VLAAMSE OVERHEID

DEPARTEMENT MOBILITEIT EN OPENBARE WERKEN
WATERBOUWKUNDIG LABORATORIUM

Langdurige metingen Deurganckdok: Opvolging en analyse aanslibbing

Bestek 16EB/05/04

The frame & the equipment

Deelrapport 2.7 : Zout – en slibverdeling Deurganckdok & frame metingen 15/7/2006 – 31/10/2006

Report 2.7: Salt – Silt distribution & frame measurements Deurganckdok 15/7/2006 – 31/10/2006

26 April 2007
I/RA/11283/06.122/MSA

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Document Control Sheet

Document Identification

Title:	Report 2.7 : Salt-Silt distribution & frame measurements Deurganckdok (7/2006 - 10/2006)
Project:	Langdurige metingen Deurganckdok: Opvolging en analyse aanslibbing
Client	Waterbouwkundig Laboratorium
File reference	I/RA/11283/06.122/MSA
File Name	K:\PROJECTS\11\11283 - Opvolging aanslibbing dgd\10-Rap\RA06122_Salt_silt_zomer06\Ra06122_Salt_Silt_zomer06_v20.doc

Revisions

Version	Date	Author	Description
2.0	26/04/2007	SRI/MBO	Final version
1.0	26/03/2007	SRI/MBO	concept

Distribution list

Name	# ex.	Company/authorities	Position in reference to the project
Joris Vanlede	7	Waterbouwkundig Laboratorium	client
Frederik Roose	3	Afdeling Maritieme Toegang	client

Approval

Version	Date	Author	Project manager	Commissioner
2.0	26/04/2007	SRI/MBO	MSA	MSA
1.0	26/03/2007	SRI/MBO	MSA	MSA

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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)'[1].

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.

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 one year
- 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.

[1] Langdurige metingen Deurganckdok: Opvolging en analyse aanslibbing

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 as essential for understanding sediment transport between the dock and the Scheldt river.

1.3. Overview of the Reports

Reports of the project 'Opvolging aanslibbing Deurganckdok' are summarized in Table 1-1.

Reports of the measurement campaign HCBS2 for which the winter and summer campaign has been carried out simultaneously with measurements in this report are listed in APPENDIX F.

Table 1-1: Overview of Deurganckdok Reports

Report	Description
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)
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 neap tide (to be scheduled) (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)
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 15/01/2007 – 15/03/2007 (I/RA/11283/06.123/MSA)

Report	Description
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)
3.2	Boundary condtions: Annual report (I/RA/11283/06.128/MSA)
Analysis	
4	Analysis of Siltation Processes and Factors (I/RA/11283/06.129/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)

1.3.1. 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 salt 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 (IMDC, 2006a & IMDC, 2007a).

1.4. Structure of this report

This report is the factual data report for two measurement campaigns:

- Long term salt/silt measurements in the Deurganckdok
- Near bed frame measurements in the vicinity of Deurganckdok from the 18th of July until the 11th of October 2006.

The first chapter comprises an introduction. The second chapter describes the project. Chapter 3 describes the measurement campaign, equipment and the course of the actual measurements. The measurement results and processed data are presented in Chapter 4, whereas chapter 5 gives a preliminary analysis of the data.

2. SEDIMENTATION IN DEURGANCKDOK

2.1. Project Area: Deurganckdok

Deurganckdok is a tidal dock situated at the left bank in the Lower Sea Scheldt, between Liefkenshoek and Doel. Deurganckdok has the following characteristics:

1. the dock has a total length of 2750 m and is 450 m wide at the Scheldt end and 400 m wide at the inward end of the dock
2. The bottom of Deurganckdok is provided at a depth of –17m TAW in the transition zones between the quay walls and the central trench and of –19m TAW in the central trench.
3. the quay walls reach up to +9m TAW

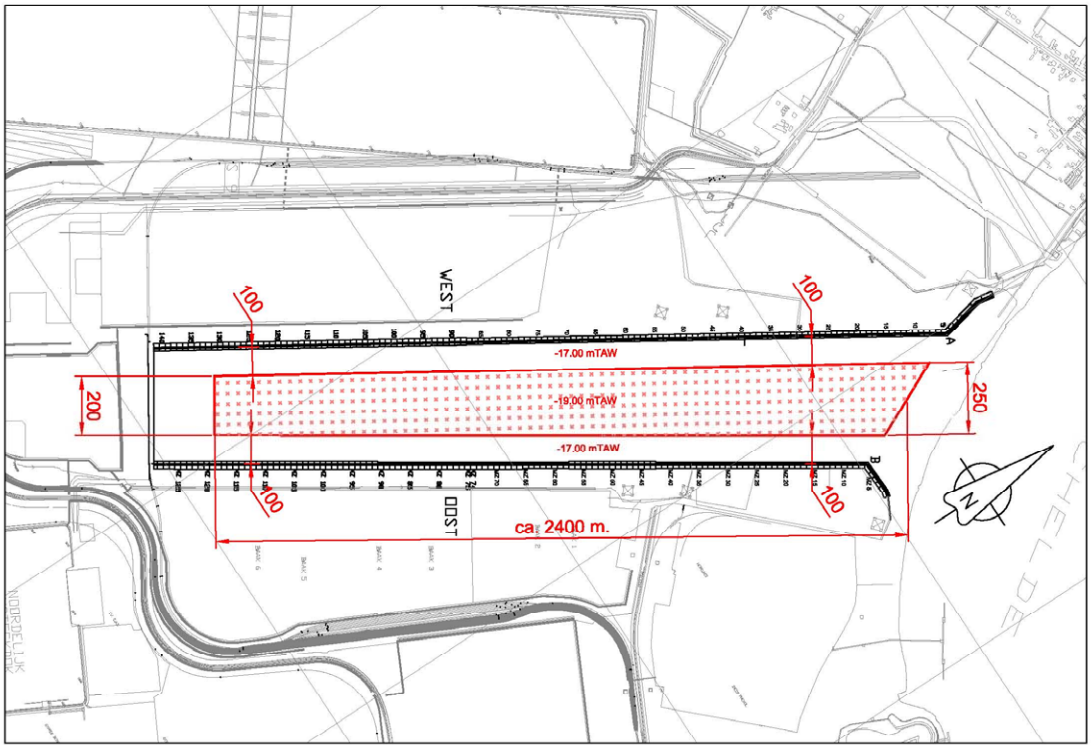

Figure 2-1: Overview of Deurganckdok

The dredging of the dock is performed in 3 phases. On 18 February 2005 the dike between the Scheldt and the Deurganckdok was breached. On 6 July 2005 Deurganckdok was officially opened. The second dredging phase was finalized a few weeks later. The first terminal operations have started since.

2.2. Overview of the studied 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 2-2).

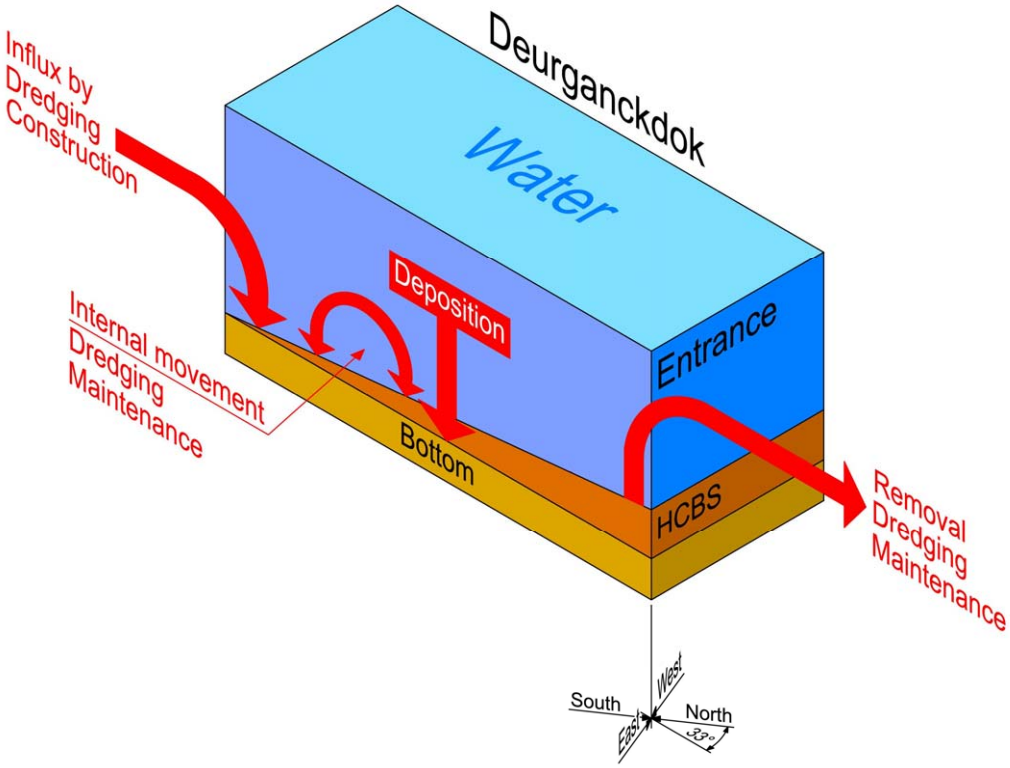

Figure 2-2: Elements of the sediment balance

A net deposition can be calculated from a comparison with a chosen initial condition t_0 (Figure 2-3). 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.

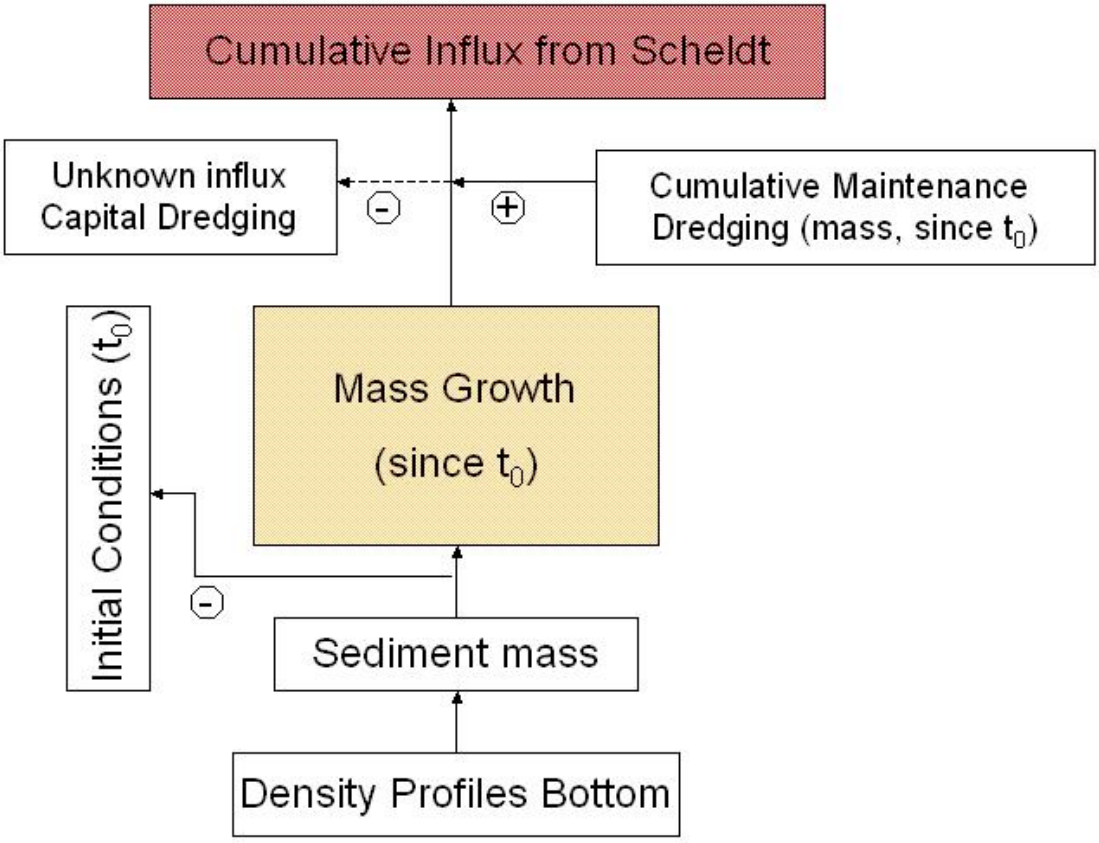

Figure 2-3: Determining a sediment balance

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

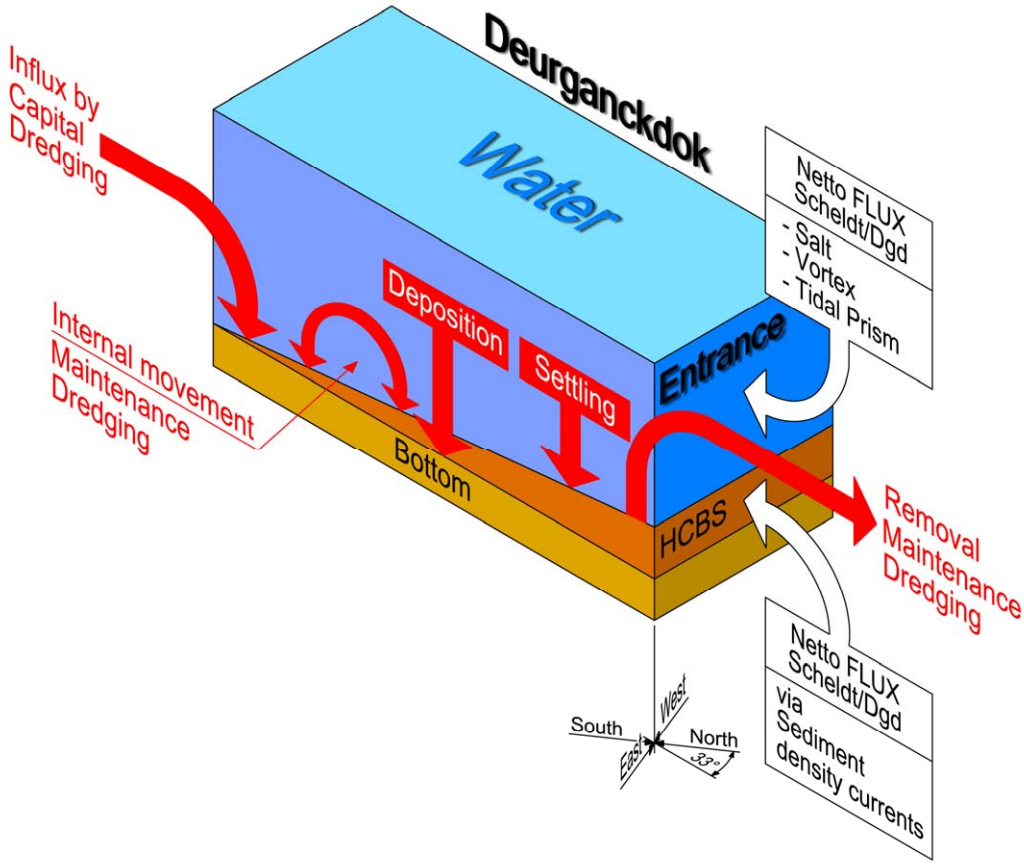

Figure 2-4: Transport mechanisms

These aspects of hydrodynamics and sediment transport have been landmark in determining the parameters to be measured during the project. Measurements will be focused 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 upstream discharge in the Scheldt river.
- Monitoring Salt and sediment concentration in the Lower Sea Scheldt at permanent measurement locations at Oosterweel, up- and downstream of the Deurganckdok.
- Long term measurement of salt 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 current, salt 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 entrance channels towards the Kallo, Zandvliet and Berendrecht locks as well as dredging and dumping activities in the Lower Sea Scheldt.
- In situ calibrations were conducted on several dates to calibrate all turbidity and conductivity sensors.

2.3. Measurement objectives

2.3.1. Objective of the near bed continuous monitoring

The purpose of the deployment of the anchored measuring frame/rig is to monitor the detailed vertical structure of flow and suspended sediment concentration within a few decimeters from the bed. This frame measures at one location only, by definition, and is difficult to reposition. Therefore, it should be positioned at a location where near-bed HCBS are most likely, and with a vertical resolution of the instruments that matches the concentration gradients in suspension. The vertical flow and sediment structure assessed with the preliminary 3D mud transport model allows for an optimization of the layout of the anchored measuring frame with respect to the instrumentation.

2.3.2. Objective of the long term measurements near the quay walls

The goal of the survey is to monitor the spatial distribution of salt and silt in the Deurganckdok. Longitudinal, vertical and horizontal (from North to South quay) distribution is surveyed in this set up. The entrance of the dock is a favoured location because of the dynamics caused by the river-dock interaction. One deeper location in the dock is necessary to sample the longitudinal distribution of salt and silt along the dock.

3. THE MEASUREMENT CAMPAIGNS

3.1. Description of the long term suspended sediment-salinity measurements 20/07/2006 – 12/10/2006

3.1.1. Measurement location

During the period from 20/07/2006 till 12/10/2006, 6 multi parameter probes were placed on 3 fixed locations hanging from the quay wall in Deurganckdok at fixed depths.

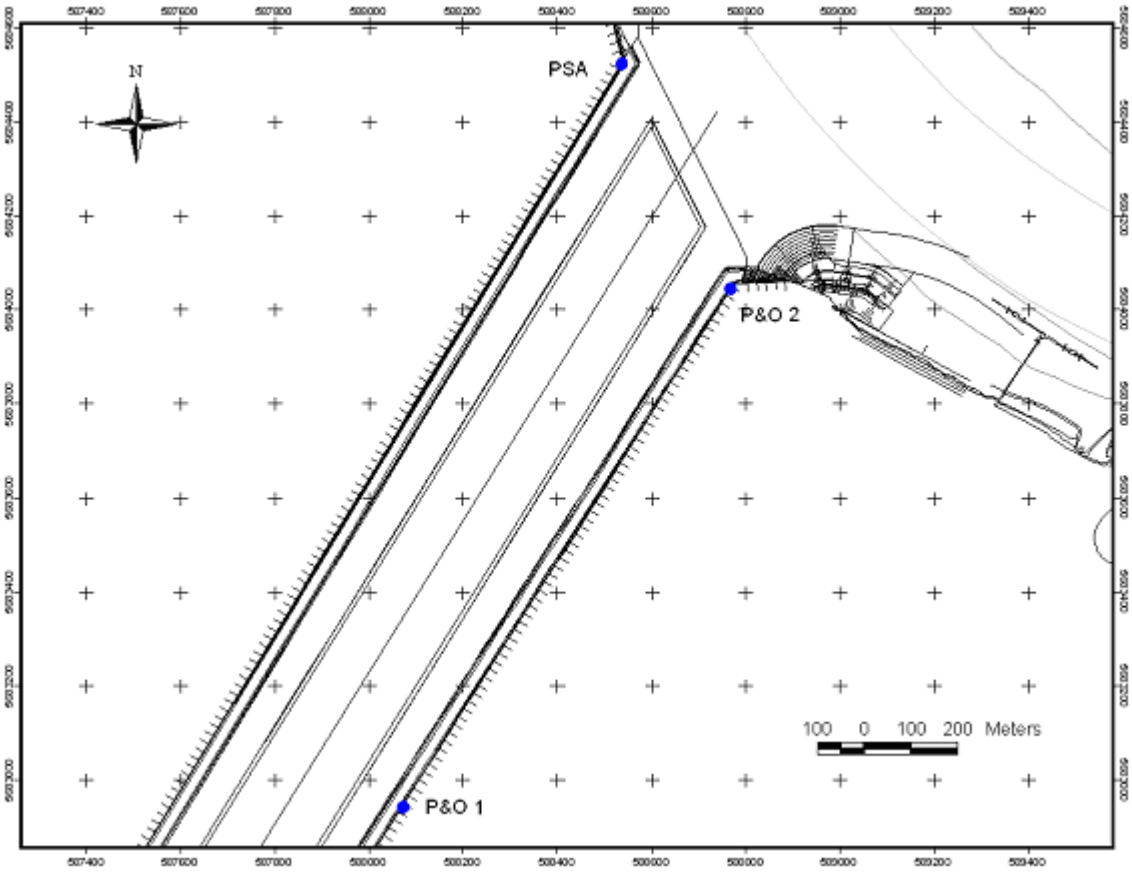

Figure 3-1: Map of the measurement locations for long term salt-silt measurements in Deurganckdok

Table 3-1: Measurement locations in UTM ED50

Location	***EASTING***	***NORTHING***	***Boulder***	***Operator***
P&O 1 (S-back)	588074	5682942	Moot 72	P&O Ports
P&O 2 (S-entrance)	588767	5684045	Moot 7	P&O Ports
PSA (N-entrance)	588536	5684523	Moot 5 (boulder 286)	PSA HNN

Table 3-2: Deployment depths of all instruments for the measurement period

Salt Silt Measurements Deurganckdok

Location	*Easting (UTM ED 50)*	*Northing (UTM ED 50)*	*Depth of instrument [m TAW]*	*Period*
P&O 1 top	588074	5682942	-2.4	20/07/2006 – 12/10/2006
P&O 1 bottom	588074	5682942	-12.2	20/07/2006 – 12/10/2006
P&O 2 top	588767	5684045	-2.4	20/07/2006 – 12/10/2006
P&O 2 bottom	588767	5684045	-12.2	20/07/2006 – 12/10/2006
PSA top	588536	5684523	-2.4	20/07/2006 – 12/10/2006
PSA bottom	588536	5684523	-12.2	20/07/2006 – 12/10/2006

3.1.2. The equipment

3.1.2.1. Quay Frame set up

A simple rectangular measurement frame was conceived for suspending the instruments from the quay wall down into the Deurganckdok. Two frames rest against the dock wall and are suspended by stainless steel cables hanging from a rawlplug, secured on top of the quay wall.

Using a guiding system and a winch, it was possible to recover these instruments without the help of a survey vessel.

Figure 3-2: Guiding system and chain suspended from the rawlplug (left), frame with RCM-9 and steel cables (right)

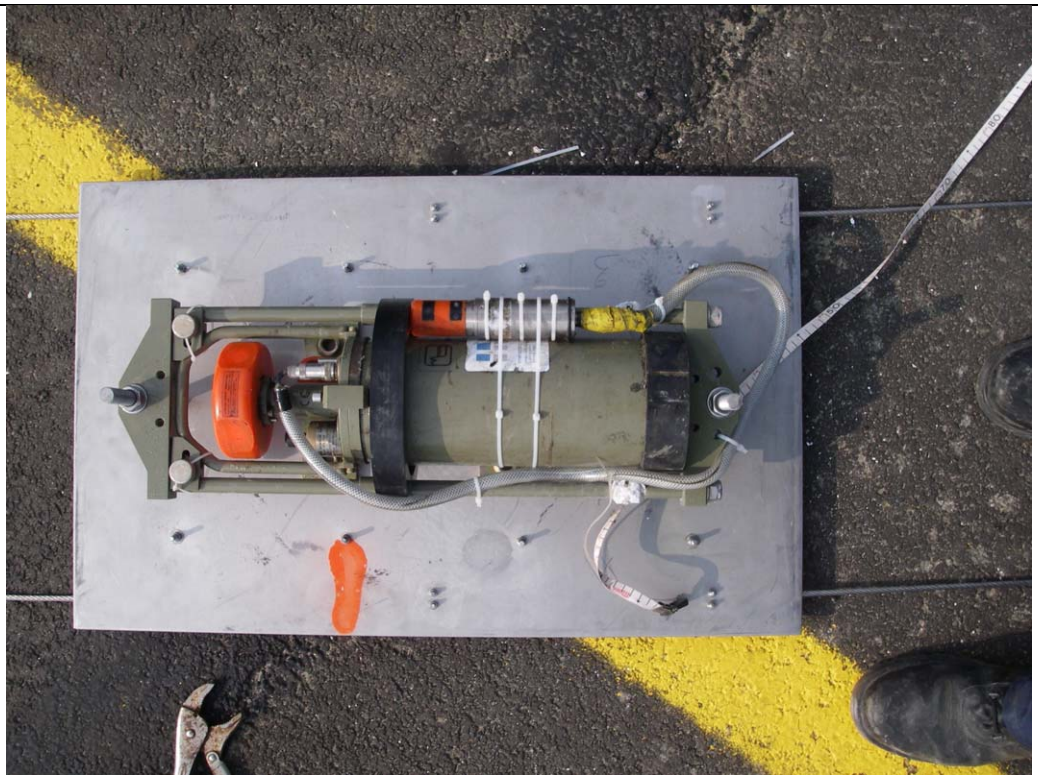

Figure 3-3: frame design

3.1.2.2. Aanderaa RCM-9

The Aanderaa Recording Current Meter RCM-9 MkII is a multi-parameter instrument that consists of a CTD probe, Doppler Current Sensors and a Turbidity Sensor. It was set up to measure an average of a number of pings spread over an interval of 10 minutes for conductivity, depth, temperature and turbidity.

IMDC (2006a) gives more technical details on the RCM-9.

3.1.2.3. D& A Instruments OBS 3A

The D & A Instruments OBS 3A is a multiparameter instruments that consists of a CTD probe and a turbidity sensor. The instrument was set up to measure every ten minutes for a minute at a frequency of 1 Hz and output the average.

IMDC (2006a) gives more technical details on the OBS 3A.

3.1.3. Course of the measurements

After deployment on 20/07/2006, the instruments were recovered, cleaned and read out every two weeks. Table 3-3 lists the measurement periods and possible issues. Only OBS 3A instruments were deployed during this measurement period

Table 3-3: Overview of measurement periods and data gaps

P&O1 (S-BACK): -12.2 m TAW			
Period	*No data*	*Faulty data*	*Comments*
20/07/2006			Start measurement period
10/08, 20/08, 26/08, 6/09/2006	X		Gaps in data
12/10/2006			End measurement period
P&O1 (S-BACK): -2.4 m TAW			
Period	*No data*	*Faulty data*	*Comments*
20/07/2006			Start measurement period
16/09, 20/09/2006	X		Gaps in data
12/10/2006			End measurement period
P&O 2 (S-ENTRANCE): -12.2 m TAW			
Period	*No data*	*Faulty data*	*Comments*
20/07/2006			Start measurement period
03/08, 17-19/09, 23-24/09	X		Gaps in data
12/10/2006			End measurement period
P&O 2 (S-ENTRANCE): -2.4 m TAW			
Period	*No data*	*Faulty data*	*Comments*
20/07/2006			Start measurement period
08/08, 19-20/09/2006	X		Gaps in data
12/10/2006			End measurement period
PSA (N-ENTRANCE): -12.2 m TAW			
Period	*No data*	*Faulty data*	*Comments*
20/07/2006			Start measurement period
05/08, 28/08/2006	X		Gaps in data
12/10/2006			End measurement period
PSA (N-ENTRANCE): -2.4 m TAW			
Period	*No data*	*Faulty data*	*Comments*
20/07/2006	X		Start measurement period
7/8/2006	X		Damage OBS 3A s/n 222
24/08/2006			Installation new OBS 3A instrument
3/9/2006	X		Gaps in data
12/10/2006			End measurement period

3.2. Description of the near bed continuous monitoring 18/7/2006 – 11/10/2006

3.2.1. Measurement location

During the period 18/07/2006 till 11/10/2006, two frames were placed in the vicinity of the entrance of Deurganckdok. The first one was placed at the downstream edge of the Deurganckdock. This location is situated nearby the future CDW location (Current Deflecting Wall), near the left bank of the Scheldt. The frame was placed at a depth of –14m TAW roughly. The placement of the frame occurred at 15h10 (18th of July), removal of the frame at 10h00 (11th of October). The second frame was placed at the upstream edge of the dock, on the sill. The depth at the location of the frame is –14m TAW roughly. Placement of this frame occurred at 10h30 (19th of July), removal of the frame at 10h10 (11th of October). During the measurement period the Sill frame was moved to buoy 84 (from the 2nd of August till th 30th of August) due to some works in the vicinity of the original location. To signal the presence of the frames buoys were place near the frames.

Spring tides occurred around 11th of August 2006, the 8th of September 2006 and 7th of October 2006. Time is always given in MET.

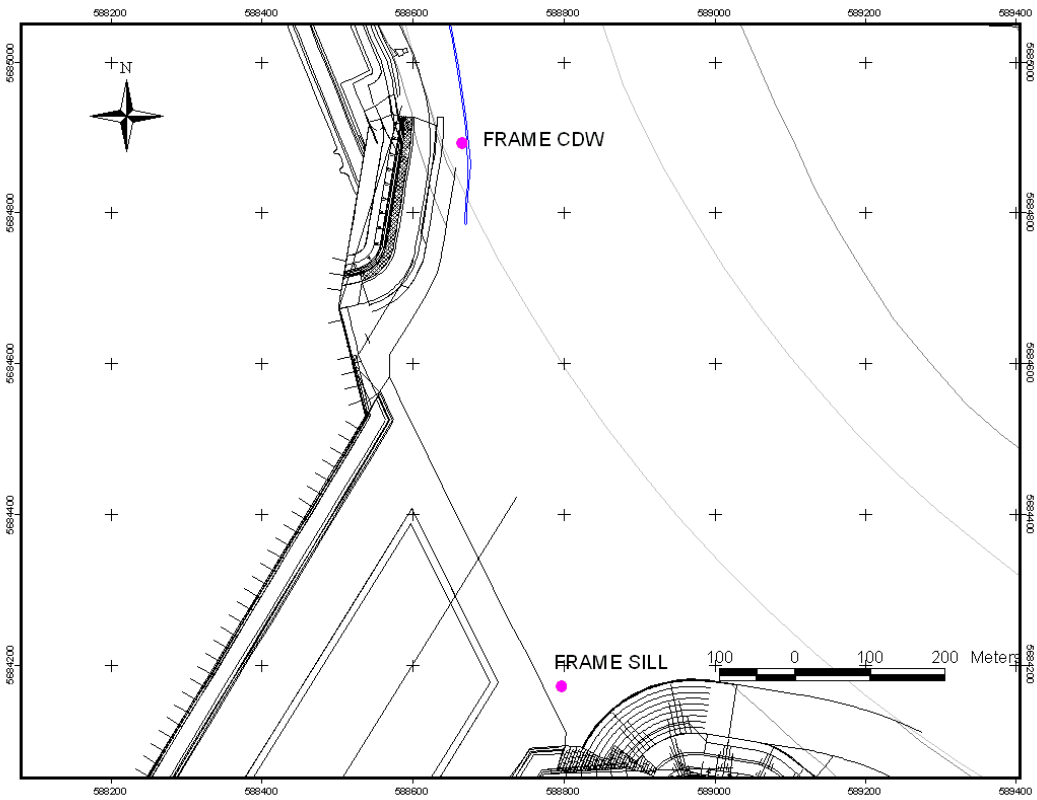

Figure 3-4: Map of the measurement location

3.2.2. The equipment

3.2.2.1. The frames

Two new frames were developed for autonomous measurement of sediment transport phenomena. The frames are equipped with an ARGUS ASM-IV high-resolution turbidity array, an

ALTUS precision echosounder and furthermore two multiprobes: an Aanderaa RCM-9 and a Valeport MIDAS. This way proper instrumentation in the near bed zone was ensured. Data about the orientation, pitch and roll of the frames is obtained from a magnetic compass (orientation, Valeport MIDAS) and a tilt sensor (pitch and roll, ARGUS ASM-IV / Aanderaa RCM-9).

Set up of the CDW frame is as follows:

- The RCM 9 was installed at 1m above the bottom, with the following sensors: a CTD probe, Doppler Current Sensors and a Turbidity Sensor
- The Valeport Midas was installed at 0.1m above the bottom, with the following sensors: a CTD-probe, an electromagnetic Current Meter (ECM) and an OBS3+ turbidity sensor
- The ALTUS was installed at 0.37m above the bottom
- The ARGUS ASM-IV was installed in such a way that the lowest turbidity sensor was placed at 0.17m above the bottom

Since the Sill frame penetrated considerably during previous measurements, the supporting surface was enlarged. Further set up of the Sill frame is as follows:

- The RCM 9 was installed at 1.1m above the bottom, with the following sensors: a CTD probe, Doppler Current Sensors and a Turbidity Sensor
- The Valeport Midas was installed at 0.1m above the bottom, with the following sensors: a CTD-probe, an electromagnetic Current Meter (ECM) and an OBS3+ turbidity sensor
- The ALTUS was installed at 0.43m above the bottom
- The ARGUS ASM-IV was installed in such a way that the lowest turbidity sensor was placed at 0.23m above the bottom

This is anticipated to allow a proper measurement of the lower current profile and give additional information on the suspended sediment concentration structure. Figure 3-5 shows the CDW frame with all the sensors. The Sill frame is built up identically.

Each sensor had its own data logger and power supply from internal batteries.

The frames were designed for easy transport and installation. The sensor positions, in particular sensor height above the bed, can be adjusted to specific requirements over a wide range. The structure of the frames consists of a tripod with a separation of about 4 metres between the legs. The height is about 2.3 m. Several girders give the frames the required sturdiness. The sensors can be clamped to adjustable supports. Hoisting support facilities are attached to the top of the frames.

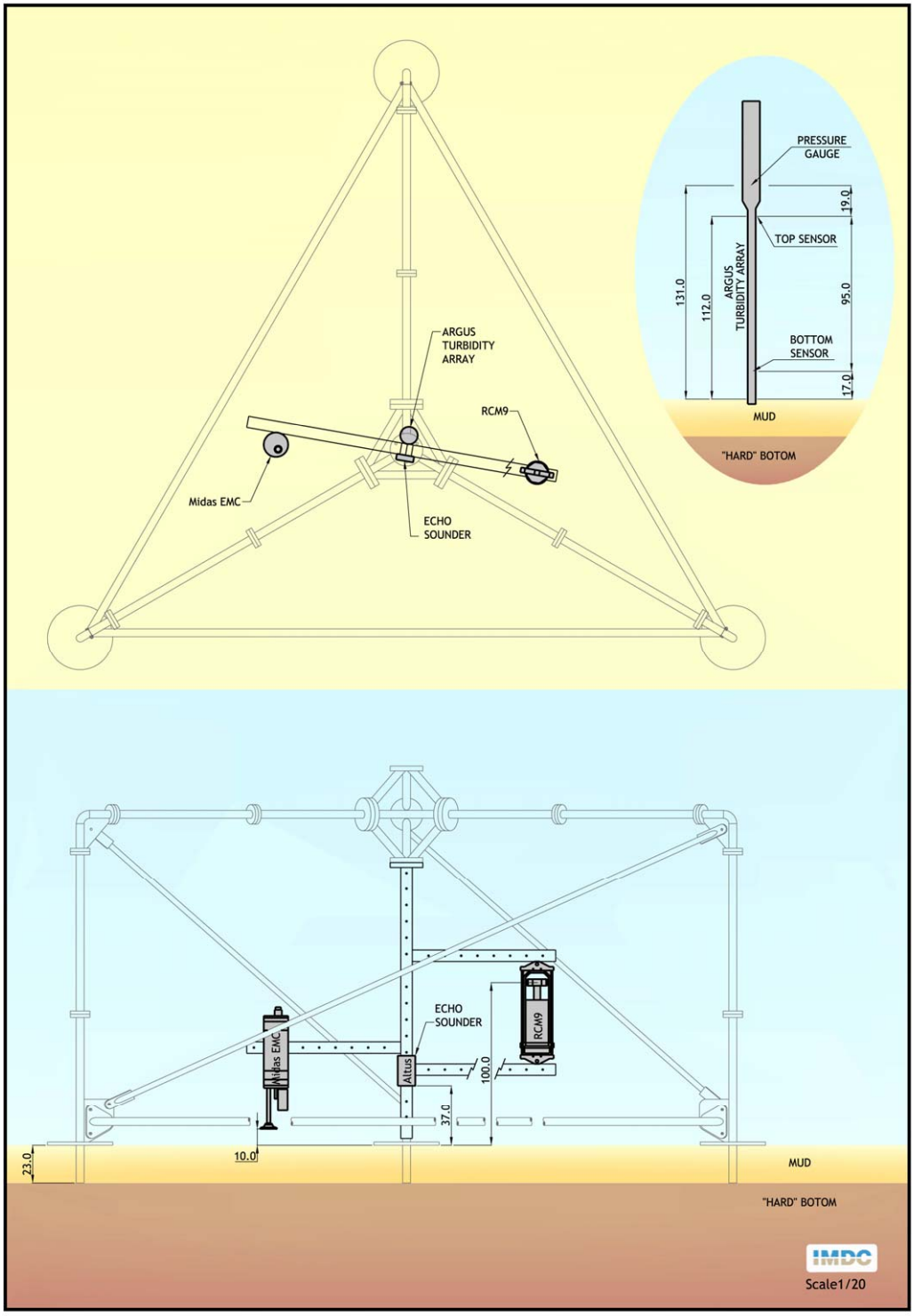

Figure 3-5: Sketch of the CDW frame with all the sensors (dimensions in [cm])

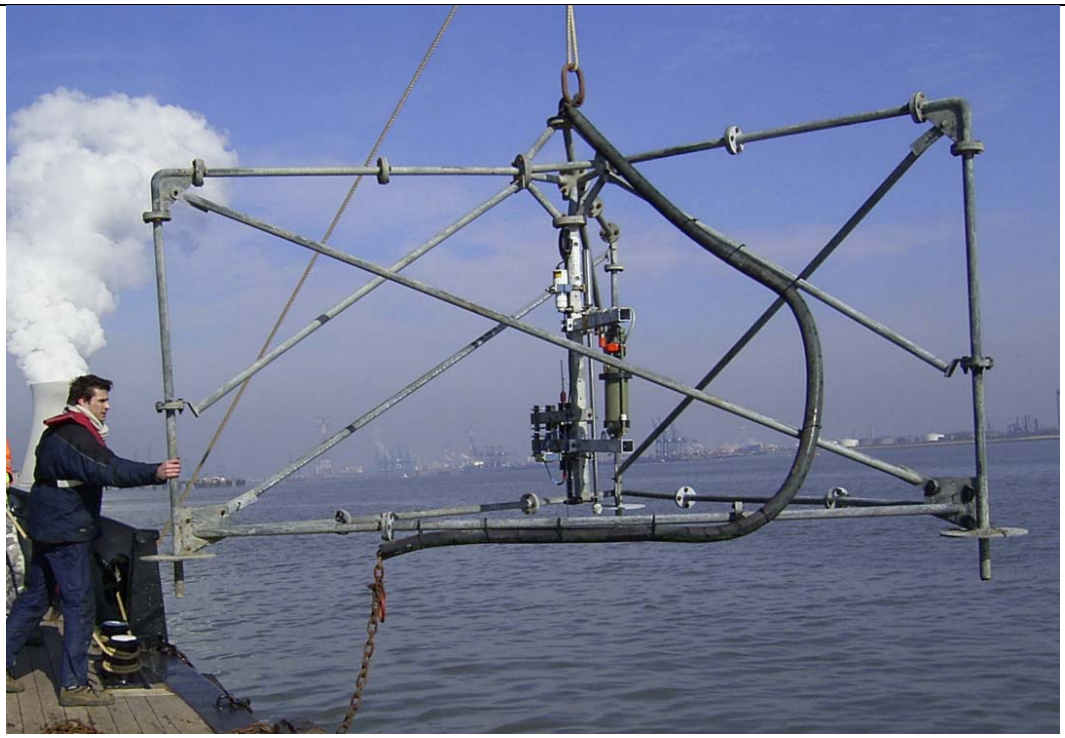

Figure 3-6: Installation of the CDW frame

3.2.2.2. ARGUS ASM-IV

The ARGUS ASM-IV was used to detect the vertical structure of the suspended sediment concentration in the zone of 1 meter above the bed.

The ARGUS ASM-IV was developed for high resolution measuring of accretion and erosion of the riverbed. (ARGUS UMWELT-MEATECHNIK, 2005). The instrument operates with backscatter infrared laser sensors embedded in a stainless steel rod. The 96 sensors are placed on an active board at a distance of 0.01m of each other. There are three additional sensors: an inclinometer, a pressure gauge and a on board temperature sensor.

A battery powered central unit in the head of the instrument controls activation and power supply of the sensors as well as the transmission of the signals. The sealed in unit consists of a microprocessor, a data memory, the additional sensors and the energy supply.

The ARGUS ASM-IV has a sampling interval of 5 seconds and every cycle there are 20 samples taken. The break range between each burst (i.e. pause) is set at 500 seconds. This means that the total cycle time is 600 seconds.

The measurement range of the ARGUS ASM-IV is from 0 to 5000mg/l.

More details on the ARGUS ASM-IV can be found in the February Survey Reports of the HCBS 1 measurement campaign (IMDC, 2005h)

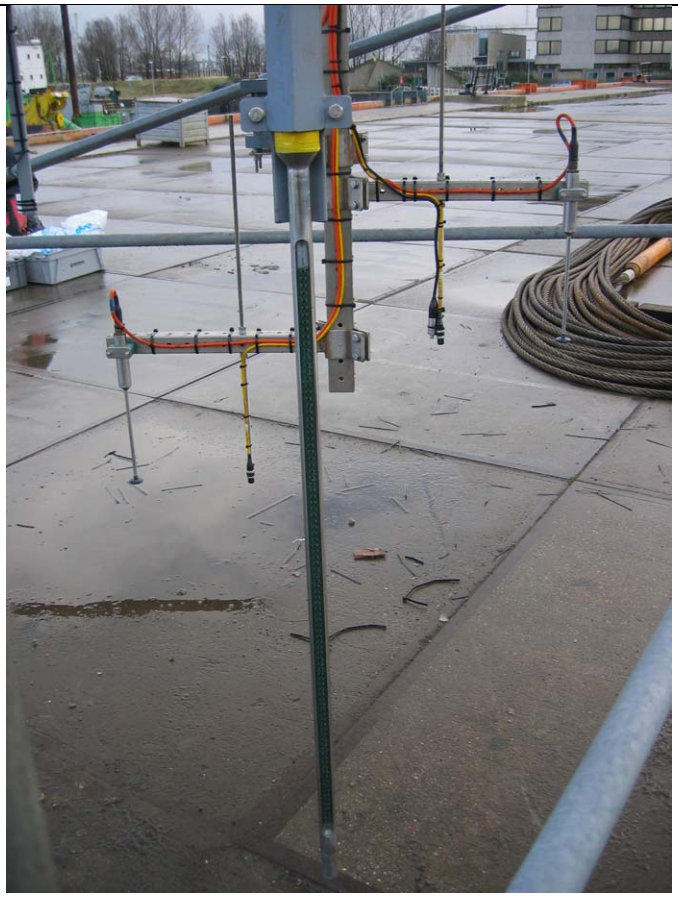

Figure 3-7: ARGUS ASM-IV

3.2.2.3. ALTUS

The ALTUS is specially designed for mainly muddy environments to precisely quantify changes of bottom elevation. It is a high frequency acoustic submersible recording altimeter and is based on a 2 MHz echo sounder which transducer is located at a given distance from the bed. The echosounder was attached to the frame such that (looking downward) it can measure bottom variations with an accuracy of about 2mm. A separate container includes altimeter electronics, data logger, pressure sensor and energy.

The logging cadence was 600 seconds.

The technical details on the Altus are described in the February Survey Reports of the HCBS 1 measurement campaign (IMDC, 2005h).

3.2.2.4. Valeport MIDAS OBS3+

The Valeport MIDAS is a multiparameter instrument that has CTD- probe, an electromagnetic Current Meter (EMC) and an OBS3+ turbidity sensor with a range of 0-1500 FTU. The instrument was set to measure in cycles of 10 minutes, divided into 100 samples at a rate of 1Hz and a pause of 500 seconds.

Further technical details on the Valeport MIDAS OBS3+ are described in the Report 6.1 Winter calibration (IMDC, 2006a) of the HCBS2 Measurement campaign.

Figure 3-8: Valeport MIDAS EMC and OBS3+

3.2.2.5. Aanderaa RCM-9

The Aanderaa Recording Current Meter RCM-9 MkII is a multi-parameter instrument that consists of a CTD probe, Doppler Current Sensors and a Turbidity Sensor. The instrument was set up to measure every 10 minutes. All sensors (temperature, pressure, conductivity, turbidity, tilting) except the Doppler Current Sensor were set to record once every 10 minutes. The Doppler Current Sensor sent 600 pings during every 10 minute-interval and calculated the average value for current speed and direction over this interval. Data storage units in the instruments logged all the measured values..

IMDC (2006a) gives more technical details on the RCM-9.

Figure 3-9: Aanderaa RCM-9

3.2.3. Course of the measurements

At the entrance of Deurganckdok the two frames were set to measure from the 18th (CDW frame) respectively the 19th (Sill frame) of July 2006 till the 11th of October 2006 (both). Every week one of the two frames was recovered, the data of all equipment was downloaded and batteries were replaced, whereupon the frame was deployed again.

After removal of the frames, data of all equipment was tested. For the frame at the downstream edge of Deurganckdok (CDW) the Argus turbidity rod measured 20 samples per cycle with a sample interval of 5s with a pause of 500s between successive cycles, obtaining a total cycle time of 10 minutes. All sensors worked properly, the tilt meter indicates a good horizontal position of the frame most of the deployments. Also the Altus echosounder and the Aanderaa RCM9, both with a measurement cadence of 10 minutes, worked properly. Though some data from the Altus was not stored properly (from the 23rd of August till the 7th of September). The Valeport MIDAS OBS3+ measured properly until the 26th of July. Afterwards there was some slight water infiltration which made downloading of the data impossible. Hence the instrument was sent back to the manufacturer for reparation. After this reparation tests in the office showed that the turbidity sensor didn't measure properly. Nevertheless the 20th of September the instrument was placed again on the frame, but without its turbidity sensor. One measurement cycle of the Valeport took 10 minutes (100 samples were taken at a rate of 1 sample per second and a pause of 500s).

Concerning the frame placed at the sill of Deurganckdok, the instruments measured with the same tuning as the CDW frame. The Altus and the Aanderaa RCM9 worked properly. Except for a failure in battery-supply between the 22nd and the 30th of August also the ARGUS measured successfully. As for the MIDAS OBS3+ this instrument also worked properly. But due to the failure of some screws that had to ensure the waterproofness it was decided to remove it from the frame the 29th of September. The MIDAS OBS3+ wasn't replaced afterwards. During the measurements it also came clear that after the modification of the frame (i.e. enlarging of the supporting area) there where no more problems with the penetration of the frame into the muddy bottom. Due to some works nearby the sill of Deurganckdok, the frame was moved to the vicinity of buoy 84 from the 2nd till the 30th of August 2006.

An overview of the measurement locations is given in Table 3-4, while a chronological overview of measured data with an explanation can be found in Table 3-5.

Table 3-4: Overview of the measurement locations (UTM50) and periods

Near bed continuous monitoring			
Location	*Easting (UTM ED 50)*	*Northing (UTM ED 50)*	*Period*
Deurganckdok CDW	588685	5684880	18/07/2006 – 11/10/2006
Deurganckdok Sill	588805	5684170	19/07/2006 – 11/10/2006

Table 3-5: Chronological overview of missing and faulty data

Deurganckdok CDW			
Period	***No data***	***Faulty data***	***Comment***
18/07/2006			Deployment
26/072006			Recovery/Deployment
26/07/2006 – 20/09/2006	MIDAS OBS3+		Reparation MIDAS after damage due to water infiltration.
09/08/2006			Recovery/Deployment
23/08/2006			Recovery/Deployment
23/08/2006 – 07/09/2006	ALTUS		Altus data not stored properly
07/09/2006			Recovery/Deployment
20/09/2006			Recovery/Deployment
20/09/2006 – 11/10/2006	Turbidity sensor MIDAS OBS3+		Turbidity sensor failed after reparation MIDAS
11/10/2006			Recovery
Deurganckdok Sill			
Period	***No data***	***Faulty data***	***Comment***
19/07/2006			Deployment
02/08/2006			Recovery/Deployment Frame moved to buoy 84
22/08/2006			Recovery/Deployment
22/08/2006 – 30/08/2006	ARGUS		Battery-supply cut-off
30/08/2006			Recovery/Deployment Frame placed back to the sill of Deurganckdok
13/09/2006			Recovery/Deployment
29/09/2006			Recovery/Deployment
29/09/2006 – 10/11/2006	MIDAS OBS3+		Instrument not redeployed due to failure screws
11/10/2006			Recovery

4. PROCESSING OF DATASETS

4.1. Calibration of the sensors

A crucial aspect of the accuracy and reliability of the data concerns the calibration of the instruments before the measurement campaign. The calibration procedures and results are described in report 6.1 Winter calibration of the HCBS2 measurements (IMDC, 2006a) and report 6.2 Summer calibration of the HCBS2 measurements (IMDC, 2007a) .

4.2. Long term measurements near quay wall

A second period of the long term measurements executed at two depths (-2.4 m TAW, -12.2 m TAW) at three locations on the quay walls of Deurganckdok lasted from 20 July until 12 October 2006. Depth, temperature, salinity and suspended sediment concentration have been logged. All gathered time series have been converted to appropriate engineering units and combined to form series covering the complete period. During validation erroneous data due to mid term recovery, sensor malfunction and buried equipment has been removed. In this form the data is ready for processing.

4.2.1. Factual data: Weekseries

Measurements are visualized per instrument, location and per week in APPENDIX B.

- The title shows the week number followed by the year
- The second graph depicts the salinity and temperature
- The third and last graph shows the water level at the nearest tidal gauge and the suspended sediment concentration

Faulty data is omitted from these graphs.

4.2.2. Average tidal cycle of local parameters

For all parameters measured at one location data has been organised in separate series per tidal cycle (low water to next low water). High water moments were placed on a fixed position in the series, low water moments differ in time relative to high water due to variation in flood and ebb length with neap-spring phases. In this way a time series with time relative to high water is produced for each tide. When tidal elevation data showed substantial gaps data from pressure gauges was used to divide the long series into tidal series.

By defining average tidal amplitude A for neap, average and spring tides, it becomes possible to classify tidal cycles in three categories in the following way:

$$Neap : A \leq \alpha(A_{neap} + A_{aver})$$

$$Spring : A \geq \alpha(A_{spring} + A_{aver})$$

$$Average : \alpha(A_{neap} + A_{aver}) < A < \alpha(A_{spring} + A_{aver})$$

where: A_{neap} , A_{aver} and A_{spring} are average amplitudes

α is a factor to decide where to distinguish between categories (here taken as 0.5)

Using such categorisation the tidal series can be grouped in neap, average and spring tides. Within these groups an average is made per parameter per tidal phase relative to high water (Figure 4-1). In this way an average neap tidal cycle, an average middle tidal cycle and an average spring tidal cycle is obtained for all parameters.

The same exercise is repeated for relative values, which are the measured values divided by the tidal average (the average parameter value for that particular tidal cycle). All three types are shown in one plot with a plot for salinity, sediment concentration and temperature per page in APPENDIX G1.

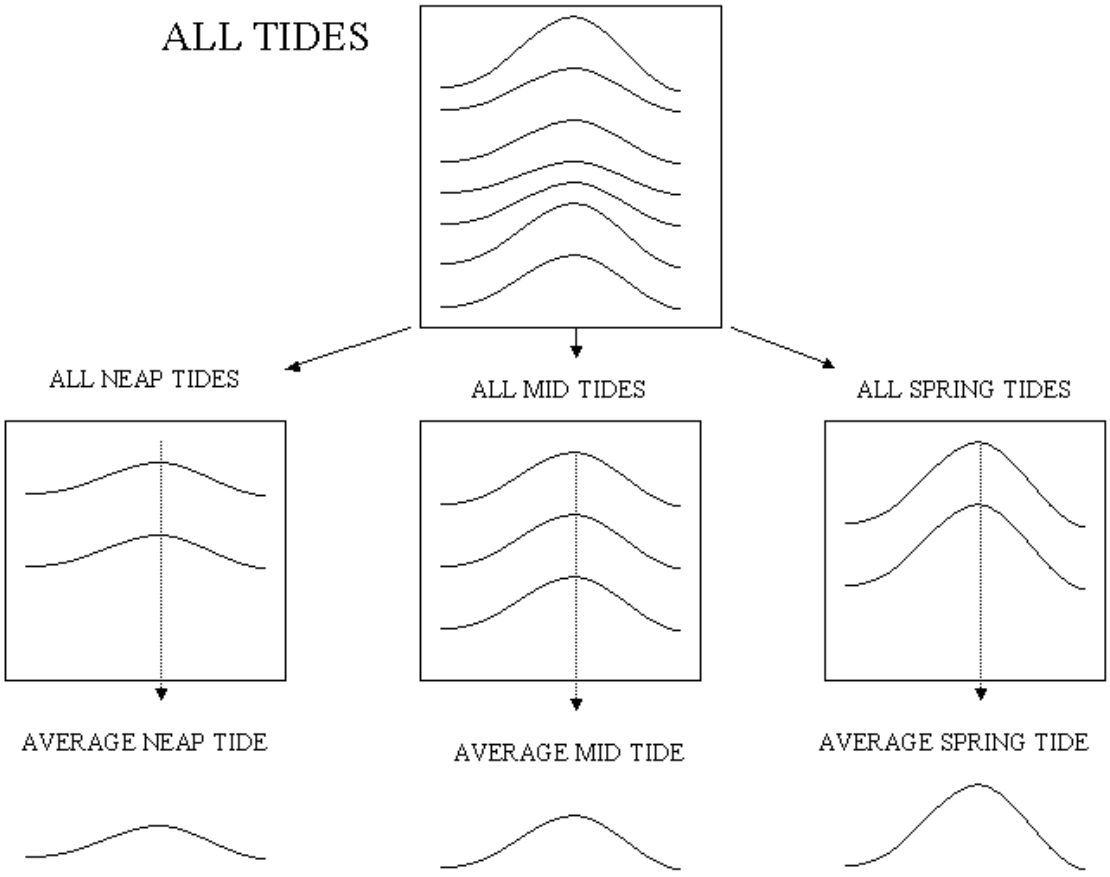

Figure 4-1: Categorisation of tidal tidal cycles

4.2.3. Average tidal cycle of gradients

For each of the three parameters being processed, four horizontal gradients (along dock's axis and cross dock, each at two depths) and three vertical gradients (one per location) have been calculated. The gradient along Deurganckdok was obtained by the difference of measurements between locations P&O2 (S-ENTRANCE) and P&O1 (S-BACK) (P&O1 minus P&O2) , the gradient across Deurganckdok was calculated as the difference between locations P&O2 (S-ENTRANCE) and PSA (N-ENTRANCE) (PSA minus P&O2). For each of the locations a vertical gradient has been calculated from the difference between the measurements at –2.4m TAW and the measurements at –12.2m TAW (-12.2m data minus –2.4m data).

The time series of gradients obtained as such have then been processed following exactly the same tidal separation technique as for the local parameters (described in 4.2.2). The results are shown in APPENDIX G2.

4.3. Near bed continuous monitoring

4.3.1. Methodology of processing the ARGUS ASM-IV data

The data gathered by the ARGUS ASM-IV during the measurements was processed with the ASMA 3.11 software (provided by ARGUS UMWELT-MEATECHNIK).

Raw data files are loaded in combination with the appropriate calibration file. This file is set up during the calibration. Finally only the data at the beginning and the end of the time series (apparatus not submerged) needed to be removed.

Time series, which show the sedimentation profile measured by the 96 sensors, can be found in APPENDIX C. In these plots the time axis shows MET-time. Also a table showing average values for SS concentration per tidal phase is shown. All sensors are organized per 10 (except top 6 are together) and averaged over flood and ebb phases. An average tidal phase (i.e. tidal phase with an average tidal difference) is also shown for every deployment period in APPENDIX C.

4.3.2. Methodology of processing the Altus data

The Altus data were validated and processed. Outliers were screened and removed.

The ALTUS gathers echo-signals at 4 different threshold values. The maximal echo value is used as a reference value for the hardness of the bottom. When the echo signal exceeds certain percentage of this emitted signal strength, a high percentage (70%) threshold will give an indication of the hard bottom, lower percentage threshold values (11%, 23%, 39%) indicate various levels in the soft bottom with a decreasing ‘density’. Increasing distances indicate a net erosion, decreasing distances a net sedimentation. The differences between the 4 signals at one given time and measurement give an indication on the ‘firmness or solidity’ of the soft bottom. These differences are hard to quantify and are more to be analysed qualitatively. Table 4-1 shows the threshold values used and their colour in the graphs.

Week series are shown in APPENDIX C together with the ARGUS week series. Altus datasheets show values for all measured signals including the tide at a nearby tidal station (Liefkenshoek).

A table is added with the Altus Echosounder-Bottom distances of every signal for each High Water (HW) and Low Water (LW). An average tidal phase is also shown for every deployment period in APPENDIX C.

Table 4-1: Overview of the used threshold values for the Altus Echosounder

Legend name used	***Threshold value [% of Signal]***	***Colour in the graph***
Signal 1	11%	Red
Signal 2	23%	Green
Signal 3	39%	Blue
Signal 4	70%	Black

4.3.3. Multiprobes: RCM9 and Valeport data

RCM9 and Valeport MIDAS OBS3+ data were validated and processed. Outliers were screened and removed.

Velocities were computed with a reference to the magnetic North.

Datasheets in APPENDIX D gives the ‘2 days’-series of RCM9 and Valeport data:

- Velocity Magnitude and Direction of UP sensors (RCM9)
- Velocity Magnitude and Direction of DOWN sensors (Valeport)
- Suspended Sediment Concentration of UP (blue) and DOWN (red) sensors. Tidal height is included together with these parameters from the nearest tidal station (Liefkenshoek)
- Absolute Suspended Sediment Flux of UP (blue) and DOWN (red) sensors. Tidal height is included together with these parameters from the nearest tidal station (Liefkenshoek)

The Absolute Suspended Sediment Flux is not defined for a defined cross-section. It is an absolute flux (Velocity Magnitude x SS Concentration).

In APPENDIX D tables are showing average values for Velocity Magnitude, Direction, SS Concentrations and Absolute Fluxes for both UP and DOWN sensors per tidal phase (ebb/flood).. An average tidal phase is also shown in APPENDIX D.

In APPENDIX E the suspended sediment concentration measured by the RCM9 and Valeport sensors (blue) was compared to the suspended sediment concentration measured by the ARGUS sensors (red) at the same height:

- For the CDW frame, the UP sensor was located at 1.0 m above the bottom and was compared to the ARGUS sensor 13, which resided at the same depth.
- For the CDW frame, the DOWN-sensor was located at 0.1 m above the bottom and was compared to the lowest ARGUS sensor 96, which was located at 0.17 m above the bottom.
- For the Sill frame, the UP sensor was located at 1.1 m above the bottom and was compared to the ARGUS sensor 9, which resided at the same depth.
- For the Sill frame, the DOWN sensor was located at 0.1 m above the bottom and was compared to the ARGUS sensor 96, which was located at 0.23 m above the bottom.

Tidal height is included together with these parameters from the nearest tidal station (Liefkenshoek).

In APPENDIX E tables are showing average values for SS Concentrations of both Argus and RCM9 and Valeport sensors per tidal phase (ebb/flood). An average tidal phase is also shown in APPENDIX E.

5. PRELIMINARY ANALYSIS

5.1. Long term salinity measurements 20/7/2006 – 12/10/2006

For each of the three locations salinity, sediment concentration and temperature have been logged at two depths. Apart from week series per parameter average tidal cycles have been determined for each parameter. This has been done for absolute and relative values as well as for horizontal gradients along and cross the dock and vertical gradients (APPENDIX **G**). All of these results are discussed below.

5.1.1. Week series

5.1.1.1. P&O1 (S-BACK)

Salinity levels are in the range of 9 ppt to 25 ppt with a variation of masimum 4 ppt per tide for the bottom instrument, and up to 6 ppt per tide for the top instrument. Temperature drops gradually after a peak over 25 °C in July to 18°C in October. Sediment concentration is generally lower than 100 mg/l with peaks of 600- 800 mg/l occurring more frequently in September-October.

5.1.1.2. P&O 2 (S-ENTRANCE)

Salinity ranges from 9 ppt to 25 ppt with a smaller tidal variation near the bottom compared to near the surface. . Temperature drops gradually after a peak over 25 °C in July to 18°C in October. Sediment concentration is generally lower than 100 mg/l with peaks of 400- 1000 mg/l occurring more frequently in September-October near the bottom.

5.1.1.3. PSA (N-ENTRANCE)

Salinity levels are in the range of 7 ppt to 25 ppt with small tidal variation near the bottom compared to near the surface. Temperature drops gradually after a peak over 25 °C in July to 18°C in October. Sediment concentration varies between 50 mg/l and 1000 mg/l near the bed and between 30 mg/l and 500 mg/l at –2m TAW. Higher concentrations are generally found during flood and occur more frequently in September and October.

5.1.2. Average tidal cycles

Plots of averaged tidal cycles can be found in APPENDIX **G**.

5.1.2.1. Local Parameters

The highest temperatures and salinity during an average tidal cycle occur during an average tide. The lowest temperatures occur during spring tides. For salinity the difference between average, neap and spring tides is less apparent. The highest range in salinity variation within one tidal cycle occurs at PSA (N-entrance), varying between 15 and 19 ppt at –12.2 m TAW, and between 12 and 17 ppt at –2.4 m TAW. Peak values of high salinity values occur about 1.5 and 3 hours after high water for PSA (N-entrance) and P&O1 (S-back). The salinity variation within a tidal cycle at P&O2 (S-entrance) is less pronounced and is not defined by a high value peak, high salinities occur between 1-6 hours after high water.

Suspended sediment concentration is highest during spring tides for the bottom instruments at –12.5 m TAW.

About sediment concentrations we can say that an outstanding peak occurs near the bed at 2.5 and 0.5 hour after high water for locations P&O1 (S-BACK) and PSA (N-ENTRANCE) respectively. The peak for P&O2 (S-ENTRANCE) occurs from 1 hour before to 1 hour after high water. Highest peaks occur for spring tides, followed by average tides and neap tides.

This peak is most pronounced for PSA (N-ENTRANCE), with almost 400 mg/l respectively for an average spring tide, while P&O 1 (S-ENTRANCE) and P&O 2 (S-BACK) have peaks of 200 mg/l and 150 mg/l respectively for an average spring tide.

For the measurements at –2m TAW peaks are much less pronounced at all locations with no peak reaching 100 mg/l.

5.1.2.2. Gradients

Cross-dock gradients from P&O 2 (S-ENTRANCE) towards PSA (N-ENTRANCE) have been calculated at –2.4 m TAW and at –12.2 m TAW. Plots of the both gradients shows a salinity gradient being positive almost the complete tidal cycle, which means that salinity is higher near the surface and near the bottom at PSA (N-ENTRANCE) than at P&O 2 (S-ENTRANCE), except during low water.

Sediment concentration gradients near the bottom are close to zero throughout an average tidal cycle, meaning that the concentration at the downstream quay (PSA (N-ENTRANCE)) is in general equal to the one near the upstream quay (P&O 2 (S-ENTRANCE)). Half an hour before high water till 2 hours after high water a positive gradient is observed, demonstrating higher concentrations at PSA (N-ENTRANCE). Sediment concentration at -2m TAW is showing a gradient constantly close to zero.

Along-dock gradients run from the entrance towards the inland end of the dock. Close to the water surface (-2.4 m TAW) there is almost no gradient during ebb or flood for temperature and suspended sediment concentration. The salinity gradient is negative from about 4 hours before high water till high water, it is positive for the remaining tide. This means salinity is higher during flood near the entrance. Closer to the bed we see a fluctuating salinity gradient, changing sign three times per tidal cycle. The sediment concentration gradient is close to zero until 1hour before high water, reaching -0.1 mg/l/m at high water. Right after high water the gradient rises to become positive for two hours and then falling to close to zero again. This seems to be the signature of a cloud passing along the eastern quay wall from river into the dock. Indeed, looking back to the average cycles for local parameters we see a peaking concentration at P&O 2 (S-ENTRANCE) at high water and a peaking concentration at P&O1 (S-BACK) about 2.5 hours later.

Vertical gradients are very small for suspended sediment concentration, except for a peak at times of high bottom concentrations at PSA (N-ENTRANCE), i.e. at high water. Salinity gradients show a weak peak corresponding with low water slack at all locations.

5.1.3. Comparison with previous measurements

In comparison to previous measurements lower suspended sediment concentrations occurred during this campaign. The salinity range is significantly higher with a range of 8-25 ppt in comparison to 5-11 ppt during the spring campaign. Temperature variability is comparable but temperatures were higher during this campaign.

Regarding the averaged tidal cycles, it seems that most phenomena and observations during the summer campaign (July-October) are similar to the observations made during the spring campaign (March-April)), however less extreme.

All parameter ranges, extremes (min-max) seem less distinct especially for suspended sediment concentration. It is assumable that sediment load is smaller during the summer in comparison to the winter.

Also the variability between different tidal (spring, average, neap) cycles is less pronounced in the summer campaign. Where spring tides showed the highest ranges for salinity, temperature and suspended sediment concentrations in the spring campaign, this is certainly not the case for the summer campaign. In summer the average tides (instead of the spring tides) show the highest tidal variation in these analyses.

The same goes for the gradients. This is illustrated remarkably by the vertical gradients, which are very small during the summer campaign.

5.2. Near bed continuous monitoring 19/4/2006 – 23/5/2006

5.2.1. CDW frame data

Average concentrations per tidal phase in layers of 10 cm, measured by the ARGUS vary from 25 to 4382 mg/l. This last value, which is relatively high, can be explained by the measurements between the 25th of June and the 9th of August. During this period the largest concentrations can be found in the upper half of the measurement range (see weekseries APPENDIX C). After recovery en redeployment of the frame the concentrations are much lower. Growth on the instrument can explain this observation. Maximum average concentration per tidal phase without taking this period in consideration is much lower (1030 mg/l). Considering the complete deployment period, some higher concentrations occur at several heights of the water column Some floating dirt can probably explain this. During flood suspended sediment concentrations are higher than those measured during ebb. Near spring tide (around the 11th of August, the 8th of September and the 7th of October 2006) the concentrations are generally the highest.

It appears from the recorded data that the bottom is situated more or less 40 cm below the Altus sensor, consequently at approximately –14 m TAW. Depending on the deployment this can vary a little. (see weekseries APPENDIX C).

Average velocities per tidal phase (ebb/flood) 1 m above the bed vary from 0.2 up to 0.5 m/s, 0.1 m above the bed they vary from 0.2 up to 0.4 m/s. Average SS concentrations measured by the upper sensor are smaller than those measured by the lower sensor (Figure 5-2).

Comparison of the sensors to the ARGUS is not done due to growth on the instruments, which sometimes cause large values of concentrations.

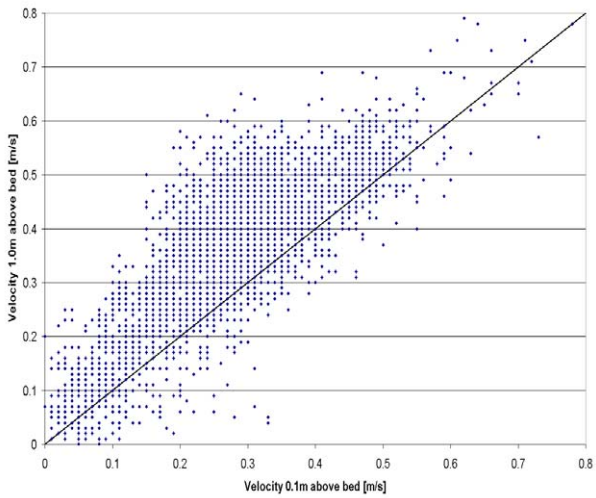

Figure 5-1: Near bed current velocities (18/07/2006 - 11/10/2006) CDW frame

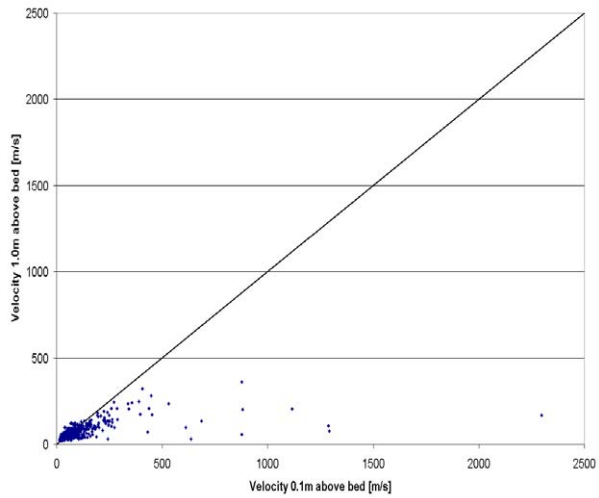

Figure 5-2: Near bed SS concentrations (18/07/2006 - 11/10/2006) CDW frame

5.2.2. Sill frame data

The following preliminary analysis is made based on the data obtained by measurements nearby the sill of Deurganckdok. The measurements in the vicinity of buoy 84 are not considered here.

Average concentrations per tidal phase in layers of 10 cm, measured by the ARGUS vary from 3 to 2070 mg/l. The highest concentrations occur in the lowest cm of the water column as to be expected. Just as for the CDW frame there can be observed growth on the instrument starting from the 25th of June till the 2nd of August 2006 when the frame was recovered and cleaned. In this period higher concentrations are measured (see weekseries APPENDIX C). During flood suspended sediment concentrations are higher than those measured during ebb. Generally concentrations are the highest near spring tide (11th of August, the 8th of September and the 7th of October 2006).

It appears from the recorded data that the bottom is situated 35 to 40 cm below the Altus sensor. Depending on the deployment this can vary a little (see weekseries APPENDIX C). Furthermore some datasheets show slight sedimentation after every high water.

Average velocities per tidal phase (ebb/flood) 1.1 m above the bed vary from 0.1 up to 0.3 m/s, 0.1 m above the bed they vary from 0.1 up to 0.2 m/s. Average SS concentrations measured by the upper sensor are somewhat smaller than those measured by the lower sensor

Similar to the CDW frame comparison between the multiprobes and the ARGUS is hard to do due to growth on the instruments.

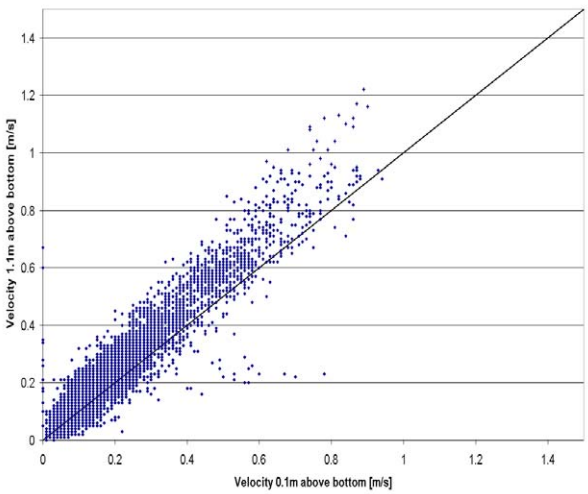

Figure 5-3: Near bed current velocities (18/07/2006 - 11/10/2006) Sill frame

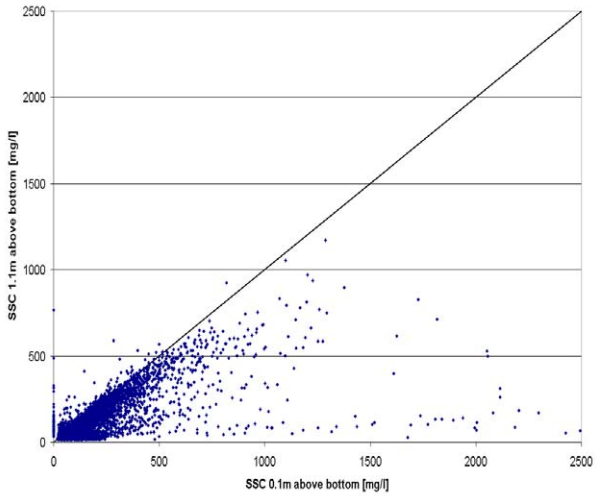

Figure 5-4: Near bed SS concentrations (18/07/2006 - 11/10/2006) Sill frame

5.2.3. Comparison with previous measurements

Previous measurements at the same locations were executed as part of the HCBS project (17/02/2005 – 03/03/2005, 14/03/2006 – 05/04/2006) and as part of this project for the

measurement campaign in the spring (19/04/2006 – 23/05/2006). Comparison will be made for a period of comparable tidal amplitudes (24/03/2006 – 5/04/2006 & 22/04/2006 – 05/05/2006 & 07/08/2006- -18/08/2006). For the CDW frame measurements of this summer measurement campaign will be compared to the spring measurements and the HCBS2 measurements. Concerning the Sill frame, no measurements were executed nearby the sill of Deurganckdok during the considered period of comparable tidal amplitudes. Hence, no comparison is given here.

Comparing the average concentration per tidal phase in layers of 10 cm measured by the ARGUS, for a period of comparable tidal amplitudes, there can be seen that tidal changes are similar (larger value near high water than near low water). Further generally higher concentrations were measured during the previous measurements. Also during both measurements the highest suspended sediment concentrations were measured close to spring tide Figure 5-5 gives a comparison of the ARGUS sensors 67 to 76 (sensor 1 = uppermost sensor). Notice that during both measurements the ARGUS was mounted to the frame at exactly the same height.

Bottom variations for a period of comparable tidal amplitudes are very alike for all measurements. Average echosounder – bottom distances seem to be smaller for the summer measurements (Figure 5-6). During both measurements the Altus was mounted to the frame at the same height.

When comparing average suspended sediment concentrations measured 1 m above the bed (RCM9), during a period of comparable tidal amplitudes, it's clear that smaller values are measured during this summer measurement campaign (Figure 5-7). While for the HCBS 2 measurements and for the spring measurements a clear augmentation of the suspended sediment concentration can be observed near spring tide, this is less pronounced for the summer measurements. Average velocities 1m above the bed are very similar to those measured during the HCBS2 measurements and slightly larger than during the spring measurement campaign (Figure 5-8).

During the period of comparable tidal amplitudes (07/08/2006- -18/08/2006), the Valeport MIDAS mounted on the CDW frame was sent back to the manufacturer for reparation.

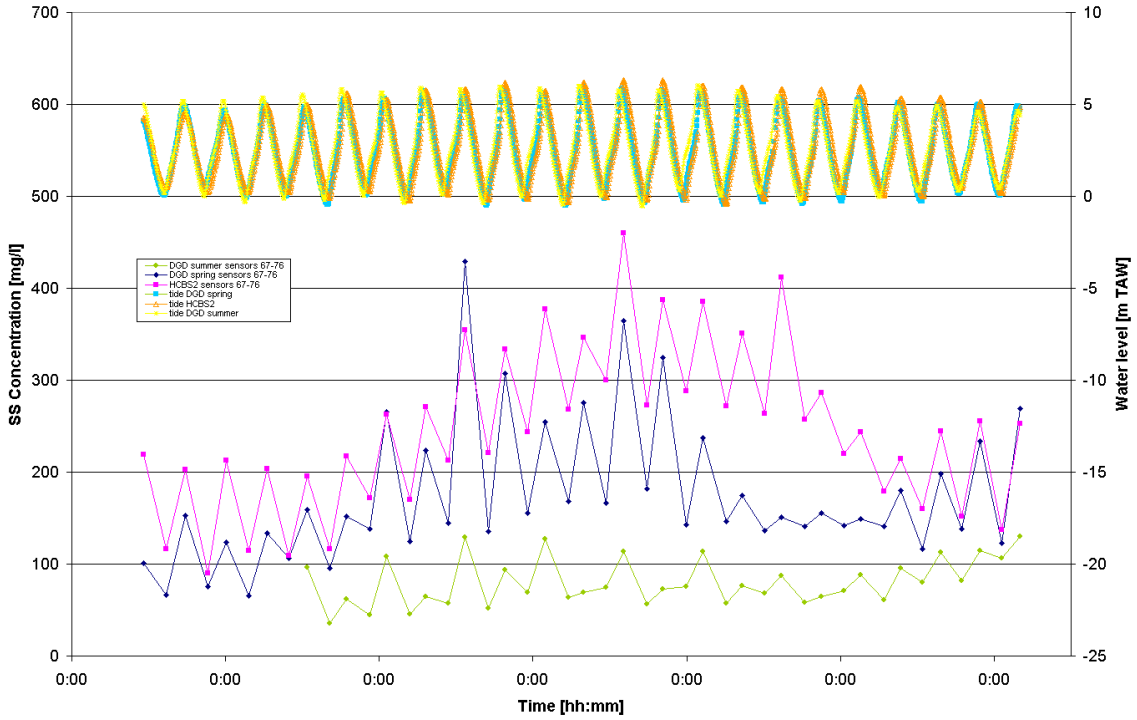

Figure 5-5: Average concentration per tidal phase for ARGUS sensors 67-76 (DGD summer vs.DGD spring and HCBS2)

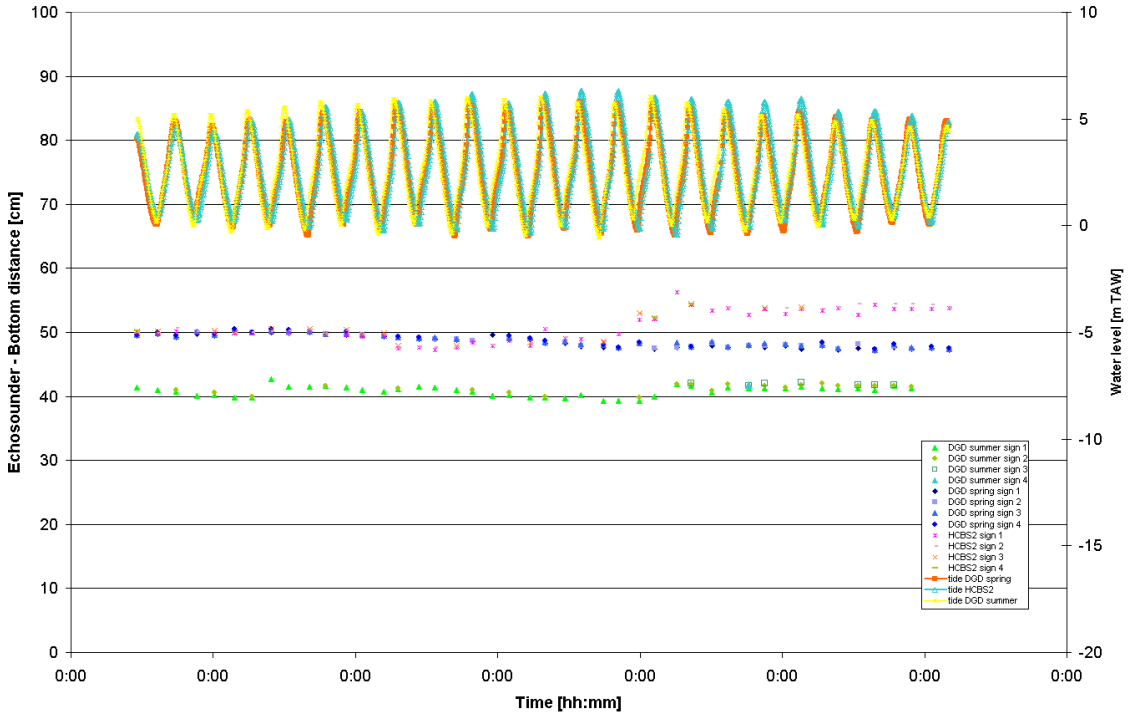

Figure 5-6: Echosounder - bottom variation for each HW/LW (DGD summer vs. DGD spring and HCBS2)

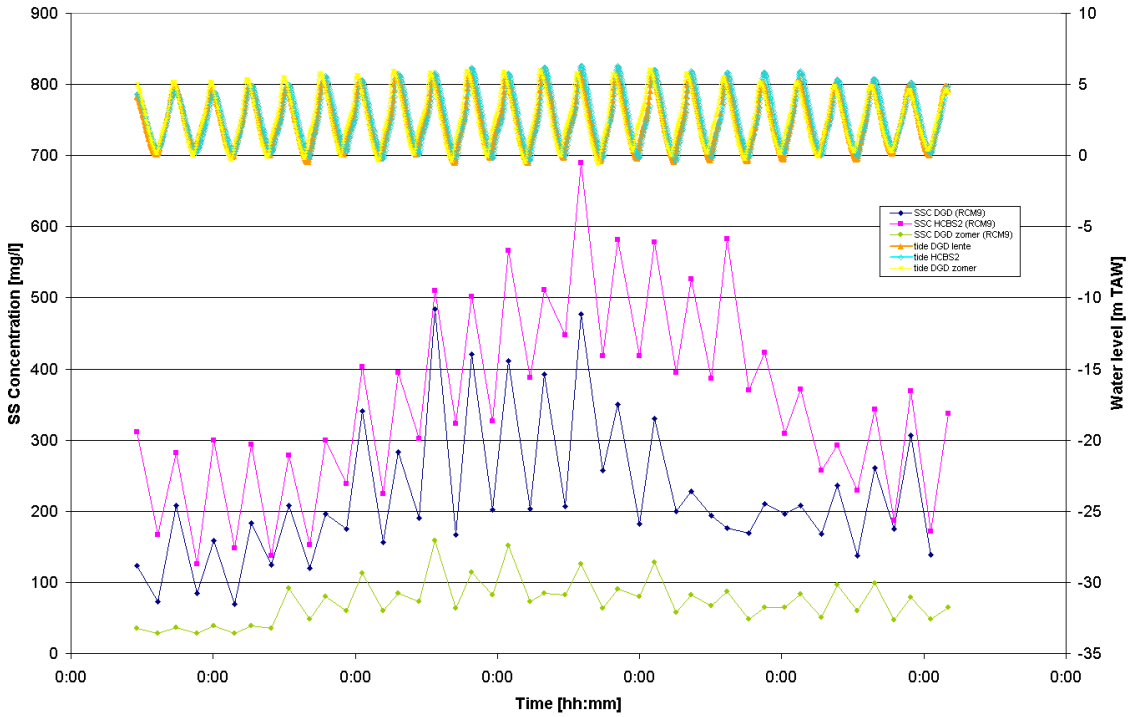

Figure 5-7: Average concentration per tidal phase 1.0m above the bed (DGD summer vs. DGD spring and HCBS2)

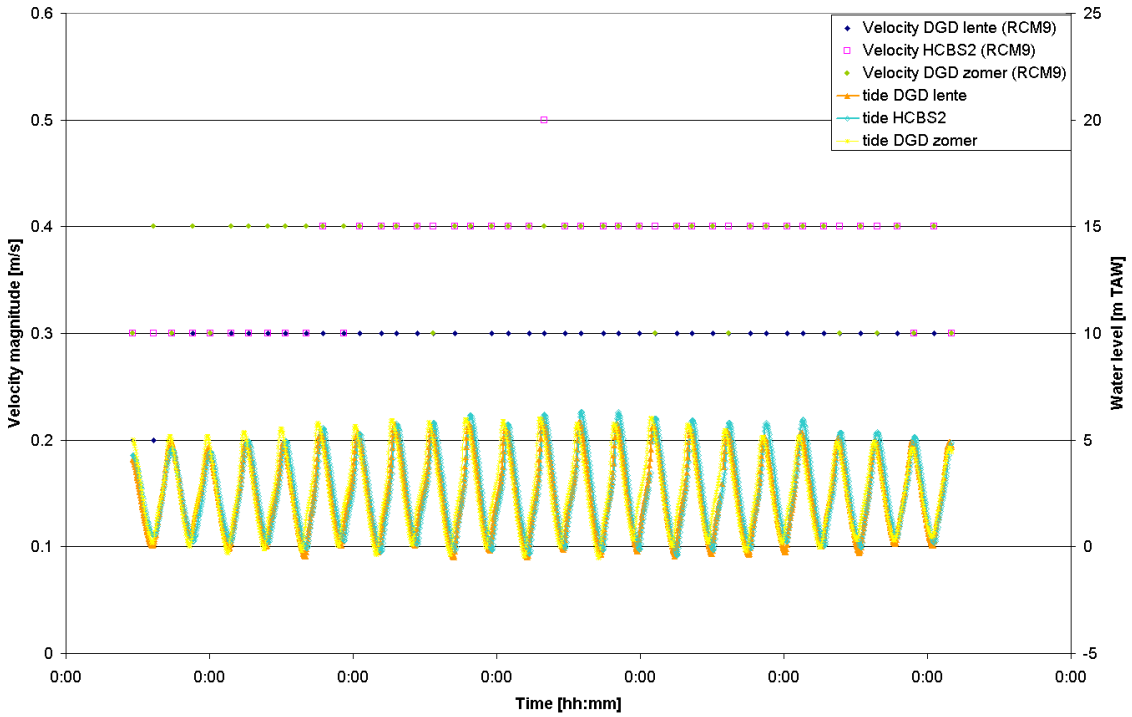

Figure 5-8: Average velocity magnitude per tidal phase (DGD summer vs. DGD spring and HCBS2)

6. REFERENCES

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IMDC (2005b). Uitbreiding studie densiteitsstromingen in de Beneden Zeeschelde in het kader van LTV Meetcampagne naar hooggeconcentreerde slibsuspensies Deelrapport 2.1: Deurganckdok 17/02/2005, I/RA/11265/05.009/MSA.

IMDC (2005c). Uitbreiding studie densiteitsstromingen in de Beneden Zeeschelde in het kader van LTV Meetcampagne naar hooggeconcentreerde slibsuspensies Deelrapport 2.2: Zandvliet 17/02/2005, I/RA/11265/05.010/MSA.

IMDC (2005d). Uitbreiding studie densiteitsstromingen in de Beneden Zeeschelde in het kader van LTV Meetcampagne naar hooggeconcentreerde slibsuspensies Deelrapport 2.3: Liefkenshoek 17/02/2005, I/RA/11265/05.0011/MSA.

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.

IMDC (2005f). Uitbreiding studie densiteitsstromingen in de Beneden Zeeschelde in het kader van LTV Meetcampagne naar hooggeconcentreerde slibsuspensies Deelrapport 2.5: Deurganckdok 16/02/2005, I/RA/11265/05.013/MSA.

IMDC (2005g). Uitbreiding studie densiteitsstromingen in de Beneden Zeeschelde in het kader van LTV Meetcampagne naar hooggeconcentreerde slibsuspensies Deelrapport 2.6: Kallosluis 18/02/2005, I/RA/11265/05.014/MSA.

IMDC (2005h). Uitbreiding studie densiteitsstromingen in de Beneden Zeeschelde in het kader van LTV Meetcampagne naar hooggeconcentreerde slibsuspensies Deelrapport 2.7: Near bed continious monitoring: february 2005, I/RA/11265/05.015/MSA.

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IMDC (2005k). Uitbreiding studie densiteitsstromingen in de Beneden Zeeschelde in het kader van LTV Meetcampagne naar hooggeconcentreerde slibsuspensies Deelrapport 5.1: Overview of ambient conditions in the river Scheldt January-June 2005, I/RA/11265/05.018/MSA.

IMDC (2005l). Uitbreiding studie densiteitsstromingen in de Beneden Zeeschelde in het kader van LTV Meetcampagne naar hooggeconcentreerde slibsuspensies Deelrapport 5.2: Overview of ambient conditions in the river Scheldt July-December 2005, I/RA/11265/05.019/MSA.

IMDC (2006a) Uitbreiding studie densiteitsstromingen in de Beneden Zeeschelde in het kader van LTV Meetcampagne naar hooggeconcentreerde slibsuspensies Deelrapport 6.1 Calibration Winter 15 March & 14 April 2006 (I/RA/11291/06.092/MSA).

IMDC (2006b) Uitbreiding studie densiteitsstromingen in de Beneden Zeeschelde in het kader van LTV Meetcampagne naar hooggeconcentreerde slibsuspensies Deelrapport 7.1 21 March 2006 Scheldewacht – Deurganckdok (I/RA/11291/06.094/MSA).

IMDC (2006c) Uitbreiding studie densiteitsstromingen in de Beneden Zeeschelde in het kader van LTV Meetcampagne naar hooggeconcentreerde slibsuspensies Deelrapport 7.2 22 March 2006 Parel 2 – Deurganckdok (downstream) (I/RA/11291/06.095/MSA).

IMDC (2006d) Uitbreiding studie densiteitsstromingen in de Beneden Zeeschelde in het kader van LTV Meetcampagne naar hooggeconcentreerde slibsuspensies Deelrapport 7.3 22 March 2006 Laure Marie – Liefkenshoek (I/RA/11291/06.096/MSA).

IMDC (2006e) Uitbreiding studie densiteitsstromingen in de Beneden Zeeschelde in het kader van LTV Meetcampagne naar hooggeconcentreerde slibsuspensies Deelrapport 7.4 23 March 2006 Parel 2 – Schelle (I/RA/11291/06.097/MSA).

IMDC (2006f) Uitbreiding studie densiteitsstromingen in de Beneden Zeeschelde in het kader van LTV Meetcampagne naar hooggeconcentreerde slibsuspensies Deelrapport 7.5 23 March 2006 Laure Marie – Deurganckdok (downstream) (I/RA/11291/06.098/MSA).

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IMDC(2006h) Langdurige metingen Deurganckdok: Opvolging en analyse aanslibbing. Deelrapport 2.1 Opmeting stroming en zout- en sedimentbeweging aan de ingang van het Deurganckdok (SiltProfiler) (I/RA/11283/06.087/WGO).

IMDC(2006i) Langdurige metingen Deurganckdok: Opvolging en analyse aanslibbing. Deelrapport 2.3. Opmeting stroming en zout-en sedimentbeweging aan de ingang van het Deurganckdok (ADCP) (I/RA/11283/06.110/BDC)

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IMDC (2007b) 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 (2007c) 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 (2007d) 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)

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

IMDC (2007g) 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 (2007h) Langdurige metingen Deurganckdok: Opvolging en analyse aanslibbing. Deelrapport 2.5 Through tide measurement Sediview neap tide (to be scheduled) (I/RA/11283/06.120/MSA)

IMDC (2007i) 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 (2007j) 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 (2007k) 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 (2007l) Langdurige metingen Deurganckdok: Opvolging en analyse aanslibbing. Deelrapport 3.2 Boundary condtions: Annual report (I/RA/11283/06.128/MSA)

APPENDIX A.

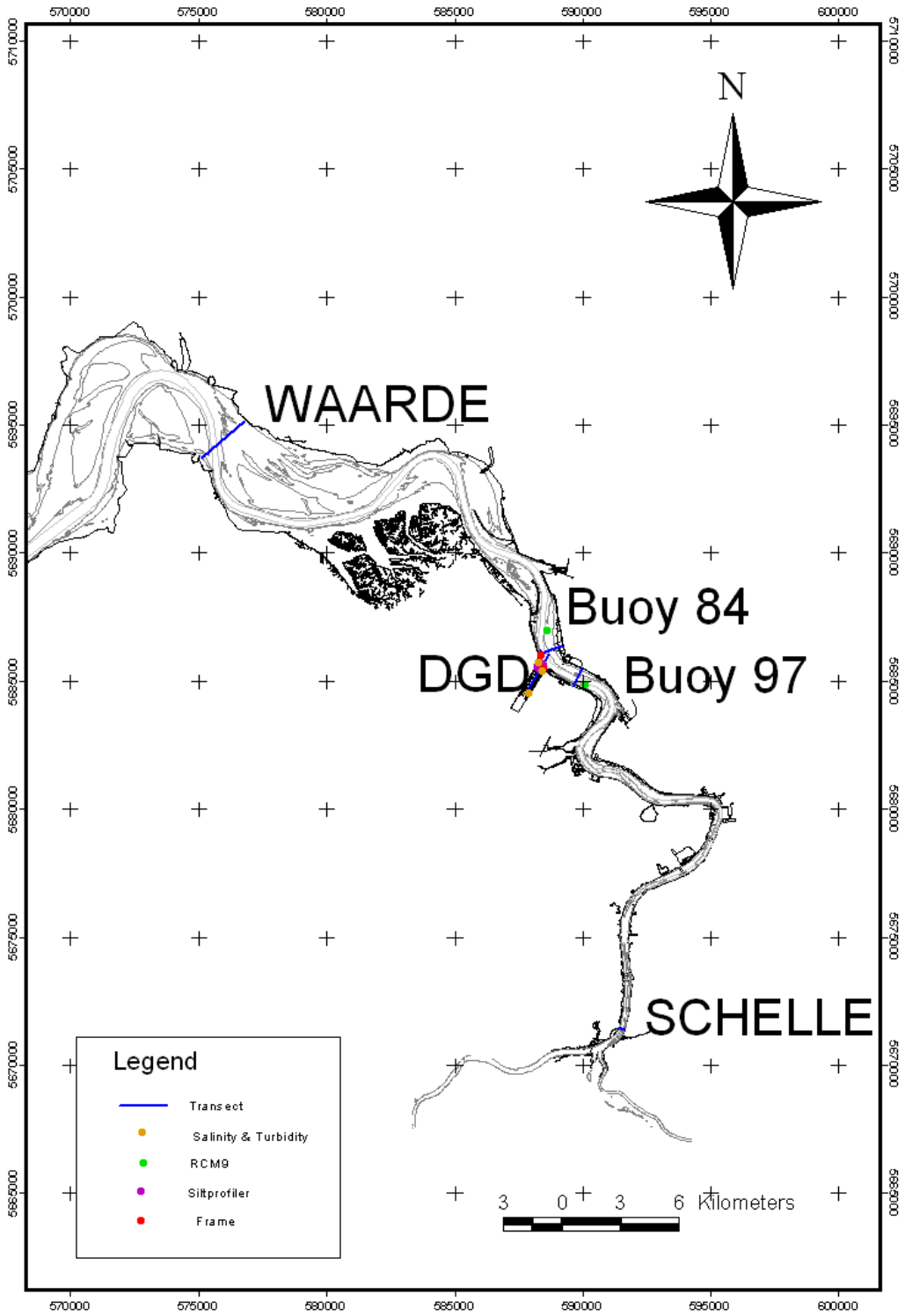
OVERVIEW OF MEASUREMENTS

A.1 Overview of the measurement locations for the whole HCBS 2 measurement campaign

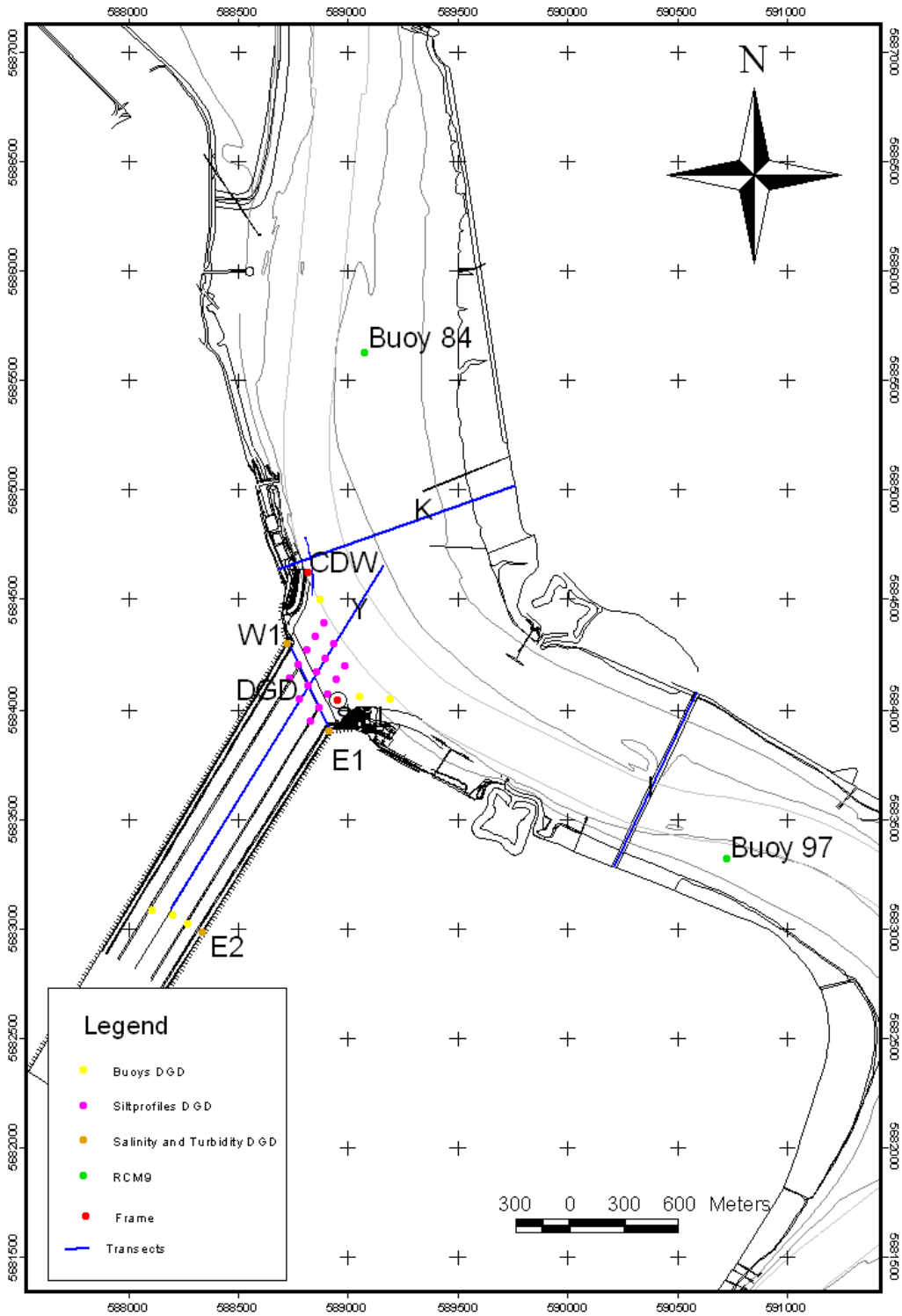
Through tide measurements: Transects					
Location	*Easting (UTM ED 50)*		*Northing (UTM ED 50)*		*Period*
Deurganckdok (in dock)	*Left Bank*	*Right Bank*	*Left Bank*	*Right Bank*	21/03/2006 & 26/09/2006
(transect Y)	*589059*	591298	*5684948*	*5683077*	
Liefkenshoek	*Left Bank*	*Right Bank*	*Left Bank*	*Right Bank*	22/03/2006 & 27/09/2006
(transect I)	590318	590771	5684257	5683302	
Deurganckdok (downstream)	*Left Bank*	*Right Bank*	*Left Bank*	*Right Bank*	22 & 23/03/2006 & 27 & 28/09/2006
(transect K)	588484	589775	5684924	5685384	
Deurganckdok (in dock)	*Left Bank*	*Right Bank*	*Left Bank*	*Right Bank*	22/03/2006 & 27/09/2006
(transect DGD)	588765	588541	5684056	5684527	
Schelle	*Left Bank*	*Right Bank*	*Left Bank*	*Right Bank*	23/03/2006 & 28/09/2006
(transect S)	592645	592953	5665794	5665682	
Waarde	*Left Bank*	*Right Bank*	*Left Bank*	*Right Bank*	23/03/2006 & 28/09/2006
(transect W)	573541	571318	5696848	5694933	
Through tide measurements: Siltprofiler gauging points					
Location	*Easting (UTM ED 50)*		*Northing (UTM ED 50)*		*Period*
Location 1: Xa	588549		5684335		21/03/2006 & 26/09/2006
Location 2: Xb	588596		5684411		
Location 3: Xc	588643		5684486		
Location 4: Xd	588690		5684562		
Location 5: Xe	588737		5684638		
Location 6: Ya	588606		5684217		
Location 7: Yb	588653		5684293		
Location 8: Yc	588700		5684368		
Through tide measurements: Siltprofiler gauging points					
Location	*Easting (UTM ED 50)*		*Northing (UTM ED 50)*		*Period*

Location 9: Yd	588747	5684444	21/03/2006 & 26/09/2006
Location 10: Ye	588793	5684520	
Location 11: Za	588662	5684099	
Location 12: Zb	588709	5684174	
Location 13: Zc	588756	5684250	
Location 14: Zd	588803	5684326	
Location 15: Ze	588850	5684402	
Near bed continuous monitoring			
Location	*Easting (UTM ED 50)*	*Northing (UTM ED 50)*	*Period*
Deurganckdok CDW	588653	5684906	14/03/2006 – 05/04/2006
Deurganckdok CDW	588685	5684880	19/04/2006 – 23/05/2006
Deurganckdok Sill	588805	5684170	19/04/2006 – 23/05/2006
Deurganckdok CDW	588685	5684880	18/07/2006 – 11/10/2006
Deurganckdok Sill	588805	5684170	19/07/2006 – 11/10/2006
Salt Silt measurements Deurganckdok			
Location	*Easting (UTM ED 50)*	*Northing (UTM ED 50)*	*Period*
P&O 1	588074	5682942	17/03/2006 – 28/04/2006
P&O 2	588767	5684045	17/03/2006 – 28/04/2006
PSA	588536	5684523	17/03/2006 – 28/04/2006
P&O 1	588074	5682942	20/07/2006 – 12/10/2006
P&O 2	588767	5684045	20/07/2006 – 12/10/2006
PSA	588536	5684523	20/07/2006 – 12/10/2006

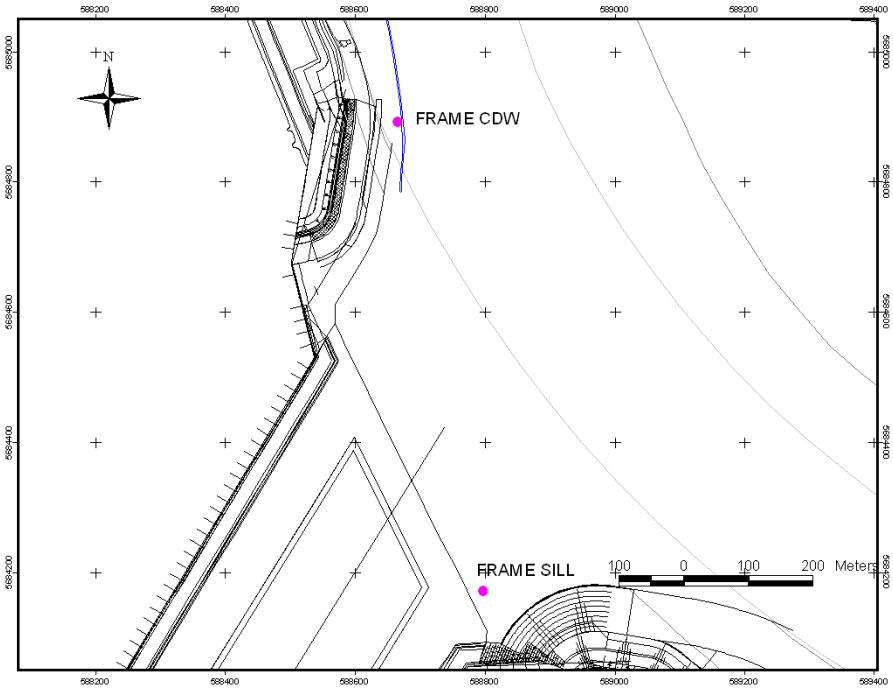
Settling velocity – INSSEV			
Location	*Easting (UTM ED 50)*	*Northing (UTM ED 50)*	*Period*
Deurganckdok CDW	588717	5684898	05/09/2006
Deurganckdok SILL	588800	5684250	06/09/2006
Deurganckdok Western quay wall	588452	5684355	07/09/2006



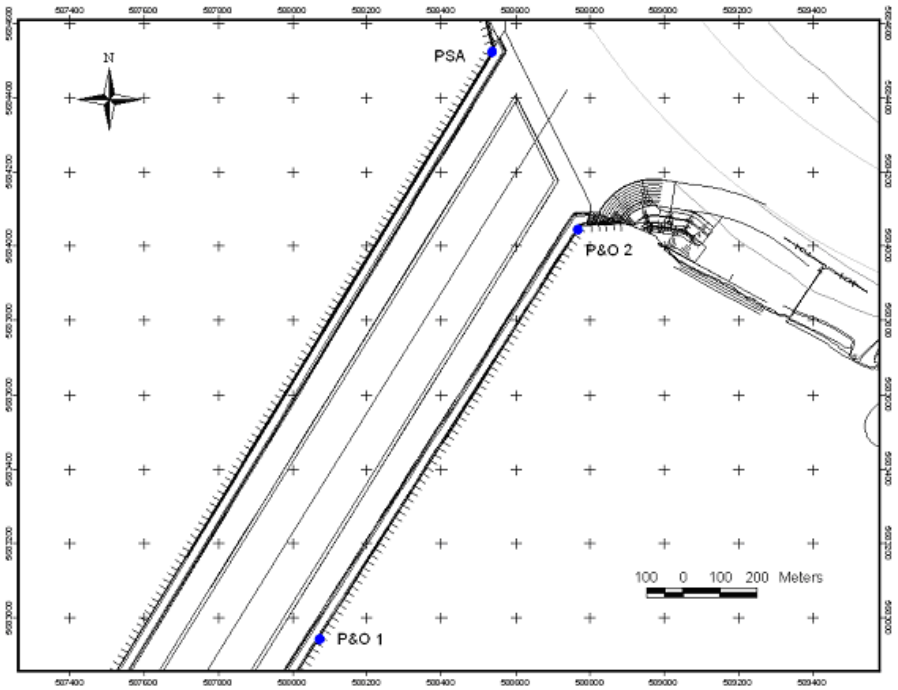
Overview of the measurement locations
21/03/2006 – 23/03/2006 & 26/09/2006 – 28/09/2006



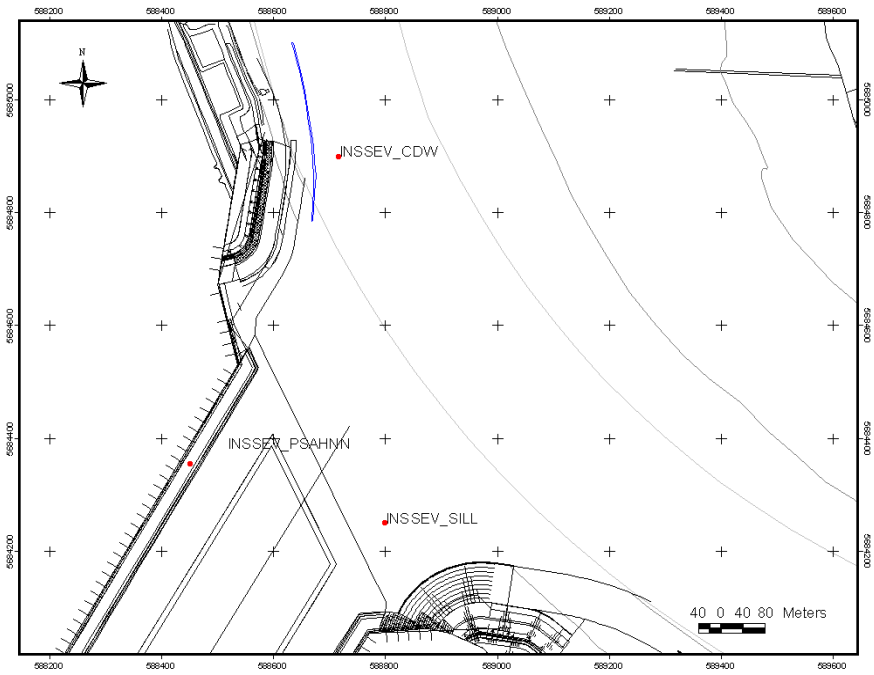
Overview of the measurement locations in Deurganckdok
21/03/2006 – 23/03/2006 & 26/09/2006 – 28/09/2006



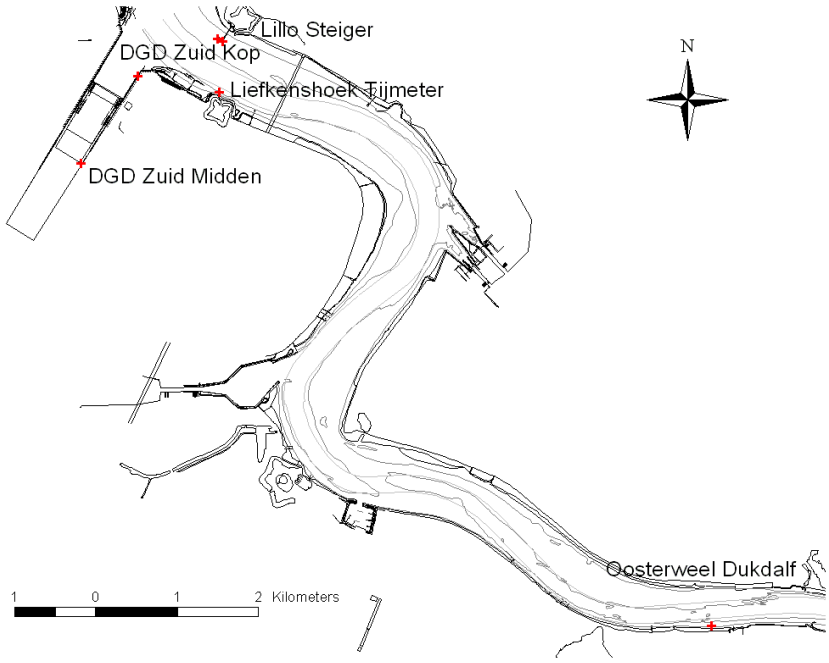
Near bed continuous monitoring
14/03/2006 – 05/04/2006 & 19/04/2006 – 23/05/2006 & 18/07/2006 – 11/10/2006



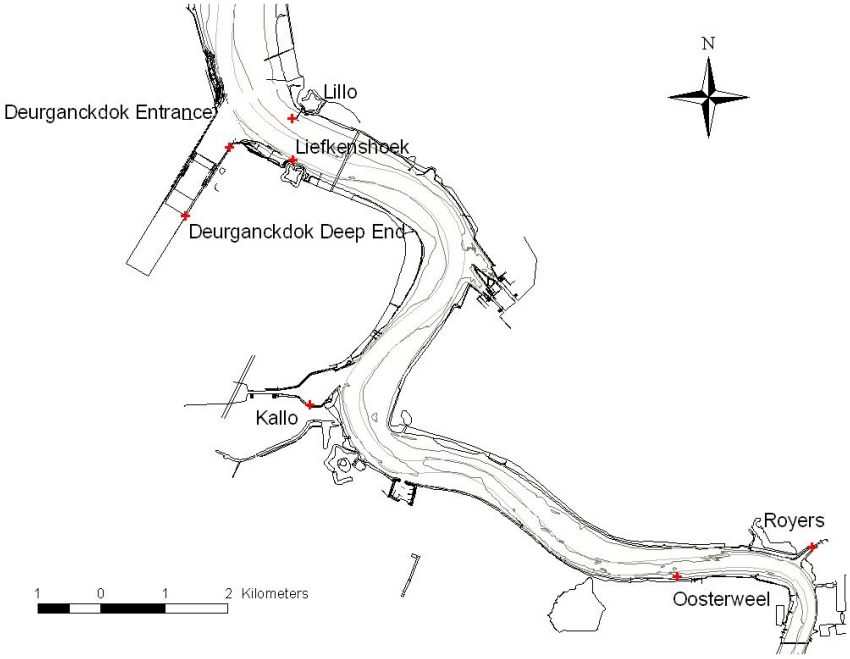
Long term salt-silt measurements in Deurganckdok
17/03/2006 – 28/04/2006 & 20/07/2006 – 12/10/2006



Settling velocity (INSSEV) 05/09/2006 – 07/09/2006



Calibration measurements - 15/03/2006 & 14/04/2006



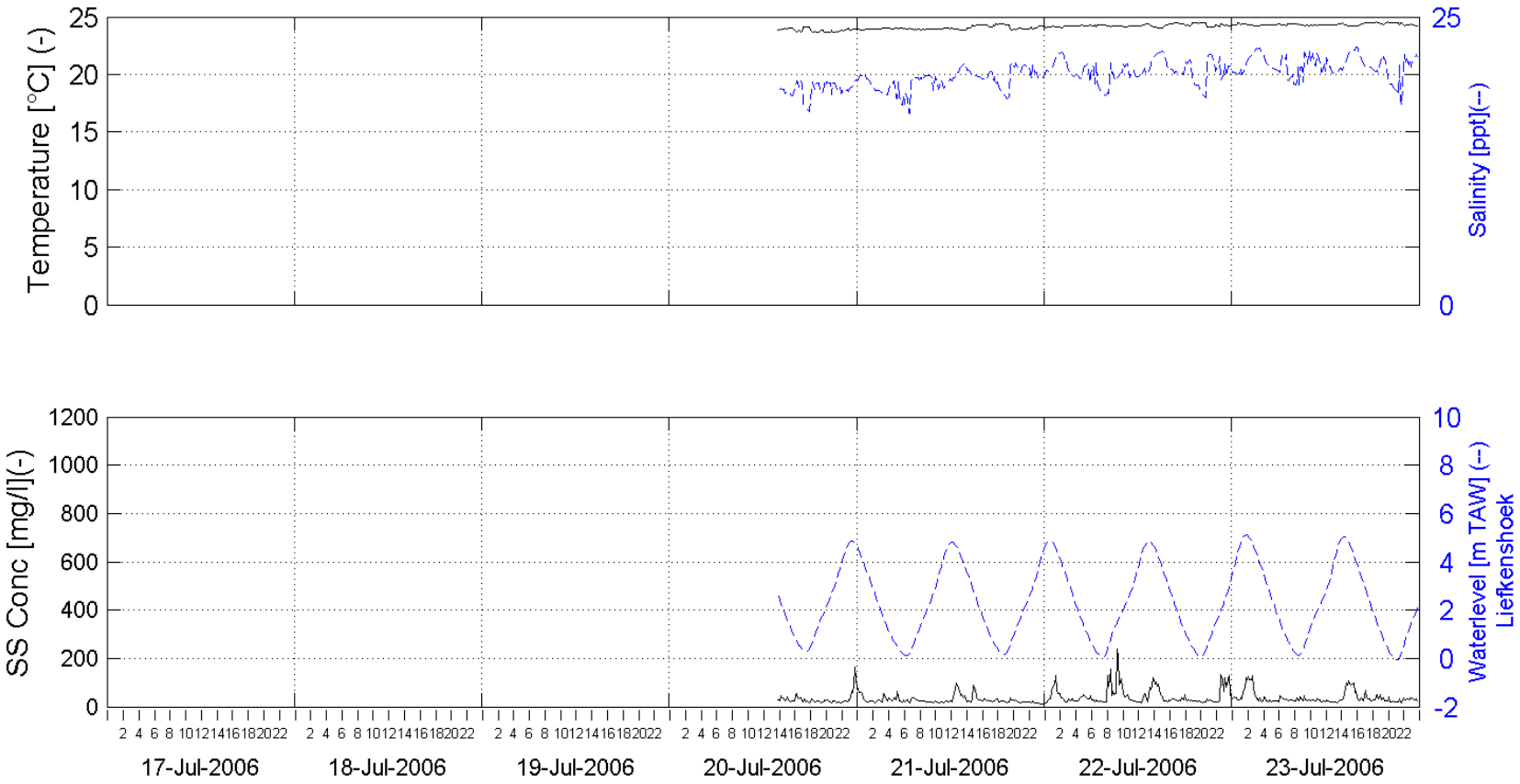
Calibration measurements - 23/06/2006 & 18/09/2006

APPENDIX B. WEEKSERIES ZOUT- SLIB METINGEN DGD

B.1 PSA (N-ENTRANCE)

11283 - Long-term monitoring DGD - Summer 2006

Week 29 - 2006



Week series of Salinity, Temperature,
SS Concentration and Tide

Location:
N-ENTRANCE BOTTOM 4.8m above bottom (-12.2m TAW)

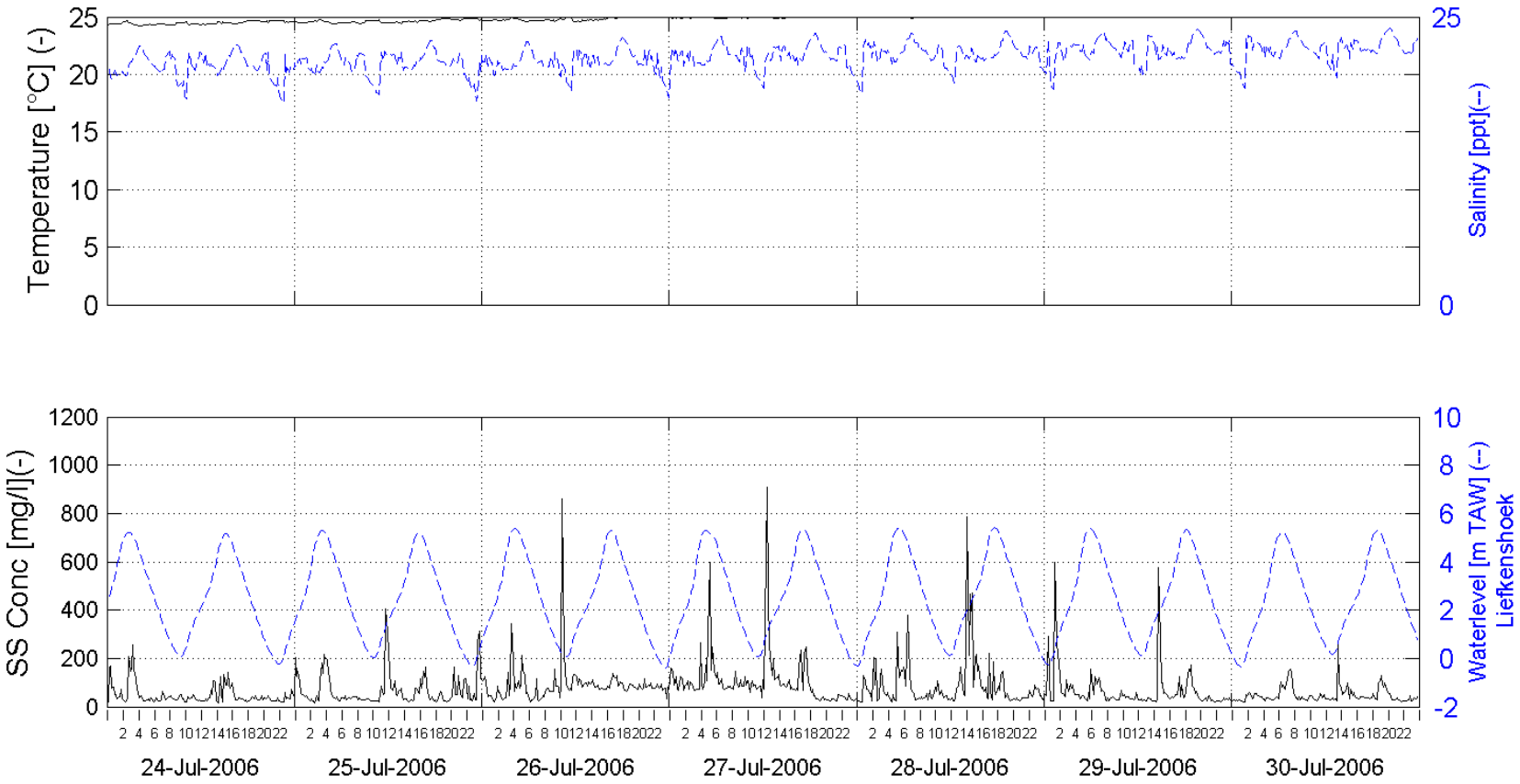
Processed by:

In Association with:

I/RA/11283/06.122/MSA

11283 - Long-term monitoring DGD - Summer 2006

Week 30 - 2006



Week series of Salinity, Temperature,
SS Concentration and Tide

Location:
N-ENTRANCE BOTTOM 4.8m above bottom (-12.2m TAW)

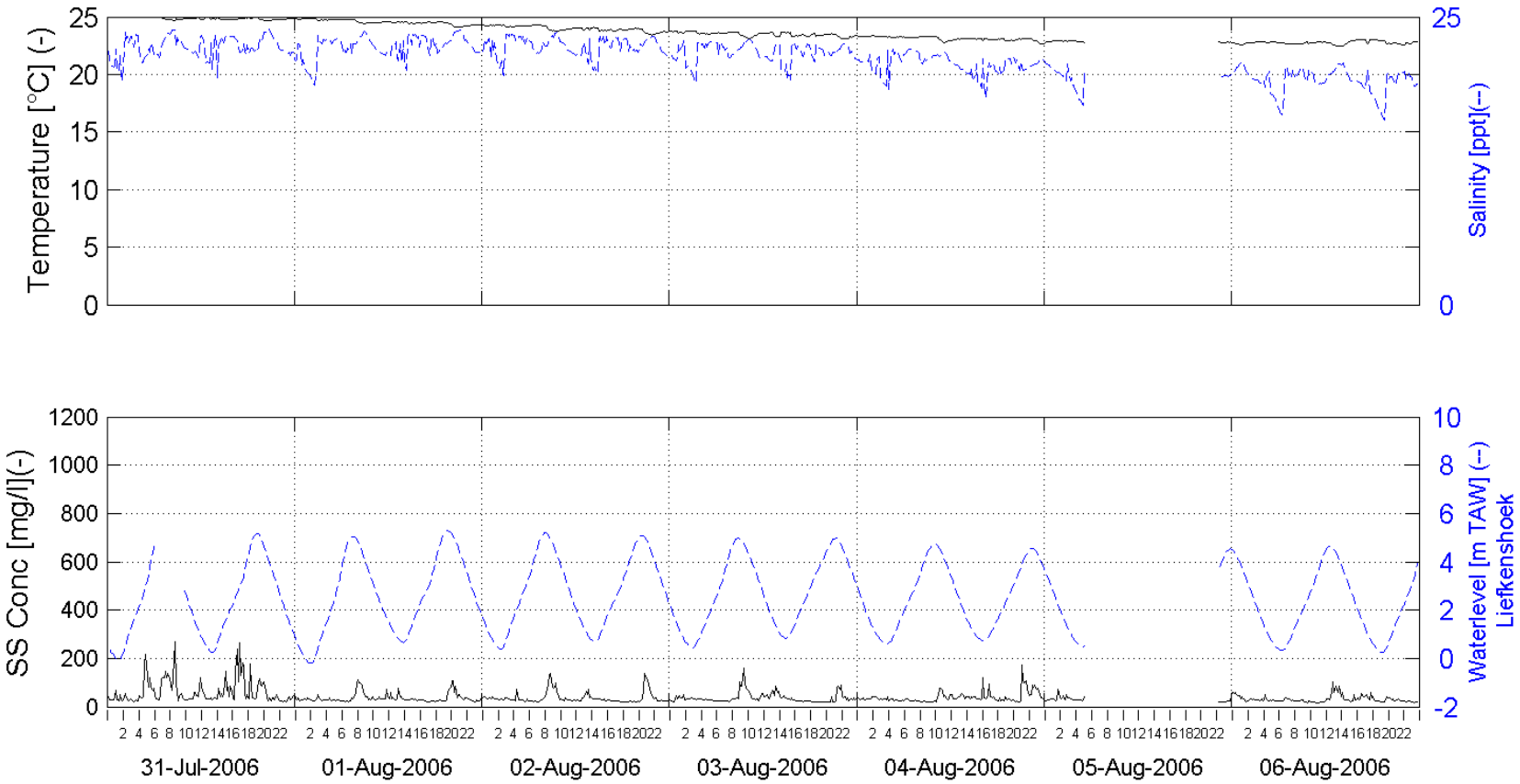
Processed by:

In Association with:

I/RA/11283/06.122/MSA

11283 - Long-term monitoring DGD - Summer 2006

Week 31 - 2006



Week series of Salinity, Temperature,
SS Concentration and Tide

Location:
N-ENTRANCE BOTTOM 4.8m above bottom (-12.2m TAW)

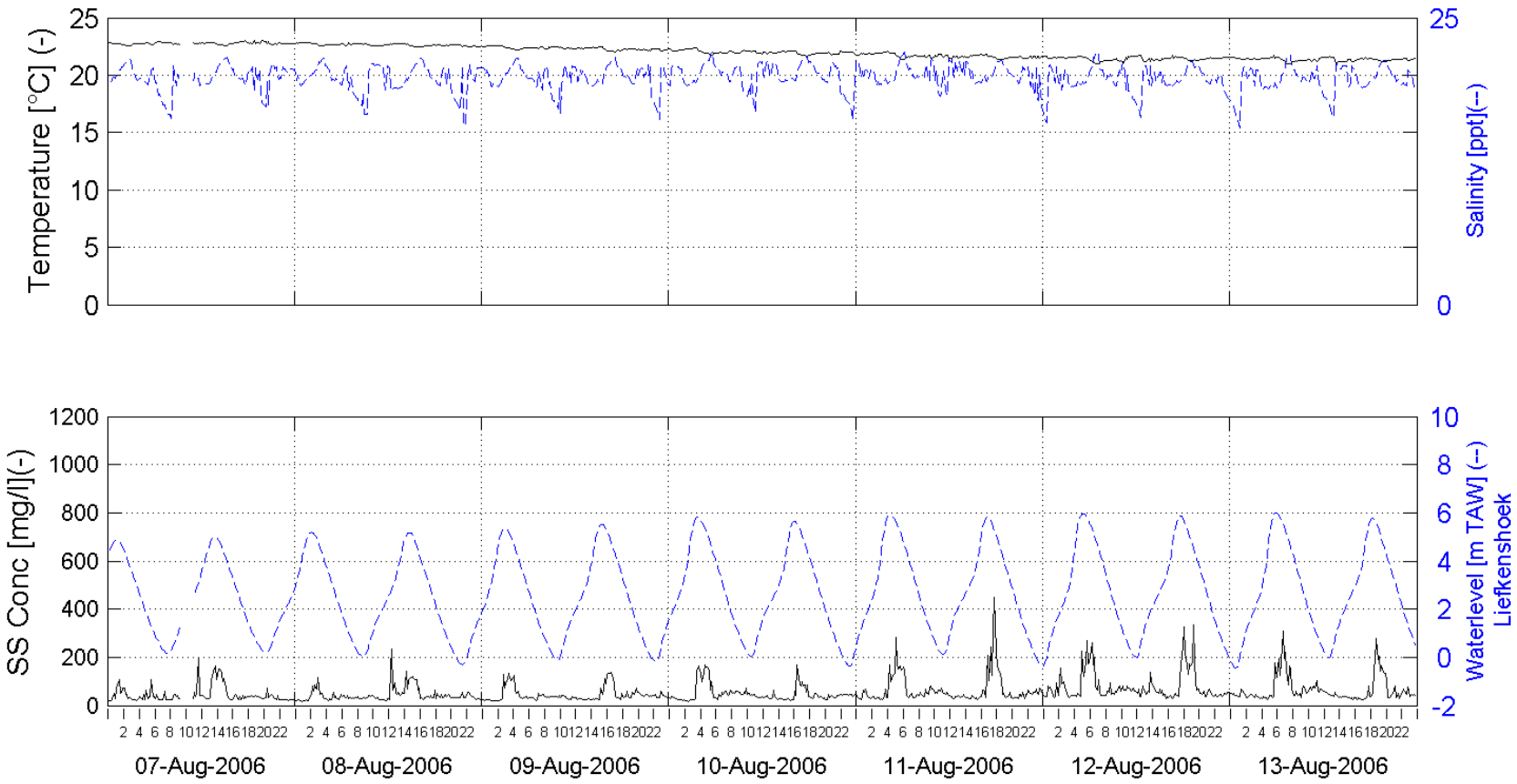
Processed by:

In Association with:

I/RA/11283/06.122/MSA

11283 - Long-term monitoring DGD - Summer 2006

Week 32 - 2006



Week series of Salinity, Temperature,
SS Concentration and Tide

Location:
N-ENTRANCE BOTTOM 4.8m above bottom (-12.2m TAW)

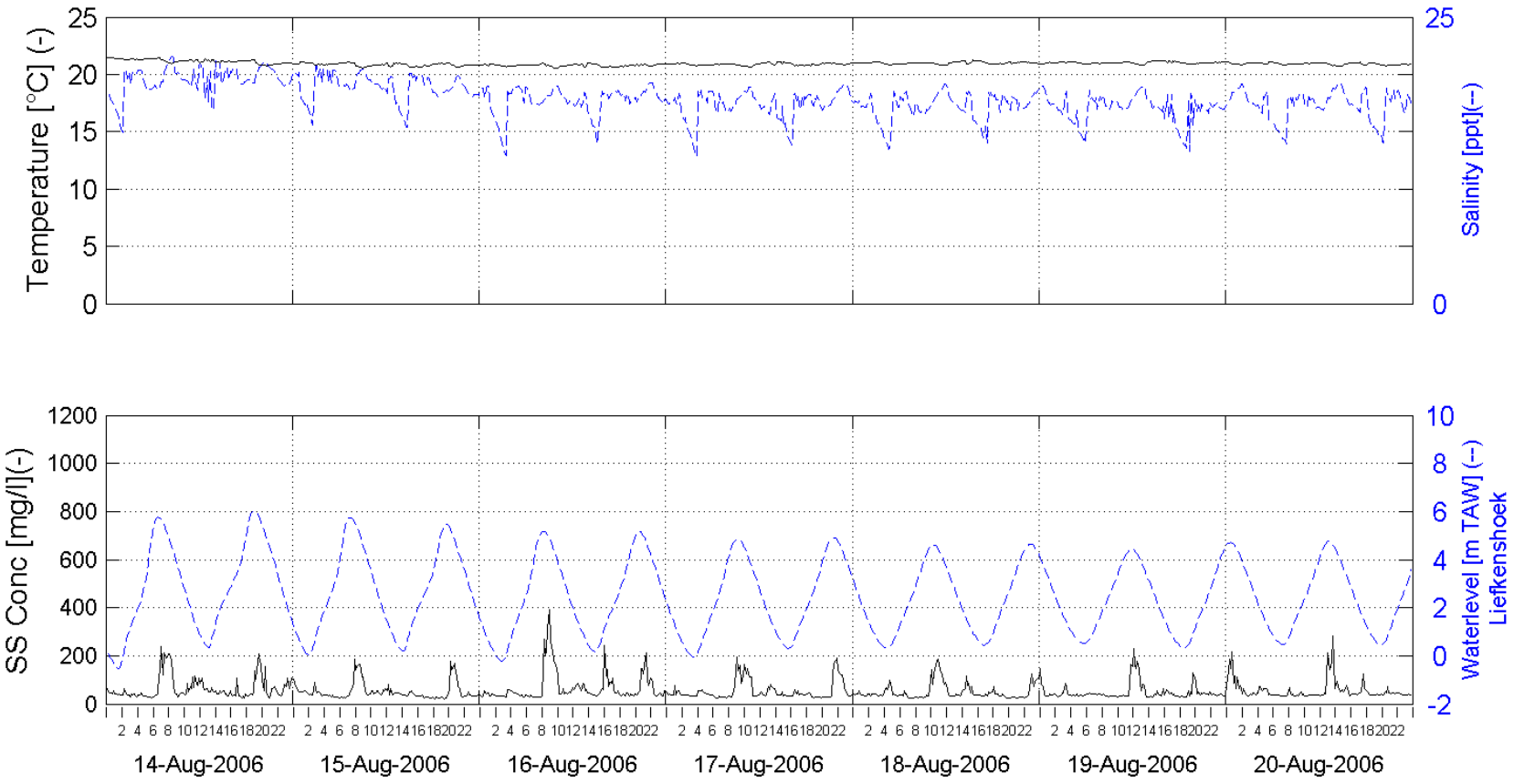
Processed by:

In Association with:

I/RA/11283/06.122/MSA

11283 - Long-term monitoring DGD - Summer 2006

Week 33 - 2006



Week series of Salinity, Temperature,
SS Concentration and Tide

Location:
N-ENTRANCE BOTTOM 4.8m above bottom (-12.2m TAW)

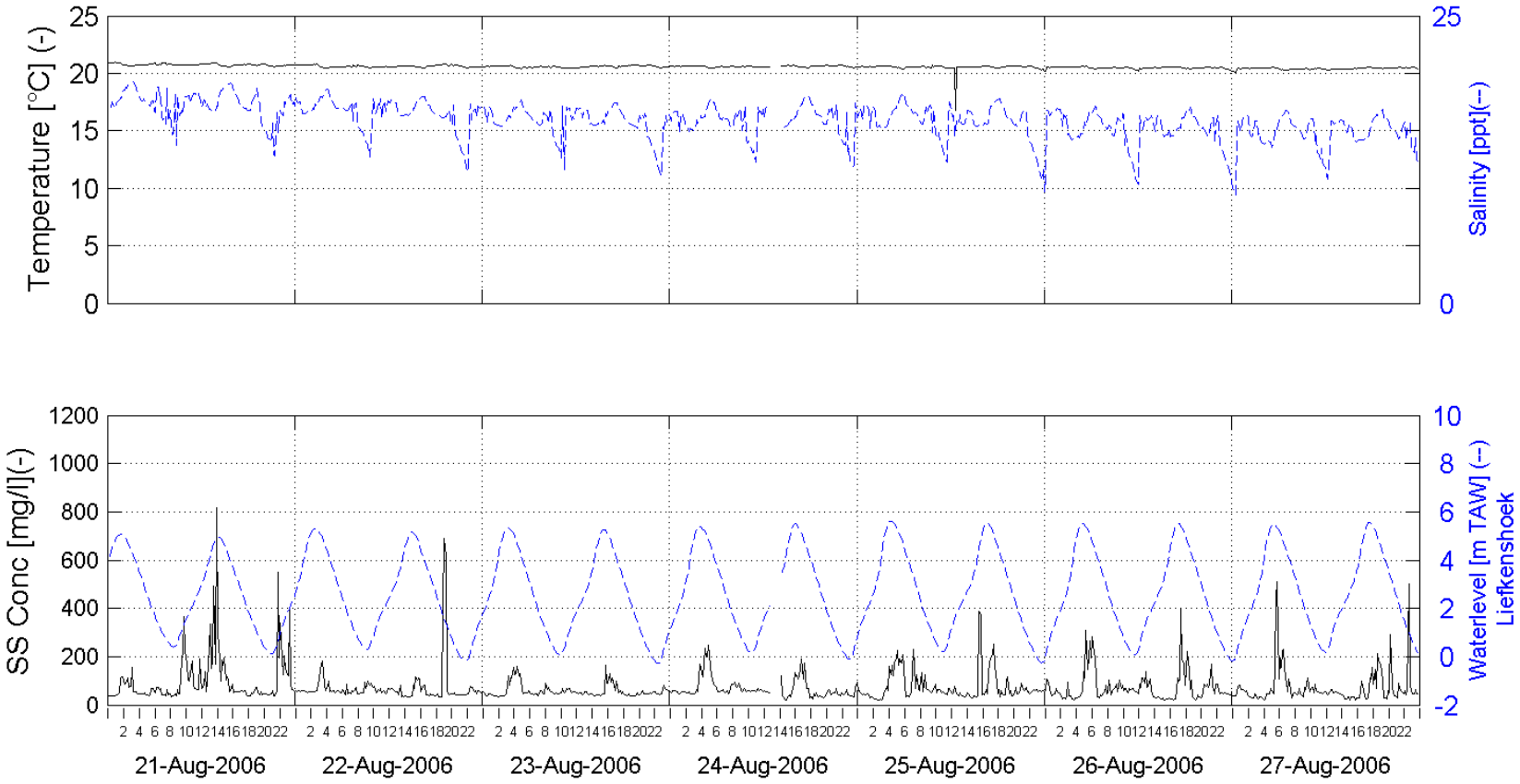
Processed by:

In Association with:

I/RA/11283/06.122/MSA

11283 - Long-term monitoring DGD - Summer 2006

Week 34 - 2006



Week series of Salinity, Temperature,
SS Concentration and Tide

Location:
N-ENTRANCE BOTTOM 4.8m above bottom (-12.2m TAW)

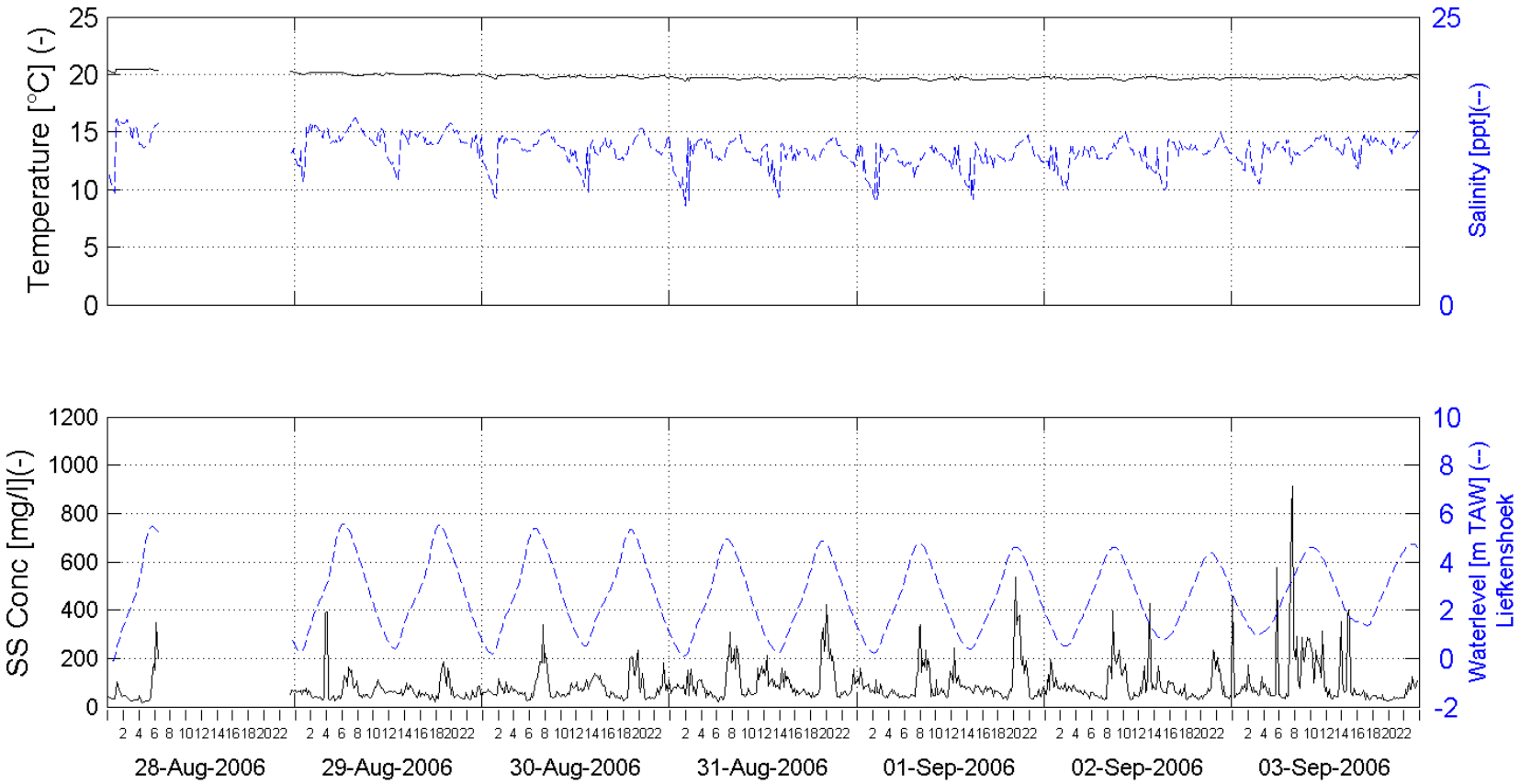
Processed by:

In Association with:

I/RA/11283/06.122/MSA

11283 - Long-term monitoring DGD - Summer 2006

Week 35 - 2006



Week series of Salinity, Temperature,
SS Concentration and Tide

Location:
N-ENTRANCE BOTTOM 4.8m above bottom (-12.2m TAW)

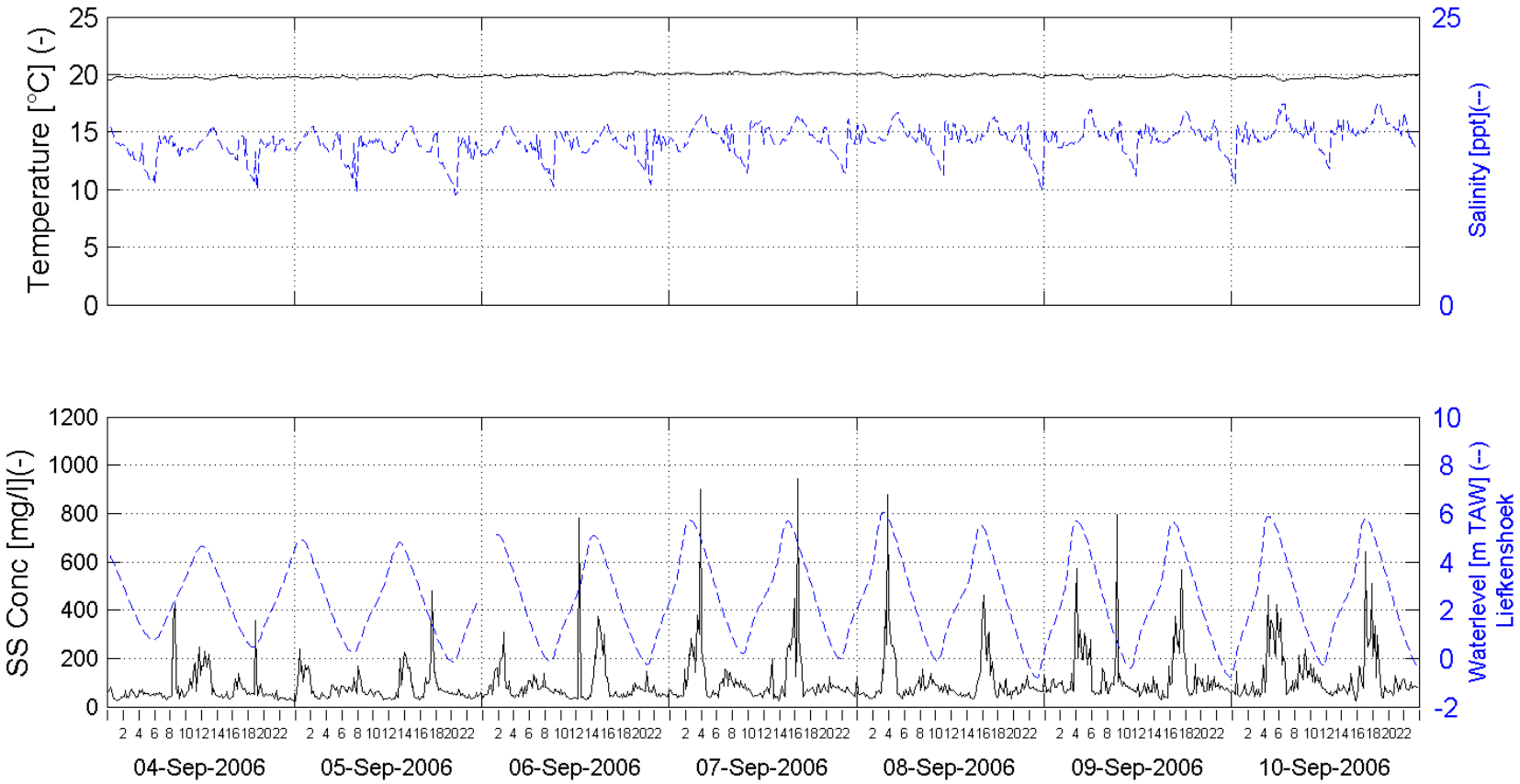
Processed by:

In Association with:

I/RA/11283/06.122/MSA

11283 - Long-term monitoring DGD - Summer 2006

Week 36 - 2006



Week series of Salinity, Temperature,
SS Concentration and Tide

Location:
N-ENTRANCE BOTTOM 4.8m above bottom (-12.2m TAW)

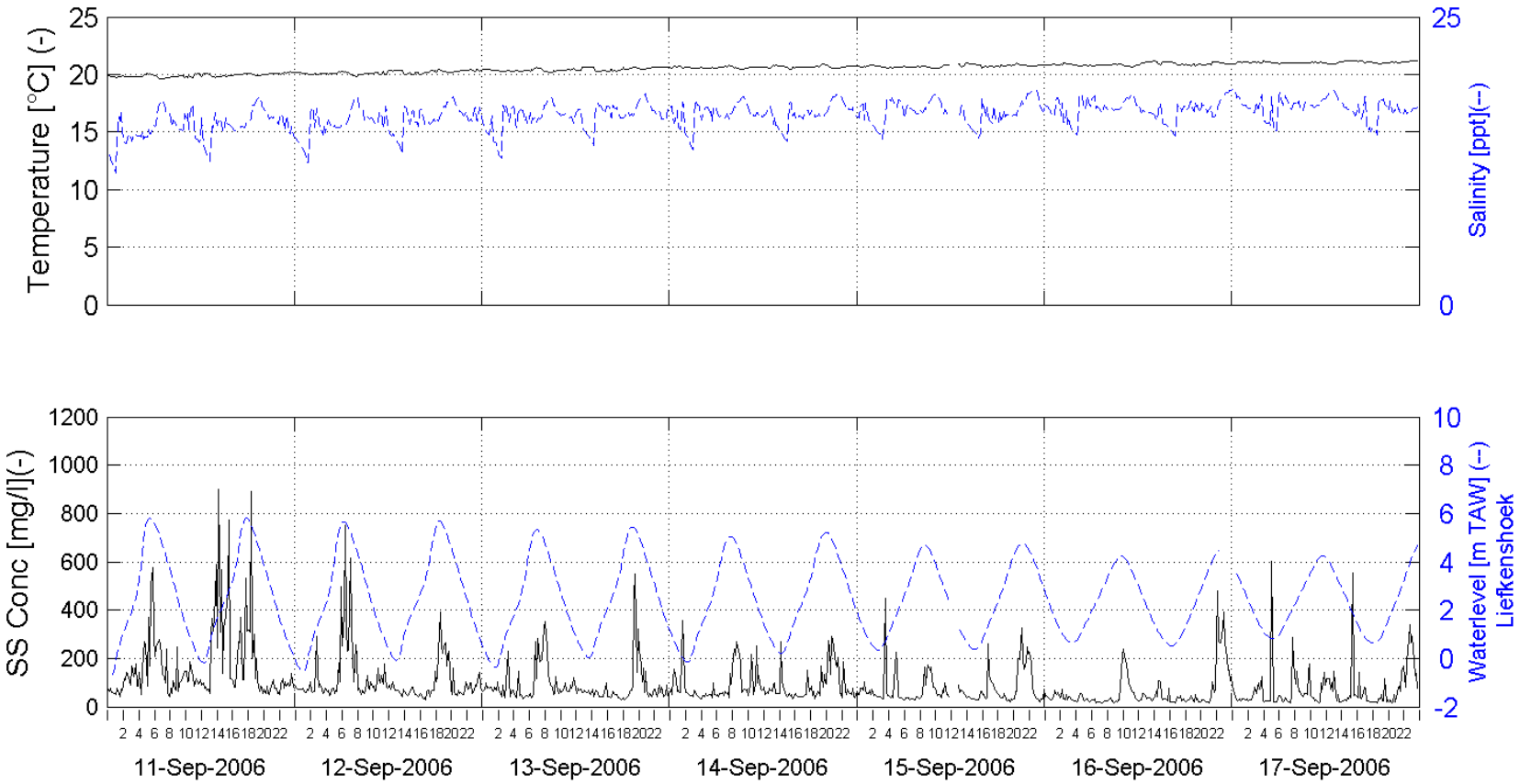
Processed by:

In Association with:

I/RA/11283/06.122/MSA

11283 - Long-term monitoring DGD - Summer 2006

Week 37 - 2006



Week series of Salinity, Temperature,
SS Concentration and Tide

Location:
N-ENTRANCE BOTTOM 4.8m above bottom (-12.2m TAW)

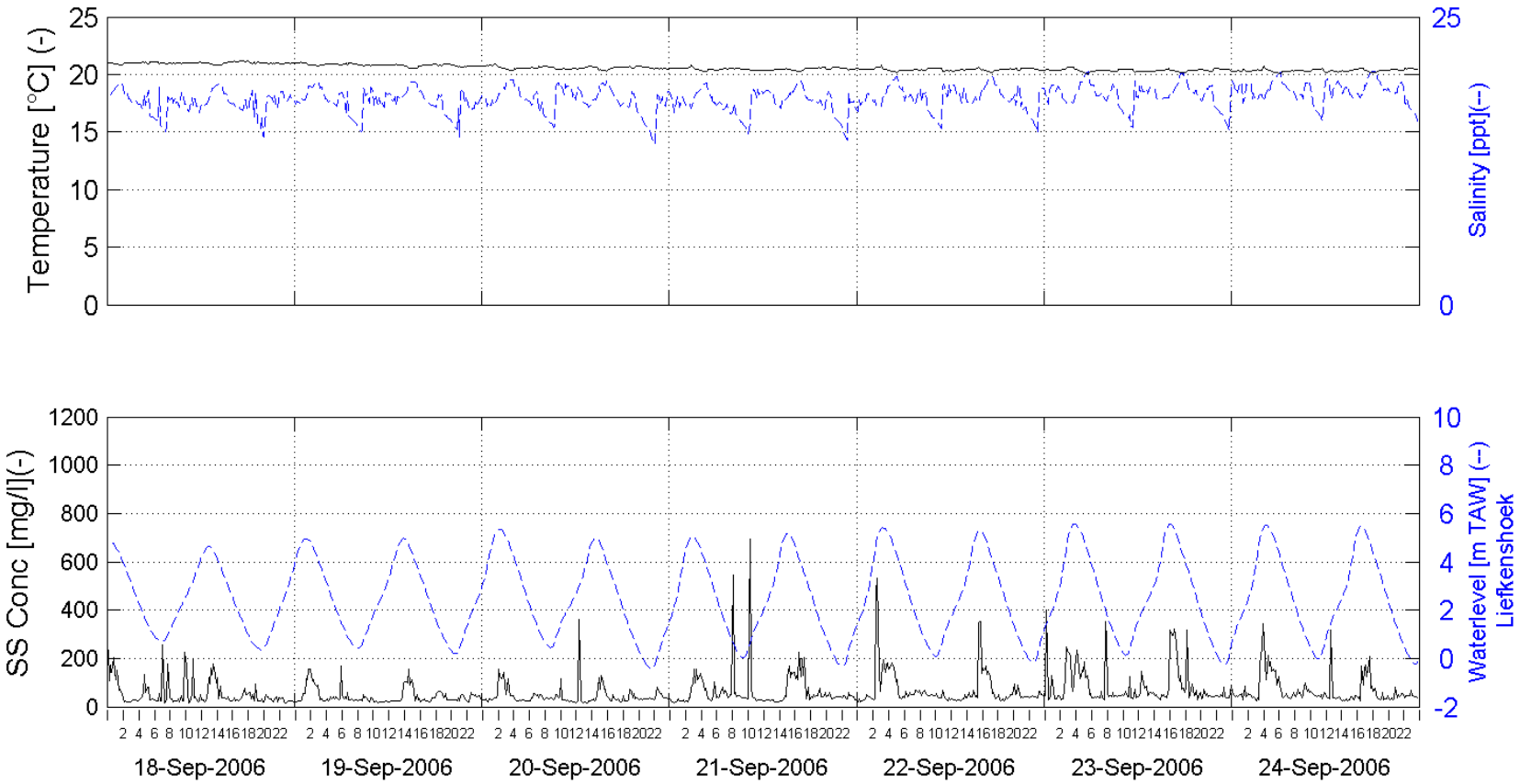
Processed by:

In Association with:

I/RA/11283/06.122/MSA

11283 - Long-term monitoring DGD - Summer 2006

Week 38 - 2006



Week series of Salinity, Temperature,
SS Concentration and Tide

Location:
N-ENTRANCE BOTTOM 4.8m above bottom (-12.2m TAW)

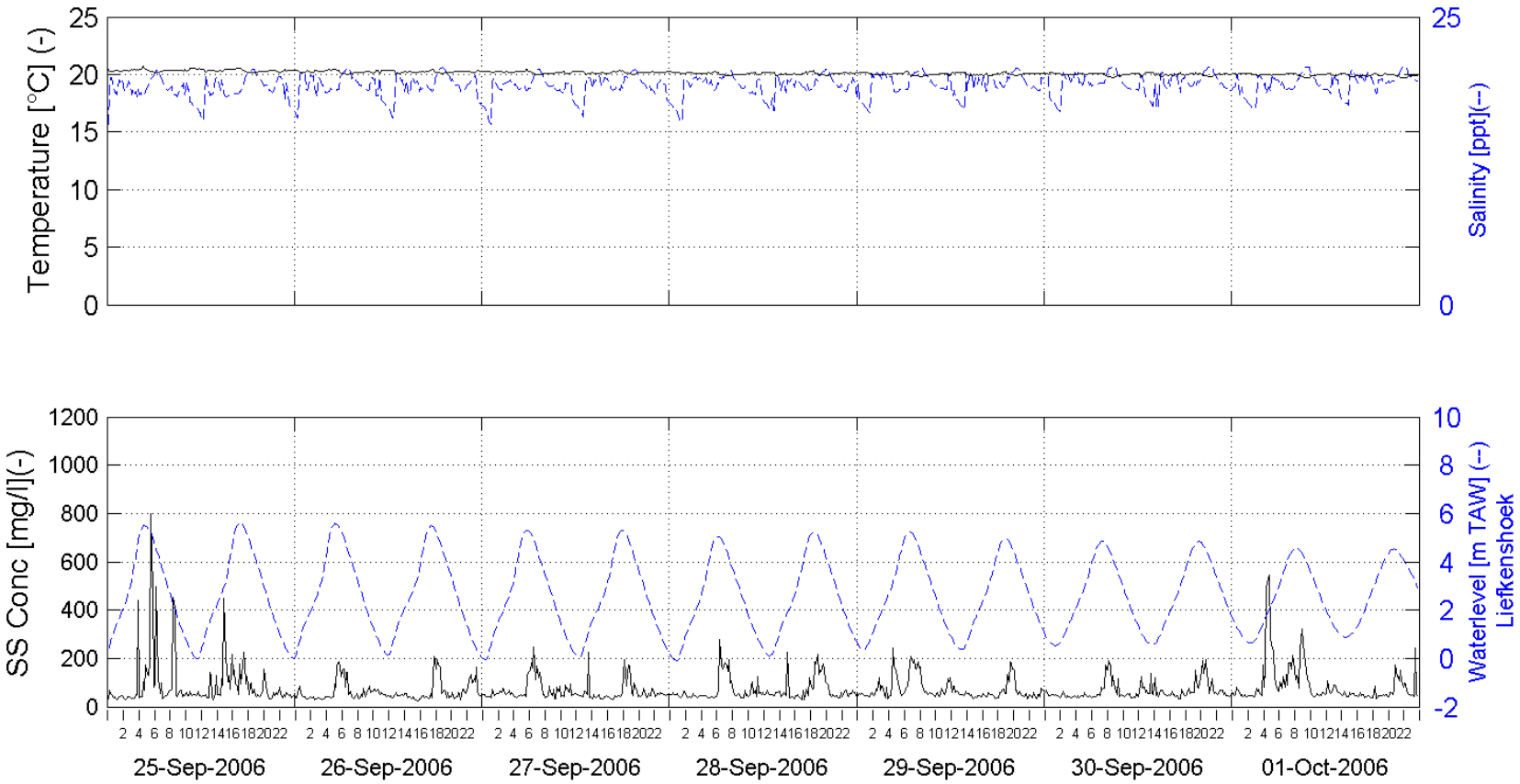
Processed by:

In Association with:

I/RA/11283/06.122/MSA

11283 - Long-term monitoring DGD - Summer 2006

Week 39 - 2006



Week series of Salinity, Temperature,
SS Concentration and Tide

Location:
N-ENTRANCE BOTTOM 4.8m above bottom (-12.2m TAW)

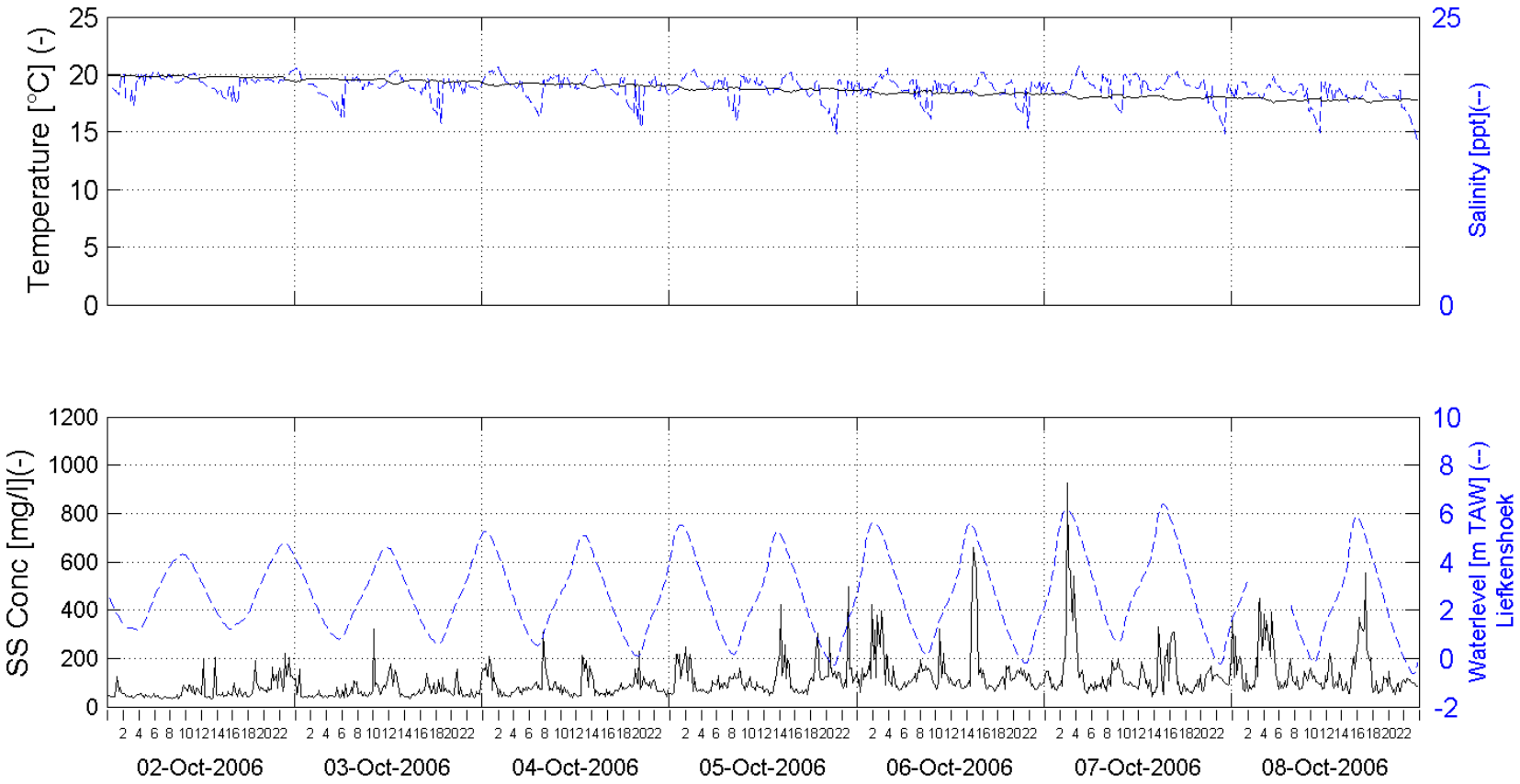
Processed by:

In Association with:

I/RA/11283/06.122/MSA

11283 - Long-term monitoring DGD - Summer 2006

Week 40 - 2006



Week series of Salinity, Temperature,
SS Concentration and Tide

Location:
N-ENTRANCE BOTTOM 4.8m above bottom (-12.2m TAW)

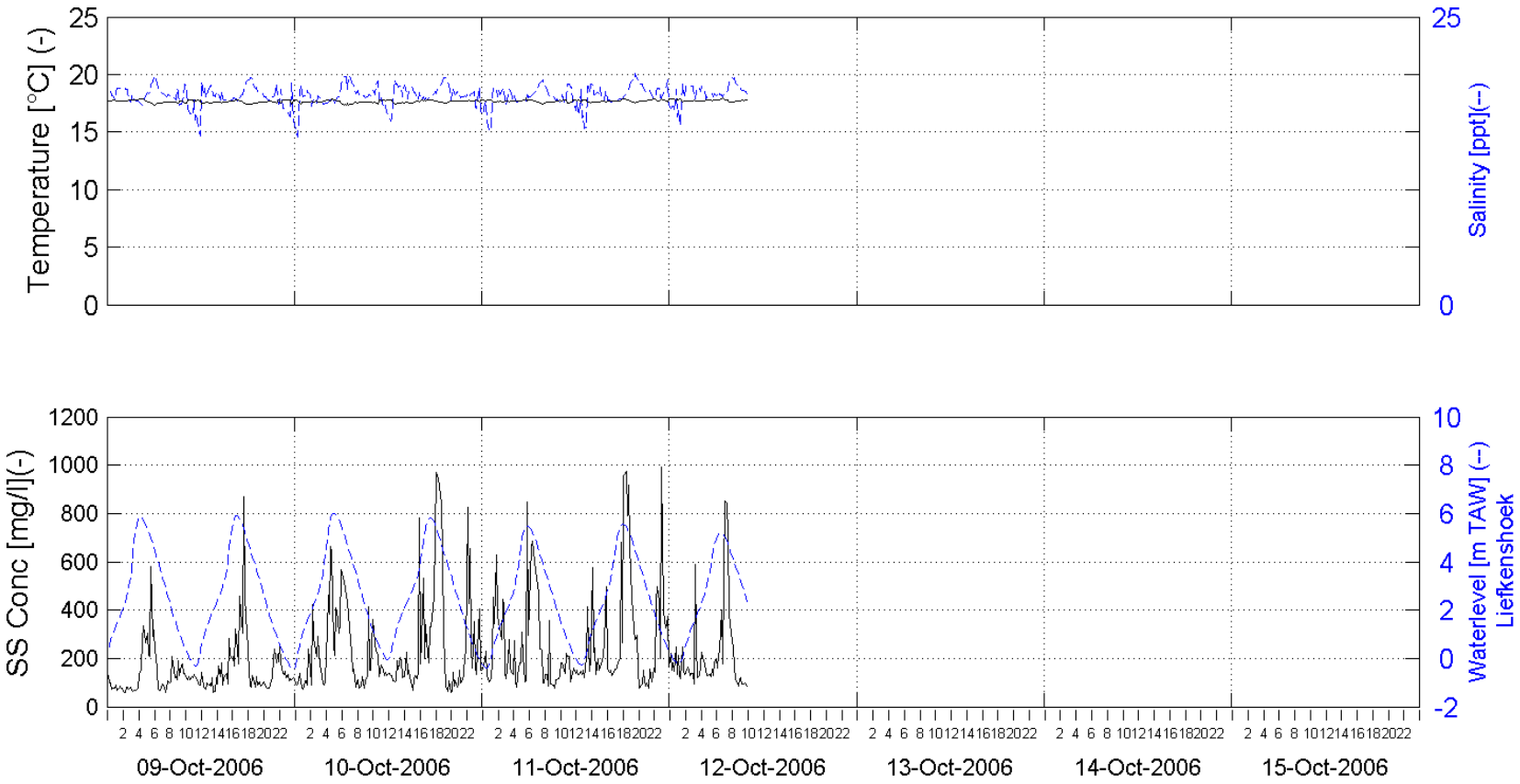
Processed by:

In Association with:

I/RA/11283/06.122/MSA

11283 - Long-term monitoring DGD - Summer 2006

Week 41 - 2006



Week series of Salinity, Temperature,
SS Concentration and Tide

Location:
N-ENTRANCE BOTTOM 4.8m above bottom (-12.2m TAW)

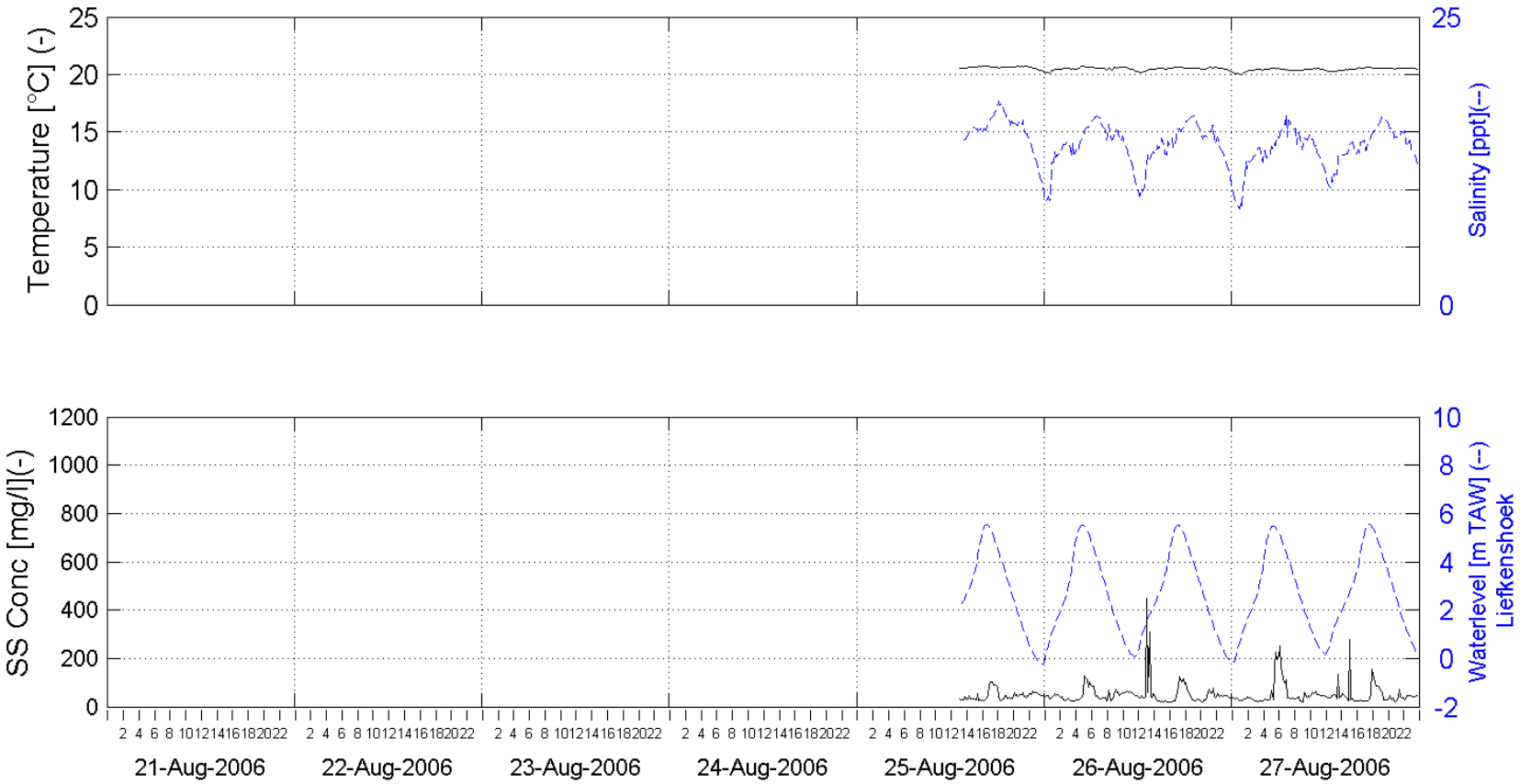
Processed by:

In Association with:

I/RA/11283/06.122/MSA

11283 - Long-term monitoring DGD - Summer 2006

Week 34 - 2006



Week series of Salinity, Temperature,
SS Concentration and Tide

Location:
N-Entrance TOP 14.6m above bottom (-2.4m TAW)

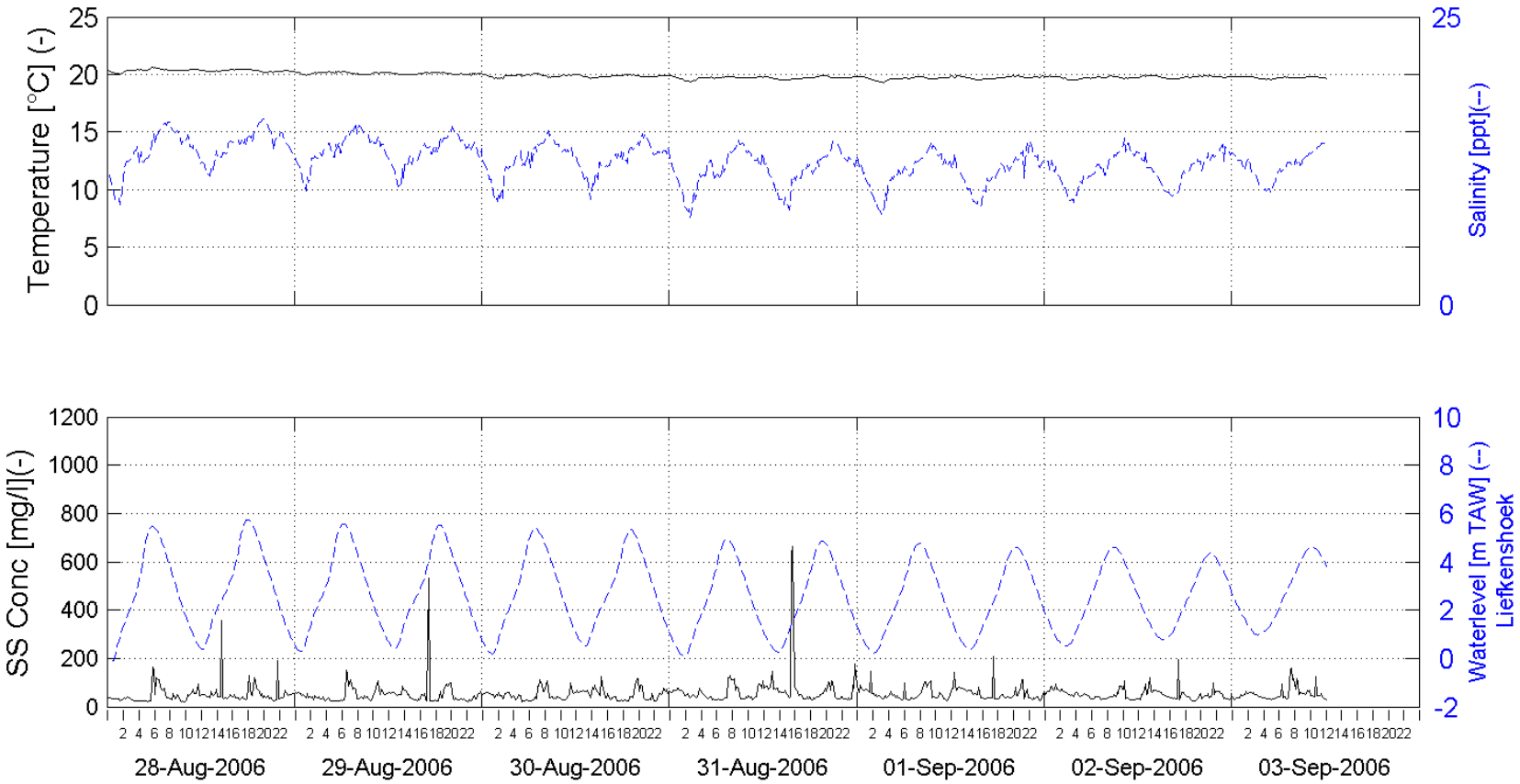
Processed by:

In Association with:

I/RA/11283/06.122/MSA

11283 - Long-term monitoring DGD - Summer 2006

Week 35 - 2006



Week series of Salinity, Temperature,
SS Concentration and Tide

Location:

N-Entrance TOP 14.6m above bottom (-2.4m TAW)

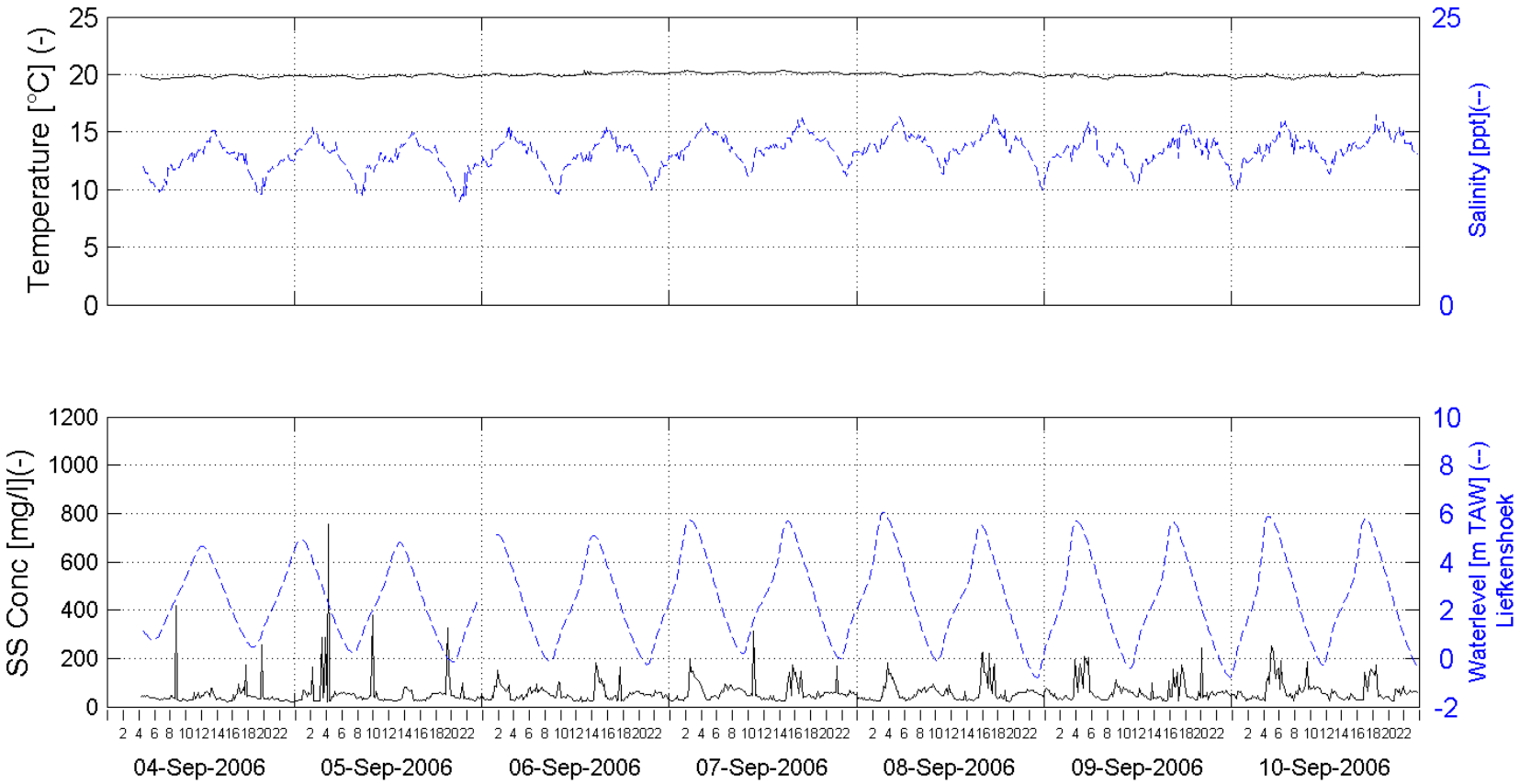
Processed by:

In Association with:

I/RA/11283/06.122/MSA

11283 - Long-term monitoring DGD - Summer 2006

Week 36 - 2006



Week series of Salinity, Temperature,
SS Concentration and Tide

Location:
N-Entrance TOP 14.6m above bottom (-2.4m TAW)

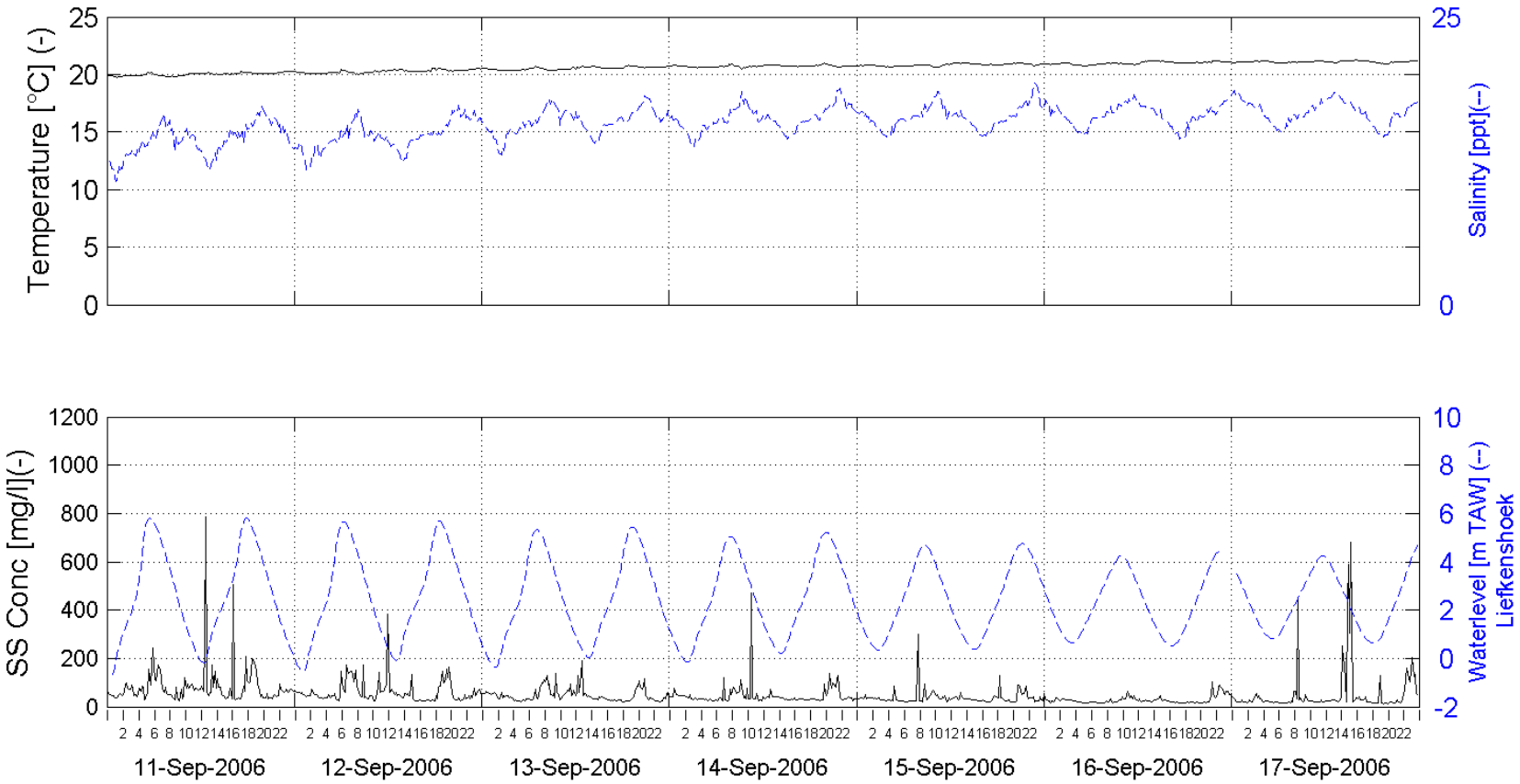
Processed by:

In Association with:

I/RA/11283/06.122/MSA

11283 - Long-term monitoring DGD - Summer 2006

Week 37 - 2006



Week series of Salinity, Temperature,
SS Concentration and Tide

Location:
N-Entrance TOP 14.6m above bottom (-2.4m TAW)

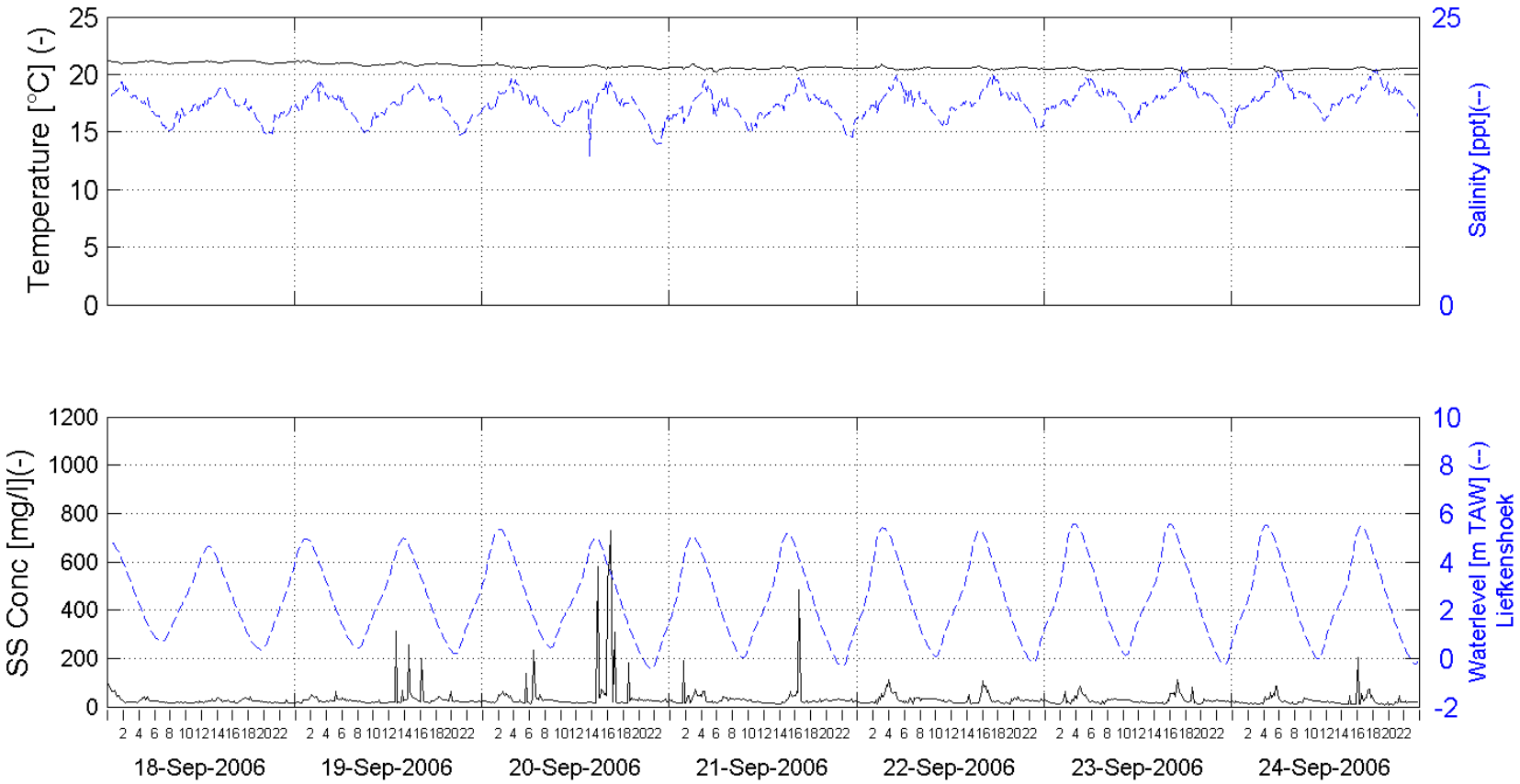
Processed by:

In Association with:

I/RA/11283/06.122/MSA

11283 - Long-term monitoring DGD - Summer 2006

Week 38 - 2006



Week series of Salinity, Temperature,
SS Concentration and Tide

Location:

N-Entrance TOP 14.6m above bottom (-2.4m TAW)

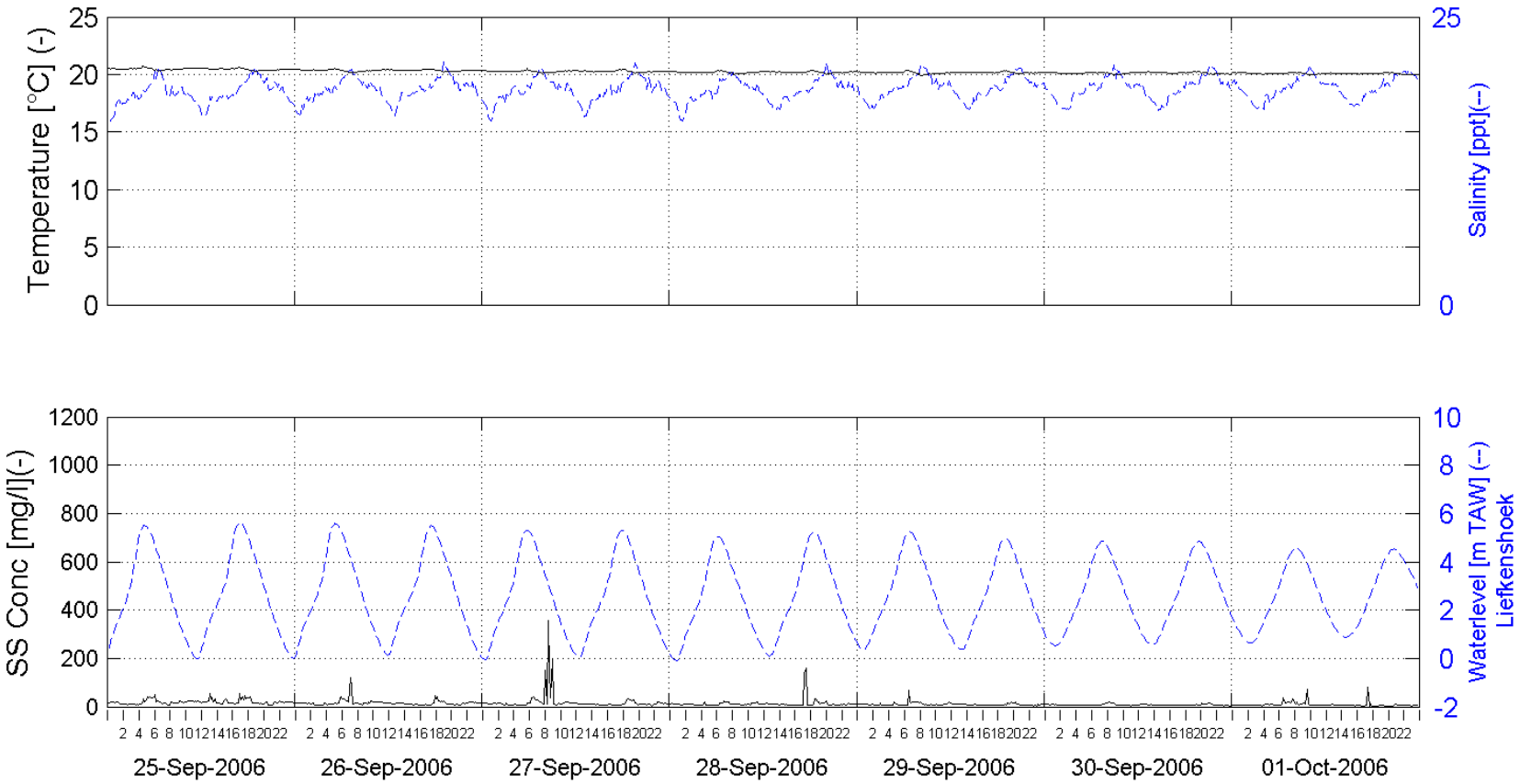
Processed by:

In Association with:

I/RA/11283/06.122/MSA

11283 - Long-term monitoring DGD - Summer 2006

Week 39 - 2006



Week series of Salinity, Temperature,
SS Concentration and Tide

Location:
N-Entrance TOP 14.6m above bottom (-2.4m TAW)

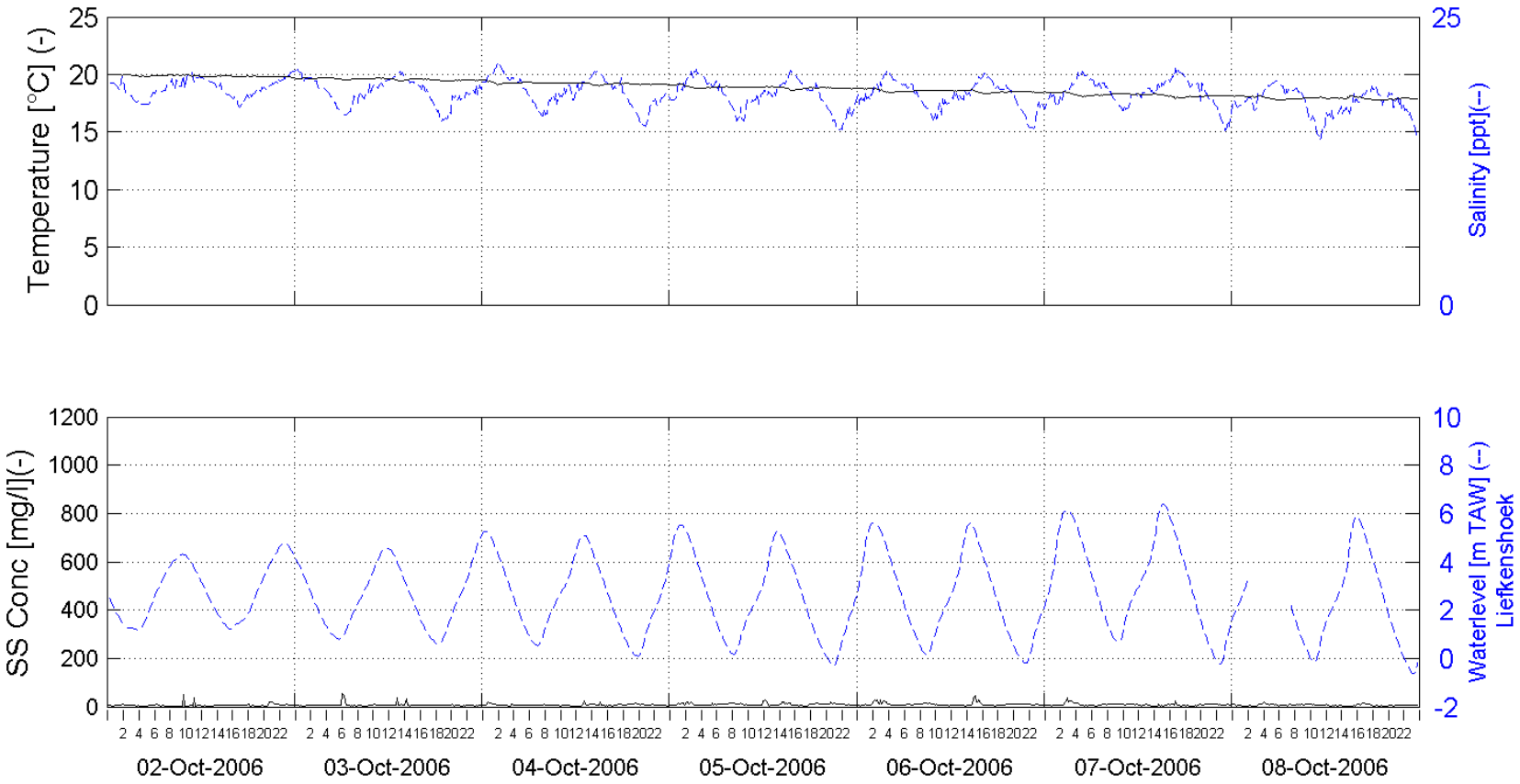
Processed by:

In Association with:

I/RA/11283/06.122/MSA

11283 - Long-term monitoring DGD - Summer 2006

Week 40 - 2006



Week series of Salinity, Temperature,
SS Concentration and Tide

Location:
N-Entrance TOP 14.6m above bottom (-2.4m TAW)

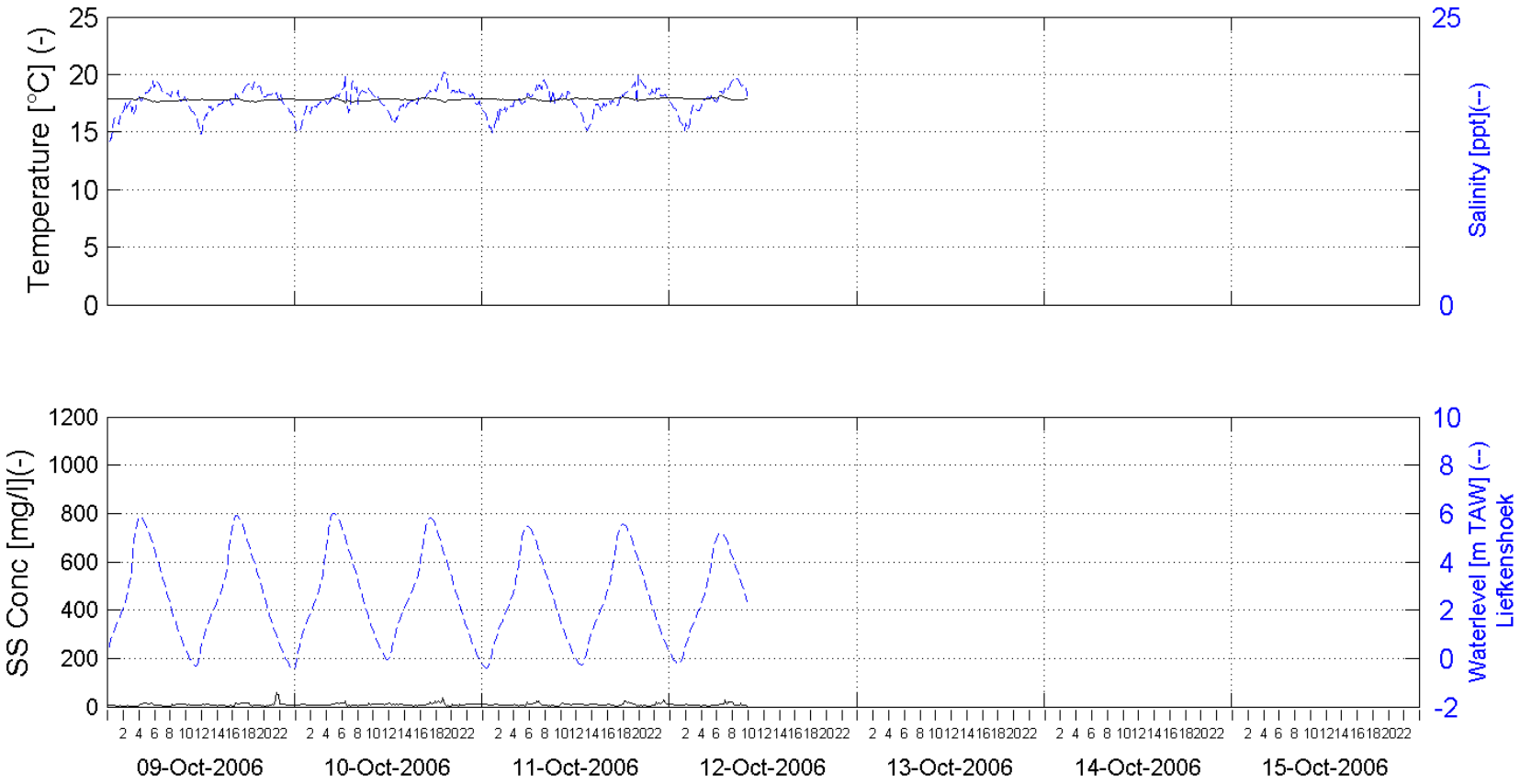
Processed by:

In Association with:

I/RA/11283/06.122/MSA

11283 - Long-term monitoring DGD - Summer 2006

Week 41 - 2006



Week series of Salinity, Temperature,
SS Concentration and Tide

Location:
N-Entrance TOP 14.6m above bottom (-2.4m TAW)

Processed by:

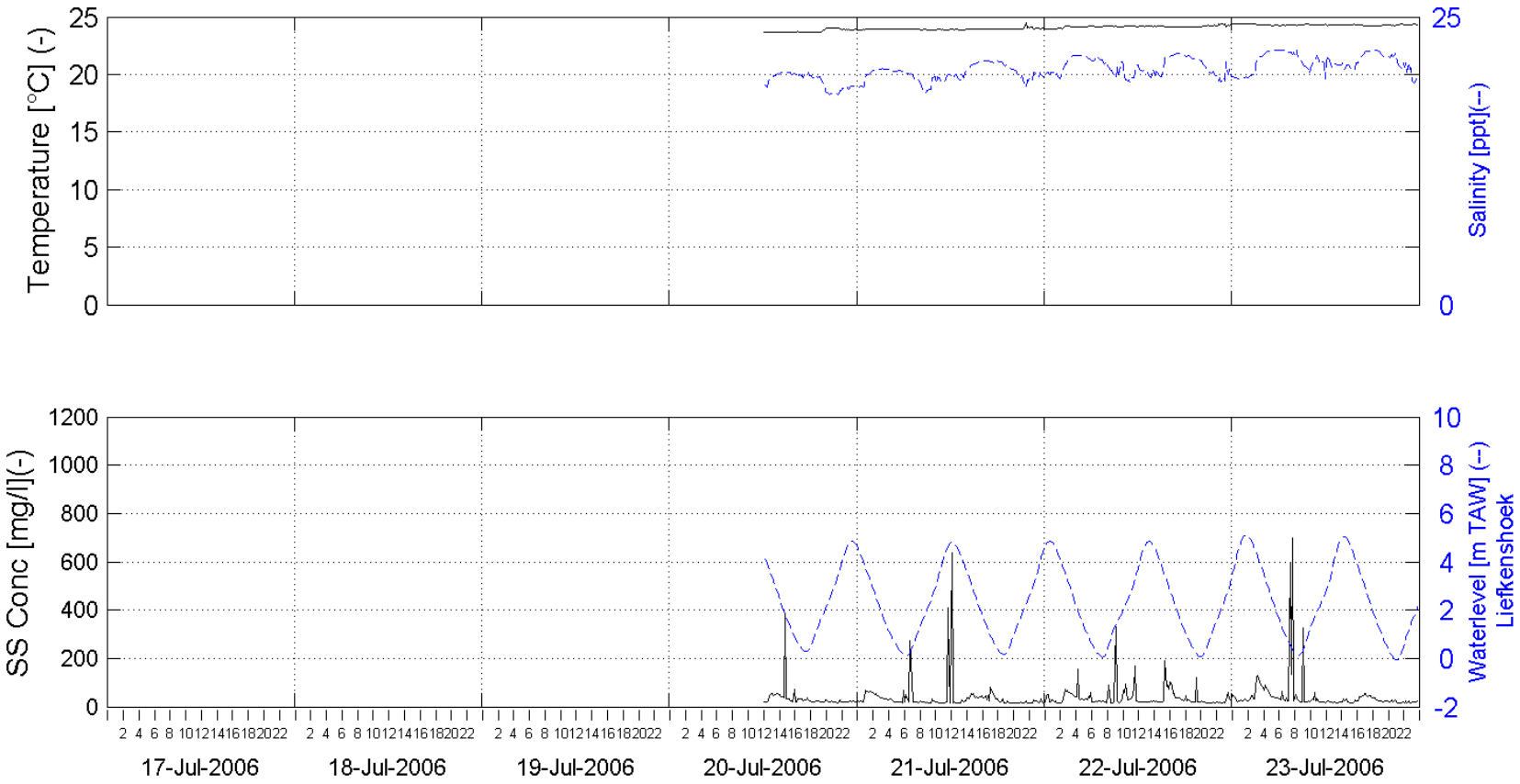
In Association with:

I/RA/11283/06.122/MSA

B.2 P&O1 (S-BACK)

11283 - Long-term monitoring DGD - Summer 2006

Week 29 - 2006



Week series of Salinity, Temperature,
SS Concentration and Tide

Location:
S-BACK BOTTOM 4.8m above bottom (-12.2m TAW)

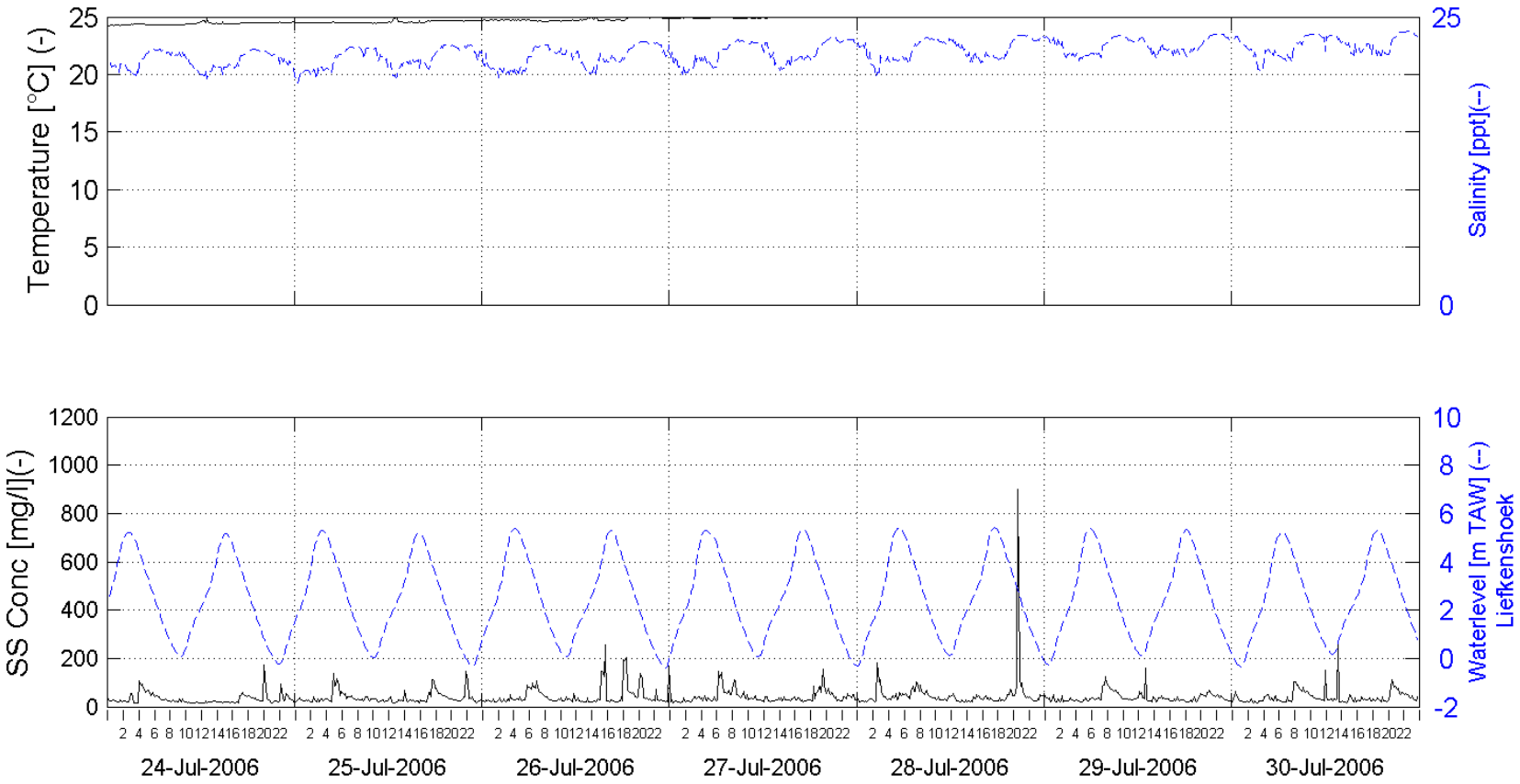
Processed by:

In Association with:

I/RA/11283/06.122/MSA

11283 - Long-term monitoring DGD - Summer 2006

Week 30 - 2006



Week series of Salinity, Temperature,
SS Concentration and Tide

Location:
S-BACK BOTTOM 4.8m above bottom (-12.2m TAW)

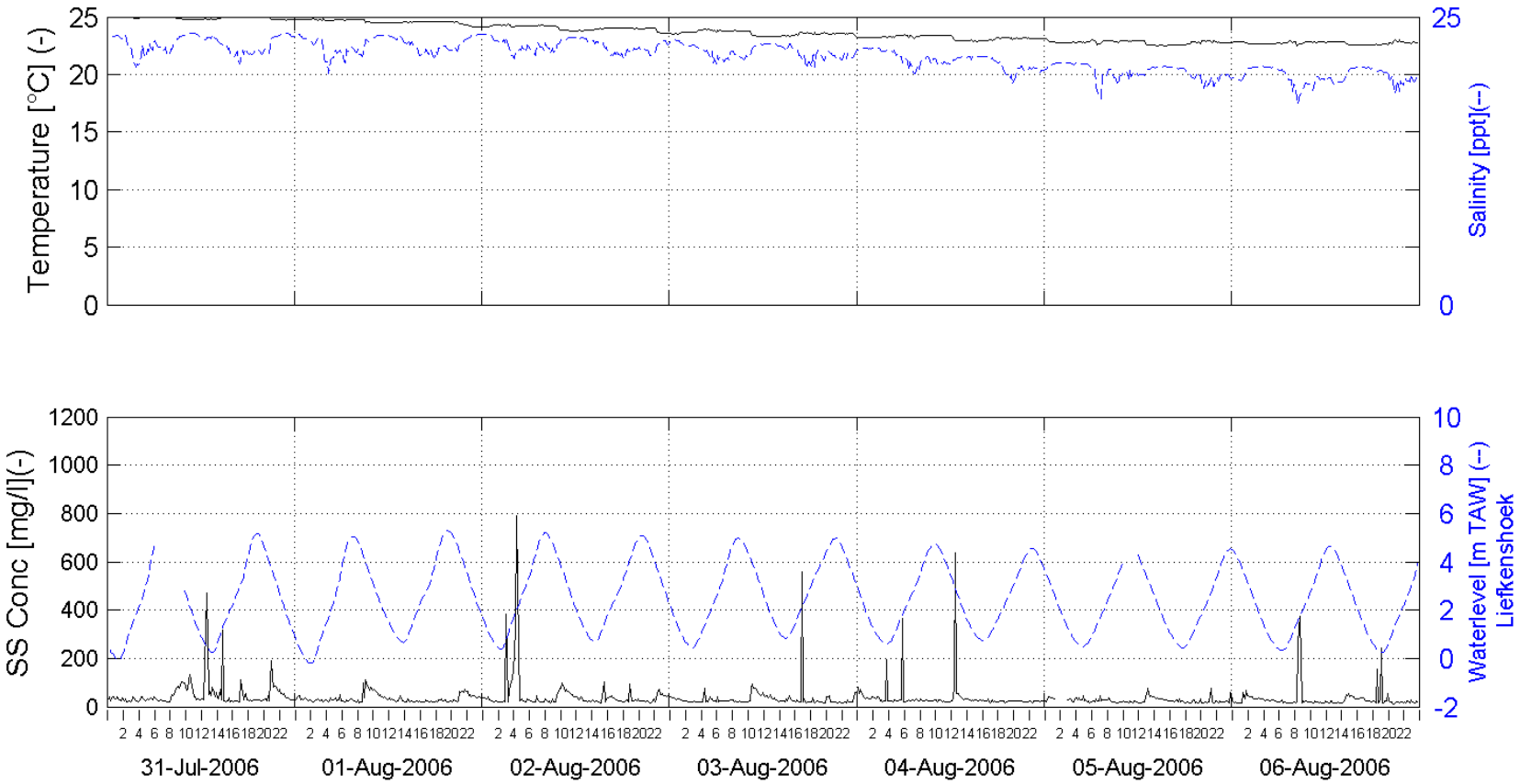
Processed by:

In Association with:

I/RA/11283/06.122/MSA

11283 - Long-term monitoring DGD - Summer 2006

Week 31 - 2006



Week series of Salinity, Temperature,
SS Concentration and Tide

Location:
S-BACK BOTTOM 4.8m above bottom (-12.2m TAW)

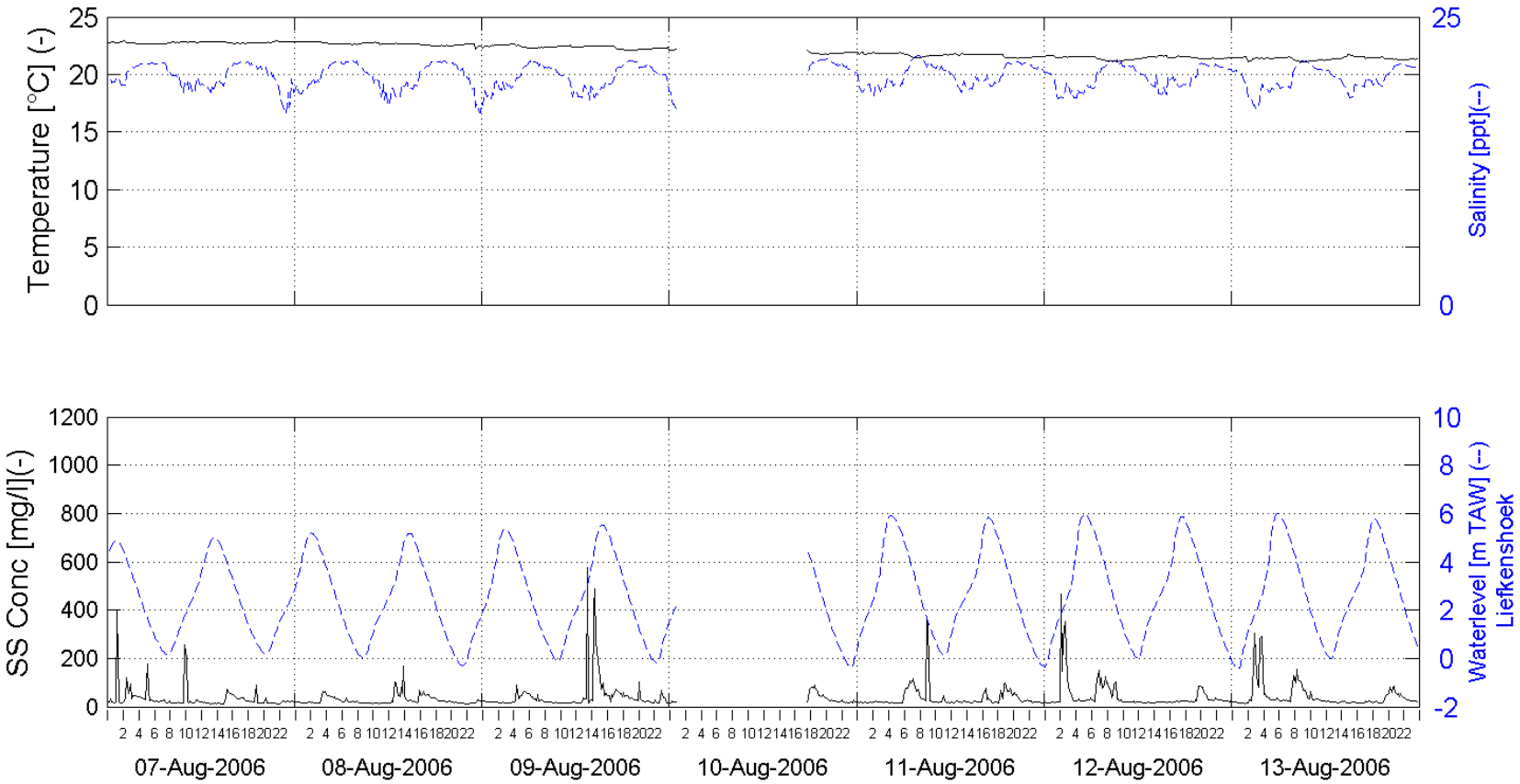
Processed by:

In Association with:

I/RA/11283/06.122/MSA

11283 - Long-term monitoring DGD - Summer 2006

Week 32 - 2006



Week series of Salinity, Temperature,
SS Concentration and Tide

Location:
S-BACK BOTTOM 4.8m above bottom (-12.2m TAW)

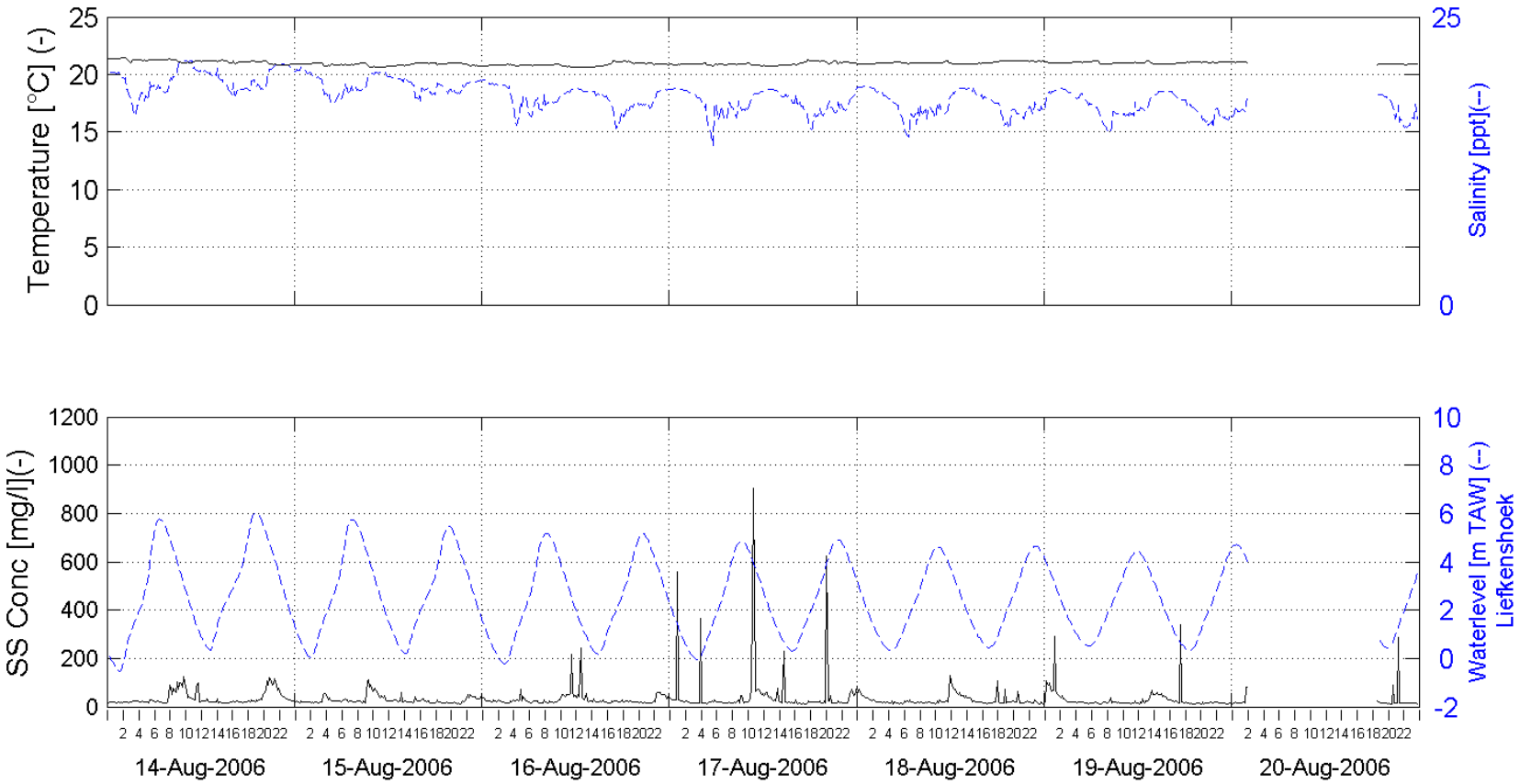
Processed by:

In Association with:

I/RA/11283/06.122/MSA

11283 - Long-term monitoring DGD - Summer 2006

Week 33 - 2006



Week series of Salinity, Temperature,
SS Concentration and Tide

Location:
S-BACK BOTTOM 4.8m above bottom (-12.2m TAW)

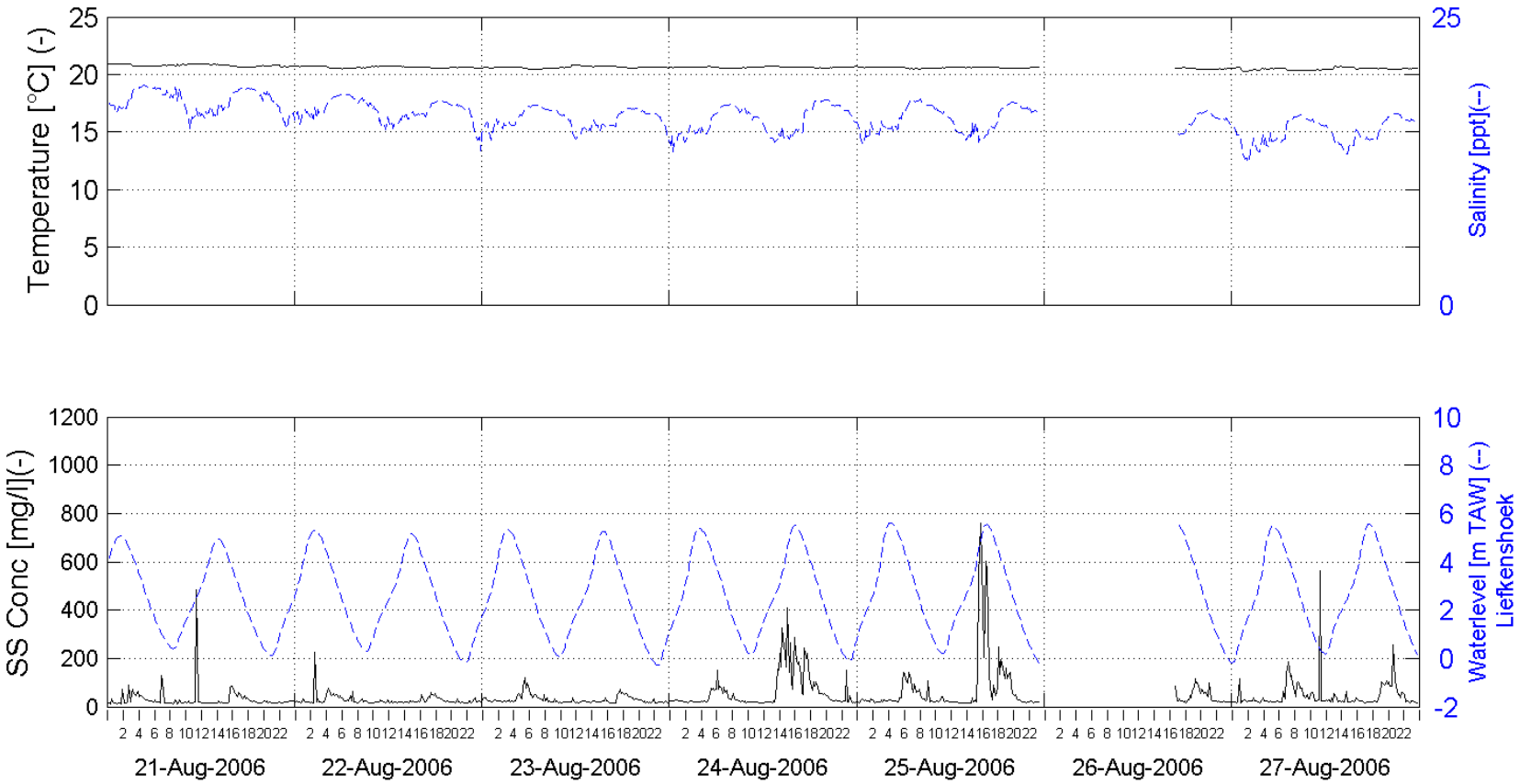
Processed by:

In Association with:

I/RA/11283/06.122/MSA

11283 - Long-term monitoring DGD - Summer 2006

Week 34 - 2006



Week series of Salinity, Temperature,
SS Concentration and Tide

Location:
S-BACK BOTTOM 4.8m above bottom (-12.2m TAW)

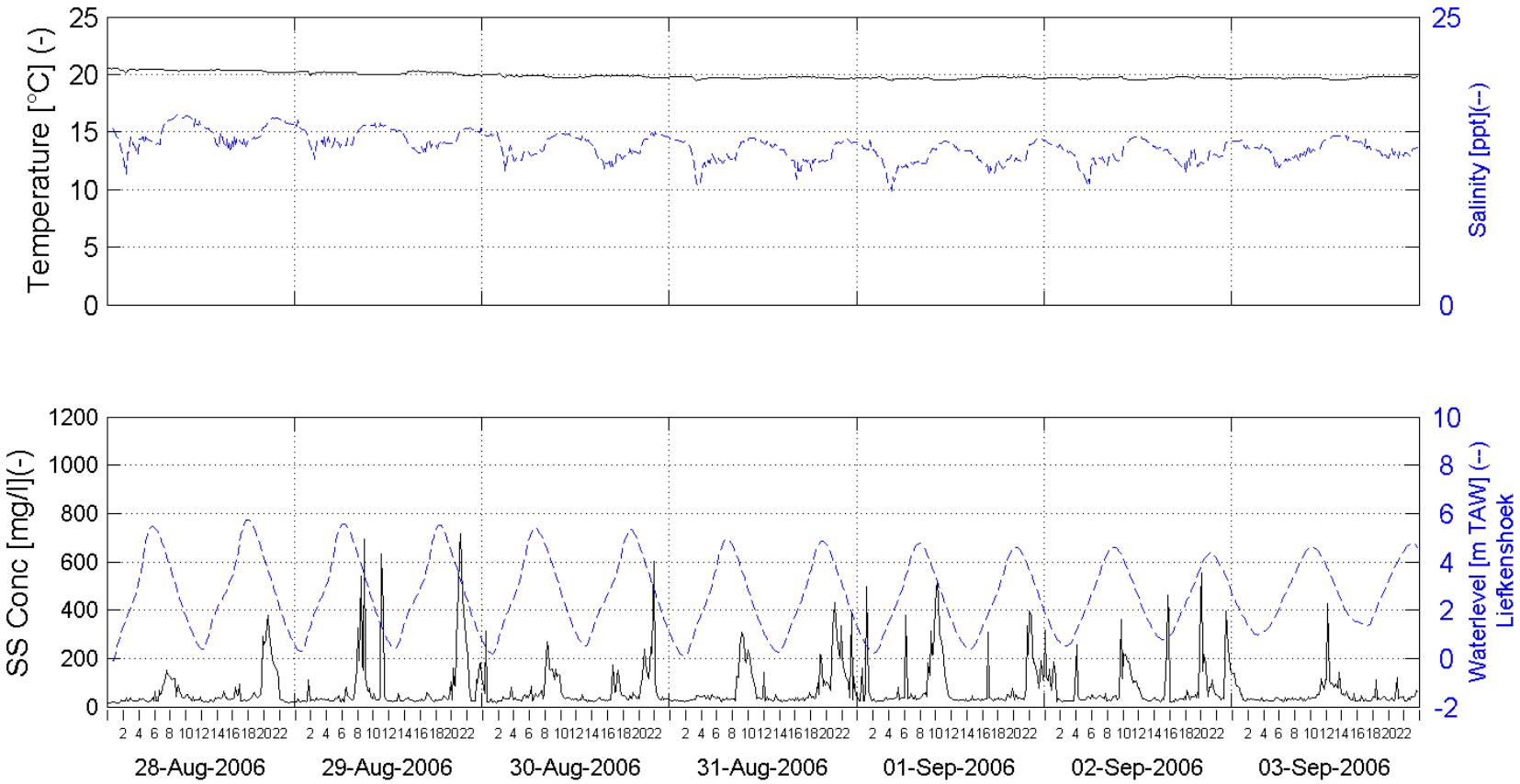
Processed by:

In Association with:

I/RA/11283/06.122/MSA

11283 - Long-term monitoring DGD - Summer 2006

Week 35 - 2006



Week series of Salinity, Temperature,
SS Concentration and Tide

Location:
S-BACK BOTTOM 4.8m above bottom (-12.2m TAW)

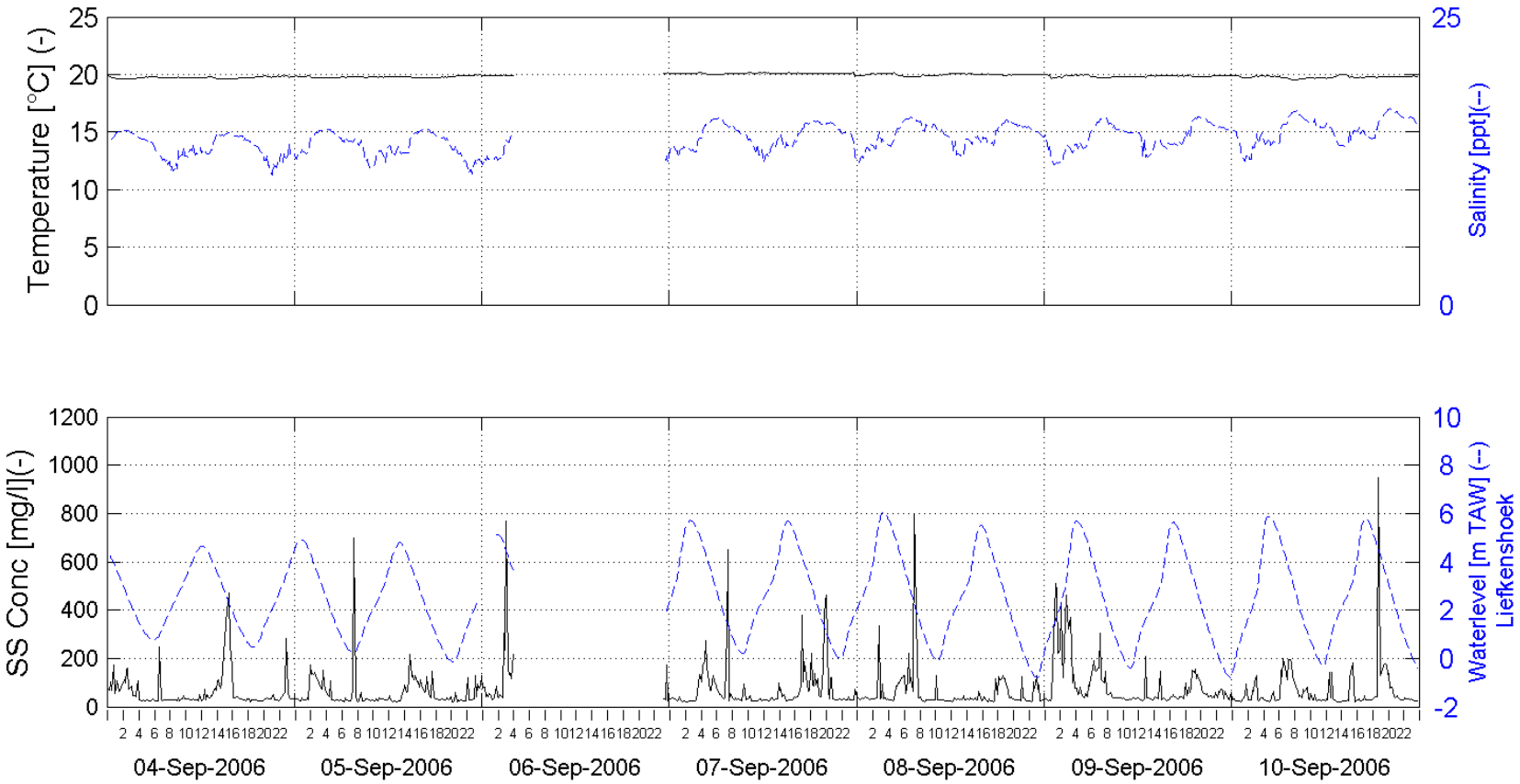
Processed by:

In Association with:

I/RA/11283/06.122/MSA

11283 - Long-term monitoring DGD - Summer 2006

Week 36 - 2006



Week series of Salinity, Temperature,
SS Concentration and Tide

Location:
S-BACK BOTTOM 4.8m above bottom (-12.2m TAW)

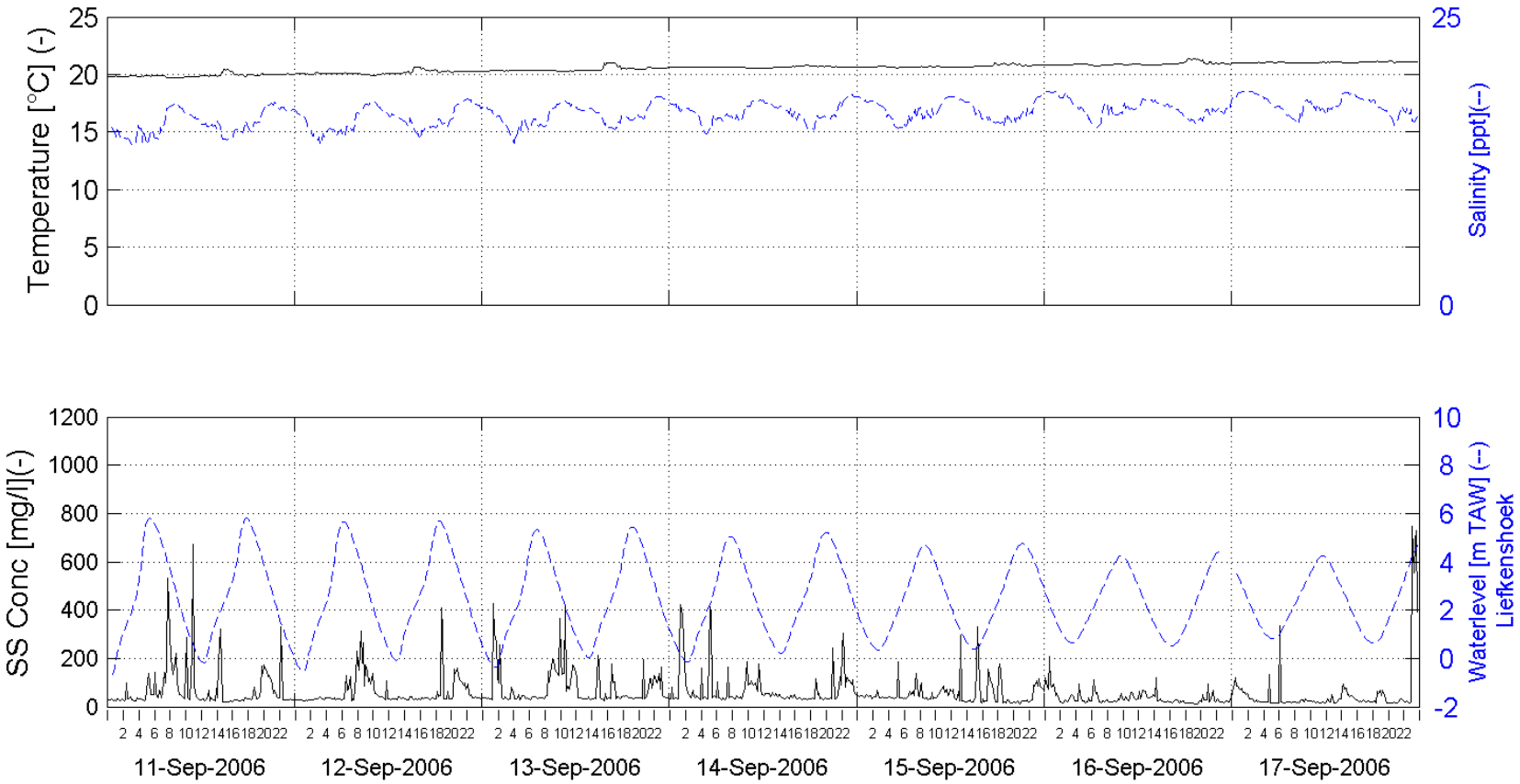
Processed by:

