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Langdurige metingen Deurganckdok: Opvolging en analyse aanslibbing

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Deelrapport 2.28: 13-uursmeting ADCP neervorming DGD zomer 2008

Report 2.28: Through tide measurement ADCP eddy DGD Summer 2008

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1. INTRODUCTION

1.1. The assignment

This report is part of the set of reports describing the results of the long-term measurements conducted in Deurganckdok aiming at the monitoring and analysis of silt accretion. This measurement campaign is an extension of the study “Extension of the study about density currents in the Beneden Zeeschelde” as part of the Long Term Vision for the Scheldt estuary. It is complementary to the study ‘Field measurements high-concentration benthic suspensions (HCBS 2)’.

The terms of reference for this study were prepared by the ‘Departement Mobiliteit en Openbare Werken van de Vlaamse Overheid, Afdeling Waterbouwkundig Laboratorium’ (16EB/05/04). The repetition of this study was awarded to International Marine and Dredging Consultants NV in association with WL|Delft Hydraulics and Gems International on 10/01/2006. The project term was prolonged with an extra year from April 2007 till March 2008 and a second time prolonged with one extra year from April 2008 till March 2009.

Waterbouwkundig Laboratorium– Cel Hydrometrie Schelde provided data on discharge, tide, salinity and turbidity along the river Scheldt and provided survey vessels for the long term and through tide measurements. Afdeling Maritieme Toegang provided maintenance dredging data. Agentschap voor Maritieme Dienstverlening en Kust – Afdeling Kust and Port of Antwerp provided depth sounding measurements.

The execution of the study involves a twofold assignment:

- Part 1: Setting up a sediment balance of Deurganckdok covering a period of two years, i.e. 04/2007 – 03/2009
- Part 2: An analysis of the parameters contributing to siltation in Deurganckdok

1.2. Purpose of the study

The Lower Sea Scheldt (Beneden Zeeschelde) is the stretch of the Scheldt estuary between the Belgium-Dutch border and Rupelmonde, where the entrance channels to the Antwerp sea locks are located. The navigation channel has a sandy bed, whereas the shallower areas (intertidal areas, mud flats, salt marshes) consist of sandy clay or even pure mud sometimes. This part of the Scheldt is characterized by large horizontal salinity gradients and the presence of a turbidity maximum with depth-averaged concentrations ranging from 50 to 500 mg/l at grain sizes of 60 - 100 μm. The salinity gradients generate significant density currents between the river and the entrance channels to the locks, causing large siltation rates. It is to be expected that in the near future also the Deurganckdok will suffer from such large siltation rates, which may double the amount of dredging material to be dumped in the Lower Sea Scheldt.

Results from the study may be interpreted by comparison with results from the HCBS and HCBS2 studies covering the whole Lower Sea Scheldt. These studies included through-tide measurement campaigns in the vicinity of Deurganckdok and long term measurements of turbidity and salinity in and near Deurganckdok.

The first part of the study focuses on obtaining a sediment balance of Deurganckdok. Aside from natural sedimentation, the sediment balance is influenced by the maintenance and capital dredging works. This involves sediment influx from capital dredging works in the Deurganckdok, and internal relocation and removal of sediment by maintenance dredging works. To compute a sediment balance an inventory of bathymetric data (depth soundings), density measurements of the deposited material and detailed information of capital and maintenance dredging works will be made up.

The second part of the study is to gain insight in the mechanisms causing siltation in Deurganckdok, it is important to follow the evolution of the parameters involved, and this on a long and short term basis (long term & through-tide measurements). Previous research has shown the importance of water exchange at the entrance of Deurganckdok is essential for understanding sediment transport between the dock and the river Scheldt.

1.3. Overview of the study

1.3.1. Reports

Reports of the project 'Opvolging aanslibbing Deurganckdok' between April 2008 till March 2009 are summarized in Table 1-1. An overview of the HCBS2 and 'Opvolging aanslibbing Deurganckdok' (between April 2006 till March 2008) reports are given in APPENDIX G.

This report 2.28, is one of a set of reports that gains insight in sediment and water transport between Deurganckdok and the river Scheldt, which belongs to the second part of this project.

Table 1-1: Overview of Deurganckdok Reports

Report	Description
Sediment Balance: Bathymetry surveys, Density measurements, Maintenance and construction dredging activities	
1.20	Sediment Balance: Three monthly report 1/4/2008 - 30/6/2008 (I/RA/11283/08.076/MSA)
1.21	Sediment Balance: Three monthly report 1/7/2008 – 30/9/2008 (I/RA/11283/08.077/MSA)
1.22	Sediment Balance: Three monthly report 1/10/2008 – 31/12/2008 (I/RA/11283/08.078/MSA)
1.23	Sediment Balance: Three monthly report 1/1/2009 – 31/03/2009 (I/RA/11283/08.079/MSA)
1.24	Annual Sediment Balance (I/RA/11283/08,080/MSA)
Factors contributing to salt and sediment distribution in Deurganckdok: Salt-Silt (OBS3A) & Frame measurements, Through tide measurements (SiltProfiling & ADCP) & Calibrations	
2.20	Through tide measurement Sediview DGD during average tide Spring 2008 – 19 June 2008 (I/RA/11283/08.081/MSA)
2.21	Through tide measurement Sediview DGD during average tide Spring 2008 –26 June 2008 (I/RA/11283/08.082/MSA)
2.22	Through tide measurement Sediview DGD during neap tide Summer 2008 – 24 September 2008 (I/RA/11283/08.083/MSA)
2.23	Through tide measurement Sediview DGD during spring tide Summer 2008 – 30 September 2008 (I/RA/11283/08.084/MSA)
2.24	Through tide measurement Sediview DGD during neap tide Autumn 2008 (I/RA/11283/08.085/MSA)
2.25	Through tide measurement Sediview DGD during spring tide Autumn 2008 (I/RA/11283/08.086/MSA)
2.26	Through tide measurement Sediview DGD during neap tide Winter 2009 (I/RA/11283/08.087/MSA)

Report	Description
2.27	Through tide measurement Sediview DGD during spring tide Winter 2009 (I/RA/11283/08.088/MSA)
2.28	Through tide measurement ADCP eddy DGD Summer 2008 – 1 October 2008 (I/RA/11283/08.089/MSA)
2.29	Through tide measurement Siltprofiler DGD Summer 2008 – 29 September 2008 (I/RA/11283/08.090/MSA)
2.30	Through tide measurement Siltprofiler DGD Winter 2009 (I/RA/11283/08.091/MSA)
2.31	Through tide measurement Salinity Profiling DGD Winter 2009 (I/RA/11283/08.092/MSA)
2.32	Salt-Silt distribution Deurganckdok: Six monthly report 1/4/2008 - 30/9/2008 (I/RA/11283/08.093/MSA)
2.33	Salt-Silt distribution Deurganckdok: Six monthly report 1/10/2008 – 31/3/2009 (I/RA/11283/08.094/MSA)
2.34	Calibration stationary & mobile equipment Autumn 2008 (I/RA/11283/08.095/MSA)
Boundary Conditions: Upriver Discharge, Salt concentration Scheldt, Bathymetric evolution in access channels, dredging activities in Lower Sea Scheldt and access channels	
3.20	Boundary conditions: Six monthly report 1/4/2008 – 30/09/2008 (I/RA/11283/08.096/MSA)
3.21	Boundary conditions: Six monthly report 1/10/2008 – 31/03/2009 (I/RA/11283/08.097/MSA)
Analysis	
4.20	Analysis of Siltation Processes and Factors, 4/’06 – 3/’09 (I/RA/11283/08.098/MSA)

1.3.2. Measurement actions

Following measurements have been carried out during the course of this project:

1. Monitoring upstream discharge in the Scheldt river
2. Monitoring Salt and sediment concentration in the Lower Sea Scheldt taken from on permanent data acquisition sites at Lillo, Oosterweel and up- and downstream of the Deurganckdok.
3. Long term measurement of salt distribution in Deurganckdok.
4. Long term measurement of sediment concentration in Deurganckdok
5. Monitoring near-bed processes in the central trench in the dock, near the entrance as well as near the landward end: near-bed turbidity, near-bed current velocity and bed elevation variations are measured from a fixed frame placed on the dock’s bed.
6. Measurement of current, salt and sediment transport at the entrance of Deurganckdok for which ADCP backscatter intensity over a full cross section are calibrated with the Sediview procedure and vertical sediment and salinity profiles are recorded with the SiltProfiler equipment
7. Through tide measurements of vertical sediment concentration profiles -including near bed highly concentrated suspensions- with the SiltProfiler equipment. Executed over a grid of points near the entrance of Deurganckdok.

8. Monitoring dredging activities at entrance channels towards the Kallo, Zandvliet and Berendrecht locks
9. Monitoring dredging and dumping activities in the Lower Sea Scheldt

In-situ calibrations were conducted on several dates to calibrate all turbidity and conductivity sensors, a description can be found in IMDC (2006a; 2007a; 2008f; 2008o; 2009c).

1.4. Structure of the report

This report is the factual data report of the through tide measurements at the entrance of Deurganckdok on the 1st of October 2008. The first chapter comprises an introduction. The second chapter describes the measurement campaign and the equipment. Chapter 3 describes the course of the actual measurements. The results and processed data are presented in Chapter 4, whereas chapter 5 gives a preliminary analysis of the data.

2. THE MEASUREMENT CAMPAIGN

2.1. Overview of the parameters

The first part of the study aims at determining a sediment balance of Deurganckdok and the net influx of sediment. The sediment balance comprises a number of sediment transport modes: deposition, influx from capital dredging works, internal replacement and removal of sediments due to maintenance dredging (Figure 2-1).

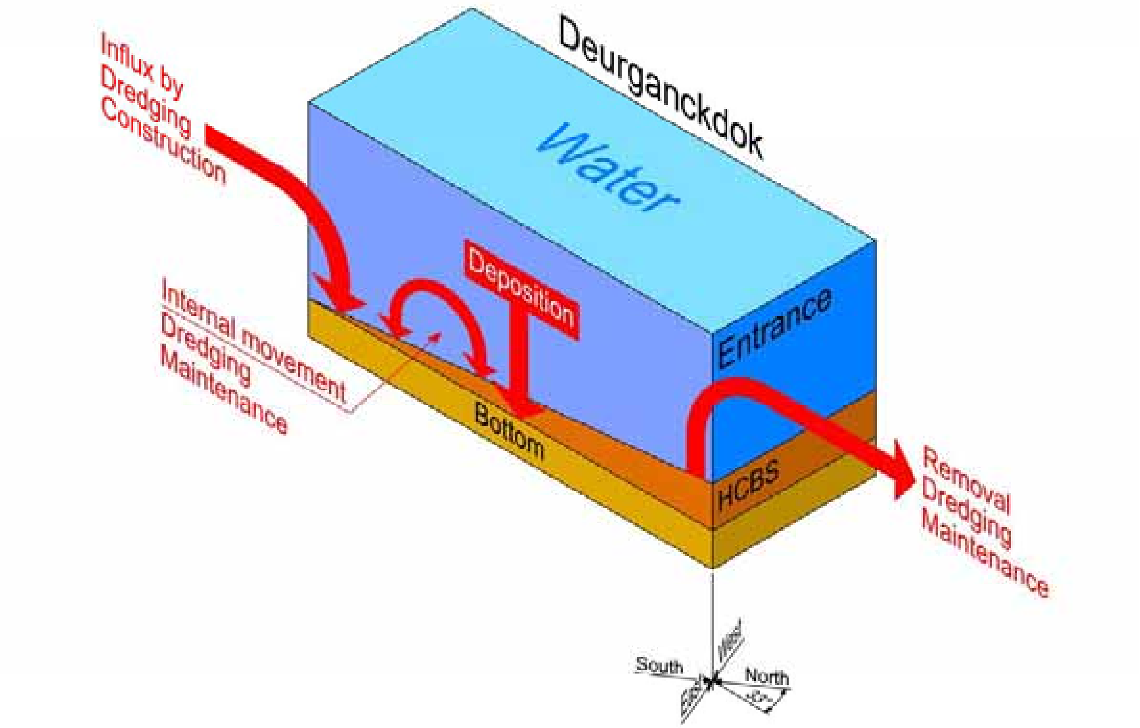

Figure 2-1: Elements of the sediment balance

A net deposition can be calculated from a comparison with a chosen initial condition t_0 (Figure 2-2). The mass of deposited sediment is determined from the integration of bed density profiles recorded at grid points covering the dock. Subtracting bed sediment mass at t_0 leads to the change in mass of sediments present in the dock (mass growth). Adding cumulated dry matter mass of dredged material removed since t_0 and subtracting any sediment influx due to capital dredging works leads to the total cumulated mass entered from the Scheldt river since t_0.

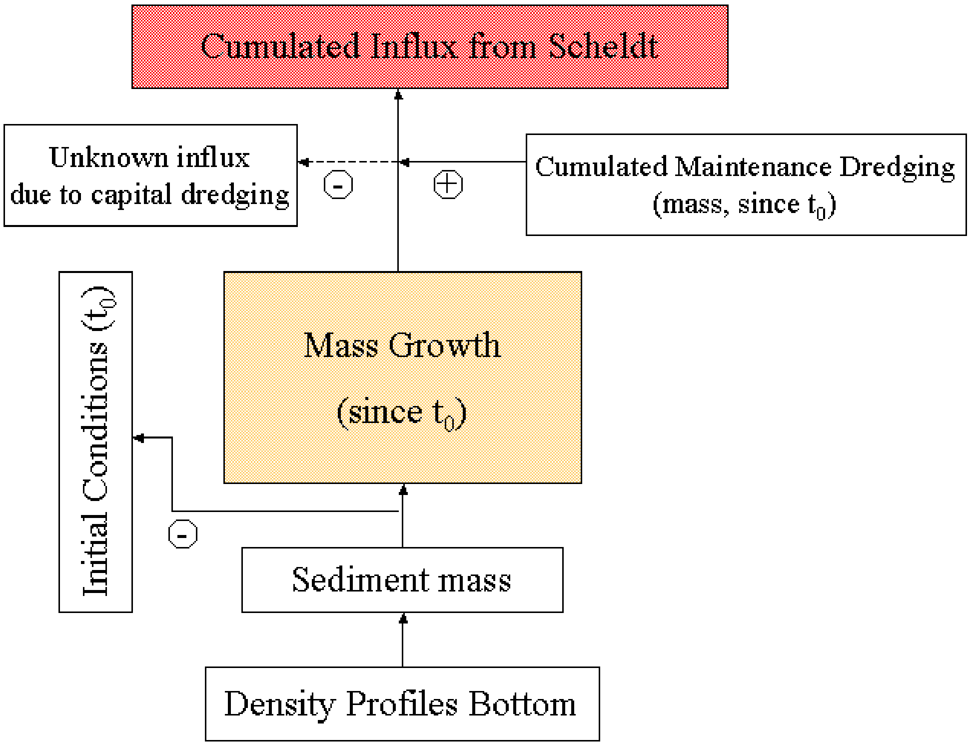

Figure 2-2: Determining a sediment balance

The main purpose of the second part of the study is to gain insight in the mechanisms causing siltation in Deurganckdok. The following mechanisms will be aimed at in this part of the study:

- Tidal prism, i.e. the extra volume in a water body due to high tide
- Vortex patterns due to passing tidal current
- Density currents due to salt gradient between the Scheldt river and the dock
- Density currents due to highly concentrated benthic suspensions

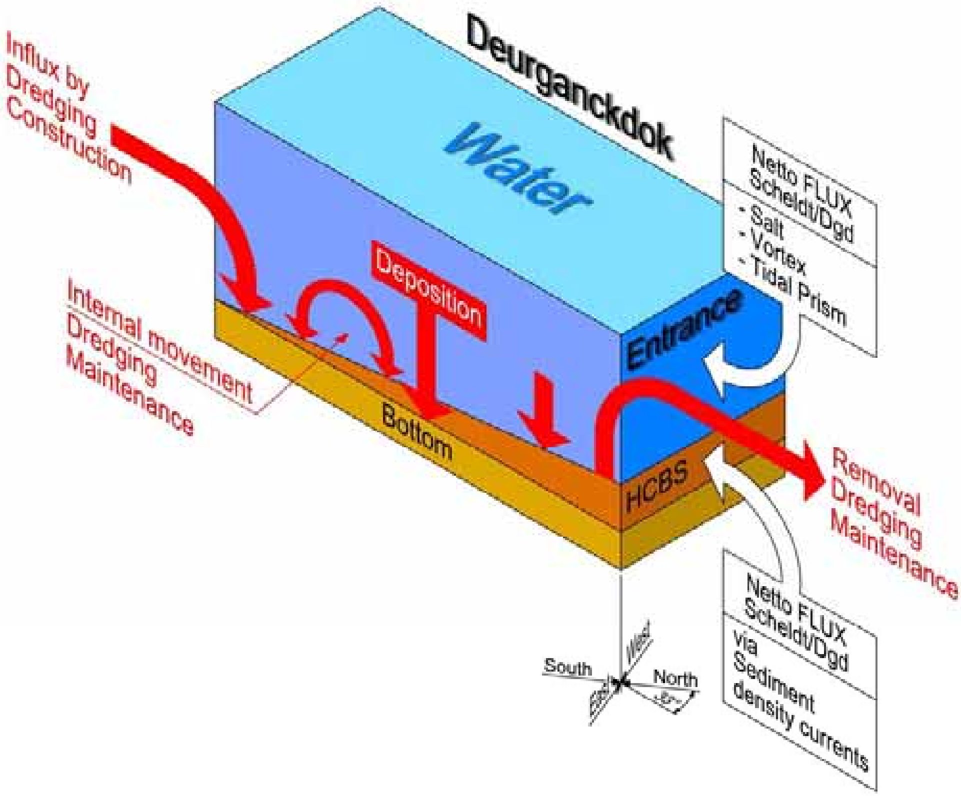

Figure 2-3: Transport mechanisms

These aspects of hydrodynamics and sediment transport have been landmark in determining the parameters to be measured during the project. Measurements will be focussed on three types of timescales: one tidal cycle, one neap-spring cycle and seasonal variation within one year.

Following data are being collected to understand these mechanisms:

- Monitoring the freshwater input (discharge) from the tributaries into the river Scheldt.
- Monitoring salinity and sediment concentration in the Lower Sea Scheldt at permanent measurement locations at Oosterweel, up- and downstream of the Deurganckdok.
- Long term measurement of salinity and suspended sediment distribution in Deurganckdok.
- Monitoring near-bed processes (current velocity, turbidity, and bed elevation variations) in the central trench in the dock, near the entrance as well as near the current deflecting wall location.
- Dynamic measurements of flow pattern, salinity and sediment transport at the entrance of Deurganckdok.
- Through tide measurements of vertical sediment concentration profiles -including near bed high concentrated benthic suspensions.
- Monitoring dredging activities at the entrance channels towards the Kallo, Zandvliet and Berendrecht locks as well as dredging and dumping activities in the Lower Sea Scheldt and Deurganckdok in particular.

In situ calibrations were conducted on several dates to calibrate all turbidity and conductivity sensors.

2.2. Description of the measurement campaign

2.2.1. Purpose of the measurement campaign

The purpose of the measurements was to determine the flow pattern at the entrance of the Deurganckdok during a complete tidal cycle. At this location, an eddy pattern may form, depending on the water levels in side and outside the dock and the flow on the Scheldt.

This report focuses on the through tide measurements at the entrance of Deurganckdok at three different transects that run parallel to the dock (perpendicular to the dock entrance), and that cover a part of the Scheldt river and the entrance of the Deurganckdok, see (Figure 2-4). In this way, the area where eddy patterns are expected to occur is completely covered.

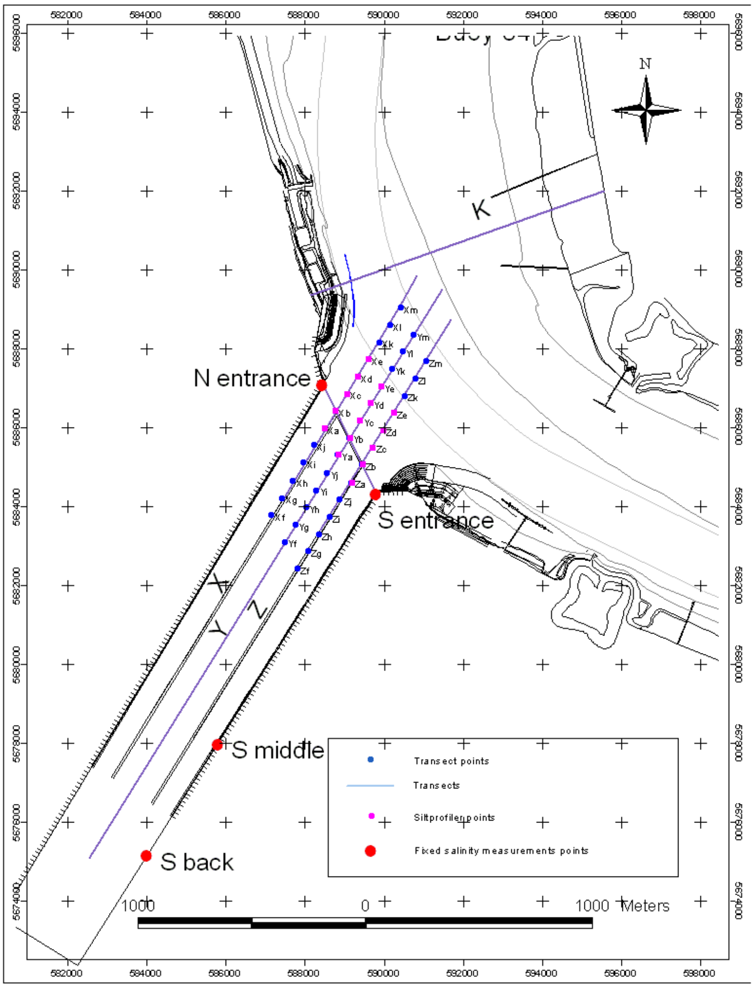

Figure 2-4: Map of sailed transect and calibration points at Deurganckdok on 1st of October 2008

2.2.2. Measurement procedure

Flow velocity, Salinity and Temperature measurements were conducted on the 1st of Oktober from 5h45 MET until 18h45 MET. From the survey vessel Scheldewacht II a measurement cycle, consisting of consecutively measuring transects X,Y and Z, was completed approximately every 20 minutes. The vessel with a mounted ADCP sailed a fixed transect from the right bank to the left bank and vice versa as a backup transect (Table 2-1). Profiles were gathered to calibrate the ADCP transects for temperature, salinity, one during low water and one during high water using a CTD-probe.

Table 2-1:Transect of the Flow Measurements on 19th of June 2008 (UTM31 ED50)

Measurement location	***Left Bank Easting***	***Left Bank Northing***	***Right Bank Easting***	***Right Bank Northing***	***Avg Length [m]***	***Avg Course [degr.]***
Transect X	588878	5684866	588314	5683955	1071	32
Transect Y	588934	5684748	588371	5683837	1071	32
Transect Z	588991	5684630	588427	5683719	1071	32

2.3. The equipment

2.3.1. ADCP

The current measurements were conducted using an RD Instruments ADCP 600 kHz Workhorse with beam angle 30°. For positioning the GPS onboard the vessel Scheldewacht II was used. For the measurement of the heading a gyrocompass was installed.

This 600 KHz ADCP system was mounted on a steel pole underneath the central axis of the vessel. The transducer set was looking vertically downwards to the bottom. Transceiver unit and computer system were connected to peripherals such as the differential GPS-receiver, the heave compensator and the gyrocompass.

During the measurements the ADCP constantly measured upstream from the vessel. The acquisition software of Winriver was used. The main settings are given in Table 2-2.

Table 2-2: Main Configuration Settings of ADCP

Main configuration settings of ADCP 600kHz Worhhorse:
Cell depth: 0.5 m
Number of cells: 50
Number of Water pings per ensemble: 2
Number of Bottom Track pings per ensemble: 2
Time between ensembles: 0
Averaging: None
Speed of Sound: Fixed 1500 m/s
Salinity 0 psu
3-beam solution: enabled
Beam angle: 30°

2.3.2. CTD

A CTD Diver was used at two instances to measure the conductivity and temperature profiles (together with the absolute pressure) of the upper part of the water column.

3. COURSE OF THE MEASUREMENTS

3.1. Measurement periods

At Deurganckdok three different ADCP transects were sailed about every 20 to 25 minutes for 13 hours. In total 28 sets of three transect were measured (the last two consisted of only two transects).

APPENDIX A gives the start and end points of the tracks, the sailed length and the course.

3.2. Hydro-meteorological conditions during the measurement campaign

3.2.1. Vertical tide during the measurements

The vertical tide was measured at the Liefkenshoek tidal gauges. Graphs of the tide at Liefkenshoek on the 1st Oktober of 2008 can be found in APPENDIX B. Table 3-1 gives the most important characteristics (high and low tide) of the tide at those gauges on the 1st of Oktober 2008.

Table 3-1: High and low tide at Liefkenshoek on 01/10/2008

Liefkenshoek Tidal Gauge		
1 Oktober 2008		
	Time [MET]	***Water level [m TAW]***
HW (1)	4:10	6.07
LW (2)	10:50	0.59
HW (3)	16:20	6.31

In Table 3-2 the tidal characteristics of the tide on the 1st of October 2008 are compared to the average tide over the decade 1991-2000 (AMT, 2003).

Table 3-2: Comparison of the tidal characteristics of 01/10/2008 with the average tide, the average neap tide and the average spring tide over the decade 1991-2000 for Liefkenshoek.

	Neap tide (1991 - 2000)	Avg Tide (1991 - 2000)	Spring Tide (1991 - 2000)	Tide 01/10/2008
Water level [m TAW]				
HW (1)	4.63	5.19	5.63	6.07
LW (2)	0.39	0.05	-0.18	0.59
HW (3)	-	-	-	6.31
Tidal difference [m]				
Falling (1 to 2)	4.24	5.14	5.81	5.48
Rising (2 to 3)	4.24	5.14	5.81	5.72
Duration [hh:mm]				
Falling (1 to 2)	6:40	6:50	7:02	6:40
Rising (2 to 3)	5:59	5:34	5:16	5:30
Tide (1 to 3)	12:39	12:24	12:18	12:10
Tidal coefficient				
Falling (1 to 2)	0.82	1.00	1.13	1.07
Rising (2 to 3)	0.82	1.00	1.13	1.11

The tidal coefficients from 1.07 up to 1.11 for the measured tide of the 1st of Oktober 2008 indicate that this tide is similar to the spring tide for the decade of 1991-2000, and can be classified as a spring tide.

3.2.2. Meteorological data

Meteorological data at Hove was obtained from the Weather Underground website (Wunderground, 2008).

The weather on the 1st of Oktober 2008 was rainy and the wind blew from the south west at an average velocity of 22 km/h with maximal gust velocity of 59 km/h. The air temperature varied between 10 and 15°C. The sky was cloudy with precipitation.

3.3. Navigation information

An overview of the navigation at the measurement location is given in APPENDIX C.

3.4. Remarks on data

At 6.32h MET, there is a gap in the data of approximately one hour. No transect could be sailed at this moment because of a leaving super container vessel.

Shipwakes were removed from the data where possible.

4. PROCESSING OF DATASETS

4.1. Methodology of processing of the ADCP data

The recorded velocity fields of the ADCP data were used to obtain contour plots of the velocity of the sailed transect and maps showing the velocity fields of the three transects that were measured together. In the following, first the used depth averaging methodology is discussed, followed by a discussion of the contour plots of the velocities at the transect, the maps containing the depth averaged velocity fields and the presented output.

4.1.1. Depth averaging methodology

Because of the importance of the flow for navigation purposes, a depth-averaging methodology was used here, which explicitly accounts for the effect of the flow on the vessels.

In this technique, the measured velocity is averaged by summing the flow pressure (calculated form the measured velocity) on a strip of unit width on the vessel, and then calculating an equivalent velocity from this pressure. For the average direction, the direction of the sum of the squared velocities is taken, and hence this equivalent velocity is a kind of root mean square.

The two horizontal components of the force on a vessel per unit width (F_x and F_y) with a draught H are given by:

$$F_x = C \int_H \rho u_x U dz$$

$$F_y = C \int_H \rho u_y U dz$$

Here, u_x and u_y are the velocities in the x and y direction respectively, U is the velocity magnitude and C is a dimensionless constant. The total force on the vessel is given by:

$$F = \sqrt{F_x^2 + F_y^2}$$

Now, the total force on the vessel is represented by an equivalent velocity U_{eq} and direction ϕ_{eq}:

$$F \equiv C\rho H U_{eq}^2$$

This leads to:

$$U_{eq}^2 = \frac{F}{C\rho H} = \frac{C\sqrt{\left(\int_H \rho u_x U dz\right)^2 + \left(\int_H \rho u_y U dz\right)^2}}{C\rho H}$$

which leads for the assumed constant density to:

$$U_{eq} = \left(\frac{\left(\int_H u_x U dz \right)^2 + \left(\int_H u_y U dz \right)^2}{H^2} \right)^{1/4}$$

and

$$\phi_{eq} = \arctan\left(\frac{F_y}{F_x} \right) = \arctan\left(\frac{\left(C \int_H \rho u_y U dz \right)}{\left(C \int_H \rho u_x U dz \right)} \right) = \arctan\left(\frac{\left(\int_H u_y U dz \right)}{\left(\int_H u_x U dz \right)} \right)$$

4.1.2. Contour plots of the transects

All contour plots show perpendicular and parallel projected values on the straightened sailed transects. The heading of the straightened sailed transect is defined by picking 2 points in the straight part of the line after having corrected the heading of the ADCP compass. The compass offset is derived from a comparison of the ADCP's bottom track with the external GPS data.

4.1.3. Maps of the measured depth averaged velocity

Maps were made of the measured depth averaged (over the highest 12 m of the water column) velocity fields by plotting a velocity vector at the recorded location of the measurements (using ED 50 UTM 31 coordinates), together with a map of the Deurganckdok and the Scheldt river.

4.1.4. Output

General transect information containing start-stop coordinates of each sailed transects with stop time, track length and heading is given in APPENDIX A.

In APPENDIX E, two contour plots were generated for each transect showing the flow velocity perpendicular and parallel to the transect, in combination with a vector plot of the depth averaged (over the complete water depth) velocity field project on the theoretical transect (with a vector spacing of 50 m). The following conventions were used:

- Distances on the X-axis were referenced to the starting point of the transect, the start of the sailed transect is always at distance equal to zero.
- Left bank is always shown left, right bank on the right side. For transect DGD, left bank was taken to be the western quay wall and the right bank to be the eastern quay wall considering the dock as being a tributuary to the Scheldt river.
- Perpendicular flow velocities and fluxes are positive for downstream flow (ebb, out of Deurganckdok), negative for upstream flow (flood, inbound).
- Parallel flow velocities are positive for flow going from the left bank to the right bank, and negative for flow going from the right bank to the left bank.
- Absolute Depth is given in meters above TAW.

In APPENDIX F, the measured depth averaged velocities (over the highest 12 m of the water column) are plotted. Here the depth-averaged velocities were calculated with the methodology described in the previous paragraph. For the area between the highest measurement bin and the free surface, the velocity data were extrapolated for each ensemble assuming a constant velocity equal to the velocity in the highest measurement bin.of that ensemble. In the horizontal plane, an averaging over three vectors along the transect was performed, and only these averaged vectors (i.e. one out of three) were plotted, because otherwise the vectors would be to closely spaced to obtain a clear view. Each map shows the velocity fields of the three consecutively recorded transects X, Y and Z.

5. PRELIMINARY ANALYSIS OF THE DATA

5.1. Previous investigations

Similar vector plots of the current measured using an ADCP at the entrance of the Dock are presented in previous reports (IMDC 2006m and IMDC 2006q). In these investigations, IMDC 2006m correspond to spring tide conditions (a tidal coefficient of 1.09 to 1.11), which is very similar to the measurement. However, in the previous report, the velocities in the upper and lower bin of the ADCP were plotted, rather than depth averages as in the present report. A 3-d numeric simulation of these cases has been made (WL|Delft Hydraulics and IMDC, 2006), and it was found that the numerical results agreed well with the measurements. Therefore, we will compare the results of the present mainly with the depth-averaged results of the 3-d model simulation. Further descriptions of the processes that occur at a harbour mouth can be found in PIANC (2008).

5.2. Oktober 1st 2008 survey

As Deurganckdok is situated along the part of the Scheldt River, which is under tidal influence, it is subject to complex current fields near its entrance. For the present report, measurements were performed along different transects at the entrance of the Deurganckdok in order to obtain more insight in the occurring flow field at this location. These transects started well into the Scheldt river and extended some 500 meters into the Deurganckdok, which is a distance that is approximately equal to the width of the Deurganckdok.

The present measurements started approximately two hours after high water, i.e. during ebb conditions. In these measurements, it can be seen that on the River Scheldt tidal flow occurs, with a westward flow during ebb. The flow parallel to the dock's entrance decreases strongly when approaching the dock. Perpendicular to the dock entrance, the flow is directed outwards (i.e. the dock is emptying). The flow at the Scheldt shows a maximum ebb velocity around 4 to 5 hours after high water. It is interesting to note that no clear eddy pattern is visible during the ebb flow in the depth-averaged data, even though sometimes a very weak eddy appears (at 4h16 and 5h07 after HW to be precise). This compares rather well with model simulation, which show in the depth-averaged data (which is in that report defined over the complete water depth, and here over the upper 12 m) rather weak eddies during ebb.

Approximately one hour after low water, slack water occurs on the river, and afterwards the flood current, which is here in easterly direction, starts to increase. At this moment the flow inside the dock is directed southward (i.e. the flow is directed into the dock), but this flow is rather weak. After this moment an eddy starts to form in the dock entrance, and the flow inside the dock has a direction opposite to the flow in the river. This eddy starts to become particularly strong at around 2.30 to 1.00 hours before high water. At this instant in time, the flow at the inflowing side of the eddy is stronger than in the outflowing side. This pattern is also clearly visible in the model simulations (WL|Delft Hydraulics and IMDC, 2006) during flood. Similar flow patterns were observed in laboratory measurements of the eddy in a tidal harbour (Langendoen 1992 and references therein), especially the fact that the eddy is stronger during flood than during ebb

After this, the flow at the river decreases, and when this happens, the strength of the eddy decreases as well, even though it still remains visible for some time after the flow has decreased. After the eddy has decayed, there is mainly outflow. This is a difference with the results from (WL|Delft Hydraulics and IMDC, 2006), where the depth-averaged eddy although it decreases in the strength, remains visible until up to an hour after HW.

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IMDC (2005e). Uitbreiding studie densiteitsstromingen in de Beneden Zeeschelde in het kader van LTV Meetcampagne naar hooggeconcentreerde slibsuspensies Deelrapport 2.4: Schelle 17/02/2005, I/RA/11265/05.0012/MSA.

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IMDC (2006j). Uitbreiding studie densiteitsstromingen in de Beneden Zeeschelde in het kader van LTV Meetcampagne naar hooggeconcentreerde slibsuspensies Deelrapport 8.1: Vaste meetopstelling in zake bodemgedrag, I/RA/11291/06.100/MSA.

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IMDC (2006l) Uitbreiding studie densiteitsstromingen in de Beneden Zeeschelde in het kader van LTV Meetcampagne naar hooggeconcentreerde slibsuspensies Deelrapport 5.3 Overview of ambient conditions in the river Scheldt – January-June 2006 (I/RA/11291/06.089/MSA), in opdracht van AWZ.

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IMDC (2006p) Uitbreiding studie densiteitsstromingen in de Beneden Zeeschelde in het kader van LTV Meetcampagne naar hooggeconcentreerde slibsuspensies Deelrapport 5.3 Overview of ambient conditions in the river Scheldt – Januari-June 2006 (I/RA/11291/06.089/MSA), in opdracht van AWZ.

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IMDC (2007b). Uitbreiding studie densiteitsstromingen in de Beneden Zeeschelde in het kader van LTV Meetcampagne naar hooggeconcentreerde slibsuspensies Deelrapport 5.4 Overview of ambient conditions in the river Scheldt – July-December 2006 (I/RA/11291/06.089/MSA), in opdracht van AWZ.

IMDC (2007c). Uitbreiding studie densiteitsstromingen in de Beneden Zeeschelde in het kader van LTV Meetcampagne naar hooggeconcentreerde slibsuspensies Deelrapport 11.1 Through tide Measurement Sediview & Siltprofiler 27/9 Stream - Liefkenshoek (I/RA/11291/06.104/MSA), in opdracht van AWZ.

IMDC (2007d). Uitbreiding studie densiteitsstromingen in de Beneden Zeeschelde in het kader van LTV Meetcampagne naar hooggeconcentreerde slibsuspensies Deelrapport 11.2 Through tide Measurement Sediview 27/9 Veremans - Raai K (I/RA/11291/06.105/MSA), in opdracht van AWZ.

IMDC (2007e). Uitbreiding studie densiteitsstromingen in de Beneden Zeeschelde in het kader van LTV Meetcampagne naar hooggeconcentreerde slibsuspensies Deelrapport 11.3 Through tide Measurement Sediview & Siltprofiler 28/9 Stream - Raai K (I/RA/11291/06.106/MSA), in opdracht van AWZ.

IMDC (2007f). Uitbreiding studie densiteitsstromingen in de Beneden Zeeschelde in het kader van LTV Meetcampagne naar hooggeconcentreerde slibsuspensies Deelrapport 11.4 Through tide Measurement Sediview 28/9 Veremans - Waarde(I/RA/11291/06.107/MSA), in opdracht van AWZ.

IMDC (2007g). Uitbreiding studie densiteitsstromingen in de Beneden Zeeschelde in het kader van LTV Meetcampagne naar hooggeconcentreerde slibsuspensies Deelrapport 11.5 Through tide Measurement Sediview 28/9 Parel 2 - Schelle (I/RA/11291/06.108/MSA), in opdracht van AWZ.

IMDC (2007h). Uitbreiding studie densiteitsstromingen in de Beneden Zeeschelde in het kader van LTV Meetcampagne naar hooggeconcentreerde slibsuspensies Deelrapport 11.6 Through tide Measurement Salinity Distribution 26/9 Scheldewacht – Deurganckdok in opdracht van AWZ.

IMDC (2007i) Langdurige metingen Deurganckdok: Opvolging en analyse aanslibbing. Deelrapport 1.1 Sediment Balance: Three monthly report 1/4/2006 – 30/06/2006 (I/RA/11283/06.113/MSA)

IMDC (2007j) Langdurige metingen Deurganckdok: Opvolging en analyse aanslibbing. Deelrapport 1.2 Sediment Balance: Three monthly report 1/7/2006 – 30/09/2006 (I/RA/11283/06.114/MSA)

IMDC (2007k) Langdurige metingen Deurganckdok: Opvolging en analyse aanslibbing. Deelrapport 1.3 Sediment Balance: Three monthly report 1/10/2006 – 31/12/2006 (I/RA/11283/06.115/MSA)

IMDC (2007l) Langdurige metingen Deurganckdok: Opvolging en analyse aanslibbing. Deelrapport 1.4 Sediment Balance: Three monthly report 1/1/2007 – 31/03/2007 (I/RA/11283/06.116/MSA)

IMDC (2007m) Langdurige metingen Deurganckdok: Opvolging en analyse aanslibbing. Deelrapport 1.5 Annual Sediment Balance (I/RA/11283/06.117/MSA)

IMDC (2007n) Langdurige metingen Deurganckdok: Opvolging en analyse aanslibbing. Deelrapport 2.2 Through tide measurement SiltProfiler 26/09/2006 Stream (I/RA/11283/06.068/MSA)

IMDC (2007o) Langdurige metingen Deurganckdok: Opvolging en analyse aanslibbing. Deelrapport 2.7 Salt-Silt distribution & Frame Measurements Deurganckdok 15/07/2006 – 31/10/2006 (I/RA/11283/06.122/MSA)

IMDC (2007p) Langdurige metingen Deurganckdok: Opvolging en analyse aanslibbing. Deelrapport 2.8 Salt-Silt distribution & Frame Measurements Deurganckdok 15/01/2007 – 15/03/2007 (I/RA/11283/06.123/MSA)

IMDC (2007q) Langdurige metingen Deurganckdok: Opvolging en analyse aanslibbing. Deelrapport 3.1 Boundary conditions: Three monthly report 1/1/2007 – 31/03/2007 (I/RA/11283/06.127/MSA)

IMDC (2007r) Langdurige metingen Deurganckdok: Opvolging en analyse aanslibbing Deelrapport 1.10: Sediment Balance: Three monthly report 1/4/2007 – 30/06/2007 (I/RA/11283/07.081/MSA)

IMDC (2007s) Langdurige metingen Deurganckdok: Opvolging en analyse aanslibbing. Deelrapport 1.11: Sediment Balance: Three monthly report 1/7/2007 – 30/09/2007 (I/RA/11283/07.082/MSA)

IMDC (2007t) Langdurige metingen Deurganckdok: Opvolging en analyse aanslibbing. Deelrapport 2.16: Salt-Silt distribution Deurganckdok summer (21/6/2007 – 30/07/2007) (I/RA/11283/07.092/MSA)

IMDC (2007v) Langdurige metingen Deurganckdok: Opvolging en analyse aanslibbing. Deelrapport 3.10: Boundary conditions: Three monthly report 1/04/2007 – 30/06/2007 (I/RA/11283/07.097/MSA)

IMDC (2007w) Langdurige metingen Deurganckdok: Opvolging en analyse aanslibbing. Deelrapport 3.11: Boundary conditions: Two monthly report 1/07/2007 – 30/09/2007 (I/RA/11283/07.098/MSA)

IMDC (2008a) Langdurige metingen Deurganckdok: Opvolging en analyse aanslibbing. Deelrapport 2.5: Through tide measurement Sediview average tide 24/10/2007 (I/RA/11283/06.120/MSA)

IMDC (2008b) Langdurige metingen Deurganckdok: Opvolging en analyse aanslibbing. Deelrapport 4.1: Analysis of siltation Processes and Factors (I/RA/11283/06.129/MSA)

IMDC (2008c) Langdurige metingen Deurganckdok: Opvolging en analyse aanslibbing. Deelrapport 1.12: Sediment Balance: Four monthly report 1/9/2007 – 31/12/2007 (I/RA/11283/07.083/MSA)

IMDC (2008d) Langdurige metingen Deurganckdok: Opvolging en analyse aanslibbing. Deelrapport 1.13: Sediment Balance: Four monthly report 1/01/2007 – 31/03/2007 (I/RA/11283/07.084/MSA)

IMDC (2008e) Langdurige metingen Deurganckdok: Opvolging en analyse aanslibbing. Deelrapport 1.14: Annual Sediment Balance. (I/RA/11283/07.085/MSA)

IMDC (2008f) Langdurige metingen Deurganckdok: Opvolging en analyse aanslibbing. Deelrapport 2.09: Calibration stationary equipment autumn (I/RA/11283/07.095/MSA)

IMDC (2008g) Langdurige metingen Deurganckdok: Opvolging en analyse aanslibbing. Deelrapport 2.10: Through tide measurement SiltProfiler 23 October 2007 (I/RA/11283/07.086/MSA)

IMDC (2008h) Langdurige metingen Deurganckdok: Opvolging en analyse aanslibbing. Deelrapport 2.11: Through tide measurement Salinity Profiling winter 12 March 2008 (I/RA/11283/07.087/MSA)

IMDC (2008i) Langdurige metingen Deurganckdok: Opvolging en analyse aanslibbing. Deelrapport 2.12: Through tide measurement Sediview winter 11 March 2008 – Transect I (I/RA/11283/07.088/MSA)

IMDC (2008j) Langdurige metingen Deurganckdok: Opvolging en analyse aanslibbing. Deelrapport 2.13: Through tide measurement Sediview winter 11 March 2008 – Transect K (I/RA/11283/07.089/MSA)

IMDC (2008k) Langdurige metingen Deurganckdok: Opvolging en analyse aanslibbing. Deelrapport 2.14: Through tide measurement Sediview winter 11 March 2008 – Transect DGD (I/RA/11283/07.090/MSA)

IMDC (2008l) Langdurige metingen Deurganckdok: Opvolging en analyse aanslibbing. Deelrapport 2.15: Through tide measurement SiltProfiler winter 12 March 2008 (I/RA/11283/07.091/MSA)

IMDC (2008m) Langdurige metingen Deurganckdok: Opvolging en analyse aanslibbing. Deelrapport 2.17: Salt-Silt distribution & Frame Measurements Deurganckdok autumn (17/9/2007-10/12/2007) (I/RA/11283/07.093/MSA)

IMDC (2008n) Langdurige metingen Deurganckdok: Opvolging en analyse aanslibbing. Deelrapport 2.18: Salt-Silt distribution & Frame Measurements Deurganckdok winter (18/02/2007-31/03/2008) (I/RA/11283/07.094/MSA)

IMDC (2008o) Langdurige metingen Deurganckdok: Opvolging en analyse aanslibbing. Deelrapport 2.19: Calibration stationary & mobile equipment winter (I/RA/11283/07.096/MSA)

IMDC (2008p) Langdurige metingen Deurganckdok: Opvolging en analyse aanslibbing. Deelrapport 3.12: Boundary conditions: Three monthly report 1/9/2007 – 31/12/2007 (I/RA/11283/07.099/MSA)

IMDC (2008q) Langdurige metingen Deurganckdok: Opvolging en analyse aanslibbing. Deelrapport 3.13: Boundary conditions: Three monthly report 1/1/2008 – 31/3/2007 (I/RA/11283/07.100/MSA)

IMDC (2008r) Langdurige metingen Deurganckdok: Opvolging en analyse aanslibbing. Deelrapport 3.14: Boundary conditions: Annual report (I/RA/11283/07.101/MSA)

IMDC (2008s) Langdurige metingen Deurganckdok: Opvolging en analyse aanslibbing. Deelrapport 4.10: Analysis of siltation Processes and Factors (I/RA/11283/07.102/MSA)

IMDC (2008t) Langdurige metingen Deurganckdok: Opvolging en analyse aanslibbing Deelrapport 1.20: Sediment Balance: Three monthly report 1/4/2008 – 30/06/2008 (I/RA/11283/08.076/MSA)

IMDC (2008u) Langdurige metingen Deurganckdok: Opvolging en analyse aanslibbing. Deelrapport 2.20: Through tide measurement Sediview during average tide Spring 2008 – 19 June 2008 (I/RA/11283/08.081/MSA)

IMDC (2008v) Langdurige metingen Deurganckdok: Opvolging en analyse aanslibbing. Deelrapport 2.21: Through tide measurement Sediview during average tide Spring 2008 – 26 June 2008 (I/RA/11283/08.082/MSA)

IMDC (2008w) Langdurige metingen Deurganckdok: Opvolging en analyse aanslibbing Deelrapport 1.21: Sediment Balance: Three monthly report 1/7/2008 – 30/09/2008 (I/RA/11283/08.077/MSA)

IMDC (2008x) Langdurige metingen Deurganckdok: Opvolging en analyse aanslibbing. Deelrapport 2.22: Through tide measurement Sediview during neap tide Summer 2008 – 24 September 2008 (I/RA/11283/08.083/MSA)

IMDC (2008y) Langdurige metingen Deurganckdok: Opvolging en analyse aanslibbing. Deelrapport 2.28: Through tide measurement ADCP eddy Summer 2008 – 1 October 2008 (I/RA/11283/08.089/MSA)

IMDC (2008z) Langdurige metingen Deurganckdok: Opvolging en analyse aanslibbing. Deelrapport 2.32: Salt-Silt distribution Deurganckdok: six monthly report 1/4/2008 – 30/9/2008 (I/RA/11283/08.093/MSA)

IMDC (2008aa) Langdurige metingen Deurganckdok: Opvolging en analyse aanslibbing. Deelrapport 3.20: Boundary conditions: Six monthly report 1/4/2008 – 30/09/2008 (I/RA/11283/08.096/MSA)

IMDC (2009a) Langdurige metingen Deurganckdok: Opvolging en analyse aanslibbing. Deelrapport 2.23: Through tide measurement Sediview during spring tide Summer 2008 – 30 September 2008 (I/RA/11283/08.084/MSA)

IMDC (2009b) Langdurige metingen Deurganckdok: Opvolging en analyse aanslibbing. Deelrapport 2.29: Through tide measurement SiltProfiler summer 2008 – 29 September 2008 (I/RA/11283/07.090/MSA)

IMDC (2009c) Langdurige metingen Deurganckdok: Opvolging en analyse aanslibbing. Deelrapport 2.34: Calibration stationary & mobile equipment autumn 2008 (I/RA/11283/08.095/MSA)

IMDC (2009d) Langdurige metingen Deurganckdok: Opvolging en analyse aanslibbing Deelrapport 1.22: Sediment Balance: Three monthly report 1/10/2008 – 31/12/2008 (I/RA/11283/08.078/MSA)

IMDC (2009e) Langdurige metingen Deurganckdok: Opvolging en analyse aanslibbing. Deelrapport 2.24: Through tide measurement Sediview during neap tide Autumn 2008 (I/RA/11283/08.085/MSA)

IMDC (2009f) Langdurige metingen Deurganckdok: Opvolging en analyse aanslibbing. Deelrapport 2.25: Through tide measurement Sediview during spring tide Autumn 2008 (I/RA/11283/08.086/MSA)

IMDC (2009g) Langdurige metingen Deurganckdok: Opvolging en analyse aanslibbing Deelrapport 1.23: Sediment Balance: Three monthly report 1/01/2009 – 31/03/2009 (I/RA/11283/08.079/MSA)

IMDC (2009h) Langdurige metingen Deurganckdok: Opvolging en analyse aanslibbing Deelrapport 1.24: Annual Sediment Balance (I/RA/11283/08.080/MSA)

IMDC (2009i) Langdurige metingen Deurganckdok: Opvolging en analyse aanslibbing. Deelrapport 2.26: Through tide measurement Sediview during neap tide Winter 2009 (I/RA/11283/08.087/MSA)

IMDC (2009j) Langdurige metingen Deurganckdok: Opvolging en analyse aanslibbing. Deelrapport 2.30: Through tide measurement SiltProfiler winter 2009 (I/RA/11283/08.091/MSA)

IMDC (2009k) Langdurige metingen Deurganckdok: Opvolging en analyse aanslibbing. Deelrapport 2.31: Through tide measurement Salinity Profiling winter 2009 (I/RA/11283/08.092/MSA)

IMDC (2009l) Langdurige metingen Deurganckdok: Opvolging en analyse aanslibbing. Deelrapport 2.33: Salt-Silt distribution Deurganckdok: six monthly report 1/10/2008 – 31/3/2009 (I/RA/11283/08.094/MSA)

IMDC (2009m) Langdurige metingen Deurganckdok: Opvolging en analyse aanslibbing. Deelrapport 3.21: Boundary conditions: Six monthly report 1/10/2008 – 31/03/2009 (I/RA/11283/08.097/MSA)

IMDC (2009n) Langdurige metingen Deurganckdok: Opvolging en analyse aanslibbing. Deelrapport 2.27: Through tide measurement Sediview during spring tide Winter 2009 (I/RA/11283/08.088/MSA)

IMDC (2009o) Langdurige metingen Deurganckdok: Opvolging en analyse aanslibbing. Deelrapport 4.20: Analysis of siltation Processes and Factors (I/RA/11283/08.098/MSA)

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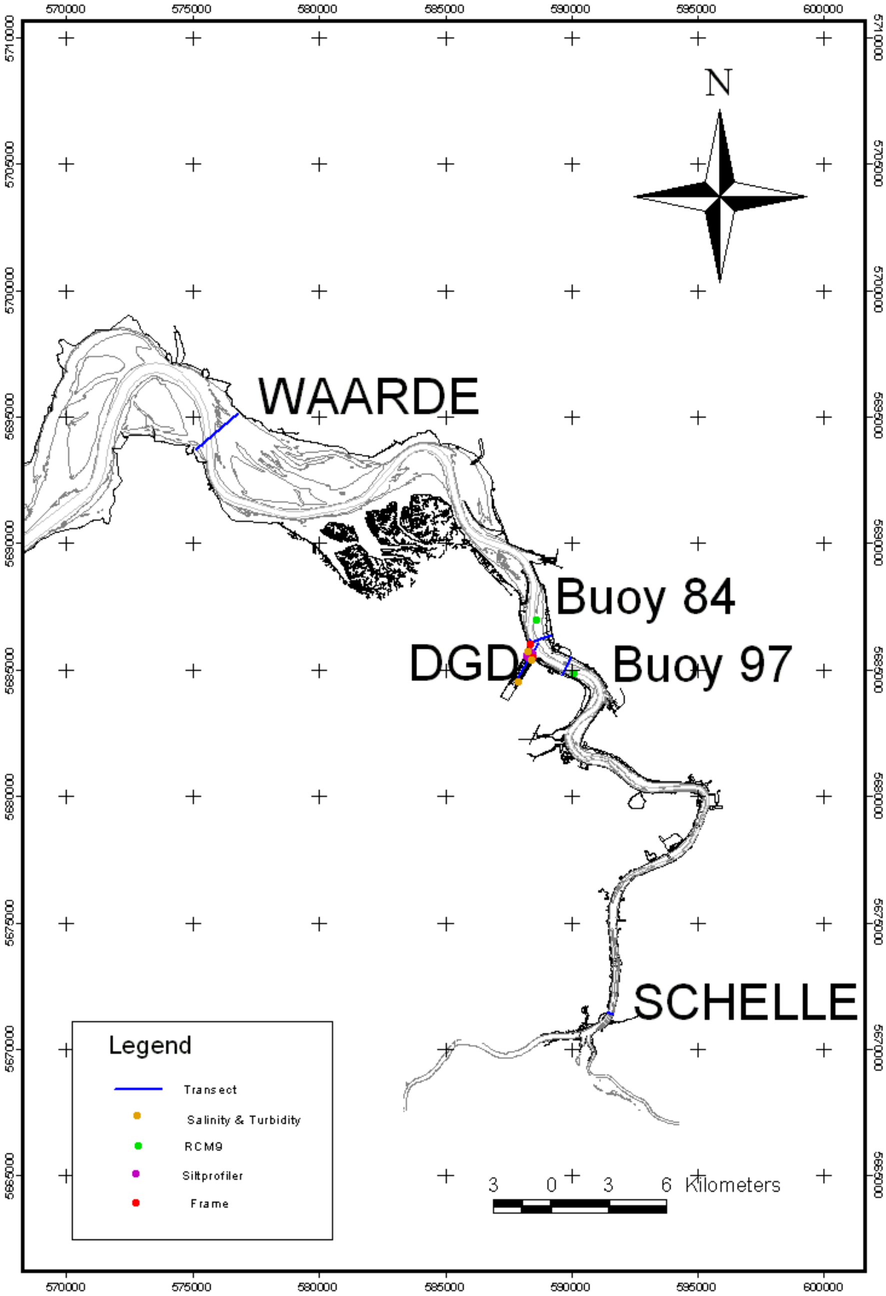
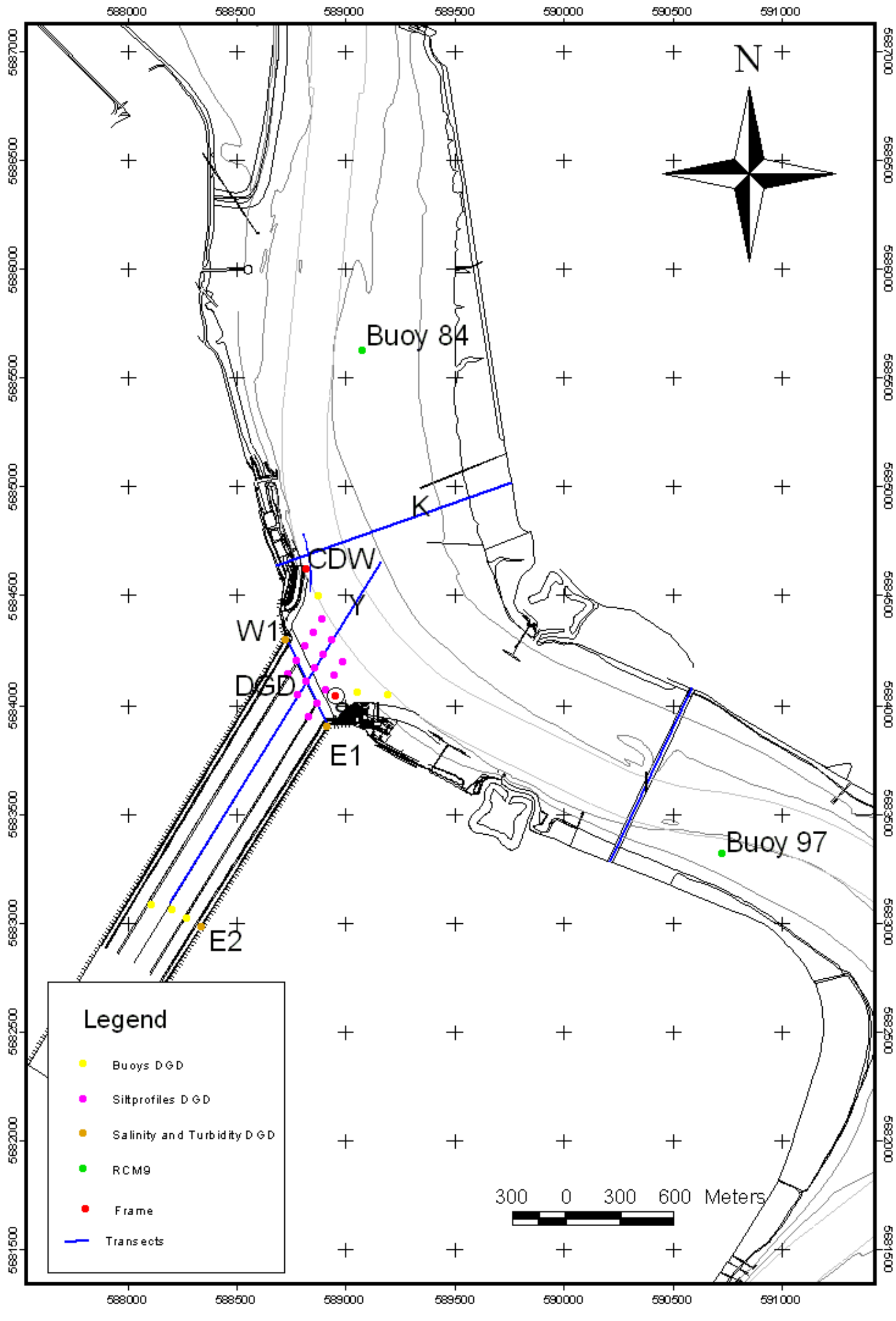
APPENDIX A.

