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MINISTRY OF AGRICULTURE, FISHERIES AND FOOD
FISHERIES LABORATORY, LOWESTOFT, SUFFOLK NR33 0HT, ENGLAND

1992 RESEARCH VESSEL PROGRAMME

PROGRAMME: RV CORYSTES: CRUISE 11/92

STAFF:
J M Rees (Scientist in Charge)
D Kirkwood (28 Sept-4 Oct)
J Read (28 Sept-4 Oct)
D Sivyer (28 Sept-4 Oct)
N Faber (28 Sept-4 Oct)
PML (2) (28 Sept-4 Oct)

N D Pearson (4-12 Oct)
E Shreeve (4-12 Oct)
A Emery (4-12 Oct)
M O Green (University of Cambridge) (4-12 Oct)
M Mason (University of Cambridge) (4-12 Oct)
S Hall (SOAFD) (4-12 Oct)
A N Other (SOAFD) (4-12 Oct)

DURATION: 28 September-12 October

LOCALITY: North Sea, Wash and Humber

AIMS:

Part A.

1) To identify and quantify the fate of river-borne nutrients entering the Wash and Humber estuary, examining nutrient distributions and critical processes from the river inputs through to the North Sea in sub-tidal sediments and overlying water.

2) To measure factors affecting benthic nutrient recycling in sub-tidal sediments along a transect across the North Sea.

Part B.

1) To locate a muddy sand site in 25m of water in Newburgh Bay, Aberdeen, Scotland for a long deployment of the Tetrapod. This site is exposed to northerly gales with the potential for extreme long period wave activity important for the resuspending of Cohesive sediments. The effects of the storm on the Benthos will be part of a longer term study by SOAFD.

2) To survey the proposed site and identify the sediment characteristics.

3) To identify the hydrographic environment in the vicinity of the proposed deployment site.

4) To deploy the Tetrapod, Quadrapod and guard buoys in Newburgh Bay for a long deployment (to be serviced in December by RV SCOTIA and recovered in January by CIROLANA 1/93).

LOCALITY: North Sea, Wash and Humber.

PLAN (all times GMT):

Part A.

RV CORYSTES will sail from Lowestoft at 1000h on 28 September and proceed to the North Killingholme sediment process site (HSP2) on the Humber and anchor. After sediment sampling on the morning of the 29th, a CTD grid/transect will be worked in the Humber and Wash. After anchoring overnight in the Wash, a further sediment process site (A1) and CTD stations will be completed (30th). Water samples will then be taken on the southern North Sea grid (Wash, Thames, Dutch Coast) on the remainder of the 30th and 1st. Early the following morning (2 Sept) the BELS2 sediment process site will be undertaken. Further water samples will be taken before arriving at the Outer Silver Pit (OSP7) for a sediment process station on the morning of the 3rd. The remainder of the southern North Sea water sampling stations will then be completed on the return leg to Lowestoft (0228h on the 4th).

Part B

RV CORYSTES will sail at 1550h on the 4th of October from Lowestoft for Aberdeen. Water samples for Nutrient analysis will be taken en route. On reaching Newburgh Bay (just north of Aberdeen) on the morning of the 6th, a suitable site for a long deployment of the Tetrapod will be found. A detailed survey of the site will be undertaken with the TV sledge, Sidescan sonar, CTD, RoxAnn (seabed discrimination device) and Day grabs for size analysis and Benthos analysis (SOAFD). A possible trial deployment of the Tetrapod may be completed to test all the systems. Sector Scanning Sonar trials will also be undertaken. The Tetrapod and Quadrapod will be deployed in approximately 25m of water on a muddy sand site for 10 weeks. The Tetrapod and Quadrapod will be recovered and serviced by RV SCOTIA on the 20/21st of December. The CORYSTES will leave the Aberdeen area on the evening of the 10th to arrive on the 0922h tide on the 12th in Lowestoft.

J M Rees
(SIC)
17 August 1992

INITIALLED:CEP

DISTRIBUTION:

Basic List +	D Sivyer
J M Rees	N Faber
D Kirkwood	PML (2)
N D Pearson	M O Green (University of Cambridge)
E Shreeve	M Mason (University of Cambridge)
J W Read	S Hall (SOAFD)
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