Cruise inventory

RV Prince Madog PD04/08

Cruise summary report

Cruise Info.	
Cruise period	2008-02-12 — 2008-02-15
Status	Completed
Port of departure	Menai Bridge, United Kingdom
Port of return	Menai Bridge, United Kingdom
Purpose	Research
Objectives	The objectives are to recover COBS Smart Buoy and deploy moored instrumentation, i.e. STABLE III and mini-STABLE frames at the mouth of the River Dee. Also to carry out CTD observations for at least a tidal cycle in the Welsh Channel and the Hilbre Swash, to study turbulence and SPM processes. To Carry out a side scan sonar survey of the Hilbre Swash. In the following narrative all times are UMT The Prince Madog was loaded on the 11/02/2008, Mini-STABLE, was loaded. We sailed from Menai Bridge at 08:0 on the 12/02/2008. Go to site 12 adn deploy ADCP. Travel to Welsh Channel. After arriving to the Welsh Channel we carried a side scan sonar survey 12:02 most of the Channel until we deployed mini-STABLE at 13:00. Took grab samples and started 25 hrs CTD and INSSEV station at

	13:30. Finished CTDs at 14:00 13/02/2008 and set sail to Vittoria Docks loading STABLE III and Triaxis wave buoy. 14/04/2008 set sail to Hilbre Channel 05:00 arriving at 07:30, carry out a side scan survey. Stable deployed at 9:15 and wave buoy at 10:00. 25 hrs CTD station started at 10:30. CTDs finished 15/02/2008 14:00 and set sail to Menai Bridge Docking at 17:00
Chief scientist	Alejandro J Souza (Proudman Oceanographic Laboratory)
Project	Dee Experiment
Coordinating body	Proudman Oceanographic Laboratory
Ocean/sea areas	
General	Irish Sea and St. George's Channel
Specific	Liverpool Bay, Mouth of the Dee Estuary
Measurements	
Physical oceanography	
Surface measurements underway (T,S)	Description: Underway Temp, sal, chlorophyll, transmittance.
CTD stations	Quantity: number of profiles = 83 Description: TD profiles, supplementary Chlorophyll, Transmissometer and LISST data
Current profiler (eg ADCP)	Description: On board ADCP
Geology and geophysics	
Grab	Quantity: number of samples = 3

	Description: Grab samples
Single-beam echosounding	Quantity: number of measurements = 3 Description: 3 lines of side scan sonar in the Hilbre Swash
Moorings, landers, buoys	
Physical oceanography	
Transparency (eg transmissometer)	53° 22' 11" N 3° 19' 30" W — Mini-STABLE with 3 5 MHz ADVs, 1.2 mode 12 ADCP, 2-D ripple scanner and ABS LISST-100 C rcording at 20 min burst every hour at 1.0 m from the bed.
Current profiler (eg ADCP)	53° 22' 37" N 3° 14' 12" W — Bottom mounted 1.2 MHz RDI ADCP, mode 12 every second; 50cm bin size 20 min burst
Instrumented wave measurements	53° 23' 1" N 3° 14' 17" W — Triaxis wave ride
Other physical oceanographic measurements	53° 22' 20" N 3° 14' 3" W — STABLE with 2 5 MHz ADV, 1 10 MHz ADV, LISST-ST, 3-D Ripple profiler, ABS, Fast CT Samp.
Other physical oceanographic measurements	53° 27' 0" N 3° 38' 35" W — Recover SMART Buoy
Other physical oceanographic measurements	53° 22' 11" N 3° 19' 30" W — Mini-STABLE with 3 5 MHz ADVs, 1.2 mode 12 ADCP, 2-D ripple scanner and ABS LISST-100 C rcording at 20 min burst every hour at 1.0 m from the bed.
Data held at BODC	
Series/Profiles	
84 CTD/STD cast	Raw suspended particulate material optical sensor output

Density of the water column
Visible waveband radiance and irradiance measurements in the water column
Transmittance and attenuance of the water column
Dissolved oxygen parameters in the water column
Raw fluorometer output
Temperature of the water column
Salinity of the water column
Vertical spatial coordinates

[Show series]

BODC id	Date/Time	Location	Doc.
928977	2008-02-12 11:06	53° 26' 52" N 3° 29' 36" W	
928989	2008-02-12 13:33	53° 22' 10" N 3° 19' 53" W	
928990	2008-02-12 14:01	53° 22' 10" N 3° 19' 57" W	
929004	2008-02-12 14:31	53° 22' 10" N 3° 19' 57" W	
929016	2008-02-12 15:00	53° 22' 10" N 3° 19' 58" W	
929028	2008-02-12 15:30	53° 22' 10" N 3° 20' 0" W	
9290	2008-	53° 22' 9" N 3° 20'	

