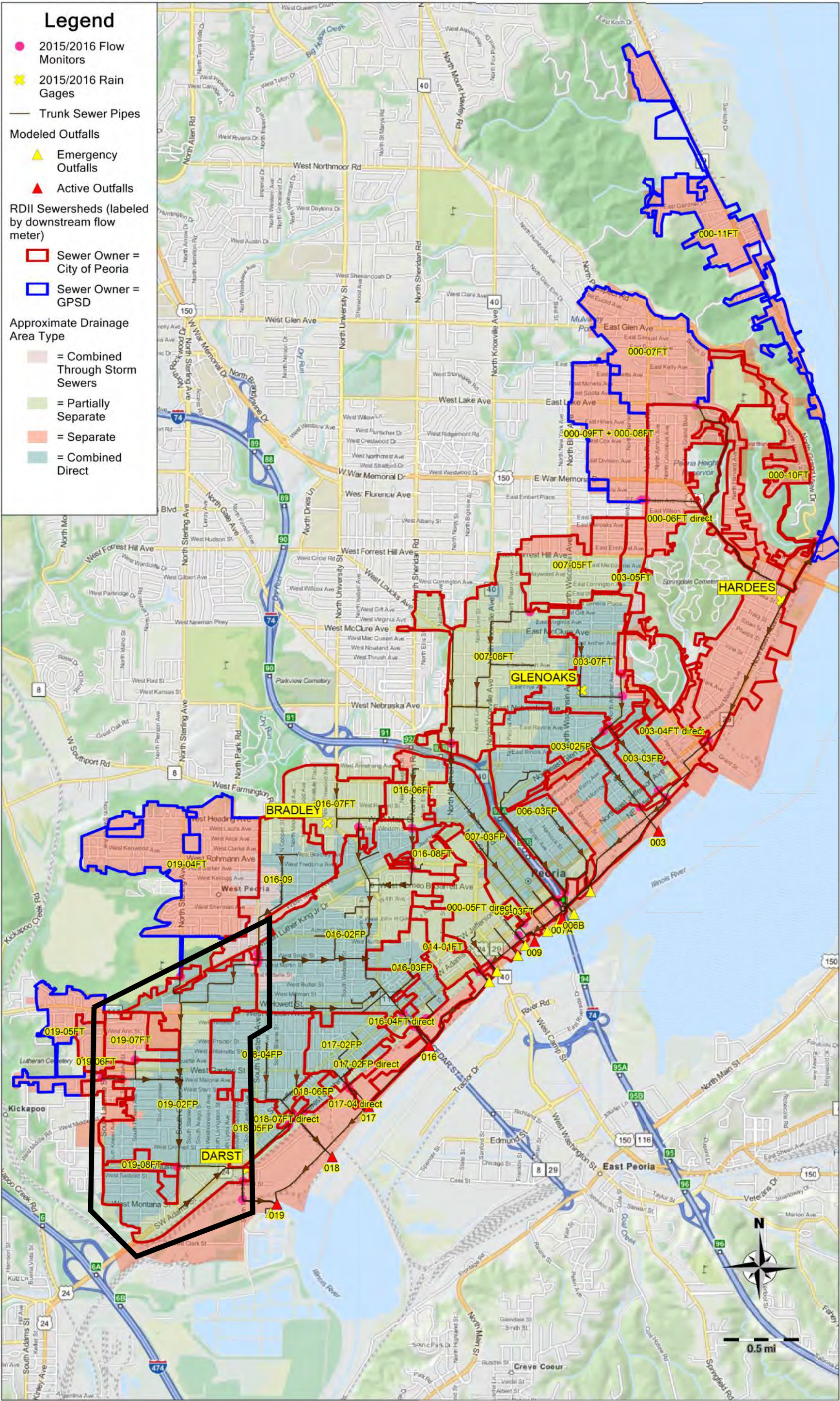
Sanger 018-10FE – Verification Events



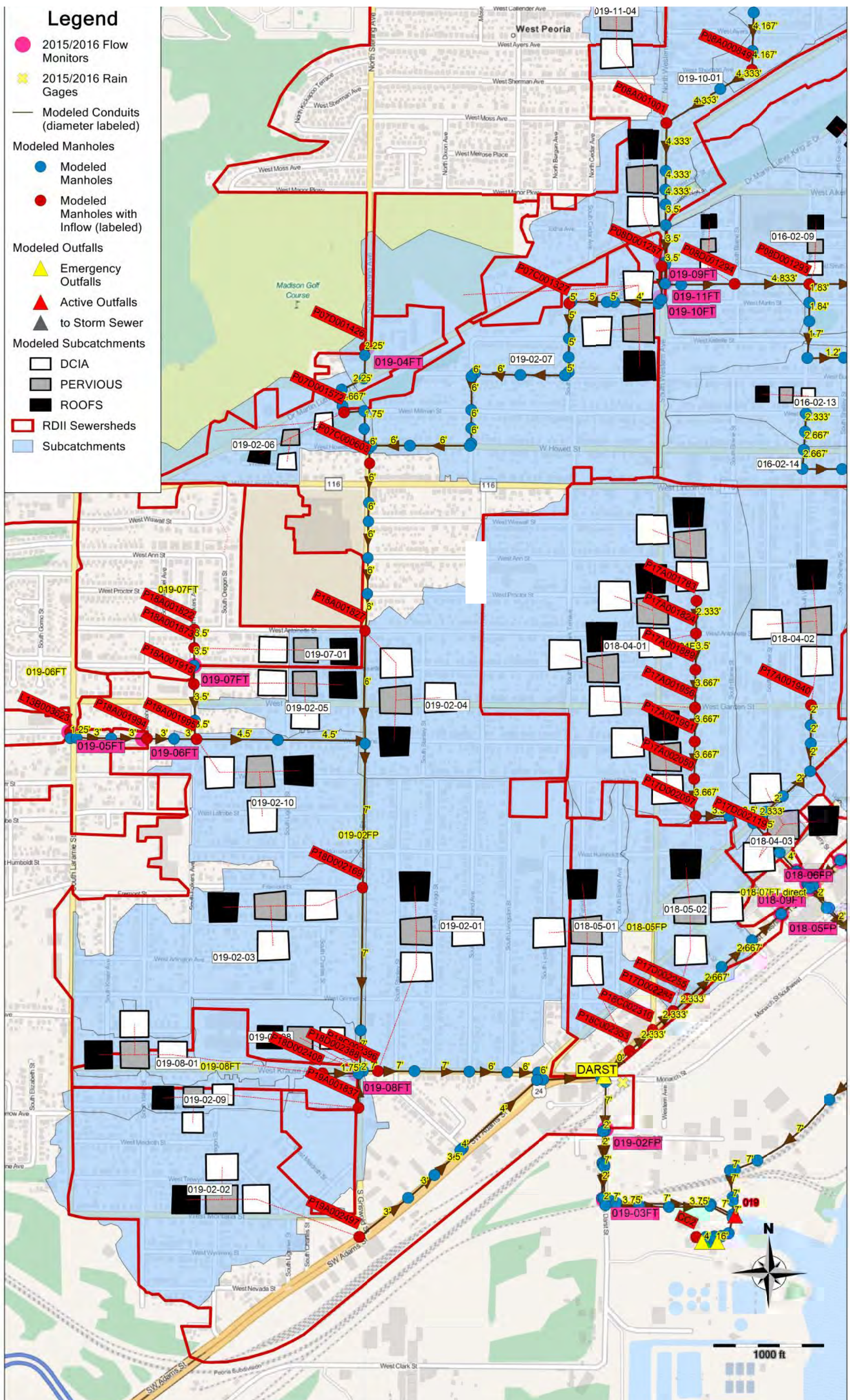
Sanger 018-10FE – Verification Events



Flow Monitor 019-02FP and 019-03FT Overview Map



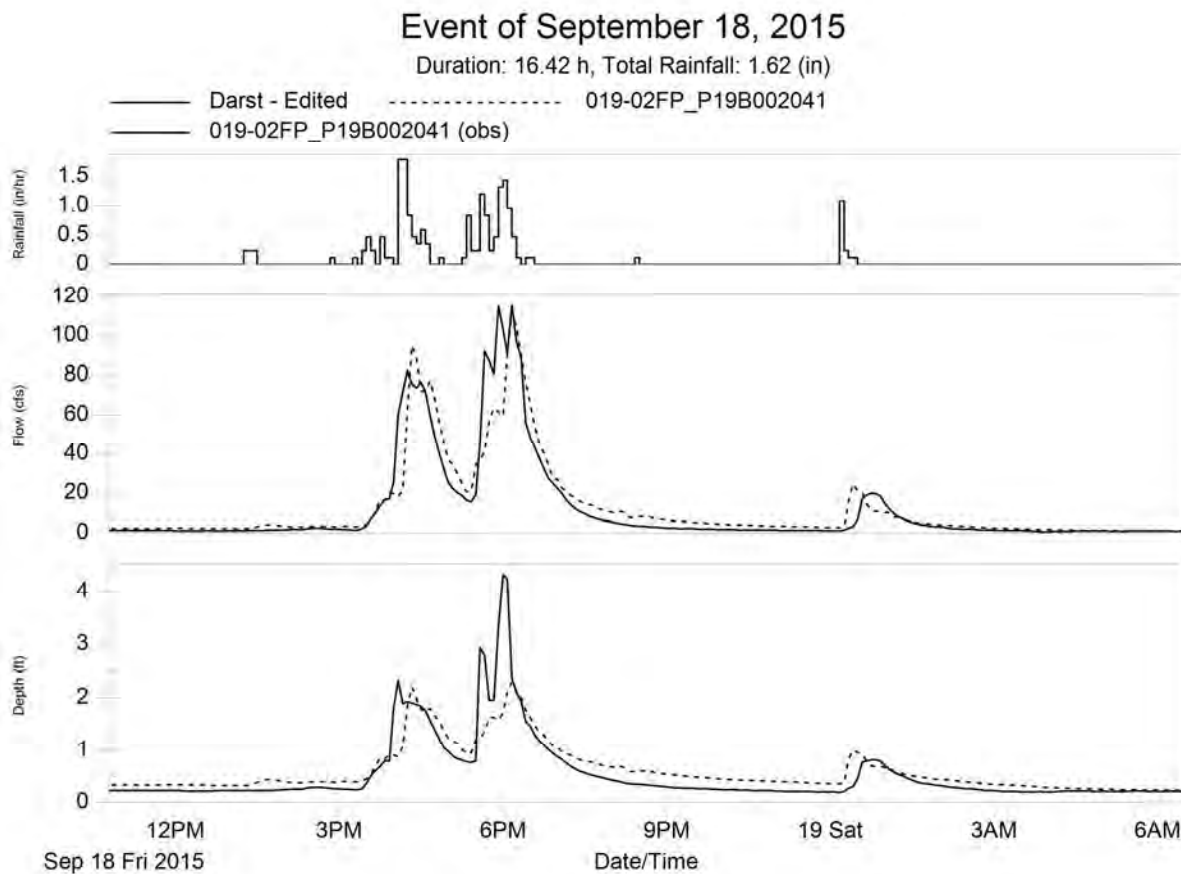
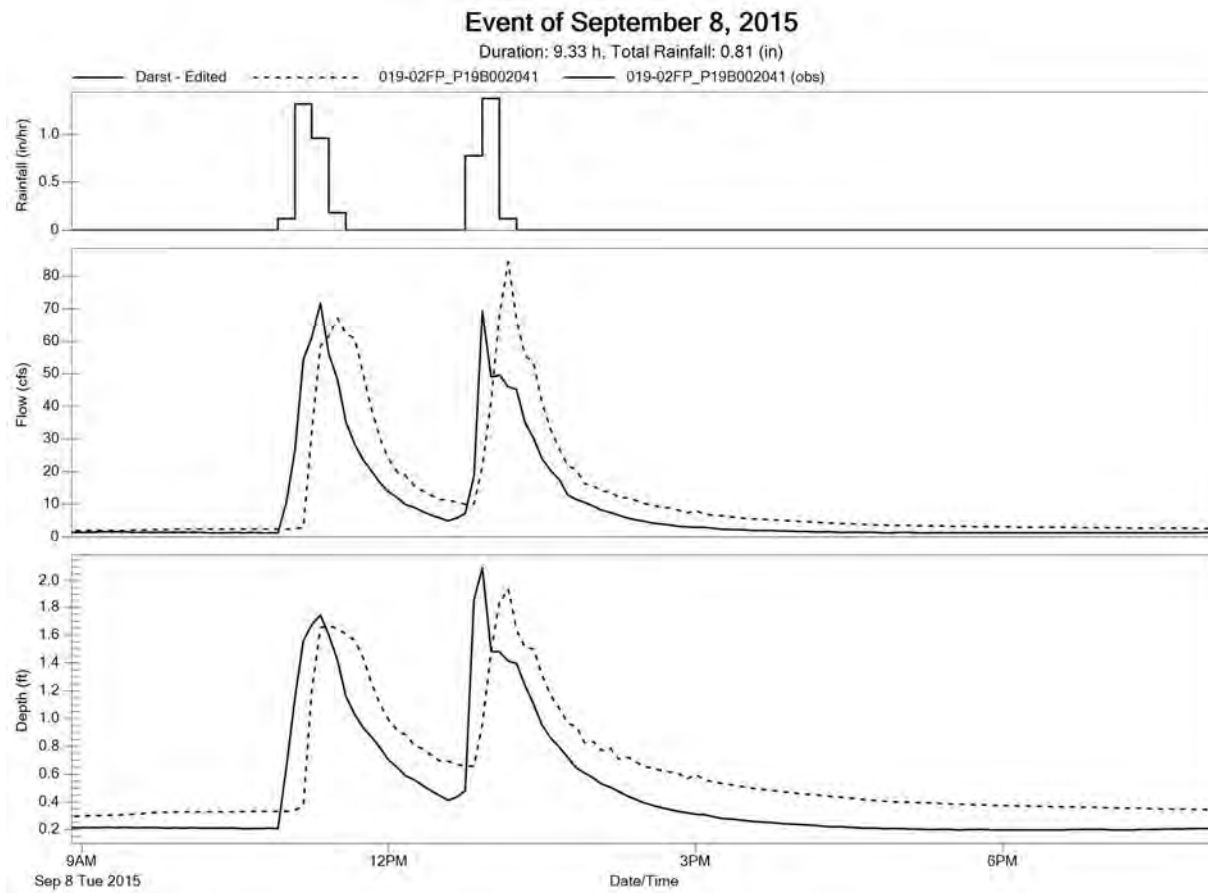
019-02FP: Darst Regulator Influent Flow Meter



Darst 019-02FP

Date	Duration (h)	Rainfall (in) Darst Edited	Maximum Flow (cfs) Observed Modeled		Maximum Flow (mgd) Observed Modeled		Total Volume (ft³) Observed Modeled		Volume (million gallons) Observed Modeled		Peak Flow Rate (-15% to +25%)	Flow Volume (-10% to +20%)	Rainfall Variability
CALIBRATION EVENTS - FLOW													
9/8/2015 9:50	9.3	0.81	71.6	86.6	46.3	55.9	305300	469000	2.3	3.5	21%	54%	variable
9/18/2015 13:10	13.1	1.62	115.5	109.9	74.6	71.0	784800	851000	5.9	6.4	-5%	8%	possibly uniform
11/5/2015 13:55	14.3	0.34	12.5	22.4	8.0	14.5	138000	255000	1.0	1.9	80%	85%	possibly uniform
11/11/2015 19:40	2.3	0.60	109.0	102.2	70.4	66.0	217300	278200	1.6	2.1	-6%	28%	variable
11/16/2015 21:15	35.7	1.59	42.3	47.1	27.4	30.4	1152000	1080000	8.6	8.1	11%	-6%	variable
11/26/2015 21:25	10.8	1.01	30.3	31.5	19.6	20.3	514000	520600	3.8	3.9	4%	1%	possibly uniform
12/13/2015 2:55	30.8	1.75	30.2	34.8	19.5	22.5	890600	1033000	6.7	7.7	15%	16%	variable
12/20/2015 22:20	14.9	0.70	18.1	24.0	11.7	15.5	301400	413300	2.3	3.1	33%	37%	variable
12/23/2015 7:00	6.1	0.67	55.4	47.9	35.8	30.9	385000	356800	2.9	2.7	-14%	-7%	variable
12/28/2015 3:40	16.2	2.54	89.5	116.1	57.8	75.0	1331000	1228000	10.0	9.2	30%	-8%	variable
VERIFICATION EVENTS - FLOW													
6/17/2015 2:05	3.6	0.80	127.3	106.2	82.2	68.6	452700	346100	3.4	2.6	-17%	-24%	variable
6/24/2015 18:00	52.1	1.91	55.5	76.8	35.9	49.6	890200	1220000	6.7	9.1	38%	37%	variable
6/28/2015 17:30	4.3	0.51	86.7	55.5	56.0	35.8	259600	238900	1.9	1.8	-36%	-8%	variable
7/8/2015 5:15	24.4	1.39	49.5	43.5	32.0	28.1	681900	775800	5.1	5.8	-12%	14%	variable
7/11/2015 8:45	12.3	1.07	Bad Meter Data										
7/16/2015 21:00	4.3	1.22	Bad Meter Data										
7/29/2015 1:30	2.5	0.57	58.6	88.7	37.8	57.3	180000	253900	1.3	1.9	51%	41%	possibly uniform
8/18/2015 2:05	2.9	0.40	62.2	75.1	40.2	48.5	150800	185200	1.1	1.4	21%	23%	possibly uniform
8/18/2015 15:05	4.9	0.66	55.5	94.0	35.9	60.7	253600	320000	1.9	2.4	69%	26%	variable
							WEIGHTED AVERAGES						
							Calibration - Possibly Uniform		4%		13%		possibly uniform
							Calibration - Variable		10%		6%		variable
							Calibration Weighted - All Events		8%		8%		
							Verification - Possibly Uniform		36%		33%		possibly uniform
							Verification - Variable		0%		14%		variable
							Verification Weighted - All Events		9%		16%		
							Weighted Average - All Events		9%		11%		
							NET AVERAGES						
							Calibration - Possibly Uniform		26%		32%		possibly uniform
							Calibration - Variable		13%		16%		variable
							Calibration Net - All Events		17%		21%		
							Verification - Possibly Uniform		36%		32%		possibly uniform
							Verification - Variable		9%		9%		variable
							Verification Net - All Events		16%		16%		
							Net Average - All Events		17%		19%		

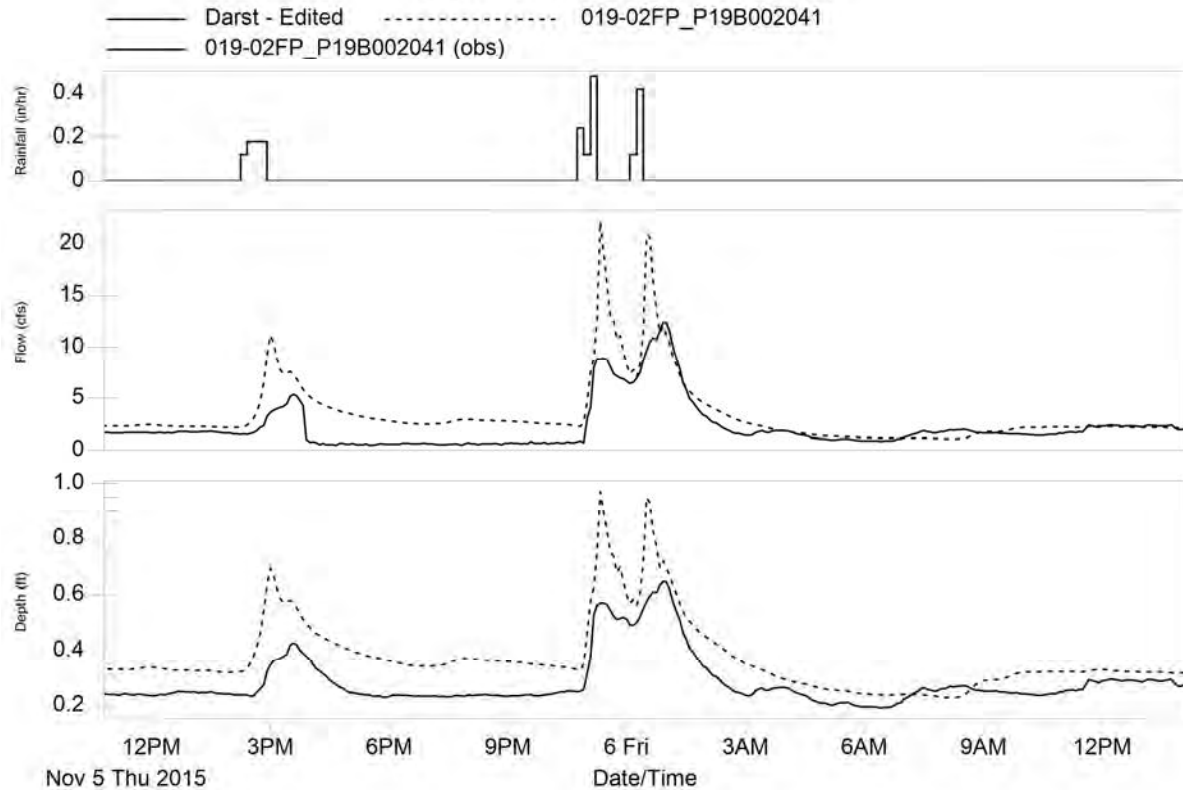
Darst 019-02FP – Calibration Events



Darst 019-02FP – Calibration Events

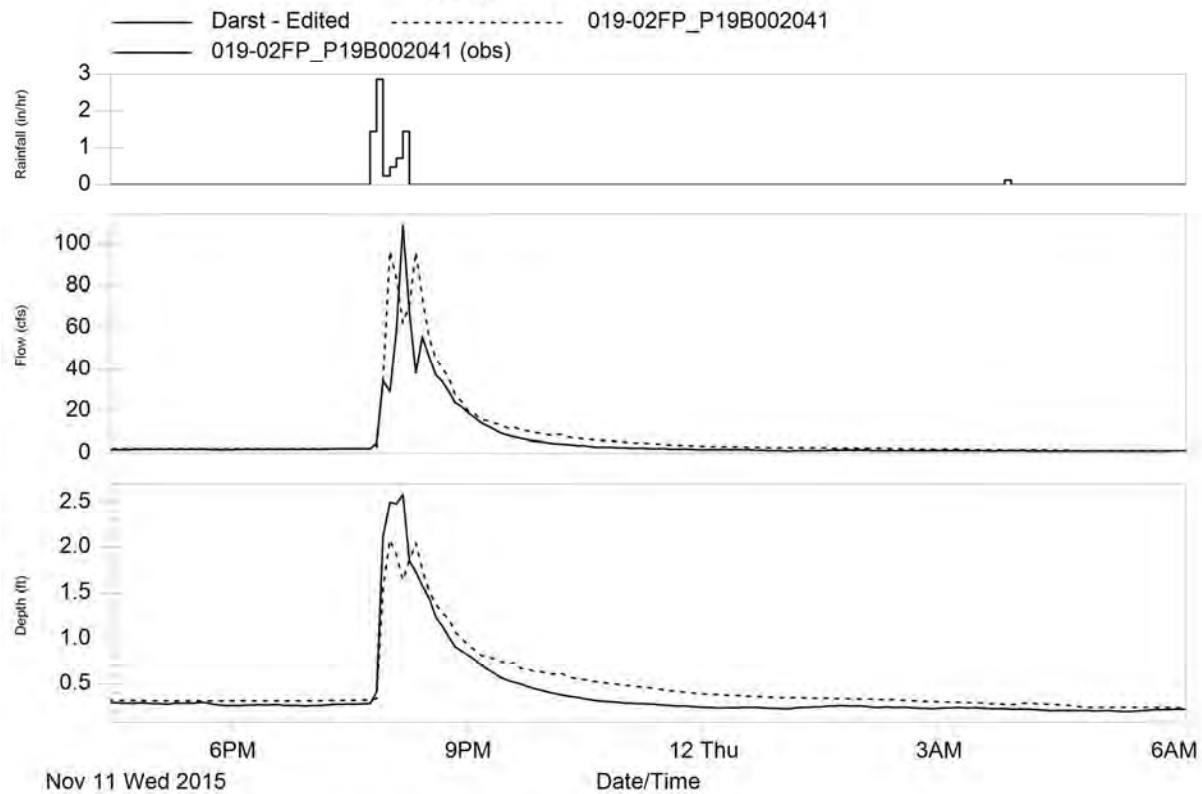
Event of November 5, 2015

Duration: 22.75 h, Total Rainfall: 0.34 (in)

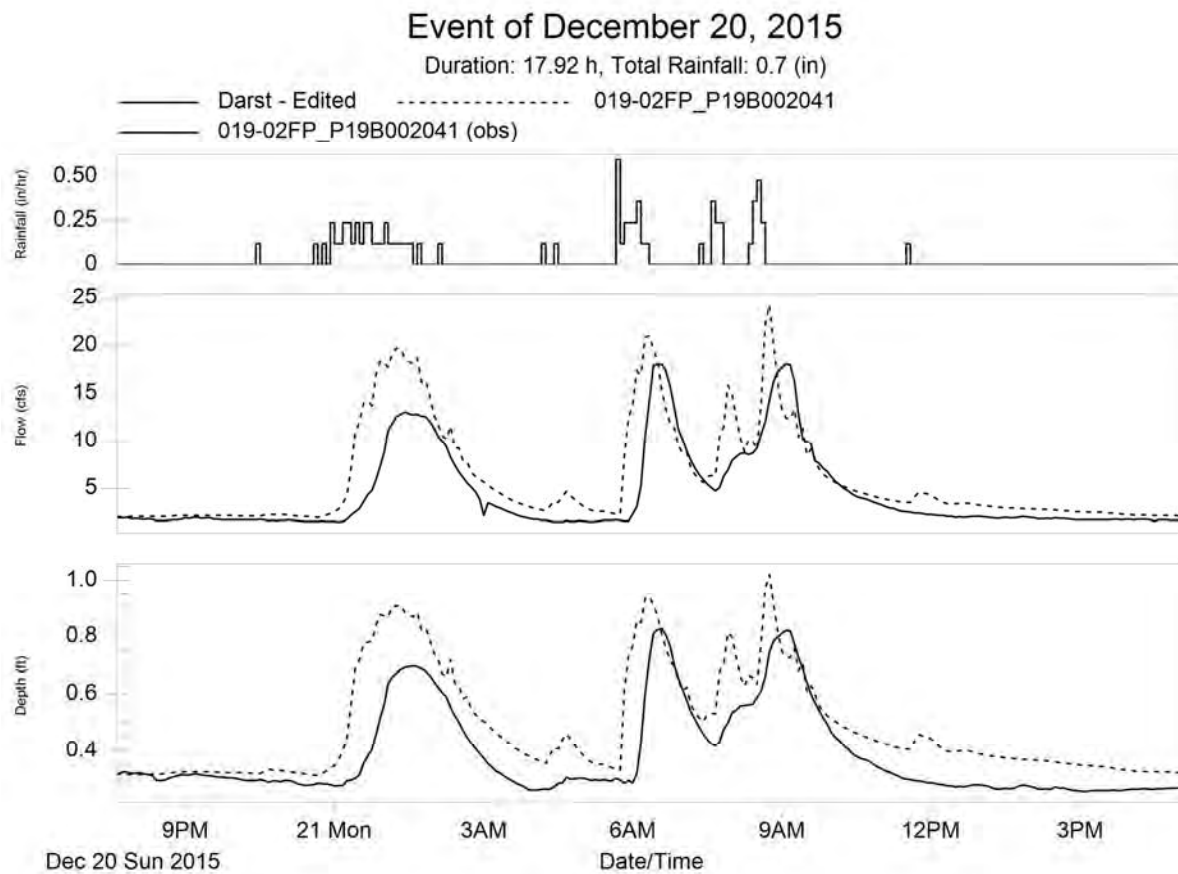
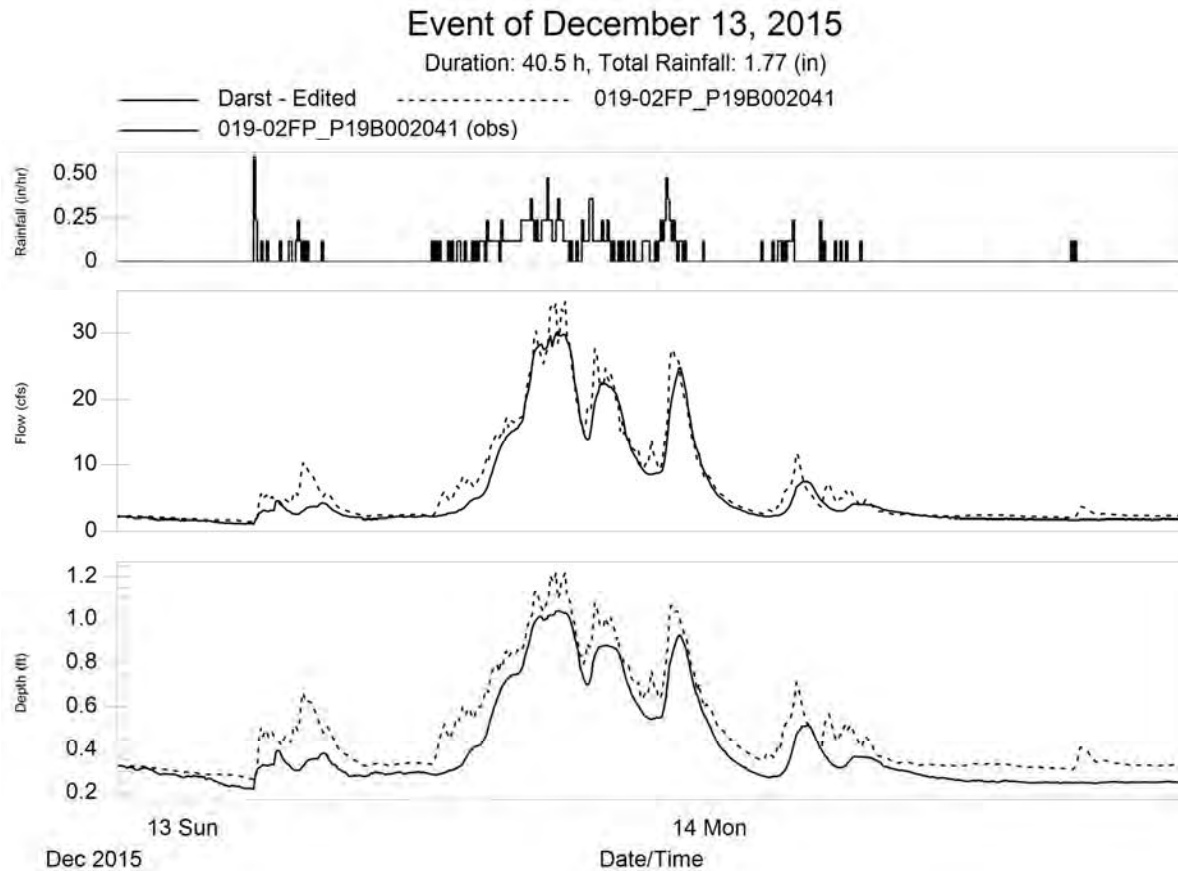


Event of November 11, 2015

Duration: 11.42 h, Total Rainfall: 0.61 (in)



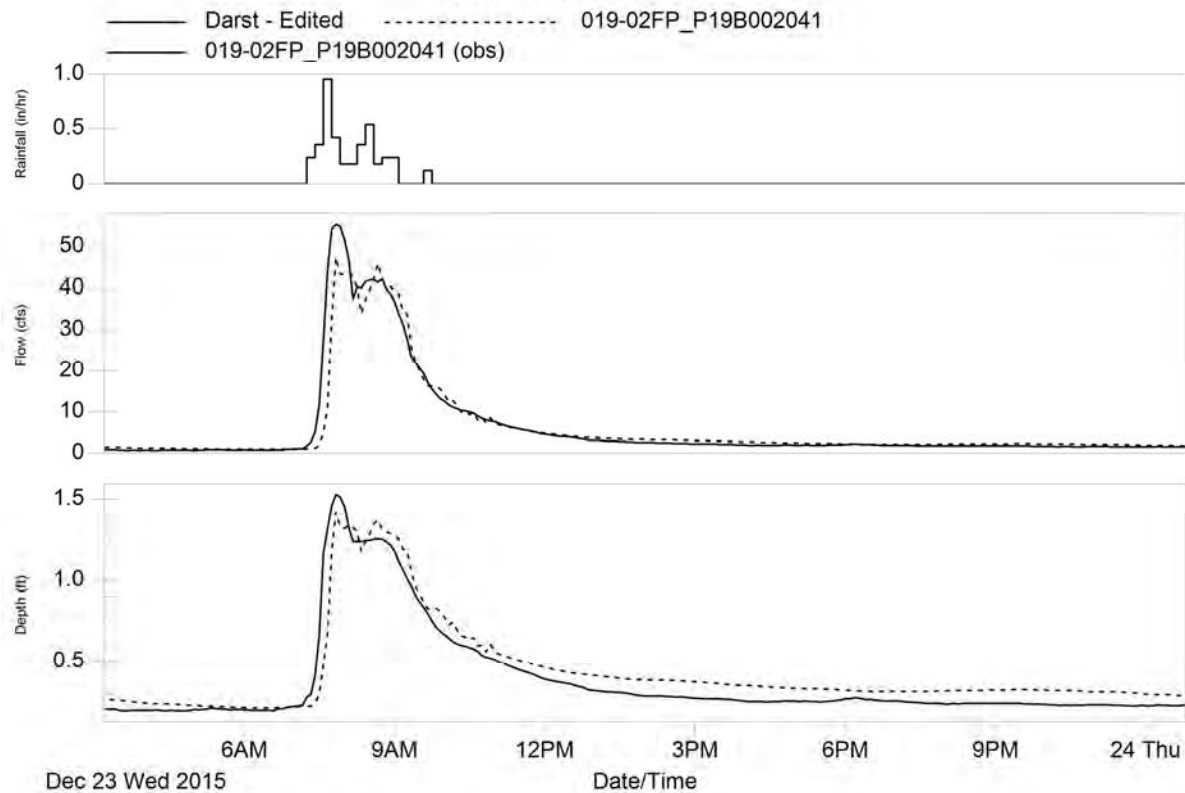
Darst 019-02FP – Calibration Events



Darst 019-02FP – Calibration Events

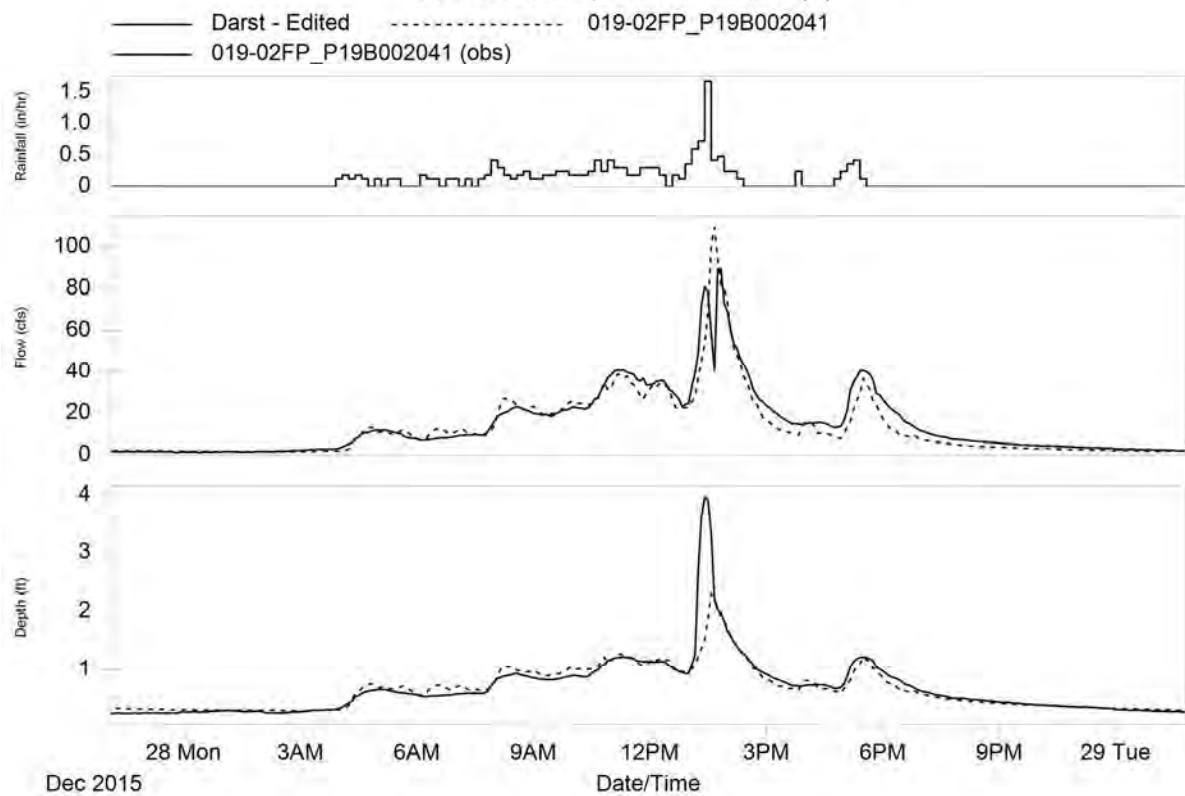
Event of December 23, 2015

Duration: 18 h, Total Rainfall: 0.67 (in)

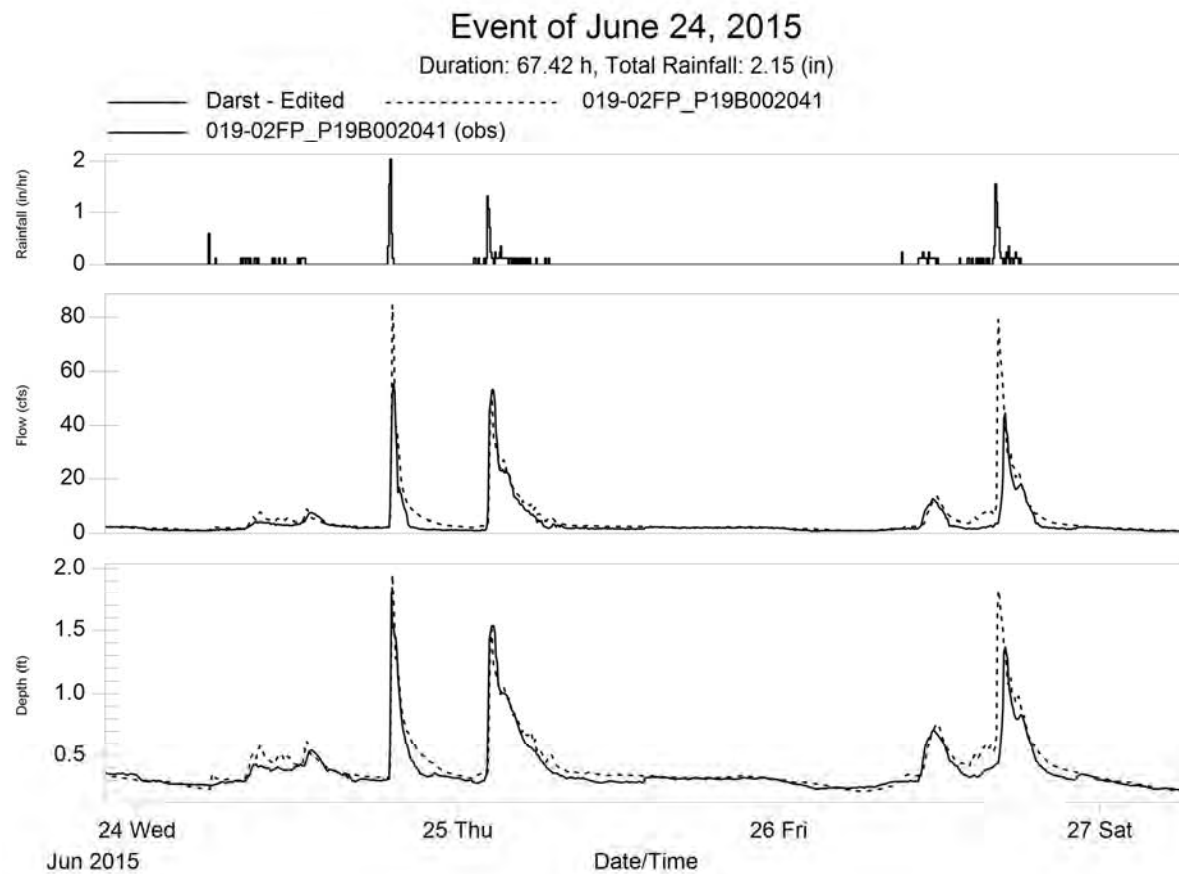
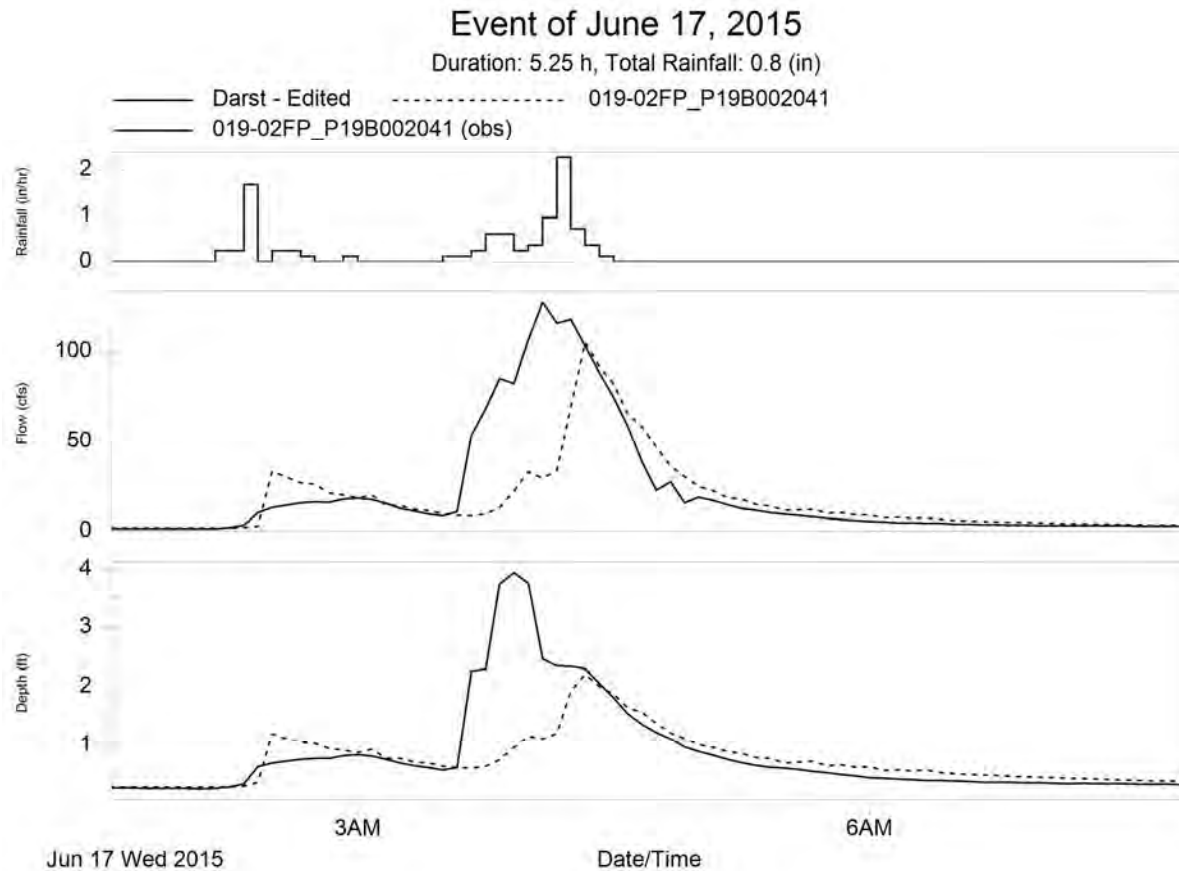


Event of December 28, 2015

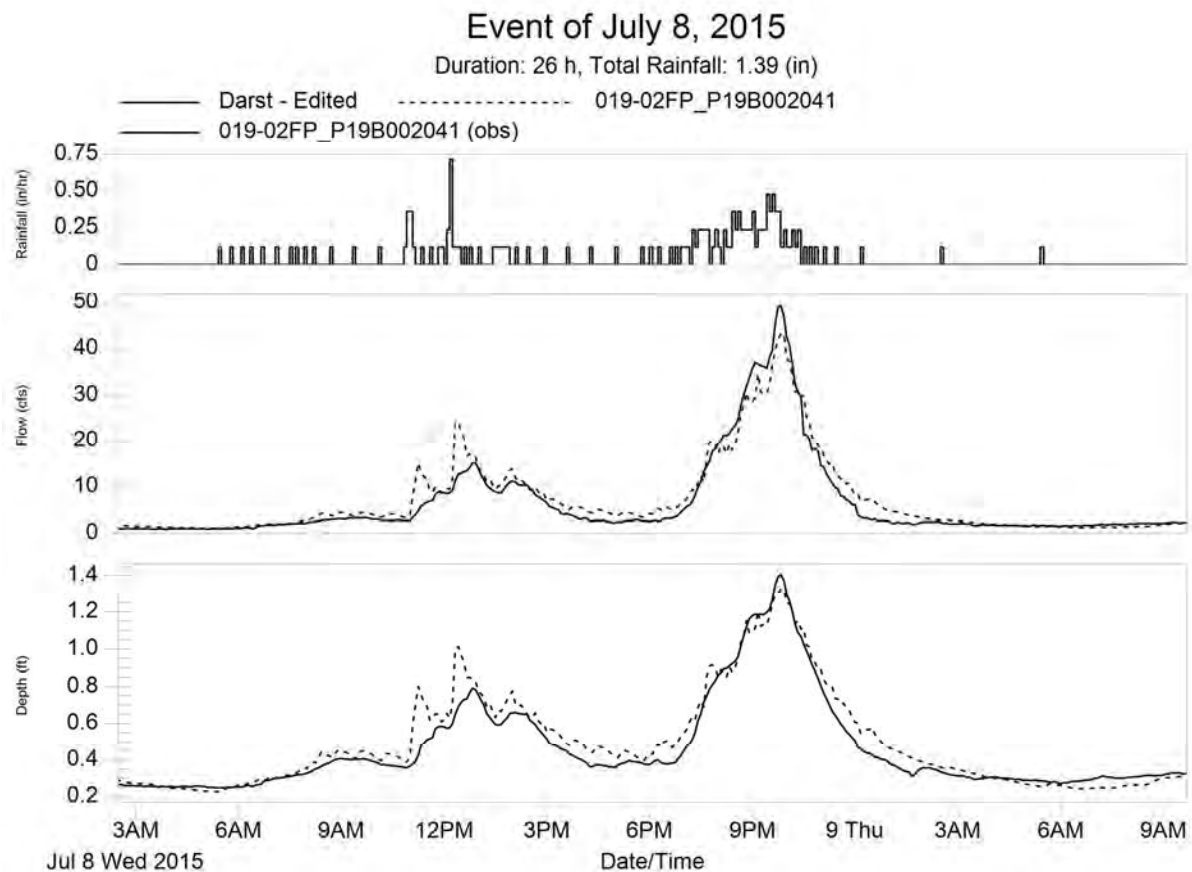
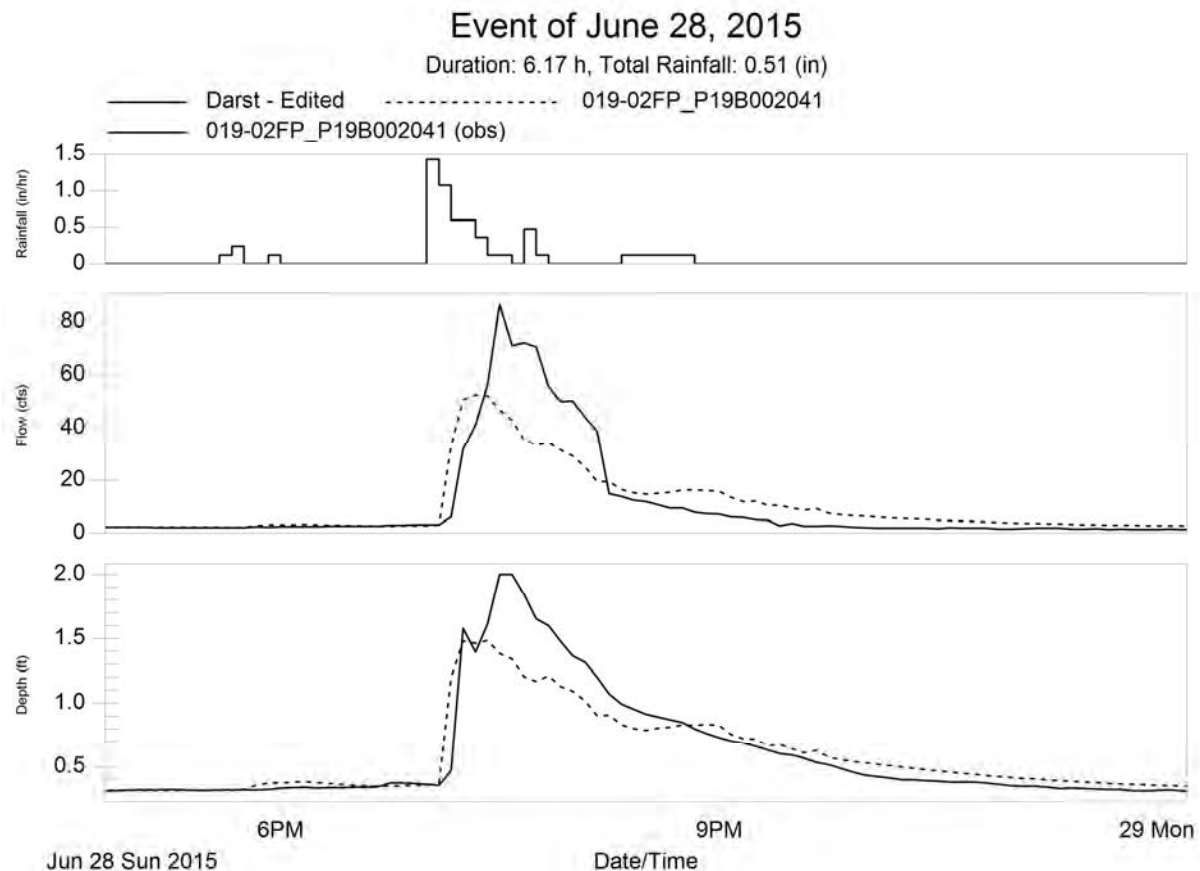
Duration: 23.08 h, Total Rainfall: 2.54 (in)



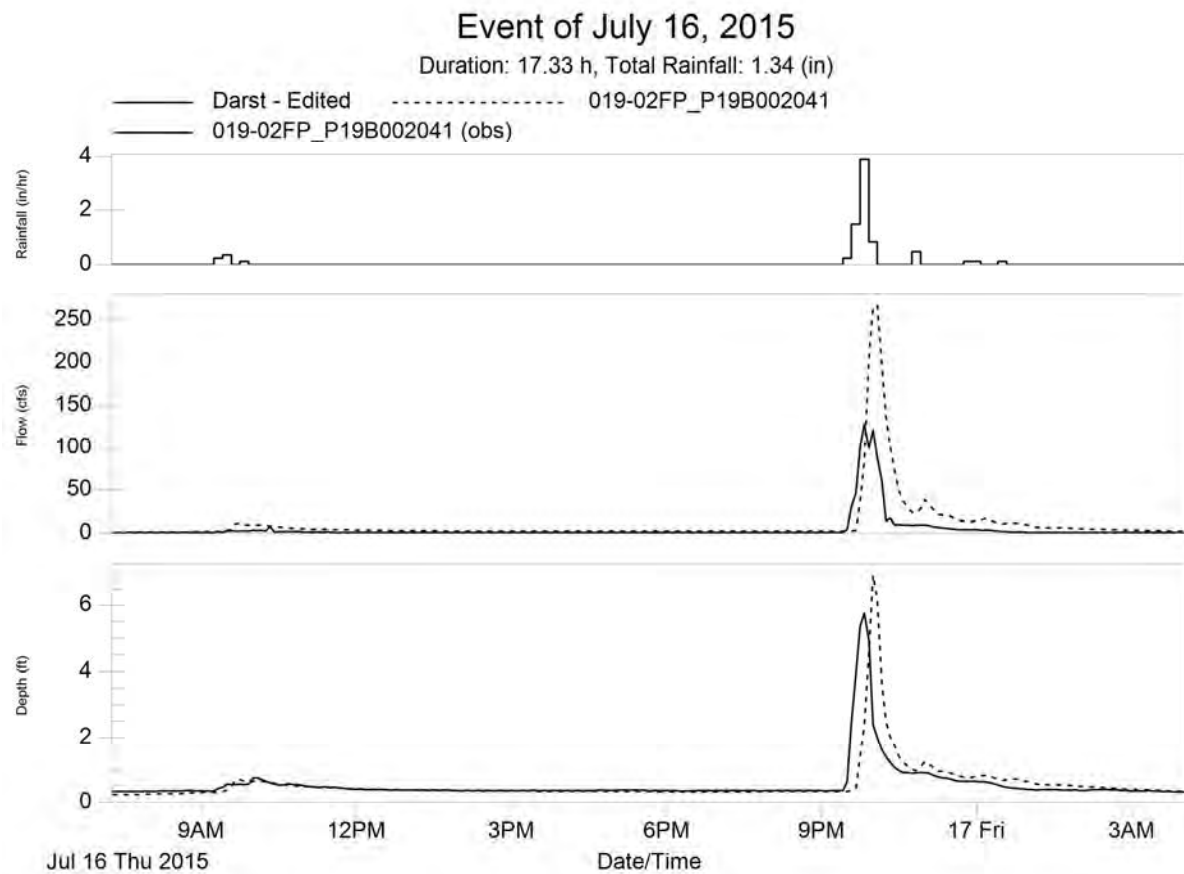
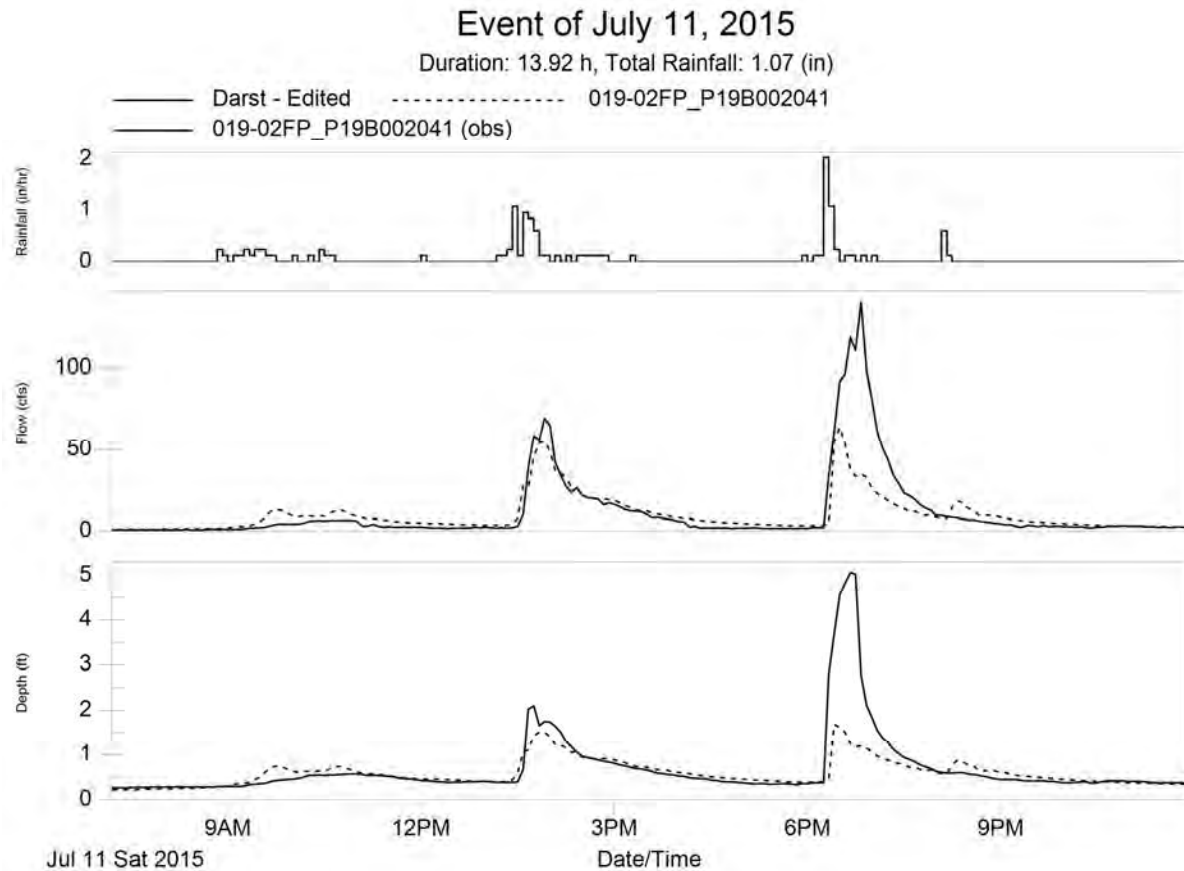
Darst 019-02FP – Verification Events



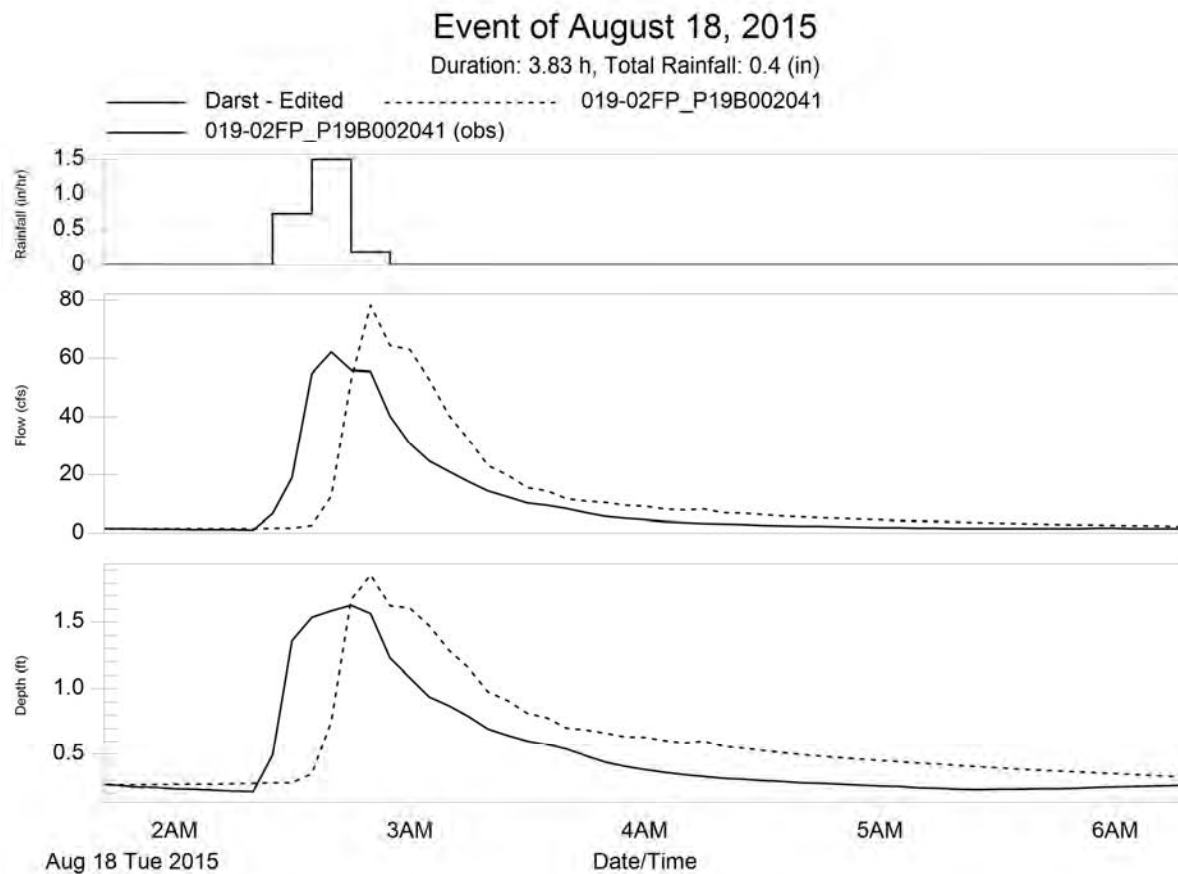
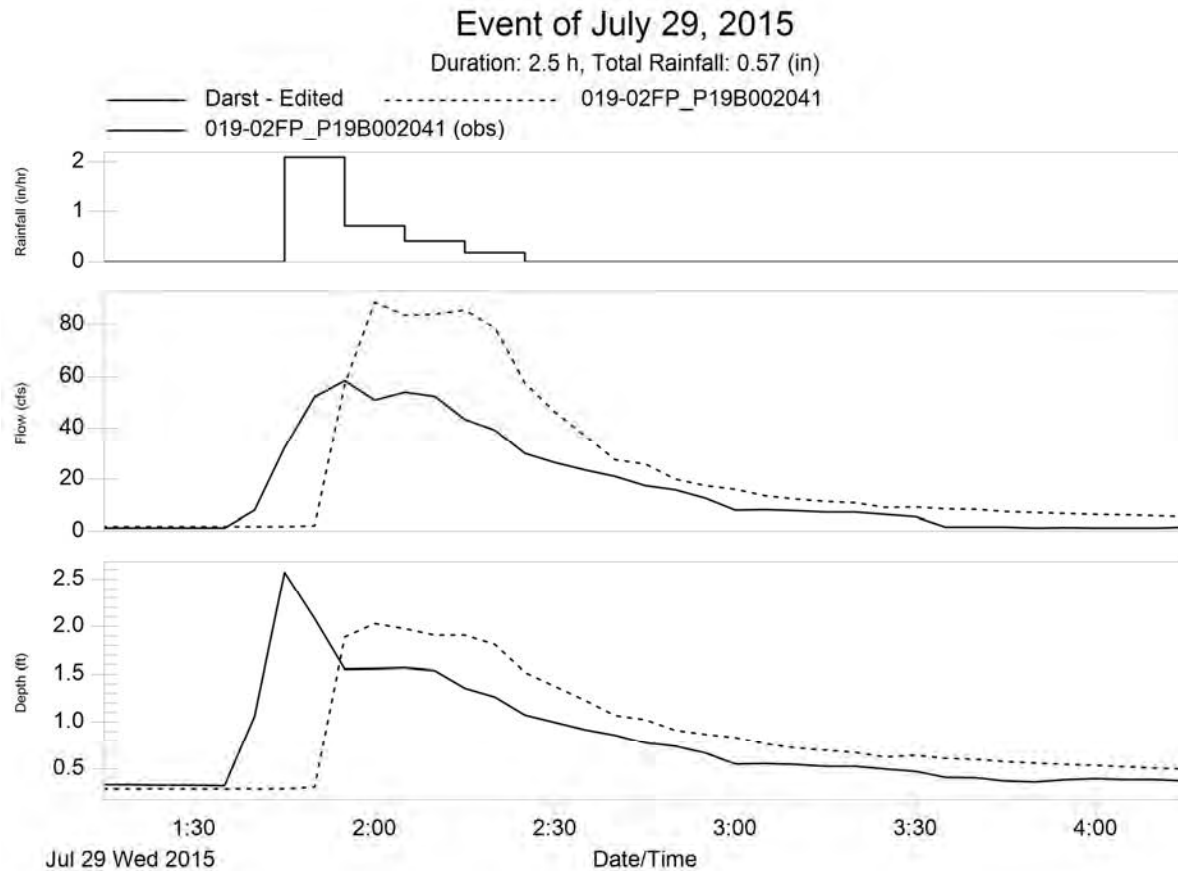
Darst 019-02FP – Verification Events



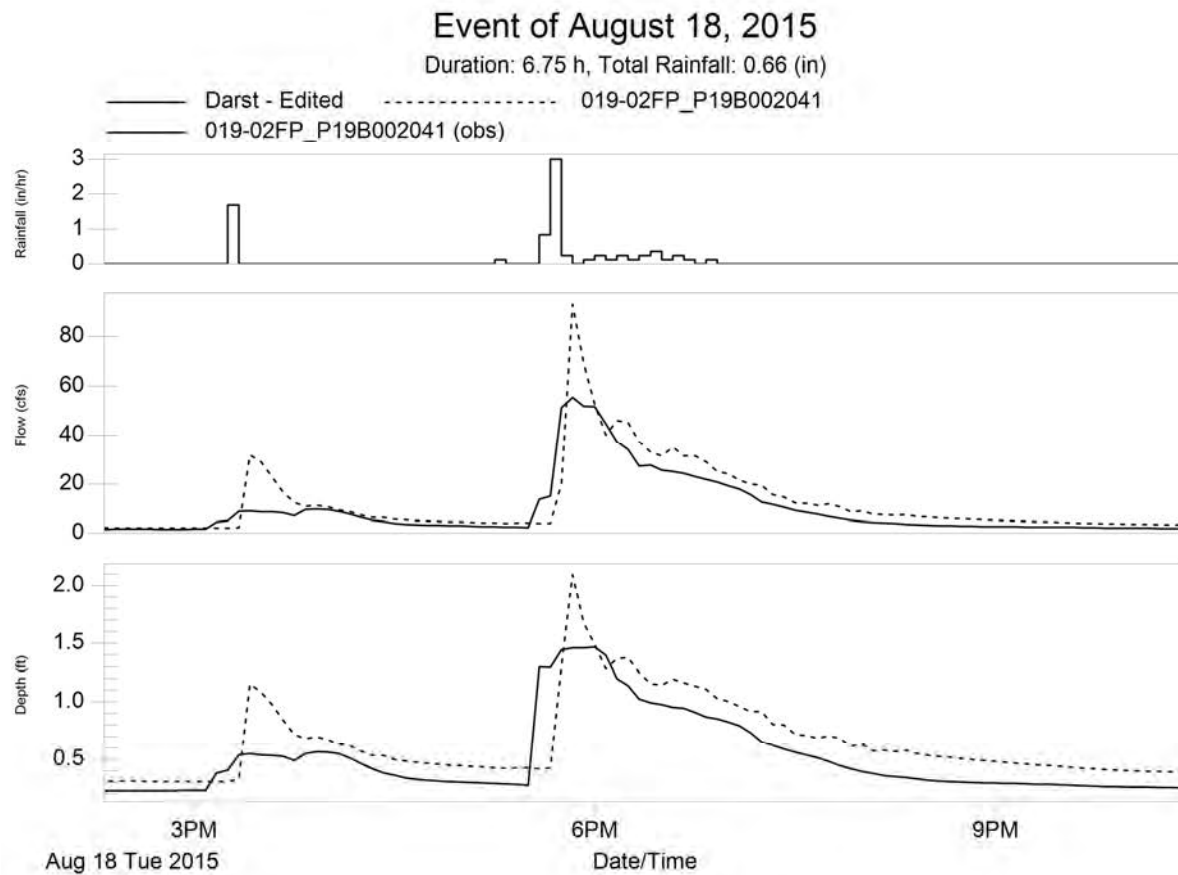
Darst 019-02FP – Verification Events



Darst 019-02FP – Verification Events



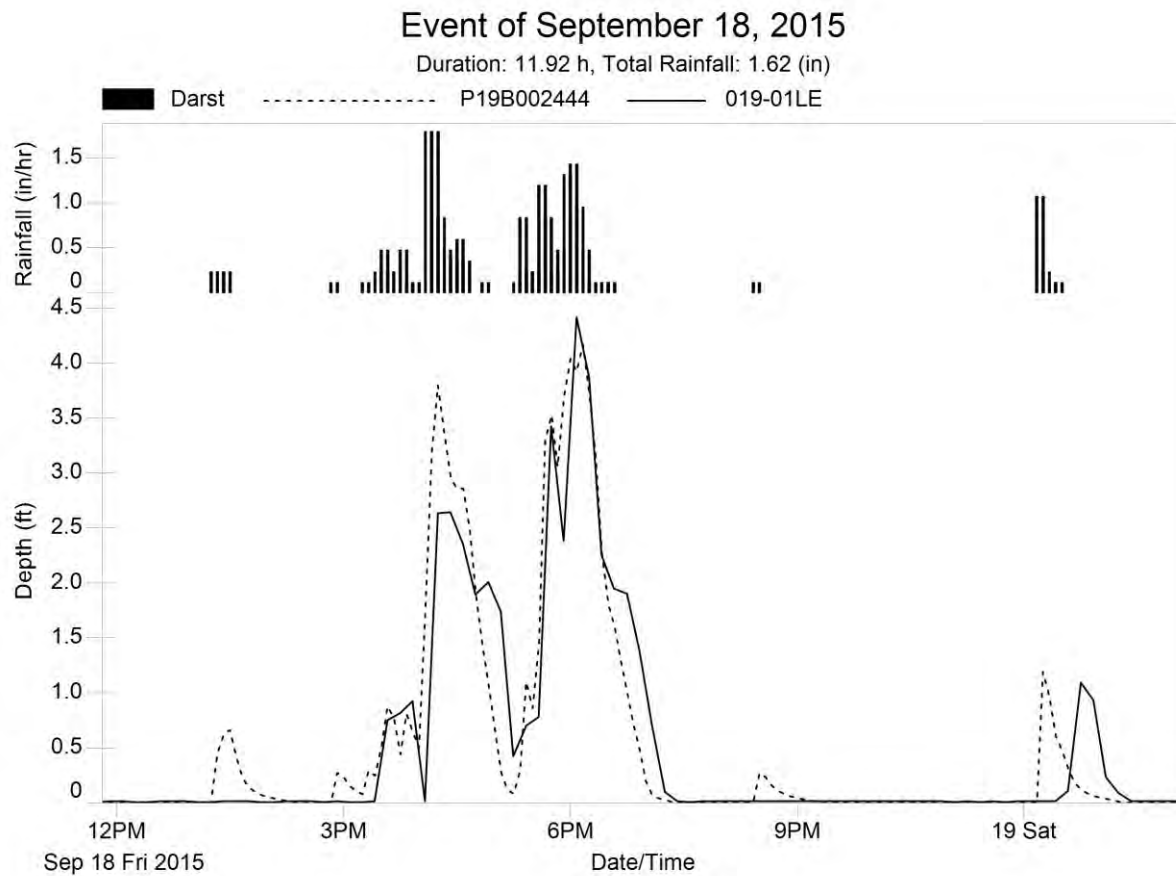
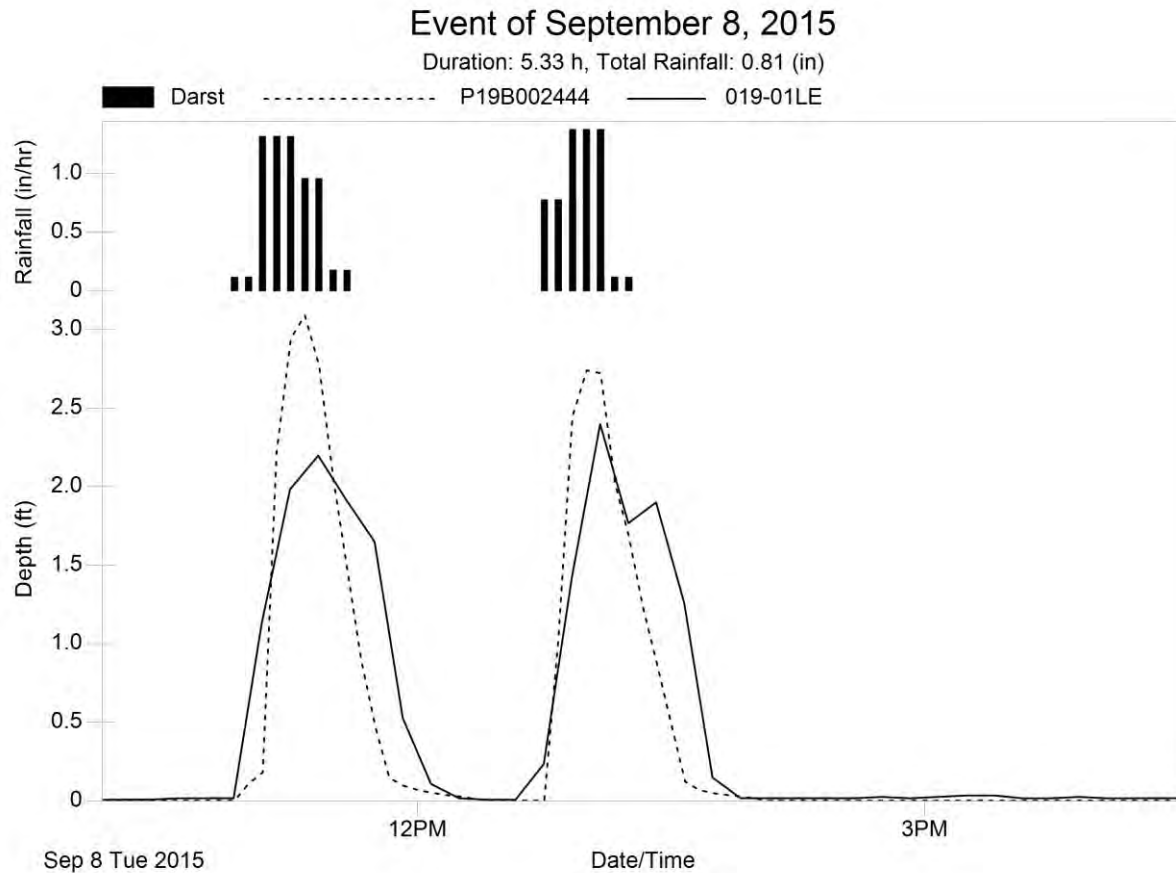
Darst 019-02FP – Verification Events



Date	Duration (h)	Maximum Depth (ft)		Minimum Depth (ft)		Average Depth (ft)		Maximum Depth (ft)	Minimum Depth (ft)	Average Depth (ft)	Rainfall Variability			
		metered	modeled	metered	modeled	metered	modeled	Surcharged: -0.33 ft to +1.67 ft	Surcharged: -0.33 ft to +1.67 ft	Surcharged: -0.33 ft to +1.67 ft				
CALIBRATION EVENTS - DEPTH								Non-Surcharged: -0.33 ft to +0.33 ft	Non-Surcharged: -0.33 ft to +0.33 ft	Non-Surcharged: -0.33 ft to +0.33 ft				
9/8/2015 10:40:00	5.33	2.400	3.092	0.008	0.000	0.594	0.504	0.692	-0.008	-0.090	variable			
9/18/2015 13:00:0	11.92	4.417	4.166	0.008	0.000	0.594	0.618	-0.251	-0.008	0.025	possibly uniform			
11/5/2015 13:45:0	11.75	0.758	0.972	0.008	0.000	0.102	0.099	0.213	-0.008	-0.004	possibly uniform			
11/11/2015 19:30:	2.00	3.442	3.560	0.008	0.000	1.098	1.003	0.118	-0.008	-0.095	variable			
11/16/2015 21:10:	33.58	1.833	1.908	0.008	0.000	0.278	0.193	0.075	-0.008	-0.085	variable			
11/26/2015 18:15:	28.50	1.717	1.072	0.008	0.000	0.178	0.137	-0.645	-0.008	-0.040	possibly uniform			
12/13/2015 2:40:0	29.17	1.625	1.126	0.008	0.000	0.230	0.259	-0.499	-0.008	0.029	variable			
12/20/2015 22:15:	13.83	0.483	0.909	0.008	0.000	0.087	0.190	0.426	-0.008	0.103	variable			
12/23/2015 6:50:0	6.58	2.067	2.350	0.017	0.000	0.549	0.456	0.283	-0.017	-0.093	variable			
12/28/2015 0:45:0	19.58	4.175	3.427	0.008	0.000	0.725	0.563	-0.748	-0.008	-0.163	variable			
VERIFICATION EVENTS - DEPTH														
6/17/2015 2:05:00	3.58	4.333	4.737	0.009	0.000	1.173	1.081	0.404	-0.008	-0.092	variable			
6/24/2015 4:20:00	67.42	2.242	2.522	0.242	0.295	0.763	0.751	0.280	0.054	-0.012	variable			
6/28/2015 17:25:0	4.83	Bad meter data									variable			
7/8/2015 5:10:00	24.75	Bad meter data									variable			
7/11/2015 8:40:00	12.08	Bad meter data									variable			
7/16/2015 9:00:00	16.58	5.908	6.013	0.008	0.000	0.167	0.221	0.105	-0.008	0.053	possibly uniform			
7/29/2015 1:15:00	1.92	2.742	3.193	0.017	0.000	0.954	0.787	0.451	-0.017	-0.168	possibly uniform			
8/18/2015 2:05:00	1.58	2.358	3.028	0.008	0.000	0.910	0.766	0.670	-0.008	-0.144	possibly uniform			
8/18/2015 15:10:0	4.33	2.575	3.046	0.008	0.000	0.536	0.489	0.471	-0.008	-0.047	variable			
Notes: Results from interceptor only model using flow meter data as influent flow to regulator.						WEIGHTED AVERAGES								
						Calibration - Relatively Uniform		N/A		N/A		N/A		relatively uniform
						Calibration - Possibly Uniform		-0.298		-0.008		0.008		possibly uniform
						Calibration - Variable		-0.059		-0.010		-0.094		variable
						Calibration Weighted - All Events		-0.131		-0.010		-0.074		All Events
						Verification - Relatively Uniform		N/A		N/A		N/A		relatively uniform
						Verification - Possibly Uniform		0.312		-0.012		-0.139		possibly uniform
						Verification - Variable		0.392		0.049		-0.057		variable
						Verification Weighted - All Event		0.349		0.042		-0.094		All Events
						Weighted Average - All Events		0.094		0.030		-0.084		
						NET AVERAGES								
						Calibration - Relatively Uniform		N/A		N/A		N/A		relatively uniform
						Calibration - Possibly Uniform		-0.228		-0.008		-0.006		possibly uniform
						Calibration - Variable		0.050		-0.009		-0.056		variable
						Calibration Net - All Events		-0.034		-0.009		-0.041		All Events
						Verification - Relatively Uniform		N/A		N/A		N/A		relatively uniform
						Verification - Possibly Uniform		0.409		-0.011		-0.086		possibly uniform
Verification - Variable		0.385		0.012		-0.050		variable						
Verification Net - All Events		0.397		0.001		-0.068		All Events						
Net Average - All Events		0.128		-0.005		-0.051								

Notes:
Results from interceptor only model using flow meter data as influent flow to regulator.