OVERVIEW OF MEASUREMENT

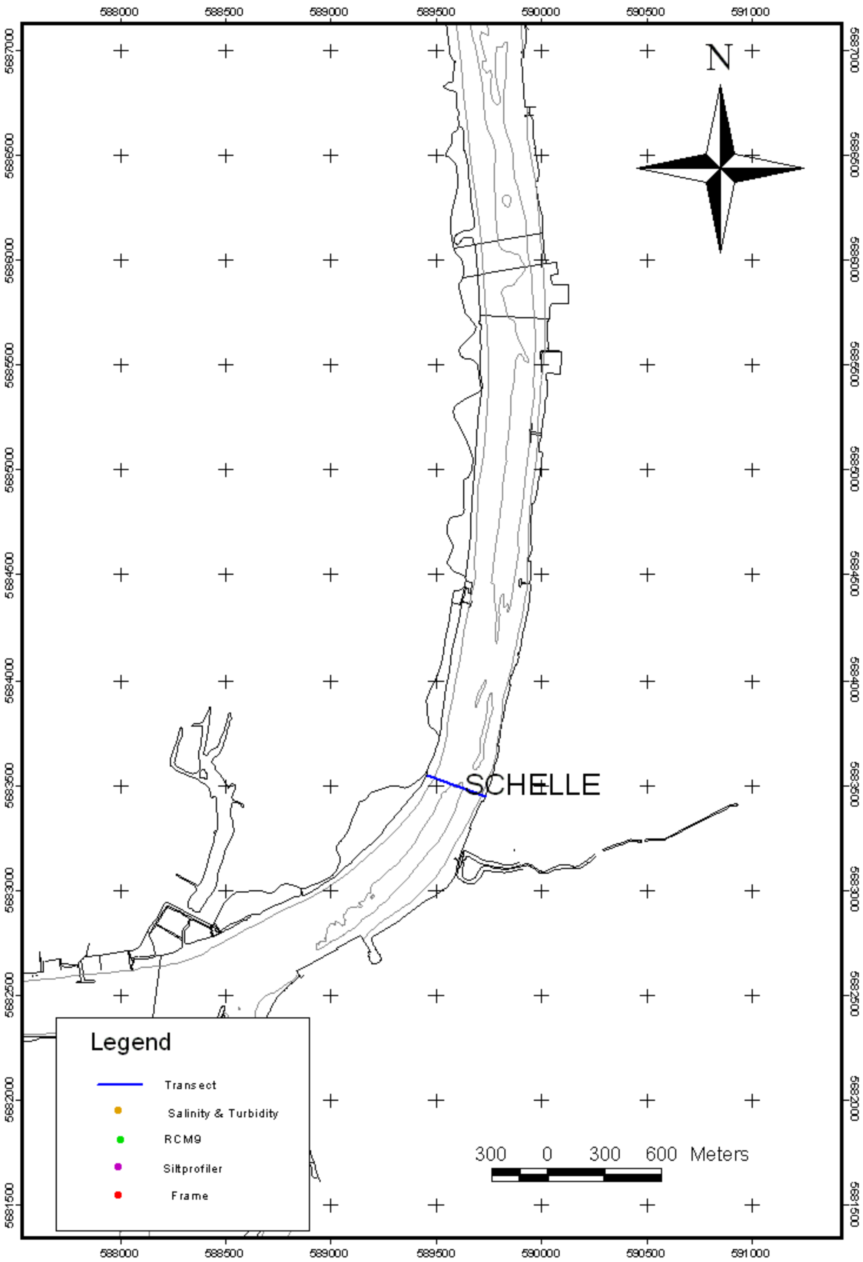
A.1 Overview of the measurement locations for the whole HCBS2 and Deurganckdok measurement campaigns



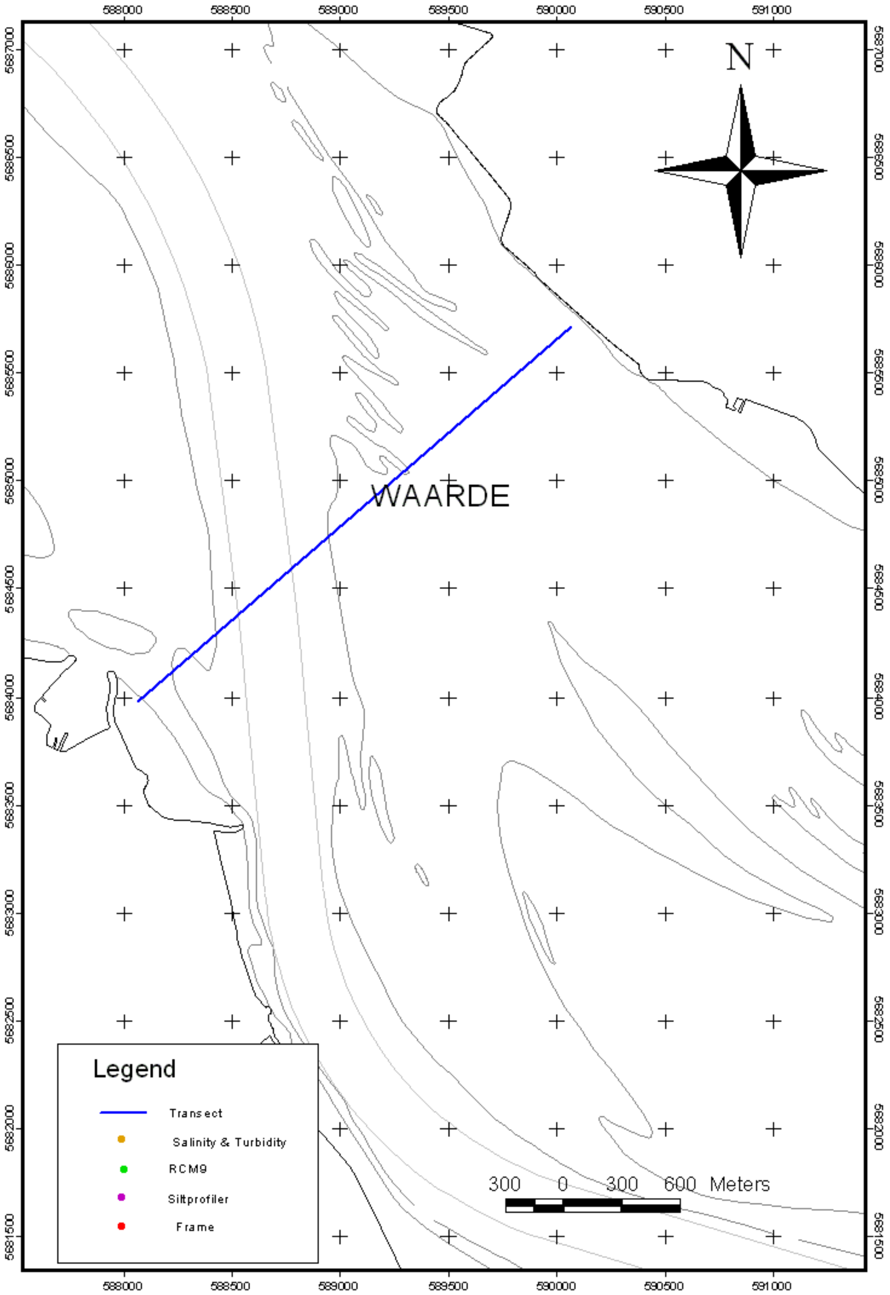
Annex Figure A-1: Overview of the measurement locations



Annex Figure A-2: Overview of the measurement locations at Deurganckdok



Annex Figure A-3: Transect S in Schelle



Annex Figure A-4: Transect W in Waarde

A.2 Overview of all measurement locations HCBS and Deurganckdok measurement campaigns

Annex Table A-1: coordinates of theoretical transects

Transect	Start Easting	Start Northing	End Easting	End Northing
I	590318.00	5683302.00	590771.00	5684257.00
K	588484.00	5684924.00	589775.00	5685384.00
SCHELLE	592645.07	5665794.06	592952.68	5665682.28
DGD	588764.88	5684056.49	588540.95	5684526.94
Y	589059.09	5684948.36	587898.76	5683076.56
WAARDE	573541.00	5696848.20	571318.00	5694932.90

Annex Table A-2: coordinates of SiltProfiler gauging locations

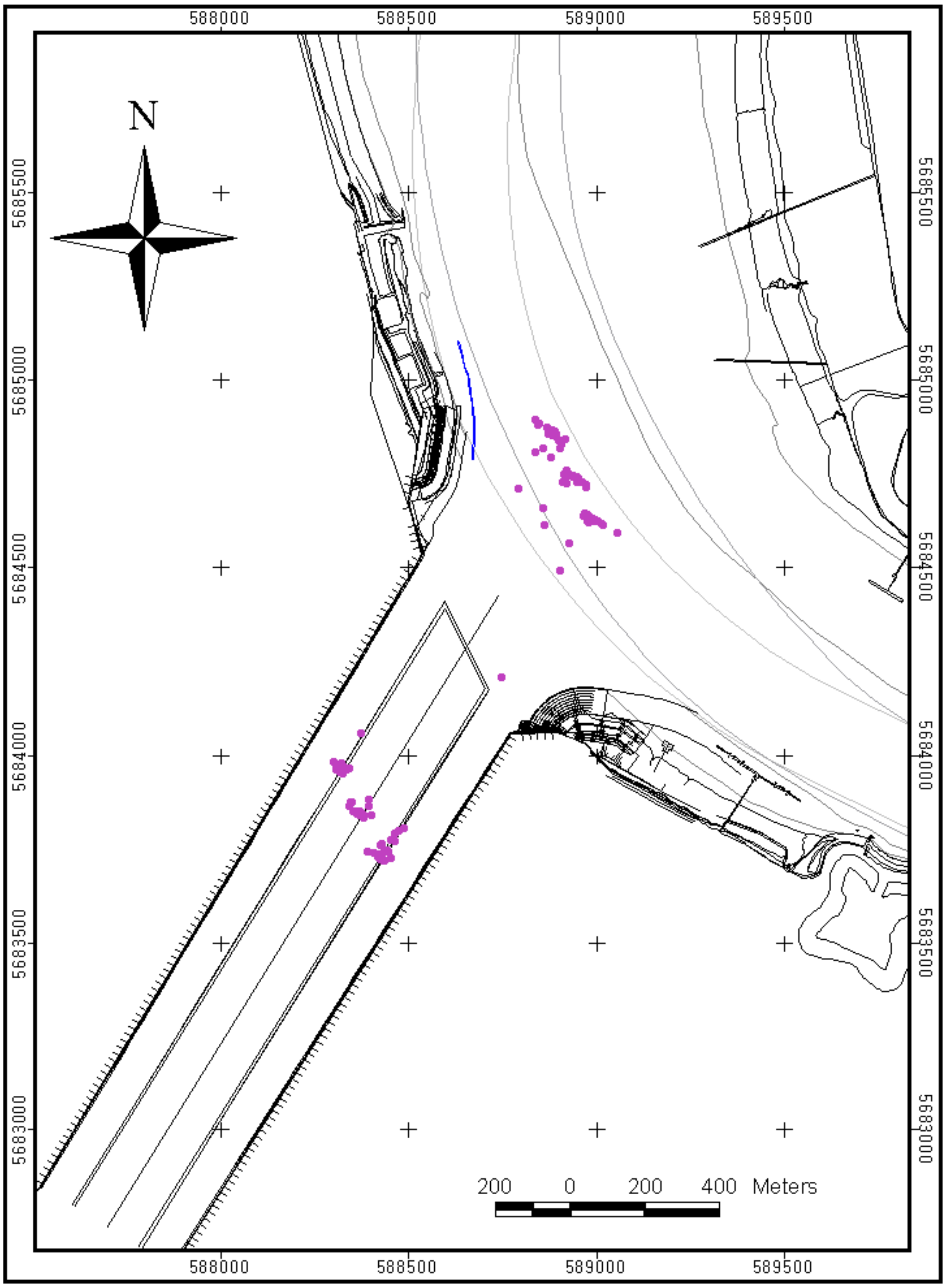
SP	EASTING	NORTHING
1	588737	5684638
2	588690	5684562
3	588643	5684486
4	588596	5684411
5	588549	5684335
6	588606	5684217
7	588653	5684293
8	588700	5684368
9	588747	5684444
10	588793	5684520
11	588850	5684402
12	588803	5684326
13	588756	5684250
14	588709	5684174
15	588662	5684099

A.3 Measurement overview at Transect DGD on 1/10/2008

FileName	*End time [hh:mm MET]*	*Time after HW [hh:mm]*	*Easting Left (UTM31 ED50)*	*Northing Left (UTM31 ED50)*	*Easting Right (UTM31 ED50)*	*Northing Right (UTM31 ED50)*	*Transect length [m]*	*Transect heading [°]*
04:51	00:41	1001DGDtrX000r_c.csv	588318	5683958	588876	5684859	1060	58
5:10	01:00	1004DGDtrX000r_c.csv	588377	5684055	588876	5684855	943	238
5:31	01:21	1007DGDtrX000r_c.csv	588322	5683958	588878	5684860	1059	58
6:30	02:20	1008DGDtrX000r_c.csv	588321	5683953	588875	5684858	1062	239
6:52	02:42	1011DGDtrX000r_c.csv	588316	5683960	588839	5684890	1067	61
7:20	03:10	1014DGDtrX000r_c.csv	588310	5683959	588859	5684814	1016	237
7:46	03:36	1017DGDtrX000r_c.csv	588320	5683955	588870	5684868	1066	59
8:11	04:01	1020DGDtrX000r_c.csv	588316	5683955	588880	5684853	1061	238
8:37	04:27	1023DGDtrX000r_c.csv	588327	5683969	588849	5684880	1050	60
8:57	04:47	1026DGDtrX000r_c.csv	588319	5683954	588874	5684858	1061	238
9:23	05:13	1029DGDtrX000r_c.csv	588329	5683947	588844	5684877	1063	61
9:46	05:36	1032DGDtrX000r_c.csv	588319	5683962	588886	5684858	1061	238
10:10	06:00	1035DGDtrX000r_c.csv	588317	5683964	588882	5684862	1061	58
10:37	06:27	1038DGDtrX000r_c.csv	588316	5683959	588901	5684835	1053	236
10:59	-5:21	1041DGDtrX000r_c.csv	588325	5683952	588880	5684791	1005	57
11:35	-4:44	1044DGDtrX000r_c.csv	588339	5683960	588879	5684861	1051	239
12:04	-4:15	1047DGDtrX000r_c.csv	588346	5683964	588894	5684853	1044	58
12:44	-3:35	1050DGDtrX000r_c.csv	588319	5683956	588919	5684839	1067	236
13:19	-3:00	1053DGDtrX000r_c.csv	588312	5683960	588839	5684806	996	58
13:51	-2:28	1056DGDtrX000r_c.csv	588311	5683964	588890	5684858	1065	237
14:16	-2:03	1059DGDtrX000r_c.csv	588326	5683955	588884	5684848	1053	58
14:47	-1:32	1062DGDtrX000r_c.csv	588328	5683947	588909	5684824	1052	236
15:17	-1:02	1065DGDtrX000r_c.csv	588320	5683959	588905	5684813	1036	56
15:41	-0:38	1068DGDtrX000r_c.csv	588317	5683959	588872	5684853	1052	238
16:6	-0:13	1071DGDtrX000r_c.csv	588324	5683976	588886	5684859	1046	58
16:32	00:12	1074DGDtrX000r_c.csv	588302	5683981	588894	5684853	1055	236
16:50	00:30	1077DGDtrX000r_c.csv	588793	5684705	588893	5684847	173	55
17:34	01:14	1082DGDtrX000r_c.csv	588319	5683965	588874	5684866	1058	58
04:57	00:47	1002DGDtrY000r_c.csv	588353	5683873	588938	5684741	1047	236
5:19	01:09	1005DGDtrY000r_c.csv	588376	5683840	588927	5684742	1057	59
6:38	02:28	1009DGDtrY000r_c.csv	588371	5683845	588921	5684754	1062	59
6:58	02:48	1012DGDtrY000r_c.csv	588346	5683862	588916	5684743	1049	237
7:29	03:19	1015DGDtrY000r_c.csv	588368	5683842	588920	5684749	1061	59
7:53	03:43	1018DGDtrY000r_c.csv	588383	5683832	588952	5684724	1058	237
8:22	04:12	1021DGDtrY000r_c.csv	588372	5683843	588928	5684744	1059	58
8:43	04:33	1024DGDtrY000r_c.csv	588397	5683878	588921	5684751	1018	239
9:05	04:55	1027DGDtrY000r_c.csv	588367	5683847	588911	5684723	1031	58
9:29	05:19	1030DGDtrY000r_c.csv	588375	5683846	588947	5684738	1060	237
9:53	05:43	1033DGDtrY000r_c.csv	588366	5683843	588931	5684740	1060	58
10:18	06:08	1036DGDtrY000r_c.csv	588357	5683848	588925	5684740	1057	238

FileName	End time [hh:mm MET]	Time after HW [hh:mm]	Easting Left (UTM31 ED50)	Northing Left (UTM31 ED50)	Easting Right (UTM31 ED50)	Northing Right (UTM31 ED50)	Transect length [m]	Transect heading [°]
10:43	06:33	1039DGDtrY000r_c.csv	588372	5683848	588862	5684611	907	57
11:07	-5:12	1042DGDtrY000r_c.csv	588397	5683863	588952	5684736	1035	238
11:44	-4:35	1045DGDtrY000r_c.csv	588361	5683846	588930	5684743	1063	58
12:17	-4:02	1048DGDtrY000r_c.csv	588384	5683837	588927	5684745	1059	239
12:51	-3:28	1051DGDtrY000r_c.csv	588379	5683839	588976	5684711	1056	56
13:28	-2:51	1054DGDtrY000r_c.csv	588367	5683841	588963	5684724	1066	236
13:58	-2:21	1057DGDtrY000r_c.csv	588381	5683836	588922	5684722	1038	59
14:25	-1:54	1060DGDtrY000r_c.csv	588406	5683837	588940	5684739	1048	239
14:58	-1:21	1063DGDtrY000r_c.csv	588374	5683837	588975	5684717	1066	56
15:26	-0:53	1066DGDtrY000r_c.csv	588366	5683841	588954	5684735	1070	237
15:50	-0:29	1069DGDtrY000r_c.csv	588377	5683843	588928	5684744	1056	59
16:14	-0:05	1072DGDtrY000r_c.csv	588373	5683840	588938	5684738	1061	238
16:39	00:19	1075DGDtrY000r_c.csv	588367	5683842	588921	5684755	1068	59
17:00	00:40	1078DGDtrY000r_c.csv	588349	5683872	588950	5684738	1054	235
17:20	01:00	1080DGDtrY000r_c.csv	588375	5683844	588860	5684655	945	59
5:05	00:55	1003DGDtrZ000r_c.csv	588430	5683724	588999	5684621	1062	58
5:24	01:14	1006DGDtrZ000r_c.csv	588468	5683788	588991	5684627	989	238
6:44	02:34	1010DGDtrZ000r_c.csv	588478	5683796	588928	5684560	886	240
7:13	03:03	1013DGDtrZ000r_c.csv	588455	5683721	588970	5684639	1052	61
7:37	03:27	1016DGDtrZ000r_c.csv	588435	5683715	588977	5684636	1068	239
8:02	03:52	1019DGDtrZ000r_c.csv	588419	5683735	588972	5684641	1062	59
8:29	04:19	1022DGDtrZ000r_c.csv	588438	5683718	588986	5684629	1063	239
8:50	04:40	1025DGDtrZ000r_c.csv	588442	5683739	588985	5684623	1038	58
9:10	05:00	1028DGDtrZ000r_c.csv	588492	5683801	588750	5684207	481	238
9:37	05:27	1031DGDtrZ000r_c.csv	588423	5683733	588992	5684626	1059	57
10:01	05:51	1034DGDtrZ000r_c.csv	588428	5683727	588992	5684626	1061	238
10:27	06:17	1037DGDtrZ000r_c.csv	588423	5683728	588982	5684615	1049	58
10:52	-5:27	1040DGDtrZ000r_c.csv	588428	5683758	588993	5684618	1030	237
11:19	-5:00	1043DGDtrZ000r_c.csv	588430	5683724	589056	5684588	1067	54
11:54	-4:25	1046DGDtrZ000r_c.csv	588436	5683718	589004	5684620	1066	238
12:24	-3:56	1049DGDtrZ000r_c.csv	588432	5683760	588995	5684621	1029	57
13:00	-3:19	1052DGDtrZ000r_c.csv	588467	5683767	589000	5684622	1007	238
13:40	-2:39	1055DGDtrZ000r_c.csv	588429	5683719	588979	5684621	1057	59
14:07	-2:12	1058DGDtrZ000r_c.csv	588450	5683740	589001	5684618	1037	238
14:32	-1:47	1061DGDtrZ000r_c.csv	588438	5683742	588966	5684633	1036	59
15:08	-1:11	1064DGDtrZ000r_c.csv	588426	5683721	589021	5684608	1068	236
15:33	-0:46	1067DGDtrZ000r_c.csv	588456	5683770	588904	5684489	847	58
15:57	-0:22	1070DGDtrZ000r_c.csv	588448	5683744	588999	5684625	1039	238
16:21	00:01	1073DGDtrZ000r_c.csv	588422	5683727	588981	5684632	1063	58
16:47	00:27	1076DGDtrZ000r_c.csv	588394	5683741	589016	5684611	1069	234
17:08	00:48	1079DGDtrZ000r_c.csv	588429	5683729	589002	5684621	1060	57

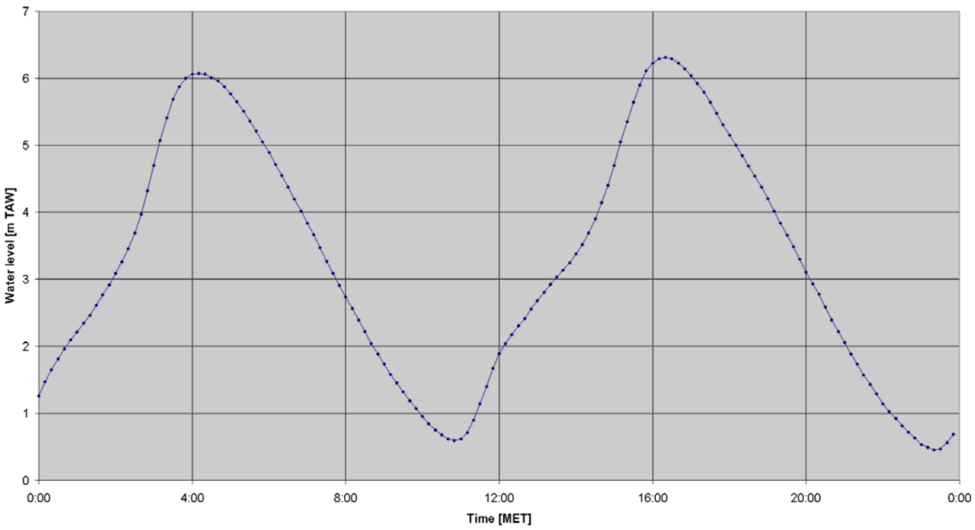
FileName	***End time [hh:mm MET]***	***Time after HW [hh:mm]***	***Easting Left (UTM31 ED50)***	***Northing Left (UTM31 ED50)***	***Easting Right (UTM31 ED50)***	***Northing Right (UTM31 ED50)***	***Transect length [m]***	***Transect heading [°]***
17:27	01:07	1081DGDtrZ000r_c.csv	588410	5683738	589005	5684619	1063	236
17:41	01:21	1083DGDtrZ000r_c.csv	588431	5683723	588991	5684621	1058	238



Annex Figure A-5: Location of start en end points of the sailed tracks

APPENDIX B. TIDAL DATA

11283 – Summer 2008 SURVEY



Measured tide on 01/10/2008 at Liefkenshoek		*Data processed by:*
Location: River Scheldt	Date: 01/10/2008	*In association with:* I/RA/11283/08.089/MSA

APPENDIX C.

NAVIGATION INFORMATION AS RECORDED ON SITE

Ship:			Scheldewacht II
Location:			Deurganckdok (transect DGD)
Nr.	Time (MET)	Type ship	Direction (Invaart, Uitvaart)
1	06:55	Duwbak (3)	Uit
2	07:02	Duwbak Dommel	Uit
3	07:15	Duwbak Skyline 3250T	Uit
4	07:30	Coaster Clommore	Uit
5	08:20	Cosco America	In
6	08:30	Navira tankschip 7032T	ter plaatse inkomend
7	08:40	idem ligt in ens. Raai	langszij gevaren
8	08:51	Sleepboot	Uit
9	08:55	Sleepboot	langszij uit (Union Ruley)
10	08:57	heeft veel schroefwater	
11	08:58	Reggeborg coaster	In
12	09:00	Sleepboot Lieven Gevaert	Uit
13	09:12	Duwbak (4) +/- 5000T Quinta	langsgevaren
14	09:22	Elvela tankschip	voorbij uit afwaarts
15	09:23	Scaldis 1500T	voorbij afwaarts
16	09:50	Duwbak	In
17	09:52	Apollo 1380	In
18	09:53	Dresden II	voorbij achter Scheldewacht
19	09:53	Mustang 1000T	In
20	10:14	Parel II	langszij
21	10:26	K'ocean coaster	In
22	10:50	Calendula tankschip 1500T	Uit
23	11:08	Bevoorraad tanken bunker	In
24	11:14	Coaster "Solon" voorbij DGD	
25	12:02	Marajo 5500T	Uit
26	12:15	Dusseldorf 2600T	In
27	12:24	Laurosa 2073T	zwaait en vaart uit
28	12:25	Reggeborg vaart naar de	overkant in dok
29	12:50	Sleepboot Union B	In

Ship:		**Scheldewacht II**	
Location:		**Deurganckdok (transect DGD)**	
Nr.	**Time (MET)**	**Type ship**	**Direction (Invaart, Uitvaart)**
30	12:50	Duwbak (2)	**In**
31	12:50	Goudvis 3000T	**In**
32	12:58	Binnenschip	**Uit**
33	12:58	Apollo 1380T	**Uit & In**
34	13:03	Odessa duwbak	**Uit**
35	13:10	Birka exporter Coaster	**voorbij het dok opwaarts**
36	13:19	Duwbak koppelverband	**Uit**
37	13:19	Duwbak koppelverband	**In**
38	13:25	Duwbak Pibo	**Uit**
39	13:30	Manou 1558T	**In**
40	13:55	Navigatie 1500T	**voorbij dok opwaarts**
41	13:55	Veremans	**voorbij dok opwaarts**
42	14:02	Sleepboot Union B	**ter plaatse schroefwater**
43	14:05	K-Ocean	**voor de boeg rond en uit**
44	14:15	Pirareus tankschip	**voor de boeg voorbij**
45	14:25	Cape Manuel coaster	**Uit**
46	15:08	Hannover Bridge container	**Uit**
47	15:35	2X Binnenvaart	**In**
48	15:40	Baraka 1500T	**Uit**
49	15:44	Cilantro 1500T	**In**
50	15:46	Ganzepoort 5000T	**In**
51	16:23	Duwbak 2000T	**In**
52	16:24	Sleepboot Schelde	**In**
53	16:32	Aardenburg 3300T	**Uit**
54	16:40	China Shipping Line	**In**
55	16:42	Duwbak 1500T	**In**
56	16:50	Alcedo 3000T	**Uit**
57	16:55	Duwbak koppelverband	**Uit**
58	17:25	El-Blajo 1500T	**Uit**
59	18:30	86 - Antwerp coaster	**In**
60	18:57	Sleepboot Union Ruby	**Uit**
61	19:09	Duwbak koppel	**Uit**

APPENDIX D.

UNESCO PPS-78 FORMULA FOR CALCULATING SALINITY

Practical Salinity Scale (PPS 78) Salinity in the range of 2 to 42

Constants from the 19th Edition of Standard Methods

R cond.ratio	0.0117	$R = \frac{C}{42.914mS/cm}$
C Cond at t	**0.5**	**Input conductivity in mS/cm of sample**
t deg. C	**22.00**	**Input temperature of sample solution**
P dBar	**20**	**Input pressure at which sample is measured in decibars**
Rp	1.0020845	$R_p = 1 + \frac{p(e_1 + e_2 p + e_3 p^2)}{1 + d_1 t + d_2 t^2 + (d_3 + d_4 t)R}$
rt	1.1641102	$r_t = c_0 + c_1 t + c_2 t^2 + c_3 t^3 + c_4 t^4$
Rt	0.0099879	$R_t = \frac{R}{R_p \times r_t}$
Delta S	-0.0010	$\text{Delta S} = \frac{(t-15)}{1+k(t-15)}(b_0 + b_1 R_t^{1/2} + b_2 R_t + b_3 R_t^{3/2} + b_4 R_t^2 + b_5 R_t^{5/2})$
S = Salinity	**0.257**	$S = a_0 + a_1 R_t^{1/2} + a_2 R_t + a_3 R_t^{3/2} + a_4 R_t^2 + a_5 R_t^{5/2} + \text{delta S}$

a0	0.0080	b0	0.0005	c0	0.6766097	d1	3.426E-02	e1	2.070E-04
a1	-0.1692	b1	-0.0056	c1	2.00564E-02	d2	4.464E-04	e2	-6.370E-08
a2	25.3851	b2	-0.0066	c2	1.104259E-04	d3	4.215E-01	e3	3.989E-12
a3	14.0941	b3	-0.0375	c3	-6.9698E-07	d4	-3.107E-03		
a4	-7.0261	b4	0.0636	c4	1.0031E-09				
a5	2.7081	b5	-0.0144						
		k	0.0162						

R = ratio of measured conductivity to the conductivity of the Standard Seawater Solution

Conductivity Ratio R is a function of salinity, temperature, and hydraulic pressure. So that we can factor R into three parts i.e.

R = Rt x Rp x rt

R = C(S,t,p)/C(35,15,0)

C = 42.914 mS/cm at 15 deg C and 0 dbar pressure ie C(35,15,0) where 35 is the salinity

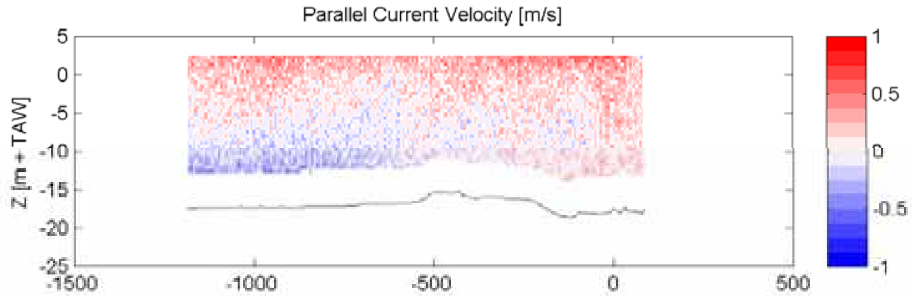
Ocean pressure is usually measured in decibars. 1 dbar = 10^-1 bar = 10^5 dyne/cm^2 = 10^4 Pascal.

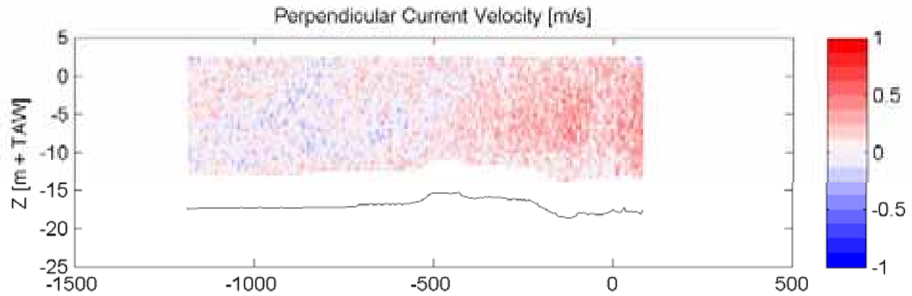
APPENDIX E. CONTOURPLOTS OF FLOW VELOCITIES PER SAILED TRANSECT

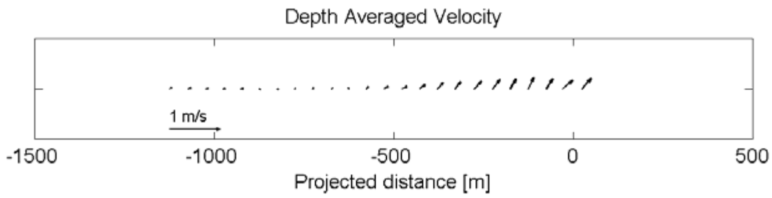
E.1 Raai X

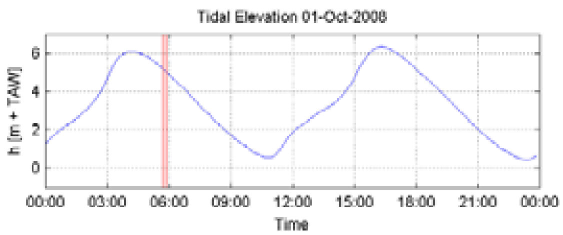
Opvolging aanslibbing DGD

11283	Equipment(s): ADCP
Sourcefile: 1001DGDtrX000r_c.csv	Location: Deurganckdok









HW/LW: 04:10: h = 6.07 m+TAW
10:50: h = 0.59 m+TAW
16:20: h = 6.31 m+TAW

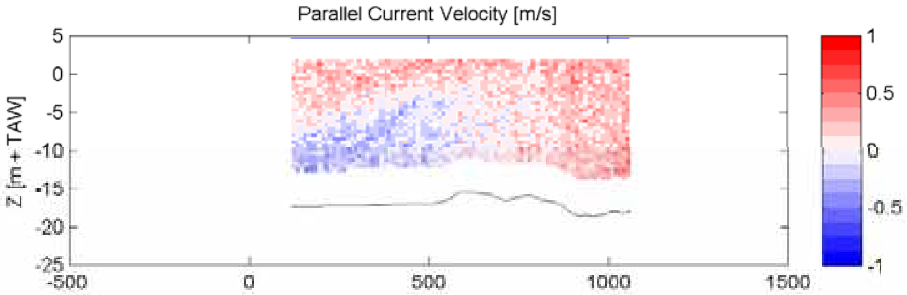
Date / Time [MET] :
01-Oct-2008
05:42 - 05:51

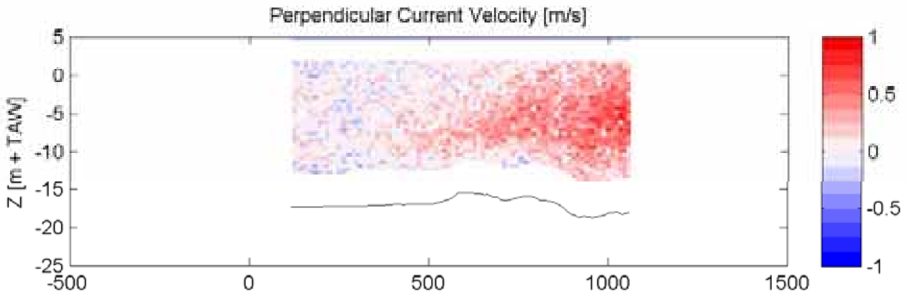
Time after HW [HH:MM]
1:37

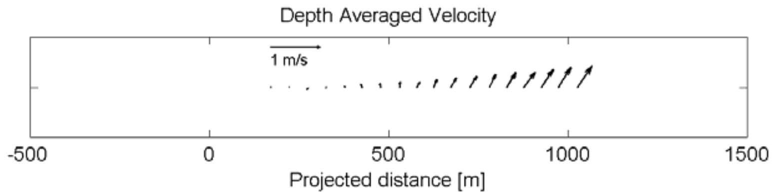
Data Processed by:
In association with :
I/RA/11283/08.089/MSA

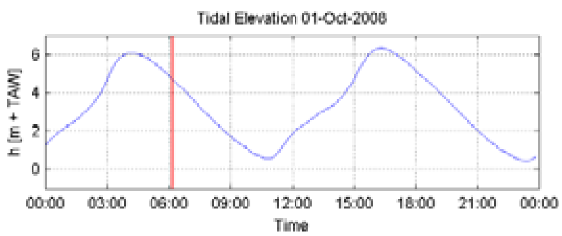
Opvolging aanslibbing DGD

11283	Equipment(s): ADCP
Sourcefile: 1004DGDtrX000r_c.csv	Location: Deurganckdok









HW/LW:
04:10: h = 6.07 m+TAW
10:50: h = 0.59 m+TAW
16:20: h = 6.31 m+TAW

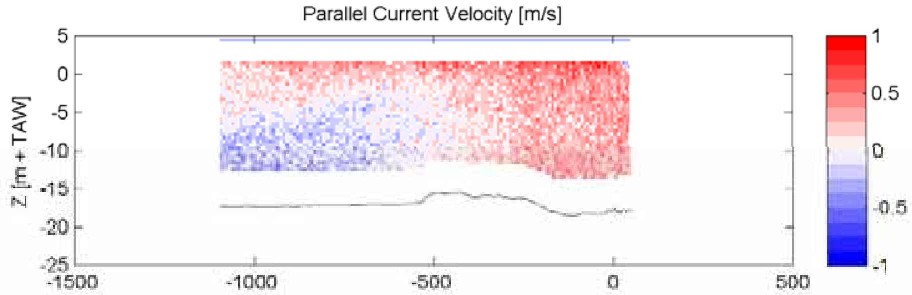
Date / Time [MET] :
01-Oct-2008
06:07 - 06:10

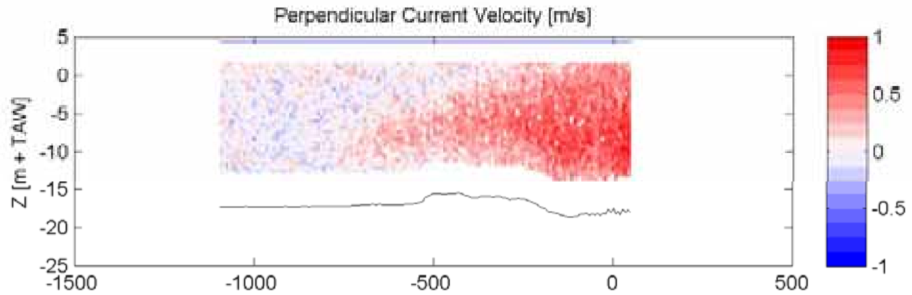
Time after HW [HH:MM]
1:59

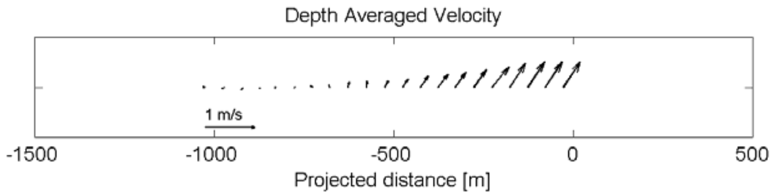
Data Processed by:
In association with :
I/RA/11283/08.089/MSA

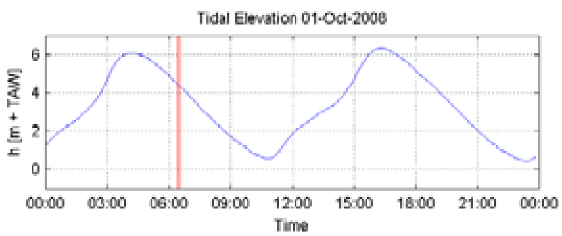
Opvolging aanslibbing DGD

11283	Equipment(s): ADCP
Sourcefile: 1007DGDtrX000r_c.csv	Location: Deurganckdok









HW/LW: 04:10: h = 6.07 m+TAW
10:50: h = 0.59 m+TAW
16:20: h = 6.31 m+TAW

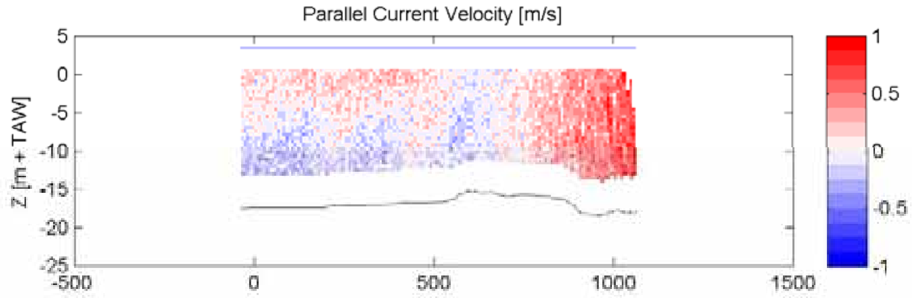
Date / Time [MET] :
01-Oct-2008
06:25 - 06:31

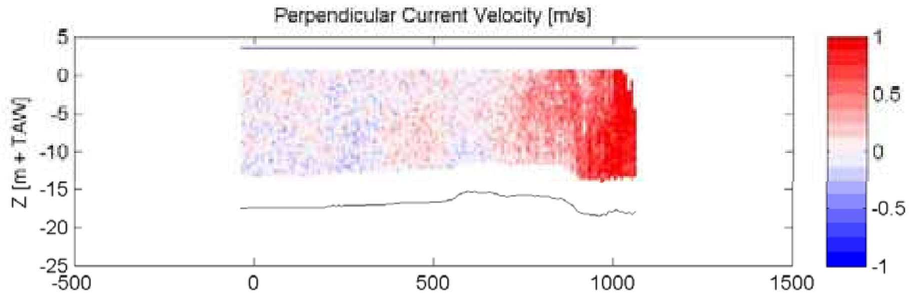
Time after HW [HH:MM]
2:18

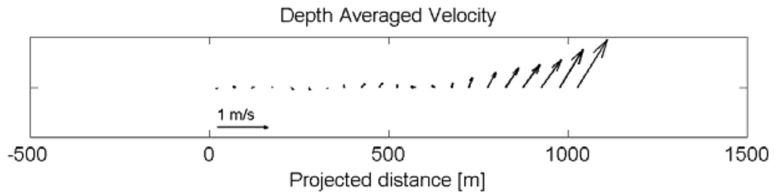
Data Processed by:
In association with :
I/RA/11283/08.089/MSA

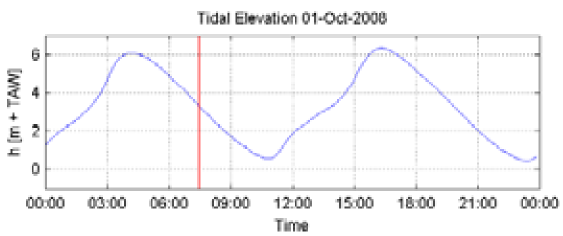
Opvolging aanslibbing DGD

11283	Equipment(s): ADCP
Sourcefile: 1008DGDtrX000r_c.csv	Location: Deurganckdok









HW/LW: 04:10: h = 6.07 m+TAW
10:50: h = 0.59 m+TAW
16:20: h = 6.31 m+TAW

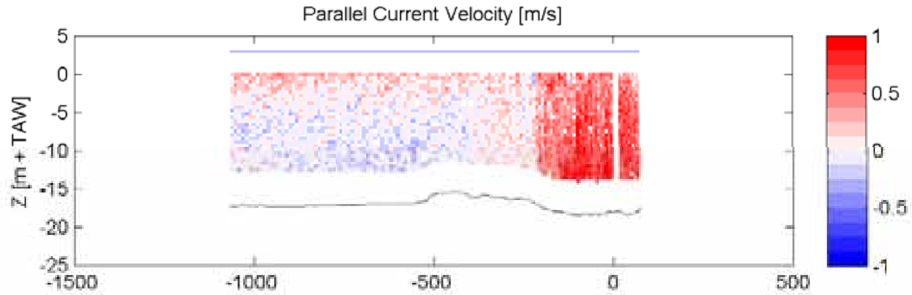
Date / Time [MET] :
01-Oct-2008
07:24 - 07:30

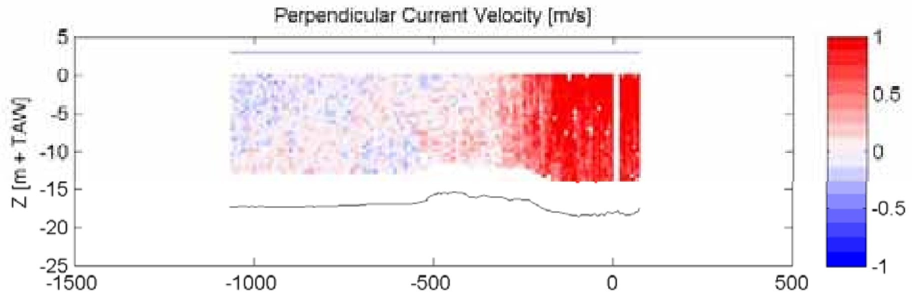
Time after HW [HH:MM]
3:17

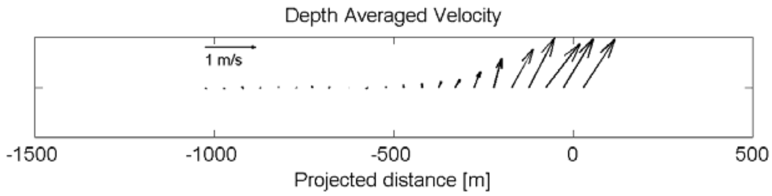
Data Processed by:
In association with :
I/RA/11283/08.089/MSA

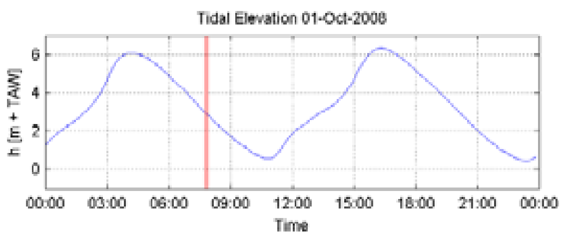
Opvolging aanslibbing DGD

11283	Equipment(s): ADCP
Sourcefile: 1011DGDtrX000r_c.csv	Location: Deurganckdok









HW/LW: 04:10: h = 6.07 m+TAW
10:50: h = 0.59 m+TAW
16:20: h = 6.31 m+TAW

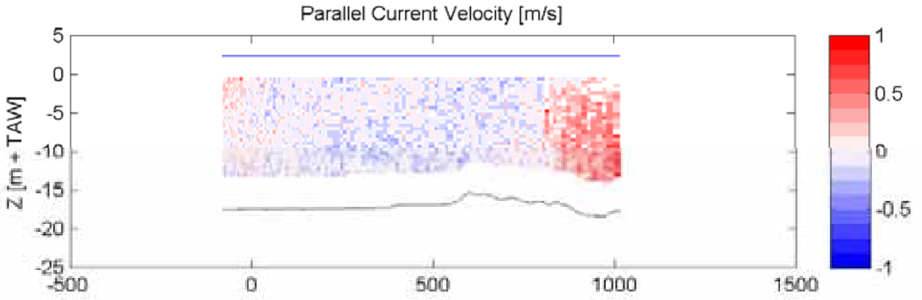
Date / Time [MET] :
01-Oct-2008
07:47 - 07:52

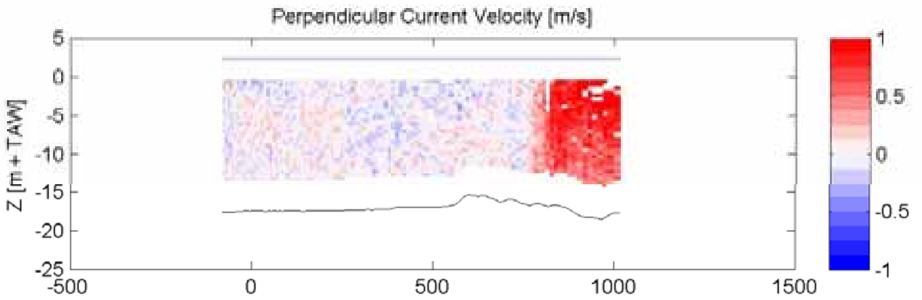
Time after HW [HH:MM]
3:39

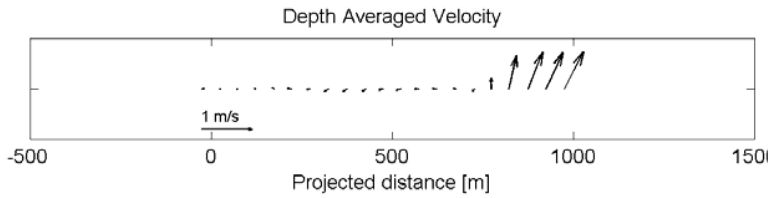
Data Processed by:
In association with :
I/RA/11283/08.089/MSA

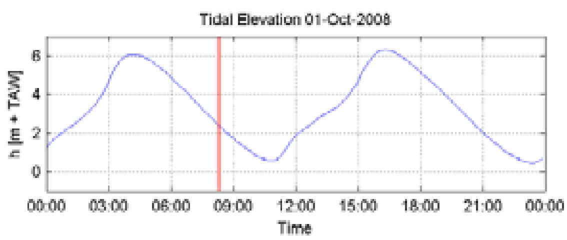
Opvolging aanslibbing DGD

11283	Equipment(s): ADCP
Sourcefile: 1014DGDtrX000r_c.csv	Location: Deurganckdok









HW/LW: 04:10: h = 6.07 m+TAW
10:50: h = 0.59 m+TAW
16:20: h = 6.31 m+TAW

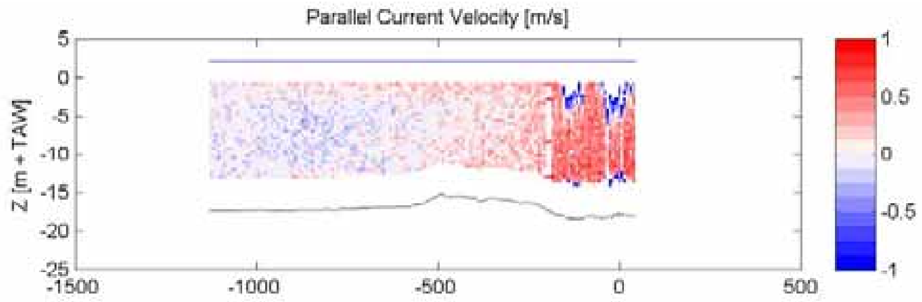
Date / Time [MET] :
01-Oct-2008
08:15 - 08:20

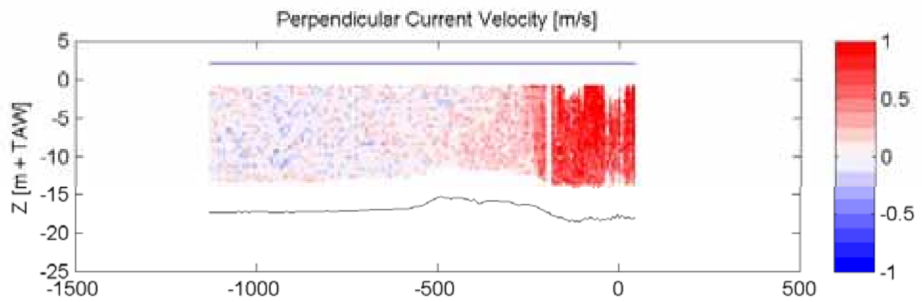
Time after HW [HH:MM]
4:07

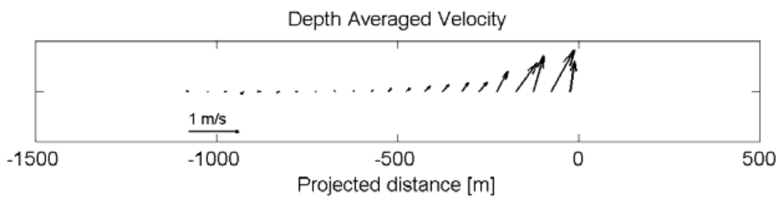
Data Processed by:
In association with :
I/RA/11283/08.089/MSA

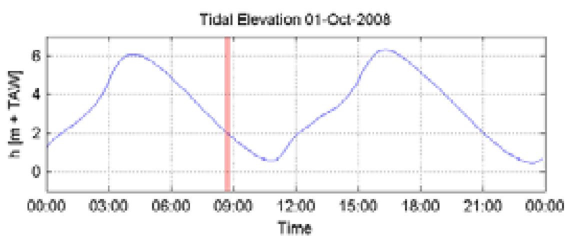
Opvolging aanslibbing DGD

11283	Equipment(s): ADCP
Sourcefile: 1017DGDtrX000r_c.csv	Location: Deurganckdok









HW/LW: 04:10: h = 6.07 m+TAW
10:50: h = 0.59 m+TAW
16:20: h = 6.31 m+TAW

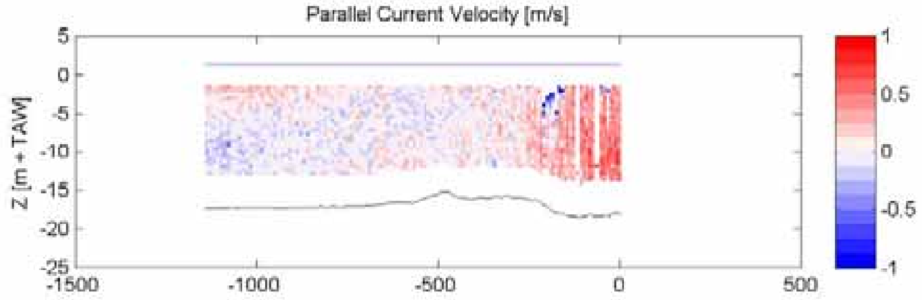
Date / Time [MET] :
01-Oct-2008
08:39 - 08:46

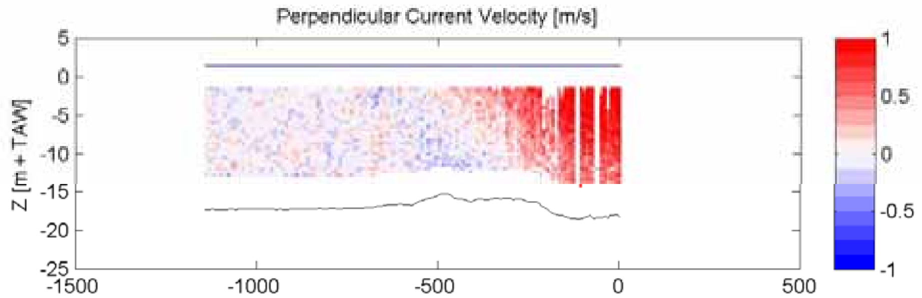
Time after HW [HH:MM]
4:33

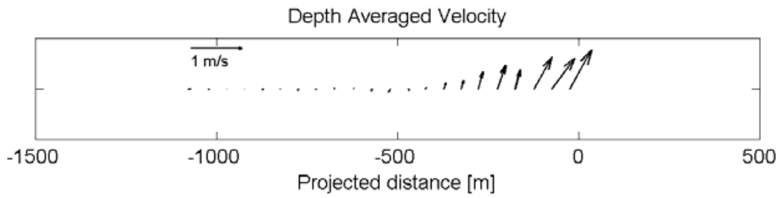
Data Processed by:
In association with :
I/RA/11283/08.089/MSA

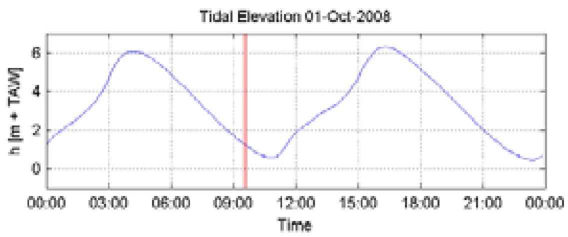
Opvolging aanslibbing DGD

11283	Equipment(s): ADCP
Sourcefile: 1023DGDtrX000r_c.csv	Location: Deurganckdok









HW/LW:
04:10: h = 6.07 m+TAW
10:50: h = 0.59 m+TAW
16:20: h = 6.31 m+TAW

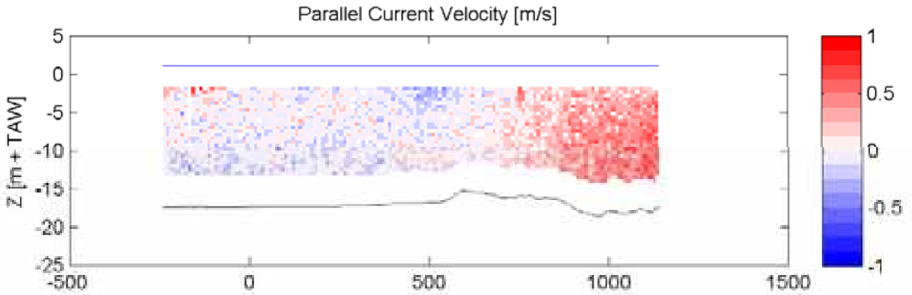
Date / Time [MET] :
01-Oct-2008
09:32 - 09:37

