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Discharge measurements at bypass in Genk and Postels vaartje and watercapture 33B in Lommel

Control of theoretical discharges

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Control of theoretical discharges

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This publication should be cited as follows:

Vereecken, H.; Claeys, S.; Deschamps, M.; Mostaert, F. (2017). Discharge measurements at bypass in Genk and Postels vaartje and watercapture 33B in Lommel: Control of theoretical discharges. Version 4.0. FHR Reports, 17_071_2. Flanders Hydraulics Research: Antwerp.

Document identification

Customer:	De Vlaamse Waterweg nv, Sethy, Rijkswaterstaat	Ref.:	WL2017R17_071_2
Keywords (3-5):	Discharge, culvert, low flow		
Text (p.):	15	Appendices (p.):	38
Confidentiality:	☒ No	☒ Available online	

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Control

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Abstract

In the scope of the International Meuse Commission, Flanders Hydraulics Research (FHR) is contributing to a low water measuring campaign on the watersystem of river Meuse at the Flemish border with the Walloon region and the Netherlands. The goal of this study is to quantify the amount of water that flows through the bypass in Genk on the Albert canal. Also in Lommel, upstream of sluice 1, the flow to Postels Vaartje and water capture 33b has to be quantified.

The detailed amount of flow through the bypass in Genk is measured with Rio Grande ADCP upstream at the entrance the inlet. The results of these measurements are compared with theoretical discharges used by the water managers of de Vlaamse Waterweg nv (dVW).

The quantity of the flow towards “Postels Vaartje” and “water capture 33b” is measured with Streampro-ADCP. For Postels Vaartje the measurements have been executed from the bridge 80m downstream and downstream and close to the inlet. For watercapture 33b Streampro is operated from a bridge 10 m downstream of the inlet.

Results of the measurement in Genk indicate that the theoretical discharges are not reached and are overestimated by 10-70% at the tested opening diameters.

Results of the measurement at Postels Vaartje show discharges from 0,19 to 0,77 m^3/s at the different opening heights tested. Results of measurements of watercapture 33b show discharges of about 0,11 m^3/s. Both results are comparable with discharge measurements with Qliner ADCP at the same locations in 2005.

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1 Introduction

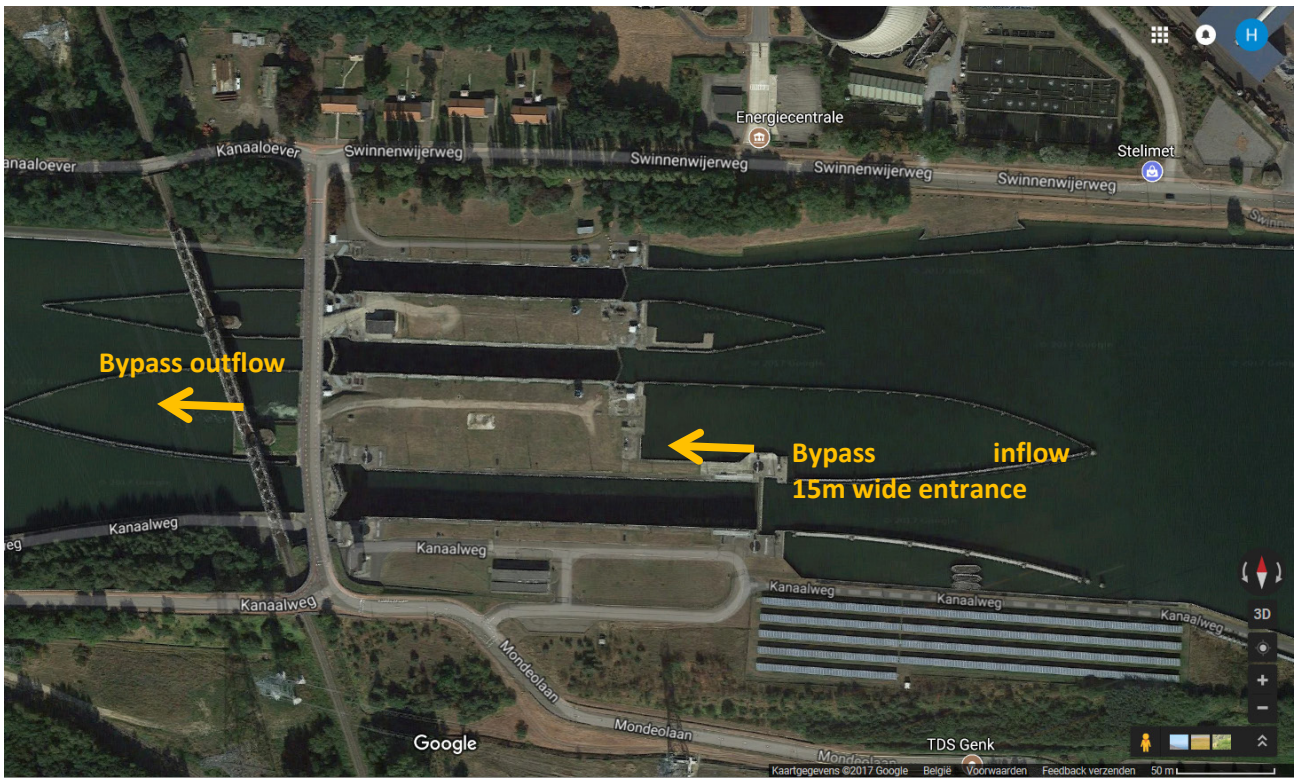
In the scope of the International Meuse Commission, Flanders Hydraulics Research (FHR) is contributing to a low water measuring campaign on the watersystem of river Meuse at the Flemish border with the Walloon region and the Netherlands. This campaign is carried out together with the 3 responsible water managers:

- de Vlaamse Waterweg nv (dVW),
- Rijkswaterstaat Zuid-Nederland (RWS)
- Service Public de Wallonie - Direction générale opérationnelle Mobilité et Voies hydrauliques (DGO2).

The goal of this campaign is to quantify in detail the amount of water that is divided between the 3 water managers regions during periods of low flow.

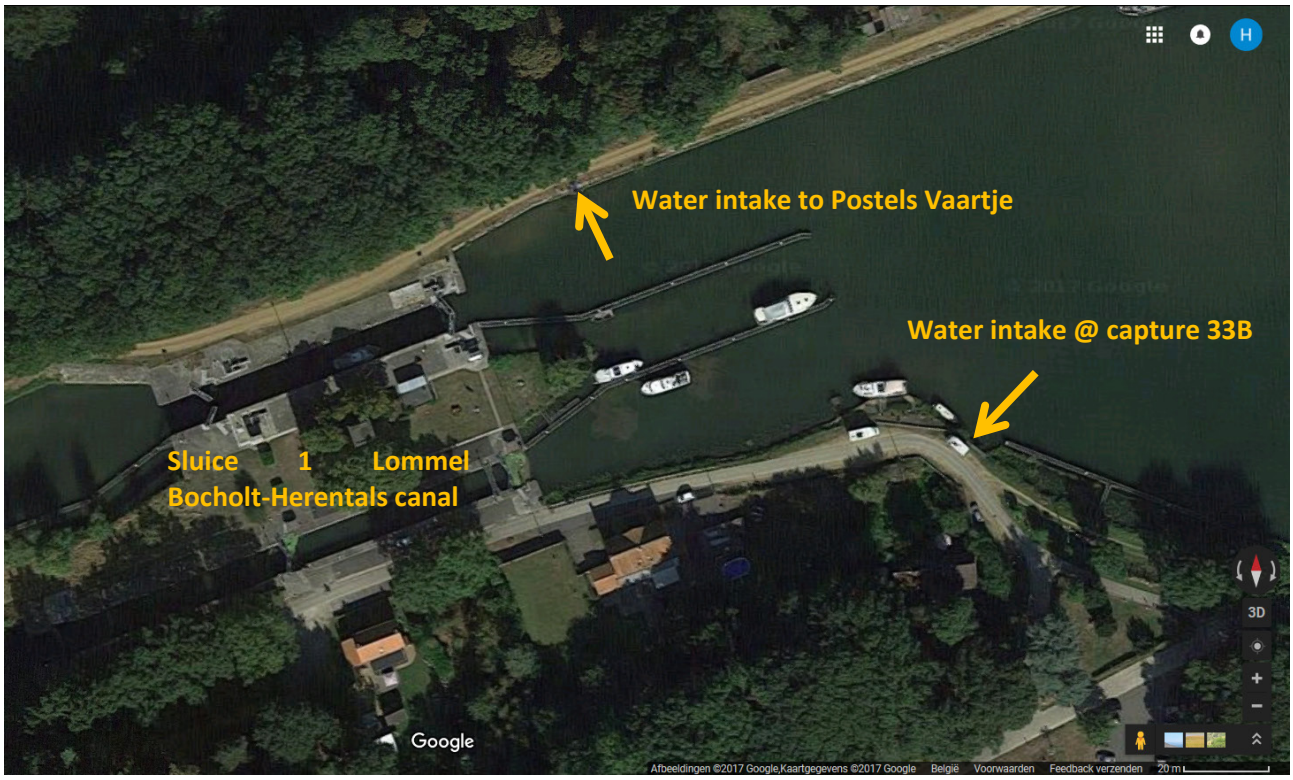
The detailed amount of flow that flows through the bypass in Genk on the Albertcanal (figure 1) is measured during this campaign. This bypass regulates the amount of water that flows to the downstream part of the Albertcanal.

Figure 1 – General situation bypass Genk on Albertcanal (Source: Google Maps)



Also in Lommel on the Bocholt-Herentals canal, upstream of sluice 1, the flow to Postels Vaartje and water capture 33B has to be quantified (figure 2).

Figure 2 – General situation of inflow to Postels Vaartje and watercapture 33B upstream sluice 1 in Lommel on Bocholt-Herentals canal (Source: Google Maps)



The detailed quantity of the flow through the bypass in Genk is measured by Rio Grande 1200 kHz ADCP, operated at the entrance of the bypass. Rio Grande ADCP measures discharge and velocity while sailing transects across the stream. This way a discharge measurement can be obtained at this location for every 1 or 2 minutes. Data is collected real-time and transmitted via a wireless data link to a pc. The measurements were executed on 10/11/17. The results of the measurement will be compared with the theoretical discharges shown in table 1.

Table 1 – Theoretical discharges of bypass Genk related to opening of the tap diameter (m)

diameter tap bypass (m)	discharge (m3/s)
0,00	0,00
0,10	1,33
0,20	2,65
0,30	3,90
0,40	5,80
0,50	7,67
0,60	8,40
0,70	11,20
0,80	13,40
0,90	14,80
1,00	16,20
1,10	17,40
1,20	20,00
1,30	20,60
1,40	21,20

A detailed amount of the flow to Postels Vaartje and water capture 33B in Lommel is measured with a Streampro-ADCP, respectively operated downstream and from the bridge 80m downstream of the intake to Postels Vaartje (figure 3) and from the bridge 10m downstream of the capture 33B (figure 4). Streampro ADCP measures current velocity and the related calculated discharge in streams from 30-400 cm in depth, while sailing a transect across the stream towed from a bridge. This way a discharge measurement can be obtained at this location in 1 or 2 minutes. Data is collected real-time and transmitted by a wireless data link to a handheld tablet. The measurements were executed on 20/10/17.

Technical specifications of Rio Grande 1200 kHz ADCP and of Streampro 2000 kHz ADCP are given in figure 5 and 6.

Figure 3 – Situation measurement locations for flow to Postels Vaartje upstream sluice 1 in Lommel on Bocholt-Herentals canal (Source: Google Maps)

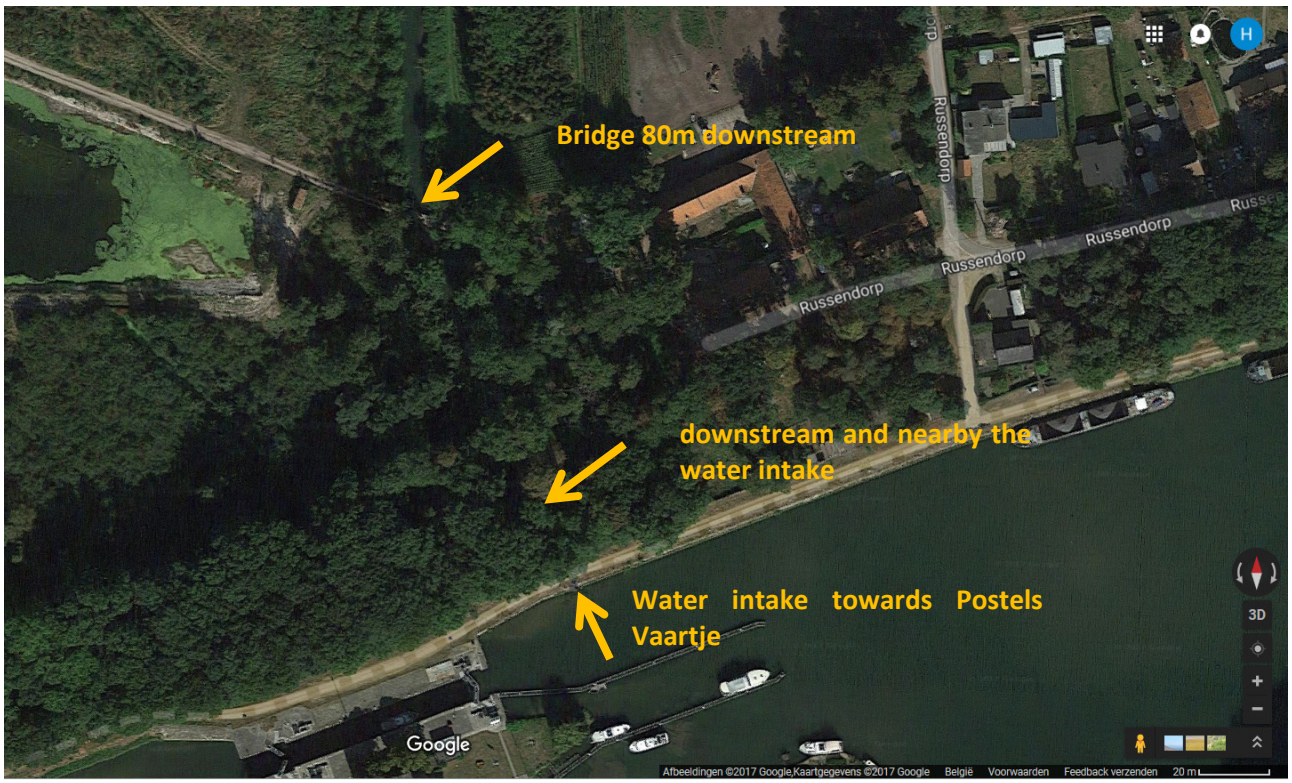


Figure 4 – Situation measurement location for flow to capture 33B upstream sluice 1 in Lommel on Bocholt-Herentals canal (Source: Google Maps)

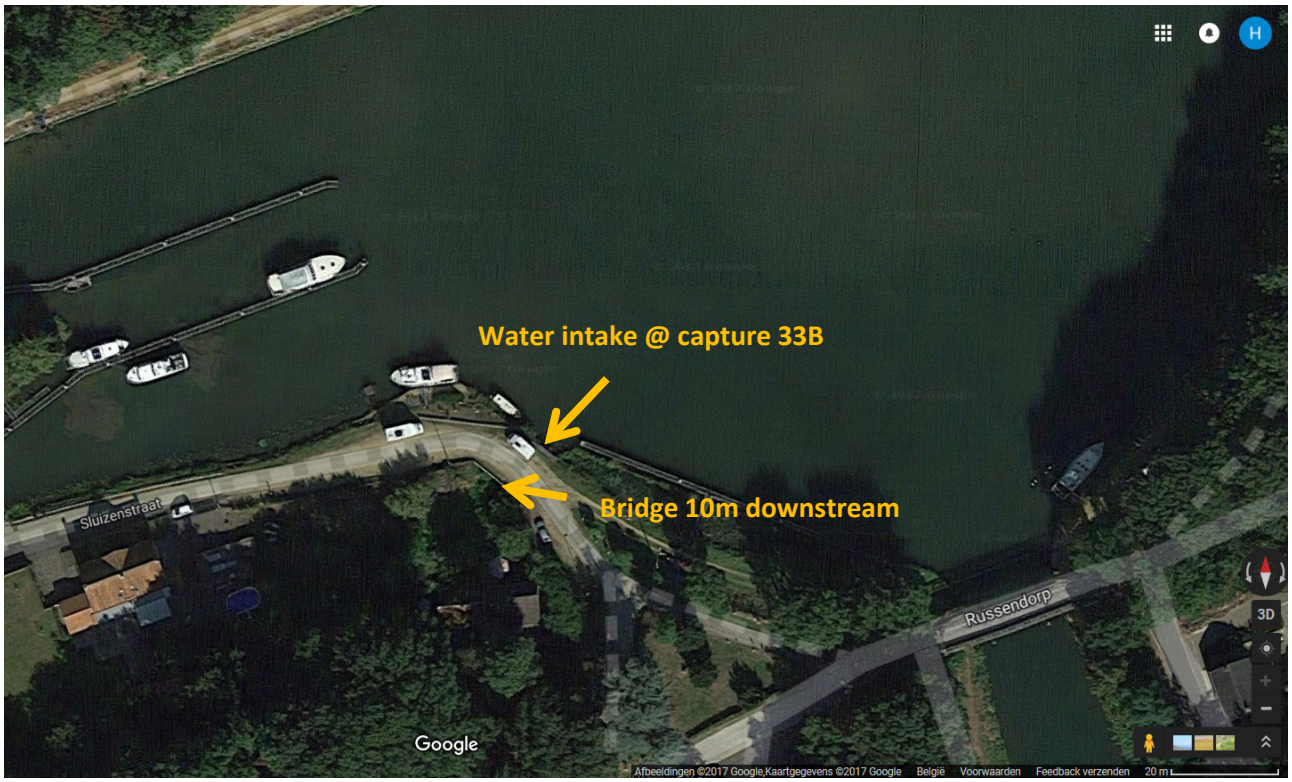


Figure 5 – Technical specs of 1200 kHz ADCP (Source: white paper – RD Instruments)

Workhorse Rio Grande ADCP

HIGHLY ACCURATE RIVER DISCHARGE MEASUREMENT TOOL

Technical Specifications

Standard Mode Water Profiling				
1200kHz ZedHed	Bin Size (m)	Std. Dev. (cm/s)[1]	Min. Range (m)[2]	Typical Range (m)[2]
	0.25	14.0	1.2	20
	0.5	7.0	1.7	22
	1.0	3.5	2.7	24
	2.0	1.8	4.8	26
600kHz	Bin Size (m)	Std. Dev. (cm/s)[1]	Min. Range (m)[2]	Typical Range (m)[2]
	0.5	14.0	1.8	70
	1.0	7.0	2.9	80
	2.0	3.4	5	90
	4.0	1.9	9.2	100

Special Features				
Rio Grande comes complete with **high-resolution modes** *used in special river conditions*				
1200kHz ZedHed: shallow water, slow flow mode (Mode 11)				
	Bin Size (m)	Std. Dev. (cm/s)[1]	Min. Range (m)[2]	Max. Range (m)[2]
	0.05	1.0	0.3	4
	0.1	0.7	0.5	4
	0.25	0.4	1	4
600kHz: shallow water, slow flow mode (Mode 11)				
	Bin Size (m)	Std. Dev. (cm/s)[1]	Min. Range (m)[2]	Max. Range (m)[2]
	0.1	0.8	0.7	8
	0.25	0.5	1	8
	0.5	0.4	1.6	8
Bottom tracking (included)				
	Max. altitude (m)	Min. altitude (m)		
1200kHz	30	0.75		
600kHz	100	0.75		

[1]Standard deviation for default setup, 15°C, typical sediment load.
[2]Ranges are for fresh water, 15°C, typical sediment load.

Standard Sensors

Temperature (mounted on transducer):
Range: -5° to 45°C
Precision: ±0.4°C
Resolution: 0.01°

Tilt: Range: ±15°
Accuracy: ±0.5°
Precision: ±0.5°
Resolution: 0.01°

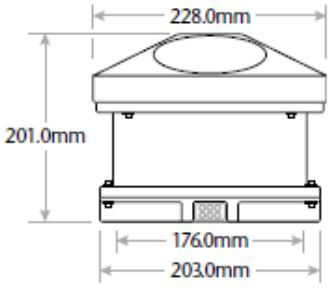
Compass (fluxgate type, includes built-in field calibration feature):
Accuracy: ±2° [3]
Precision: ±0.5° [3]
Resolution: 0.01°
Maximum tilt: ±15°

[3] @ 60° magnetic dip angle. 0.5G total field

Transducer and Hardware

Beam angle: 20°
Configuration: 4-beam, transducer
Communications: Serial port selectable by switch for RS-232 or RS-422. ASCII or binary output at 1,200–115,400 baud
Internal memory: Optional flash PC card
Velocity accuracy: ±0.25% of the (water + boat) velocity ±0.25cm/s
Velocity resolution: 0.1cm/s
Velocity range: ±5m/s default; ±20m/s maximum
Number of depth cells: 1–128
Ping rate: 2Hz (typical)

Dimensions



Standard Software

RDI's Windows™-based WinRiver

Upgrades Available

- Memory: 2 PCMCIA slots, total 2GB

Power

DC input: 10.5–18V DC

New Options Available

- Shallow water bottom tracking from 30cm depth – Bottom Mode 7
- Fast sampling mode: selectable 10Hz, 20Hz, 40Hz – Water Mode 12

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Free 24/7 emergency support

Figure 6 – Technical specs of 2000 kHz Streampro ADCP (Source: white paper – RD Instruments)

A Teledyne RD Instruments Water Resources Datasheet

StreamPro ADCP

Shallow Streamflow Measurement System

TECHNICAL SPECIFICATIONS

Water Velocity Profiling	Profiling range	0.1m[1] to 2m standard or 6m[2] with upgrade		
	Velocity range	±5m/s[3]		
	Accuracy	±1% of water velocity relative to ADCP, ±2mm/s		
	Resolution	1mm/s		
	Number of cells	1–20 standard or 1–30 with upgrade		
	Cell size	2cm to 10cm standard or 20cm with upgrade		
	Blanking distance	3cm		
	Data output rate	1Hz		
Bottom Tracking	Depth range	0.1m–7m[2]		
	Accuracy	±1.0% of bottom velocity relative to ADCP, ±2mm/s		
	Resolution	1mm/s		
Depth Measurement	Range	0.1m–7m[2]		
	Accuracy	1%[4]		
	Resolution	1mm		
Sensors		Temperature (standard)	Tilt (pitch and roll) (optional)	Compass (heading) (optional)
	Range	-4° to 45°C	±90°	0-360°
	Accuracy	±0.5°C	±0.3°	±1°
Operation Modes	Standard profiling (Broadband) High-precison profiling (included)			
Transducer	Frequency	2MHz		
	Configuration	Janus 4 beams at 20° beam angle		
Software	• StreamPro Software for Pocket PC • WinRiver II (included) for moving-boat measurement • SxS Pro (optional) for stationary measurement (i.e., under-ice); comes with an uncertainty model for in situ quality evaluation and control			
Available Upgrades	• Extended profiling range to 6 meters • SxS Pro Software for stationary measurement. • Compass and tilt (pitch and roll) sensors • GPS • High-speed float			
Communications	Bluetooth wireless Baud rates: 115,200 bps			
Construction	Cast polyurethane with stainless hardware			
Power	Voltage	10.5 – 18 VDC (8 AA batteries, alkaline or rechargeable NiMH)		
	Battery capacity	7.5 hours continuous with 8 AA alkaline batteries; 12.75 hours continuous with 8 AA NiMH rechargeable batteries		
Environmental	Operating temperature:	-5°C to 45°C		
	Storage temperature:	-20°C to 50°C		
Physical Properties	Weight in air	5.9 kg including electronics, transducer, float, and batteries		
	Dimensions	Electronics housing: 16 x 21 x 11cm Transducer: 3.5cm diam. x 15cm length Float: 42 x 70 x 10cm *(line drawings available upon request)*		

1. Assume one good cell (minimum cell size) with high precision profiling mode, range measured from the transducer surface.
2. Assume fresh water, actual range depends on temperature and suspended solids concentration.
3. 2m/s for standard float; 3.5m/s for optional high-speed float.
4. Assume uniform water temperature and salinity profile

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2 Results

2.1 Rio Grande ADCP measurements at bypass in Genk

At 10/11/17 from 10h30 to 12h30 (UTC+1) different transects were measured with Rio Grande ADCP at the entrance of the bypass. Different openings of the bypass were managed by the local operator. When the requested opening was achieved, ADCP measurements started after 2 minutes to allow the flow to be stable. For each different opening 4-6 transects (5-8 minutes) were measured.

Table 2 gives an overview of the measured discharge in m^3/s of the different transects at the different openings of the bypass on 10/11/17. Table 3 summarizes some statistics. Figure 7 shows a boxplot of the different measurements.

Table 2 – Rio Grande ADCP measured discharges at entrance of bypass in Genk on Albertcanal with different opening diameters of tap system on 10/11/17

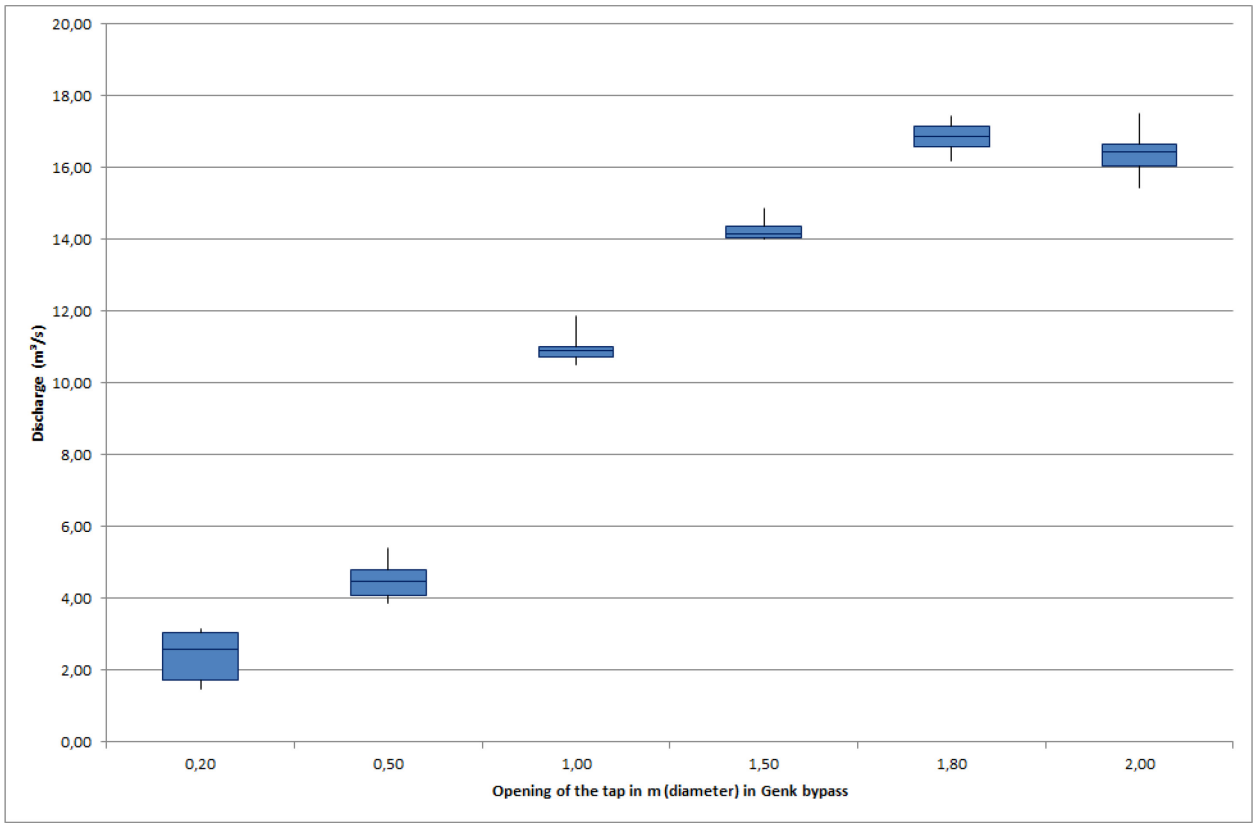
Transect	diameter tap bypass (m)	Start Bank	Start Time (UTC+1)	End Time (UTC+1)	Total Q (m^3/s)	Left Dist. (m)	Right Dist. (m)	Width (m)	Flow Speed (m/s)
genk2004	0,2	Right	10:48:26	10:49:17	2,00	0,80	0,60	12,60	0,03
genk2005	0,2	Left	10:49:25	10:50:15	1,49	0,80	0,60	12,75	0,03
genk2006	0,2	Right	10:50:21	10:51:09	1,56	0,80	0,60	12,80	0,04
genk2007	0,2	Left	10:51:16	10:52:08	2,71	0,80	0,60	12,88	0,04
genk2008	0,2	Right	10:52:32	10:53:20	2,81	0,80	0,60	12,71	0,07
genk2009	0,2	Left	10:53:26	10:54:22	3,13	0,80	0,60	13,01	0,05
genk2010	0,2	Right	10:54:32	10:55:18	3,12	0,80	0,60	12,77	0,05
genk2011	0,2	Left	10:55:26	10:56:17	3,17	0,80	0,60	12,75	0,06
genk2012	0,2	Right	10:57:07	10:57:56	1,66	0,80	0,60	12,95	0,05
genk2013	0,2	Left	10:58:03	10:58:57	2,44	0,80	0,60	12,94	0,04
Genk001	0,5	Right	10:28:41	10:29:42	5,42	0,80	0,60	12,61	0,09
Genk002	0,5	Left	10:30:02	10:30:59	3,86	0,80	0,60	12,93	0,08
Genk003	0,5	Right	10:31:16	10:32:06	5,42	0,80	0,60	12,79	0,09
Genk004	0,5	Left	10:32:18	10:33:09	4,48	0,80	0,60	13,23	0,09
genk2000	0,5	Right	10:37:27	10:38:27	4,44	0,80	0,60	12,77	0,07
genk2001	0,5	Left	10:38:39	10:39:32	4,02	0,80	0,60	12,92	0,07
genk2002	0,5	Right	10:39:39	10:40:26	4,01	0,80	0,60	12,86	0,07
genk2003	0,5	Left	10:40:33	10:41:25	4,12	0,80	0,60	13,10	0,07
genk4021	0,5	Right	12:30:31	12:31:52	4,45	0,80	0,60	12,89	0,08
genk4022	0,5	Left	12:31:59	12:33:25	4,50	0,80	0,60	12,86	0,08
genk4023	0,5	Right	12:33:40	12:35:05	4,77	0,80	0,60	13,19	0,08
genk4024	0,5	Left	12:35:14	12:36:44	4,89	0,80	0,60	13,10	0,08
genk2014	1	Right	11:08:28	11:09:26	11,06	0,80	0,60	13,12	0,21
genk4000	1	Left	11:16:45	11:18:23	10,86	0,80	0,60	12,86	0,19
genk4001	1	Right	11:18:36	11:19:57	11,86	0,80	0,60	12,92	0,20
genk4002	1	Left	11:20:06	11:21:38	10,51	0,80	0,60	13,00	0,19
genk4003	1	Right	11:21:48	11:23:04	10,93	0,80	0,60	13,08	0,19

genk4004	1	Left	11:23:28	11:24:50	10,68	0,80	0,60	12,97	0,19
genk4005	1,5	Right	11:33:53	11:35:15	14,86	0,80	0,60	12,90	0,26
genk4006	1,5	Left	11:35:22	11:36:52	14,02	0,80	0,60	12,73	0,26
genk4007	1,5	Right	11:37:01	11:38:15	14,06	0,80	0,60	12,80	0,27
genk4008	1,5	Left	11:38:21	11:39:45	14,22	0,80	0,60	12,90	0,27
genk4009	1,8	Right	11:45:19	11:46:32	17,44	0,80	0,60	12,78	0,32
genk4010	1,8	Left	11:46:40	11:47:59	16,68	0,80	0,60	12,83	0,32
genk4011	1,8	Right	11:48:07	11:49:21	16,57	0,80	0,60	12,81	0,30
genk4012	1,8	Left	11:49:29	11:51:00	16,19	0,80	0,60	13,17	0,30
genk4013	1,8	Right	11:51:21	11:52:38	17,06	0,80	0,60	12,92	0,32
genk4014	1,8	Left	11:52:45	11:54:14	17,20	0,80	0,60	13,28	0,32
genk4015	2	Right	11:59:40	12:00:50	17,52	0,80	0,60	13,18	0,32
genk4016	2	Left	12:00:59	12:02:30	16,23	0,80	0,60	13,21	0,30
genk4017	2	Right	12:02:39	12:03:58	16,62	0,80	0,60	12,98	0,28
genk4018	2	Left	12:04:04	12:05:44	16,00	0,80	0,60	12,63	0,31
genk4019	2	Right	12:05:52	12:07:04	16,65	0,80	0,60	12,98	0,30
genk4020	2	Left	12:07:10	12:08:40	15,45	0,80	0,60	12,92	0,31

Table 3 – Simple statistics of results from measurements on 10/11/17 with Rio Grande ADCP at different opening diameters of bypass in Genk on Albertcanal (0,2-2,00 m)

diameter tap bypass (m)	mean discharge (m^3/s)	stdev (m^3/s)
0,20	2,41	0,65
0,50	4,53	0,50
1,00	10,98	0,43
1,50	14,29	0,34
1,80	16,85	0,42
2,00	16,41	0,64

Figure 7 – Box plot of discharges measured upstream of bypass Genk on 10/11/17 with Rio Grande ADCP at different opening diameters of the tap (0,20-2,00 m)



2.2 Streampro ADCP measurements at intake to Postels Vaartje in Lommel

At 20/10/17 from 12h15 to 14h30 (UTC+2) different transects were measured with Streampro ADCP downstream of the inlet to Postels Vaartje. Different openings, measured in cm to the top of the iron frame which contains the valve, were managed by FHR and the local operator. When the requested opening was achieved, ADCP measurements started after 2-3 minutes to allow the flow to be stable. For each different opening 2-7 transects (3-10 minutes) were executed.

Discharges were measured in the downstream of and nearby the inlet. Because of difficult measurement conditions for opening 6-26 cm, we moved to a bridge about 80m downstream of the inlet and repeated the measurements with all settings of the opening at that location. About 50m upstream of this bridge a small channels diverts the water from the inlet. This will be taken into account in the results.

Table 4 gives an overview of all measured discharge in m³/s of the different transects at the different openings of the inlet to Postels Vaartje on 20/10/17. Table 5 summarizes the results with some statistics. Figure 8 shows a boxplot of the different measurements.

Table 4 – Streampro ADCP measured discharges of inlet to Postels Vaartje with different openings of valve on 20/10/17 measured immediately downstream and from a bridge 80m downstream of the inlet

BRIDGE MEASUREMENTS										
Transect	**opening (cm)**	**Start Bank**	**Start Time (UTC+2)**	**End Time (UTC+2)**	**Total Q (m^3/s)**	**Left Dist. (m)**	**Right Dist. (m)**	**Width (m)**	**Total Area (m^2)**	**Flow Speed (m/s)**
brug 20171020003	6	Right	13:52:18	13:53:12	0,64	0,80	0,80	5,50	4,35	0,13
brug 20171020004	6	Left	13:53:31	13:54:37	0,62	0,80	0,80	4,97	3,69	0,13
brug 20171020005	6	Right	13:56:26	13:57:29	0,66	0,80	0,80	6,16	4,97	0,10
brug 20171020006	6	Left	13:58:26	13:59:21	0,74	0,80	0,80	5,48	4,25	0,15
brug 20171020001	26	Right	13:36:34	13:37:28	0,67	0,80	0,80	5,55	4,38	0,13
brug 20171020002	26	Left	13:37:45	13:38:56	0,61	0,80	0,80	4,10	3,36	0,13
brug 20171020007	46	Right	14:03:28	14:04:19	0,59	0,80	0,80	5,52	4,41	0,11
brug 20171020008	46	Left	14:04:36	14:05:38	0,49	0,80	0,80	4,65	3,37	0,10
brug 20171020009	46	Right	14:05:56	14:06:54	0,63	0,80	0,80	5,62	4,42	0,11
brug 20171020010	46	Left	14:07:11	14:08:14	0,58	0,80	0,80	3,86	2,77	0,10
brug 20171020011	66	Right	14:15:15	14:16:23	0,39	0,80	0,80	5,93	4,59	0,08
brug 20171020012	66	Left	14:16:40	14:17:43	0,42	0,80	0,80	5,44	4,13	0,08
brug 20171020013	86	Right	14:23:34	14:24:43	0,15	0,80	0,80	5,68	4,43	0,03
brug 20171020014	86	Left	14:25:01	14:26:14	0,13	0,80	0,80	3,45	2,19	0,03
DOWNSTREAM NEARBY INLET MEASUREMENTS										
Transect	**schuifopening (cm)**	**Start Bank**	**Start Time (UTC+2)**	**End Time (UTC+2)**	**Total Q (m^3/s)**	**Left Dist. (m)**	**Right Dist. (m)**	**Width (m)**	**Total Area (m^2)**	**Flow Speed (m/s)**
20171020016	46	Right	12:55:27	12:57:00	0,51	2,00	2,00	6,75	3,80	0,10
20171020017	46	Left	12:57:18	12:58:30	0,83	2,00	2,00	8,28	6,15	0,15
20171020018	46	Right	12:59:25	13:00:28	0,44	0,50	0,50	3,74	2,87	0,13
20171020019	46	Left	13:00:47	13:01:59	0,86	0,50	0,50	3,61	2,85	0,18
20171020020	46	Right	13:02:19	13:03:15	0,52	0,50	0,50	3,95	3,02	0,16
20171020021	46	Left	13:03:35	13:04:36	0,77	0,50	0,50	5,05	4,06	0,17
20171020009	66	Right	12:33:37	12:35:04	0,34	2,00	2,00	8,64	6,23	0,07
20171020010	66	Left	12:35:31	12:37:21	0,41	2,00	2,00	7,60	5,32	0,05
20171020011	66	Right	12:37:44	12:39:02	0,62	2,00	2,00	8,08	5,78	0,11
20171020012	66	Left	12:39:27	12:40:50	0,66	2,00	2,00	6,79	3,95	0,14
20171020013	66	Right	12:42:28	12:43:24	0,76	4,00	3,00	9,89	5,41	0,15
20171020014	66	Left	12:44:43	12:45:42	0,23	0,50	0,50	4,36	3,44	0,09
20171020015	66	Right	12:46:17	12:47:15	0,44	0,50	0,50	4,09	3,10	0,12
20171020003	86	Right	12:13:50	12:15:28	0,20	1,50	2,00	7,87	6,48	0,03
20171020004	86	Left	12:16:01	12:17:56	0,17	2,00	2,00	12,02	8,40	0,03

Table 5 – Simple statistics of results from measurements on 20/10/17 with Streampro ADCP at different openings of inlet valve to Postels Vaartje measured immediately downstream and from the bridge 80m downstream of the inlet

BRIDGE MEASUREMENTS		
opening (cm)	Mean measured discharge (m^3/s)	stdev (m^3/s)
6	0,67	0,05
26	0,64	0,03
46	0,57	0,05
66	0,40	0,01
86	0,14	0,01
DOWNSTREAM NEARBY INLET MEASUREMENTS		
opening (cm)	Mean measured discharge (m^3/s)	stdev (m^3/s)
46	0,65	0,17
66	0,49	0,18
86	0,19	0,02

From table 5 we can conclude that about 50-90 l/s water passes via the small channel with openings of the valve between 46 and 86 cm, 50 l/s for the smaller opening of 86 cm, 90 l/s for the other opening heights. This water does not pass the bridge from where most measurements were carried out.

Therefore we shall use the mean measured discharges immediately downstream for the openings 46-66-86 cm and increase the discharges measured at the bridge at opening 6-26 with 100 l/s (table 6).

Figure 8 – Box plot of discharges measured with Streampro ADCP at different openings of inlet valve to Postels Vaartje immediately downstream and from the bridge 80m downstream of the inlet

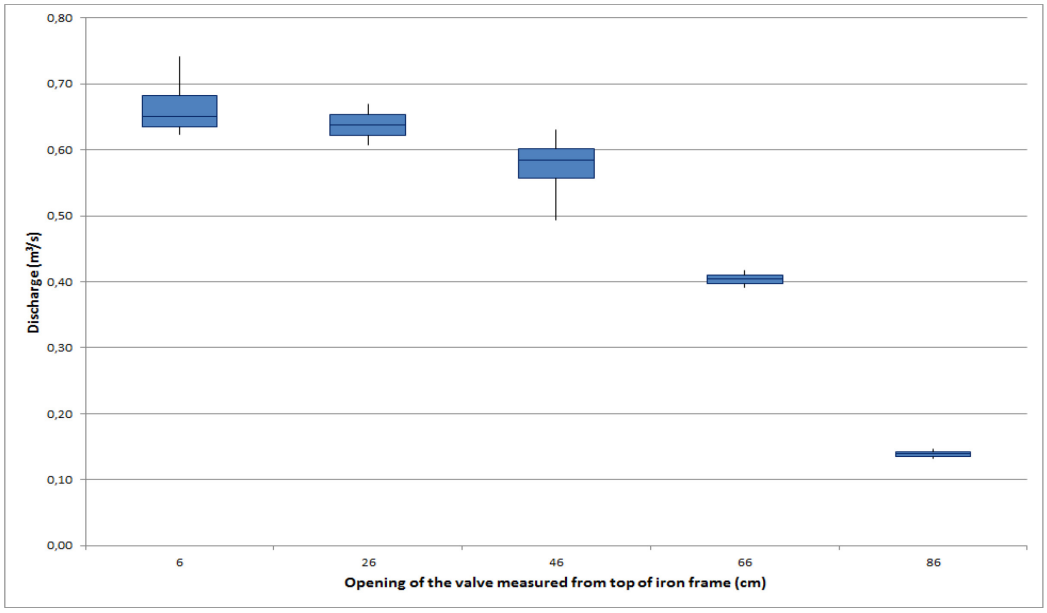
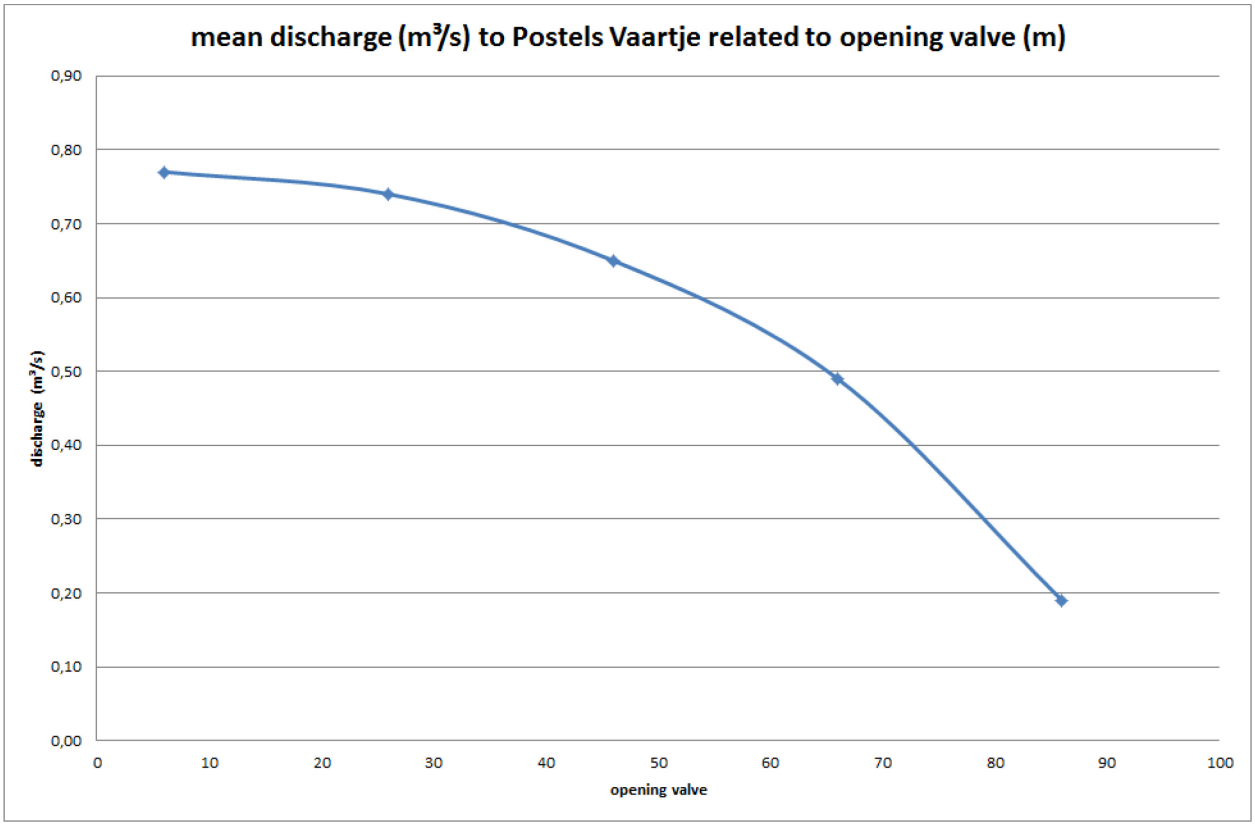


Table 6 – Mean discharges on 20/10/17 measured with Streampro ADCP at different openings of inlet valve to Postels Vaartje

opening (cm)	Mean measured discharge (m³/s)
6	0,77
26	0,74
46	0,65
66	0,49
86	0,19

Figure 9 gives a graphical overview of the relation between the opening of the valve and the discharge to Postels Vaartje, based on the above measurements.

Figure 9 – relation between opening valve and discharge to Postels Vaartje based on Streampro ADCP measurements from 20/10/17



The above measurements were qualitatively compared with discharge measurements with Qliner ADCP at the same location in 2005 and we can conclude that discharges are very similar.

2.3 Streampro ADCP measurements at intake to water capture 33B in Lommel

At 20/10/17 from 14h40 to 14h50 (UTC+2) 2 transects were measured with Streampro ADCP downstream of the inlet to water capture 33B. Because the opening of this inlet has not been changed since a few years, only the existing opening is measured.

Table 7 gives an overview of the measured discharge in m^3/s of the different transects at the different openings of the inlet to water capture 33B on 20/10/17, together with some statistics.

The measurements were also qualitatively compared with discharge measurements with Qliner ADCP at the same water capture in 2005 and we conclude that discharges are very similar.

Table 7 – Mean discharges on 20/10/17 measured with Streampro ADCP downstream of the inlet to water capture 33B

Transect	Start Bank	Start Time (UTC+2)	End Time (UTC+2)	Total Q (m^3/s)	Left Dist. (m)	Right Dist. (m)	Width (m)	Total Area (m^2)	Flow Speed (m/s)
postels kanaal lo 20171020001	Left	14:42:39	14:45:23	0,10	1,00	1,00	5,01	1,19	0,08
postels kanaal lo 20171020003	Right	14:46:24	14:47:39	0,13	1,00	1,00	3,95	0,93	0,11
			gemiddelde	0,11					
			stdev	0,011					

3 Conclusions

We can conclude that the discharges through the bypass in Genk on the Albert Canal vary between 2,41 m³/s at the lowest opening diameter of the tap of 0,20 m and 16,41 m³/s at the highest tested opening of 2,00m. These values are very well below the theoretical discharges, namely 10-70% at the tested opening diameters. We also notice that from openings of the tap of 1,80 m or higher, no extra discharge is flowing through.

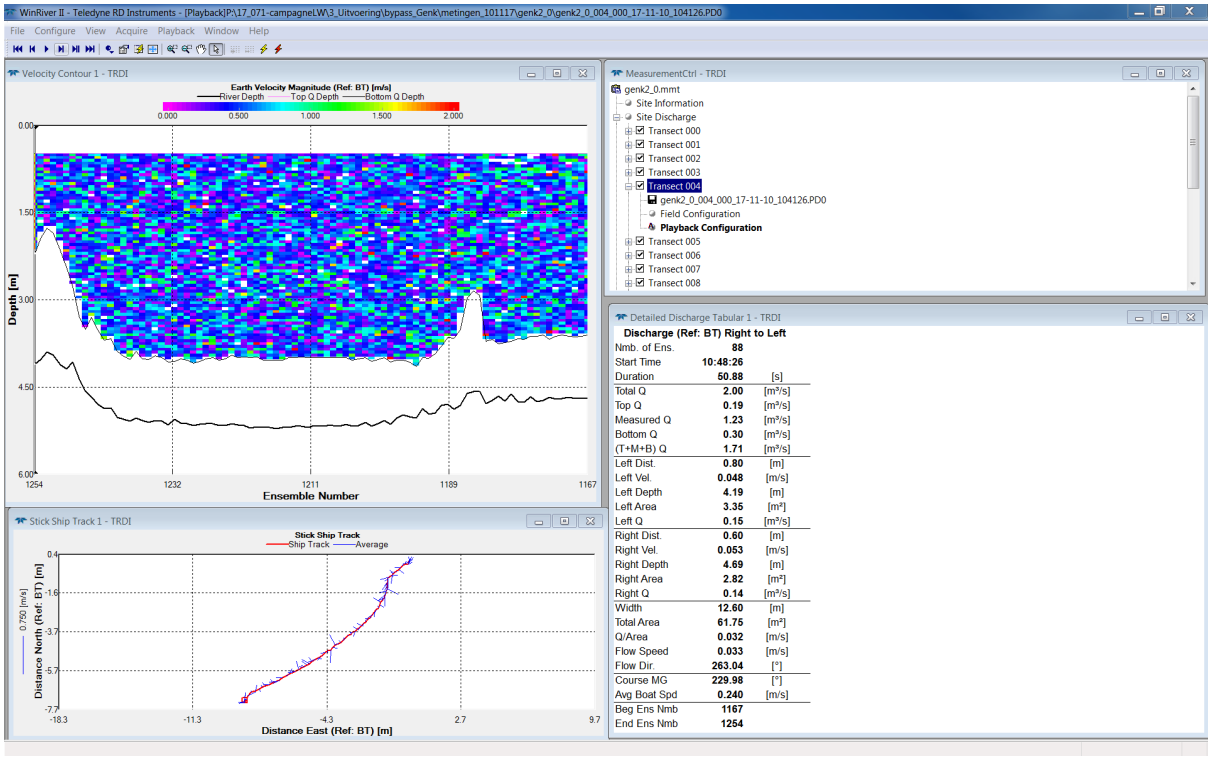
Results of the measurement at Postels Vaartje show discharges from 0,19 to 0,77 m³/s at the different opening heights tested. Results of measurements of water capture 33b show discharges of about 0,11 m³/s. Both results are comparable with discharge measurements with Qliner ADCP at the same locations in 2005.