In Association with:

I/RA/11283/06.122/MSA

11283 - Long-term monitoring DGD - Summer 2006

Week 37 - 2006



Week series of Salinity, Temperature,
SS Concentration and Tide

Location:
S-BACK BOTTOM 4.8m above bottom (-12.2m TAW)

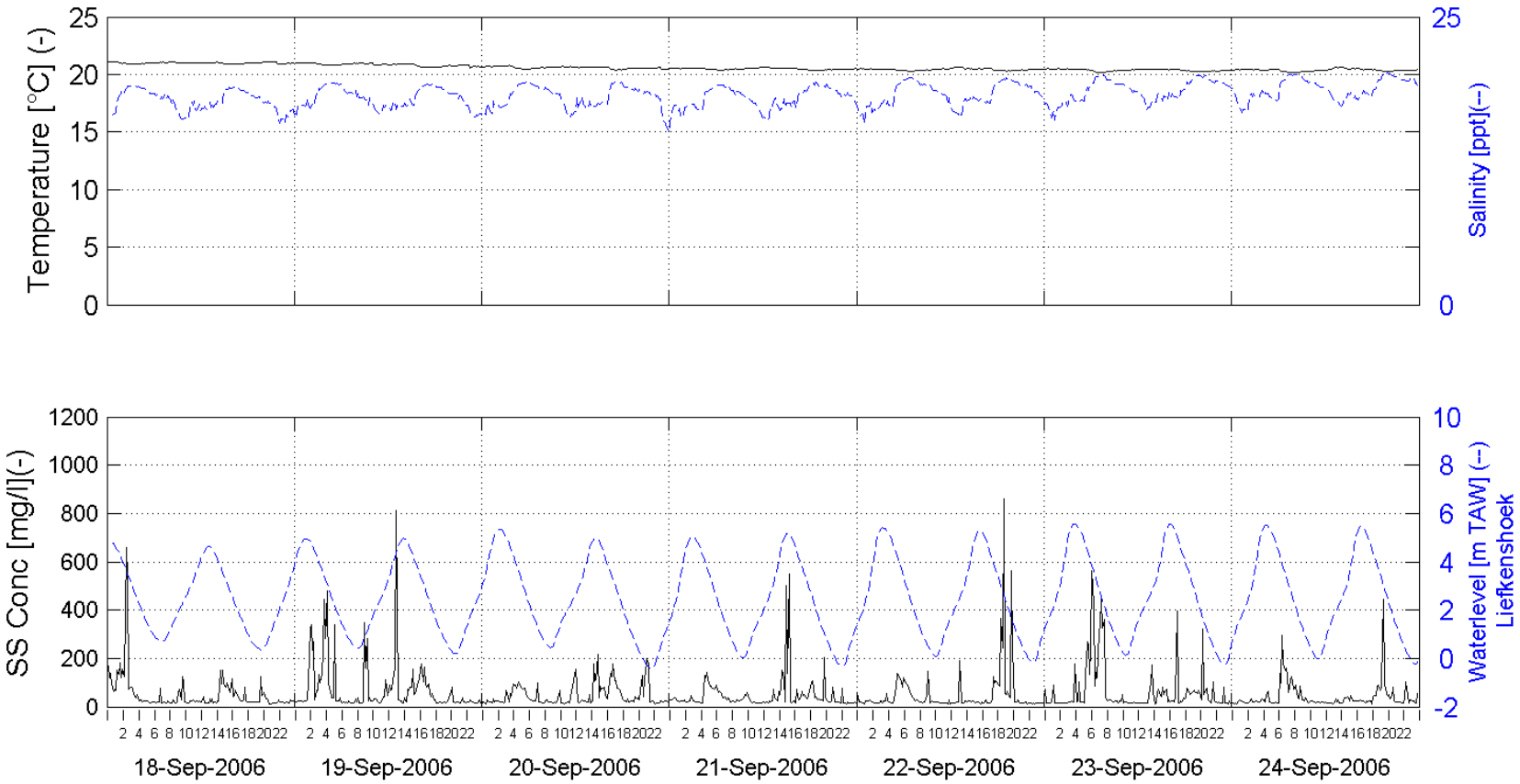
Processed by:

In Association with:

I/RA/11283/06.122/MSA

11283 - Long-term monitoring DGD - Summer 2006

Week 38 - 2006



Week series of Salinity, Temperature,
SS Concentration and Tide

Location:
S-BACK BOTTOM 4.8m above bottom (-12.2m TAW)

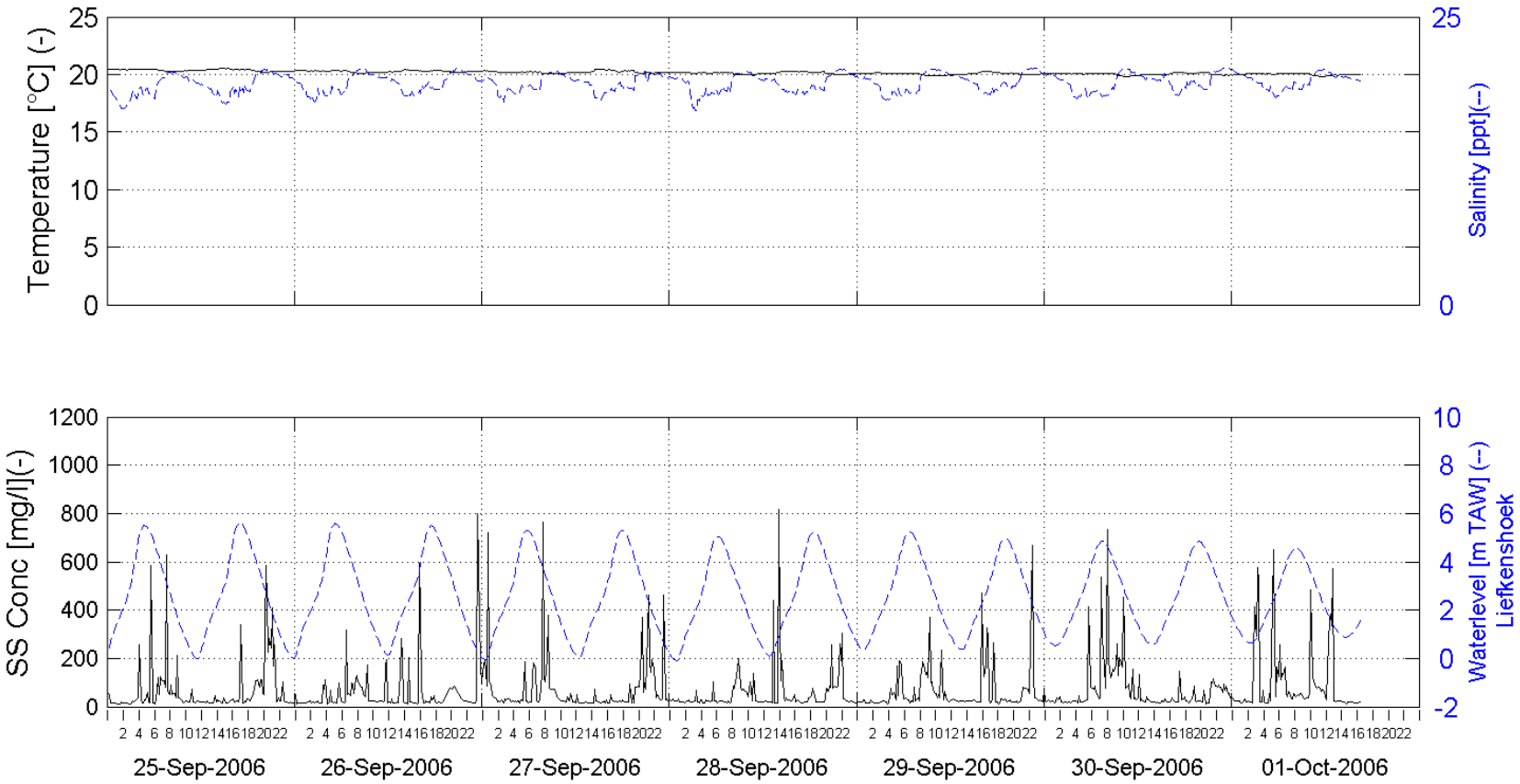
Processed by:

In Association with:

I/RA/11283/06.122/MSA

11283 - Long-term monitoring DGD - Summer 2006

Week 39 - 2006



Week series of Salinity, Temperature,
SS Concentration and Tide

Location:
S-BACK BOTTOM 4.8m above bottom (-12.2m TAW)

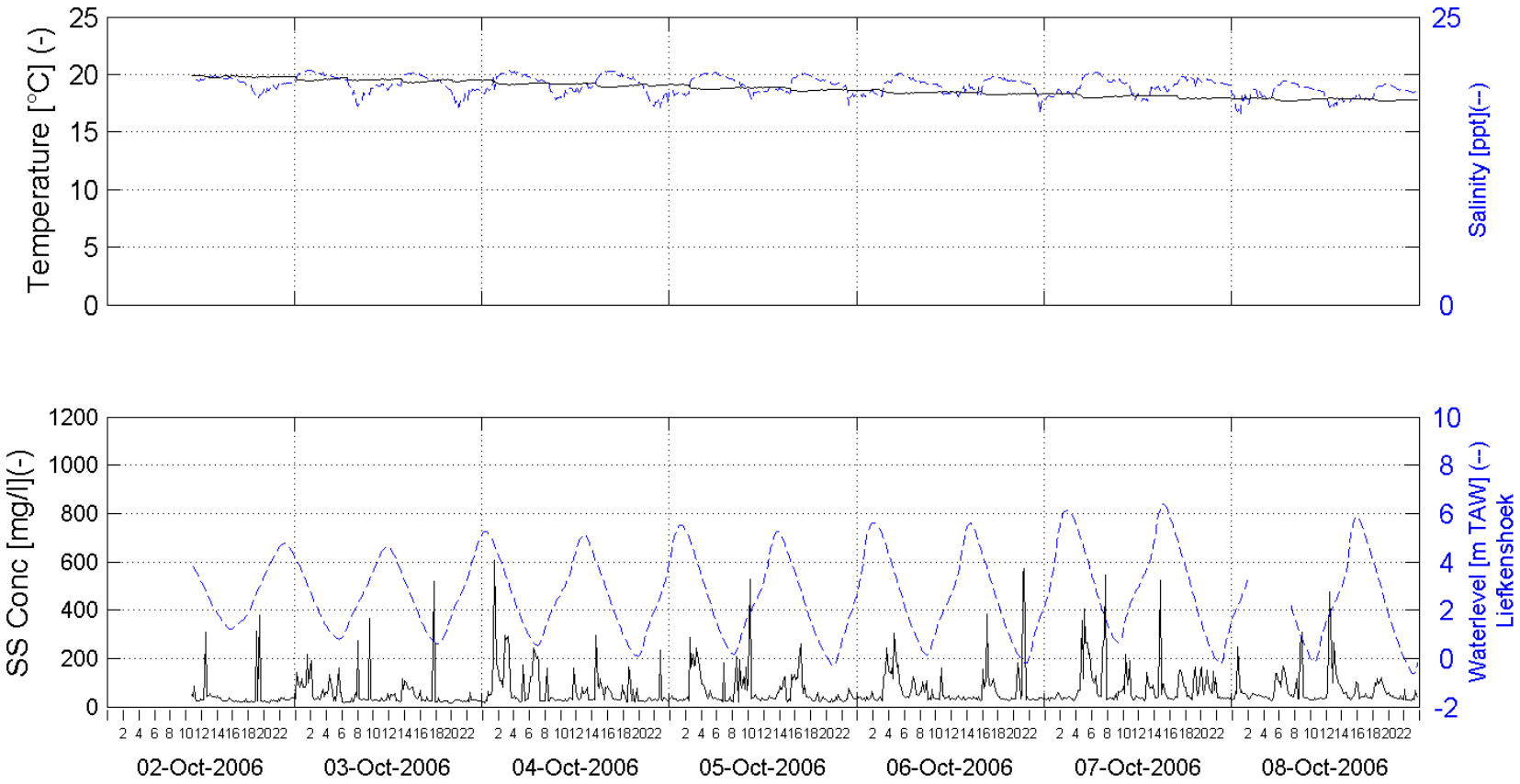
Processed by:

In Association with:

I/RA/11283/06.122/MSA

11283 - Long-term monitoring DGD - Summer 2006

Week 40 - 2006



Week series of Salinity, Temperature,
SS Concentration and Tide

Location:
S-BACK BOTTOM 4.8m above bottom (-12.2m TAW)

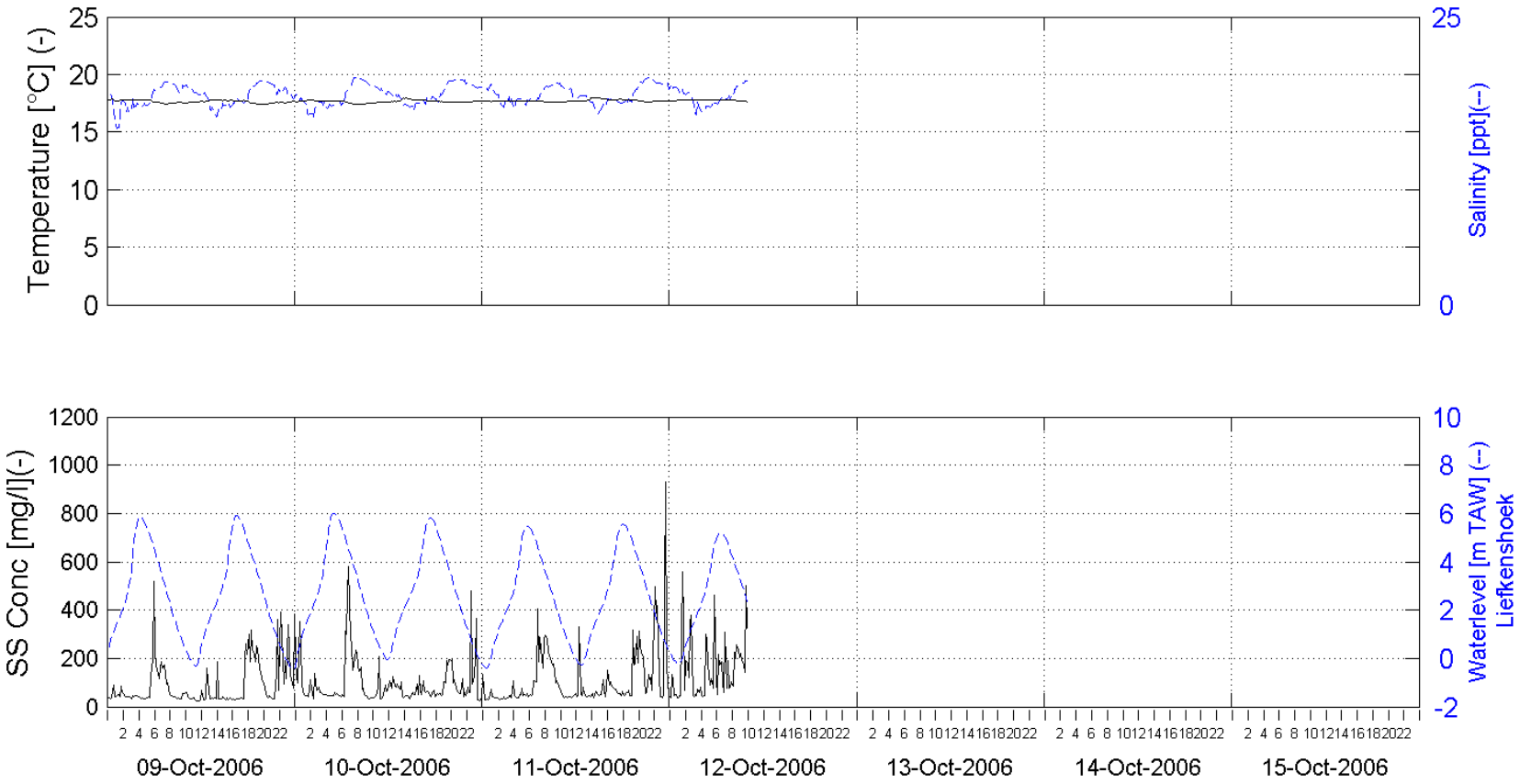
Processed by:

In Association with:

I/RA/11283/06.122/MSA

11283 - Long-term monitoring DGD - Summer 2006

Week 41 - 2006



Week series of Salinity, Temperature,
SS Concentration and Tide

Location:
S-BACK BOTTOM 4.8m above bottom (-12.2m TAW)

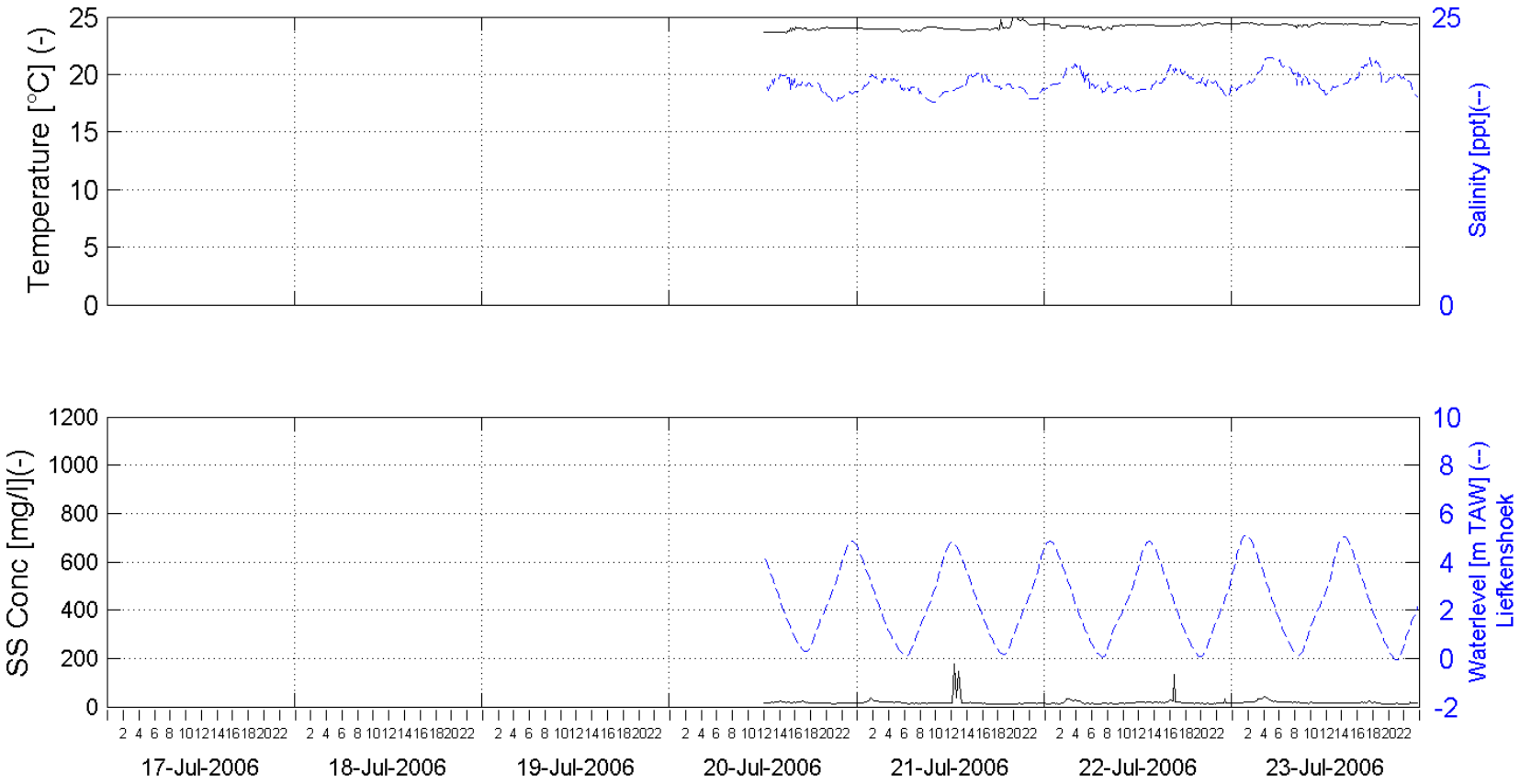
Processed by:

In Association with:

I/RA/11283/06.122/MSA

11283 - Long-term monitoring DGD - Summer 2006

Week 29 - 2006



Week series of Salinity, Temperature,
SS Concentration and Tide

Location:
S-BACK TOP 14.5m above bottom (-2.5m TAW)

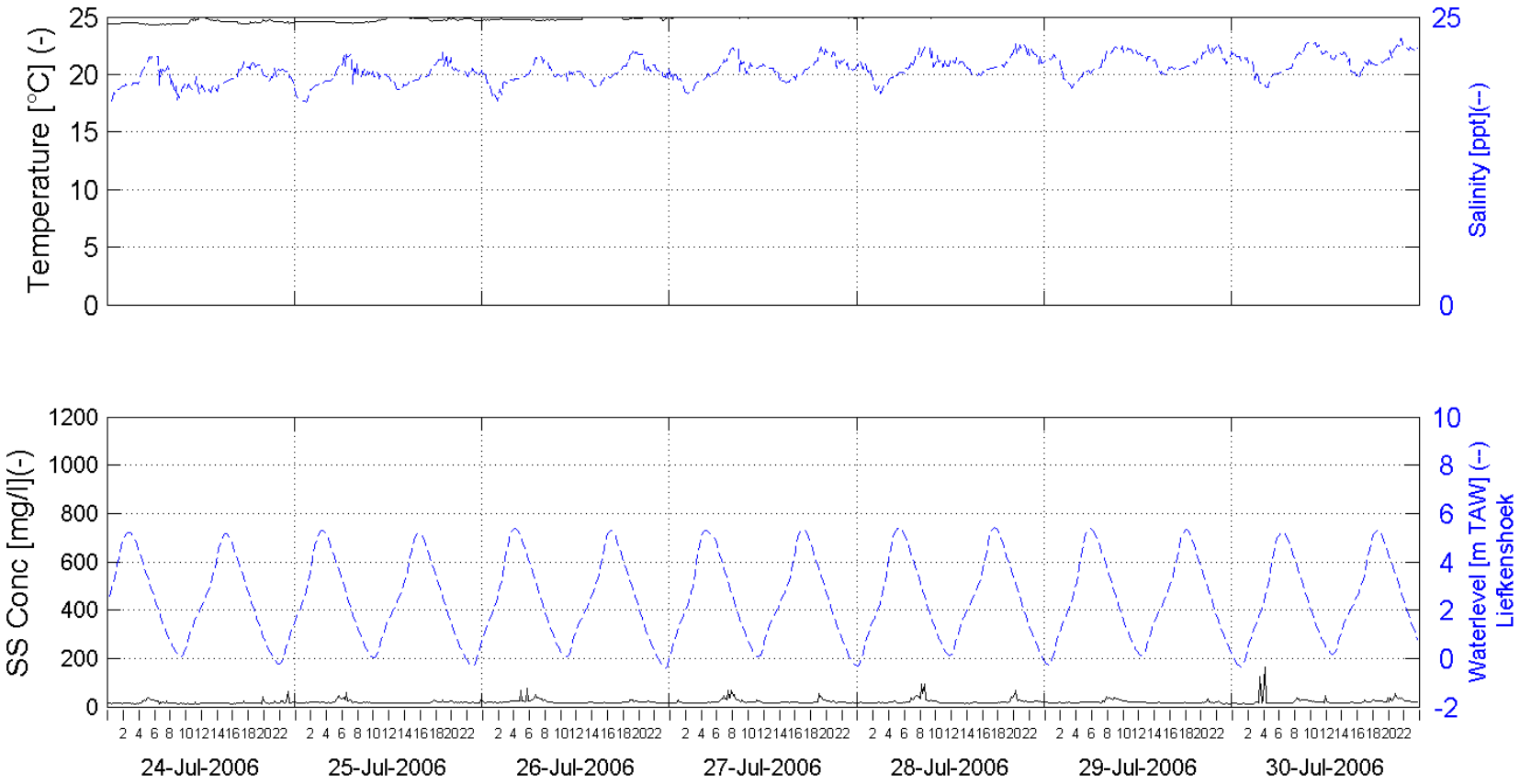
Processed by:

In Association with:

I/RA/11283/06.122/MSA

11283 - Long-term monitoring DGD - Summer 2006

Week 30 - 2006



Week series of Salinity, Temperature, SS Concentration and Tide

Location:

S-BACK TOP 14.5m above bottom (-2.5m TAW)

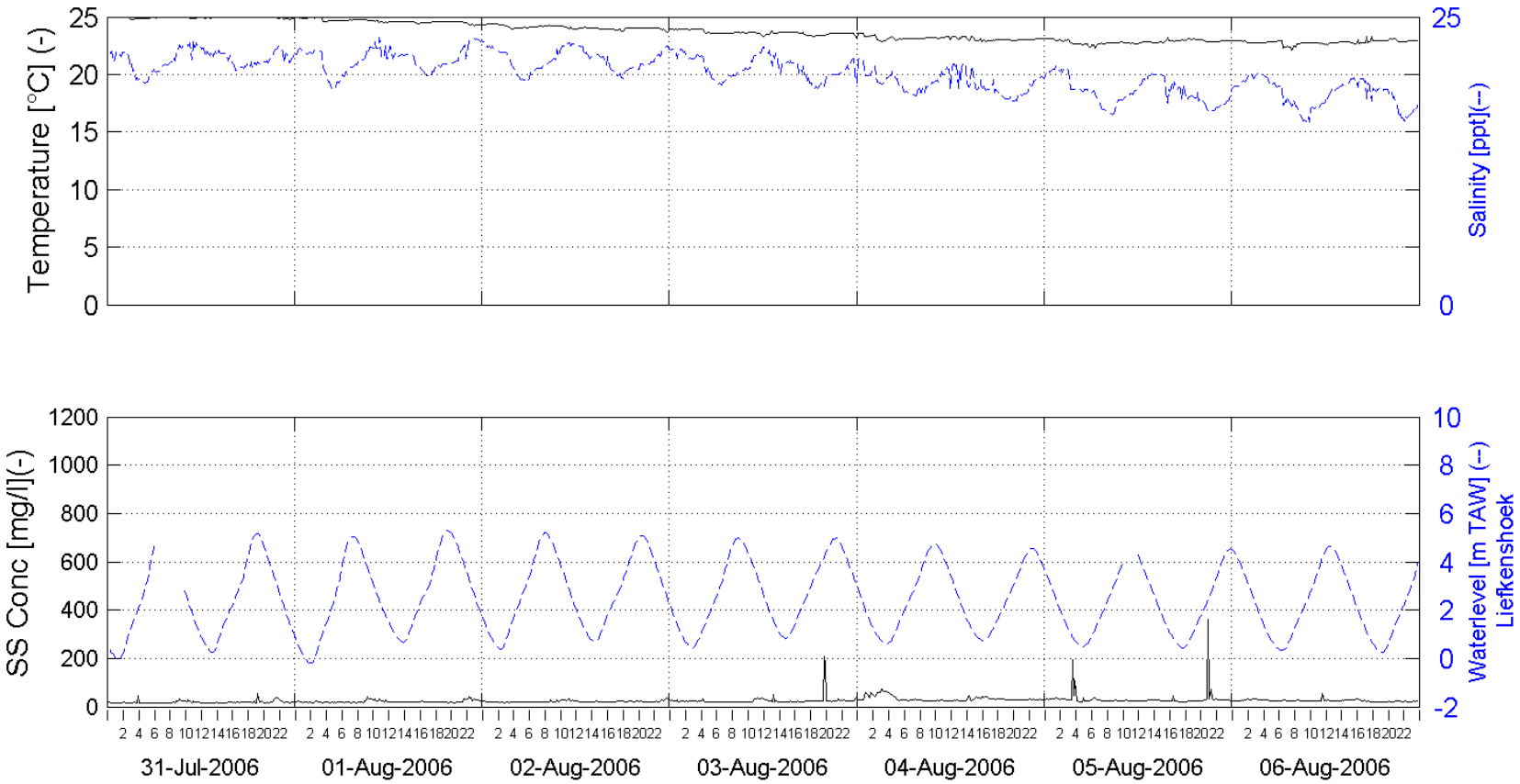
Processed by:

In Association with:

I/RA/11283/06.122/MSA

11283 - Long-term monitoring DGD - Summer 2006

Week 31 - 2006



Week series of Salinity, Temperature,
SS Concentration and Tide

Location:
S-BACK TOP 14.5m above bottom (-2.5m TAW)

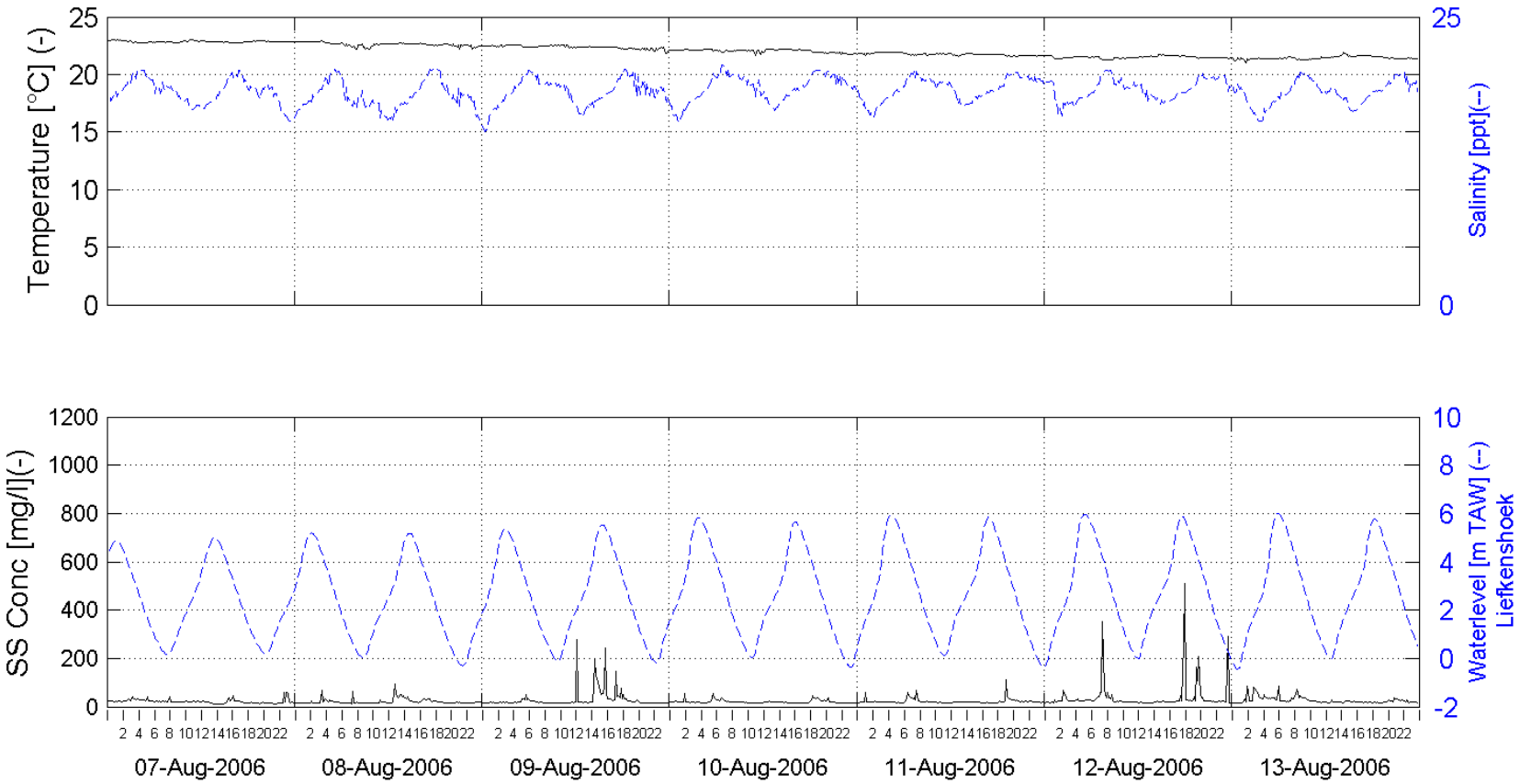
Processed by:

In Association with:

I/RA/11283/06.122/MSA

11283 - Long-term monitoring DGD - Summer 2006

Week 32 - 2006



Week series of Salinity, Temperature,
SS Concentration and Tide

Location:

S-BACK TOP 14.5m above bottom (-2.5m TAW)

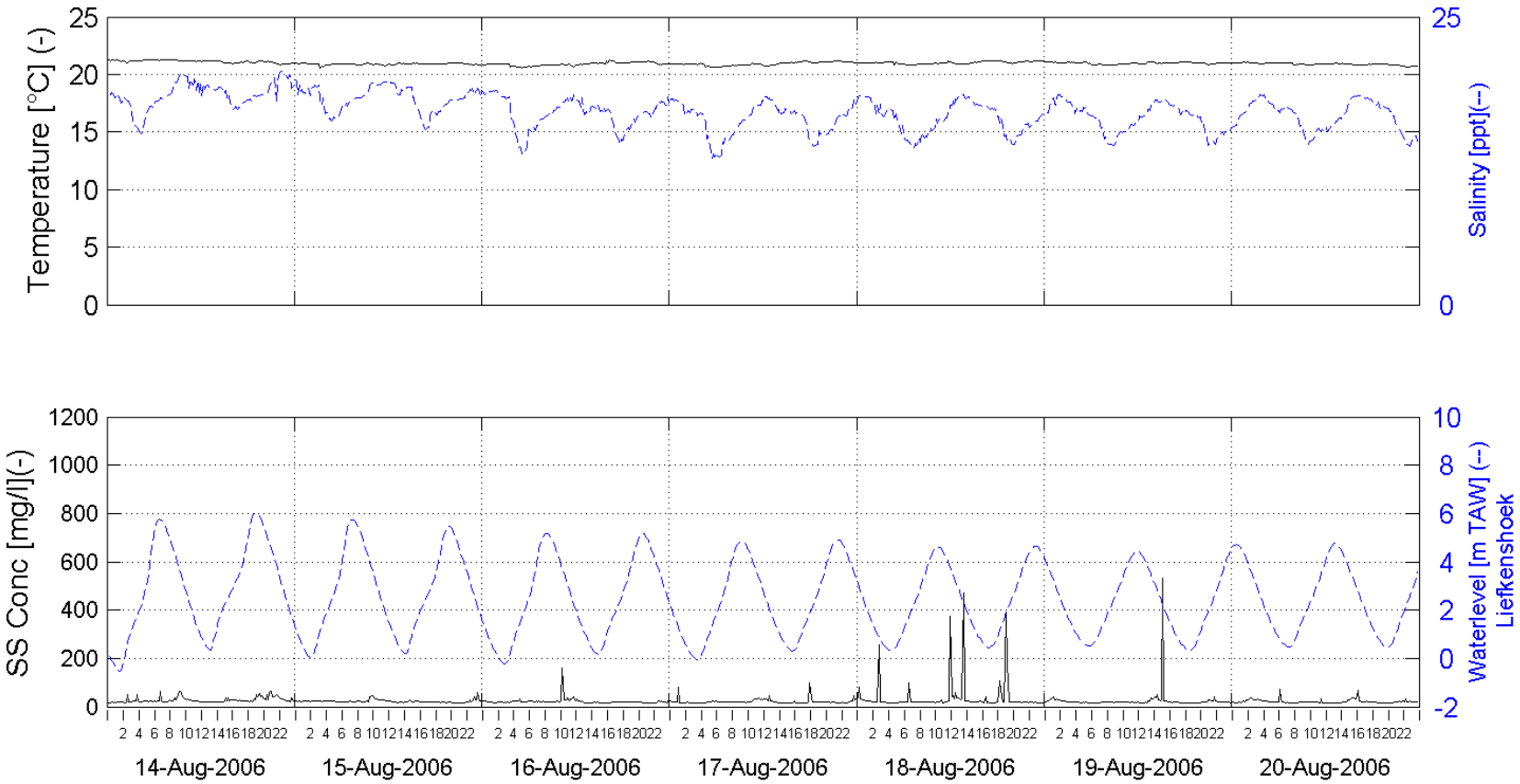
Processed by:

In Association with:

I/RA/11283/06.122/MSA

11283 - Long-term monitoring DGD - Summer 2006

Week 33 - 2006



Week series of Salinity, Temperature,
SS Concentration and Tide

Location:

S-BACK TOP 14.5m above bottom (-2.5m TAW)

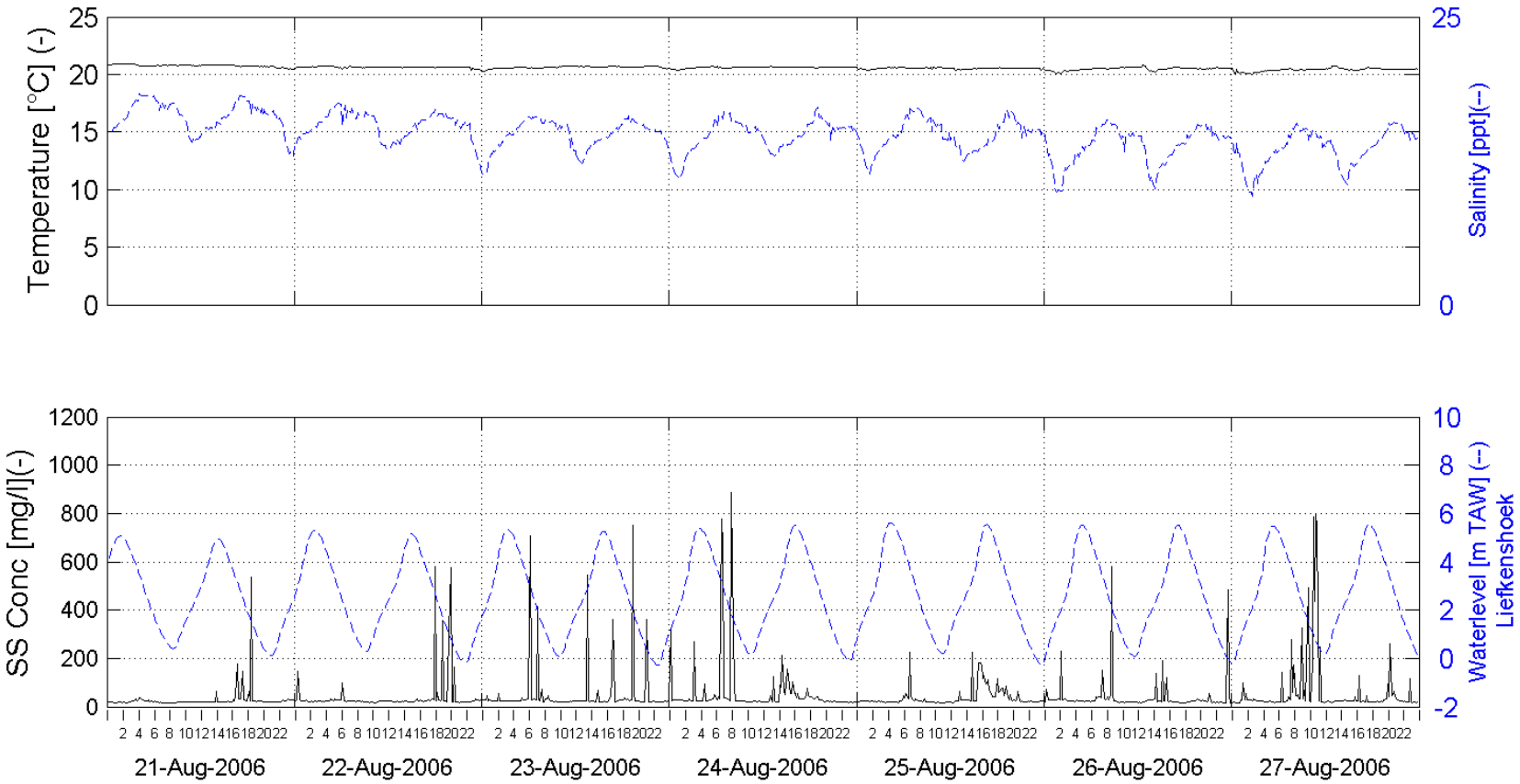
Processed by:

In Association with:

I/RA/11283/06.122/MSA

11283 - Long-term monitoring DGD - Summer 2006

Week 34 - 2006



Week series of Salinity, Temperature, SS Concentration and Tide

Location:

S-BACK TOP 14.5m above bottom (-2.5m TAW)

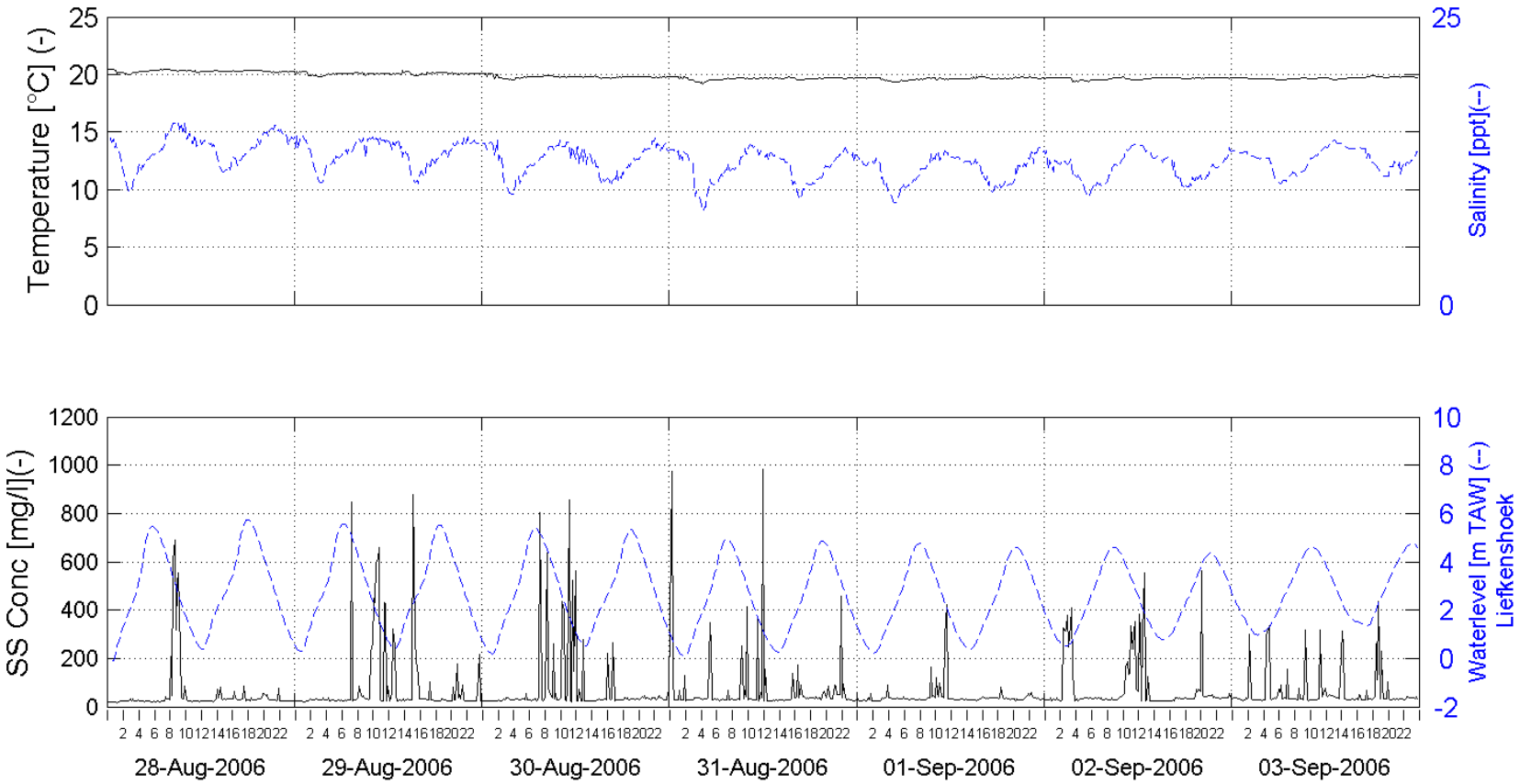
Processed by:

In Association with:

I/RA/11283/06.122/MSA

11283 - Long-term monitoring DGD - Summer 2006

Week 35 - 2006



Week series of Salinity, Temperature,
SS Concentration and Tide

Location:

S-BACK TOP 14.5m above bottom (-2.5m TAW)

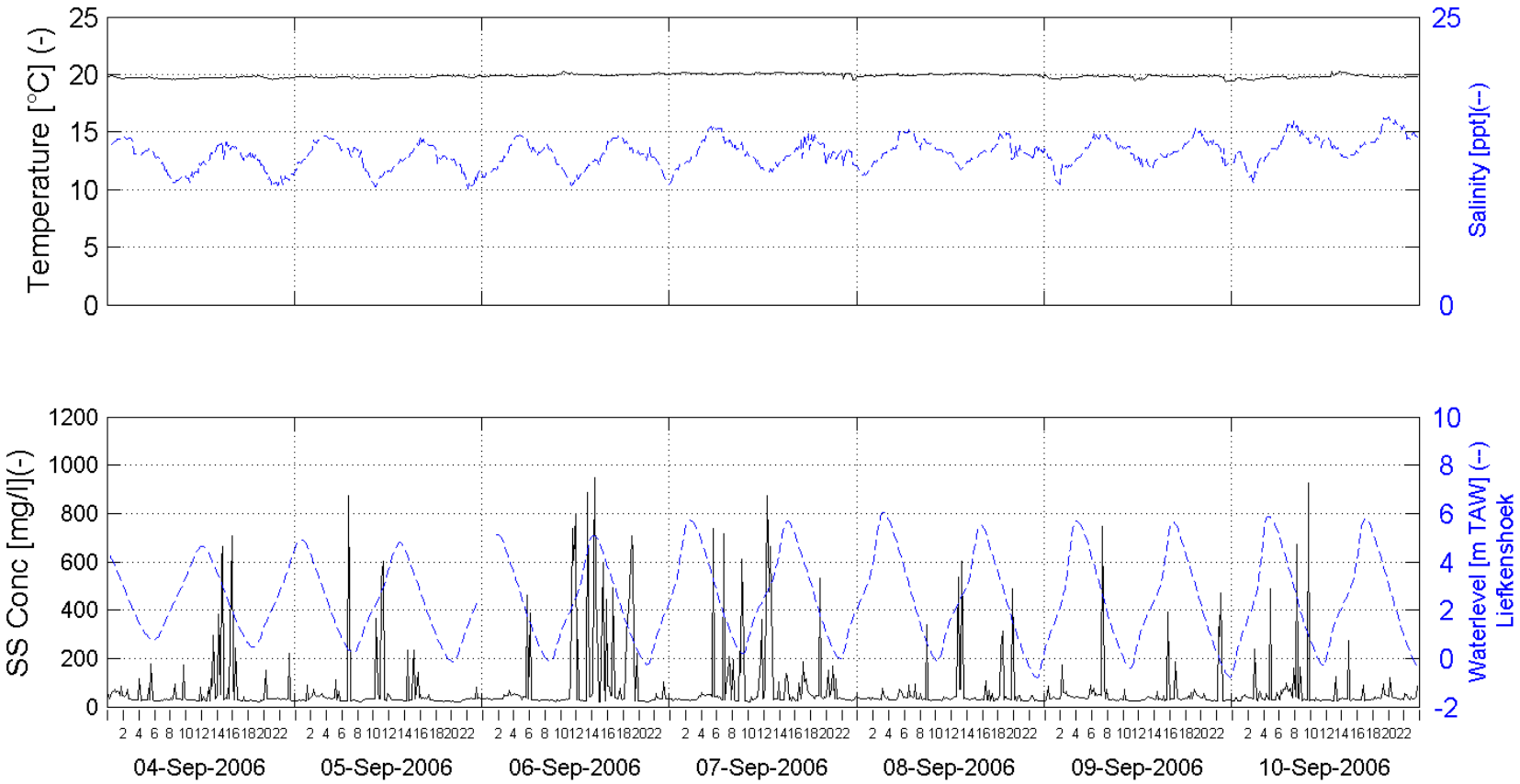
Processed by:

In Association with:

I/RA/11283/06.122/MSA

11283 - Long-term monitoring DGD - Summer 2006

Week 36 - 2006



Week series of Salinity, Temperature,
SS Concentration and Tide

Location:

S-BACK TOP 14.5m above bottom (-2.5m TAW)

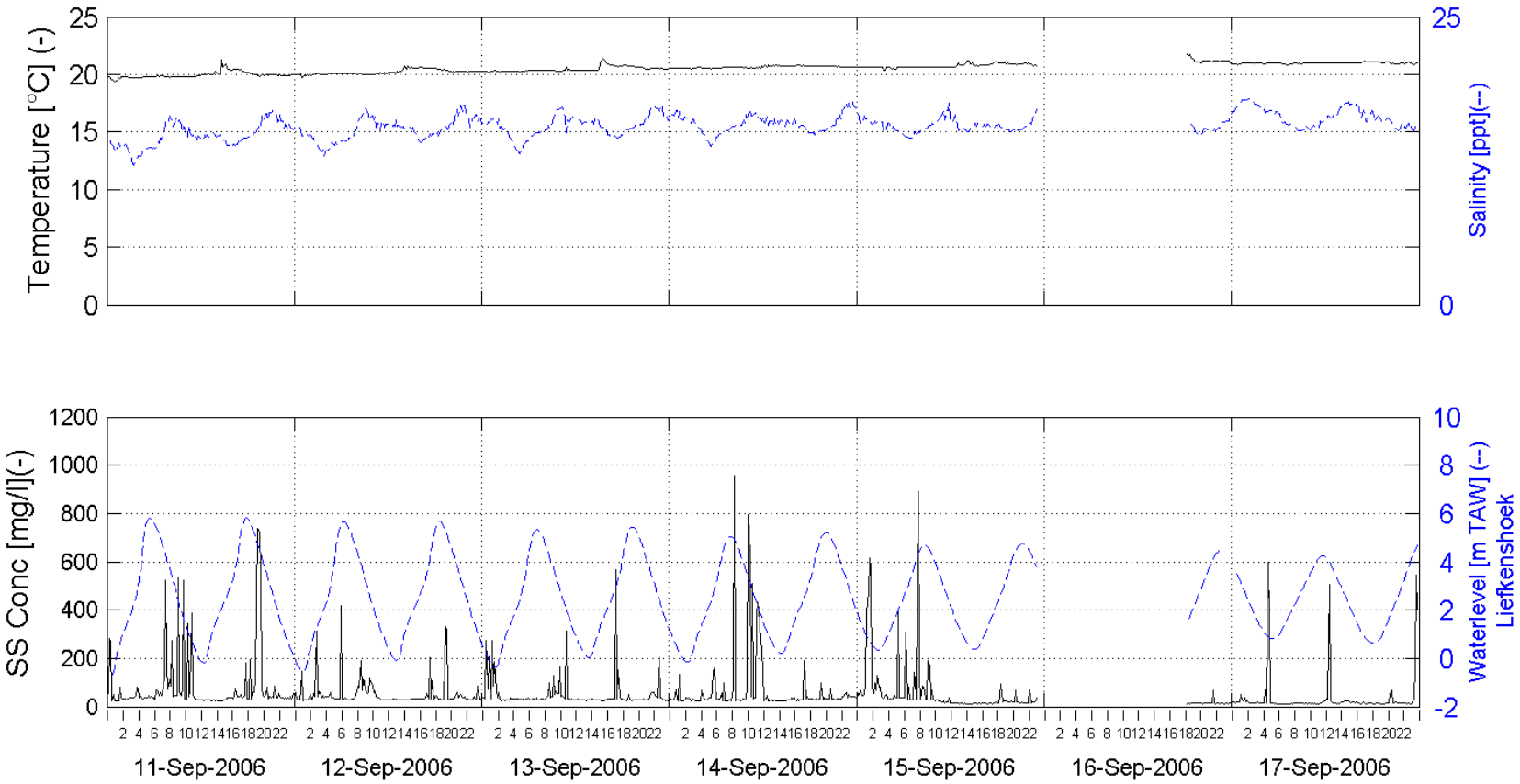
Processed by:

In Association with:

I/RA/11283/06.122/MSA

11283 - Long-term monitoring DGD - Summer 2006

Week 37 - 2006



Week series of Salinity, Temperature, SS Concentration and Tide

Location:

S-BACK TOP 14.5m above bottom (-2.5m TAW)

Processed by:

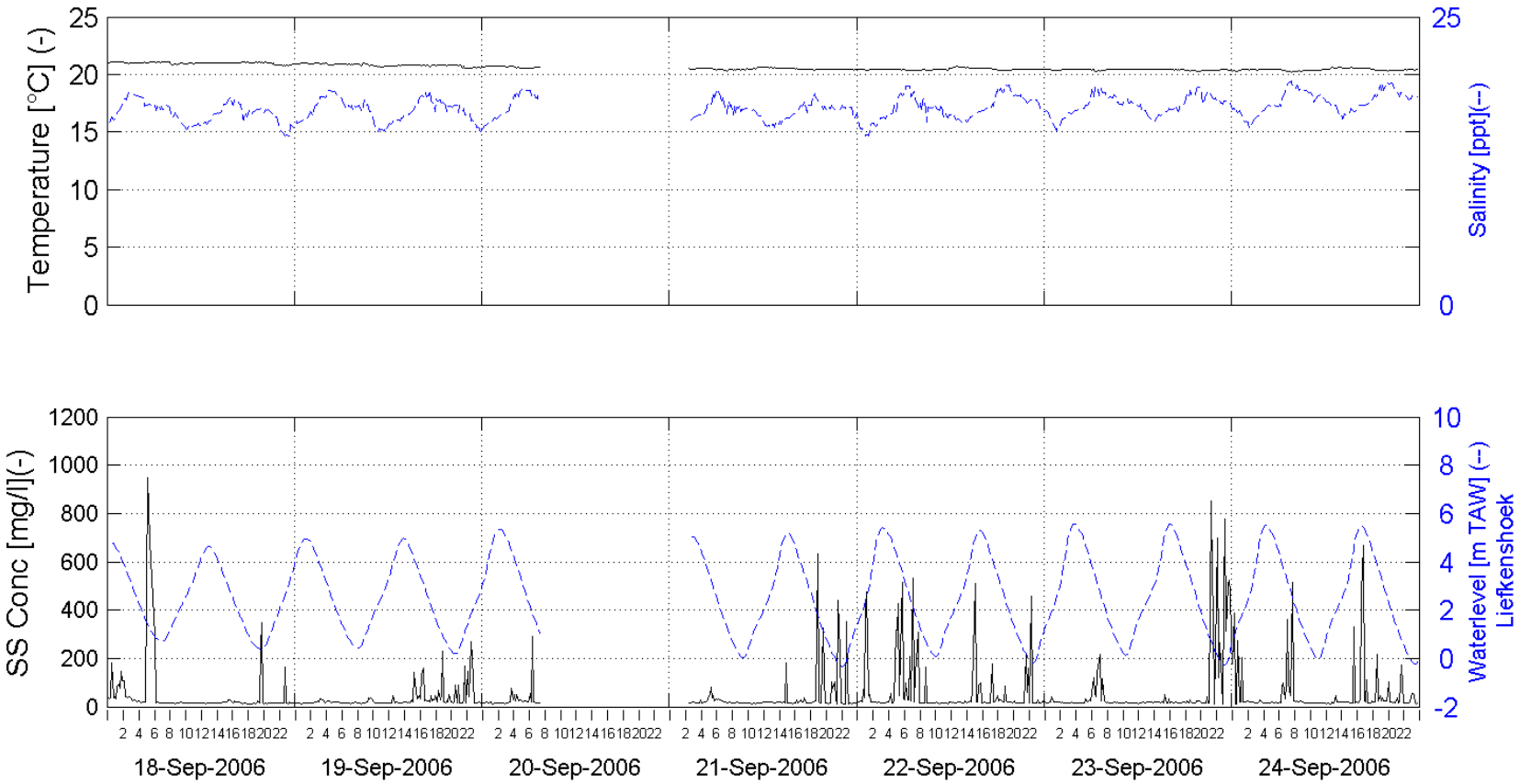
IMDC

In Association with:

I/RA/11283/06.122/MSA

11283 - Long-term monitoring DGD - Summer 2006

Week 38 - 2006



Week series of Salinity, Temperature,
SS Concentration and Tide

Location:

S-BACK TOP 14.5m above bottom (-2.5m TAW)

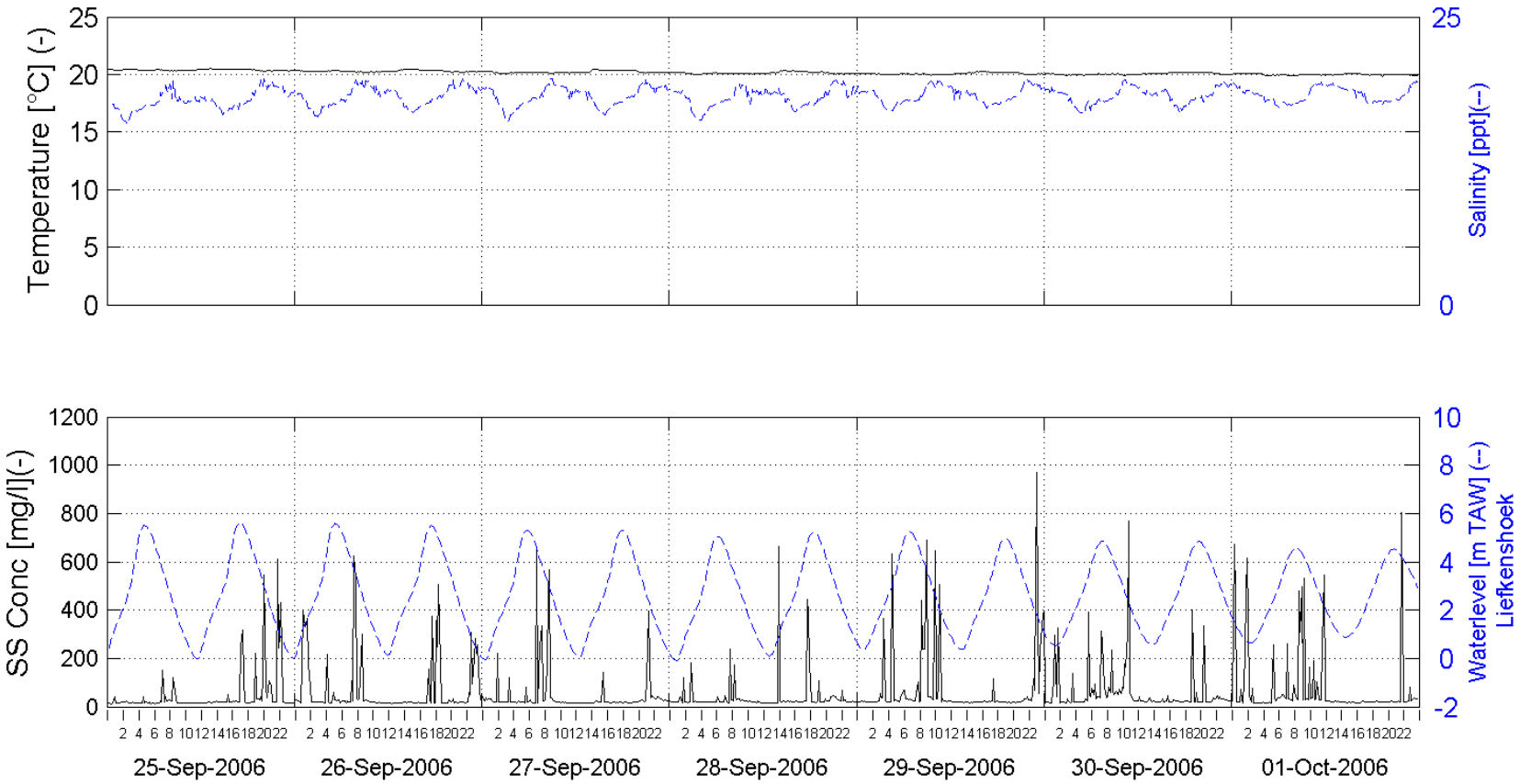
Processed by:

In Association with:

I/RA/11283/06.122/MSA

11283 - Long-term monitoring DGD - Summer 2006

Week 39 - 2006



Week series of Salinity, Temperature,
SS Concentration and Tide

Location:

S-BACK TOP 14.5m above bottom (-2.5m TAW)

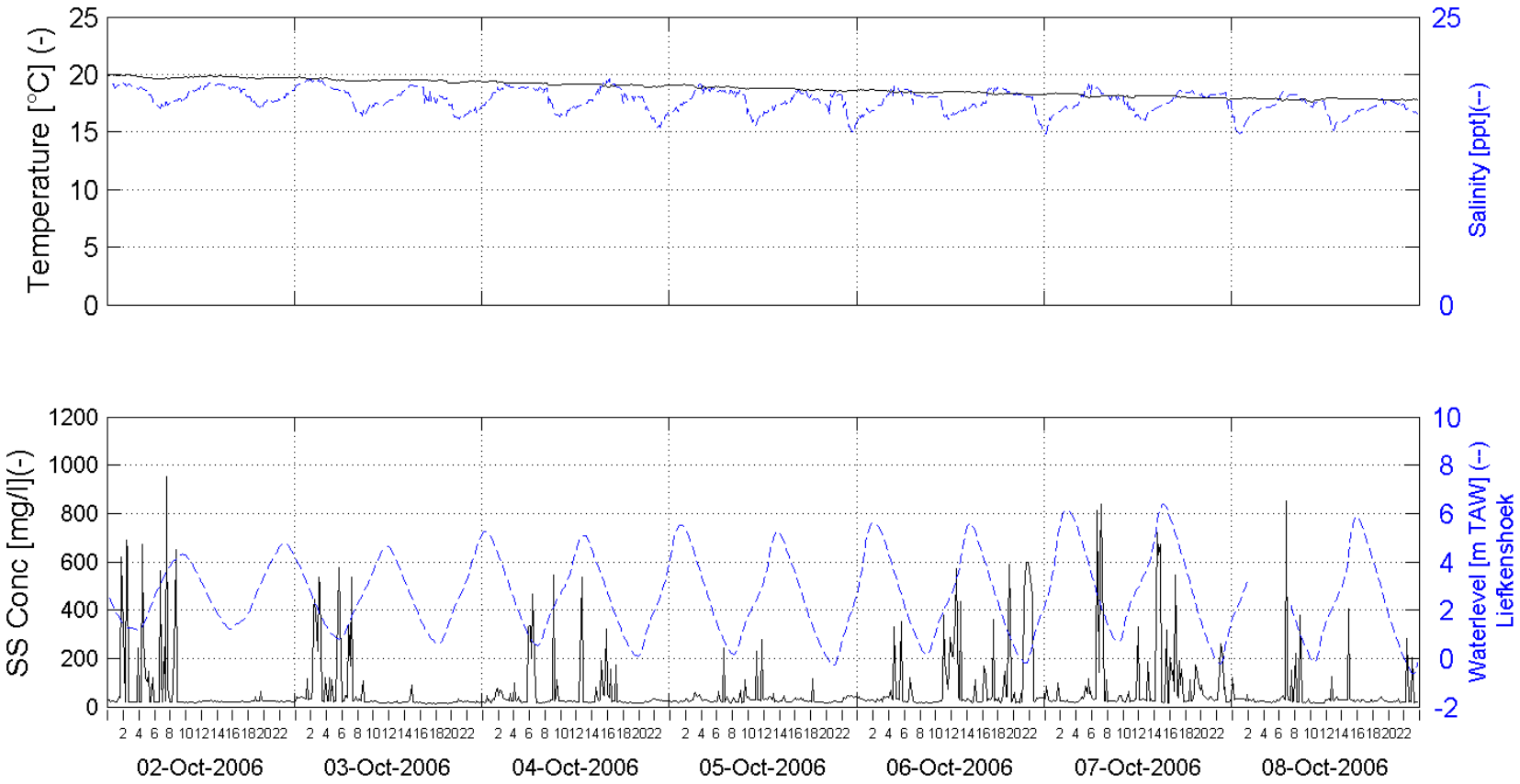
Processed by:

In Association with:

I/RA/11283/06.122/MSA

11283 - Long-term monitoring DGD - Summer 2006

Week 40 - 2006



Week series of Salinity, Temperature,
SS Concentration and Tide

Location:

S-BACK TOP 14.5m above bottom (-2.5m TAW)

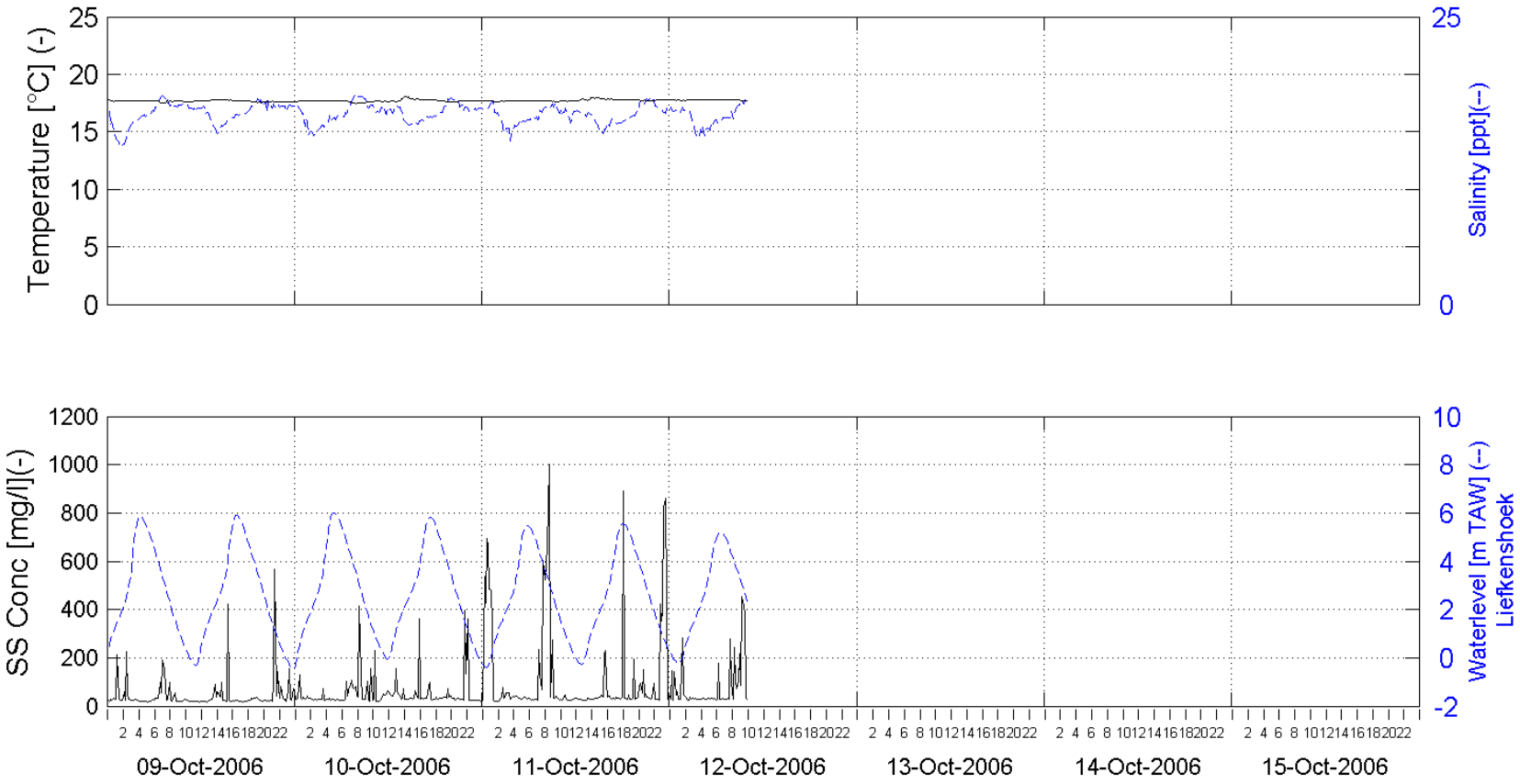
Processed by:

In Association with:

I/RA/11283/06.122/MSA

11283 - Long-term monitoring DGD - Summer 2006

Week 41 - 2006



Week series of Salinity, Temperature,
SS Concentration and Tide

Location:
S-BACK TOP 14.5m above bottom (-2.5m TAW)

Processed by:

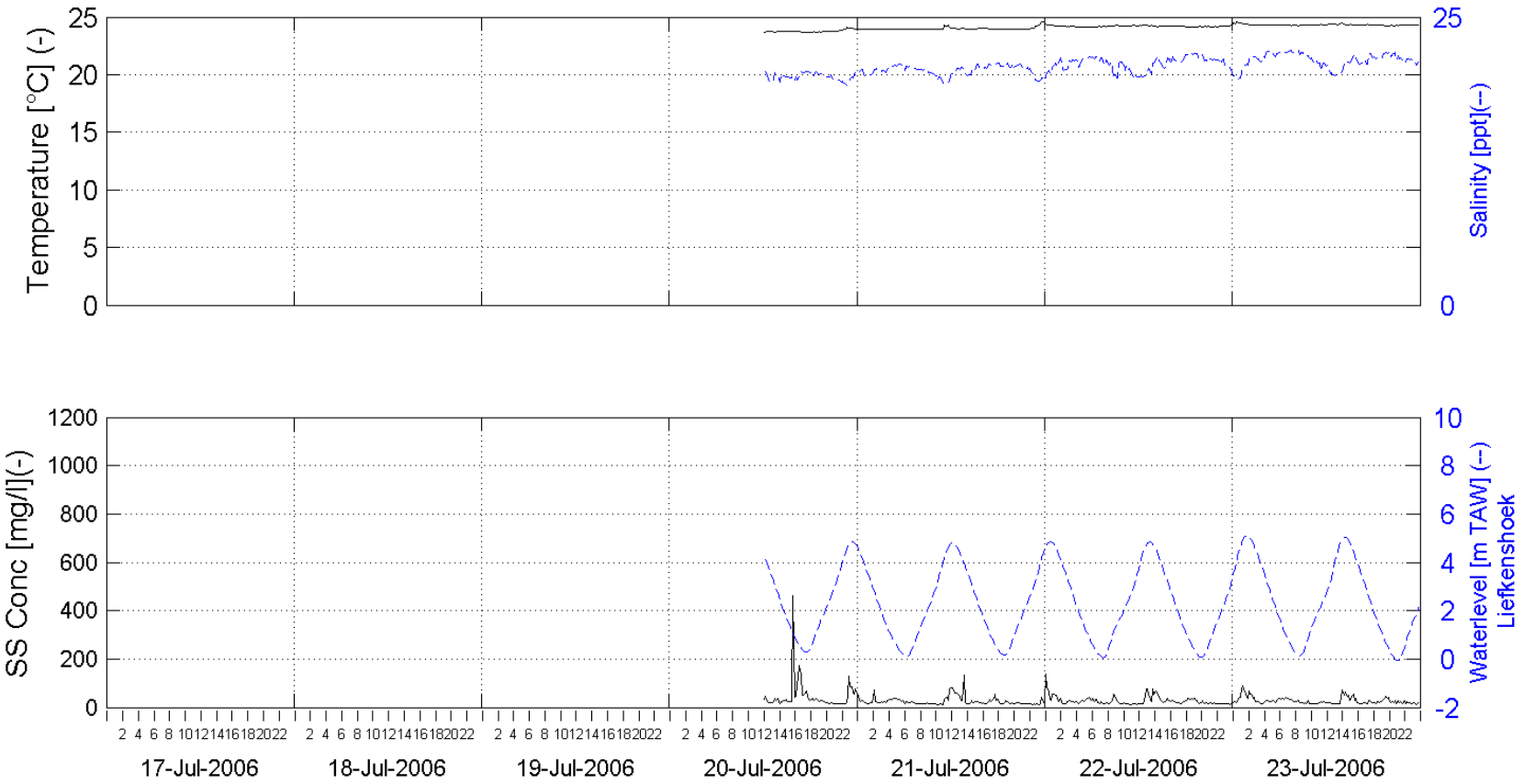
In Association with:

I/RA/11283/06.122/MSA

B.3 P&O 2 (S-ENTRANCE)

11283 - Long-term monitoring DGD - Summer 2006

Week 29 - 2006



Week series of Salinity, Temperature,
SS Concentration and Tide

Location:
S-ENTRANCE BOTTOM 4.8m above bottom (-12.2m TAW)

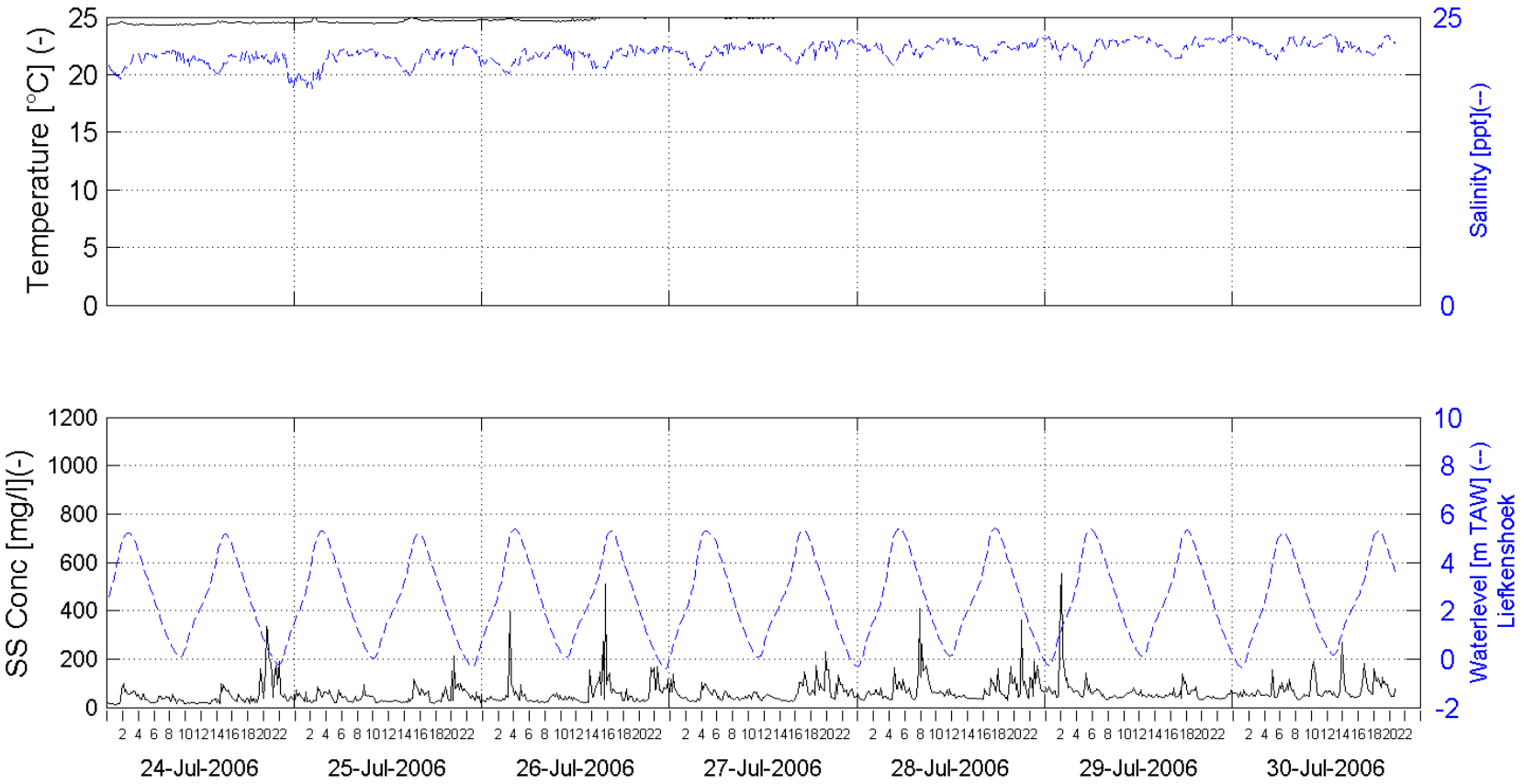
Processed by:

In Association with:

I/RA/11283/06.122/MSA

11283 - Long-term monitoring DGD - Summer 2006

Week 30 - 2006



Week series of Salinity, Temperature,
SS Concentration and Tide

Location:
S-ENTRANCE BOTTOM 4.8m above bottom (-12.2m TAW)

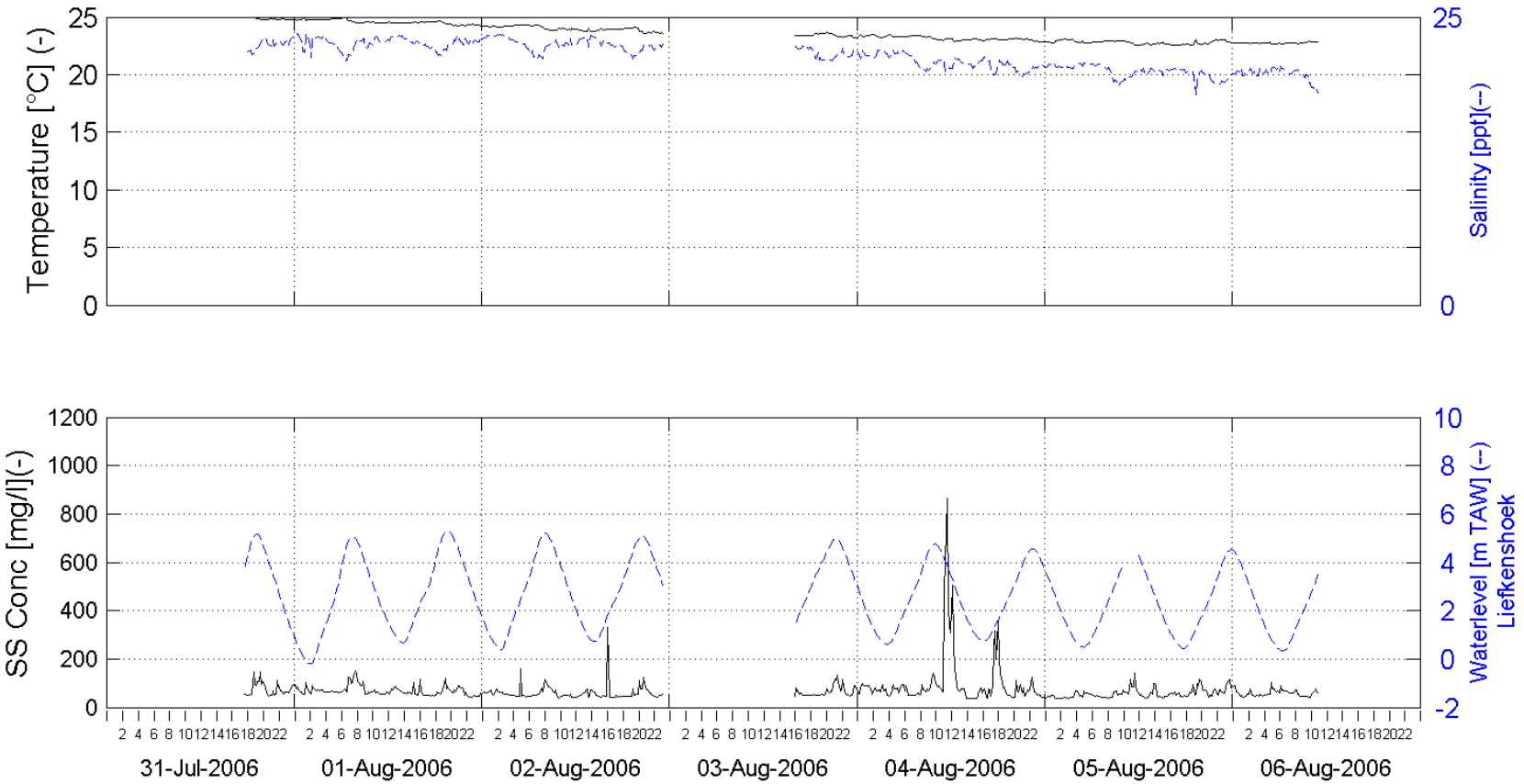
Processed by:

In Association with:

I/RA/11283/06.122/MSA

11283 - Long-term monitoring DGD - Summer 2006

Week 31 - 2006



Week series of Salinity, Temperature,
SS Concentration and Tide

Location:
S-ENTRANCE BOTTOM 4.8m above bottom (-12.2m TAW)

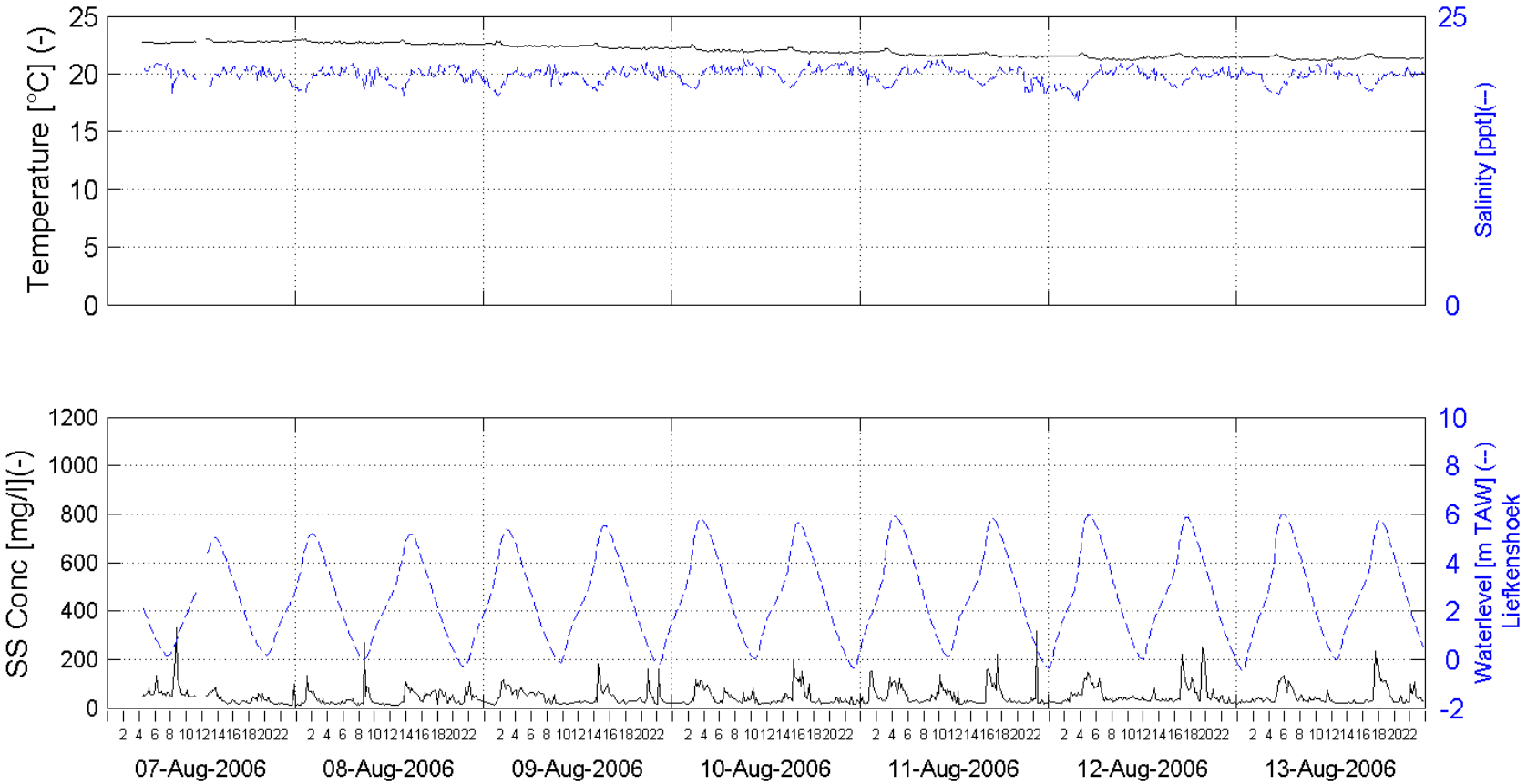
Processed by:

In Association with:

I/RA/11283/06.122/MSA

11283 - Long-term monitoring DGD - Summer 2006

Week 32 - 2006



Week series of Salinity, Temperature, SS Concentration and Tide

Location:

S-ENTRANCE BOTTOM 4.8m above bottom (-12.2m TAW)

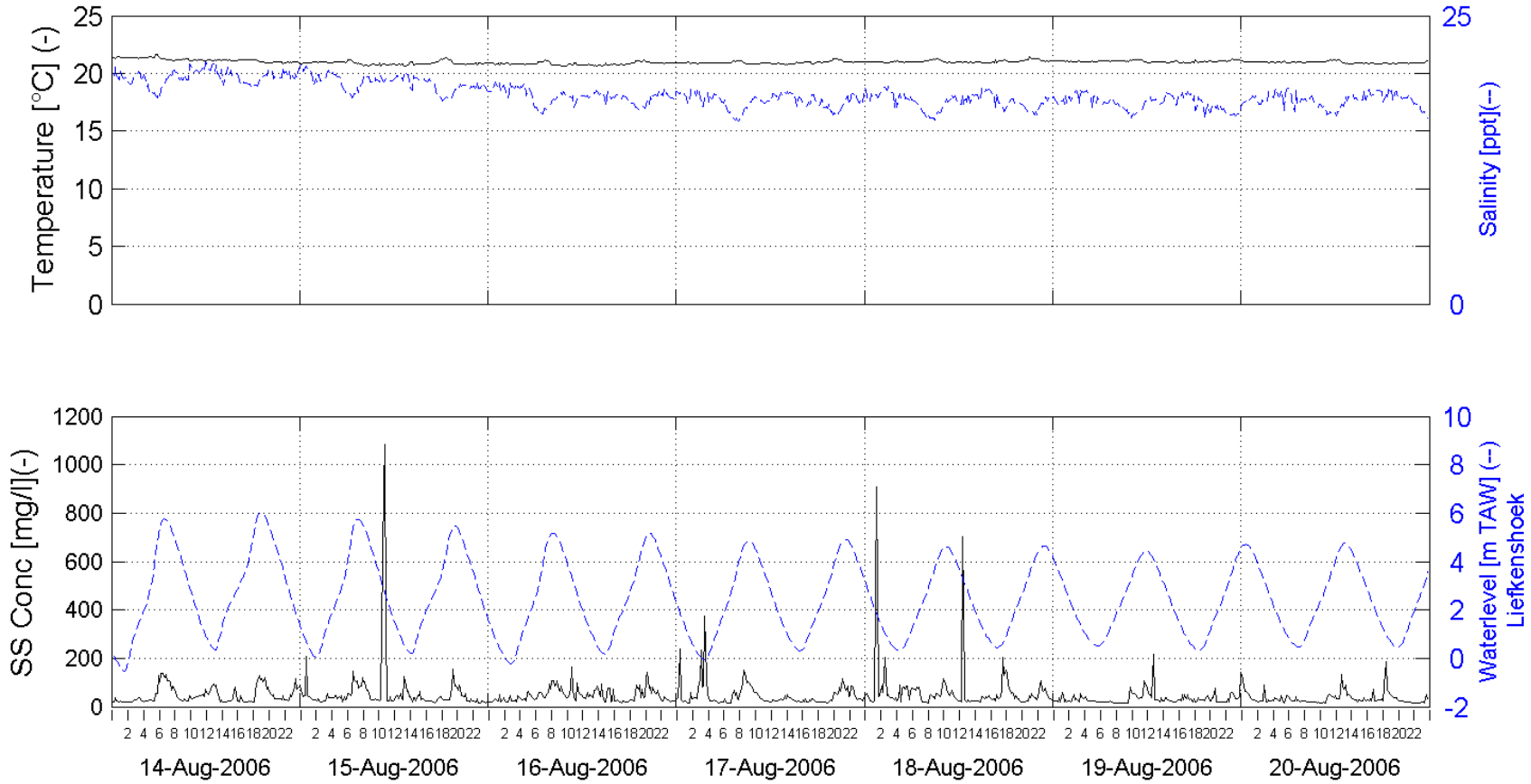
Processed by:

In Association with:

I/RA/11283/06.122/MSA

11283 - Long-term monitoring DGD - Summer 2006

Week 33 - 2006



Week series of Salinity, Temperature, SS Concentration and Tide

Location:

S-ENTRANCE BOTTOM 4.8m above bottom (-12.2m TAW)

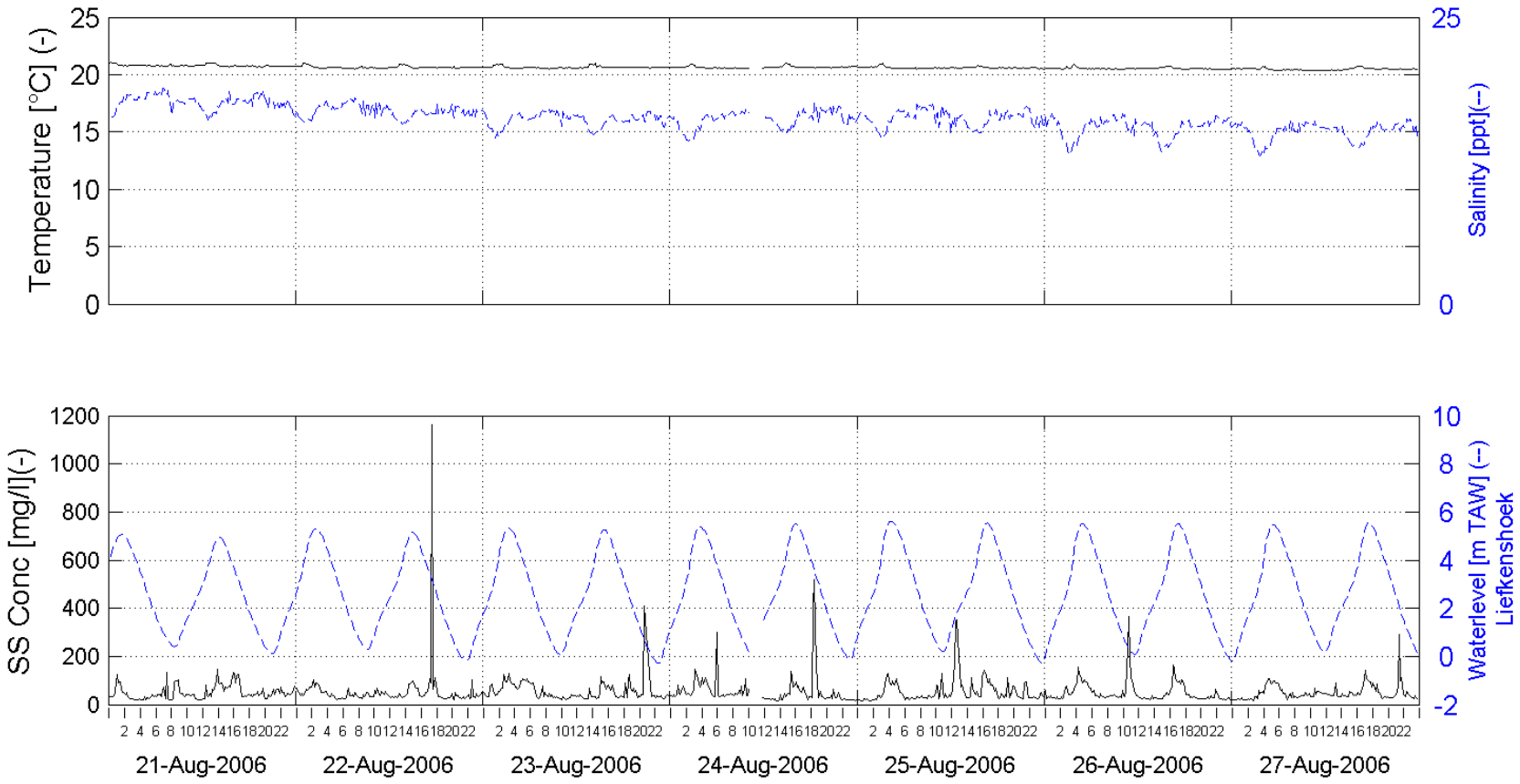
Processed by:

In Association with:

I/RA/11283/06.122/MSA

11283 - Long-term monitoring DGD - Summer 2006

Week 34 - 2006



Week series of Salinity, Temperature,
SS Concentration and Tide

Location:
S-ENTRANCE BOTTOM 4.8m above bottom (-12.2m TAW)

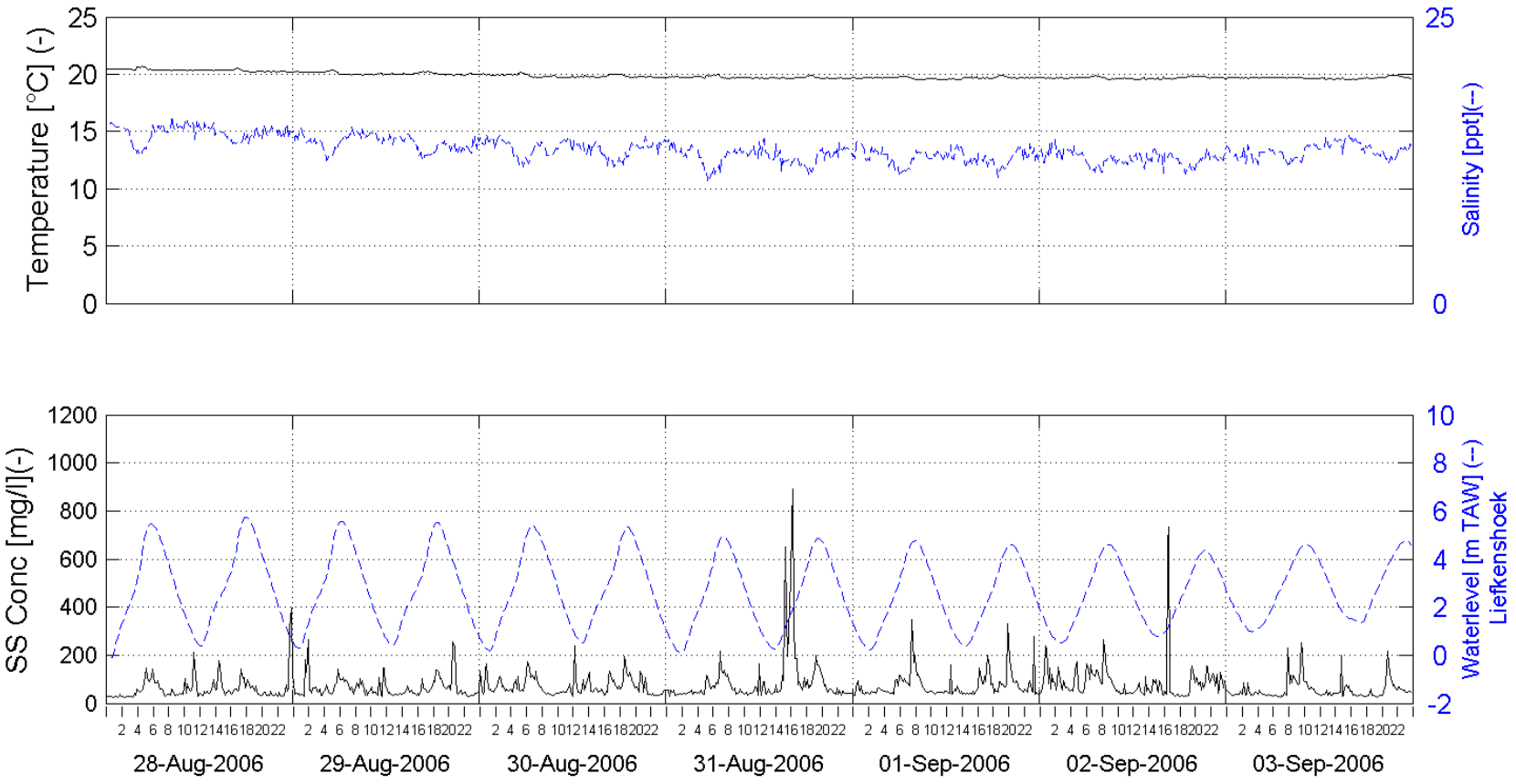
Processed by:

In Association with:

I/RA/11283/06.122/MSA

11283 - Long-term monitoring DGD - Summer 2006

Week 35 - 2006



Week series of Salinity, Temperature,
SS Concentration and Tide

Location:
S-ENTRANCE BOTTOM 4.8m above bottom (-12.2m TAW)

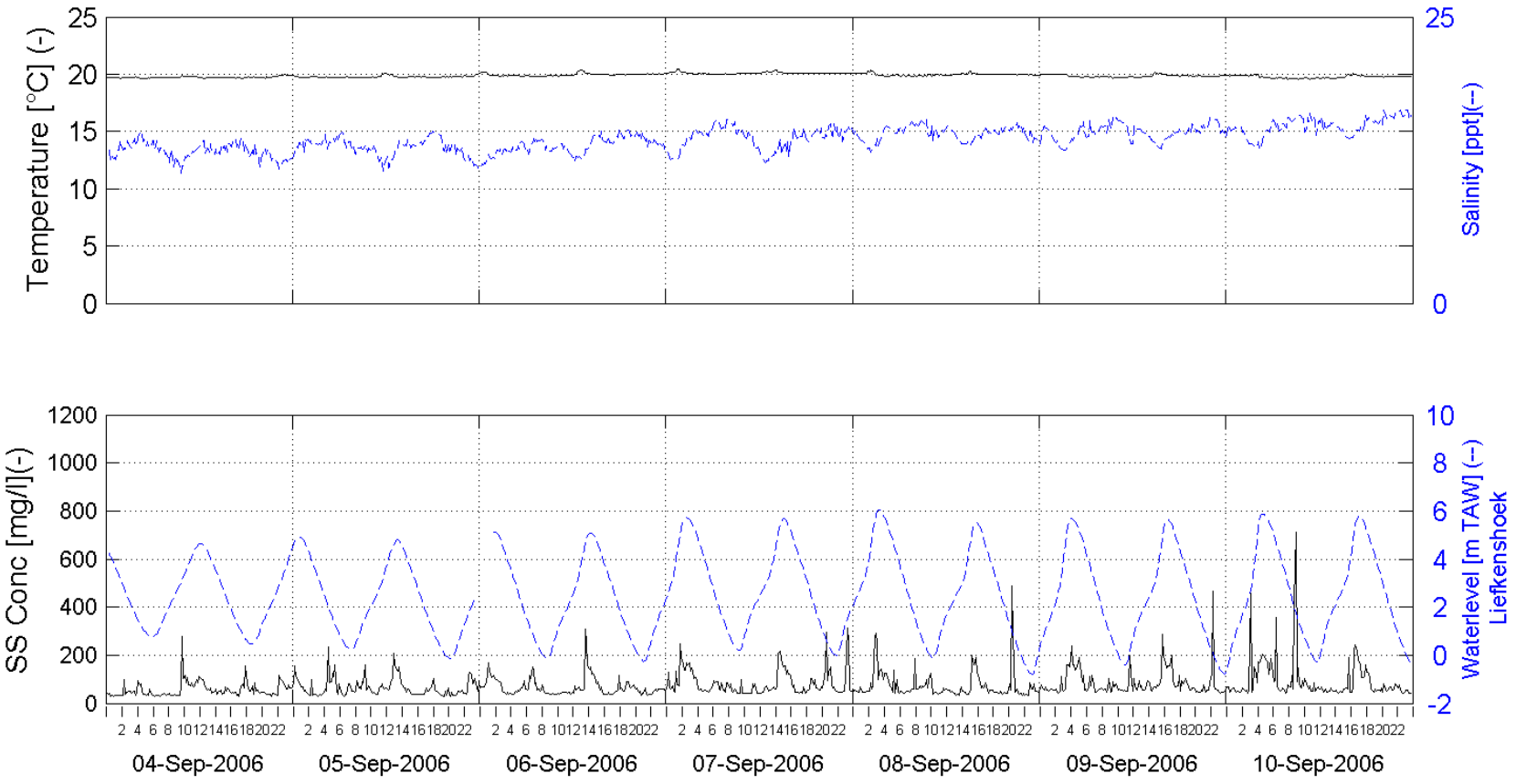
Processed by:

In Association with:

I/RA/11283/06.122/MSA

11283 - Long-term monitoring DGD - Summer 2006

Week 36 - 2006



Week series of Salinity, Temperature,
SS Concentration and Tide

Location:
S-ENTRANCE BOTTOM 4.8m above bottom (-12.2m TAW)

Processed by:

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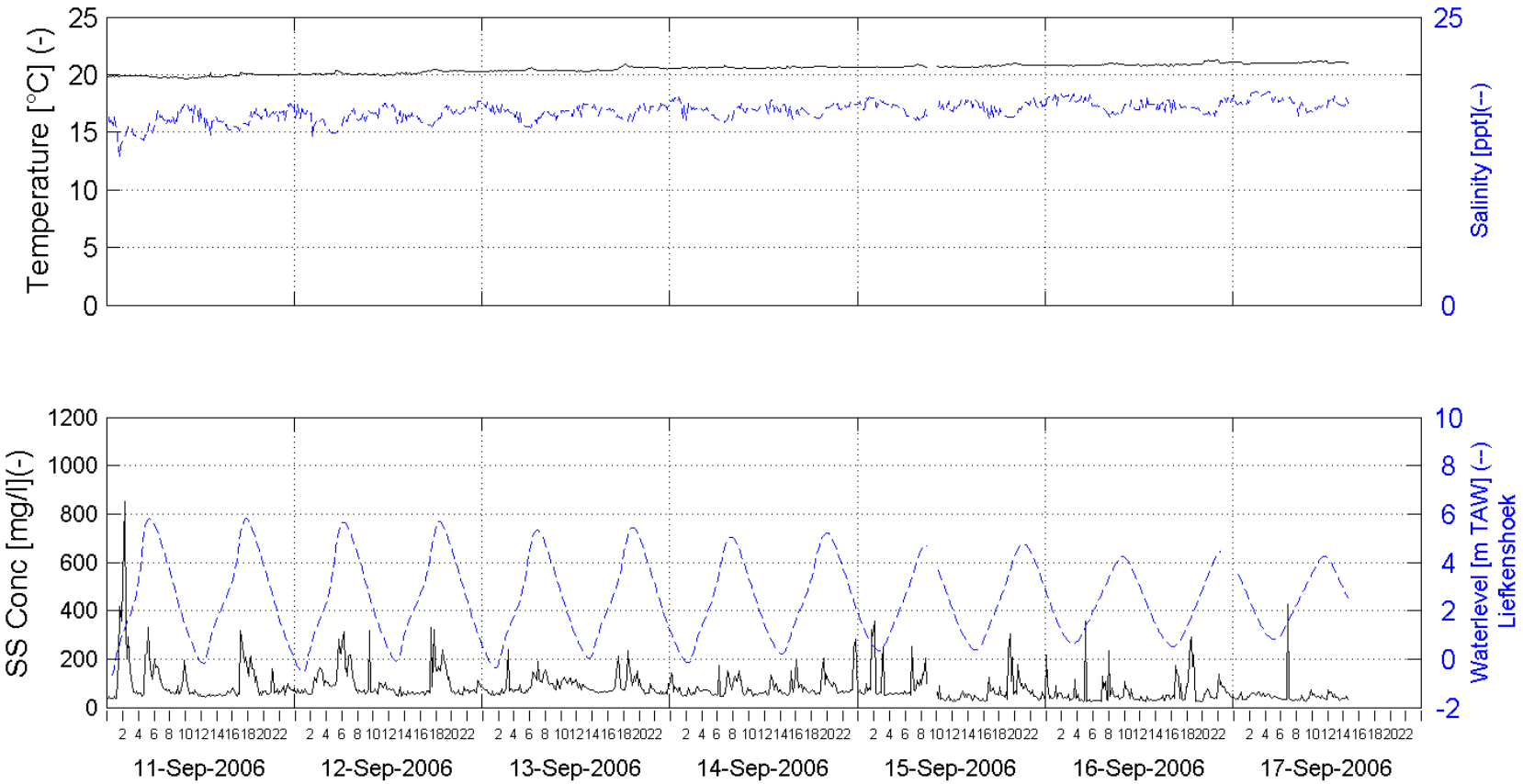
I/RA/11283/06.122/MSA

11283 - Long-term monitoring DGD - Summer 2006

Week 37 - 2006



Week series of Salinity, Temperature,
SS Concentration and Tide

Location:
S-ENTRANCE BOTTOM 4.8m above bottom (-12.2m TAW)

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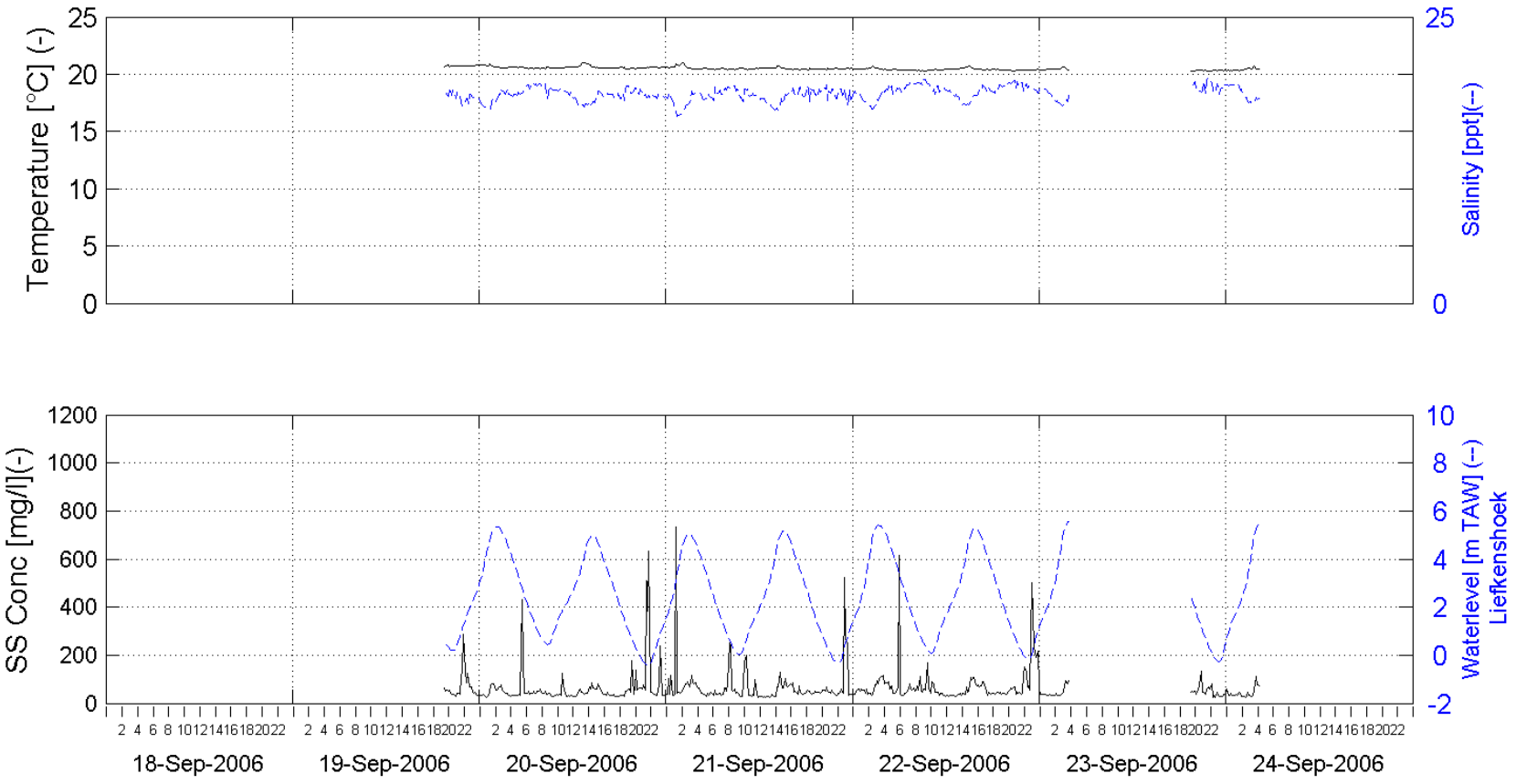
I/RA/11283/06.122/MSA

11283 - Long-term monitoring DGD - Summer 2006

Week 38 - 2006



Week series of Salinity, Temperature,
SS Concentration and Tide

Location:
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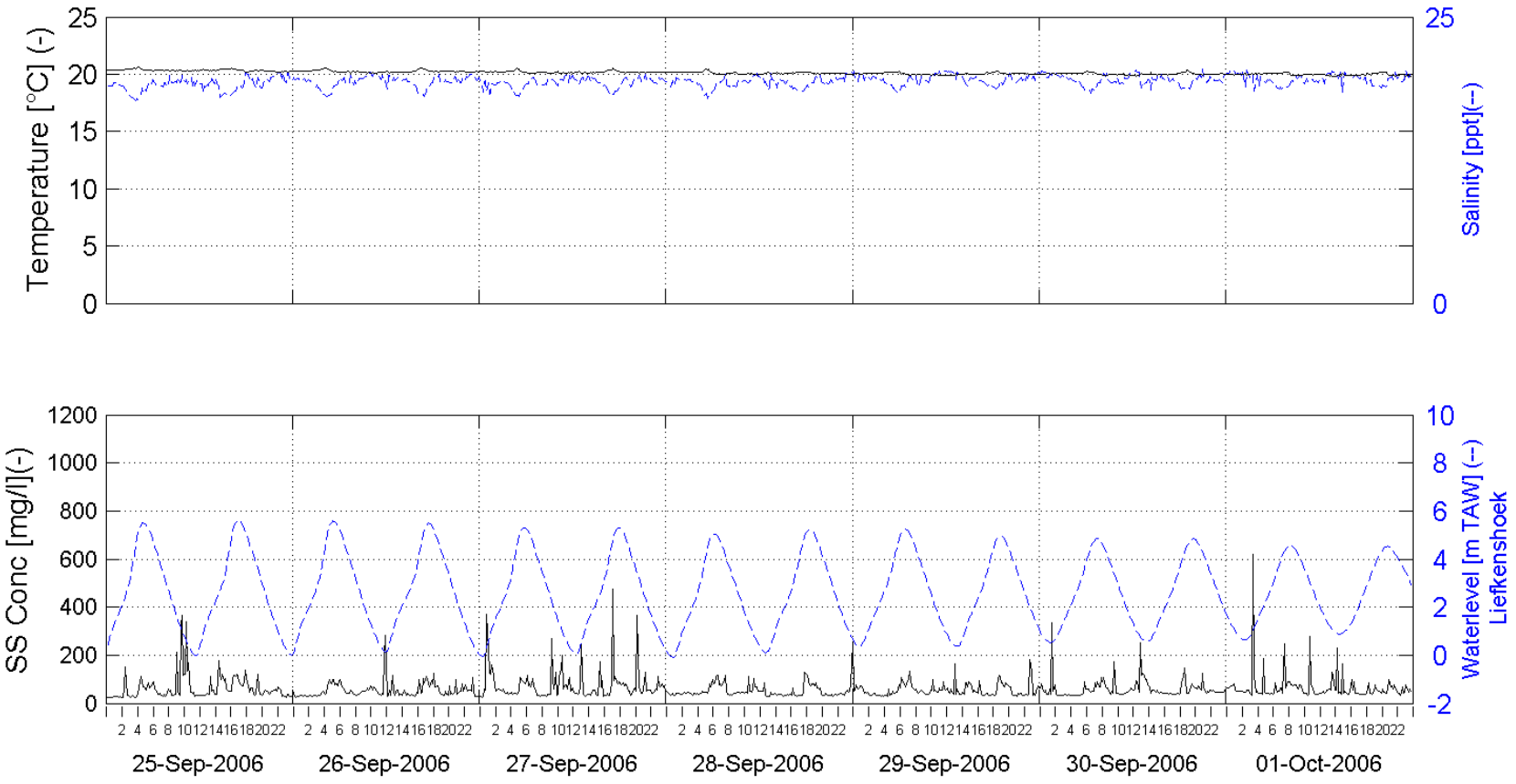
11283 - Long-term monitoring DGD - Summer 2006

Week 39 - 2006



Week series of Salinity, Temperature,
SS Concentration and Tide

Location:
S-ENTRANCE BOTTOM 4.8m above bottom (-12.2m TAW)

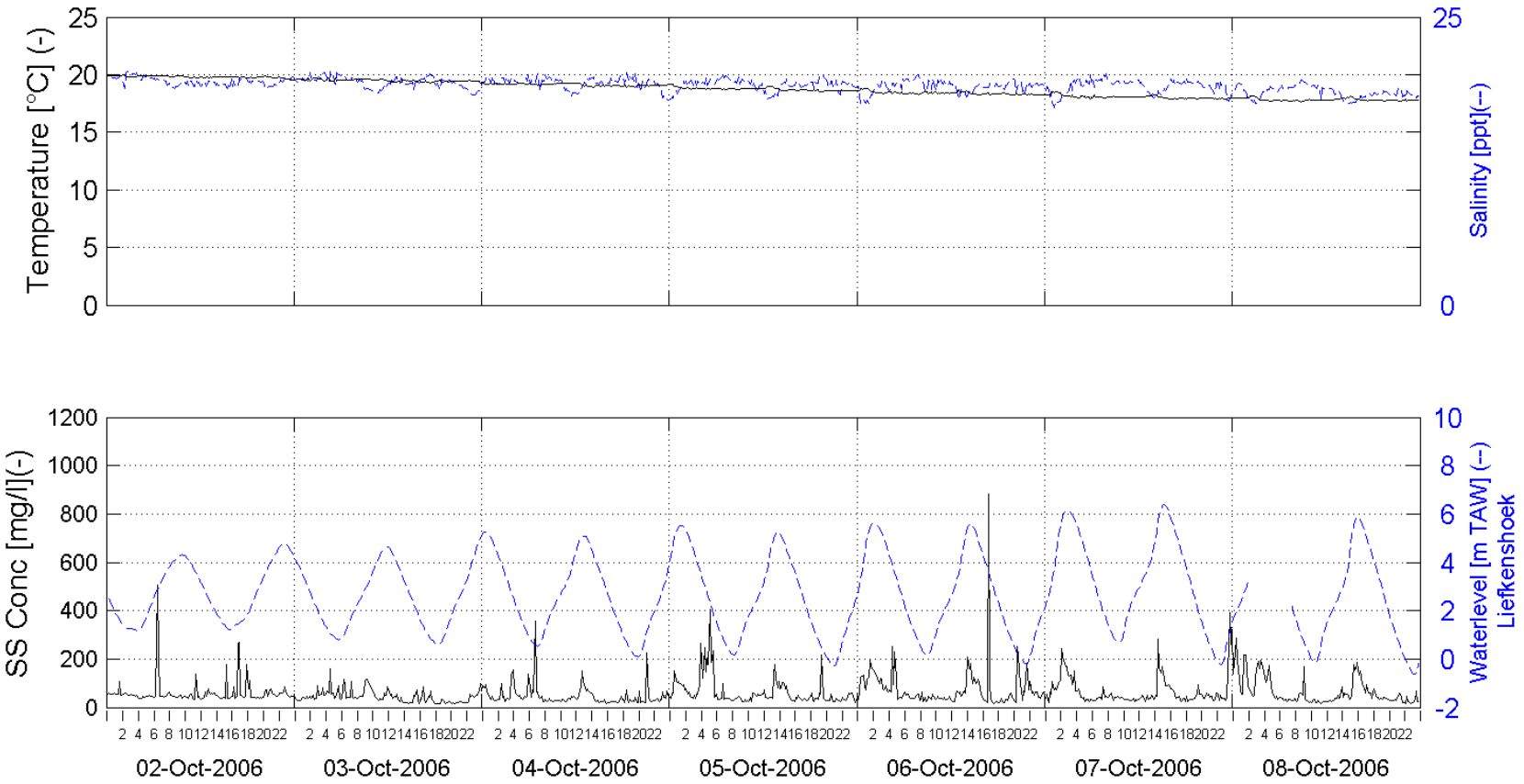
Processed by:

In Association with:

I/RA/11283/06.122/MSA

11283 - Long-term monitoring DGD - Summer 2006

Week 40 - 2006



Week series of Salinity, Temperature,
SS Concentration and Tide

Location:
S-ENTRANCE BOTTOM 4.8m above bottom (-12.2m TAW)

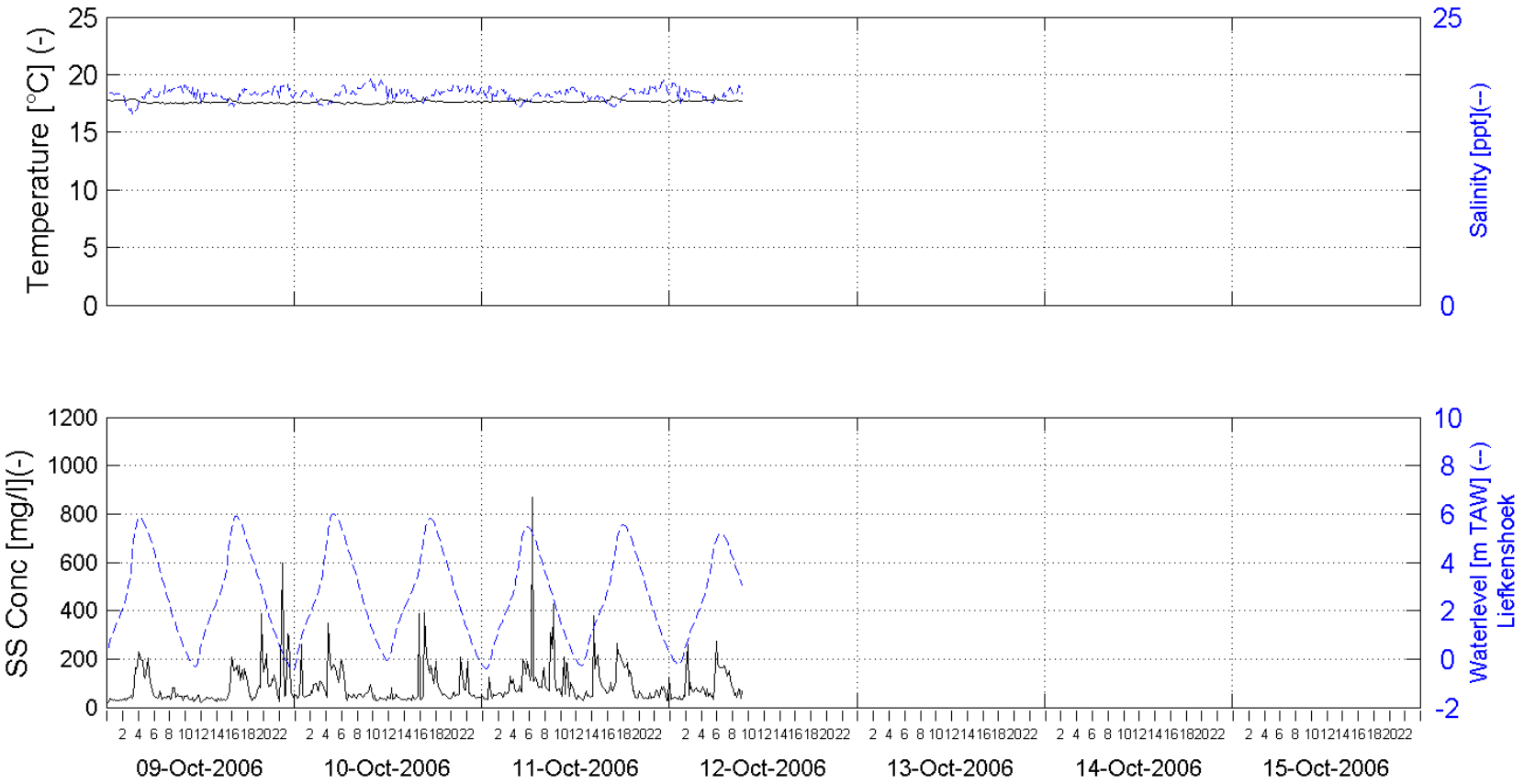
Processed by:

In Association with:

I/RA/11283/06.122/MSA

11283 - Long-term monitoring DGD - Summer 2006

Week 41 - 2006



Week series of Salinity, Temperature,
SS Concentration and Tide

Location:
S-ENTRANCE BOTTOM 4.8m above bottom (-12.2m TAW)

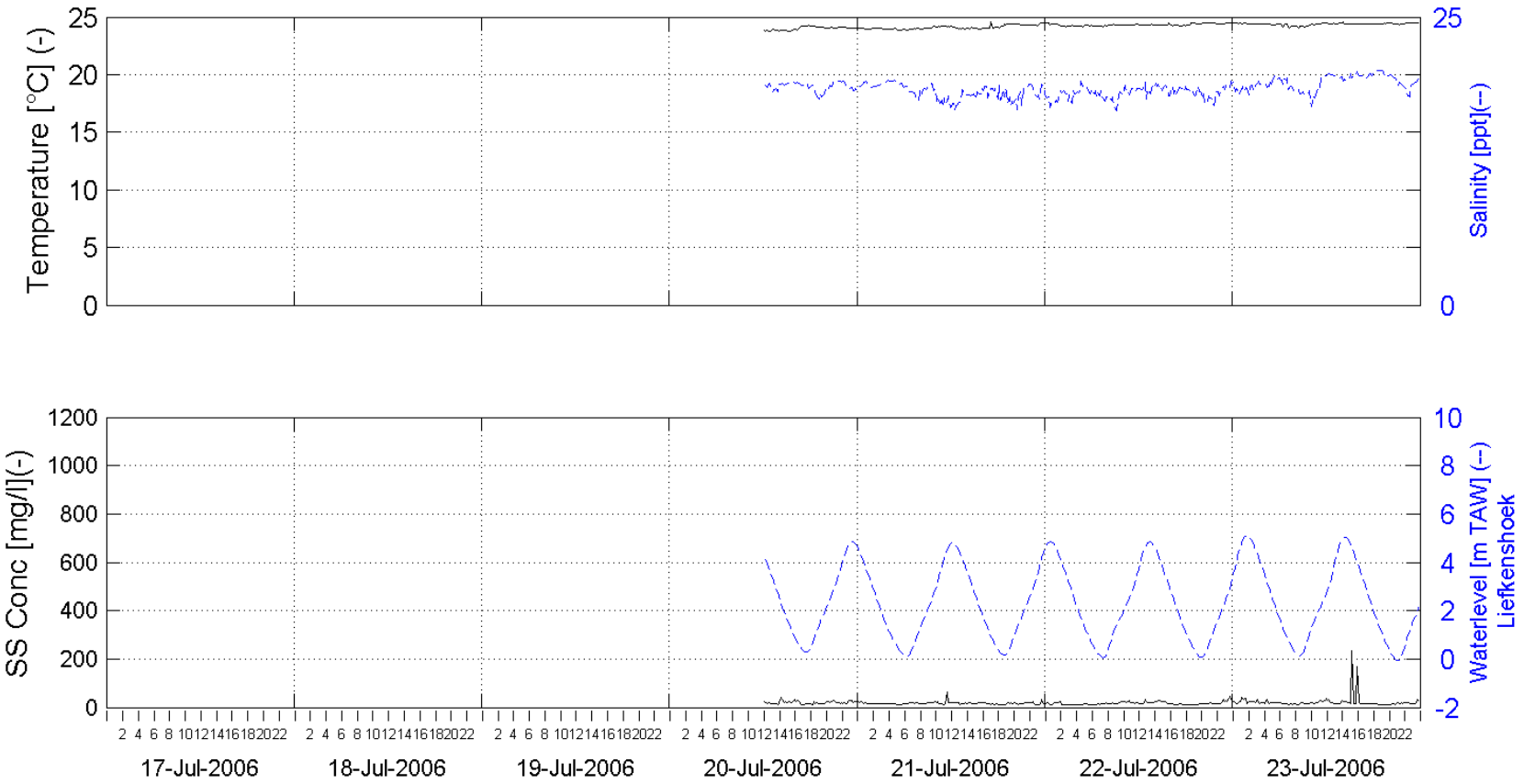
Processed by:

In Association with:

I/RA/11283/06.122/MSA

11283 - Long-term monitoring DGD - Summer 2006

Week 29 - 2006



Week series of Salinity, Temperature,
SS Concentration and Tide

Location:
S-ENTRANCE TOP 14.6m above bottom (-2.4m TAW)

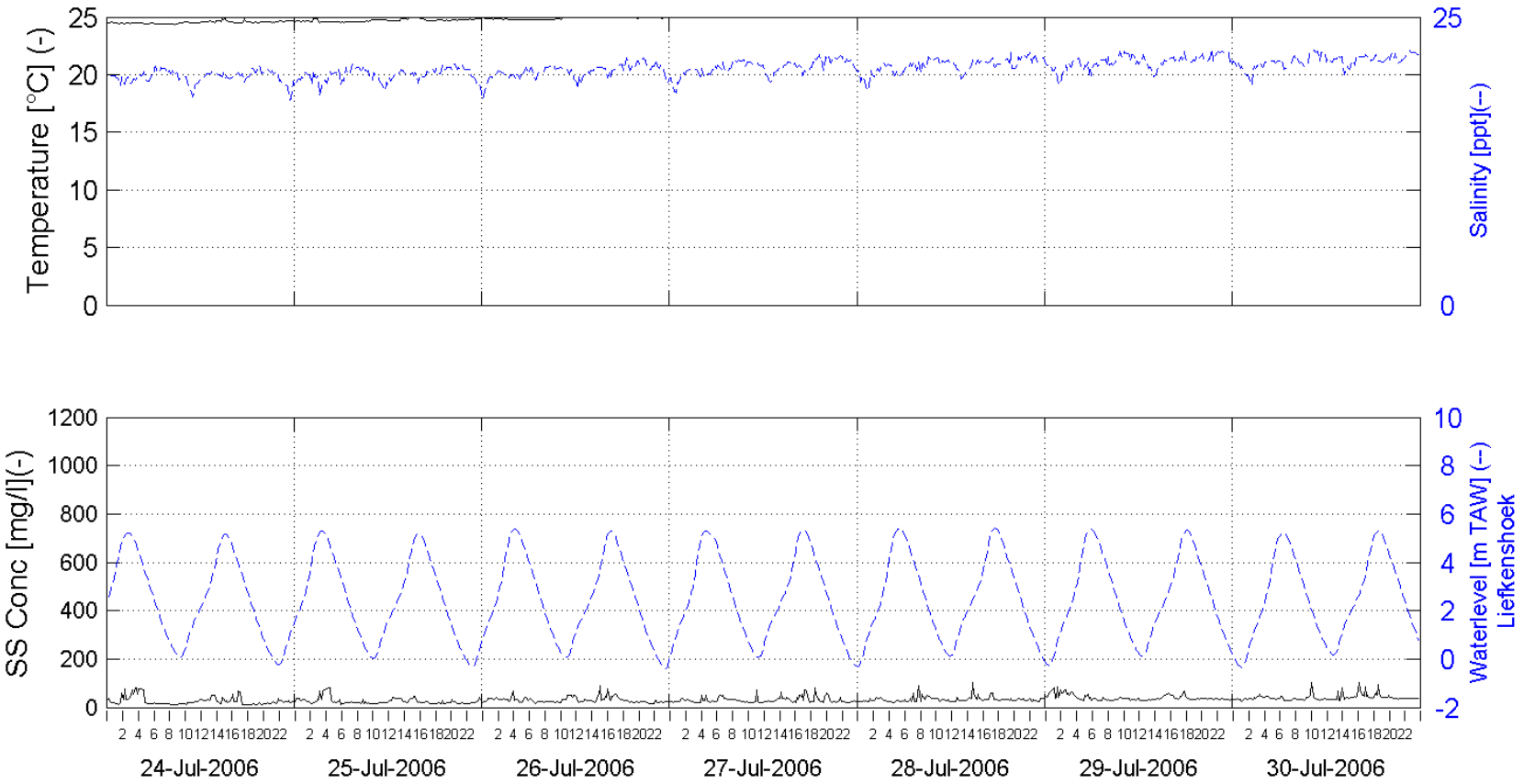
Processed by:

In Association with:

I/RA/11283/06.122/MSA

11283 - Long-term monitoring DGD - Summer 2006

Week 30 - 2006



Week series of Salinity, Temperature,
SS Concentration and Tide

Location:
S-ENTRANCE TOP 14.6m above bottom (-2.4m TAW)

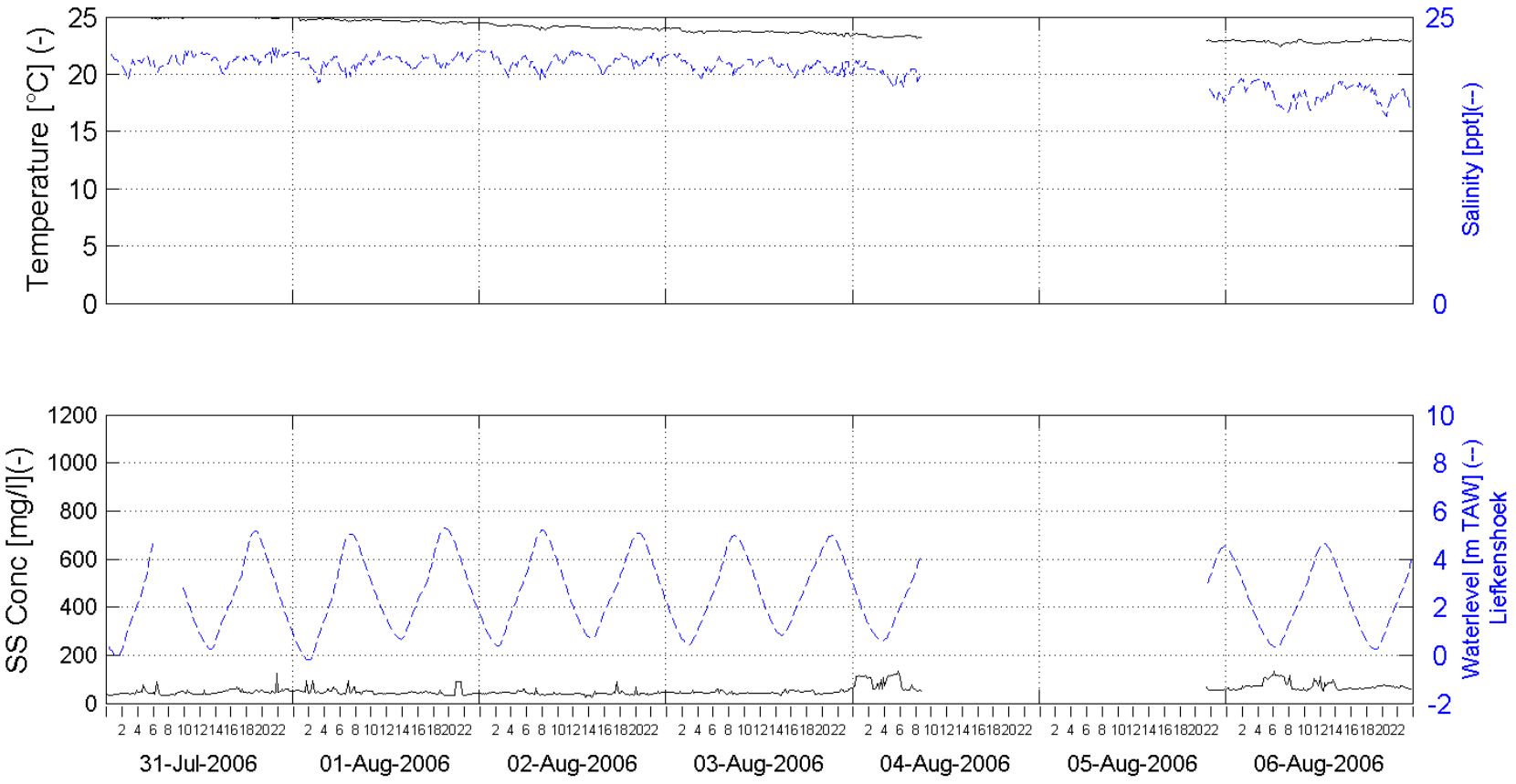
Processed by:

In Association with:

I/RA/11283/06.122/MSA

11283 - Long-term monitoring DGD - Summer 2006

Week 31 - 2006



Week series of Salinity, Temperature,
SS Concentration and Tide

Location:
S-ENTRANCE TOP 14.6m above bottom (-2.4m TAW)

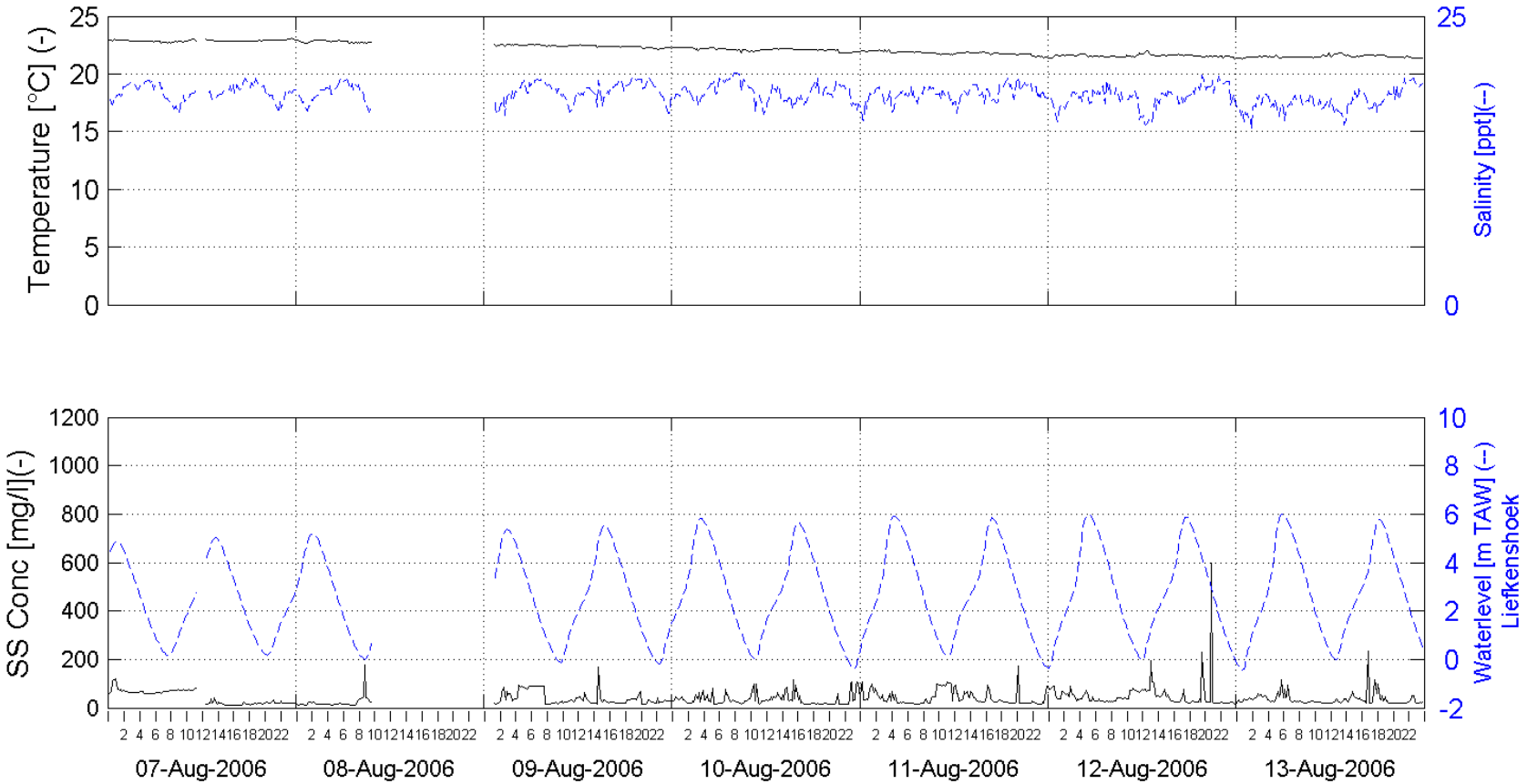
Processed by:

In Association with:

I/RA/11283/06.122/MSA

11283 - Long-term monitoring DGD - Summer 2006

Week 32 - 2006



Week series of Salinity, Temperature, SS Concentration and Tide

Location:

S-ENTRANCE TOP 14.6m above bottom (-2.4m TAW)

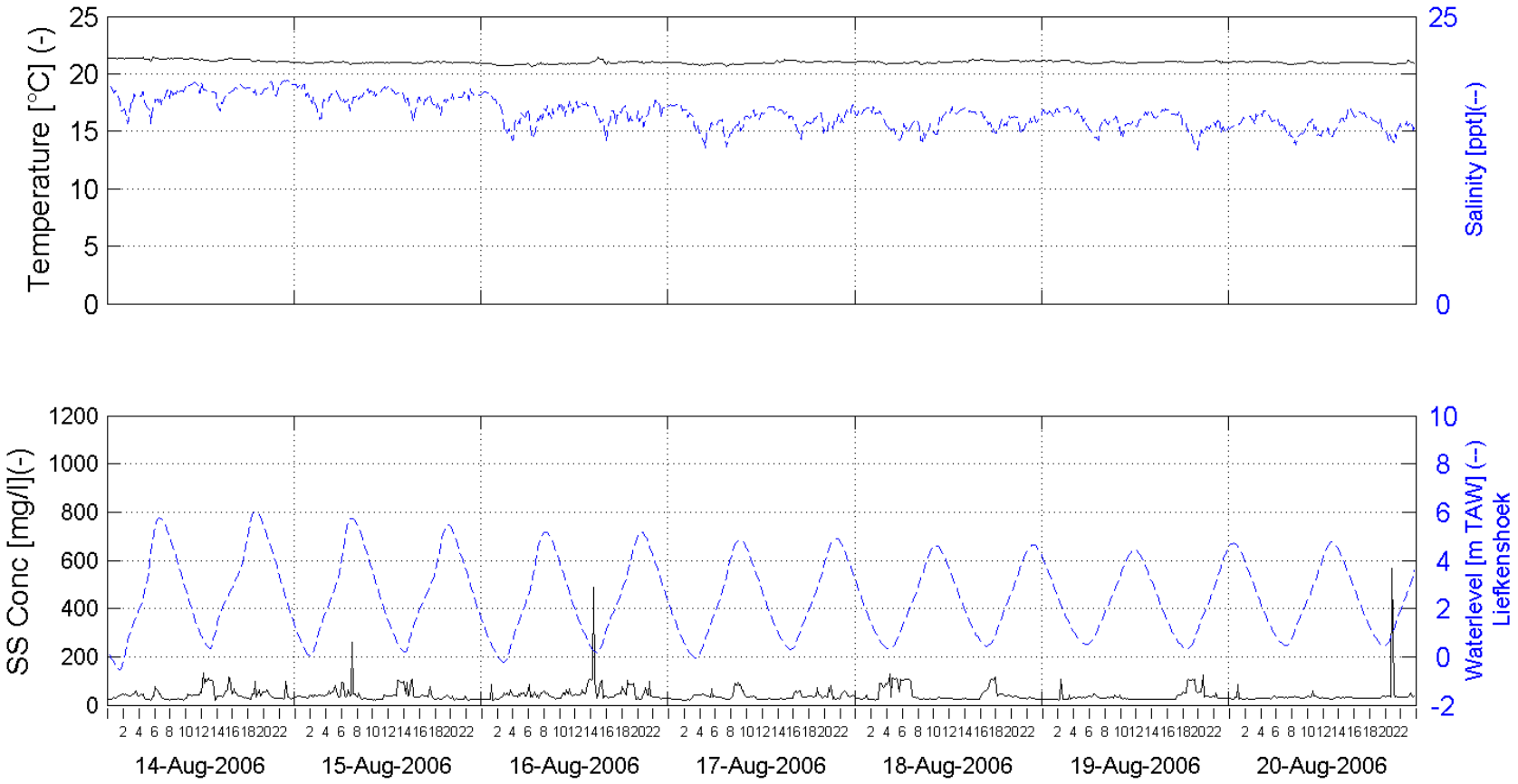
Processed by:

In Association with:

I/RA/11283/06.122/MSA

11283 - Long-term monitoring DGD - Summer 2006

Week 33 - 2006



Week series of Salinity, Temperature, SS Concentration and Tide

Location:

S-ENTRANCE TOP 14.6m above bottom (-2.4m TAW)

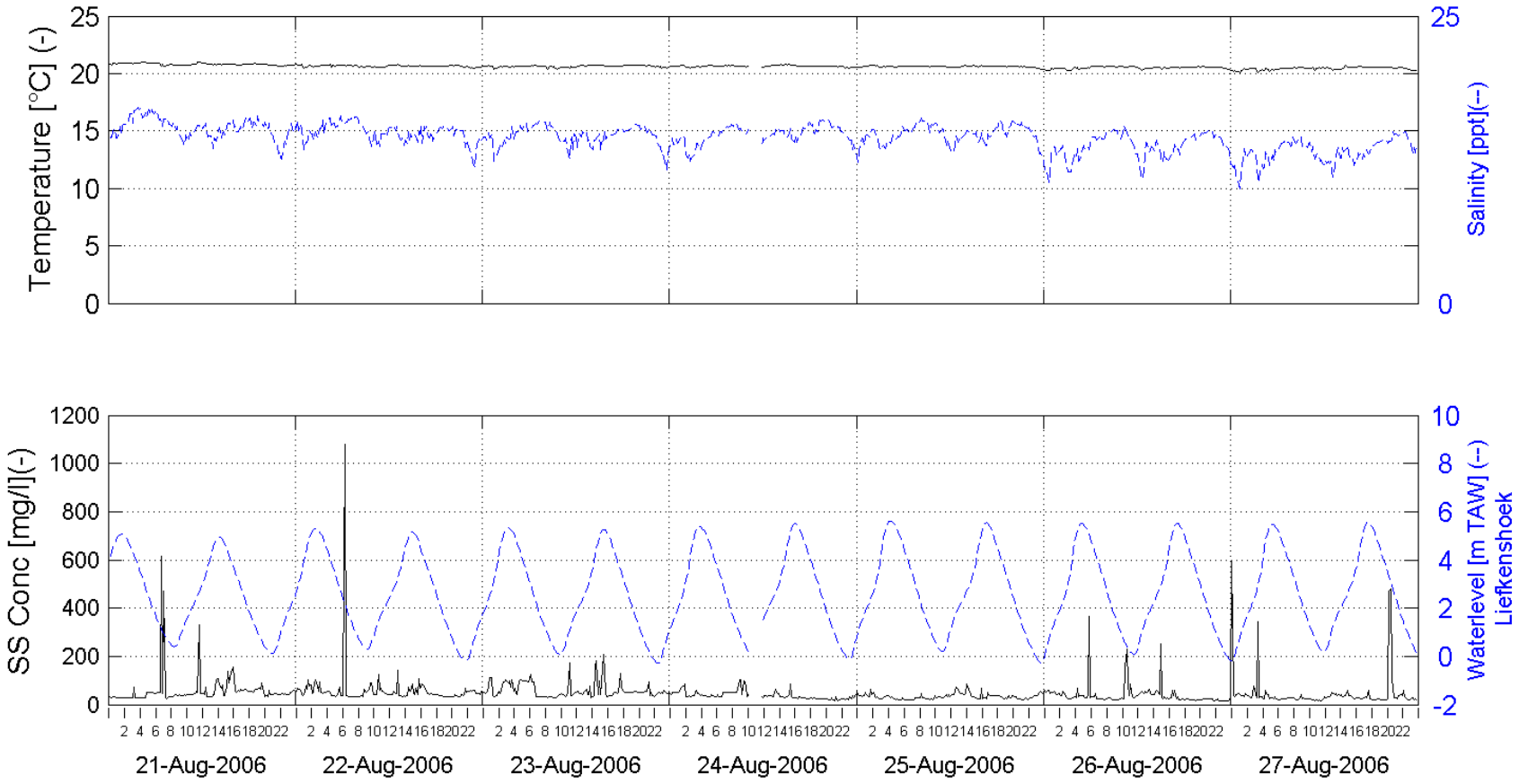
Processed by:

In Association with:

I/RA/11283/06.122/MSA

11283 - Long-term monitoring DGD - Summer 2006

Week 34 - 2006



Week series of Salinity, Temperature, SS Concentration and Tide

Location:

S-ENTRANCE TOP 14.6m above bottom (-2.4m TAW)

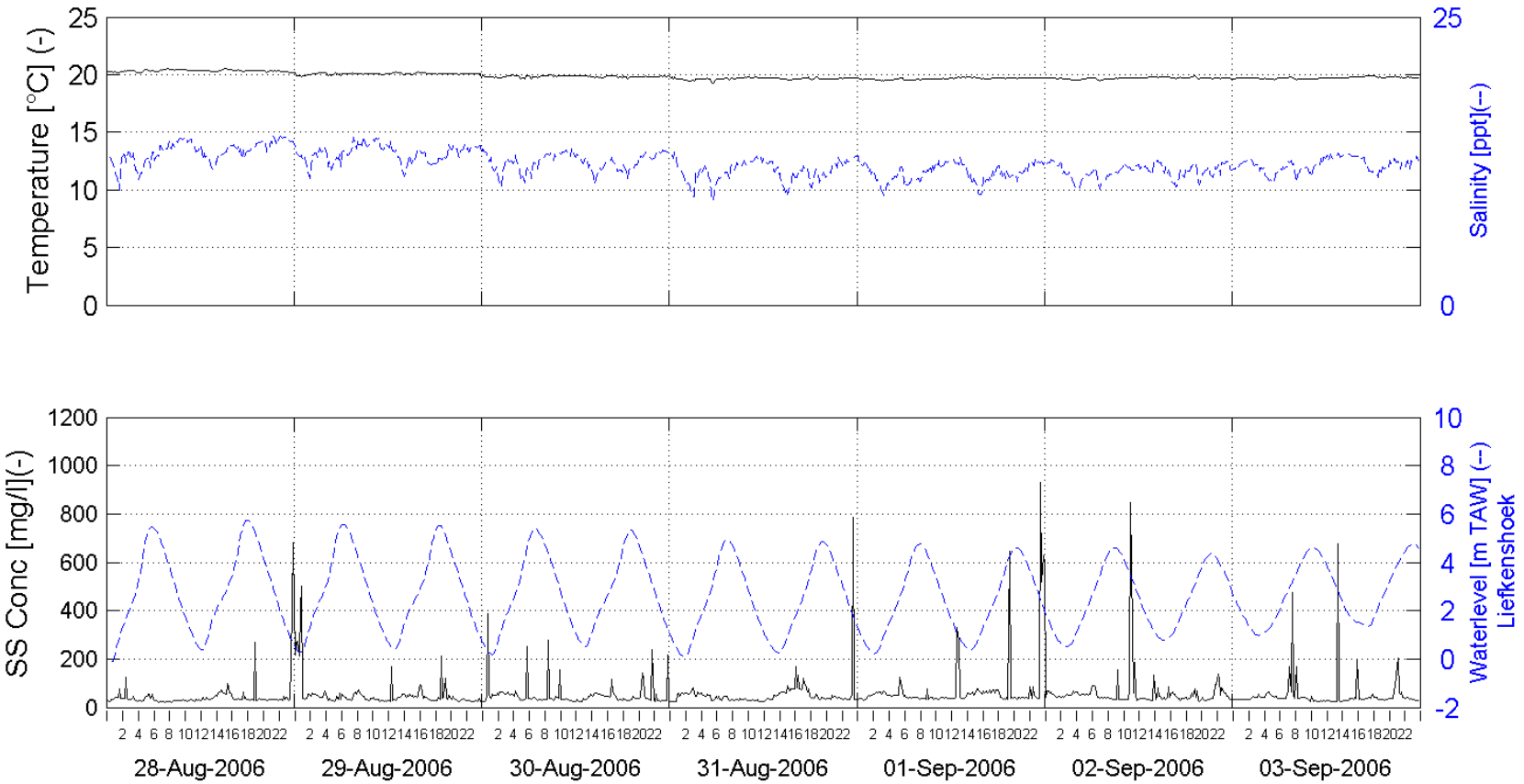
Processed by:

In Association with:

I/RA/11283/06.122/MSA

11283 - Long-term monitoring DGD - Summer 2006

Week 35 - 2006



Week series of Salinity, Temperature,
SS Concentration and Tide

Location:
S-ENTRANCE TOP 14.6m above bottom (-2.4m TAW)

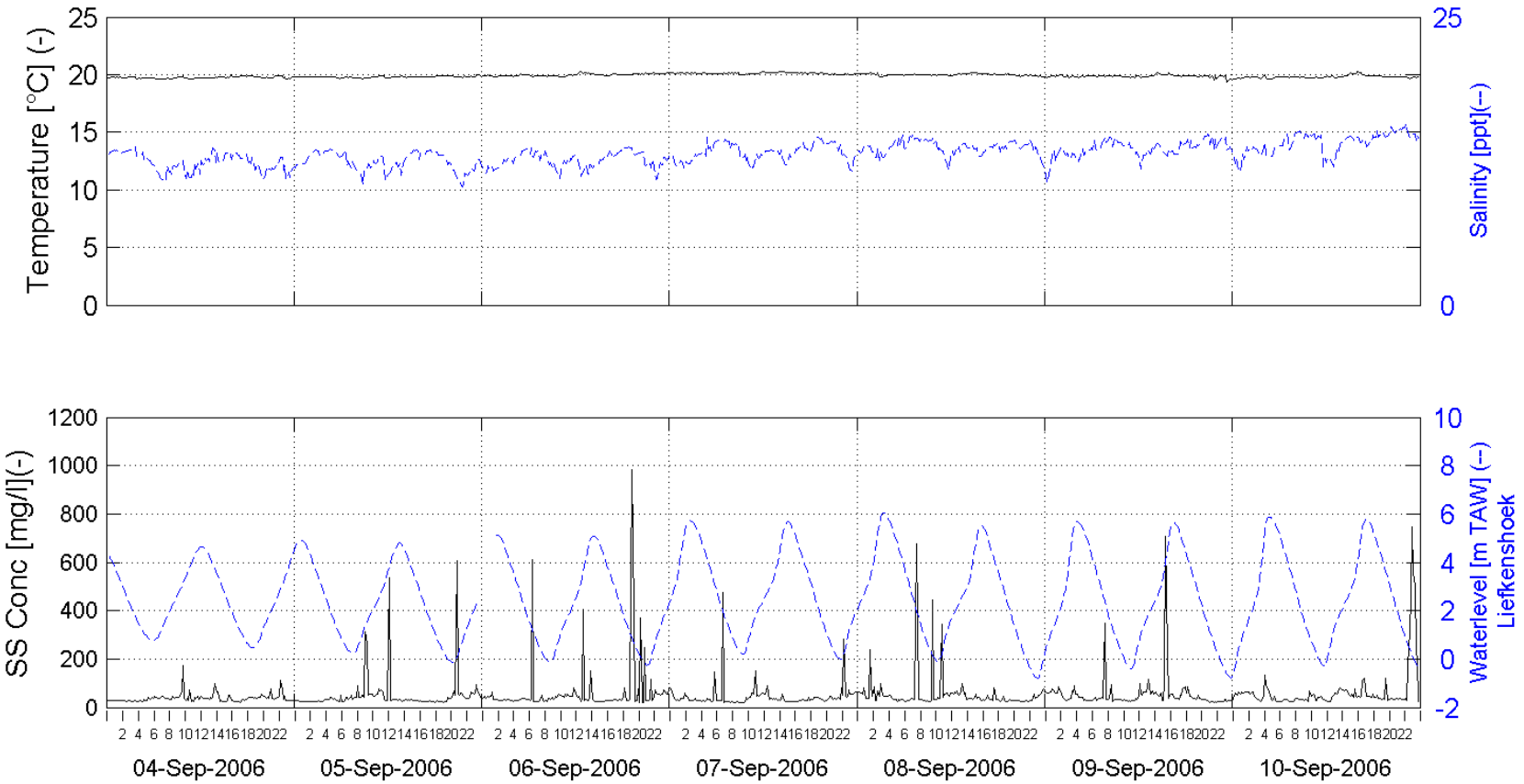
Processed by:

In Association with:

I/RA/11283/06.122/MSA

11283 - Long-term monitoring DGD - Summer 2006

Week 36 - 2006



Week series of Salinity, Temperature,
SS Concentration and Tide

Location:
S-ENTRANCE TOP 14.6m above bottom (-2.4m TAW)

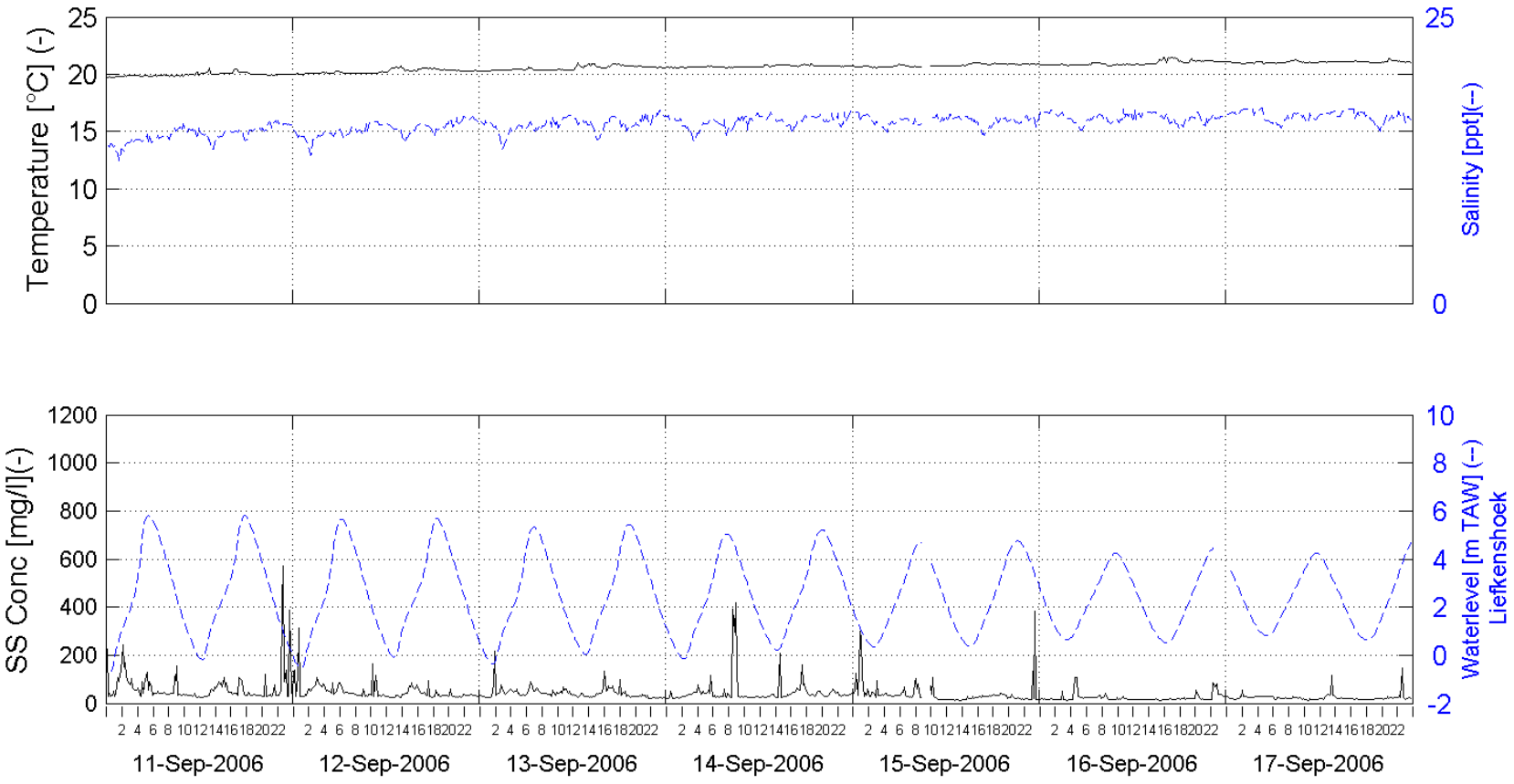
Processed by:

In Association with:

I/RA/11283/06.122/MSA

11283 - Long-term monitoring DGD - Summer 2006

Week 37 - 2006



Week series of Salinity, Temperature,
SS Concentration and Tide

Location:
S-ENTRANCE TOP 14.6m above bottom (-2.4m TAW)

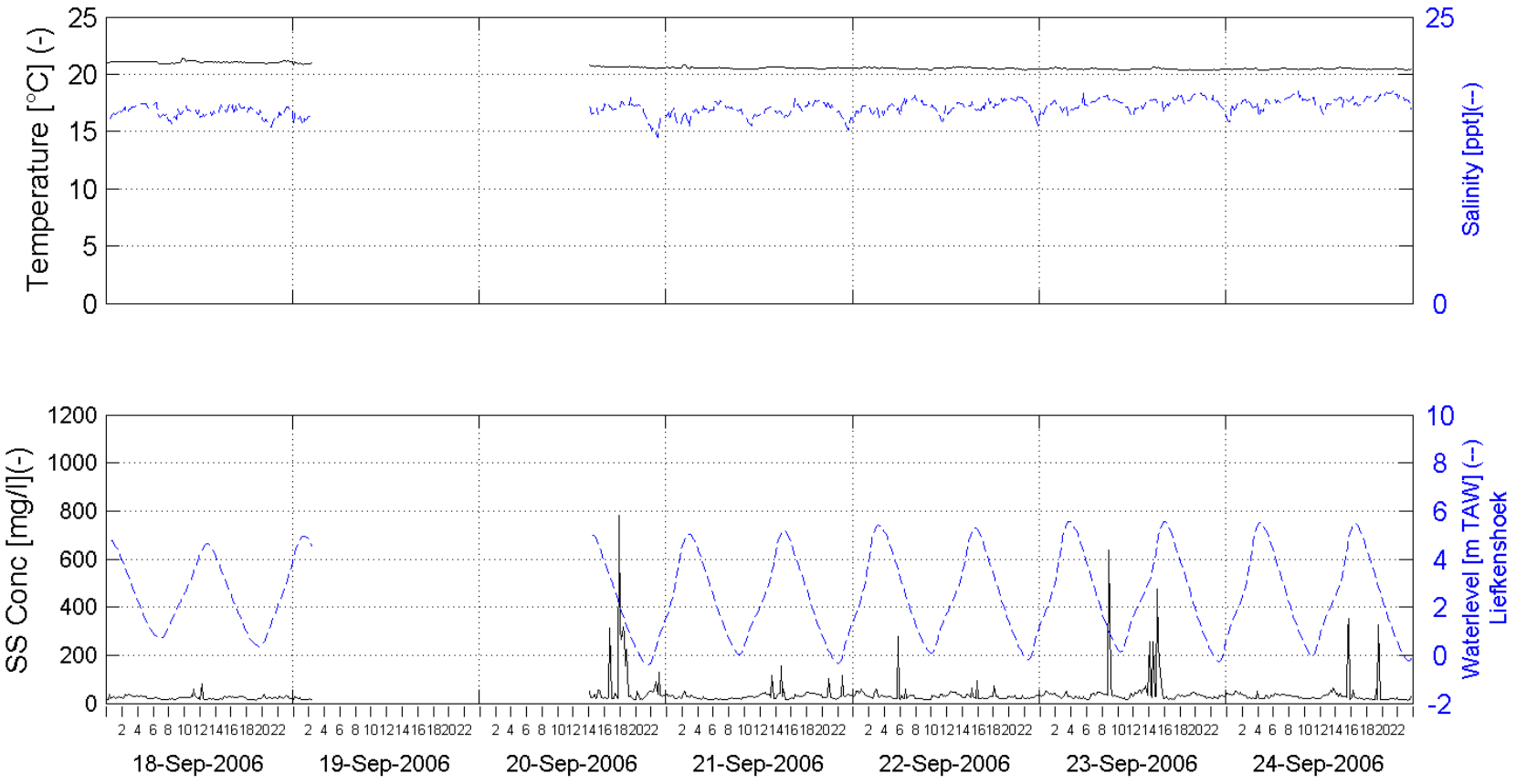
Processed by:

In Association with:

I/RA/11283/06.122/MSA

11283 - Long-term monitoring DGD - Summer 2006

Week 38 - 2006



Week series of Salinity, Temperature,
SS Concentration and Tide

Location:
S-ENTRANCE TOP 14.6m above bottom (-2.4m TAW)

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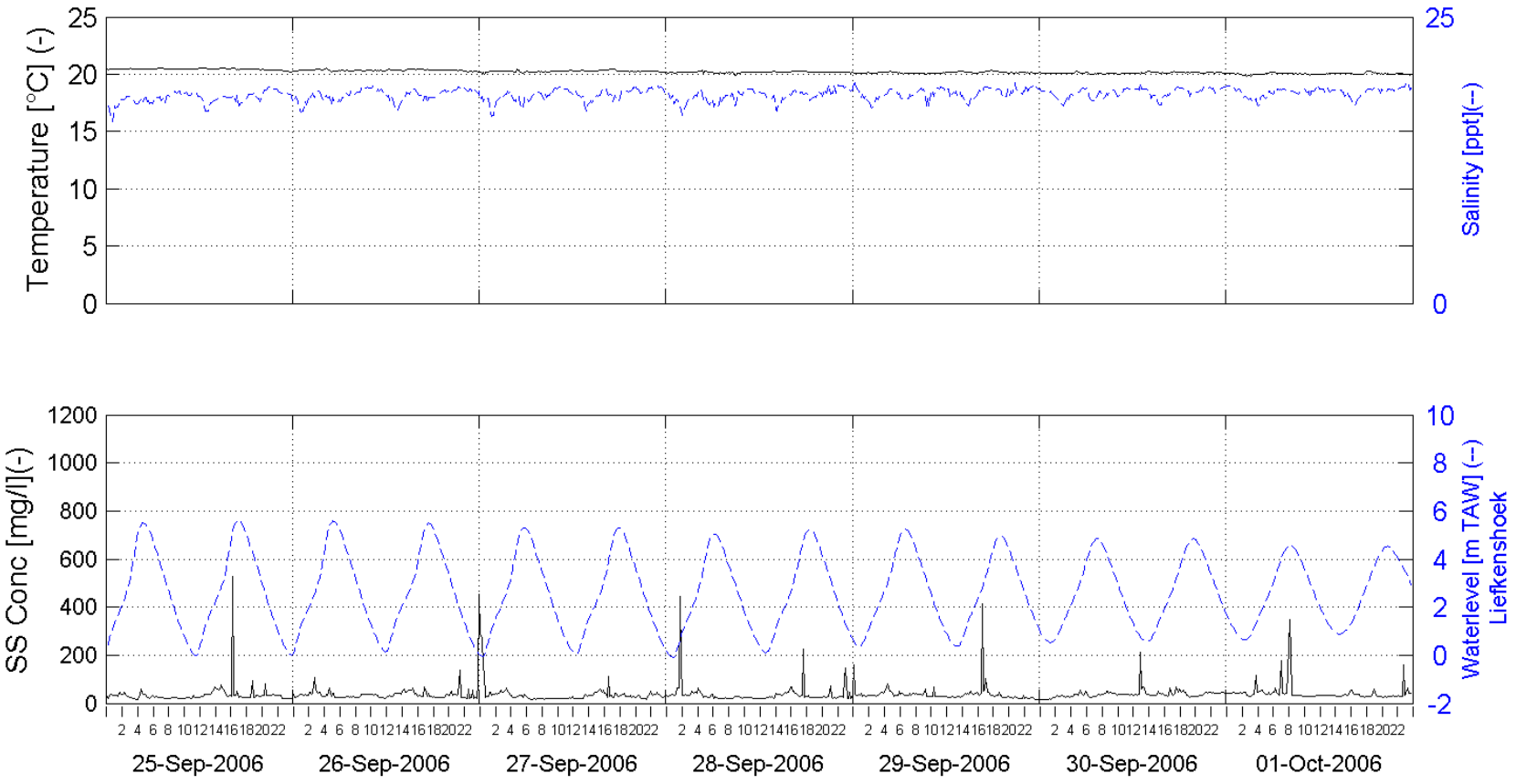
11283 - Long-term monitoring DGD - Summer 2006

Week 39 - 2006



Week series of Salinity, Temperature,
SS Concentration and Tide

Location:
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Processed by:

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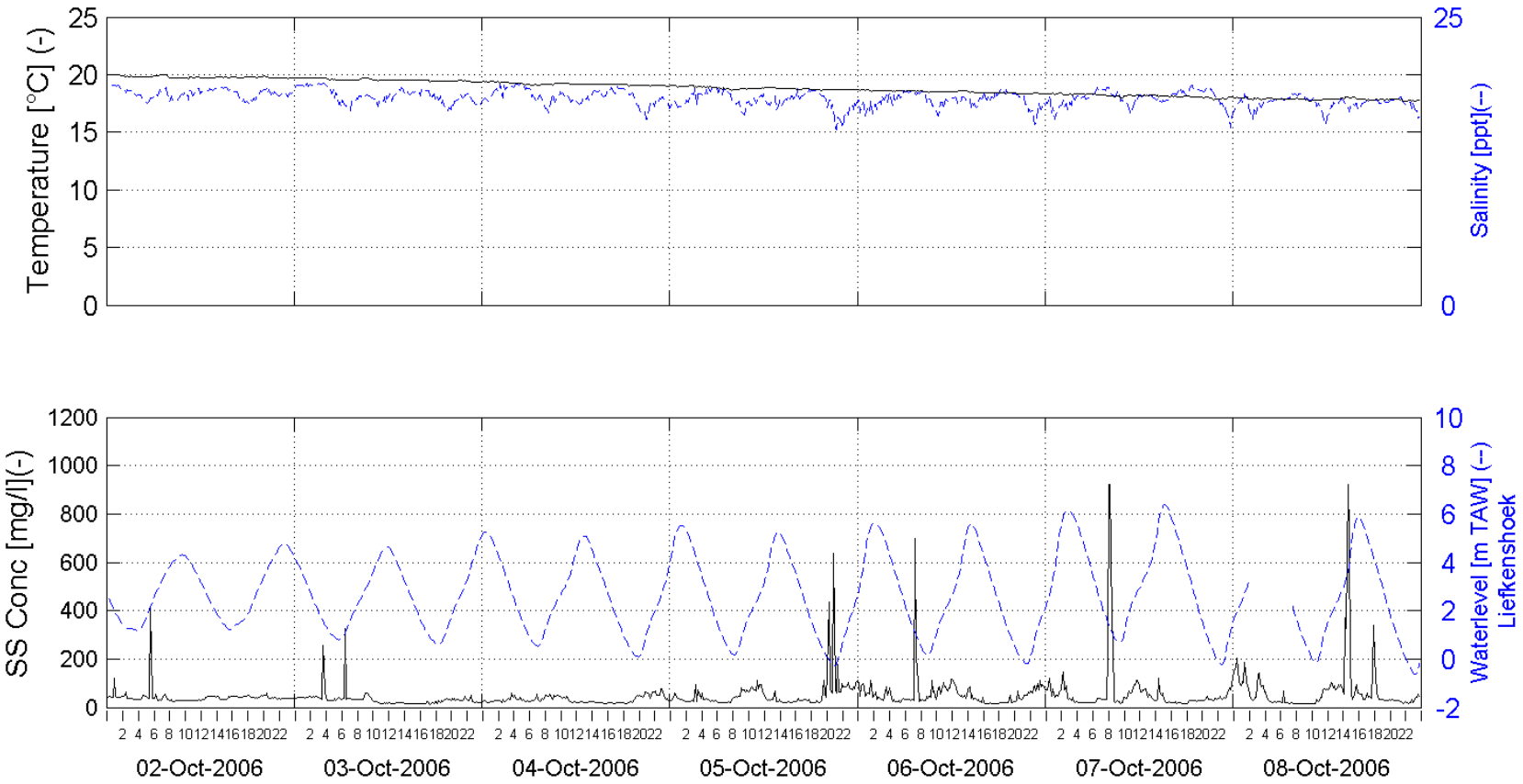
I/RA/11283/06.122/MSA

11283 - Long-term monitoring DGD - Summer 2006

Week 40 - 2006



Week series of Salinity, Temperature,
SS Concentration and Tide

Location:
S-ENTRANCE TOP 14.6m above bottom (-2.4m TAW)

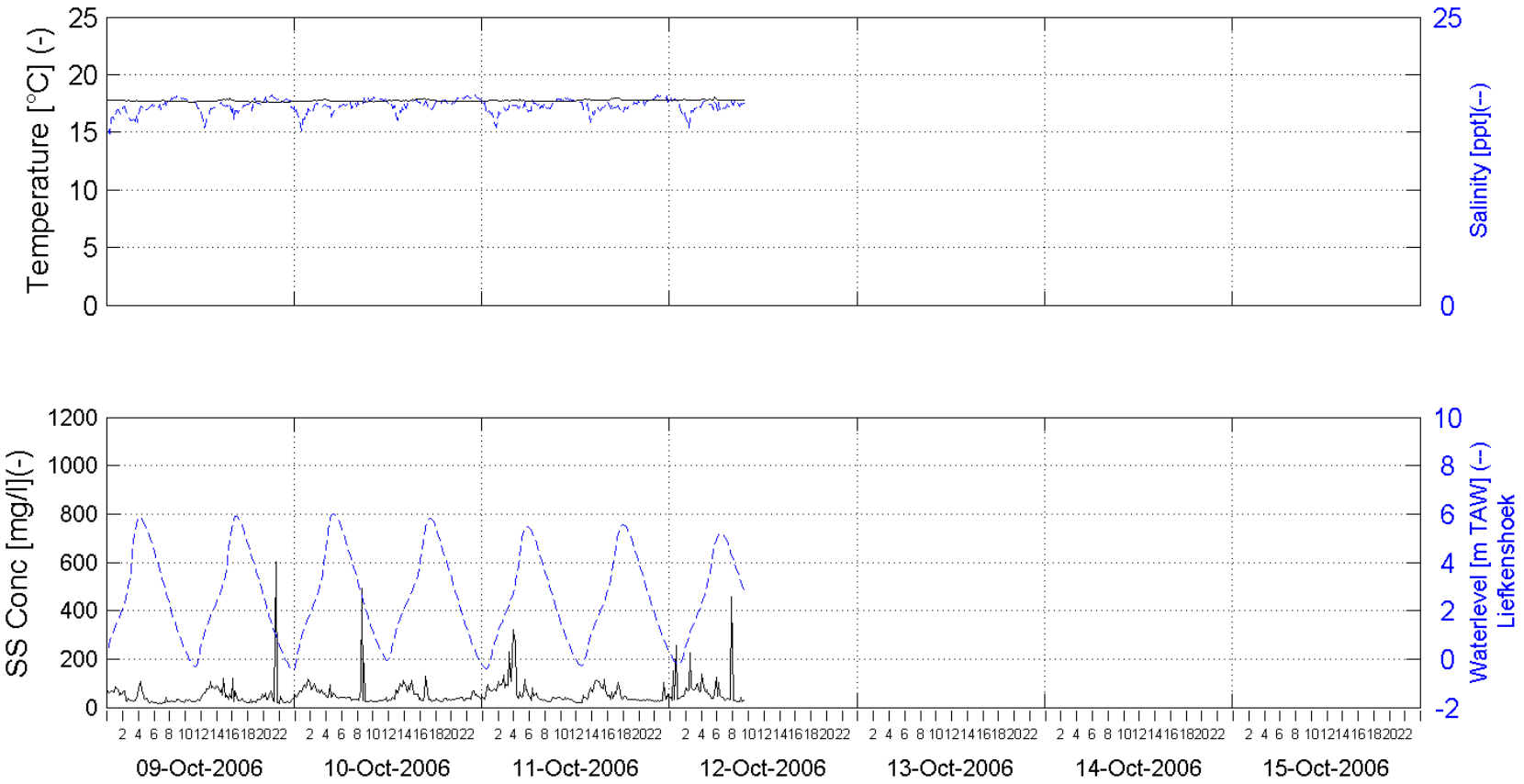
Processed by:

In Association with:

I/RA/11283/06.122/MSA

11283 - Long-term monitoring DGD - Summer 2006

Week 41 - 2006



Week series of Salinity, Temperature,
SS Concentration and Tide

Location:
S-ENTRANCE TOP 14.6m above bottom (-2.4m TAW)

Processed by:

In Association with:

I/RA/11283/06.122/MSA

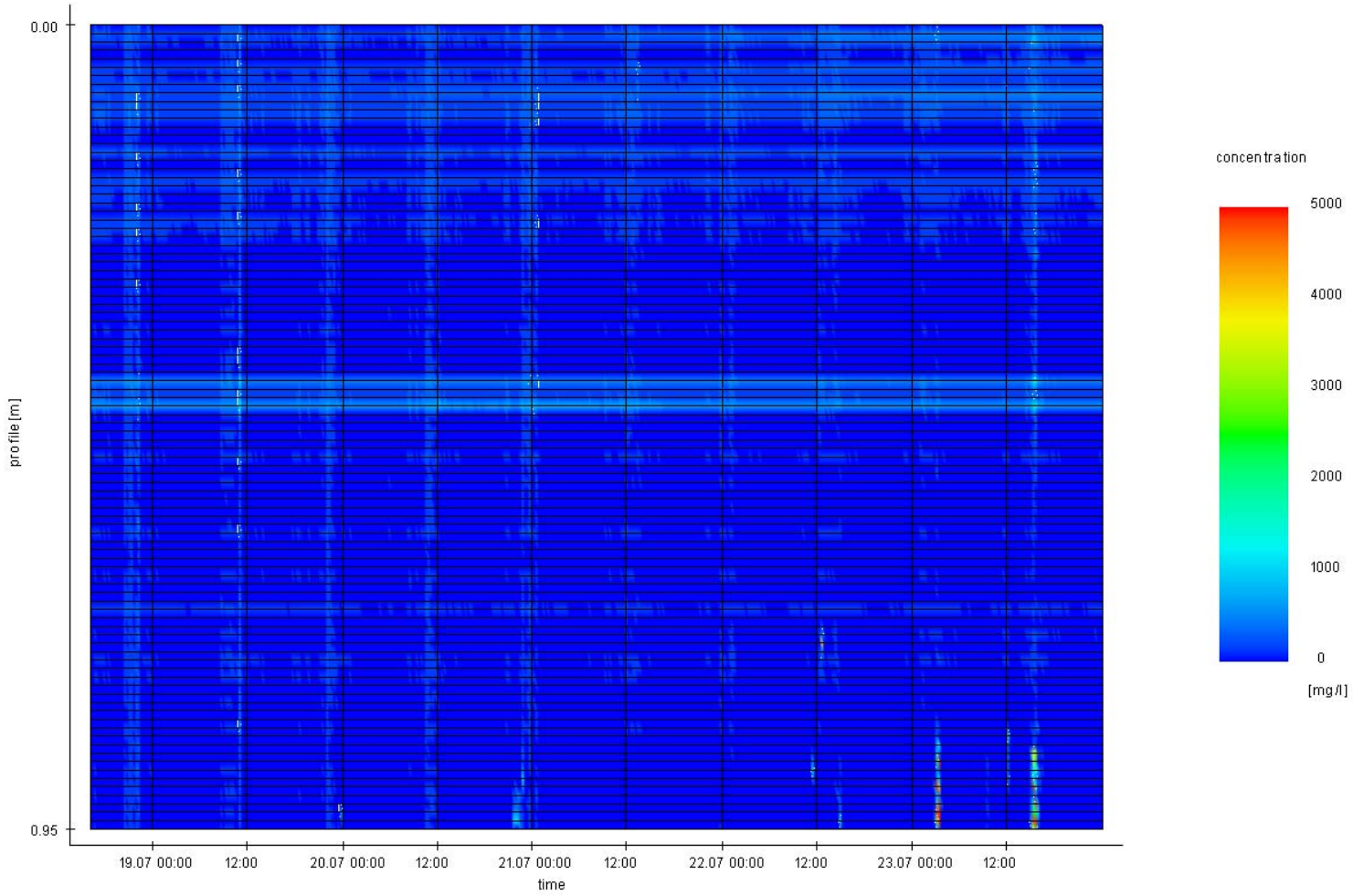
APPENDIX C.

WEEKSERIES, AVERAGE TIDE & TABLES

ARGUS ASM – IV & ALTUS (MET TIME)

C.1 CDW frame

11283 Accretion Deurganckdok – Near bed continuous monitoring – Summer 2006



Time series suspended sediment concentration
ARGUS ASM-IV

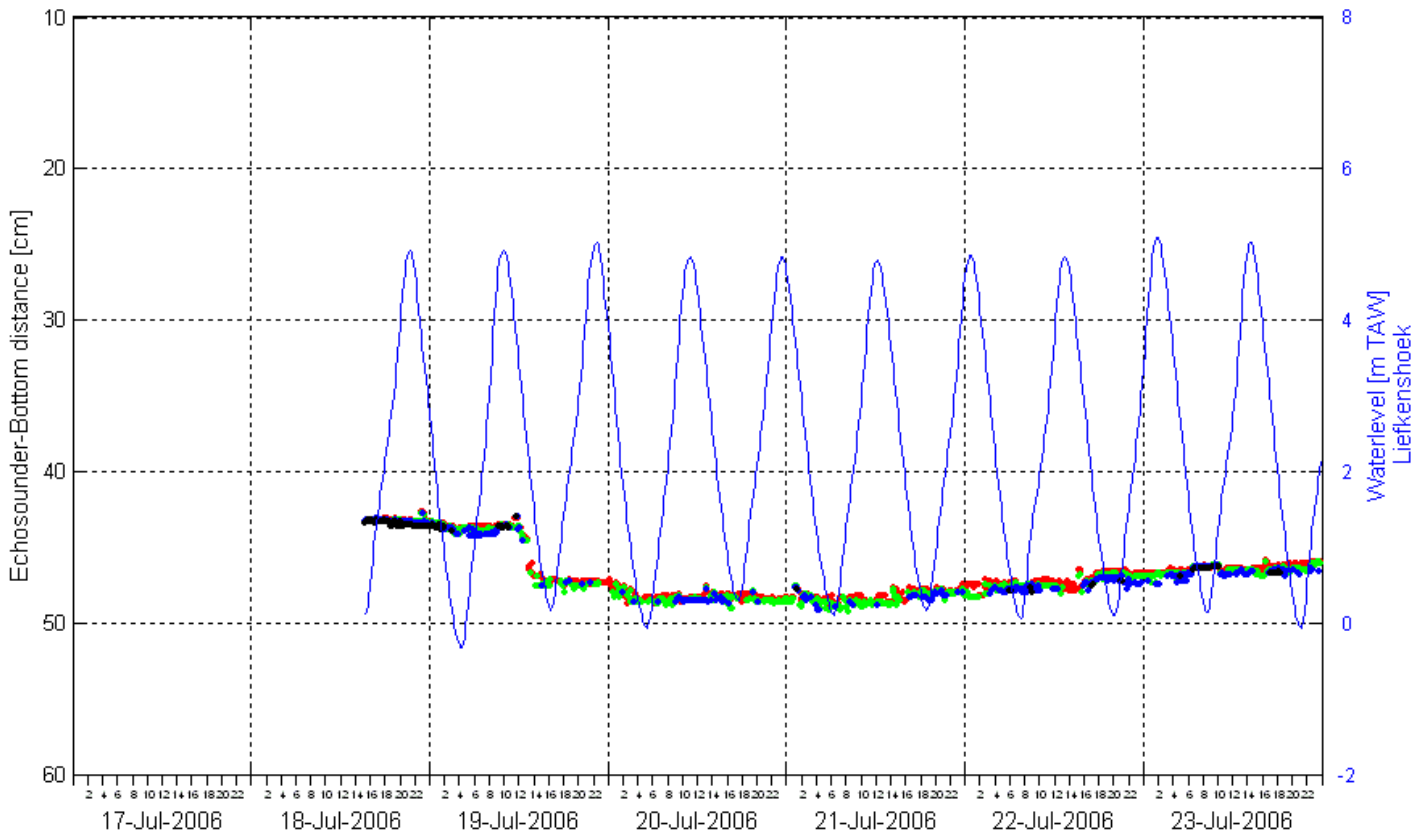
Location:	Date:
Deurganckdok CDW	18/07/2006 – 23/07/2006

Data processed by: IMDC

In association with: WL | delft hydraulics, GEMS International

I/RA/11283/06.122/MSA

11283 Accretion Deurganckdok - Near bed continuous monitoring – Summer 2006



SIGNAL 4
SIGNAL 3
SIGNAL 2
SIGNAL 1

Legend

Echosounder – bottom distance
Waterlevel [mTAW] at Liefkenshoek

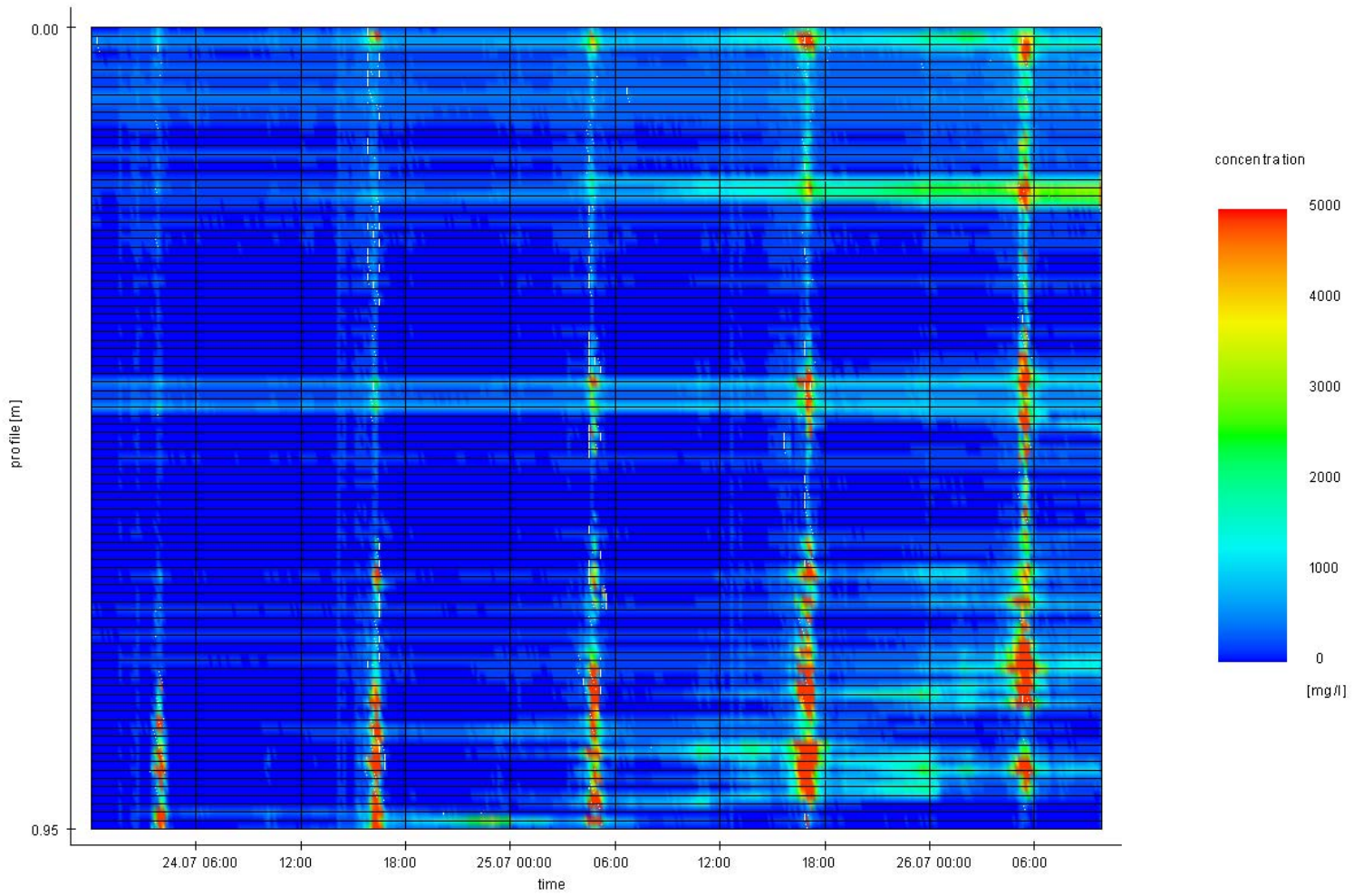
Location:	Date:
Deurganckdok CDW	18/07/2006 – 23/07/2006

Data processed by: IMDC

In association with: WL | delft hydraulics, GEMS International

I/RA/11283/06.122/MSA

11283 Accretion Deurganckdok - Near bed continuous monitoring – Summer 2006



Time series suspended sediment concentration
ARGUS ASM-IV

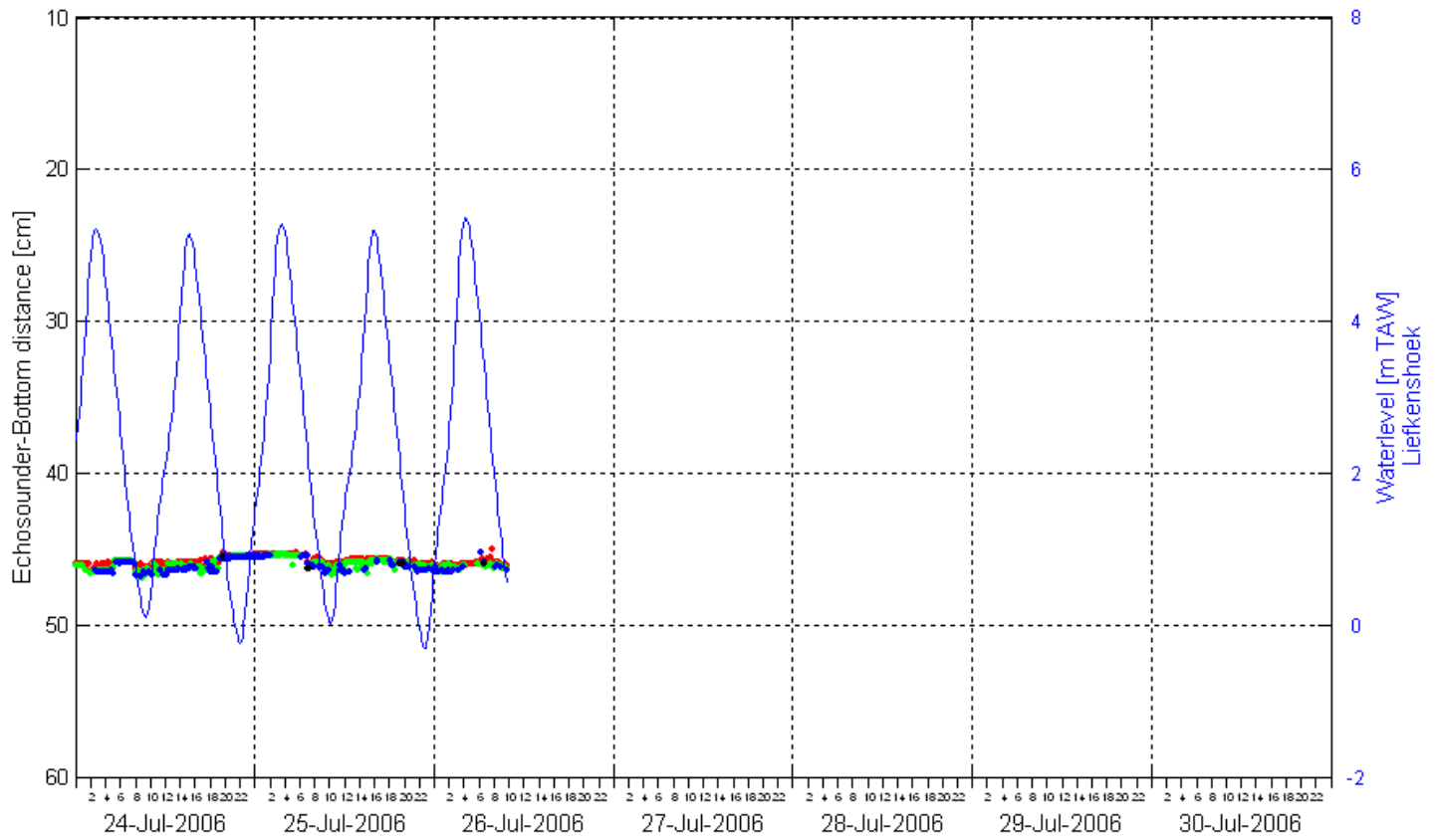
Location:	Date:
Deurganckdok CDW	24/07/2006 – 26/07/2006

Data processed by: IMDC

In association with: WL | delft hydraulics, GEMS International

I/RA/11283/06.122/MSA

11283 Accretion Deurganckdok - Near bed continuous monitoring – Summer 2006



SIGNAL 4
SIGNAL 3
SIGNAL 2
SIGNAL 1

Legend

Echosounder – bottom distance
Waterlevel [mTAW] at Liefkenshoek

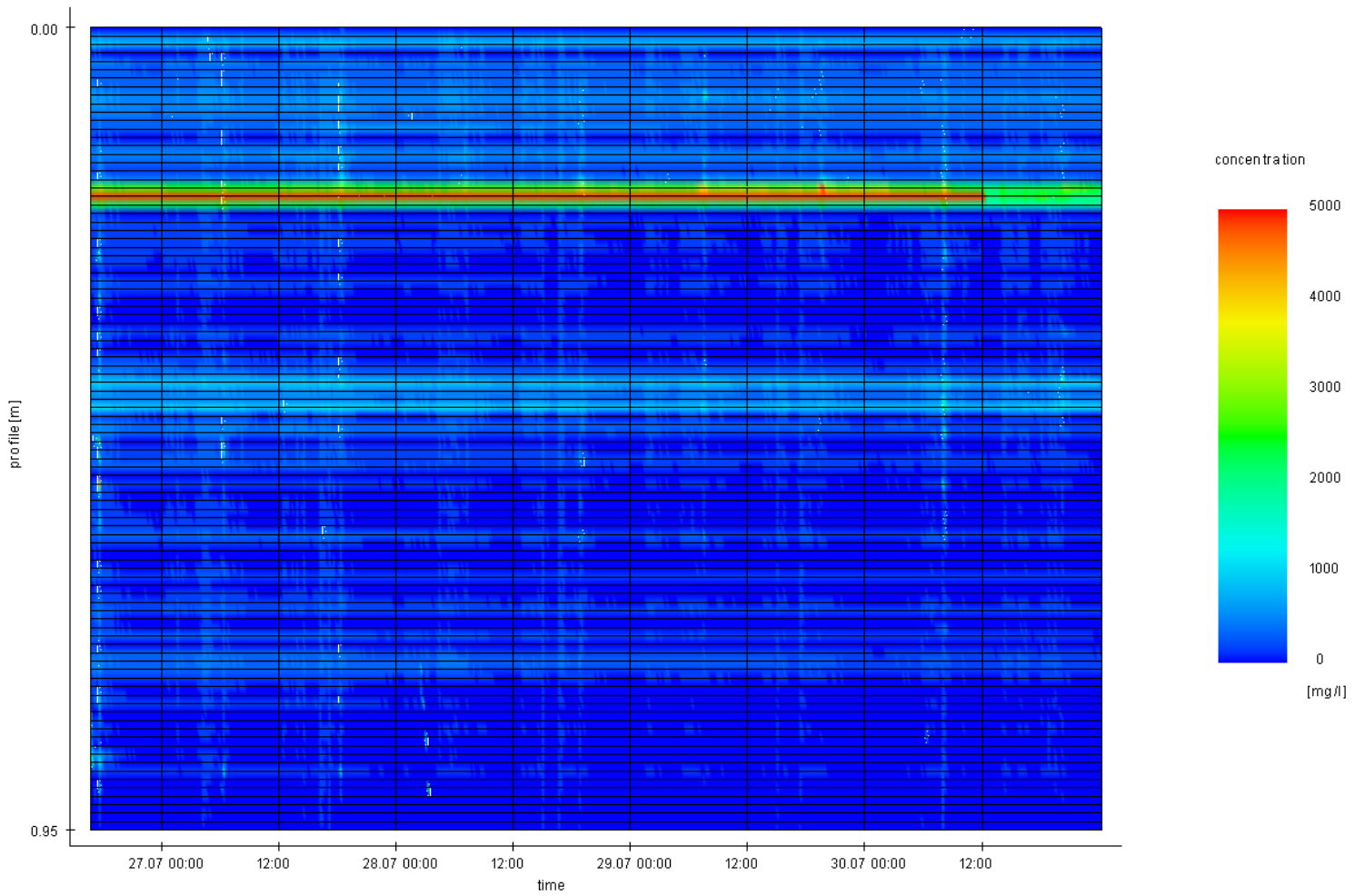
Location:	Date:
Deurganckdok CDW	24/07/2006 – 26/07/2006

Data processed by: IMDC

In association with: WL | delft hydraulics, GEMS International

I/RA/11283/06.122/MSA

11283 Accretion Deurganckdok - Near bed continuous monitoring – Summer 2006



Time series suspended sediment concentration
ARGUS ASM-IV

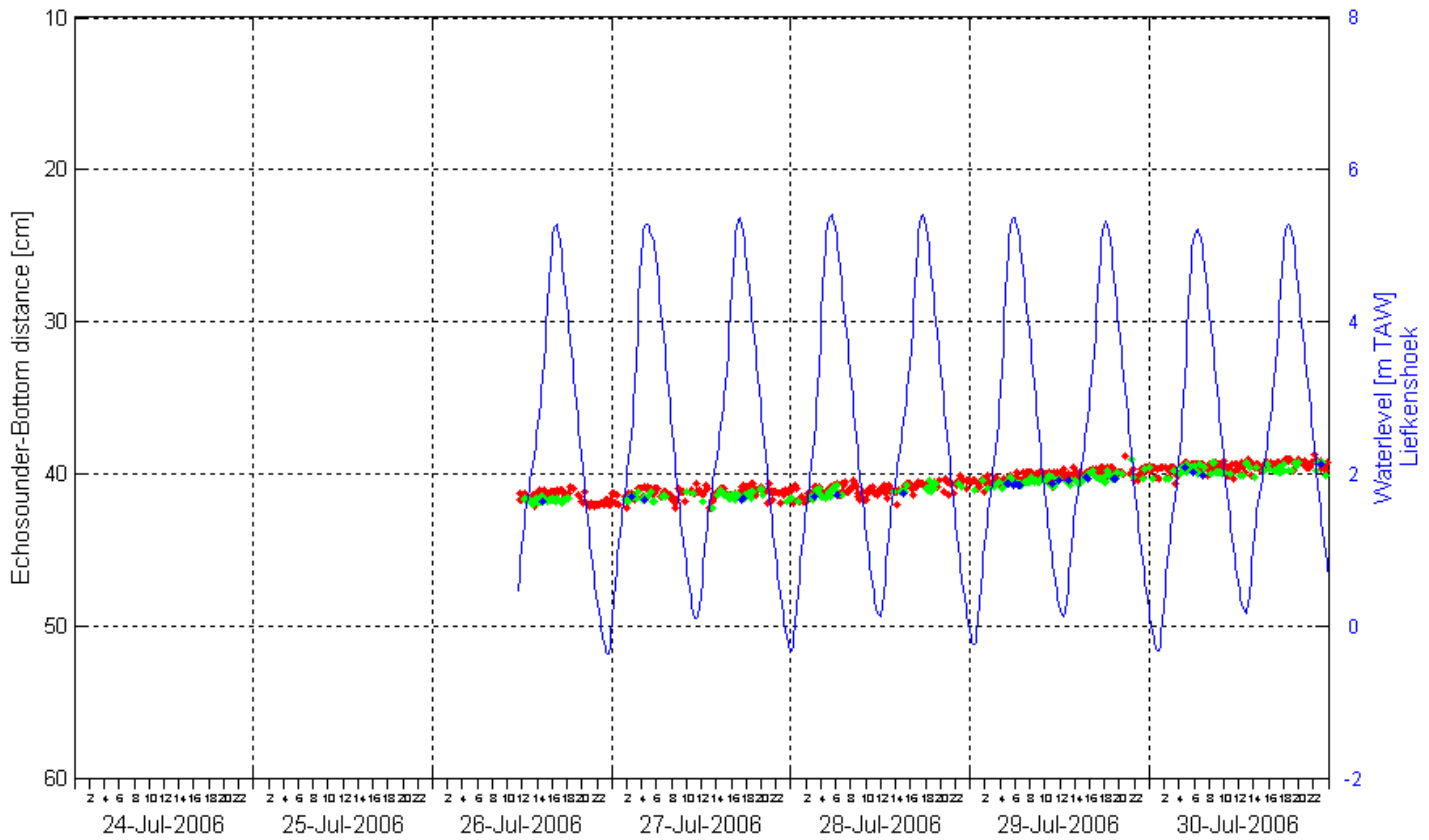
Location:	Date:
Deurganckdok CDW	26/07/2006 – 30/07/2006

Data processed by: IMDC

In association with: WL | delft hydraulics, GEMS International

I/RA/11283/06.122/MSA

11283 Accretion Deurganckdok - Near bed continuous monitoring – Summer 2006



SIGNAL 4
SIGNAL 3
SIGNAL 2
SIGNAL 1

Legend

Echosounder – bottom distance
Waterlevel [mTAW] at Liefkenshoek

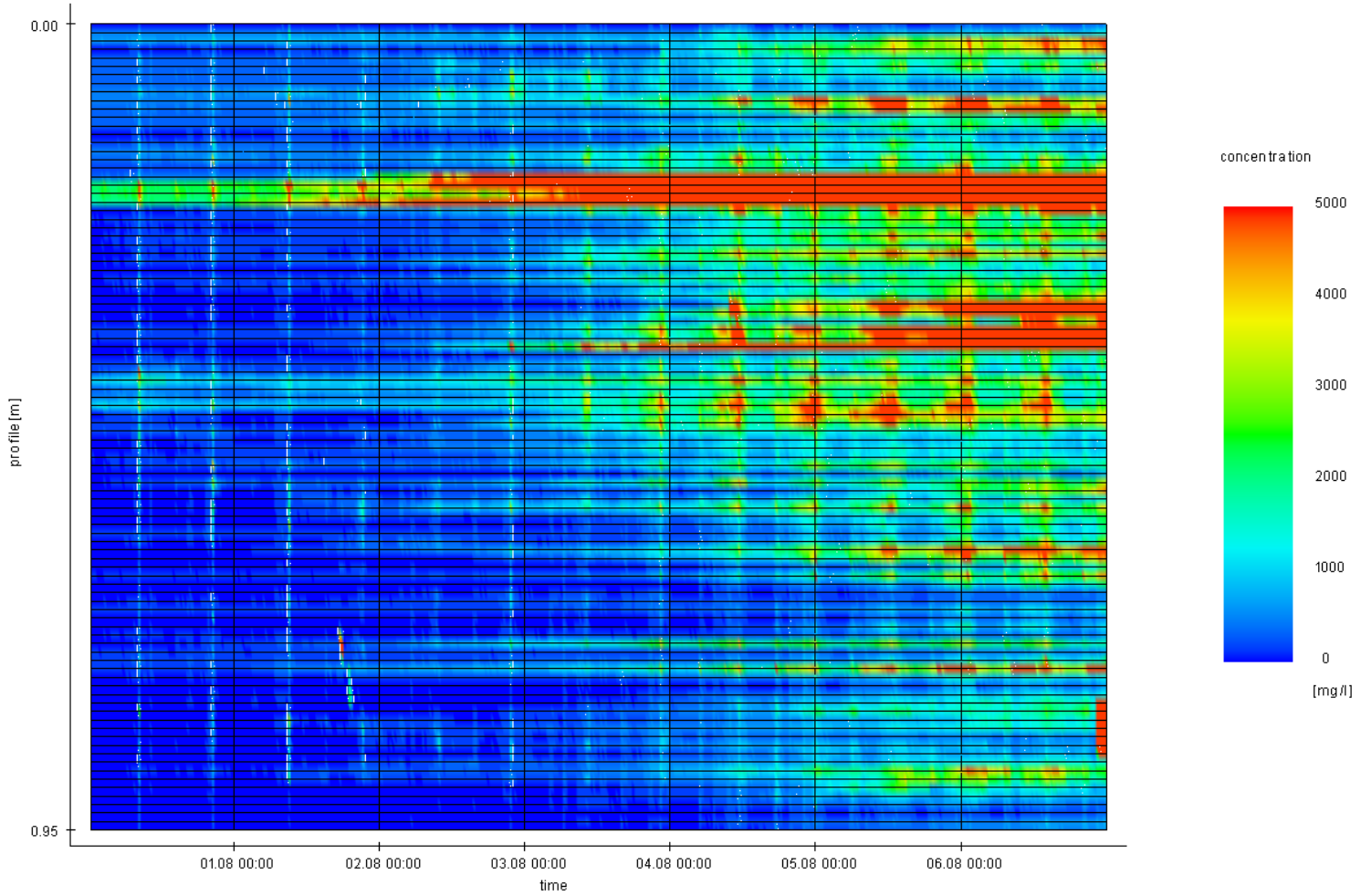
Location:	Date:
Deurganckdok CDW	26/07/2006 – 30/07/2006

Data processed by: IMDC

In association with: w.l | delft hydraulics, GEMS International

I/RA/11283/06.122/MSA

11283 Accretion Deurganckdok - Near bed continuous monitoring – Summer 2006



Time series suspended sediment concentration
ARGUS ASM-IV

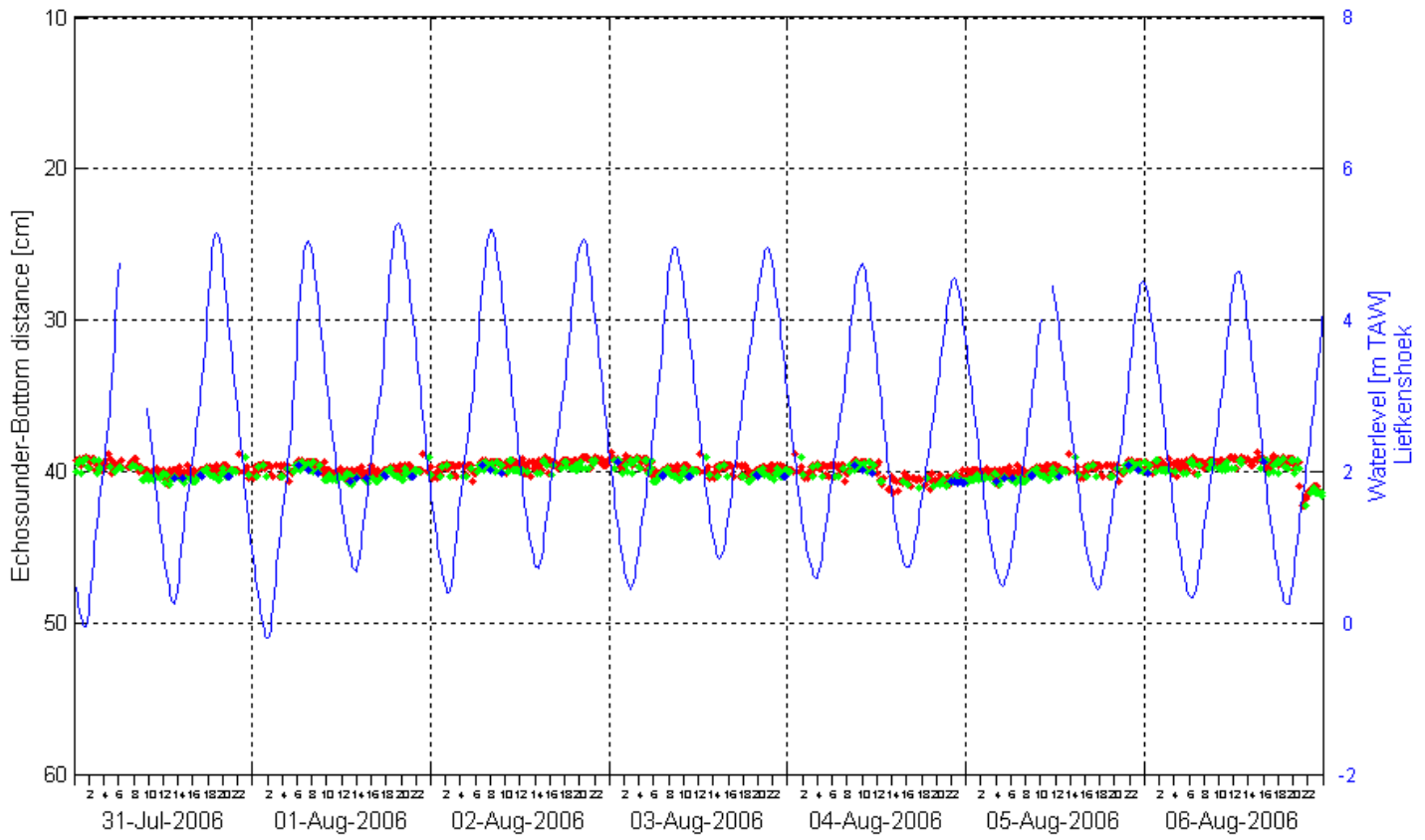
Location:	Date:
Deurganckdok CDW	31/07/2006 – 06/08/2006

Data processed by: IMDC

In association with: WL | delft hydraulics, GEMS International

I/RA/11283/06.122/MSA

11283 Accretion Deurganckdok - Near bed continuous monitoring – Summer 2006



SIGNAL 4
SIGNAL 3
SIGNAL 2
SIGNAL 1

Legend

Echosounder – bottom distance
Waterlevel [mTAW] at Liefkenshoek

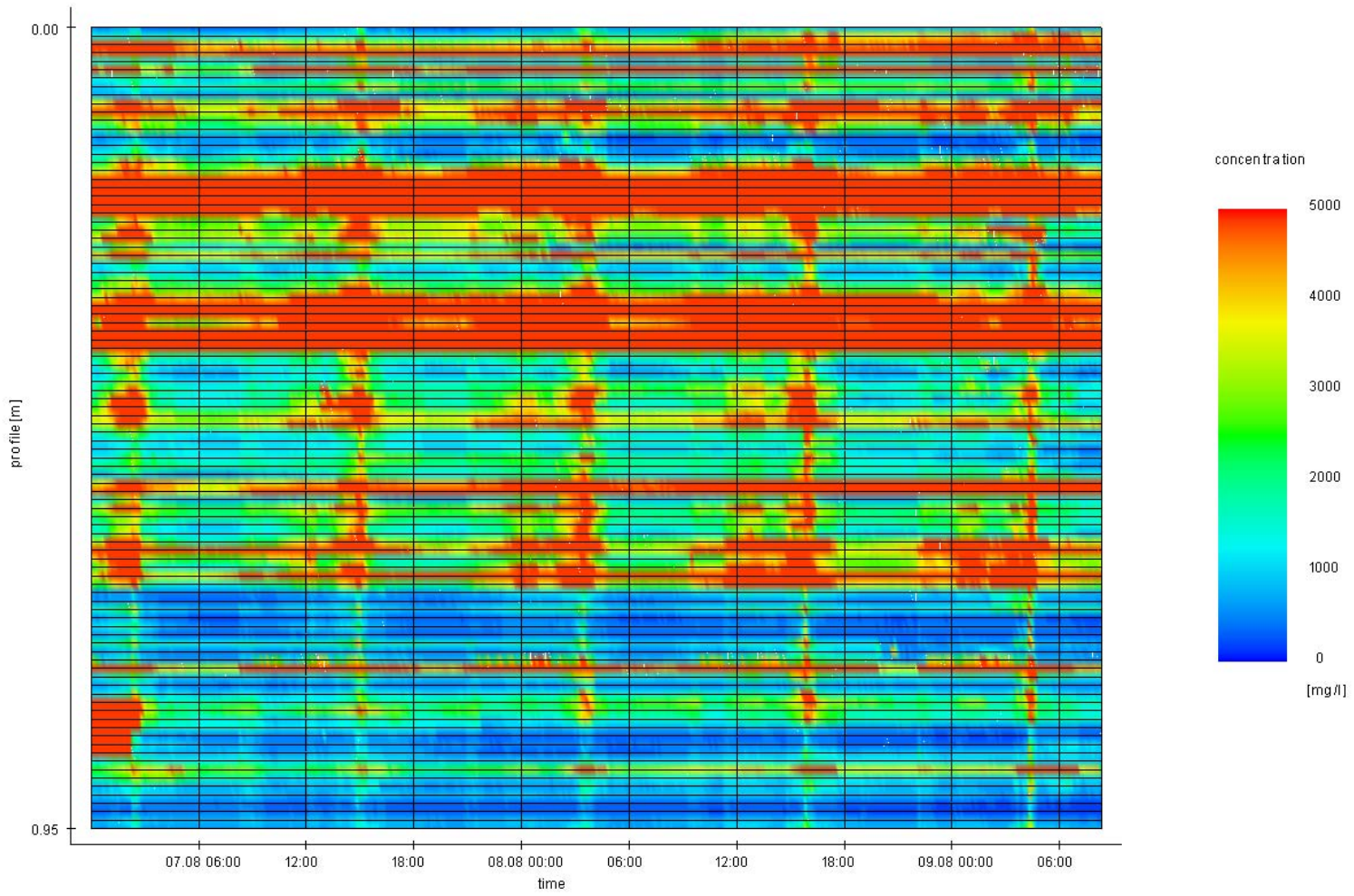
Location:	Date:
Deurganckdok CDW	31/07/2006 – 06/08/2006

Data processed by: IMDC

In association with: WL | delft hydraulics, GEMS International

I/RA/11283/06.122/MSA

11283 Accretion Deurganckdok - Near bed continuous monitoring – Summer 2006



Time series suspended sediment concentration
ARGUS ASM-IV

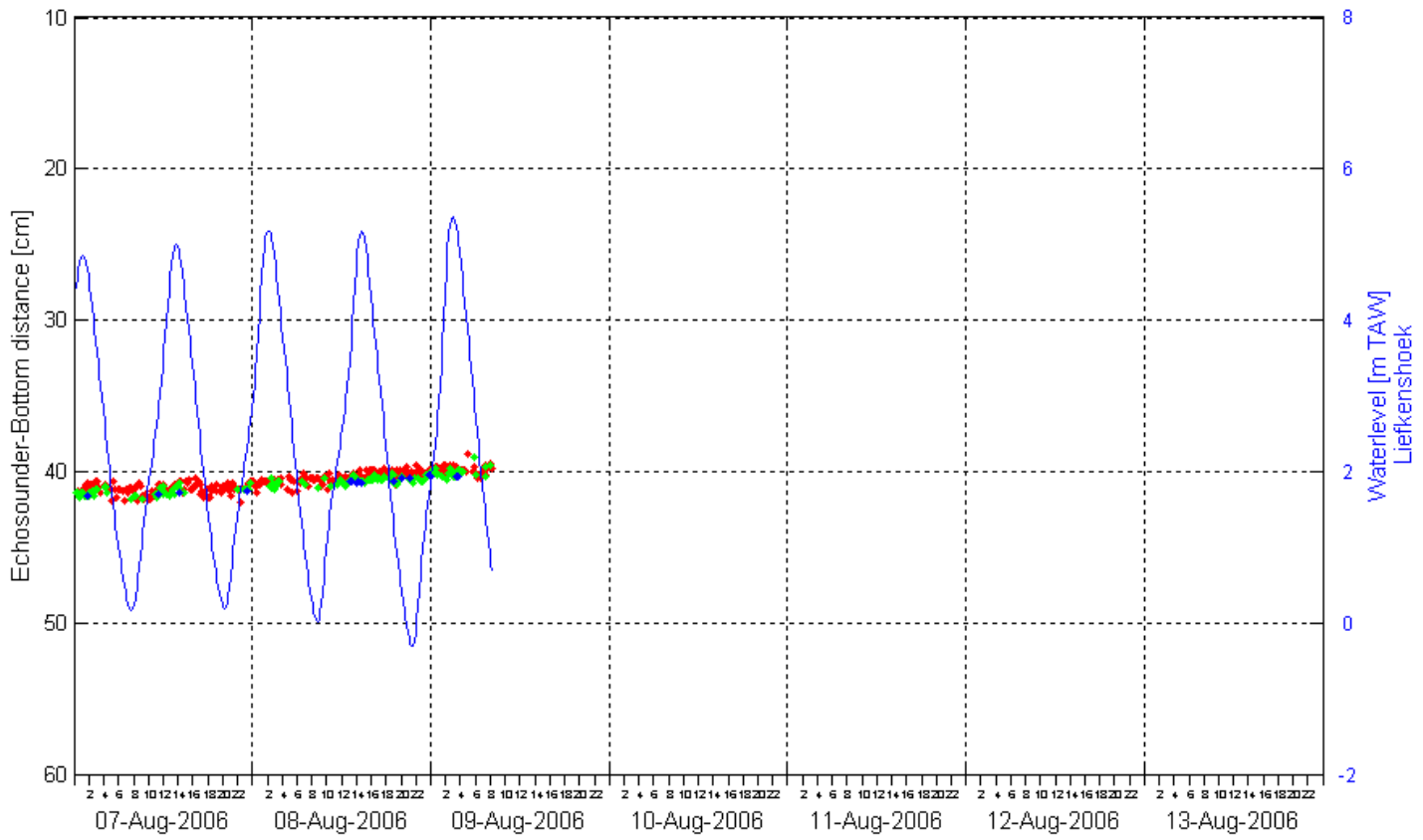
Location:	Date:
Deurganckdok CDW	07/08/2006 – 09/08/2006

Data processed by: IMDC

In association with: WL | delft hydraulics, GEMS International

I/RA/11283/06.122/MSA

11283 Accretion Deurganckdok - Near bed continuous monitoring – Summer 2006



SIGNAL 4
SIGNAL 3
SIGNAL 2
SIGNAL 1

Legend

Echosounder – bottom distance
Waterlevel [mTAW] at Liefkenshoek

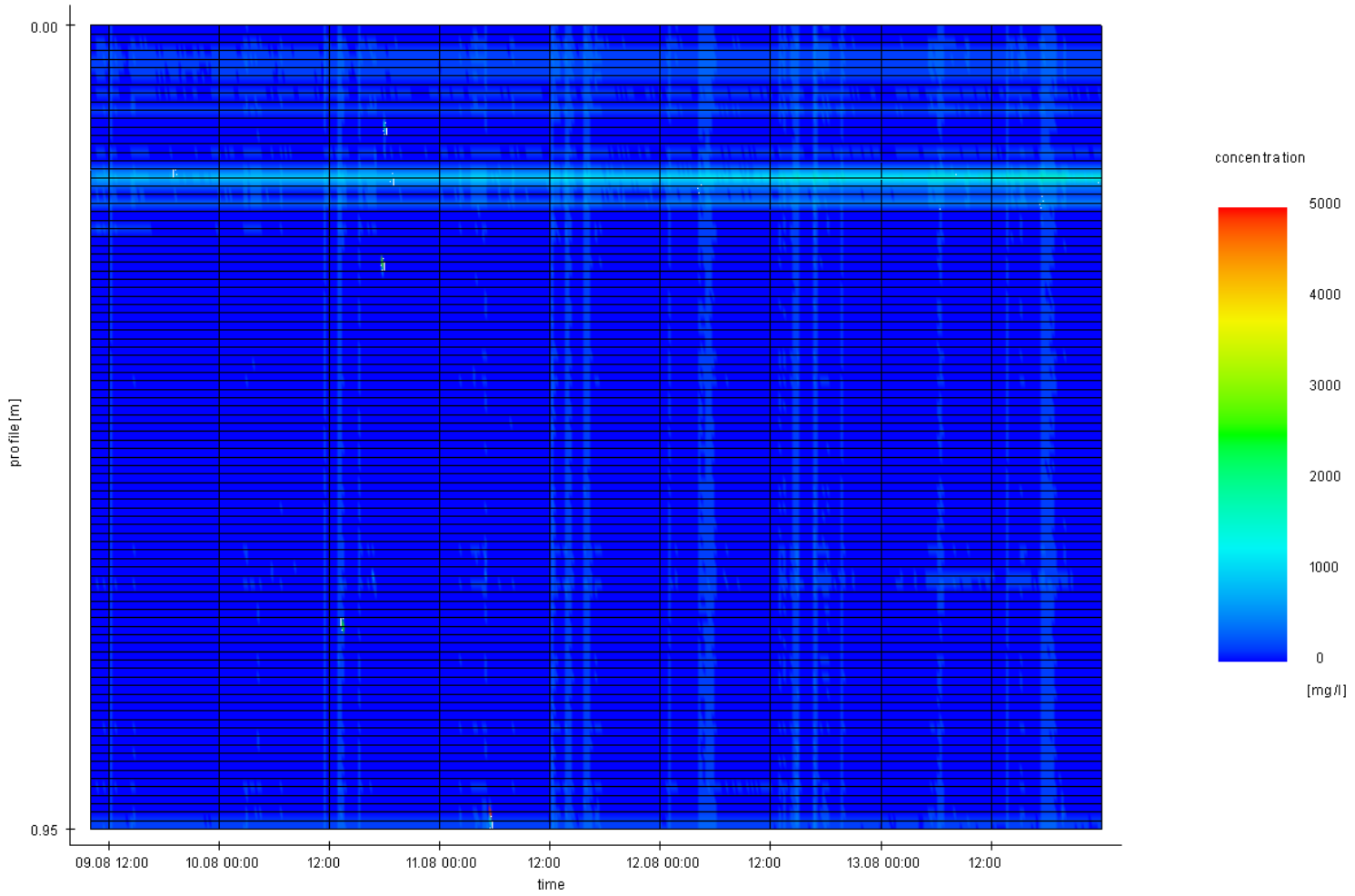
Location:	Date:
Deurganckdok CDW	07/08/2006 – 09/08/2006

Data processed by: IMDC

In association with: WL | delft hydraulics, GEMS International

I/RA/11283/06.122/MSA

11283 Accretion Deurganckdok - Near bed continuous monitoring – Summer 2006



Time series suspended sediment concentration
ARGUS ASM-IV

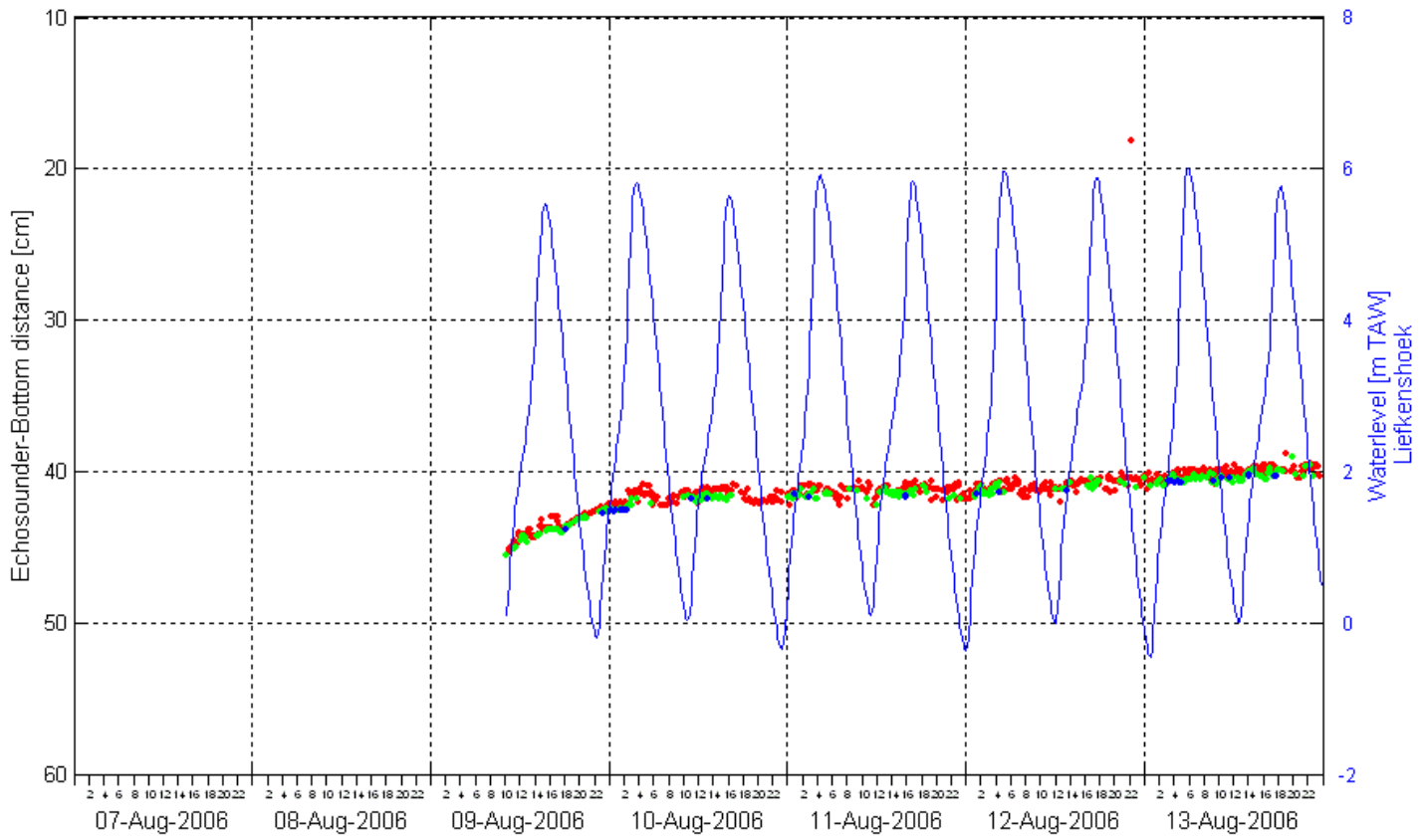
Location:	Date:
Deurganckdok CDW	09/08/2006 – 13/08/2006

Data processed by: IMDC

In association with: WL | delft hydraulics, GEMS International

I/RA/11283/06.122/MSA

11283 Accretion Deurganckdok - Near bed continuous monitoring – Summer 2006



SIGNAL 4
SIGNAL 3
SIGNAL 2
SIGNAL 1

Legend

Echosounder – bottom distance
Waterlevel [mTAW] at Liefkenshoek

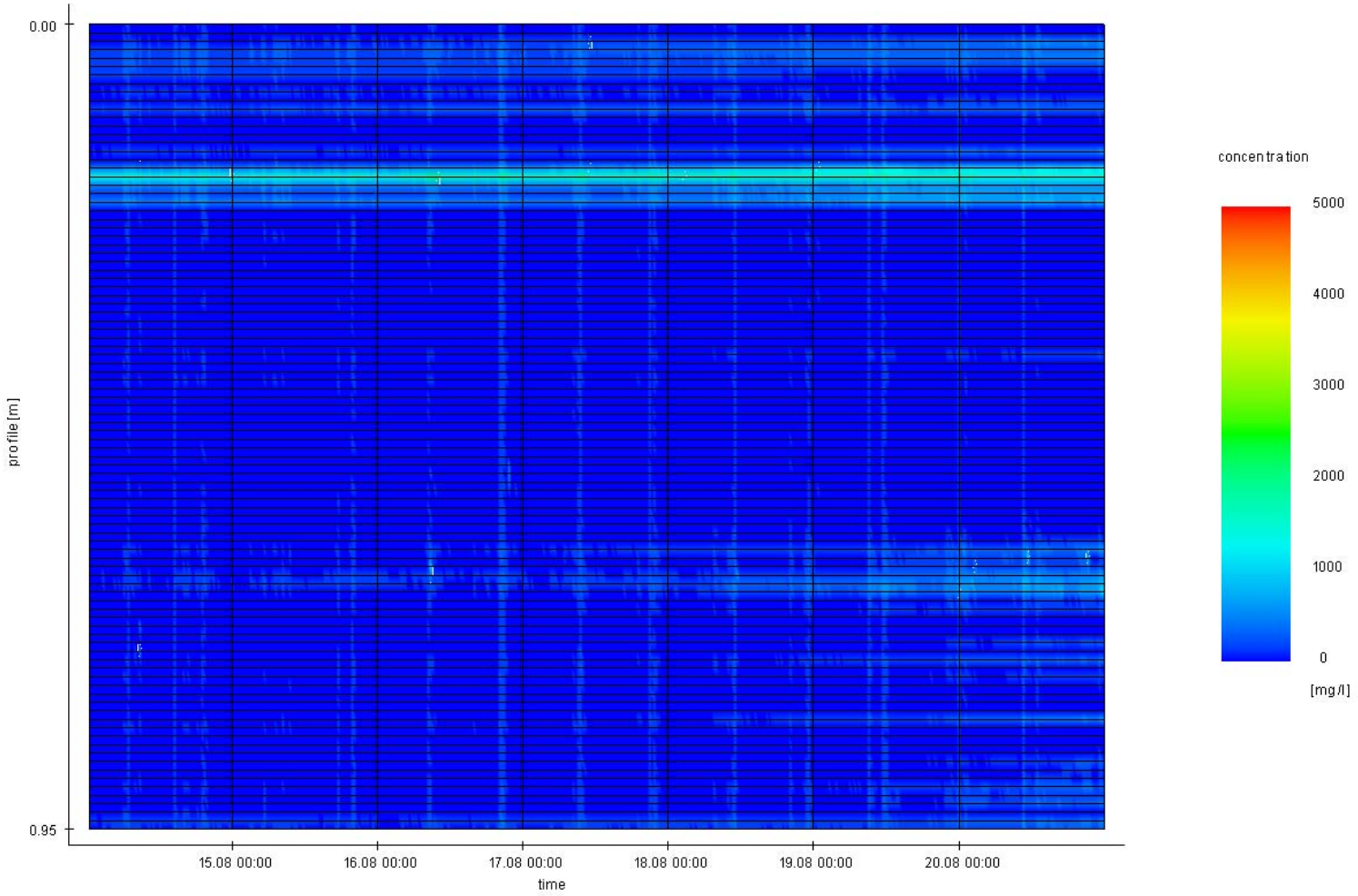
Location:	Date:
Deurganckdok CDW	09/08/2006 – 13/08/2006

Data processed by: IMDC

In association with: w.l | delft hydraulics, GEMS International

I/RA/11283/06.122/MSA

11283 Accretion Deurganckdok - Near bed continuous monitoring – Summer 2006



Time series suspended sediment concentration
ARGUS ASM-IV

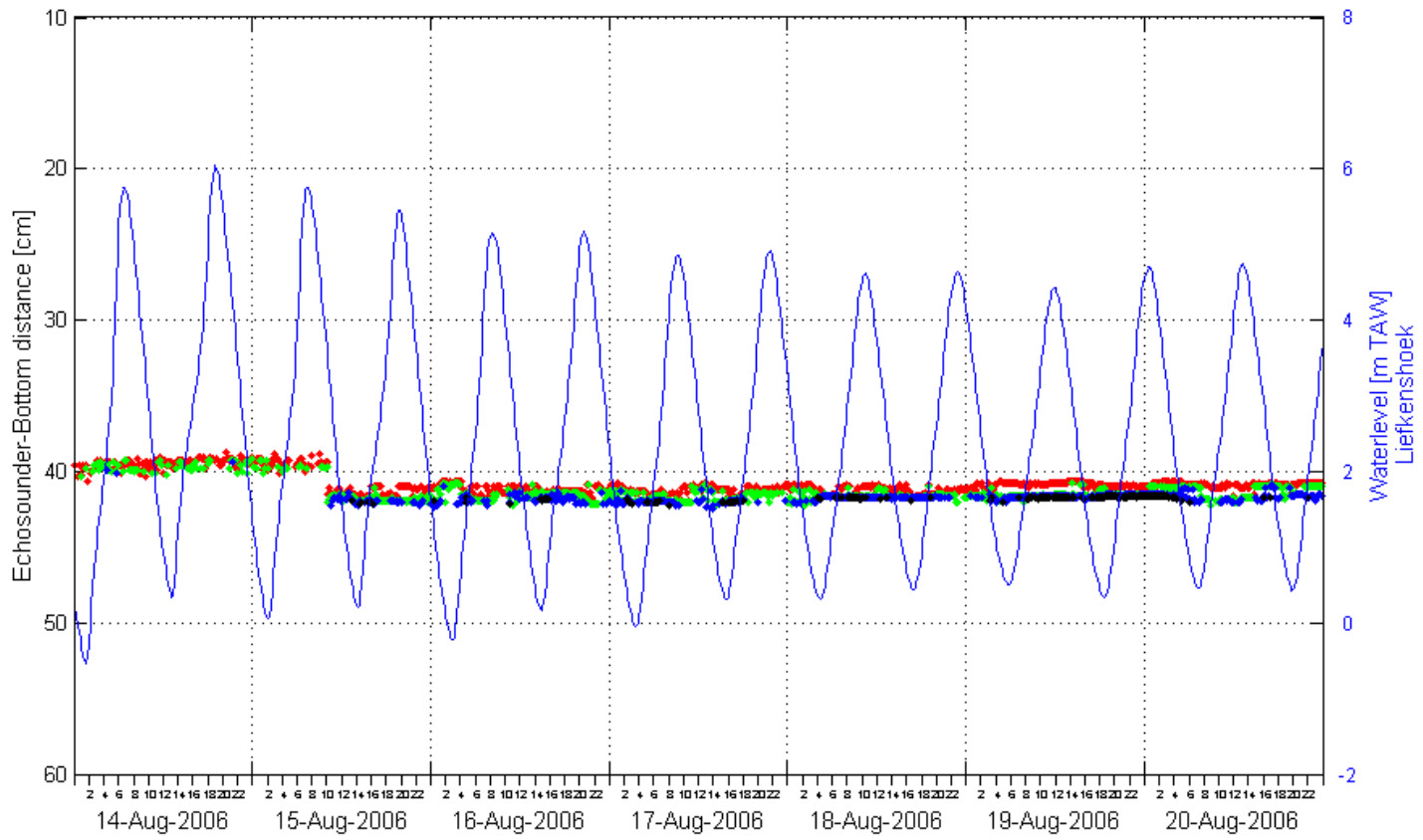
Location:	Date:
Deurganckdok CDW	14/08/2006 – 20/08/2006