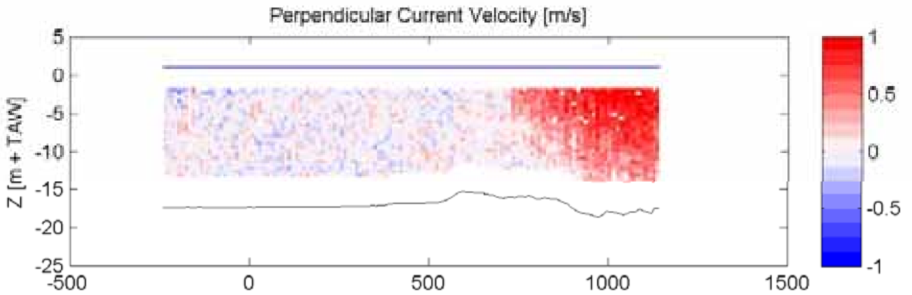
Time after HW [HH:MM]
5:25

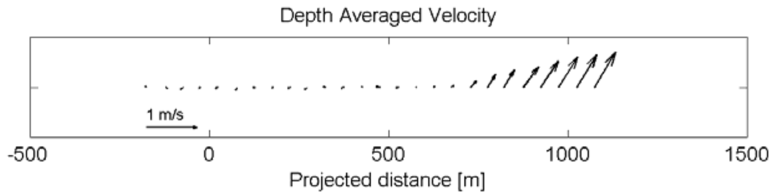
Data Processed by:
In association with :
I/RA/11283/08.089/MSA

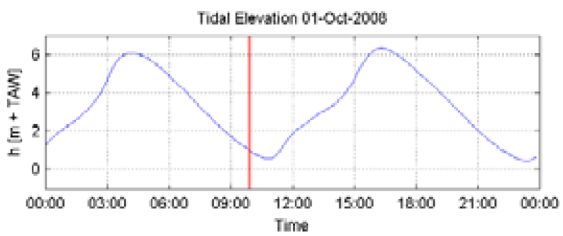
Opvolging aanslibbing DGD

11283	Equipment(s): ADCP
Sourcefile: 1026DGDtrX000r_c.csv	Location: Deurganckdok









HW/LW: 04:10: h = 6.07 m+TAW
10:50: h = 0.59 m+TAW
16:20: h = 6.31 m+TAW

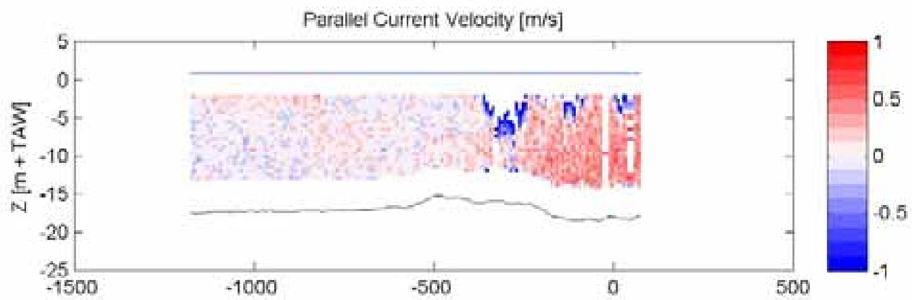
Date / Time [MET] :
01-Oct-2008
09:52 - 09:57

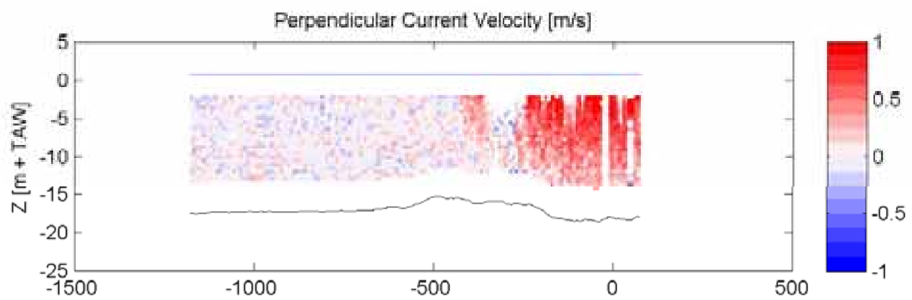
Time after HW [HH:MM]
5:44

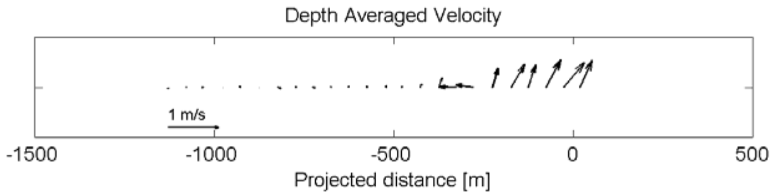
Data Processed by:
In association with :
I/RA/11283/08.089/MSA

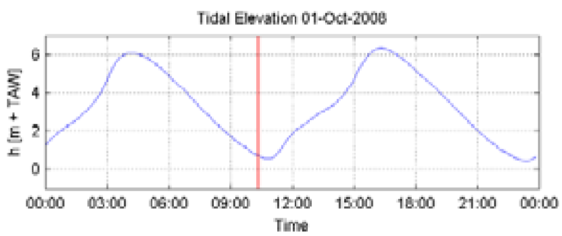
Opvolging aanslibbing DGD

11283	Equipment(s): ADCP
Sourcefile: 1029DGDtrX000r_c.csv	Location: Deurganckdok









HW/LW: 04:10: h = 6.07 m+TAW
10:50: h = 0.59 m+TAW
16:20: h = 6.31 m+TAW

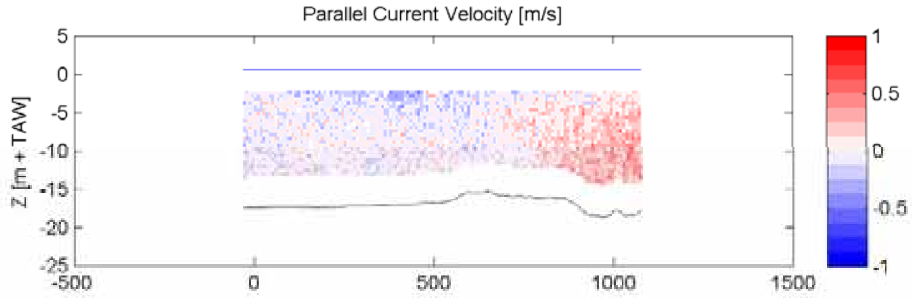
Date / Time [MET] :
01-Oct-2008
10:17 - 10:23

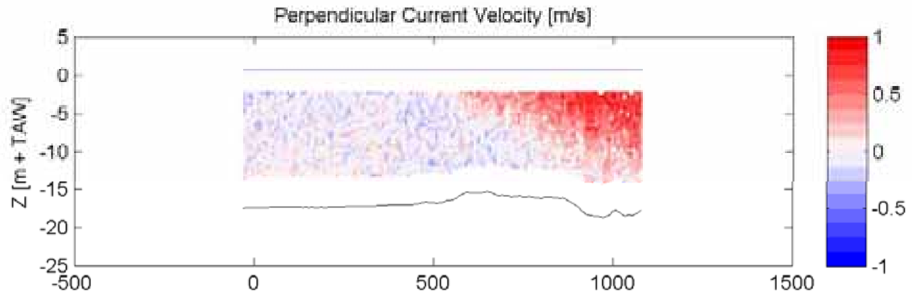
Time after HW [HH:MM]
6:10

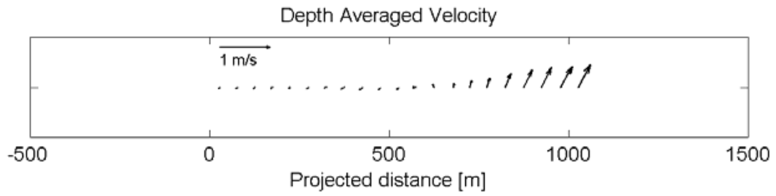
Data Processed by:
In association with :
I/RA/11283/08.089/MSA

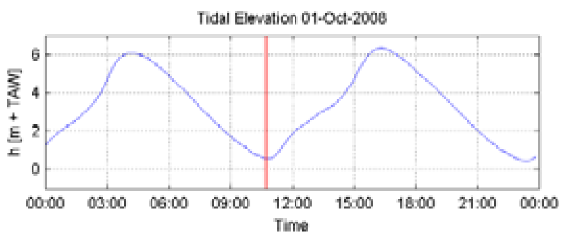
Opvolging aanslibbing DGD

11283	Equipment(s): ADCP
Sourcefile: 1032DGDtrX000r_c.csv	Location: Deurganckdok









HW/LW: 04:10: h = 6.07 m+TAW
10:50: h = 0.59 m+TAW
16:20: h = 6.31 m+TAW

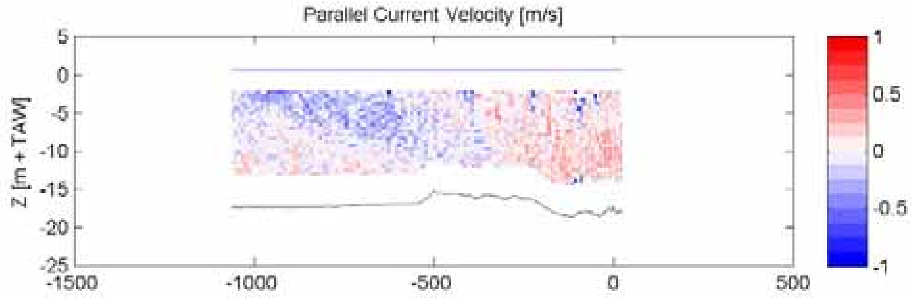
Date / Time [MET] :
01-Oct-2008
10:40 - 10:46

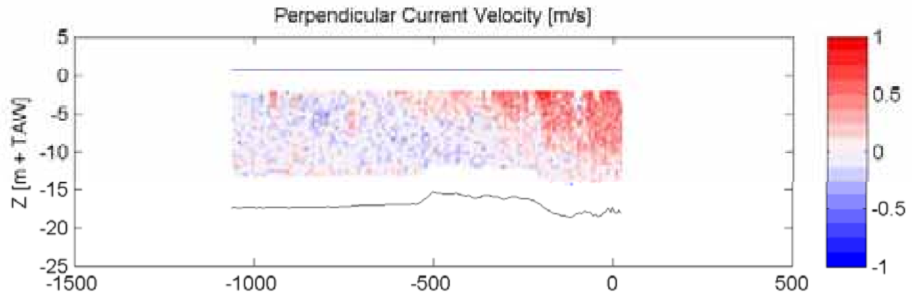
Time after HW [HH:MM]
6:33

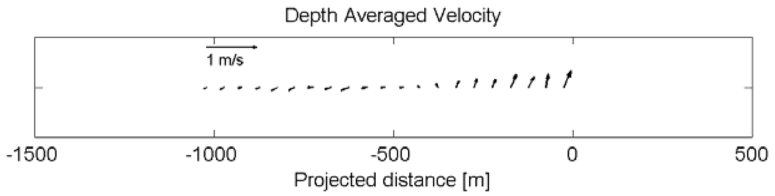
Data Processed by:
In association with :
I/RA/11283/08.089/MSA

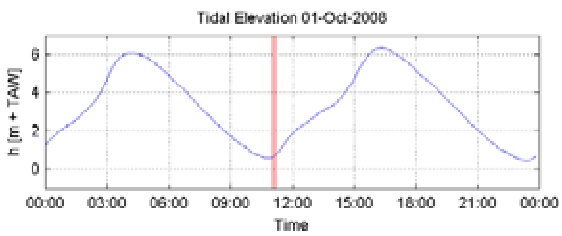
Opvolging aanslibbing DGD

11283	Equipment(s): ADCP
Sourcefile: 1035DGDtrX000r_c.csv	Location: Deurganckdok









HW/LW: 04:10: h = 6.07 m+TAW
10:50: h = 0.59 m+TAW
16:20: h = 6.31 m+TAW

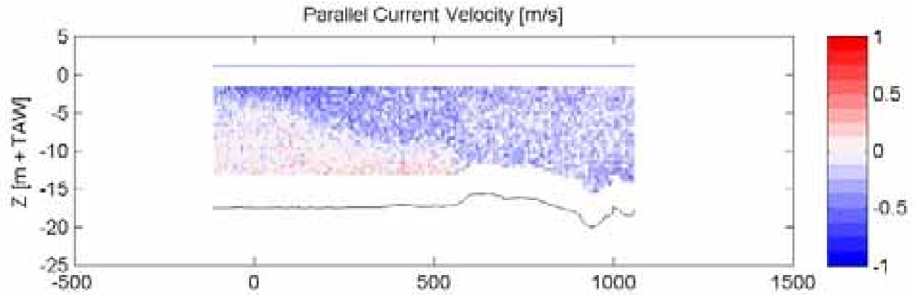
Date / Time [MET] :
01-Oct-2008
11:05 - 11:10

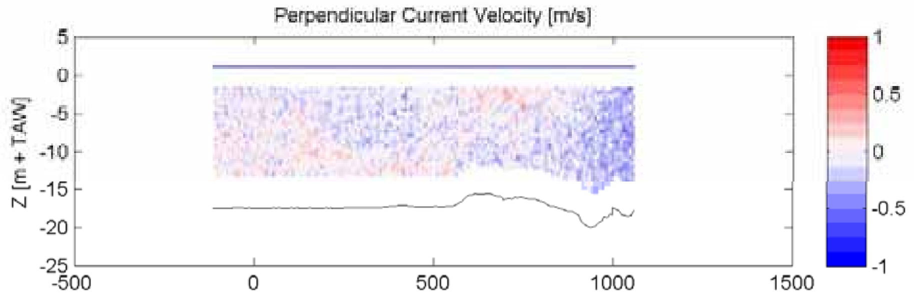
Time after HW [HH:MM]
-5:11

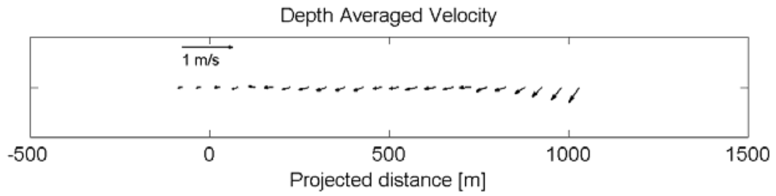
Data Processed by:
In association with :
I/RA/11283/08.089/MSA

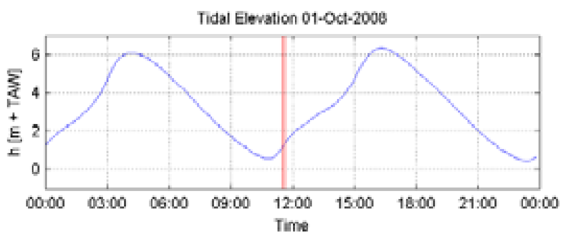
Opvolging aanslibbing DGD

11283	Equipment(s): ADCP
Sourcefile: 1038DGDtrX000r_c.csv	Location: Deurganckdok









HW/LW: 04:10: h = 6.07 m+TAW
10:50: h = 0.59 m+TAW
16:20: h = 6.31 m+TAW

Date / Time [MET] :
01-Oct-2008
11:30 - 11:37

Time after HW [HH:MM]
-4:45

Data Processed by:
In association with :
I/RA/11283/08.089/MSA

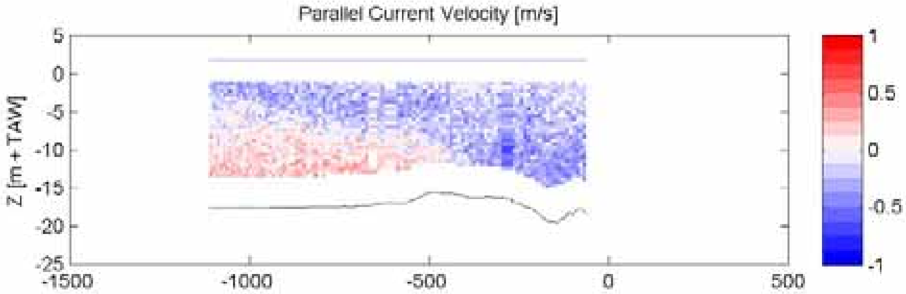
Opvolging aanslibbing DGD

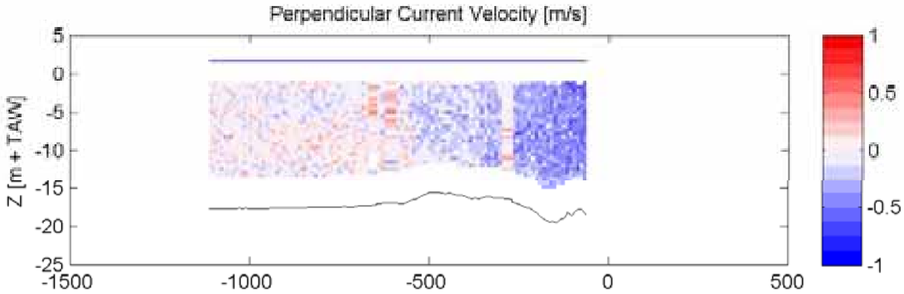
11283

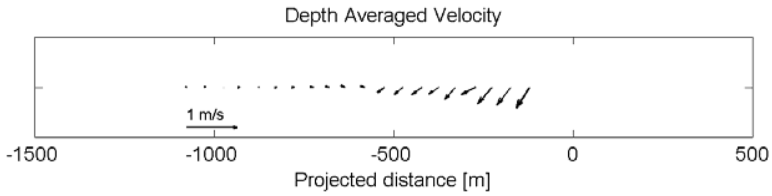
Equipment(s): ADCP

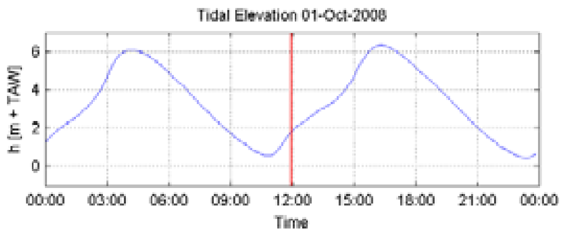
Sourcefile: 1041DGDtrX000r_c.csv

Location: Deurganckdok









HW/LW: 04:10: h = 6.07 m+TAW
10:50: h = 0.59 m+TAW
16:20: h = 6.31 m+TAW

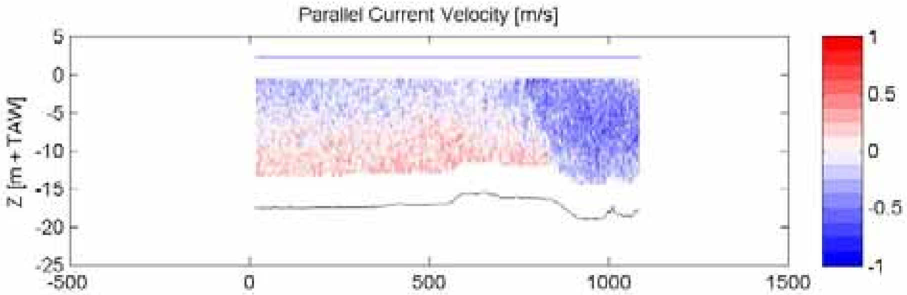
Date / Time [MET] :
01-Oct-2008
11:54 - 11:59

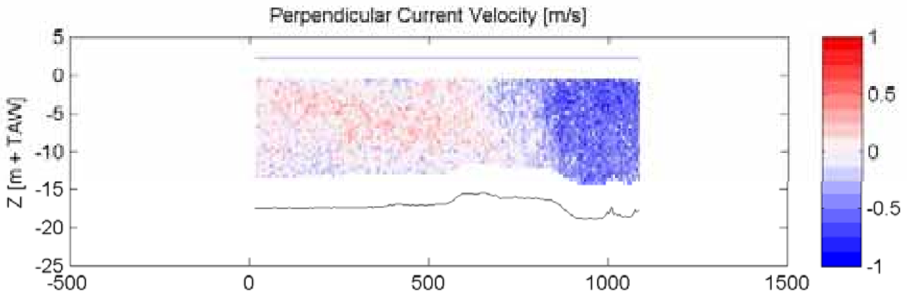
Time after HW [HH:MM]
-4:23

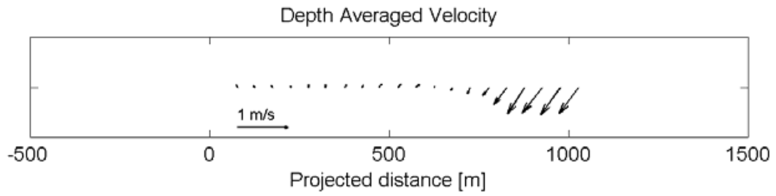
Data Processed by:
In association with :
I/RA/11283/08.089/MSA

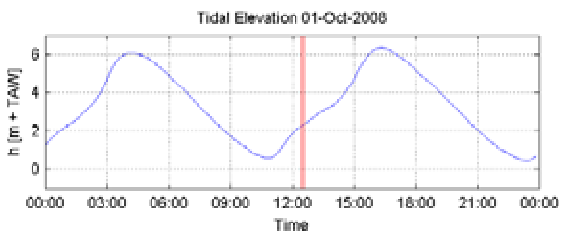
Opvolging aanslibbing DGD

11283	Equipment(s): ADCP
Sourcefile: 1044DGDtrX000r_c.csv	Location: Deurganckdok









HW/LW: 04:10: h = 6.07 m+TAW
10:50: h = 0.59 m+TAW
16:20: h = 6.31 m+TAW

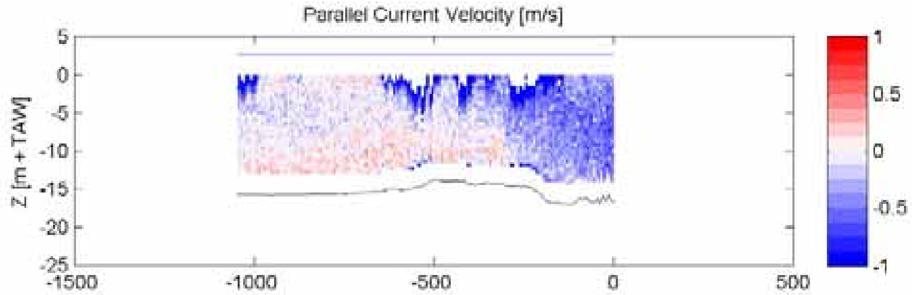
Date / Time [MET] :
01-Oct-2008
12:27 - 12:35

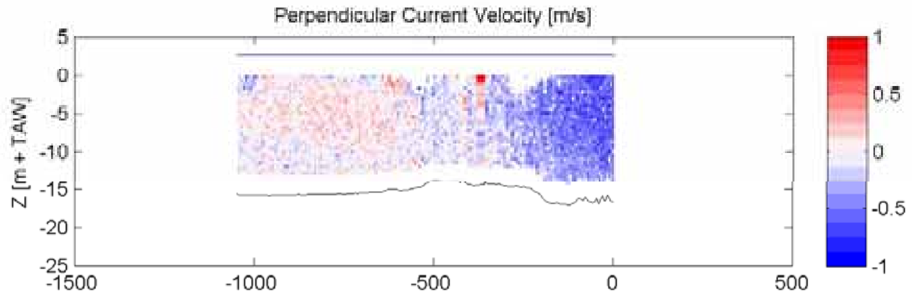
Time after HW [HH:MM]
-3:48

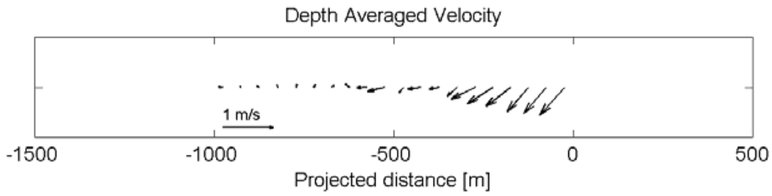
Data Processed by:
In association with :
I/RA/11283/08.089/MSA

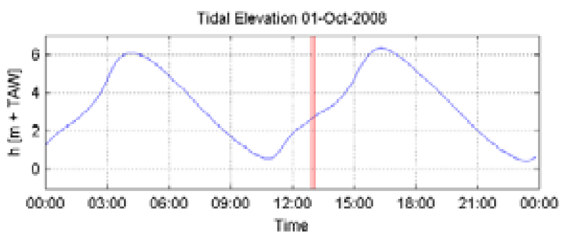
Opvolging aanslibbing DGD

11283	Equipment(s): ADCP
Sourcefile: 1047DGDtrX000r_c.csv	Location: Deurganckdok









HW/LW: 04:10: h = 6.07 m+TAW
10:50: h = 0.59 m+TAW
16:20: h = 6.31 m+TAW

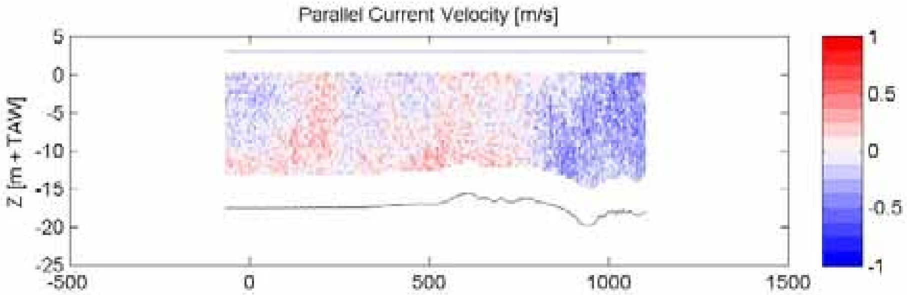
Date / Time [MET] :
01-Oct-2008
12:57 - 13:04

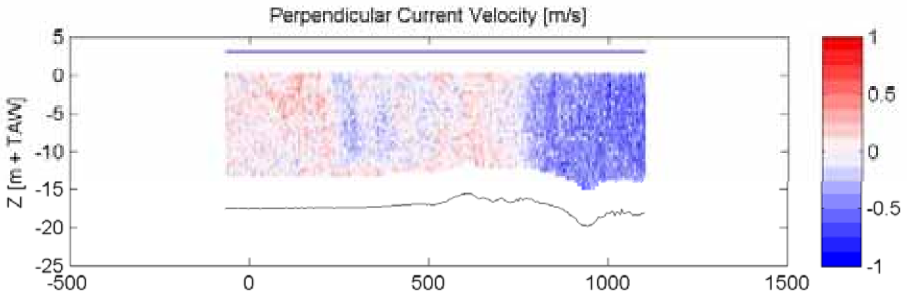
Time after HW [HH:MM]
-3:18

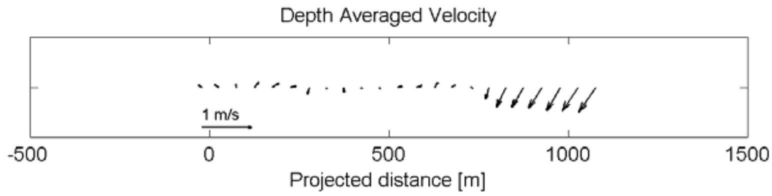
Data Processed by:
In association with :
I/RA/11283/08.089/MSA

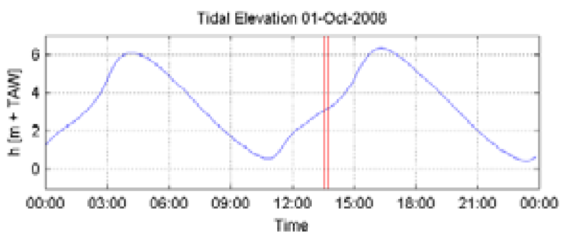
Opvolging aanslibbing DGD

11283	Equipment(s): ADCP
Sourcefile: 1050DGDtrX000r_c.csv	Location: Deurganckdok









HW/LW: 04:10: h = 6.07 m+TAW
10:50: h = 0.59 m+TAW
16:20: h = 6.31 m+TAW

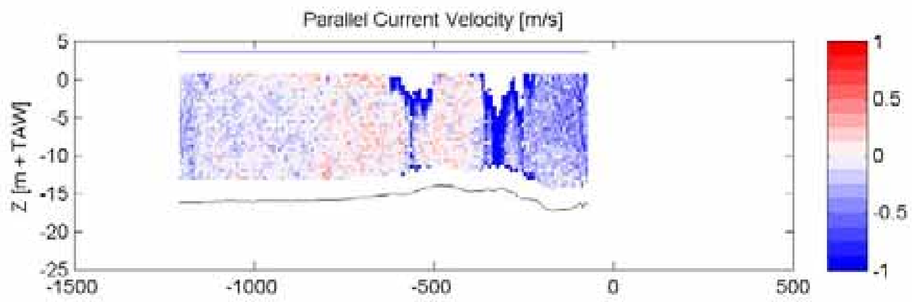
Date / Time [MET] :
01-Oct-2008
13:34 - 13:44

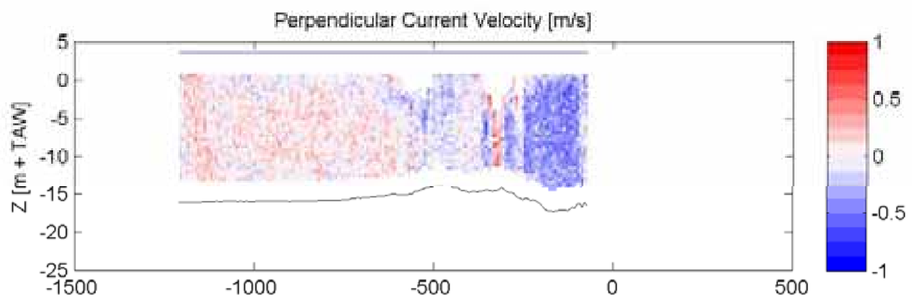
Time after HW [HH:MM]
-2:40

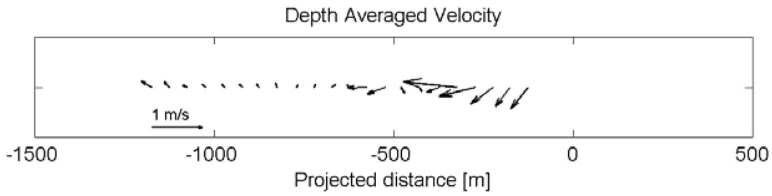
Data Processed by:
In association with :
I/RA/11283/08.089/MSA

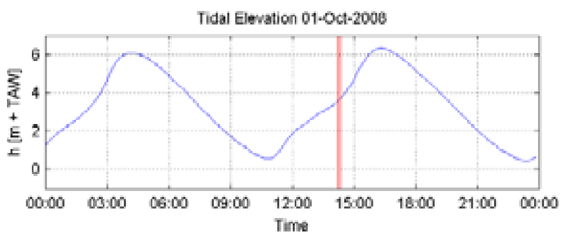
Opvolging aanslibbing DGD

11283	Equipment(s): ADCP
Sourcefile: 1053DGDtrX000r_c.csv	Location: Deurganckdok









HW/LW: 04:10: h = 6.07 m+TAW
10:50: h = 0.59 m+TAW
16:20: h = 6.31 m+TAW

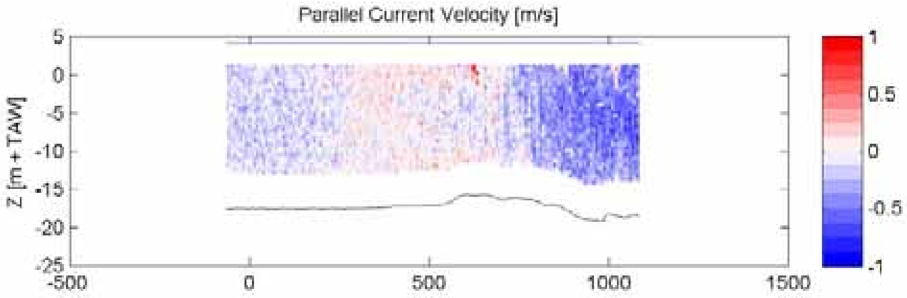
Date / Time [MET] :
01-Oct-2008
14:12 - 14:19

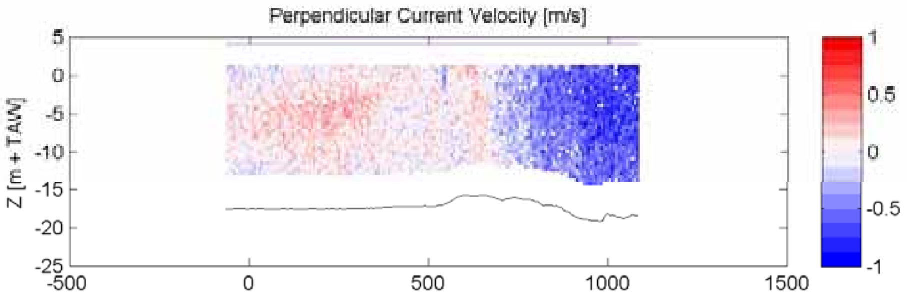
Time after HW [HH:MM]
-2:04

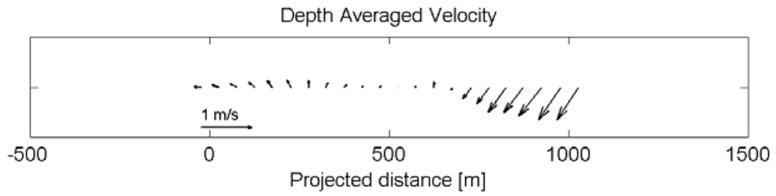
Data Processed by:
In association with :
I/RA/11283/08.089/MSA

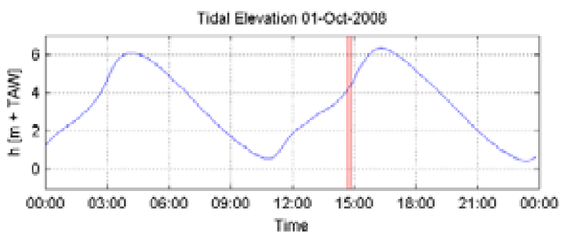
Opvolging aanslibbing DGD

11283	Equipment(s): ADCP
Sourcefile: 1056DGDtrX000r_c.csv	Location: Deurganckdok









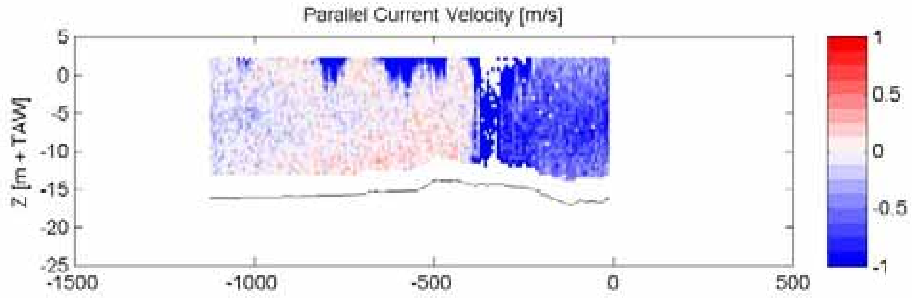
HW/LW: 04:10: h = 6.07 m+TAW
10:50: h = 0.59 m+TAW
16:20: h = 6.31 m+TAW

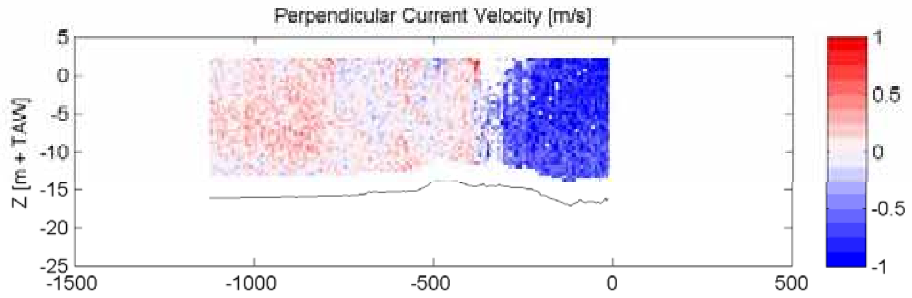
Date / Time [MET] :
01-Oct-2008
14:43 - 14:51
Time after HW [HH:MM]
-1:32

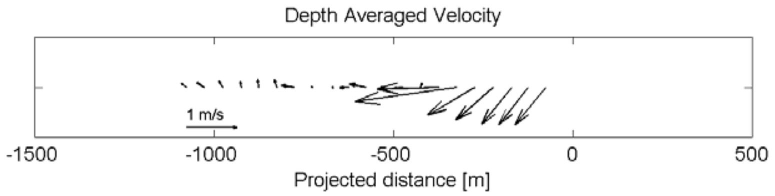
Data Processed by:
In association with :
I/RA/11283/08.089/MSA

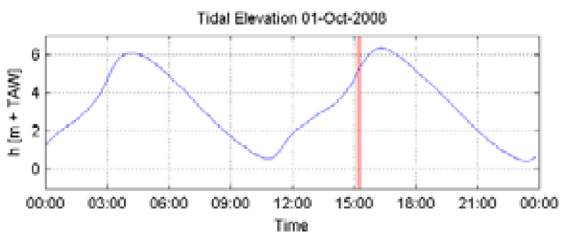
Opvolging aanslibbing DGD

11283	Equipment(s): ADCP
Sourcefile: 1059DGDtrX000r_c.csv	Location: Deurganckdok









HW/LW:
04:10: h = 6.07 m+TAW
10:50: h = 0.59 m+TAW
16:20: h = 6.31 m+TAW

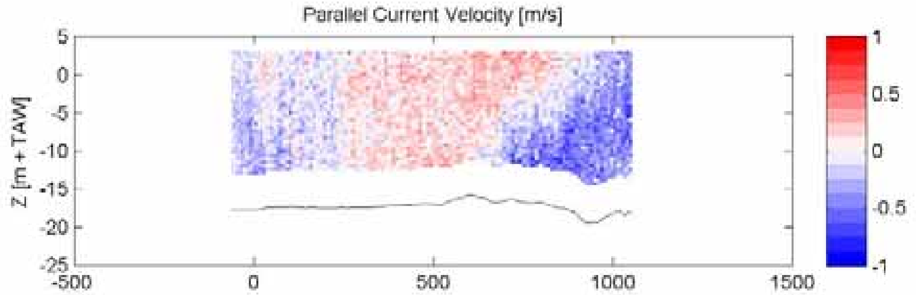
Date / Time [MET] :
01-Oct-2008
15:10 - 15:17

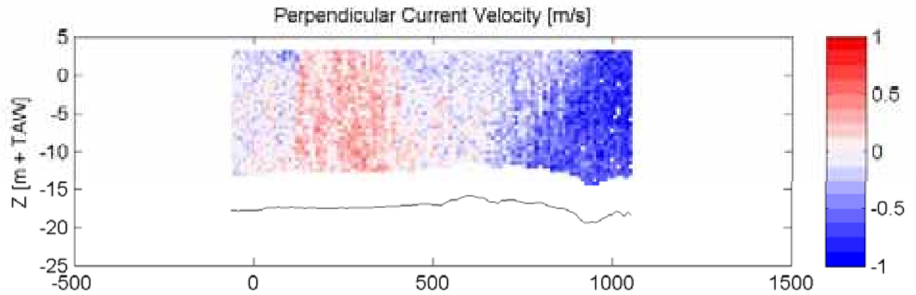
Time after HW [HH:MM]
-1:06

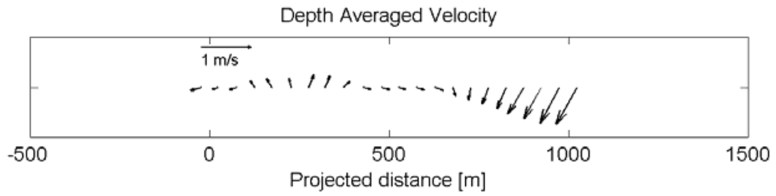
Data Processed by:
In association with :
I/RA/11283/08.089/MSA

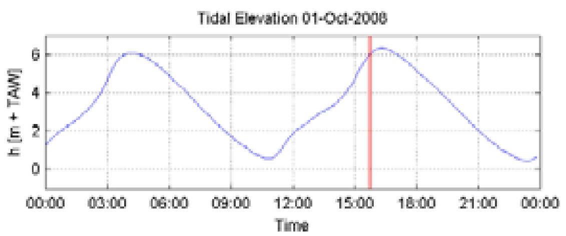
Opvolging aanslibbing DGD

11283	Equipment(s): ADCP
Sourcefile: 1062DGDtrX000r_c.csv	Location: Deurganckdok









HW/LW: 04:10: h = 6.07 m+TAW
10:50: h = 0.59 m+TAW
16:20: h = 6.31 m+TAW

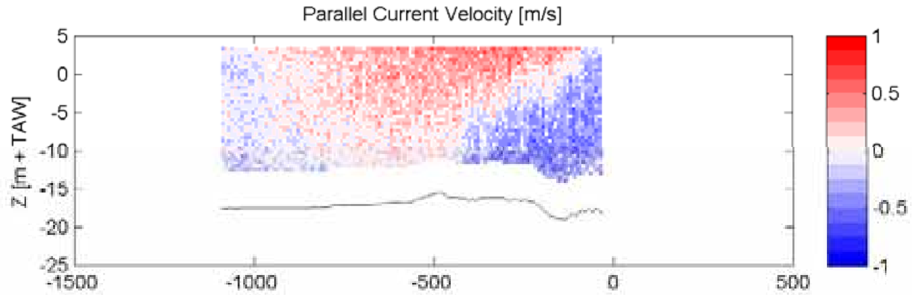
Date / Time [MET] :
01-Oct-2008
15:42 - 15:47

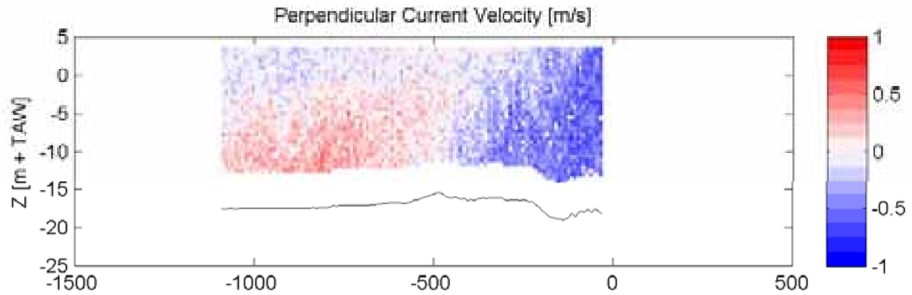
Time after HW [HH:MM]
-0:34

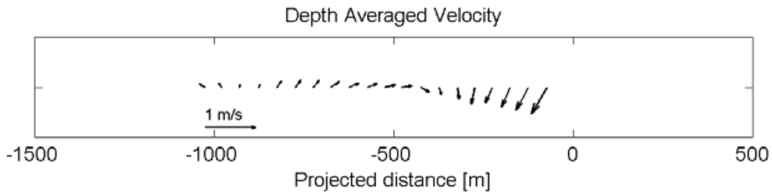
Data Processed by:
In association with :
I/RA/11283/08.089/MSA

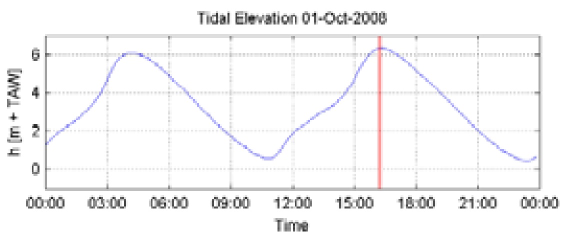
Opvolging aanslibbing DGD

11283	Equipment(s): ADCP
Sourcefile: 1065DGDtrX000r_c.csv	Location: Deurganckdok









HW/LW: 04:10: h = 6.07 m+TAW
10:50: h = 0.59 m+TAW
16:20: h = 6.31 m+TAW

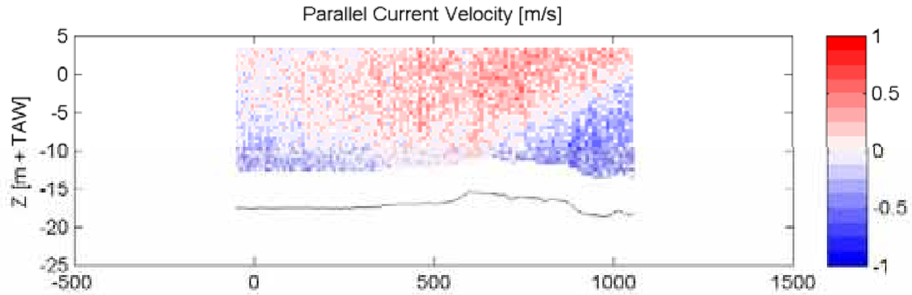
Date / Time [MET] :
01-Oct-2008
16:12 - 16:17

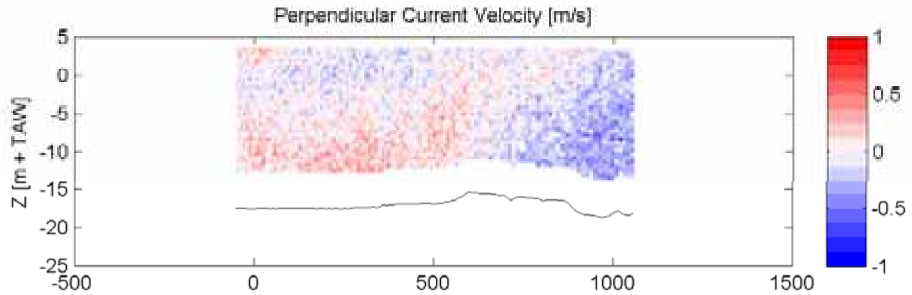
Time after HW [HH:MM]
-0:04

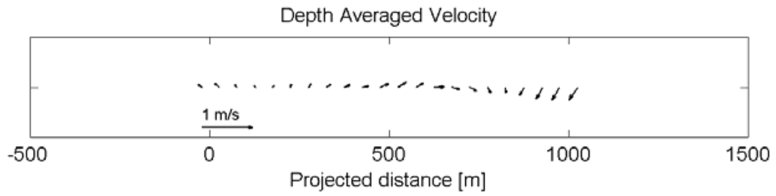
Data Processed by:
In association with :
I/RA/11283/08.089/MSA

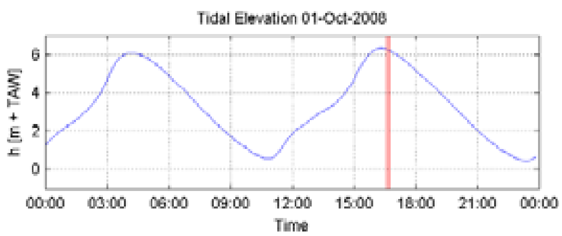
Opvolging aanslibbing DGD

11283	Equipment(s): ADCP
Sourcefile: 1068DGDtrX000r_c.csv	Location: Deurganckdok









HW/LW:
04:10: h = 6.07 m+TAW
10:50: h = 0.59 m+TAW
16:20: h = 6.31 m+TAW

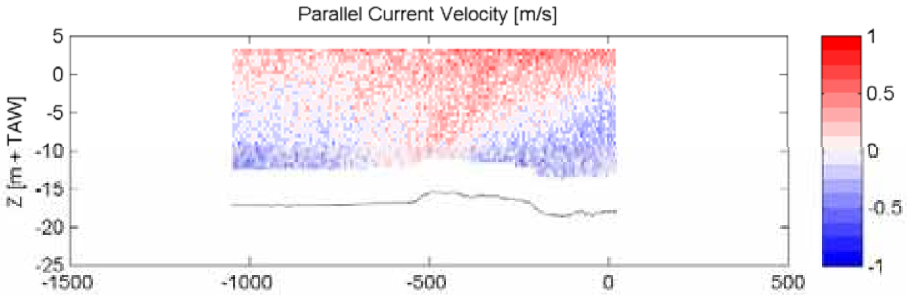
Date / Time [MET] :
01-Oct-2008
16:36 - 16:41

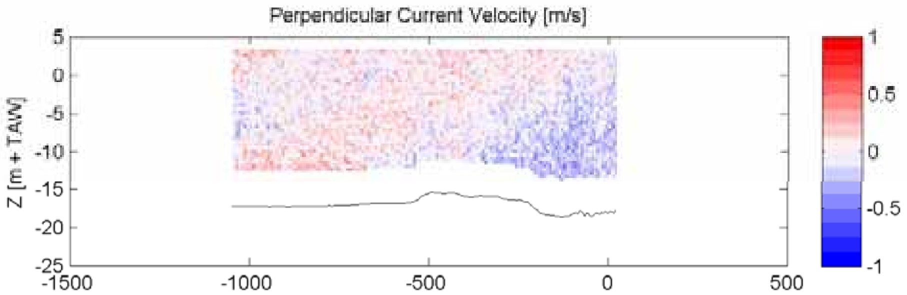
Time after HW [HH:MM]
0:19

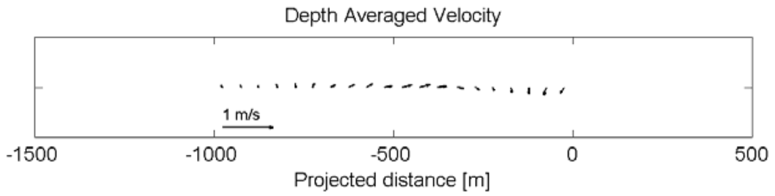
Data Processed by:
In association with :
I/RA/11283/08.089/MSA

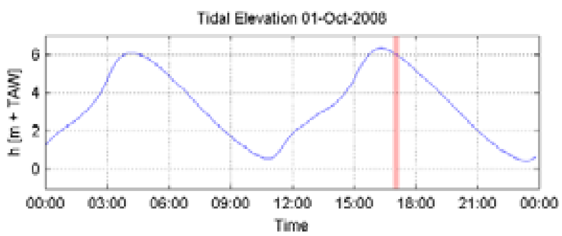
Opvolging aanslibbing DGD

11283	Equipment(s): ADCP
Sourcefile: 1071DGDtrX000r_c.csv	Location: Deurganckdok









HW/LW: 04:10: h = 6.07 m+TAW
10:50: h = 0.59 m+TAW
16:20: h = 6.31 m+TAW

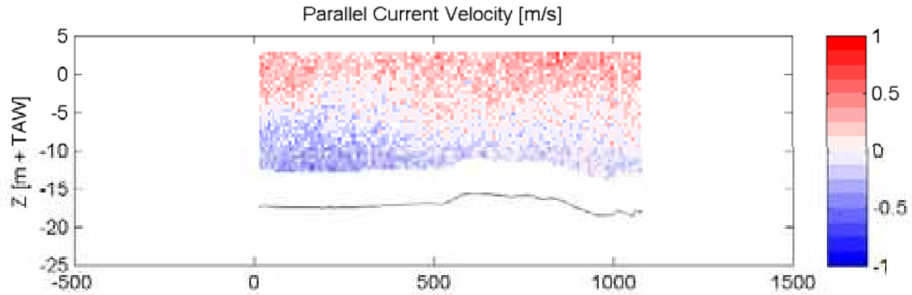
Date / Time [MET] :
01-Oct-2008
16:59 - 17:06

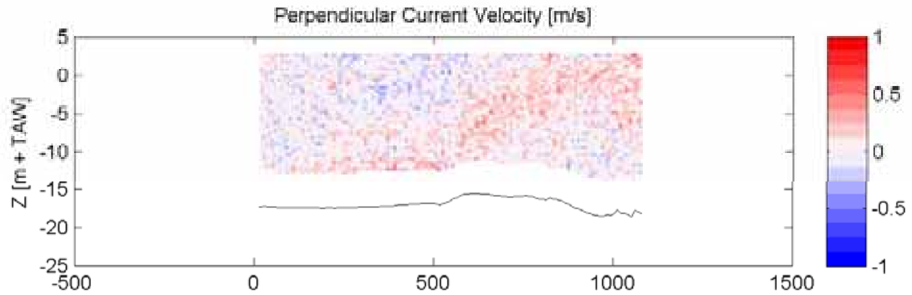
Time after HW [HH:MM]
0:43

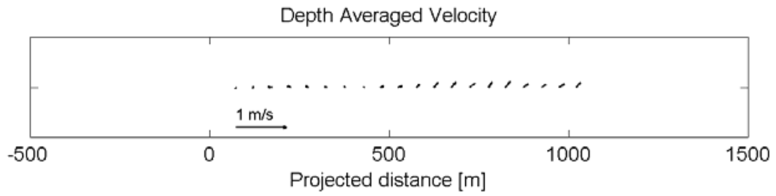
Data Processed by:
In association with :
I/RA/11283/08.089/MSA

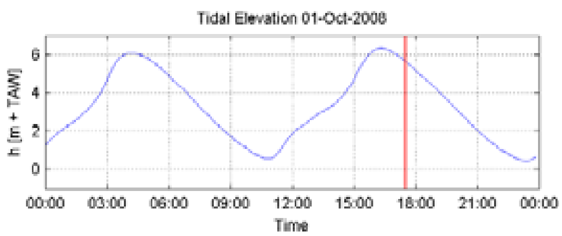
Opvolging aanslibbing DGD

11283	Equipment(s): ADCP
Sourcefile: 1074DGDtrX000r_c.csv	Location: Deurganckdok









HW/LW: 04:10: h = 6.07 m+TAW
10:50: h = 0.59 m+TAW
16:20: h = 6.31 m+TAW

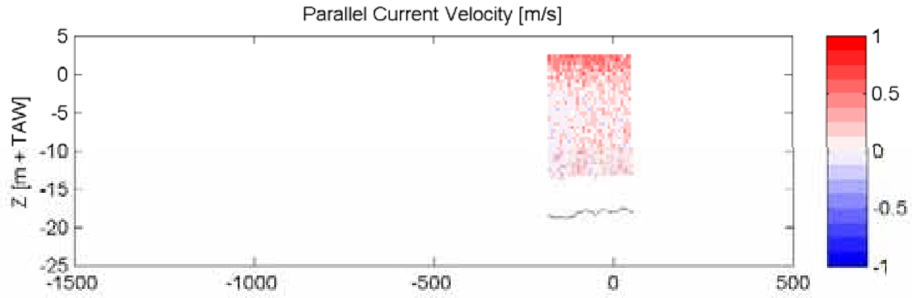
Date / Time [MET] :
01-Oct-2008
17:27 - 17:32

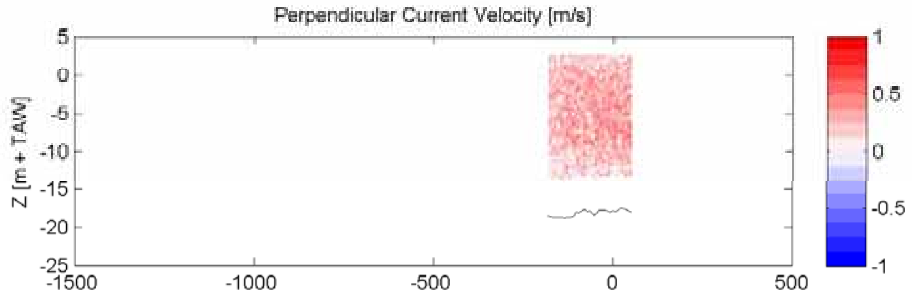
Time after HW [HH:MM]
1:10

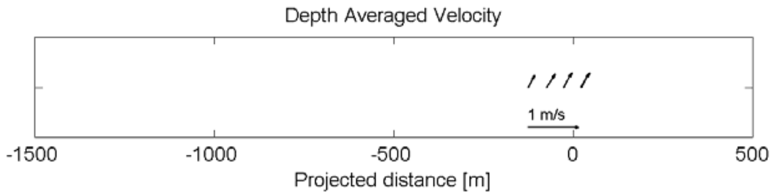
Data Processed by:
In association with :
I/RA/11283/08.089/MSA

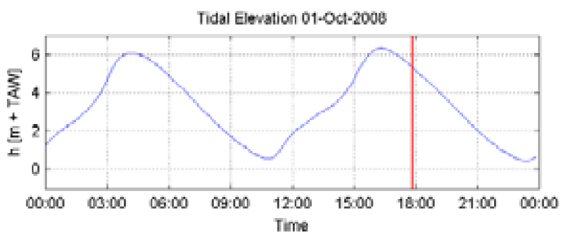
Opvolging aanslibbing DGD

11283	Equipment(s): ADCP
Sourcefile: 1077DGDtrX000r_c.csv	Location: Deurganckdok









HW/LW: 04:10: h = 6.07 m+TAW
10:50: h = 0.59 m+TAW
16:20: h = 6.31 m+TAW

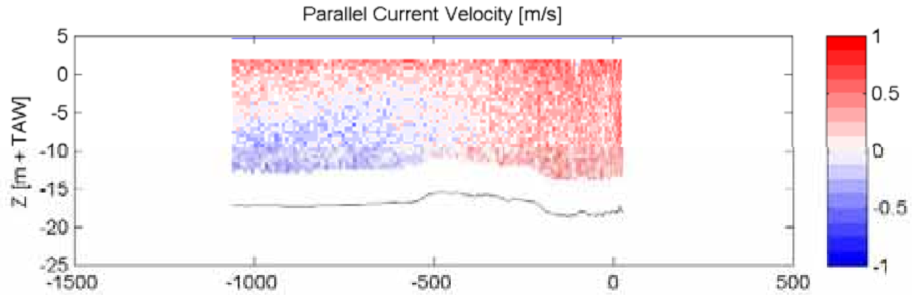
Date / Time [MET] :
01-Oct-2008
17:49 - 17:50