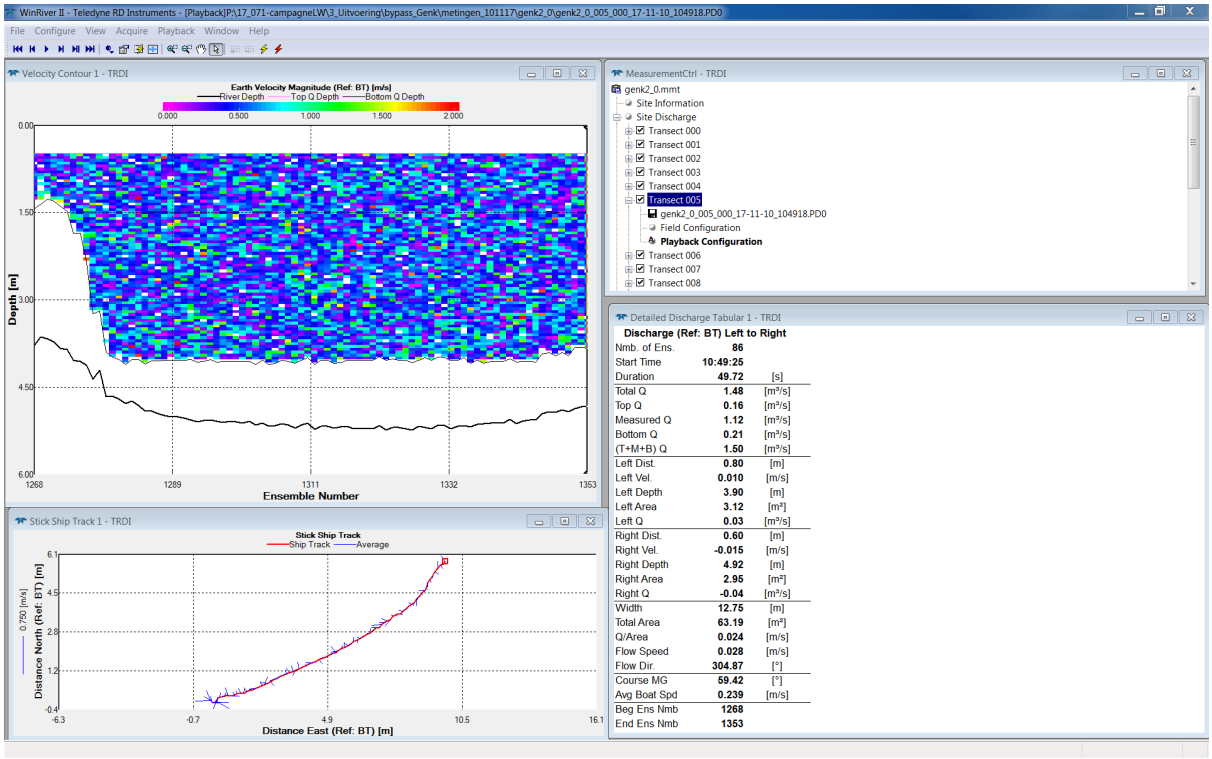
4 Acknowledgements

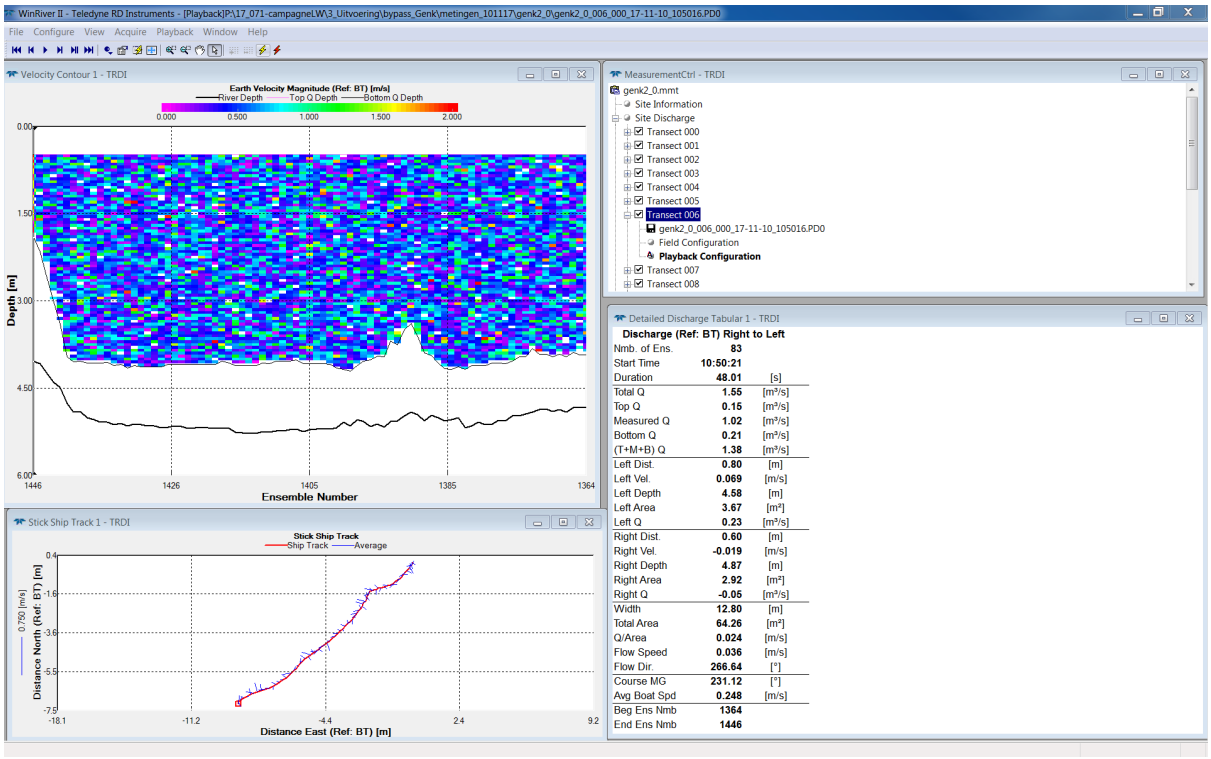
We want to thank the local operators at sluice Genk and Postels Vaartje for their contribution to this campaign.