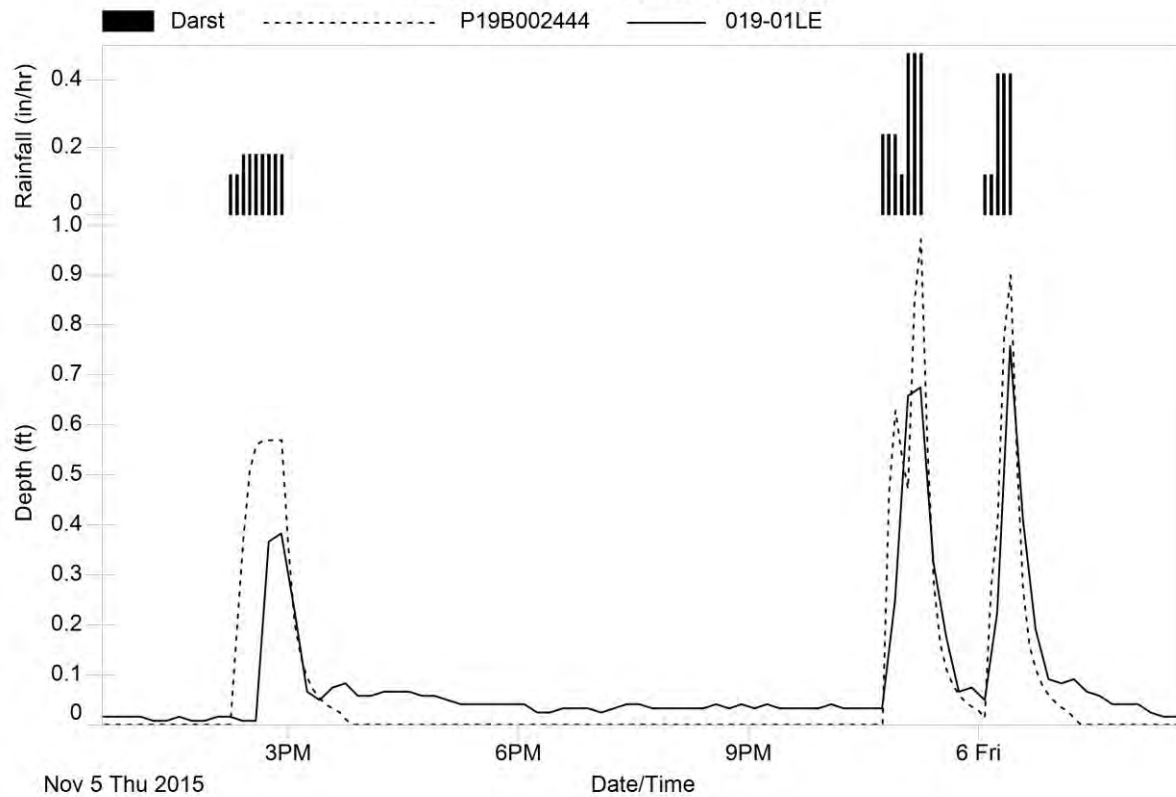
Darst 019-01LE – Calibration Events



Darst 019-01LE – Calibration Events

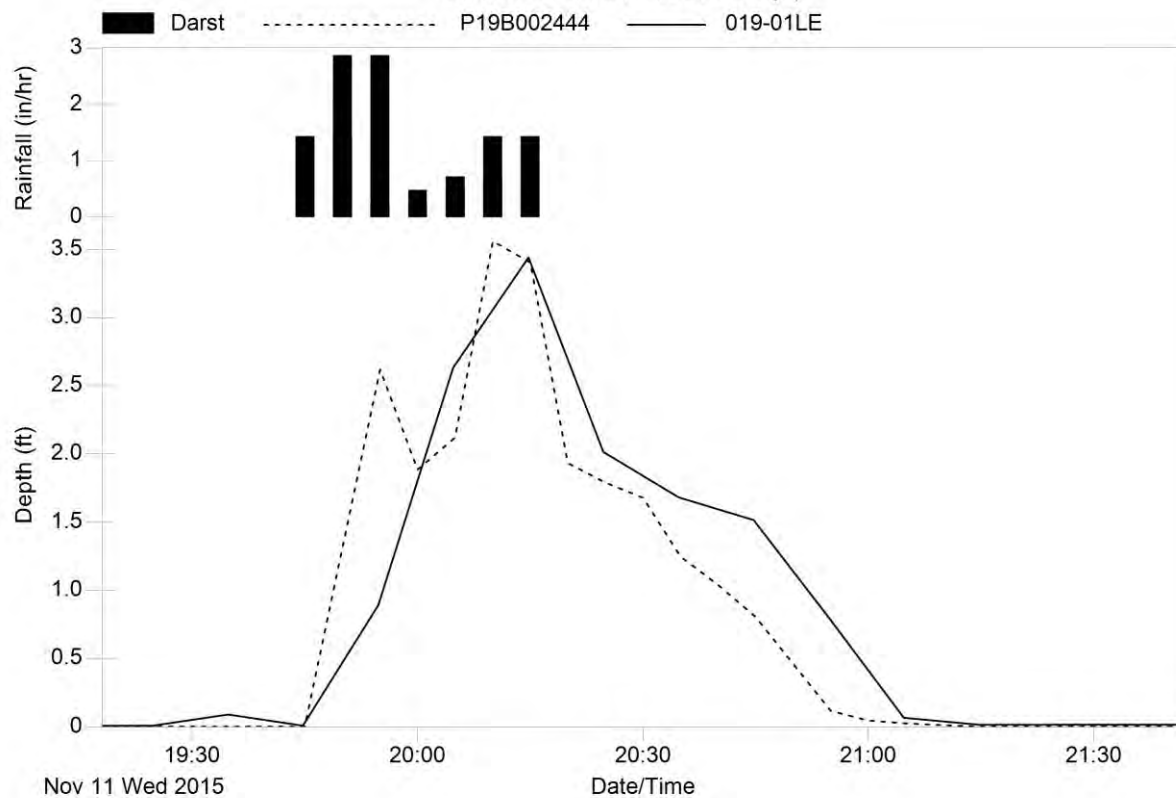
Event of November 5, 2015

Duration: 11.75 h, Total Rainfall: 0.34 (in)



Event of November 11, 2015

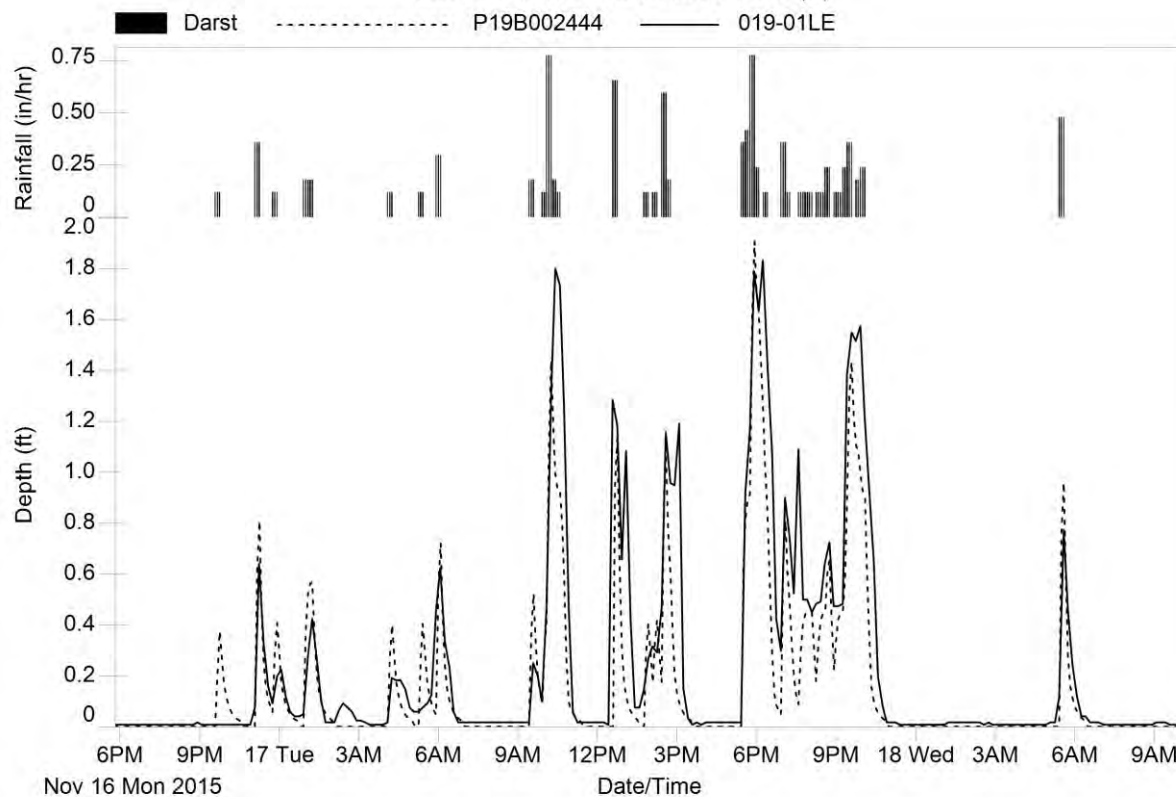
Duration: 2 h, Total Rainfall: 0.6 (in)



Darst 019-01LE – Calibration Events

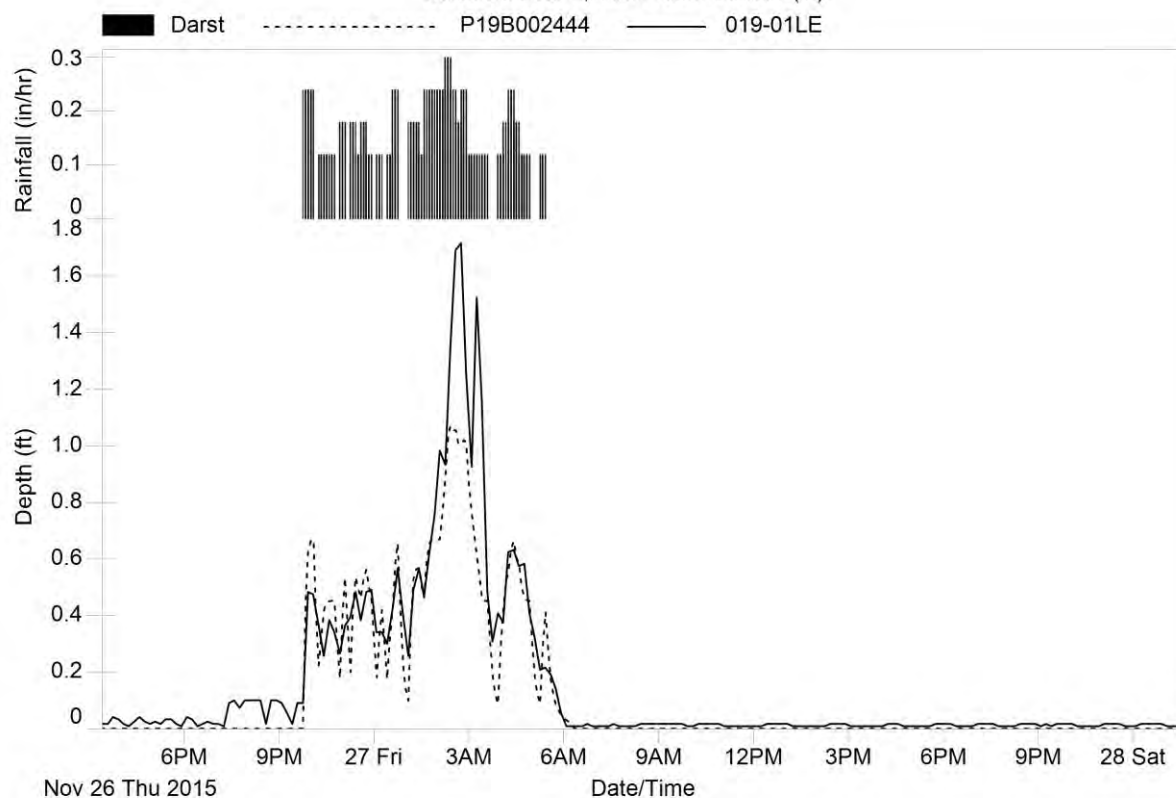
Event of November 16, 2015

Duration: 33.58 h, Total Rainfall: 1.59 (in)



Event of November 26, 2015

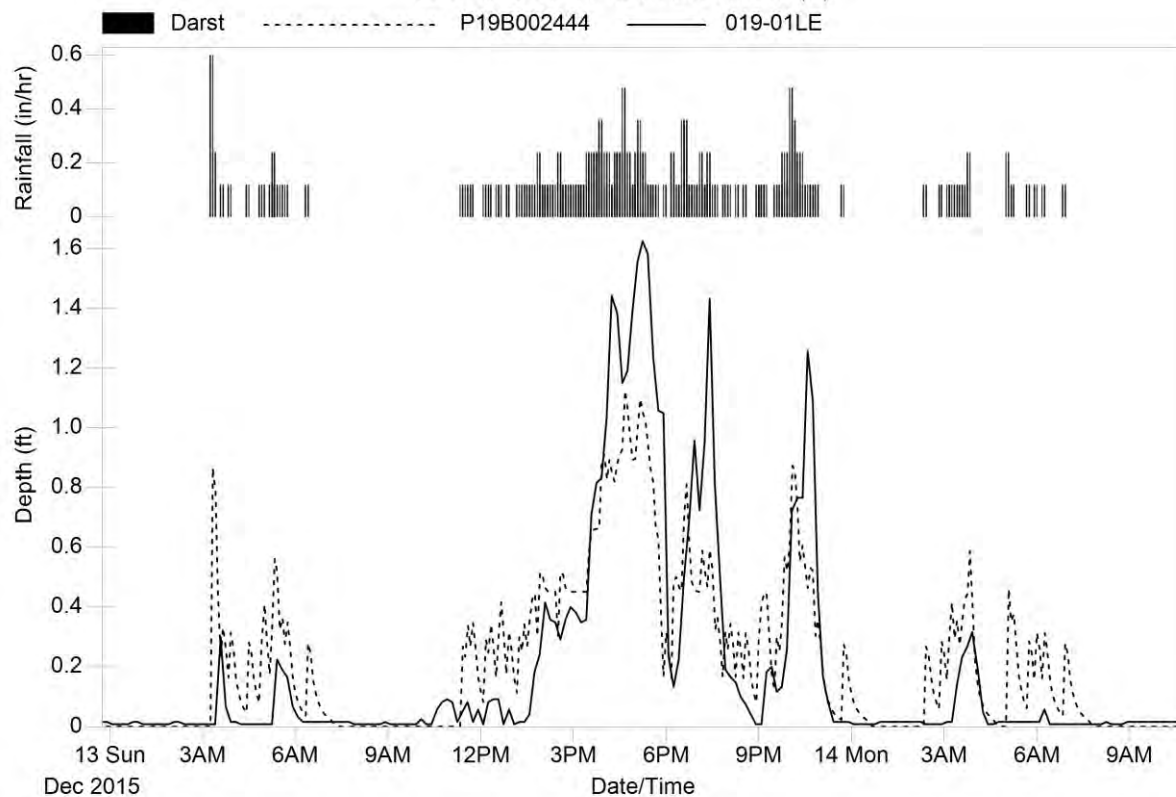
Duration: 28.5 h, Total Rainfall: 1.01 (in)



Darst 019-01LE – Calibration Events

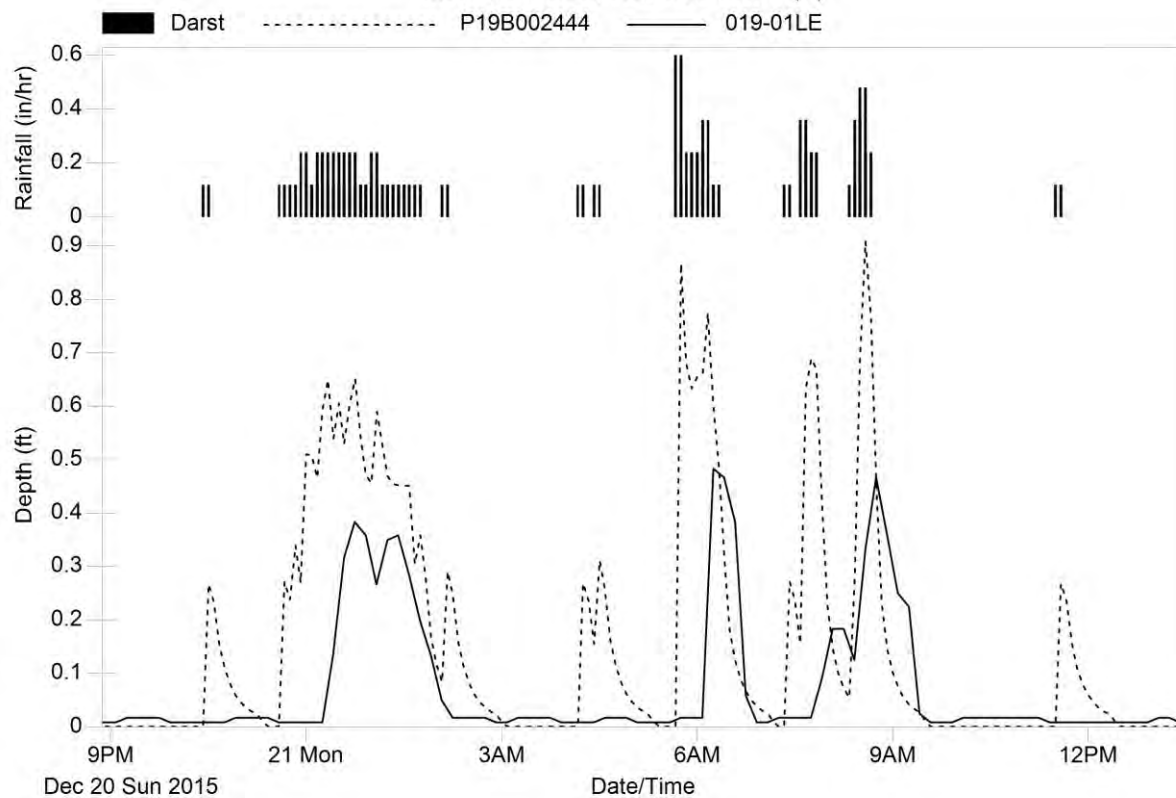
Event of December 13, 2015

Duration: 29.17 h, Total Rainfall: 1.75 (in)



Event of December 20, 2015

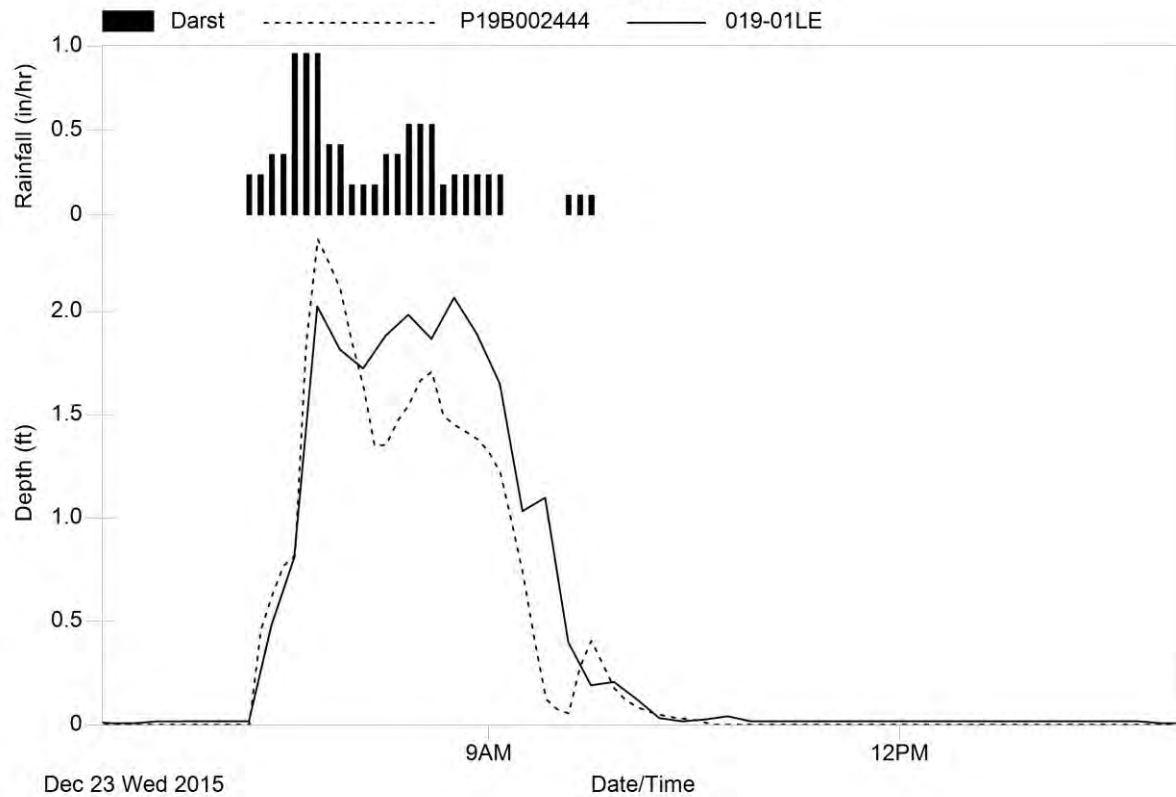
Duration: 13.83 h, Total Rainfall: 0.7 (in)



Darst 019-01LE – Calibration Events

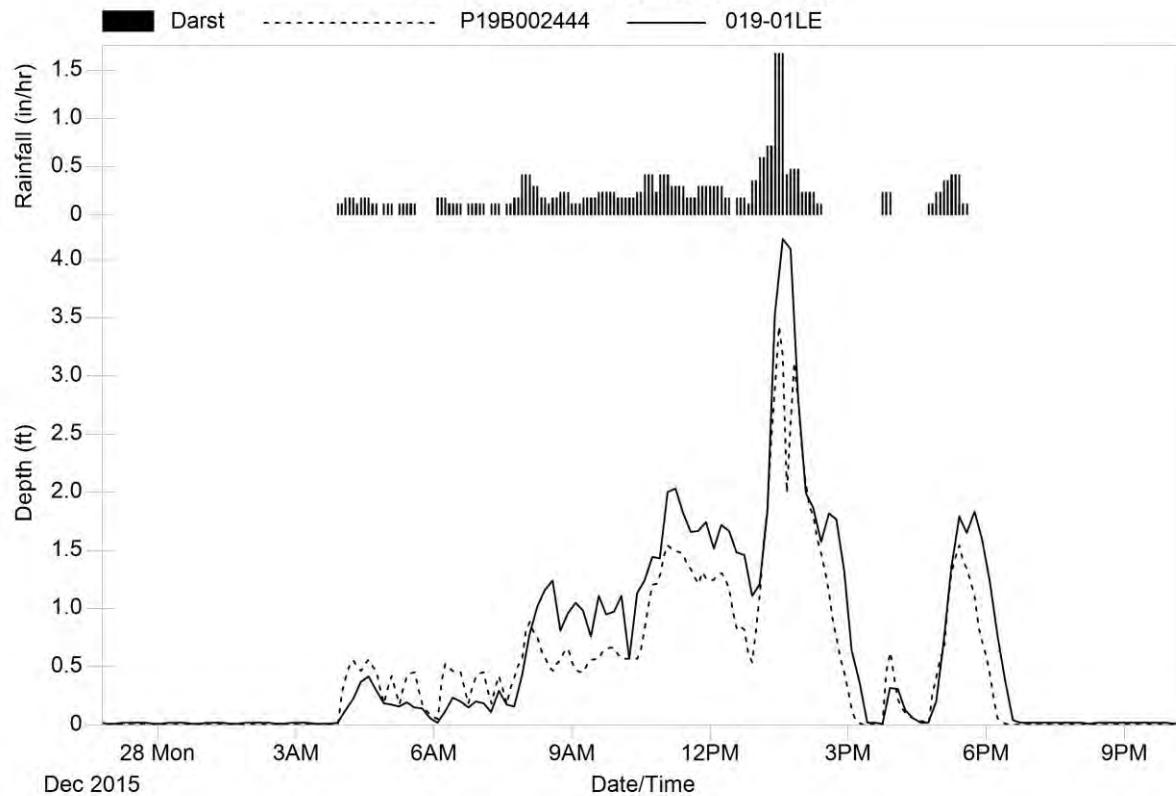
Event of December 23, 2015

Duration: 6.58 h, Total Rainfall: 0.67 (in)

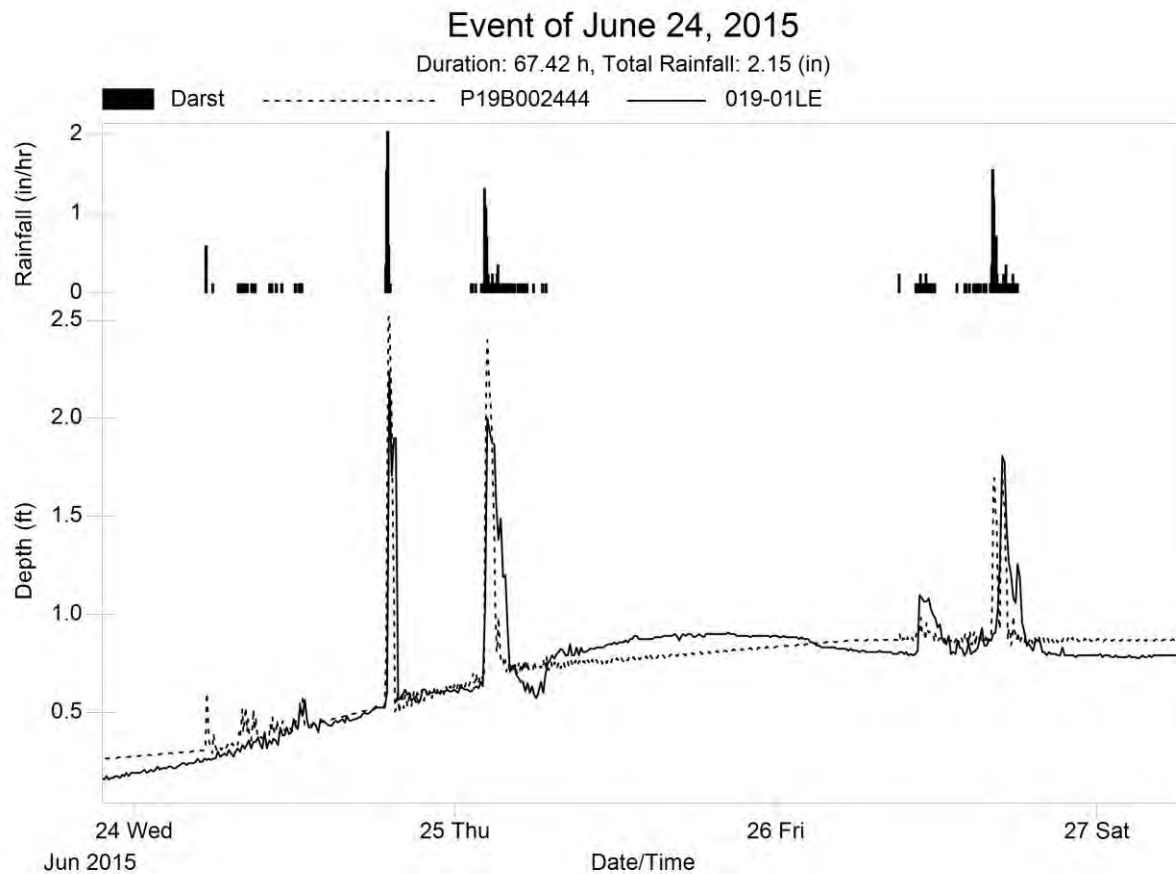
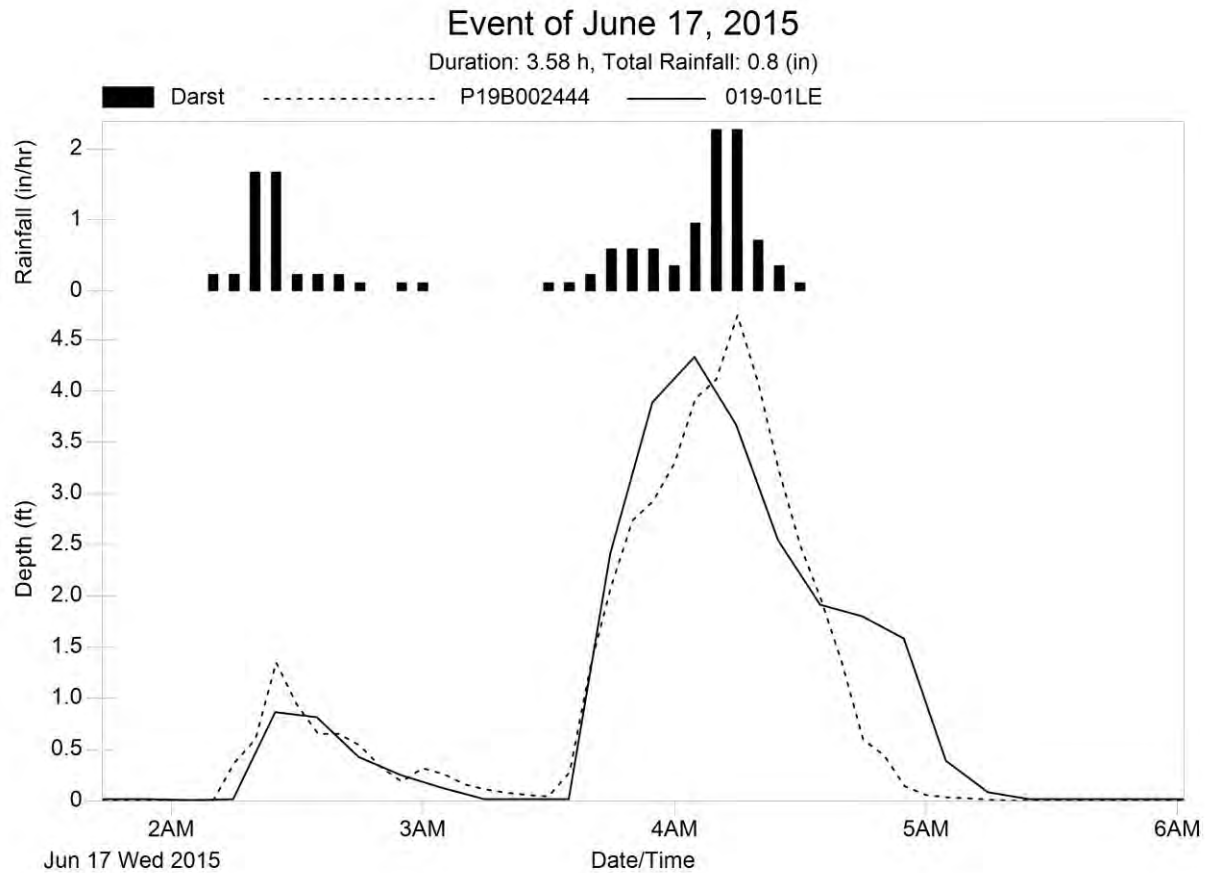


Event of December 28, 2015

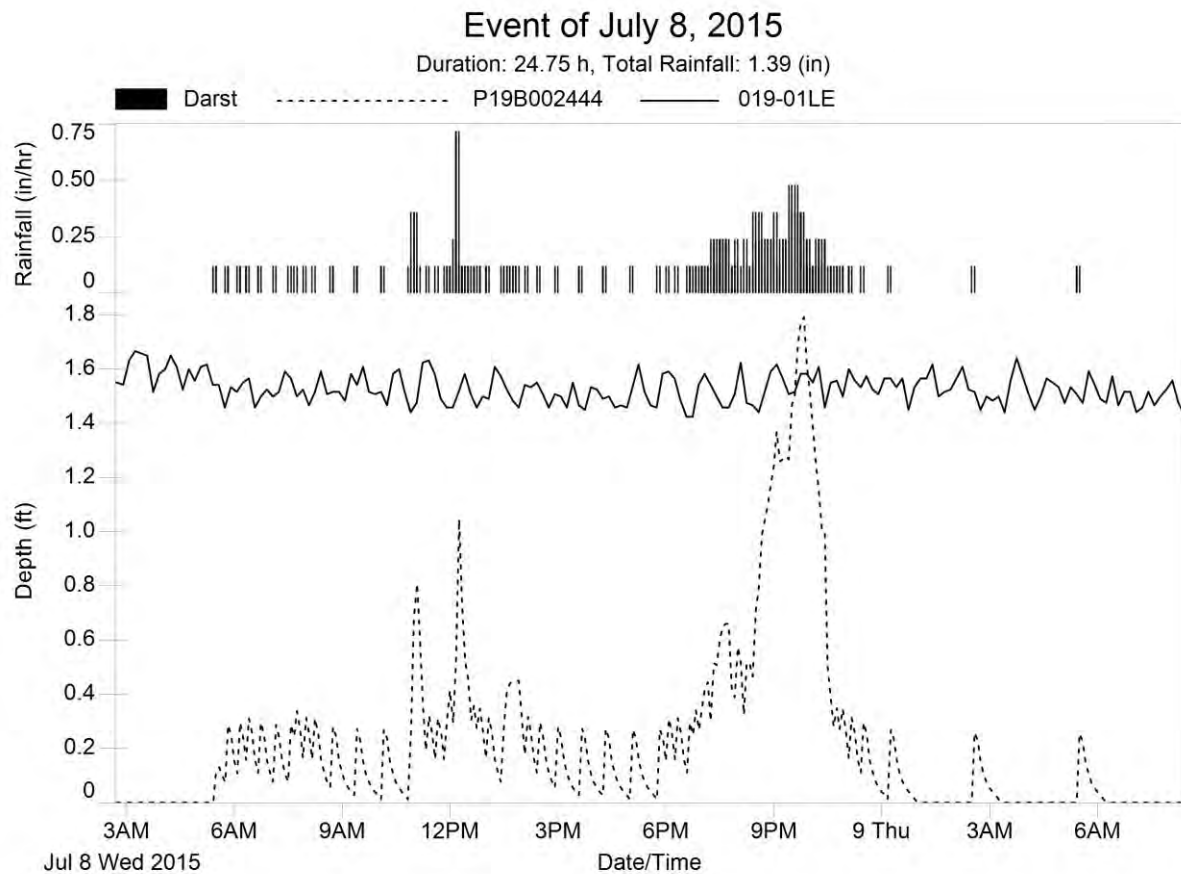
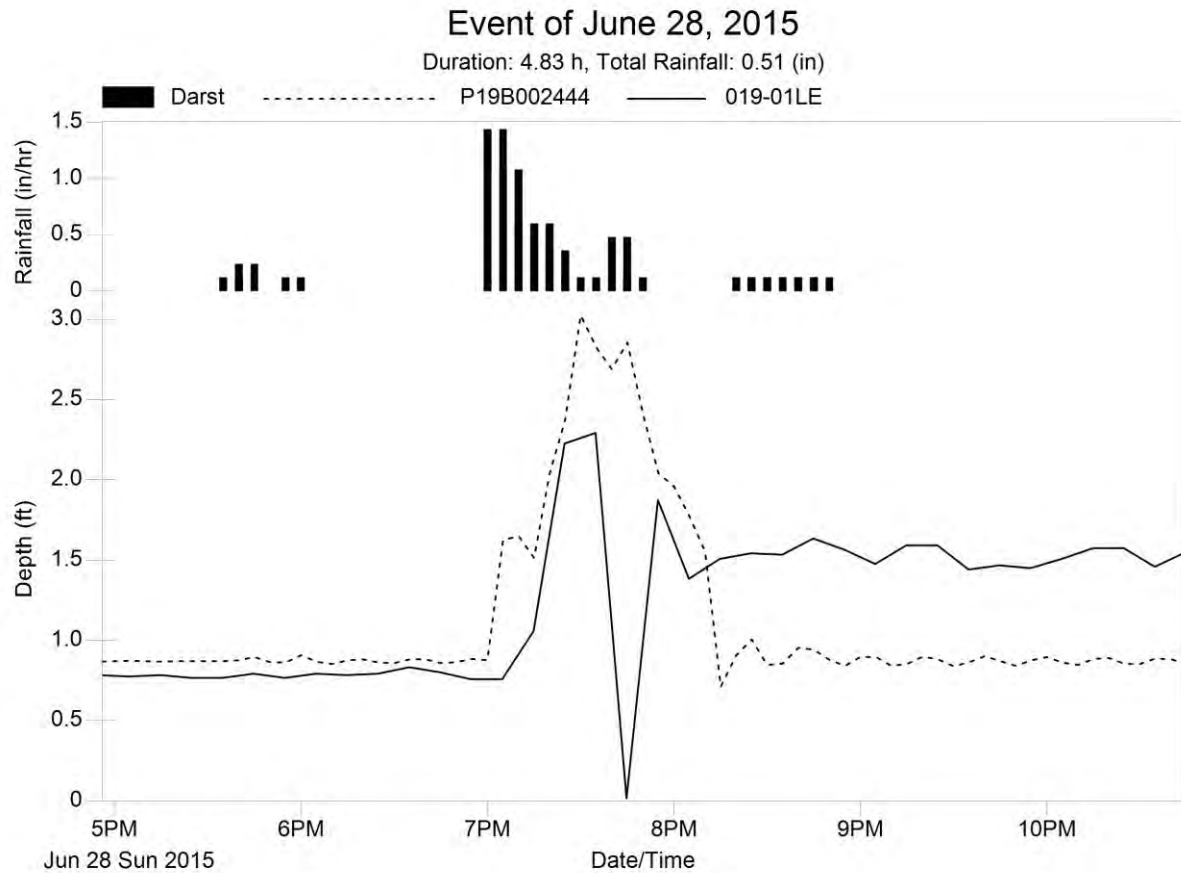
Duration: 19.58 h, Total Rainfall: 2.54 (in)



Darst 019-01LE – Calibration Events



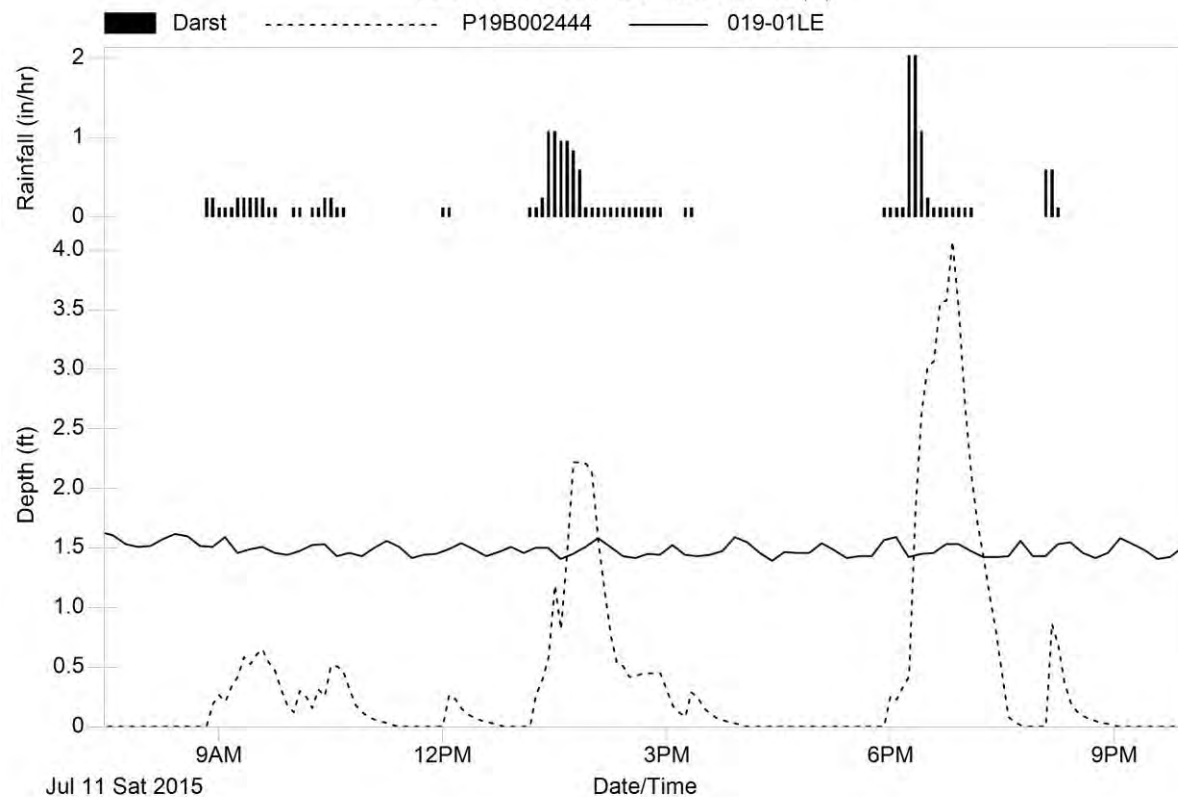
Darst 019-01LE – Calibration Events



Darst 019-01LE – Calibration Events

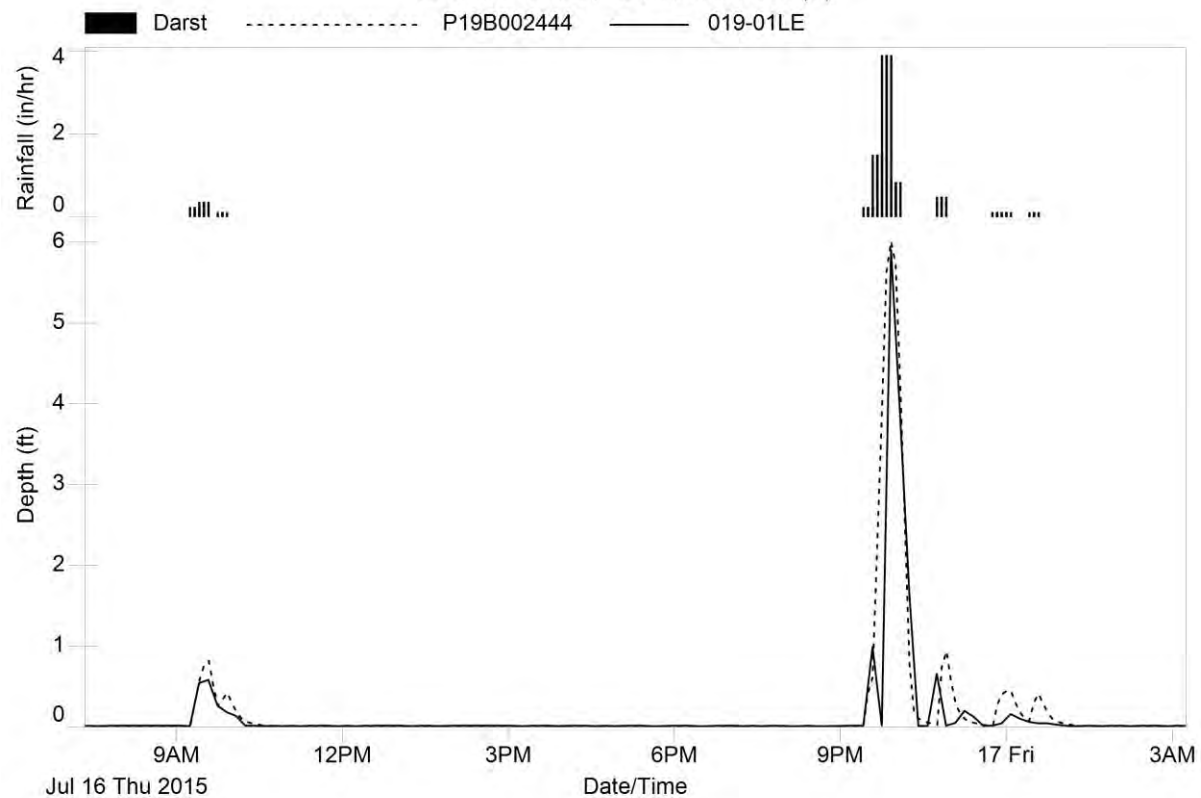
Event of July 11, 2015

Duration: 12.08 h, Total Rainfall: 1.07 (in)

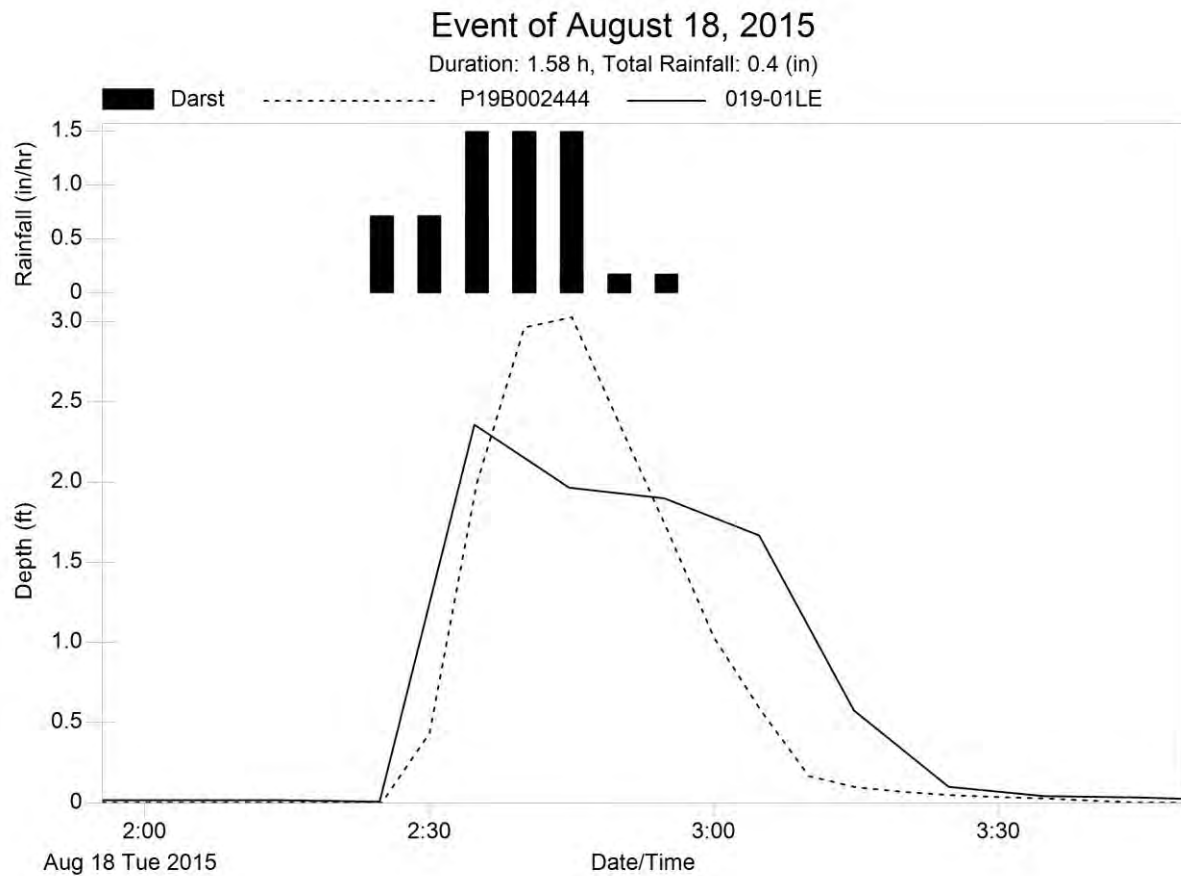
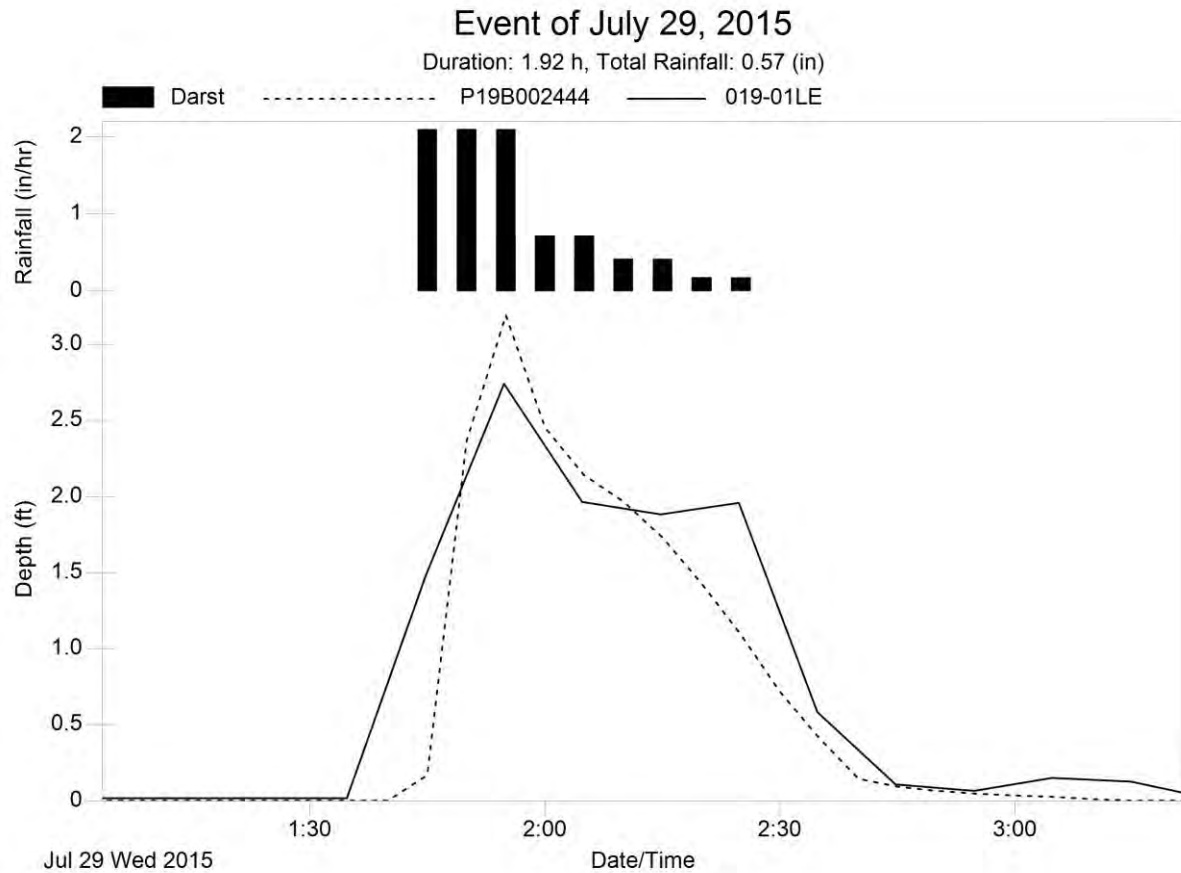


Event of July 16, 2015

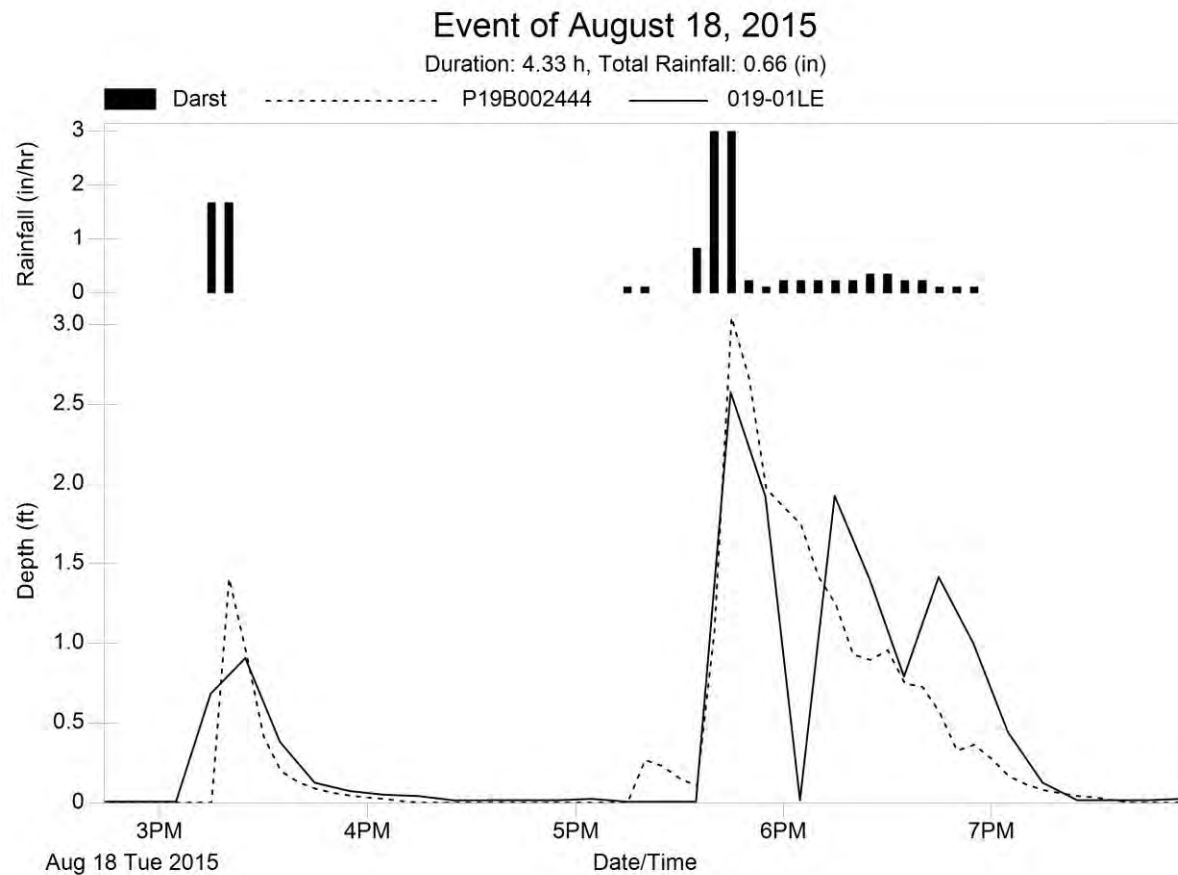
Duration: 16.58 h, Total Rainfall: 1.34 (in)



Darst 019-01LE – Verification Events



Darst 019-01LE – Verification Events



Darst 019-03FT

Date	Duration (h)	Rainfall (in)	Maximum Flow (cfs)		Maximum Flow (mgd)		Total Volume (ft³)		Volume (million gallons)		Peak Flow Rate (-15% to +25%)	Flow Volume (-10% to +20%)	Shape
		Darst Edited	Observed	Modeled	Observed	Modeled	Observed	Modeled	Observed	Modeled			
CALIBRATION EVENTS - FLOW													
9/8/2015 9:50	9.3	0.81	20.40	24.10	13.18	15.57	194100	235600	1.45	1.76	18%	21%	variable
9/18/2015 12:25	16.4	1.62	26.88	24.78	17.36	16.01	389900	435100	2.92	3.25	-8%	12%	possibly uniform
11/5/2015 13:05	22.8	0.34	12.24	12.41	7.91	8.02	190800	182400	1.43	1.36	1%	-4%	possibly uniform
11/11/2015 17:35	11.4	0.61	23.13	24.53	14.94	15.85	151200	191400	1.13	1.43	6%	27%	variable
11/16/2015 21:10	43.1	1.59	21.76	23.40	14.06	15.12	1021000	1126000	7.64	8.42	8%	10%	variable
11/26/2015 18:15	34.8	1.01	23.77	23.08	15.36	14.91	615800	671100	4.61	5.02	-3%	9%	possibly uniform
12/13/2015 1:05	40.5	1.77	20.29	23.07	13.11	14.90	796100	913500	5.95	6.83	14%	15%	variable
12/20/2015 21:25	17.9	0.70	20.18	18.03	13.04	11.65	313900	321200	2.35	2.40	-11%	2%	variable
12/23/2015 5:00	18.0	0.67	22.36	23.80	14.44	15.37	298400	347400	2.23	2.60	6%	16%	variable
12/28/2015 0:25	23.1	2.54	22.59	24.40	14.59	15.76	961000	1079000	7.19	8.07	8%	12%	variable
VERIFICATION EVENTS - FLOW													
6/17/2015 2:05	5.3	0.80	26.14	25.18	16.89	16.27	216200	238700	1.62	1.79	-4%	10%	variable
6/24/2015 4:20	67.4	2.15	23.05	23.77	14.89	15.36	1003000	936800	7.50	7.01	3%	-7%	variable
6/28/2015 17:25	6.2	0.51	21.72	24.02	14.03	15.52	194400	162400	1.45	1.21	11%	-16%	variable
7/8/2015 5:05	26.0	1.39	20.40	23.48	13.18	15.17	545800	595900	4.08	4.46	15%	9%	variable
7/11/2015 8:35	13.9	1.07	25.23	24.85	16.30	16.05	396000	396900	2.96	2.97	-2%	0%	variable
7/16/2015 9:00	17.3	1.34	24.40	26.01	15.76	16.80	268300	175100	2.01	1.31	7%	-35%	possibly uniform
7/29/2015 1:30	2.5	0.57	22.10	24.28	14.28	15.68	88950	119800	0.67	0.90	10%	35%	possibly uniform
8/18/2015 2:05	3.8	0.40	22.45	24.06	14.50	15.54	81460	108200	0.61	0.81	7%	33%	possibly uniform
8/18/2015 15:00	6.8	0.66	23.72	24.25	15.32	15.67	179000	221400	1.34	1.66	2%	24%	variable
Notes: Results from interceptor only model using flow meter data as influent flow to regulator.							WEIGHTED AVERAGES						
							Calibration - Relatively Uniform		N/A		N/A		relatively uniform
							Calibration - Possibly Uniform		-4%		8%		possibly uniform
							Calibration - Variable		7%		13%		variable
							Calibration Weighted - All Events		4%		12%		All Events
							Verification - Relatively Uniform		N/A		N/A		relatively uniform
							Verification - Possibly Uniform		8%		-8%		possibly uniform
							Verification - Variable		4%		1%		variable
							Verification Weighted - All Events		5%		-1%		All Events
							Weighted Average - All Events		4%		7%		
							NET AVERAGES						
							Calibration - Relatively Uniform		N/A		N/A		relatively uniform
							Calibration - Possibly Uniform		-3%		5%		possibly uniform
							Calibration - Variable		7%		15%		variable
							Calibration Net - All Events		4%		12%		All Events
							Verification - Relatively Uniform		N/A		N/A		relatively uniform
							Verification - Possibly Uniform		8%		11%		possibly uniform
							Verification - Variable		4%		3%		variable
							Verification Net - All Events		6%		6%		All Events
							Net Average - All Events		5%		9%		

Notes:
Results from interceptor only model using flow meter data as influent flow to regulator.