41	02-12 18:31	1" W	
929053	2008-02-12 19:01	53° 22' 9" N 3° 20' 1" W	
929065	2008-02-12 19:33	53° 22' 9" N 3° 20' 1" W	
929077	2008-02-12 20:01	53° 22' 9" N 3° 20' 1" W	
929089	2008-02-12 20:31	53° 22' 9" N 3° 20' 1" W	
929090	2008-02-12 21:00	53° 22' 9" N 3° 20' 1" W	
929108	2008-02-12 21:34	53° 22' 9" N 3° 20' 1" W	
929121	2008-02-12 22:00	53° 22' 9" N 3° 19' 58" W	
929133	2008-02-12 22:30	53° 22' 10" N 3° 19' 57" W	
929145	2008-02-12 23:01	53° 22' 8" N 3° 19' 55" W	
929157	2008-02-12 23:30	53° 22' 8" N 3° 19' 54" W	

929169	2008-02-13 00:02	53° 22' 8" N 3° 19' 54" W	
929170	2008-02-13 00:32	53° 22' 8" N 3° 19' 54" W	
929182	2008-02-13 01:03	53° 22' 9" N 3° 19' 54" W	
929194	2008-02-13 01:31	53° 22' 8" N 3° 19' 54" W	
929201	2008-02-13 02:02	53° 22' 9" N 3° 19' 55" W	
929213	2008-02-13 02:32	53° 22' 9" N 3° 19' 57" W	
929225	2008-02-13 03:01	53° 22' 9" N 3° 19' 58" W	
929237	2008-02-13 03:31	53° 22' 9" N 3° 19' 59" W	
929249	2008-02-13 04:00	53° 22' 9" N 3° 20' 1" W	
929250	2008-02-13 06:35	53° 22' 9" N 3° 20' 1" W	
929262	2008-02-13 07:00	53° 22' 9" N 3° 20' 1" W	

929274	2008-02-13 07:31	53° 22' 9" N 3° 20' 1" W	
929286	2008-02-13 08:01	53° 22' 9" N 3° 20' 1" W	
929298	2008-02-13 08:30	53° 22' 9" N 3° 20' 1" W	
929305	2008-02-13 09:00	53° 22' 9" N 3° 20' 1" W	
929317	2008-02-13 09:33	53° 22' 9" N 3° 20' 1" W	
929329	2008-02-13 10:02	53° 22' 8" N 3° 20' 0" W	
929330	2008-02-13 10:32	53° 22' 9" N 3° 19' 58" W	
929342	2008-02-13 11:03	53° 22' 8" N 3° 19' 55" W	
929354	2008-02-13 11:32	53° 22' 7" N 3° 19' 55" W	
929366	2008-02-13 12:01	53° 22' 7" N 3° 19' 55" W	
929378	2008-02-13 12:31	53° 22' 8" N 3° 19' 55" W	

929391	2008-02-13 13:00	53° 22' 8" N 3° 19' 54" W	
929409	2008-02-13 13:31	53° 22' 8" N 3° 19' 55" W	
929410	2008-02-13 13:59	53° 22' 1" N 3° 19' 14" W	
929422	2008-02-14 10:33	53° 22' 9" N 3° 13' 48" W	
929434	2008-02-14 10:59	53° 22' 9" N 3° 13' 48" W	
929446	2008-02-14 11:30	53° 22' 8" N 3° 13' 48" W	
929458	2008-02-14 12:00	53° 22' 7" N 3° 13' 49" W	
929471	2008-02-14 12:30	53° 22' 5" N 3° 13' 42" W	
929483	2008-02-14 12:57	53° 22' 6" N 3° 13' 41" W	
929495	2008-02-14 13:29	53° 22' 5" N 3° 13' 41" W	
929502	2008-02-14 14:59	53° 22' 5" N 3° 13' 41" W	

929514	2008-02-14 15:31	53° 22' 5" N 3° 13' 41" W	
929526	2008-02-14 15:59	53° 22' 6" N 3° 13' 43" W	
929538	2008-02-14 16:32	53° 22' 9" N 3° 13' 48" W	
929551	2008-02-14 17:01	53° 22' 8" N 3° 13' 48" W	
929563	2008-02-14 17:31	53° 22' 9" N 3° 13' 47" W	
929575	2008-02-14 18:01	53° 22' 9" N 3° 13' 47" W	
929587	2008-02-14 20:34	53° 22' 9" N 3° 13' 47" W	
929599	2008-02-14 21:01	53° 22' 9" N 3° 13' 47" W	
929606	2008-02-14 21:31	53° 22' 9" N 3° 13' 47" W	
929618	2008-02-14 22:01	53° 22' 9" N 3° 13' 48" W	
929631	2008-02-14 22:30	53° 22' 9" N 3° 13' 48" W	

