

CENTRE FOR ENVIRONMENT, FISHERIES AND AQUACULTURE SCIENCE,
LOWESTOFT, SUFFOLK, ENGLAND

2008 RESEARCH VESSEL PROGRAMME

PROGRAMME: RV Endeavour: CRUISE 1/08

STAFF:

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| | Keith Weston (UEA) |
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DURATION: Thursday 17th January – Tuesday 22nd January

Approx Sailing Time 03:00 GMT

Approx Docking Time 21:00 GMT

LOCALITY: Thames, Southern Bight, Oyster grounds and Central North Sea, Dogger Bank region.

Background:

This cruise primarily serves need to service SmartBuoys and waveriders at several sites in the North Sea and undertake surface mapping for dissolved nutrients. This is also the 6th cruise of a series of cruises that form an essential part of a project (ME3205) addressing the source, cycling and fate of nutrients (i.e. carbon, nitrogen, silicon, oxygen) in UK Shelf Seas, specifically the North Sea. The time available for this work is severely limited and only the core measurements will be undertaken.

Specific cruise AIMS (not in priority order)

1. Recover and re-deploy landers at Sean Gas Field, Oyster Ground and North Dogger.
2. Recover and re-deploy SmartBuoys at Warp, West Gabbard and North Dogger
3. Recover and re-deploy Waveriders at Tyne and Dowsing.
4. CTD casts for nutrient samples and deck incubations
5. Underway measurements for nutrient samples and isotopic ratio work from continuous supply.
6. Collect Plankton samples for species composition using vertical nets.
7. Deployment of SPI camera.
8. Undertake assessment of benthic flora/fauna assemblage using hyperbenthic sledge.
9. Collect sediment profiles, of nutrients, oxygen, chl-a. (NIOZ corer).
10. Undertake experiments on productivity and grazing the three E3205 sites.

PLAN (all times GMT):

Weather permitting Endeavour will sail at approximately 03:30 on 17 January 08 and steam to the West Gabbard site arriving at 07:00. Work will commence here, with a CTD and water sampling. The SmartBuoy will be serviced followed by a CTD. Surface samples will be collected hourly en-route to the Warp. The SmartBuoy will be serviced and then the ship will continue south to the Varne for a CTD. We then travel north to the Sean Gas Field site where the lander and guard buoy will be serviced and a range of coring, nets and water sampling operations will take place for 10 hours. This pattern will be repeated at the Oyster Ground (13 hrs) and North Dogger (15 hrs) sites. Thereafter the Endeavour will proceed towards the Tyne for several water stations and a waverider service. The southerly journey home will remain close to the coast visiting the Humber and Wash but will detour to service the Dowsing waverider. Docking time is estimated to be 21:00 on the 22nd January.

Dave Sivyer
(Scientist-in-Charge)
13 November 2007