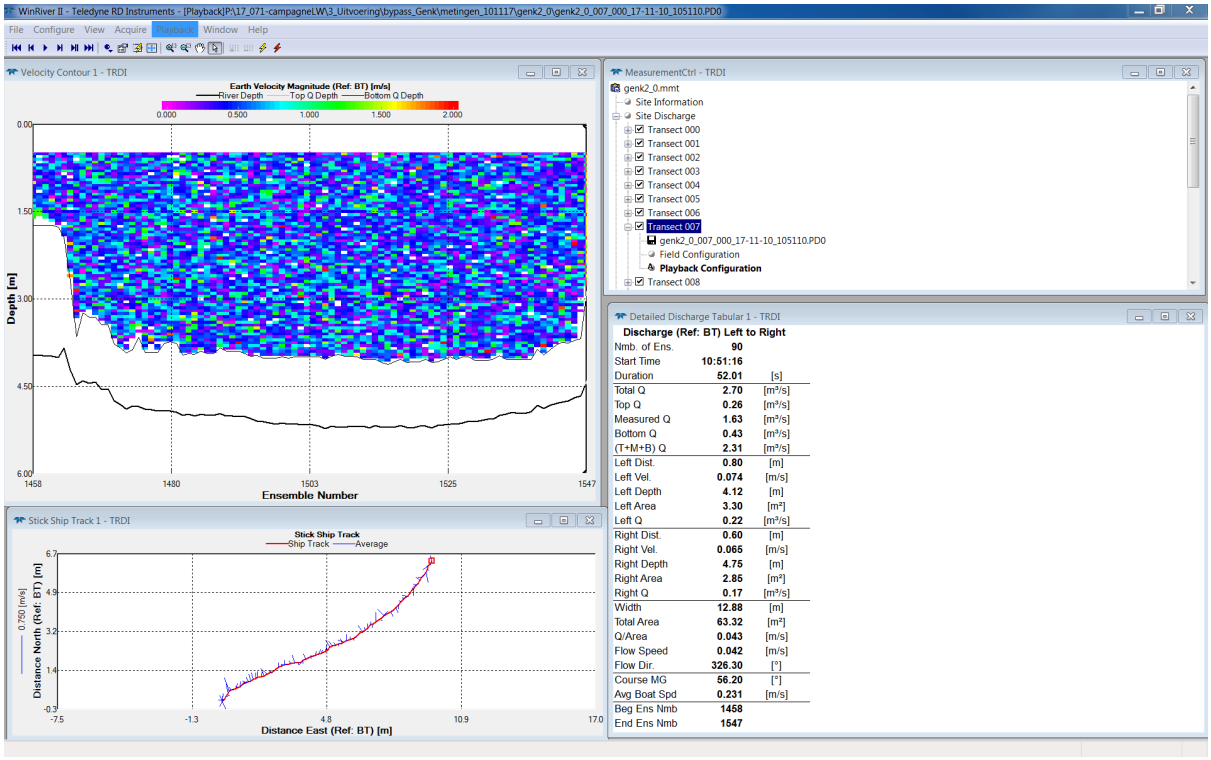
5 Appendix

5.1 ADCP measurements at bypass Genk – Winriver output






WinRiver II - Teledyne RD Instruments - [Playback]P:\17_071-campagneLW\3_Uitvoering\bypass_Genk\metingen_101117\genk2_0\genk2_0_006_000_17-11-10_105016.PD0
Velocity Contour 1 - TRDI
Earth Velocity Magnitude (Ref: BT) [m/s]
River Depth
Top Q Depth
Bottom Q Depth
Depth [m]
Ensemble Number
MeasurementCtrl - TRDI
genk2_0.mmt
Site Information
Site Discharge
Transect 000
Transect 001
Transect 002
Transect 003
Transect 004
Transect 005
Transect 006
genk2_0_006_000_17-11-10_105016.PD0
Field Configuration
Playback Configuration
Transect 007
Transect 008
Detailed Discharge Tabular 1 - TRDI
Discharge (Ref: BT) Right to Left
Nmb. of Ens. 83
Start Time 10:50:21
Duration 48.01 [s]
Total Q 1.55 [m³/s]
Top Q 0.15 [m³/s]
Measured Q 1.02 [m³/s]
Bottom Q 0.21 [m³/s]
(T+M+B) Q 1.38 [m³/s]
Left Dist. 0.80 [m]
Left Vel. 0.069 [m/s]
Left Depth 4.58 [m]
Left Area 3.67 [m²]
Left Q 0.23 [m³/s]
Right Dist. 0.60 [m]
Right Vel. -0.019 [m/s]
Right Depth 4.87 [m]
Right Area 2.92 [m²]
Right Q -0.05 [m³/s]
Width 12.80 [m]
Total Area 64.26 [m²]
Q/Area 0.024 [m/s]
Flow Speed 0.036 [m/s]
Flow Dir. 266.64 [°]
Course MG 231.12 [°]
Avg Boat Spd 0.248 [m/s]
Beg Ens Nmb 1364
End Ens Nmb 1446
Stick Ship Track 1 - TRDI
Stick Ship Track
Ship Track
Average
Distance North (Ref: BT) [m]
Distance East (Ref: BT) [m]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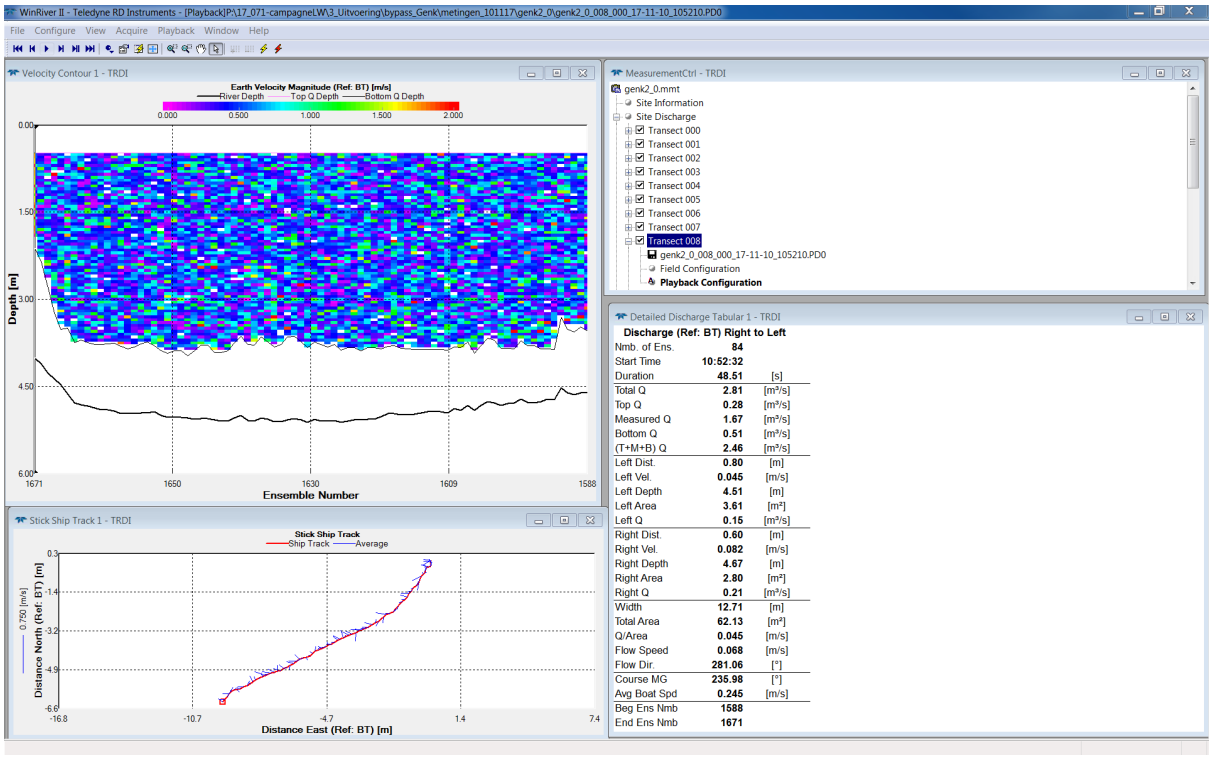
Velocity Contour 1 - TRDI
Earth Velocity Magnitude (Ref: BT) [m/s]
River Depth
Top Q Depth
Bottom Q Depth
Depth [m]
Ensemble Number
MeasurementCtrl - TRDI
genk2_0.mmt
Site Information
Site Discharge
Transect 000
Transect 001
Transect 002
Transect 003
Transect 004
Transect 005
Transect 006
Transect 007
genk2_0_007_000_17-11-10_105110.PD0
Field Configuration
Playback Configuration
Transect 008
Detailed Discharge Tabular 1 - TRDI
Discharge (Ref: BT) Left to Right
Nmb. of Ens. 90
Start Time 10:51:16
Duration 52.01 [s]
Total Q 2.70 [m³/s]
Top Q 0.26 [m³/s]
Measured Q 1.63 [m³/s]
Bottom Q 0.43 [m³/s]
(T+M+B) Q 2.31 [m³/s]
Left Dist. 0.80 [m]
Left Vel. 0.074 [m/s]
Left Depth 4.12 [m]
Left Area 3.30 [m²]
Left Q 0.22 [m³/s]
Right Dist. 0.60 [m]
Right Vel. 0.065 [m/s]
Right Depth 4.75 [m]
Right Area 2.85 [m²]
Right Q 0.17 [m³/s]
Width 12.88 [m]
Total Area 63.32 [m²]
Q/Area 0.043 [m/s]
Flow Speed 0.042 [m/s]
Flow Dir. 326.30 [°]
Course MG 56.20 [°]
Avg Boat Spd 0.231 [m/s]
Beg Ens Nmb 1458
End Ens Nmb 1547
Stick Ship Track 1 - TRDI
Stick Ship Track
Ship Track
Average
Distance North (Ref: BT) [m]
Distance East (Ref: BT) [m]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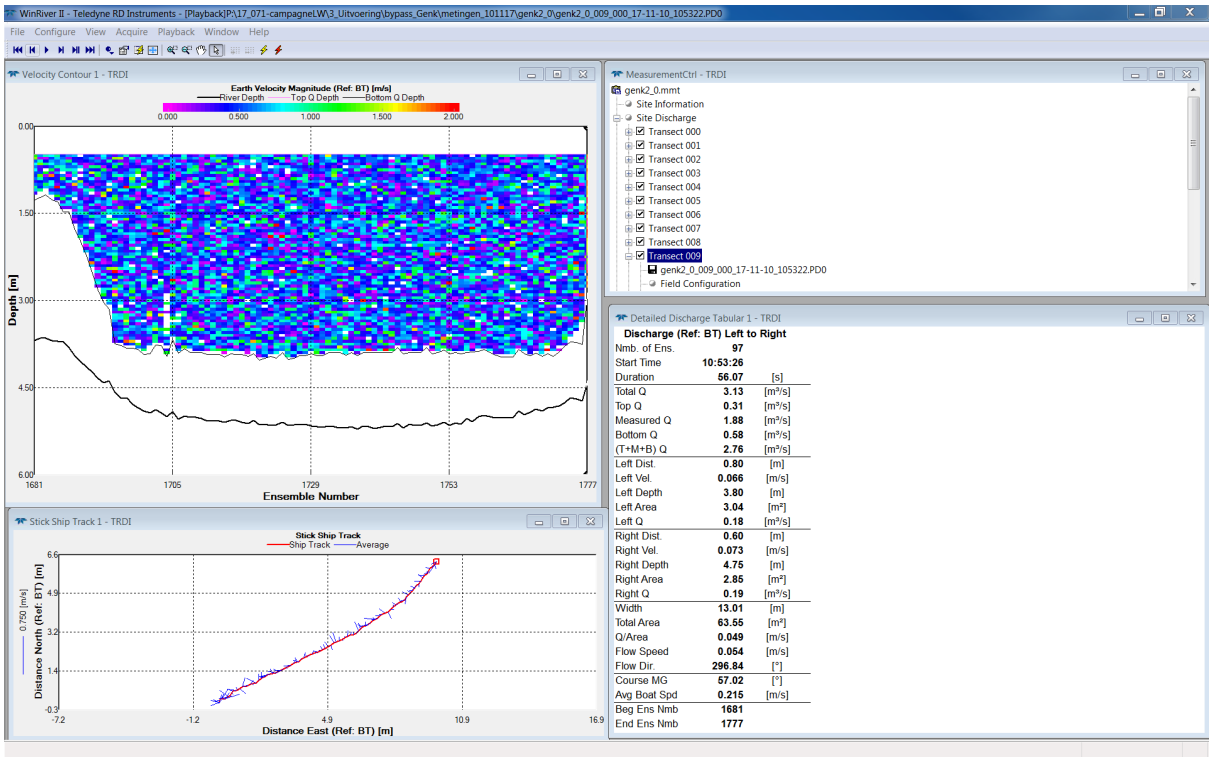
Velocity Contour 1 - TRDI
Earth Velocity Magnitude (Ref: BT) [m/s]
River Depth
Top Q Depth
Bottom Q Depth
Depth [m]
Ensemble Number
MeasurementCtrl - TRDI
genk2_0.mmt
Site Information
Site Discharge
Transect 000
Transect 001
Transect 002
Transect 003
Transect 004
Transect 005
Transect 006
Transect 007
Transect 008
genk2_0_008_000_17-11-10_105210.PD0
Field Configuration
Playback Configuration
Detailed Discharge Tabular 1 - TRDI
Discharge (Ref: BT) Right to Left
Nmb. of Ens. 84
Start Time 10:52:32
Duration 48.51 [s]
Total Q 2.81 [m³/s]
Top Q 0.28 [m³/s]
Measured Q 1.67 [m³/s]
Bottom Q 0.51 [m³/s]
(T+M+B) Q 2.46 [m³/s]
Left Dist. 0.80 [m]
Left Vel. 0.045 [m/s]
Left Depth 4.51 [m]
Left Area 3.61 [m²]
Left Q 0.15 [m³/s]
Right Dist. 0.60 [m]
Right Vel. 0.082 [m/s]
Right Depth 4.67 [m]
Right Area 2.80 [m²]
Right Q 0.21 [m³/s]
Width 12.71 [m]
Total Area 62.13 [m²]
Q/Area 0.045 [m/s]
Flow Speed 0.068 [m/s]
Flow Dir. 281.06 [°]
Course MG 235.98 [°]
Avg Boat Spd 0.245 [m/s]
Beg Ens Nmb 1588
End Ens Nmb 1671
Stick Ship Track 1 - TRDI
Stick Ship Track
Ship Track
Average
Distance North (Ref: BT) [m]
Distance East (Ref: BT) [m]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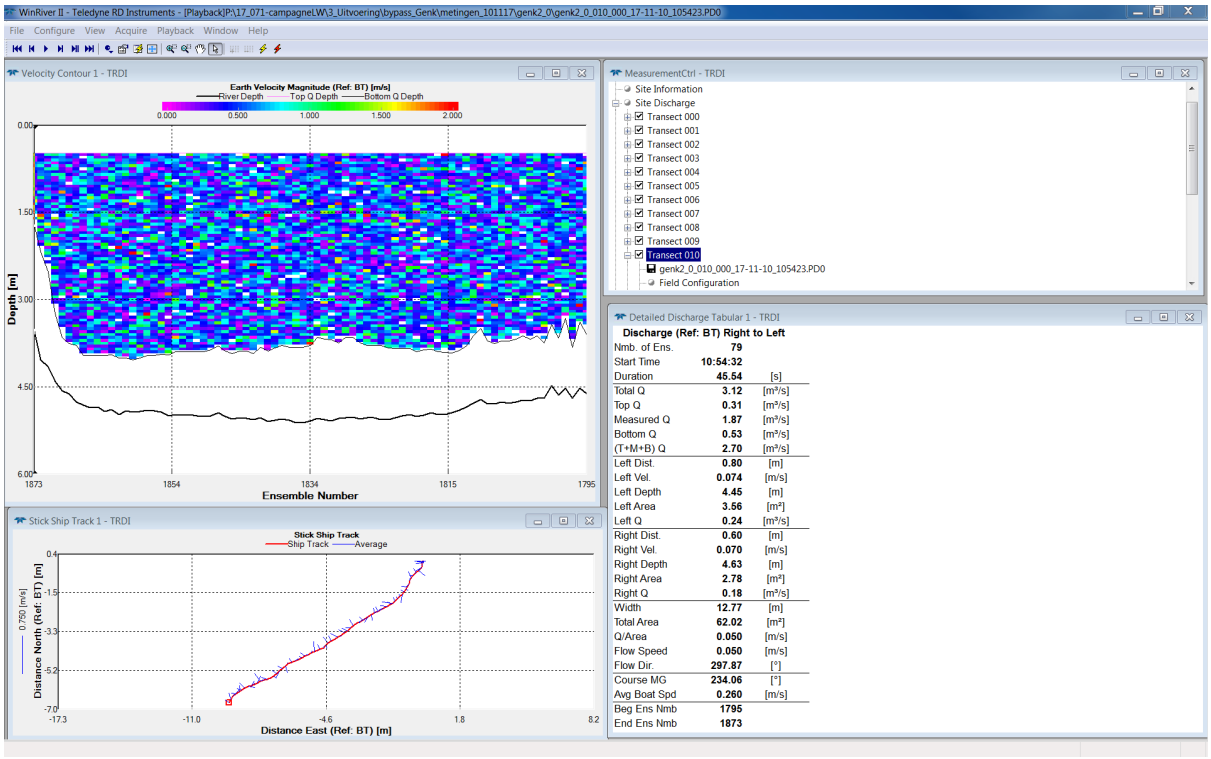
Velocity Contour 1 - TRDI
Earth Velocity Magnitude (Ref: BT) [m/s]
River Depth
Top Q Depth
Bottom Q Depth
Depth [m]
Ensemble Number
MeasurementCtrl - TRDI
genk2_0.mmt
Site Information
Site Discharge
Transect 000
Transect 001
Transect 002
Transect 003
Transect 004
Transect 005
Transect 006
Transect 007
Transect 008
Transect 009
genk2_0_009_000_17-11-10_105322.PD0
Field Configuration
Detailed Discharge Tabular 1 - TRDI
Discharge (Ref: BT) Left to Right
Nmb. of Ens. 97
Start Time 10:53:26
Duration 56.07 [s]
Total Q 3.13 [m³/s]
Top Q 0.31 [m³/s]
Measured Q 1.88 [m³/s]
Bottom Q 0.58 [m³/s]
(T+M+B) Q 2.76 [m³/s]
Left Dist. 0.80 [m]
Left Vel. 0.066 [m/s]
Left Depth 3.80 [m]
Left Area 3.04 [m²]
Left Q 0.18 [m³/s]
Right Dist. 0.60 [m]
Right Vel. 0.073 [m/s]
Right Depth 4.75 [m]
Right Area 2.85 [m²]
Right Q 0.19 [m³/s]
Width 13.01 [m]
Total Area 63.55 [m²]
Q/Area 0.049 [m/s]
Flow Speed 0.054 [m/s]
Flow Dir. 296.84 [°]
Course MG 57.02 [°]
Avg Boat Spd 0.215 [m/s]
Beg Ens Nmb 1681
End Ens Nmb 1777
Stick Ship Track 1 - TRDI
Stick Ship Track
Ship Track
Average
Distance North (Ref: BT) [m]
Distance East (Ref: BT) [m]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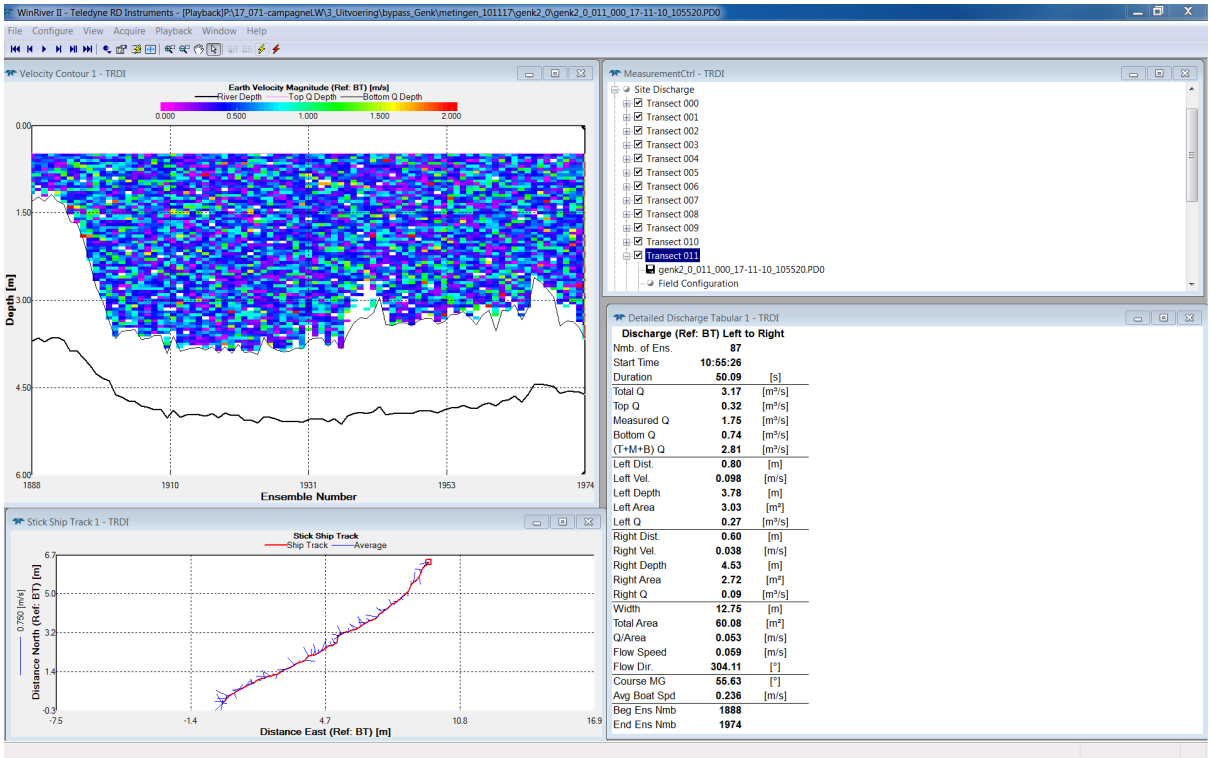
File Configure View Acquire Playback Window Help
Velocity Contour 1 - TRDI
Earth Velocity Magnitude (Ref: BT) [m/s]
River Depth Top Q Depth Bottom Q Depth
0.000 0.500 1.000 1.500 2.000
Depth [m]
0.00 1.50 3.00 4.50 6.00
1873 1854 1834 1815 1795
Ensemble Number
MeasurementCtrl - TRDI
Site Information
Site Discharge
Transect 000
Transect 001
Transect 002
Transect 003
Transect 004
Transect 005
Transect 006
Transect 007
Transect 008
Transect 009
Transect 010
genk2_0_010_000_17-11-10_105423.PD0
Field Configuration
Detailed Discharge Tabular 1 - TRDI
Discharge (Ref: BT) Right to Left
Nmb. of Ens. 79
Start Time 10:54:32
Duration 45.54 [s]
Total Q 3.12 [m³/s]
Top Q 0.31 [m³/s]
Measured Q 1.87 [m³/s]
Bottom Q 0.53 [m³/s]
(T+M+B) Q 2.70 [m³/s]
Left Dist. 0.80 [m]
Left Vel. 0.074 [m/s]
Left Depth 4.45 [m]
Left Area 3.56 [m²]
Left Q 0.24 [m³/s]
Right Dist. 0.60 [m]
Right Vel. 0.070 [m/s]
Right Depth 4.63 [m]
Right Area 2.78 [m²]
Right Q 0.18 [m³/s]
Width 12.77 [m]
Total Area 62.02 [m²]
Q/Area 0.050 [m/s]
Flow Speed 0.050 [m/s]
Flow Dir. 297.87 [°]
Course MG 234.06 [°]
Avg Boat Spd 0.260 [m/s]
Beg Ens Nmb 1795
End Ens Nmb 1873
Stick Ship Track 1 - TRDI
Stick Ship Track
Ship Track Average
Distance North (Ref: BT) [m]
0.750 [m/s]
0.4 -1.5 -3.3 -5.2 -7.0
-17.3 -11.0 -4.6 1.8 8.2
Distance East (Ref: BT) [m]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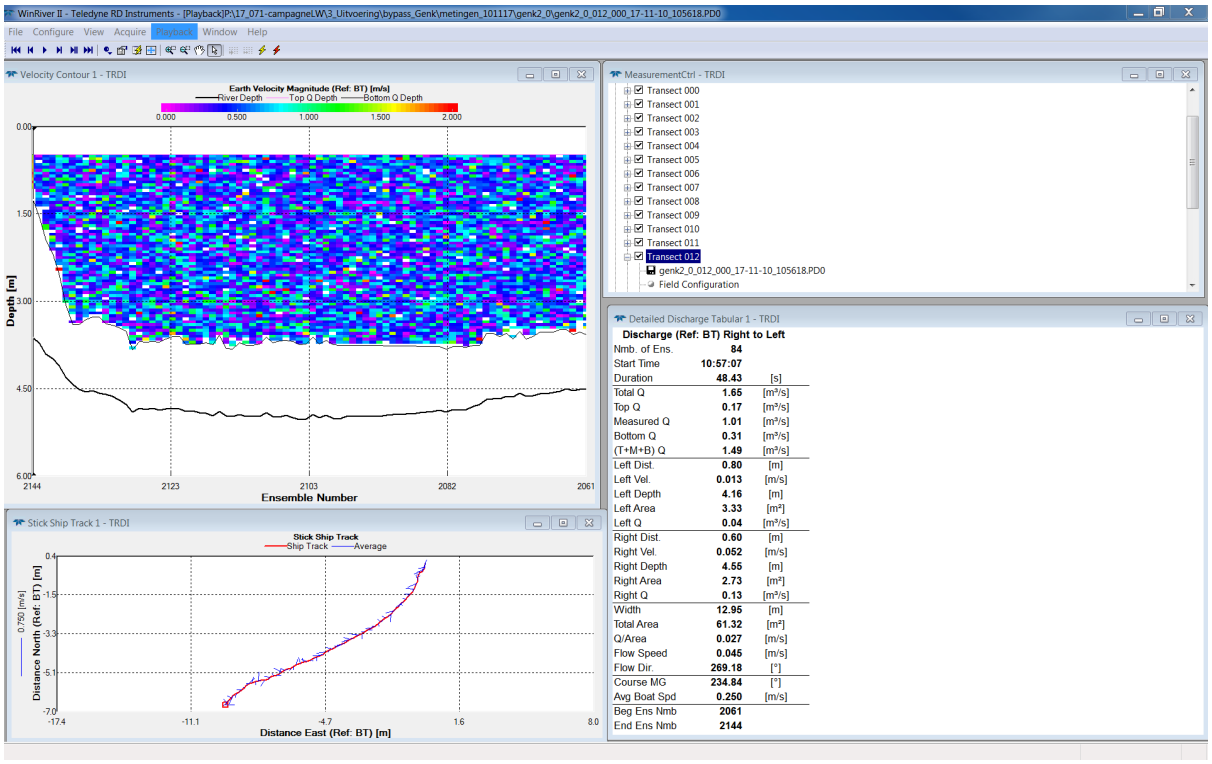
File Configure View Acquire Playback Window Help
Velocity Contour 1 - TRDI
Earth Velocity Magnitude (Ref: BT) [m/s]
River Depth Top Q Depth Bottom Q Depth
0.000 0.500 1.000 1.500 2.000
Depth [m]
0.00 1.50 3.00 4.50 6.00
1888 1910 1931 1953 1974
Ensemble Number
MeasurementCtrl - TRDI
Site Discharge
Transect 000
Transect 001
Transect 002
Transect 003
Transect 004
Transect 005
Transect 006
Transect 007
Transect 008
Transect 009
Transect 010
Transect 011
genk2_0_011_000_17-11-10_105520.PD0
Field Configuration
Detailed Discharge Tabular 1 - TRDI
Discharge (Ref: BT) Left to Right
Nmb. of Ens. 87
Start Time 10:55:26
Duration 50.09 [s]
Total Q 3.17 [m³/s]
Top Q 0.32 [m³/s]
Measured Q 1.75 [m³/s]
Bottom Q 0.74 [m³/s]
(T+M+B) Q 2.81 [m³/s]
Left Dist. 0.80 [m]
Left Vel. 0.098 [m/s]
Left Depth 3.78 [m]
Left Area 3.03 [m²]
Left Q 0.27 [m³/s]
Right Dist. 0.60 [m]
Right Vel. 0.038 [m/s]
Right Depth 4.53 [m]
Right Area 2.72 [m²]
Right Q 0.09 [m³/s]
Width 12.75 [m]
Total Area 60.08 [m²]
Q/Area 0.053 [m/s]
Flow Speed 0.059 [m/s]
Flow Dir. 304.11 [°]
Course MG 55.63 [°]
Avg Boat Spd 0.236 [m/s]
Beg Ens Nmb 1888
End Ens Nmb 1974
Stick Ship Track 1 - TRDI
Stick Ship Track
Ship Track Average
Distance North (Ref: BT) [m]
0.750 [m/s]
6.7 5.0 3.2 1.4 -0.3
-7.5 -1.4 4.7 10.8 16.9
Distance East (Ref: BT) [m]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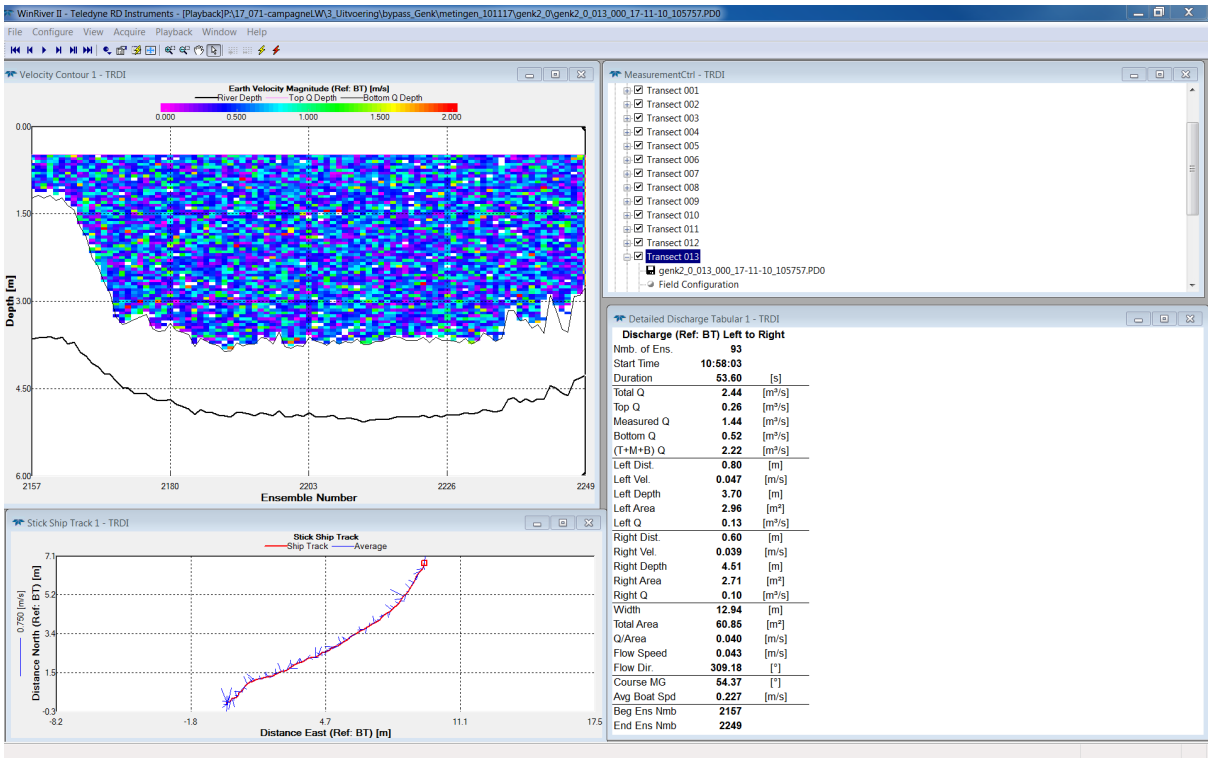
Velocity Contour 1 - TRDI
Earth Velocity Magnitude (Ref: BT) [m/s]
River Depth
Top Q Depth
Bottom Q Depth
Depth [m]
Ensemble Number
MeasurementCtrl - TRDI
Transect 000
Transect 001
Transect 002
Transect 003
Transect 004
Transect 005
Transect 006
Transect 007
Transect 008
Transect 009
Transect 010
Transect 011
Transect 012
genk2_0_012_000_17-11-10_105618.PD0
Field Configuration
Detailed Discharge Tabular 1 - TRDI
Discharge (Ref: BT) Right to Left
Nmb. of Ens. 84
Start Time 10:57:07
Duration 48.43 [s]
Total Q 1.65 [m³/s]
Top Q 0.17 [m³/s]
Measured Q 1.01 [m³/s]
Bottom Q 0.31 [m³/s]
(T+M+B) Q 1.49 [m³/s]
Left Dist. 0.80 [m]
Left Vel. 0.013 [m/s]
Left Depth 4.16 [m]
Left Area 3.33 [m²]
Left Q 0.04 [m³/s]
Right Dist. 0.60 [m]
Right Vel. 0.052 [m/s]
Right Depth 4.55 [m]
Right Area 2.73 [m²]
Right Q 0.13 [m³/s]
Width 12.95 [m]
Total Area 61.32 [m²]
Q/Area 0.027 [m/s]
Flow Speed 0.045 [m/s]
Flow Dir. 269.18 [°]
Course MG 234.84 [°]
Avg Boat Spd 0.250 [m/s]
Beg Ens Nmb 2061
End Ens Nmb 2144
Stick Ship Track 1 - TRDI
Stick Ship Track
Ship Track
Average
Distance North (Ref: BT) [m]
Distance East (Ref: BT) [m]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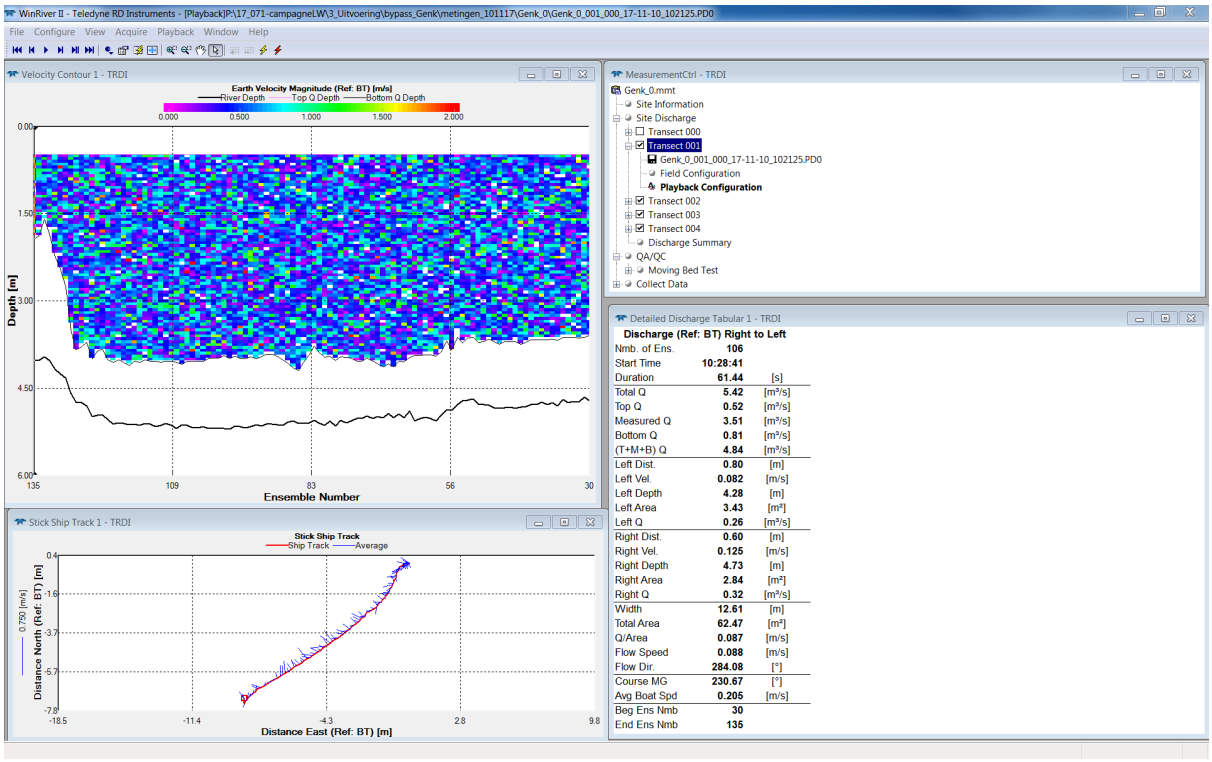
Velocity Contour 1 - TRDI
Earth Velocity Magnitude (Ref: BT) [m/s]
River Depth
Top Q Depth
Bottom Q Depth
Depth [m]
Ensemble Number
MeasurementCtrl - TRDI
Transect 001
Transect 002
Transect 003
Transect 004
Transect 005
Transect 006
Transect 007
Transect 008
Transect 009
Transect 010
Transect 011
Transect 012
Transect 013
genk2_0_013_000_17-11-10_105757.PD0
Field Configuration
Detailed Discharge Tabular 1 - TRDI
Discharge (Ref: BT) Left to Right
Nmb. of Ens. 93
Start Time 10:58:03
Duration 53.60 [s]
Total Q 2.44 [m³/s]
Top Q 0.26 [m³/s]
Measured Q 1.44 [m³/s]
Bottom Q 0.52 [m³/s]
(T+M+B) Q 2.22 [m³/s]
Left Dist. 0.80 [m]
Left Vel. 0.047 [m/s]
Left Depth 3.70 [m]
Left Area 2.96 [m²]
Left Q 0.13 [m³/s]
Right Dist. 0.60 [m]
Right Vel. 0.039 [m/s]
Right Depth 4.51 [m]
Right Area 2.71 [m²]
Right Q 0.10 [m³/s]
Width 12.94 [m]
Total Area 60.85 [m²]
Q/Area 0.040 [m/s]
Flow Speed 0.043 [m/s]
Flow Dir. 309.18 [°]
Course MG 54.37 [°]
Avg Boat Spd 0.227 [m/s]
Beg Ens Nmb 2157
End Ens Nmb 2249
Stick Ship Track 1 - TRDI
Stick Ship Track
Ship Track
Average
Distance North (Ref: BT) [m]
Distance East (Ref: BT) [m]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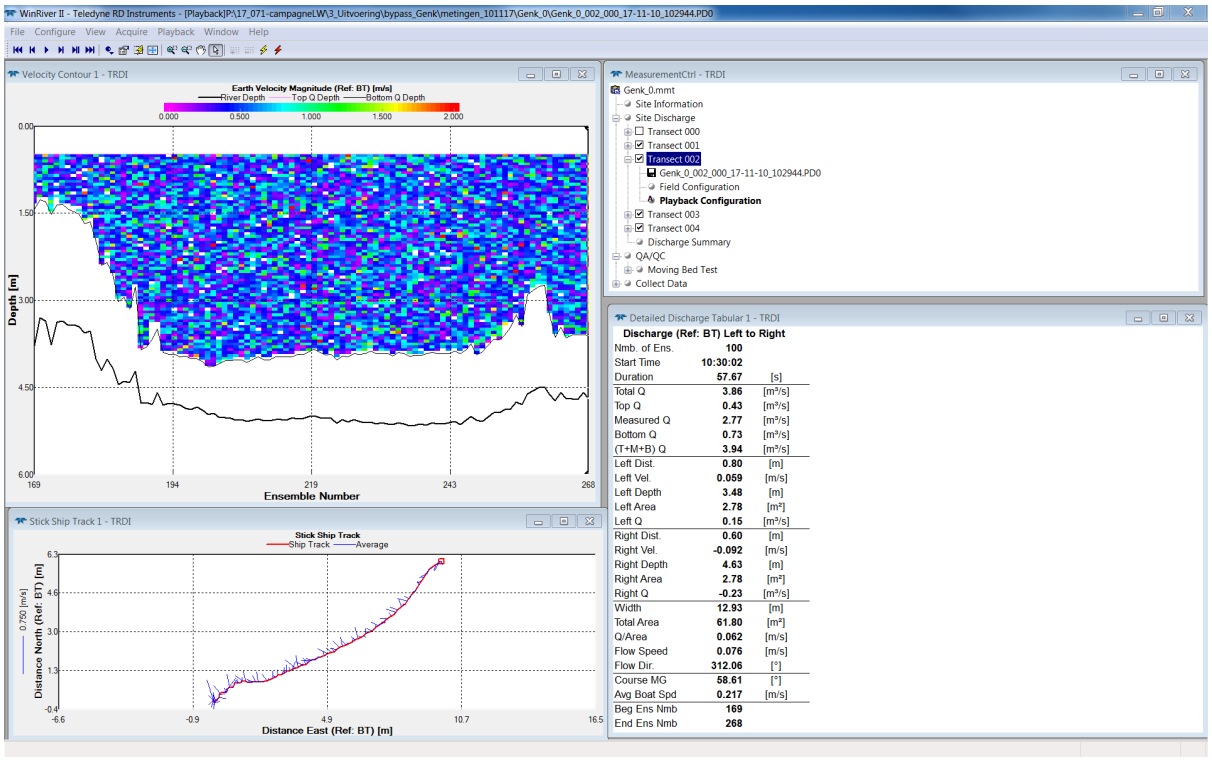
File Configure View Acquire Playback Window Help
Velocity Contour 1 - TRDI
Earth Velocity Magnitude (Ref: BT) [m/s]
River Depth Top Q Depth Bottom Q Depth
0.000 0.500 1.000 1.500 2.000
Depth [m]
Ensemble Number
MeasurementCtrl - TRDI
Genk_0.mmt
Site Information
Site Discharge
Transect 000
Transect 001
Genk_0_001_000_17-11-10_102125.PD0
Field Configuration
Playback Configuration
Transect 002
Transect 003
Transect 004
Discharge Summary
QA/QC
Moving Bed Test
Collect Data
Detailed Discharge Tabular 1 - TRDI
Discharge (Ref: BT) Right to Left
Nmb. of Ens. 106
Start Time 10:28:41
Duration 61.44 [s]
Total Q 5.42 [m³/s]
Top Q 0.52 [m³/s]
Measured Q 3.51 [m³/s]
Bottom Q 0.81 [m³/s]
(T+M+B) Q 4.84 [m³/s]
Left Dist. 0.80 [m]
Left Vel. 0.082 [m/s]
Left Depth 4.28 [m]
Left Area 3.43 [m²]
Left Q 0.26 [m³/s]
Right Dist. 0.60 [m]
Right Vel. 0.125 [m/s]
Right Depth 4.73 [m]
Right Area 2.84 [m²]
Right Q 0.32 [m³/s]
Width 12.61 [m]
Total Area 62.47 [m²]
Q/Area 0.087 [m/s]
Flow Speed 0.088 [m/s]
Flow Dir. 284.08 [°]
Course MG 230.67 [°]
Avg Boat Spd 0.205 [m/s]
Beg Ens Nmb 30
End Ens Nmb 135
Stick Ship Track 1 - TRDI
Stick Ship Track
Ship Track Average
Distance North (Ref: BT) [m]
Distance East (Ref: BT) [m]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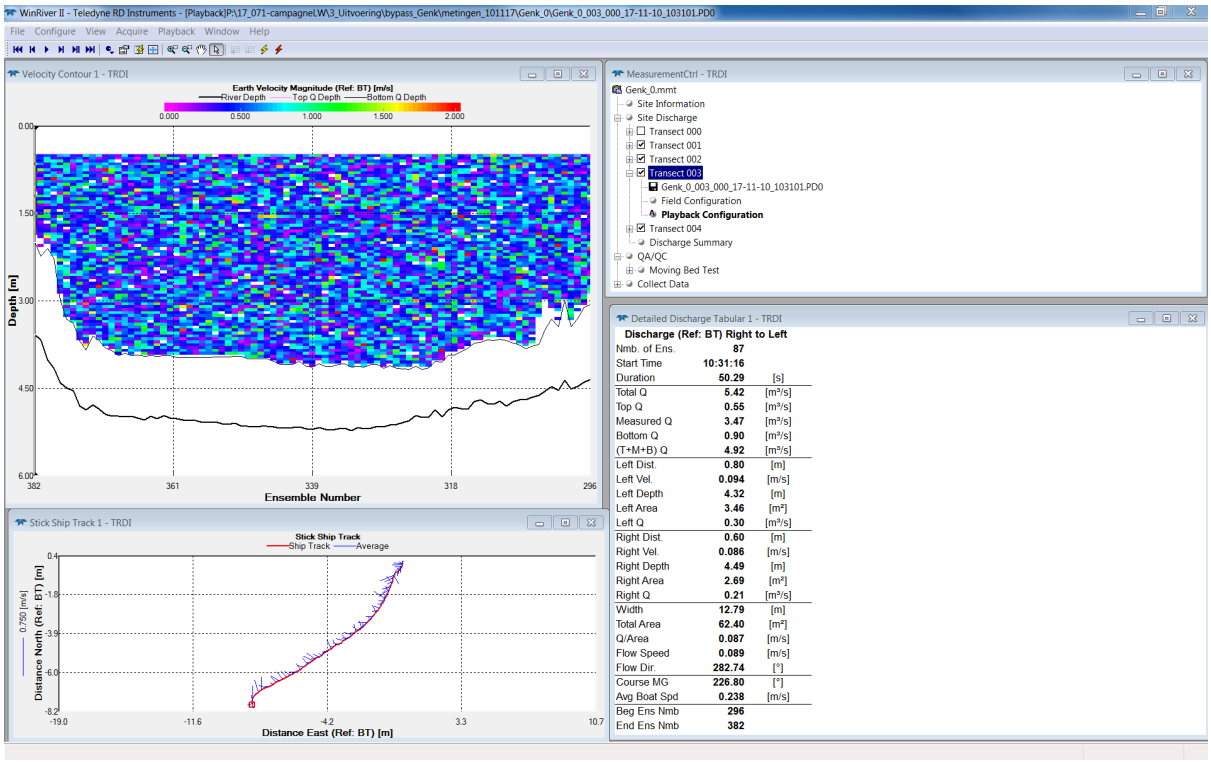
File Configure View Acquire Playback Window Help
Velocity Contour 1 - TRDI
Earth Velocity Magnitude (Ref: BT) [m/s]
River Depth Top Q Depth Bottom Q Depth
0.000 0.500 1.000 1.500 2.000
Depth [m]
Ensemble Number
MeasurementCtrl - TRDI
Genk_0.mmt
Site Information
Site Discharge
Transect 000
Transect 001
Transect 002
Genk_0_002_000_17-11-10_102944.PD0
Field Configuration
Playback Configuration
Transect 003
Transect 004
Discharge Summary
QA/QC
Moving Bed Test
Collect Data
Detailed Discharge Tabular 1 - TRDI
Discharge (Ref: BT) Left to Right
Nmb. of Ens. 100
Start Time 10:30:02
Duration 57.67 [s]
Total Q 3.86 [m³/s]
Top Q 0.43 [m³/s]
Measured Q 2.77 [m³/s]
Bottom Q 0.73 [m³/s]
(T+M+B) Q 3.94 [m³/s]
Left Dist. 0.80 [m]
Left Vel. 0.059 [m/s]
Left Depth 3.48 [m]
Left Area 2.78 [m²]
Left Q 0.15 [m³/s]
Right Dist. 0.60 [m]
Right Vel. -0.092 [m/s]
Right Depth 4.63 [m]
Right Area 2.78 [m²]
Right Q -0.23 [m³/s]
Width 12.93 [m]
Total Area 61.80 [m²]
Q/Area 0.062 [m/s]
Flow Speed 0.076 [m/s]
Flow Dir. 312.06 [°]
Course MG 58.61 [°]
Avg Boat Spd 0.217 [m/s]
Beg Ens Nmb 169
End Ens Nmb 268
Stick Ship Track 1 - TRDI
Stick Ship Track
Ship Track Average
Distance North (Ref: BT) [m]
Distance East (Ref: BT) [m]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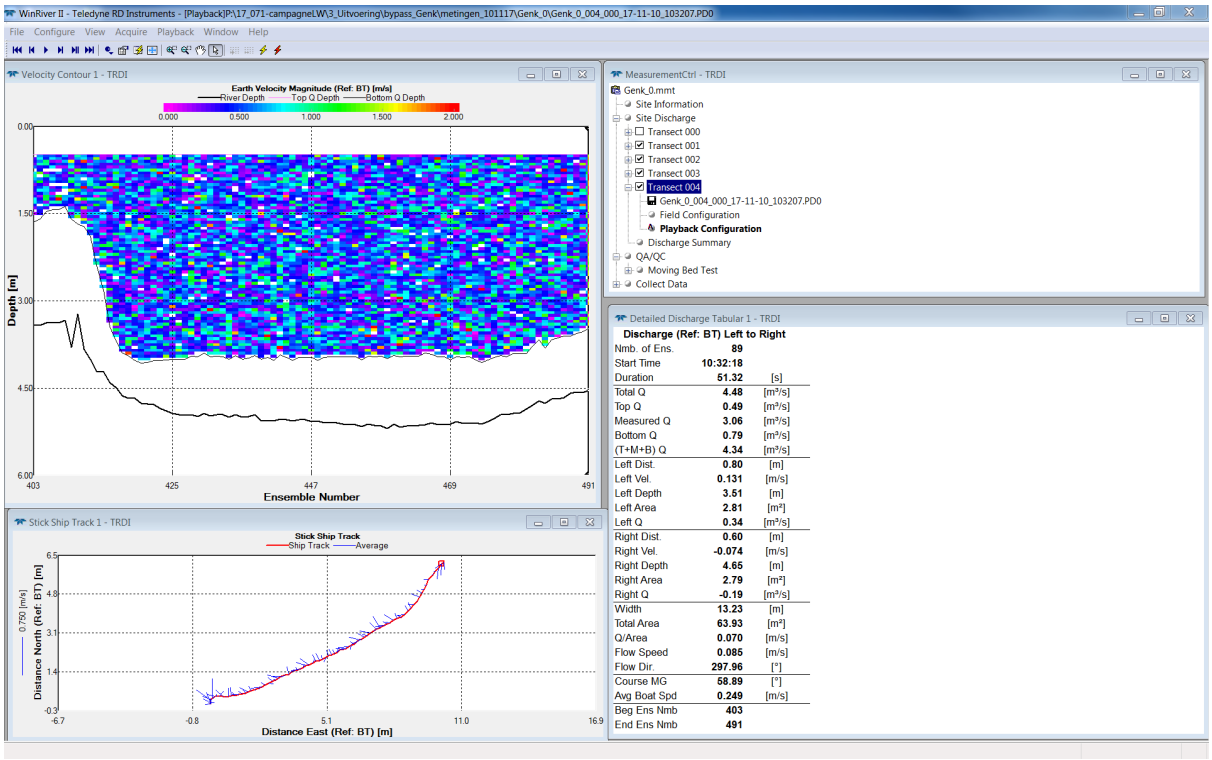
File Configure View Acquire Playback Window Help
Velocity Contour 1 - TRDI
Earth Velocity Magnitude (Ref: BT) [m/s]
River Depth Top Q Depth Bottom Q Depth
0.000 0.500 1.000 1.500 2.000
Depth [m]
Ensemble Number
MeasurementCtrl - TRDI
Genk_0.mmt
Site Information
Site Discharge
Transect 000
Transect 001
Transect 002
Transect 003
Genk_0_003_000_17-11-10_103101.PD0
Field Configuration
Playback Configuration
Transect 004
Discharge Summary
QA/QC
Moving Bed Test
Collect Data
Detailed Discharge Tabular 1 - TRDI
Discharge (Ref: BT) Right to Left
Nmb. of Ens. 87
Start Time 10:31:16
Duration 50.29 [s]
Total Q 5.42 [m³/s]
Top Q 0.55 [m³/s]
Measured Q 3.47 [m³/s]
Bottom Q 0.90 [m³/s]
(T+M+B) Q 4.92 [m³/s]
Left Dist. 0.80 [m]
Left Vel. 0.094 [m/s]
Left Depth 4.32 [m]
Left Area 3.46 [m²]
Left Q 0.30 [m³/s]
Right Dist. 0.60 [m]
Right Vel. 0.086 [m/s]
Right Depth 4.49 [m]
Right Area 2.69 [m²]
Right Q 0.21 [m³/s]
Width 12.79 [m]
Total Area 62.40 [m²]
Q/Area 0.087 [m/s]
Flow Speed 0.089 [m/s]
Flow Dir. 282.74 [°]
Course MG 226.80 [°]
Avg Boat Spd 0.238 [m/s]
Beg Ens Nmb 296
End Ens Nmb 382
Stick Ship Track 1 - TRDI
Stick Ship Track
Ship Track Average
Distance North (Ref: BT) [m]
Distance East (Ref: BT) [m]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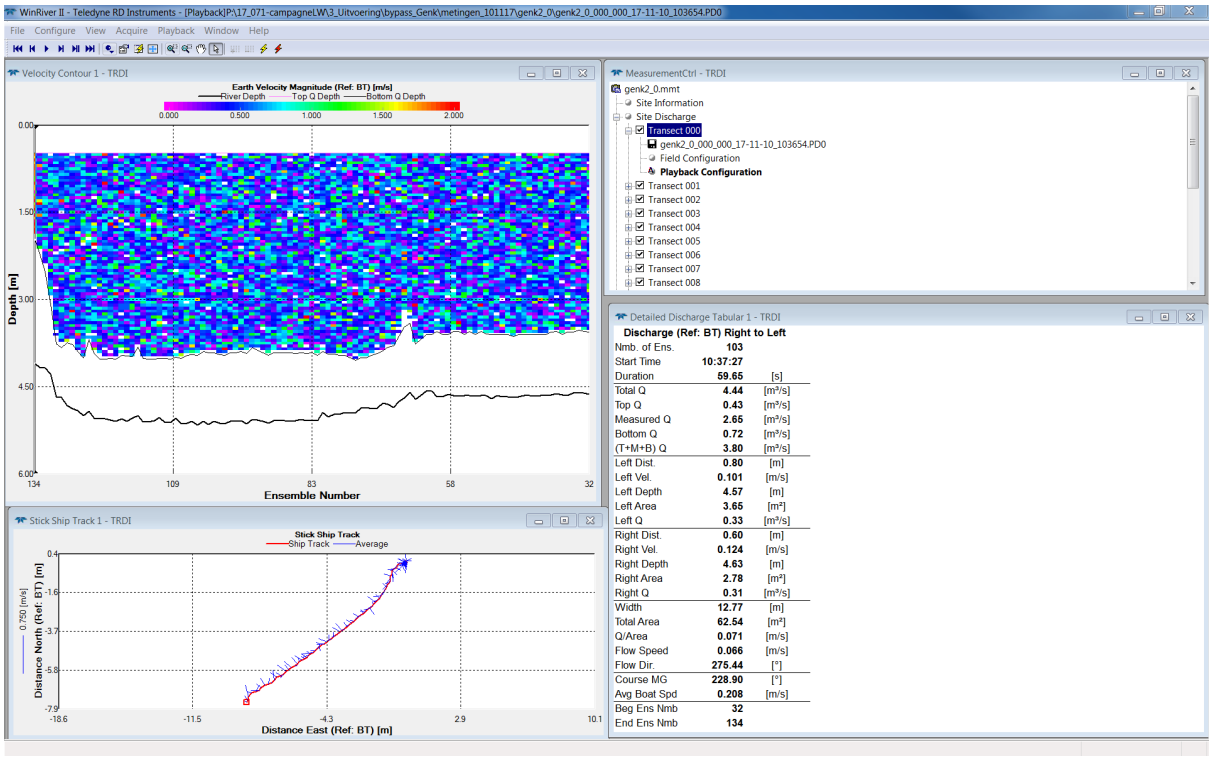
File Configure View Acquire Playback Window Help
Velocity Contour 1 - TRDI
Earth Velocity Magnitude (Ref: BT) [m/s]
River Depth Top Q Depth Bottom Q Depth
0.000 0.500 1.000 1.500 2.000
Depth [m]
Ensemble Number
MeasurementCtrl - TRDI
Genk_0.mmt
Site Information
Site Discharge
Transect 000
Transect 001
Transect 002
Transect 003
Transect 004
Genk_0_004_000_17-11-10_103207.PD0
Field Configuration
Playback Configuration
Discharge Summary
QA/QC
Moving Bed Test
Collect Data
Detailed Discharge Tabular 1 - TRDI
Discharge (Ref: BT) Left to Right
Nmb. of Ens. 89
Start Time 10:32:18
Duration 51.32 [s]
Total Q 4.48 [m³/s]
Top Q 0.49 [m³/s]
Measured Q 3.06 [m³/s]
Bottom Q 0.79 [m³/s]
(T+M+B) Q 4.34 [m³/s]
Left Dist. 0.80 [m]
Left Vel. 0.131 [m/s]
Left Depth 3.51 [m]
Left Area 2.81 [m²]
Left Q 0.34 [m³/s]
Right Dist. 0.60 [m]
Right Vel. -0.074 [m/s]
Right Depth 4.65 [m]
Right Area 2.79 [m²]
Right Q -0.19 [m³/s]
Width 13.23 [m]
Total Area 63.93 [m²]
Q/Area 0.070 [m/s]
Flow Speed 0.085 [m/s]
Flow Dir. 297.96 [°]
Course MG 58.89 [°]
Avg Boat Spd 0.249 [m/s]
Beg Ens Nmb 403
End Ens Nmb 491
Stick Ship Track 1 - TRDI
Stick Ship Track
Ship Track Average
Distance North (Ref: BT) [m]
Distance East (Ref: BT) [m]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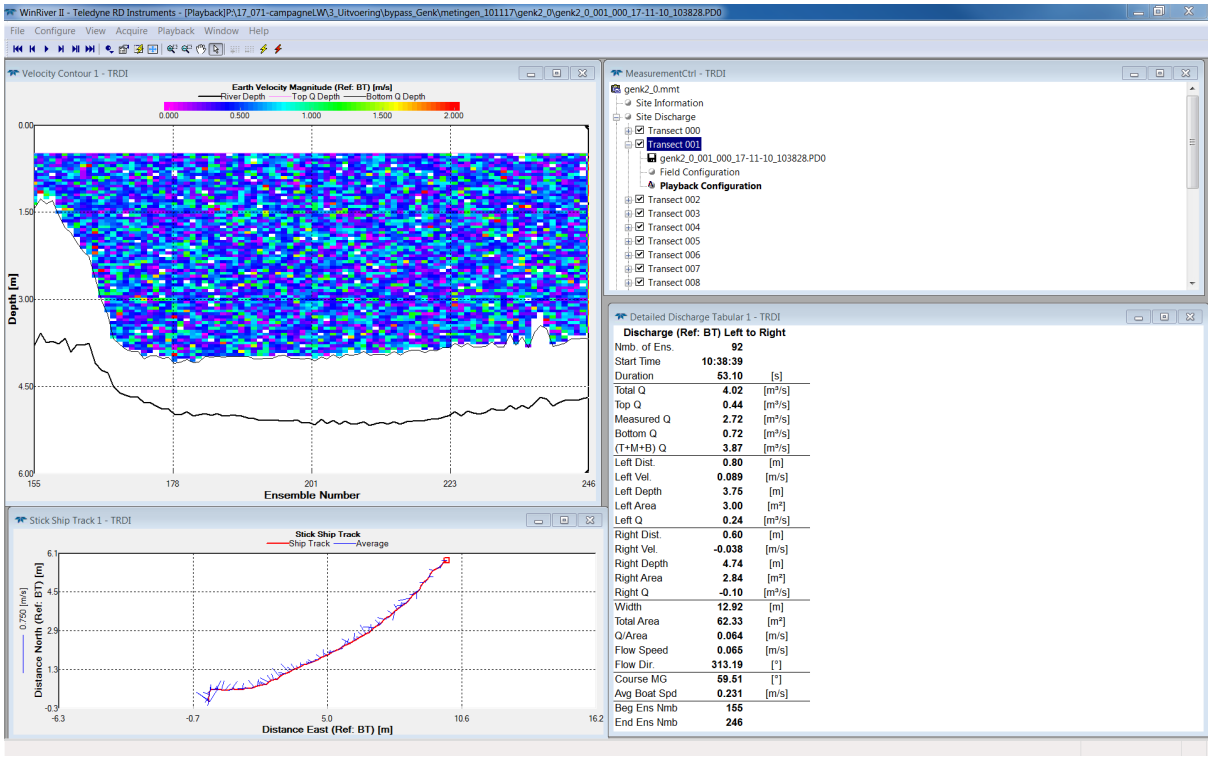
Velocity Contour 1 - TRDI
Earth Velocity Magnitude (Ref: BT) [m/s]
River Depth
Top Q Depth
Bottom Q Depth
Depth [m]
Ensemble Number
MeasurementCtrl - TRDI
genk2_0.mmt
Site Information
Site Discharge
Transect 000
genk2_0_000_000_17-11-10_103654.PD0
Field Configuration
Playback Configuration
Transect 001
Transect 002
Transect 003
Transect 004
Transect 005
Transect 006
Transect 007
Transect 008
Detailed Discharge Tabular 1 - TRDI
Discharge (Ref: BT) Right to Left
Nmb. of Ens. 103
Start Time 10:37:27
Duration 59.65 [s]
Total Q 4.44 [m³/s]
Top Q 0.43 [m³/s]
Measured Q 2.65 [m³/s]
Bottom Q 0.72 [m³/s]
(T+M+B) Q 3.80 [m³/s]
Left Dist. 0.80 [m]
Left Vel. 0.101 [m/s]
Left Depth 4.57 [m]
Left Area 3.65 [m²]
Left Q 0.33 [m³/s]
Right Dist. 0.60 [m]
Right Vel. 0.124 [m/s]
Right Depth 4.63 [m]
Right Area 2.78 [m²]
Right Q 0.31 [m³/s]
Width 12.77 [m]
Total Area 62.54 [m²]
Q/Area 0.071 [m/s]
Flow Speed 0.066 [m/s]
Flow Dir. 275.44 [°]
Course MG 228.90 [°]
Avg Boat Spd 0.208 [m/s]
Beg Ens Nmb 32
End Ens Nmb 134
Stick Ship Track 1 - TRDI
Stick Ship Track
Ship Track
Average
Distance North (Ref: BT) [m]
Distance East (Ref: BT) [m]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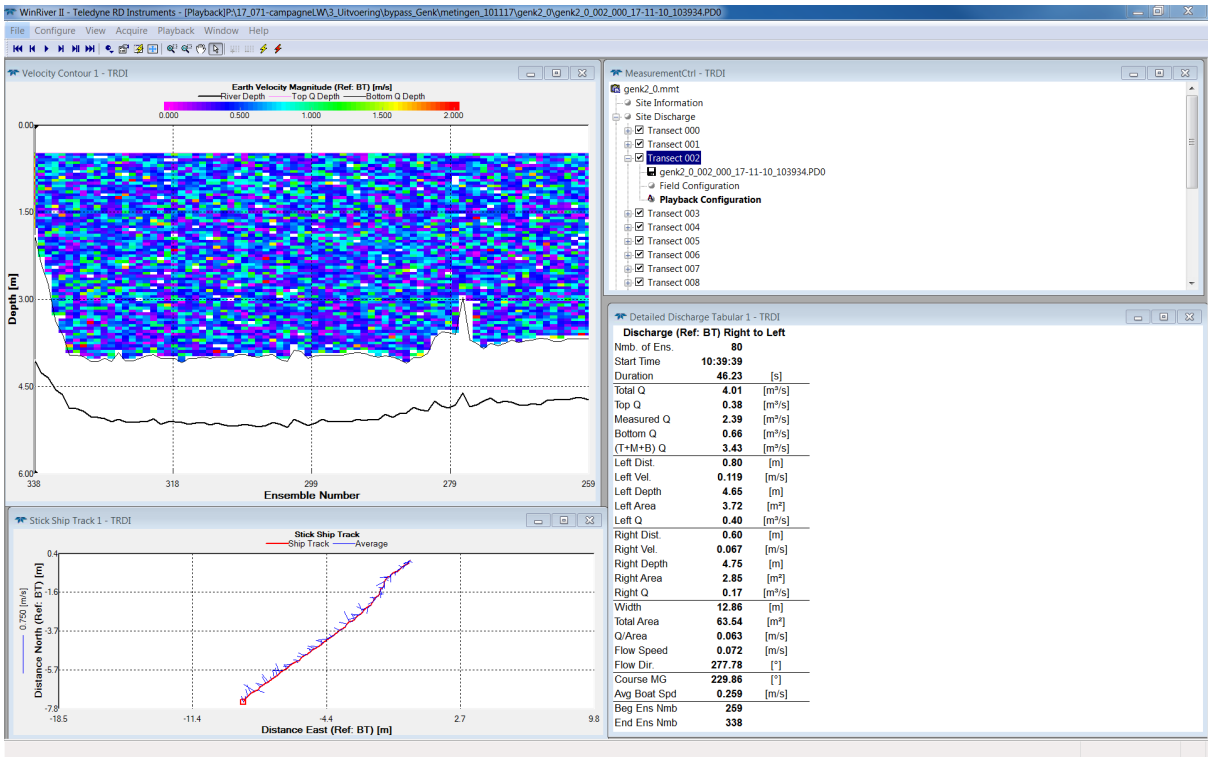
Velocity Contour 1 - TRDI
Earth Velocity Magnitude (Ref: BT) [m/s]
River Depth
Top Q Depth
Bottom Q Depth
Depth [m]
Ensemble Number
MeasurementCtrl - TRDI
genk2_0.mmt
Site Information
Site Discharge
Transect 000
Transect 001
genk2_0_001_000_17-11-10_103828.PD0
Field Configuration
Playback Configuration
Transect 002
Transect 003
Transect 004
Transect 005
Transect 006
Transect 007
Transect 008
Detailed Discharge Tabular 1 - TRDI
Discharge (Ref: BT) Left to Right
Nmb. of Ens. 92
Start Time 10:38:39
Duration 53.10 [s]
Total Q 4.02 [m³/s]
Top Q 0.44 [m³/s]
Measured Q 2.72 [m³/s]
Bottom Q 0.72 [m³/s]
(T+M+B) Q 3.87 [m³/s]
Left Dist. 0.80 [m]
Left Vel. 0.089 [m/s]
Left Depth 3.75 [m]
Left Area 3.00 [m²]
Left Q 0.24 [m³/s]
Right Dist. 0.60 [m]
Right Vel. -0.038 [m/s]
Right Depth 4.74 [m]
Right Area 2.84 [m²]
Right Q -0.10 [m³/s]
Width 12.92 [m]
Total Area 62.33 [m²]
Q/Area 0.064 [m/s]
Flow Speed 0.065 [m/s]
Flow Dir. 313.19 [°]
Course MG 59.51 [°]
Avg Boat Spd 0.231 [m/s]
Beg Ens Nmb 155
End Ens Nmb 246
Stick Ship Track 1 - TRDI
Stick Ship Track
Ship Track
Average
Distance North (Ref: BT) [m]
Distance East (Ref: BT) [m]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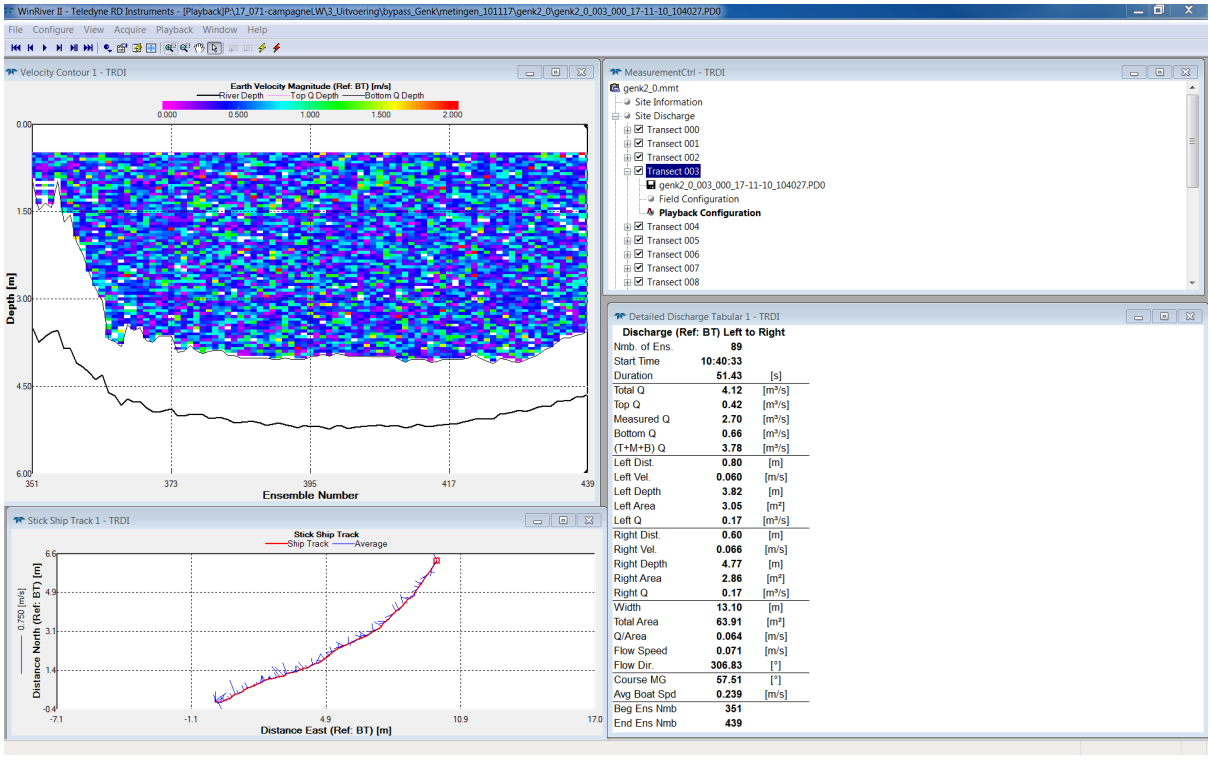
Velocity Contour 1 - TRDI
Earth Velocity Magnitude (Ref: BT) [m/s]
River Depth
Top Q Depth
Bottom Q Depth
Depth [m]
Ensemble Number
MeasurementCtrl - TRDI
genk2_0.mmt
Site Information
Site Discharge
Transect 000
Transect 001
Transect 002
genk2_0_002_000_17-11-10_103934.PD0
Field Configuration
Playback Configuration
Transect 003
Transect 004
Transect 005
Transect 006
Transect 007
Transect 008
Detailed Discharge Tabular 1 - TRDI
Discharge (Ref: BT) Right to Left
Nmb. of Ens. 80
Start Time 10:39:39
Duration 46.23 [s]
Total Q 4.01 [m³/s]
Top Q 0.38 [m³/s]
Measured Q 2.39 [m³/s]
Bottom Q 0.66 [m³/s]
(T+M+B) Q 3.43 [m³/s]
Left Dist. 0.80 [m]
Left Vel. 0.119 [m/s]
Left Depth 4.65 [m]
Left Area 3.72 [m²]
Left Q 0.40 [m³/s]
Right Dist. 0.60 [m]
Right Vel. 0.067 [m/s]
Right Depth 4.75 [m]
Right Area 2.85 [m²]
Right Q 0.17 [m³/s]
Width 12.86 [m]
Total Area 63.54 [m²]
Q/Area 0.063 [m/s]
Flow Speed 0.072 [m/s]
Flow Dir. 277.78 [°]
Course MG 229.86 [°]
Avg Boat Spd 0.259 [m/s]
Beg Ens Nmb 259
End Ens Nmb 338
Stick Ship Track 1 - TRDI
Stick Ship Track
Ship Track
Average
Distance North (Ref: BT) [m]
Distance East (Ref: BT) [m]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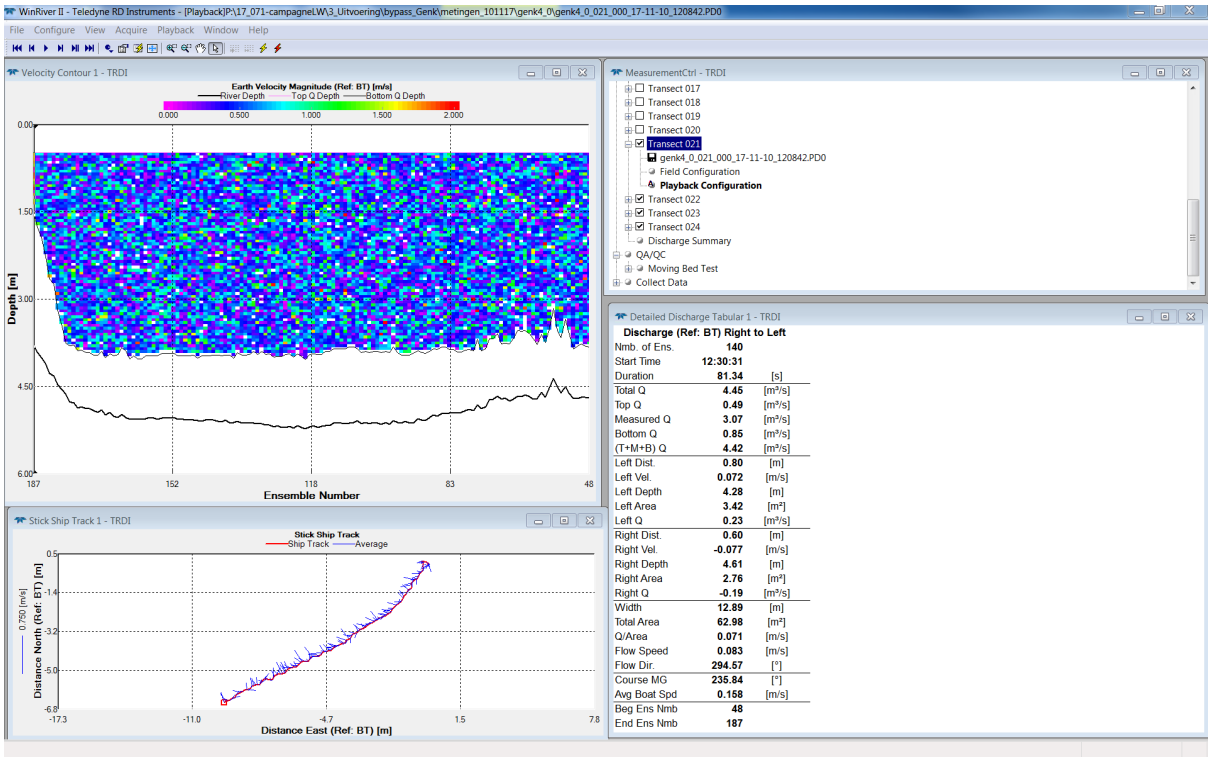
Velocity Contour 1 - TRDI
Earth Velocity Magnitude (Ref: BT) [m/s]
River Depth
Top Q Depth
Bottom Q Depth
Depth [m]
Ensemble Number
MeasurementCtrl - TRDI
genk2_0.mmt
Site Information
Site Discharge
Transect 000
Transect 001
Transect 002
Transect 003
genk2_0_003_000_17-11-10_104027.PD0
Field Configuration
Playback Configuration
Transect 004
Transect 005
Transect 006
Transect 007
Transect 008
Detailed Discharge Tabular 1 - TRDI
Discharge (Ref: BT) Left to Right
Nmb. of Ens. 89
Start Time 10:40:33
Duration 51.43 [s]
Total Q 4.12 [m³/s]
Top Q 0.42 [m³/s]
Measured Q 2.70 [m³/s]
Bottom Q 0.66 [m³/s]
(T+M+B) Q 3.78 [m³/s]
Left Dist. 0.80 [m]
Left Vel. 0.060 [m/s]
Left Depth 3.82 [m]
Left Area 3.05 [m²]
Left Q 0.17 [m³/s]
Right Dist. 0.60 [m]
Right Vel. 0.066 [m/s]
Right Depth 4.77 [m]
Right Area 2.86 [m²]
Right Q 0.17 [m³/s]
Width 13.10 [m]
Total Area 63.91 [m²]
Q/Area 0.064 [m/s]
Flow Speed 0.071 [m/s]
Flow Dir. 306.83 [°]
Course MG 57.51 [°]
Avg Boat Spd 0.239 [m/s]
Beg Ens Nmb 351
End Ens Nmb 439
Stick Ship Track 1 - TRDI
Stick Ship Track
Ship Track
Average
Distance North (Ref: BT) [m]
Distance East (Ref: BT) [m]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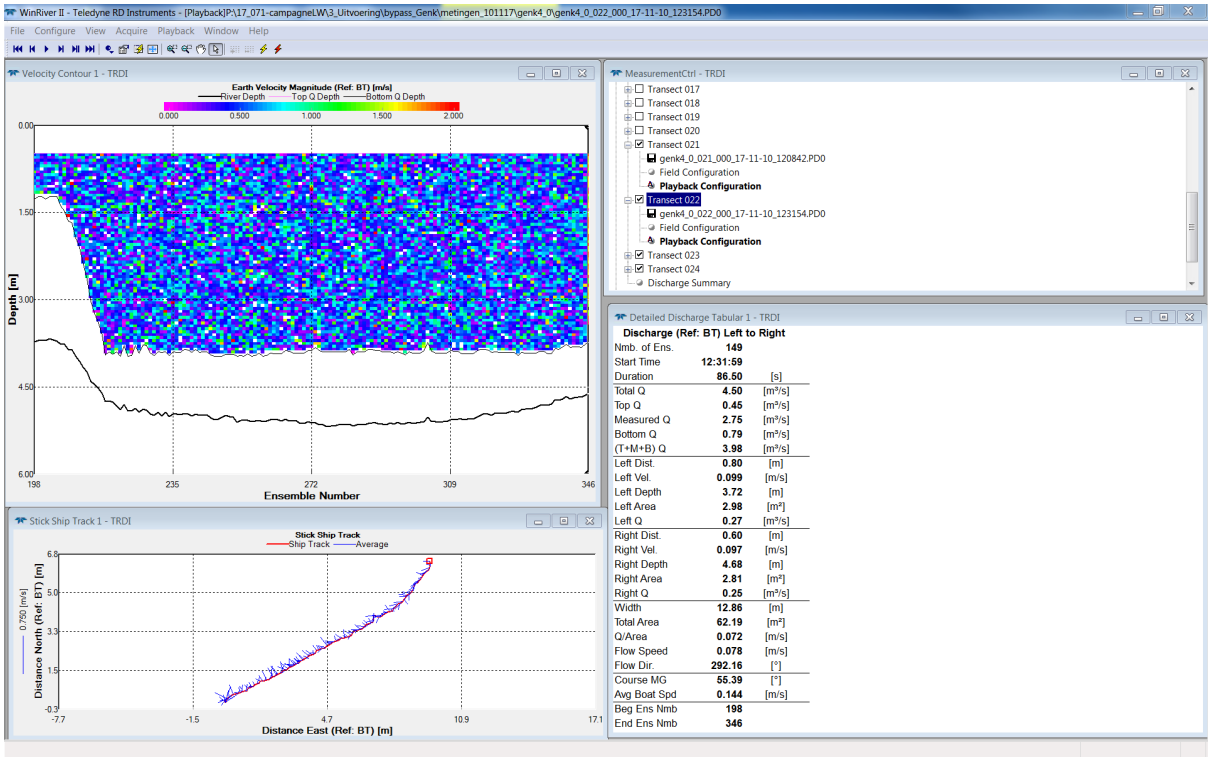
File Configure View Acquire Playback Window Help
Velocity Contour 1 - TRDI
Earth Velocity Magnitude (Ref: BT) [m/s]
River Depth Top Q Depth Bottom Q Depth
0.000 0.500 1.000 1.500 2.000
Depth [m]
Ensemble Number
MeasurementCtrl - TRDI
Transect 017
Transect 018
Transect 019
Transect 020
Transect 021
genk4_0_021_000_17-11-10_120842.PD0
Field Configuration
Playback Configuration
Transect 022
Transect 023
Transect 024
Discharge Summary
QA/QC
Moving Bed Test
Collect Data
Detailed Discharge Tabular 1 - TRDI
Discharge (Ref: BT) Right to Left
Nmb. of Ens. 140
Start Time 12:30:31
Duration 81.34 [s]
Total Q 4.45 [m³/s]
Top Q 0.49 [m³/s]
Measured Q 3.07 [m³/s]
Bottom Q 0.85 [m³/s]
(T+M+B) Q 4.42 [m³/s]
Left Dist. 0.80 [m]
Left Vel. 0.072 [m/s]
Left Depth 4.28 [m]
Left Area 3.42 [m²]
Left Q 0.23 [m³/s]
Right Dist. 0.60 [m]
Right Vel. -0.077 [m/s]
Right Depth 4.61 [m]
Right Area 2.76 [m²]
Right Q -0.19 [m³/s]
Width 12.89 [m]
Total Area 62.98 [m²]
Q/Area 0.071 [m/s]
Flow Speed 0.083 [m/s]
Flow Dir. 294.57 [°]
Course MG 235.84 [°]
Avg Boat Spd 0.158 [m/s]
Beg Ens Nmb 48
End Ens Nmb 187
Stick Ship Track 1 - TRDI
Stick Ship Track
Ship Track Average
Distance North (Ref: BT) [m]
Distance East (Ref: BT) [m]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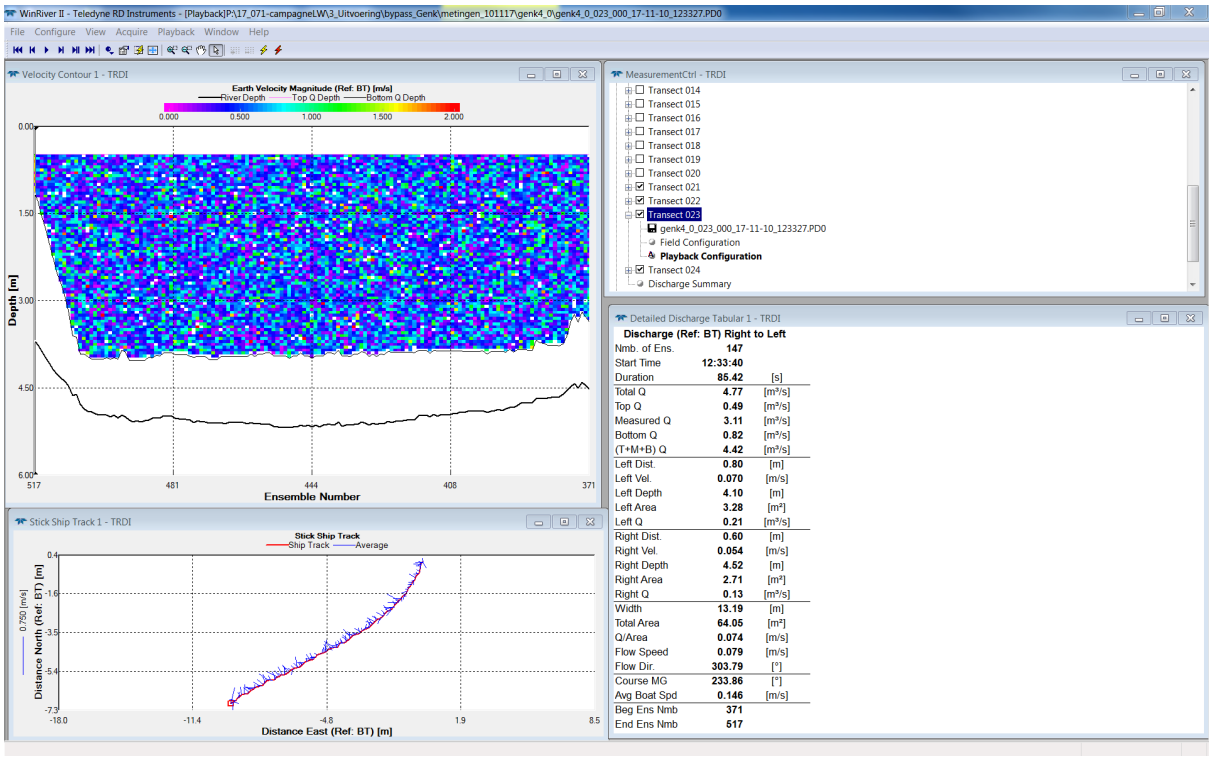
File Configure View Acquire Playback Window Help
Velocity Contour 1 - TRDI
Earth Velocity Magnitude (Ref: BT) [m/s]
River Depth Top Q Depth Bottom Q Depth
0.000 0.500 1.000 1.500 2.000
Depth [m]
Ensemble Number
MeasurementCtrl - TRDI
Transect 017
Transect 018
Transect 019
Transect 020
Transect 021
genk4_0_021_000_17-11-10_120842.PD0
Field Configuration
Playback Configuration
Transect 022
genk4_0_022_000_17-11-10_123154.PD0
Field Configuration
Playback Configuration
Transect 023
Transect 024
Discharge Summary
Detailed Discharge Tabular 1 - TRDI
Discharge (Ref: BT) Left to Right
Nmb. of Ens. 149
Start Time 12:31:59
Duration 86.50 [s]
Total Q 4.50 [m³/s]
Top Q 0.45 [m³/s]
Measured Q 2.75 [m³/s]
Bottom Q 0.79 [m³/s]
(T+M+B) Q 3.98 [m³/s]
Left Dist. 0.80 [m]
Left Vel. 0.099 [m/s]
Left Depth 3.72 [m]
Left Area 2.98 [m²]
Left Q 0.27 [m³/s]
Right Dist. 0.60 [m]
Right Vel. 0.097 [m/s]
Right Depth 4.68 [m]
Right Area 2.81 [m²]
Right Q 0.25 [m³/s]
Width 12.86 [m]
Total Area 62.19 [m²]
Q/Area 0.072 [m/s]
Flow Speed 0.078 [m/s]
Flow Dir. 292.16 [°]
Course MG 55.39 [°]
Avg Boat Spd 0.144 [m/s]
Beg Ens Nmb 198
End Ens Nmb 346
Stick Ship Track 1 - TRDI
Stick Ship Track
Ship Track Average
Distance North (Ref: BT) [m]
Distance East (Ref: BT) [m]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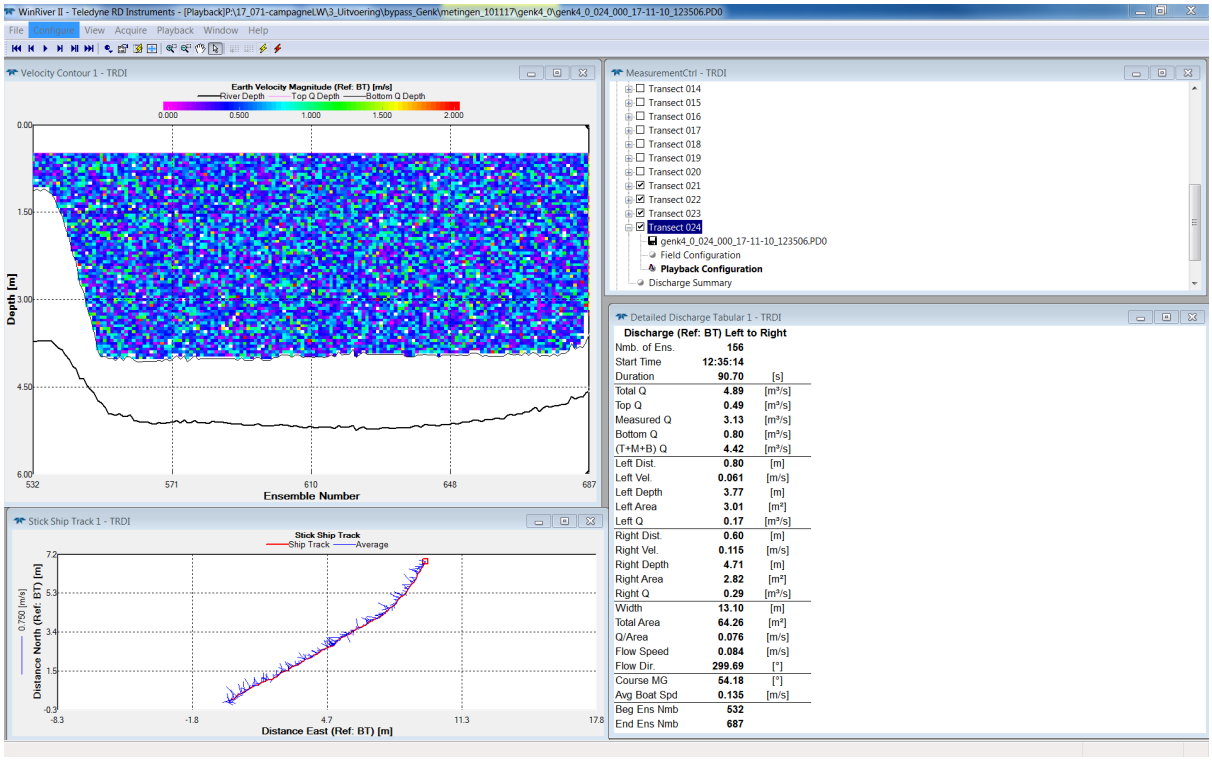
File Configure View Acquire Playback Window Help
Velocity Contour 1 - TRDI
Earth Velocity Magnitude (Ref: BT) [m/s]
River Depth Top Q Depth Bottom Q Depth
0.000 0.500 1.000 1.500 2.000
Depth [m]
Ensemble Number
MeasurementCtrl - TRDI
Transect 014
Transect 015
Transect 016
Transect 017
Transect 018
Transect 019
Transect 020
Transect 021
Transect 022
Transect 023
genk4_0_023_000_17-11-10_123327.PD0
Field Configuration
Playback Configuration
Transect 024
Discharge Summary
Detailed Discharge Tabular 1 - TRDI
Discharge (Ref: BT) Right to Left
Nmb. of Ens. 147
Start Time 12:33:40
Duration 85.42 [s]
Total Q 4.77 [m³/s]
Top Q 0.49 [m³/s]
Measured Q 3.11 [m³/s]
Bottom Q 0.82 [m³/s]
(T+M+B) Q 4.42 [m³/s]
Left Dist. 0.80 [m]
Left Vel. 0.070 [m/s]
Left Depth 4.10 [m]
Left Area 3.28 [m²]
Left Q 0.21 [m³/s]
Right Dist. 0.60 [m]
Right Vel. 0.054 [m/s]
Right Depth 4.52 [m]
Right Area 2.71 [m²]
Right Q 0.13 [m³/s]
Width 13.19 [m]
Total Area 64.05 [m²]
Q/Area 0.074 [m/s]
Flow Speed 0.079 [m/s]
Flow Dir. 303.79 [°]
Course MG 233.86 [°]
Avg Boat Spd 0.146 [m/s]
Beg Ens Nmb 371
End Ens Nmb 517
Stick Ship Track 1 - TRDI
Stick Ship Track
Ship Track Average
Distance North (Ref: BT) [m]
Distance East (Ref: BT) [m]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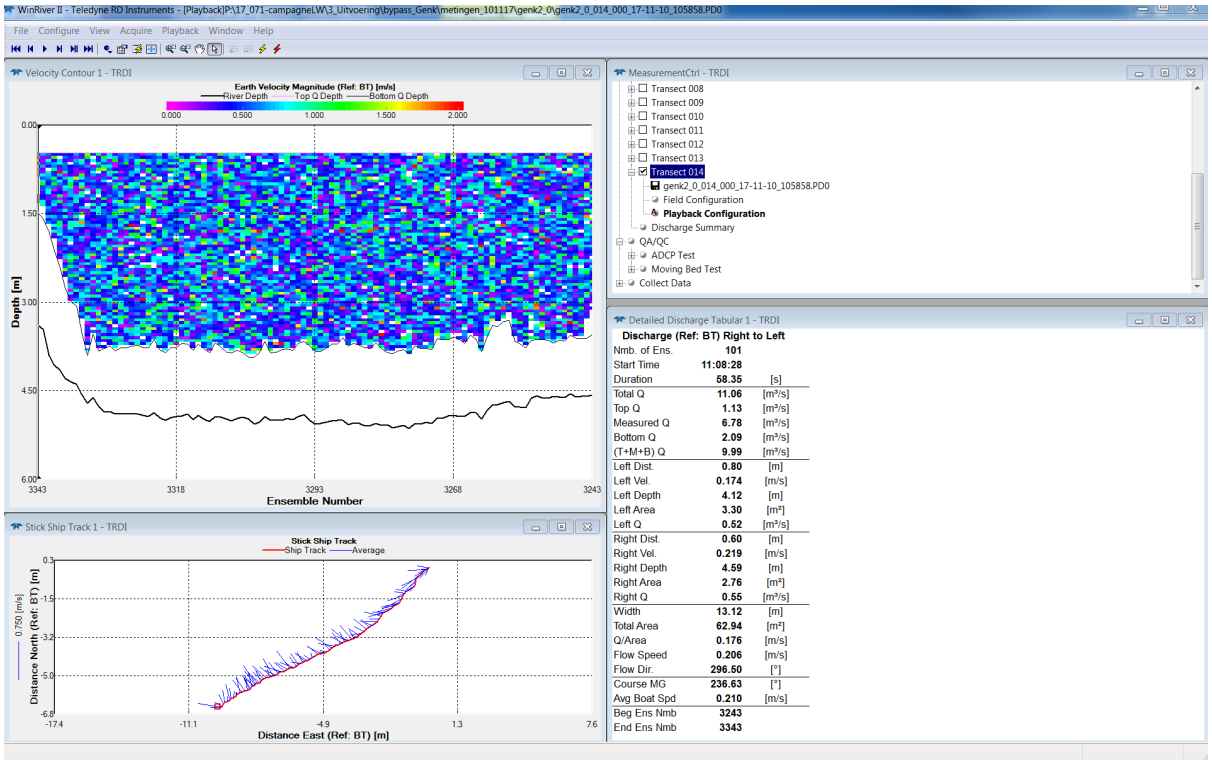
File Configure View Acquire Playback Window Help
Velocity Contour 1 - TRDI
Earth Velocity Magnitude (Ref: BT) [m/s]
River Depth Top Q Depth Bottom Q Depth
0.000 0.500 1.000 1.500 2.000
Depth [m]
Ensemble Number
MeasurementCtrl - TRDI
Transect 014
Transect 015
Transect 016
Transect 017
Transect 018
Transect 019
Transect 020
Transect 021
Transect 022
Transect 023
Transect 024
genk4_0_024_000_17-11-10_123506.PD0
Field Configuration
Playback Configuration
Discharge Summary
Detailed Discharge Tabular 1 - TRDI
Discharge (Ref: BT) Left to Right
Nmb. of Ens. 156
Start Time 12:35:14
Duration 90.70 [s]
Total Q 4.89 [m³/s]
Top Q 0.49 [m³/s]
Measured Q 3.13 [m³/s]
Bottom Q 0.80 [m³/s]
(T+M+B) Q 4.42 [m³/s]
Left Dist. 0.80 [m]
Left Vel. 0.061 [m/s]
Left Depth 3.77 [m]
Left Area 3.01 [m²]
Left Q 0.17 [m³/s]
Right Dist. 0.60 [m]
Right Vel. 0.115 [m/s]
Right Depth 4.71 [m]
Right Area 2.82 [m²]
Right Q 0.29 [m³/s]
Width 13.10 [m]
Total Area 64.26 [m²]
Q/Area 0.076 [m/s]
Flow Speed 0.084 [m/s]
Flow Dir. 299.69 [°]
Course MG 54.18 [°]
Avg Boat Spd 0.135 [m/s]
Beg Ens Nmb 532
End Ens Nmb 687
Stick Ship Track 1 - TRDI
Stick Ship Track
Ship Track Average
Distance North (Ref: BT) [m]
Distance East (Ref: BT) [m]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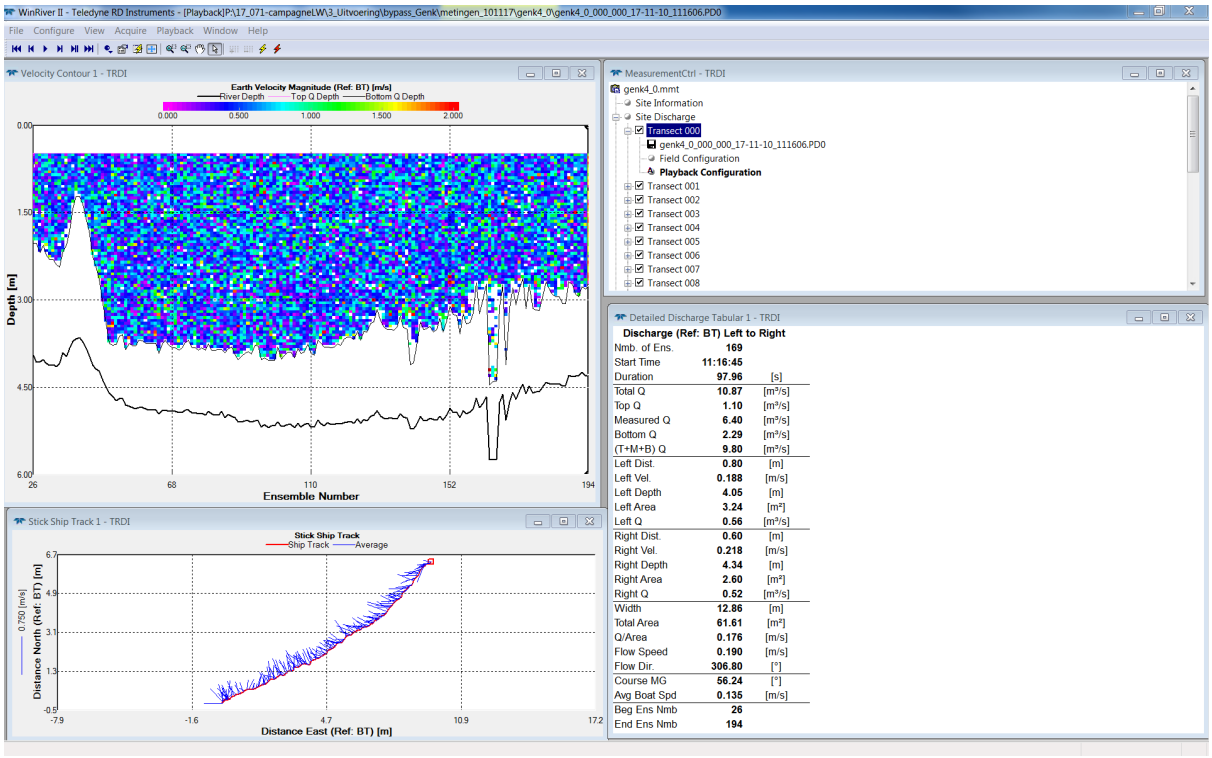
File Configure View Acquire Playback Window Help
Velocity Contour 1 - TRDI
Earth Velocity Magnitude (Ref: BT) [m/s]
River Depth Top Q Depth Bottom Q Depth
0.000 0.500 1.000 1.500 2.000
Depth [m]
Ensemble Number
MeasurementCtrl - TRDI
Transect 008
Transect 009
Transect 010
Transect 011
Transect 012
Transect 013
Transect 014
genk2_0_014_000_17-11-10_105858.PD0
Field Configuration
Playback Configuration
Discharge Summary
QA/QC
ADCP Test
Moving Bed Test
Collect Data
Detailed Discharge Tabular 1 - TRDI
Discharge (Ref: BT) Right to Left
Nmb. of Ens. 101
Start Time 11:08:28
Duration 58.35 [s]
Total Q 11.06 [m³/s]
Top Q 1.13 [m³/s]
Measured Q 6.78 [m³/s]
Bottom Q 2.09 [m³/s]
(T+M+B) Q 9.99 [m³/s]
Left Dist. 0.80 [m]
Left Vel. 0.174 [m/s]
Left Depth 4.12 [m]
Left Area 3.30 [m²]
Left Q 0.52 [m³/s]
Right Dist. 0.60 [m]
Right Vel. 0.219 [m/s]
Right Depth 4.59 [m]
Right Area 2.76 [m²]
Right Q 0.55 [m³/s]
Width 13.12 [m]
Total Area 62.94 [m²]
Q/Area 0.176 [m/s]
Flow Speed 0.206 [m/s]
Flow Dir. 296.50 [°]
Course MG 236.63 [°]
Avg Boat Spd 0.210 [m/s]
Beg Ens Nmb 3243
End Ens Nmb 3343
Stick Ship Track 1 - TRDI
Stick Ship Track
Ship Track Average
Distance North (Ref: BT) [m]
Distance East (Ref: BT) [m]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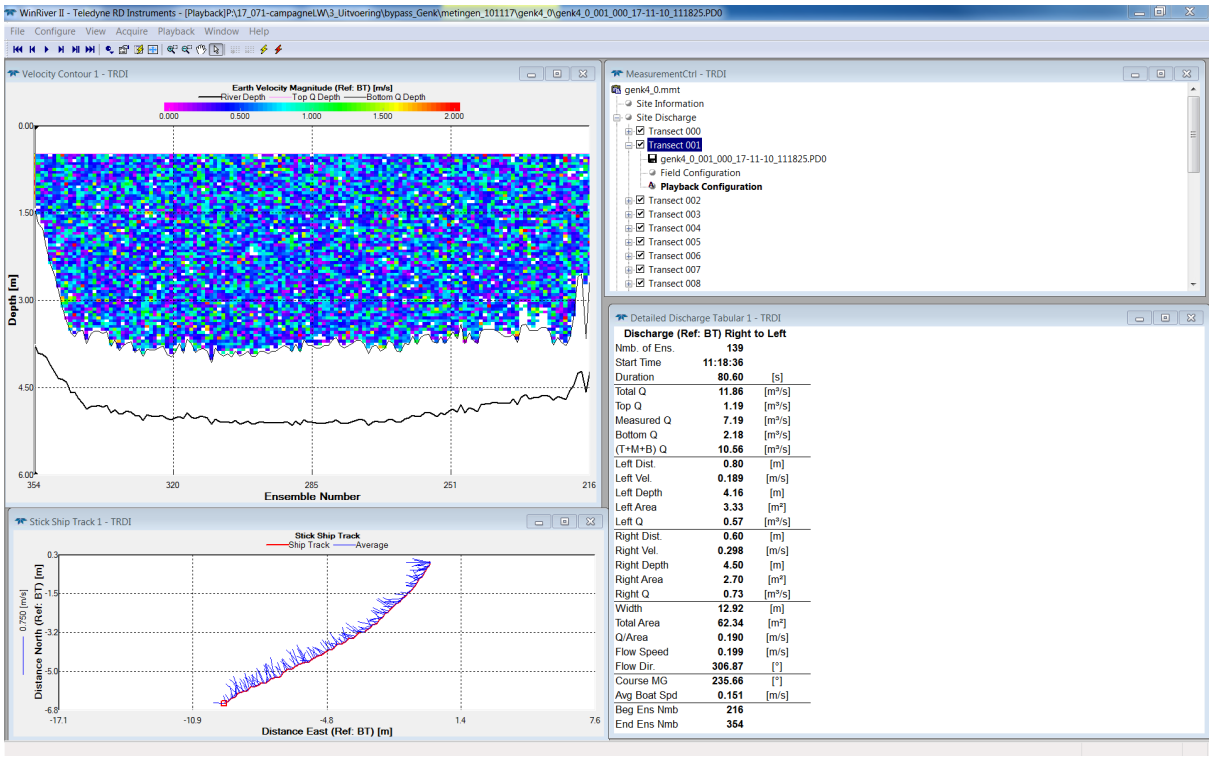
File Configure View Acquire Playback Window Help
Velocity Contour 1 - TRDI
Earth Velocity Magnitude (Ref: BT) [m/s]
River Depth Top Q Depth Bottom Q Depth
0.000 0.500 1.000 1.500 2.000
Depth [m]
Ensemble Number
MeasurementCtrl - TRDI
genk4_0.mmt
Site Information
Site Discharge
Transect 000
genk4_0_000_000_17-11-10_111606.PD0
Field Configuration
Playback Configuration
Transect 001
Transect 002
Transect 003
Transect 004
Transect 005
Transect 006
Transect 007
Transect 008
Detailed Discharge Tabular 1 - TRDI
Discharge (Ref: BT) Left to Right
Nmb. of Ens. 169
Start Time 11:16:45
Duration 97.96 [s]
Total Q 10.87 [m³/s]
Top Q 1.10 [m³/s]
Measured Q 6.40 [m³/s]
Bottom Q 2.29 [m³/s]
(T+M+B) Q 9.80 [m³/s]
Left Dist. 0.80 [m]
Left Vel. 0.188 [m/s]
Left Depth 4.05 [m]
Left Area 3.24 [m²]
Left Q 0.56 [m³/s]
Right Dist. 0.60 [m]
Right Vel. 0.218 [m/s]
Right Depth 4.34 [m]
Right Area 2.60 [m²]
Right Q 0.52 [m³/s]
Width 12.86 [m]
Total Area 61.61 [m²]
Q/Area 0.176 [m/s]
Flow Speed 0.190 [m/s]
Flow Dir. 306.80 [°]
Course MG 56.24 [°]
Avg Boat Spd 0.135 [m/s]
Beg Ens Nmb 26
End Ens Nmb 194
Stick Ship Track 1 - TRDI
Stick Ship Track
Ship Track Average
Distance North (Ref: BT) [m]
Distance East (Ref: BT) [m]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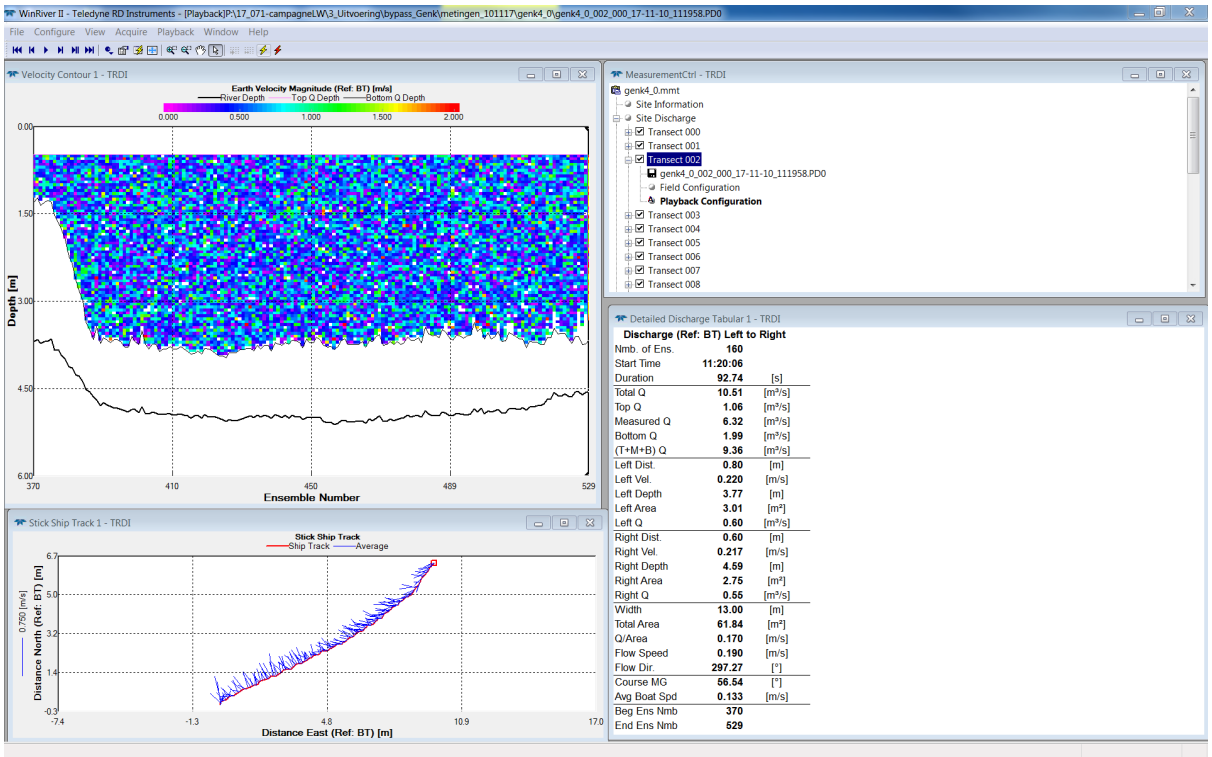
File Configure View Acquire Playback Window Help
Velocity Contour 1 - TRDI
Earth Velocity Magnitude (Ref: BT) [m/s]
River Depth Top Q Depth Bottom Q Depth
0.000 0.500 1.000 1.500 2.000
Depth [m]
Ensemble Number
MeasurementCtrl - TRDI
genk4_0.mmt
Site Information
Site Discharge
Transect 000
Transect 001
genk4_0_001_000_17-11-10_111825.PD0
Field Configuration
Playback Configuration
Transect 002
Transect 003
Transect 004
Transect 005
Transect 006
Transect 007
Transect 008
Detailed Discharge Tabular 1 - TRDI
Discharge (Ref: BT) Right to Left
Nmb. of Ens. 139
Start Time 11:18:36
Duration 80.60 [s]
Total Q 11.86 [m³/s]
Top Q 1.19 [m³/s]
Measured Q 7.19 [m³/s]
Bottom Q 2.18 [m³/s]
(T+M+B) Q 10.56 [m³/s]
Left Dist. 0.80 [m]
Left Vel. 0.189 [m/s]
Left Depth 4.16 [m]
Left Area 3.33 [m²]
Left Q 0.57 [m³/s]
Right Dist. 0.60 [m]
Right Vel. 0.298 [m/s]
Right Depth 4.50 [m]
Right Area 2.70 [m²]
Right Q 0.73 [m³/s]
Width 12.92 [m]
Total Area 62.34 [m²]
Q/Area 0.190 [m/s]
Flow Speed 0.199 [m/s]
Flow Dir. 306.87 [°]
Course MG 235.66 [°]
Avg Boat Spd 0.151 [m/s]
Beg Ens Nmb 216
End Ens Nmb 354
Stick Ship Track 1 - TRDI
Stick Ship Track
Ship Track Average
Distance North (Ref: BT) [m]
Distance East (Ref: BT) [m]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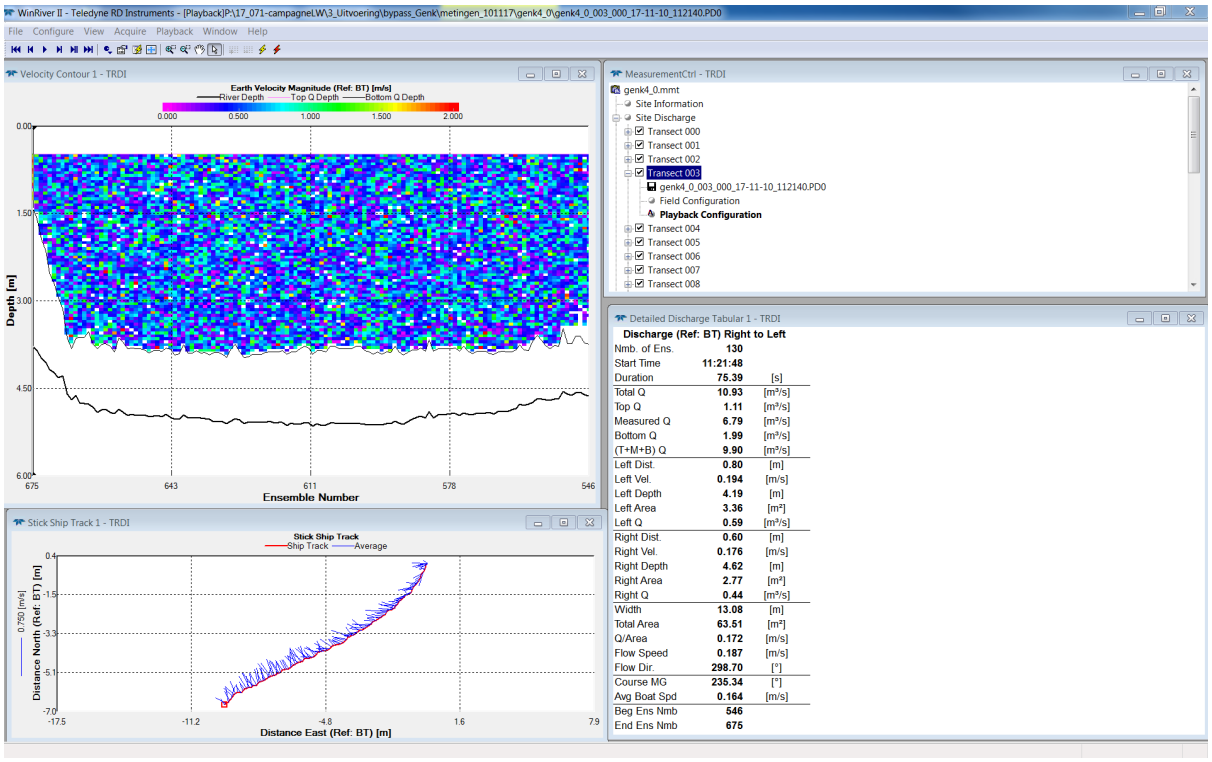
File Configure View Acquire Playback Window Help
Velocity Contour 1 - TRDI
Earth Velocity Magnitude (Ref: BT) [m/s]
River Depth Top Q Depth Bottom Q Depth
0.000 0.500 1.000 1.500 2.000
Depth [m]
Ensemble Number
MeasurementCtrl - TRDI
genk4_0.mmt
Site Information
Site Discharge
Transect 000
Transect 001
Transect 002
genk4_0_002_000_17-11-10_111958.PD0
Field Configuration
Playback Configuration
Transect 003
Transect 004
Transect 005
Transect 006
Transect 007
Transect 008
Detailed Discharge Tabular 1 - TRDI
Discharge (Ref: BT) Left to Right
Nmb. of Ens. 160
Start Time 11:20:06
Duration 92.74 [s]
Total Q 10.51 [m³/s]
Top Q 1.06 [m³/s]
Measured Q 6.32 [m³/s]
Bottom Q 1.99 [m³/s]
(T+M+B) Q 9.36 [m³/s]
Left Dist. 0.80 [m]
Left Vel. 0.220 [m/s]
Left Depth 3.77 [m]
Left Area 3.01 [m²]
Left Q 0.60 [m³/s]
Right Dist. 0.60 [m]
Right Vel. 0.217 [m/s]
Right Depth 4.59 [m]
Right Area 2.75 [m²]
Right Q 0.55 [m³/s]
Width 13.00 [m]
Total Area 61.84 [m²]
Q/Area 0.170 [m/s]
Flow Speed 0.190 [m/s]
Flow Dir. 297.27 [°]
Course MG 56.54 [°]
Avg Boat Spd 0.133 [m/s]
Beg Ens Nmb 370
End Ens Nmb 529
Stick Ship Track 1 - TRDI
Stick Ship Track
Ship Track Average
Distance North (Ref: BT) [m]
Distance East (Ref: BT) [m]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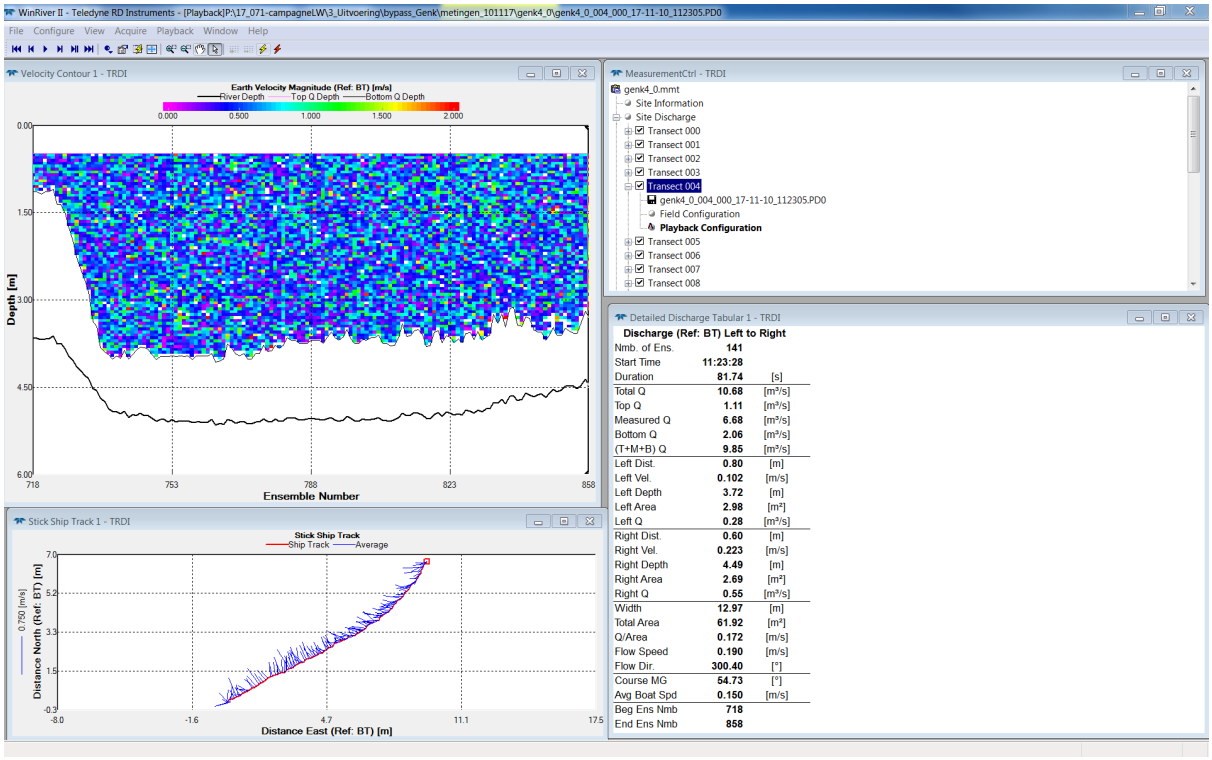
File Configure View Acquire Playback Window Help
Velocity Contour 1 - TRDI
Earth Velocity Magnitude (Ref: BT) [m/s]
River Depth Top Q Depth Bottom Q Depth
0.000 0.500 1.000 1.500 2.000
Depth [m]
Ensemble Number
MeasurementCtrl - TRDI
genk4_0.mmt
Site Information
Site Discharge
Transect 000
Transect 001
Transect 002
Transect 003
genk4_0_003_000_17-11-10_112140.PD0
Field Configuration
Playback Configuration
Transect 004
Transect 005
Transect 006
Transect 007
Transect 008
Detailed Discharge Tabular 1 - TRDI
Discharge (Ref: BT) Right to Left
Nmb. of Ens. 130
Start Time 11:21:48
Duration 75.39 [s]
Total Q 10.93 [m³/s]
Top Q 1.11 [m³/s]
Measured Q 6.79 [m³/s]
Bottom Q 1.99 [m³/s]
(T+M+B) Q 9.90 [m³/s]
Left Dist. 0.80 [m]
Left Vel. 0.194 [m/s]
Left Depth 4.19 [m]
Left Area 3.36 [m²]
Left Q 0.59 [m³/s]
Right Dist. 0.60 [m]
Right Vel. 0.176 [m/s]
Right Depth 4.62 [m]
Right Area 2.77 [m²]
Right Q 0.44 [m³/s]
Width 13.08 [m]
Total Area 63.51 [m²]
Q/Area 0.172 [m/s]
Flow Speed 0.187 [m/s]
Flow Dir. 298.70 [°]
Course MG 235.34 [°]
Avg Boat Spd 0.164 [m/s]
Beg Ens Nmb 546
End Ens Nmb 675
Stick Ship Track 1 - TRDI
Stick Ship Track
Ship Track Average
Distance North (Ref: BT) [m]
0.750 [m/s]
Distance East (Ref: BT) [m]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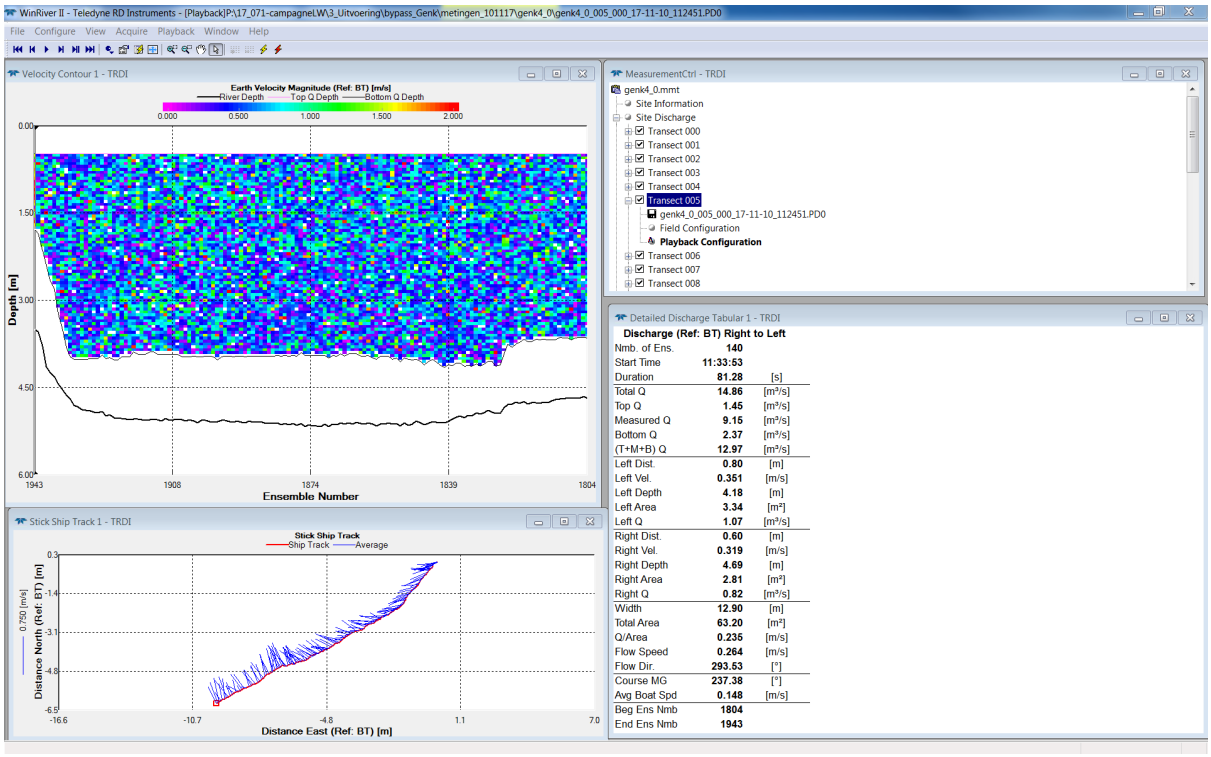
File Configure View Acquire Playback Window Help
Velocity Contour 1 - TRDI
Earth Velocity Magnitude (Ref: BT) [m/s]
River Depth Top Q Depth Bottom Q Depth
0.000 0.500 1.000 1.500 2.000
Depth [m]
Ensemble Number
MeasurementCtrl - TRDI
genk4_0.mmt
Site Information
Site Discharge
Transect 000
Transect 001
Transect 002
Transect 003
Transect 004
genk4_0_004_000_17-11-10_112305.PD0
Field Configuration
Playback Configuration
Transect 005
Transect 006
Transect 007
Transect 008
Detailed Discharge Tabular 1 - TRDI
Discharge (Ref: BT) Left to Right
Nmb. of Ens. 141
Start Time 11:23:28
Duration 81.74 [s]
Total Q 10.68 [m³/s]
Top Q 1.11 [m³/s]
Measured Q 6.68 [m³/s]
Bottom Q 2.06 [m³/s]
(T+M+B) Q 9.85 [m³/s]
Left Dist. 0.80 [m]
Left Vel. 0.102 [m/s]
Left Depth 3.72 [m]
Left Area 2.98 [m²]
Left Q 0.28 [m³/s]
Right Dist. 0.60 [m]
Right Vel. 0.223 [m/s]
Right Depth 4.49 [m]
Right Area 2.69 [m²]
Right Q 0.55 [m³/s]
Width 12.97 [m]
Total Area 61.92 [m²]
Q/Area 0.172 [m/s]
Flow Speed 0.190 [m/s]
Flow Dir. 300.40 [°]
Course MG 54.73 [°]
Avg Boat Spd 0.150 [m/s]
Beg Ens Nmb 718
End Ens Nmb 858
Stick Ship Track 1 - TRDI
Stick Ship Track
Ship Track Average
Distance North (Ref: BT) [m]
0.750 [m/s]
Distance East (Ref: BT) [m]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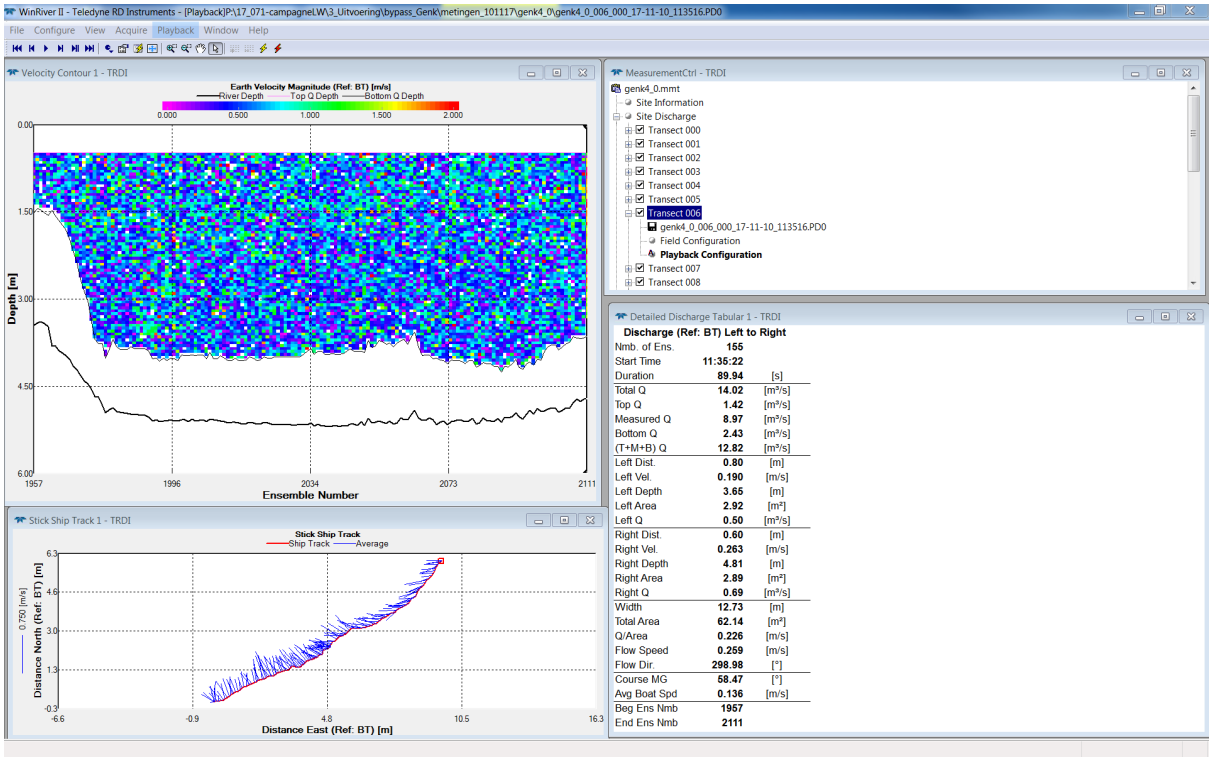
File Configure View Acquire Playback Window Help
Velocity Contour 1 - TRDI
Earth Velocity Magnitude (Ref: BT) [m/s]
River Depth Top Q Depth Bottom Q Depth
0.000 0.500 1.000 1.500 2.000
Depth [m]
Ensemble Number
MeasurementCtrl - TRDI
genk4_0.mmt
Site Information
Site Discharge
Transect 000
Transect 001
Transect 002
Transect 003
Transect 004
Transect 005
genk4_0_005_000_17-11-10_112451.PD0
Field Configuration
Playback Configuration
Transect 006
Transect 007
Transect 008
Detailed Discharge Tabular 1 - TRDI
Discharge (Ref: BT) Right to Left
Nmb. of Ens. 140
Start Time 11:33:53
Duration 81.28 [s]
Total Q 14.86 [m³/s]
Top Q 1.45 [m³/s]
Measured Q 9.15 [m³/s]
Bottom Q 2.37 [m³/s]
(T+M+B) Q 12.97 [m³/s]
Left Dist. 0.80 [m]
Left Vel. 0.351 [m/s]
Left Depth 4.18 [m]
Left Area 3.34 [m²]
Left Q 1.07 [m³/s]
Right Dist. 0.60 [m]
Right Vel. 0.319 [m/s]
Right Depth 4.69 [m]
Right Area 2.81 [m²]
Right Q 0.82 [m³/s]
Width 12.90 [m]
Total Area 63.20 [m²]
Q/Area 0.235 [m/s]
Flow Speed 0.264 [m/s]
Flow Dir. 293.53 [°]
Course MG 237.38 [°]
Avg Boat Spd 0.148 [m/s]
Beg Ens Nmb 1804
End Ens Nmb 1943
Stick Ship Track 1 - TRDI
Stick Ship Track
Ship Track Average
Distance North (Ref: BT) [m]
Distance East (Ref: BT) [m]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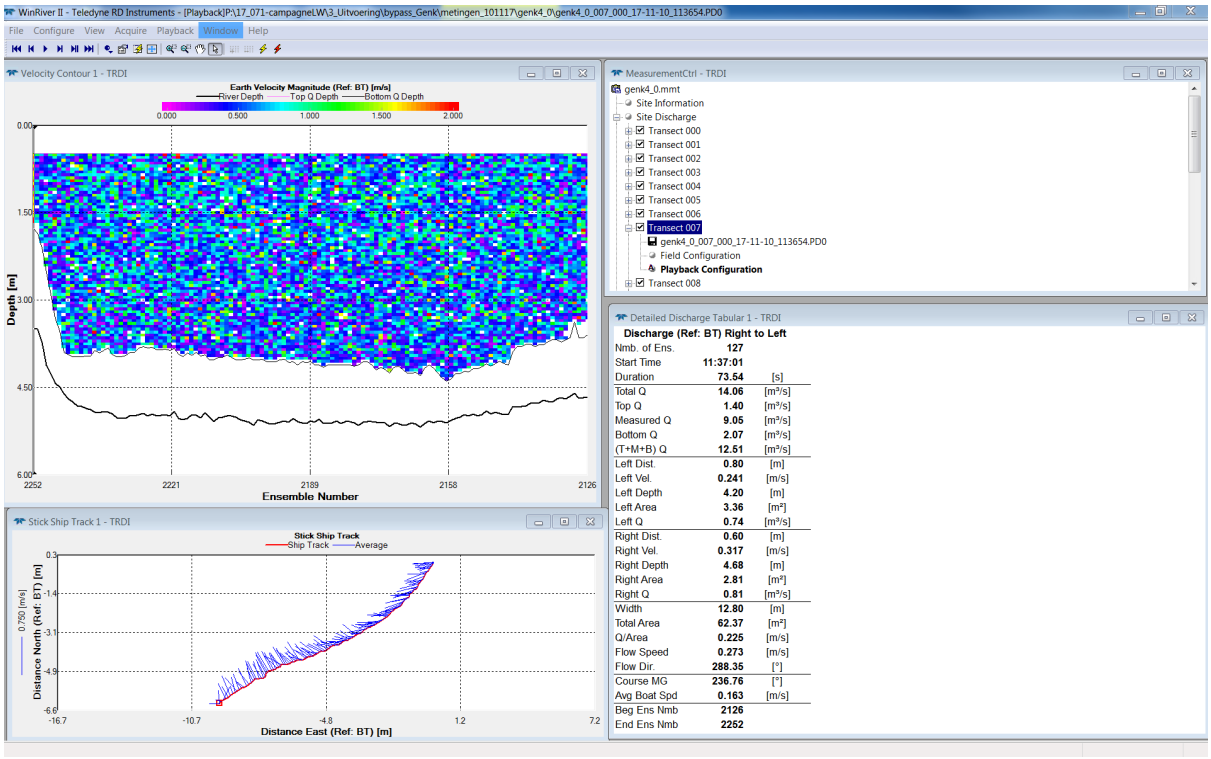
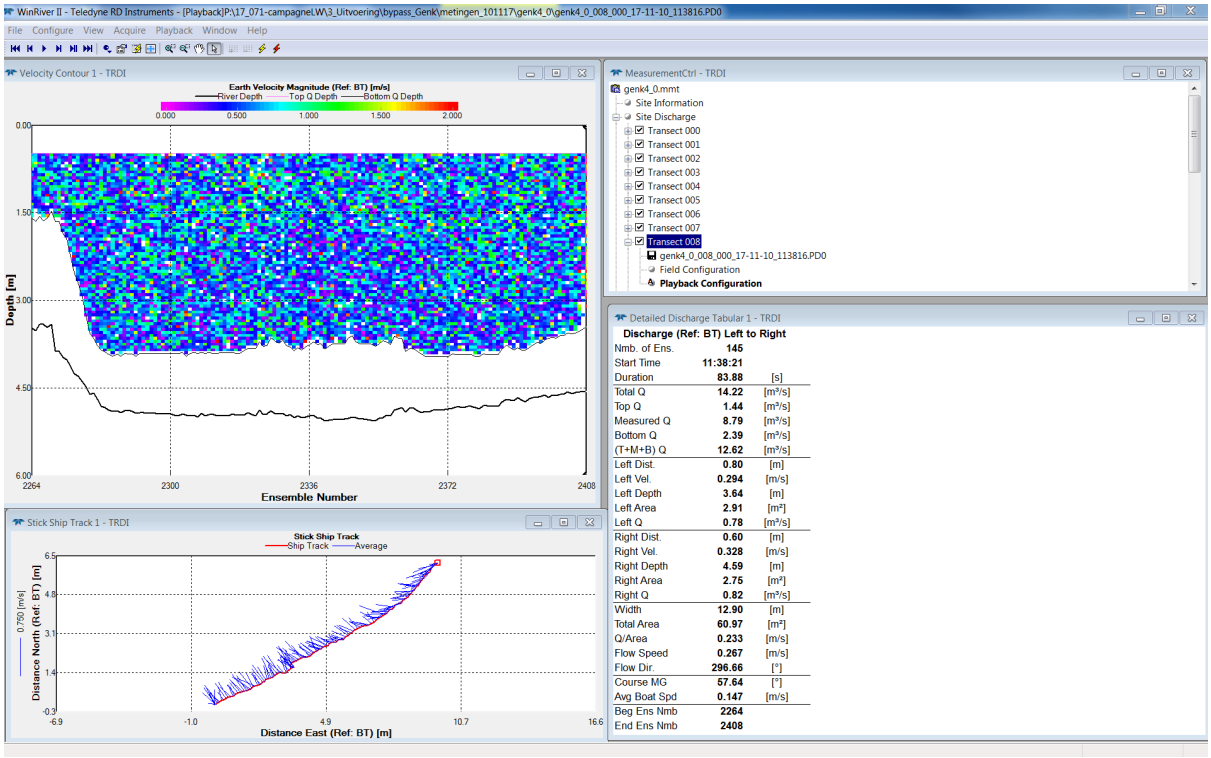
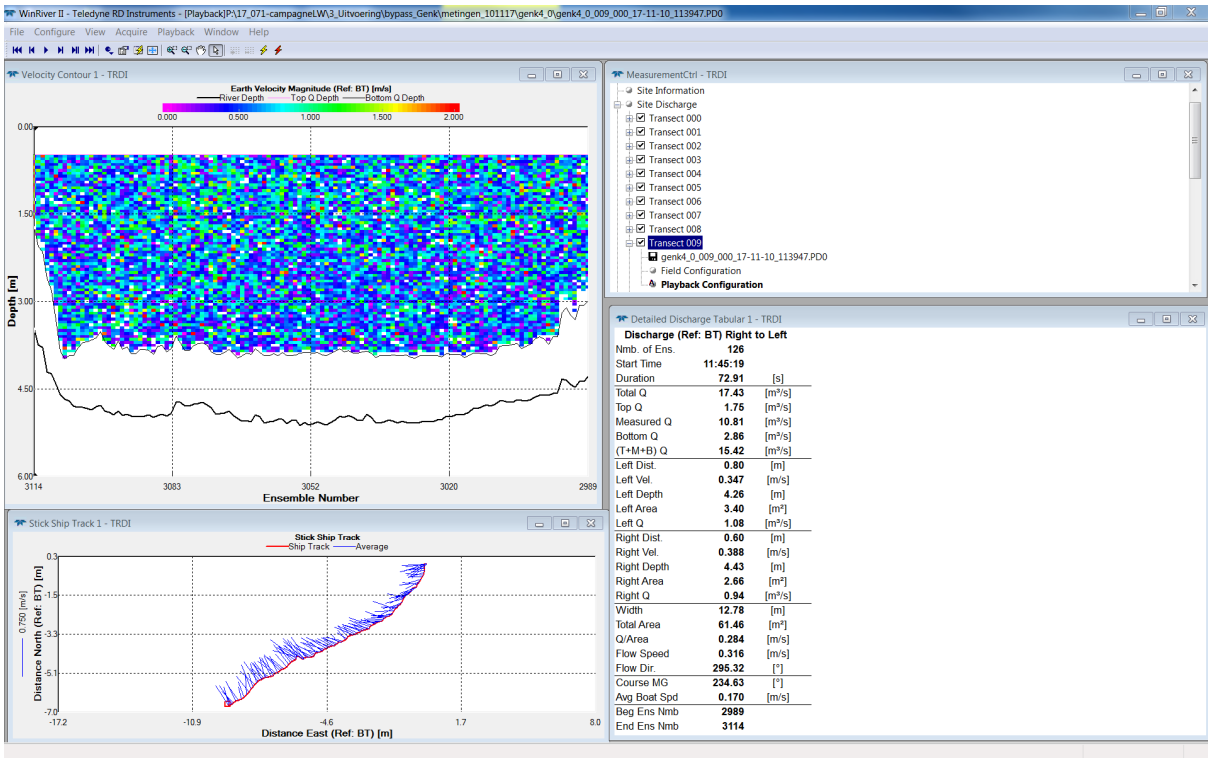
File Configure View Acquire Playback Window Help
Velocity Contour 1 - TRDI
Earth Velocity Magnitude (Ref: BT) [m/s]
River Depth Top Q Depth Bottom Q Depth
0.000 0.500 1.000 1.500 2.000
Depth [m]
Ensemble Number
MeasurementCtrl - TRDI
genk4_0.mmt
Site Information
Site Discharge
Transect 000
Transect 001
Transect 002
Transect 003
Transect 004
Transect 005
Transect 006
genk4_0_006_000_17-11-10_113516.PD0
Field Configuration
Playback Configuration
Transect 007
Transect 008
Detailed Discharge Tabular 1 - TRDI
Discharge (Ref: BT) Left to Right
Nmb. of Ens. 155
Start Time 11:35:22
Duration 89.94 [s]
Total Q 14.02 [m³/s]
Top Q 1.42 [m³/s]
Measured Q 8.97 [m³/s]
Bottom Q 2.43 [m³/s]
(T+M+B) Q 12.82 [m³/s]
Left Dist. 0.80 [m]
Left Vel. 0.190 [m/s]
Left Depth 3.65 [m]
Left Area 2.92 [m²]
Left Q 0.50 [m³/s]
Right Dist. 0.60 [m]
Right Vel. 0.263 [m/s]
Right Depth 4.81 [m]
Right Area 2.89 [m²]
Right Q 0.69 [m³/s]
Width 12.73 [m]
Total Area 62.14 [m²]
Q/Area 0.226 [m/s]
Flow Speed 0.259 [m/s]
Flow Dir. 298.98 [°]
Course MG 58.47 [°]
Avg Boat Spd 0.136 [m/s]
Beg Ens Nmb 1957
End Ens Nmb 2111
Stick Ship Track 1 - TRDI
Stick Ship Track
Ship Track Average
Distance North (Ref: BT) [m]
Distance East (Ref: BT) [m]