929643	2008-02-14 22:59	53° 22' 8" N 3° 13' 49" W	
929655	2008-02-14 23:30	53° 22' 7" N 3° 13' 49" W	
929667	2008-02-15 00:00	53° 22' 7" N 3° 13' 49" W	
929679	2008-02-15 00:30	53° 22' 7" N 3° 13' 47" W	
929680	2008-02-15 01:04	53° 22' 6" N 3° 13' 45" W	
929692	2008-02-15 01:31	53° 22' 5" N 3° 13' 42" W	
929711	2008-02-15 02:00	53° 22' 4" N 3° 13' 42" W	
929723	2008-02-15 02:29	53° 22' 4" N 3° 13' 41" W	
929735	2008-02-15 03:58	53° 22' 4" N 3° 13' 42" W	
929747	2008-02-15 04:32	53° 22' 4" N 3° 13' 42" W	
929759	2008-02-15 05:02	53° 22' 5" N 3° 13' 46" W	

929760	2008-02-15 05:32	53° 22' 5" N 3° 13' 46" W	
929772	2008-02-15 06:02	53° 22' 6" N 3° 13' 46" W	
929784	2008-02-15 06:31	53° 22' 7" N 3° 13' 46" W	
929796	2008-02-15 07:02	53° 22' 7" N 3° 13' 46" W	
929803	2008-02-15 07:32	53° 22' 7" N 3° 13' 46" W	
929815	2008-02-15 08:03	53° 22' 8" N 3° 13' 47" W	
929827	2008-02-15 08:32	53° 22' 8" N 3° 13' 47" W	
929839	2008-02-15 09:00	53° 22' 8" N 3° 13' 47" W	
929840	2008-02-15 09:31	53° 22' 7" N 3° 13' 47" W	
929852	2008-02-15 10:30	53° 22' 7" N 3° 13' 48" W	
929864	2008-02-15 10:59	53° 22' 7" N 3° 13' 48" W	

	9298 76	2008-02-15 11:31	53° 22' 8" N 3° 13' 49" W	

1 GPS positioning system

Raw suspended particulate material optical sensor output
Density of the water column
Visible waveband radiance and irradiance measurements in the water column
Transmittance and attenuance of the water column
Dissolved oxygen parameters in the water column
Raw fluorometer output
Temperature of the water column
Salinity of the water column
Vertical spatial coordinates
Date and time
Horizontal spatial co-ordinates
Platform or instrument orientation
Bathymetry and Elevation
Horizontal platform movement

[Show series]

BODC id	Date/Time	Location	Doc.
932116	2008-02-12 09:11 — 2008-02-15 17:00	53° 19' 18" N 4° 1' 59" W — 53° 31' 1" N 3° 12' 47" W	

1 Meteorological data logger

Raw suspended particulate material optical sensor output

	Density of the water column Visible waveband radiance and irradiance measurements in the water column Transmittance and attenuance of the water column Dissolved oxygen parameters in the water column Raw fluorometer output Temperature of the water column Salinity of the water column Vertical spatial coordinates Date and time Horizontal spatial co-ordinates Platform or instrument orientation Bathymetry and Elevation Horizontal platform movement Date and time Wind speed and direction Horizontal spatial co-ordinates Air temperature Solar Radiation Atmospheric humidity Air pressure [Show series] **BODC id** / **Date/Time** / **Location** / **Doc.** 932104 / 2008-02-12 09:11 — 2008-02-15 17:00 / 53° 19' 18" N 4° 1' 59" W — 53° 31' 1" N 3° 12' 47" W / 
1 Ship's non-toxic	Raw suspended particulate material optical sensor

supply	output Density of the water column Visible waveband radiance and irradiance measurements in the water column Transmittance and attenuance of the water column Dissolved oxygen parameters in the water column Raw fluorometer output Temperature of the water column Salinity of the water column Vertical spatial coordinates Date and time Horizontal spatial co-ordinates Platform or instrument orientation Bathymetry and Elevation Horizontal platform movement Date and time Wind speed and direction Horizontal spatial co-ordinates Air temperature Solar Radiation Atmospheric humidity Air pressure Raw suspended particulate material optical sensor output Date and time Transmittance and attenuance of the water column Horizontal spatial co-ordinates Raw fluorometer output Temperature of the water column Salinity of the water column

[Show series]

BODC id	Date/Time	Location	Doc.
932097	2008-02-12 09:11 — 2008-02-15 17:00	53° 19' 18" N 4° 1' 59" W — 53° 31' 1" N 3° 12' 47" W	

Discrete samples

84 CTD frame plus rosette sampler

Raw suspended particulate material optical sensor output
Density of the water column
Visible waveband radiance and irradiance measurements in the water column
Transmittance and attenuance of the water column
Dissolved oxygen parameters in the water column
Raw fluorometer output
Temperature of the water column
Concentration of suspended particulate material in the water column
Salinity of the water column
Raw light meter output