

MINISTRY OF AGRICULTURE, FISHERIES AND FOOD  
FISHERIES LABORATORY, LOWESTOFT, SUFFOLK, ENGLAND

1991 RESEARCH VESSEL PROGRAMME

REPORT: RV CORYSTES : CRUISE 11

(PROVISIONAL: Not to be quoted without prior reference to the author)

STAFF:

T C Doddington  
W C Camplin (7-15 November)  
D G Turner (15-27 November)  
W J Meadows  
R J Read  
P Caldwell  
A J Baxter  
T A Bailey  
N D Pearson )  
J W Read ) 15 November  
J M Rees )  
M Green (Cambridge )

DURATION:

7-27 November

LOCALITY:

North Sea, English Channel, Bristol Channel, Irish Sea, West and North of Scotland,  
Shetland, Orkneys

AIMS:

1. To continue examination of the distribution of caesium-134 and caesium-137 in coastal waters of the British Isles.
2. To determine concentrations of tritium in the Bristol Channel and other selected areas.
3. To lay the near bed velocity recorder and associated guard buoys near St Bees Head.

NARRATIVE:

RV CORYSTES sailed from Lowestoft at 0930 h on 7 November. Twenty surface samples were taken on passage to the Bristol Channel using the ships clean seawater supply.

The series of stations in the Bristol Channel were started at 0010 h on 10 November. Surface seawater samples were taken at approximately 10 mile intervals on the south and north sides of the Channel with a transect of 5 stations from Hinkley Point to Lavernock Point. These stations were completed to the west of Carmarthen Bay at 1520 h on 10 November. Eighteen tritium and five caesium samples were collected.

Bad weather prevented further stations from being worked and the ship dodged until 0600 h on 11 November when the Irish Sea stations were started. Bottom samples were collected using 30 L Niskin bottles. Work was again interrupted by bad weather and the ship sheltered in Red Wharf Bay from late afternoon on 12 November to the afternoon of 13 November before continuing the grid of stations.

The sea-rider was used to pick up extra staff to lay the near-bed rig and make a staff change at 0545 h on 15 November. This aim of the cruise was completed in good weather conditions and the extra staff landed back in Whitehaven at 1340 h.

The grid of stations in the Irish Sea was continued and completed in the north Channel early on 18 November. Bottom sediment samples were collected at 5 of these stations for sediment chemistry at Burnham-on-Crouch.

Twenty-one stations were completed on the Scottish west coast using 30 L Niskin bottles or the CTD and rosette sampler to collect subsurface samples before sheltering in the Minch at 0600 h on 21 November.

Late on 21 November stations to the north of Scotland were started but weather conditions were too bad to use the CTD. On some sheltered stations surface and bottom samples were taken by using 30 L Niskin bottles but for others only surface samples were collected. Nine stations were abandoned due to weather conditions and shortage of time. The stations north of Shetlands were completed at 1808 h on 23 November.

Passage south was slow with southerly gales. Surface samples were taken at approximately 30 mile intervals. CORYSTES docked at Lowestoft at 0010 h on 27 November.

## RESULTS:

All stations on passage to, and in the Irish Sea were worked as planned.

On some stations to the west and north of Scotland sampling was modified to suit the weather conditions. Nine stations were not worked due to bad weather and lack of time.

The grid in the North Sea was abandoned with stations being taken at 30 mile intervals en route to Lowestoft.

The following samples were collected. Caesium samples were processed on board for— subsequent radiometric analysis.

