CENTRE FOR ENVIRONMENT, FISHERIES AND AQUACULTURE SCIENCE LOWESTOFT LABORATORY, SUFFOLK, NR33 0HT

2016 RESEARCH VESSEL PROGRAMME

REPORT: RV Cefas Endeavour: Survey 24/16.

STAFF: D Sivyer D Pearce R Faulkner E Fitton N Needham T Hull P Simpson (NOCS)

DURATION: 11th to 16th Nov 2016

LOCATION: North Sea

AIMS:

- 1. Service SmartBuoys at Dowsing, Warp and West Gabbard (SLA25G 1 day)
- 2. Zooplankton nets at West Gabbard SmartBuoy site (SLA021 0.5 day)
- 3. Service waverider buoys at Torness. Forth and Tyne (C6029A 2 days)
- 4. Deploy noise monitoring lander at Dowsing (SLA20A 0.5 days)

NARRATIVE:

Endeavour sailed on time (17:30 11/11/16) and went directly to the West Gabbard 2 site. One CTD profile and water samples were collected. It then proved impossible to engage the DP so it was decided to collect a ring-net sample before returning to Lowestoft to await technical assistance in the morning. On the morning of the 12th the GPS feed issue was fixed via telephone support. By this time the ship was 7 hrs from the Warp SmartBuoy and therefore 24 hrs behind schedule.

The ship proceeded north to the Dowsing where the "noise lander" was deployed and the SmartBuoy serviced along with the customary water samples). Continuing north the Tyne/Tees waverider was serviced in the morning of the 13th. After 2hrs steaming north it was realised that the light cover of the waverider had not been removed so it was necessary to return. The ships boat was launched to go and remove the light cover at sea level rather than risk recovering the waverider to deck. In the clement weather this was a safe option with the added advantage of giving one of the boats a run at sea. The time lost meant the Firth of Forth waverider had to wait until the morning of the 14th. This was successful and uneventful and followed by the equally efficacious service of the waverider and guard buoy off Torness nuclear power station. The Endeavour made a slow passage for timed arrival at the Dowsing

to retrieve the "noise lander" in daylight - using the acoustic release rather than hauling in the surface buffs.

Having agreed an 24hr extension to the original survey to complete the two remaining SmartBuoys, the ship proceeded directly to the West Gabbard 2 site. On arrival, the waverider and SmartBuoy were recovered. The proximity of the two moorings was assessed and they were re-deployed further apart. A single CTD dip preceded a slow overnight steam down to the Warp for a timed arrival at the bar for 09:00 on 16/11/16 to allow sufficient water for safe passage (low springs). Water samples were collected via the CTD rosette before and after the successful service of the SmartBuoy. Two more rosette casts were undertaken before Endeavour made passage to Lowestoft for the evening tide. Passive sampler units from NIVA were deployed on all three SmartBuoys.

RESULTS:

Waverider data from Torness was processed, a draft report produced and will be provided in full to EDF. The data from the other two waveriders and three SmartBuoys will be made available via the requisite websites as the data as processed and QA'd. The water samples and CTD casts will be available in due course. Contact Nathan Merchant for information regarding the data from the noise lander and Sophie Pitois for zooplankton results.

Dave Sivyer Scientist in Charge 16/11/16

SEEN IN DRAFT

Master: Paul Kersey

INITIALLED:

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