Data processed by: IMDC

In association with: w.l | delft hydraulics, GEMS International

I/RA/11283/06.122/MSA

11283 Accretion Deurganckdok - Near bed continuous monitoring – Summer 2006



SIGNAL 4
SIGNAL 3
SIGNAL 2
SIGNAL 1

Legend

Echosounder – bottom distance
Waterlevel [mTAW] at Liefkenshoek

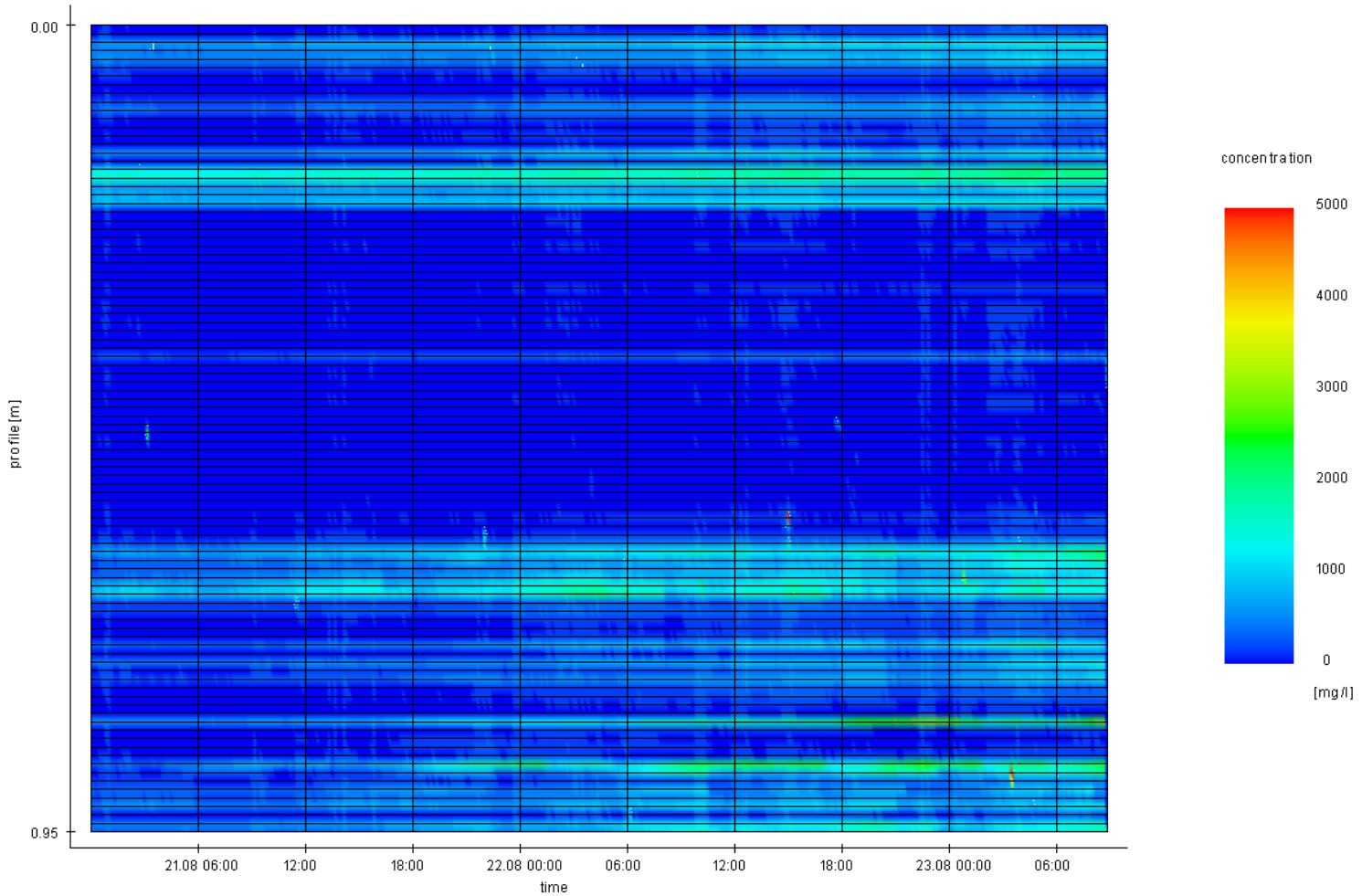
Location:	Date:
Deurganckdok CDW	14/08/2006 – 20/08/2006

Data processed by: IMDC

In association with: w.l | delft hydraulics, GEMS International

I/RA/11283/06.122/MSA

11283 Accretion Deurganckdok - Near bed continuous monitoring – Summer 2006



Time series suspended sediment concentration
ARGUS ASM-IV

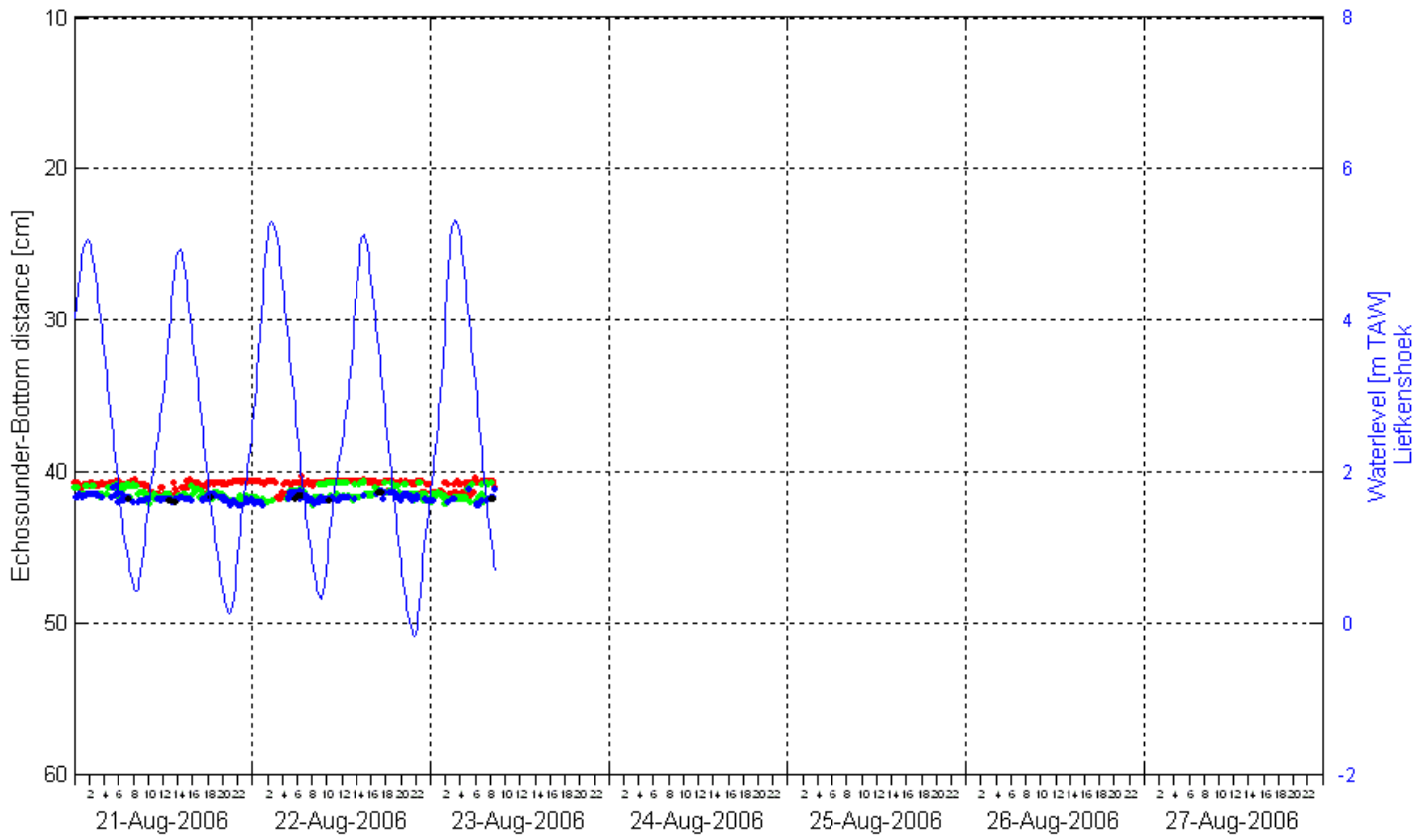
Location:	Date:
Deurganckdok CDW	21/08/2006 – 23/08/2006

Data processed by: IMDC

In association with: WL | delft hydraulics, GEMS International

I/RA/11283/06.122/MSA

11283 Accretion Deurganckdok - Near bed continuous monitoring – Summer 2006



SIGNAL 4
SIGNAL 3
SIGNAL 2
SIGNAL 1

Legend

Echosounder – bottom distance
Waterlevel [mTAW] at Liefkenshoek

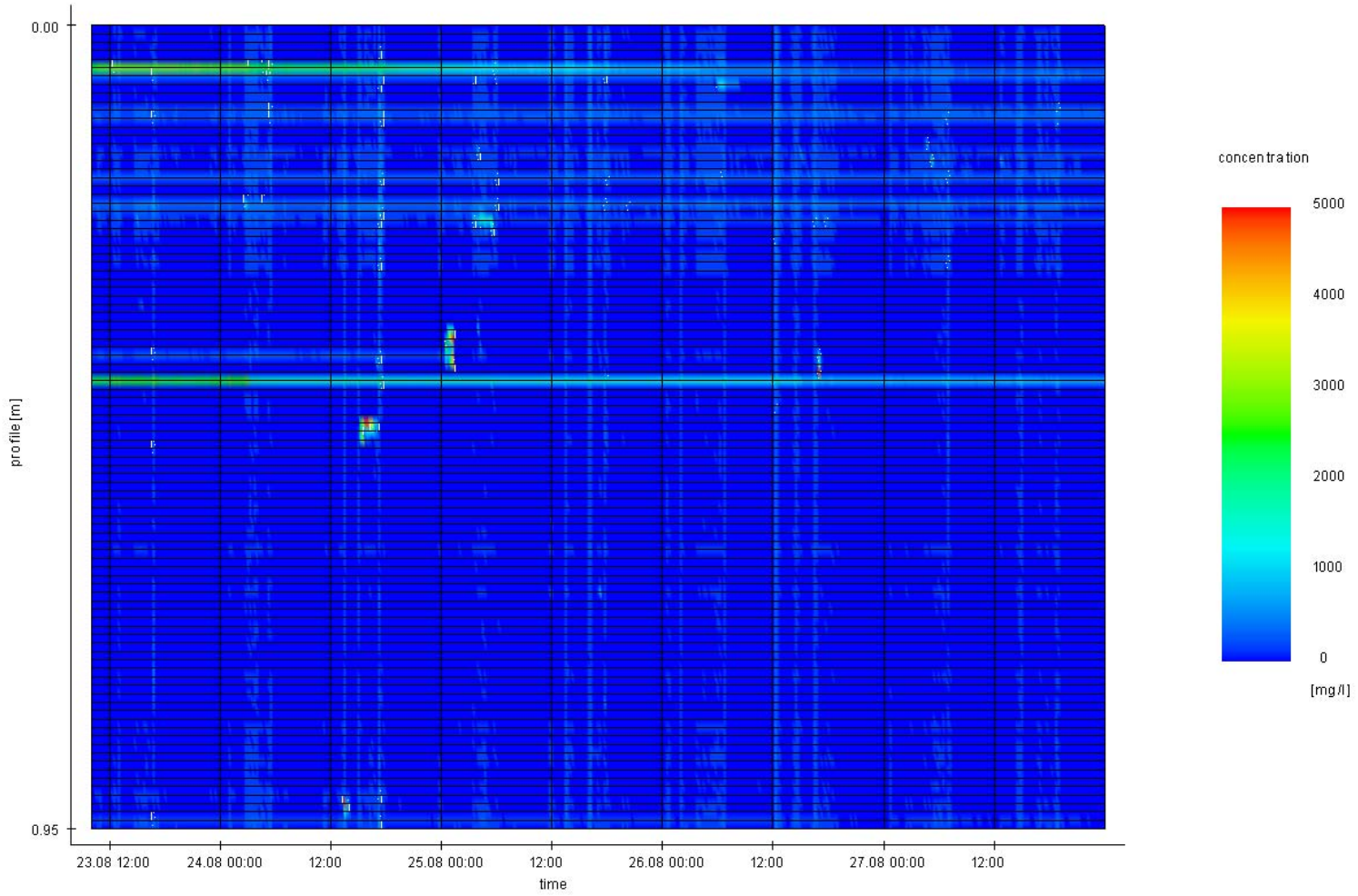
Location:	Date:
Deurganckdok CDW	21/08/2006 – 23/08/2006

Data processed by: IMDC

In association with: WL | delft hydraulics, GEMS International

I/RA/11283/06.122/MSA

11283 Accretion Deurganckdok - Near bed continuous monitoring – Summer 2006



Time series suspended sediment concentration
ARGUS ASM-IV

Location:	Date:
Deurganckdok CDW	23/08/2006 – 27/08/2006

Data processed by: IMDC

In association with: WL | delft hydraulics, GEMS International

I/RA/11283/06.122/MSA

11283 Accretion Deurganckdok - Near bed continuous monitoring – Summer 2006

No Data

SIGNAL 4
SIGNAL 3
SIGNAL 2
SIGNAL 1

Legend

Echosounder – bottom distance
Waterlevel [mTAW] at Liefkenshoek

Location:
Deurganckdok CDW

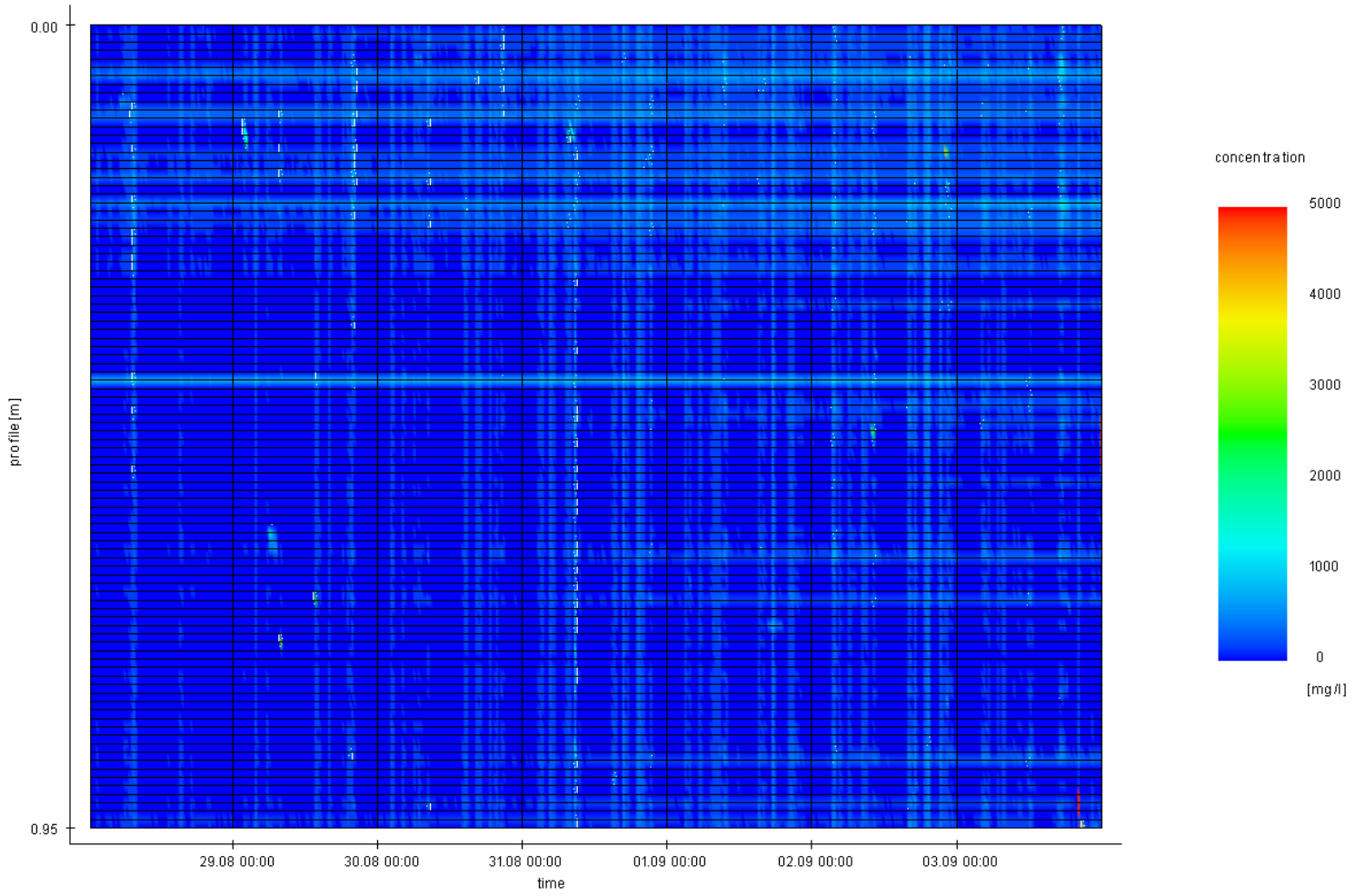
Date:
23/08/2006 – 27/08/2006

Data processed by: IMDC

In association with: WL | delft hydraulics, GEMS International

I/RA/11283/06.122/MSA

11283 Accretion Deurganckdok - Near bed continuous monitoring – Summer 2006



Time series suspended sediment concentration
ARGUS ASM-IV

Location:	Date:
Deurganckdok CDW	29/08/2006 – 03/09/2006

Data processed by: IMDC

In association with: WL | delft hydraulics, GEMS International

I/RA/11283/06.122/MSA

11283 Accretion Deurganckdok - Near bed continuous monitoring – Summer 2006

No Data

SIGNAL 4
SIGNAL 3
SIGNAL 2
SIGNAL 1

Legend

Echosounder – bottom distance
Waterlevel [mTAW] at Liefkenshoek

Location:
Deurganckdok CDW

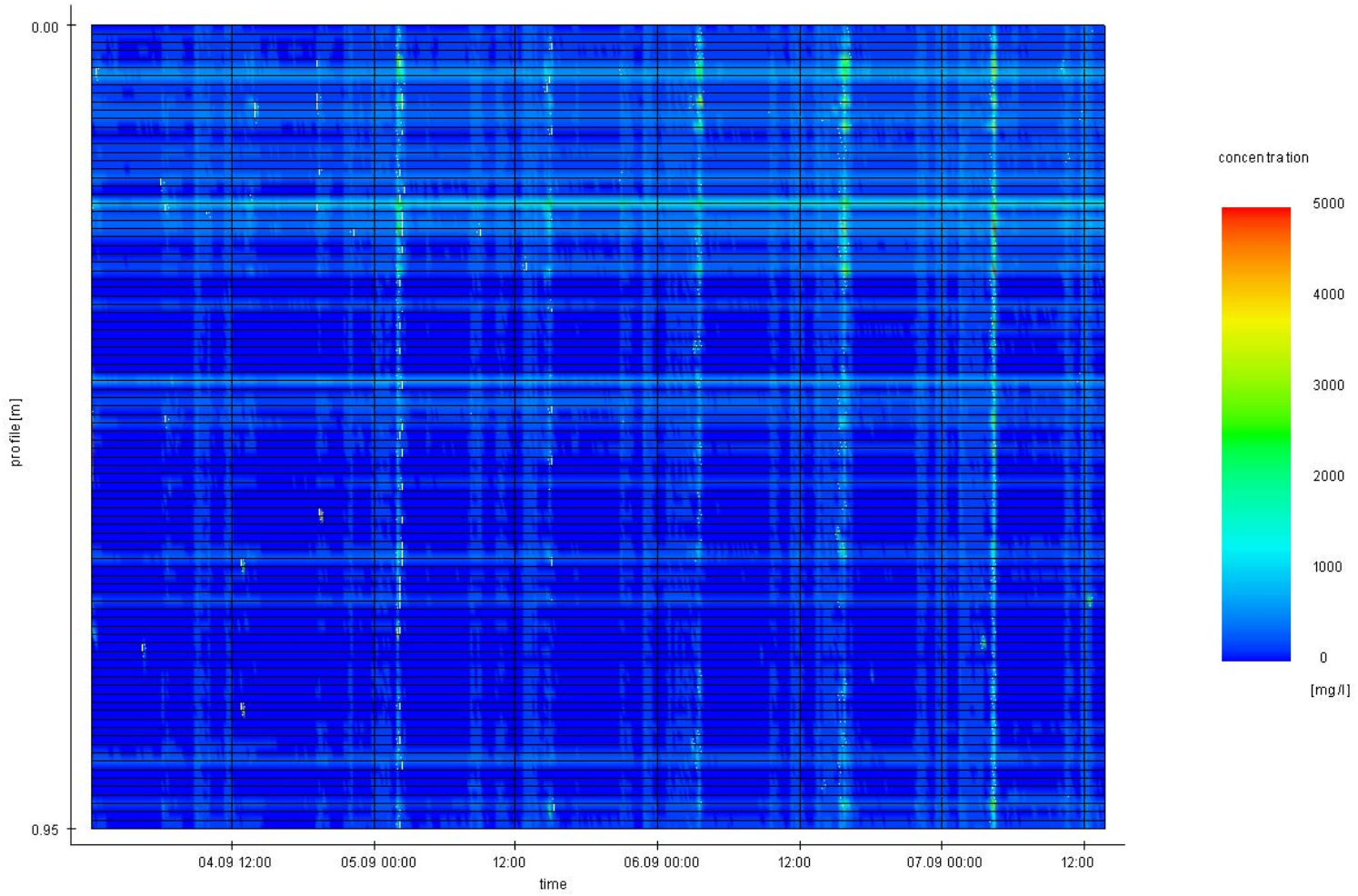
Date:
24/07/2006 – 26/07/2006

Data processed by: IMDC

In association with: WL | delft hydraulics, GEMS International

I/RA/11283/06.122/MSA

11283 Accretion Deurganckdok - Near bed continuous monitoring – Summer 2006



Time series suspended sediment concentration
ARGUS ASM-IV

Location:	Date:
Deurganckdok CDW	04/09/2006 – 07/09/2006

Data processed by: IMDC

In association with: WL | delft hydraulics, GEMS International

I/RA/11283/06.122/MSA

11283 Accretion Deurganckdok - Near bed continuous monitoring – Summer 2006

No Data

SIGNAL 4
SIGNAL 3
SIGNAL 2
SIGNAL 1

Legend

Echosounder – bottom distance
Waterlevel [mTAW] at Liefkenshoek

Location:
Deurganckdok CDW

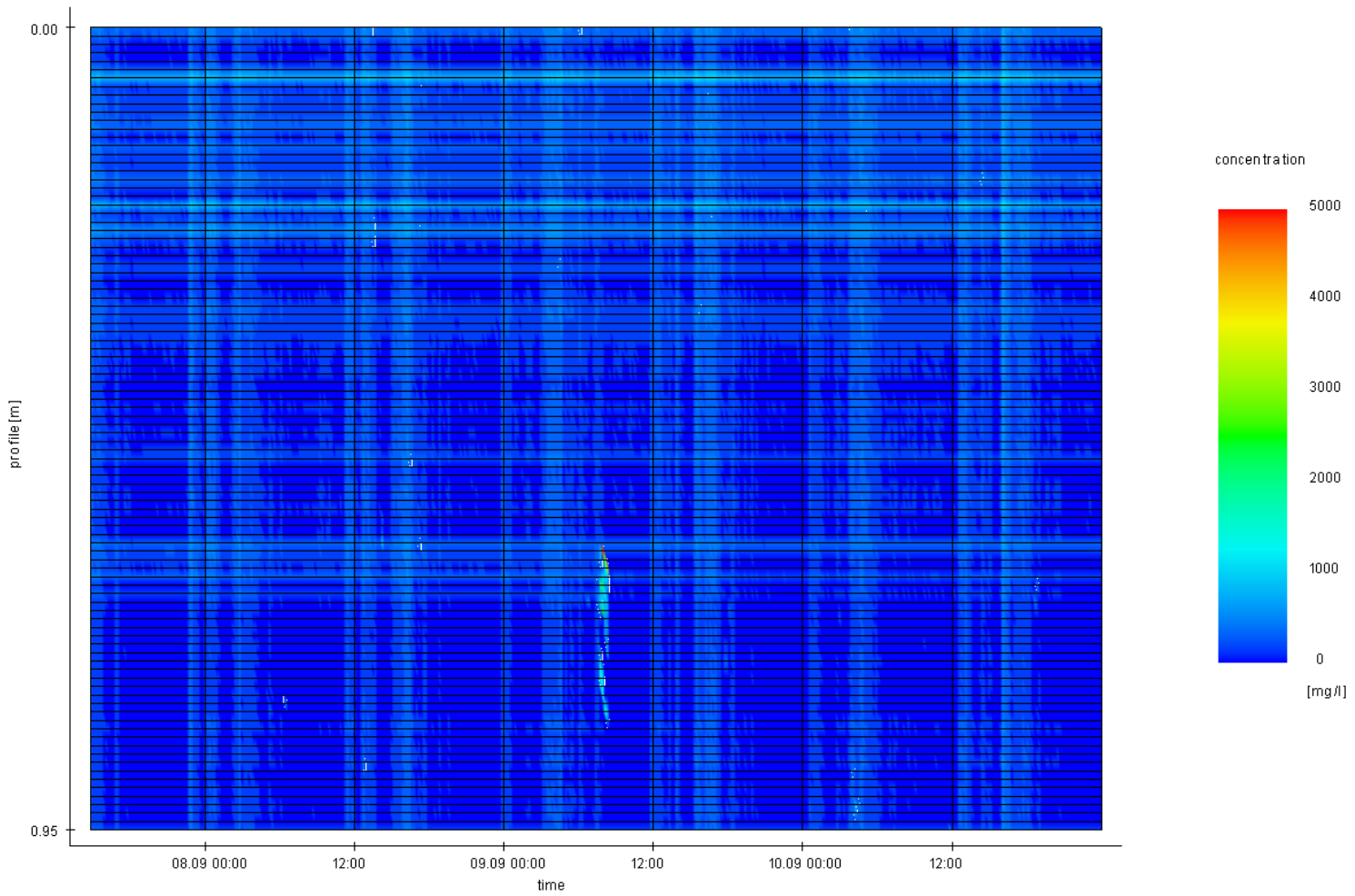
Date:
24/07/2006 – 26/07/2006

Data processed by: IMDC

In association with: WL | delft hydraulics, GEMS International

I/RA/11283/06.122/MSA

11283 Accretion Deurganckdok - Near bed continuous monitoring – Summer 2006



Time series suspended sediment concentration
ARGUS ASM-IV

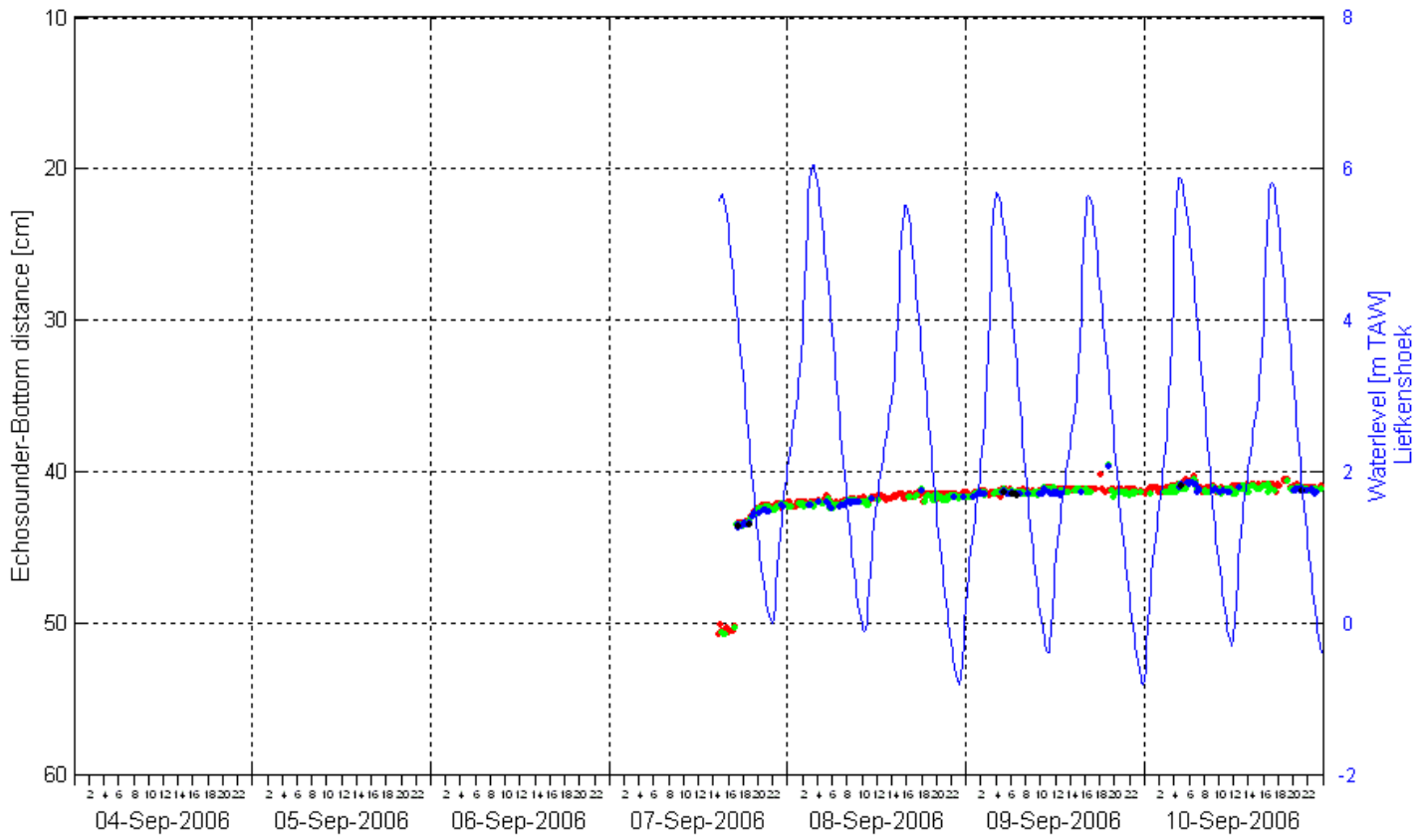
Location:	Date:
Deurganckdok CDW	07/09/2006 – 10/09/2006

Data processed by: IMDC

In association with: w.l | delft hydraulics, GEMS International

I/RA/11283/06.122/MSA

11283 Accretion Deurganckdok - Near bed continuous monitoring – Summer 2006



SIGNAL 4
SIGNAL 3
SIGNAL 2
SIGNAL 1

Legend

Echosounder – bottom distance
Waterlevel [mTAW] at Liefkenshoek

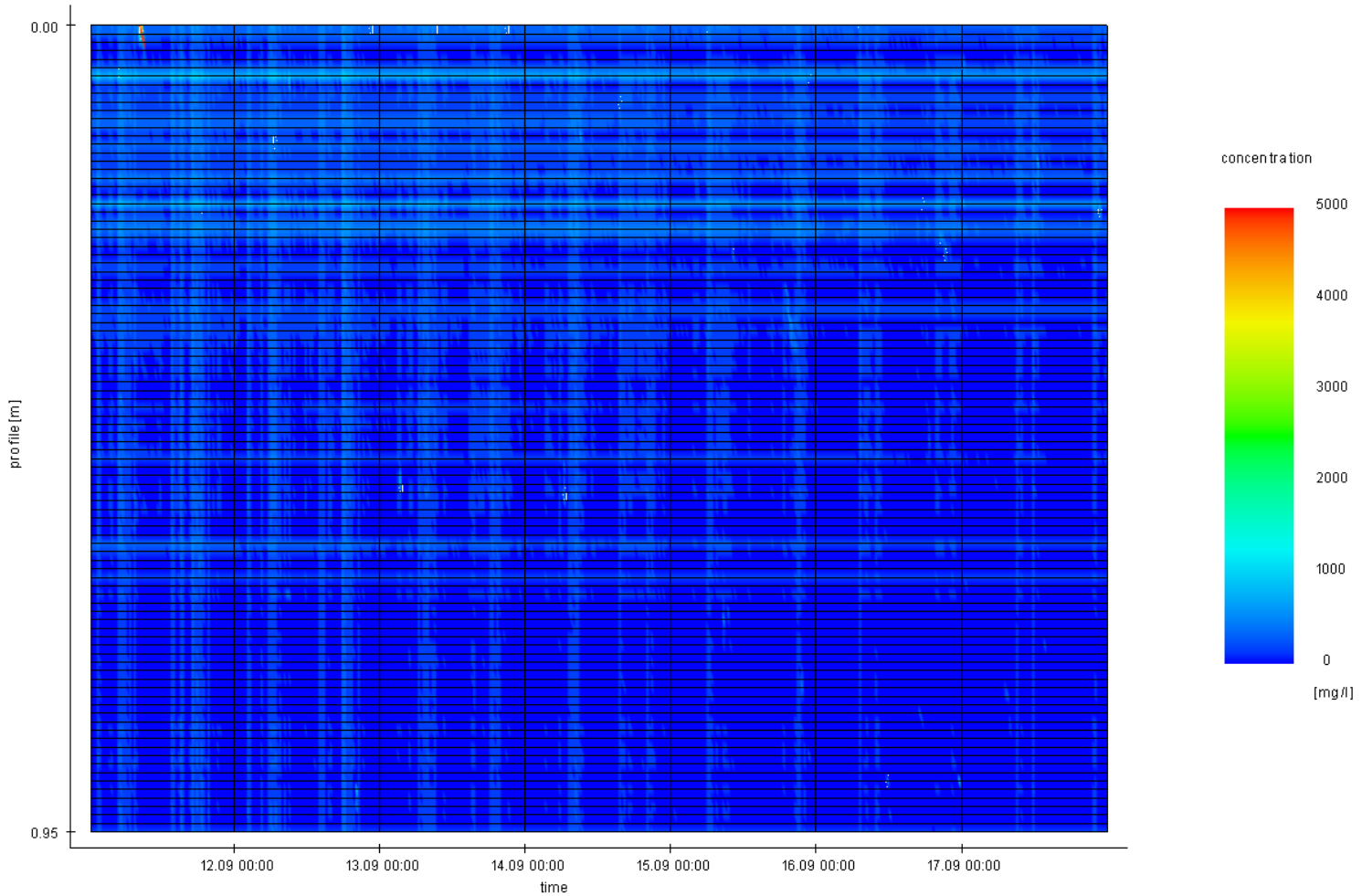
Location:	Date:
Deurganckdok CDW	07/09/2006 – 10/09/2006

Data processed by: IMDC

In association with: WL | delft hydraulics, GEMS International

I/RA/11283/06.122/MSA

11283 Accretion Deurganckdok - Near bed continuous monitoring – Summer 2006



Time series suspended sediment concentration
ARGUS ASM-IV

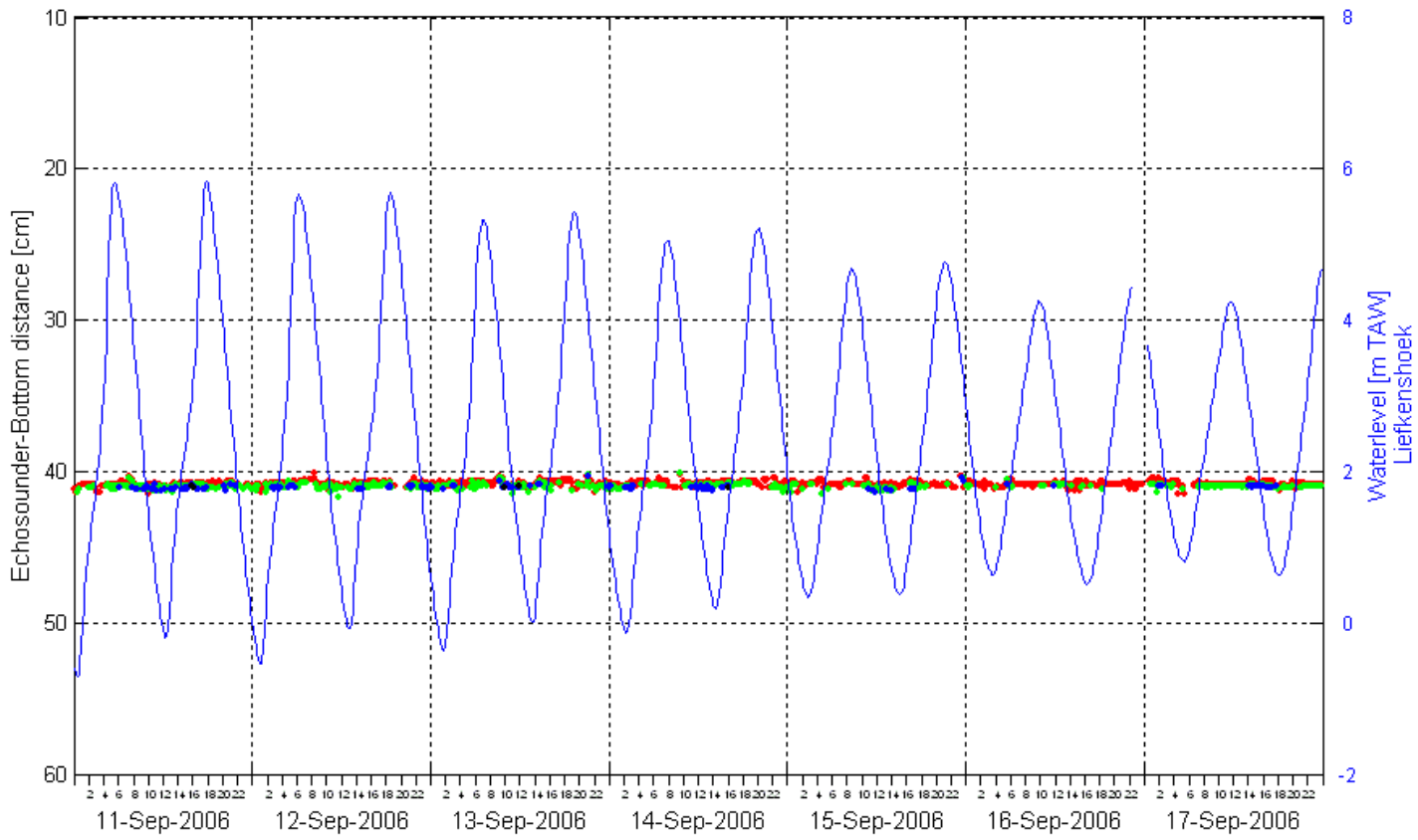
Location:	Date:
Deurganckdok CDW	11/09/2006 – 17/09/2006

Data processed by: IMDC

In association with: WL | delft hydraulics, GEMS International

I/RA/11283/06.122/MSA

11283 Accretion Deurganckdok - Near bed continuous monitoring – Summer 2006



SIGNAL 4
SIGNAL 3
SIGNAL 2
SIGNAL 1

Legend

Echosounder – bottom distance
Waterlevel [mTAW] at Liefkenshoek

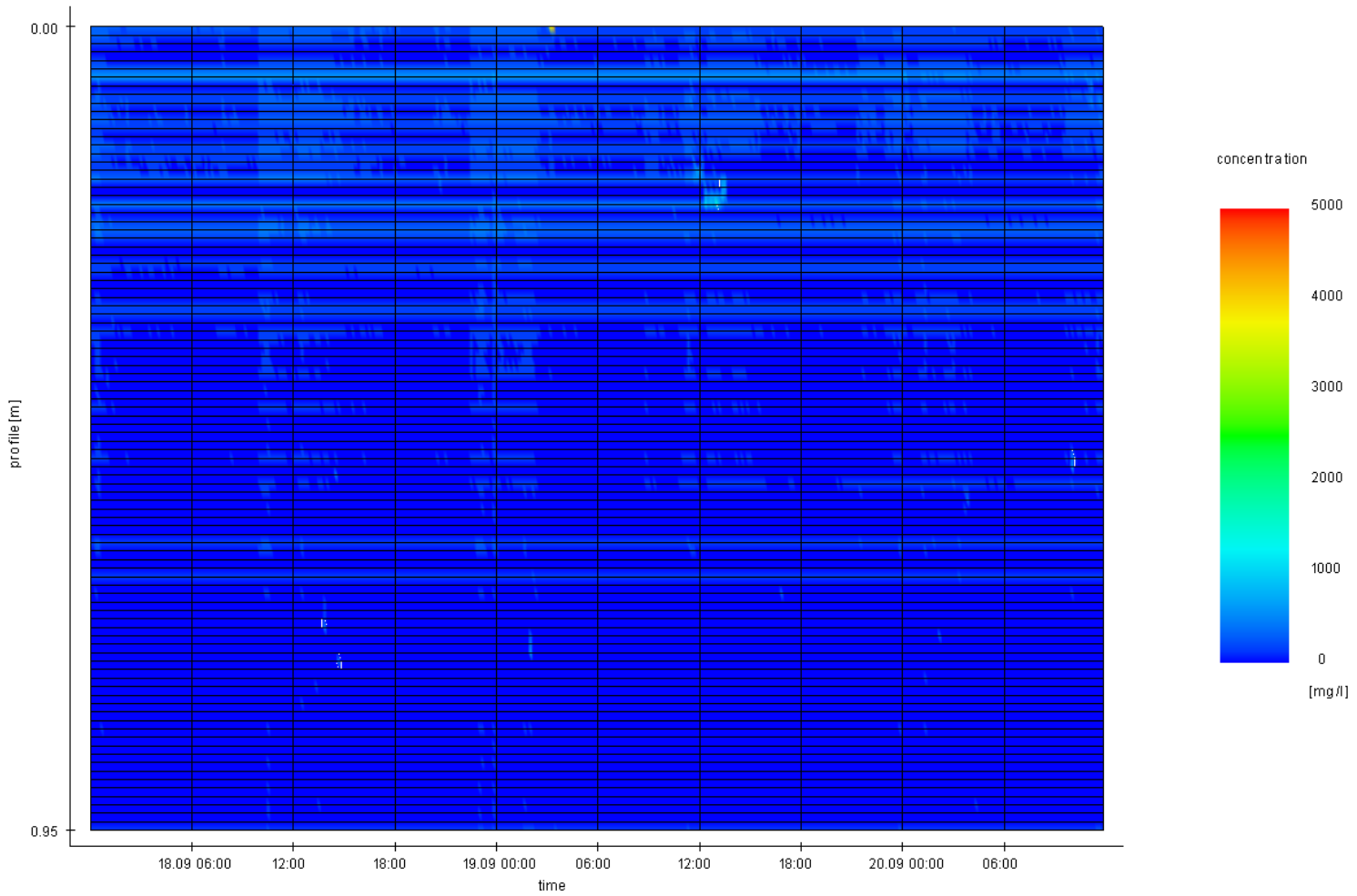
Location:	Date:
Deurganckdok CDW	11/09/2006 – 17/09/2006

Data processed by: IMDC

In association with: w.l | delft hydraulics, GEMS International

I/RA/11283/06.122/MSA

11283 Accretion Deurganckdok - Near bed continuous monitoring – Summer 2006



Time series suspended sediment concentration
ARGUS ASM-IV

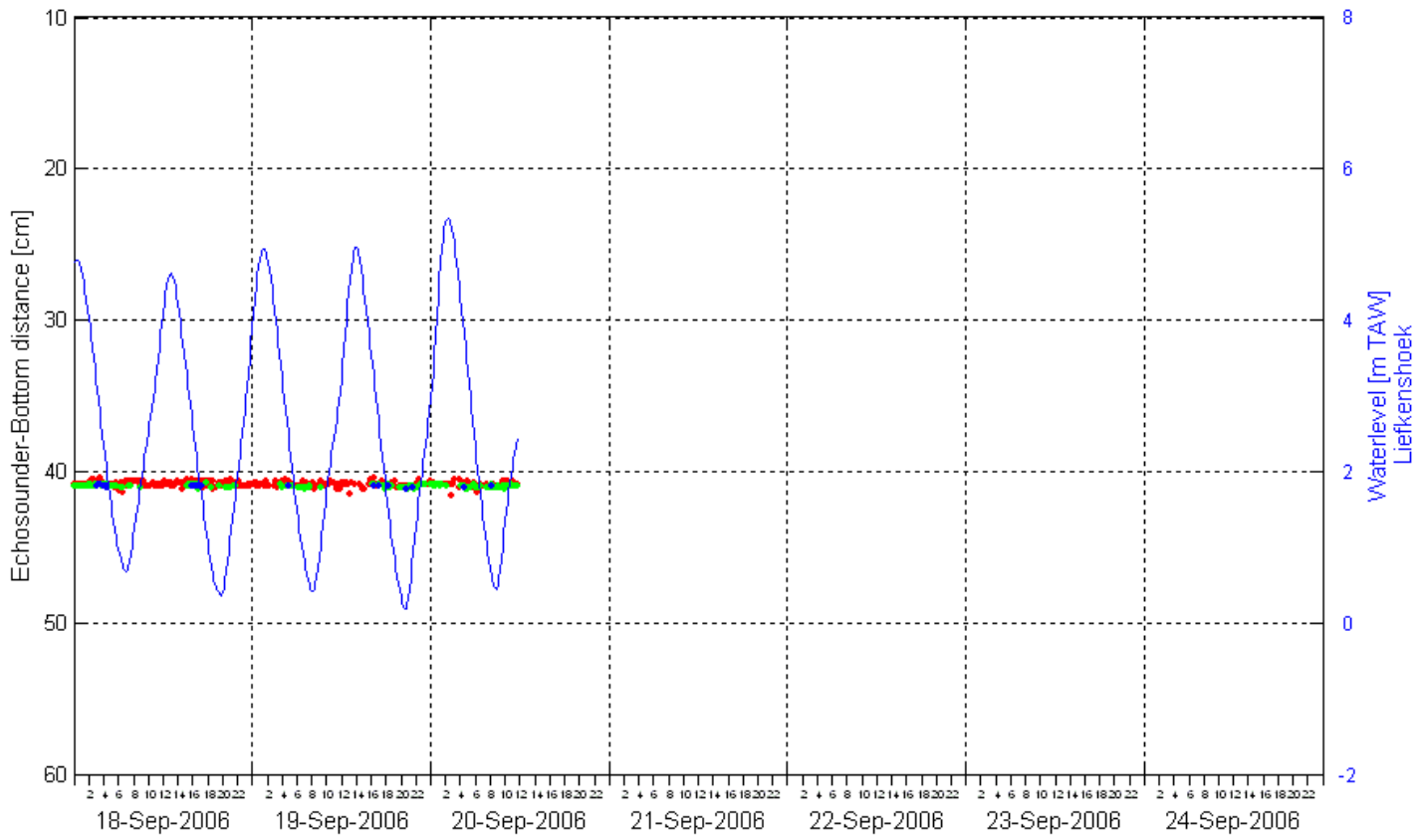
Location:	Date:
Deurganckdok CDW	18/09/2006 – 20/09/2006

Data processed by: IMDC

In association with: WL | delft hydraulics, GEMS International

I/RA/11283/06.122/MSA

11283 Accretion Deurganckdok - Near bed continuous monitoring – Summer 2006



SIGNAL 4
SIGNAL 3
SIGNAL 2
SIGNAL 1

Legend

Echosounder – bottom distance
Waterlevel [mTAW] at Liefkenshoek

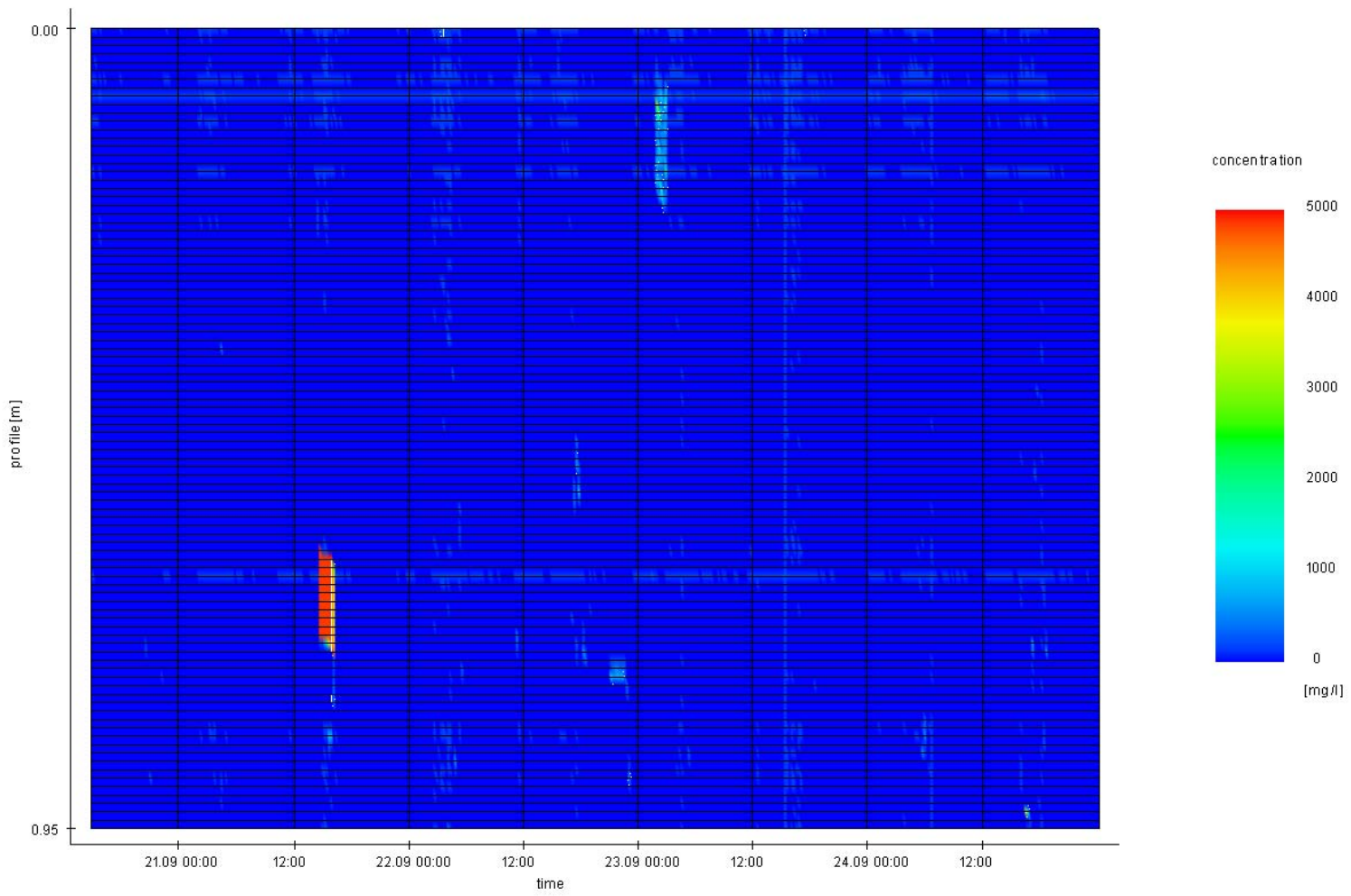
Location:	Date:
Deurganckdok CDW	18/09/2006 – 20/09/2006

Data processed by: IMDC

In association with: WL | delft hydraulics, GEMS International

I/RA/11283/06.122/MSA

11283 Accretion Deurganckdok - Near bed continuous monitoring – Summer 2006



Time series suspended sediment concentration
ARGUS ASM-IV

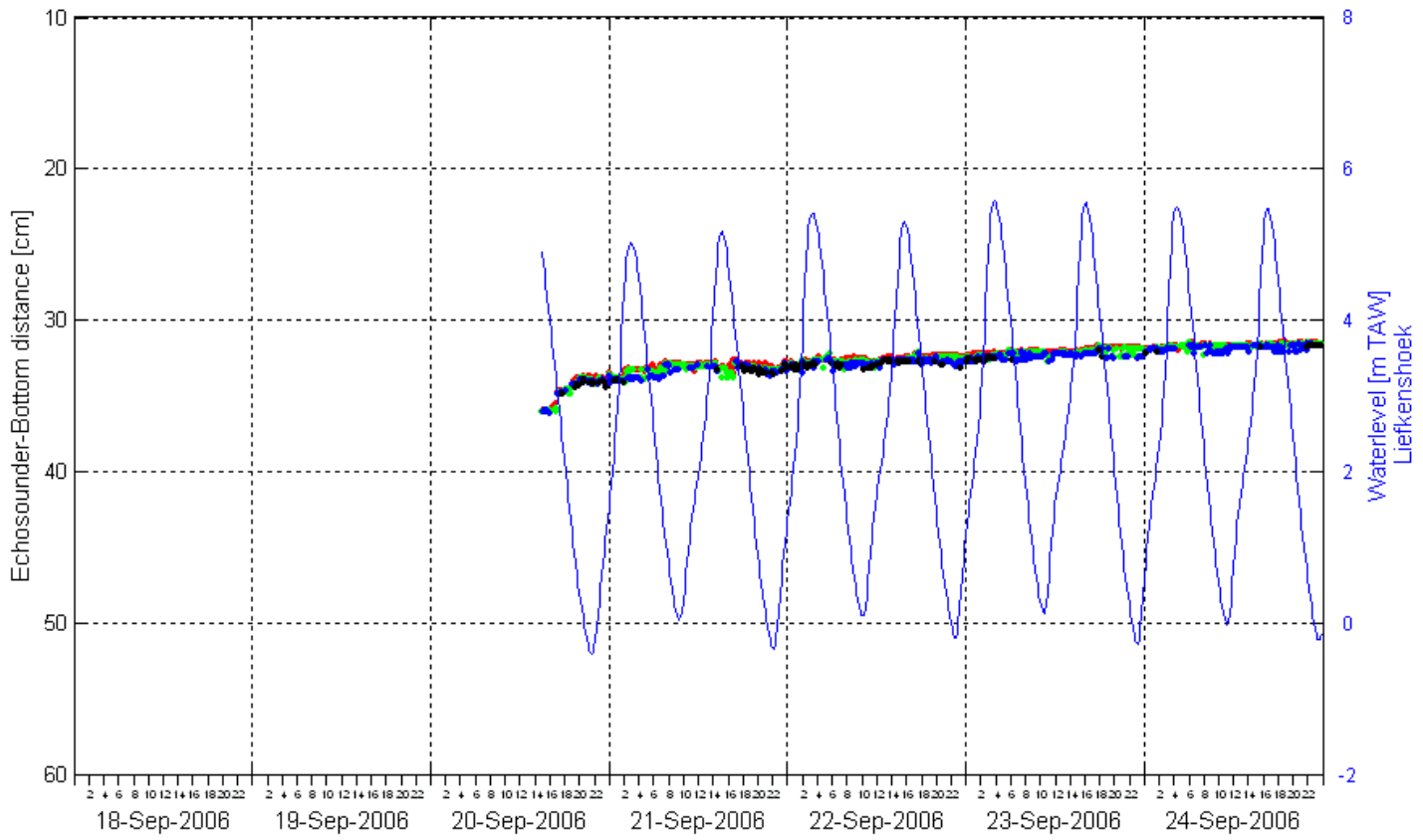
Location:	Date:
Deurganckdok CDW	20/09/2006 – 24/09/2006

Data processed by: IMDC

In association with: WL | delft hydraulics, GEMS International

I/RA/11283/06.122/MSA

11283 Accretion Deurganckdok - Near bed continuous monitoring – Summer 2006



SIGNAL 4
SIGNAL 3
SIGNAL 2
SIGNAL 1

Legend

Echosounder – bottom distance
Waterlevel [mTAW] at Liefkenshoek

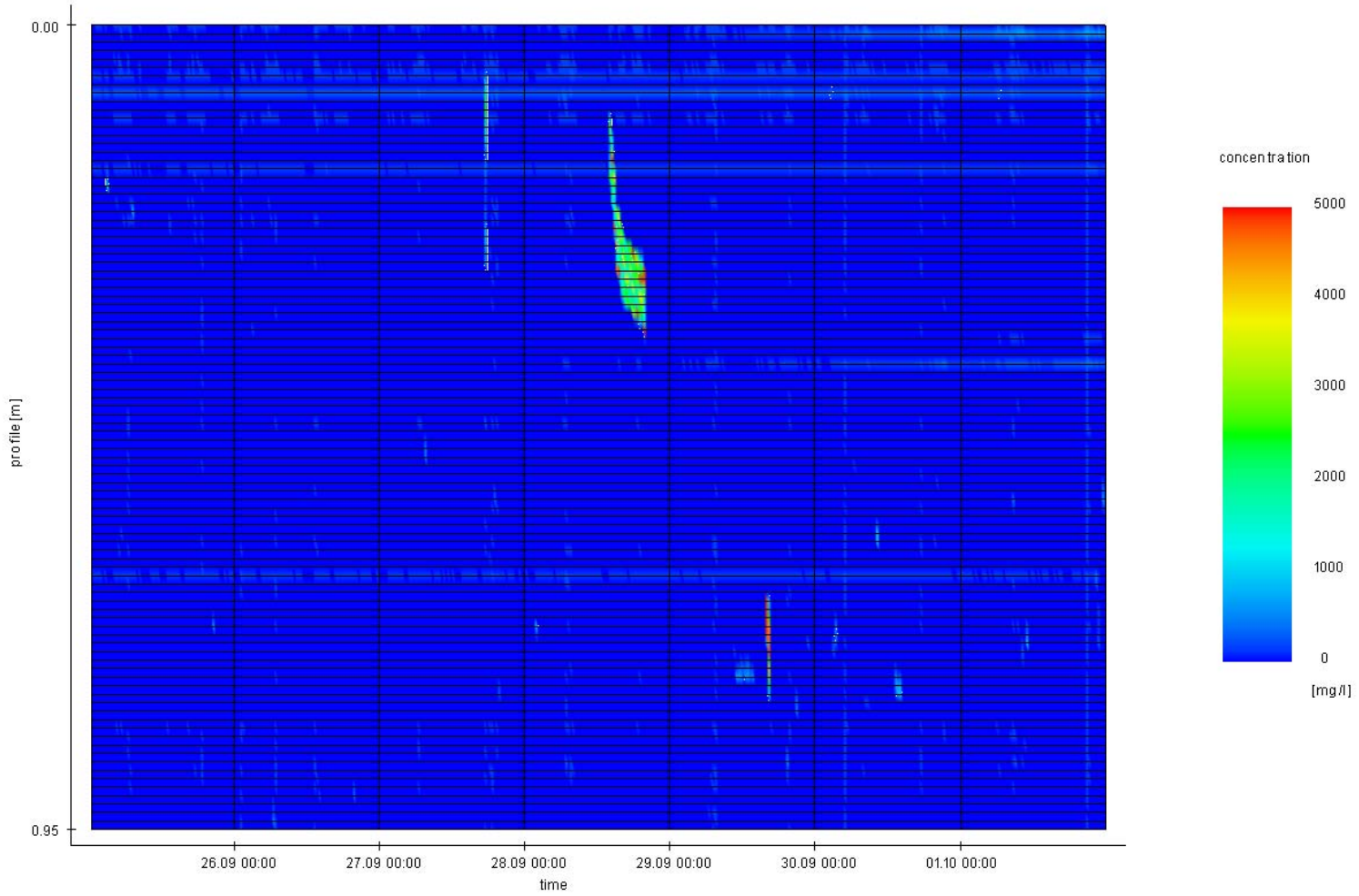
Location:	Date:
Deurganckdok CDW	20/09/2006 – 24/09/2006

Data processed by: IMDC

In association with: w.l | delft hydraulics, GEMS International

I/RA/11283/06.122/MSA

11283 Accretion Deurganckdok - Near bed continuous monitoring – Summer 2006



Time series suspended sediment concentration
ARGUS ASM-IV

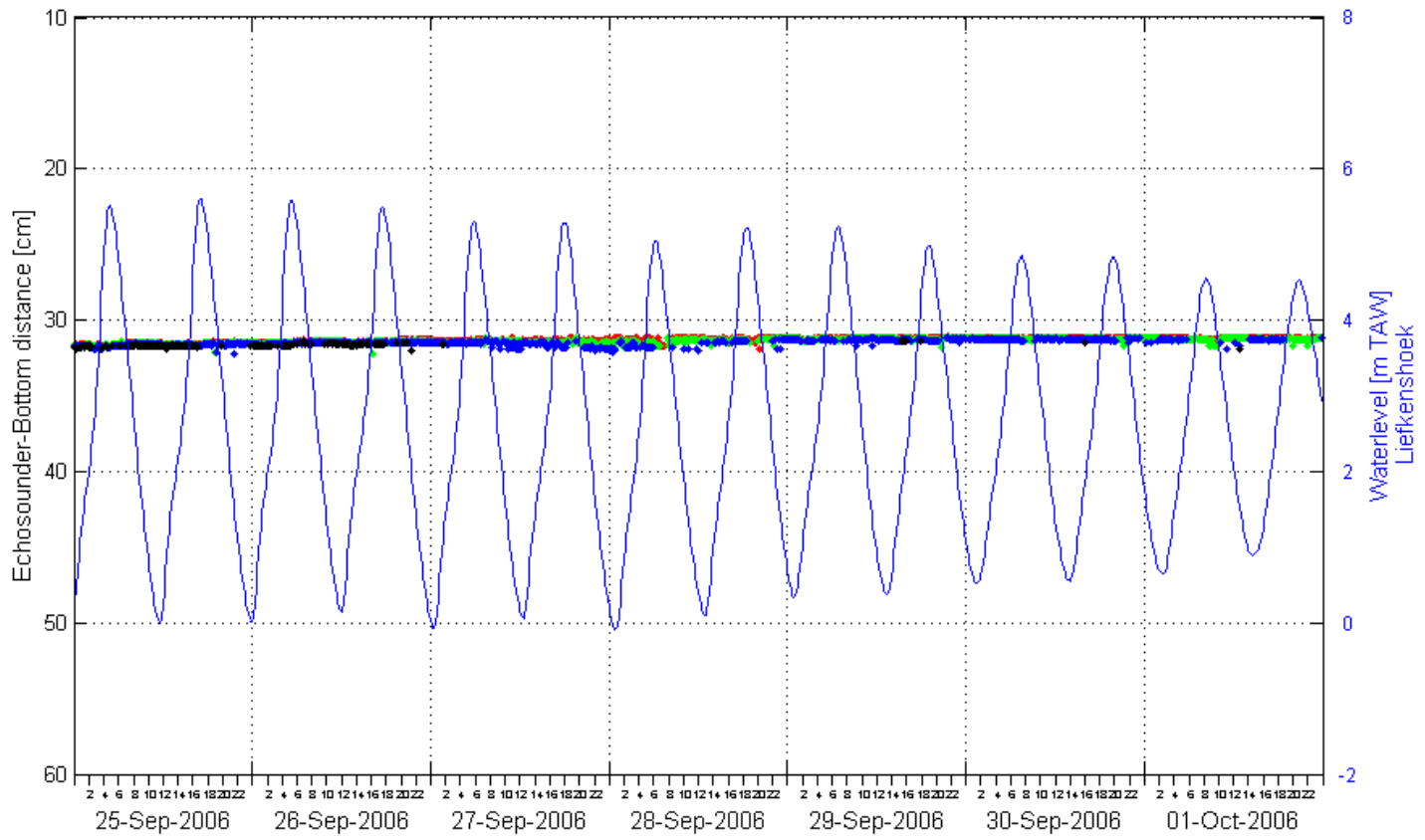
Location:	Date:
Deurganckdok CDW	25/09/2006 – 01/10/2006

Data processed by: IMDC

In association with: WL | delft hydraulics, GEMS International

I/RA/11283/06.122/MSA

11283 Accretion Deurganckdok - Near bed continuous monitoring – Summer 2006



SIGNAL 4
SIGNAL 3
SIGNAL 2
SIGNAL 1

Legend

Echosounder – bottom distance
Waterlevel [mTAW] at Liefkenshoek

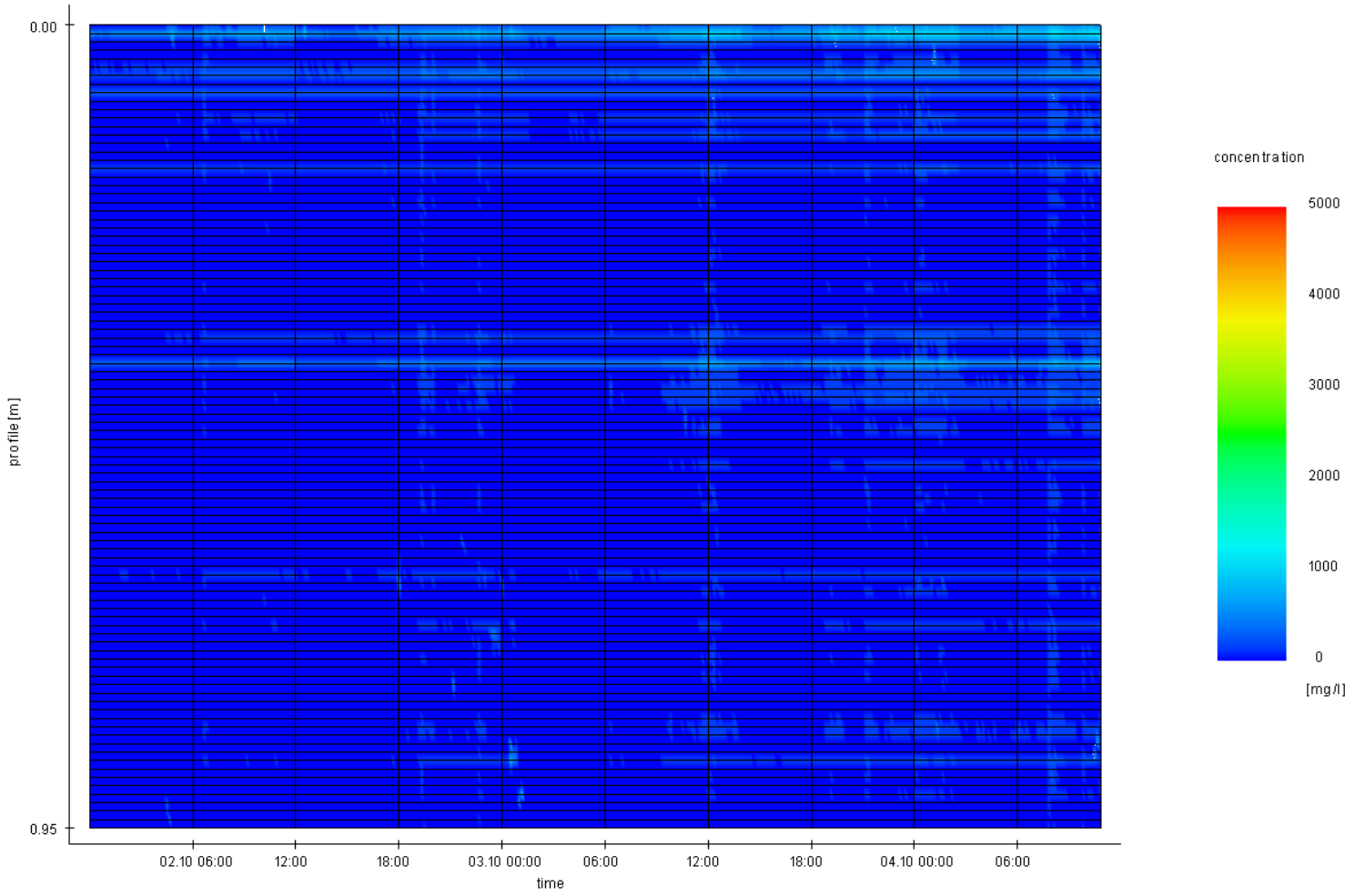
Location:	Date:
Deurganckdok CDW	25/09/2006 – 01/10/2006

Data processed by: IMDC

In association with: WL | delft hydraulics, GEMS International

I/RA/11283/06.122/MSA

11283 Accretion Deurganckdok - Near bed continuous monitoring – Summer 2006



Time series suspended sediment concentration
ARGUS ASM-IV

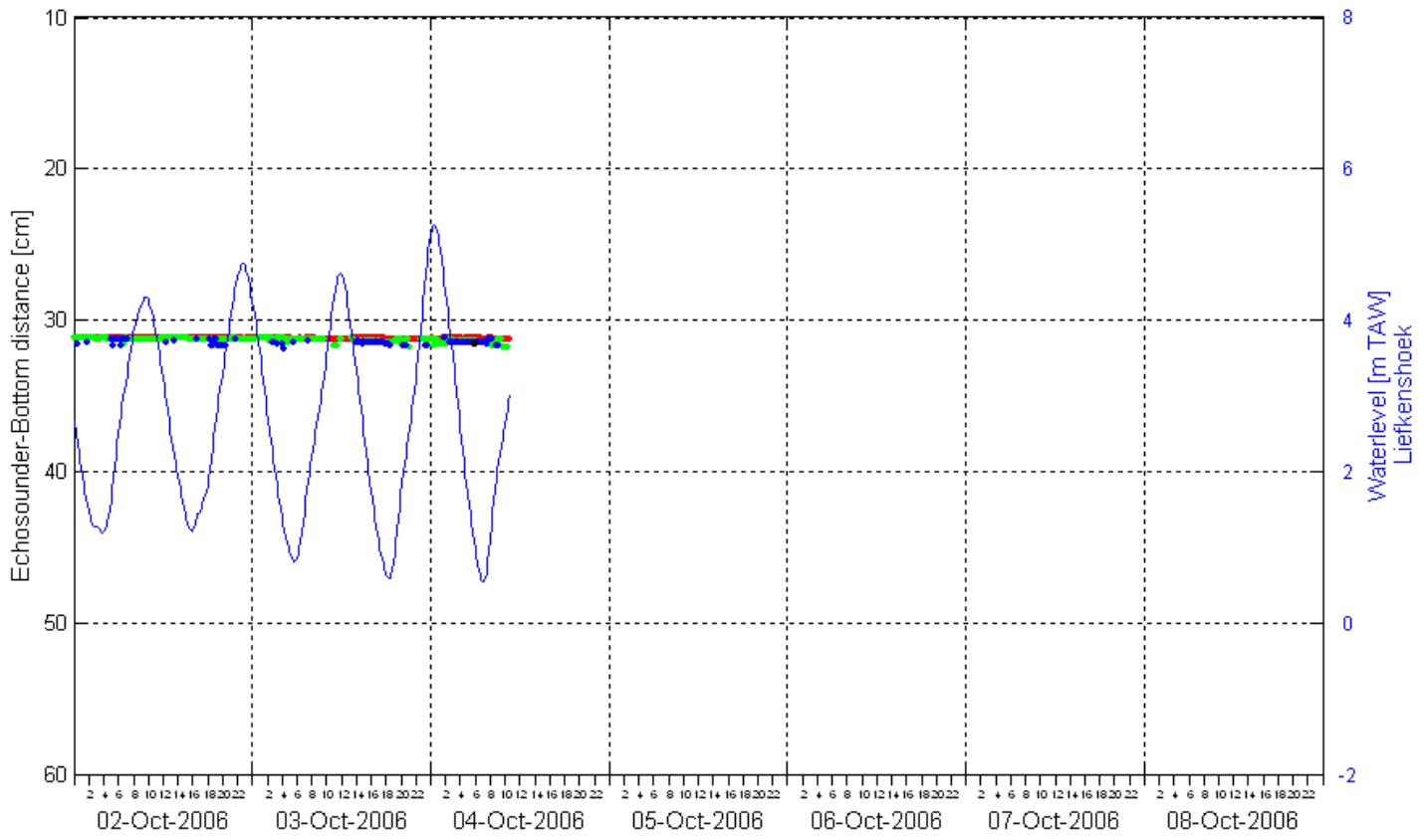
Location:	Date:
Deurganckdok CDW	02/10/2006 – 04/10/2006

Data processed by: IMDC

In association with: WL | delft hydraulics, GEMS International

I/RA/11283/06.122/MSA

11283 Accretion Deurganckdok - Near bed continuous monitoring – Summer 2006



SIGNAL 4
SIGNAL 3
SIGNAL 2
SIGNAL 1

Legend

Echosounder – bottom distance
Waterlevel [mTAW] at Liefkenshoek

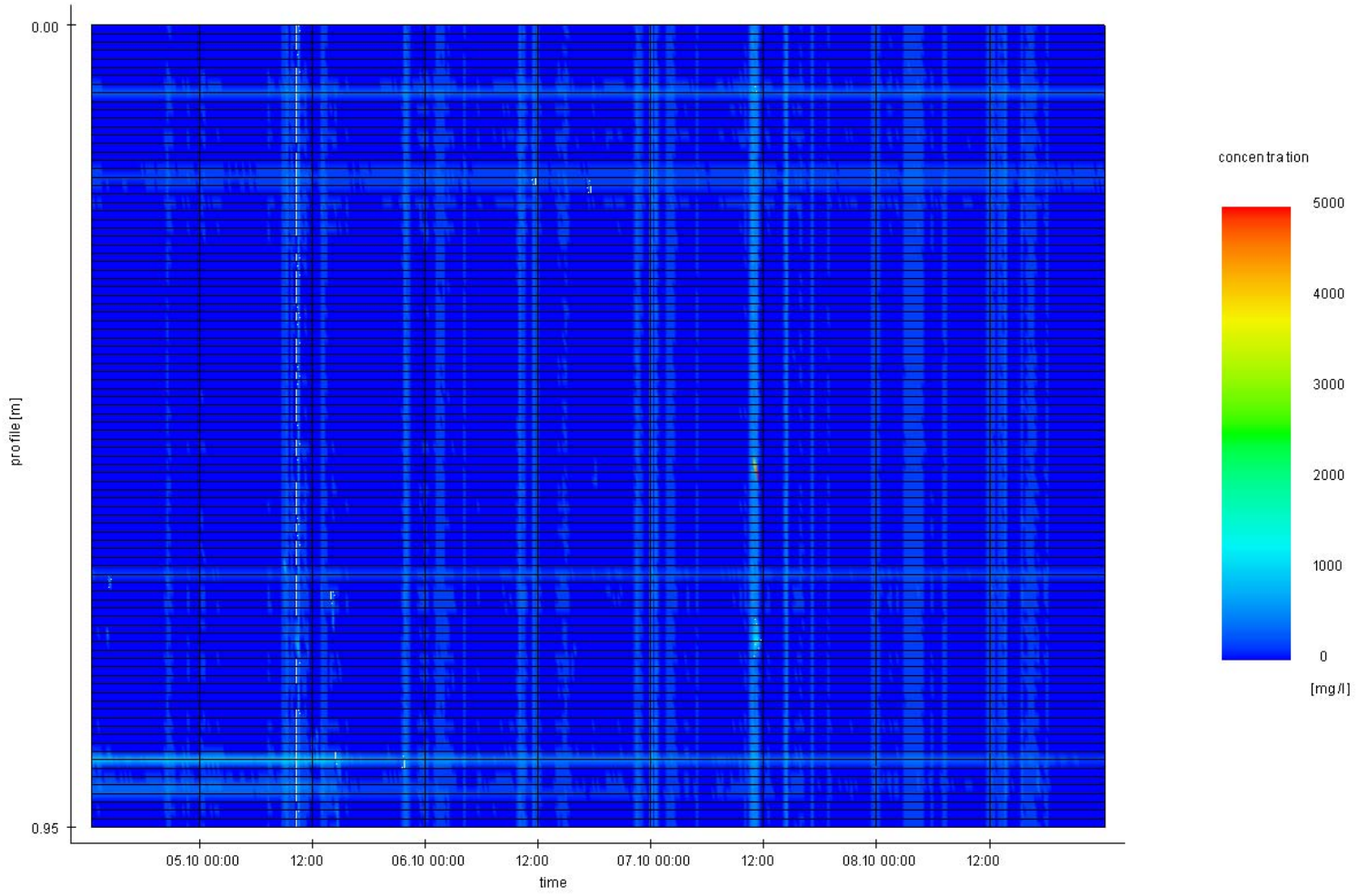
Location:	Date:
Deurganckdok CDW	02/10/2006 – 04/10/2006

Data processed by: IMDC

In association with: w.l | delft hydraulics, GEMS International

I/RA/11283/06.122/MSA

11283 Accretion Deurganckdok - Near bed continuous monitoring – Summer 2006



Time series suspended sediment concentration
ARGUS ASM-IV

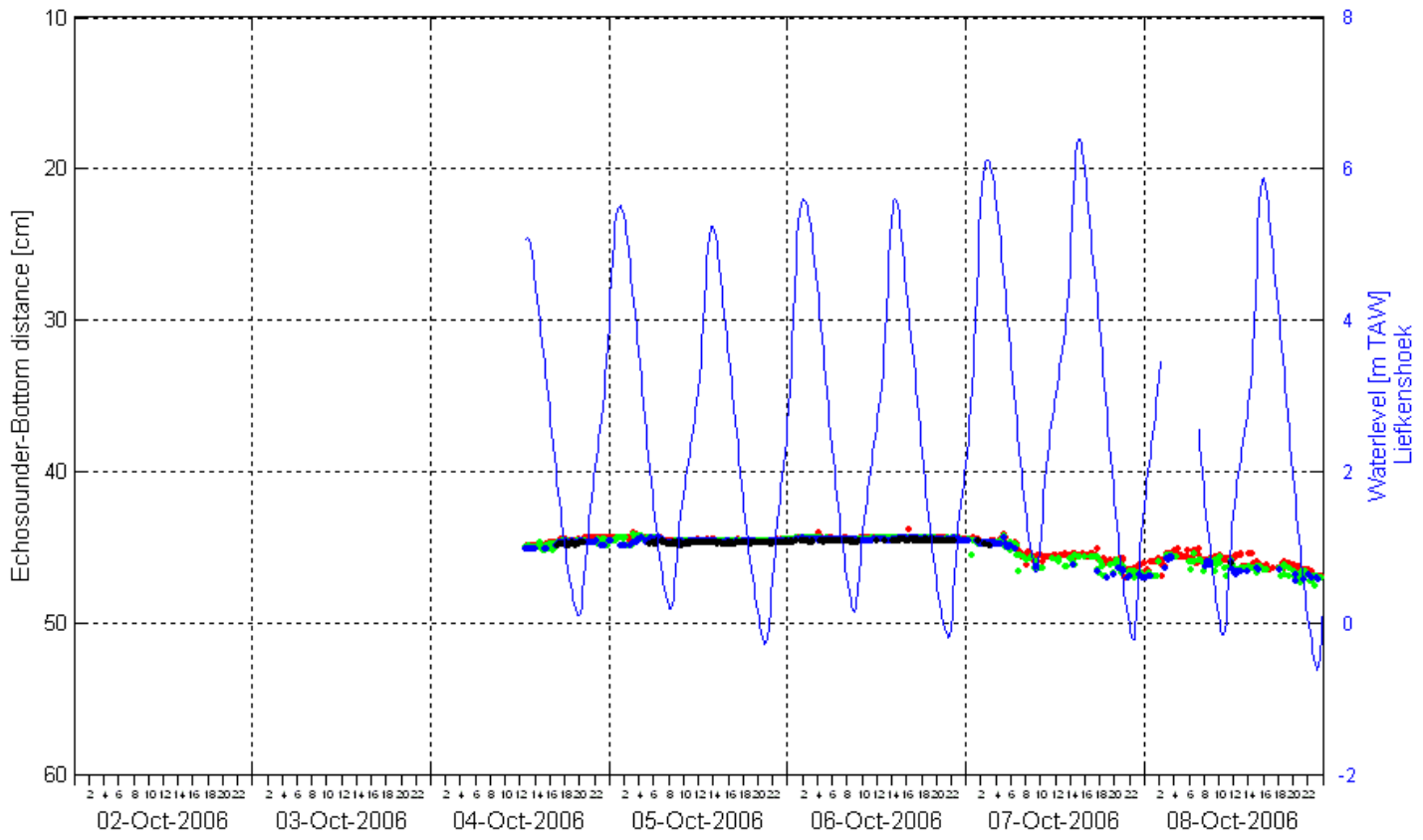
Location:	Date:
Deurganckdok CDW	04/10/2006 – 08/10/2006

Data processed by: IMDC

In association with: WL | delft hydraulics, GEMS International

I/RA/11283/06.122/MSA

11283 Accretion Deurganckdok - Near bed continuous monitoring – Summer 2006



SIGNAL 4
SIGNAL 3
SIGNAL 2
SIGNAL 1

Legend

Echosounder – bottom distance
Waterlevel [mTAW] at Liefkenshoek

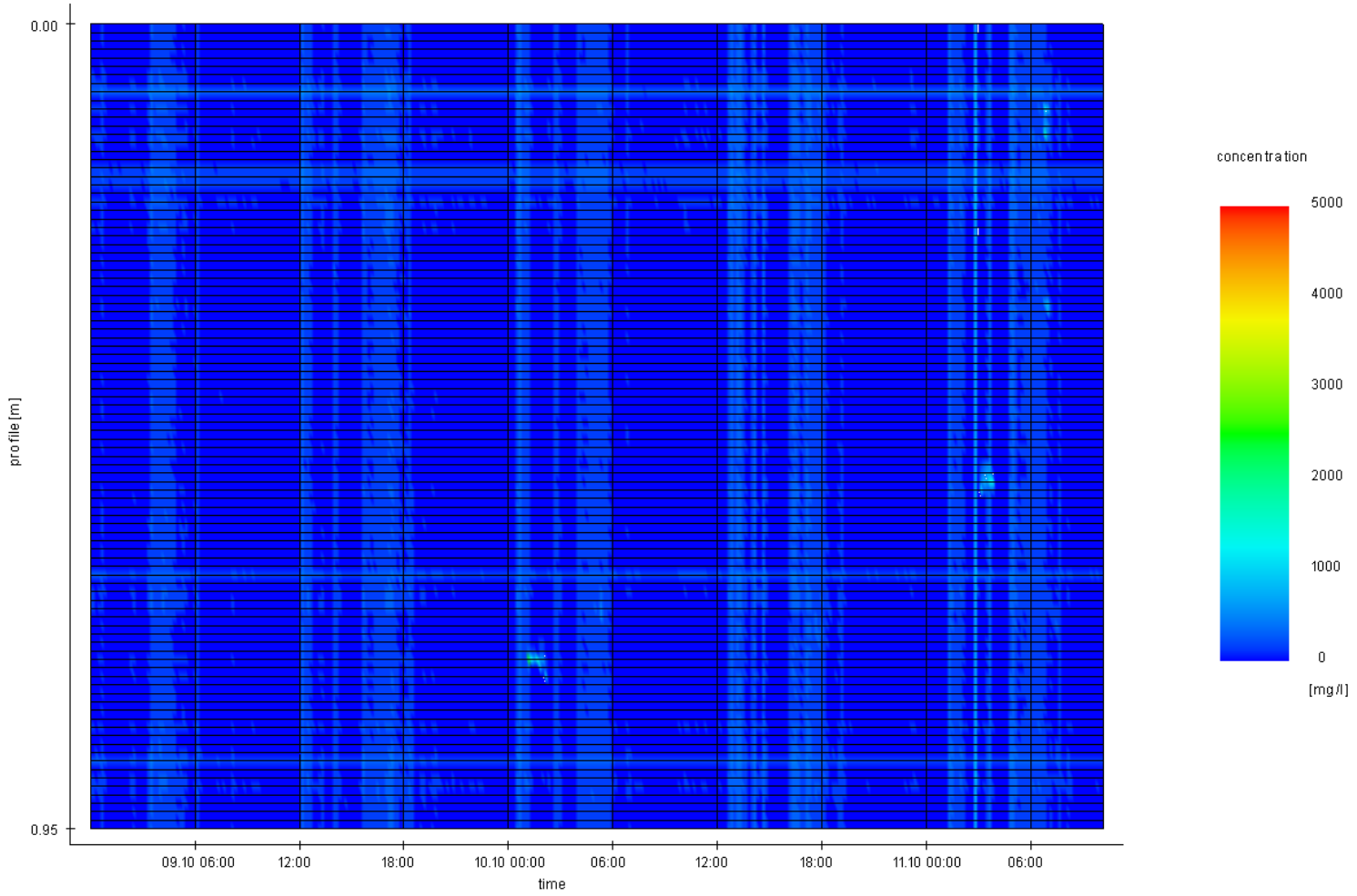
Location:	Date:
Deurganckdok CDW	04/10/2006 – 08/10/2006

Data processed by: IMDC

In association with: w.l | delft hydraulics, GEMS International

I/RA/11283/06.122/MSA

11283 Accretion Deurganckdok - Near bed continuous monitoring – Summer 2006



Time series suspended sediment concentration
ARGUS ASM-IV

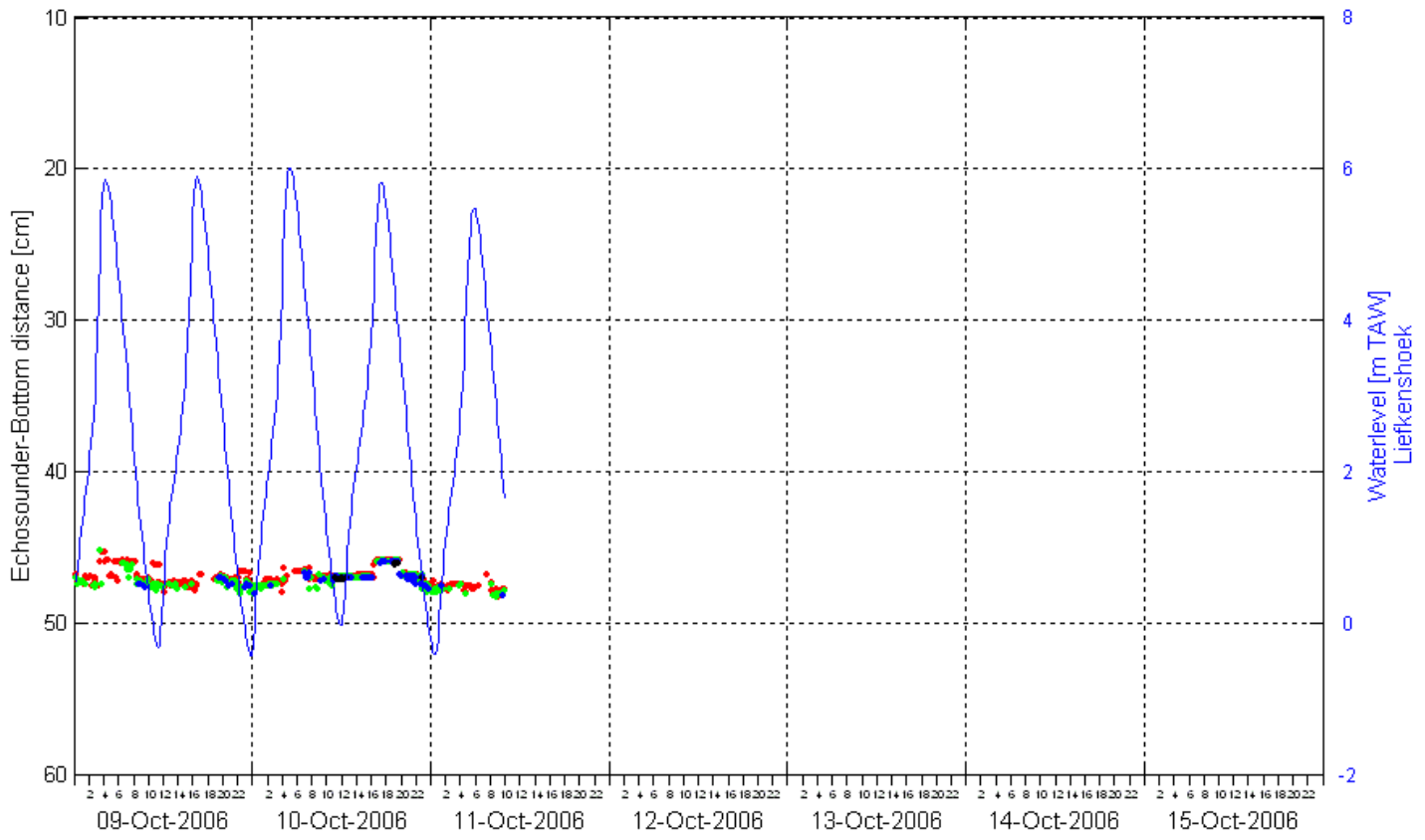
Location:	Date:
Deurganckdok CDW	09/10/2006 – 11/10/2006

Data processed by: IMDC

In association with: WL | delft hydraulics, GEMS International

I/RA/11283/06.122/MSA

11283 Accretion Deurganckdok - Near bed continuous monitoring – Summer 2006



SIGNAL 4
SIGNAL 3
SIGNAL 2
SIGNAL 1

Legend

Echosounder – bottom distance
Waterlevel [mTAW] at Liefkenshoek

Location:	Date:
Deurganckdok CDW	09/10/2006 – 11/10/2006

Data processed by: IMDC

In association with: w.l | delft hydraulics, GEMS International

I/RA/11283/06.122/MSA

ARGUS Mean SS Concentration [mg/l] per tidal phase in layers of 10 cm (*except first column 6 cm) [distances given in cm above bottom]

Date	*Tide no.*	*Phase*	*Tidal diff [m]*	*112-107**	*106-97*	*96-87*	*86-77*	*76-67*	*66-57*	*56-47*	*46-37*	*36-27*	*26-17*
20060718	1	flood	3.9	204.9	259.3	206.6	94.1	260.1	116	96.2	114.7	97.1	96.5
20060719	1	ebb	5.3	169.9	228.3	175.1	69.6	230.6	89	72.6	92.4	78.3	75.3
20060719	2	flood	5.3	169.4	223.4	167.3	67.1	222	83	67.2	85.5	67.4	65.4
20060719	2	ebb	4.8	182.8	233.5	180.5	75.7	235.9	93.6	72.8	96.1	83.7	76.2
20060719	3	flood	4.8	196	250.4	187	84.7	244.9	108.2	86.1	106.9	90.1	86.9
20060720	3	ebb	5.1	162.8	213.6	146.7	55.3	213.8	73.1	57.4	72	65.9	62.3
20060720	4	flood	4.9	176.9	233.9	164.7	68.1	232.2	88.4	68.9	82.5	72.2	67.6
20060720	4	ebb	4.5	173.4	234.7	162.8	65.3	241	83.4	63.2	77.6	70.6	63.3
20060720	5	flood	4.6	180.4	240	166.1	69.7	246.9	89.7	70.8	83.6	72.4	125.5
20060721	5	ebb	4.7	179.4	231	154.2	60.4	235.2	75	59.5	70	58.7	37.3
20060721	6	flood	4.7	190.3	238.8	156.8	59.9	238.2	80.1	61.4	78.8	63.1	37.3
20060721	6	ebb	4.7	205.1	238.8	149.8	56.9	228	73.5	53.1	68.7	59.1	35.4
20060722	7	flood	4.7	219.8	241	152.8	58.1	222.1	75	56.8	71.7	59.1	35.5
20060722	7	ebb	4.8	230.6	237.6	142.3	51.4	212.5	66.5	50	64.3	52.8	31
20060722	8	flood	4.8	254	255.4	156.6	59.3	219.6	75.5	55.8	87.2	58.4	42
20060722	8	ebb	4.8	286.4	267.4	158.7	63	222.3	77.6	56.6	73	59.3	54.5
20060723	9	flood	5	280.8	264.9	153.1	58.4	215.8	73	52.8	70.2	51.7	37.8
20060723	9	ebb	4.9	291.6	266	154.9	58.5	216	70.5	51.9	75.7	65.5	232.4
20060723	10	flood	4.9	297	266.6	154.6	57.5	214.3	68.8	49.3	71.8	55.7	57.1
20060723	10	ebb	5.1	336.4	287.2	180.9	76.7	248.5	85.2	59.9	88.8	72.2	313.5
20060724	11	flood	5.3	322.2	274.9	162.7	64.2	227.3	73.9	55.8	84.7	61	71

ARGUS Mean SS Concentration [mg/l] per tidal phase in layers of 10 cm (*except first column 6 cm) [distances given in cm above bottom]

Date	*Tide no.*	*Phase*	*Tidal diff [m]*	*112-107**	*106-97*	*96-87*	*86-77*	*76-67*	*66-57*	*56-47*	*46-37*	*36-27*	*26-17*
20060724	11	ebb	5.1	382	289.9	182.1	72.2	251.1	82.2	65.1	109.9	196.8	406.7
20060724	12	flood	5	397.5	299.4	215.8	80.7	251.2	88.7	71.1	111.3	107.1	156.8
20060724	12	ebb	5.4	535.6	323.9	266.1	107.3	319	107.6	144.8	205.9	464.1	695.6
20060725	13	flood	5.5	457.5	304.8	244.6	76.1	284.4	86	69	130.2	230.8	333.5
20060725	13	ebb	5.3	633.8	346.9	408.7	103	463.8	154	153.2	285.7	627.4	767.1
20060725	14	flood	5.1	654.6	360.3	524.4	105.5	399.3	131.4	128.9	216.5	468.5	563.1
20060725	14	ebb	5.5	1024.1	428.9	748.7	124	685.4	249.5	415.6	565.6	1042.1	1123.7
20060726	15	flood	5.7	910.8	408.1	813.3	105.4	481.3	211.1	292.4	460.6	629.8	571
20060726	15	ebb	4.8	1275.9	663.2	1239.6	244	927.6	626.7	578.5	1197.3	1045.7	679.4
20060727	16	flood	0.1	417.8	450.2	1215.4	182	492.7	296.8	208.2	260	188.8	117.6
20060727	16	ebb	5.2	423.5	468.6	1204	152.8	484.6	272.5	195.2	247.7	169.6	104.9
20060727	17	flood	5.2	439.9	506.5	1221.9	161	506	275.7	197.8	244.1	178.5	106.1
20060727	17	ebb	5.7	416.4	509.8	1213.2	128.7	469.8	231.7	157.4	207.7	143	82.4
20060728	18	flood	5.7	410.3	472.5	1164.3	113.3	447	213.1	143.1	193.7	138.7	78.8
20060728	18	ebb	5.3	416.3	487.5	1191.1	119.2	444.3	201.9	144.7	189.2	111.7	69.7
20060728	19	flood	5.2	421.8	484.6	1179.7	125.8	451.2	208.8	152.7	198.4	120.1	79.6
20060729	19	ebb	5.6	394	452.2	1172.8	99	415.7	176.3	125.9	167.1	91.3	53.2
20060729	20	flood	5.6	401.2	445.5	1173.6	107.4	415.8	183.1	130.5	169.7	102.3	63.1
20060729	20	ebb	5.2	393.9	449.4	1217	111.1	419.9	170.2	125.3	161.9	97.3	64.9
20060729	21	flood	5.2	400.3	432.9	1197.8	118.5	414.7	174.1	129	164.2	102	67.5
20060730	21	ebb	5.6	392.3	415.5	1218.1	109.9	393.2	152.2	105.5	138.3	82	51.9
Location: Sill DGD													
20060730	22	flood	5.5	381.7	401.6	1141.8	106.5	379.9	150.1	102.6	137.7	83.8	51.5

ARGUS Mean SS Concentration [mg/l] per tidal phase in layers of 10 cm (*except first column 6 cm) [distances given in cm above bottom]

Date	*Tide no.*	*Phase*	*Tidal diff [m]*	*112-107**	*106-97*	*96-87*	*86-77*	*76-67*	*66-57*	*56-47*	*46-37*	*36-27*	*26-17*
20060730	22	ebb	5	395	425.2	1095.7	140.4	424	175.4	116.9	154.9	97.2	67.6
20060730	23	flood	5.1	393.9	421.3	835.8	135	423	172.7	124.6	161.2	105.3	74.1
20060731	23	ebb	5.3	372.4	408.5	840.2	115.4	465.4	151.7	102.3	131.7	80.9	52.3
20060731	24	flood	5.3	360.5	393.6	825.1	110.4	471.8	151.6	99.6	129.2	79.3	50.7
20060731	24	ebb	5	400.7	455	942.9	169.1	692.3	257.6	135.3	159	114.7	78.4
20060731	25	flood	4.9	385.8	435.8	911.4	155.6	496.1	219	124.5	150.5	104.2	68.6
20060801	25	ebb	5.4	405.4	466.1	1037	187.4	475.6	293.6	139.6	152.5	132.3	76.1
20060801	26	flood	5.2	393.2	430.3	1018	161	440.8	202.7	139.9	150.3	129.5	65.7
20060801	26	ebb	4.4	471.3	530.9	1324.7	207.4	519.3	263.7	220.1	180.5	203.2	115.6
20060801	27	flood	4.6	426	467.2	1346.7	185.3	500.2	223.8	227.3	319.6	251.6	97.1
20060802	27	ebb	4.9	515.1	571.1	1646.6	220.7	563.7	259.7	306.3	186.2	241	141.1
20060802	28	flood	4.8	480.8	549.5	1721.9	255.5	586.8	287	300	206.9	217.1	114.9
Location: Buoy 84													
20060802	28	ebb	4.5	636.4	801.3	2072.6	337.6	750	392.8	378.9	257.5	277	157.2
20060802	29	flood	4.4	510.7	700.2	2145.8	417.4	877.5	447.4	369	271.3	237.4	142.2
20060803	29	ebb	4.6	582.8	960.1	2335.3	547	1124	574	432.6	318.9	282.8	186.2
20060803	30	flood	4.5	516.9	805	2397.1	704.2	1189.6	724	452.7	344.1	320.6	186.1
20060803	30	ebb	4.1	600.2	1003.6	2645.8	984.9	1709.3	950.7	536.3	382.2	415.8	257.7
20060803	31	flood	4.2	576.5	910.2	2728.3	1213.2	1991.4	1153	628.8	418.1	469.9	267.4
20060804	31	ebb	4.4	782.3	1063	2870.6	1334.2	2111.9	1174.6	695.6	425.3	541	346.2
20060804	32	flood	4.2	1017.5	1173	3011.1	1703.7	2585.6	1496.4	932.4	529.2	673.4	432.6
20060804	32	ebb	4	1250.2	1455.8	3390.4	2094.6	2738.6	1479.6	1047.7	530	771.3	566.5
20060804	33	flood	3.8	1293.9	1558.1	3250.9	2160.8	2878.9	1638.5	1311.5	631	934	640.8

ARGUS Mean SS Concentration [mg/l] per tidal phase in layers of 10 cm (*except first column 6 cm) [distances given in cm above bottom]

Date	*Tide no.*	*Phase*	*Tidal diff [m]*	*112-107**	*106-97*	*96-87*	*86-77*	*76-67*	*66-57*	*56-47*	*46-37*	*36-27*	*26-17*
20060805	33	ebb	4	1535.2	1705.5	3246.6	2270.1	2910	1808.8	1380.6	610.8	1013.5	859.3
20060805	34	flood	4	1588.4	1764	3359.8	2461.9	3062.7	1970	1764.4	749.1	1154.5	920
20060805	34	ebb	4.1	1940.6	1999.6	3707	2703.2	3271.8	2011.2	1723.8	788.3	1238.8	1290.8
20060805	35	flood	4	1923.3	1955	3688.8	2958.7	3352.1	1990.1	2148.2	946.5	1385.4	1188.1
20060806	35	ebb	4.2	2094.2	2010.2	3634	2961.6	3238.3	2114.1	2060.6	949.9	1436.8	1431.9
20060806	36	flood	4.3	2078.5	1803.8	3506.5	3004.5	3213.2	2044.2	2313	1060	1510.3	1207.4
20060806	36	ebb	4.4	2360.8	1932.9	3861.3	3094.6	3195.3	2088.3	2424.2	1024.9	1543.4	1344.3
20060807	37	flood	4.6	2629.2	1831.8	3889	3133.9	2875.5	2177.1	2755.7	1082.1	2767.3	1330.6
20060807	37	ebb	4.7	2779.2	2107.9	4245.3	3260.3	3033.1	2499.3	2827.7	1010.7	2164.4	1421.2
20060807	38	flood	4.8	2752.7	2090.8	4137.1	3295.7	2937.8	2525.7	2965.1	1065.3	1571.1	1035.6
20060807	38	ebb	4.8	2843.1	2339.6	4382.6	3494.5	3202.1	2962.6	3050	1136.4	1786.7	1110.3
20060808	39	flood	5	2849	2196.2	4358.2	3362.6	3020.5	2909.8	3337.8	1333.6	1594.8	943.7
20060808	39	ebb	5.1	3048.6	2200	4164	3270.1	3113	2921.4	3096.4	1206.2	1846.1	1137.6
20060808	40	flood	5.1	3292	2218.6	4231.4	3271.3	3222.5	2937	3500.5	1432	1761.9	1171.1
20060808	40	ebb	5.5	3617.7	2512.5	4166.6	3342.7	3027	3006.7	3187.7	1454.5	1952.9	1344.4
20060809	41	flood	5.7	3540.6	2243.5	4247.6	3115.2	2724.6	2703.5	3534.9	1403.3	1561.6	1108.1
20060809	41	ebb	4.6	3706.2	2434.8	3961.9	3222.7	2895.7	2637.6	3399.9	1378.1	1856	1358.2
20060809	42	flood	5	260.7	179.1	373.1	136	130.1	124.7	154.1	96.8	108.6	136.4
20060809	42	ebb	5.7	122.3	89.7	248.3	28	31.7	27.9	36.8	35.5	35	75.8
20060810	43	flood	5.9	160.5	122.6	283.4	49.5	56	50.7	63.8	61.8	60.8	106.6
20060810	43	ebb	5.7	137.8	102.4	264.3	34.2	39.7	35.2	47.3	44.9	44.7	85
20060810	44	flood	5.5	192.1	150.9	314.2	79	86.2	80.7	94.3	108.6	92.9	144.8
20060810	44	ebb	6	144.9	110.9	267.1	43.9	43.9	40.1	48.2	45.7	46	87.8

ARGUS Mean SS Concentration [mg/l] per tidal phase in layers of 10 cm (*except first column 6 cm) [distances given in cm above bottom]

Date	*Tide no.*	*Phase*	*Tidal diff [m]*	*112-107**	*106-97*	*96-87*	*86-77*	*76-67*	*66-57*	*56-47*	*46-37*	*36-27*	*26-17*
20060811	45	flood	6.2	166.5	126.7	290.3	52	58.4	53	64.2	64.2	63.5	106.2
20060811	45	ebb	5.8	158.5	119.5	284.3	44.9	50.5	46.5	58.1	57.4	56	114.5
20060811	46	flood	5.7	236.7	193.6	365.6	115.3	123.2	117.8	132.2	129.1	127.5	174.1
20060811	46	ebb	6.2	153.5	112.1	291.6	39.6	44.2	40.7	52.6	51.9	50.9	92.1
20060812	47	flood	6.3	200.3	158.2	346.7	79.8	85	79.1	96.8	93.3	90.6	137
20060812	47	ebb	5.9	171.8	130.1	331.5	53.8	60.7	56.2	73.3	68.9	66.1	110.7
20060812	48	flood	5.8	233.3	187.5	406.6	109.7	117.9	111.9	133.7	127.7	124.7	170.8
20060813	48	ebb	6.3	166.5	124.2	351.8	49.5	54.7	51.2	70.4	63.3	58.7	94.8
20060813	49	flood	6.4	175.2	130.1	366.2	52.9	56.6	51.8	74.2	69	60.5	97.8
20060813	49	ebb	6	180.4	134.4	376.9	54.5	61.2	55.2	82.3	74.4	66.5	100.6
20060813	50	flood	5.7	226.7	175	427.8	92.2	100.6	92.7	119.3	113.8	104.7	143.1
20060814	50	ebb	6.3	163.6	116.1	369.1	41.6	47.2	40.9	62.4	56.5	51	86.7
20060814	51	flood	6.2	188.1	135.5	388.1	55.9	63.2	56.4	78.8	73	66.1	99.9
20060814	51	ebb	5.4	189.4	133.3	384.1	52.5	59.6	55.3	78.4	75.9	65.7	99
20060814	52	flood	5.7	233.8	172.8	426.9	89.7	97.4	90.1	123.5	113.8	104.7	140.3
20060815	52	ebb	5.9	165.3	114.8	368.5	37.9	43.9	38.6	61.1	57.3	49.3	77.1
20060815	53	flood	5.7	190.5	135.6	392.3	53.4	60.6	53.5	77.1	76.4	65.8	94.3
20060815	53	ebb	5.5	183.9	125.2	387	42.4	48.8	42.7	68.3	67.9	54.6	81.3
20060815	54	flood	5.2	201.6	141	404.6	57.3	65	58.7	88.5	87.4	71.1	99.1
20060816	54	ebb	5.7	170.5	109.8	376.9	29.3	35.4	30.4	60.3	58.1	40.8	66.1
20060816	55	flood	5.4	187.6	121	398.2	37.6	44.5	38.3	69.2	64.3	51.5	78
20060816	55	ebb	5	202.7	134.9	416.2	44.5	51.4	44.6	84.2	71.3	61.1	89
20060816	56	flood	5	222.8	153.9	427.4	61.5	68.6	60.2	98.7	88	78.6	108.6

ARGUS Mean SS Concentration [mg/l] per tidal phase in layers of 10 cm (*except first column 6 cm) [distances given in cm above bottom]

Date	*Tide no.*	*Phase*	*Tidal diff [m]*	*112-107**	*106-97*	*96-87*	*86-77*	*76-67*	*66-57*	*56-47*	*46-37*	*36-27*	*26-17*
20060817	56	ebb	5.2	192.7	123.2	398.2	38	40.4	37.9	70.9	60.6	48.8	75
20060817	57	flood	4.9	234.3	158.8	435	62.4	70.9	61.6	103.4	95.4	81.2	110.9
20060817	57	ebb	4.5	211.2	135.8	415.6	43.4	50.6	43.3	84.7	80.1	61.6	92.9
20060817	58	flood	4.6	243.9	164.6	460.1	69.3	76.1	66.6	117.3	112.4	92.4	123
20060818	58	ebb	4.6	210.1	128.3	434	35.1	42.1	33.7	84.2	81.9	57.2	88.8
20060818	59	flood	4.3	242.1	153.2	465.5	55.2	68.3	52.6	112.3	114.4	84.1	115
20060818	59	ebb	4.1	227.5	134.6	457.1	37.2	44.6	34.2	94.1	106.5	62.8	97.3
20060818	60	flood	4.2	248.5	144	480.8	47.7	56.1	43.9	111.6	129.8	78.8	116.5
20060819	60	ebb	4.2	233.6	129.2	473.3	30.5	37.5	26.8	101.9	125.1	59.7	108.9
20060819	61	flood	3.9	280.9	165.2	533.4	66.1	78.4	61.3	155.1	189.3	104.3	156.2
20060819	61	ebb	4.1	245.2	117	498	27.6	37.3	24.6	134.6	172.1	67	130.4
20060820	62	flood	4.4	286	155.6	523.6	55	66.9	50.8	190.5	215.9	109.5	172
20060820	62	ebb	4.2	274	138.7	499.4	32.1	42.4	26.7	179.3	222.9	92.3	186.4
20060820	63	flood	4.3	314.8	172.9	528.2	59.8	71.7	49.1	228.7	276.9	130.1	224.8
20060820	63	ebb	4.3	308.2	144.4	512.1	34.1	48.1	24.4	196.8	265.7	111.2	256.4
20060821	64	flood	4.6	360.1	186.8	551.6	64.1	81.1	46.2	242.4	328.9	157.2	293.4
20060821	64	ebb	4.6	352.2	182.8	541.3	40.9	62.6	36.2	264.6	345.8	159.6	359.3
20060821	65	flood	4.5	407.9	225.5	574.1	62.4	88	44.6	335.2	434	207.7	404.8
20060821	65	ebb	4.8	418.3	240.8	582.3	51.1	76.2	33.9	362.6	445.3	266.6	549.8
20060822	66	flood	5.2	458.7	299.3	643.7	81.5	104.1	55.6	450.9	565.3	352.5	624.9
20060822	66	ebb	5	500.4	333.2	668.1	75.8	102.5	51.8	508.3	652.5	379	769.6
20060822	67	flood	4.8	580.8	414.9	733.3	111.8	134.9	71.1	567.3	661.9	441.5	870.2
20060822	67	ebb	5.3	622.7	414.6	733.1	87.5	121.7	60.5	547.6	659.3	499.5	955.8

ARGUS Mean SS Concentration [mg/l] per tidal phase in layers of 10 cm (*except first column 6 cm) [distances given in cm above bottom]

Date	*Tide no.*	*Phase*	*Tidal diff [m]*	*112-107**	*106-97*	*96-87*	*86-77*	*76-67*	*66-57*	*56-47*	*46-37*	*36-27*	*26-17*
20060823	68	flood	5.5	682.3	456.9	779.5	128.4	170.9	82.4	577.8	668.7	520.4	847.9
20060823	68	ebb	5.6	741.5	492.3	805.4	121.5	178.3	79.2	729.9	800.5	549.9	1030.8
20060823	69	flood	5	542.4	168.7	202.9	62.4	323.9	45.4	51.5	46.1	58.9	118.3
20060823	69	ebb	5.5	534.7	160	189.6	53.9	314	39.3	42	38.7	51.1	104.6
20060824	70	flood	5.6	536.6	184.6	215.8	72.5	439.8	55.6	60.2	55.8	67.1	127.5
20060824	70	ebb	5.2	473.1	186	212.8	70.3	245.1	52.7	55.9	52.9	64.8	124.3
20060824	71	flood	5.3	468.7	196	227.9	82.8	255.3	161.7	68.9	77.1	77	165.5
20060824	71	ebb	5.6	394.7	177	208.3	68	232.1	99.1	47	44.1	54	103.7
20060825	72	flood	5.7	358.8	194	240.6	79.5	410.8	68.6	65.3	59.8	70.8	115.2
20060825	72	ebb	5.3	296.3	184.6	228.4	69.6	201.6	53.2	56.1	52.7	61.5	103.2
20060825	73	flood	5.3	311.9	211.7	226.3	97.7	223.1	79.8	83.3	77.8	90.7	133
20060825	73	ebb	5.8	246.3	195.4	207	71.1	198.3	62.1	60.8	58.1	69.9	104.7
20060826	74	flood	5.7	244.1	214.5	229.6	95.3	218	76.8	80.2	74.6	84.7	126.6
20060826	74	ebb	5.4	203.7	234.4	224	89.5	207.1	71.9	77	69.2	82.8	121.1
20060826	75	flood	5.5	212	254.6	273.3	128.8	256	108.4	110.4	103.1	116.3	157
20060826	75	ebb	5.7	121	179.6	191.4	58.5	136.9	40.9	46.3	39.2	48.4	81.9
20060827	76	flood	5.7	146.1	210.5	226.7	80.8	158.9	61.5	65.3	60.5	70	104.2
20060827	76	ebb	5.3	137.1	207.3	215.9	77.4	154.3	60.1	62.5	58	64.8	99.8
20060827	77	flood	5.4	149.9	219.6	231.5	87	160.1	66.5	72.3	66.3	75.8	109.6
20060828	77	ebb	5.7	119.7	198.9	202.3	64.9	126	41.6	48.2	41.4	51.2	82.3
20060828	78	flood	5.6	128.6	211	210.5	70.1	134.9	50.8	55.9	50.9	57.5	90.9
20060828	78	ebb	5.1	155.4	245.4	242.9	99.3	158.1	72.9	75.7	76.6	82.2	116.4
20060828	79	flood	5.3	153.9	232.3	235.4	91.5	153.4	68.9	76.9	69.1	79.5	114.2

ARGUS Mean SS Concentration [mg/l] per tidal phase in layers of 10 cm (*except first column 6 cm) [distances given in cm above bottom]

Date	*Tide no.*	*Phase*	*Tidal diff [m]*	*112-107**	*106-97*	*96-87*	*86-77*	*76-67*	*66-57*	*56-47*	*46-37*	*36-27*	*26-17*
20060829	79	ebb	5.4	131.5	211.7	208.1	63.3	123.4	40.3	46.4	39.8	46.4	81.4
20060829	80	flood	5.3	169.4	278.9	251.6	102.6	163	80.5	113.6	80.9	88.4	125
20060829	80	ebb	5.2	140.1	227.3	217.8	61.8	123.9	40.8	71.1	56.6	47.9	83
20060829	81	flood	5.1	182	267.3	264.4	107.3	167.1	84	94.4	93.9	95	133.6
20060830	81	ebb	5.3	166.8	261.9	247.6	85.7	137.5	56.7	67.3	59.4	63.5	103.7
20060830	82	flood	5.2	211.4	285.6	279.5	118.1	178.3	90.7	103.1	94	97	143.7
20060830	82	ebb	4.8	208.8	282.1	270	95.9	149.3	65.7	79.9	67.4	70.7	117.5
Location: Sill DGD													
20060830	83	flood	4.7	268.8	341.4	332.7	164	215.6	135.4	153.7	139.7	142.4	193.9
20060831	83	ebb	5.2	225	295.3	262.2	84.1	137.7	60.1	71.3	60.9	63.9	111.8
20060831	84	flood	4.8	276	359.5	337.7	162.9	212	138	150.8	137.3	140.2	193.2
20060831	84	ebb	4.7	270.1	354.6	313.6	133.2	178.5	112.5	118	107.6	106.4	161.3
20060831	85	flood	4.6	318	390.9	380.3	202.9	247.1	178	193.6	175.1	175.9	236.3
20060901	85	ebb	4.6	259.5	333.6	316	136.2	171.2	108	119.4	92	99.2	164.7
20060901	86	flood	4.5	287.4	363.3	353.2	177.3	214.4	147.3	164.9	137.4	136	194.5
20060901	86	ebb	4.4	264.3	339.9	322	134.6	168.3	109.4	124.3	93.9	93.9	163.6
20060901	87	flood	4.2	323.5	396.1	379.8	205.5	242.7	180.8	194.6	188.8	165.6	232.6
20060902	87	ebb	4.1	258.8	293	307.5	126.5	161.8	103.9	120.7	88.6	82.5	154.5
20060902	88	flood	4.1	344.2	383.8	401.8	221.6	255.5	198.2	217	176.5	173.9	246.4
20060902	88	ebb	3.9	237.4	307.8	310.3	118	172.6	117	111.9	80.9	66.7	142.2
20060902	89	flood	3.6	383.3	448.2	455.3	268	310.3	257.9	275.8	230.4	233	318.8
20060903	89	ebb	3.4	262.6	354.8	349.1	144.7	182.3	135.7	135	98.3	98.7	174.8
20060903	90	flood	3.6	284.3	360.5	397.4	179.9	216.2	164	167.2	125.3	119.3	214

ARGUS Mean SS Concentration [mg/l] per tidal phase in layers of 10 cm (*except first column 6 cm) [distances given in cm above bottom]

Date	*Tide no.*	*Phase*	*Tidal diff [m]*	*112-107**	*106-97*	*96-87*	*86-77*	*76-67*	*66-57*	*56-47*	*46-37*	*36-27*	*26-17*
20060903	90	ebb	3.2	281.7	336.8	367	138.6	181.9	129.5	123.3	92.4	89.2	183.5
20060903	91	flood	3.4	290.5	359.8	414.9	173.6	209.5	164.3	169.7	119.6	120.8	365.4
20060904	91	ebb	3.9	204.3	287.3	329.3	109.2	150.7	494.4	89.7	68.1	50.1	128.5
20060904	92	flood	3.9	267	352.4	412.2	177.4	214.5	166.1	159.1	117.7	120.2	196.7
20060904	92	ebb	4.2	218.6	312.9	385.9	133.8	171.9	115.1	109.1	68.7	72.3	146.4
20060905	93	flood	4.4	262.3	349.3	437.1	181.3	231	153.6	158.1	114.2	104.8	191
20060905	93	ebb	4.7	307.2	378.4	476.1	198.8	225.9	156.4	149.4	102.7	96.1	189.7
20060905	94	flood	4.5	293.9	378.9	487.3	218.1	256.9	197.7	178.5	136.3	133.7	224.9
20060905	94	ebb	4.9	277.9	362.4	483.5	195.2	219.9	162.9	131.3	86.3	86	199.6
20060906	95	flood	5.2	300.3	380.8	499.9	232	259	202.1	181	132.2	134.2	211.1
20060906	95	ebb	5.2	325.3	400.6	496.7	222.3	240.8	185.3	145.5	96.1	116.8	202.7
20060906	96	flood	5.2	317.9	397.7	514.4	255.3	280.3	214.6	190.4	140.3	152	228.5
20060906	96	ebb	5.3	441.2	497.6	579.6	321.9	284.5	242	207	120.3	169.8	258.5
20060907	97	flood	5.9	360	427.4	531.1	296.5	303.5	245.9	222.7	166.7	186.5	256.6
20060907	97	ebb	5.5	407.5	467.5	553.1	315.6	289.6	249.7	223.6	135.1	170.4	276.3
20060908	98	flood	6.1	320	389.8	434.7	252.8	227.9	218.4	257.7	161.4	151.8	185.5
20060908	98	ebb	6.1	276.9	344.8	354.2	194.5	163.6	168.8	229.8	122.1	110.6	124.4
20060908	99	flood	5.6	356.7	425.1	436.5	277.3	248.8	256.1	315.8	202.3	193.1	211.6
20060908	99	ebb	6.3	287.2	356.2	360.4	205.1	175.4	180	238.7	137.6	124.3	145.9
20060909	100	flood	6.5	330	398.9	401.2	248.6	218.2	220.5	274.4	174	161.2	180.5
20060909	100	ebb	6	296	366.4	365.3	214.9	185.2	184.1	265.7	193	155.1	150
20060909	101	flood	5.9	358	431.7	425.2	276.3	249.3	247.8	271.9	175.3	185.2	209.2
20060909	101	ebb	6.4	287	357.7	352.1	200.7	172.8	171.7	197	110.1	114.3	141.3

ARGUS Mean SS Concentration [mg/l] per tidal phase in layers of 10 cm (*except first column 6 cm) [distances given in cm above bottom]

Date	*Tide no.*	*Phase*	*Tidal diff [m]*	*112-107**	*106-97*	*96-87*	*86-77*	*76-67*	*66-57*	*56-47*	*46-37*	*36-27*	*26-17*
20060910	102	flood	6.6	335.4	409.4	405.8	251.7	225	223.6	242.8	153	160.8	194.1
20060910	102	ebb	6.2	303	379.6	374.1	218.3	189.1	187.2	208.2	118.8	127.1	154.7
20060910	103	flood	6	371.7	453.6	446.1	292.4	265.1	261.5	279.6	187.4	200.3	226.8
20060911	103	ebb	6.5	285.6	364.3	348.8	200.1	173.5	169.7	193.4	108.5	115.4	142
20060911	104	flood	6.4	314.7	392.3	378.2	227.8	202.6	196.8	216.5	127.6	137.6	163.3
20060911	104	ebb	5.9	490.2	371.4	357.9	208.1	178.7	174.7	194.9	105.9	116.1	144.9
20060911	105	flood	6	370.8	448.2	436.8	284.7	257.3	253	266.4	179.6	191.5	219.3
20060912	105	ebb	6.3	288.1	363.7	350	196.1	167.1	164.3	182.3	95.8	109.6	137.4
20060912	106	flood	6.1	329.5	402.1	393.3	238	207.9	207	216.7	129.6	144.5	176.5
20060912	106	ebb	5.7	305.7	378.5	369	211.1	180.6	182	190.3	110.7	118.5	149.9
20060912	107	flood	5.7	360.2	427.8	425.9	266.3	240.6	243.3	239.9	155.6	167.5	196.9
20060913	107	ebb	6	287.1	346.4	347.2	181.9	159.3	160.1	160.3	85.6	92.9	124.7
20060913	108	flood	5.6	317.6	375.5	380.3	213.7	194.3	189.4	186.8	111.1	117.7	143.4
20060913	108	ebb	5.3	305.2	355.9	364.2	198.9	180.2	172.8	170.2	106.8	107	133.1
20060913	109	flood	5.3	337.7	390.7	401.5	237.1	222.8	218	203.7	133.2	138.5	164.5
20060914	109	ebb	5.5	268.2	319.7	328.5	161.7	144.9	143.6	133.8	68.7	72.9	95.9
20060914	110	flood	5.1	298.5	351.6	361.5	197.2	180.5	185.6	166.9	92.8	96.8	122.6
20060914	110	ebb	4.8	288.6	343.1	350.9	186.5	171.2	170	153.8	88.2	94	119.4
20060914	111	flood	5	300.3	355.9	367.2	206.3	190.4	191.9	166.6	98.9	102.8	133.2
20060915	111	ebb	4.9	258.1	306.8	321	159.5	141	140.1	126.9	62.5	64.1	91.5
20060915	112	flood	4.3	292.6	342.9	358.8	197.1	179	176.9	157.4	97.8	100.7	133.6
20060915	112	ebb	4.3	254.6	301.4	315.6	157.3	134.2	128.5	114	55.2	58.9	88.7
20060915	113	flood	4.4	284.1	333.4	350.2	199.2	178.5	160.5	145.5	78	87	117.8

ARGUS Mean SS Concentration [mg/l] per tidal phase in layers of 10 cm (*except first column 6 cm) [distances given in cm above bottom]

Date	*Tide no.*	*Phase*	*Tidal diff [m]*	*112-107**	*106-97*	*96-87*	*86-77*	*76-67*	*66-57*	*56-47*	*46-37*	*36-27*	*26-17*
20060916	113	ebb	4.1	243.7	292.2	311.2	130.5	120.5	116.7	109.6	48.9	54.5	82.3
20060916	114	flood	3.6	274.7	327.4	346.4	161.4	156.4	149.2	138.4	71.4	80.2	113.7
20060916	114	ebb	3.7	226.4	278.3	295.6	115	102.9	96.3	94.7	35.6	40.7	73.2
20060916	115	flood	4	255.1	304.9	324.1	147.6	128.9	119.2	112.9	50.7	59.6	89.3
20060917	115	ebb	3.7	225.2	271.3	277.9	95.8	93.6	81.3	86.2	26.8	32.7	62.7
20060917	116	flood	3.4	265.1	307.6	315.2	135.5	136.9	113	120.6	57.7	72.6	99.6
20060917	116	ebb	3.6	230.4	269.8	285.4	103	98.5	74.5	86.2	30.6	35.3	66.6
20060918	117	flood	4.2	258	295	299.5	131.2	127.1	99.1	107.5	45	53.7	90.1
20060918	117	ebb	4.1	213.7	265.8	233.6	107	95.8	68.8	82.1	25.1	32.6	63
20060918	118	flood	3.9	240.9	292.5	261	133.5	119.3	89.2	100.9	39.4	50	81.5
20060918	118	ebb	4.3	223.7	271	239.3	119.7	99.2	68.9	85.1	32.6	37.3	68
20060919	119	flood	4.6	254.2	300.6	264.4	154.4	130	94.8	108.6	46.1	58.8	93.1
20060919	119	ebb	4.5	245.3	267.8	228.9	129.7	99.7	70.1	87.7	33.7	39.4	71.4
20060919	120	flood	4.5	217	274.4	265.2	142.6	108.7	80.3	95.4	35	44.3	78.5
20060919	120	ebb	4.7	201.5	248.5	175.2	131.5	95.7	71.2	87.3	31.2	37.4	69.7
20060920	121	flood	5.1	219	265.7	196	150	110.2	91	100.7	41.8	51.3	82.9
20060920	121	ebb	4.9	200.6	242.1	179.4	133	94.9	78.4	90.7	33.5	44.5	75
20060921	122	flood	2.5	95.9	117.7	77.4	52.3	41.2	40	54.3	34.4	40.7	55.2
20060921	122	ebb	5	79.4	94.8	61.4	41.4	35.1	35.7	58.7	47.9	52.3	63.5
20060921	123	flood	5.1	95	107.1	73	50.2	41.8	44	247.8	447.1	59	71
20060921	123	ebb	5.5	74	93.9	55.5	37.1	30.7	31.7	207.4	479.6	56.2	56.2
20060922	124	flood	5.7	86.5	98.5	65.5	45.5	38.9	41	62	47.8	55.3	63.6
20060922	124	ebb	5.3	86.6	101.5	69.7	50.5	44.7	44.4	69	53	60.6	72.5

ARGUS Mean SS Concentration [mg/l] per tidal phase in layers of 10 cm (*except first column 6 cm) [distances given in cm above bottom]

Date	*Tide no.*	*Phase*	*Tidal diff [m]*	*112-107**	*106-97*	*96-87*	*86-77*	*76-67*	*66-57*	*56-47*	*46-37*	*36-27*	*26-17*
20060922	125	flood	5.2	96.3	112	76.1	54.2	46	49.2	72.2	59.2	63.7	74.1
20060922	125	ebb	5.4	75.2	90.9	58.6	39.4	32	49.7	58.3	57.9	80.1	57.3
20060923	126	flood	5.8	97.1	261.7	137.3	52.5	44.6	47.5	70.4	54.2	62.3	74.4
20060923	126	ebb	5.4	81.5	94.7	60.4	41	35	36.8	59.5	45.3	53	61.9
20060923	127	flood	5.4	114.8	126.9	92	68.5	60.6	62.1	86.7	70.6	75.3	90.1
20060923	127	ebb	5.9	84.9	95.6	62.8	43.5	36.6	38.6	60.5	47.2	51.1	62.1
20060924	128	flood	5.8	90.7	104.6	70	48.5	41	43.1	67.7	50.2	54.7	66.1
20060924	128	ebb	5.5	87.1	103.8	67.5	45.3	39.8	41.6	64.8	50	58.7	71.8
20060924	129	flood	5.5	96.2	112.6	76.6	52.7	45.9	47.5	73	55.3	59.1	96.6
20060924	129	ebb	5.7	72.6	93.8	58.9	37.9	33.2	35.2	56	50.2	45	56.1
20060925	130	flood	5.7	91.8	109.1	79.1	47.8	40.9	43	64.5	49.7	53.9	64.7
20060925	130	ebb	5.5	86.6	106.8	72.2	46.7	40.3	42.6	65.6	50.2	53.2	65
20060925	131	flood	5.6	100.8	121.1	80.8	57	49.9	50.9	74.7	60	61.9	74.2
20060925	131	ebb	5.6	80.9	102.2	65.2	44.3	36.9	38.4	60.8	54.4	54.1	60.4
20060926	132	flood	5.6	103.6	124.4	83.4	59.6	52.1	53	76.2	60.9	63.9	77.4
20060926	132	ebb	5.4	85.2	106.7	68.8	46.7	39.1	42.3	62.3	48.2	51.1	67.9
20060926	133	flood	5.4	104	127.9	85.2	62	54.1	57.8	77.4	62.5	64.8	77.9
20060927	133	ebb	5.5	77.6	102.1	62.3	40.3	35.3	37	56.3	41.6	44.9	61.1
20060927	134	flood	5.3	95.3	118.4	76.6	52.1	46.7	48.7	68.1	53.3	55.7	65.3
20060927	134	ebb	5.2	82.8	108.3	65.8	43.1	37.7	44	60	47.7	48.1	58
20060927	135	flood	5.2	107	171.4	94.9	67	55.7	108.6	113.1	140.4	62.9	74.7
20060928	135	ebb	5.4	91.8	113	67.4	45	40.6	42.3	62.1	48.3	52	61.5
20060928	136	flood	5.1	96.1	114.5	69.8	45.7	42.5	42.4	63.3	54.7	48.5	58.5

ARGUS Mean SS Concentration [mg/l] per tidal phase in layers of 10 cm (*except first column 6 cm) [distances given in cm above bottom]

Date	*Tide no.*	*Phase*	*Tidal diff [m]*	*112-107**	*106-97*	*96-87*	*86-77*	*76-67*	*66-57*	*56-47*	*46-37*	*36-27*	*26-17*
20060928	136	ebb	4.9	100.4	122.7	75.8	52.6	50.1	47.2	70.9	56.1	62.5	67.5
20060928	137	flood	5.1	109.2	196	479.8	1177.7	52.6	49.7	73	55.8	58.3	71.4
20060929	137	ebb	4.9	92.3	109.9	61.8	351.2	59.1	36.9	58.6	43	44.4	54.6
20060929	138	flood	4.9	116.6	129.5	78.8	61.4	97.6	50.5	72.3	57.1	57.8	67
20060929	138	ebb	4.9	102.5	113.8	64.5	43.1	46.9	38.1	59.7	53.1	93.7	56.3
20060929	139	flood	4.6	122.5	124.9	69.8	48.8	54	44	66.9	449.2	83.6	62.4
20060930	139	ebb	4.4	120.6	115.1	63.5	42.3	49.5	38.2	58.7	50	51.5	56.8
20060930	140	flood	4.3	145.8	127.3	71.9	51.7	63.2	47.4	67.9	64.4	52.3	67.5
20060930	140	ebb	4.3	144.5	115.3	60.5	43.2	54	35.1	62.8	41	70	53.1
20060930	141	flood	4.3	163.8	123.1	65	44	64.9	42.2	60.3	43.8	45.8	53.5
20061001	141	ebb	4.2	160.8	109.1	54.2	33.5	59.4	30.4	48.8	34.2	37.6	42.3
20061001	142	flood	3.9	190.5	119.6	59.7	38.6	68.5	36.3	54.4	40.6	41.6	47.3
20061001	142	ebb	3.7	191.2	116.2	60.1	35.7	74.9	37.5	53	54.8	41.5	51
20061001	143	flood	3.6	194.2	113.8	55	32.8	79.8	36.1	48.9	37	36.5	41.8
20061002	143	ebb	3.3	199.3	118.4	57.7	31.1	86.7	34.5	53.4	40	37.7	42.3
20061002	144	flood	3	222.7	125.8	54.5	30.9	97.2	31.1	45.8	37.9	37.8	44.5
20061002	144	ebb	3.1	222.5	118.1	51.2	26.9	102.4	28.4	41.1	37.4	35.4	36.7
20061002	145	flood	3.5	277	160.4	77.1	52	161.5	57.6	71.8	69.6	69.7	69
20061003	145	ebb	3.9	259.4	139.4	54	32.6	142.7	38.2	44.9	47.4	44.7	54.7
20061003	146	flood	3.8	322	170.2	69.7	48.9	186.6	60.4	61.1	58.4	64.1	60.3
20061003	146	ebb	4	332.2	182.2	74	52.6	204.8	61.8	61.7	63.6	66.7	66.6
20061004	147	flood	4.7	432.1	218.5	98.3	76.3	258.9	90.3	82.8	93.9	91	94.9
20061004	147	ebb	4.7	418.2	215.8	93	69.1	255.7	85.5	76.3	85.1	84.5	87.8

ARGUS Mean SS Concentration [mg/l] per tidal phase in layers of 10 cm (*except first column 6 cm) [distances given in cm above bottom]

Date	*Tide no.*	*Phase*	*Tidal diff [m]*	*112-107**	*106-97*	*96-87*	*86-77*	*76-67*	*66-57*	*56-47*	*46-37*	*36-27*	*26-17*
20061005	148	flood	6.6	150.7	148	119	65.5	108.3	71.9	89.1	91	87.6	234.7
20061005	148	ebb	5.3	51.7	112.7	113.6	51.9	49.1	56.1	83.4	79.4	74.8	256.5
20061005	149	flood	5.1	148.5	214.6	217.2	149.9	144.9	153.6	182	187.6	180.8	352
20061005	149	ebb	5.6	60.7	125.1	126.7	62.7	59.5	66.6	94.7	89.2	82.2	209.6
20061006	150	flood	5.9	143	209.9	211.8	143.5	138.3	146.8	175.3	170.6	161.4	262.3
20061006	150	ebb	5.5	78.4	141.8	141.9	77.3	73.7	79.2	108.9	100.5	92.9	190.3
20061006	151	flood	5.4	142.1	208.6	210.4	142.1	138.2	144.5	173.4	163.3	156.3	242.8
20061006	151	ebb	5.8	74.7	137.8	140.7	75.5	72	79.5	106.5	96.4	89	169.1
20061007	152	flood	6.3	178.9	242.4	246.9	180	175.4	182	210.3	197.1	194.1	264.6
20061007	152	ebb	5.4	77.5	140.1	142.6	78.4	76.2	80.5	110	98.5	92.5	158.7
20061007	153	flood	5.8	162.5	224.8	228.8	163.4	159.5	188.7	191.9	197.3	170.8	236.7
20061007	153	ebb	6.6	74.4	135.5	139.7	75.8	73.9	76.5	108.4	94.3	86.7	149
20061008	154	flood	6.3	138	197.7	201.7	134.5	132	134.1	163.7	152.1	142.4	201.6
20061008	154	ebb	6.3	97	159.5	163	99.6	95.2	98.2	129.9	116.2	108.3	165.2
20061008	155	flood	6	147.7	207.6	211.1	145.6	143.3	146	176	162.6	154.7	209.9
20061008	155	ebb	6.5	72.6	132.5	133.7	73.2	72.8	74.5	104.9	91.3	83.4	134.5
20061009	156	flood	6.4	109.6	169.3	170.6	107.7	105.1	108.4	137.5	125.1	117	158.8
20061009	156	ebb	6.1	87.8	146.9	150.9	88	86.5	87.7	117.6	104.4	98.2	139.7
20061009	157	flood	6.2	128.4	186	189.8	125.4	123.1	124	153.7	141	133	175.4
20061009	157	ebb	6.3	108.2	167.9	172.2	109.4	107.8	110.4	140.3	126.2	119	163
20061010	158	flood	6.4	138.6	199	201.2	137.1	133.8	135.9	164.6	178	151.9	185.4
20061010	158	ebb	6	88.8	146.3	151	87.5	85.6	88.1	116.1	103.5	96.7	136.2
20061010	159	flood	5.8	184.4	241.2	247.2	183.2	179.7	181.6	207.9	194.8	188.9	229.4

ARGUS Mean SS Concentration [mg/l] per tidal phase in layers of 10 cm (*except first column 6 cm) [distances given in cm above bottom]

Date	*Tide no.*	*Phase*	*Tidal diff [m]*	*112-107**	*106-97*	*96-87*	*86-77*	*76-67*	*66-57*	*56-47*	*46-37*	*36-27*	*26-17*
20061011	159	ebb	6.3	93.5	150.8	156.5	94	91.9	93.5	122.6	111.9	102.4	144
20061011	160	flood	5.8	180.5	237.3	245	179	177	205.6	204.1	190.7	185.8	225.4

ALTUS Echosounder bottom distance [cm]						
Date	**Tide no.**	**HW/LW**	**Signal 1**	**Signal 2**	**Signal 3**	**Signal 4**
20060718	1	HW	43.28	43.28	43.36	43.52
20060719	1	LW	43.77	43.93	-	-
20060719	2	HW	43.56	43.6	43.69	-
20060719	2	LW	47.34	47.63	-	-
20060719	3	HW	47.3	47.42	-	-
20060720	3	LW	48.53	-	-	-
20060720	4	HW	48.41	48.49	48.57	-
20060720	4	LW	48.33	48.41	-	-
20060720	5	HW	48.41	48.53	-	-
20060721	5	LW	48.45	48.78	-	-
20060721	6	HW	48.61	48.78	-	-
20060721	6	LW	47.83	47.87	-	-
20060722	7	HW	47.46	48	-	-
20060722	7	LW	47.5	47.5	47.67	-
20060722	8	HW	47.42	47.71	-	-
20060722	8	LW	46.64	46.97	47.01	-
20060723	9	HW	46.72	47.42	-	-
20060723	9	LW	46.23	46.27	46.27	46.35
20060723	10	HW	46.56	46.56	-	-
20060723	10	LW	46.23	46.72	46.77	-
20060724	11	HW	46.31	46.48	46.56	-
20060724	11	LW	46.6	46.93	-	-
20060724	12	HW	45.86	46.23	46.35	-
20060724	12	LW	45.45	45.53	45.53	-
20060725	13	HW	45.33	45.41	-	-
20060725	13	LW	46.03	46.07	46.4	-
20060725	14	HW	45.74	45.94	-	-
20060725	14	LW	45.98	46.4	-	-
20060726	15	HW	45.98	46.07	-	-
20060726	15	LW	46.11	46.27	46.44	-
20060726	16	HW	41.59	41.67	-	-
20060727	16	LW	41.35	-	-	-
20060727	17	HW	40.98	-	-	-
20060727	17	LW	40.73	-	-	-
20060727	18	HW	41.18	41.26	-	-
20060728	18	LW	41.47	-	-	-
20060728	19	HW	41.35	-	-	-
20060728	19	LW	40.94	-	-	-
20060728	20	HW	40.69	40.98	-	-

ALTUS Echosounder bottom distance [cm]						
Date	**Tide no.**	**HW/LW**	**Signal 1**	**Signal 2**	**Signal 3**	**Signal 4**
Location: Sill DGD						
20060729	20	LW	40.12	-	-	-
20060729	21	HW	40.24	40.57	-	-
20060729	21	LW	39.87	-	-	-
20060729	22	HW	39.87	39.95	-	-
20060730	22	LW	39.74	-	-	-
20060730	23	HW	40.16	-	-	-
20060730	23	LW	39.34	-	-	-
20060730	24	HW	39.29	-	-	-
20060731	24	LW	39.34	39.79	-	-
20060731	25	HW	39.87	40.52	-	-
20060731	25	LW	39.87	-	-	-
20060731	26	HW	39.87	39.95	-	-
20060801	26	LW	39.74	-	-	-
20060801	27	HW	39.87	40.52	-	-
20060801	27	LW	39.87	-	-	-
20060801	28	HW	39.87	39.95	-	-
20060802	28	LW	39.74	-	-	-
20060802	29	HW	40.16	-	-	-
Location: Buoy 84						
20060802	29	LW	39.34	-	-	-
20060802	30	HW	39.29	-	-	-
20060803	30	LW	39.34	39.79	-	-
20060803	31	HW	39.87	39.95	-	-
20060803	31	LW	39.74	-	-	-
20060803	32	HW	39.87	39.95	-	-
20060804	32	LW	39.74	-	-	-
20060804	33	HW	40.57	40.69	-	-
20060804	33	LW	40.12	-	-	-
20060805	34	HW	40.24	40.57	-	-
20060805	34	LW	39.87	-	-	-
20060805	35	HW	39.87	39.95	-	-
20060805	35	LW	39.74	-	-	-
20060806	36	HW	40.16	-	-	-
20060806	36	LW	39.34	-	-	-
20060806	37	HW	39.29	-	-	-
20060806	37	LW	39.34	39.79	-	-
20060807	38	HW	41.18	41.26	-	-
20060807	38	LW	41.47	-	-	-
20060807	39	HW	41.35	-	-	-

ALTUS Echosounder bottom distance [cm]						
Date	**Tide no.**	**HW/LW**	**Signal 1**	**Signal 2**	**Signal 3**	**Signal 4**
20060807	39	LW	40.94	-	-	-
20060808	40	HW	40.69	40.98	-	-
20060808	40	LW	40.12	-	-	-
20060808	41	HW	40.24	40.57	-	-
20060808	41	LW	39.87	-	-	-
20060809	42	HW	39.87	39.95	-	-
20060809	42	LW	42.66	-	-	-
20060810	43	HW	41.51	-	-	-
20060810	43	LW	41.55	-	-	-
20060810	44	HW	41.59	41.67	-	-
20060810	44	LW	41.35	-	-	-
20060811	45	HW	40.98	-	-	-
20060811	45	LW	40.73	-	-	-
20060811	46	HW	41.18	41.26	-	-
20060811	46	LW	41.47	-	-	-
20060812	47	HW	41.35	-	-	-
20060812	47	LW	40.94	-	-	-
20060812	48	HW	40.69	40.98	-	-
20060813	48	LW	40.12	-	-	-
20060813	49	HW	40.24	40.57	-	-
20060813	49	LW	39.87	-	-	-
20060813	50	HW	39.87	39.95	-	-
20060814	50	LW	39.74	-	-	-
20060814	51	HW	40.16	-	-	-
20060814	51	LW	39.34	-	-	-
20060814	52	HW	39.29	-	-	-
20060815	52	LW	39.34	39.79	-	-
20060815	53	HW	39.99	-	-	-
20060815	53	LW	41.88	41.96	-	-
20060815	54	HW	41.59	41.92	42.09	-
20060816	54	LW	40.65	40.9	-	-
20060816	55	HW	41.43	41.88	-	-
20060816	55	LW	41.26	41.35	41.67	41.84
20060816	56	HW	41.31	41.63	42.04	-
20060817	56	LW	41.31	41.35	-	-
20060817	57	HW	41.55	41.84	42.21	-
20060817	57	LW	41.22	42.09	-	-
20060817	58	HW	41.18	41.63	-	-
20060818	58	LW	41.22	41.67	41.76	-
20060818	59	HW	40.98	41.67	41.72	-

ALTUS Echosounder bottom distance [cm]						
Date	**Tide no.**	**HW/LW**	**Signal 1**	**Signal 2**	**Signal 3**	**Signal 4**
20060818	59	LW	41.63	41.67	41.76	-
20060818	60	HW	41.22	41.47	-	-
20060819	60	LW	40.77	41.67	42.04	-
20060819	61	HW	40.77	41.59	41.63	41.72
20060819	61	LW	40.81	41.18	41.59	41.67
20060820	62	HW	41.02	41.47	41.55	41.63
20060820	62	LW	40.85	41.02	41.88	-
20060820	63	HW	41.06	41.72	41.8	-
20060820	63	LW	40.85	41.06	-	-
20060821	64	HW	40.9	41.55	41.63	-
20060821	64	LW	40.81	40.94	-	-
20060821	65	HW	41.55	41.8	41.88	-
20060821	65	LW	40.81	41.84	41.96	-
20060822	66	HW	40.69	-	-	-
20060822	66	LW	40.73	40.85	42.04	-
20060822	67	HW	40.65	40.73	-	-
20060822	67	LW	40.81	41.55	41.92	-
20060823	68	HW	41.47	41.8	41.84	-
20060823	68	LW	41.1	41.14	41.22	-
Location: Sill DGD						
20060908	69	HW	42	42.17	42.29	-
20060908	69	LW	41.88	-	-	-
20060908	70	HW	41.8	-	-	-
20060908	70	LW	41.67	41.67	-	-
20060909	71	HW	41.51	-	-	-
20060909	71	LW	41.1	41.18	41.31	-
20060909	72	HW	41.31	41.43	-	-
20060909	72	LW	41.26	-	-	-
20060910	73	HW	40.9	41.02	-	-
20060910	73	LW	41.18	41.22	41.35	-
20060910	74	HW	40.9	41.26	-	-
20060911	74	LW	41.35	-	-	-
20060911	75	HW	40.98	41.14	-	-
20060911	75	LW	40.98	40.98	41.18	-
20060911	76	HW	40.73	40.98	41.14	-
20060912	76	LW	40.9	41.02	-	-
20060912	77	HW	40.81	40.94	-	-
20060912	77	LW	40.9	-	-	-
20060912	78	HW	40.77	40.94	41.06	-
20060913	78	LW	40.77	41.1	-	-

ALTUS Echosounder bottom distance [cm]						
Date	**Tide no.**	**HW/LW**	**Signal 1**	**Signal 2**	**Signal 3**	**Signal 4**
20060913	79	HW	40.65	-	-	-
20060913	79	LW	41.1	-	-	-
20060913	80	HW	41.14	41.31	-	-
20060914	80	LW	40.98	41.06	-	-
20060914	81	HW	41.02	-	-	-
20060914	81	LW	40.73	41.14	41.22	-
20060914	82	HW	40.73	-	-	-
20060915	82	LW	41.02	-	-	-
20060915	83	HW	40.65	-	-	-
20060915	83	LW	40.9	-	-	-
20060915	84	HW	40.98	-	-	-
20060916	84	LW	40.85	-	-	-
20060916	85	HW	40.9	-	-	-
20060916	85	LW	40.9	41.02	-	-
20060916	86	HW	40.85	-	-	-
20060917	86	LW	41.47	-	-	-
20060917	87	HW	40.9	41.02	-	-
20060917	87	LW	40.94	40.94	41.02	-
20060918	88	HW	40.85	40.94	-	-
20060918	88	LW	41.39	-	-	-
20060918	89	HW	40.73	-	-	-
20060918	89	LW	40.94	-	-	-
20060919	90	HW	40.9	-	-	-
20060919	90	LW	40.9	40.94	-	-
20060919	91	HW	40.81	-	-	-
20060919	91	LW	40.98	41.06	-	-
20060920	92	HW	40.9	40.98	-	-
20060920	92	LW	40.94	41.06	-	-
20060921	93	HW	33.22	33.3	33.83	-
20060921	93	LW	32.89	32.97	33.26	-
20060921	94	HW	33.14	33.38	-	-
20060921	94	LW	33.09	33.26	33.42	33.55
20060922	95	HW	32.73	32.85	32.93	32.97
20060922	95	LW	32.56	32.69	32.85	-
20060922	96	HW	32.52	32.6	32.69	-
20060922	96	LW	32.36	32.48	-	-
20060923	97	HW	32.19	32.31	32.44	32.52
20060923	97	LW	32.07	32.15	32.48	-
20060923	98	HW	32.03	32.23	-	-
20060923	98	LW	31.78	32.36	-	-

ALTUS Echosounder bottom distance [cm]						
Date	**Tide no.**	**HW/LW**	**Signal 1**	**Signal 2**	**Signal 3**	**Signal 4**
20060924	99	HW	31.7	31.82	-	-
20060924	99	LW	31.7	31.74	32.15	-
20060924	100	HW	31.62	31.66	31.74	-
20060924	100	LW	31.58	31.58	31.66	31.74
20060925	101	HW	31.7	31.7	31.78	-
20060925	101	LW	31.54	31.54	31.62	31.7
20060925	102	HW	31.58	31.66	31.7	-
20060925	102	LW	31.49	31.49	31.58	-
20060926	103	HW	31.49	31.49	31.58	31.66
20060926	103	LW	31.37	31.41	31.49	-
20060926	104	HW	31.41	31.41	31.49	31.58
20060927	104	LW	31.29	31.49	31.49	-
20060927	105	HW	31.41	31.45	31.49	-
20060927	105	LW	31.37	31.41	31.86	-
20060927	106	HW	31.37	31.45	31.82	-
20060928	106	LW	31.33	31.45	32.07	-
20060928	107	HW	31.29	31.33	31.78	-
20060928	107	LW	31.17	31.29	31.49	-
20060928	108	HW	31.25	31.29	31.33	-
20060929	108	LW	31.17	31.21	31.25	-
20060929	109	HW	31.21	31.29	-	-
20060929	109	LW	31.17	31.21	31.25	-
20060929	110	HW	31.29	31.29	-	-
20060930	110	LW	31.17	31.17	31.25	-
20060930	111	HW	31.17	31.25	31.29	-
20060930	111	LW	31.17	31.21	31.25	-
20060930	112	HW	31.17	31.25	31.41	-
20061001	112	LW	31.17	31.21	31.25	-
20061001	113	HW	31.25	31.25	-	-
20061001	113	LW	31.17	31.25	31.25	-
20061001	114	HW	31.17	31.25	-	-
20061002	114	LW	31.13	31.21	-	-
20061002	115	HW	31.17	31.25	-	-
20061002	115	LW	31.17	31.25	-	-
20061002	116	HW	31.21	31.25	-	-
20061003	116	LW	31.25	31.25	31.54	-
20061003	117	HW	31.25	-	-	-
20061003	117	LW	31.25	31.54	31.62	-
20061004	118	HW	31.25	31.29	-	-
20061004	118	LW	31.25	31.45	31.54	-

ALTUS Echosounder bottom distance [cm]						
Date	**Tide no.**	**HW/LW**	**Signal 1**	**Signal 2**	**Signal 3**	**Signal 4**
20061004	119	HW	44.96	45.04	45.12	-
20061004	119	LW	44.63	44.63	44.8	-
20061005	120	HW	44.34	44.34	-	-
20061005	120	LW	44.67	44.67	44.71	44.8
20061005	121	HW	44.59	44.59	44.59	44.71
20061005	121	LW	44.63	44.63	44.67	44.75
20061006	122	HW	44.42	44.42	44.51	44.59
20061006	122	LW	44.47	44.51	44.51	44.67
20061006	123	HW	44.38	44.42	44.47	44.55
20061006	123	LW	44.47	44.47	44.55	44.63
20061007	124	HW	44.67	44.67	44.75	44.8
20061007	124	LW	45.94	46.44	-	-
20061007	125	HW	45.53	45.62	-	-
20061007	125	LW	46.56	46.6	-	-
20061008	126	HW	45.45	45.53	45.62	-
20061008	126	LW	45.82	-	-	-
20061008	127	HW	46.31	46.35	-	-
20061008	127	LW	46.89	46.93	47.01	-
20061009	128	HW	45.94	-	-	-
20061009	128	LW	46.15	47.91	-	-
20061009	129	HW	47.87	-	-	-
20061009	129	LW	46.77	47.96	-	-
20061010	130	HW	-	-	-	-
20061010	130	LW	46.93	46.97	47.05	47.13
20061010	131	HW	45.9	45.94	46.07	-
20061011	131	LW	47.75	48	-	-
20061011	132	HW	47.83	-	-	-

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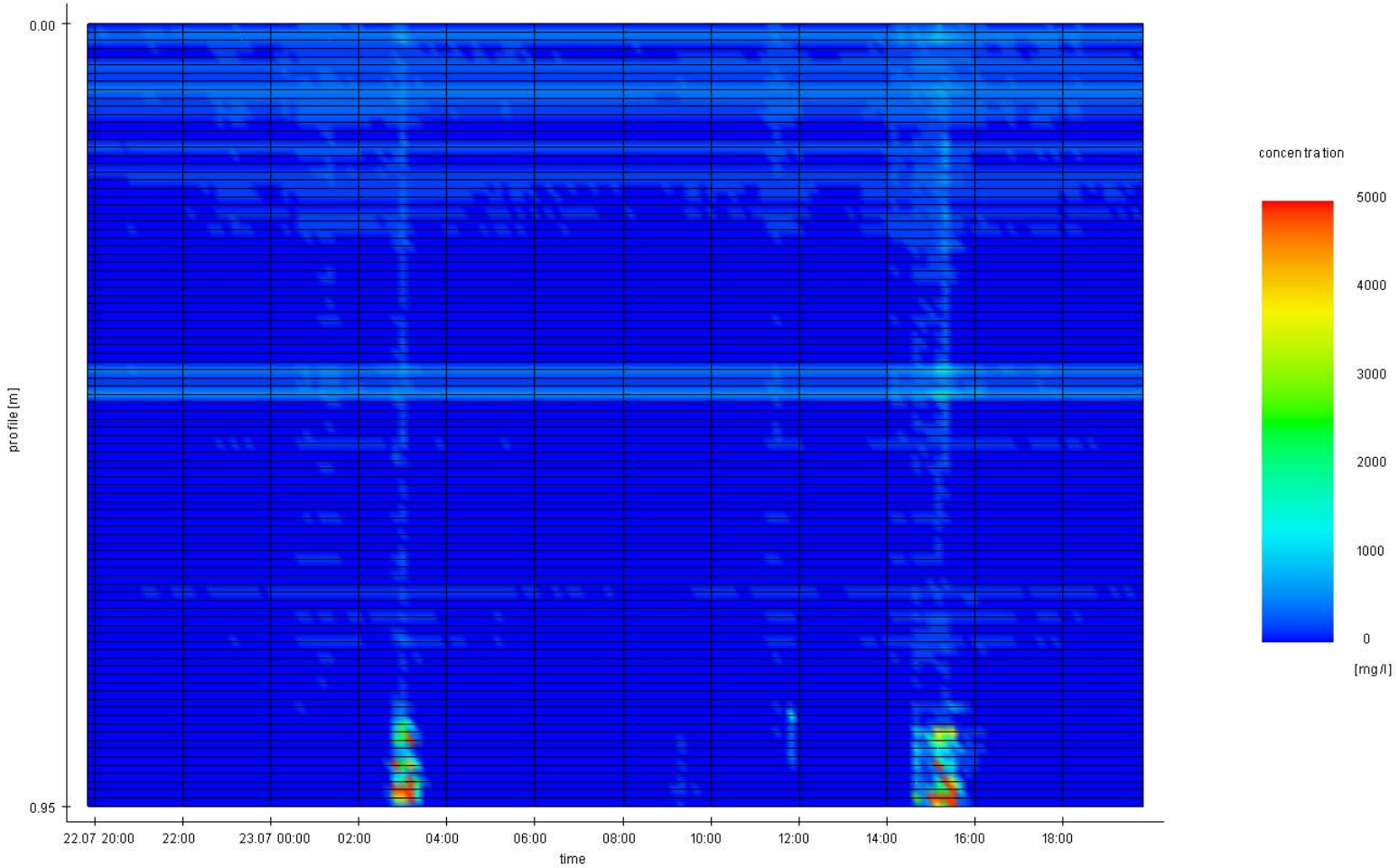
11283 Accretion Deurganckok - Near bed continuous monitoring – Summer 2006



Time series suspended sediment concentration
ARGUS ASM-IV

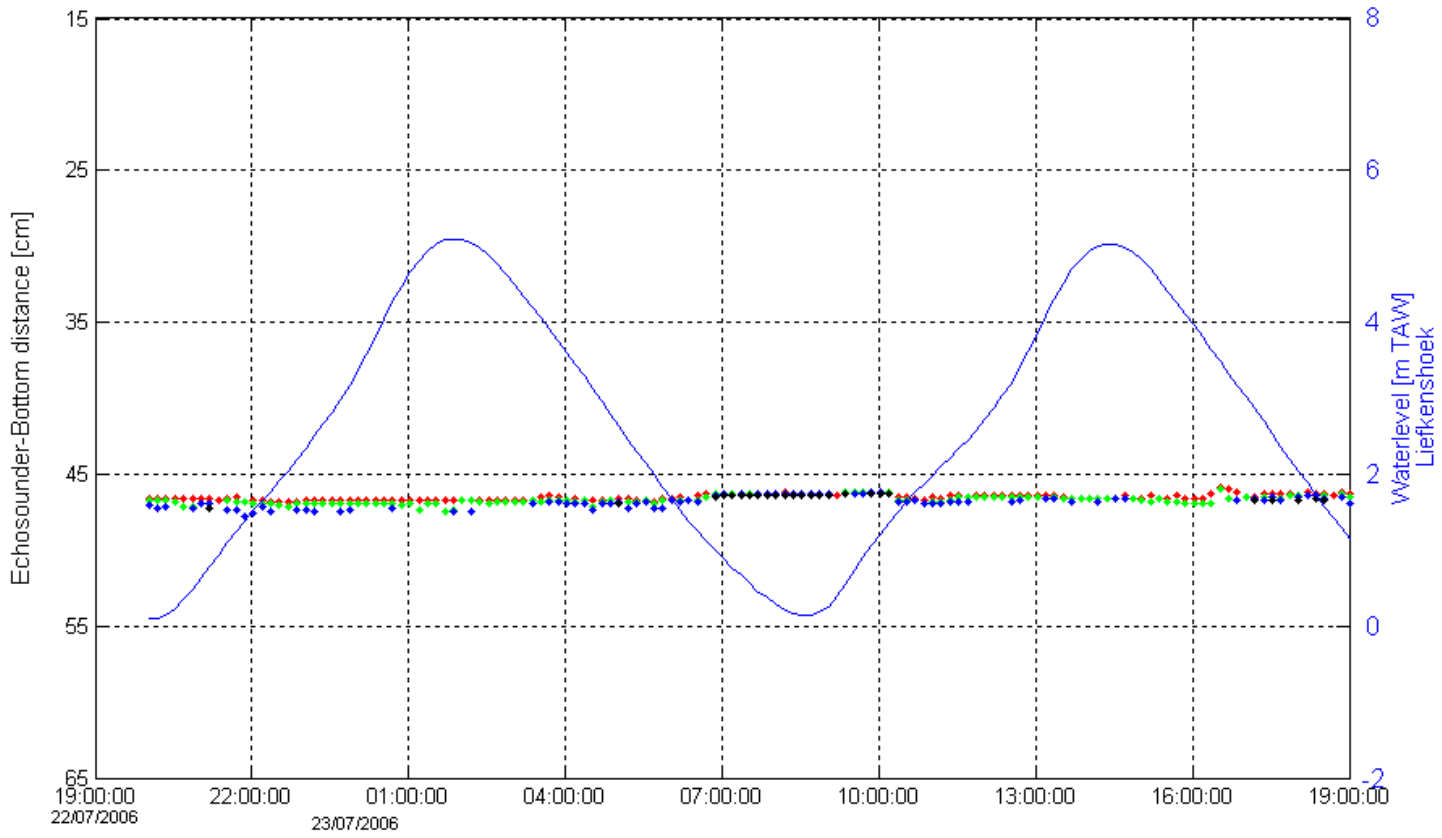
Location:	Date:
Deurganckdok CDW	Avg Tide 22/07 – 23/07

Data processed by: IMDC

In association with: WL | delft hydraulics, GEMS International

I/RA/11283/06.122/MSA

11283 Accretion Deurganckdok - Near bed continuous monitoring – Summer 2006



SIGNAL 4
SIGNAL 3
SIGNAL 2
SIGNAL 1

Legend

Echosounder – bottom distance
Waterlevel [mTAW] at Liefkenshoek

Location:
Deurganckdok CDW

Date:
Avg Tide 22/07 – 23/07

Data processed by: IMDC

In association with: WL | delft hydraulics, GEMS International

I/RA/11283/06.122/MSA

C.2 Sill frame

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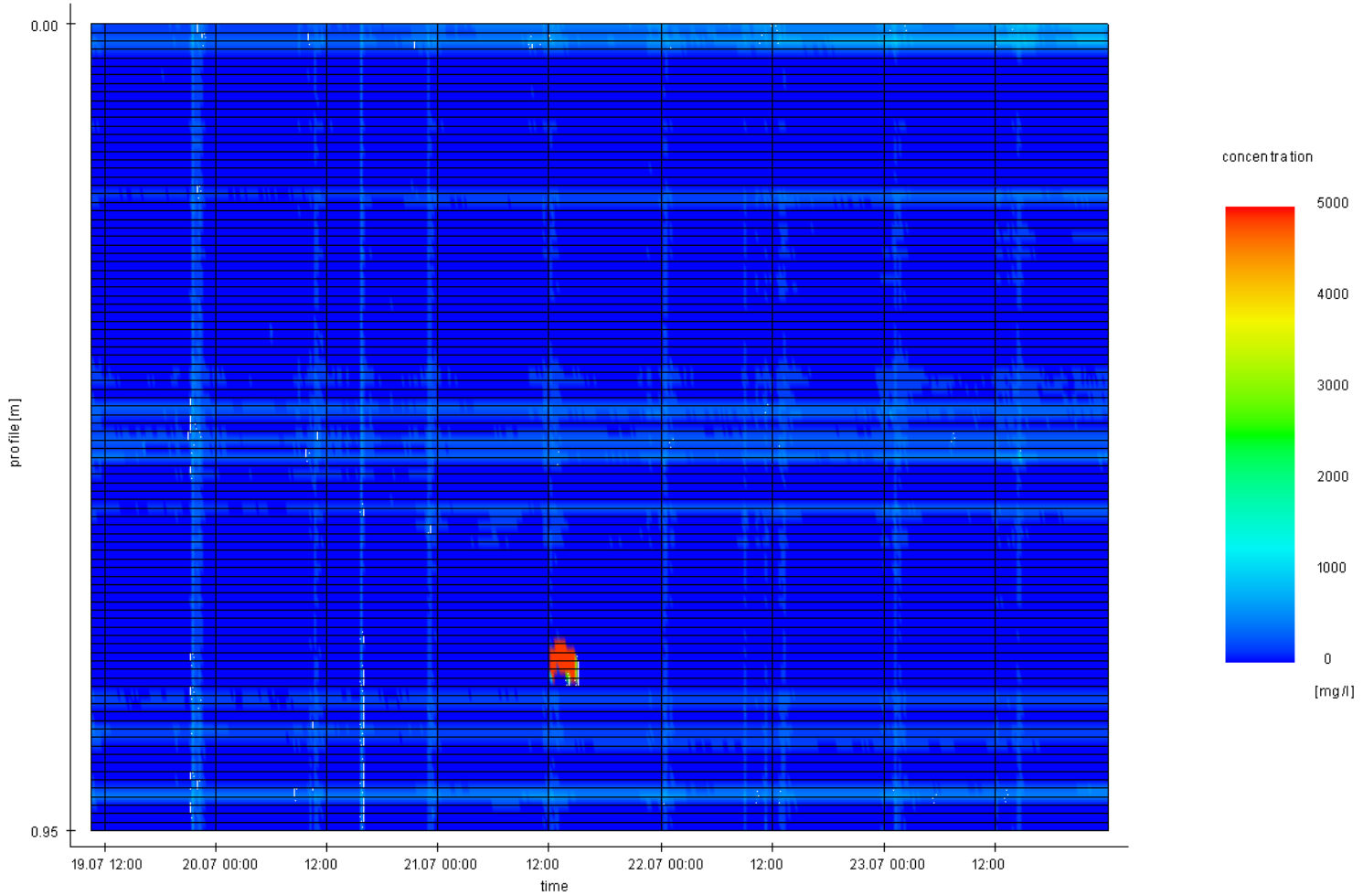
11283 Accretion Deurganckdok - Near bed continuous monitoring – Summer 2006



Time series suspended sediment concentration
ARGUS ASM-IV

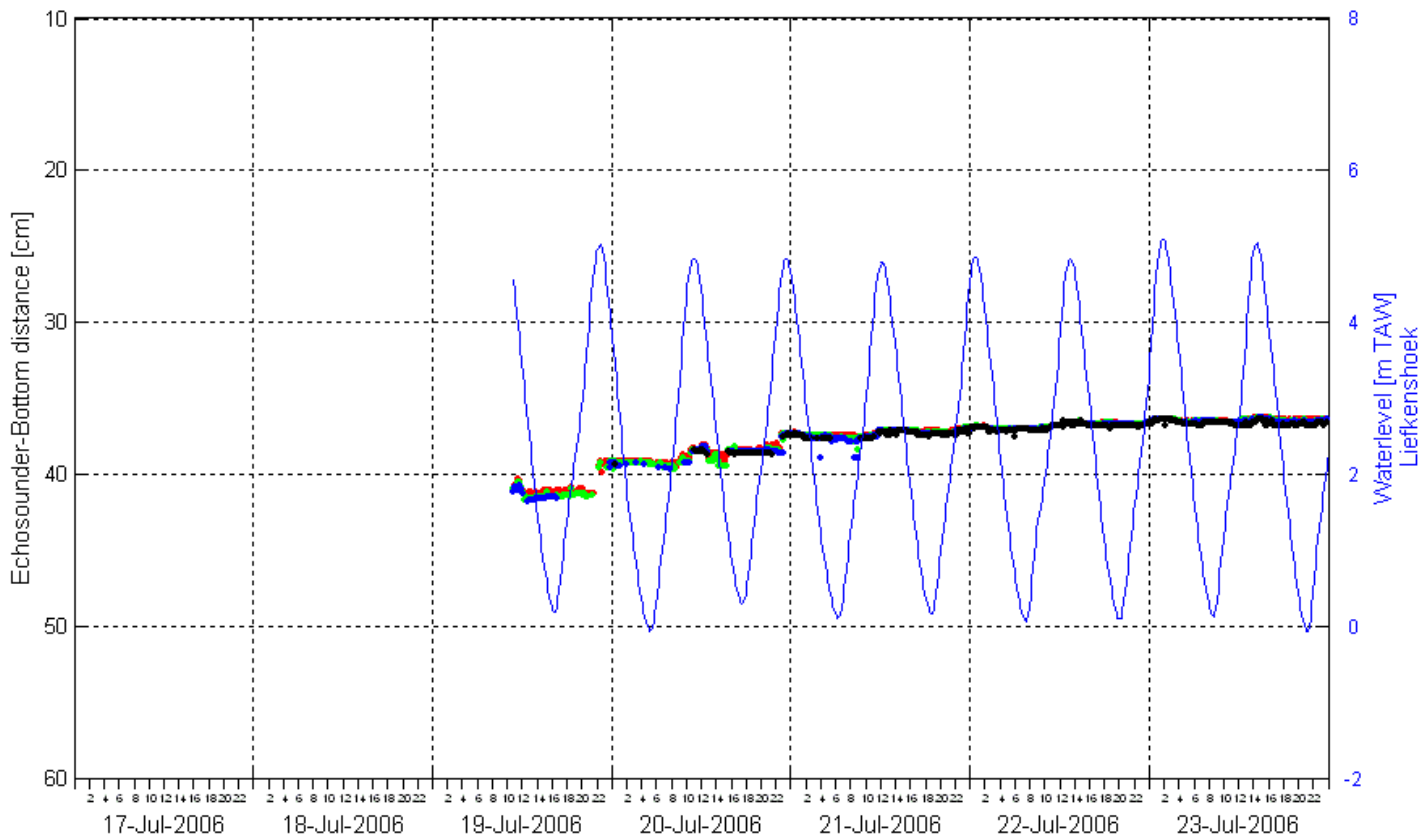
Location:	Date:
Deurganckdok Sill	19/07/2006 – 23/07/2006

Data processed by: IMDC

In association with: WL | delft hydraulics, GEMS International

I/RA/11283/06.122/MSA

11283 Accretion Deurganckdok - Near bed continuous monitoring – Summer 2006



SIGNAL 4
SIGNAL 3
SIGNAL 2
SIGNAL 1

Legend

Echosounder – bottom distance
Waterlevel [mTAW] at Liefkenshoek

Location:
Deurganckdok Sill

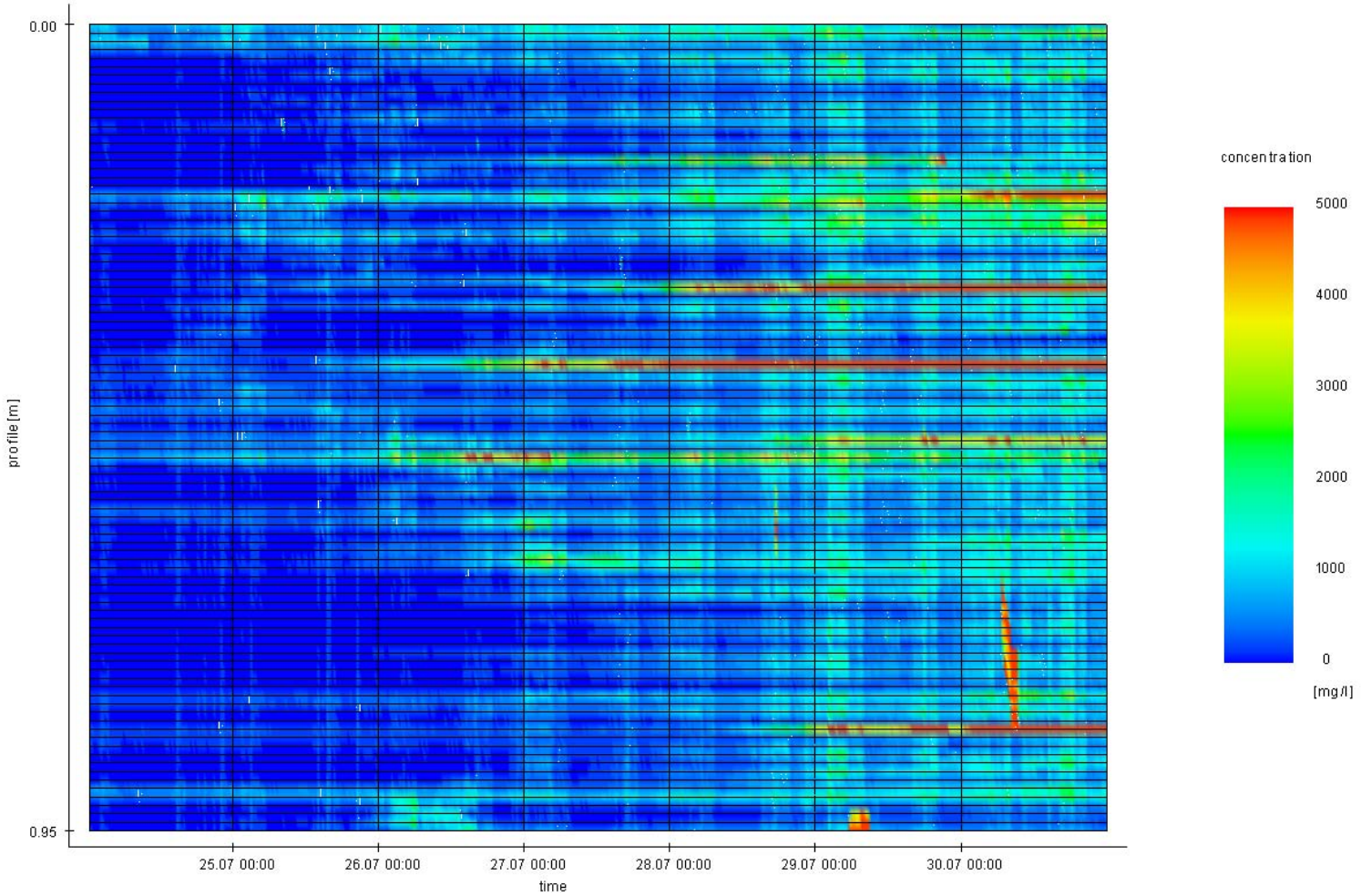
Date:
19/07/2006 – 23/07/2006

Data processed by: IMDC

In association with: WL | delft hydraulics, GEMS International

I/RA/11283/06.122/MSA

11283 Accretion Deurganckdok - Near bed continuous monitoring – Summer 2006



Time series suspended sediment concentration
ARGUS ASM-IV

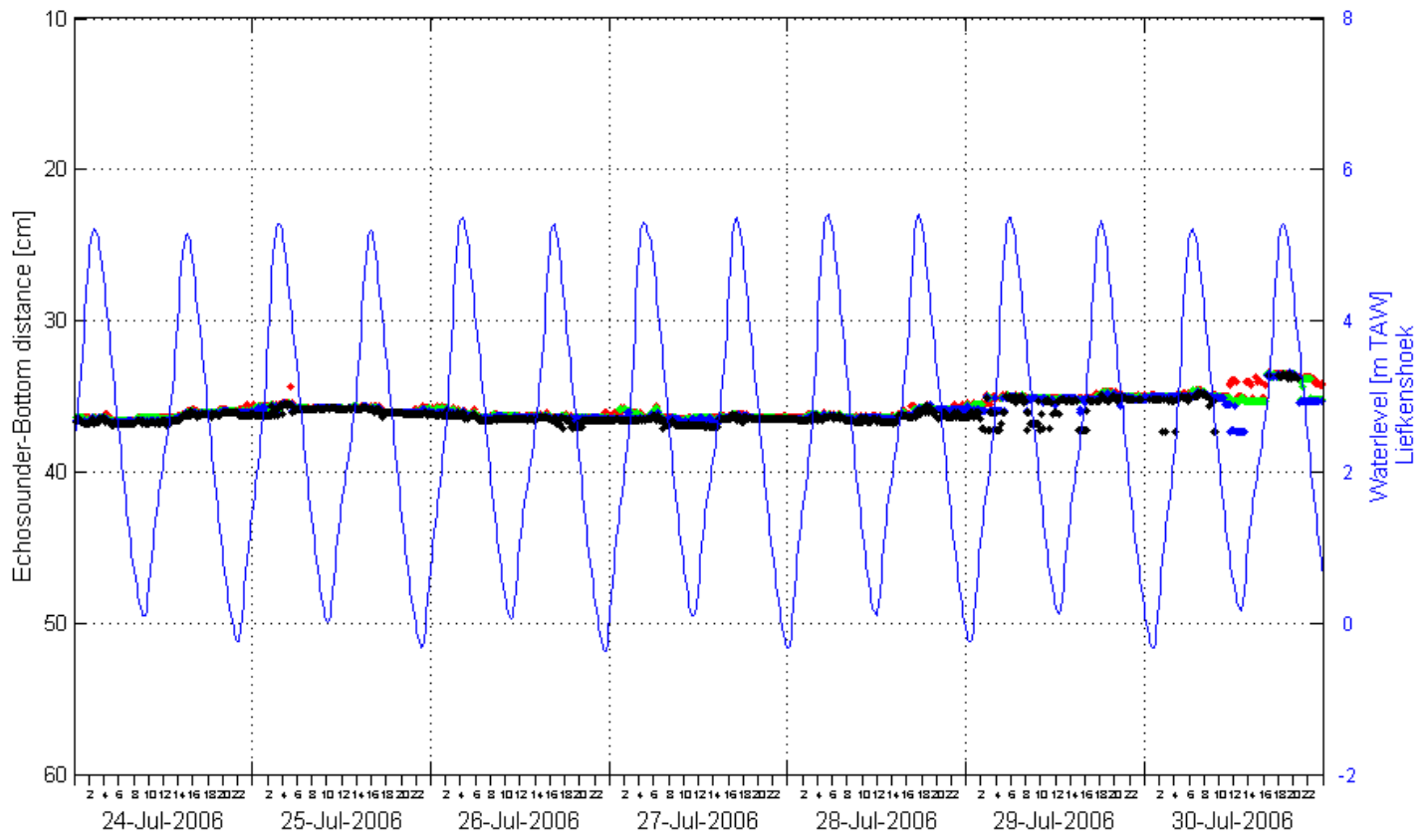
Location:	Date:
Deurganckdok Sill	24/07/2006 – 30/07/2006

Data processed by: IMDC

In association with: WL | delft hydraulics, GEMS International

I/RA/11283/06.122/MSA

11283 Accretion Deurganckdok - Near bed continuous monitoring – Summer 2006



SIGNAL 4
SIGNAL 3
SIGNAL 2
SIGNAL 1

Legend

Echosounder – bottom distance
Waterlevel [mTAW] at Liefkenshoek

Location:
Deurganckdok Sill

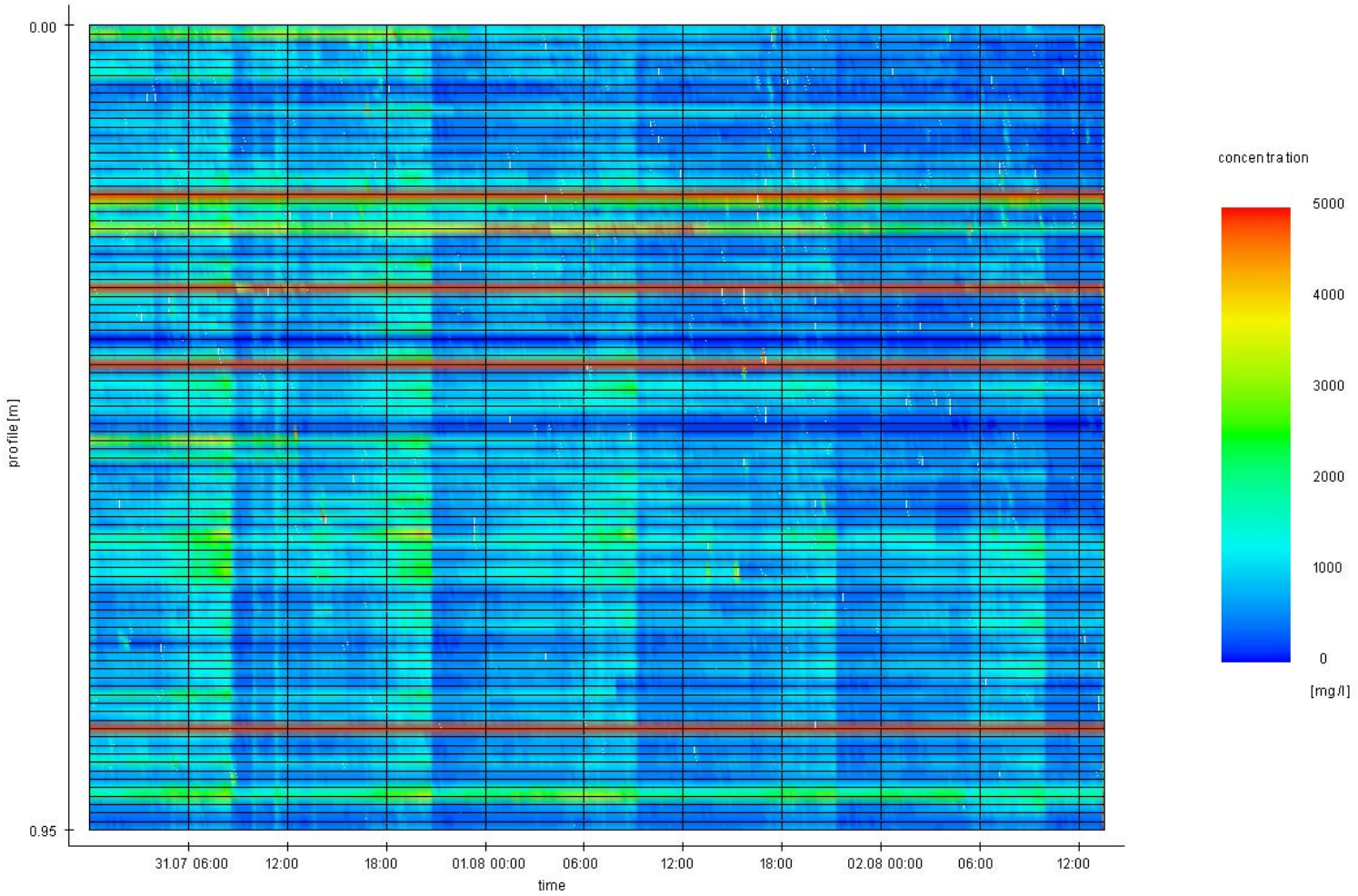
Date:
24/07/2006 – 30/07/2006

Data processed by: IMDC

In association with: WL | delft hydraulics, GEMS International

I/RA/11283/06.122/MSA

11283 Accretion Deurganckdok - Near bed continuous monitoring – Summer 2006



Time series suspended sediment concentration
ARGUS ASM-IV

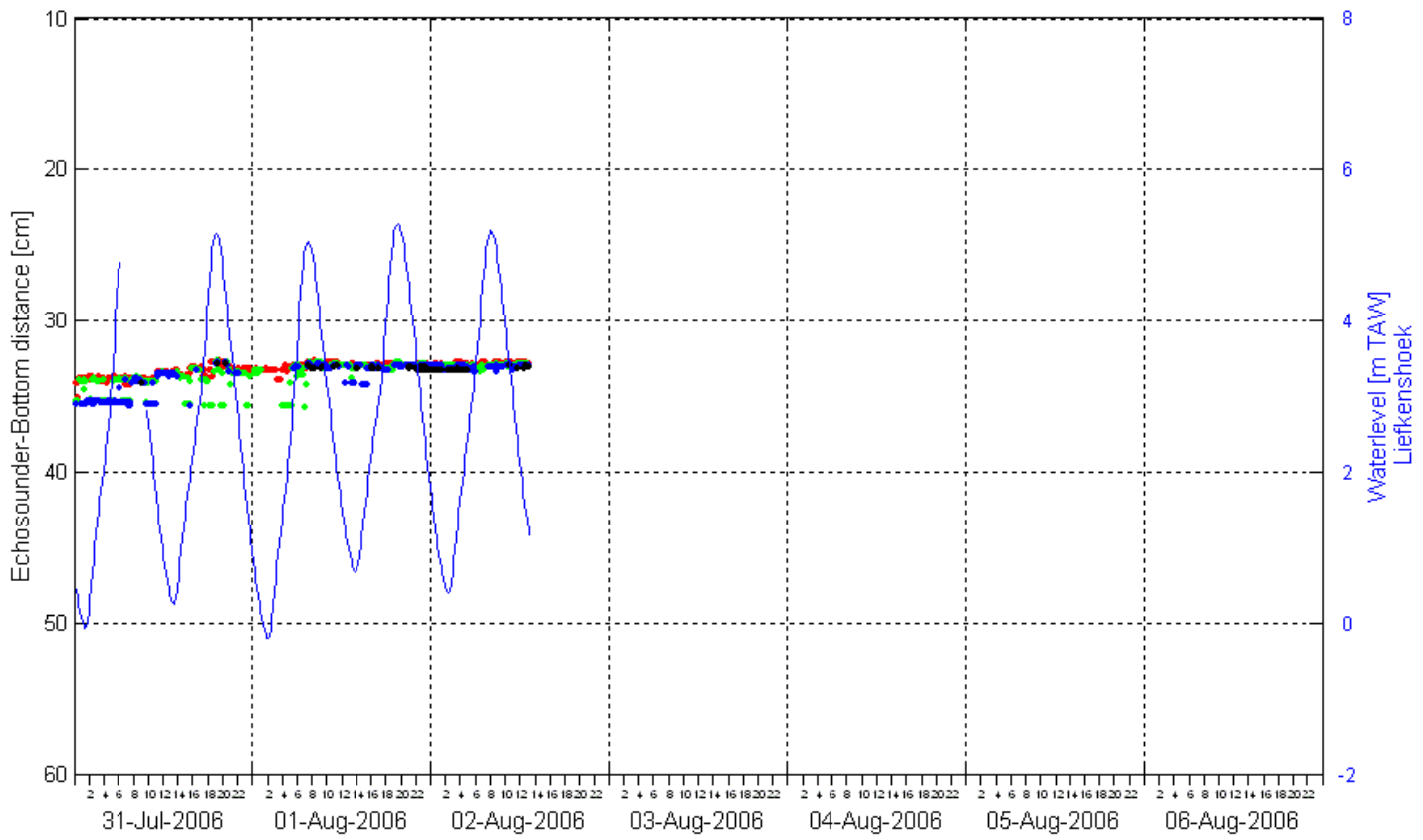
Location:	Date:
Deurganckdok Sill	31/07/2006 – 02/08/2006

Data processed by: IMDC

In association with: WL | delft hydraulics, GEMS International

I/RA/11283/06.122/MSA

11283 Accretion Deurganckdok - Near bed continuous monitoring – Summer 2006



SIGNAL 4
SIGNAL 3
SIGNAL 2
SIGNAL 1

Legend

Echosounder – bottom distance
Waterlevel [mTAW] at Liefkenshoek

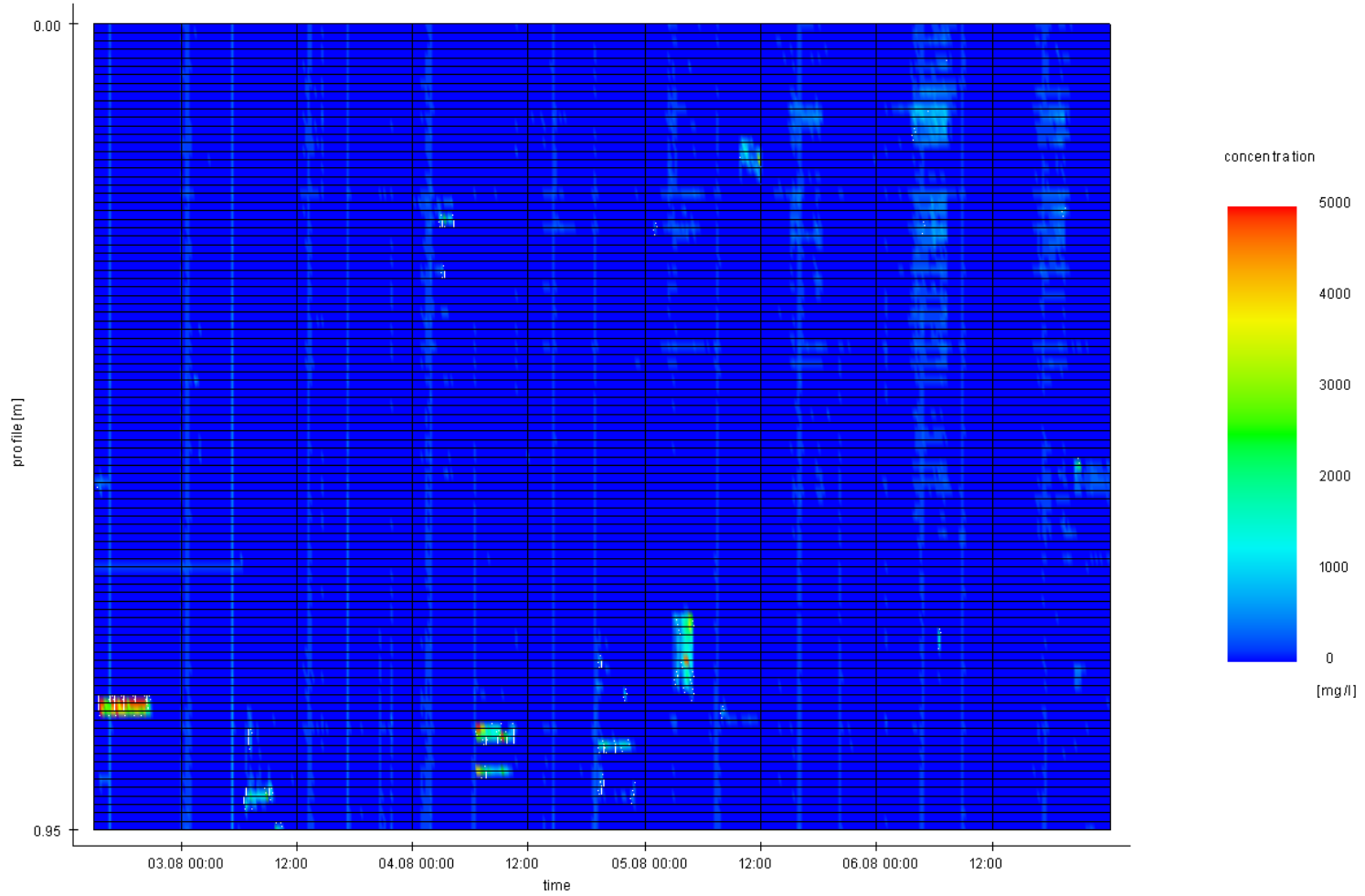
Location:	Date:
Deurganckdok Sill	31/07/2006 – 02/08/2006

Data processed by: IMDC

In association with: WL | delft hydraulics, GEMS International

I/RA/11283/06.122/MSA

11283 Accretion Deurganckdok - Near bed continuous monitoring – Summer 2006



Time series suspended sediment concentration
ARGUS ASM-IV

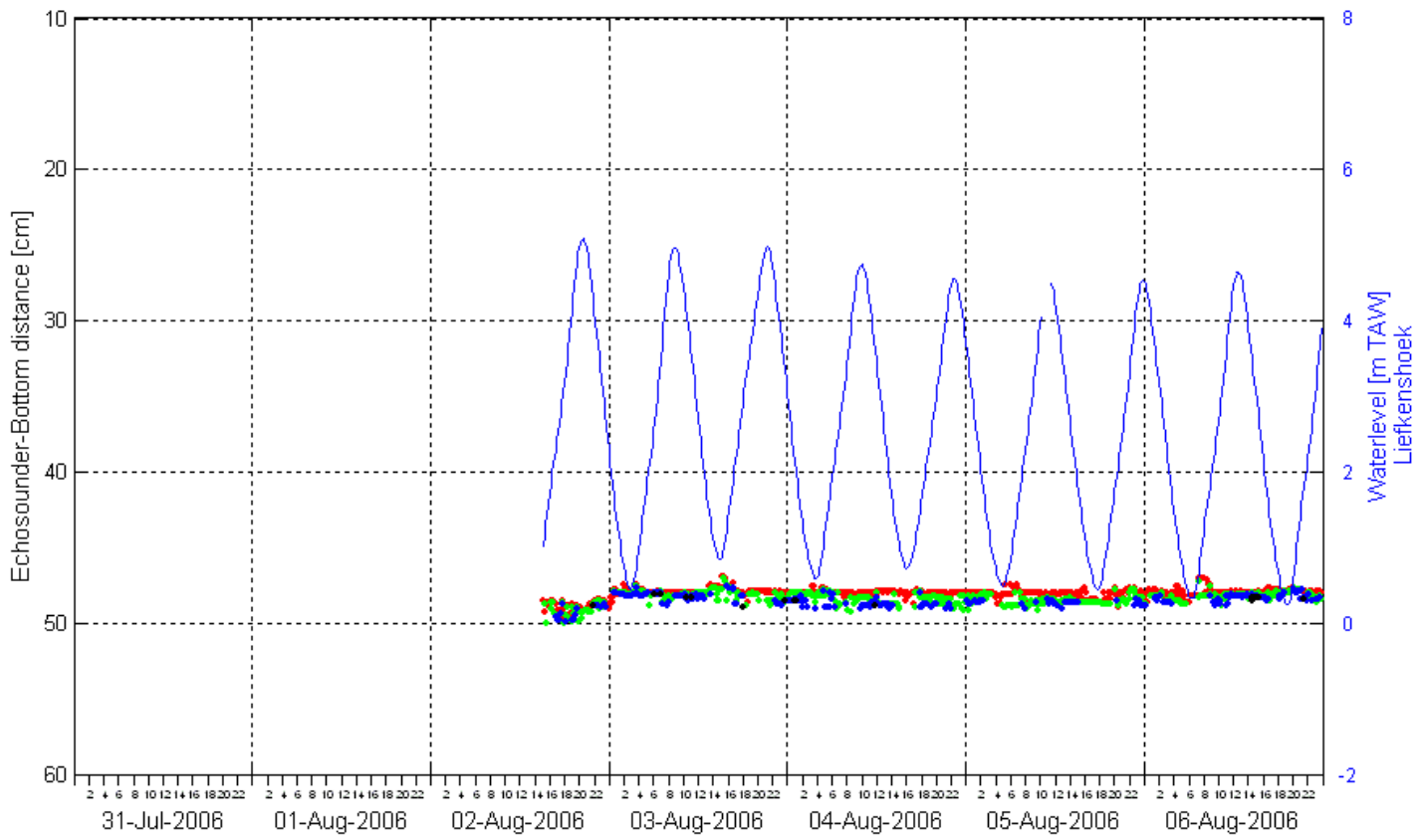
Location:	Date:
Buoy 84	02/08/2006 – 06/08/2006

Data processed by: IMDC

In association with: WL | delft hydraulics, GEMS International

I/RA/11283/06.122/MSA

11283 Accretion Deurganckdok - Near bed continuous monitoring – Summer 2006



SIGNAL 4
SIGNAL 3
SIGNAL 2
SIGNAL 1

Legend

Echosounder – bottom distance
Waterlevel [mTAW] at Liefkenshoek

Location:
Buoy 84

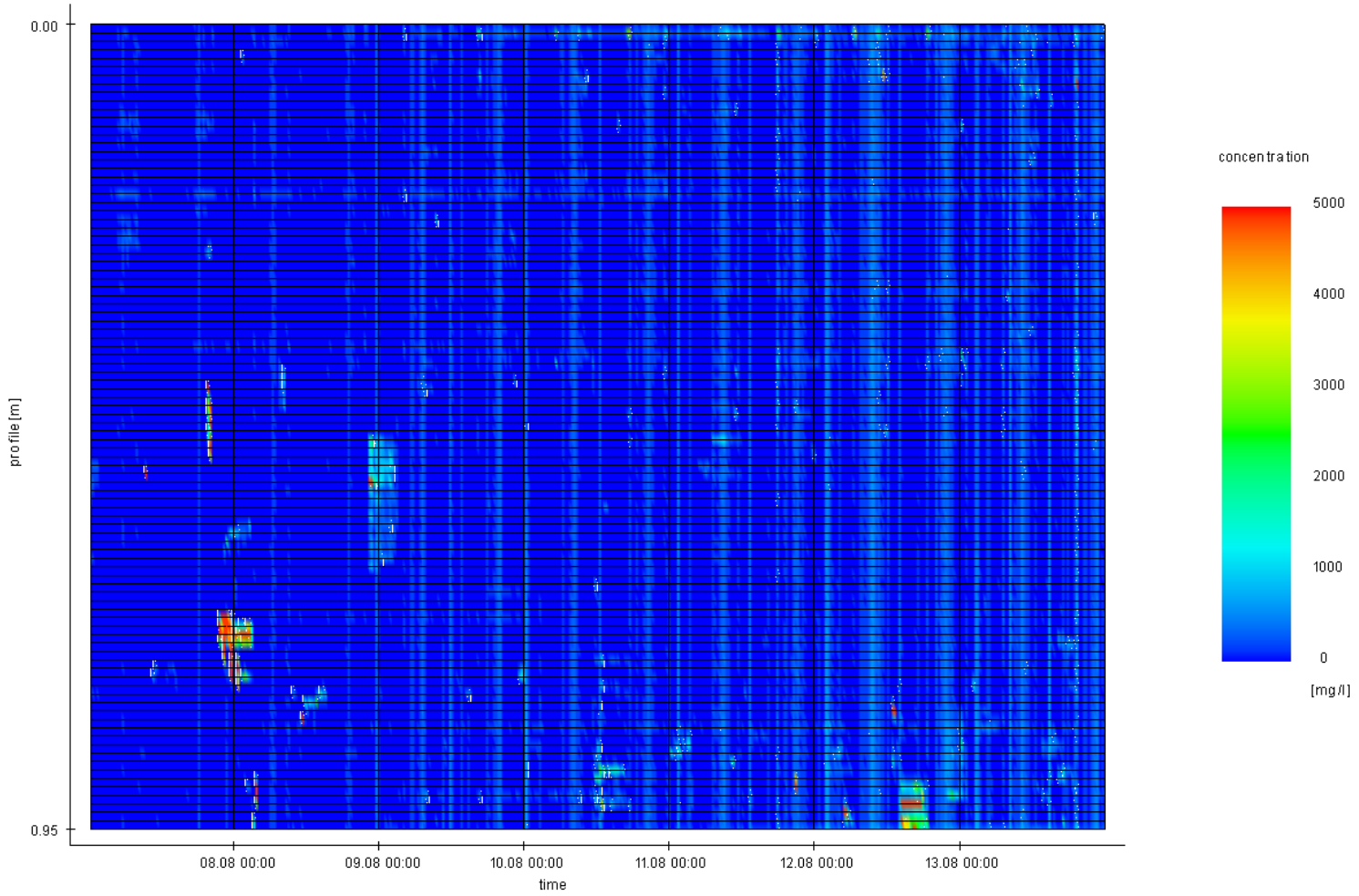
Date:
02/08/2006 – 06/08/2006

Data processed by: IMDC

In association with: WL | delft hydraulics, GEMS International

I/RA/11283/06.122/MSA

11283 Accretion Deurganckdok - Near bed continuous monitoring – Summer 2006



Time series suspended sediment concentration
ARGUS ASM-IV

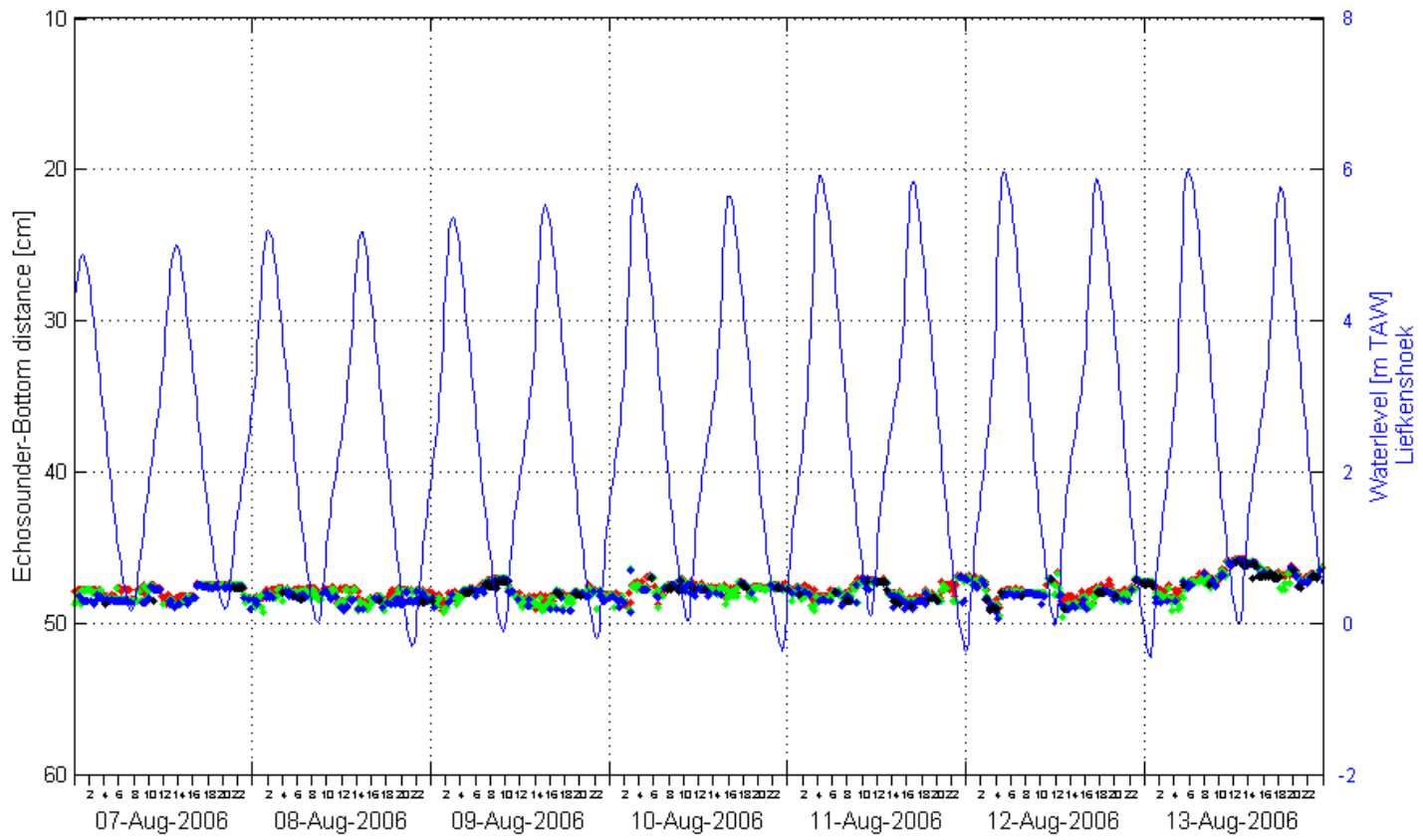
Location:	Date:
Buoy 84	07/08/2006 – 13/08/2006

Data processed by: IMDC

In association with: WL | delft hydraulics, GEMS International

I/RA/11283/06.122/MSA

11283 Accretion Deurganckdok - Near bed continuous monitoring – Summer 2006



SIGNAL 4
SIGNAL 3
SIGNAL 2
SIGNAL 1

Legend

Echosounder – bottom distance
Waterlevel [mTAW] at Liefkenshoek

Location:
Buoy 84

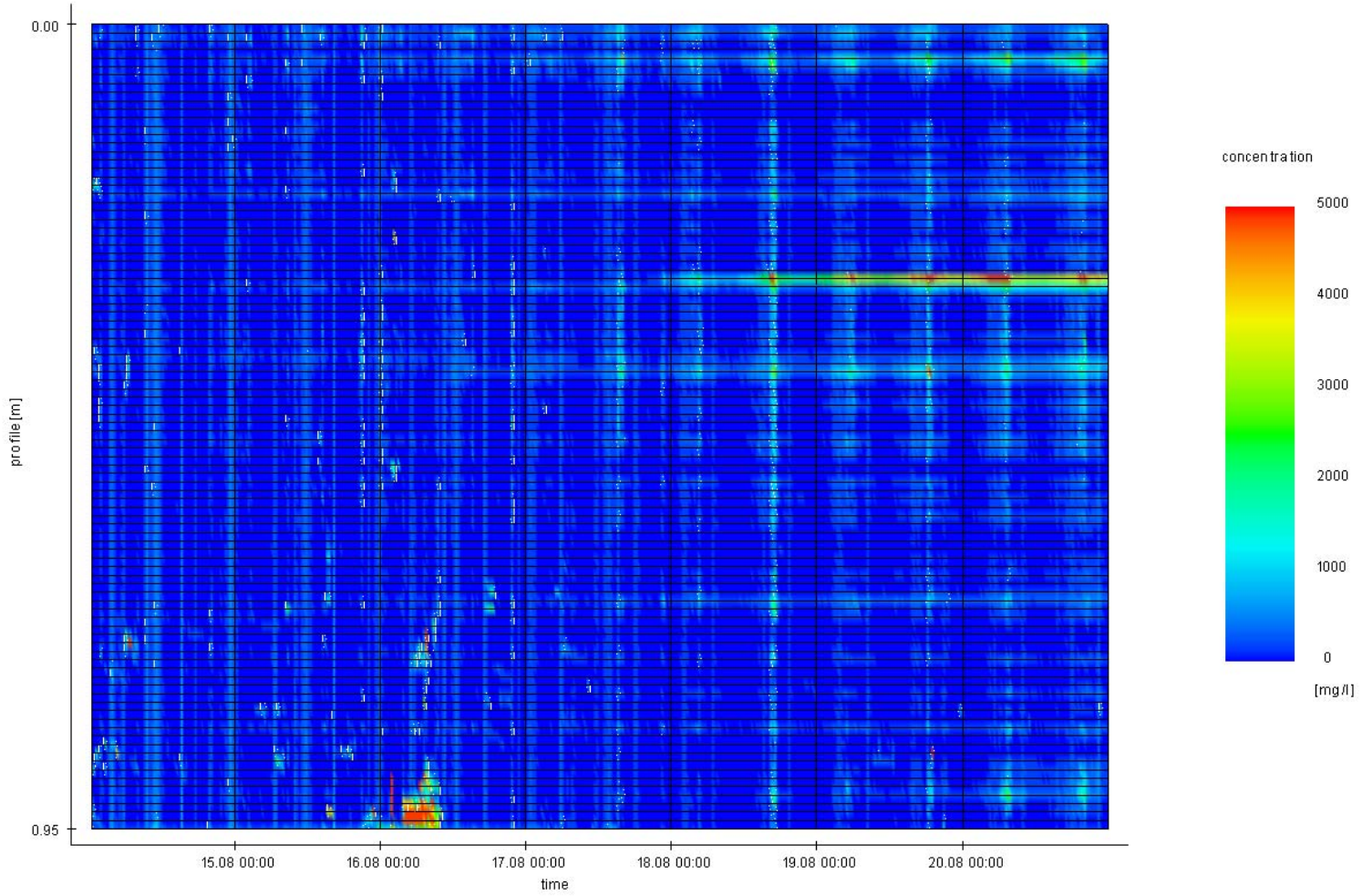
Date:
07/08/2006 – 13/08/2006

Data processed by: IMDC

In association with: WL | delft hydraulics, GEMS International

I/RA/11283/06.122/MSA

11283 Accretion Deurganckdok - Near bed continuous monitoring – Summer 2006



Time series suspended sediment concentration
ARGUS ASM-IV

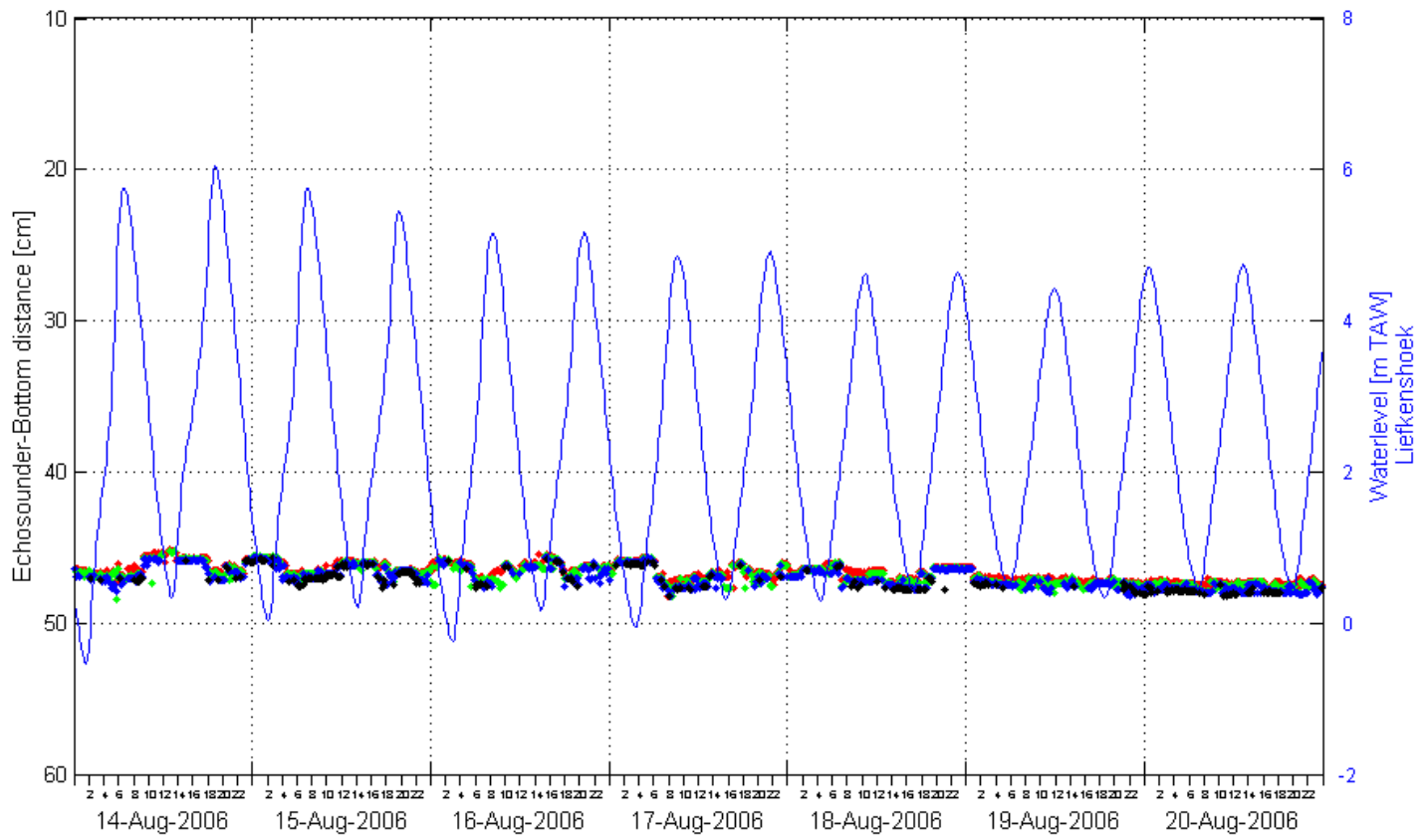
Location:	Date:
Buoy 84	14/08/2006 – 20/08/2006

Data processed by: IMDC

In association with: WL | delft hydraulics, GEMS International

I/RA/11283/06.122/MSA

11283 Accretion Deurganckdok - Near bed continuous monitoring – Summer 2006



SIGNAL 4
SIGNAL 3
SIGNAL 2
SIGNAL 1

Legend

Echosounder – bottom distance
Waterlevel [mTAW] at Liefkenshoek

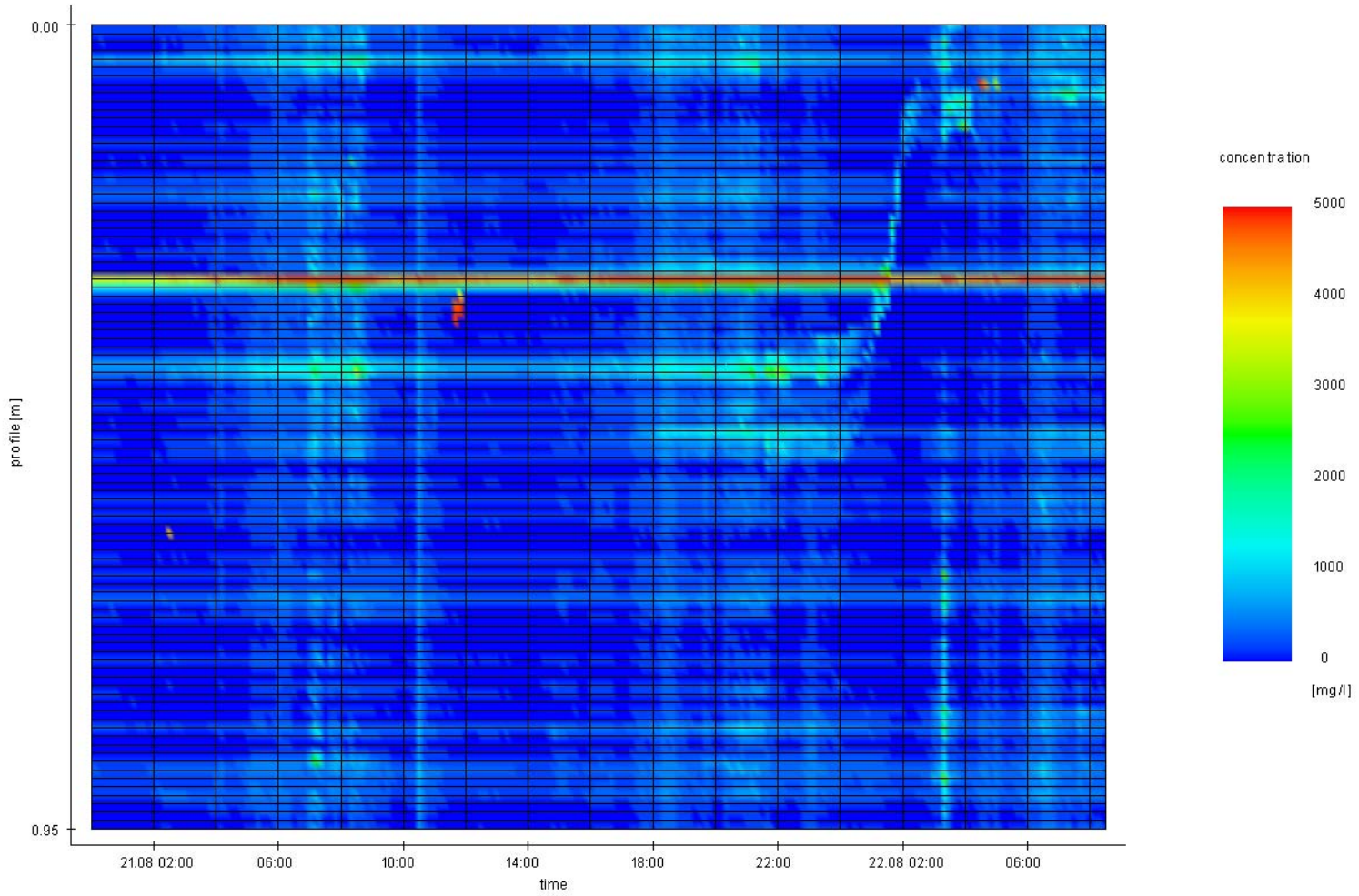
Location:	Date:
Buoy 84	14/08/2006 – 20/08/2006

Data processed by: IMDC

In association with: WL | delft hydraulics, GEMS International

I/RA/11283/06.122/MSA

11283 Accretion Deurganckdok - Near bed continuous monitoring – Summer 2006



Time series suspended sediment concentration
ARGUS ASM-IV

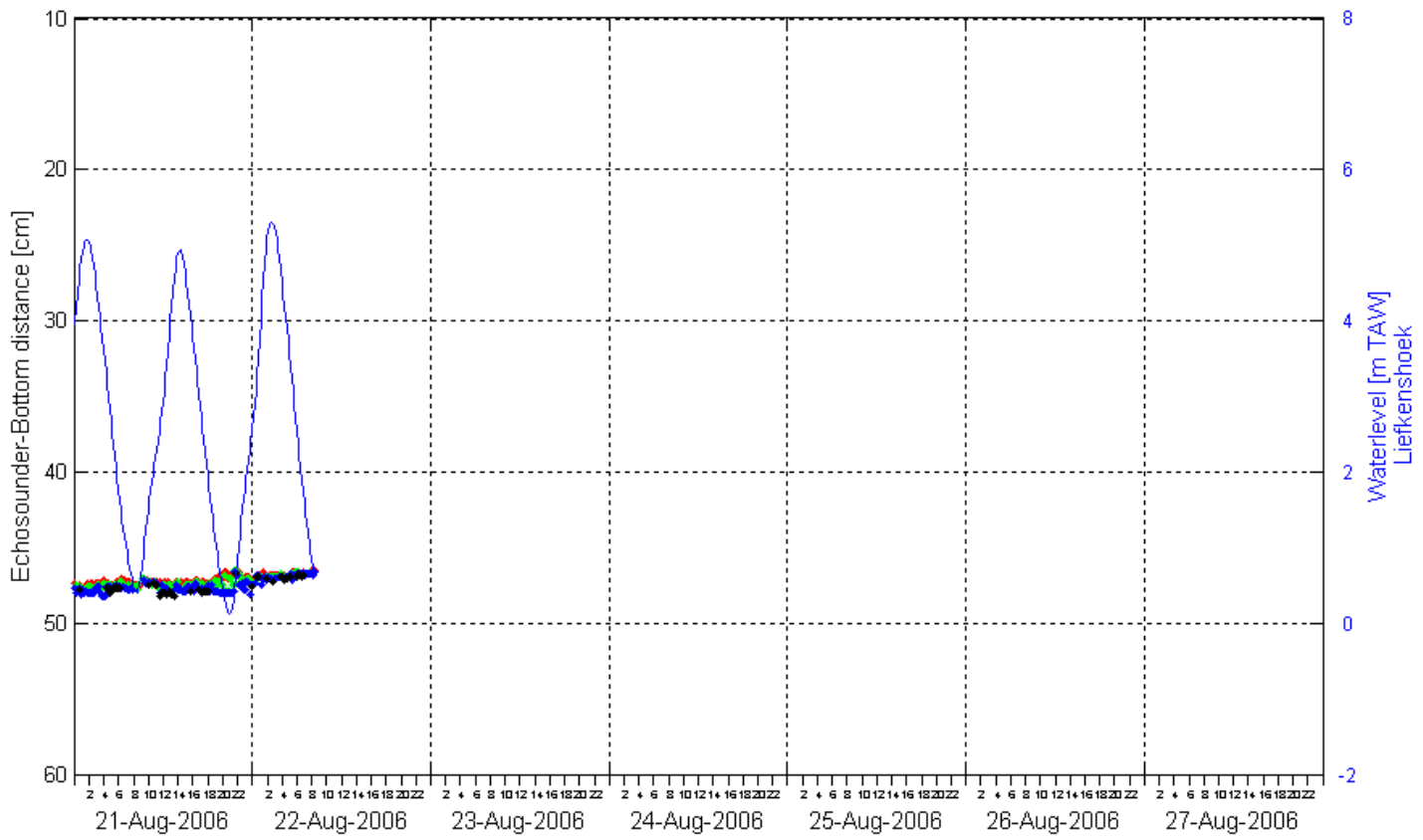
Location:	Date:
Buoy 84	21/08/2006 – 22/08/2006

Data processed by: IMDC

In association with: WL | delft hydraulics, GEMS International

I/RA/11283/06.122/MSA

11283 Accretion Deurganckdok - Near bed continuous monitoring – Summer 2006



SIGNAL 4
SIGNAL 3
SIGNAL 2
SIGNAL 1

Legend

Echosounder – bottom distance
Waterlevel [mTAW] at Liefkenshoek

Location:	Date:
Buoy 84	21/08/2006 – 22/08/2006

Data processed by: IMDC

In association with: WL | delft hydraulics, GEMS International

I/RA/11283/06.122/MSA

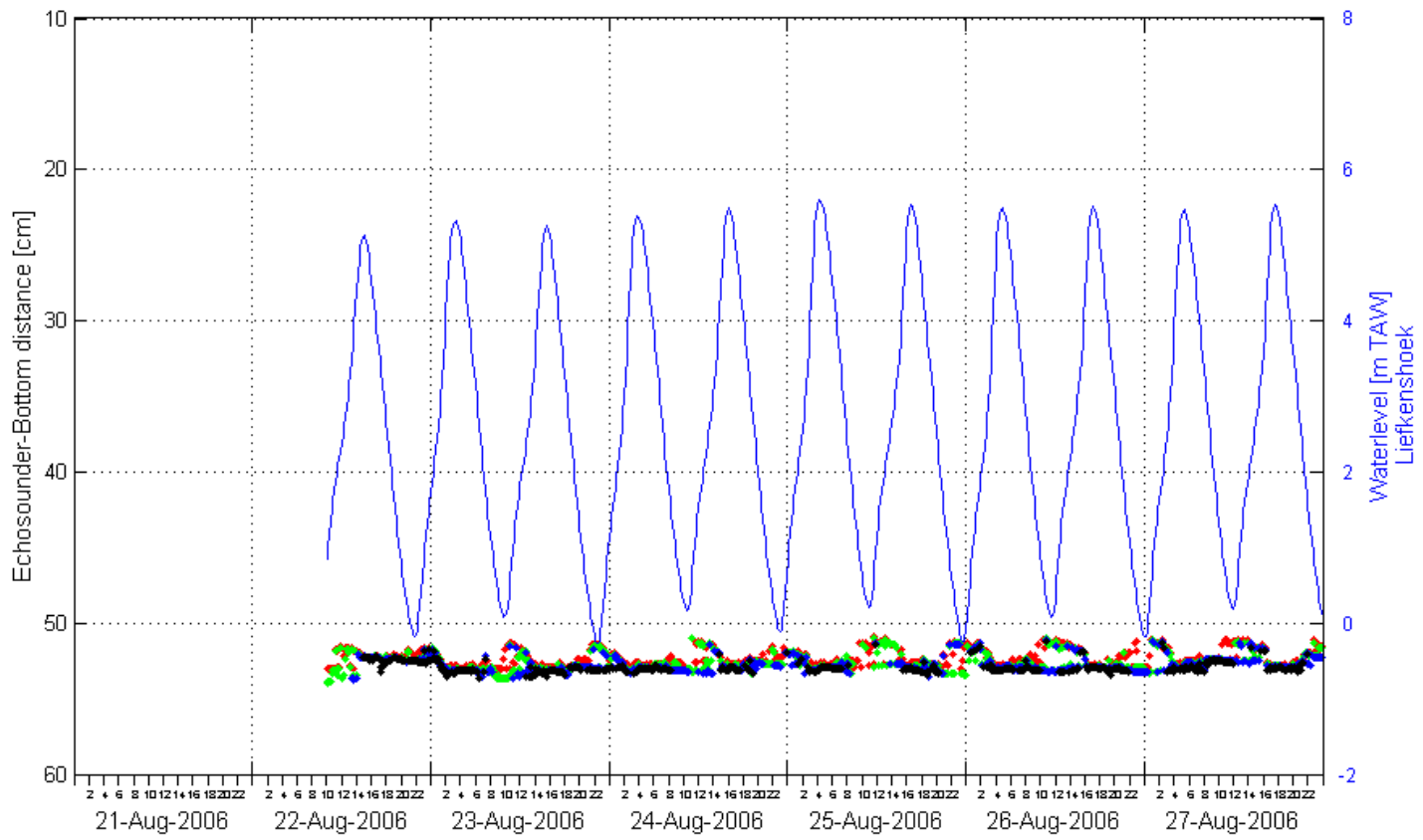
11283 Accretion Deurganckdok - Near bed continuous monitoring – Summer 2006

NO DATA

Time series suspended sediment concentration ARGUS ASM-IV		Data processed by: IMDC
Location: Buoy 84	Date: 22/08/2006 – 27/08/2006	In association with: WL | delft hydraulics, GEMS International

I/RA/11283/06.122/MSA

11283 Accretion Deurganckdok - Near bed continuous monitoring – Summer 2006



SIGNAL 4
SIGNAL 3
SIGNAL 2
SIGNAL 1

Legend

Echosounder – bottom distance
Waterlevel [mTAW] at Liefkenshoek

Location:
Buoy 84

Date:
22/08/2006 – 27/08/2006

Data processed by: IMDC

In association with: WL | delft hydraulics, GEMS International

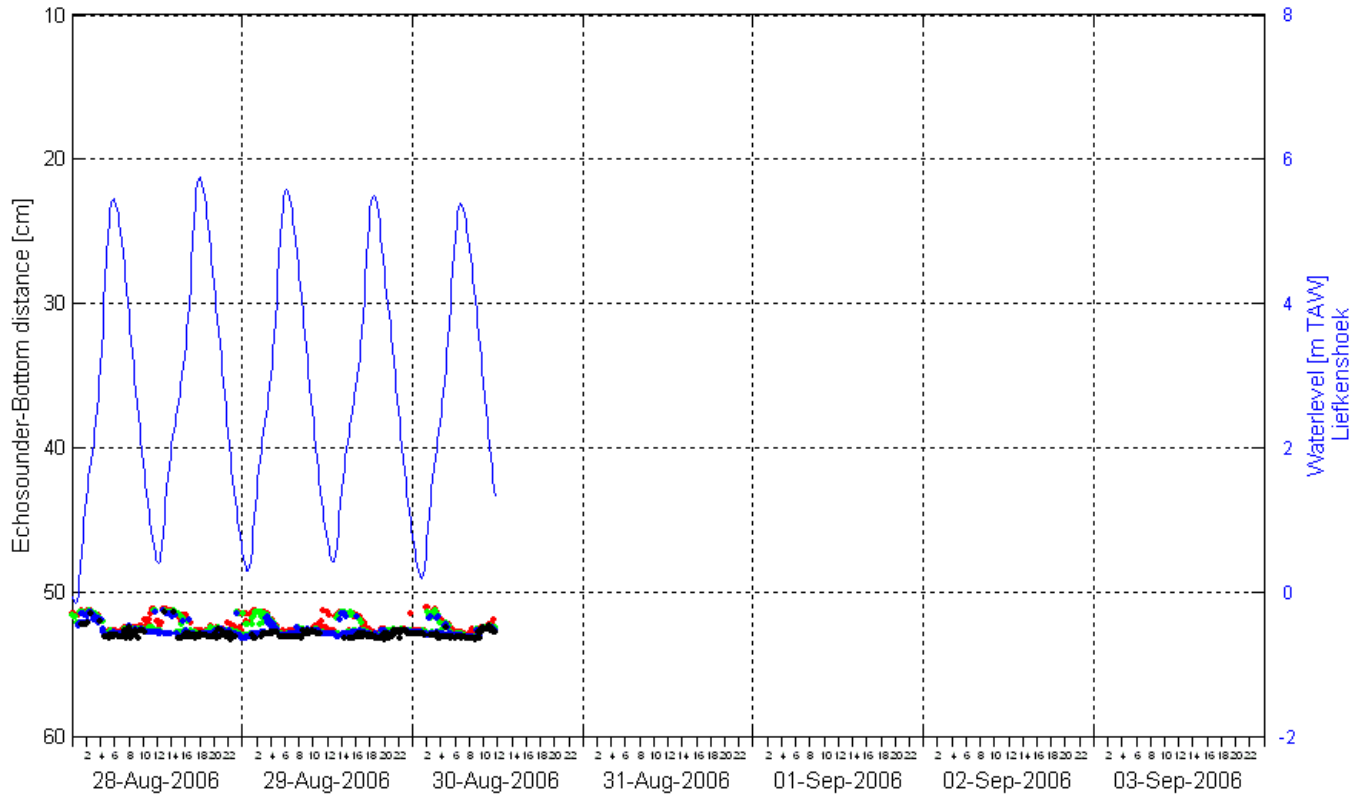
I/RA/11283/06.122/MSA

11283 Accretion Deurganckdok - Near bed continuous monitoring – Summer 2006

NO DATA

Time series suspended sediment concentration ARGUS ASM-IV		Data processed by: IMDC
Location: Buoy 84	Date: 28/08/2006 – 30/08/2006	In association with: wl | delft hydraulics, GEMS International I/RA/11283/06.122/MSA

11283 Accretion Deurganckdok - Near bed continuous monitoring – Summer 2006



SIGNAL 4
SIGNAL 3
SIGNAL 2
SIGNAL 1

Legend

Echosounder – bottom distance
Waterlevel [mTAW] at Liefkenshoek

Location:
Buoy 84

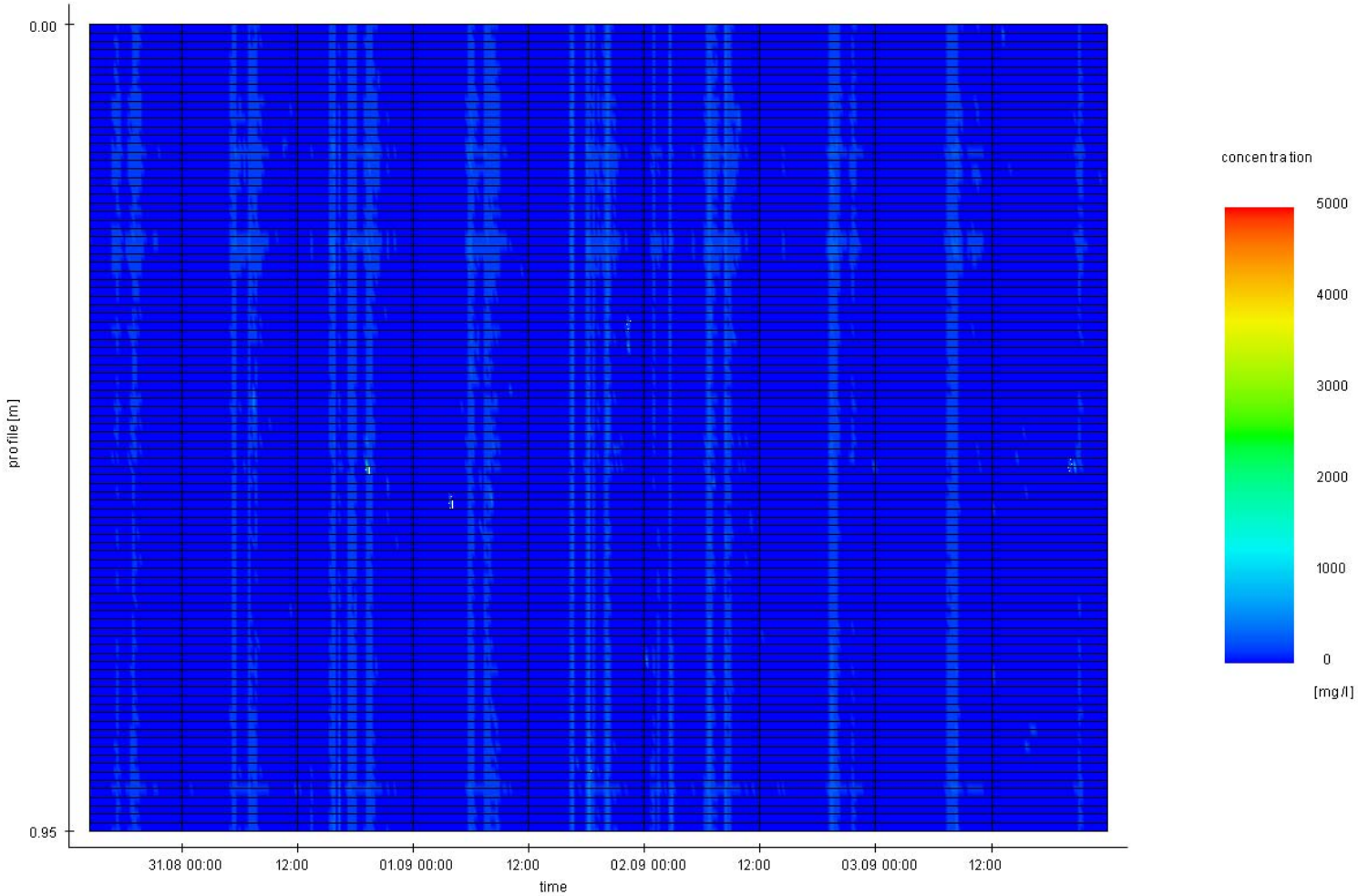
Date:
28/08/2006 – 30/08/2006

Data processed by: IMDC

In association with: WL | delft hydraulics, GEMS International

I/RA/11283/06.122/MSA

11283 Accretion Deurganckdok - Near bed continuous monitoring – Summer 2006



Time series suspended sediment concentration
ARGUS ASM-IV

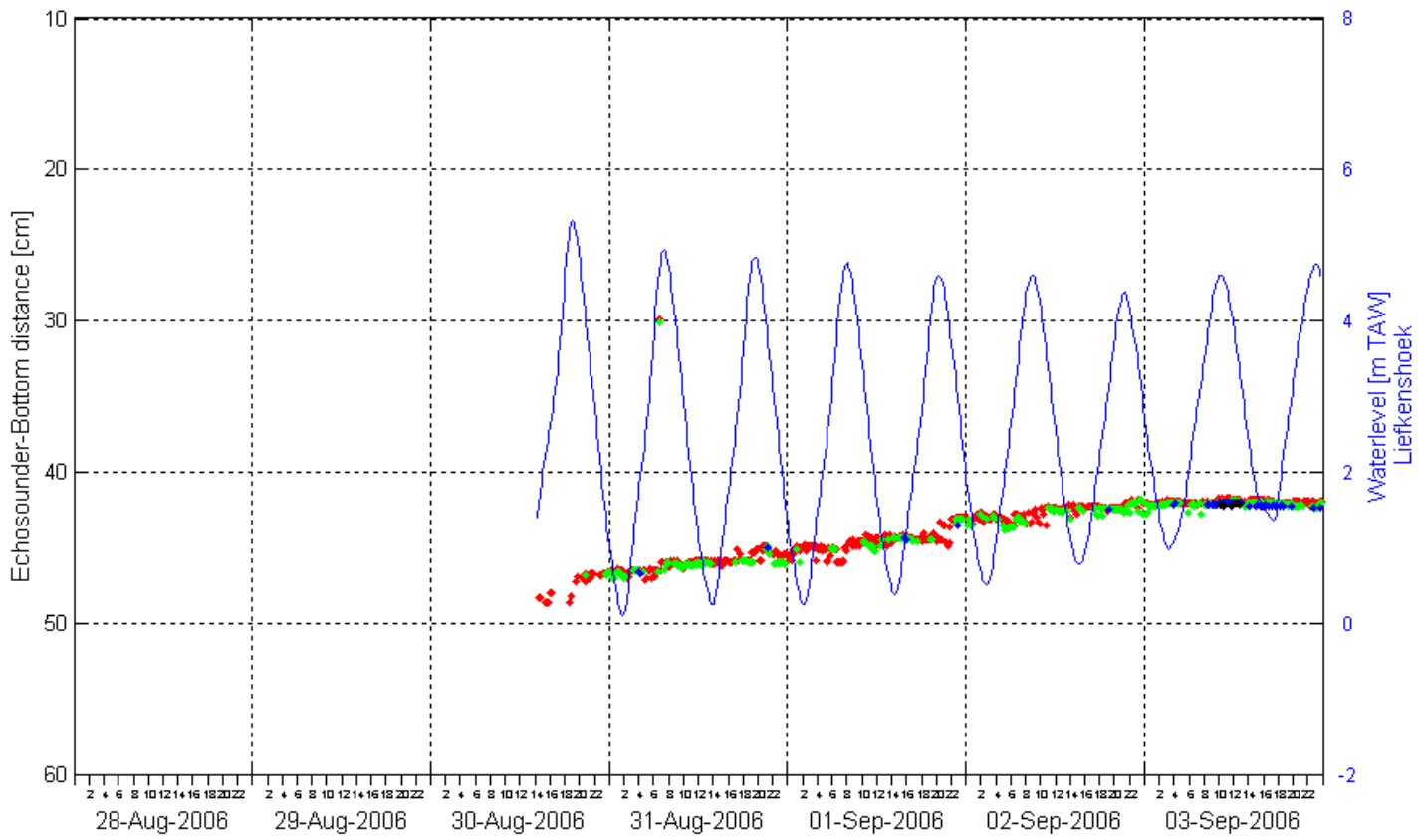
Location:	Date:
Deurganckdok Sill	30/08/2006 – 03/09/2006