WinRiver II - Teledyne RD Instruments - [Playback]P:\17_071-campagneLW\3_Uitvoering\bypass_Genk\metingen_101117\genk4_0\genk4_0_007_000_17-11-10_113654.PD0
Velocity Contour 1 - TRDI
Earth Velocity Magnitude (Ref: BT) [m/s]
River Depth
Top Q Depth
Bottom Q Depth
Depth [m]
Ensemble Number
MeasurementCtrl - TRDI
genk4_0.mmt
Site Information
Site Discharge
Transect 000
Transect 001
Transect 002
Transect 003
Transect 004
Transect 005
Transect 006
Transect 007
genk4_0_007_000_17-11-10_113654.PD0
Field Configuration
Playback Configuration
Transect 008
Detailed Discharge Tabular 1 - TRDI
Discharge (Ref: BT) Right to Left
Nmb. of Ens. 127
Start Time 11:37:01
Duration 73.54 [s]
Total Q 14.06 [m³/s]
Top Q 1.40 [m³/s]
Measured Q 9.05 [m³/s]
Bottom Q 2.07 [m³/s]
(T+M+B) Q 12.51 [m³/s]
Left Dist. 0.80 [m]
Left Vel. 0.241 [m/s]
Left Depth 4.20 [m]
Left Area 3.36 [m²]
Left Q 0.74 [m³/s]
Right Dist. 0.60 [m]
Right Vel. 0.317 [m/s]
Right Depth 4.68 [m]
Right Area 2.81 [m²]
Right Q 0.81 [m³/s]
Width 12.80 [m]
Total Area 62.37 [m²]
Q/Area 0.225 [m/s]
Flow Speed 0.273 [m/s]
Flow Dir. 288.35 [°]
Course MG 236.76 [°]
Avg Boat Spd 0.163 [m/s]
Beg Ens Nmb 2126
End Ens Nmb 2252
Stick Ship Track 1 - TRDI
Stick Ship Track
Ship Track
Average
Distance North (Ref: BT) [m]
Distance East (Ref: BT) [m]