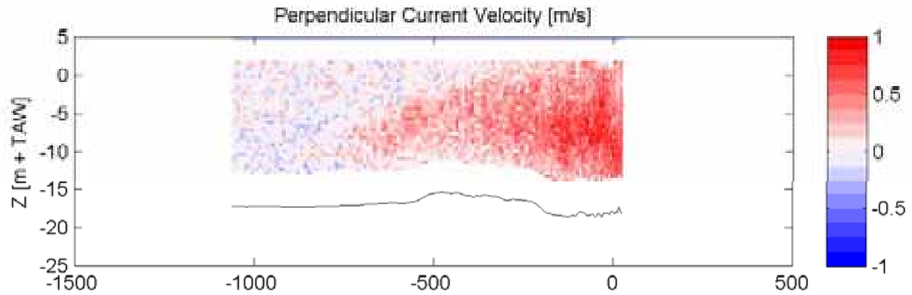
Time after HW [HH:MM]
1:29

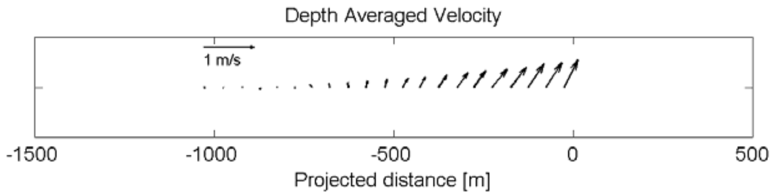
Data Processed by:
In association with :
I/RA/11283/08.089/MSA

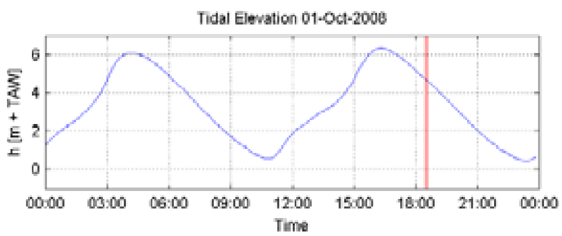
Opvolging aanslibbing DGD

11283	Equipment(s): ADCP
Sourcefile: 1082DGDtrX000r_c.csv	Location: Deurganckdok









HW/LW: 04:10: h = 6.07 m+TAW
10:50: h = 0.59 m+TAW
16:20: h = 6.31 m+TAW

Date / Time [MET] :
01-Oct-2008
18:28 - 18:34

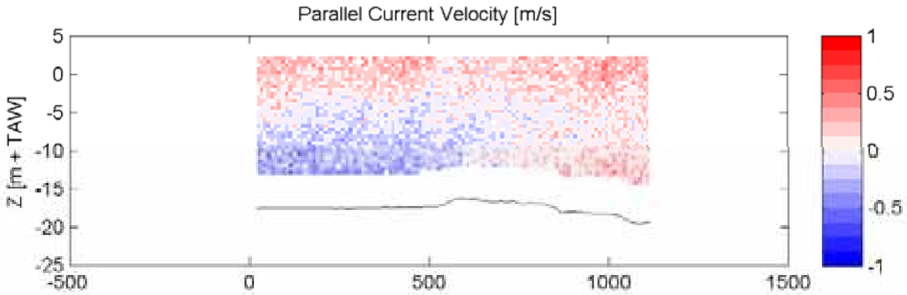
Time after HW [HH:MM]
2:11

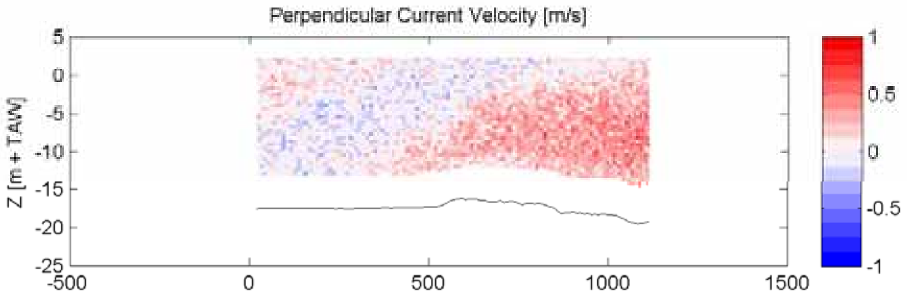
Data Processed by:
In association with :
I/RA/11283/08.089/MSA

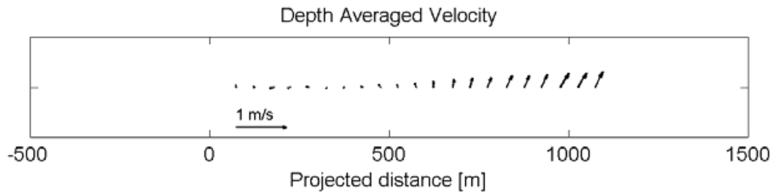
E.2 Raai Y

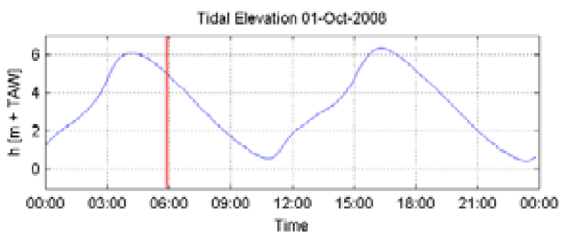
Opvolging aanslibbing DGD

11283	Equipment(s): ADCP
Sourcefile: 1002DGDtrY000r_c.csv	Location: Deurganckdok









HW/LW: 04:10: h = 6.07 m+TAW
10:50: h = 0.59 m+TAW
16:20: h = 6.31 m+TAW

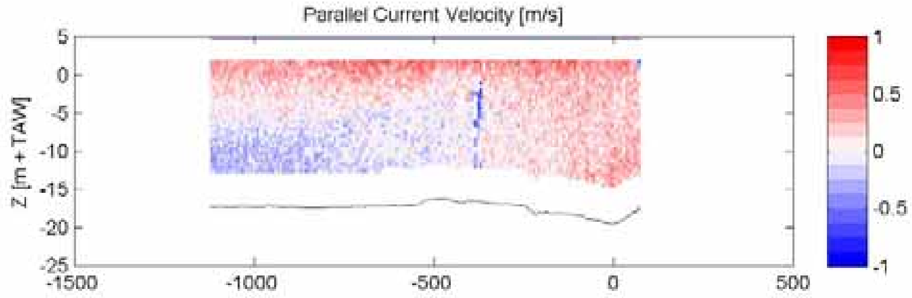
Date / Time [MET] :
01-Oct-2008
05:52 - 05:57

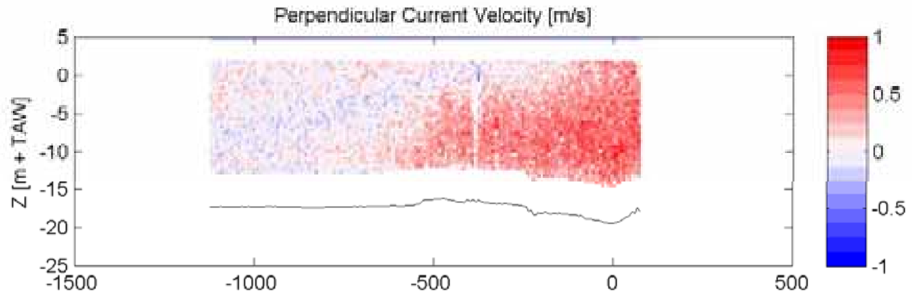
Time after HW [HH:MM]
1:44

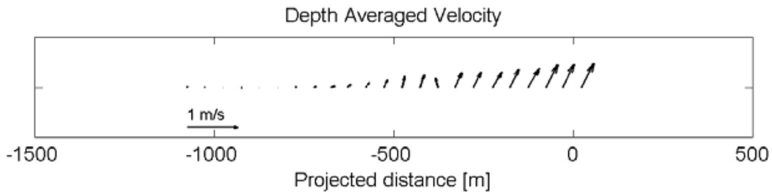
Data Processed by:
In association with :
I/RA/11283/08.089/MSA

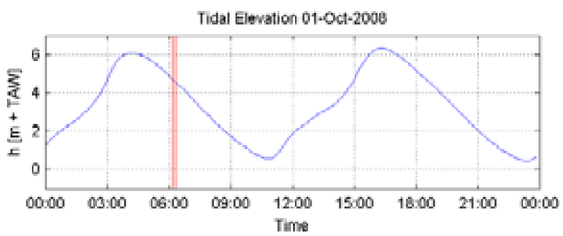
Opvolging aanslibbing DGD

11283	Equipment(s): ADCP
Sourcefile: 1005DGDtrY000r_c.csv	Location: Deurganckdok









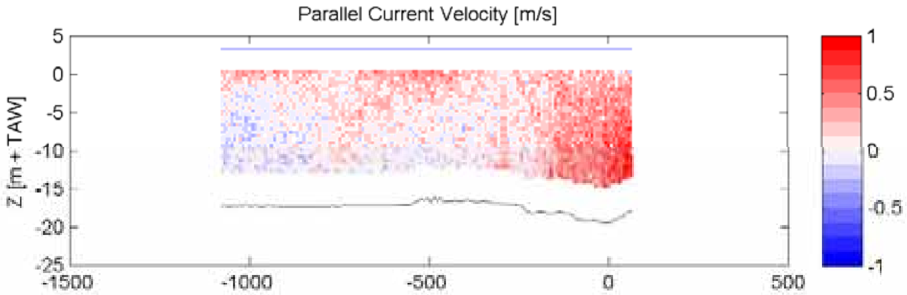
HW/LW: 04:10: h = 6.07 m+TAW
10:50: h = 0.59 m+TAW
16:20: h = 6.31 m+TAW

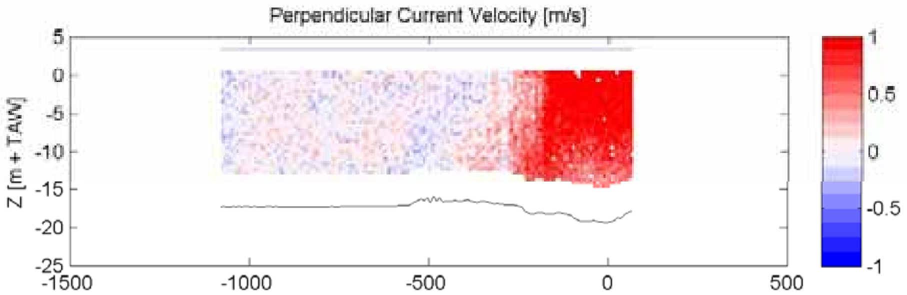
Date / Time [MET] :
01-Oct-2008
06:11 - 06:19

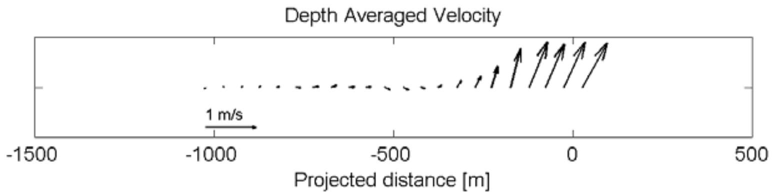
Time after HW [HH:MM]
2:05

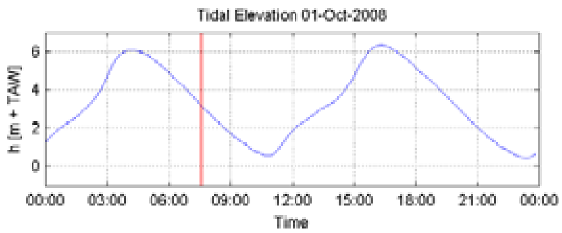
Data Processed by:
In association with :
I/RA/11283/08.089/MSA

Opvolging aanslibbing DGD	
11283	Equipment(s): ADCP
Sourcefile: 1009DGDtrY000r_c.csv	Location: Deurganckdok









HW/LW: 04:10: h = 6.07 m+TAW
10:50: h = 0.59 m+TAW
16:20: h = 6.31 m+TAW

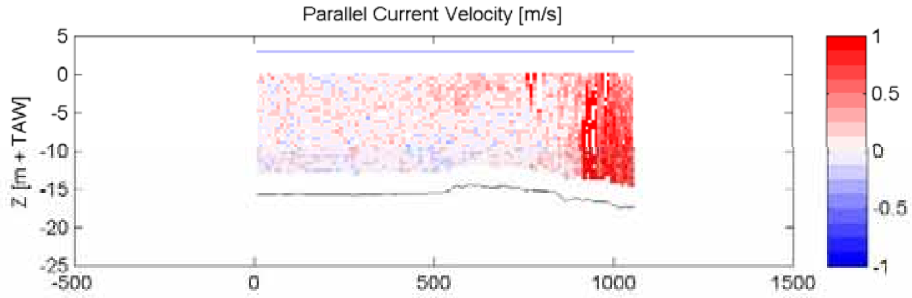
Date / Time [MET] :
01-Oct-2008
07:32 - 07:38

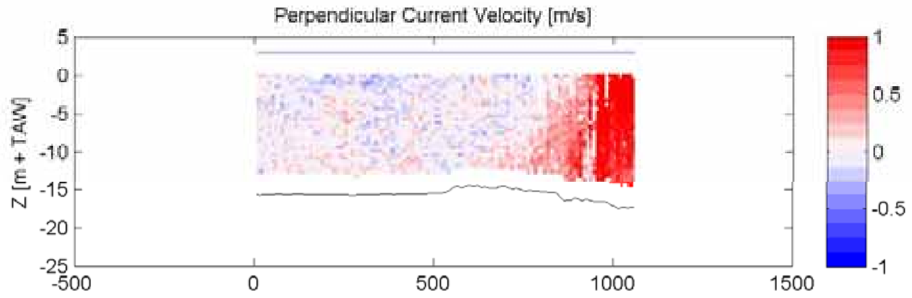
Time after HW [HH:MM]
3:25

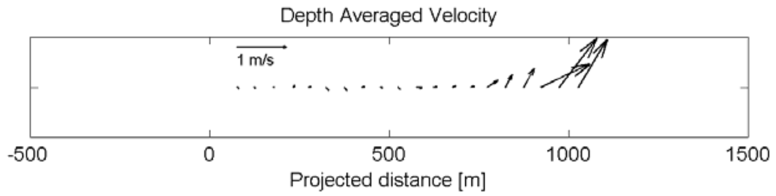
Data Processed by:
In association with :
I/RA/11283/08.089/MSA

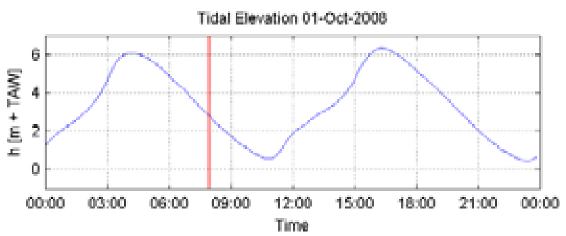
Opvolging aanslibbing DGD

11283	Equipment(s): ADCP
Sourcefile: 1012DGDtrY000r_c.csv	Location: Deurganckdok









HW/LW: 04:10: h = 6.07 m+TAW
10:50: h = 0.59 m+TAW
16:20: h = 6.31 m+TAW

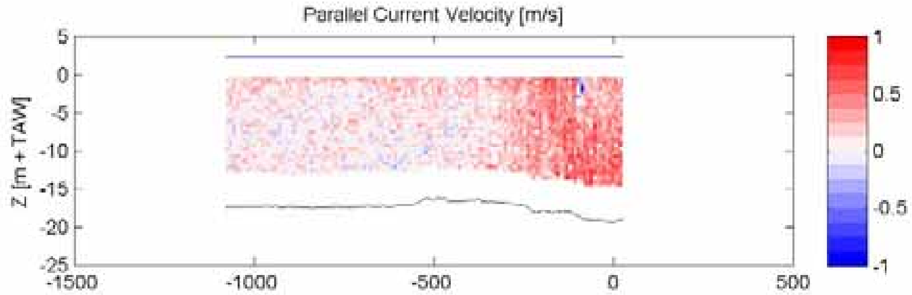
Date / Time [MET] :
01-Oct-2008
07:53 - 07:58

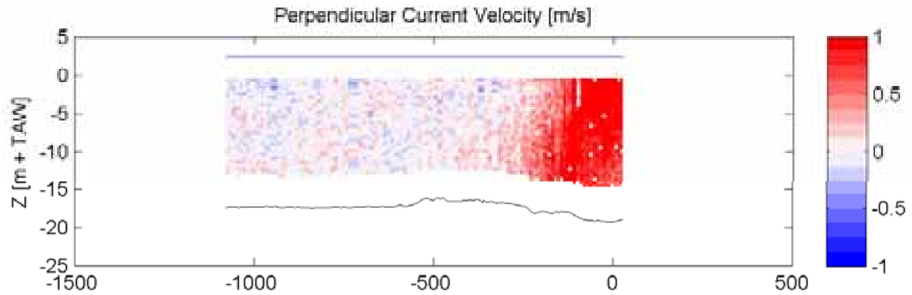
Time after HW [HH:MM]
3:46

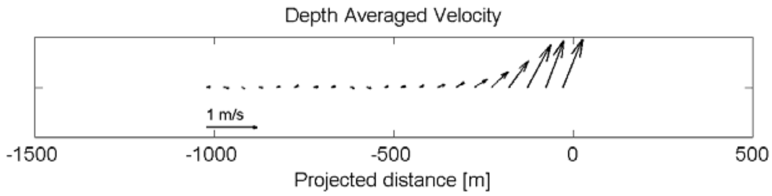
Data Processed by:
In association with :
I/RA/11283/08.089/MSA

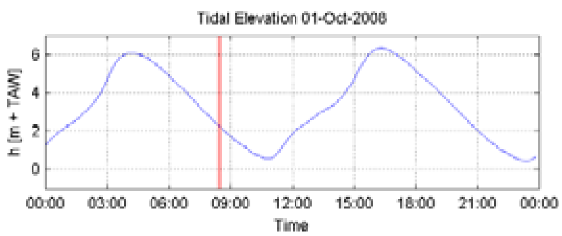
Opvolging aanslibbing DGD

11283	Equipment(s): ADCP
Sourcefile: 1015DGDtrY000r_c.csv	Location: Deurganckdok









HW/LW:
04:10: h = 6.07 m+TAW
10:50: h = 0.59 m+TAW
16:20: h = 6.31 m+TAW

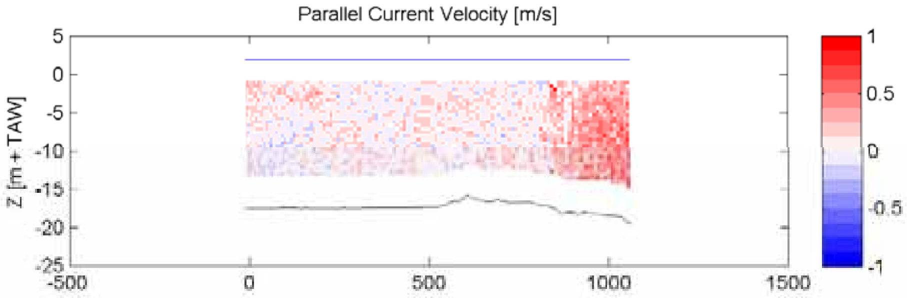
Date / Time [MET] :
01-Oct-2008
08:24 - 08:29

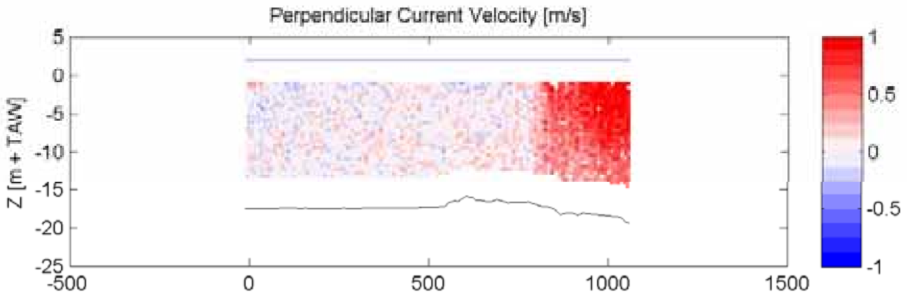
Time after HW [HH:MM]
4:17

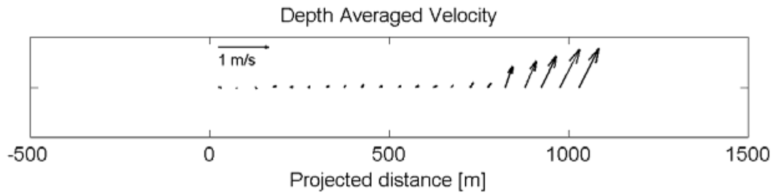
Data Processed by:
In association with :
I/RA/11283/08.089/MSA

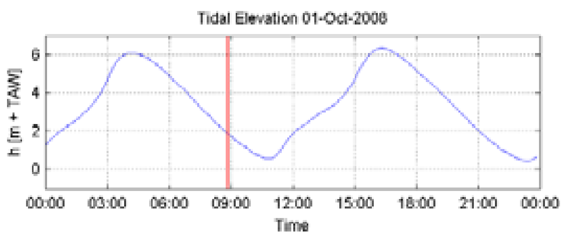
Opvolging aanslibbing DGD

11283	Equipment(s): ADCP
Sourcefile: 1018DGDtrY000r_c.csv	Location: Deurganckdok









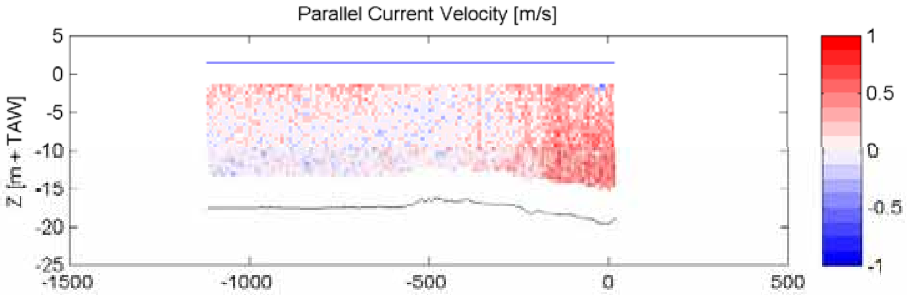
HW/LW: 04:10: h = 6.07 m+TAW
10:50: h = 0.59 m+TAW
16:20: h = 6.31 m+TAW

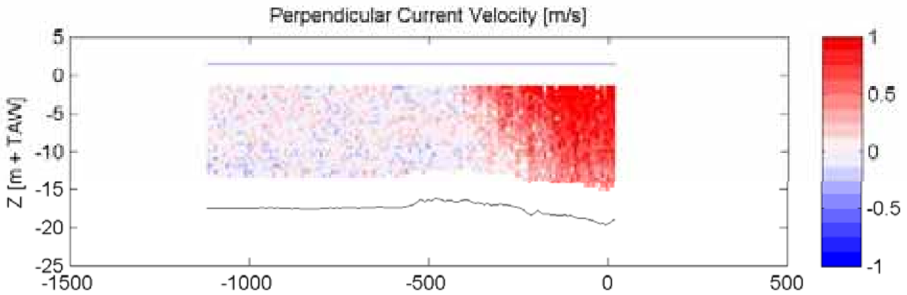
Date / Time [MET] :
01-Oct-2008
08:47 - 08:53

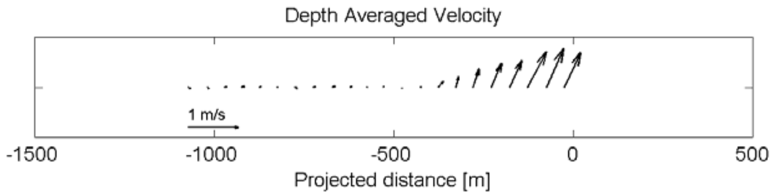
Time after HW [HH:MM]
4:40

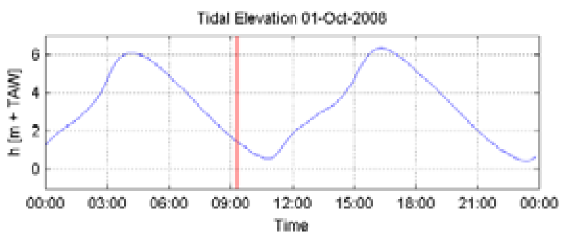
Data Processed by:
In association with :
I/RA/11283/08.089/MSA

Opvolging aanslibbing DGD	
11283	Equipment(s): ADCP
Sourcefile: 1021DGDtrY000r_c.csv	Location: Deurganckdok









HW/LW: 04:10: h = 6.07 m+TAW
10:50: h = 0.59 m+TAW
16:20: h = 6.31 m+TAW

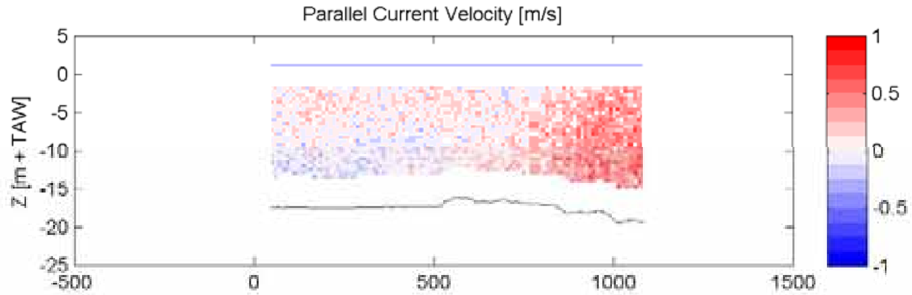
Date / Time [MET] :
01-Oct-2008
09:16 - 09:22

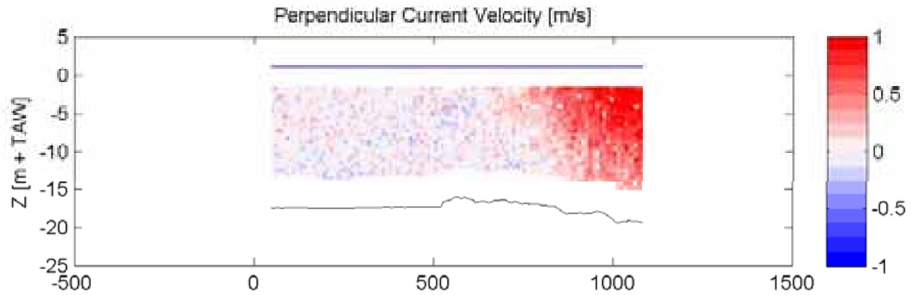
Time after HW [HH:MM]
5:09

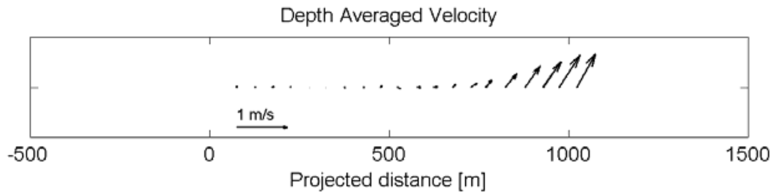
Data Processed by:
In association with :
I/RA/11283/08.089/MSA

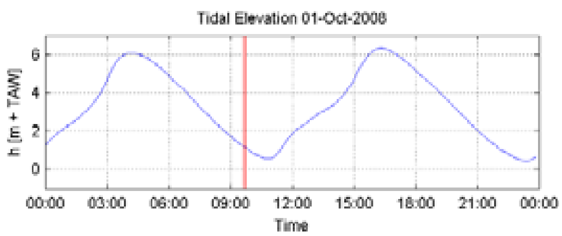
Opvolging aanslibbing DGD

11283	Equipment(s): ADCP
Sourcefile: 1024DGDtrY000r_c.csv	Location: Deurganckdok









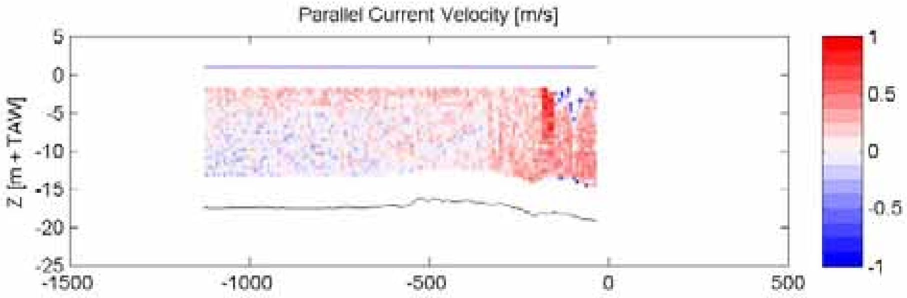
HW/LW: 04:10: h = 6.07 m+TAW
10:50: h = 0.59 m+TAW
16:20: h = 6.31 m+TAW

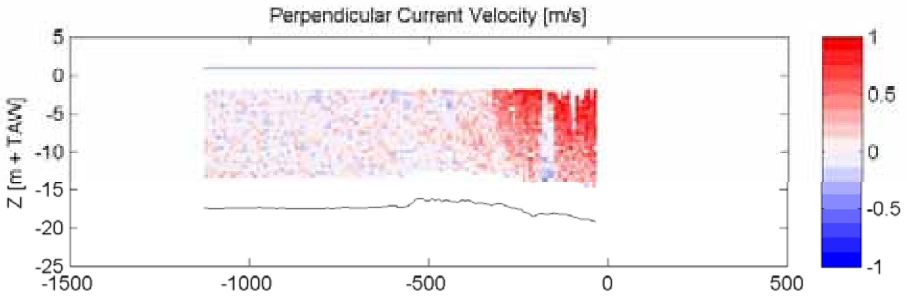
Date / Time [MET] :
01-Oct-2008
09:39 - 09:44

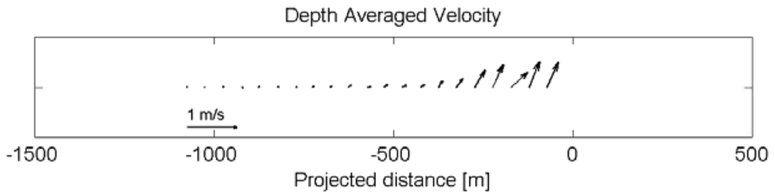
Time after HW [HH:MM]
5:31

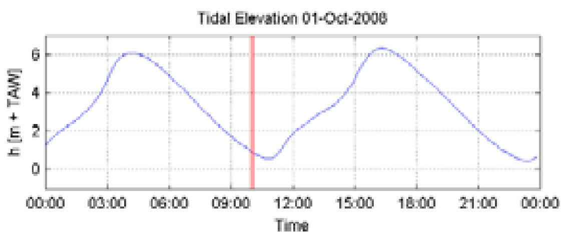
Data Processed by:
In association with :
I/RA/11283/08.089/MSA

Opvolging aanslibbing DGD	
11283	Equipment(s): ADCP
Sourcefile: 1027DGDtrY000r_c.csv	Location: Deurganckdok









HW/LW: 04:10: h = 6.07 m+TAW
10:50: h = 0.59 m+TAW
16:20: h = 6.31 m+TAW

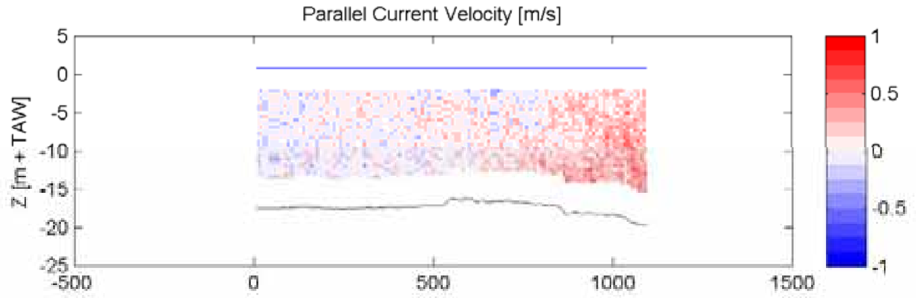
Date / Time [MET] :
01-Oct-2008
09:59 - 10:05

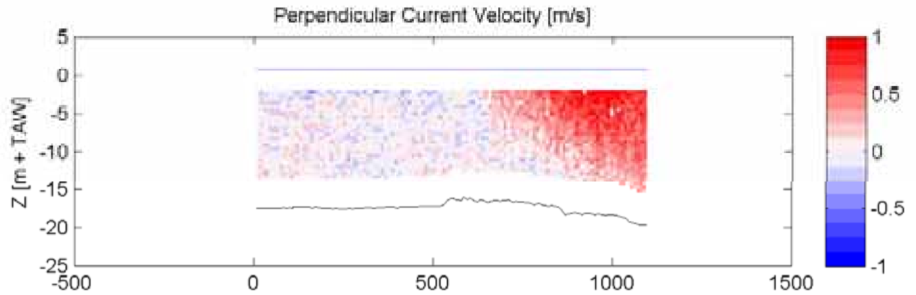
Time after HW [HH:MM]
5:52

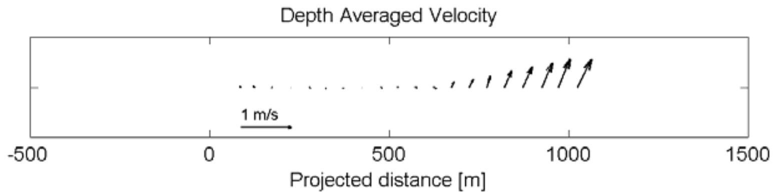
Data Processed by:
In association with :
I/RA/11283/08.089/MSA

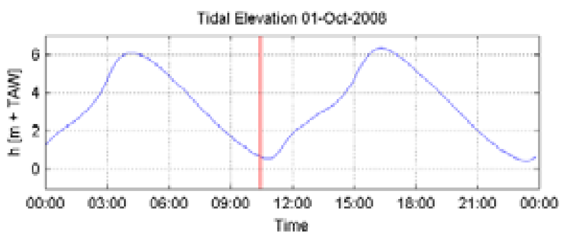
Opvolging aanslibbing DGD

11283	Equipment(s): ADCP
Sourcefile: 1030DGDtrY000r_c.csv	Location: Deurganckdok









HW/LW: 04:10: h = 6.07 m+TAW
10:50: h = 0.59 m+TAW
16:20: h = 6.31 m+TAW

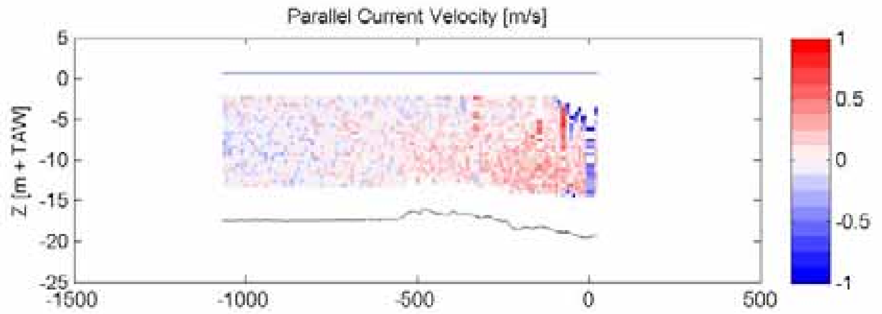
Date / Time [MET] :
01-Oct-2008
10:24 - 10:29

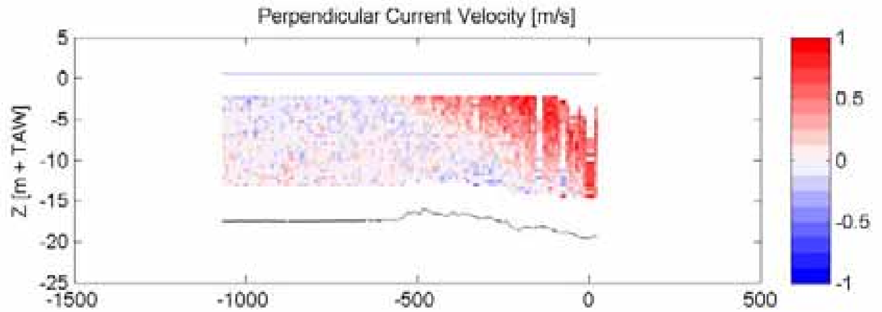
Time after HW [HH:MM]
6:17

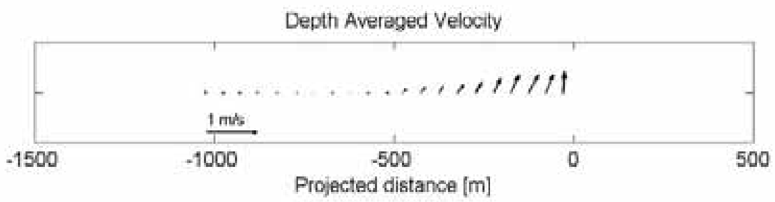
Data Processed by:
In association with :
I/RA/11283/08.089/MSA

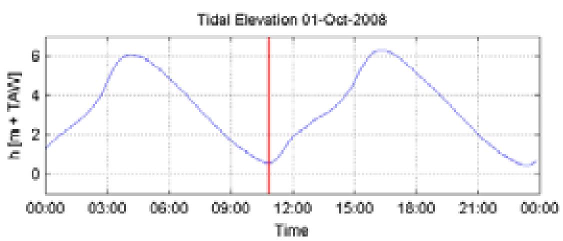
Opvolging aanslibbing DGD

11283	Equipment(s): ADCP
Sourcefile: 1033DGDtrY000r_c.csv	Location: Deurganckdok









HW/LW: 04:10: h = 6.07 m+TAW
10:50: h = 0.59 m+TAW
16:20: h = 6.31 m+TAW

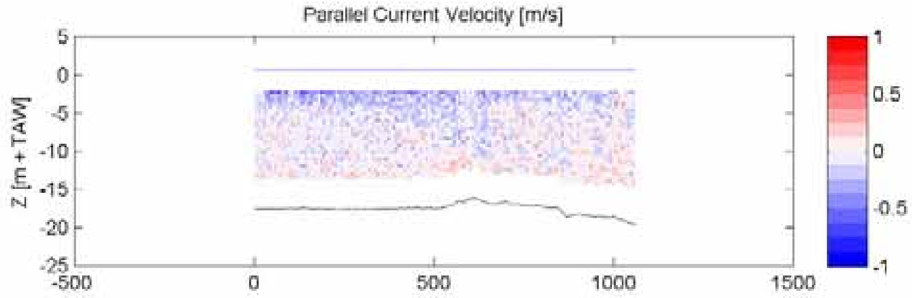
Date / Time [MET] :
01-Oct-2008
10:48 - 10:53

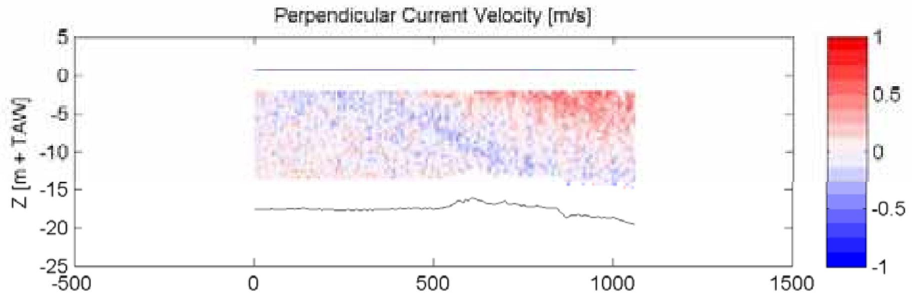
Time after HW [HH:MM]
-5:29

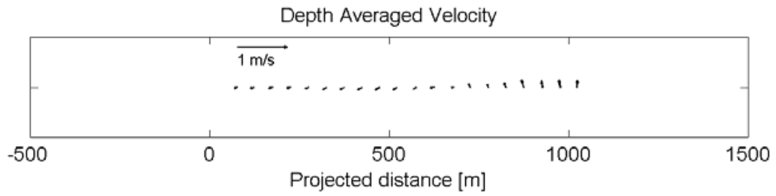
Data Processed by:
In association with :
I/RA/11283/08.089/MSA

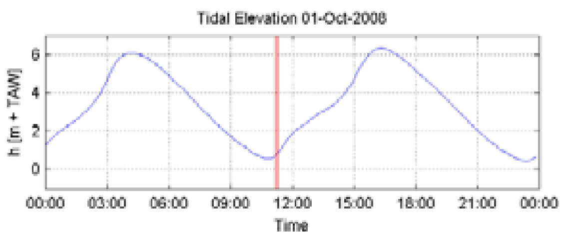
Opvolging aanslibbing DGD

11283	Equipment(s): ADCP
Sourcefile: 1036DGDtrY000r_c.csv	Location: Deurganckdok









HW/LW: 04:10: h = 6.07 m+TAW
10:50: h = 0.59 m+TAW
16:20: h = 6.31 m+TAW

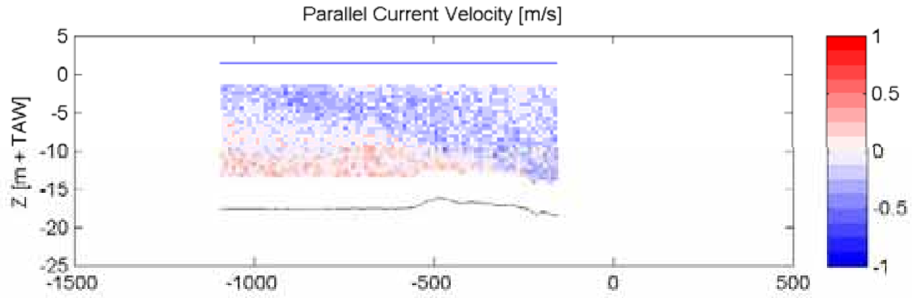
Date / Time [MET] :
01-Oct-2008
11:12 - 11:18

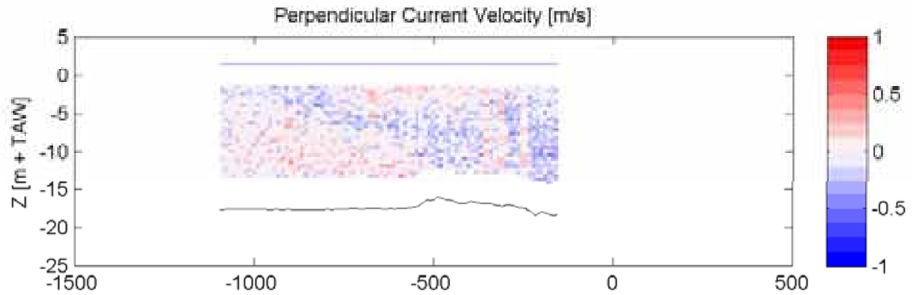
Time after HW [HH:MM]
-5:04

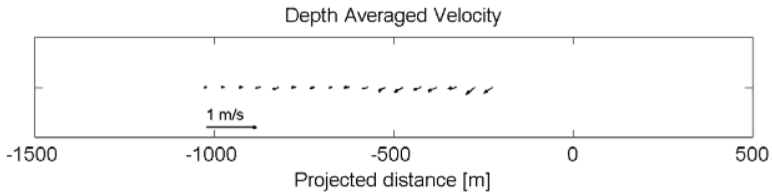
Data Processed by:
In association with :
I/RA/11283/08.089/MSA

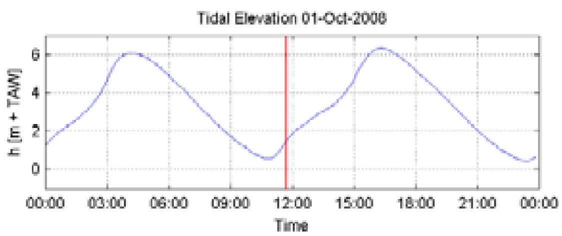
Opvolging aanslibbing DGD

11283	Equipment(s): ADCP
Sourcefile: 1039DGDtrY000r_c.csv	Location: Deurganckdok









HW/LW: 04:10: h = 6.07 m+TAW
10:50: h = 0.59 m+TAW
16:20: h = 6.31 m+TAW

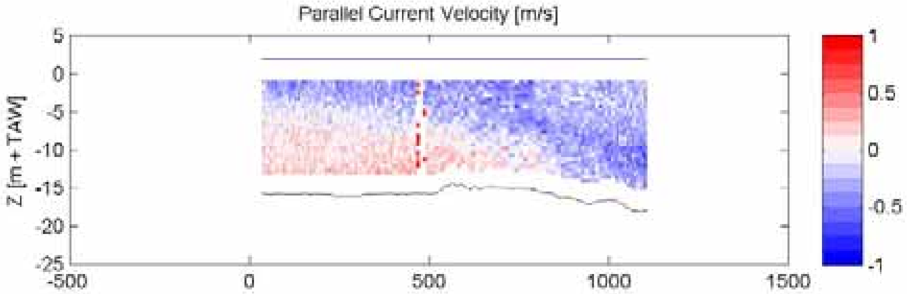
Date / Time [MET] :
01-Oct-2008
11:40 - 11:44

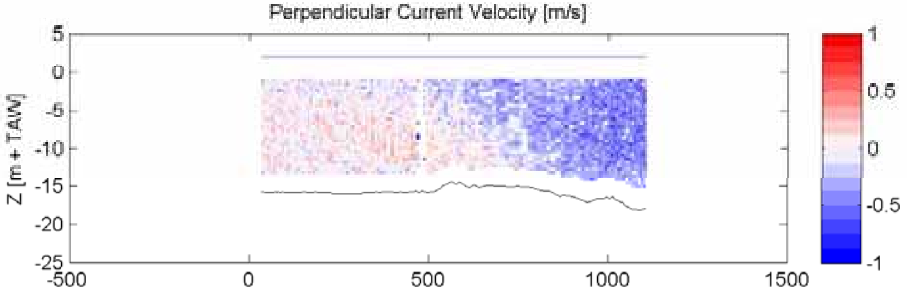
Time after HW [HH:MM]
-4:37

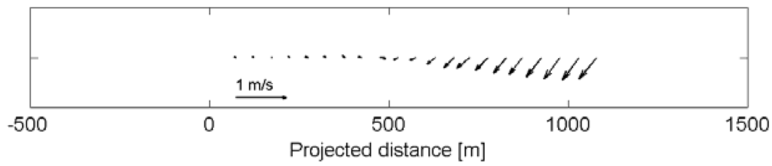
Data Processed by:
In association with :
I/RA/11283/08.089/MSA

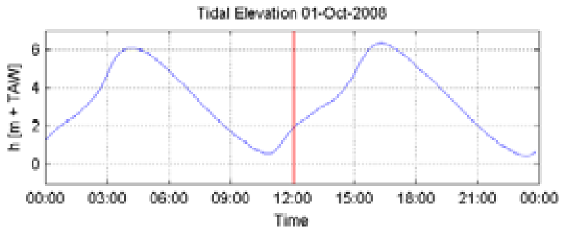
Opvolging aanslibbing DGD

11283	Equipment(s): ADCP
Sourcefile: 1042DGDtrY000r_c.csv	Location: Deurganckdok









HW/LW:
04:10: h = 6.07 m+TAW
10:50: h = 0.59 m+TAW
16:20: h = 6.31 m+TAW

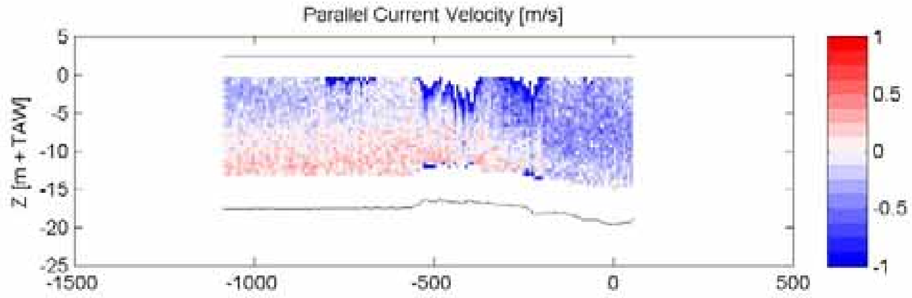
Date / Time [MET] :
01-Oct-2008
12:01 - 12:07

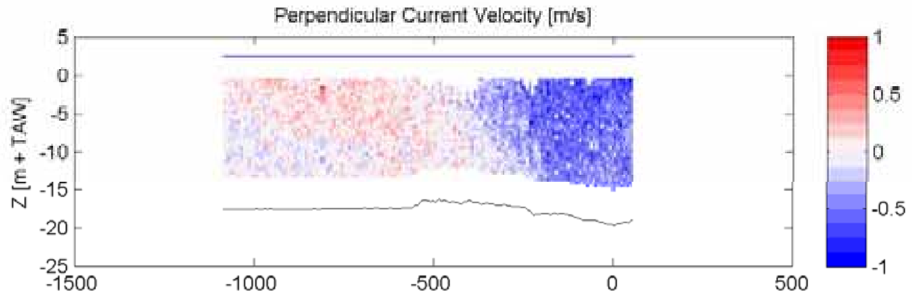
Time after HW [HH:MM]
-4:15

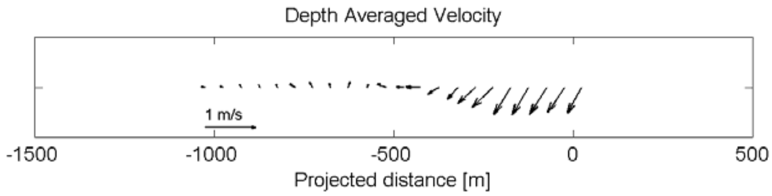
Data Processed by:
In association with :
I/RA/11283/08.089/MSA

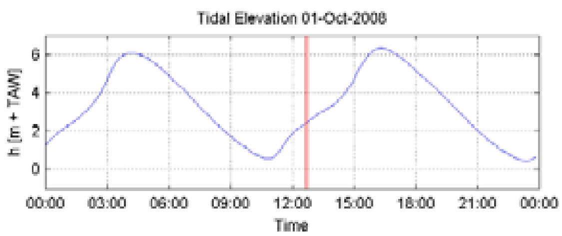
Opvolging aanslibbing DGD

11283	Equipment(s): ADCP
Sourcefile: 1045DGDtrY000r_c.csv	Location: Deurganckdok









HW/LW: 04:10: h = 6.07 m+TAW
10:50: h = 0.59 m+TAW
16:20: h = 6.31 m+TAW

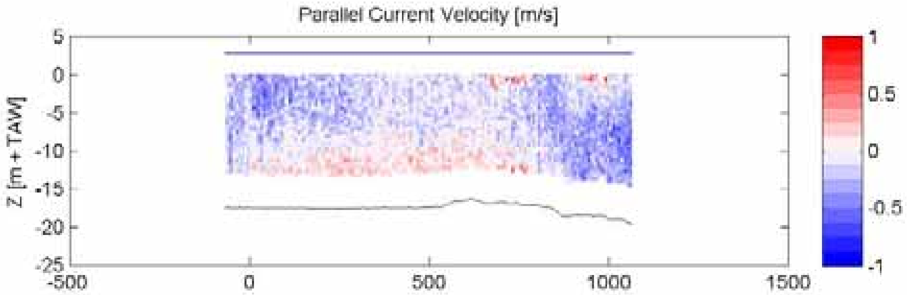
Date / Time [MET] :
01-Oct-2008
12:37 - 12:44

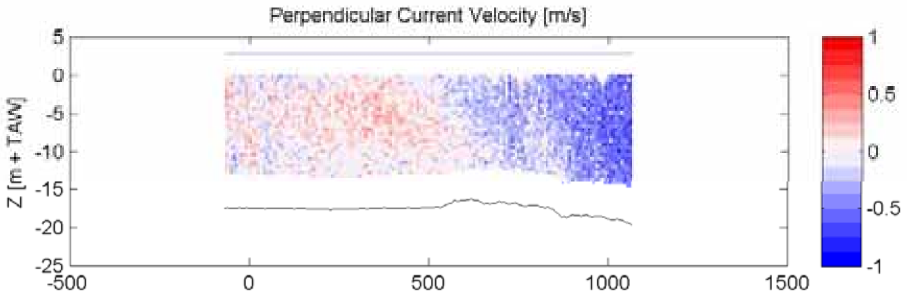
Time after HW [HH:MM]
-3:38

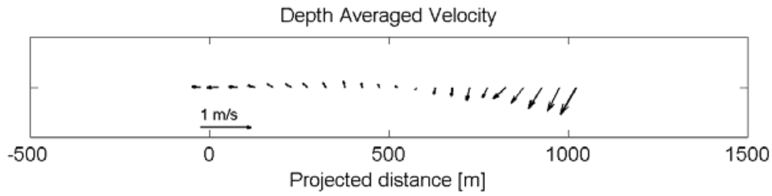
Data Processed by:
In association with :
I/RA/11283/08.089/MSA

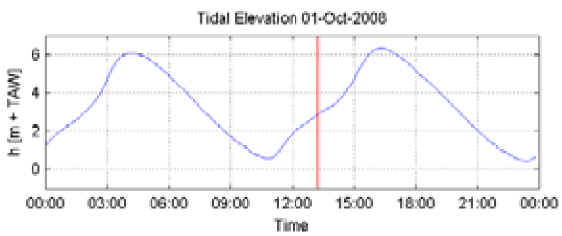
Opvolging aanslibbing DGD

11283	Equipment(s): ADCP
Sourcefile: 1048DGDtrY000r_c.csv	Location: Deurganckdok









HW/LW: 04:10: h = 6.07 m+TAW
10:50: h = 0.59 m+TAW
16:20: h = 6.31 m+TAW

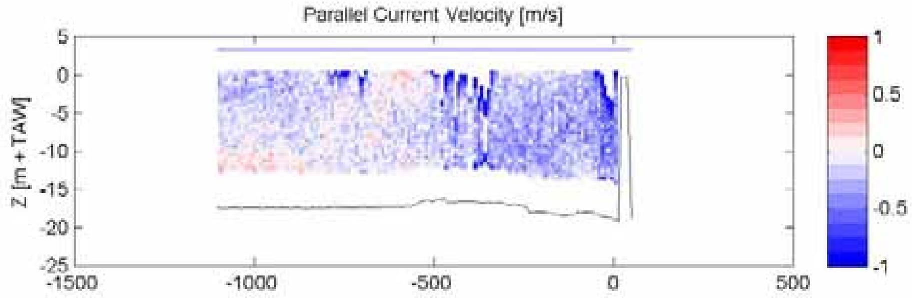
Date / Time [MET] :
01-Oct-2008
13:11 - 13:17

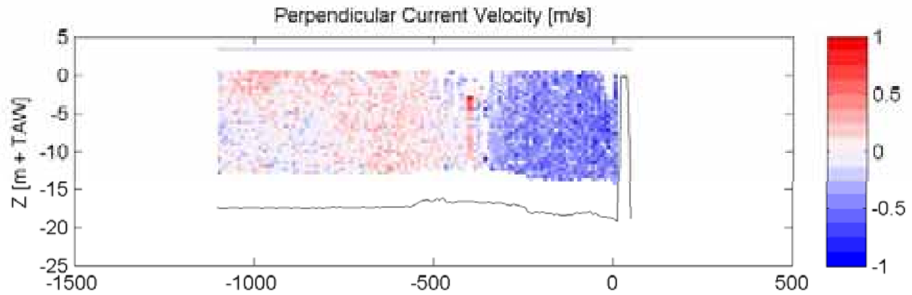
Time after HW [HH:MM]
-3:05

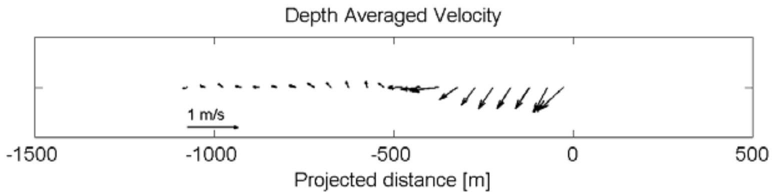
Data Processed by:
In association with :
I/RA/11283/08.089/MSA

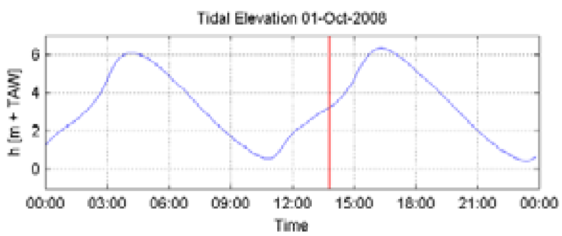
Opvolging aanslibbing DGD

11283	Equipment(s): ADCP
Sourcefile: 1051DGDtrY000r_c.csv	Location: Deurganckdok









HW/LW: 04:10: h = 6.07 m+TAW
10:50: h = 0.59 m+TAW
16:20: h = 6.31 m+TAW

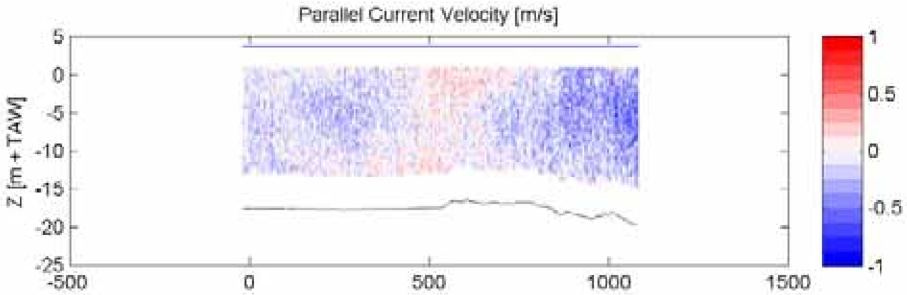
Date / Time [MET] :
01-Oct-2008
13:45 - 13:51

