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

FRV *Clupea*

Cruise 0895C

REPORT

1-12 May 1995

Ports

Loading:	Mallaig
Unloading:	Fraserburgh

Personnel

G Slesser	HSO (in charge)
RD Adams	SO
R Garvine	UCNW 1-4 May
D Boon	UCNW 1-9 May
K Hawesburgh	UCNW 1-4 May
A Terrats	Spanish Visitor 1-4 May
AE Hill	UCNW 4-9 May

Objectives

1. To recover five Argos tracked, drifting buoys in the southern Minch.

2. To conduct a hydrographic and chemical survey of the area.

Out-turn days per project - 12 days BGC1.

Narrative

The Marine Laboratory and UCNW staff travelled to join *Clupea* on 1 May 1995. Recovery of the drifting buoys commenced on the morning of 2 May west of Barra and South Uist and completed by early afternoon. One of the drifter buoys was redeployed west of Tiree in the early evening. On 3 May three of the drifter buoys were redeployed in the southern Minch. The hydrographic and chemical survey of the southern Minch commenced on the afternoon of 3 May using a SEABIRD SEALOGGER CTD and rosette sampler. Sampling work continued on the morning of 4 May until the afternoon when *Clupea* returned to Mallaig for change over of UCNW staff. On 5-6 May further hydrographic and chemical sampling was done. On 7 May the four drifter buoys were recovered in the southern Minch. The remaining part of 7 May and most of 8 May was employed in further sampling work before returning to Mallaig. On the morning of 9 May the UCNW staff disembarked from *Clupea* at Mallaig. The remainder of the sampling stations were completed by late evening 9 May.

On 10-11 May *Clupea* made passage to Fraserburgh. *Clupea* was unloaded on 12 May and scientific staff left the vessel that morning.

Objectives

1. Four of the five drifting buoys were successfully recovered. The fifth buoy was left to allow monitoring of the current west of the Hebrides. The four drifting buoys were redeployed at new positions to further examine the extent of the gyre and later recovered.

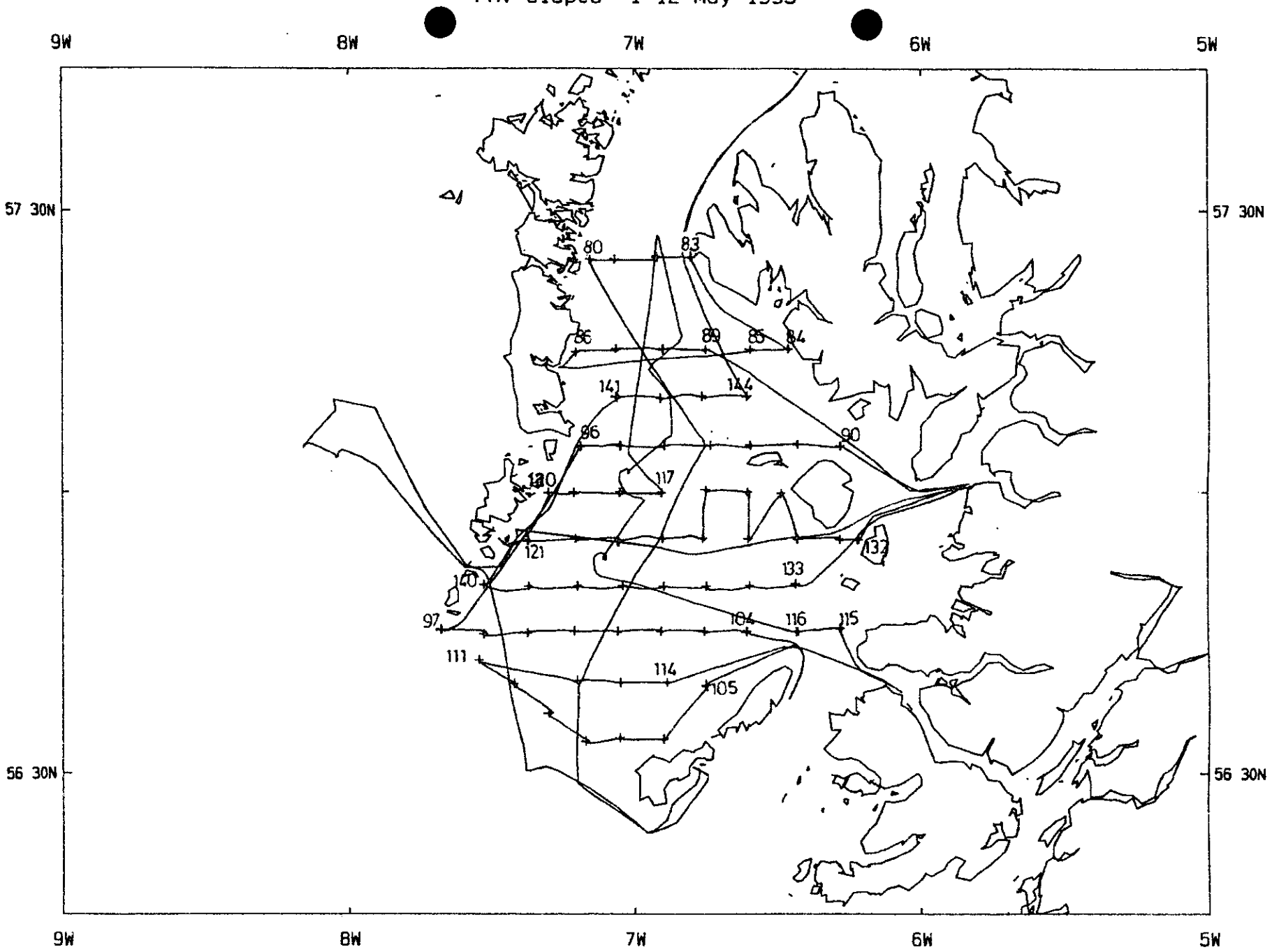
2. A total of 65 temperature and salinity profiles were measured using a CTD. Forty-four rosette sampler stations were worked and phosphate, nitrate, silicate, chlorophyll and ammonia samples were taken. All samples were filtered and frozen for later analysis at the laboratory. Salinity and temperature samples were taken periodically to allow calibration of the CTD and the thermosalinograph.

Results

Preliminary results from the drifting buoys and CTD stations show the presence of a gyre circulating in the southern Minch. Further work in the laboratory on these data will be needed to examine the extent and composition of the gyre. The chemistry and chlorophyll measurements when analysed will be used to relate *Nephrops* settlement to primary and secondary production. In addition the results from these data collected will be used to produce a Quality Satus Report by the year 2000.

G Slesser
23 May 1995

Seen in draft: G Geddes, OIC, FRV *Clupea*


FRV Clupea 1-12 May 1995
9W
8W
7W
6W
5W
57 30N
56 30N
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83
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