Darst 019-03FT Depth

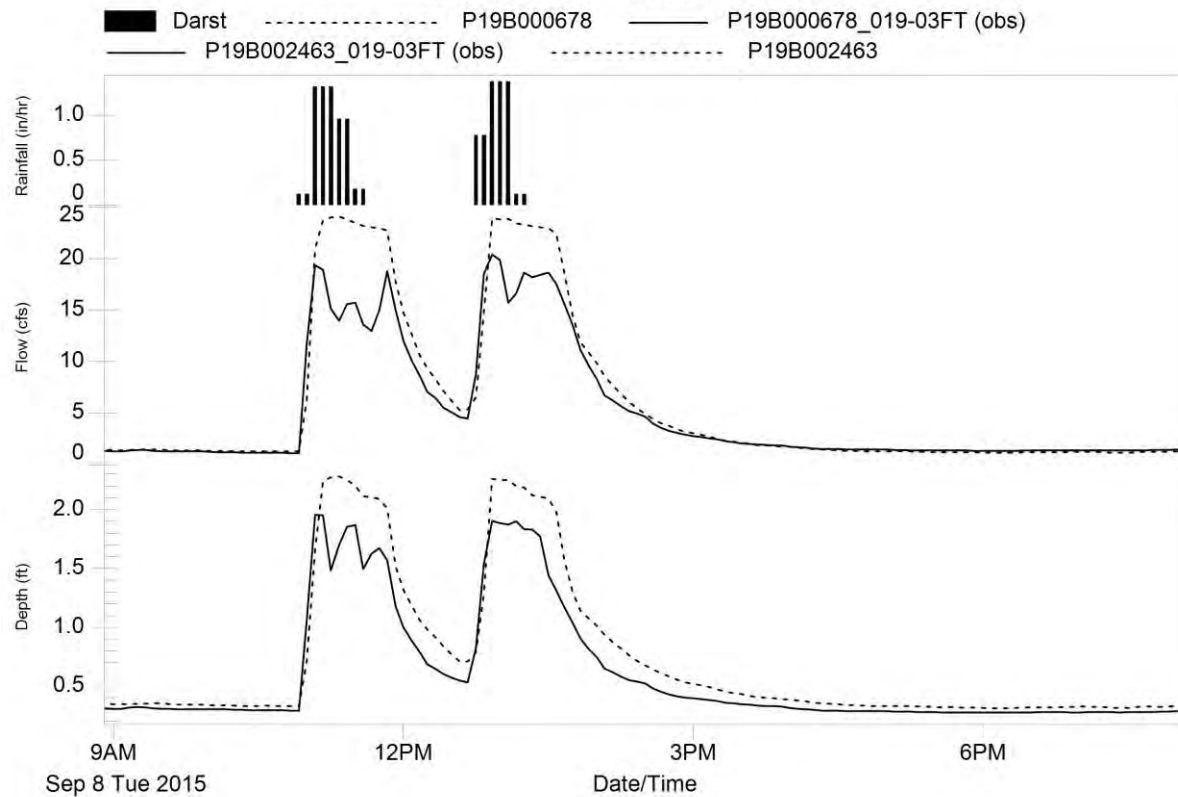
Date	Duration (h)	Maximum Depth (ft)		Minimum Depth (ft)		Average Depth (ft)		Maximum Depth (ft)	Minimum Depth (ft)	Average Depth (ft)	Rainfall Variability
		metered	modeled	metered	modeled	metered	modeled	Surcharged: -0.33 ft to +1.67 ft Non-Surcharged: -0.33 ft to +0.33 ft	Surcharged: -0.33 ft to +1.67 ft Non-Surcharged: -0.33 ft to +0.33 ft	Surcharged: -0.33 ft to +1.67 ft Non-Surcharged: -0.33 ft to +0.33 ft	
CALIBRATION EVENTS - DEPTH											
9/8/2015 9:50:00	9.33	1.956	2.282	0.276	0.313	0.655	0.802	0.326	0.037	0.148	variable
9/18/2015 12:25:00	16.42	2.519	2.368	0.230	0.245	0.718	0.833	-0.151	0.015	0.116	possibly uniform
11/5/2015 13:05:00	21.25	0.999	1.168	0.241	0.204	0.385	0.403	0.169	-0.037	0.018	possibly uniform
11/11/2015 19:30:00	7.50	2.168	2.337	0.212	0.284	0.608	0.618	0.169	0.073	0.010	variable
11/16/2015 21:10:00	43.08	2.242	2.196	0.259	0.351	0.667	0.816	-0.046	0.092	0.148	variable
11/26/2015 18:15:00	34.83	1.915	2.108	0.223	0.280	0.548	0.663	0.193	0.057	0.115	possibly uniform
12/13/2015 1:05:00	40.50	1.813	2.107	0.323	0.309	0.660	0.742	0.294	-0.013	0.083	variable
12/20/2015 22:10:00	16.75	1.747	1.519	0.348	0.366	0.619	0.639	-0.228	0.017	0.020	variable
12/23/2015 6:35:00	13.33	2.071	2.245	0.268	0.243	0.687	0.677	0.174	-0.024	-0.010	variable
12/28/2015 0:25:00	23.08	2.530	2.320	0.271	0.335	1.139	1.268	-0.210	0.064	0.129	variable
VERIFICATION EVENTS - DEPTH											
6/17/2015 2:05:00	5.25	2.591	2.417	0.238	0.318	1.092	1.252	-0.174	0.079	0.160	variable
6/24/2015 4:20:00	67.42	2.213	2.244	0.258	0.263	0.552	0.553	0.031	0.004	0.001	variable
6/28/2015 17:25:00	6.17	2.202	2.273	0.364	0.362	0.951	0.845	0.071	-0.002	-0.106	variable
7/8/2015 5:05:00	26.00	2.117	2.207	0.264	0.273	0.708	0.753	0.090	0.009	0.045	variable
7/11/2015 8:35:00	13.92	3.117	2.377	0.345	0.258	0.892	0.889	-0.740	-0.087	-0.003	variable
7/16/2015 9:00:00	17.33	2.486	2.522	0.338	0.243	0.593	0.445	0.036	-0.095	-0.148	possibly uniform
7/29/2015 1:30:00	2.50	2.117	2.304	0.348	0.311	1.118	1.308	0.187	-0.037	0.190	possibly uniform
8/18/2015 2:05:00	3.83	1.966	2.278	0.244	0.312	0.724	0.877	0.312	0.068	0.154	possibly uniform
8/18/2015 15:00:00	6.75	1.983	2.303	0.280	0.359	0.792	0.980	0.320	0.079	0.188	variable
						WEIGHTED AVERAGES					
Notes:						Calibration - Relatively Uniform			N/A		relatively uniform
Results from interceptor only model using flow meter data as influent flow to regulator.						Calibration - Possibly Uniform			0.029 0.011		0.093 possibly uniform
Depth taken from P19B002463 minus a 0.6ft outlet offset						Calibration - Variable			0.060 0.032		0.081 variable
						Calibration Weighted - All Events			0.051 0.026		0.084 All Events
						Verification - Relatively Uniform			N/A N/A		N/A relatively uniform
						Verification - Possibly Uniform			0.167 -0.030		0.097 possibly uniform
						Verification - Variable			-0.120 0.008		0.051 variable
						Verification Weighted - All Events			-0.029 -0.006		0.066 All Events
						Weighted Average - All Events			0.010 0.010		0.074
						NET AVERAGES					
						Calibration - Relatively Uniform			N/A N/A		N/A relatively uniform
						Calibration - Possibly Uniform			0.070 0.012		0.083 possibly uniform
						Calibration - Variable			0.068 0.035		0.075 variable
						Calibration Net - All Events			0.069 0.028		0.078 All Events
						Verification - Relatively Uniform			N/A N/A		N/A relatively uniform
						Verification - Possibly Uniform			0.178 -0.021		0.065 possibly uniform
						Verification - Variable			-0.067 0.014		0.047 variable
						Verification Net - All Events			0.015 0.002		0.053 All Events
						Net Average - All Events			0.043 0.016		0.066

Notes:
Results from interceptor only model using flow meter data as influent flow to regulator.
Depth taken from P19B002463 minus a 0.6ft outlet offset

Darst 019-03FT – Calibration Events

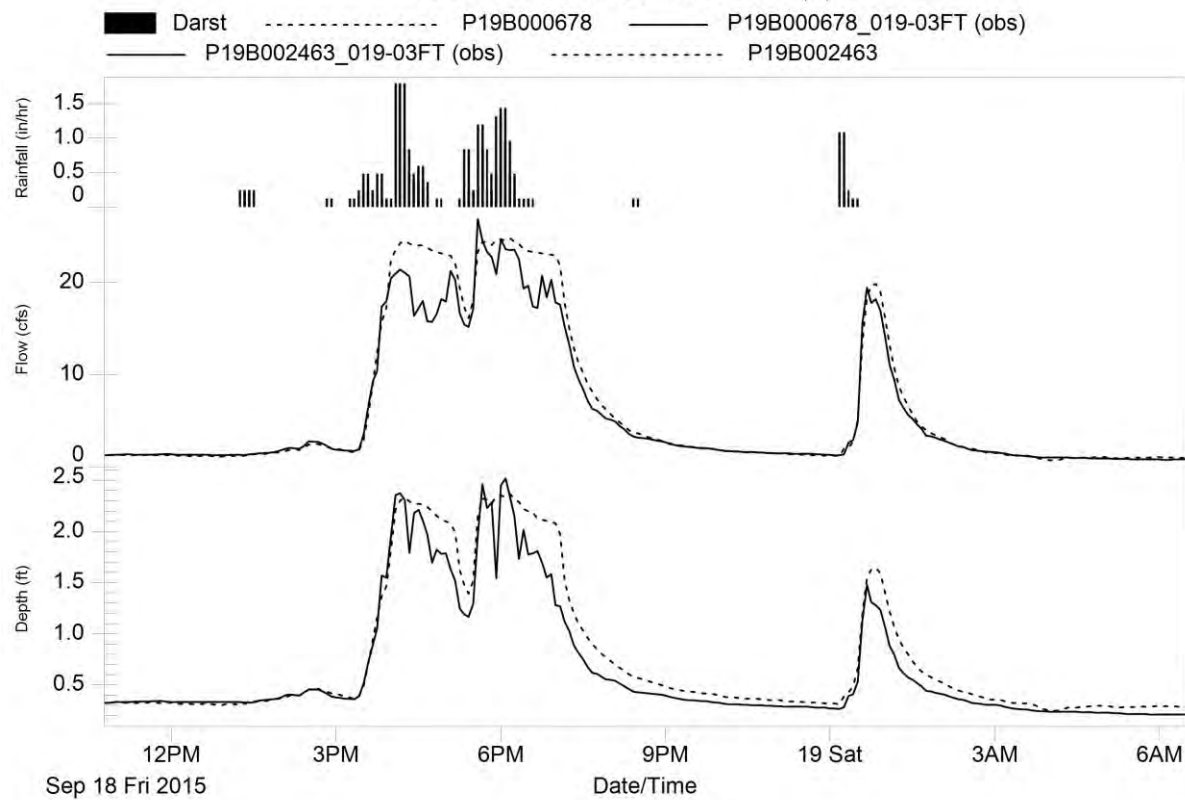
Event of September 8, 2015

Duration: 9.33 h, Total Rainfall: 0.81 (in)



Event of September 18, 2015

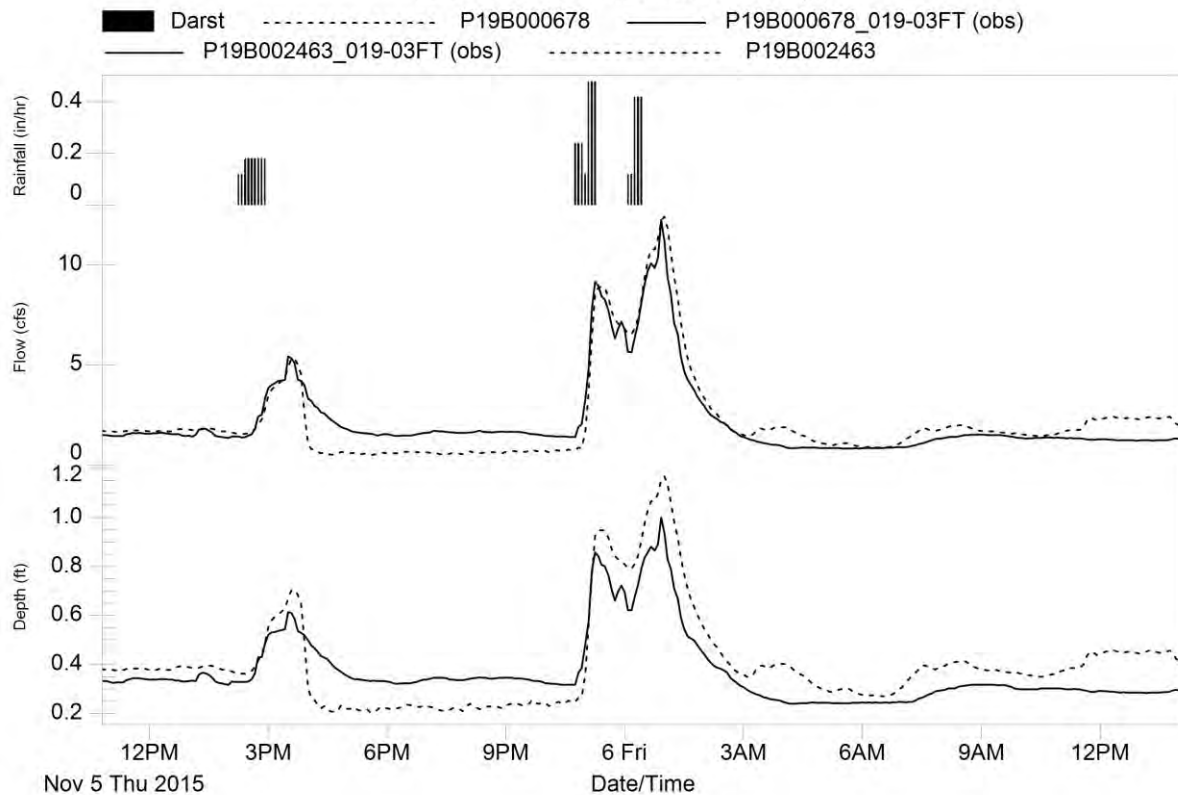
Duration: 16.42 h, Total Rainfall: 1.62 (in)



Darst 019-03FT – Calibration Events

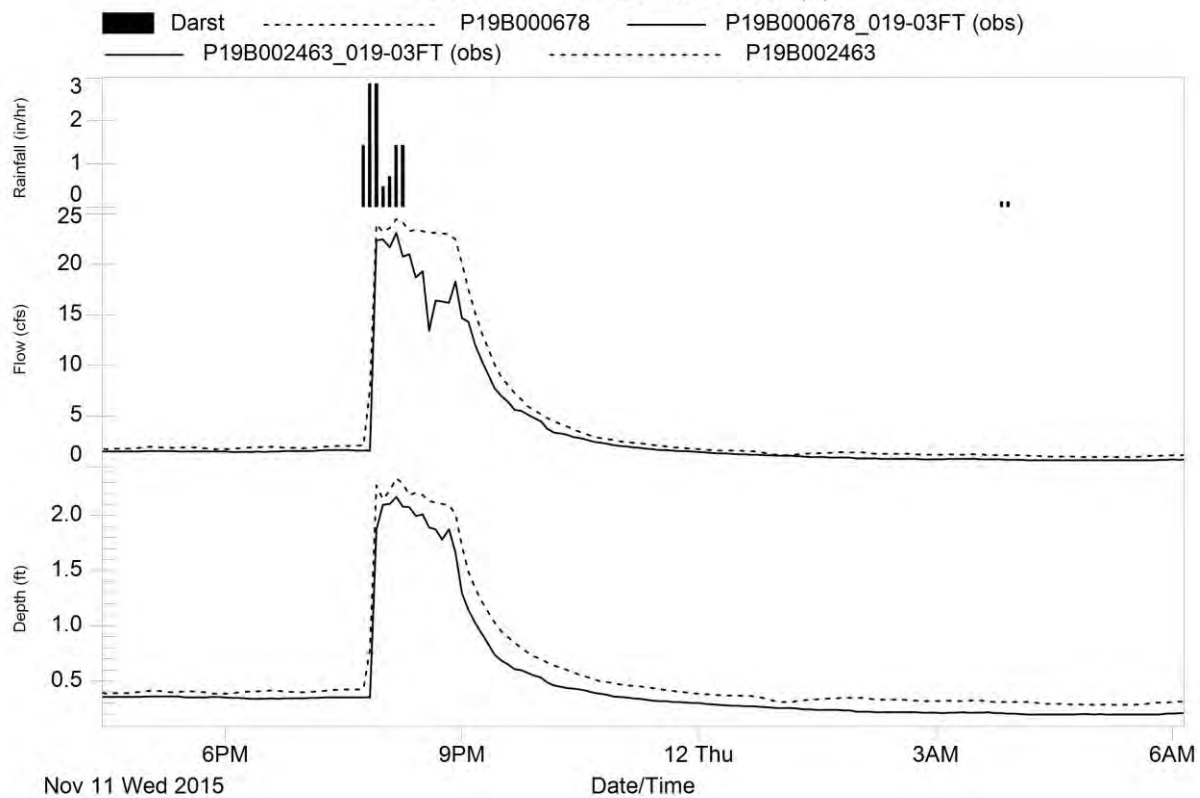
Event of November 5, 2015

Duration: 22.75 h, Total Rainfall: 0.34 (in)



Event of November 11, 2015

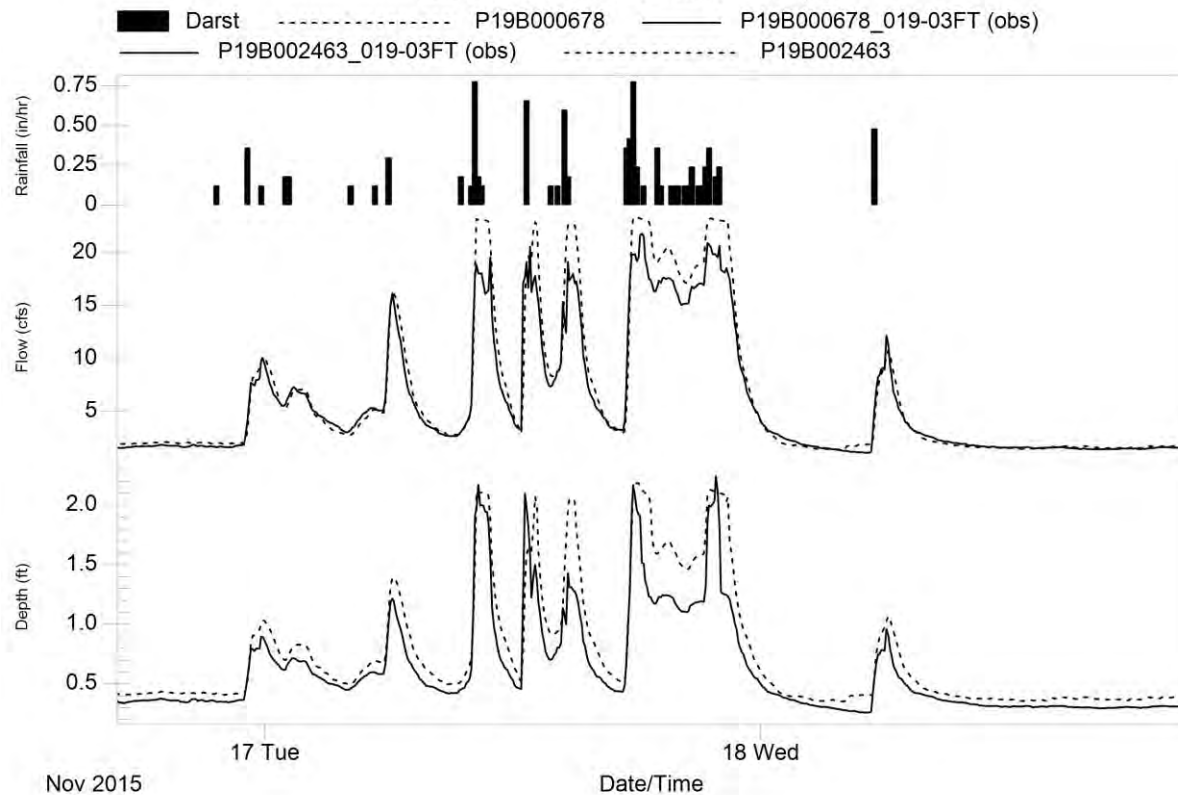
Duration: 11.42 h, Total Rainfall: 0.61 (in)



Darst 019-03FT – Calibration Events

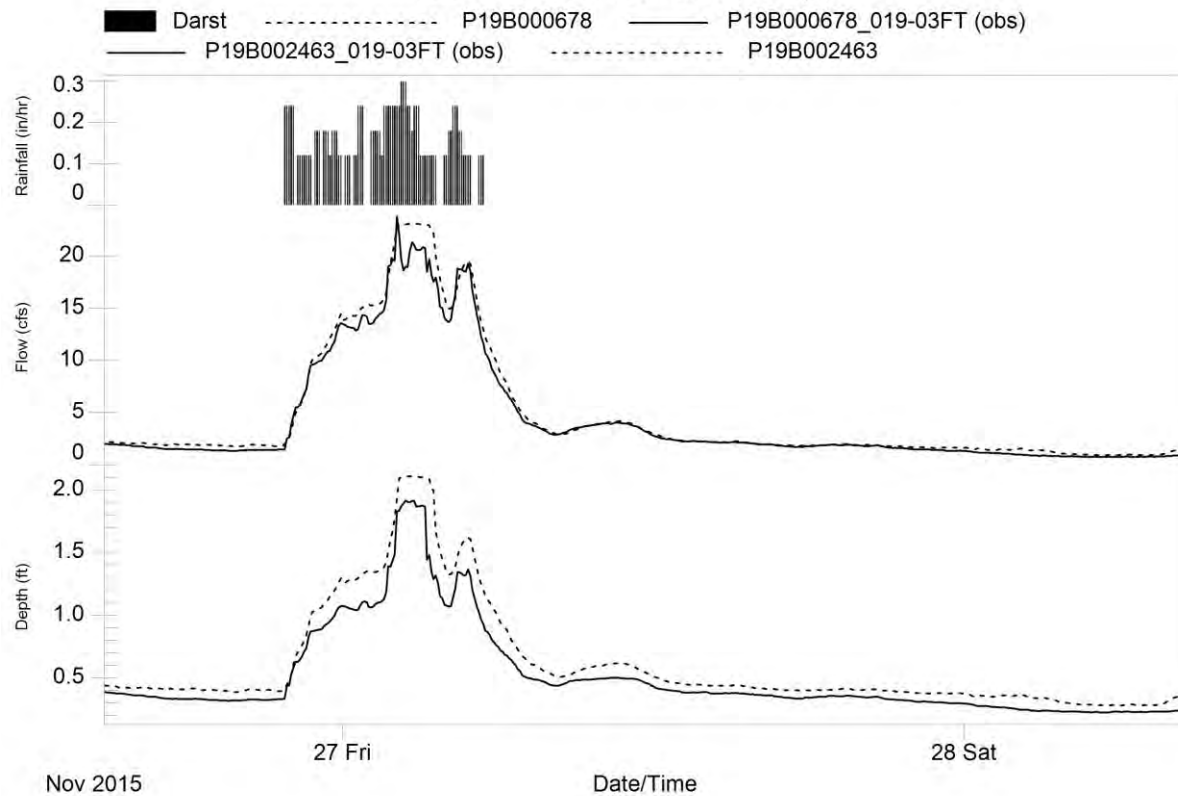
Event of November 16, 2015

Duration: 43.08 h, Total Rainfall: 1.59 (in)



Event of November 26, 2015

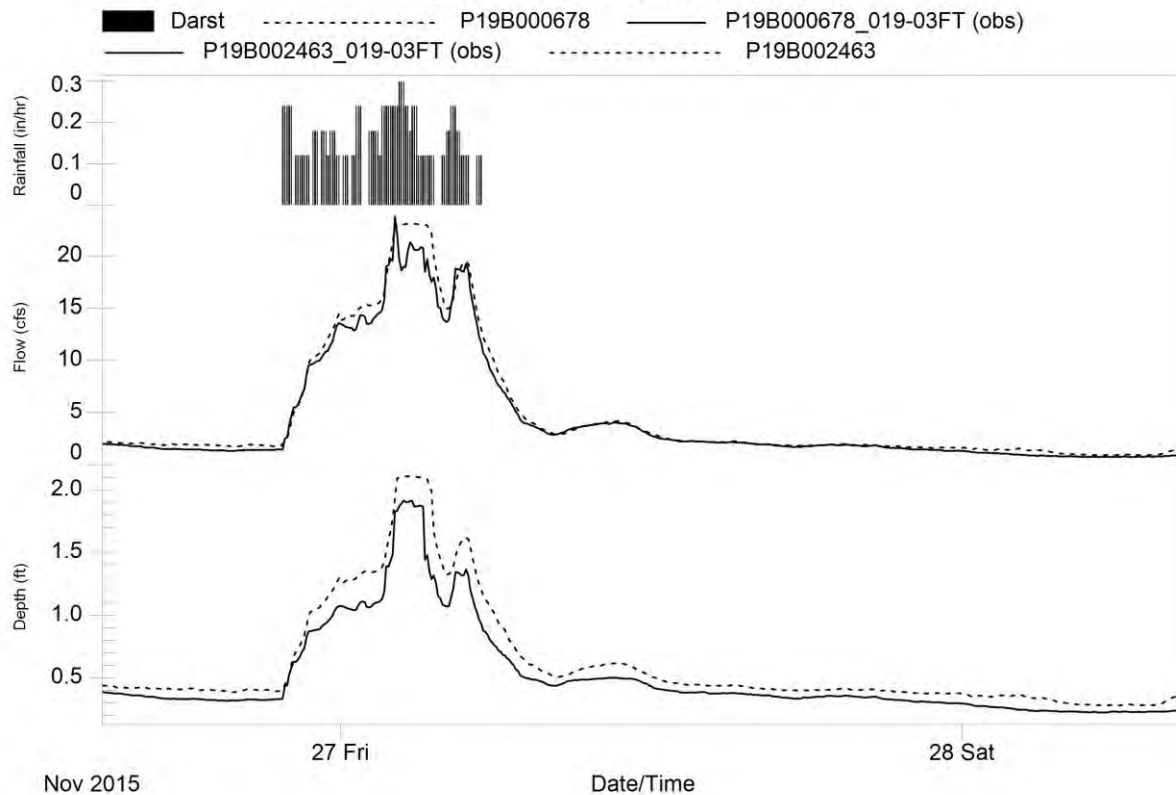
Duration: 34.83 h, Total Rainfall: 1.01 (in)



Darst 019-03FT – Calibration Events

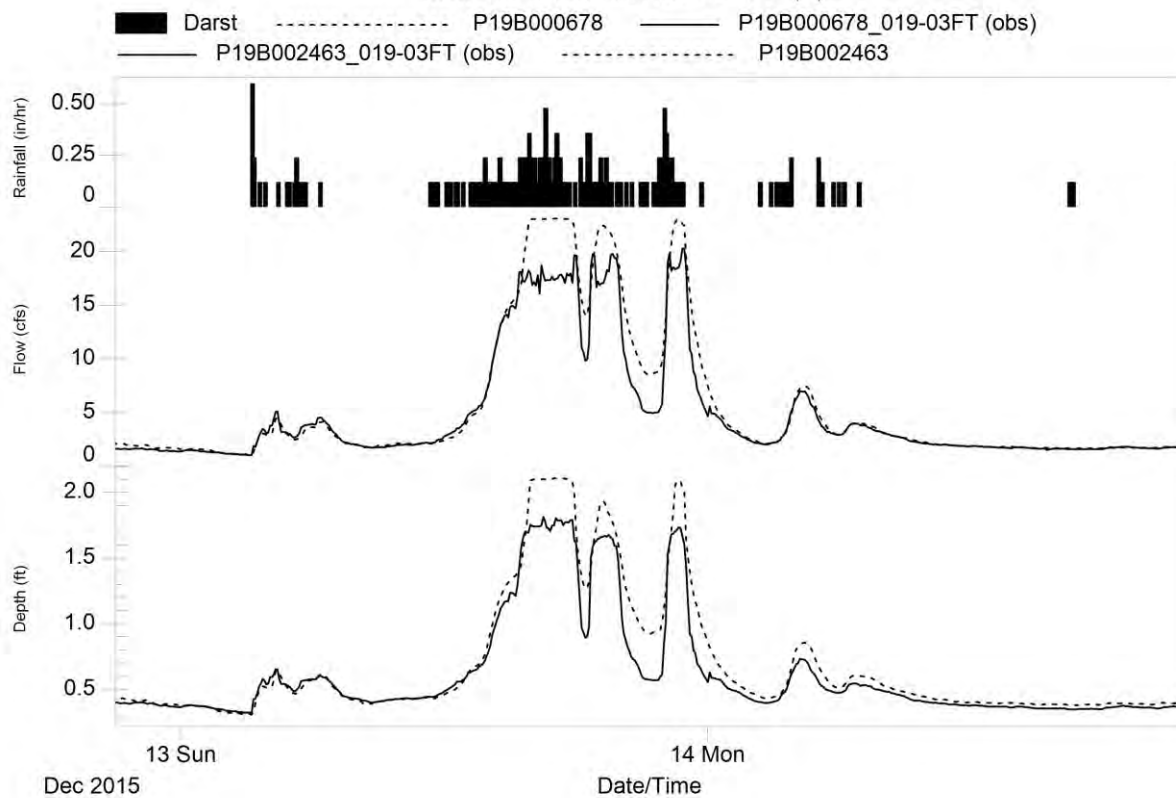
Event of November 26, 2015

Duration: 34.83 h, Total Rainfall: 1.01 (in)



Event of December 13, 2015

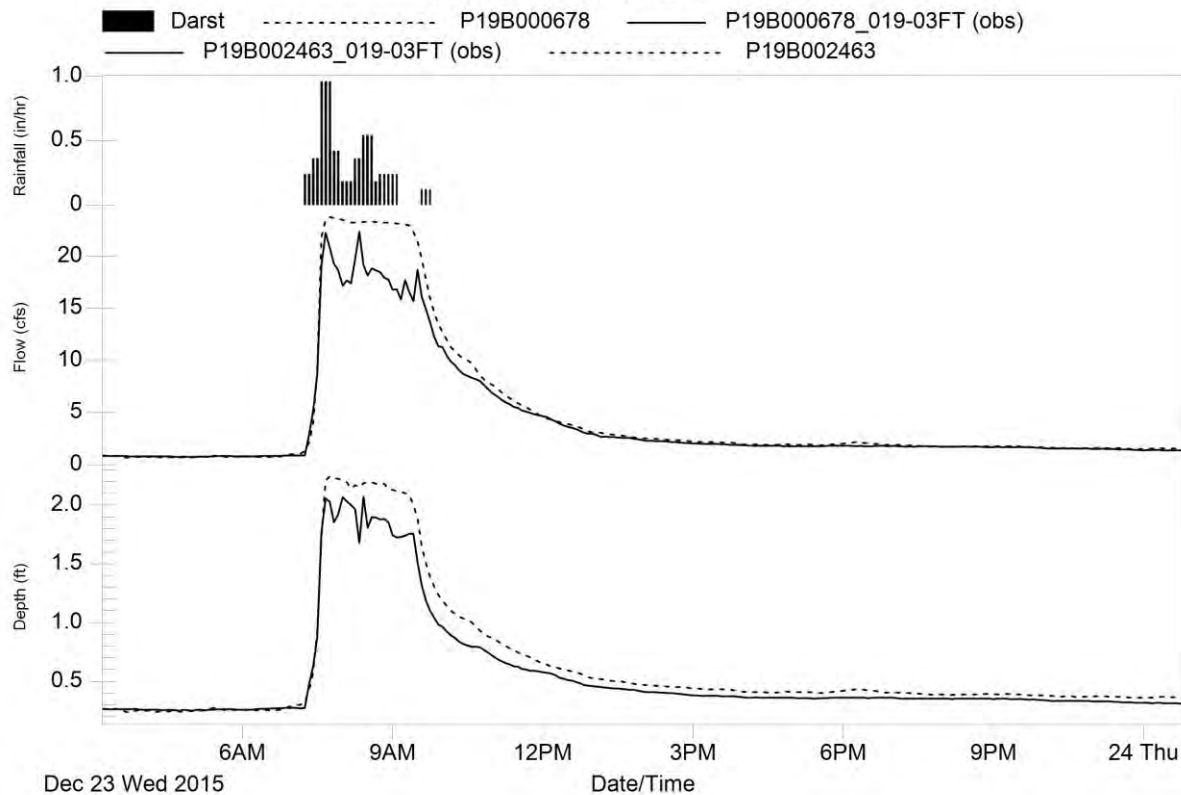
Duration: 40.5 h, Total Rainfall: 1.77 (in)



Darst 019-03FT – Calibration Events

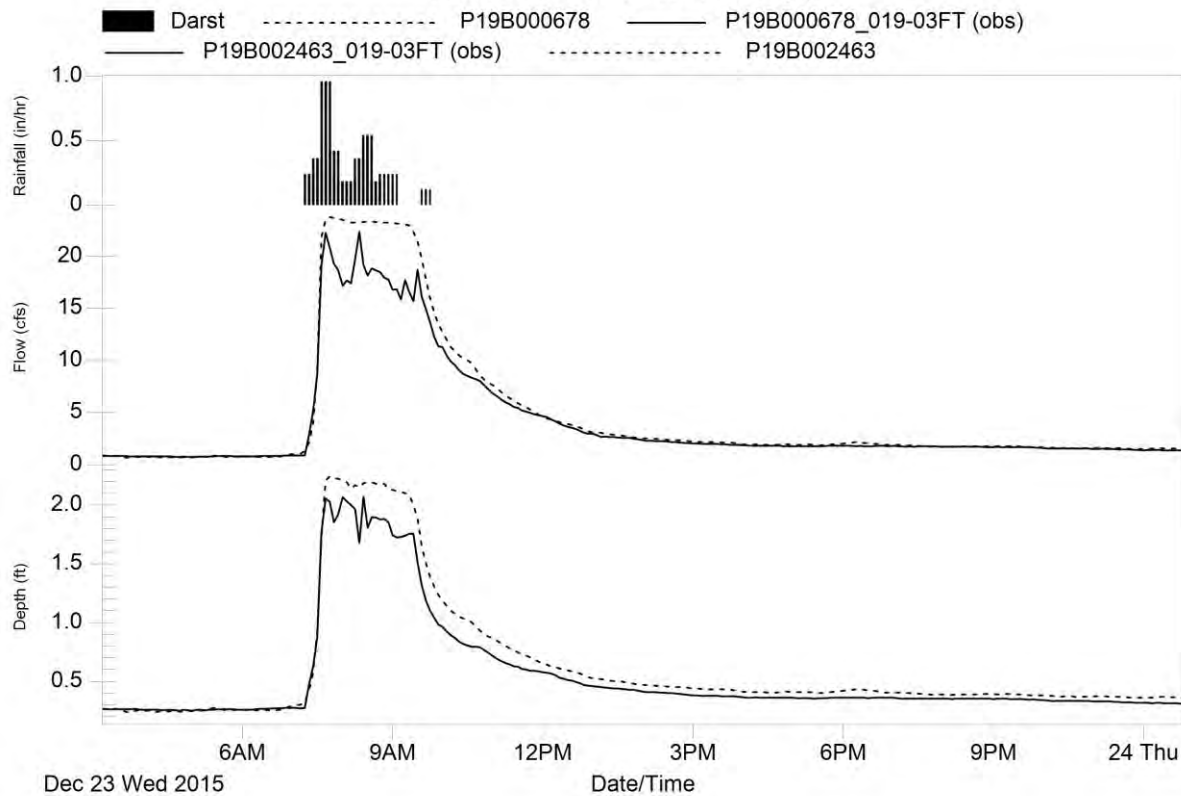
Event of December 23, 2015

Duration: 18 h, Total Rainfall: 0.67 (in)

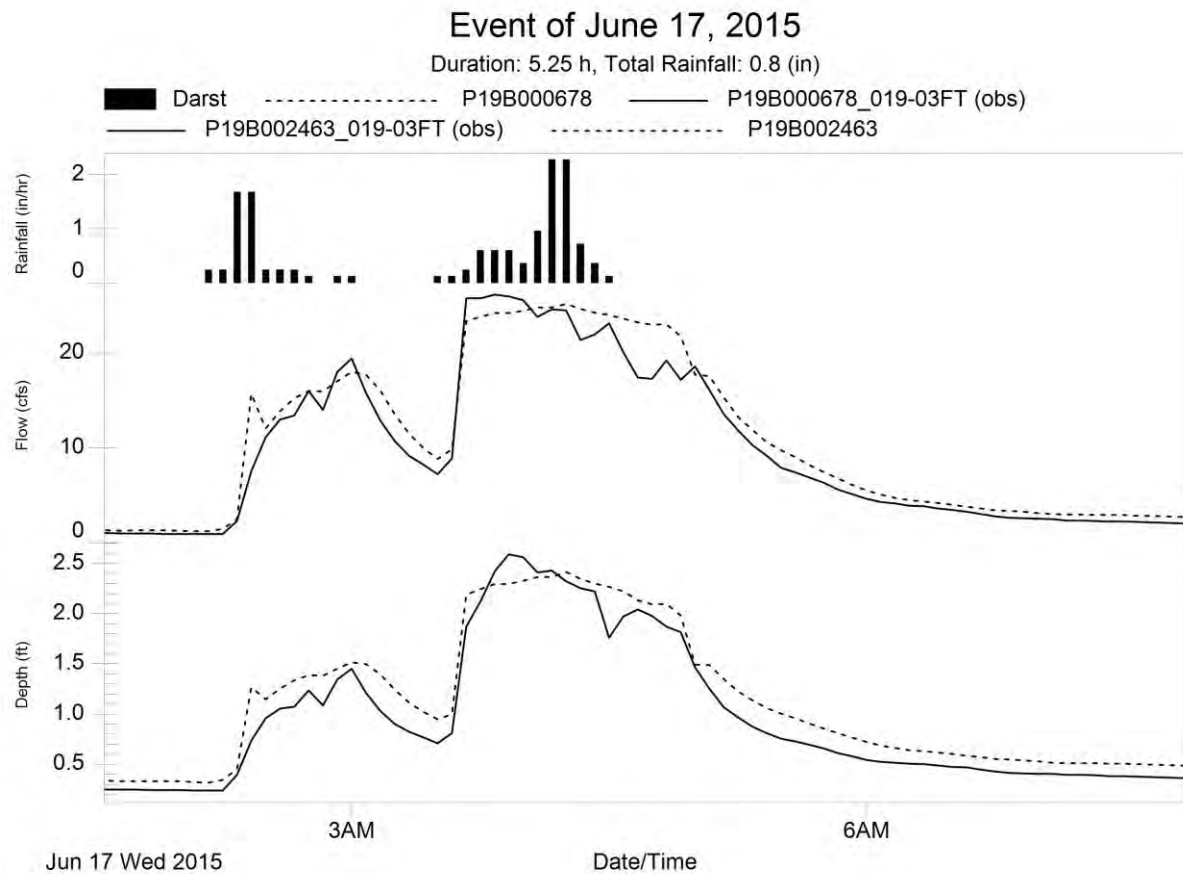
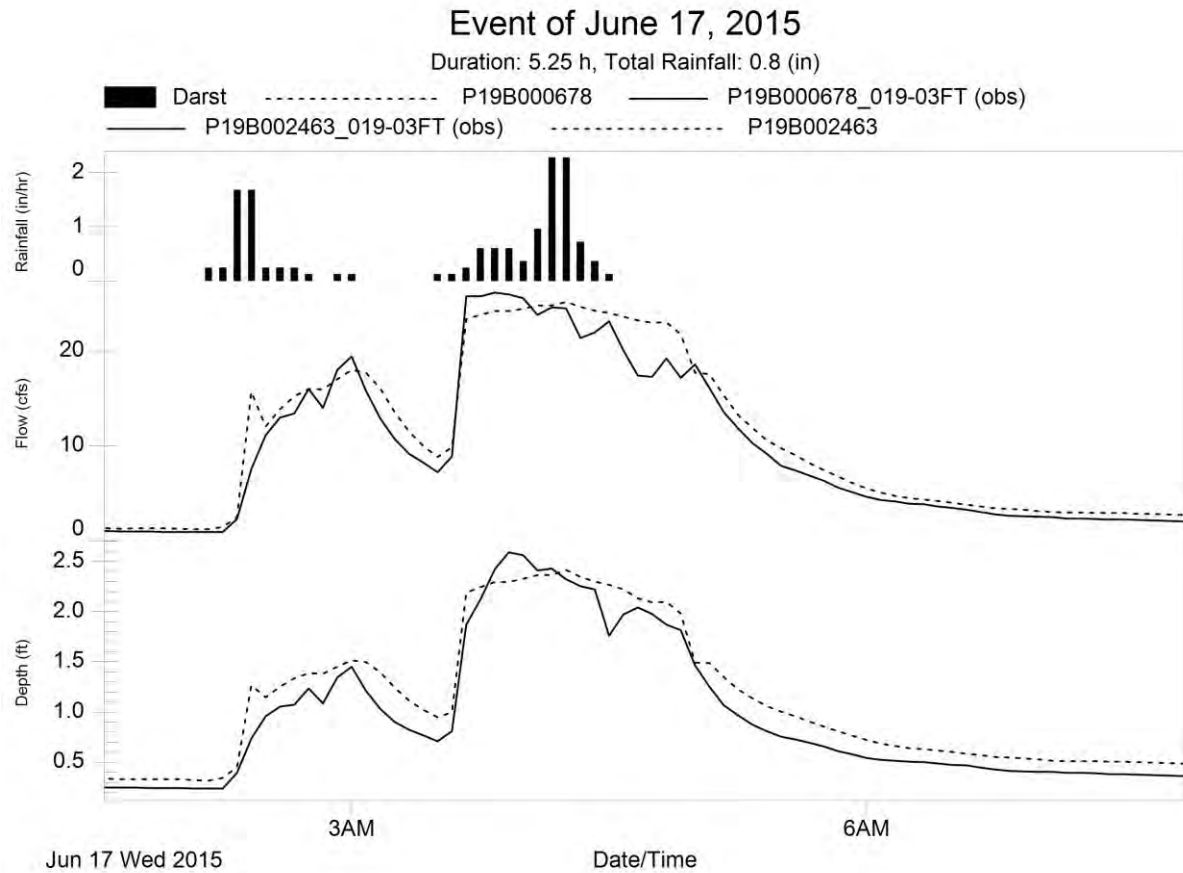


Event of December 23, 2015

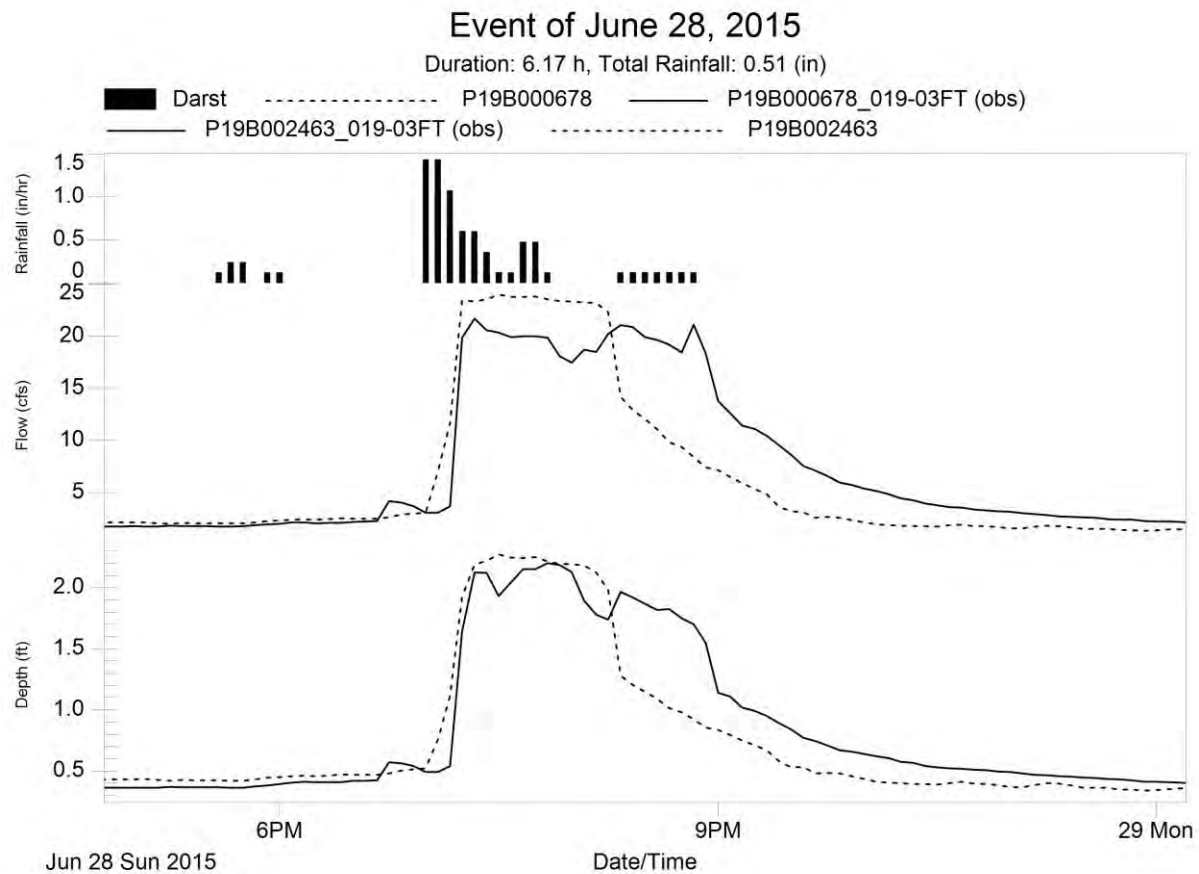
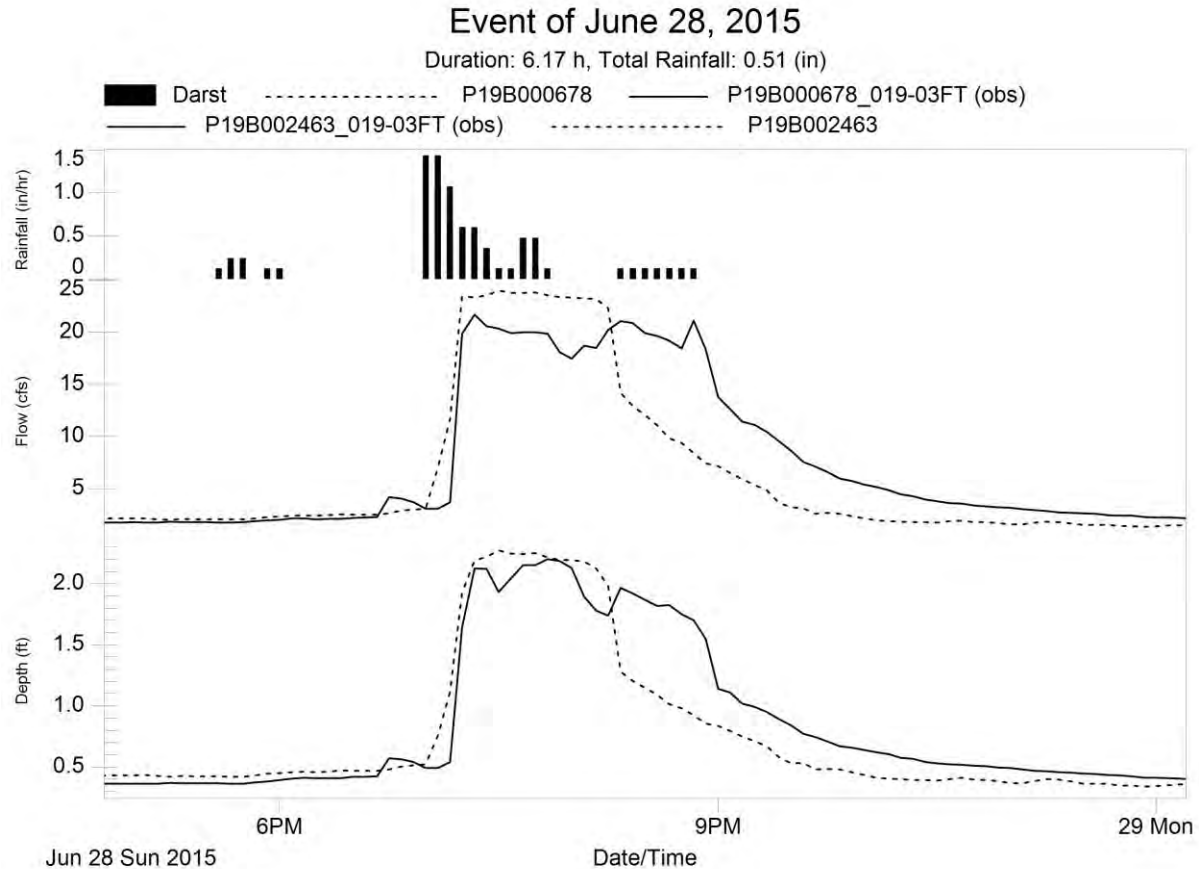
Duration: 18 h, Total Rainfall: 0.67 (in)



Darst 019-03FT – Verification Events



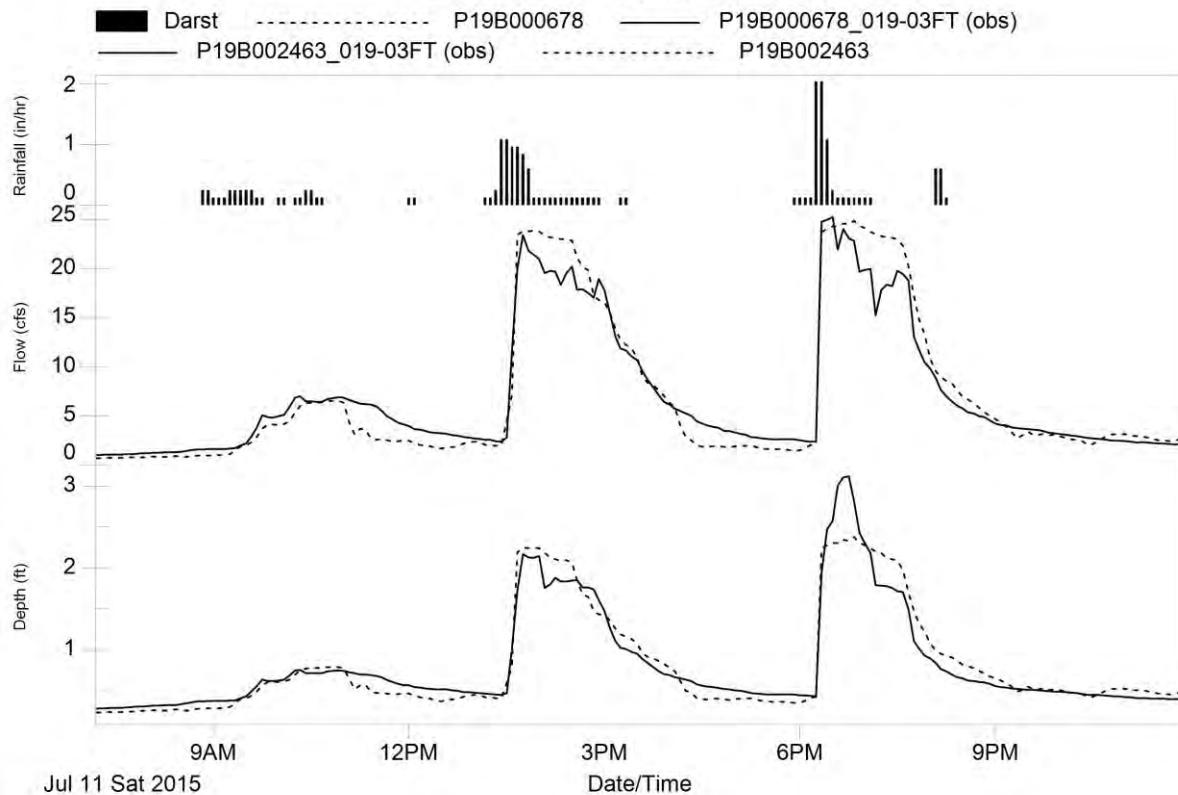
Darst 019-03FT – Verification Events



Darst 019-03FT – Verification Events

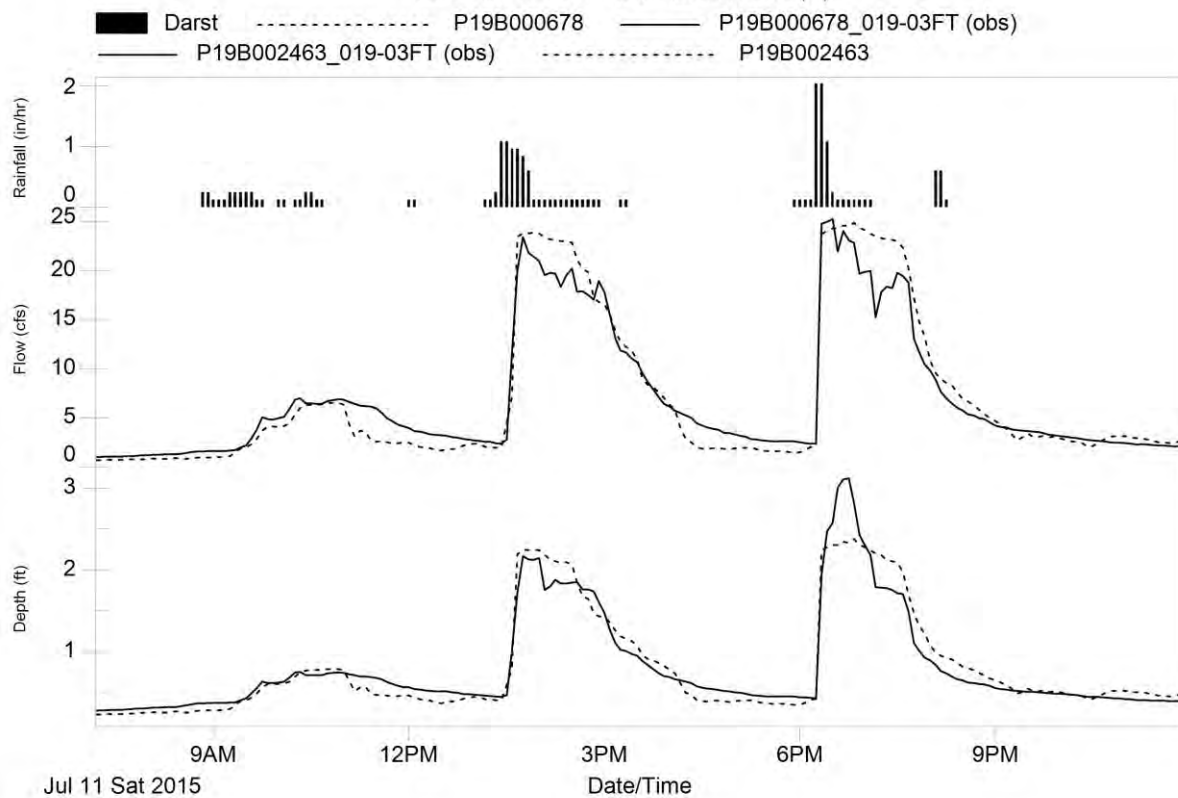
Event of July 11, 2015

Duration: 13.92 h, Total Rainfall: 1.07 (in)



Event of July 11, 2015

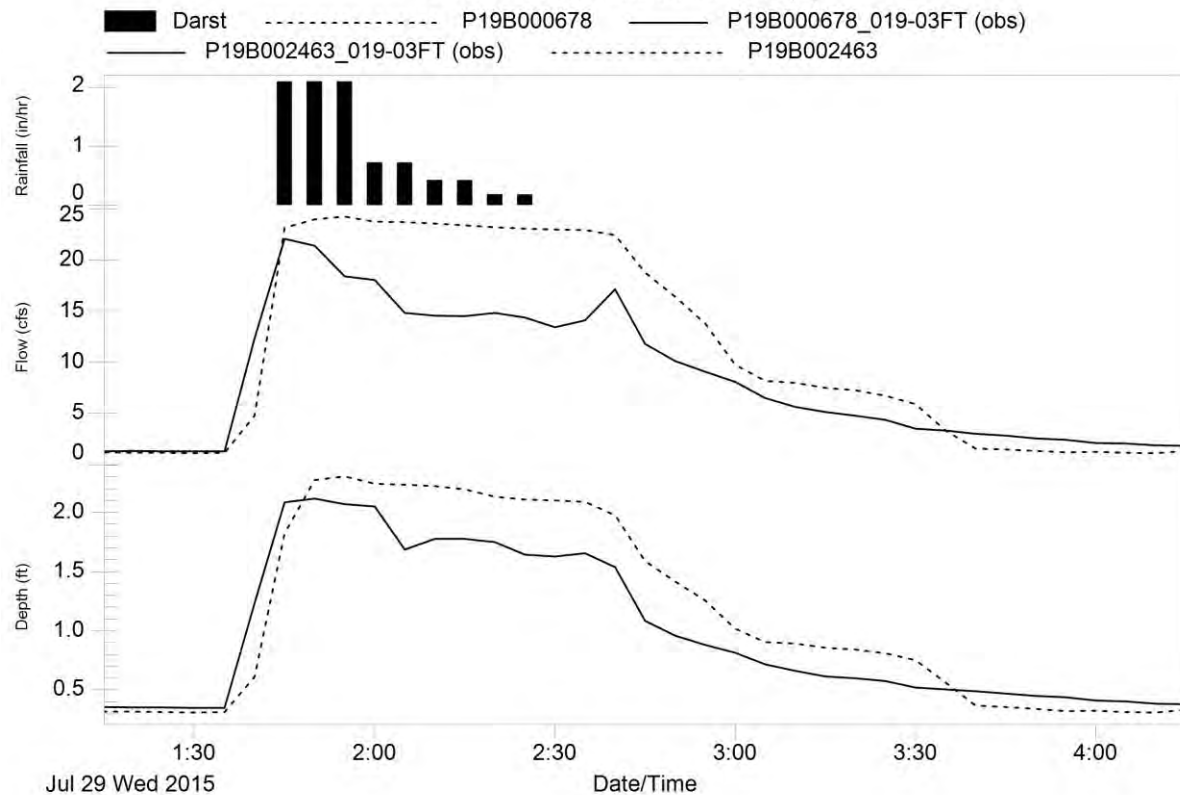
Duration: 13.92 h, Total Rainfall: 1.07 (in)



Darst 019-03FT – Verification Events

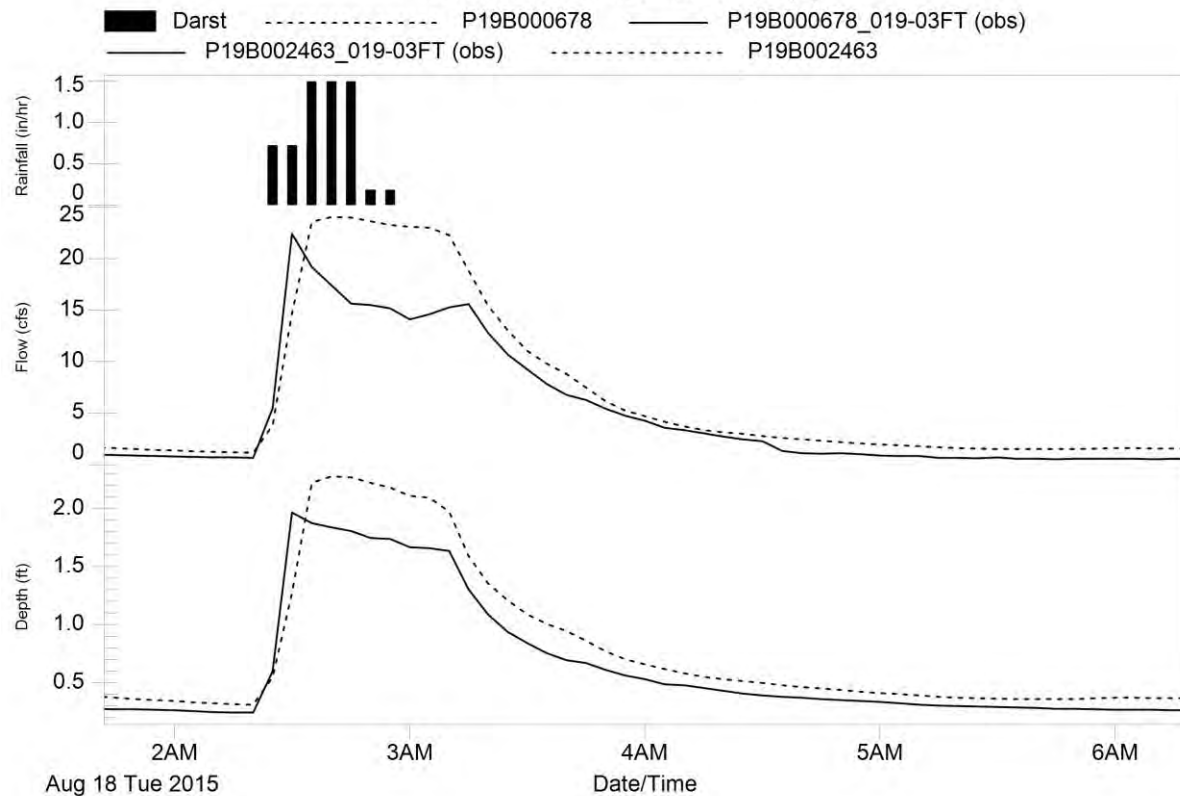
Event of July 29, 2015

Duration: 2.5 h, Total Rainfall: 0.57 (in)

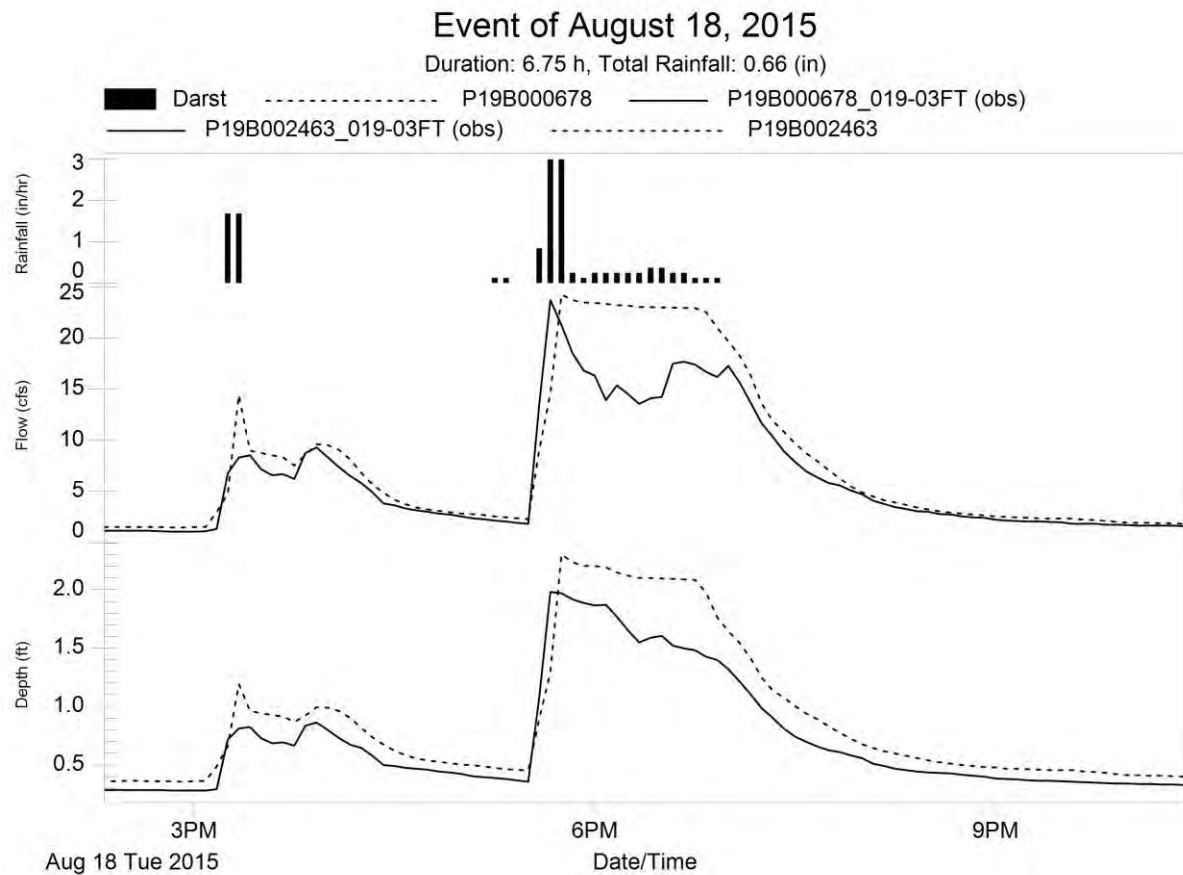


Event of August 18, 2015

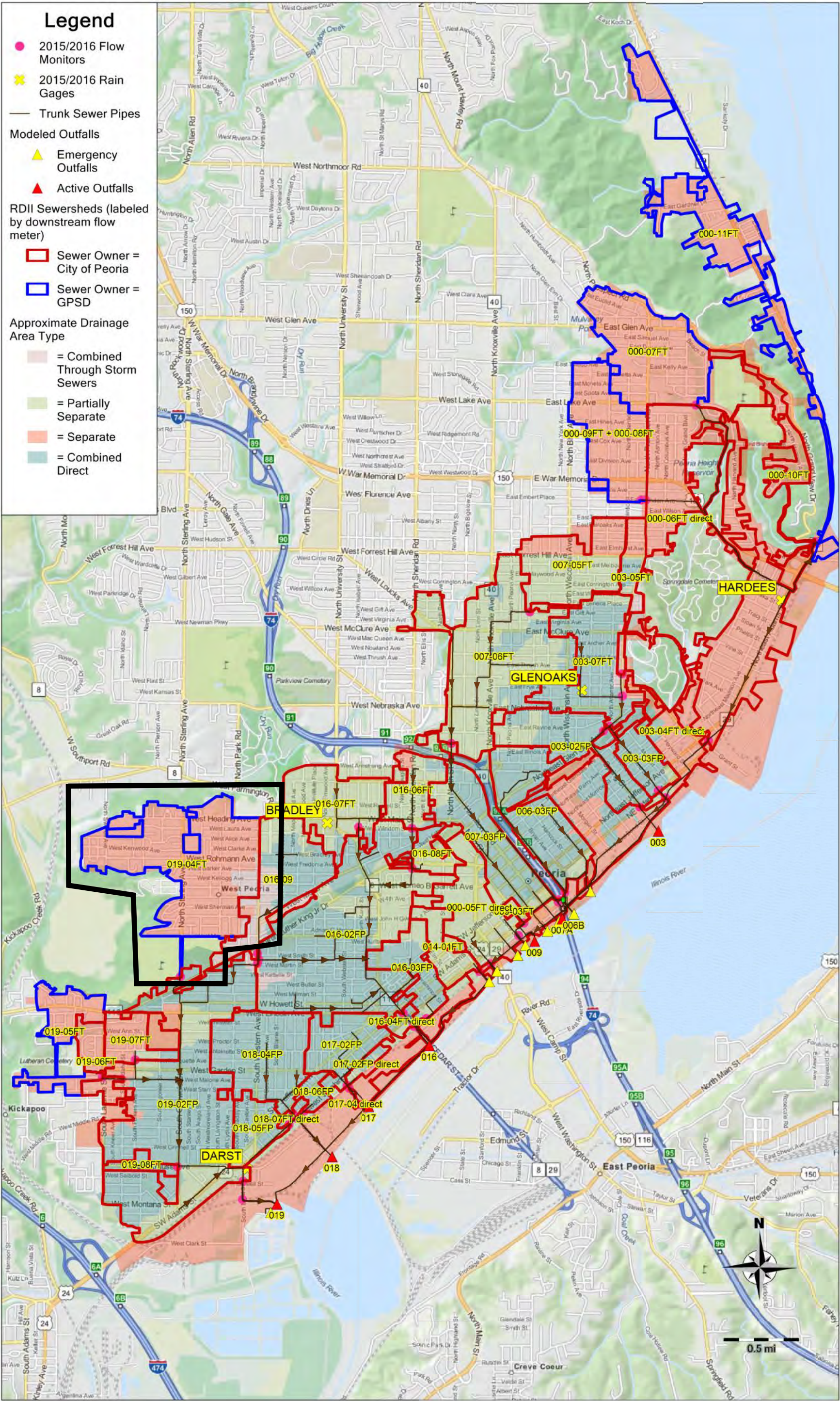
Duration: 3.83 h, Total Rainfall: 0.4 (in)



Darst 019-03FT – Verification Events



Flow Monitor 019-04FT Overview Map



Legend

- 2015/2016 Flow Monitors
- Modeled Pipes (diameter labeled)
- Modeled Manholes
- Modeled Manholes with Inflow (labeled)
- RDII Sewersheds

Modeled Manholes

- Modeled Manholes
- Modeled Manholes with Inflow (labeled)

RDII Sewersheds

North

1500 ft

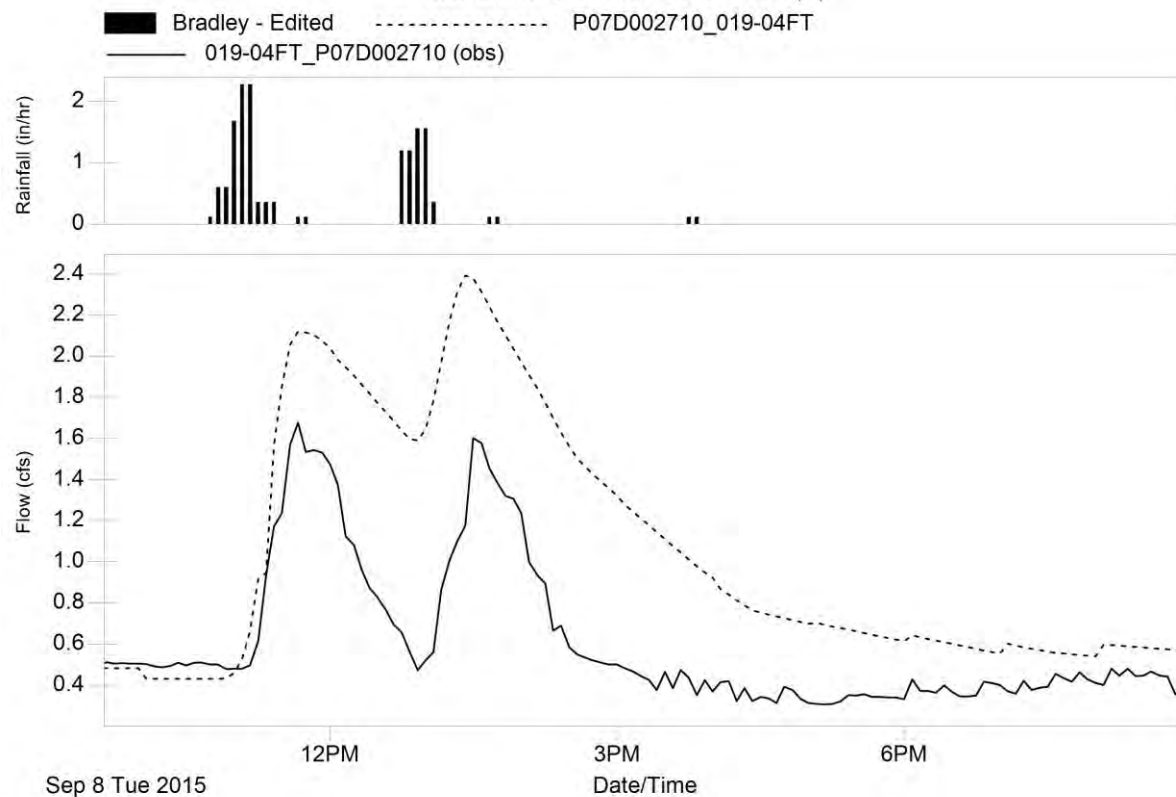
Darst 019-04FT

Date	Duration (h)	Rainfall (in)	Maximum Flow (cfs)		Maximum Flow (mgd)		Total Volume (ft³)		Volume (million gallons)		Peak Flow Rate (-15% to +25%)	Flow Volume (-10% to +20%)	Rainfall Variability									
		Bradley Edited	Observed	Modeled	Observed	Modeled	Observed	Modeled	Observed	Modeled												
CALIBRATION EVENTS - FLOW																						
9/8/2015 10:35	9.4	0.87	1.7	2.4	1.1	1.5	21610	39520	0.2	0.3	43%	83%	variable									
9/18/2015 13:05	14.5	1.62	3.7	3.7	2.4	2.4	40610	63810	0.3	0.5	2%	57%	possibly uniform									
11/5/2015 13:55	15.3	0.43	0.7	0.9	0.5	0.6	26650	30260	0.2	0.2	33%	14%	possibly uniform									
11/11/2015 19:30	9.2	0.61	2.5	2.5	1.6	1.6	15130	28760	0.1	0.2	3%	90%	variable									
11/16/2015 21:10	43.1	2.37	1.7	1.8	1.1	1.2	117700	126500	0.9	0.9	9%	7%	variable									
11/26/2015 20:30	27.5	1.12	1.8	1.3	1.2	0.9	80770	65520	0.6	0.5	-26%	-19%	possibly uniform									
12/13/2015 1:05	40.5	1.77	2.0	1.8	1.3	1.1	104900	94140	0.8	0.7	-13%	-10%	variable									
12/20/2015 22:15	16.1	0.70	1.5	1.2	1.0	0.8	40180	38080	0.3	0.3	-19%	-5%	variable									
12/23/2015 7:05	15.1	0.73	2.6	2.3	1.7	1.5	54500	46460	0.4	0.3	-11%	-15%	variable									
12/28/2015 0:25	23.1	1.64	8.5	2.2	5.5	1.4	181700	76450	1.4	0.6	-75%	-58%	variable									
VERIFICATION EVENTS - FLOW																						
6/17/2015 2:05	5.5	0.80	2.6	2.4	1.7	1.6	18110	24740	0.1	0.2	-7%	37%	variable									
6/24/2015 4:20	67.4	2.15	2.6	2.0	1.7	1.3	151900	149800	1.1	1.1	-25%	-1%	variable									
6/28/2015 17:25	4.6	0.51	2.9	1.7	1.9	1.1	19960	16500	0.1	0.1	-42%	-17%	variable									
7/8/2015 5:05	26.0	1.39	2.1	2.1	1.4	1.4	65700	75030	0.5	0.6	-2%	14%	variable									
7/11/2015 8:45	13.2	1.07	2.2	1.7	1.4	1.1	43210	47120	0.3	0.4	-24%	9%	variable									
7/16/2015 9:00	17.3	1.16	2.5	3.0	1.6	1.9	41010	53330	0.3	0.4	19%	30%	possibly uniform									
7/29/2015 1:10	4.4	0.51	1.3	1.8	0.8	1.2	9867	16120	0.1	0.1	38%	63%	possibly uniform									
8/18/2015 2:05	3.8	0.45	1.4	1.7	0.9	1.1	8795	14050	0.1	0.1	19%	60%	possibly uniform									
8/18/2015 15:00	10.0	0.66	1.8	2.0	1.2	1.3	25480	34310	0.2	0.3	10%	35%	variable									
WEIGHTED AVERAGES																						
									Calibration - Relatively Uniform		N/A	N/A	relatively uniform									
									Calibration - Possibly Uniform		-3%	8%	possibly uniform									
									Calibration - Variable		-30%	-16%	variable									
									Calibration Weighted - All Events		-24%	-11%										
									Verification - Relatively Uniform		N/A	N/A	relatively uniform									
									Verification - Possibly Uniform		24%	40%	possibly uniform									
									Verification - Variable		-17%	7%	variable									
									Verification Weighted - All Events		-6%	12%										
									Weighted Average - All Events		-17%	-3%										
									NET AVERAGES													
									Calibration - Relatively Uniform		N/A	N/A	relatively uniform									
									Calibration - Possibly Uniform		3%	17%	possibly uniform									
									Calibration - Variable		-9%	13%	variable									
									Calibration Net - All Events		-5%	14%										
									Verification - Relatively Uniform		N/A	N/A	relatively uniform									
									Verification - Possibly Uniform		25%	51%	possibly uniform									
									Verification - Variable		-15%	13%	variable									
									Verification Net - All Events		-2%	25%										
									Net Average - All Events		-4%	20%										

Darst 019-04FT – Calibration Events

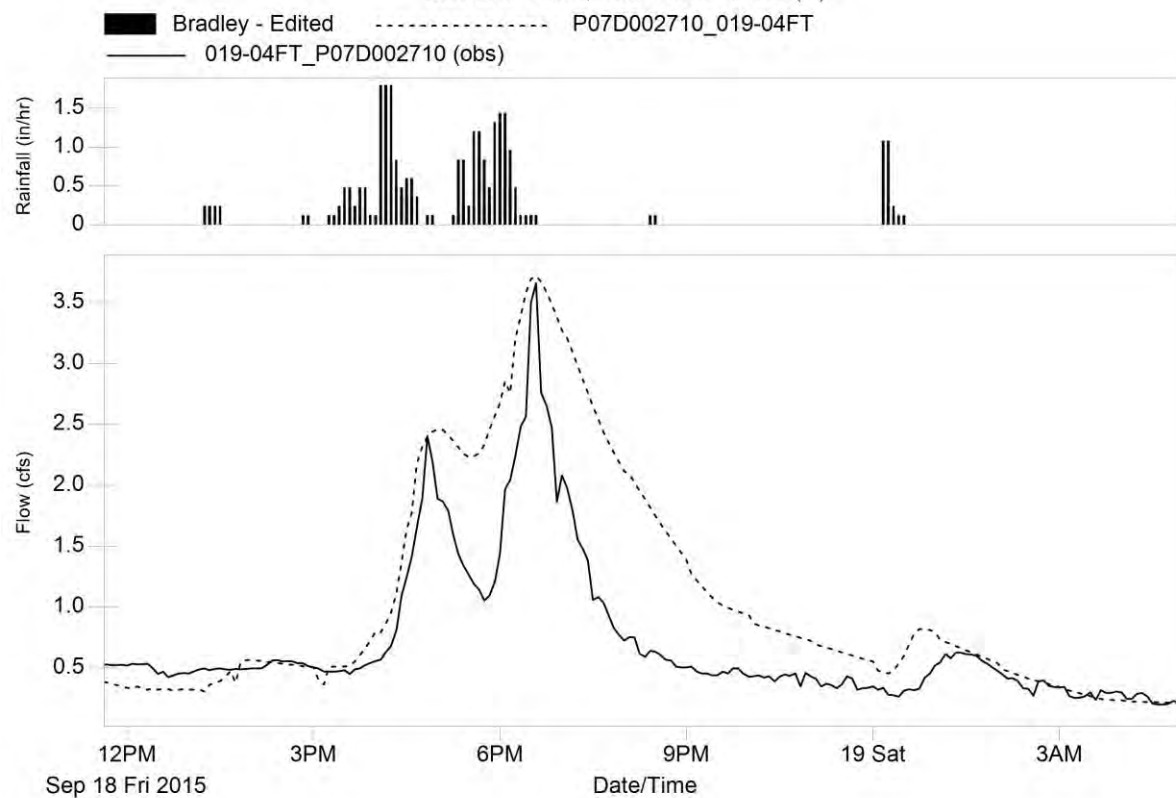
Event of September 8, 2015

Duration: 9.42 h, Total Rainfall: 0.87 (in)