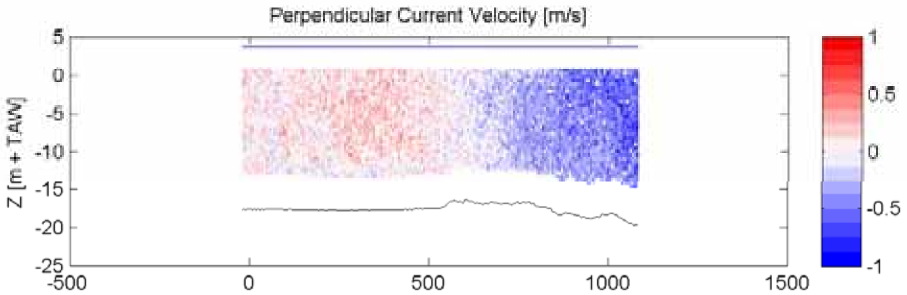
Time after HW [HH:MM]
-2:31

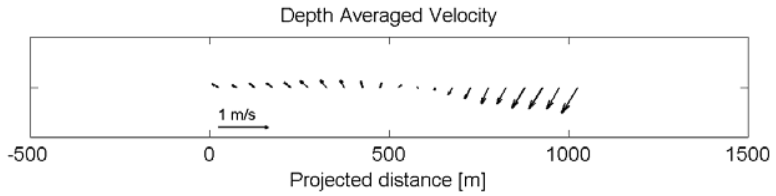
Data Processed by:
In association with :
I/RA/11283/08.089/MSA

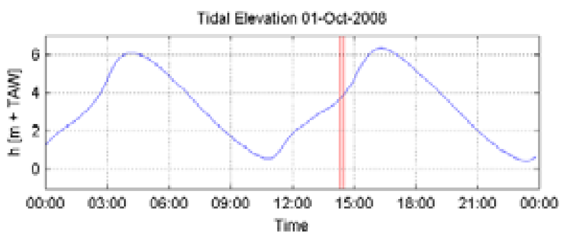
Opvolging aanslibbing DGD

11283	Equipment(s): ADCP
Sourcefile: 1054DGDtrY000r_c.csv	Location: Deurganckdok









HW/LW: 04:10: h = 6.07 m+TAW
10:50: h = 0.59 m+TAW
16:20: h = 6.31 m+TAW

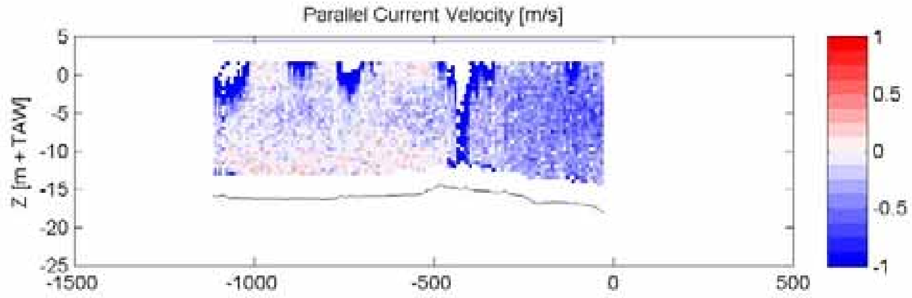
Date / Time [MET] :
01-Oct-2008
14:20 - 14:28

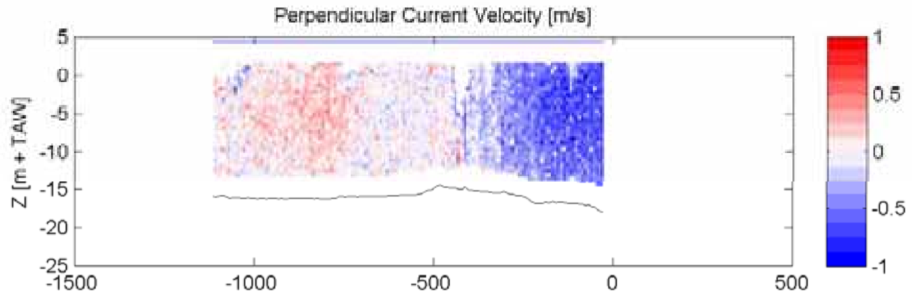
Time after HW [HH:MM]
-1:55

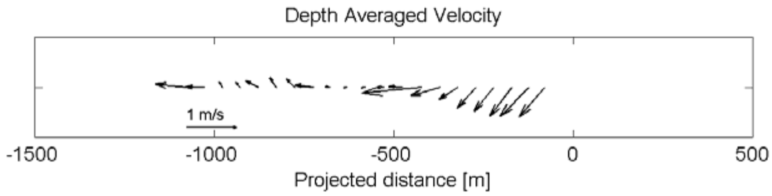
Data Processed by:
In association with :
I/RA/11283/08.089/MSA

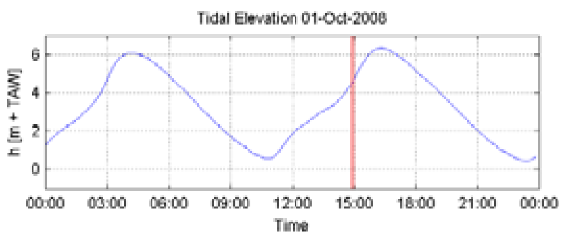
Opvolging aanslibbing DGD

11283	Equipment(s): ADCP
Sourcefile: 1057DGDtrY000r_c.csv	Location: Deurganckdok









HW/LW:
04:10: h = 6.07 m+TAW
10:50: h = 0.59 m+TAW
16:20: h = 6.31 m+TAW

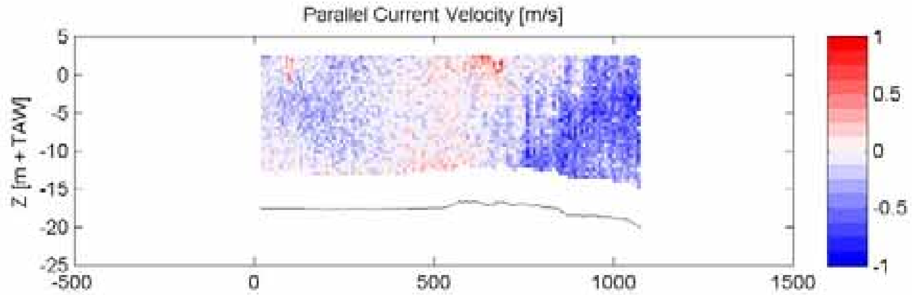
Date / Time [MET] :
01-Oct-2008
14:52 - 14:58

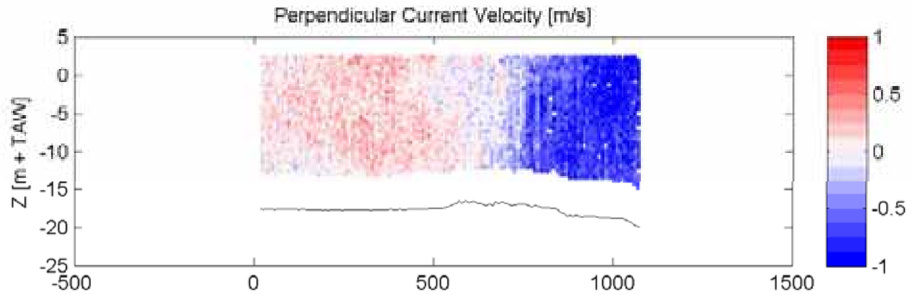
Time after HW [HH:MM]
-1:24

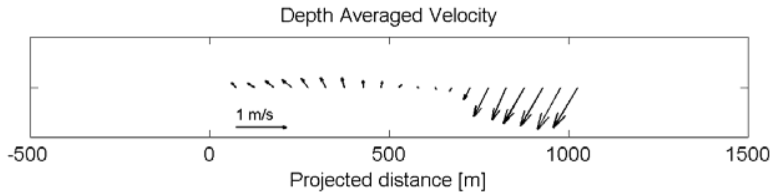
Data Processed by:
In association with :
I/RA/11283/08.089/MSA

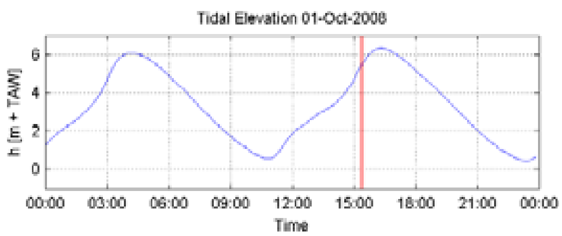
Opvolging aanslibbing DGD

11283	Equipment(s): ADCP
Sourcefile: 1060DGDtrY000r_c.csv	Location: Deurganckdok









HW/LW: 04:10: h = 6.07 m+TAW
10:50: h = 0.59 m+TAW
16:20: h = 6.31 m+TAW

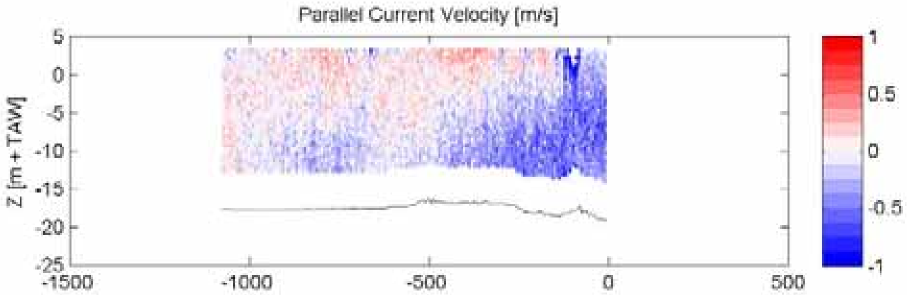
Date / Time [MET] :
01-Oct-2008
15:19 - 15:25

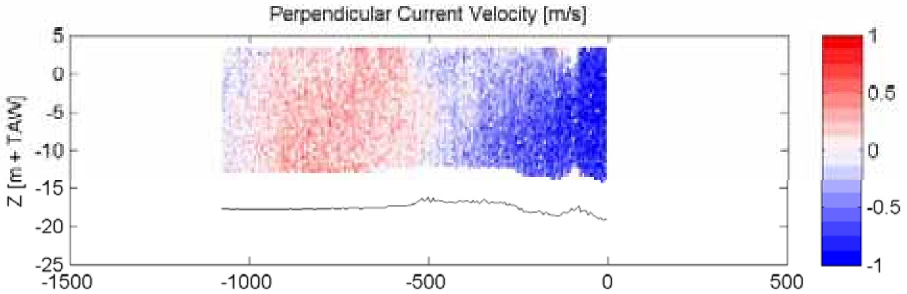
Time after HW [HH:MM]
-0:57

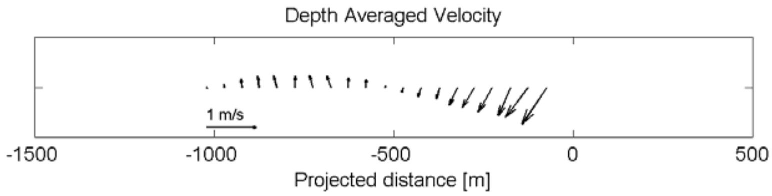
Data Processed by:
In association with :
I/RA/11283/08.089/MSA

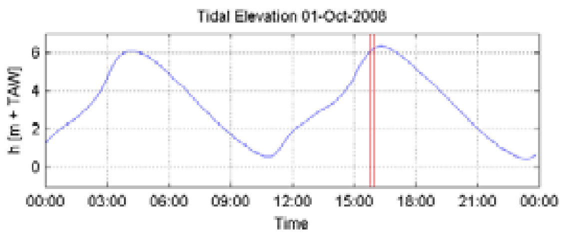
Opvolging aanslibbing DGD

11283	Equipment(s): ADCP
Sourcefile: 1063DGDtrY000r_c.csv	Location: Deurganckdok









HW/LW: 04:10: h = 6.07 m+TAW
10:50: h = 0.59 m+TAW
16:20: h = 6.31 m+TAW

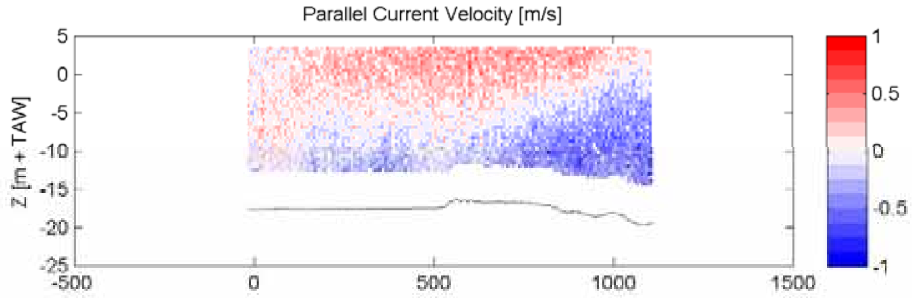
Date / Time [MET] :
01-Oct-2008
15:49 - 15:58

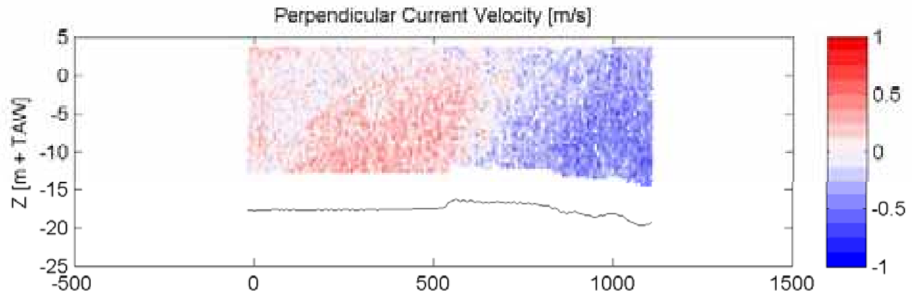
Time after HW [HH:MM]
-0:26

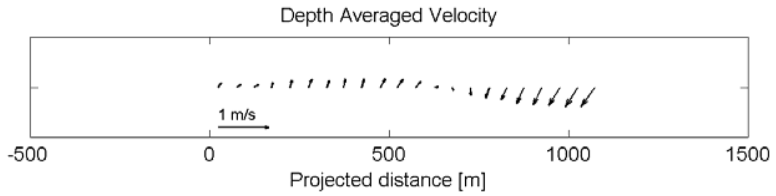
Data Processed by:
In association with :
I/RA/11283/08.089/MSA

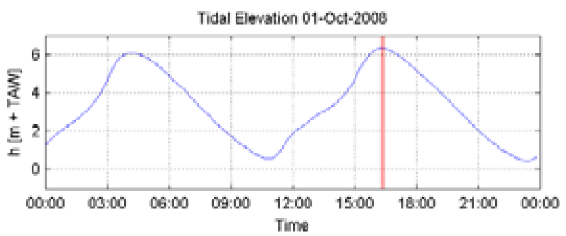
Opvolging aanslibbing DGD

11283	Equipment(s): ADCP
Sourcefile: 1066DGDtrY000r_c.csv	Location: Deurganckdok









HW/LW: 04:10: h = 6.07 m+TAW
10:50: h = 0.59 m+TAW
16:20: h = 6.31 m+TAW

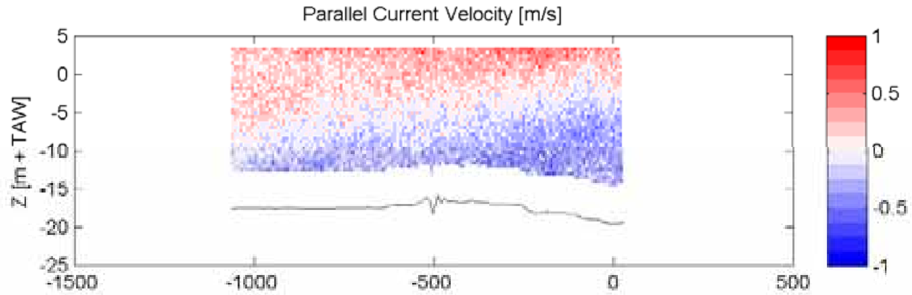
Date / Time [MET] :
01-Oct-2008
16:19 - 16:26

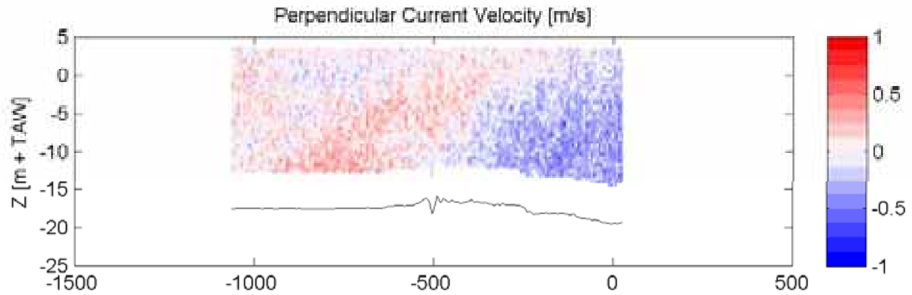
Time after HW [HH:MM]
0:02

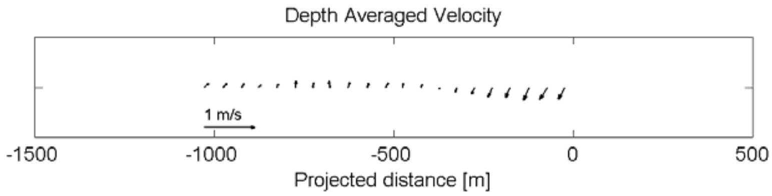
Data Processed by:
In association with :
I/RA/11283/08.089/MSA

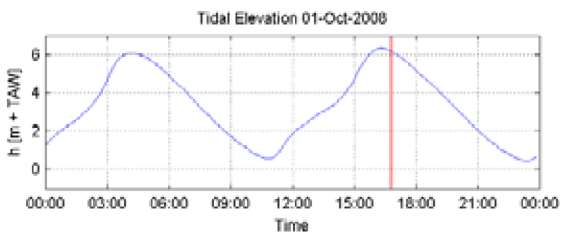
Opvolging aanslibbing DGD

11283	Equipment(s): ADCP
Sourcefile: 1069DGDtrY000r_c.csv	Location: Deurganckdok









HW/LW:
04:10: h = 6.07 m+TAW
10:50: h = 0.59 m+TAW
16:20: h = 6.31 m+TAW

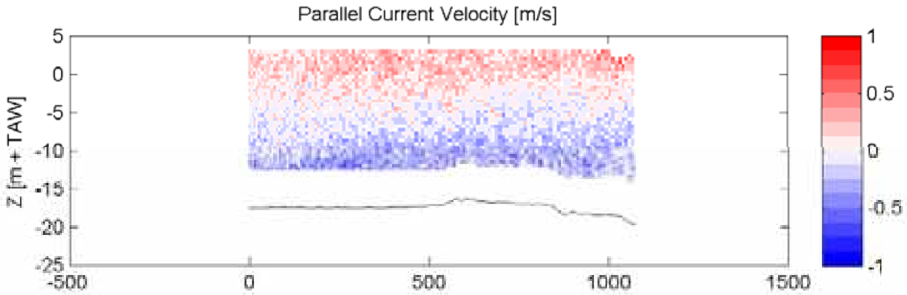
Date / Time [MET] :
01-Oct-2008
16:43 - 16:50

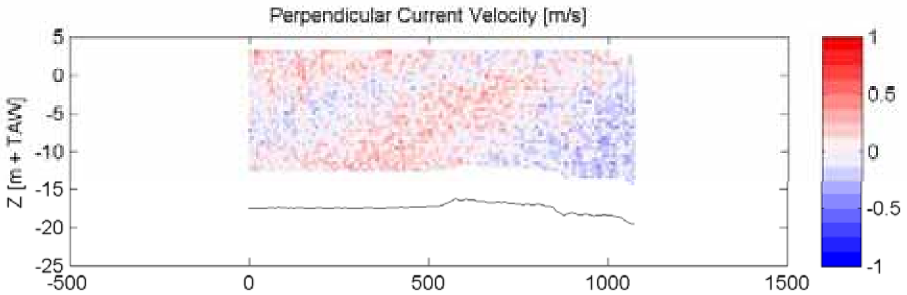
Time after HW [HH:MM]
0:27

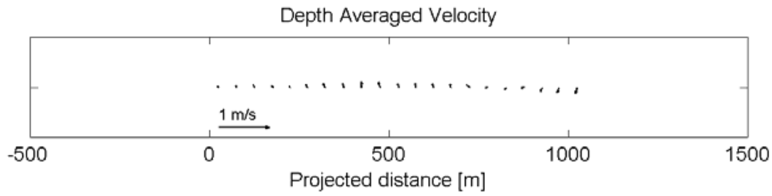
Data Processed by:
In association with :
I/RA/11283/08.089/MSA

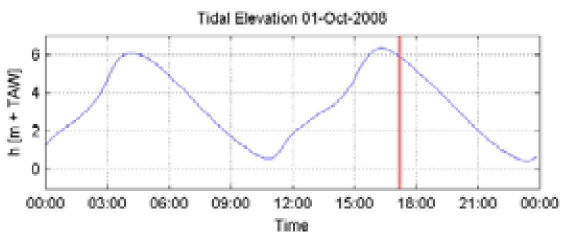
Opvolging aanslibbing DGD

11283	Equipment(s): ADCP
Sourcefile: 1072DGDtrY000r_c.csv	Location: Deurganckdok









HW/LW: 04:10: h = 6.07 m+TAW
10:50: h = 0.59 m+TAW
16:20: h = 6.31 m+TAW

Date / Time [MET] :
01-Oct-2008
17:08 - 17:14

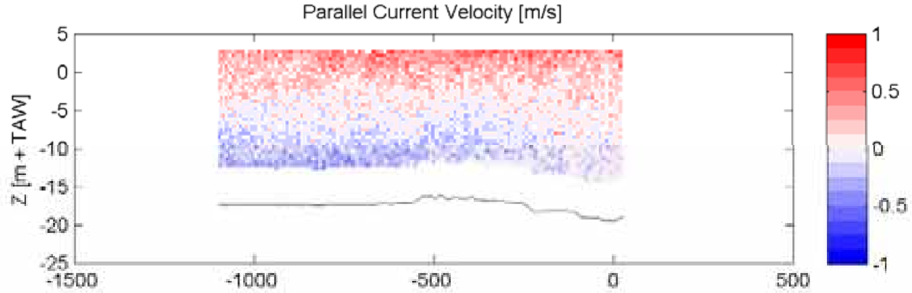
Time after HW [HH:MM]
0:51

Data Processed by:
In association with :
I/RA/11283/08.089/MSA

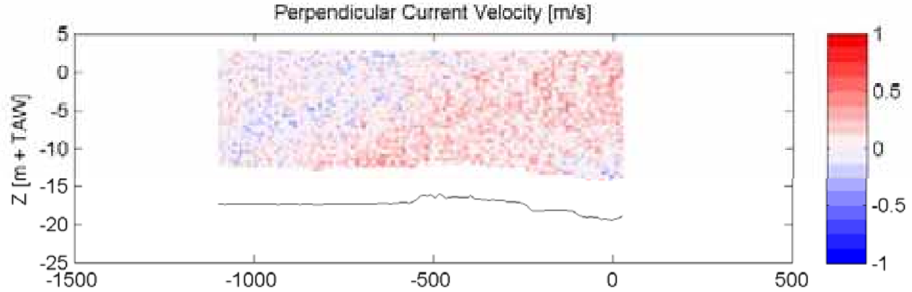
Opvolging aanslibbing DGD

11283	Equipment(s): ADCP
Sourcefile: 1075DGDtrY000r_c.csv	Location: Deurganckdok

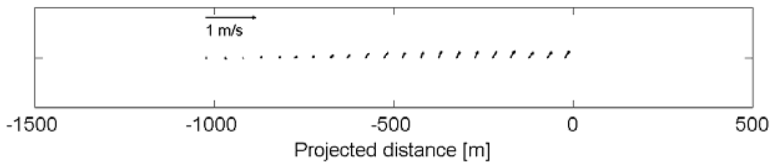
Parallel Current Velocity [m/s]



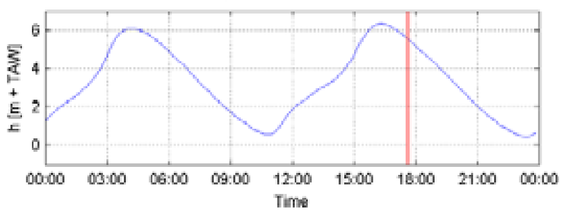
Perpendicular Current Velocity [m/s]



Depth Averaged Velocity



Tidal Elevation 01-Oct-2008



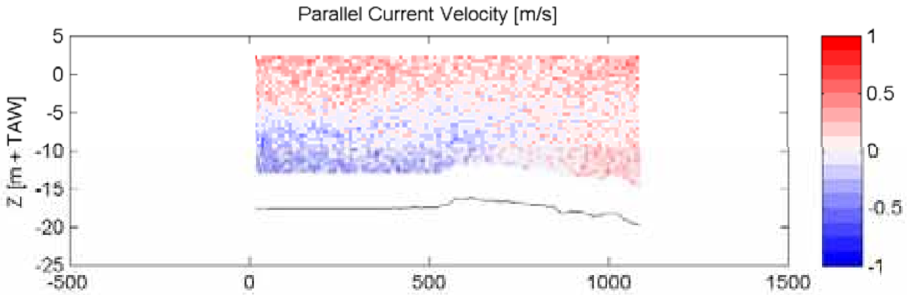
HW/LW: 04:10: h = 6.07 m+TAW
10:50: h = 0.59 m+TAW
16:20: h = 6.31 m+TAW

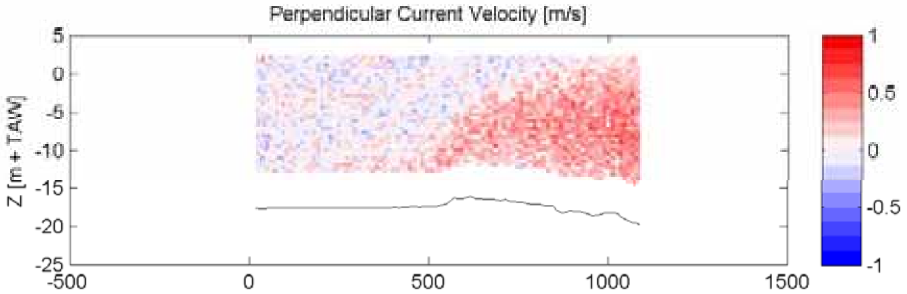
Date / Time [MET] :
01-Oct-2008
17:34 - 17:39

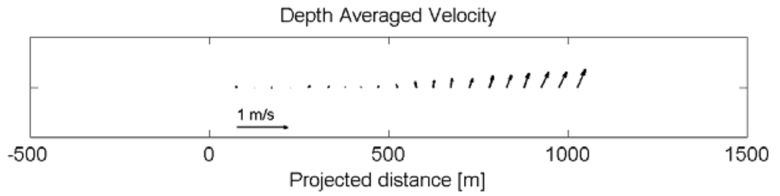
Time after HW [HH:MM]
1:17

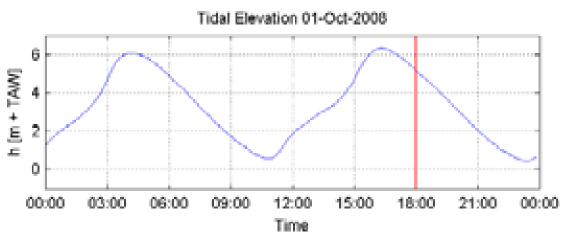
Data Processed by:
In association with :
I/RA/11283/08.089/MSA

Opvolging aanslibbing DGD	
11283	Equipment(s): ADCP
Sourcefile: 1078DGDtrY000r_c.csv	Location: Deurganckdok









HW/LW: 04:10: h = 6.07 m+TAW
10:50: h = 0.59 m+TAW
16:20: h = 6.31 m+TAW

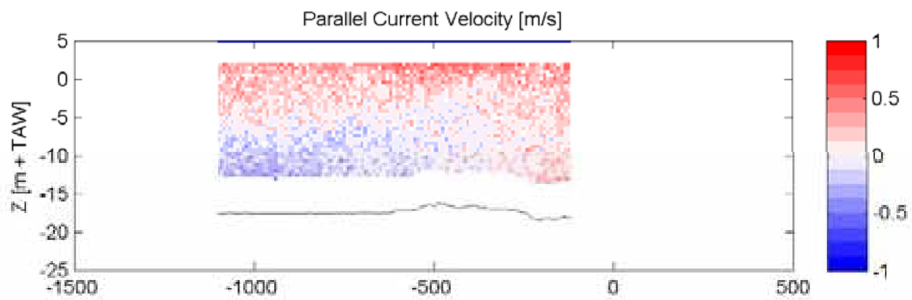
Date / Time [MET] :
01-Oct-2008
17:56 - 18:00

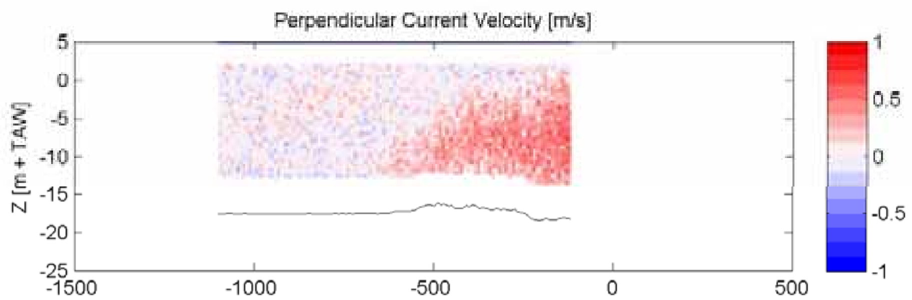
Time after HW [HH:MM]
1:38

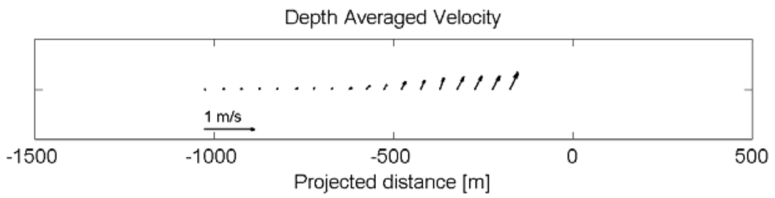
Data Processed by:
In association with :
I/RA/11283/08.089/MSA

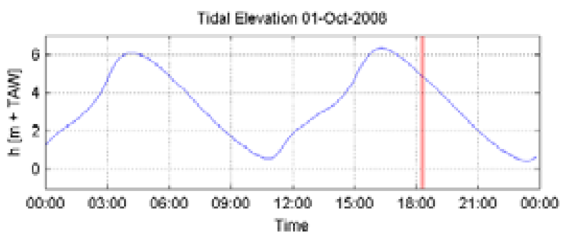
Opvolging aanslibbing DGD

11283	Equipment(s): ADCP
Sourcefile: 1080DGDtrY000r_c.csv	Location: Deurganckdok









HW/LW: 04:10: h = 6.07 m+TAW
10:50: h = 0.59 m+TAW
16:20: h = 6.31 m+TAW

Date / Time [MET] :
01-Oct-2008
18:16 - 18:20

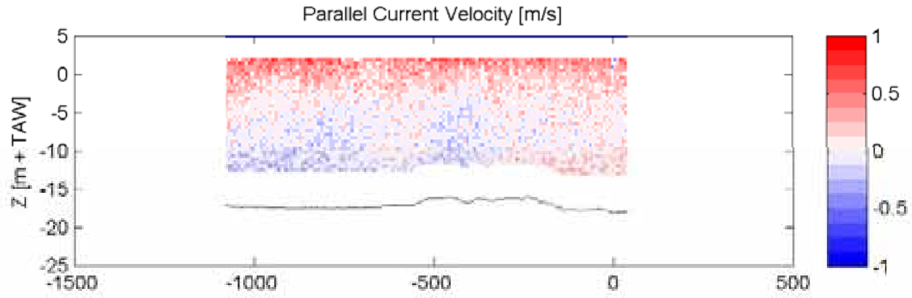
Time after HW [HH:MM]
1:58

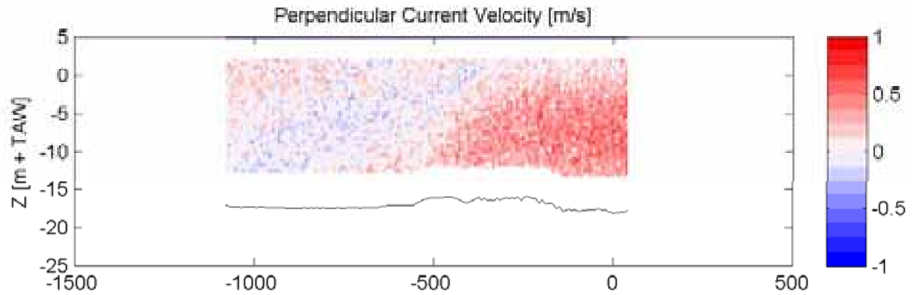
Data Processed by:
In association with :
I/RA/11283/08.089/MSA

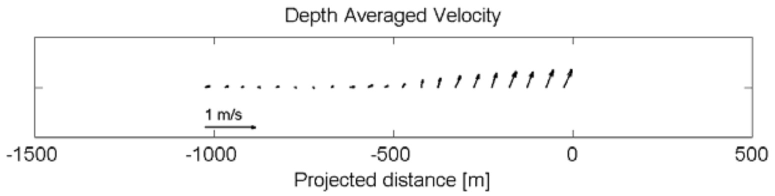
E.3 Raai Z

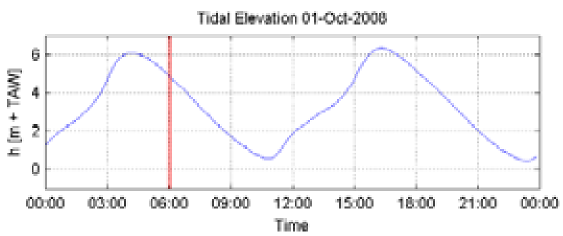
Opvolging aanslibbing DGD

11283	Equipment(s): ADCP
Sourcefile: 1003DGDtrZ000r_c.csv	Location: Deurganckdok









HW/LW: 04:10: h = 6.07 m+TAW
10:50: h = 0.59 m+TAW
16:20: h = 6.31 m+TAW

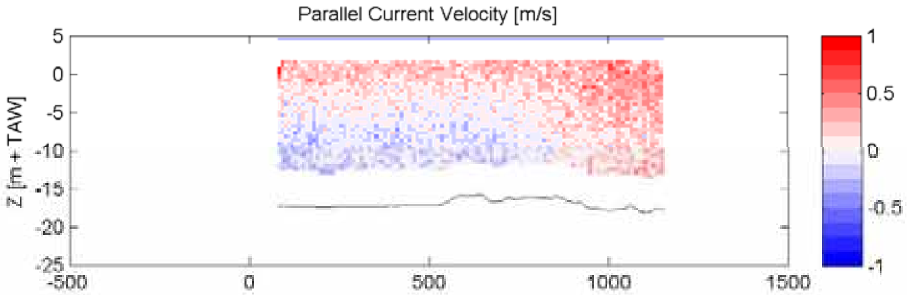
Date / Time [MET] :
01-Oct-2008
05:59 - 06:05

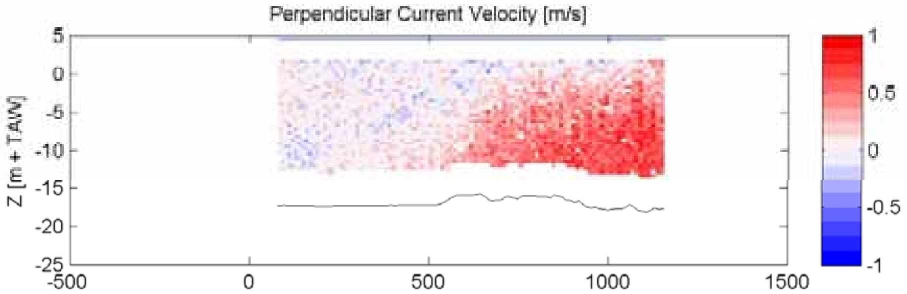
Time after HW [HH:MM]
1:52

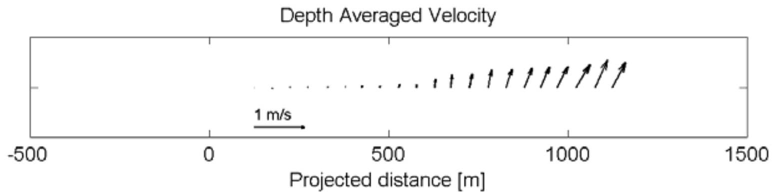
Data Processed by:
In association with :
I/RA/11283/08.089/MSA

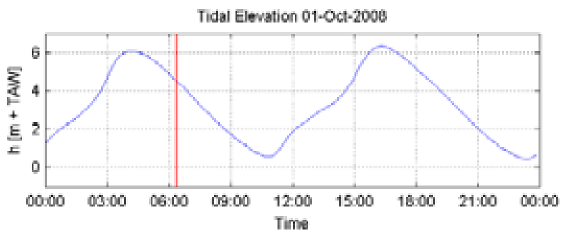
Opvolging aanslibbing DGD

11283	Equipment(s): ADCP
Sourcefile: 1006DGDtrZ000r_c.csv	Location: Deurganckdok









HW/LW:
04:10: h = 6.07 m+TAW
10:50: h = 0.59 m+TAW
16:20: h = 6.31 m+TAW

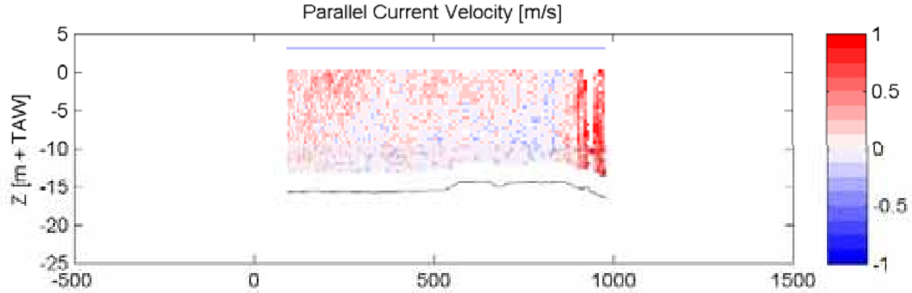
Date / Time [MET] :
01-Oct-2008
06:20 - 06:24

Time after HW [HH:MM]
2:12

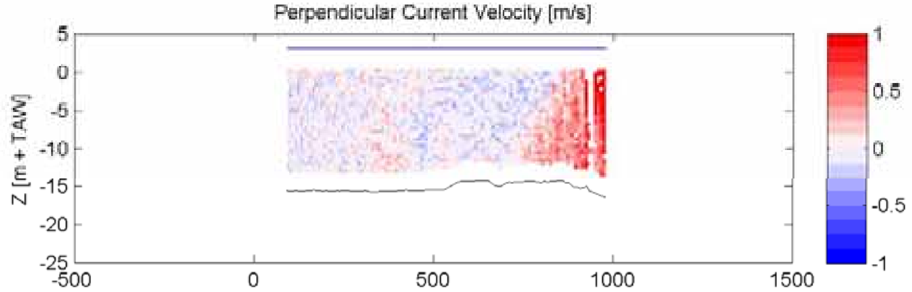
Data Processed by:
In association with :
I/RA/11283/08.089/MSA

Opvolging aanslibbing DGD	
11283	Equipment(s): ADCP
Sourcefile: 1010DGDtrZ000r_c.csv	Location: Deurganckdok

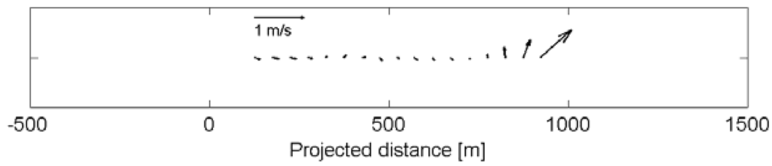
Parallel Current Velocity [m/s]



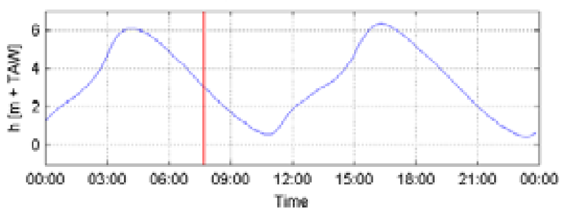
Perpendicular Current Velocity [m/s]



Depth Averaged Velocity



Tidal Elevation 01-Oct-2008



HW/LW: 04:10: h = 6.07 m+TAW
10:50: h = 0.59 m+TAW
16:20: h = 6.31 m+TAW

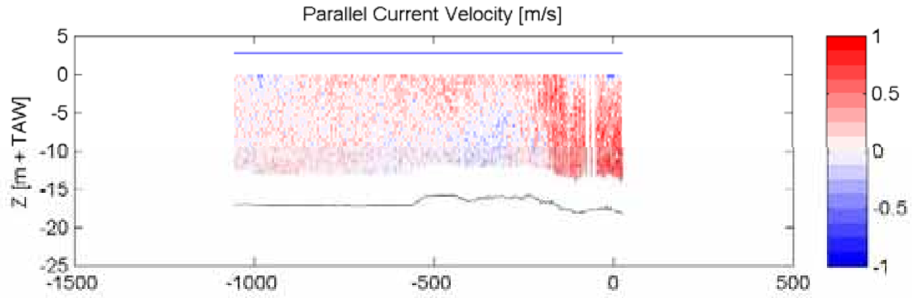
Date / Time [MET] :
01-Oct-2008
07:40 - 07:44

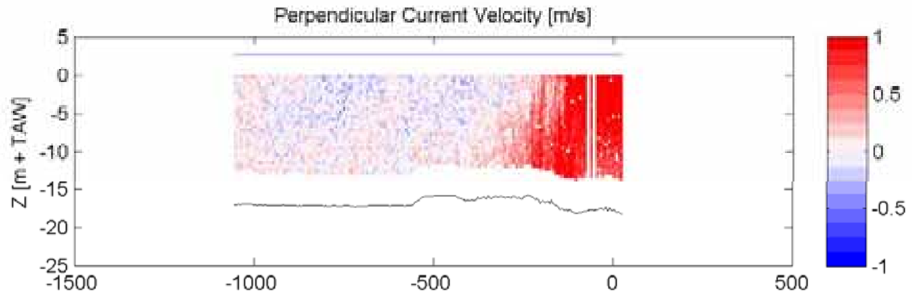
Time after HW [HH:MM]
3:32

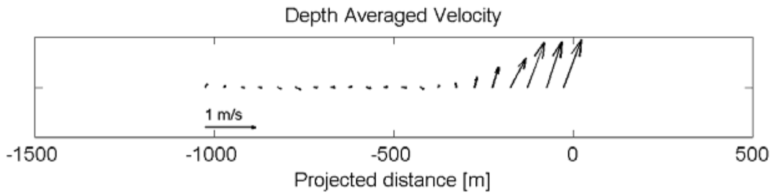
Data Processed by:
In association with :
I/RA/11283/08.089/MSA

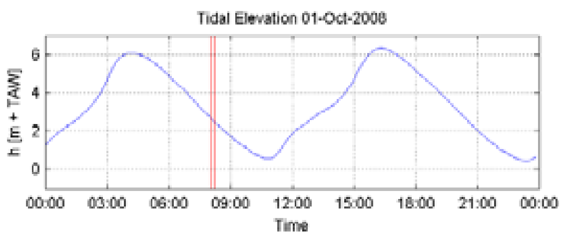
Opvolging aanslibbing DGD

11283	Equipment(s): ADCP
Sourcefile: 1013DGDtrZ000r_c.csv	Location: Deurganckdok









HW/LW: 04:10: h = 6.07 m+TAW
10:50: h = 0.59 m+TAW
16:20: h = 6.31 m+TAW

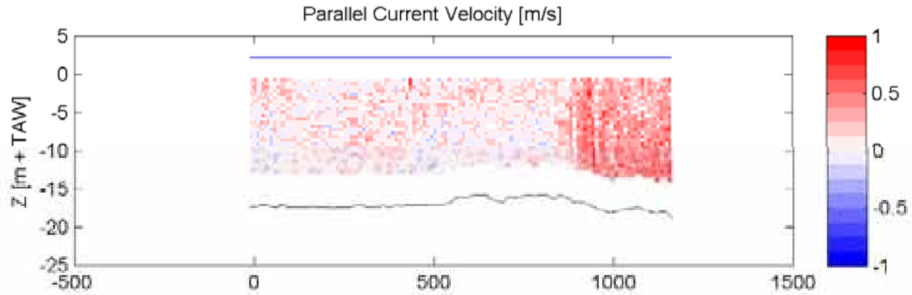
Date / Time [MET] :
01-Oct-2008
08:03 - 08:13

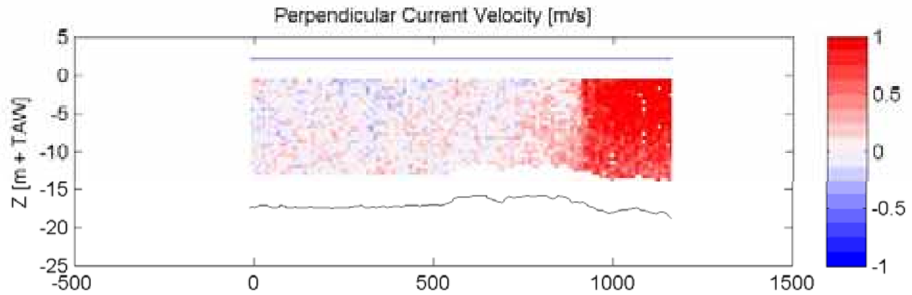
Time after HW [HH:MM]
3:58

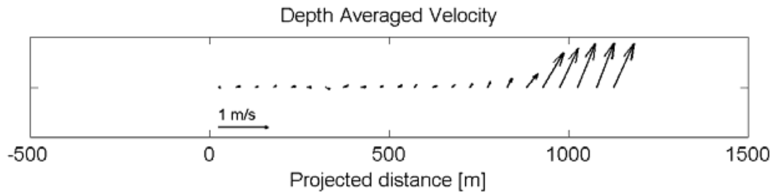
Data Processed by:
In association with :
I/RA/11283/08.089/MSA

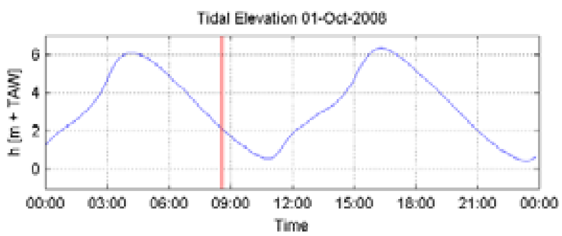
Opvolging aanslibbing DGD

11283	Equipment(s): ADCP
Sourcefile: 1016DGDtrZ000r_c.csv	Location: Deurganckdok









HW/LW: 04:10: h = 6.07 m+TAW
10:50: h = 0.59 m+TAW
16:20: h = 6.31 m+TAW

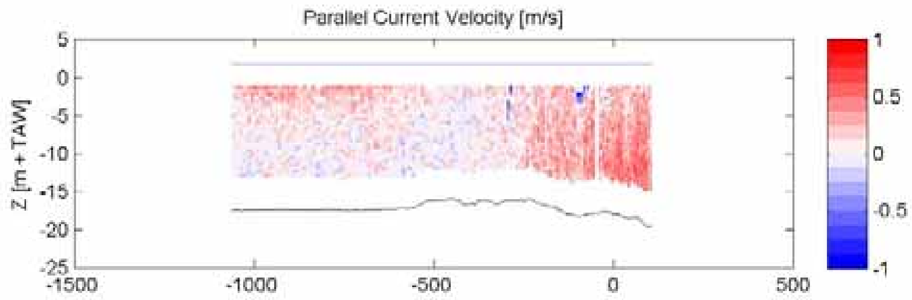
Date / Time [MET] :
01-Oct-2008
08:32 - 08:37

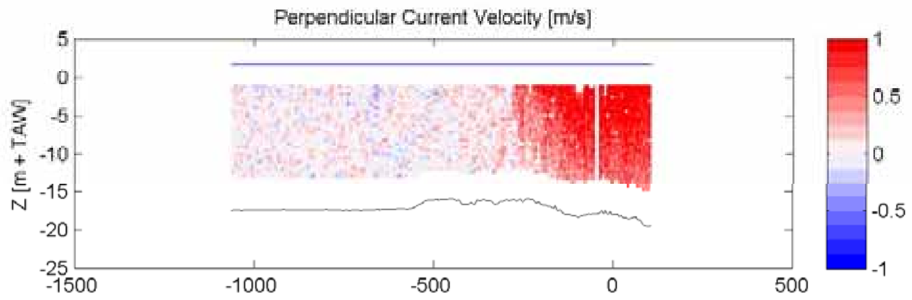
Time after HW [HH:MM]
4:25

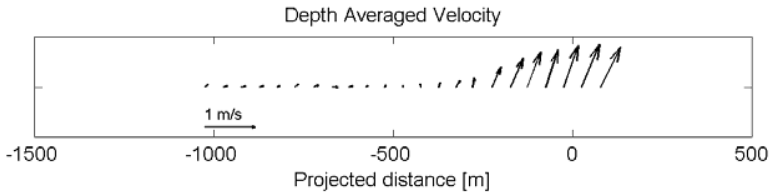
Data Processed by:
In association with :
I/RA/11283/08.089/MSA

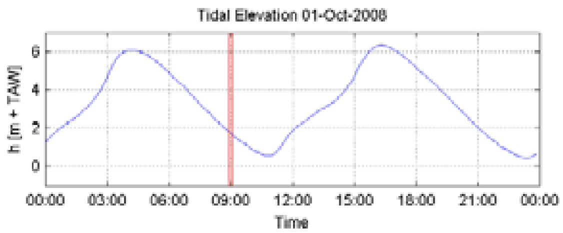
Opvolging aanslibbing DGD

11283	Equipment(s): ADCP
Sourcefile: 1019DGDtrZ000r_c.csv	Location: Deurganckdok









HW/LW: 04:10: h = 6.07 m+TAW
10:50: h = 0.59 m+TAW
16:20: h = 6.31 m+TAW

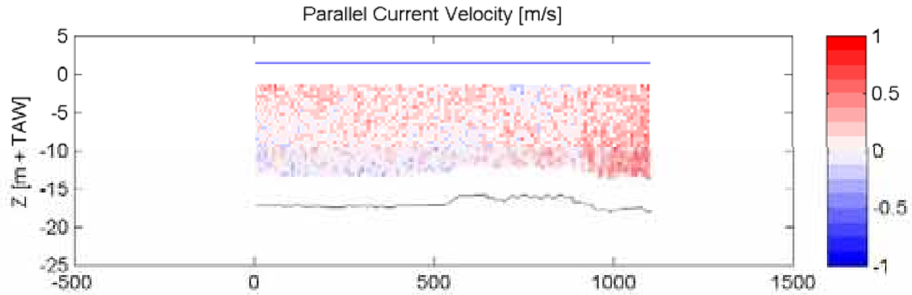
Date / Time [MET] :
01-Oct-2008
08:55 - 09:02

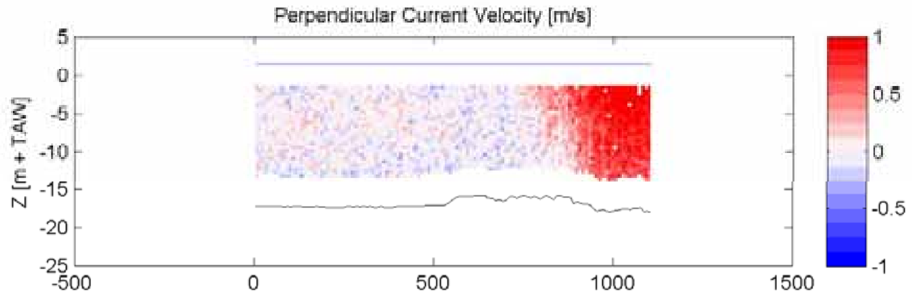
Time after HW [HH:MM]
4:48

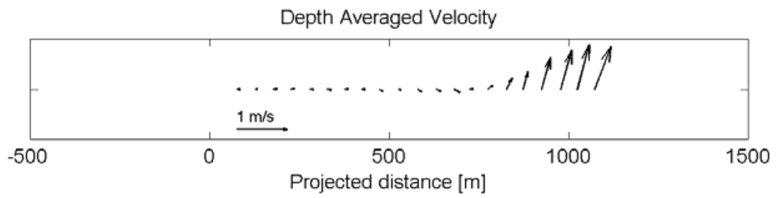
Data Processed by:
In association with :
I/RA/11283/08.089/MSA

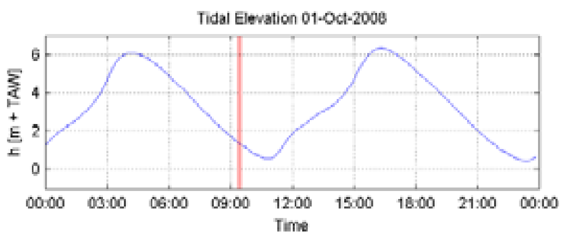
Opvolging aanslibbing DGD

11283	Equipment(s): ADCP
Sourcefile: 1022DGDtrZ000r_c.csv	Location: Deurganckdok









HW/LW: 04:10: h = 6.07 m+TAW
10:50: h = 0.59 m+TAW
16:20: h = 6.31 m+TAW

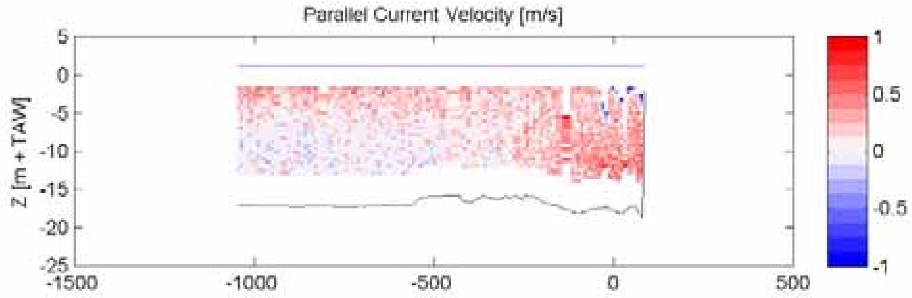
Date / Time [MET] :
01-Oct-2008
09:24 - 09:29

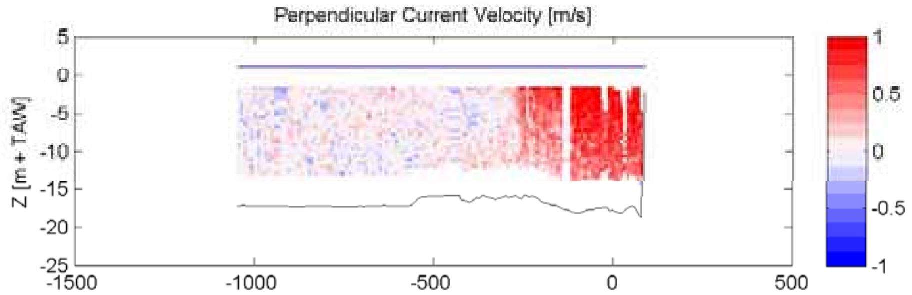
Time after HW [HH:MM]
5:17

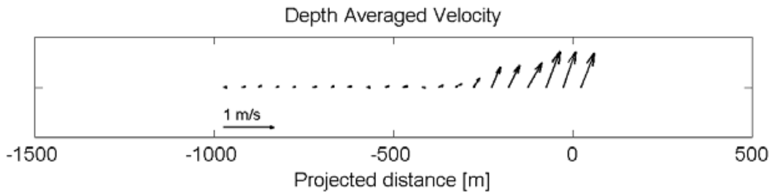
Data Processed by:
In association with :
I/RA/11283/08.089/MSA

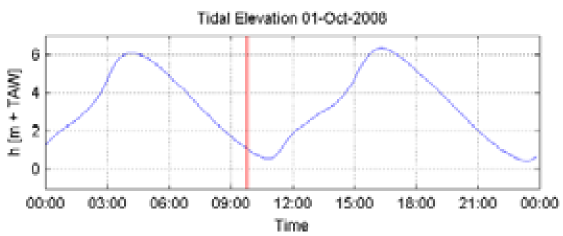
Opvolging aanslibbing DGD

11283	Equipment(s): ADCP
Sourcefile: 1025DGDtrZ000r_c.csv	Location: Deurganckdok









HW/LW:
04:10: h = 6.07 m+TAW
10:50: h = 0.59 m+TAW
16:20: h = 6.31 m+TAW

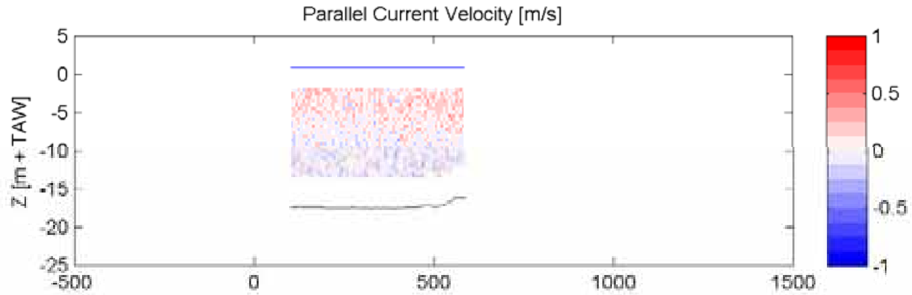
Date / Time [MET] :
01-Oct-2008
09:44 - 09:50

