Not to be cited without prior reference to the FRS Marine Laboratory, Aberdeen

FRV *Scotia*

Cruise 1208S (Part 1)

PROGRAMME

26 September – 9/10 October 2008

Loading: Aberdeen
Unloading: Aberdeen
Half landing: Ullapool

Personnel

G Slesser	In charge
M Geldart	
D Lichtman	
D Watson	
N Collie	
J Turriff	
D Mayor	Aberdeen University
E Lines	Aberdeen University

Out-turn days per project: 14 AE11R0

Gear

Sea-Bird CTD, ADCP and Current Meter Moorings, Thermosalinograph, Recovery Trawl, Maxi-corer.

Objectives

1. Perform hydrographic surveys along the JONSIS standard section in the northern North Sea.

2. Perform hydrographic surveys along the standard Faroe Shetland Channel sections.

3. Service two ADCP moorings in the Faroe Shetland Channel.

4. Recover and redeploy two current meter moorings in the Fair Isle Channel.

5. Perform a CTD survey East of Shetland.

6. Take core samples for benthic productivity in the Faroe-Shetland.

7. Perform CTD surveys along the Shelf Edge

Procedure

On sailing from Aberdeen the *Scotia* will carry out trial CTD deployments. Thereafter, passage will be made to the start of the JONSIS standard line which will be surveyed using the CTD/rosette package. On completion of the JONSIS line two current meter moorings (59°

43.34’N 001° 41.53’W, 59° 28.35’N 002° 01.78’W) will be recovered and redeployed in the Fair Isle Channel. Passage will then be made to east of Shetland Islands where three CTD lines east of the Shetland Islands will also be sampled.

The *Scotia* will then proceed with hydrographic survey work in the Faroe-Shetland Channel. The two standard lines, the Fair Isle - Munken and the Nolso - Flugga sections will be worked. This will be followed by the recovery, servicing and redeployment of two NWOCE ADCP moorings, NWSD (60° 26.97'N 004° 22.54'W) and NWSE (60° 16.62'N 004° 20.08'W). During the survey of the Nolso-Flugga section deep sea coring will take place at Nolso - Flugga station 4.

Following this, if time allows, CTD stations will be sampled along the shelf edge prior to the end of the first part of the cruise.

The first part of the cruise will end at Ullapool where an exchange of staff will take place.

The thermosalinograph will be run throughout the cruise.

(NOTE: The survey will take *Scotia* into the Foinaven Development Area. This is now standard practice, and normal on-site communications will be established with the Foinaven co-ordinating officer).

Normal contacts will be maintained with the laboratory.

J A Morrison
11 September 2008

JONSIS Line

	Name	Latitude	Longitude	Depth	Spacing
01	JO 1	59 17.00' N	02 14.00' W	75 m	
02	JO 1A	59 17.00' N	02 5.00' W	90 m	8.5 km
03	JO 2	59 17.00' N	01 56.00' W	100 m	8.5 km
04	JO 3	59 17.00' N	01 48.00' W	80 m	7.6 km
05	JO 4	59 17.00' N	01 40.00' W	90 m	7.6 km
06	JO 5	59 17.00' N	01 30.00' W	95 m	9.5 km
07	JO 6	59 17.00' N	01 20.00' W	110 m	9.5 km
08	JO 6A	59 17.00' N	01 10.00' W	120 m	9.5 km
09	JO 7	59 17.00' N	01 0.00' W	125 m	9.5 km
10	JO 8	59 17.00' N	00 40.00' W	120 m	18.9 km
11	JO 9	59 17.00' N	00 20.00' W	140 m	18.9 km
12	JO10	59 17.00' N	00 0.00' W	135 m	18.9 km
			Totals	1180 m	126.9 km

Fair Isle - Munken (Ammended for presence of Foinaven oil platform)

	Name	Latitude	Longitude	Depth	Spacing
01	FIM-01	60 10.00' N	03 44.00' W	150 m	
02	SEFOS	60 13.00' N	03 51.50' W	170 m	8.9 km
03	FIM-02	60 16.00' N	03 59.00' W	200 m	8.9 km
04	SEFOS	60 18.00' N	04 04.50' W	330 m	6.3 km
05	*FIM-03*	*60 20.25' N*	*04 09.00' W*	*390 m*	*6.3 km*
06	FIM-04	60 25.00' N	04 19.00' W	655 m	12.4 km
07	FIM-05	60 29.00' N	04 26.00' W	995 m	9.8 km
08	FIM-06	60 35.00' N	04 45.00' W	1090 m	20.6 km
09	FIM-6a	60 38.00' N	04 54.00' W	1030 m	9.9 km
10	FIM-07	60 43.00' N	05 06.00' W	915 m	14.3 km
11	FIM-08	60 47.00' N	05 16.00' W	830 m	11.7 km
12	FIM-09	60 51.00' N	05 29.00' W	600 m	13.9 km
13	FIM-10	61 02.00' N	05 57.00' W	280 m	32.4 km
14	FIM-11	61 12.00' N	06 22.00' W	240 m	
			Totals	7,585.00	155.40

Nolso-Flugga

	Name	Latitude	Longitude	Depth	Spacing
01	NOL-01	60 56.00' N	01 00.00' W	110 m	
02	SEFOS	60 58.70' N	01 17.70' W	125 m	16.7 km
03	SEFOS	61 01.40' N	01 35.40' W	155 m	16.7 km
04	NOL-02	61 04.00' N	01 53.00' W	270 m	16.7 km
05	SEFOS	61 06.00' N	02 01.50' W	440 m	8.5 km
06	NOL-03	61 08.00' N	02 10.00' W	550 m	8.5 km
07	SEFOS	61 09.30' N	02 17.50' W	630 m	7.1 km
08	NOL-3a	61 11.00' N	02 25.00' W	730 m	7.4 km
09	NOL-04	61 14.00' N	02 40.00' W	1080 m	14.5 km
10	NOL-05	61 21.00' N	03 10.00' W	1370 m	29.6 km
11	NOL-06	61 28.00' N	03 42.00' W	1235 m	31.2 km
12	NOL-07	61 35.00' N	04 15.00' W	990 m	31.9 km
13	NOL-08	61 42.00' N	04 51.00' W	235 m	34.2 km
14	NOL-09	61 49.00' N	05 21.00' W	180 m	29.3 km
15	NOL-10	61 54.00' N	05 45.00' W	290 m	22.9 km
16	NOL-11	62 00.00' N	06 12.00' W	125 m	26.0 km
			Totals	8250 m	301.20 km