

Cruise Report 18-22nd May 2009

Cruise Personnel: Tom Rippeth (PSO), Yueng-Djern Lenn, Ben Lincoln, Chris Old, Ray Wilton, Ben Powell, Louiza Norman, Suzie Jackson and Clare Davies (Liverpool University).

Cruise Objectives:

- 1) Deployment of ADCP and thermistor moorings in the seasonally stratified part of the Western Irish Sea.
- 2) 50 hour time series of microstructure measurements next to the mooring using the VMP profiler.
- 3) CTD profiles and water samples for chemical analysis.

Report:

Sailing was delayed due to poor weather, however, as this delay did not exceed the planned the redundancy time built into the cruise plan, it did not impinge on the planned scientific programme.

All of the cruise objectives where met, as per timetable given below. Two problems were encountered:

- 1) Chain/ wire mixed used in mooring lines caused the winch to jam. This was rectified by removing most of the chain from the moorings.
- 2) Problems were encountered using the ships hydraulic system to power the VMP winch. This problem has since been rectified.

Neither problem impinged on the scientific programme significantly.

Timetable

Monday 18th May 2009

17.00 GMT Depart Menai Bridge. Sailing delayed due to poor weather conditions and forecast.
19.00 GMT Anchor overnight in Bull Bay, Anglesey.

Tuesday 19th May 2009

10:21	Arrive at planned mooring site	53° 46.916 N	005° 38.004 W
10:45	Abandon mooring deployment due to chain collapse		
14.45	Release subsurface ADCP & thermistor chain as single mooring		
	Position	53° 46.916 N	005° 38.004 W
17:18	CTD cast #1 – fired 11 bottles		
		53° 47.39' N	005° 37.74' W
17:30 -18:30	Problem with VMP winch clutch, replaced with spare part		
18:43 -19:50	8 VMP casts	53° 47.39' N	005° 37.74' W
20:04 - 20:50	7 VMP casts		
21:13 – 22:00	5 VMP casts	53° 46.941' N	005° 37.493' W
22:15 – 23:15	6 VMP casts	53° 47.591' N	005° 36.927' W

23:19	CTD cast #2	fired 12 bottles	
		53° 46.778' N	005° 36.962' W
23:46 – 00:30	5 VMP casts	53° 46.423' N	005° 36.785' W

Wednesday 20th May 2009

	6 VMP casts	53° 46.774' N	005° 36.720' W
01:03 – 02:00	6 VMP casts	53° 47.656' N	005° 36.826' W
02:14 – 03:00	6 VMP casts	53° 46.920' N	005° 36.929' W
03:17 – 04:00	5 VMP casts	53° 46.652' N	005° 36.967' W
04:21 – 05:05	5 VMP casts	53° 47.673' N	005° 37.120' W
05:11	CTD cast #3	12 bottles fired	
		53° 47.792' N	005° 37.853' W
05:37 – 06:30	Hydraulic problem caused line puller problem		
06:32 – 07:10	5 VMP casts	53° 47.480' N	005° 36.862' W
07:30	CTD cast #4	12 bottles fired	
		53° 47.211' N	005° 37.140' W
07:45 – 08:05	Further delay due to hydraulic problem		
08:08 – 09:30	9 VMP casts	53° 47.437' N	005° 36.943'
10:06 – 11:00	6 VMP casts	53° 47.266' N	005° 37.034'
11:20	CTD cast #5	12 bottles fired	
		53° 46.741' N	005° 37.723' W
11:46	S2 Shear probe changed from M441 to M423		
12:27 – 13:10	5 VMP casts	53° 46.864' N	005° 37.575' W
13:31	S12 Shear probe changed from M440 to M441		
13:59 – 15:00	7 VMP casts	53° 47.868' N	005° 36.460' W
15:03 – 15:35	4 VMP casts	53° 47.451' N	005° 37.112' W
17:07	CTD cast #6	12 bottles fired	
		53° 47.330' N	005° 37.211' W
17:35 – 21:00	24 VMP casts	53° 47.812' N	005° 36.932' W
21:12	CTD cast #7	no bottles fired	
		53° 46.963' N	005° 37.157' W
21:32 – 22:15	6 VMP casts	53° 47.048' N	005° 36.970' W
21:35 – 23:00	5 VMP casts	53° 47.048' N	005° 36.970' W
23:21	CTD cast #8	no bottles fired	
		53° 46.963' N	005° 37.157' W
23:-40 – 1:10	10 VMP casts	53° 46.963' N	005° 37.157' W

Thursday 21st May 2009

01:20 – 02:00	5 VMP casts	53° 46.685' N	005° 36.814' W
02:04	CTD cast # 9	no bottles fired	
		53° 46.954' N	005° 36.917' W
02:24 – 03:56	11 VMP casts	53° 48.068' N	005° 37.305' W
04:08 – 04:42	5 VMP casts	53° 49.203' N	005° 37.161' W
05:06	CTD cast #10	12 bottles fired	
05:10 – 05:50	300 kHz ADCP mooring deployed		
		53° 46.997' N	005° 38.195' W
06:14 – 08:50	18 VMP casts	53° 47.334' N	005° 37.314' W
09:00	CTD cast #11	53° 47.753' N	005° 36.525' W

09:25 – 11:20 11:34	19 VMP casts CTD cast #12	53° 47.753' N 12 bottles fired	005° 36.525' W
11.52 – 13:50 14:00	13 VMP casts CTD cast #13	53° 45.336' N 53° 45.316' N no bottles fired	005° 37.775' W 005° 37.546' W
14.18 – 15:30 15:40 – 16:55 17:15	10 VMP casts 11 VMP casts CTD cast #14	53° 47.195' N 53° 48.431' N 53° 48.903' N no bottles fired	005° 37.373' W 005° 37.277' W 005° 37.214' W
17:30 – 19:50 20:10	17 VMP casts CTD cast #15	53° 47.827' N 53° 47.831' N no bottles fired	005° 36.806' W 005° 36.727' W
22:27	CTD cast #16	53° 46.751' N no bottles fired	005° 37.317' W 130m
23.12	CTD cast #17	53° 43.953' N no bottles fired 53° 41.860' N	005° 30.131' W 86m 005° 22.035' W

Friday 22st May 2009

00:01	CTD cast #18	no bottles fired 053° 38.929' N	005° 12.045' W
06.00	Alongside, Menai Bridge.		