Event of September 18, 2015

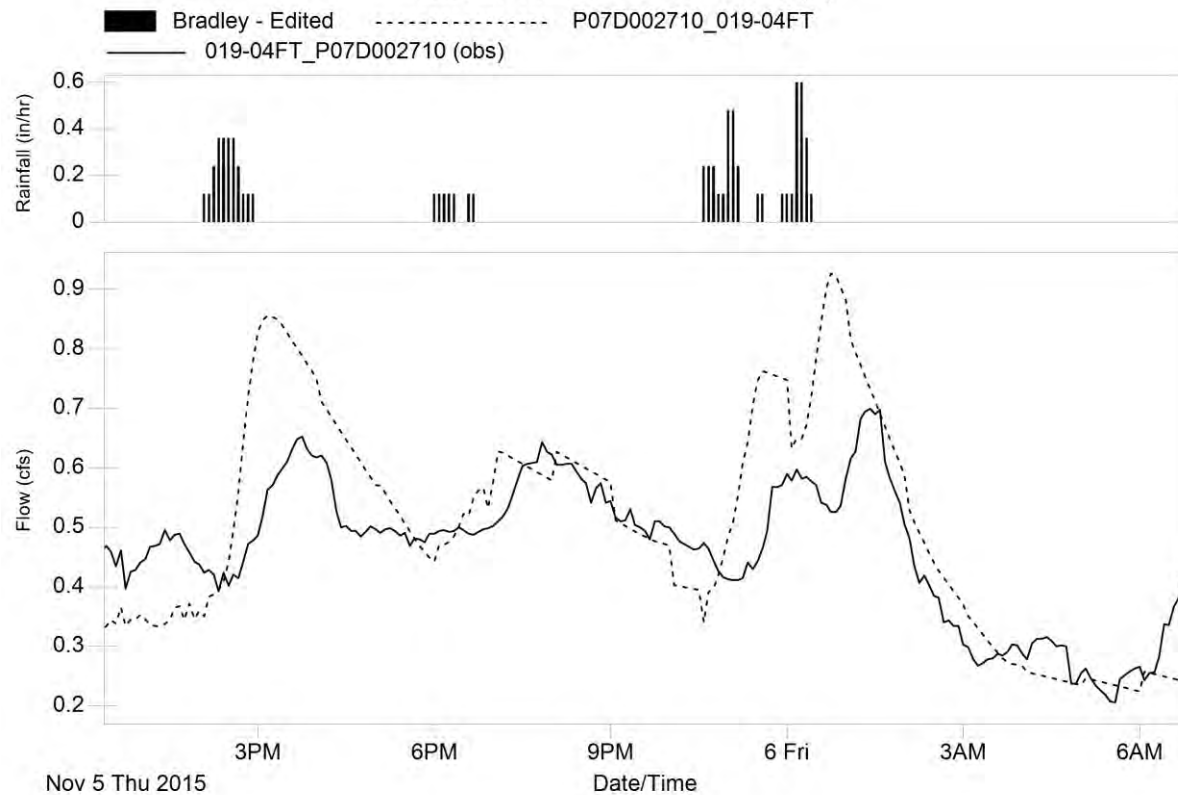
Duration: 14.5 h, Total Rainfall: 1.62 (in)



Darst 019-04FT – Calibration Events

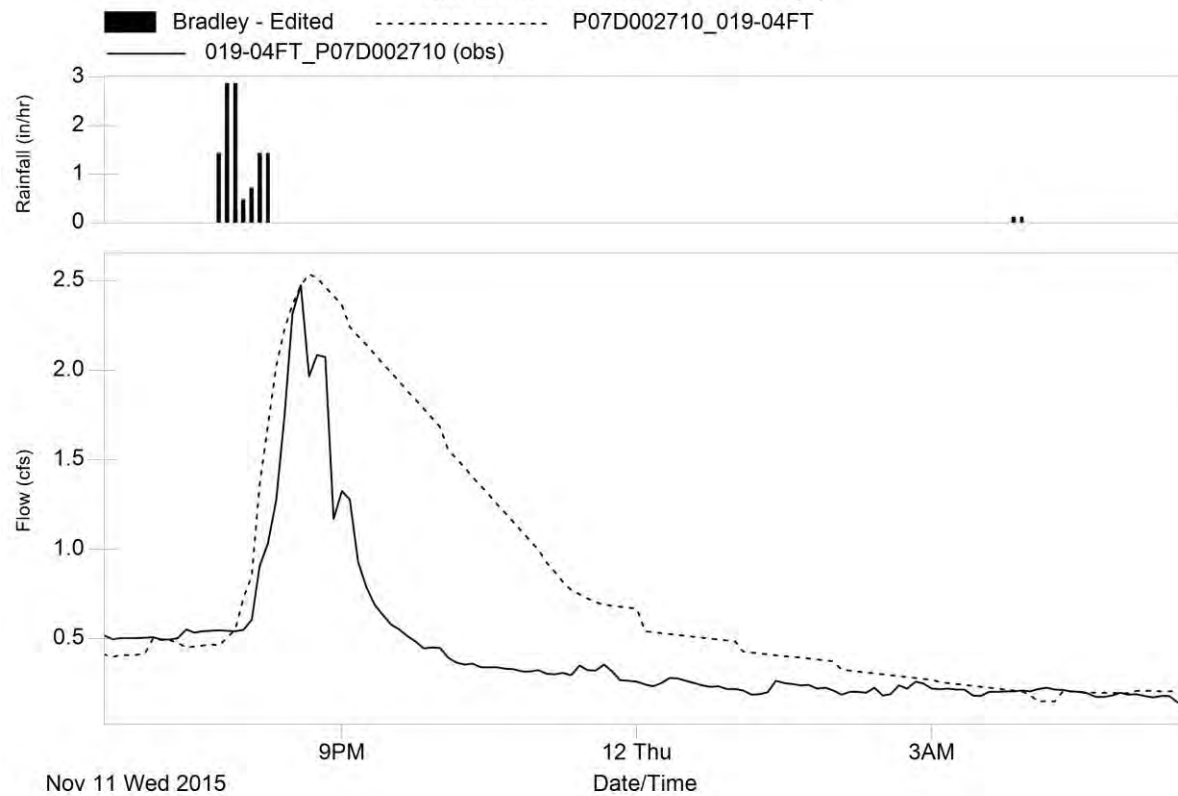
Event of November 5, 2015

Duration: 15.33 h, Total Rainfall: 0.43 (in)



Event of November 11, 2015

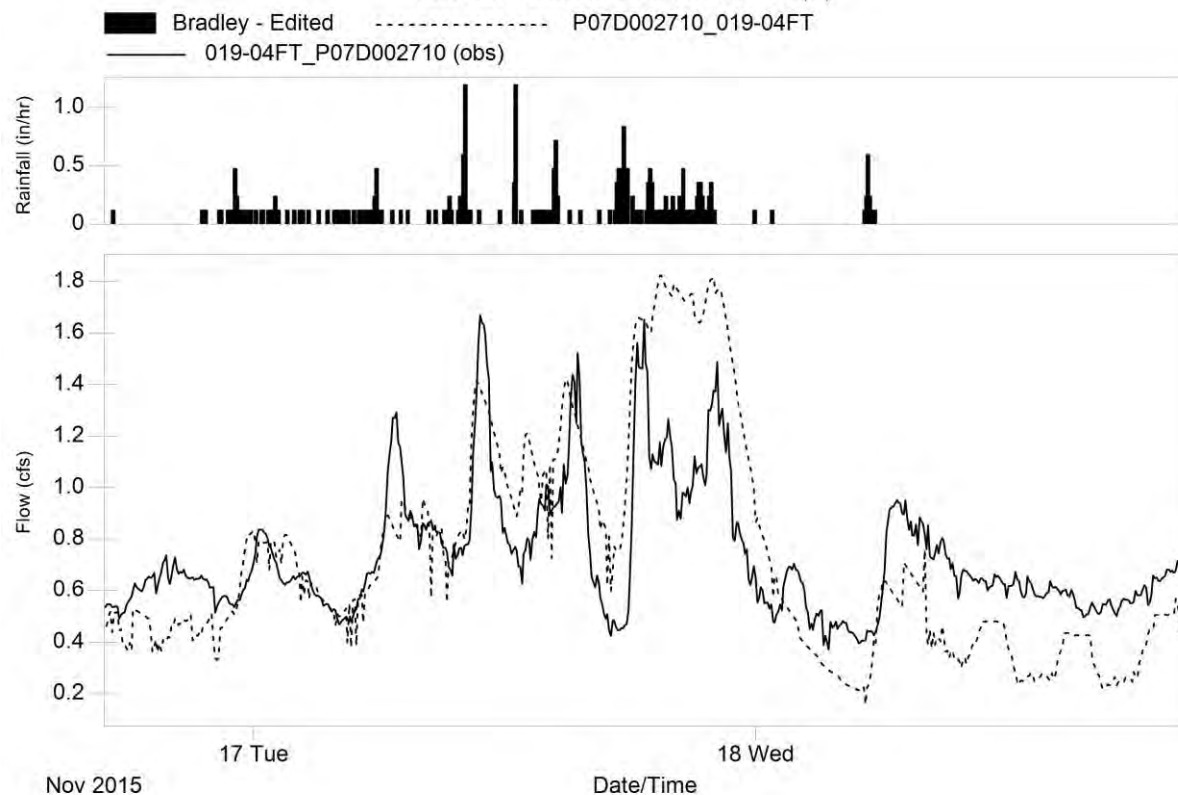
Duration: 9.17 h, Total Rainfall: 0.61 (in)



Darst 019-04FT – Calibration Events

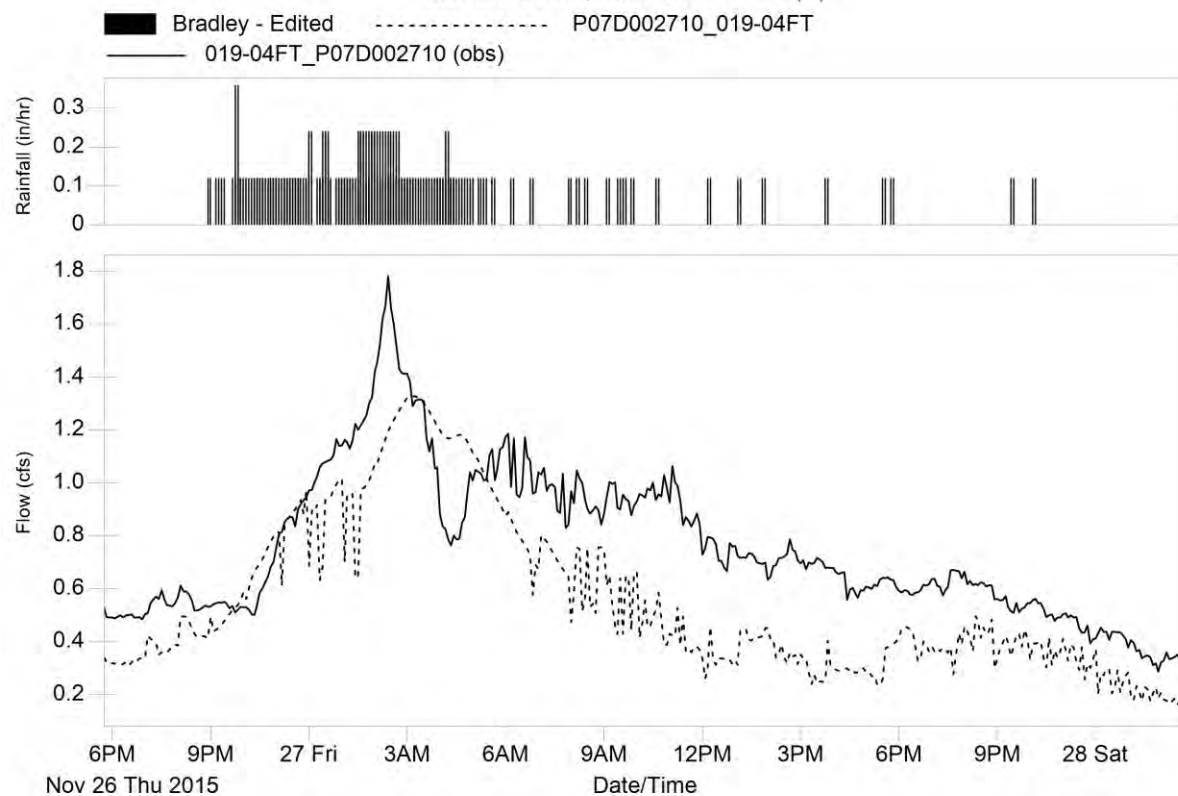
Event of November 16, 2015

Duration: 43.08 h, Total Rainfall: 2.37 (in)



Event of November 26, 2015

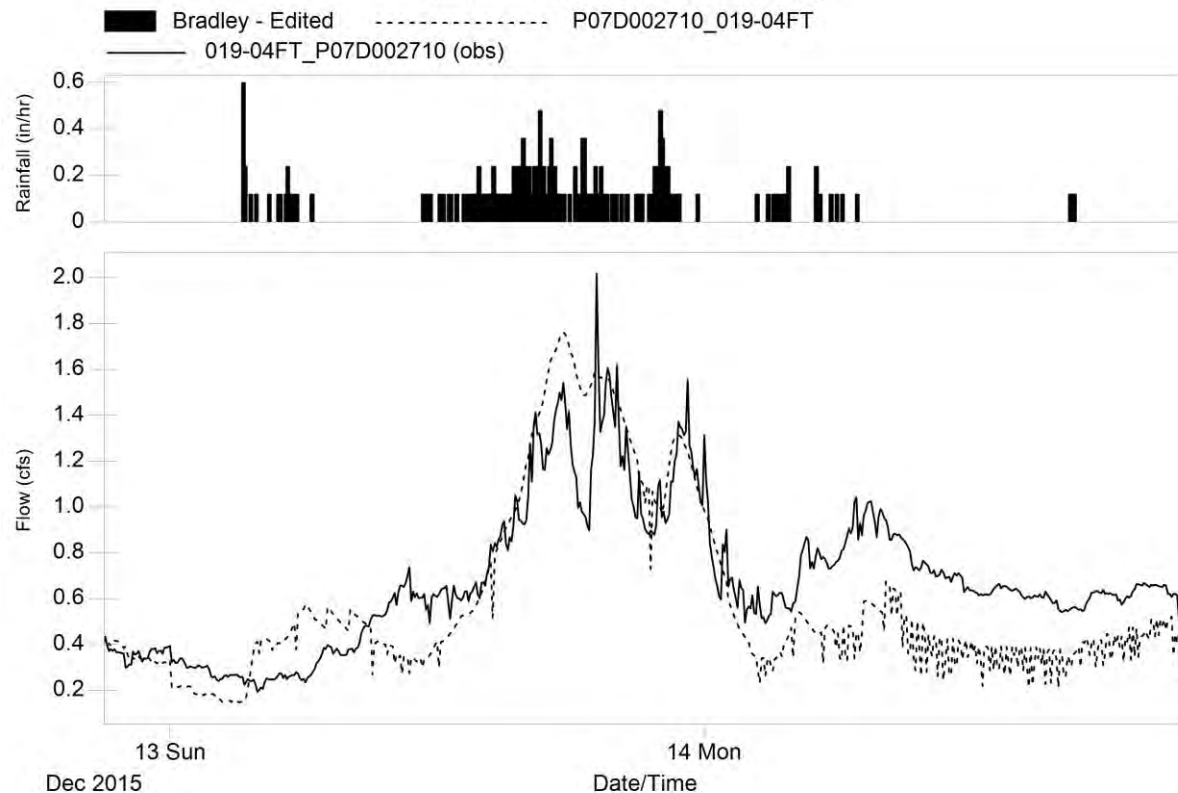
Duration: 27.5 h, Total Rainfall: 1.12 (in)



Darst 019-04FT – Calibration Events

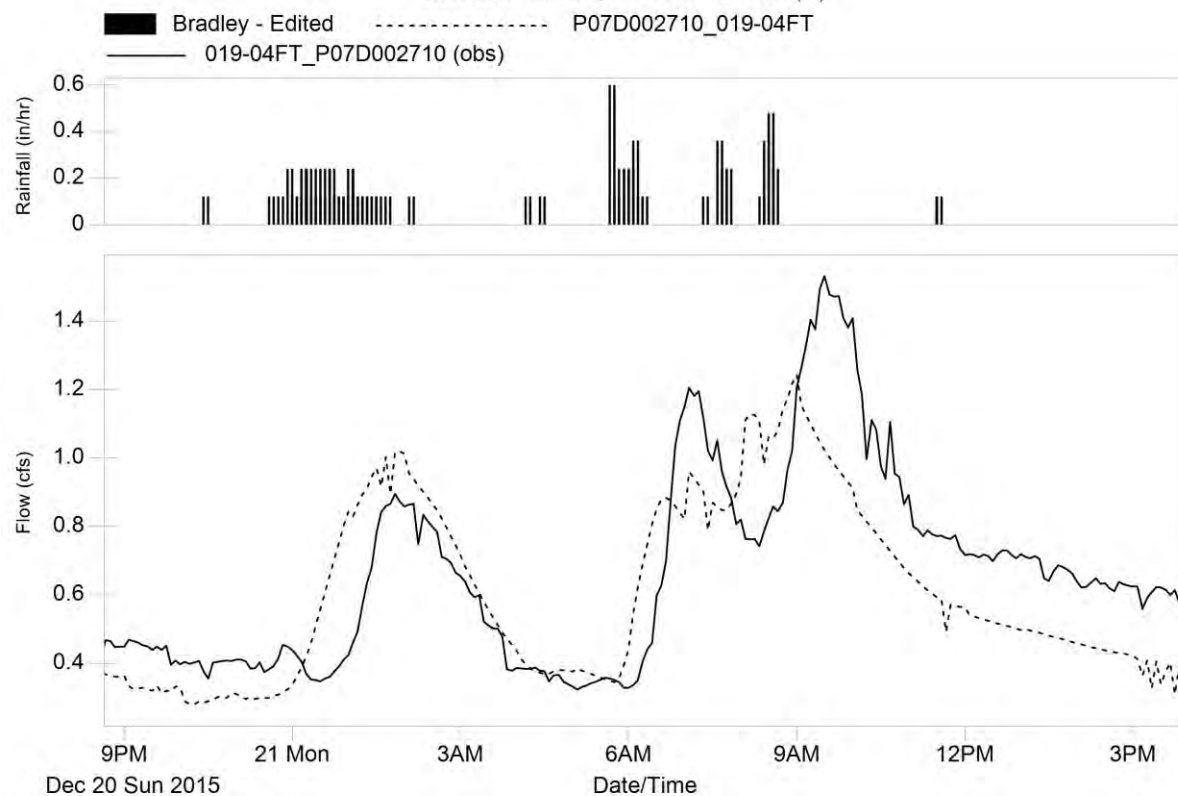
Event of December 13, 2015

Duration: 40.5 h, Total Rainfall: 1.77 (in)



Event of December 20, 2015

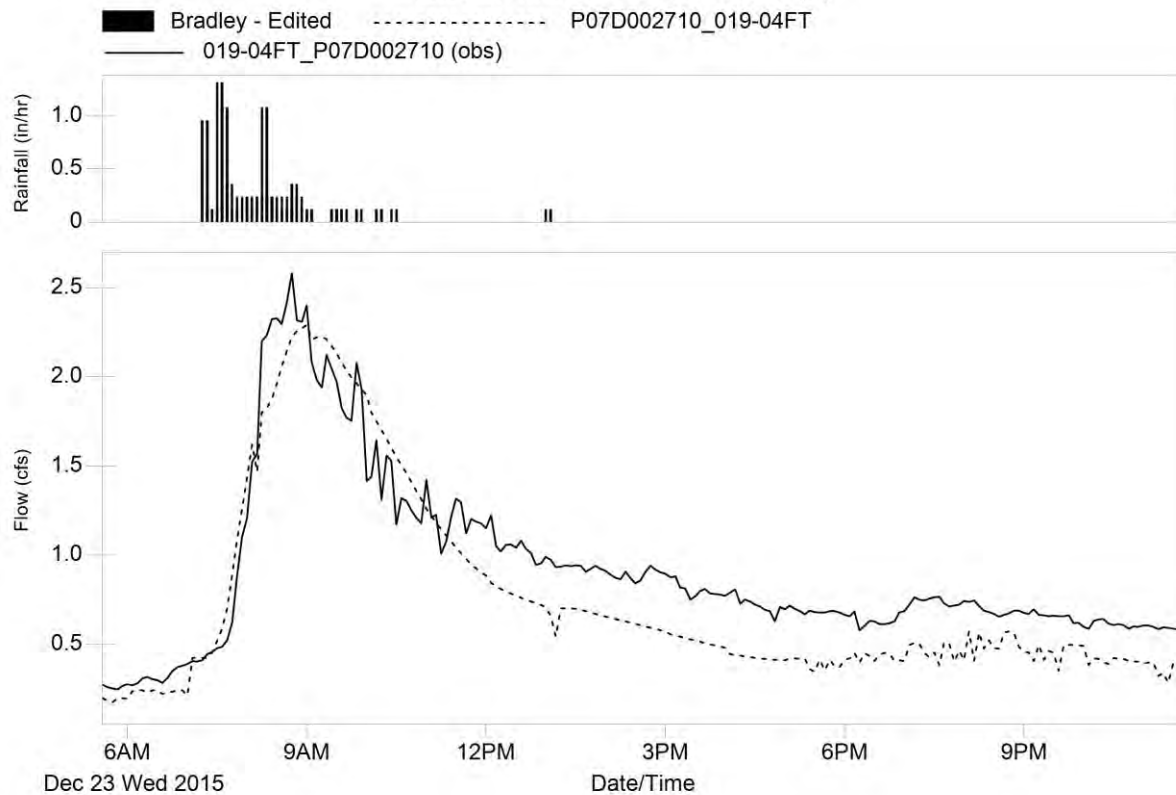
Duration: 16.08 h, Total Rainfall: 0.7 (in)



Darst 019-04FT – Calibration Events

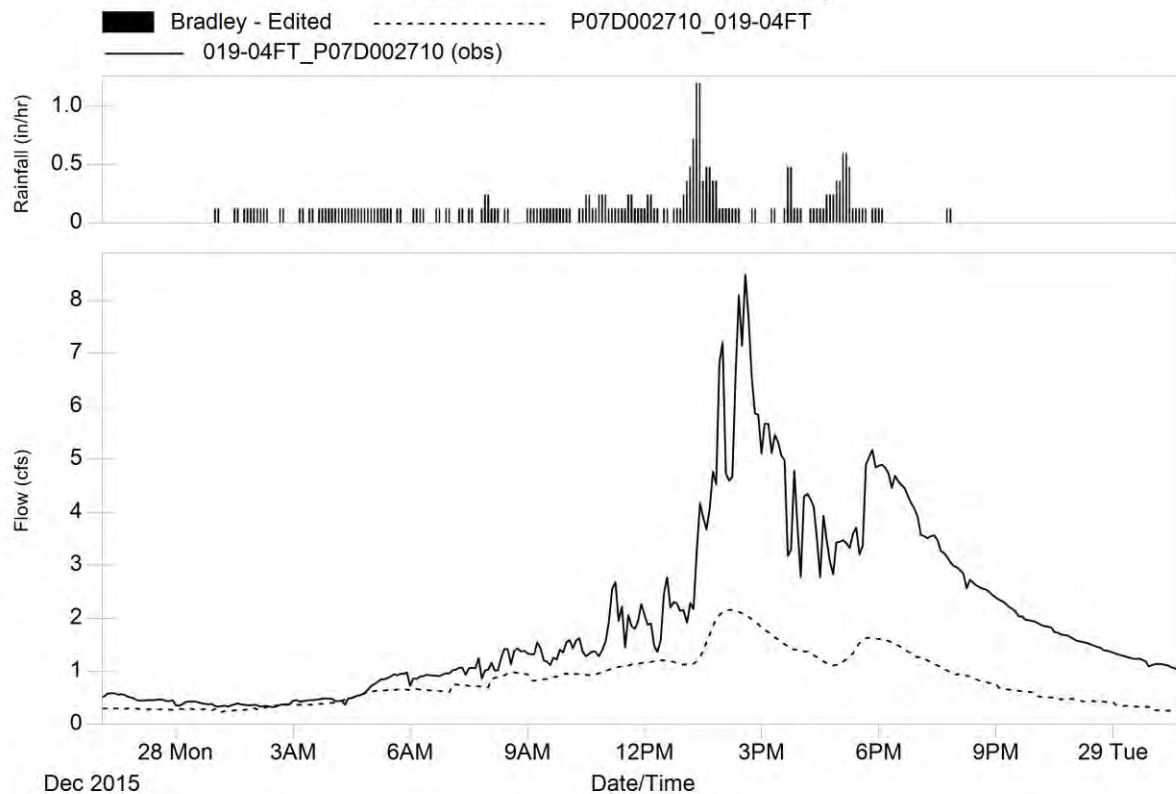
Event of December 23, 2015

Duration: 15.08 h, Total Rainfall: 0.73 (in)



Event of December 28, 2015

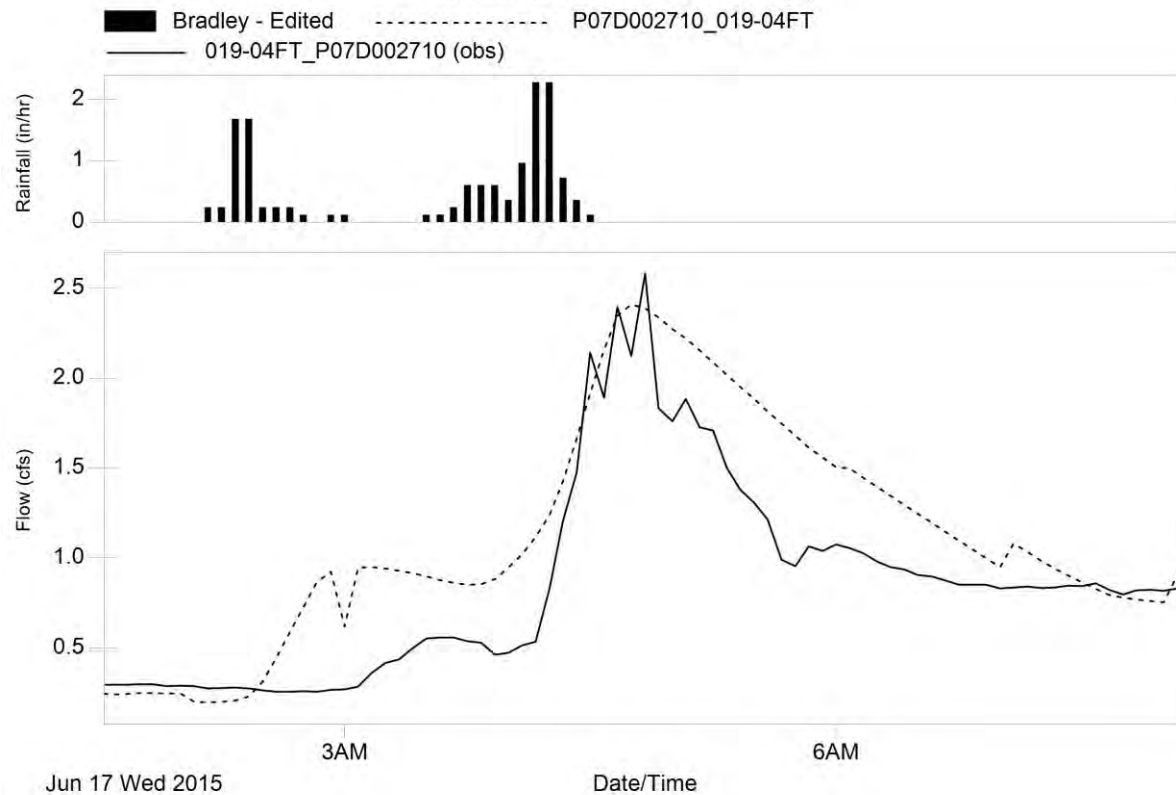
Duration: 23.08 h, Total Rainfall: 1.64 (in)



Darst 019-04FT – Verification Events

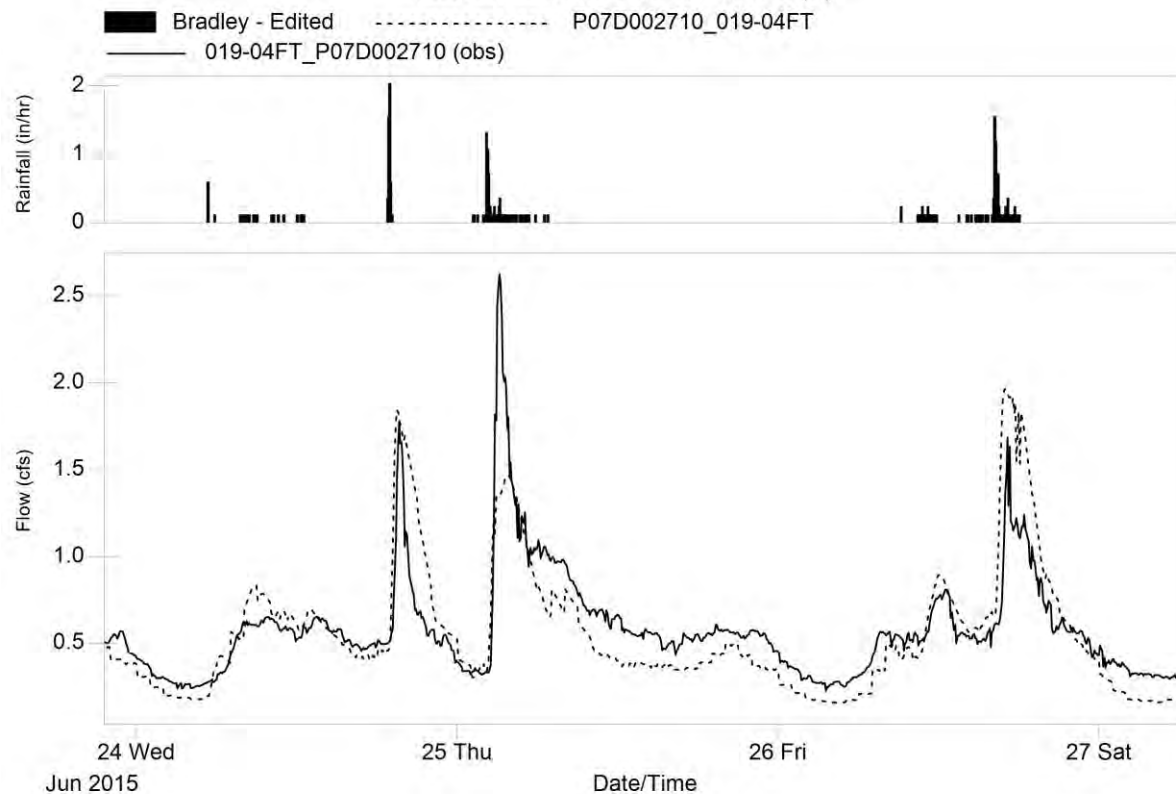
Event of June 17, 2015

Duration: 5.5 h, Total Rainfall: 0.8 (in)



Event of June 24, 2015

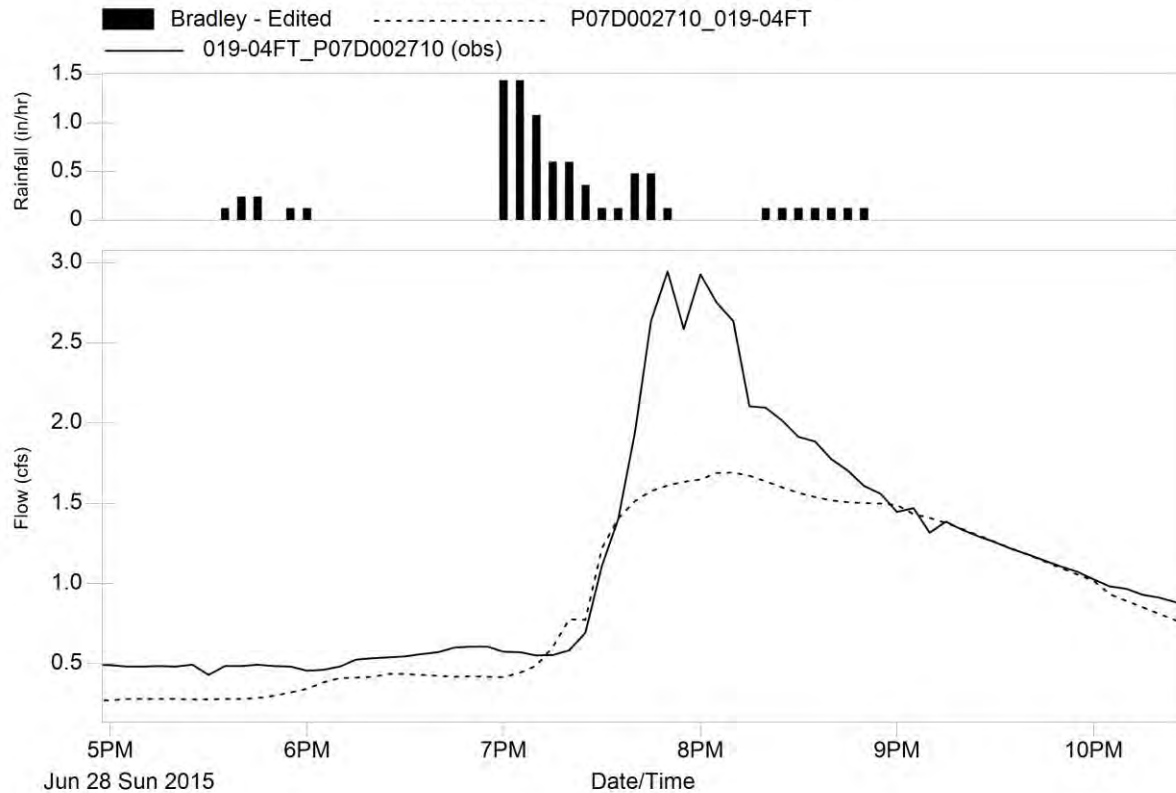
Duration: 67.42 h, Total Rainfall: 2.15 (in)



Darst 019-04FT – Verification Events

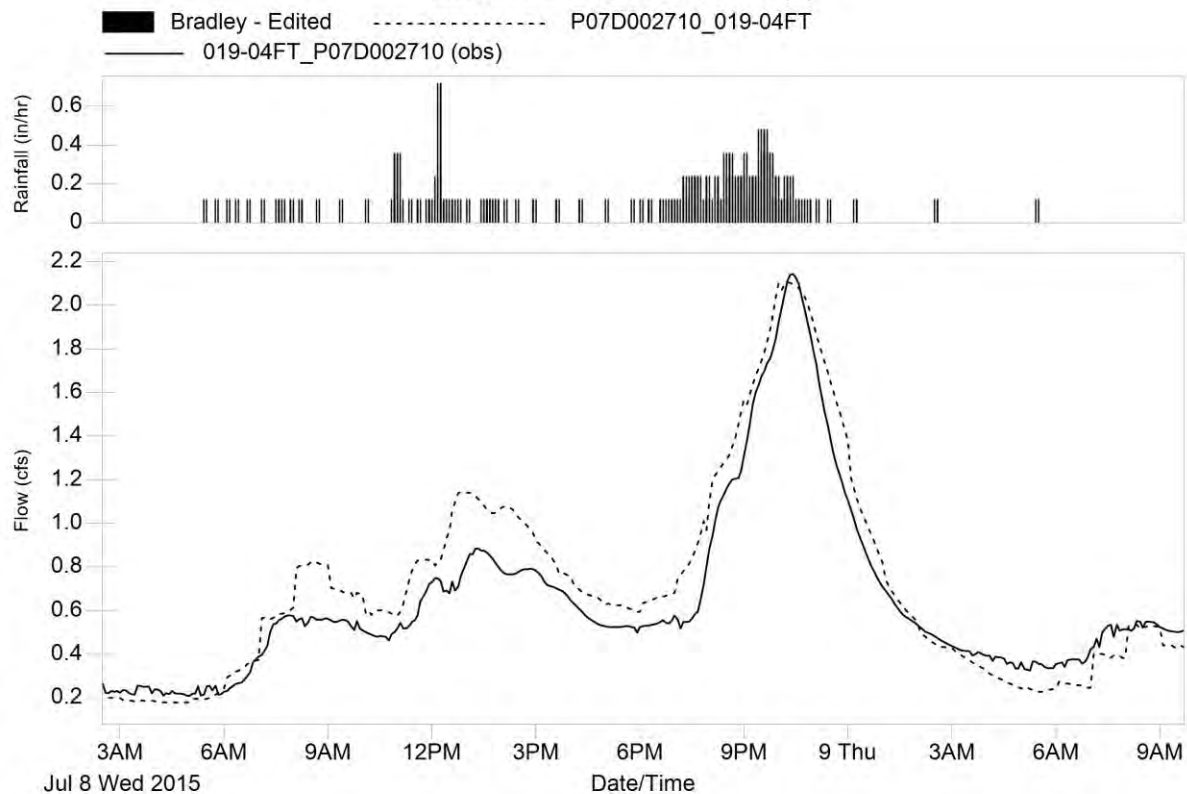
Event of June 28, 2015

Duration: 4.58 h, Total Rainfall: 0.51 (in)

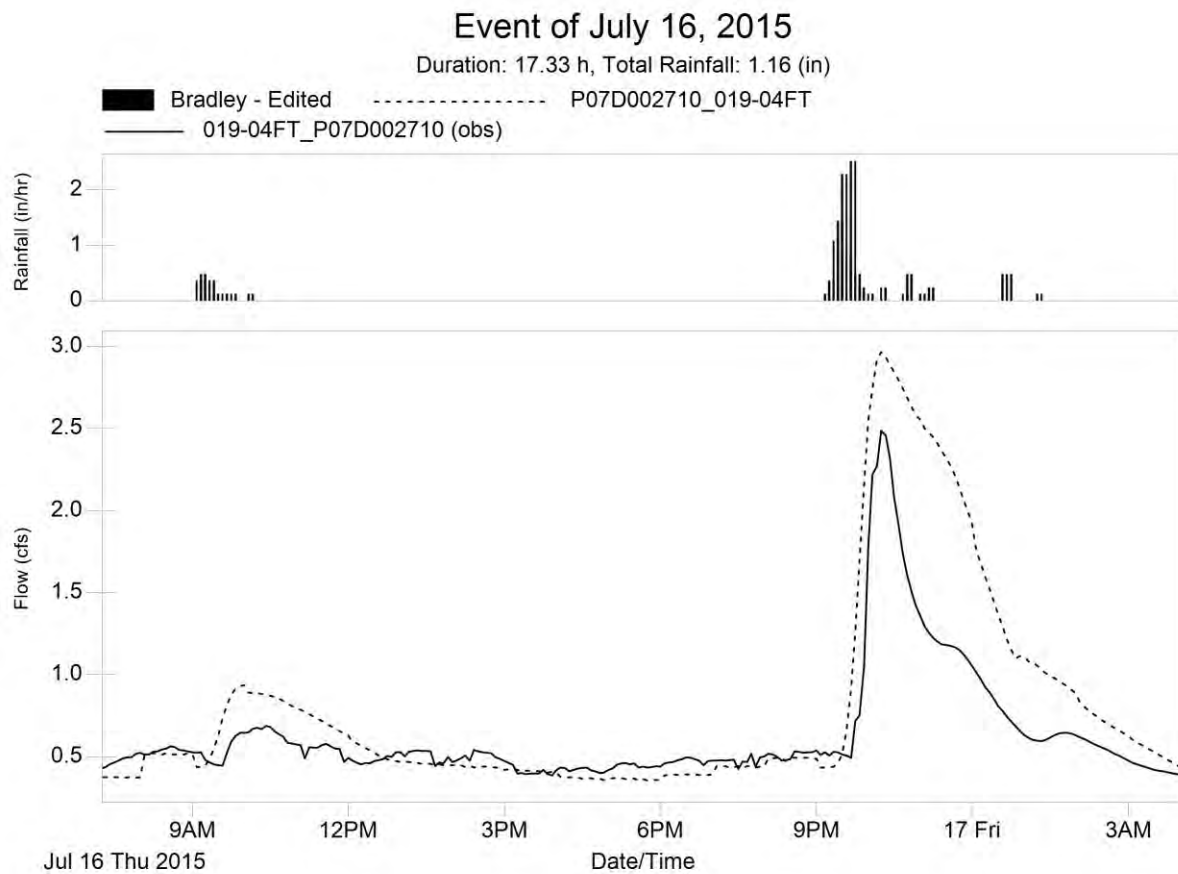
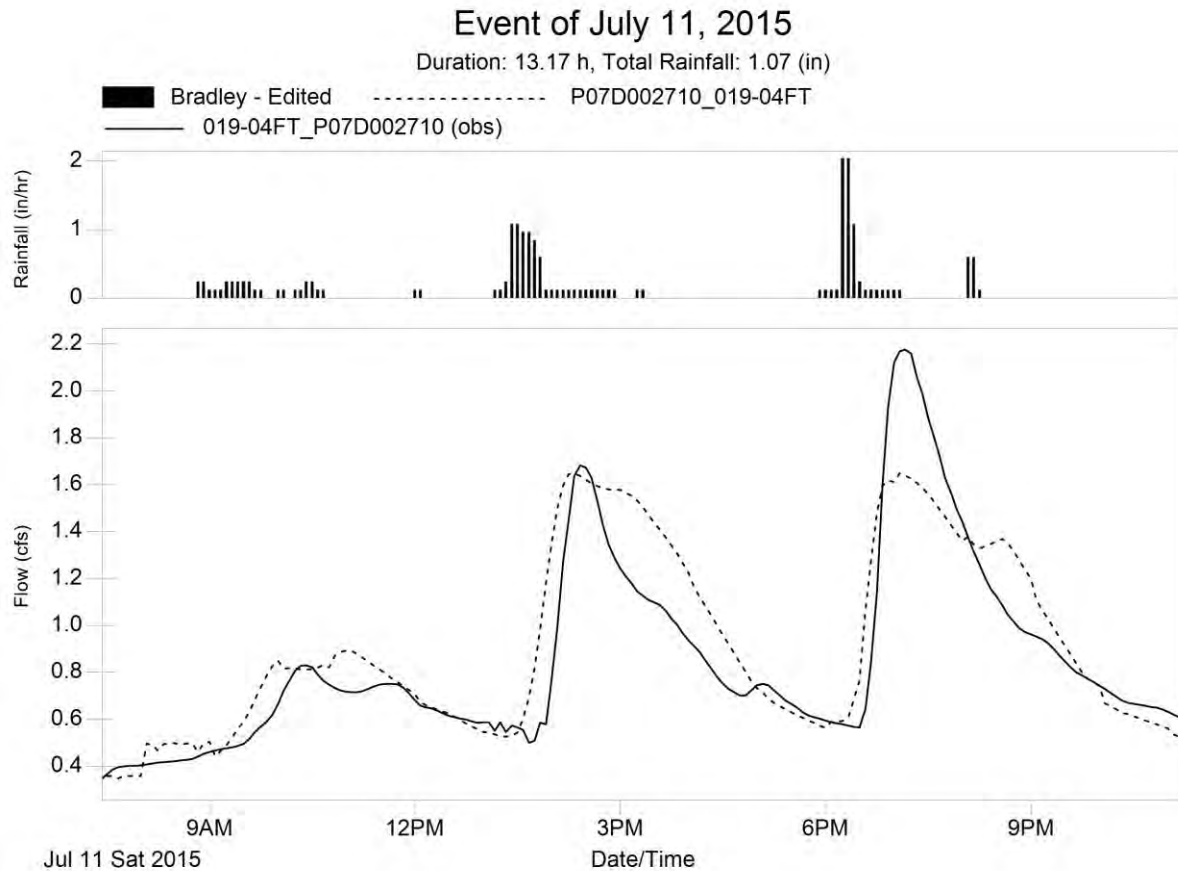


Event of July 8, 2015

Duration: 26 h, Total Rainfall: 1.39 (in)



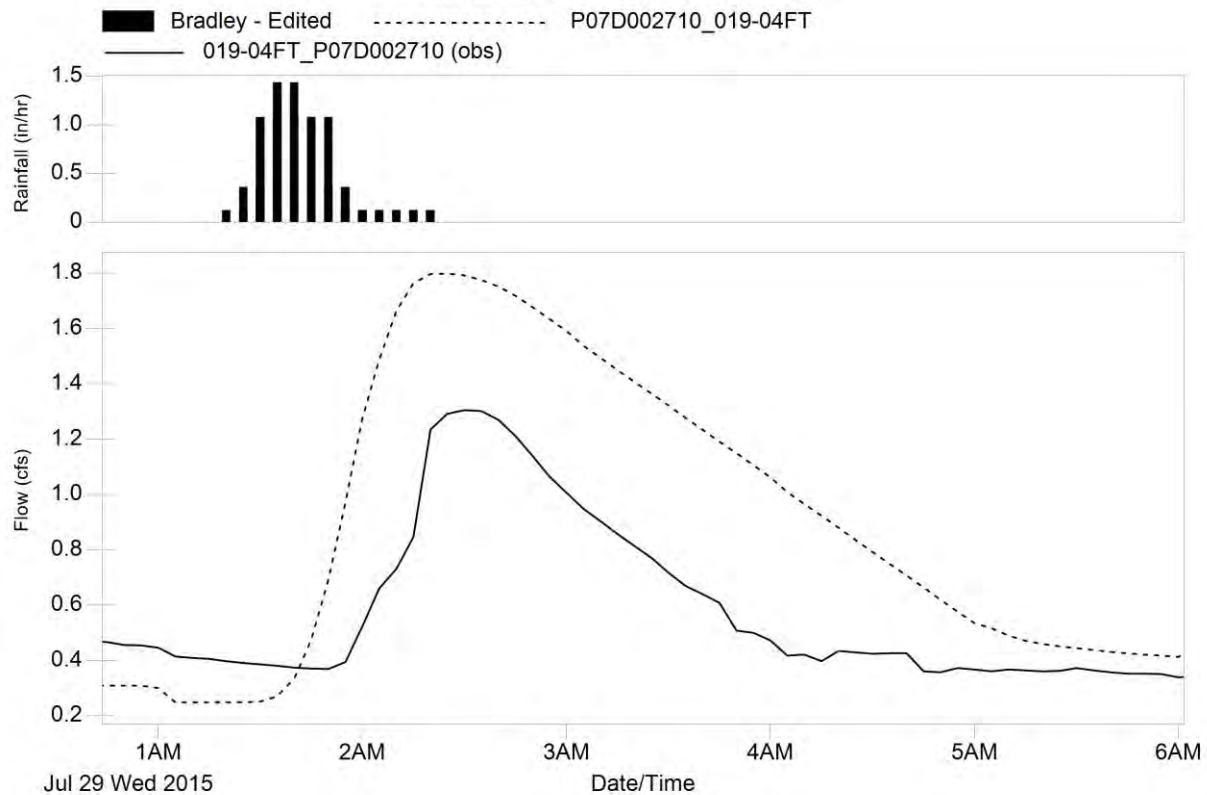
Darst 019-04FT – Verification Events



Darst 019-04FT – Verification Events

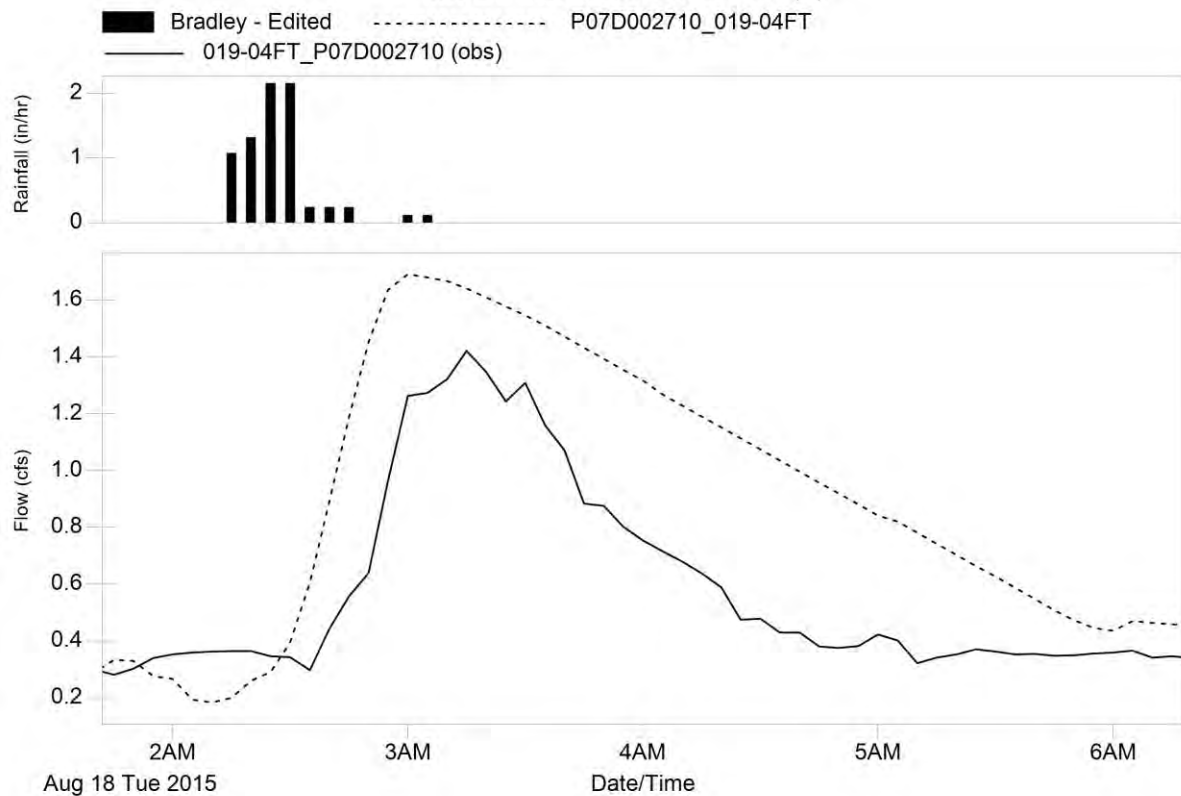
Event of July 29, 2015

Duration: 4.42 h, Total Rainfall: 0.51 (in)



Event of August 18, 2015

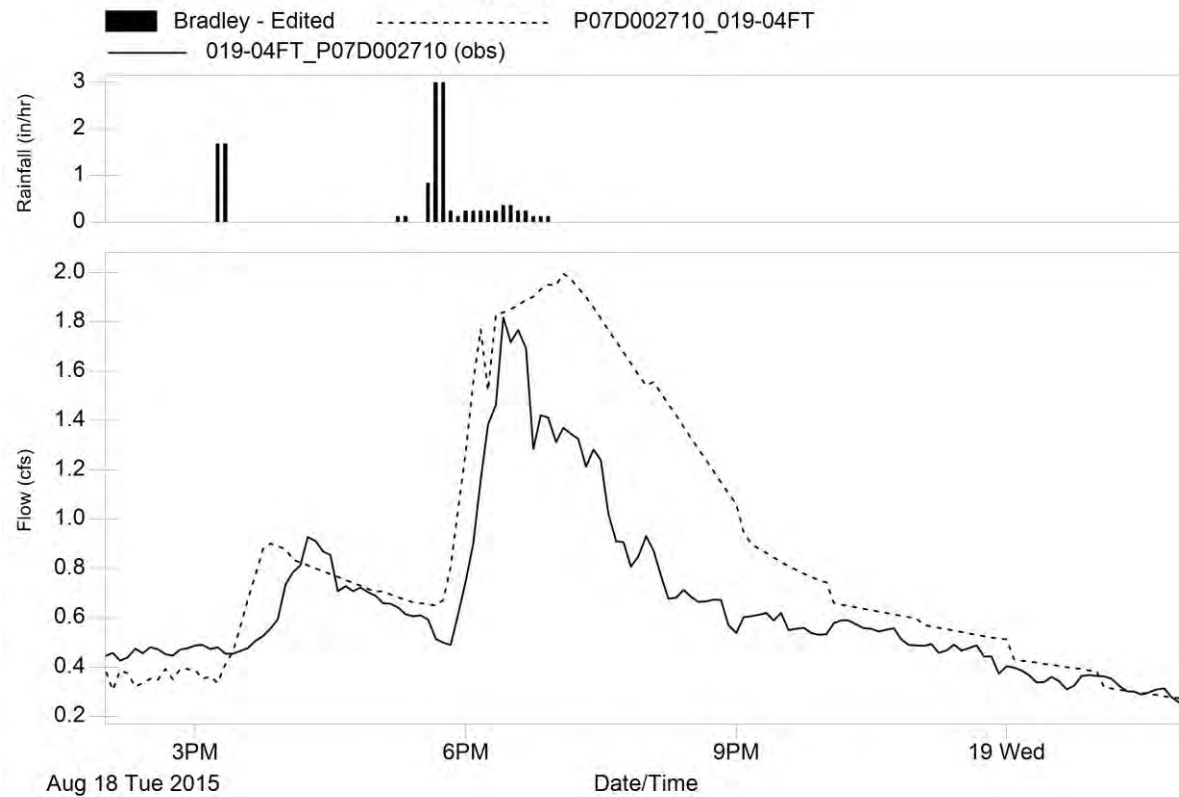
Duration: 3.83 h, Total Rainfall: 0.45 (in)



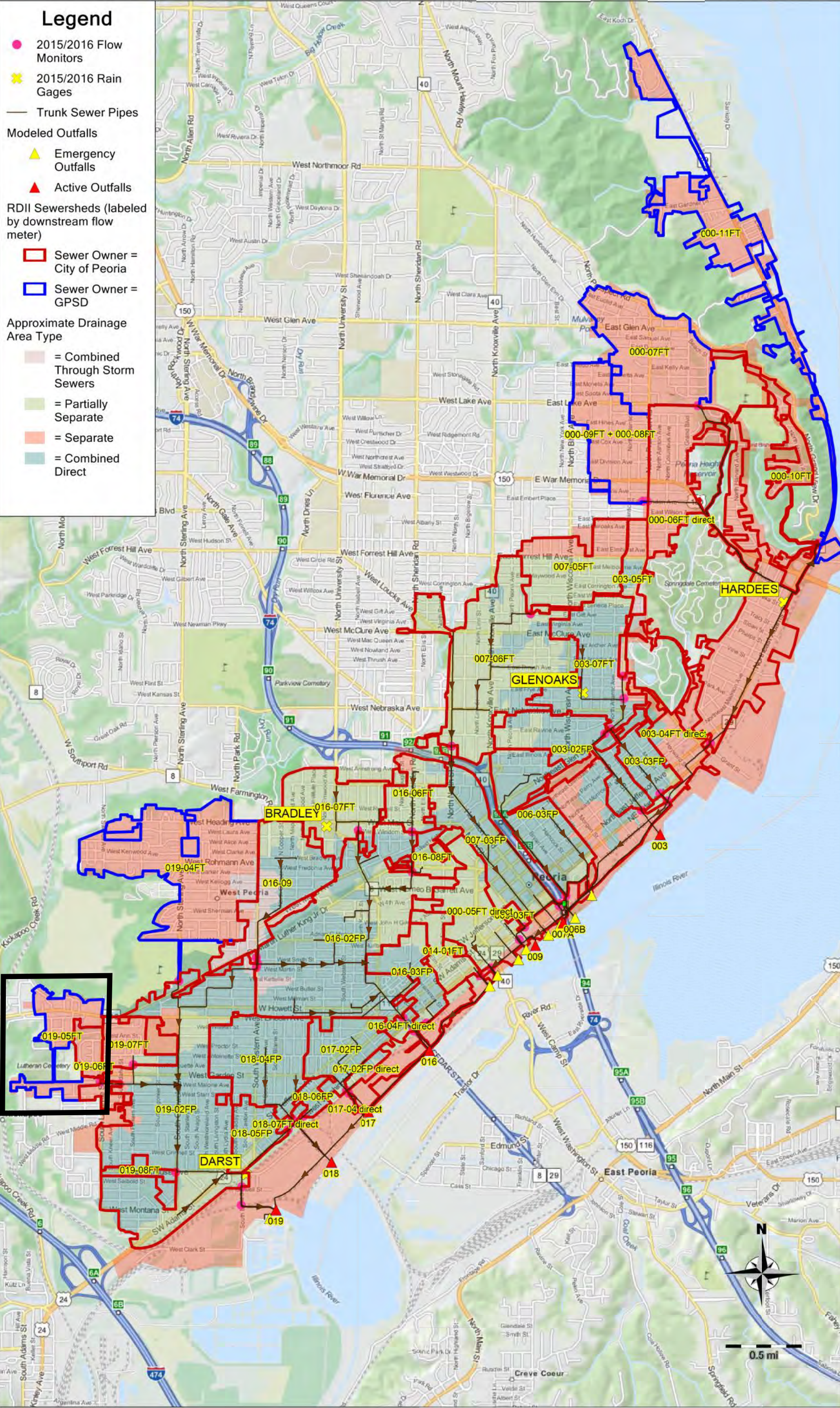
Darst 019-04FT – Verification Events

Event of August 18, 2015

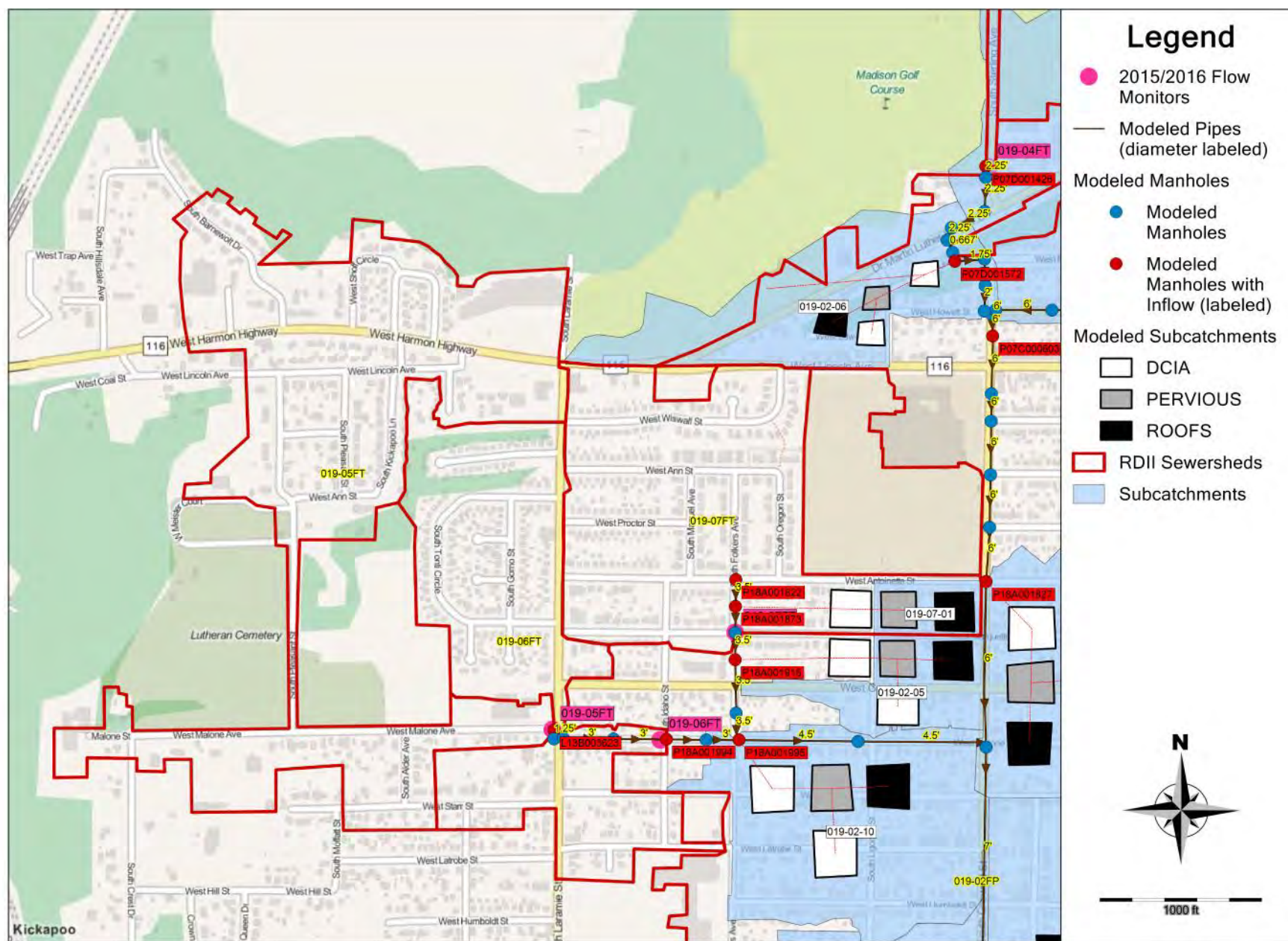
Duration: 10 h, Total Rainfall: 0.66 (in)



Flow Monitor 019-05FT Overview Map



019-05FT: Separate Sewer Flow Meter



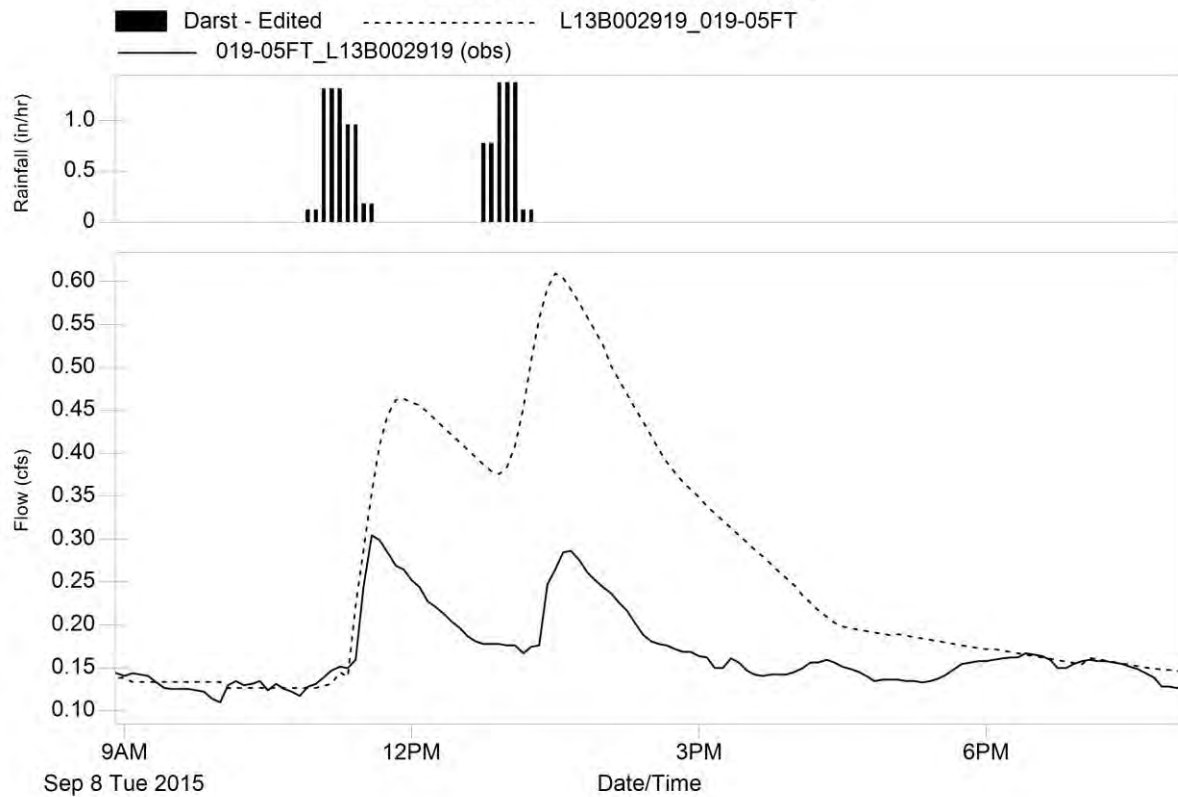
Darst 019-05 RDII

Date	Duration (h)	Rainfall (in)	Maximum Flow (cfs)		Maximum Flow (mgd)		Total Volume (ft³)		Volume (million gallons)		Peak Flow Rate (-15% to +25%)	Flow Volume (-10% to +20%)	Rainfall Variability	
		Darst Edited	Observed	Modeled	Observed	Modeled	Observed	Modeled	Observed	Modeled				
CALIBRATION EVENTS - FLOW														
9/8/2015 9:50	9.3	0.81	0.3	0.6	0.2	0.4	5,821	9,692	0.0	0.1	100%	67%	variable	
9/18/2015 12:25	16.3	1.90	0.6	0.9	0.4	0.6	11,480	17,940	0.1	0.1	42%	56%	possibly uniform	
11/5/2015 13:40	13.3	0.34	0.2	0.3	0.1	0.2	7,051	8,287	0.1	0.1	56%	18%	possibly uniform	
11/11/2015 19:05	9.4	0.70	0.5	0.6	0.3	0.4	5,869	7,678	0.0	0.1	18%	31%	variable	
11/16/2015 20:45	35.4	1.59	0.5	0.4	0.3	0.2	25,140	24,450	0.2	0.2	-17%	-3%	variable	
11/26/2015 20:30	19.7	1.01	0.3	0.4	0.2	0.2	13,580	15,430	0.1	0.1	12%	14%	possibly uniform	
12/13/2015 1:15	38.6	1.02	0.5	0.5	0.3	0.3	25,430	27,860	0.2	0.2	6%	10%	variable	
12/20/2015 23:30	21.8	0.45	0.3	0.3	0.2	0.2	11,250	13,980	0.1	0.1	24%	24%	variable	
12/23/2015 5:00	18.0	0.67	0.4	0.5	0.3	0.3	11,290	12,670	0.1	0.1	26%	12%	variable	
12/28/2015 2:40	28.7	2.54	1.0	0.9	0.6	0.6	35,260	28,840	0.3	0.2	-11%	-18%	variable	
VERIFICATION EVENTS - FLOW														
6/17/2015 1:00	12.2	0.84	0.6	0.6	0.4	0.4	8,518	10,130	0.1	0.1	-8%	19%	variable	
6/24/2015 4:20	67.4	2.15	0.4	0.5	0.2	0.3	34,920	44,720	0.3	0.3	46%	28%	variable	
6/28/2015 17:00	13.4	0.52	0.5	0.4	0.3	0.3	7,642	8,659	0.1	0.1	-17%	13%	variable	
7/8/2015 4:10	31.5	1.39	0.6	0.5	0.4	0.3	19,100	22,750	0.1	0.2	-5%	19%	variable	
7/11/2015 7:00	25.2	1.07	0.6	0.4	0.4	0.3	15,870	17,540	0.1	0.1	-28%	11%	variable	
7/16/2015 6:05	24.8	1.34	0.5	1.0	0.3	0.6	13,140	20,410	0.1	0.2	110%	55%	possibly uniform	
7/28/2015 23:55	11.5	0.57	0.2	0.5	0.1	0.3	4,912	7,932	0.0	0.1	162%	61%	possibly uniform	
8/17/2015 23:15	9.9	0.40	0.2	0.4	0.1	0.2	4,046	5,928	0.0	0.0	64%	47%	possibly uniform	
8/18/2015 14:15	12.3	0.66	0.3	0.5	0.2	0.3	6,494	9,689	0.0	0.1	60%	49%	variable	
WEIGHTED AVERAGES														
Calibration - Relatively Uniform										n/a		n/a		relatively uniform
Calibration - Possibly Uniform										36%		30%		possibly uniform
Calibration - Variable										12%		4%		variable
Calibration Weighted - All Events										18%		10%		
Verification - Relatively Uniform										n/a		n/a		relatively uniform
Verification - Possibly Uniform										109%		55%		possibly uniform
Verification - Variable										0%		23%		variable
Verification Weighted - All Events										25%		29%		
Weighted Average - All Events										21%		18%		
NET AVERAGES														
Calibration - Relatively Uniform										n/a		n/a		relatively uniform
Calibration - Possibly Uniform										37%		29%		possibly uniform
Calibration - Variable										21%		17%		variable
Calibration Net - All Events										26%		21%		
Verification - Relatively Uniform										n/a		n/a		relatively uniform
Verification - Possibly Uniform										112%		54%		possibly uniform
Verification - Variable										8%		23%		variable
Verification Net - All Events										43%		34%		
Net Average - All Events										34%		27%		

Darst 019-05FT – Calibration Events

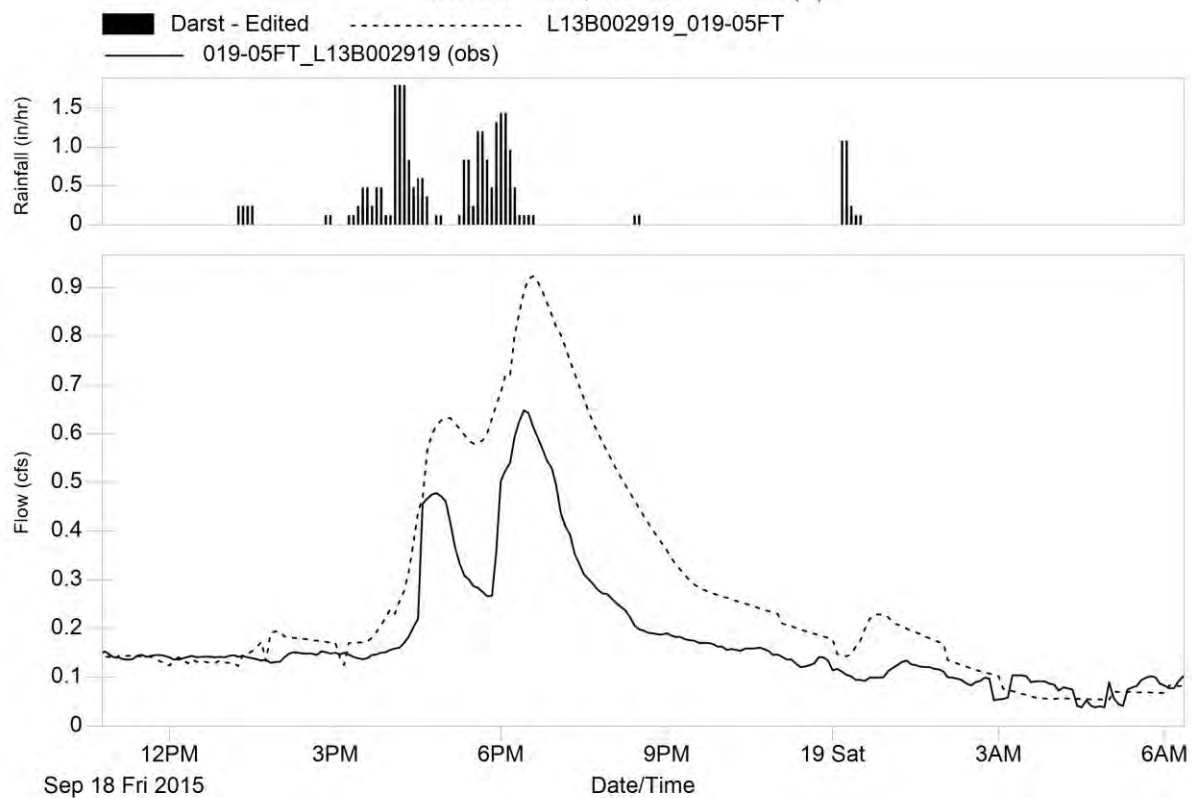
Event of September 8, 2015

Duration: 9.3 h, Total Rainfall: 0.81 (in)



