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FRV "SCOTIA"

CRUISE 9/87

9SR87

Report

9-29 September 1987

Personnel

J H A Martin	PSO
E W Henderson	PSO
R Payne	HSO
G Slesser	HSO
W R Turrell	HSO
R D Adams	SO
A Rothwell	(Visitor NCC)

Objectives

1. To lay 13 current meter moorings, eight in the North Sea, four west of Orkney and one west of Shetland as part of the "ACE" project.
2. To recover two current meter moorings from the Faroe-Shetland Channel and work hydrographic sections.
3. To do an extensive hydrographic survey adjacent to the Fair Isle and Dooley currents.
4. To release and recover an Argos satellite buoy in the Fair Isle area.
5. To collect radio-caesium samples.

Narrative

The "Scotia" sailed from Aberdeen on 9 September and immediately proceeded to lay the eight moorings in the North Sea and do associated hydrography. Strong winds held up the mooring laying on occasions but the time was employed doing hydrographic sections. The remaining moorings were deployed west of Orkney and off Foula before the "Scotia" proceeded to Lerwick for the half landing on 21 September.

The following day "Scotia" sailed northwards and proceeded to work both the Nolsø, Faroes-Flugga, Shetland and the Munken, Faroes-Fair Isle hydrographic sections. Very strong winds however forced the "Scotia" to dodge for 24 hours before the two current meter moorings deployed off the Faroes shelf could be recovered. The remainder of the cruise was used to do a hydrographic survey of the Fair Isle area, and adjacent to the current meter moorings deployed in the North Sea. Radio-caesium samples were collected. The Argos buoy was deployed for a short time but lost its drogue.

"Scotia" docked in Aberdeen on the morning of 29 September 1987.

Results

The current meters deployed in the Faroe-Shetland Channel worked well and showed internal waves of 4 day periodicity associated with atmospheric forcing. The hydrography of the area revealed the presence of a previously unexpected water mass with a salinity less than 34.9 at around 700 metres. It is thought to be associated with the low salinity of the North Atlantic water of the mid 1970's.

There was nothing unusual about the hydrography of the northern North Sea but final analysis will depend on further observations taken throughout the ACE project.

J H A Martin

25 May 1988