WinRiver II - Teledyne RD Instruments - [Playback]P:\17_071-campagneLW\3_Uitvoering\bypass_Genk\metingen_101117\genk4_0\genk4_0_008_000_17-11-10_113816.PD0
Velocity Contour 1 - TRDI
Earth Velocity Magnitude (Ref: BT) [m/s]
River Depth
Top Q Depth
Bottom Q Depth
Depth [m]
Ensemble Number
MeasurementCtrl - TRDI
genk4_0.mmt
Site Information
Site Discharge
Transect 000
Transect 001
Transect 002
Transect 003
Transect 004
Transect 005
Transect 006
Transect 007
Transect 008
genk4_0_008_000_17-11-10_113816.PD0
Field Configuration
Playback Configuration
Detailed Discharge Tabular 1 - TRDI
Discharge (Ref: BT) Left to Right
Nmb. of Ens. 145
Start Time 11:38:21
Duration 83.88 [s]
Total Q 14.22 [m³/s]
Top Q 1.44 [m³/s]
Measured Q 8.79 [m³/s]
Bottom Q 2.39 [m³/s]
(T+M+B) Q 12.62 [m³/s]
Left Dist. 0.80 [m]
Left Vel. 0.294 [m/s]
Left Depth 3.64 [m]
Left Area 2.91 [m²]
Left Q 0.78 [m³/s]
Right Dist. 0.60 [m]
Right Vel. 0.328 [m/s]
Right Depth 4.59 [m]
Right Area 2.75 [m²]
Right Q 0.82 [m³/s]
Width 12.90 [m]
Total Area 60.97 [m²]
Q/Area 0.233 [m/s]
Flow Speed 0.267 [m/s]
Flow Dir. 296.66 [°]
Course MG 57.64 [°]
Avg Boat Spd 0.147 [m/s]
Beg Ens Nmb 2264
End Ens Nmb 2408
Stick Ship Track 1 - TRDI
Stick Ship Track
Ship Track
Average
Distance North (Ref: BT) [m]
Distance East (Ref: BT) [m]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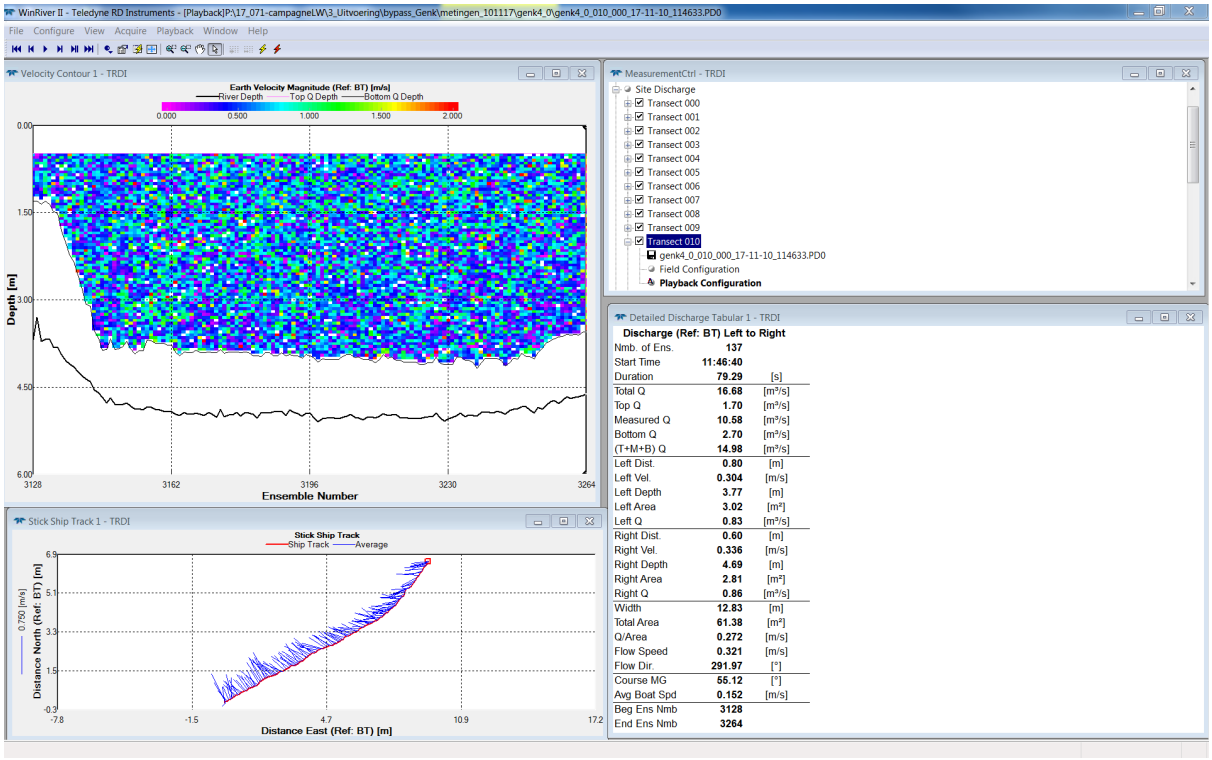
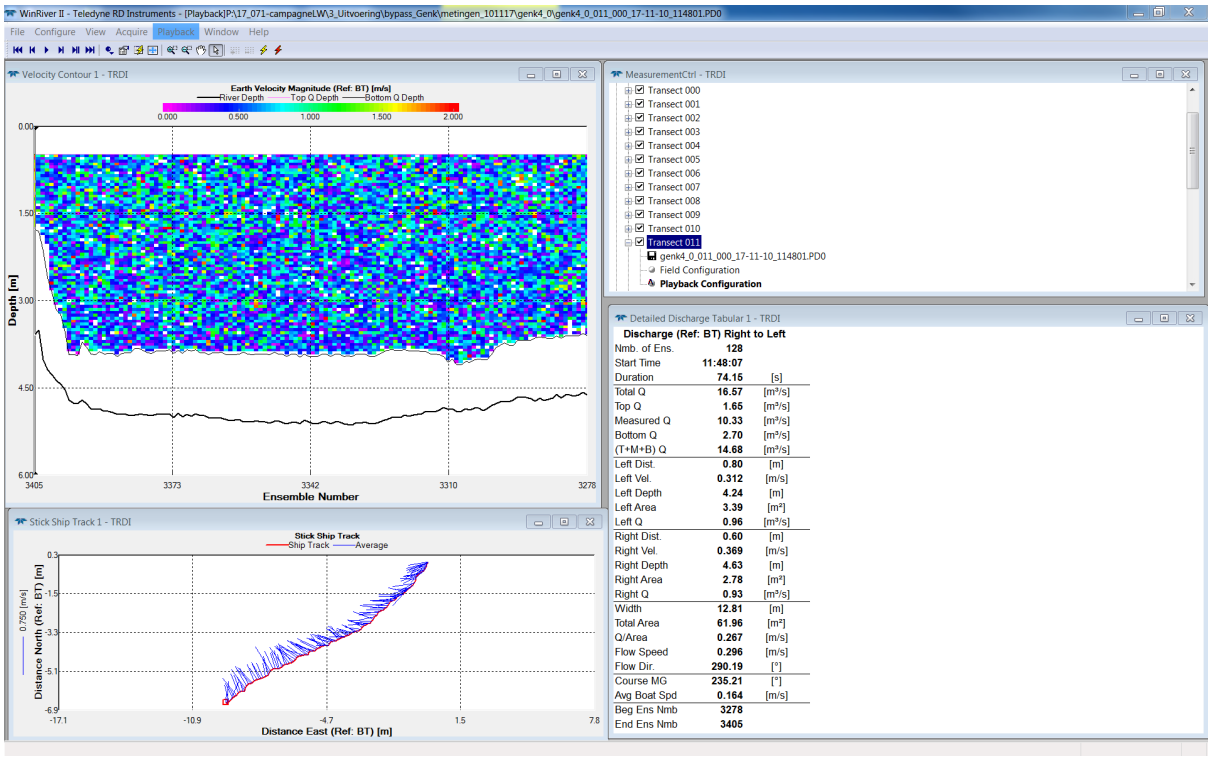
Velocity Contour 1 - TRDI
Earth Velocity Magnitude (Ref: BT) [m/s]
River Depth
Top Q Depth
Bottom Q Depth
Depth [m]
Ensemble Number
MeasurementCtrl - TRDI
Site Information
Site Discharge
Transect 000
Transect 001
Transect 002
Transect 003
Transect 004
Transect 005
Transect 006
Transect 007
Transect 008
Transect 009
genk4_0_009_000_17-11-10_113947.PD0
Field Configuration
Playback Configuration
Detailed Discharge Tabular 1 - TRDI
Discharge (Ref: BT) Right to Left
Nmb. of Ens. 126
Start Time 11:45:19
Duration 72.91 [s]
Total Q 17.43 [m³/s]
Top Q 1.75 [m³/s]
Measured Q 10.81 [m³/s]
Bottom Q 2.86 [m³/s]
(T+M+B) Q 15.42 [m³/s]
Left Dist. 0.80 [m]
Left Vel. 0.347 [m/s]
Left Depth 4.26 [m]
Left Area 3.40 [m²]
Left Q 1.08 [m³/s]
Right Dist. 0.60 [m]
Right Vel. 0.388 [m/s]
Right Depth 4.43 [m]
Right Area 2.66 [m²]
Right Q 0.94 [m³/s]
Width 12.78 [m]
Total Area 61.46 [m²]
Q/Area 0.284 [m/s]
Flow Speed 0.316 [m/s]
Flow Dir. 296.32 [°]
Course MG 234.63 [°]
Avg Boat Spd 0.170 [m/s]
Beg Ens Nmb 2989
End Ens Nmb 3114
Stick Ship Track 1 - TRDI
Stick Ship Track
Ship Track
Average
Distance North (Ref: BT) [m]
Distance East (Ref: BT) [m]


WinRiver II - Teledyne RD Instruments - [Playback]P:\17_071-campagneLW\3_Uitvoering\bypass_Genk\metingen_101117\genk4_0\genk4_0_010_000_17-11-10_114633.PD0
Velocity Contour 1 - TRDI
Earth Velocity Magnitude (Ref: BT) [m/s]
River Depth
Top Q Depth
Bottom Q Depth
Depth [m]
Ensemble Number
MeasurementCtrl - TRDI
Site Discharge
Transect 000
Transect 001
Transect 002
Transect 003
Transect 004
Transect 005
Transect 006
Transect 007
Transect 008
Transect 009
Transect 010
genk4_0_010_000_17-11-10_114633.PD0
Field Configuration
Playback Configuration
Detailed Discharge Tabular 1 - TRDI
Discharge (Ref: BT) Left to Right
Nmb. of Ens. 137
Start Time 11:46:40
Duration 79.29 [s]
Total Q 16.68 [m³/s]
Top Q 1.70 [m³/s]
Measured Q 10.58 [m³/s]
Bottom Q 2.70 [m³/s]
(T+M+B) Q 14.98 [m³/s]
Left Dist. 0.80 [m]
Left Vel. 0.304 [m/s]
Left Depth 3.77 [m]
Left Area 3.02 [m²]
Left Q 0.83 [m³/s]
Right Dist. 0.60 [m]
Right Vel. 0.336 [m/s]
Right Depth 4.69 [m]
Right Area 2.81 [m²]
Right Q 0.86 [m³/s]
Width 12.83 [m]
Total Area 61.38 [m²]
Q/Area 0.272 [m/s]
Flow Speed 0.321 [m/s]
Flow Dir. 291.97 [°]
Course MG 55.12 [°]
Avg Boat Spd 0.152 [m/s]
Beg Ens Nmb 3128
End Ens Nmb 3264
Stick Ship Track 1 - TRDI
Stick Ship Track
Ship Track
Average
Distance North (Ref: BT) [m]
Distance East (Ref: BT) [m]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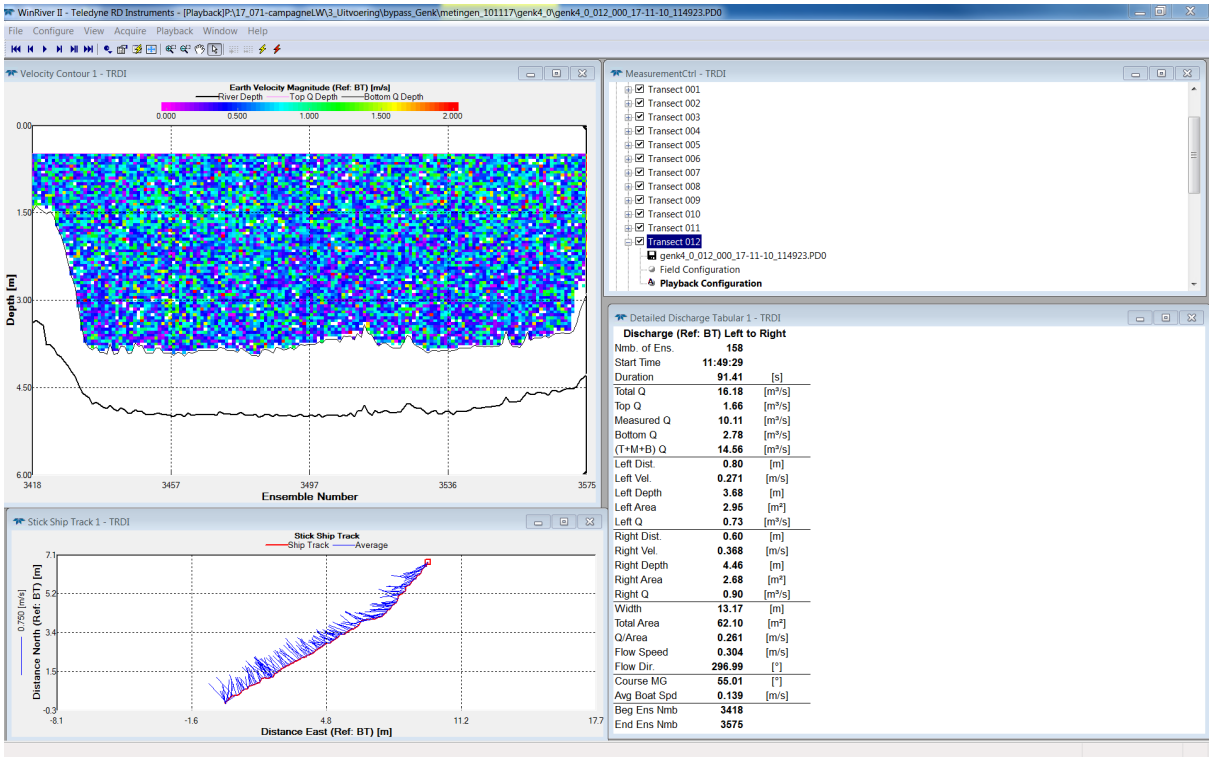
Velocity Contour 1 - TRDI
Earth Velocity Magnitude (Ref: BT) [m/s]
River Depth
Top Q Depth
Bottom Q Depth
Depth [m]
Ensemble Number
MeasurementCtrl - TRDI
Transect 000
Transect 001
Transect 002
Transect 003
Transect 004
Transect 005
Transect 006
Transect 007
Transect 008
Transect 009
Transect 010
Transect 011
genk4_0_011_000_17-11-10_114801.PD0
Field Configuration
Playback Configuration
Detailed Discharge Tabular 1 - TRDI
Discharge (Ref: BT) Right to Left
Nmb. of Ens. 128
Start Time 11:48:07
Duration 74.15 [s]
Total Q 16.57 [m³/s]
Top Q 1.65 [m³/s]
Measured Q 10.33 [m³/s]
Bottom Q 2.70 [m³/s]
(T+M+B) Q 14.68 [m³/s]
Left Dist. 0.80 [m]
Left Vel. 0.312 [m/s]
Left Depth 4.24 [m]
Left Area 3.39 [m²]
Left Q 0.96 [m³/s]
Right Dist. 0.60 [m]
Right Vel. 0.369 [m/s]
Right Depth 4.63 [m]
Right Area 2.78 [m²]
Right Q 0.93 [m³/s]
Width 12.81 [m]
Total Area 61.96 [m²]
Q/Area 0.267 [m/s]
Flow Speed 0.296 [m/s]
Flow Dir. 290.19 [°]
Course MG 235.21 [°]
Avg Boat Spd 0.164 [m/s]
Beg Ens Nmb 3278
End Ens Nmb 3405
Stick Ship Track 1 - TRDI
Stick Ship Track
Ship Track
Average
Distance North (Ref: BT) [m]
Distance East (Ref: BT) [m]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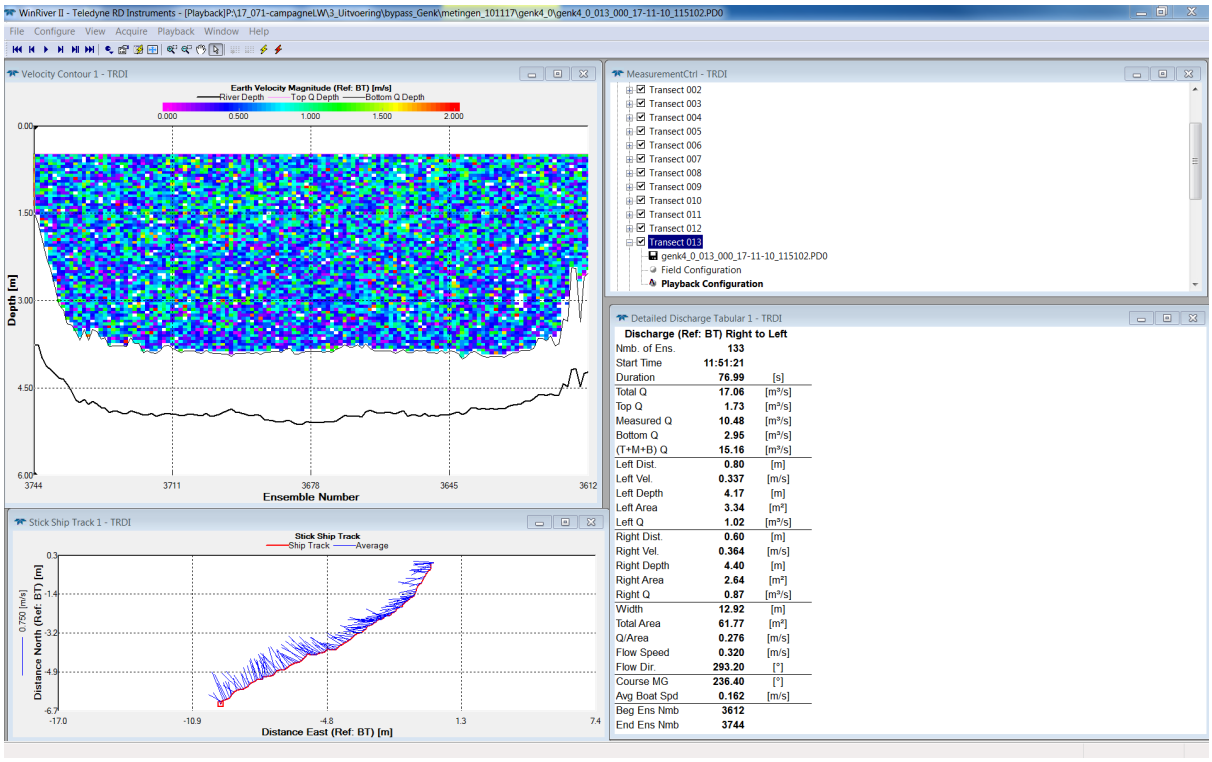
Velocity Contour 1 - TRDI
Earth Velocity Magnitude (Ref: BT) [m/s]
River Depth
Top Q Depth
Bottom Q Depth
Depth [m]
Ensemble Number
MeasurementCtrl - TRDI
Transect 001
Transect 002
Transect 003
Transect 004
Transect 005
Transect 006
Transect 007
Transect 008
Transect 009
Transect 010
Transect 011
Transect 012
genk4_0_012_000_17-11-10_114923.PD0
Field Configuration
Playback Configuration
Detailed Discharge Tabular 1 - TRDI
Discharge (Ref: BT) Left to Right
Nmb. of Ens. 158
Start Time 11:49:29
Duration 91.41 [s]
Total Q 16.18 [m³/s]
Top Q 1.66 [m³/s]
Measured Q 10.11 [m³/s]
Bottom Q 2.78 [m³/s]
(T+M+B) Q 14.56 [m³/s]
Left Dist. 0.80 [m]
Left Vel. 0.271 [m/s]
Left Depth 3.68 [m]
Left Area 2.95 [m²]
Left Q 0.73 [m³/s]
Right Dist. 0.60 [m]
Right Vel. 0.368 [m/s]
Right Depth 4.46 [m]
Right Area 2.68 [m²]
Right Q 0.90 [m³/s]
Width 13.17 [m]
Total Area 62.10 [m²]
Q/Area 0.261 [m/s]
Flow Speed 0.304 [m/s]
Flow Dir. 296.99 [°]
Course MG 55.01 [°]
Avg Boat Spd 0.139 [m/s]
Beg Ens Nmb 3418
End Ens Nmb 3575
Stick Ship Track 1 - TRDI
Stick Ship Track
Ship Track
Average
Distance North (Ref: BT) [m]
Distance East (Ref: BT) [m]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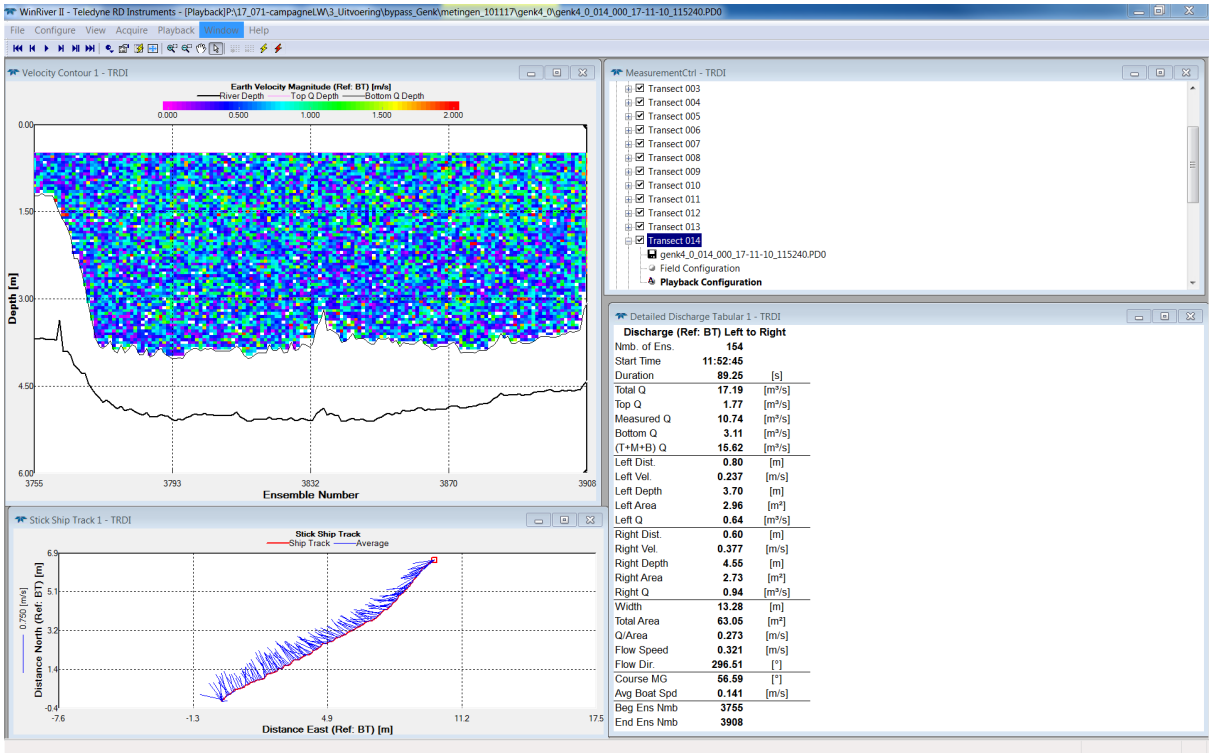
Velocity Contour 1 - TRDI
Earth Velocity Magnitude (Ref: BT) [m/s]
River Depth
Top Q Depth
Bottom Q Depth
Depth [m]
Ensemble Number
MeasurementCtrl - TRDI
Transect 002
Transect 003
Transect 004
Transect 005
Transect 006
Transect 007
Transect 008
Transect 009
Transect 010
Transect 011
Transect 012
Transect 013
genk4_0_013_000_17-11-10_115102.PD0
Field Configuration
Playback Configuration
Detailed Discharge Tabular 1 - TRDI
Discharge (Ref: BT) Right to Left
Nmb. of Ens. 133
Start Time 11:51:21
Duration 76.99 [s]
Total Q 17.06 [m³/s]
Top Q 1.73 [m³/s]
Measured Q 10.48 [m³/s]
Bottom Q 2.95 [m³/s]
(T+M+B) Q 15.16 [m³/s]
Left Dist. 0.80 [m]
Left Vel. 0.337 [m/s]
Left Depth 4.17 [m]
Left Area 3.34 [m²]
Left Q 1.02 [m³/s]
Right Dist. 0.60 [m]
Right Vel. 0.364 [m/s]
Right Depth 4.40 [m]
Right Area 2.64 [m²]
Right Q 0.87 [m³/s]
Width 12.92 [m]
Total Area 61.77 [m²]
Q/Area 0.276 [m/s]
Flow Speed 0.320 [m/s]
Flow Dir. 293.20 [°]
Course MG 236.40 [°]
Avg Boat Spd 0.162 [m/s]
Beg Ens Nmb 3612
End Ens Nmb 3744
Stick Ship Track 1 - TRDI
Stick Ship Track
Ship Track
Average
Distance North (Ref: BT) [m]
Distance East (Ref: BT) [m]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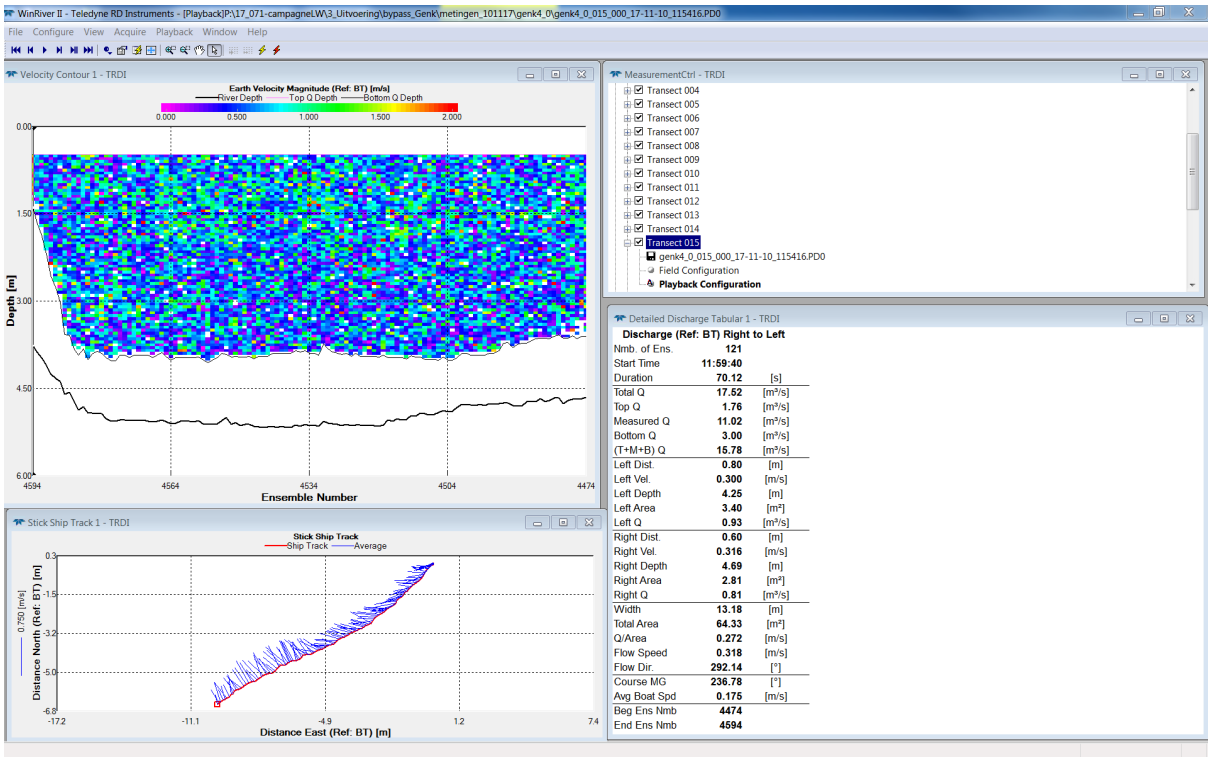
Velocity Contour 1 - TRDI
Earth Velocity Magnitude (Ref: BT) [m/s]
River Depth
Top Q Depth
Bottom Q Depth
Depth [m]
Ensemble Number
MeasurementCtrl - TRDI
Transect 003
Transect 004
Transect 005
Transect 006
Transect 007
Transect 008
Transect 009
Transect 010
Transect 011
Transect 012
Transect 013
Transect 014
genk4_0_014_000_17-11-10_115240.PD0
Field Configuration
Playback Configuration
Detailed Discharge Tabular 1 - TRDI
Discharge (Ref: BT) Left to Right
Nmb. of Ens. 154
Start Time 11:52:45
Duration 89.25 [s]
Total Q 17.19 [m³/s]
Top Q 1.77 [m³/s]
Measured Q 10.74 [m³/s]
Bottom Q 3.11 [m³/s]
(T+M+B) Q 15.62 [m³/s]
Left Dist. 0.80 [m]
Left Vel. 0.237 [m/s]
Left Depth 3.70 [m]
Left Area 2.96 [m²]
Left Q 0.64 [m³/s]
Right Dist. 0.60 [m]
Right Vel. 0.377 [m/s]
Right Depth 4.55 [m]
Right Area 2.73 [m²]
Right Q 0.94 [m³/s]
Width 13.28 [m]
Total Area 63.05 [m²]
Q/Area 0.273 [m/s]
Flow Speed 0.321 [m/s]
Flow Dir. 296.51 [°]
Course MG 56.59 [°]
Avg Boat Spd 0.141 [m/s]
Beg Ens Nmb 3755
End Ens Nmb 3908
Stick Ship Track 1 - TRDI
Stick Ship Track
Ship Track
Average
Distance North (Ref: BT) [m]
Distance East (Ref: BT) [m]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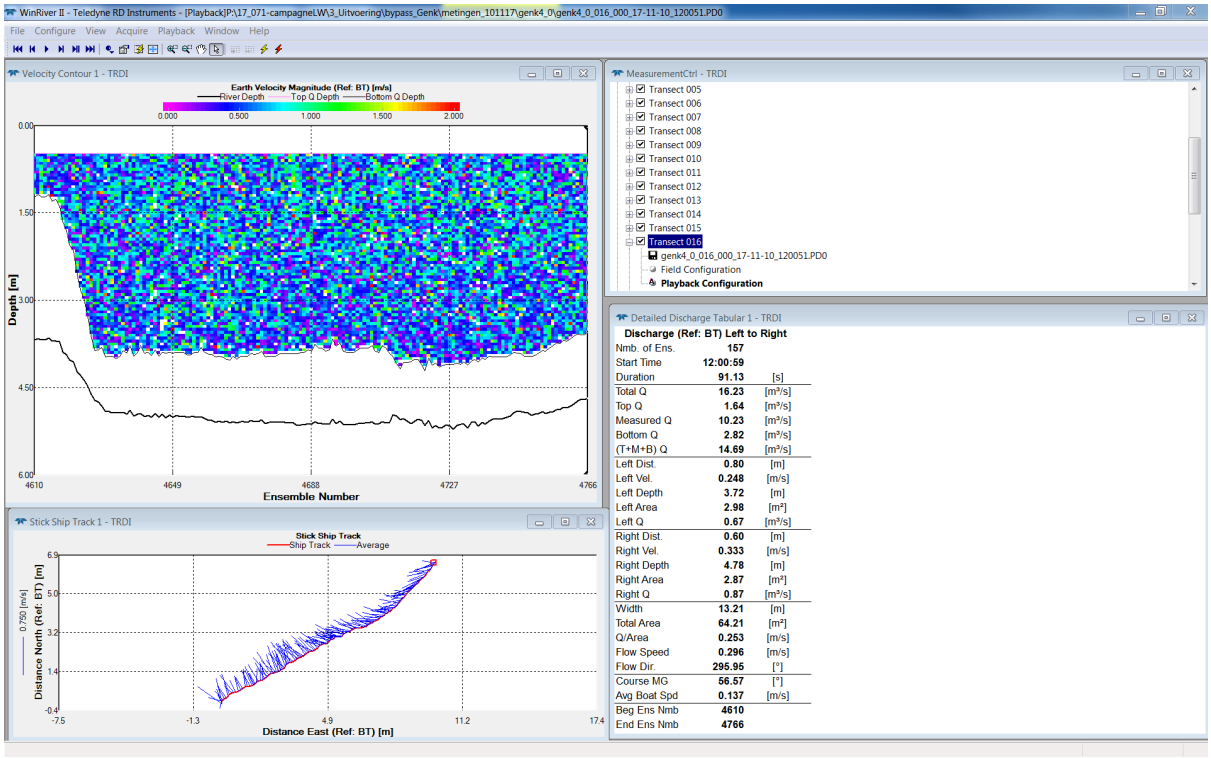
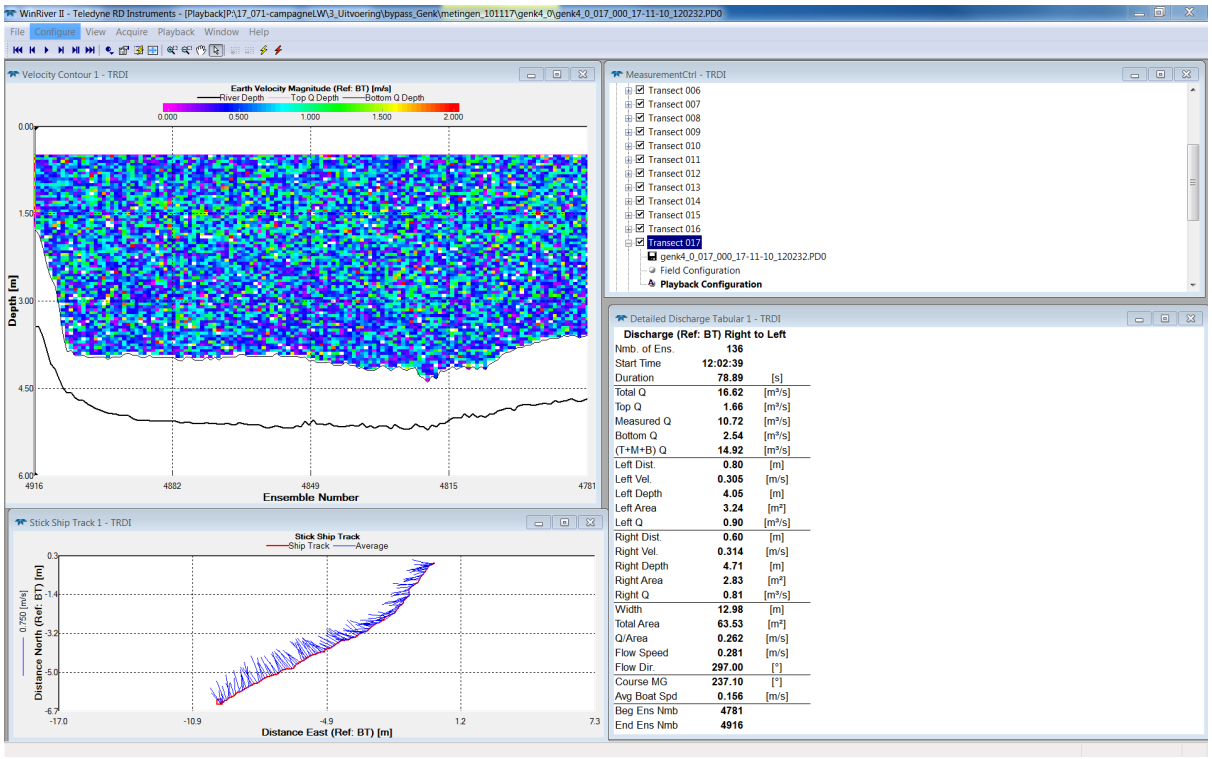
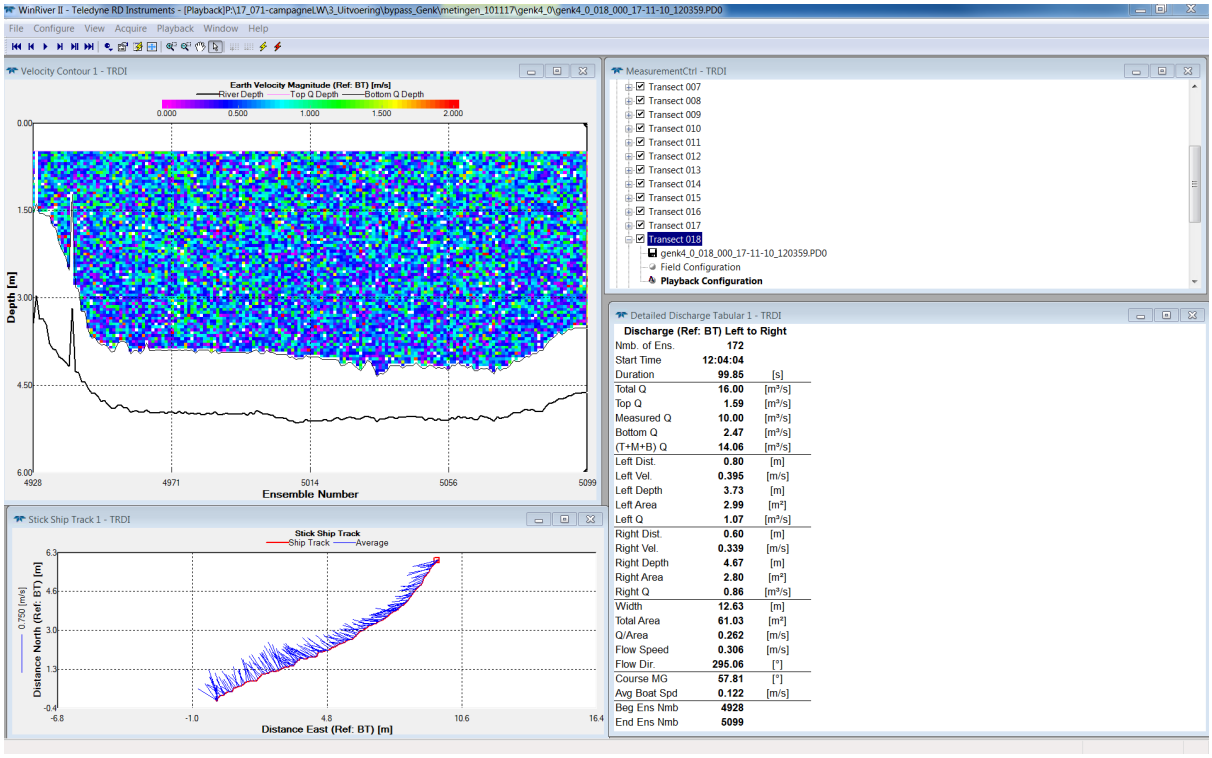
Velocity Contour 1 - TRDI
Earth Velocity Magnitude (Ref: BT) [m/s]
River Depth
Top Q Depth
Bottom Q Depth
Depth [m]
Ensemble Number
MeasurementCtrl - TRDI
Transect 004
Transect 005
Transect 006
Transect 007
Transect 008
Transect 009
Transect 010
Transect 011
Transect 012
Transect 013
Transect 014
Transect 015
genk4_0_015_000_17-11-10_115416.PD0
Field Configuration
Playback Configuration
Detailed Discharge Tabular 1 - TRDI
Discharge (Ref: BT) Right to Left
Nmb. of Ens. 121
Start Time 11:59:40
Duration 70.12 [s]
Total Q 17.52 [m³/s]
Top Q 1.76 [m³/s]
Measured Q 11.02 [m³/s]
Bottom Q 3.00 [m³/s]
(T+M+B) Q 15.78 [m³/s]
Left Dist. 0.80 [m]
Left Vel. 0.300 [m/s]
Left Depth 4.25 [m]
Left Area 3.40 [m²]
Left Q 0.93 [m³/s]
Right Dist. 0.60 [m]
Right Vel. 0.316 [m/s]
Right Depth 4.69 [m]
Right Area 2.81 [m²]
Right Q 0.81 [m³/s]
Width 13.18 [m]
Total Area 64.33 [m²]
Q/Area 0.272 [m/s]
Flow Speed 0.318 [m/s]
Flow Dir. 292.14 [°]
Course MG 236.78 [°]
Avg Boat Spd 0.175 [m/s]
Beg Ens Nmb 4474
End Ens Nmb 4594
Stick Ship Track 1 - TRDI
Stick Ship Track
Ship Track
Average
Distance North (Ref: BT) [m]
Distance East (Ref: BT) [m]


WinRiver II - Teledyne RD Instruments - [Playback]P:\17_071-campagneLW\3_Uitvoering\bypass_Genk\metingen_101117\genk4_0\genk4_0_016_000_17-11-10_120051.PD0
Velocity Contour 1 - TRDI
Earth Velocity Magnitude (Ref: BT) [m/s]
River Depth
Top Q Depth
Bottom Q Depth
Depth [m]
Ensemble Number
MeasurementCtrl - TRDI
Transect 005
Transect 006
Transect 007
Transect 008
Transect 009
Transect 010
Transect 011
Transect 012
Transect 013
Transect 014
Transect 015
Transect 016
genk4_0_016_000_17-11-10_120051.PD0
Field Configuration
Playback Configuration
Detailed Discharge Tabular 1 - TRDI
Discharge (Ref: BT) Left to Right
Nmb. of Ens. 157
Start Time 12:00:59
Duration 91.13 [s]
Total Q 16.23 [m³/s]
Top Q 1.64 [m³/s]
Measured Q 10.23 [m³/s]
Bottom Q 2.82 [m³/s]
(T+M+B) Q 14.69 [m³/s]
Left Dist. 0.80 [m]
Left Vel. 0.248 [m/s]
Left Depth 3.72 [m]
Left Area 2.98 [m²]
Left Q 0.67 [m³/s]
Right Dist. 0.60 [m]
Right Vel. 0.333 [m/s]
Right Depth 4.78 [m]
Right Area 2.87 [m²]
Right Q 0.87 [m³/s]
Width 13.21 [m]
Total Area 64.21 [m²]
Q/Area 0.253 [m/s]
Flow Speed 0.296 [m/s]
Flow Dir. 295.95 [°]
Course MG 56.57 [°]
Avg Boat Spd 0.137 [m/s]
Beg Ens Nmb 4610
End Ens Nmb 4766
Stick Ship Track 1 - TRDI
Stick Ship Track
Ship Track
Average
Distance North (Ref: BT) [m]
Distance East (Ref: BT) [m]


WinRiver II - Teledyne RD Instruments - [Playback]P:\17_071-campagneLW\3_Uitvoering\bypass_Genk\metingen_101117\genk4_0\genk4_0_017_000_17-11-10_120232.PD0
Velocity Contour 1 - TRDI
Earth Velocity Magnitude (Ref: BT) [m/s]
River Depth
Top Q Depth
Bottom Q Depth
Depth [m]
Ensemble Number
MeasurementCtrl - TRDI
Transect 006
Transect 007
Transect 008
Transect 009
Transect 010
Transect 011
Transect 012
Transect 013
Transect 014
Transect 015
Transect 016
Transect 017
genk4_0_017_000_17-11-10_120232.PD0
Field Configuration
Playback Configuration
Detailed Discharge Tabular 1 - TRDI
Discharge (Ref: BT) Right to Left
Nmb. of Ens. 136
Start Time 12:02:39
Duration 78.89 [s]
Total Q 16.62 [m³/s]
Top Q 1.66 [m³/s]
Measured Q 10.72 [m³/s]
Bottom Q 2.54 [m³/s]
(T+M+B) Q 14.92 [m³/s]
Left Dist. 0.80 [m]
Left Vel. 0.305 [m/s]
Left Depth 4.05 [m]
Left Area 3.24 [m²]
Left Q 0.90 [m³/s]
Right Dist. 0.60 [m]
Right Vel. 0.314 [m/s]
Right Depth 4.71 [m]
Right Area 2.83 [m²]
Right Q 0.81 [m³/s]
Width 12.98 [m]
Total Area 63.53 [m²]
Q/Area 0.262 [m/s]
Flow Speed 0.281 [m/s]
Flow Dir. 297.00 [°]
Course MG 237.10 [°]
Avg Boat Spd 0.156 [m/s]
Beg Ens Nmb 4781
End Ens Nmb 4916
Stick Ship Track 1 - TRDI
Stick Ship Track
Ship Track
Average
Distance North (Ref: BT) [m]
Distance East (Ref: BT) [m]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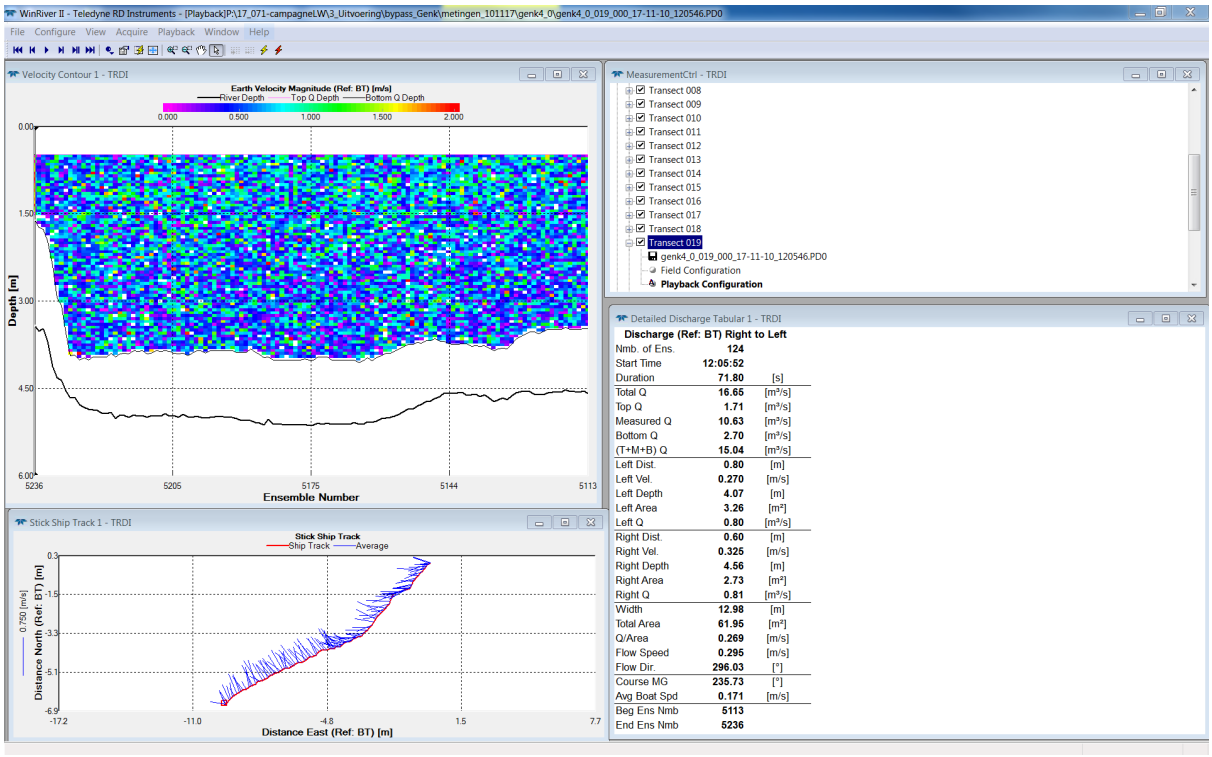
Velocity Contour 1 - TRDI
Earth Velocity Magnitude (Ref: BT) [m/s]
River Depth
Top Q Depth
Bottom Q Depth
Depth [m]
Ensemble Number
MeasurementCtrl - TRDI
Transect 007
Transect 008
Transect 009
Transect 010
Transect 011
Transect 012
Transect 013
Transect 014
Transect 015
Transect 016
Transect 017
Transect 018
genk4_0_018_000_17-11-10_120359.PD0
Field Configuration
Playback Configuration
Detailed Discharge Tabular 1 - TRDI
Discharge (Ref: BT) Left to Right
Nmb. of Ens. 172
Start Time 12:04:04
Duration 99.85 [s]
Total Q 16.00 [m³/s]
Top Q 1.59 [m³/s]
Measured Q 10.00 [m³/s]
Bottom Q 2.47 [m³/s]
(T+M+B) Q 14.06 [m³/s]
Left Dist. 0.80 [m]
Left Vel. 0.395 [m/s]
Left Depth 3.73 [m]
Left Area 2.99 [m²]
Left Q 1.07 [m³/s]
Right Dist. 0.60 [m]
Right Vel. 0.339 [m/s]
Right Depth 4.67 [m]
Right Area 2.80 [m²]
Right Q 0.86 [m³/s]
Width 12.63 [m]
Total Area 61.03 [m²]
Q/Area 0.262 [m/s]
Flow Speed 0.306 [m/s]
Flow Dir. 295.06 [°]
Course MG 57.81 [°]
Avg Boat Spd 0.122 [m/s]
Beg Ens Nmb 4928
End Ens Nmb 5099
Stick Ship Track 1 - TRDI
Stick Ship Track
Ship Track
Average
Distance North (Ref: BT) [m]
Distance East (Ref: BT) [m]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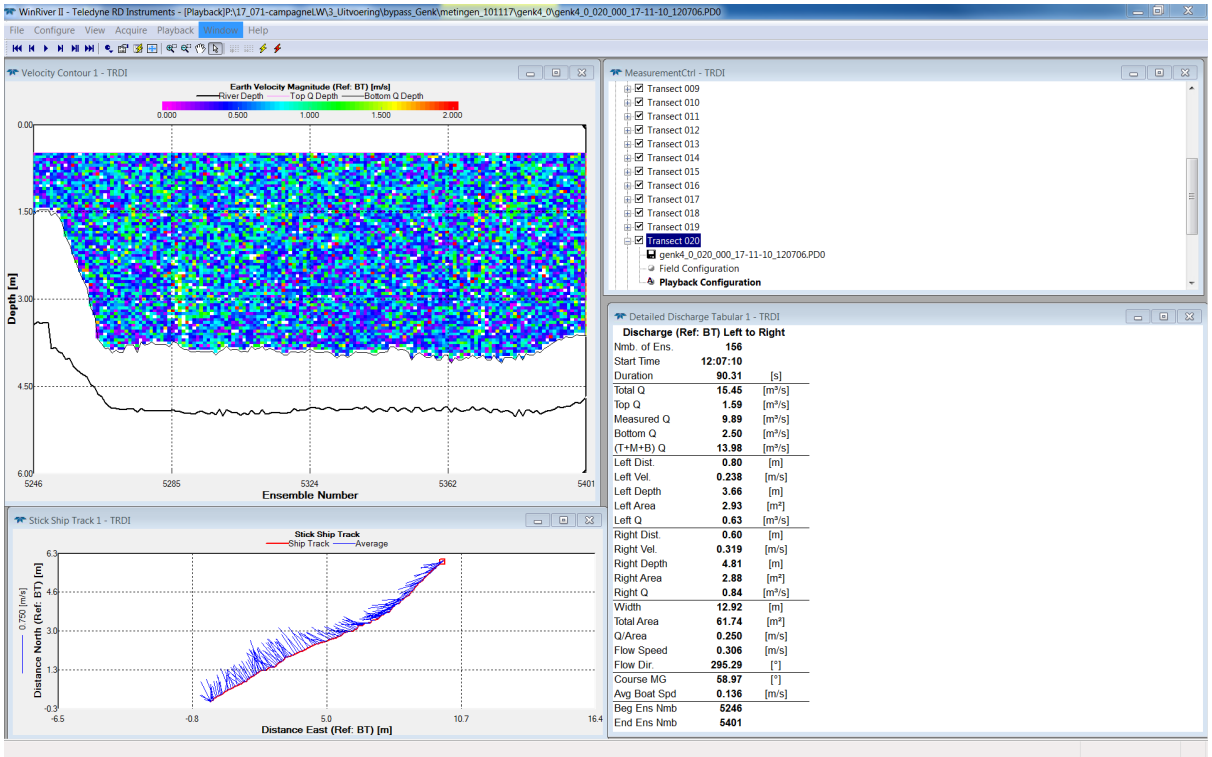
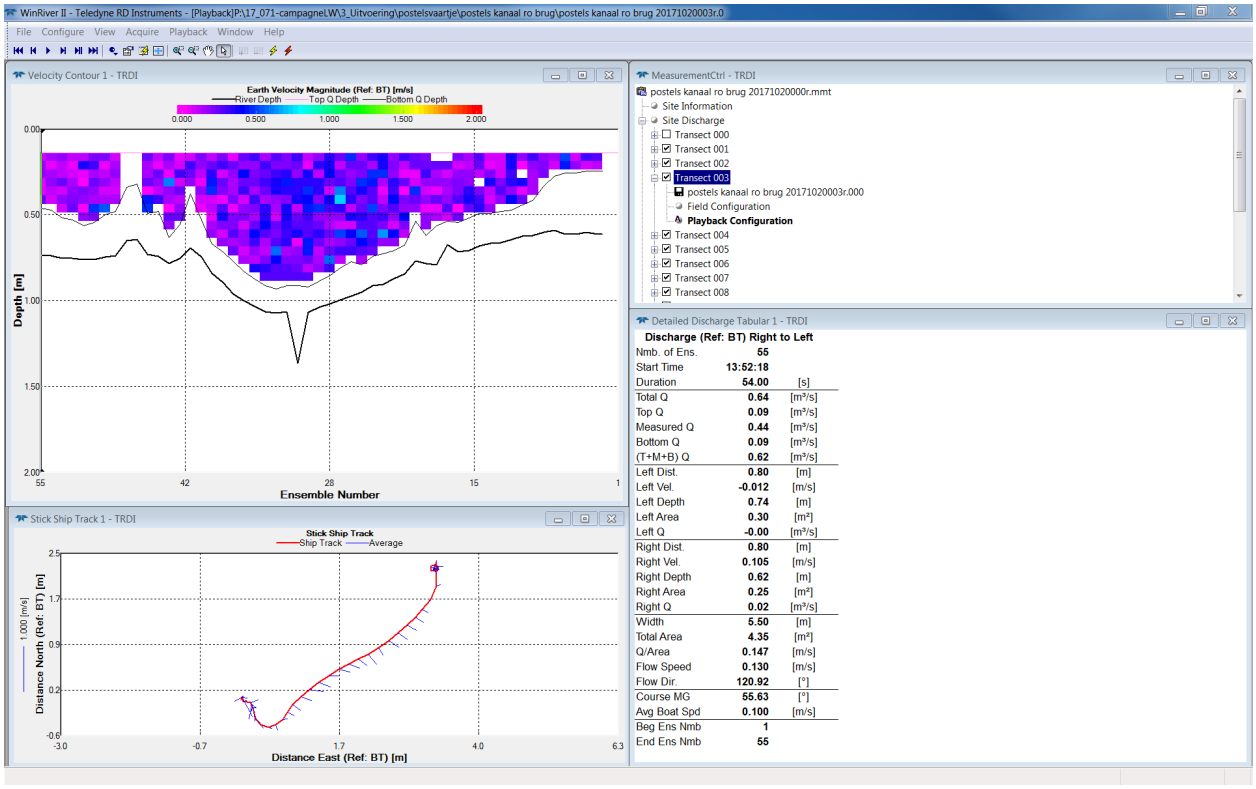
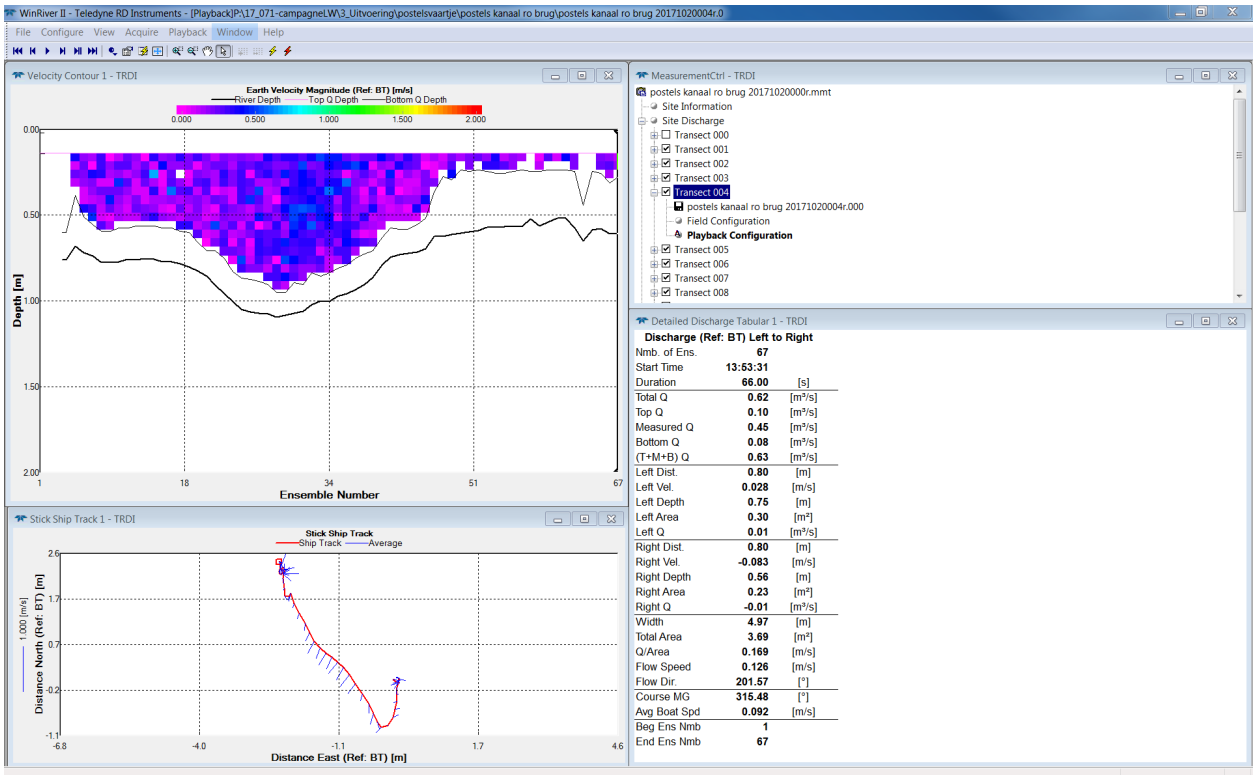
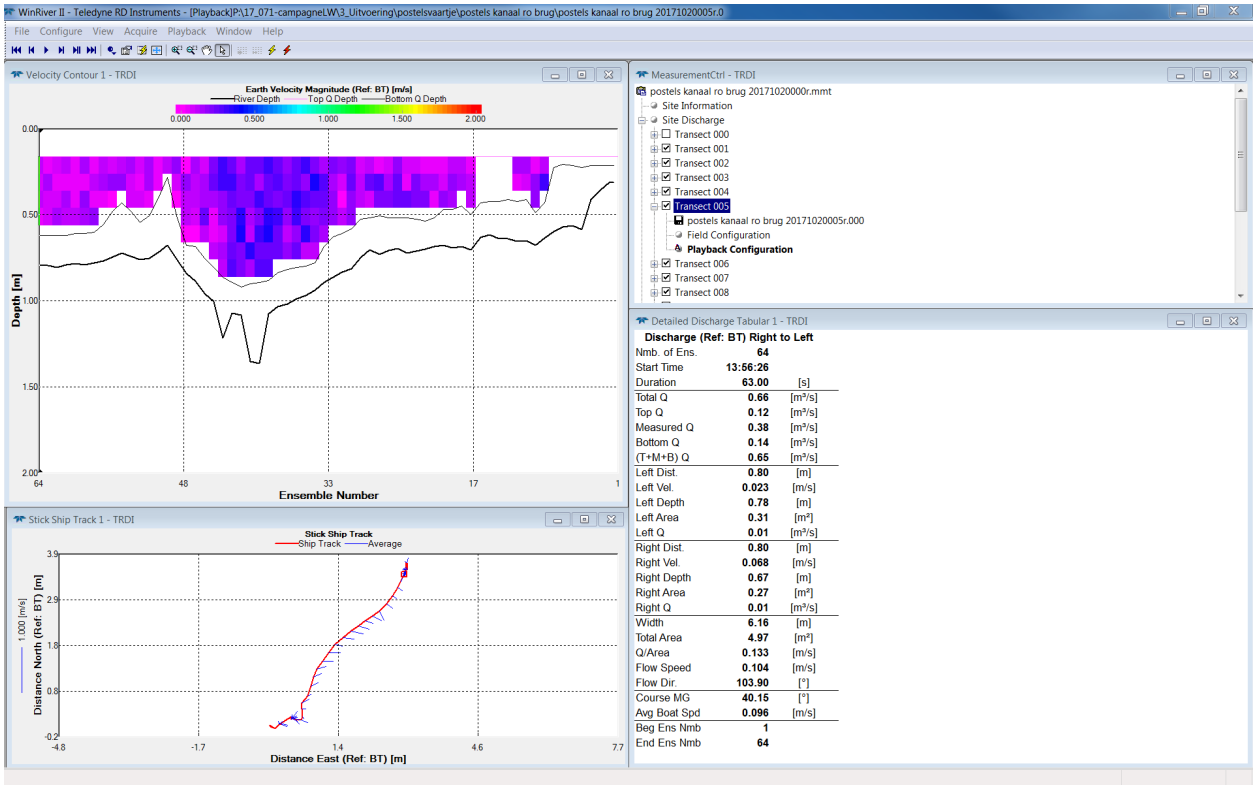
File Configure View Acquire Playback Window Help
Velocity Contour 1 - TRDI
Earth Velocity Magnitude (Ref: BT) [m/s]
River Depth Top Q Depth Bottom Q Depth
0.000 0.500 1.000 1.500 2.000
Depth [m]
0.00
1.50
3.00
4.50
6.00
5236 5205 5175 5144 5113
Ensemble Number
Stick Ship Track 1 - TRDI
Stick Ship Track
Ship Track Average
Distance North (Ref: BT) [m]
0.750 [m/s]
0.3 -1.5 -3.3 -5.1 -6.9
-17.2 -11.0 -4.8 1.5 7.7
Distance East (Ref: BT) [m]
MeasurementCtrl - TRDI
Transect 008
Transect 009
Transect 010
Transect 011
Transect 012
Transect 013
Transect 014
Transect 015
Transect 016
Transect 017
Transect 018
Transect 019
genk4_0_019_000_17-11-10_120546.PD0
Field Configuration
Playback Configuration
Detailed Discharge Tabular 1 - TRDI
Discharge (Ref: BT) Right to Left
Nmb. of Ens. 124
Start Time 12:05:52
Duration 71.80 [s]
Total Q 16.65 [m³/s]
Top Q 1.71 [m³/s]
Measured Q 10.63 [m³/s]
Bottom Q 2.70 [m³/s]
(T+M+B) Q 15.04 [m³/s]
Left Dist. 0.80 [m]
Left Vel. 0.270 [m/s]
Left Depth 4.07 [m]
Left Area 3.26 [m²]
Left Q 0.80 [m³/s]
Right Dist. 0.60 [m]
Right Vel. 0.325 [m/s]
Right Depth 4.56 [m]
Right Area 2.73 [m²]
Right Q 0.81 [m³/s]
Width 12.98 [m]
Total Area 61.95 [m²]
Q/Area 0.269 [m/s]
Flow Speed 0.295 [m/s]
Flow Dir. 296.03 [°]
Course MG 235.73 [°]
Avg Boat Spd 0.171 [m/s]
Beg Ens Nmb 5113
End Ens Nmb 5236