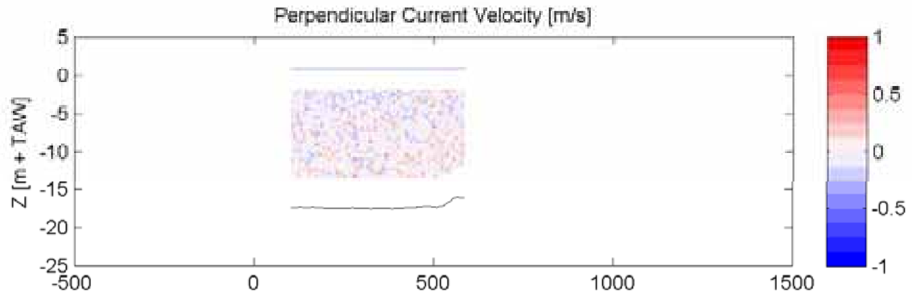
Time after HW [HH:MM]
5:37

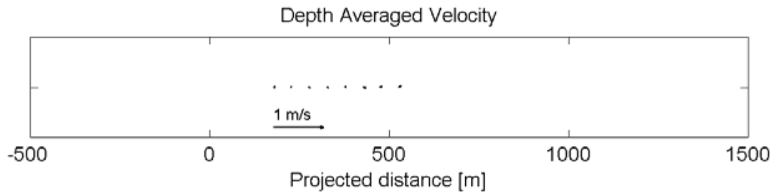
Data Processed by:
In association with :
I/RA/11283/08.089/MSA

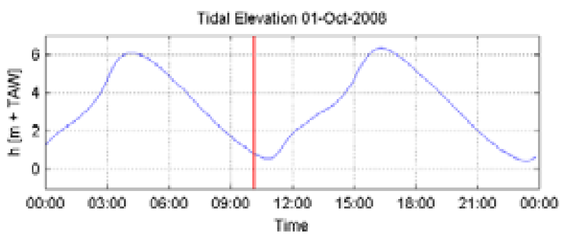
Opvolging aanslibbing DGD

11283	Equipment(s): ADCP
Sourcefile: 1028DGDtrZ000r_c.csv	Location: Deurganckdok









HW/LW: 04:10: h = 6.07 m+TAW
10:50: h = 0.59 m+TAW
16:20: h = 6.31 m+TAW

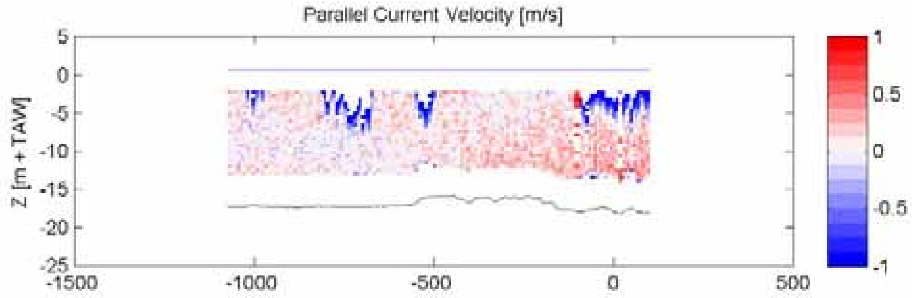
Date / Time [MET] :
01-Oct-2008
10:07 - 10:10

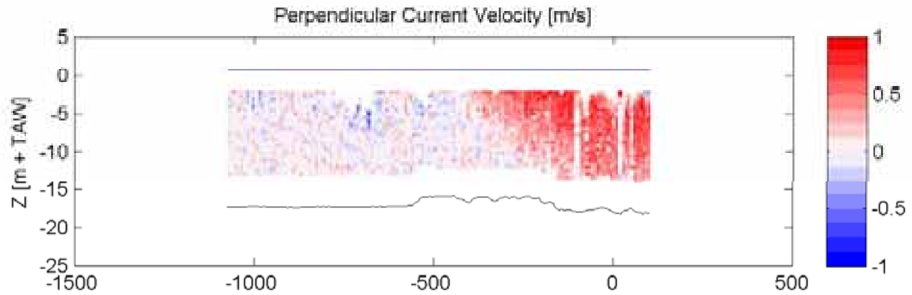
Time after HW [HH:MM]
5:58

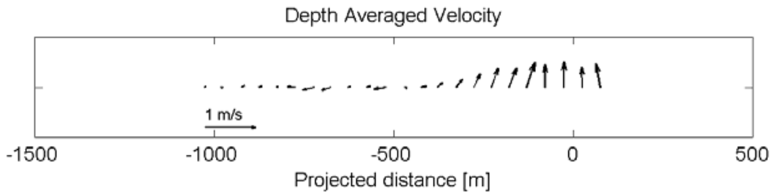
Data Processed by:
In association with :
I/RA/11283/08.089/MSA

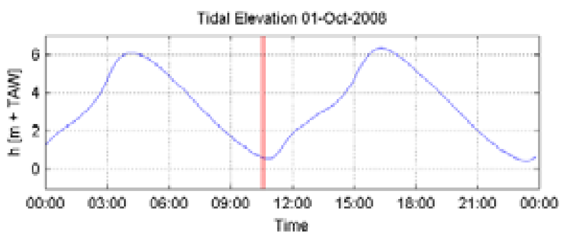
Opvolging aanslibbing DGD

11283	Equipment(s): ADCP
Sourcefile: 1031DGDtrZ000r_c.csv	Location: Deurganckdok









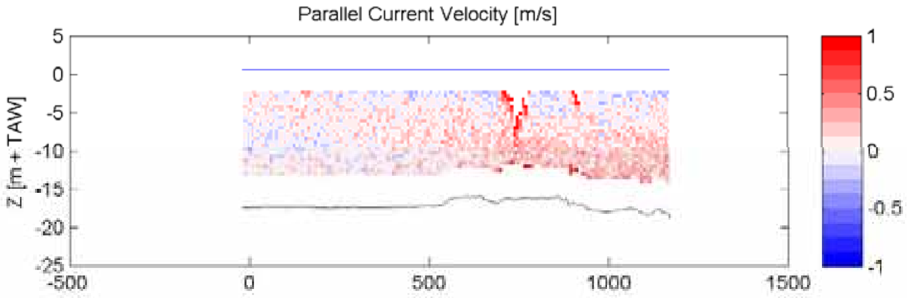
HW/LW: 04:10: h = 6.07 m+TAW
10:50: h = 0.59 m+TAW
16:20: h = 6.31 m+TAW

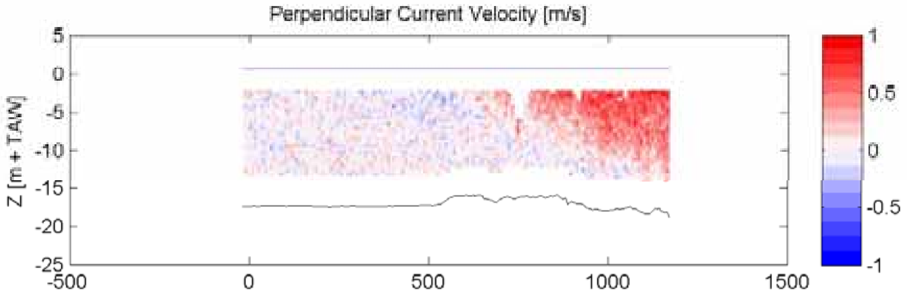
Date / Time [MET] :
01-Oct-2008
10:31 - 10:37

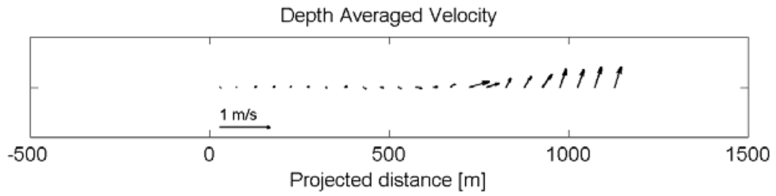
Time after HW [HH:MM]
6:24

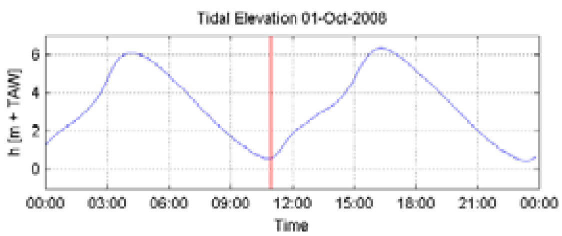
Data Processed by:
In association with :
I/RA/11283/08.089/MSA

Opvolging aanslibbing DGD	
11283	Equipment(s): ADCP
Sourcefile: 1034DGDtrZ000r_c.csv	Location: Deurganckdok









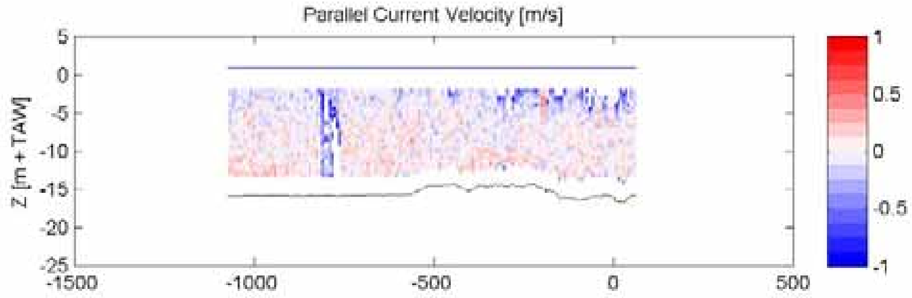
HW/LW: 04:10: h = 6.07 m+TAW
10:50: h = 0.59 m+TAW
16:20: h = 6.31 m+TAW

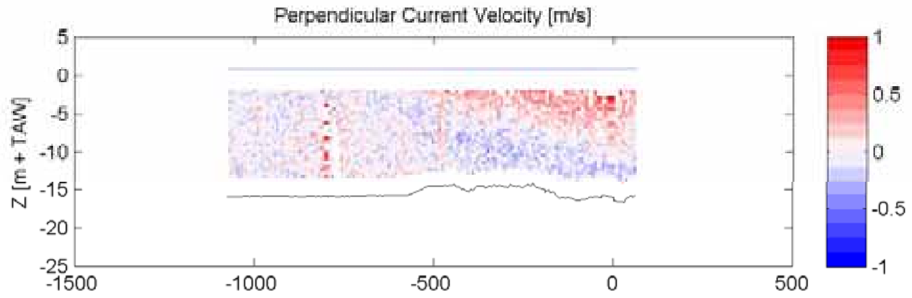
Date / Time [MET] :
01-Oct-2008
10:55 - 11:01

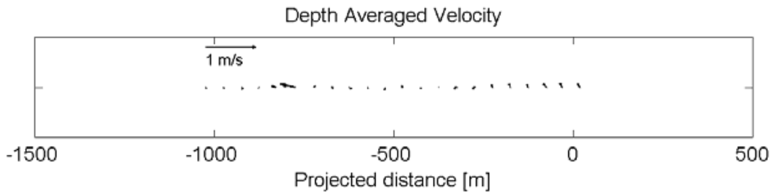
Time after HW [HH:MM]
-5:21

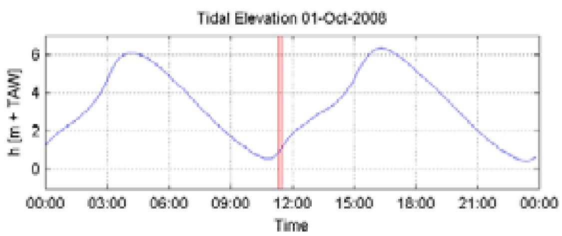
Data Processed by:
In association with :
I/RA/11283/08.089/MSA

Opvolging aanslibbing DGD	
11283	Equipment(s): ADCP
Sourcefile: 1037DGDtrZ000r_c.csv	Location: Deurganckdok









HW/LW: 04:10: h = 6.07 m+TAW
10:50: h = 0.59 m+TAW
16:20: h = 6.31 m+TAW

Date / Time [MET] :
01-Oct-2008
11:20 - 11:27
Time after HW [HH:MM]
-4:56

Data Processed by:
In association with :
I/RA/11283/08.089/MSA

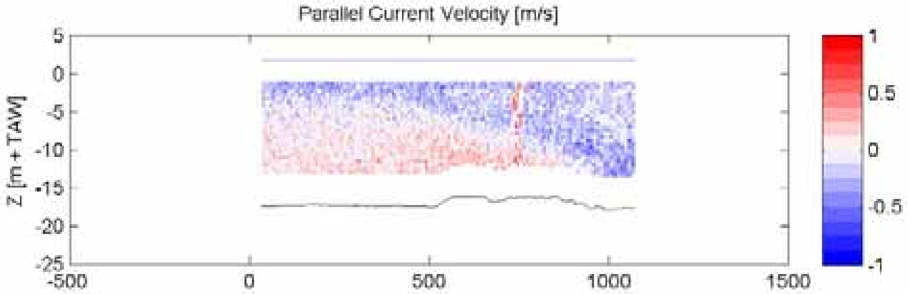
Opvolging aanslibbing DGD

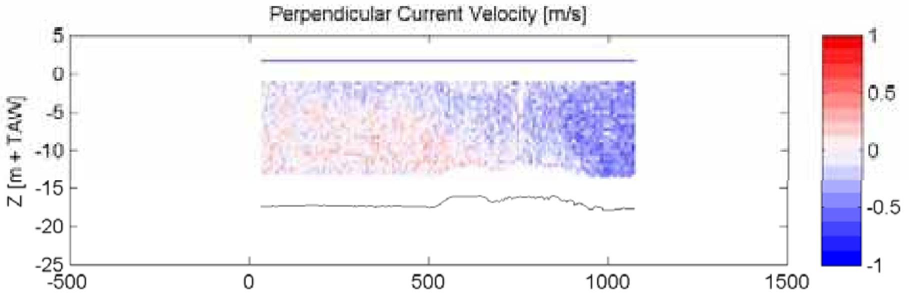
11283

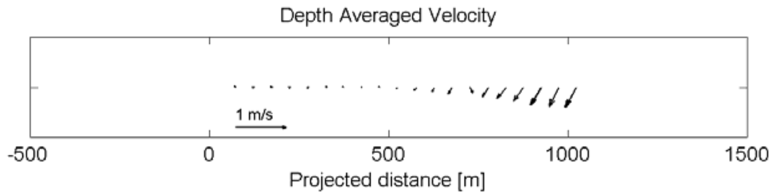
Equipment(s):
ADCP

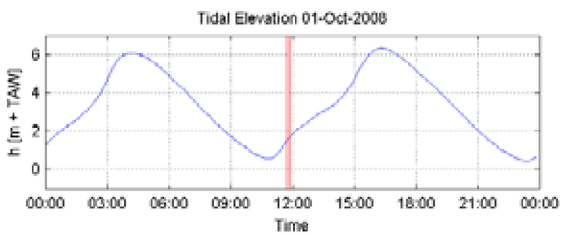
Sourcefile:
1040DGDtrZ000r_c.csv

Location:
Deurganckdok









HW/LW: 04:10: h = 6.07 m+TAW
10:50: h = 0.59 m+TAW
16:20: h = 6.31 m+TAW

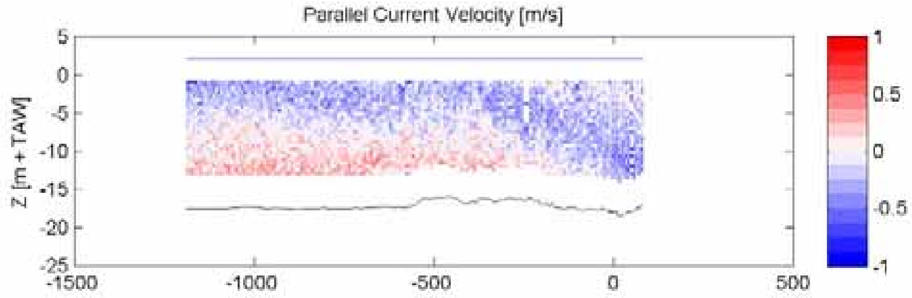
Date / Time [MET] :
01-Oct-2008
11:45 - 11:52

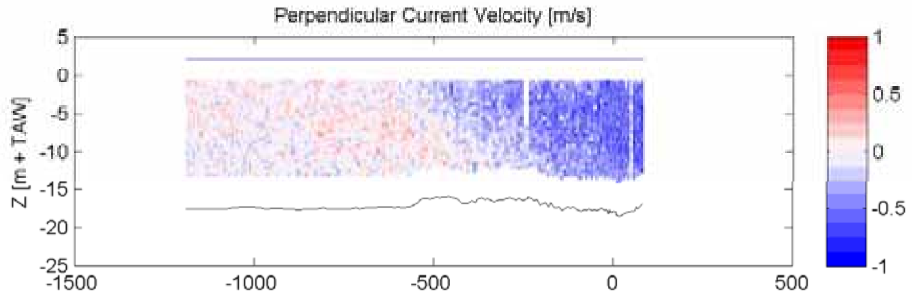
Time after HW [HH:MM]
-4:31

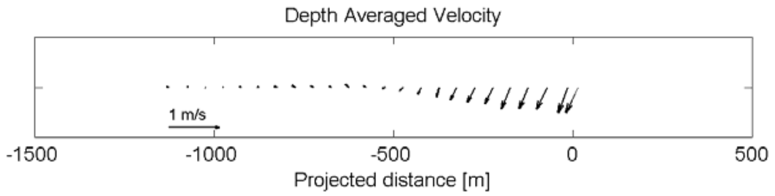
Data Processed by:
In association with :
I/RA/11283/08.089/MSA

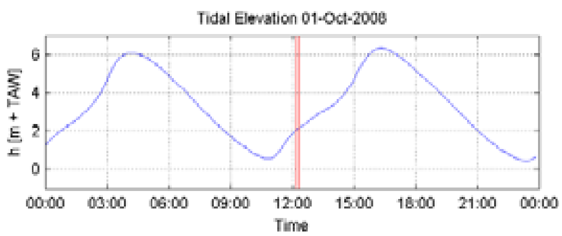
Opvolging aanslibbing DGD

11283	Equipment(s): ADCP
Sourcefile: 1043DGDtrZ000r_c.csv	Location: Deurganckdok









HW/LW: 04:10: h = 6.07 m+TAW
10:50: h = 0.59 m+TAW
16:20: h = 6.31 m+TAW

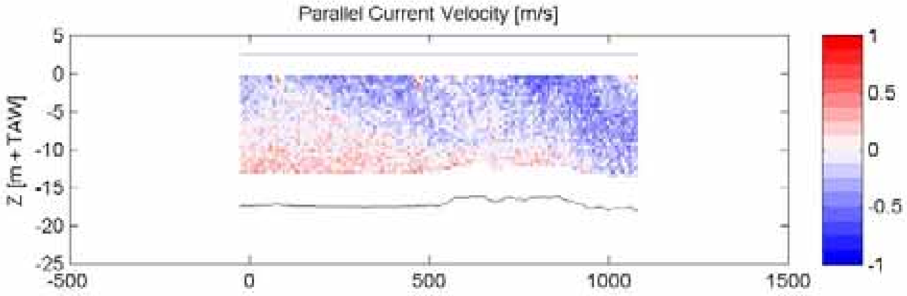
Date / Time [MET] :
01-Oct-2008
12:10 - 12:19

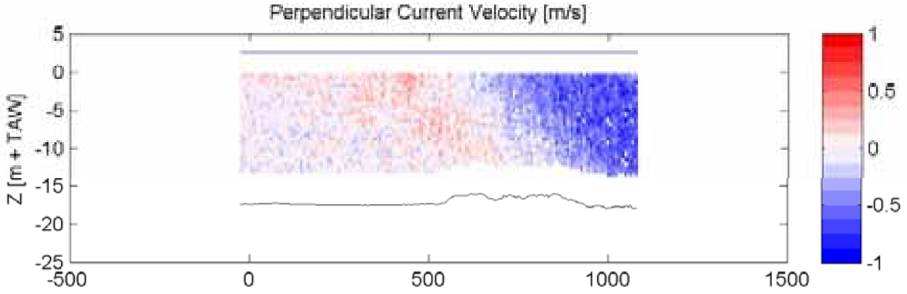
Time after HW [HH:MM]
-4:05

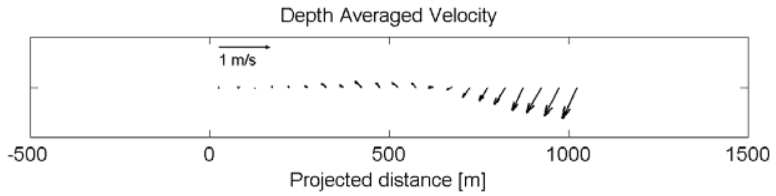
Data Processed by:
In association with :
I/RA/11283/08.089/MSA

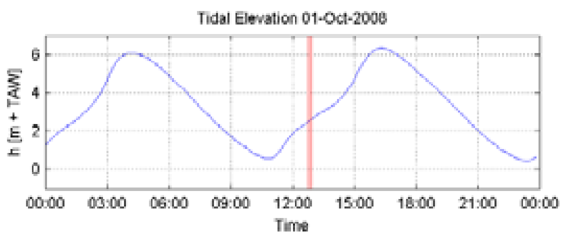
Opvolging aanslibbing DGD

11283	Equipment(s): ADCP
Sourcefile: 1046DGDtrZ000r_c.csv	Location: Deurganckdok









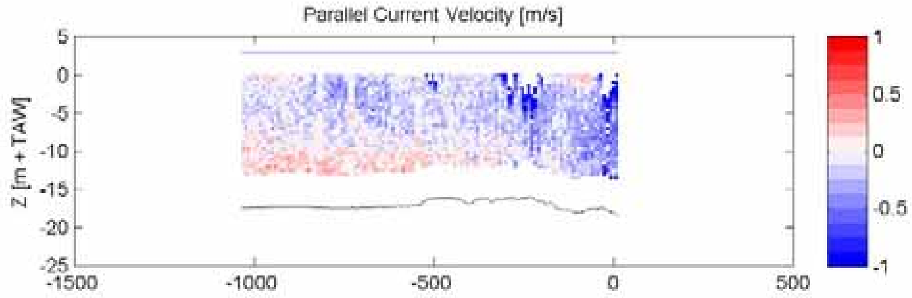
HW/LW: 04:10: h = 6.07 m+TAW
10:50: h = 0.59 m+TAW
16:20: h = 6.31 m+TAW

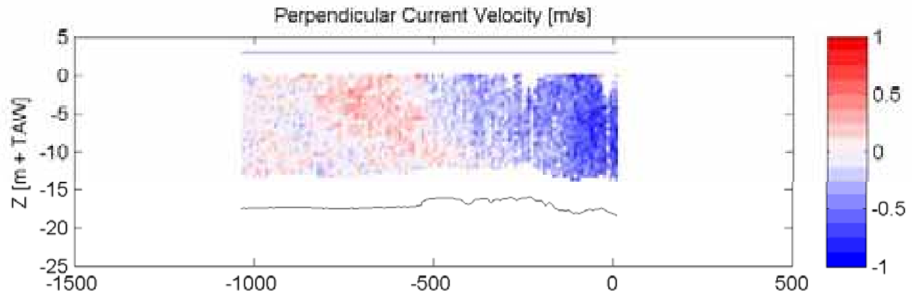
Date / Time [MET] :
01-Oct-2008
12:47 - 12:54
Time after HW [HH:MM]
-3:29

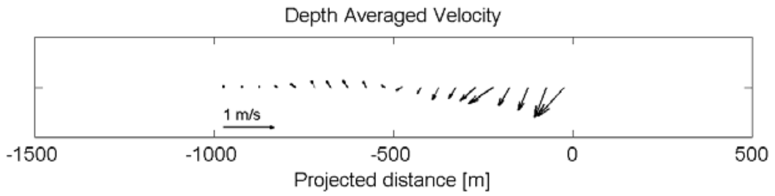
Data Processed by:
In association with :
I/RA/11283/08.089/MSA

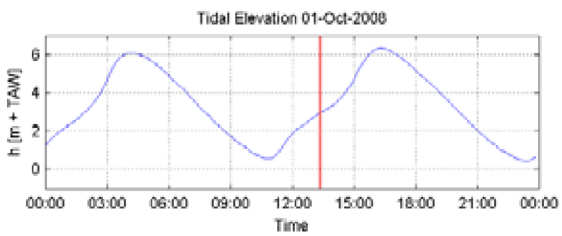
Opvolging aanslibbing DGD

11283	Equipment(s): ADCP
Sourcefile: 1049DGDtrZ000r_c.csv	Location: Deurganckdok









HW/LW: 04:10: h = 6.07 m+TAW
10:50: h = 0.59 m+TAW
16:20: h = 6.31 m+TAW

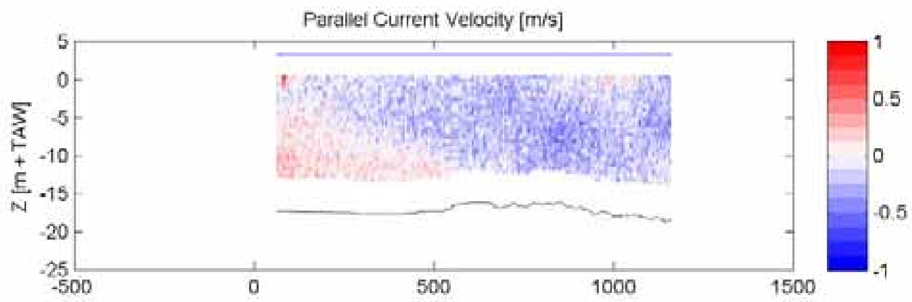
Date / Time [MET] :
01-Oct-2008
13:18 - 13:24

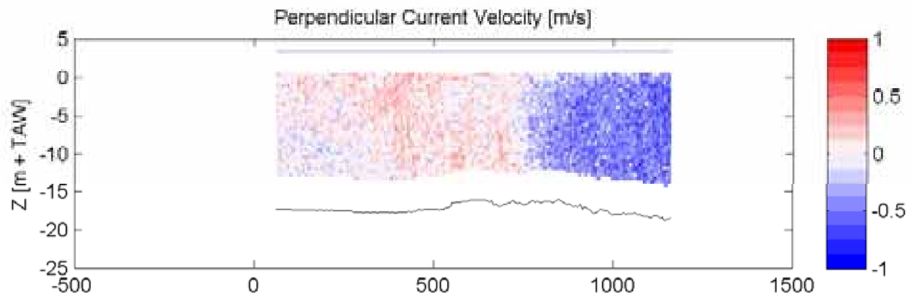
Time after HW [HH:MM]
-2:58

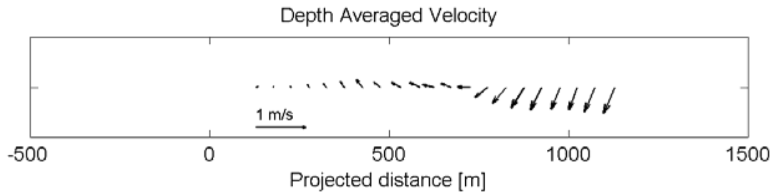
Data Processed by:
In association with :
I/RA/11283/08.089/MSA

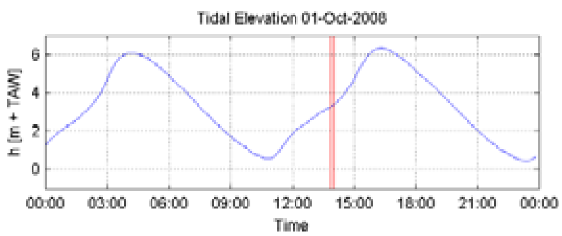
Opvolging aanslibbing DGD

11283	Equipment(s): ADCP
Sourcefile: 1052DGDtrZ000r_c.csv	Location: Deurganckdok









HW/LW: 04:10: h = 6.07 m+TAW
10:50: h = 0.59 m+TAW
16:20: h = 6.31 m+TAW

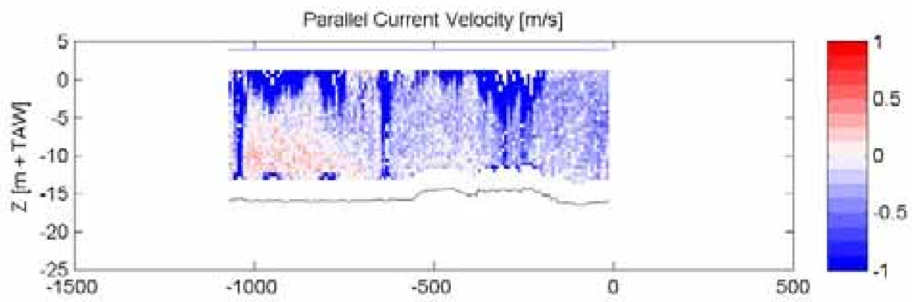
Date / Time [MET] :
01-Oct-2008
13:52 - 14:00

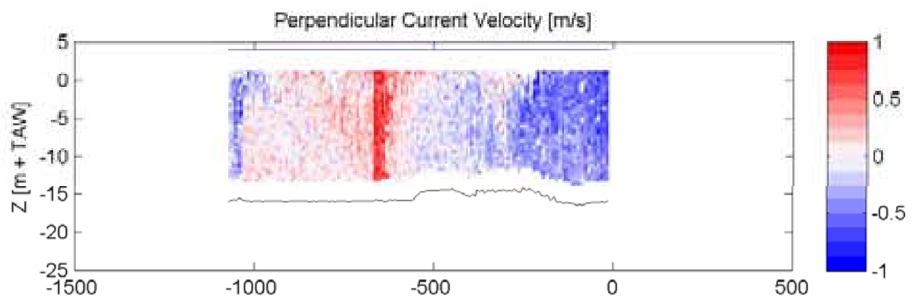
Time after HW [HH:MM]
-2:23

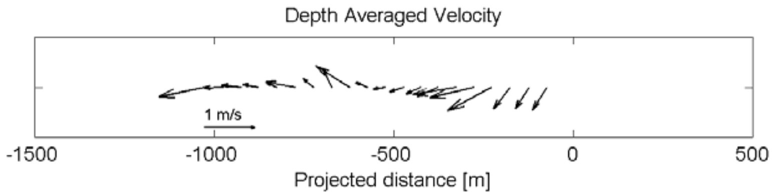
Data Processed by:
In association with :
I/RA/11283/08.089/MSA

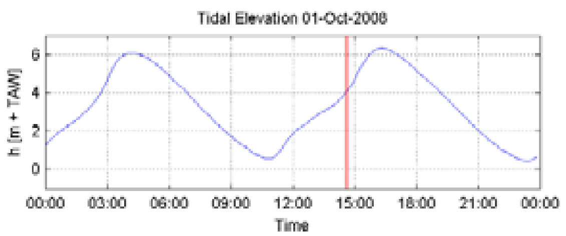
Opvolging aanslibbing DGD

11283	Equipment(s): ADCP
Sourcefile: 1055DGDtrZ000r_c.csv	Location: Deurganckdok









HW/LW: 04:10: h = 6.07 m+TAW
10:50: h = 0.59 m+TAW
16:20: h = 6.31 m+TAW

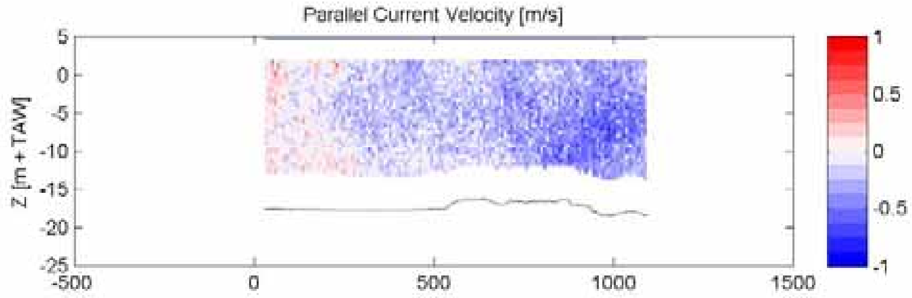
Date / Time [MET] :
01-Oct-2008
14:33 - 14:40

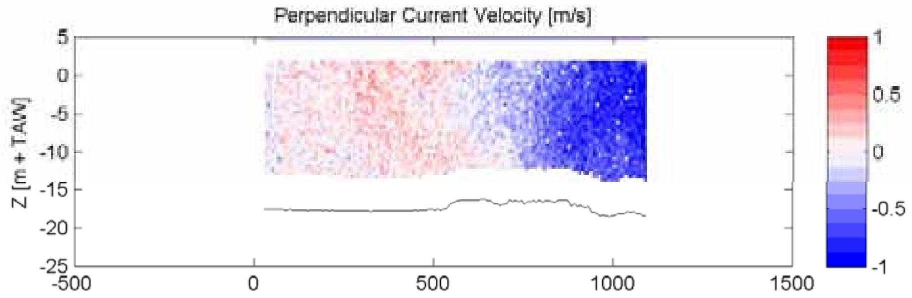
Time after HW [HH:MM]
-1:42

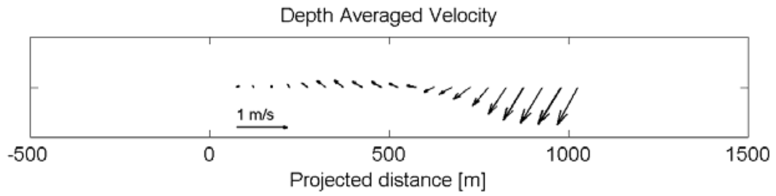
Data Processed by:
In association with :
I/RA/11283/08.089/MSA

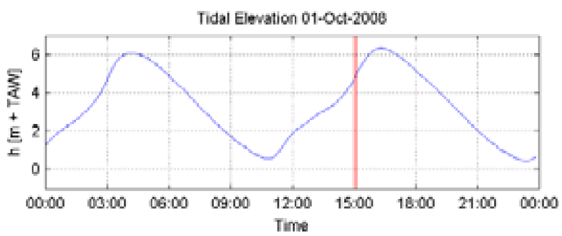
Opvolging aanslibbing DGD

11283	Equipment(s): ADCP
Sourcefile: 1058DGDtrZ000r_c.csv	Location: Deurganckdok









HW/LW: 04:10: h = 6.07 m+TAW
10:50: h = 0.59 m+TAW
16:20: h = 6.31 m+TAW

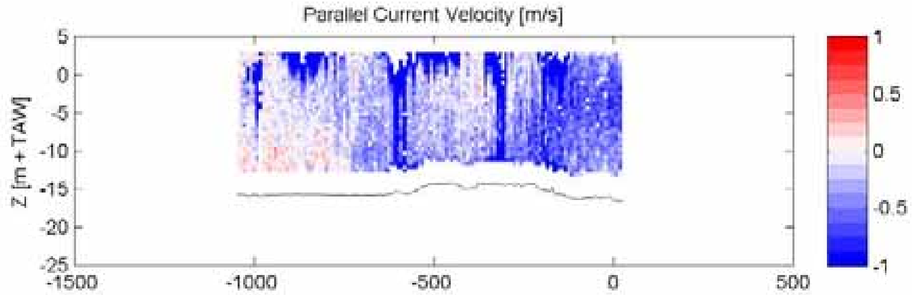
Date / Time [MET] :
01-Oct-2008
15:01 - 15:07

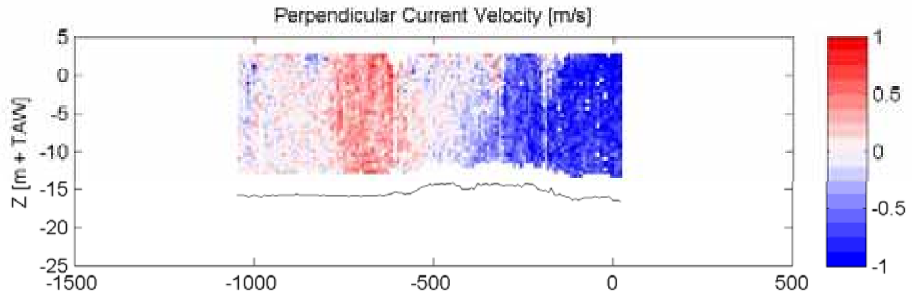
Time after HW [HH:MM]
-1:15

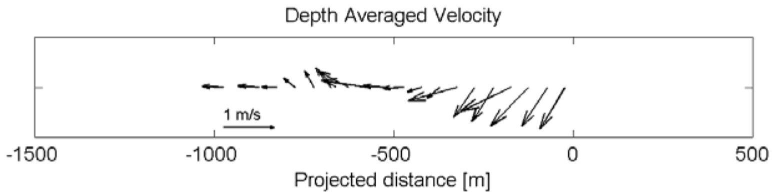
Data Processed by:
In association with :
I/RA/11283/08.089/MSA

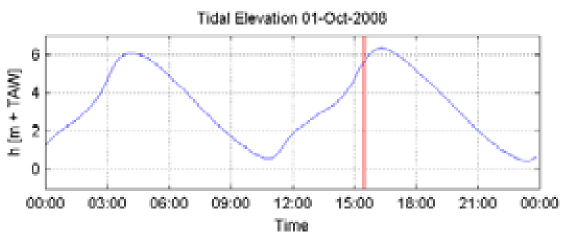
Opvolging aanslibbing DGD

11283	Equipment(s): ADCP
Sourcefile: 1061DGDtrZ000r_c.csv	Location: Deurganckdok









HW/LW: 04:10: h = 6.07 m+TAW
10:50: h = 0.59 m+TAW
16:20: h = 6.31 m+TAW

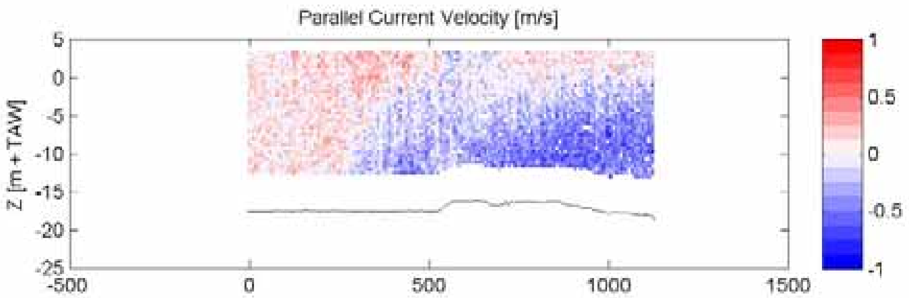
Date / Time [MET] :
01-Oct-2008
15:26 - 15:32

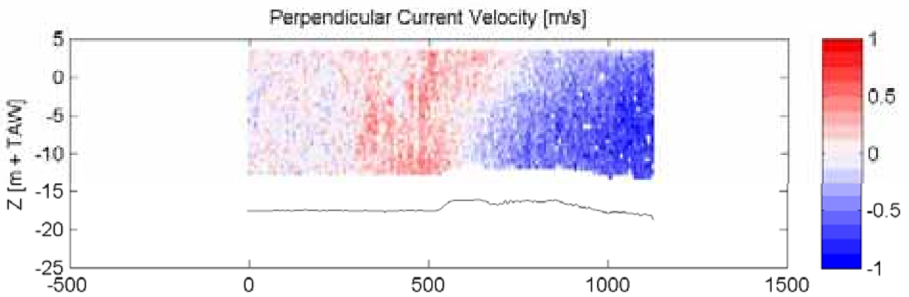
Time after HW [HH:MM]
-0:50

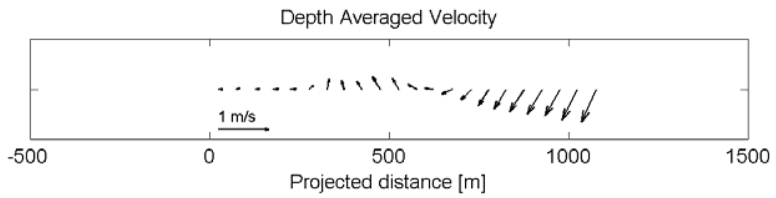
Data Processed by:
In association with :
I/RA/11283/08.089/MSA

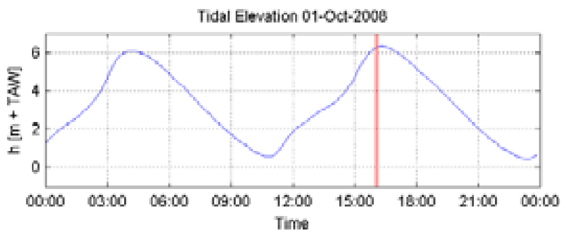
Opvolging aanslibbing DGD

11283	Equipment(s): ADCP
Sourcefile: 1064DGDtrZ000r_c.csv	Location: Deurganckdok









HW/LW: 04:10: h = 6.07 m+TAW
10:50: h = 0.59 m+TAW
16:20: h = 6.31 m+TAW

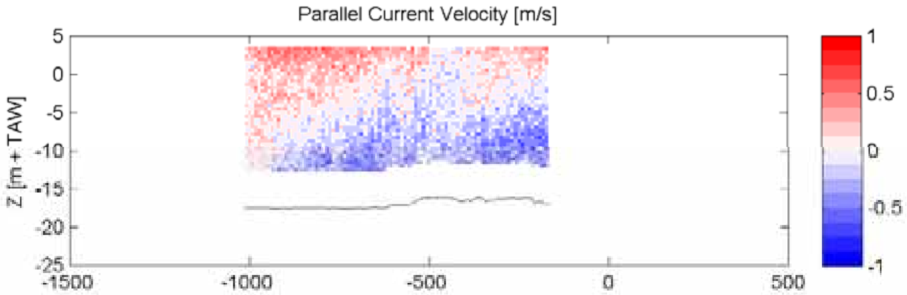
Date / Time [MET] :
01-Oct-2008
16:01 - 16:08

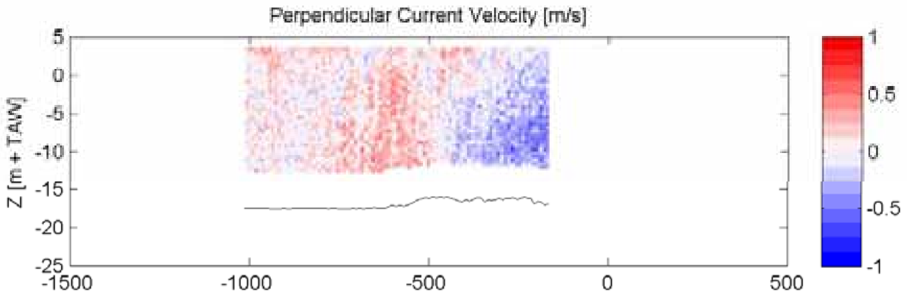
Time after HW [HH:MM]
-0:15

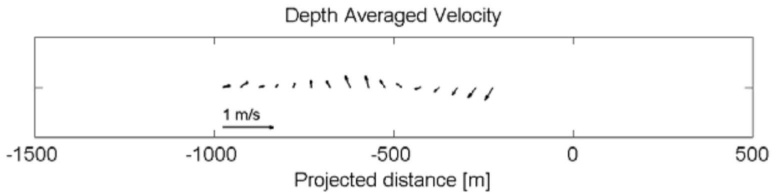
Data Processed by:
In association with :
I/RA/11283/08.089/MSA

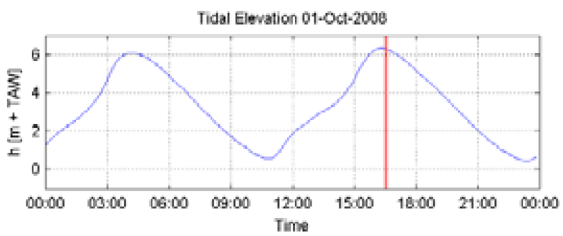
Opvolging aanslibbing DGD

11283	Equipment(s): ADCP
Sourcefile: 1067DGDtrZ000r_c.csv	Location: Deurganckdok









HW/LW: 04:10: h = 6.07 m+TAW
10:50: h = 0.59 m+TAW
16:20: h = 6.31 m+TAW

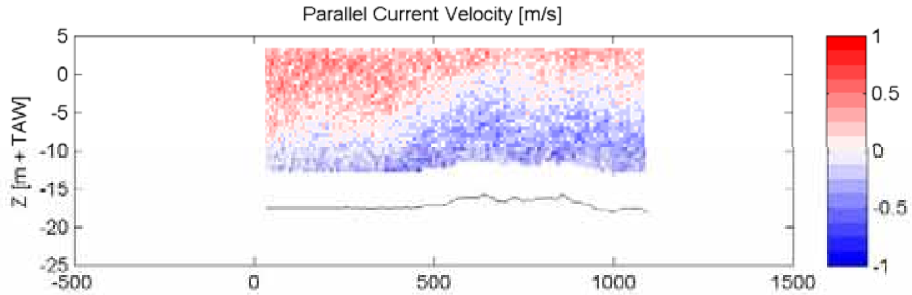
Date / Time [MET] :
01-Oct-2008
16:29 - 16:33

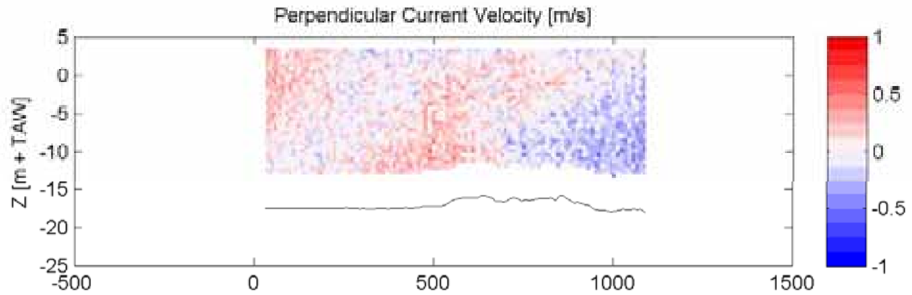
Time after HW [HH:MM]
0:11

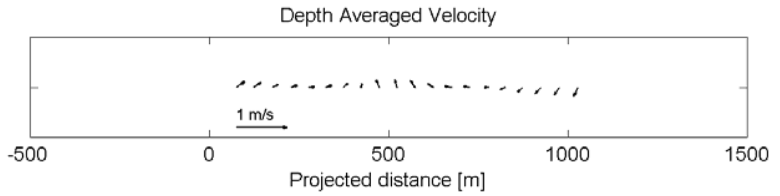
Data Processed by:
In association with :
I/RA/11283/08.089/MSA

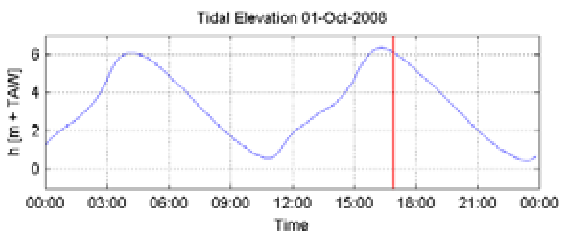
Opvolging aanslibbing DGD

11283	Equipment(s): ADCP
Sourcefile: 1070DGDtrZ000r_c.csv	Location: Deurganckdok









HW/LW: 04:10: h = 6.07 m+TAW
10:50: h = 0.59 m+TAW
16:20: h = 6.31 m+TAW

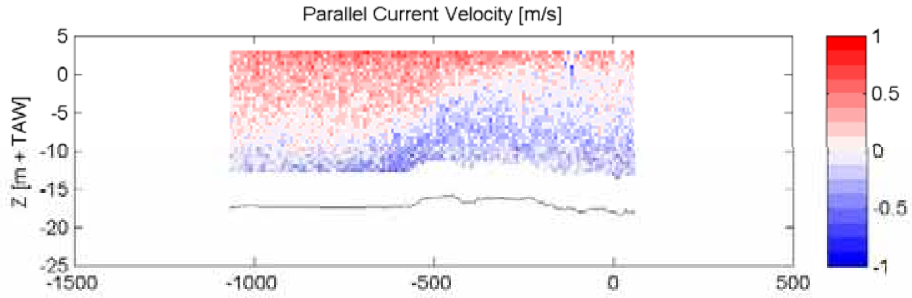
Date / Time [MET] :
01-Oct-2008
16:52 - 16:57

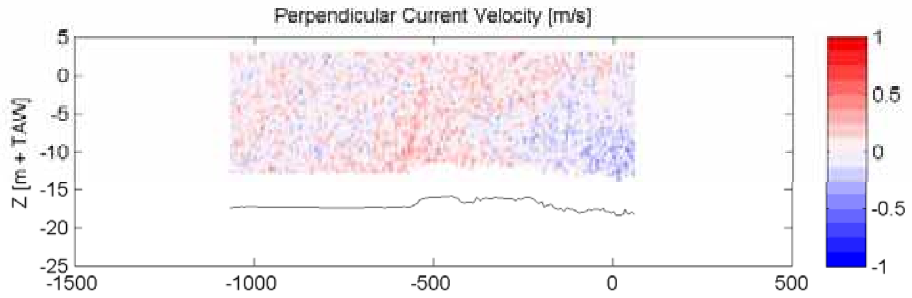
Time after HW [HH:MM]
0:35

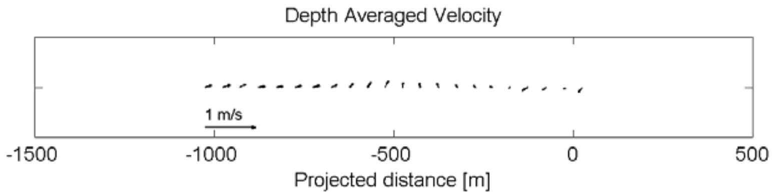
Data Processed by:
In association with :
I/RA/11283/08.089/MSA

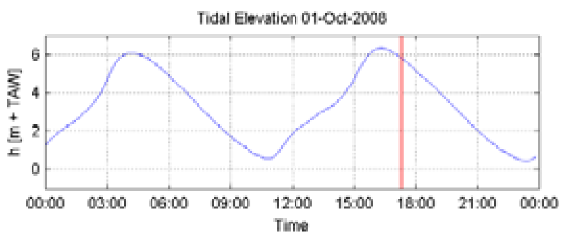
Opvolging aanslibbing DGD

11283	Equipment(s): ADCP
Sourcefile: 1073DGDtrZ000r_c.csv	Location: Deurganckdok









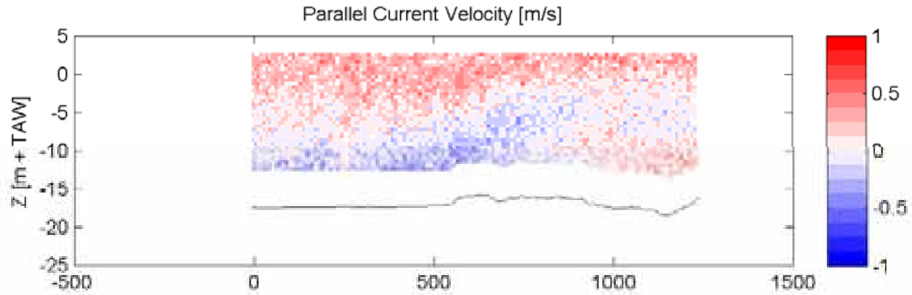
HW/LW: 04:10: h = 6.07 m+TAW
10:50: h = 0.59 m+TAW
16:20: h = 6.31 m+TAW

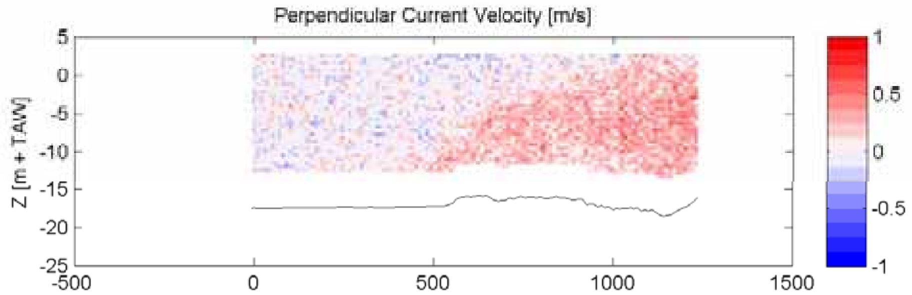
Date / Time [MET] :
01-Oct-2008
17:15 - 17:21

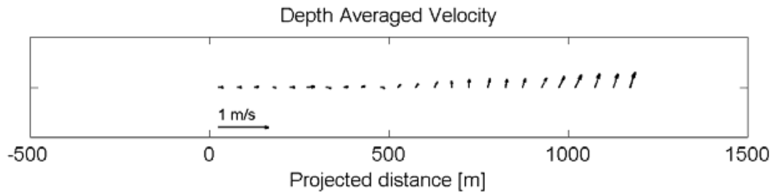
Time after HW [HH:MM]
0:58

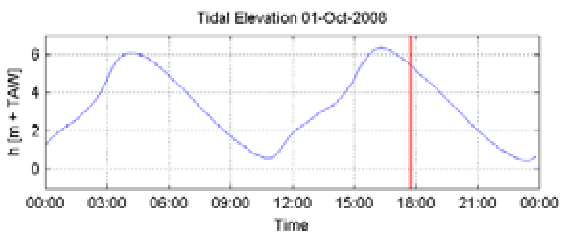
Data Processed by:
In association with :
I/RA/11283/08.089/MSA

Opvolging aanslibbing DGD	
11283	Equipment(s): ADCP
Sourcefile: 1076DGDtrZ000r_c.csv	Location: Deurganckdok









HW/LW: 04:10: h = 6.07 m+TAW
10:50: h = 0.59 m+TAW
16:20: h = 6.31 m+TAW

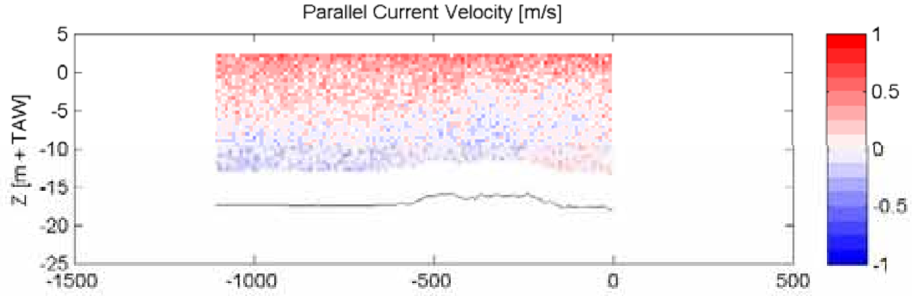
Date / Time [MET] :
01-Oct-2008
17:41 - 17:47
Time after HW [HH:MM]
1:24

Data Processed by:
In association with :
I/RA/11283/08.089/MSA

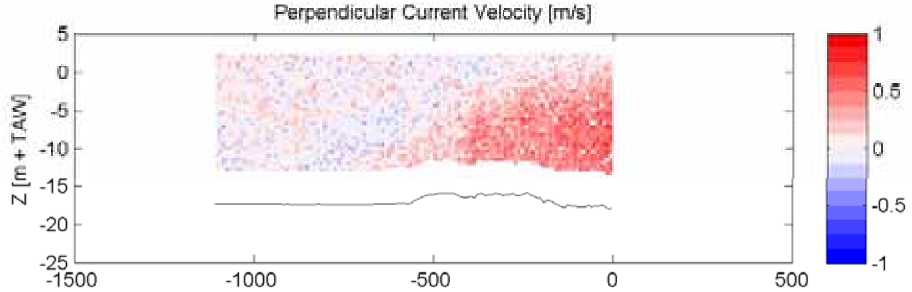
Opvolging aanslibbing DGD

11283	Equipment(s): ADCP
Sourcefile: 1079DGDtrZ000r_c.csv	Location: Deurganckdok

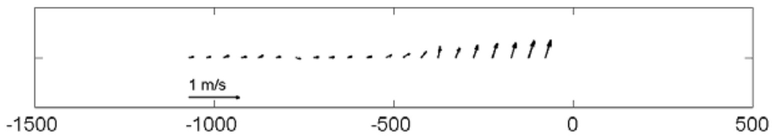
Parallel Current Velocity [m/s]



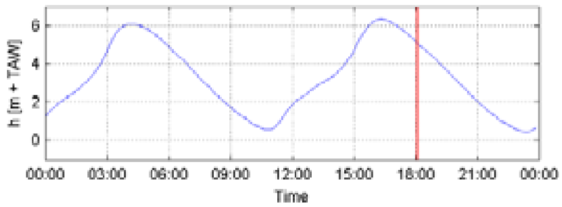
Perpendicular Current Velocity [m/s]



Depth Averaged Velocity



Tidal Elevation 01-Oct-2008



HW/LW: 04:10: h = 6.07 m+TAW
10:50: h = 0.59 m+TAW
16:20: h = 6.31 m+TAW

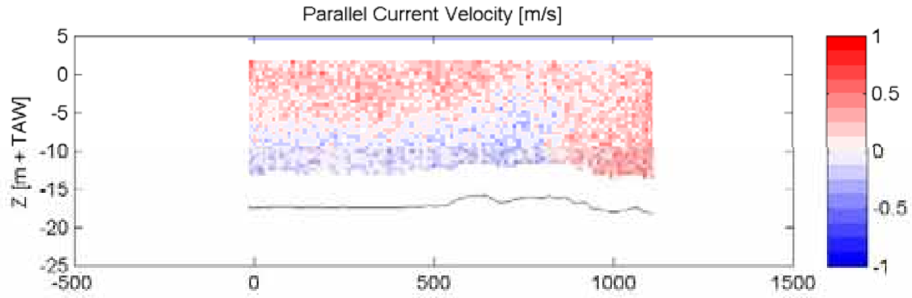
Date / Time [MET] :
01-Oct-2008
18:02 - 18:08

