



QRev Discharge Measurement Report

1 of 4

Station Name: 07292024_Diamond

Station Number:

Measurement Date: 2024.07.29

Measurement Number: 0

Discharge: 58.98

Stage: 0.00

User Rating: Not Rated

Processed: 2024.08.08 10:07:10

Field Crew:		Discharge Summary		Cross Section															
Processed By:	sarah	Discharge (ft3/s):	58.98	Mean Velocity (ft/s):	1.235														
Software:	QRev	Navigation Ref.:	bt_vel	Max. Velocity (ft/s):	2.969														
Version:	4.37	Total Duration (s):	850.2	Mean Depth (ft):	1.754														
ADCP		Start Time:	13:19:05	Max. Depth (ft):	2.893														
Manufacturer:	TRDI	End Time:	13:30:17	Width (ft):	27.230														
Model:	StreamPro	Stage Start:	0.00	Width COV (%):	1.07														
Serial Number:	2673	Stage End:	0.00	Area (ft2):	47.768														
Firmware:	31.19	Mean Stage:	0.00	Area COV (%):	3.75														
Frequency (kHz):	2000	Mean Boat Speed (ft/s):	0.142	Uncertainty															
Premeasurement		Top Extrap:	Power	Uncertainty Method: QRev															
W. Temp. (C):	20.688889	Bottom Extrap:	Power	95% Total Uncertainty: 8.1 <table><caption>Uncertainty Components</caption><tr><th>Component</th><th>Value (%)</th></tr><tr><td>COV</td><td>8.1</td></tr><tr><td>Systematic</td><td>~15</td></tr><tr><td>Extrap.</td><td>~12</td></tr><tr><td>Edges</td><td>~5</td></tr><tr><td>Moving-bed</td><td>~5</td></tr><tr><td>Invalid</td><td>~2</td></tr></table>		Component	Value (%)	COV	8.1	Systematic	~15	Extrap.	~12	Edges	~5	Moving-bed	~5	Invalid	~2
Component	Value (%)																		
COV	8.1																		
Systematic	~15																		
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Edges	~5																		
Moving-bed	~5																		
Invalid	~2																		
W. Temp. ADCP (C):		Extrap Exponent:	0.4269																
System Test:	Passed	Discharg COV (%):	4.29																
Compass Cal/Eval:	0.55	Top Q (%):	25.12																
Magnetic Variaton:	13.5	Measured Q (%):	54.80																
MovBed Test Type:	Loop	Left Q (%):	2.16																
MovBed Test Quality:	Warnings	Right Q (%):	1.42																
MovBed Test Dur.(s):	310.9	Bottom Q (%):	16.50																
Max MovBed (%):	0.09	Invalid Cells Q (%):	0.28																
Q Correction (%):	0.00	Invalid Ensembles Q (%):	3.48																

Automated QA Messages:

WARNINGS

- TEMPERATURE: The difference between ADCP and reference is > 2: 2.9 C;

Cautions

- Extrapolation: The extrapolation uncertainty is more than 2 percent;
- Carefully review the extrapolation;
- Moving-Bed Test: The moving-bed test(s) has warnings, please review tests to determine validity;
- Site Info: Station number not entered;
- Extrapolation: User modified default automatic setting.

Comments:

- MMT Remarks:
- [Extrap, 2024-08-08 10:01:28, sarah]: Automated extrapolation chosen best fit.



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Comments:

- [MovBedTst, 2024-08-08 10:01:56, sarah]: Still having some issues with right edge from bridge post eddys, previously mentioned tarp causing major disruption was cleared before measurement. Removal helped somewhat on edge, may need to consider flowtracking for remainder of season due to this issue.
- [Temp/Sal, 2024-08-08 10:04:34, sarah]: ADCP allowed to equilibrate in water for 30 minutes, may have issue with independent device or temperature increase between file generation time and actual measurement. Will be NIST testing independent and ADCP this coming week to determine equipment problem or if temperature gradient present.
- [Main, 2024-08-08 10:06:48, sarah]: No station number for this location.
- [2024-08-08 10:07:06, sarah]: File Saved Q = 58.98 ft³/s (Uncertainty: 8.1%)

ID	File Name
0	07292024_Diamond_0_000_24-07-29.PD0
1	07292024_Diamond_0_001_24-07-29.PD0
2	07292024_Diamond_0_002_24-07-29.PD0
3	07292024_Diamond_0_003_24-07-29.PD0

Transect ID	Start Edge	Start Time	End Time	Duration (sec)	Top Q (ft ³ /s)	Middle Q	Bottom Q	Left Q (ft ³ /s)	Right Q (ft ³ /s)	Total Q (ft ³ /s)
						Q (ft ³ /s)	Q (ft ³ /s)			
0	Left	13:19:05	13:22:18	192.6	15.0	35.02	10.18	1.63	0.68	62.51
1	Right	13:22:40	13:26:00	200.3	14.97	31.52	9.58	1.44	0.56	58.07
2	Left	13:26:12	13:30:01	228.4	14.16	31.15	9.28	1.1	0.86	56.55
3	Right	13:30:17	13:34:06	228.9	15.14	31.61	9.88	0.93	1.24	58.8
					850.2	14.82	32.32	9.73	1.28	58.98