Data processed by: IMDC

In association with: WL | delft hydraulics, GEMS International

I/RA/11283/06.122/MSA

11283 Accretion Deurganckdok - Near bed continuous monitoring – Summer 2006



SIGNAL 4
SIGNAL 3
SIGNAL 2
SIGNAL 1

Legend

Echosounder – bottom distance
Waterlevel [mTAW] at Liefkenshoek

Location:
Deurganckdok Sill

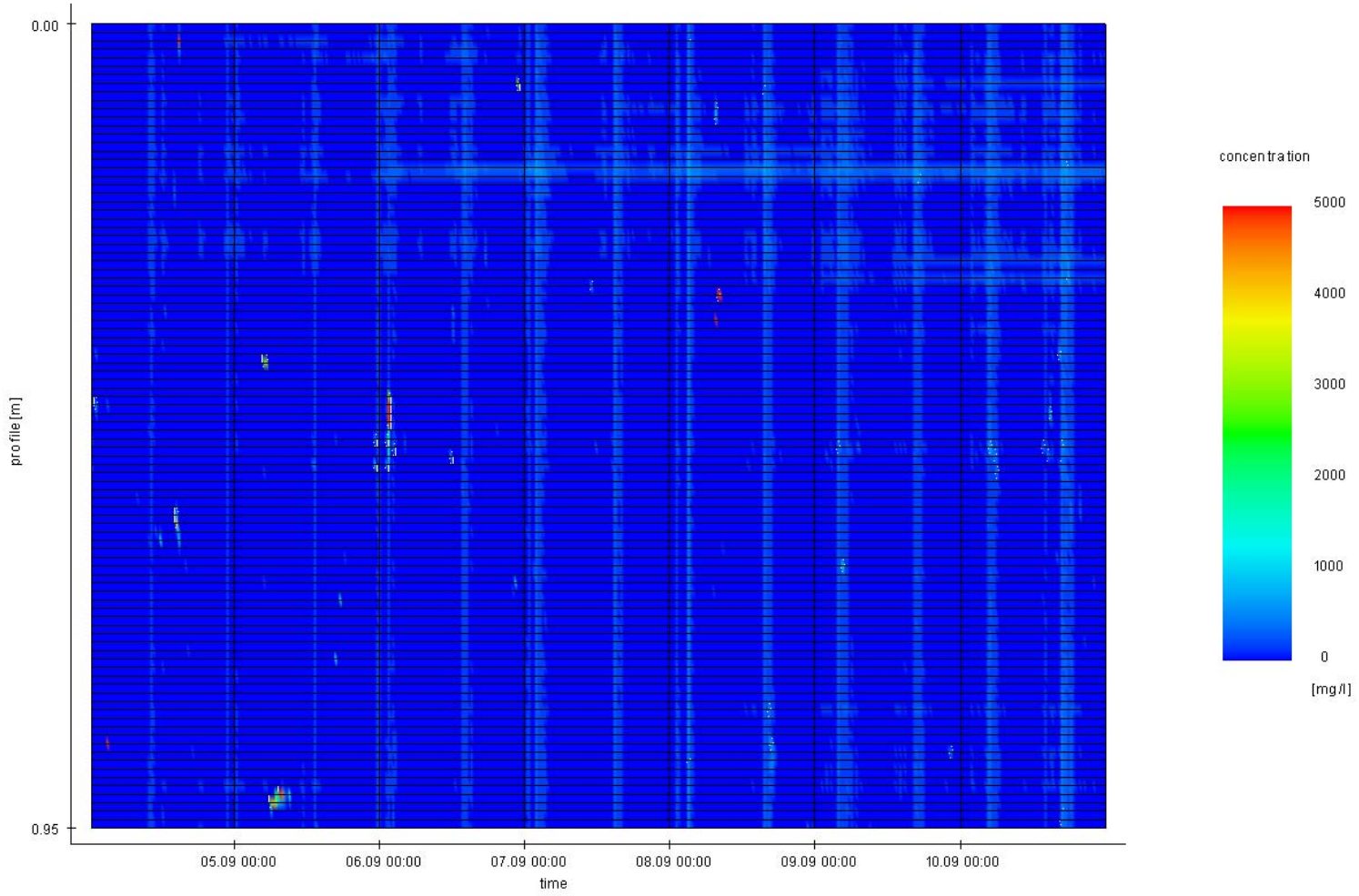
Date:
30/08/2006 – 03/09/2006

Data processed by: IMDC

In association with: WL | delft hydraulics, GEMS International

I/RA/11283/06.122/MSA

11283 Accretion Deurganckdok - Near bed continuous monitoring – Summer 2006



Time series suspended sediment concentration
ARGUS ASM-IV

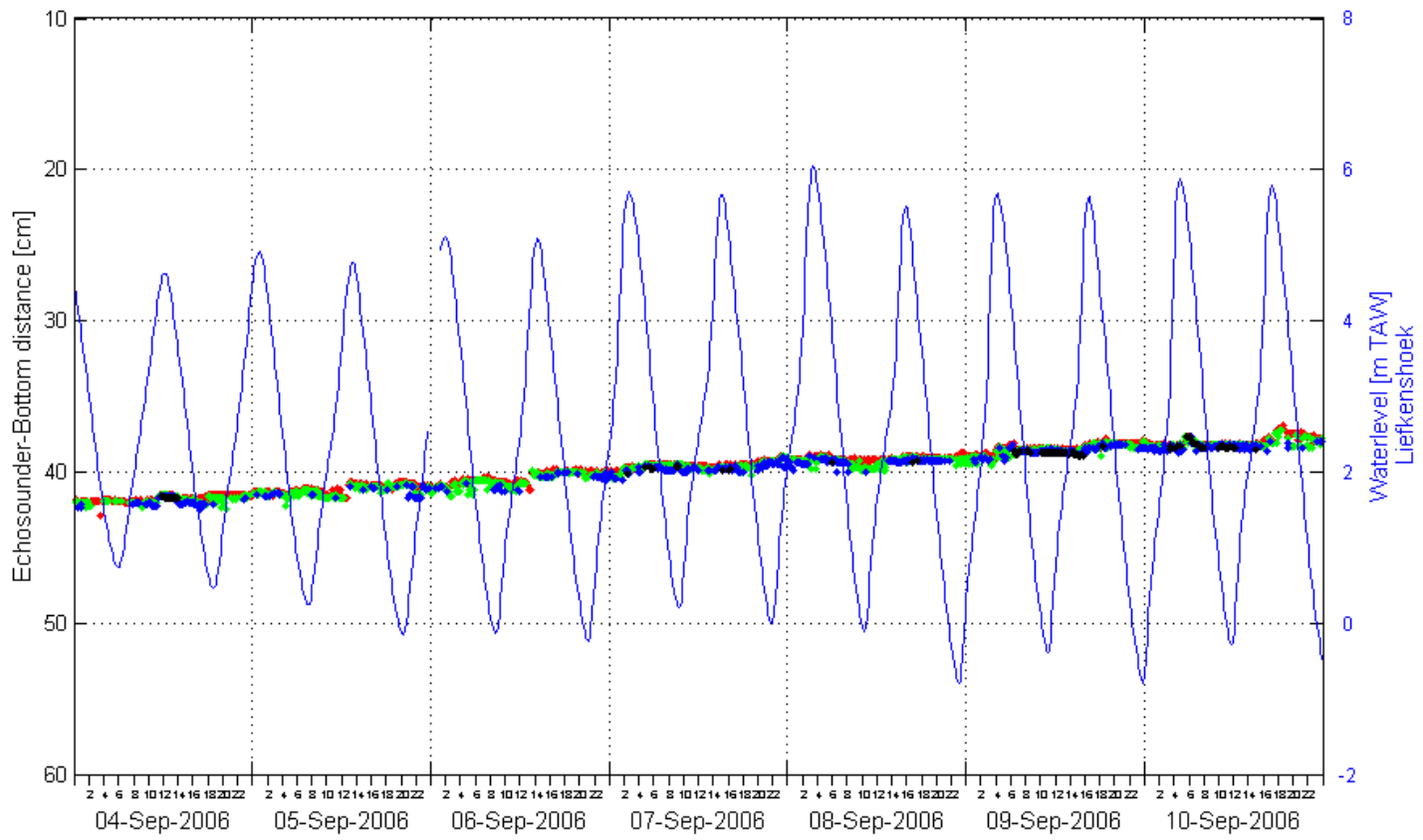
Location:	Date:
Deurganckdok Sill	04/09/2006 – 10/09/2006

Data processed by: IMDC

In association with: WL | delft hydraulics, GEMS International

I/RA/11283/06.122/MSA

11283 Accretion Deurganckdok - Near bed continuous monitoring – Summer 2006



SIGNAL 4
SIGNAL 3
SIGNAL 2
SIGNAL 1

Legend

Echosounder – bottom distance
Waterlevel [mTAW] at Liefkenshoek

Location:
Deurganckdok Sill

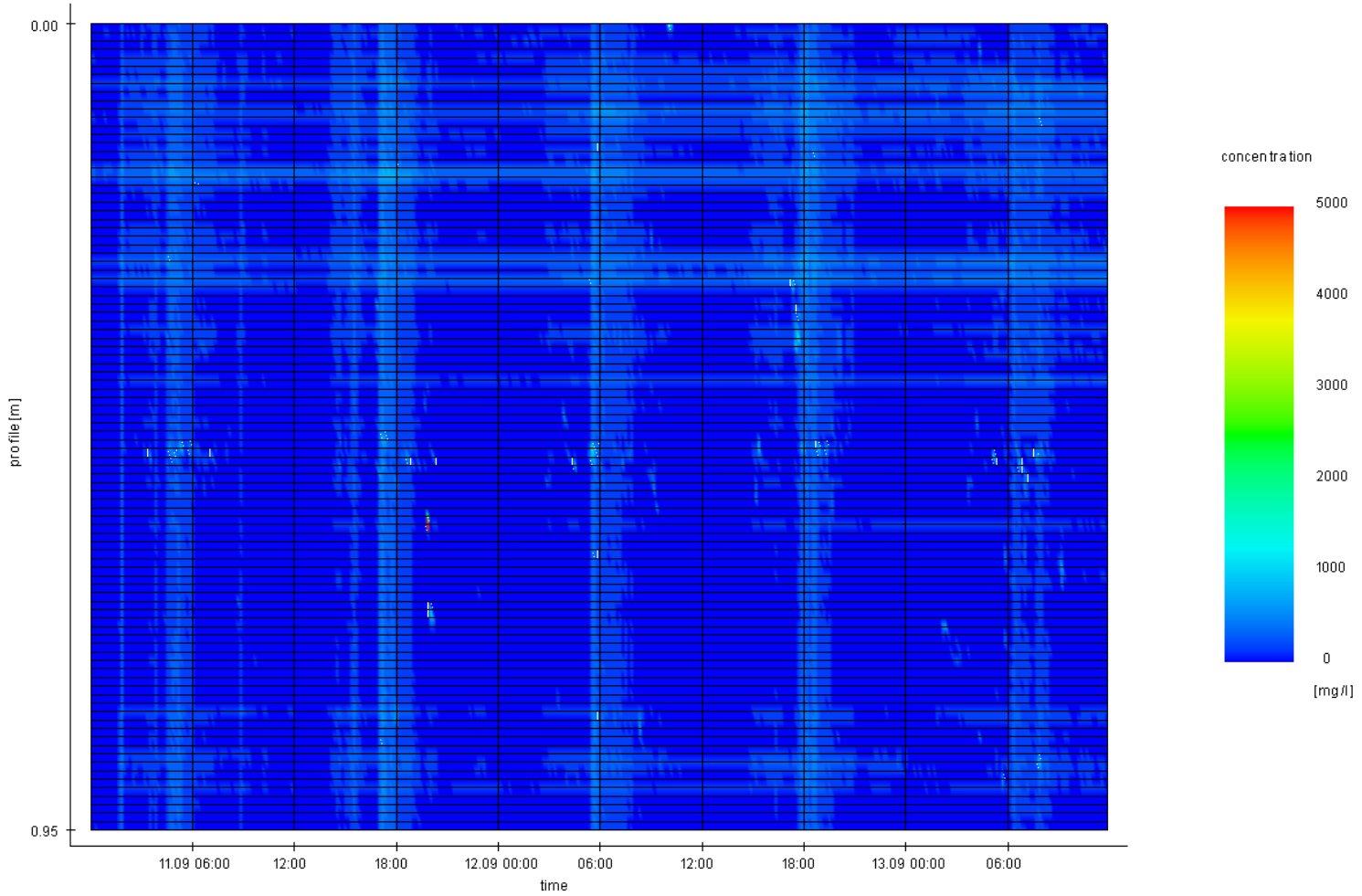
Date:
04/09/2006 – 10/09/2006

Data processed by: IMDC

In association with: WL | delft hydraulics, GEMS International

I/RA/11283/06.122/MSA

11283 Accretion Deurganckdok - Near bed continuous monitoring – Summer 2006



Time series suspended sediment concentration
ARGUS ASM-IV

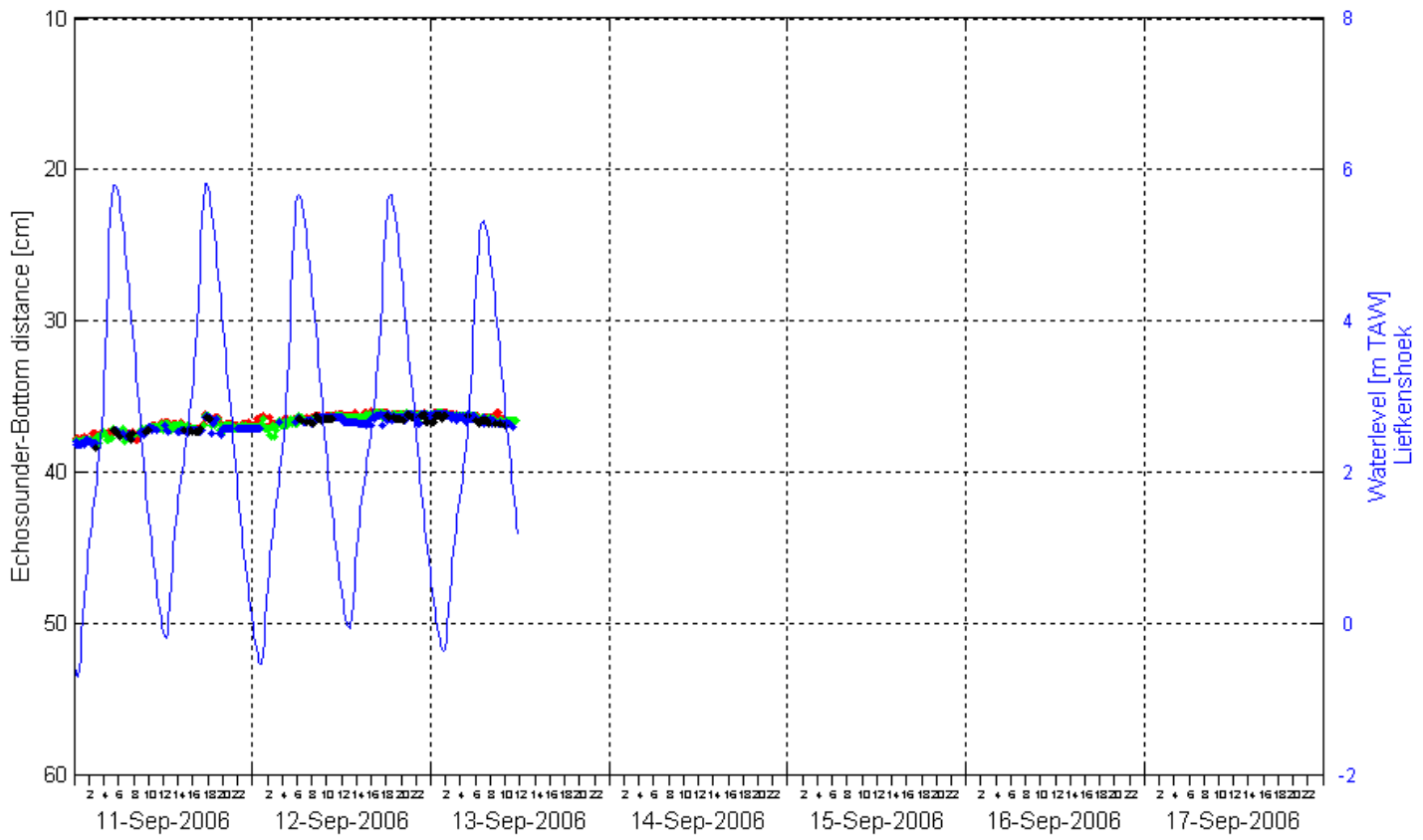
Location:	Date:
Deurganckdok Sill	11/09/2006 – 13/09/2006

Data processed by: IMDC

In association with: WL | delft hydraulics, GEMS International

I/RA/11283/06.122/MSA

11283 Accretion Deurganckdok - Near bed continuous monitoring – Summer 2006



SIGNAL 4
SIGNAL 3
SIGNAL 2
SIGNAL 1

Legend

Echosounder – bottom distance
Waterlevel [mTAW] at Liefkenshoek

Location:
Deurganckdok Sill

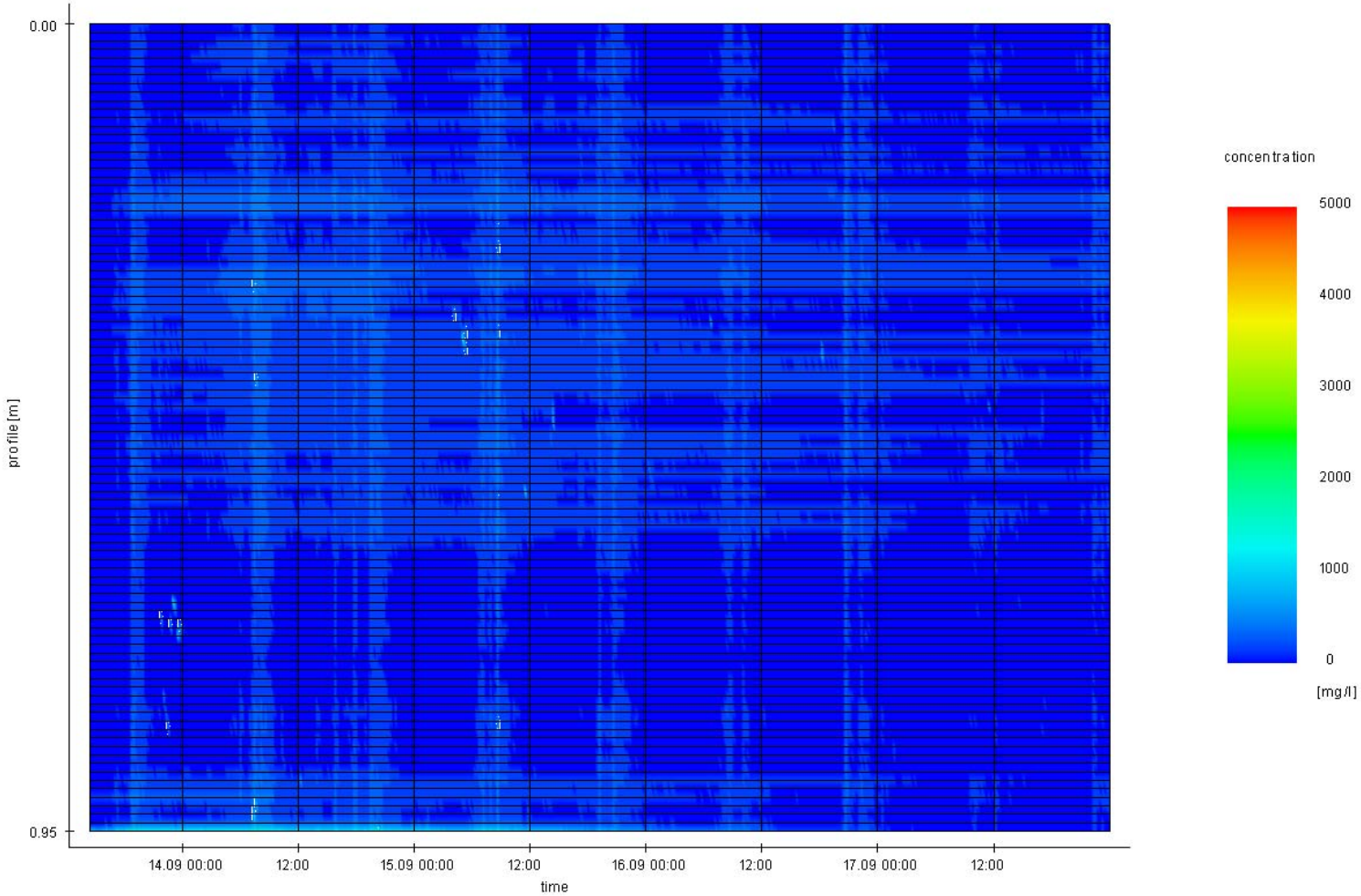
Date:
11/09/2006 – 13/09/2006

Data processed by: IMDC

In association with: WL | delft hydraulics, GEMS International

I/RA/11283/06.122/MSA

11283 Accretion Deurganckdok - Near bed continuous monitoring – Summer 2006



Time series suspended sediment concentration
ARGUS ASM-IV

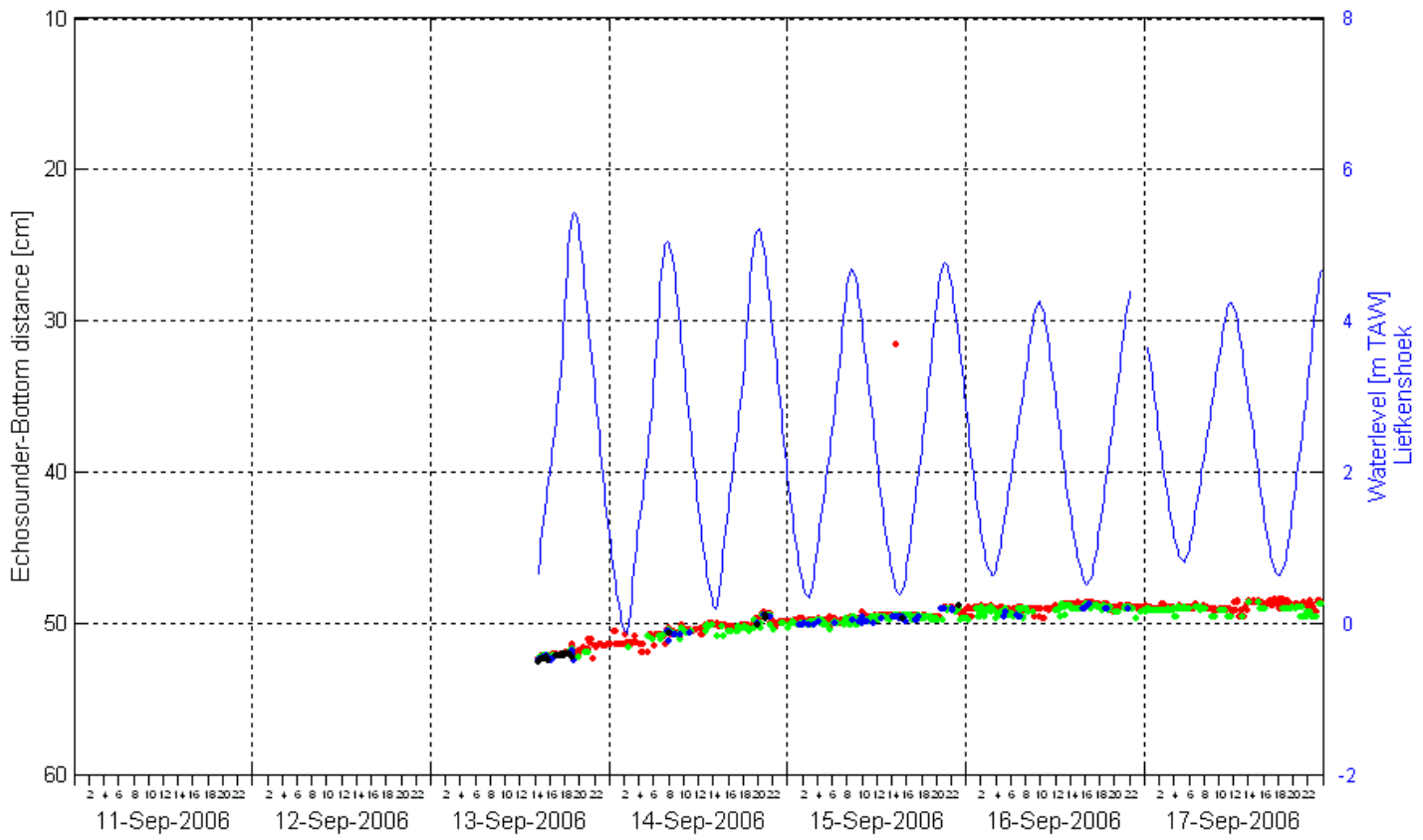
Location:	Date:
Deurganckdok Sill	13/09/2006 – 17/09/2006

Data processed by: IMDC

In association with: WL | delft hydraulics, GEMS International

I/RA/11283/06.122/MSA

11283 Accretion Deurganckdok - Near bed continuous monitoring – Summer 2006



SIGNAL 4
SIGNAL 3
SIGNAL 2
SIGNAL 1

Legend

Echosounder – bottom distance
Waterlevel [mTAW] at Liefkenshoek

Location:
Deurganckdok Sill

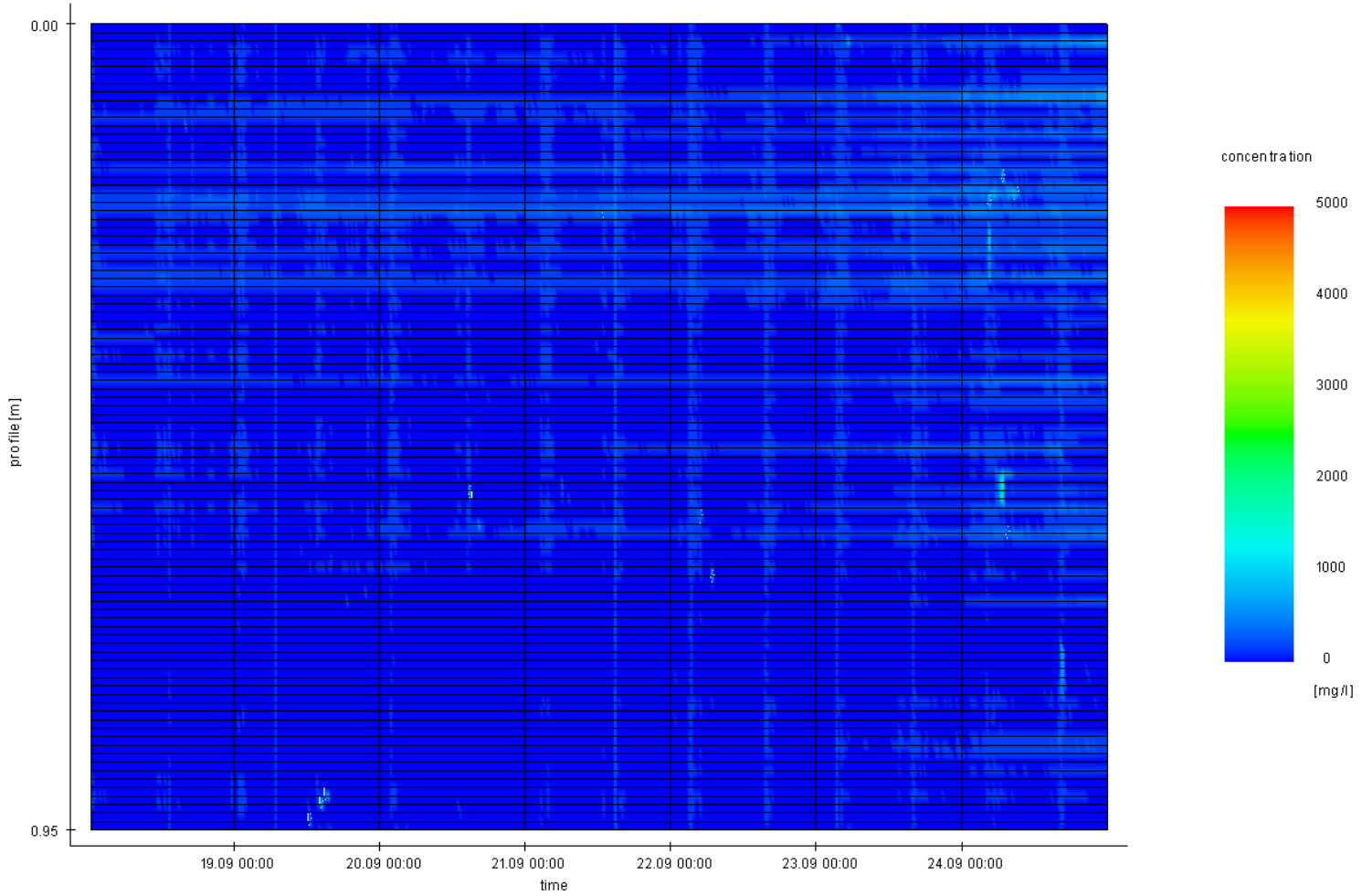
Date:
13/09/2006 – 17/09/2006

Data processed by: IMDC

In association with: WL | delft hydraulics, GEMS International

I/RA/11283/06.122/MSA

11283 Accretion Deurganckdok - Near bed continuous monitoring – Summer 2006



Time series suspended sediment concentration
ARGUS ASM-IV

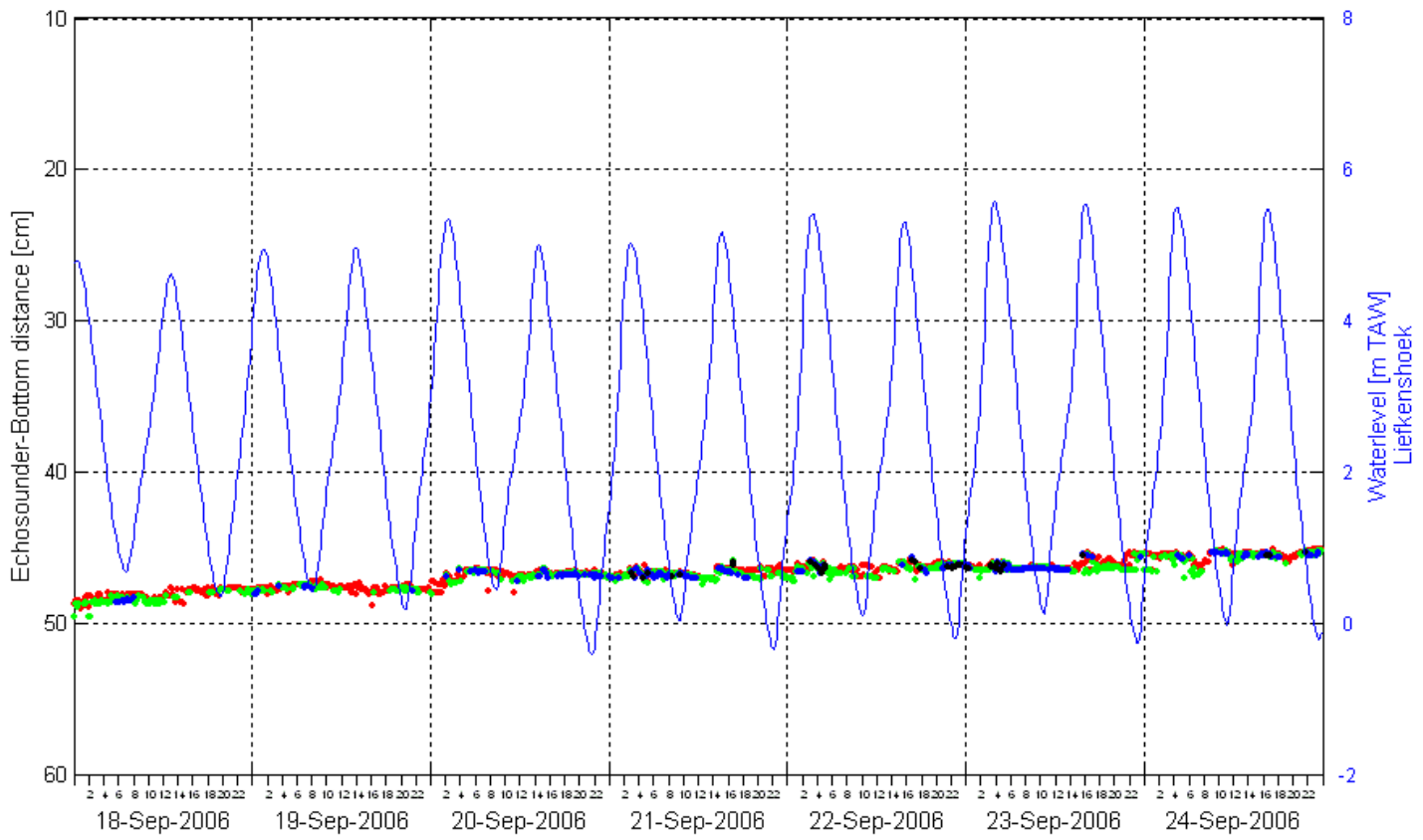
Location:	Date:
Deurganckdok Sill	18/09/2006 – 24/09/2006

Data processed by: IMDC

In association with: WL | delft hydraulics, GEMS International

I/RA/11283/06.122/MSA

11283 Accretion Deurganckdok - Near bed continuous monitoring – Summer 2006



SIGNAL 4
SIGNAL 3
SIGNAL 2
SIGNAL 1

Legend

Echosounder – bottom distance
Waterlevel [mTAW] at Liefkenshoek

Location:
Deurganckdok Sill

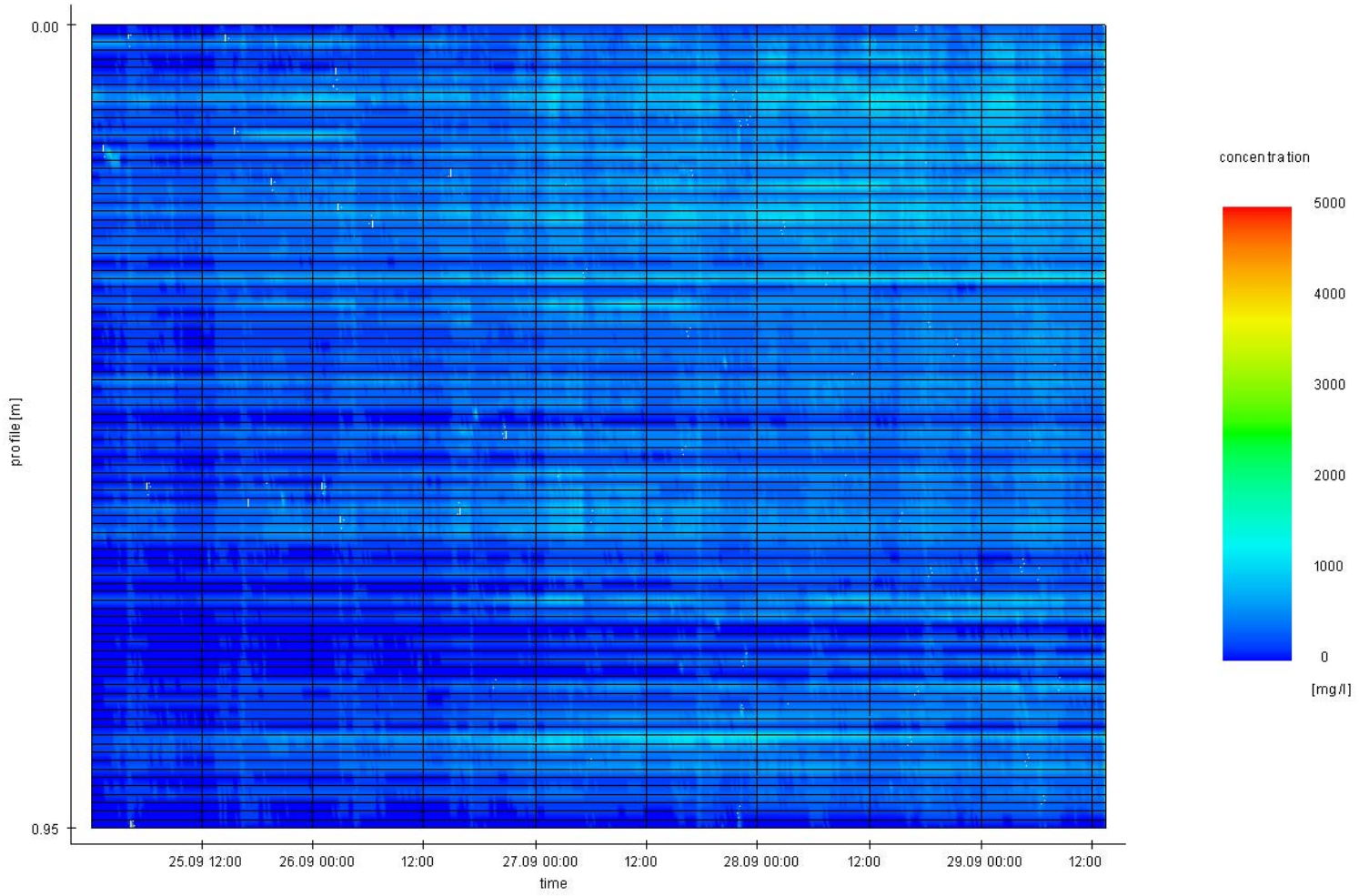
Date:
18/09/2006 – 24/09/2006

Data processed by: IMDC

In association with: WL | delft hydraulics, GEMS International

I/RA/11283/06.122/MSA

11283 Accretion Deurganckdok - Near bed continuous monitoring – Summer 2006



Time series suspended sediment concentration
ARGUS ASM-IV

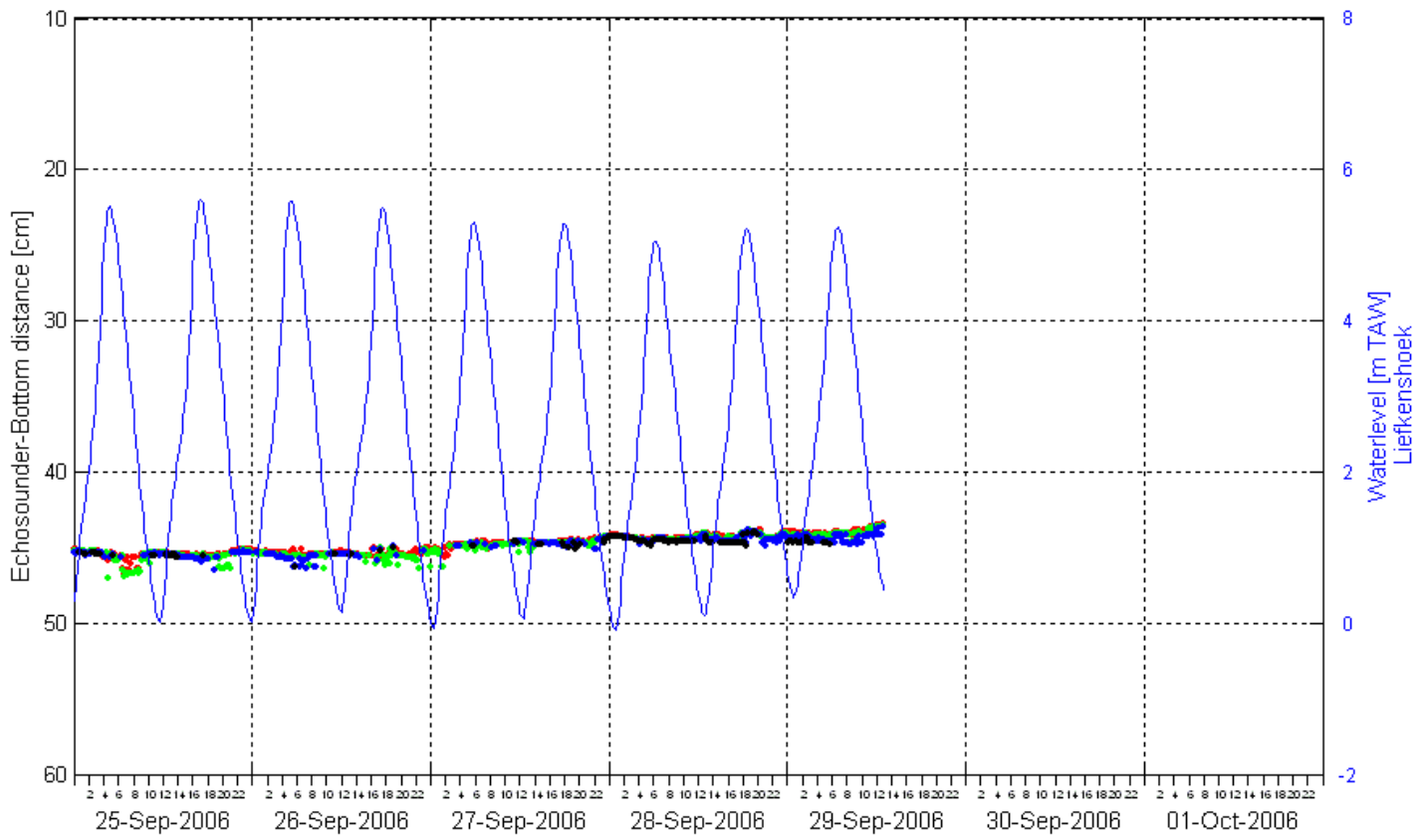
Location:	Date:
Deurganckdok Sill	25/09/2006 – 29/09/2006

Data processed by: IMDC

In association with: WL | delft hydraulics, GEMS International

I/RA/11283/06.122/MSA

11283 Accretion Deurganckdok - Near bed continuous monitoring – Summer 2006



SIGNAL 4
SIGNAL 3
SIGNAL 2
SIGNAL 1

Legend

Echosounder – bottom distance
Waterlevel [mTAW] at Liefkenshoek

Location:
Deurganckdok Sill

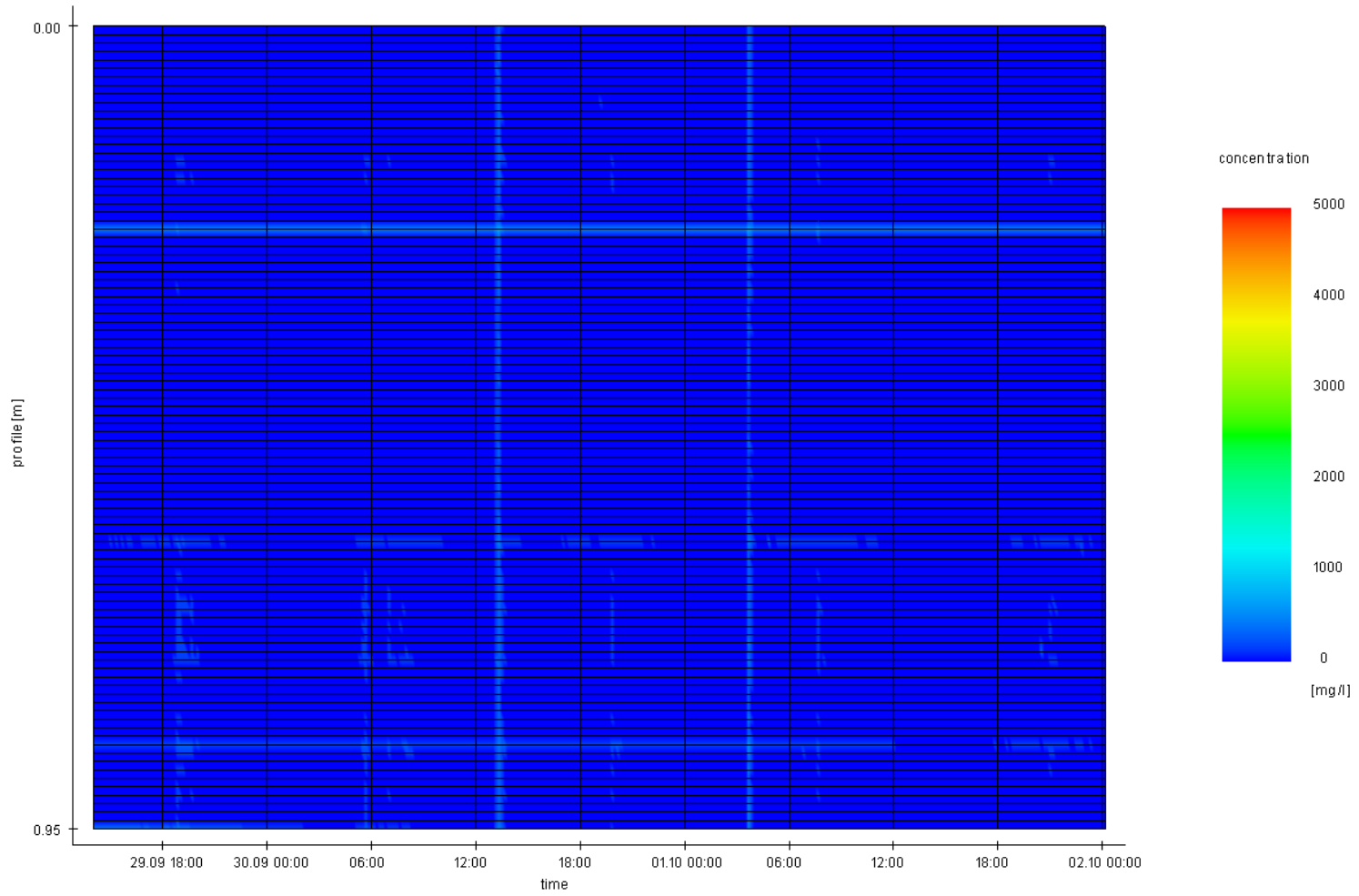
Date:
25/09/2006 – 29/09/2006

Data processed by: IMDC

In association with: WL | delft hydraulics, GEMS International

I/RA/11283/06.122/MSA

11283 Accretion Deurganckdok - Near bed continuous monitoring – Summer 2006



Time series suspended sediment concentration
ARGUS ASM-IV

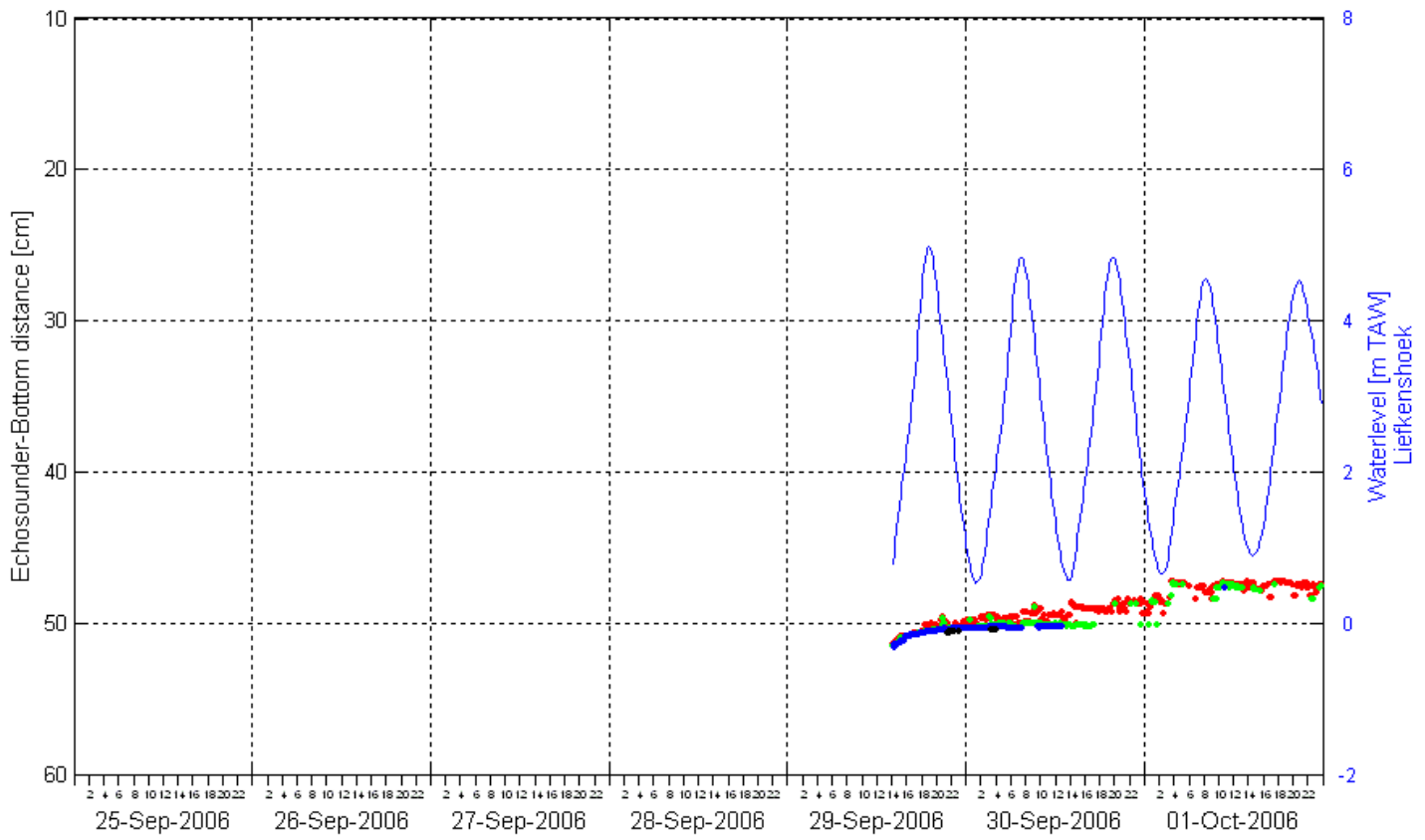
Location:	Date:
Deurganckdok Sill	29/09/2006 – 01/10/2006

Data processed by: IMDC

In association with: WL | delft hydraulics, GEMS International

I/RA/11283/06.122/MSA

11283 Accretion Deurganckdok - Near bed continuous monitoring – Summer 2006



SIGNAL 4
SIGNAL 3
SIGNAL 2
SIGNAL 1

Legend

Echosounder – bottom distance
Waterlevel [mTAW] at Liefkenshoek

Location:
Deurganckdok Sill

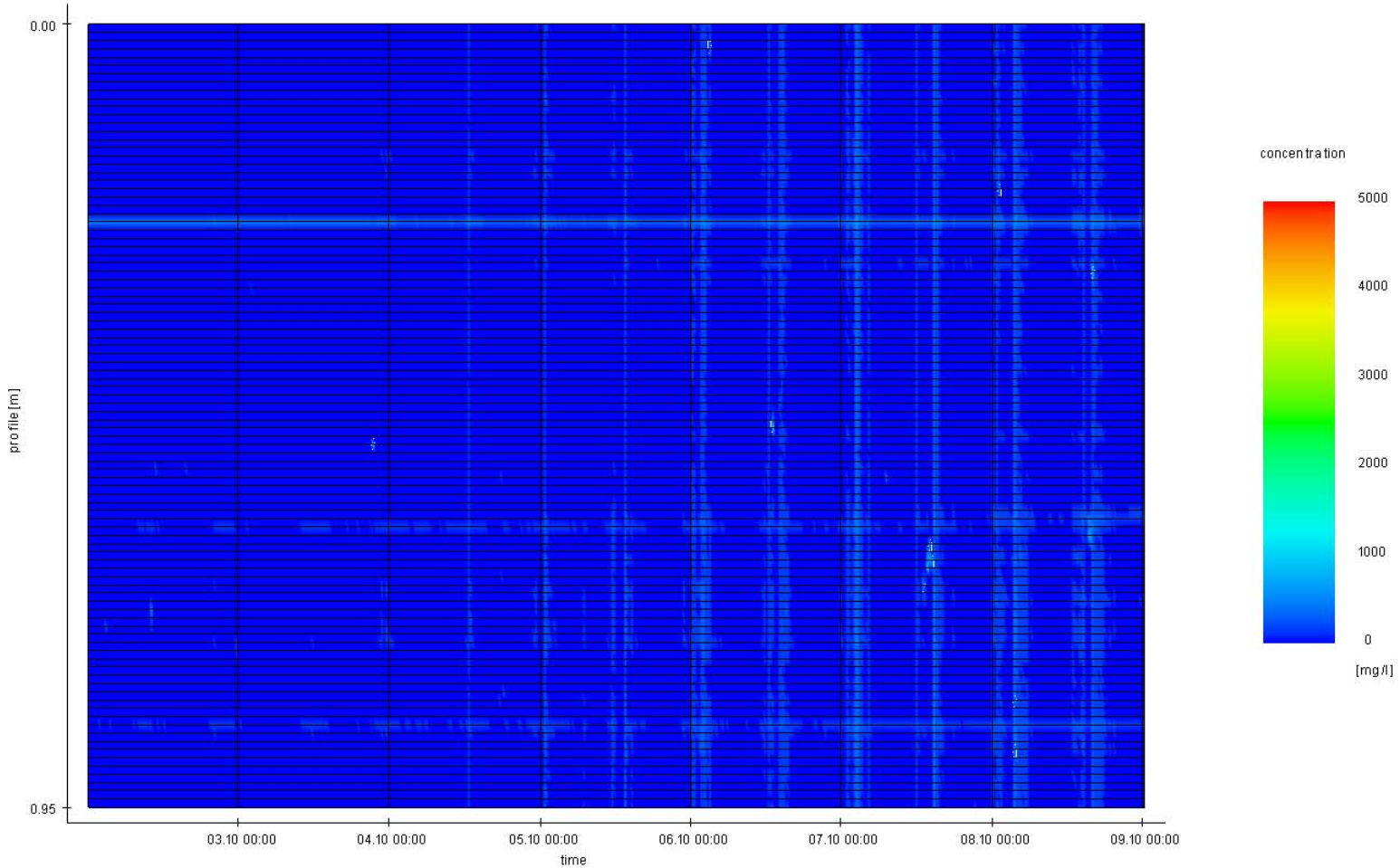
Date:
29/09/2006 – 01/20/2006

Data processed by: IMDC

In association with: WL | delft hydraulics, GEMS International

I/RA/11283/06.122/MSA

11283 Accretion Deurganckdok - Near bed continuous monitoring – Summer 2006



Time series suspended sediment concentration
ARGUS ASM-IV

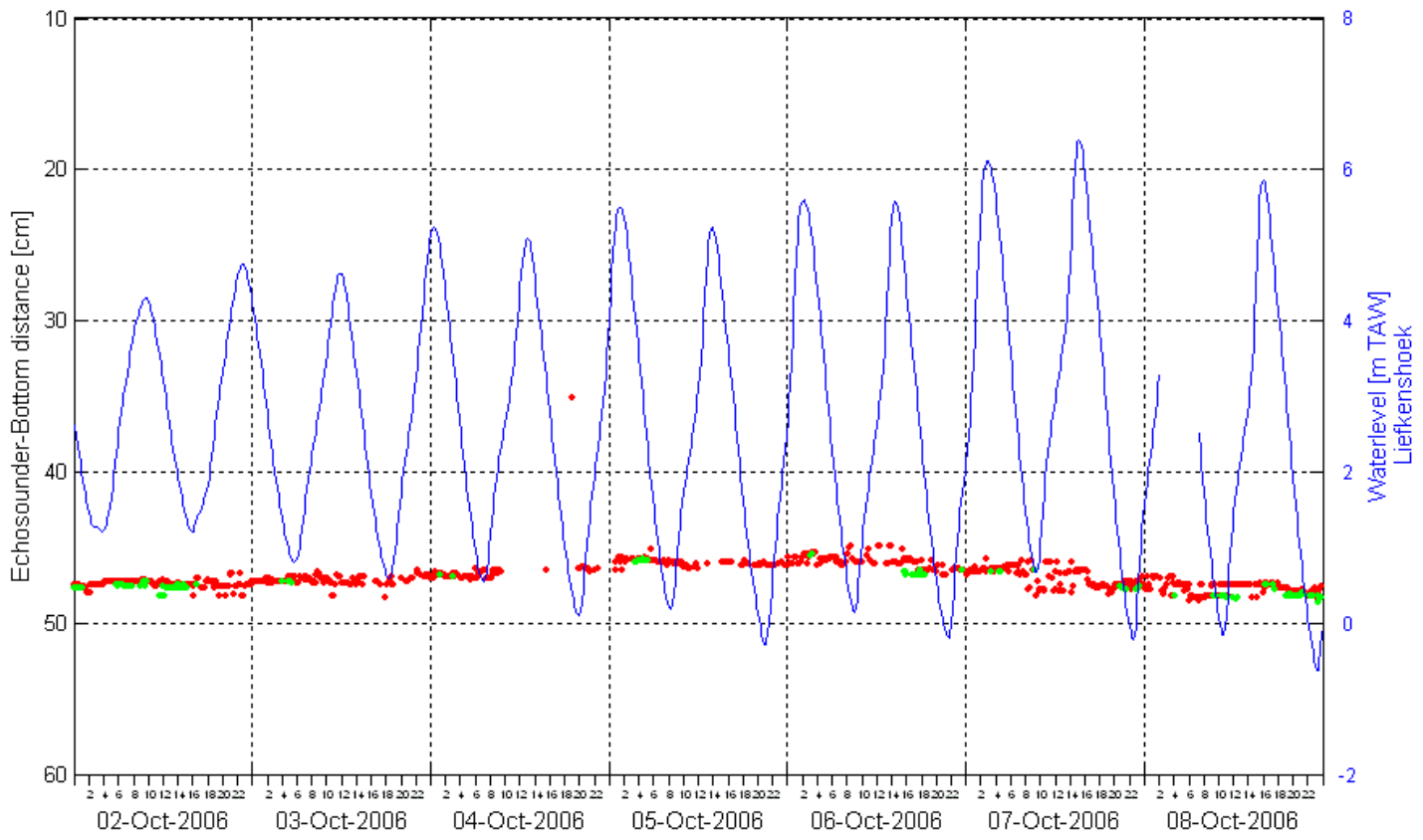
Location:	Date:
Deurganckdok Sill	02/10/2006 – 08/10/2006

Data processed by: IMDC

In association with: WL | delft hydraulics, GEMS International

I/RA/11283/06.122/MSA

11283 Accretion Deurganckdok - Near bed continuous monitoring – Summer 2006



SIGNAL 4
SIGNAL 3
SIGNAL 2
SIGNAL 1

Legend

Echosounder – bottom distance
Waterlevel [mTAW] at Liefkenshoek

Location:
Deurganckdok Sill

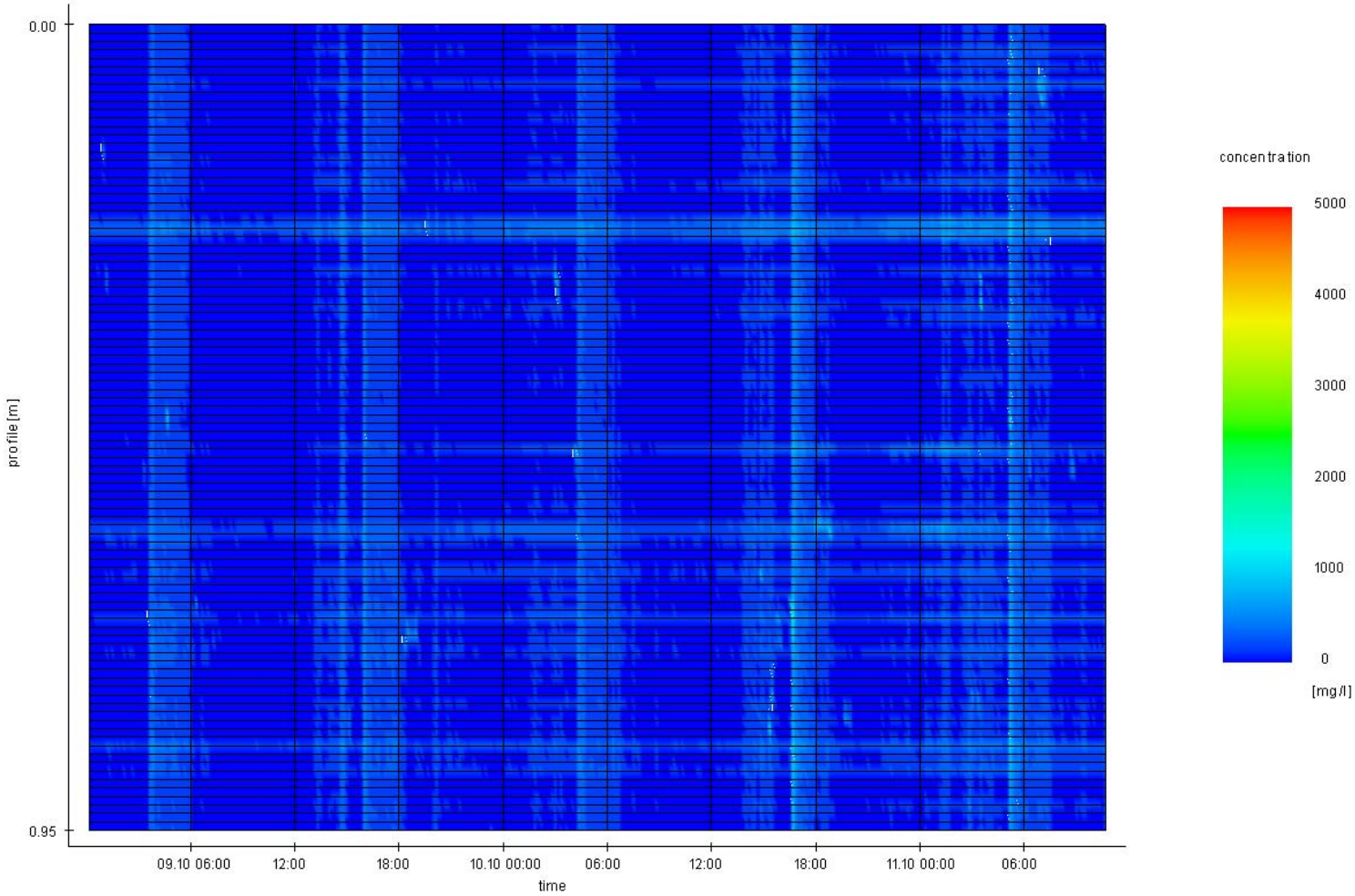
Date:
02/10/2006 – 08/10/2006

Data processed by: IMDC

In association with: WL | delft hydraulics, GEMS International

I/RA/11283/06.122/MSA

11283 Accretion Deurganckdok - Near bed continuous monitoring – Summer 2006



Time series suspended sediment concentration
ARGUS ASM-IV

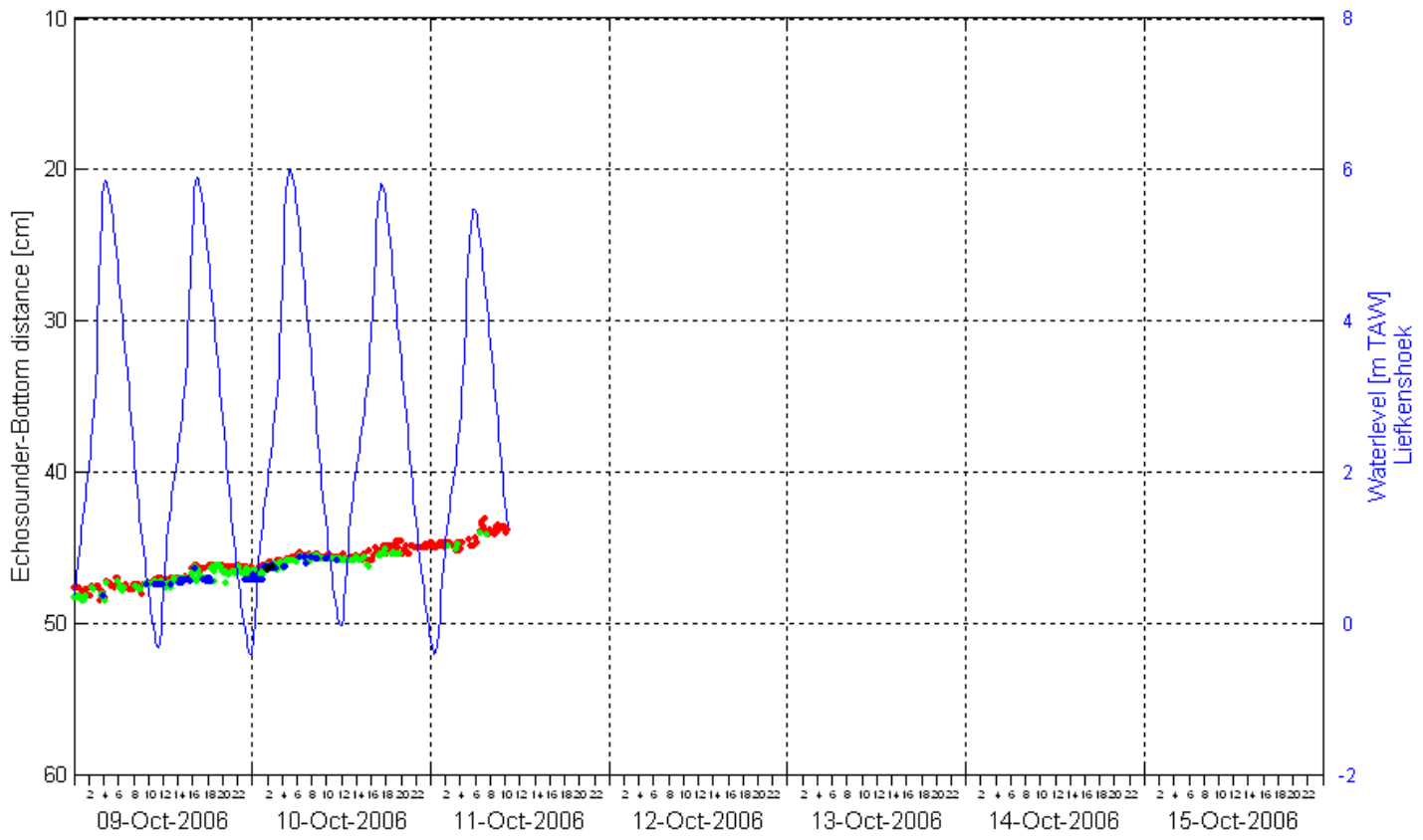
Location:	Date:
Deurganckdok Sill	09/10/2006 – 11/10/2006

Data processed by: IMDC

In association with: WL | delft hydraulics, GEMS International

I/RA/11283/06.122/MSA

11283 Accretion Deurganckdok - Near bed continuous monitoring – Summer 2006



SIGNAL 4
SIGNAL 3
SIGNAL 2
SIGNAL 1

Legend

Echosounder – bottom distance
Waterlevel [mTAW] at Liefkenshoek

Location:
Deurganckdok Sill

Date:
09/10/2006 – 11/10/2006

Data processed by: IMDC

In association with: WL | delft hydraulics, GEMS International

I/RA/11283/06.122/MSA

ARGUS Mean SS Concentration [mg/l] per tidal phase in layers of 10 cm (*except first column 6 cm) [distances given in cm above bottom]

Date	*Tide no.*	*Phase*	*Tidal diff [m]*	*119-114**	*113-104*	*103-94*	*93-84*	*83-74*	*73-64*	*63-54*	*53-44*	*43-34*	*33-24*
20060719	1	ebb	4.3	201.7	25.2	47.8	26.5	109.3	196.6	46.4	15.4	123.5	107.3
20060719	1	flood	4.9	247.6	67.8	89.8	68.2	149.4	215.5	90.2	59.8	165.2	150.9
20060720	2	ebb	5.1	200.8	23	41.6	22.4	100.8	160.3	43.6	13.1	115.3	99
20060720	2	flood	5	219.9	39.9	59.4	38.4	120.4	179.9	61	31.4	134.4	121.1
20060720	3	ebb	4.6	235.3	44.9	69.7	45.9	127.7	186.6	69.5	36.3	142.8	127.9
20060720	3	flood	4.6	259.7	36	72.7	38.3	112.7	173.8	85.8	28.8	125	126.3
20060721	4	ebb	4.8	275.3	22.5	54.4	21.6	96.8	158.8	99.5	11.2	110.5	120.7
20060721	4	flood	4.7	323	31.9	74.2	41.7	115.2	187.5	112	76.7	178.5	151.9
20060721	5	ebb	4.7	323.7	22.4	69.1	35.8	110.4	188.2	96.6	462.4	382.9	142.5
20060722	5	flood	4.8	352.8	34.5	83.8	50.1	120.4	203.1	116.2	31.7	156.5	156.5
20060722	6	ebb	4.9	333.5	20.1	69.4	31.2	105.5	178.7	81.7	14.8	130.2	125.5
20060722	6	flood	4.8	398.2	47.7	112.9	79.1	149.8	221.8	136.3	49.4	179.6	178.1
20060722	7	ebb	4.8	372.8	19.7	81.9	45.3	110.9	186.4	82.6	13.5	127.9	125.4
20060723	7	flood	5.1	430.9	40.3	104.1	72.3	145.6	215.3	131.2	38.2	157.7	162.1
20060723	8	ebb	5	399.8	21.1	89.4	40.4	124	189.3	87.9	13.1	127.8	122.5
20060723	8	flood	4.9	456.5	32.4	117.2	62.2	136.4	219.9	108.3	28.3	137.9	132.9
20060723	9	ebb	5.2	470.9	23.2	115.9	47.9	133.6	205.9	99.7	15.5	124.1	119.3
20060724	9	flood	5.4	542	45.2	158	73.2	164.2	256.1	141.4	35.4	146.6	166.5
20060724	10	ebb	5.2	509.6	37.7	161.4	70.4	187.9	246.9	131.6	25.1	137.3	145.5
20060724	10	flood	5.1	374.1	47.8	220.5	101.2	268.9	289.6	162.2	38.7	146.6	167
20060724	11	ebb	5.5	469.2	67.6	320.7	168	396.1	329.9	176.8	50.7	174.6	206.7

ARGUS Mean SS Concentration [mg/l] per tidal phase in layers of 10 cm (*except first column 6 cm) [distances given in cm above bottom]

Date	*Tide no.*	*Phase*	*Tidal diff [m]*	*119-114**	*113-104*	*103-94*	*93-84*	*83-74*	*73-64*	*63-54*	*53-44*	*43-34*	*33-24*
20060725	11	flood	5.6	698.7	98.6	531	263.3	433.9	396.7	203.3	50.4	183.7	250.8
20060725	12	ebb	5.3	464.9	133.6	558.3	234.8	303.8	363	157.9	29.6	150.2	194.4
20060725	12	flood	5.2	534.1	174.6	656.1	341.3	335.4	446	219.9	61.9	197.5	258.4
20060725	13	ebb	5.6	629.1	254.4	519.5	310.4	307.9	523.5	240.6	48.1	183.4	270.7
20060726	13	flood	5.7	991	300	631.5	317.3	376.9	764.4	402.5	75.4	223.8	536.2
20060726	14	ebb	5.4	828.7	243.3	528.5	238.3	401.5	733.4	348.8	65.9	191.8	671.4
20060726	14	flood	5.2	927.4	228.8	512.6	276.2	534.7	951	512.9	129.7	278.4	723.7
20060726	15	ebb	5.7	791.8	201.6	472.6	293.3	667.8	923.3	697.9	167.2	345	414.6
20060727	15	flood	5.7	1083.9	341.8	828.3	473.3	1001.7	1129.8	1244.4	355.3	543.7	604.2
20060727	16	ebb	5.2	776.5	274.9	635.2	356.3	776.6	738.9	697.3	238.1	315.9	332.4
20060727	16	flood	5.3	966.9	400.6	889.2	540.5	967.8	851.4	862.9	395.4	439.1	405
20060727	17	ebb	5.7	884.9	426.5	875.7	488.7	987.1	734.7	688.9	471.8	431.5	428.7
20060728	17	flood	5.8	1195.3	642.6	1357	901.9	1151.9	1072.6	953.5	689	576.1	583.2
20060728	18	ebb	5.4	1027.6	502	1181.2	815.1	1008.4	895.6	681	502.2	507.7	498.5
20060728	18	flood	5.3	1239.4	642.4	1520	1065.9	1147.9	1299.2	1032	690.4	754.6	702.4
20060729	19	ebb	5.7	1112.4	644.1	1526.4	1082	1159.4	1280	830.8	773.7	926.4	774.8
20060729	19	flood	5.7	1553.6	990.1	1993.5	1661.7	1511.1	1747.4	1168.2	1109.1	1393.2	1228.7
20060729	20	ebb	5.3	1090.2	719.9	1686.9	1255.1	1217.9	1276.8	792.7	671.6	1027	1275.8
20060729	20	flood	5.3	1094.7	777.9	1610.6	1271.4	1179.2	1343.7	958.5	807.1	1232.7	894.7
20060730	21	ebb	5.7	1017.6	703.7	1817.2	1312.1	1234.4	1373.5	974.4	701.9	1180.2	821.4
20060730	21	flood	5.6	1188.1	919.2	1945.6	1501.8	1420.3	1520.9	1246.1	954.6	1424.9	1002.2
20060730	22	ebb	5.1	1134.5	946.1	2047	1383.4	1433.5	1486.6	1161.8	1606.4	2070.3	945.3

ARGUS Mean SS Concentration [mg/l] per tidal phase in layers of 10 cm (*except first column 6 cm) [distances given in cm above bottom]

Date	*Tide no.*	*Phase*	*Tidal diff [m]*	*119-114**	*113-104*	*103-94*	*93-84*	*83-74*	*73-64*	*63-54*	*53-44*	*43-34*	*33-24*
20060730	22	flood	5.2	1241.4	1142.1	2186.1	1618.5	1536.1	1448.3	1386	1045.5	1546.7	1159.3
20060731	23	ebb	5.4	1321.9	873	2203.9	1424.6	1409	1286.5	1120	752	1318.3	896.5
20060731	23	flood	5.4	1257.2	925.1	1903.3	1481.2	1406.8	1081.4	1408.2	920.6	1499.5	1124.2
20060731	24	ebb	5.1	1330.8	798	1933.3	1324.9	1378	1079.2	1314	820.6	1293.7	972.7
20060731	24	flood	4.9	1408.1	877	1880.1	1517.7	1445.1	974.8	1471.8	908	1341.1	1012.5
20060801	25	ebb	5.5	1022.9	700.8	1846.4	1332.8	1379	901.7	1216.3	792.3	1244.6	960.1
20060801	25	flood	5.3	926.1	769.2	1816.1	1303.9	1457.1	856.5	1315.8	915.5	1346.8	1098
20060801	26	ebb	4.4	824.4	668.2	1827.4	1124.5	1390.2	792.5	1202.3	805.6	1142.5	877.3
20060801	26	flood	4.7	770.2	667.7	1689.1	1149.4	1311.5	681.6	997	844.9	1223.9	941.7
20060802	27	ebb	4.9	634.2	546.7	1575	1070.1	1209.6	594.1	944.7	774	1127.5	899
20060802	27	flood	4.9	602.8	554.9	1429.6	1088.9	1154.2	555.9	967.5	914.3	1260.7	953.1
20060802	28	ebb	10	493.4	424.6	1241.2	996.1	1114	479.6	874.8	858.6	1125.8	907.9
20060802	28	flood	4.1	28.8	28	28.9	24.1	25.5	42.2	47.7	28.3	727.4	49.9
20060803	29	ebb	4.7	59.2	63.7	58.2	52.2	58.3	51.1	68	48.1	82.2	62.8
20060803	29	flood	4.5	40.1	39.9	41.2	38.2	42.1	39.4	53.4	43.3	75.3	141.5
20060803	30	ebb	4.1	65.5	70.7	62	57.7	55.2	51.9	49.9	49.5	61.7	107.3
20060803	30	flood	4.2	37.5	36.4	37.3	34.4	38.1	38.4	41	44.4	60	62.2
20060804	31	ebb	4.4	65.7	67.7	109.3	76.5	66.8	55.9	54.8	56.1	71.2	68.8
20060804	31	flood	4.2	32.2	30.3	37.4	27.6	33.9	30.3	31.2	33.8	282.2	153.2
20060804	32	ebb	4	54.4	59.4	70.5	50	51.9	42.4	36.1	38.5	59.3	49.3
20060804	32	flood	3.9	26.3	25.1	36	21.7	26	21.6	21	34.8	126.6	62.3
20060805	33	ebb	4.1	52.7	63.4	93.4	46.7	52.6	39.2	26	239.1	100	37

ARGUS Mean SS Concentration [mg/l] per tidal phase in layers of 10 cm (*except first column 6 cm) [distances given in cm above bottom]

Date	*Tide no.*	*Phase*	*Tidal diff [m]*	*119-114**	*113-104*	*103-94*	*93-84*	*83-74*	*73-64*	*63-54*	*53-44*	*43-34*	*33-24*
20060805	33	flood	4.1	29.2	55	55.3	23.3	33.9	22.4	20	21.6	53.9	31.1
20060805	34	ebb	4.1	74.1	123.7	123	76.3	72.3	62.9	42.3	35.2	43.6	45.3
20060805	34	flood	4.1	30.3	30.3	27.7	25.3	33	30.7	20.8	17.6	30	24.9
20060806	35	ebb	4.2	113.4	234.2	149.9	135.2	99.2	97.4	52	39.1	39.3	35.4
20060806	35	flood	4.4	83	99.6	60.8	54.5	50.7	45.7	41.7	21.7	26.8	28.2
20060806	36	ebb	4.4	88.3	128.4	122.4	88.7	71	58.5	62.2	32	35.3	35.8
20060807	36	flood	4.7	40.7	34	33.3	24	31.5	126.5	55.2	19.2	48.8	28.3
20060807	37	ebb	4.7	82	83.6	94.2	58.5	42.6	48.3	34.6	27	33	32.2
20060807	37	flood	4.9	44.2	38.7	39.5	24.7	28.4	40.5	26.7	26.6	59.4	39.2
20060807	38	ebb	4.9	80.8	91.1	73.1	56.9	125.4	174.4	35.5	35.4	49.1	42.4
20060808	38	flood	5	48.5	35.1	31.3	20.8	30.6	21.6	104.5	1163.4	219.5	41.5
20060808	39	ebb	5.2	94.7	85.6	82.1	65.6	118.7	63	65.7	169.2	80.1	185
20060808	39	flood	5.1	43.8	38.5	38.5	30.6	36.1	31.9	27.5	32.9	148	48.8
20060808	40	ebb	5.5	101.9	89.4	76.9	68	77.4	60.7	55.2	62.5	73.9	77.4
20060809	40	flood	5.7	78.9	58.8	60.7	51.7	56.8	542	313.4	63.3	73.3	88
20060809	41	ebb	5.6	161.6	136.2	137.2	115.5	146.6	110	101.5	117.6	116.2	140.4
20060809	41	flood	5.7	95.1	74.4	75.4	73	78.8	69.3	73.4	84.6	107.3	111.3
20060809	42	ebb	5.8	187.2	144.7	150.9	132	151.8	119	121.1	142.4	130.8	153
20060810	42	flood	6	124.4	90.4	97.7	91.5	97.6	93.1	99	122.6	176.2	147.7
20060810	43	ebb	5.8	222	158.5	144.8	125.6	138.8	115.1	109.7	120	128.8	152.3
20060810	43	flood	5.6	109.9	55.1	64.4	47.7	59.6	47.1	61.7	97.5	125.2	376.7
20060810	44	ebb	6.1	288.7	151.8	162.9	151	156.6	140.9	136.7	143	149.7	186.2

ARGUS Mean SS Concentration [mg/l] per tidal phase in layers of 10 cm (*except first column 6 cm) [distances given in cm above bottom]

Date	*Tide no.*	*Phase*	*Tidal diff [m]*	*119-114**	*113-104*	*103-94*	*93-84*	*83-74*	*73-64*	*63-54*	*53-44*	*43-34*	*33-24*
20060811	44	flood	6.3	168.2	108.5	106.7	99.7	108.1	101.4	110.3	117.6	167.9	210
20060811	45	ebb	5.8	262.2	165.8	148.9	158.8	163.7	206	141.4	144.3	157.5	187.9
20060811	45	flood	5.8	143.3	72.3	77.2	78	88	86.5	81.4	94.6	114.1	134.6
20060811	46	ebb	6.3	256.3	170.6	164.7	164.2	192.8	176.6	151.8	149.9	160.7	252.8
20060812	46	flood	6.4	213	158.8	165.2	169.5	176	175.2	176.7	191.6	235.5	373.9
20060812	47	ebb	6	372.1	254.3	226.2	235.7	250.8	229.8	224.6	229.5	237.4	295
20060812	47	flood	5.9	166.4	101.8	103.9	113.2	119.8	114.4	119.8	134.5	238.9	1074.7
20060813	48	ebb	6.4	339.9	214.3	205.7	219.1	250.7	198.1	190.4	201	267.7	436.5
20060813	48	flood	6.5	222.4	122.3	127.3	137.6	148.1	136	145.4	171.3	228.2	238.2
20060813	49	ebb	6	331.9	260.7	231.6	218.2	248.3	206.8	198.3	212.3	216.4	253.6
20060813	49	flood	5.8	157.6	119	118	124.3	139.7	132	144.4	194	211.8	276.1
20060814	50	ebb	6.3	251.6	217.3	198.4	179	241.4	187	166	179.6	180.5	256.3
20060814	50	flood	6.3	170.1	128.5	128	131.3	176.2	134.3	143.4	264.9	217.9	247.8
20060814	51	ebb	5.4	290.8	237	216.7	219.2	218	207.4	202.3	239	220	260.7
20060814	51	flood	5.7	123.7	77.9	74.5	78.2	86.6	81.9	87.7	110.1	109.9	146.8
20060815	52	ebb	6	266.7	200	176.2	175.6	202.8	176.9	150.4	172.1	162.8	202.6
20060815	52	flood	5.8	151.5	87.9	97	97.5	114	97.8	100.4	127.4	150.4	180.9
20060815	53	ebb	5.6	322.7	212.9	195	193.6	208.8	191.2	170.3	194.9	174.1	213.7
20060815	53	flood	5.3	164.4	79.3	97.5	102.5	110	102.6	140.8	150.2	129.4	251.7
20060816	54	ebb	5.8	314.1	125.3	154.3	156.4	204.4	169.5	113.4	120.7	117.3	386.9
20060816	54	flood	5.4	203.4	95.1	104.1	121.4	132.7	105.8	119	288.9	189.2	1825.8
20060816	55	ebb	5.1	398.3	188.5	241	265.7	269.5	204.7	180.4	222.3	171.8	465.5

ARGUS Mean SS Concentration [mg/l] per tidal phase in layers of 10 cm (*except first column 6 cm) [distances given in cm above bottom]

Date	*Tide no.*	*Phase*	*Tidal diff [m]*	*119-114**	*113-104*	*103-94*	*93-84*	*83-74*	*73-64*	*63-54*	*53-44*	*43-34*	*33-24*
20060816	55	flood	5	183.7	64	86.6	83.4	101.7	72.6	77.9	169.4	122	102.3
20060817	56	ebb	5.2	340.9	124.6	158.8	179.3	222.9	147.8	123.5	131.1	120.2	149.3
20060817	56	flood	4.9	246.9	88.8	112.2	115.4	147.1	100	105.5	142.6	110.2	119.3
20060817	57	ebb	4.6	455.7	183	205.1	228.3	292.2	185.2	146.8	159.6	145.4	173.7
20060817	57	flood	4.6	275.2	83.5	108.5	119.9	154.9	96.1	88.6	97.2	87.7	83.9
20060818	58	ebb	4.7	478.8	153	196.4	299.9	279.4	169	121.8	158.9	121.1	116.1
20060818	58	flood	4.4	294.2	92.8	99.6	197.9	162.6	84.3	76.9	111.4	78.3	69.9
20060818	59	ebb	4.1	578.7	148.4	235.2	476.3	361.7	211.9	158.4	197.1	126.9	148.8
20060818	59	flood	4.3	273	73	119.3	337.2	189.8	104.3	101.5	115.8	84.2	88.3
20060819	60	ebb	4.2	547.1	121.9	179.8	532.3	358	183.2	131.5	148.9	106.3	122.9
20060819	60	flood	4	349.2	74.5	128.4	457.9	240.1	108.6	85.5	133.3	86.1	109.3
20060819	61	ebb	4.1	630.2	159.1	276.9	694.9	445.2	232.5	160	185.7	125.9	183.1
20060820	61	flood	4.4	381.7	85.6	158.4	583.2	214.3	137.8	114.6	140.3	99.3	150.7
20060820	62	ebb	4.3	627.5	147.4	274.2	807.4	431.3	230	152.9	175.5	140.7	253.5
20060820	62	flood	4.3	440.5	96.8	193.1	574	268.3	127.5	133.2	161.7	134	245.9
20060820	63	ebb	4.3	747.6	166.6	302.5	710.4	466.5	250.4	176.1	188.7	136.6	312
20060821	63	flood	4.7	485.4	129	243.8	688	350.1	171	183.3	208.1	156.4	294.7
20060821	64	ebb	4.7	597	195.6	352.1	885.6	517.7	275.1	224.4	234.2	174	332.8
20060821	64	flood	4.5	440.4	139.8	235.3	913.2	369.9	187.4	196.1	193.8	159.4	248.4
20060821	65	ebb	4.9	589.2	204.4	340.2	994.2	511.4	343.1	226	218.3	231.1	285.7
20060822	65	flood	5.3	444.1	198.8	279.8	962.2	490.9	366.5	216.5	210.9	243.6	283.1
20060822	66	ebb	4.8	600.1	529.3	267.4	762.5	172.8	321.4	290	305.7	324.9	386.7

ARGUS Mean SS Concentration [mg/l] per tidal phase in layers of 10 cm (*except first column 6 cm) [distances given in cm above bottom]

Date	*Tide no.*	*Phase*	*Tidal diff [m]*	*119-114**	*113-104*	*103-94*	*93-84*	*83-74*	*73-64*	*63-54*	*53-44*	*43-34*	*33-24*
20060830	66	flood	4.1	89.5	114.2	118.1	106.1	81.7	80.2	63.4	65.7	82.2	100.7
20060831	67	ebb	5.2	36	56.4	62.2	53.9	32.7	30	21.2	22.3	33.3	47.6
20060831	67	flood	4.9	87.4	112.7	114.4	105.4	82.7	75.3	62.2	62.7	76.9	93.1
20060831	68	ebb	4.7	45.1	68.8	69.4	62	39.8	40.9	26.9	30.2	41.8	57.4
20060831	68	flood	4.6	125.1	153.2	155.4	145.7	118.8	121.7	103.1	105	125.1	147.1
20060901	69	ebb	4.7	43.1	63.7	65.5	58.8	36	34.6	24.3	25.2	36	48.1
20060901	69	flood	4.5	91.2	115.7	115.9	106.2	86.7	87.2	72.4	74	81.2	96.7
20060901	70	ebb	4.5	41	62.3	63.5	56.2	35.1	35.8	22.5	24.9	35.5	48.1
20060901	70	flood	4.3	111.7	138.8	139.9	131.3	108.3	107.5	95.1	97.2	111.7	135.5
20060902	71	ebb	4.2	68.5	92.7	96	88.6	69.5	69	54.2	61.4	75.1	97.4
20060902	71	flood	4.1	104.5	129.8	131.4	121.2	95.1	98.9	81.6	84.4	98.3	116.9
20060902	72	ebb	3.9	50.5	76.2	73.8	63.5	40.5	40.4	29.1	28.4	38.3	51.1
20060902	72	flood	3.6	91.7	113.7	116.2	106.4	83.1	85.1	72.6	74.8	85.6	101.7
20060903	73	ebb	3.4	38.2	56.9	60.4	51.2	27.4	32.2	18.4	23.3	29	40.6
20060903	73	flood	3.7	74.8	96.5	99.2	88.7	62.9	64.9	53.1	53.6	64.5	76.9
20060903	74	ebb	3.2	27.9	41.8	47.2	35.1	15.1	21	9.5	11.4	22.1	22.9
20060903	74	flood	3.5	44	62.4	67.1	54.1	33	41.1	24.1	26.8	33.8	44.1
20060904	75	ebb	4	20.6	36.2	42.1	29.7	15.4	15.9	3.1	5.2	30.1	18
20060904	75	flood	4	63.1	82.5	87.2	72.4	49.3	51.1	53.5	40.8	50.3	60.8
20060904	76	ebb	4.2	68.5	60.9	66.5	50.1	27.1	27.5	41.6	23.3	31.4	41.7
20060905	76	flood	4.5	80.6	94.9	98.6	78.9	56	55.9	47.8	49.1	59.6	73.1
20060905	77	ebb	4.7	61	57.3	62.9	45.1	69.5	39.6	16	19.3	27.7	164

ARGUS Mean SS Concentration [mg/l] per tidal phase in layers of 10 cm (*except first column 6 cm) [distances given in cm above bottom]

Date	*Tide no.*	*Phase*	*Tidal diff [m]*	*119-114**	*113-104*	*103-94*	*93-84*	*83-74*	*73-64*	*63-54*	*53-44*	*43-34*	*33-24*
20060905	77	flood	4.6	112.6	100.7	103.2	81.7	55.4	58.4	44.1	45.8	59.1	116
20060905	78	ebb	5	74.7	56.4	60.4	35.9	16	18	13.2	21.8	17.5	27.5
20060906	78	flood	5.3	163.7	139	141.3	106.6	129.6	201.6	73.3	74.4	87.2	96.4
20060906	79	ebb	5.3	90.5	88.3	107.4	59.2	35.9	40.5	29.6	31.4	44.8	52.1
20060906	79	flood	5.3	140.1	126.5	154	94.8	70	76.9	60.2	61.6	74.2	78.8
20060906	80	ebb	5.4	82	78	123.6	54.1	29.2	32.7	23.8	25.7	36.8	39.3
20060907	80	flood	6	143.8	166.1	210.4	124	97.1	103.5	92.4	99.3	105.5	112.1
20060907	81	ebb	5.5	74.1	90	126.4	57.3	34.8	38.4	28	29.5	40.9	44
20060907	81	flood	5.5	123	130.6	150.1	99.6	73.3	80.2	64.9	66.1	78.2	83.3
20060907	82	ebb	5.7	95.6	110.9	127.6	65.7	38.6	41.5	31.1	42.3	46.2	51.9
20060908	82	flood	6.1	118.3	165	189.6	123.2	88.6	96.4	82.1	86.6	102.8	114.1
20060908	83	ebb	6.2	56.4	107	141.2	125.4	29	33.1	22	25.9	36	40.8
20060908	83	flood	5.7	107.4	155.1	195.3	124.1	82.1	92.2	73	77.1	93.5	99.3
20060908	84	ebb	6.4	69.9	122	143.3	87.8	45.1	49.4	41.7	42	60.4	74.1
20060909	84	flood	6.6	120.8	186.5	200.3	150.9	97.4	103.6	83.6	87	106.4	121
20060909	85	ebb	6.1	105.2	144.3	168.3	120.6	74.8	73.5	63.7	63.1	78	92
20060909	85	flood	6.1	128.2	172.4	202	156.2	102.7	98.4	84	85.3	104.2	110.9
20060909	86	ebb	6.5	81.8	132.1	156.8	124.8	75	57	42.7	46.6	64.2	77.5
20060910	86	flood	6.7	132.1	181.5	198.4	180.4	107.8	114.7	79.9	85.1	103.2	117.6
20060910	87	ebb	6.3	107.8	161.2	175.1	162	82.1	76.2	57	60.7	81.1	93.5
20060910	87	flood	6.1	166.8	207.6	219.7	215.3	138.3	136.7	106.4	105.5	127.1	147.5
20060911	88	ebb	6.6	110.1	144.5	162.4	151	68	59.4	52.8	53.3	73	90

ARGUS Mean SS Concentration [mg/l] per tidal phase in layers of 10 cm (*except first column 6 cm) [distances given in cm above bottom]

Date	*Tide no.*	*Phase*	*Tidal diff [m]*	*119-114**	*113-104*	*103-94*	*93-84*	*83-74*	*73-64*	*63-54*	*53-44*	*43-34*	*33-24*
20060911	88	flood	6.6	183.4	242.3	243.8	236.5	156	149.1	120.6	127.8	153.7	185.5
20060911	89	ebb	6.1	127.3	176.4	189.7	173.7	95.7	76.2	54.3	59.8	85.3	108.1
20060911	89	flood	6.1	199.3	258.2	265.3	259.6	173.9	158.2	129.3	125.4	165.1	188
20060912	90	ebb	6.4	122.8	186.8	189.1	192	101.9	73.7	74.5	62.9	86.3	113
20060912	90	flood	6.3	176.4	242.7	217.4	235.4	149.2	118	85.3	81.7	117.7	147.4
20060912	91	ebb	5.8	169.3	259	200.5	228	145.3	83.9	68.1	66.6	99.6	134.5
20060912	91	flood	5.8	194.7	308.6	228.7	271.3	193.6	123.6	98.9	92.7	126.3	171.9
20060913	92	ebb	6.1	153.6	279.6	177.9	226	140.2	78.2	72.8	64.7	99.5	128.7
20060913	92	flood	5.7	165.5	312.2	197.2	255.9	160.3	98.3	84.7	84	119.4	114.6
20060913	93	ebb	5.2	158.1	305	215.9	262.8	185.6	102.8	99.5	93.9	134.9	157.4
20060913	93	flood	4.9	85.1	85.9	127.5	136.7	134.8	112.6	95.2	77.7	90.8	255.2
20060914	94	ebb	5.6	100.2	96.4	197.9	216.6	185.9	159.4	112.5	81.7	98.9	324.1
20060914	94	flood	5.2	204.6	173.5	266.4	302.1	247.4	214	162.9	93	127.7	372.8
20060914	95	ebb	4.9	171.2	157.6	256.8	305.2	256.2	222.1	169.7	85.4	118.7	348.6
20060914	95	flood	5.1	186.6	192.9	288.1	333.9	280.4	254.2	202.9	113.7	144.8	355.2
20060915	96	ebb	5	128.2	154.5	223.1	236.8	246.8	227	176.9	77.4	104.7	297.2
20060915	96	flood	4.4	150.3	185.9	251.5	235.6	268	247.6	201.1	101.1	125.6	314.1
20060915	97	ebb	4.4	117	157	227.9	212.7	232.9	231.1	175.8	70.3	99.1	276.5
20060915	97	flood	4.5	153.9	196.4	254.2	250.2	249.1	223.7	191.4	93.8	132	267.3
20060916	98	ebb	4.1	110.9	147.4	201.6	205.8	204.4	182	142.2	50.7	86.9	195.1
20060916	98	flood	3.7	122.5	154.4	206.6	203.4	197.9	179.5	141.9	49.7	86.3	181.5
20060916	99	ebb	3.8	104.7	141.1	193.7	182.2	181.7	163.5	138.3	41.4	77.2	151.6

ARGUS Mean SS Concentration [mg/l] per tidal phase in layers of 10 cm (*except first column 6 cm) [distances given in cm above bottom]

Date	*Tide no.*	*Phase*	*Tidal diff [m]*	*119-114**	*113-104*	*103-94*	*93-84*	*83-74*	*73-64*	*63-54*	*53-44*	*43-34*	*33-24*
20060916	99	flood	4.1	126.1	150.6	198	195.3	202.3	169	150	59.6	94.2	157.7
20060917	100	ebb	3.8	102.4	114.3	160.1	166.4	169.2	125.5	115.2	29.2	62.9	110.5
20060917	100	flood	3.5	101.9	118.5	160.5	163.3	163.9	122.1	107.2	31.3	54	91.9
20060917	101	ebb	3.7	95.7	118.1	159.6	158.5	149.6	119.2	102.6	28.4	48.4	82.8
20060918	101	flood	4.3	111.6	141.5	182.6	177.6	152.6	129	120.3	46.1	63.1	96.6
20060918	102	ebb	4.2	85.5	102.3	153.5	148.2	123.8	97.4	96.3	26.5	41.1	71.6
20060918	102	flood	4	107.8	117.7	172.7	158	122.6	100.1	99.8	37.3	49	76.2
20060918	103	ebb	4.3	96.3	117.7	179	152.5	106.6	92.1	94.7	29.5	40.8	64
20060919	103	flood	4.6	113.3	140.6	205.7	167.6	125.4	111.2	114.6	49.9	63	88
20060919	104	ebb	4.6	90.3	121	186.6	140.8	98.7	91.6	91.9	31.8	43.5	61.4
20060919	104	flood	4.6	92.5	130.7	202.3	141.7	96.1	96.9	95.2	34.4	43.5	64.7
20060919	105	ebb	4.8	103.2	129	195.3	138.2	97.4	91.8	100.4	32.8	37.5	67.9
20060920	105	flood	5.2	123	145.6	212.9	151.2	111	107.5	117.4	41.6	52.1	60.9
20060920	106	ebb	4.9	95.2	115.3	190.6	129.3	88.7	89.4	104.6	27.5	31.1	47.8
20060920	106	flood	4.6	102.9	123.3	200.9	138.2	91.3	94.6	102.3	27.6	32.9	42.1
20060920	107	ebb	5.5	96	119.9	193.3	130.5	84.7	81.9	95.4	22.4	28	33.1
20060921	107	flood	5.5	114.2	137.5	214.5	147.9	96.7	83.7	108.9	32.7	39.2	43.4
20060921	108	ebb	5.1	107	137.3	214.1	150.9	102.2	93.2	114.1	37.7	44.8	50
20060921	108	flood	5.2	108.8	155.9	232.3	161	109.3	96.5	117.2	43.1	51.6	55.5
20060921	109	ebb	5.6	91.2	129.6	204.6	144.3	79.2	85.5	97.4	30.8	38.6	43.4
20060922	109	flood	5.8	110	153.2	230.2	170.4	99.8	106.4	120	48.4	59.1	61
20060922	110	ebb	5.4	99.4	139.2	209.8	155.7	93.9	95.8	109.4	44.7	52.2	55

ARGUS Mean SS Concentration [mg/l] per tidal phase in layers of 10 cm (*except first column 6 cm) [distances given in cm above bottom]

Date	*Tide no.*	*Phase*	*Tidal diff [m]*	*119-114**	*113-104*	*103-94*	*93-84*	*83-74*	*73-64*	*63-54*	*53-44*	*43-34*	*33-24*
20060922	110	flood	5.3	103.5	156	236.3	173.3	103	105.8	114.8	43.6	56.8	58.8
20060922	111	ebb	5.6	92.1	147.5	222.6	162.9	96.9	92.2	103.4	32.5	52.4	53.3
20060923	111	flood	5.8	122.3	179.9	262.9	194.9	118.8	115.2	123	45.3	70.3	69.5
20060923	112	ebb	5.5	120.7	175.1	248.7	183.2	113.4	113.1	113.4	37.9	71.3	59.8
20060923	112	flood	5.4	142	229	299.1	226.9	148.2	143.8	152.6	62.5	103.2	89.8
20060923	113	ebb	6	134	225.1	287.2	219.2	143.9	134.6	141.1	46.7	91.3	80.7
20060924	113	flood	5.8	167.2	266.6	338.1	278.9	167.9	154.1	172.9	57.6	105	92.9
20060924	114	ebb	5.6	170.3	277.4	313.2	223	180.4	228.9	202.8	62.8	120	103.5
20060924	114	flood	5.5	200.3	310	284.2	255.1	202.4	180.8	194.3	84.1	141.5	107.6
20060924	115	ebb	5.8	227	315.7	277.1	253.8	199.8	146.1	213.2	70.8	128.6	108.1
20060925	115	flood	5.8	258.2	382.6	345.8	319.5	244.4	176.9	235.3	90.7	155.7	145
20060925	116	ebb	5.6	221	376.2	336.2	317.4	266.3	199.4	253.1	90.2	175.8	151.1
20060925	116	flood	5.6	282.7	444.4	406.1	396.8	316.2	252.5	289.3	126.6	233.8	198.1
20060925	117	ebb	5.6	280.3	528.7	446.5	432.3	326.7	282.9	352.5	124.6	277.3	218.8
20060926	117	flood	5.7	322.9	573.9	497.7	476.2	347.5	300.7	370.2	144.9	292	234.4
20060926	118	ebb	5.5	269.3	472.5	474.5	441.1	354.4	323.5	365.9	137.2	281	226.6
20060926	118	flood	5.4	326.2	542.6	539.9	514.3	388.9	376.2	424.8	191.3	298.9	259.3
20060927	119	ebb	5.6	311.3	556.1	558.6	507.8	419.8	387.6	436.8	226.6	376.5	281.9
20060927	119	flood	5.4	428.2	701.8	672.5	632.6	484.7	505.5	594.6	320.2	468.3	345.9
20060927	120	ebb	5.3	390.4	633	654.7	599.7	444.2	458.5	545.7	308.7	490.4	330.4
20060927	120	flood	5.3	474.5	720.3	728.4	625.8	456.6	439.1	564.3	347.4	508.5	355.3
20060928	121	ebb	5.5	444.8	673.8	685.1	540.3	480.5	404.8	505.9	346.6	551.1	361.5

ARGUS Mean SS Concentration [mg/l] per tidal phase in layers of 10 cm (*except first column 6 cm) [distances given in cm above bottom]

Date	*Tide no.*	*Phase*	*Tidal diff [m]*	*119-114**	*113-104*	*103-94*	*93-84*	*83-74*	*73-64*	*63-54*	*53-44*	*43-34*	*33-24*
20060928	121	flood	5.2	536.3	752.8	811.8	609.1	513.8	424.4	518.4	380.7	507.9	364.6
20060928	122	ebb	5	501.8	808.1	819.9	620.9	540.7	447.7	508.3	407.9	509.3	355.1
20060928	122	flood	5.2	544.1	835.2	805.8	617	554.5	459	498.1	397.4	502.4	372
20060929	123	ebb	5	473.8	771.2	751.5	605.9	574.1	465.1	488.8	449.5	499	383.4
20060929	123	flood	5	583.3	850.6	799.4	661	605.5	501.6	519.3	501.3	545	428
20060929	124	ebb	4.9	503.1	696.9	739.6	633.9	596.7	493.9	486.5	438	487	385.2
20060929	124	flood	4.4	23.3	24.3	83.6	15.3	14.6	14.5	38.2	62.6	49.1	88.3
20060930	125	ebb	4.5	17.8	17.2	77	11.8	11.7	11.6	32.8	53	44	58.9
20060930	125	flood	4.4	24.3	24.2	84.9	18.5	17.2	17.1	39.9	60.1	49.7	50.3
20060930	126	ebb	4.3	38.2	37.9	100.8	30.1	27.5	27.9	53.2	82	68.6	65.5
20060930	126	flood	4.3	19.3	18.9	80.8	12.6	11.4	12	33.9	56.5	45.2	35.6
20061001	127	ebb	4.3	12.7	12.8	72.9	8.2	6.6	7.1	27	45.6	38.1	25.4
20061001	127	flood	4	37	38.2	99.4	30	27.7	27	52.9	76.9	67	56.4
20061001	128	ebb	3.8	12.6	11.4	70.6	6.8	5.6	5.8	25.2	42.8	33.3	20.9
20061001	128	flood	3.7	7.8	7.2	65.3	3.6	2.6	2.7	19.5	34.1	23.5	13.3
20061002	129	ebb	3.3	15.6	14.2	75.5	10.3	8.9	8.3	29.5	45.9	33.4	23.9
20061002	129	flood	3.1	9.2	8.4	68.9	4.6	4.5	3.9	22.3	33.7	23.5	14.4
20061002	130	ebb	3.2	8.8	7.8	69.4	4.5	3.1	7.4	22.4	43.3	24.2	13.9
20061002	130	flood	3.6	19.2	19.1	84.7	15.2	12.1	11.3	33.9	52.7	37.9	30.4
20061003	131	ebb	4	9.1	7.5	69.9	5.7	3	3	21.2	36.4	24.5	16.4
20061003	131	flood	3.9	14.1	12.7	71.4	9.3	7.3	6.5	25.6	41.3	28.1	19.6
20061003	132	ebb	4.1	11.4	11.2	70.4	7.6	4.7	5	25.9	42.2	27.9	19.2

ARGUS Mean SS Concentration [mg/l] per tidal phase in layers of 10 cm (*except first column 6 cm) [distances given in cm above bottom]

Date	*Tide no.*	*Phase*	*Tidal diff [m]*	*119-114**	*113-104*	*103-94*	*93-84*	*83-74*	*73-64*	*63-54*	*53-44*	*43-34*	*33-24*
20061004	132	flood	4.8	29.7	30.9	93.1	24.8	20.8	23.6	45.6	68.4	49.1	42
20061004	133	ebb	4.7	15.1	14.6	71.2	11	7.5	7.6	31.3	54.6	37.3	28.4
20061004	133	flood	4.6	32.6	31.8	88	25.7	20.2	20	46	69.9	46.2	38.1
20061004	134	ebb	5	18.8	18.3	71.5	14.8	10.6	10.8	34.8	56	41.1	30.8
20061005	134	flood	5.5	54.6	52.7	108.5	47.7	39.9	40.1	69.2	96.4	73.5	67.9
20061005	135	ebb	5.4	25.9	25.1	80.1	22.9	17.7	17.5	44.9	71.5	49.4	45.8
20061005	135	flood	5.1	70	70.9	124.1	66.9	60	57.2	89.2	113.2	89.2	87
20061005	136	ebb	5.6	21.1	20.6	74.4	21.5	14.2	13.9	39.6	60.4	41.4	35.4
20061006	136	flood	5.9	100.5	103.2	155.8	103.3	90.6	87.6	127	155.3	129.5	127.5
20061006	137	ebb	5.5	39.5	36.2	88.7	37.2	27.4	26.7	55.2	78.9	58.1	53.5
20061006	137	flood	5.5	86.1	86	140.6	90.8	72	77.2	110.2	133.4	107.9	103.5
20061006	138	ebb	5.9	33.3	36.3	90.5	41.1	31.2	33.8	64.3	87.4	69.5	66.1
20061007	138	flood	6.4	111.2	114.5	168.4	116	98.4	96.8	141.2	164.7	141.6	136.5
20061007	139	ebb	5.4	35.9	38.7	94.2	43.2	30.2	32.6	67.7	92	72.7	65.9
20061007	139	flood	5.8	91.3	93.4	146.7	95.5	79.5	79.2	137.6	150.7	117.2	110.8
20061007	140	ebb	6.6	30.8	31.5	86.4	36.1	20.7	23.5	63.4	74.7	59.3	48.9
20061008	140	flood	6.4	126.1	131.6	193.1	139.6	112.8	124	174.6	189.1	163.6	161.1
20061008	141	ebb	6.4	46.5	50.8	109.5	49.7	40.6	42.1	90.9	97.4	80.2	69.7
20061008	141	flood	6	103.1	110.6	173.6	114.8	94	96.9	176	160.5	139.6	136.4
20061008	142	ebb	6.6	39	43.9	107.5	44.2	34.9	37.8	97.1	93.1	79.2	66.2
20061009	142	flood	6.6	74.8	87	157.1	87.9	69.2	77.8	150.3	138.4	120.4	103.6
20061009	143	ebb	6.3	72.1	80.3	144.6	75	62.8	70.3	126.5	133.8	116.4	100.9

ARGUS Mean SS Concentration [mg/l] per tidal phase in layers of 10 cm (*except first column 6 cm) [distances given in cm above bottom]

Date	*Tide no.*	*Phase*	*Tidal diff [m]*	*119-114**	*113-104*	*103-94*	*93-84*	*83-74*	*73-64*	*63-54*	*53-44*	*43-34*	*33-24*
20061009	143	flood	6.3	129.7	140.1	213.1	140.1	114.6	123.8	197.7	199.6	181	157.7
20061009	144	ebb	6.4	88.1	93.8	183.5	101.4	72.5	86.3	173.4	178.8	143	132.3
20061010	144	flood	6.5	133	138	238.6	157.2	106.1	135	223.4	210.2	180.8	167.3
20061010	145	ebb	6.1	80.4	84.3	174.1	83.5	57	76.2	148.1	149.9	124.5	113.5
20061010	145	flood	5.9	175.3	184.4	277.4	187.4	142.1	171.2	255.5	266.7	230	209.5
20061011	146	ebb	6.3	100.2	103	195.1	103.5	62.4	105.9	209.4	152.7	144.9	133.6
20061011	146	flood	6	232.2	228.1	329.8	238.6	171.9	234.2	325.9	285.1	273.6	267.3

ALTUS Echosounder bottom distance [cm]						
Date	**Tide no.**	**HW/LW**	**Signal 1**	**Signal 2**	**Signal 3**	**Signal 4**
20060719	1	LW	41.38	41.46	41.54	-
20060719	1	HW	39.48	39.56	-	-
20060720	2	LW	39.15	39.32	-	-
20060720	2	HW	38.66	38.58	-	-
20060720	3	LW	38.41	38.49	38.49	38.58
20060720	3	HW	37.3	37.42	37.46	-
20060721	4	LW	37.46	37.63	37.67	-
20060721	4	HW	37.22	37.22	37.26	37.3
20060721	5	LW	37.3	37.3	37.38	37.46
20060722	5	HW	36.89	36.93	36.93	36.97
20060722	6	LW	37.01	37.01	37.05	37.05
20060722	6	HW	36.56	36.6	36.6	36.64
20060722	7	LW	36.64	36.68	36.68	36.76
20060723	7	HW	36.39	36.39	36.39	36.43
20060723	8	LW	36.52	36.52	36.56	36.56
20060723	8	HW	36.31	36.39	36.52	36.6
20060723	9	LW	36.35	36.56	36.64	36.76
20060724	9	HW	36.39	36.39	36.43	36.52
20060724	10	LW	36.39	36.43	36.64	36.76
20060724	10	HW	36.1	36.1	36.15	36.27
20060724	11	LW	35.98	36.02	36.02	36.1
20060725	11	HW	35.9	35.94	36.02	36.31
20060725	12	LW	35.73	35.77	35.77	35.86
20060725	12	HW	35.81	35.86	35.9	35.9
20060725	13	LW	35.81	35.9	36.06	36.19
20060726	13	HW	36.1	36.1	36.15	36.27
20060726	14	LW	36.31	36.35	36.52	36.52
20060726	14	HW	36.47	36.52	36.52	36.56
20060726	15	LW	36.1	36.47	36.47	36.56
20060727	15	HW	36.19	36.27	36.47	36.64
20060727	16	LW	36.43	36.47	36.56	36.97
20060727	16	HW	36.15	36.19	36.23	36.35
20060727	17	LW	36.35	36.35	36.47	36.52
20060728	17	HW	36.27	36.27	36.35	36.39
20060728	18	LW	36.31	36.39	36.43	36.47
20060728	18	HW	35.86	35.9	35.98	36.35
20060729	19	LW	35.45	35.49	35.61	36.43
20060729	19	HW	34.87	34.91	35.16	35.16
20060729	20	LW	35.07	35.24	35.49	36.1

ALTUS Echosounder bottom distance [cm]						
Date	**Tide no.**	**HW/LW**	**Signal 1**	**Signal 2**	**Signal 3**	**Signal 4**
20060729	20	HW	34.79	34.99	35.2	35.2
20060730	21	LW	34.91	34.99	34.99	35.2
20060730	21	HW	34.83	34.95	34.95	35.07
20060730	22	LW	34.99	35.28	37.38	-
20060730	22	HW	33.51	33.51	33.51	33.55
20060731	23	LW	34	34.62	35.49	-
20060731	23	HW	33.88	33.96	35.4	-
20060731	24	LW	33.39	33.47	33.51	-
20060731	24	HW	32.77	33.43	-	-
20060801	25	LW	33.3	-	-	-
20060801	25	HW	33.14	34.21	-	-
20060801	26	LW	32.89	33.14	34.17	-
20060801	26	HW	32.89	32.93	33.02	-
20060802	27	LW	32.97	33.22	33.26	-
20060802	27	HW	33.06	-	-	-
20060802	28	LW	48.67	48.75	-	-
20060802	28	HW	48.91	49.24	-	-
20060803	29	LW	48.05	48.09	48.17	-
20060803	29	HW	48.05	-	-	-
20060803	30	LW	47.8	48.09	-	-
20060803	30	HW	47.97	-	-	-
20060804	31	LW	47.55	48.17	-	-
20060804	31	HW	48.01	48.38	-	-
20060804	32	LW	48.05	-	-	-
20060804	32	HW	48.01	-	-	-
20060805	33	LW	48.71	-	-	-
20060805	33	HW	48.34	48.38	48.46	-
20060805	34	LW	48.42	48.67	-	-
20060805	34	HW	47.92	48.46	48.83	-
20060806	35	LW	48.62	-	-	-
20060806	35	HW	47.97	-	-	-
20060806	36	LW	47.88	47.92	47.97	-
20060807	36	HW	47.84	47.97	48.25	48.34
20060807	37	LW	48.46	48.5	48.58	-
20060807	37	HW	48.62	48.71	48.99	-
20060807	38	LW	47.47	47.51	-	-
20060808	38	HW	47.92	47.97	48.3	-
20060808	39	LW	47.84	48.25	-	-
20060808	39	HW	48.42	48.54	-	-
20060808	40	LW	47.88	48.46	48.58	-

ALTUS Echosounder bottom distance [cm]						
Date	**Tide no.**	**HW/LW**	**Signal 1**	**Signal 2**	**Signal 3**	**Signal 4**
20060809	40	HW	48.05	48.09	48.13	-
20060809	41	LW	47.06	47.1	47.14	47.31
20060809	41	HW	48.58	-	-	-
20060809	42	LW	47.8	47.84	47.92	-
20060810	42	HW	47.43	-	-	-
20060810	43	LW	47.35	47.39	47.55	-
20060810	43	HW	47.76	48.34	-	-
20060810	44	LW	47.51	47.64	47.68	-
20060811	44	HW	48.17	48.42	-	-
20060811	45	LW	47.1	47.1	47.1	47.22
20060811	45	HW	48.54	48.54	48.67	48.87
20060811	46	LW	47.1	47.22	48.58	-
20060812	46	HW	47.92	48.05	48.17	-
20060812	47	LW	47.31	47.43	-	-
20060812	47	HW	47.59	47.84	-	-
20060813	48	LW	47.22	47.22	47.27	47.39
20060813	48	HW	47.35	47.43	47.55	-
20060813	49	LW	45.78	45.78	45.82	-
20060813	49	HW	46.69	46.81	46.9	46.94
20060814	50	LW	46.56	46.65	-	-
20060814	50	HW	46.85	46.94	47.35	-
20060814	51	LW	45.12	45.21	-	-
20060814	51	HW	46.56	46.61	46.94	-
20060815	52	LW	45.66	45.7	45.78	-
20060815	52	HW	46.73	46.77	46.94	47.06
20060815	53	LW	45.99	46.03	46.15	-
20060815	53	HW	46.52	46.61	46.69	-
20060816	54	LW	45.82	45.95	-	-
20060816	54	HW	47.22	47.35	47.39	-
20060816	55	LW	45.49	46.24	-	-
20060816	55	HW	46.28	46.32	46.4	-
20060817	56	LW	45.91	45.99	46.03	46.07
20060817	56	HW	47.14	47.55	47.59	47.68
20060817	57	LW	46.77	46.85	-	-
20060817	57	HW	46.69	47.02	47.06	-
20060818	58	LW	46.4	46.44	46.61	-
20060818	58	HW	46.61	47.14	47.18	-
20060818	59	LW	47.1	47.22	47.68	-
20060818	59	HW	46.32	46.36	46.44	-
20060819	60	LW	47.06	47.39	47.43	-

ALTUS Echosounder bottom distance [cm]						
Date	**Tide no.**	**HW/LW**	**Signal 1**	**Signal 2**	**Signal 3**	**Signal 4**
20060819	60	HW	47.1	47.64	-	-
20060819	61	LW	47.31	47.35	47.39	-
20060820	61	HW	47.39	47.43	47.51	-
20060820	62	LW	47.47	47.84	47.92	-
20060820	62	HW	47.35	47.43	48.05	-
20060820	63	LW	47.43	47.55	48.05	-
20060821	63	HW	47.55	47.92	48.01	-
20060821	64	LW	47.47	47.59	-	-
20060821	64	HW	47.31	47.31	47.84	-
20060821	65	LW	47.02	47.92	47.97	-
20060822	65	HW	46.85	46.98	47.06	-
20060822	66	LW	51.8	53.57	-	-
20060822	66	HW	52.25	52.25	52.25	52.29
20060822	67	LW	52.33	52.45	52.45	52.54
20060823	67	HW	52.91	53.16	53.16	53.32
20060823	68	LW	53.03	53.65	-	-
20060823	68	HW	52.87	53.16	53.28	53.32
20060823	69	LW	51.38	51.55	52.99	53.07
20060824	69	HW	52.58	52.91	53.16	53.2
20060824	70	LW	53.03	53.07	53.2	-
20060824	70	HW	52.62	52.91	52.95	53.07
20060824	71	LW	52.17	52.7	52.78	-
20060825	71	HW	52.95	53.03	53.03	53.07
20060825	72	LW	51.55	-	-	-
20060825	72	HW	52.87	52.91	52.99	53.03
20060825	73	LW	52.99	53.32	-	-
20060826	73	HW	52.99	52.99	53.03	53.07
20060826	74	LW	51.26	51.42	53.2	-
20060826	74	HW	52.83	52.87	52.87	52.91
20060826	75	LW	52.87	52.95	53.2	-
20060827	75	HW	52.66	52.95	52.95	52.99
20060827	76	LW	51.38	52.45	52.5	52.62
20060827	76	HW	52.83	52.83	52.87	52.99
20060828	77	LW	51.55	51.67	-	-
20060828	77	HW	52.66	52.78	52.95	53.03
20060828	78	LW	51.26	51.26	52.83	-
20060828	78	HW	52.66	53.03	53.03	53.07
20060829	79	LW	51.55	53.03	53.2	-
20060829	79	HW	52.83	53.03	53.07	53.07
20060829	80	LW	52.7	52.91	52.95	-

ALTUS Echosounder bottom distance [cm]						
Date	**Tide no.**	**HW/LW**	**Signal 1**	**Signal 2**	**Signal 3**	**Signal 4**
20060829	80	HW	52.87	52.99	52.99	53.03
20060830	81	LW	52.74	52.78	52.83	52.95
20060830	81	HW	52.87	52.95	53.07	53.07
20060830	82	LW	52.5	52.5	52.7	52.78
20060830	82	HW	48.62	-	-	-
20060831	83	LW	46.56	46.98	-	-
20060831	83	HW	45.95	-	-	-
20060831	84	LW	45.99	46.11	-	-
20060831	84	HW	45.33	45.95	-	-
20060901	85	LW	45	-	-	-
20060901	85	HW	45.21	-	-	-
20060901	86	LW	44.3	44.42	-	-
20060901	86	HW	44.51	-	-	-
20060902	87	LW	42.94	43.06	-	-
20060902	87	HW	43.39	-	-	-
20060902	88	LW	42.73	-	-	-
20060902	88	HW	42.36	42.49	-	-
20060903	89	LW	42.08	42.16	-	-
20060903	89	HW	41.95	42.08	42.12	-
20060903	90	LW	41.83	42.12	42.2	-
20060903	90	HW	42.03	42.2	-	-
20060904	91	LW	41.87	41.95	-	-
20060904	91	HW	41.54	41.54	41.58	41.62
20060904	92	LW	41.46	41.7	-	-
20060905	92	HW	41.29	41.5	-	-
20060905	93	LW	41.13	41.42	-	-
20060905	93	HW	40.63	40.8	40.92	-
20060905	94	LW	40.67	40.84	-	-
20060906	94	HW	40.88	40.88	40.96	-
20060906	95	LW	40.59	40.76	-	-
20060906	95	HW	40.02	40.06	-	-
20060906	96	LW	39.85	40.47	-	-
20060907	96	HW	39.69	39.77	39.85	40.1
20060907	97	LW	39.44	39.48	39.48	39.65
20060907	97	HW	39.69	39.69	-	-
20060907	98	LW	39.27	39.36	39.4	-
20060908	98	HW	39.11	39.81	-	-
20060908	99	LW	39.69	39.85	-	-
20060908	99	HW	39.03	39.07	39.27	-
20060908	100	LW	38.95	39.6	-	-

ALTUS Echosounder bottom distance [cm]						
Date	**Tide no.**	**HW/LW**	**Signal 1**	**Signal 2**	**Signal 3**	**Signal 4**
20060909	100	HW	38.53	38.62	-	-
20060909	101	LW	38.49	38.58	38.62	38.7
20060909	101	HW	38.24	38.33	38.37	-
20060909	102	LW	37.88	37.96	38.37	-
20060910	102	HW	38.49	38.49	38.7	-
20060910	103	LW	38.12	38.24	38.24	38.33
20060910	103	HW	37.79	37.88	38	-
20060911	104	LW	37.75	37.88	37.96	-
20060911	104	HW	37.5	-	-	-
20060911	105	LW	36.76	37.22	-	-
20060911	105	HW	36.15	36.27	36.35	-
20060912	106	LW	37.01	37.05	-	-
20060912	106	HW	36.6	36.76	-	-
20060912	107	LW	36.31	36.35	36.72	-
20060912	107	HW	36.15	36.15	36.19	36.35
20060913	108	LW	36.06	36.1	36.19	36.47
20060913	108	HW	36.39	36.43	36.47	36.6
20060913	109	LW	52.54	52.58	52.58	52.78
20060913	109	HW	51.38	51.92	52.08	-
20060914	110	LW	51.38	-	-	-
20060914	110	HW	51.47	-	-	-
20060914	111	LW	50.15	-	-	-
20060914	111	HW	49.7	-	-	-
20060915	112	LW	49.98	50.07	-	-
20060915	112	HW	49.65	50.19	-	-
20060915	113	LW	31.61	49.57	-	-
20060915	113	HW	49.08	49.78	-	-
20060916	114	LW	48.99	49.08	-	-
20060916	114	HW	49.12	-	-	-
20060916	115	LW	48.87	48.99	49.04	-
20060916	115	HW	48.91	49.12	-	-
20060917	116	LW	48.99	-	-	-
20060917	116	HW	49.12	49.65	-	-
20060917	117	LW	48.75	-	-	-
20060918	117	HW	48.71	49.65	-	-
20060918	118	LW	48.3	48.38	48.54	-
20060918	118	HW	48.25	-	-	-
20060918	119	LW	47.8	47.92	-	-
20060919	119	HW	47.76	-	-	-
20060919	120	LW	47.47	47.55	-	-

ALTUS Echosounder bottom distance [cm]						
Date	**Tide no.**	**HW/LW**	**Signal 1**	**Signal 2**	**Signal 3**	**Signal 4**
20060919	120	HW	47.47	-	-	-
20060919	121	LW	47.72	47.88	-	-
20060920	121	HW	46.73	46.81	46.9	-
20060920	122	LW	46.56	46.65	-	-
20060920	122	HW	46.65	46.94	-	-
20060920	123	LW	46.77	46.85	46.85	-
20060921	123	HW	46.81	46.9	-	-
20060921	124	LW	46.69	46.77	46.81	-
20060921	124	HW	46.28	46.4	46.44	-
20060921	125	LW	46.44	46.98	-	-
20060922	125	HW	45.82	45.82	45.82	46.03
20060922	126	LW	46.9	-	-	-
20060922	126	HW	45.95	46.03	-	-
20060922	127	LW	46.07	46.11	46.28	46.32
20060923	127	HW	45.99	46.07	-	-
20060923	128	LW	46.32	46.32	46.44	-
20060923	128	HW	45.49	45.49	45.49	45.53
20060923	129	LW	45.7	46.48	-	-
20060924	129	HW	45.66	46.19	-	-
20060924	130	LW	45.21	45.41	-	-
20060924	130	HW	45.41	45.45	45.49	-
20060924	131	LW	45.16	45.33	45.53	-
20060925	131	HW	45.49	45.58	-	-
20060925	132	LW	45.33	45.41	45.45	-
20060925	132	HW	45.66	45.7	45.74	-
20060925	133	LW	45.16	45.25	45.33	-
20060926	133	HW	45.62	45.62	45.74	-
20060926	134	LW	45.25	45.41	45.45	-
20060926	134	HW	45.04	45.04	45.12	45.25
20060927	135	LW	45.12	45.29	-	-
20060927	135	HW	44.75	44.75	44.79	44.96
20060927	136	LW	44.55	44.59	-	-
20060927	136	HW	44.71	44.79	44.92	-
20060928	137	LW	44.26	44.26	44.26	44.3
20060928	137	HW	44.47	44.47	44.47	44.51
20060928	138	LW	44.05	44.09	44.26	-
20060928	138	HW	44.13	44.13	44.26	-
20060929	139	LW	43.97	44.18	44.47	44.67
20060929	139	HW	44.09	44.13	44.67	-
20060929	140	LW	43.52	43.6	44.22	-

ALTUS Echosounder bottom distance [cm]						
Date	**Tide no.**	**HW/LW**	**Signal 1**	**Signal 2**	**Signal 3**	**Signal 4**
20060929	140	HW	50.15	50.6	50.6	-
20060930	141	LW	50.11	50.31	50.4	-
20060930	141	HW	50.07	50.31	50.35	-
20060930	142	LW	49.61	50.15	-	-
20060930	142	HW	49.12	-	-	-
20061001	143	LW	48.25	-	-	-
20061001	143	HW	47.68	-	-	-
20061001	144	LW	47.43	-	-	-
20061001	144	HW	47.55	-	-	-
20061002	145	LW	47.47	-	-	-
20061002	145	HW	47.18	47.27	-	-
20061002	146	LW	47.51	-	-	-
20061002	146	HW	46.73	-	-	-
20061003	147	LW	47.27	47.39	-	-
20061003	147	HW	46.81	-	-	-
20061003	148	LW	47.47	-	-	-
20061004	148	HW	46.9	-	-	-
20061004	149	LW	46.61	-	-	-
20061004	149	HW	-	-	-	-
20061004	150	LW	-	-	-	-
20061005	150	HW	-	-	-	-
20061005	151	LW	45.82	-	-	-
20061005	151	HW	-	-	-	-
20061005	152	LW	45.99	-	-	-
20061006	152	HW	45.66	-	-	-
20061006	153	LW	45.74	-	-	-
20061006	153	HW	45.95	-	-	-
20061006	154	LW	46.81	-	-	-
20061007	154	HW	46.44	-	-	-
20061007	155	LW	46.56	46.56	-	-
20061007	155	HW	46.52	-	-	-
20061007	156	LW	47.27	-	-	-
20061008	156	HW	47.06	-	-	-
20061008	157	LW	47.47	48.25	-	-
20061008	157	HW	47.39	-	-	-
20061008	158	LW	48.34	-	-	-
20061009	158	HW	48.05	48.09	48.21	-
20061009	159	LW	47.22	47.47	47.47	-
20061009	159	HW	46.19	47.22	-	-
20061009	160	LW	46.61	46.69	47.18	-

ALTUS Echosounder bottom distance [cm]						
Date	**Tide no.**	**HW/LW**	**Signal 1**	**Signal 2**	**Signal 3**	**Signal 4**
20061010	160	HW	45.82	45.82	-	-
20061010	161	LW	45.7	45.78	-	-
20061010	161	HW	45.25	45.49	-	-
20061011	162	LW	-	-	-	-
20061011	162	HW	44.88	-	-	-

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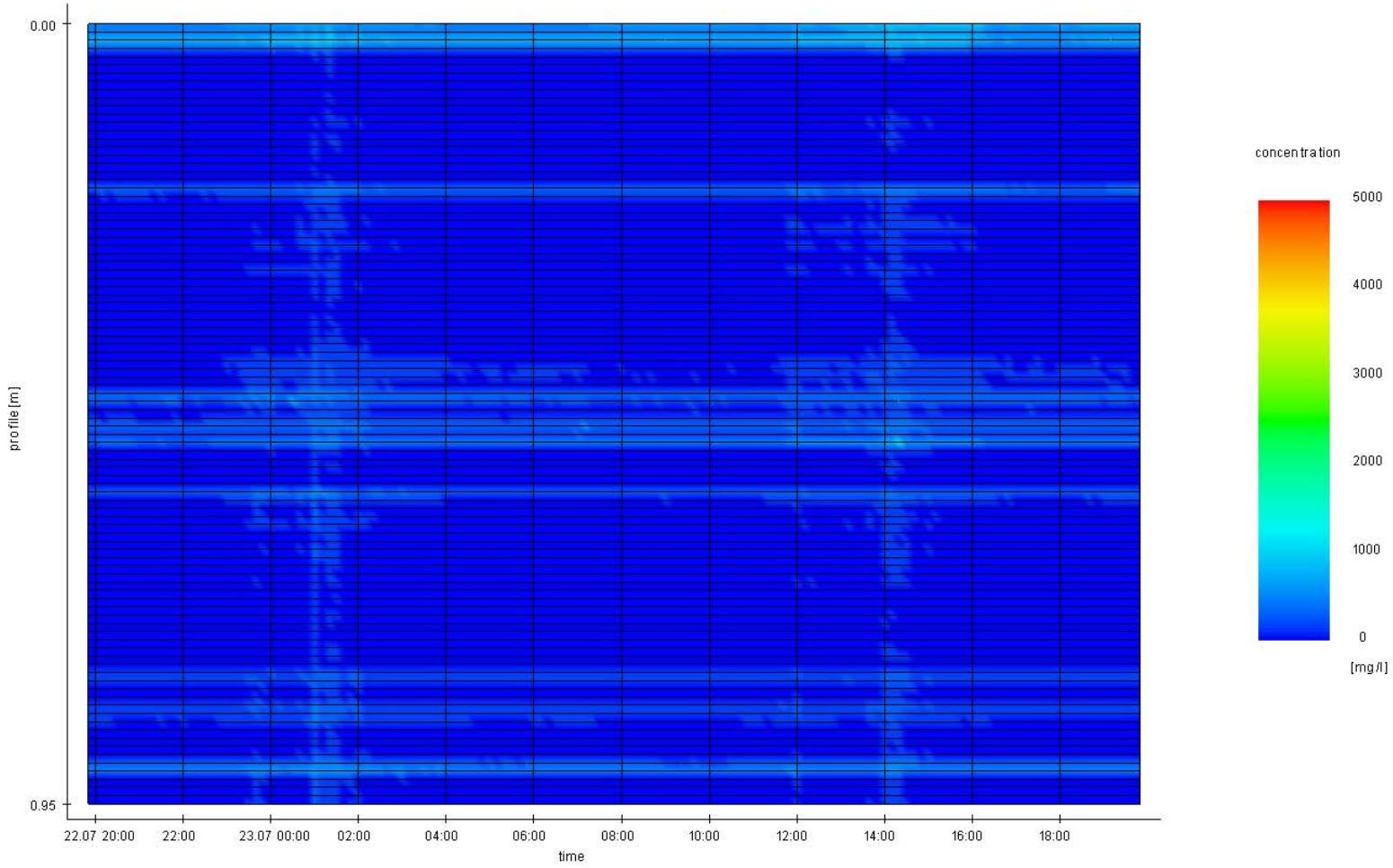
11283 Accretion Deurganckdok - Near bed continuous monitoring – Summer 2006



Time series suspended sediment concentration
ARGUS ASM-IV

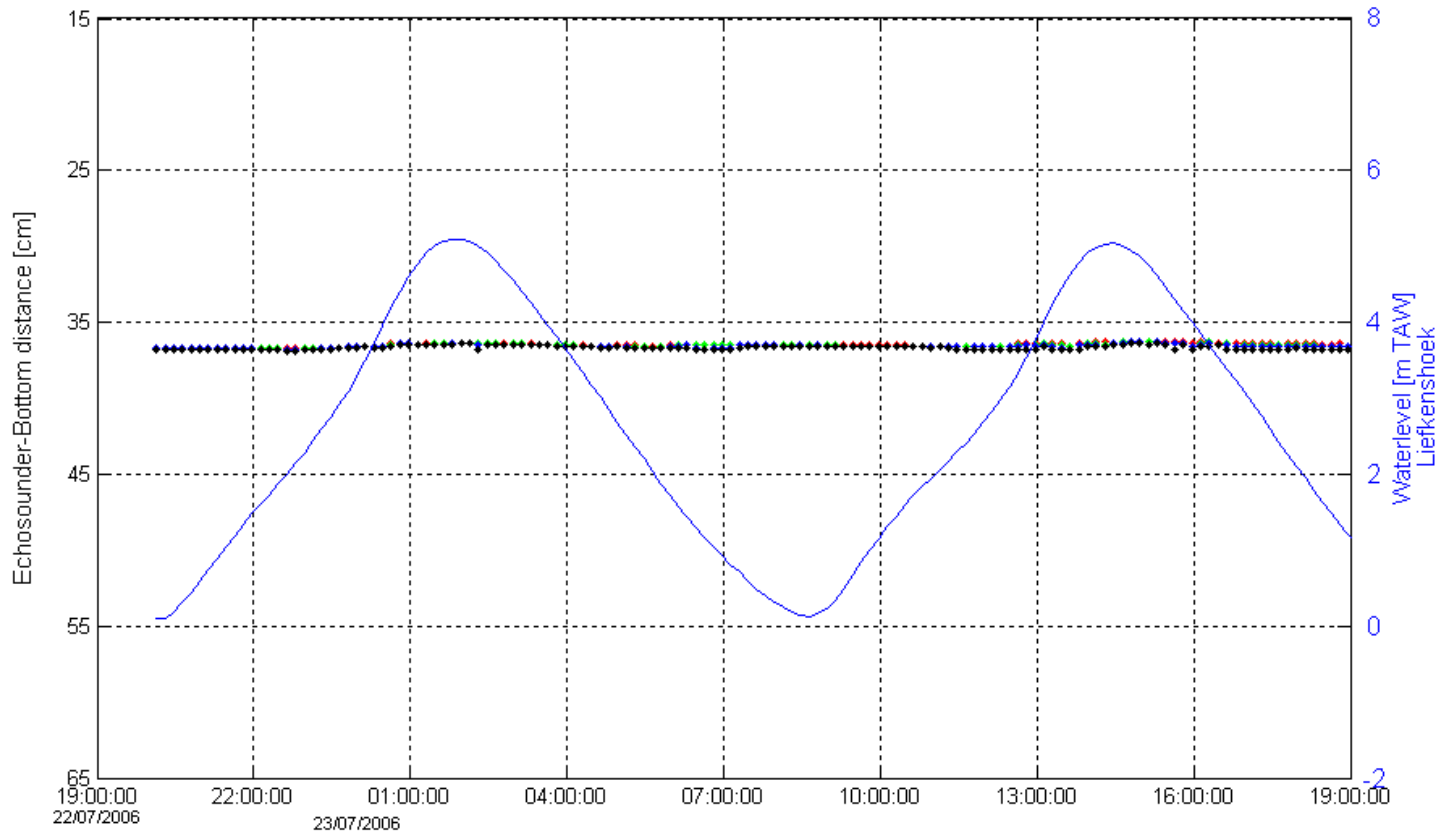
Location:	Date:
Deurganckdok Sill	Avg Tide 22/07 – 23/07

Data processed by: IMDC

In association with: WL | delft hydraulics, GEMS International

I/RA/11283/06.122/MSA

11283 Accretion Deurganckdok - Near bed continuous monitoring – Summer 2006



SIGNAL 4
SIGNAL 3
SIGNAL 2
SIGNAL 1

Legend

Echosounder – bottom distance
Waterlevel [mTAW] at Liefkenshoek

Location:	Date:
Deurganckdok Sill	Avg Tide 22/07 – 23/07

Data processed by: IMDC

In association with: WL | delft hydraulics, GEMS International

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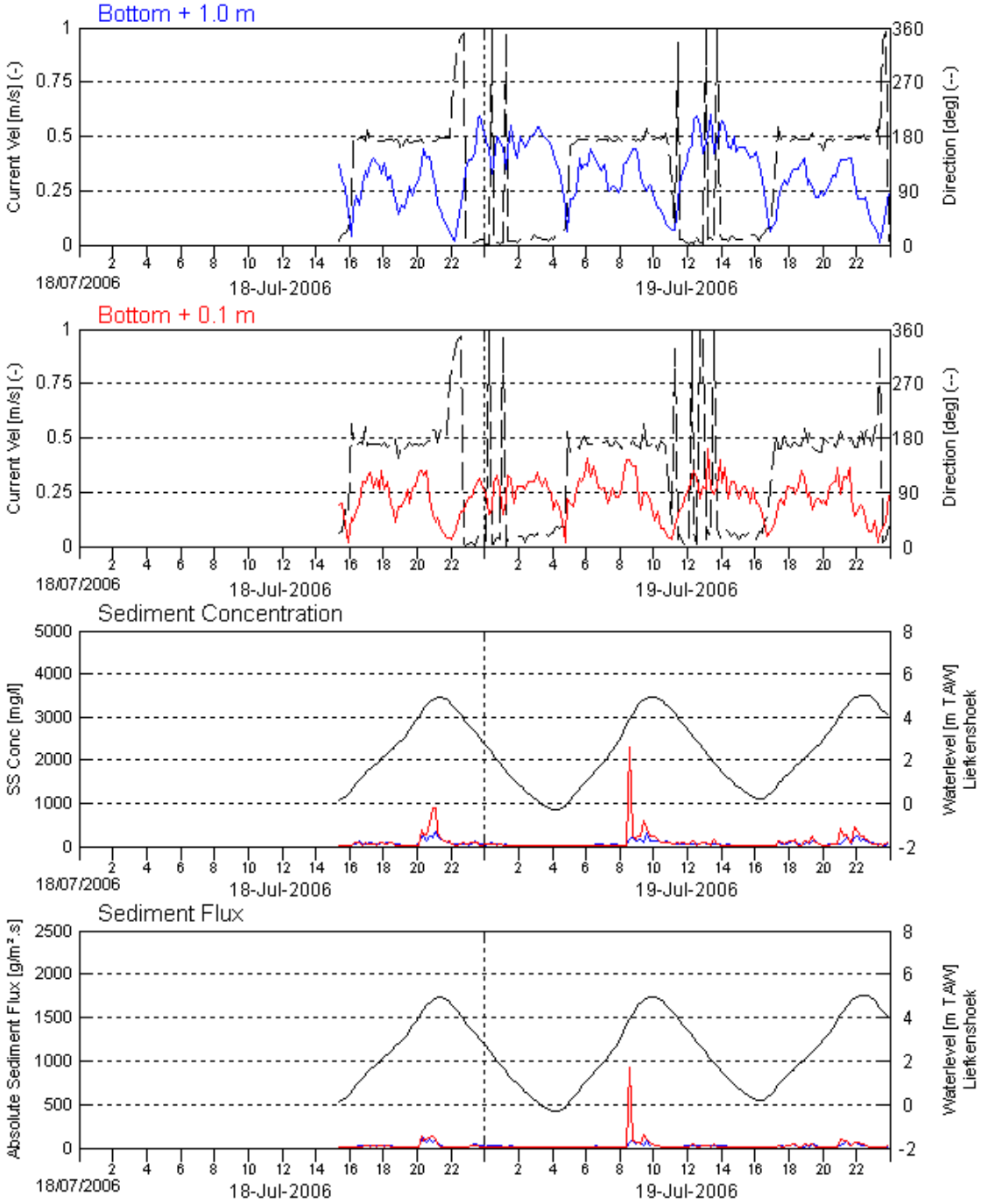
APPENDIX D.

TIMESERIES RCM9 & VALEPORT

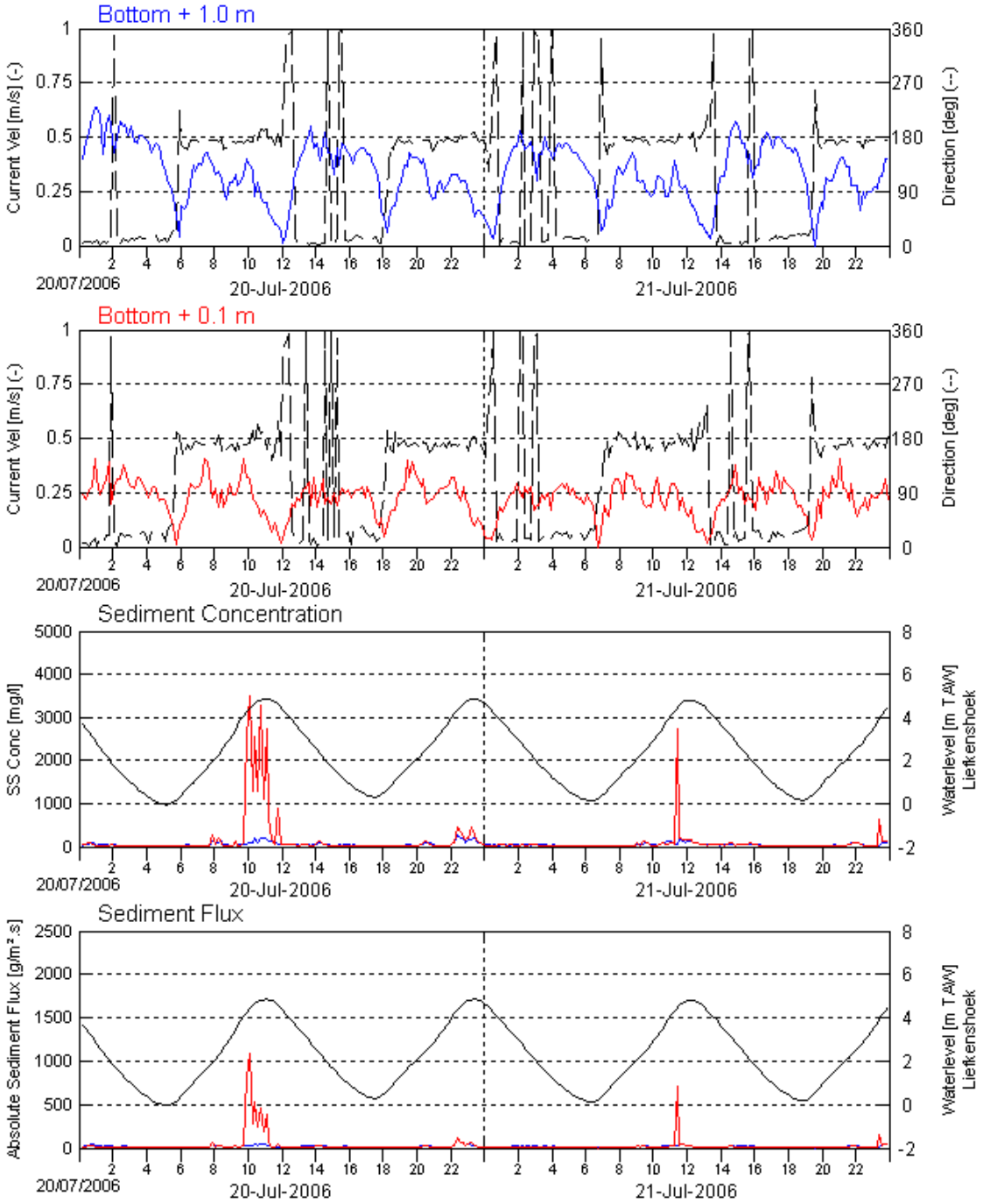
D.1 CDW frame

11283 Accretion Deurganckdok – Near bed continuous monitoring – Summer 2006



Current Velocity and Direction upper (RCM9) and lower (Valeport) EMC, OBS SS Conc. & flux and waterlevel		*Data processed by:* IMDC
Location: Deurganckdok CDW	Date: 18/07/2006– 19/07/2006	*In association with:* WL | delft hydraulics, GEMS International
		I/RA/11283/06.122MSA

11283 Accretion Deurganckdok – Near bed continuous monitoring – Summer 2006



Current Velocity and Direction upper (RCM9) and lower (Valeport) EMC, OBS SS Conc. & flux and waterlevel

Location: Deurganckdok CDW

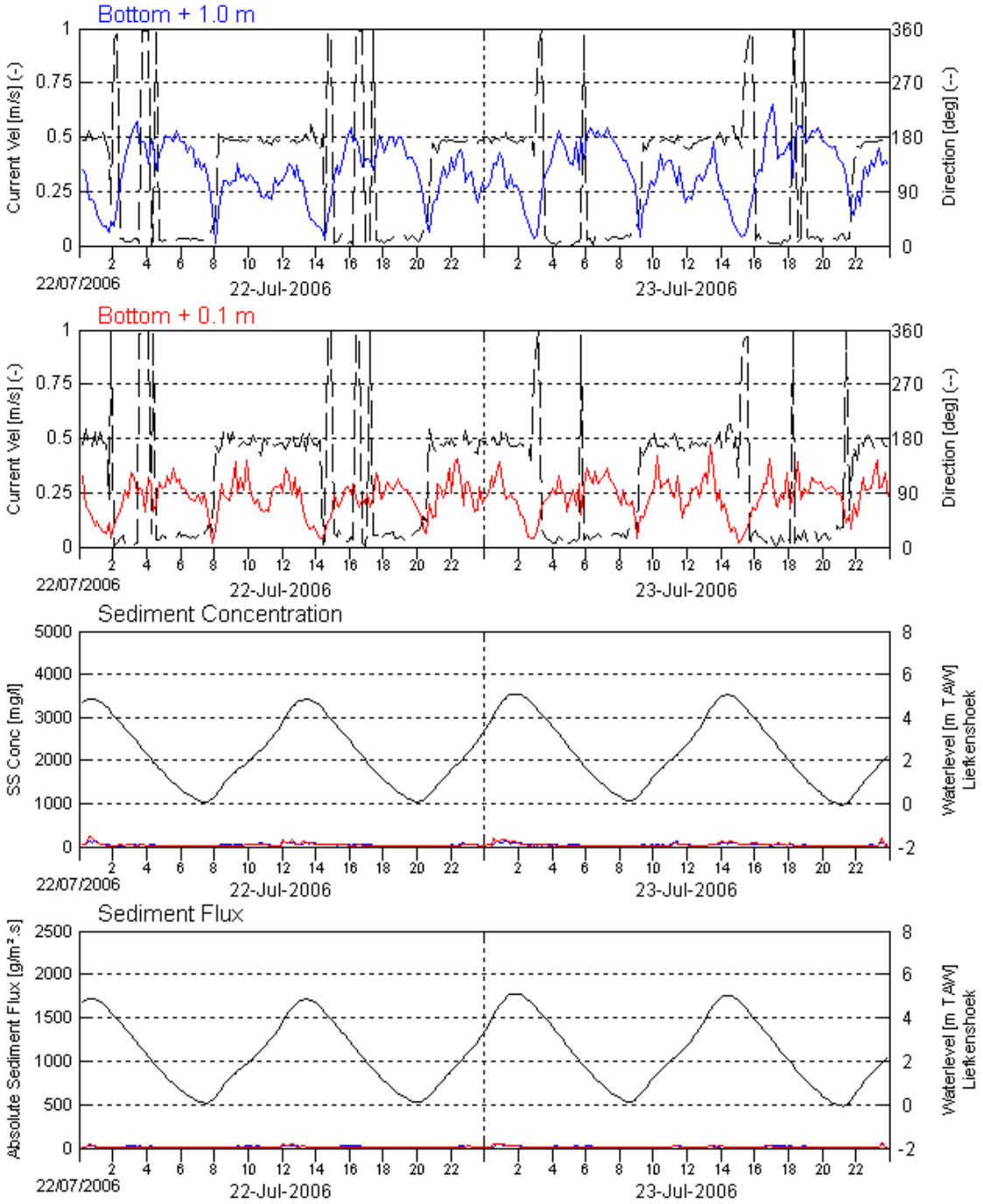
Date: 20/07/2006– 21/07/2006

Data processed by: IMDC

In association with: WL | delft hydraulics, GEMS International

I/RA/11283/06.122MSA

11283 Accretion Deurganckdok – Near bed continuous monitoring – Summer 2006



Current Velocity and Direction upper (RCM9) and lower (Valeport) EMC, OBS SS Conc. & flux and waterlevel

Location: Deurganckdok CDW

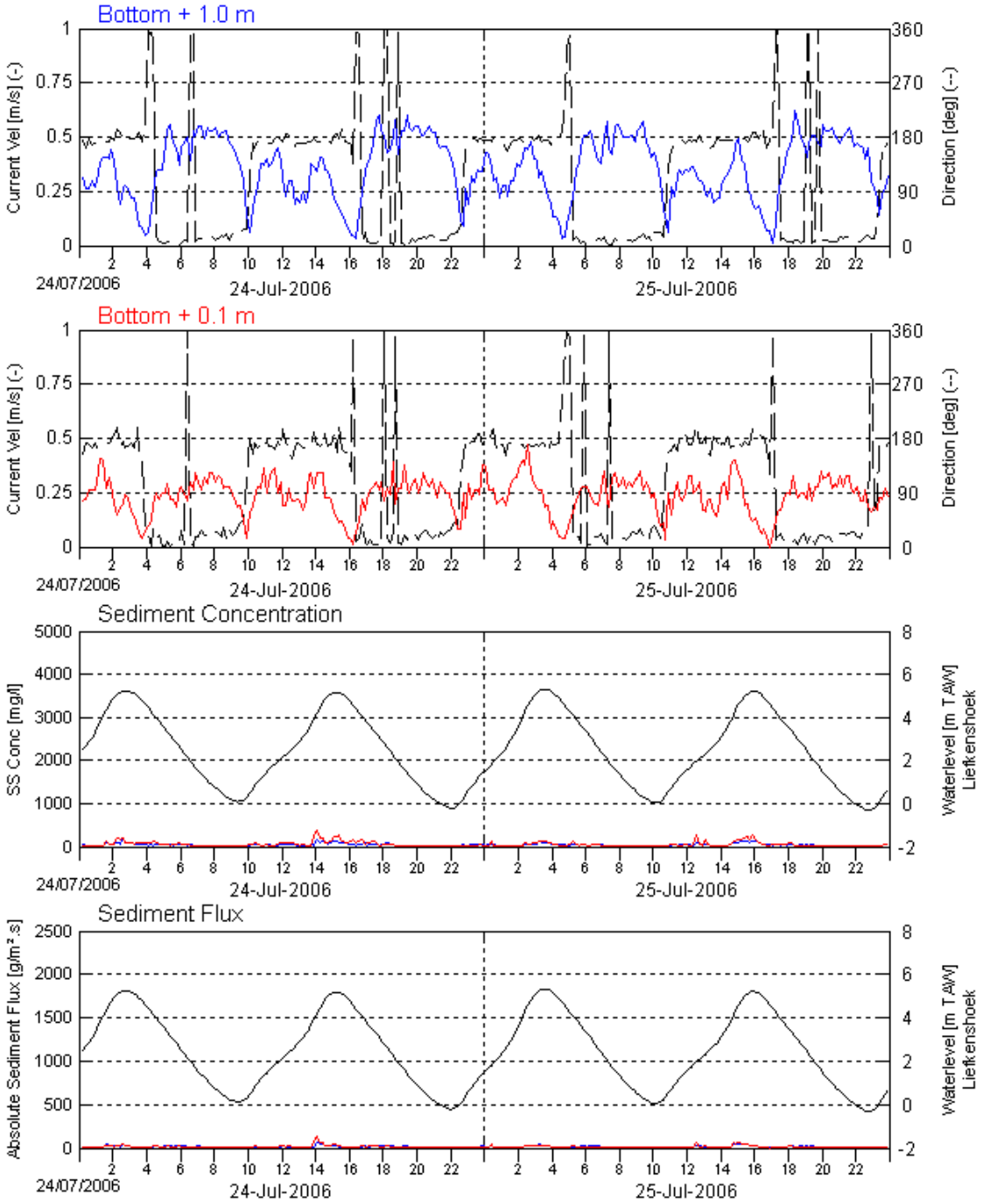
Date: 22/07/2006– 23/07/2006

Data processed by: IMDC

In association with: WL | delft hydraulics, GEMS International

I/RA/11283/06.122MSA

11283 Accretion Deurganckdok – Near bed continuous monitoring – Summer 2006



Current Velocity and Direction upper (RCM9) and lower (Valeport) EMC, OBS SS Conc. & flux and waterlevel

Location: Deurganckdok CDW

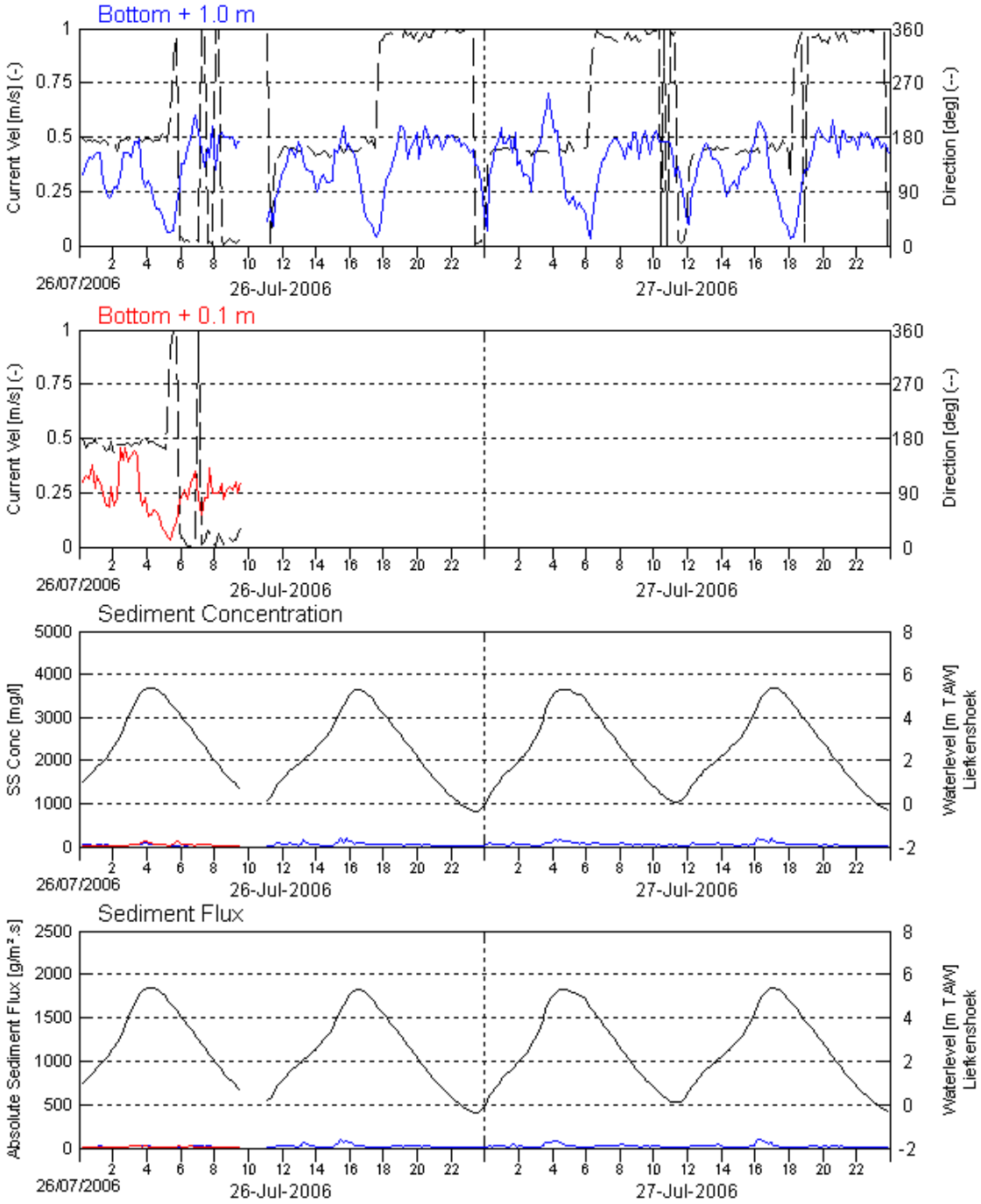
Date: 24/07/2006– 25/07/2006

Data processed by: IMDC

In association with: WL | delft hydraulics, GEMS International

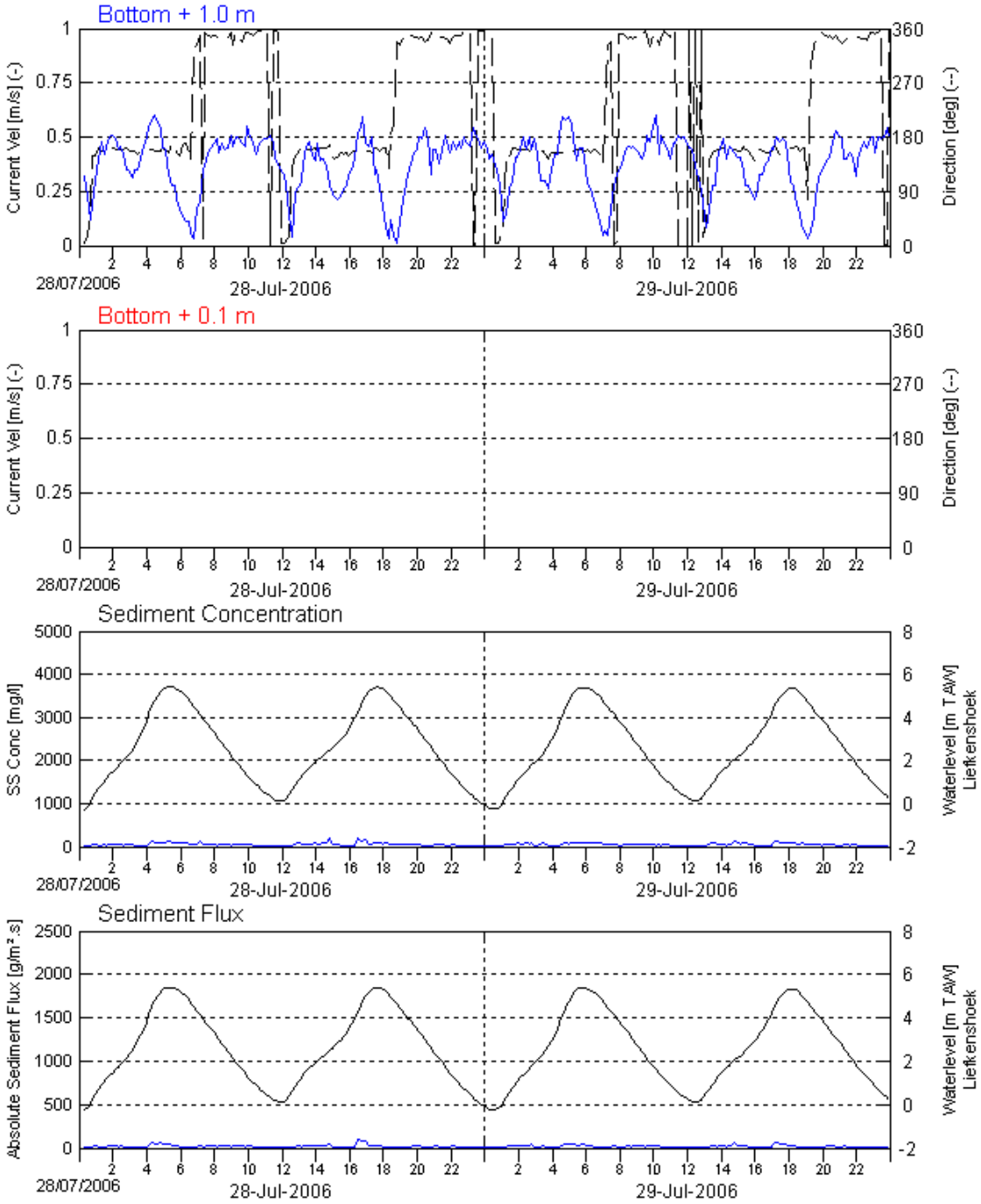
I/RA/11283/06.122MSA

11283 Accretion Deurganckdok – Near bed continuous monitoring – Summer 2006



Current Velocity and Direction upper (RCM9) and lower (Valeport) EMC, OBS SS Conc. & flux and waterlevel		*Data processed by:* IMDC
Location: Deurganckdok CDW	Date: 26/07/2006– 27/07/2006	*In association with:* WL | delft hydraulics, GEMS International
		I/RA/11283/06.122MSA

11283 Accretion Deurganckdok – Near bed continuous monitoring – Summer 2006



Current Velocity and Direction upper (RCM9) and lower (Valeport) EMC, OBS SS Conc. & flux and waterlevel

Location: Deurganckdok CDW

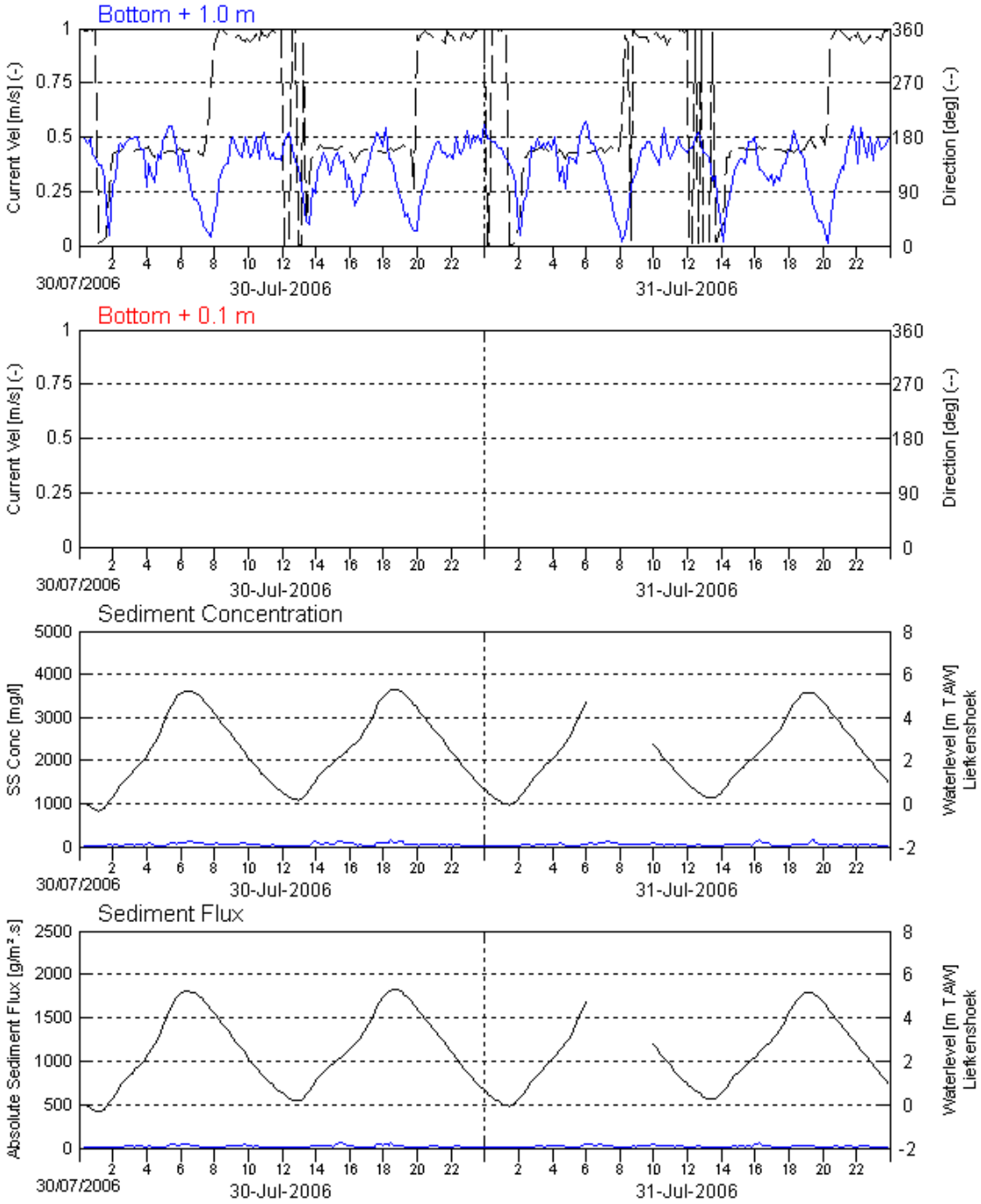
Date: 28/07/2006– 29/07/2006

Data processed by: IMDC

In association with: WL | delft hydraulics, GEMS International

I/RA/11283/06.122MSA

11283 Accretion Deurganckdok – Near bed continuous monitoring – Summer 2006



Current Velocity and Direction upper (RCM9) and lower (Valeport) EMC, OBS SS Conc. & flux and waterlevel

Location: Deurganckdok CDW

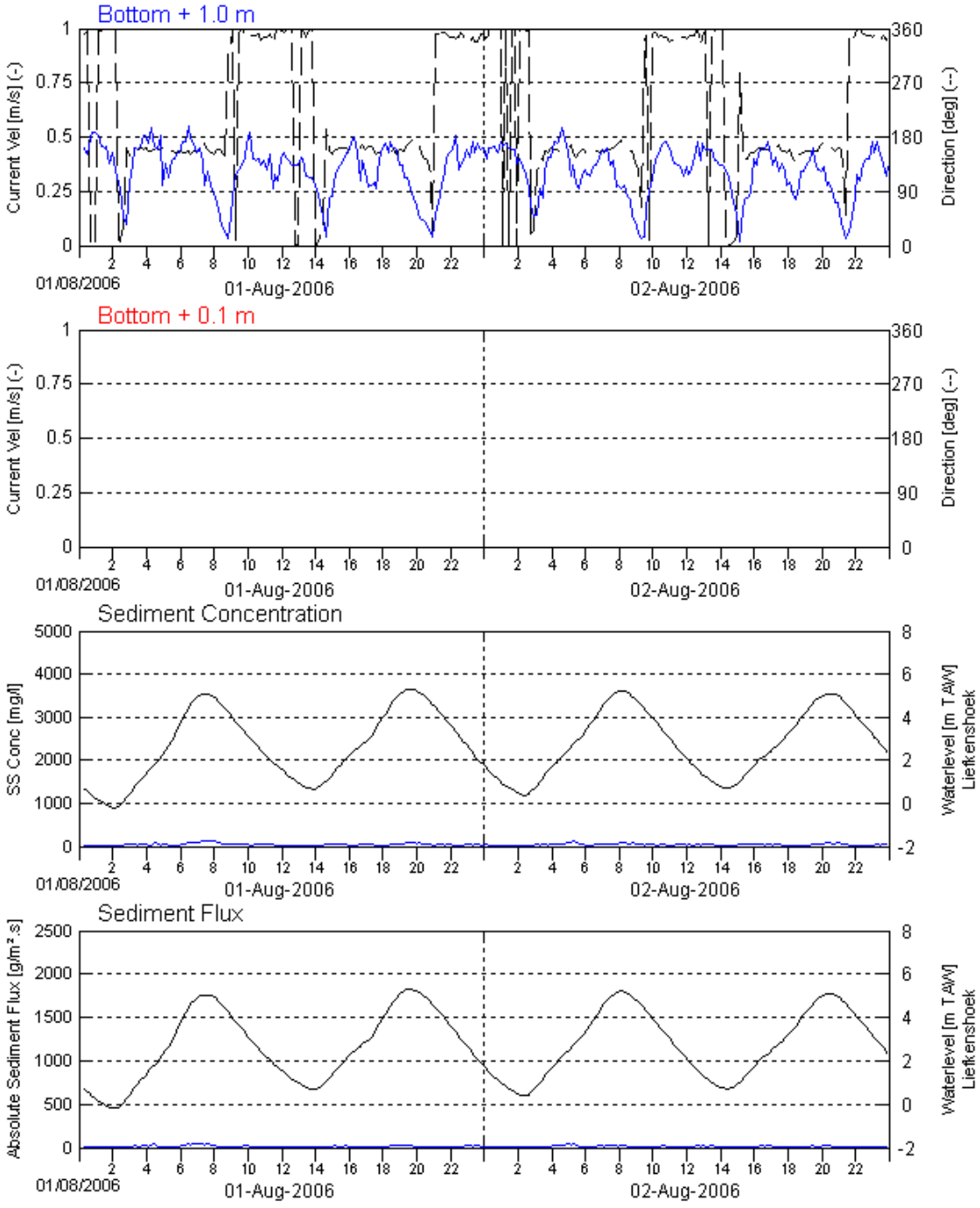
Date: 30/07/2006– 31/07/2006

Data processed by: IMDC

In association with: WL | delft hydraulics, GEMS International

I/RA/11283/06.122MSA

11283 Accretion Deurganckdok – Near bed continuous monitoring – Summer 2006



Current Velocity and Direction upper (RCM9) and lower (Valeport) EMC, OBS SS Conc. & flux and waterlevel

Location: Deurganckdok CDW

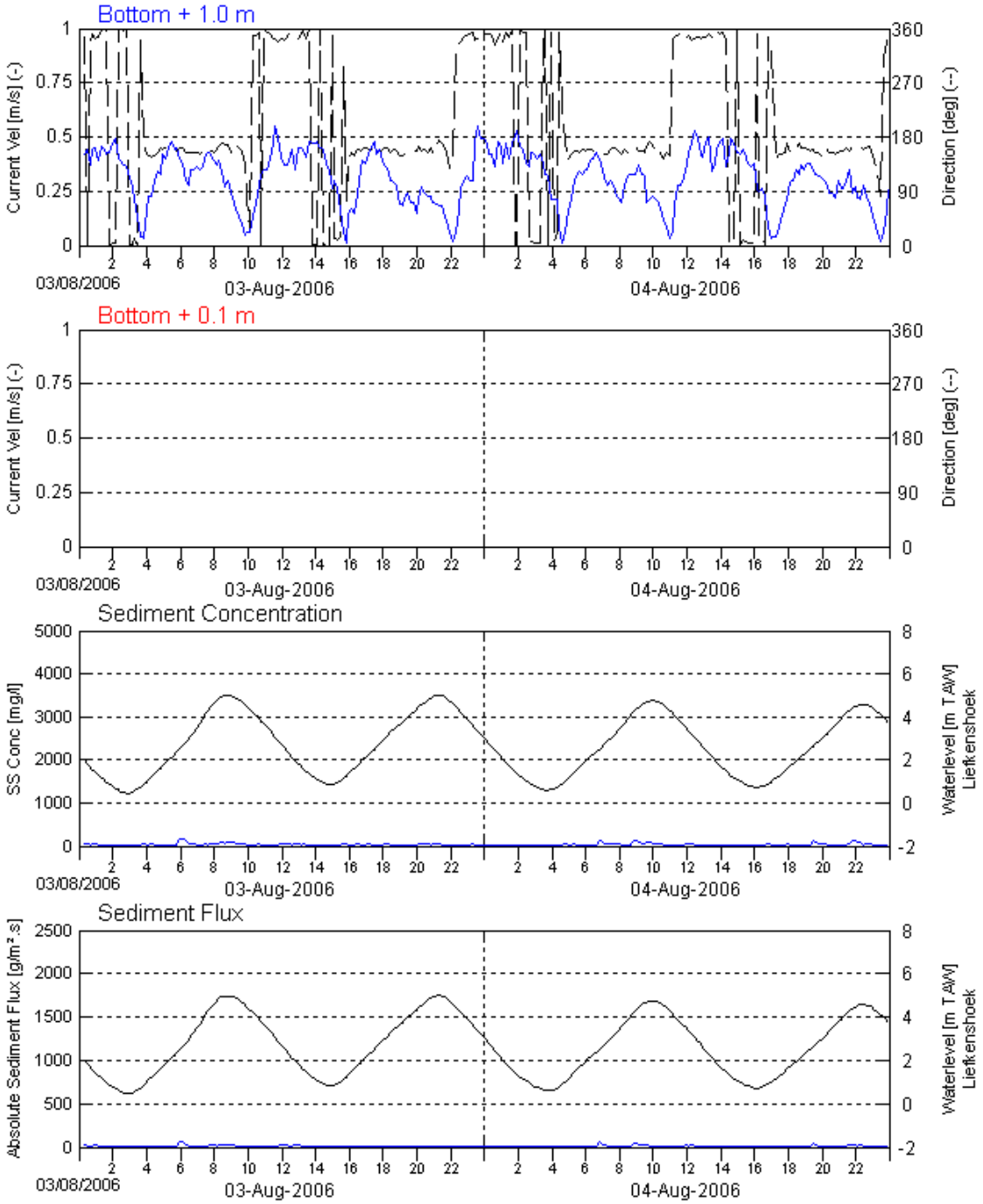
Date: 01/08/2006– 02/08/2006

Data processed by: IMDC

In association with: WL | delft hydraulics, GEMS International

I/RA/11283/06.122MSA

11283 Accretion Deurganckdok – Near bed continuous monitoring – Summer 2006



Current Velocity and Direction upper (RCM9) and lower (Valeport) EMC, OBS SS Conc. & flux and waterlevel

Location: Deurganckdok CDW

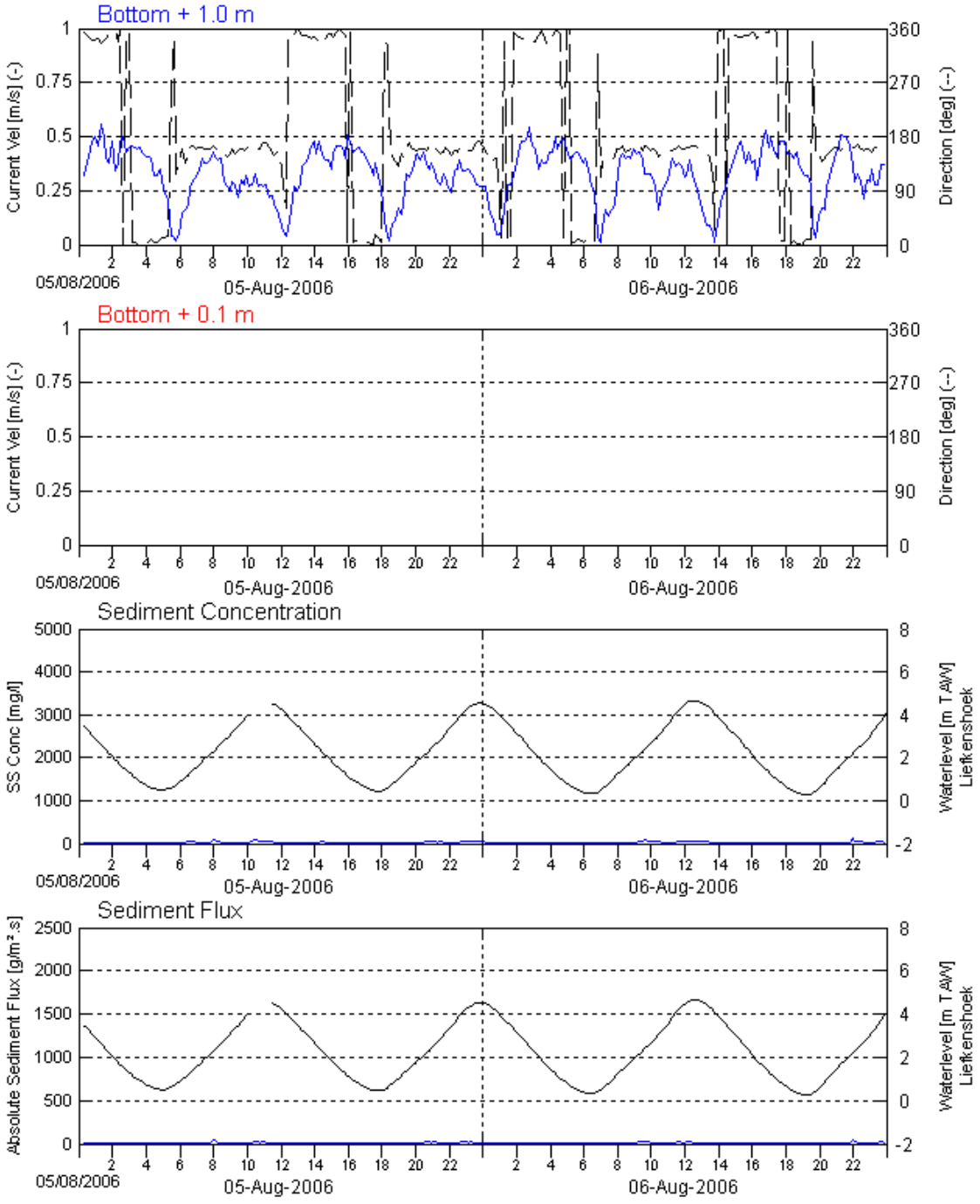
Date: 03/08/2006– 04/08/2006

Data processed by: IMDC

In association with: WL | delft hydraulics, GEMS International

I/RA/11283/06.122MSA

11283 Accretion Deurganckdok – Near bed continuous monitoring – Summer 2006



Current Velocity and Direction upper (RCM9) and lower (Valeport) EMC, OBS SS Conc. & flux and waterlevel

Location: Deurganckdok CDW

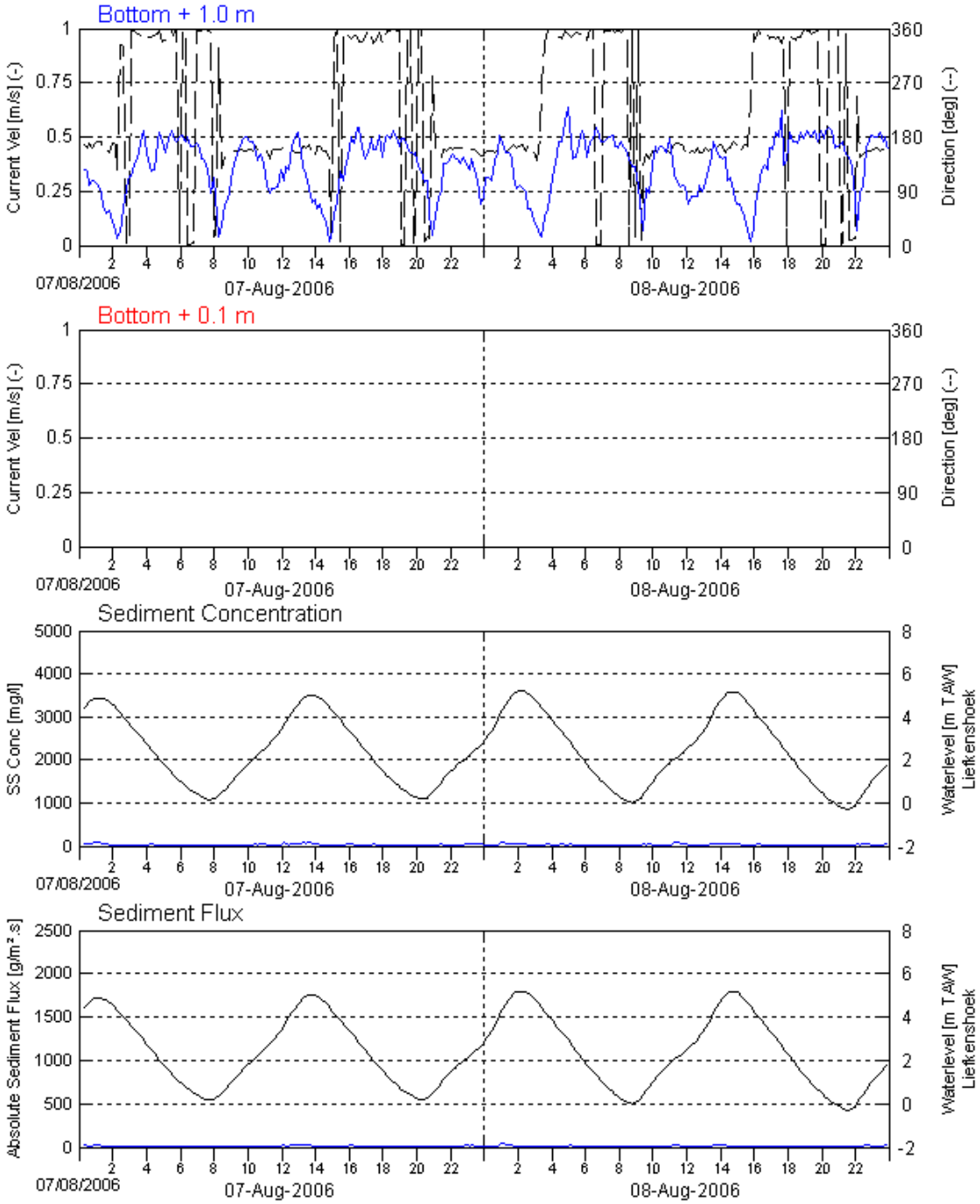
Date: 05/08/2006– 06/08/2006

Data processed by: IMDC

In association with: WL | delft hydraulics, GEMS International

I/RA/11283/06.122MSA

11283 Accretion Deurganckdok – Near bed continuous monitoring – Summer 2006



Current Velocity and Direction upper (RCM9) and lower (Valeport) EMC, OBS SS Conc. & flux and waterlevel

Location: Deurganckdok CDW

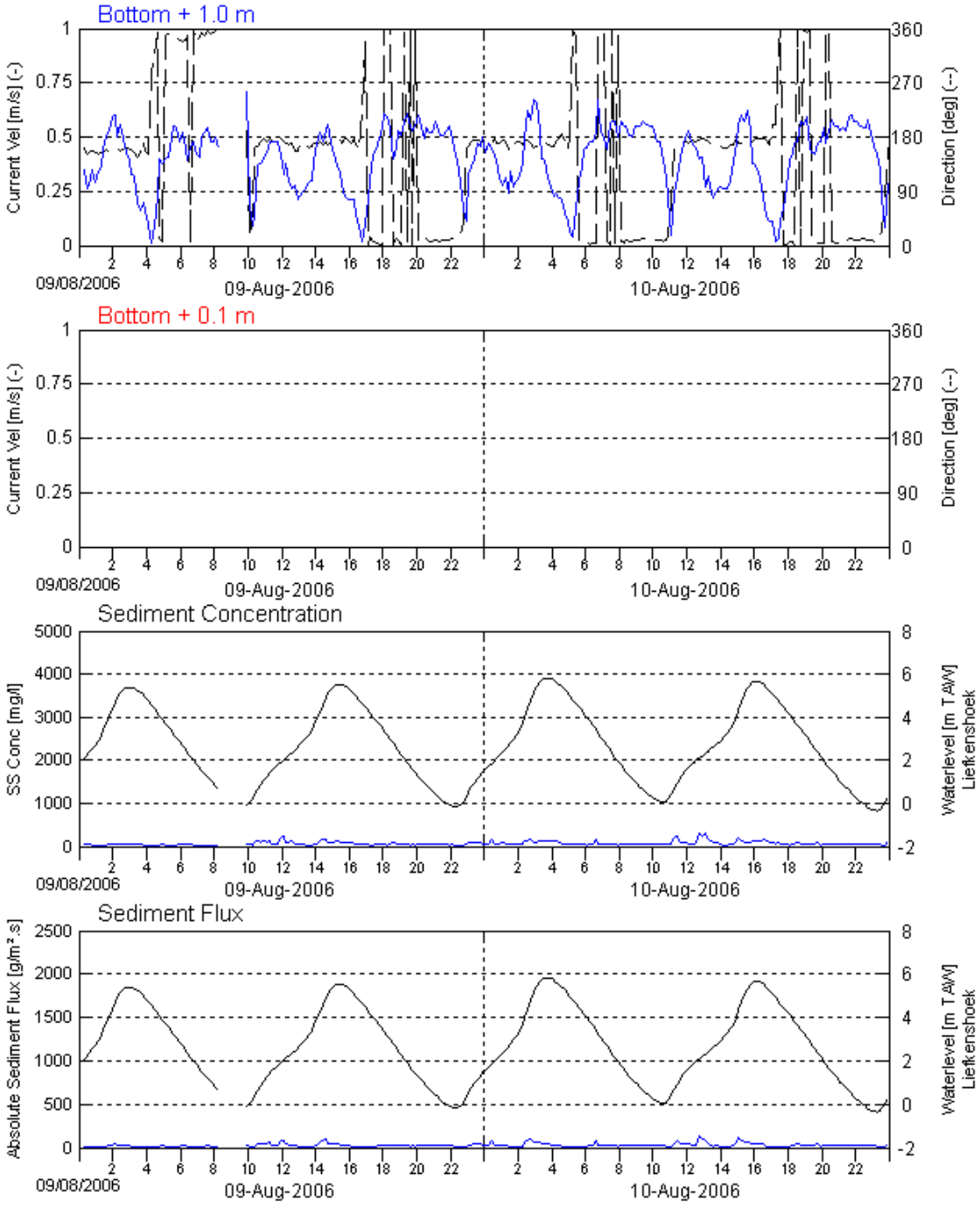
Date: 07/08/2006– 08/08/2006

Data processed by: IMDC

In association with: WL | delft hydraulics, GEMS International

I/RA/11283/06.122MSA

11283 Accretion Deurganckdok – Near bed continuous monitoring – Summer 2006



Current Velocity and Direction upper (RCM9) and lower (Valeport) EMC, OBS SS Conc. & flux and waterlevel

Location: Deurganckdok CDW

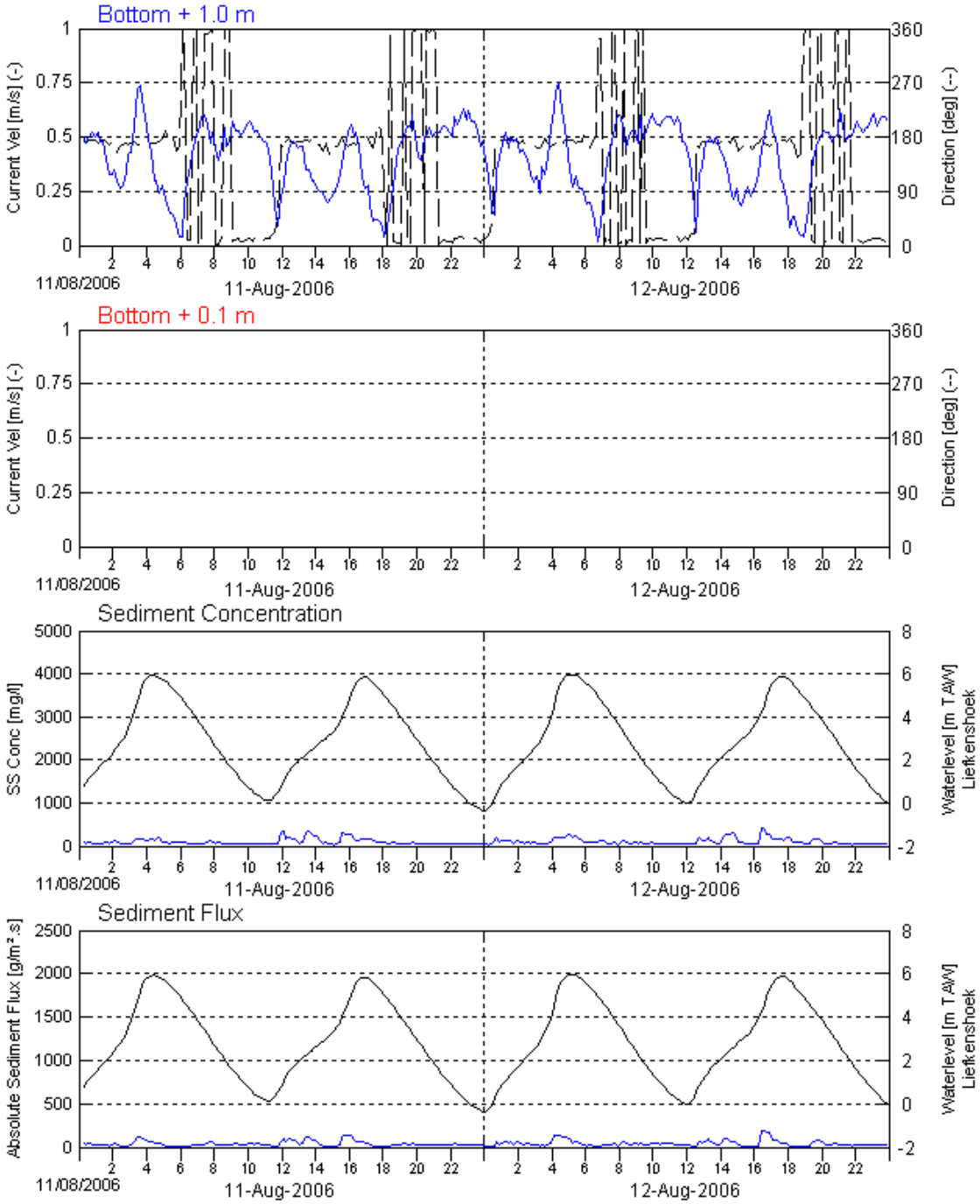
Date: 09/08/2006– 10/08/2006

Data processed by: IMDC

In association with: WL | delft hydraulics, GEMS International

I/RA/11283/06.122MSA

11283 Accretion Deurganckdok – Near bed continuous monitoring – Summer 2006



Current Velocity and Direction upper (RCM9) and lower (Valeport) EMC, OBS SS Conc. & flux and waterlevel

Location: Deurganckdok CDW

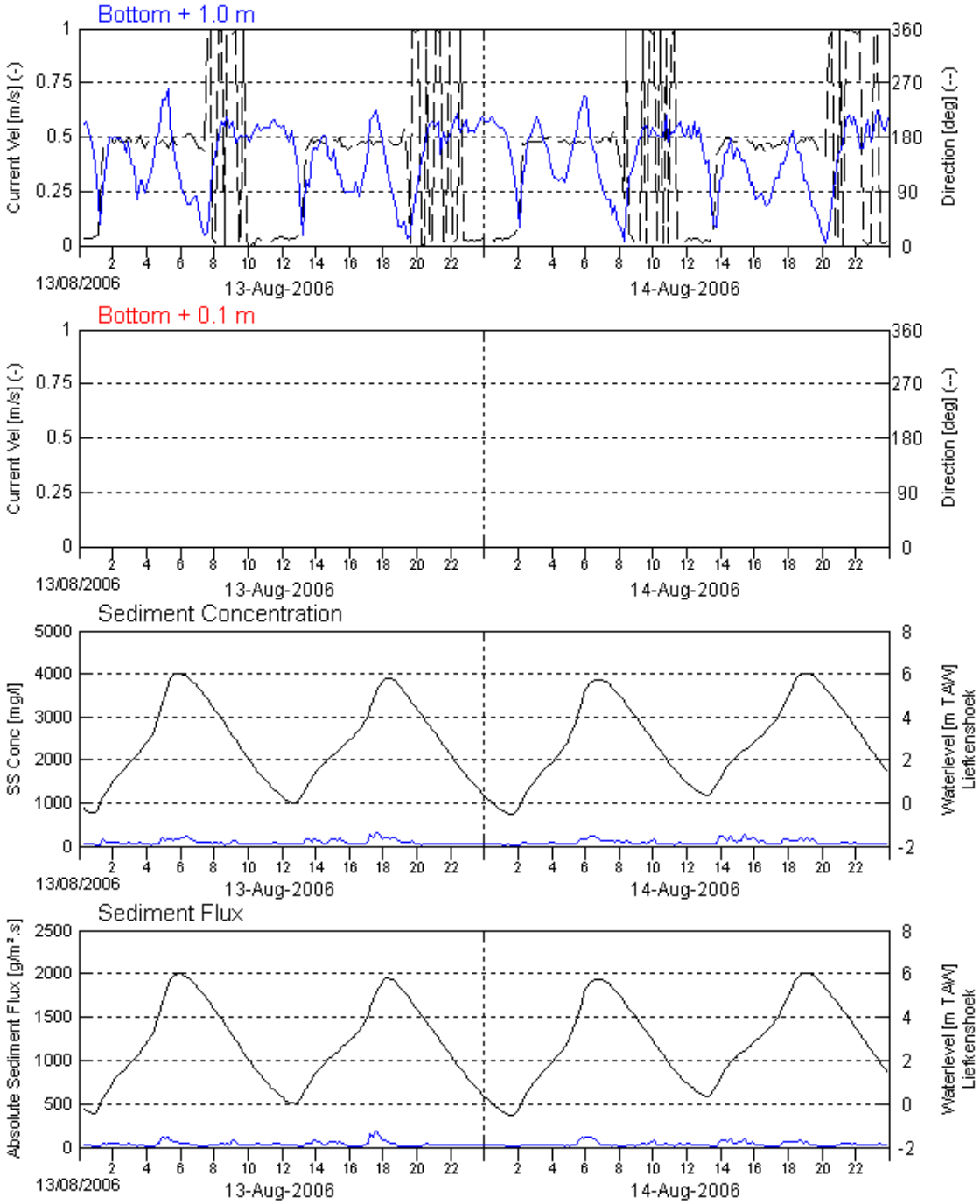
Date: 11/8/2006– 12/08/2006

Data processed by: IMDC

In association with: WL | delft hydraulics, GEMS International

I/RA/11283/06.122MSA

11283 Accretion Deurganckdok – Near bed continuous monitoring – Summer 2006



Current Velocity and Direction upper (RCM9) and lower (Valeport) EMC, OBS SS Conc. & flux and waterlevel

Location: Deurganckdok CDW

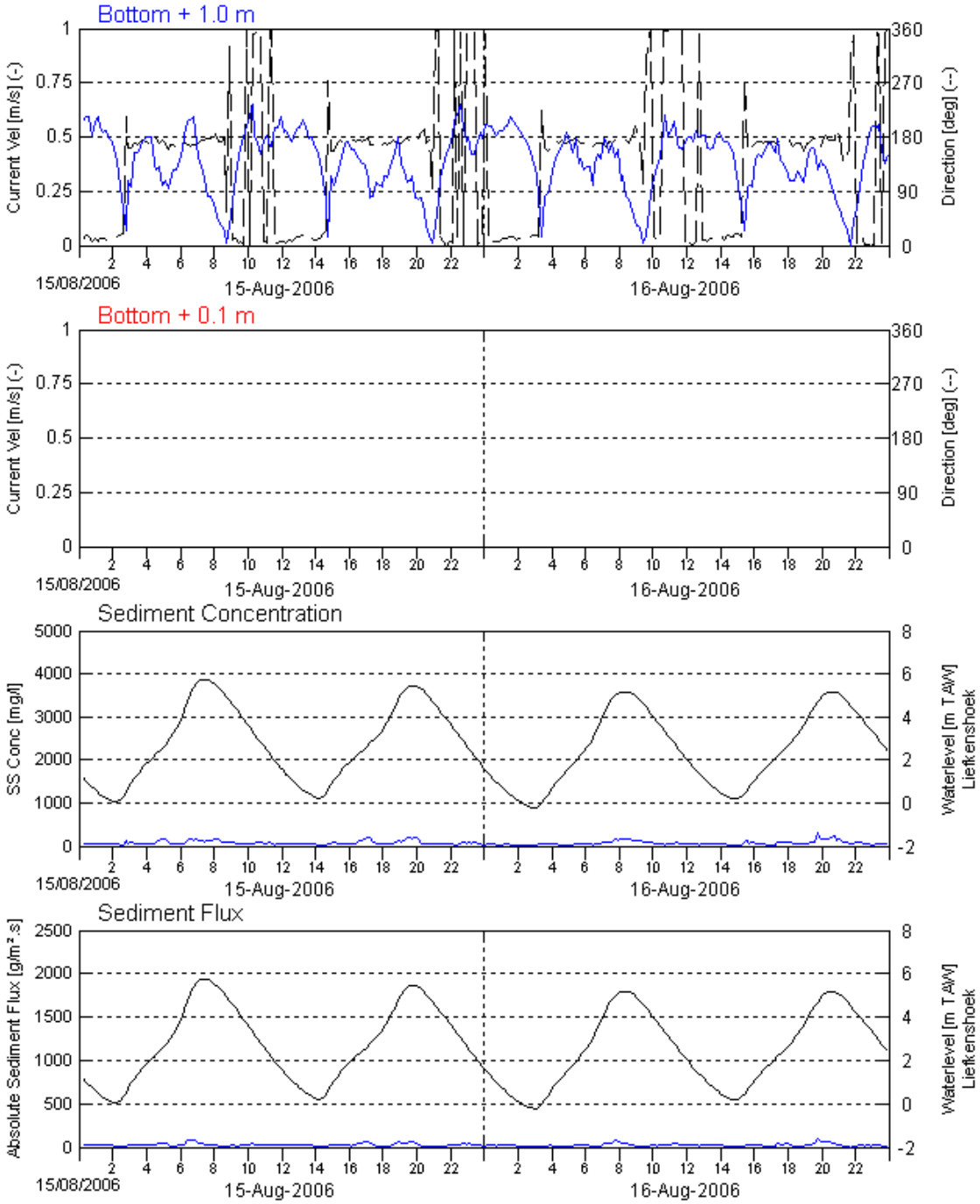
Date: 13/08/2006– 14/08/2006

Data processed by: IMDC

In association with: WL | delft hydraulics, GEMS International

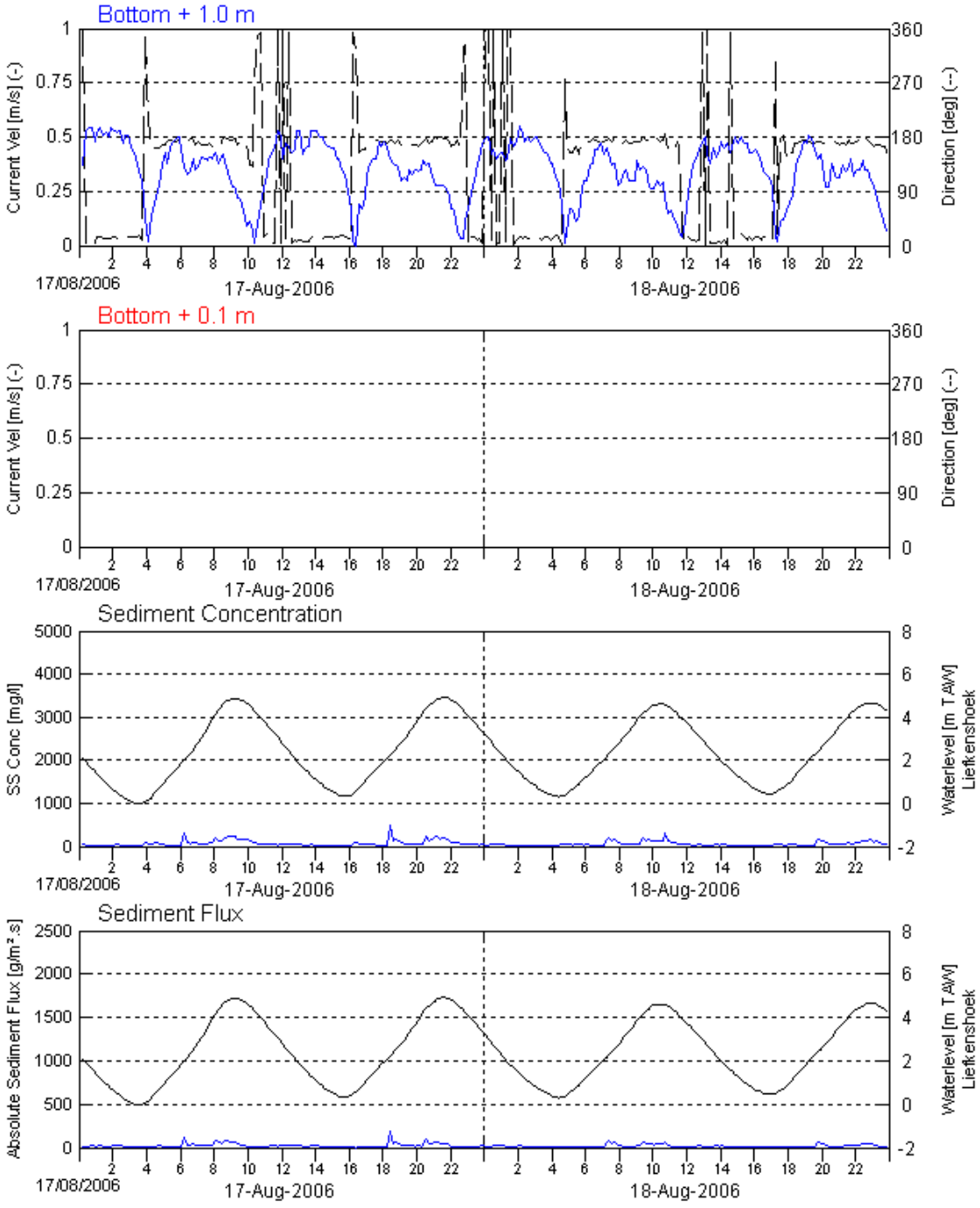
I/RA/11283/06.122MSA

11283 Accretion Deurganckdok – Near bed continuous monitoring – Summer 2006



Current Velocity and Direction upper (RCM9) and lower (Valeport) EMC, OBS SS Conc. & flux and waterlevel		*Data processed by:* IMDC
Location: Deurganckdok CDW	Date: 15/08/2006– 16/08/2006	*In association with:* WL | delft hydraulics, GEMS International
		I/RA/11283/06.122MSA

11283 Accretion Deurganckdok – Near bed continuous monitoring – Summer 2006



Current Velocity and Direction upper (RCM9) and lower (Valeport) EMC, OBS SS Conc. & flux and waterlevel

Location: Deurganckdok CDW

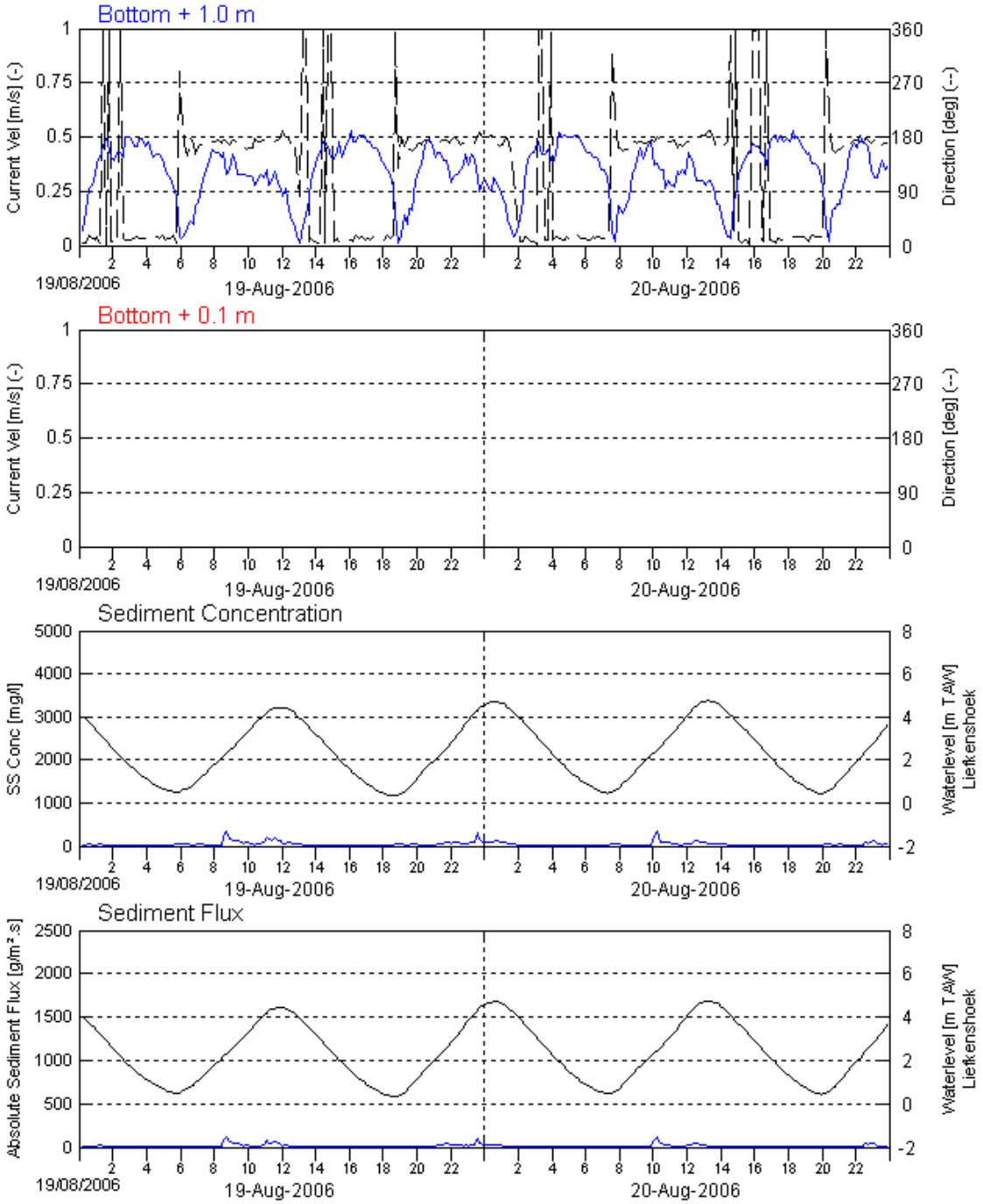
Date: 17/08/2006– 18/08/2006

Data processed by: IMDC

In association with: WL | delft hydraulics, GEMS International

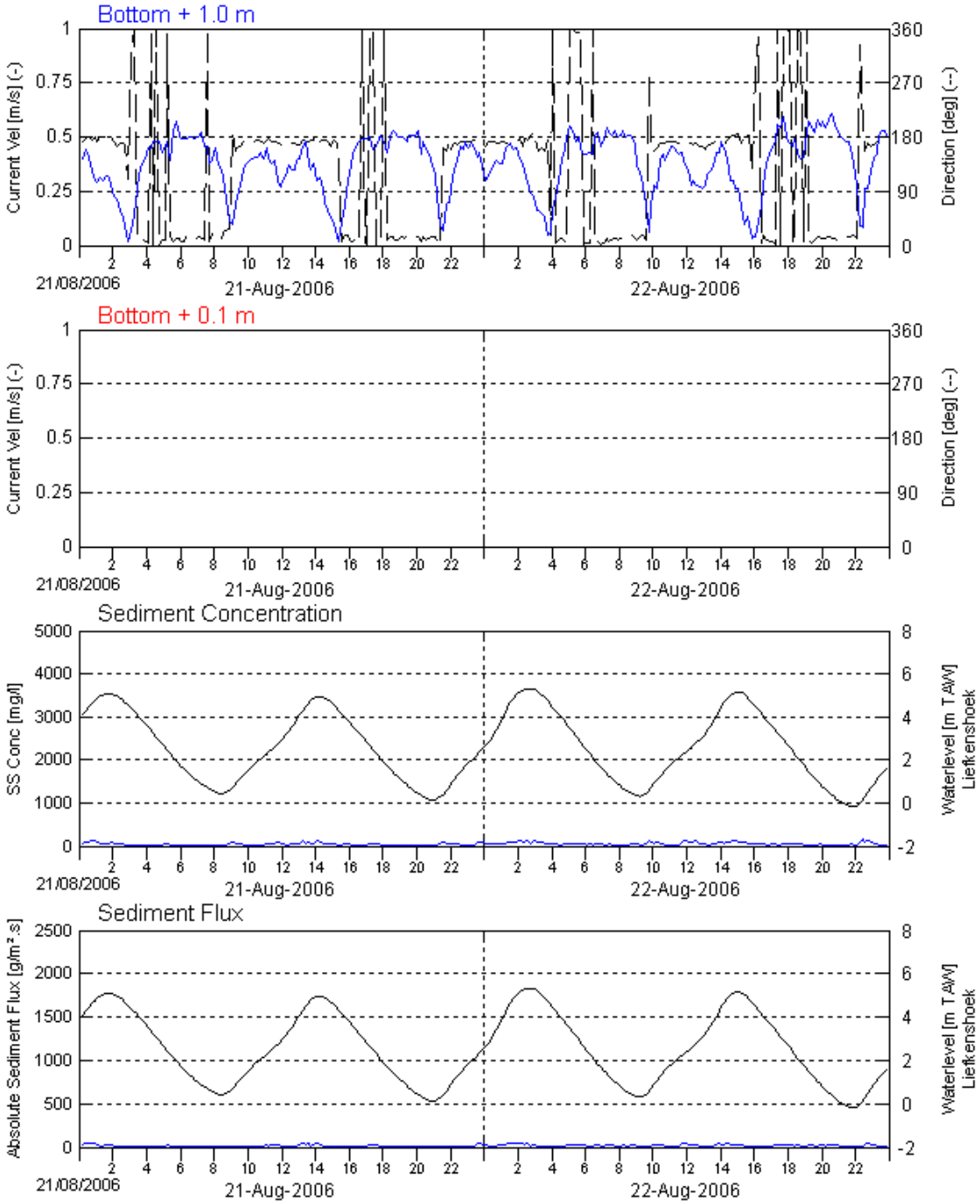
I/RA/11283/06.122MSA

11283 Accretion Deurganckdok – Near bed continuous monitoring – Summer 2006



Current Velocity and Direction upper (RCM9) and lower (Valeport) EMC, OBS SS Conc. & flux and waterlevel		Data processed by: IMDC
Location: Deurganckdok CDW	Date: 19/08/2006– 20/08/2006	In association with: WL | delft hydraulics, GEMS International
		I/RA/11283/06.122MSA

11283 Accretion Deurganckdok – Near bed continuous monitoring – Summer 2006



Current Velocity and Direction upper (RCM9) and lower (Valeport) EMC, OBS SS Conc. & flux and waterlevel

Location: Deurganckdok CDW

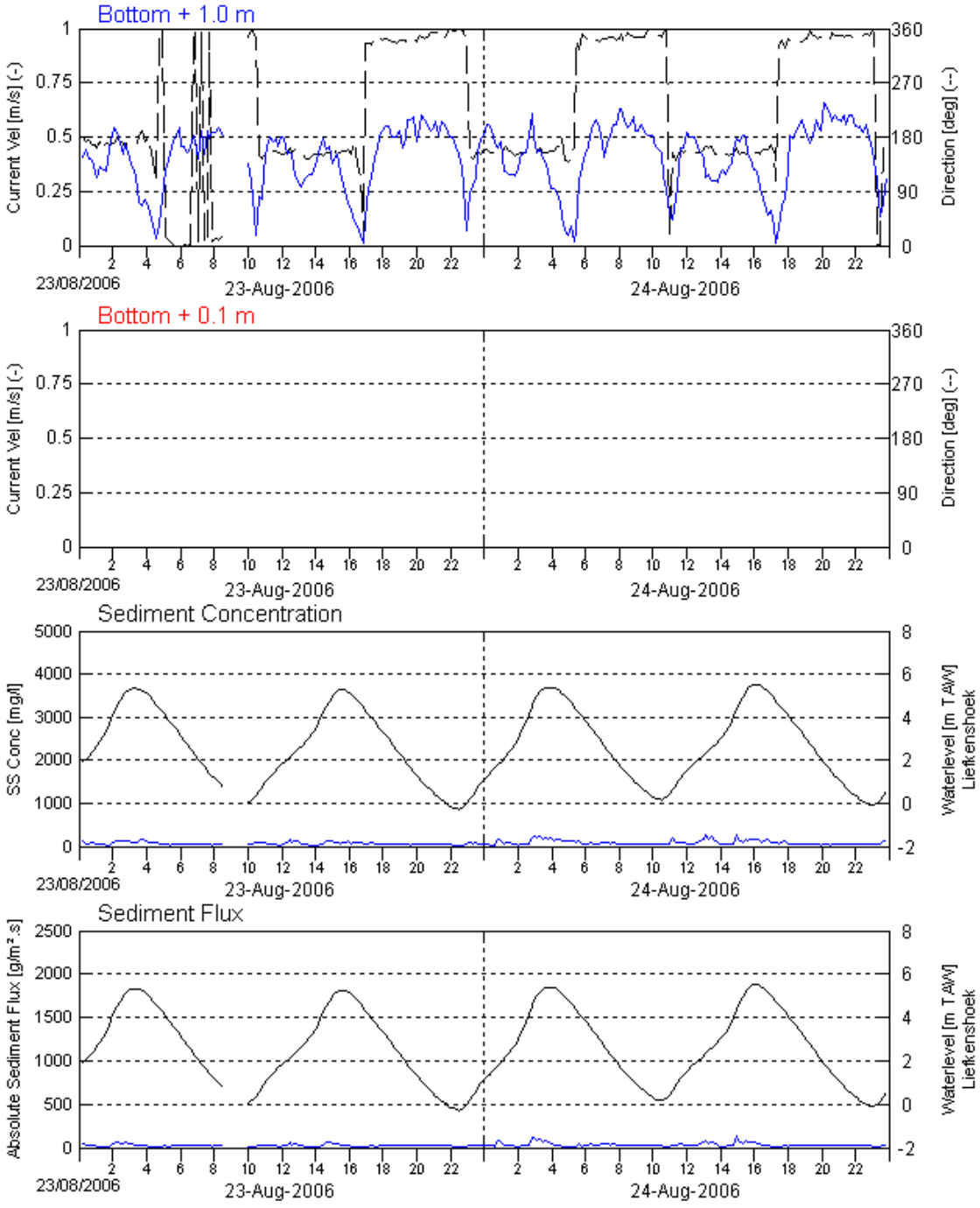
Date: 21/08/2006– 22/08/2006

Data processed by: IMDC

In association with: WL | delft hydraulics, GEMS International

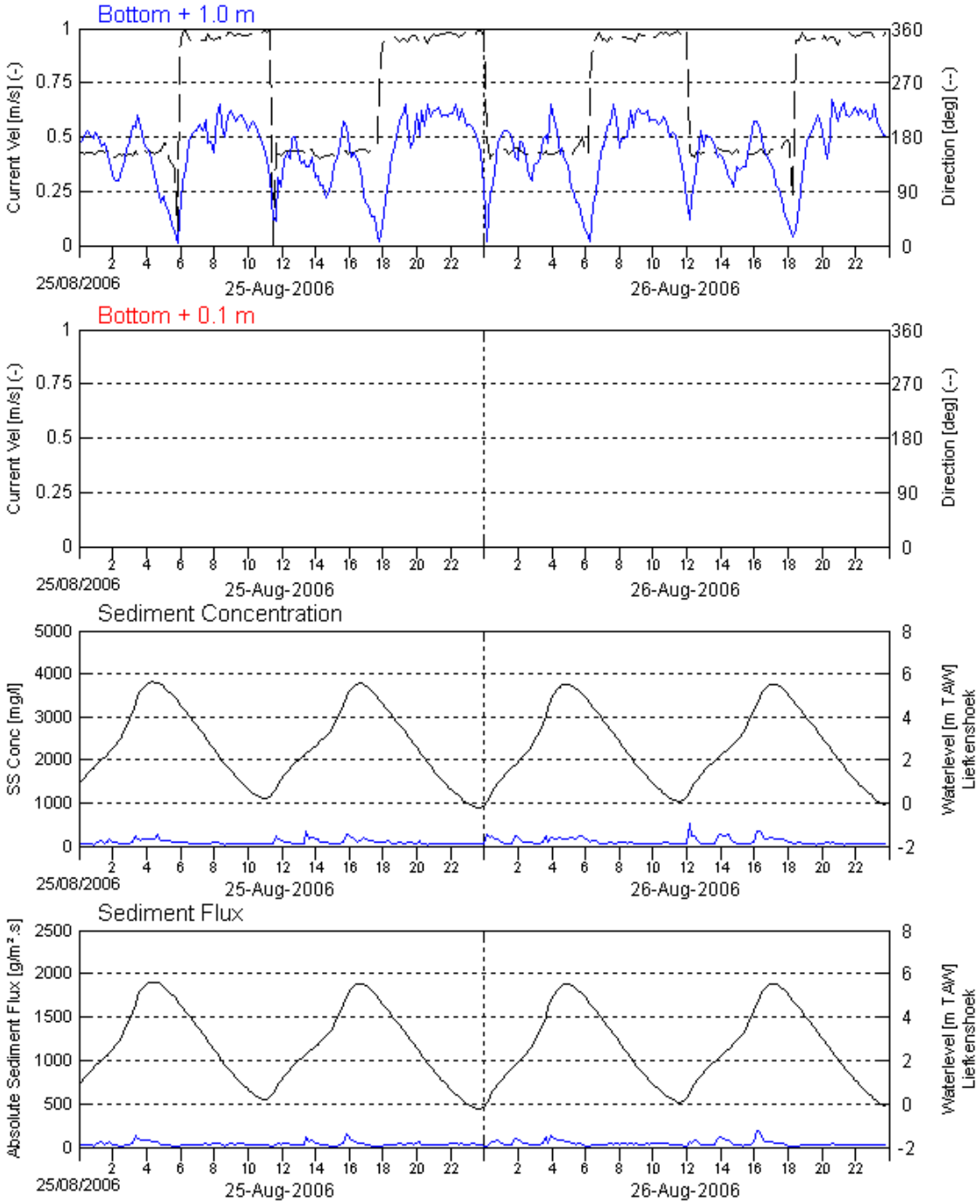
I/RA/11283/06.122MSA

11283 Accretion Deurganckdok – Near bed continuous monitoring – Summer 2006



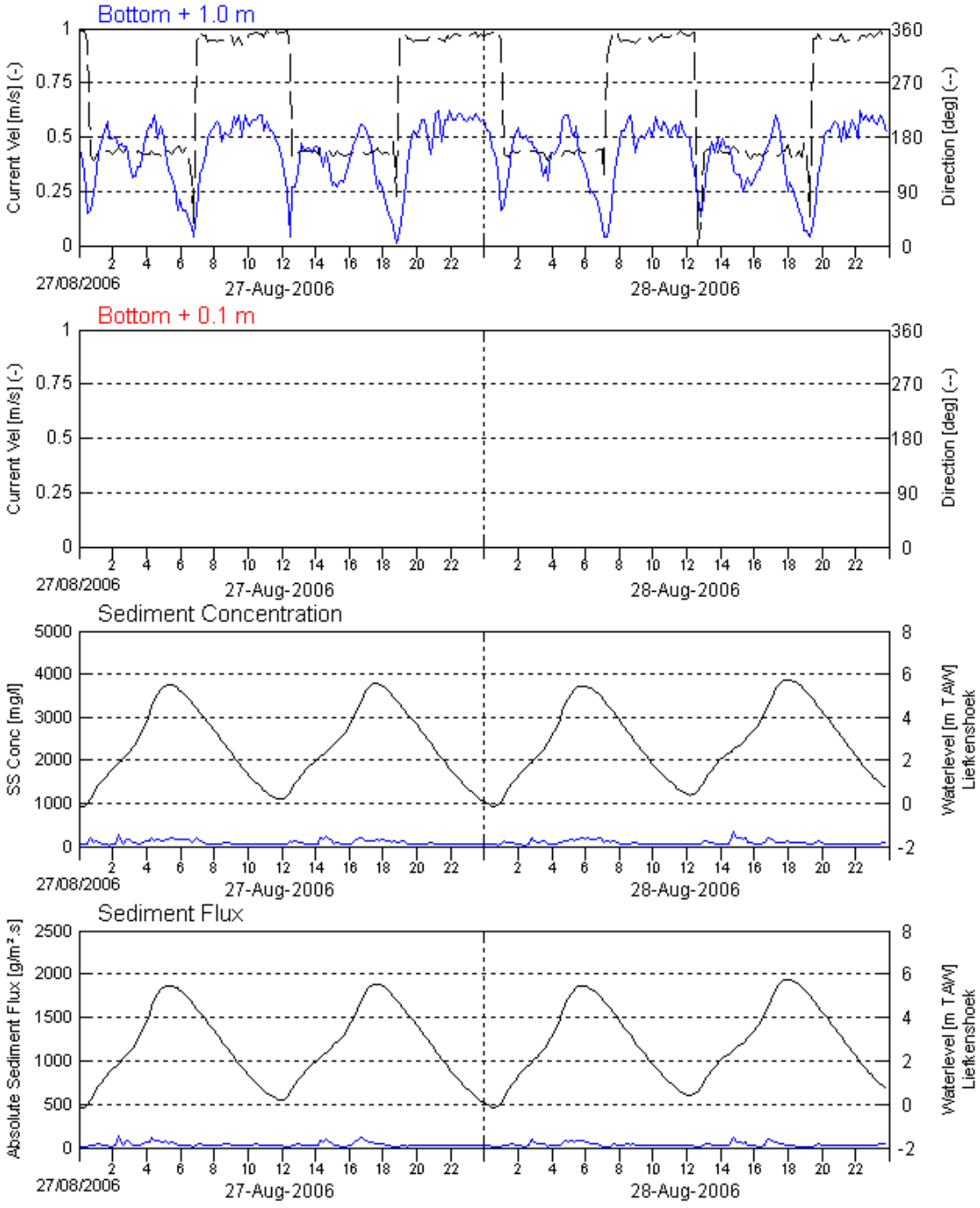
Current Velocity and Direction upper (RCM9) and lower (Valeport) EMC, OBS SS Conc. & flux and waterlevel		*Data processed by:* IMDC
Location: Deurganckdok CDW	Date: 23/08/2006– 24/08/2006	*In association with:* WL | delft hydraulics, GEMS International
		I/RA/11283/06.122MSA

11283 Accretion Deurganckdok – Near bed continuous monitoring – Summer 2006



Current Velocity and Direction upper (RCM9) and lower (Valeport) EMC, OBS SS Conc. & flux and waterlevel		*Data processed by:* IMDC
Location: Deurganckdok CDW	Date: 25/08/2006– 26/08/2006	*In association with:* WL | delft hydraulics, GEMS International
		I/RA/11283/06.122MSA

11283 Accretion Deurganckdok – Near bed continuous monitoring – Summer 2006



Current Velocity and Direction upper (RCM9) and lower (Valeport) EMC, OBS SS Conc. & flux and waterlevel

Location: Deurganckdok CDW

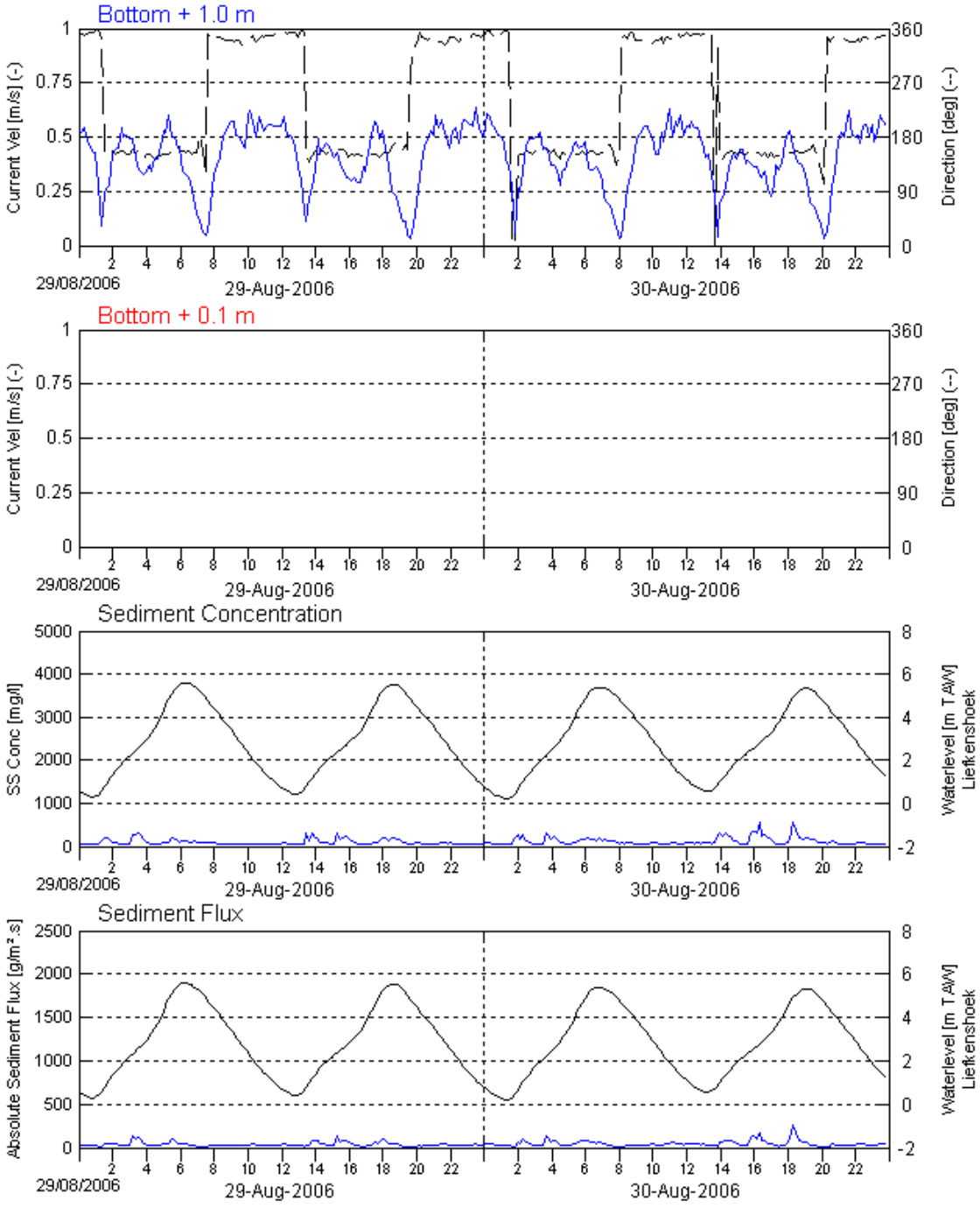
Date: 27/8/2006– 28/08/2006

Data processed by: IMDC

In association with: WL | delft hydraulics, GEMS International

I/RA/11283/06.122MSA

11283 Accretion Deurganckdok – Near bed continuous monitoring – Summer 2006



Current Velocity and Direction upper (RCM9) and lower (Valeport) EMC, OBS SS Conc. & flux and waterlevel

Location: Deurganckdok CDW

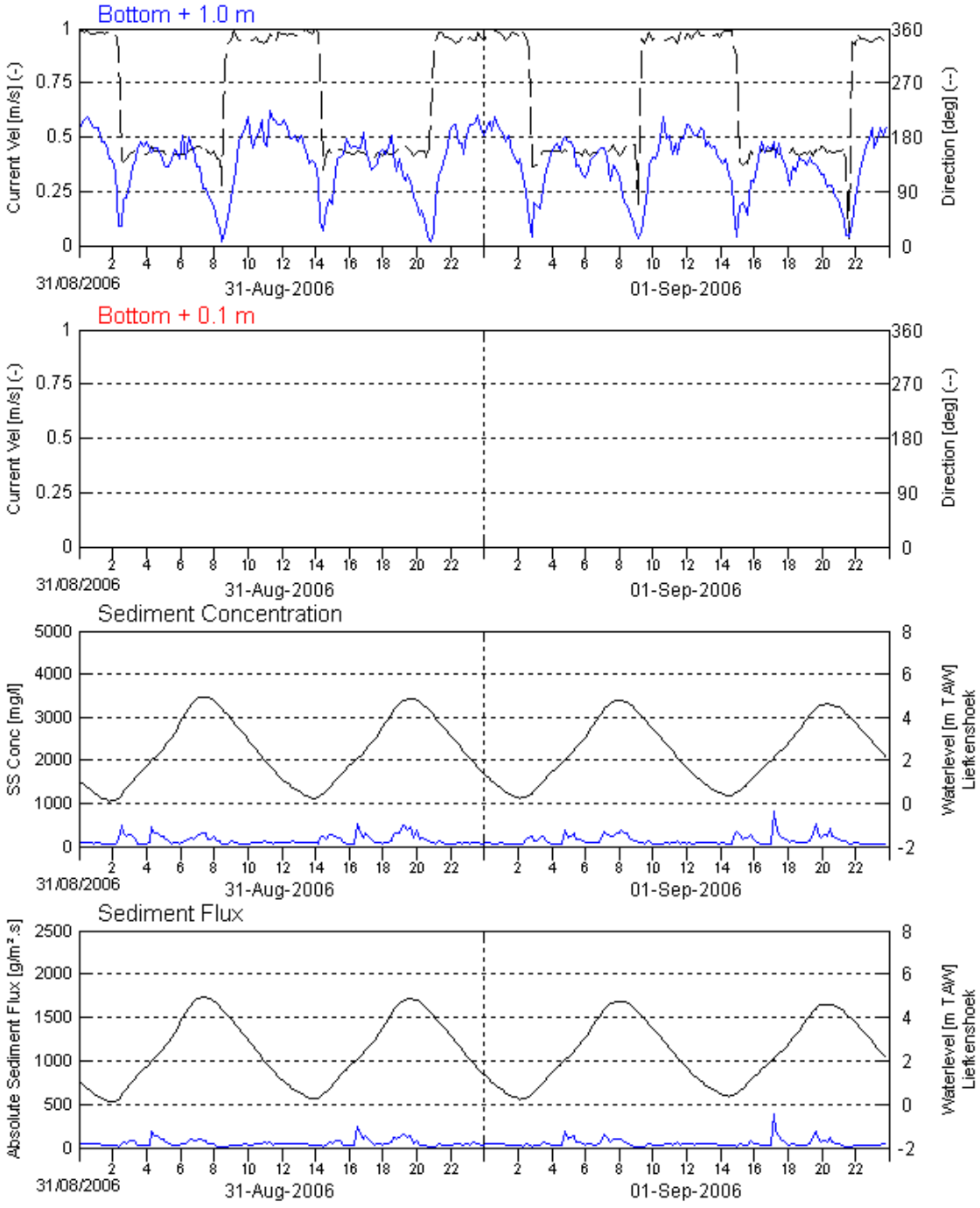
Date: 29/08/2006– 30/08/2006

Data processed by: IMDC

In association with: WL | delft hydraulics, GEMS International

I/RA/11283/06.122MSA

11283 Accretion Deurganckdok – Near bed continuous monitoring – Summer 2006



Current Velocity and Direction upper (RCM9) and lower (Valeport) EMC, OBS SS Conc. & flux and waterlevel

