Indexed .

PD

R1/12

Not to be cited without prior reference to the Laboratory

FRV "SCOTIA"

CRUISE 10/88

10SR88

35.

and the figure of the second second

Report

17 September-6 October 1988

Personnel

E W Henderson PSO
W R Turrell HSO
R Payne HSO
G Slesser HSO
J C McKie HSO
R D Adams SO
Mrs F Brown ASO

Objectives

- 1. To deploy four current meter moorings in the North Sea.
 - 2. To recover two current meter moorings west of Orkney and two west of Shetland which were deployed in June 1988.

en de la companya de

and the second of the second o

"我们的我的我们的,这个一种大型的,我们就是我们

- 3. To conduct a hydrochemical survey of the Clyde Basin and recover two current meter moorings on the Great Plateau which were deployed in June 1988.
- 4. To carry out an extensive hydrographic survey in the area of the Fair Isle and Dooley currents in the North Sea and in the area west of Orkney and Shetland.
- 5. To work hydrographic stations along the Fair Isle-Munken, Farce and the Nolso, Farce-Flugga, Shetland sections.
- 6. To collect water samples for radio caesium samples.

Narrative

"Scotia" sailed at 1130 on Saturday 17 September and immediately began to work hydrographic stations north-east of Kinnairds Head. Three current meter moorings were deployed the following day and the fourth on the morning of Monday 19 September. Hydrographic studies were resumed and were carried out westwards to the area west of Orkney and then southwards to Cape Wrath. Early on the morning of 21 September, "Scotia" left for the Firth of Clyde.

On arrival in the Clyde on 22 September, both current meter moorings were completely recovered and a hydrochemical survey was started. On completion of this survey on the morning of 24 September, "Scotia" proceeded northwards again to resume work around Orkney.

Both current meter moorings west of Orkney were completely recovered during the morning of 25 September when hydrographic work was resumed. This continued, with a short break due to bad weather, until "Scotia" was due to depart for Kirkwall for the half-landing. However, owing to the lack of a berth, the half-landing was delayed for 24 hours and the opportunity was taken to continue hydrographic studies east of Orkney. "Scotia" docked in Kirkwall for the half-landing at 1200 on 27 September.

"Scotia" sailed from Kirkwall at 1400 on 28 September and commenced an intensive grid of CTD stations east of Shetland. This survey was interrupted by bad weather for two 24 hour periods and was completed on 2 October. Both the current meter moorings west of Shetland were completely recovered on 3 October.

"Scotia" then proceeded to work hydrographic stations using the "Smart" CTD in the area east of Orkney and north-east of Kinnairds Head before docking in Aberdeen at 0930 on 6 October.

Results

All 12 current meters and one pressure recorder appear to have functioned well. The data tapes await processing and analysis. The "Smart" CTD performed satisfactorily throughout the cruise and data from this instrument also await further analysis.

Owing to the 48 hours lost due to storm force winds, and the need to complete the work in the North Sea, there was insufficient time to carry out any work in the Farce-Shetland Channel.

All nutrient samples collected during the cruise were analysed on board and the results will be more closely studied once the salinity samples have been analysed.

At one station in the Firth of Clyde and at one west of Orkney, replicate samples for phosphate analysis were collected. Samples were preserved in different ways to determine if these affected the results obtained from subsequent analysis.

The pre-production version of the Marine Position Recorder (MPR) was thoroughly tested during the cruise. Preliminary analysis of the data logged by the MPR indicate that it was functioning extremely well apart from not logging the switching on and off of the mains power supply and losing the navigation signal off Kinnairds Head.