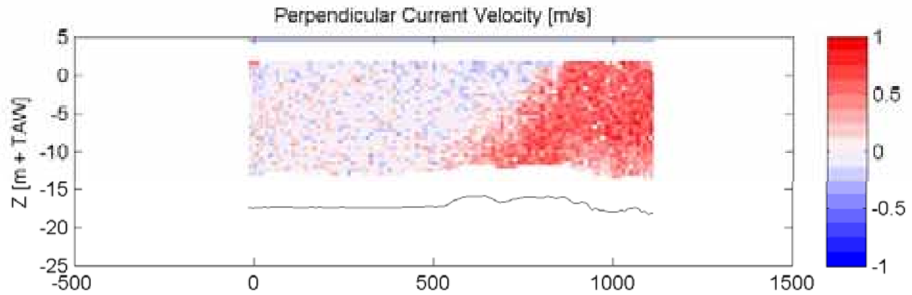
Time after HW [HH:MM]
1:45

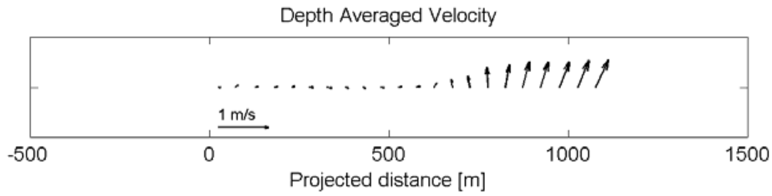
Data Processed by:
In association with :
I/RA/11283/08.089/MSA

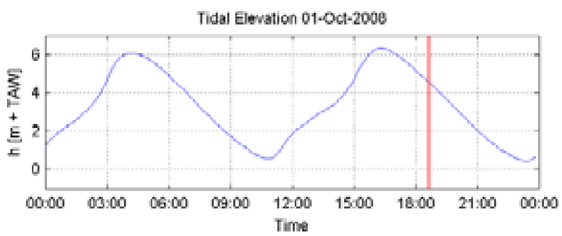
Opvolging aanslibbing DGD

11283	Equipment(s): ADCP
Sourcefile: 1083DGDtrZ000r_c.csv	Location: Deurganckdok









HW/LW: 04:10: h = 6.07 m+TAW
10:50: h = 0.59 m+TAW
16:20: h = 6.31 m+TAW

Date / Time [MET] :
01-Oct-2008
18:37 - 18:41

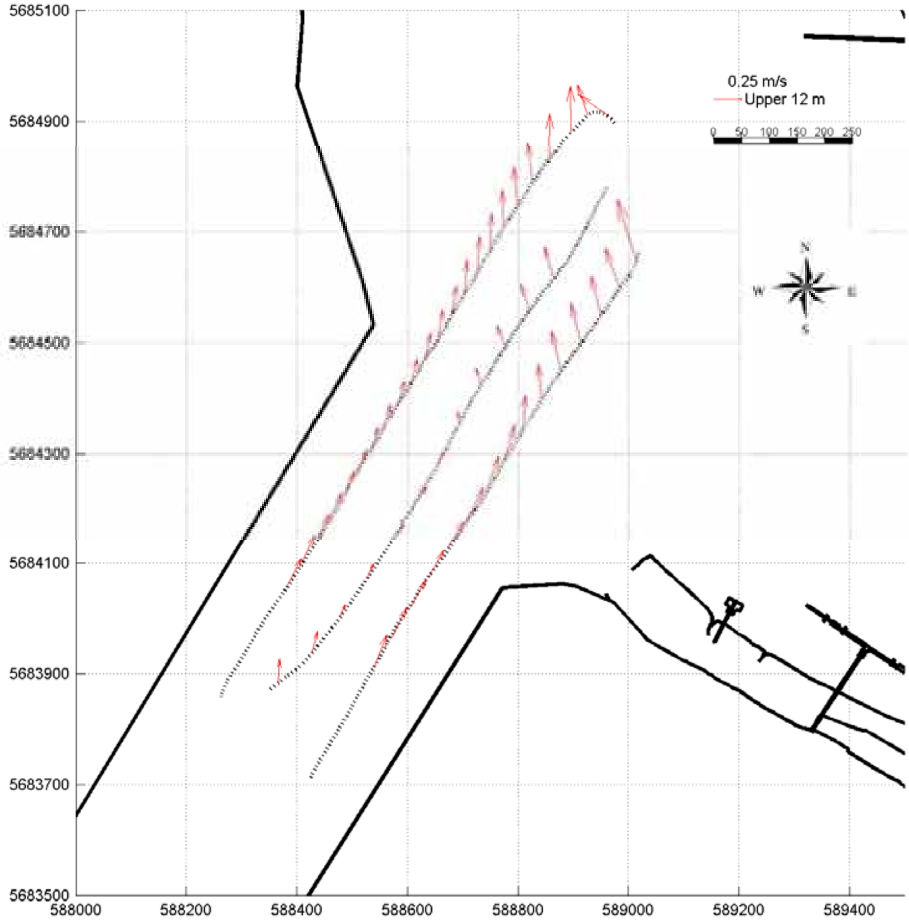
Time after HW [HH:MM]
2:19

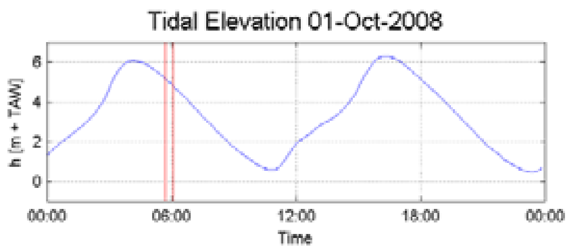
Data Processed by:
In association with :
I/RA/11283/08.089/MSA

APPENDIX F. MAPS OF THE MEASURED DEPTH AVERAGED VELOCITY FIELDS

11283 Opvolging aanslibbing DGD

	Equipment(s): ADCP
Sourcefile: 1001DGDtrX000r_c	Location: Deurganckdok





Slack water Liefkenshoek:
04:10: h = 6.07 m+TAW
16:20: h = 6.31 m+TAW
10:50: h = 0.59 m+TAW

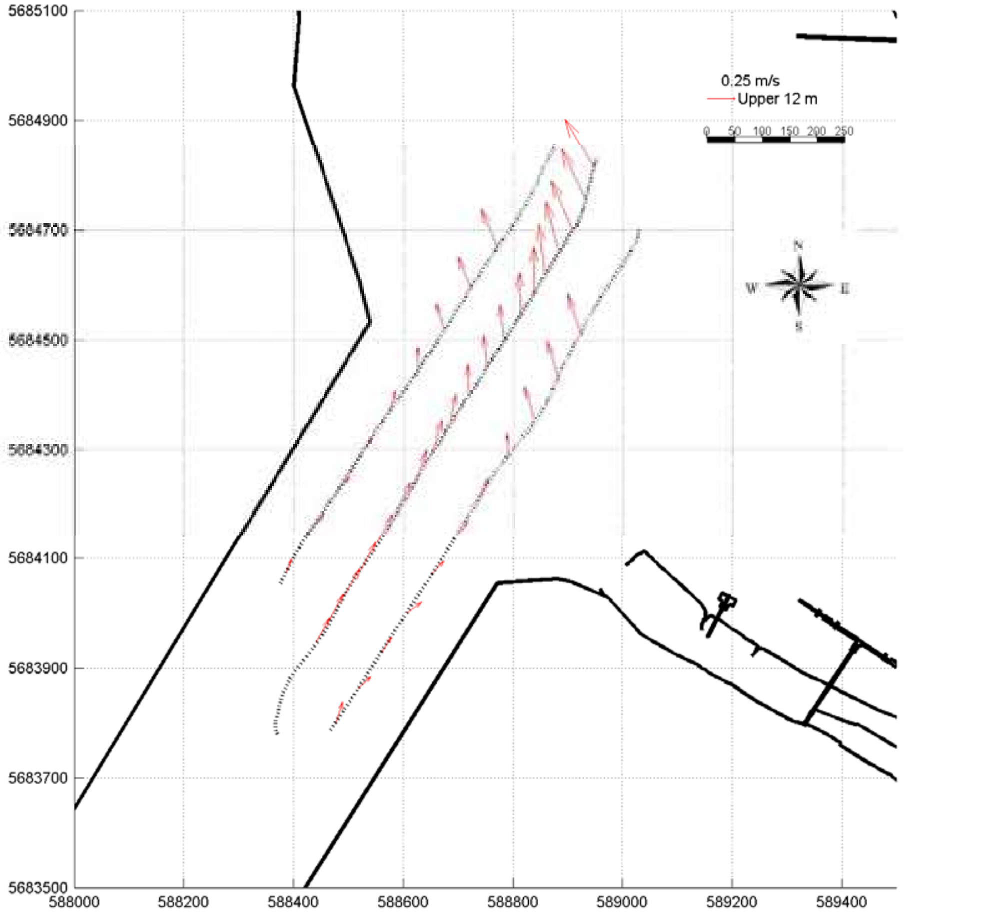
Date / Time [MET] :
01-Oct-2008
05:42 - 06:05

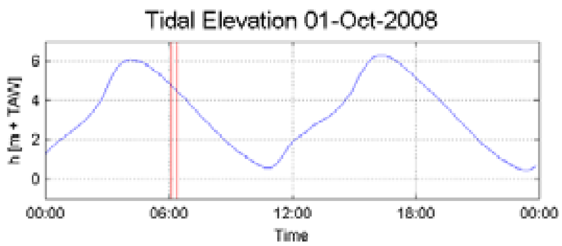
Time after HW Liefkenshoek [HH:MM]
1:43

Data Processed by: IMDC
In association with : wL | delft hydraulics
I/RA/11283/08.089/MSA

11283 Opvolging aanslibbing DGD

	Equipment(s): ADCP
Sourcefile: 1004DGDtrX000r_c	Location: Deurganckdok





Slack water Liefkenshoek: 04:10: h = 6.07 m+TAW
16:20: h = 6.31 m+TAW
10:50: h = 0.59 m+TAW

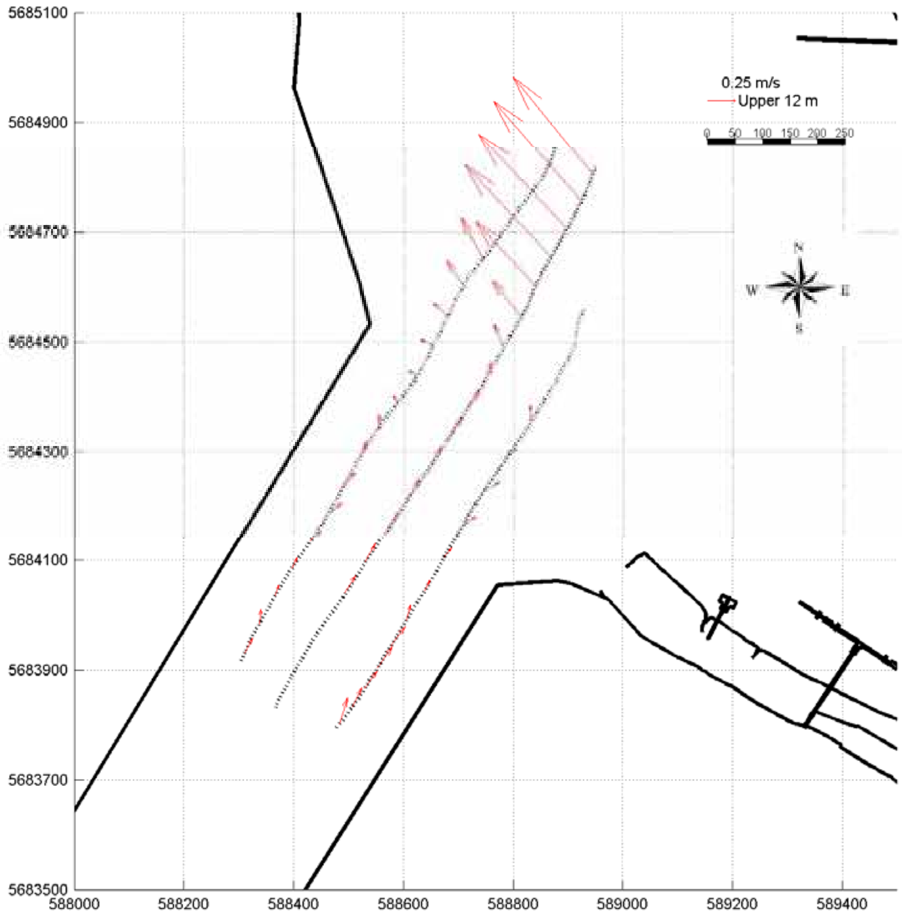
Date / Time [MET] :
01-Oct-2008
06:07 - 06:24

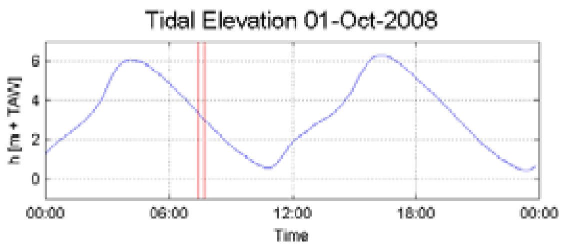
Time after HW Liefkenshoek [HH:MM]
2:06

Data Processed by: IMDC
In association with : wl | delft hydraulics
I/RA/11283/08.089/MSA

11283 Opvolging aanslibbing DGD

	Equipment(s): ADCP
Sourcefile: 1008DGDtrX000r_c	Location: Deurganckdok





Slack water Liefkenshoek:
04:10: h = 6.07 m+TAW
16:20: h = 6.31 m+TAW
10:50: h = 0.59 m+TAW

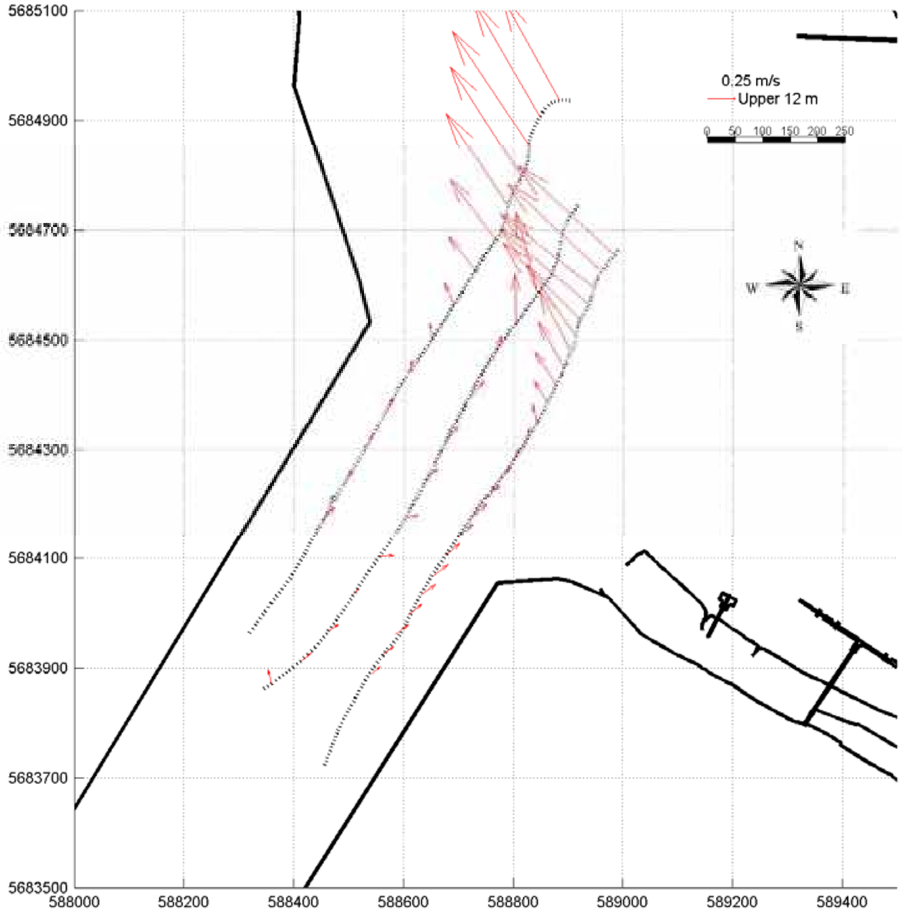
Date / Time [MET] :
01-Oct-2008
07:24 - 07:44

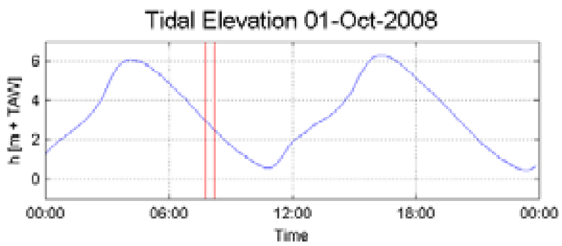
Time after HW Liefkenshoek [HH:MM]
3:24

Data Processed by: IMDC
In association with : wl | delft hydraulics
I/RA/11283/08.089/MSA

11283 Opvolging aanslibbing DGD

	Equipment(s): ADCP
Sourcefile: 1011DGDtrX000r_c	Location: Deurganckdok





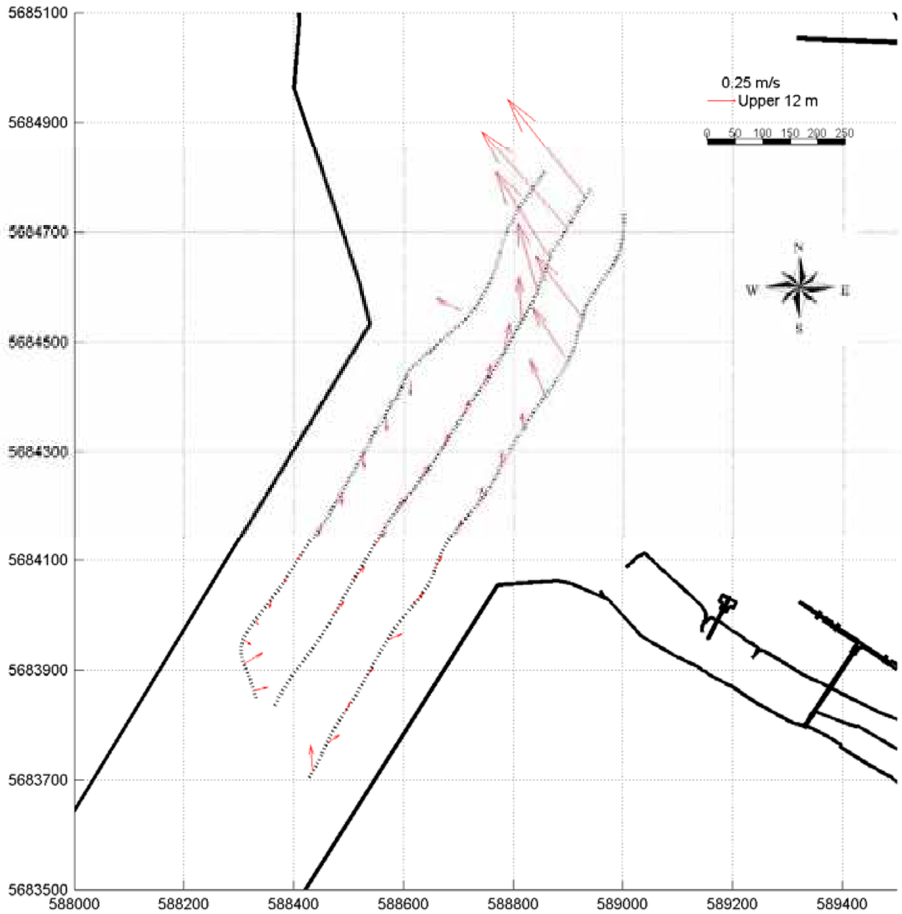
Slack water Liefkenshoek:
04:10: h = 6.07 m+TAW
16:20: h = 6.31 m+TAW
10:50: h = 0.59 m+TAW

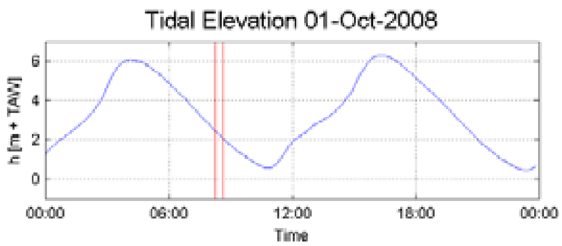
Date / Time [MET] :
01-Oct-2008
07:47 - 08:13

Time after HW Liefkenshoek [HH:MM]
3:50

Data Processed by: IMDC
In association with : wl | delft hydraulics
I/RA/11283/08.089/MSA

11283 Opvolging aanslibbing DGD	
	Equipment(s): ADCP
Sourcefile: 1014DGDtrX000r_c	Location: Deurganckdok





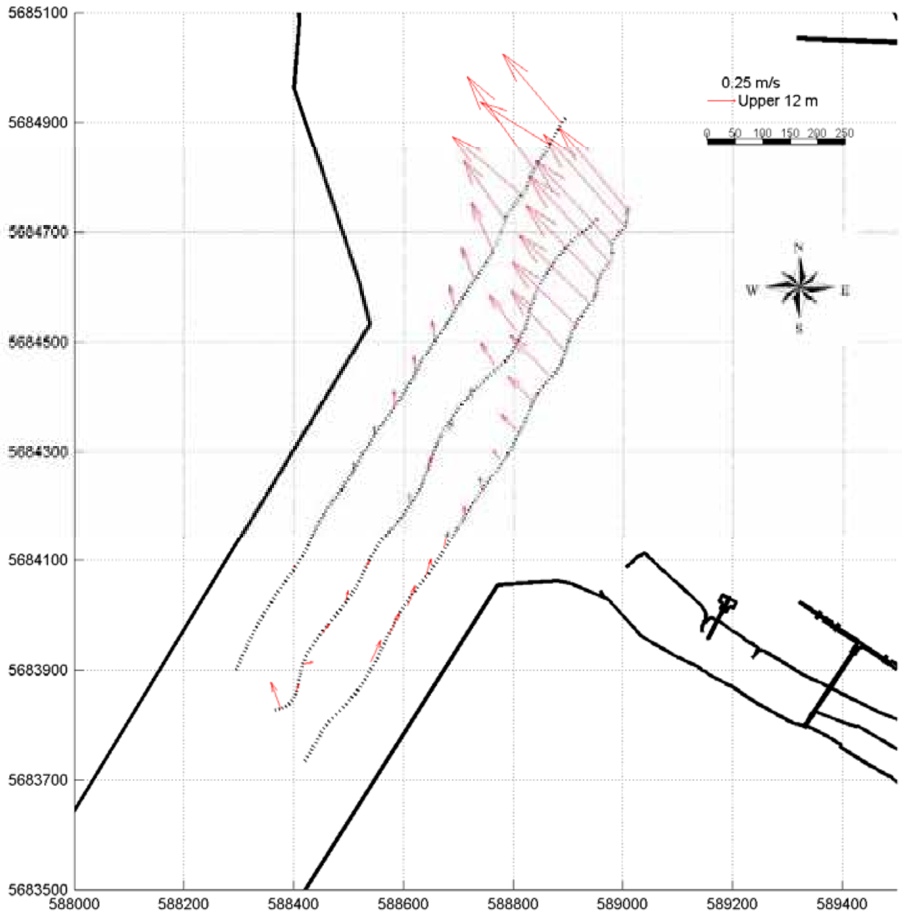
Slack water Liefkenshoek:
04:10: h = 6.07 m+TAW
16:20: h = 6.31 m+TAW
10:50: h = 0.59 m+TAW

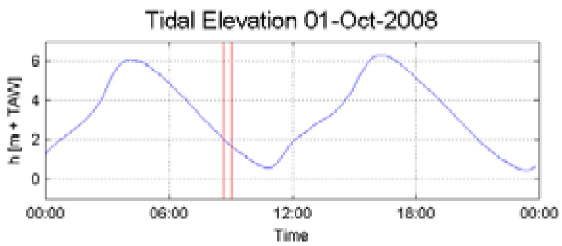
Date / Time [MET] :
01-Oct-2008
08:15 - 08:37

Time after HW Liefkenshoek [HH:MM]
4:16

Data Processed by: IMDC
In association with : wL | delft hydraulics
I/RA/11283/08.089/MSA

11283 Opvolging aanslibbing DGD	
	Equipment(s): ADCP
Sourcefile: 1017DGDtrX000r_c	Location: Deurganckdok





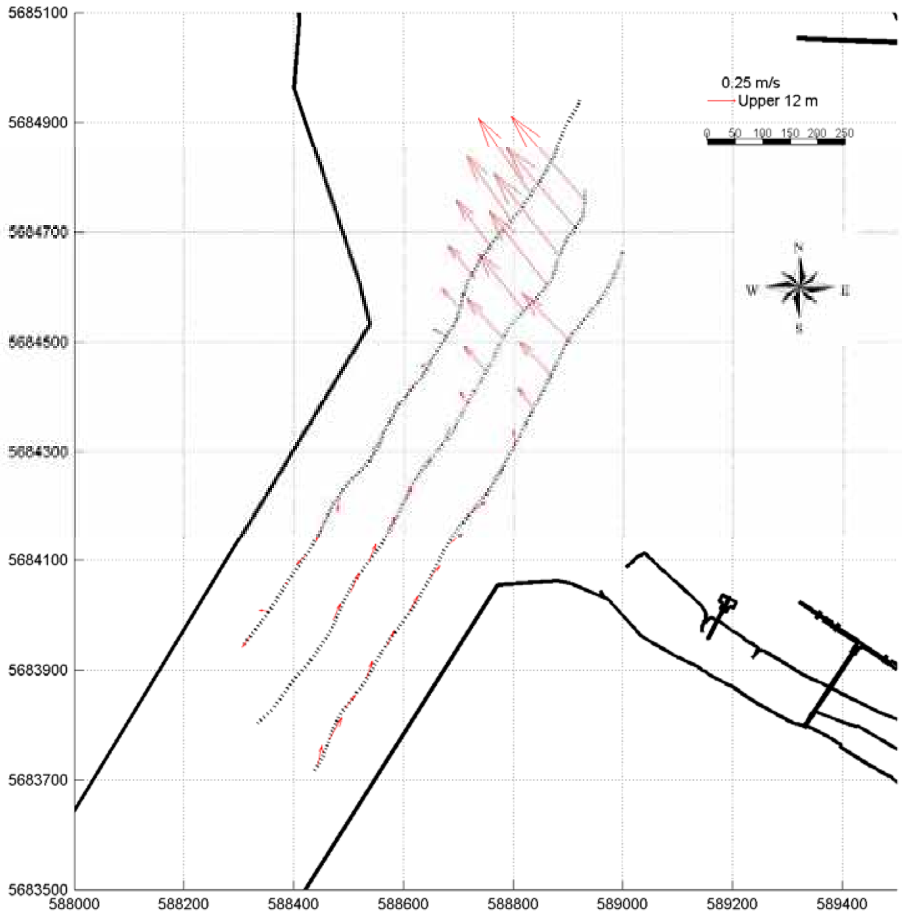
Slack water Liefkenshoek:
04:10: h = 6.07 m+TAW
16:20: h = 6.31 m+TAW
10:50: h = 0.59 m+TAW

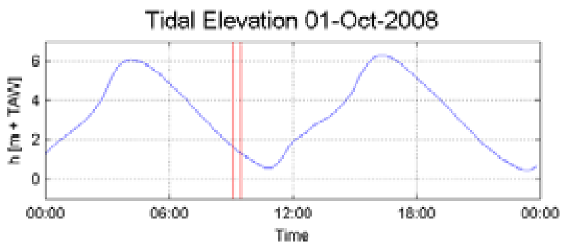
Date / Time [MET] :
01-Oct-2008
08:39 - 09:02

Time after HW Liefkenshoek [HH:MM]
4:41

Data Processed by: IMDC
In association with : wl | delft hydraulics
I/RA/11283/08.089/MSA

11283 Opvolging aanslibbing DGD	
	Equipment(s): ADCP
Sourcefile: 1020DGDtrX000r_c	Location: Deurganckdok





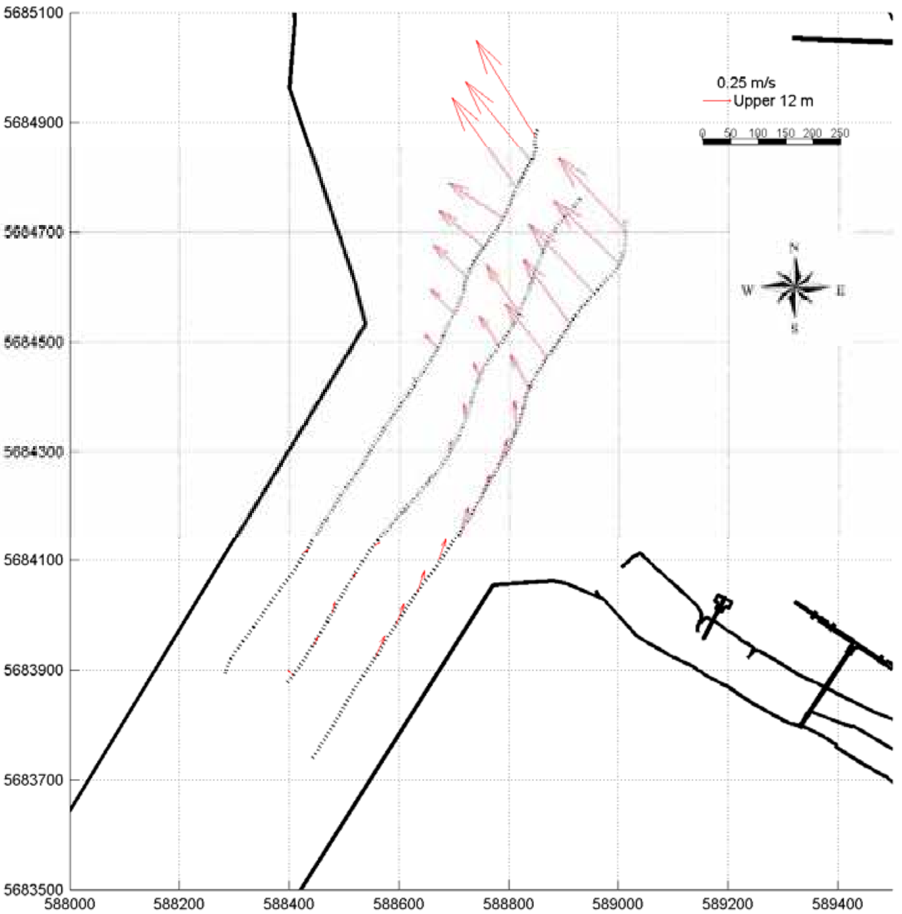
Slack water Liefkenshoek:
04:10: h = 6.07 m+TAW
16:20: h = 6.31 m+TAW
10:50: h = 0.59 m+TAW

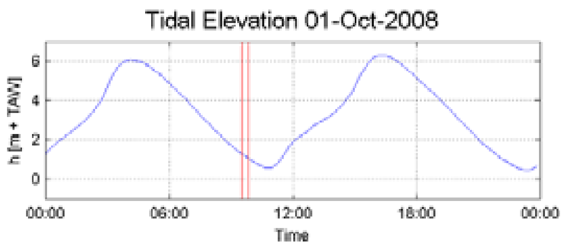
Date / Time [MET] :
01-Oct-2008
09:05 - 09:29

Time after HW Liefkenshoek [HH:MM]
5:07

Data Processed by: IMDC
In association with : wl | delft hydraulics
I/RA/11283/08.089/MSA

11283 Opvolging aanslibbing DGD	
	Equipment(s): ADCP
Sourcefile: 1023DGDtrX000r_c	Location: Deurganckdok





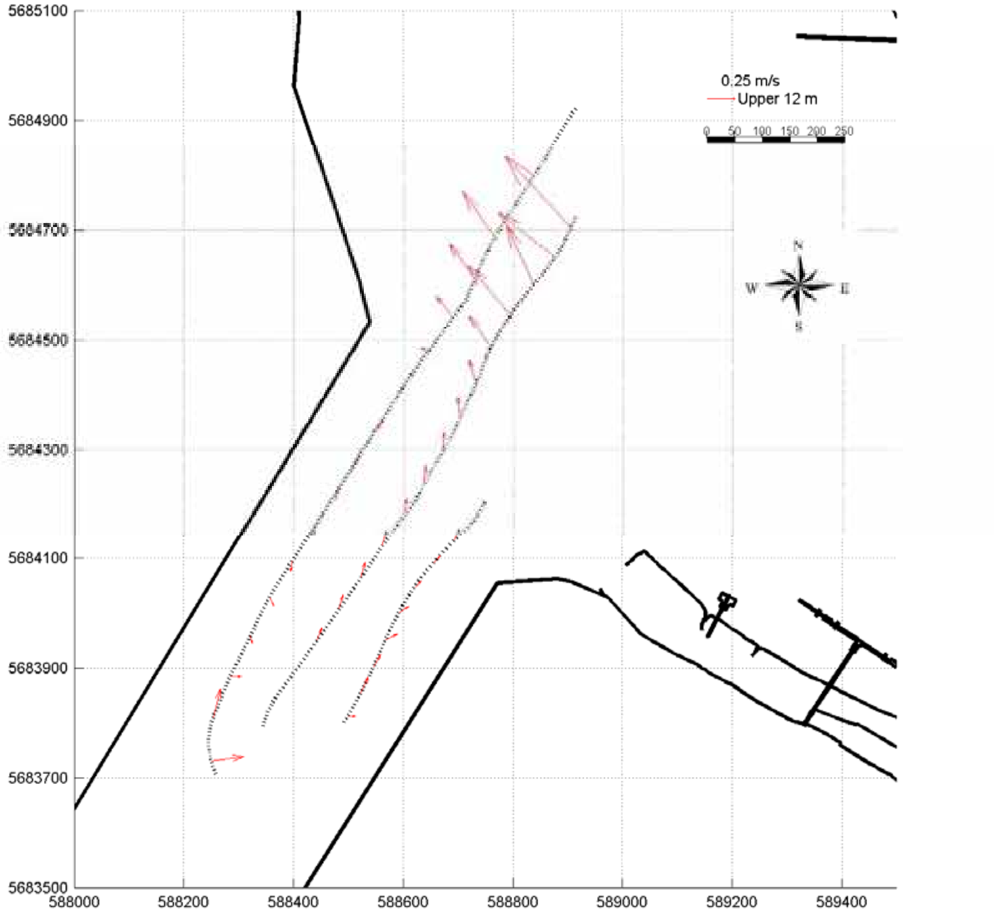
Slack water Liefkenshoek:
04:10: h = 6.07 m+TAW
16:20: h = 6.31 m+TAW
10:50: h = 0.59 m+TAW

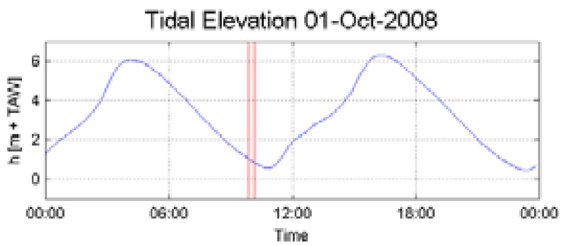
Date / Time [MET] :
01-Oct-2008
09:32 - 09:50
Time after HW Liefkenshoek [HH:MM]
5:31

Data Processed by: IMDC
In association with : wl | delft hydraulics
I/RA/11283/08.089/MSA

11283 Opvolging aanslibbing DGD

	Equipment(s): ADCP
Sourcefile: 1026DGDtrX000r_c	Location: Deurganckdok





Slack water Liefkenshoek:
04:10: h = 6.07 m+TAW
16:20: h = 6.31 m+TAW
10:50: h = 0.59 m+TAW

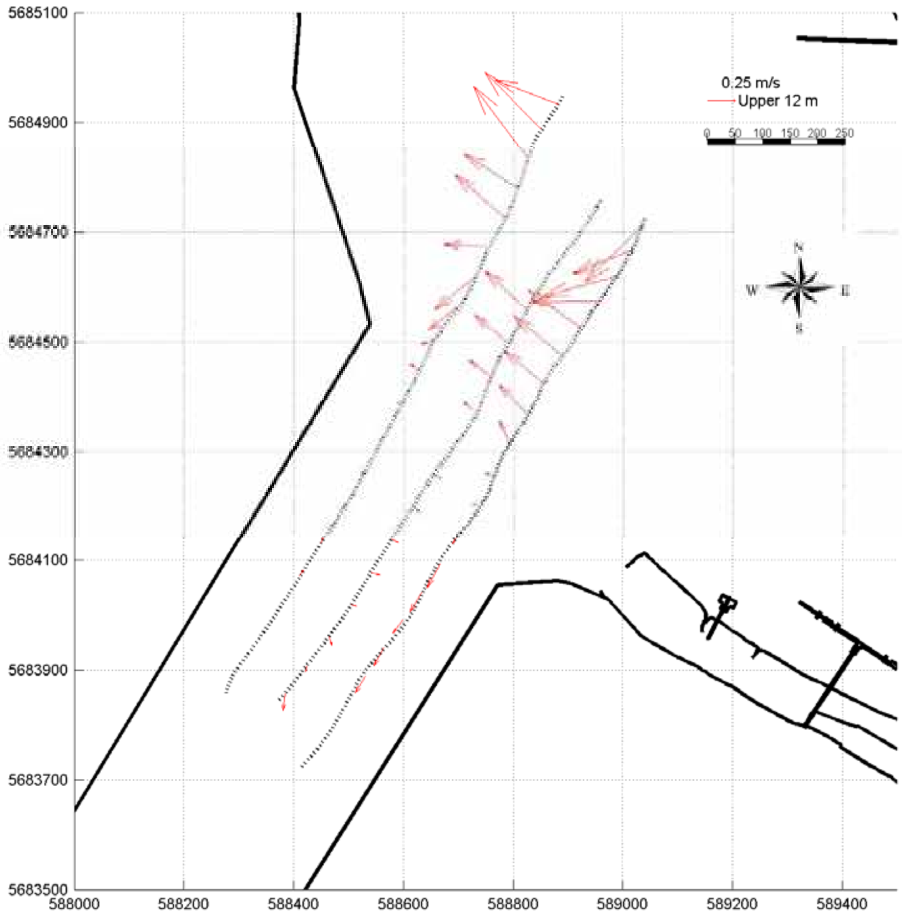
Date / Time [MET] :
01-Oct-2008
09:52 - 10:10

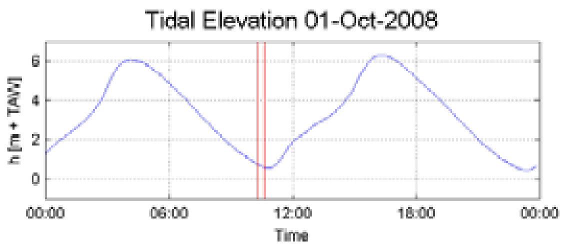
Time after HW Liefkenshoek [HH:MM]
5:51

Data Processed by: IMDC
In association with : wl | delft hydraulics
I/RA/11283/08.089/MSA

11283 Opvolging aanslibbing DGD

	Equipment(s): ADCP
Sourcefile: 1029DGDtrX000r_c	Location: Deurganckdok





Slack water Liefkenshoek:
04:10: h = 6.07 m+TAW
16:20: h = 6.31 m+TAW
10:50: h = 0.59 m+TAW

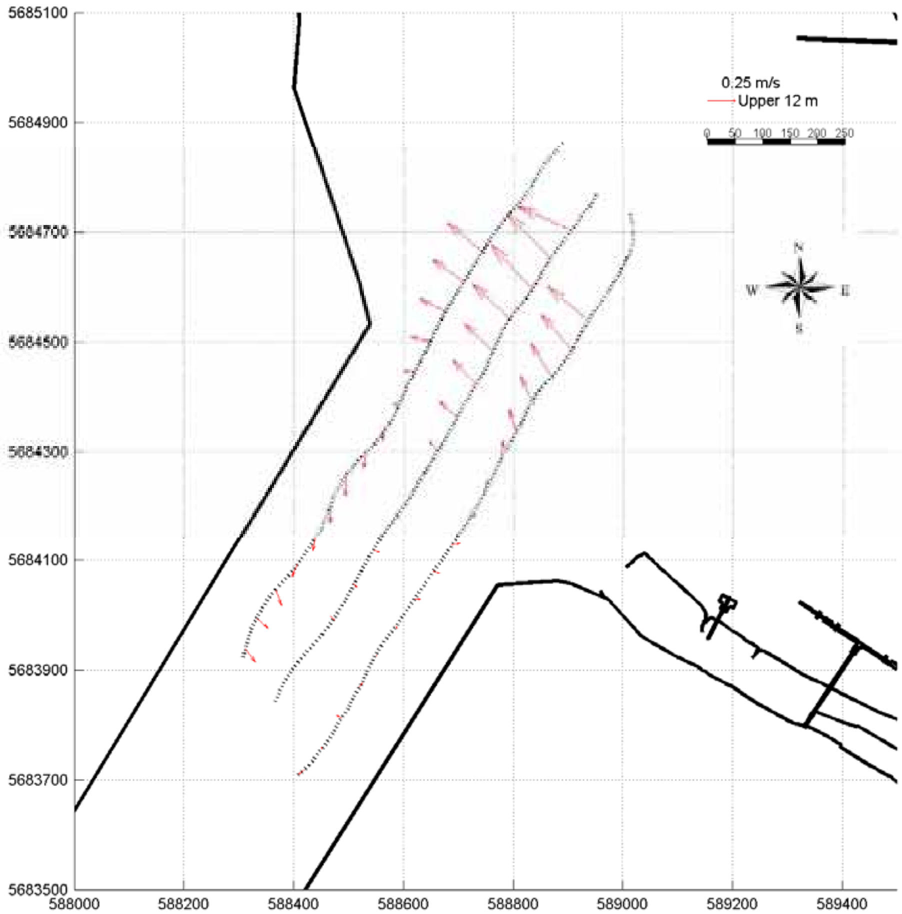
Date / Time [MET] :
01-Oct-2008
10:17 - 10:37

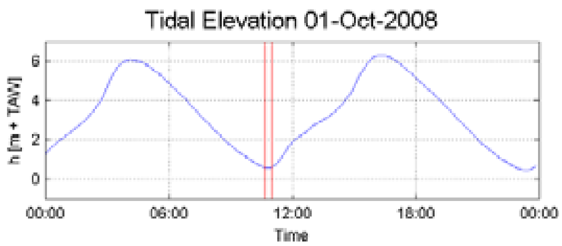
Time after HW Liefkenshoek [HH:MM]
6:17

Data Processed by: IMDC
In association with : wl | delft hydraulics
I/RA/11283/08.089/MSA

11283 Opvolging aanslibbing DGD

	Equipment(s): ADCP
Sourcefile: 1032DGDtrX000r_c	Location: Deurganckdok





Slack water Liefkenshoek:
04:10: h = 6.07 m+TAW
16:20: h = 6.31 m+TAW
10:50: h = 0.59 m+TAW

Date / Time [MET] :
01-Oct-2008
10:40 - 11:01

Time after HW Liefkenshoek [HH:MM]
-5:28

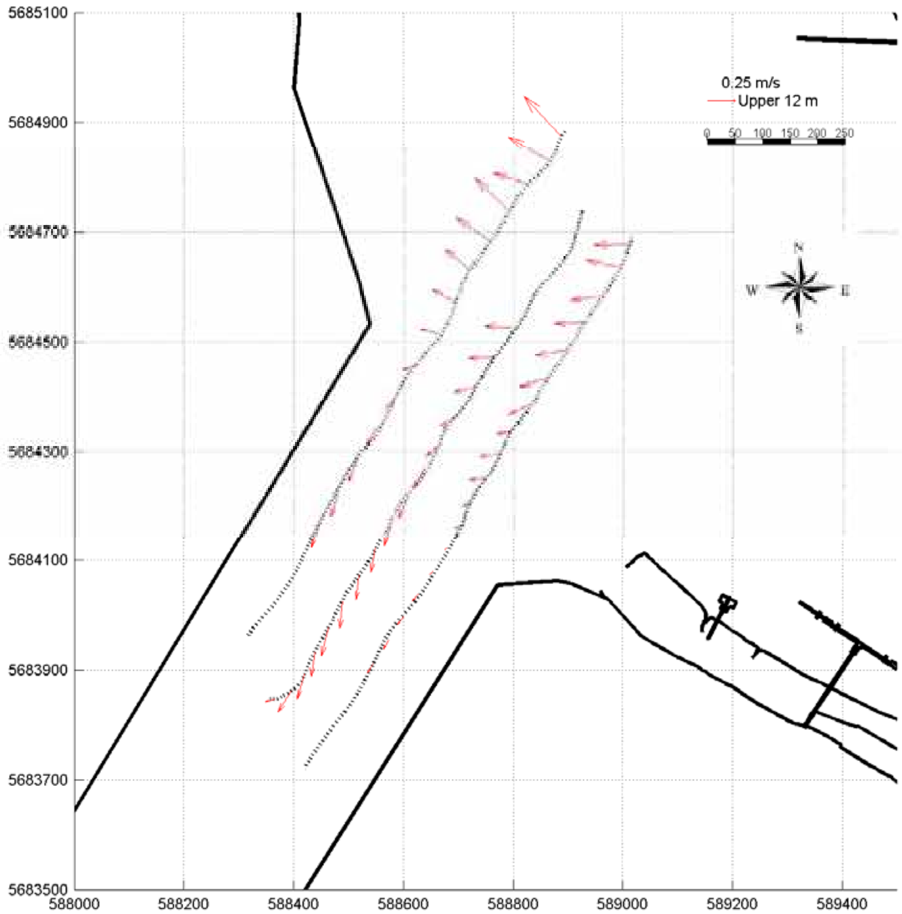
Data Processed by: IMDC
In association with : wl | delft hydraulics
I/RA/11283/08.089/MSA

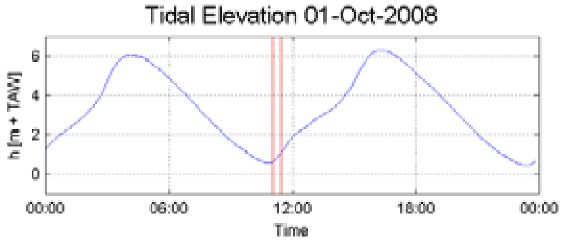
11283 Opvolging aanslibbing DGD

Equipment(s): ADCP

Sourcefile: 1035DGDtrX000r_c

Location: Deurganckdok





Slack water Liefkenshoek:
04:10: h = 6.07 m+TAW
16:20: h = 6.31 m+TAW
10:50: h = 0.59 m+TAW

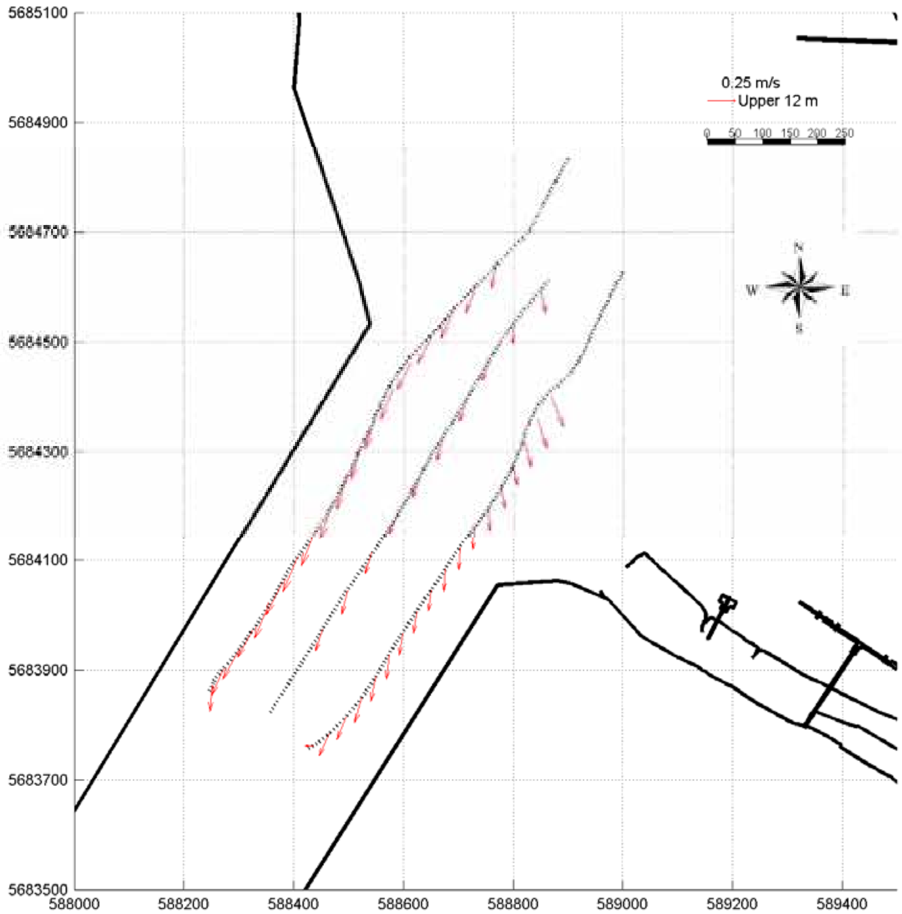
Date / Time [MET] :
01-Oct-2008
11:05 - 11:27

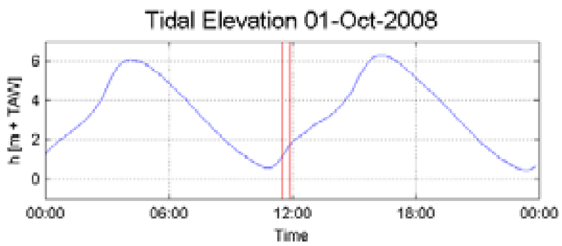
Time after HW Liefkenshoek [HH:MM]
-5:03

Data Processed by: IMDC
In association with : wl | delft hydraulics
I/RA/11283/08.089/MSA

11283 Opvolging aanslibbing DGD

	Equipment(s): ADCP
Sourcefile: 1038DGDtrX000r_c	Location: Deurganckdok





Slack water Liefkenshoek:
04:10: h = 6.07 m+TAW
16:20: h = 6.31 m+TAW
10:50: h = 0.59 m+TAW

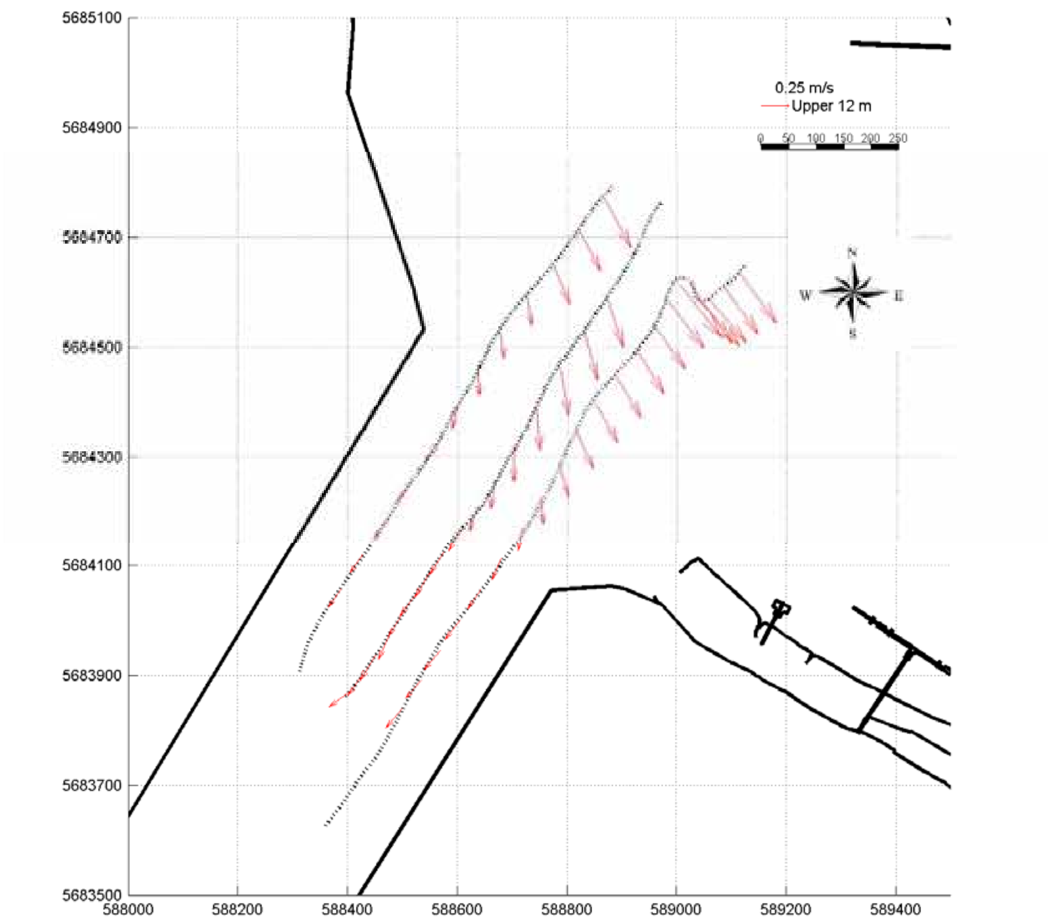
Date / Time [MET] :
01-Oct-2008
11:30 - 11:52

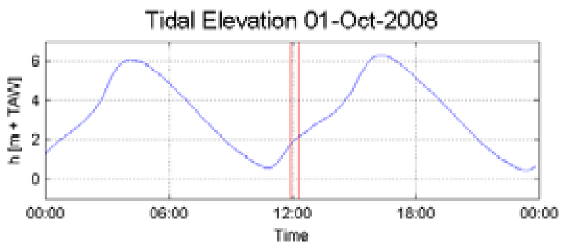
Time after HW Liefkenshoek [HH:MM]
-4:38

Data Processed by: IMDC
In association with : wl | delft hydraulics
I/RA/11283/08.089/MSA

11283 Opvolging aanslibbing DGD

	Equipment(s): ADCP
Sourcefile: 1041DGDtrX000r_c	Location: Deurganckdok





Slack water Liefkenshoek:
04:10: h = 6.07 m+TAW
16:20: h = 6.31 m+TAW
10:50: h = 0.59 m+TAW

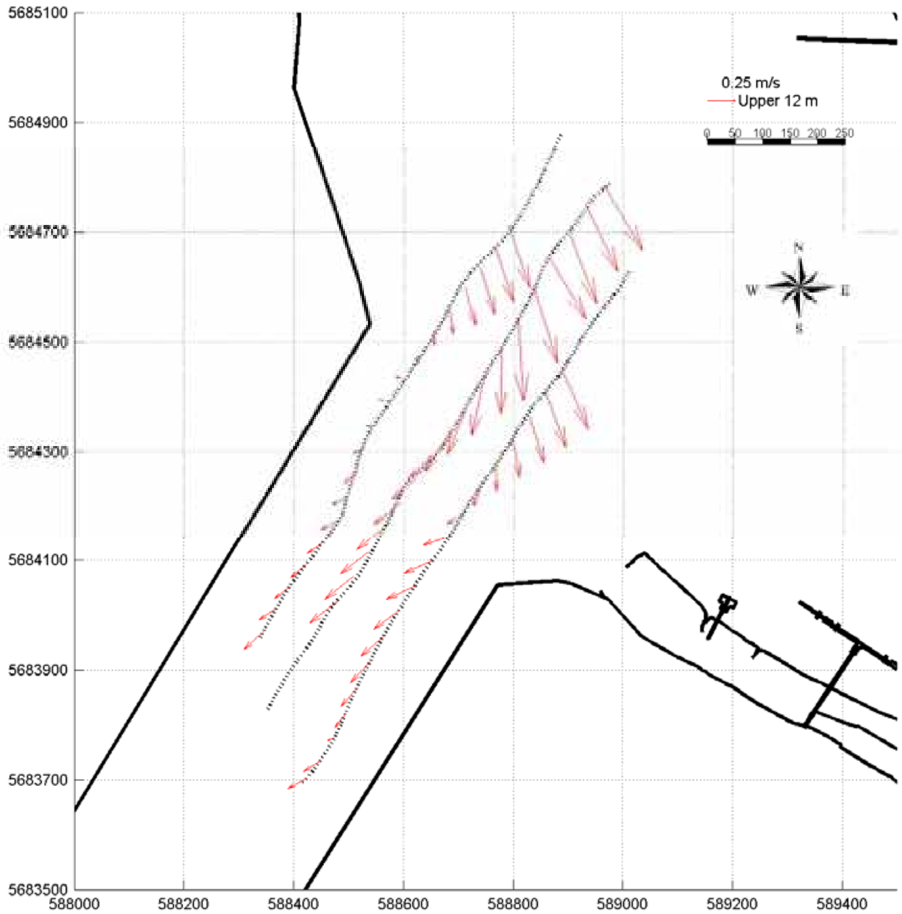
Date / Time [MET] :
01-Oct-2008
11:54 - 12:19