Location: Deurganckdok CDW

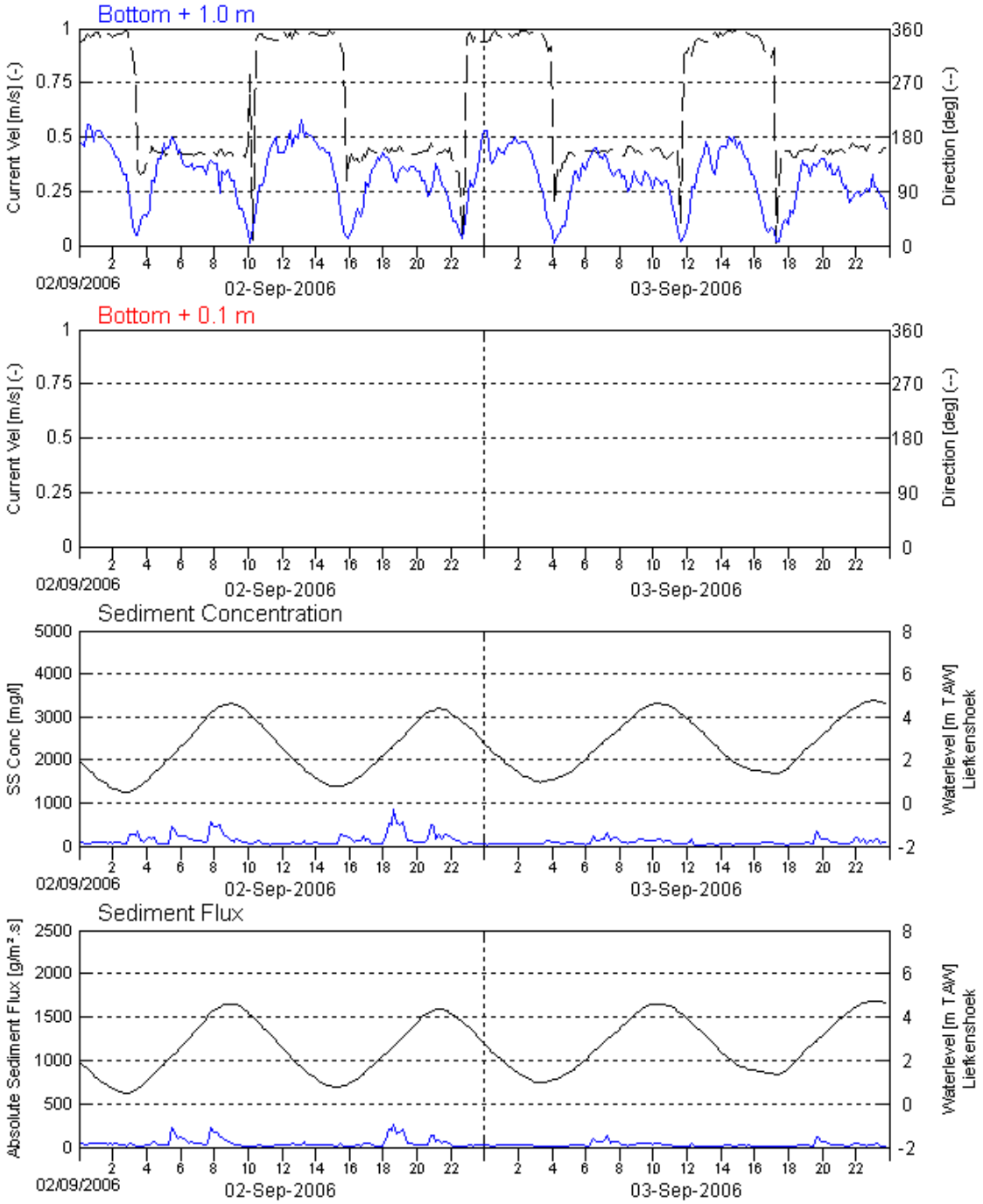
Date: 31/08/2006– 01/09/2006

Data processed by: IMDC

In association with: WL | delft hydraulics, GEMS International

I/RA/11283/06.122MSA

11283 Accretion Deurganckdok – Near bed continuous monitoring – Summer 2006



Current Velocity and Direction upper (RCM9) and lower (Valeport) EMC, OBS SS Conc. & flux and waterlevel

Location: Deurganckdok CDW

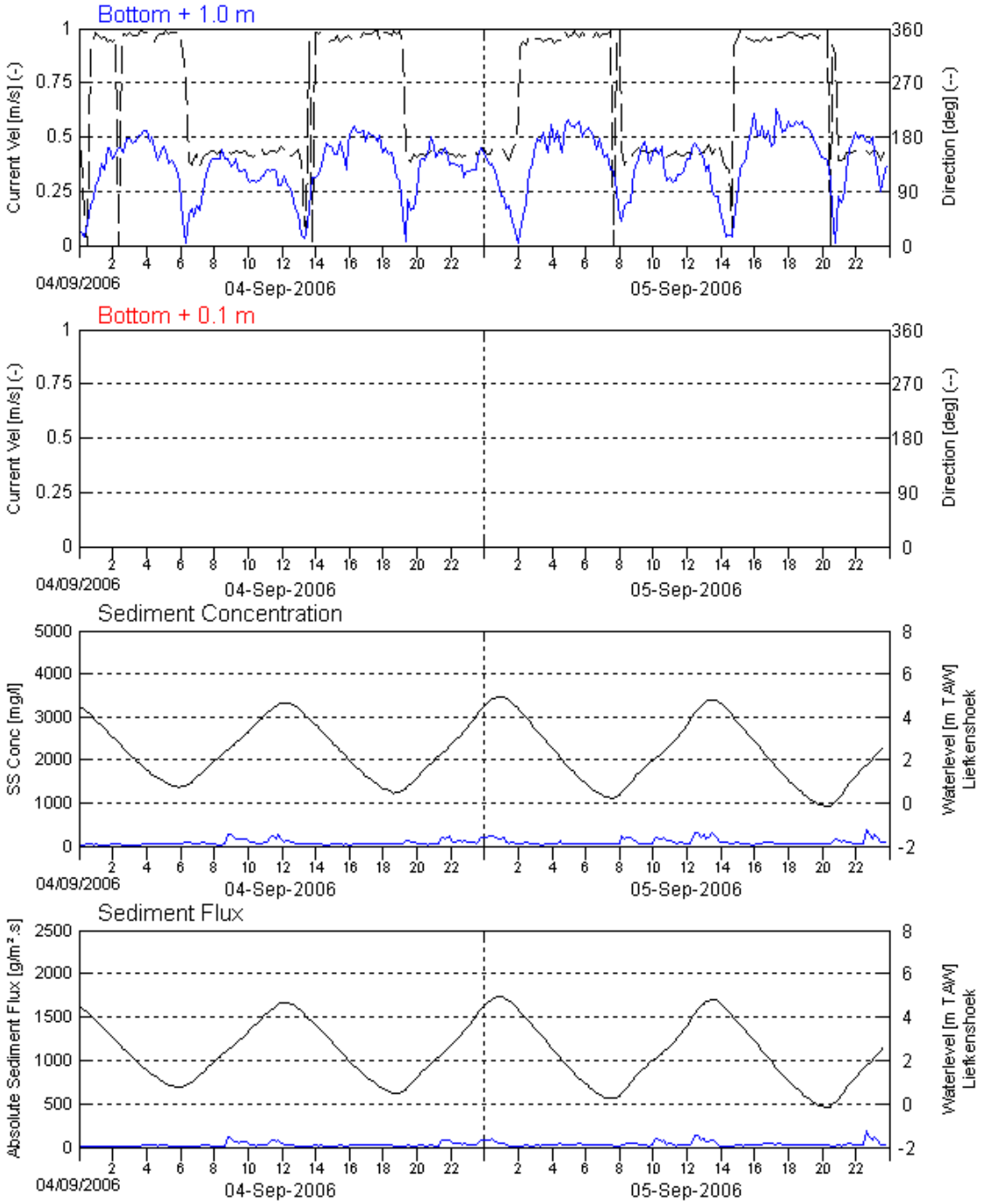
Date: 02/09/2006– 03/09/2006

Data processed by: IMDC

In association with: WL | delft hydraulics, GEMS International

I/RA/11283/06.122MSA

11283 Accretion Deurganckdok – Near bed continuous monitoring – Summer 2006



Current Velocity and Direction upper (RCM9) and lower (Valeport) EMC, OBS SS Conc. & flux and waterlevel

Location: Deurganckdok CDW

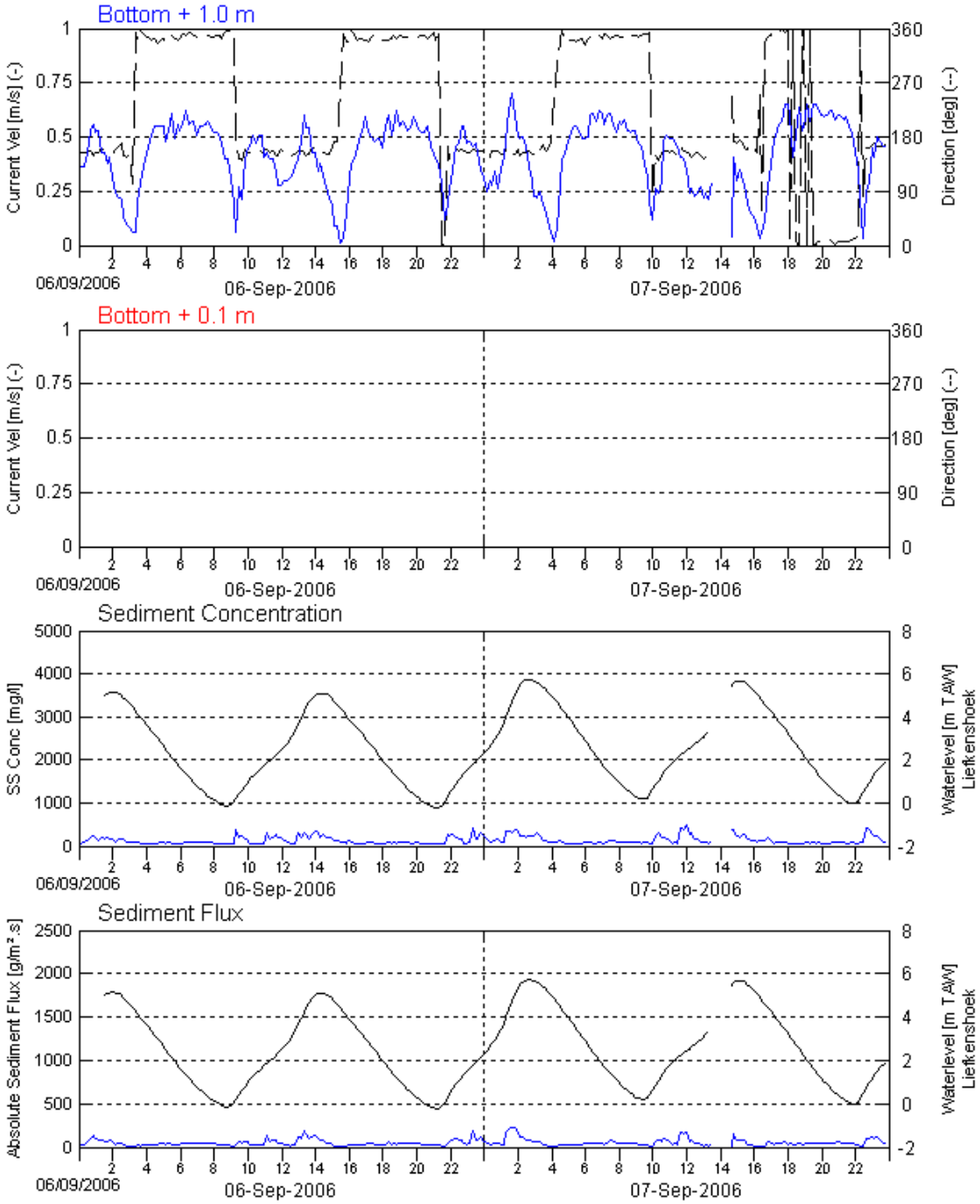
Date: 04/09/2006– 05/09/2006

Data processed by: IMDC

In association with: WL | delft hydraulics, GEMS International

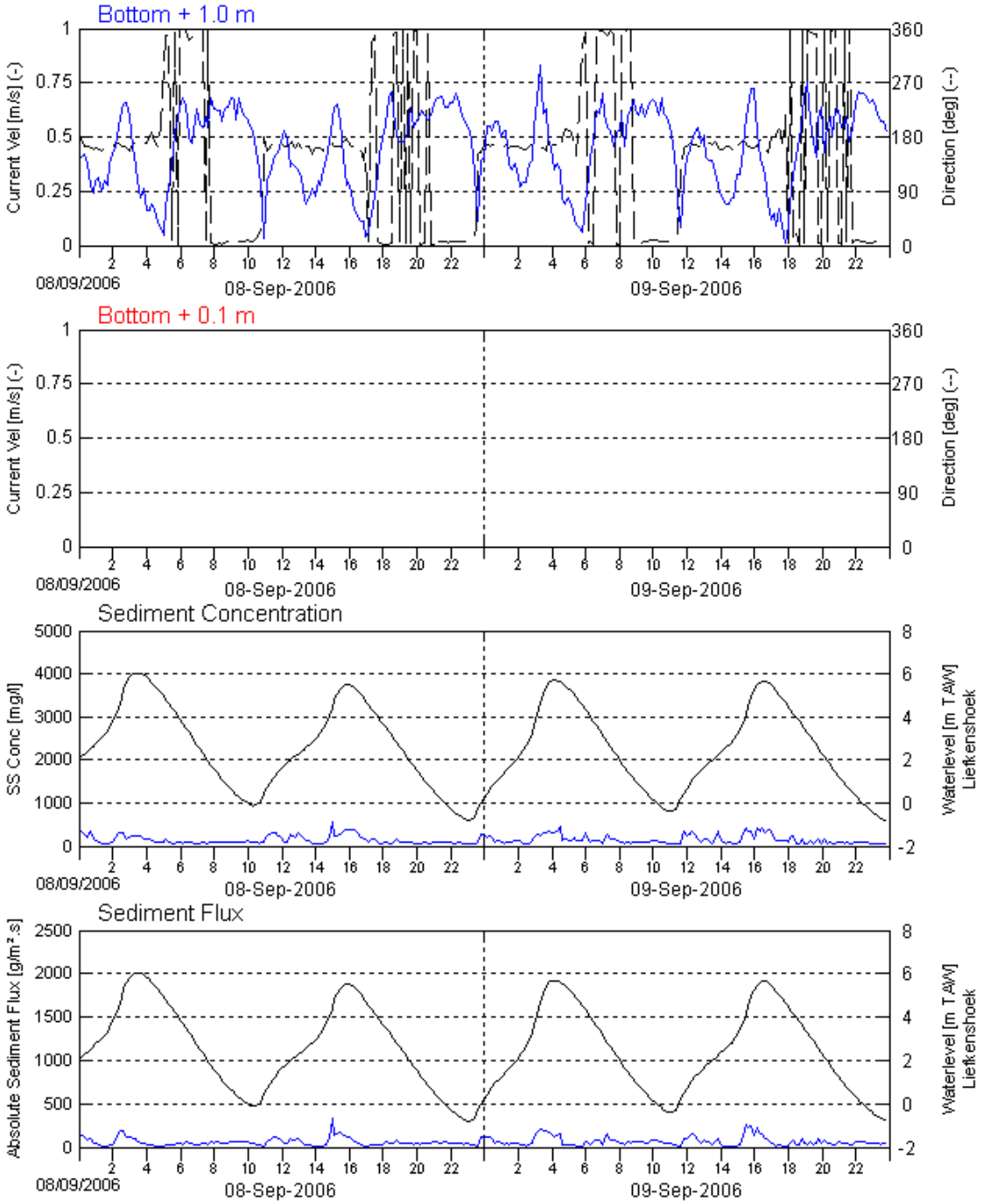
I/RA/11283/06.122MSA

11283 Accretion Deurganckdok – Near bed continuous monitoring – Summer 2006



Current Velocity and Direction upper (RCM9) and lower (Valeport) EMC, OBS SS Conc. & flux and waterlevel		*Data processed by:* IMDC
Location: Deurganckdok CDW	Date: 06/09/2006– 07/09/2006	*In association with:* WL | delft hydraulics, GEMS International
		I/RA/11283/06.122MSA

11283 Accretion Deurganckdok – Near bed continuous monitoring – Summer 2006



Current Velocity and Direction upper (RCM9) and lower (Valeport) EMC, OBS SS Conc. & flux and waterlevel

Location: Deurganckdok CDW

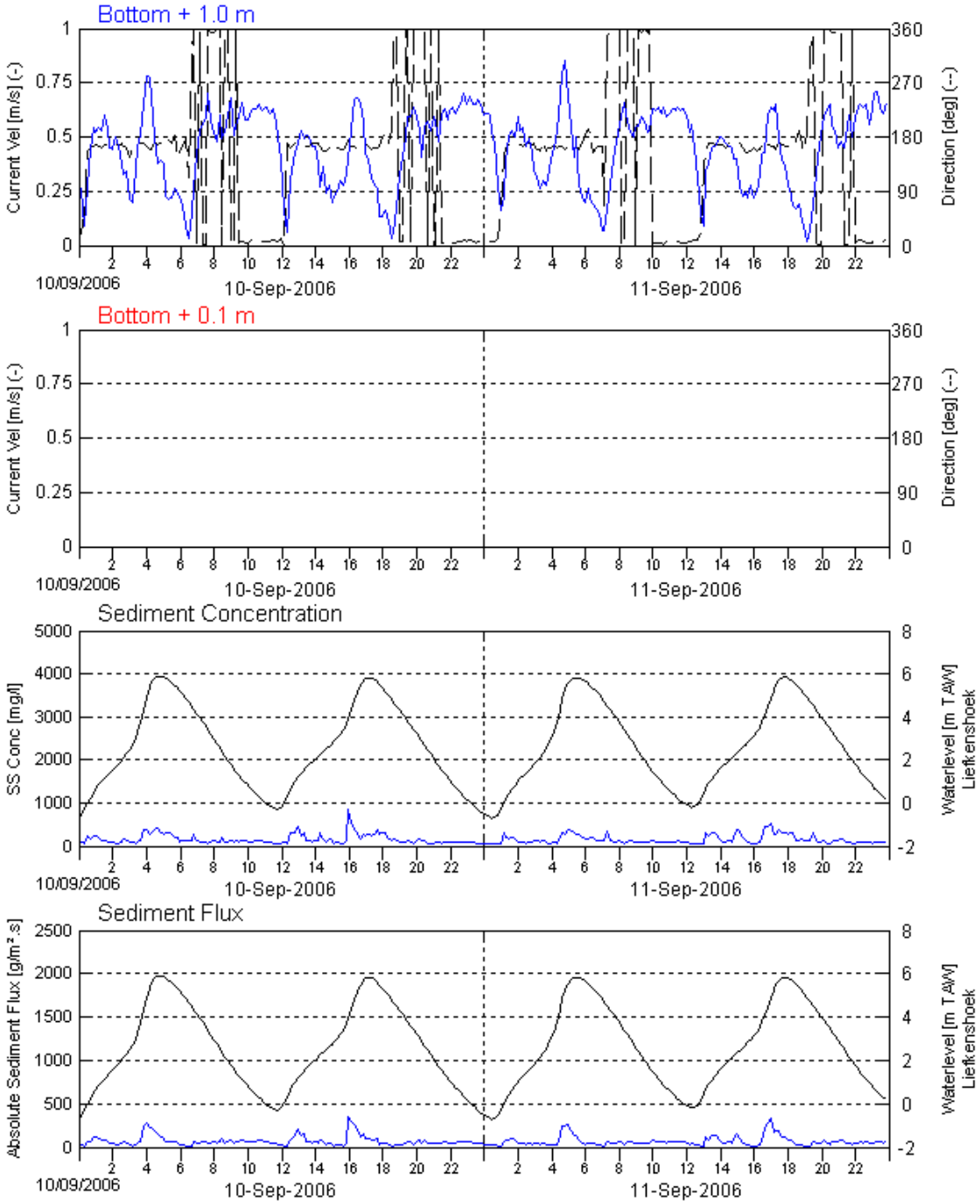
Date: 08/09/2006– 09/09/2006

Data processed by: IMDC

In association with: WL | delft hydraulics, GEMS International

I/RA/11283/06.122MSA

11283 Accretion Deurganckdok – Near bed continuous monitoring – Summer 2006



Current Velocity and Direction upper (RCM9) and lower (Valeport) EMC, OBS SS Conc. & flux and waterlevel

Location: Deurganckdok CDW

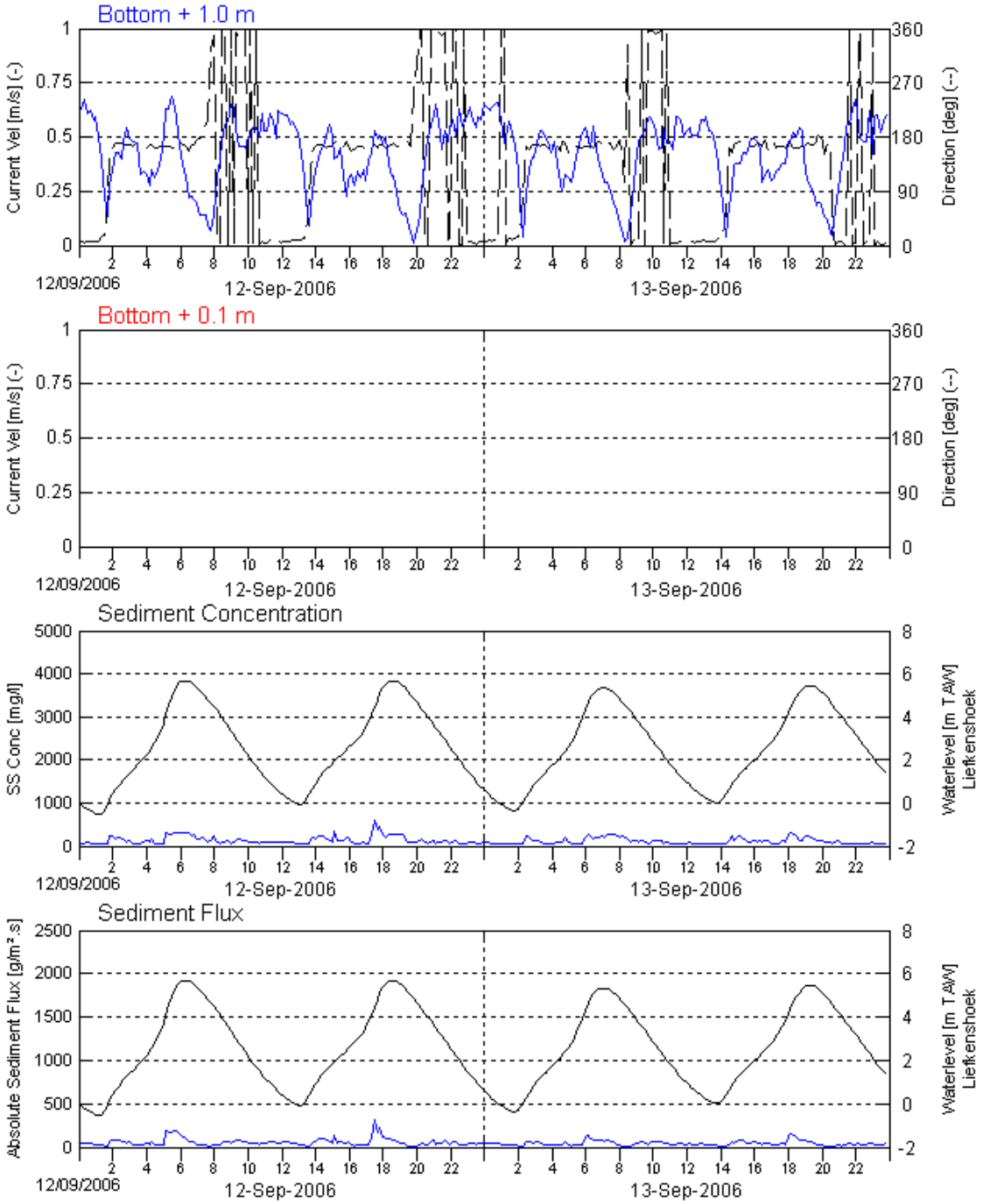
Date: 10/09/2006– 11/09/2006

Data processed by: IMDC

In association with: WL | delft hydraulics, GEMS International

I/RA/11283/06.122MSA

11283 Accretion Deurganckdok – Near bed continuous monitoring – Summer 2006



Current Velocity and Direction upper (RCM9) and lower (Valeport) EMC, OBS SS Conc. & flux and waterlevel

Location: Deurganckdok CDW

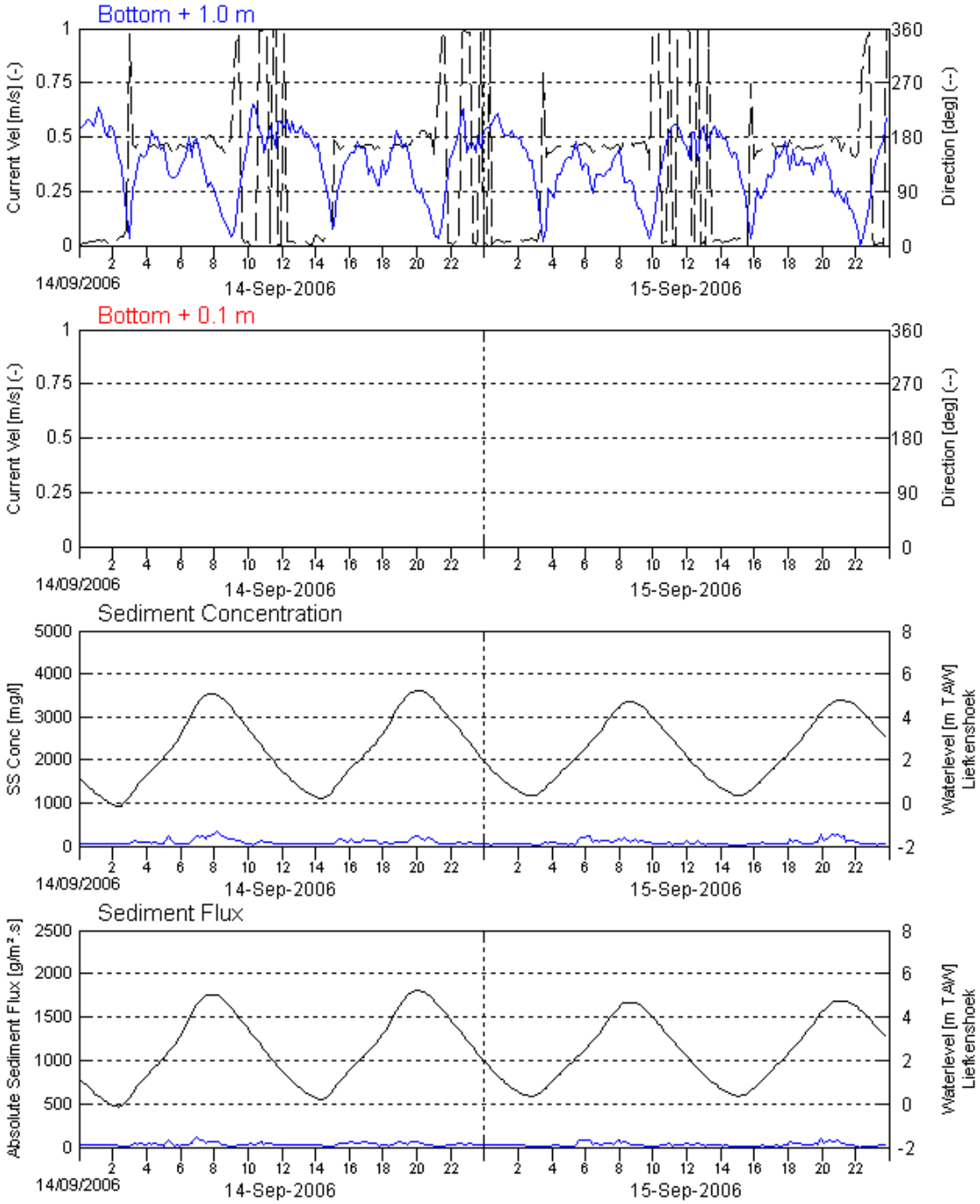
Date: 12/09/2006– 13/09/2006

Data processed by: IMDC

In association with: WL | delft hydraulics, GEMS International

I/RA/11283/06.122MSA

11283 Accretion Deurganckdok – Near bed continuous monitoring – Summer 2006



Current Velocity and Direction upper (RCM9) and lower (Valeport) EMC, OBS SS Conc. & flux and waterlevel

Location: Deurganckdok CDW

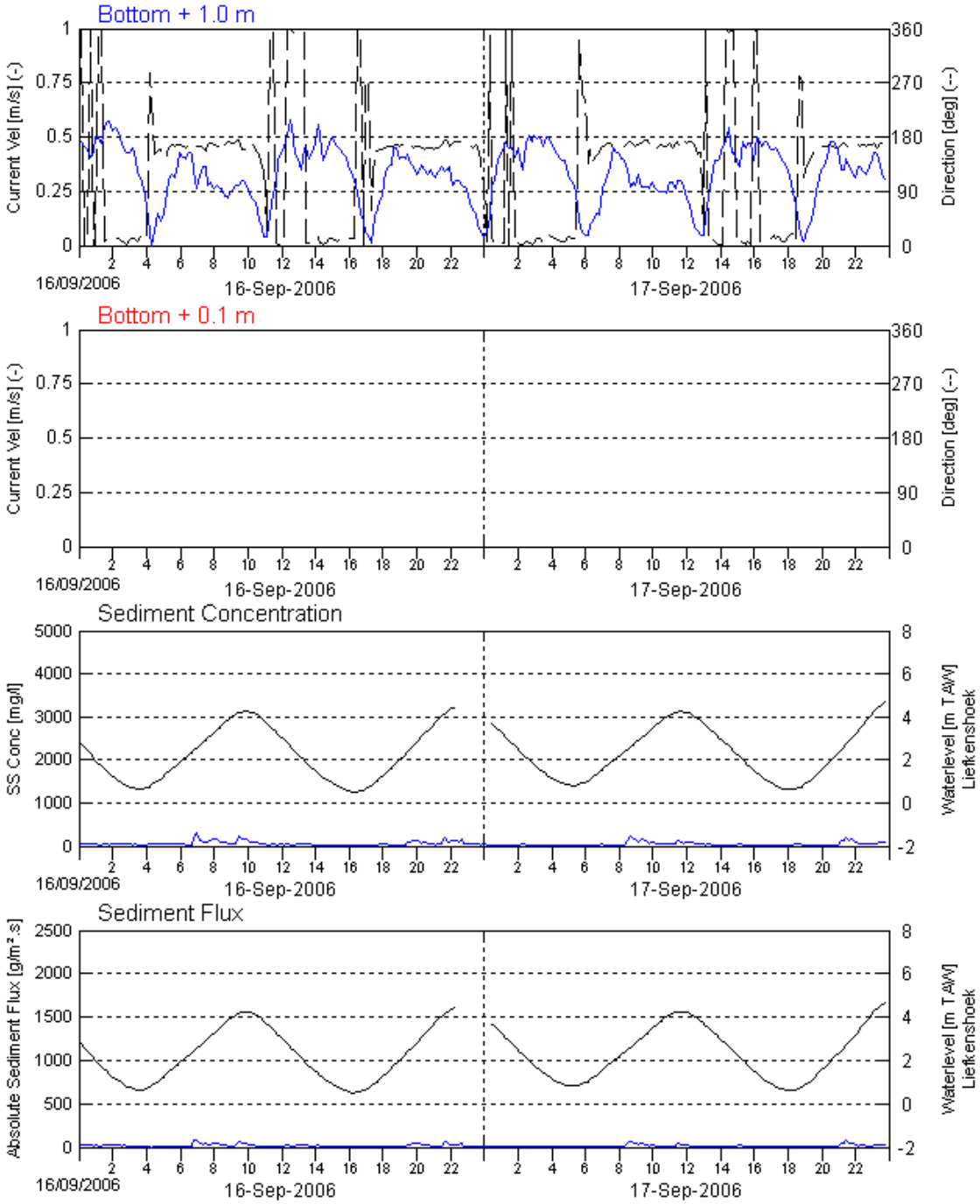
Date: 14/09/2006– 15/09/2006

Data processed by: IMDC

In association with: WL | delft hydraulics, GEMS International

I/RA/11283/06.122MSA

11283 Accretion Deurganckdok – Near bed continuous monitoring – Summer 2006



Current Velocity and Direction upper (RCM9) and lower (Valeport) EMC, OBS SS Conc. & flux and waterlevel

Location: Deurganckdok CDW

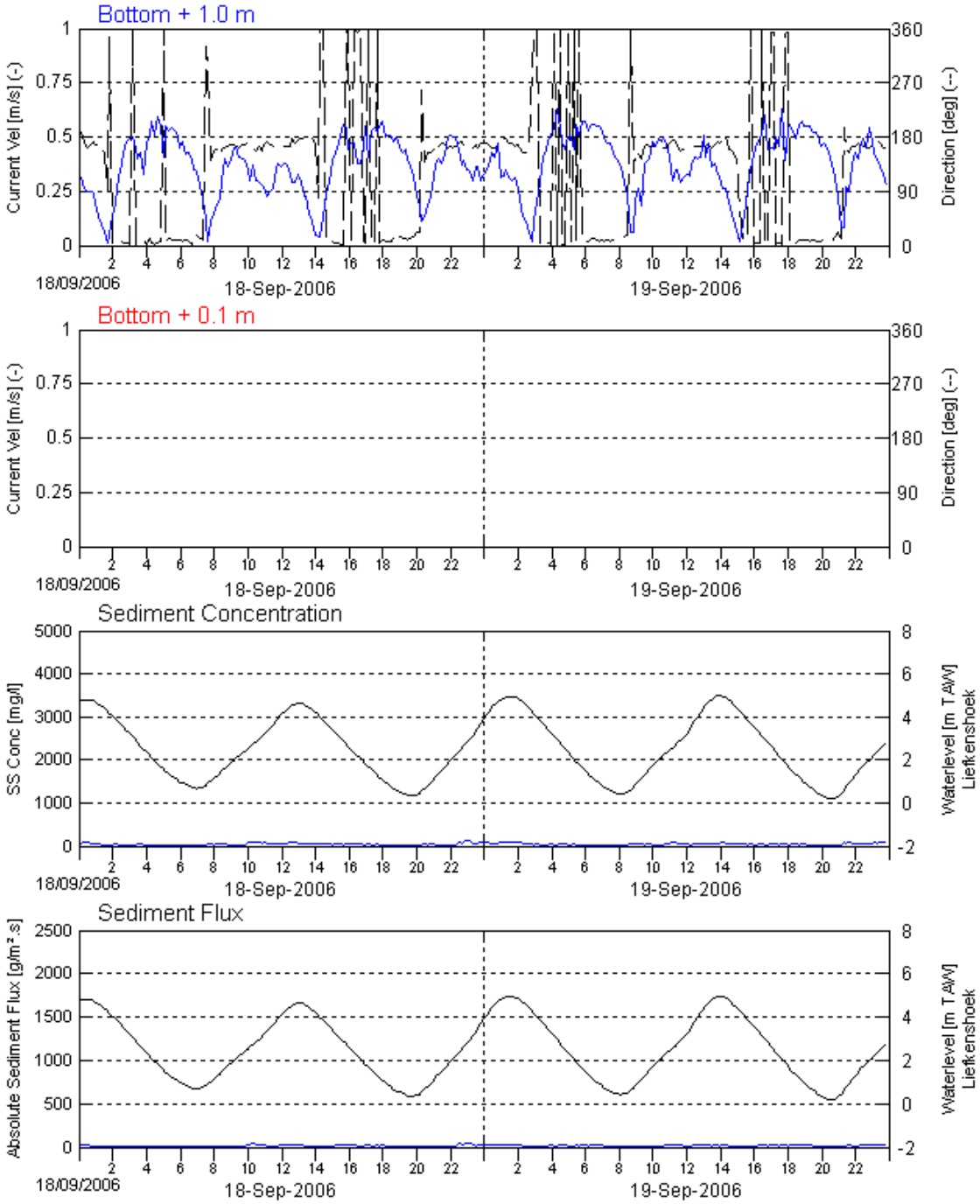
Date: 16/09/2006– 17/09/2006

Data processed by: IMDC

In association with: WL | delft hydraulics, GEMS International

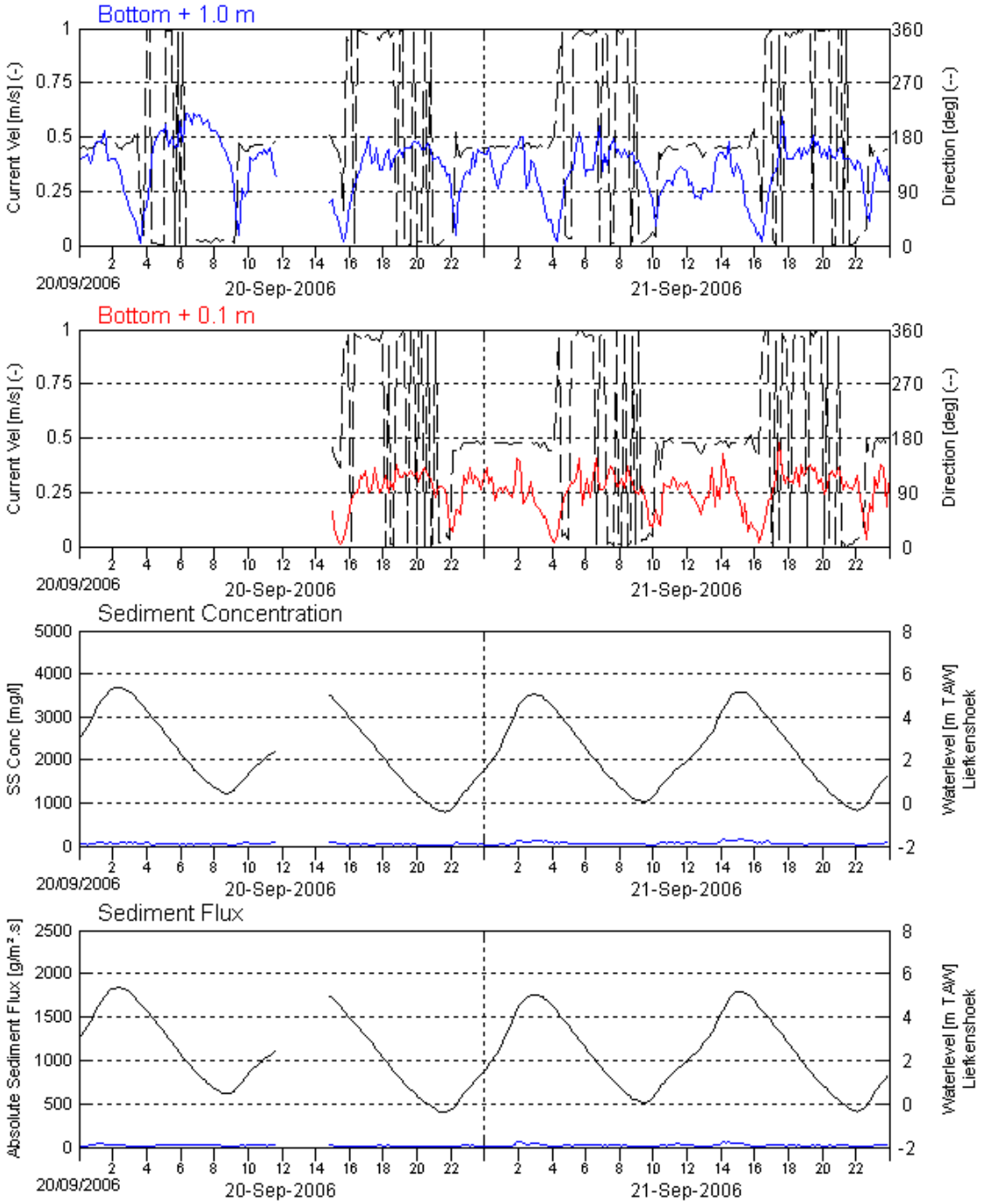
I/RA/11283/06.122MSA

11283 Accretion Deurganckdok – Near bed continuous monitoring – Summer 2006



Current Velocity and Direction upper (RCM9) and lower (Valeport) EMC, OBS SS Conc. & flux and waterlevel		*Data processed by:* IMDC
Location: Deurganckdok CDW	Date: 18/09/2006– 19/09/2006	*In association with:* WL | delft hydraulics, GEMS International
		I/RA/11283/06.122MSA

11283 Accretion Deurganckdok – Near bed continuous monitoring – Summer 2006



Current Velocity and Direction upper (RCM9) and lower (Valeport) EMC, OBS SS Conc. & flux and waterlevel

Location: Deurganckdok CDW

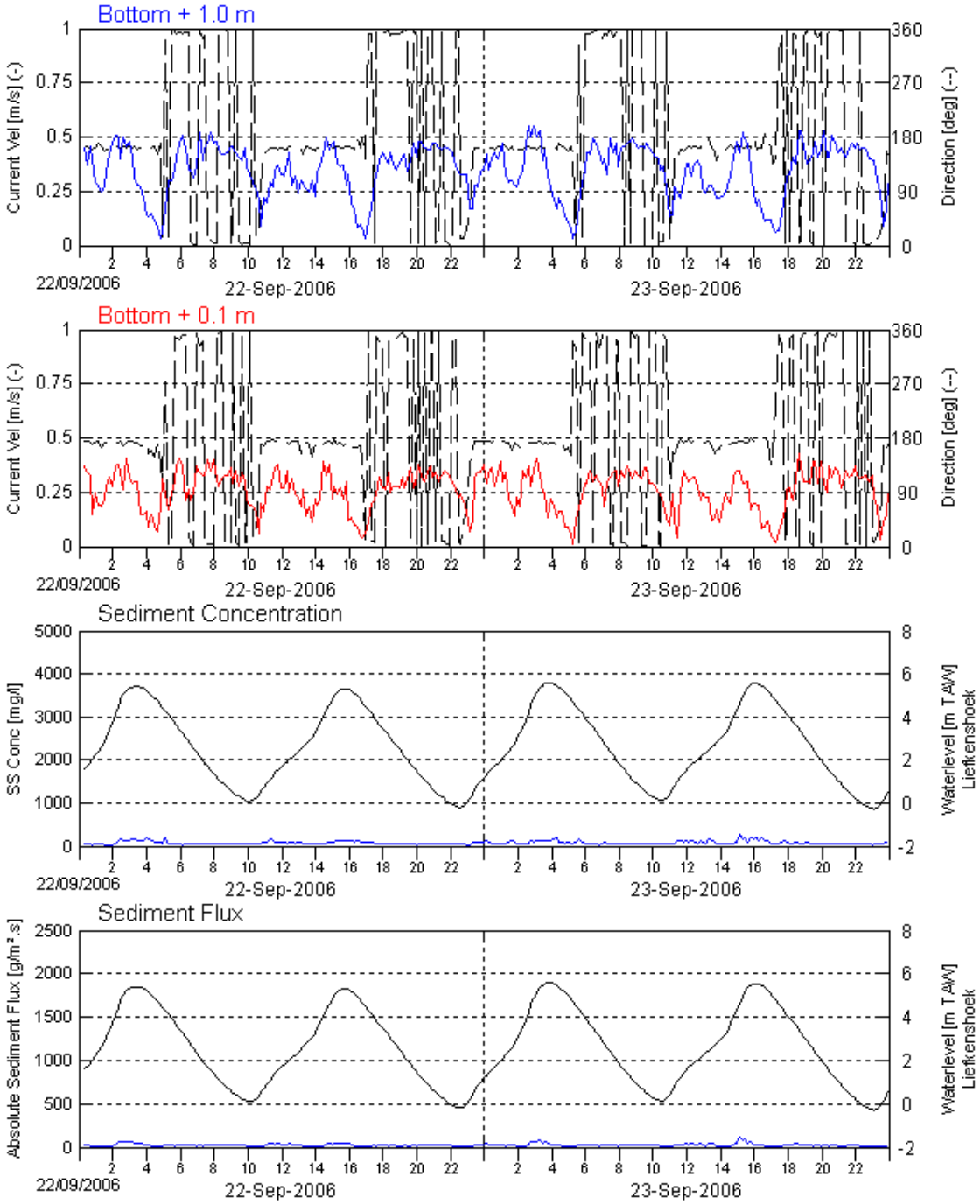
Date: 20/09/2006– 21/09/2006

Data processed by: IMDC

In association with: WL | delft hydraulics, GEMS International

I/RA/11283/06.122MSA

11283 Accretion Deurganckdok – Near bed continuous monitoring – Summer 2006



Current Velocity and Direction upper (RCM9) and lower (Valeport) EMC, OBS SS Conc. & flux and waterlevel

Location: Deurganckdok CDW

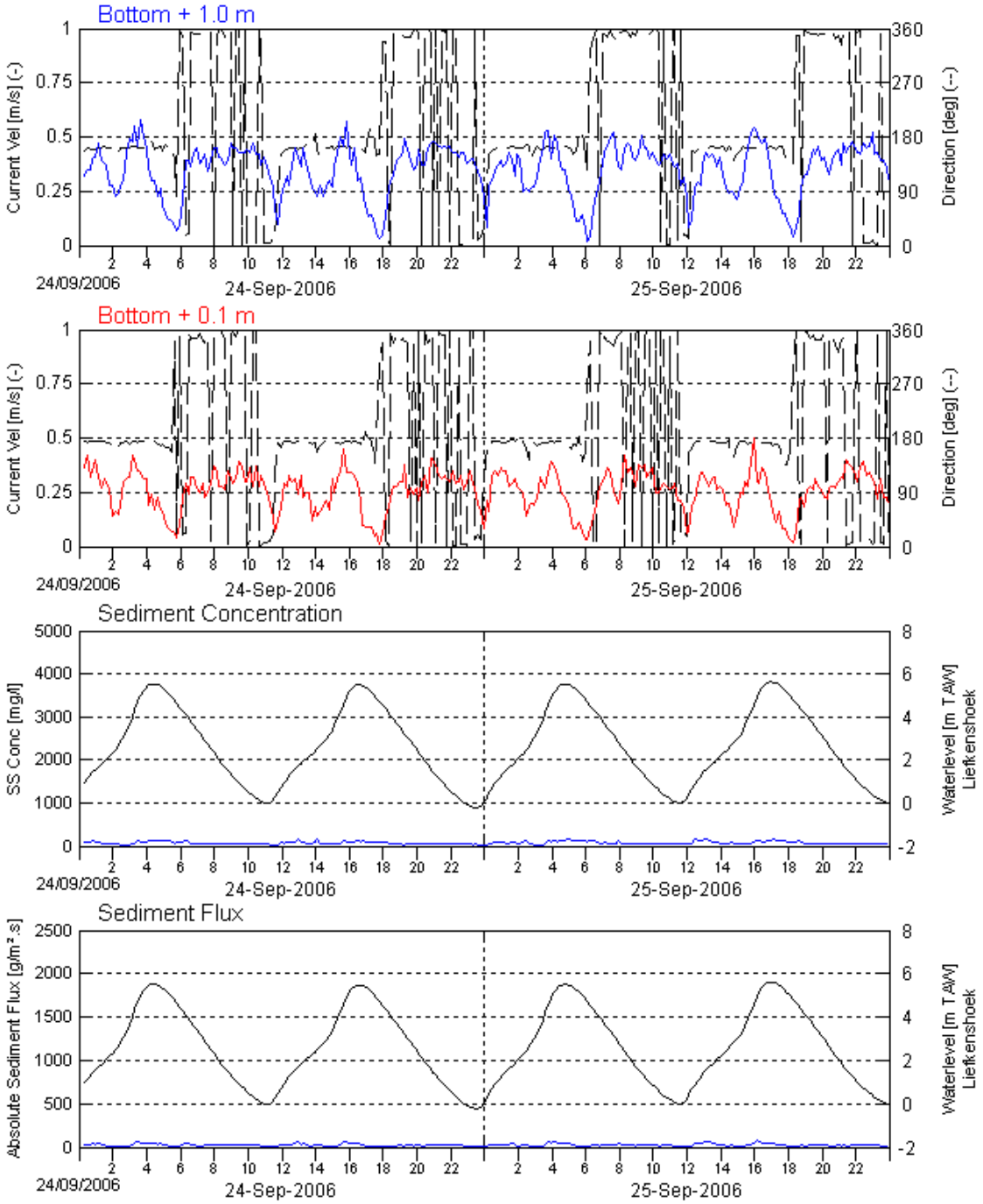
Date: 22/09/2006– 23/09/2006

Data processed by: IMDC

In association with: WL | delft hydraulics, GEMS International

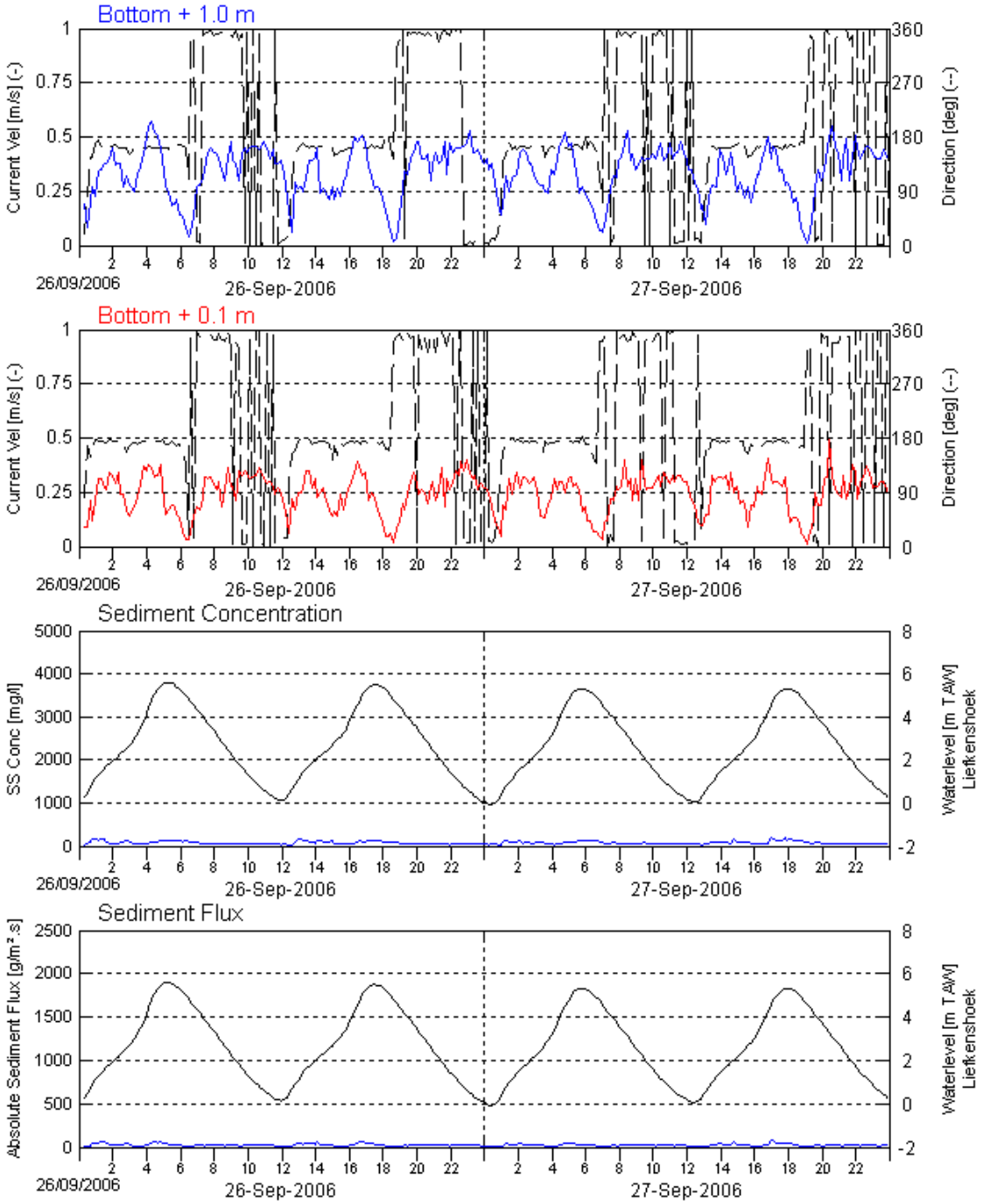
I/RA/11283/06.122MSA

11283 Accretion Deurganckdok – Near bed continuous monitoring – Summer 2006



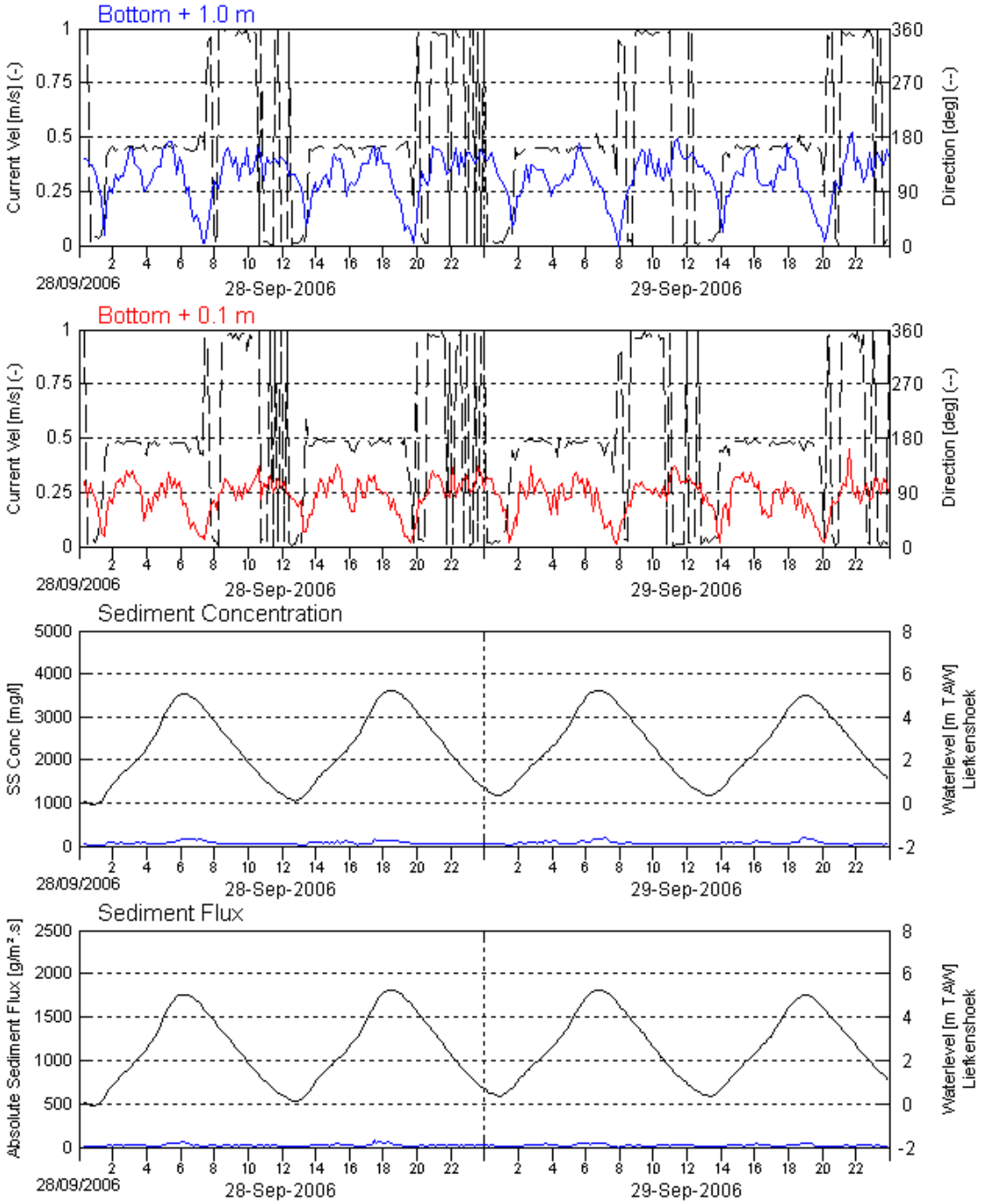
Current Velocity and Direction upper (RCM9) and lower (Valeport) EMC, OBS SS Conc. & flux and waterlevel		*Data processed by:* IMDC
Location: Deurganckdok CDW	Date: 24/09/2006– 25/09/2006	*In association with:* WL | delft hydraulics, GEMS International
		I/RA/11283/06.122MSA

11283 Accretion Deurganckdok – Near bed continuous monitoring – Summer 2006



Current Velocity and Direction upper (RCM9) and lower (Valeport) EMC, OBS SS Conc. & flux and waterlevel		*Data processed by:* IMDC
Location: Deurganckdok CDW	Date: 26/09/2006– 27/09/2006	*In association with:* WL | delft hydraulics, GEMS International
		I/RA/11283/06.122MSA

11283 Accretion Deurganckdok – Near bed continuous monitoring – Summer 2006



Current Velocity and Direction upper (RCM9) and lower (Valeport) EMC, OBS SS Conc. & flux and waterlevel

Location: Deurganckdok CDW

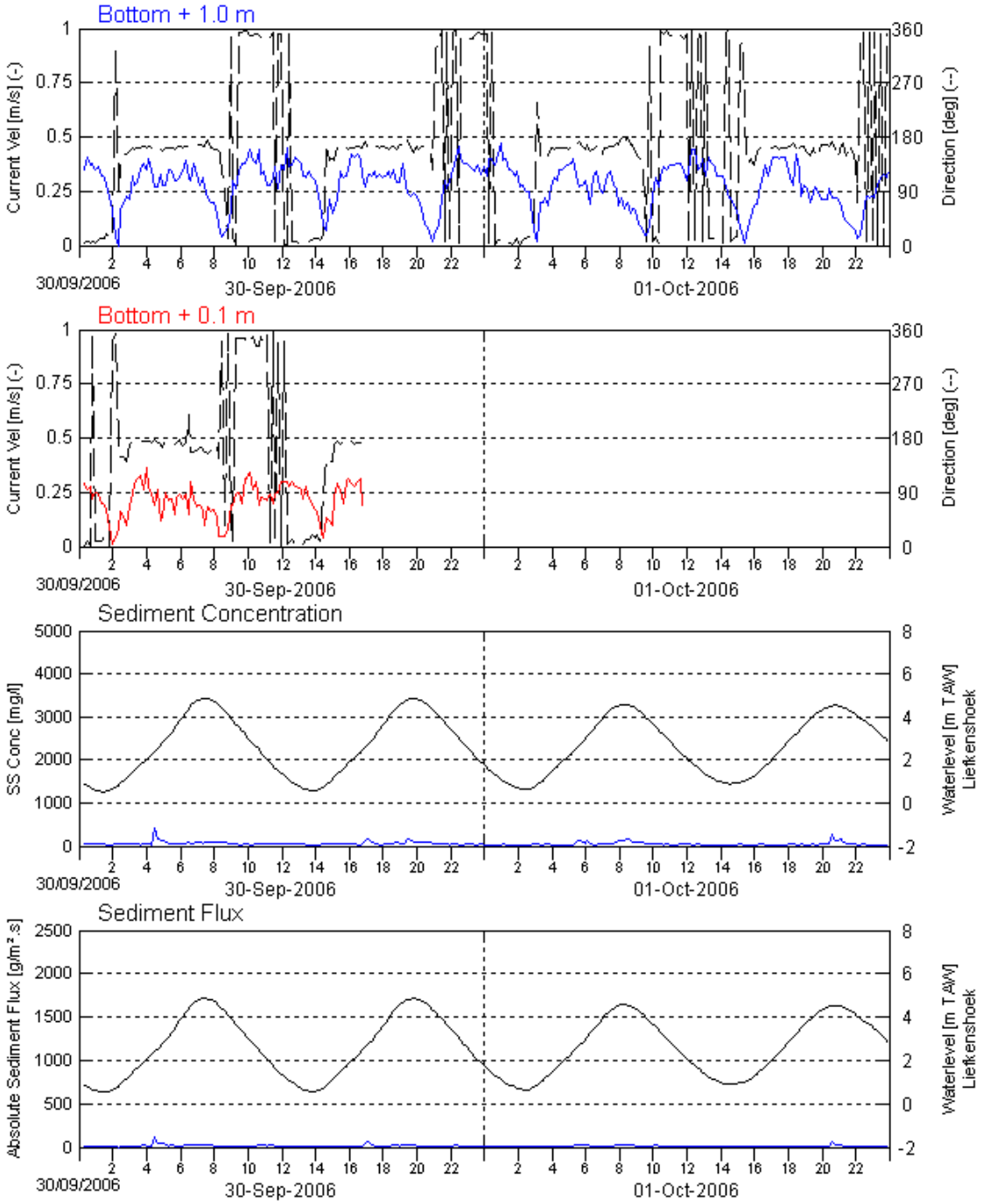
Date: 28/09/2006– 29/09/2006

Data processed by: IMDC

In association with: WL | delft hydraulics, GEMS International

I/RA/11283/06.122MSA

11283 Accretion Deurganckdok – Near bed continuous monitoring – Summer 2006



Current Velocity and Direction upper (RCM9) and lower (Valeport) EMC, OBS SS Conc. & flux and waterlevel

Location: Deurganckdok CDW

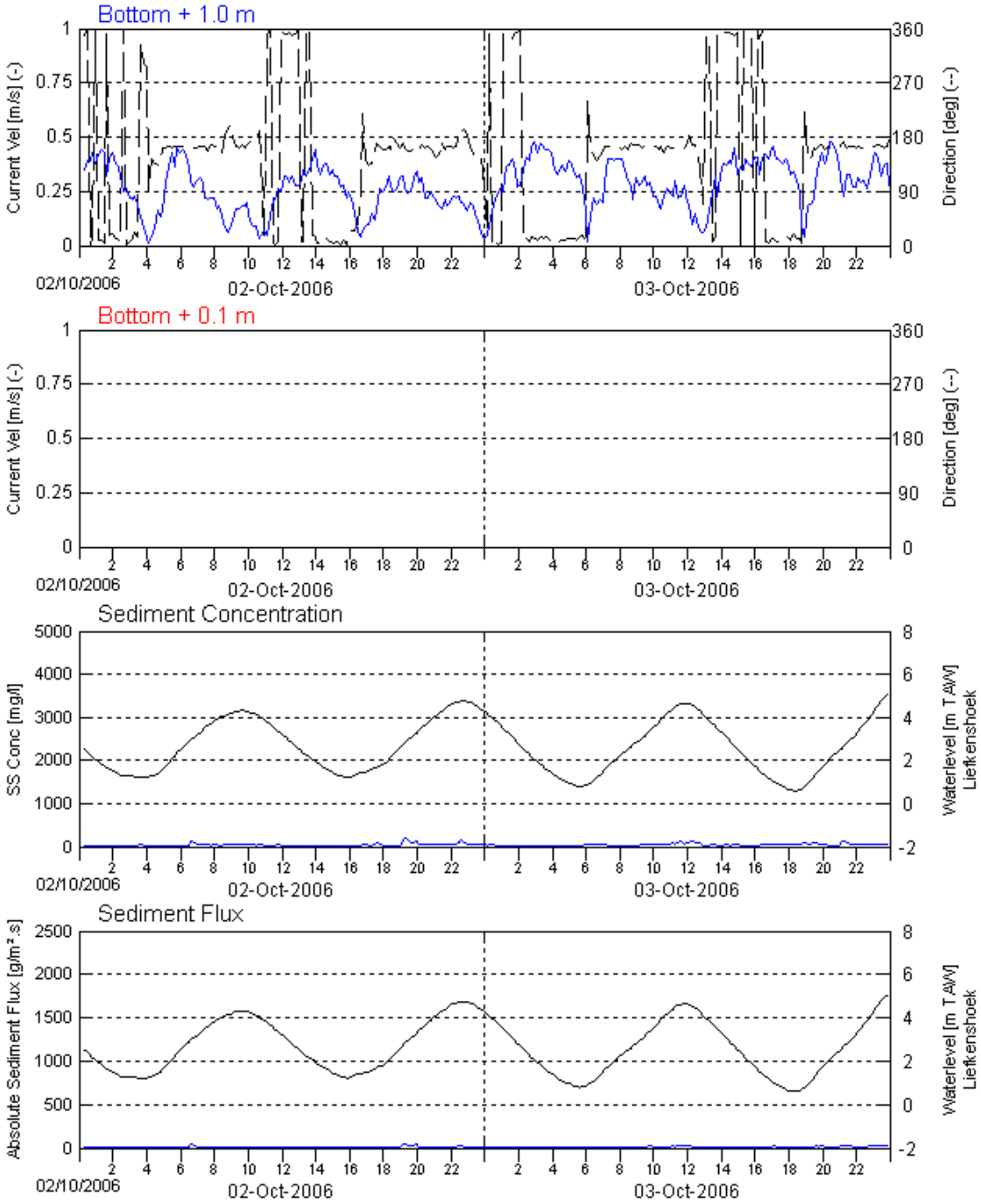
Date: 30/09/2006– 01/10/2006

Data processed by: IMDC

In association with: WL | delft hydraulics, GEMS International

I/RA/11283/06.122MSA

11283 Accretion Deurganckdok – Near bed continuous monitoring – Summer 2006



Current Velocity and Direction upper (RCM9) and lower (Valeport) EMC, OBS SS Conc. & flux and waterlevel

Location: Deurganckdok CDW

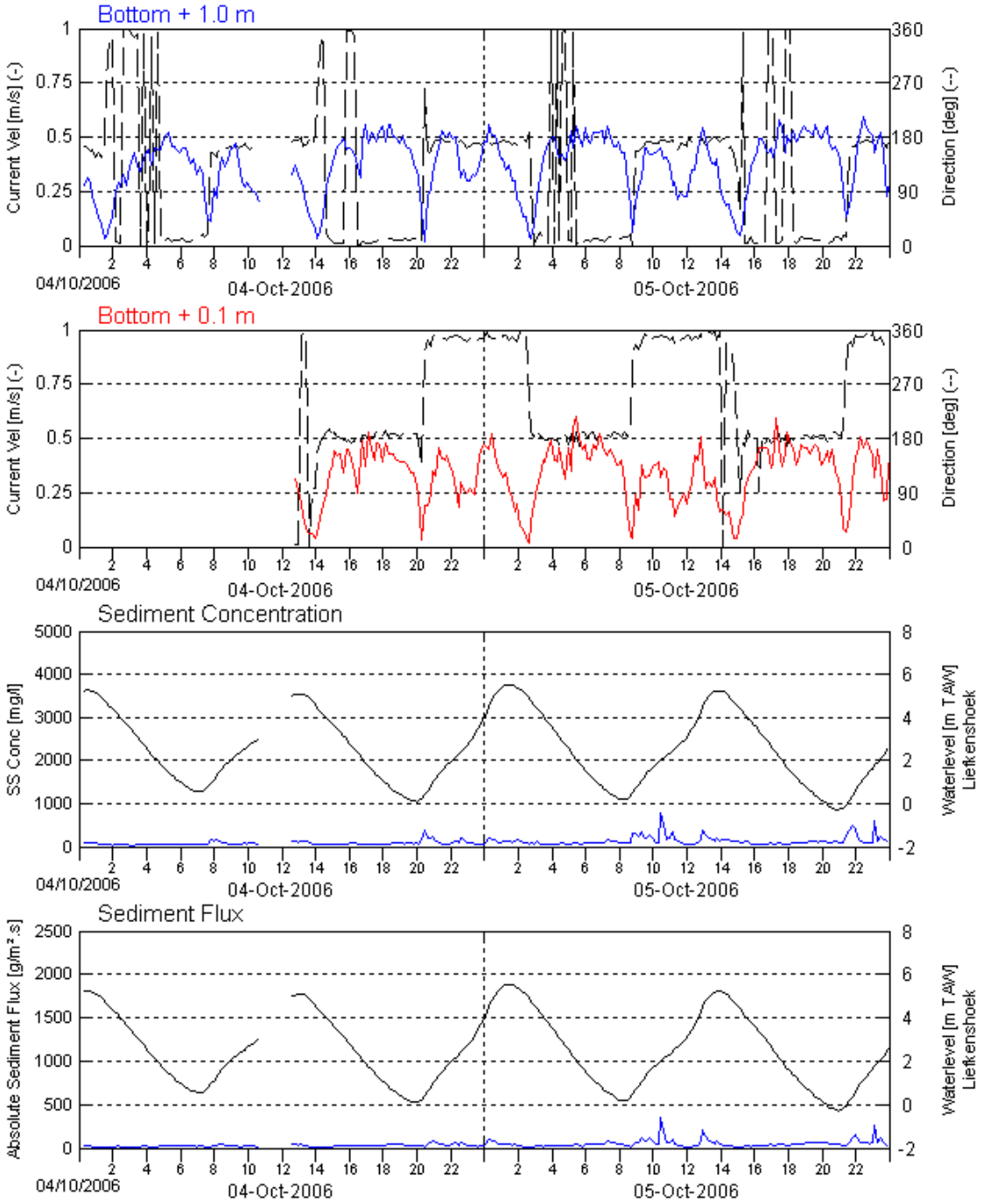
Date: 02/10/2006-03/10/2006

Data processed by: IMDC

In association with: WL | delft hydraulics, GEMS International

I/RA/11283/06.122MSA

11283 Accretion Deurganckdok – Near bed continuous monitoring – Summer 2006



Current Velocity and Direction upper (RCM9) and lower (Valeport) EMC, OBS SS Conc. & flux and waterlevel

Location: Deurganckdok CDW

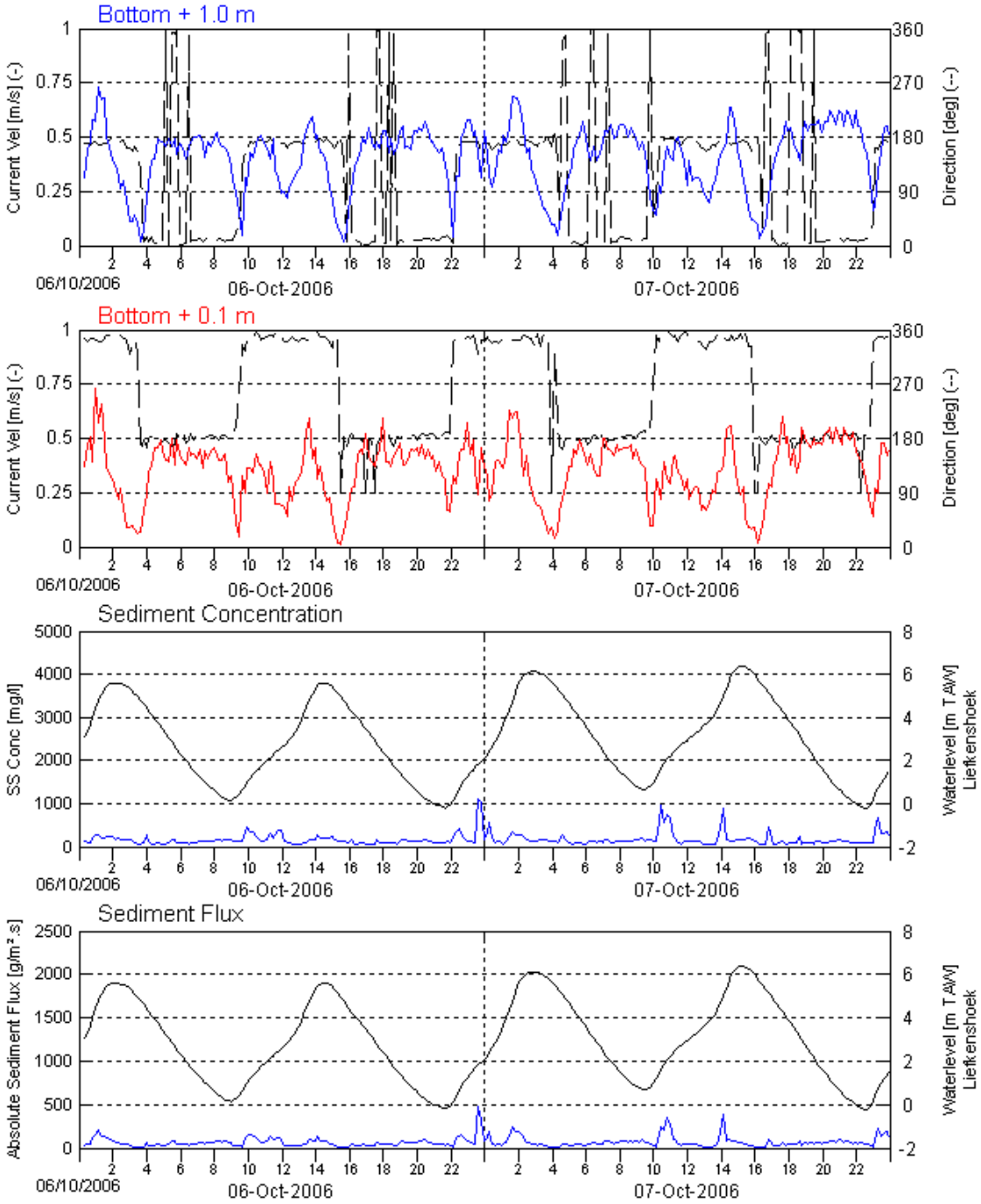
Date: 04/10/2006-05/10/2006

Data processed by: IMDC

In association with: WL | delft hydraulics, GEMS International

I/RA/11283/06.122MSA

11283 Accretion Deurganckdok – Near bed continuous monitoring – Summer 2006



Current Velocity and Direction upper (RCM9) and lower (Valeport) EMC, OBS SS Conc. & flux and waterlevel

Location: Deurganckdok CDW

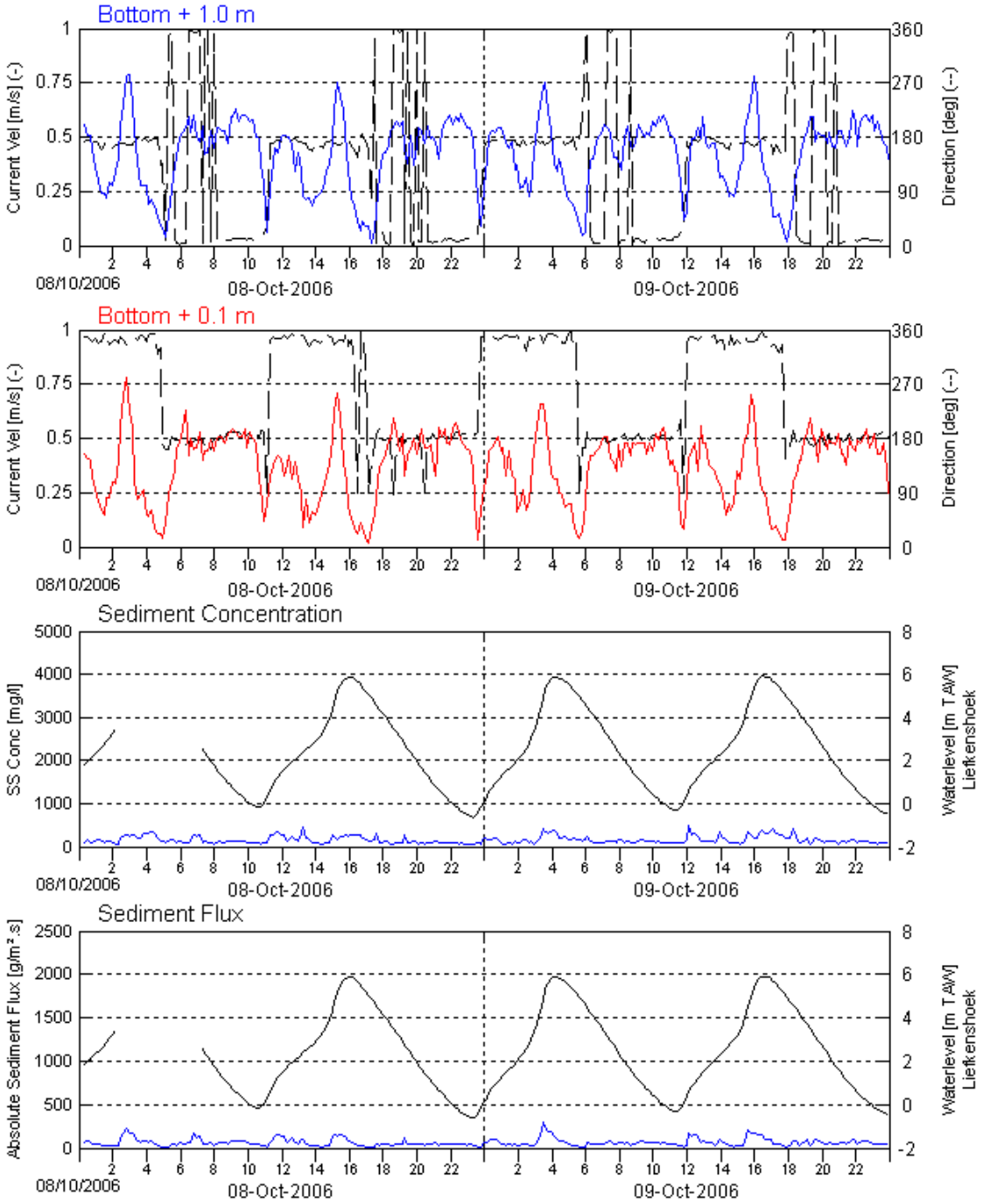
Date: 06/10/2006-07/10/2006

Data processed by: IMDC

In association with: WL | delft hydraulics, GEMS International

I/RA/11283/06.122MSA

11283 Accretion Deurganckdok – Near bed continuous monitoring – Summer 2006



Current Velocity and Direction upper (RCM9) and lower (Valeport) EMC, OBS SS Conc. & flux and waterlevel

Location: Deurganckdok CDW

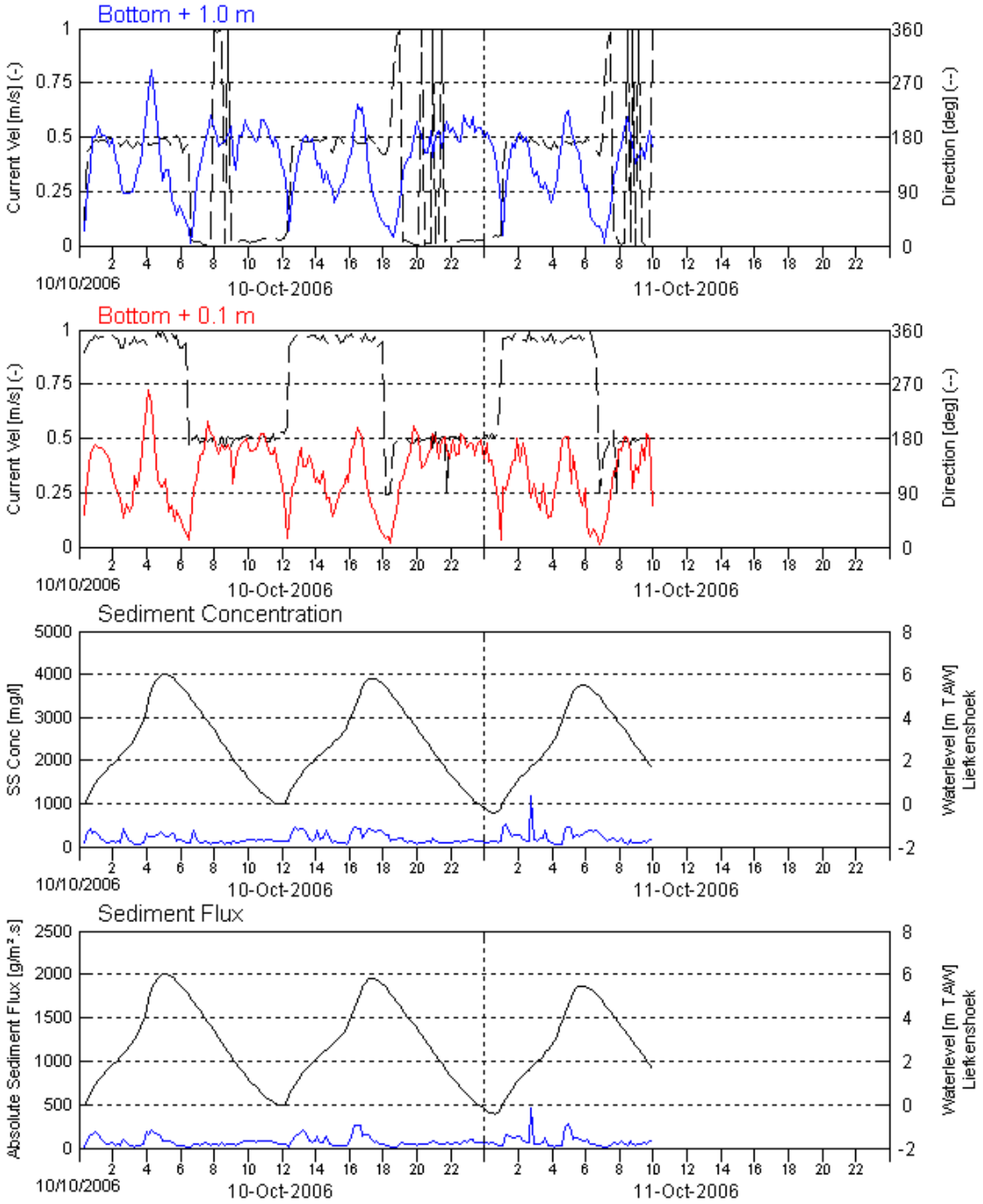
Date: 08/10/2006-09/10/2006

Data processed by: IMDC

In association with: WL | delft hydraulics, GEMS International

I/RA/11283/06.122MSA

11283 Accretion Deurganckdok – Near bed continuous monitoring – Summer 2006



Current Velocity and Direction upper (RCM9) and lower (Valeport) EMC, OBS SS Conc. & flux and waterlevel		Data processed by: IMDC
Location: Deurganckdok CDW	Date: 10/10/2006-11/10/2006	In association with: WL | delft hydraulics, GEMS International
		I/RA/11283/06.122MSA

RCM9 & VALEPORT AVERAGES FOR EVERY TIDAL PHASE

Date	Tide no.	Phase	Tidal Diff	UP Velocity (RCM9) Bottom +1.0m		DOWN Velocity (Valeport) Bottom +0.1m		SS Concentration [mg/l]		SS Flux [g/m²s]	
			[m]	Magnitude [m/s]	Direction [°]	Magnitude [m/s]	Direction [°]	UP (RCM9)	DOWN (Valeport)	UP (RCM9)	DOWN (Valeport)
20060718	1	HW	4,8	0,3	148,6	0,2	153,4	86,6	131,7	26,9	27,8
20060719	1	LW	5,2	0,4	76,3	0,2	77,3	48	45,2	15,9	8,2
20060719	2	HW	5,2	0,3	157,4	0,3	157,8	65,3	151,6	21,3	48,6
20060719	2	LW	4,7	0,4	65,1	0,2	84	53,1	62,5	17,8	12,5
20060719	3	HW	4,8	0,3	155,1	0,2	158,3	78,6	112,3	22,8	25,2
20060720	3	LW	5,1	0,4	59,5	0,2	52,7	43,7	39,7	16,5	8,2
20060720	4	HW	4,9	0,3	157,4	0,2	160,3	64,2	542,7	18,2	119,2
20060720	4	LW	4,5	0,4	88,9	0,2	97,2	46,3	79,6	14,6	10,7
20060720	5	HW	4,5	0,3	153,6	0,2	156,1	69,2	83,1	19,3	17,5
20060721	5	LW	4,7	0,4	98,2	0,2	84,4	39	30,9	12,9	5,9
20060721	6	HW	4,7	0,3	164,4	0,2	160,1	59,3	131,1	15,9	31,2
20060721	6	LW	4,6	0,4	68,2	0,2	71,2	40,1	37,7	13,4	7,3
20060722	7	HW	4,7	0,3	157,9	0,2	161,4	49	66,5	13,9	14,7
20060722	7	LW	4,8	0,4	87	0,2	87,4	38,1	32,6	13	6,4
20060722	8	HW	4,8	0,3	157,6	0,2	160,6	50	46,4	14,4	11
20060722	8	LW	4,7	0,4	88,4	0,2	80,5	40,8	36,5	13,1	6,4
20060723	9	HW	5	0,3	153,5	0,2	158,2	48,3	53	15,1	13,9
20060723	9	LW	5	0,4	65,7	0,2	66,1	36,9	27,4	13,3	5,9
20060723	10	HW	4,9	0,3	157,5	0,2	158,7	45,2	38,5	13,3	9
20060723	10	LW	5,1	0,4	87,7	0,2	62,7	41	41,7	13,9	7,8
20060724	11	HW	5,3	0,3	159	0,3	170,7	46,3	53	14,8	12,5

RCM9 & VALEPORT AVERAGES FOR EVERY TIDAL PHASE

Date	Tide no.	Phase	Tidal Diff	UP Velocity (RCM9) Bottom +1.0m		DOWN Velocity (Valeport) Bottom +0.1m		SS Concentration [mg/l]		SS Flux [g/m²s]	
			[m]	Magnitude [m/s]	Direction [°]	Magnitude [m/s]	Direction [°]	UP (RCM9)	DOWN (Valeport)	UP (RCM9)	DOWN (Valeport)
20060724	11	LW	5,1	0,4	83,2	0,2	47,1	41,1	52,4	15,1	10,6
20060724	12	HW	5	0,3	159,2	0,2	160,6	53,1	89,2	16,1	22,2
20060724	12	LW	5,4	0,4	74,5	0,2	57,7	41,4	57,7	15,3	10,3
20060725	13	HW	5,5	0,3	158	0,3	161,1	47,5	43,5	15,8	11,8
20060725	13	LW	5,2	0,4	57,6	0,2	84,8	38,4	35,2	14	7
20060725	14	HW	5,2	0,3	155,2	0,2	159	58	73,3	18,1	17,2
20060725	14	LW	5,5	0,4	81,2	0,2	47,6	37,2	34,8	13,4	6,6
20060726	15	HW	5,7	0,3	155,4	0,3	170,1	40,8	38,5	13,8	10,4
20060726	15	LW	5,2	0,4	117	0,2	86,4	36,5	42,2	12,8	8,5
20060726	16	HW	5	0,4	150	-	-	73,4	-	28,7	-
20060726	16	LW	5,7	0,4	313,5	-	-	42,7	-	15	-
20060727	17	HW	5,6	0,4	141,9	-	-	60,3	-	27,2	-
20060727	17	LW	5,2	0,4	287,1	-	-	56,6	-	18,9	-
20060727	18	HW	5,3	0,4	141,2	-	-	68,6	-	27	-
20060727	18	LW	5,7	0,4	294,7	-	-	41,3	-	14,3	-
20060728	19	HW	5,7	0,4	139,7	-	-	50,8	-	22,2	-
20060728	19	LW	5,3	0,4	284,7	-	-	54	-	18,1	-
20060728	20	HW	5,3	0,3	143,1	-	-	68,7	-	26,7	-
20060729	20	LW	5,6	0,4	304,4	-	-	40,6	-	13,9	-
20060729	21	HW	5,6	0,4	138,6	-	-	55,6	-	22,9	-
20060729	21	LW	5,3	0,4	249,3	-	-	47,9	-	16,7	-

RCM9 & VALEPORT AVERAGES FOR EVERY TIDAL PHASE

Date	Tide no.	Phase	Tidal Diff	UP Velocity (RCM9) Bottom +1.0m		DOWN Velocity (Valeport) Bottom +0.1m		SS Concentration [mg/l]		SS Flux [g/m²s]	
			[m]	Magnitude [m/s]	Direction [°]	Magnitude [m/s]	Direction [°]	UP (RCM9)	DOWN (Valeport)	UP (RCM9)	DOWN (Valeport)
20060729	22	HW	5,2	0,4	150,2	-	-	61,1	-	23,2	-
20060730	22	LW	5,7	0,4	293,5	-	-	41	-	14,1	-
20060730	23	HW	5,5	0,4	141,1	-	-	49,8	-	20,2	-
20060730	23	LW	5	0,4	277,3	-	-	50,6	-	16,5	-
20060730	24	HW	5,1	0,3	153,3	-	-	68,3	-	24,9	-
20060731	24	LW	5,3	0,4	290,7	-	-	42,4	-	14,3	-
20060731	25	HW	5,2	0,4	182,3	-	-	51	-	18,7	-
20060801	25	LW	5,4	0,4	295,2	-	-	44,2	-	15	-
20060801	26	HW	5,3	0,4	150,3	-	-	50,8	-	20,7	-
20060801	26	LW	4,4	0,3	279,1	-	-	46,2	-	14	-
20060801	27	HW	4,6	0,3	146,8	-	-	43,3	-	14,9	-
20060802	27	LW	4,9	0,3	279	-	-	40,5	-	13,1	-
20060802	28	HW	4,8	0,3	159,8	-	-	48,7	-	17,1	-
20060802	28	LW	4,5	0,3	273	-	-	42,2	-	13,2	-
20060802	29	HW	4,3	0,3	147,1	-	-	40,1	-	12,8	-
20060803	29	LW	4,6	0,3	279	-	-	36,8	-	12,1	-
20060803	30	HW	4,5	0,3	145,6	-	-	49,1	-	16,3	-
20060803	30	LW	4,1	0,3	232,6	-	-	40,5	-	13	-
20060803	31	HW	4,1	0,3	152,2	-	-	35,3	-	9,1	-
20060804	31	LW	4,4	0,4	251,7	-	-	28,9	-	10,3	-
20060804	32	HW	4,1	0,3	162,5	-	-	46,2	-	13,2	-

RCM9 & VALEPORT AVERAGES FOR EVERY TIDAL PHASE

Date	Tide no.	Phase	Tidal Diff	UP Velocity (RCM9) Bottom +1.0m		DOWN Velocity (Valeport) Bottom +0.1m		SS Concentration [mg/l]		SS Flux [g/m²s]	
			[m]	Magnitude [m/s]	Direction [°]	Magnitude [m/s]	Direction [°]	UP (RCM9)	DOWN (Valeport)	UP (RCM9)	DOWN (Valeport)
20060804	32	LW	4	0,4	229	-	-	31,8	-	11	-
20060804	33	HW	3,8	0,3	163,2	-	-	42,3	-	11	-
20060805	33	LW	4,1	0,3	198,4	-	-	26,3	-	9	-
20060805	34	HW	4	0,3	179,8	-	-	31,9	-	9,6	-
20060806	34	LW	4,2	0,4	214,1	-	-	24	-	8,5	-
20060806	35	HW	4,3	0,3	151,3	-	-	35,5	-	10,8	-
20060806	35	LW	4,4	0,3	222,6	-	-	25,4	-	8,3	-
20060807	36	HW	4,6	0,3	155,4	-	-	38,6	-	12,1	-
20060807	36	LW	4,7	0,4	262	-	-	25,4	-	8,8	-
20060807	37	HW	4,8	0,3	158,2	-	-	35,5	-	12	-
20060807	37	LW	4,8	0,4	266,9	-	-	28,2	-	10,4	-
20060808	38	HW	5	0,3	148,5	-	-	36,2	-	12,4	-
20060808	38	LW	5,2	0,4	282	-	-	27,8	-	10,5	-
20060808	39	HW	5,1	0,3	154,7	-	-	38,4	-	12,6	-
20060808	39	LW	5,5	0,4	271,6	-	-	28,7	-	11,2	-
20060809	40	HW	5,7	0,4	146,6	-	-	38,7	-	16,2	-
20060809	40	LW	5,4	0,4	268,9	-	-	35,5	-	13,7	-
20060809	41	HW	5,5	0,4	161,6	-	-	91,8	-	35,5	-
20060809	41	LW	5,7	0,4	99,3	-	-	47,6	-	19,1	-
20060810	42	HW	6	0,4	156,6	-	-	79,5	-	34,4	-
20060810	42	LW	5,8	0,4	100	-	-	59,6	-	24,3	-

RCM9 & VALEPORT AVERAGES FOR EVERY TIDAL PHASE

Date	Tide no.	Phase	Tidal Diff	UP Velocity (RCM9) Bottom +1.0m		DOWN Velocity (Valeport) Bottom +0.1m		SS Concentration [mg/l]		SS Flux [g/m²s]	
			[m]	Magnitude [m/s]	Direction [°]	Magnitude [m/s]	Direction [°]	UP (RCM9)	DOWN (Valeport)	UP (RCM9)	DOWN (Valeport)
20060810	43	HW	5,6	0,4	157,3	-	-	112,8	-	43,7	-
20060810	43	LW	6	0,4	99,9	-	-	60,4	-	23,3	-
20060811	44	HW	6,2	0,4	156,8	-	-	84,7	-	39,2	-
20060811	44	LW	5,8	0,4	140,7	-	-	72,4	-	27,9	-
20060811	45	HW	5,7	0,3	152,1	-	-	159	-	58,4	-
20060811	45	LW	6,2	0,4	116,4	-	-	63,4	-	24,8	-
20060812	46	HW	6,3	0,4	155,4	-	-	113,8	-	53	-
20060812	46	LW	6	0,4	112,3	-	-	82,7	-	32,7	-
20060812	47	HW	5,9	0,4	155,8	-	-	151,9	-	60,5	-
20060813	47	LW	6,3	0,4	106,5	-	-	72,8	-	28	-
20060813	48	HW	6,4	0,4	157,7	-	-	84,8	-	38,3	-
20060813	48	LW	6	0,4	120,1	-	-	81,7	-	31	-
20060813	49	HW	5,7	0,4	157,8	-	-	125,3	-	53,2	-
20060814	49	LW	6,3	0,4	105,2	-	-	62,9	-	22,7	-
20060814	50	HW	6,3	0,4	157,9	-	-	90,3	-	42	-
20060814	50	LW	5,4	0,4	126,1	-	-	80,1	-	29,8	-
20060814	51	HW	5,7	0,3	156	-	-	128,3	-	45,8	-
20060815	51	LW	6	0,4	124,7	-	-	58,1	-	24,3	-
20060815	52	HW	5,7	0,4	156,1	-	-	81,7	-	31,7	-
20060815	52	LW	5,5	0,4	107,5	-	-	66,7	-	23,5	-
20060815	53	HW	5,2	0,3	160,6	-	-	86,8	-	29,1	-

RCM9 & VALEPORT AVERAGES FOR EVERY TIDAL PHASE

Date	Tide no.	Phase	Tidal Diff	UP Velocity (RCM9) Bottom +1.0m		DOWN Velocity (Valeport) Bottom +0.1m		SS Concentration [mg/l]		SS Flux [g/m²s]	
			[m]	Magnitude [m/s]	Direction [°]	Magnitude [m/s]	Direction [°]	UP (RCM9)	DOWN (Valeport)	UP (RCM9)	DOWN (Valeport)
20060816	53	LW	5,7	0,4	107,1	-	-	48,7	-	18,7	-
20060816	54	HW	5,4	0,4	161,2	-	-	64,5	-	24,2	-
20060816	54	LW	5	0,4	144,1	-	-	64,3	-	20,5	-
20060816	55	HW	5	0,4	160,4	-	-	83,1	-	28,7	-
20060817	55	LW	5,2	0,4	87,5	-	-	51,1	-	17,1	-
20060817	56	HW	4,9	0,3	172,7	-	-	96,3	-	32,4	-
20060817	56	LW	4,5	0,4	84,1	-	-	59,6	-	17,4	-
20060817	57	HW	4,6	0,3	171,3	-	-	99,1	-	31,8	-
20060818	57	LW	4,6	0,4	99,8	-	-	47,1	-	15	-
20060818	58	HW	4,3	0,3	169,7	-	-	78,7	-	24,6	-
20060818	58	LW	4,1	0,4	65,3	-	-	48,7	-	14,8	-
20060818	59	HW	4,2	0,3	165,7	-	-	64,5	-	21,4	-
20060819	59	LW	4,1	0,3	60,8	-	-	36,7	-	11,8	-
20060819	60	HW	3,9	0,3	175	-	-	82,5	-	25,9	-
20060819	60	LW	4,1	0,4	78,7	-	-	33,3	-	10,7	-
20060820	61	HW	4,4	0,3	176,7	-	-	65,6	-	20,5	-
20060820	61	LW	4,2	0,4	64,3	-	-	35,2	-	11,7	-
20060820	62	HW	4,3	0,3	171,9	-	-	65,7	-	21,2	-
20060820	62	LW	4,3	0,4	90,8	-	-	30,9	-	10,7	-
20060821	63	HW	4,6	0,3	173,2	-	-	56,6	-	18,8	-
20060821	63	LW	4,6	0,4	88,1	-	-	32,8	-	12	-

RCM9 & VALEPORT AVERAGES FOR EVERY TIDAL PHASE

Date	Tide no.	Phase	Tidal Diff	UP Velocity (RCM9) Bottom +1.0m		DOWN Velocity (Valeport) Bottom +0.1m		SS Concentration [mg/l]		SS Flux [g/m²s]	
			[m]	Magnitude [m/s]	Direction [°]	Magnitude [m/s]	Direction [°]	UP (RCM9)	DOWN (Valeport)	UP (RCM9)	DOWN (Valeport)
20060821	64	HW	4,5	0,3	158,9	-	-	51,4	-	17,3	-
20060821	64	LW	4,8	0,4	72	-	-	36,6	-	13,6	-
20060822	65	HW	5,2	0,4	156,6	-	-	61,7	-	22,2	-
20060822	65	LW	5	0,4	97,6	-	-	45,9	-	16,5	-
20060822	66	HW	4,8	0,3	163,5	-	-	67,9	-	22	-
20060822	66	LW	5,3	0,4	107,3	-	-	43,7	-	16,5	-
20060823	67	HW	5,5	0,4	166	-	-	72,1	-	26,9	-
20060823	67	LW	5,2	0,4	117,9	-	-	59,6	-	19,3	-
20060823	68	HW	5,2	0,4	170,3	-	-	72,9	-	26,6	-
20060823	68	LW	5,5	0,4	308,1	-	-	52	-	19,9	-
20060824	69	HW	5,6	0,4	172,6	-	-	92,1	-	38	-
20060824	69	LW	5,2	0,4	302,5	-	-	78	-	26,7	-
20060824	70	HW	5,3	0,4	161,9	-	-	108,6	-	40,3	-
20060824	70	LW	5,6	0,5	311,6	-	-	60	-	23,3	-
20060825	71	HW	5,7	0,4	149,5	-	-	94,7	-	41,1	-
20060825	71	LW	5,4	0,4	298,9	-	-	79,1	-	30,3	-
20060825	72	HW	5,3	0,4	161,2	-	-	114,4	-	42,2	-
20060825	72	LW	5,8	0,5	318	-	-	74	-	30,7	-
20060826	73	HW	5,7	0,4	167,5	-	-	128,5	-	51,7	-
20060826	73	LW	5,4	0,4	306,7	-	-	90,9	-	33	-
20060826	74	HW	5,4	0,4	172,3	-	-	153,5	-	57,9	-

RCM9 & VALEPORT AVERAGES FOR EVERY TIDAL PHASE

Date	Tide no.	Phase	Tidal Diff	UP Velocity (RCM9) Bottom +1.0m		DOWN Velocity (Valeport) Bottom +0.1m		SS Concentration [mg/l]		SS Flux [g/m²s]	
			[m]	Magnitude [m/s]	Direction [°]	Magnitude [m/s]	Direction [°]	UP (RCM9)	DOWN (Valeport)	UP (RCM9)	DOWN (Valeport)
20060827	74	LW	5,7	0,5	313,4	-	-	64,6	-	25,9	-
20060827	75	HW	5,6	0,4	172,3	-	-	104,3	-	44,6	-
20060827	75	LW	5,3	0,4	299,3	-	-	84,1	-	29,7	-
20060827	76	HW	5,3	0,4	170,7	-	-	106	-	41,7	-
20060828	76	LW	5,7	0,5	312,1	-	-	62,8	-	24,1	-
20060828	77	HW	5,6	0,4	171,5	-	-	91,1	-	39,8	-
20060828	77	LW	5,1	0,4	303,3	-	-	85,8	-	30,3	-
20060828	78	HW	5,3	0,4	157,4	-	-	106,7	-	40,3	-
20060829	78	LW	5,4	0,4	304,3	-	-	61,9	-	25,6	-
20060829	79	HW	5,3	0,4	176,6	-	-	115,8	-	45,3	-
20060829	79	LW	5,2	0,4	307,6	-	-	70,2	-	27,7	-
20060829	80	HW	5,1	0,4	170,2	-	-	131,3	-	46,9	-
20060830	80	LW	5,3	0,4	317,6	-	-	70,2	-	27,7	-
20060830	81	HW	5,2	0,4	150,1	-	-	139,4	-	52,1	-
20060830	81	LW	4,8	0,4	310,1	-	-	80,7	-	31,6	-
20060830	82	HW	4,8	0,4	164,9	-	-	188,9	-	65,1	-
20060831	82	LW	5,2	0,4	311,5	-	-	80,7	-	32,2	-
20060831	83	HW	4,8	0,4	170,8	-	-	179,3	-	62	-
20060831	83	LW	4,7	0,4	308,7	-	-	99,6	-	37,4	-
20060831	84	HW	4,6	0,4	169,9	-	-	206,4	-	72,2	-
20060901	84	LW	4,6	0,4	312,5	-	-	92,8	-	32,9	-

RCM9 & VALEPORT AVERAGES FOR EVERY TIDAL PHASE

Date	Tide no.	Phase	Tidal Diff	UP Velocity (RCM9) Bottom +1.0m		DOWN Velocity (Valeport) Bottom +0.1m		SS Concentration [mg/l]		SS Flux [g/m²s]	
			[m]	Magnitude [m/s]	Direction [°]	Magnitude [m/s]	Direction [°]	UP (RCM9)	DOWN (Valeport)	UP (RCM9)	DOWN (Valeport)
20060901	85	HW	4,5	0,4	169,2	-	-	167,8	-	59,1	-
20060901	85	LW	4,4	0,4	311,1	-	-	103,4	-	34,8	-
20060901	86	HW	4,2	0,3	167,9	-	-	199,8	-	67	-
20060902	86	LW	4,1	0,4	301,1	-	-	92,2	-	32,4	-
20060902	87	HW	4,1	0,3	168,2	-	-	208,7	-	66,9	-
20060902	87	LW	3,8	0,4	307,2	-	-	65,4	-	23,1	-
20060902	88	HW	3,6	0,3	161,1	-	-	230	-	66	-
20060903	88	LW	3,4	0,3	291,1	-	-	77,9	-	22,1	-
20060903	89	HW	3,6	0,3	167,8	-	-	109,8	-	33,8	-
20060903	89	LW	3,2	0,3	291,5	-	-	58,4	-	15,2	-
20060903	90	HW	3,4	0,3	156,3	-	-	96,4	-	29,6	-
20060904	90	LW	4	0,4	291,2	-	-	44,2	-	15,3	-
20060904	91	HW	3,9	0,3	165,4	-	-	108,2	-	33,9	-
20060904	91	LW	4,2	0,4	292,2	-	-	49,3	-	17,7	-
20060905	92	HW	4,4	0,3	167,6	-	-	111,6	-	39,4	-
20060905	92	LW	4,7	0,4	313,6	-	-	63,4	-	23,3	-
20060905	93	HW	4,5	0,3	160,1	-	-	134,6	-	46,5	-
20060905	93	LW	4,9	0,4	309,1	-	-	65,8	-	25,3	-
20060906	94	HW	5,3	0,4	158,4	-	-	137,1	-	54,8	-
20060906	94	LW	5,3	0,4	312,4	-	-	78,1	-	30,9	-
20060906	95	HW	5,2	0,4	166,3	-	-	170,4	-	64,4	-

RCM9 & VALEPORT AVERAGES FOR EVERY TIDAL PHASE

Date	Tide no.	Phase	Tidal Diff	UP Velocity (RCM9) Bottom +1.0m		DOWN Velocity (Valeport) Bottom +0.1m		SS Concentration [mg/l]		SS Flux [g/m²s]	
			[m]	Magnitude [m/s]	Direction [°]	Magnitude [m/s]	Direction [°]	UP (RCM9)	DOWN (Valeport)	UP (RCM9)	DOWN (Valeport)
20060906	95	LW	5,3	0,4	315,6	-	-	85,6	-	32,9	-
20060907	96	HW	5,9	0,4	151,8	-	-	192	-	83,3	-
20060907	96	LW	5,5	0,4	305,3	-	-	98,1	-	38,4	-
20060907	97	HW	5,4	0,3	169,3	-	-	192,8	-	60,6	-
20060907	97	LW	5,7	0,5	149,3	-	-	95,6	-	39,2	-
20060908	98	HW	6	0,4	158,3	-	-	188	-	78,5	-
20060908	98	LW	6,2	0,5	156,4	-	-	99	-	42	-
20060908	99	HW	5,6	0,4	152	-	-	188,9	-	76,3	-
20060908	99	LW	6,3	0,5	100,9	-	-	114,1	-	44,3	-
20060909	100	HW	6,4	0,4	154,2	-	-	163,5	-	79,7	-
20060909	100	LW	6	0,5	153,9	-	-	132,1	-	56,2	-
20060909	101	HW	6	0,4	150,9	-	-	196,3	-	86,8	-
20060909	101	LW	6,4	0,5	133,2	-	-	114,7	-	45,2	-
20060910	102	HW	6,7	0,5	151,1	-	-	172,3	-	86,5	-
20060910	102	LW	6,1	0,5	133,7	-	-	128,6	-	54,5	-
20060910	103	HW	6	0,4	154,5	-	-	219,8	-	95,7	-
20060911	103	LW	6,5	0,5	122,8	-	-	117,6	-	47	-
20060911	104	HW	6,5	0,5	150,1	-	-	151,3	-	76,2	-
20060911	104	LW	6	0,5	153,8	-	-	121,1	-	49,2	-
20060911	105	HW	6	0,4	149,7	-	-	209,8	-	92,4	-
20060912	105	LW	6,4	0,5	114,1	-	-	114,2	-	46,7	-

RCM9 & VALEPORT AVERAGES FOR EVERY TIDAL PHASE

Date	Tide no.	Phase	Tidal Diff	UP Velocity (RCM9) Bottom +1.0m		DOWN Velocity (Valeport) Bottom +0.1m		SS Concentration [mg/l]		SS Flux [g/m²s]	
			[m]	Magnitude [m/s]	Direction [°]	Magnitude [m/s]	Direction [°]	UP (RCM9)	DOWN (Valeport)	UP (RCM9)	DOWN (Valeport)
20060912	106	HW	6,2	0,4	152,4	-	-	153,7	-	71,1	-
20060912	106	LW	5,7	0,4	136,1	-	-	123,1	-	46,5	-
20060912	107	HW	5,8	0,4	149,3	-	-	181,6	-	74,4	-
20060913	107	LW	6	0,5	150	-	-	95,4	-	38	-
20060913	108	HW	5,7	0,4	148,3	-	-	115,7	-	46,4	-
20060913	108	LW	5,3	0,4	113,7	-	-	113,3	-	38,8	-
20060913	109	HW	5,4	0,4	148,6	-	-	135,7	-	53,8	-
20060914	109	LW	5,5	0,5	66,2	-	-	69,2	-	27,8	-
20060914	110	HW	5,2	0,4	158,2	-	-	104,5	-	39,1	-
20060914	110	LW	4,8	0,4	122,3	-	-	95,9	-	29,9	-
20060914	111	HW	5	0,4	149,9	-	-	102,9	-	36,7	-
20060915	111	LW	4,9	0,4	107,8	-	-	63,7	-	22,6	-
20060915	112	HW	4,3	0,3	154,3	-	-	100,8	-	33,2	-
20060915	112	LW	4,3	0,4	135,6	-	-	62,1	-	21,6	-
20060915	113	HW	4,4	0,3	150,1	-	-	95,5	-	30,4	-
20060916	113	LW	4,1	0,4	118,4	-	-	54,8	-	17,3	-
20060916	114	HW	3,6	0,3	156,8	-	-	83,4	-	23	-
20060916	114	LW	3,7	0,4	115,7	-	-	43,1	-	14,2	-
20060917	115	HW	3,7	0,3	132,7	-	-	52,2	-	15,8	-
20060917	115	LW	3,6	0,4	101,1	-	-	39	-	12	-
20060918	116	HW	4,2	0,3	157,6	-	-	57,7	-	18,7	-

RCM9 & VALEPORT AVERAGES FOR EVERY TIDAL PHASE

Date	Tide no.	Phase	Tidal Diff	UP Velocity (RCM9) Bottom +1.0m		DOWN Velocity (Valeport) Bottom +0.1m		SS Concentration [mg/l]		SS Flux [g/m²s]	
			[m]	Magnitude [m/s]	Direction [°]	Magnitude [m/s]	Direction [°]	UP (RCM9)	DOWN (Valeport)	UP (RCM9)	DOWN (Valeport)
20060918	116	LW	4,1	0,4	62,4	-	-	33,4	-	12	-
20060918	117	HW	3,9	0,3	163,9	-	-	54,3	-	16,4	-
20060918	117	LW	4,3	0,4	113,3	-	-	42,1	-	15	-
20060919	118	HW	4,6	0,3	155	-	-	58,4	-	20,4	-
20060919	118	LW	4,5	0,4	105	-	-	41,4	-	15,7	-
20060919	119	HW	4,5	0,4	155,8	-	-	48,2	-	16,8	-
20060919	119	LW	4,8	0,4	85,1	-	-	42,2	-	16	-
20060920	120	HW	5,2	0,4	148,7	-	-	55,3	-	21	-
20060920	120	LW	4,9	0,4	100,6	-	-	47,4	-	17,9	-
20060921	121	HW	4,6	0,3	173,6	0,3	197,9	49,8	-	17,1	-261,2
20060921	121	LW	5	0,3	224,8	0,2	197,9	60,5	-	18,5	-246,8
20060921	122	HW	5,1	0,3	139,6	0,2	151,3	76,3	-	25	-242
20060921	122	LW	5,5	0,4	223,8	0,3	187,7	58,5	-	17,8	-265,9
20060922	123	HW	5,7	0,4	147,6	0,3	161,5	70,5	-	26,8	-274,8
20060922	123	LW	5,3	0,3	175,4	0,3	166,1	70,3	-	20,5	-270,7
20060922	124	HW	5,2	0,3	156,5	0,2	159,9	78,6	-	25,8	-245,5
20060922	124	LW	5,5	0,3	226,3	0,3	195,8	60,2	-	18,6	-257,9
20060923	125	HW	5,7	0,4	148,4	0,3	162,4	78,7	-	30,1	-276,1
20060923	125	LW	5,4	0,4	221,8	0,3	208,7	65,4	-	20,2	-257
20060923	126	HW	5,4	0,3	155,4	0,2	178,3	100,9	-	33,3	-226,5
20060923	126	LW	5,8	0,4	179,2	0,3	198,2	62,2	-	19,6	-265,7

RCM9 & VALEPORT AVERAGES FOR EVERY TIDAL PHASE

Date	Tide no.	Phase	Tidal Diff	UP Velocity (RCM9) Bottom +1.0m		DOWN Velocity (Valeport) Bottom +0.1m		SS Concentration [mg/l]		SS Flux [g/m²s]	
			[m]	Magnitude [m/s]	Direction [°]	Magnitude [m/s]	Direction [°]	UP (RCM9)	DOWN (Valeport)	UP (RCM9)	DOWN (Valeport)
20060924	127	HW	5,7	0,4	148	0,3	162,8	73,6	-	27,1	-273,9
20060924	127	LW	5,5	0,3	215,5	0,3	227,4	69,2	-	21,5	-255,9
20060924	128	HW	5,5	0,3	146,1	0,2	161,1	78,5	-	27,4	-248,2
20060924	128	LW	5,7	0,3	218,3	0,2	212,3	55,2	-	16,6	-249,5
20060925	129	HW	5,7	0,4	145,9	0,3	159,5	72,5	-	26,9	-267,5
20060925	129	LW	5,5	0,3	271,9	0,2	223,4	71,8	-	20,7	-247,1
20060925	130	HW	5,5	0,3	146,8	0,3	161,3	87	-	32	-255,9
20060925	130	LW	5,6	0,3	227,4	0,2	197,1	63,6	-	19,2	-244,9
20060926	131	HW	5,6	0,4	145,2	0,3	159,1	86,2	-	30,6	-253,4
20060926	131	LW	5,4	0,3	211,9	0,2	207,7	67,1	-	19,7	-245,9
20060926	132	HW	5,3	0,3	146,1	0,2	158,7	87,6	-	28,9	-243,3
20060927	132	LW	5,6	0,4	226,5	0,2	246,2	60,4	-	19,2	-241,7
20060927	133	HW	5,4	0,3	144,8	0,2	159	75,5	-	26	-240
20060927	133	LW	5,2	0,3	221,1	0,2	213,2	64,2	-	19,7	-243,5
20060927	134	HW	5,2	0,3	146,1	0,2	170,2	86,8	-	28,5	-249,7
20060928	134	LW	5,4	0,3	221,4	0,2	223	61,6	-	19,1	-244,6
20060928	135	HW	5,1	0,3	144,2	0,2	156,6	67,3	-	23,2	-242,8
20060928	135	LW	4,9	0,3	210,7	0,2	205,4	73,9	-	19,1	-223,2
20060928	136	HW	5,1	0,3	143,7	0,2	160,2	81,9	-	27,4	-242,4
20060929	136	LW	4,9	0,3	199,6	0,2	177,5	58,3	-	17,2	-238,9
20060929	137	HW	4,9	0,3	140,8	0,2	155,9	76,3	-	23,8	-232,5

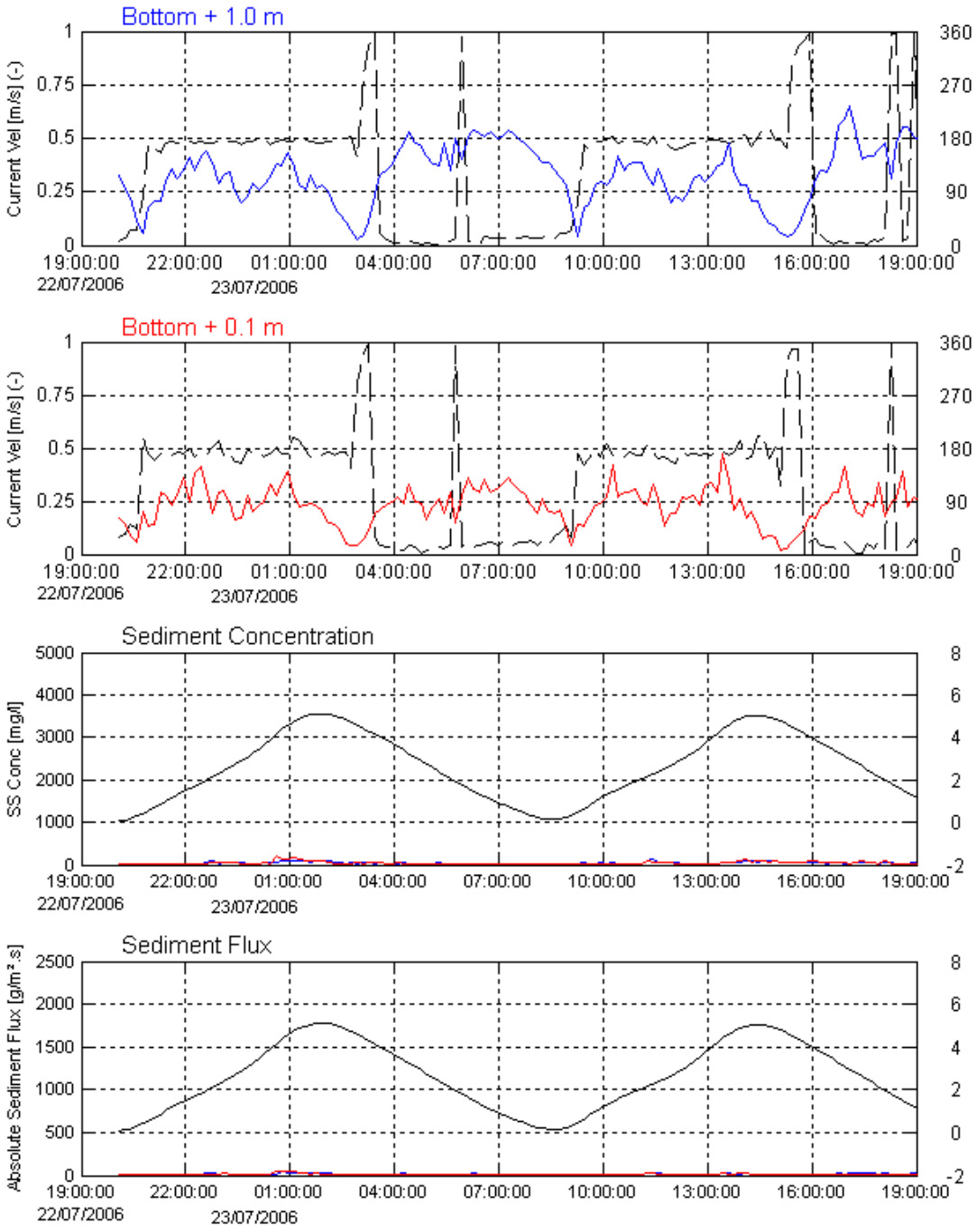
RCM9 & VALEPORT AVERAGES FOR EVERY TIDAL PHASE

Date	Tide no.	Phase	Tidal Diff	UP Velocity (RCM9) Bottom +1.0m		DOWN Velocity (Valeport) Bottom +0.1m		SS Concentration [mg/l]		SS Flux [g/m²s]	
			[m]	Magnitude [m/s]	Direction [°]	Magnitude [m/s]	Direction [°]	UP (RCM9)	DOWN (Valeport)	UP (RCM9)	DOWN (Valeport)
20060929	137	LW	4,8	0,3	187	0,2	187,7	63,3	-	18,2	-228,2
20060929	138	HW	4,6	0,3	145	0,2	156,5	70,8	-	21,5	-224,4
20060930	138	LW	4,5	0,3	186,7	0,2	175,7	58,4	-	15,9	-222,4
20060930	139	HW	4,3	0,3	147,5	0,2	165,5	69,2	-	19,6	-195,9
20060930	139	LW	4,3	0,3	181,7	0,2	174,8	51,9	-	14	-221,3
20060930	140	HW	4,2	0,3	148,6	0,2	144,4	59,5	-	16,8	-211,8
20061001	140	LW	4,2	0,3	181,6	-	-	44,7	-	11,9	-
20061001	141	HW	3,9	0,3	147,5	-	-	51	-	13,2	-
20061001	141	LW	3,7	0,3	191,1	-	-	51,7	-	12,5	-
20061001	142	HW	3,6	0,3	157,8	-	-	43,5	-	10,6	-
20061002	142	LW	3,2	0,3	167,8	-	-	38,9	-	9,4	-
20061002	143	HW	3	0,2	153,8	-	-	38,4	-	8,3	-
20061002	143	LW	3,1	0,3	137,5	-	-	30,7	-	7,4	-
20061002	144	HW	3,5	0,2	151	-	-	58,2	-	13,4	-
20061003	144	LW	4	0,3	102,7	-	-	33,6	-	9,5	-
20061003	145	HW	3,8	0,3	155,6	-	-	45,5	-	11,4	-
20061003	145	LW	4	0,3	182,1	-	-	45,3	-	12,9	-
20061004	146	HW	4,7	0,3	152,4	-	-	62,7	-	18,2	-
20061004	146	LW	4,7	0,3	130,3	-	-	51,9	-	17,3	-
20061005	147	HW	4,9	0,4	125,6	0,3	242,4	88,9	-	30,8	-330,1
20061005	147	LW	5,3	0,4	82,9	0,4	209,2	83,6	-	32,8	-360,5

RCM9 & VALEPORT AVERAGES FOR EVERY TIDAL PHASE

Date	Tide no.	Phase	Tidal Diff	UP Velocity (RCM9) Bottom +1.0m		DOWN Velocity (Valeport) Bottom +0.1m		SS Concentration [mg/l]		SS Flux [g/m²s]	
			[m]	Magnitude [m/s]	Direction [°]	Magnitude [m/s]	Direction [°]	UP (RCM9)	DOWN (Valeport)	UP (RCM9)	DOWN (Valeport)
20061005	148	HW	5,1	0,4	151,5	0,3	332,2	199,9	-	73,1	-281,5
20061005	148	LW	5,5	0,4	90,6	0,4	190	95,7	-	36,9	-359,1
20061006	149	HW	5,9	0,4	155	0,4	334,4	205,8	-	87,3	-373,2
20061006	149	LW	5,5	0,4	83,2	0,3	210,2	120,2	-	45,1	-343,2
20061006	150	HW	5,4	0,4	155,7	0,3	334,3	191,3	-	72,3	-310,6
20061006	150	LW	5,8	0,4	74,1	0,3	193,5	115,3	-	45,4	-349,5
20061007	151	HW	6,3	0,4	153,1	0,4	333,5	256,8	-	111,6	-393,9
20061007	151	LW	5,5	0,4	87,8	0,3	206,6	123	-	47,1	-340,7
20061007	152	HW	5,7	0,4	164,7	0,3	335,1	238,1	-	88,4	-300
20061007	152	LW	6,6	0,4	94,7	0,4	184,4	115,3	-	49,3	-394,9
20061008	153	HW	6,1	0,4	141,8	0,4	281,1	173,3	-	72,5	-363
20061008	153	LW	6,5	0,4	98	0,4	189,3	116,7	-	40,2	-384,5
20061009	154	HW	6,4	0,4	157	0,4	335,6	159,6	-	77,7	-364,1
20061009	154	LW	6,2	0,4	103,2	0,4	208,3	130,2	-	50,5	-378,4
20061009	155	HW	6,2	0,4	156	0,4	326,5	182	-	81,8	-358,4
20061009	155	LW	6,3	0,4	106,9	0,4	203,9	161,6	-	56,6	-381,1
20061010	156	HW	6,4	0,4	156,5	0,4	333,6	191,9	-	83,2	-353,4
20061010	156	LW	6	0,4	82,7	0,4	206,7	135,2	-	51,3	-373,5
20061010	157	HW	5,8	0,4	153,9	0,3	331,9	250,7	-	103,2	-312,7
20061011	157	LW	6,2	0,4	78	0,4	185,7	147,6	-	51,7	-370,2
20061011	158	HW	5,9	0,4	159,5	0,3	339,7	258,4	-	100,3	-308,4

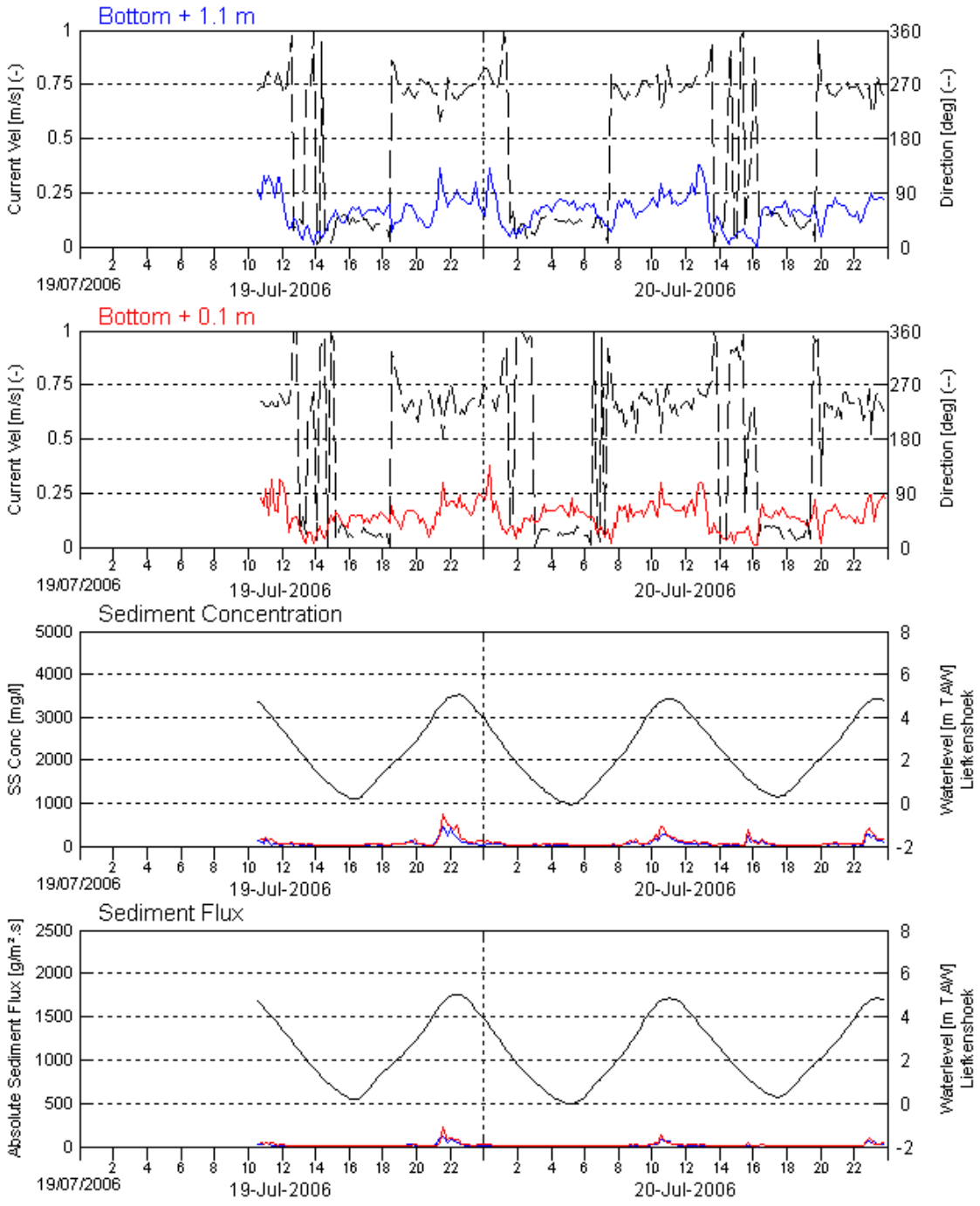
11283 Accretion Deurganckdok – Near bed continuous monitoring – Summer 2006



Current Velocity and Direction upper (RCM9) and lower (Valeport) EMC, OBS SS Conc. & flux and waterlevel		Data processed by: IMDC
Location: Deurganckdok CDW	Date: Avg Tide 22/07– 23/07	In association with: WL | delft hydraulics, GEMS International
		I/RA/11283/06.122MSA

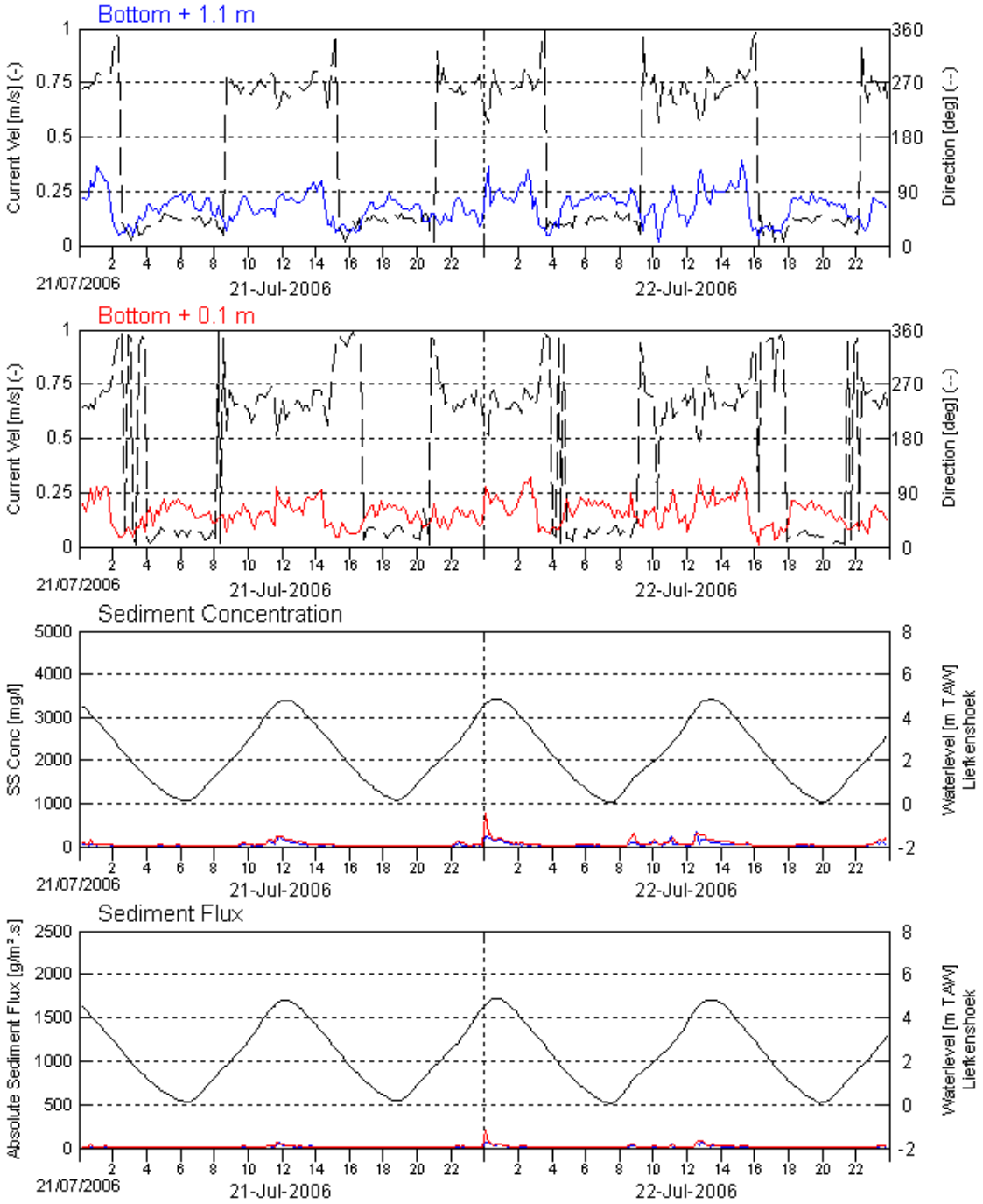
D.2 Sill Frame

11283 Accretion Deurganckdok – Near bed continuous monitoring – Summer 2006



Current Velocity and Direction upper (RCM9) and lower (Valeport) EMC, OBS SS Conc. & flux and waterlevel		*Data processed by:* IMDC
Location: Deurganckdok Sill	Date: 19/07/2006– 20/07/2006	*In association with:* WL | delft hydraulics, GEMS International
		I/RA/11283/06.122MSA

11283 Accretion Deurganckdok – Near bed continuous monitoring – Summer 2006



Current Velocity and Direction upper (RCM9) and lower (Valeport) EMC, OBS SS Conc. & flux and waterlevel

Location: Deurganckdok Sill

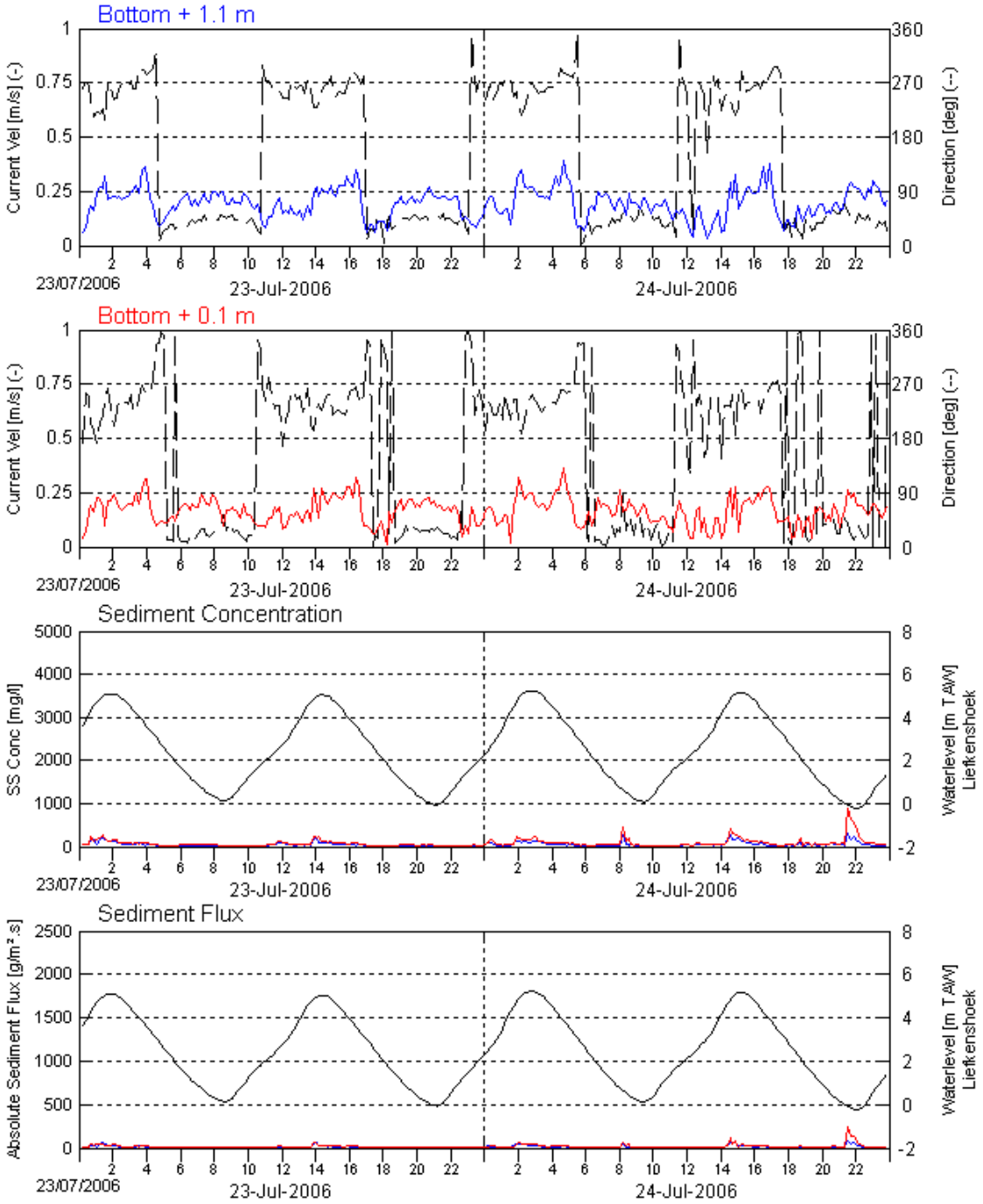
Date: 21/07/2006– 22/07/2006

Data processed by: IMDC

In association with: WL | delft hydraulics, GEMS International

I/RA/11283/06.122MSA

11283 Accretion Deurganckdok – Near bed continuous monitoring – Summer 2006



Current Velocity and Direction upper (RCM9) and lower (Valeport) EMC, OBS SS Conc. & flux and waterlevel

Location: Deurganckdok Sill

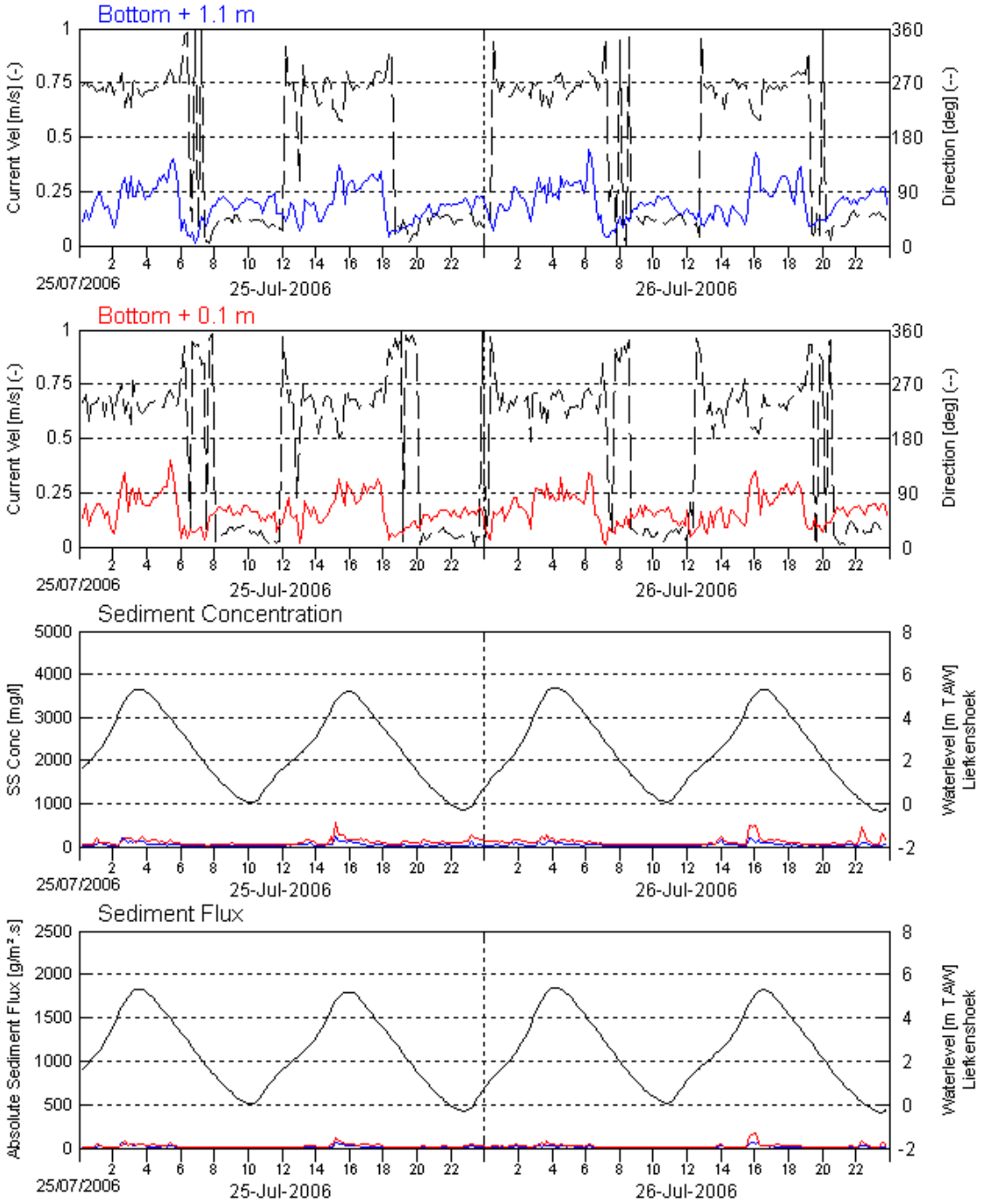
Date: 23/07/2006– 24/07/2006

Data processed by: IMDC

In association with: WL | delft hydraulics, GEMS International

I/RA/11283/06.122MSA

11283 Accretion Deurganckdok – Near bed continuous monitoring – Summer 2006



Current Velocity and Direction upper (RCM9) and lower (Valeport) EMC, OBS SS Conc. & flux and waterlevel

Location: Deurganckdok Sill

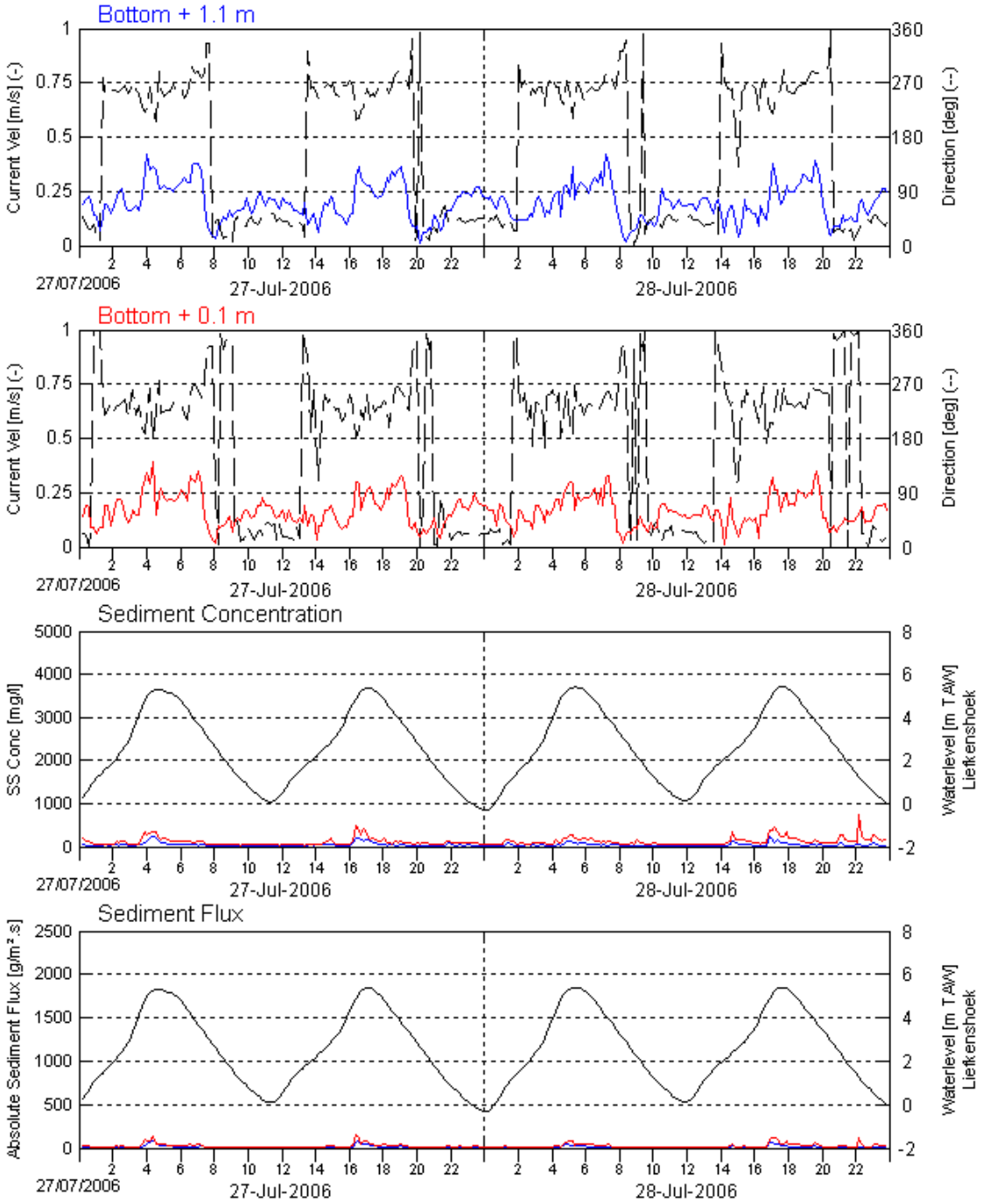
Date: 25/07/2006– 26/07/2006

Data processed by: IMDC

In association with: WL | delft hydraulics, GEMS International

I/RA/11283/06.122MSA

11283 Accretion Deurganckdok – Near bed continuous monitoring – Summer 2006



Current Velocity and Direction upper (RCM9) and lower (Valeport) EMC, OBS SS Conc. & flux and waterlevel

Location: Deurganckdok Sill

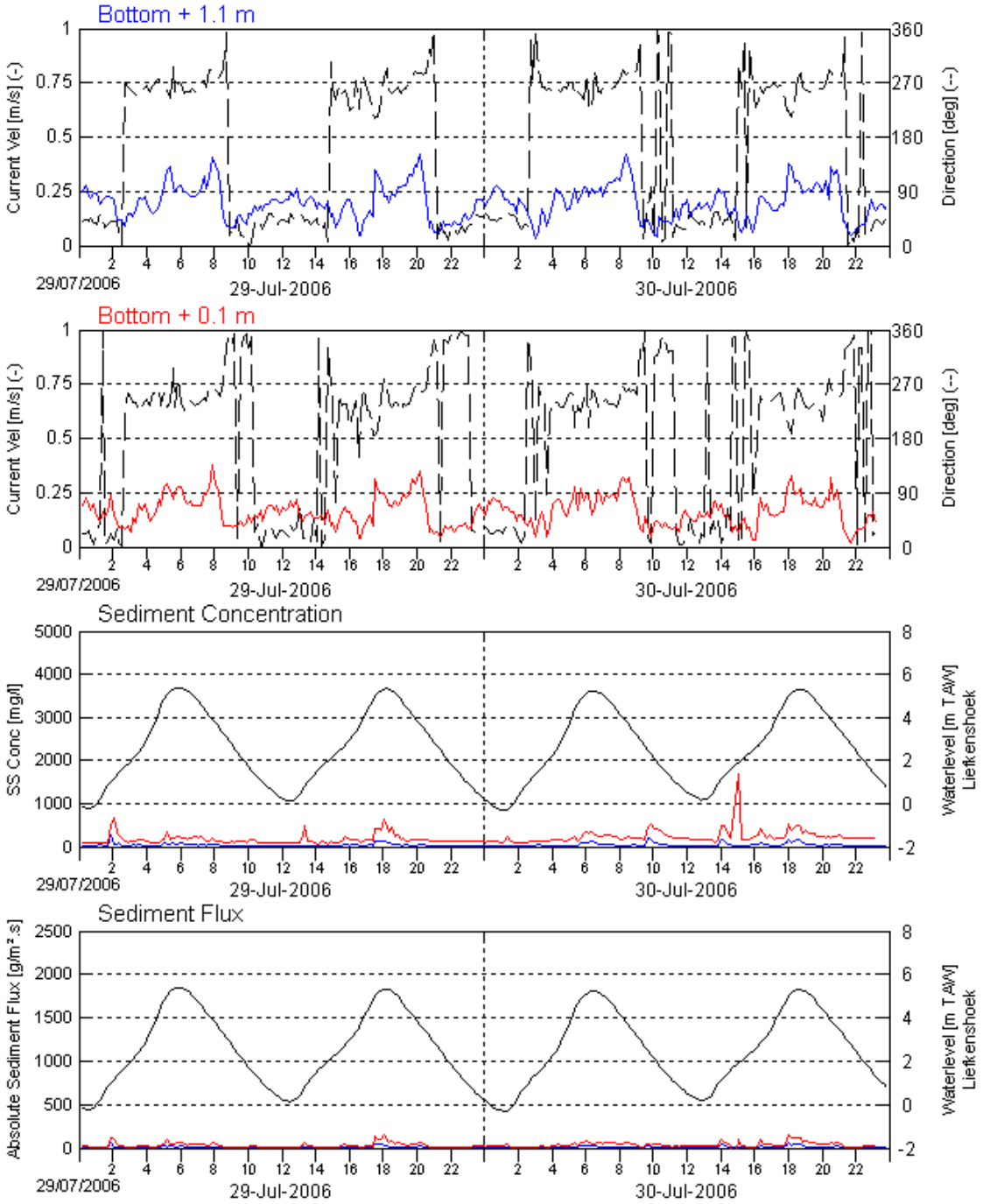
Date: 27/07/2006– 28/7/2006

Data processed by: IMDC

In association with: WL | delft hydraulics, GEMS International

I/RA/11283/06.122MSA

11283 Accretion Deurganckdok – Near bed continuous monitoring – Summer 2006



Current Velocity and Direction upper (RCM9) and lower (Valeport) EMC, OBS SS Conc. & flux and waterlevel

Location: Deurganckdok Sill

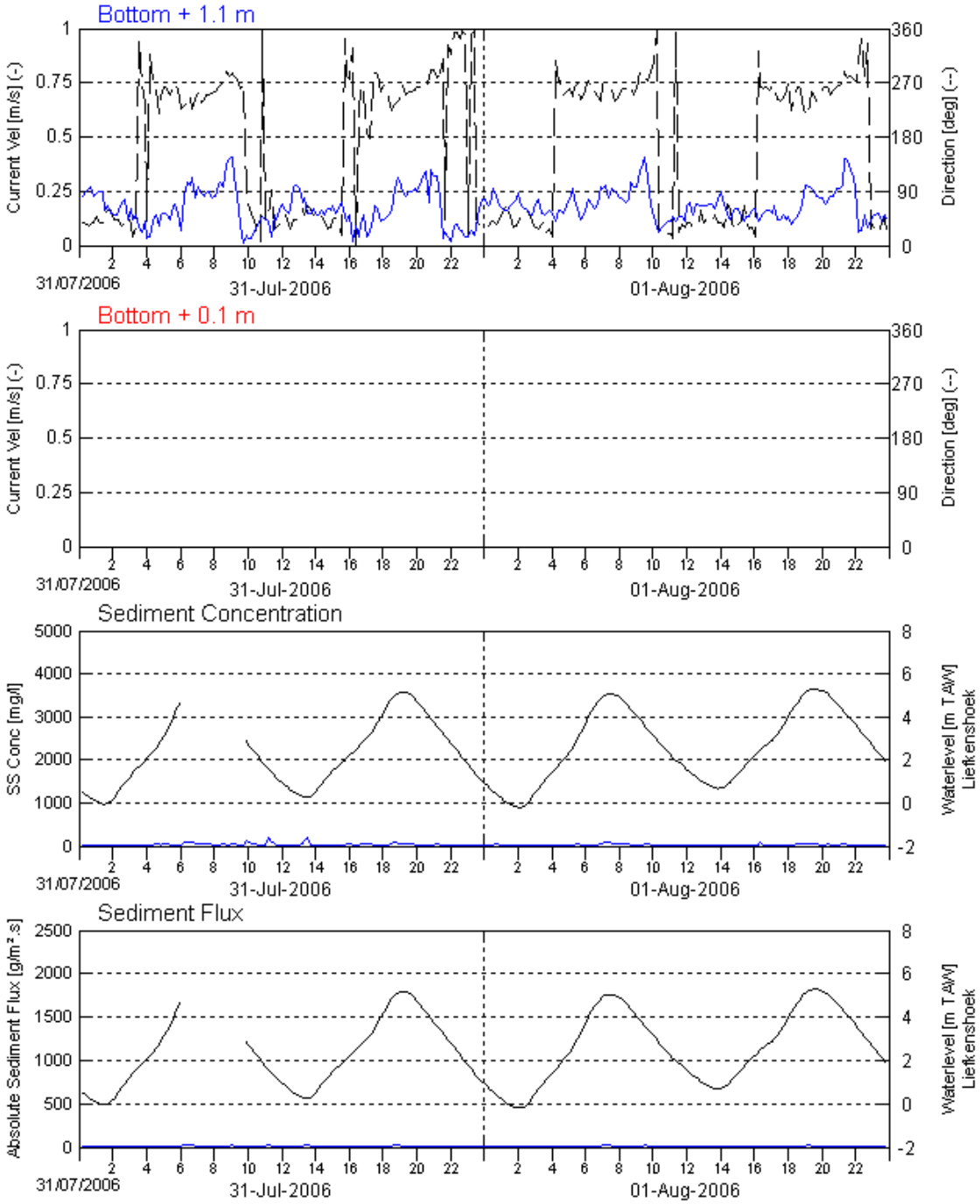
Date: 29/07/2006– 30/07/2006

Data processed by: IMDC

In association with: WL | delft hydraulics, GEMS International

I/RA/11283/06.122MSA

11283 Accretion Deurganckdok – Near bed continuous monitoring – Summer 2006



Current Velocity and Direction upper (RCM9) and lower (Valeport) EMC, OBS SS Conc. & flux and waterlevel

Location: Deurganckdok Sill

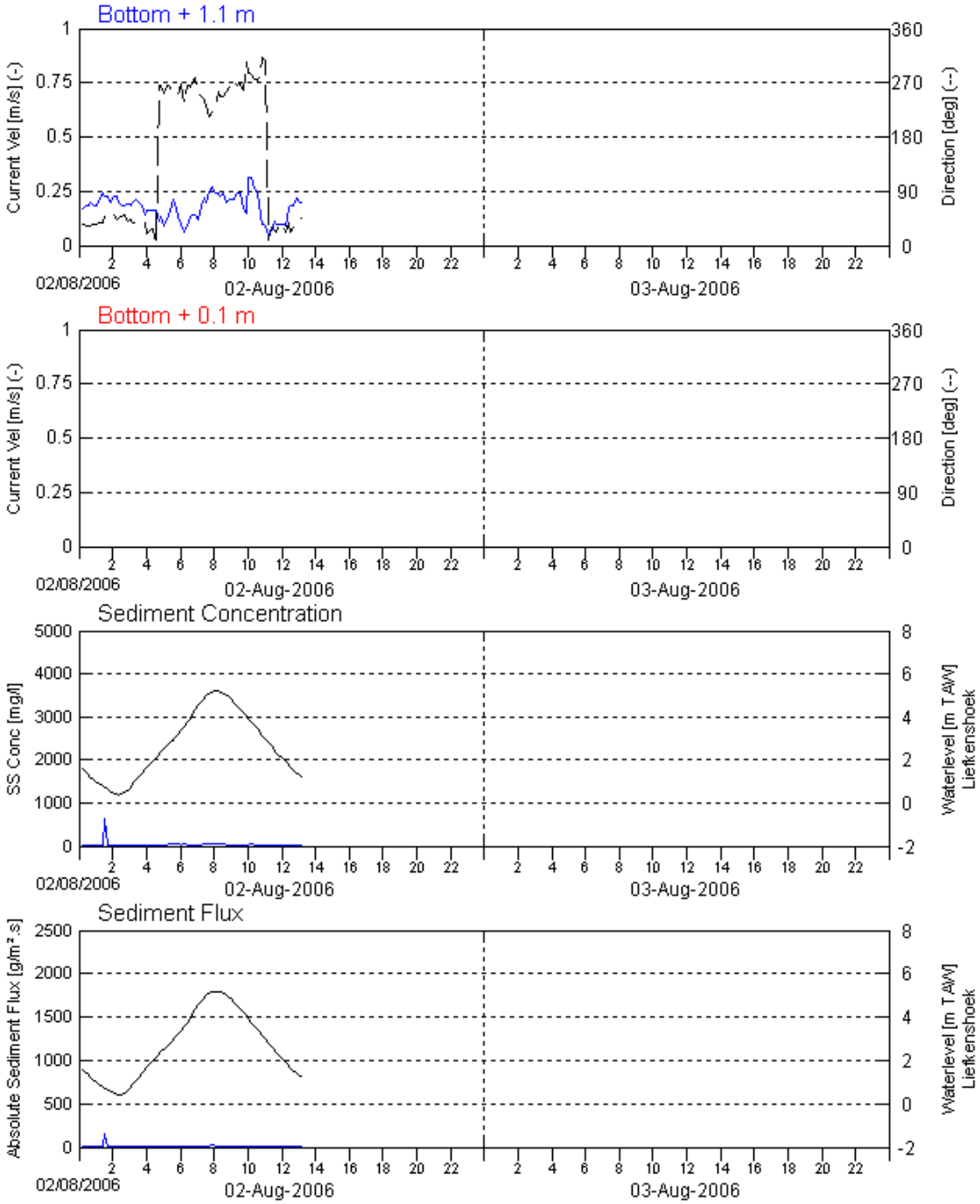
Date: 31/07/2006–01/08/2006

Data processed by: IMDC

In association with: WL | delft hydraulics, GEMS International

I/RA/11283/06.122MSA

11283 Accretion Deurganckdok – Near bed continuous monitoring – Summer 2006



Current Velocity and Direction upper (RCM9) and lower (Valeport) EMC, OBS SS Conc. & flux and waterlevel

Location: Deurganckdok Sill

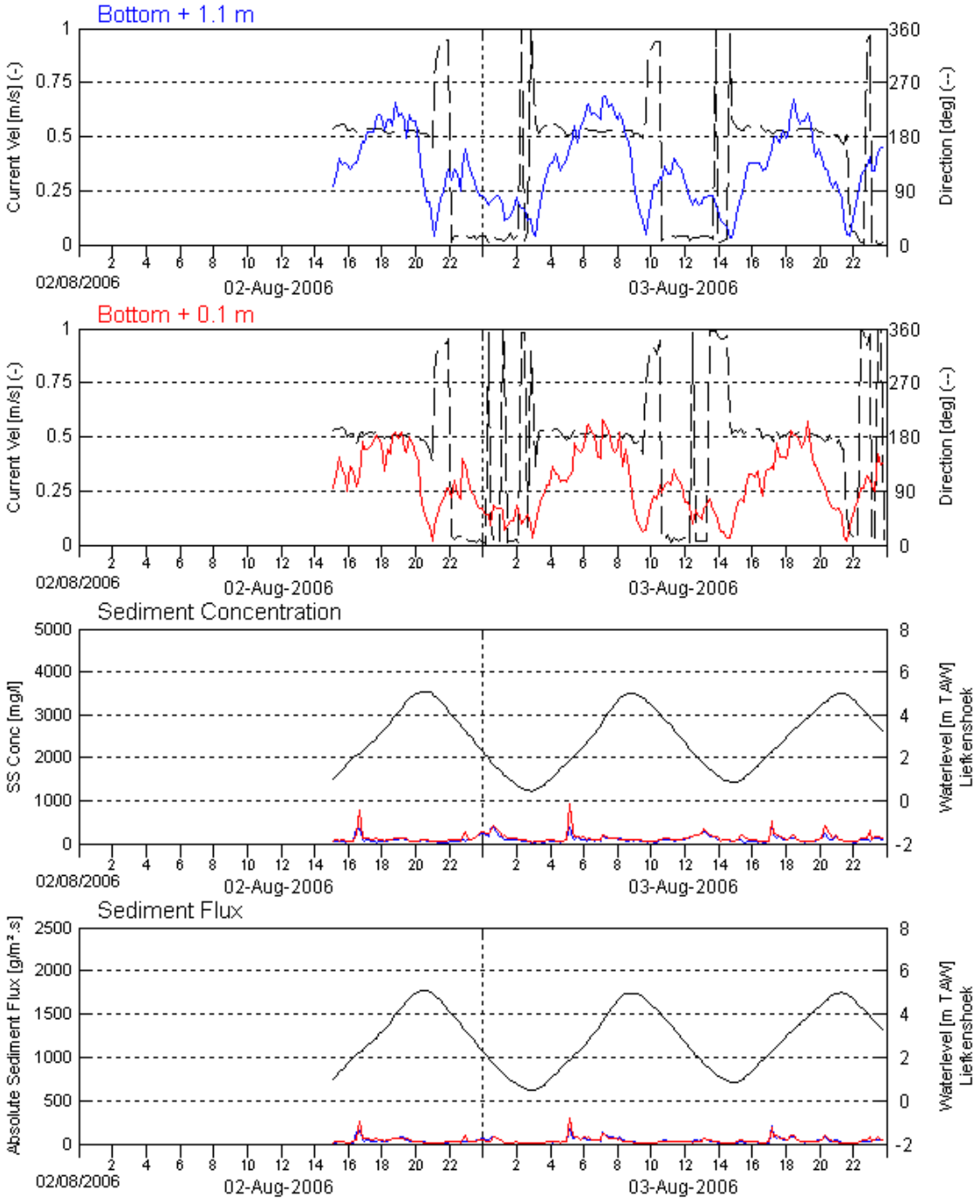
Date: 02/08/2006– 03/08/2006

Data processed by: IMDC

In association with: WL | delft hydraulics, GEMS International

I/RA/11283/06.122MSA

11283 Accretion Deurganckdok – Near bed continuous monitoring – Summer 2006



Current Velocity and Direction upper (RCM9) and lower (Valeport) EMC, OBS SS Conc. & flux and waterlevel

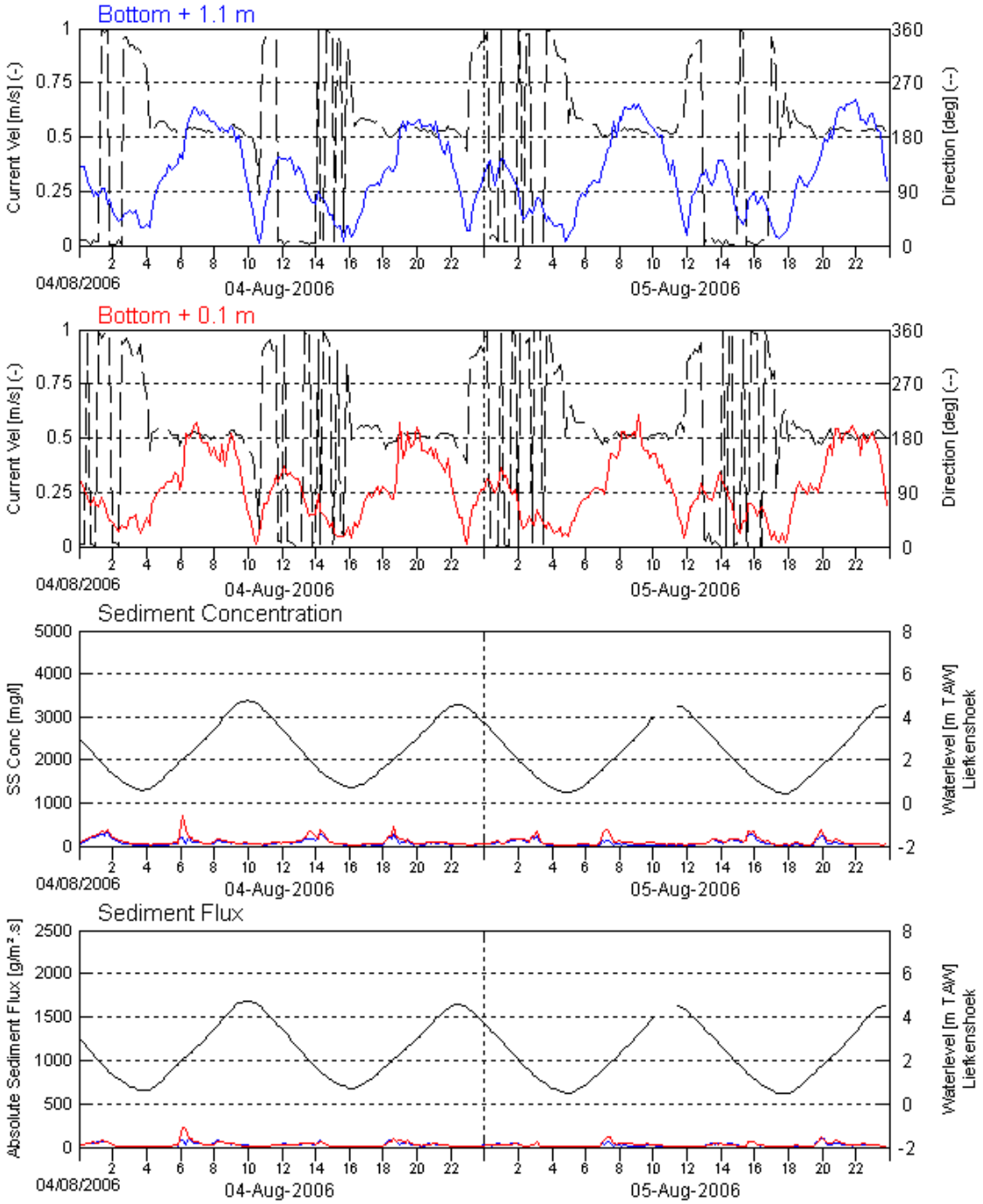
Location:	Date:
Buoy 84	02/08/2006– 03/08/2006

Data processed by: IMDC

In association with: WL | delft hydraulics, GEMS International

I/RA/11283/06.122MSA

11283 Accretion Deurganckdok – Near bed continuous monitoring – Summer 2006



Current Velocity and Direction upper (RCM9) and lower (Valeport) EMC, OBS SS Conc. & flux and waterlevel

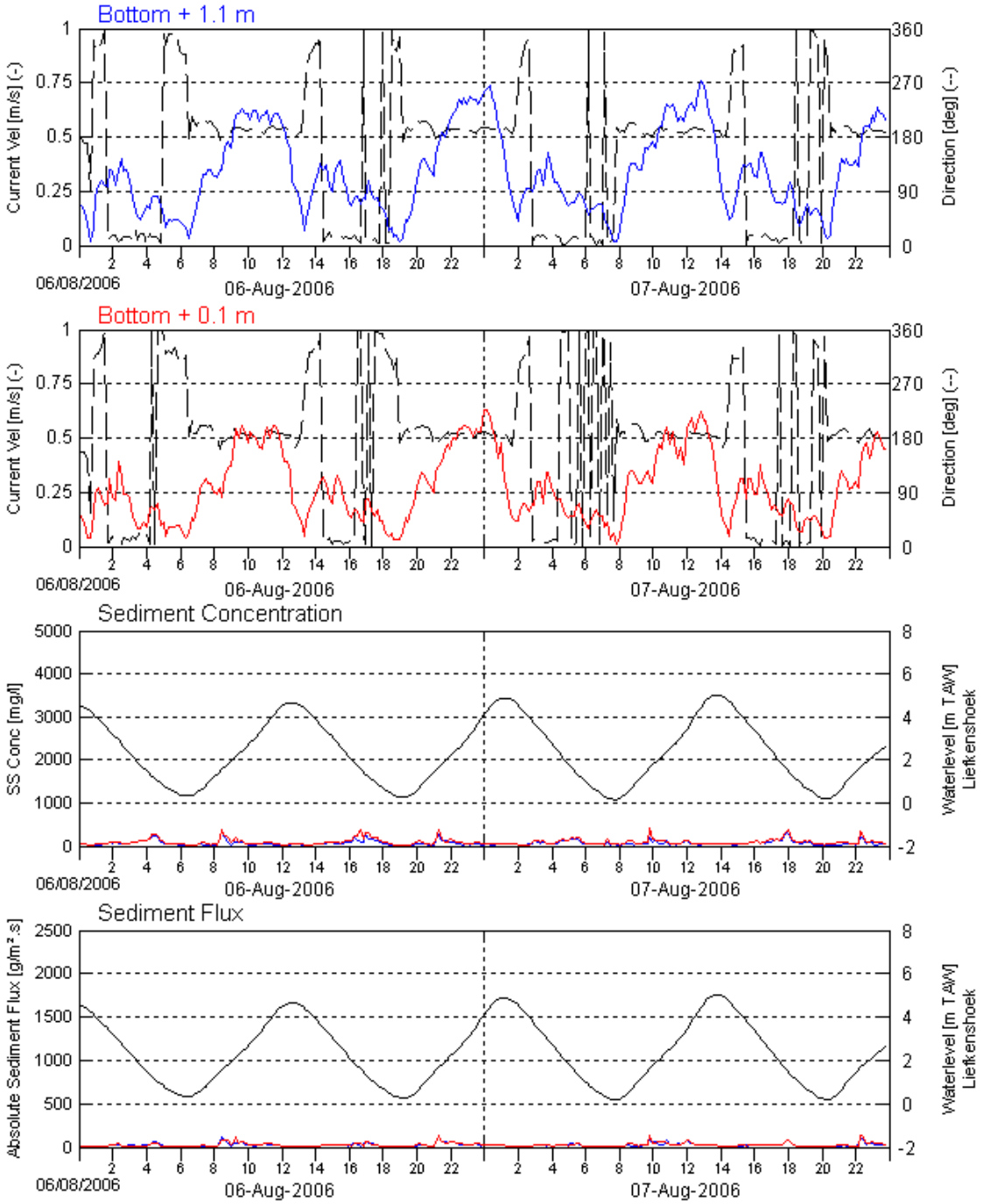
Location:	Date:
Buoy 84	04/08/2006– 05/08/2006

Data processed by: IMDC

In association with: WL | delft hydraulics, GEMS International

I/RA/11283/06.122MSA

11283 Accretion Deurganckdok – Near bed continuous monitoring – Summer 2006



Current Velocity and Direction upper (RCM9) and lower (Valeport) EMC, OBS SS Conc. & flux and waterlevel

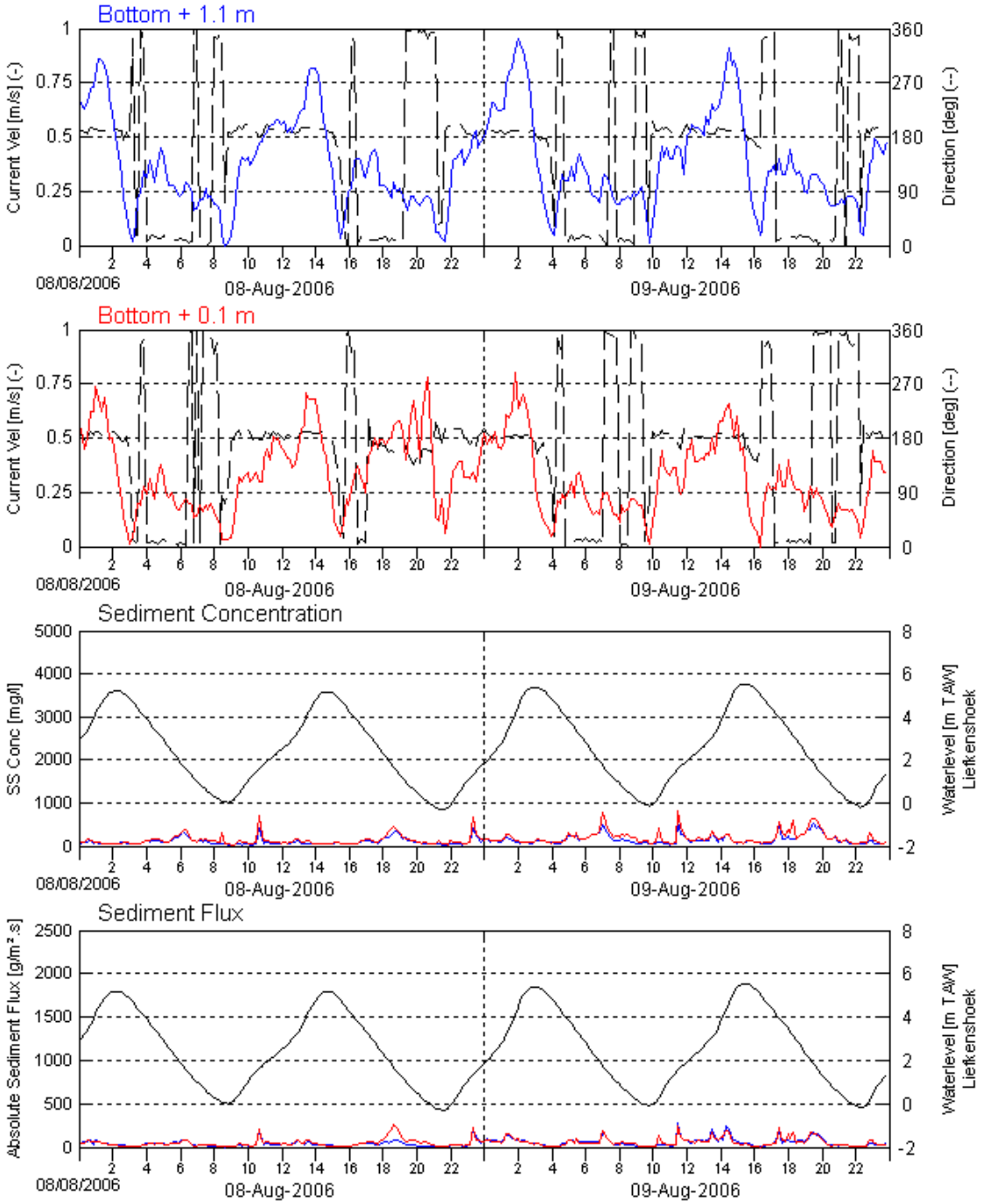
Location:	Date:
Buoy 84	06/08/2006– 07/08/2006

Data processed by: IMDC

In association with: WL | delft hydraulics, GEMS International

I/RA/11283/06.122MSA

11283 Accretion Deurganckdok – Near bed continuous monitoring – Summer 2006



Current Velocity and Direction upper (RCM9) and lower (Valeport) EMC, OBS SS Conc. & flux and waterlevel

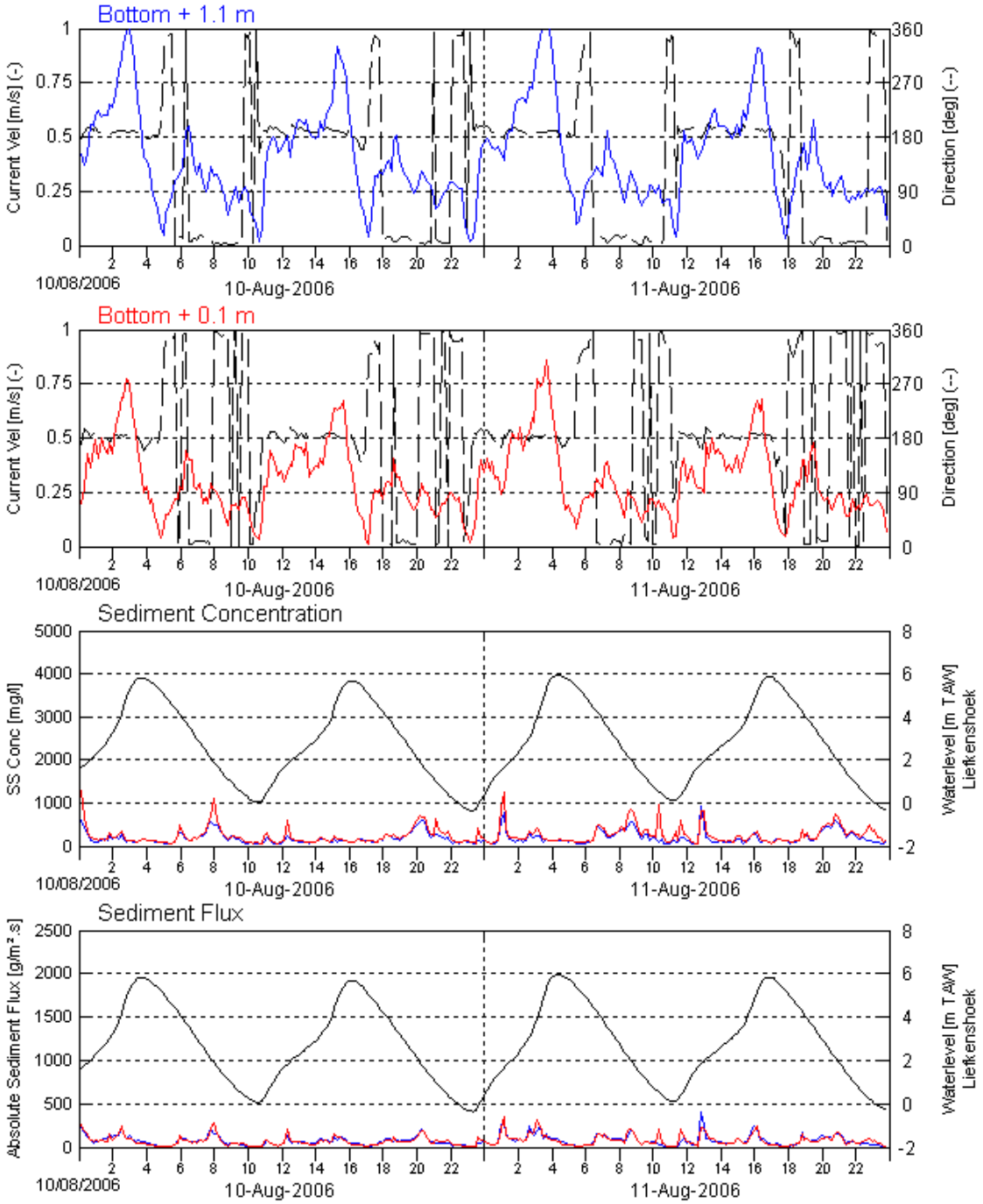
Location:	Date:
Buoy 84l	08/08/2006– 09/08/2006

Data processed by: IMDC

In association with: WL | delft hydraulics, GEMS International

I/RA/11283/06.122MSA

11283 Accretion Deurganckdok – Near bed continuous monitoring – Summer 2006



Current Velocity and Direction upper (RCM9) and lower (Valeport) EMC, OBS SS Conc. & flux and waterlevel

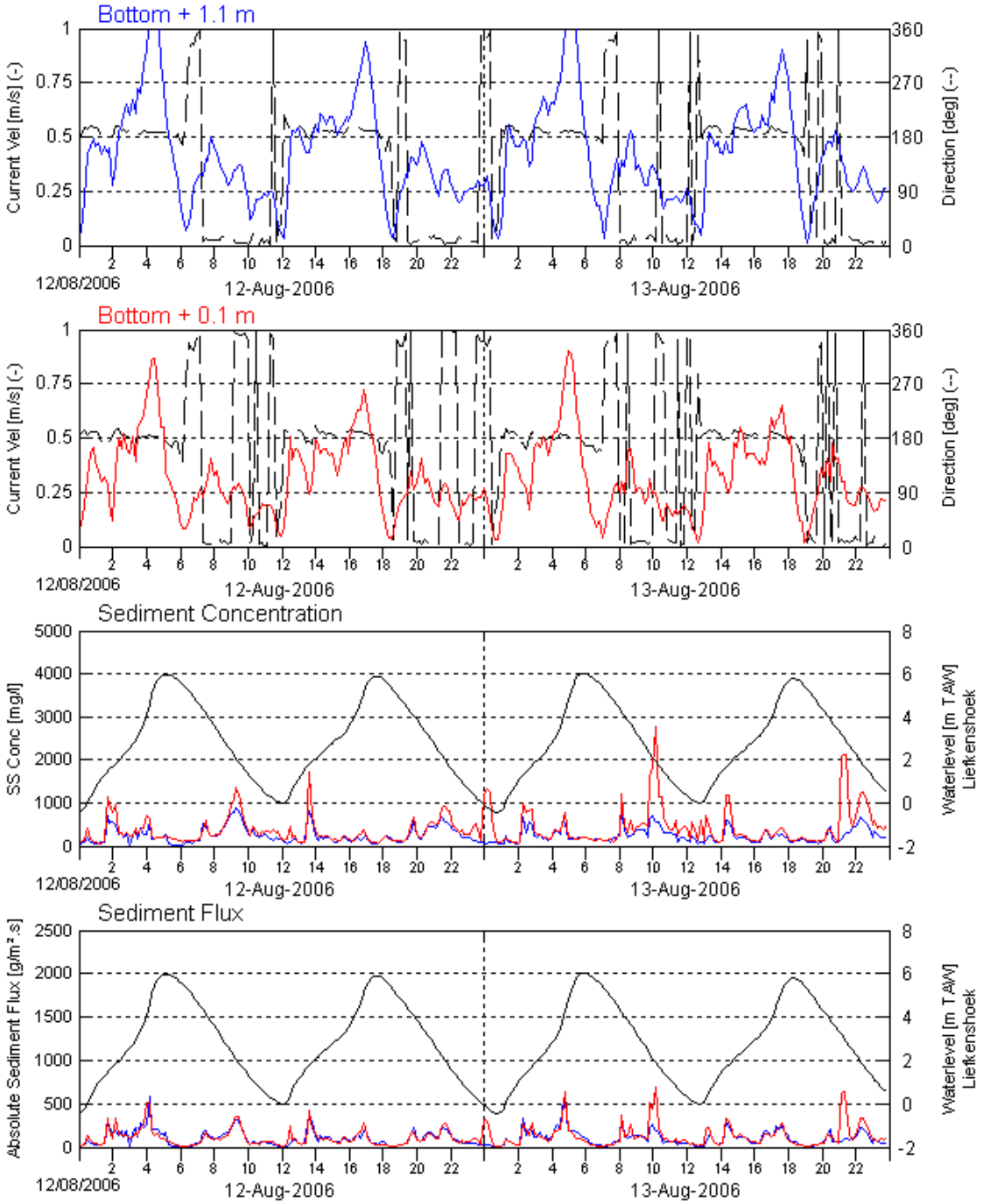
Location:	Date:
Buoy 84l	10/08/2006– 11/08/2006

Data processed by: IMDC

In association with: WL | delft hydraulics, GEMS International

I/RA/11283/06.122MSA

11283 Accretion Deurganckdok – Near bed continuous monitoring – Summer 2006



Current Velocity and Direction upper (RCM9) and lower (Valeport) EMC, OBS SS Conc. & flux and waterlevel

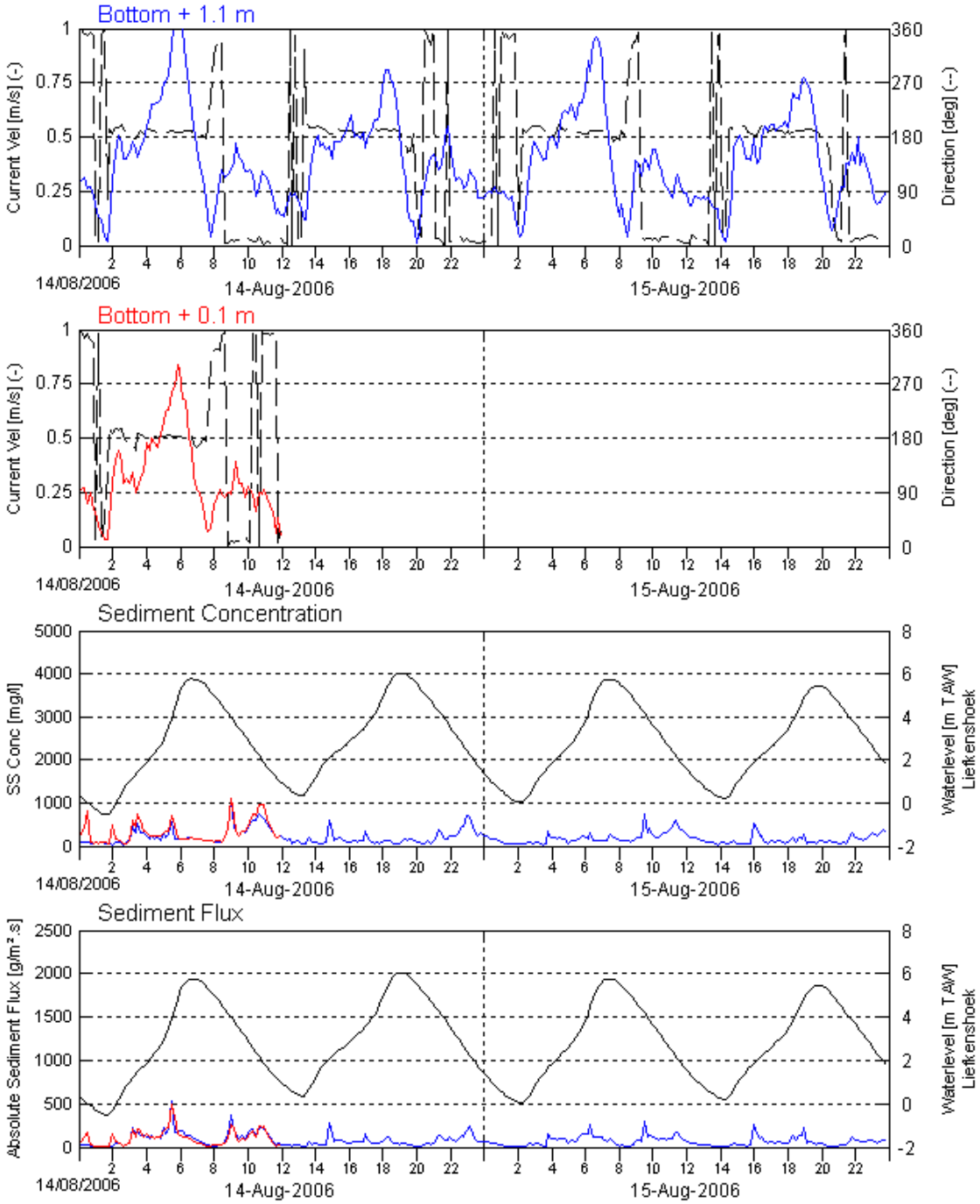
Location:	Date:
Buoy 84	12/08/2006– 13/08/2006

Data processed by: IMDC

In association with: WL | delft hydraulics, GEMS International

I/RA/11283/06.122MSA

11283 Accretion Deurganckdok – Near bed continuous monitoring – Summer 2006



Current Velocity and Direction upper (RCM9) and lower (Valeport) EMC, OBS SS Conc. & flux and waterlevel

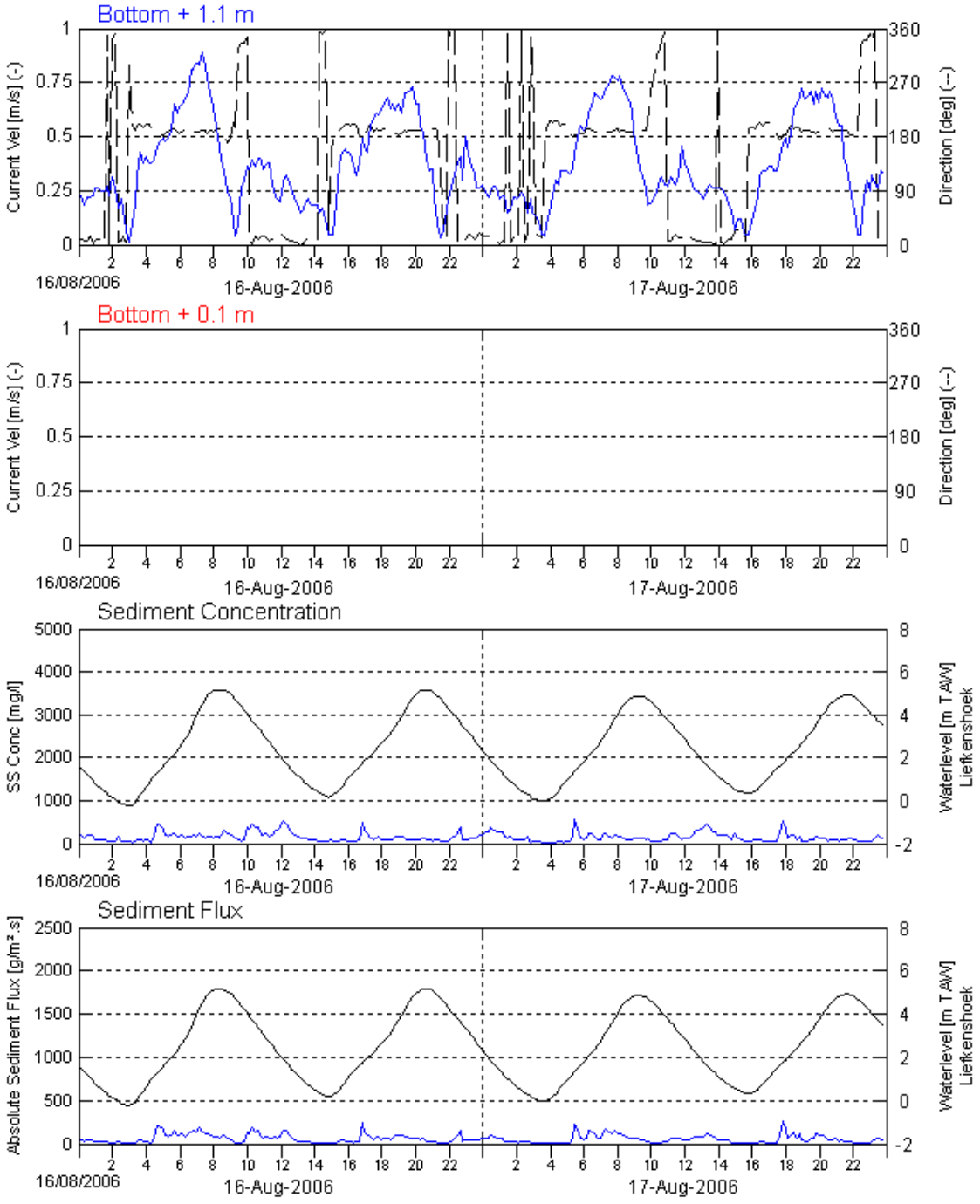
Location:	Date:
Buoy 84	14/08/2006– 15/08/2006

Data processed by: IMDC

In association with: WL | delft hydraulics, GEMS International

I/RA/11283/06.122MSA

11283 Accretion Deurganckdok – Near bed continuous monitoring – Summer 2006



Current Velocity and Direction upper (RCM9) and lower (Valeport) EMC, OBS SS Conc. & flux and waterlevel

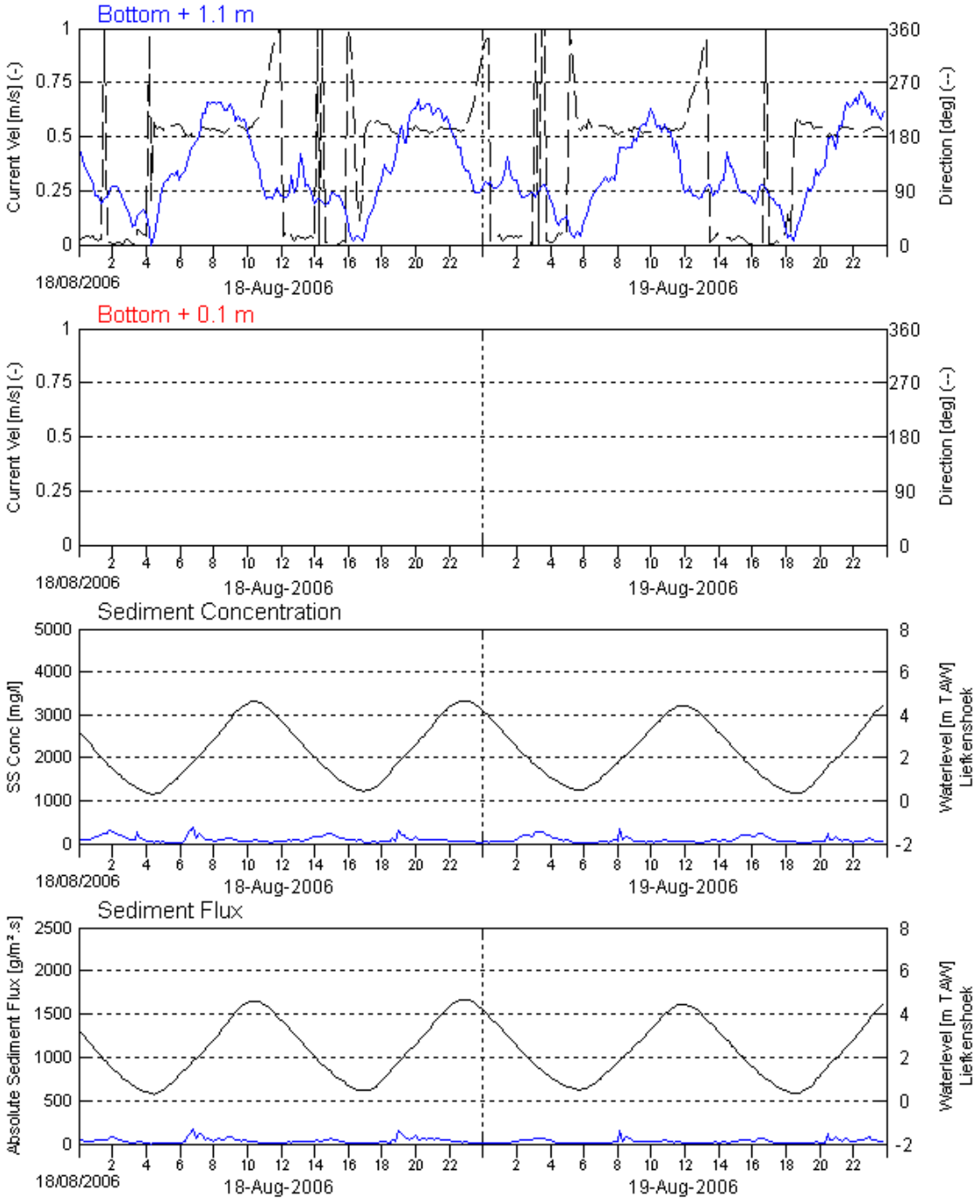
Location:	Date:
Buoy 84	16/08/2006– 17/08/2006

Data processed by: IMDC

In association with: WL | delft hydraulics, GEMS International

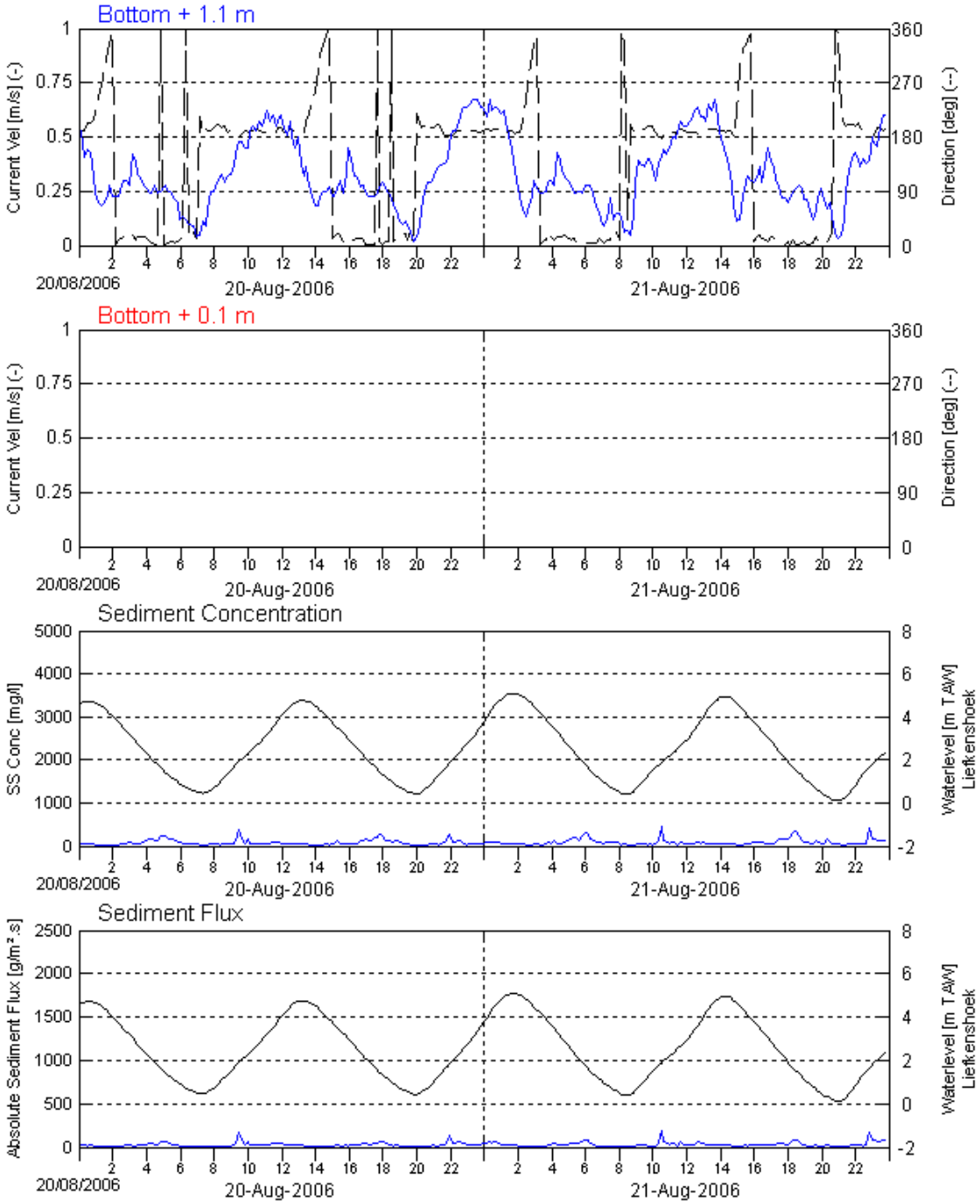
I/RA/11283/06.122MSA

11283 Accretion Deurganckdok – Near bed continuous monitoring – Summer 2006



Current Velocity and Direction upper (RCM9) and lower (Valeport) EMC, OBS SS Conc. & flux and waterlevel		Data processed by: IMDC
Location: Buoy 84	Date: 18/08/2006– 19/08/2006	In association with: WL | delft hydraulics, GEMS International
		I/RA/11283/06.122MSA

11283 Accretion Deurganckdok – Near bed continuous monitoring – Summer 2006



Current Velocity and Direction upper (RCM9) and lower (Valeport) EMC, OBS SS Conc. & flux and waterlevel

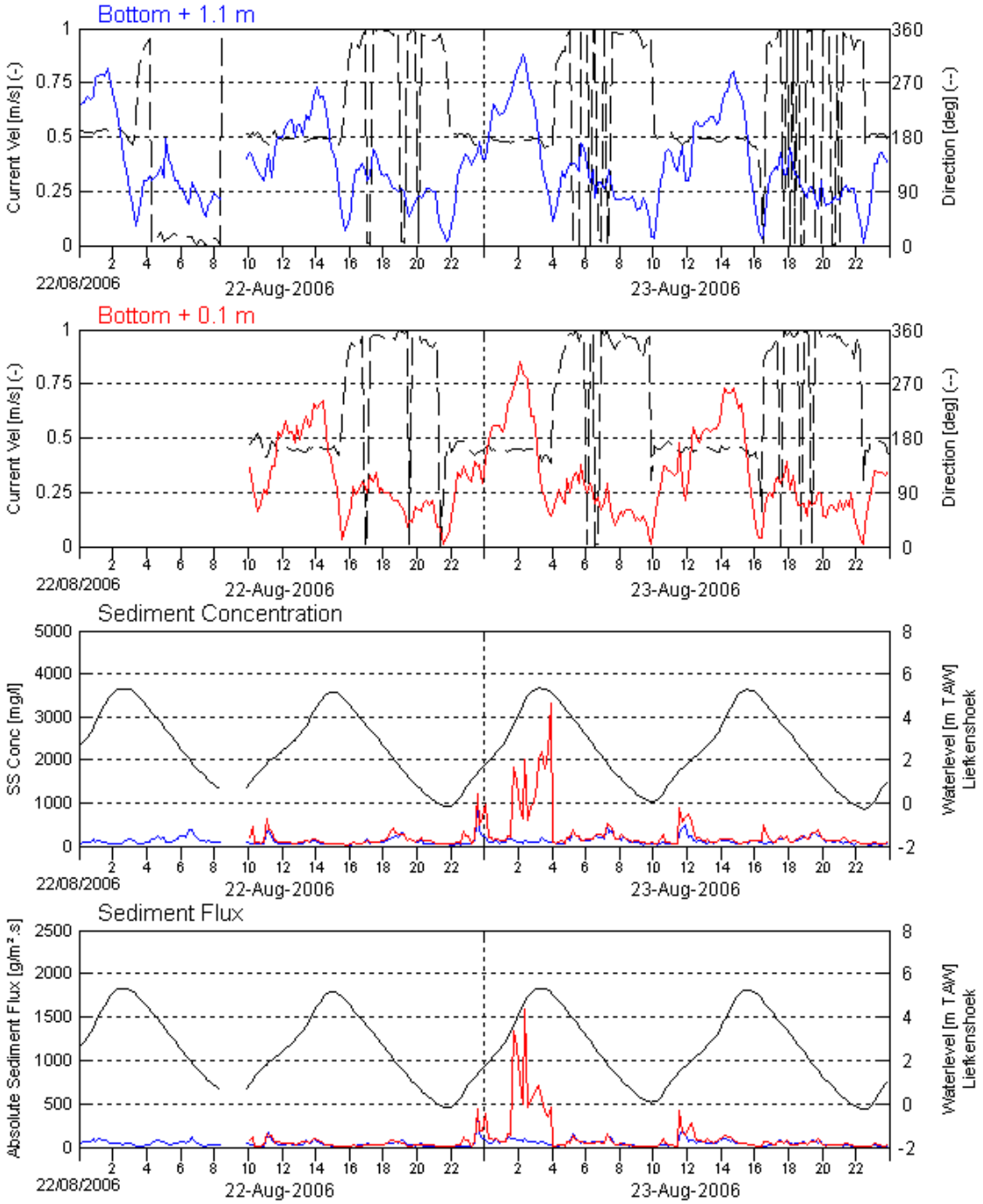
Location:	Date:
Buoy 84	20/08/2006– 21/08/2006

Data processed by: IMDC

In association with: WL | delft hydraulics, GEMS International

I/RA/11283/06.122MSA

11283 Accretion Deurganckdok – Near bed continuous monitoring – Summer 2006



Current Velocity and Direction upper (RCM9) and lower (Valeport) EMC, OBS SS Conc. & flux and waterlevel

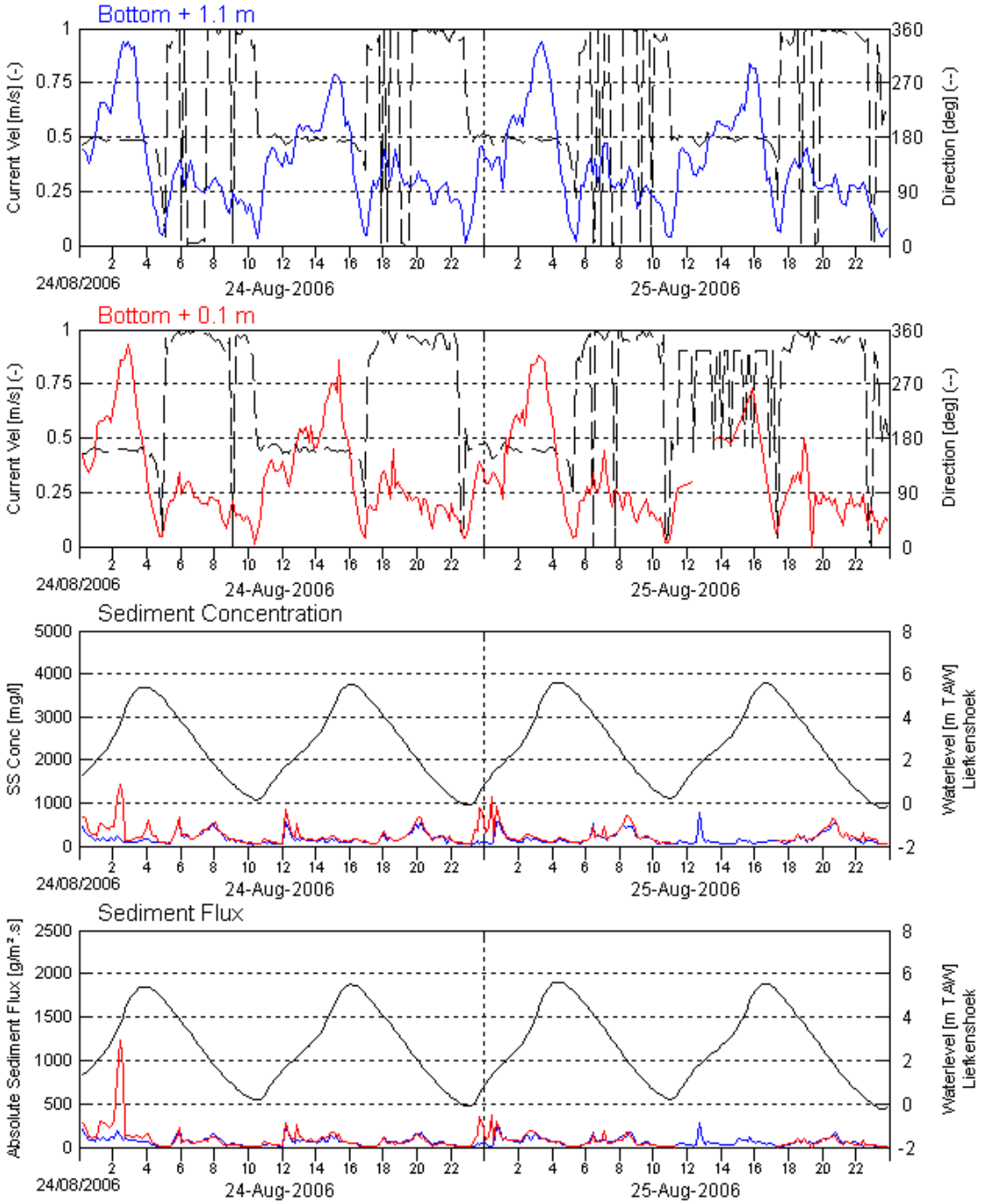
Location:	Date:
Buoy 84	22/08/2006– 23/08/2006

Data processed by: IMDC

In association with: WL | delft hydraulics, GEMS International

I/RA/11283/06.122MSA

11283 Accretion Deurganckdok – Near bed continuous monitoring – Summer 2006



Current Velocity and Direction upper (RCM9) and lower (Valeport) EMC, OBS SS Conc. & flux and waterlevel

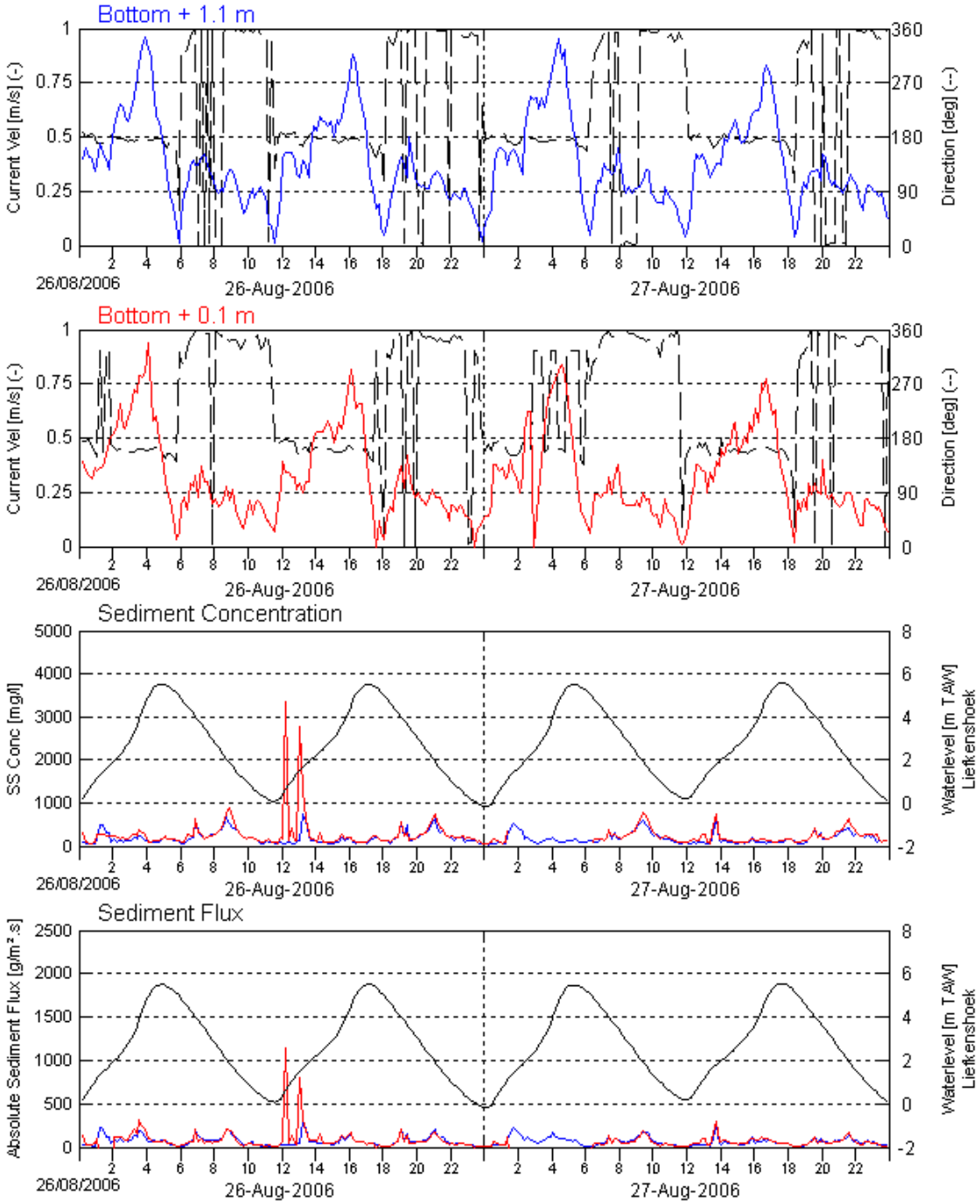
Location:	Date:
Buoy 84	24/08/2006– 25/08/2006

Data processed by: IMDC

In association with: WL | delft hydraulics, GEMS International

I/RA/11283/06.122MSA

11283 Accretion Deurganckdok – Near bed continuous monitoring – Summer 2006



Current Velocity and Direction upper (RCM9) and lower (Valeport) EMC, OBS SS Conc. & flux and waterlevel

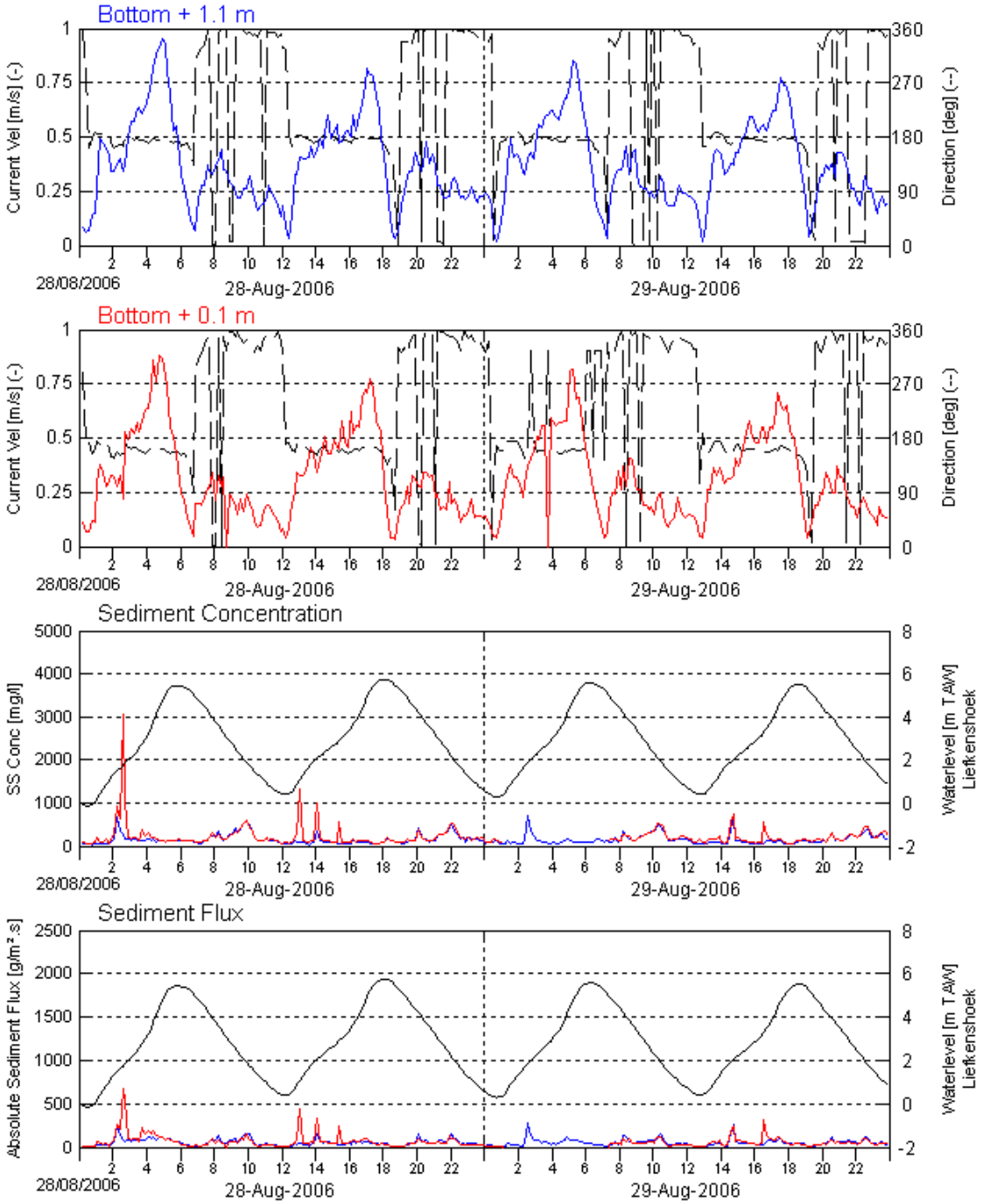
Location:	Date:
Buoy 84	26/08/2006– 27/08/2006

Data processed by: IMDC

In association with: WL | delft hydraulics, GEMS International

I/RA/11283/06.122MSA

11283 Accretion Deurganckdok – Near bed continuous monitoring – Summer 2006



Current Velocity and Direction upper (RCM9) and lower (Valeport) EMC, OBS SS Conc. & flux and waterlevel

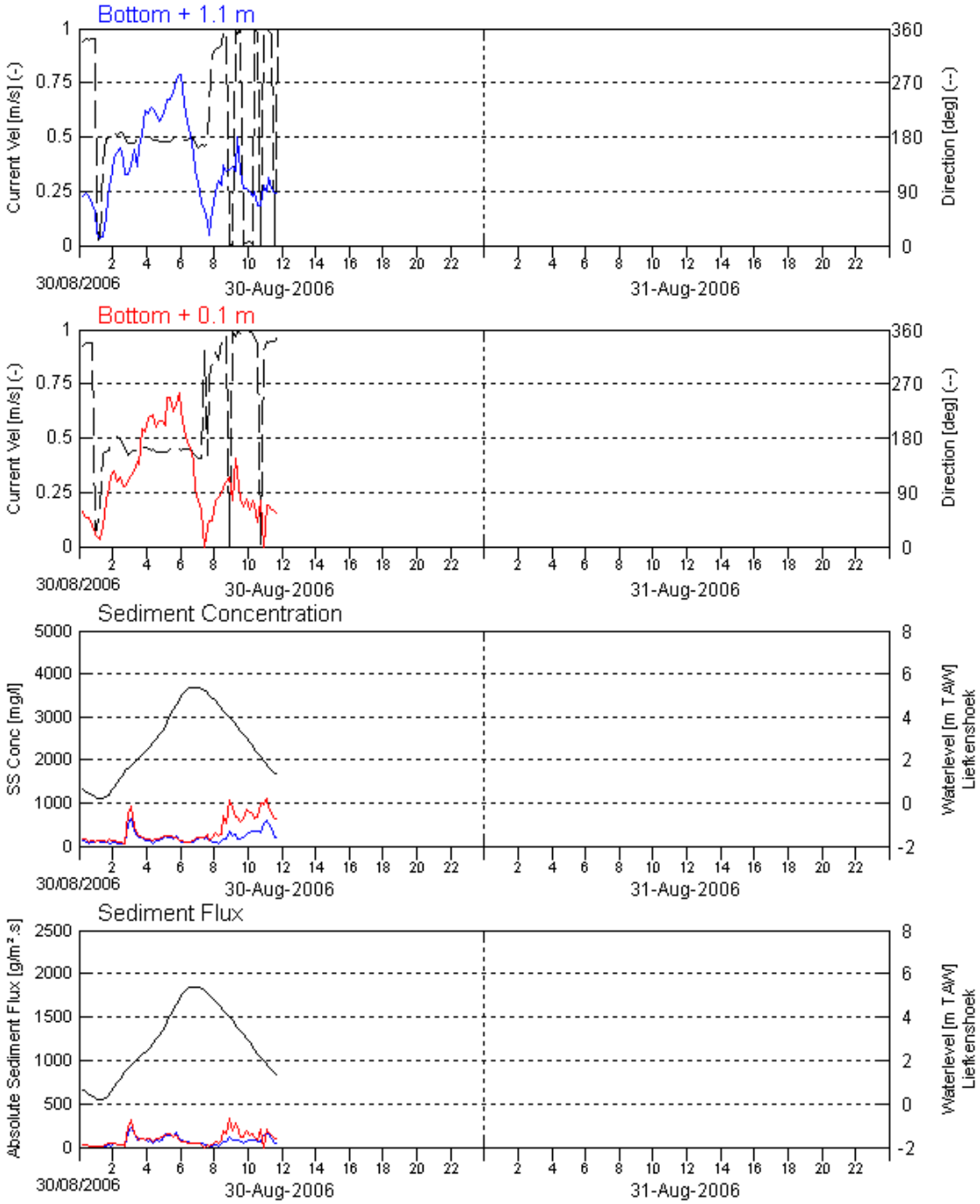
Location:	Date:
Buoy 84	28/08/2006– 29/08/2006

Data processed by: IMDC

In association with: WL | delft hydraulics, GEMS International

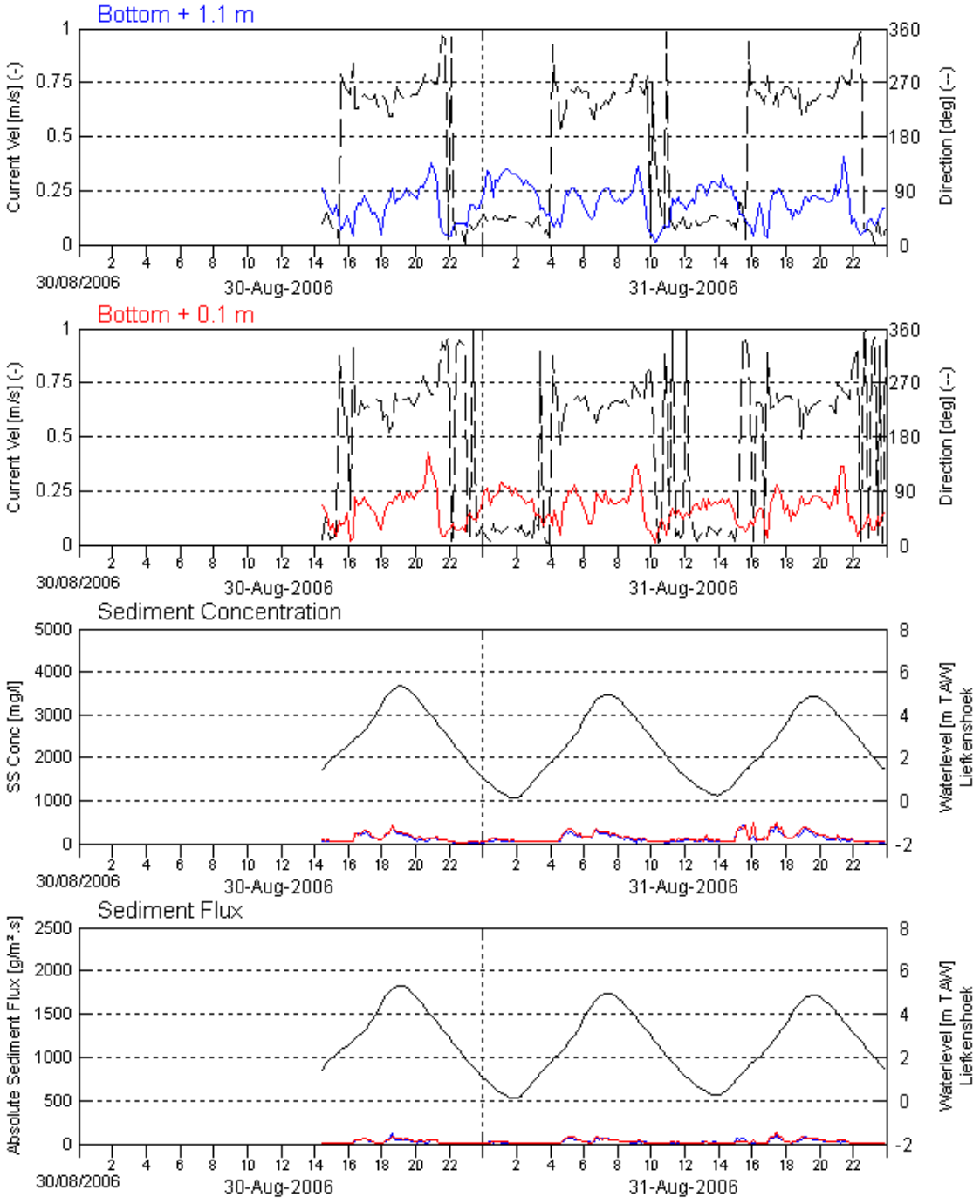
I/RA/11283/06.122MSA

11283 Accretion Deurganckdok – Near bed continuous monitoring – Summer 2006



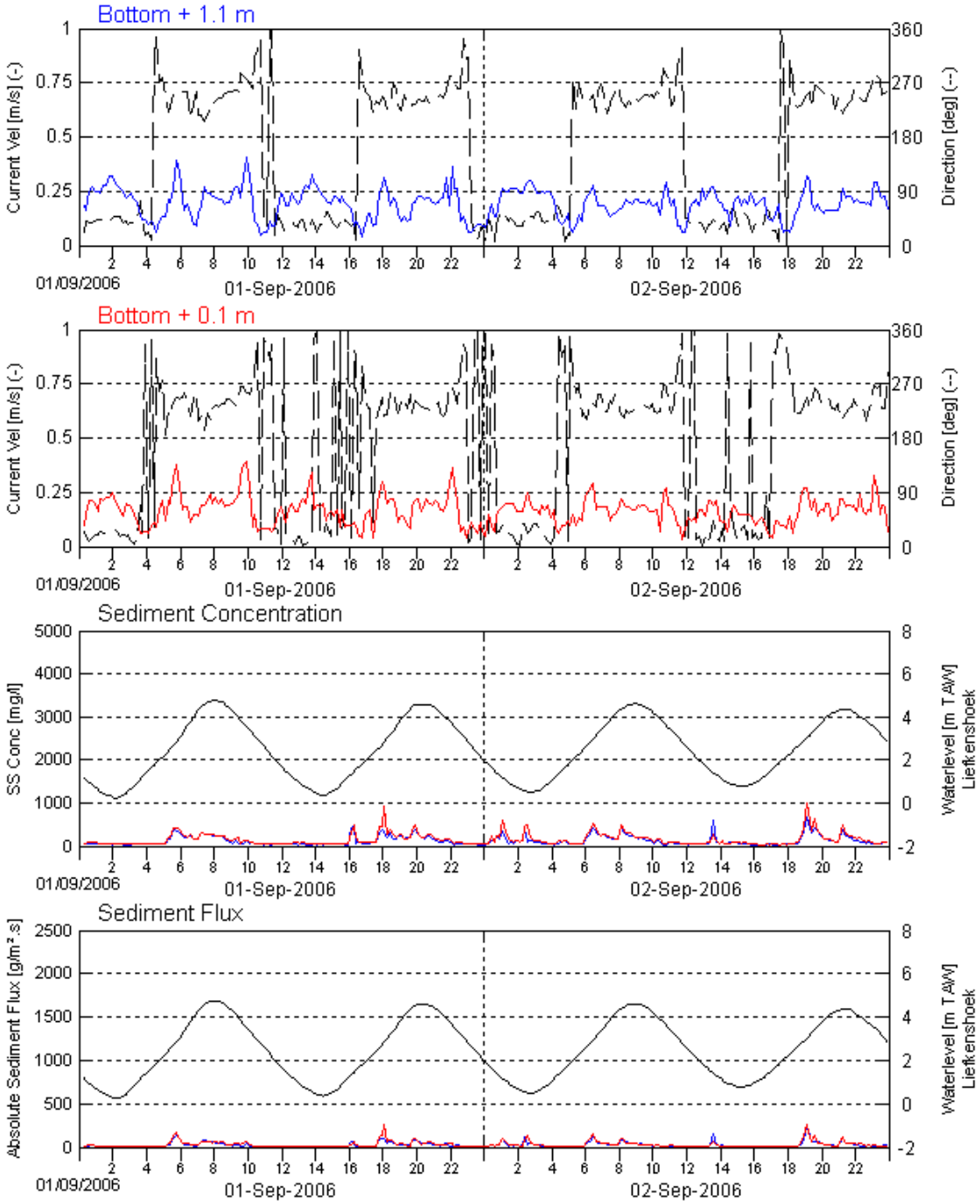
Current Velocity and Direction upper (RCM9) and lower (Valeport) EMC, OBS SS Conc. & flux and waterlevel		Data processed by: IMDC
Location: Buoy 84	Date: 30/08/2006– 31/08/2006	In association with: WL | delft hydraulics, GEMS International
		I/RA/11283/06.122MSA

11283 Accretion Deurganckdok – Near bed continuous monitoring – Summer 2006



Current Velocity and Direction upper (RCM9) and lower (Valeport) EMC, OBS SS Conc. & flux and waterlevel		*Data processed by:* IMDC
Location: Deurganckdok Sill	Date: 30/08/2006– 31/08/2006	*In association with:* WL | delft hydraulics, GEMS International
		I/RA/11283/06.122MSA

11283 Accretion Deurganckdok – Near bed continuous monitoring – Summer 2006



Current Velocity and Direction upper (RCM9) and lower (Valeport) EMC, OBS SS Conc. & flux and waterlevel

Location: Deurganckdok Sill

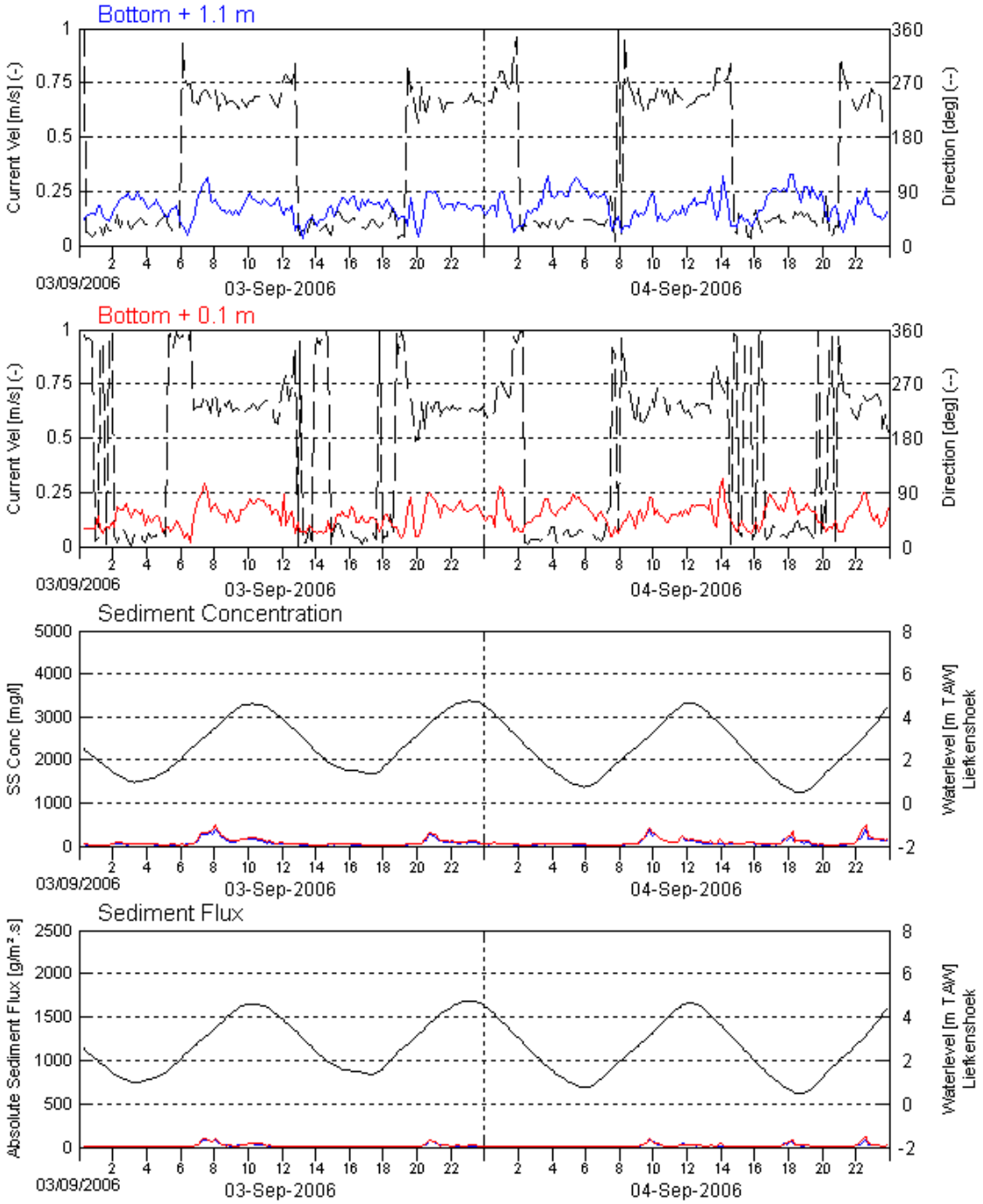
Date: 01/09/2006– 02/09/2006

Data processed by: IMDC

In association with: WL | delft hydraulics, GEMS International

I/RA/11283/06.122MSA

11283 Accretion Deurganckdok – Near bed continuous monitoring – Summer 2006



Current Velocity and Direction upper (RCM9) and lower (Valeport) EMC, OBS SS Conc. & flux and waterlevel