Event of September 18, 2015

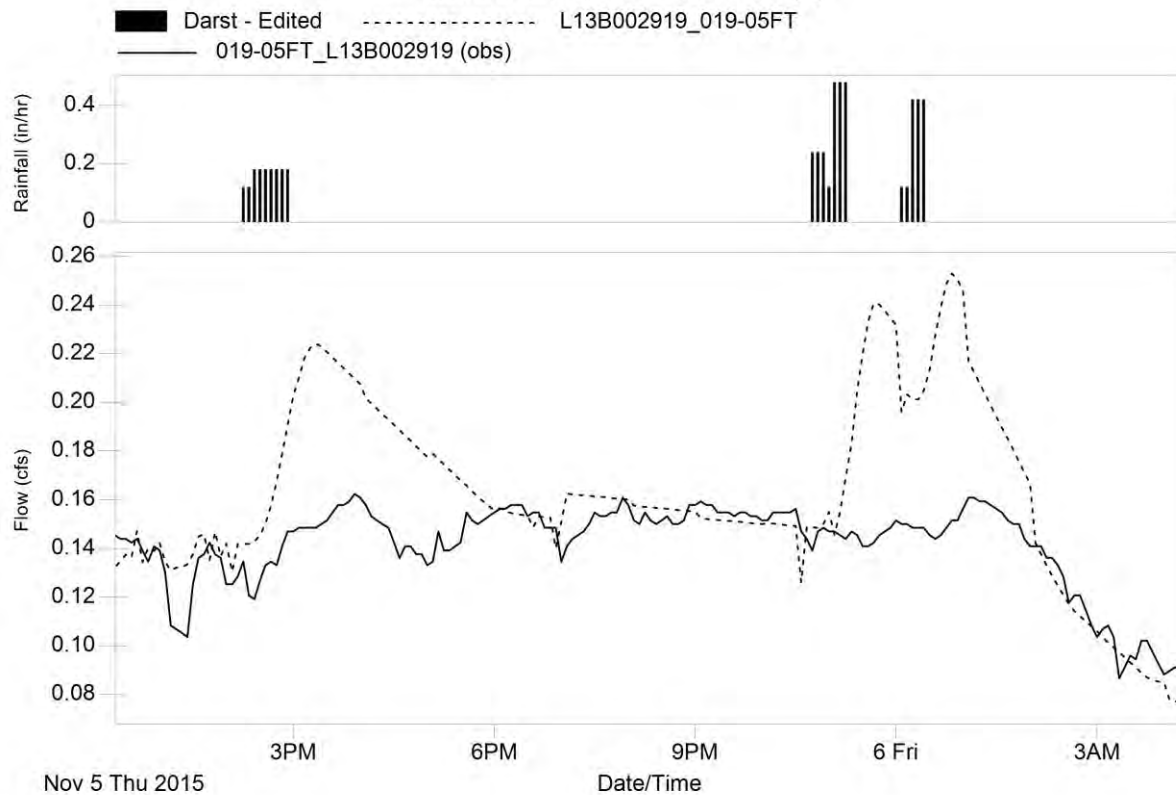
Duration: 16.3 h, Total Rainfall: 1.62 (in)



Darst 019-05FT – Calibration Events

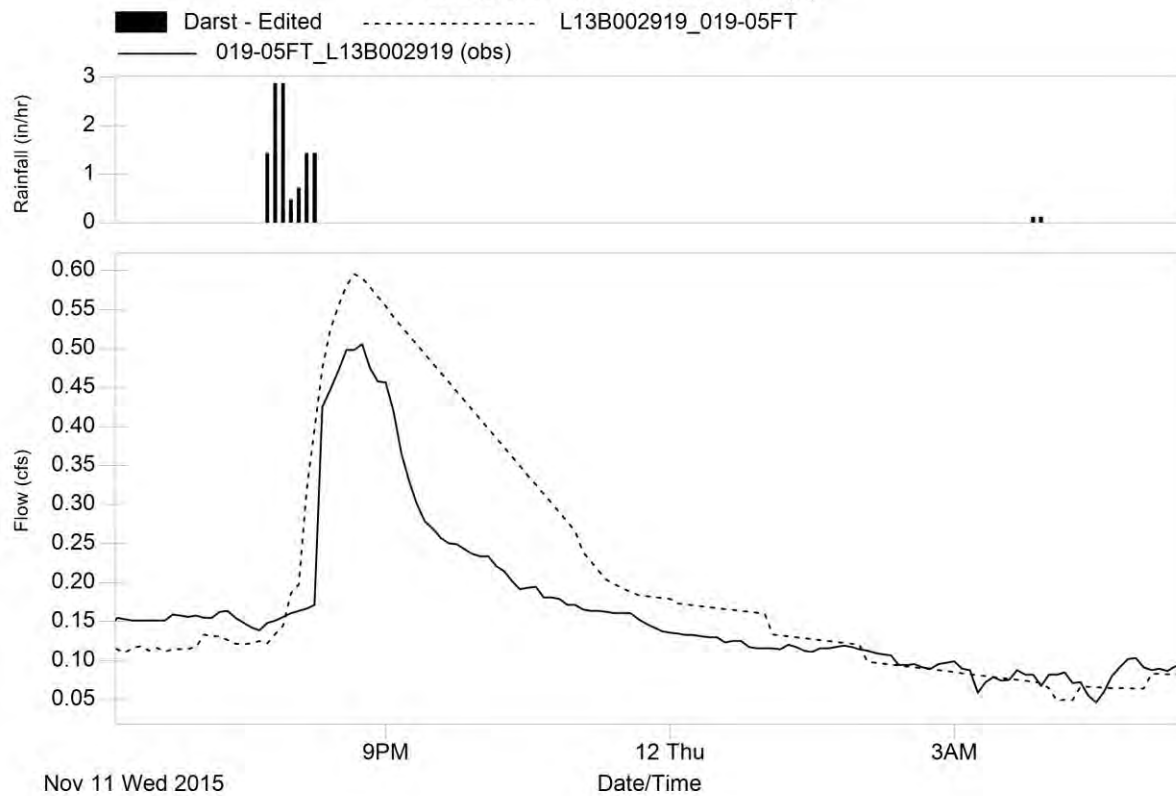
Event of November 5, 2015

Duration: 13.3 h, Total Rainfall: 0.34 (in)



Event of November 11, 2015

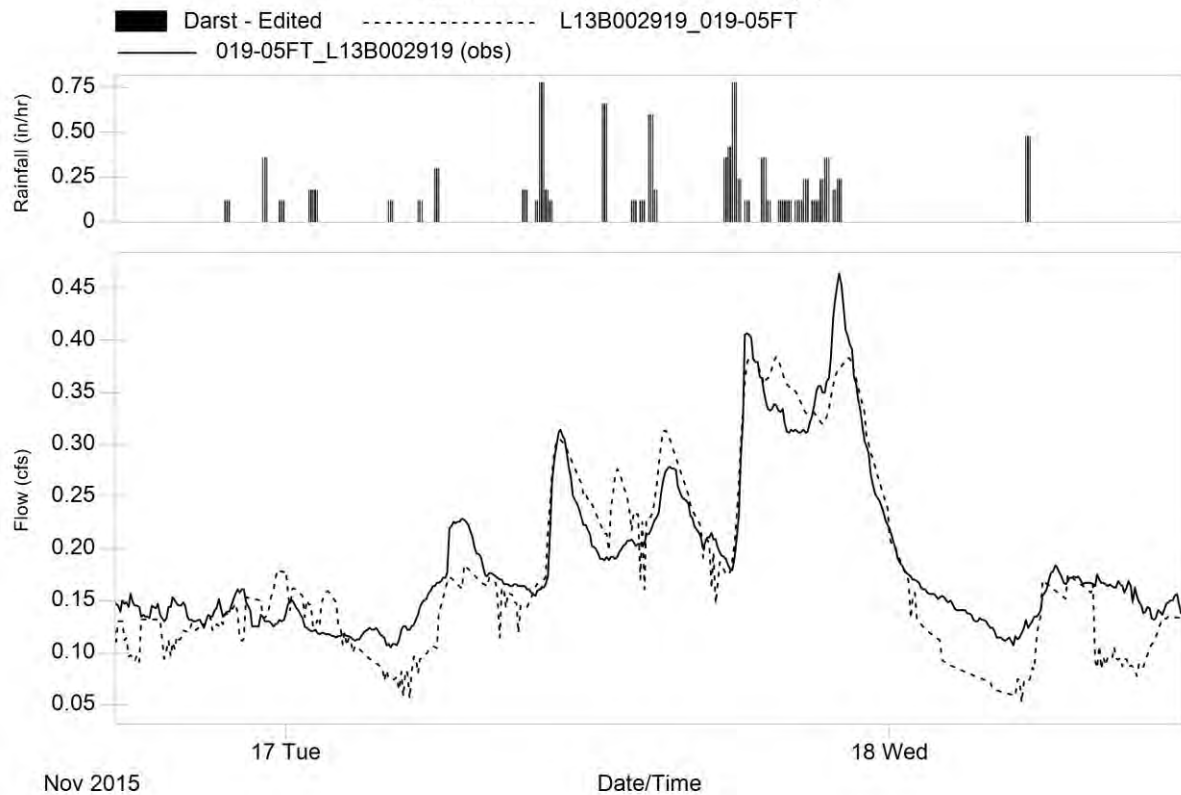
Duration: 9.4 h, Total Rainfall: 0.61 (in)



Darst 019-05FT – Calibration Events

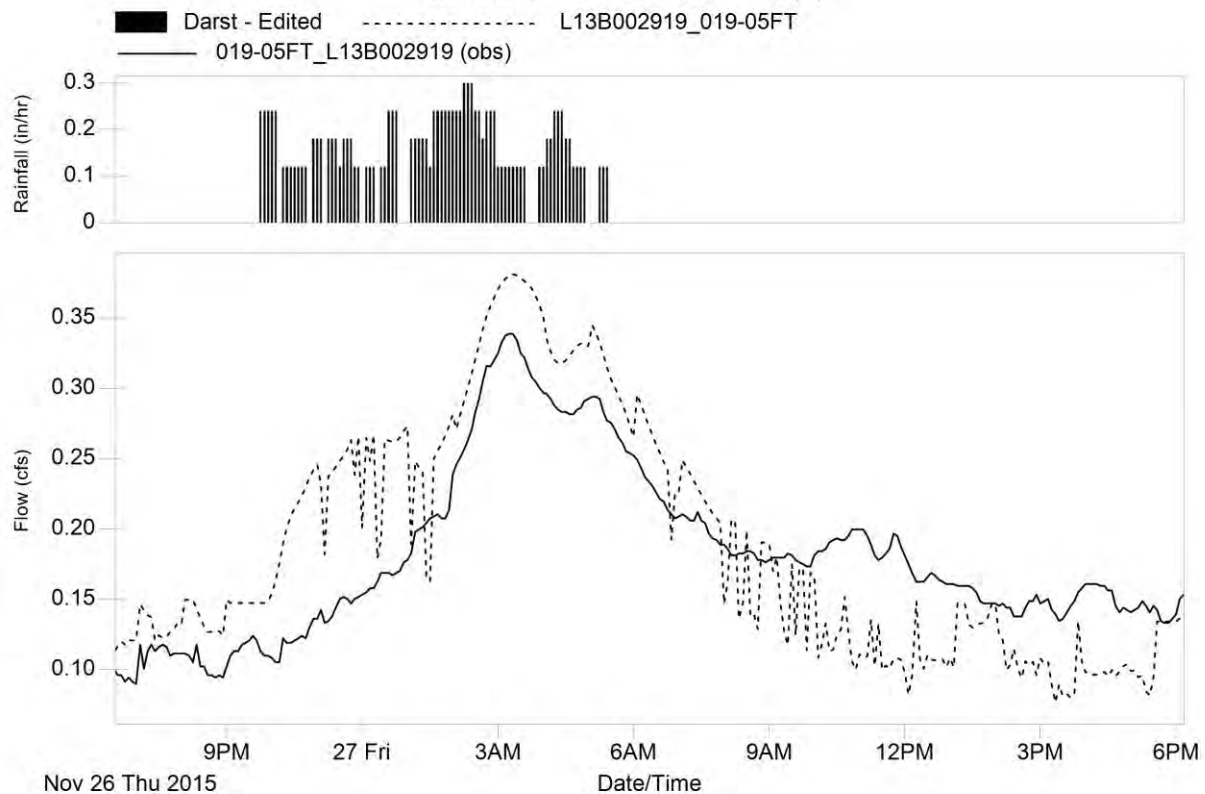
Event of November 16, 2015

Duration: 35.4 h, Total Rainfall: 1.59 (in)



Event of November 26, 2015

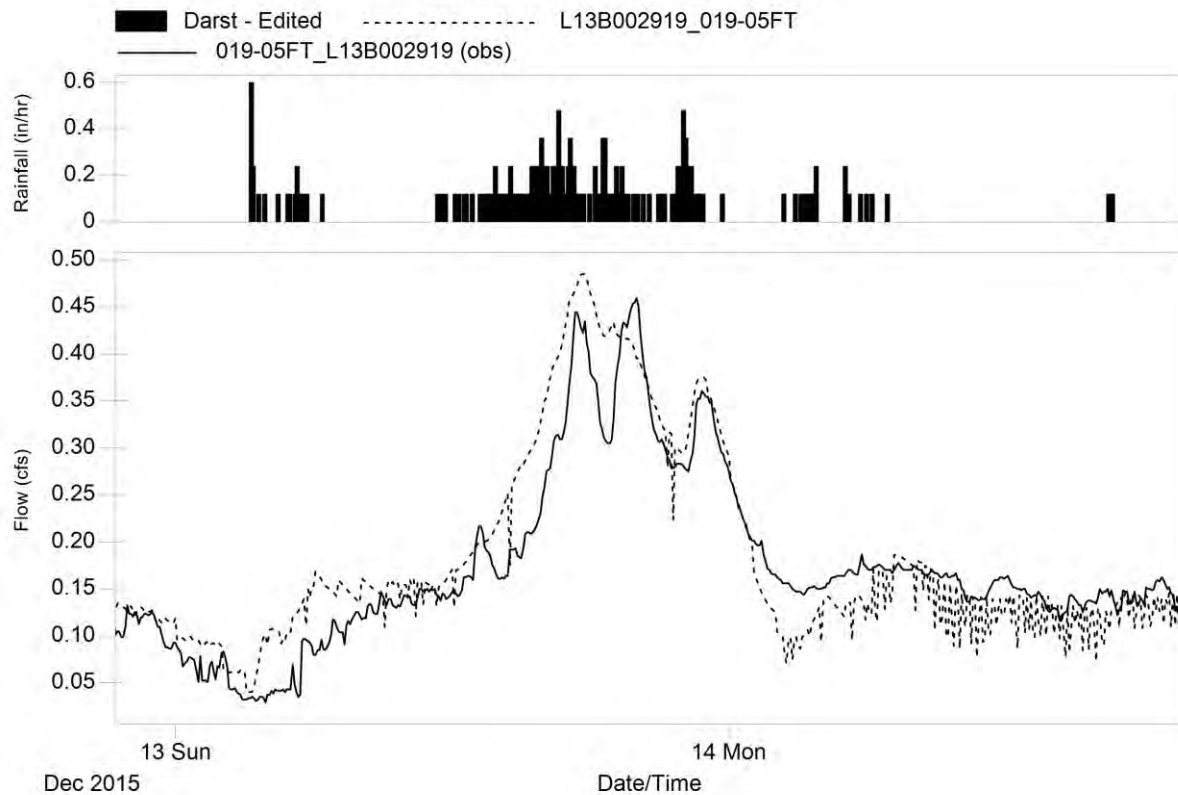
Duration: 19.7 h, Total Rainfall: 1.01 (in)



Darst 019-05FT – Calibration Events

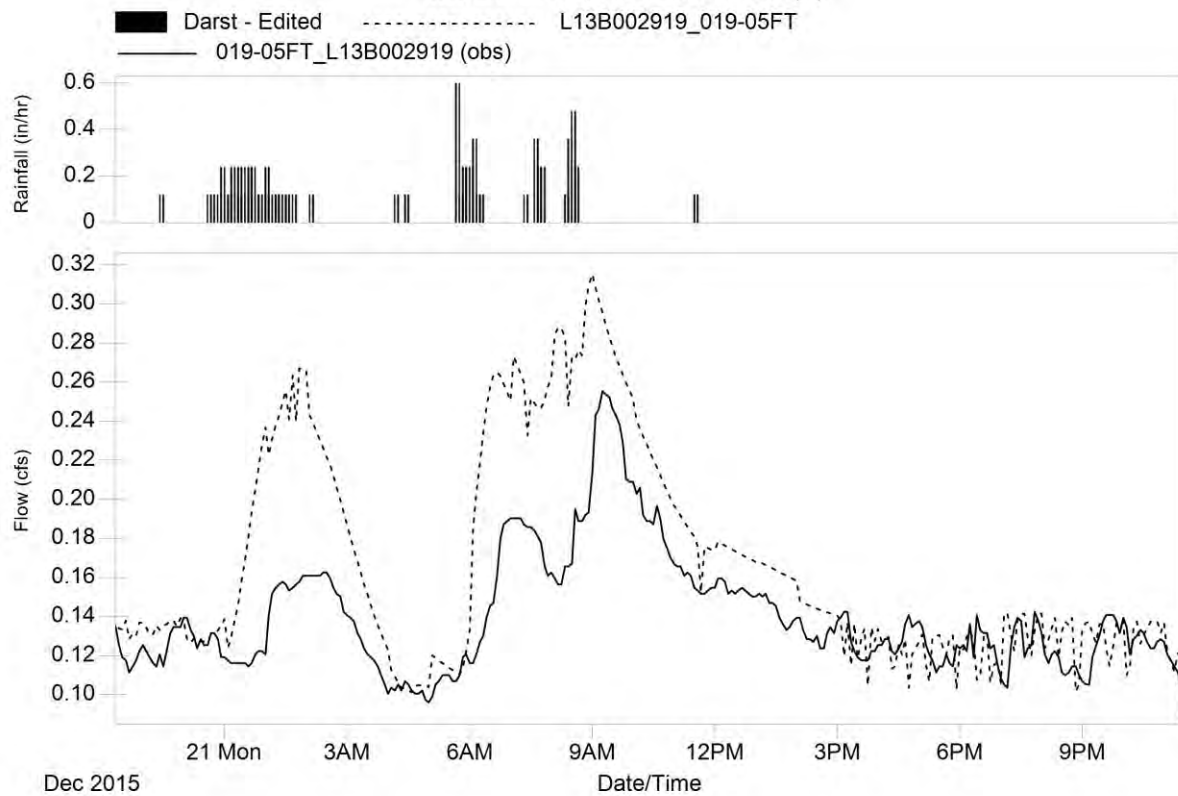
Event of December 13, 2015

Duration: 38.6 h, Total Rainfall: 1.75 (in)



Event of December 20, 2015

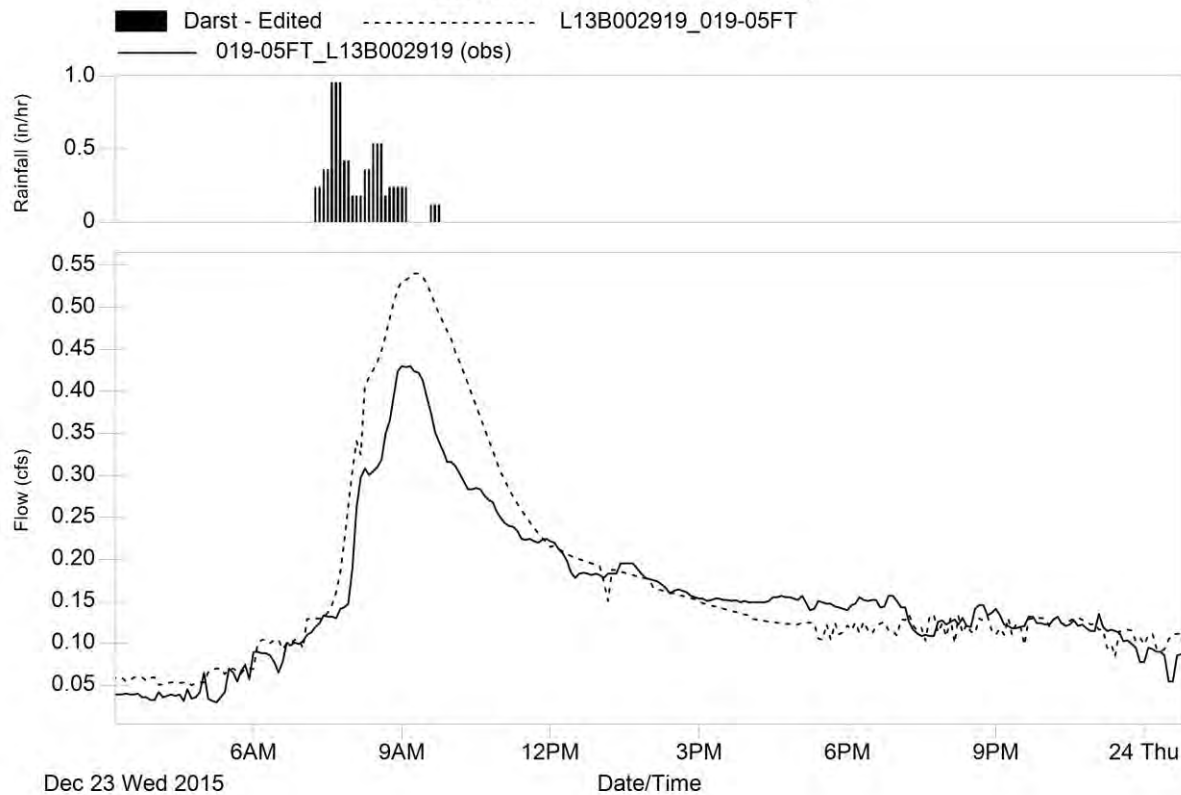
Duration: 21.8 h, Total Rainfall: 0.69 (in)



Darst 019-05FT – Calibration Events

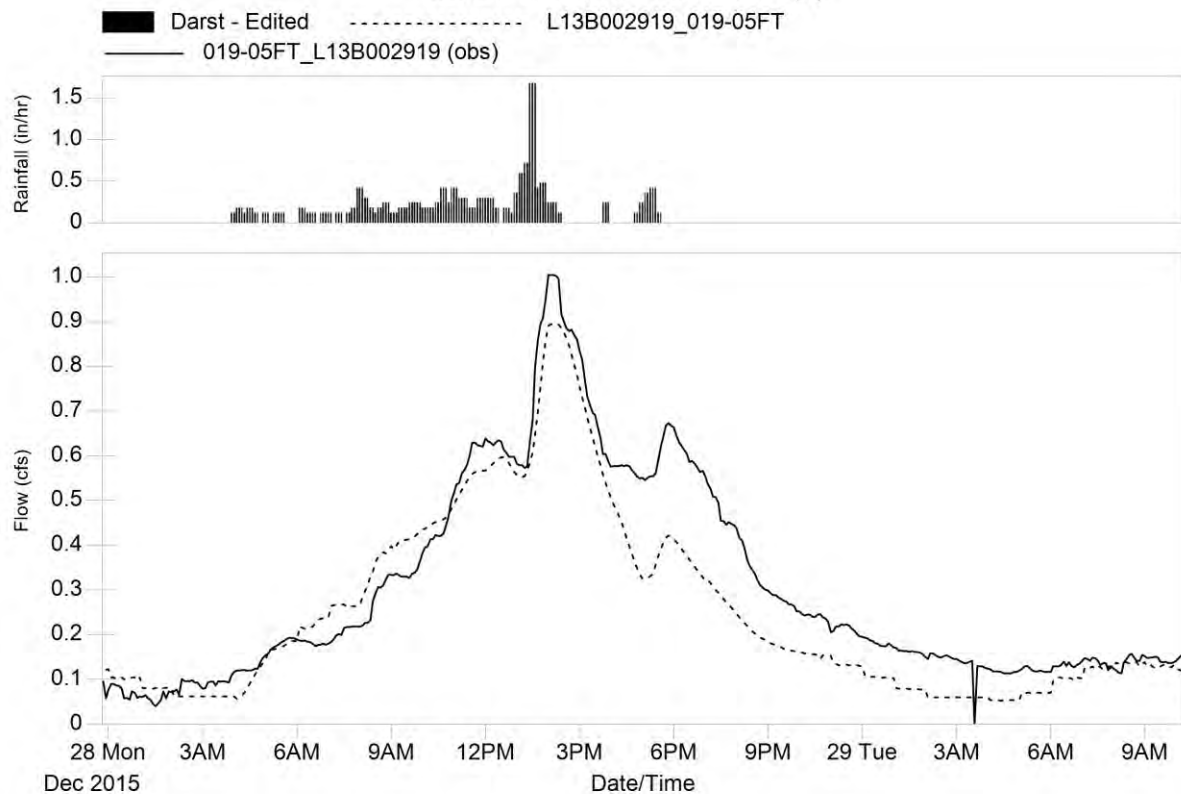
Event of December 23, 2015

Duration: 18 h, Total Rainfall: 0.67 (in)



Event of December 28, 2015

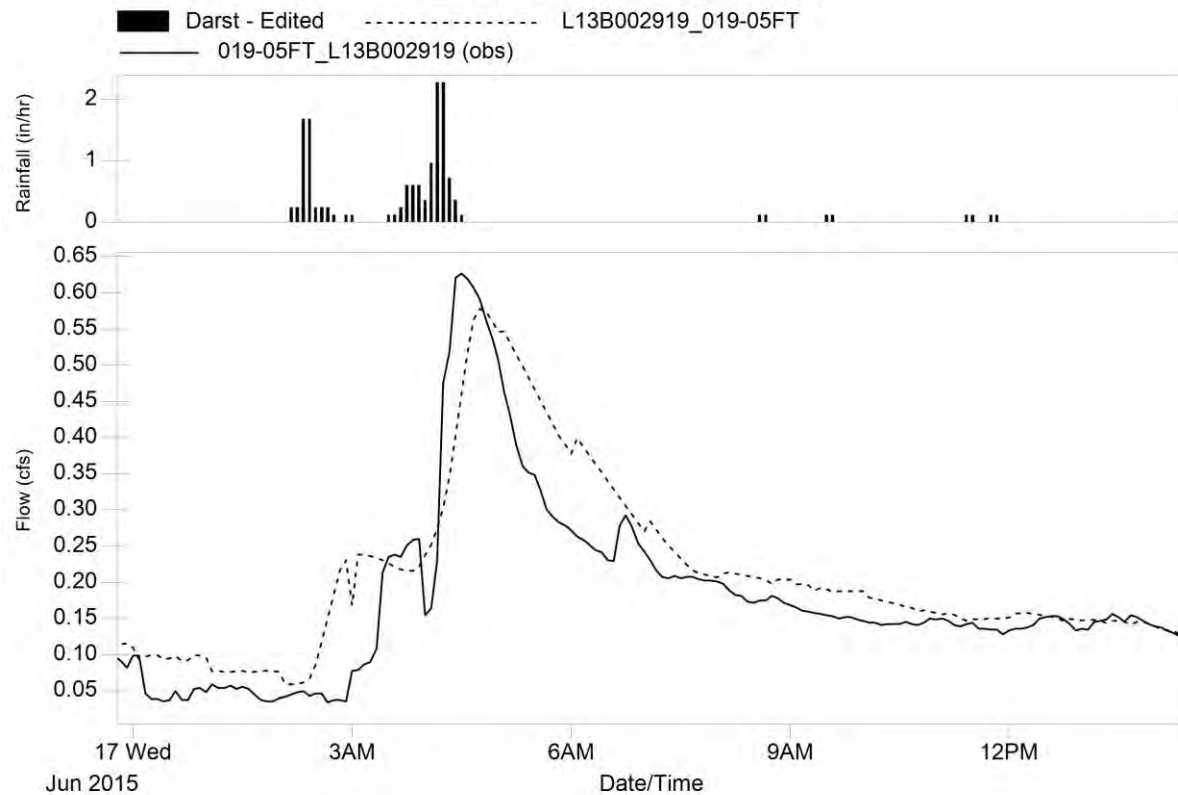
Duration: 28.7 h, Total Rainfall: 2.54 (in)



Darst 019-05FT – Verification Events

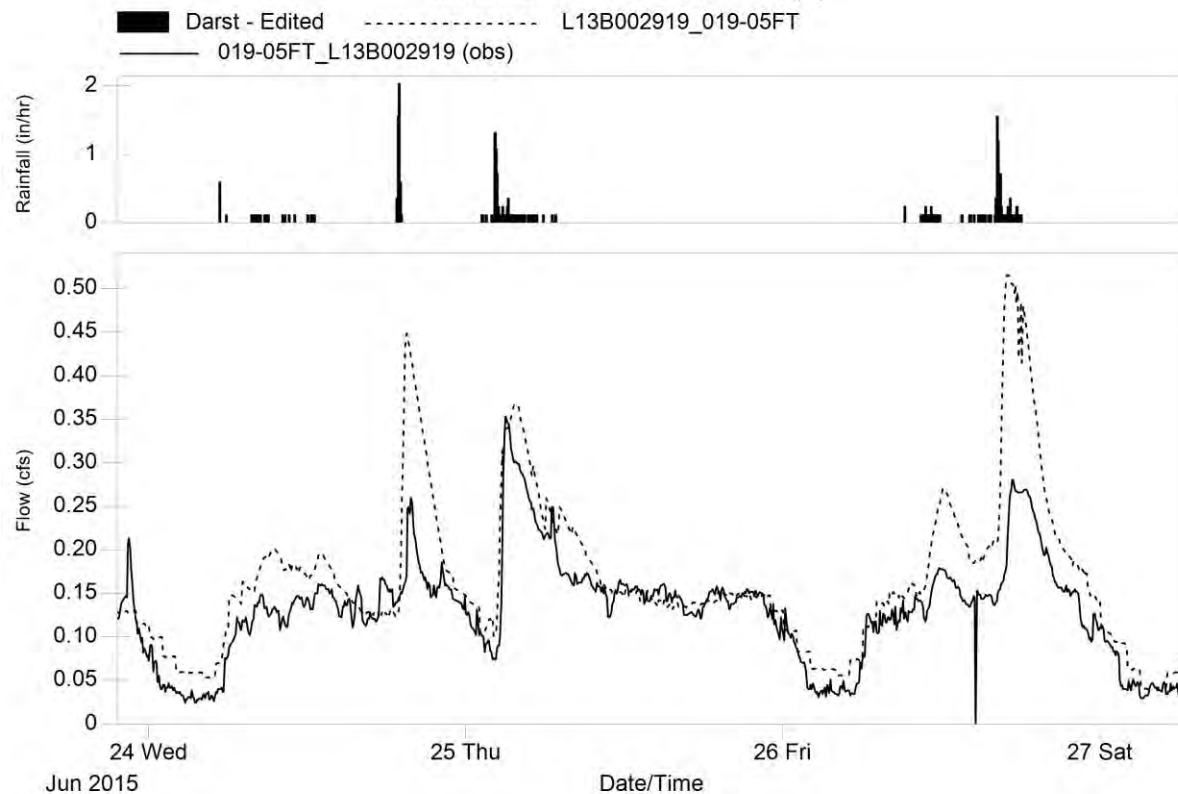
Event of June 17, 2015

Duration: 12.2 h, Total Rainfall: 0.84 (in)



Event of June 24, 2015

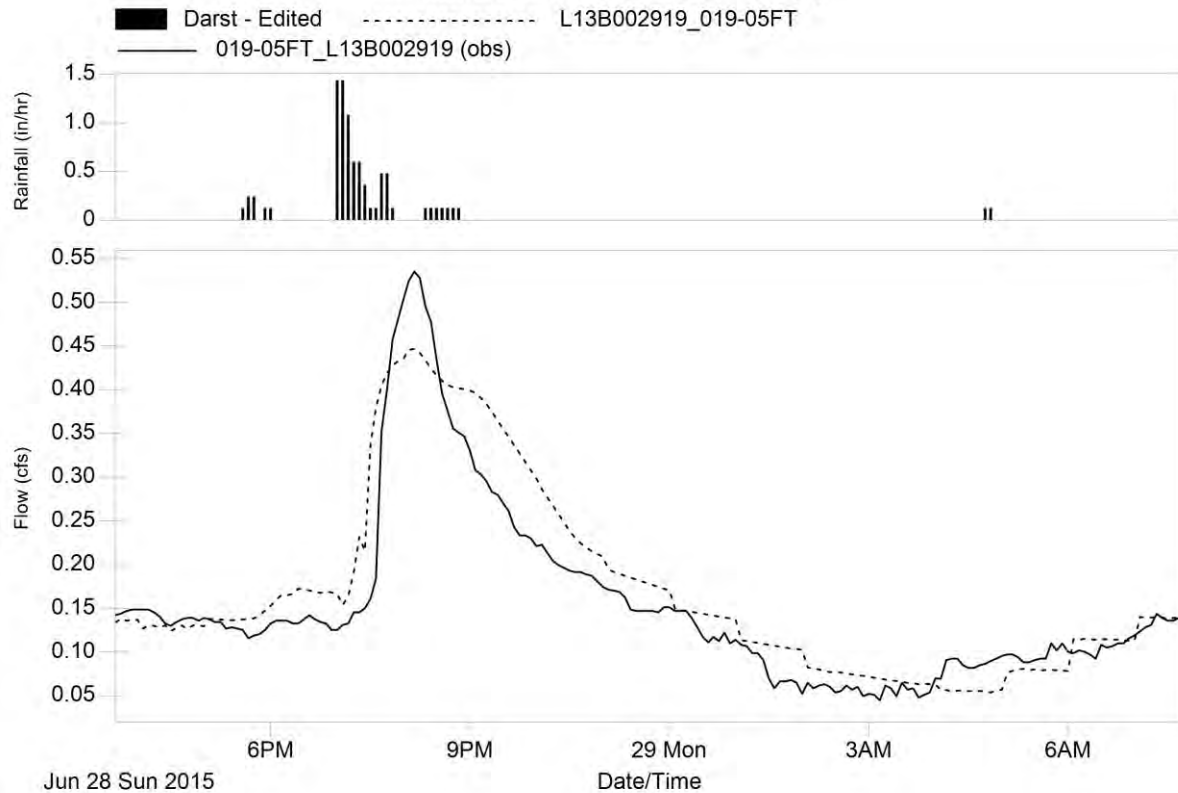
Duration: 67.4 h, Total Rainfall: 2.15 (in)



Darst 019-05FT – Verification Events

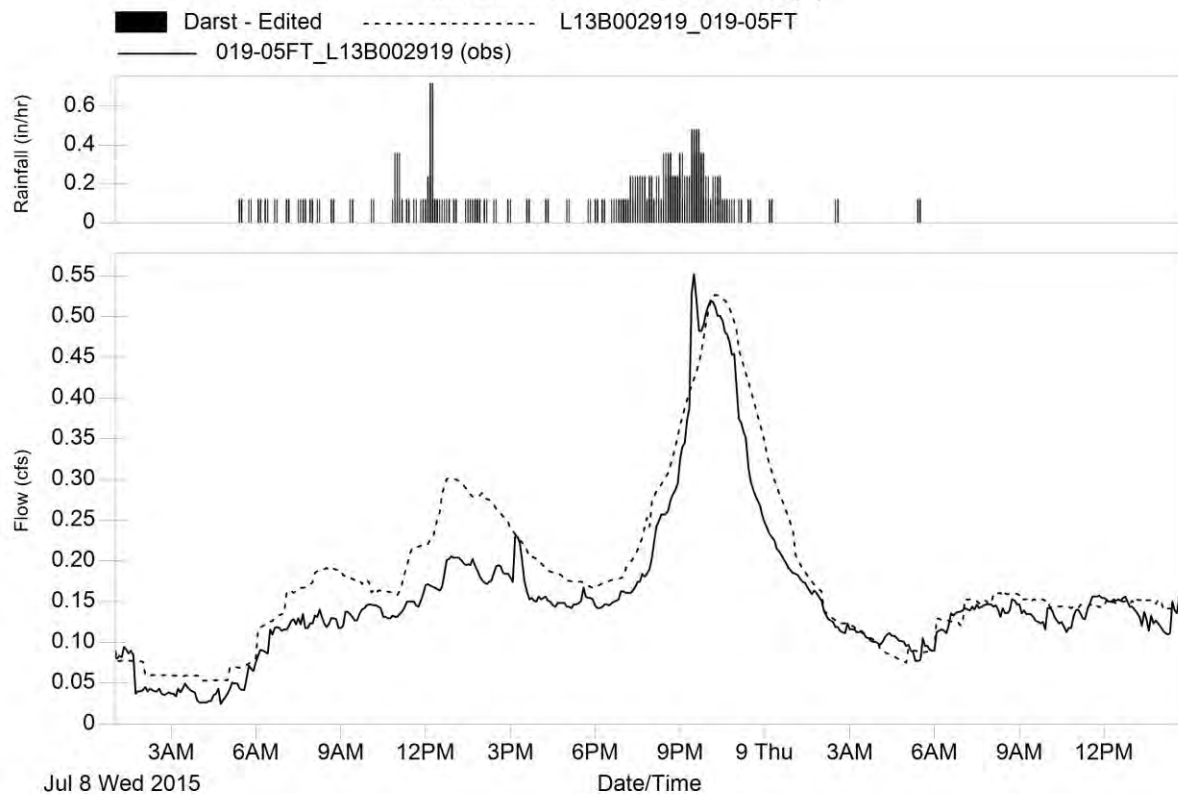
Event of June 28, 2015

Duration: 13.4 h, Total Rainfall: 0.52 (in)

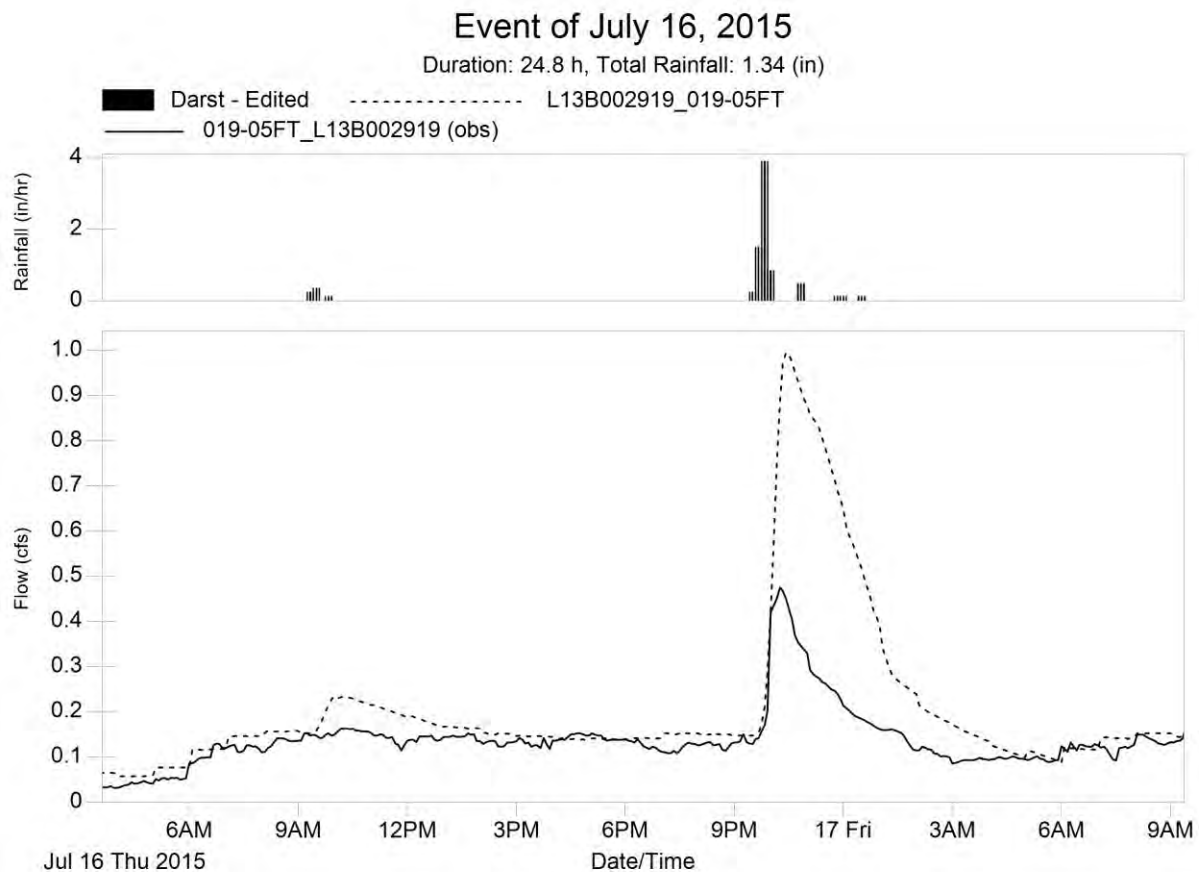
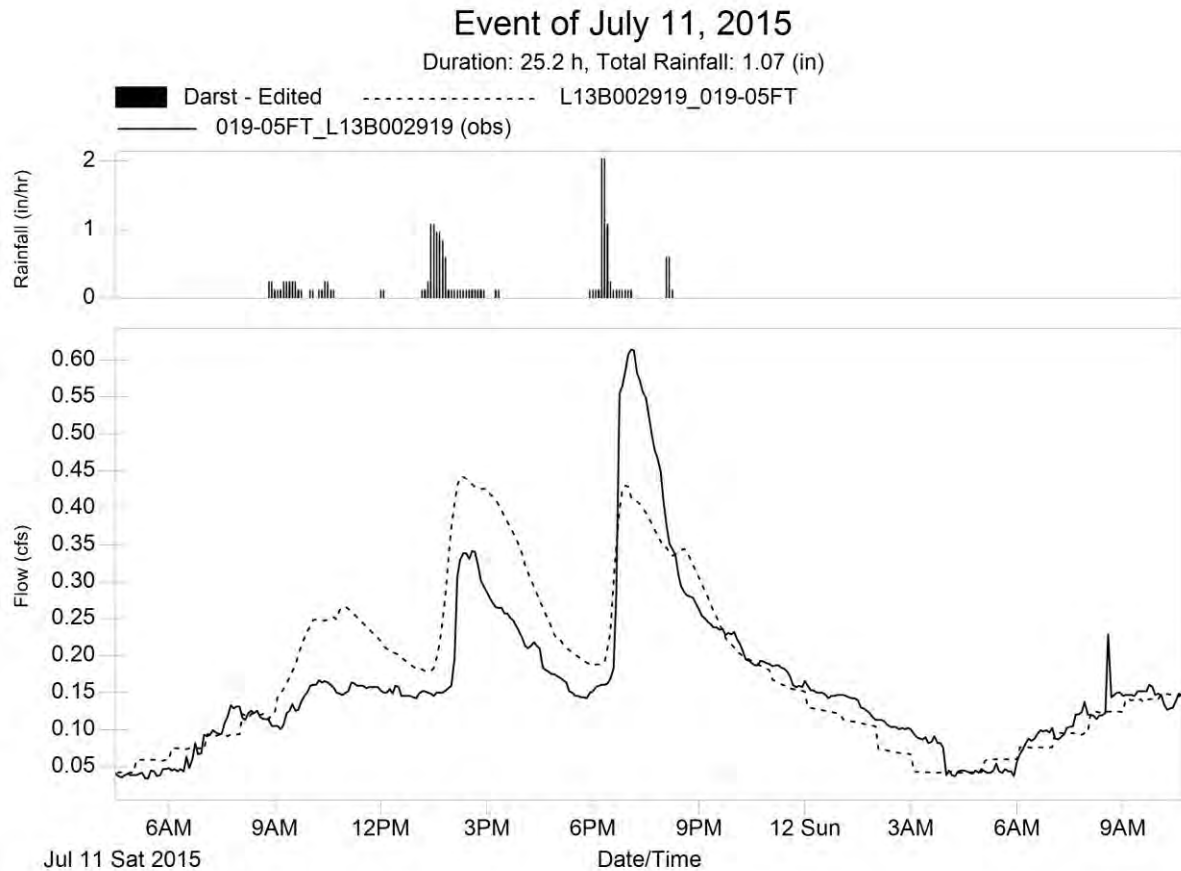


Event of July 8, 2015

Duration: 31.5 h, Total Rainfall: 1.39 (in)



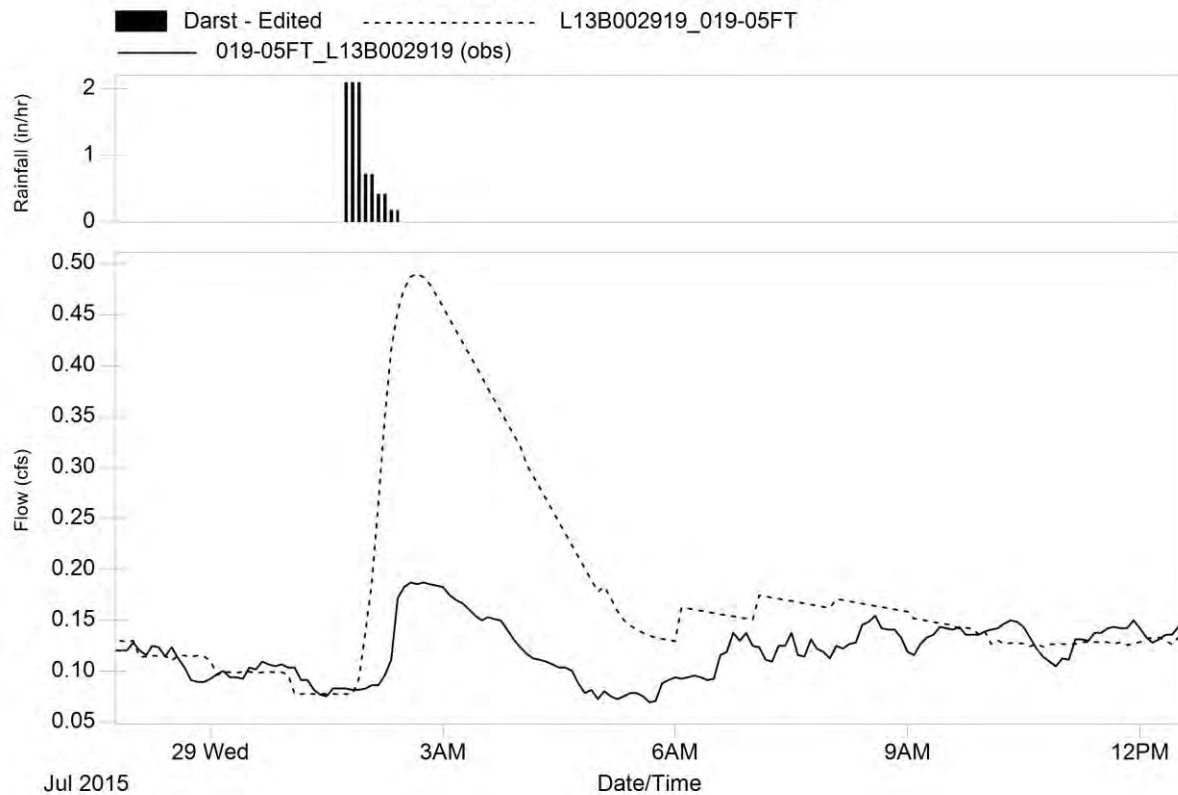
Darst 019-05FT – Verification Events



Darst 019-05FT – Verification Events

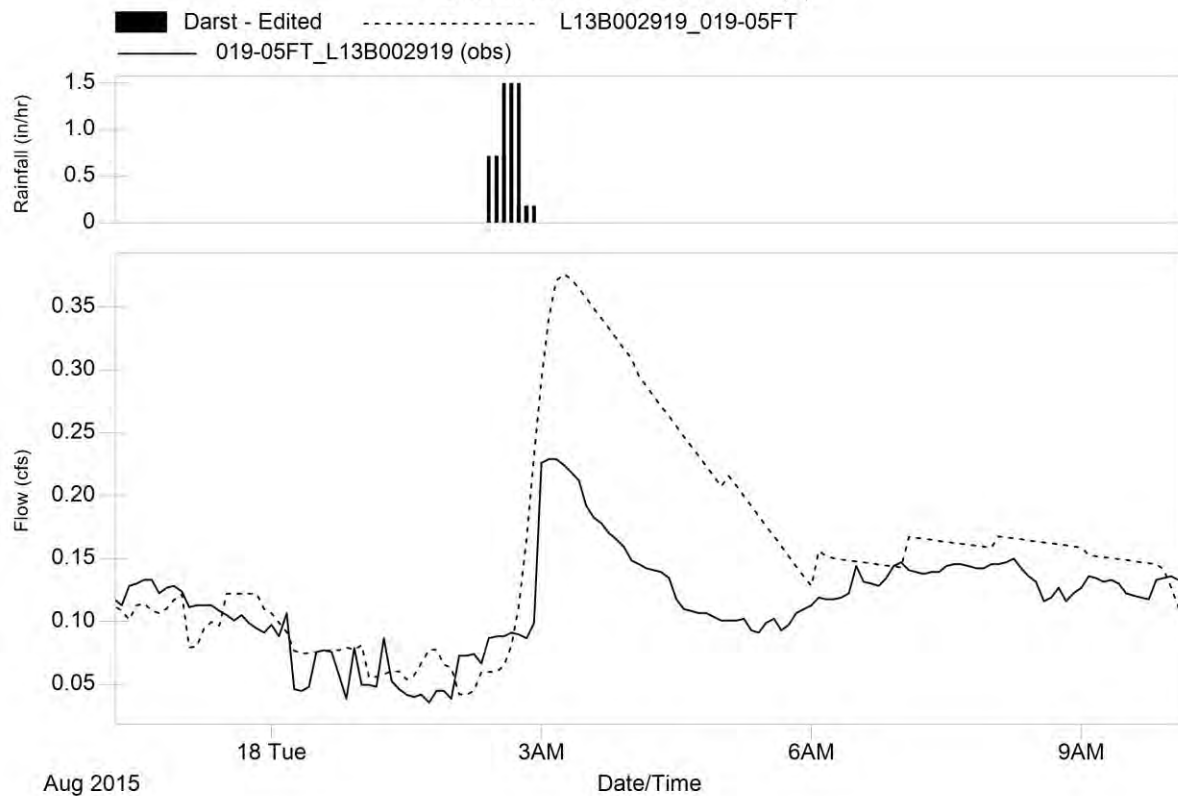
Event of July 28, 2015

Duration: 11.5 h, Total Rainfall: 0.57 (in)

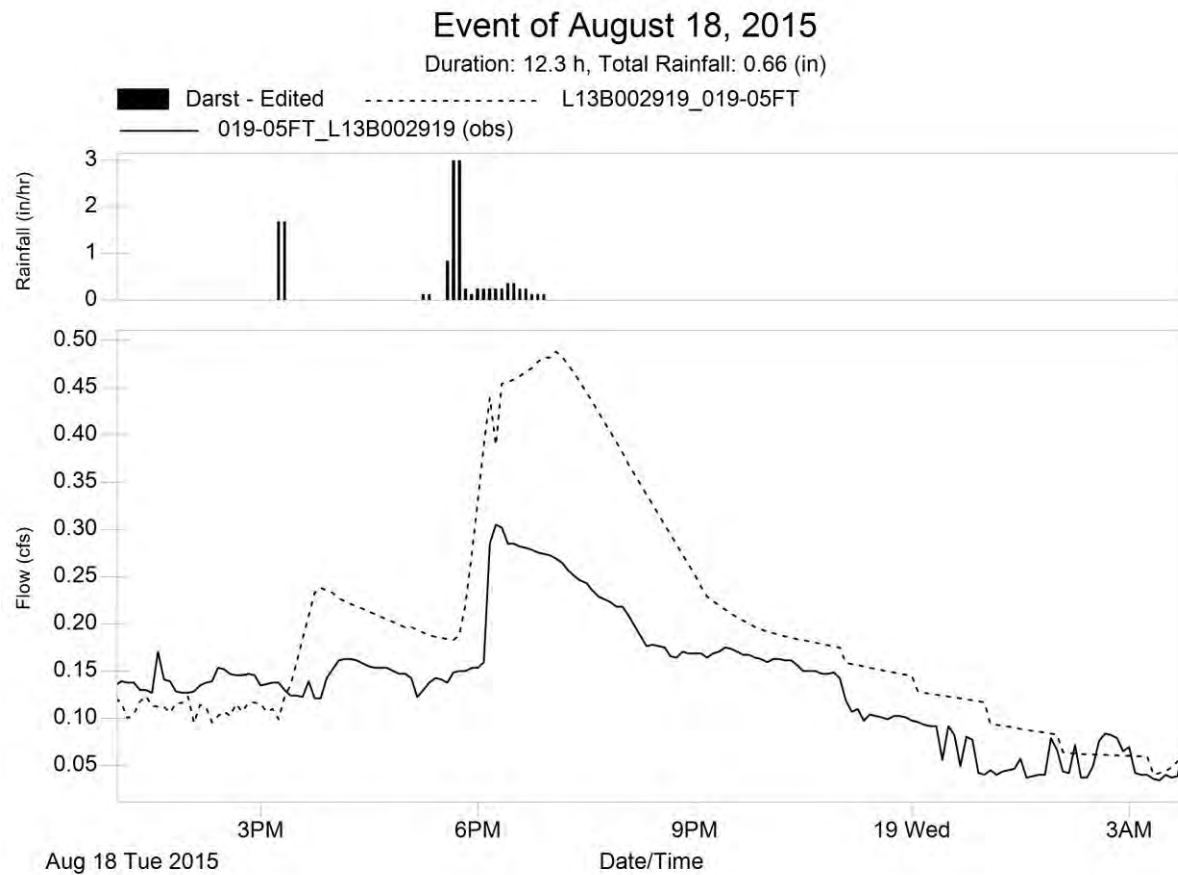


Event of August 17, 2015

Duration: 9.9 h, Total Rainfall: 0.4 (in)



Darst 019-05FT – Verification Events



Legend

- 2015/2016 Flow Monitors
- 2015/2016 Rain Gauges
- Trunk Sewer Pipes
- Modeled Outfalls
 - Emergency Outfalls
 - Active Outfalls
- RDII Sewersheds (labeled by downstream flow meter)
 - Sewer Owner = City of Peoria
 - Sewer Owner = GPSD
- Approximate Drainage Area Type
 - = Combined Through Storm Sewers
 - = Partially Separate
 - = Separate
 - = Combined Direct

Map Labels: BRADLEY, GLENOAKS, HARDEES, DARST, 000-11FT, 000-07FT, 000-09FT + 000-08FT, 000-10FT, 000-06FT direct, 007-05FT, 003-05FT, 007-06FT, 003-07FT, 003-02FP, 006-03FP, 007-03FP, 016-06FT, 016-08FT, 016-09, 016-02FP, 016-03FP, 016-04FT direct, 017-02FP, 017-02FP direct, 018-06FP, 017-04 direct, 018-07FT direct, 018-05FP, 019-04FT, 019-05FT, 019-06FT, 019-02FP, 019-08FT, 019-07FT, 019-08FT, 000-05FT direct, 003-03FP, 003-04FT direct, 003, 006B, 009, 016, 017, 018, 019.

Scale: 0.5 mi

Legend

- 2015/2016 Flow Monitors
- Modeled Pipes (diameter labeled)
- Modeled Manholes
 - Modeled Manholes
 - Modeled Manholes with Inflow (labeled)
- Modeled Subcatchments
 - DCIA
 - PERVIOUS
 - ROOFS
- RDII Sewersheds
- Subcatchments

1000 ft

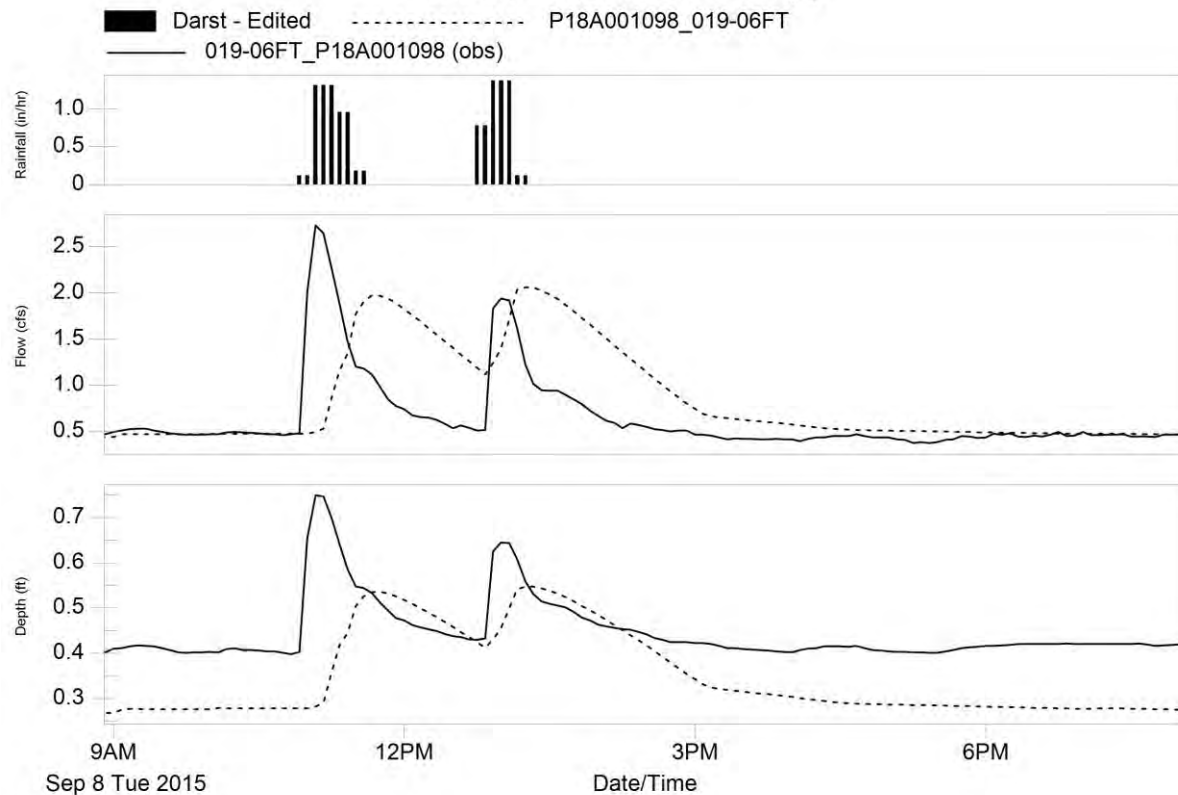
Darst 019-06FT

Date	Duration (h)	Rainfall (in)	Maximum Flow (cfs)		Maximum Flow (mgd)		Total Volume (ft³)		Volume (million gallons)		Peak Flow Rate (-15% to +25%)	Flow Volume (-10% to +20%)	Rainfall Variability			
		Darst Edited	Observed	Modeled	Observed	Modeled	Observed	Modeled	Observed	Modeled						
CALIBRATION EVENTS - FLOW																
9/8/2015 9:50	9.3	0.81	2.7	2.1	1.8	1.3	22950	31230	0.2	0.2	-24%	36%	variable			
9/18/2015 12:25	16.4	1.62	3.0	3.2	1.9	2.1	46870	56330	0.4	0.4	6%	20%	possibly uniform			
11/5/2015 13:05	22.8	0.34	0.9	0.9	0.6	0.6	35860	40930	0.3	0.3	6%	14%	possibly uniform			
11/11/2015 17:35	11.4	0.61	1.7	2.6	1.1	1.7	23000	27850	0.2	0.2	55%	21%	variable			
11/16/2015 21:10	43.1	1.59	1.1	1.5	0.7	1.0	99540	93700	0.7	0.7	31%	-6%	variable			
11/26/2015 18:15	34.8	1.01	1.2	1.4	0.8	0.9	71020	70940	0.5	0.5	19%	0%	possibly uniform			
12/13/2015 1:05	40.5	1.77						Meter removed								
12/20/2015 21:25	17.9	0.70						Meter removed								
12/23/2015 5:00	18.0	0.67						Meter removed								
12/28/2015 0:25	23.1	2.54						Meter removed								
VERIFICATION EVENTS - FLOW																
6/17/2015 2:05	5.3	0.80	3.1	2.3	2.0	1.5	23540	20600	0.2	0.2	-25%	-12%	variable			
6/24/2015 4:20	67.4	2.15	2.1	2.1	1.4	1.3	125000	144800	0.9	1.1	-4%	16%	variable			
6/28/2015 17:25	6.2	0.51	2.5	1.8	1.6	1.2	19580	19710	0.1	0.1	-28%	1%	variable			
7/8/2015 5:05	26.0	1.39	2.4	1.9	1.5	1.2	61860	64940	0.5	0.5	-21%	5%	variable			
7/11/2015 8:35	13.9	1.07	3.0	1.7	1.9	1.1	46390	43600	0.3	0.3	-42%	-6%	variable			
7/16/2015 9:00	17.3	1.34	3.1	4.3	2.0	2.8	40190	53880	0.3	0.4	40%	34%	possibly uniform			
7/29/2015 1:30	2.5	0.57	1.9	2.2	1.2	1.4	7945	12380	0.1	0.1	15%	56%	possibly uniform			
8/18/2015 2:05	3.8	0.40	2.1	1.7	1.4	1.1	9156	11250	0.1	0.1	-21%	23%	possibly uniform			
8/18/2015 15:00	6.8	0.66	2.1	1.9	1.4	1.2	18560	23440	0.1	0.2	-12%	26%	variable			
								WEIGHTED AVERAGES								
								Calibration - Possibly Uniform						9%	9%	possibly uniform
								Calibration - Variable						11%	5%	variable
								Calibration Weighted - All Events						10%	7%	
								Verification - Possibly Uniform						15%	35%	possibly uniform
								Verification - Variable						-23%	8%	variable
								Verification Weighted - All Events						-11%	12%	
								Weighted Average - All Events						-4%	10%	
								NET AVERAGES								
								Calibration - Possibly Uniform						10%	11%	possibly uniform
								Calibration - Variable						20%	17%	variable
								Calibration Net - All Events						15%	14%	
								Verification - Possibly Uniform						12%	38%	possibly uniform
								Verification - Variable						-22%	5%	variable
								Verification Net - All Events						-11%	16%	
								Net Average - All Events						0%	15%	

Darst 019-06FT – Calibration Events

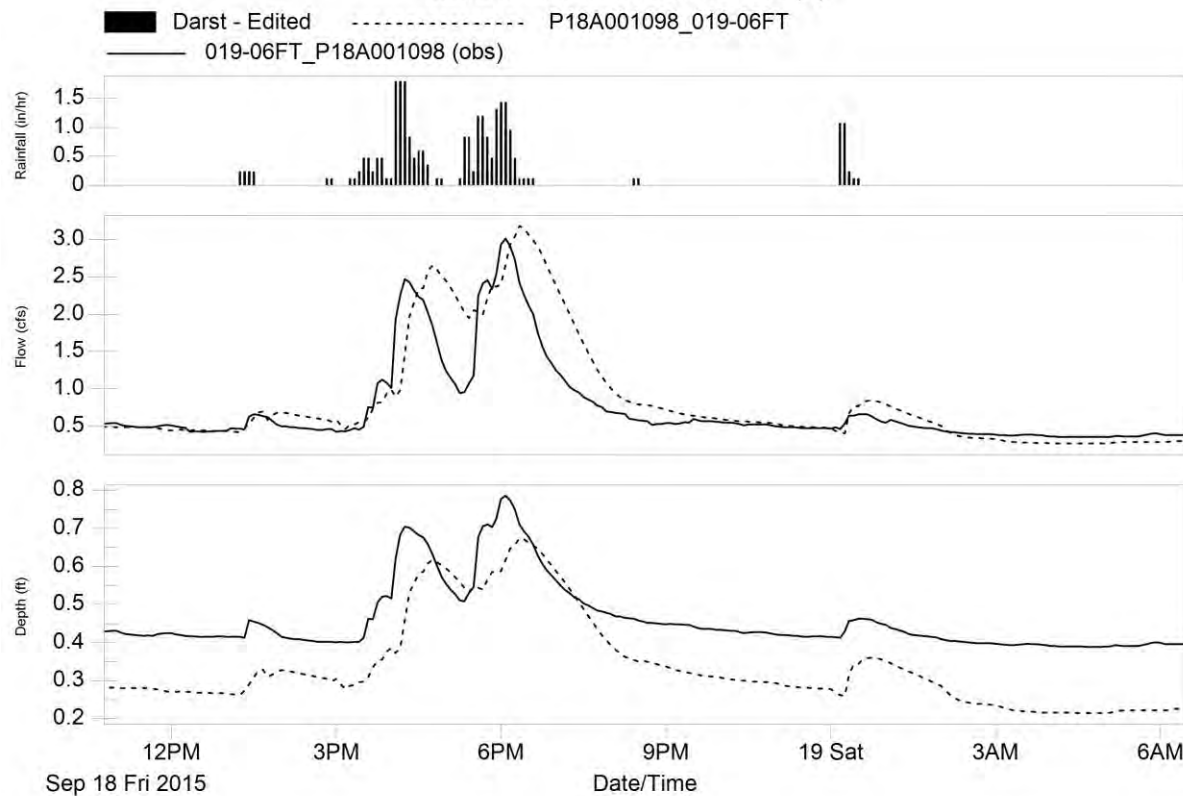
Event of September 8, 2015

Duration: 9.3 h, Total Rainfall: 0.81 (in)



Event of September 18, 2015

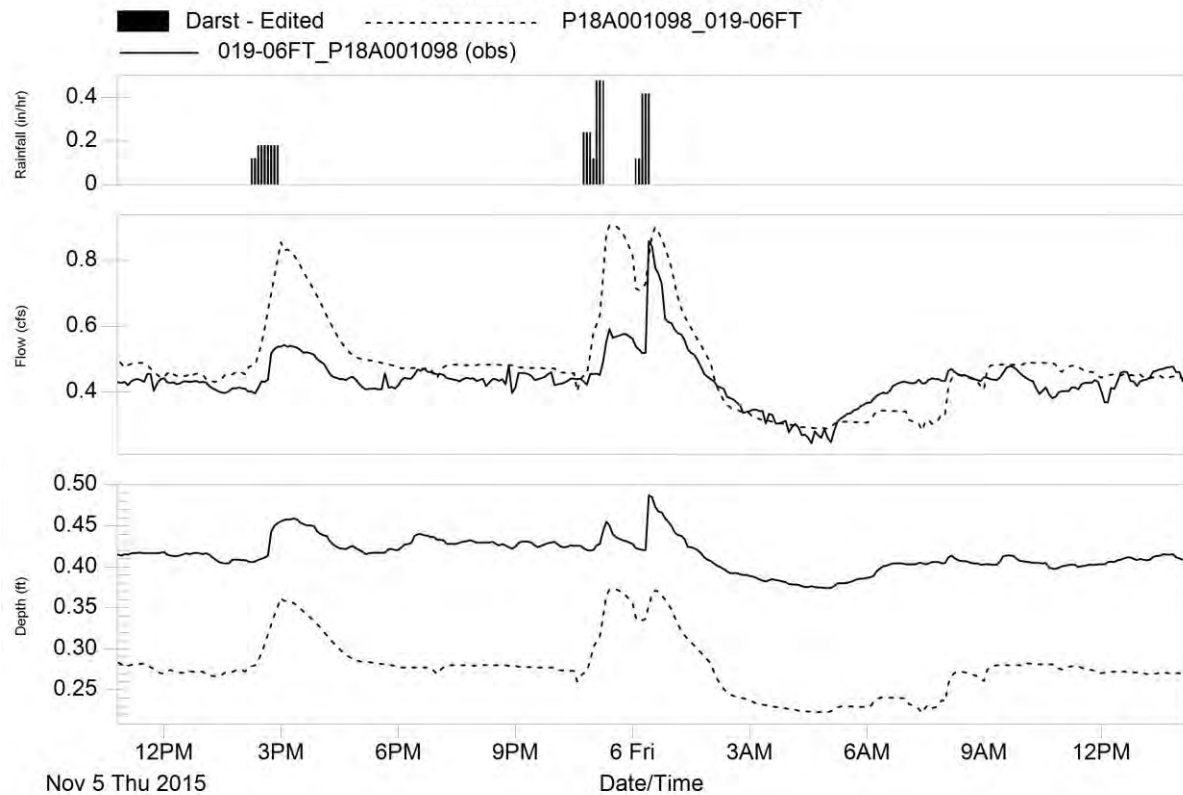
Duration: 16.4 h, Total Rainfall: 1.62 (in)



Darst 019-06FT – Calibration Events

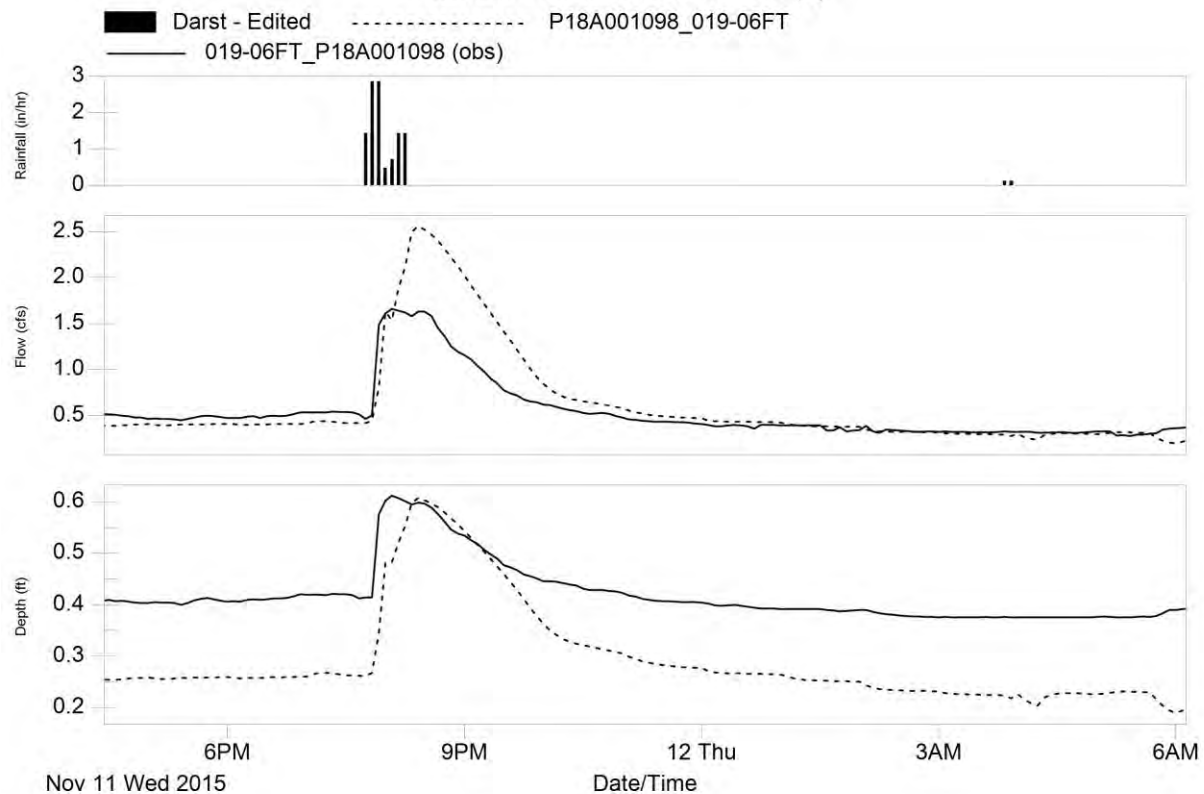
Event of November 5, 2015

Duration: 22.8 h, Total Rainfall: 0.34 (in)



Event of November 11, 2015

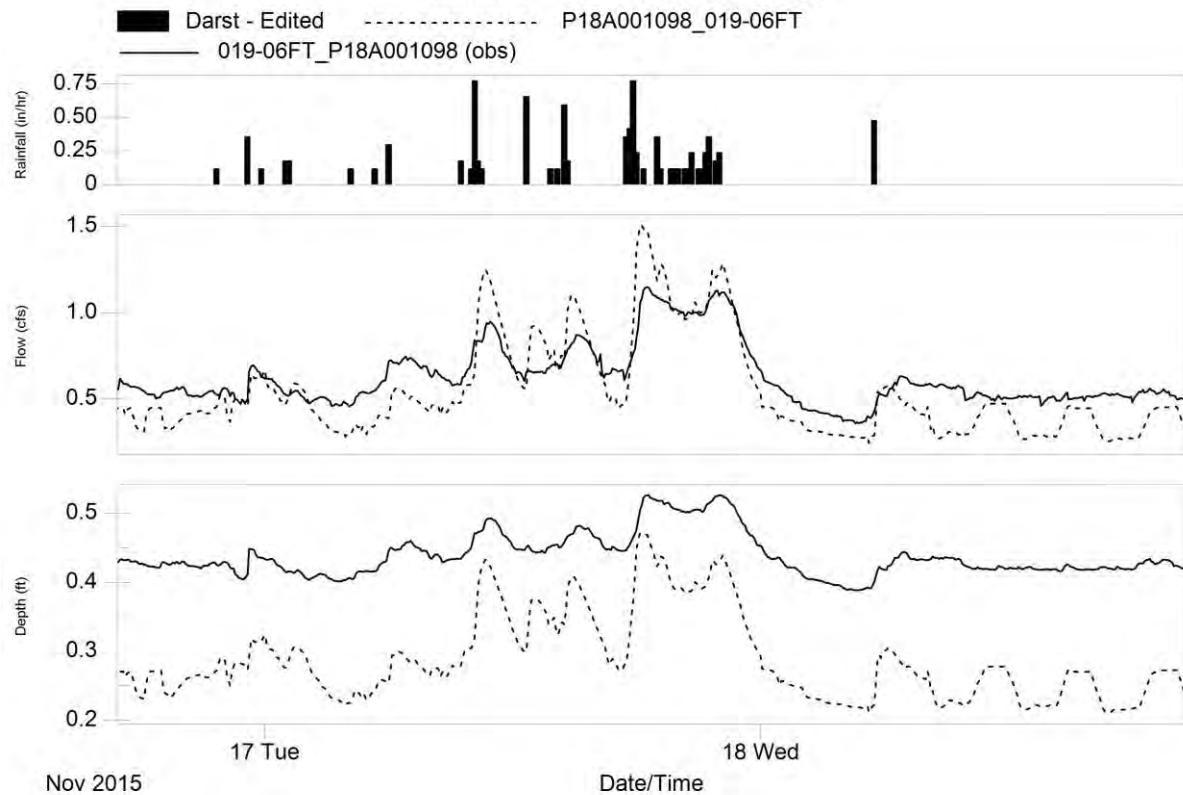
Duration: 11.4 h, Total Rainfall: 0.61 (in)