<u>Area</u>	<u>Number of stations</u>	<u>Number of caesium samples</u>	<u>Number of tritium samples</u>
On passage to Bristol Channel	20	20	6
Bristol Channel	18	5	18
Irish Sea	77	133	23

W of Scotland	22	43	0
N of Scotland	12	14	1
On passage to Lowestoft	17	17	0

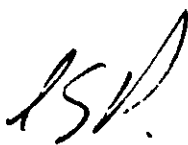
T C Doddington  
28 November 1991

SEEN IN DRAFT:

M J W

R G

INITIALLED:



DISTRIBUTION:

Basic List +

T C Doddington

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J M Rees

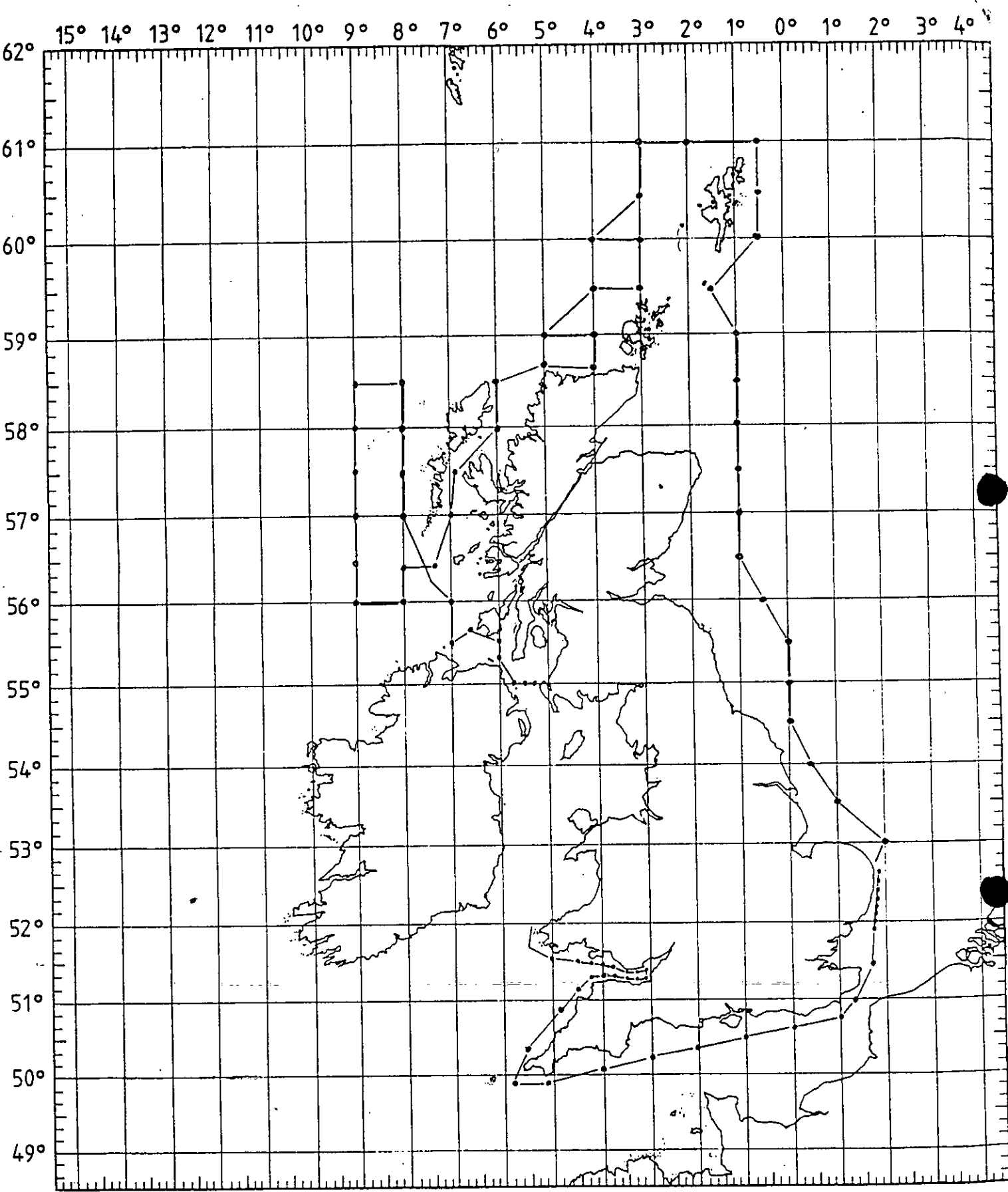
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R V CORYSTES 11/91