Transect ID	Start Edge	Left Edge Type	Left Dist. (ft)	Left Edge # Ens.	Left Edge Coeff.	Right Edge Type	Right Dist (ft)	Right Edge # Ens.	Right Edge Coeff.
0	Left	Triangular	2.00	10	0.3535	Triangular	3.50	10	0.3535
1	Right	Triangular	2.00	10	0.3535	Triangular	3.50	10	0.3535
2	Left	Triangular	2.00	10	0.3535	Triangular	3.50	10	0.3535
3	Right	Triangular	2.00	10	0.3535	Triangular	3.50	10	0.3535



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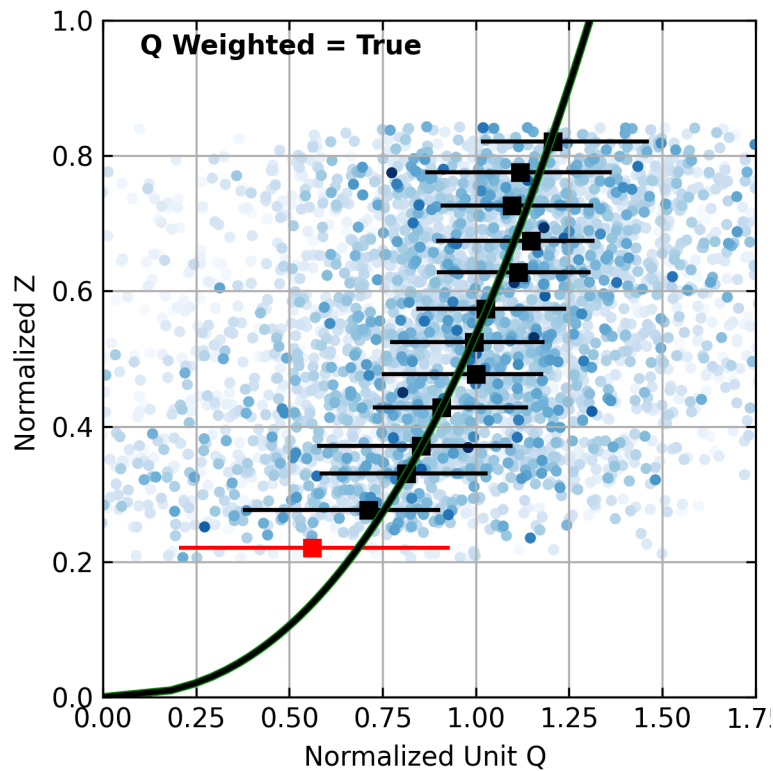
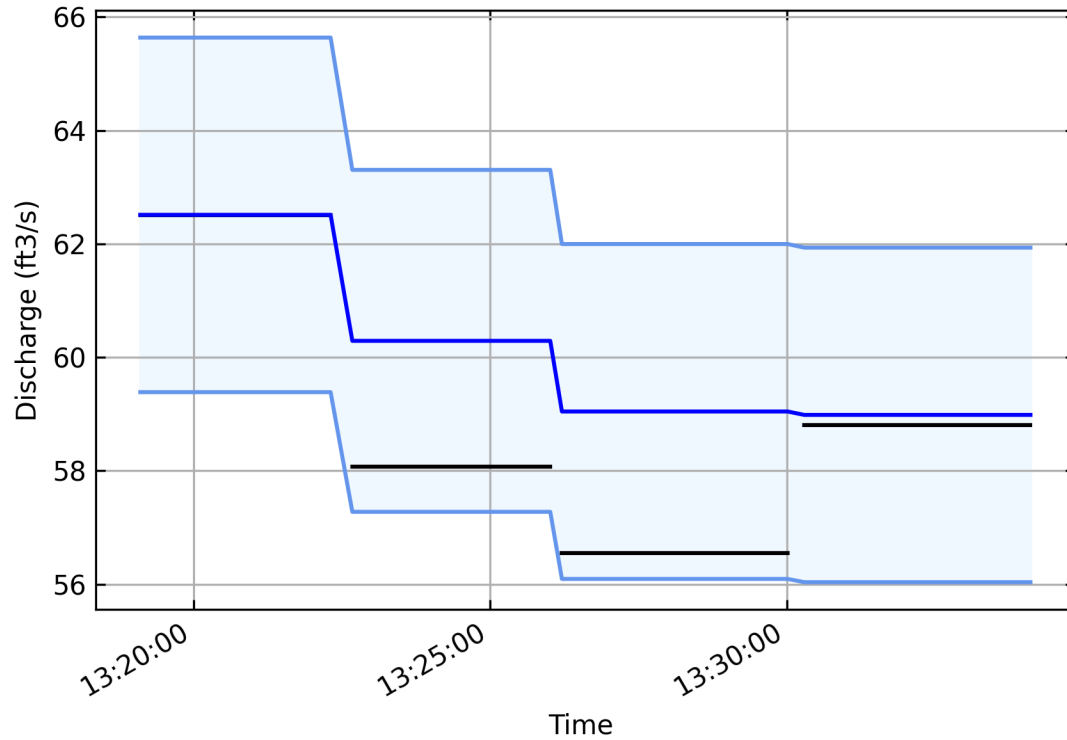
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