

CRUISE 10/01

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 R Parker
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 A Hewer
 M Trimmer (QMW) pt1
 J Lewis (U of Westminster) pt 1
 Eva Perez (U of Westminster)

DURATION: 11th – 23rd October

LOCALITY: North Sea

AIMS

1. To study the impact of various types of seabed disturbance on sediment geochemistry (A1224)
2. To trial a range of acoustic techniques at selected impacted sites in the North Sea, and conduct pilot surveys at dredged material disposal and aggregate extraction sites. (A1033)
3. Service SmartBuoys at the Outer Gabbard and The Warp (AE004)
4. Collect samples to study spatial and vertical distribution of dinoflagellate cysts in the southern North Sea with a more detailed study in the Thames region

NARRATIVE:

11/10/01 Sailed 15:00 – proceed to Outer Silver Pit

12/10/01 Two sediment disturbance sites visited and samples taken using the NIOZ corer, Hammond Grab, 2m beam trawl and CTD.

Site F3 (J Metcalfe multi-beam survey)

Sidescan start 7km survey at 22:00

QTC and Roxanne grids F3a and F3b

13/10/01 Two sites visited and samples taken using the NIOZ corer, Hammond Grab, 2m beam trawl and CTD.

Site F3 (J Metcalfe multi-beam survey)

Sub-bottom profiler (GeoChirp) finish 22:00

Day grabs for ground truth

Proceed to the Tyne

14/10/01 Tynemouth – searider ashore to drop off Mark Trimmer and Jane Lewis

11:00 Sidescan survey of dredge spoil site TY081 (Souter Point Outer)

Sidescan survey TY070 North Tyne spoil ground (positions from Sextant)

Camera drops at TY081 Souter Point (Outer) spoil (positions from Sextant)

ADGS survey (QTC and Roxann) at TY070 North Tyne spoil ground – finish at 07:15

15/10/01 Two sediment disturbance sites visited and samples taken using the NIOZ corer, Hammond Grab, 2m beam trawl and CTD.

Hammond grab drops to ground truth remaining 3 camera sites

ADGS survey over half of Souter Point overnight

16/10/01 07:00 Camera ground truth 5 sites on the North Tyne dump site TY070

Trial NIOZ at Tyne 3 – successful

NIOZ coring at TYNE 4 (NG3)

NIOZ coring at TYNE 3

Hammond grabs at TYNE 3

Hammond grabs at TYNE 4 and 4 other ground truth sites.

CTD at Tyne 4

CTD at TYNE 3

2m beam trawls at Tyne 3 (x4)

2m beam trawls at Tyne 4 (x4)

17/10/01 Sidescan and ADGS survey at Tees dump site and Camera ground truth of Tees dump site.

Proceed to Area 408 for ADCP survey.

18/10/01 finish ADCP survey at 07:00 and head south for Area 222

Area 222 – sub-bottom profiler, Sidescan and ADGS surveys

19/10/01 NIOZ cores at test sites for high impact (3rd site successful) so called Thames

1. Proceed to collect samples for sediment disturbance with NIOZ, Hammond grabs, 2m beam trawls and CTD

NIOZ cores for dinoflagellate grid 3 successful plus checked the other “high” site Thames 2

20/10/01 NIOZ coring at Thames 3 (low impact), Hammond grabs, 2m beam trawls

Move to Thames 2 for further NIOZ coring, Hammond grabs, 2m beam trawls and CTD
NIOZ cores for dinoflagellate grid until 22:00

21/10/01 Drop off Ruth Parker at Southend Pier and collect some NAS reagents
Thames 4 (The Warp, TH1, SmartBuoy) Successfully recover and service the Warp SmartBuoy and collect samples for sediment disturbance with CTD, NIOZ coring, Hammond grabs, 2m beam trawls

Complete the dinoflagellate grid and proceed to the Outer Gabbard

22/10/01 Outer Gabbard SmartBuoy successfully serviced, CTD's and then home to Lowestoft.

All aims and objectives were completed. This was due the complete dedication of all the scientists and the co-operation and assistance of the marine staff. I would like to thank them all for their efforts.

Dave Sivyer (SIC) 6/11/01