

R1/12

Not to be cited without prior reference to the Laboratory

FRV "Scotia"

Cruise 13/89 Part 2

13pt2SR89

REPORT

12-20 December 1989

Personnel

W R Turrell	HSO (in charge)
R Payne	HSO
G Slessor	HSO
J C McKie	HSO
R D Adams	SO
F Brown (Mrs)	ASO

Objectives

1. To work hydrographic stations east of the Shetland Isles as a preliminary investigation of the inflow of Atlantic water to the northern North Sea.
2. To work hydrographic stations east of the Orkney Islands (JONSIS line) and east of the Scottish mainland.
3. To collect caesium samples as required.

Narrative

On sailing from Aberdeen on Tuesday 12 December FRV "Scotia" proceeded to 57°30'N 0°40'W where a northward running CTD section commenced. On completion of this section, the ship worked lines of hydro stations between Orkney and Shetland, and then east of Shetland moving progressively northwards. Once work was completed east of Shetland "Scotia" performed hydro stations west of Shetland, moving south until weather forced work to be abandoned. In all 48 hours were lost due to adverse weather conditions. After sheltering, the ship worked east along the JONSIS line, and then south west along the EC line.

Results

In all 83 CTD stations were completed. Preliminary results (see attached charts) show a moderate flow of mixed Atlantic/coastal water through the Orkney/Shetland gap. Some evidence exists for a more northerly influx of Atlantic water. The storm during the trip resulted in a lowering of temperatures in the North Sea by approximately 0.4°C.

W R Turrell

25 January 1990

Seen in draft: H A MacKenzie



