

RV FREDERICK RUSSELL

CRUISE REPORT FR 4/84

4 March 1984 - 16 March 1984

Participants:

R D Pingree	IOS/MBA (Principal Scientist)
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Aims:

To lay two satellite tracked ARGOS drifting buoys close to the island of Guernsey, one on each side.

To perform a survey of the Bay of Seine, with continuous underway sampling of nutrients and fluorescence. CTD station dips to include pumped samples for plankton analysis.

Lay two moorings 076 and 077 with current meters and a thermistor chain at the shelf break. Complete an echo-sounding survey of the area of shelf break where further moorings were to be laid in June. Launch a satellite tracked buoy.

Procedure:

RV Frederick Russell departed Plymouth on the evening of Sunday 4/3/84, heading for the first CTD station at position E1. This station was completed by 2350 and course set for the Channel Isles. The Argos satellite tracked drifting buoy 1819 was deployed about 6 nm west of Guernsey at 1415 5/3/84 and station CTD2 completed. The vessel then passed round the north of the island to launch buoy 1817. The deployment 6 nm ENE at the island was followed by 24 hours of surface sampling in the area south and south-west of Jersey. Buoy 1816 was then deployed between Guernsey and Jersey, the buoy was tracked as it travelled around Jersey, with surface samples and 2 CTD stations alongside the buoy. On 6/3/86 at 1215 the buoy was recovered and the vessel proceeded to the Bay of Seine. A zig-zag survey as shown on the cruise track occupied the next 48 hours with surface samples and nine CTD and pump sampling stations.

Buoy 1817 had been recovered by a linking vessel, and was transferred to the Frederick Russell off Alderney at 1300 9/3/84. The buoy was prepared for redeployment and launched close to the original position, but further NE of Guernsey. The vessel then steamed to Concarneau, arriving 1030 10/3/84.

The vessel departed Concarneau the next morning and steamed to the shelf break at 5030'N, before taking a course along the 200 m contour to the position of moorings 076 and 077. During these two legs, five CTD stations were completed, with the weather rapidly deteriorating. Most of 12 March was spent with the vessel *hove to*, waiting for conditions calm enough to lay the moorings. Eventually the pinger was wire tested and both rigs deployed, rig 076 at 1120 13/3/84 and rig 077 at 1520.

The vessel steamed SW for a deep CTD station in 3000 m of water, before starting the run back to the Channel Isles. The proposed sounding survey was abandoned.

Much of the next two days was spent *hove to* in the gale, eventually arriving SW of Guernsey at 2130 15/3/84. A fruitless search was made for the Argos buoys with the direction finding radio before shortage of time forced the return run to Falmouth, arriving at 0800 16/3/84.

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DATE	GMT	STATION POSITIONS		STATION
		LAT	LON	
4MAR84	2000	50 12.4N	4 12.0W	PLYMOUTH
4MAR84	2222	50 02.0N	4 22.0W	CTD1
5MAR84	1413	49 26.4N	2 50.2W	CTD2 BUOY1819 DEPLOYED
5MAR84	1750	49 31.5N	2 18.2W	BUOY1817 DEPLOYED
6MAR84	1430	49 17.3N	2 19.4W	CTD3 BUOY1816 DEPLOYED
6MAR84	1630	49 12.1N	2 20.1W	CTD4
7MAR84	1230	49 05.3N	2 20.6W	BUOY1816 RECOVERED
7MAR84	2300	49 37.3N	1 06.7W	CTD5 LEG13
8MAR84	0342	49 49.1N	0 47.8W	CTD6 LEG15
8MAR84	0800	49 28.5N	0 34.2W	CTD7 LEG16
8MAR84	0933	49 40.2N	0 29.9W	CTD8
8MAR84	1130	49 48.7N	0 28.2W	CTD9
8MAR84	1230	49 50.6N	0 22.8W	LEG17
8MAR84	1400	49 37.2N	0 17.5W	CTD10
8MAR84	1700	49 21.8N	0 07.7W	CTD11 LEG18
8MAR84	2200	49 41.4N	0 04.9W	CTD12 LEG19
9MAR84	0017	49 54.9N	0 09.9E	CTD13 LEG20
9MAR84	0237	49 45.5N	0 00.3W	LEG21
9MAR84	0430	50 00.8N	0 17.9W	LEG22
9MAR84	0500	50 05.2N	0 22.1W	LEG23
9MAR84	0600	49 55.8N	0 23.6W	LEG24
9MAR84	1300	49 40.0N	2 10.0W	BUOY 1817 FROM FISHING VESSEL
9MAR84	1510	49 35.2N	2 23.6W	LEG25
9MAR84	1530	49 34.0N	2 27.1W	BUOY 1817 REDEPLOYED
9MAR84	1600	49 32.9N	2 34.0W	LEG26
10MAR84	0417	48 05.5N	5 11.3W	LEG27
10MAR84	1030	47 47.1N	3 57.7W	CONCARNEAU
11MAR84	1000	47 42.2N	3 41.5W	CTD14
11MAR84	1410	47 36.8N	3 49.8W	CTD15
11MAR84	1646	47 29.4N	3 50.8W	CTD16
11MAR84	2230	47 29.3N	4 35.1W	CTD17
12MAR84	0300	47 36.0N	5 15.4W	CTD18
13MAR84	1120	47 51.5N	6 21.7W	RIG076A GALEB
13MAR84	1524	47 36.4N	6 32.3W	RIG077A
13MAR84	2000	47 09.9N	6 46.1W	CTD19
14MAR84	1100	48 31.9N	6 03.7W	HOVE TO
15MAR84	2130	49 22.1N	2 39.7W	SW GUERNSEY
16MAR84	0800	50 08.9N	5 01.1W	FALMOUTH

} current meter rigs

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