Darst 019-06FT – Calibration Events

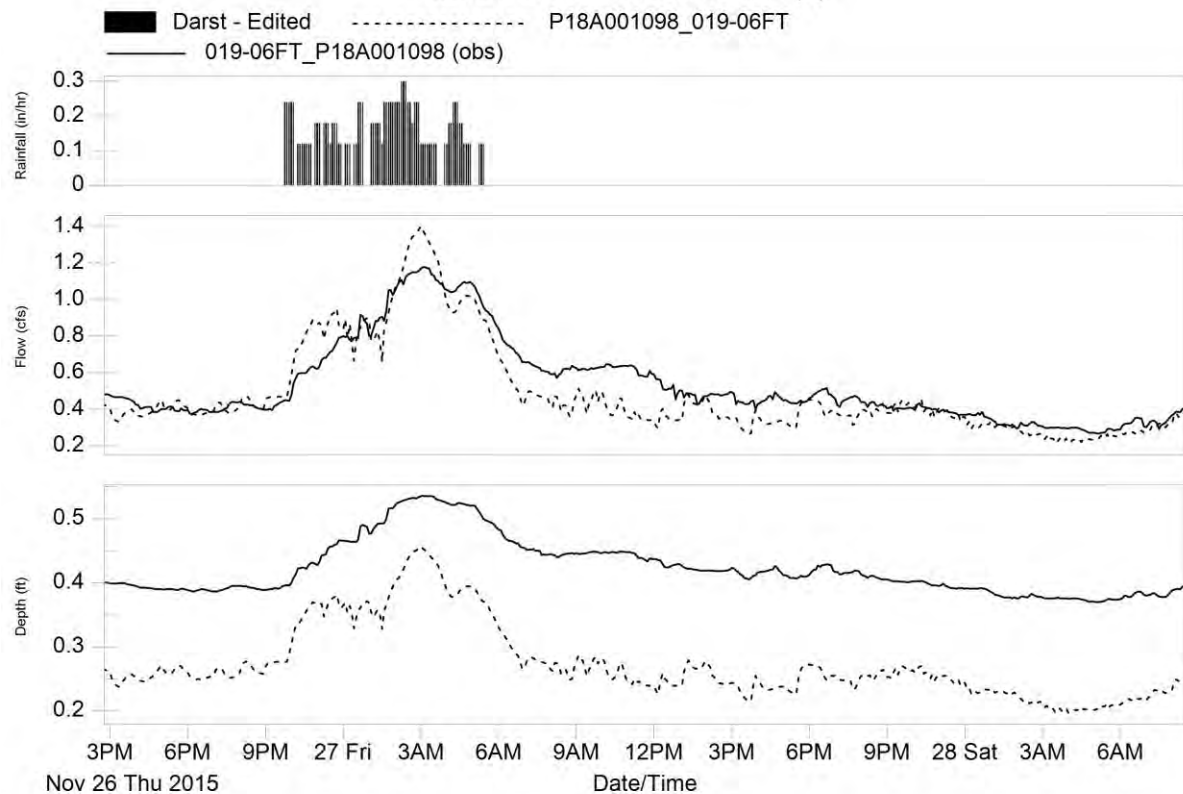
Event of November 16, 2015

Duration: 43.1 h, Total Rainfall: 1.59 (in)



Event of November 26, 2015

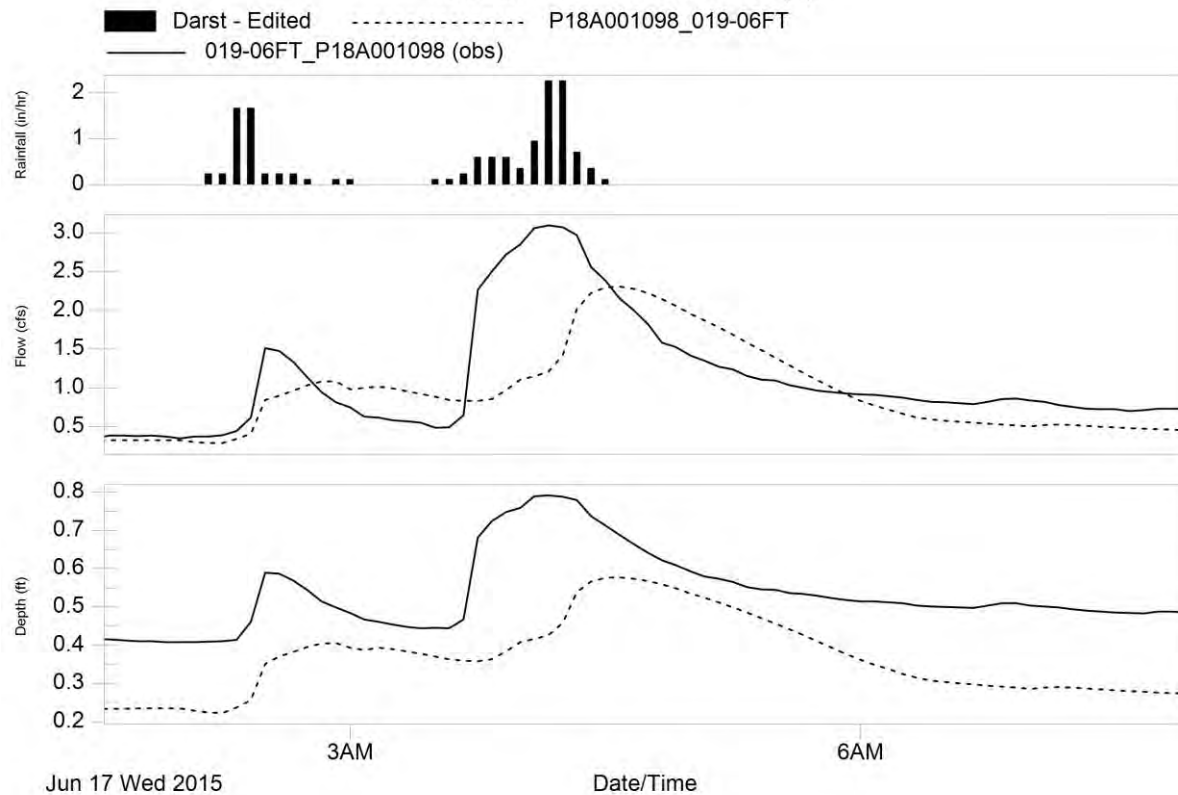
Duration: 34.8 h, Total Rainfall: 1.01 (in)



Darst 019-06FT – Verification Events

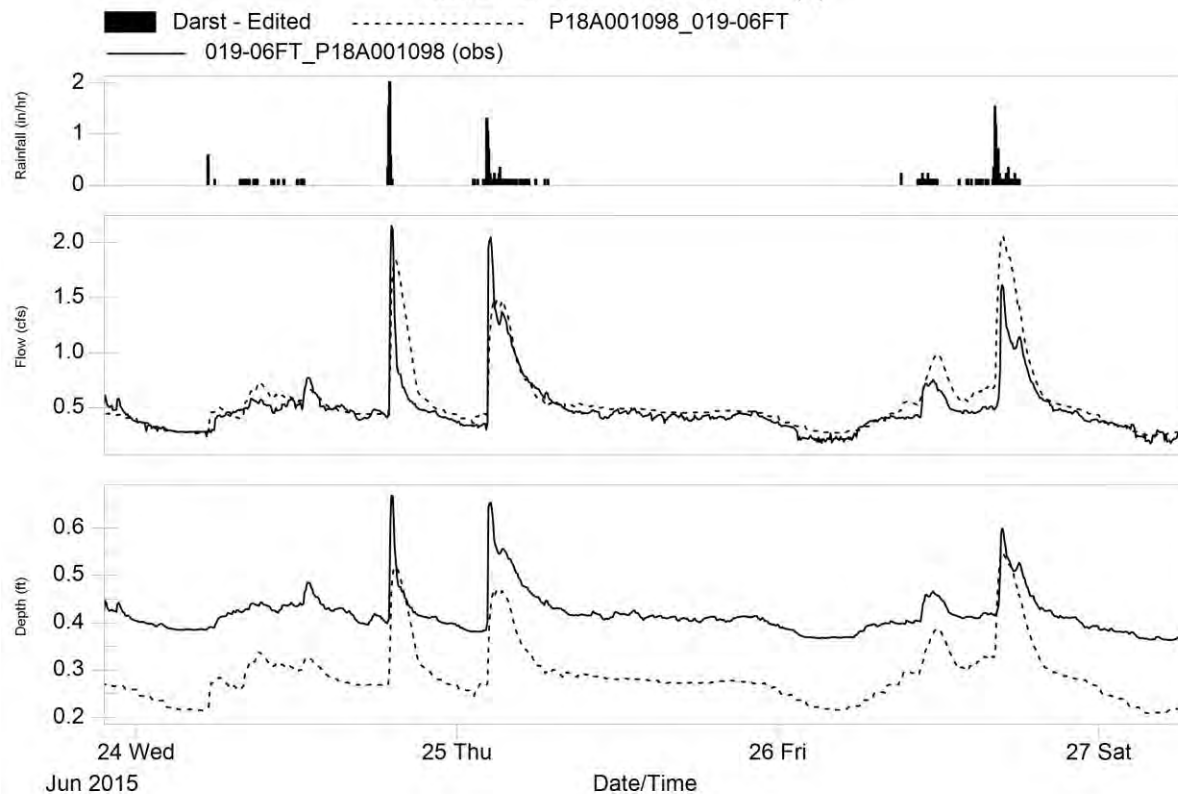
Event of June 17, 2015

Duration: 5.3 h, Total Rainfall: 0.8 (in)



Event of June 24, 2015

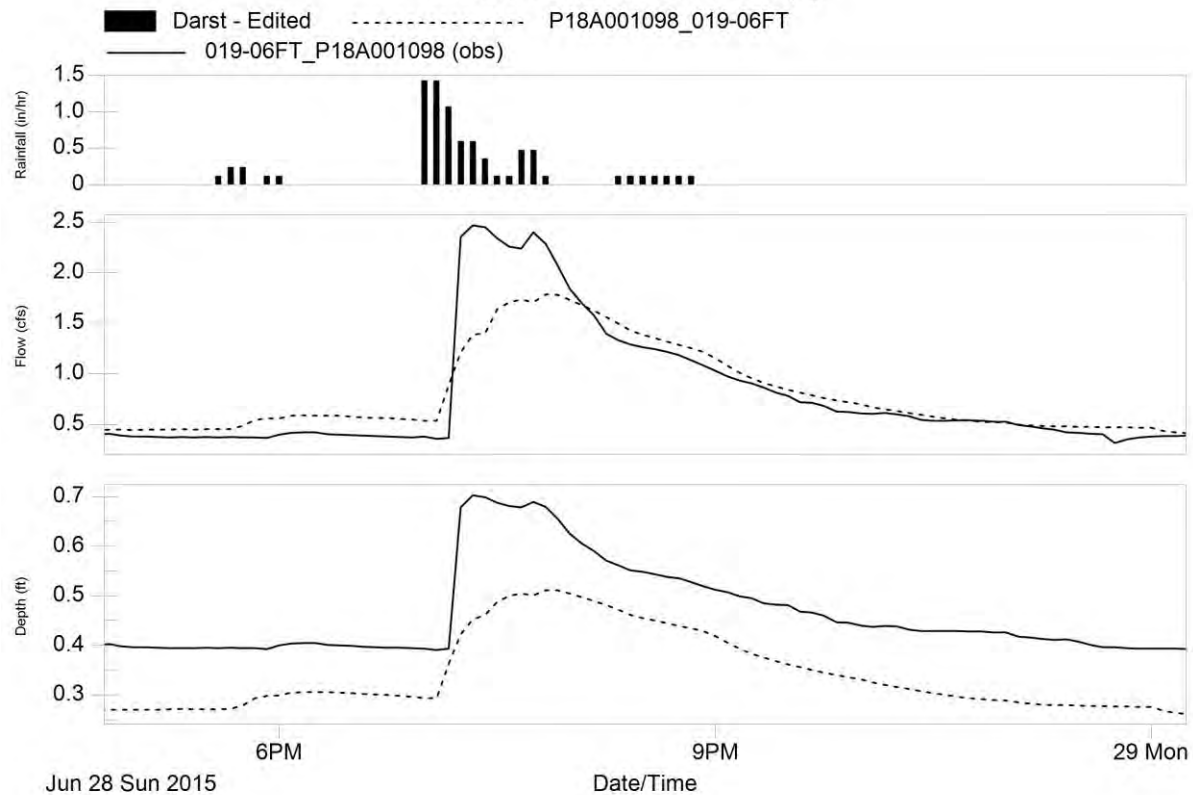
Duration: 67.4 h, Total Rainfall: 2.15 (in)



Darst 019-06FT – Verification Events

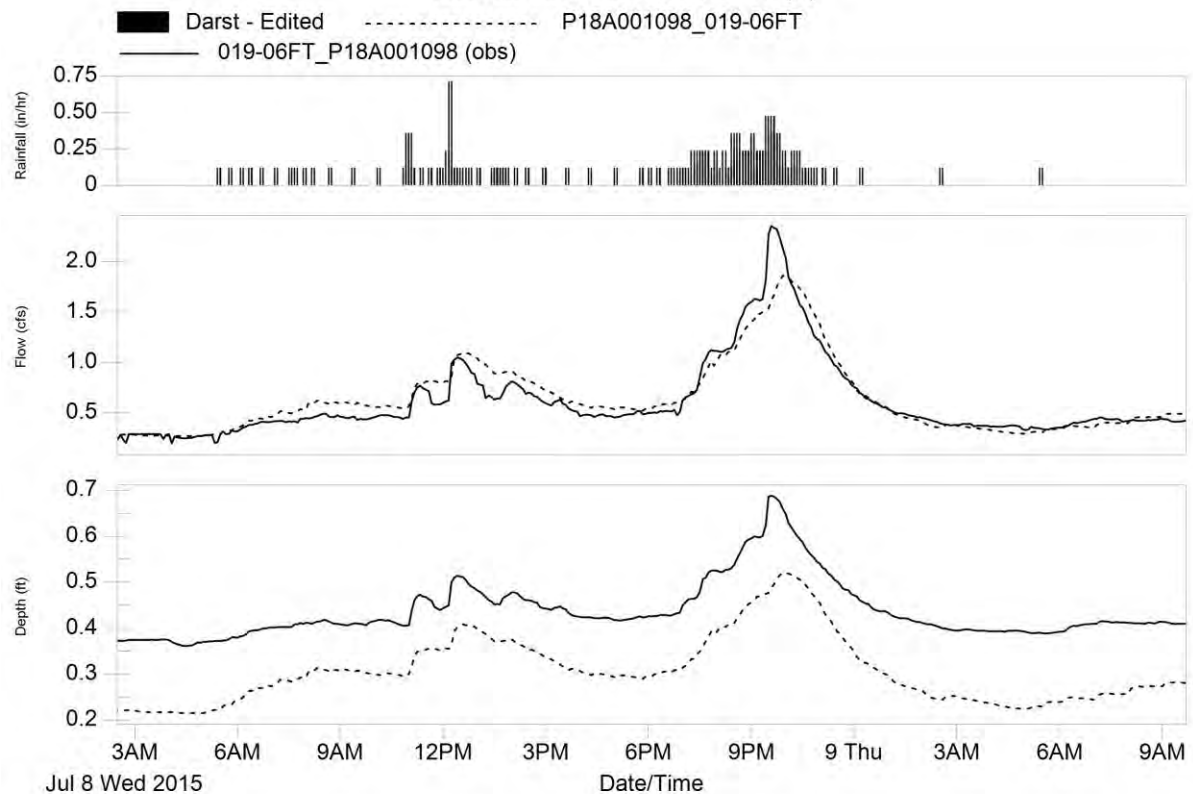
Event of June 28, 2015

Duration: 6.2 h, Total Rainfall: 0.51 (in)



Event of July 8, 2015

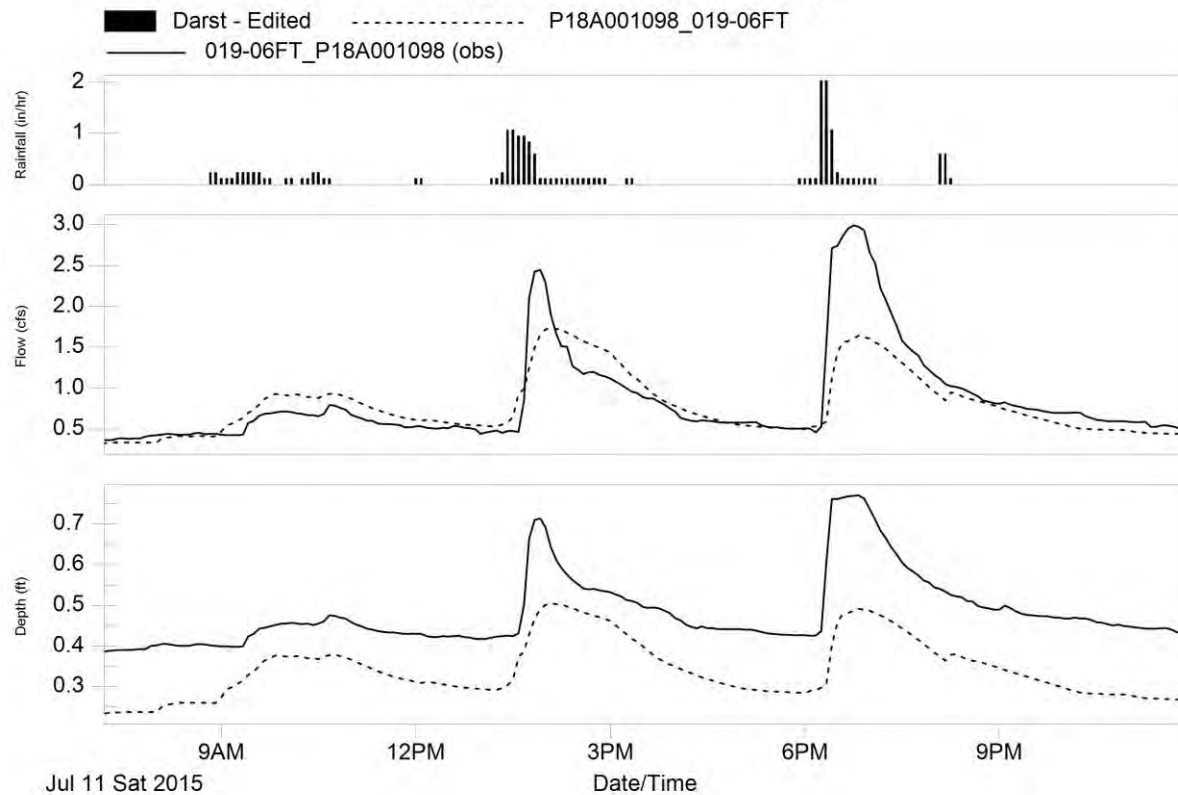
Duration: 26 h, Total Rainfall: 1.39 (in)



Darst 019-06FT – Verification Events

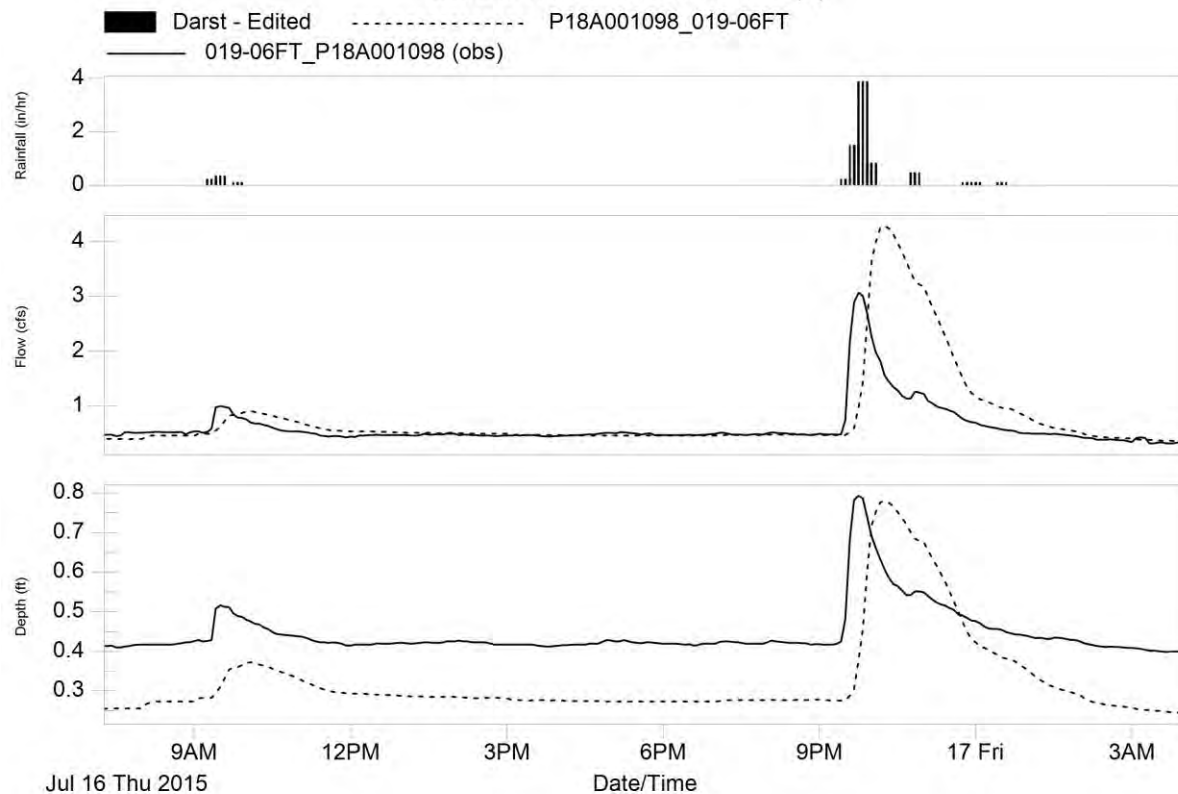
Event of July 11, 2015

Duration: 13.9 h, Total Rainfall: 1.07 (in)

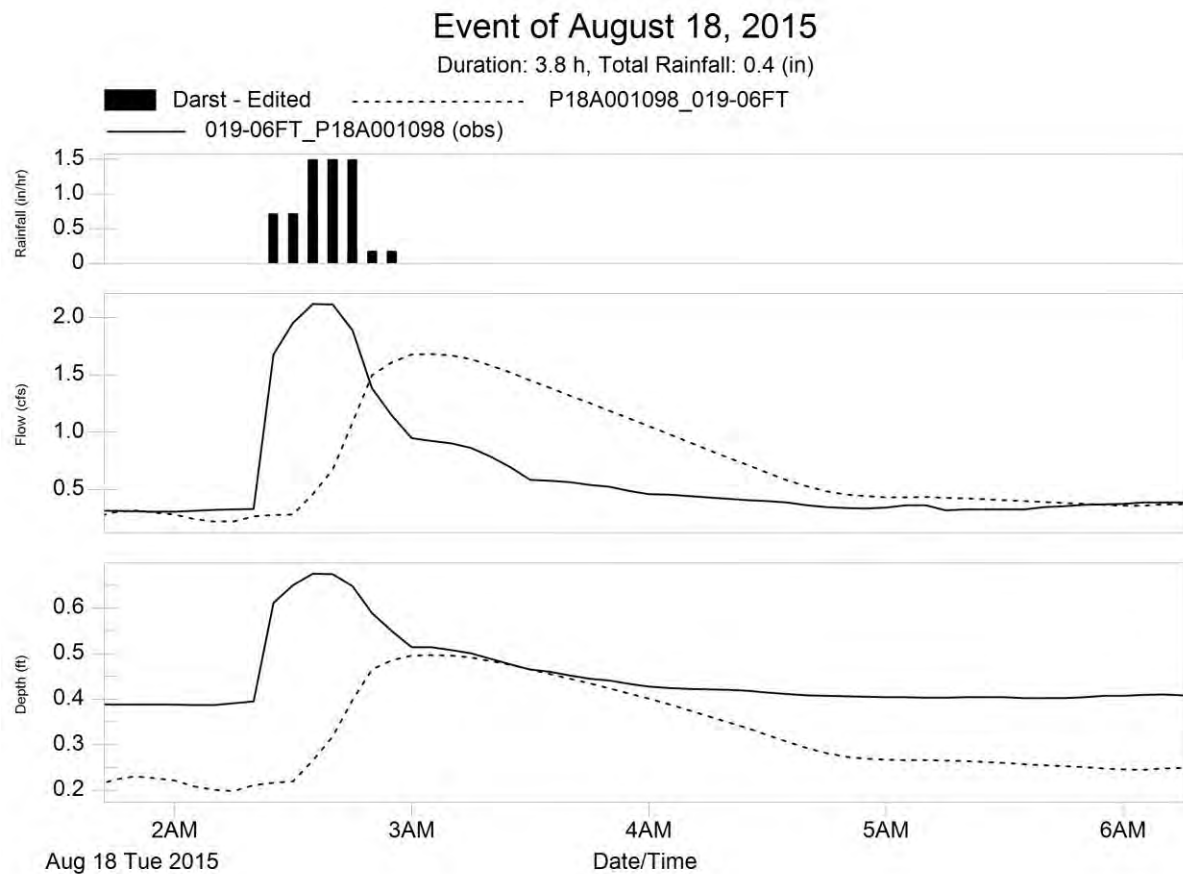
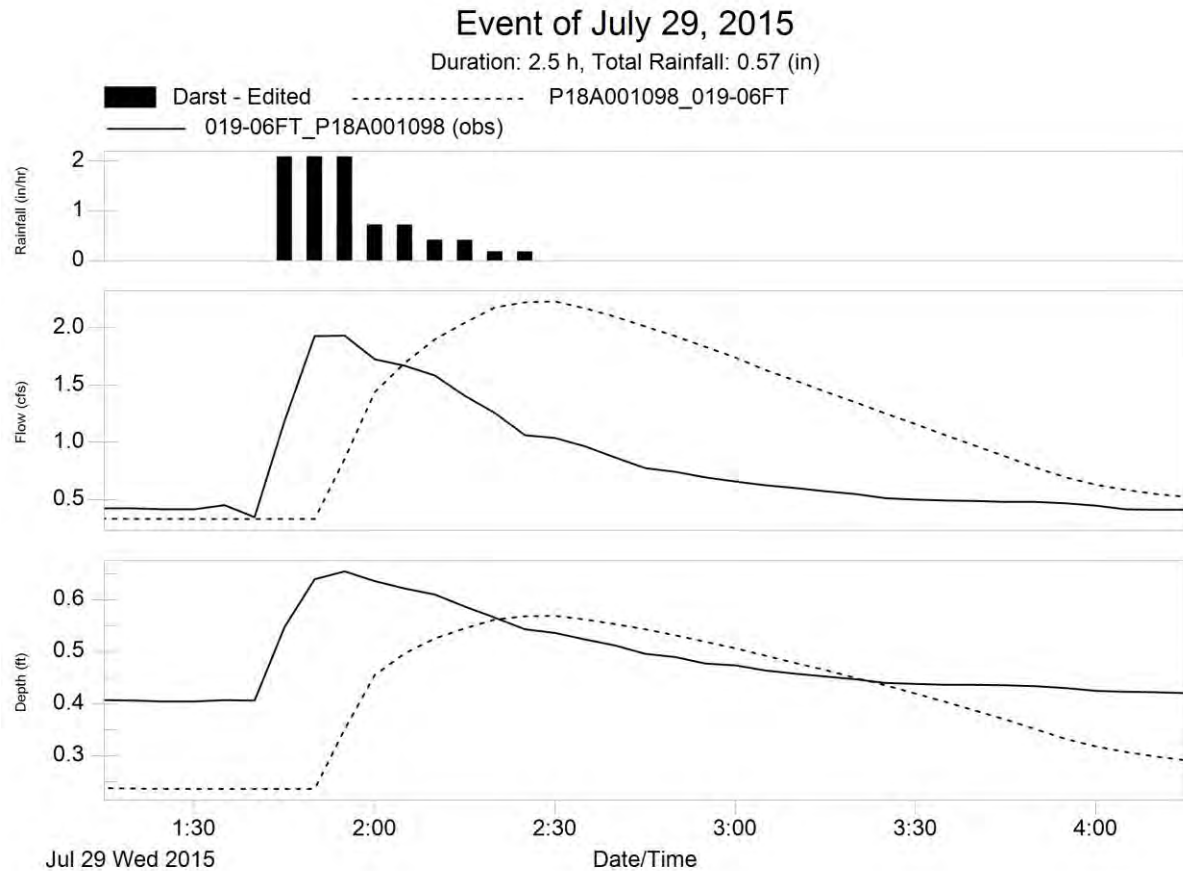


Event of July 16, 2015

Duration: 17.3 h, Total Rainfall: 1.34 (in)



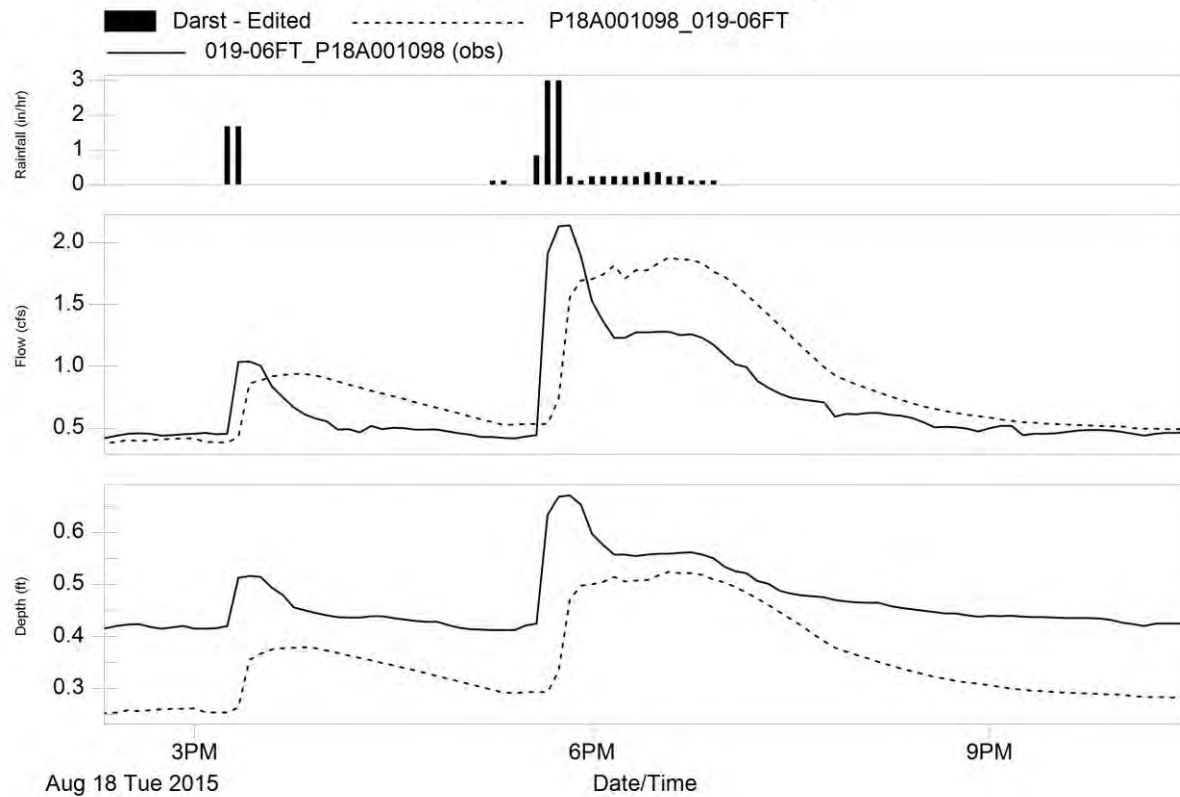
Darst 019-06FT – Verification Events



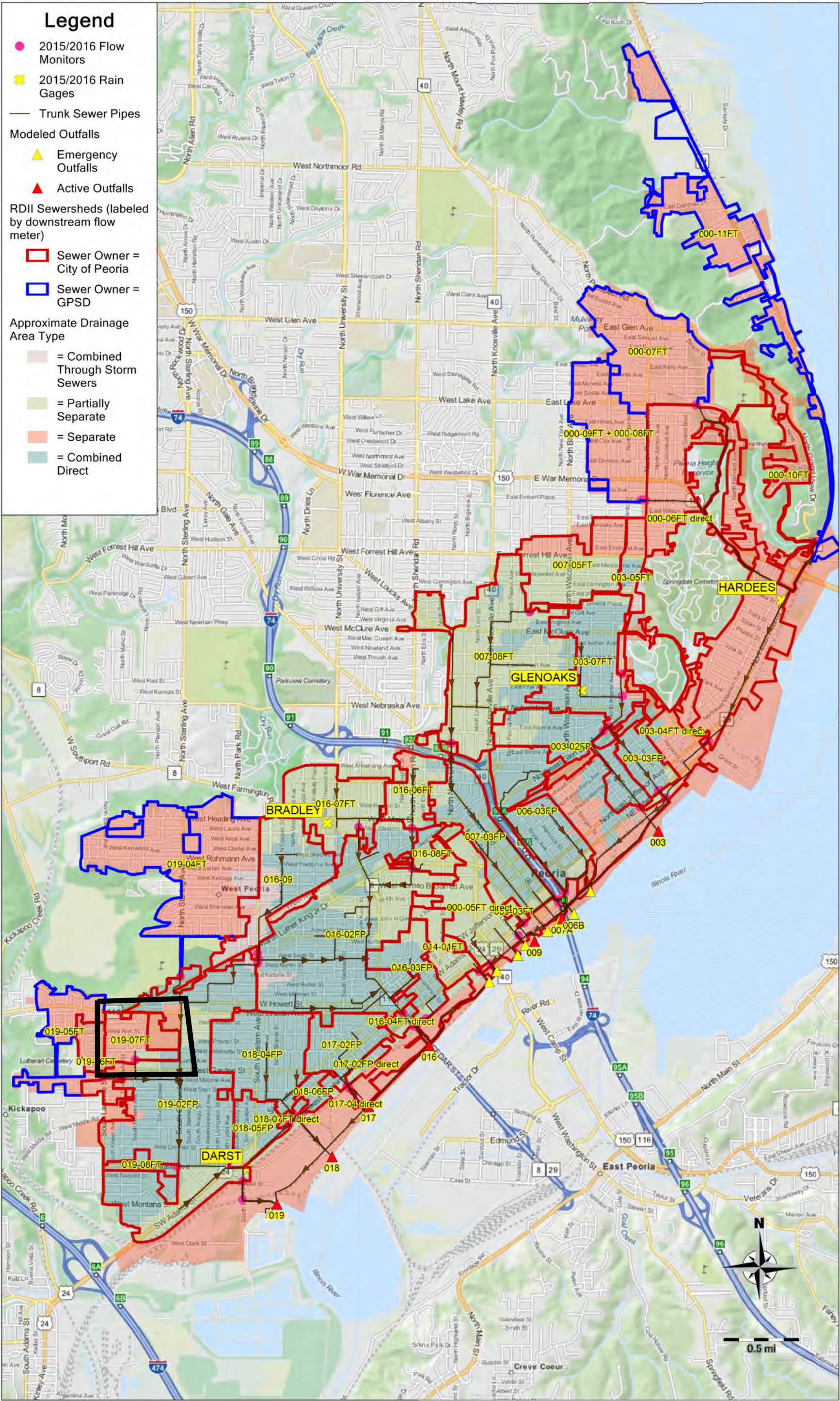
Darst 019-06FT – Verification Events

Event of August 18, 2015

Duration: 6.8 h, Total Rainfall: 0.66 (in)



Flow Monitor 019-07FT Overview Map



Legend

- 2015/2016 Flow Monitors
- Modeled Pipes (diameter labeled)
- Modeled Manholes
 - Modeled Manholes
 - Modeled Manholes with Inflow (labeled)
- Modeled Subcatchments
 - DCIA
 - PERVIOUS
 - ROOFS
- RDII Sewersheds
- Subcatchments

1000 ft

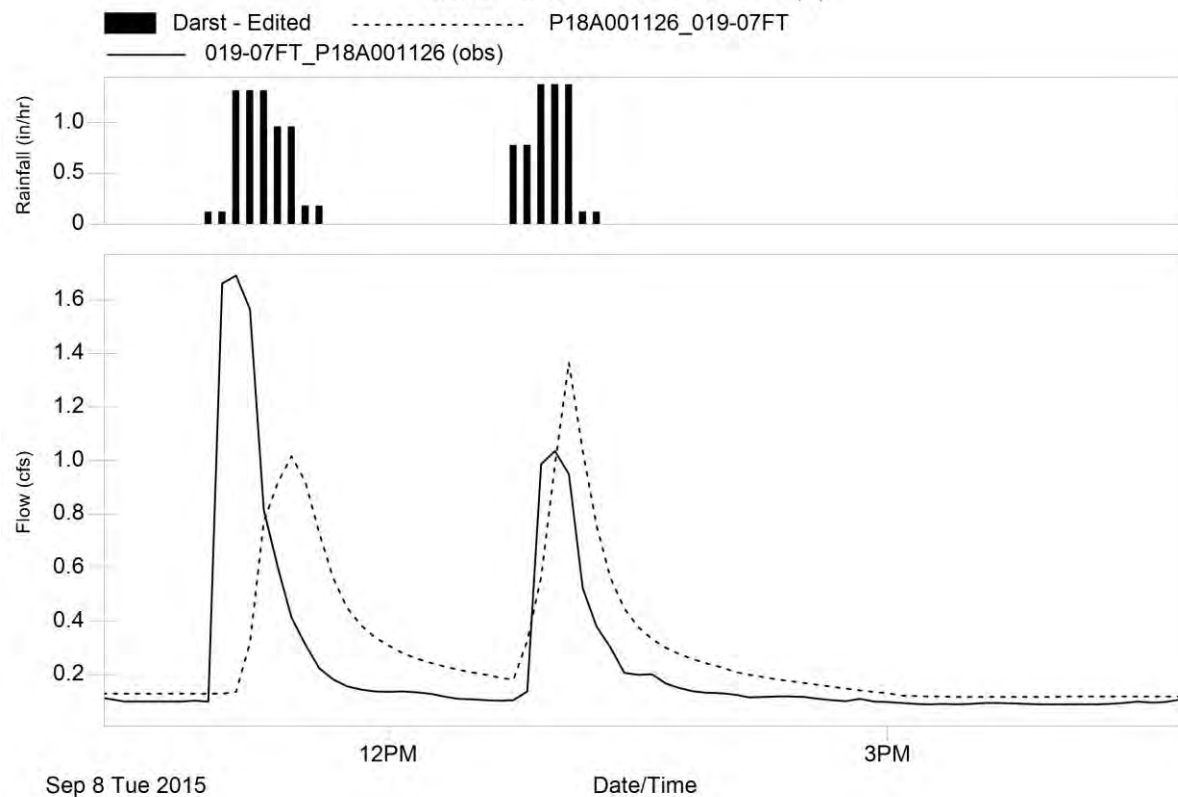
Darst 019-07FT

Date	Duration (h)	Rainfall (in)	Maximum Flow (cfs)		Maximum Flow (mgd)		Total Volume (ft³)		Volume (million gallons)		Peak Flow Rate (-15% to +25%)	Flow Volume (-10% to +20%)	Rainfall Variability	
		Darst Edited	Observed	Modeled	Observed	Modeled	Observed	Modeled	Observed	Modeled				
CALIBRATION EVENTS - FLOW														
9/8/2015 10:50	5.4	0.81	1.7	1.4	1.1	0.9	5275	6402	0.0	0.0	-20%	21%	variable	
9/18/2015 15:15	5.3	1.42	2.1	1.5	1.4	1.0	9579	9400	0.1	0.1	-30%	-2%	possibly uniform	
11/5/2015 13:05	22.8	0.34	0.3	0.4	0.2	0.3	11470	9650	0.1	0.1	19%	-16%	possibly uniform	
11/5/2015 22:30	3.0	0.23	0.3	0.4	0.2	0.3	1908	2052	0.0	0.0	19%	8%	variable	
11/16/2015 20:35	35.9	1.59	0.8	0.8	0.5	0.5	28160	20020	0.2	0.1	-2%	-29%	variable	
11/26/2015 21:35	9.3	1.01	0.5	0.4	0.3	0.3	8767	7508	0.1	0.1	-11%	-14%	possibly uniform	
VERIFICATION EVENTS - FLOW														
6/17/2015 2:05	5.3	0.80	2.0	1.5	1.3	1.0	7090	5047	0.1	0.0	-24%	-29%	variable	
6/24/2015 4:20	67.4	2.15	1.5	1.2	0.9	0.8	41380	34620	0.3	0.3	-15%	-16%	variable	
6/28/2015 17:25	6.2	0.51	1.6	0.8	1.1	0.5	5912	5059	0.0	0.0	-48%	-14%	variable	
7/8/2015 5:05	26.0	1.39	0.6	0.6	0.4	0.4	15170	15640	0.1	0.1	-3%	3%	variable	
7/11/2015 8:35	13.9	1.07	2.1	1.1	1.4	0.7	17420	11290	0.1	0.1	-48%	-35%	variable	
7/16/2015 9:00	17.3	1.34	3.1	4.0	2.0	2.6	15120	13660	0.1	0.1	30%	-10%	possibly uniform	
7/29/2015 1:30	2.5	0.57	1.4	1.3	0.9	0.8	2502	3322	0.0	0.0	-11%	33%	possibly uniform	
8/18/2015 2:05	3.8	0.40	1.5	1.2	1.0	0.8	2465	2662	0.0	0.0	-18%	8%	possibly uniform	
8/18/2015 15:00	Bad match to rainfall												variable	
								WEIGHTED AVERAGES						
												-21%	-11%	possibly uniform
												-10%	-19%	variable
												-16%	-16%	
												8%	-2%	possibly uniform
												-32%	-18%	variable
												-14%	-15%	
												-15%	-15%	
								NET AVERAGES						
												-7%	-11%	possibly uniform
												-1%	0%	variable
												-4%	-5%	
												n/a	n/a	relatively uniform
												0%	10%	possibly uniform
												-27%	-18%	variable
												-17%	-8%	
												-11%	-7%	

Darst 019-07FT – Calibration Events

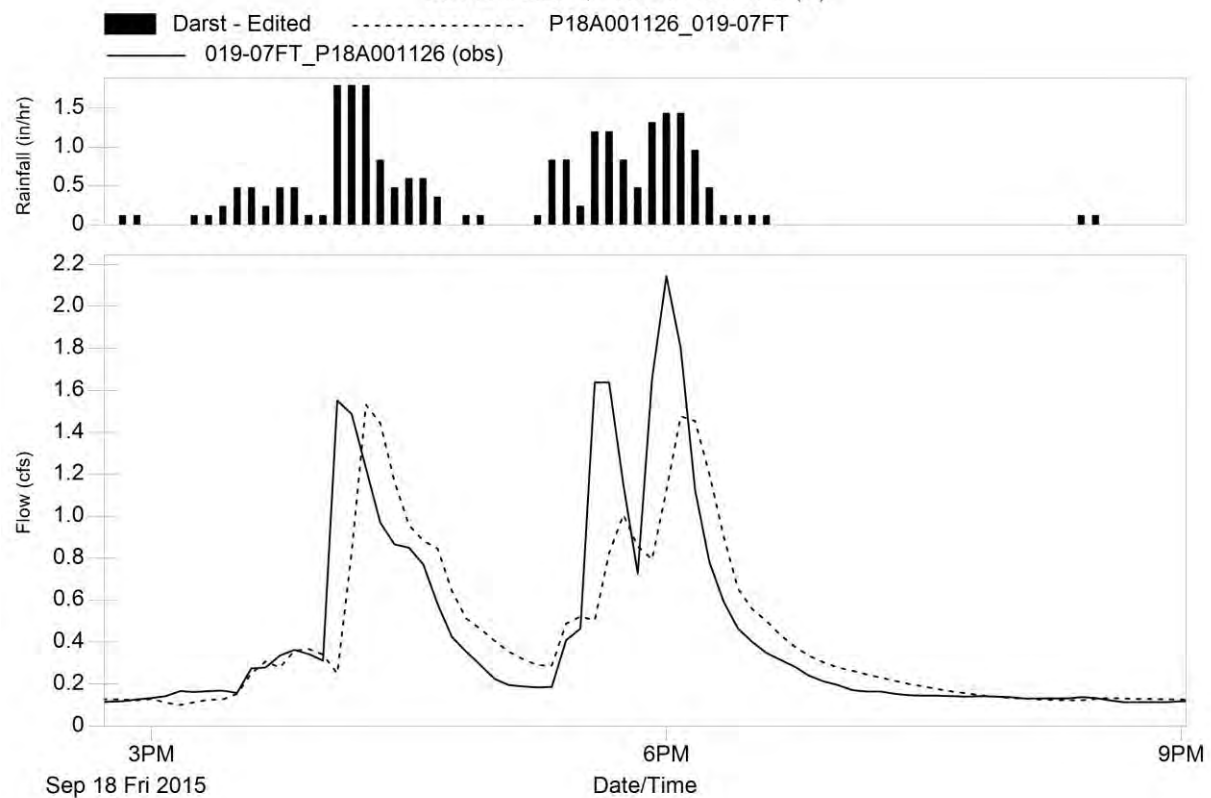
Event of September 8, 2015

Duration: 5.42 h, Total Rainfall: 0.81 (in)



Event of September 18, 2015

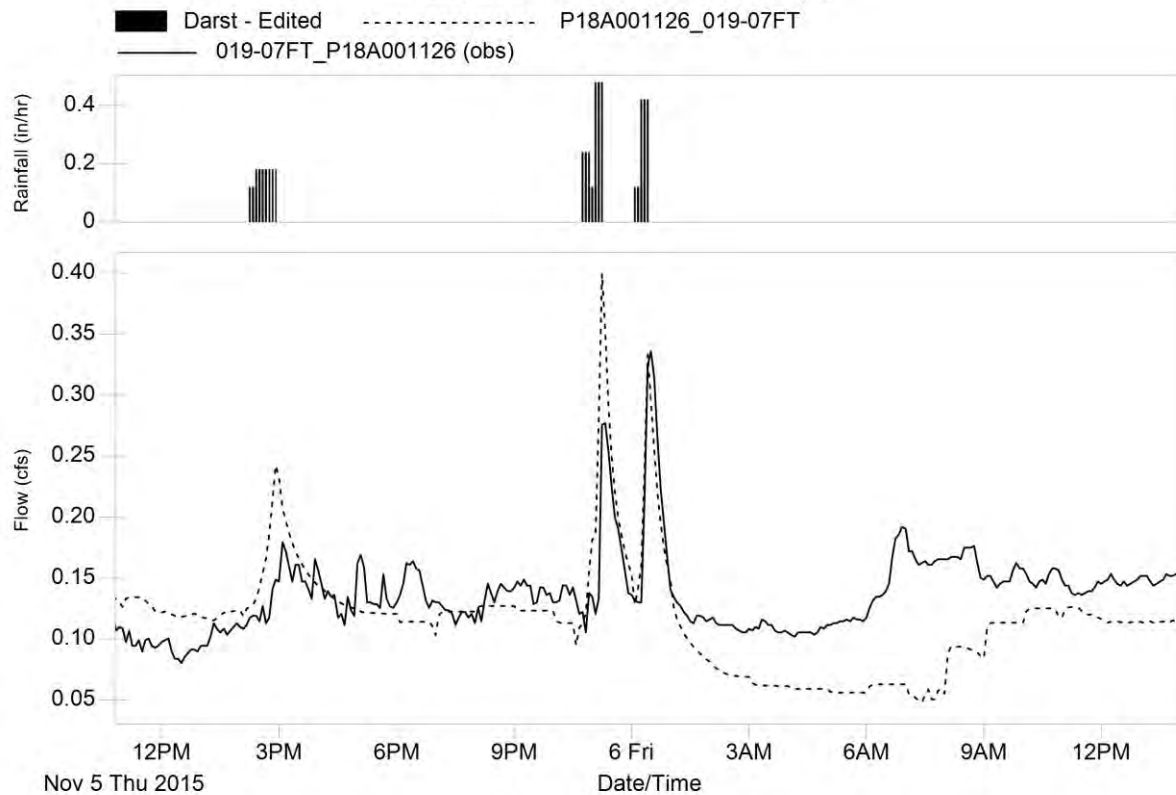
Duration: 5.25 h, Total Rainfall: 1.42 (in)



Darst 019-07FT – Calibration Events

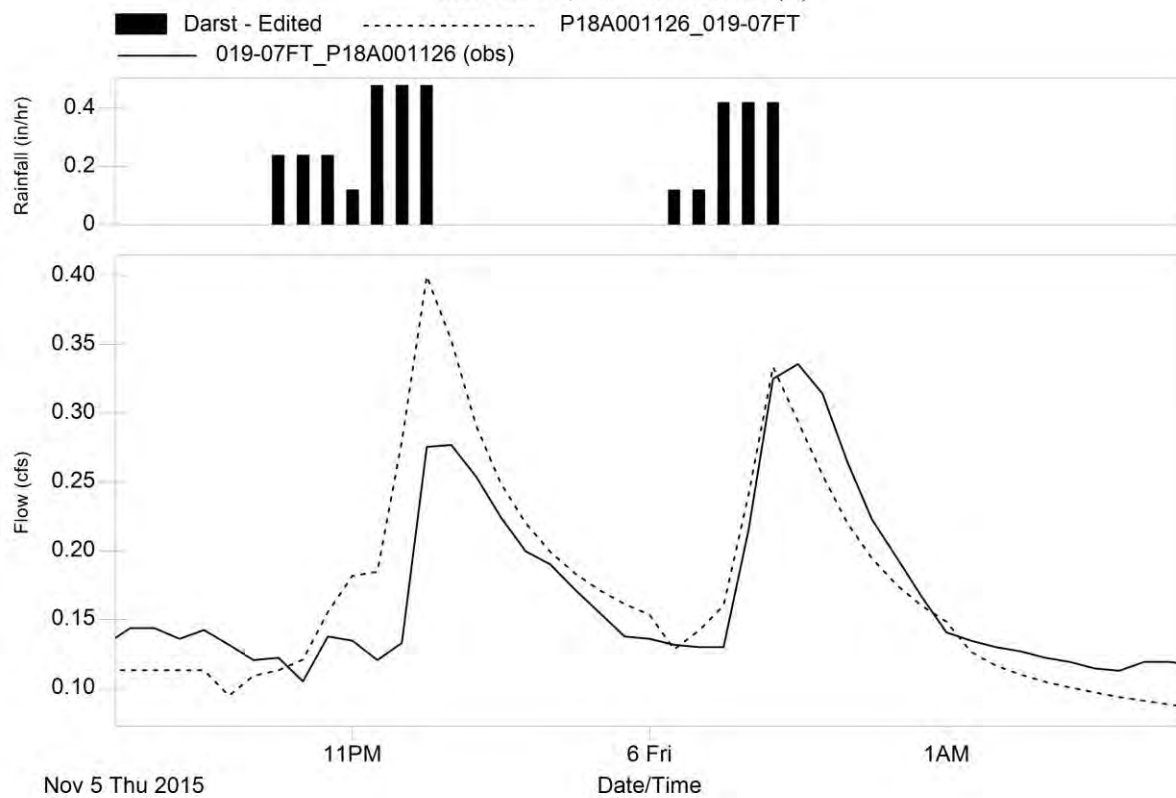
Event of November 5, 2015

Duration: 22.75 h, Total Rainfall: 0.34 (in)



Event of November 5, 2015

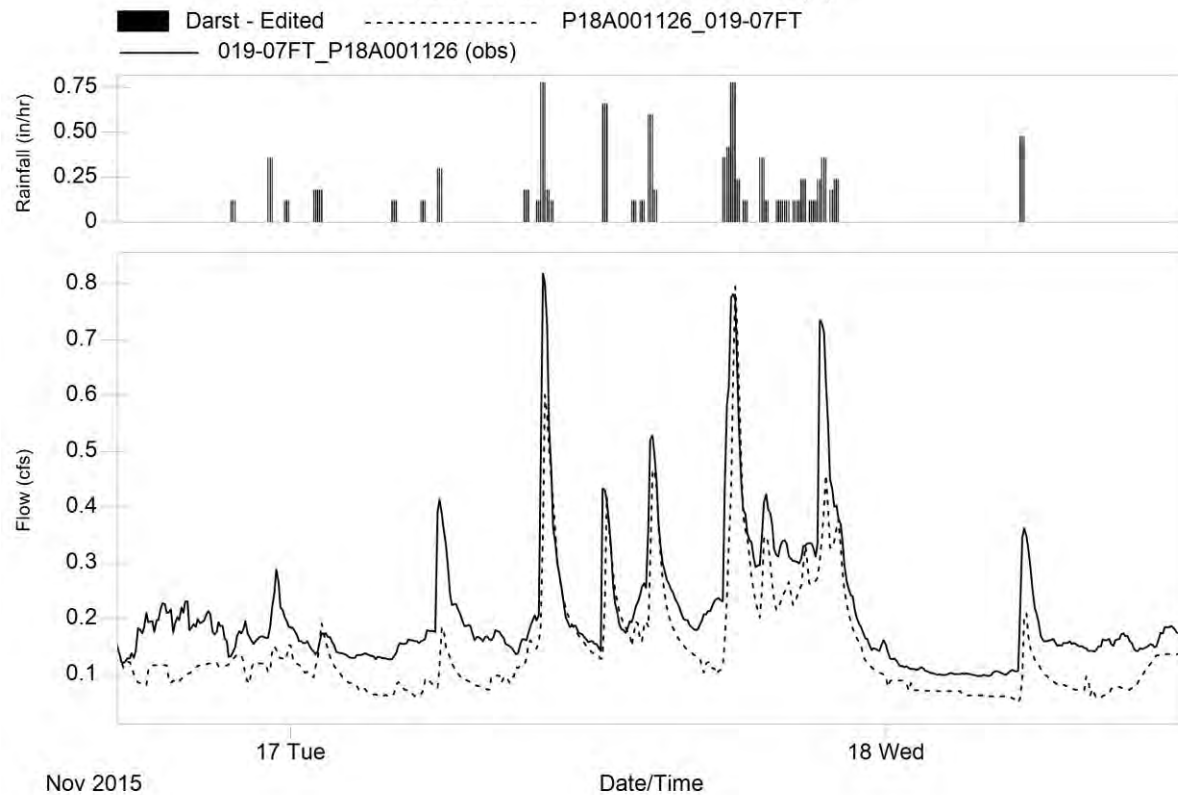
Duration: 3 h, Total Rainfall: 0.23 (in)



Darst 019-07FT – Calibration Events

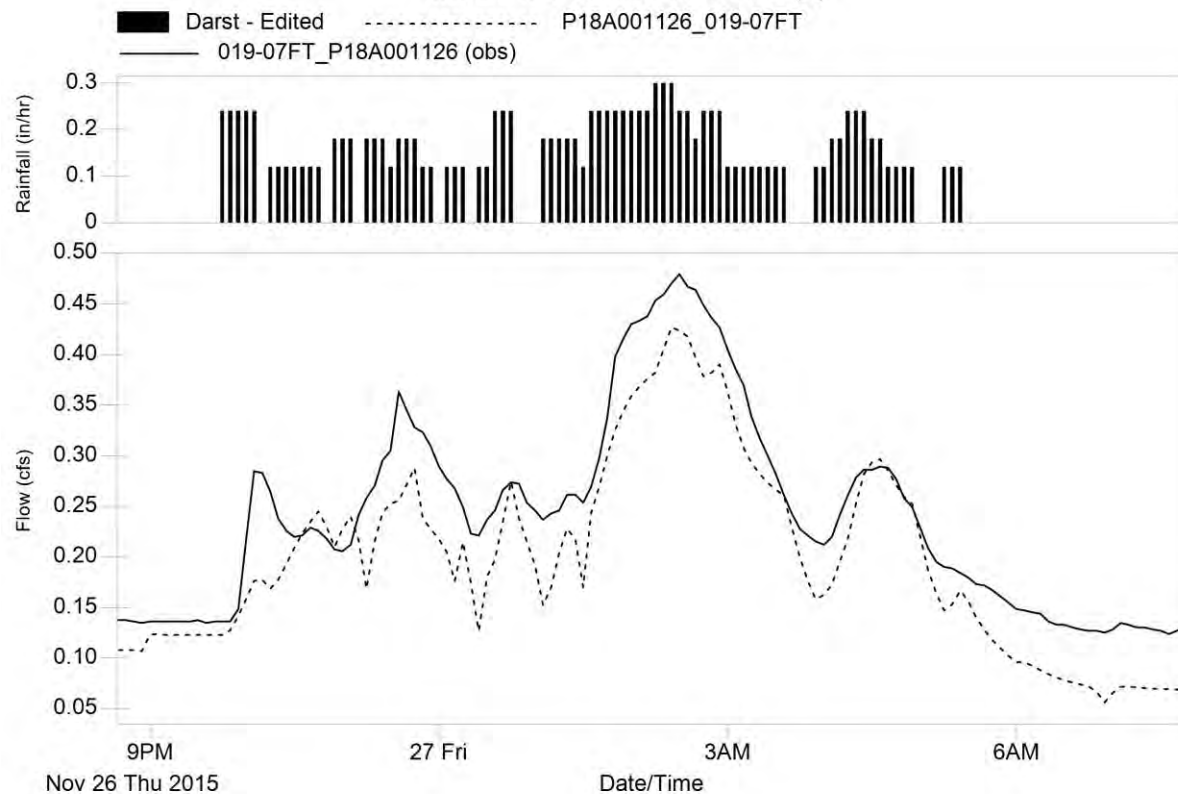
Event of November 16, 2015

Duration: 35.92 h, Total Rainfall: 1.59 (in)

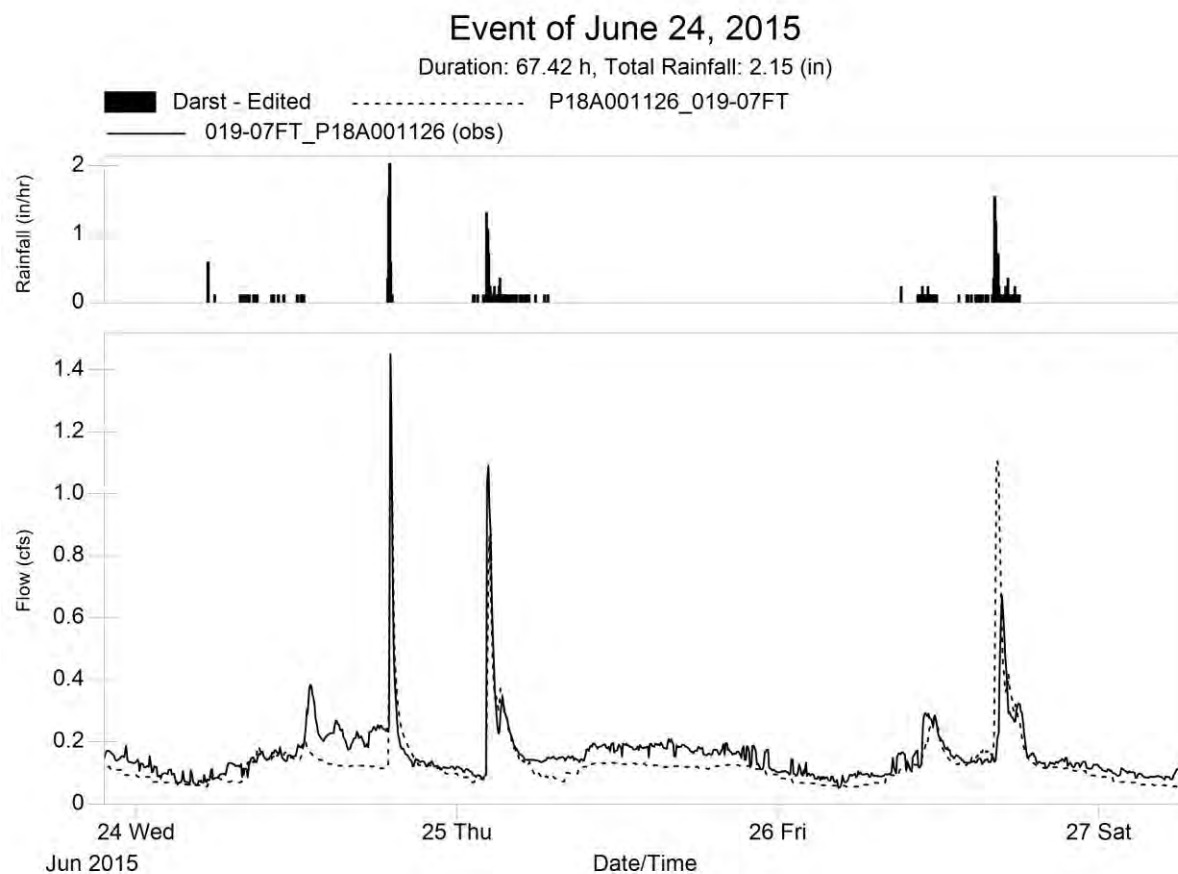
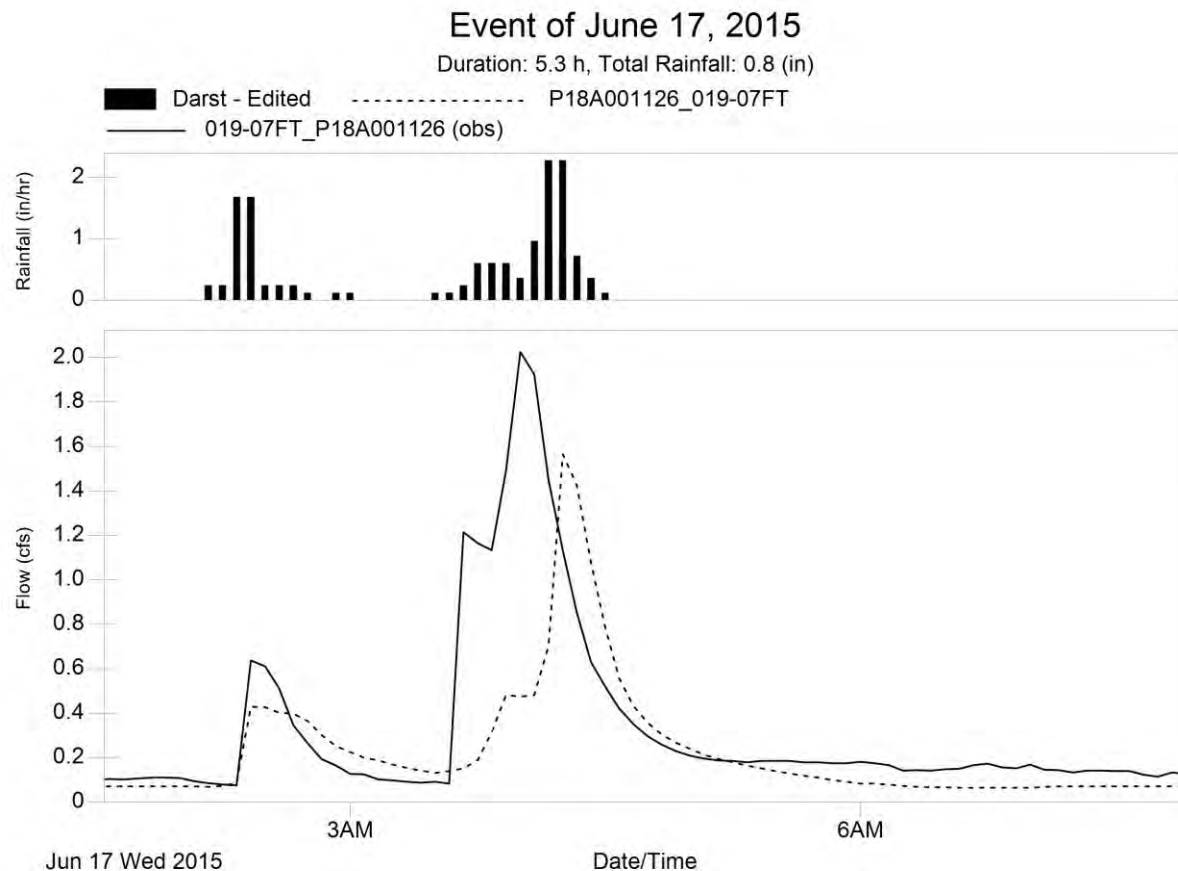


Event of November 26, 2015

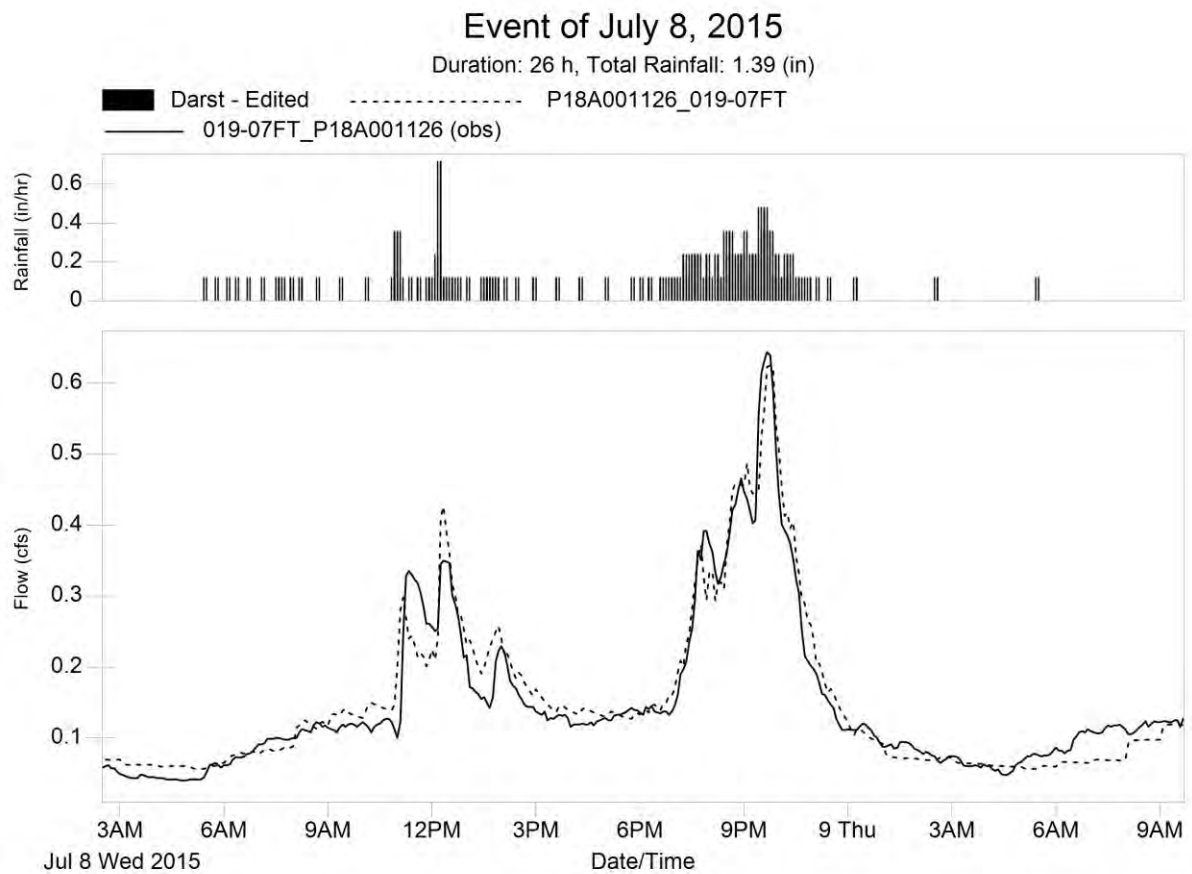
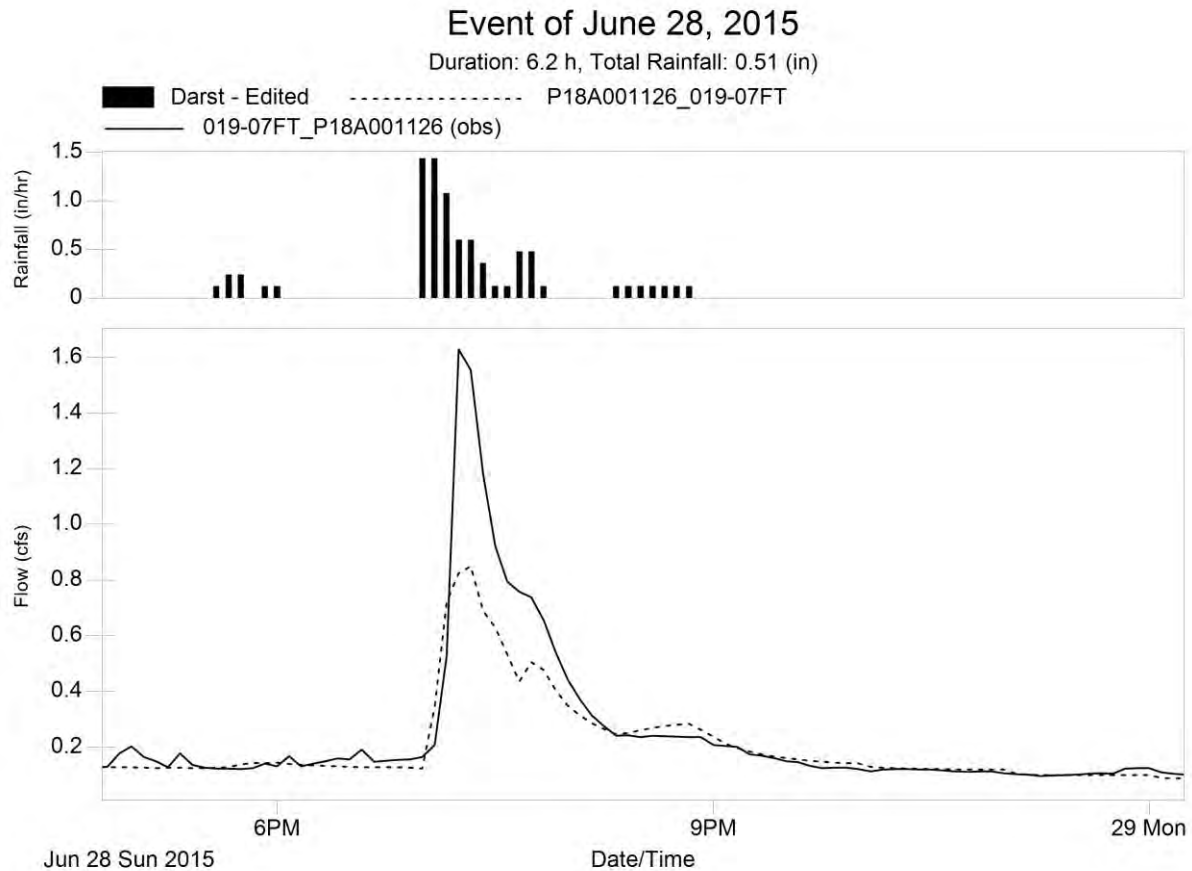
Duration: 9.25 h, Total Rainfall: 1.01 (in)