Location: Deurganckdok Sill

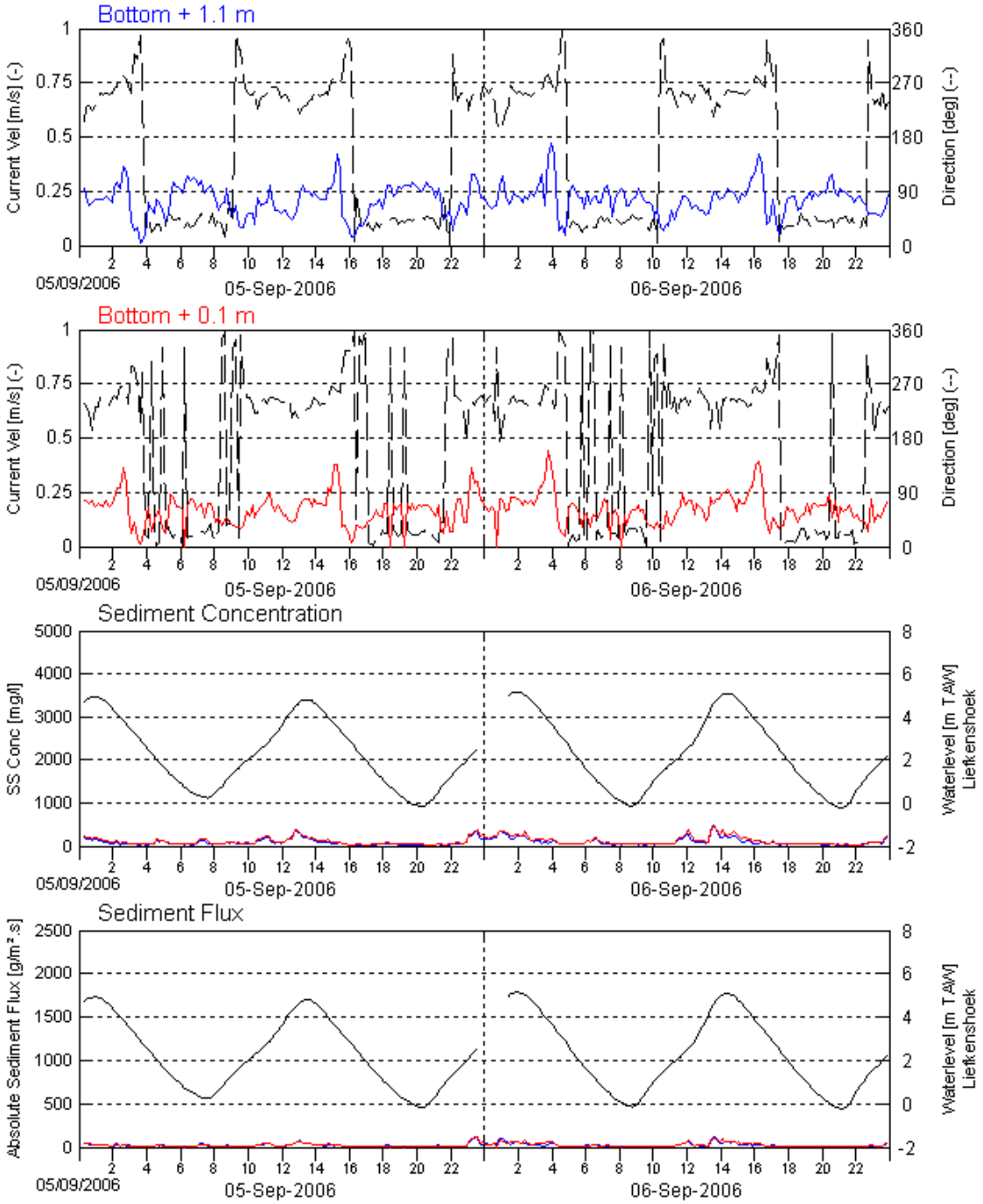
Date: 03/09/2006– 04/09/2006

Data processed by: IMDC

In association with: WL | delft hydraulics, GEMS International

I/RA/11283/06.122MSA

11283 Accretion Deurganckdok – Near bed continuous monitoring – Summer 2006



Current Velocity and Direction upper (RCM9) and lower (Valeport) EMC, OBS SS Conc. & flux and waterlevel

Location: Deurganckdok Sill

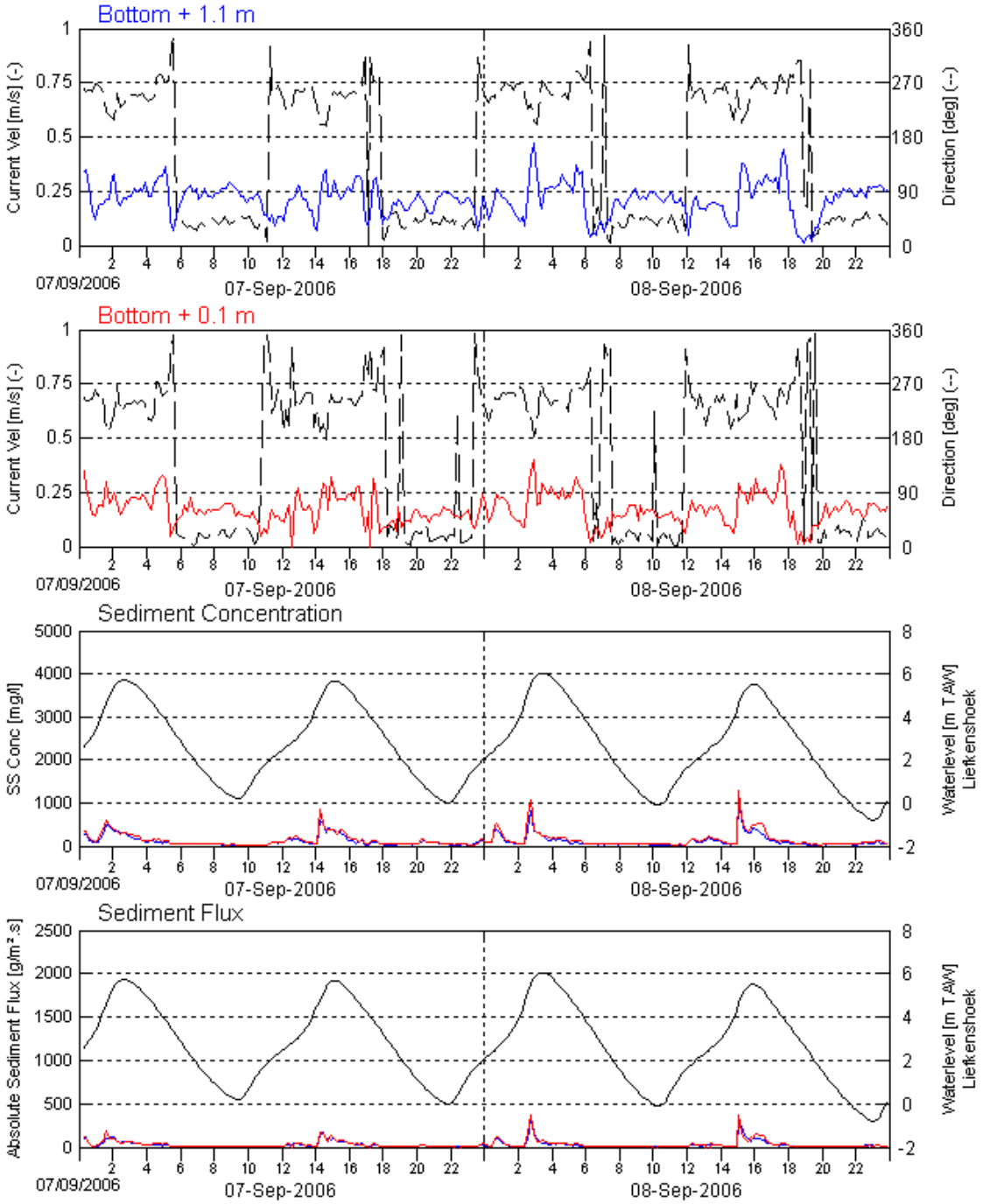
Date: 05/09/2006– 06/09/2006

Data processed by: IMDC

In association with: WL | delft hydraulics, GEMS International

I/RA/11283/06.122MSA

11283 Accretion Deurganckdok – Near bed continuous monitoring – Summer 2006



Current Velocity and Direction upper (RCM9) and lower (Valeport) EMC, OBS SS Conc. & flux and waterlevel

Location: Deurganckdok Sill

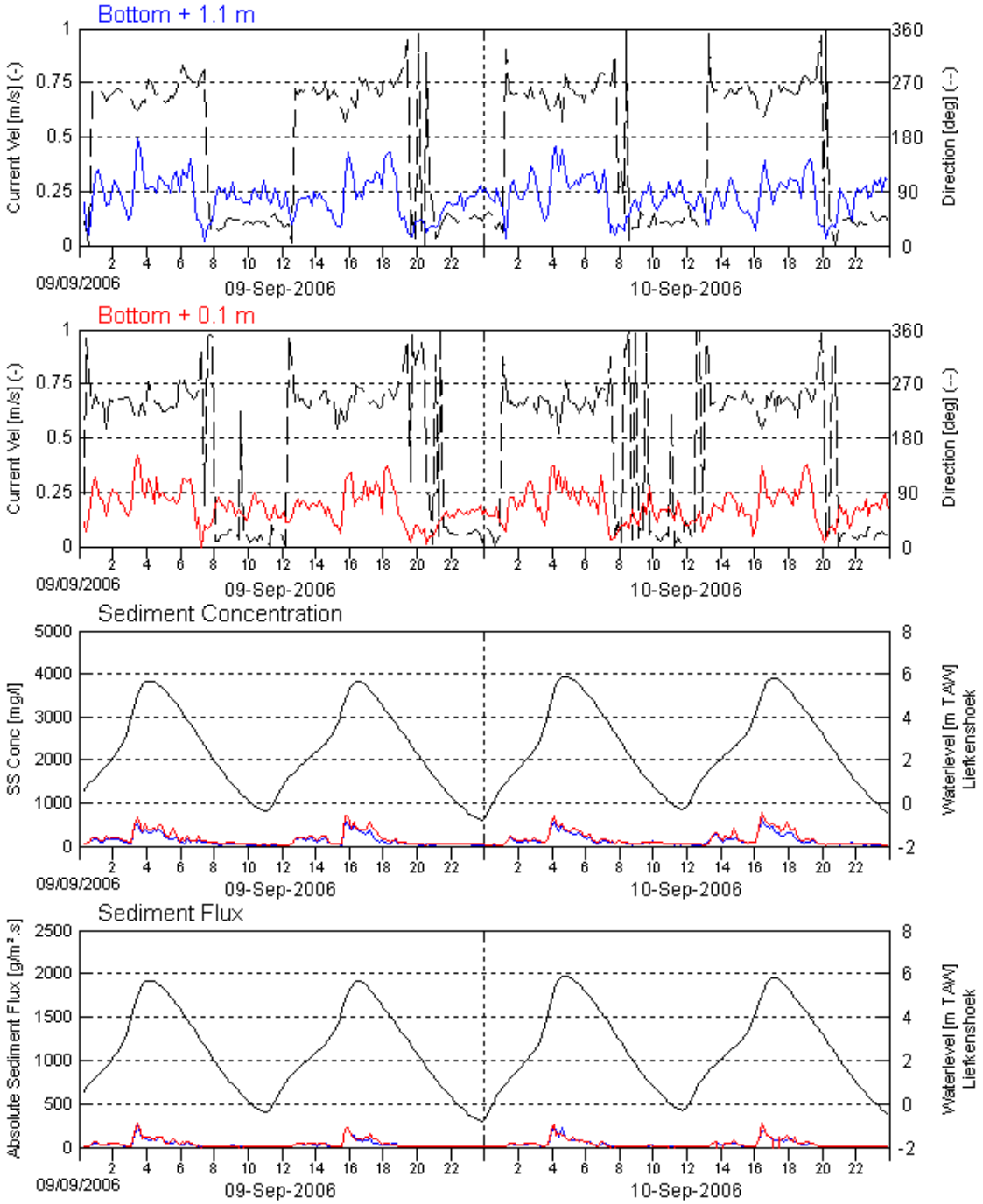
Date: 07/09/2006– 08/09/2006

Data processed by: IMDC

In association with: WL | delft hydraulics, GEMS International

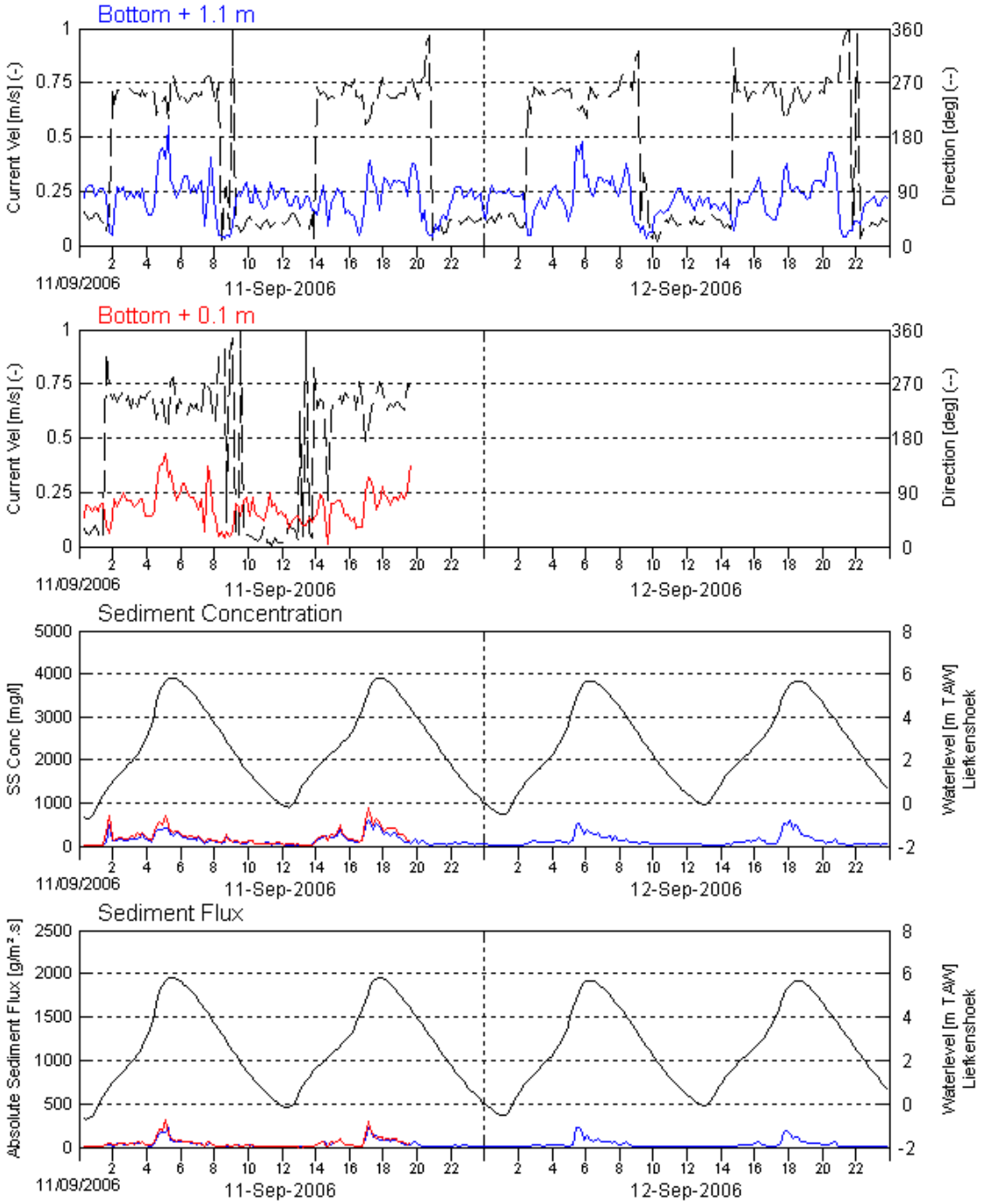
I/RA/11283/06.122MSA

11283 Accretion Deurganckdok – Near bed continuous monitoring – Summer 2006



Current Velocity and Direction upper (RCM9) and lower (Valeport) EMC, OBS SS Conc. & flux and waterlevel		*Data processed by:* IMDC
Location: Deurganckdok Sill	Date: 09/09/2006– 10/09/2006	*In association with:* WL | delft hydraulics, GEMS International
		I/RA/11283/06.122MSA

11283 Accretion Deurganckdok – Near bed continuous monitoring – Summer 2006



Current Velocity and Direction upper (RCM9) and lower (Valeport) EMC, OBS SS Conc. & flux and waterlevel

Location: Deurganckdok Sill

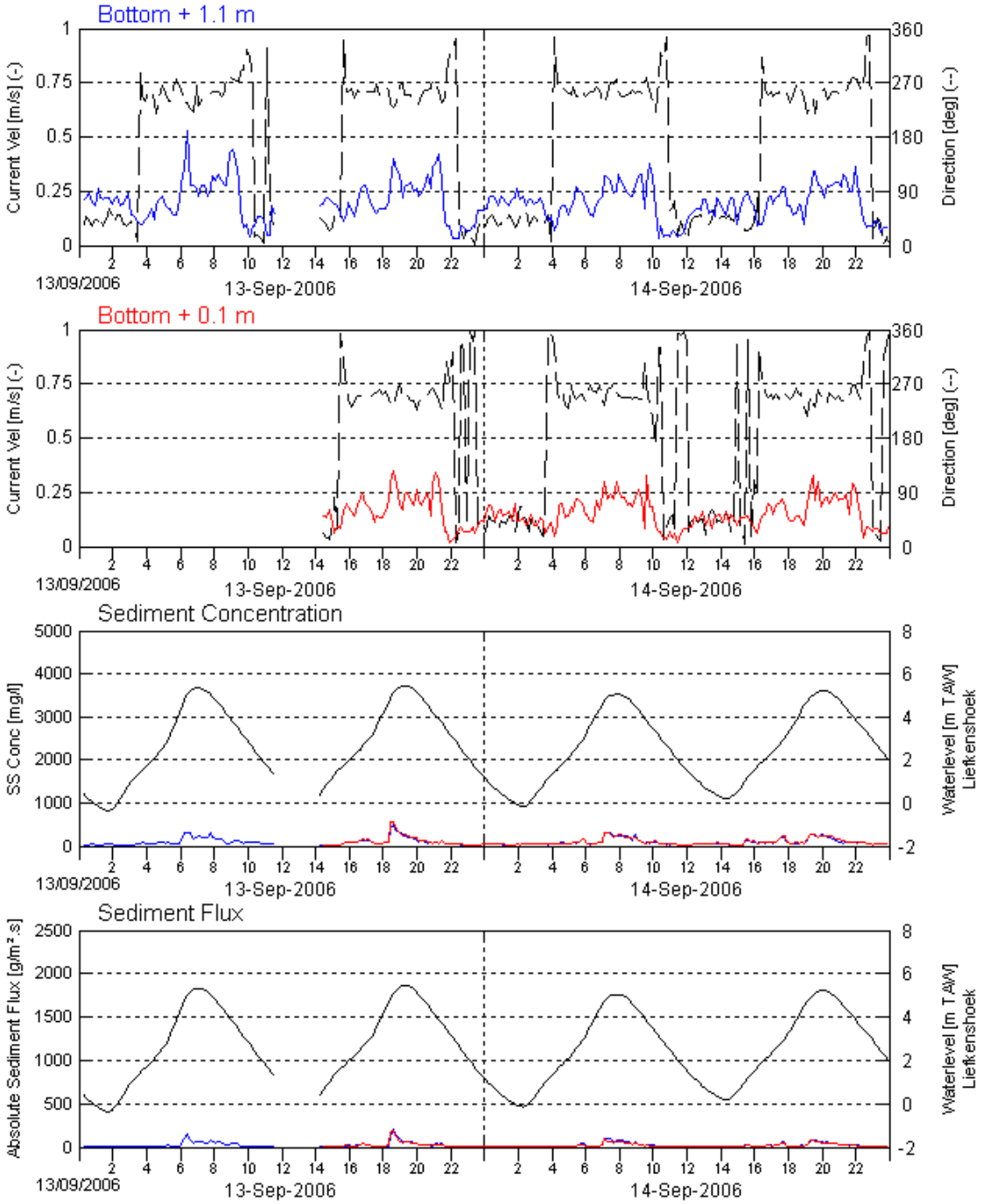
Date: 11/09/2006– 12/09/2006

Data processed by: IMDC

In association with: WL | delft hydraulics, GEMS International

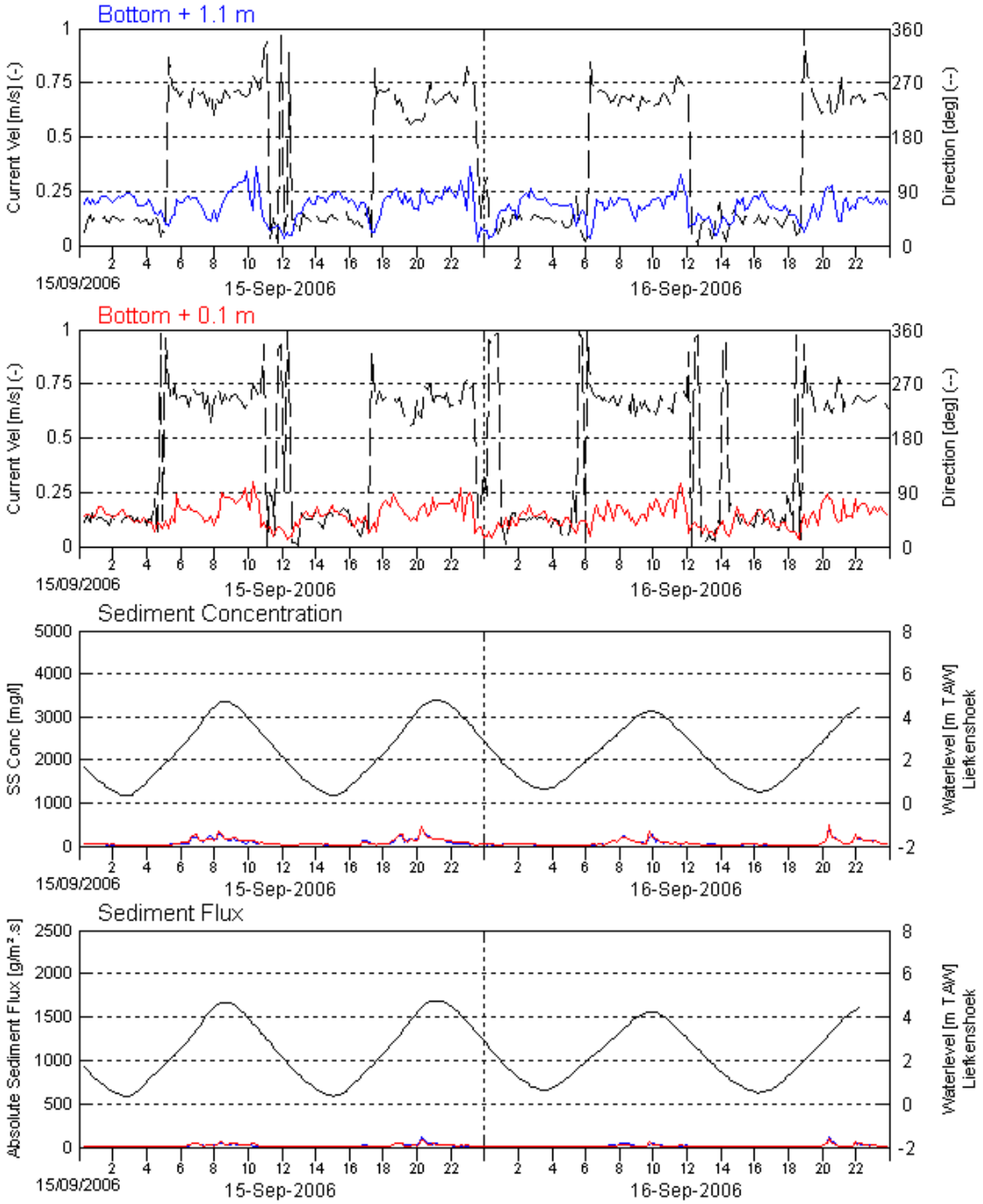
I/RA/11283/06.122MSA

11283 Accretion Deurganckdok – Near bed continuous monitoring – Summer 2006



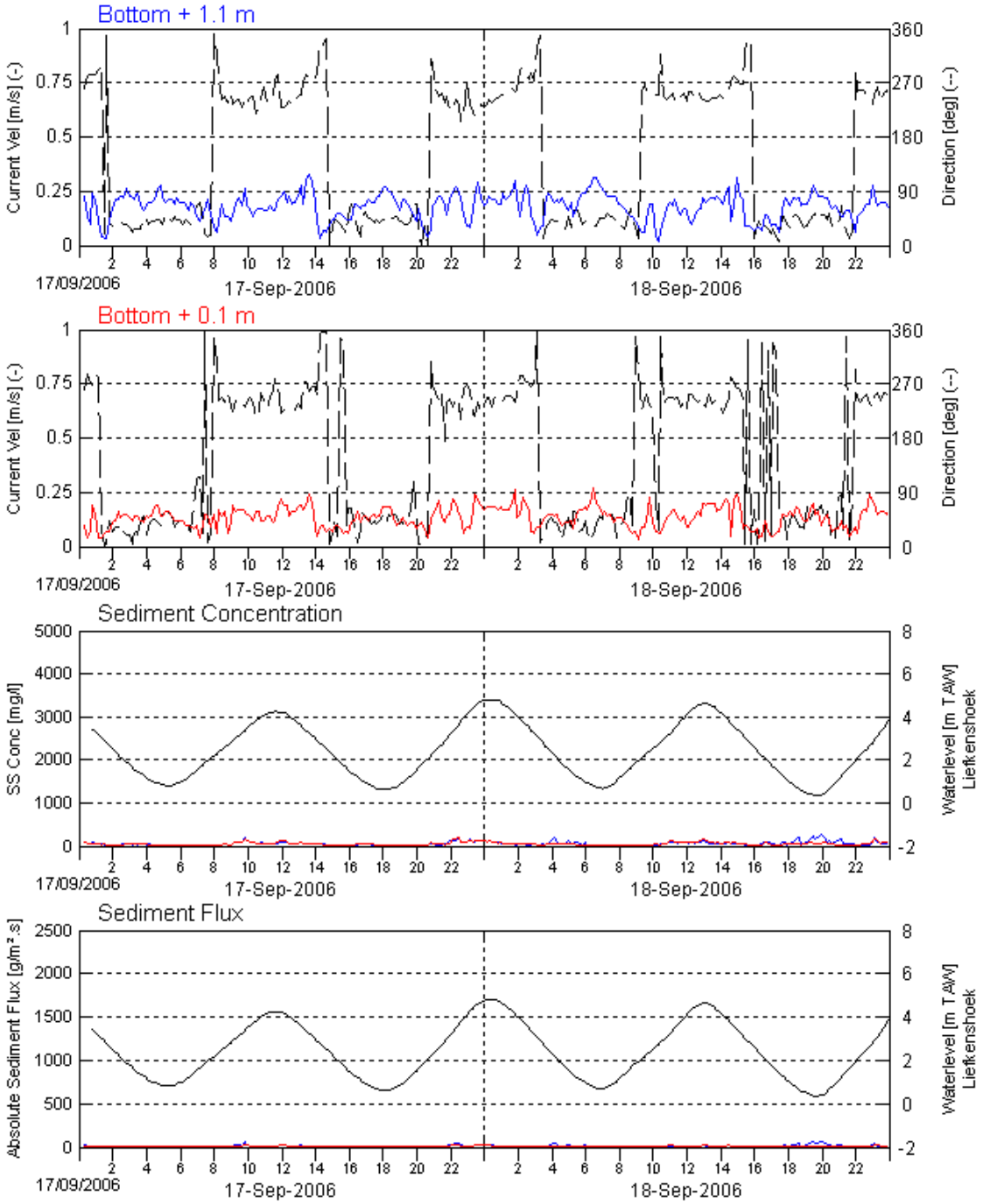
Current Velocity and Direction upper (RCM9) and lower (Valeport) EMC, OBS SS Conc. & flux and waterlevel		*Data processed by:* IMDC
Location: Deurganckdok Sill	Date: 13/09/2006– 14/09/2006	*In association with:* WL | delft hydraulics, GEMS International
		I/RA/11283/06.122MSA

11283 Accretion Deurganckdok – Near bed continuous monitoring – Summer 2006



Current Velocity and Direction upper (RCM9) and lower (Valeport) EMC, OBS SS Conc. & flux and waterlevel		*Data processed by:* IMDC
Location: Deurganckdok Sill	Date: 15/09/2006– 16/09/2006	*In association with:* WL | delft hydraulics, GEMS International
		I/RA/11283/06.122MSA

11283 Accretion Deurganckdok – Near bed continuous monitoring – Summer 2006



Current Velocity and Direction upper (RCM9) and lower (Valeport) EMC, OBS SS Conc. & flux and waterlevel

Location: Deurganckdok Sill

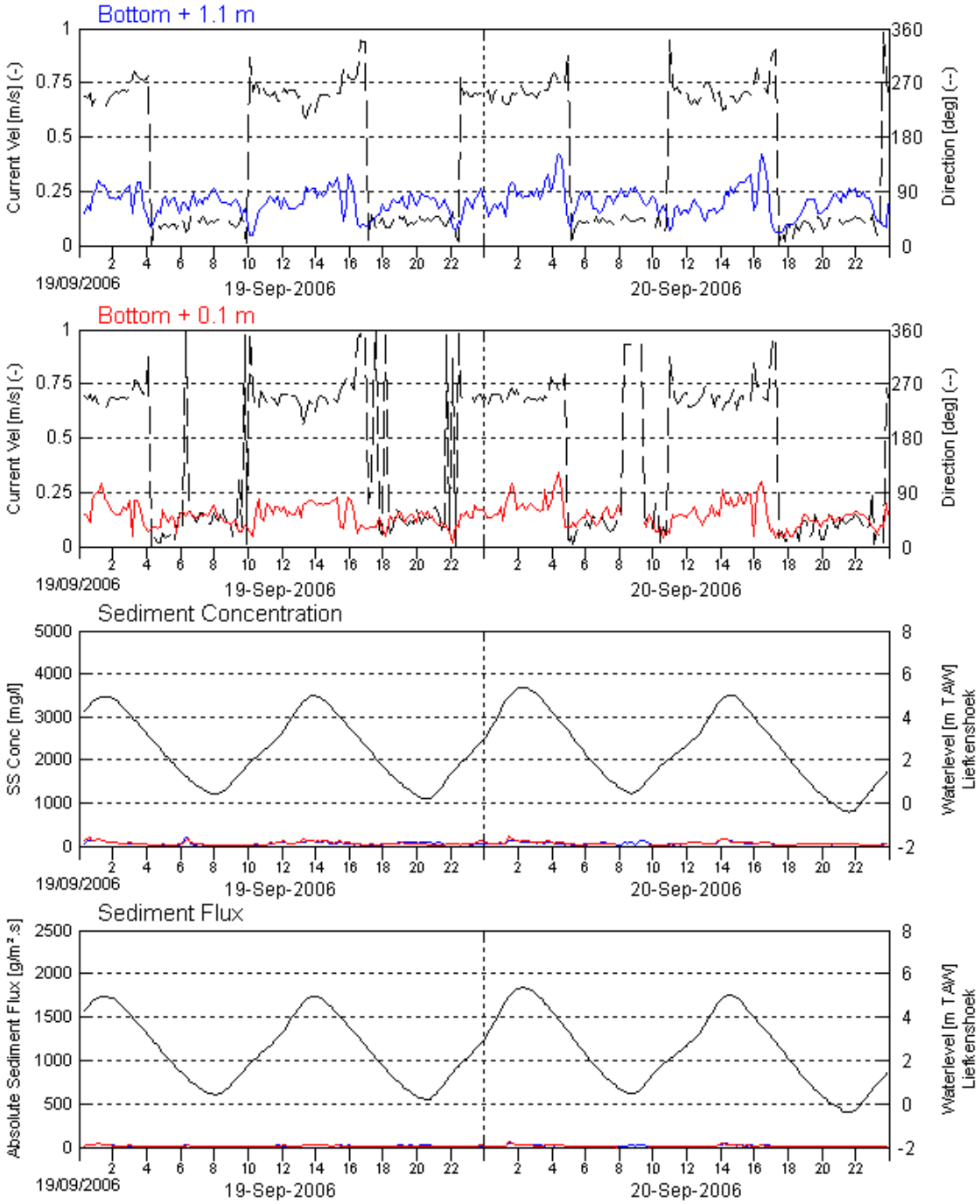
Date: 17/09/2006– 18/09/2006

Data processed by: IMDC

In association with: WL | delft hydraulics, GEMS International

I/RA/11283/06.122MSA

11283 Accretion Deurganckdok – Near bed continuous monitoring – Summer 2006



Current Velocity and Direction upper (RCM9) and lower (Valeport) EMC, OBS SS Conc. & flux and waterlevel

Location: Deurganckdok Sill

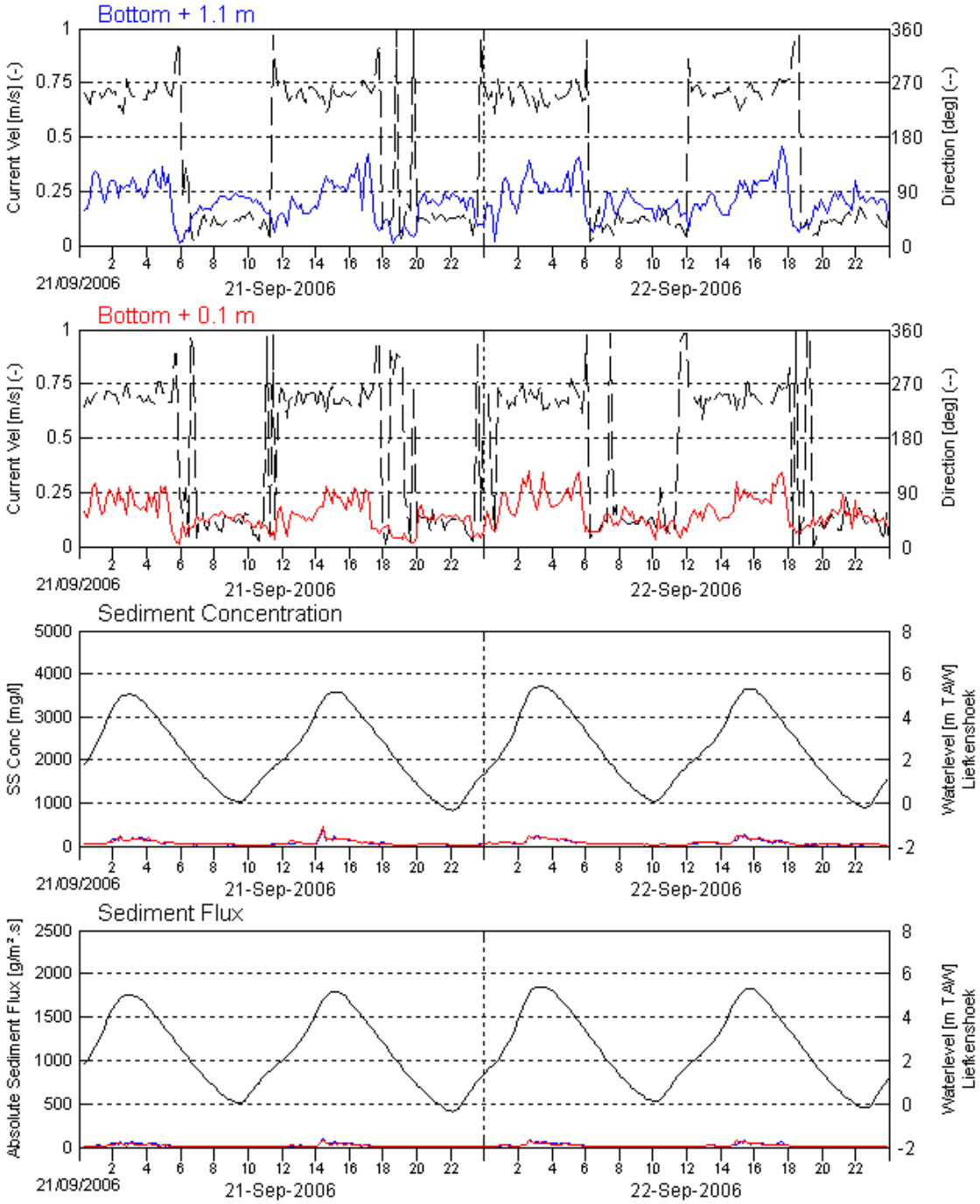
Date: 19/09/2006– 20/09/2006

Data processed by: IMDC

In association with: WL | delft hydraulics, GEMS International

I/RA/11283/06.122MSA

11283 Accretion Deurganckdok – Near bed continuous monitoring – Summer 2006



Current Velocity and Direction upper (RCM9) and lower (Valeport) EMC, OBS SS Conc. & flux and waterlevel

Location: Deurganckdok Sill

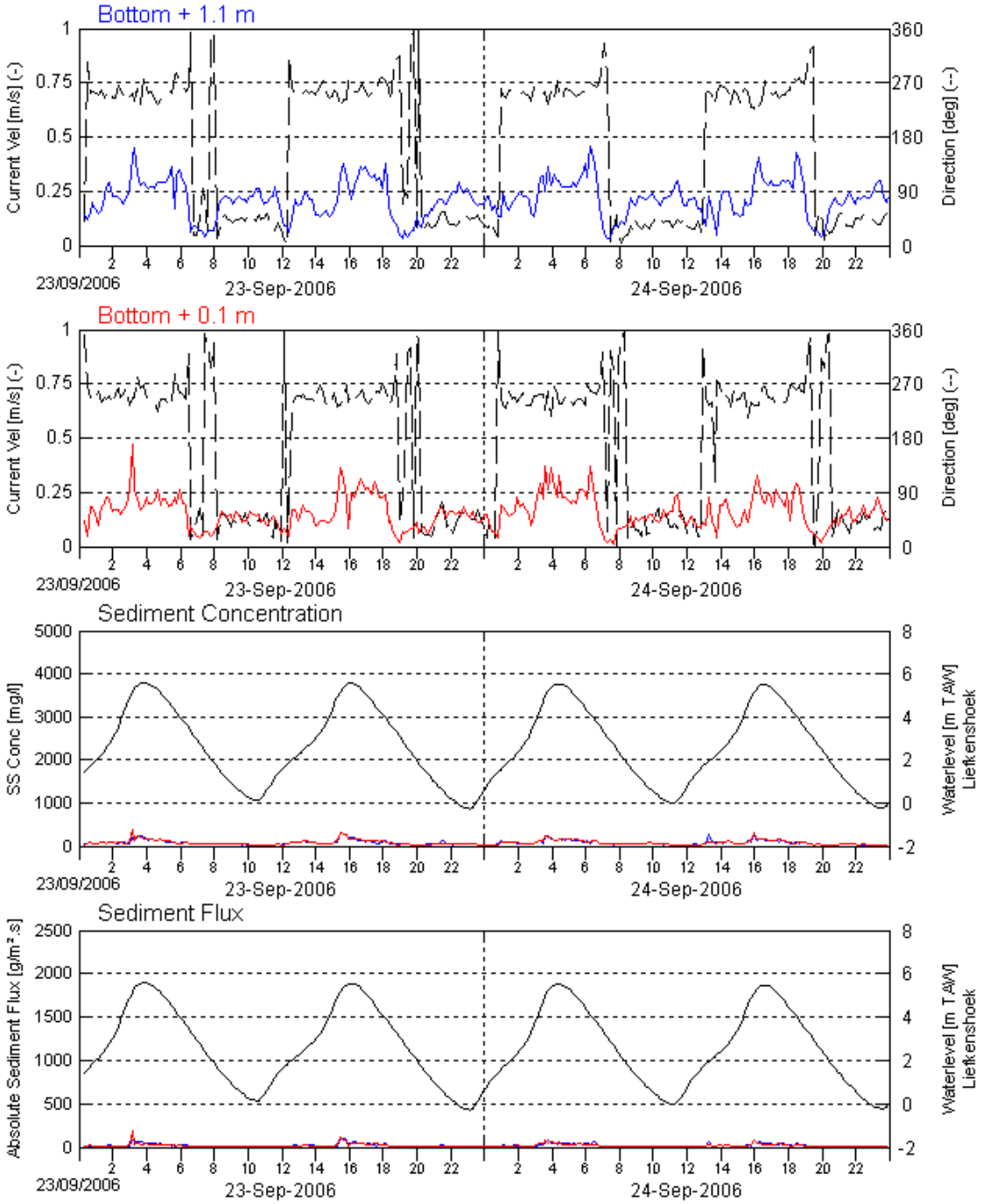
Date: 21/09/2006– 22/09/2006

Data processed by: IMDC

In association with: WL | delft hydraulics, GEMS International

I/RA/11283/06.122MSA

11283 Accretion Deurganckdok – Near bed continuous monitoring – Summer 2006



Current Velocity and Direction upper (RCM9) and lower (Valeport) EMC, OBS SS Conc. & flux and waterlevel

Location: Deurganckdok Sill

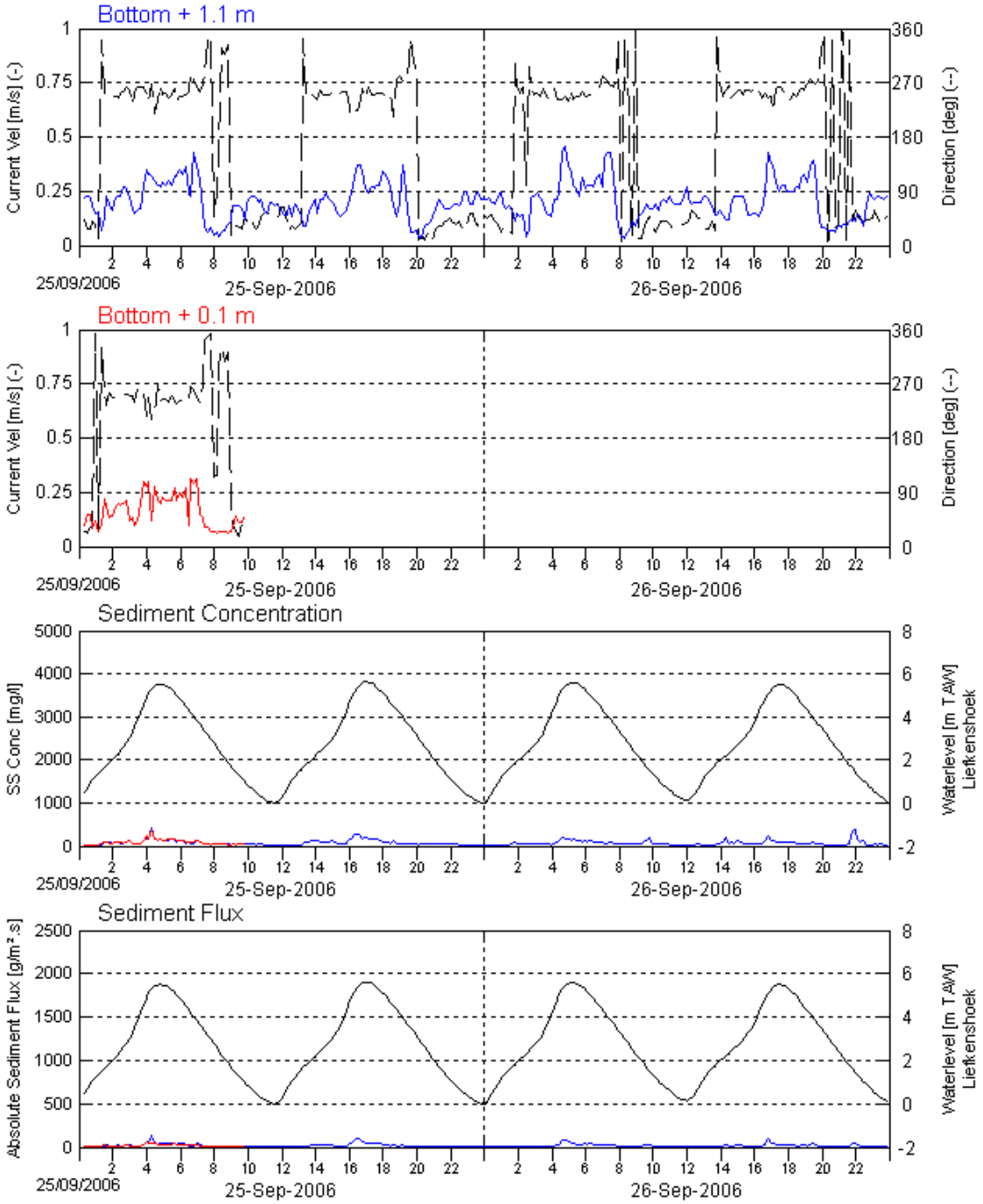
Date: 23/09/2006– 24/09/2006

Data processed by: IMDC

In association with: WL | delft hydraulics, GEMS International

I/RA/11283/06.122MSA

11283 Accretion Deurganckdok – Near bed continuous monitoring – Summer 2006



Current Velocity and Direction upper (RCM9) and lower (Valeport) EMC, OBS SS Conc. & flux and waterlevel

Location: Deurganckdok Sill

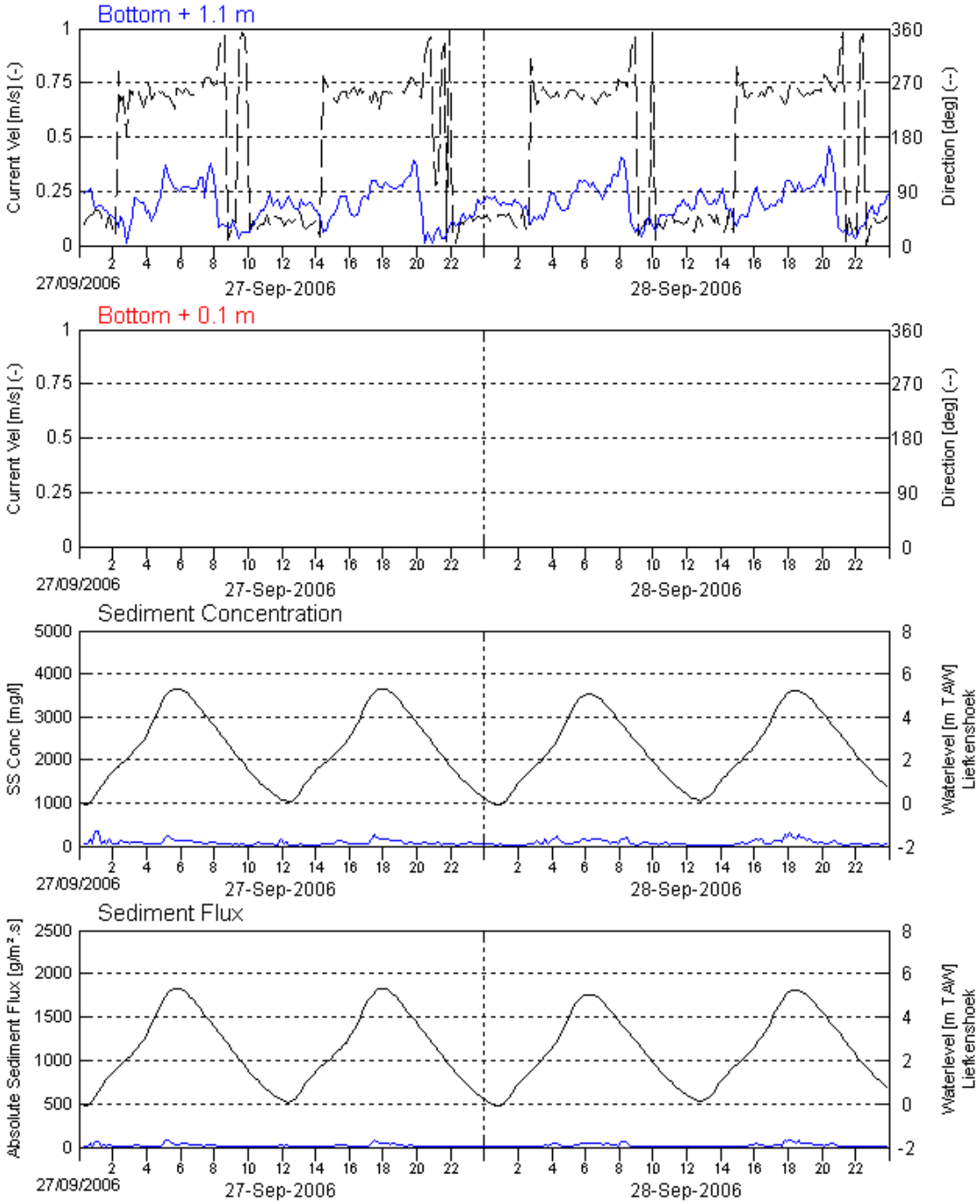
Date: 25/09/2006– 26/09/2006

Data processed by: IMDC

In association with: WL | delft hydraulics, GEMS International

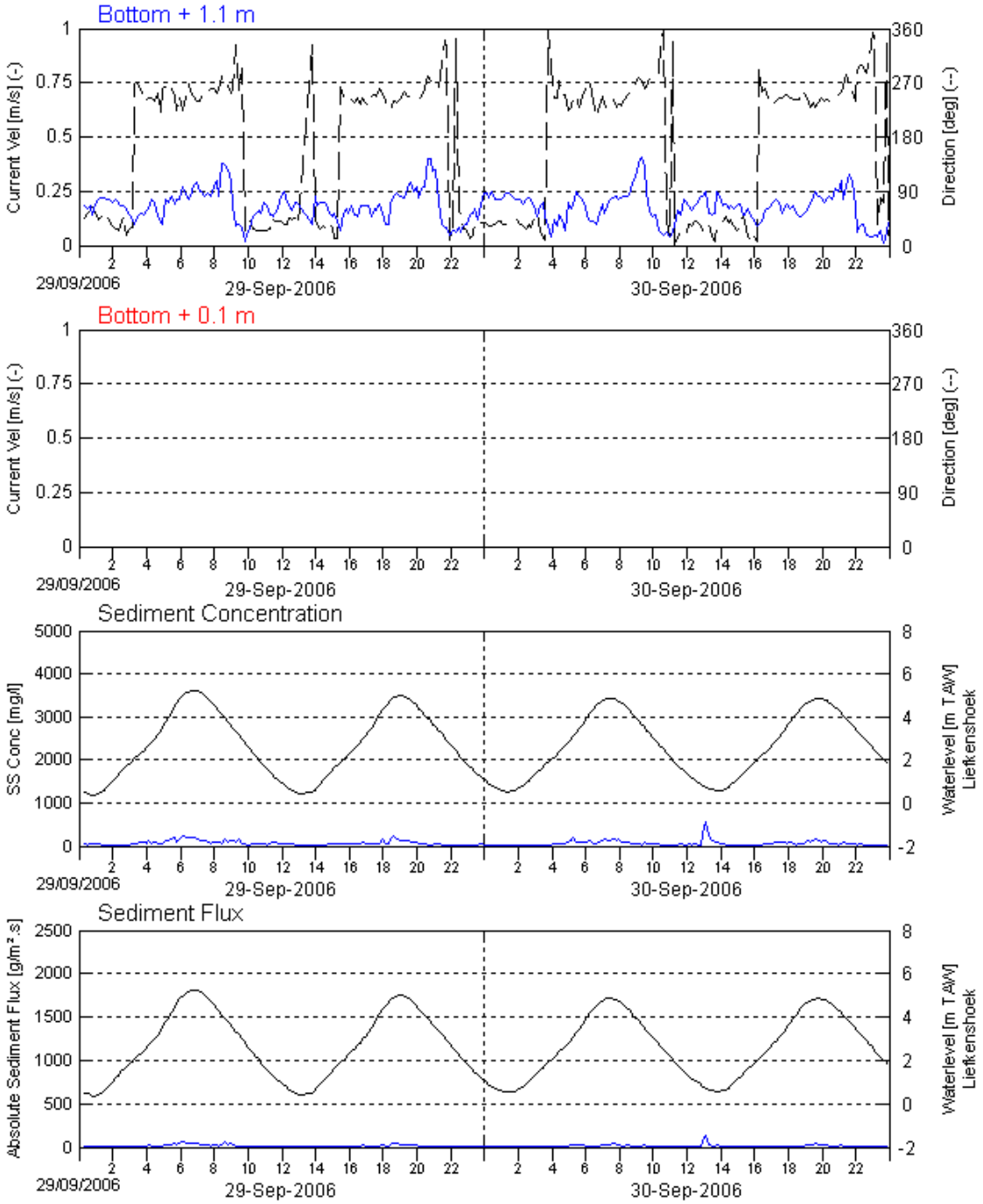
I/RA/11283/06.122MSA

11283 Accretion Deurganckdok – Near bed continuous monitoring – Summer 2006



Current Velocity and Direction upper (RCM9) and lower (Valeport) EMC, OBS SS Conc. & flux and waterlevel		*Data processed by:* IMDC
Location: Deurganckdok Sill	Date: 27/09/2006– 28/09/2006	*In association with:* WL | delft hydraulics, GEMS International
		I/RA/11283/06.122MSA

11283 Accretion Deurganckdok – Near bed continuous monitoring – Summer 2006



Current Velocity and Direction upper (RCM9) and lower (Valeport) EMC, OBS SS Conc. & flux and waterlevel

Location: Deurganckdok Sill

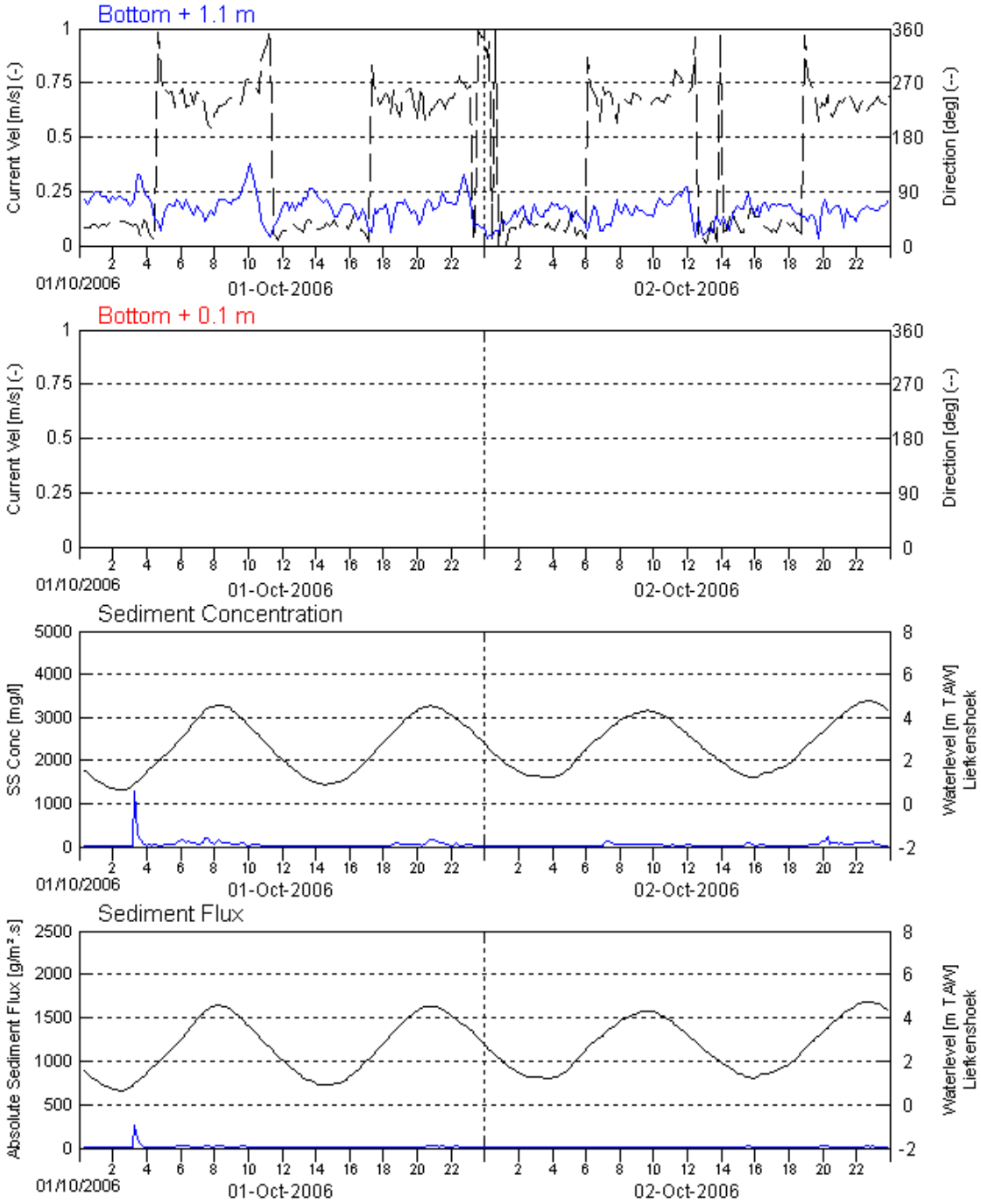
Date: 29/09/2006– 30/09/2006

Data processed by: IMDC

In association with: WL | delft hydraulics, GEMS International

I/RA/11283/06.122MSA

11283 Accretion Deurganckdok – Near bed continuous monitoring – Summer 2006



Current Velocity and Direction upper (RCM9) and lower (Valeport) EMC, OBS SS Conc. & flux and waterlevel

Location: Deurganckdok Sill

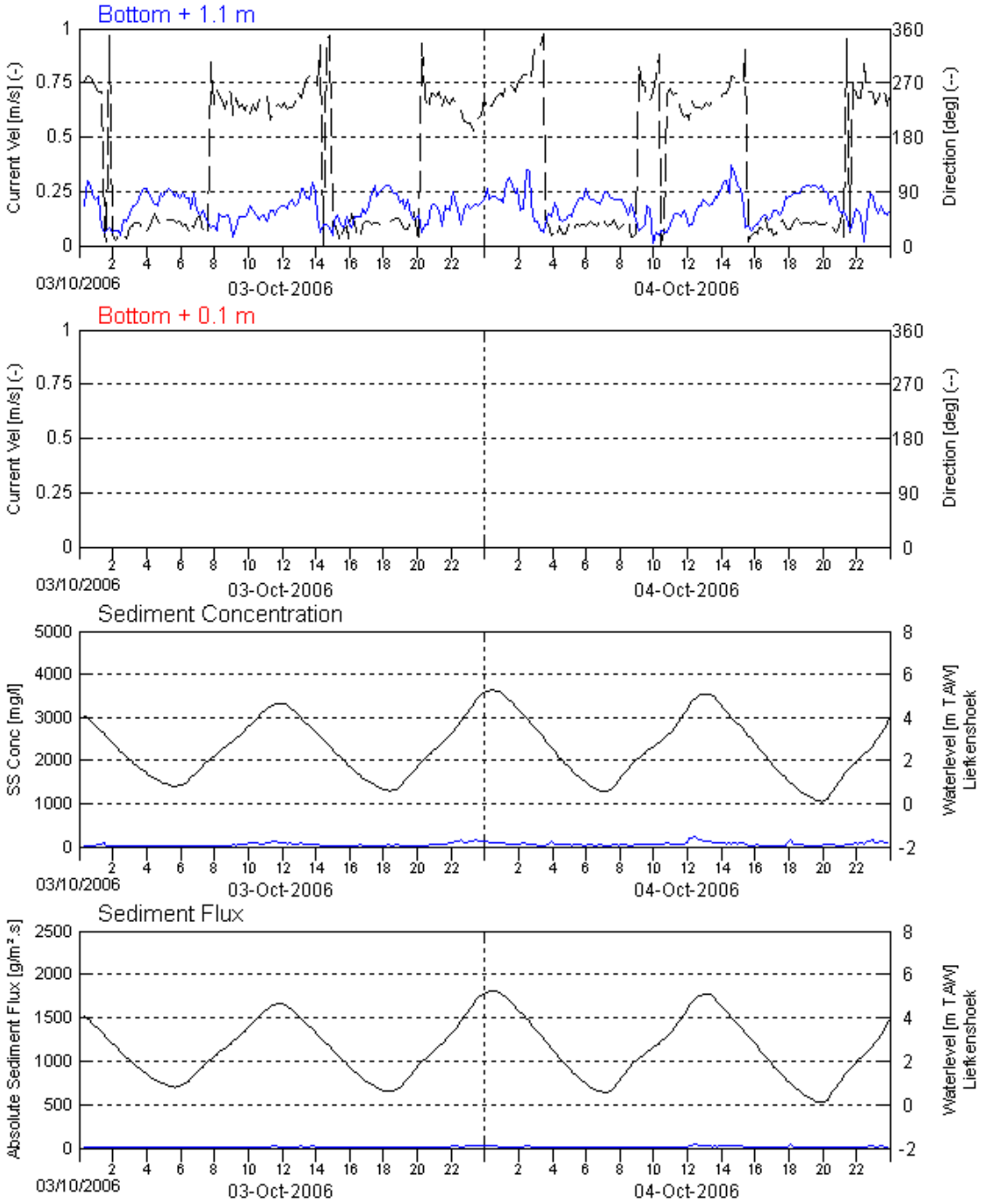
Date: 01/10/2006– 02/10/2006

Data processed by: IMDC

In association with: WL | delft hydraulics, GEMS International

I/RA/11283/06.122MSA

11283 Accretion Deurganckdok – Near bed continuous monitoring – Summer 2006



Current Velocity and Direction upper (RCM9) and lower (Valeport) EMC, OBS SS Conc. & flux and waterlevel

Location: Deurganckdok Sill

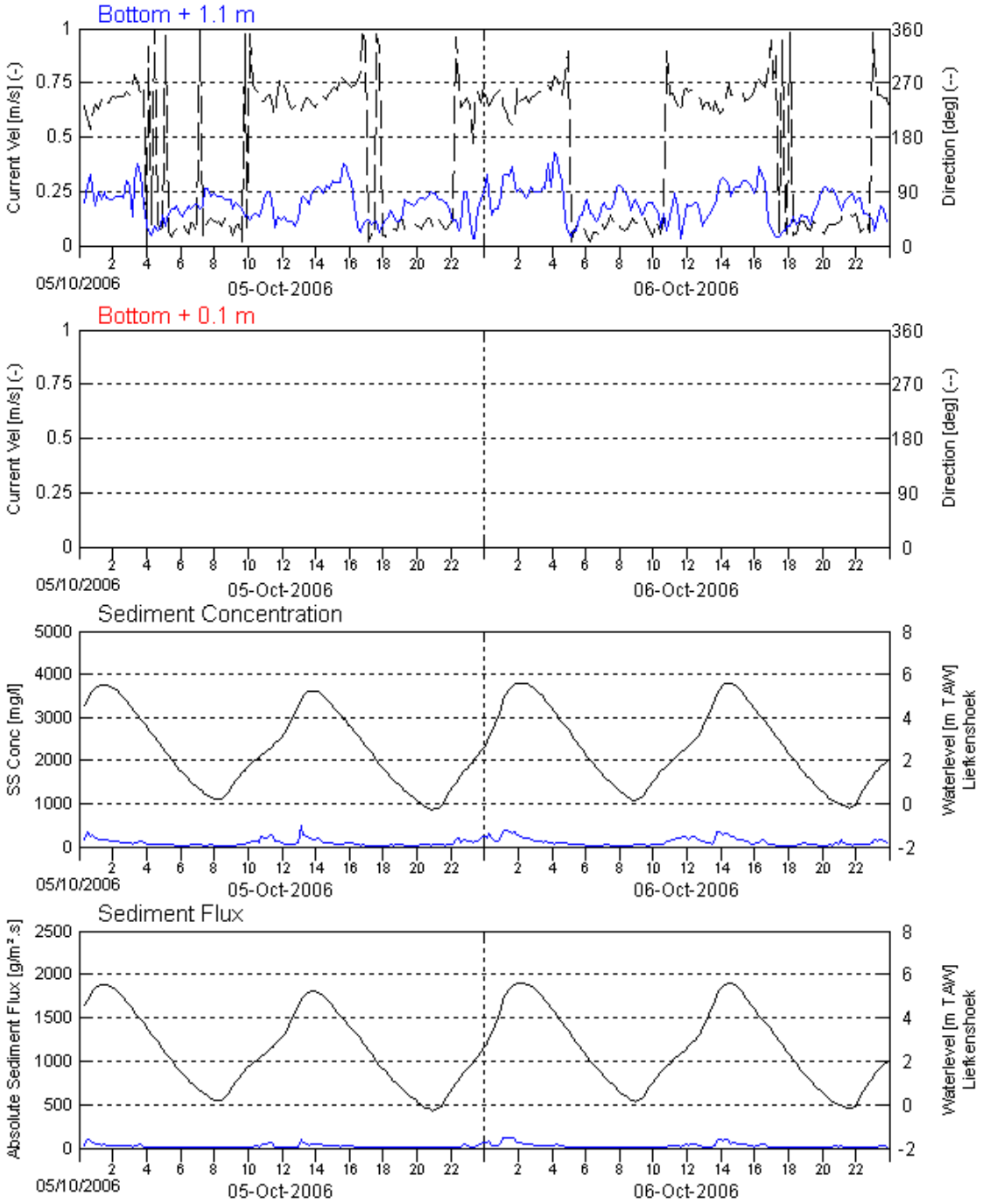
Date: 03/10/2006– 04/10/2006

Data processed by: IMDC

In association with: WL | delft hydraulics, GEMS International

I/RA/11283/06.122MSA

11283 Accretion Deurganckdok – Near bed continuous monitoring – Summer 2006



Current Velocity and Direction upper (RCM9) and lower (Valeport) EMC, OBS SS Conc. & flux and waterlevel

Location: Deurganckdok Sill

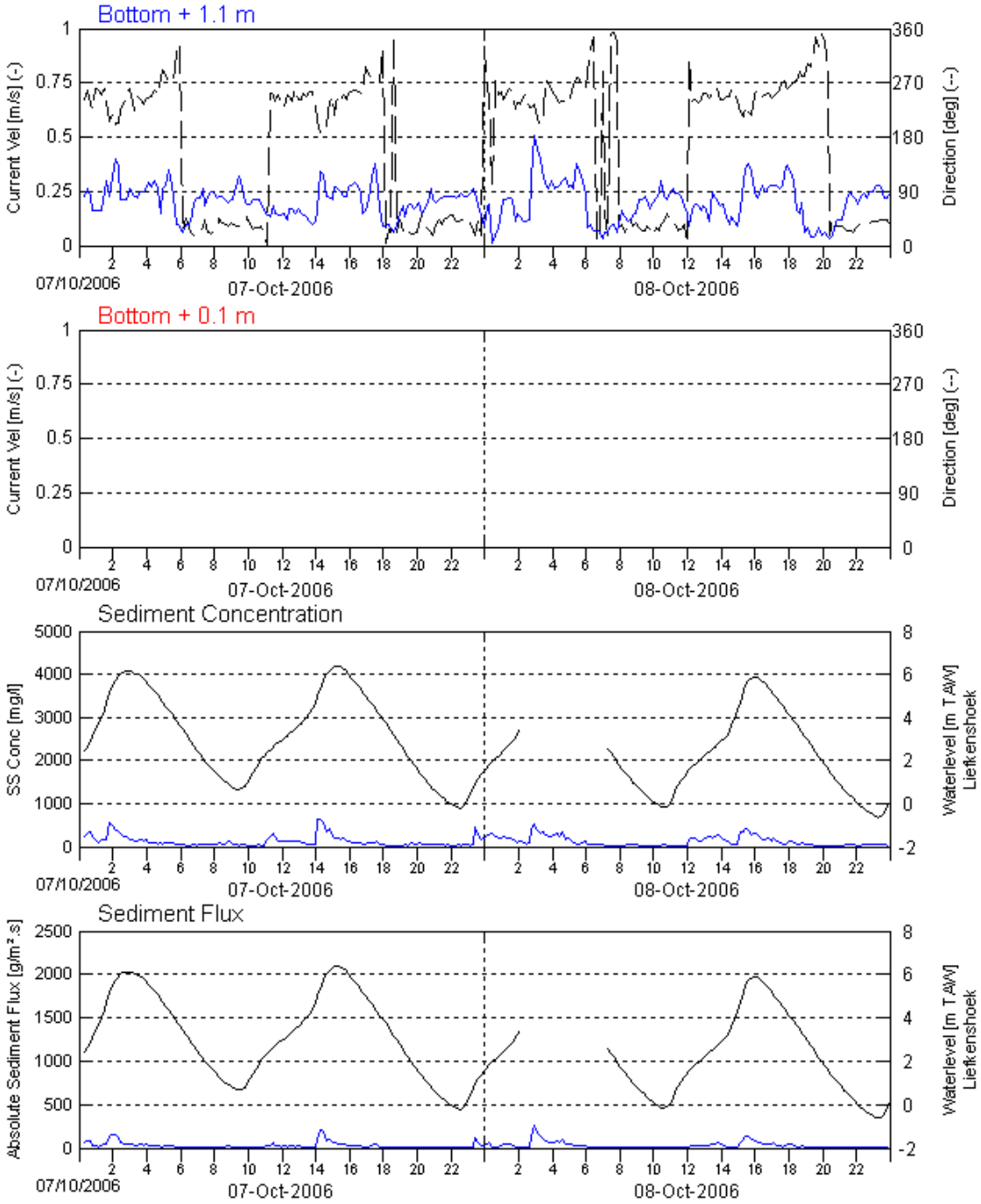
Date: 05/10/2006– 06/10/2006

Data processed by: IMDC

In association with: WL | delft hydraulics, GEMS International

I/RA/11283/06.122MSA

11283 Accretion Deurganckdok – Near bed continuous monitoring – Summer 2006



Current Velocity and Direction upper (RCM9) and lower (Valeport) EMC, OBS SS Conc. & flux and waterlevel

Location: Deurganckdok Sill

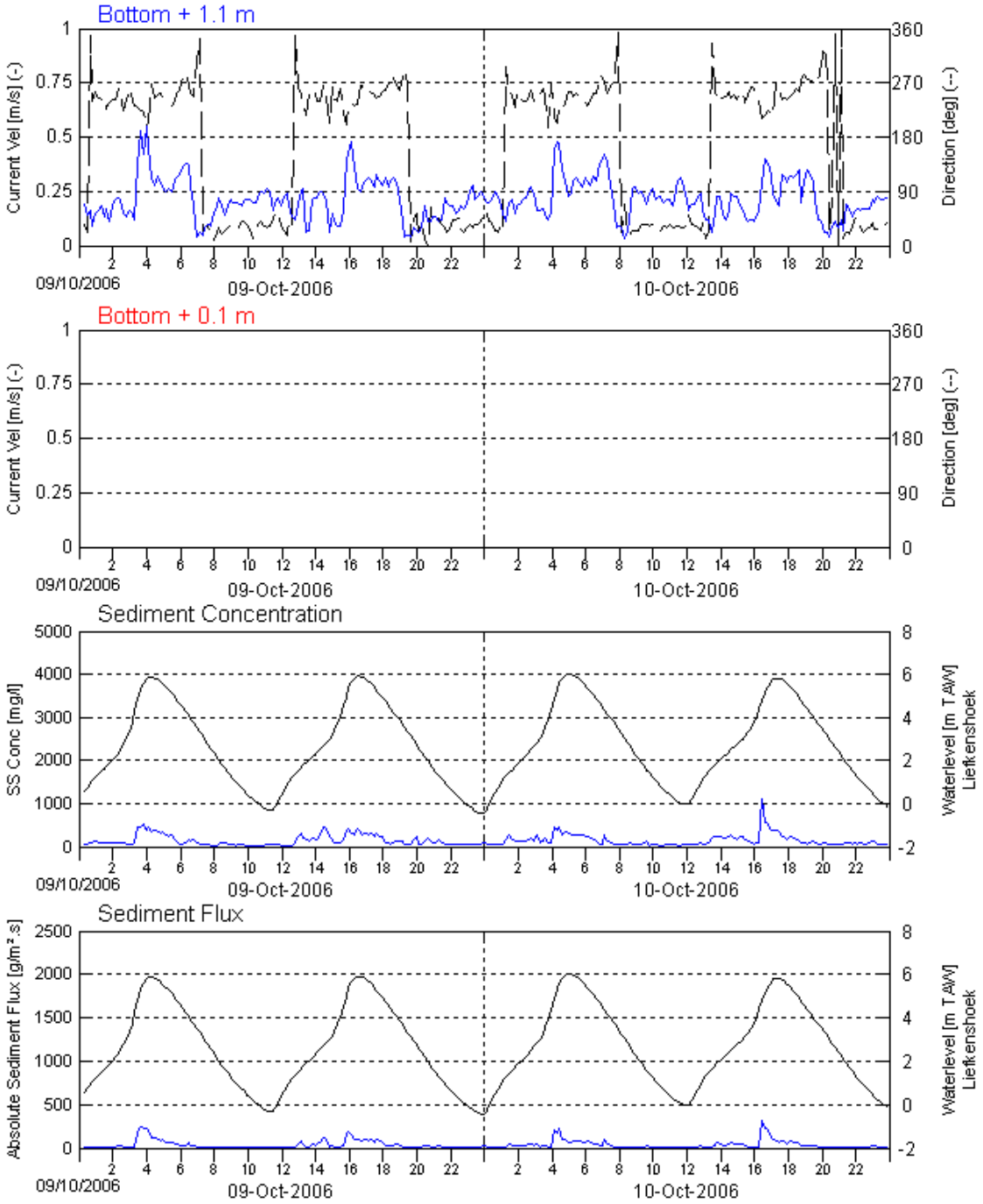
Date: 07/10/2006– 08/10/2006

Data processed by: IMDC

In association with: WL | delft hydraulics, GEMS International

I/RA/11283/06.122MSA

11283 Accretion Deurganckdok – Near bed continuous monitoring – Summer 2006



Current Velocity and Direction upper (RCM9) and lower (Valeport) EMC, OBS SS Conc. & flux and waterlevel

Location: Deurganckdok Sill

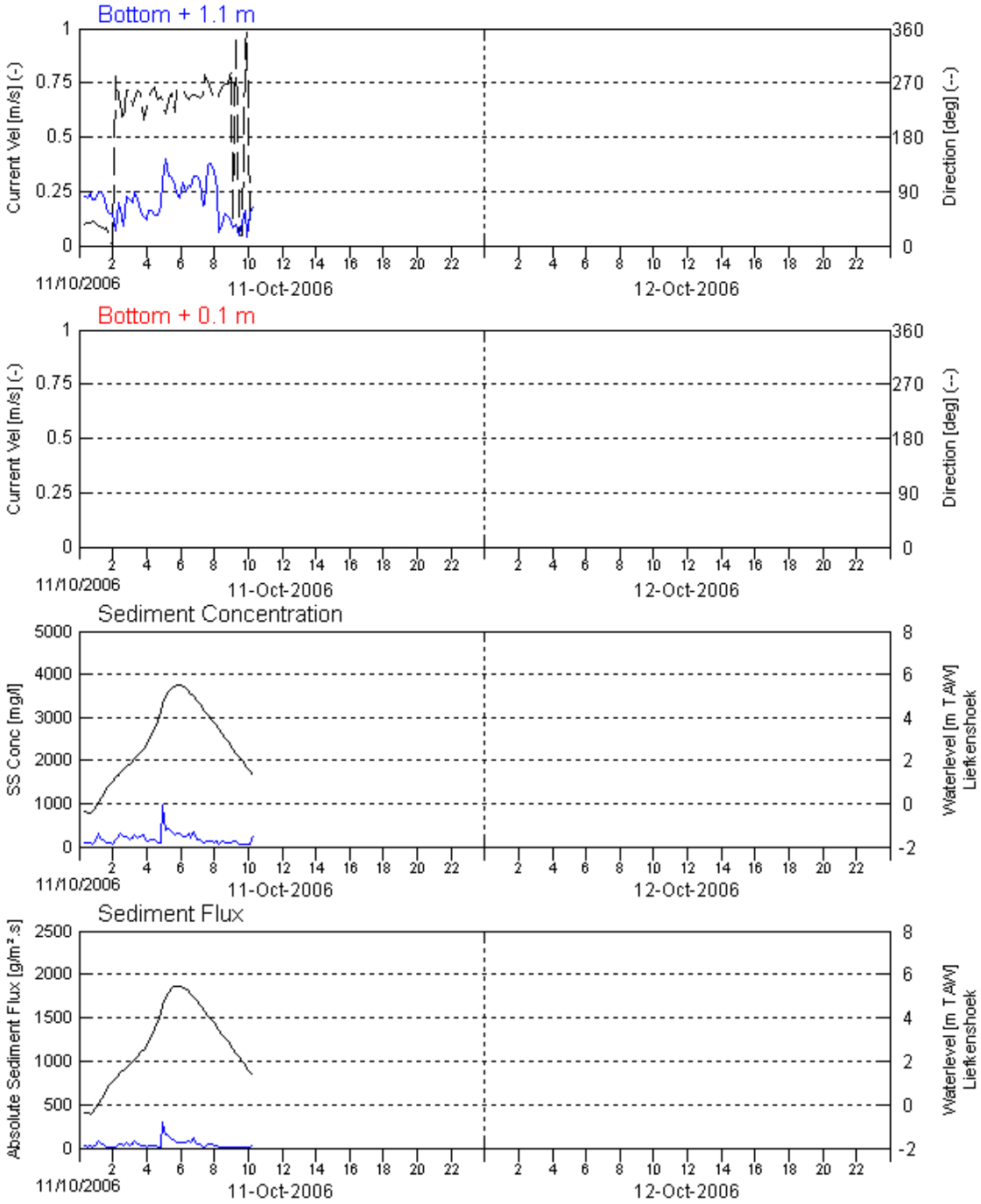
Date: 09/10/2006– 10/10/2006

Data processed by: IMDC

In association with: WL | delft hydraulics, GEMS International

I/RA/11283/06.122MSA

11283 Accretion Deurganckdok – Near bed continuous monitoring – Summer 2006



Current Velocity and Direction upper (RCM9) and lower (Valeport) EMC, OBS SS Conc. & flux and waterlevel

Location: Deurganckdok Sill

Date: 11/10/2006– 12/10/2006

Data processed by: IMDC

In association with: WL | delft hydraulics, GEMS International

I/RA/11283/06.122MSA

RCM9 & VALEPORT AVERAGES FOR EVERY TIDAL PHASE

Date	Tide no.	Phase	Tidal Diff	UP Velocity (RCM9) Bottom +1.0m		DOWN Velocity (Valeport) Bottom +0.1m		SS Concentration [mg/l]		SS Flux [g/m²s]	
			[m]	Magnitude [m/s]	Direction [°]	Magnitude [m/s]	Direction [°]	UP (RCM9)	DOWN (Valeport)	UP (RCM9)	DOWN (Valeport)
Location: Sill DGD											
20060719	1	LW	4,6	0,2	165,9	0,1	187,5	41,9	63,2	8,3	11,7
20060719	1	HW	4,9	0,2	184,2	0,1	166,9	96,8	134,5	20,5	26,1
20060720	2	LW	5	0,2	140,6	0,2	182,9	38,2	57,2	7,2	10,4
20060720	2	HW	4,9	0,2	175,8	0,2	180,6	66,1	94,5	13,9	17,7
20060720	3	LW	4,5	0,1	179,4	0,1	194,4	59,6	81,6	8,4	11,1
20060720	3	HW	4,5	0,2	175,8	0,1	169,6	55,8	77,3	10,7	13,8
20060721	4	LW	4,7	0,2	140,8	0,2	169	35,5	53,1	7,3	10,3
20060721	4	HW	4,7	0,2	179,7	0,2	173,7	48,4	64,3	9,2	11,1
20060721	5	LW	4,6	0,2	142,4	0,2	196,3	36,2	50,3	6,8	8,5
20060722	5	HW	4,7	0,2	179,4	0,2	180,6	48,7	78,8	10,1	16,4
20060722	6	LW	4,8	0,2	136,9	0,2	148,4	38,4	53	8,2	9,9
20060722	6	HW	4,7	0,2	194,9	0,2	180,2	73,9	107,9	15	20,9
20060722	7	LW	4,8	0,2	133,7	0,2	189	36,5	56,8	7,8	11
20060723	7	HW	5	0,2	170,3	0,1	175,4	59,1	81,4	11,8	13
20060723	8	LW	4,9	0,2	131,3	0,2	145,3	38,5	55,8	8,6	11,1
20060723	8	HW	4,9	0,2	176,5	0,1	173,5	48,4	62	9,7	10,1
20060723	9	LW	5,1	0,2	122,2	0,2	148	34,8	52,7	7,9	10,9
20060724	9	HW	5,3	0,2	188	0,2	182,9	49,2	67,9	11,3	13,6
20060724	10	LW	5,1	0,2	138,6	0,2	145,5	49,4	82,3	10,9	16,3
20060724	10	HW	5,1	0,2	170,8	0,1	167,4	55,7	77,7	10,5	12,7
20060724	11	LW	5,4	0,2	120,4	0,2	142,1	60,4	132,7	13,4	26,9
20060725	11	HW	5,5	0,2	189,6	0,2	197,7	57,2	95,1	13,9	19,2
20060725	12	LW	5,2	0,2	157,3	0,2	174,9	38,2	73,4	8,7	14,3

20060725	12	HW	5,2	0,2	176,9	0,2	164,1	45,6	104,7	10	19,9

RCM9 & VALEPORT AVERAGES FOR EVERY TIDAL PHASE

Date	Tide no.	Phase	Tidal Diff	UP Velocity (RCM9) Bottom +1.0m		DOWN Velocity (Valeport) Bottom +0.1m		SS Concentration [mg/l]		SS Flux [g/m²s]	
			[m]	Magnitude [m/s]	Direction [°]	Magnitude [m/s]	Direction [°]	UP (RCM9)	DOWN (Valeport)	UP (RCM9)	DOWN (Valeport)
20060725	13	LW	5,5	0,2	130,9	0,2	174,7	36,8	104,5	7,8	17,9
20060726	13	HW	5,7	0,2	194,5	0,2	195,1	53,5	144,7	11,7	26,4
20060726	14	LW	5,3	0,2	166,3	0,2	173,2	37,6	79,9	8,3	15,1
20060726	14	HW	5,2	0,2	181,4	0,1	179,6	53,9	116,9	12	24,2
20060726	15	LW	5,6	0,2	136,2	0,2	146,2	39,5	101,2	8,8	19,3
20060727	15	HW	5,6	0,2	181,3	0,2	194,4	59,9	138,1	16,3	29,9
20060727	16	LW	5,2	0,2	142,7	0,2	174,9	38	77,3	8,9	16,2
20060727	16	HW	5,2	0,2	178,1	0,1	169,7	51,8	108,7	12,2	21,4
20060728	17	LW	5,7	0,2	133	0,2	145,4	37,9	93,5	8,3	17,8
20060728	17	HW	5,7	0,2	182,2	0,2	177,2	40,1	105,4	8,5	19,6
20060728	18	LW	5,3	0,2	156,1	0,2	160,7	34,6	96,2	7,5	17
20060728	18	HW	5,3	0,2	174,9	0,1	171,1	51,5	131,4	10,6	23,7
20060729	19	LW	5,7	0,2	138,9	0,2	182,6	39,6	163	8,4	28,7
20060729	19	HW	5,6	0,2	177,1	0,2	170,7	46,3	174,6	9,7	30,9
20060729	20	LW	5,2	0,2	135,7	0,2	183,8	30,4	130	7	24,2
20060729	20	HW	5,2	0,2	170,2	0,1	164,9	38,9	184,1	8,6	32,7
20060730	21	LW	5,6	0,2	134,7	0,2	204,2	25,7	150,1	5,8	26,1
20060730	21	HW	5,5	0,2	208,3	0,2	184,5	36,6	163,3	7,5	29,1
20060730	22	LW	5	0,2	172,6	0,2	198,8	42,8	239,1	7,6	37,6
20060730	22	HW	5,1	0,2	179,3	0,2	182,2	54,1	306,7	12,7	43,5
20060731	23	LW	5,3	0,2	136	0,2	237,9	29	229,8	6,7	37,4
20060731	23	HW	5,2	0,2	162,4	-	-	39,2	-	6,6	-
20060801	24	LW	5,3	0,2	186,4	-	-	27,2	-	5,2	-

20060801	24	HW	5,2	0,2	177,2	-	-	28,2	-	5,7	-
20060801	25	LW	4,4	0,2	145,6	-	-	28	-	5,9	-

RCM9 & VALEPORT AVERAGES FOR EVERY TIDAL PHASE

Date	Tide no.	Phase	Tidal Diff	UP Velocity (RCM9) Bottom +1.0m		DOWN Velocity (Valeport) Bottom +0.1m		SS Concentration [mg/l]		SS Flux [g/m²s]	
			[m]	Magnitude [m/s]	Direction [°]	Magnitude [m/s]	Direction [°]	UP (RCM9)	DOWN (Valeport)	UP (RCM9)	DOWN (Valeport)
20060801	25	HW	4,6	0,2	171,9	-	-	28,2	-	4,9	-
20060802	26	LW	4,9	0,2	147,3	-	-	39,2	-	8,6	-
20060802	26	HW	4,8	0,2	168,7	-	-	29,9	-	5,3	-
Location: Buoy 84											
20060802	27	LW	4,3	0,2	172,4	0,2	162	26,6	74	5,2	11,8
20060802	27	HW	4,1	0,5	190,7	0,4	183,9	84,7	112,7	40,7	44,4
20060803	28	LW	4,6	0,2	92,8	0,2	123,6	105,1	137,7	23,3	24,4
20060803	28	HW	4,5	0,5	195	0,4	185,2	89,9	129,5	46,2	51
20060803	29	LW	4,1	0,2	104,3	0,2	163	103,8	120,7	23	20,8
20060803	29	HW	4,1	0,4	190,2	0,3	182,4	94,9	134,8	39,5	43,3
20060804	30	LW	4,4	0,2	126,5	0,2	191,3	106,3	138,3	26,2	27,6
20060804	30	HW	4,1	0,4	194,8	0,4	186,2	71,3	112,6	34,2	44
20060804	31	LW	4	0,2	152,3	0,2	174,3	90,6	117,6	22,1	22,2
20060804	31	HW	3,8	0,4	196,1	0,3	186,5	66,7	89	27,6	29,8
20060805	32	LW	4,1	0,2	193,2	0,2	227	72,3	87,4	16,4	15,6
20060805	32	HW	4	0,4	171,2	0,3	185,1	59,9	92,1	20,7	27,1
20060806	33	LW	4,2	0,2	147,8	0,2	166,3	72,4	83,3	15	13,8
20060806	33	HW	4,3	0,5	193,9	0,4	186,8	57,6	80,7	26,2	30,9
20060806	34	LW	4,4	0,2	133,5	0,2	186,5	73,5	107,5	17	18,4
20060807	34	HW	4,6	0,5	192,7	0,4	187	56,8	78	29,3	32,9
20060807	35	LW	4,7	0,2	85,3	0,2	173,4	72,7	87,5	16,5	15,5
20060807	35	HW	4,8	0,5	192	0,4	187,6	56,9	87,4	29	35

20060807	36	LW	4,8	0,2	128,9	0,2	131,7	82,9	104,3	19,8	19,5
20060808	36	HW	5	0,5	190,9	0,4	185,5	60,7	89,4	34,3	40,2
20060808	37	LW	5,2	0,2	113,6	0,2	127,2	108,3	135,4	28	26

RCM9 & VALEPORT AVERAGES FOR EVERY TIDAL PHASE

Date	Tide no.	Phase	Tidal Diff	UP Velocity (RCM9) Bottom +1.0m		DOWN Velocity (Valeport) Bottom +0.1m		SS Concentration [mg/l]		SS Flux [g/m²s]	
			[m]	Magnitude [m/s]	Direction [°]	Magnitude [m/s]	Direction [°]	UP (RCM9)	DOWN (Valeport)	UP (RCM9)	DOWN (Valeport)
20060808	37	HW	5,1	0,5	191,5	0,4	184,9	69,3	106,6	36,2	43,6
20060808	38	LW	5,5	0,2	148	0,4	159,5	108,5	134,4	27,7	59,8
20060809	38	HW	5,7	0,6	190,1	0,5	184,7	106,9	141,9	64,1	65,1
20060809	39	LW	5,5	0,2	112,2	0,2	139,2	159,1	212,9	42,5	43,4
20060809	39	HW	5,6	0,5	190,5	0,4	183,7	139,2	182,7	79,4	75,5
20060809	40	LW	5,7	0,3	121,4	0,2	183,9	182,9	232,9	53,6	55,8
20060810	40	HW	6	0,6	188,1	0,4	183,3	173,1	244,5	97,6	92,9
20060810	41	LW	5,8	0,3	111,7	0,2	186,6	189,3	228,5	56,4	53,1
20060810	41	HW	5,6	0,5	188,7	0,4	180,3	106,5	142	58,9	59,4
20060810	42	LW	6	0,3	122,9	0,2	180,6	203,6	252,9	57,4	54,7
20060811	42	HW	6,2	0,6	189,4	0,5	183,2	177,5	252,5	108,5	112,8
20060811	43	LW	5,8	0,3	103,2	0,2	170,5	218	299	64,8	66,7
20060811	43	HW	5,7	0,5	187,9	0,4	181,4	160,7	219,9	87,4	84,6
20060812	44	LW	6,2	0,3	106,5	0,2	208,5	209,8	272,2	59,4	59,2
20060812	44	HW	6,3	0,6	188,6	0,5	183,3	246,1	346,8	152	150,9
20060812	45	LW	6	0,3	87,9	0,2	154,7	287,7	380,5	87,1	86,1
20060812	45	HW	5,9	0,6	192,1	0,4	186,9	175,4	247,3	98,9	103,7
20060813	46	LW	6,3	0,3	83,1	0,2	161,4	248,6	424,4	73,6	92,9
20060813	46	HW	6,4	0,6	188,7	0,5	182,2	239	314,7	156,4	144,1
20060813	47	LW	6	0,3	104,4	0,2	148,8	271,6	518,3	82,2	113,3
20060813	47	HW	5,7	0,6	190,6	0,4	185,3	202,4	305,9	117,4	123,8

20060814	48	LW	6,3	0,3	110,3	0,2	118,1	210,8	521,2	62,7	126,4
20060814	48	HW	6,2	0,6	188,6	0,5	183,5	203,5	289,2	133,1	136,2
20060814	49	LW	5,4	0,3	91,4	0,2	187,7	297,3	393	91	91,8
20060814	49	HW	5,7	0,5	195,4	-	-	128,1	-	64,7	-

RCM9 & VALEPORT AVERAGES FOR EVERY TIDAL PHASE

Date	Tide no.	Phase	Tidal Diff	UP Velocity (RCM9) Bottom +1.0m		DOWN Velocity (Valeport) Bottom +0.1m		SS Concentration [mg/l]		SS Flux [g/m²s]	
			[m]	Magnitude [m/s]	Direction [°]	Magnitude [m/s]	Direction [°]	UP (RCM9)	DOWN (Valeport)	UP (RCM9)	DOWN (Valeport)
20060815	50	LW	6	0,3	125,5	-	-	203	-	59,4	-
20060815	50	HW	5,7	0,6	190,2	-	-	135,9	-	84,6	-
20060815	51	LW	5,5	0,3	97,9	-	-	230,5	-	66,5	-
20060815	51	HW	5,2	0,5	186,1	-	-	129,4	-	68,1	-
20060816	52	LW	5,7	0,2	71,8	-	-	147,4	-	38,6	-
20060816	52	HW	5,4	0,6	190	-	-	162,2	-	95,6	-
20060816	53	LW	5	0,2	96,5	-	-	213	-	60,1	-
20060816	53	HW	5	0,5	189	-	-	113,7	-	59,8	-
20060817	54	LW	5,2	0,2	89,5	-	-	141,7	-	36,6	-
20060817	54	HW	4,9	0,5	190,6	-	-	131,4	-	76,2	-
20060817	55	LW	4,5	0,2	84,2	-	-	171,1	-	42,6	-
20060817	55	HW	4,6	0,5	191,8	-	-	111,8	-	58,1	-
20060818	56	LW	4,6	0,2	98	-	-	125,9	-	28,6	-
20060818	56	HW	4,3	0,5	192,6	-	-	91,6	-	46,2	-
20060818	57	LW	4,1	0,2	123,6	-	-	99,6	-	20,8	-
20060818	57	HW	4,2	0,5	192,2	-	-	84,5	-	42,8	-
20060819	58	LW	4,2	0,2	120,5	-	-	95,7	-	22,2	-
20060819	58	HW	3,9	0,4	192	-	-	64	-	27,6	-
20060819	59	LW	4,1	0,2	81,3	-	-	93,6	-	22,1	-
20060820	59	HW	4,4	0,5	193,5	-	-	63,7	-	33	-

20060820	60	LW	4,2	0,2	90,7	-	-	83,5	-	20	-
20060820	60	HW	4,3	0,4	190,7	-	-	67,9	-	31,7	-
20060820	61	LW	4,3	0,2	93,5	-	-	84,1	-	20,4	-
20060821	61	HW	4,6	0,5	191,5	-	-	68,1	-	34,6	-
20060821	62	LW	4,7	0,2	80,6	-	-	92,2	-	22,3	-

RCM9 & VALEPORT AVERAGES FOR EVERY TIDAL PHASE

Date	Tide no.	Phase	Tidal Diff	UP Velocity (RCM9) Bottom +1.0m		DOWN Velocity (Valeport) Bottom +0.1m		SS Concentration [mg/l]		SS Flux [g/m²s]	
			[m]	Magnitude [m/s]	Direction [°]	Magnitude [m/s]	Direction [°]	UP (RCM9)	DOWN (Valeport)	UP (RCM9)	DOWN (Valeport)
20060821	62	HW	4,5	0,5	189,9	-	-	68,1	-	32	-
20060821	63	LW	4,8	0,2	84	-	-	96,8	-	23,5	-
20060822	63	HW	5,2	0,5	192,3	-	-	94,6	-	52,8	-
20060822	64	LW	5,5	0,3	188,3	0,3	231	112	134	34,8	39,3
20060823	64	HW	5,5	0,5	176,8	0,5	161,9	127,1	575,1	68,3	329,6
20060823	65	LW	5,2	0,3	254,4	0,2	287,1	151,3	403,5	43,5	81
20060823	65	HW	5,2	0,5	177,4	0,5	162,4	119,2	208,9	57,6	92,8
20060823	66	LW	5,5	0,2	221,8	0,2	286,4	121,8	165,3	31,2	33,9
20060824	66	HW	5,7	0,6	175,9	0,5	161,6	126,6	342,4	73,8	210,5
20060824	67	LW	5,2	0,2	229,1	0,2	295,4	198,6	242,6	55,4	52,5
20060824	67	HW	5,3	0,5	176,7	0,5	161,1	126,7	187,4	65,1	87,3
20060824	68	LW	5,6	0,3	272,5	0,2	296,7	181,2	208,5	50,7	43,1
20060825	68	HW	5,7	0,5	176,5	0,5	160,7	140,7	296,1	75,4	127,6
20060825	69	LW	5,4	0,3	235,2	0,2	278,4	196,5	231,7	56,2	50,8
20060825	69	HW	5,3	0,5	177,4	0,4	282,1	104,2	69	50,4	-375,9
20060825	70	LW	5,8	0,3	280	0,2	300	184,6	225,3	50,3	38,4
20060826	70	HW	5,7	0,5	178,8	0,5	179,8	144,5	172,4	80,1	63
20060826	71	LW	5,4	0,3	253,6	0,2	304,8	230,7	266,5	66	57,7
20060826	71	HW	5,4	0,5	177,4	0,5	163,4	131,6	375	64,6	138,2

20060827	72	LW	5,7	0,2	266,6	0,2	272,8	210,8	241,9	58,2	50,7
20060827	72	HW	5,6	0,6	176,2	0,4	215,4	158,5	126,4	85,8	-307,5
20060827	73	LW	5,3	0,3	252	0,2	318,1	214,4	266,4	59,2	40,6
20060827	73	HW	5,3	0,5	176,2	0,5	160,3	106,8	158,3	51,1	70,2
20060828	74	LW	5,7	0,2	245,1	0,2	281	185,2	225,5	49,4	46,1
20060828	74	HW	5,6	0,6	175,8	0,5	160,6	137,7	323,1	74,3	131,7

RCM9 & VALEPORT AVERAGES FOR EVERY TIDAL PHASE

Date	Tide no.	Phase	Tidal Diff	UP Velocity (RCM9) Bottom +1.0m		DOWN Velocity (Valeport) Bottom +0.1m		SS Concentration [mg/l]		SS Flux [g/m²s]	
			[m]	Magnitude [m/s]	Direction [°]	Magnitude [m/s]	Direction [°]	UP (RCM9)	DOWN (Valeport)	UP (RCM9)	DOWN (Valeport)
20060828	75	LW	5	0,3	273,4	0,2	280	191,6	201,9	52	40,1
20060828	75	HW	5,3	0,5	180,4	0,5	161,1	83,6	183	41,2	76
20060829	76	LW	5,5	0,3	267,8	0,2	272,7	171,2	192,7	45,7	37,9
20060829	76	HW	5,3	0,5	176,9	0,5	181,2	116,6	71,3	58,9	-450,3
20060829	77	LW	5,1	0,3	254,1	0,2	306,9	186	217	48,9	31
20060829	77	HW	5,1	0,5	175,9	0,4	161,8	107,5	164,4	49,9	70,3
20060830	78	LW	5,3	0,2	226,5	0,2	272,5	169,4	198,8	43,3	36,2
20060830	78	HW	5,2	0,5	175,5	0,5	162	157,5	200,9	79	89
20060830	79	LW	4,1	0,3	222,1	0,2	291,2	242,1	587,5	64,1	119,5
Location: Sill DGD											
20060830	79	HW	4	0,2	190,3	0,1	180,8	138	157,6	25,4	27,6
20060831	80	LW	5,2	0,2	137,9	0,2	165,1	69,4	91	16,4	19,9
20060831	80	HW	4,8	0,2	161,8	0,2	159,9	128,8	147,1	26,6	29,5
20060831	81	LW	4,7	0,2	137,6	0,2	150,4	76,8	106,1	16,1	19,4
20060831	81	HW	4,6	0,2	188,9	0,2	183,8	184,6	221,7	33,2	36,6
20060901	82	LW	4,6	0,2	137,2	0,2	173,6	68,4	91,6	14,4	17,8
20060901	82	HW	4,5	0,2	170,3	0,2	168,5	137,3	154,6	29,9	31,9
20060901	83	LW	4,4	0,2	153,4	0,2	172,1	69,4	95,7	15,1	19,6

20060901	83	HW	4,2	0,2	174,7	0,1	199,9	166,2	210,1	30,7	38,5
20060902	84	LW	4,1	0,2	135,5	0,2	164,2	112,9	159,3	24,4	29,4
20060902	84	HW	4,1	0,2	166,9	0,2	189,7	156,1	183,7	29,8	33,9
20060902	85	LW	3,8	0,2	139,1	0,2	149,7	89,2	96,5	18,2	15,5
20060902	85	HW	3,6	0,2	170,4	0,1	205,7	138,5	171,2	29,4	33,8
20060903	86	LW	3,4	0,2	138	0,1	196,7	66,6	87,1	13,3	14,4
20060903	86	HW	3,6	0,2	167,1	0,1	201,3	115,6	132,8	23	23,4

RCM9 & VALEPORT AVERAGES FOR EVERY TIDAL PHASE

Date	Tide no.	Phase	Tidal Diff	UP Velocity (RCM9) Bottom +1.0m		DOWN Velocity (Valeport) Bottom +0.1m		SS Concentration [mg/l]		SS Flux [g/m²s]	
			[m]	Magnitude [m/s]	Direction [°]	Magnitude [m/s]	Direction [°]	UP (RCM9)	DOWN (Valeport)	UP (RCM9)	DOWN (Valeport)
20060903	87	LW	3,2	0,2	114,2	0,1	152,4	48,4	60,1	8,4	9
20060903	87	HW	3,4	0,2	169,9	0,1	202,2	74,7	90,7	14,7	16,1
20060904	88	LW	4	0,2	131,2	0,2	130,1	42,4	53,8	8,4	8,9
20060904	88	HW	3,9	0,2	185,6	0,1	189,1	97,6	109	16,2	17,1
20060904	89	LW	4,2	0,2	124,7	0,2	161,8	70,6	91,6	14,9	16,6
20060905	89	HW	4,4	0,2	166,6	0,1	191,2	107,7	130,7	21	23,6
20060905	90	LW	4,7	0,2	137	0,2	141,4	65,8	82,9	14,5	14,3
20060905	90	HW	4,5	0,2	200,3	0,2	209,3	111,2	131,4	20,8	21,6
20060905	91	LW	4,9	0,2	130,1	0,2	162,1	53,3	67,2	12,1	12,7
20060906	91	HW	5,3	0,2	185,3	0,2	194,8	138,9	163	32,8	33,5
20060906	92	LW	5,3	0,2	134,4	0,2	158	81,6	111,1	19,3	22,1
20060906	92	HW	5,2	0,2	195,8	0,2	205,7	124,8	152,5	24,9	29,9
20060906	93	LW	5,3	0,2	137,4	0,2	136,2	69,4	94,2	16,6	19,6
20060907	93	HW	5,9	0,2	195,3	0,2	190,5	168,6	193,5	39,6	42
20060907	94	LW	5,5	0,2	136,8	0,2	120,4	76,2	99,3	18,7	20,8
20060907	94	HW	5,4	0,2	184	0,2	192,3	133,1	157,7	31,2	32,4
20060907	95	LW	5,7	0,2	120,7	0,2	135,8	84,9	107,9	19	19,7

20060908	95	HW	6	0,2	195,1	0,2	196,6	152,5	193,7	40	-1085,7
20060908	96	LW	6,1	0,2	140,6	0,2	147,9	63,1	86,6	14,9	-1037,1
20060908	96	HW	5,6	0,2	186,9	0,2	179	155,8	184,1	37,1	-7412,7
20060908	97	LW	6,3	0,2	139,2	0,2	136,3	80,2	116,3	20,3	25,6
20060909	97	HW	6,4	0,3	184,6	0,2	193,8	157,8	199,3	46,9	53,2
20060909	98	LW	6	0,2	148,2	0,2	155,6	113,5	152,3	28,6	-1234,5
20060909	98	HW	6	0,2	182,6	0,2	189,8	148	177,8	38,5	39,6
20060909	99	LW	6,4	0,2	148,8	0,2	172,5	88	128	21,5	27,8

RCM9 & VALEPORT AVERAGES FOR EVERY TIDAL PHASE

Date	Tide no.	Phase	Tidal Diff	UP Velocity (RCM9) Bottom +1.0m		DOWN Velocity (Valeport) Bottom +0.1m		SS Concentration [mg/l]		SS Flux [g/m²s]	
			[m]	Magnitude [m/s]	Direction [°]	Magnitude [m/s]	Direction [°]	UP (RCM9)	DOWN (Valeport)	UP (RCM9)	DOWN (Valeport)
20060910	99	HW	6,7	0,3	193,8	0,2	188,6	155,7	189,6	50,6	50,3
20060910	100	LW	6,2	0,2	145,9	0,2	153,5	109,5	135,1	26,8	-4017,8
20060910	100	HW	6	0,2	200,7	0,2	218,2	172,8	208,9	42,2	-5651,8
20060911	101	LW	6,5	0,2	135,7	0,2	128,9	90,3	132,8	23,7	-10025,6
20060911	101	HW	6,5	0,3	194,2	0,2	200,4	182,1	250,3	50,6	60,7
20060911	102	LW	6	0,2	135	0,2	145,1	110	131,5	24,5	25,6
20060911	102	HW	5,9	0,2	187,7	0,2	195	199	241,7	47,2	-992,9
20060912	103	LW	6,4	0,2	132,1	0,2	242,7	93,6	316,6	24	75,2
20060912	103	HW	6,2	0,2	192,9	-	-	135,2	-	40,8	-
20060912	104	LW	5,7	0,2	133,7	-	-	98,6	-	23,8	-
20060912	104	HW	5,7	0,2	196	-	-	156,8	-	39,7	-
20060913	105	LW	6	0,2	144,7	-	-	75,4	-	18,2	-
20060913	105	HW	5,7	0,2	180,5	-	-	91,1	-	23,7	-
20060913	106	LW	4,9	0,2	204,1	0,1	28,3	115,3	33,2	28,1	4,3
20060913	106	HW	4,8	0,2	206,2	0,2	211,8	127,7	135,6	33,8	31,1
20060914	107	LW	5,5	0,2	133,4	0,1	163,3	62,8	70	14,3	12,7

20060914	107	HW	5,2	0,2	192,5	0,2	209,9	94,5	94,5	22,1	18,9
20060914	108	LW	4,8	0,2	145,7	0,1	160,5	81,4	84	18,3	14,7
20060914	108	HW	5	0,2	179,4	0,2	203,3	110,2	119,5	25,5	22,5
20060915	109	LW	4,9	0,2	128,6	0,2	151,1	63,9	72,1	14,5	12,9
20060915	109	HW	4,3	0,2	165,8	0,1	183,7	88,9	94,5	15,2	14,5
20060915	110	LW	4,3	0,2	143,8	0,1	150,7	60,3	70,8	12,8	12,8
20060915	110	HW	4,4	0,2	163,3	0,1	171,6	110,4	109,9	22,8	17,9
20060916	111	LW	4,1	0,2	126,8	0,1	154,1	52,6	60,2	10,5	9,8
20060916	111	HW	3,6	0,2	158,8	0,1	180,1	66,9	67,5	12,1	10,2

RCM9 & VALEPORT AVERAGES FOR EVERY TIDAL PHASE

Date	Tide no.	Phase	Tidal Diff	UP Velocity (RCM9) Bottom +1.0m		DOWN Velocity (Valeport) Bottom +0.1m		SS Concentration [mg/l]		SS Flux [g/m²s]	
			[m]	Magnitude [m/s]	Direction [°]	Magnitude [m/s]	Direction [°]	UP (RCM9)	DOWN (Valeport)	UP (RCM9)	DOWN (Valeport)
20060916	112	LW	3,7	0,2	114,8	0,1	145,7	53,2	54,7	9,7	8,3
20060917	112	HW	3,7	0,2	154,6	0,1	153,6	60,1	59,9	11,6	9,3
20060917	113	LW	3,6	0,2	147,9	0,1	160,6	42,8	46,8	8,3	7
20060918	113	HW	4,2	0,2	155,2	0,1	157	64,4	64,7	12,5	10,1
20060918	114	LW	4,1	0,2	142,5	0,2	130,4	54,5	48	11,1	7,6
20060918	114	HW	3,9	0,2	176	0,1	179,1	49	58,7	7,7	7,6
20060918	115	LW	4,3	0,2	134	0,1	147,3	70,8	52,9	14	7,9
20060919	115	HW	4,6	0,2	171,6	0,1	181,9	93,6	77,7	19,3	12,9
20060919	116	LW	4,5	0,2	128,9	0,1	132,9	50,1	55	10,3	8,3
20060919	116	HW	4,5	0,2	178,1	0,1	186,6	50,2	59,6	10,2	9,9
20060919	117	LW	4,8	0,2	147,5	0,1	175,3	62,4	58,7	13	9
20060920	117	HW	5,2	0,2	178,4	0,1	202,2	62,4	68,9	12,7	11,5
20060920	118	LW	4,9	0,2	130,1	0,2	149,9	56,5	61,8	13,5	0,8
20060920	118	HW	4,5	0,2	177,8	0,1	200,4	67,5	63,3	12,3	2,8
20060920	119	LW	5,4	0,2	125,8	0,1	123,8	50,7	53,2	11,3	8,4

20060921	119	HW	5,4	0,2	181,3	0,2	168,8	68	64,3	16,7	12,7
20060921	120	LW	5	0,2	149,6	0,1	154,8	73,8	76,2	17,1	12,8
20060921	120	HW	5,1	0,2	182,4	0,1	179,3	72,7	77,5	16	12,9
20060921	121	LW	5,5	0,2	140,5	0,1	161	62	63,1	13,7	10,3
20060922	121	HW	5,7	0,2	192,1	0,2	179,9	77,2	79,9	19,6	16,2
20060922	122	LW	5,3	0,2	127,9	0,2	135,2	77,9	79,8	18,4	15,1
20060922	122	HW	5,2	0,2	180,7	0,1	209	78,9	81,5	17	15,1
20060922	123	LW	5,5	0,2	139,1	0,2	136,7	62,7	66,3	16,5	13
20060923	123	HW	5,7	0,2	186	0,2	192,8	79,1	84,5	20,5	18,5
20060923	124	LW	5,4	0,2	150,8	0,1	153,4	67,6	71,8	15,6	12,2

RCM9 & VALEPORT AVERAGES FOR EVERY TIDAL PHASE

Date	Tide no.	Phase	Tidal Diff	UP Velocity (RCM9) Bottom +1.0m		DOWN Velocity (Valeport) Bottom +0.1m		SS Concentration [mg/l]		SS Flux [g/m²s]	
			[m]	Magnitude [m/s]	Direction [°]	Magnitude [m/s]	Direction [°]	UP (RCM9)	DOWN (Valeport)	UP (RCM9)	DOWN (Valeport)
20060923	124	HW	5,4	0,2	183,5	0,1	181,5	86,1	88,4	20	16,7
20060923	125	LW	5,8	0,2	157,2	0,2	152,2	63,7	68	15,5	13,4
20060924	125	HW	5,7	0,2	182,9	0,2	187,4	77,4	80	18,8	17,8
20060924	126	LW	5,5	0,2	134,3	0,2	159,1	72,4	76	18	14,1
20060924	126	HW	5,5	0,2	176,7	0,2	180	85,3	77,4	20	14,7
20060924	127	LW	5,7	0,2	134,5	0,2	153,2	56,2	60,7	14,2	11
20060925	127	HW	5,7	0,2	187,6	0,2	192,5	79,5	83,7	20,3	15,9
20060925	128	LW	5,5	0,2	164,6	0,2	215,8	61,7	78,7	14,7	15
20060925	128	HW	5,5	0,2	191,5	-	-	97,5	-	23,1	-
20060925	129	LW	5,6	0,2	134,7	-	-	61,5	-	13,4	-
20060926	129	HW	5,6	0,2	175,9	-	-	63,2	-	16,2	-
20060926	130	LW	5,4	0,2	149,5	-	-	72,4	-	16,5	-
20060926	130	HW	5,3	0,2	192,1	-	-	67,6	-	15,9	-
20060927	131	LW	5,6	0,2	158,1	-	-	69,4	-	13	-

20060927	131	HW	5,4	0,2	179,8	-	-	108,2	-	22	-
20060927	132	LW	5,2	0,2	167,4	-	-	63,4	-	13,3	-
20060927	132	HW	5,2	0,2	180,9	-	-	71,7	-	15,9	-
20060928	133	LW	5,4	0,2	162,9	-	-	61,5	-	12,3	-
20060928	133	HW	5,1	0,2	180	-	-	80,2	-	16,5	-
20060928	134	LW	4,9	0,2	142,5	-	-	72,1	-	16,6	-
20060928	134	HW	5,1	0,2	178,7	-	-	88	-	20	-
20060929	135	LW	4,9	0,2	157,6	-	-	68,9	-	16,5	-
20060929	135	HW	4,9	0,2	166,4	-	-	85,7	-	17,3	-
20060929	136	LW	4,8	0,2	139,7	-	-	75,5	-	16,1	-
20060929	136	HW	4,5	0,2	185,2	-	-	66,4	-	11,7	-

RCM9 & VALEPORT AVERAGES FOR EVERY TIDAL PHASE

Date	Tide no.	Phase	Tidal Diff	UP Velocity (RCM9) Bottom +1.0m		DOWN Velocity (Valeport) Bottom +0.1m		SS Concentration [mg/l]		SS Flux [g/m²s]	
			[m]	Magnitude [m/s]	Direction [°]	Magnitude [m/s]	Direction [°]	UP (RCM9)	DOWN (Valeport)	UP (RCM9)	DOWN (Valeport)
20060930	137	LW	4,5	0,2	146,5	-	-	43,1	-	9,5	-
20060930	137	HW	4,3	0,2	168,3	-	-	58,4	-	9,8	-
20060930	138	LW	4,3	0,2	152,4	-	-	79,5	-	16,8	-
20060930	138	HW	4,2	0,2	165,8	-	-	53,8	-	9,8	-
20061001	139	LW	4,2	0,2	165,2	-	-	40,5	-	7,9	-
20061001	139	HW	3,9	0,2	166,1	-	-	113,4	-	22,7	-
20061001	140	LW	3,7	0,2	146,8	-	-	41,5	-	8,7	-
20061001	140	HW	3,6	0,2	152,7	-	-	35,8	-	6	-
20061002	141	LW	3,2	0,1	169,9	-	-	41,6	-	6,8	-
20061002	141	HW	3	0,1	143	-	-	35,3	-	5	-
20061002	142	LW	3,1	0,2	142,6	-	-	33,9	-	5,8	-
20061002	142	HW	3,5	0,2	153,6	-	-	56,5	-	8,7	-
20061003	143	LW	4	0,2	122,1	-	-	35,5	-	6,2	-

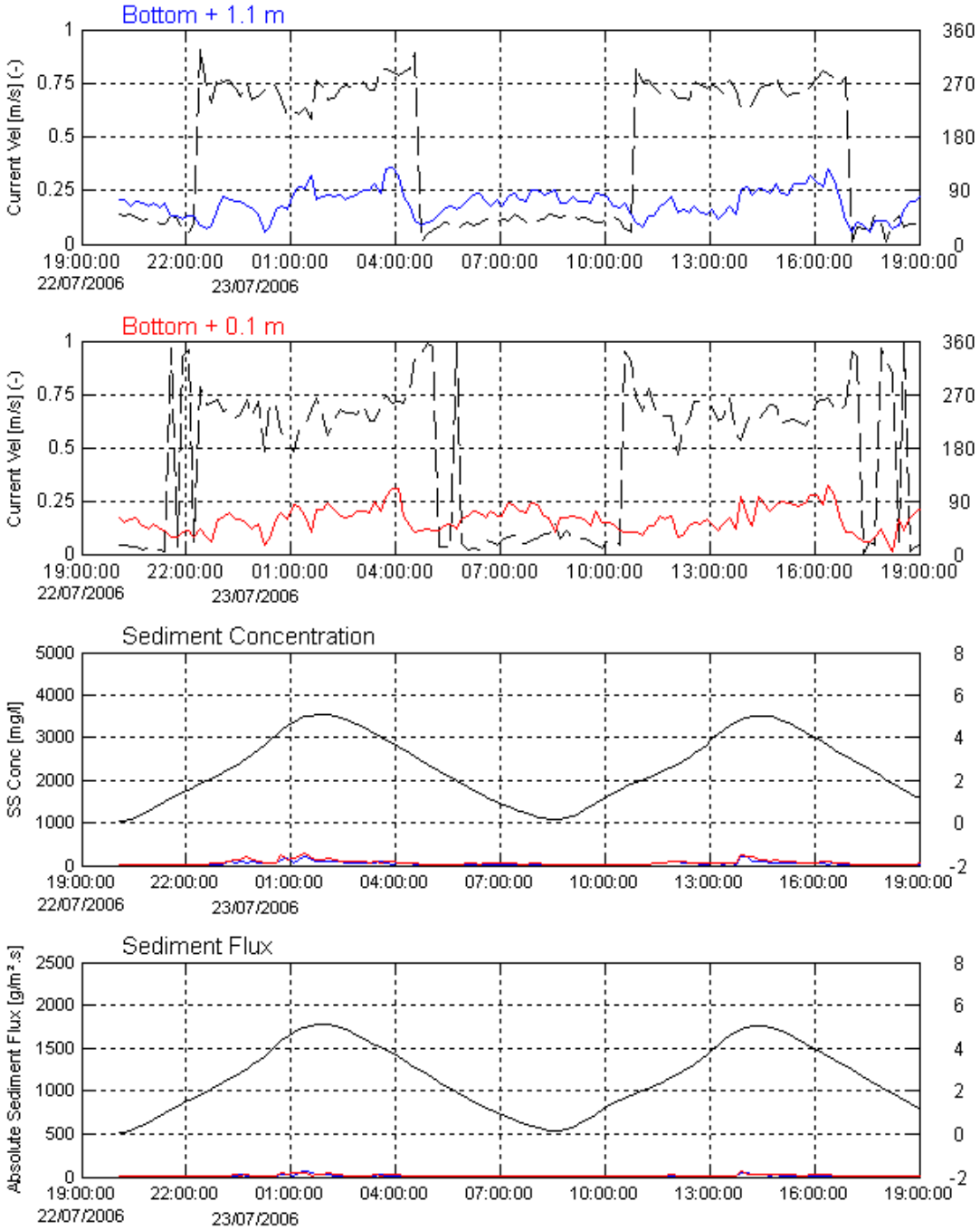
20061003	143	HW	3,8	0,1	171,9	-	-	46,1	-	6,7	-
20061003	144	LW	4	0,2	133,5	-	-	41,3	-	7,7	-
20061004	144	HW	4,7	0,2	174,3	-	-	71,6	-	13	-
20061004	145	LW	4,7	0,2	143,8	-	-	50,1	-	9,7	-
20061004	145	HW	4,5	0,1	165,5	-	-	74,5	-	10	-
20061004	146	LW	5	0,2	113,2	-	-	55,3	-	12,3	-
20061005	146	HW	5,4	0,2	188,2	-	-	103,9	-	21,8	-
20061005	147	LW	5,3	0,2	139	-	-	64,5	-	13,1	-
20061005	147	HW	5,1	0,2	186,4	-	-	119,1	-	21,6	-
20061005	148	LW	5,5	0,2	149,9	-	-	55,2	-	12,6	-
20061006	148	HW	5,9	0,2	194,2	-	-	175,2	-	41,4	-
20061006	149	LW	5,5	0,2	124,7	-	-	70,6	-	16,5	-

RCM9 & VALEPORT AVERAGES FOR EVERY TIDAL PHASE

Date	Tide no.	Phase	Tidal Diff	UP Velocity (RCM9) Bottom +1.0m		DOWN Velocity (Valeport) Bottom +0.1m		SS Concentration [mg/l]		SS Flux [g/m²s]	
			[m]	Magnitude [m/s]	Direction [°]	Magnitude [m/s]	Direction [°]	UP (RCM9)	DOWN (Valeport)	UP (RCM9)	DOWN (Valeport)
20061006	149	HW	5,4	0,2	181,4	-	-	146,8	-	28,6	-
20061006	150	LW	5,8	0,2	140,2	-	-	74,3	-	16,6	-
20061007	150	HW	6,3	0,2	197,9	-	-	185,6	-	42,5	-
20061007	151	LW	5,5	0,2	141,4	-	-	77,6	-	18	-
20061007	151	HW	5,7	0,2	177,4	-	-	170,1	-	35,8	-
20061007	152	LW	6,6	0,2	126,6	-	-	62,3	-	14	-
20061008	152	HW	6,1	0,2	175,1	-	-	143	-	33,6	-
20061008	153	LW	6,5	0,2	179,3	-	-	72,1	-	16,9	-
20061009	153	HW	6,4	0,2	191,5	-	-	136,8	-	46	-
20061009	154	LW	6,2	0,2	126	-	-	107,9	-	27,6	-
20061009	154	HW	6,2	0,2	191,9	-	-	185,7	-	45,8	-
20061009	155	LW	6,3	0,2	128	-	-	125,5	-	27,5	-

20061010	155	HW	6,4	0,2	191,6	-	-	173,2	-	47,1	-
20061010	156	LW	6	0,2	129,8	-	-	97,8	-	27	-
20061010	156	HW	5,8	0,2	188	-	-	214,1	-	51	-
20061011	157	LW	6,2	0,2	143,8	-	-	96,5	-	22	-
20061011	157	HW	5,9	0,2	187,4	-	-	225,7	-	52,2	-

11283 Accretion Deurganckdok – Near bed continuous monitoring – Summer 2006



Current Velocity and Direction upper (RCM9) and lower (Valeport) EMC, OBS SS Conc. & flux and waterlevel

Location:	Date:
Deurganckdok Sill	Avg Tide 22/07– 23/07

Data processed by: IMDC

In association with: WL | delft hydraulics, GEMS International

I/RA/11283/06.122MSA

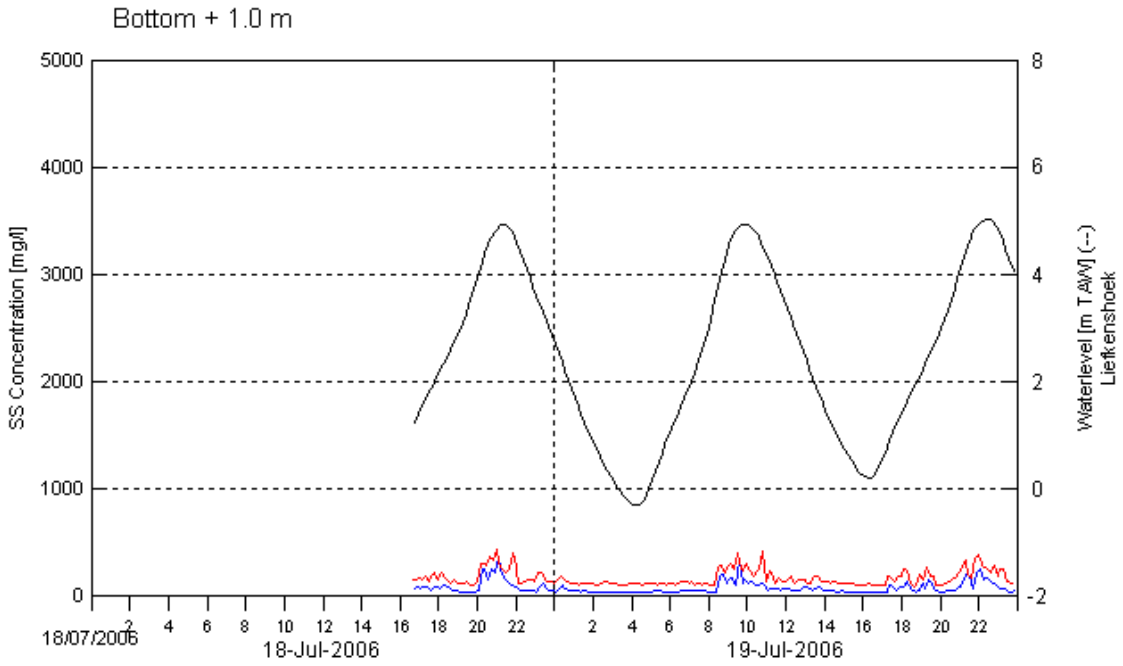
APPENDIX E.

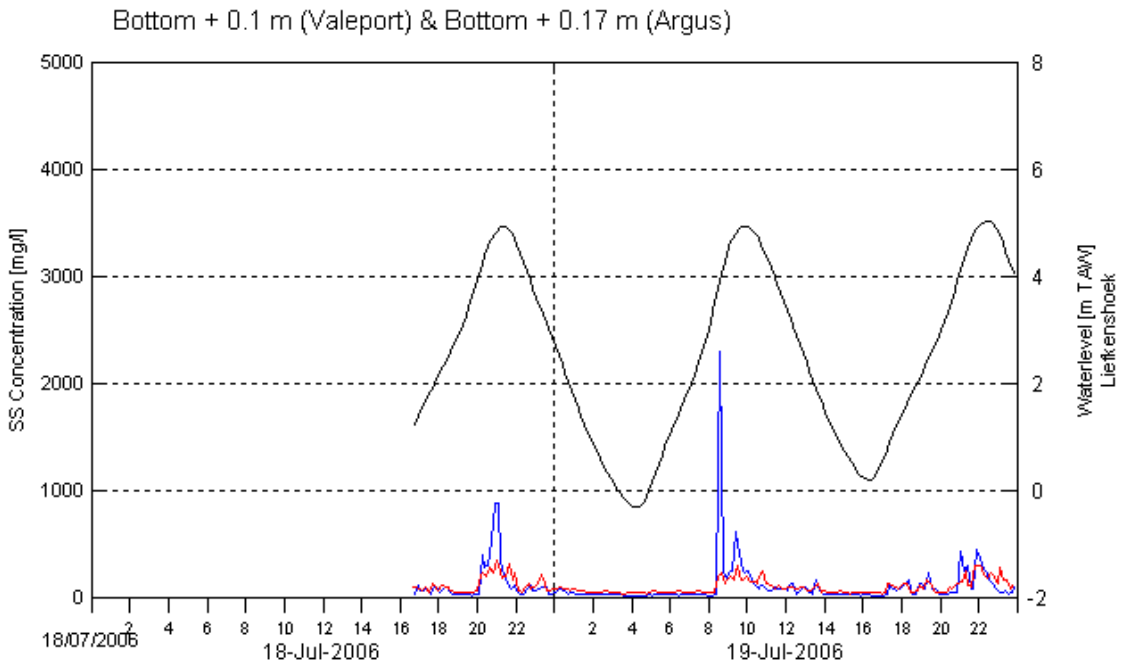
COMPARISON OF RCM9 & VALEPORT SENSORS

TO ARGUS SENSORS

E.1 CDW Frame

11283 Accretion Deurganckdok – Near bed continuous monitoring – Summer 2006





Comparison of RCM9 & Valeport (blue) to Argus sensors (red) at 1.0 and 0.1 m above the bottom for SS concentration

Location: Deurganckdok CDW

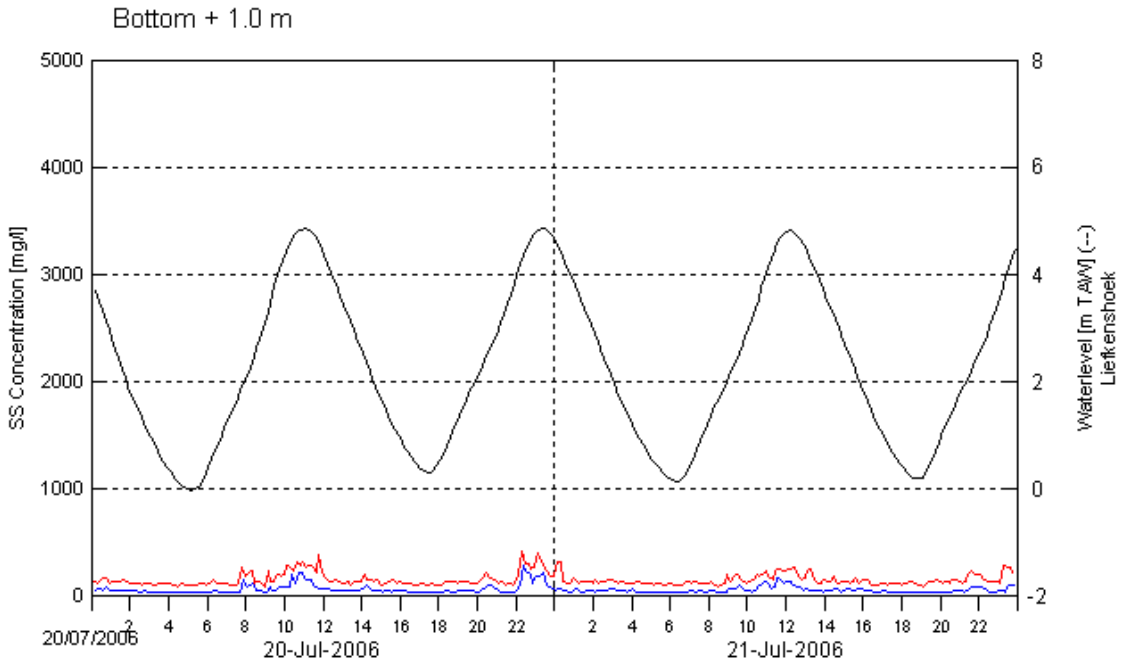
Date: 18/07/06 – 19/07/06

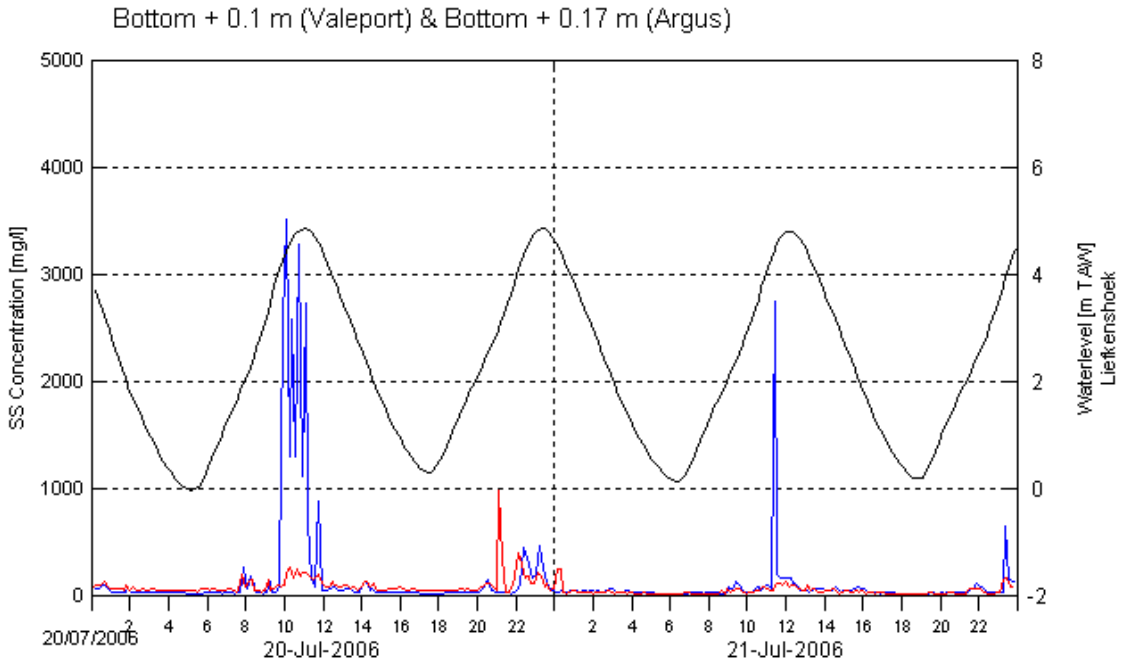
Data processed by: IMDC

In association with: WL | delft hydraulics, GEMS International

I/RA/11283/06.122/MSA

11283 Accretion Deurganckdok – Near bed continuous monitoring – Summer 2006





Comparison of RCM9 & Valeport (blue) to Argus sensors (red) at 1.0 and 0.1 m above the bottom for SS concentration

Location: Deurganckdok CDW

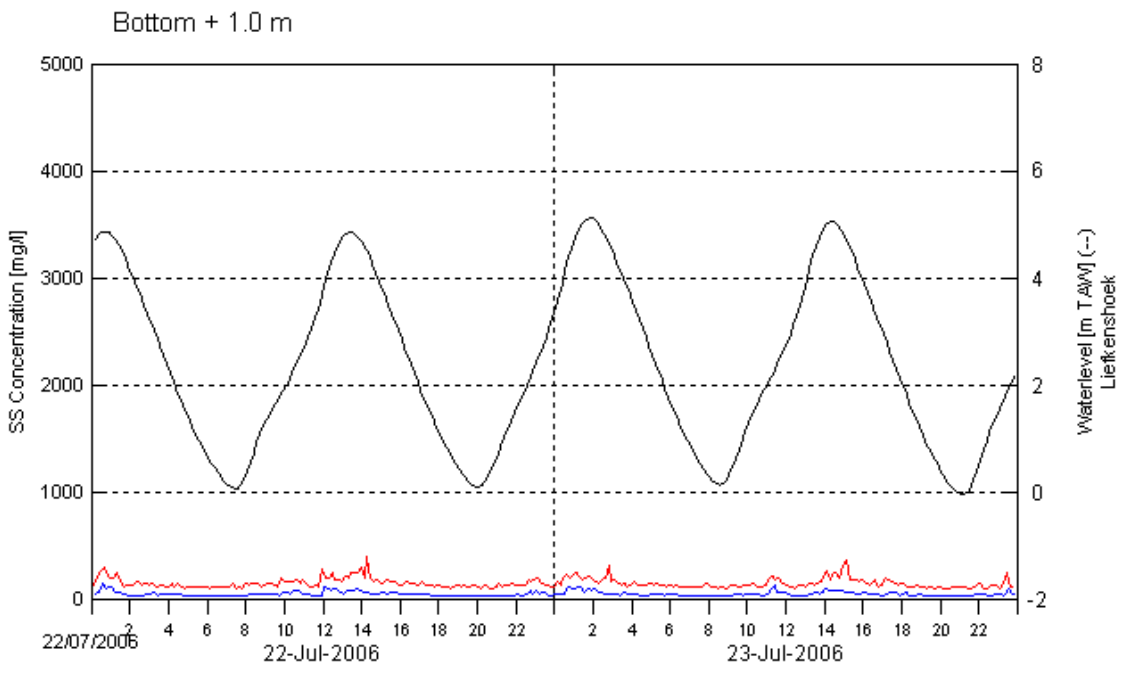
Date: 20/07/06 – 21/07/06

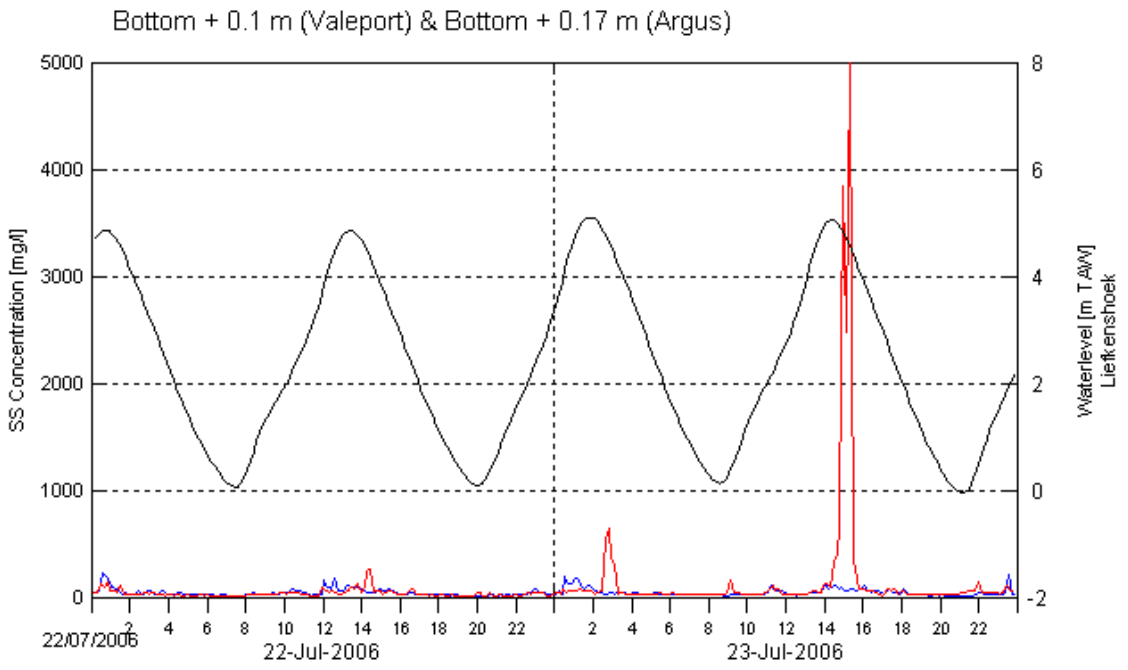
Data processed by: IMDC

In association with: WL | delft hydraulics, GEMS International

I/RA/11283/06.122/MSA

11283 Accretion Deurganckdok – Near bed continuous monitoring – Summer 2006





Comparison of RCM9 & Valeport (blue) to Argus sensors (red) at 1.0 and 0.1 m above the bottom for SS concentration

Location: Deurganckdok CDW

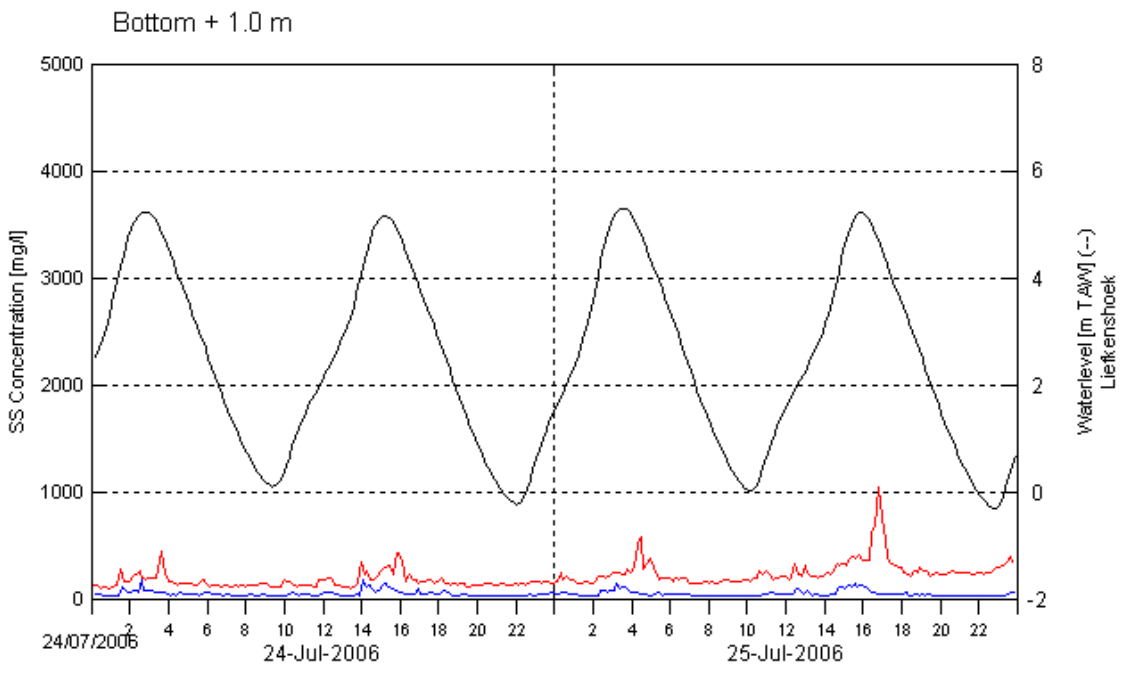
Date: 22/07/06 – 23/07/06

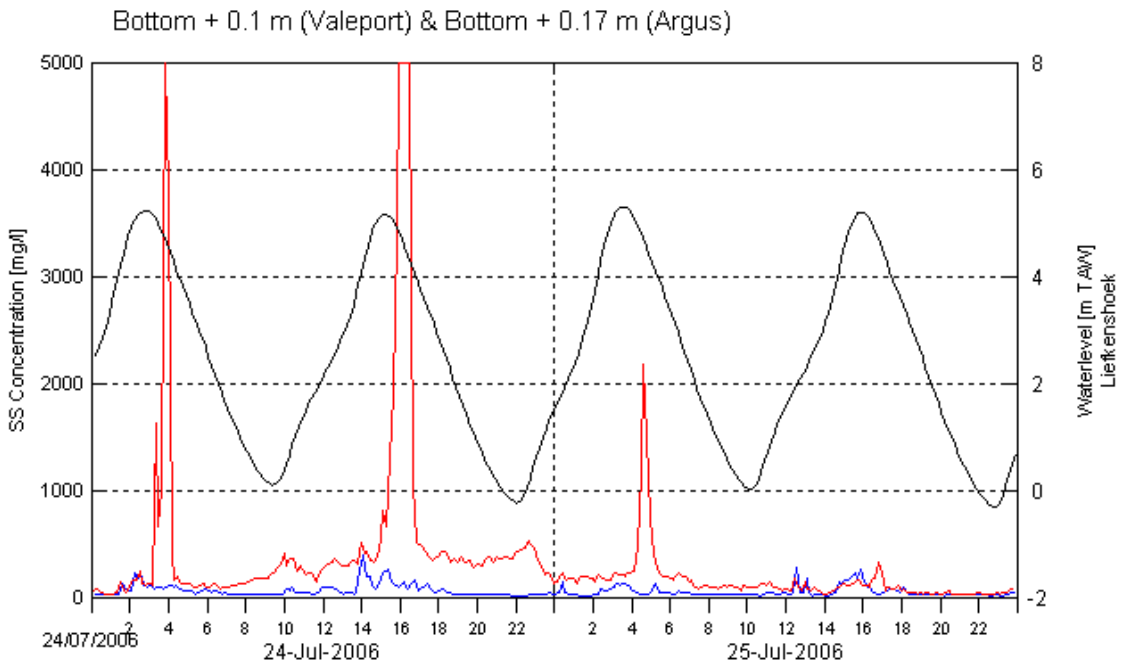
Data processed by: IMDC

In association with: WL | delft hydraulics, GEMS International

I/RA/11283/06.122/MSA

11283 Accretion Deurganckdok – Near bed continuous monitoring – Summer 2006





Comparison of RCM9 & Valeport (blue) to Argus sensors (red) at 1.0 and 0.1 m above the bottom for SS concentration

Location: Deurganckdok CDW

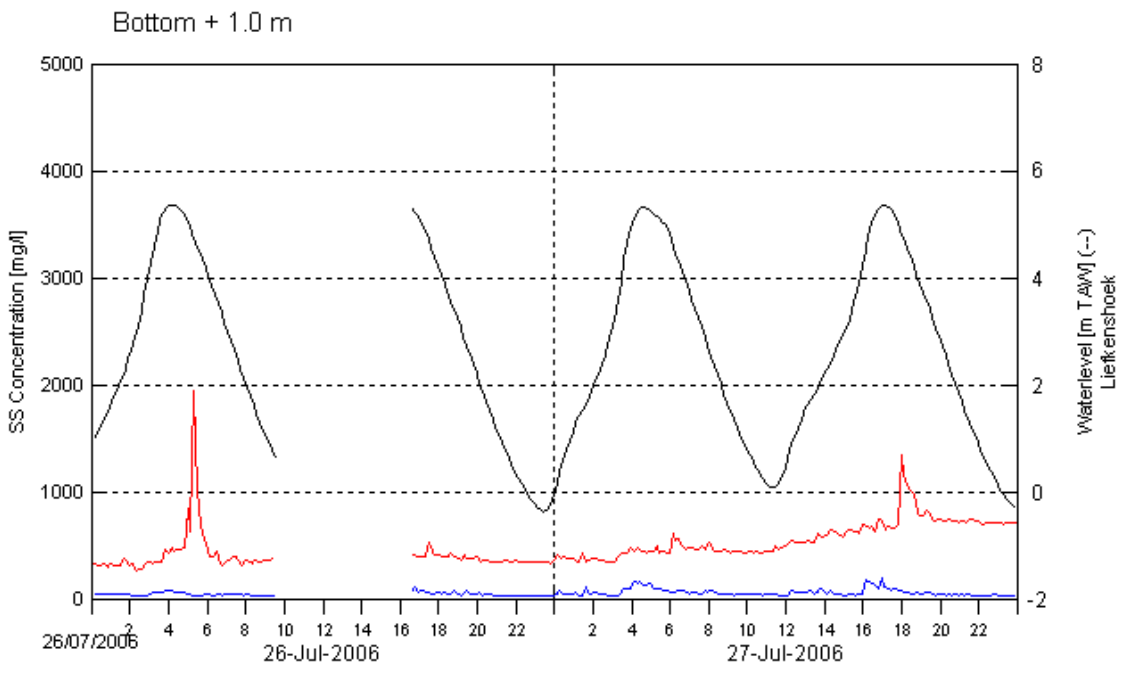
Date: 24/07/06 – 25/07/06

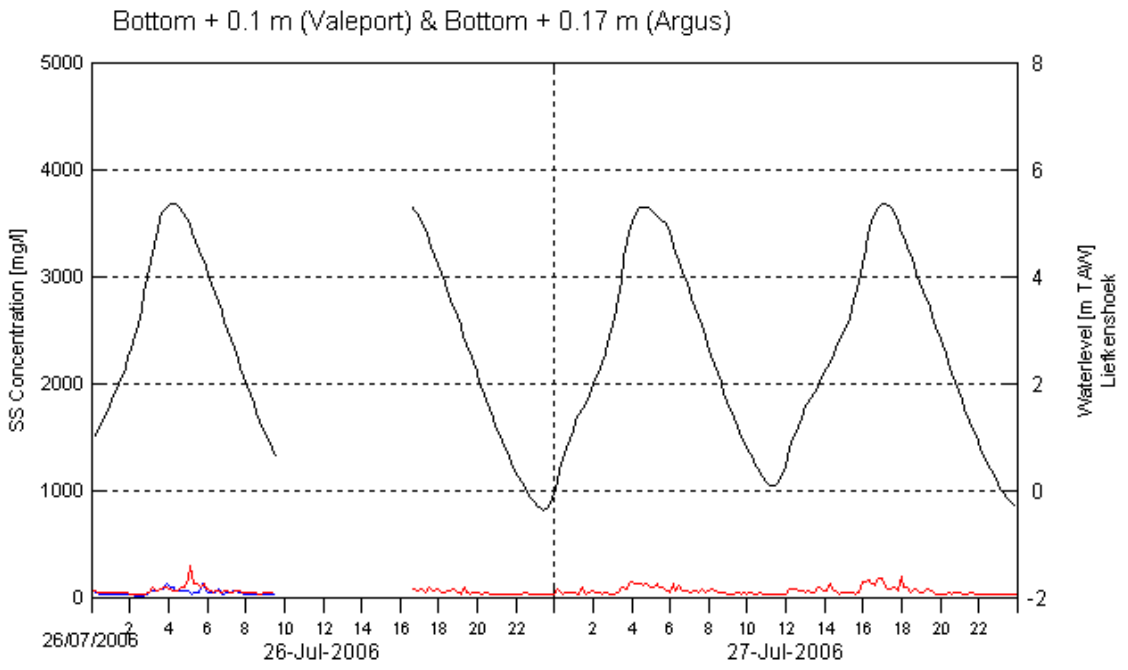
Data processed by: IMDC

In association with: WL | delft hydraulics, GEMS International

I/RA/11283/06.122/MSA

11283 Accretion Deurganckdok – Near bed continuous monitoring – Summer 2006





Comparison of RCM9 & Valeport (blue) to Argus sensors (red) at 1.0 and 0.1 m above the bottom for SS concentration

Location: Deurganckdok CDW

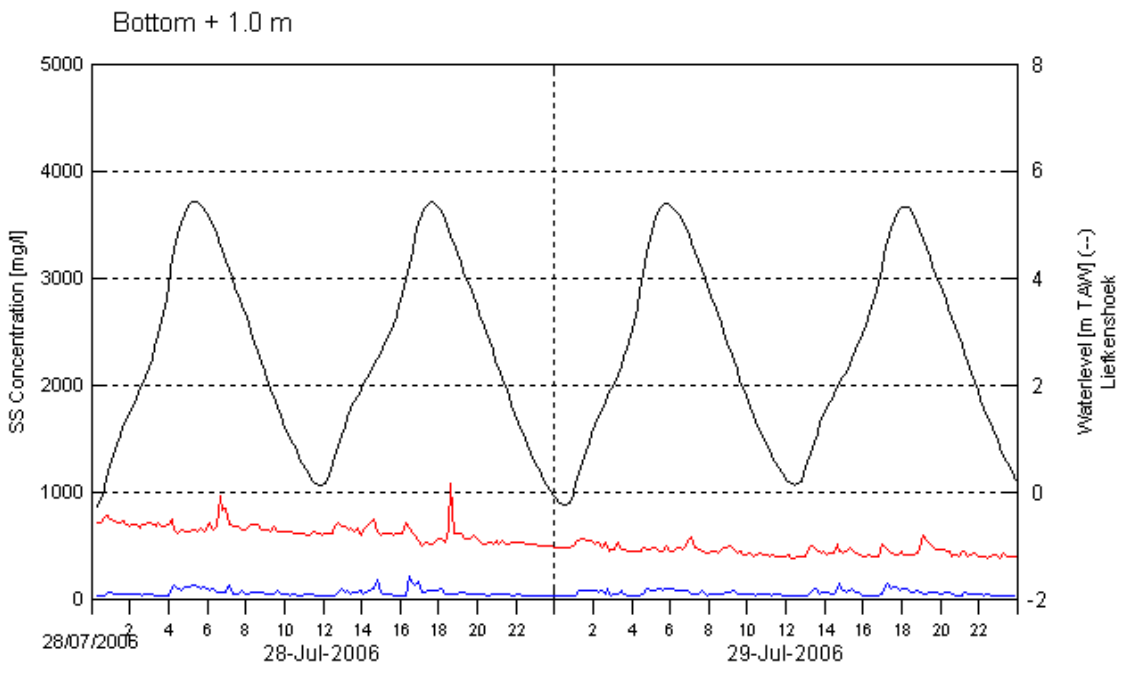
Date: 26/07/06 – 27/07/06

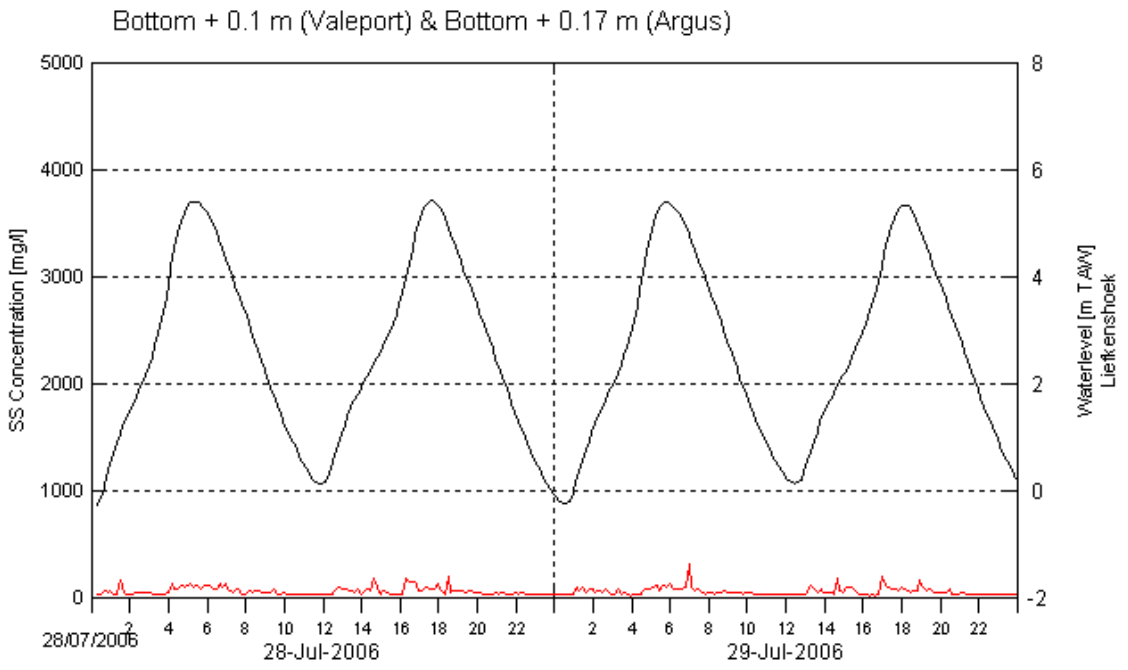
Data processed by: IMDC

In association with: WL | delft hydraulics, GEMS International

I/RA/11283/06.122/MSA

11283 Accretion Deurganckdok – Near bed continuous monitoring – Summer 2006





Comparison of RCM9 & Valeport (blue) to Argus sensors (red) at 1.0 and 0.1 m above the bottom for SS concentration

Location: Deurganckdok CDW

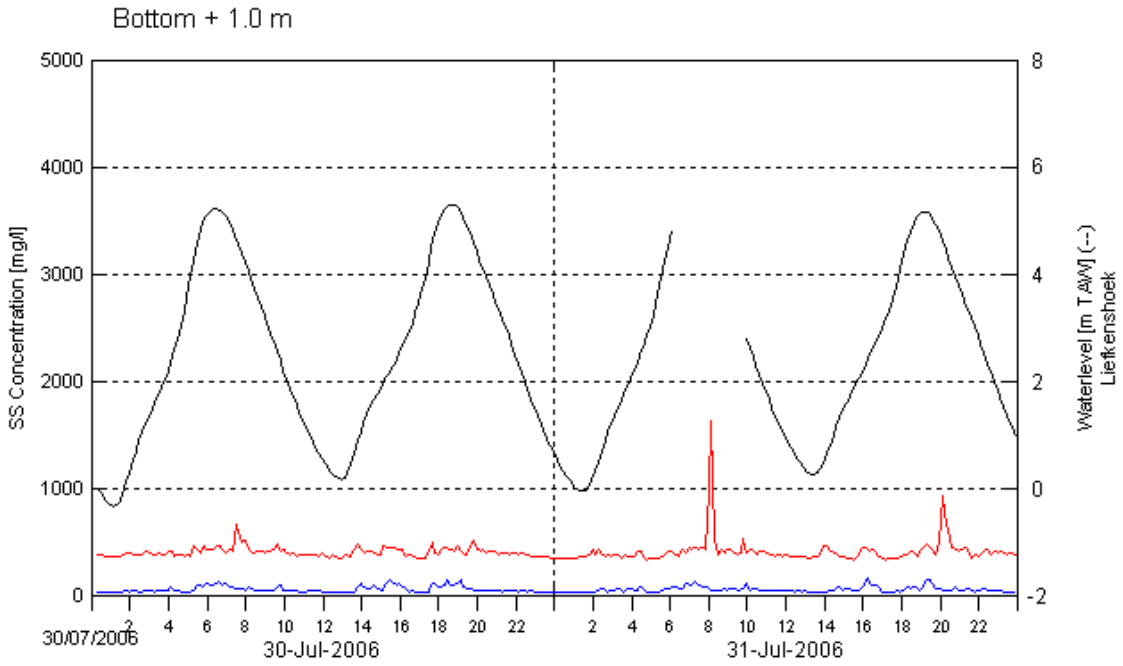
Date: 28/07/06 – 29/07/06

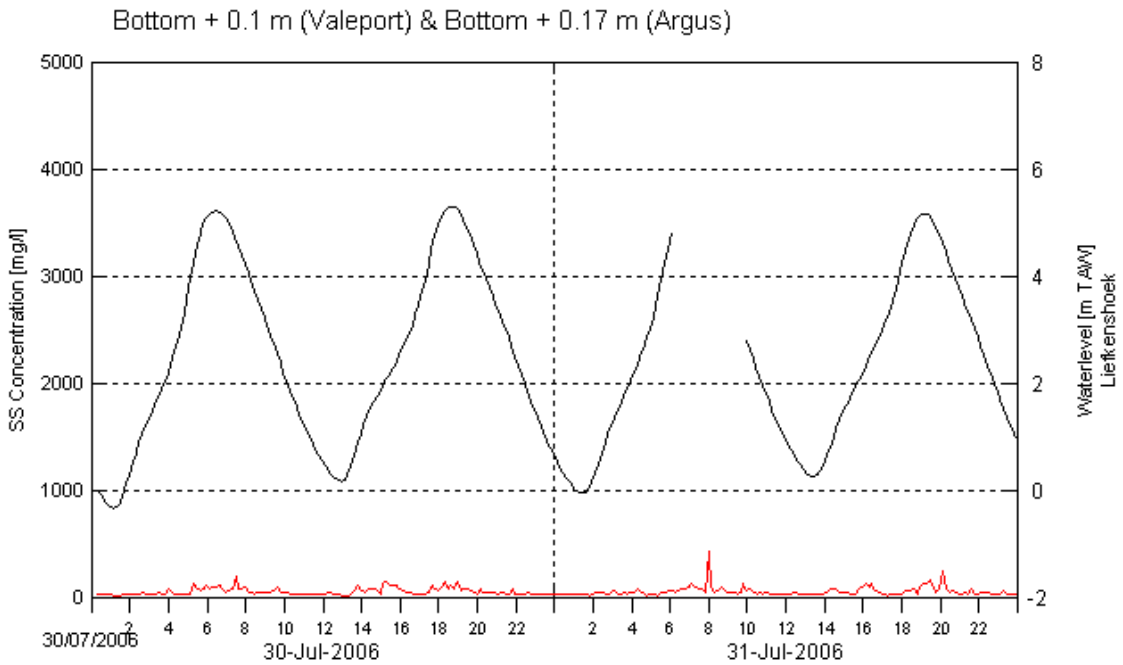
Data processed by: IMDC

In association with: WL | delft hydraulics, GEMS International

I/RA/11283/06.122/MSA

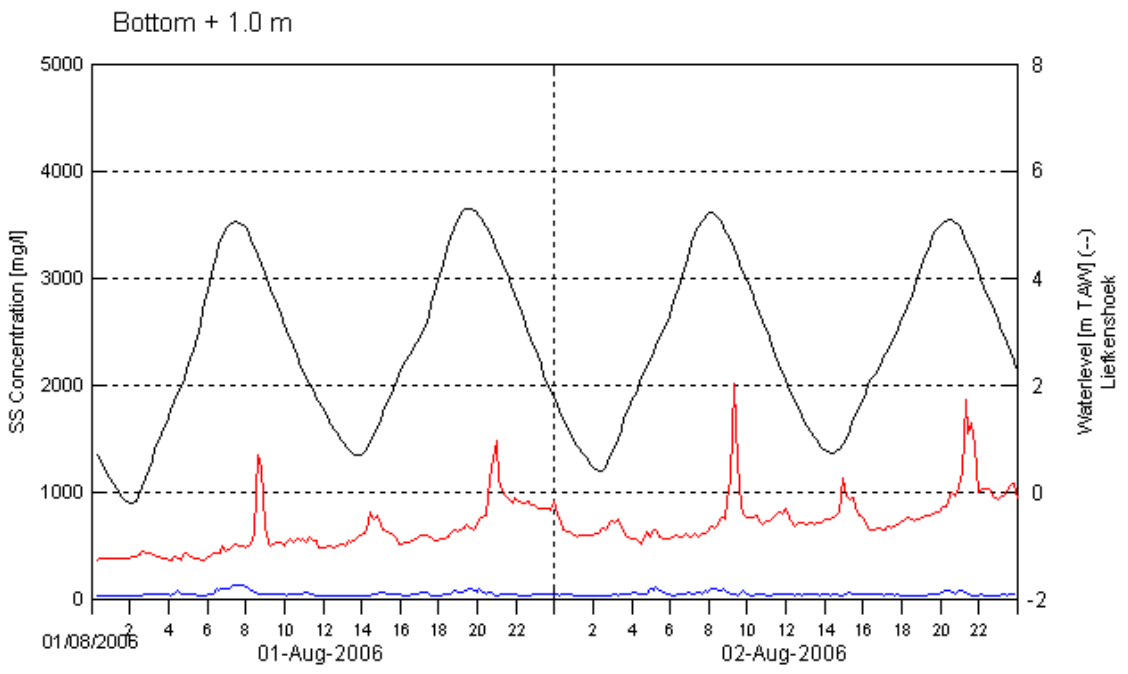
11283 Accretion Deurganckdok – Near bed continuous monitoring – Summer 2006

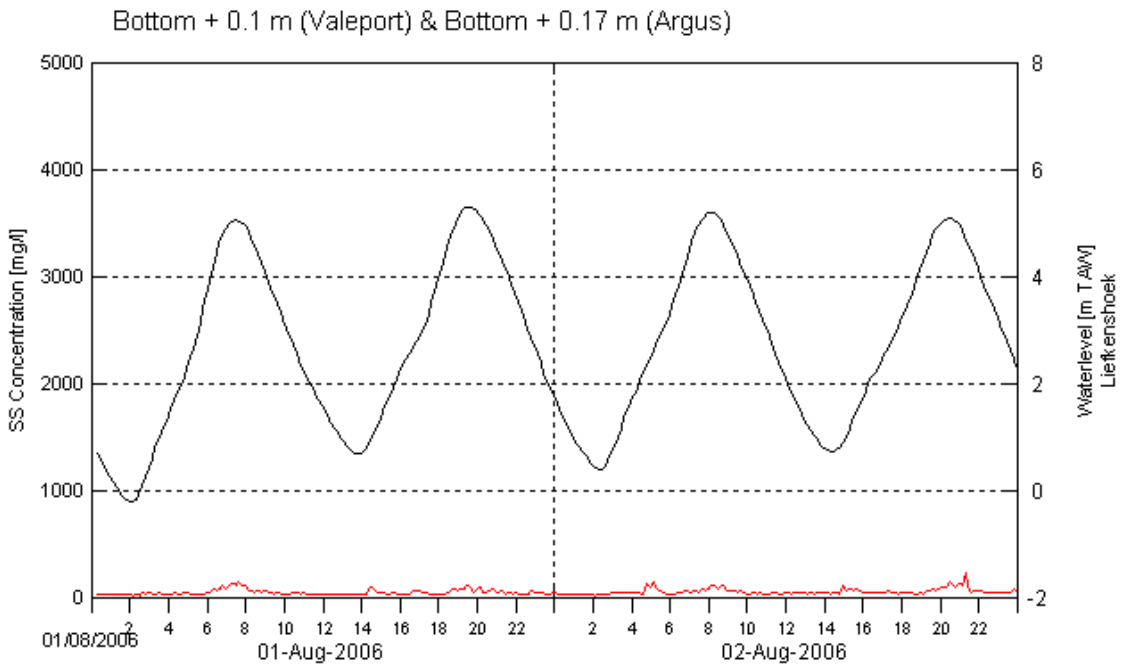




Comparison of RCM9 & Valeport (blue) to Argus sensors (red) at 1.0 and 0.1 m above the bottom for SS concentration		*Data processed by:* IMDC
Location: Deurganckdok CDW	Date: 30/07/06 – 31/07/06	*In association with:* WL | delft hydraulics, GEMS International
		I/RA/11283/06.122/MSA

11283 Accretion Deurganckdok – Near bed continuous monitoring – Summer 2006

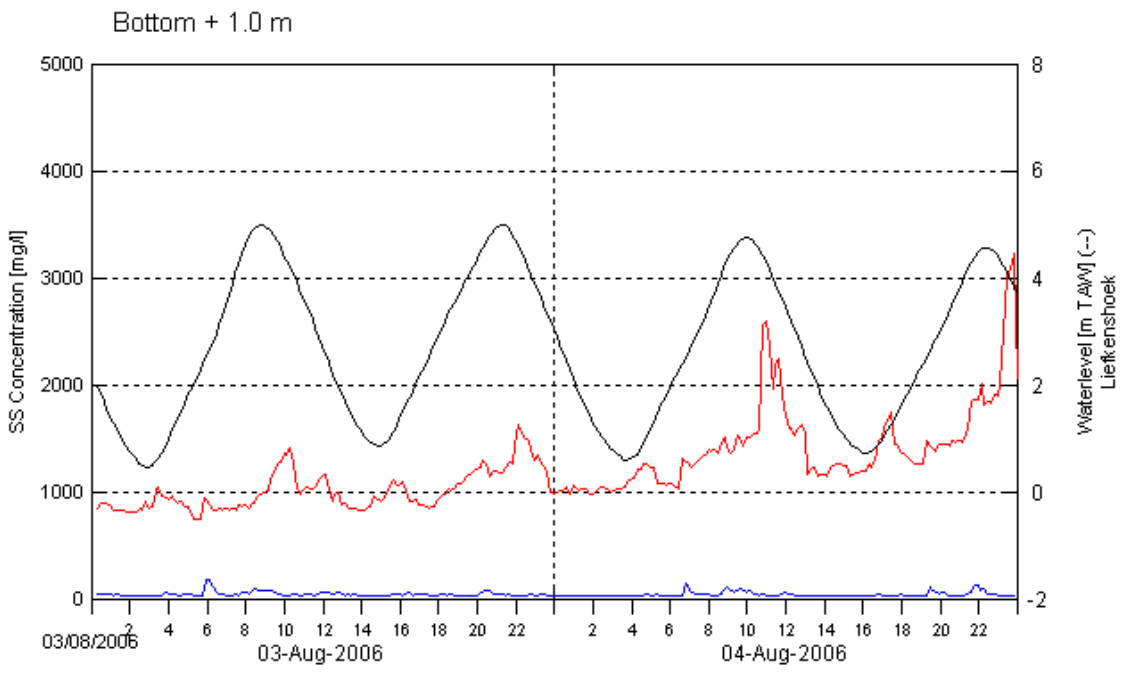


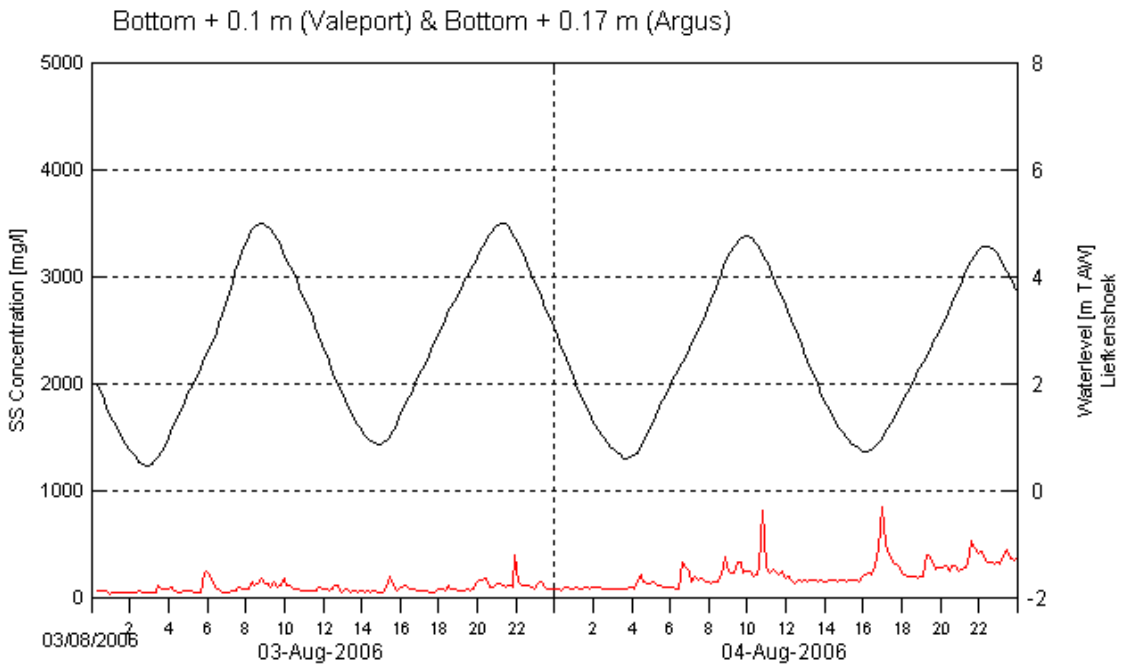


Comparison of RCM9 & Valeport (blue) to Argus sensors (red) at 1.0 and 0.1 m above the bottom for SS concentration

Location:	Date:	
Deurganckdok CDW	01/08/06 – 02/08/06	*Data processed by:* IMDC *In association with:* WL | delft hydraulics, GEMS International *I/RA/11283/06.122/MSA*

11283 Accretion Deurganckdok – Near bed continuous monitoring – Summer 2006





Comparison of RCM9 & Valeport (blue) to Argus sensors (red) at 1.0 and 0.1 m above the bottom for SS concentration

Location: Deurganckdok CDW

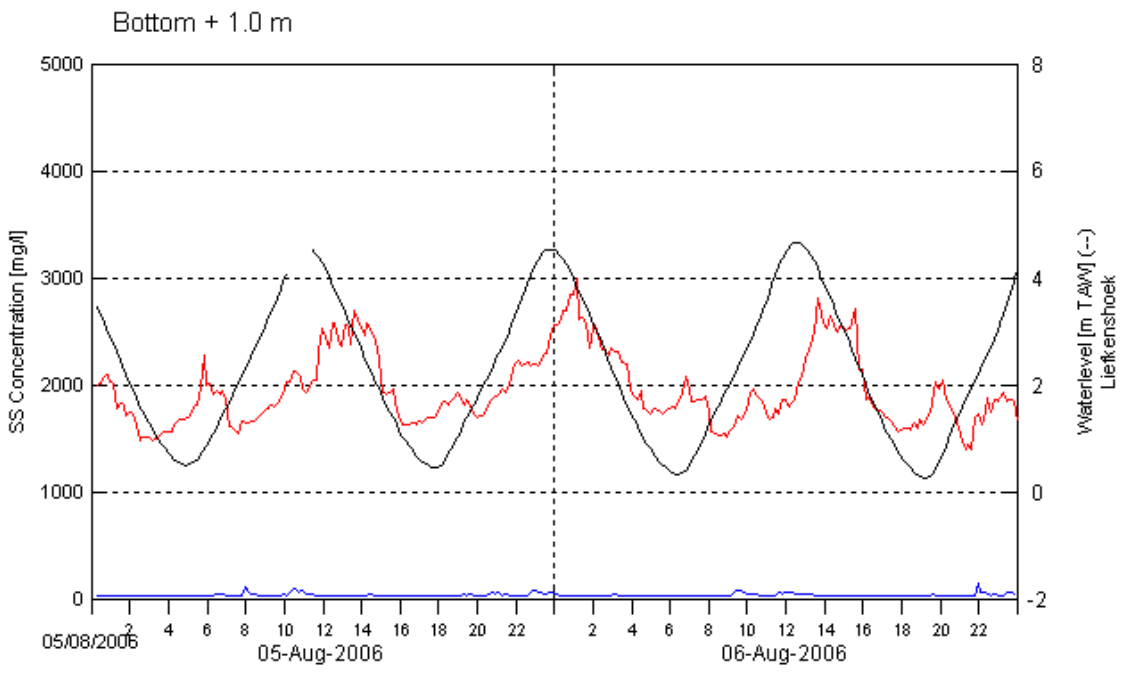
Date: 03/08/06 – 04/08/06

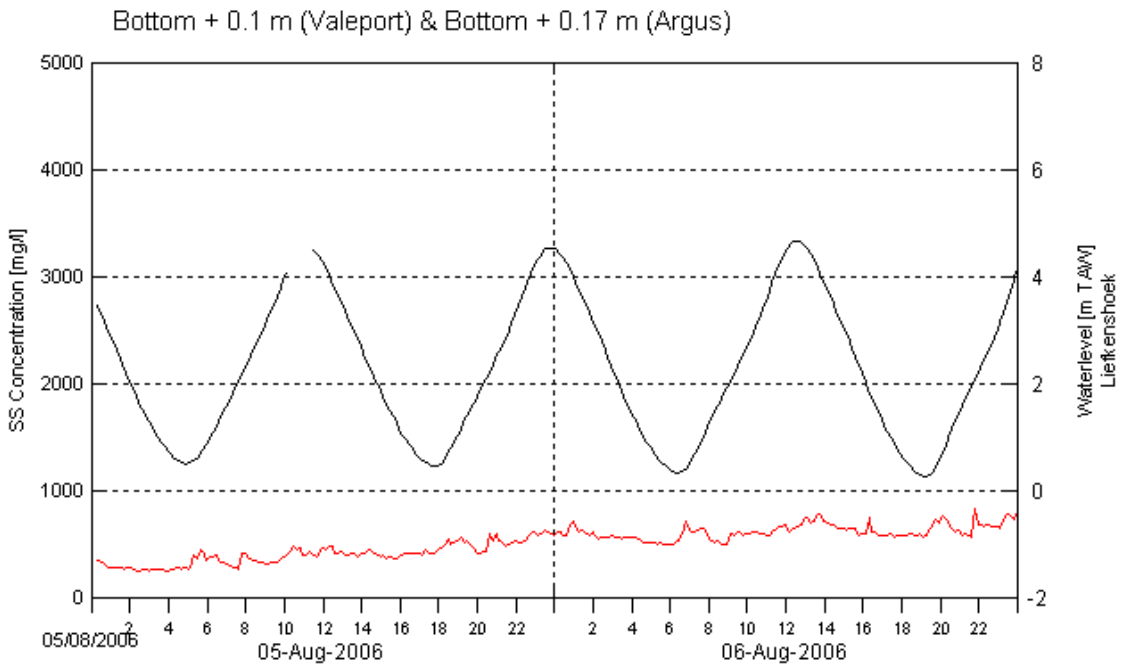
Data processed by: IMDC

In association with: WL | delft hydraulics, GEMS International

I/RA/11283/06.122/MSA

11283 Accretion Deurganckdok – Near bed continuous monitoring – Summer 2006





Comparison of RCM9 & Valeport (blue) to Argus sensors (red) at 1.0 and 0.1 m above the bottom for SS concentration

Location: Deurganckdok CDW

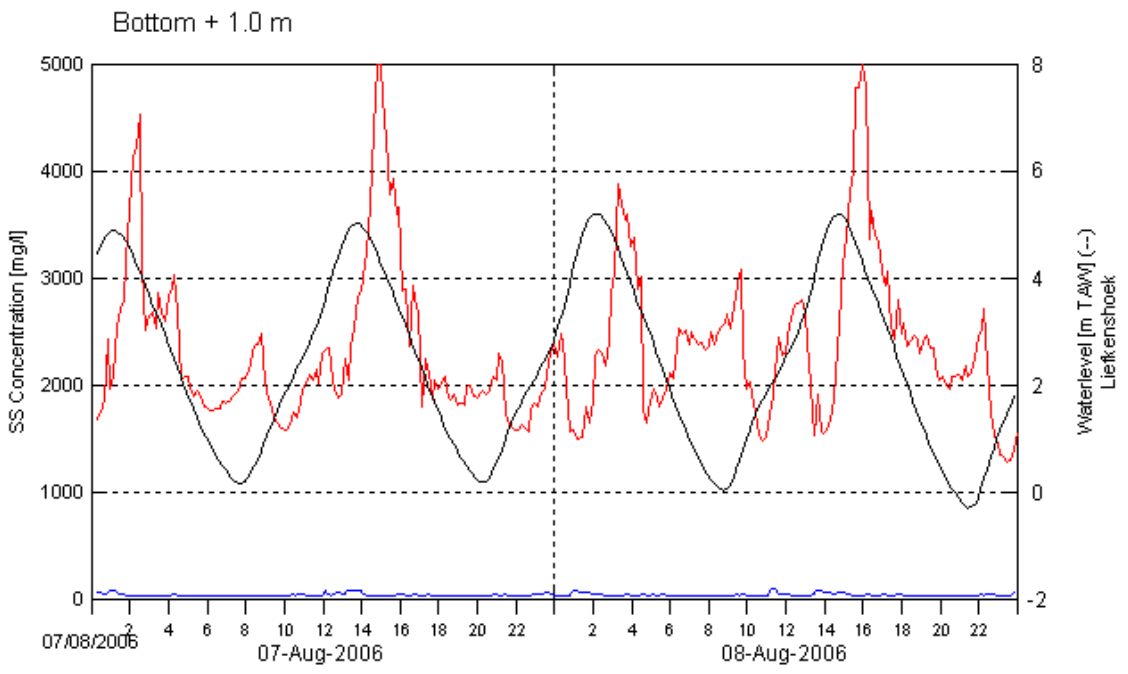
Date: 05/08/06 – 06/08/06

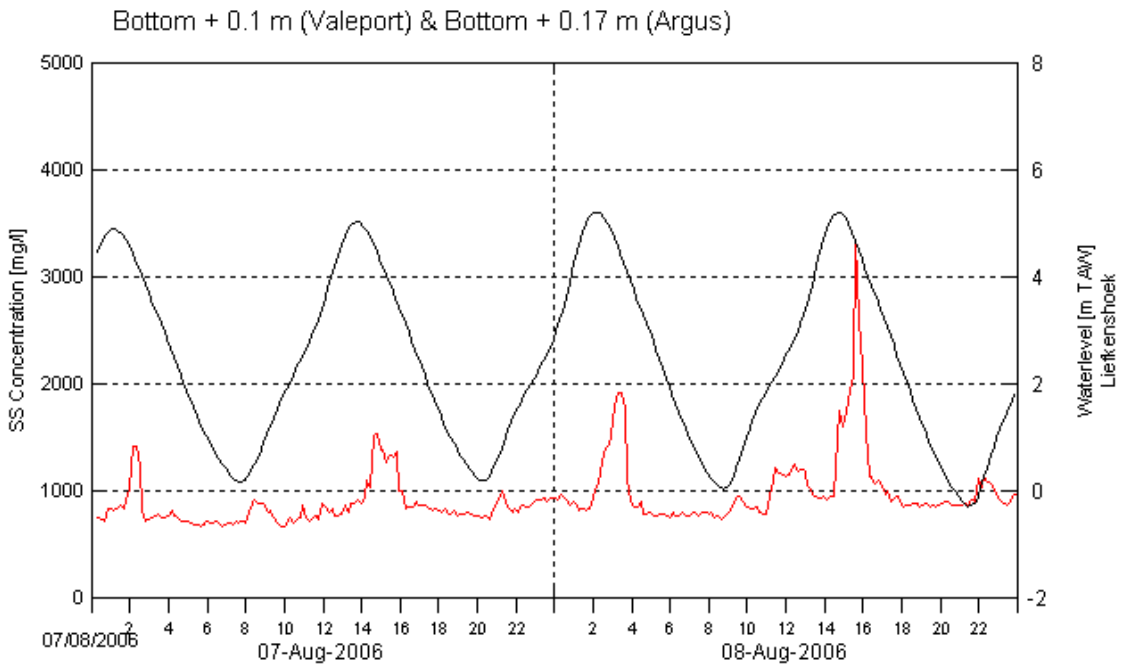
Data processed by: IMDC

In association with: WL | delft hydraulics, GEMS International

I/RA/11283/06.122/MSA

11283 Accretion Deurganckdok – Near bed continuous monitoring – Summer 2006





Comparison of RCM9 & Valeport (blue) to Argus sensors (red) at 1.0 and 0.1 m above the bottom for SS concentration

Location: Deurganckdok CDW

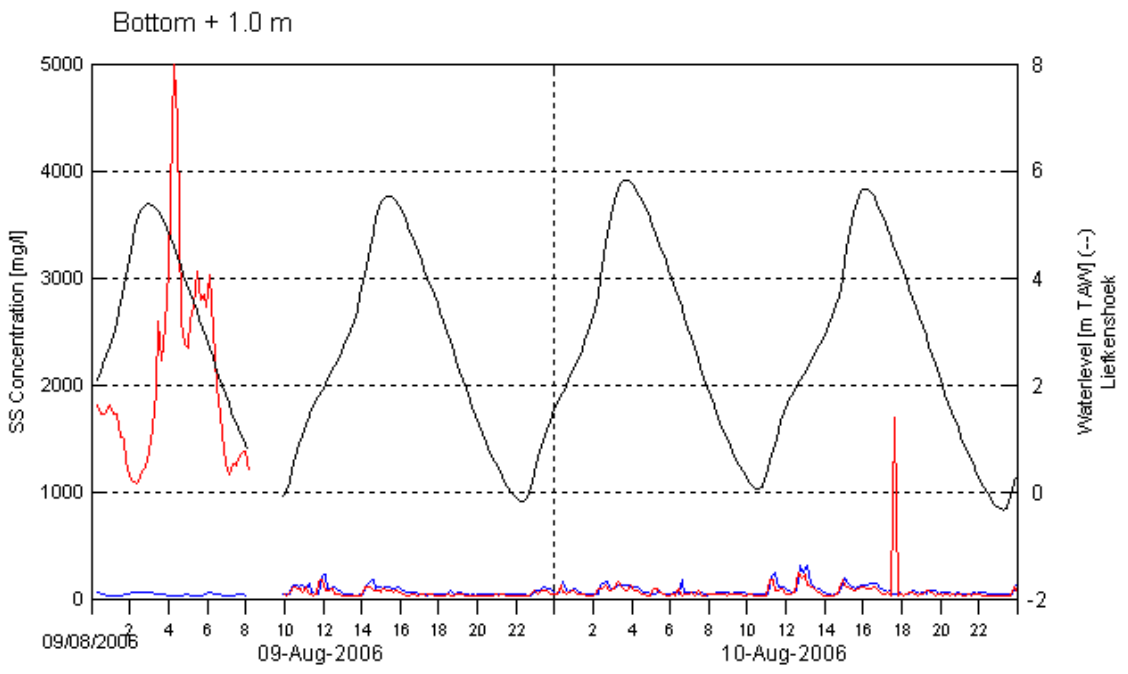
Date: 07/08/06 – 08/08/06

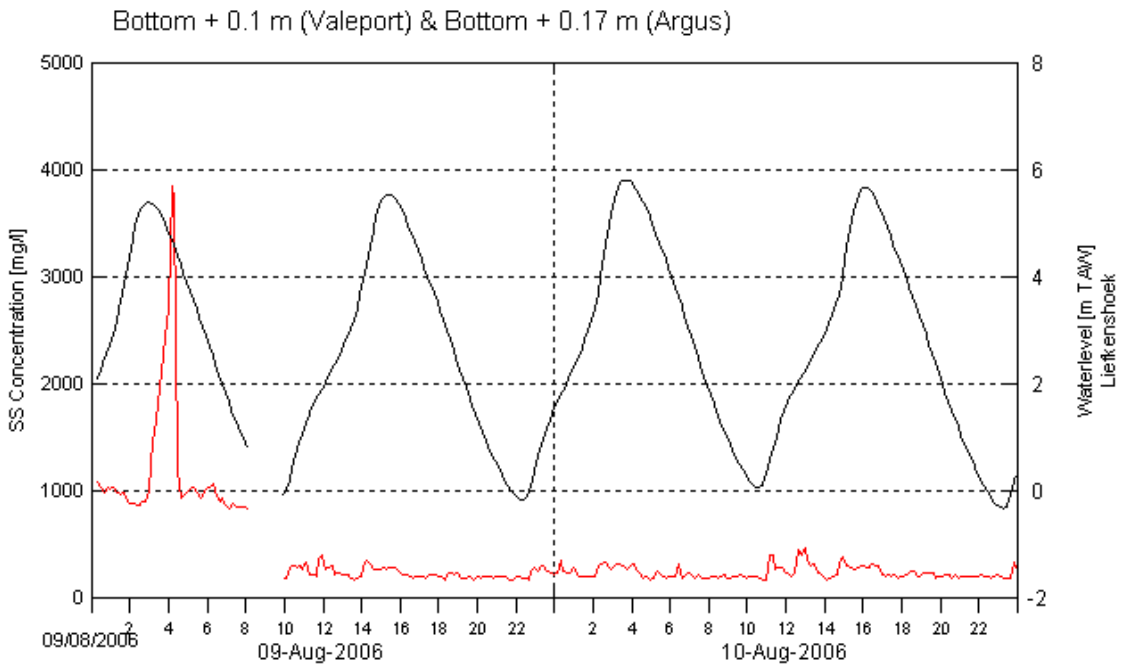
Data processed by: IMDC

In association with: WL | delft hydraulics, GEMS International

I/RA/11283/06.122/MSA

11283 Accretion Deurganckdok – Near bed continuous monitoring – Summer 2006





Comparison of RCM9 & Valeport (blue) to Argus sensors (red) at 1.0 and 0.1 m above the bottom for SS concentration

Location: Deurganckdok CDW

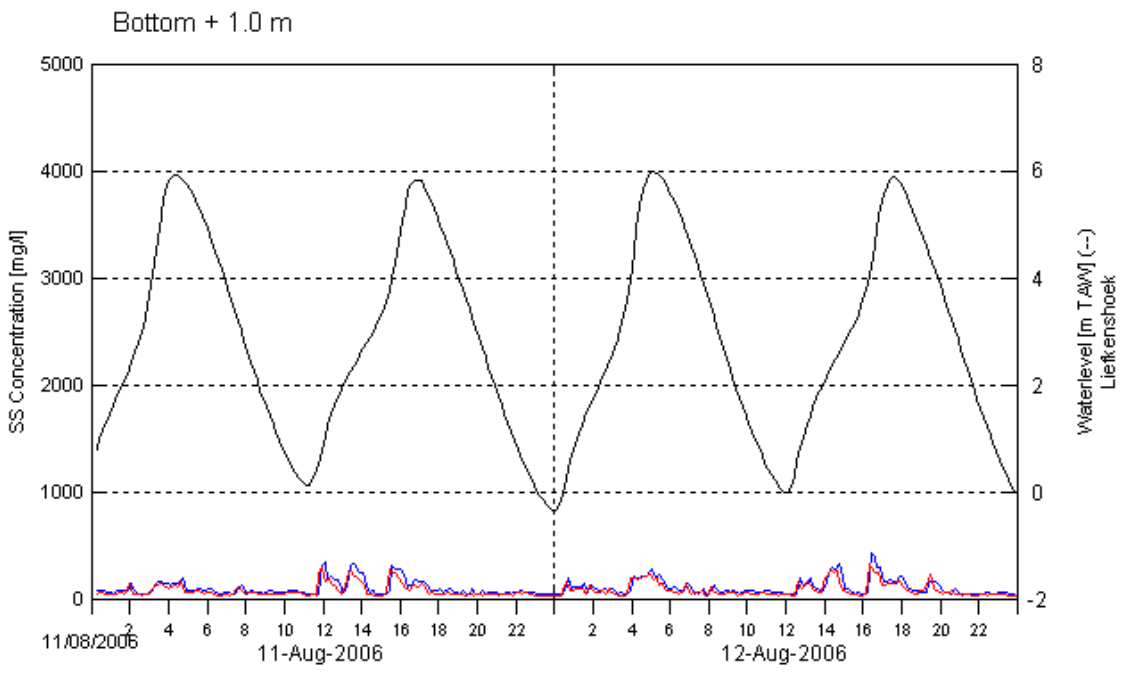
Date: 09/08/06 – 10/08/06

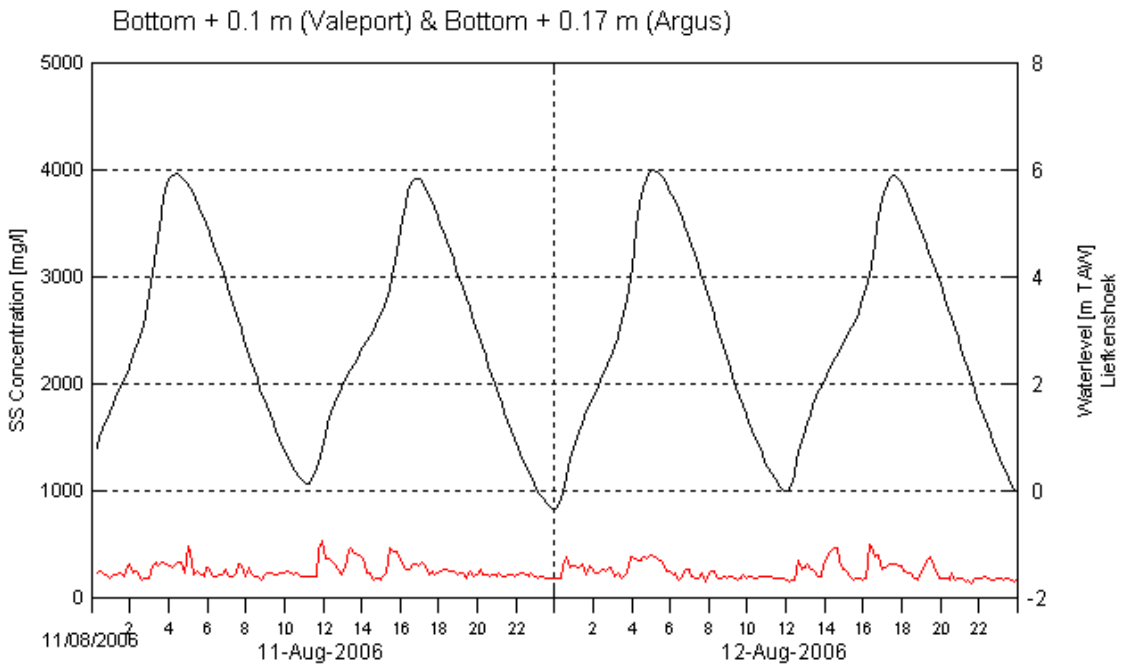
Data processed by: IMDC

In association with: WL | delft hydraulics, GEMS International

I/RA/11283/06.122/MSA

11283 Accretion Deurganckdok – Near bed continuous monitoring – Summer 2006





Comparison of RCM9 & Valeport (blue) to Argus sensors (red) at 1.0 and 0.1 m above the bottom for SS concentration

Location: Deurganckdok CDW

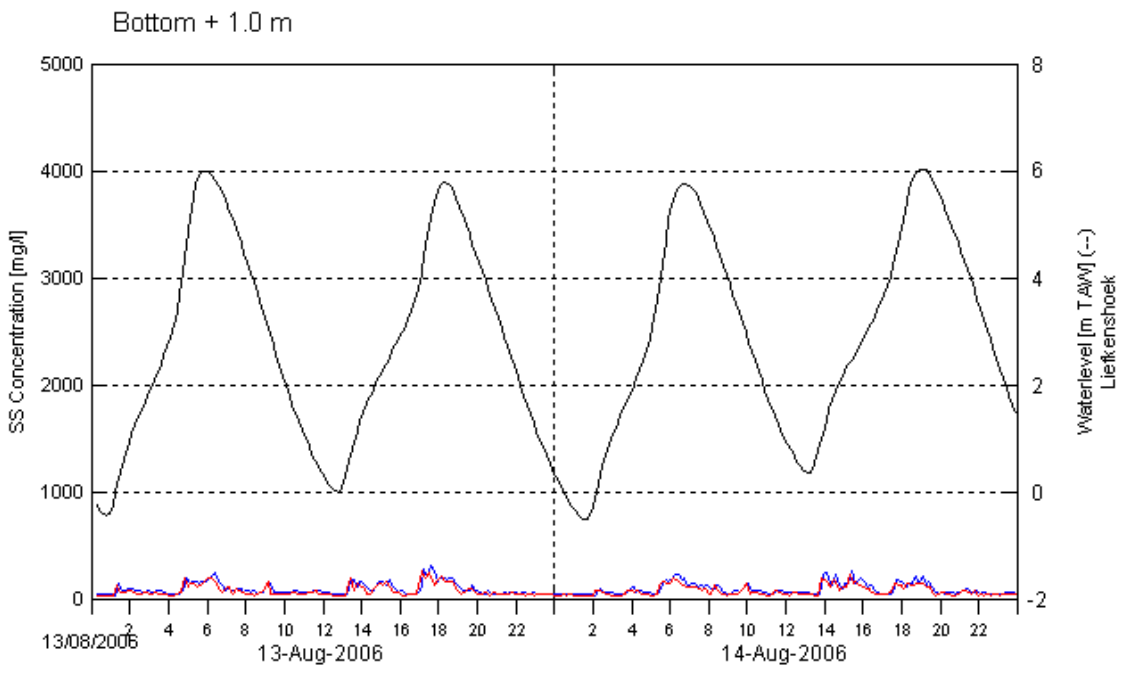
Date: 11/08/06 – 12/08/06

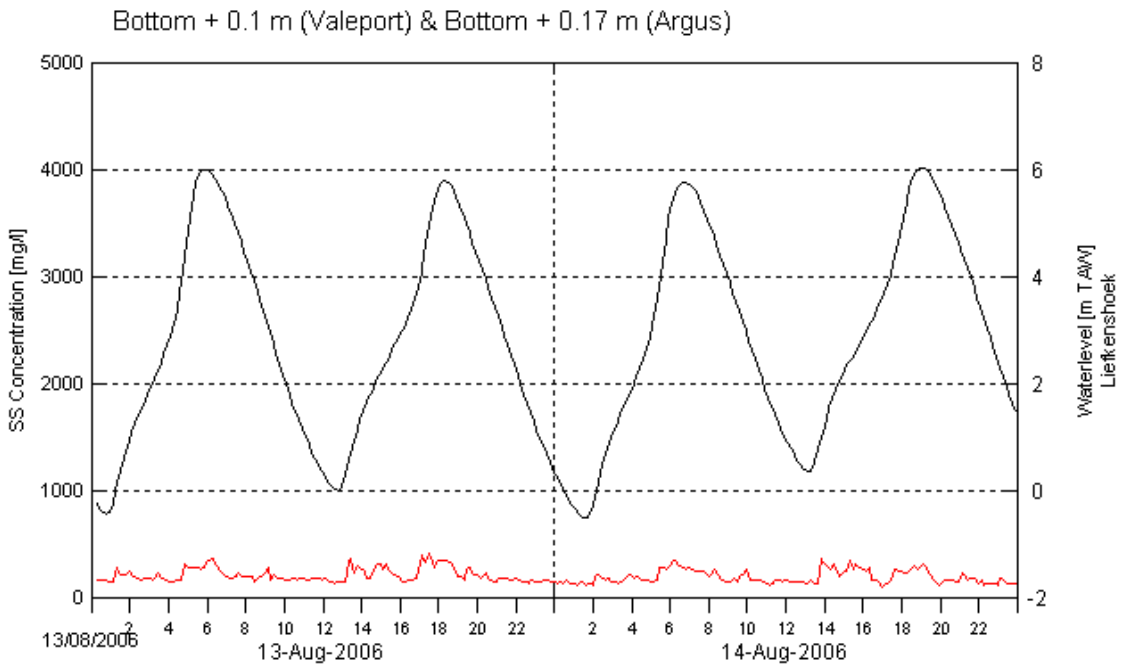
Data processed by: IMDC

In association with: WL | delft hydraulics, GEMS International

I/RA/11283/06.122/MSA

11283 Accretion Deurganckdok – Near bed continuous monitoring – Summer 2006





Comparison of RCM9 & Valeport (blue) to Argus sensors (red) at 1.0 and 0.1 m above the bottom for SS concentration

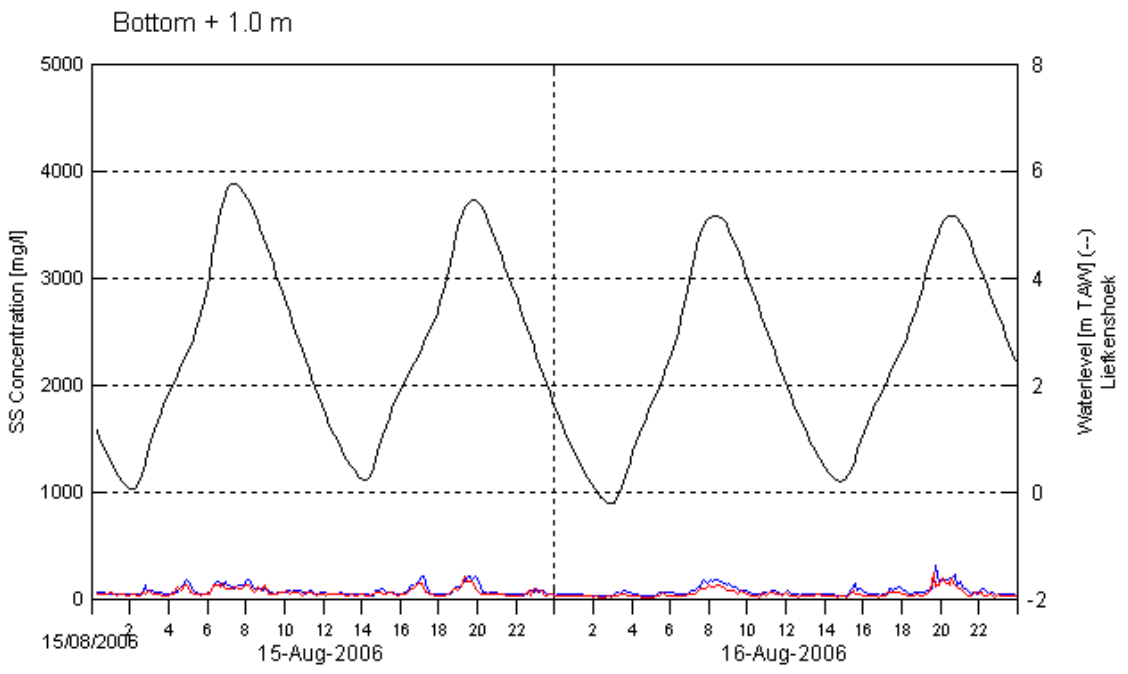
Location:	Date:
Deurganckdok CDW	13/08/06 – 14/08/06

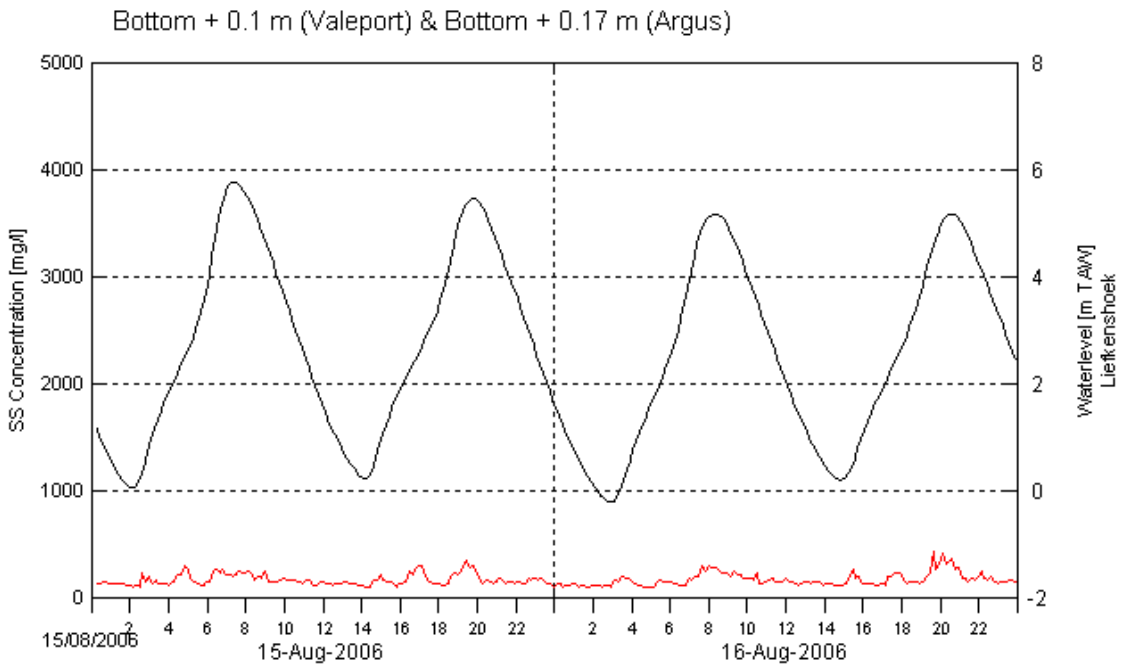
Data processed by: IMDC

In association with: WL | delft hydraulics, GEMS International

I/RA/11283/06.122/MSA

11283 Accretion Deurganckdok – Near bed continuous monitoring – Summer 2006





Comparison of RCM9 & Valeport (blue) to Argus sensors (red) at 1.0 and 0.1 m above the bottom for SS concentration

Location: Deurganckdok CDW

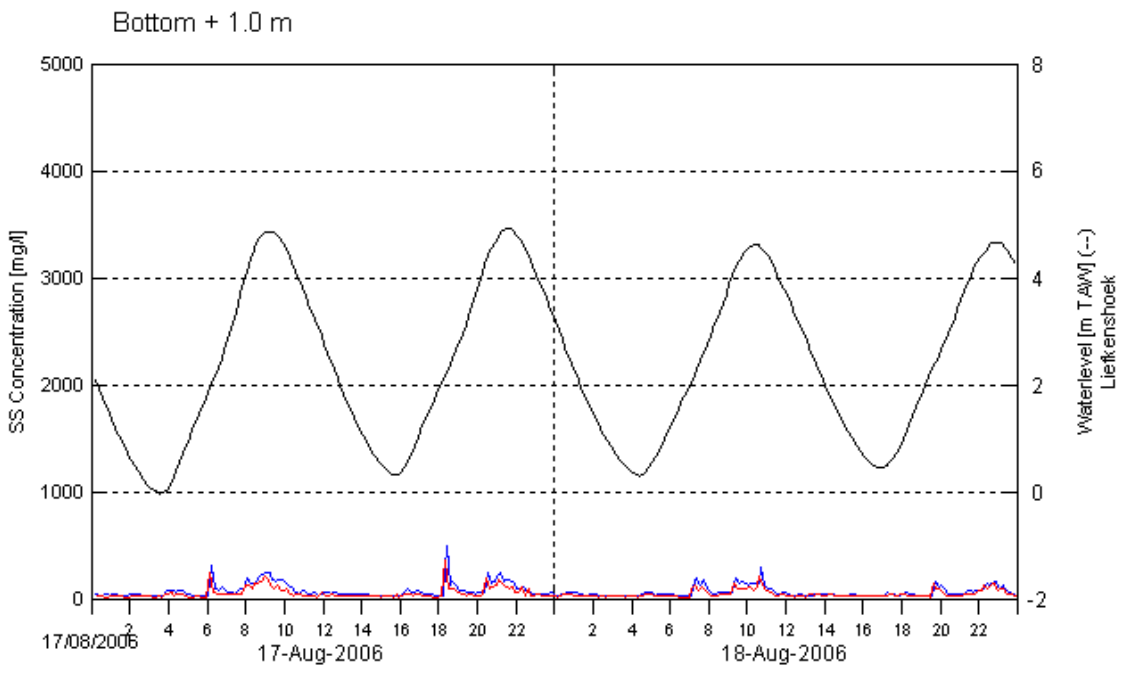
Date: 15/08/06 – 16/08/06

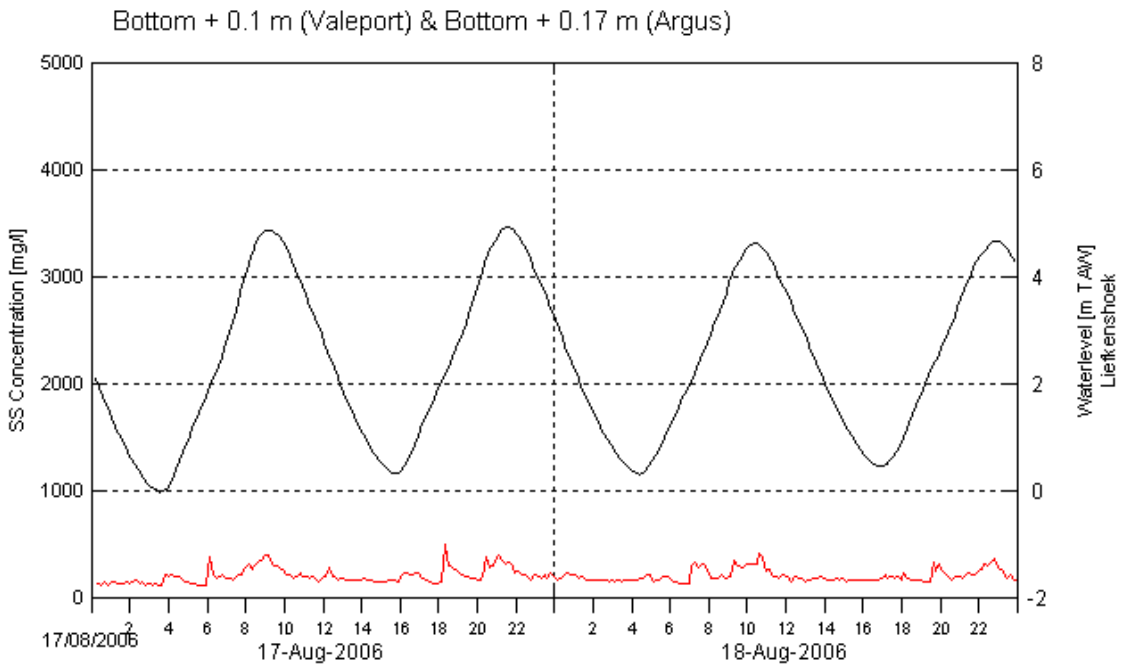
Data processed by: IMDC

In association with: WL | delft hydraulics, GEMS International

I/RA/11283/06.122/MSA

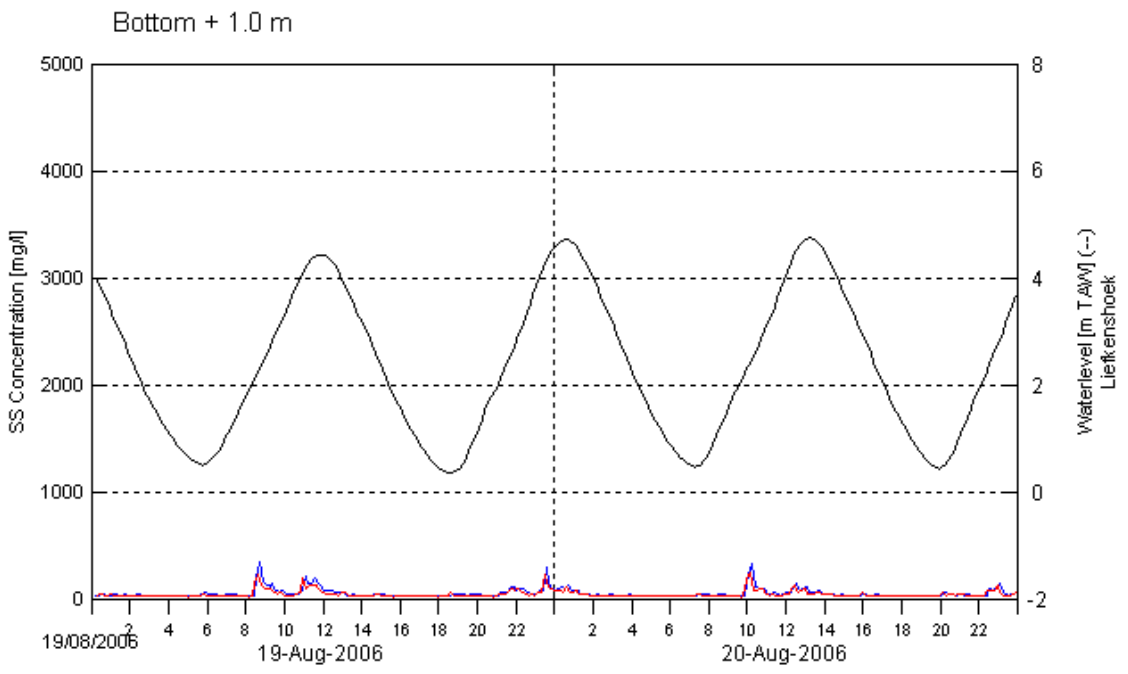
11283 Accretion Deurganckdok – Near bed continuous monitoring – Summer 2006

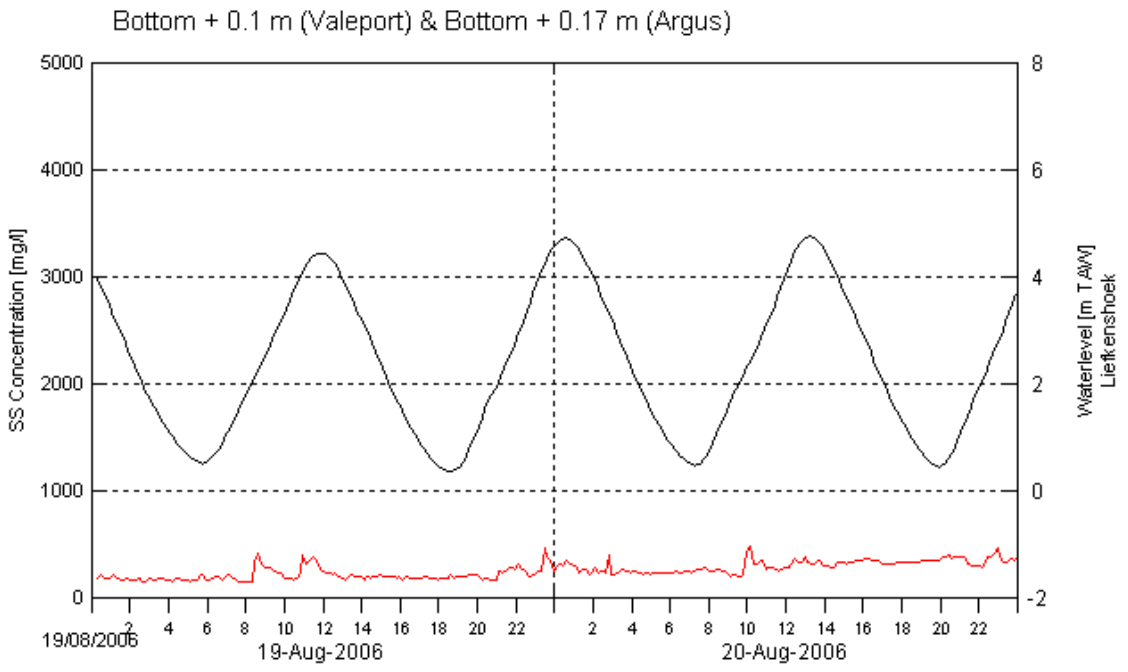




Comparison of RCM9 & Valeport (blue) to Argus sensors (red) at 1.0 and 0.1 m above the bottom for SS concentration		*Data processed by:* IMDC
Location: Deurganckdok CDW	Date: 17/08/06 – 18/08/06	*In association with:* WL | delft hydraulics, GEMS International
		I/RA/11283/06.122/MSA

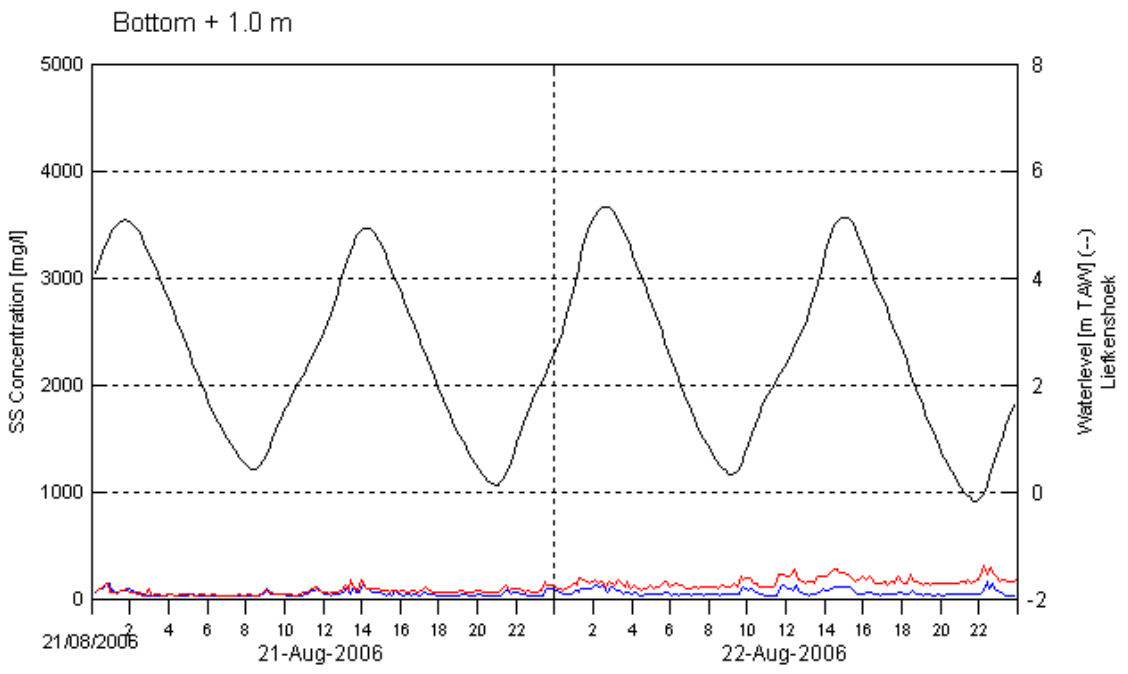
11283 Accretion Deurganckdok – Near bed continuous monitoring – Summer 2006

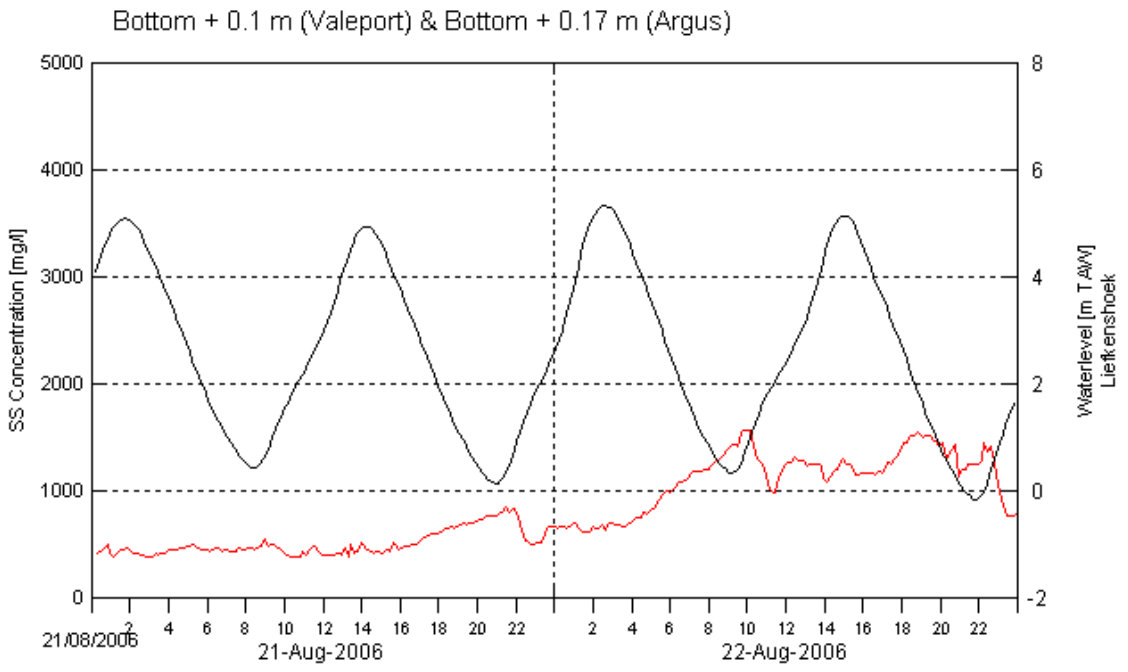




Comparison of RCM9 & Valeport (blue) to Argus sensors (red) at 1.0 and 0.1 m above the bottom for SS concentration		*Data processed by:* IMDC
Location: Deurganckdok CDW	Date: 19/08/06 – 20/08/06	*In association with:* WL | delft hydraulics, GEMS International
		I/RA/11283/06.122/MSA

11283 Accretion Deurganckdok – Near bed continuous monitoring – Summer 2006





Comparison of RCM9 & Valeport (blue) to Argus sensors (red) at 1.0 and 0.1 m above the bottom for SS concentration

Location: Deurganckdok CDW

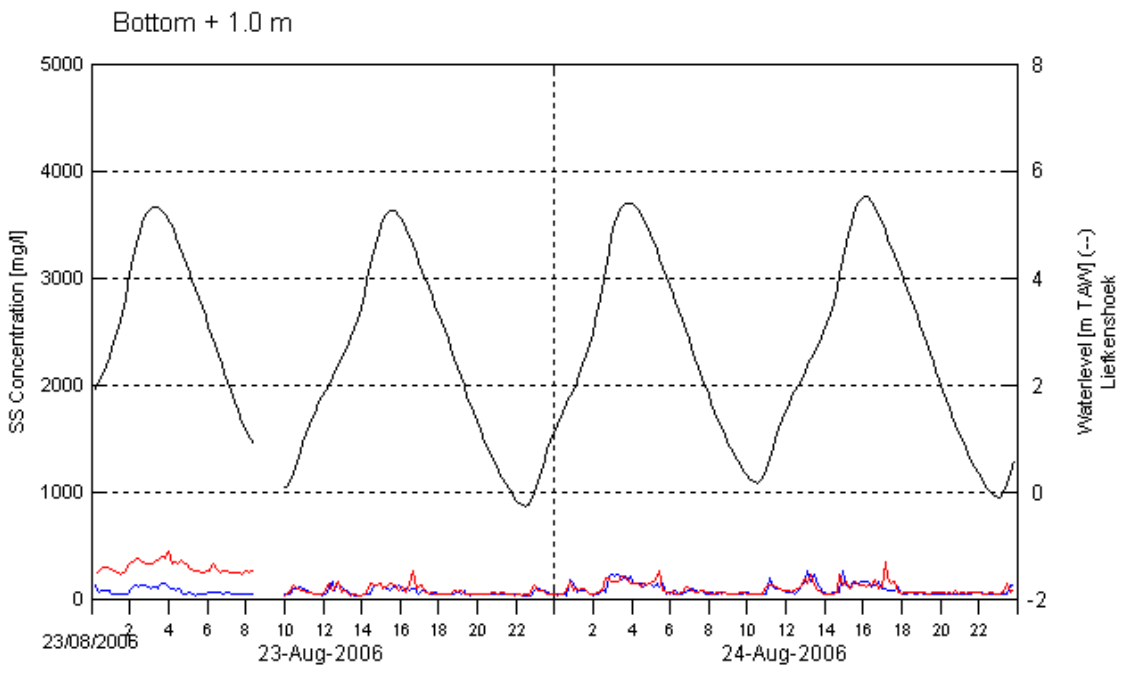
Date: 21/08/06 – 22/08/06

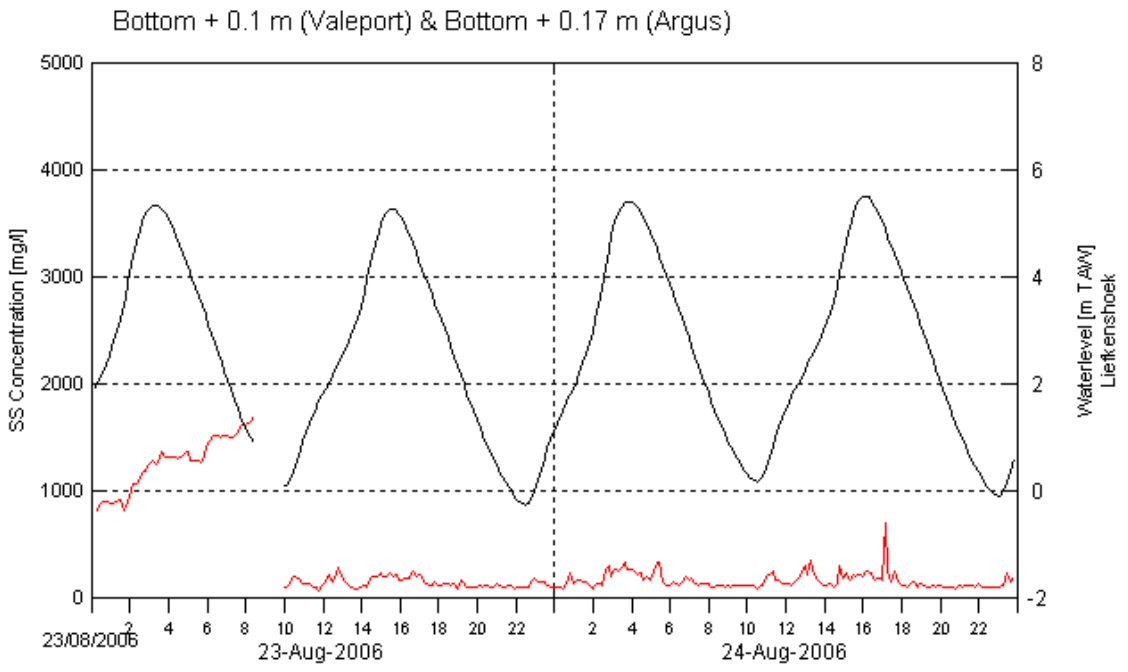
Data processed by: IMDC

In association with: WL | delft hydraulics, GEMS International

I/RA/11283/06.122/MSA

11283 Accretion Deurganckdok – Near bed continuous monitoring – Summer 2006





Comparison of RCM9 & Valeport (blue) to Argus sensors (red) at 1.0 and 0.1 m above the bottom for SS concentration

Location: Deurganckdok CDW

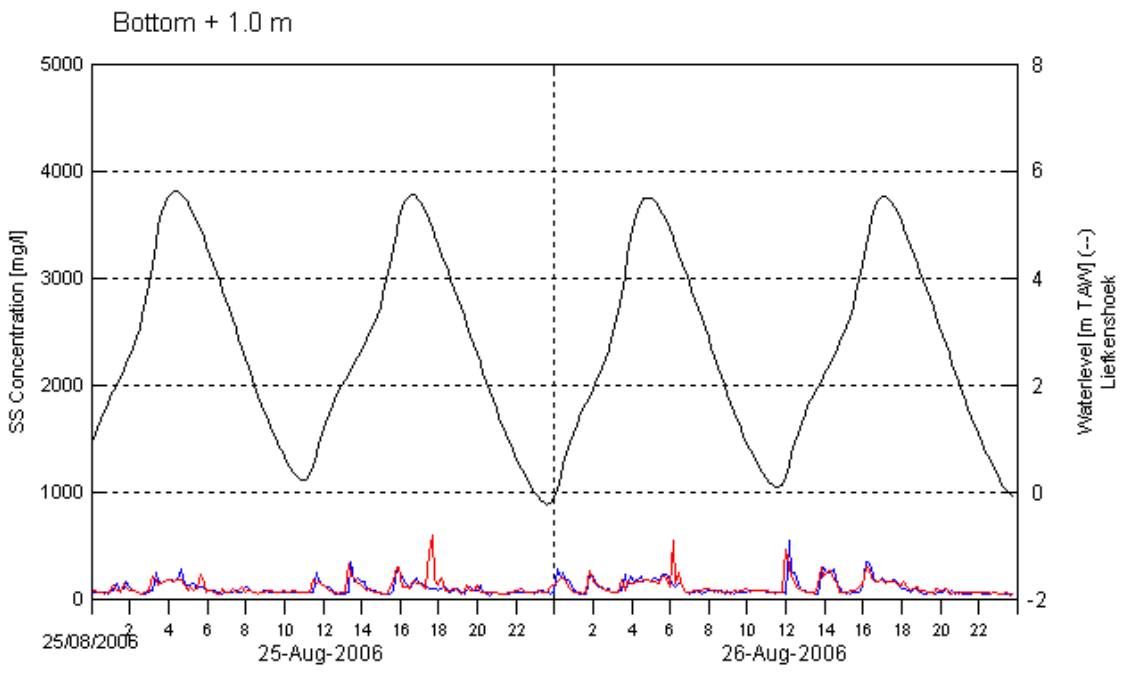
Date: 23/08/06 – 24/08/06

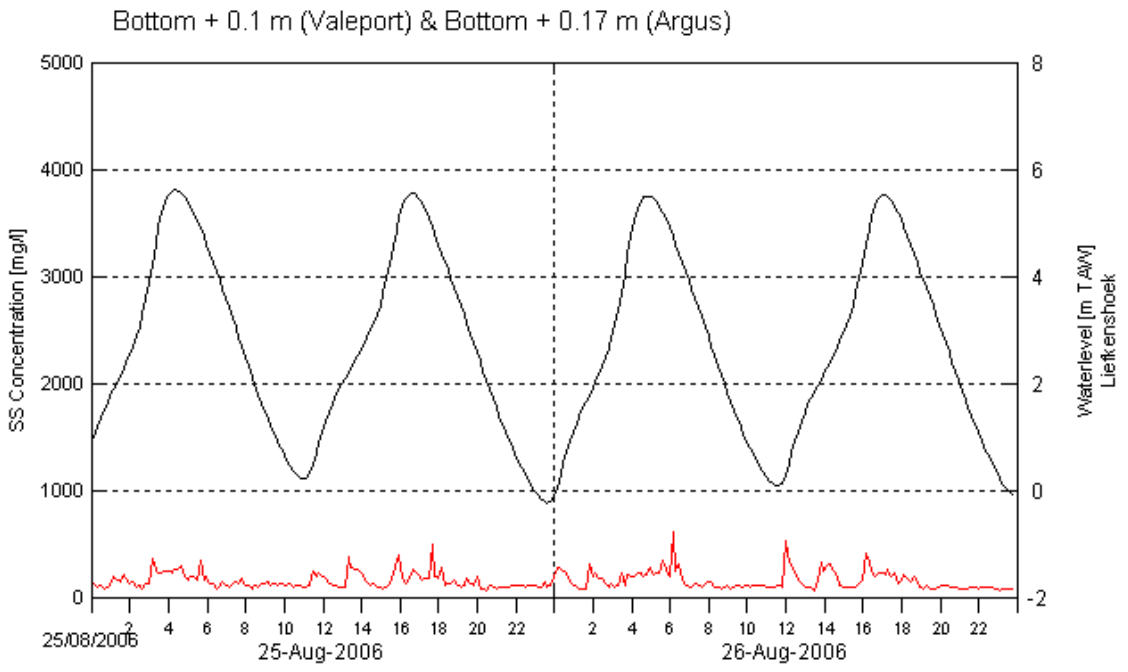
Data processed by: IMDC

In association with: WL | delft hydraulics, GEMS International

I/RA/11283/06.122/MSA

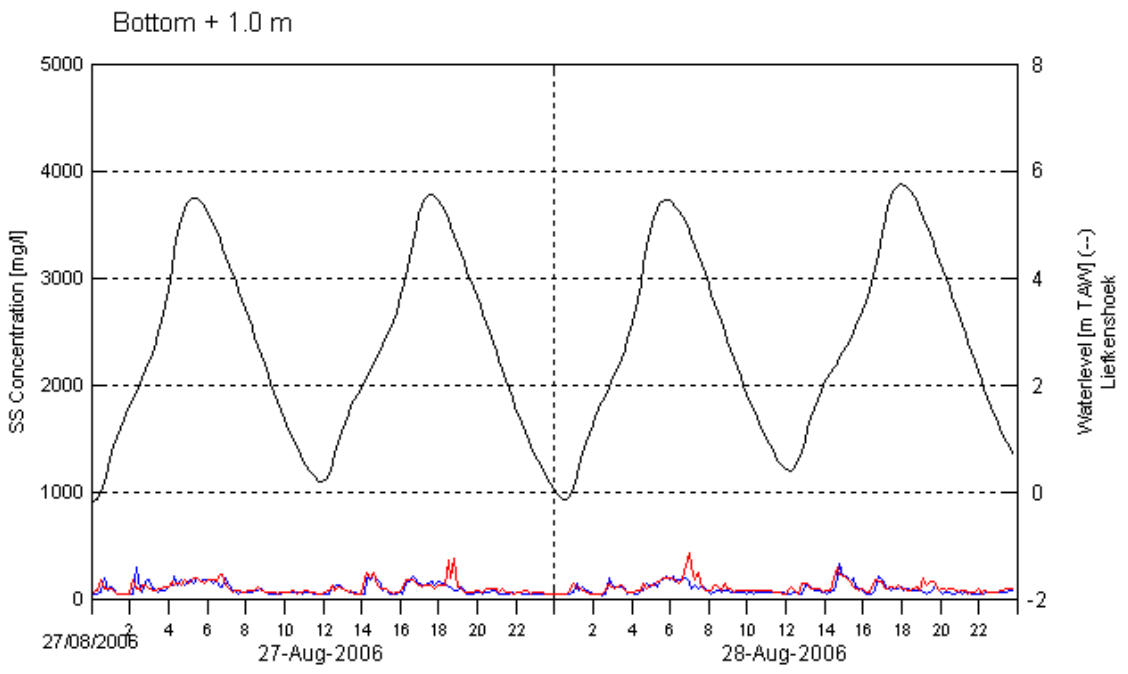
11283 Accretion Deurganckdok – Near bed continuous monitoring – Summer 2006

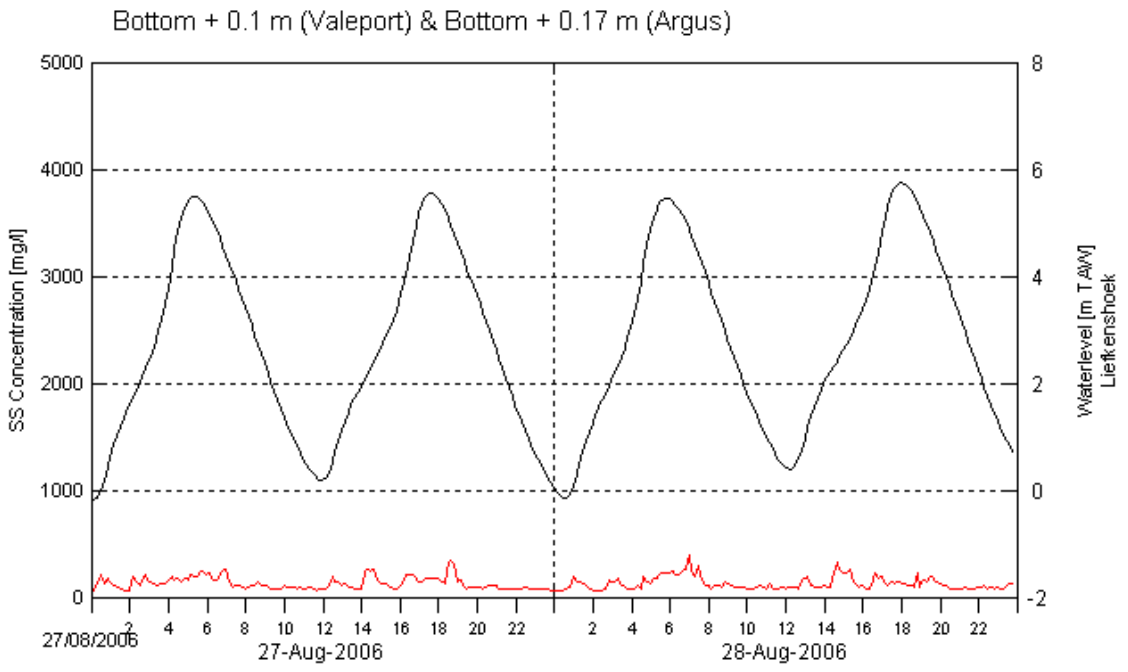




Comparison of RCM9 & Valeport (blue) to Argus sensors (red) at 1.0 and 0.1 m above the bottom for SS concentration		*Data processed by:* IMDC
Location: Deurganckdok CDW	Date: 25/08/06 – 26/08/06	*In association with:* WL | delft hydraulics, GEMS International
		I/RA/11283/06.122/MSA