WinRiver II - Teledyne RD Instruments - [Playback]P:\17_071-campagneLW\3_Uitvoering\bypass_Genk\metingen_101117\genk4_0\genk4_0_020_000_17-11-10_120706.PD0
File Configure View Acquire Playback Window Help
Velocity Contour 1 - TRDI
Earth Velocity Magnitude (Ref: BT) [m/s]
River Depth Top Q Depth Bottom Q Depth
0.000 0.500 1.000 1.500 2.000
Depth [m]
0.00
1.50
3.00
4.50
6.00
5246 5285 5324 5362 5401
Ensemble Number
Stick Ship Track 1 - TRDI
Stick Ship Track
Ship Track Average
Distance North (Ref: BT) [m]
0.750 [m/s]
6.3 4.6 3.0 1.3 -0.3
-6.5 -0.8 5.0 10.7 16.4
Distance East (Ref: BT) [m]
MeasurementCtrl - TRDI
Transect 009
Transect 010
Transect 011
Transect 012
Transect 013
Transect 014
Transect 015
Transect 016
Transect 017
Transect 018
Transect 019
Transect 020
genk4_0_020_000_17-11-10_120706.PD0
Field Configuration
Playback Configuration
Detailed Discharge Tabular 1 - TRDI
Discharge (Ref: BT) Left to Right
Nmb. of Ens. 156
Start Time 12:07:10
Duration 90.31 [s]
Total Q 15.45 [m³/s]
Top Q 1.59 [m³/s]
Measured Q 9.89 [m³/s]
Bottom Q 2.50 [m³/s]
(T+M+B) Q 13.98 [m³/s]
Left Dist. 0.80 [m]
Left Vel. 0.238 [m/s]
Left Depth 3.66 [m]
Left Area 2.93 [m²]
Left Q 0.63 [m³/s]
Right Dist. 0.60 [m]
Right Vel. 0.319 [m/s]
Right Depth 4.81 [m]
Right Area 2.88 [m²]
Right Q 0.84 [m³/s]
Width 12.92 [m]
Total Area 61.74 [m²]
Q/Area 0.250 [m/s]
Flow Speed 0.306 [m/s]
Flow Dir. 295.29 [°]
Course MG 58.97 [°]
Avg Boat Spd 0.136 [m/s]
Beg Ens Nmb 5246
End Ens Nmb 5401

5.2 ADCP measurements at Postels Vaartje – Winriver output



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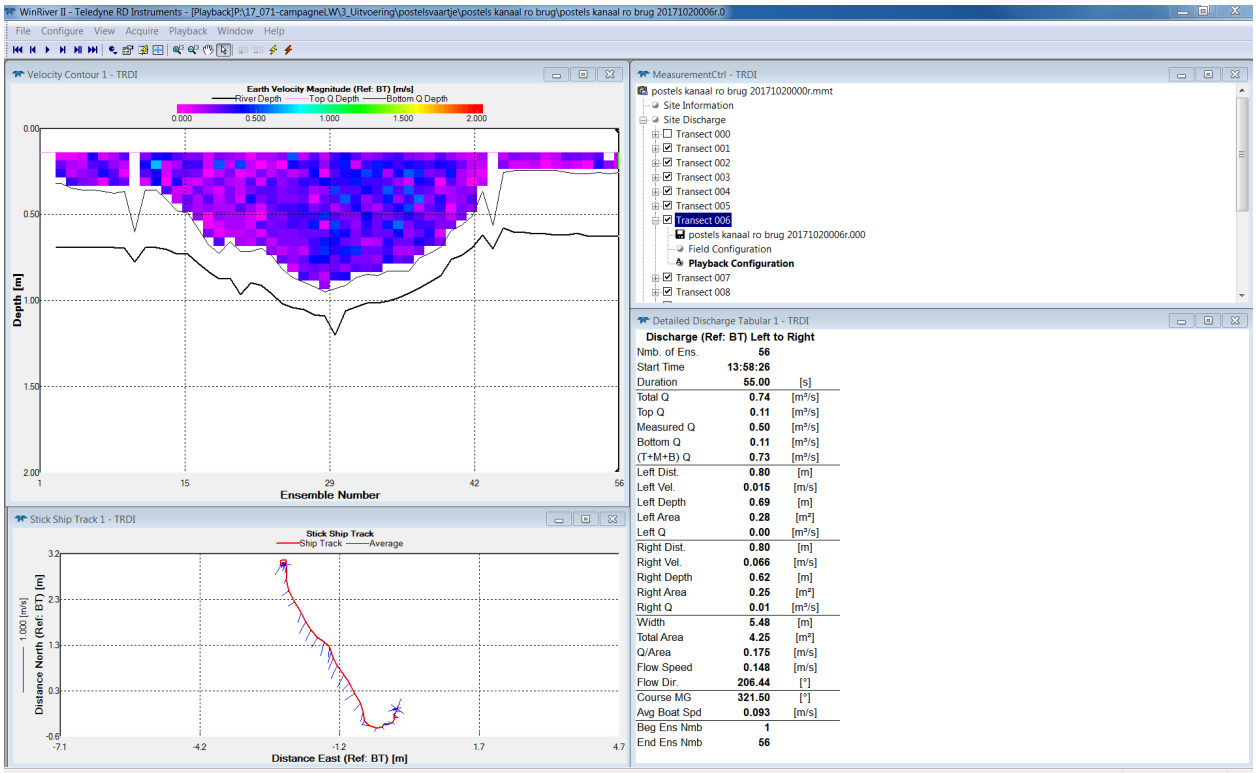
File Configure View Acquire Playback Window Help
Velocity Contour 1 - TRDI
Earth Velocity Magnitude (Ref: BT) [m/s]
River Depth Top Q Depth Bottom Q Depth
0.000 0.500 1.000 1.500 2.000
Depth [m]
Ensemble Number
MeasurementCtrl - TRDI
postels kanaal ro brug 20171020000r.mmt
Site Information
Site Discharge
Transect 000
Transect 001
Transect 002
Transect 003
Transect 004
Transect 005
postels kanaal ro brug 20171020005r.000
Field Configuration
Playback Configuration
Transect 006
Transect 007
Transect 008
Detailed Discharge Tabular 1 - TRDI
Discharge (Ref: BT) Right to Left
Nmb. of Ens. 64
Start Time 13:56:26
Duration 63.00 [s]
Total Q 0.66 [m³/s]
Top Q 0.12 [m³/s]
Measured Q 0.38 [m³/s]
Bottom Q 0.14 [m³/s]
(T+M+B) Q 0.65 [m³/s]
Left Dist. 0.80 [m]
Left Vel. 0.023 [m/s]
Left Depth 0.78 [m]
Left Area 0.31 [m²]
Left Q 0.01 [m³/s]
Right Dist. 0.80 [m]
Right Vel. 0.068 [m/s]
Right Depth 0.67 [m]
Right Area 0.27 [m²]
Right Q 0.01 [m³/s]
Width 6.16 [m]
Total Area 4.97 [m²]
Q/Area 0.133 [m/s]
Flow Speed 0.104 [m/s]
Flow Dir. 103.90 [°]
Course MG 40.15 [°]
Avg Boat Spd 0.096 [m/s]
Beg Ens Nmb 1
End Ens Nmb 64
Stick Ship Track 1 - TRDI
Stick Ship Track
Ship Track Average
Distance North (Ref: BT) [m]
Distance East (Ref: BT) [m]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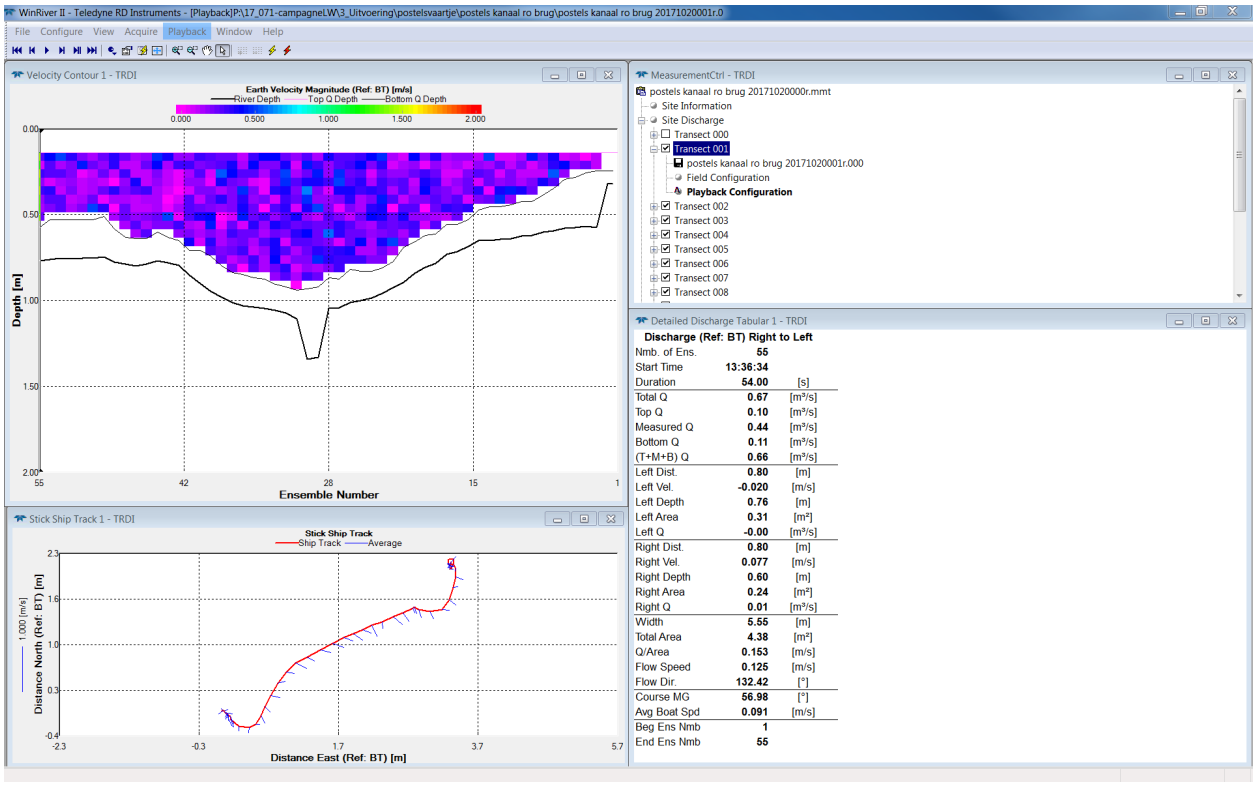
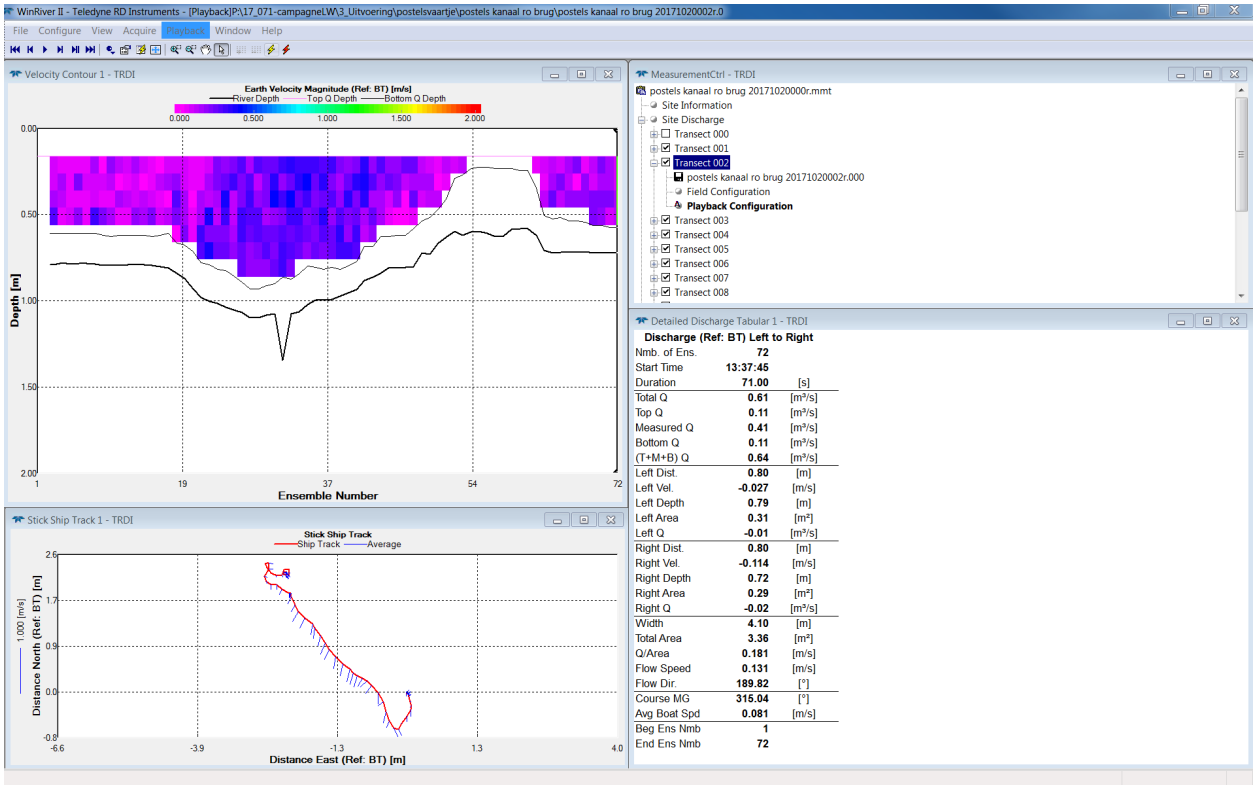
File Configure View Acquire Playback Window Help
Velocity Contour 1 - TRDI
Earth Velocity Magnitude (Ref: BT) [m/s]
River Depth Top Q Depth Bottom Q Depth
0.000 0.500 1.000 1.500 2.000
Depth [m]
Ensemble Number
MeasurementCtrl - TRDI
postels kanaal ro brug 20171020000r.mmt
Site Information
Site Discharge
Transect 000
Transect 001
Transect 002
Transect 003
Transect 004
Transect 005
Transect 006
postels kanaal ro brug 20171020006r.000
Field Configuration
Playback Configuration
Transect 007
Transect 008
Detailed Discharge Tabular 1 - TRDI
Discharge (Ref: BT) Left to Right
Nmb. of Ens. 56
Start Time 13:58:26
Duration 55.00 [s]
Total Q 0.74 [m³/s]
Top Q 0.11 [m³/s]
Measured Q 0.50 [m³/s]
Bottom Q 0.11 [m³/s]
(T+M+B) Q 0.73 [m³/s]
Left Dist. 0.80 [m]
Left Vel. 0.015 [m/s]
Left Depth 0.69 [m]
Left Area 0.28 [m²]
Left Q 0.00 [m³/s]
Right Dist. 0.80 [m]
Right Vel. 0.066 [m/s]
Right Depth 0.62 [m]
Right Area 0.25 [m²]
Right Q 0.01 [m³/s]
Width 5.48 [m]
Total Area 4.25 [m²]
Q/Area 0.175 [m/s]
Flow Speed 0.148 [m/s]
Flow Dir. 206.44 [°]
Course MG 321.50 [°]
Avg Boat Spd 0.093 [m/s]
Beg Ens Nmb 1
End Ens Nmb 56
Stick Ship Track 1 - TRDI
Stick Ship Track
Ship Track Average
Distance North (Ref: BT) [m]
Distance East (Ref: BT) [m]


WinRiver II - Teledyne RD Instruments - [Playback]P:\17_071-campagneLW\3_Uitvoering\postelsvaartje\postels kanaal ro brug\postels kanaal ro brug 20171020001r.0
File Configure View Acquire Playback Window Help
Velocity Contour 1 - TRDI
Earth Velocity Magnitude (Ref: BT) [m/s]
River Depth Top Q Depth Bottom Q Depth
0.000 0.500 1.000 1.500 2.000
Depth [m]
Ensemble Number
Stick Ship Track 1 - TRDI
Stick Ship Track
Ship Track Average
Distance North (Ref: BT) [m]
Distance East (Ref: BT) [m]
MeasurementCtrl - TRDI
postels kanaal ro brug 20171020000r.mmt
Site Information
Site Discharge
Transect 000
Transect 001
postels kanaal ro brug 20171020001r.000
Field Configuration
Playback Configuration
Transect 002
Transect 003
Transect 004
Transect 005
Transect 006
Transect 007
Transect 008
Detailed Discharge Tabular 1 - TRDI
Discharge (Ref: BT) Right to Left
Nmb. of Ens. 55
Start Time 13:36:34
Duration 54.00 [s]
Total Q 0.67 [m³/s]
Top Q 0.10 [m³/s]
Measured Q 0.44 [m³/s]
Bottom Q 0.11 [m³/s]
(T+M+B) Q 0.66 [m³/s]
Left Dist. 0.80 [m]
Left Vel. -0.020 [m/s]
Left Depth 0.76 [m]
Left Area 0.31 [m²]
Left Q -0.00 [m³/s]
Right Dist. 0.80 [m]
Right Vel. 0.077 [m/s]
Right Depth 0.60 [m]
Right Area 0.24 [m²]
Right Q 0.01 [m³/s]
Width 5.55 [m]
Total Area 4.38 [m²]
Q/Area 0.153 [m/s]
Flow Speed 0.125 [m/s]
Flow Dir. 132.42 [°]
Course MG 56.98 [°]
Avg Boat Spd 0.091 [m/s]
Beg Ens Nmb 1
End Ens Nmb 55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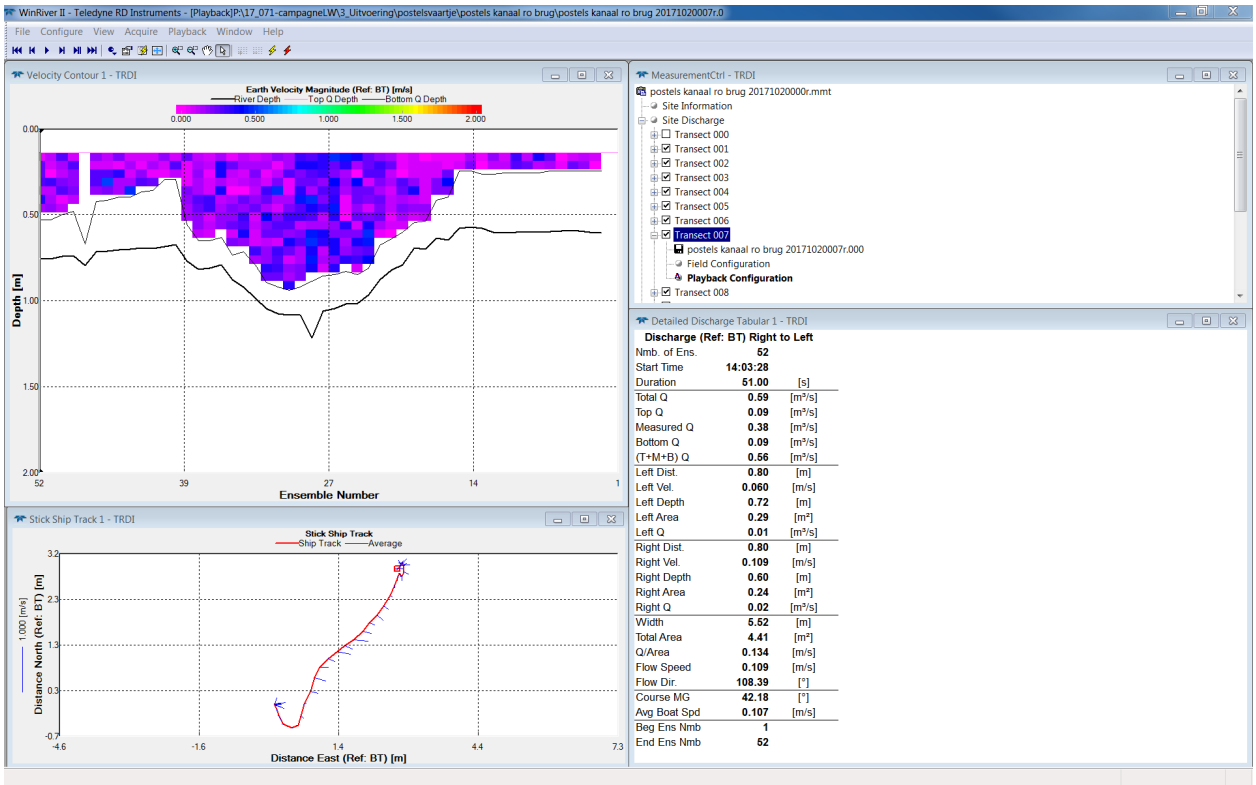
File Configure View Acquire Playback Window Help
Velocity Contour 1 - TRDI
Earth Velocity Magnitude (Ref: BT) [m/s]
River Depth Top Q Depth Bottom Q Depth
0.000 0.500 1.000 1.500 2.000
Depth [m]
Ensemble Number
Stick Ship Track 1 - TRDI
Stick Ship Track
Ship Track Average
Distance North (Ref: BT) [m]
Distance East (Ref: BT) [m]
MeasurementCtrl - TRDI
postels kanaal ro brug 20171020000r.mmt
Site Information
Site Discharge
Transect 000
Transect 001
Transect 002
postels kanaal ro brug 20171020002r.000
Field Configuration
Playback Configuration
Transect 003
Transect 004
Transect 005
Transect 006
Transect 007
Transect 008
Detailed Discharge Tabular 1 - TRDI
Discharge (Ref: BT) Left to Right
Nmb. of Ens. 72
Start Time 13:37:45
Duration 71.00 [s]
Total Q 0.61 [m³/s]
Top Q 0.11 [m³/s]
Measured Q 0.41 [m³/s]
Bottom Q 0.11 [m³/s]
(T+M+B) Q 0.64 [m³/s]
Left Dist. 0.80 [m]
Left Vel. -0.027 [m/s]
Left Depth 0.79 [m]
Left Area 0.31 [m²]
Left Q -0.01 [m³/s]
Right Dist. 0.80 [m]
Right Vel. -0.114 [m/s]
Right Depth 0.72 [m]
Right Area 0.29 [m²]
Right Q -0.02 [m³/s]
Width 4.10 [m]
Total Area 3.36 [m²]
Q/Area 0.181 [m/s]
Flow Speed 0.131 [m/s]
Flow Dir. 189.82 [°]
Course MG 315.04 [°]
Avg Boat Spd 0.081 [m/s]
Beg Ens Nmb 1
End Ens Nmb 72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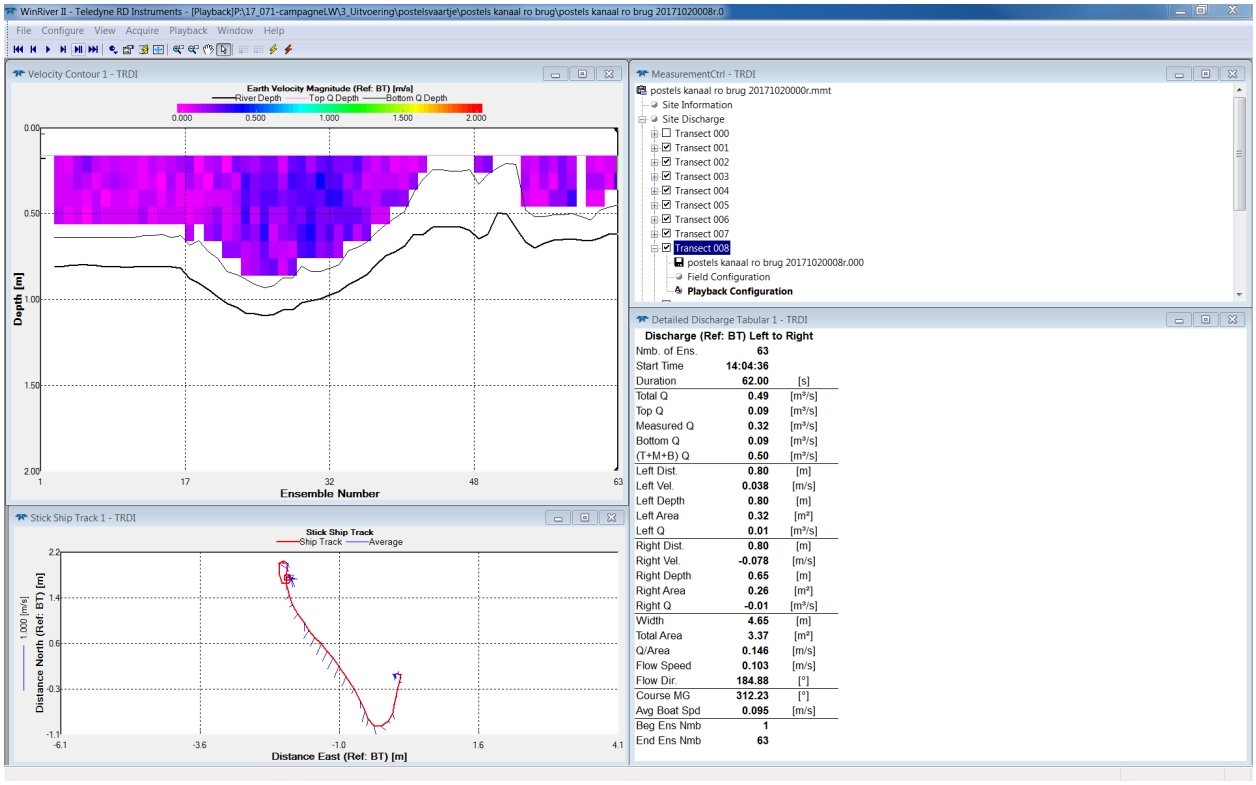
File Configure View Acquire Playback Window Help
Velocity Contour 1 - TRDI
Earth Velocity Magnitude (Ref: BT) [m/s]
River Depth Top Q Depth Bottom Q Depth
0.000 0.500 1.000 1.500 2.000
Depth [m]
Ensemble Number
MeasurementCtrl - TRDI
postels kanaal ro brug 20171020000r.mmt
Site Information
Site Discharge
Transect 000
Transect 001
Transect 002
Transect 003
Transect 004
Transect 005
Transect 006
Transect 007
postels kanaal ro brug 20171020007r.000
Field Configuration
Playback Configuration
Transect 008
Detailed Discharge Tabular 1 - TRDI
Discharge (Ref: BT) Right to Left
Nmb. of Ens. 52
Start Time 14:03:28
Duration 51.00 [s]
Total Q 0.59 [m³/s]
Top Q 0.09 [m³/s]
Measured Q 0.38 [m³/s]
Bottom Q 0.09 [m³/s]
(T+M+B) Q 0.56 [m³/s]
Left Dist. 0.80 [m]
Left Vel. 0.060 [m/s]
Left Depth 0.72 [m]
Left Area 0.29 [m²]
Left Q 0.01 [m³/s]
Right Dist. 0.80 [m]
Right Vel. 0.109 [m/s]
Right Depth 0.60 [m]
Right Area 0.24 [m²]
Right Q 0.02 [m³/s]
Width 5.52 [m]
Total Area 4.41 [m²]
Q/Area 0.134 [m/s]
Flow Speed 0.109 [m/s]
Flow Dir. 108.39 [°]
Course MG 42.18 [°]
Avg Boat Spd 0.107 [m/s]
Beg Ens Nmb 1
End Ens Nmb 52
Stick Ship Track 1 - TRDI
Stick Ship Track
Ship Track Average
1.000 [m/s]
Distance North (Ref: BT) [m]
Distance East (Ref: BT) [m]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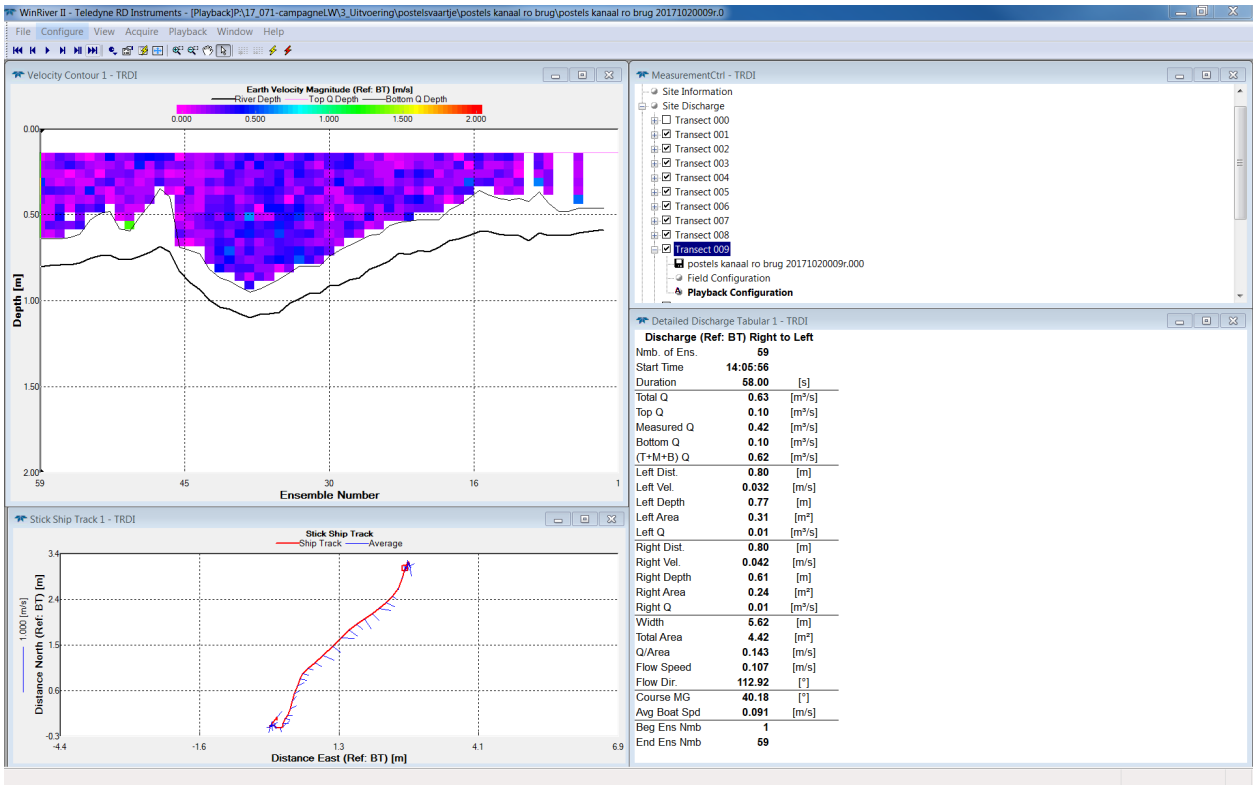
File Configure View Acquire Playback Window Help
Velocity Contour 1 - TRDI
Earth Velocity Magnitude (Ref: BT) [m/s]
River Depth Top Q Depth Bottom Q Depth
0.000 0.500 1.000 1.500 2.000
Depth [m]
Ensemble Number
MeasurementCtrl - TRDI
postels kanaal ro brug 20171020000r.mmt
Site Information
Site Discharge
Transect 000
Transect 001
Transect 002
Transect 003
Transect 004
Transect 005
Transect 006
Transect 007
Transect 008
postels kanaal ro brug 20171020008r.000
Field Configuration
Playback Configuration
Detailed Discharge Tabular 1 - TRDI
Discharge (Ref: BT) Left to Right
Nmb. of Ens. 63
Start Time 14:04:36
Duration 62.00 [s]
Total Q 0.49 [m³/s]
Top Q 0.09 [m³/s]
Measured Q 0.32 [m³/s]
Bottom Q 0.09 [m³/s]
(T+M+B) Q 0.50 [m³/s]
Left Dist. 0.80 [m]
Left Vel. 0.038 [m/s]
Left Depth 0.80 [m]
Left Area 0.32 [m²]
Left Q 0.01 [m³/s]
Right Dist. 0.80 [m]
Right Vel. -0.078 [m/s]
Right Depth 0.65 [m]
Right Area 0.26 [m²]
Right Q -0.01 [m³/s]
Width 4.65 [m]
Total Area 3.37 [m²]
Q/Area 0.146 [m/s]
Flow Speed 0.103 [m/s]
Flow Dir. 184.88 [°]
Course MG 312.23 [°]
Avg Boat Spd 0.095 [m/s]
Beg Ens Nmb 1
End Ens Nmb 63
Stick Ship Track 1 - TRDI
Stick Ship Track
Ship Track Average
1.000 [m/s]
Distance North (Ref: BT) [m]
Distance East (Ref: BT) [m]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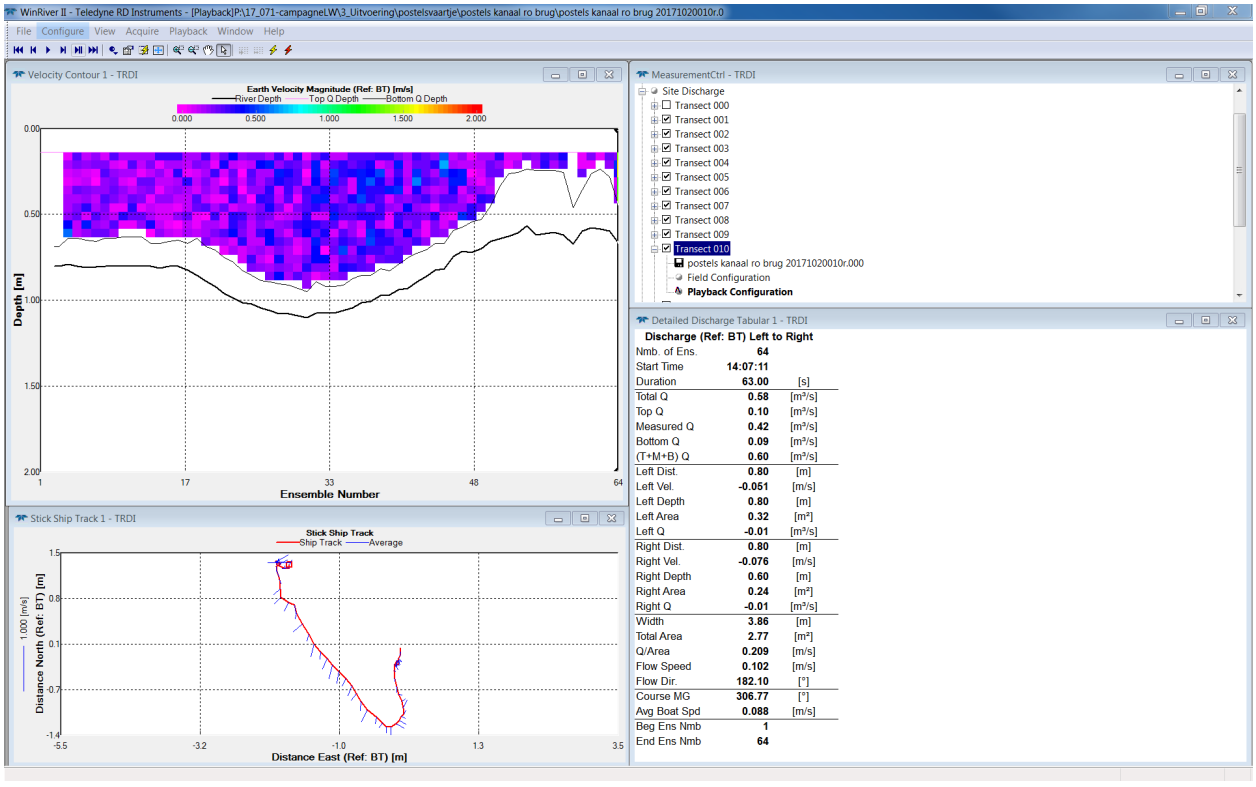
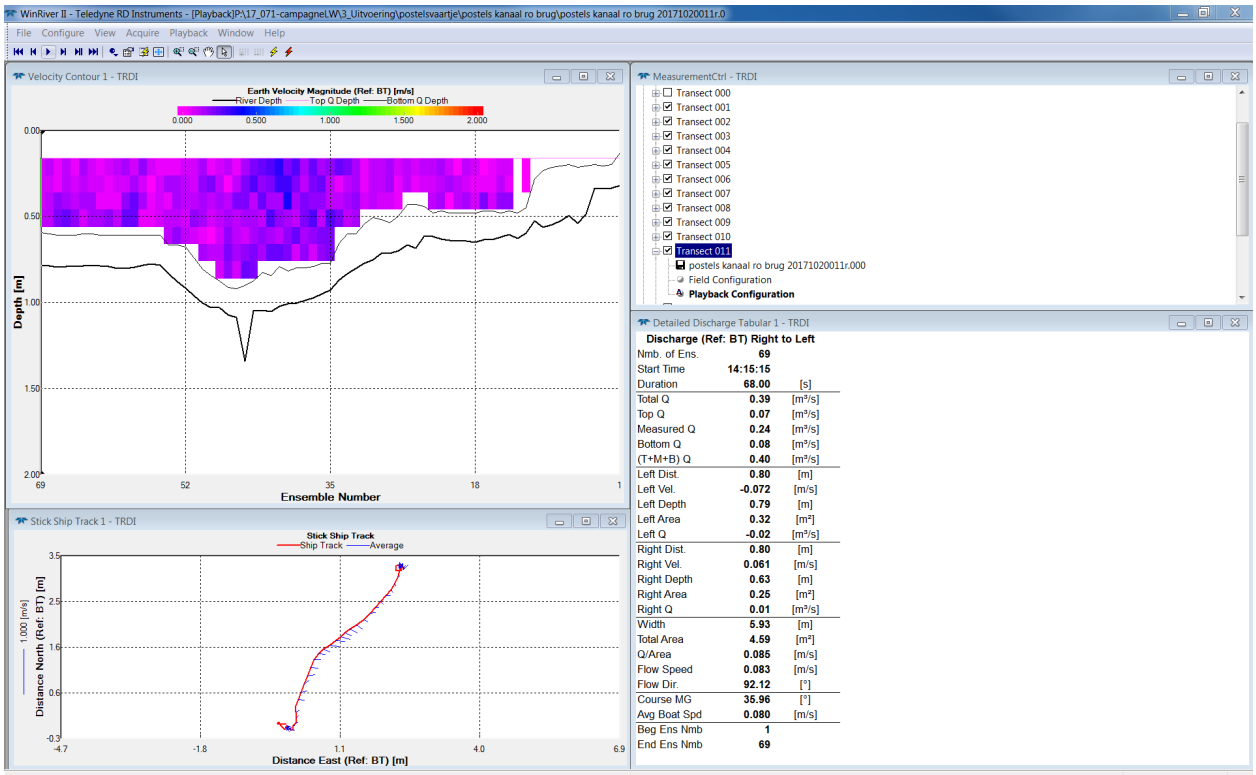
File Configure View Acquire Playback Window Help
Velocity Contour 1 - TRDI
Earth Velocity Magnitude (Ref: BT) [m/s]
River Depth Top Q Depth Bottom Q Depth
0.000 0.500 1.000 1.500 2.000
Depth [m]
Ensemble Number
MeasurementCtrl - TRDI
Site Information
Site Discharge
Transect 000
Transect 001
Transect 002
Transect 003
Transect 004
Transect 005
Transect 006
Transect 007
Transect 008
Transect 009
postels kanaal ro brug 20171020009r.000
Field Configuration
Playback Configuration
Detailed Discharge Tabular 1 - TRDI
Discharge (Ref: BT) Right to Left
Nmb. of Ens. 59
Start Time 14:05:56
Duration 58.00 [s]
Total Q 0.63 [m³/s]
Top Q 0.10 [m³/s]
Measured Q 0.42 [m³/s]
Bottom Q 0.10 [m³/s]
(T+M+B) Q 0.62 [m³/s]
Left Dist. 0.80 [m]
Left Vel. 0.032 [m/s]
Left Depth 0.77 [m]
Left Area 0.31 [m²]
Left Q 0.01 [m³/s]
Right Dist. 0.80 [m]
Right Vel. 0.042 [m/s]
Right Depth 0.61 [m]
Right Area 0.24 [m²]
Right Q 0.01 [m³/s]
Width 5.62 [m]
Total Area 4.42 [m²]
Q/Area 0.143 [m/s]
Flow Speed 0.107 [m/s]
Flow Dir. 112.92 [°]
Course MG 40.18 [°]
Avg Boat Spd 0.091 [m/s]
Beg Ens Nmb 1
End Ens Nmb 59
Stick Ship Track 1 - TRDI
Stick Ship Track
Ship Track Average
1.000 [m/s]
Distance North (Ref: BT) [m]
Distance East (Ref: BT) [m]