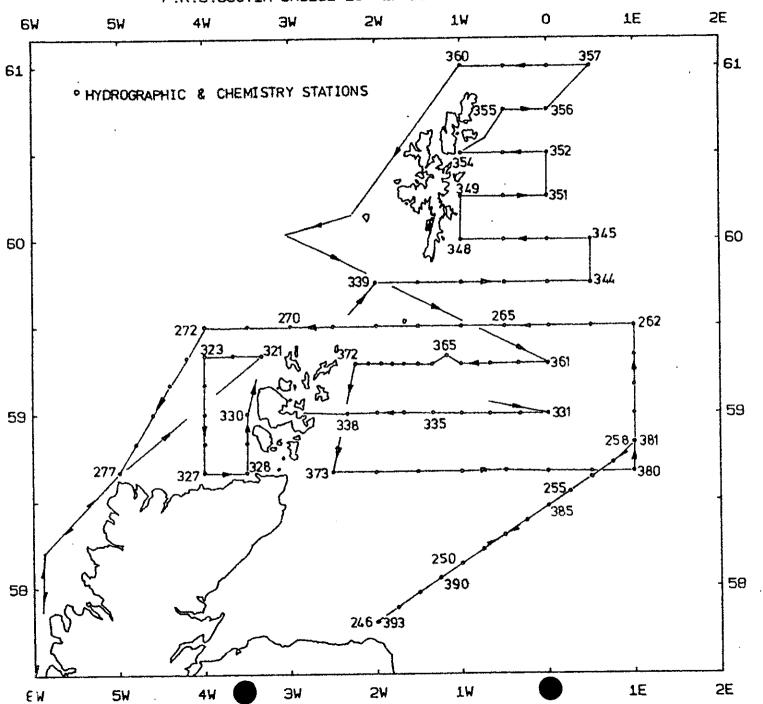
Water samples for radio caesium analysis were collected at four positions during the cruise.

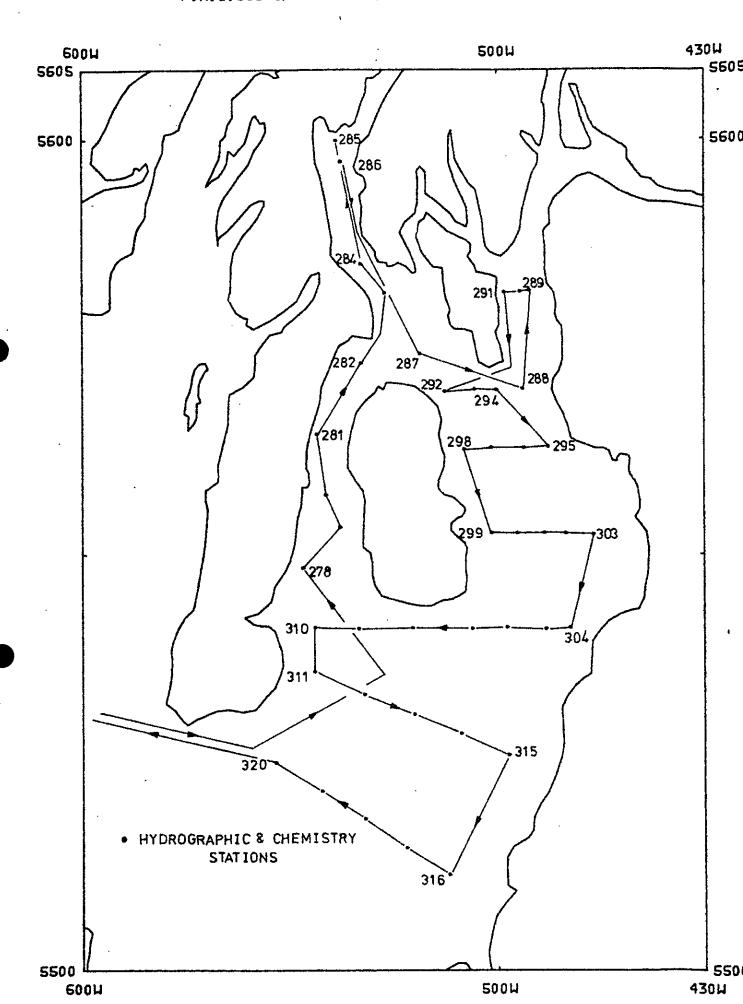
E W Henderson

17 January 1989

Seen in draft: N E McInnes, CO

F.R.S.SCOTIA CRUISE 10 17 SEPT. - 5 OCT. 1988





1.00