Darst 019-07FT – Verification Events



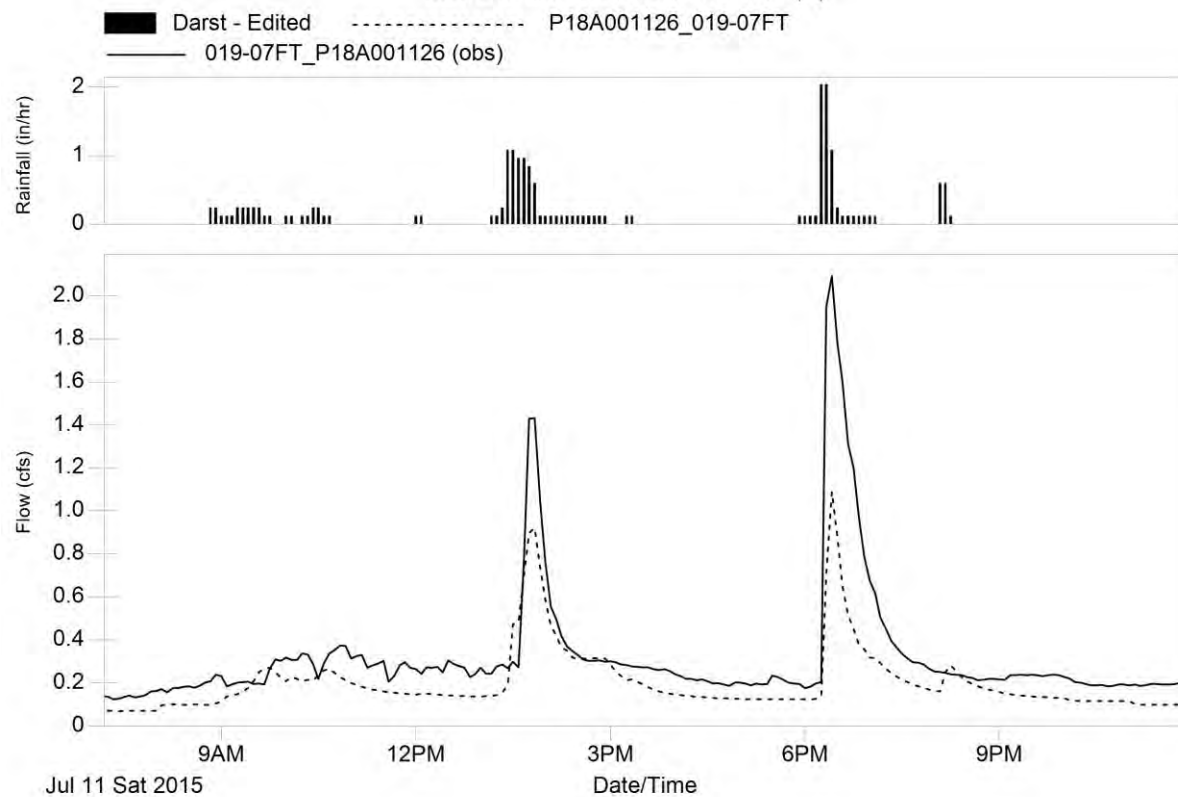
Darst 019-07FT – Verification Events



Darst 019-07FT – Verification Events

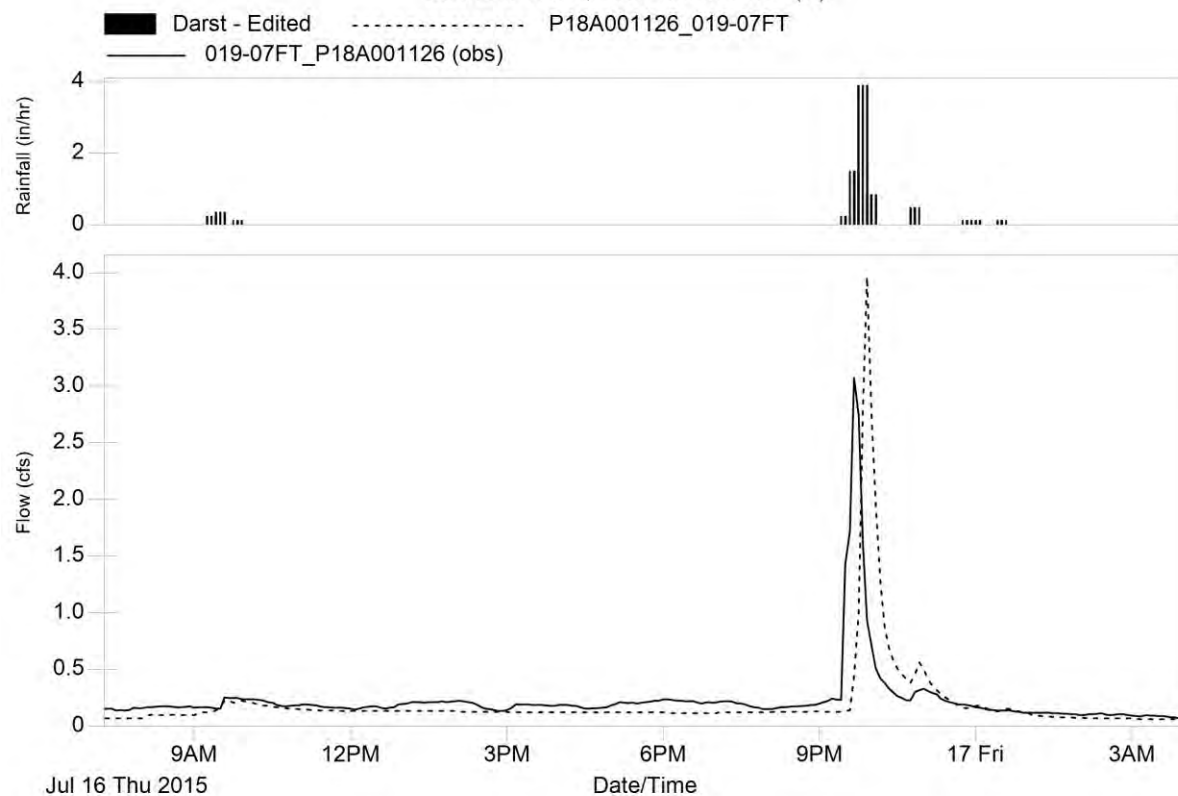
Event of July 11, 2015

Duration: 13.9 h, Total Rainfall: 1.07 (in)



Event of July 16, 2015

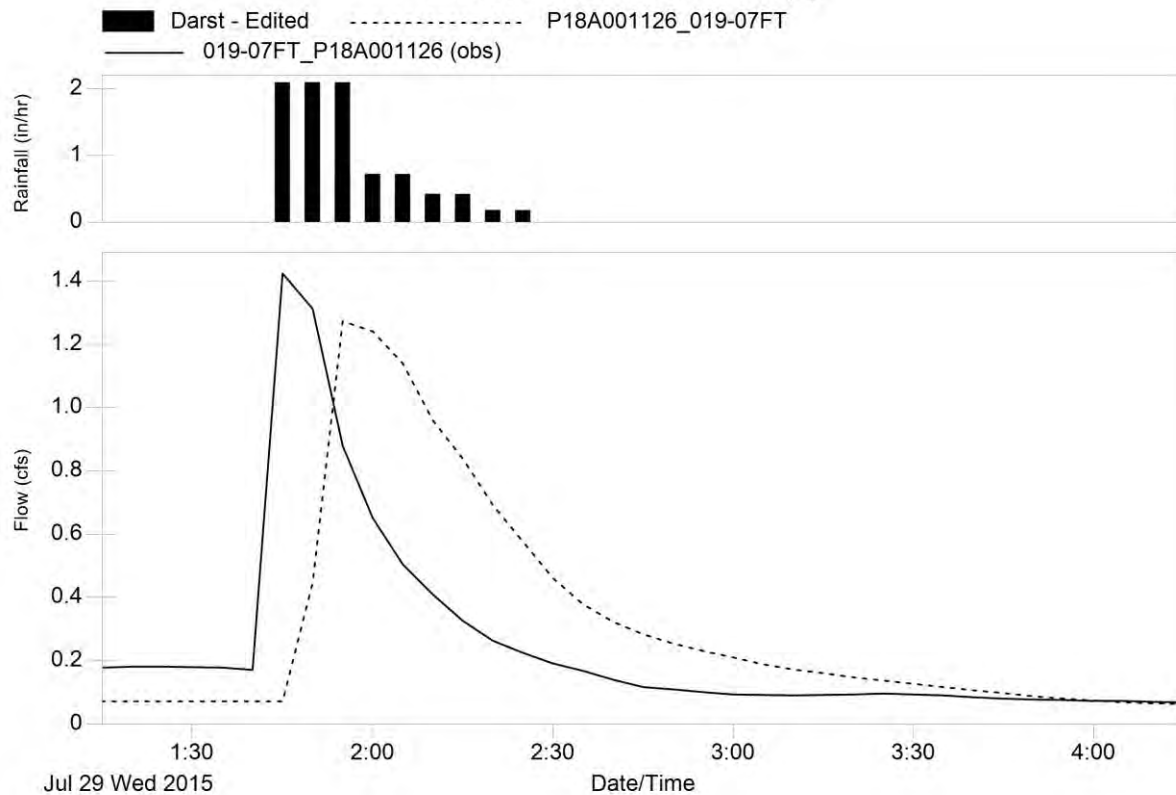
Duration: 17.3 h, Total Rainfall: 1.34 (in)



Darst 019-07FT – Verification Events

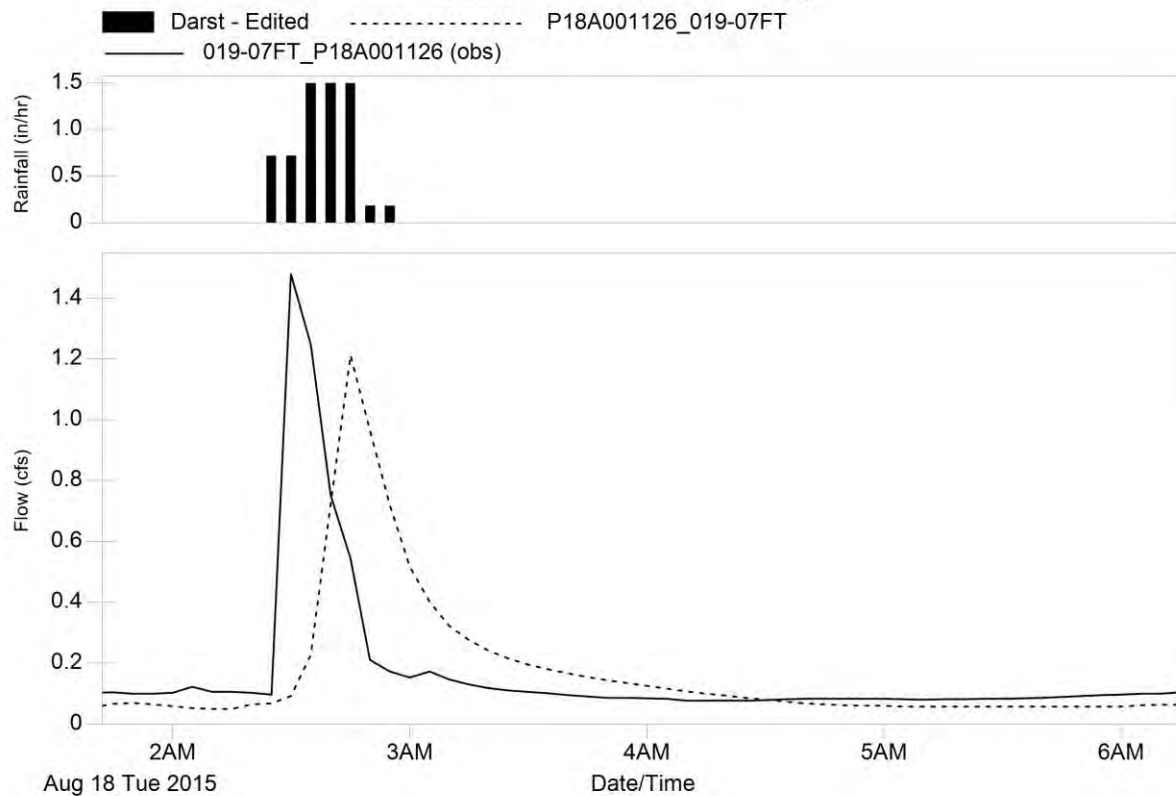
Event of July 29, 2015

Duration: 2.5 h, Total Rainfall: 0.57 (in)

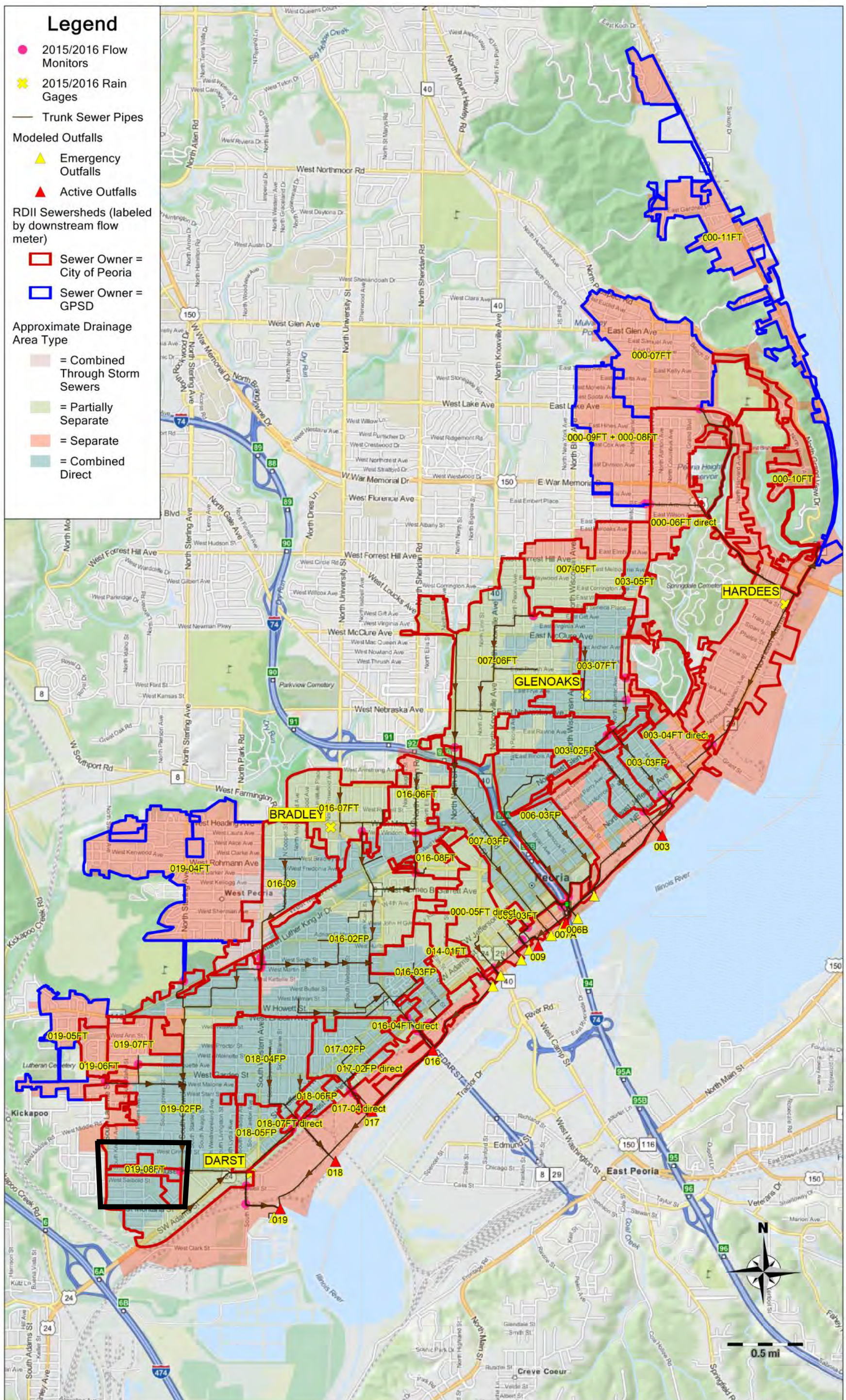


Event of August 18, 2015

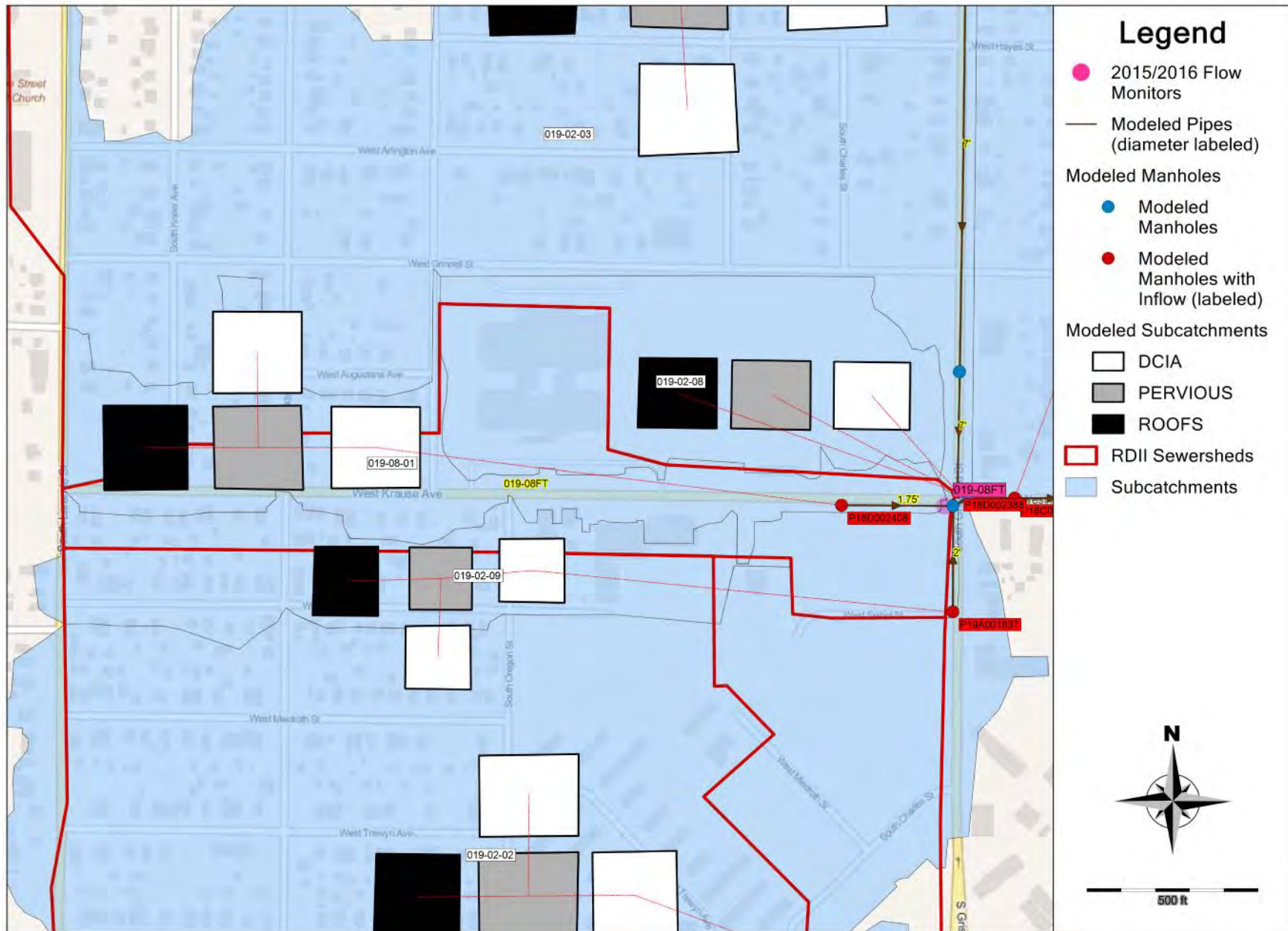
Duration: 3.8 h, Total Rainfall: 0.4 (in)



Flow Monitor 019-08FT Overview Map



019-08FT: Combined Sewer Flow Meter



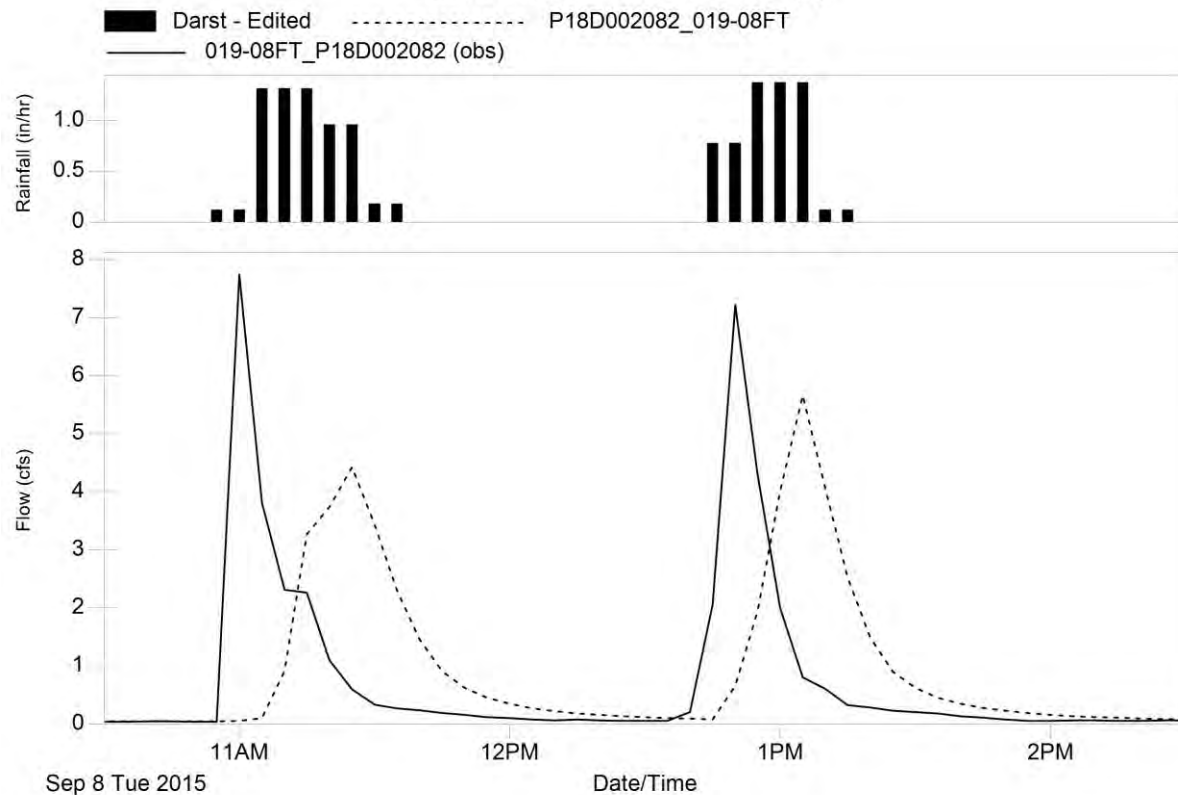
Darst 019-08FT

Date	Duration (h)	Rainfall (in) Darst	Maximum Flow (cfs) Observed Modeled		Maximum Flow (mgd) Observed Modeled		Total Volume (ft³) Observed Modeled		Volume (million gallons) Observed Modeled		Peak Flow Rate (-15% to +25%)	Peak Flow Rate (+/-0.1 mgd)	Flow Volume (-10% to +20%)	Flow Volume (+/-0.1 MG)	Rainfall Variability
CALIBRATION EVENTS - FLOW															
9/8/2015 10:50	3.3	0.81	7.7	5.7	5.0	3.7	11600	14440	0.1	0.1	-27%	-1.355	24%	0.021	variable
9/18/2015 13:10	12.0	1.62	10.7	6.3	6.9	4.1	30860	29760	0.2	0.2	-41%	-2.828	-4%	-0.008	possibly uniform
11/5/2015 14:10	12.4	0.34	1.1	1.4	0.7	0.9	5537	6788	0.0	0.1	31%	0.216	23%	0.009	possibly uniform
11/11/2015 19:40	1.4	0.60	6.4	6.4	4.1	4.1	7074	10460	0.1	0.1	0%	0.019	48%	0.025	variable
11/16/2015 21:10	33.8	1.59	3.6	3.1	2.3	2.0	37190	31530	0.3	0.2	-14%	-0.313	-15%	-0.042	variable
11/26/2015 21:20	9.5	1.01	1.1	1.4	0.7	0.9	14650	18540	0.1	0.1	26%	0.187	27%	0.029	possibly uniform
12/13/2015 2:45	29.9	1.75	1.3	1.6	0.8	1.0	30680	34170	0.2	0.3	25%	0.202	11%	0.026	variable
12/20/2015 22:15	13.8	0.70	0.9	1.4	0.6	0.9	8995	13310	0.1	0.1	54%	0.309	48%	0.032	variable
12/28/2015 3:40	14.8	2.54	6.1	7.2	4.0	4.7	39070	48200	0.3	0.4	18%	0.715	23%	0.068	variable
12/23/15	Bad meter data														
VERIFICATION EVENTS - FLOW															
6/17/2015 2:05	3.3	0.80	8.0	6.5	5.2	4.2	18920	13850	0.1	0.1	-19%	-0.970	-27%	-0.038	variable
6/24/2015 18:20	49.6	1.91	7.0	5.5	4.5	3.6	28570	36970	0.2	0.3	-21%	-0.959	29%	0.063	variable
6/28/2015 17:30	4.1	0.51	5.4	3.5	3.5	2.2	9030	8514	0.1	0.1	-36%	-1.257	-6%	-0.004	variable
7/8/2015 5:10	24.5	1.39	2.1	2.0	1.3	1.3	19280	24550	0.1	0.2	-3%	-0.037	27%	0.039	variable
7/11/2015 8:45	12.3	1.07	11.4	4.8	7.3	3.1	32600	18760	0.2	0.1	-58%	-4.253	-42%	-0.104	variable
7/16/2015 21:00	3.8	1.22	10.6	17.0	6.8	11.0	14660	21780	0.1	0.2	60%	4.141	49%	0.053	possibly uniform
7/29/2015 1:35	2.1	0.57	5.4	6.0	3.5	3.9	6373	9850	0.0	0.1	11%	0.395	55%	0.026	possibly uniform
8/18/2015 2:15	1.7	0.40	7.8	5.5	5.1	3.6	6049	6550	0.0	0.0	-30%	-1.492	8%	0.004	possibly uniform
8/18/2015 15:00	4.5	0.66	8.8	6.5	5.7	4.2	9308	11610	0.1	0.1	-26%	-1.505	25%	0.017	variable
							WEIGHTED AVERAGES								
							Calibration - Possibly Uniform				-29%	-2.310	8%	0.004	possibly uniform
							Calibration - Variable				-3%	-0.254	13%	0.019	variable
							Calibration Weighted - All Events				-11%	-0.935	12%	0.015	
							Verification - Possibly Uniform				20%	1.444	41%	0.036	possibly uniform
							Verification - Variable				-33%	-1.943	-3%	-0.012	variable
							Verification Weighted - All Events				-14%	-0.731	5%	-0.003	
							Weighted Average - All Events				-13%	-0.806	9%	0.007	
							NET AVERAGES								
							Calibration - Possibly Uniform				5%	-0.808	15%	0.010	possibly uniform
							Calibration - Variable				10%	-0.070	23%	0.022	variable
							Calibration Net - All Events				8%	-0.316	21%	0.018	
							Verification - Relatively Uniform				14%	2.268	37%	0.040	possibly uniform
							Verification - Variable				-27%	-1.497	1%	-0.004	variable
							Verification Net - All Events				-13%	-0.660	13%	0.006	
							Net Average - All Events				-3%	-0.488	17%	0.012	

Darst 019-08FT – Calibration Events

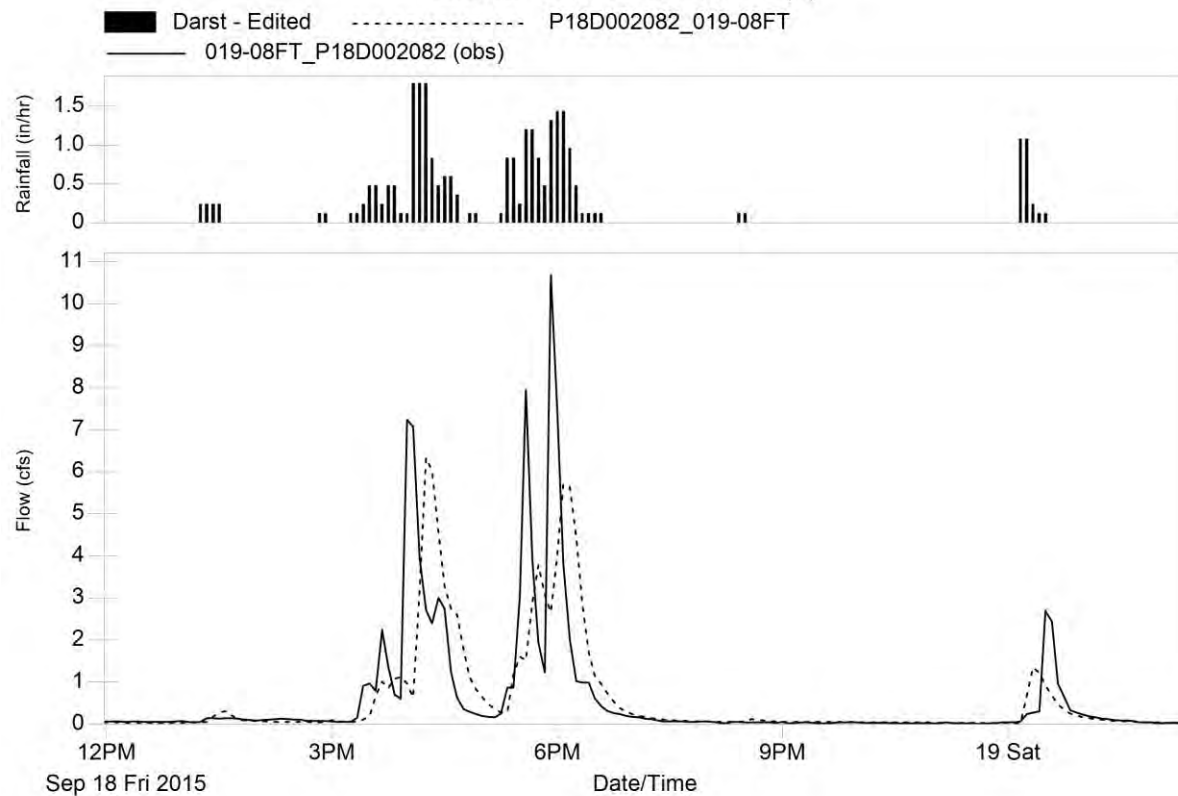
Event of September 8, 2015

Duration: 3.33 h, Total Rainfall: 0.81 (in)



Event of September 18, 2015

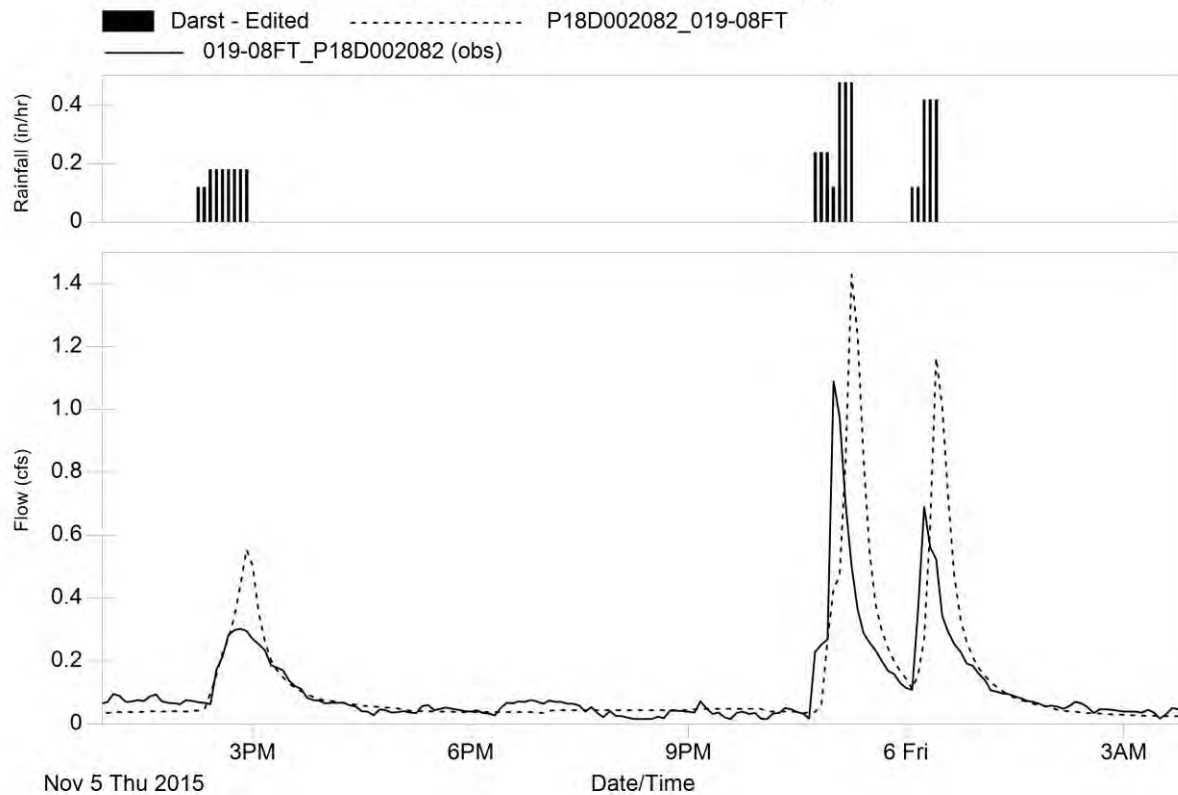
Duration: 12 h, Total Rainfall: 1.62 (in)



Darst 019-08FT – Calibration Events

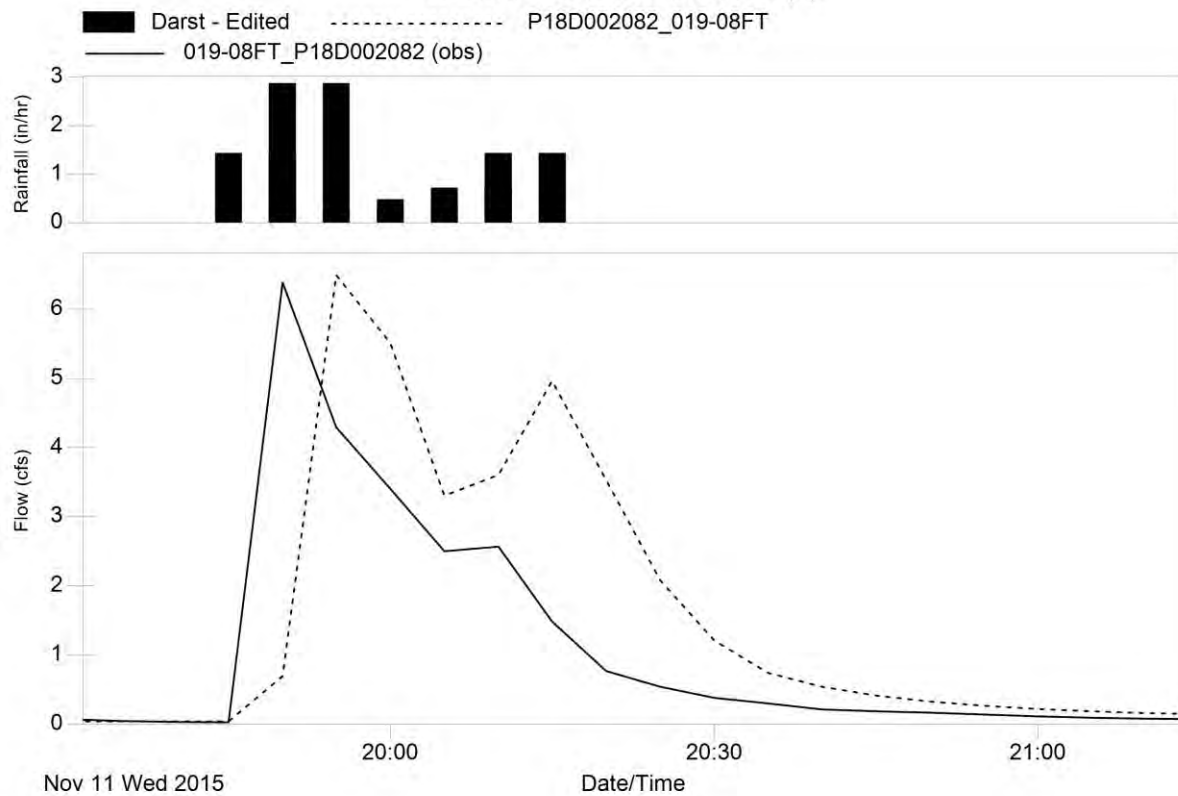
Event of November 5, 2015

Duration: 12.42 h, Total Rainfall: 0.34 (in)



Event of November 11, 2015

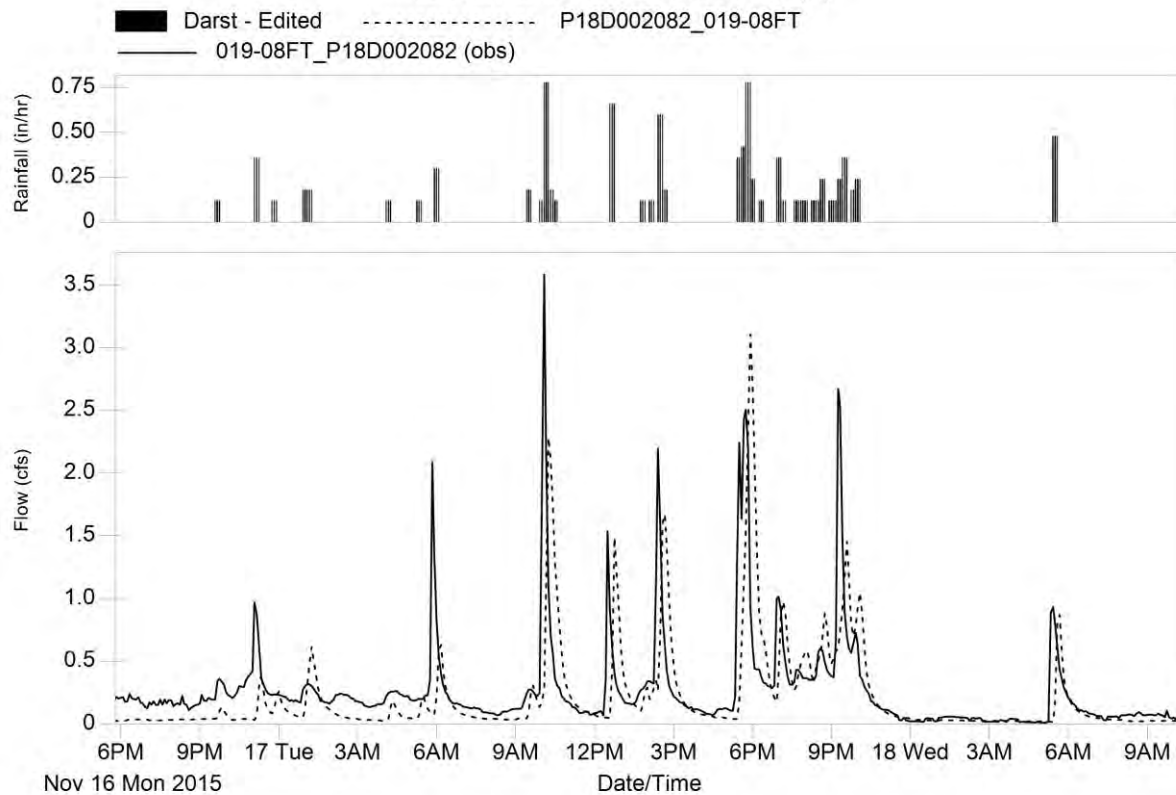
Duration: 1.42 h, Total Rainfall: 0.6 (in)



Darst 019-08FT – Calibration Events

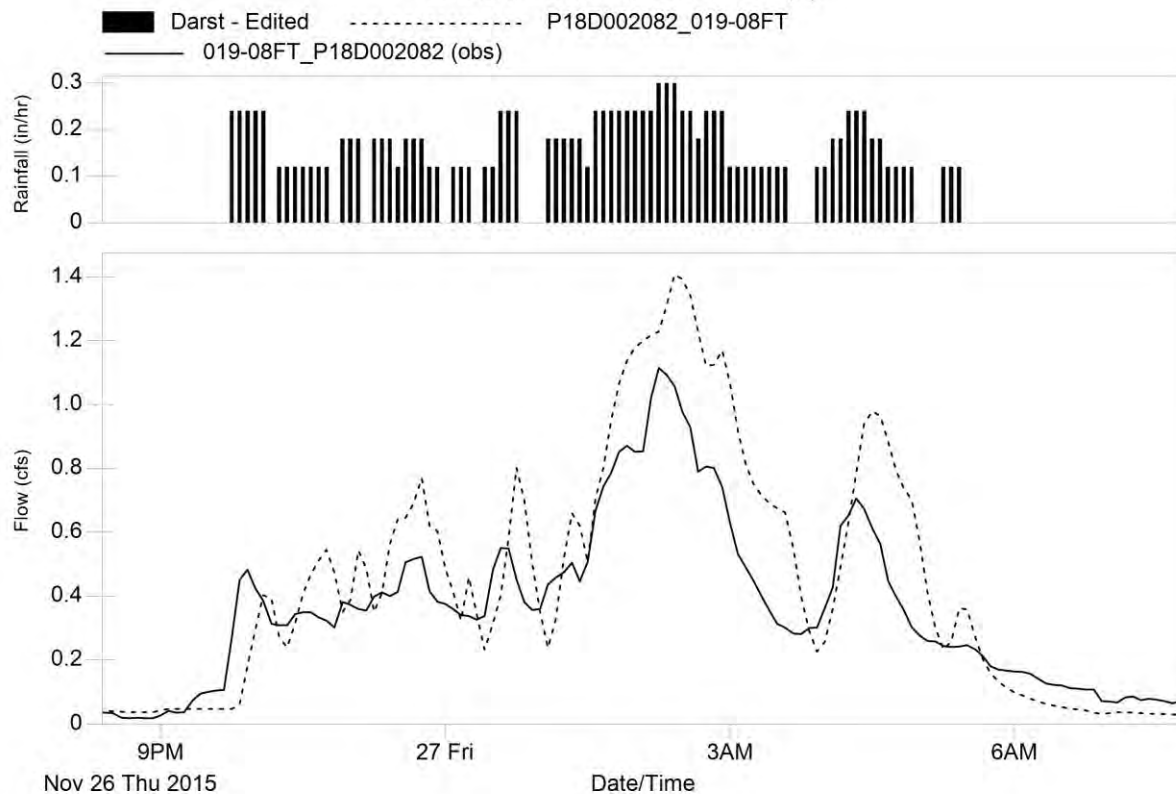
Event of November 16, 2015

Duration: 33.83 h, Total Rainfall: 1.59 (in)



Event of November 26, 2015

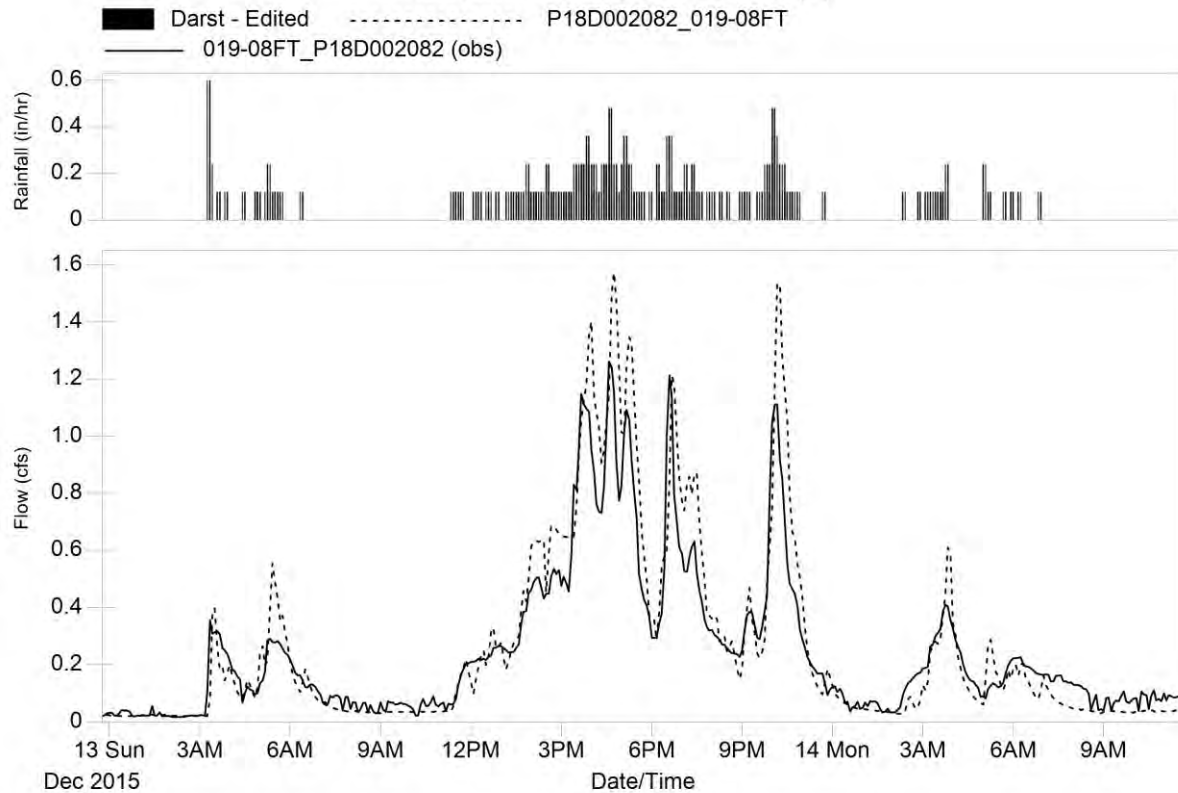
Duration: 9.5 h, Total Rainfall: 1.01 (in)



Darst 019-08FT – Calibration Events

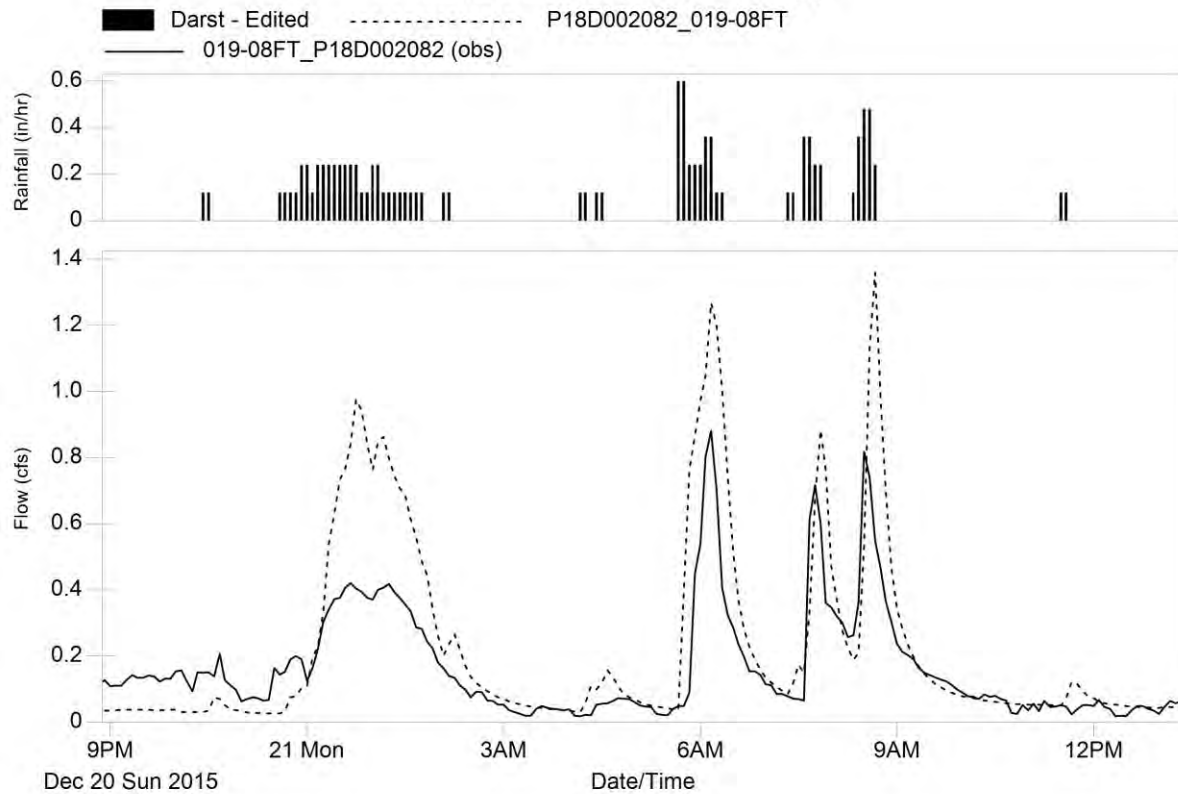
Event of December 13, 2015

Duration: 29.92 h, Total Rainfall: 1.75 (in)



Event of December 20, 2015

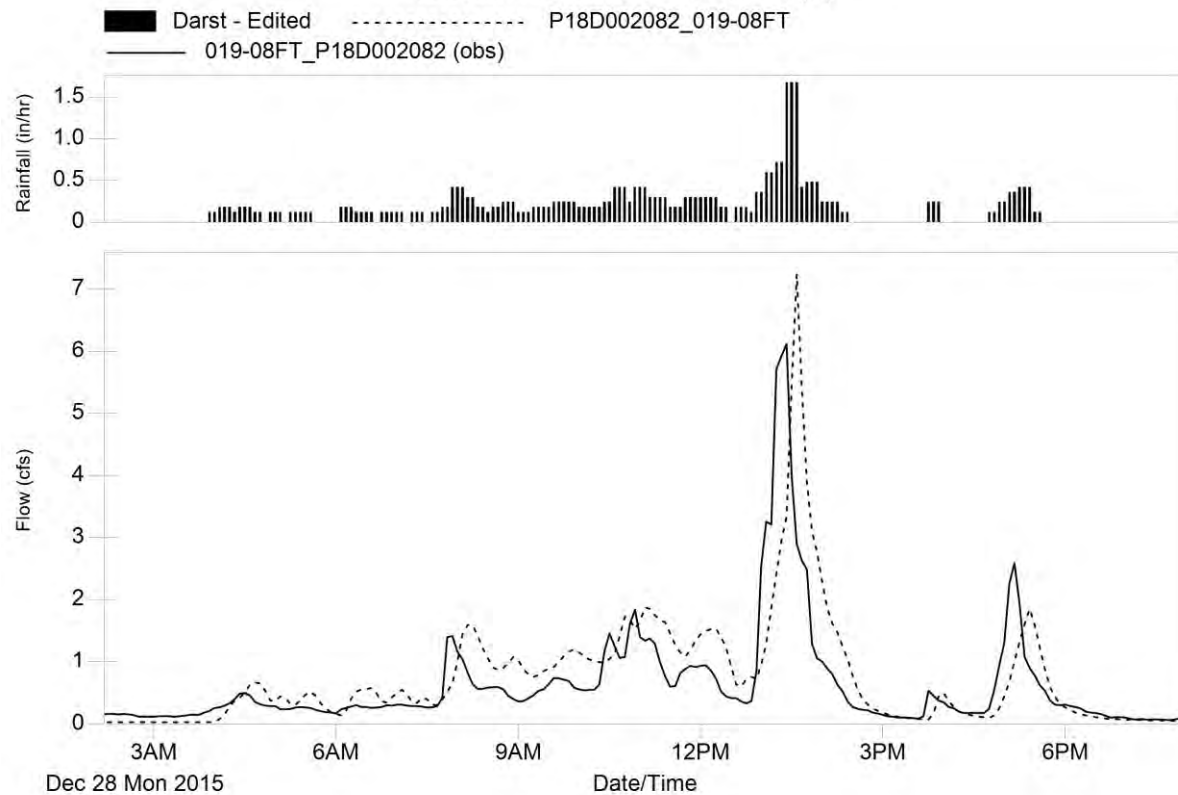
Duration: 13.75 h, Total Rainfall: 0.7 (in)



Darst 019-08FT – Calibration Events

Event of December 28, 2015

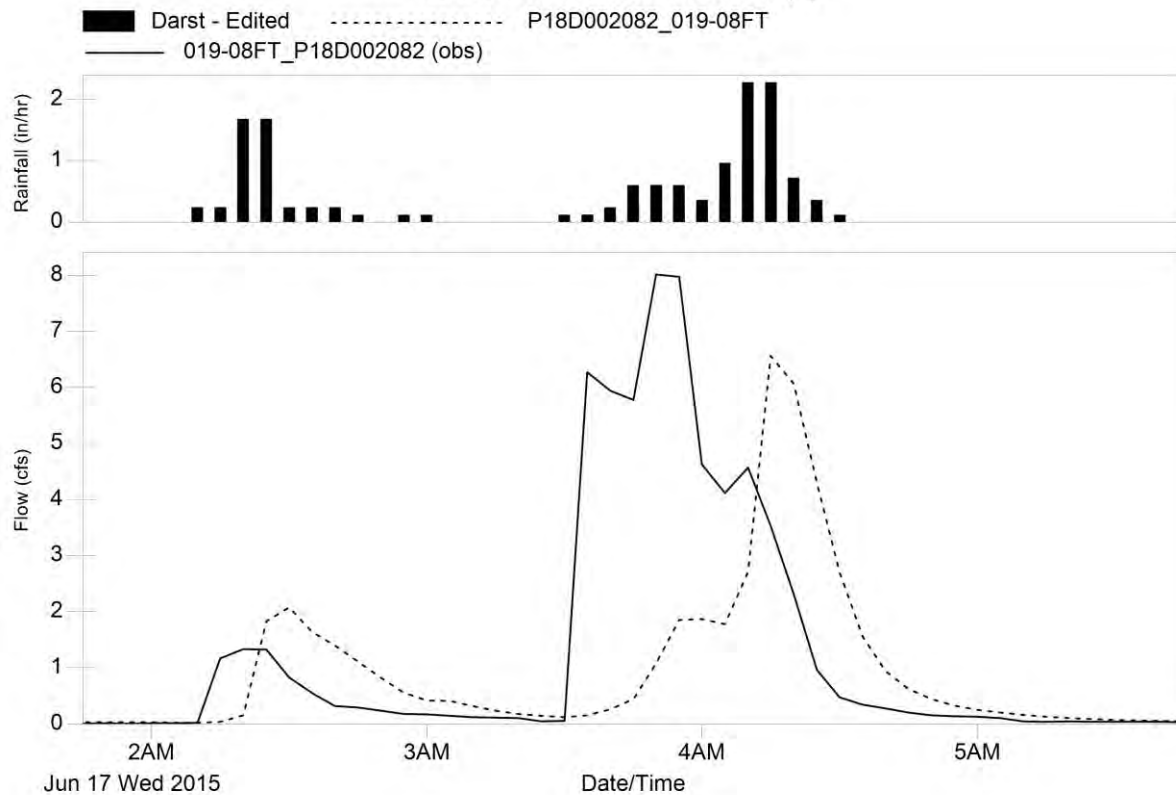
Duration: 14.83 h, Total Rainfall: 2.54 (in)



Darst 019-08FT – Verification Events

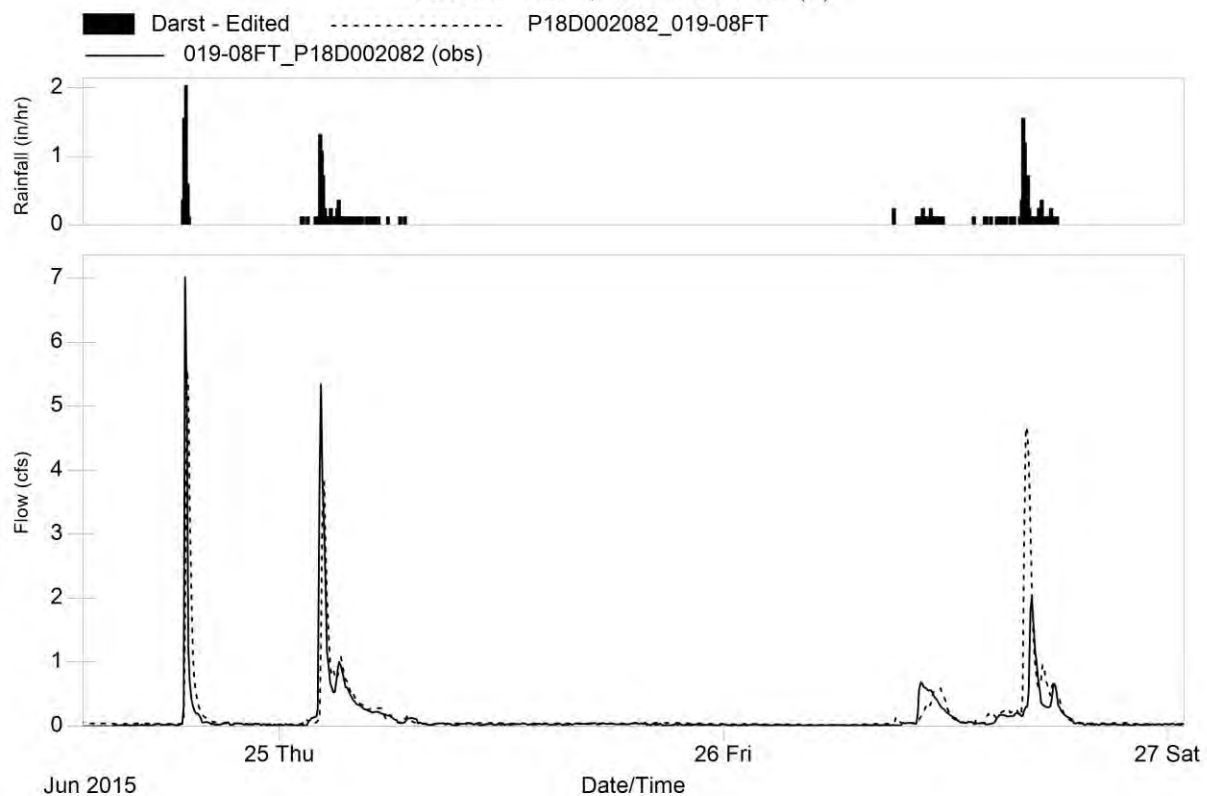
Event of June 17, 2015

Duration: 3.33 h, Total Rainfall: 0.8 (in)

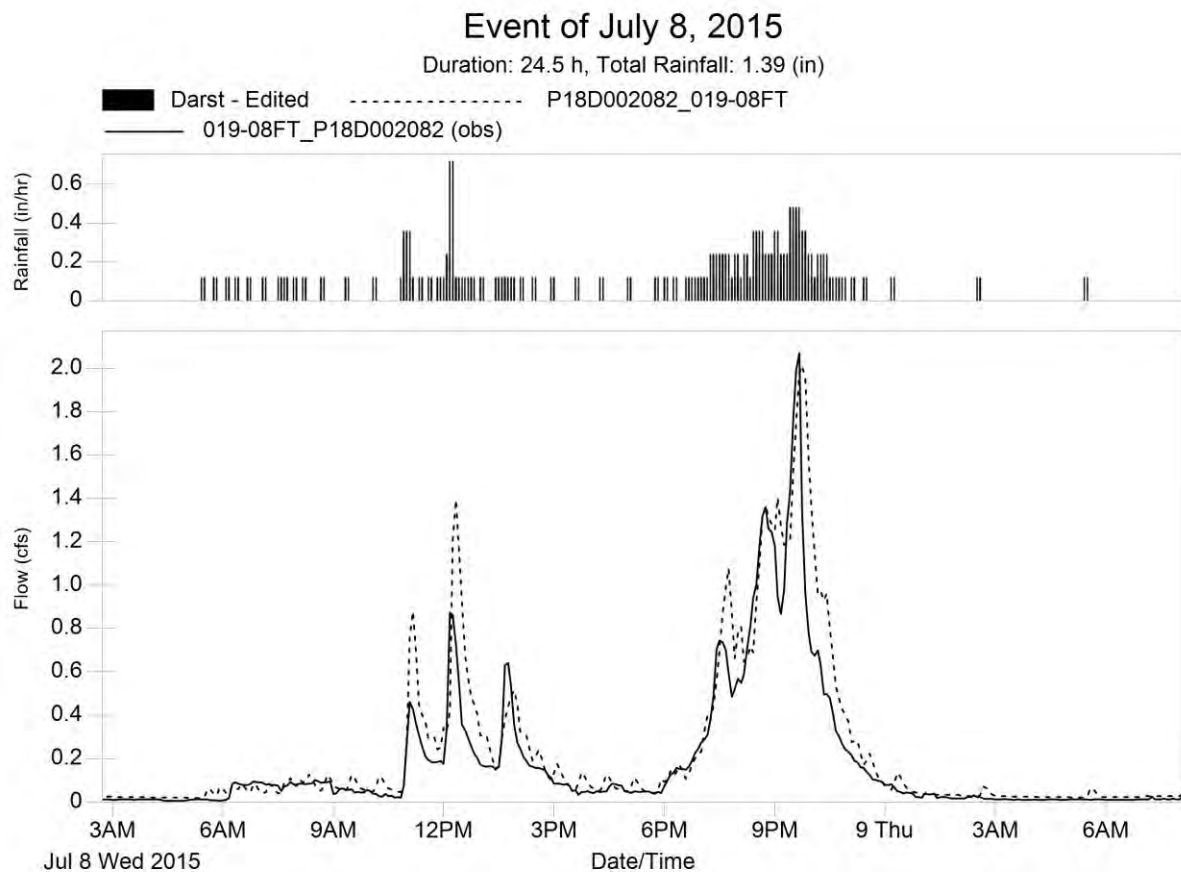
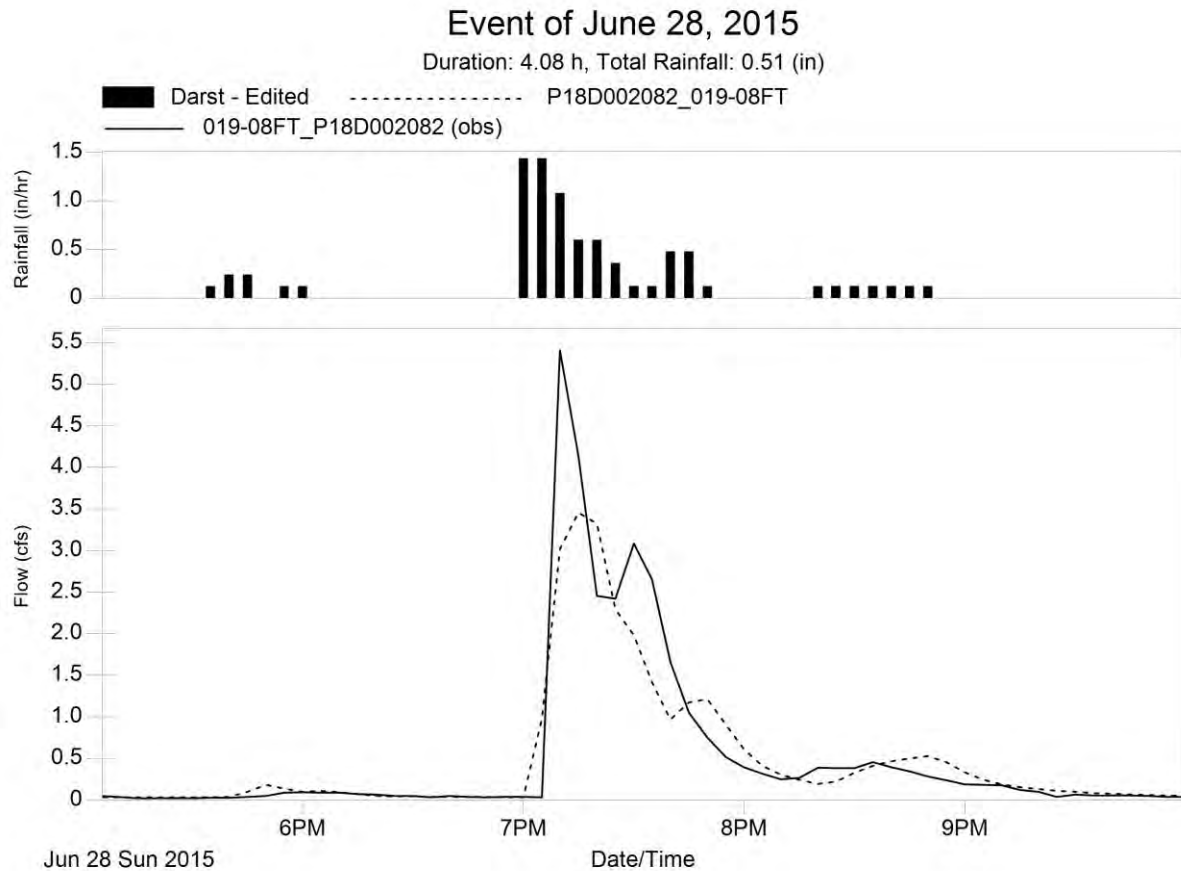


Event of June 24, 2015

Duration: 49.58 h, Total Rainfall: 1.91 (in)



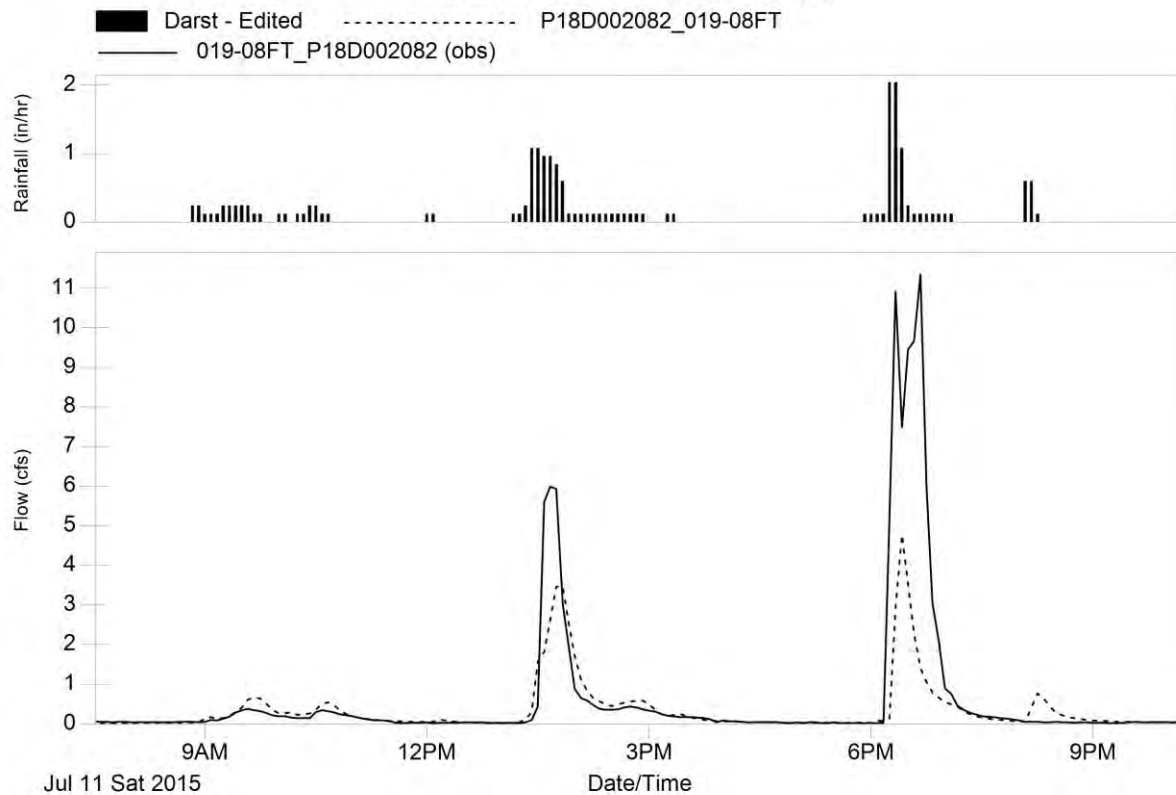
Darst 019-08FT – Verification Events



Darst 019-08FT – Verification Events

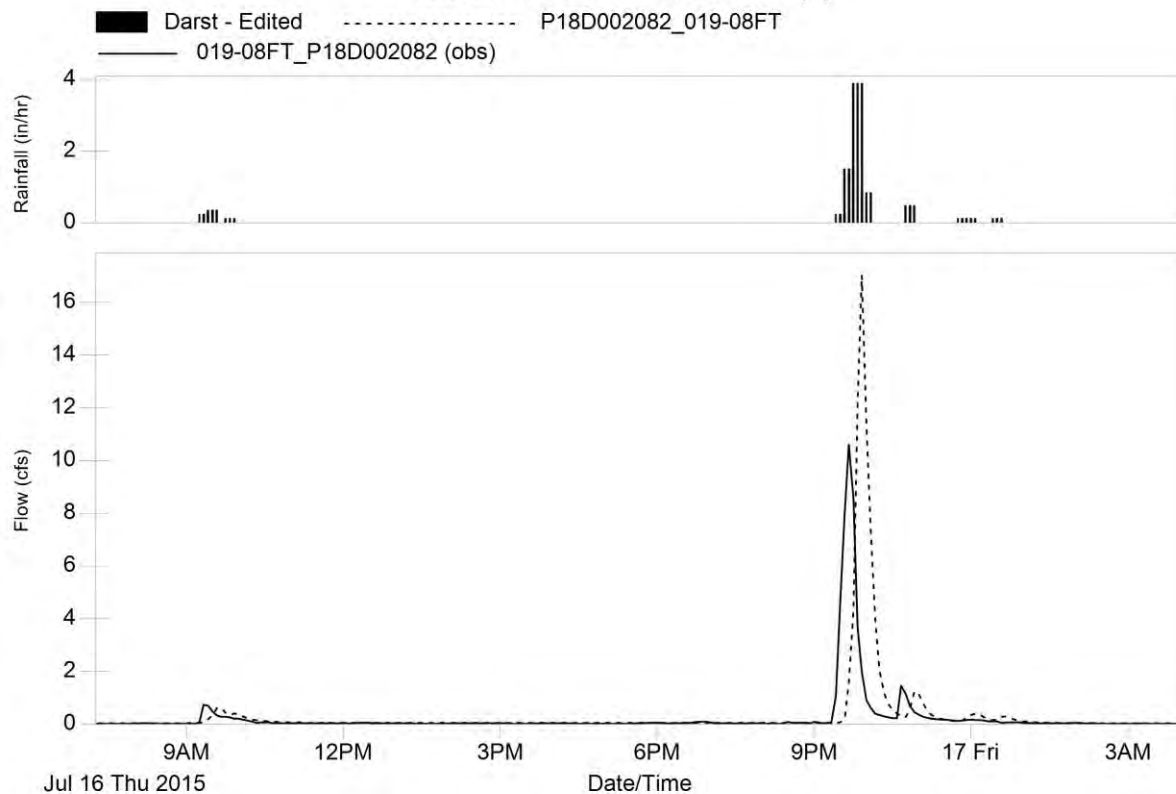
Event of July 11, 2015

Duration: 12.25 h, Total Rainfall: 1.07 (in)