WinRiver II - Teledyne RD Instruments - [Playback]P:\17_071-campagneLW\3_Uitvoering\postelsvaartje\postels kanaal ro brug\postels kanaal ro brug 20171020010r.0
File Configure View Acquire Playback Window Help
Velocity Contour 1 - TRDI
Earth Velocity Magnitude (Ref: BT) [m/s]
River Depth Top Q Depth Bottom Q Depth
0.000 0.500 1.000 1.500 2.000
Depth [m]
Ensemble Number
MeasurementCtrl - TRDI
Site Discharge
Transect 000
Transect 001
Transect 002
Transect 003
Transect 004
Transect 005
Transect 006
Transect 007
Transect 008
Transect 009
Transect 010
postels kanaal ro brug 20171020010r.000
Field Configuration
Playback Configuration
Detailed Discharge Tabular 1 - TRDI
Discharge (Ref: BT) Left to Right
Nmb. of Ens. 64
Start Time 14:07:11
Duration 63.00 [s]
Total Q 0.58 [m³/s]
Top Q 0.10 [m³/s]
Measured Q 0.42 [m³/s]
Bottom Q 0.09 [m³/s]
(T+M+B) Q 0.60 [m³/s]
Left Dist. 0.80 [m]
Left Vel. -0.051 [m/s]
Left Depth 0.80 [m]
Left Area 0.32 [m²]
Left Q -0.01 [m³/s]
Right Dist. 0.80 [m]
Right Vel. -0.076 [m/s]
Right Depth 0.60 [m]
Right Area 0.24 [m²]
Right Q -0.01 [m³/s]
Width 3.86 [m]
Total Area 2.77 [m²]
Q/Area 0.209 [m/s]
Flow Speed 0.102 [m/s]
Flow Dir. 182.10 [°]
Course MG 306.77 [°]
Avg Boat Spd 0.088 [m/s]
Beg Ens Nmb 1
End Ens Nmb 64
Stick Ship Track 1 - TRDI
Stick Ship Track
Ship Track Average
1.000 [m/s]
Distance North (Ref: BT) [m]
Distance East (Ref: BT) [m]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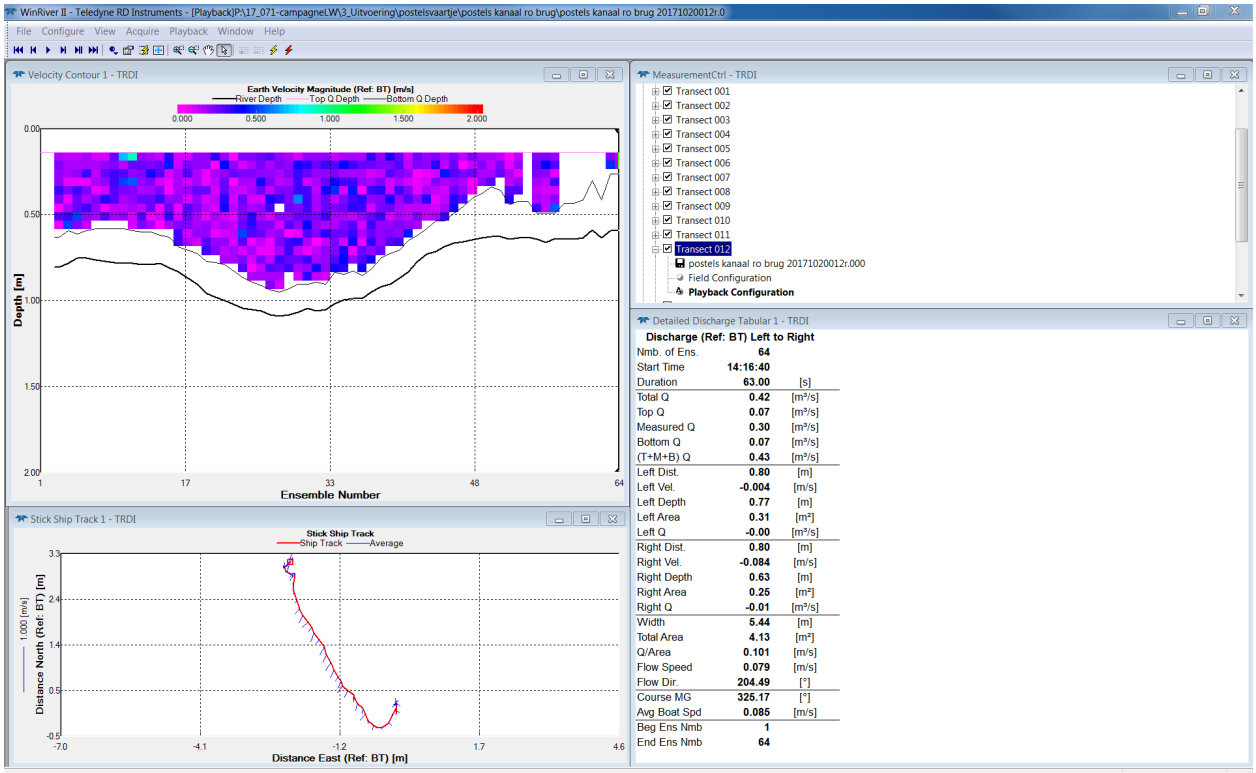
File Configure View Acquire Playback Window Help
Velocity Contour 1 - TRDI
Earth Velocity Magnitude (Ref: BT) [m/s]
River Depth Top Q Depth Bottom Q Depth
0.000 0.500 1.000 1.500 2.000
Depth [m]
0.00 0.50 1.00 1.50 2.00
69 52 35 18 1
Ensemble Number
MeasurementCtrl - TRDI
Transect 000
Transect 001
Transect 002
Transect 003
Transect 004
Transect 005
Transect 006
Transect 007
Transect 008
Transect 009
Transect 010
Transect 011
postels kanaal ro brug 20171020011r.000
Field Configuration
Playback Configuration
Detailed Discharge Tabular 1 - TRDI
Discharge (Ref: BT) Right to Left
Nmb. of Ens. 69
Start Time 14:15:15
Duration 68.00 [s]
Total Q 0.39 [m³/s]
Top Q 0.07 [m³/s]
Measured Q 0.24 [m³/s]
Bottom Q 0.08 [m³/s]
(T+M+B) Q 0.40 [m³/s]
Left Dist. 0.80 [m]
Left Vel. -0.072 [m/s]
Left Depth 0.79 [m]
Left Area 0.32 [m²]
Left Q -0.02 [m³/s]
Right Dist. 0.80 [m]
Right Vel. 0.061 [m/s]
Right Depth 0.63 [m]
Right Area 0.25 [m²]
Right Q 0.01 [m³/s]
Width 5.93 [m]
Total Area 4.59 [m²]
Q/Area 0.085 [m/s]
Flow Speed 0.083 [m/s]
Flow Dir. 92.12 [°]
Course MG 35.96 [°]
Avg Boat Spd 0.080 [m/s]
Beg Ens Nmb 1
End Ens Nmb 69
Stick Ship Track 1 - TRDI
Stick Ship Track
Ship Track Average
1.000 [m/s]
Distance North (Ref: BT) [m]
3.5 2.5 1.6 0.6 -0.3
-4.7 -1.8 1.1 4.0 6.9
Distance East (Ref: BT) [m]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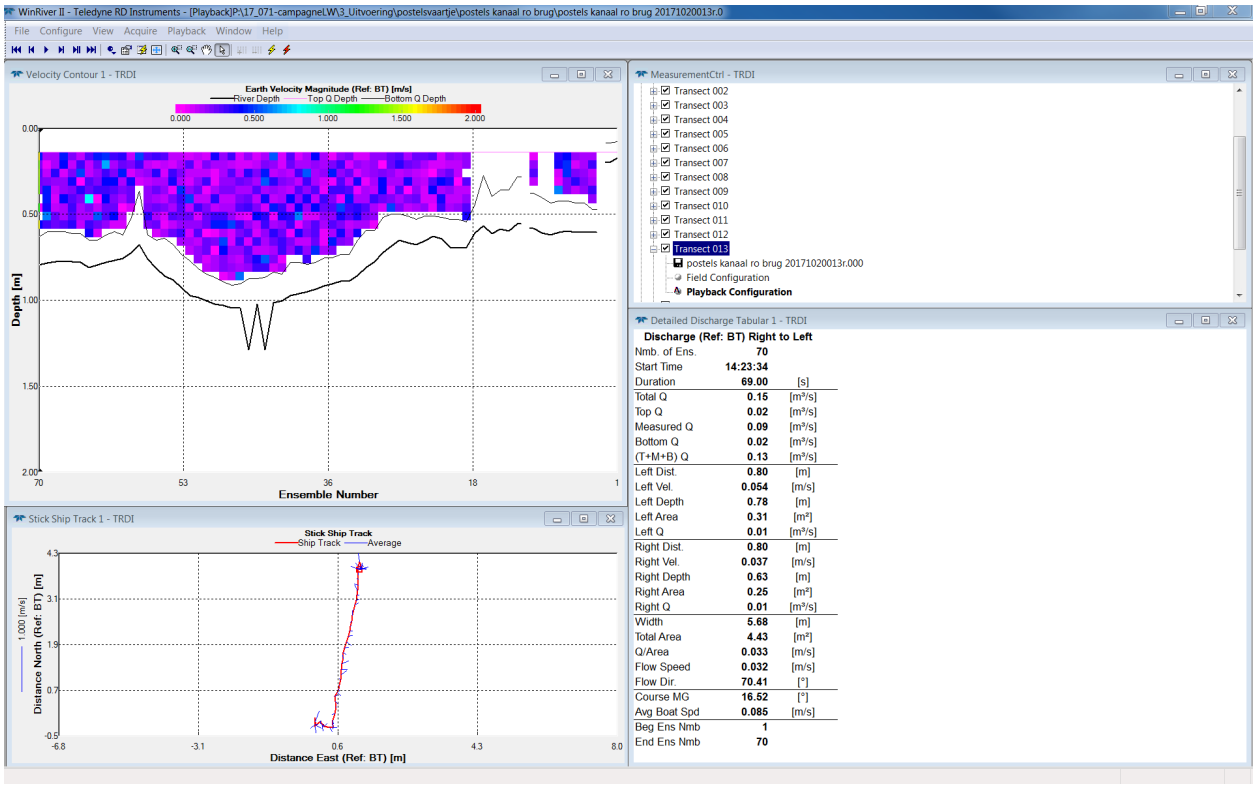
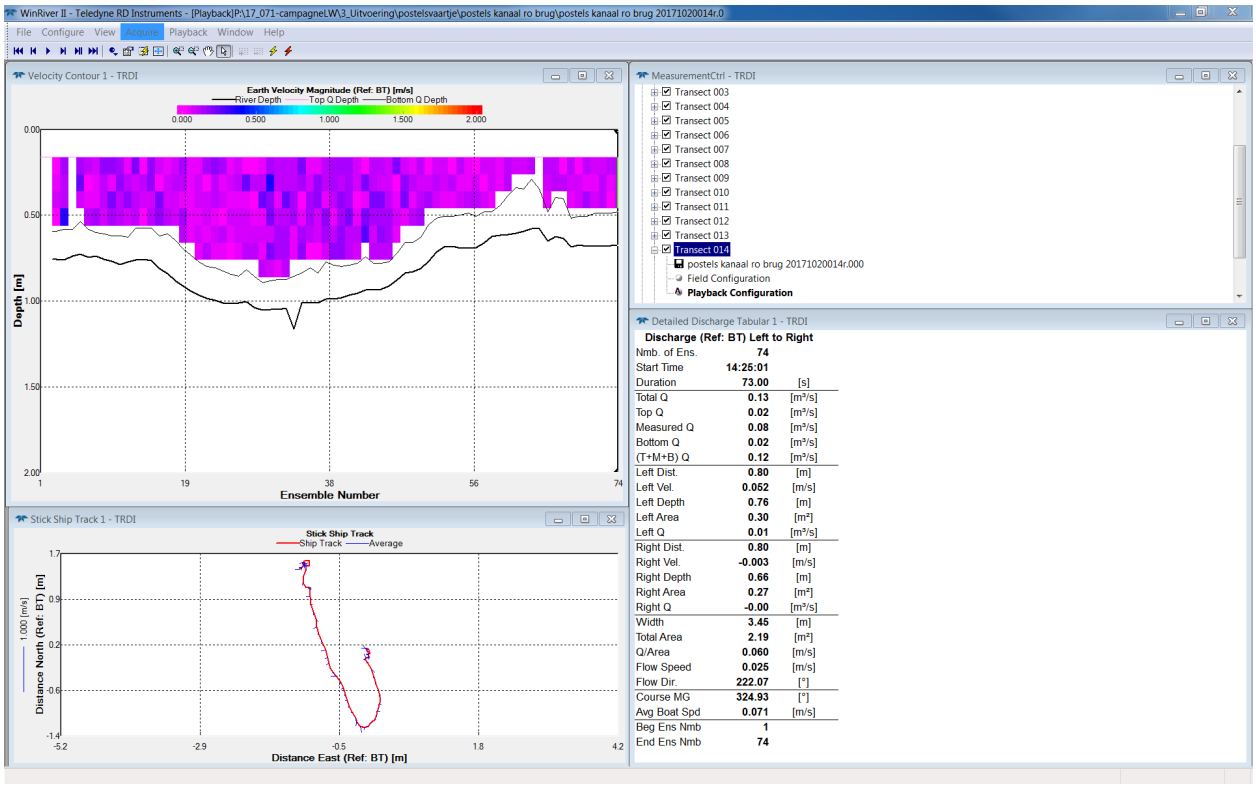
File Configure View Acquire Playback Window Help
Velocity Contour 1 - TRDI
Earth Velocity Magnitude (Ref: BT) [m/s]
River Depth Top Q Depth Bottom Q Depth
0.000 0.500 1.000 1.500 2.000
Depth [m]
0.00 0.50 1.00 1.50 2.00
1 17 33 48 64
Ensemble Number
MeasurementCtrl - TRDI
Transect 001
Transect 002
Transect 003
Transect 004
Transect 005
Transect 006
Transect 007
Transect 008
Transect 009
Transect 010
Transect 011
Transect 012
postels kanaal ro brug 20171020012r.000
Field Configuration
Playback Configuration
Detailed Discharge Tabular 1 - TRDI
Discharge (Ref: BT) Left to Right
Nmb. of Ens. 64
Start Time 14:16:40
Duration 63.00 [s]
Total Q 0.42 [m³/s]
Top Q 0.07 [m³/s]
Measured Q 0.30 [m³/s]
Bottom Q 0.07 [m³/s]
(T+M+B) Q 0.43 [m³/s]
Left Dist. 0.80 [m]
Left Vel. -0.004 [m/s]
Left Depth 0.77 [m]
Left Area 0.31 [m²]
Left Q -0.00 [m³/s]
Right Dist. 0.80 [m]
Right Vel. -0.084 [m/s]
Right Depth 0.63 [m]
Right Area 0.25 [m²]
Right Q -0.01 [m³/s]
Width 5.44 [m]
Total Area 4.13 [m²]
Q/Area 0.101 [m/s]
Flow Speed 0.079 [m/s]
Flow Dir. 204.49 [°]
Course MG 325.17 [°]
Avg Boat Spd 0.085 [m/s]
Beg Ens Nmb 1
End Ens Nmb 64
Stick Ship Track 1 - TRDI
Stick Ship Track
Ship Track Average
1.000 [m/s]
Distance North (Ref: BT) [m]
3.3 2.4 1.4 0.5 -0.5
-7.0 -4.1 -1.2 1.7 4.6
Distance East (Ref: BT) [m]


WinRiver II - Teledyne RD Instruments - [Playback]P:\17_071-campagneLW\3_Uitvoering\postelsvaartje\postels kanaal ro brug\postels kanaal ro brug 20171020013r.0
File Configure View Acquire Playback Window Help
Velocity Contour 1 - TRDI
Earth Velocity Magnitude (Ref: BT) [m/s]
River Depth Top Q Depth Bottom Q Depth
0.000 0.500 1.000 1.500 2.000
Depth [m]
0.00 0.50 1.00 1.50 2.00
70 53 36 18 1
Ensemble Number
MeasurementCtrl - TRDI
Transect 002
Transect 003
Transect 004
Transect 005
Transect 006
Transect 007
Transect 008
Transect 009
Transect 010
Transect 011
Transect 012
Transect 013
postels kanaal ro brug 20171020013r.000
Field Configuration
Playback Configuration
Detailed Discharge Tabular 1 - TRDI
Discharge (Ref: BT) Right to Left
Nmb. of Ens. 70
Start Time 14:23:34
Duration 69.00 [s]
Total Q 0.15 [m³/s]
Top Q 0.02 [m³/s]
Measured Q 0.09 [m³/s]
Bottom Q 0.02 [m³/s]
(T+M+B) Q 0.13 [m³/s]
Left Dist. 0.80 [m]
Left Vel. 0.054 [m/s]
Left Depth 0.78 [m]
Left Area 0.31 [m²]
Left Q 0.01 [m³/s]
Right Dist. 0.80 [m]
Right Vel. 0.037 [m/s]
Right Depth 0.63 [m]
Right Area 0.25 [m²]
Right Q 0.01 [m³/s]
Width 5.68 [m]
Total Area 4.43 [m²]
Q/Area 0.033 [m/s]
Flow Speed 0.032 [m/s]
Flow Dir. 70.41 [°]
Course MG 16.52 [°]
Avg Boat Spd 0.085 [m/s]
Beg Ens Nmb 1
End Ens Nmb 70
Stick Ship Track 1 - TRDI
Stick Ship Track
Ship Track Average
1.000 [m/s]
Distance North (Ref: BT) [m]
4.3 3.1 1.9 0.7 -0.5
-6.8 -3.1 0.6 4.3 8.0
Distance East (Ref: BT) [m]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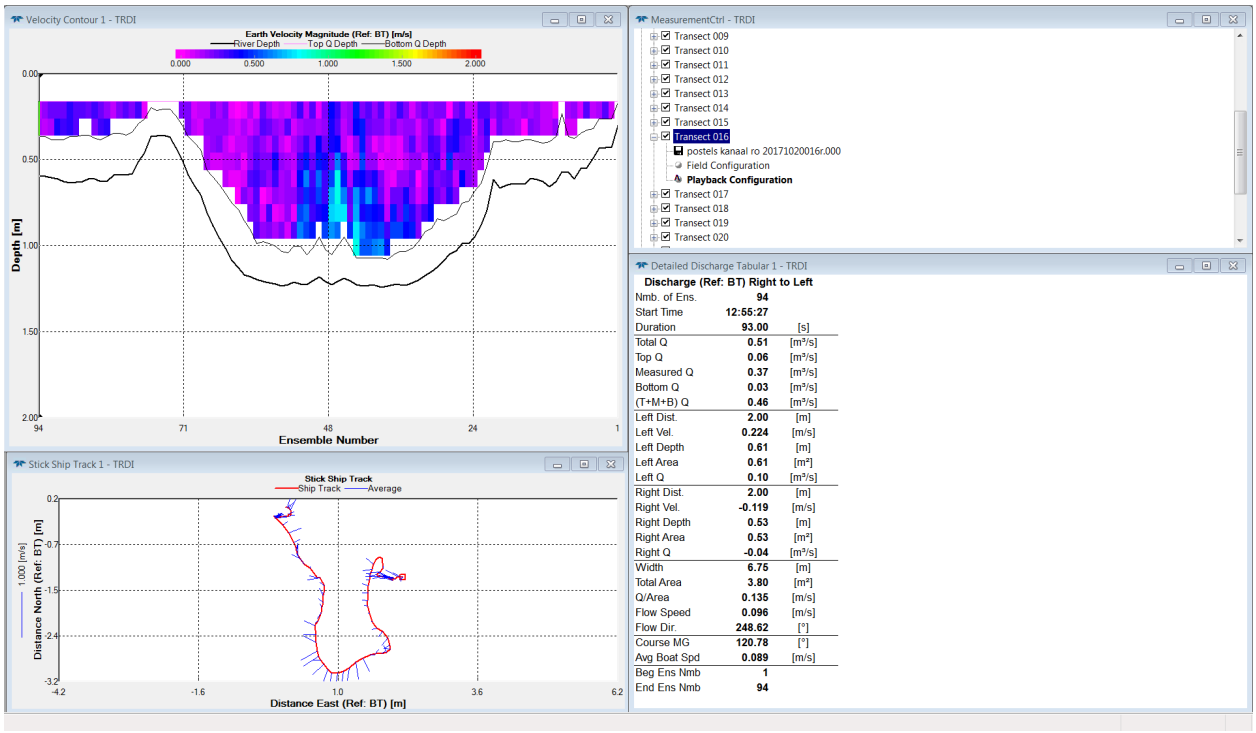
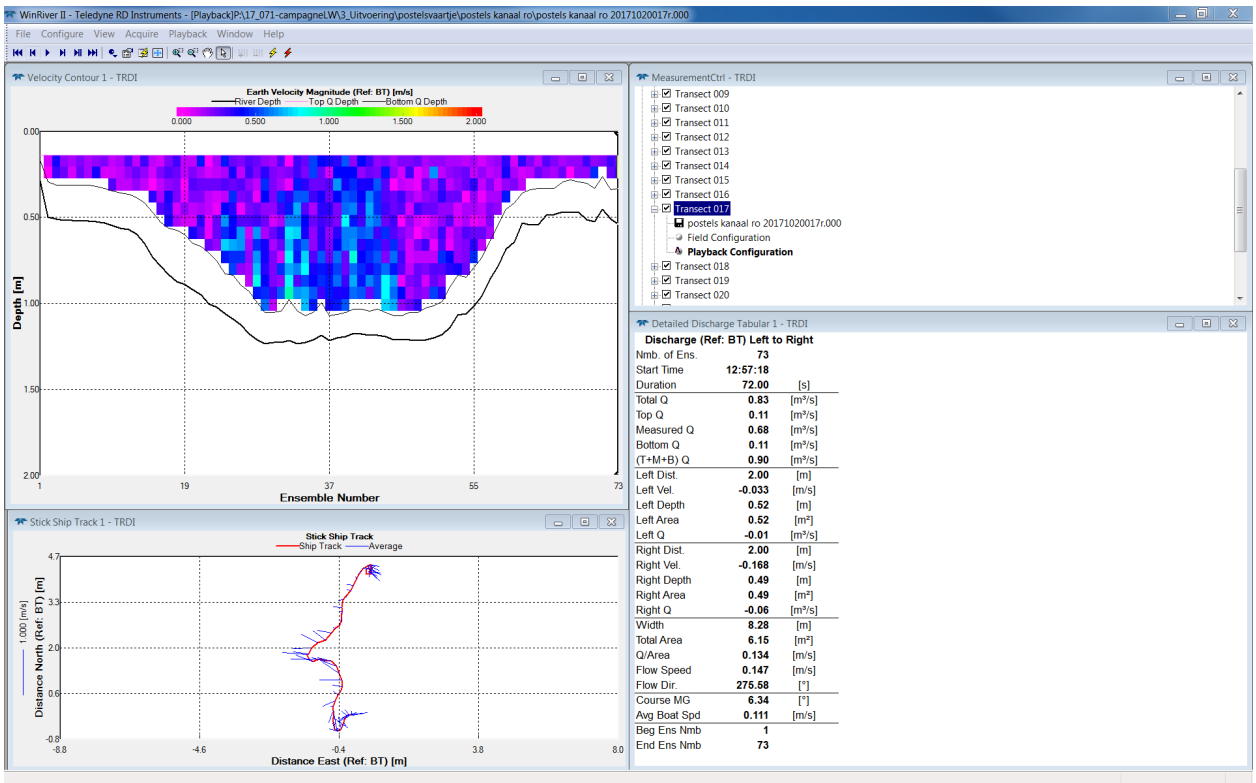
File Configure View Acquire Playback Window Help
Velocity Contour 1 - TRDI
Earth Velocity Magnitude (Ref: BT) [m/s]
River Depth Top Q Depth Bottom Q Depth
0.000 0.500 1.000 1.500 2.000
Depth [m]
0.00 0.50 1.00 1.50 2.00
1 19 38 56 74
Ensemble Number
MeasurementCtrl - TRDI
Transect 003
Transect 004
Transect 005
Transect 006
Transect 007
Transect 008
Transect 009
Transect 010
Transect 011
Transect 012
Transect 013
Transect 014
postels kanaal ro brug 20171020014r.000
Field Configuration
Playback Configuration
Detailed Discharge Tabular 1 - TRDI
Discharge (Ref: BT) Left to Right
Nmb. of Ens. 74
Start Time 14:25:01
Duration 73.00 [s]
Total Q 0.13 [m³/s]
Top Q 0.02 [m³/s]
Measured Q 0.08 [m³/s]
Bottom Q 0.02 [m³/s]
(T+M+B) Q 0.12 [m³/s]
Left Dist. 0.80 [m]
Left Vel. 0.052 [m/s]
Left Depth 0.76 [m]
Left Area 0.30 [m²]
Left Q 0.01 [m³/s]
Right Dist. 0.80 [m]
Right Vel. -0.003 [m/s]
Right Depth 0.66 [m]
Right Area 0.27 [m²]
Right Q -0.00 [m³/s]
Width 3.45 [m]
Total Area 2.19 [m²]
Q/Area 0.060 [m/s]
Flow Speed 0.025 [m/s]
Flow Dir. 222.07 [°]
Course MG 324.93 [°]
Avg Boat Spd 0.071 [m/s]
Beg Ens Nmb 1
End Ens Nmb 74
Stick Ship Track 1 - TRDI
Stick Ship Track
Ship Track Average
1.000 [m/s]
Distance North (Ref: BT) [m]
1.7 0.9 0.2 -0.6 -1.4
-5.2 -2.9 -0.5 1.8 4.2
Distance East (Ref: BT) [m]


Velocity Contour 1 - TRDI
Earth Velocity Magnitude (Ref: BT) [m/s]
River Depth
Top Q Depth
Bottom Q Depth
Depth [m]
Ensemble Number
MeasurementCtrl - TRDI
Transect 009
Transect 010
Transect 011
Transect 012
Transect 013
Transect 014
Transect 015
Transect 016
postels kanaal ro 20171020016r.000
Field Configuration
Playback Configuration
Transect 017
Transect 018
Transect 019
Transect 020
Detailed Discharge Tabular 1 - TRDI
Discharge (Ref: BT) Right to Left
Nmb. of Ens. 94
Start Time 12:55:27
Duration 93.00 [s]
Total Q 0.51 [m³/s]
Top Q 0.06 [m³/s]
Measured Q 0.37 [m³/s]
Bottom Q 0.03 [m³/s]
(T+M+B) Q 0.46 [m³/s]
Left Dist. 2.00 [m]
Left Vel. 0.224 [m/s]
Left Depth 0.61 [m]
Left Area 0.61 [m²]
Left Q 0.10 [m³/s]
Right Dist. 2.00 [m]
Right Vel. -0.119 [m/s]
Right Depth 0.53 [m]
Right Area 0.53 [m²]
Right Q -0.04 [m³/s]
Width 6.75 [m]
Total Area 3.80 [m²]
Q/Area 0.135 [m/s]
Flow Speed 0.096 [m/s]
Flow Dir. 248.62 [°]
Course MG 120.78 [°]
Avg Boat Spd 0.089 [m/s]
Beg Ens Nmb 1
End Ens Nmb 94
Stick Ship Track 1 - TRDI
Stick Ship Track
Ship Track
Average
Distance North (Ref: BT) [m]
Distance East (Ref: BT) [m]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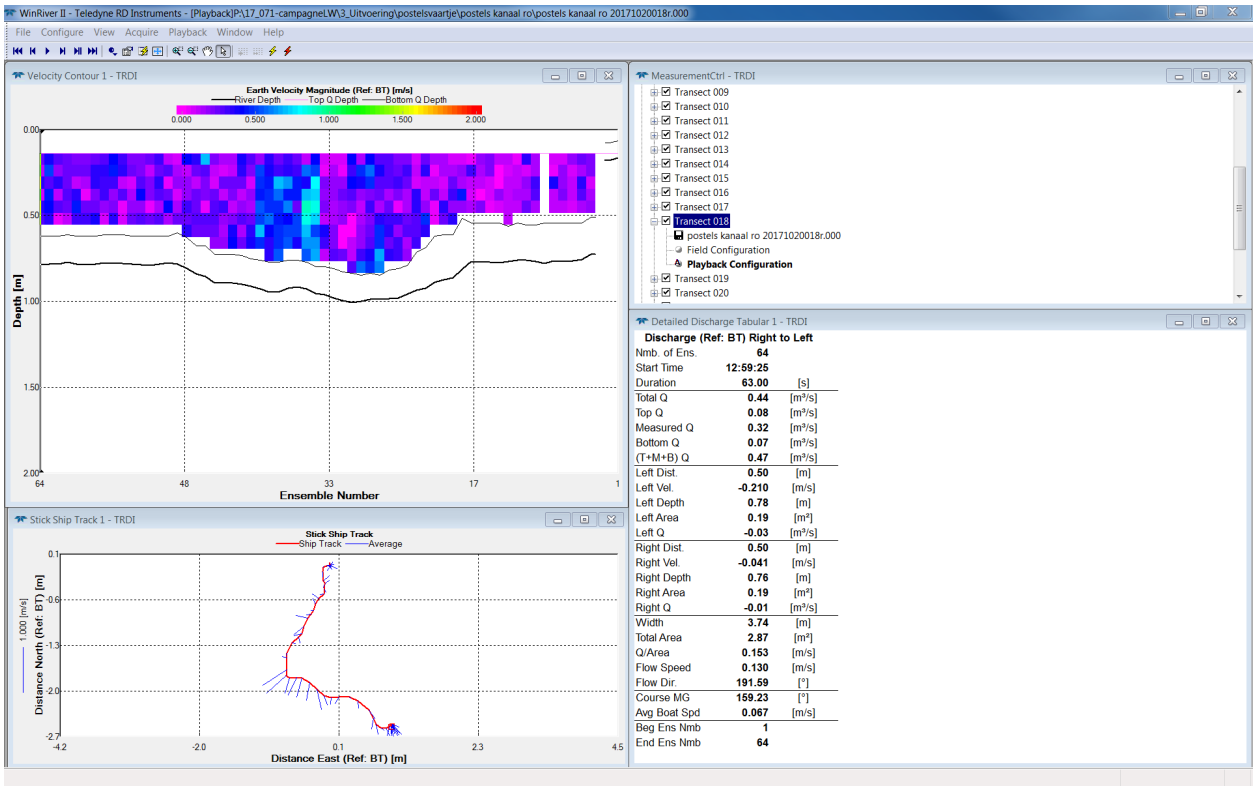
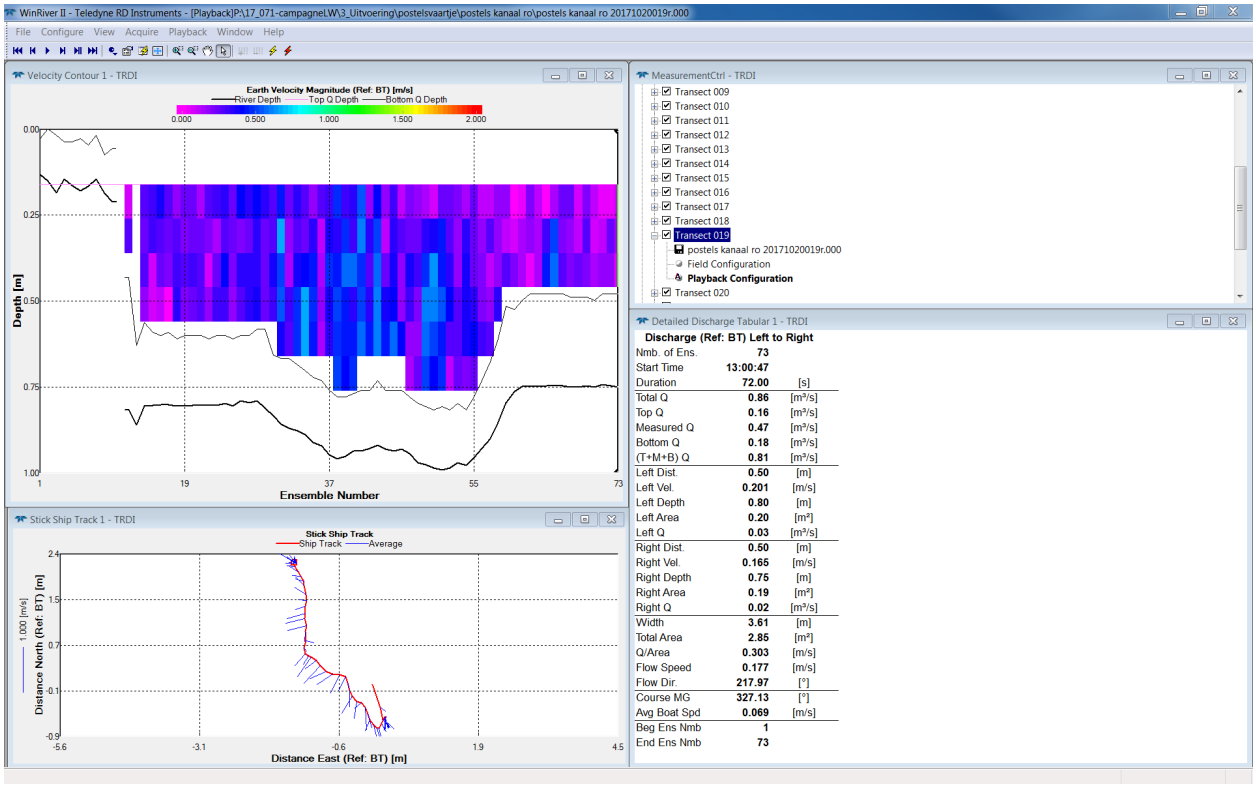
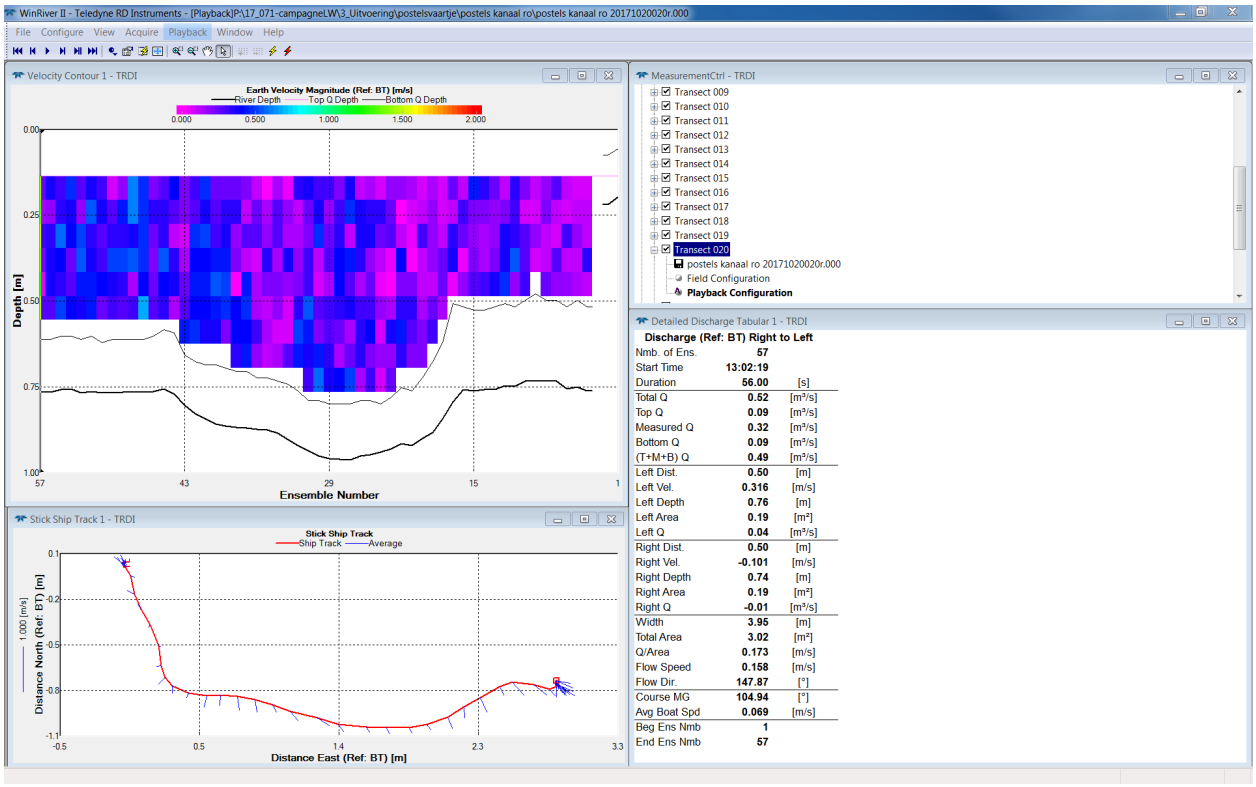
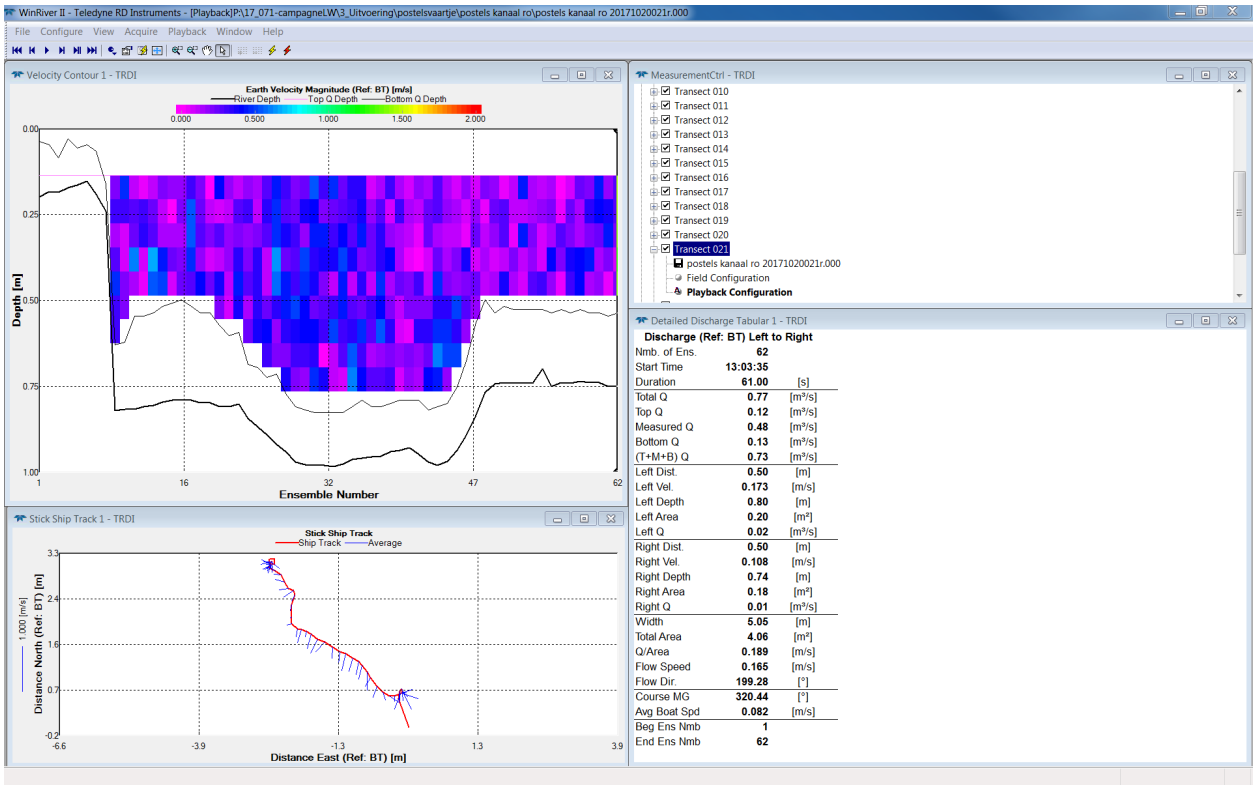
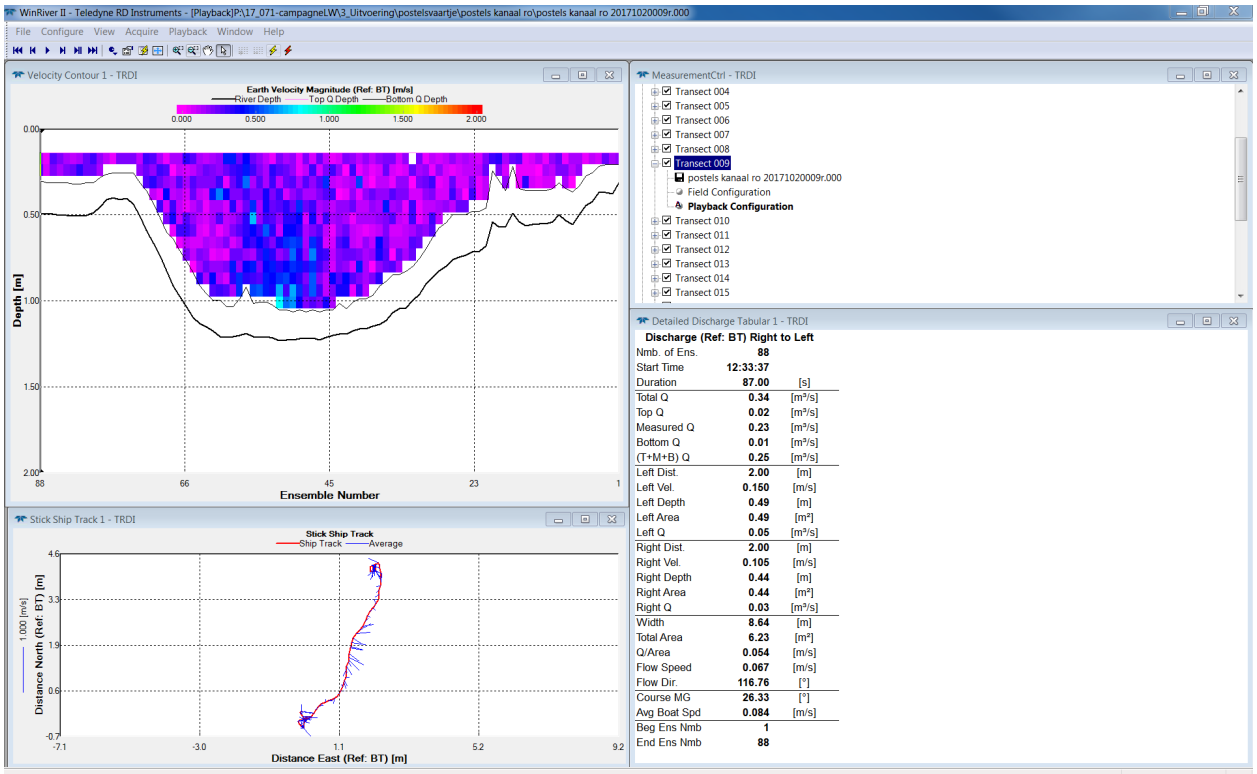
File Configure View Acquire Playback Window Help
Velocity Contour 1 - TRDI
Earth Velocity Magnitude (Ref: BT) [m/s]
River Depth
Top Q Depth
Bottom Q Depth
Depth [m]
Ensemble Number
MeasurementCtrl - TRDI
Transect 009
Transect 010
Transect 011
Transect 012
Transect 013
Transect 014
Transect 015
Transect 016
Transect 017
postels kanaal ro 20171020017r.000
Field Configuration
Playback Configuration
Transect 018
Transect 019
Transect 020
Detailed Discharge Tabular 1 - TRDI
Discharge (Ref: BT) Left to Right
Nmb. of Ens. 73
Start Time 12:57:18
Duration 72.00 [s]
Total Q 0.83 [m³/s]
Top Q 0.11 [m³/s]
Measured Q 0.68 [m³/s]
Bottom Q 0.11 [m³/s]
(T+M+B) Q 0.90 [m³/s]
Left Dist. 2.00 [m]
Left Vel. -0.033 [m/s]
Left Depth 0.52 [m]
Left Area 0.52 [m²]
Left Q -0.01 [m³/s]
Right Dist. 2.00 [m]
Right Vel. -0.168 [m/s]
Right Depth 0.49 [m]
Right Area 0.49 [m²]
Right Q -0.06 [m³/s]
Width 8.28 [m]
Total Area 6.15 [m²]
Q/Area 0.134 [m/s]
Flow Speed 0.147 [m/s]
Flow Dir. 275.58 [°]
Course MG 6.34 [°]
Avg Boat Spd 0.111 [m/s]
Beg Ens Nmb 1
End Ens Nmb 73
Stick Ship Track 1 - TRDI
Stick Ship Track
Ship Track
Average
Distance North (Ref: BT) [m]
Distance East (Ref: BT) [m]

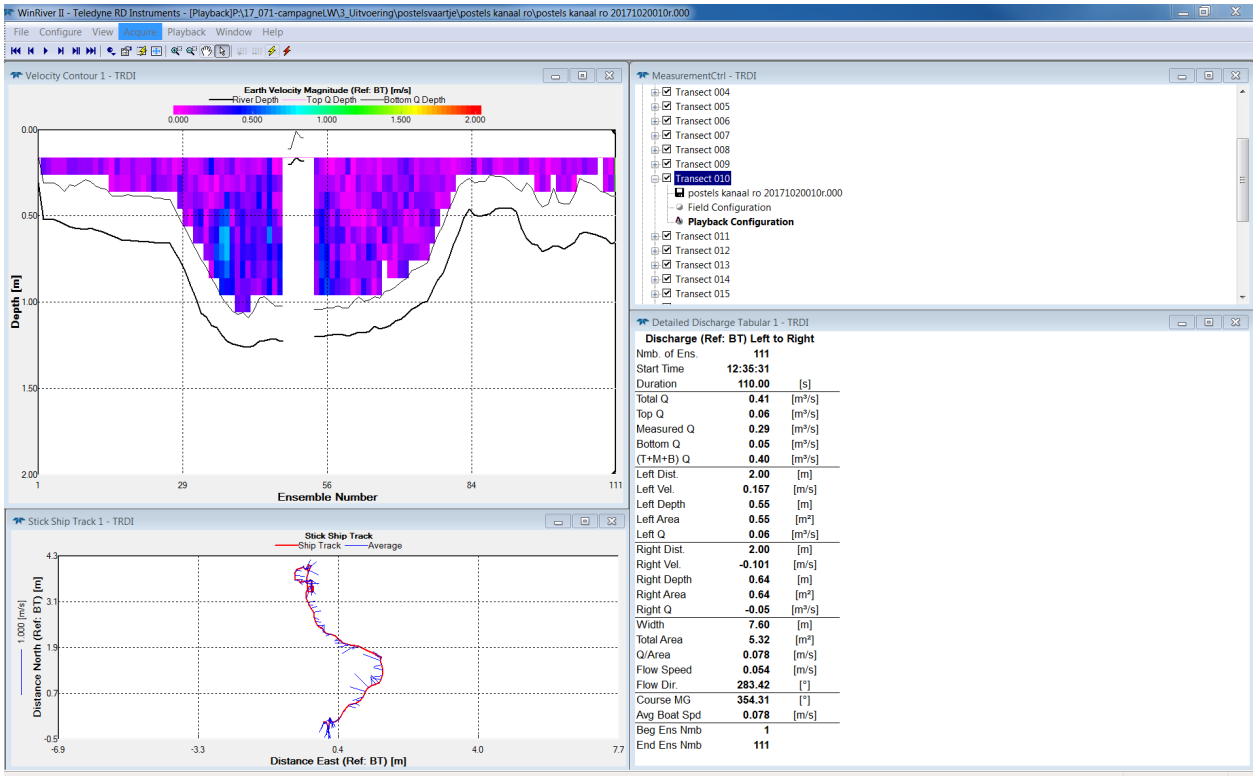

WinRiver II - Teledyne RD Instruments - [Playback]P:\17_071-campagneLW\3_Uitvoering\postelsvaartje\postels kanaal ro\postels kanaal ro 20171020018r.000
File Configure View Acquire Playback Window Help
Velocity Contour 1 - TRDI
Earth Velocity Magnitude (Ref: BT) [m/s]
River Depth Top Q Depth Bottom Q Depth
0.000 0.500 1.000 1.500 2.000
Depth [m]
Ensemble Number
MeasurementCtrl - TRDI
Transect 009
Transect 010
Transect 011
Transect 012
Transect 013
Transect 014
Transect 015
Transect 016
Transect 017
Transect 018
postels kanaal ro 20171020018r.000
Field Configuration
Playback Configuration
Transect 019
Transect 020
Detailed Discharge Tabular 1 - TRDI
Discharge (Ref: BT) Right to Left
Nmb. of Ens. 64
Start Time 12:59:25
Duration 63.00 [s]
Total Q 0.44 [m³/s]
Top Q 0.08 [m³/s]
Measured Q 0.32 [m³/s]
Bottom Q 0.07 [m³/s]
(T+M+B) Q 0.47 [m³/s]
Left Dist. 0.50 [m]
Left Vel. -0.210 [m/s]
Left Depth 0.78 [m]
Left Area 0.19 [m²]
Left Q -0.03 [m³/s]
Right Dist. 0.50 [m]
Right Vel. -0.041 [m/s]
Right Depth 0.76 [m]
Right Area 0.19 [m²]
Right Q -0.01 [m³/s]
Width 3.74 [m]
Total Area 2.87 [m²]
Q/Area 0.153 [m/s]
Flow Speed 0.130 [m/s]
Flow Dir. 191.59 [°]
Course MG 159.23 [°]
Avg Boat Spd 0.067 [m/s]
Beg Ens Nmb 1
End Ens Nmb 64
Stick Ship Track 1 - TRDI
Stick Ship Track
Ship Track Average
Distance North (Ref: BT) [m]
Distance East (Ref: BT) [m]