11283 Accretion Deurganckdok – Near bed continuous monitoring – Summer 2006





Comparison of RCM9 & Valeport (blue) to Argus sensors (red) at 1.0 and 0.1 m above the bottom for SS concentration

Location: Deurganckdok CDW

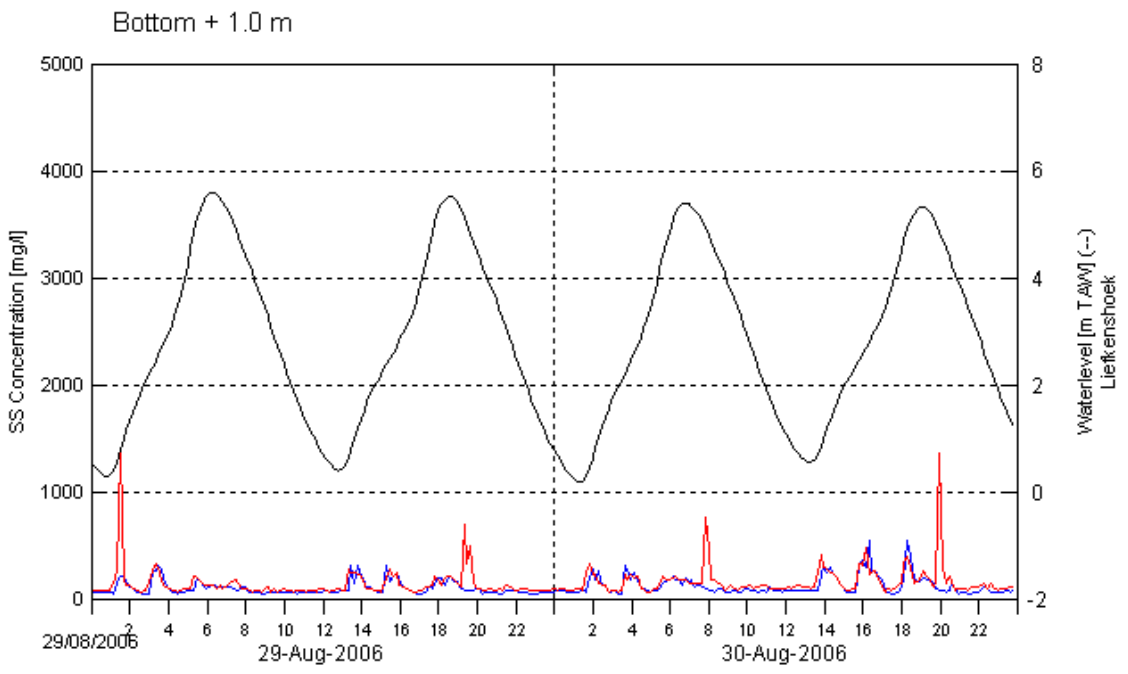
Date: 27/08/06 – 28/08/06

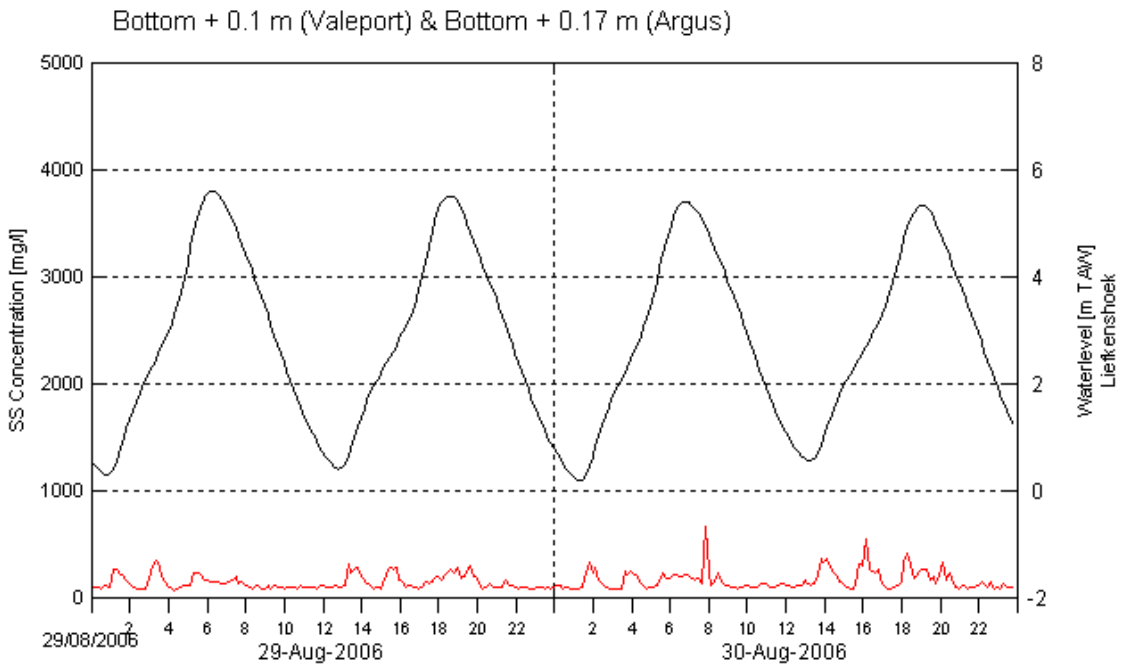
Data processed by: IMDC

In association with: WL | delft hydraulics, GEMS International

I/RA/11283/06.122/MSA

11283 Accretion Deurganckdok – Near bed continuous monitoring – Summer 2006





Comparison of RCM9 & Valeport (blue) to Argus sensors (red) at 1.0 and 0.1 m above the bottom for SS concentration

Location: Deurganckdok CDW

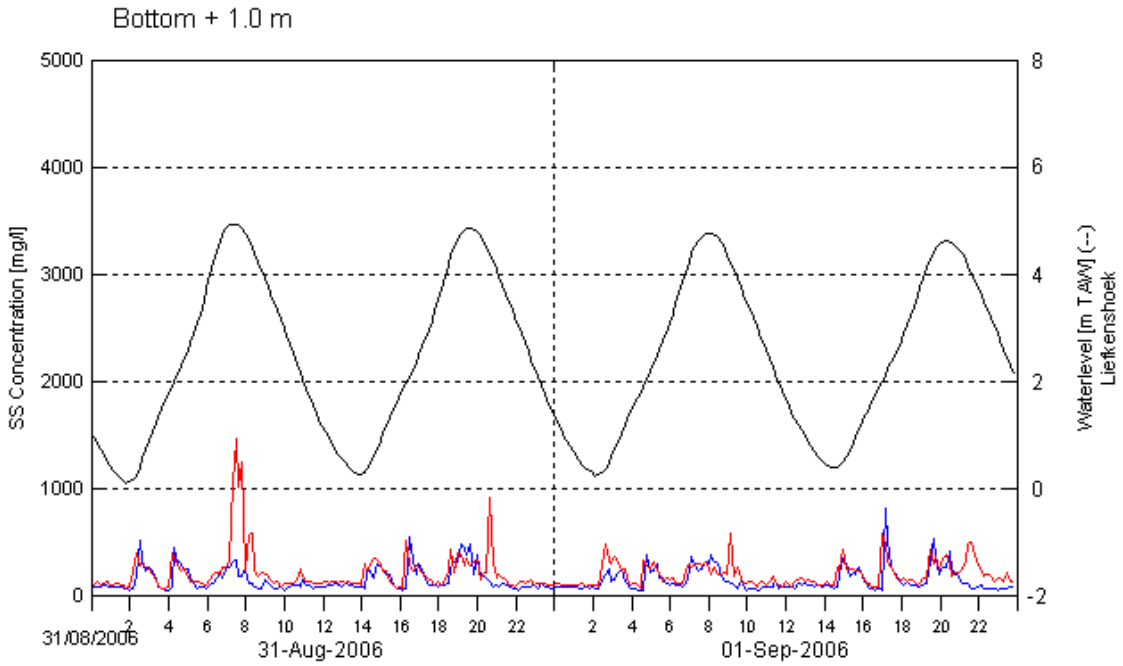
Date: 29/08/06 – 30/08/06

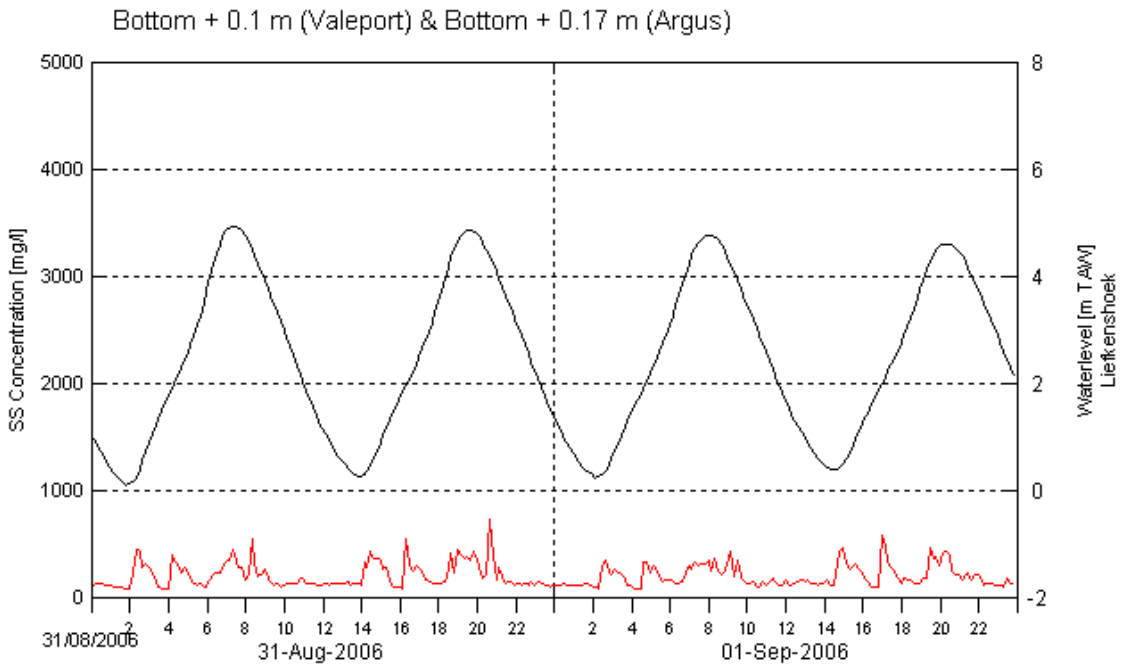
Data processed by: IMDC

In association with: WL | delft hydraulics, GEMS International

I/RA/11283/06.122/MSA

11283 Accretion Deurganckdok – Near bed continuous monitoring – Summer 2006





Comparison of RCM9 & Valeport (blue) to Argus sensors (red) at 1.0 and 0.1 m above the bottom for SS concentration

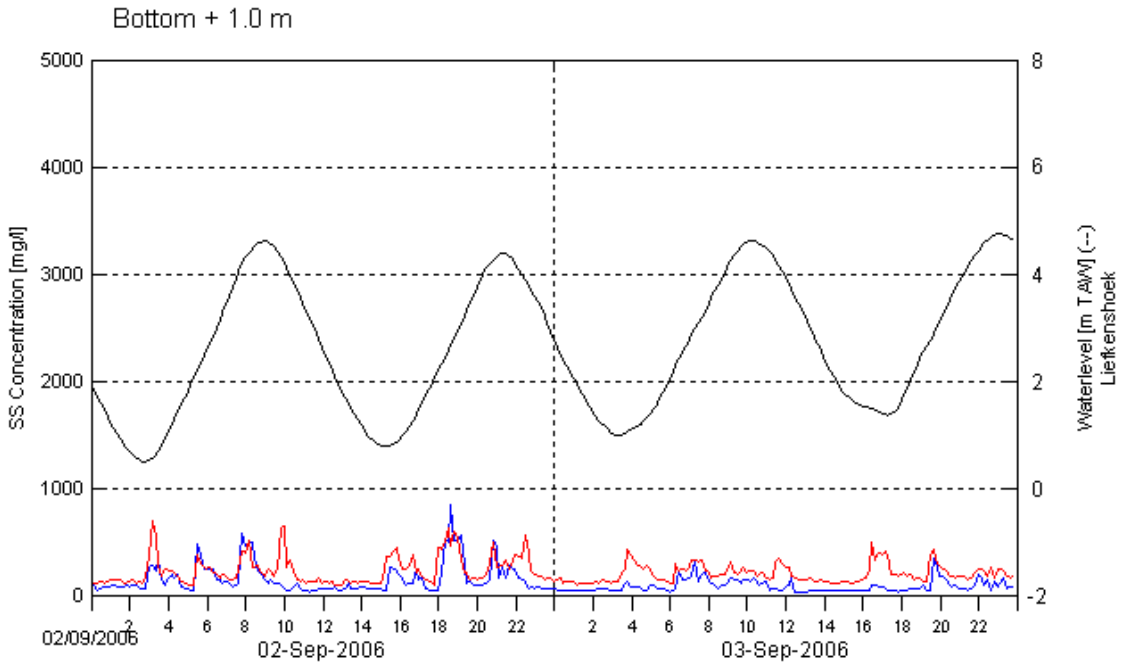
Location:	Date:
Deurganckdok CDW	31/08/06 – 01/09/06

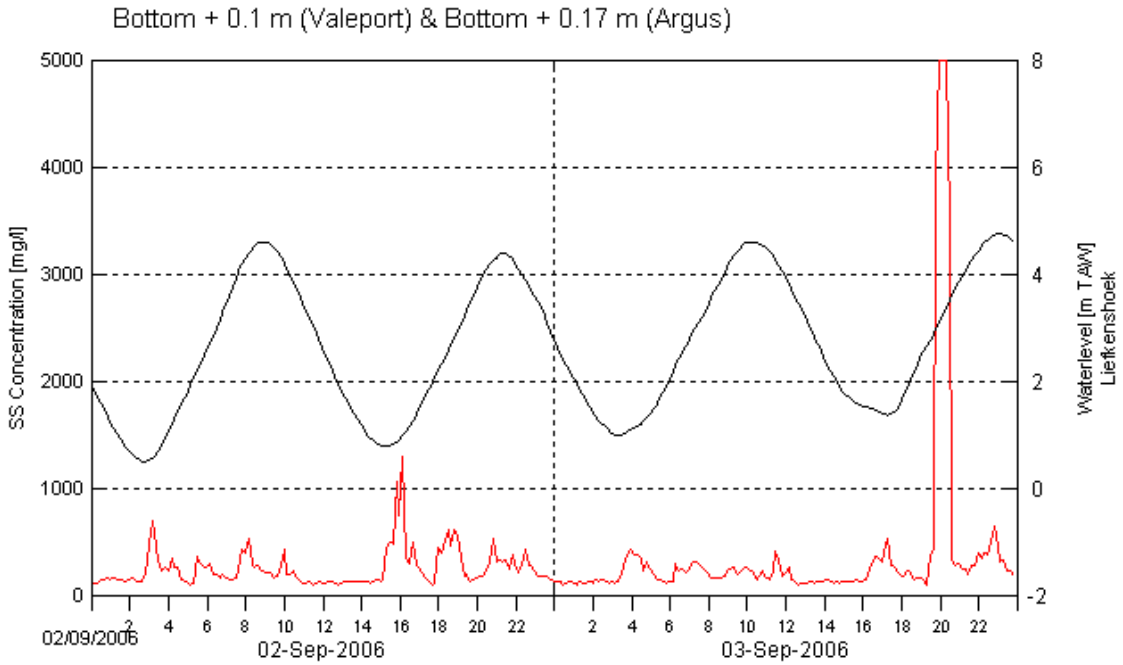
Data processed by: IMDC

In association with: WL | delft hydraulics, GEMS International

I/RA/11283/06.122/MSA

11283 Accretion Deurganckdok – Near bed continuous monitoring – Summer 2006





Comparison of RCM9 & Valeport (blue) to Argus sensors (red) at 1.0 and 0.1 m above the bottom for SS concentration

Location: Deurganckdok CDW

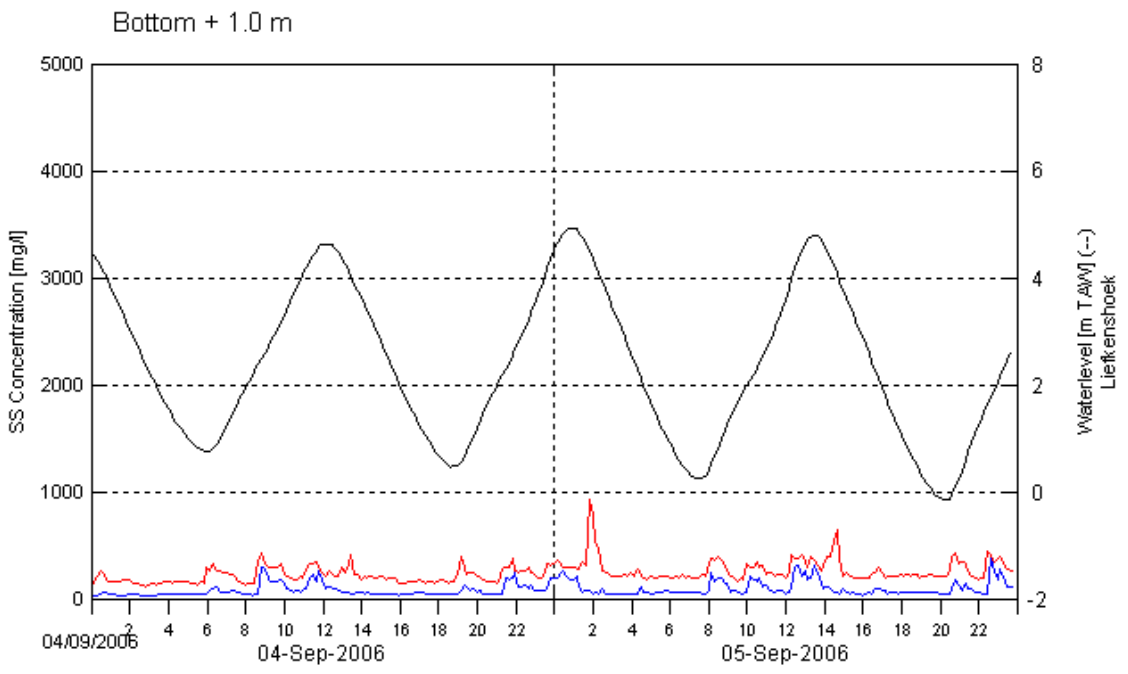
Date: 02/09/06 – 03/09/06

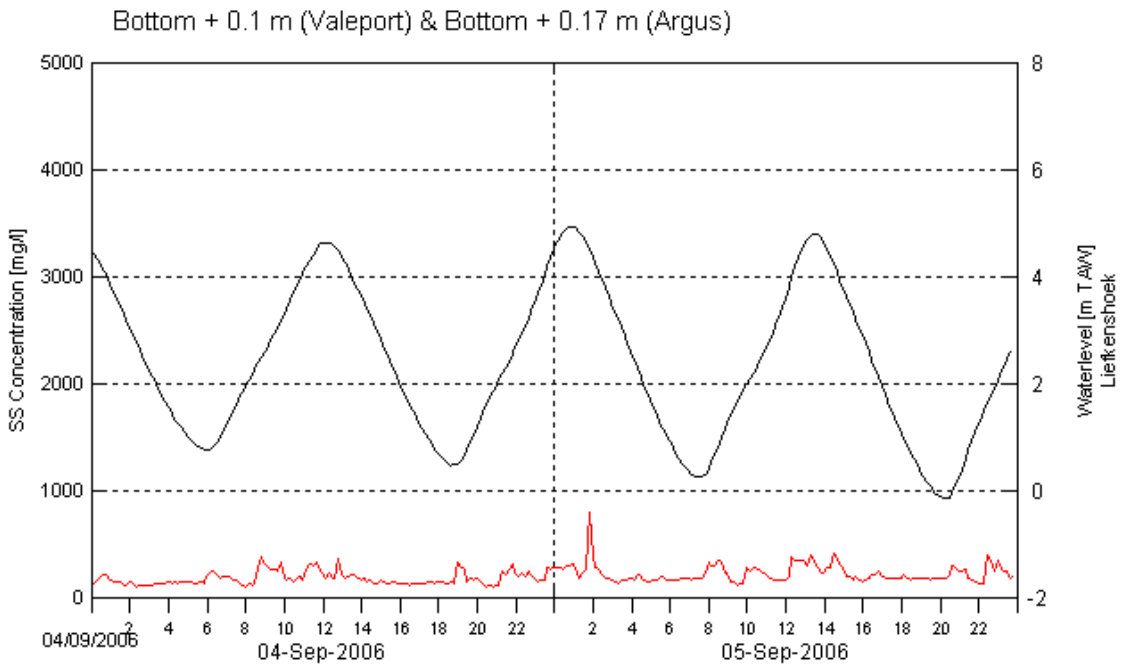
Data processed by: IMDC

In association with: WL | delft hydraulics, GEMS International

I/RA/11283/06.122/MSA

11283 Accretion Deurganckdok – Near bed continuous monitoring – Summer 2006





Comparison of RCM9 & Valeport (blue) to Argus sensors (red) at 1.0 and 0.1 m above the bottom for SS concentration

Location: Deurganckdok CDW

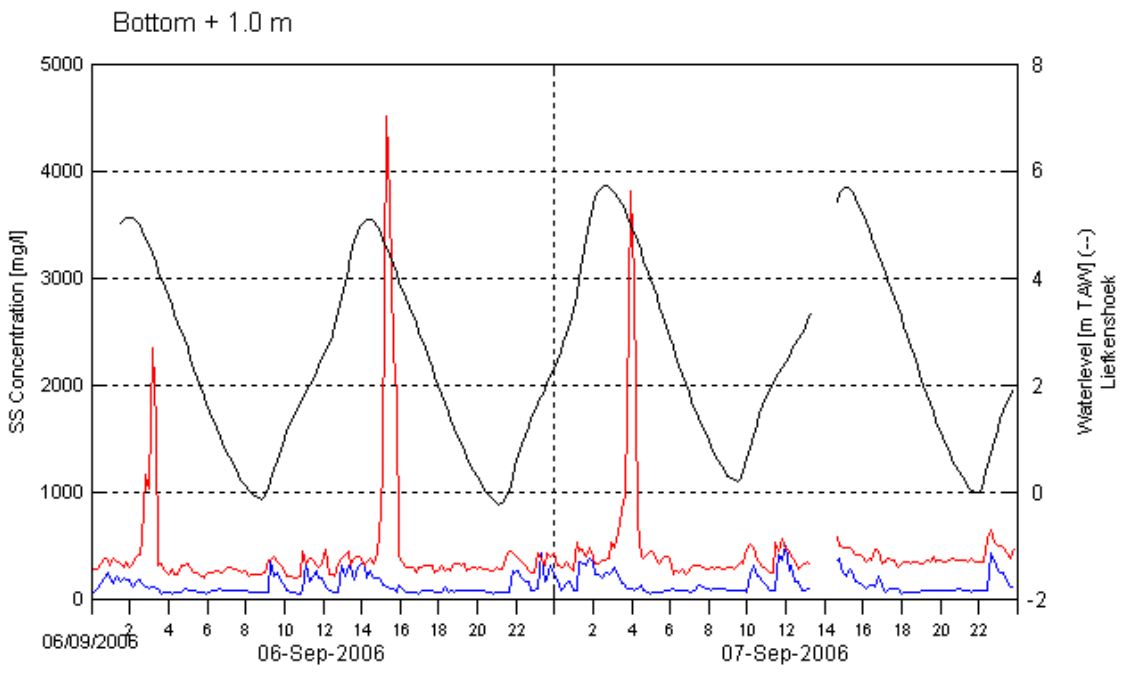
Date: 04/09/06 – 05/09/06

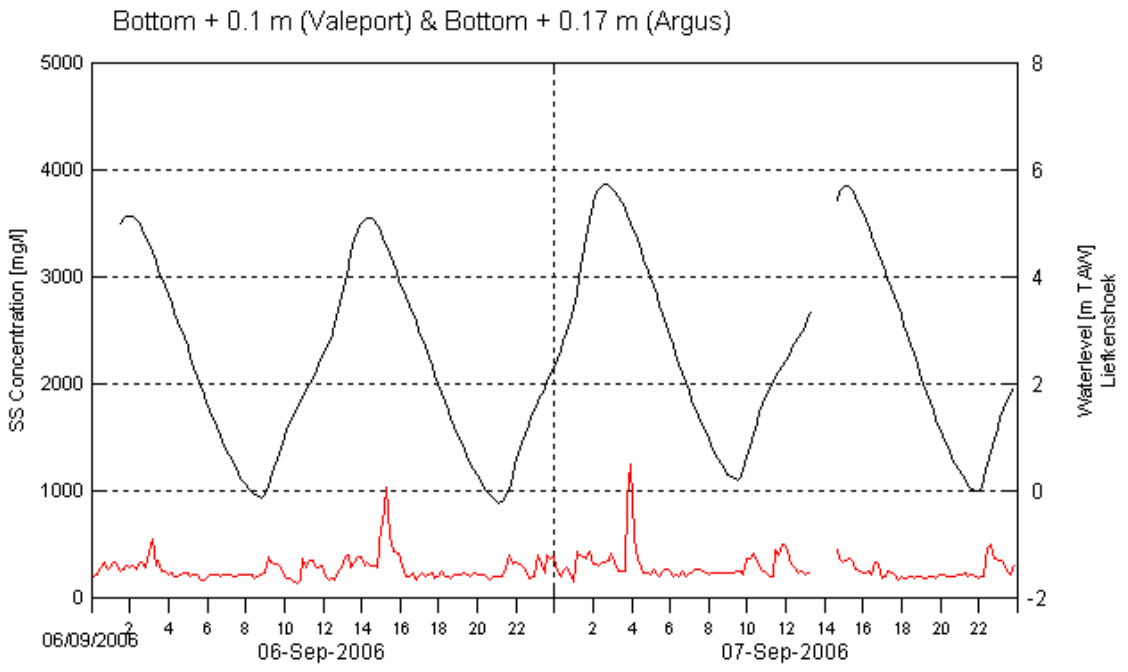
Data processed by: IMDC

In association with: WL | delft hydraulics, GEMS International

I/RA/11283/06.122/MSA

11283 Accretion Deurganckdok – Near bed continuous monitoring – Summer 2006





Comparison of RCM9 & Valeport (blue) to Argus sensors (red) at 1.0 and 0.1 m above the bottom for SS concentration

Location: Deurganckdok CDW

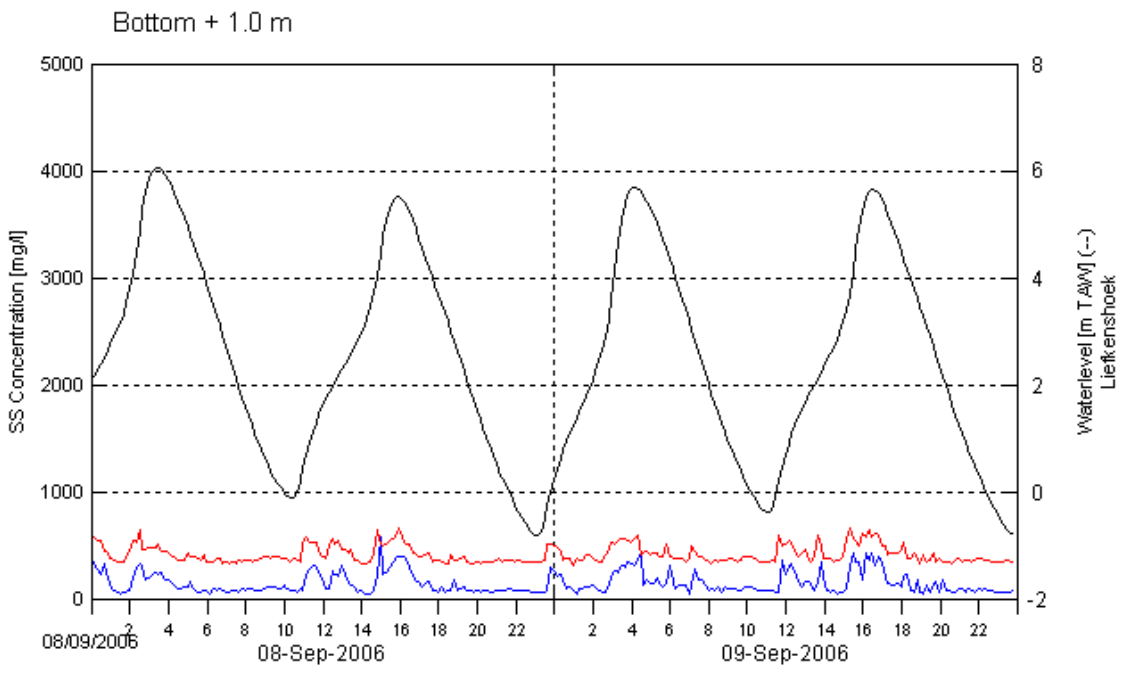
Date: 06/09/06 – 07/09/06

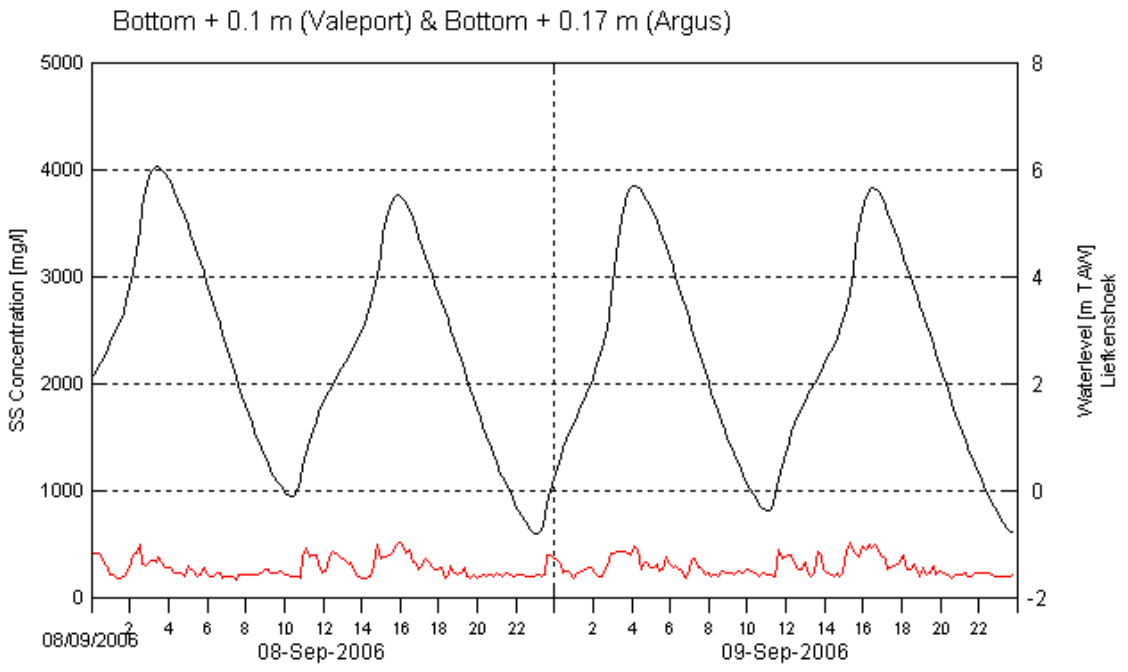
Data processed by: IMDC

In association with: WL | delft hydraulics, GEMS International

I/RA/11283/06.122/MSA

11283 Accretion Deurganckdok – Near bed continuous monitoring – Summer 2006





Comparison of RCM9 & Valeport (blue) to Argus sensors (red) at 1.0 and 0.1 m above the bottom for SS concentration

Location: Deurganckdok CDW

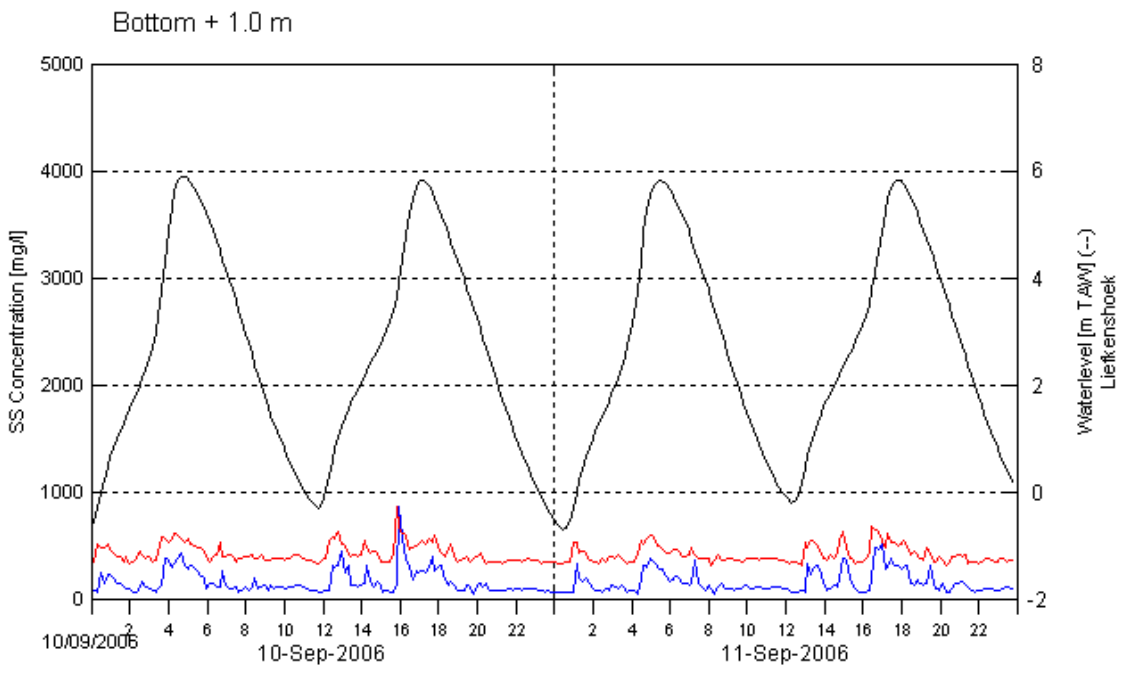
Date: 08/09/06 – 09/09/06

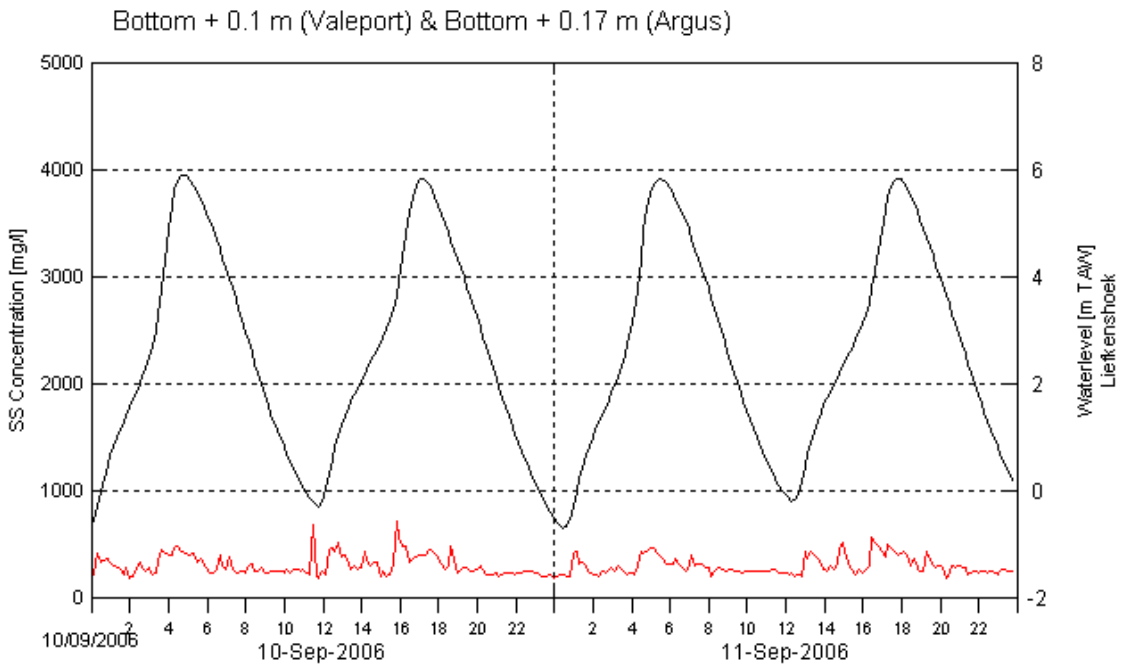
Data processed by: IMDC

In association with: WL | delft hydraulics, GEMS International

I/RA/11283/06.122/MSA

11283 Accretion Deurganckdok – Near bed continuous monitoring – Summer 2006





Comparison of RCM9 & Valeport (blue) to Argus sensors (red) at 1.0 and 0.1 m above the bottom for SS concentration

Location: Deurganckdok CDW

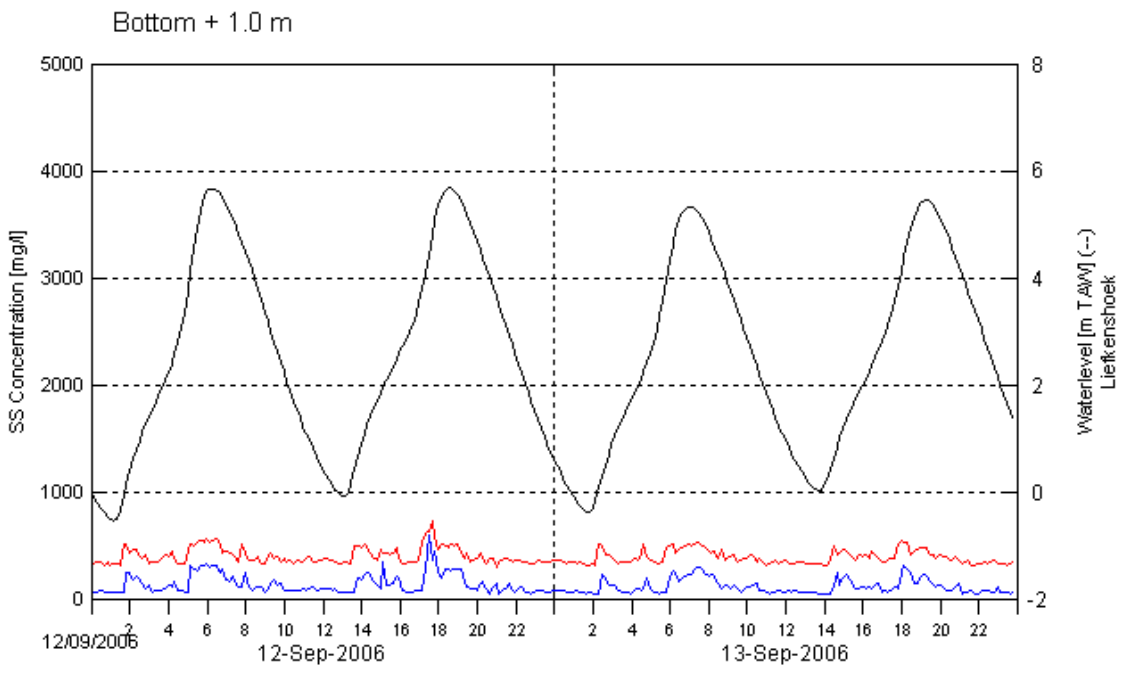
Date: 10/09/06 – 11/09/06

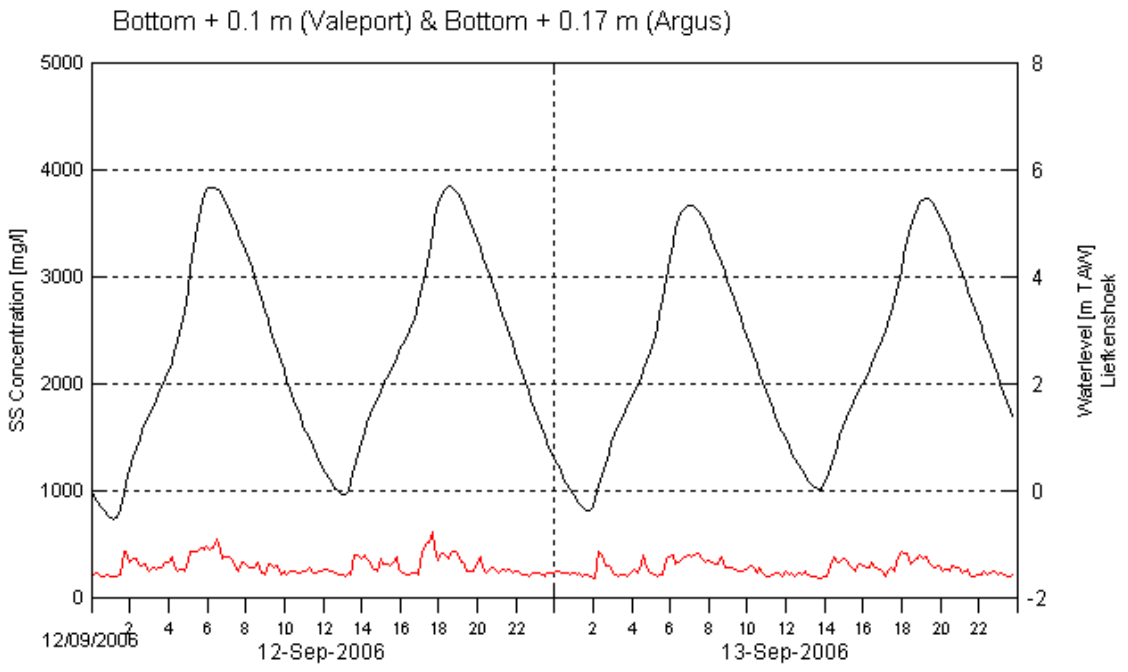
Data processed by: IMDC

In association with: WL | delft hydraulics, GEMS International

I/RA/11283/06.122/MSA

11283 Accretion Deurganckdok – Near bed continuous monitoring – Summer 2006





Comparison of RCM9 & Valeport (blue) to Argus sensors (red) at 1.0 and 0.1 m above the bottom for SS concentration

Location: Deurganckdok CDW

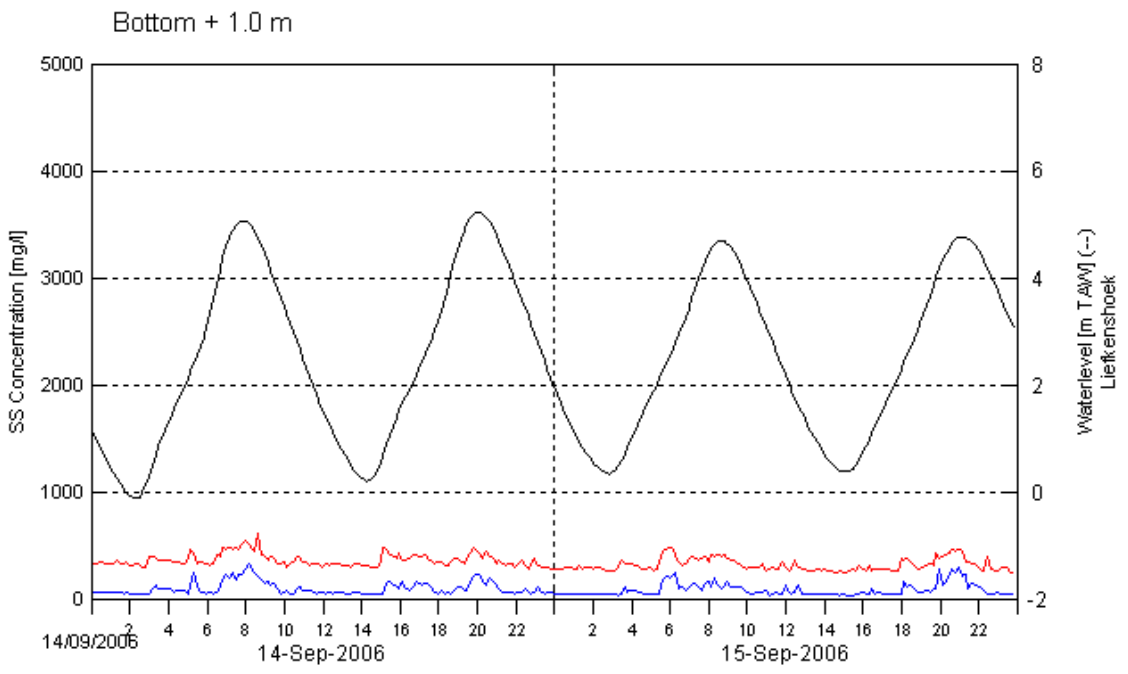
Date: 12/09/06 – 13/09/06

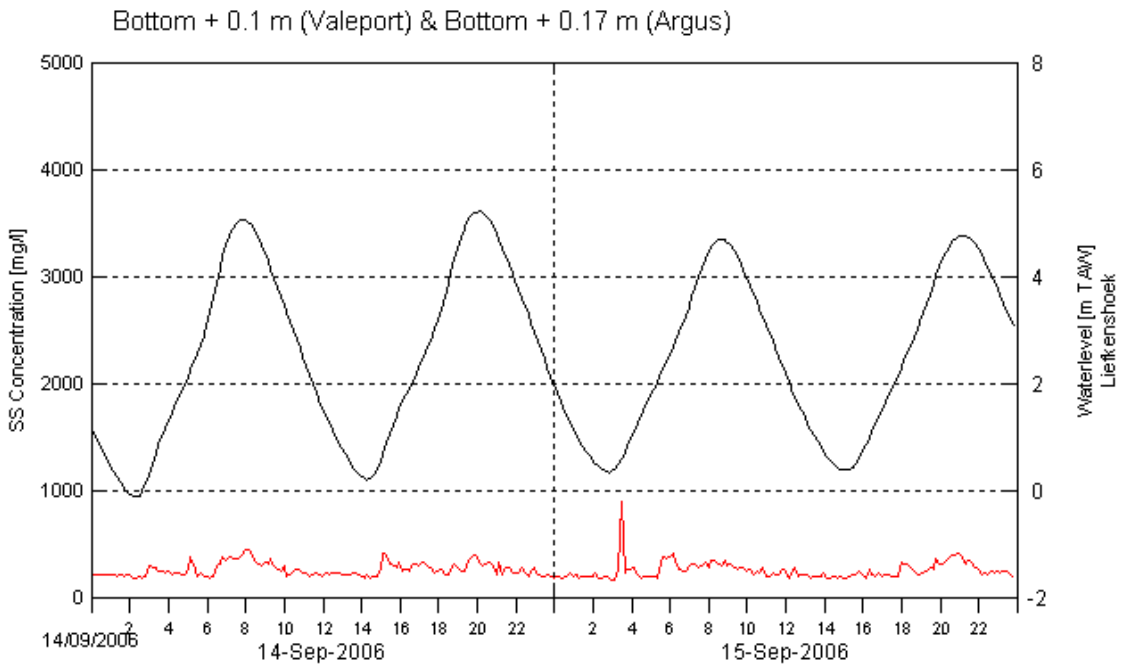
Data processed by: IMDC

In association with: WL | delft hydraulics, GEMS International

I/RA/11283/06.122/MSA

11283 Accretion Deurganckdok – Near bed continuous monitoring – Summer 2006





Comparison of RCM9 & Valeport (blue) to Argus sensors (red) at 1.0 and 0.1 m above the bottom for SS concentration

Location: Deurganckdok CDW

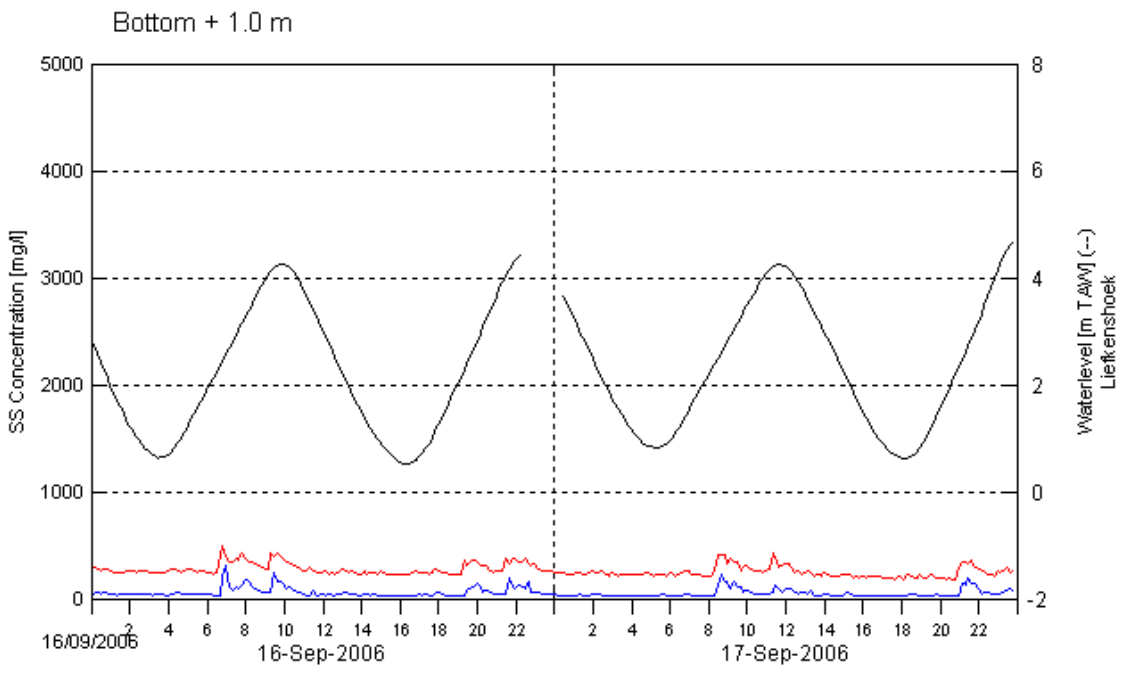
Date: 14/09/06 – 15/09/06

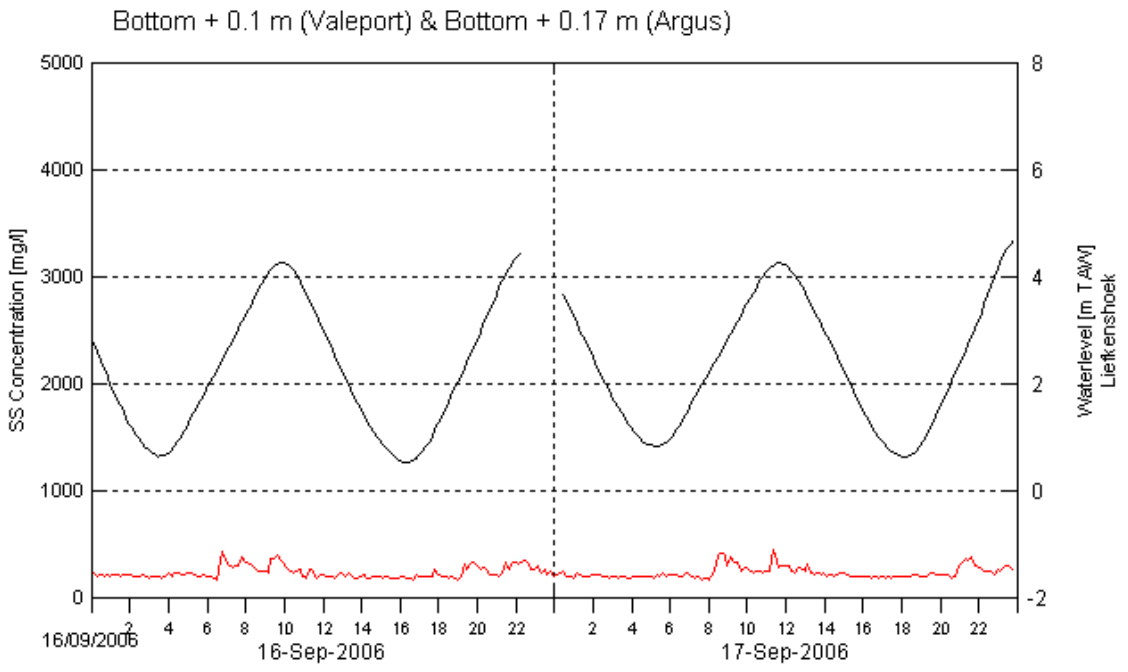
Data processed by: IMDC

In association with: WL | delft hydraulics, GEMS International

I/RA/11283/06.122/MSA

11283 Accretion Deurganckdok – Near bed continuous monitoring – Summer 2006





Comparison of RCM9 & Valeport (blue) to Argus sensors (red) at 1.0 and 0.1 m above the bottom for SS concentration

Location: Deurganckdok CDW

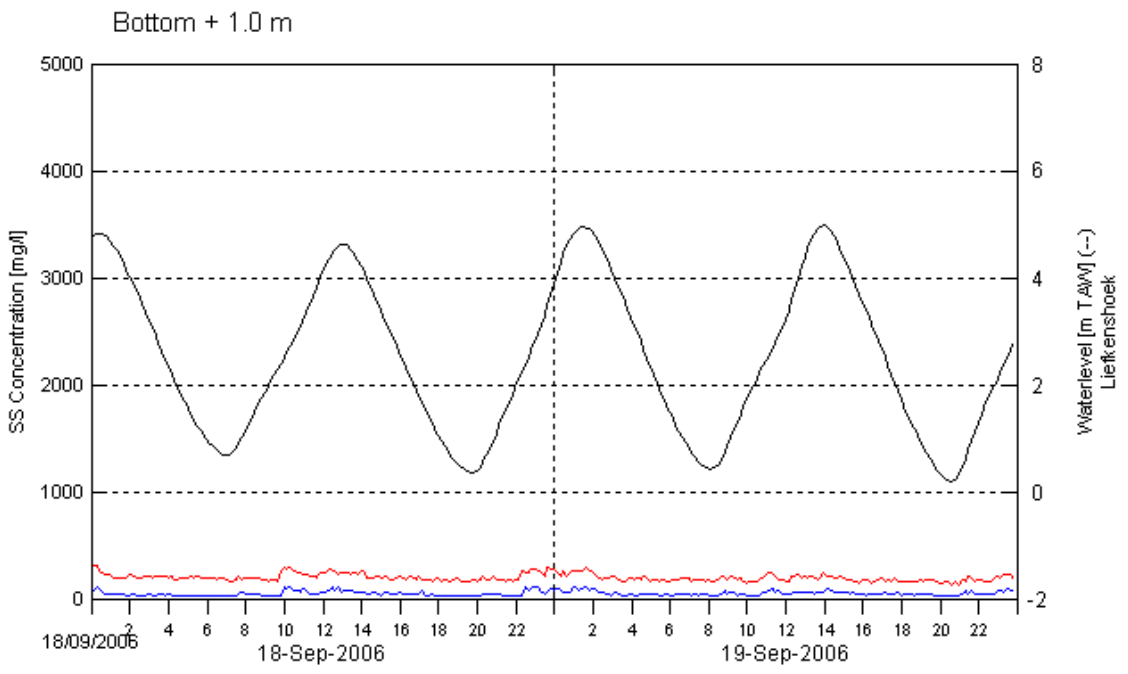
Date: 16/09/06 – 17/09/06

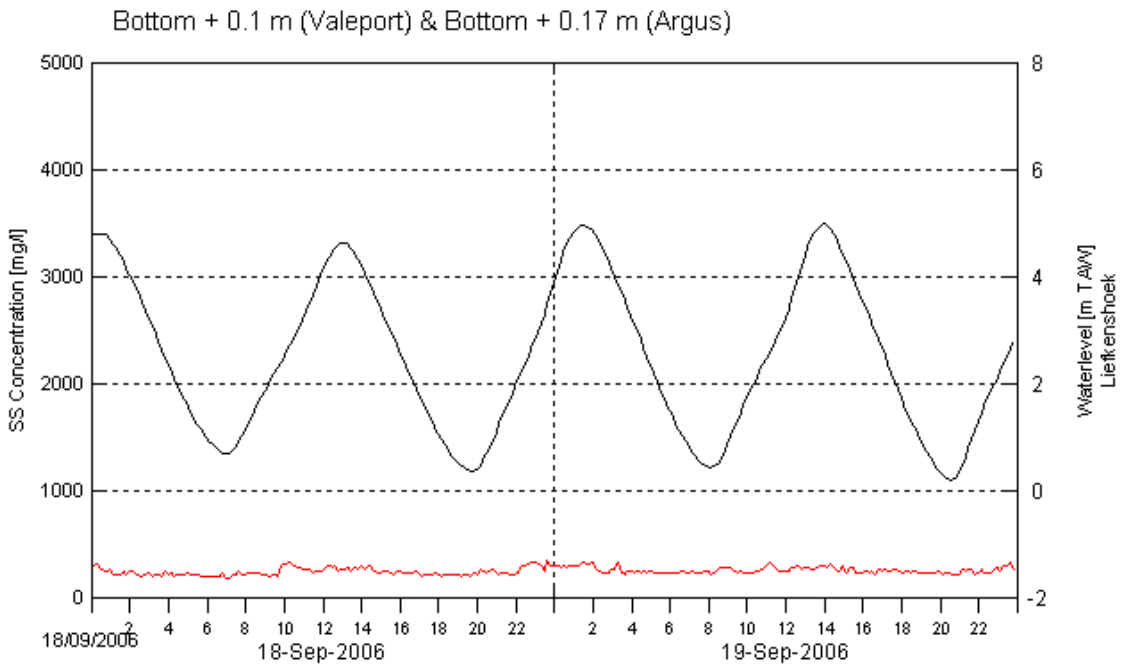
Data processed by: IMDC

In association with: WL | delft hydraulics, GEMS International

I/RA/11283/06.122/MSA

11283 Accretion Deurganckdok – Near bed continuous monitoring – Summer 2006





Comparison of RCM9 & Valeport (blue) to Argus sensors (red) at 1.0 and 0.1 m above the bottom for SS concentration

Location: Deurganckdok CDW

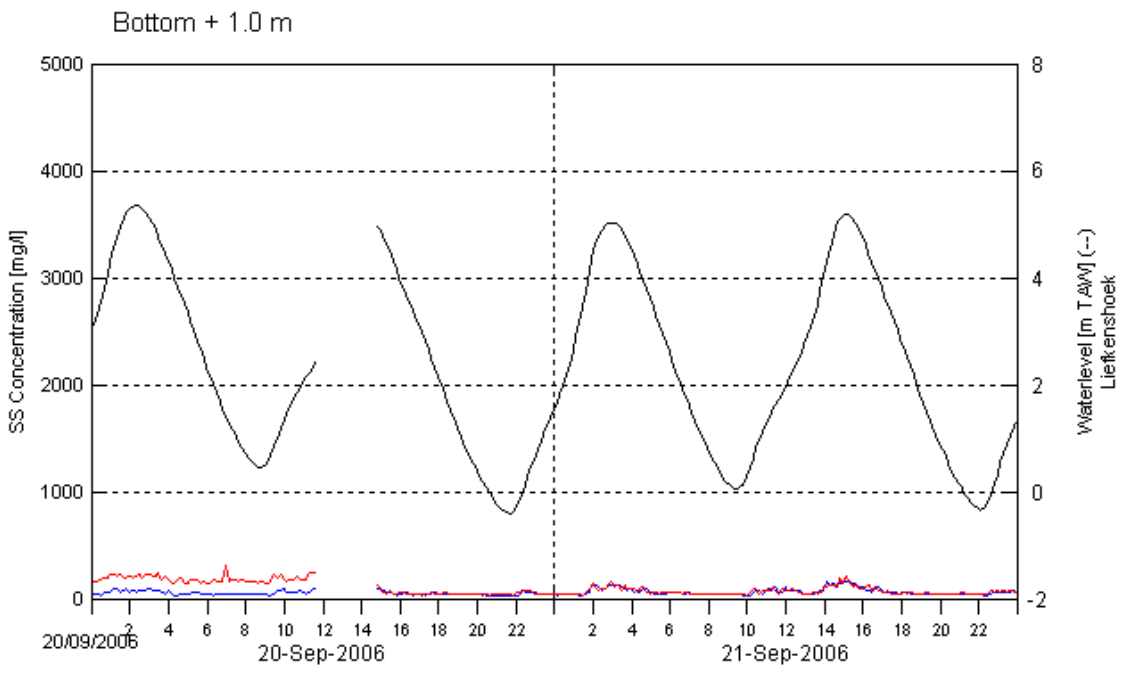
Date: 18/09/06 – 19/09/06

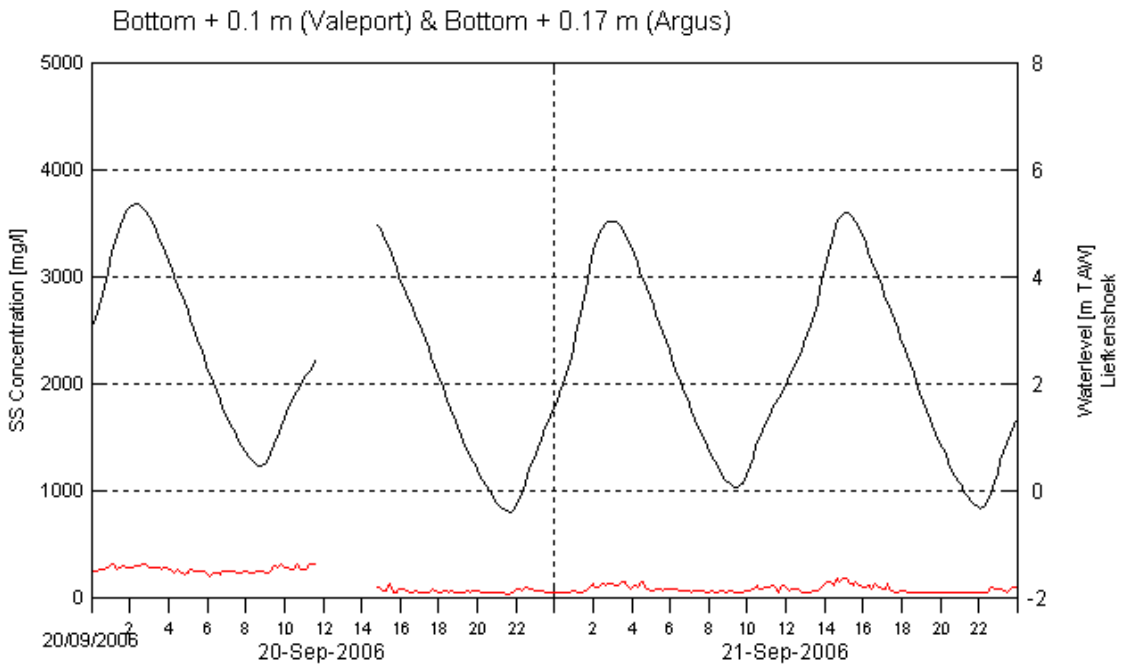
Data processed by: IMDC

In association with: WL | delft hydraulics, GEMS International

I/RA/11283/06.122/MSA

11283 Accretion Deurganckdok – Near bed continuous monitoring – Summer 2006





Comparison of RCM9 & Valeport (blue) to Argus sensors (red) at 1.0 and 0.1 m above the bottom for SS concentration

Location: Deurganckdok CDW

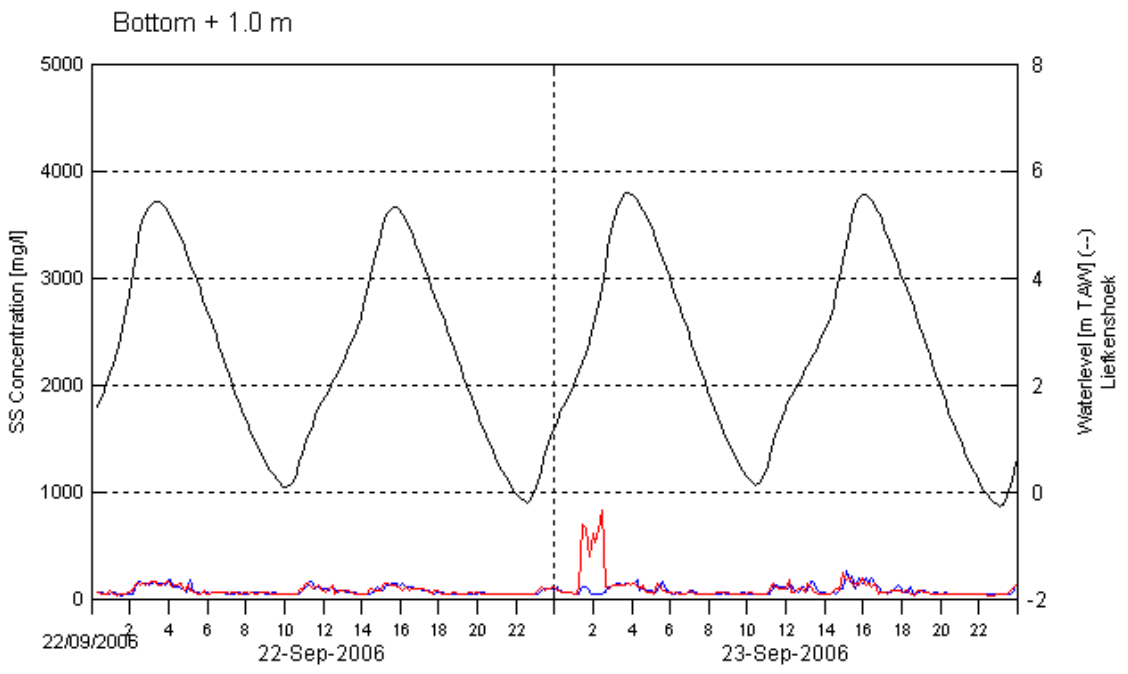
Date: 20/09/06 – 21/09/06

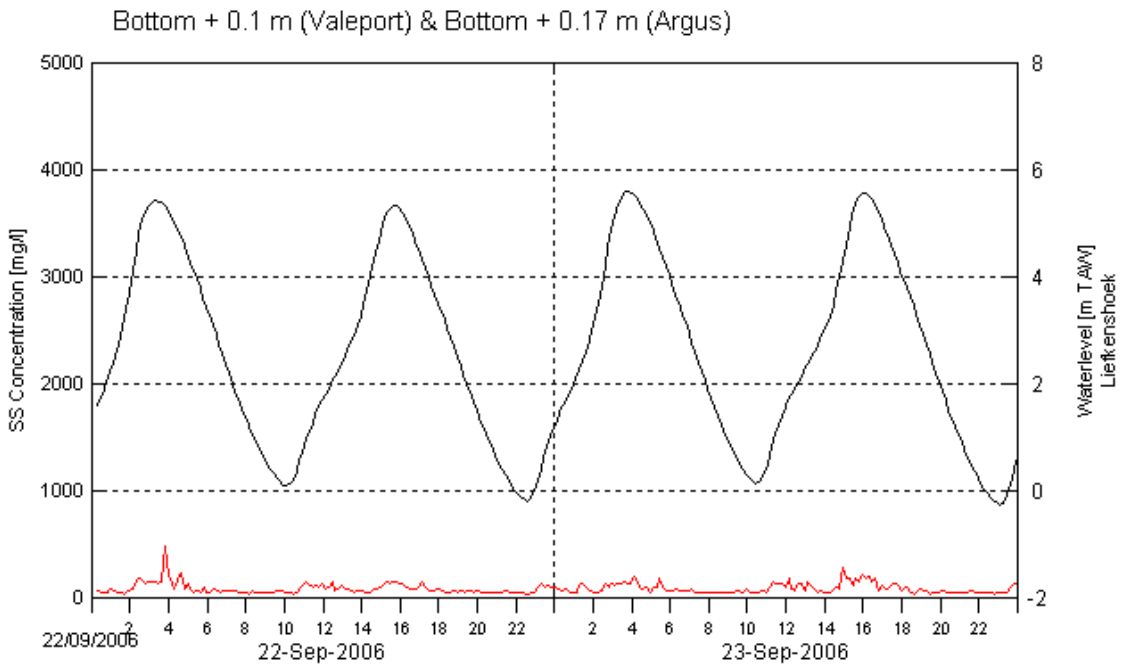
Data processed by: IMDC

In association with: WL | delft hydraulics, GEMS International

I/RA/11283/06.122/MSA

11283 Accretion Deurganckdok – Near bed continuous monitoring – Summer 2006





Comparison of RCM9 & Valeport (blue) to Argus sensors (red) at 1.0 and 0.1 m above the bottom for SS concentration

Location: Deurganckdok CDW

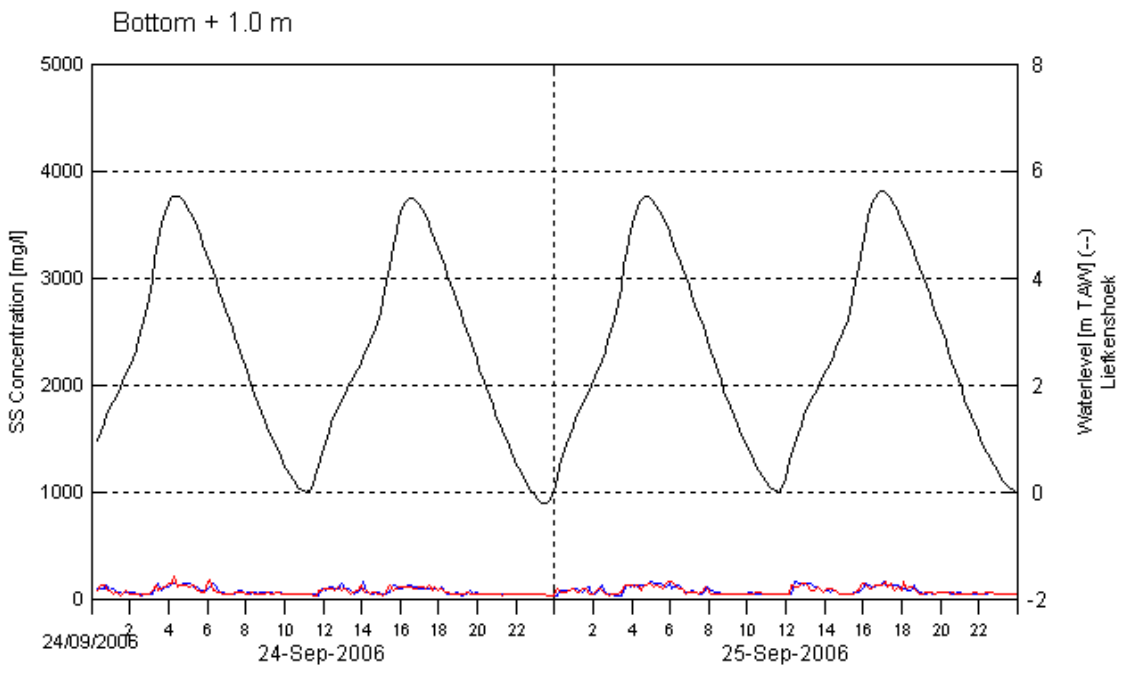
Date: 22/09/06 – 23/09/06

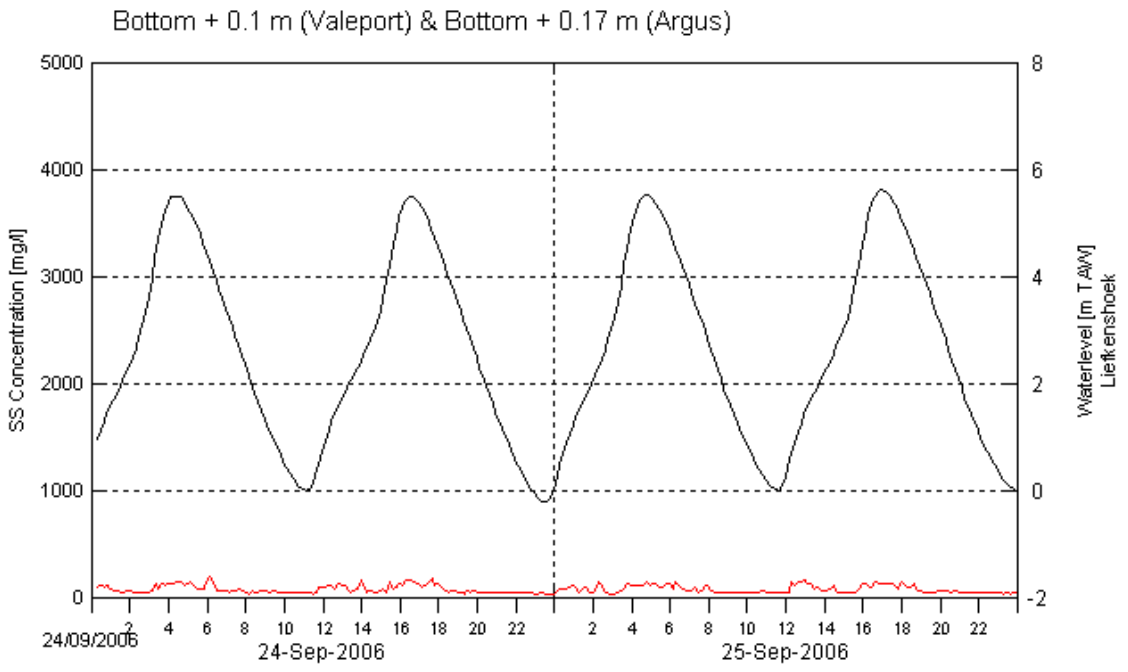
Data processed by: IMDC

In association with: WL | delft hydraulics, GEMS International

I/RA/11283/06.122/MSA

11283 Accretion Deurganckdok – Near bed continuous monitoring – Summer 2006





Comparison of RCM9 & Valeport (blue) to Argus sensors (red) at 1.0 and 0.1 m above the bottom for SS concentration

Location: Deurganckdok CDW

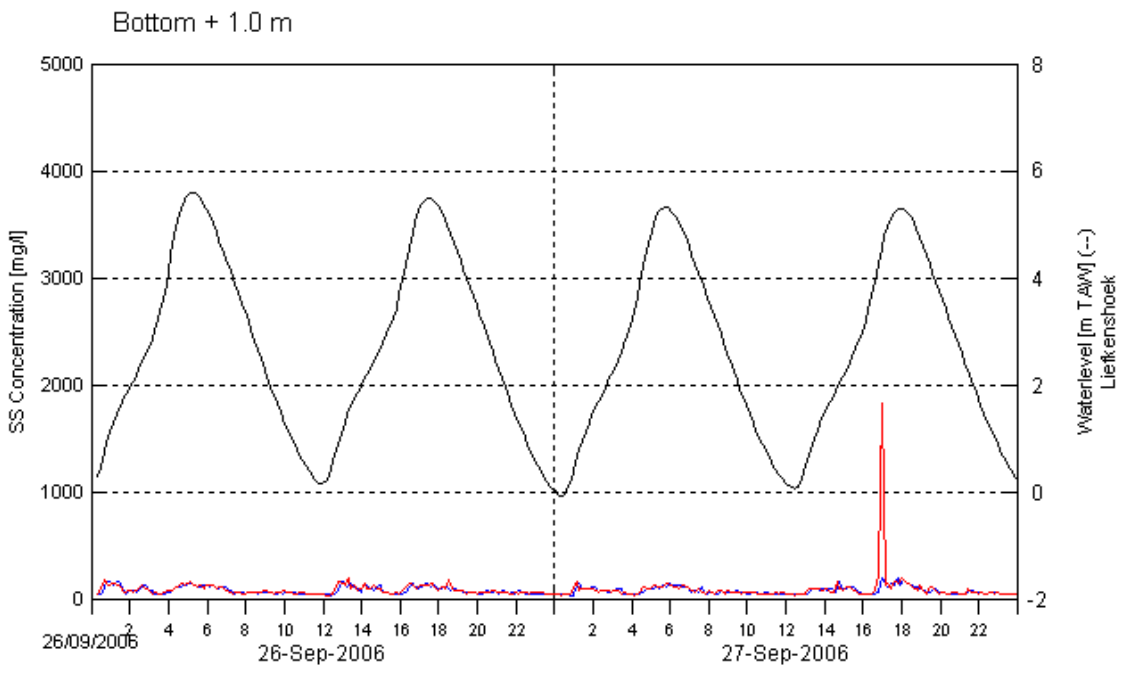
Date: 24/09/06 – 25/09/06

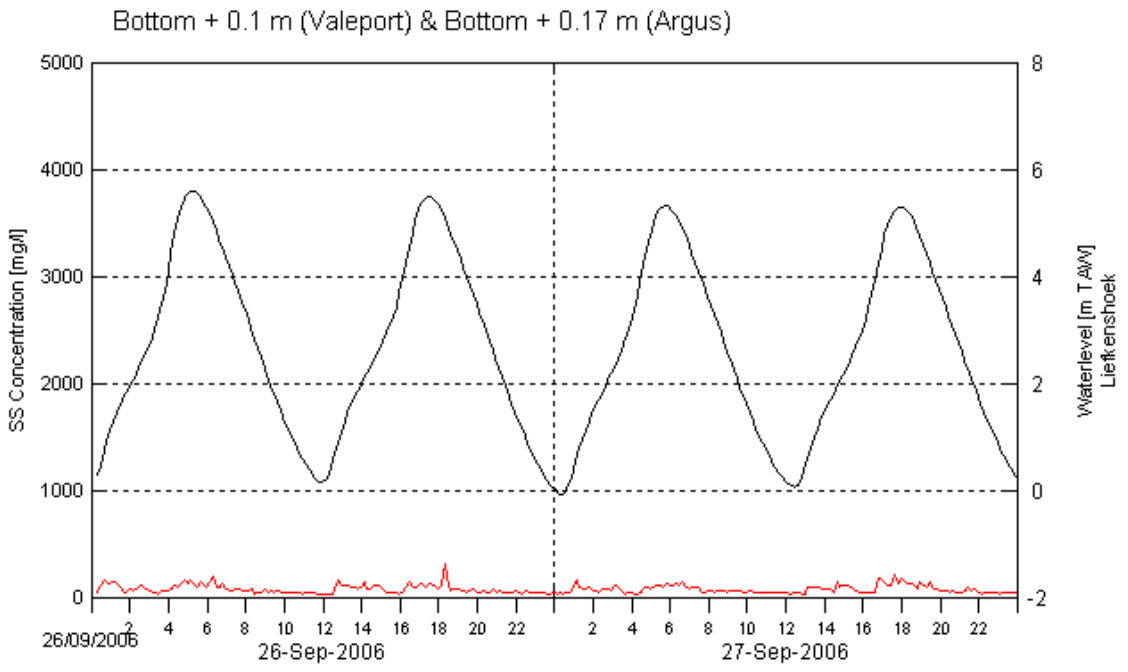
Data processed by: IMDC

In association with: WL | delft hydraulics, GEMS International

I/RA/11283/06.122/MSA

11283 Accretion Deurganckdok – Near bed continuous monitoring – Summer 2006





Comparison of RCM9 & Valeport (blue) to Argus sensors (red) at 1.0 and 0.1 m above the bottom for SS concentration

Location: Deurganckdok CDW

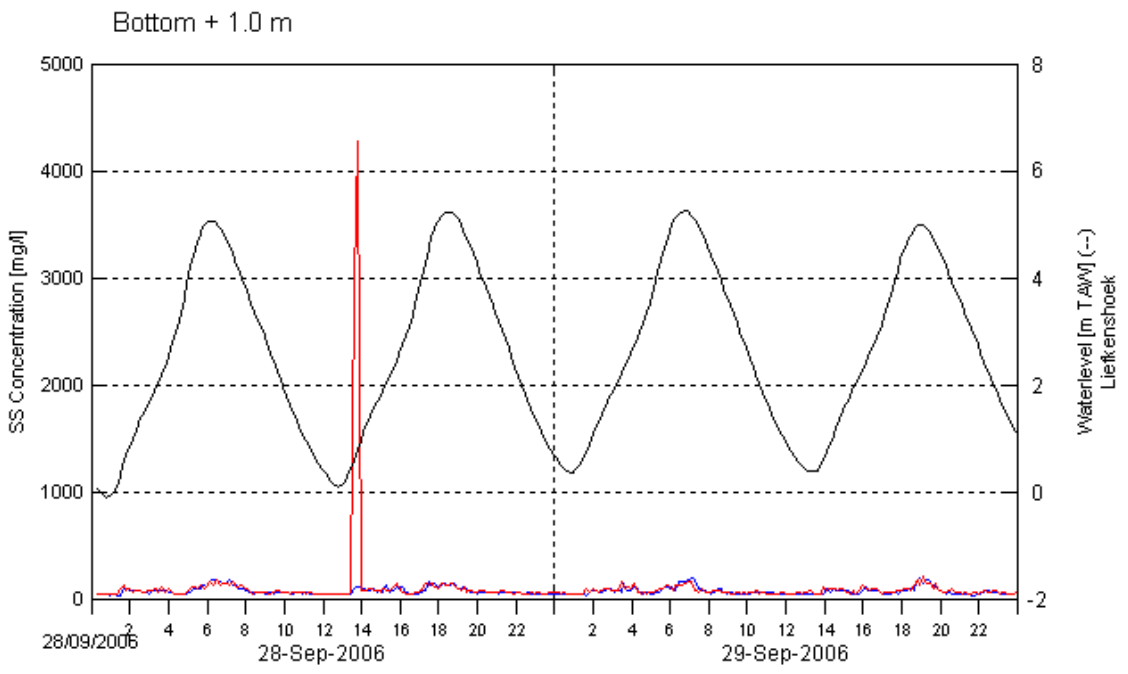
Date: 26/09/06 – 27/09/06

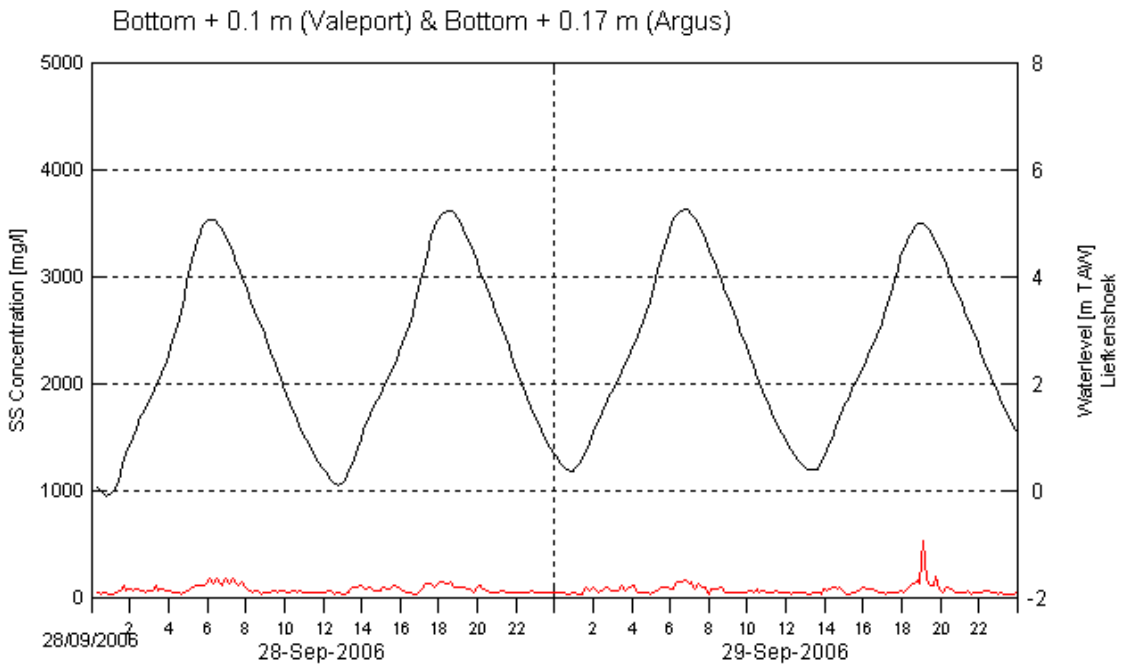
Data processed by: IMDC

In association with: WL | delft hydraulics, GEMS International

I/RA/11283/06.122/MSA

11283 Accretion Deurganckdok – Near bed continuous monitoring – Summer 2006





Comparison of RCM9 & Valeport (blue) to Argus sensors (red) at 1.0 and 0.1 m above the bottom for SS concentration

Location: Deurganckdok CDW

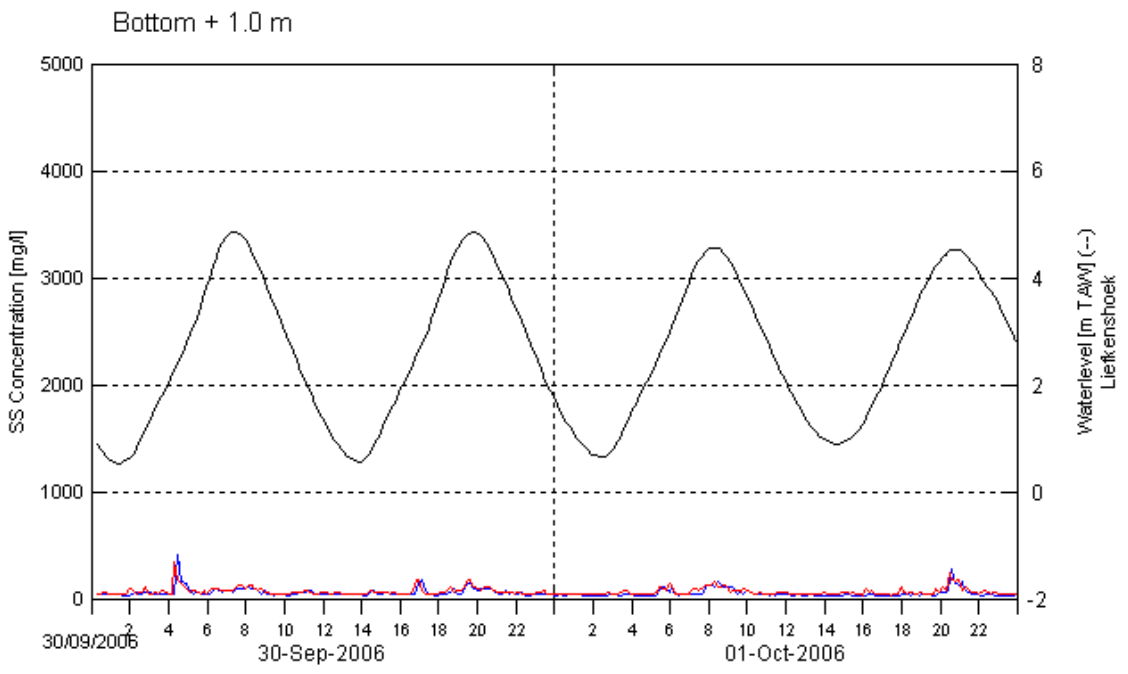
Date: 28/09/06 – 29/09/06

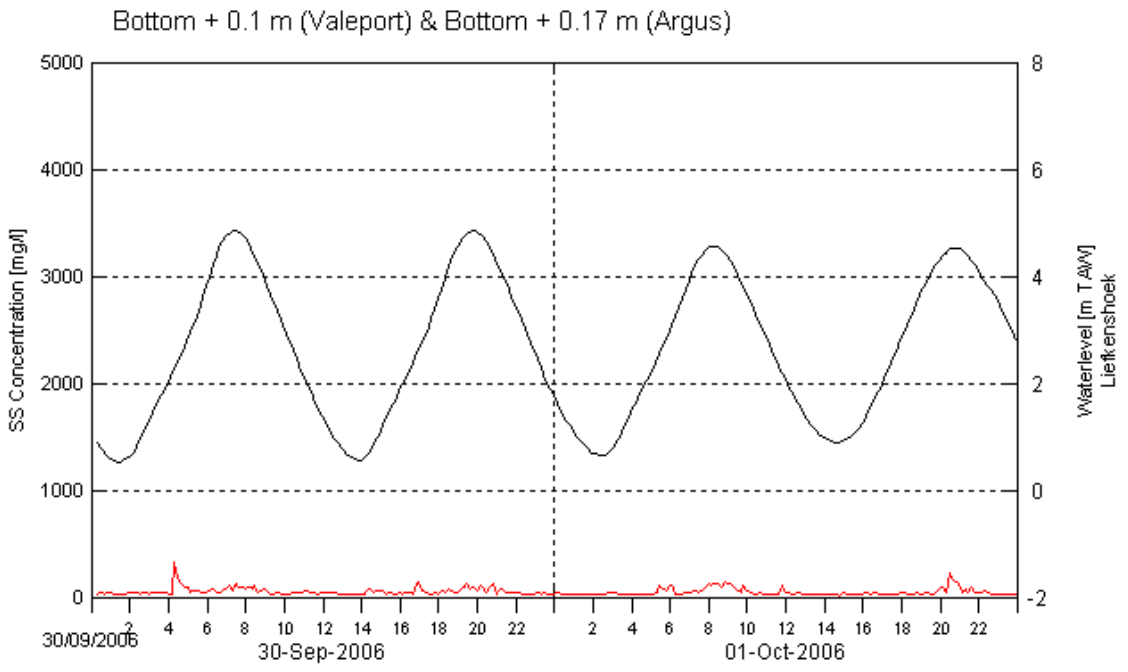
Data processed by: IMDC

In association with: WL | delft hydraulics, GEMS International

I/RA/11283/06.122/MSA

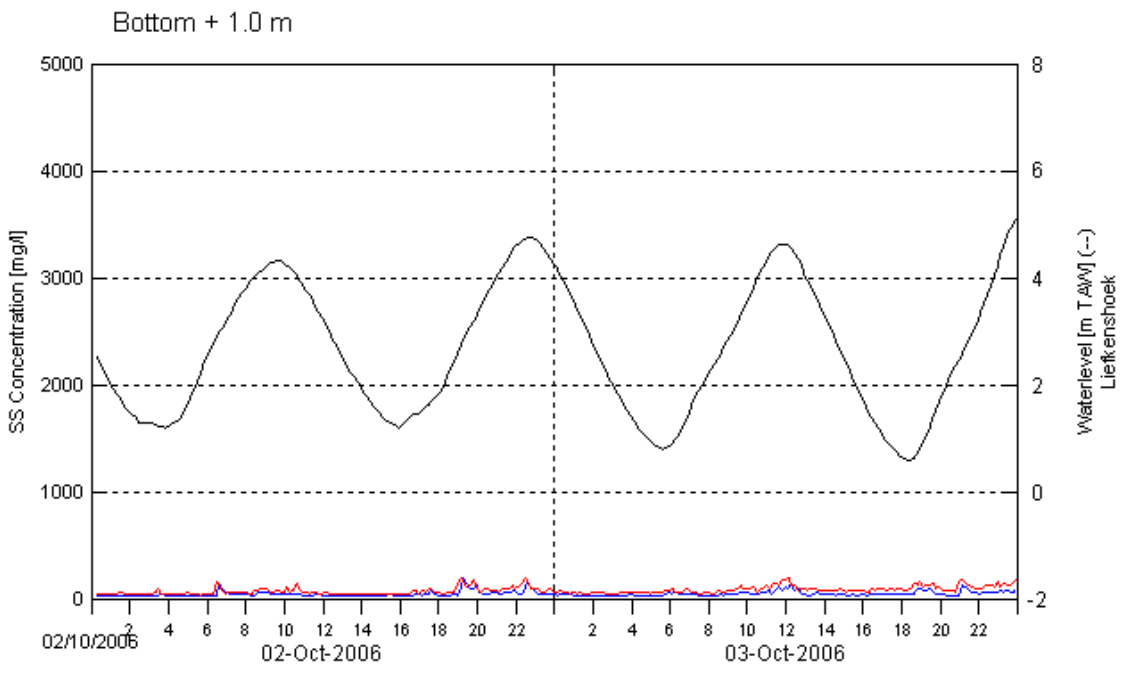
11283 Accretion Deurganckdok – Near bed continuous monitoring – Summer 2006

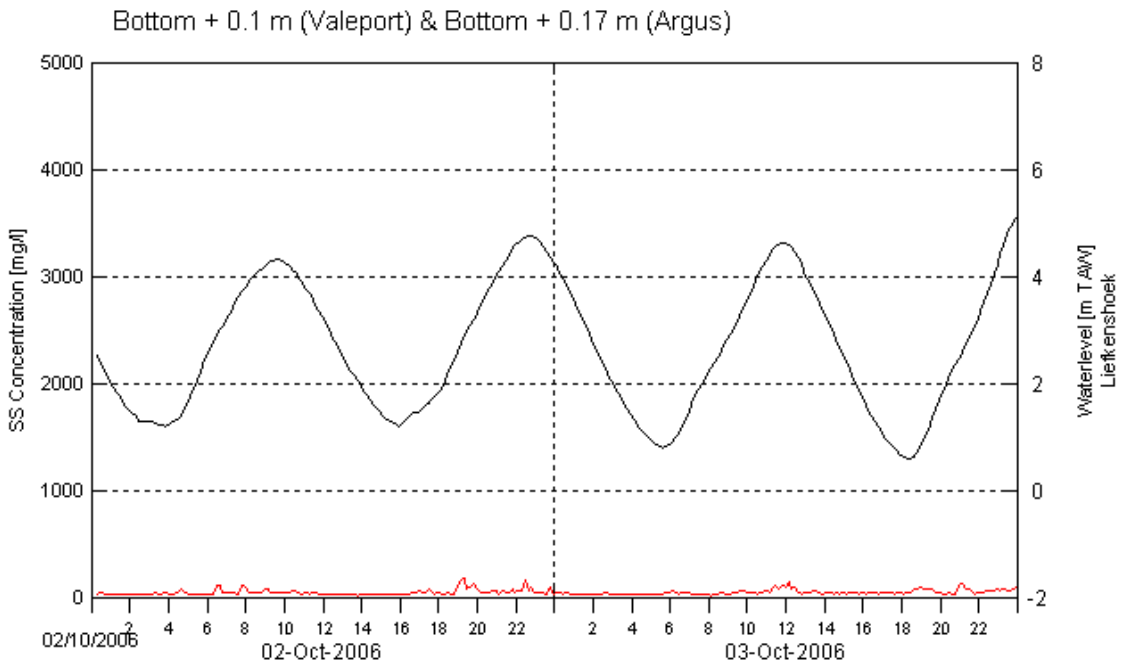




Comparison of RCM9 & Valeport (blue) to Argus sensors (red) at 1.0 and 0.1 m above the bottom for SS concentration		*Data processed by:* IMDC
Location: Deurganckdok CDW	Date: 30/09/06 – 01/10/06	*In association with:* WL | delft hydraulics, GEMS International
		I/RA/11283/06.122/MSA

11283 Accretion Deurganckdok – Near bed continuous monitoring – Summer 2006





Comparison of RCM9 & Valeport (blue) to Argus sensors (red) at 1.0 and 0.1 m above the bottom for SS concentration

Location: Deurganckdok CDW

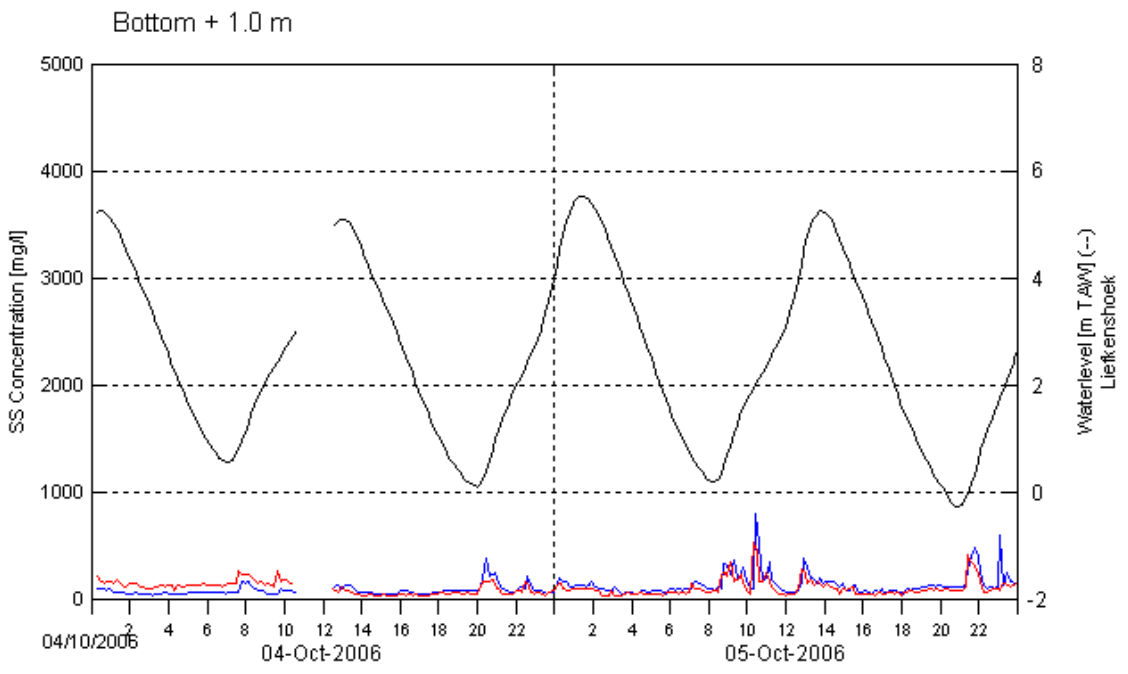
Date: 02/10/06 – 03/10/06

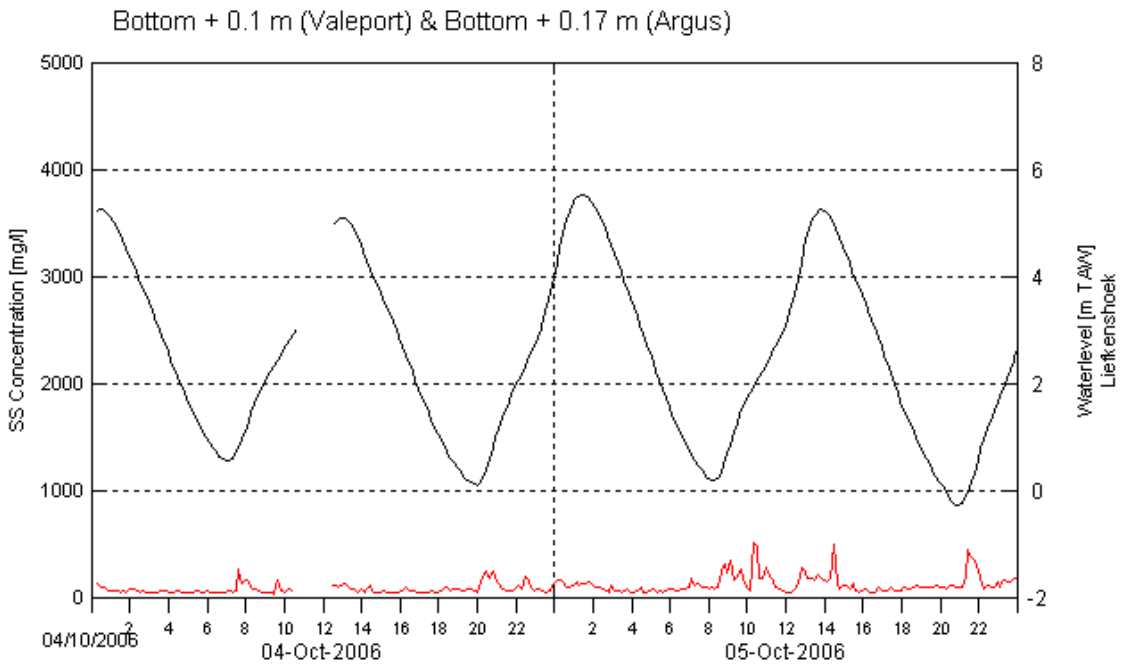
Data processed by: IMDC

In association with: WL | delft hydraulics, GEMS International

I/RA/11283/06.122/MSA

11283 Accretion Deurganckdok – Near bed continuous monitoring – Summer 2006





Comparison of RCM9 & Valeport (blue) to Argus sensors (red) at 1.0 and 0.1 m above the bottom for SS concentration

Location: Deurganckdok CDW

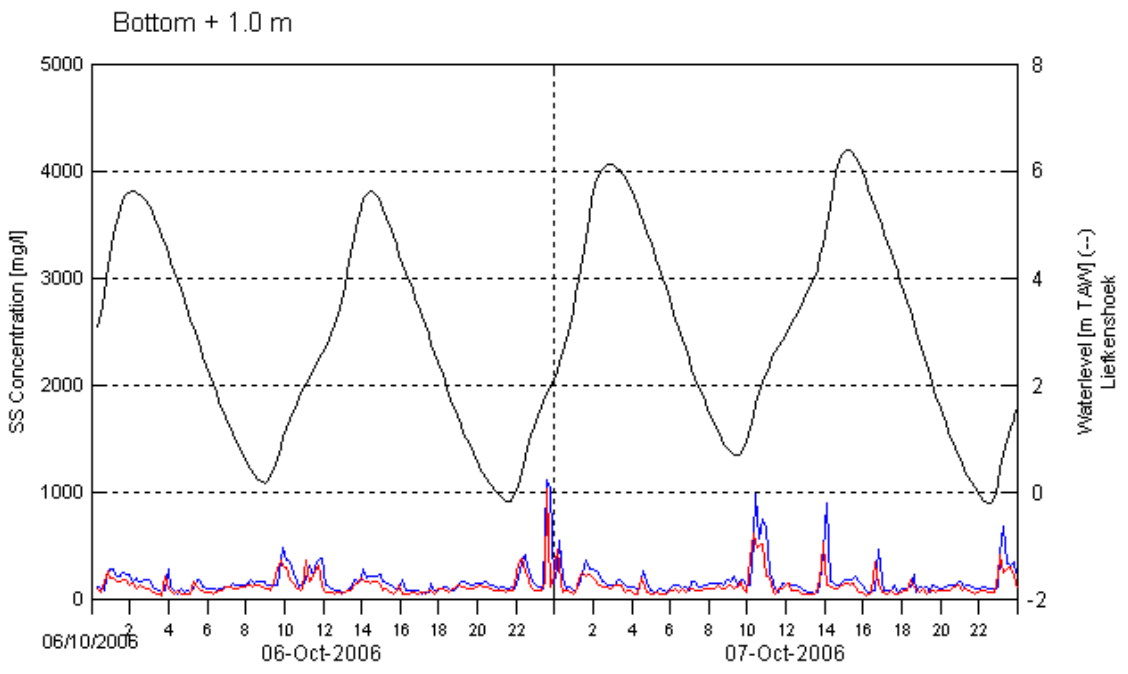
Date: 04/10/06 – 05/10/06

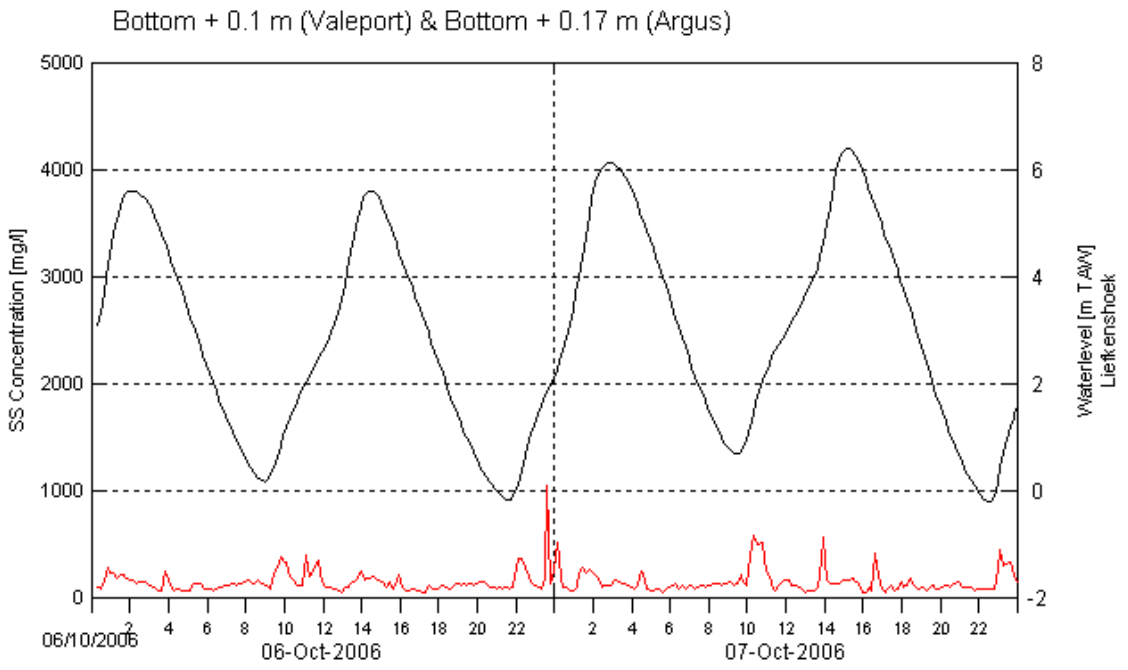
Data processed by: IMDC

In association with: WL | delft hydraulics, GEMS International

I/RA/11283/06.122/MSA

11283 Accretion Deurganckdok – Near bed continuous monitoring – Summer 2006





Comparison of RCM9 & Valeport (blue) to Argus sensors (red) at 1.0 and 0.1 m above the bottom for SS concentration

Location: Deurganckdok CDW

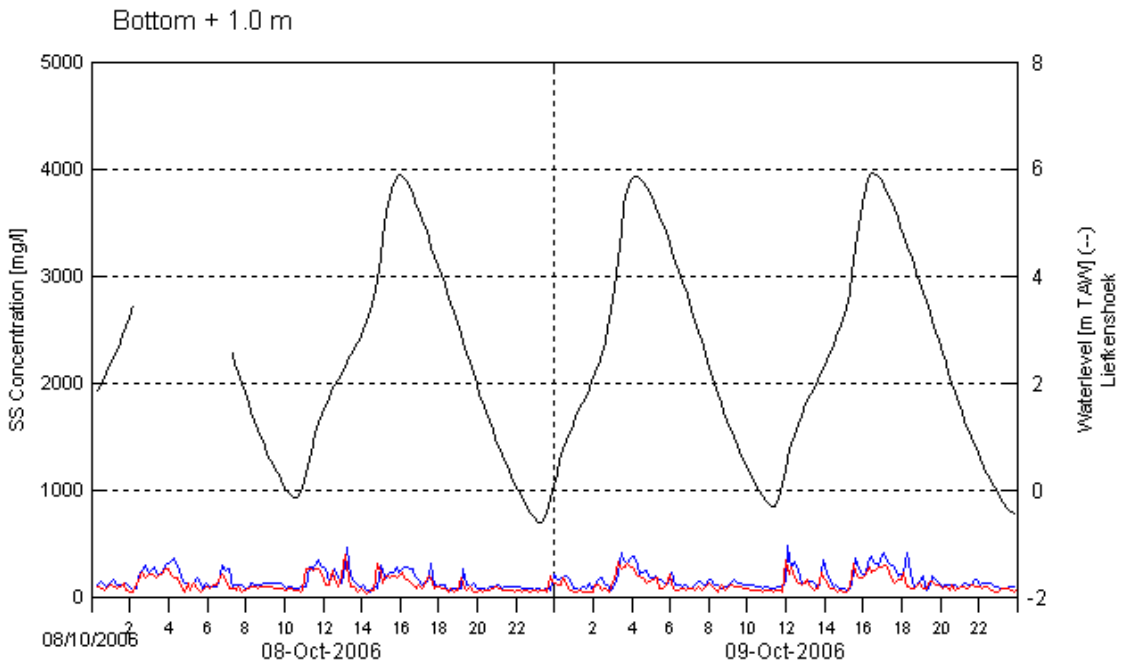
Date: 06/10/06 – 07/10/06

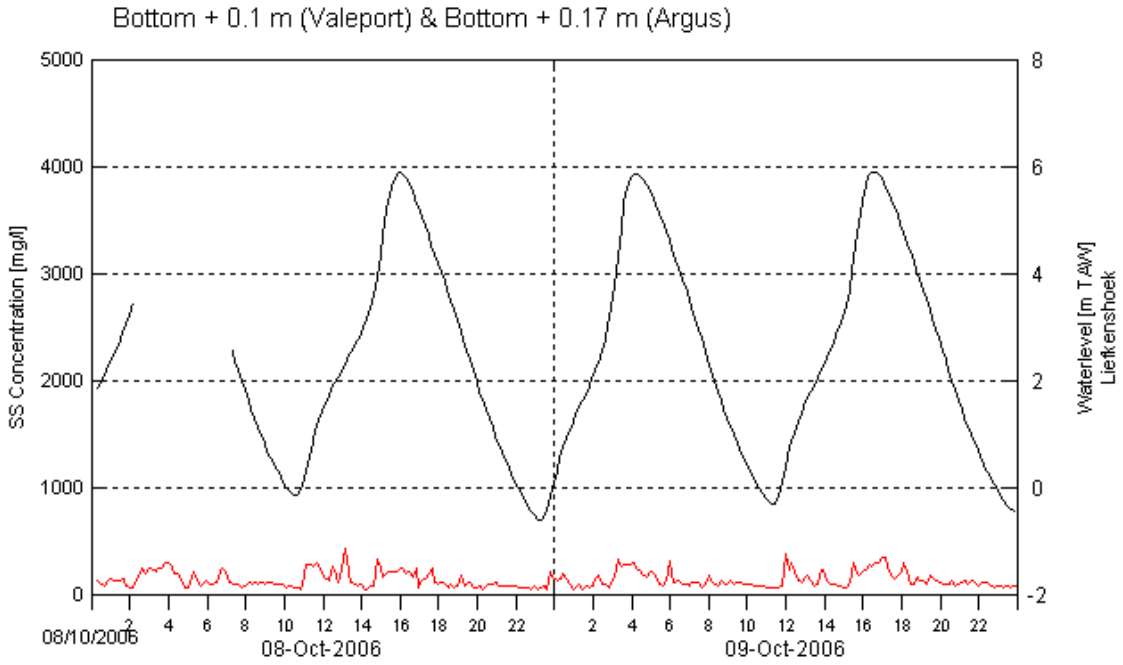
Data processed by: IMDC

In association with: WL | delft hydraulics, GEMS International

I/RA/11283/06.122/MSA

11283 Accretion Deurganckdok – Near bed continuous monitoring – Summer 2006





Comparison of RCM9 & Valeport (blue) to Argus sensors (red) at 1.0 and 0.1 m above the bottom for SS concentration

Location: Deurganckdok CDW

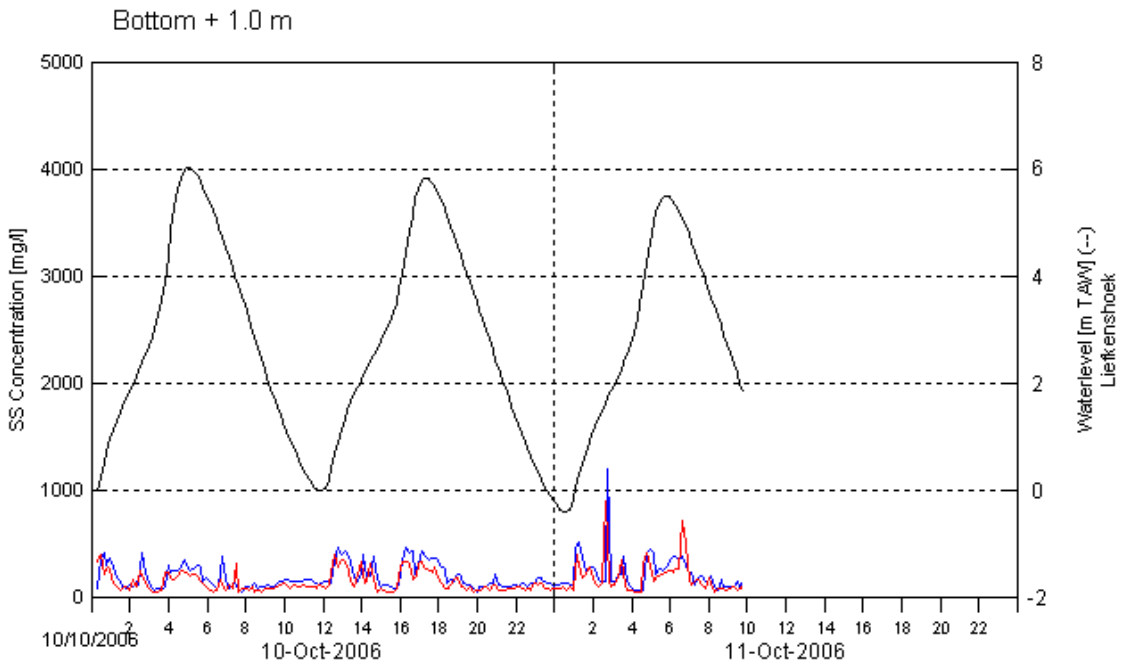
Date: 08/10/06 – 09/10/06

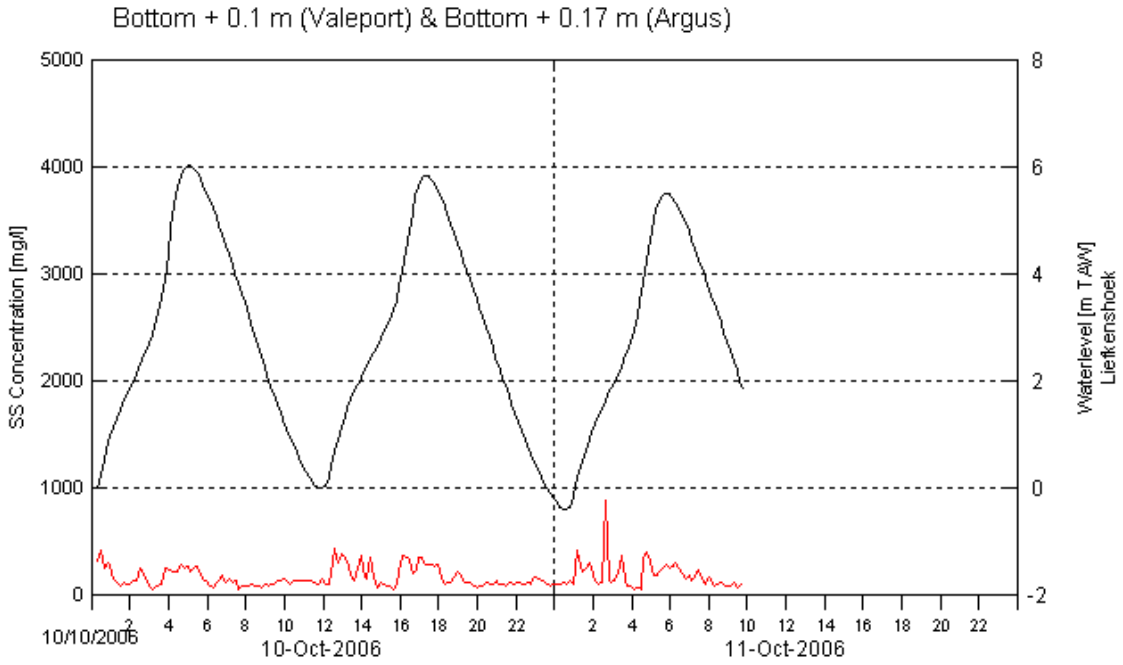
Data processed by: IMDC

In association with: WL | delft hydraulics, GEMS International

I/RA/11283/06.122/MSA

11283 Accretion Deurganckdok – Near bed continuous monitoring – Summer 2006





Comparison of RCM9 & Valeport (blue) to Argus sensors (red) at 1.0 and 0.1 m above the bottom for SS concentration		*Data processed by:* IMDC
Location: Deurganckdok CDW	Date: 10/10/06-11/10/06	*In association with:* WL | delft hydraulics, GEMS International
		I/RA/11283/06.122/MSA

Comparison of SS concentrations during each tidal phase

Date	Tide No.	Phase	Tidal Diff [m]	OBS SS Concentration [mg/l]		Argus SS Concentration [mg/l]	
				UP (RCM9)	DOWN (Valeport)	UP	DOWN
20060718	1	HW	3,8	100,9	159,5	186,8	118,2
20060719	1	LW	5,2	48	45,2	140,6	82
20060719	2	HW	5,2	65,3	151,6	145,9	81,2
20060719	2	LW	4,7	53,1	62,5	148,1	83,4
20060719	3	HW	4,8	78,6	112,3	169,9	106,8
20060720	3	LW	5,1	43,7	39,7	131	82,8
20060720	4	HW	4,9	64,2	542,7	154,9	87,9
20060720	4	LW	4,5	46,3	79,6	141,5	82,6
20060720	5	HW	4,5	69,2	83,1	160,3	124,7
20060721	5	LW	4,7	39	30,9	134,3	34,7
20060721	6	HW	4,7	59,3	131,1	147,4	37,1
20060721	6	LW	4,6	40,1	37,7	133,8	30,8
20060722	7	HW	4,7	49	66,5	156,1	36,6
20060722	7	LW	4,8	38,1	32,6	129,1	27
20060722	8	HW	4,8	50	46,4	151,3	30,3
20060722	8	LW	4,7	40,8	36,5	152,1	44,5
20060723	9	HW	5	48,3	53	147,1	32,2
20060723	9	LW	5	36,9	27,4	134	71,6
20060723	10	HW	4,9	45,2	38,5	136,4	44,9
20060723	10	LW	5,1	41	41,7	143,5	355,4
20060724	11	HW	5,3	46,3	53	137	69,1
20060724	11	LW	5,1	41,1	52,4	147,8	420,4
20060724	12	HW	5	53,1	89,2	157,5	327,4
20060724	12	LW	5,4	41,4	57,7	171,3	977,6
20060725	13	HW	5,5	47,5	43,5	172,1	241,5
20060725	13	LW	5,2	38,4	35,2	209,6	287,7
20060725	14	HW	5,2	58	73,3	248,9	89,5
20060725	14	LW	5,5	37,2	34,8	316,3	63,9
20060726	15	HW	5,7	40,8	38,5	330,2	45,2
20060726	15	LW	4,7	36,8	42,2	486,1	70,4
20060727	16	HW	0	50,2	-	378,1	46,7
20060727	16	LW	5,2	56,6	-	460,3	55,8
20060727	17	HW	5,3	68,6	-	591,7	70,4
20060727	17	LW	5,7	41,3	-	769,7	43
20060728	18	HW	5,7	50,8	-	689,8	52,8
20060728	18	LW	5,3	54	-	660,3	52,8
20060728	19	HW	5,3	68,7	-	618,8	66,4
20060729	19	LW	5,6	40,6	-	541,2	40,4
20060729	20	HW	5,6	55,6	-	482	53,5
20060729	20	LW	5,3	47,9	-	437,1	49,7
20060729	21	HW	5,2	61,1	-	430,8	61,6

Comparison of SS concentrations during each tidal phase

Date	Tide No.	Phase	Tidal Diff [m]	OBS SS Concentration [mg/l]		Argus SS Concentration [mg/l]	
				UP (RCM9)	DOWN (Valeport)	UP	DOWN
20060730	21	LW	5,7	41	-	415,1	37,1
20060730	22	HW	5,5	49,8	-	392	41
20060730	22	LW	5	50,6	-	410,4	45,1
20060730	23	HW	5,1	68,3	-	403,2	65,4
20060731	23	LW	5,3	42,4	-	381,3	37,1
20060731	24	HW	4,8	41,3	-	371,5	35
20060731	24	LW	1000,2	54,2	-	436,2	58,4
20060731	25	HW	4,9	54,7	-	379,7	52,3
20060801	25	LW	5,4	44,2	-	418,8	45
20060801	26	HW	5,3	50,8	-	406	44,3
20060801	26	LW	4,4	46,2	-	564,5	38,4
20060801	27	HW	4,6	43,3	-	607,8	43,7
20060802	27	LW	4,9	40,5	-	810,7	38
20060802	28	HW	4,8	48,7	-	607,7	50
20060802	28	LW	4,5	42,2	-	800,8	43,6
20060802	29	HW	4,3	40,1	-	770,7	52,1
20060803	29	LW	4,6	36,8	-	999,6	59,9
20060803	30	HW	4,5	49,1	-	877,8	83,7
20060803	30	LW	4,1	40,5	-	1028	77
20060803	31	HW	4,1	35,3	-	1041,8	86,3
20060804	31	LW	4,4	28,9	-	1138,3	97
20060804	32	HW	4,1	46,2	-	1269	173,6
20060804	32	LW	4	31,8	-	1516,8	196,3
20060804	33	HW	3,8	42,3	-	1474	316,1
20060805	33	LW	4,1	26,3	-	1866,3	290,1
20060805	34	HW	3,6	31,8	-	1803,9	342,7
20060805	34	LW	1000,4	30,4	-	2116,8	408,7
20060805	35	HW	4,1	33,8	-	1968,3	516,5
20060806	35	LW	4,2	24	-	2229,8	559,8
20060806	36	HW	4,3	35,5	-	1772	594,1
20060806	36	LW	4,4	25,4	-	2087,6	632,5
20060807	37	HW	4,6	38,6	-	1783,1	694,1
20060807	37	LW	4,7	25,4	-	2473,9	785,8
20060807	38	HW	4,8	35,5	-	2038,7	783,4
20060807	38	LW	4,8	28,2	-	2727,6	949,7
20060808	39	HW	5	36,2	-	1876,3	871,1
20060808	39	LW	5,2	27,8	-	2504,9	966,2
20060808	40	HW	5,1	38,4	-	2166	1012,3
20060808	40	LW	5,5	28,7	-	2834,1	1152,3
20060809	41	HW	5,7	38,7	-	1623,5	961,4
20060809	41	LW	5,4	35,6	-	2276,7	1296
20060809	42	HW	5,5	91,8	-	68,3	254,5
20060809	42	LW	5,7	47,6	-	32,1	194,6

Comparison of SS concentrations during each tidal phase

Date	Tide No.	Phase	Tidal Diff [m]	OBS SS Concentration [mg/l]		Argus SS Concentration [mg/l]	
				UP (RCM9)	DOWN (Valeport)	UP	DOWN
20060810	43	HW	6	79,5	-	63,2	247,6
20060810	43	LW	5,8	59,6	-	44,3	201,9
20060810	44	HW	5,6	112,8	-	89,1	271,6
20060810	44	LW	6	60,4	-	80,3	207,3
20060811	45	HW	6,2	84,7	-	68,2	240,3
20060811	45	LW	5,8	72,4	-	52,3	233,2
20060811	46	HW	5,7	159	-	127,2	309,3
20060811	46	LW	6,2	63,4	-	43,3	215
20060812	47	HW	6,3	113,8	-	98,4	278,5
20060812	47	LW	6	82,7	-	61,1	204,1
20060812	48	HW	5,9	151,9	-	126,8	281,6
20060813	48	LW	6,3	72,8	-	56,1	193,4
20060813	49	HW	6,4	84,8	-	70,7	205,6
20060813	49	LW	6	81,7	-	63	191
20060813	50	HW	5,7	125,3	-	111,1	252
20060814	50	LW	6,3	62,9	-	50,1	170,1
20060814	51	HW	6,3	90,3	-	74,3	198,1
20060814	51	LW	5,4	80,1	-	59,5	174,3
20060814	52	HW	5,7	128,3	-	107	230,8
20060815	52	LW	6	58,1	-	42,7	142,4
20060815	53	HW	5,7	81,7	-	66,3	173,6
20060815	53	LW	5,5	66,7	-	53,7	151,2
20060815	54	HW	5,2	86,8	-	71,7	181,4
20060816	54	LW	5,7	48,7	-	31,2	128,6
20060816	55	HW	5,4	64,5	-	40,2	160,2
20060816	55	LW	5	64,3	-	41	157
20060816	56	HW	5	83,1	-	60,9	195,2
20060817	56	LW	5,2	51,1	-	28,3	148,6
20060817	57	HW	4,9	96,3	-	67,5	216
20060817	57	LW	4,5	59,6	-	34	181,8
20060817	58	HW	4,6	99,1	-	66,5	232,4
20060818	58	LW	4,6	47,1	-	29,4	181,1
20060818	59	HW	4,3	78,7	-	53,1	216,6
20060818	59	LW	4,1	48,7	-	32,6	183,4
20060818	60	HW	4,2	64,5	-	48,2	214,1
20060819	60	LW	4,1	36,7	-	25,6	171,8
20060819	61	HW	3,9	82,5	-	61,2	226,6
20060819	61	LW	4,1	33,3	-	25,3	187,5
20060820	62	HW	4,4	65,6	-	53,3	240,3
20060820	62	LW	4,2	35,2	-	26,6	238,8
20060820	63	HW	4,3	65,7	-	51,5	282,6
20060820	63	LW	4,3	30,9	-	27,5	325,8
20060821	64	HW	4,6	56,6	-	54,5	376,6

Comparison of SS concentrations during each tidal phase

Date	Tide No.	Phase	Tidal Diff [m]	OBS SS Concentration [mg/l]		Argus SS Concentration [mg/l]	
				UP (RCM9)	DOWN (Valeport)	UP	DOWN
20060821	64	LW	4,6	32,8	-	35,7	432,5
20060821	65	HW	4,5	51,4	-	67,7	432
20060821	65	LW	4,8	36,6	-	66,3	579,4
20060822	66	HW	5,2	61,7	-	109,4	651,2
20060822	66	LW	5	45,9	-	115,7	991,6
20060822	67	HW	4,8	67,9	-	182,5	1250
20060822	67	LW	5,3	43,7	-	159,4	1309,7
20060823	68	HW	5,5	72,1	-	262,3	1022,4
20060823	68	LW	5,2	60,2	-	280,4	1382,3
20060823	69	HW	5,2	72,9	-	78,8	147,4
20060823	69	LW	5,5	52	-	62	125,1
20060824	70	HW	5,6	92,1	-	93,9	158,8
20060824	70	LW	5,2	78	-	81,2	145,8
20060824	71	HW	5,3	108,6	-	103,1	174,3
20060824	71	LW	5,6	60	-	77,3	134,1
20060825	72	HW	5,7	94,7	-	96,3	163
20060825	72	LW	5,4	79,1	-	80,6	140
20060825	73	HW	5,3	114,4	-	118,1	176,2
20060825	73	LW	5,8	74	-	99,7	134,2
20060826	74	HW	5,7	128,5	-	122	170,3
20060826	74	LW	5,4	90,9	-	104,2	151,9
20060826	75	HW	5,4	153,5	-	150,4	196,3
20060827	75	LW	5,7	64,6	-	73,2	106,9
20060827	76	HW	5,6	104,3	-	104,2	137,5
20060827	76	LW	5,3	84,1	-	90,6	121,8
20060827	77	HW	5,3	106	-	109,5	142,9
20060828	77	LW	5,7	62,8	-	84,5	108,3
20060828	78	HW	5,6	91,1	-	95	123,5
20060828	78	LW	5,1	85,8	-	118,2	138,2
20060828	79	HW	5,3	106,7	-	119	144,6
20060829	79	LW	5,4	61,9	-	84,4	103,7
20060829	80	HW	5,3	115,8	-	168,3	154,4
20060829	80	LW	5,2	70,2	-	88,2	103,9
20060829	81	HW	5,1	131,3	-	139,8	161,1
20060830	81	LW	5,3	70,2	-	122,8	119,8
20060830	82	HW	5,2	139,4	-	151,5	161,1
20060830	82	LW	4,8	80,7	-	139,6	135,5
20060830	83	HW	4,8	188,9	-	197,3	208,6
20060831	83	LW	5,2	80,7	-	148,9	125,8
20060831	84	HW	4,8	179,3	-	222,2	224
20060831	84	LW	4,7	99,6	-	242,2	163,6
20060831	85	HW	4,6	206,4	-	224,5	253
20060901	85	LW	4,6	92,8	-	148	165,6

Comparison of SS concentrations during each tidal phase

Date	Tide No.	Phase	Tidal Diff [m]	OBS SS Concentration [mg/l]		Argus SS Concentration [mg/l]	
				UP (RCM9)	DOWN (Valeport)	UP	DOWN
20060901	86	HW	4,5	167,8	-	221,6	213
20060901	86	LW	4,4	103,4	-	144,5	166,8
20060901	87	HW	4,2	199,8	-	228,2	261,5
20060902	87	LW	4,1	92,2	-	181,6	153,2
20060902	88	HW	4,1	208,7	-	247,7	261,3
20060902	88	LW	3,8	65,4	-	175,1	153,3
20060902	89	HW	3,6	230	-	295,6	376,7
20060903	89	LW	3,4	77,9	-	184,4	172,6
20060903	90	HW	3,6	109,8	-	231,8	234,2
20060903	90	LW	3,2	58,4	-	196,8	187,7
20060903	91	HW	3,4	96,4	-	205	900,9
20060904	91	LW	4	44,2	-	160,9	149,1
20060904	92	HW	3,9	108,2	-	245,2	211,6
20060904	92	LW	4,2	49,3	-	193,8	152,8
20060905	93	HW	4,4	111,6	-	250,8	204,8
20060905	93	LW	4,7	63,4	-	266,4	201
20060905	94	HW	4,5	134,6	-	287,9	243,4
20060905	94	LW	4,9	65,8	-	250,8	202,1
20060906	95	HW	5,3	137,1	-	306	244
20060906	95	LW	5,3	78,1	-	395,2	232,9
20060906	96	HW	5,2	170,4	-	316,7	269,1
20060906	96	LW	5,3	85,6	-	607,1	276,8
20060907	97	HW	5,9	192	-	359,1	296,5
20060907	97	LW	5,5	98,1	-	554,5	290
20060908	98	HW	5,8	153,5	-	403,2	272
20060908	98	LW	6,2	99	-	374,1	227
20060908	99	HW	5,6	188,9	-	460,1	322,3
20060908	99	LW	6,3	114,1	-	377,4	249
20060909	100	HW	6,4	163,5	-	434,3	302,3
20060909	100	LW	6	132,1	-	387,9	255,4
20060909	101	HW	6	196,3	-	469	324,5
20060909	101	LW	6,4	114,7	-	387,4	248,8
20060910	102	HW	6,7	172,3	-	445,6	314,1
20060910	102	LW	6,1	128,6	-	395,6	278,8
20060910	103	HW	6	219,8	-	480,9	353,2
20060911	103	LW	6,5	117,6	-	382,7	259,8
20060911	104	HW	6,5	151,3	-	419,1	298
20060911	104	LW	6	121,1	-	381,5	263,4
20060911	105	HW	6	209,8	-	461,2	345,4
20060912	105	LW	6,4	114,2	-	373,4	260,5
20060912	106	HW	6,2	153,7	-	418,6	333
20060912	106	LW	5,7	123,1	-	382,9	280
20060912	107	HW	5,8	181,6	-	445,6	330,4

Comparison of SS concentrations during each tidal phase

Date	Tide No.	Phase	Tidal Diff [m]	OBS SS Concentration [mg/l]		Argus SS Concentration [mg/l]	
				UP (RCM9)	DOWN (Valeport)	UP	DOWN
20060913	107	LW	6	95,4	-	360,3	246,6
20060913	108	HW	5,7	115,7	-	399,7	278,4
20060913	108	LW	5,3	113,3	-	377,6	261,2
20060913	109	HW	5,4	135,7	-	415,3	304,9
20060914	109	LW	5,5	69,2	-	342,8	225,9
20060914	110	HW	5,2	104,5	-	378,6	263,8
20060914	110	LW	4,8	95,9	-	355,2	252,8
20060914	111	HW	5	102,9	-	372,3	279,9
20060915	111	LW	4,9	63,7	-	307,6	219,4
20060915	112	HW	4,3	100,8	-	348,5	285,8
20060915	112	LW	4,3	62,1	-	291,4	223,3
20060915	113	HW	4,4	95,5	-	322,1	259,7
20060916	113	LW	4,1	54,8	-	270,3	217,7
20060916	114	HW	3,6	83,4	-	311,9	260,4
20060916	114	LW	3,7	43,1	-	253	205,1
20060916	115	HW	3,9	58,2	-	277,9	232,6
20060917	115	LW	1000,8	37,6	-	244,6	209,9
20060917	116	HW	3,4	62,6	-	275,2	252,8
20060917	116	LW	3,6	39	-	223,4	215,9
20060918	117	HW	4,2	57,7	-	240,9	246,1
20060918	117	LW	4,1	33,4	-	199,4	212
20060918	118	HW	3,9	54,3	-	215,4	244,2
20060918	118	LW	4,3	42,1	-	192	229,9
20060919	119	HW	4,6	58,4	-	219,6	267,4
20060919	119	LW	4,5	41,4	-	185	242
20060919	120	HW	4,5	48,2	-	189,4	259,7
20060919	120	LW	4,8	42,2	-	167,6	240,3
20060920	121	HW	5,2	55,3	-	185,1	255,7
20060920	121	LW	4,9	47,4	-	175	244,4
20060921	122	HW	4,6	49,8	-	77,8	99
20060921	122	LW	5	60,5	-	61,1	71,8
20060921	123	HW	5,1	76,3	-	79,4	86,2
20060921	123	LW	5,5	58,5	-	58,4	61,6
20060922	124	HW	5,7	70,5	-	73,2	78,3
20060922	124	LW	5,3	70,3	-	69	81,2
20060922	125	HW	5,2	78,6	-	81,2	84,9
20060922	125	LW	5,5	60,2	-	57,5	61,1
20060923	126	HW	5,7	78,7	-	207,7	82,5
20060923	126	LW	5,4	65,4	-	62,9	65,7
20060923	127	HW	5,4	100,9	-	98	108,3
20060923	127	LW	5,8	62,2	-	54,2	63,3
20060924	128	HW	5,7	73,6	-	77,3	77,5
20060924	128	LW	5,5	69,2	-	64,1	70,4

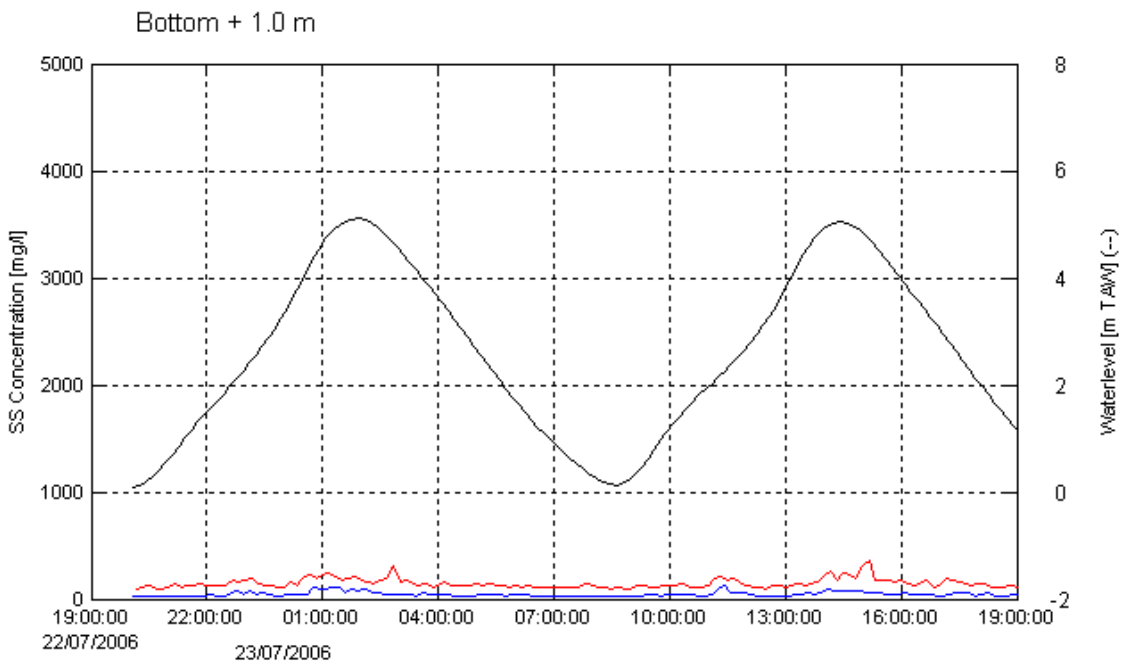
Comparison of SS concentrations during each tidal phase

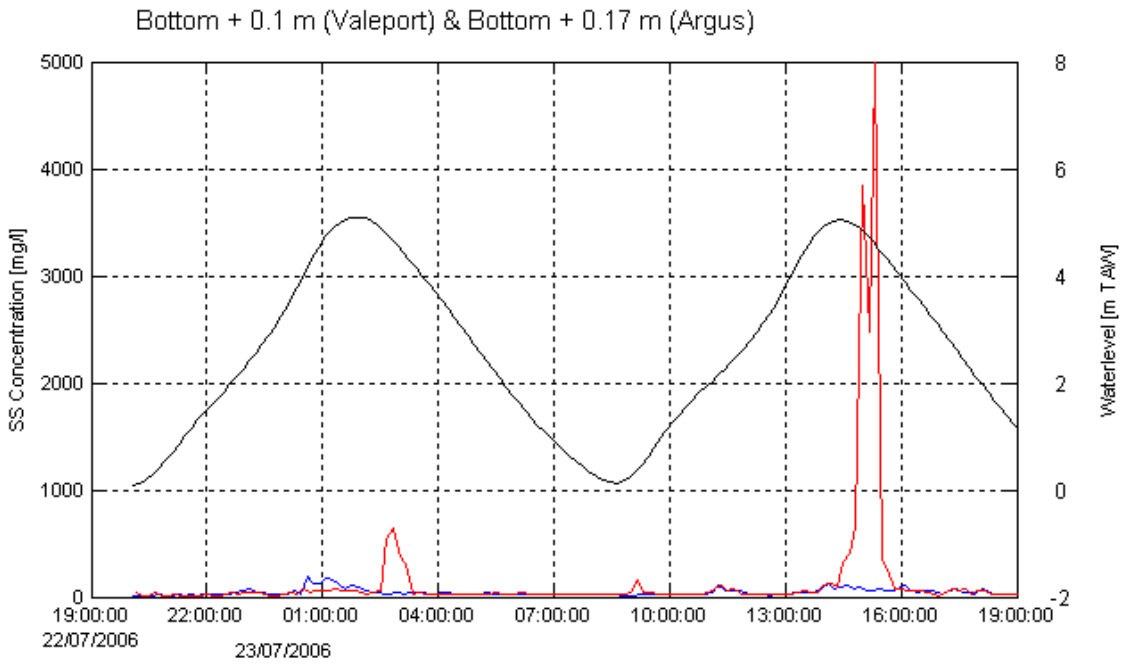
Date	Tide No.	Phase	Tidal Diff [m]	OBS SS Concentration [mg/l]		Argus SS Concentration [mg/l]	
				UP (RCM9)	DOWN (Valeport)	UP	DOWN
20060924	129	HW	5,5	78,5	-	73,6	85,4
20060924	129	LW	5,7	55,2	-	53,8	61,2
20060925	130	HW	5,7	72,5	-	72	73,8
20060925	130	LW	5,5	71,8	-	67,6	64,9
20060925	131	HW	5,5	87	-	85	86,1
20060925	131	LW	5,6	63,6	-	64,5	61,3
20060926	132	HW	5,6	86,2	-	90,8	87,1
20060926	132	LW	5,4	67,1	-	66,8	66
20060926	133	HW	5,3	87,6	-	94,2	83,5
20060927	133	LW	5,6	60,4	-	65,1	62,1
20060927	134	HW	5,4	75,5	-	79,4	71,8
20060927	134	LW	5,2	64,2	-	64,3	60,2
20060927	135	HW	5,2	86,8	-	143,2	87
20060928	135	LW	5,4	61,6	-	63,3	62,5
20060928	136	HW	5,1	67,3	-	77,3	70,4
20060928	136	LW	4,9	73,9	-	73,6	69,4
20060928	137	HW	5,1	81,9	-	290,9	78,4
20060929	137	LW	4,9	58,3	-	62,4	55,2
20060929	138	HW	4,9	76,3	-	84,1	72,8
20060929	138	LW	4,8	63,3	-	61,7	56,1
20060929	139	HW	4,6	70,8	-	80	63,1
20060930	139	LW	4,5	58,4	-	66,5	65,7
20060930	140	HW	4,3	69,2	-	78,9	63,6
20060930	140	LW	4,3	51,9	-	61,5	44,6
20060930	141	HW	4,2	59,5	-	72,1	54,8
20061001	141	LW	4,2	44,7	-	53,3	41,5
20061001	142	HW	3,9	51	-	66,8	46,6
20061001	142	LW	3,7	51,7	-	59,6	50,7
20061001	143	HW	3,6	43,5	-	62,9	43,9
20061002	143	LW	3,2	38,9	-	53,7	34,9
20061002	144	HW	3	38,4	-	57	41,7
20061002	144	LW	3,1	30,7	-	51,9	29,4
20061002	145	HW	3,5	58,2	-	86,8	57,3
20061003	145	LW	4	33,6	-	57	32,2
20061003	146	HW	3,8	45,5	-	82,7	43,6
20061003	146	LW	4	45,3	-	86,6	41,9
20061004	147	HW	4,7	62,7	-	123,6	64,1
20061004	147	LW	4,7	51,9	-	122,6	50,3
20061005	148	HW	4,9	88,9	-	83,6	82,7
20061005	148	LW	5,3	83,6	-	56,5	76,6
20061005	149	HW	5,1	199,9	-	158,9	180,8
20061005	149	LW	5,5	95,7	-	68,8	96,3
20061006	150	HW	5,9	205,8	-	150,7	175,1

Comparison of SS concentrations during each tidal phase

Date	Tide No.	Phase	Tidal Diff [m]	OBS SS Concentration [mg/l]		Argus SS Concentration [mg/l]	
				UP (RCM9)	DOWN (Valeport)	UP	DOWN
20061006	150	LW	5,5	120,2	-	85	104,2
20061006	151	HW	5,4	191,3	-	150,3	174,1
20061006	151	LW	5,8	115,3	-	81,3	102,2
20061007	152	HW	6,3	256,8	-	186,5	207,7
20061007	152	LW	5,5	123	-	85,3	108,3
20061007	153	HW	5,7	238,1	-	170,7	193,2
20061007	153	LW	6,6	115,3	-	81	101,4
20061008	154	HW	999,8	189,3	-	144,3	166,6
20061008	154	LW	999,8	150,9	-	107,8	129,3
20061008	155	HW	6	190,7	-	159,1	180,4
20061008	155	LW	6,5	116,7	-	79	100,9
20061009	156	HW	6,4	159,6	-	126,4	142
20061009	156	LW	6,2	130,2	-	91,7	113,8
20061009	157	HW	6,2	182	-	141,2	160,1
20061009	157	LW	6,3	161,6	-	113,7	137,8
20061010	158	HW	6,4	191,9	-	155,3	174,8
20061010	158	LW	6	135,2	-	95,1	113,4
20061010	159	HW	5,8	250,7	-	194,8	217,7
20061011	159	LW	6,2	147,6	-	96,4	121,7
20061011	160	HW	5,9	258,4	-	197,1	213,7

11283 Accretion Deurganckdok – Near bed continuous monitoring – Summer 2006





Comparison of RCM9 & Valeport (blue) to Argus sensors (red) at 1.0 and 0.1 m above the bottom for SS concentration

Location:	Date:
Deurganckdok CDW	Avg Tide 22/07 – 23/07

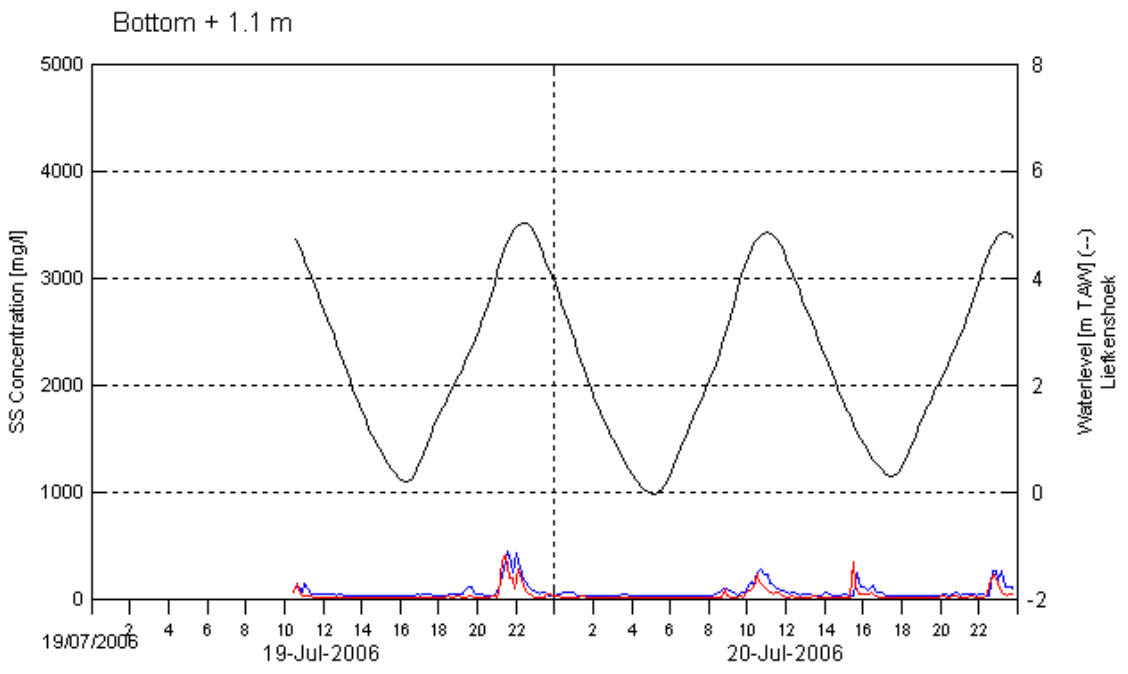
Data processed by: IMDC

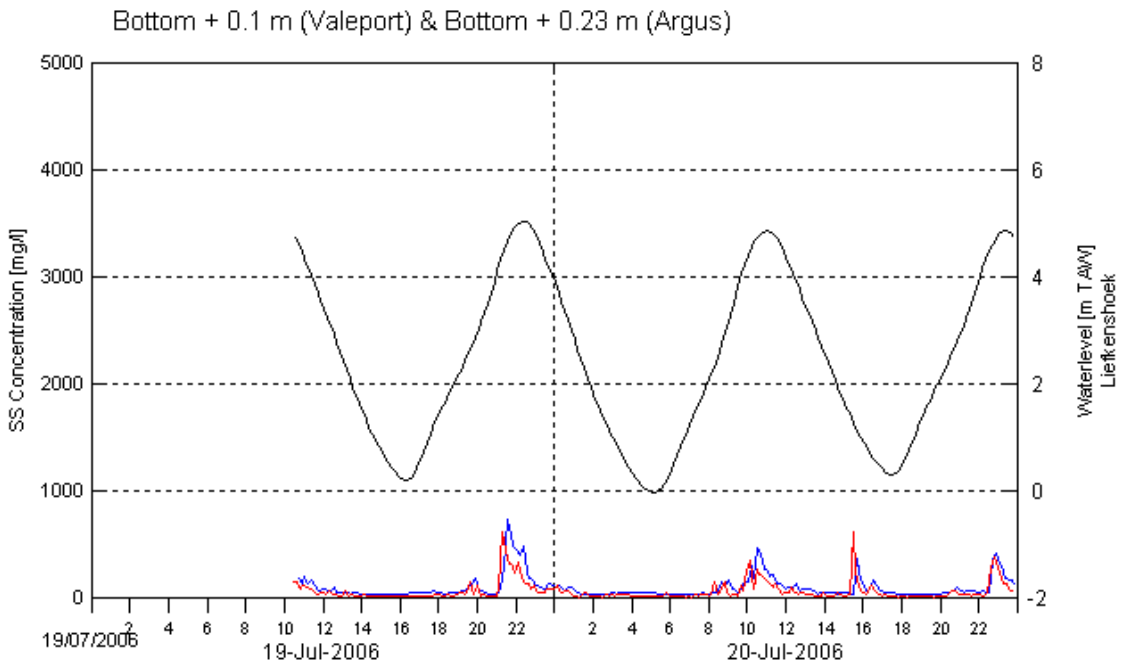
In association with: WL | delft hydraulics, GEMS International

I/RA/11283/06.122/MSA

E.2 Sill Frame

11283 Accretion Deurganckdok – Near bed continuous monitoring – Summer 2006





Comparison of RCM9 & Valeport (blue) to Argus sensors (red) at 0.9 m/1.1 m and 0.1 m/0.3 m above the bottom for SS concentration

Location: Deurganckdok Sill

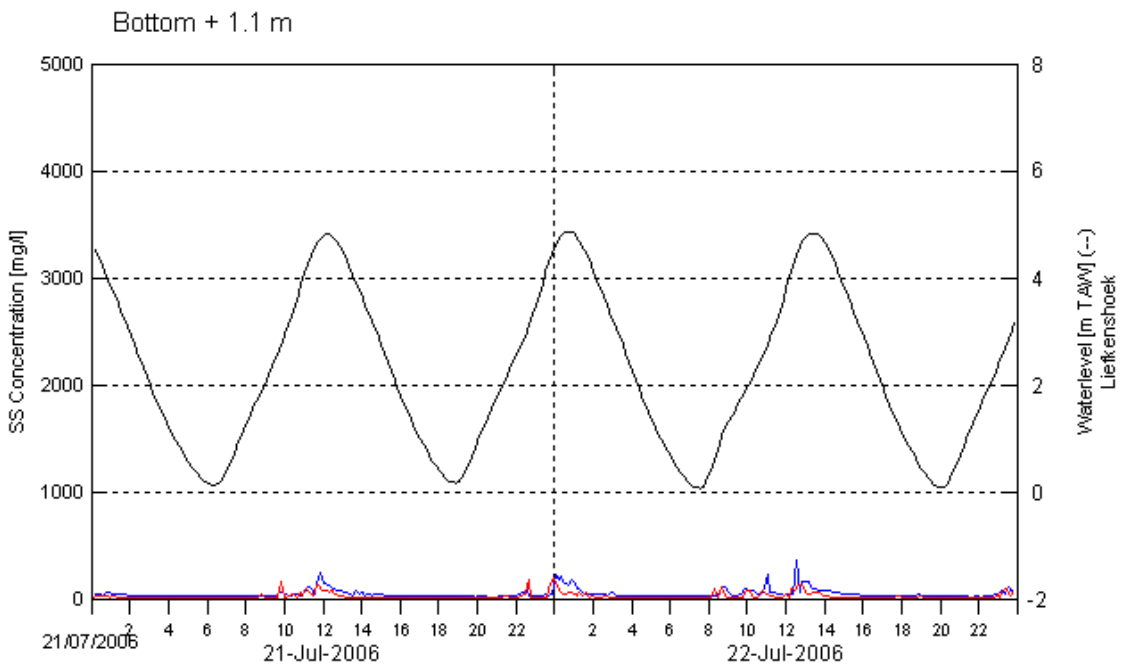
Date: 19/07/06 – 20/07/06

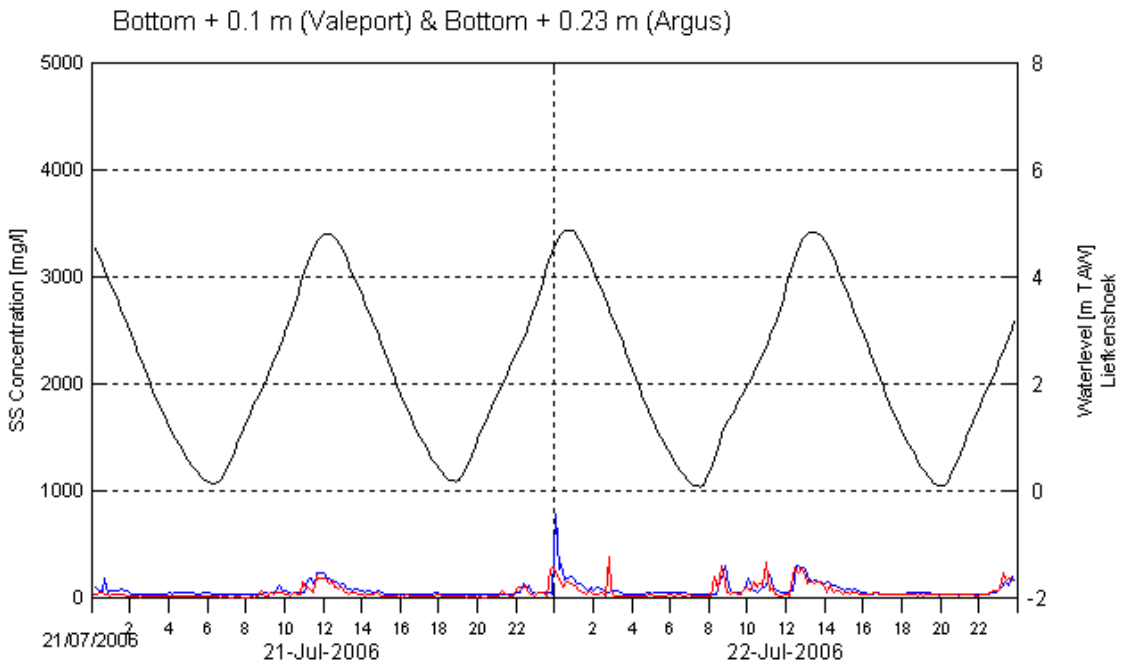
Data processed by: IMDC

In association with: WL | delft hydraulics, GEMS International

I/RA/11283/06.122/MSA

11283 Accretion Deurganckdok – Near bed continuous monitoring – Summer 2006





Comparison of RCM9 & Valeport (blue) to Argus sensors (red) at 0.9 m/1.1 m and 0.1 m/0.3 m above the bottom for SS concentration

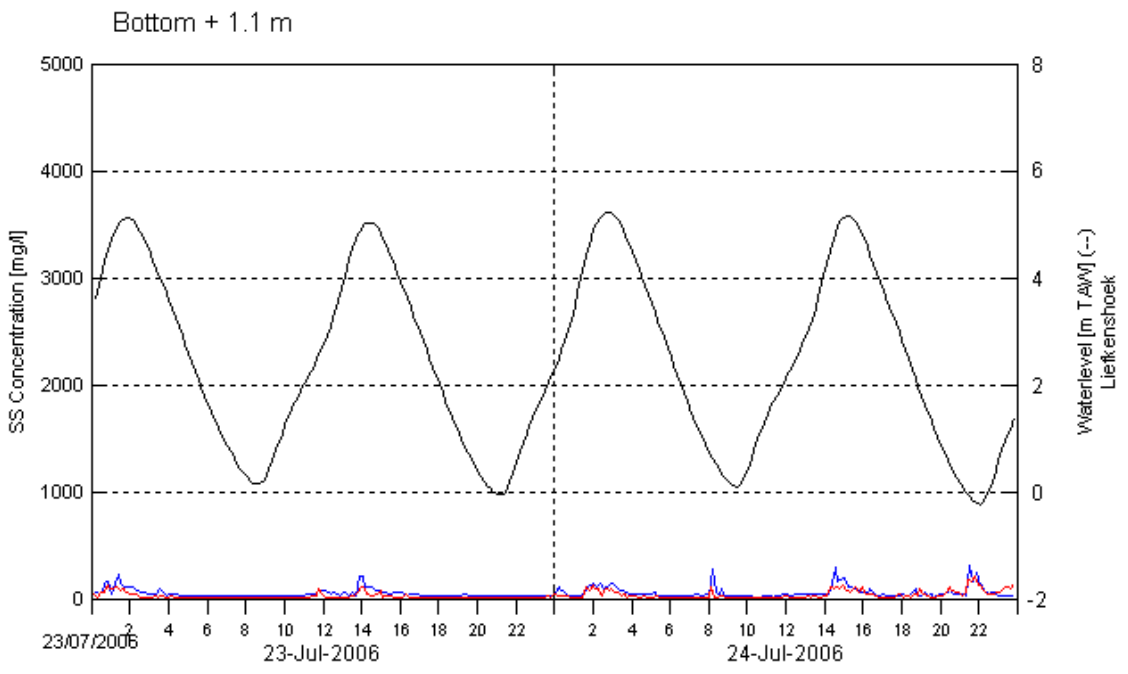
Location:	Date:
Deurganckdok Sill	21/07/06 – 22/07/06

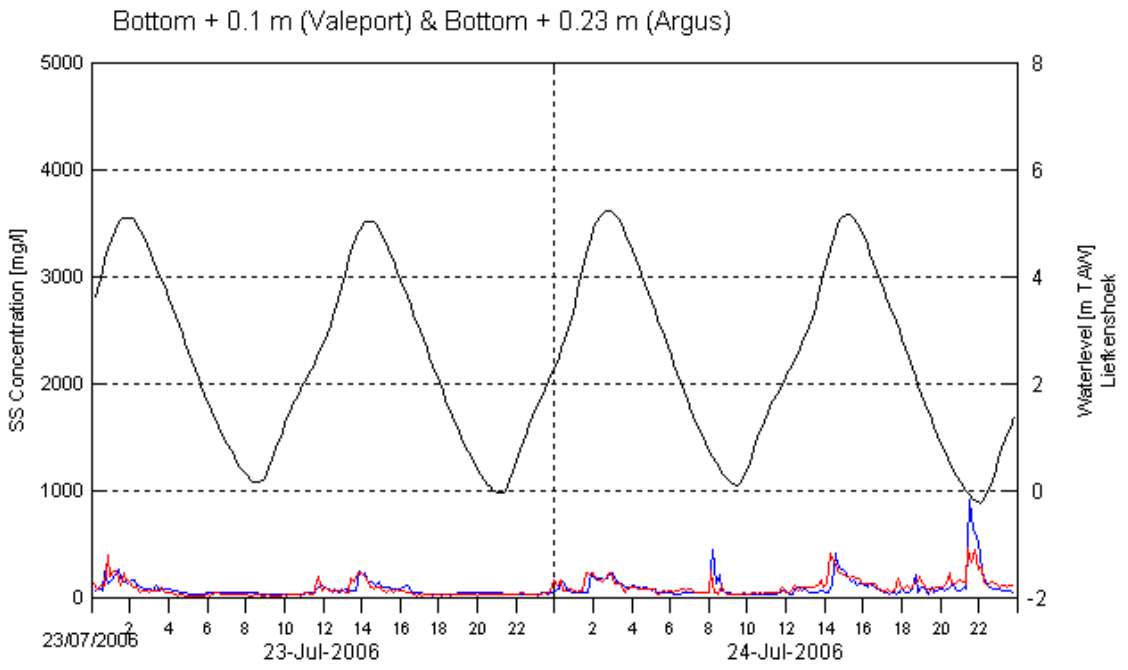
Data processed by: IMDC

In association with: WL | delft hydraulics, GEMS International

I/RA/11283/06.122/MSA

11283 Accretion Deurganckdok – Near bed continuous monitoring – Summer 2006





Comparison of RCM9 & Valeport (blue) to Argus sensors (red) at 0.9 m/1.1 m and 0.1 m/0.3 m above the bottom for SS concentration

Location: Deurganckdok Sill

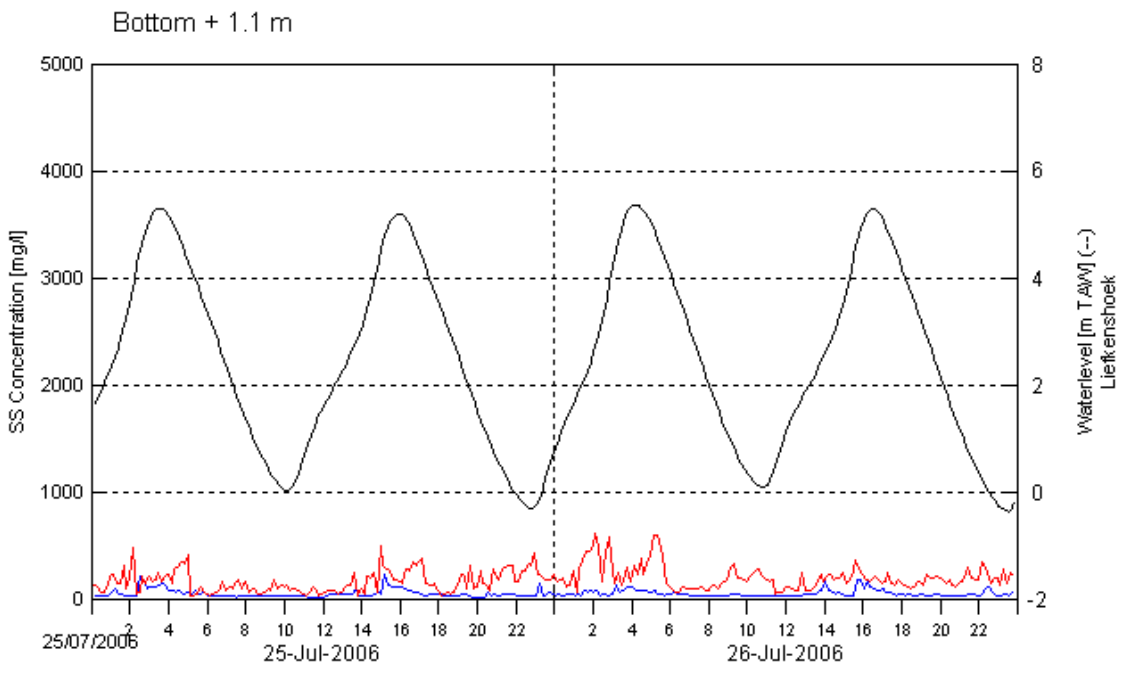
Date: 23/07/06 – 24/07/06

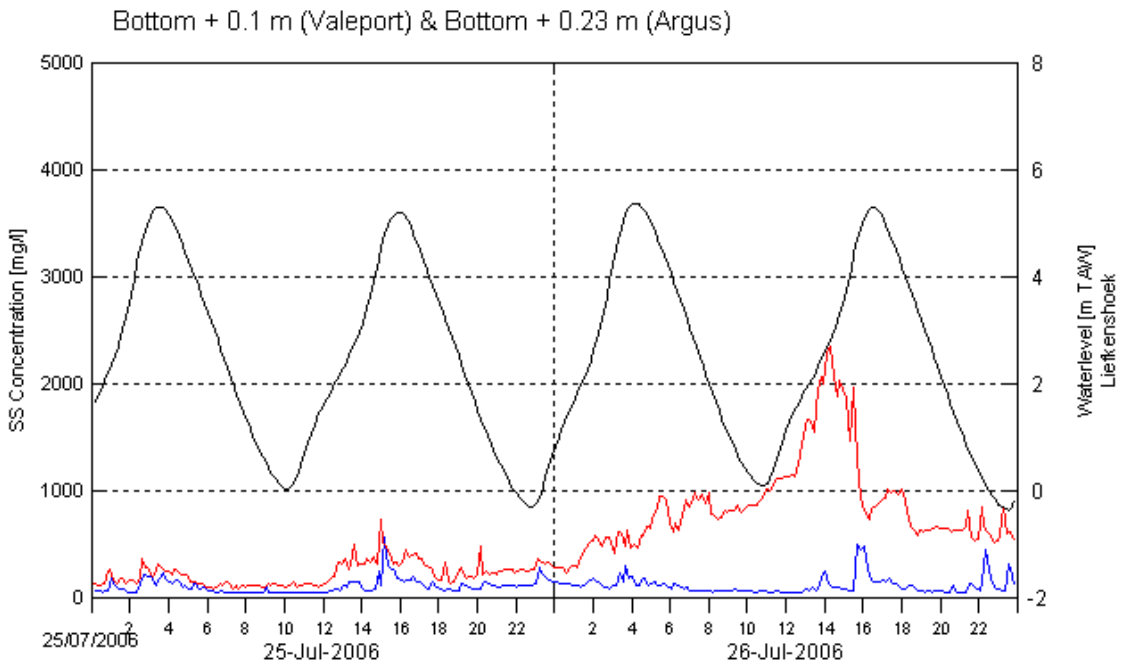
Data processed by: IMDC

In association with: WL | delft hydraulics, GEMS International

I/RA/11283/06.122/MSA

11283 Accretion Deurganckdok – Near bed continuous monitoring – Summer 2006





Comparison of RCM9 & Valeport (blue) to Argus sensors (red) at 0.9 m/1.1 m and 0.1 m/0.3 m above the bottom for SS concentration

Location: Deurganckdok Sill

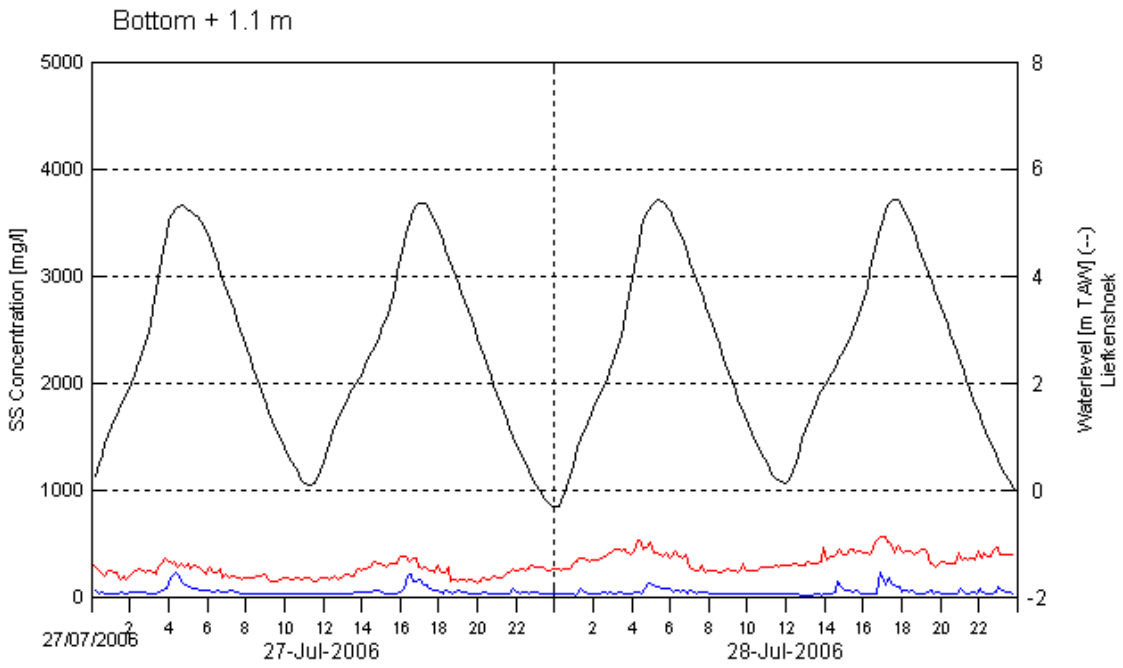
Date: 25/07/06 – 26/07/06

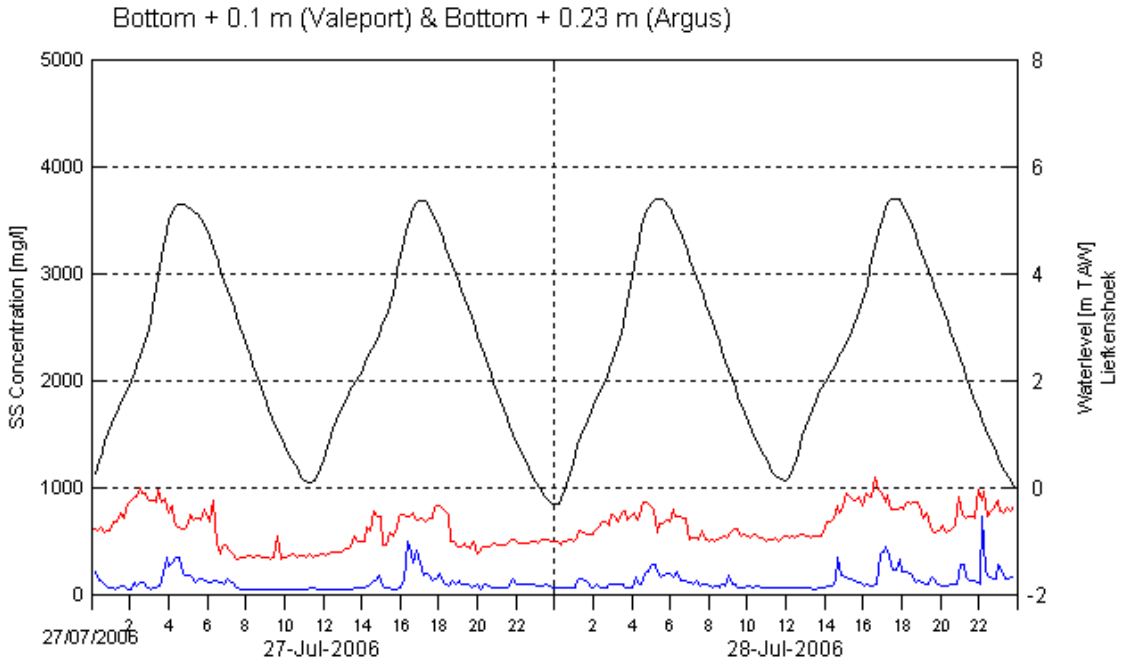
Data processed by: IMDC

In association with: WL | delft hydraulics, GEMS International

I/RA/11283/06.122/MSA

11283 Accretion Deurganckdok – Near bed continuous monitoring – Summer 2006





Comparison of RCM9 & Valeport (blue) to Argus sensors (red) at 0.9 m/1.1 m and 0.1 m/0.3 m above the bottom for SS concentration

Location: Deurganckdok Sill

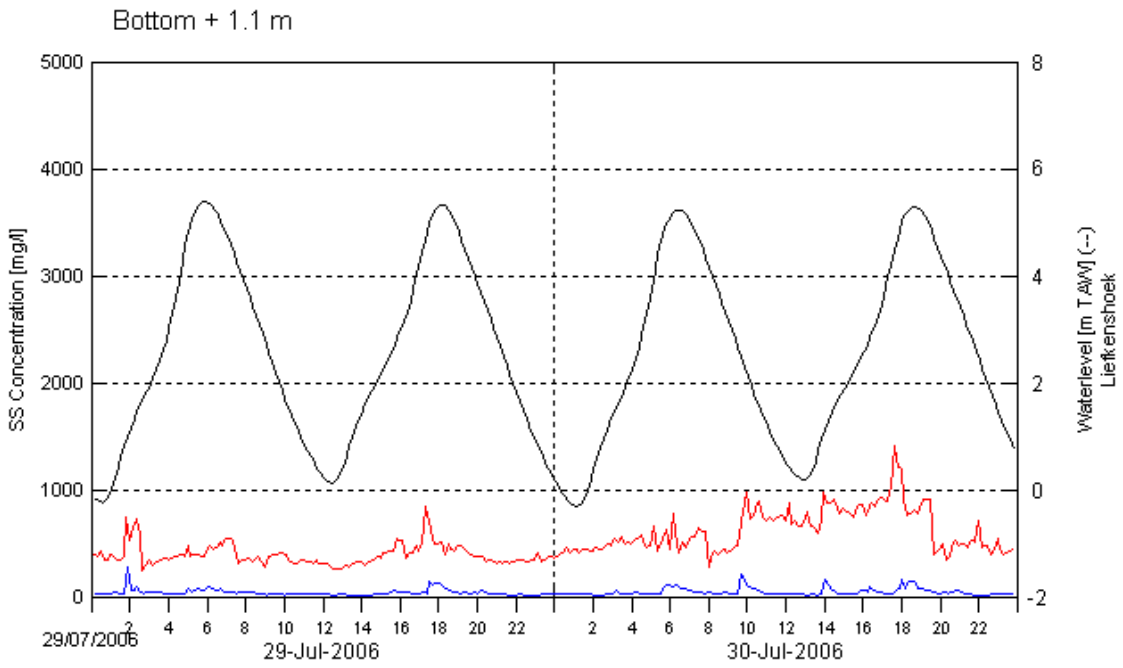
Date: 27/07/06 – 28/07/06

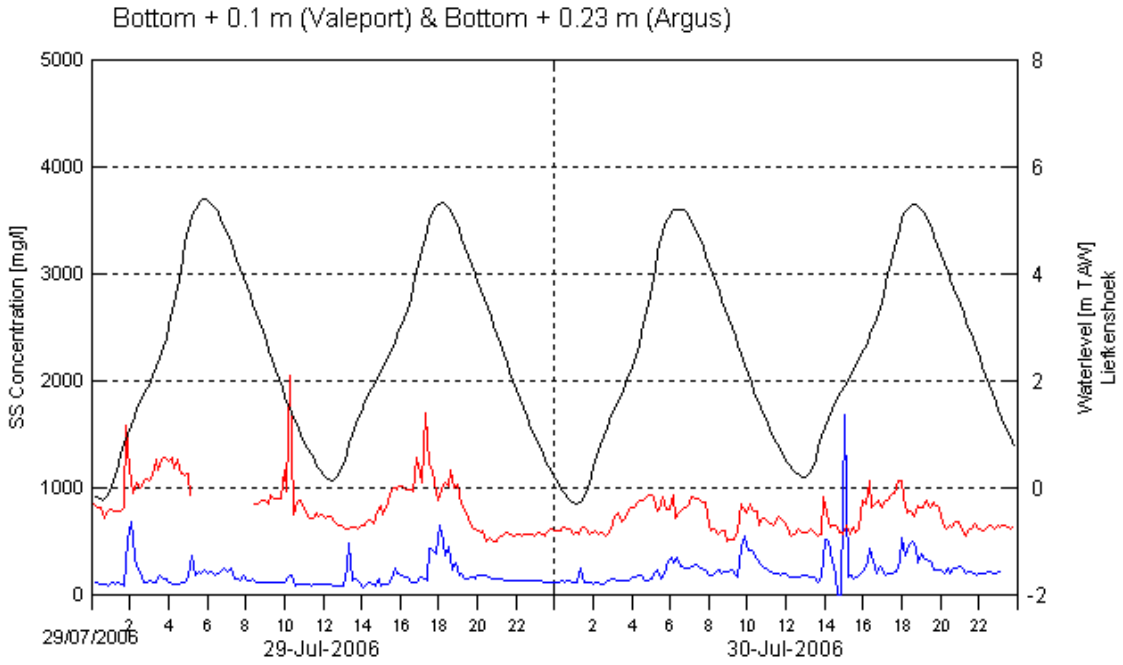
Data processed by: IMDC

In association with: WL | delft hydraulics, GEMS International

I/RA/11283/06.122/MSA

11283 Accretion Deurganckdok – Near bed continuous monitoring – Summer 2006





Comparison of RCM9 & Valeport (blue) to Argus sensors (red) at 0.9 m/1.1 m and 0.1 m/0.3 m above the bottom for SS concentration

Location: Deurganckdok Sill

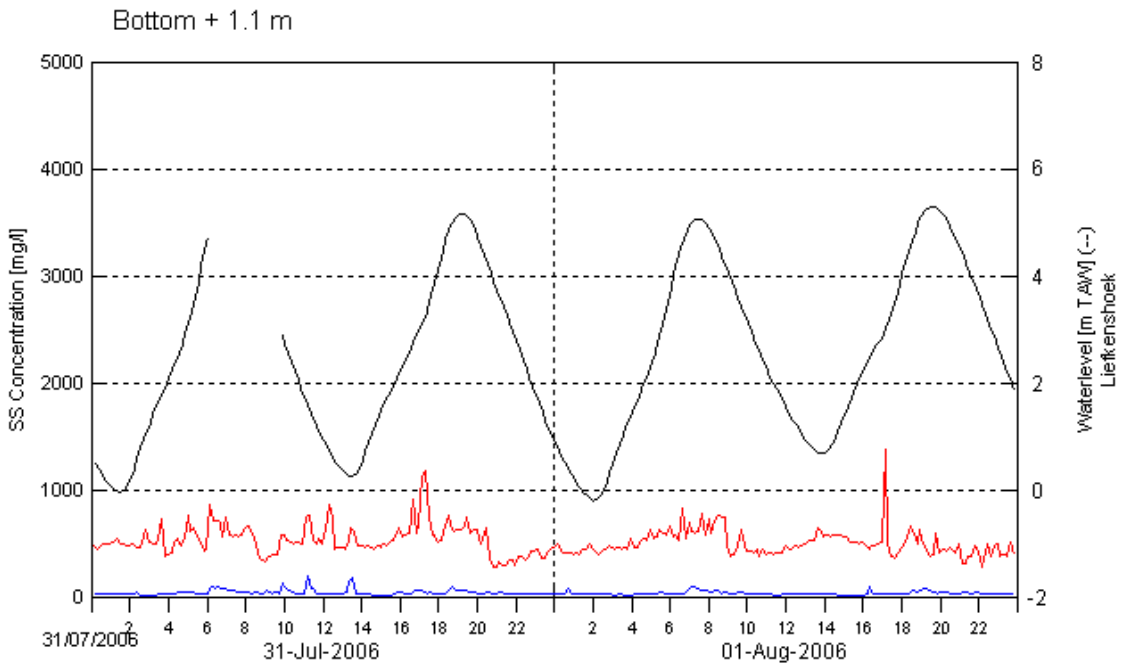
Date: 29/07/06 – 30/07/06

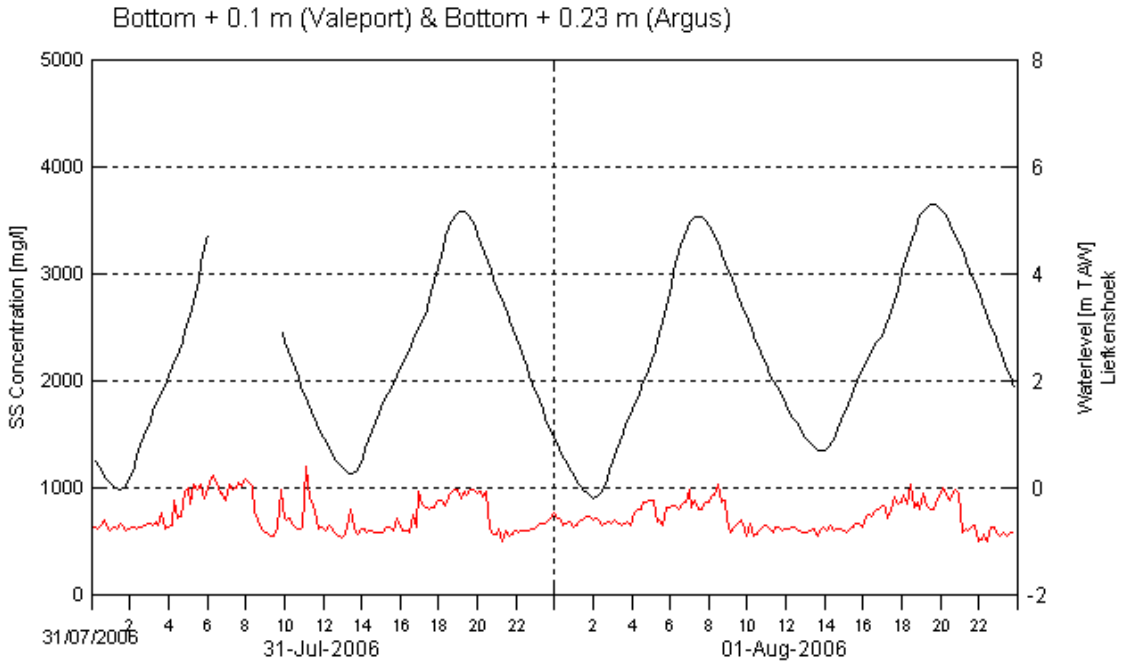
Data processed by: IMDC

In association with: WL | delft hydraulics, GEMS International

I/RA/11283/06.122/MSA

11283 Accretion Deurganckdok – Near bed continuous monitoring – Summer 2006





Comparison of RCM9 & Valeport (blue) to Argus sensors (red) at 0.9 m/1.1 m and 0.1 m/0.3 m above the bottom for SS concentration

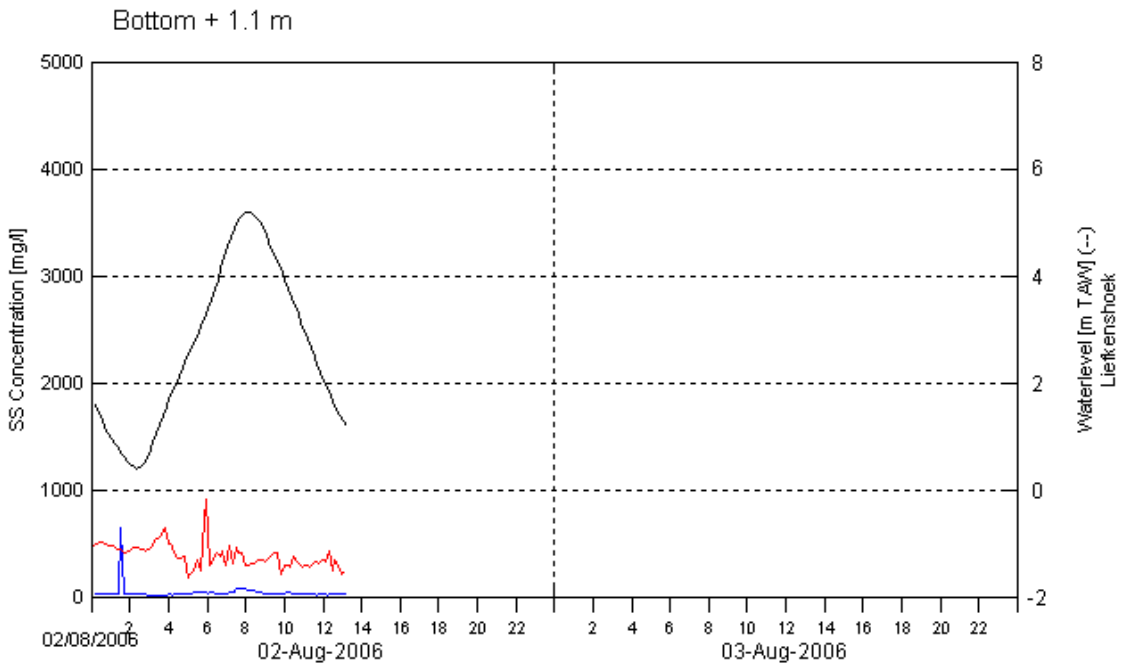
Location:	Date:
Deurganckdok Sill	31/07/06 – 01/08/06

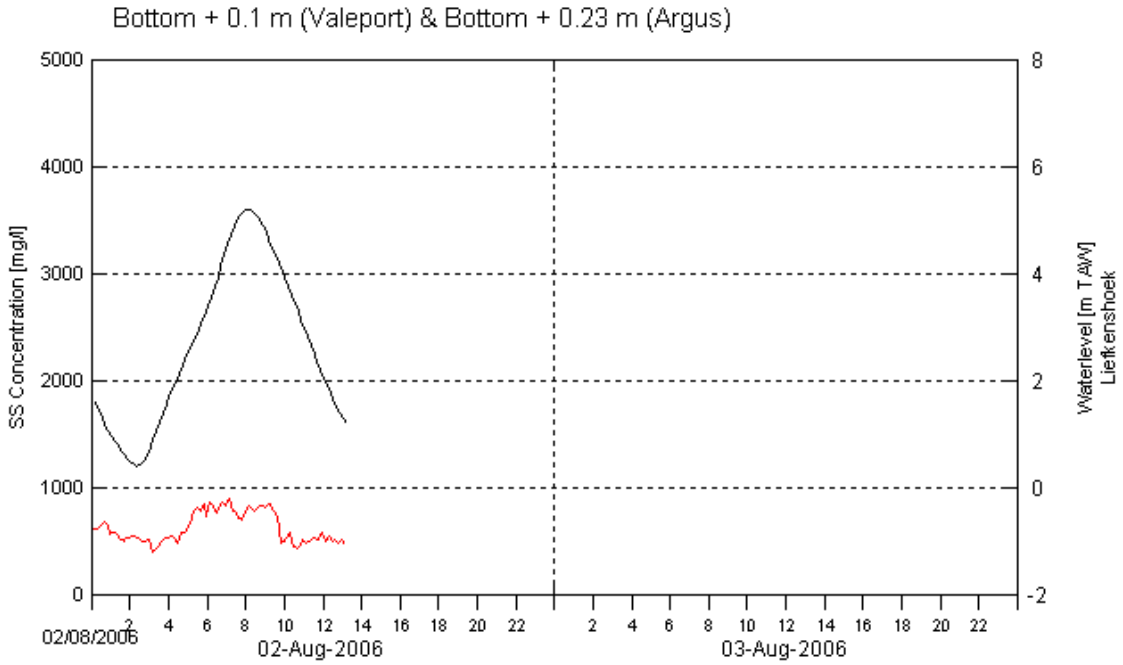
Data processed by: IMDC

In association with: WL | delft hydraulics, GEMS International

I/RA/11283/06.122/MSA

11283 Accretion Deurganckdok – Near bed continuous monitoring – Summer 2006





Comparison of RCM9 & Valeport (blue) to Argus sensors (red) at 0.9 m/1.1 m and 0.1 m/0.3 m above the bottom for SS concentration

Location: Deurganckdok Sill

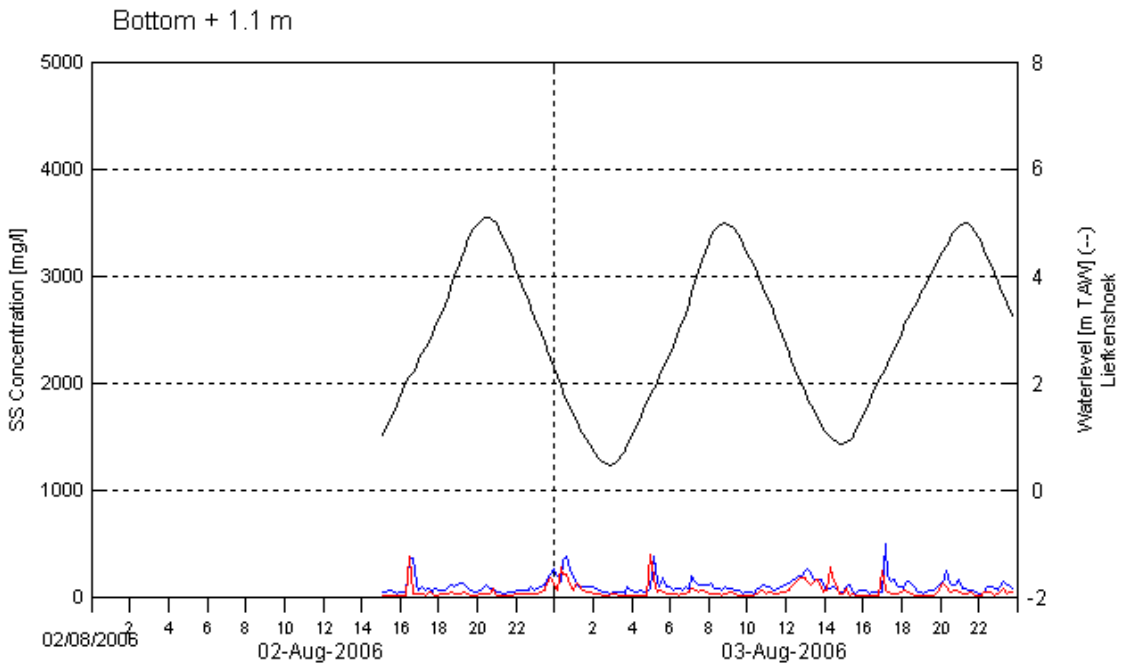
Date: 02/08/06 – 03/08/06

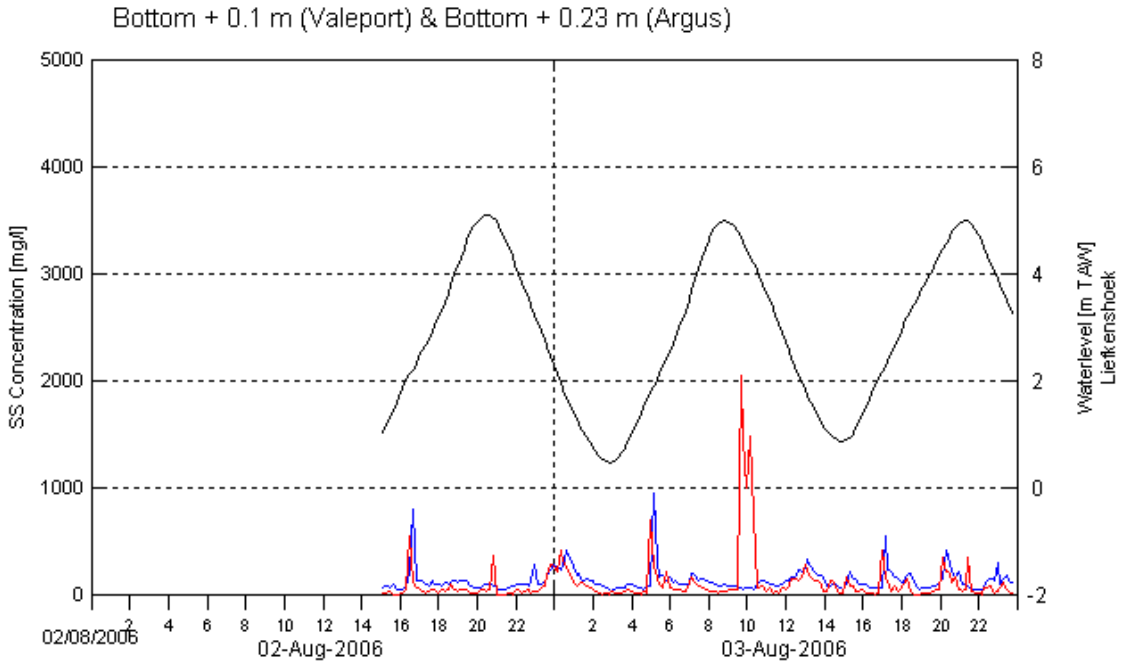
Data processed by: IMDC

In association with: WL | delft hydraulics, GEMS International

I/RA/11283/06.122/MSA

11283 Accretion Deurganckdok – Near bed continuous monitoring – Summer 2006





Comparison of RCM9 & Valeport (blue) to Argus sensors (red) at 0.9 m/1.1 m and 0.1 m/0.3 m above the bottom for SS concentration

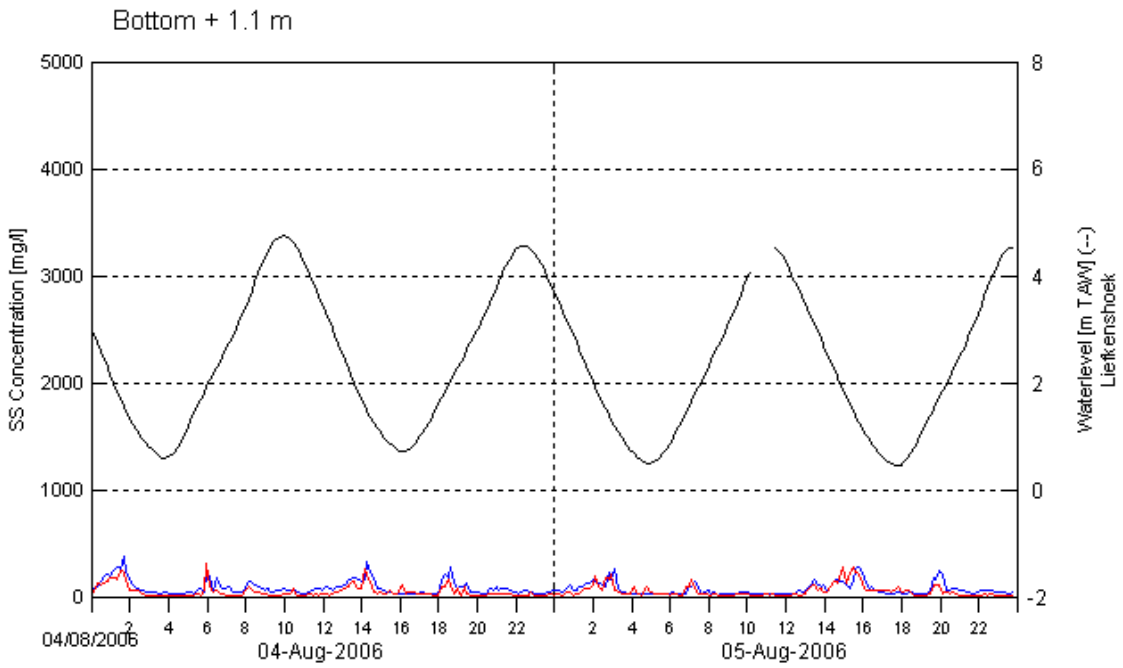
Location:	Date:
Buoy 84	02/08/06 – 03/08/06

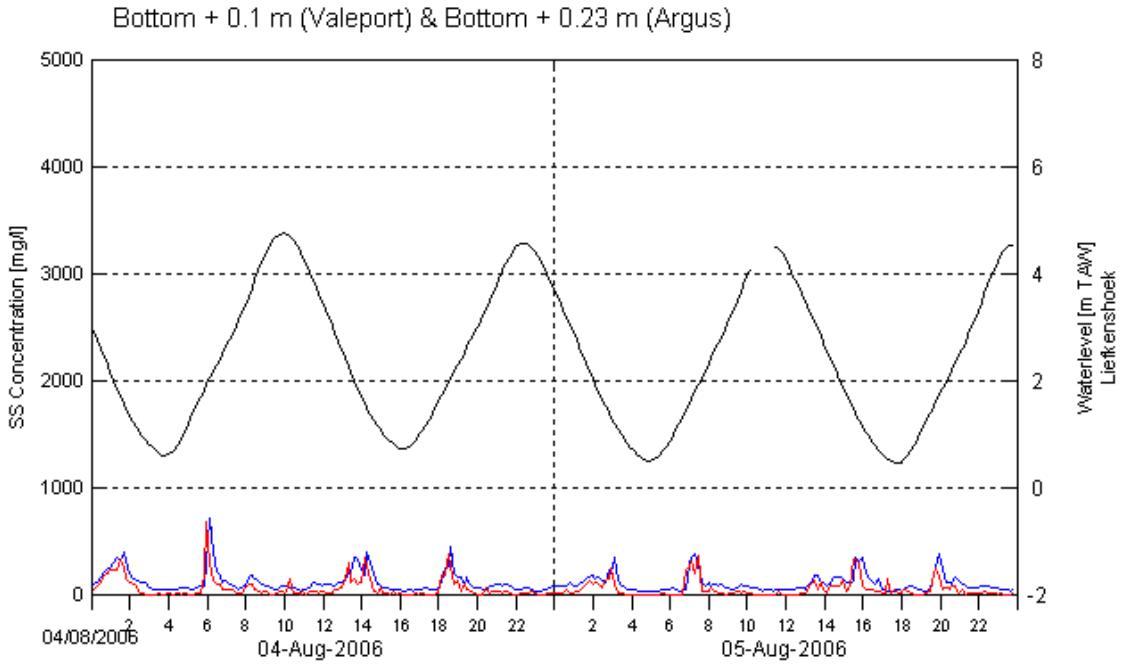
Data processed by: IMDC

In association with: WL | delft hydraulics, GEMS International

I/RA/11283/06.122/MSA

11283 Accretion Deurganckdok – Near bed continuous monitoring – Summer 2006





Comparison of RCM9 & Valeport (blue) to Argus sensors (red) at 0.9 m/1.1 m and 0.1 m/0.3 m above the bottom for SS concentration

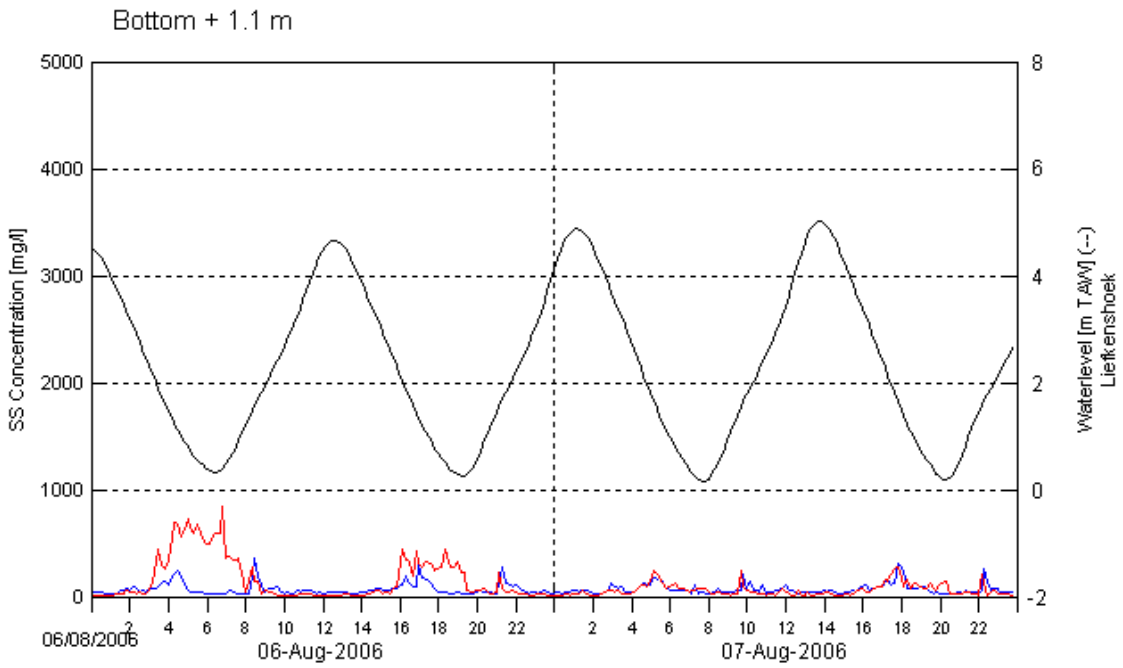
Location:	Date:
Buoy 84	04/08/06 – 05/08/06

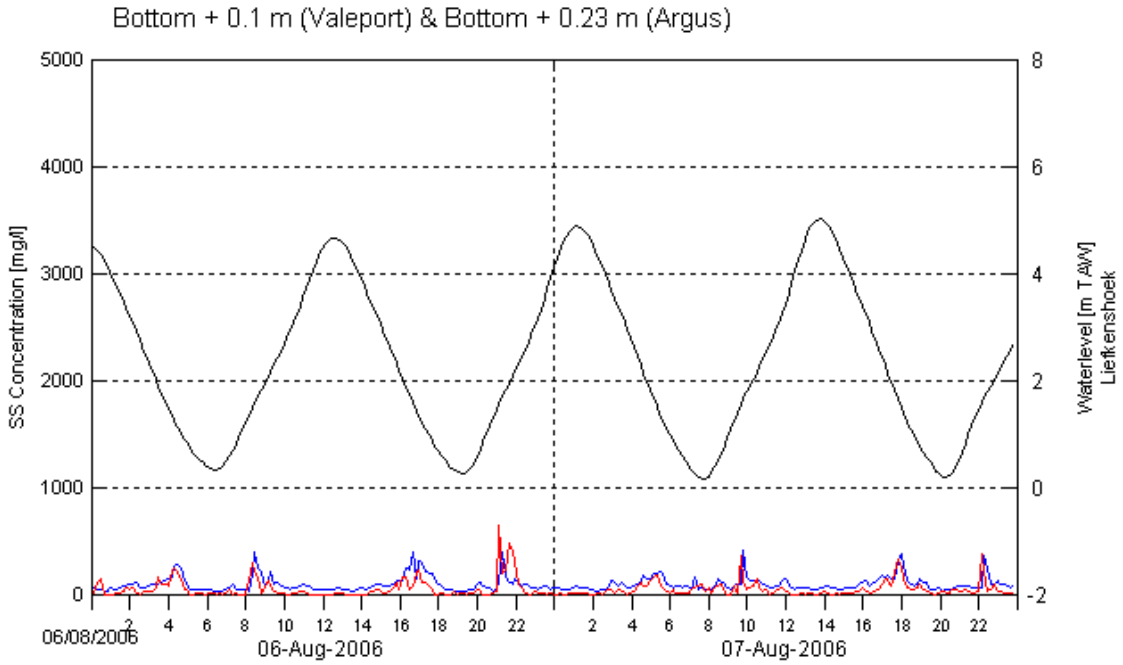
Data processed by: IMDC

In association with: WL | delft hydraulics, GEMS International

I/RA/11283/06.122/MSA

11283 Accretion Deurganckdok – Near bed continuous monitoring – Summer 2006





Comparison of RCM9 & Valeport (blue) to Argus sensors (red) at 0.9 m/1.1 m and 0.1 m/0.3 m above the bottom for SS concentration

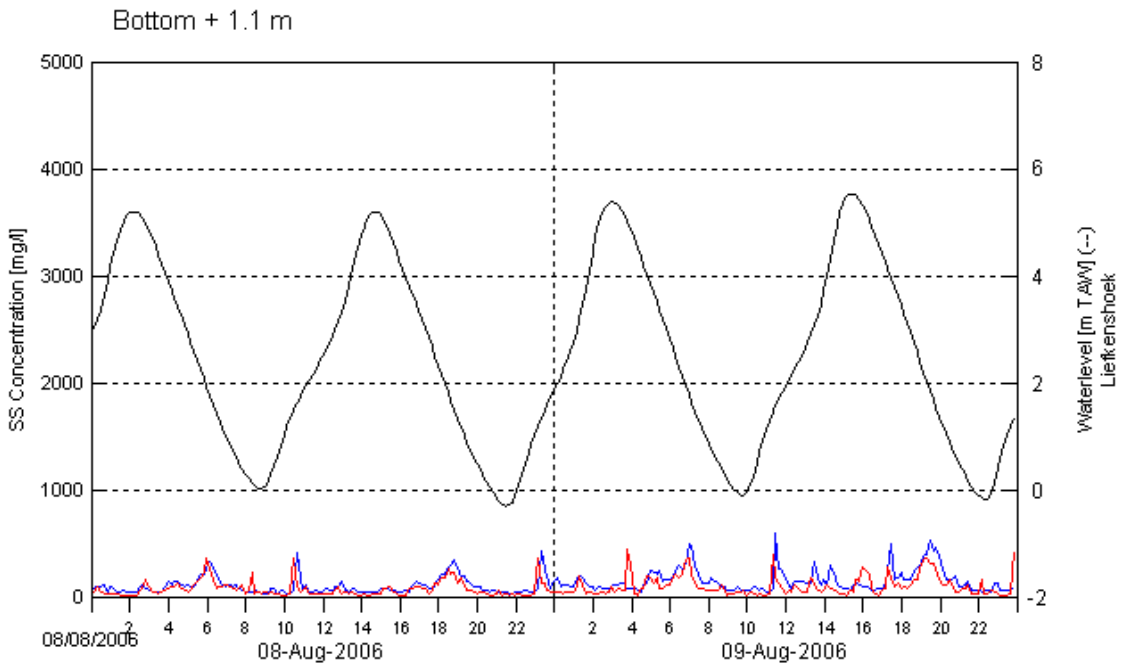
Location:	Date:
Buoy 84	06/08/06 – 07/08/06

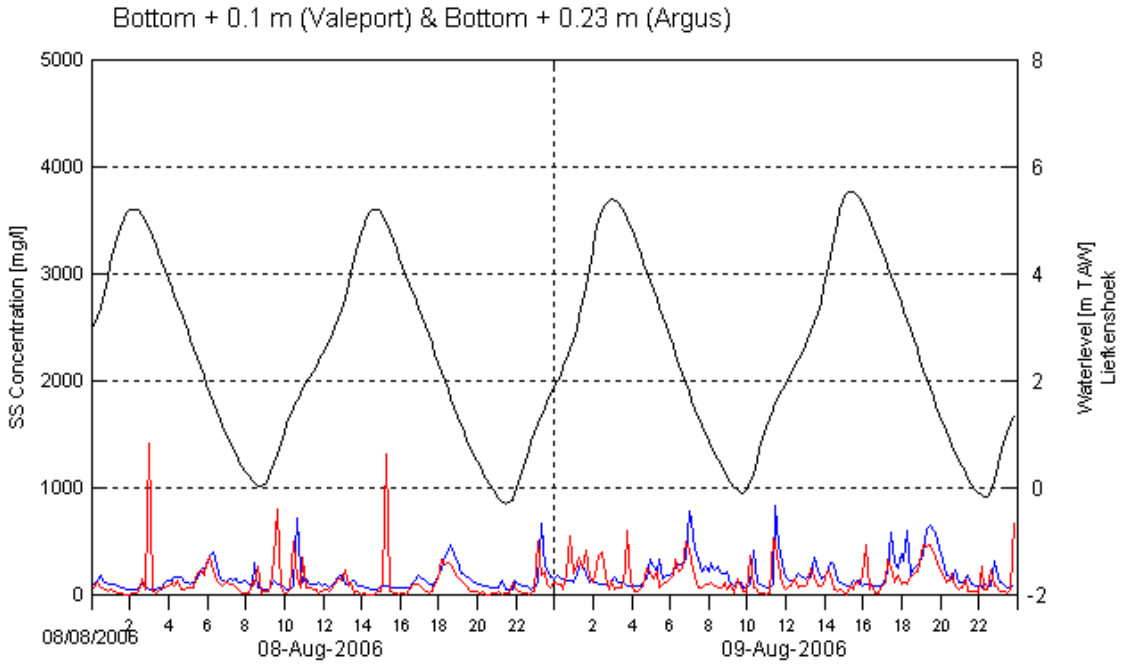
Data processed by: IMDC

In association with: WL | delft hydraulics, GEMS International

I/RA/11283/06.122/MSA

11283 Accretion Deurganckdok – Near bed continuous monitoring – Summer 2006





Comparison of RCM9 & Valeport (blue) to Argus sensors (red) at 0.9 m/1.1 m and 0.1 m/0.3 m above the bottom for SS concentration

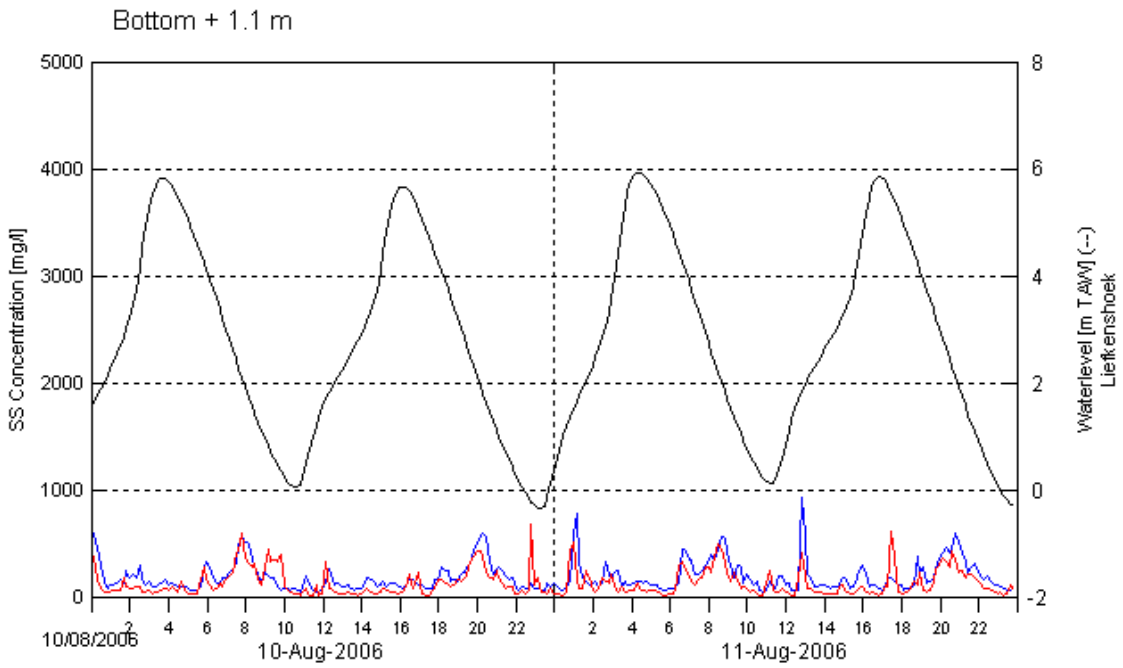
Location:	Date:
Buoy 84	08/08/06 – 09/08/06

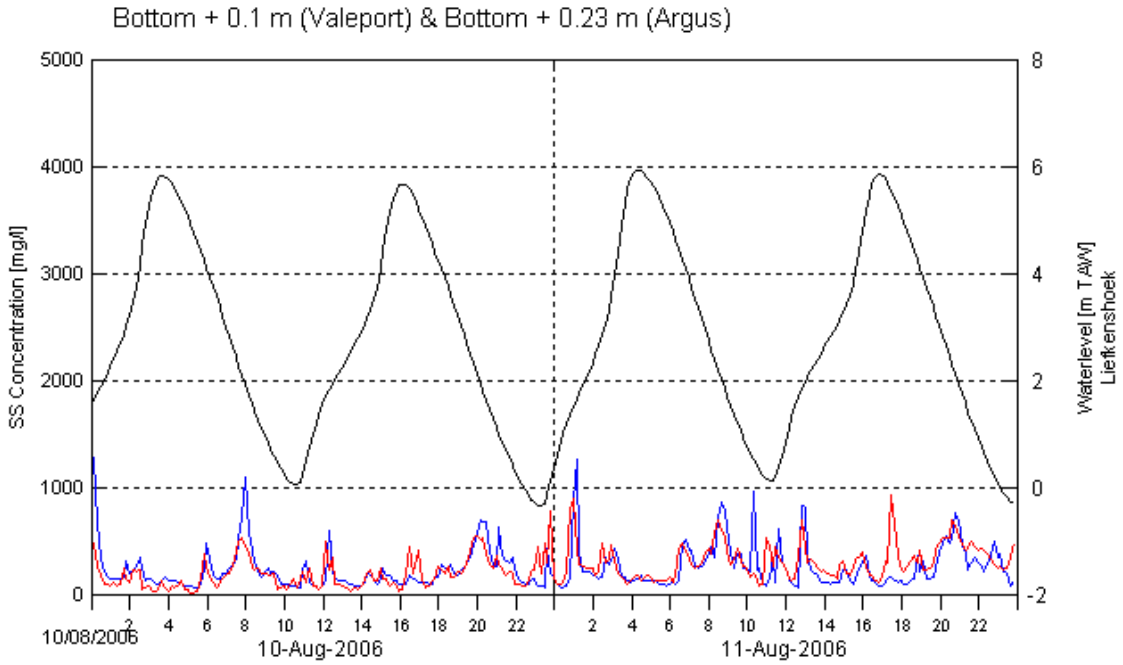
Data processed by: IMDC

In association with: WL | delft hydraulics, GEMS International

I/RA/11283/06.122/MSA

11283 Accretion Deurganckdok – Near bed continuous monitoring – Summer 2006





Comparison of RCM9 & Valeport (blue) to Argus sensors (red) at 0.9 m/1.1 m and 0.1 m/0.3 m above the bottom for SS concentration

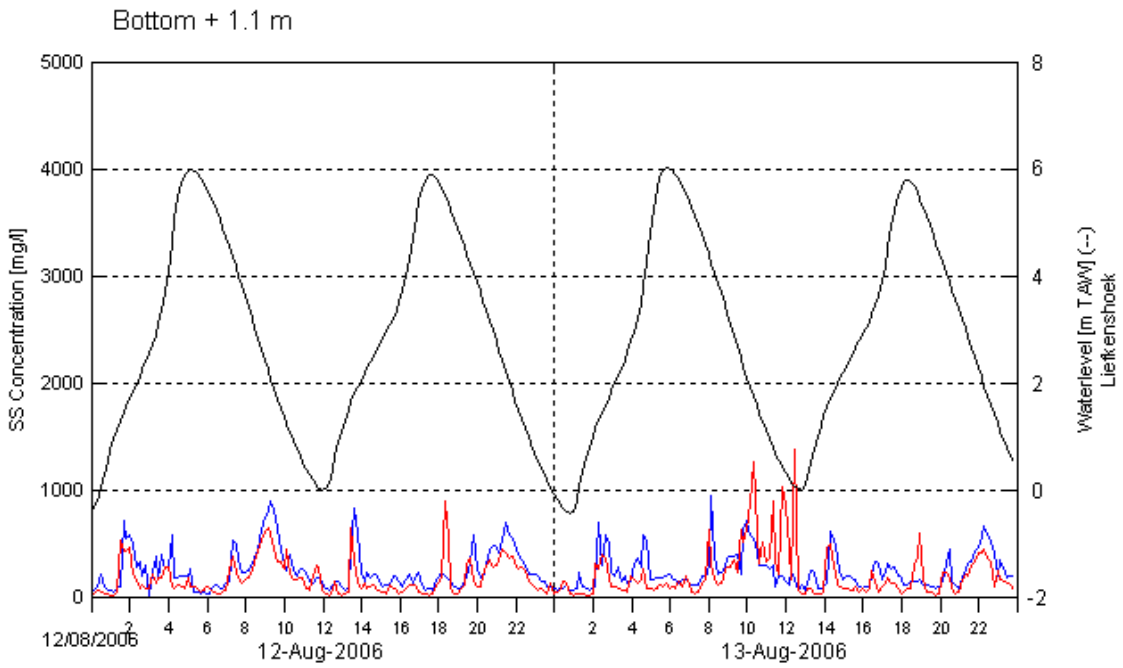
Location:	Date:
Buoy 84	10/08/06 – 11/08/06

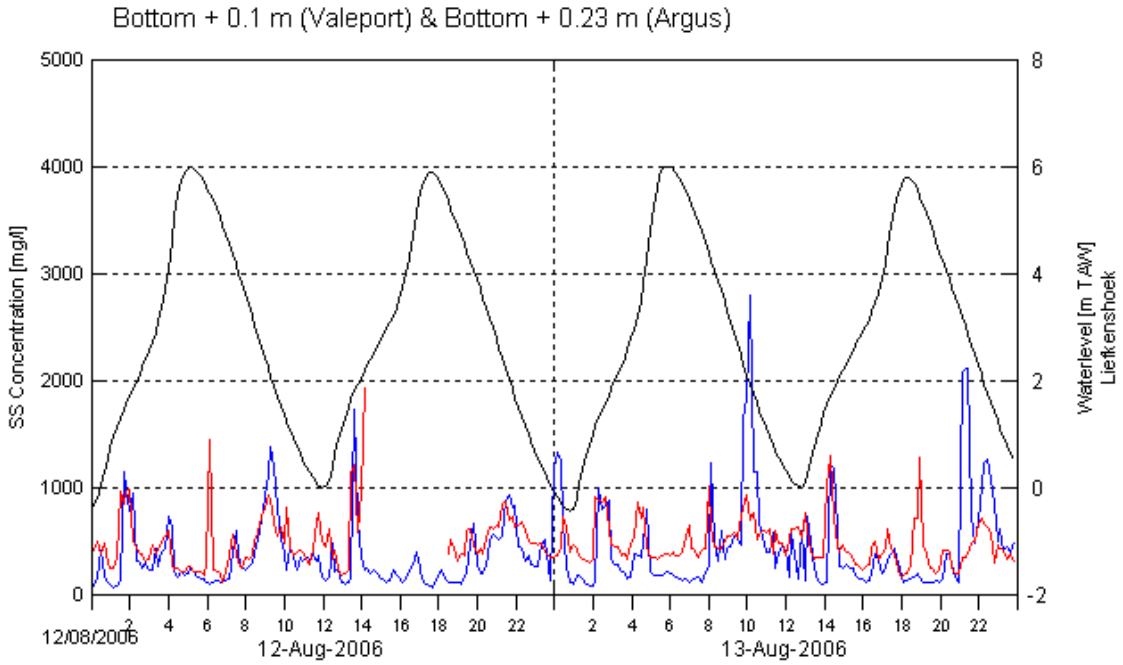
Data processed by: IMDC

In association with: WL | delft hydraulics, GEMS International

I/RA/11283/06.122/MSA

11283 Accretion Deurganckdok – Near bed continuous monitoring – Summer 2006





Comparison of RCM9 & Valeport (blue) to Argus sensors (red) at 0.9 m/1.1 m and 0.1 m/0.3 m above the bottom for SS concentration

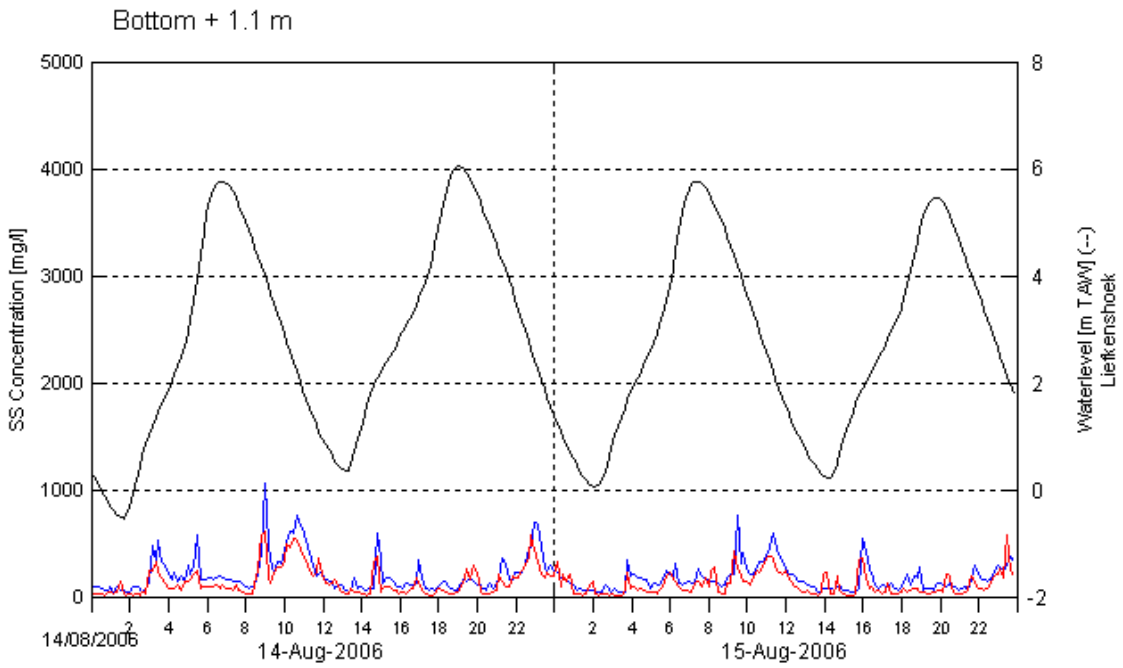
Location:	Date:
Buoy 84	12/08/06 – 13/08/06

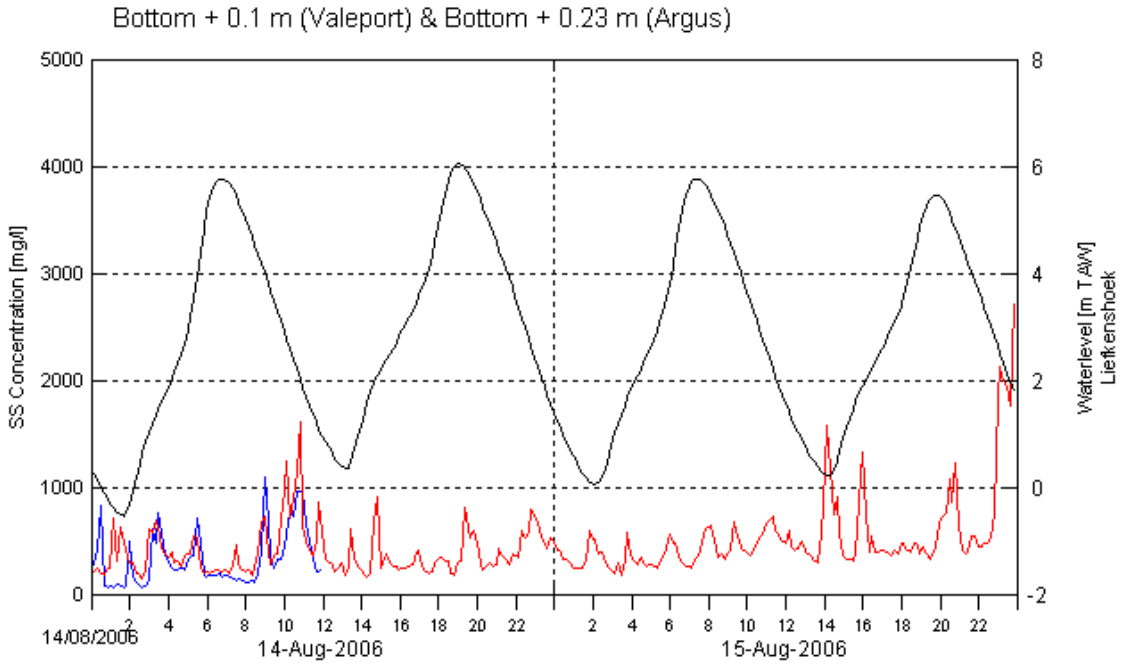
Data processed by: IMDC

In association with: WL | delft hydraulics, GEMS International

I/RA/11283/06.122/MSA

11283 Accretion Deurganckdok – Near bed continuous monitoring – Summer 2006





Comparison of RCM9 & Valeport (blue) to Argus sensors (red) at 0.9 m/1.1 m and 0.1 m/0.3 m above the bottom for SS concentration

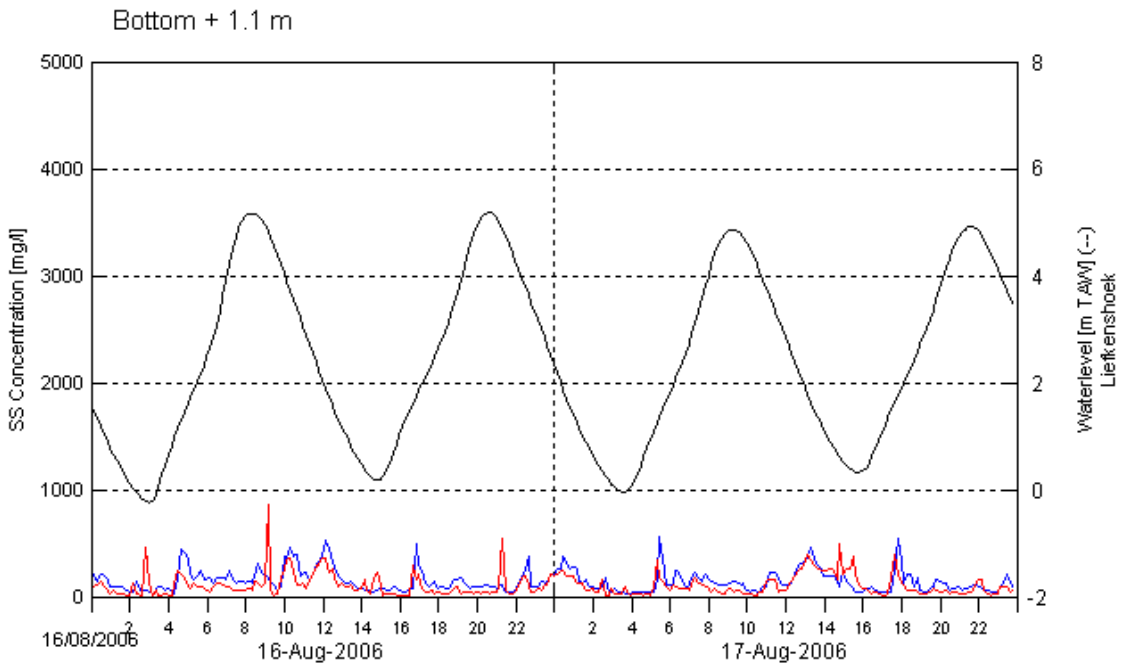
Location:	Date:
Buoy 84	14/08/06 – 15/08/06

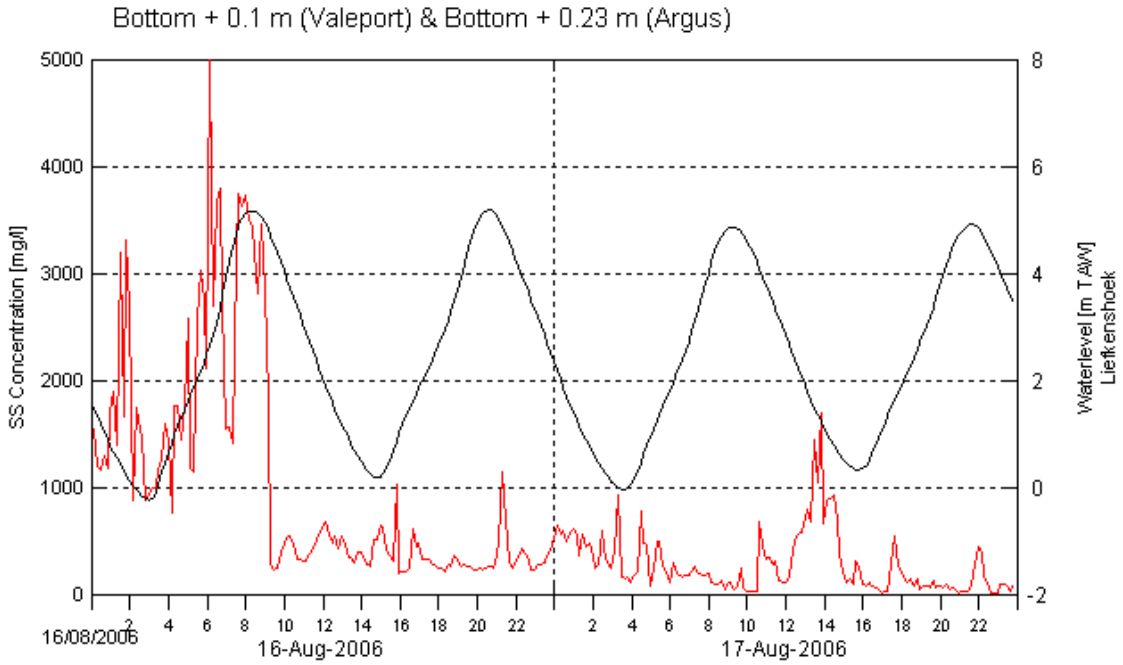
Data processed by: IMDC

In association with: WL | delft hydraulics, GEMS International

I/RA/11283/06.122/MSA

11283 Accretion Deurganckdok – Near bed continuous monitoring – Summer 2006





Comparison of RCM9 & Valeport (blue) to Argus sensors (red) at 0.9 m/1.1 m and 0.1 m/0.3 m above the bottom for SS concentration

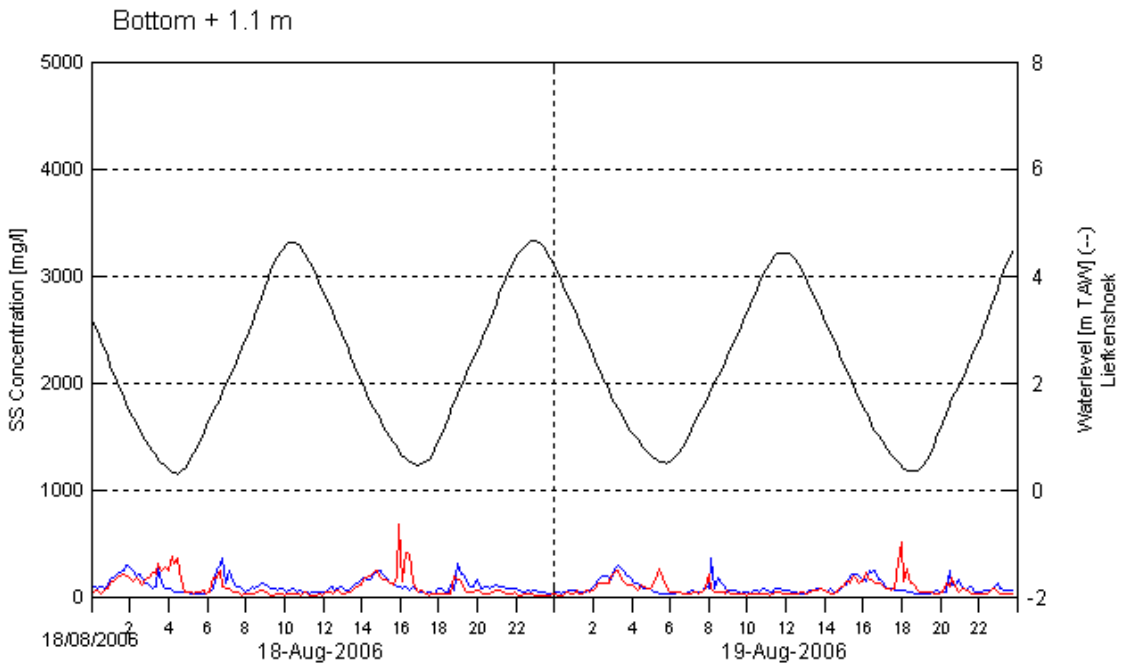
Location:	Date:
Buoy 84	16/08/06 – 17/08/06