Event of July 16, 2015

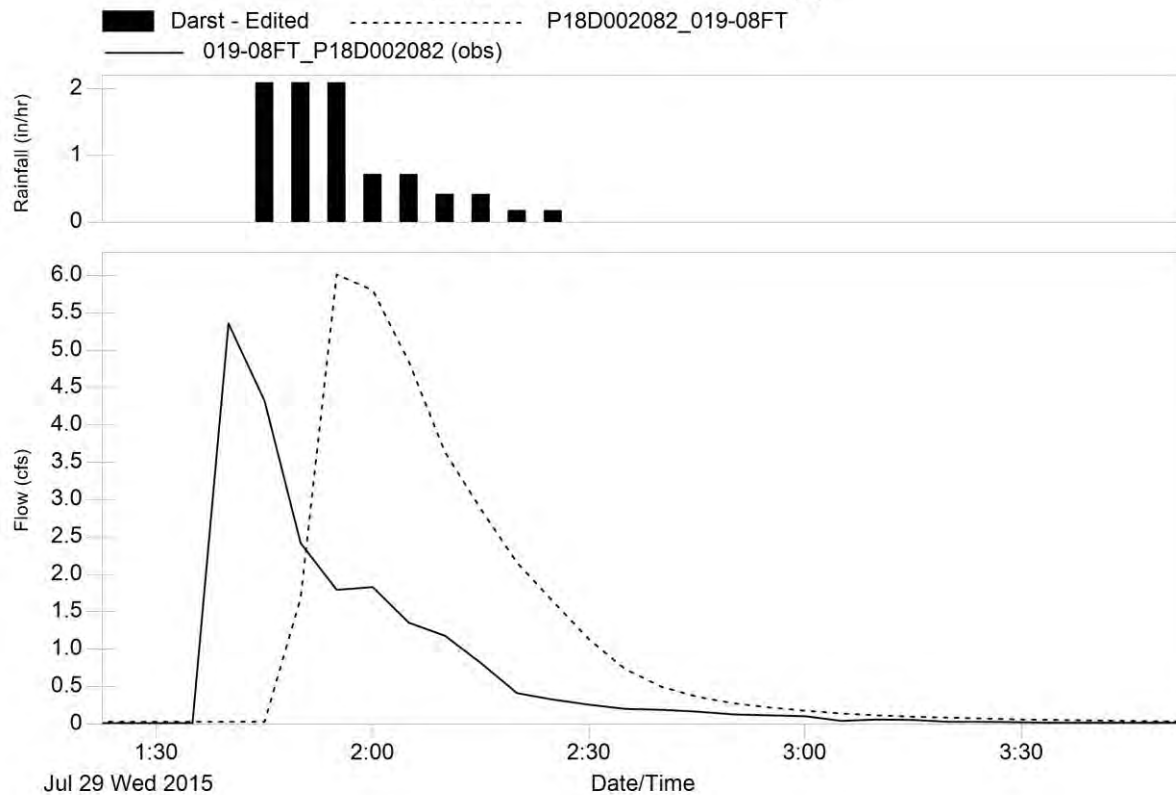
Duration: 17.33 h, Total Rainfall: 1.34 (in)



Darst 019-08FT – Verification Events

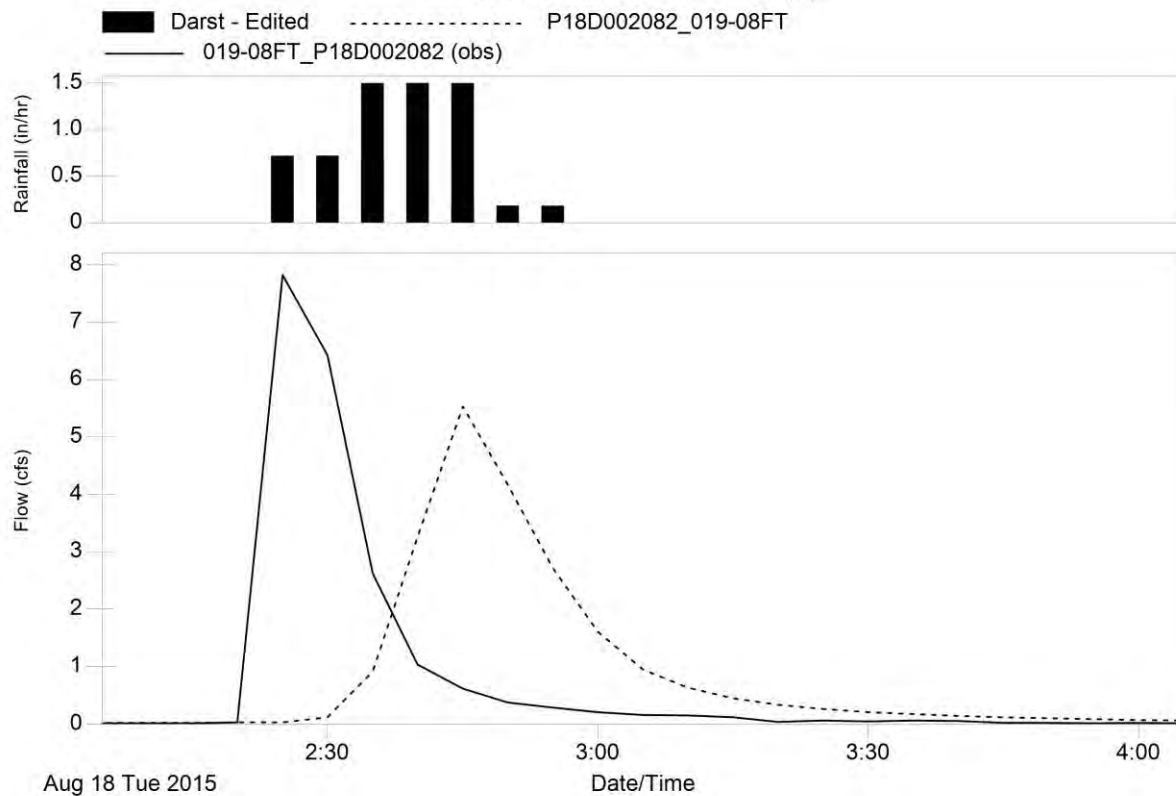
Event of July 29, 2015

Duration: 2.08 h, Total Rainfall: 0.57 (in)

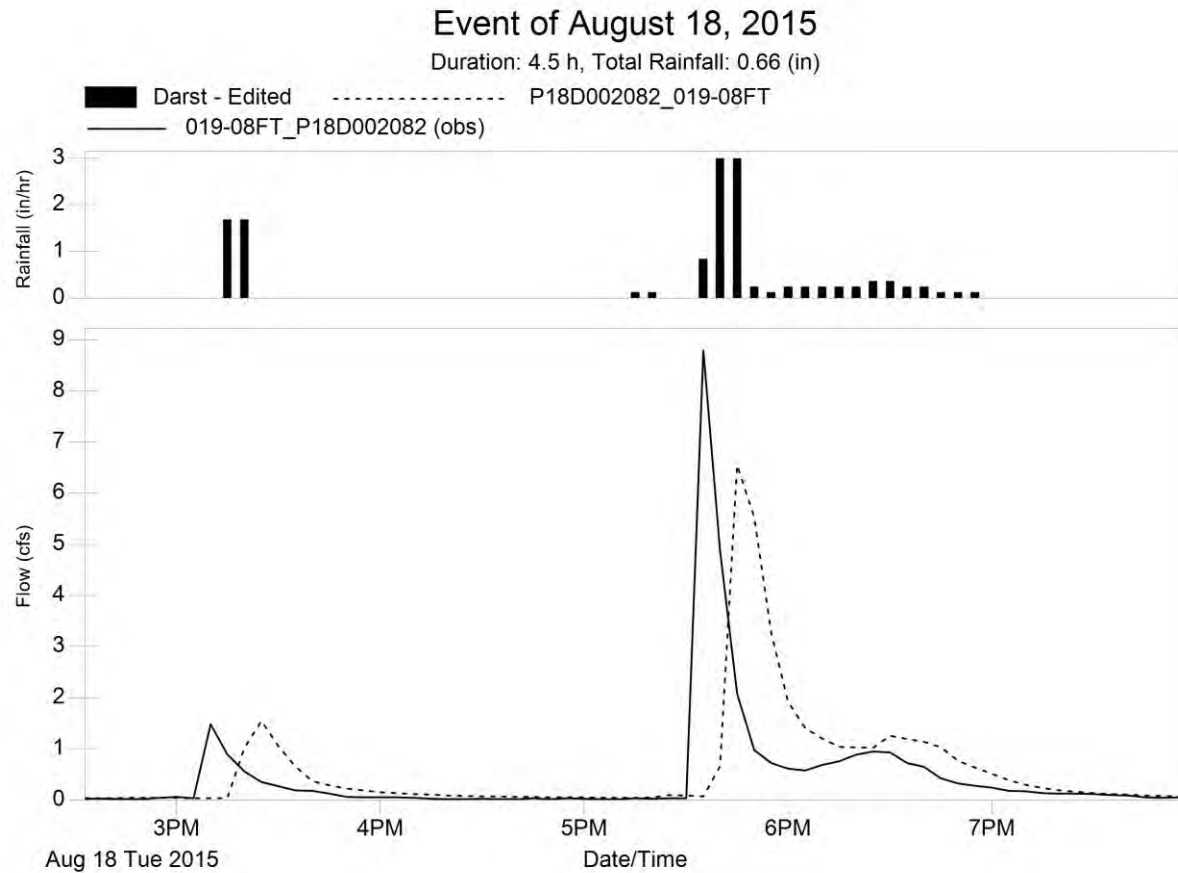


Event of August 18, 2015

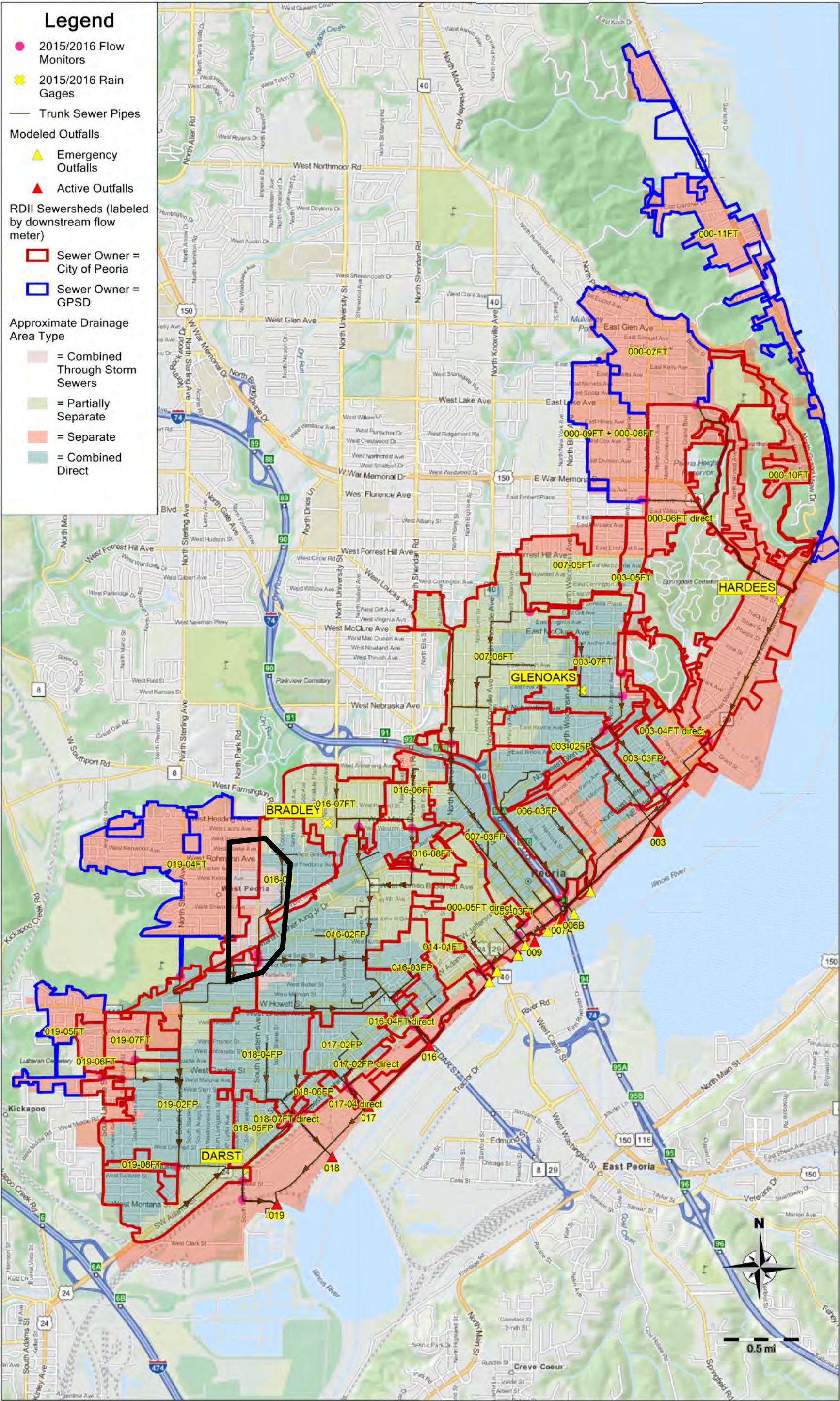
Duration: 1.67 h, Total Rainfall: 0.4 (in)



Darst 019-08FT – Verification Events



Flow Monitor 019-10FT Overview Map



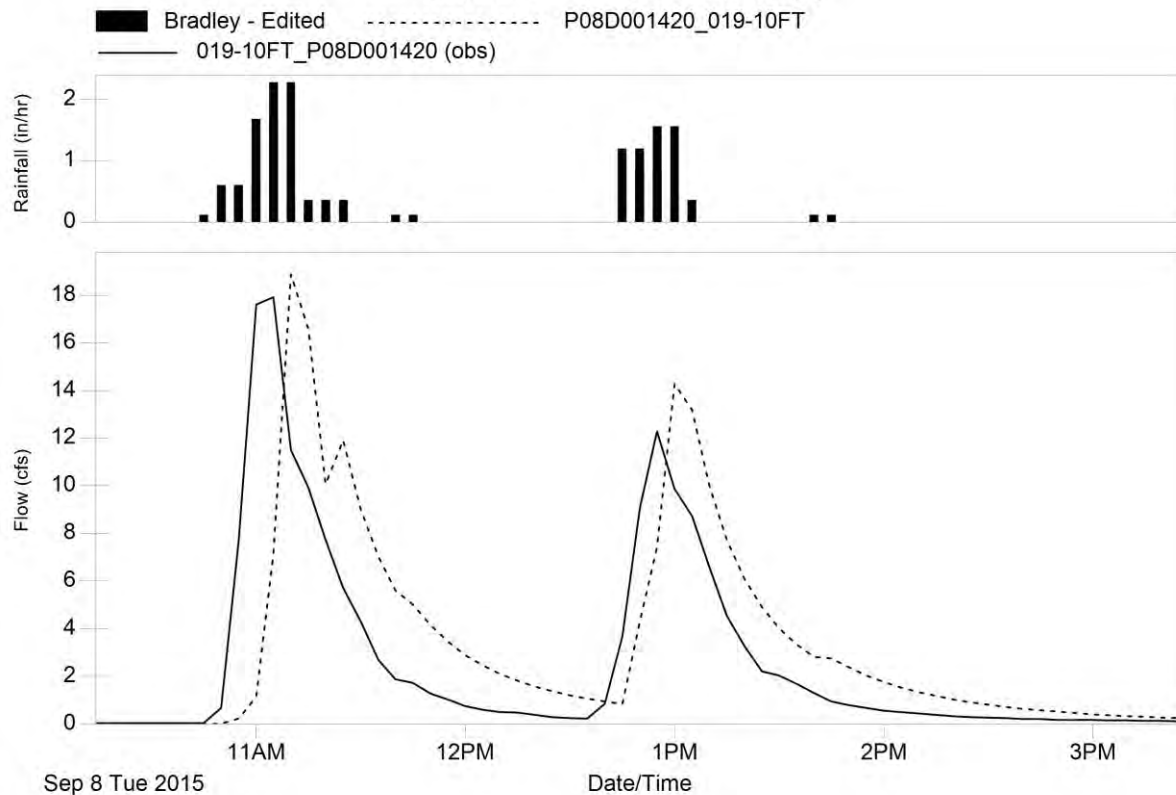
Darst 019-10 Storm

Date	Duration (h)	Rainfall (in) Bradley Edited	Maximum Flow (cfs)		Maximum Flow (mgd)		Total Volume (ft³)		Volume (million gallons)		Peak Flow Rate (-15% to +25%)	Flow Volume (-10% to +20%)	Rainfall Variability
			Observed	Modeled	Observed	Modeled	Observed	Modeled	Observed	Modeled			
CALIBRATION EVENTS - FLOW													
9/8/2015 10:40	4.3	0.87	17.9	18.8	11.6	12.1	50250	64810	0.4	0.5	5%	29%	variable
9/18/2015 13:00	12.6	1.62	16.8	21.7	10.9	14.0	102400	124900	0.8	0.9	29%	22%	possibly uniform
11/5/2015 14:00	13.8	0.43	5.4	3.7	3.5	2.4	24280	28880	0.2	0.2	-30%	19%	possibly uniform
11/11/2015 19:40	2.4	0.61	19.0	18.9	12.3	12.2	26260	44140	0.2	0.3	0%	68%	variable
11/16/2015 21:15	35.5	2.37	9.0	9.2	5.8	6.0	209600	193200	1.6	1.4	3%	-8%	variable
11/26/2015 20:40	27.0	1.12	6.0	4.3	3.9	2.8	112800	87090	0.8	0.7	-28%	-23%	possibly uniform
12/13/2015 2:50	30.2	1.77	8.0	6.0	5.2	3.9	155200	140600	1.2	1.1	-25%	-9%	variable
12/20/2015 22:20	13.9	0.70	6.8	3.9	4.4	2.5	48300	52670	0.4	0.4	-43%	9%	variable
12/23/2015 6:55	5.0	0.73	12.8	9.8	8.3	6.3	62180	55970	0.5	0.4	-24%	-10%	variable
12/28/2015 0:50	19.2	1.64	16.6	11.7	10.7	7.6	237700	133900	1.8	1.0	-30%	-44%	variable
VERIFICATION EVENTS - FLOW													
6/17/2015 2:10	3.9	0.80	19.2	20.8	12.4	13.4	57370	58230	0.4	0.4	8%	1%	variable
6/24/2015 5:10	65.3	2.15	16.3	14.4	10.5	9.3	159200	142300	1.2	1.1	-12%	-11%	variable
6/28/2015 17:30	4.8	0.51	19.2	9.2	12.4	6.0	60070	33820	0.4	0.3	-52%	-44%	variable
7/8/2015 5:25	24.2	1.39	9.0	7.9	5.8	5.1	118800	94980	0.9	0.7	-12%	-20%	variable
7/11/2015 8:40	13.2	1.07	17.3	11.5	11.2	7.4	84950	75040	0.6	0.6	-34%	-12%	variable
7/16/2015 9:00	17.3	1.16	30.2	31.6	19.5	20.4	79450	81810	0.6	0.6	5%	3%	possibly uniform
7/29/2015 1:15	1.8	0.51	14.5	14.9	9.3	9.6	29140	33280	0.2	0.2	3%	14%	possibly uniform
8/18/2015 2:05	1.9	0.45	13.6	17.3	8.8	11.2	27800	32830	0.2	0.2	27%	18%	possibly uniform
8/18/2015 15:00	5.0	0.66	19.5	16.2	12.6	10.5	47480	46170	0.4	0.3	-17%	-3%	variable
WEIGHTED AVERAGES													
Calibration - Possibly Uniform										6%	1%	possibly uniform	
Calibration - Variable										-13%	-13%	variable	
Calibration Weighted - All Events										-9%	-10%		
Verification - Possibly Uniform										9%	8%	possibly uniform	
Verification - Variable										-20%	-15%	variable	
Verification Weighted - All Events										-9%	-10%		
Weighted Average - All Events										-9%	-10%		
NET AVERAGES													
Calibration - Possibly Uniform										-10%	6%	possibly uniform	
Calibration - Variable										-16%	5%	variable	
Calibration Net - All Events										-14%	5%		
Verification - Possibly Uniform										11%	12%	possibly uniform	
Verification - Variable										-20%	-15%	variable	
Verification Net - All Events										-9%	-6%		
Net Average - All Events										-12%	0%		

Darst 019-10FT – Calibration Events

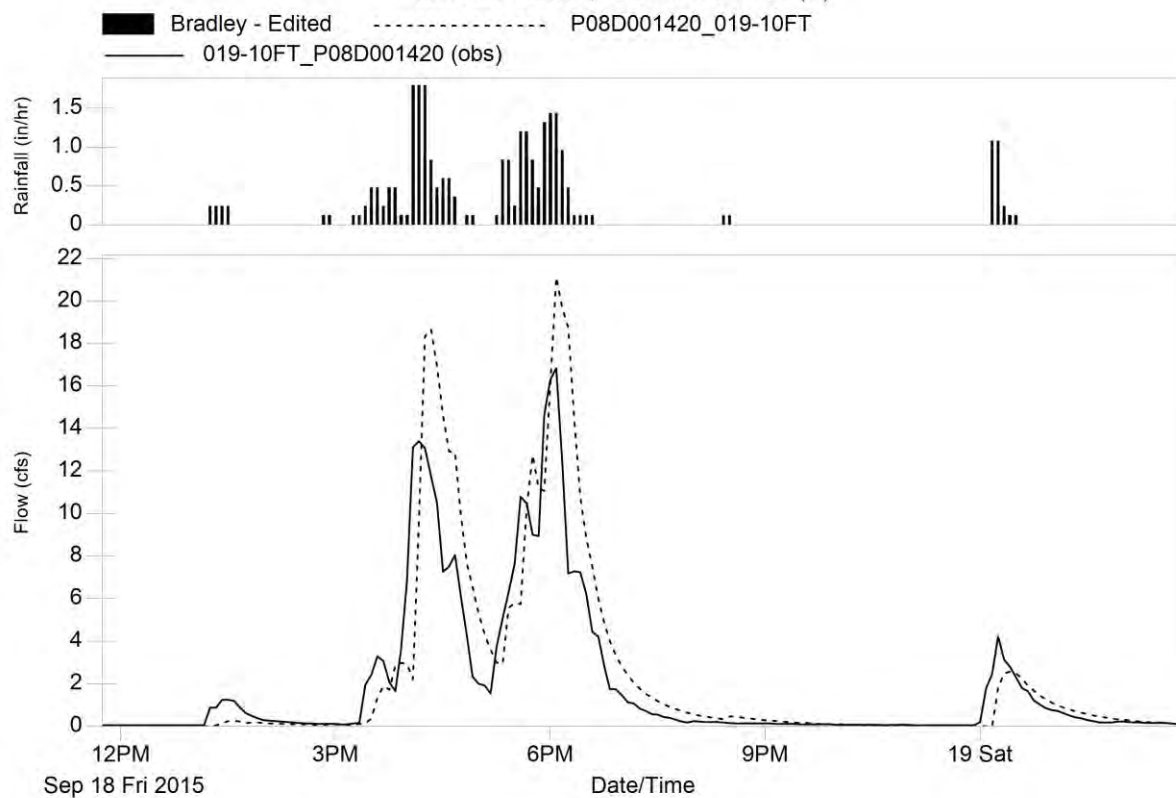
Event of September 8, 2015

Duration: 4.33 h, Total Rainfall: 0.86 (in)



Event of September 18, 2015

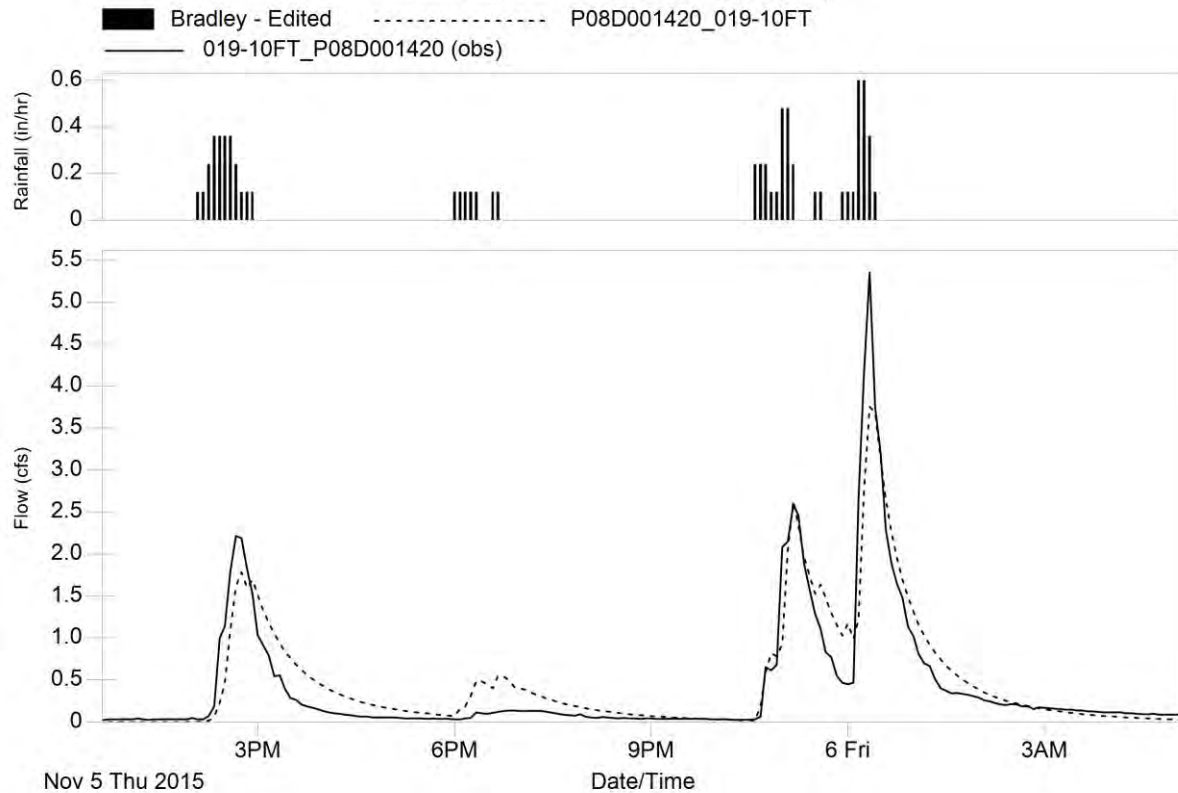
Duration: 12.58 h, Total Rainfall: 1.62 (in)



Darst 019-10FT – Calibration Events

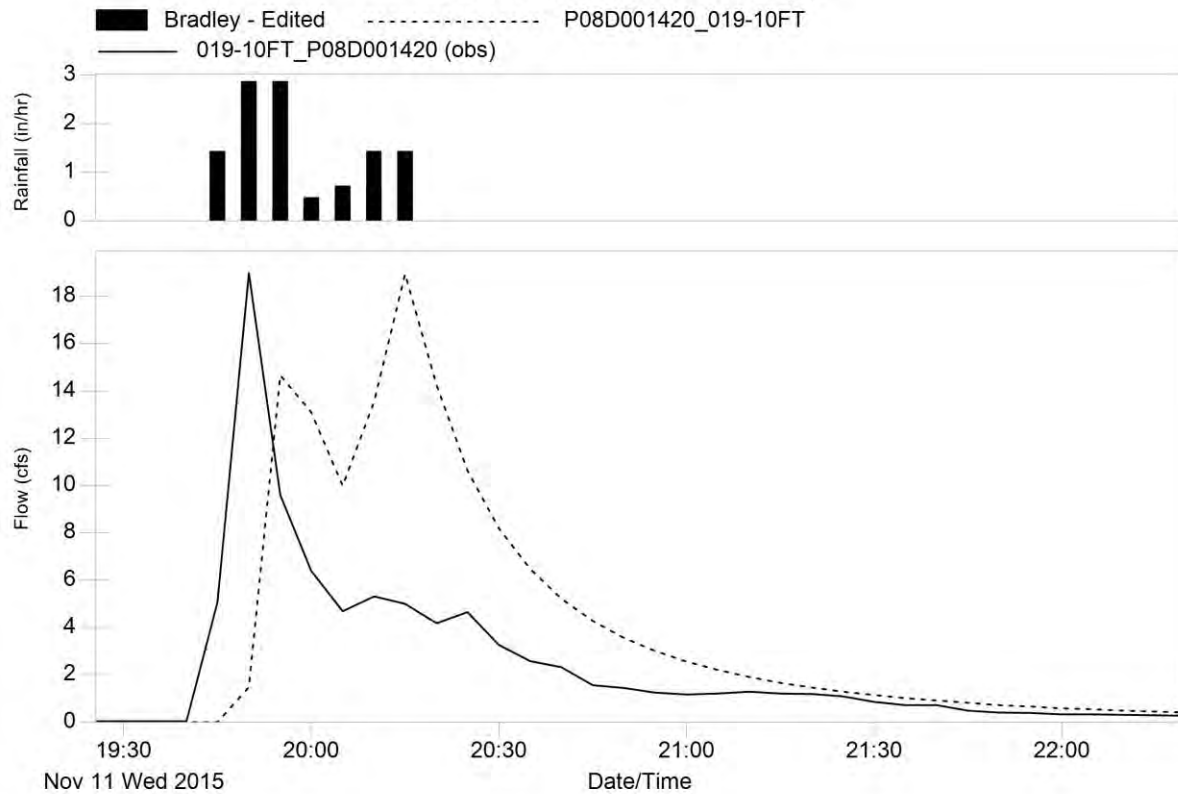
Event of November 5, 2015

Duration: 13.75 h, Total Rainfall: 0.43 (in)



Event of November 11, 2015

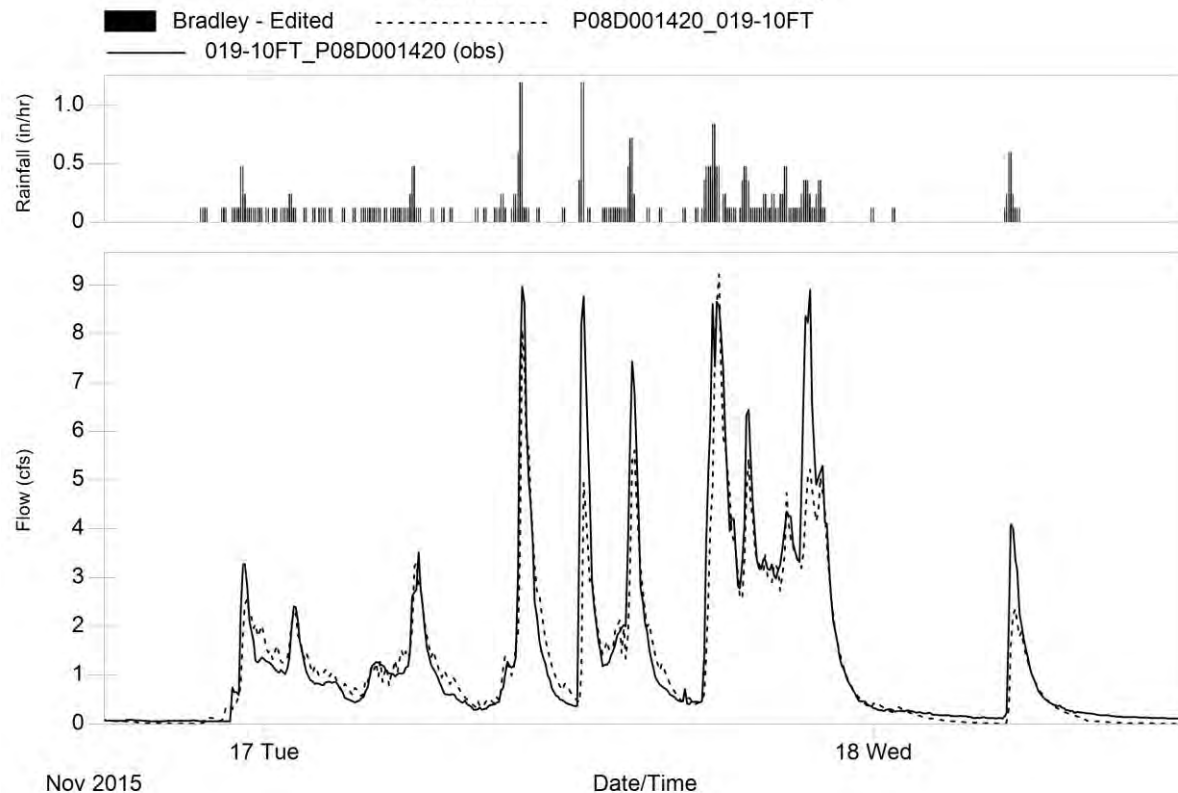
Duration: 2.42 h, Total Rainfall: 0.6 (in)



Darst 019-10FT – Calibration Events

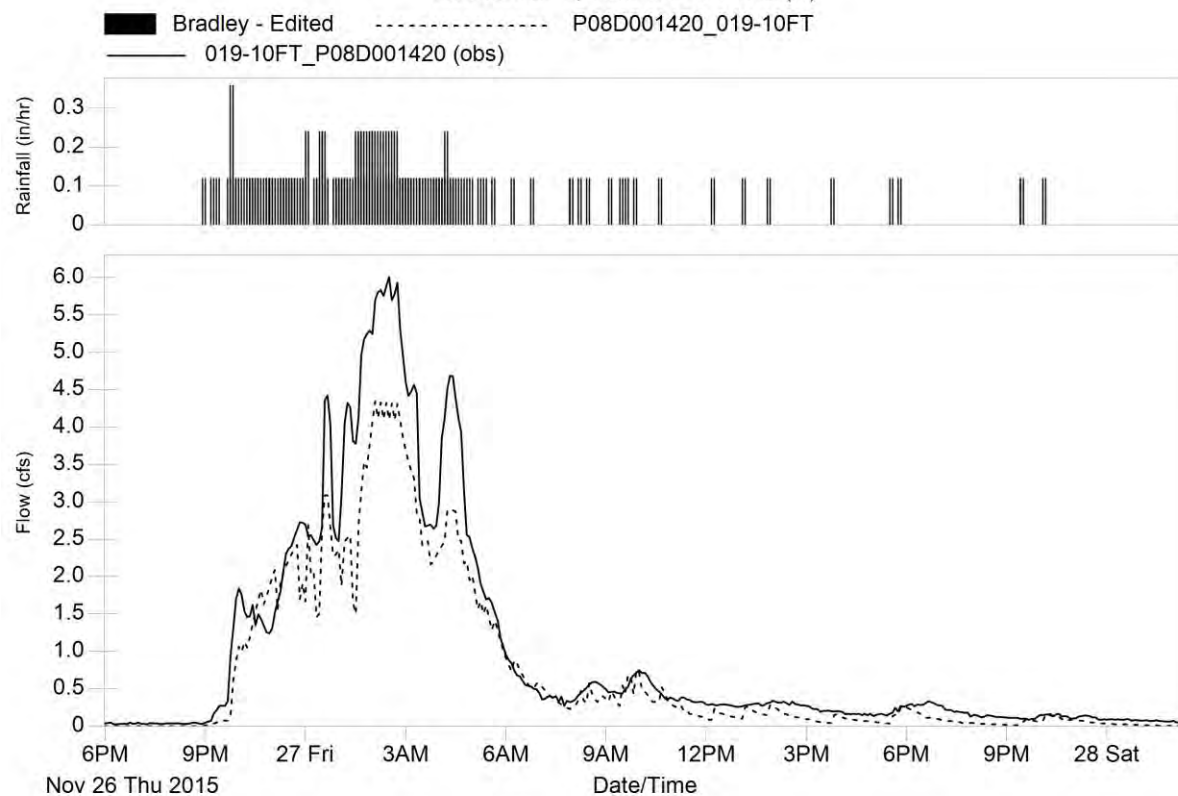
Event of November 16, 2015

Duration: 35.5 h, Total Rainfall: 2.37 (in)



Event of November 26, 2015

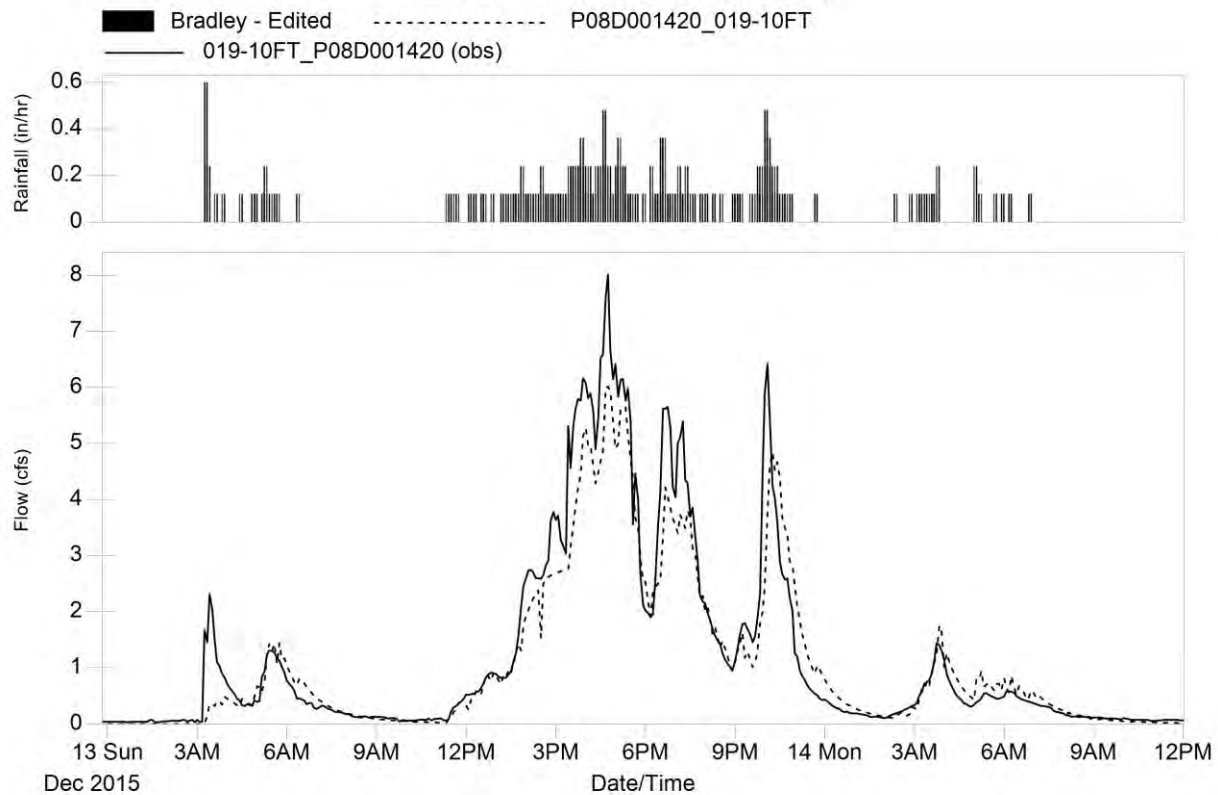
Duration: 27 h, Total Rainfall: 1.12 (in)



Darst 019-10FT – Calibration Events

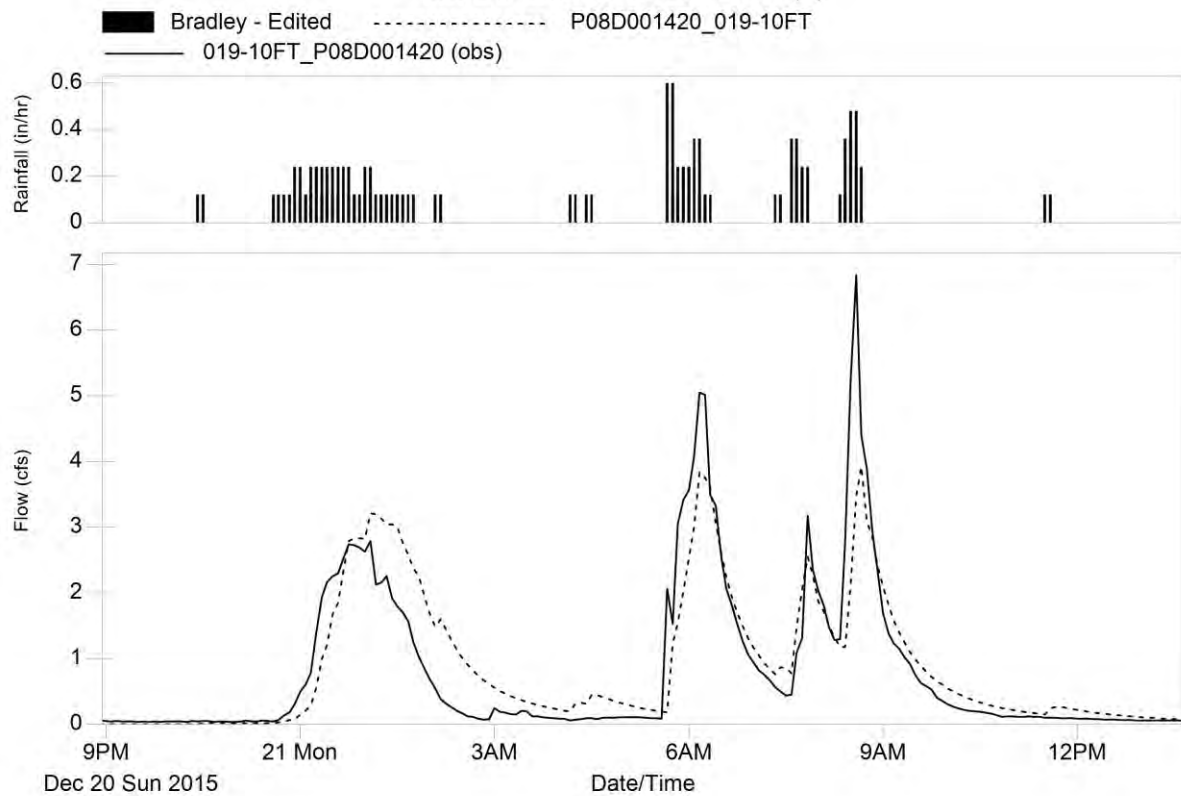
Event of December 13, 2015

Duration: 30.17 h, Total Rainfall: 1.75 (in)



Event of December 20, 2015

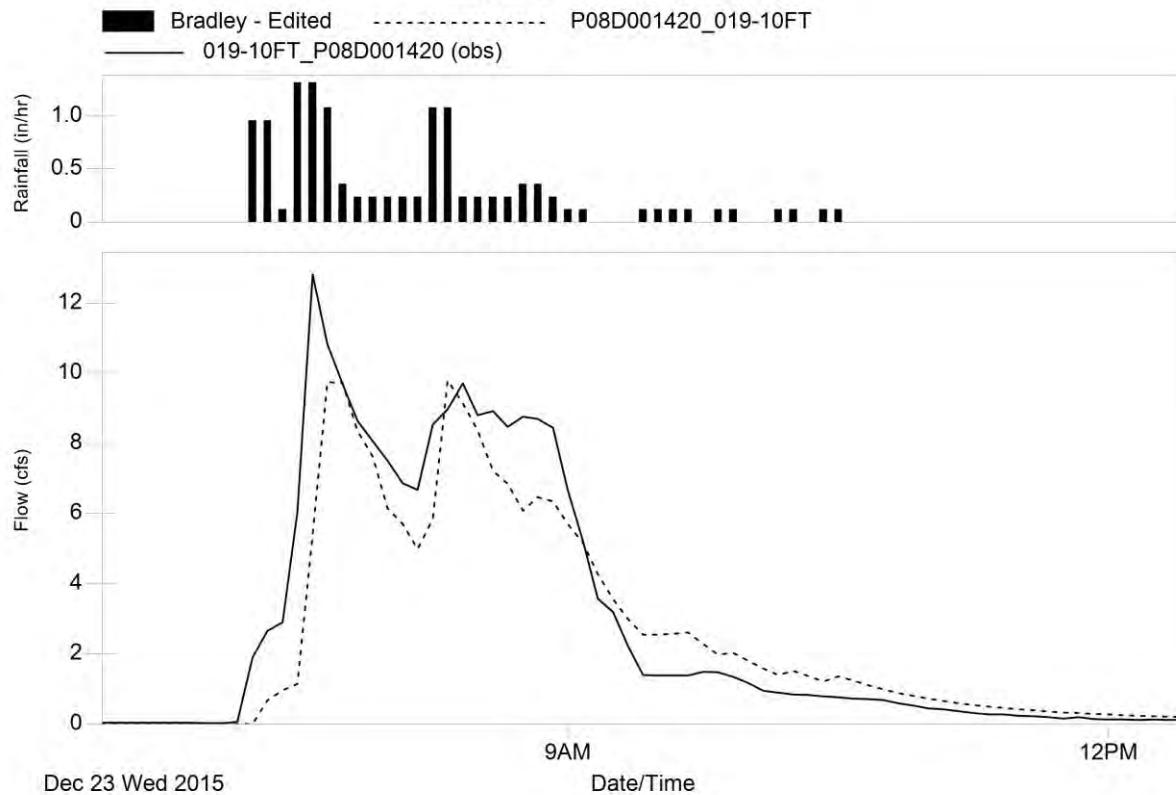
Duration: 13.92 h, Total Rainfall: 0.7 (in)



Darst 019-10FT – Calibration Events

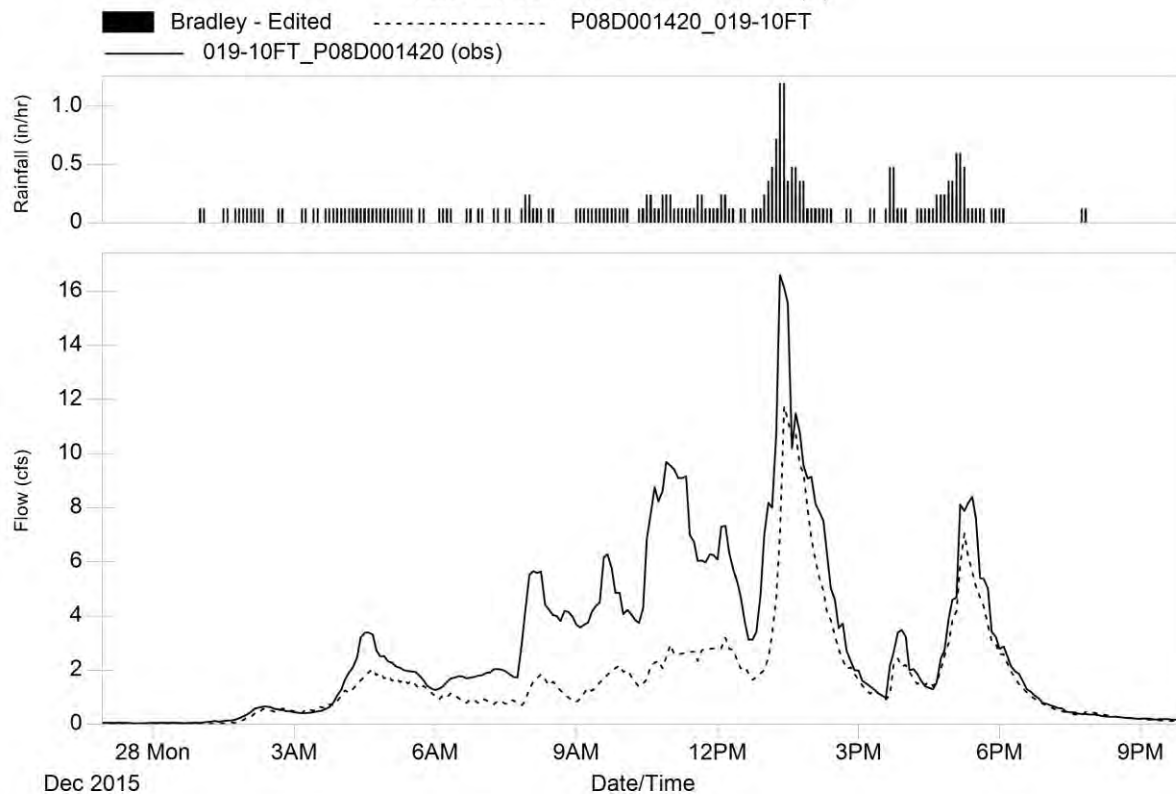
Event of December 23, 2015

Duration: 5 h, Total Rainfall: 0.72 (in)



Event of December 28, 2015

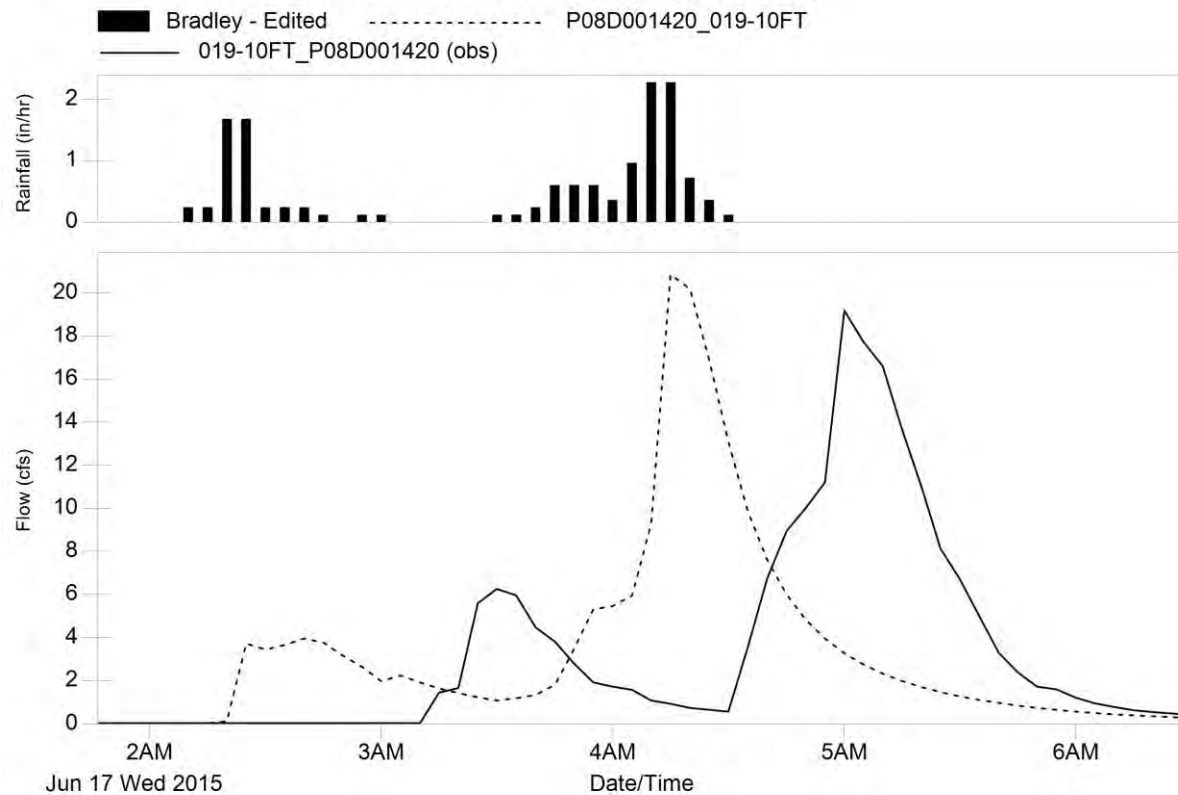
Duration: 19.17 h, Total Rainfall: 1.64 (in)



Darst 019-10FT – Verification Events

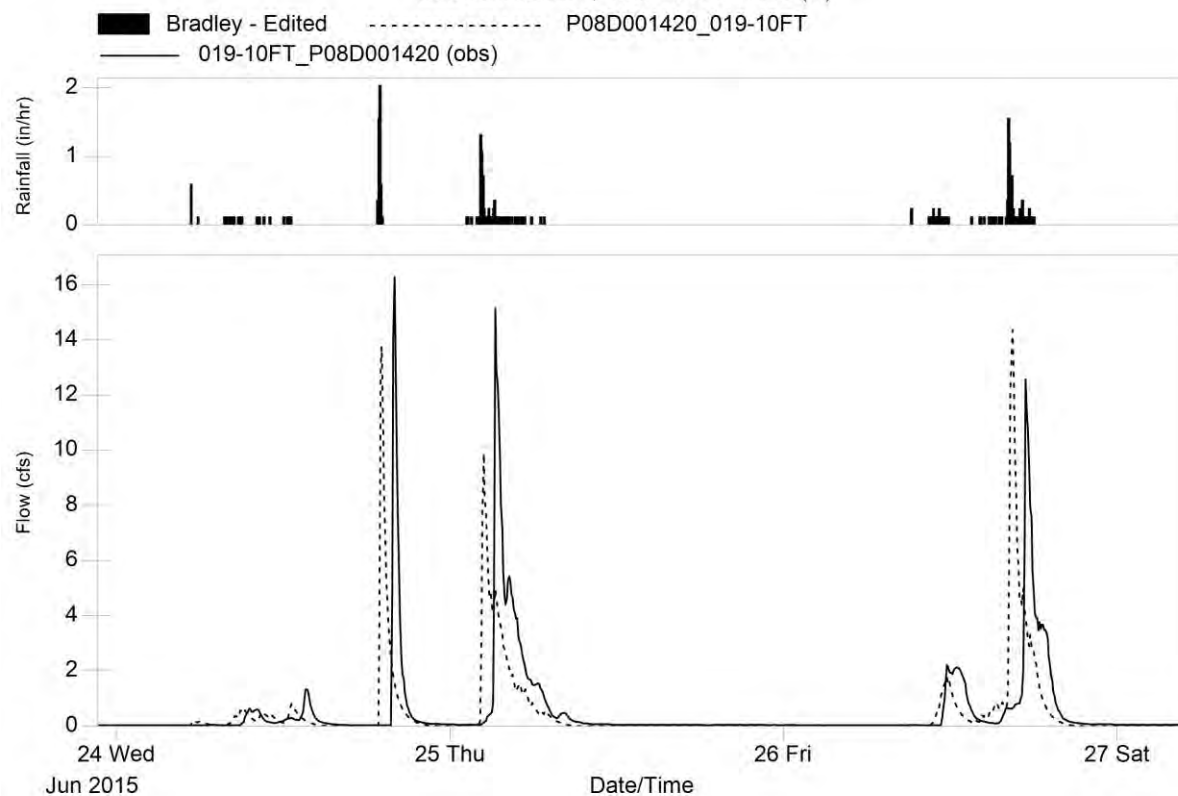
Event of June 17, 2015

Duration: 3.92 h, Total Rainfall: 0.8 (in)



Event of June 24, 2015

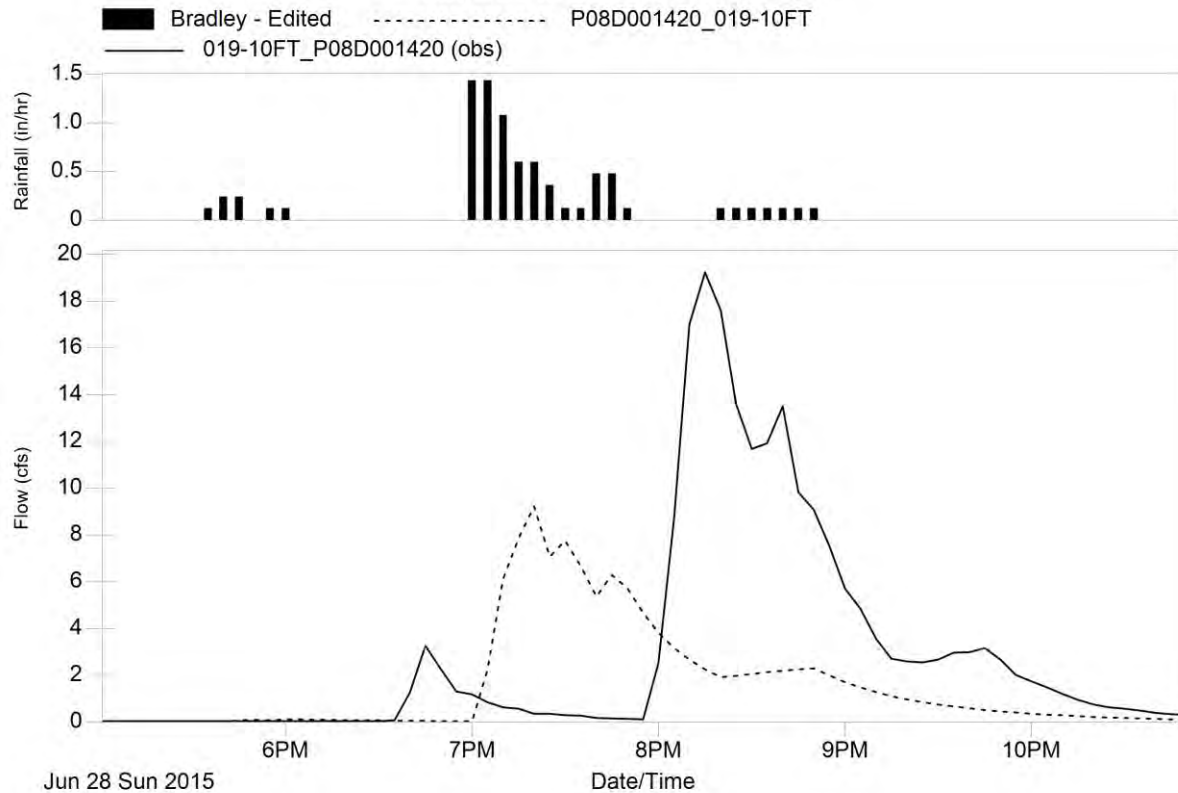
Duration: 65.25 h, Total Rainfall: 2.15 (in)



Darst 019-10FT – Verification Events

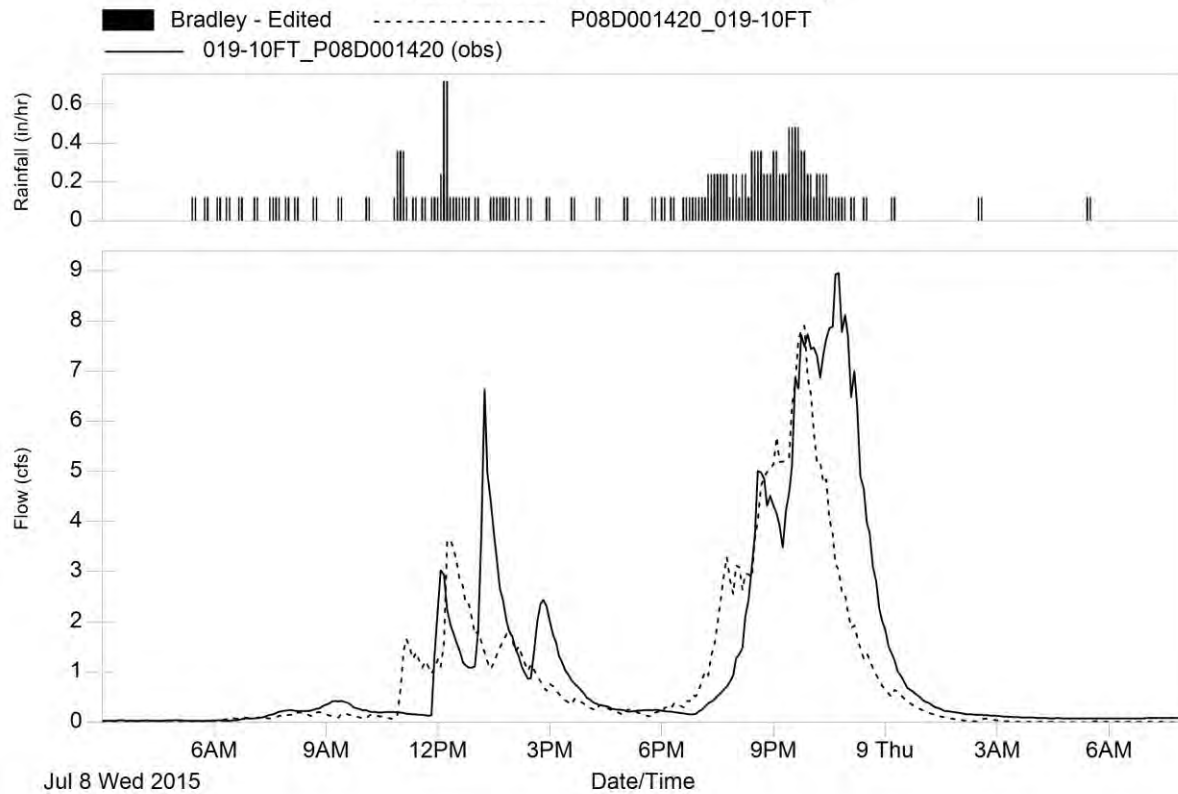
Event of June 28, 2015

Duration: 4.83 h, Total Rainfall: 0.51 (in)



Event of July 8, 2015

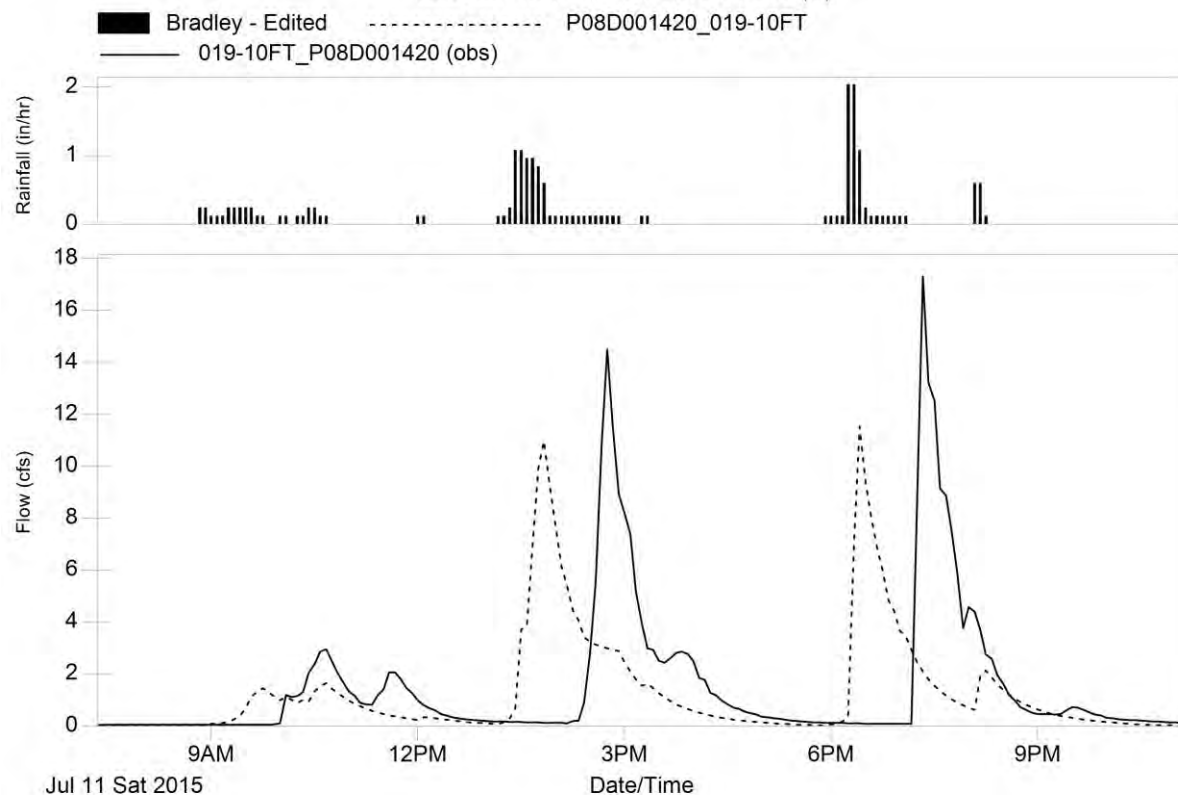
Duration: 24.17 h, Total Rainfall: 1.39 (in)



Darst 019-10FT – Verification Events

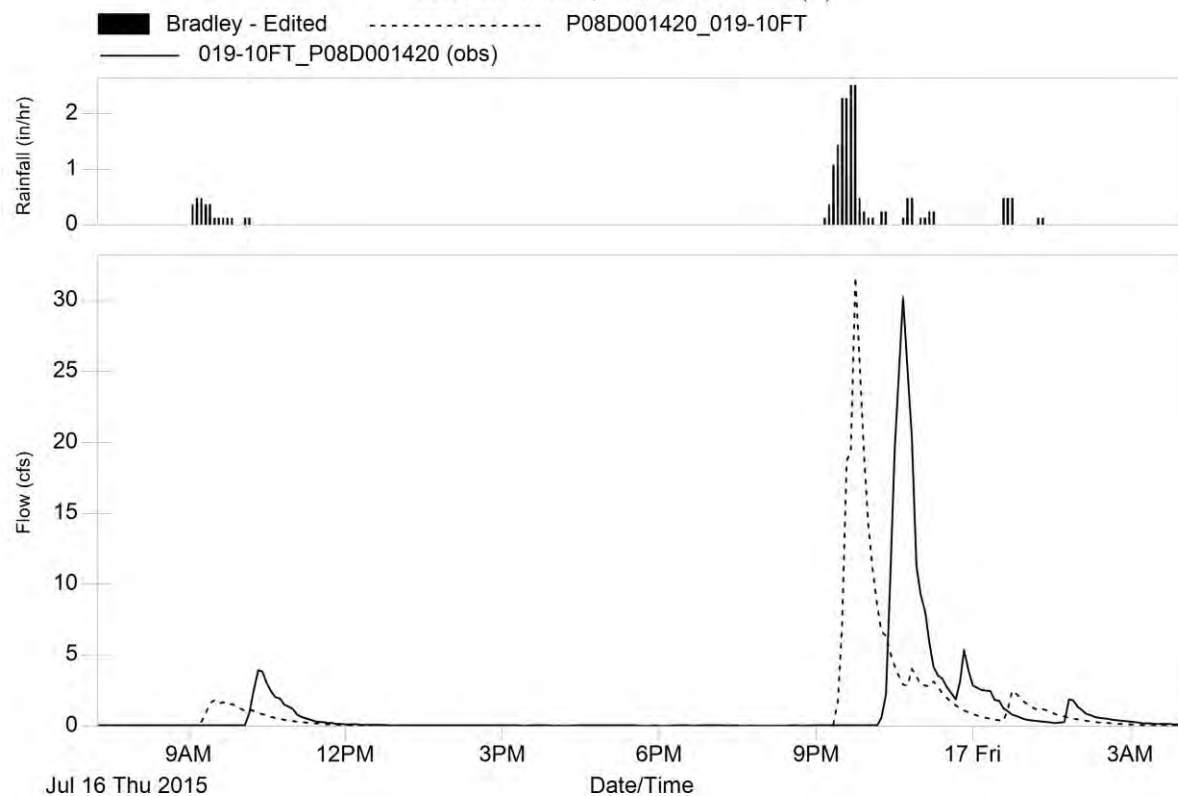
Event of July 11, 2015

Duration: 13.17 h, Total Rainfall: 1.07 (in)



Event of July 16, 2015

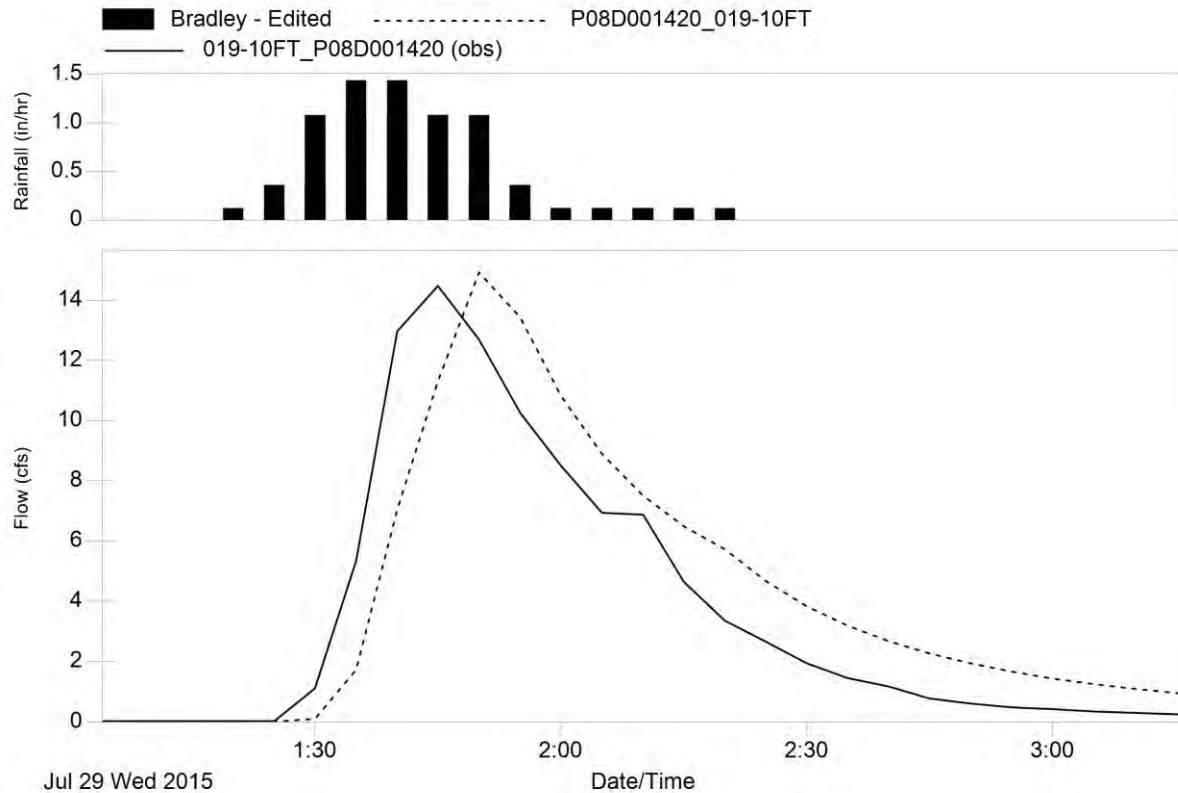
Duration: 17.33 h, Total Rainfall: 1.16 (in)



Darst 019-10FT – Verification Events

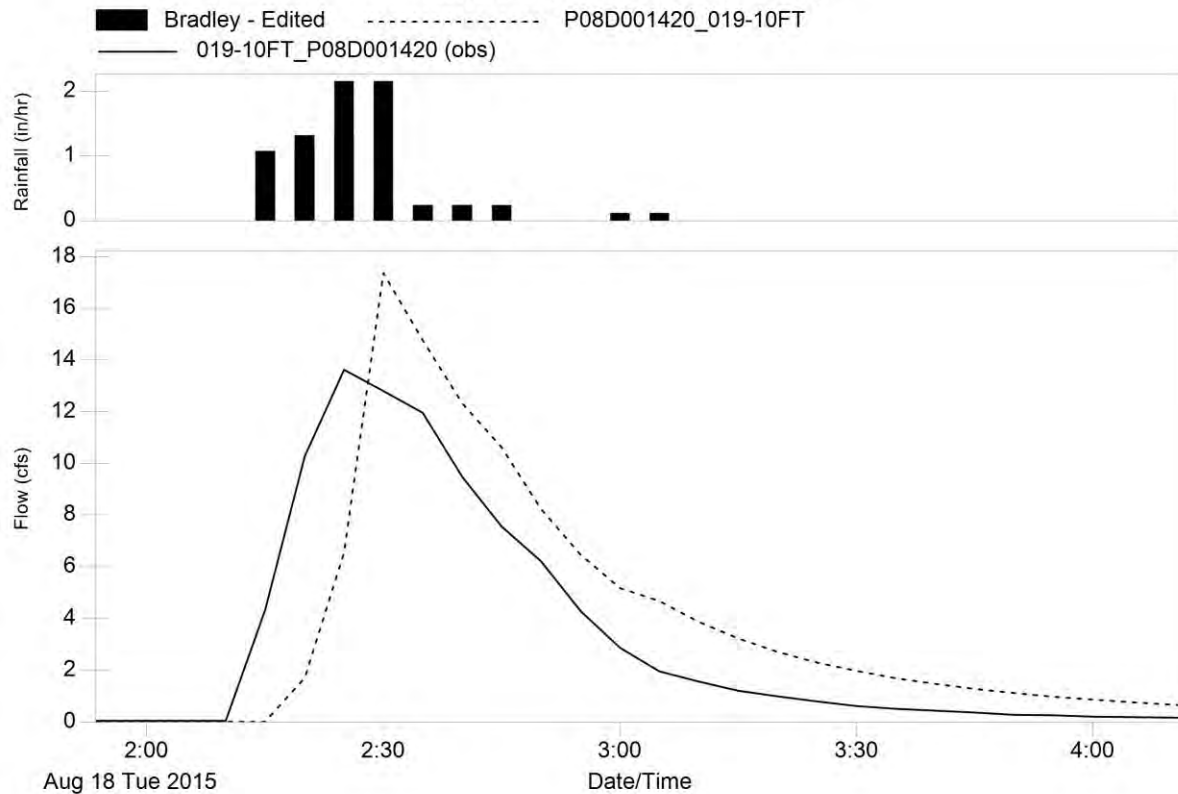
Event of July 29, 2015

Duration: 1.83 h, Total Rainfall: 0.51 (in)



Event of August 18, 2015

Duration: 1.92 h, Total Rainfall: 0.45 (in)



Darst 019-10FT – Verification Events