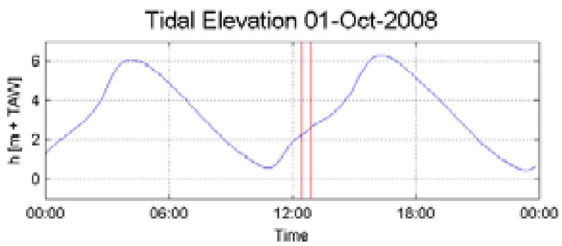
Time after HW Liefkenshoek [HH:MM]
-4:13

Data Processed by:
In association with :
I/RA/11283/08.089/MSA

11283 Opvolging aanslibbing DGD

	Equipment(s): ADCP
Sourcefile: 1044DGDtrX000r_c	Location: Deurganckdok





Slack water Liefkenshoek: 04:10: h = 6.07 m+TAW
16:20: h = 6.31 m+TAW
10:50: h = 0.59 m+TAW

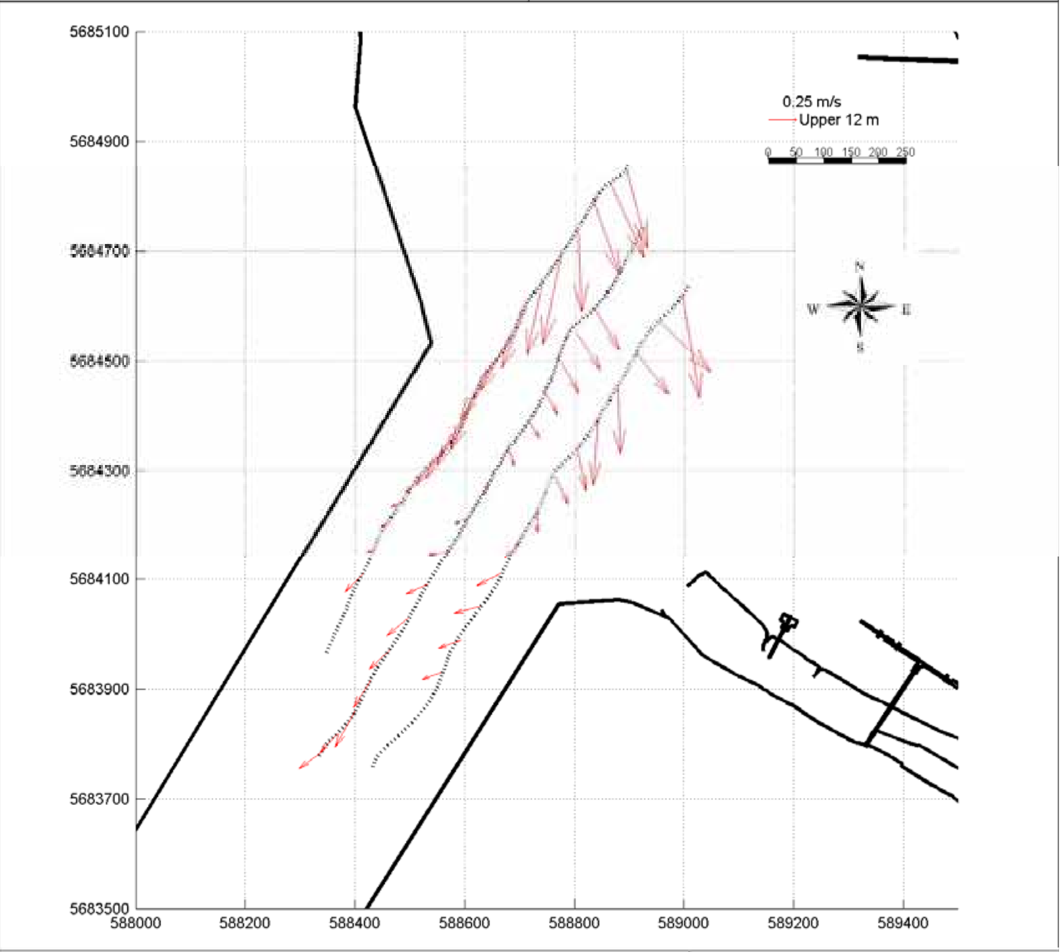
Date / Time [MET] :
01-Oct-2008
12:27 - 12:54

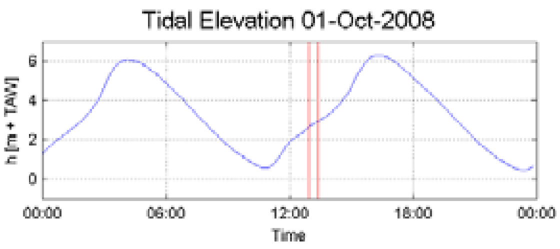
Time after HW Liefkenshoek [HH:MM]
-3:39

Data Processed by: IMDC
In association with : wl | delft hydraulics
I/RA/11283/08.089/MSA

11283 Opvolging aanslibbing DGD

	Equipment(s): ADCP
Sourcefile: 1047DGDtrX000r_c	Location: Deurganckdok





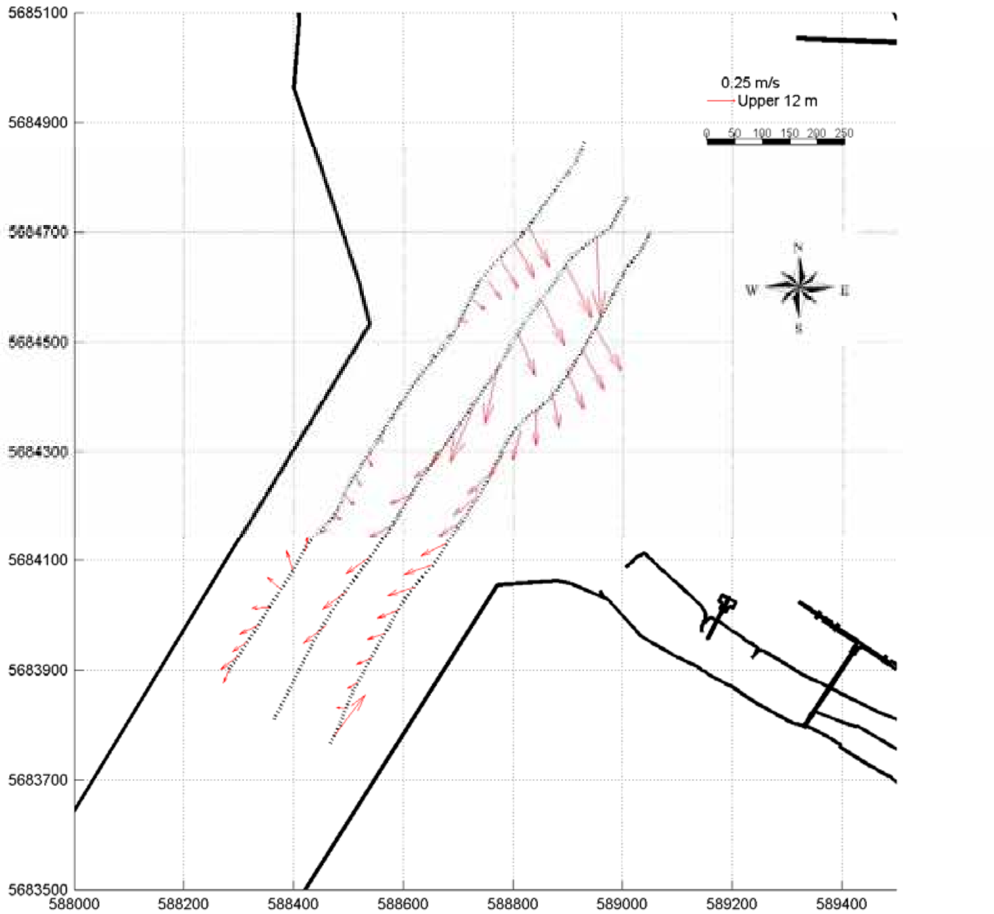
Slack water Liefkenshoek:
04:10: h = 6.07 m+TAW
16:20: h = 6.31 m+TAW
10:50: h = 0.59 m+TAW

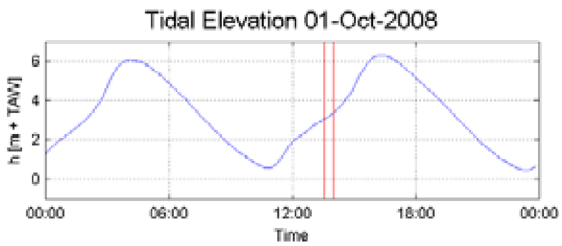
Date / Time [MET] :
01-Oct-2008
12:57 - 13:24

Time after HW Liefkenshoek [HH:MM]
-3:09

Data Processed by:
In association with :
I/RA/11283/08.089/MSA

11283 Opvolging aanslibbing DGD	
	Equipment(s): ADCP
Sourcefile: 1050DGDtrX000r_c	Location: Deurganckdok





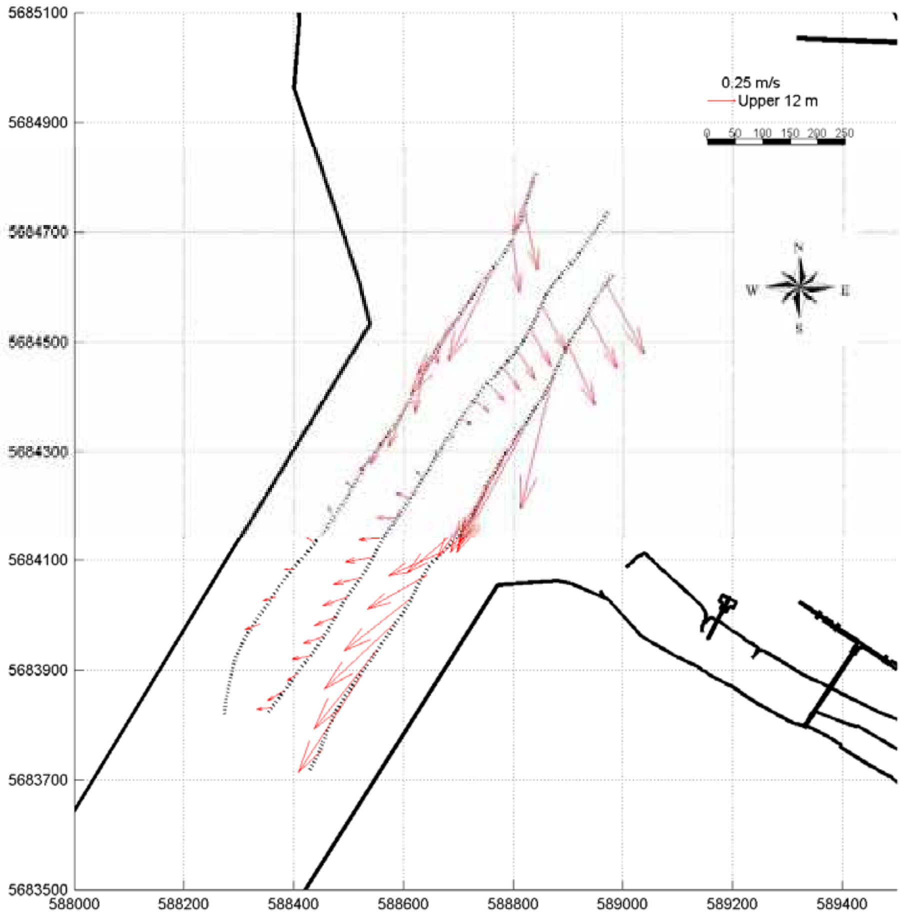
Slack water Liefkenshoek:
04:10: h = 6.07 m+TAW
16:20: h = 6.31 m+TAW
10:50: h = 0.59 m+TAW

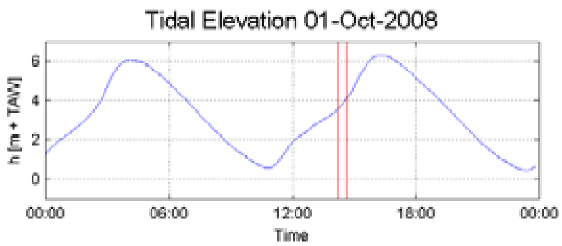
Date / Time [MET] :
01-Oct-2008
13:34 - 14:00

Time after HW Liefkenshoek [HH:MM]
-2:32

Data Processed by:
In association with :
I/RA/11283/08.089/MSA

11283 Opvolging aanslibbing DGD	
	Equipment(s): ADCP
Sourcefile: 1053DGDtrX000r_c	Location: Deurganckdok





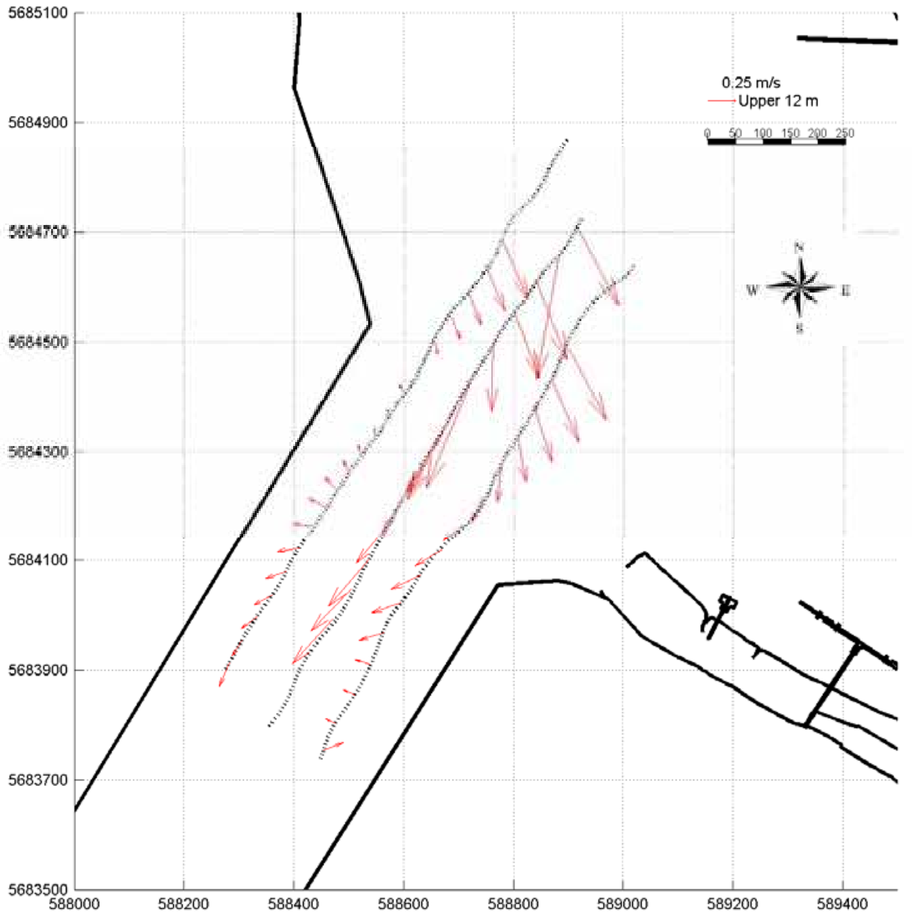
Slack water Liefkenshoek:
04:10: h = 6.07 m+TAW
16:20: h = 6.31 m+TAW
10:50: h = 0.59 m+TAW

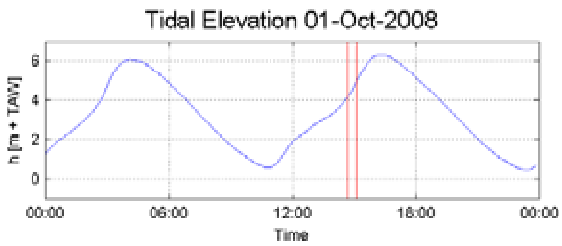
Date / Time [MET] :
01-Oct-2008
14:12 - 14:40

Time after HW Liefkenshoek [HH:MM]
-1:53

Data Processed by: IMDC
In association with : wl | delft hydraulics
I/RA/11283/08.089/MSA

11283 Opvolging aanslibbing DGD	
	Equipment(s): ADCP
Sourcefile: 1056DGDtrX000r_c	Location: Deurganckdok





Slack water Liefkenshoek:
04:10: h = 6.07 m+TAW
16:20: h = 6.31 m+TAW
10:50: h = 0.59 m+TAW

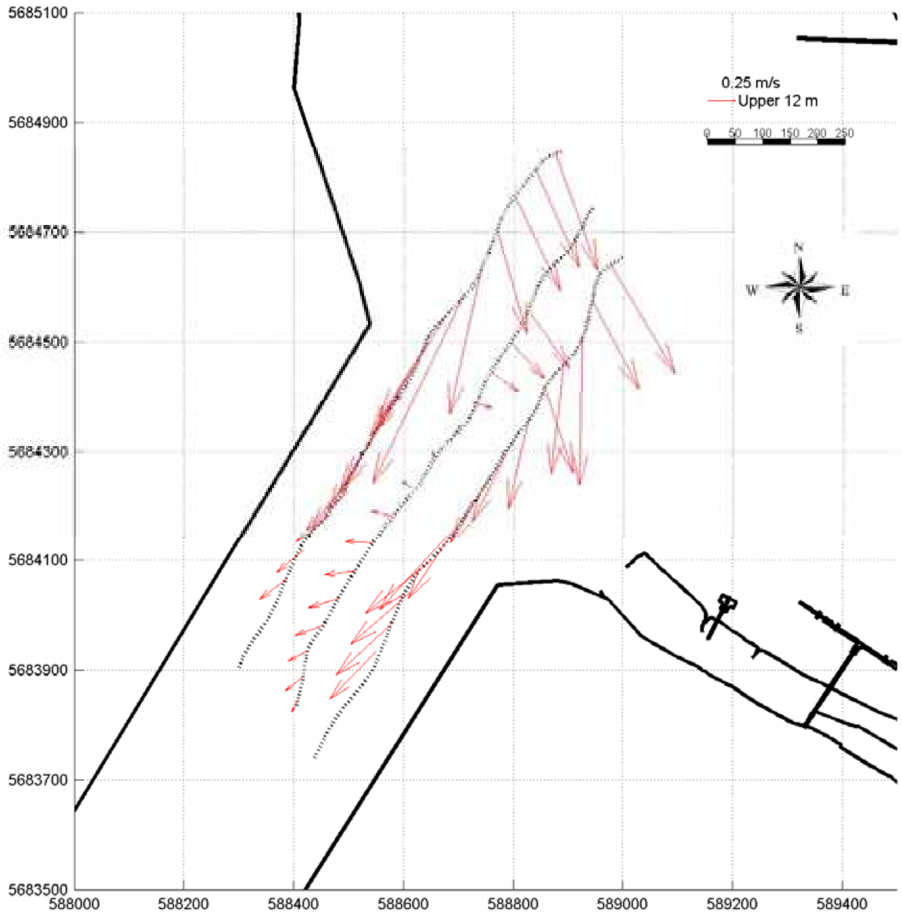
Date / Time [MET] :
01-Oct-2008
14:43 - 15:07

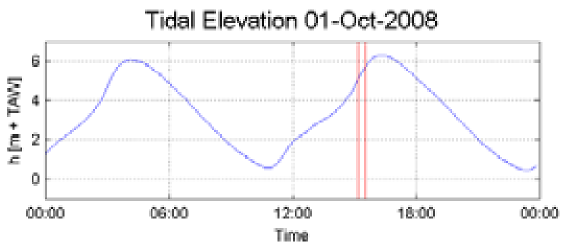
Time after HW Liefkenshoek [HH:MM]
-1:24

Data Processed by: IMDC
In association with : wl | delft hydraulics
I/RA/11283/08.089/MSA

11283 Opvolging aanslibbing DGD

	Equipment(s): ADCP
Sourcefile: 1059DGDtrX000r_c	Location: Deurganckdok





Slack water Liefkenshoek:
04:10: h = 6.07 m+TAW
16:20: h = 6.31 m+TAW
10:50: h = 0.59 m+TAW

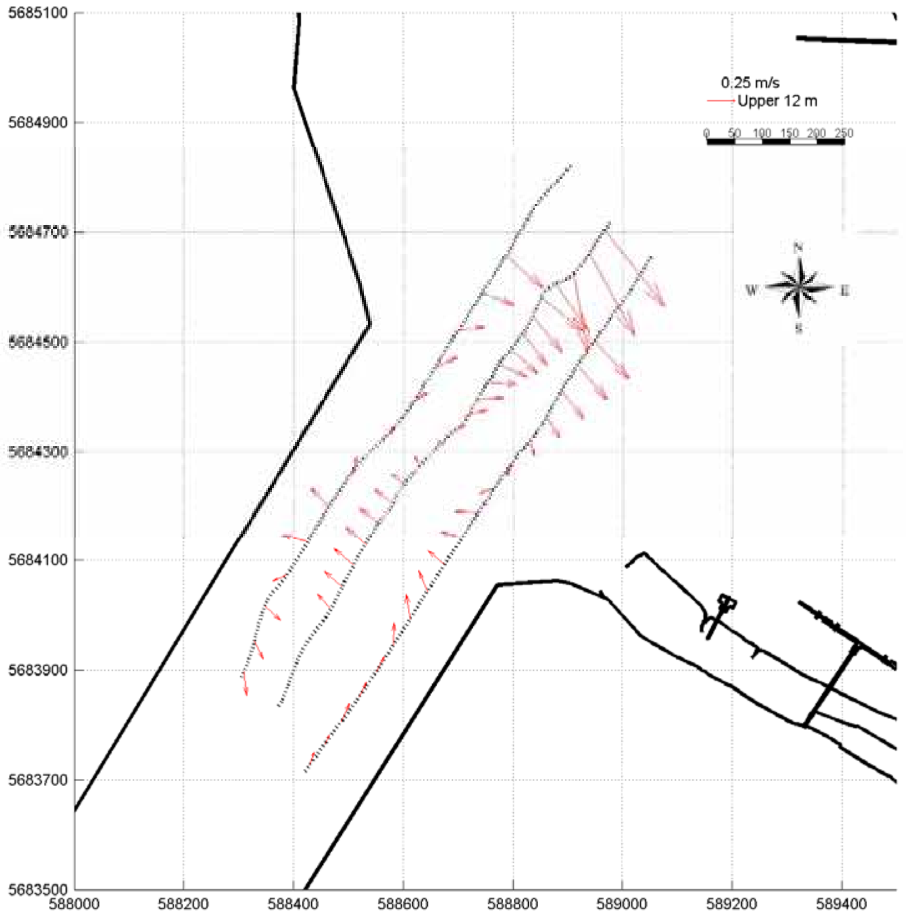
Date / Time [MET] :
01-Oct-2008
15:10 - 15:32

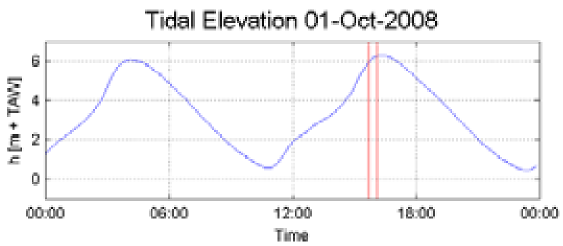
Time after HW Liefkenshoek [HH:MM]
-0:58

Data Processed by: IMDC
In association with : wl | delft hydraulics
I/RA/11283/08.089/MSA

11283 Opvolging aanslibbing DGD

	Equipment(s): ADCP
Sourcefile: 1062DGDtrX000r_c	Location: Deurganckdok





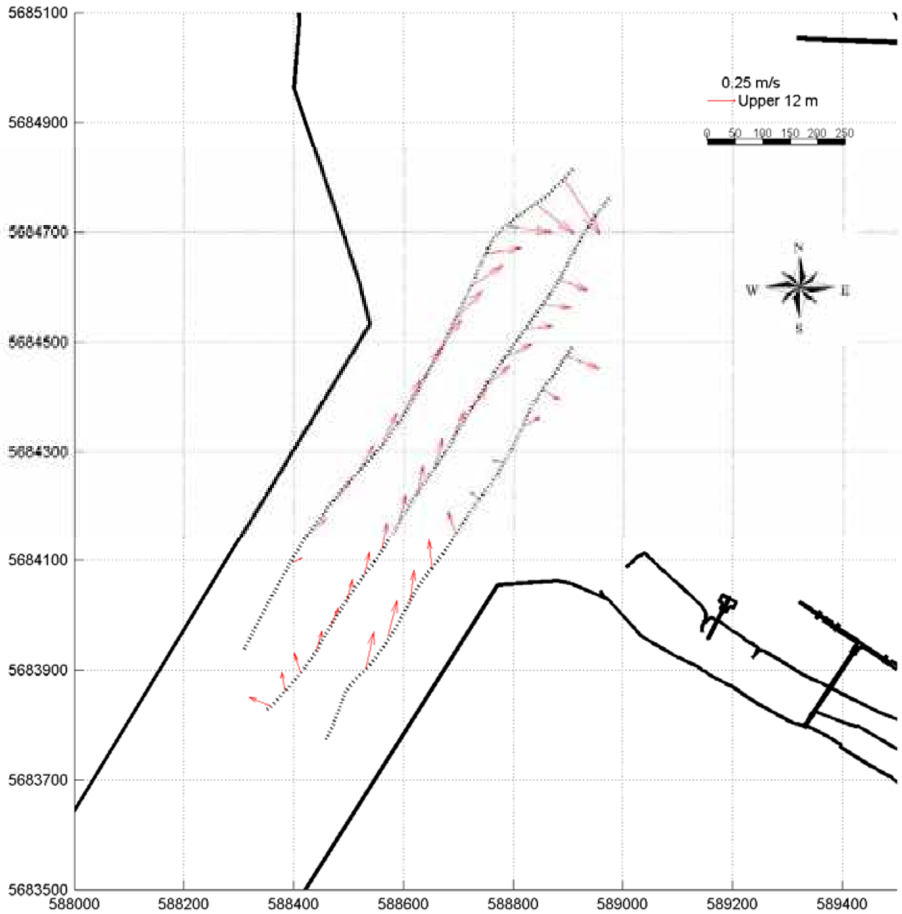
Slack water Liefkenshoek:
04:10: h = 6.07 m+TAW
16:20: h = 6.31 m+TAW
10:50: h = 0.59 m+TAW

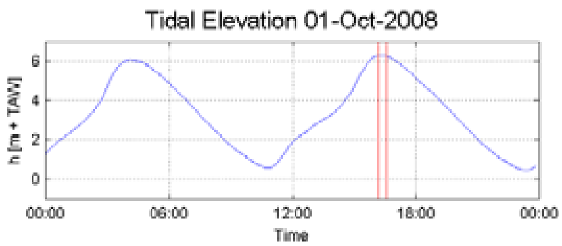
Date / Time [MET] :
01-Oct-2008
15:42 - 16:08

Time after HW Liefkenshoek [HH:MM]
-0:24

Data Processed by:
In association with :
I/RA/11283/08.089/MSA

11283 Opvolging aanslibbing DGD	
	Equipment(s): ADCP
Sourcefile: 1065DGDtrX000r_c	Location: Deurganckdok





Slack water Liefkenshoek:
04:10: h = 6.07 m+TAW
16:20: h = 6.31 m+TAW
10:50: h = 0.59 m+TAW

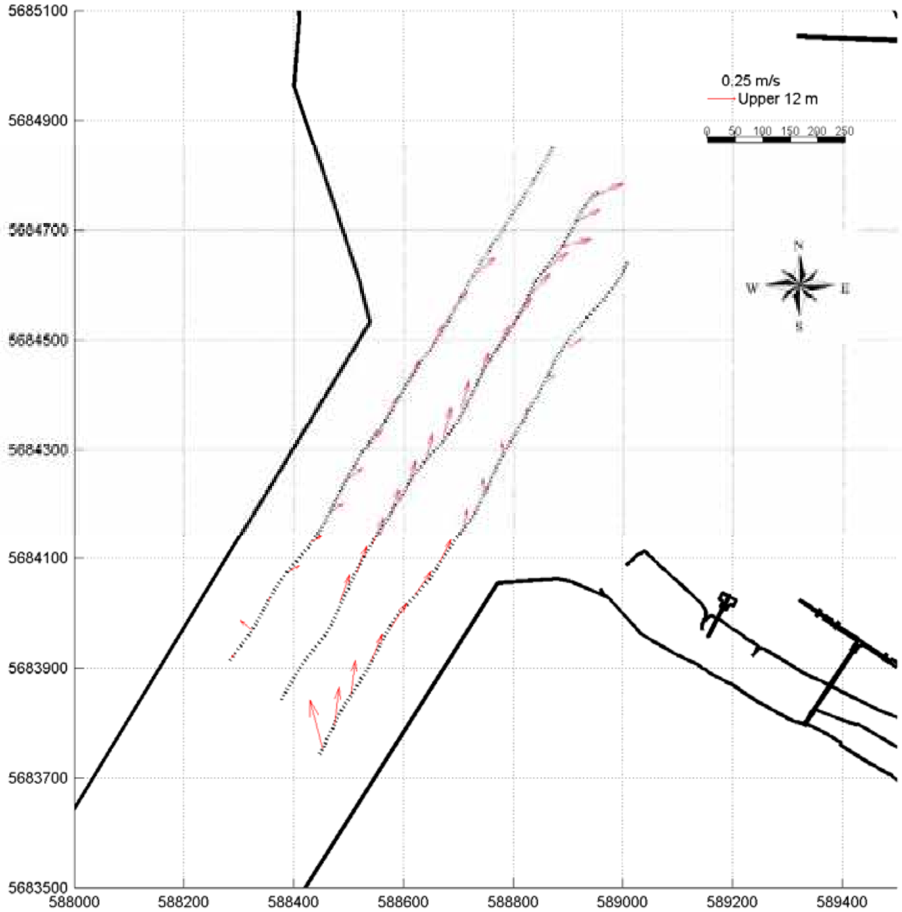
Date / Time [MET] :
01-Oct-2008
16:12 - 16:33

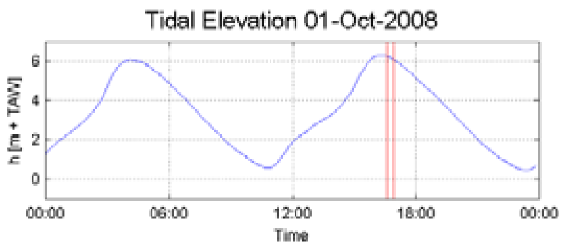
Time after HW Liefkenshoek [HH:MM]
0:02

Data Processed by: IMDC
In association with : wl | delft hydraulics
I/RA/11283/08.089/MSA

11283 Opvolging aanslibbing DGD

	Equipment(s): ADCP
Sourcefile: 1068DGDtrX000r_c	Location: Deurganckdok





Slack water Liefkenshoek:
04:10: h = 6.07 m+TAW
16:20: h = 6.31 m+TAW
10:50: h = 0.59 m+TAW

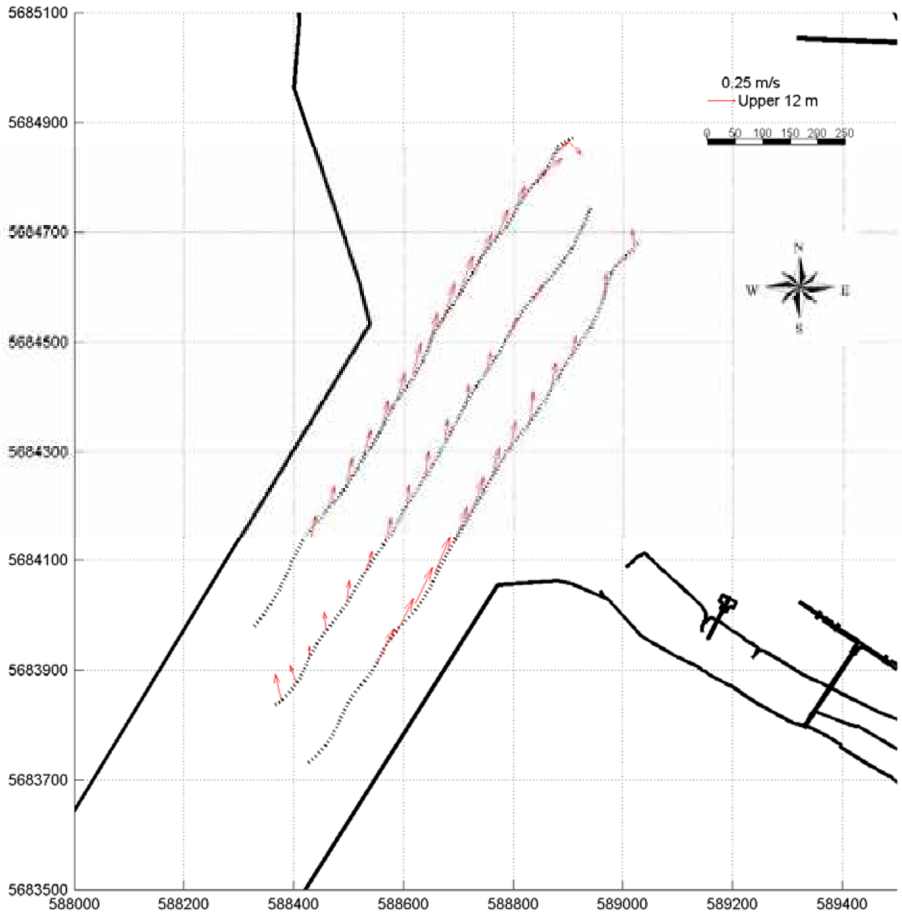
Date / Time [MET] :
01-Oct-2008
16:36 - 16:57

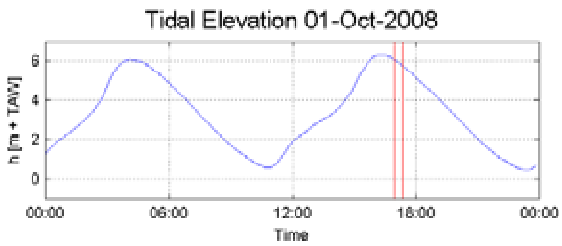
Time after HW Liefkenshoek [HH:MM]
0:27

Data Processed by: IMDC
In association with : wl | delft hydraulics
I/RA/11283/08.089/MSA

11283 Opvolging aanslibbing DGD

Sourcefile:	Equipment(s): ADCP
1071DGDtrX000r_c	Location: Deurganckdok





Slack water Liefkenshoek:
04:10: h = 6.07 m+TAW
16:20: h = 6.31 m+TAW
10:50: h = 0.59 m+TAW

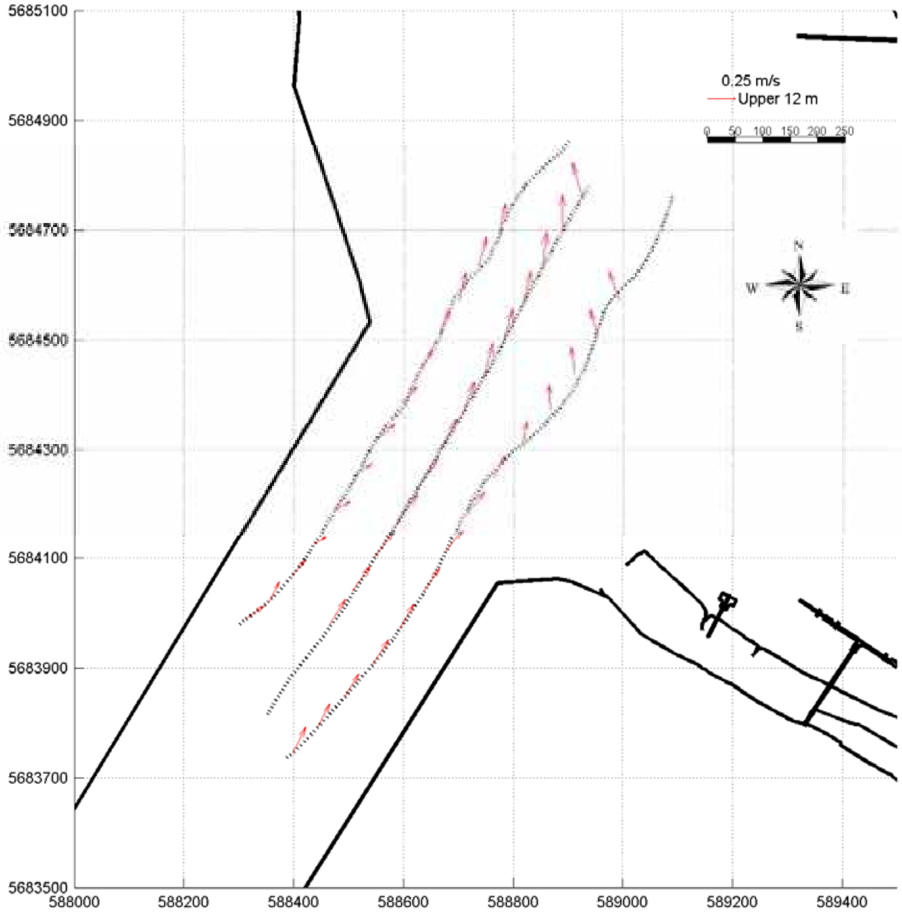
Date / Time [MET] :
01-Oct-2008
16:59 - 17:21

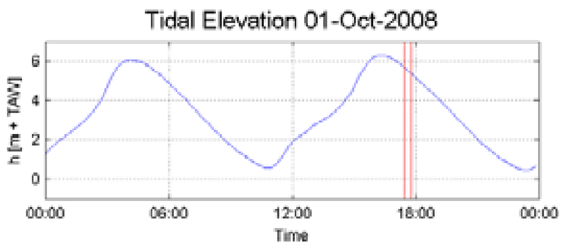
Time after HW Liefkenshoek [HH:MM]
0:50

Data Processed by: IMDC
In association with : wl | delft hydraulics
I/RA/11283/08.089/MSA

11283 Opvolging aanslibbing DGD

	Equipment(s): ADCP
Sourcefile: 1074DGDtrX000r_c	Location: Deurganckdok





Slack water Liefkenshoek:
04:10: h = 6.07 m+TAW
16:20: h = 6.31 m+TAW
10:50: h = 0.59 m+TAW

Date / Time [MET] :
01-Oct-2008
17:27 - 17:47

Time after HW Liefkenshoek [HH:MM]
1:17

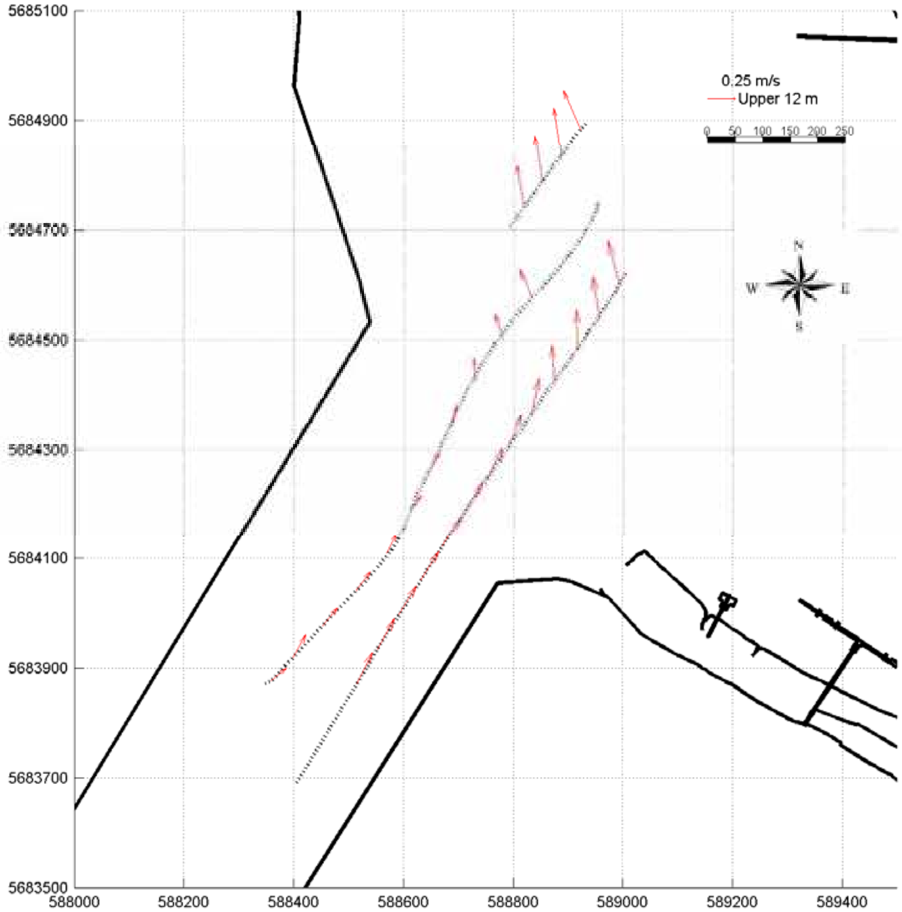
Data Processed by:
In association with :
I/RA/11283/08.089/MSA

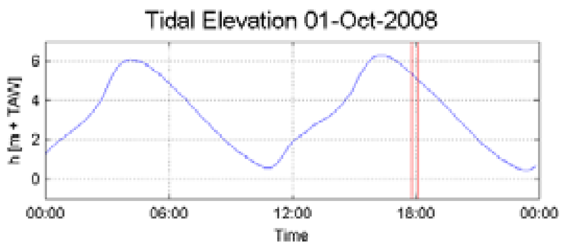
11283 Opvolging aanslibbing DGD

Equipment(s): ADCP

Sourcefile: 1077DGDtrX000r_c

Location: Deurganckdok





Slack water Liefkenshoek:
04:10: h = 6.07 m+TAW
16:20: h = 6.31 m+TAW
10:50: h = 0.59 m+TAW

Date / Time [MET] :
01-Oct-2008
17:49 - 18:08

Time after HW Liefkenshoek [HH:MM]
1:38

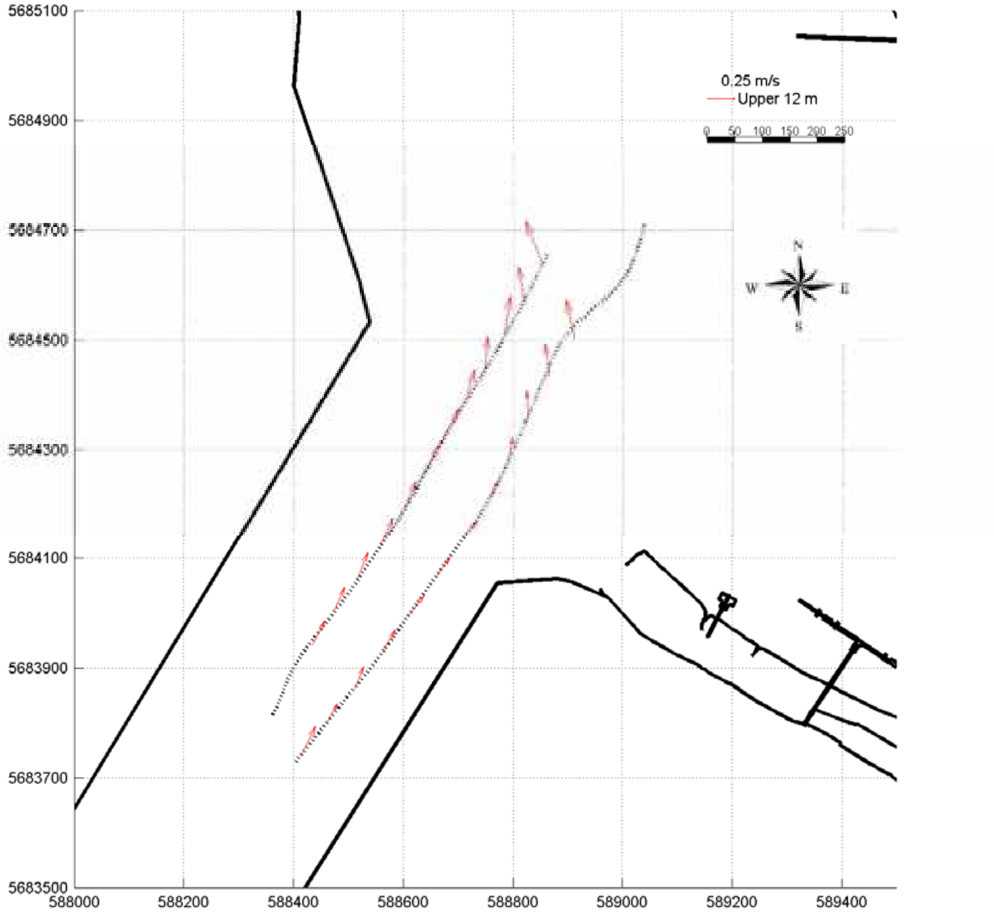
Data Processed by: IMDC

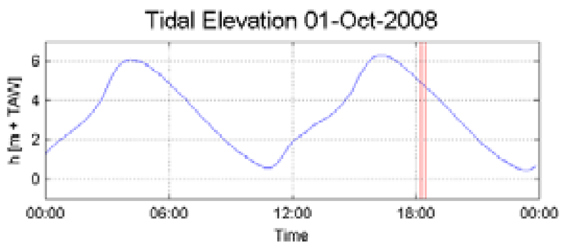
In association with : wl | delft hydraulics

I/RA/11283/08.089/MSA

11283 Opvolging aanslibbing DGD

	Equipment(s): ADCP
Sourcefile: 1080DGDtrY000r_c	Location: Deurganckdok





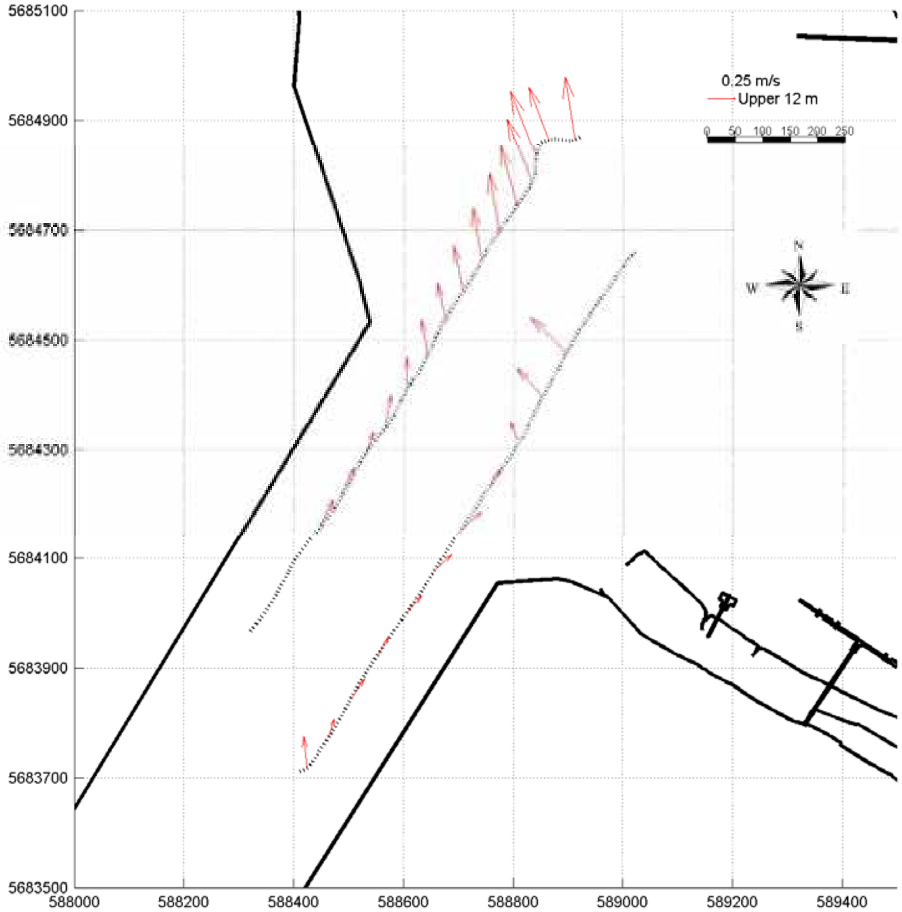
Slack water Liefkenshoek:
04:10: h = 6.07 m+TAW
16:20: h = 6.31 m+TAW
10:50: h = 0.59 m+TAW

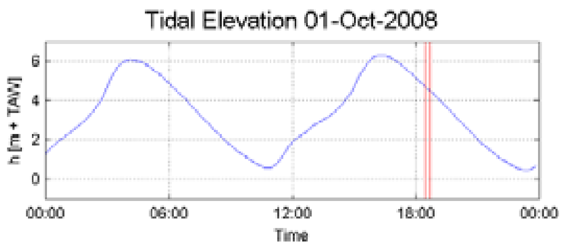
Date / Time [MET] :
01-Oct-2008
18:16 - 18:27

Time after HW Liefkenshoek [HH:MM]
2:01

Data Processed by: IMDC
In association with : wl | delft hydraulics
I/RA/11283/08.089/MSA

11283 Opvolging aanslibbing DGD	
	Equipment(s): ADCP
Sourcefile: 1082DGDtrX000r_c	Location: Deurganckdok





Slack water Liefkenshoek:
04:10: h = 6.07 m+TAW
16:20: h = 6.31 m+TAW
10:50: h = 0.59 m+TAW

Date / Time [MET] :
01-Oct-2008
18:28 - 18:41

Time after HW Liefkenshoek [HH:MM]
2:14

Data Processed by: IMDC
In association with : wl | delft hydraulics
I/RA/11283/08.089/MSA

APPENDIX G.

OVERVIEW OF HCBS2 AND AANSLIBBING DEURGANCKDOK REPORTS

Report	Description of HCBS2
Ambient Conditions Lower Sea Scheldt	
5.3	Overview of ambient conditions in the river Scheldt – January-June 2006 (I/RA/11291/06.088/MSA)
5.4	Overview of ambient conditions in the river Scheldt – July-December 2006 (I/RA/11291/06.089/MSA)
5.5	Overview of ambient conditions in the river Scheldt : RCM-9 buoy 84 & 97 (1/1/2007 -31/3/2007) (I/RA/11291/06.090/MSA)
5.6	Analysis of ambient conditions during 2006 (I/RA/11291/06.091/MSA)
Calibration	
6.1	Winter Calibration (I/RA/11291/06.092/MSA)
6.2	Summer Calibration and Final Report (I/RA/11291/06.093/MSA)
Through tide Measurements Winter 2006	
7.1	21/3 Scheldewacht – Deurganckdok – Salinity Distribution (I/RA/11291/06.094/MSA)
7.2	22/3 Parel 2 – Deurganckdok (I/RA/11291/06.095/MSA)
7.3	22/3 Laure Marie – Liefkenshoek (I/RA/11291/06.096/MSA)
7.4	23/3 Parel 2 – Schelle (I/RA/11291/06.097/MSA)
7.5	23/3 Laure Marie – Deurganckdok (I/RA/11291/06.098/MSA)
7.6	23/3 Veremans Waarde (I/RA/11291/06.099/MSA)
HCBS Near bed continuous monitoring (Frames)	
8.1	Near bed continuous monitoring winter 2006 (I/RA/11291/06.100/MSA)
INSSEV	
9	Settling Velocity - INSSEV summer 2006 (I/RA/11291/06.102/MSA)
Cohesive Sediment	
10	Cohesive sediment properties summer 2006 (I/RA/11291/06.103/MSA)
Through tide Measurements Summer 2006	
11.1	Through Tide Measurement Sediview and Siltprofiler 27/9 Stream - Liefkenshoek (I/RA/11291/06.104/MSA)
11.2	Through Tide Measurement Sediview 27/9 Veremans - Raai K (I/RA/11291/06.105/MSA)
11.3	Through Tide Measurement Sediview and Siltprofiler 28/9 Stream - Raai K (I/RA/11291/06.106/MSA)
11.4	Through Tide Measurement Sediview 28/9 Veremans - Waarde(I/RA/11291/06.107/MSA)
11.5	Through Tide Measurements Sediview 28/9 Parel 2 - Schelle (I/RA/11291/06.108/MSA)
11.6	Through Tide measurement 26/9 Scheldewacht – Deurganckdok – Salinity Distribution (I/RA/11291/06.161/MSA)

Analysis	
12	Report concerning the presence of HCBS layers in the Scheldt river (I/RA/11291/06.109/MSA)

Report	**Description of Opvolging aanslibbing Deurganckdok between April 2006 till March 2008**
Sediment Balance: Bathymetry surveys, Density measurements, Maintenance and construction dredging activities	
1.1	Sediment Balance: Three monthly report 1/4/2006 – 30/06/2006 (I/RA/11283/06.113/MSA)
1.2	Sediment Balance: Three monthly report 1/7/2006 – 30/09/2006 (I/RA/11283/06.114/MSA)
1.3	Sediment Balance: Three monthly report 1/10/2006 – 31/12/2006 (I/RA/11283/06.115/MSA)
1.4	Sediment Balance: Three monthly report 1/1/2007 – 31/03/2007 (I/RA/11283/06.116/MSA)
1.5	Annual Sediment Balance (I/RA/11283/06.117/MSA)
1.6	Sediment balance Bathymetry: 2005 – 3/2006 (I/RA/11283/06.118/MSA)
1.10	Sediment Balance: Three monthly report 1/4/2007 - 30/06/2007 (I/RA/11283/07.081/MSA)
1.11	Sediment Balance: Three monthly report 1/7/2007 – 30/09/2007 (I/RA/11283/07.082/MSA)
1.12	Sediment Balance: Three monthly report 1/10/2007 – 31/12/2007 (I/RA/11283/07.083/MSA)
1.13	Sediment Balance: Three monthly report 1/1/2007 – 31/03/2007 (I/RA/11283/07.084/MSA)
1.14	Annual Sediment Balance (I/RA/11283/07.085/MSA)
Factors contributing to salt and sediment distribution in Deurganckdok: Salt-Silt (OBS3A) & Frame measurements, Through tide measurements (SiltProfiling & ADCP)	
2.1	Through tide measurement Siltprofiler 21/03/2006 Laure Marie (I/RA/11283/06.087/WGO)
2.2	Through tide measurement Siltprofiler 26/09/2006 Stream (I/RA/11283/06.068/MSA)
2.3	Through tide measurement Sediview spring tide 22/03/2006 Veremans (I/RA/11283/06.110/BDC)
2.4	Through tide measurement Sediview spring tide 27/09/2006 Parel 2 (I/RA/11283/06.119/MSA)
2.5	Through tide measurement Sediview average tide 24/10/2007 Parel 2 (I/RA/11283/06.120/MSA)
2.6	Salt-Silt distribution & Frame Measurements Deurganckdok 13/3/2006 – 31/05/2006 (I/RA/11283/06.121/MSA)

Report	Description of Opvolging aanslibbing Deurganckdok between April 2006 till March 2008
2.7	Salt-Silt distribution & Frame Measurements Deurganckdok 15/07/2006 – 31/10/2006 (I/RA/11283/06.122/MSA)
2.8	Salt-Silt distribution & Frame Measurements Deurganckdok 12/02/2007 – 18/04/2007 (I/RA/11283/06.123/MSA)
2.9	Calibration stationary equipment autumn (I/RA/11283/07.095/MSA)
2.10	Through tide measurement Siltprofiler 23 October 2007 (I/RA/11283/07.086/MSA)
2.11	Through tide measurement Salinity Profiling winter (I/RA/11283/07.087/MSA)
2.12	Through tide measurement Sediview winter 11 March 2008 Transect I (I/RA/11283/07.088/MSA)
2.13	Through tide measurement Sediview winter 11 March 2008 Transect K (I/RA/11283/07.089/MSA)
2.14	Through tide measurement Sediview winter 11 March 2008 Transect DGD (I/RA/11283/07.090/MSA)
2.15	Through tide measurement Siltprofiler 12 March 2008 (I/RA/11283/07.091/MSA)
2.16	Salt-Silt distribution Deurganckdok summer (21/6/2007 – 30/07/2007) (I/RA/11283/07.092/MSA)
2.17	Salt-Silt distribution & Frame Measurements Deurganckdok autumn (17/09/2007 - 10/12/2007) (I/RA/11283/07.093/MSA)
2.18	Salt-Silt distribution & Frame Measurements Deurganckdok winter (18/02/2008 - 31/3/2008) (I/RA/11283/07.094/MSA)
2.19	Calibration stationary & mobile equipment winter (I/RA/11283/07.096/MSA)
Boundary Conditions: Upriver Discharge, Salt concentration Scheldt, Bathymetric evolution in access channels, dredging activities in Lower Sea Scheldt and access channels	
3.1	Boundary conditions: Three monthly report 1/1/2007 – 31/03/2007 (I/RA/11283/06.127/MSA) including HCBS 2 report 5.5
~~3.2~~	~~Boundary condtions: Annual report (I/RA/11283/06.128/MSA)~~[1]
3.10	Boundary conditions: Three monthly report 1/4/2007 – 30/06/2007 (I/RA/11283/07.097/MSA)
3.11	Boundary conditions: Three monthly report 1/7/2007 – 30/09/2007 (I/RA/11283/07.098/MSA)
3.12	Boundary conditions: Three monthly report 1/10/2007 – 31/12/2007 (I/RA/11283/07.099/MSA)
3.13	Boundary conditions: Three monthly report 1/1/2008 – 31/03/2008 (I/RA/11283/07.100/MSA)
3.14	Boundary conditions: Annual report (I/RA/11283/07.101/MSA)

[1] considered in report 5.6 ‘Analysis of ambient conditions during 2006’ (I/RA/11291/06.091/MSA) in the framework of the study ‘Extension of the study about density currents in the Beneden Zeeschelde’

Report	Description of Opvolging aanslibbing Deurganckdok between April 2006 till March 2008
Analysis	
4.1	Analysis of Siltation Processes and Factors, 4/'06 – 3/'07 (I/RA/11283/06.129/MSA)
4.10	Analysis of Siltation Processes and Factors, 4/'07 – 3/'08 (I/RA/11283/07.102/MSA)