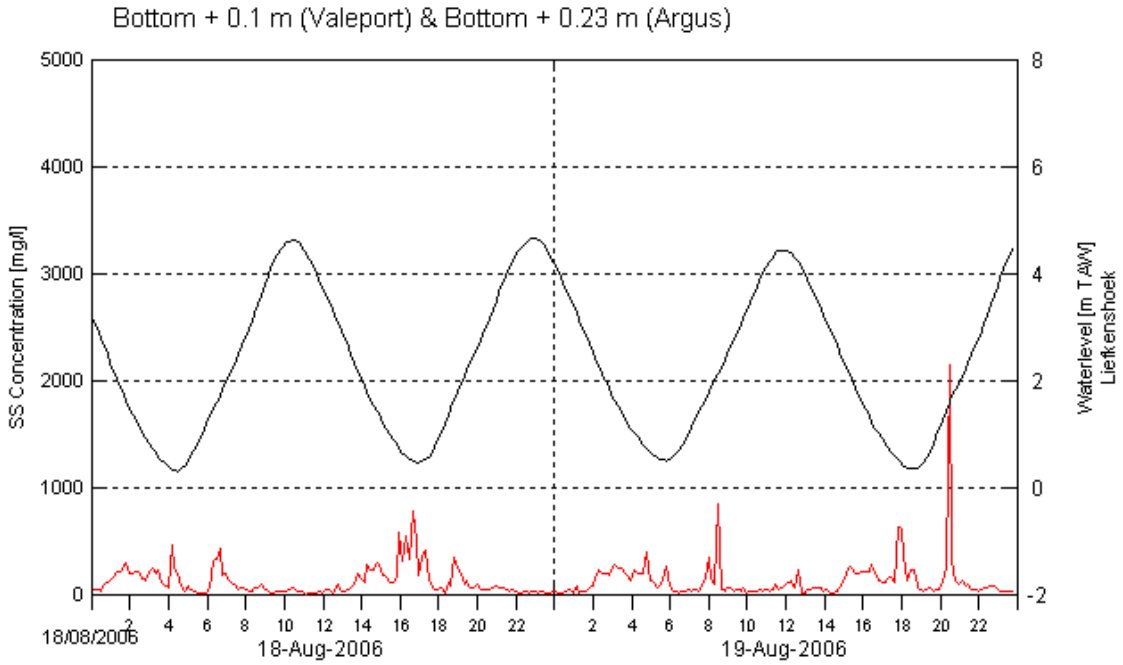
Data processed by: IMDC

In association with: WL | delft hydraulics, GEMS International

I/RA/11283/06.122/MSA

11283 Accretion Deurganckdok – Near bed continuous monitoring – Summer 2006





Comparison of RCM9 & Valeport (blue) to Argus sensors (red) at 0.9 m/1.1 m and 0.1 m/0.3 m above the bottom for SS concentration

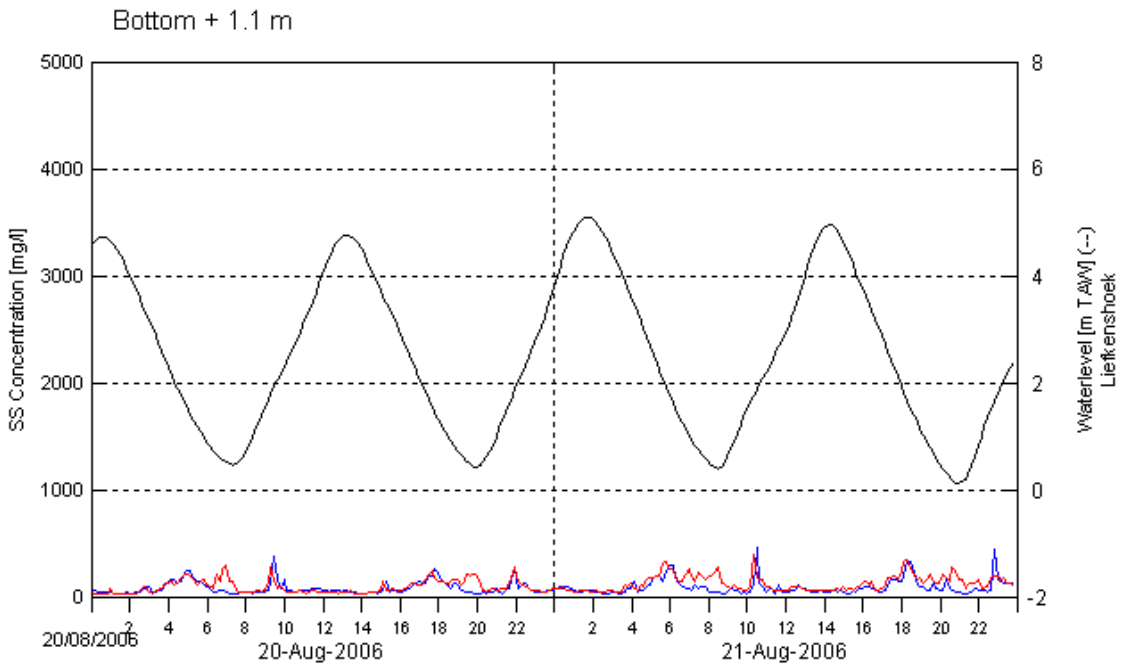
Location:	Date:
Buoy 84	18/08/06 – 19/08/06

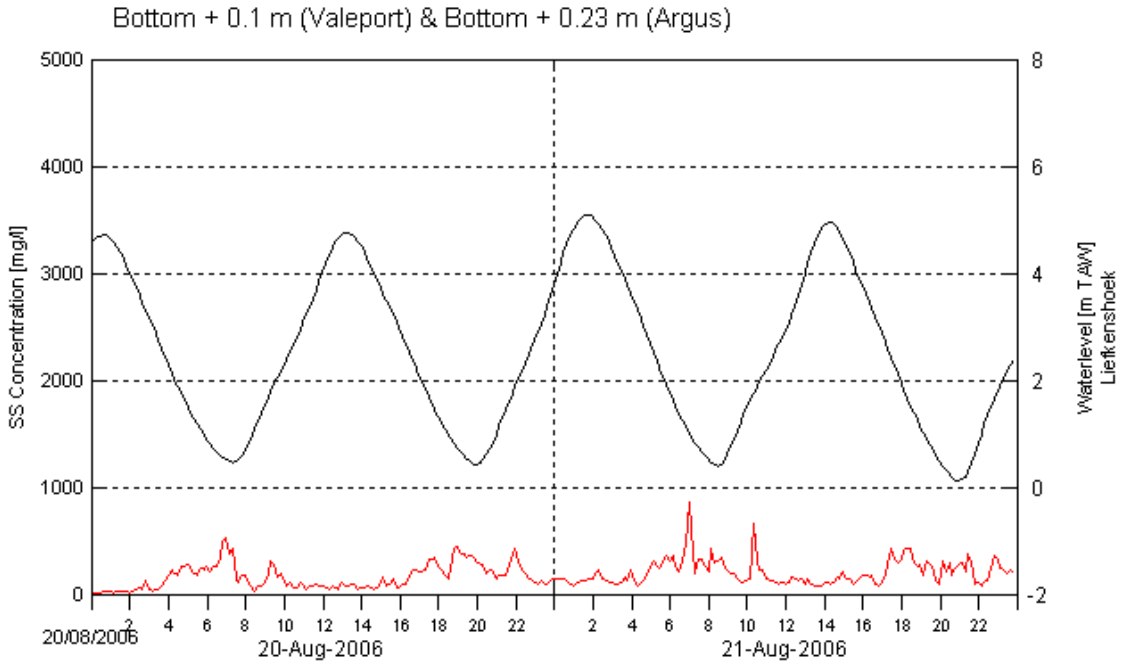
Data processed by: IMDC

In association with: WL | delft hydraulics, GEMS International

I/RA/11283/06.122/MSA

11283 Accretion Deurganckdok – Near bed continuous monitoring – Summer 2006





Comparison of RCM9 & Valeport (blue) to Argus sensors (red) at 0.9 m/1.1 m and 0.1 m/0.3 m above the bottom for SS concentration

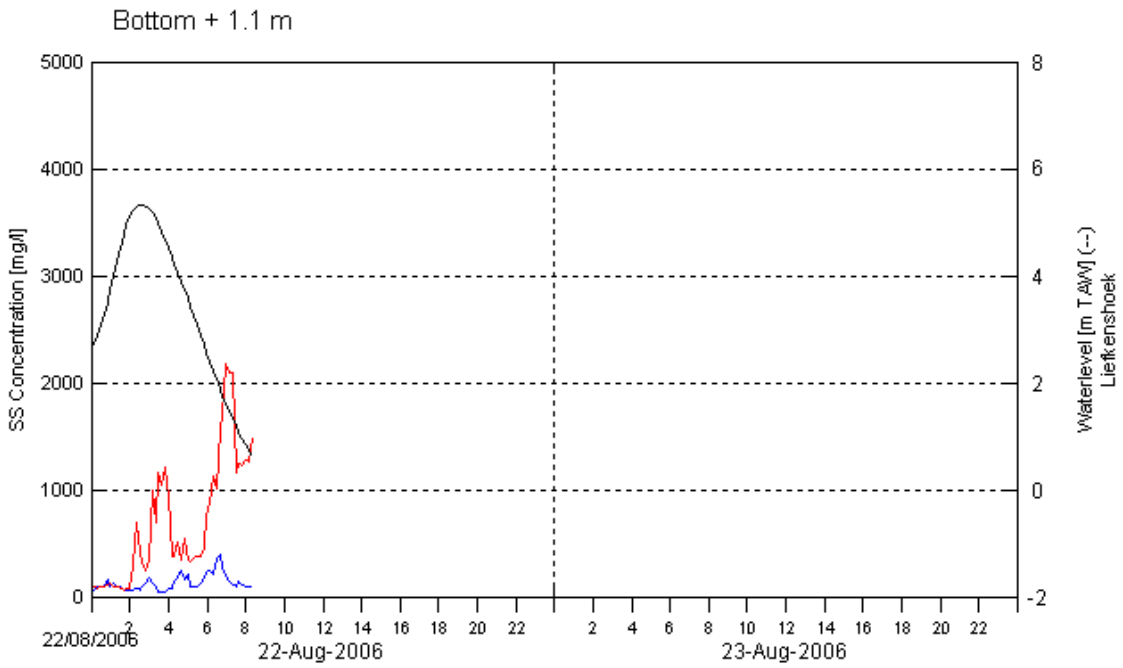
Location:	Date:
Buoy 84	20/08/06 – 21/08/06

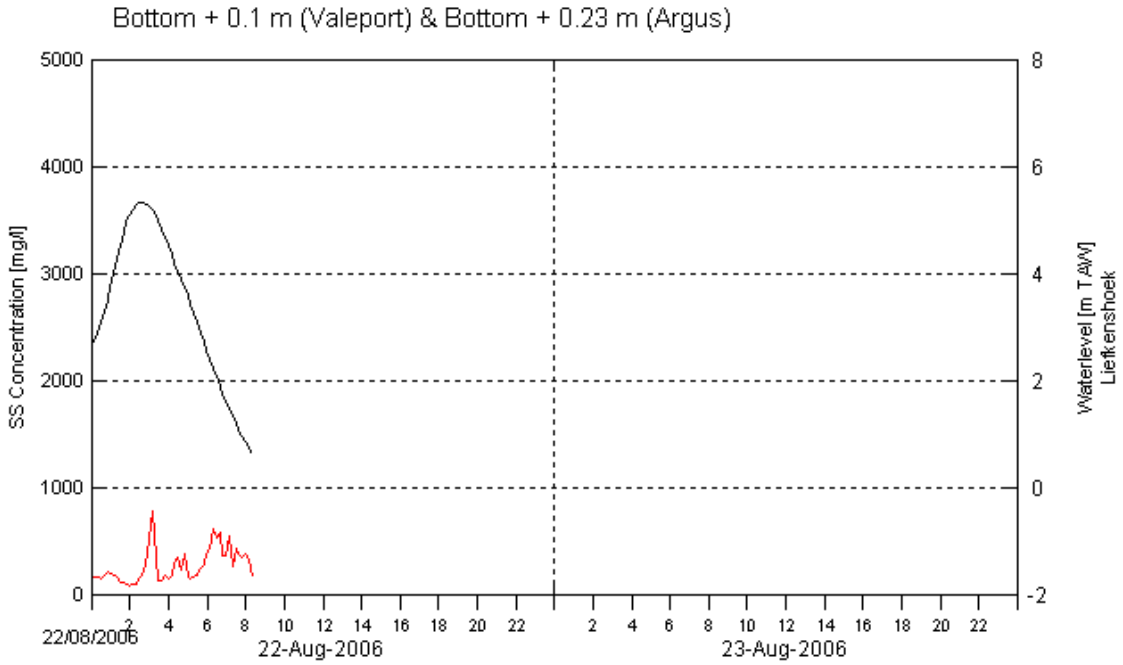
Data processed by: IMDC

In association with: WL | delft hydraulics, GEMS International

I/RA/11283/06.122/MSA

11283 Accretion Deurganckdok – Near bed continuous monitoring – Summer 2006





Comparison of RCM9 & Valeport (blue) to Argus sensors (red) at 0.9 m/1.1 m and 0.1 m/0.3 m above the bottom for SS concentration

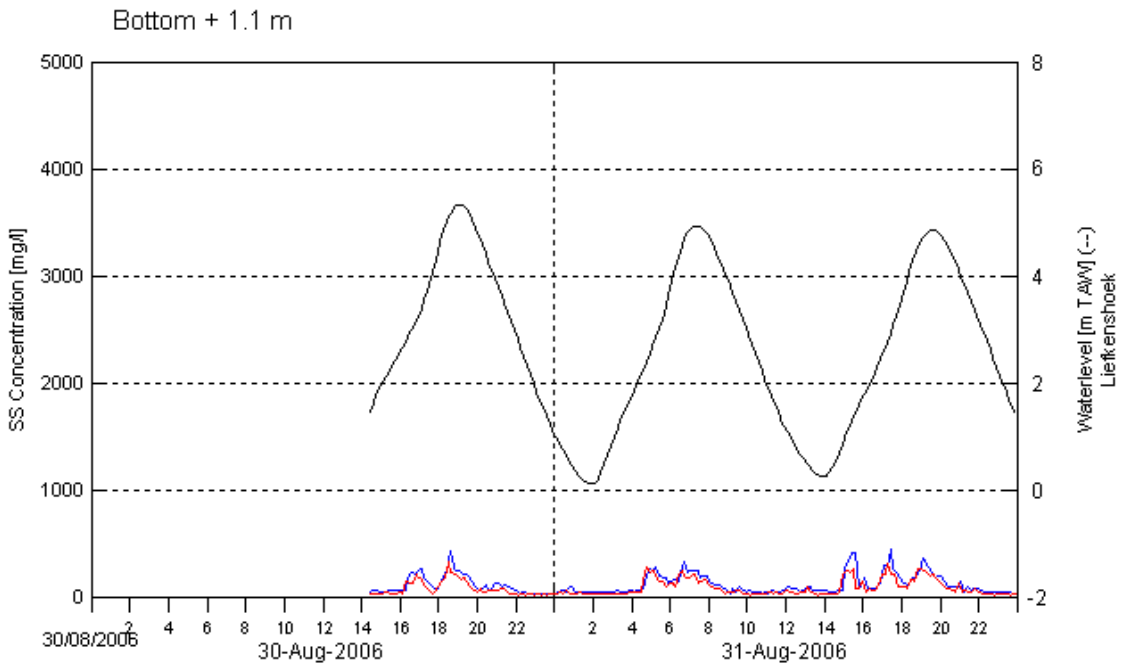
Location:	Date:
Buoy 84	22/08/06 – 23/08/06

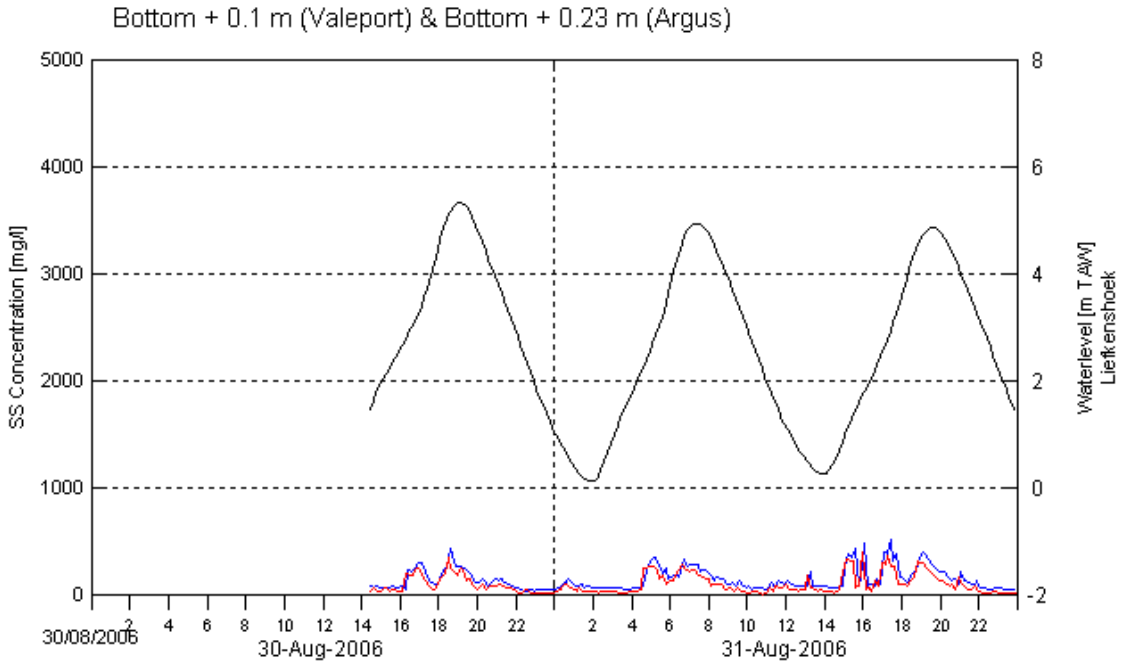
Data processed by: IMDC

In association with: WL | delft hydraulics, GEMS International

I/RA/11283/06.122/MSA

11283 Accretion Deurganckdok – Near bed continuous monitoring – Summer 2006





Comparison of RCM9 & Valeport (blue) to Argus sensors (red) at 0.9 m/1.1 m and 0.1 m/0.3 m above the bottom for SS concentration

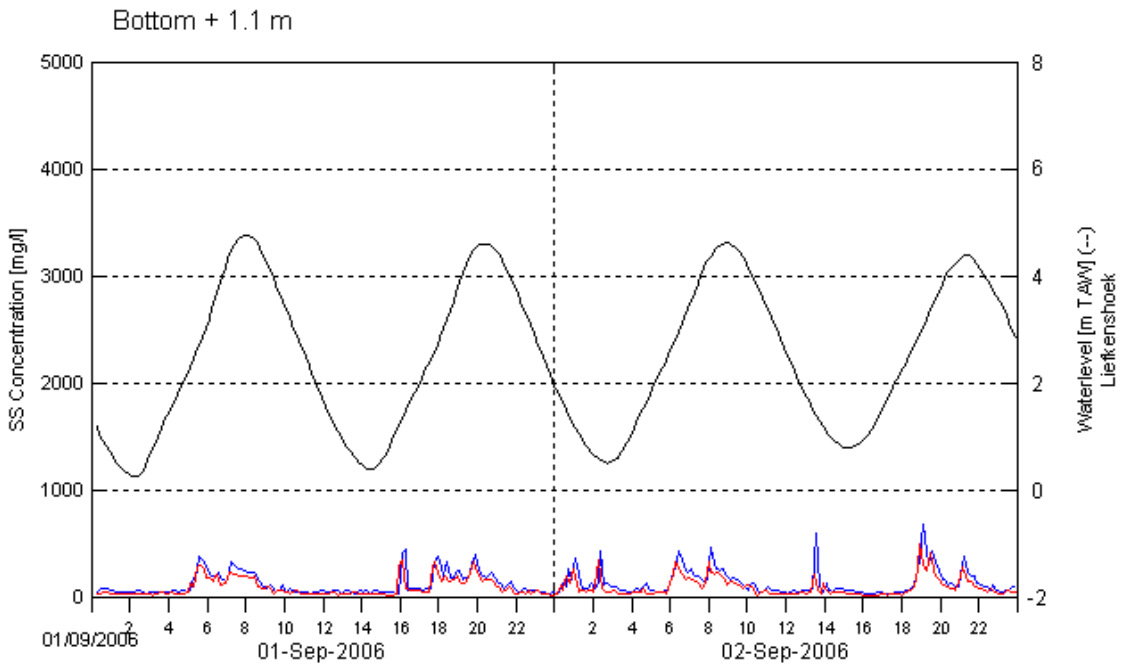
Location:	Date:
Deurganckdok Sill	30/08/06 – 31/08/06

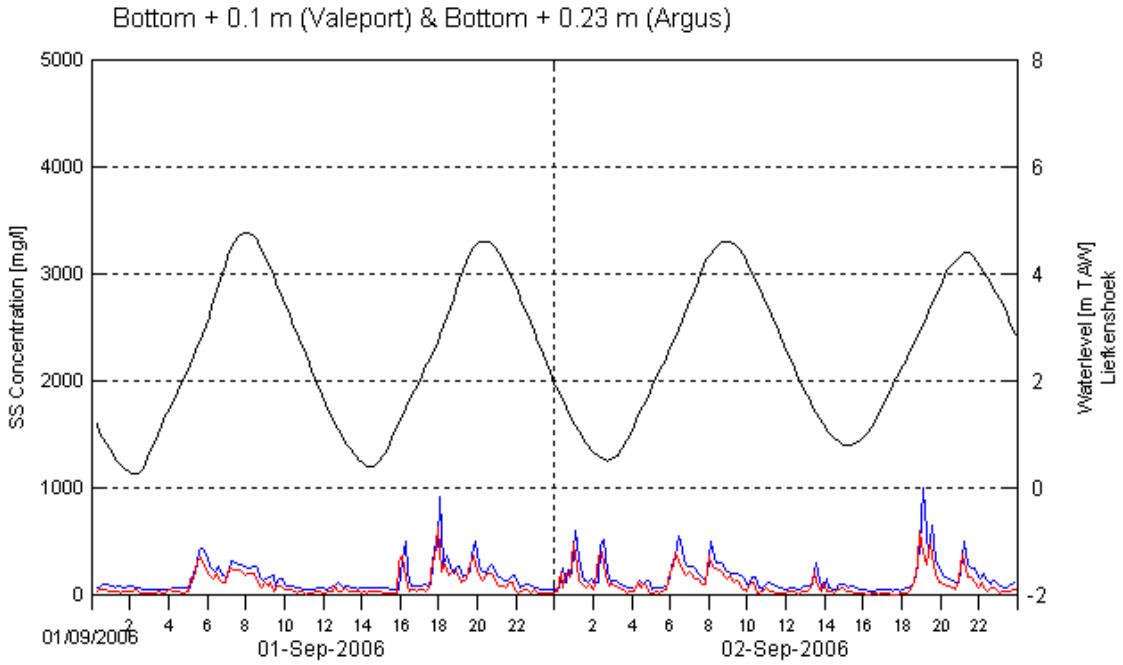
Data processed by: IMDC

In association with: WL | delft hydraulics, GEMS International

I/RA/11283/06.122/MSA

11283 Accretion Deurganckdok – Near bed continuous monitoring – Summer 2006





Comparison of RCM9 & Valeport (blue) to Argus sensors (red) at 0.9 m/1.1 m and 0.1 m/0.3 m above the bottom for SS concentration

Location: Deurganckdok Sill

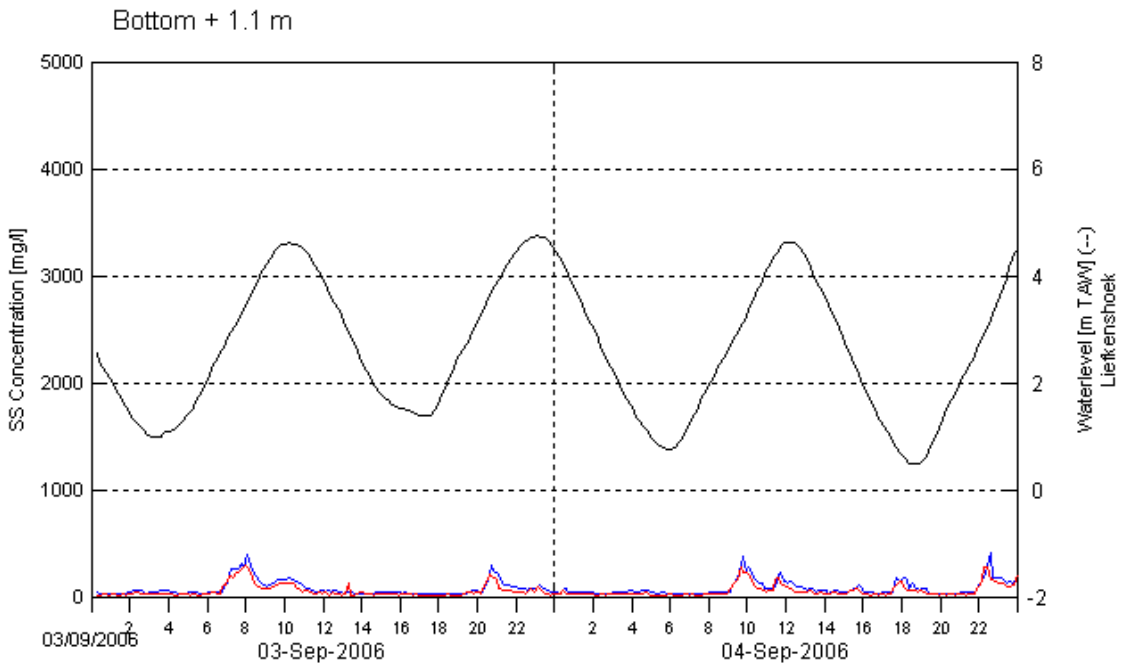
Date: 01/09/06 – 02/09/06

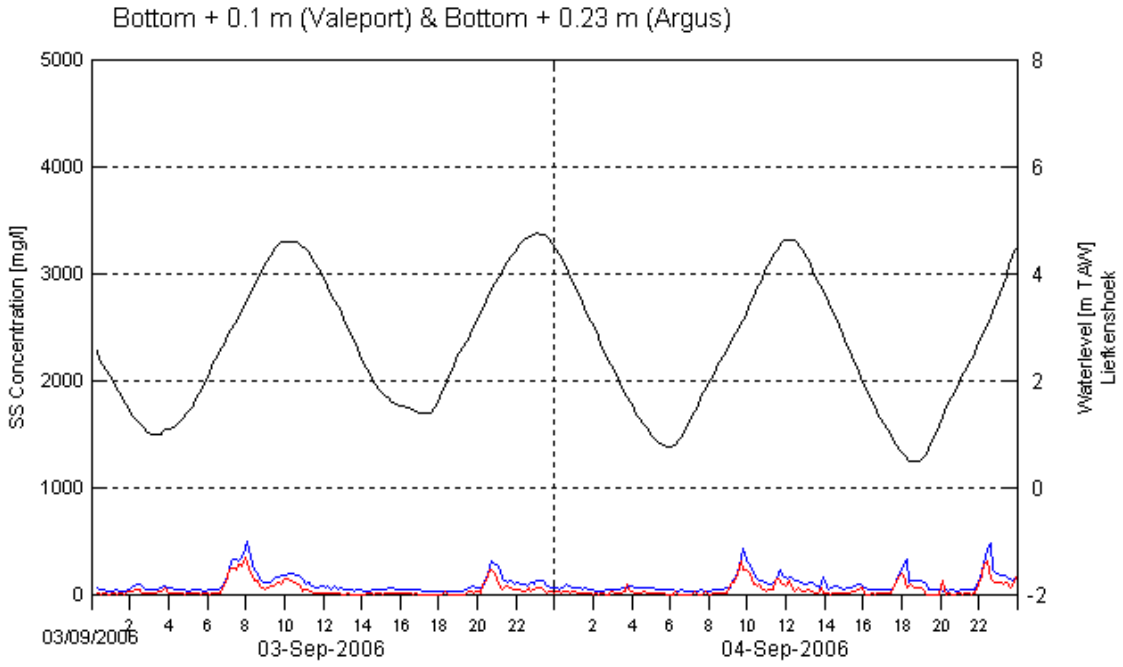
Data processed by: IMDC

In association with: WL | delft hydraulics, GEMS International

I/RA/11283/06.122/MSA

11283 Accretion Deurganckdok – Near bed continuous monitoring – Summer 2006





Comparison of RCM9 & Valeport (blue) to Argus sensors (red) at 0.9 m/1.1 m and 0.1 m/0.3 m above the bottom for SS concentration

Location: Deurganckdok Sill

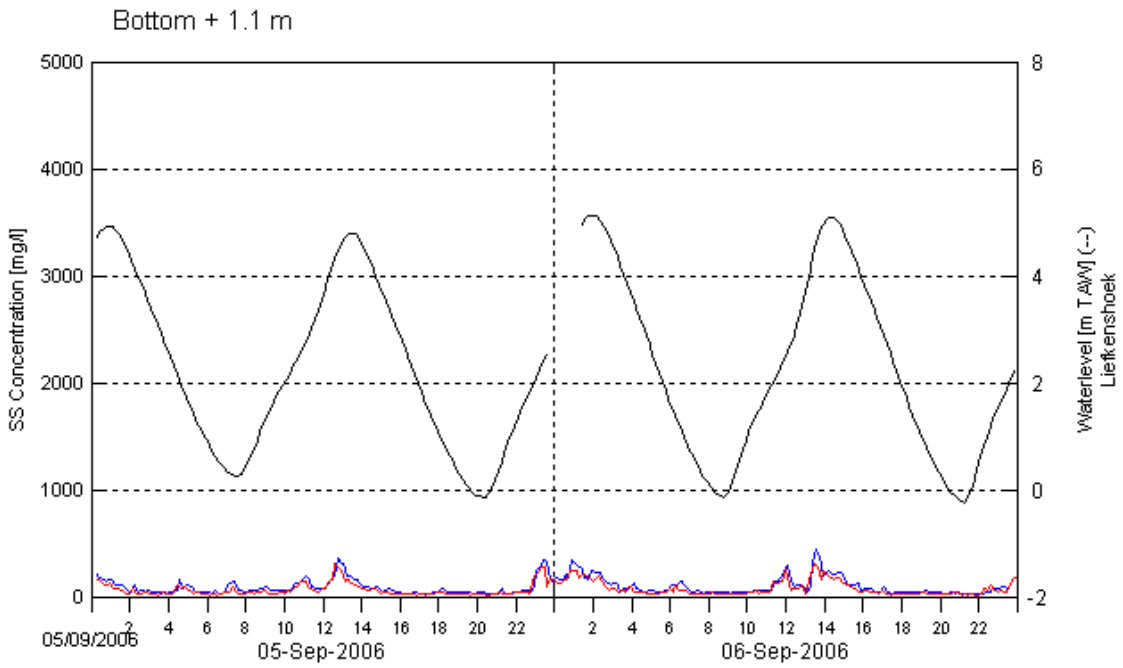
Date: 03/09/06 – 04/09/06

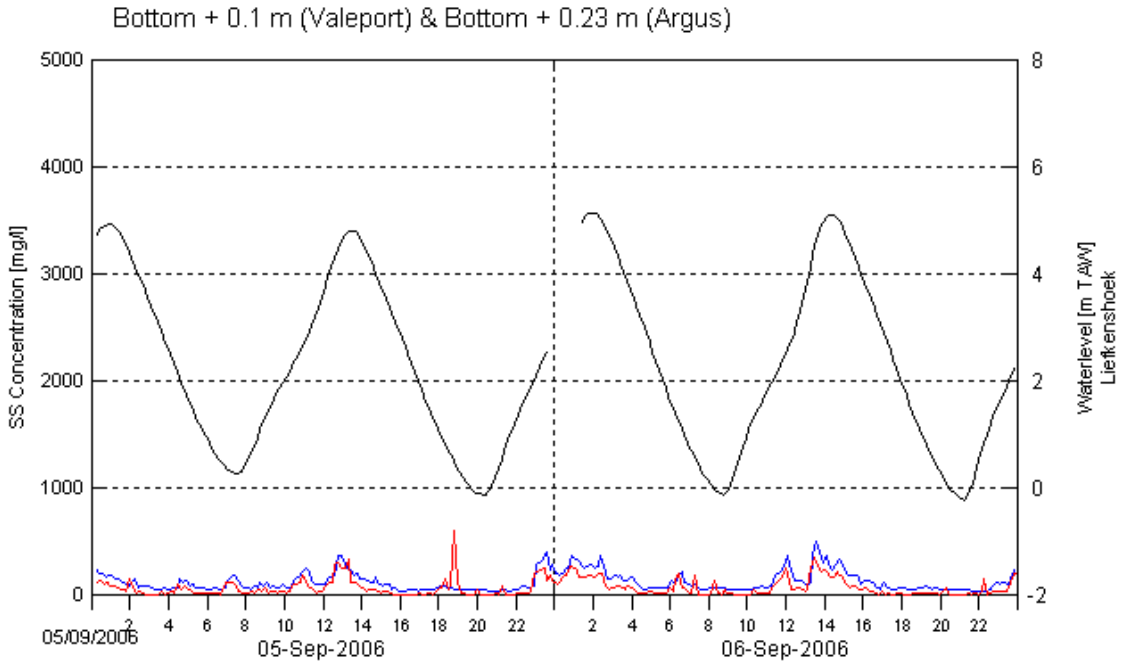
Data processed by: IMDC

In association with: WL | delft hydraulics, GEMS International

I/RA/11283/06.122/MSA

11283 Accretion Deurganckdok – Near bed continuous monitoring – Summer 2006





Comparison of RCM9 & Valeport (blue) to Argus sensors (red) at 0.9 m/1.1 m and 0.1 m/0.3 m above the bottom for SS concentration

Location: Deurganckdok Sill

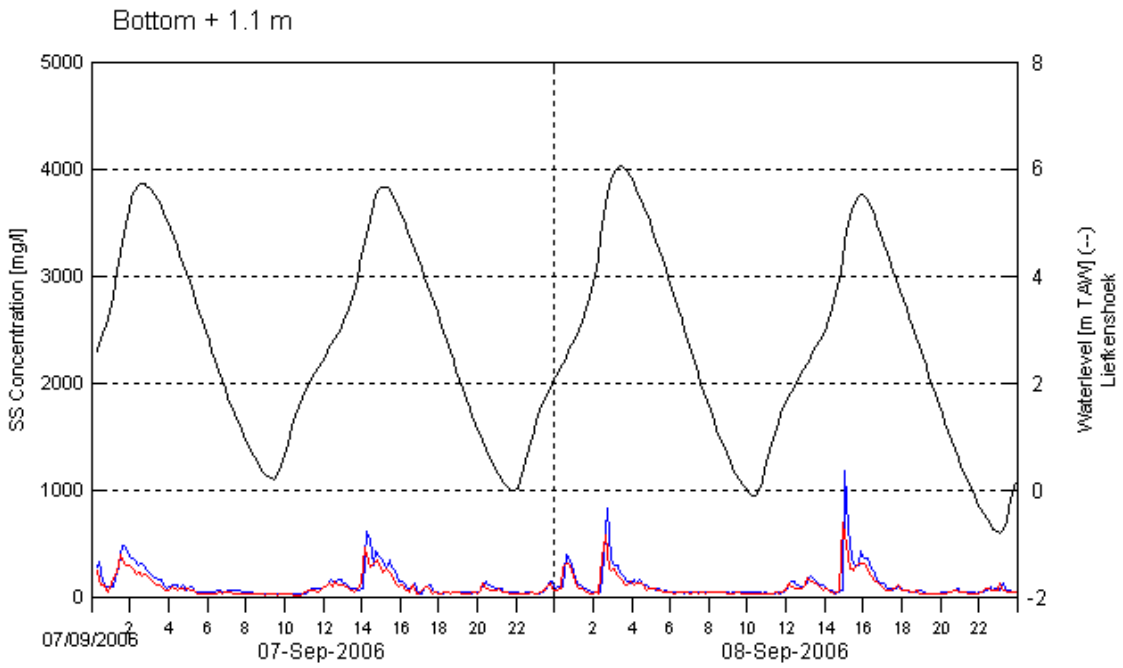
Date: 05/09/06 – 06/09/06

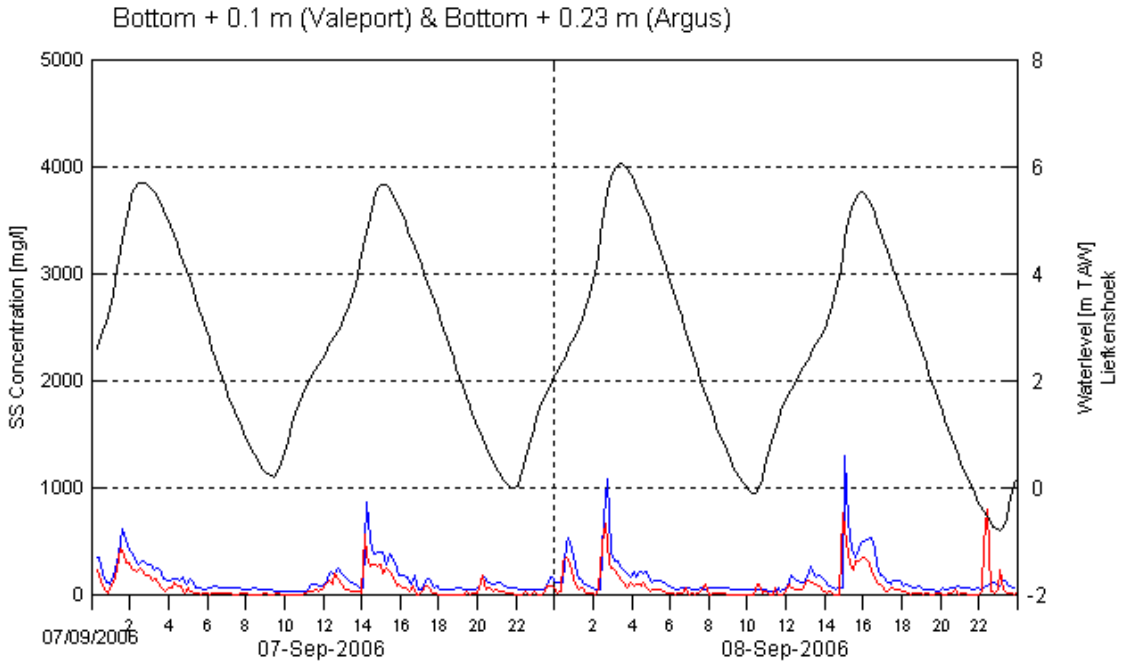
Data processed by: IMDC

In association with: WL | delft hydraulics, GEMS International

I/RA/11283/06.122/MSA

11283 Accretion Deurganckdok – Near bed continuous monitoring – Summer 2006





Comparison of RCM9 & Valeport (blue) to Argus sensors (red) at 0.9 m/1.1 m and 0.1 m/0.3 m above the bottom for SS concentration

Location: Deurganckdok Sill

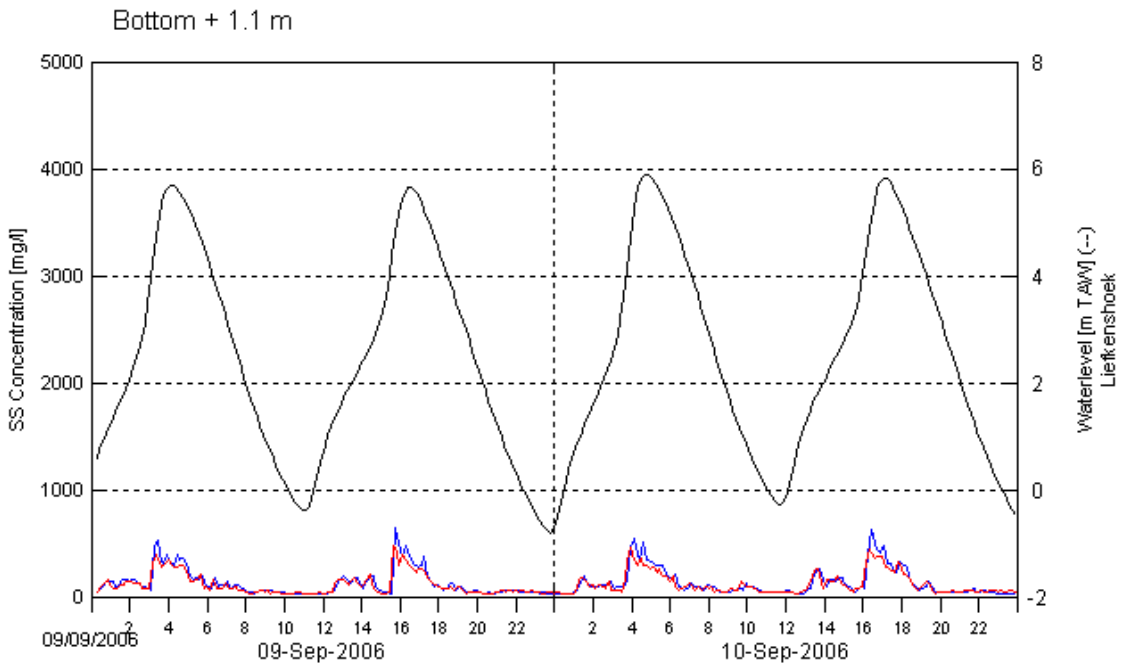
Date: 07/09/06 – 08/09/06

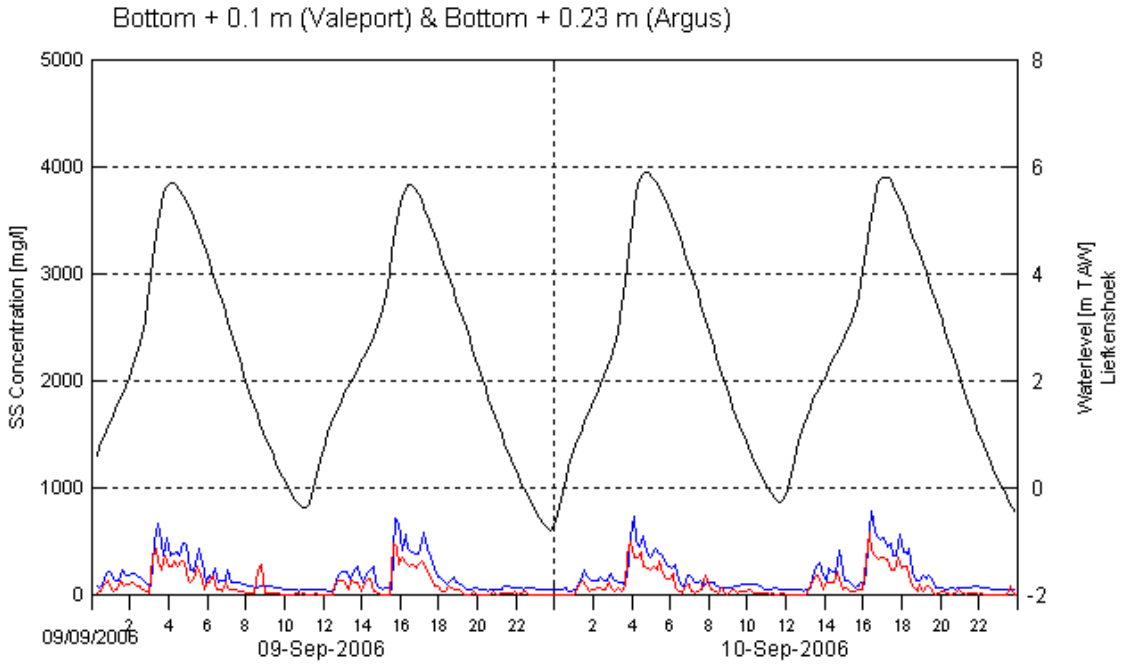
Data processed by: IMDC

In association with: WL | delft hydraulics, GEMS International

I/RA/11283/06.122/MSA

11283 Accretion Deurganckdok – Near bed continuous monitoring – Summer 2006





Comparison of RCM9 & Valeport (blue) to Argus sensors (red) at 0.9 m/1.1 m and 0.1 m/0.3 m above the bottom for SS concentration

Location: Deurganckdok Sill

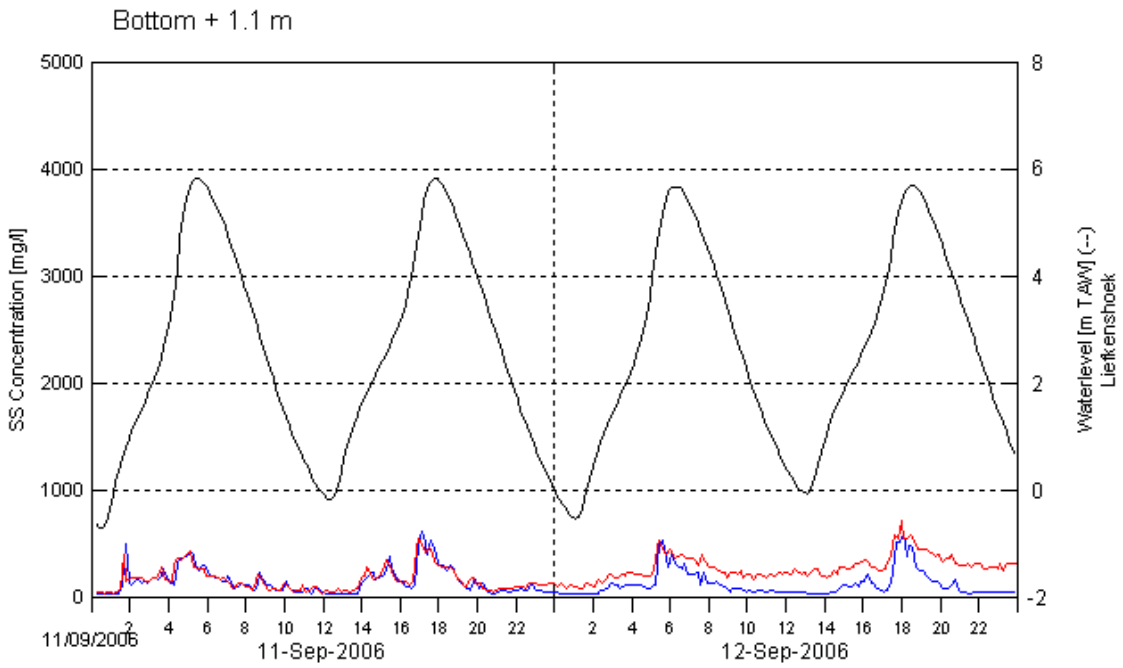
Date: 09/09/06 – 10/09/06

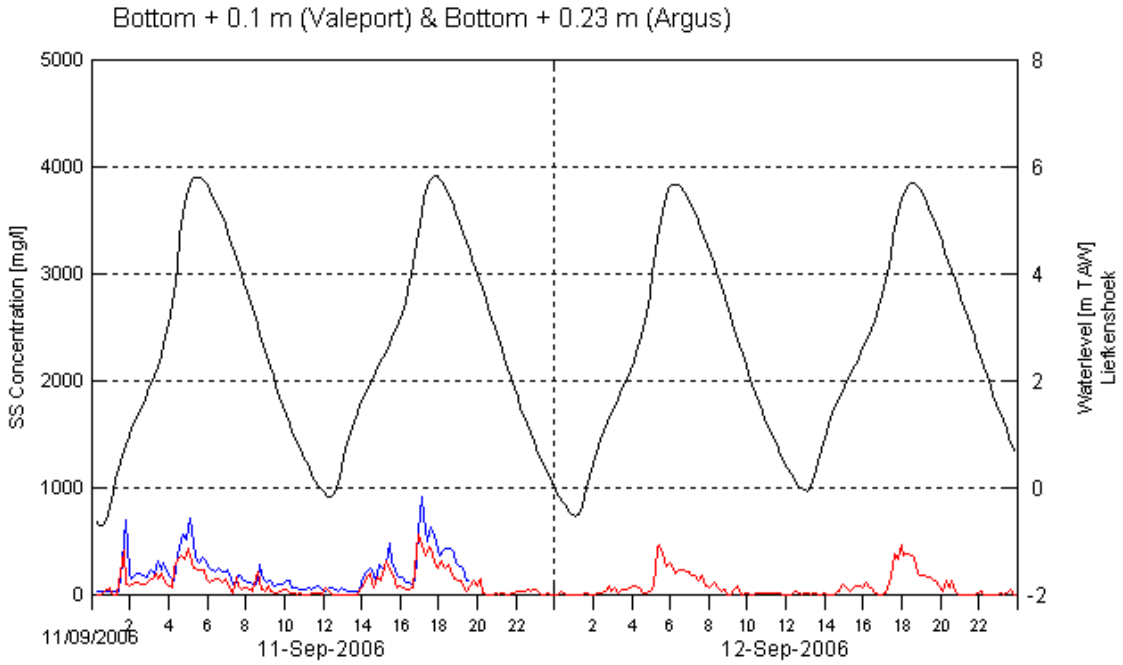
Data processed by: IMDC

In association with: WL | delft hydraulics, GEMS International

I/RA/11283/06.122/MSA

11283 Accretion Deurganckdok – Near bed continuous monitoring – Summer 2006





Comparison of RCM9 & Valeport (blue) to Argus sensors (red) at 0.9 m/1.1 m and 0.1 m/0.3 m above the bottom for SS concentration

Location: Deurganckdok Sill

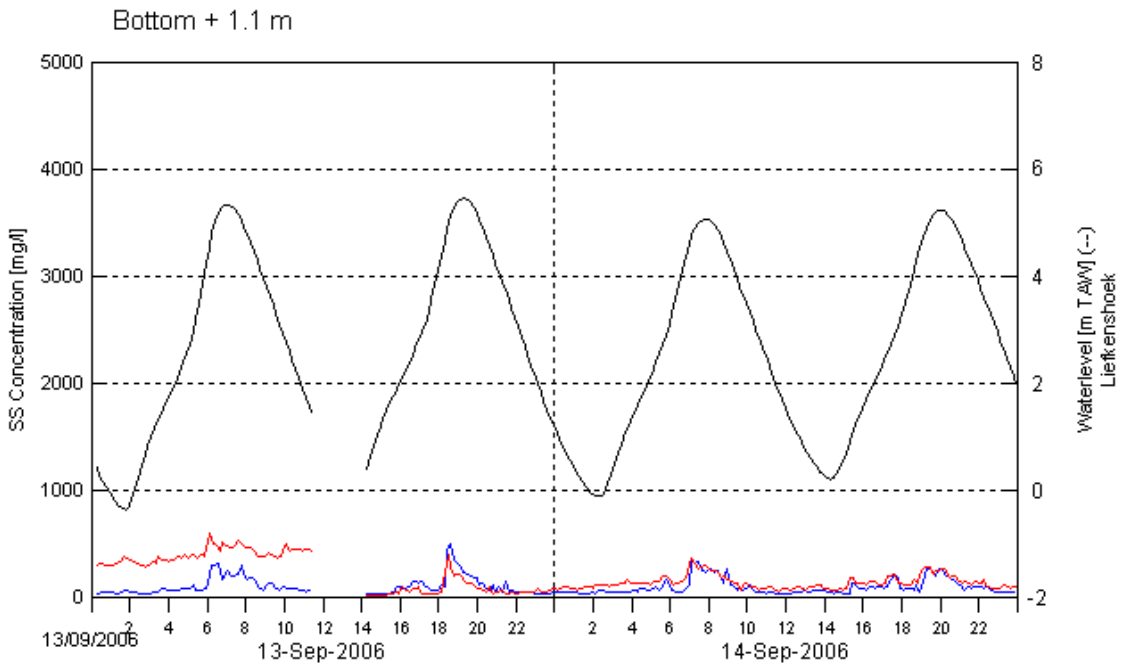
Date: 11/09/06 – 12/09/06

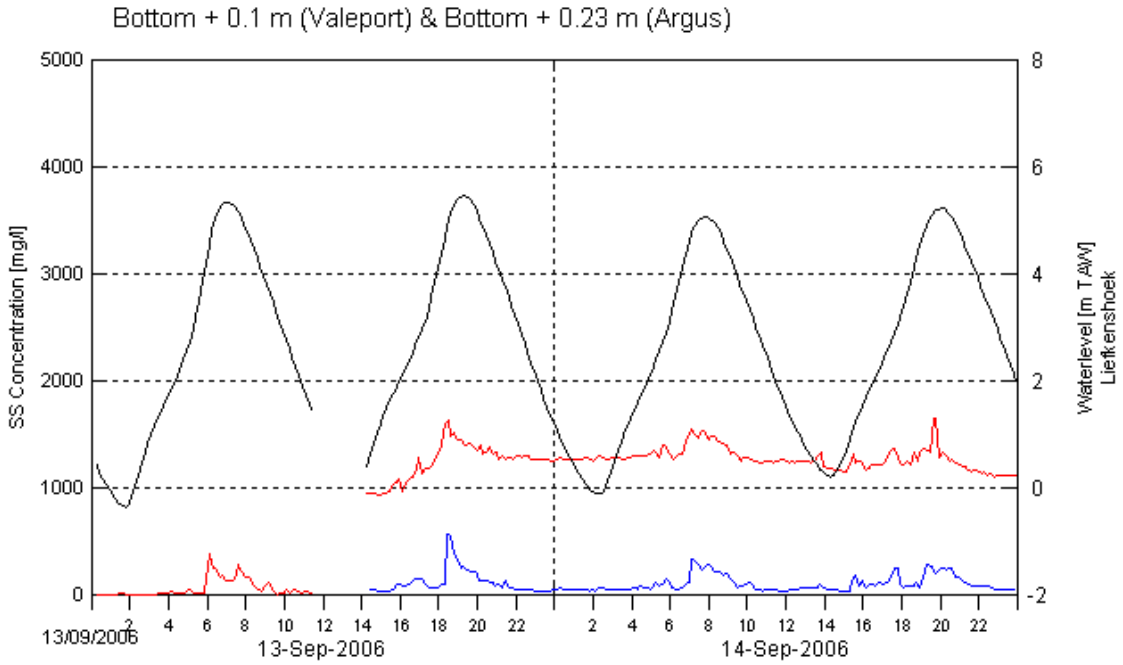
Data processed by: IMDC

In association with: WL | delft hydraulics, GEMS International

I/RA/11283/06.122/MSA

11283 Accretion Deurganckdok – Near bed continuous monitoring – Summer 2006





Comparison of RCM9 & Valeport (blue) to Argus sensors (red) at 0.9 m/1.1 m and 0.1 m/0.3 m above the bottom for SS concentration

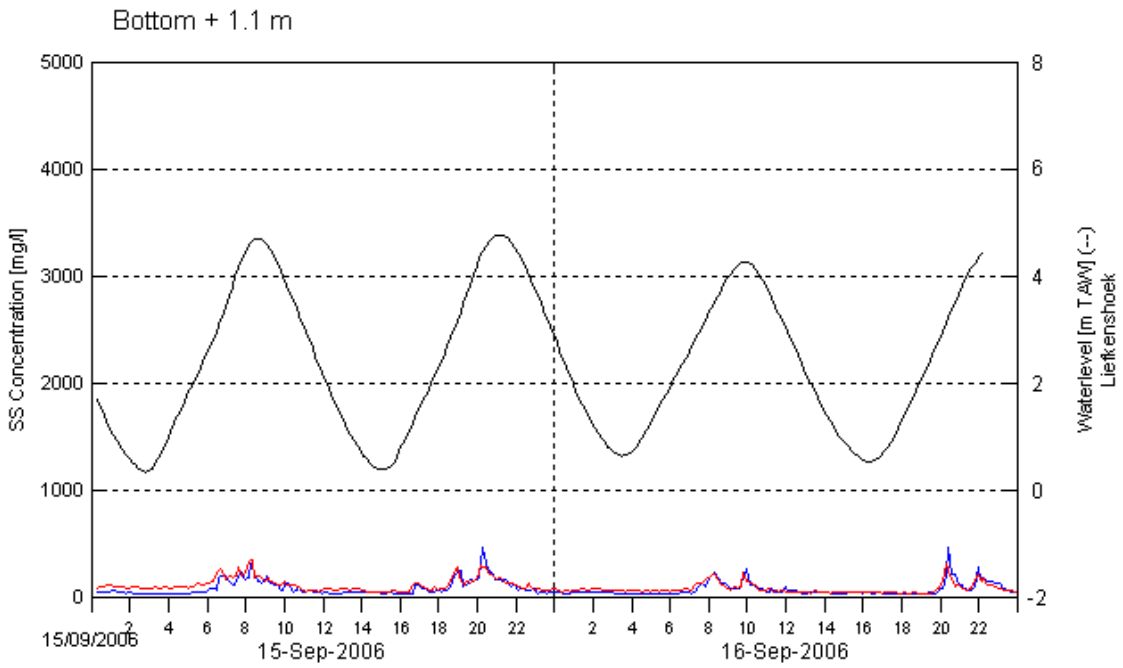
Location:	Date:
Deurganckdok Sill	13/09/06 – 14/09/06

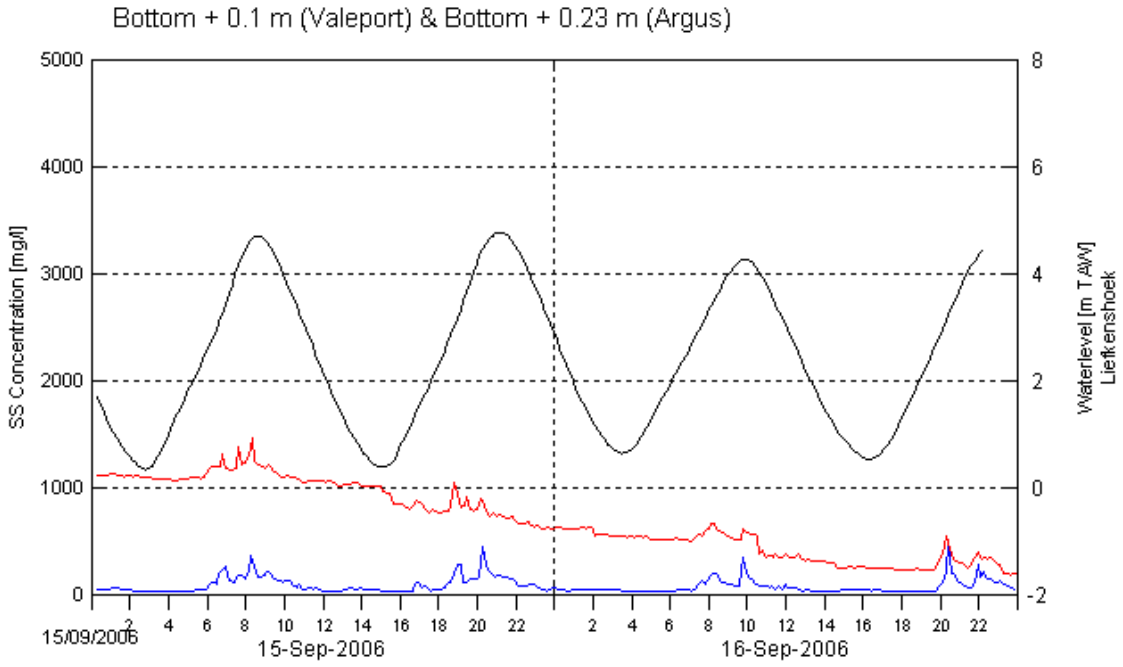
Data processed by: IMDC

In association with: WL | delft hydraulics, GEMS International

I/RA/11283/06.122/MSA

11283 Accretion Deurganckdok – Near bed continuous monitoring – Summer 2006





Comparison of RCM9 & Valeport (blue) to Argus sensors (red) at 0.9 m/1.1 m and 0.1 m/0.3 m above the bottom for SS concentration

Location: Deurganckdok Sill

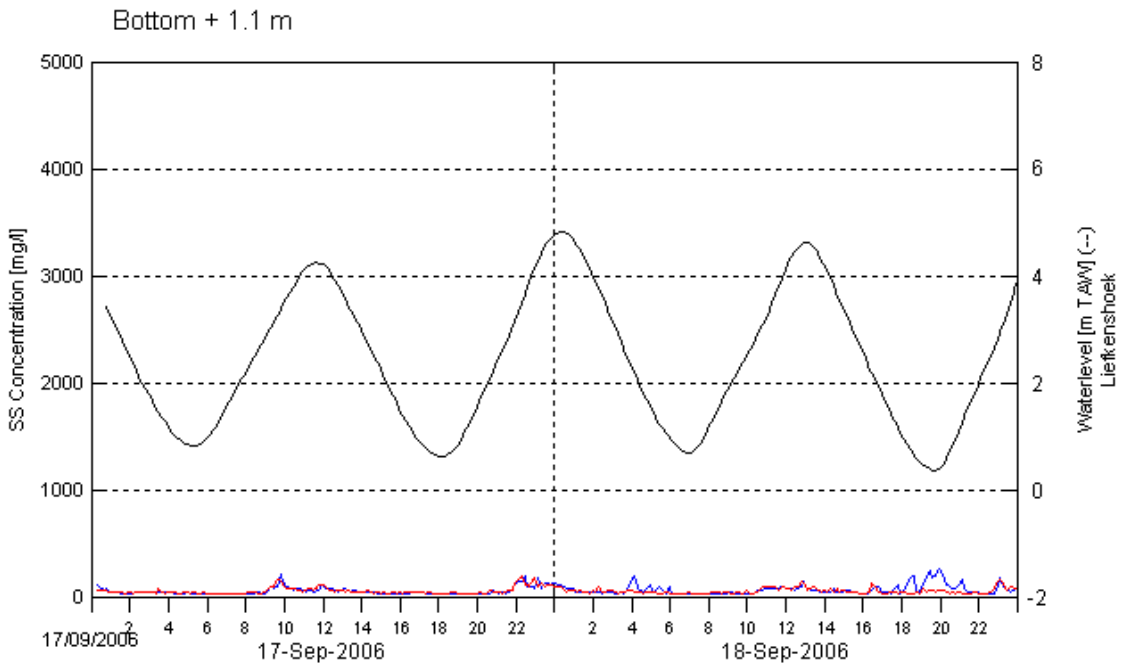
Date: 15/09/06 – 16/09/06

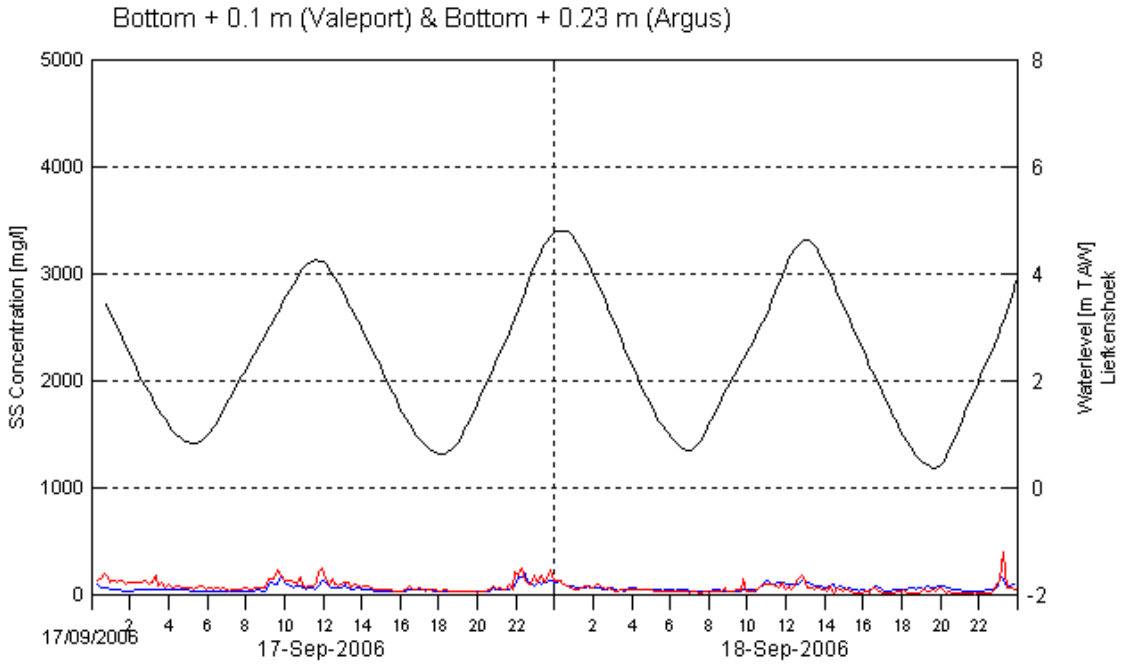
Data processed by: IMDC

In association with: WL | delft hydraulics, GEMS International

I/RA/11283/06.122/MSA

11283 Accretion Deurganckdok – Near bed continuous monitoring – Summer 2006





Comparison of RCM9 & Valeport (blue) to Argus sensors (red) at 0.9 m/1.1 m and 0.1 m/0.3 m above the bottom for SS concentration

Location: Deurganckdok Sill

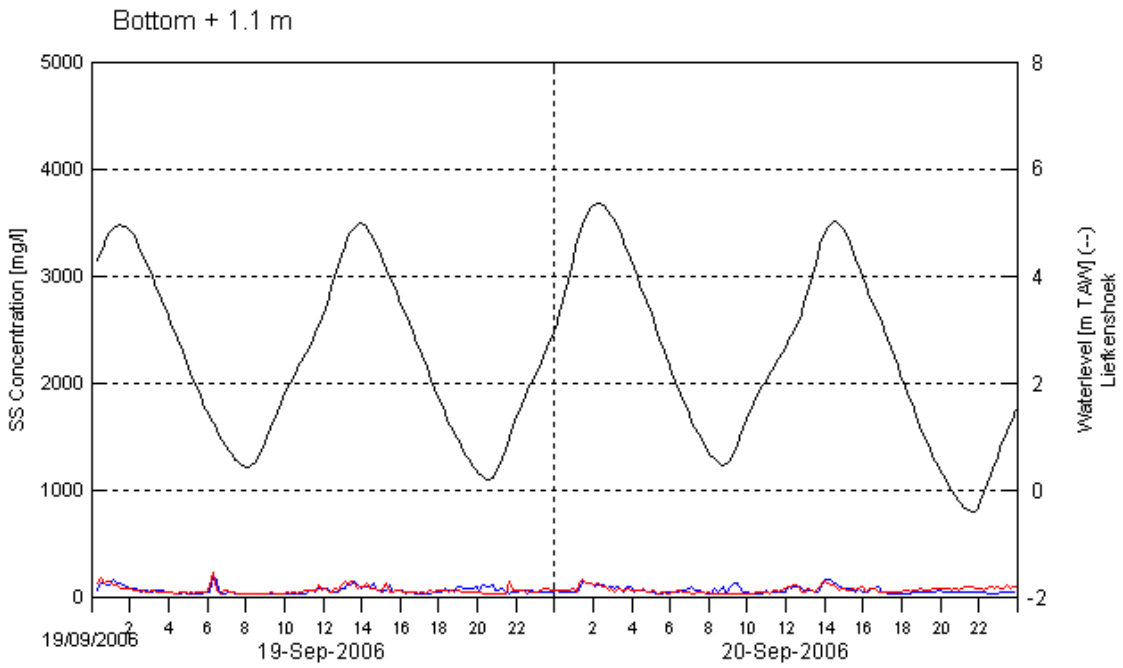
Date: 17/09/06 – 18/09/06

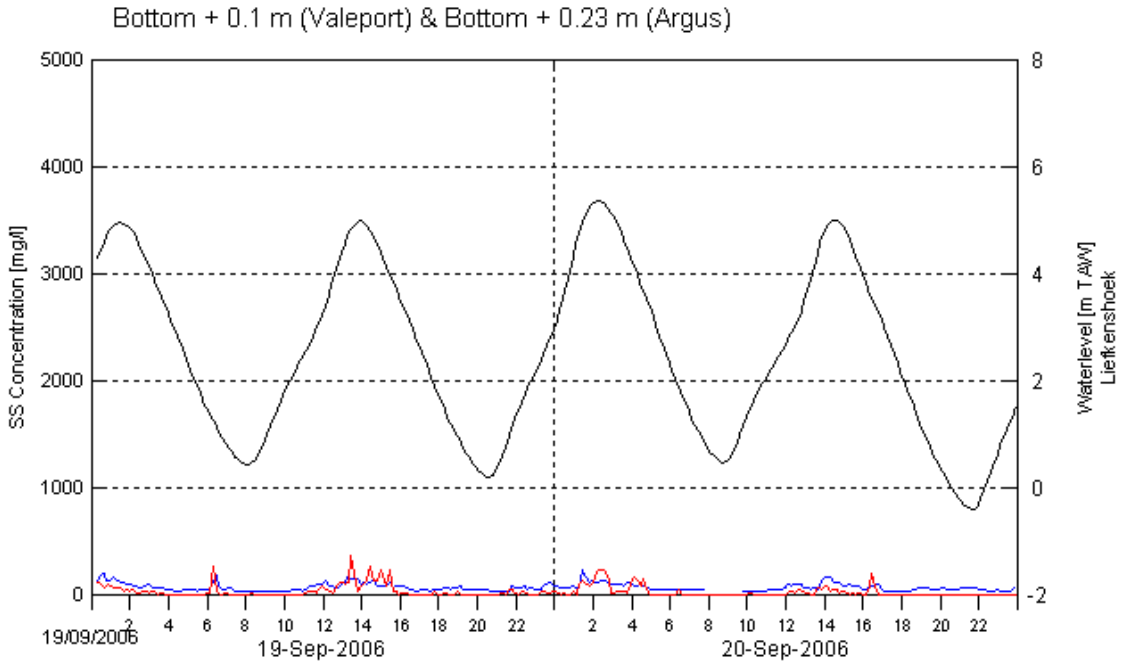
Data processed by: IMDC

In association with: WL | delft hydraulics, GEMS International

I/RA/11283/06.122/MSA

11283 Accretion Deurganckdok – Near bed continuous monitoring – Summer 2006





Comparison of RCM9 & Valeport (blue) to Argus sensors (red) at 0.9 m/1.1 m and 0.1 m/0.3 m above the bottom for SS concentration

Location: Deurganckdok Sill

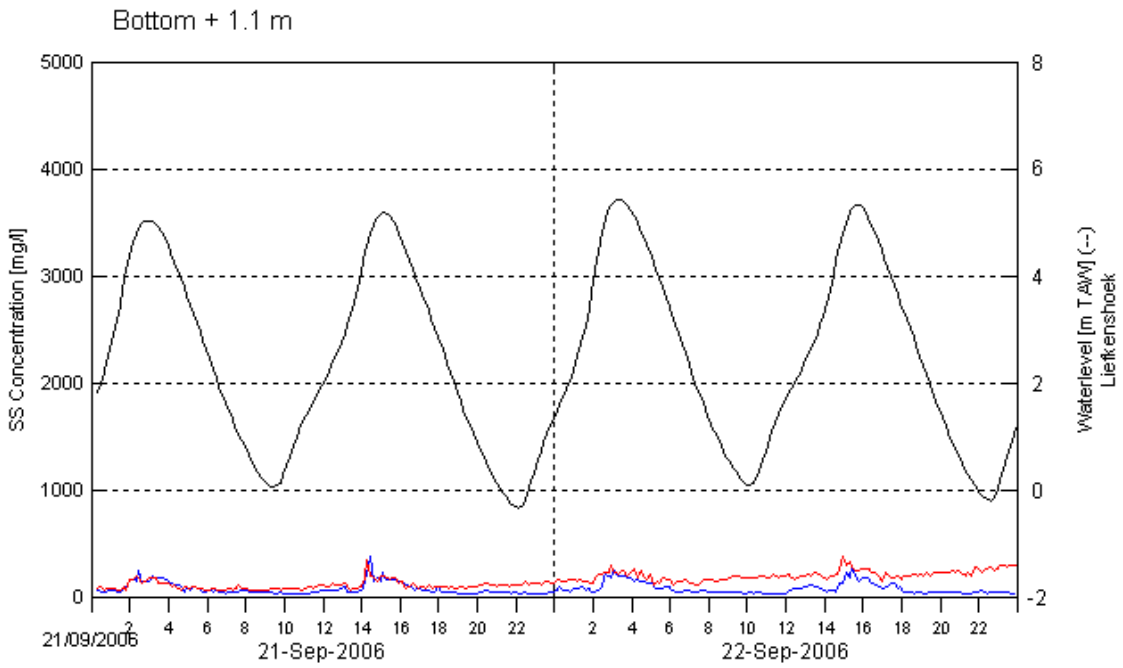
Date: 19/09/06 – 20/09/06

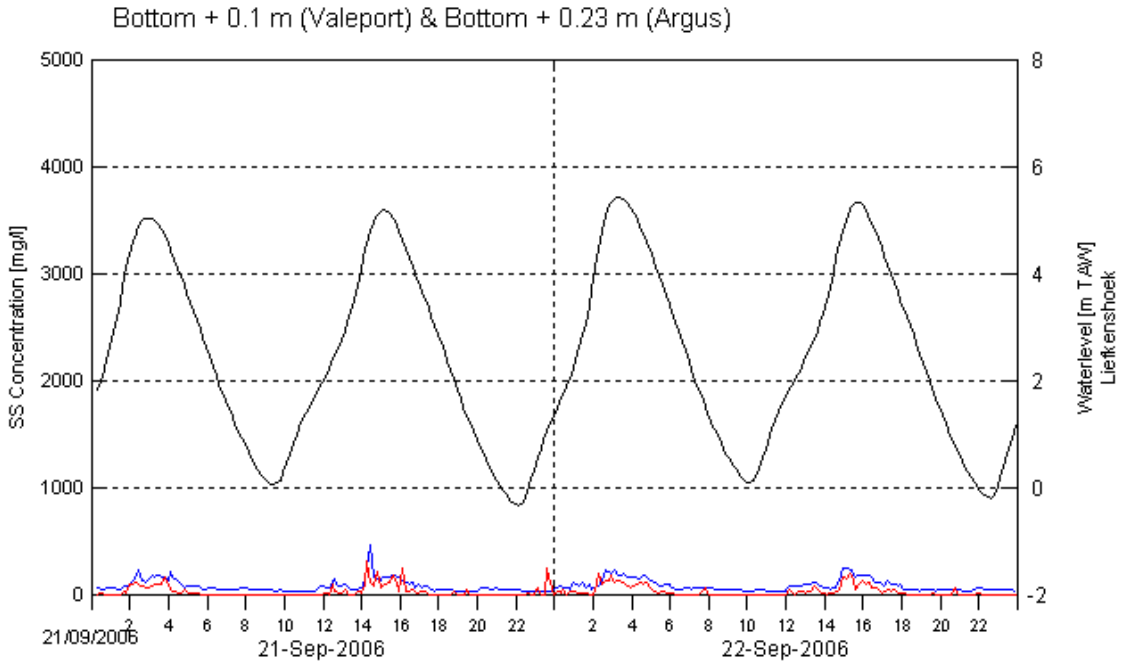
Data processed by: IMDC

In association with: WL | delft hydraulics, GEMS International

I/RA/11283/06.122/MSA

11283 Accretion Deurganckdok – Near bed continuous monitoring – Summer 2006





Comparison of RCM9 & Valeport (blue) to Argus sensors (red) at 0.9 m/1.1 m and 0.1 m/0.3 m above the bottom for SS concentration

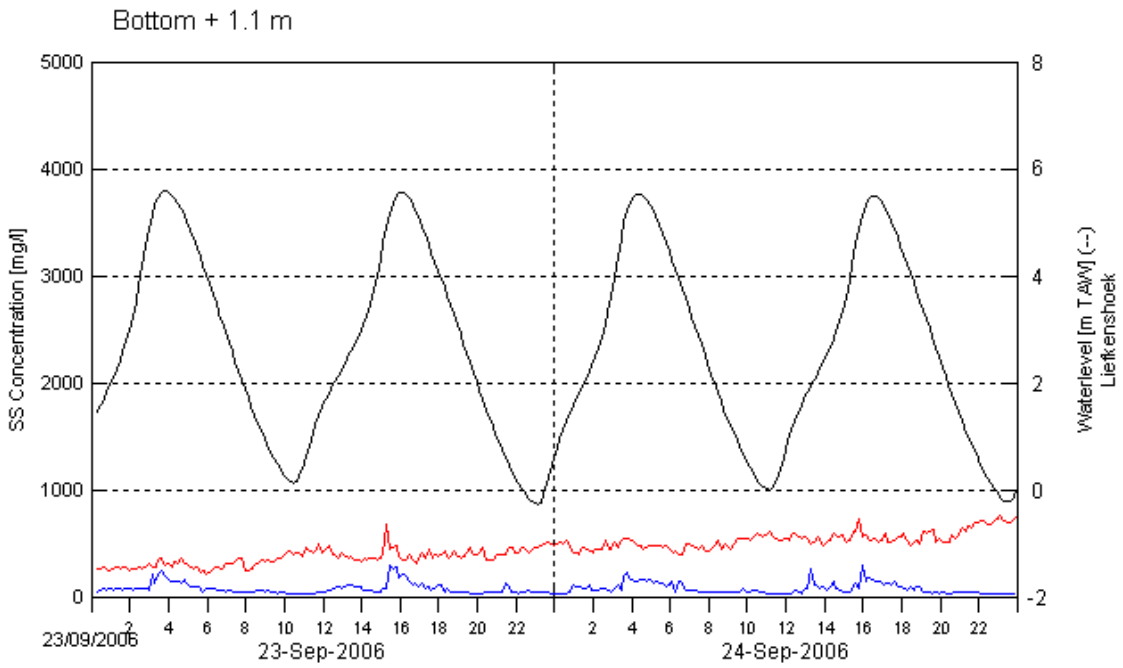
Location:	Date:
Deurganckdok Sill	21/09/06 – 22/09/06

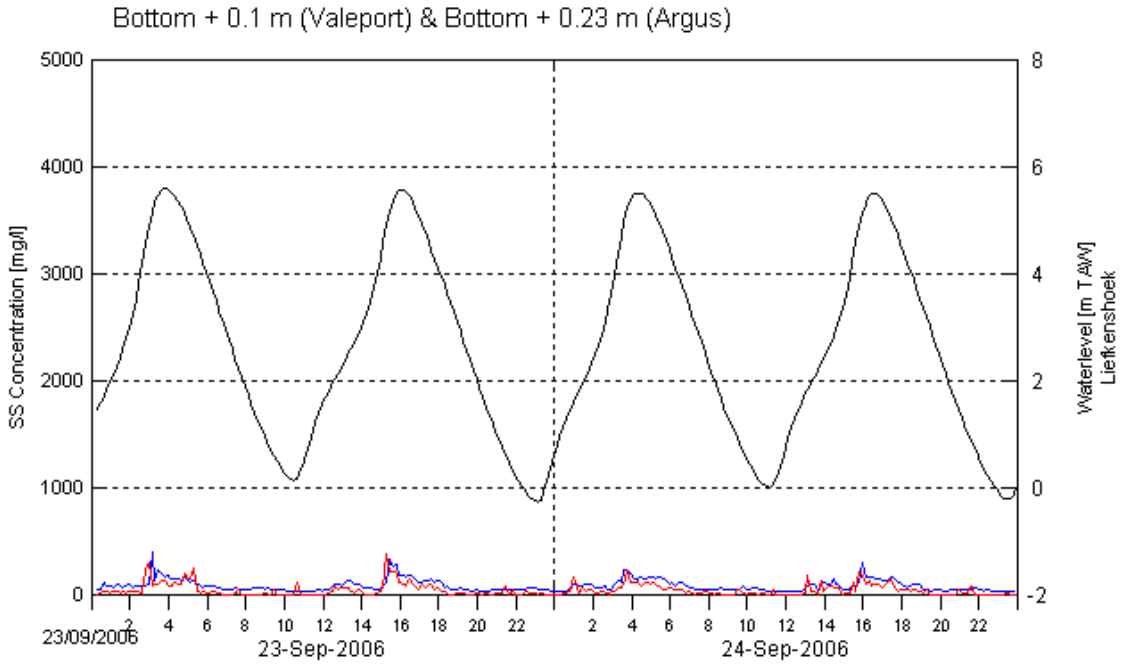
Data processed by: IMDC

In association with: WL | delft hydraulics, GEMS International

I/RA/11283/06.122/MSA

11283 Accretion Deurganckdok – Near bed continuous monitoring – Summer 2006





Comparison of RCM9 & Valeport (blue) to Argus sensors (red) at 0.9 m/1.1 m and 0.1 m/0.3 m above the bottom for SS concentration

Location: Deurganckdok Sill

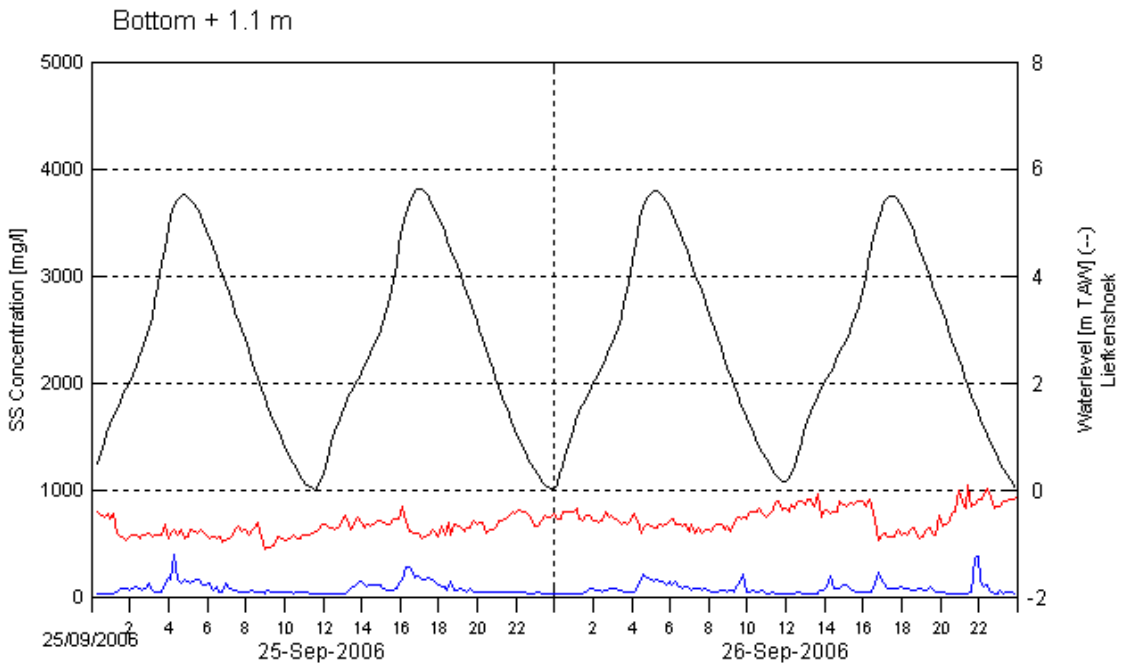
Date: 23/09/06 – 24/09/06

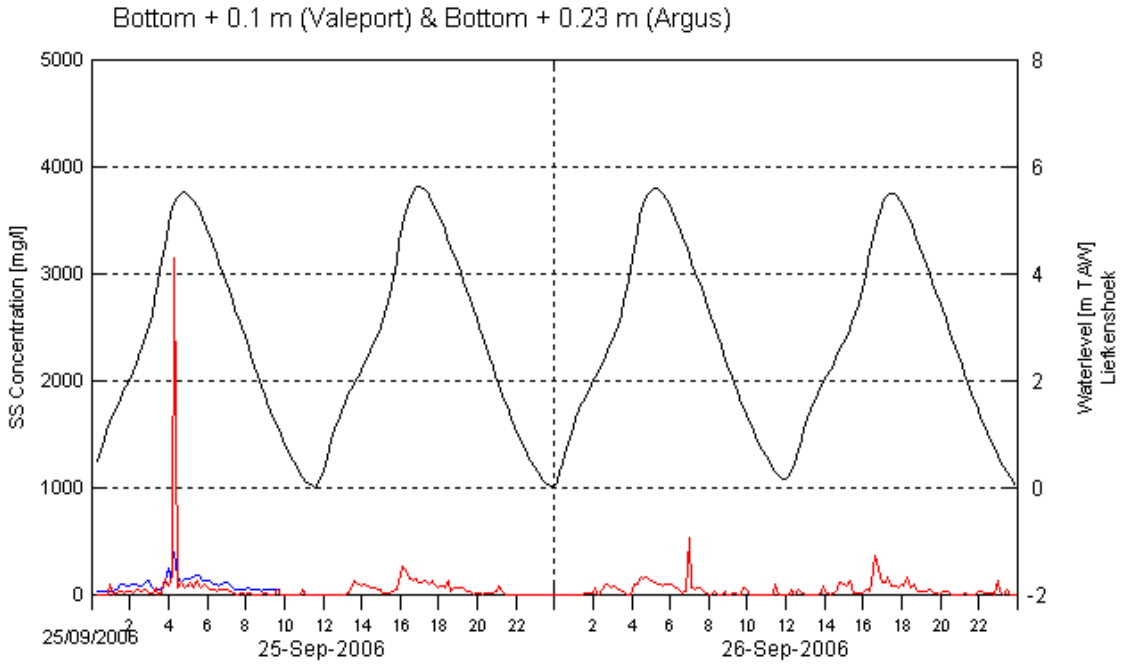
Data processed by: IMDC

In association with: WL | delft hydraulics, GEMS International

I/RA/11283/06.122/MSA

11283 Accretion Deurganckdok – Near bed continuous monitoring – Summer 2006





Comparison of RCM9 & Valeport (blue) to Argus sensors (red) at 0.9 m/1.1 m and 0.1 m/0.3 m above the bottom for SS concentration

Location: Deurganckdok Sill

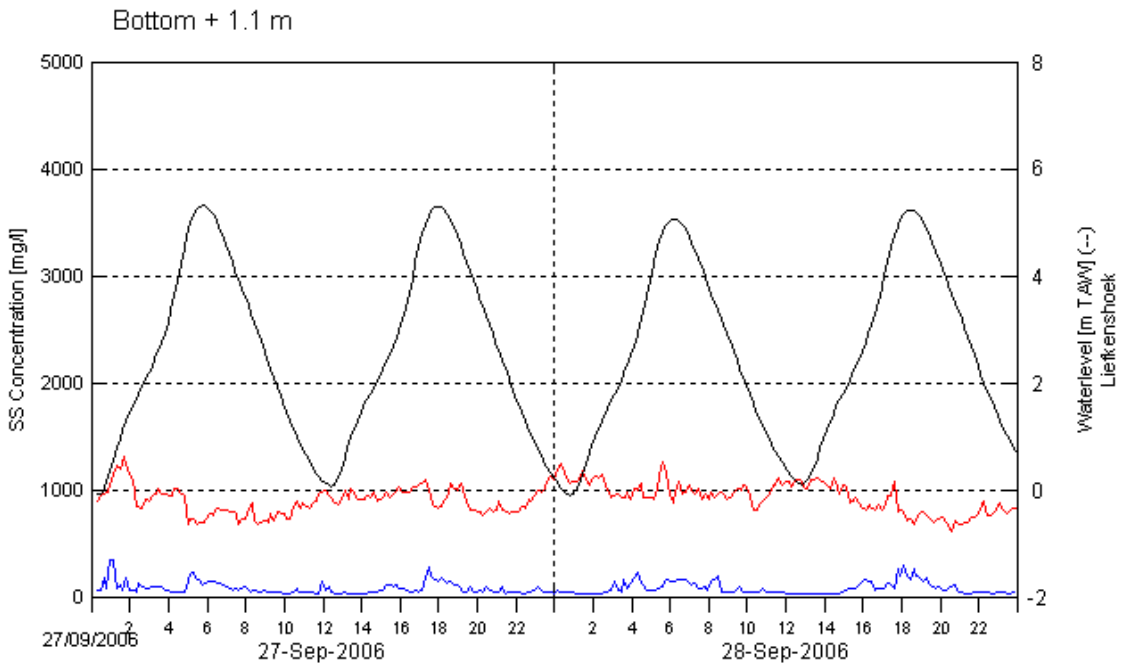
Date: 25/09/06 – 26/09/06

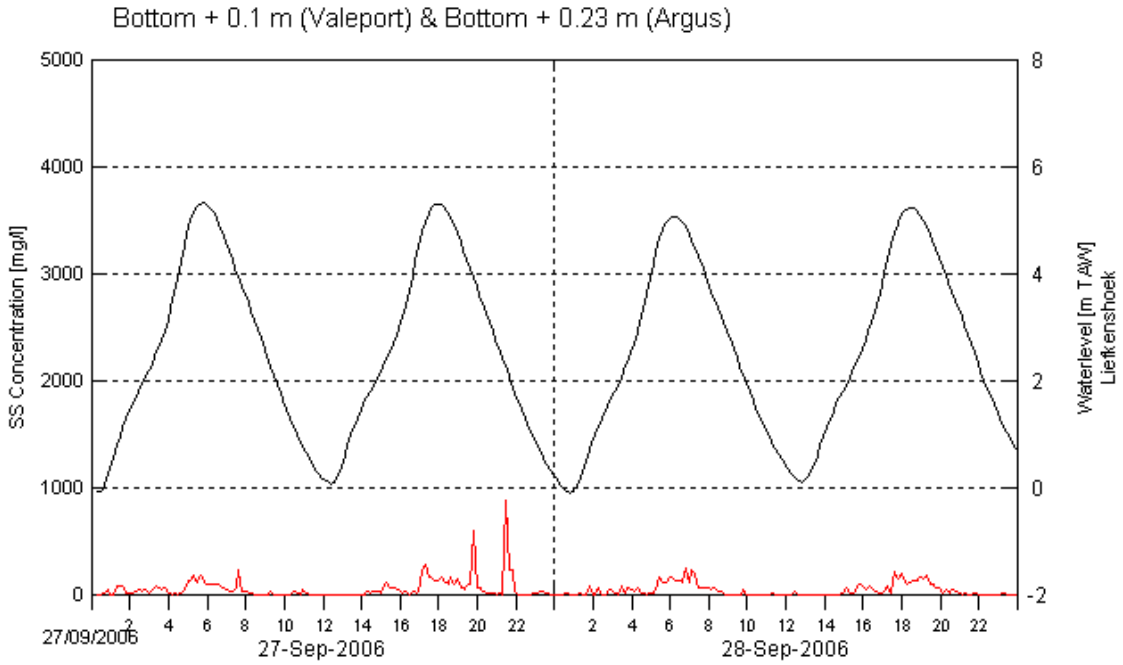
Data processed by: IMDC

In association with: WL | delft hydraulics, GEMS International

I/RA/11283/06.122/MSA

11283 Accretion Deurganckdok – Near bed continuous monitoring – Summer 2006





Comparison of RCM9 & Valeport (blue) to Argus sensors (red) at 0.9 m/1.1 m and 0.1 m/0.3 m above the bottom for SS concentration

Location: Deurganckdok Sill

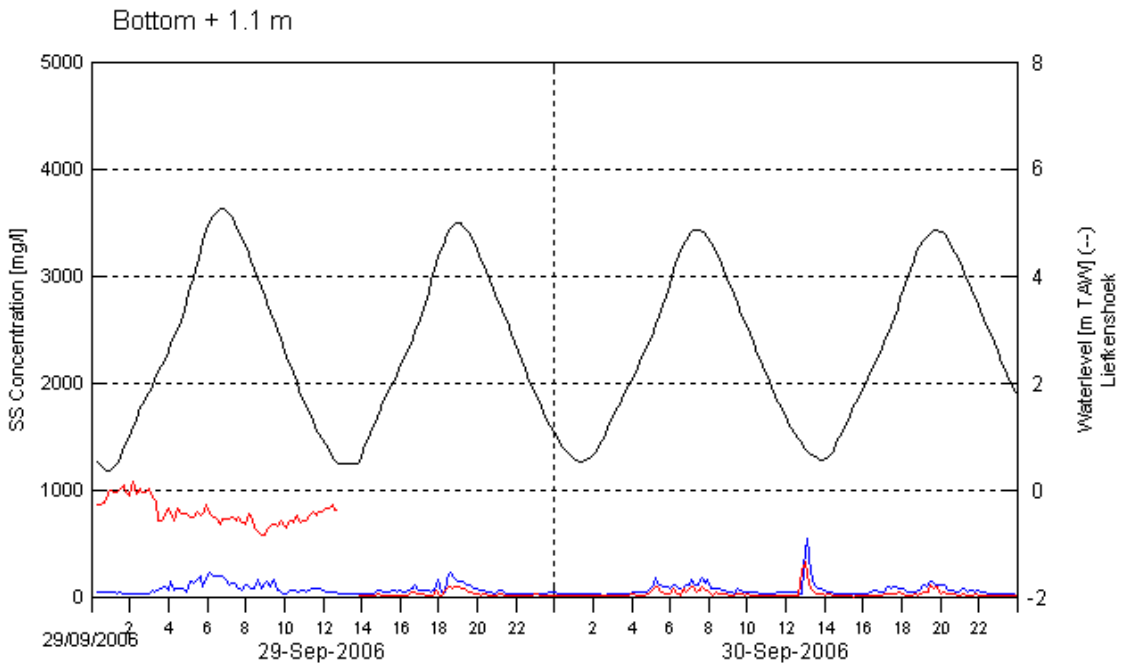
Date: 27/09/06 – 28/09/06

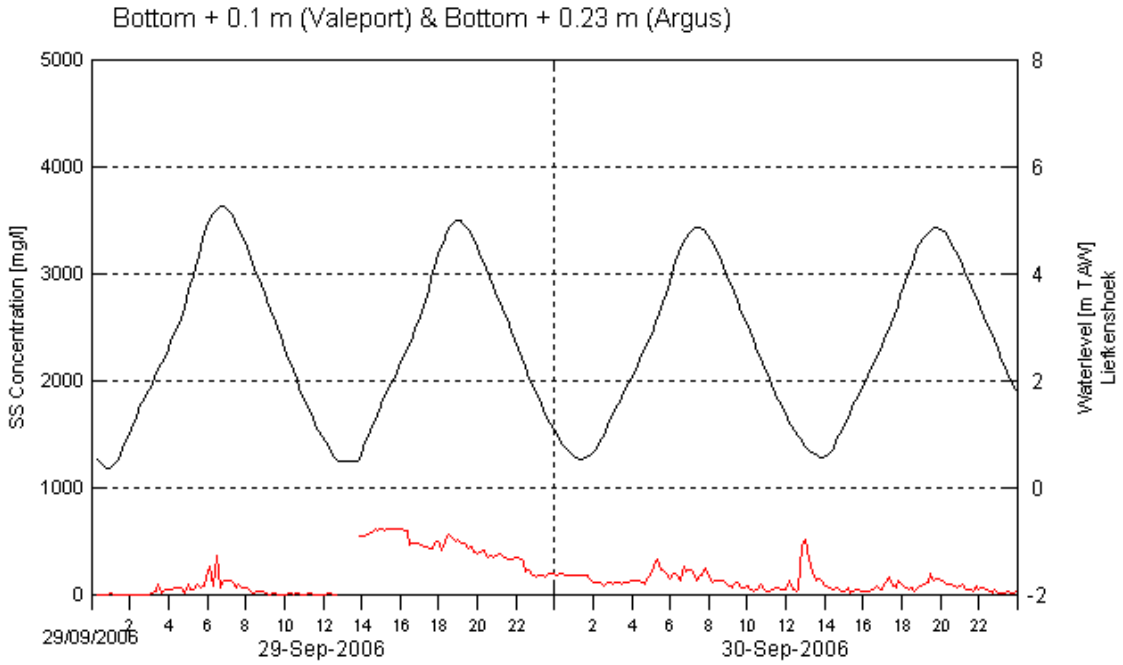
Data processed by: IMDC

In association with: WL | delft hydraulics, GEMS International

I/RA/11283/06.122/MSA

11283 Accretion Deurganckdok – Near bed continuous monitoring – Summer 2006





Comparison of RCM9 & Valeport (blue) to Argus sensors (red) at 0.9 m/1.1 m and 0.1 m/0.3 m above the bottom for SS concentration

Location: Deurganckdok Sill

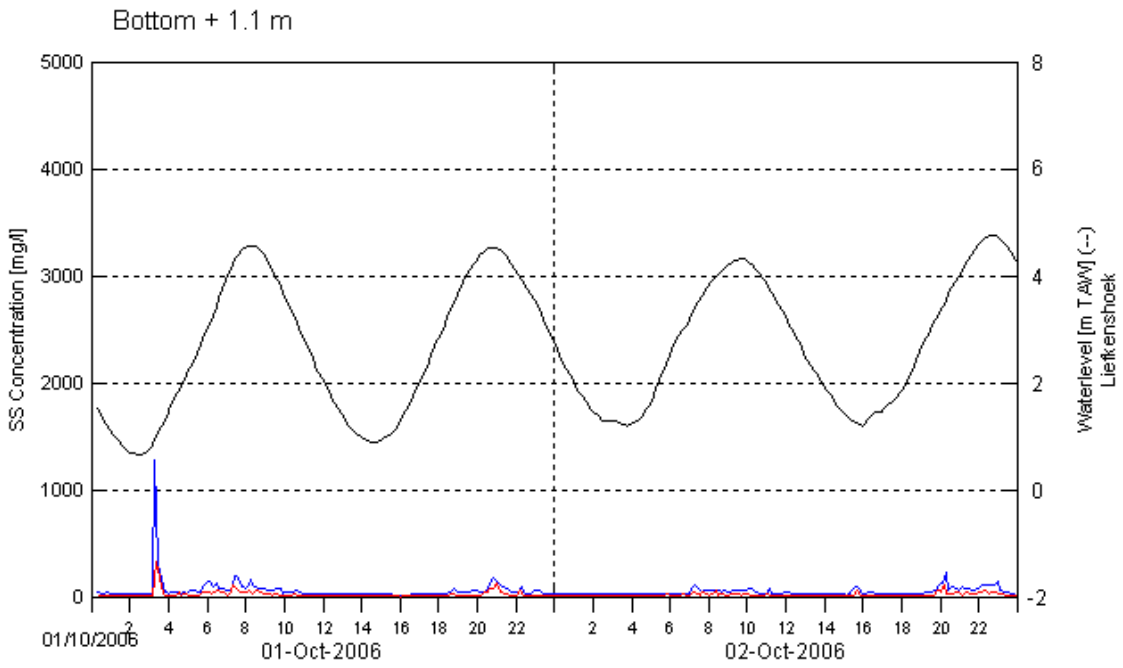
Date: 29/09/06 – 30/09/06

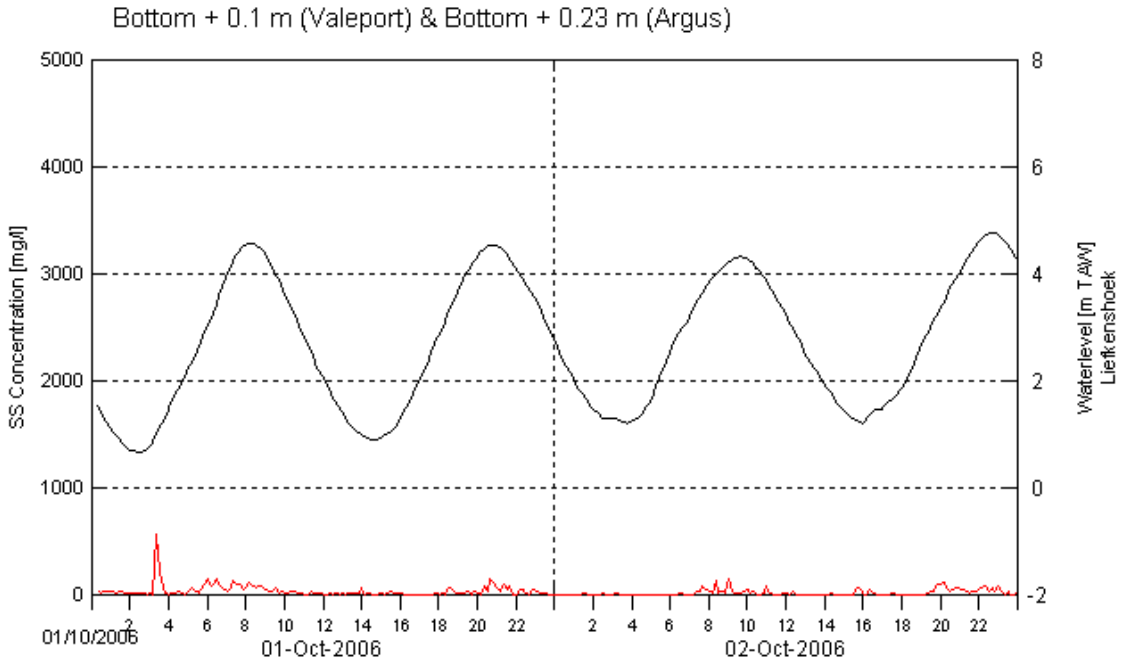
Data processed by: IMDC

In association with: WL | delft hydraulics, GEMS International

I/RA/11283/06.122/MSA

11283 Accretion Deurganckdok – Near bed continuous monitoring – Summer 2006





Comparison of RCM9 & Valeport (blue) to Argus sensors (red) at 0.9 m/1.1 m and 0.1 m/0.3 m above the bottom for SS concentration

Location: Deurganckdok Sill

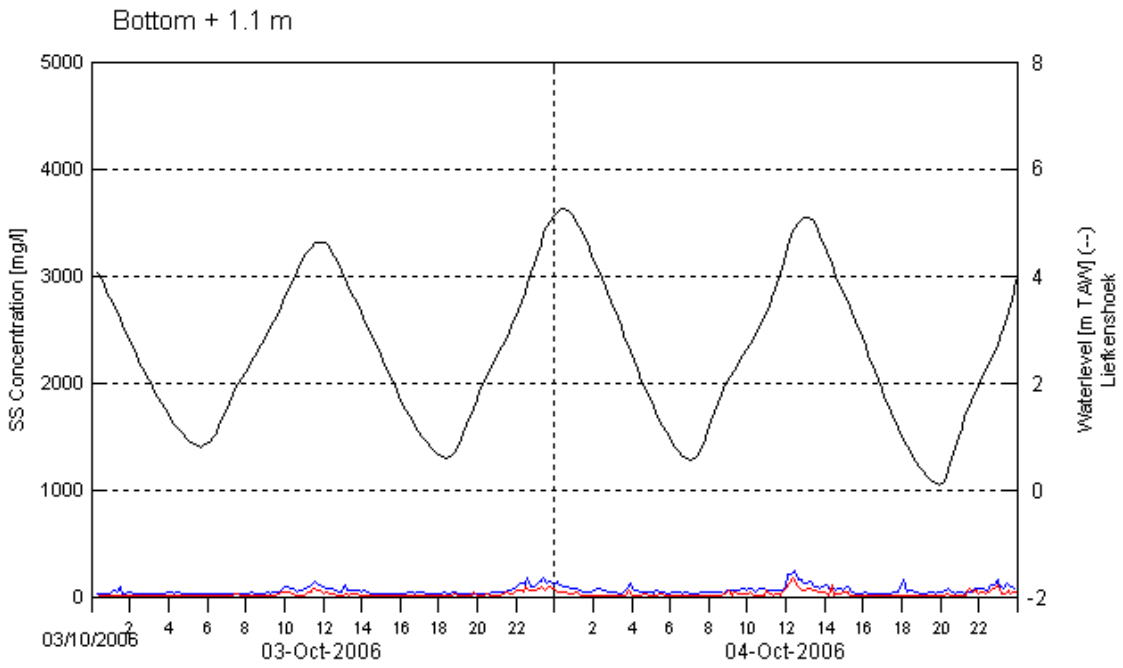
Date: 01/10/06 – 02/10/06

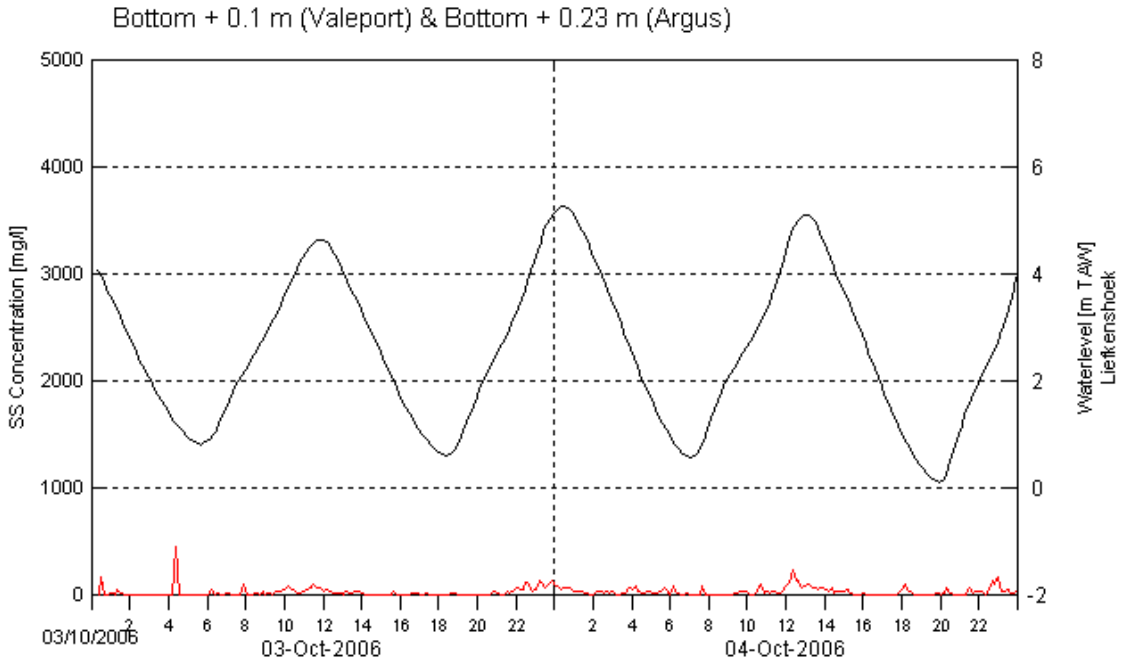
Data processed by: IMDC

In association with: WL | delft hydraulics, GEMS International

I/RA/11283/06.122/MSA

11283 Accretion Deurganckdok – Near bed continuous monitoring – Summer 2006





Comparison of RCM9 & Valeport (blue) to Argus sensors (red) at 0.9 m/1.1 m and 0.1 m/0.3 m above the bottom for SS concentration

Location: Deurganckdok Sill

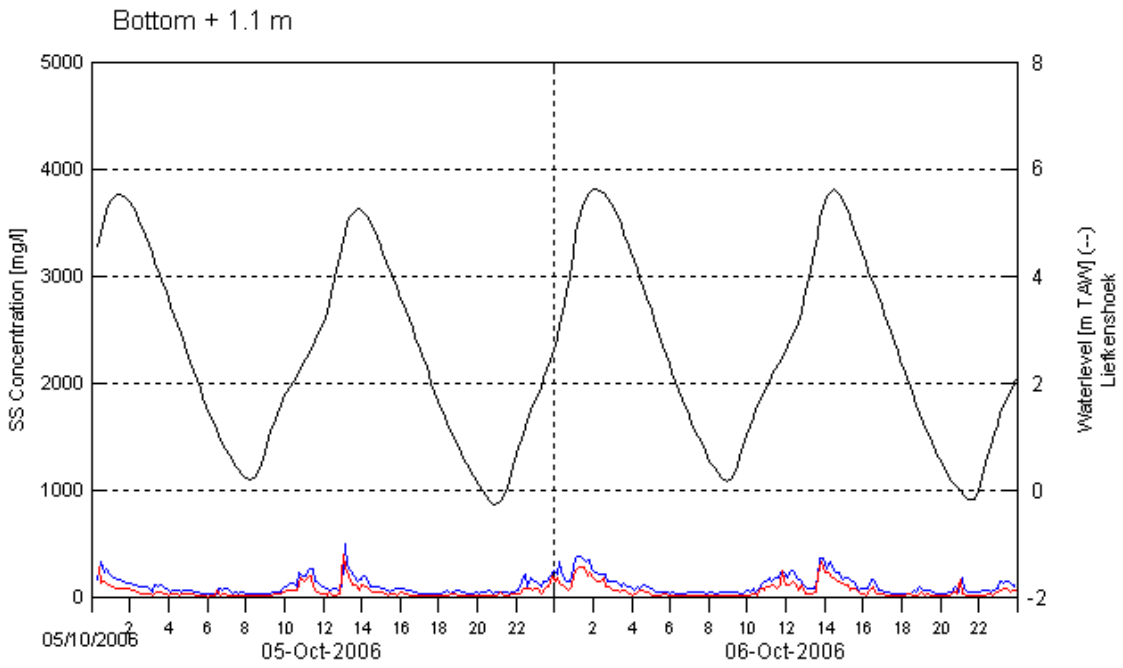
Date: 03/10/06 – 04/10/06

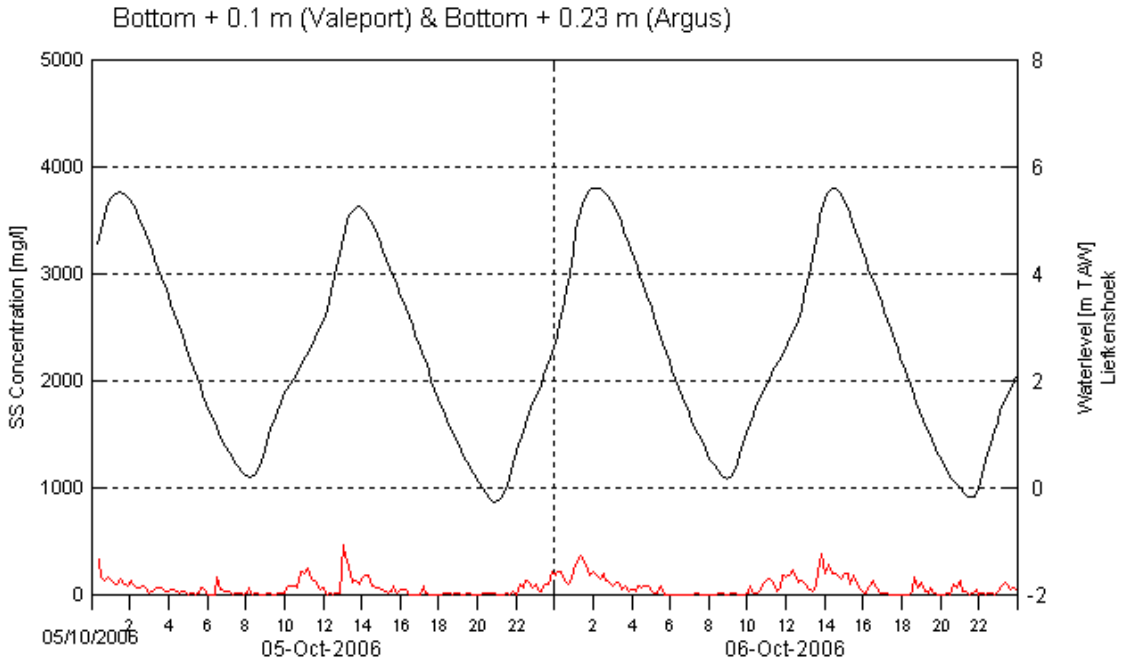
Data processed by: IMDC

In association with: WL | delft hydraulics, GEMS International

I/RA/11283/06.122/MSA

11283 Accretion Deurganckdok – Near bed continuous monitoring – Summer 2006





Comparison of RCM9 & Valeport (blue) to Argus sensors (red) at 0.9 m/1.1 m and 0.1 m/0.3 m above the bottom for SS concentration

Location: Deurganckdok Sill

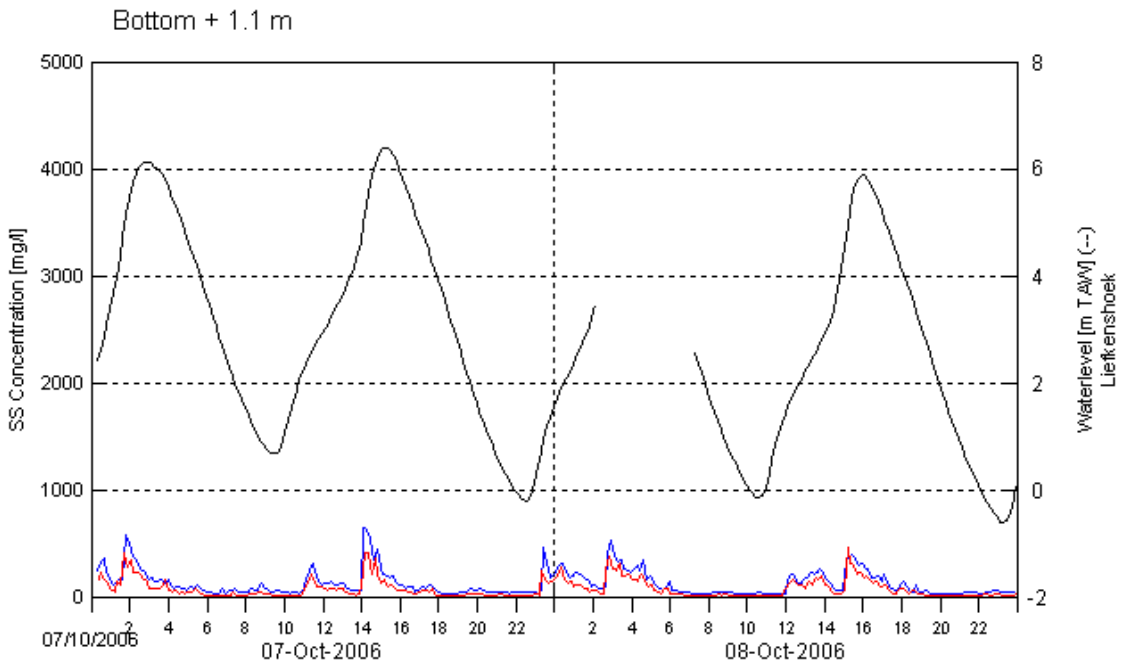
Date: 05/10/06 – 06/10/06

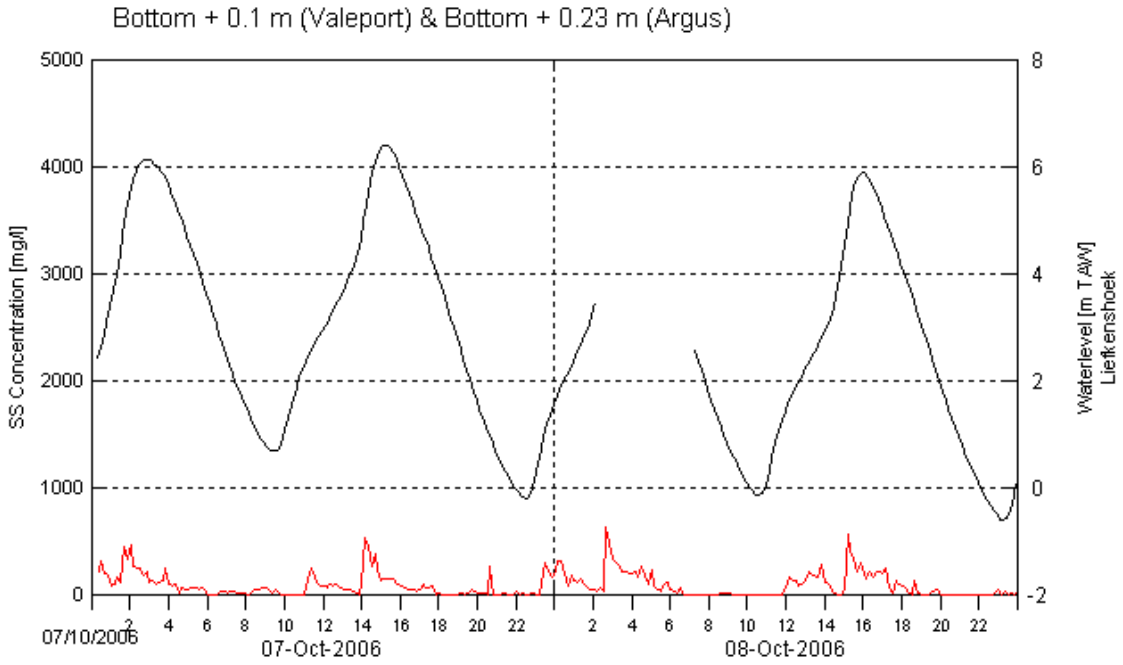
Data processed by: IMDC

In association with: WL | delft hydraulics, GEMS International

I/RA/11283/06.122/MSA

11283 Accretion Deurganckdok – Near bed continuous monitoring – Summer 2006





Comparison of RCM9 & Valeport (blue) to Argus sensors (red) at 0.9 m/1.1 m and 0.1 m/0.3 m above the bottom for SS concentration

Location: Deurganckdok Sill

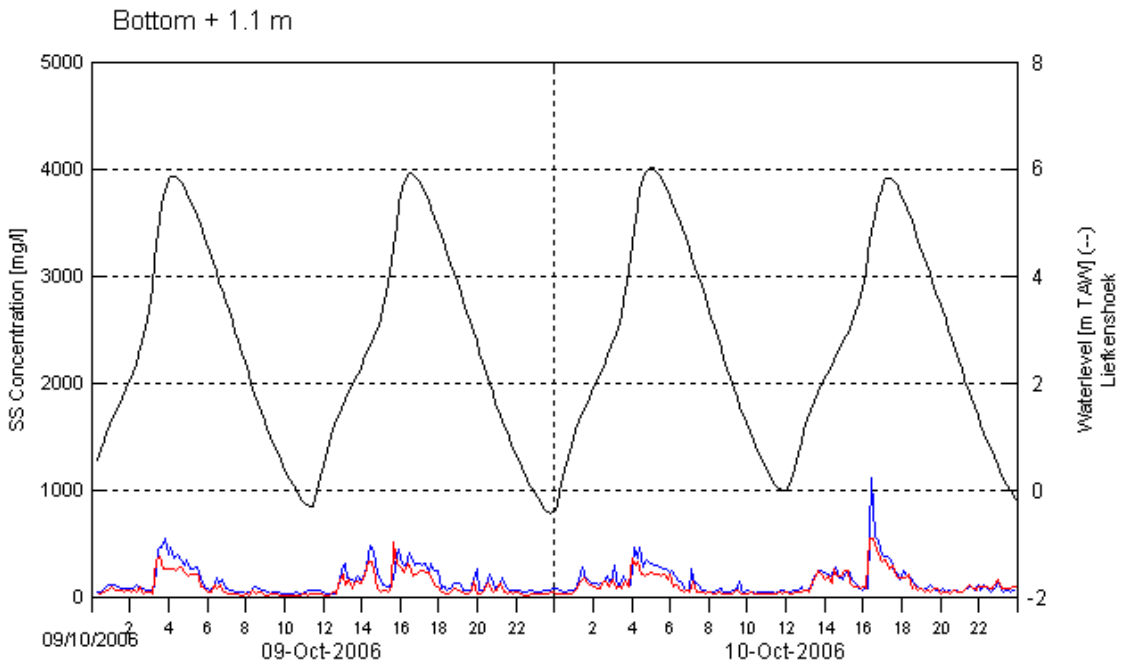
Date: 07/10/06 – 08/10/06

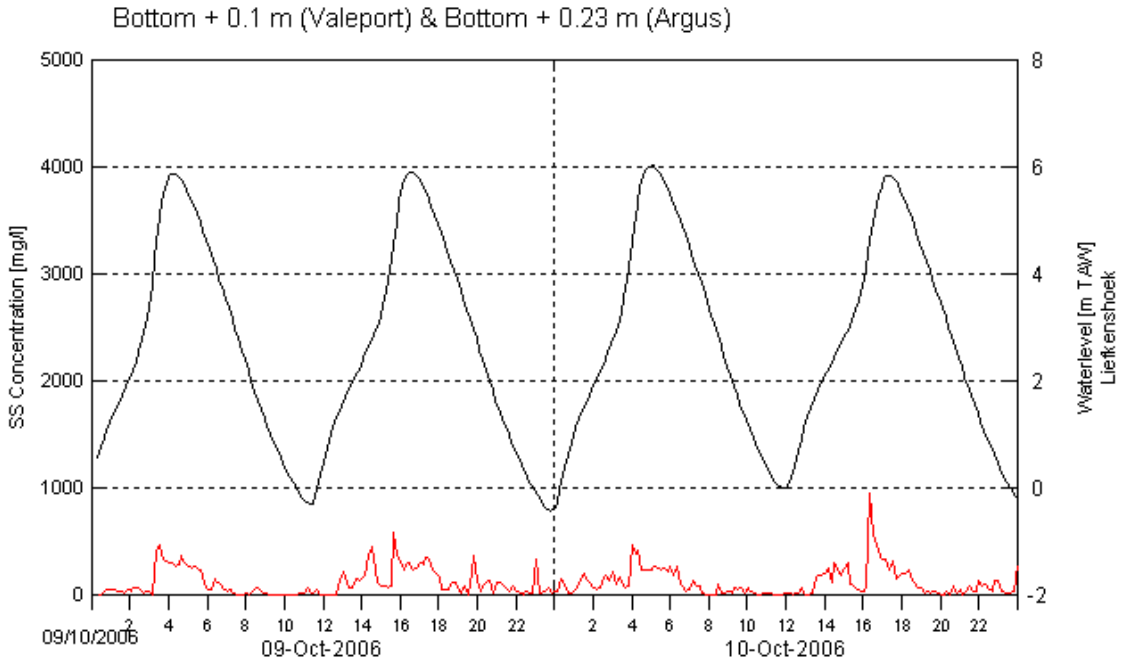
Data processed by: IMDC

In association with: WL | delft hydraulics, GEMS International

I/RA/11283/06.122/MSA

11283 Accretion Deurganckdok – Near bed continuous monitoring – Summer 2006





Comparison of RCM9 & Valeport (blue) to Argus sensors (red) at 0.9 m/1.1 m and 0.1 m/0.3 m above the bottom for SS concentration

Location: Deurganckdok Sill

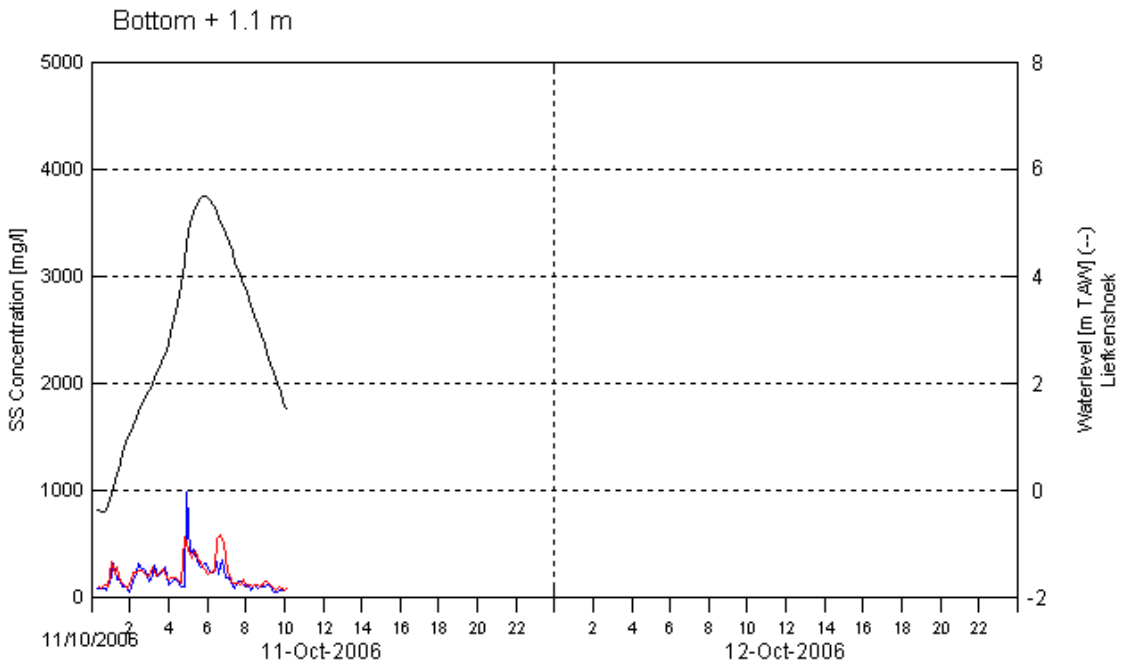
Date: 09/10/06 – 10/10/06

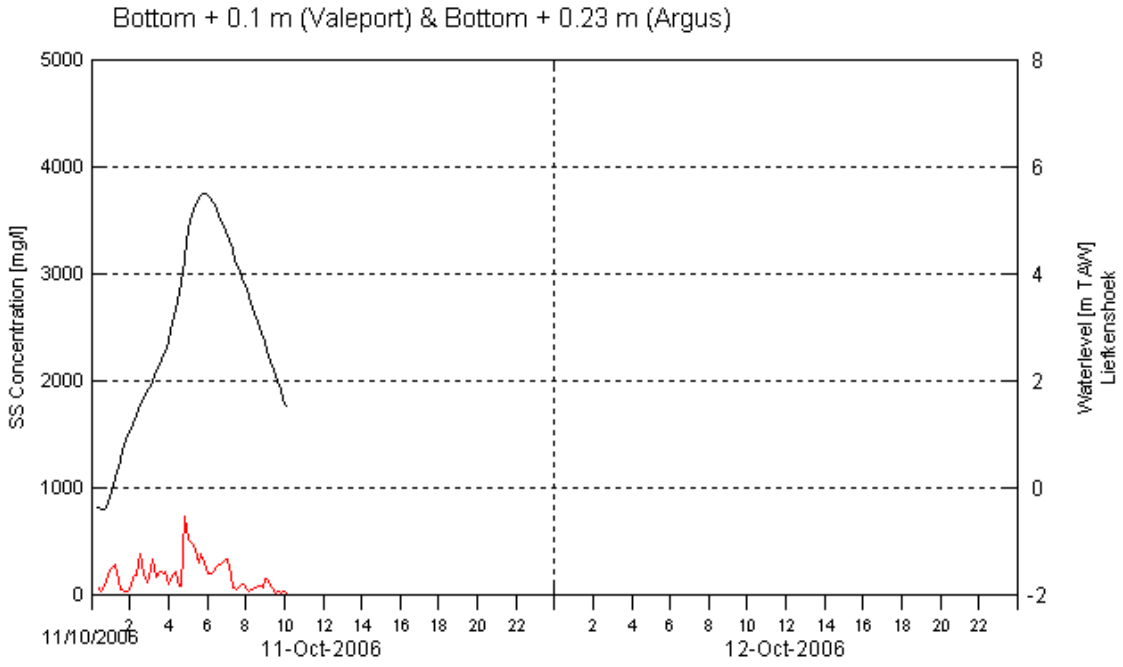
Data processed by: IMDC

In association with: WL | delft hydraulics, GEMS International

I/RA/11283/06.122/MSA

11283 Accretion Deurganckdok – Near bed continuous monitoring – Summer 2006





Comparison of RCM9 & Valeport (blue) to Argus sensors (red) at 0.9 m/1.1 m and 0.1 m/0.3 m above the bottom for SS concentration

Location: Deurganckdok Sill

Date: 11/10/06 – 12/10/06

Data processed by: IMDC

In association with: WL | delft hydraulics, GEMS International

I/RA/11283/06.122/MSA

Comparison of SS concentrations during each tidal phase

Date	Tide No.	Phase	Tidal Diff [m]	OBS SS Concentration [mg/l]		Argus SS Concentration [mg/l]	
				UP (RCM9)	DOWN (Valeport)	UP	DOWN
Location: Sill DGD							
20060719	1	LW	4,6	41,9	63,2	17,6	38,9
20060719	1	HW	4,9	96,8	134,5	53,6	84,3
20060720	2	LW	5	38,2	57,2	9,9	30,4
20060720	2	HW	4,9	66,1	94,5	30,5	63,7
20060720	3	LW	4,5	59,6	81,6	29,8	61,4
20060720	3	HW	4,5	55,8	77,3	26,4	48,6
20060721	4	LW	4,7	35,5	53,1	8,6	17,6
20060721	4	HW	4,7	48,4	64,3	28,4	40,7
20060721	5	LW	4,6	36,2	50,3	9	27,1
20060722	5	HW	4,7	48,7	78,8	27,7	50,7
20060722	6	LW	4,8	38,4	53	11	33,7
20060722	6	HW	4,7	73,9	107,9	37	99,1
20060722	7	LW	4,8	36,5	56,8	10,7	40,7
20060723	7	HW	5	59,1	81,4	32,9	89,1
20060723	8	LW	4,9	38,5	55,8	9,9	35,4
20060723	8	HW	4,9	48,4	62	19,7	66,1
20060723	9	LW	5,1	34,8	52,7	10,8	34,5
20060724	9	HW	5,3	49,2	67,9	26,4	78,5
20060724	10	LW	5,1	49,4	82,3	19,1	73,2
20060724	10	HW	5,1	55,7	77,7	24,8	97,9
20060724	11	LW	5,4	60,4	132,7	51,6	141,1
20060725	11	HW	5,5	57,2	95,1	134,5	164
20060725	12	LW	5,2	38,2	73,4	128,3	135,2
20060725	12	HW	5,2	45,6	104,7	123,7	258,6
20060725	13	LW	5,5	36,8	104,5	190,2	255,7
20060726	13	HW	5,7	53,5	144,7	278,3	405,2
20060726	14	LW	5,3	37,6	79,9	207,3	794,6
20060726	14	HW	5,2	53,9	116,9	162,4	1443,5
20060726	15	LW	5,6	39,5	101,2	177,7	709,3
20060727	15	HW	5,6	59,9	138,1	248,8	755
20060727	16	LW	5,2	38	77,3	196,4	455
20060727	16	HW	5,2	51,8	108,7	253,4	537,4
20060728	17	LW	5,7	37,9	93,5	214,1	530,5
20060728	17	HW	5,7	40,1	105,4	377,9	651,2
20060728	18	LW	5,3	34,6	96,2	285,8	569,6
20060728	18	HW	5,3	51,5	131,4	391,2	742,1
20060729	19	LW	5,7	39,6	163	379,2	764,3
20060729	19	HW	5,6	46,3	174,6	401,4	1056,1
20060729	20	LW	5,2	30,4	130	372,1	876,1
20060729	20	HW	5,2	38,9	184,1	412,4	875,8
20060730	21	LW	5,6	25,7	150,1	376,9	639,3

Comparison of SS concentrations during each tidal phase

Date	Tide No.	Phase	Tidal Diff [m]	OBS SS Concentration [mg/l]		Argus SS Concentration [mg/l]	
				UP (RCM9)	DOWN (Valeport)	UP	DOWN
20060730	21	HW	5,5	36,6	163,3	503,6	731,1
20060730	22	LW	5	42,8	239,1	617,9	693,5
20060730	22	HW	5,1	54,1	289	858,6	747,4
20060731	23	LW	5,3	29	229,8	517,4	664,7
20060731	23	HW	4,8	25	-	514,7	744,4
20060731	24	LW	1000,3	49,6	-	555,8	777
20060731	24	HW	4,9	37,5	-	607,7	721,5
20060801	25	LW	5,3	27,2	-	431,2	696,7
20060801	25	HW	5,2	28,2	-	530,3	759,3
20060801	26	LW	4,4	28	-	515,9	670,8
20060801	26	HW	4,6	28,2	-	531,8	746,5
20060802	27	LW	4,9	39,2	-	430,7	646
20060802	27	HW	4,8	29,9	-	421,7	653,6
Location: Buoy 84							
20060802	28	LW	4,3	26,6	74	303,9	577,5
20060802	28	HW	4,1	84,7	112,7	29,2	45
20060803	29	LW	4,6	105,1	137,7	57,5	88,8
20060803	29	HW	4,5	89,9	129,5	39,2	70,7
20060803	30	LW	4,1	103,8	120,7	70,3	256,7
20060803	30	HW	4,1	94,9	134,8	35,8	71,9
20060804	31	LW	4,4	106,3	138,3	62,7	79,9
20060804	31	HW	4,1	71,3	112,6	32,1	55,6
20060804	32	LW	4	90,6	117,6	53,4	62,9
20060804	32	HW	3,8	66,7	89	32,7	41,5
20060805	33	LW	4,1	72,3	87,4	50,5	34,9
20060805	33	HW	3,6	38	91,3	28,7	50,1
20060805	34	LW	1000,4	76,2	98,9	72,2	53,3
20060805	34	HW	4,1	58,5	84,6	27,6	30,9
20060806	35	LW	4,2	72,4	83,3	272,8	48,4
20060806	35	HW	4,3	57,6	80,7	137,8	32,3
20060806	36	LW	4,4	73,5	107,5	170	40,8
20060807	36	HW	4,6	56,8	78	43,7	71,4
20060807	37	LW	4,7	72,7	87,5	69,7	40,3
20060807	37	HW	4,8	56,9	87,4	36,5	41,1
20060807	38	LW	4,8	82,9	104,3	89	52,2
20060808	38	HW	5	60,7	89,4	33,8	42,4
20060808	39	LW	5,2	108,3	135,4	95,3	125,8
20060808	39	HW	5,1	69,3	106,6	40,1	101,2
20060808	40	LW	5,5	108,5	134,4	73,5	101,3
20060809	40	HW	5,7	106,9	141,9	55,1	162,1
20060809	41	LW	5,5	159,1	212,9	118,2	144,6
20060809	41	HW	5,6	139,2	182,7	68,4	113
20060809	42	LW	5,7	182,9	232,9	137,5	163,5

Comparison of SS concentrations during each tidal phase

Date	Tide No.	Phase	Tidal Diff [m]	OBS SS Concentration [mg/l]		Argus SS Concentration [mg/l]	
				UP (RCM9)	DOWN (Valeport)	UP	DOWN
20060810	42	HW	6	173,1	244,5	88	155,7
20060810	43	LW	5,8	189,3	228,5	185,1	167,4
20060810	43	HW	5,6	106,5	142	46,5	126,4
20060810	44	LW	6	203,6	252,9	159	247,7
20060811	44	HW	6,2	177,5	252,5	110,4	293,9
20060811	45	LW	5,8	218	299	147,3	288
20060811	45	HW	5,7	160,7	219,9	61,9	259,6
20060812	46	LW	6,2	209,8	272,2	150,7	389,3
20060812	46	HW	6,3	246,1	346,8	151,4	434,4
20060812	47	LW	6	287,7	380,5	221,3	459,8
20060812	47	HW	5,9	175,4	247,3	86,3	648,9
20060813	48	LW	6,3	248,6	424,4	201,7	519,5
20060813	48	HW	6,4	239	314,7	117,4	498,7
20060813	49	LW	6	271,6	518,3	361,3	538
20060813	49	HW	5,7	202,4	305,9	108,9	424,7
20060814	50	LW	6,3	210,8	521,2	156,5	418,5
20060814	50	HW	6,2	203,5	289,2	114,3	343,7
20060814	51	LW	5,4	297,3	393	223,4	483
20060814	51	HW	5,7	128,1	-	66,6	306,5
20060815	52	LW	6	203	-	165,3	429,7
20060815	52	HW	5,7	135,9	-	71,8	323,5
20060815	53	LW	5,5	230,5	-	165,6	513,8
20060815	53	HW	5,2	129,4	-	67,9	504
20060816	54	LW	5,7	147,4	-	114,7	1286,6
20060816	54	HW	5,4	162,2	-	80,5	2306,5
20060816	55	LW	5	213	-	175	724,3
20060816	55	HW	5	113,7	-	52	333,5
20060817	56	LW	5,2	141,7	-	108,7	425,6
20060817	56	HW	4,9	131,4	-	76,8	218,5
20060817	57	LW	4,5	171,1	-	174,6	434
20060817	57	HW	4,6	111,8	-	64,8	101,2
20060818	58	LW	4,6	125,9	-	144,3	157,1
20060818	58	HW	4,3	91,6	-	52,6	76,2
20060818	59	LW	4,1	99,6	-	119,6	159,9
20060818	59	HW	4,2	84,5	-	43,3	92,3
20060819	60	LW	4,2	95,7	-	85,2	115,4
20060819	60	HW	3,9	64	-	36,7	75,4
20060819	61	LW	4,1	93,6	-	105,5	150,3
20060820	61	HW	4,4	63,7	-	47,5	122,6
20060820	62	LW	4,2	83,5	-	105,9	165,2
20060820	62	HW	4,3	67,9	-	57,2	104,7
20060820	63	LW	4,3	84,1	-	103,7	186
20060821	63	HW	4,6	68,1	-	79,3	176,6

Comparison of SS concentrations during each tidal phase

Date	Tide No.	Phase	Tidal Diff [m]	OBS SS Concentration [mg/l]		Argus SS Concentration [mg/l]	
				UP (RCM9)	DOWN (Valeport)	UP	DOWN
20060821	64	LW	4,7	92,2	-	145	245,5
20060821	64	HW	4,5	68,1	-	91,3	159,2
20060821	65	LW	4,8	96,8	-	147,8	219,3
20060822	65	HW	5,2	94,6	-	144,5	179,5
20060822	66	LW	4,7	149	-	924,3	321,4
Location: Sill DGD							
20060830	66	HW	4	138	157,6	100,9	117,4
20060831	67	LW	5,2	69,4	91	39,7	50,2
20060831	67	HW	4,8	128,8	147,1	102,7	113,3
20060831	68	LW	4,7	76,8	106,1	46,2	58,4
20060831	68	HW	4,6	184,6	221,7	142,8	167,8
20060901	69	LW	4,6	68,4	91,6	41,9	41
20060901	69	HW	4,5	137,3	154,6	106,8	110,6
20060901	70	LW	4,4	69,4	95,7	46,6	47,7
20060901	70	HW	4,2	166,2	210,1	127,4	150,2
20060902	71	LW	4,1	112,9	159,3	77,3	107,2
20060902	71	HW	4,1	156,1	183,7	113,1	129,8
20060902	72	LW	3,8	89,2	96,5	54	47,2
20060902	72	HW	3,6	138,5	171,2	105,9	110,6
20060903	73	LW	3,4	66,6	87,1	38,2	32,6
20060903	73	HW	3,6	115,6	132,8	88	82,4
20060903	74	LW	3,2	48,4	60,1	30,1	12,8
20060903	74	HW	3,4	74,7	90,7	50,5	44,2
20060904	75	LW	4	42,4	53,8	23,2	11,4
20060904	75	HW	3,9	97,6	109	71,8	65
20060904	76	LW	4,2	70,6	91,6	44,4	38,2
20060905	76	HW	4,4	107,7	130,7	86,1	73,5
20060905	77	LW	4,7	65,8	82,9	39	32,6
20060905	77	HW	4,5	111,2	131,4	87,7	80,4
20060905	78	LW	4,9	53,3	67,2	33,2	41
20060906	78	HW	5,3	138,9	163	117,4	101,4
20060906	79	LW	5,3	81,6	111,1	53,5	52,1
20060906	79	HW	5,2	124,8	152,5	102,2	84,7
20060906	80	LW	5,3	69,4	94,2	47,5	33
20060907	80	HW	5,9	168,6	193,5	139	127,4
20060907	81	LW	5,5	76,2	99,3	50,9	33,2
20060907	81	HW	5,4	133,1	157,7	113,8	94
20060907	82	LW	5,7	84,9	107,9	62,9	41
20060908	82	HW	6	152,5	193,7	127,7	115,2
20060908	83	LW	6,1	63,1	86,6	52	26,4
20060908	83	HW	5,6	155,8	184,1	128,4	114,4
20060908	84	LW	6,3	80,2	116,3	65,1	72,2
20060909	84	HW	6,4	157,8	199,3	143,9	121,5

Comparison of SS concentrations during each tidal phase

Date	Tide No.	Phase	Tidal Diff [m]	OBS SS Concentration [mg/l]		Argus SS Concentration [mg/l]	
				UP (RCM9)	DOWN (Valeport)	UP	DOWN
20060909	85	LW	6	113,5	152,3	89,6	82,9
20060909	85	HW	6	148	177,8	135	101
20060909	86	LW	6,4	88	128	75,3	50
20060910	86	HW	6,7	155,7	189,6	140,1	111,5
20060910	87	LW	6,2	109,5	135,1	96,3	62,8
20060910	87	HW	6	172,8	208,9	159,5	128,5
20060911	88	LW	6,5	90,3	132,8	86,7	63,3
20060911	88	HW	6,5	182,1	250,3	195,9	162,6
20060911	89	LW	6	110	131,5	106,8	60,9
20060911	89	HW	5,9	199	241,7	211,9	156,3
20060912	90	LW	6,4	93,6	316,6	124	56,5
20060912	90	HW	6,2	135,2	-	229,4	94,6
20060912	91	LW	5,7	98,6	-	245,6	53,4
20060912	91	HW	5,7	156,8	-	330,1	108,3
20060913	92	LW	6	75,4	-	325,4	39,3
20060913	92	HW	5,7	91,1	-	374,8	54
20060913	93	LW	4,9	117,4	33,2	415,4	105,6
20060913	93	HW	4,8	127,7	135,6	78,8	1179,4
20060914	94	LW	5,5	62,8	70	65,1	1285,2
20060914	94	HW	5,2	94,5	94,5	159,9	1334,2
20060914	95	LW	4,8	81,4	84	107,4	1279,3
20060914	95	HW	5	110,2	119,5	154,1	1266,5
20060915	96	LW	4,9	63,9	72,1	108,3	1134
20060915	96	HW	4,3	88,9	94,5	146,6	1148,3
20060915	97	LW	4,3	60,3	70,8	80,6	1062,7
20060915	97	HW	4,4	110,4	109,9	121,9	828,1
20060916	98	LW	4,1	52,6	60,2	72,8	618,2
20060916	98	HW	3,6	66,9	67,5	86,3	537,5
20060916	99	LW	3,7	53,2	54,7	50,4	335,1
20060916	99	HW	3,9	78,6	80,1	74,6	277,1
20060917	100	LW	1000,8	53,3	53	47,3	140
20060917	100	HW	3,4	49,4	48	51,3	78,6
20060917	101	LW	3,6	42,8	46,8	44,8	69,2
20060918	101	HW	4,2	64,4	64,7	67,2	80
20060918	102	LW	4,1	54,5	48	42,8	42
20060918	102	HW	3,9	49	58,7	55,4	55,3
20060918	103	LW	4,3	70,8	52,9	48,7	27,9
20060919	103	HW	4,6	93,6	77,7	71,7	48,6
20060919	104	LW	4,5	50,1	55	47,8	13,2
20060919	104	HW	4,5	50,2	59,6	55,9	37,2
20060919	105	LW	4,8	62,4	58,7	50,3	39,7
20060920	105	HW	5,2	62,4	68,9	66,9	31,4
20060920	106	LW	4,9	56,5	61,8	46,4	34,9

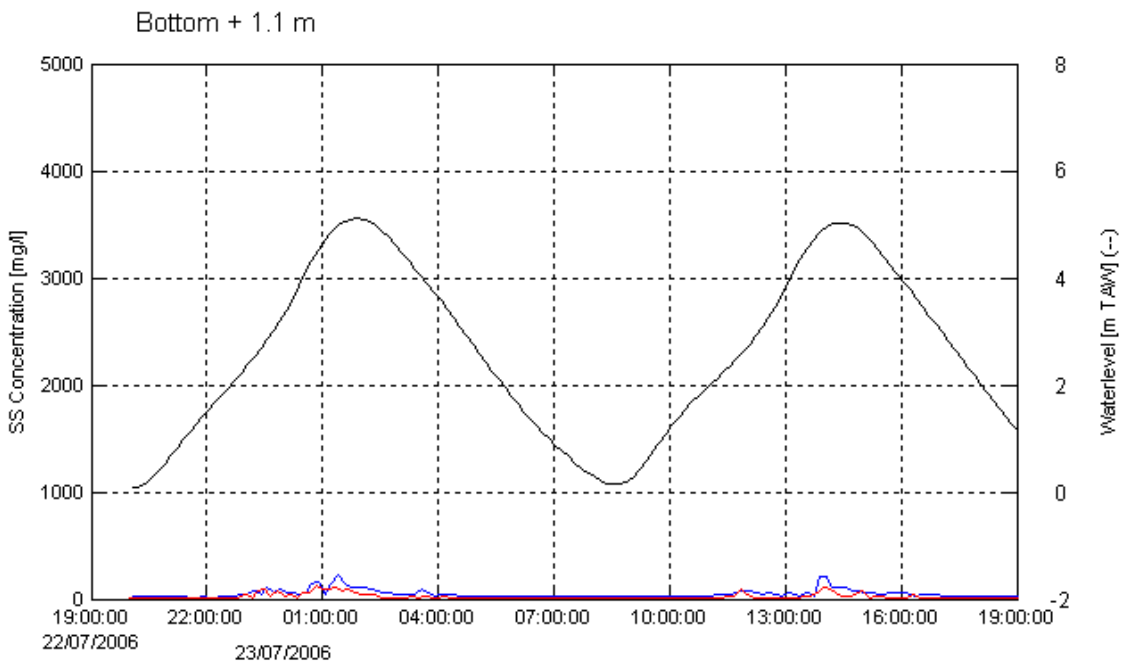
Comparison of SS concentrations during each tidal phase

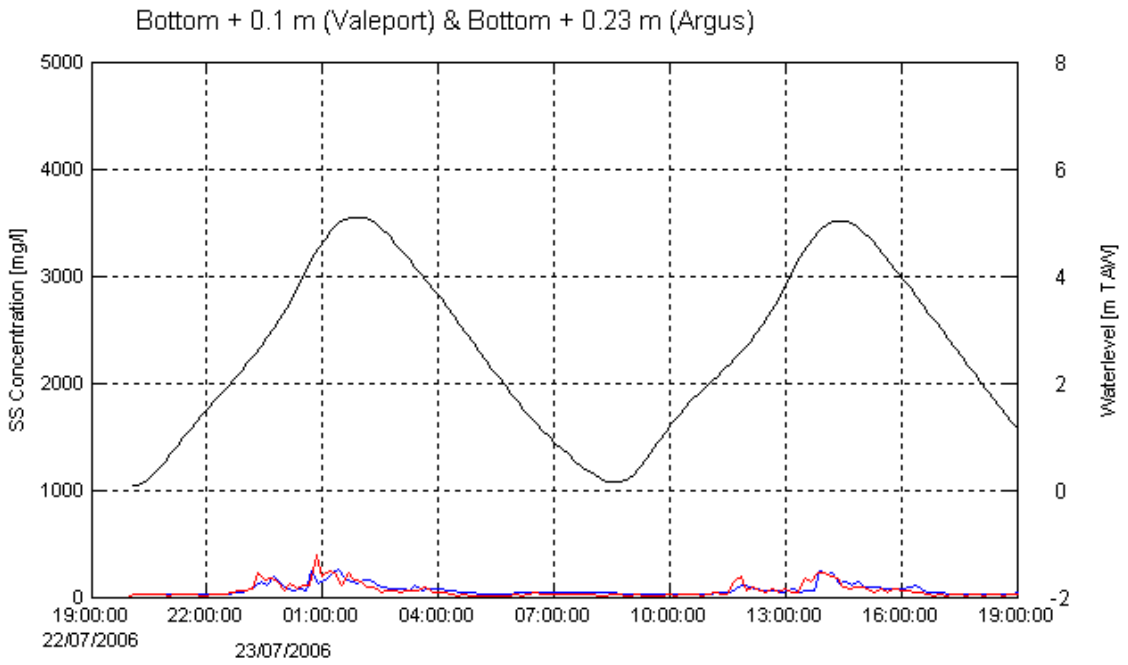
Date	Tide No.	Phase	Tidal Diff [m]	OBS SS Concentration [mg/l]		Argus SS Concentration [mg/l]	
				UP (RCM9)	DOWN (Valeport)	UP	DOWN
20060920	106	HW	4,5	67,5	63,3	59,3	13,4
20060920	107	LW	5,4	50,7	53,2	62	10,4
20060921	107	HW	5,4	68	64,3	94,5	18,9
20060921	108	LW	5	73,8	76,2	81,8	19,9
20060921	108	HW	5,1	72,7	77,5	107,7	32,4
20060921	109	LW	5,5	62	63,1	102,9	23,3
20060922	109	HW	5,7	77,2	79,9	156,7	49
20060922	110	LW	5,3	77,9	79,8	163,5	25,6
20060922	110	HW	5,2	78,9	81,5	205,3	32,3
20060922	111	LW	5,5	62,7	66,3	217,5	18,5
20060923	111	HW	5,7	79,1	84,5	277,4	39,5
20060923	112	LW	5,4	67,6	71,8	305,7	33,9
20060923	112	HW	5,4	86,1	88,4	402,6	52,5
20060923	113	LW	5,8	63,7	68	396,4	25,4
20060924	113	HW	5,7	77,4	80	474,7	42,5
20060924	114	LW	5,5	72,4	76	485	27
20060924	114	HW	5,5	85,3	77,4	550,1	49,2
20060924	115	LW	5,7	56,2	60,7	595	23,7
20060925	115	HW	5,7	79,5	83,7	631,6	130,9
20060925	116	LW	5,5	61,7	78,7	567,6	22,9
20060925	116	HW	5,5	97,5	-	678,6	59,8
20060925	117	LW	5,6	61,5	-	676,5	31,2
20060926	117	HW	5,6	63,2	-	723,8	42,4
20060926	118	LW	5,4	72,4	-	705,1	39,1
20060926	118	HW	5,3	67,6	-	806,1	56,5
20060927	119	LW	5,6	69,4	-	772,4	25,4
20060927	119	HW	5,4	108,2	-	949,8	48
20060927	120	LW	5,2	63,4	-	801,5	25,4
20060927	120	HW	5,2	71,7	-	951,9	46,9
20060928	121	LW	5,4	61,5	-	925,2	76,4
20060928	121	HW	5,1	80,2	-	1022,3	41,3
20060928	122	LW	4,9	72,1	-	980,7	38,6
20060928	122	HW	5,1	88	-	932,3	44,7
20060929	123	LW	4,9	68,9	-	767,1	32,5
20060929	123	HW	4,9	85,7	-	850,8	51,6
20060929	124	LW	4,7	75,2	-	698,5	34,9
20060929	124	HW	4,4	67,9	-	25,8	529,2
20060930	125	LW	4,5	43,1	-	11,9	281,8
20060930	125	HW	4,3	58,4	-	25,6	153,5
20060930	126	LW	4,3	79,5	-	33,1	112
20060930	126	HW	4,2	53,8	-	19,8	64,7
20061001	127	LW	4,2	40,5	-	8,2	34,4
20061001	127	HW	3,9	113,4	-	38,3	66,9

Comparison of SS concentrations during each tidal phase

Date	Tide No.	Phase	Tidal Diff [m]	OBS SS Concentration [mg/l]		Argus SS Concentration [mg/l]	
				UP (RCM9)	DOWN (Valeport)	UP	DOWN
20061001	128	LW	3,7	41,5	-	9,6	16,5
20061001	128	HW	3,6	35,8	-	10	15,4
20061002	129	LW	3,2	41,6	-	12,2	13,5
20061002	129	HW	3	35,3	-	11	13,6
20061002	130	LW	3,1	33,9	-	6,5	8,3
20061002	130	HW	3,5	56,5	-	19,4	24,9
20061003	131	LW	4	35,5	-	5,9	19,4
20061003	131	HW	3,8	46,1	-	14,8	21,1
20061003	132	LW	4	41,3	-	8,4	6,4
20061004	132	HW	4,7	71,6	-	33,4	34,8
20061004	133	LW	4,7	50,1	-	11,9	18,5
20061004	133	HW	4,5	74,5	-	35,3	32,2
20061004	134	LW	5	55,3	-	15,8	17,4
20061005	134	HW	5,4	103,9	-	58,2	62,7
20061005	135	LW	5,3	64,5	-	21,3	36,1
20061005	135	HW	5,1	119,1	-	71,4	82,5
20061005	136	LW	5,5	55,2	-	19,1	25,6
20061006	136	HW	5,9	175,2	-	107	127,8
20061006	137	LW	5,5	70,6	-	27,9	35,3
20061006	137	HW	5,4	146,8	-	90,5	107,1
20061006	138	LW	5,8	74,3	-	32,3	51,2
20061007	138	HW	6,3	185,6	-	116,4	139,3
20061007	139	LW	5,5	77,6	-	33,4	46,3
20061007	139	HW	5,7	170,1	-	99,2	106
20061007	140	LW	6,6	62,3	-	26,4	32,7
20061008	140	HW	999,8	196,7	-	127,8	159,6
20061008	141	LW	999,8	98,4	-	55,3	59
20061008	141	HW	6	158,8	-	112,8	125,7
20061008	142	LW	6,5	72,1	-	36,8	47,3
20061009	142	HW	6,4	136,8	-	93	89,3
20061009	143	LW	6,2	107,9	-	68,3	74,9
20061009	143	HW	6,2	185,7	-	144,9	152,1
20061009	144	LW	6,3	125,5	-	72,8	108,5
20061010	144	HW	6,4	173,2	-	127,4	146
20061010	145	LW	6	97,8	-	60	63,5
20061010	145	HW	5,8	214,1	-	183,1	177,7
20061011	146	LW	6,2	96,5	-	91	70,9
20061011	146	HW	5,9	225,7	-	236,4	226,5

11283 Accretion Deurganckdok – Near bed continuous monitoring – Summer 2006





Comparison of RCM9 & Valeport (blue) to Argus sensors (red) at 0.9 and 0.1 m above the bottom for SS concentration

Location:	Date:
Deurganckdok Sill	Avg Tide 22/07 – 23/07

Data processed by: IMDC

In association with: WL | delft hydraulics, GEMS International

I/RA/11283/06.122/MSA

APPENDIX F.

HCBS2 REPORTS

Report	Description
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	

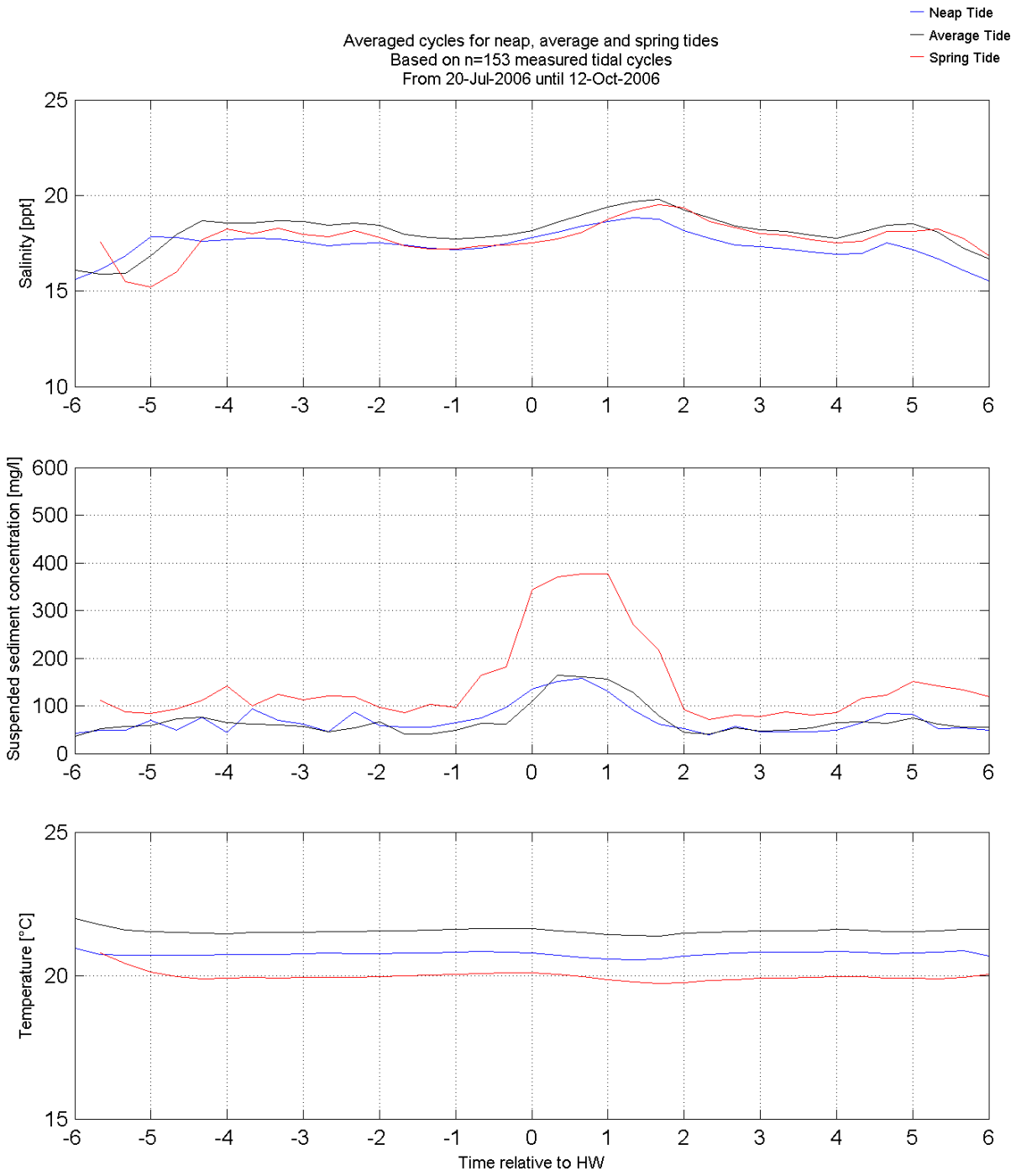
10	Cohesive sediment properties summer 2006 (I/RA/11291/06.103/MSA)
Through tide Measurements Summer	
11.1	Through Tide Measurement Sediview and Siltprofiler 27/9 Stream - Liefkenshoek (I/RA/11291/06.104/MSA)
11.2	Through Tide Measurement Sediview 27/9 Veremans - Raai K (I/RA/11291/06.105/MSA)
11.3	Through 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)

APPENDIX G. AVERAGE TIDAL CYCLES

G.1 Local parameters

Long Term Monitoring Siltation Deurganckdok

Summer 2006	Equipment(s): OBS-3A
	Location: N-ENTRANCE bottom



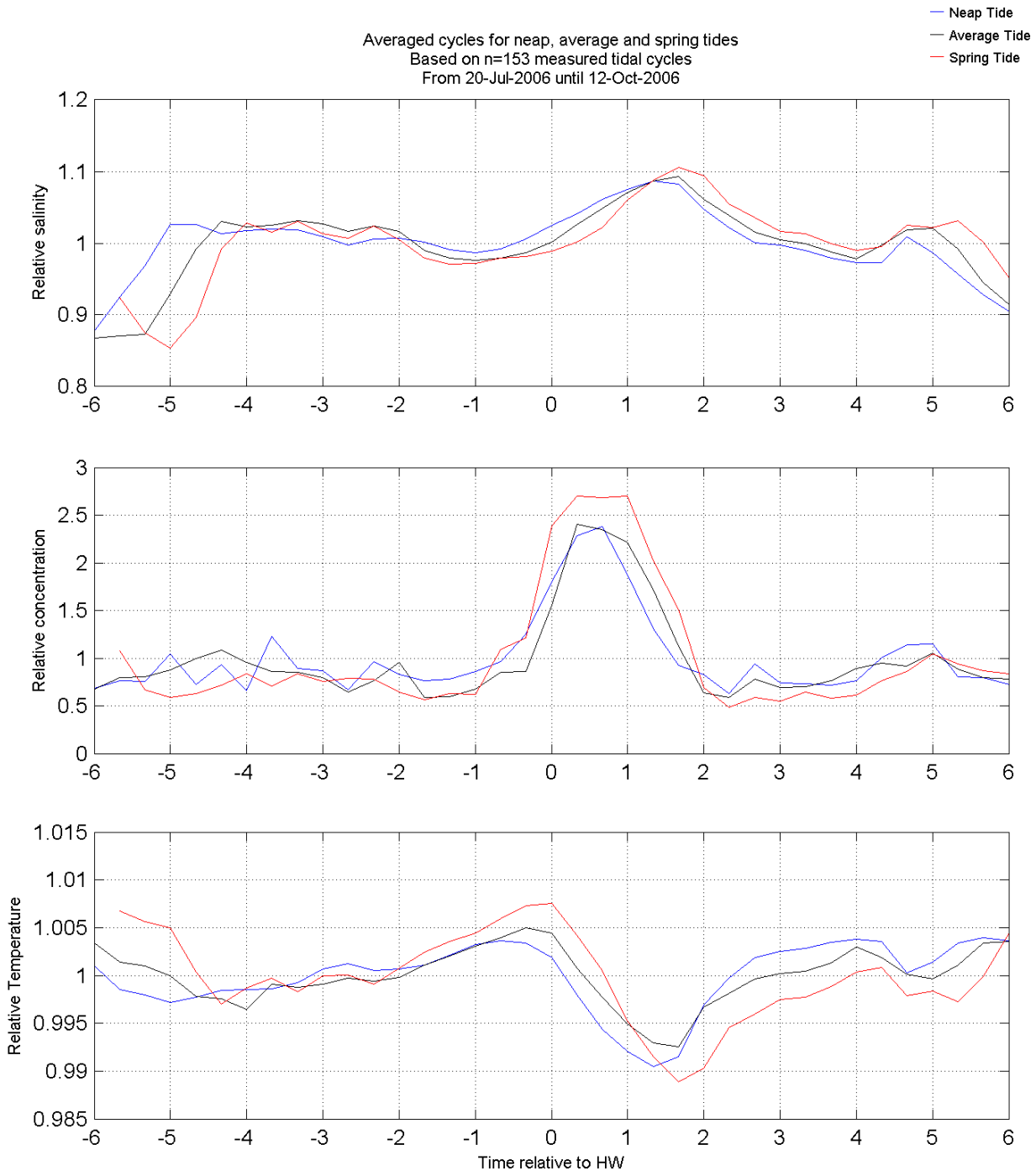
Data Processed by:

In association with :

I/RA/11283/06.122/MSA

Long Term Monitoring Siltation Deurganckdok

Summer 2006	Equipment(s): OBS-3A
	Location: N-ENTRANCE bottom



Parameters relative to average over tide

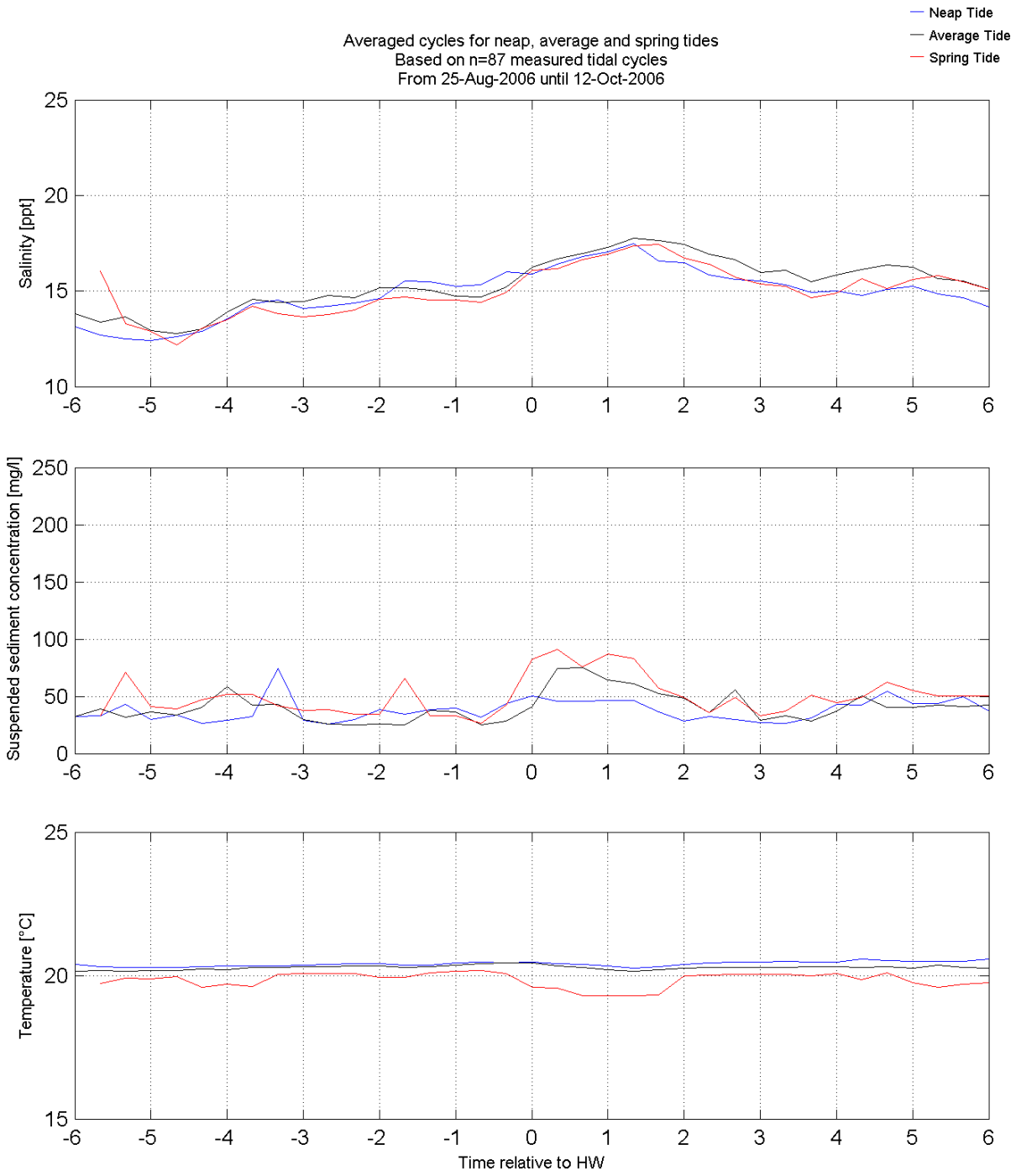
Data Processed by:

In association with :

I/RA/11283/06.122/MSA

Long Term Monitoring Siltation Deurganckdok

Summer 2006	Equipment(s): OBS-3A
	Location: N-ENTRANCE top



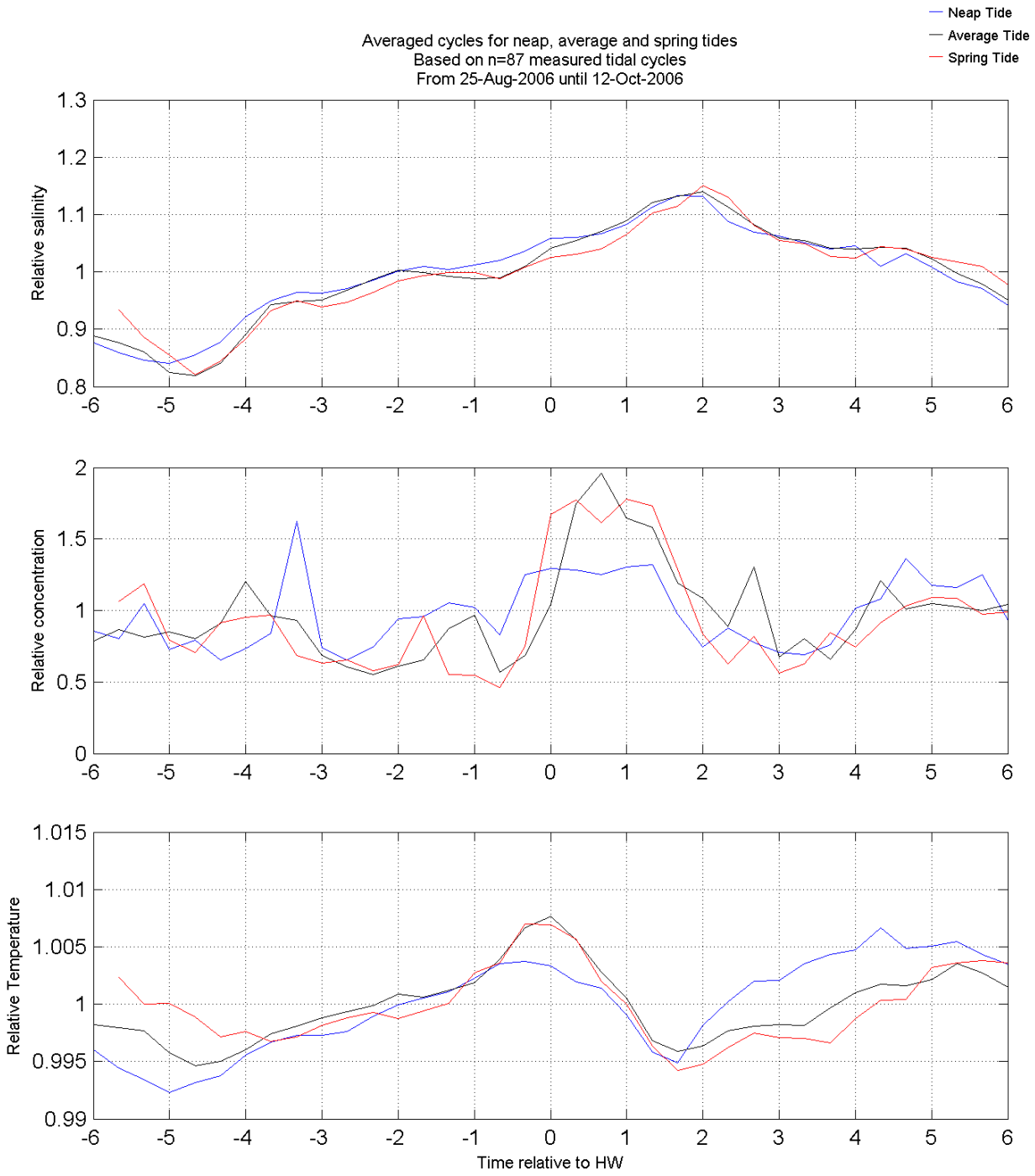
Data Processed by:

In association with :

I/RA/11283/06.122/MSA

Long Term Monitoring Siltation Deurganckdok

Summer 2006	Equipment(s): OBS-3A
	Location: N-ENTRANCE top



Parameters relative to average over tide

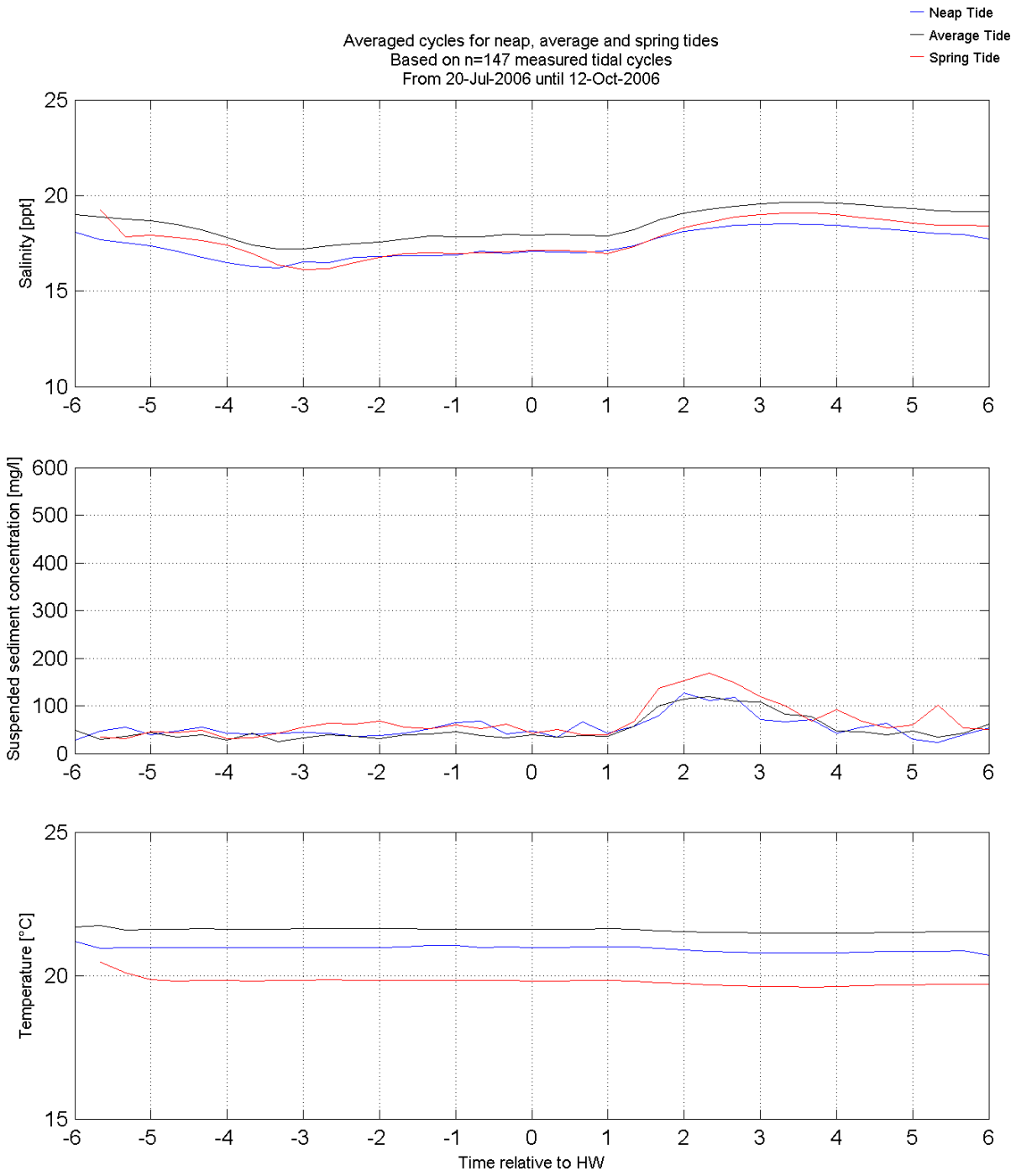
Data Processed by:

In association with :

I/RA/11283/06.122/MSA

Long Term Monitoring Siltation Deurganckdok

Summer 2006	Equipment(s): OBS-3A
	Location: S-BACK bottom



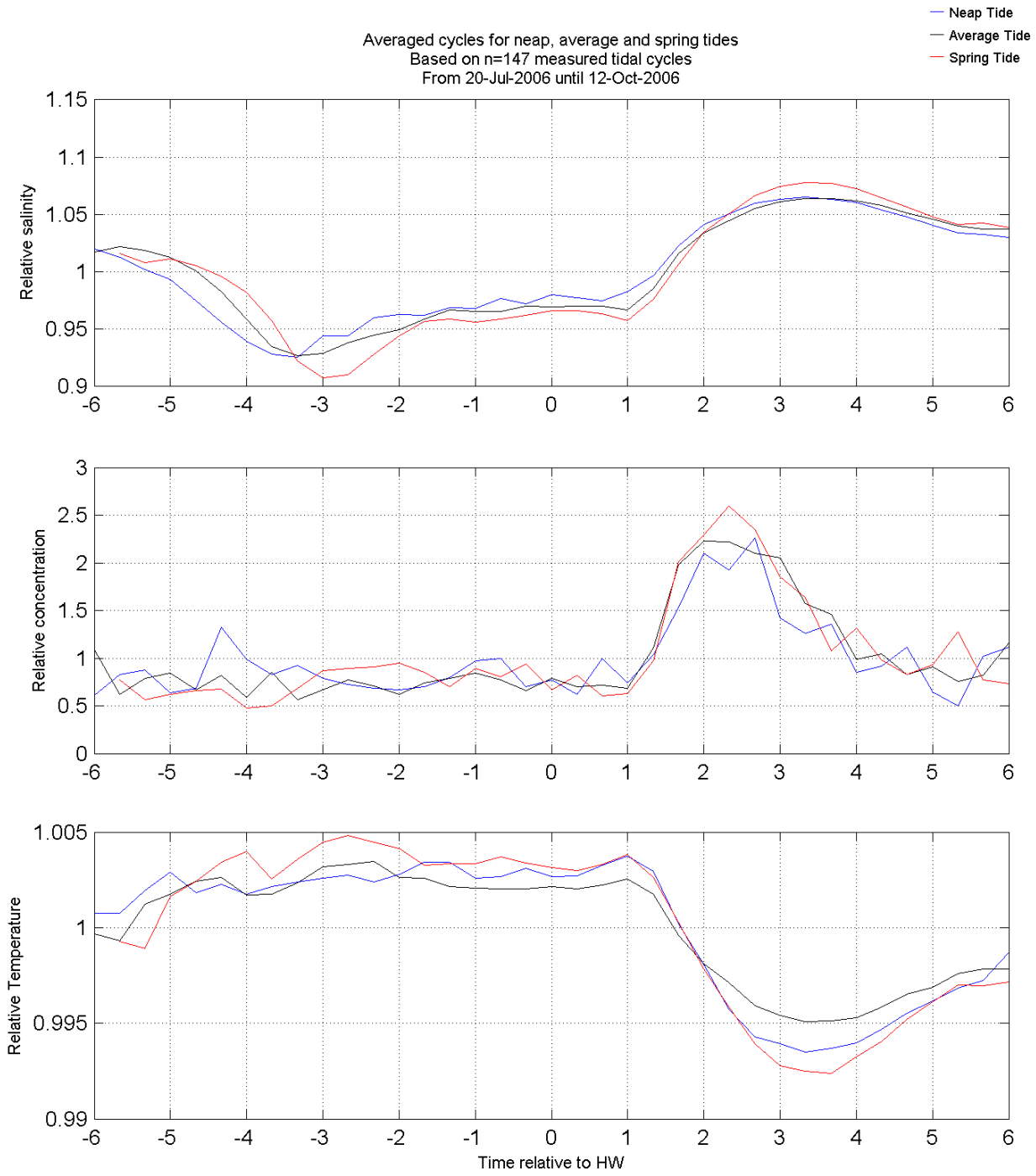
Data Processed by:

In association with :

I/RA/11283/06.122/MSA

Long Term Monitoring Siltation Deurganckdok

Summer 2006	Equipment(s): OBS-3A
	Location: S-BACK bottom



Parameters relative to average over tide

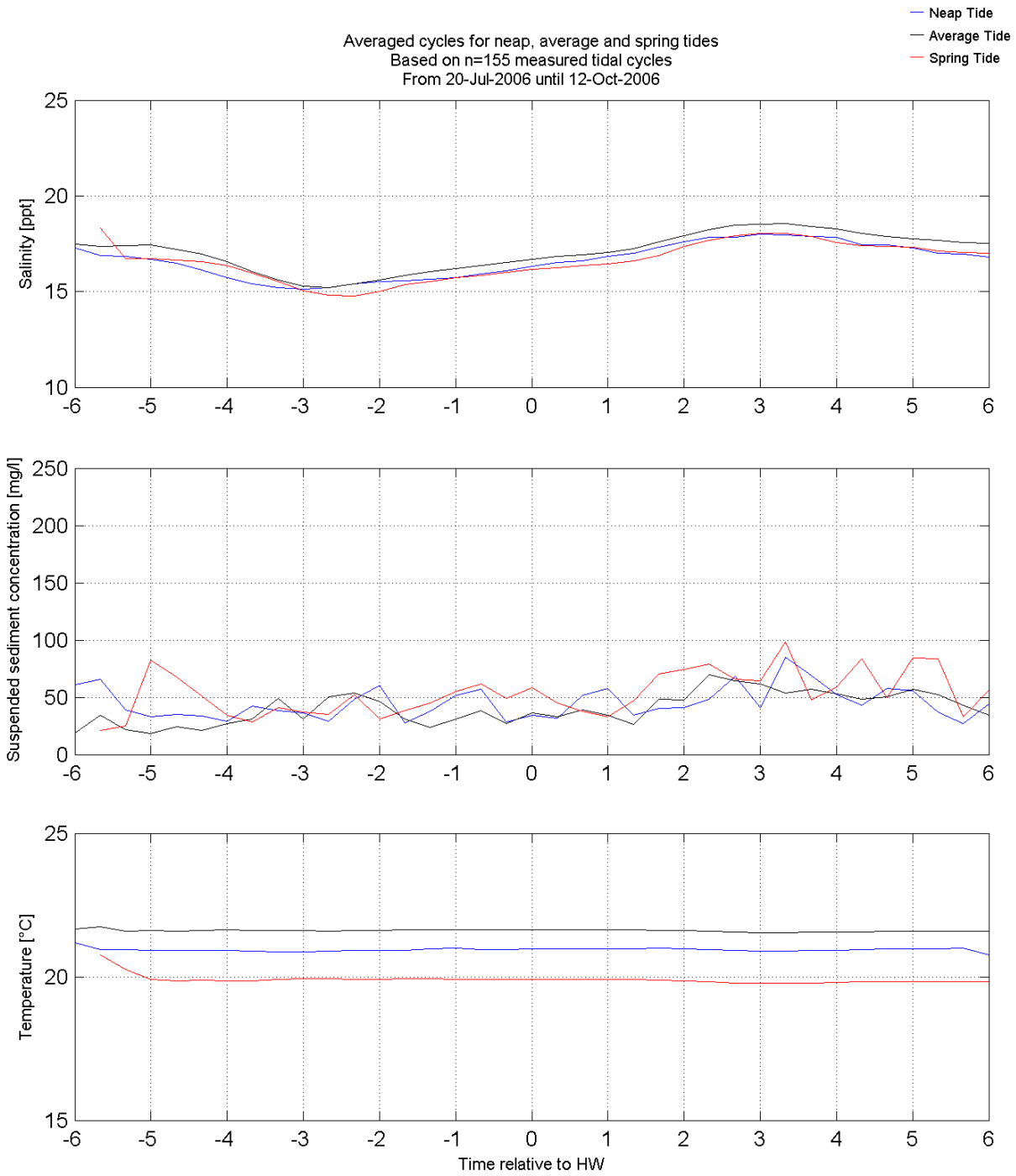
Data Processed by:

In association with :

I/RA/11283/06.122/MSA

Long Term Monitoring Siltation Deurganckdok

Summer 2006	Equipment(s): OBS-3A
	Location: S-BACK top



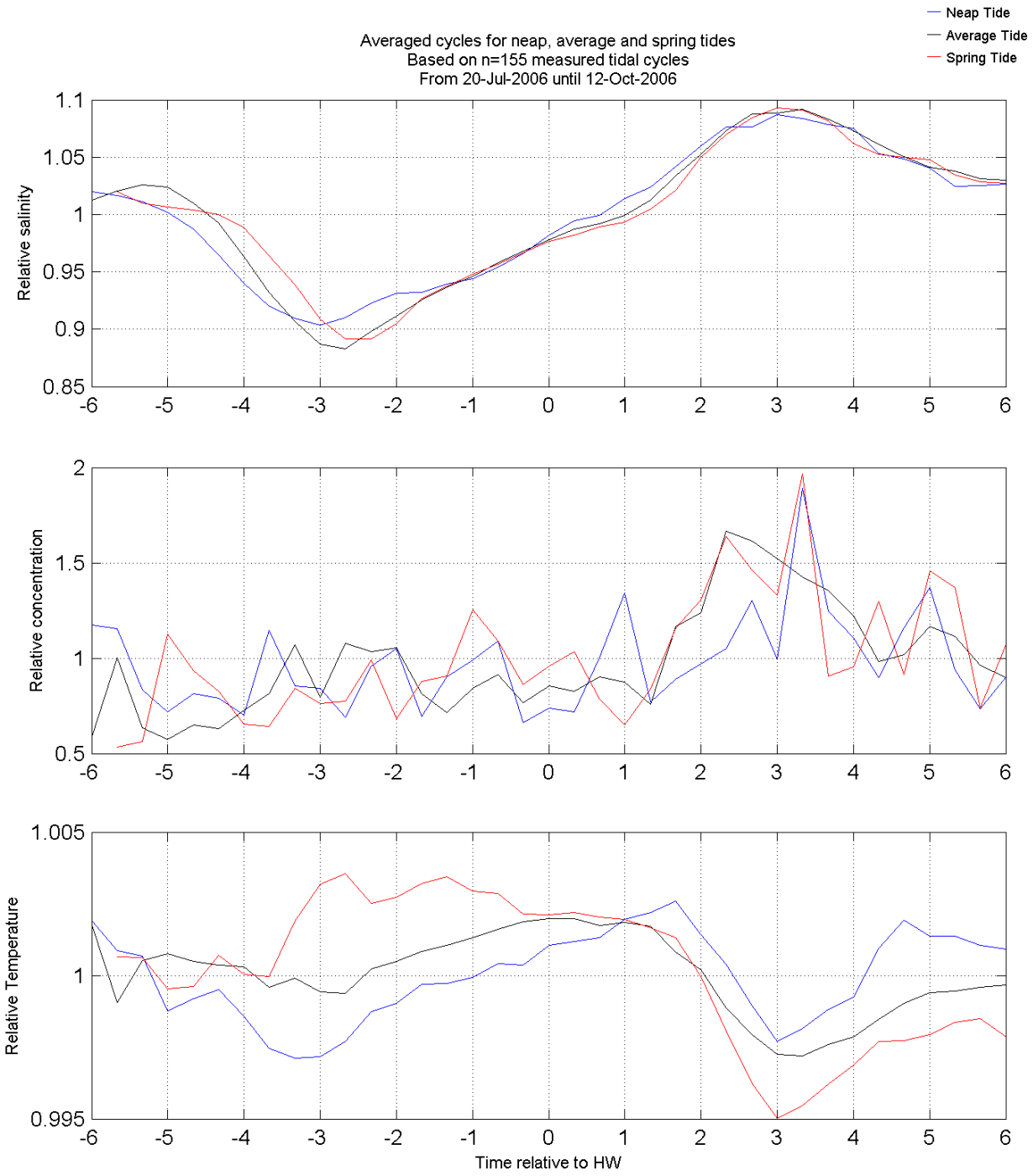
Data Processed by: IMDC

In association with : w.l | delft hydraulics GEMS International

I/RA/11283/06.122/MSA

Long Term Monitoring Siltation Deurganckdok

Summer 2006	Equipment(s): OBS-3A
	Location: S-BACK top



Parameters relative to average over tide

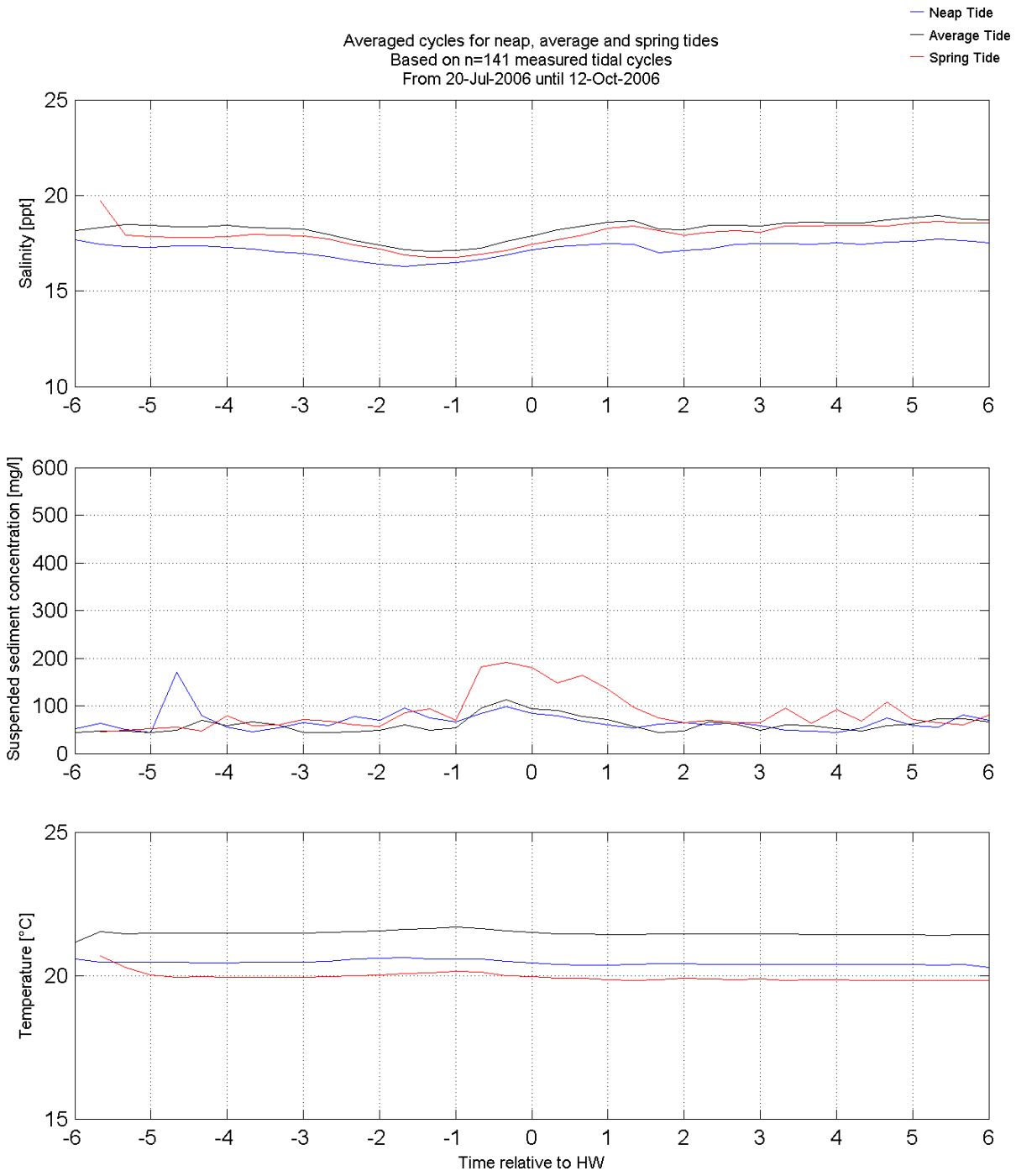
Data Processed by:

In association with :

I/RA/11283/06.122/MSA

Long Term Monitoring Siltation Deurganckdok

Summer 2006	Equipment(s): OBS-3A
	Location: S-ENTRANCE bottom



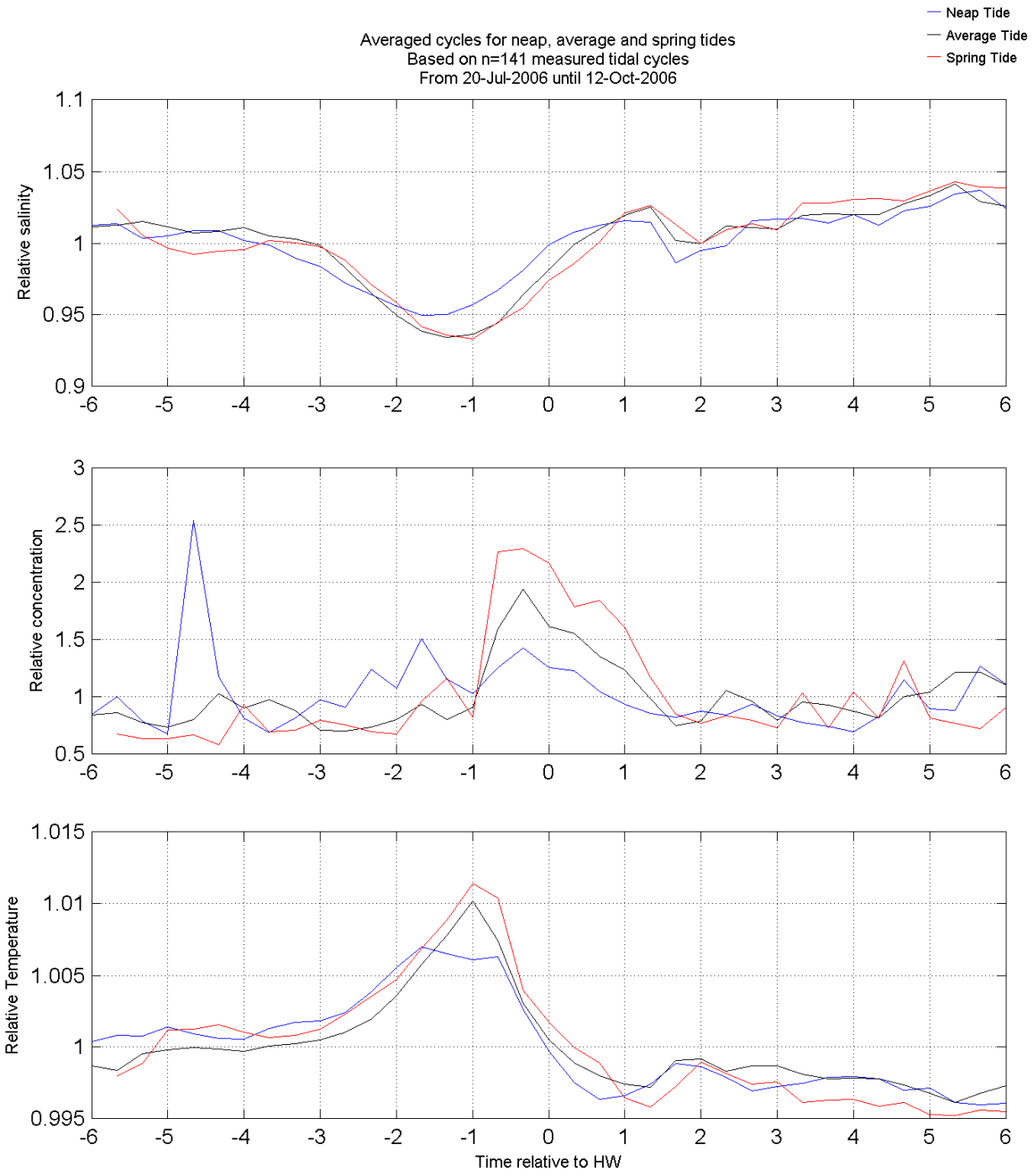
Data Processed by:

In association with :

I/RA/11283/06.122/MSA

Long Term Monitoring Siltation Deurganckdok

Summer 2006	Equipment(s): OBS-3A
	Location: S-ENTRANCE bottom



Parameters relative to average over tide

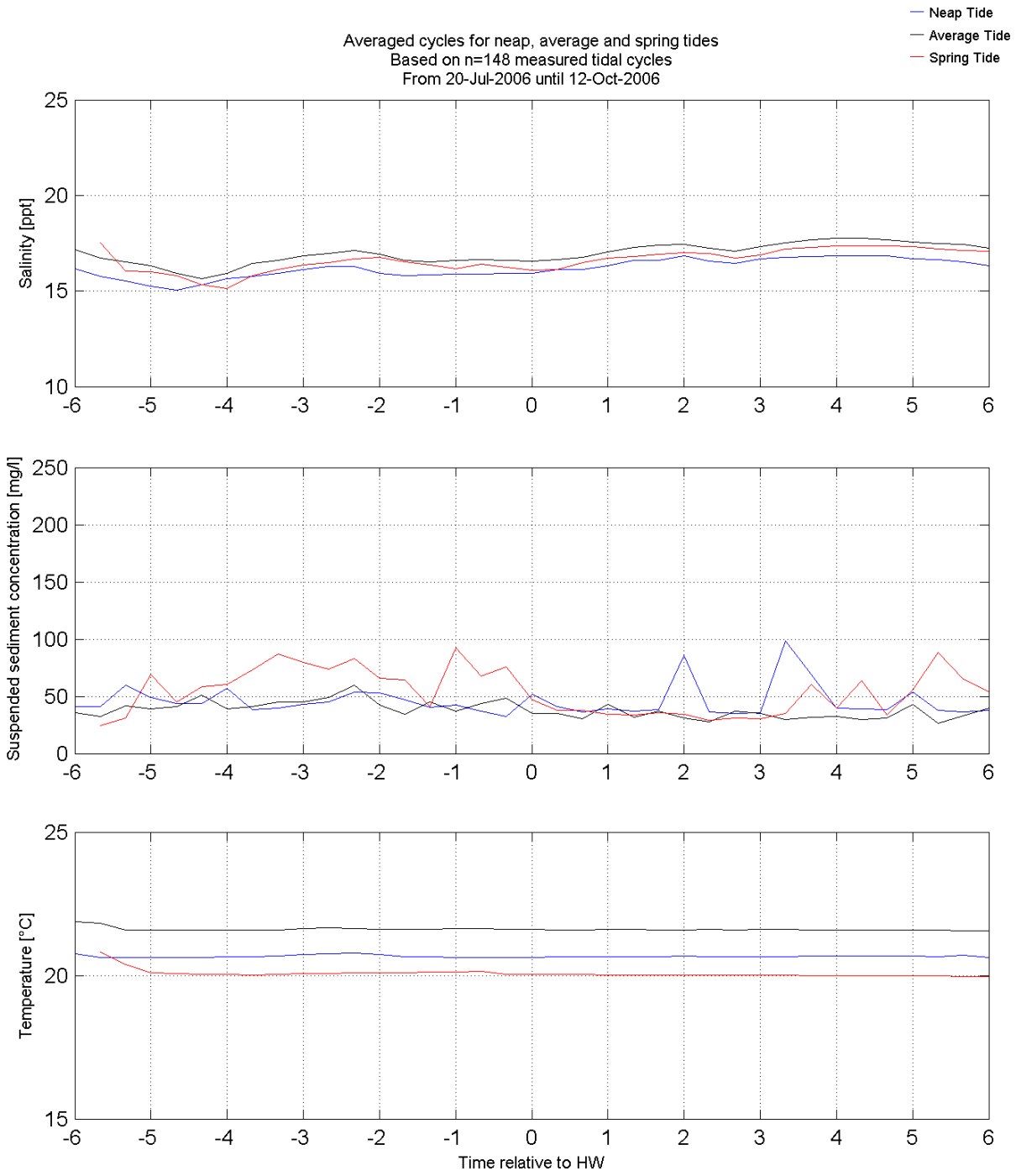
Data Processed by:

In association with :

I/RA/11283/06.122/MSA

Long Term Monitoring Siltation Deurganckdok

Summer 2006	Equipment(s): OBS-3A
	Location: S-ENTRANCE top



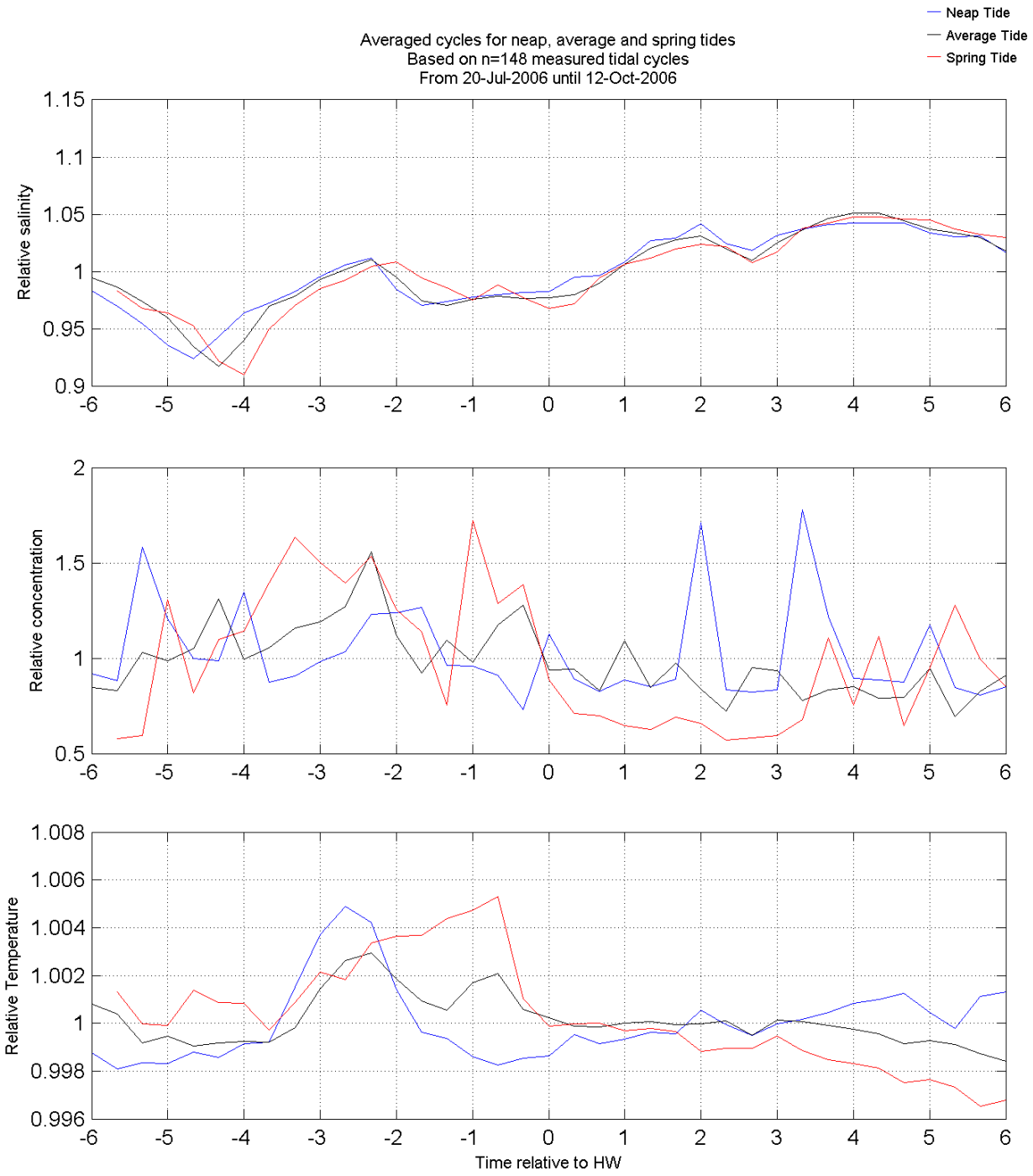
Data Processed by:

In association with :

I/RA/11283/06.122/MSA

Long Term Monitoring Siltation Deurganckdok

Summer 2006	Equipment(s): OBS-3A
	Location: S-ENTRANCE top



Parameters relative to average over tide

Data Processed by:

In association with :

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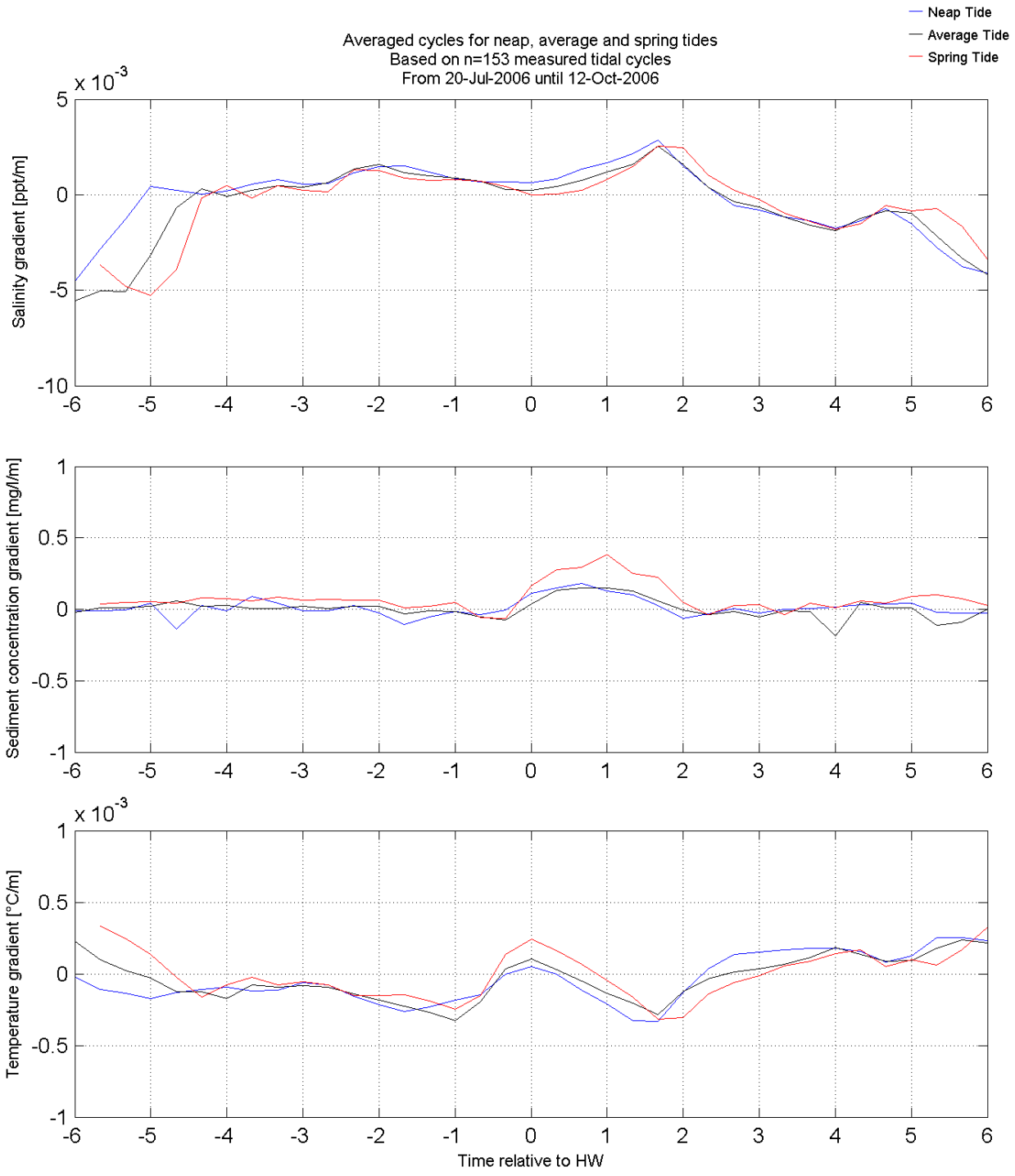
G.2 Along-dock, cross-dock and vertical gradients

Long Term Monitoring Siltation Deurganckdok

Summer 2006	OBS 3A
	Location: DGD entrance



Horizontal gradient at -12.2m TAW =(N-ENTRANCE - S-ENTRANCE)/Δx

Data Processed by: IMDC

In association with : WL | delft hydraulics, GEMS International

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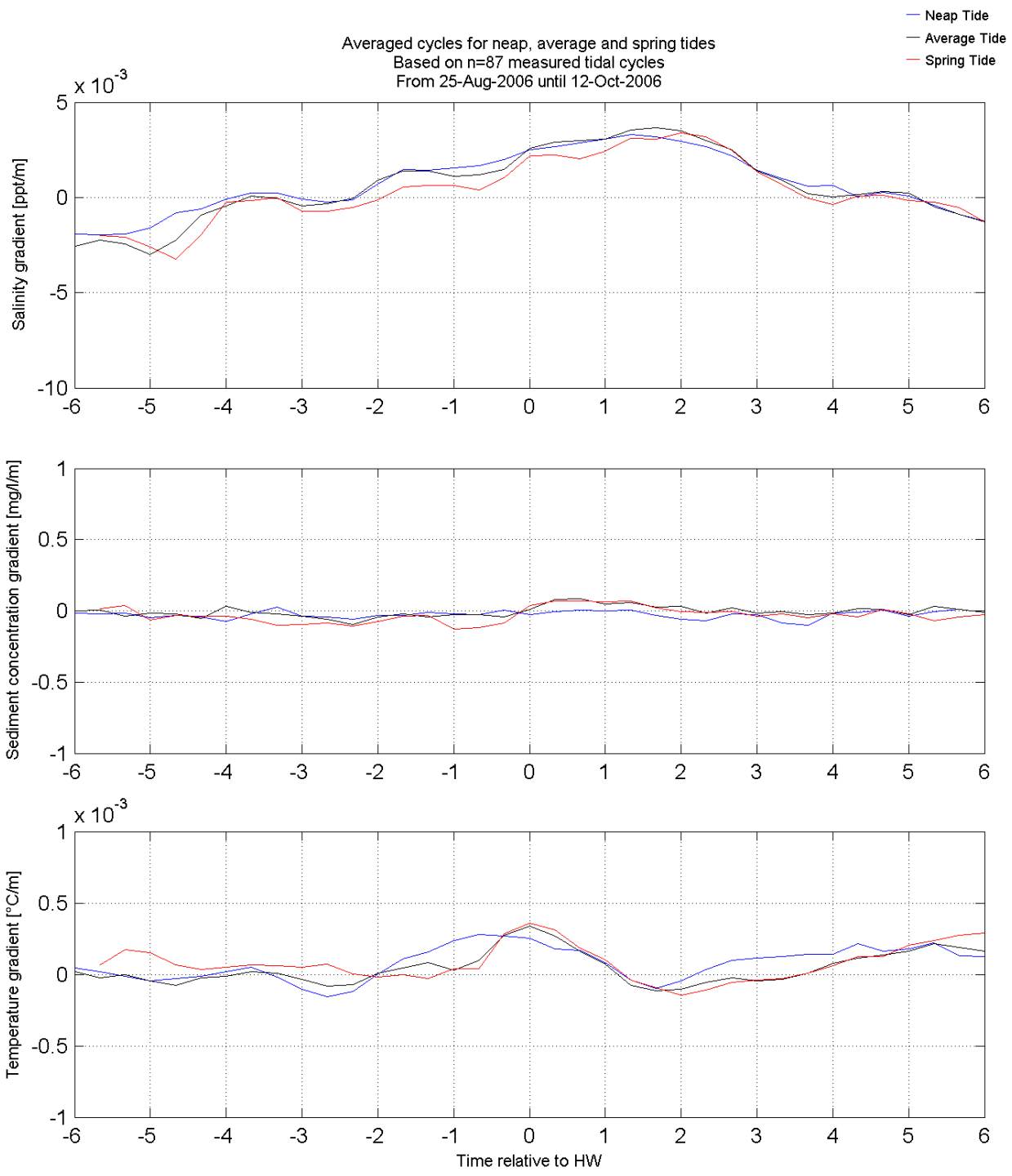
Long Term Monitoring Siltation Deurganckdok

Summer 2006	OBS 3A
	Location: DGD-entrance



Horizontal gradient at -2.4m TAW =(N-ENTRANCE - S-ENTRANCE)/Δx

Data Processed by: IMDC

In association with : WL | delft hydraulics, GEMS International

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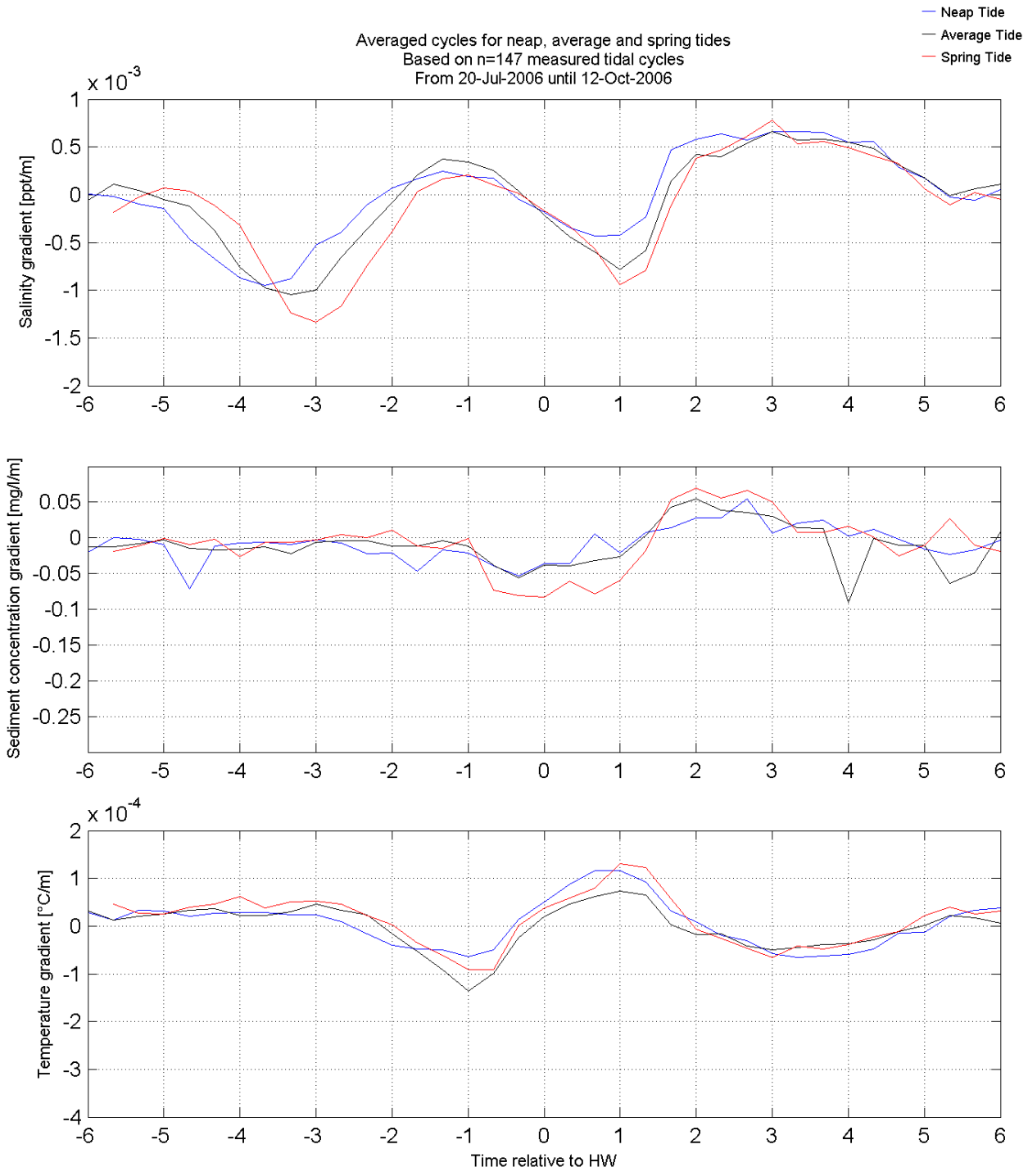
Long Term Monitoring Siltation Deurganckdok

Summer 2006	OBS 3A
	Location: DGD-P&O (S)



Horizontal gradient at -12.2m TAW =(S-BACK - S-ENTRANCE)/Δx

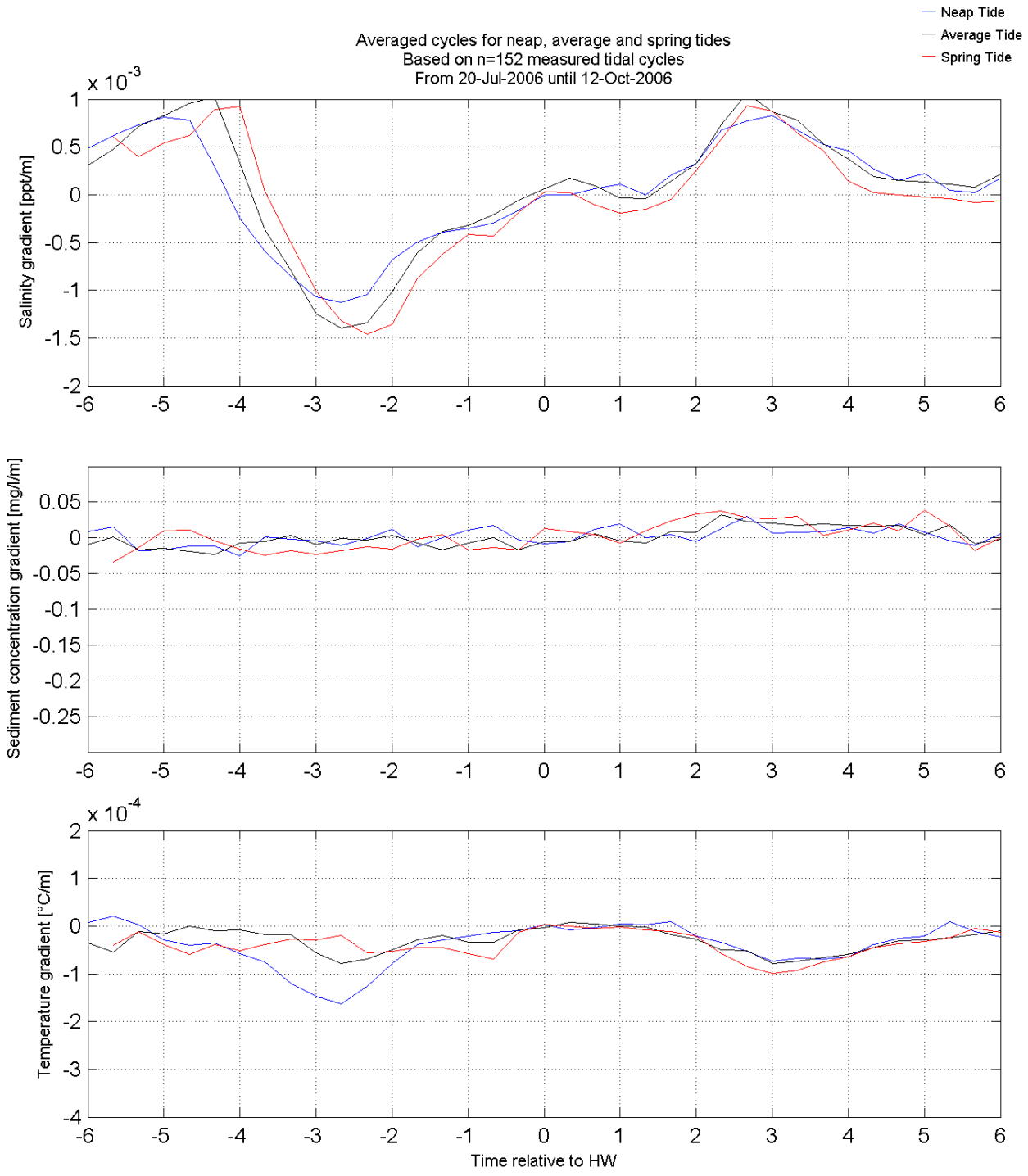
Data Processed by: IMDC

In association with : WL | delft hydraulics, GEMS International

I/RA/11283/06.122/MSA

Long Term Monitoring Siltation Deurganckdok

Summer 2006	OBS 3A
	Location: DGD-P&O (S)



Horizontal gradient at -2.4 m TAW =(S-BACK - S-ENTRANCE)/Δx

Data Processed by: IMDC

In association with : WL | delft hydraulics, GEMS International

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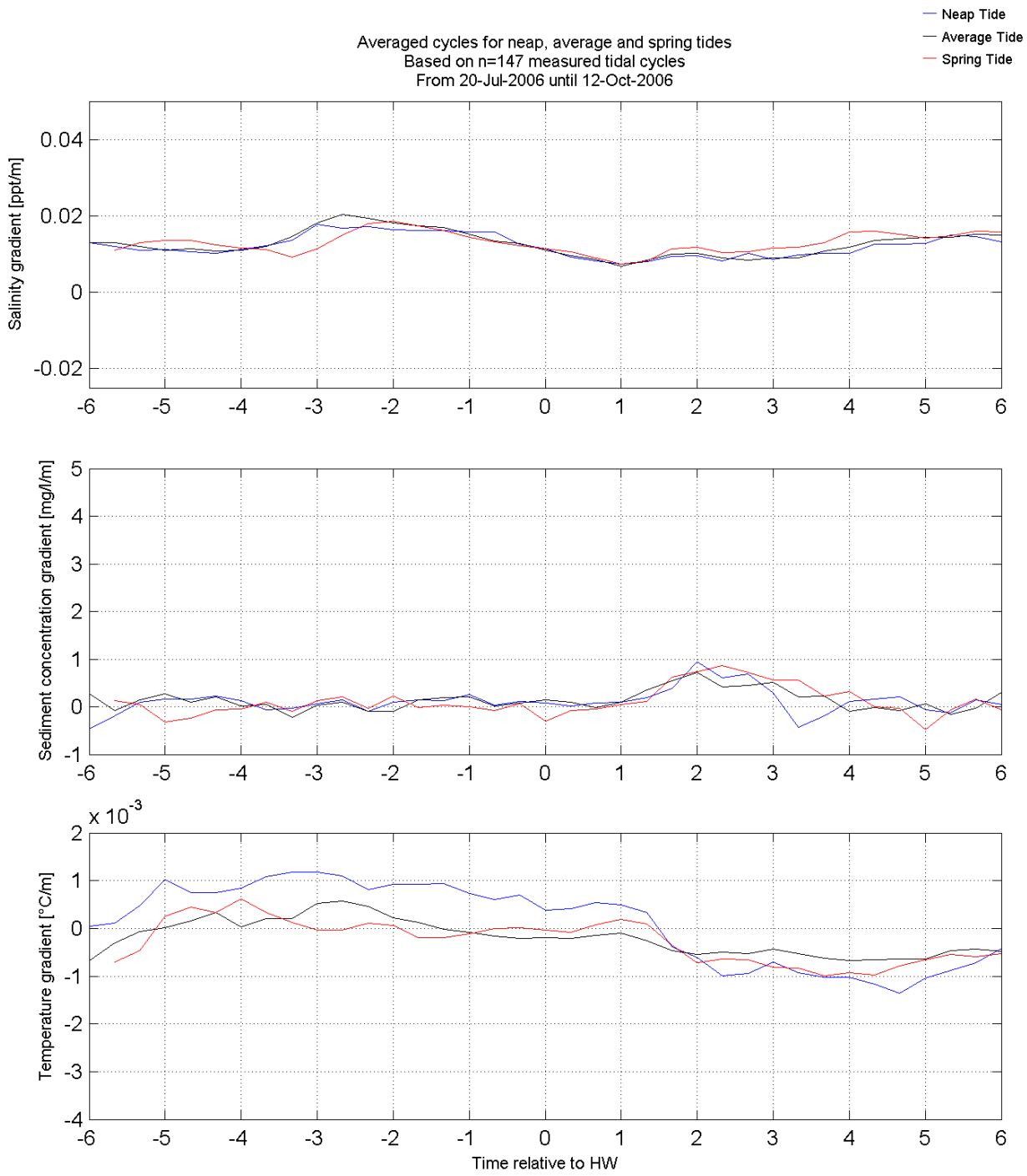
Long Term Monitoring Siltation Deurganckdok

Summer 2006	OBS 3A
	Location: DGD-P&O1 (S-back)



Vertical gradient at S-BACK =(data(-12.2m) - data(-2.4m))/Δz

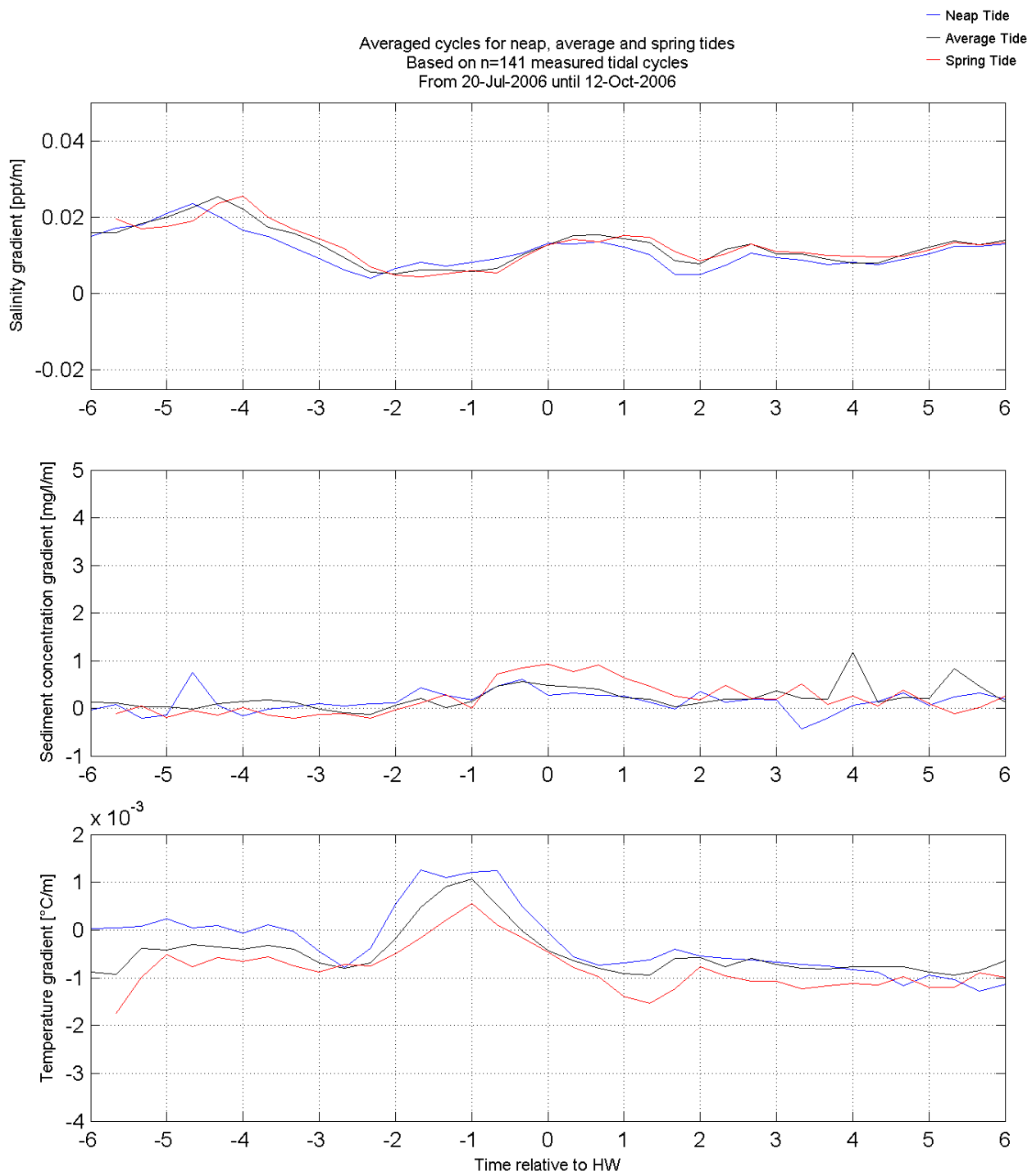
Data Processed by:

In association with :

I/RA/11283/06.122/MSA

Long Term Monitoring Siltation Deurganckdok

Summer 2006	OBS 3A
	Location: DGD-P&O2 (S-entrance)



Vertical gradient at S-ENTRANCE =(data(-12.2m) - data(-2.4m))/Δz

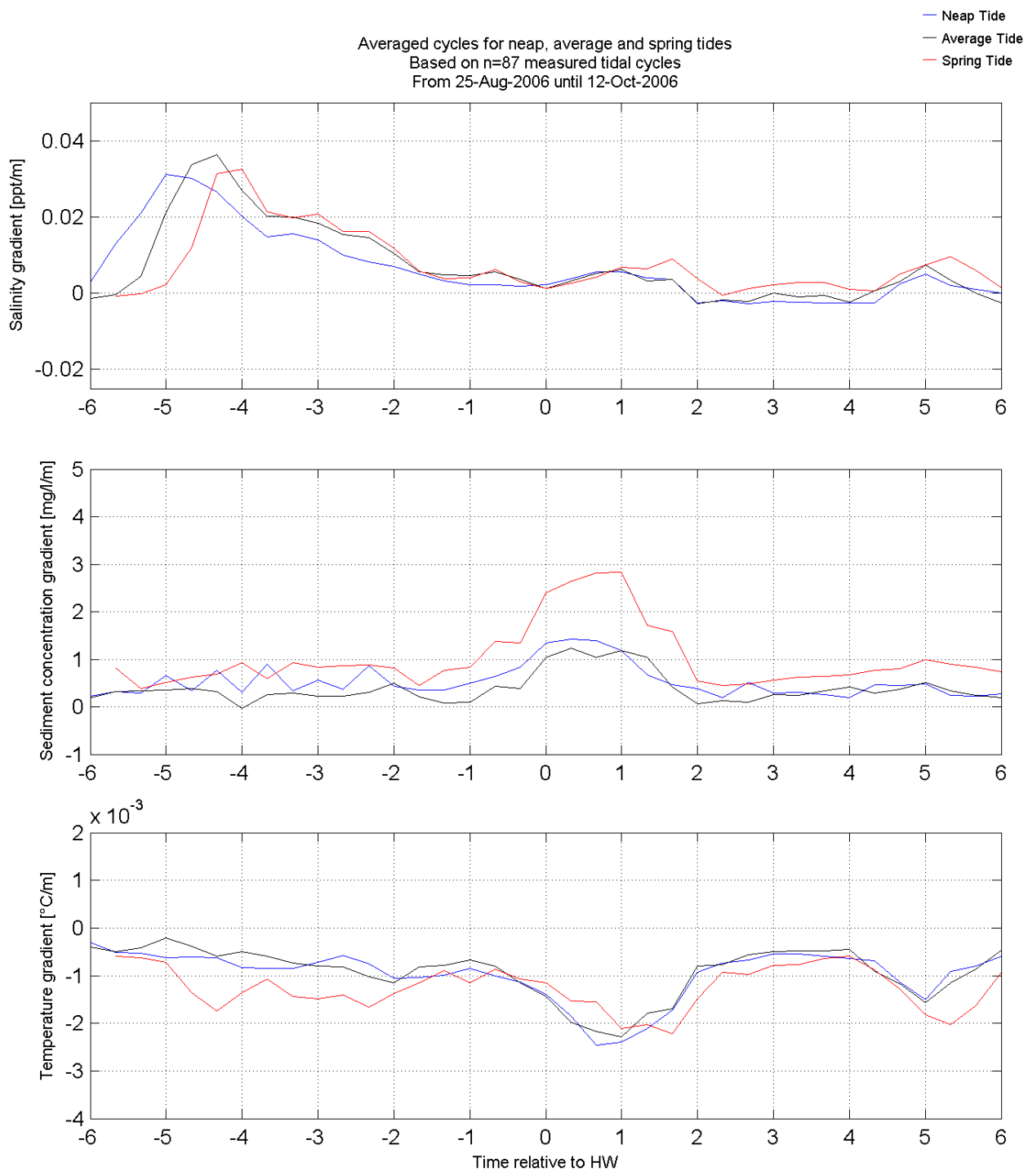
Data Processed by: IMDC

In association with : w.l | delft hydraulics, GEMS International

I/RA/11283/06.122/MSA

Long Term Monitoring Siltation Deurganckdok

Summer 2006	OBS 3A
	Location: DGD-PSA (N-entrance)



Vertical gradient at N-ENTRANCE =(data(-12.2m) - data(-2.4m))/Δz

Data Processed by: IMDC

In association with : WL | delft hydraulics, GEMS International

I/RA/11283/06.122/MSA