WinRiver II - Teledyne RD Instruments - [Playback]P:\17_071-campagneLW\3_Uitvoering\postelsvaartje\postels kanaal ro\postels kanaal ro 20171020019r.000
File Configure View Acquire Playback Window Help
Velocity Contour 1 - TRDI
Earth Velocity Magnitude (Ref: BT) [m/s]
River Depth Top Q Depth Bottom Q Depth
0.000 0.500 1.000 1.500 2.000
Depth [m]
Ensemble Number
MeasurementCtrl - TRDI
Transect 009
Transect 010
Transect 011
Transect 012
Transect 013
Transect 014
Transect 015
Transect 016
Transect 017
Transect 018
Transect 019
postels kanaal ro 20171020019r.000
Field Configuration
Playback Configuration
Transect 020
Detailed Discharge Tabular 1 - TRDI
Discharge (Ref: BT) Left to Right
Nmb. of Ens. 73
Start Time 13:00:47
Duration 72.00 [s]
Total Q 0.86 [m³/s]
Top Q 0.16 [m³/s]
Measured Q 0.47 [m³/s]
Bottom Q 0.18 [m³/s]
(T+M+B) Q 0.81 [m³/s]
Left Dist. 0.50 [m]
Left Vel. 0.201 [m/s]
Left Depth 0.80 [m]
Left Area 0.20 [m²]
Left Q 0.03 [m³/s]
Right Dist. 0.50 [m]
Right Vel. 0.165 [m/s]
Right Depth 0.75 [m]
Right Area 0.19 [m²]
Right Q 0.02 [m³/s]
Width 3.61 [m]
Total Area 2.85 [m²]
Q/Area 0.303 [m/s]
Flow Speed 0.177 [m/s]
Flow Dir. 217.97 [°]
Course MG 327.13 [°]
Avg Boat Spd 0.069 [m/s]
Beg Ens Nmb 1
End Ens Nmb 73
Stick Ship Track 1 - TRDI
Stick Ship Track
Ship Track Average
Distance North (Ref: BT) [m]
Distance East (Ref: BT) [m]


WinRiver II - Teledyne RD Instruments - [Playback]P:\17_071-campagneLW\3_Uitvoering\postelsvaartje\postels kanaal ro\postels kanaal ro 20171020020r.000
File Configure View Acquire Playback Window Help
Velocity Contour 1 - TRDI
Earth Velocity Magnitude (Ref: BT) [m/s]
River Depth Top Q Depth Bottom Q Depth
0.000 0.500 1.000 1.500 2.000
Depth [m]
Ensemble Number
MeasurementCtrl - TRDI
Transect 009
Transect 010
Transect 011
Transect 012
Transect 013
Transect 014
Transect 015
Transect 016
Transect 017
Transect 018
Transect 019
Transect 020
postels kanaal ro 20171020020r.000
Field Configuration
Playback Configuration
Detailed Discharge Tabular 1 - TRDI
Discharge (Ref: BT) Right to Left
Nmb. of Ens. 57
Start Time 13:02:19
Duration 56.00 [s]
Total Q 0.52 [m³/s]
Top Q 0.09 [m³/s]
Measured Q 0.32 [m³/s]
Bottom Q 0.09 [m³/s]
(T+M+B) Q 0.49 [m³/s]
Left Dist. 0.50 [m]
Left Vel. 0.316 [m/s]
Left Depth 0.76 [m]
Left Area 0.19 [m²]
Left Q 0.04 [m³/s]
Right Dist. 0.50 [m]
Right Vel. -0.101 [m/s]
Right Depth 0.74 [m]
Right Area 0.19 [m²]
Right Q -0.01 [m³/s]
Width 3.95 [m]
Total Area 3.02 [m²]
Q/Area 0.173 [m/s]
Flow Speed 0.158 [m/s]
Flow Dir. 147.87 [°]
Course MG 104.94 [°]
Avg Boat Spd 0.069 [m/s]
Beg Ens Nmb 1
End Ens Nmb 57
Stick Ship Track 1 - TRDI
Stick Ship Track
Ship Track Average
Distance North (Ref: BT) [m]
Distance East (Ref: BT) [m]


WinRiver II - Teledyne RD Instruments - [Playback]P:\17_071-campagneLW\3_Uitvoering\postelsvaartje\postels kanaal ro\postels kanaal ro 20171020021r.000
File Configure View Acquire Playback Window Help
Velocity Contour 1 - TRDI
Earth Velocity Magnitude (Ref: BT) [m/s]
River Depth Top Q Depth Bottom Q Depth
0.000 0.500 1.000 1.500 2.000
Depth [m]
Ensemble Number
MeasurementCtrl - TRDI
Transect 010
Transect 011
Transect 012
Transect 013
Transect 014
Transect 015
Transect 016
Transect 017
Transect 018
Transect 019
Transect 020
Transect 021
postels kanaal ro 20171020021r.000
Field Configuration
Playback Configuration
Detailed Discharge Tabular 1 - TRDI
Discharge (Ref: BT) Left to Right
Nmb. of Ens. 62
Start Time 13:03:35
Duration 61.00 [s]
Total Q 0.77 [m³/s]
Top Q 0.12 [m³/s]
Measured Q 0.48 [m³/s]
Bottom Q 0.13 [m³/s]
(T+M+B) Q 0.73 [m³/s]
Left Dist. 0.50 [m]
Left Vel. 0.173 [m/s]
Left Depth 0.80 [m]
Left Area 0.20 [m²]
Left Q 0.02 [m³/s]
Right Dist. 0.50 [m]
Right Vel. 0.108 [m/s]
Right Depth 0.74 [m]
Right Area 0.18 [m²]
Right Q 0.01 [m³/s]
Width 5.05 [m]
Total Area 4.06 [m²]
Q/Area 0.189 [m/s]
Flow Speed 0.165 [m/s]
Flow Dir. 199.28 [°]
Course MG 320.44 [°]
Avg Boat Spd 0.082 [m/s]
Beg Ens Nmb 1
End Ens Nmb 62
Stick Ship Track 1 - TRDI
Stick Ship Track
Ship Track Average
Distance North (Ref: BT) [m]
Distance East (Ref: BT) [m]


WinRiver II - Teledyne RD Instruments - [Playback]P:\17_071-campagneLW\3_Uitvoering\postelsvaartje\postels kanaal ro\postels kanaal ro 20171020009r.000
File Configure View Acquire Playback Window Help
Velocity Contour 1 - TRDI
Earth Velocity Magnitude (Ref: BT) [m/s]
River Depth Top Q Depth Bottom Q Depth
0.000 0.500 1.000 1.500 2.000
Depth [m]
Ensemble Number
MeasurementCtrl - TRDI
Transect 004
Transect 005
Transect 006
Transect 007
Transect 008
Transect 009
postels kanaal ro 20171020009r.000
Field Configuration
Playback Configuration
Transect 010
Transect 011
Transect 012
Transect 013
Transect 014
Transect 015
Detailed Discharge Tabular 1 - TRDI
Discharge (Ref: BT) Right to Left
Nmb. of Ens. 88
Start Time 12:33:37
Duration 87.00 [s]
Total Q 0.34 [m³/s]
Top Q 0.02 [m³/s]
Measured Q 0.23 [m³/s]
Bottom Q 0.01 [m³/s]
(T+M+B) Q 0.25 [m³/s]
Left Dist. 2.00 [m]
Left Vel. 0.150 [m/s]
Left Depth 0.49 [m]
Left Area 0.49 [m²]
Left Q 0.05 [m³/s]
Right Dist. 2.00 [m]
Right Vel. 0.105 [m/s]
Right Depth 0.44 [m]
Right Area 0.44 [m²]
Right Q 0.03 [m³/s]
Width 8.64 [m]
Total Area 6.23 [m²]
Q/Area 0.054 [m/s]
Flow Speed 0.067 [m/s]
Flow Dir. 116.76 [°]
Course MG 26.33 [°]
Avg Boat Spd 0.084 [m/s]
Beg Ens Nmb 1
End Ens Nmb 88
Stick Ship Track 1 - TRDI
Stick Ship Track
Ship Track Average
Distance North (Ref: BT) [m]
Distance East (Ref: BT) [m]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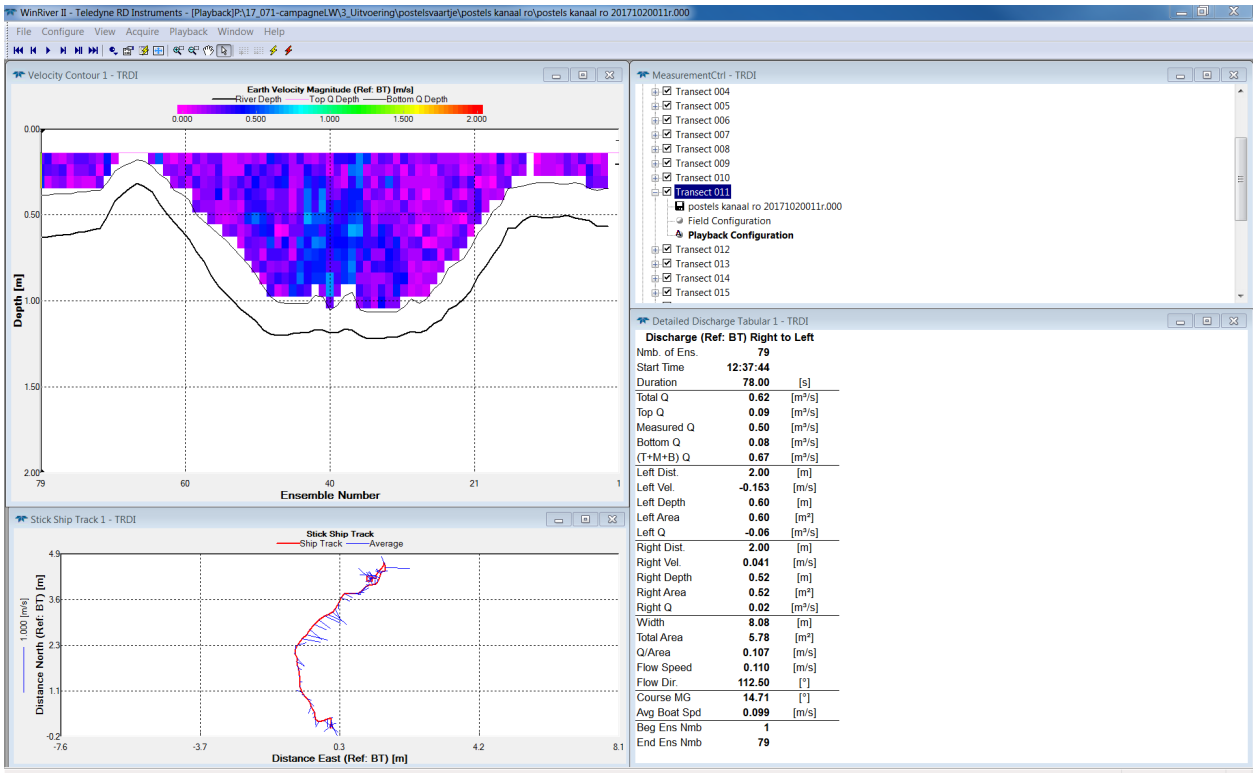
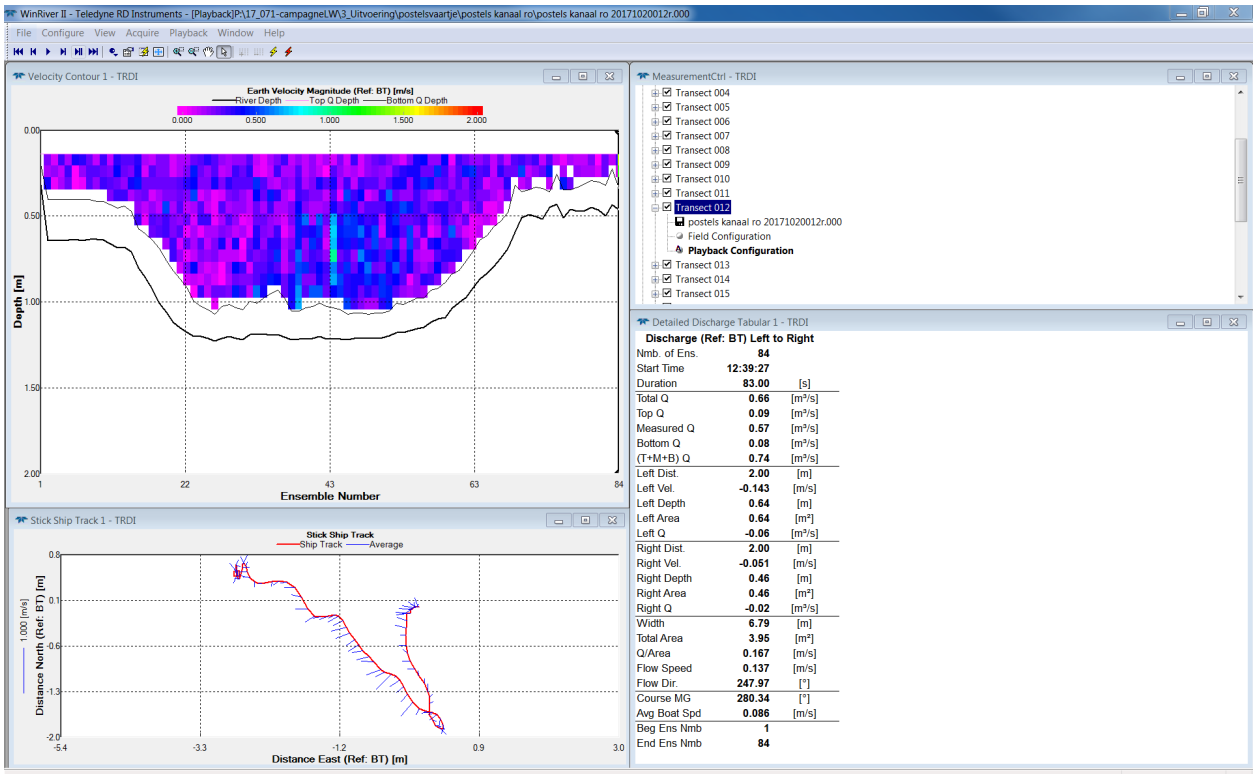
File Configure View Acquire Playback Window Help
Velocity Contour 1 - TRDI
Earth Velocity Magnitude (Ref: BT) [m/s]
River Depth Top Q Depth Bottom Q Depth
0.000 0.500 1.000 1.500 2.000
Depth [m]
Ensemble Number
MeasurementCtrl - TRDI
Transect 004
Transect 005
Transect 006
Transect 007
Transect 008
Transect 009
Transect 010
postels kanaal ro 20171020010r.000
Field Configuration
Playback Configuration
Transect 011
Transect 012
Transect 013
Transect 014
Transect 015
Detailed Discharge Tabular 1 - TRDI
Discharge (Ref: BT) Left to Right
Nmb. of Ens. 111
Start Time 12:35:31
Duration 110.00 [s]
Total Q 0.41 [m³/s]
Top Q 0.06 [m³/s]
Measured Q 0.29 [m³/s]
Bottom Q 0.05 [m³/s]
(T+M+B) Q 0.40 [m³/s]
Left Dist. 2.00 [m]
Left Vel. 0.157 [m/s]
Left Depth 0.55 [m]
Left Area 0.55 [m²]
Left Q 0.06 [m³/s]
Right Dist. 2.00 [m]
Right Vel. -0.101 [m/s]
Right Depth 0.64 [m]
Right Area 0.64 [m²]
Right Q -0.05 [m³/s]
Width 7.60 [m]
Total Area 5.32 [m²]
Q/Area 0.078 [m/s]
Flow Speed 0.054 [m/s]
Flow Dir. 283.42 [°]
Course MG 354.31 [°]
Avg Boat Spd 0.078 [m/s]
Beg Ens Nmb 1
End Ens Nmb 111
Stick Ship Track 1 - TRDI
Stick Ship Track
Ship Track Average
Distance North (Ref: BT) [m]
Distance East (Ref: BT) [m]


WinRiver II - Teledyne RD Instruments - [Playback]P:\17_071-campagneLW\3_Uitvoering\postelsvaartje\postels kanaal ro\postels kanaal ro 20171020011r.000
File Configure View Acquire Playback Window Help
Velocity Contour 1 - TRDI
Earth Velocity Magnitude (Ref: BT) [m/s]
River Depth Top Q Depth Bottom Q Depth
0.000 0.500 1.000 1.500 2.000
Depth [m]
Ensemble Number
MeasurementCtrl - TRDI
Transect 004
Transect 005
Transect 006
Transect 007
Transect 008
Transect 009
Transect 010
Transect 011
postels kanaal ro 20171020011r.000
Field Configuration
Playback Configuration
Transect 012
Transect 013
Transect 014
Transect 015
Detailed Discharge Tabular 1 - TRDI
Discharge (Ref: BT) Right to Left
Nmb. of Ens. 79
Start Time 12:37:44
Duration 78.00 [s]
Total Q 0.62 [m³/s]
Top Q 0.09 [m³/s]
Measured Q 0.50 [m³/s]
Bottom Q 0.08 [m³/s]
(T+M+B) Q 0.67 [m³/s]
Left Dist. 2.00 [m]
Left Vel. -0.153 [m/s]
Left Depth 0.60 [m]
Left Area 0.60 [m²]
Left Q -0.06 [m³/s]
Right Dist. 2.00 [m]
Right Vel. 0.041 [m/s]
Right Depth 0.52 [m]
Right Area 0.52 [m²]
Right Q 0.02 [m³/s]
Width 8.08 [m]
Total Area 5.78 [m²]
Q/Area 0.107 [m/s]
Flow Speed 0.110 [m/s]
Flow Dir. 112.50 [°]
Course MG 14.71 [°]
Avg Boat Spd 0.099 [m/s]
Beg Ens Nmb 1
End Ens Nmb 79
Stick Ship Track 1 - TRDI
Stick Ship Track
Ship Track Average
1.000 [m/s]
Distance North (Ref: BT) [m]
Distance East (Ref: BT) [m]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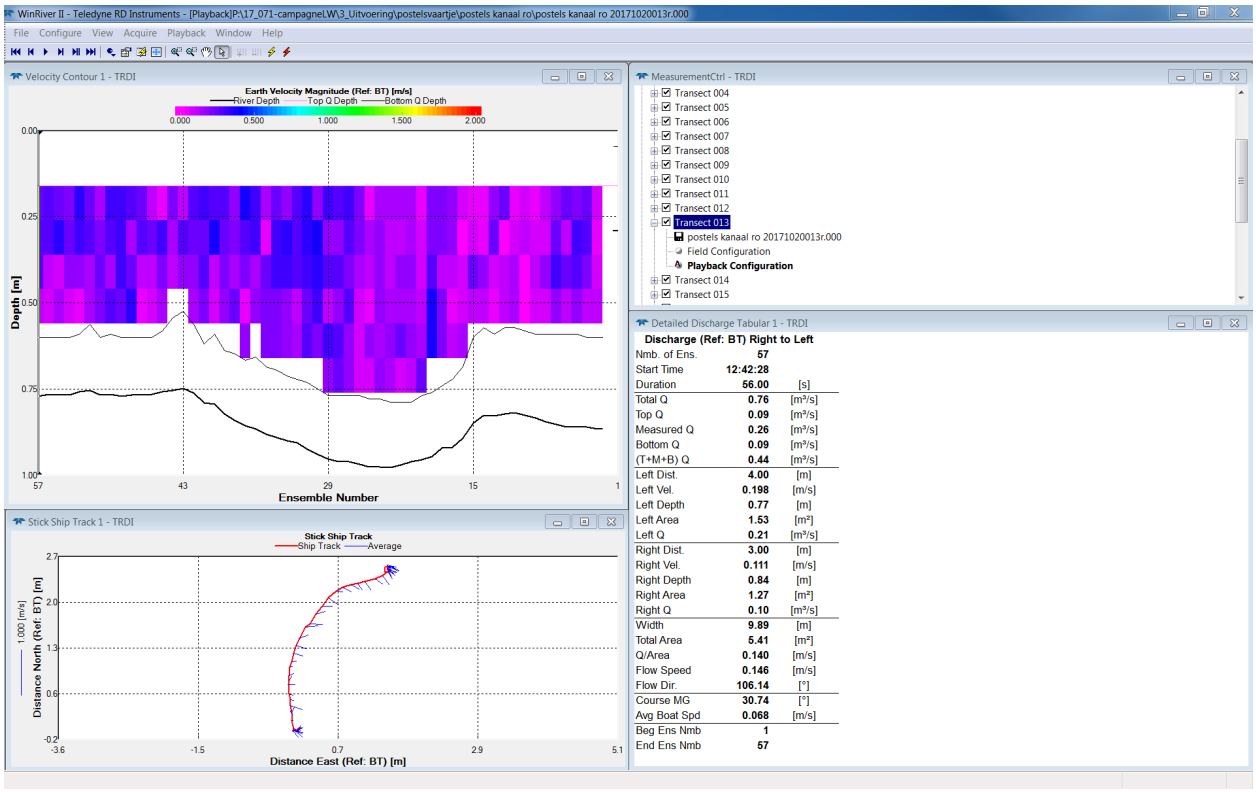
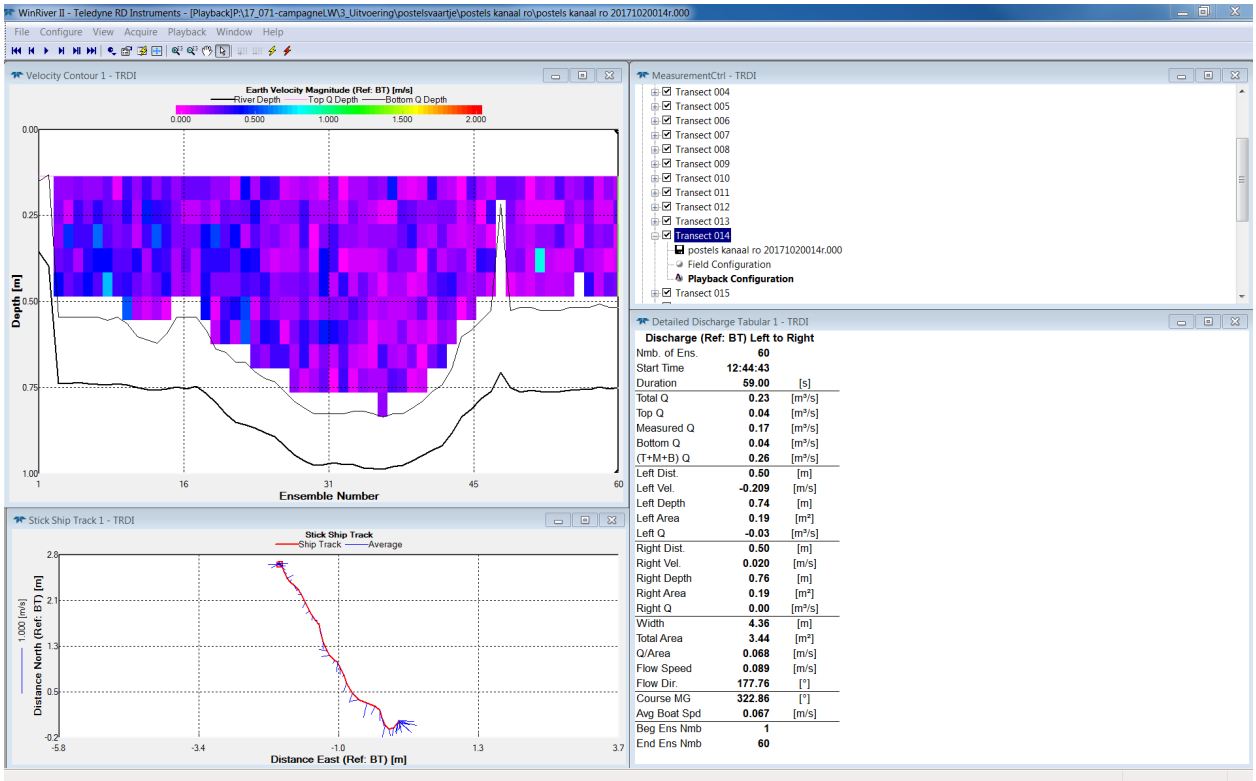
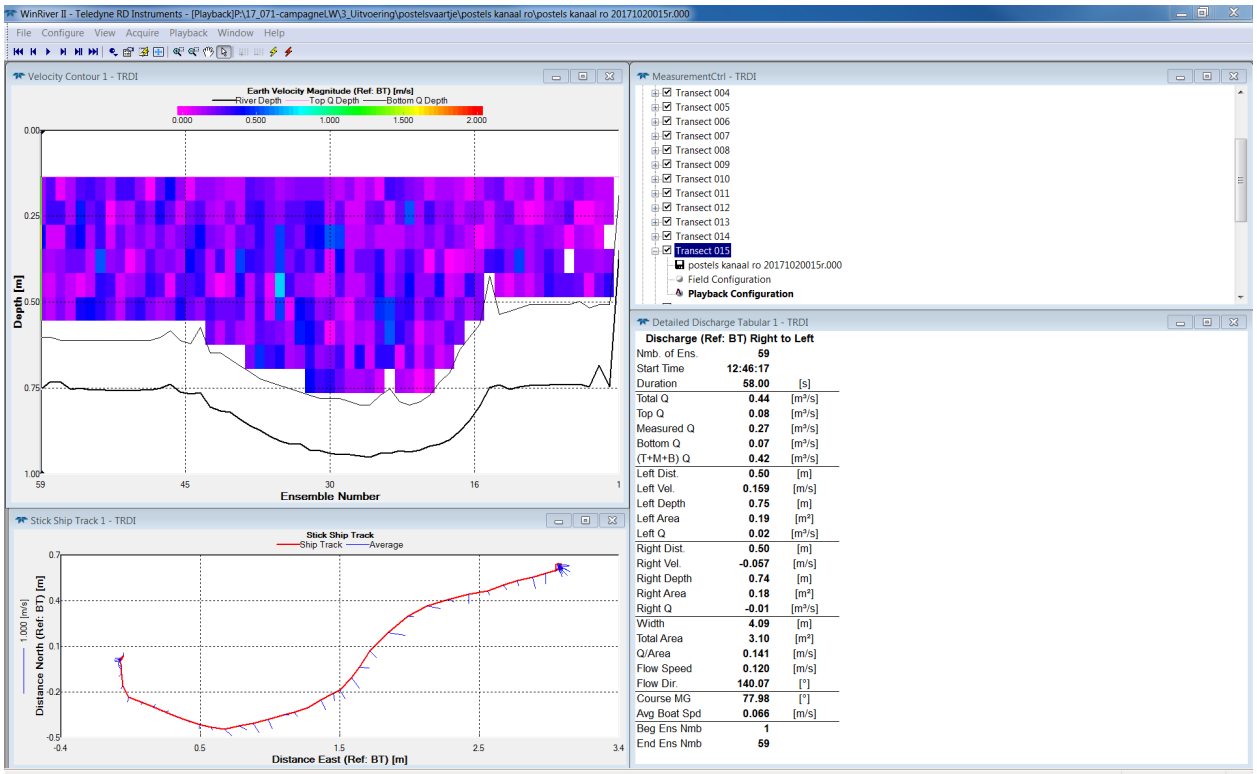
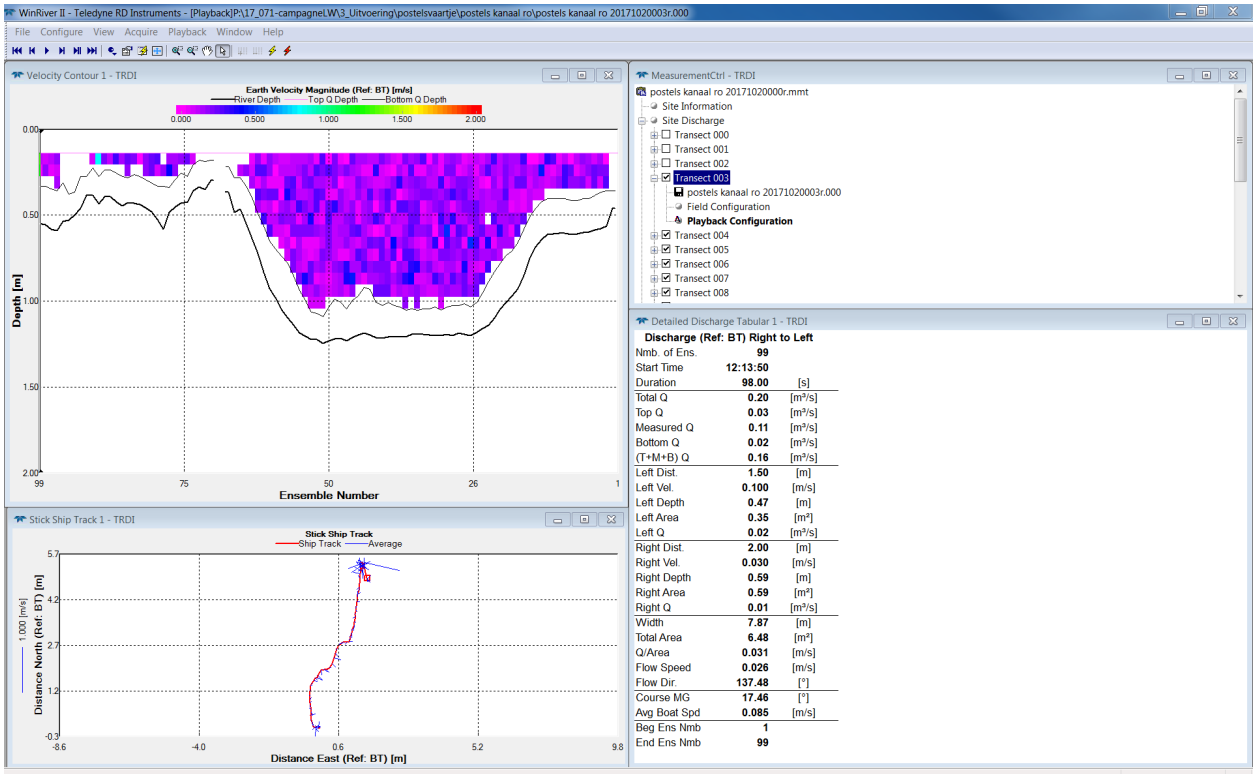
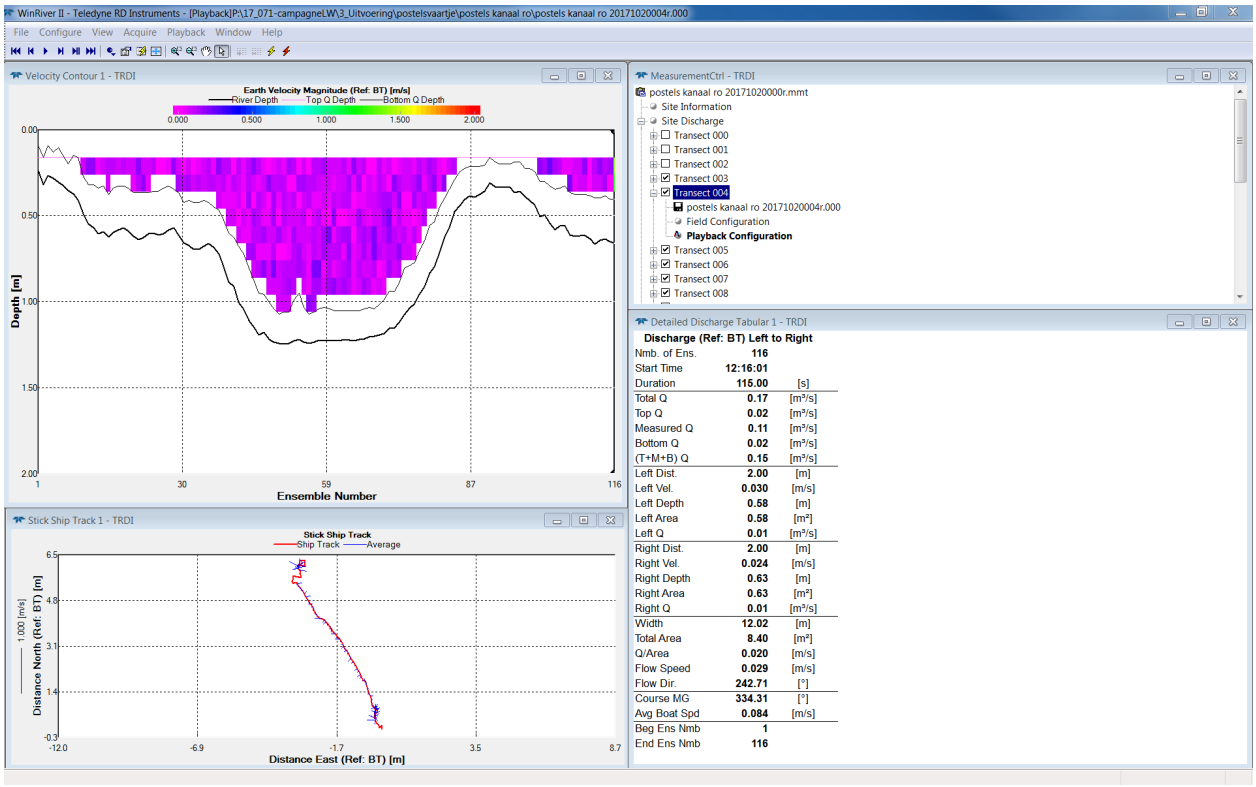
File Configure View Acquire Playback Window Help
Velocity Contour 1 - TRDI
Earth Velocity Magnitude (Ref: BT) [m/s]
River Depth Top Q Depth Bottom Q Depth
0.000 0.500 1.000 1.500 2.000
Depth [m]
Ensemble Number
MeasurementCtrl - TRDI
Transect 004
Transect 005
Transect 006
Transect 007
Transect 008
Transect 009
Transect 010
Transect 011
Transect 012
postels kanaal ro 20171020012r.000
Field Configuration
Playback Configuration
Transect 013
Transect 014
Transect 015
Detailed Discharge Tabular 1 - TRDI
Discharge (Ref: BT) Left to Right
Nmb. of Ens. 84
Start Time 12:39:27
Duration 83.00 [s]
Total Q 0.66 [m³/s]
Top Q 0.09 [m³/s]
Measured Q 0.57 [m³/s]
Bottom Q 0.08 [m³/s]
(T+M+B) Q 0.74 [m³/s]
Left Dist. 2.00 [m]
Left Vel. -0.143 [m/s]
Left Depth 0.64 [m]
Left Area 0.64 [m²]
Left Q -0.06 [m³/s]
Right Dist. 2.00 [m]
Right Vel. -0.051 [m/s]
Right Depth 0.46 [m]
Right Area 0.46 [m²]
Right Q -0.02 [m³/s]
Width 6.79 [m]
Total Area 3.95 [m²]
Q/Area 0.167 [m/s]
Flow Speed 0.137 [m/s]
Flow Dir. 247.97 [°]
Course MG 280.34 [°]
Avg Boat Spd 0.086 [m/s]
Beg Ens Nmb 1
End Ens Nmb 84
Stick Ship Track 1 - TRDI
Stick Ship Track
Ship Track Average
1.000 [m/s]
Distance North (Ref: BT) [m]
Distance East (Ref: BT) [m]


WinRiver II - Teledyne RD Instruments - [Playback]P:\17_071-campagneLW\3_Uitvoering\postelsvaartje\postels kanaal ro\postels kanaal ro 20171020013r.000
Velocity Contour 1 - TRDI
Earth Velocity Magnitude (Ref: BT) [m/s]
River Depth
Top Q Depth
Bottom Q Depth
Depth [m]
Ensemble Number
MeasurementCtrl - TRDI
Transect 004
Transect 005
Transect 006
Transect 007
Transect 008
Transect 009
Transect 010
Transect 011
Transect 012
Transect 013
postels kanaal ro 20171020013r.000
Field Configuration
Playback Configuration
Transect 014
Transect 015
Detailed Discharge Tabular 1 - TRDI
Discharge (Ref: BT) Right to Left
Nmb. of Ens. 57
Start Time 12:42:28
Duration 56.00 [s]
Total Q 0.76 [m³/s]
Top Q 0.09 [m³/s]
Measured Q 0.26 [m³/s]
Bottom Q 0.09 [m³/s]
(T+M+B) Q 0.44 [m³/s]
Left Dist. 4.00 [m]
Left Vel. 0.198 [m/s]
Left Depth 0.77 [m]
Left Area 1.53 [m²]
Left Q 0.21 [m³/s]
Right Dist. 3.00 [m]
Right Vel. 0.111 [m/s]
Right Depth 0.84 [m]
Right Area 1.27 [m²]
Right Q 0.10 [m³/s]
Width 9.89 [m]
Total Area 5.41 [m²]
Q/Area 0.140 [m/s]
Flow Speed 0.146 [m/s]
Flow Dir. 106.14 [°]
Course MG 30.74 [°]
Avg Boat Spd 0.068 [m/s]
Beg Ens Nmb 1
End Ens Nmb 57
Stick Ship Track 1 - TRDI
Stick Ship Track
Ship Track
Average
Distance North (Ref: BT) [m]
Distance East (Ref: BT) [m]

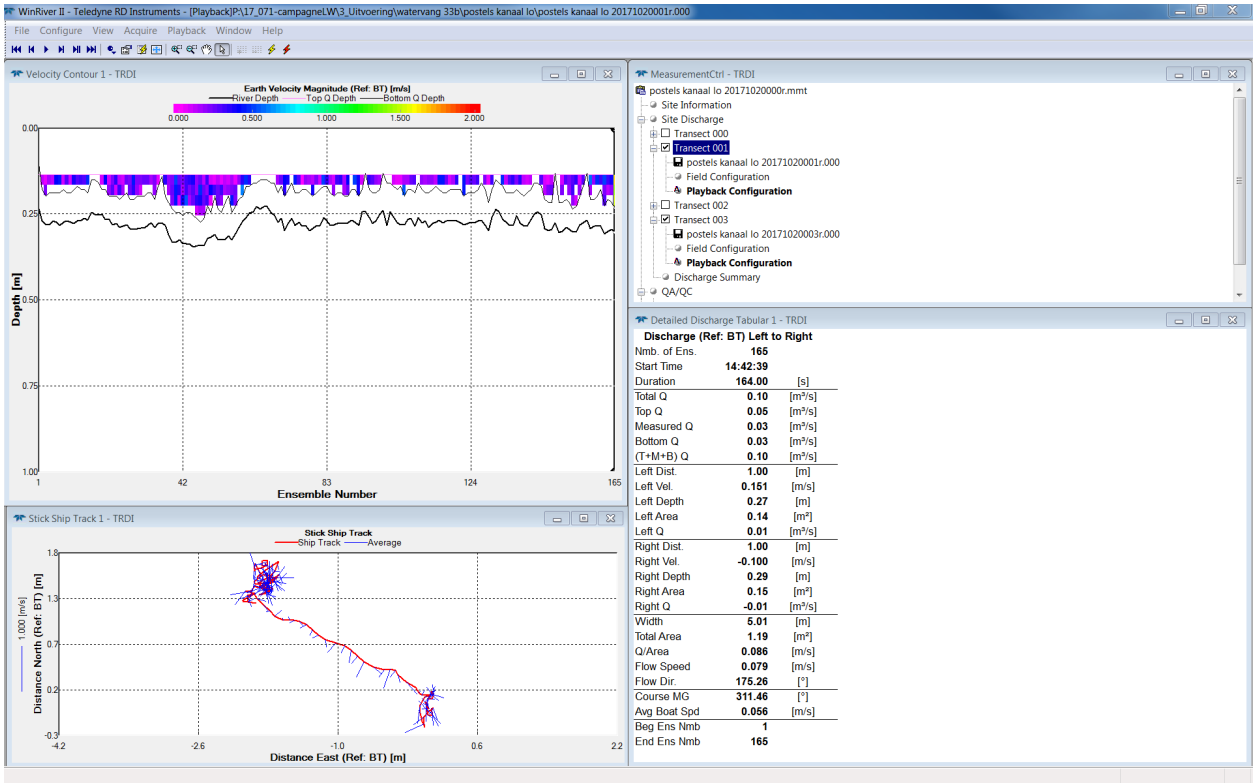

WinRiver II - Teledyne RD Instruments - [Playback]P:\17_071-campagneLW\3_Uitvoering\postelsvaartje\postels kanaal ro\postels kanaal ro 20171020014r.000
Velocity Contour 1 - TRDI
Earth Velocity Magnitude (Ref: BT) [m/s]
River Depth
Top Q Depth
Bottom Q Depth
Depth [m]
Ensemble Number
MeasurementCtrl - TRDI
Transect 004
Transect 005
Transect 006
Transect 007
Transect 008
Transect 009
Transect 010
Transect 011
Transect 012
Transect 013
Transect 014
postels kanaal ro 20171020014r.000
Field Configuration
Playback Configuration
Transect 015
Detailed Discharge Tabular 1 - TRDI
Discharge (Ref: BT) Left to Right
Nmb. of Ens. 60
Start Time 12:44:43
Duration 59.00 [s]
Total Q 0.23 [m³/s]
Top Q 0.04 [m³/s]
Measured Q 0.17 [m³/s]
Bottom Q 0.04 [m³/s]
(T+M+B) Q 0.26 [m³/s]
Left Dist. 0.50 [m]
Left Vel. -0.209 [m/s]
Left Depth 0.74 [m]
Left Area 0.19 [m²]
Left Q -0.03 [m³/s]
Right Dist. 0.50 [m]
Right Vel. 0.020 [m/s]
Right Depth 0.76 [m]
Right Area 0.19 [m²]
Right Q 0.00 [m³/s]
Width 4.36 [m]
Total Area 3.44 [m²]
Q/Area 0.068 [m/s]
Flow Speed 0.089 [m/s]
Flow Dir. 177.76 [°]
Course MG 322.86 [°]
Avg Boat Spd 0.067 [m/s]
Beg Ens Nmb 1
End Ens Nmb 60
Stick Ship Track 1 - TRDI
Stick Ship Track
Ship Track
Average
Distance North (Ref: BT) [m]
Distance East (Ref: BT) [m]

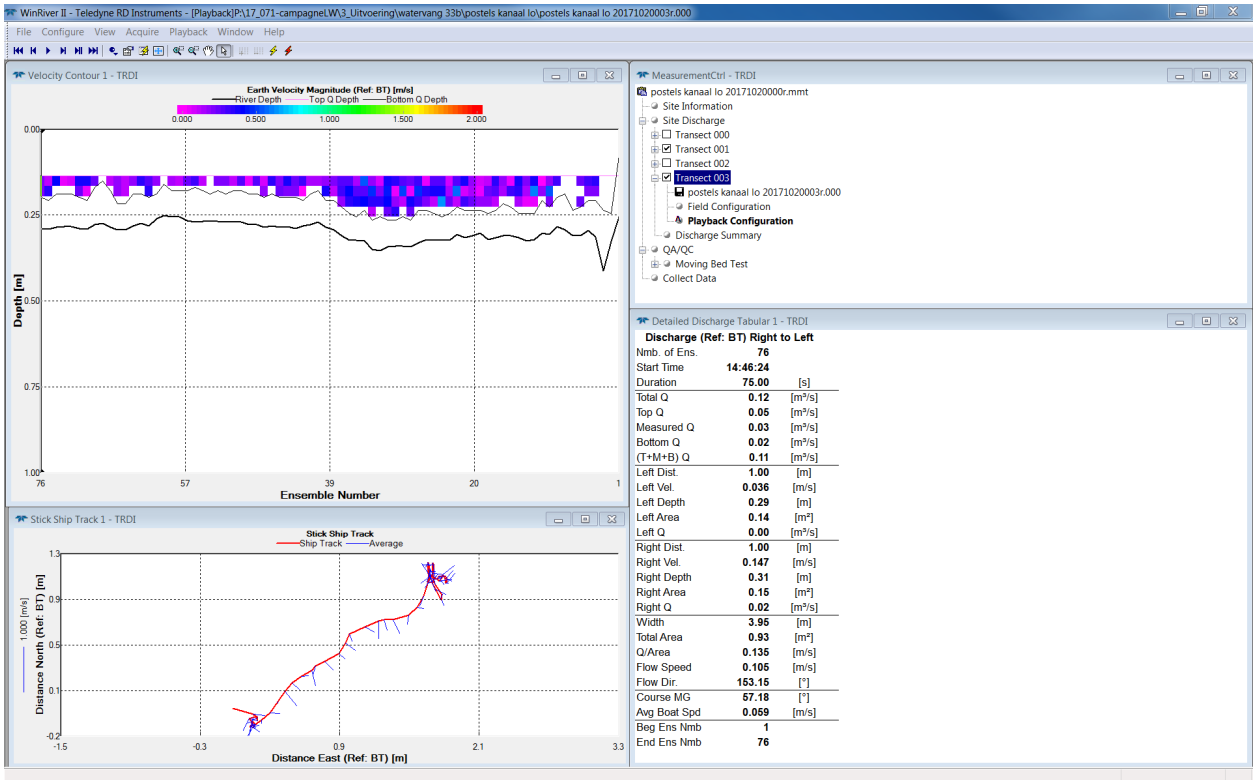

WinRiver II - Teledyne RD Instruments - [Playback]P:\17_071-campagneLW\3_Uitvoering\postelsvaartje\postels kanaal ro\postels kanaal ro 20171020015r.000
File Configure View Acquire Playback Window Help
Velocity Contour 1 - TRDI
Earth Velocity Magnitude (Ref: BT) [m/s]
River Depth Top Q Depth Bottom Q Depth
0.000 0.500 1.000 1.500 2.000
Depth [m]
Ensemble Number
MeasurementCtrl - TRDI
Transect 004
Transect 005
Transect 006
Transect 007
Transect 008
Transect 009
Transect 010
Transect 011
Transect 012
Transect 013
Transect 014
Transect 015
postels kanaal ro 20171020015r.000
Field Configuration
Playback Configuration
Detailed Discharge Tabular 1 - TRDI
Discharge (Ref: BT) Right to Left
Nmb. of Ens. 59
Start Time 12:46:17
Duration 58.00 [s]
Total Q 0.44 [m³/s]
Top Q 0.08 [m³/s]
Measured Q 0.27 [m³/s]
Bottom Q 0.07 [m³/s]
(T+M+B) Q 0.42 [m³/s]
Left Dist. 0.50 [m]
Left Vel. 0.159 [m/s]
Left Depth 0.75 [m]
Left Area 0.19 [m²]
Left Q 0.02 [m³/s]
Right Dist. 0.50 [m]
Right Vel. -0.057 [m/s]
Right Depth 0.74 [m]
Right Area 0.18 [m²]
Right Q -0.01 [m³/s]
Width 4.09 [m]
Total Area 3.10 [m²]
Q/Area 0.141 [m/s]
Flow Speed 0.120 [m/s]
Flow Dir. 140.07 [°]
Course MG 77.98 [°]
Avg Boat Spd 0.066 [m/s]
Beg Ens Nmb 1
End Ens Nmb 59
Stick Ship Track 1 - TRDI
Stick Ship Track
Ship Track Average
1.000 [m/s]
Distance North (Ref: BT) [m]
Distance East (Ref: BT) [m]


WinRiver II - Teledyne RD Instruments - [Playback]P:\17_071-campagneLW\3_Uitvoering\postelsvaartje\postels kanaal ro\postels kanaal ro 20171020003r.000
File Configure View Acquire Playback Window Help
Velocity Contour 1 - TRDI
Earth Velocity Magnitude (Ref: BT) [m/s]
River Depth Top Q Depth Bottom Q Depth
0.000 0.500 1.000 1.500 2.000
Depth [m]
Ensemble Number
MeasurementCtrl - TRDI
postels kanaal ro 20171020000r.mmt
Site Information
Site Discharge
Transect 000
Transect 001
Transect 002
Transect 003
postels kanaal ro 20171020003r.000
Field Configuration
Playback Configuration
Transect 004
Transect 005
Transect 006
Transect 007
Transect 008
Detailed Discharge Tabular 1 - TRDI
Discharge (Ref: BT) Right to Left
Nmb. of Ens. 99
Start Time 12:13:50
Duration 98.00 [s]
Total Q 0.20 [m³/s]
Top Q 0.03 [m³/s]
Measured Q 0.11 [m³/s]
Bottom Q 0.02 [m³/s]
(T+M+B) Q 0.16 [m³/s]
Left Dist. 1.50 [m]
Left Vel. 0.100 [m/s]
Left Depth 0.47 [m]
Left Area 0.35 [m²]
Left Q 0.02 [m³/s]
Right Dist. 2.00 [m]
Right Vel. 0.030 [m/s]
Right Depth 0.59 [m]
Right Area 0.59 [m²]
Right Q 0.01 [m³/s]
Width 7.87 [m]
Total Area 6.48 [m²]
Q/Area 0.031 [m/s]
Flow Speed 0.026 [m/s]
Flow Dir. 137.48 [°]
Course MG 17.46 [°]
Avg Boat Spd 0.085 [m/s]
Beg Ens Nmb 1
End Ens Nmb 99
Stick Ship Track 1 - TRDI
Stick Ship Track
Ship Track Average
1.000 [m/s]
Distance North (Ref: BT) [m]
Distance East (Ref: BT) [m]


WinRiver II - Teledyne RD Instruments - [Playback]P:\17_071-campagneLW\3_Uitvoering\postelsvaartje\postels kanaal ro\postels kanaal ro 20171020004r.000
File Configure View Acquire Playback Window Help
Velocity Contour 1 - TRDI
Earth Velocity Magnitude (Ref: BT) [m/s]
River Depth
Top Q Depth
Bottom Q Depth
0.000 0.500 1.000 1.500 2.000
Depth [m]
0.00 0.50 1.00 1.50 2.00
1 30 59 87 116
Ensemble Number
MeasurementCtrl - TRDI
postels kanaal ro 20171020000r.mmt
Site Information
Site Discharge
Transect 000
Transect 001
Transect 002
Transect 003
Transect 004
postels kanaal ro 20171020004r.000
Field Configuration
Playback Configuration
Transect 005
Transect 006
Transect 007
Transect 008
Detailed Discharge Tabular 1 - TRDI
Discharge (Ref: BT) Left to Right
Nmb. of Ens. 116
Start Time 12:16:01
Duration 115.00 [s]
Total Q 0.17 [m³/s]
Top Q 0.02 [m³/s]
Measured Q 0.11 [m³/s]
Bottom Q 0.02 [m³/s]
(T+M+B) Q 0.15 [m³/s]
Left Dist. 2.00 [m]
Left Vel. 0.030 [m/s]
Left Depth 0.58 [m]
Left Area 0.58 [m²]
Left Q 0.01 [m³/s]
Right Dist. 2.00 [m]
Right Vel. 0.024 [m/s]
Right Depth 0.63 [m]
Right Area 0.63 [m²]
Right Q 0.01 [m³/s]
Width 12.02 [m]
Total Area 8.40 [m²]
Q/Area 0.020 [m/s]
Flow Speed 0.029 [m/s]
Flow Dir. 242.71 [°]
Course MG 334.31 [°]
Avg Boat Spd 0.084 [m/s]
Beg Ens Nmb 1
End Ens Nmb 116
Stick Ship Track 1 - TRDI
Stick Ship Track
Ship Track
Average
1.000 [m/s]
Distance North (Ref: BT) [m]
6.5 4.8 3.1 1.4 -0.3
-12.0 -6.9 -1.7 3.5 8.7
Distance East (Ref: BT) [m]

5.3 ADCP measurements at water capture 33B – Winriver output





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