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

2009 RESEARCH VESSEL REPORT

PROGRAMME: RV Endeavour: CRUISE 1/09

STAFF:

Dave Sivyer (SIC)	Tom Hull
Dave Pearce	Helen Lees
Mark Smith	Naomi Greenwood
Jennie Keable	David Hayward
Adam (University of Portsmouth)	Fay Couciero (University of Portsmouth)
Tobias Boheme (4h-Jena)	Hans Ernst (4h-Jena)
Rebecca Garley (NOCS)	Frank Pope (The Times)

DURATION: Thursday 8th January - Monday 12th January 2009

Approx Sailing Time 05:00 GMT Approx Docking Time 22:00 GMT

LOCALITY: Thames, Hastings, Southern Bight, Dowsing, Wash to Tyne coastal.

Specific cruise AIMS (not in priority order)

1. Deploy new SmartBuoy at Dowsing

- 2. Service SmartBuoys at Warp and West Gabbard
- 3. Service waveriders at Tyne/Tees, Dowsing and Hastings
- 4. Collect sediment samples for expt work with mini-flume
- 5. Provide good spatial coverage to calibrate the FerryBox

Cruise Report

Sailed at 05:20 in thick fog so reduced speed was enforced. Arrived at West Gabbard 10:30 and completed a CTD cast for water at surface and bottom (nutrients (nuts), salinity (sal), oxygen (O2), chlorophyll (chl), suspended load (sl). The SmartBuoy was deployed and another CTD cast was completed before lunch. After lunch the old SmartBuoy was retrieved successfully and without incident. A further CTD was collected before departing towards the Warp at 13:45. Surface water samples for sal, nuts, chl and sl were collected hourly on the trip into the Thames. The Warp SmartBuoy was serviced successfully although the mooring wire parted during the recovery. NIOZ coring was undertaken before departing the catch the high water at the Princes Channel and passing south out of the Thames. After a night collecting surface water samples the waverider at Hastings was successfully serviced (aim 3). The Dungeness guard buoy was missing on arrival so we only deployed a replacement. After a search of the nearby waters we found and recovered the wayward buoy although the wire parted on recovery so the anchor and chain were lost. Then followed a steam to West Gabbard for 5 x hourly CTD casts. A further steam to Southern Bight for another CTD. Surface water samples were collected hourly throughout this phase of the cruise. Further north at Sean Gas Field, coring

took place (aim 4). At this point we were due to continue north, but after consideration of the weather forecast, headed west to ensure the deployment of the Dowsing SmartBuoy (aim 1) and servicing of the waverider (aim 3). The intended cruise track was then effectively reversed as we steamed north via CTD's at the Wash, Humber, Tees and Tyne CSEMP sites. We ventured offshore to look at the sea conditions around the Tyne waverider but were unable to locate due to high seas. We came back inshore to complete coring off the Tyne. The waverider position was checked online found to be okay so left alone. As it was then to rough to go out offshore we went back to the Humber to collect hourly CTD data from low to high tide. Then did the same at the Wash until we had to leave to catch the 22:00 tide at Lowestoft. Unfortunately the wind was to strong to allow Endeavour through the bridge so we had to anchor until the morning tide.

The new FerryBox was installed during the 2 days preceding the cruise and final tweaking/initial testing took place during the cruise. The system was very close to complete although there are some minor modifications still required. The position of the de-bubbler is not finalised and the VSat broadband was not operational so full testing of the ftp transfer was not possible.

All aims were completed except the Tyne/Tees waverider service. Surface mapping of nutrients was not as complete as in past years but sufficient for contract requirements. There was a disparate collection of scientists, engineers, students and a journalist on-board and everybody worked hard to ensure the cruise was a success. My thanks to all and to the captain and crew of Endeavour for their support and skill.

D Sivyer 23/1/09

DISTRIBUTION: BASIC LIST+ all those on cruise.