

CEFAS FISHERIES LABORATORY, LOWESTOFT, SUFFOLK, ENGLAND

2002/2003 RESEARCH VESSEL PROGRAMME

~~REPORT~~ PROGRAMME: RV CORYSTES: CRUISE 2/03

#### STAFF

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#### DURATION

27/01/03 – 8/02/03

#### LOCALITY

North Sea, Thames region, English Channel, SW Approaches, Bristol Channel, Irish Sea.

#### AIMS

1. To collect water samples at NMMP stations from the Tyne to Morecombe Bay (AE004)
2. Collect water samples in a transect from SW Approaches to the Irish Sea (AE004)
3. To collect calibration samples at the SmartBuoys in the southern North Sea and Liverpool Bay (A1228)
4. To collect 5 sediment samples in a transect between Tyne and Dogger Bank
5. To recover and re-deploy the West Gabbard SmartBuoy
6. To recover the Tryaxys buoy
7. To deploy a guard buoy at Hastings Waverider site and the Waverider if available.
8. Recover the sonar buoy at 53.6140 N, 2.1889 E (dec. degrees).

#### PLAN (all times are Greenwich Mean Time)

Sail on the afternoon tide of Monday 27th January after a minor delay as the continuous flow through system was prepared. Proceed to the West Gabbard to retrieve the SmartBuoy. Deploy the FSI CTD sn 1366 on arrival but it failed halfway through the cast. The surface sample was collected via the continuous system. The SmartBuoy was recovered successfully after several attempts in increasing winds. The DWM was upgraded with a new Orbcomm unit and the ESM2 logger and Orbcomm unit secured. The SmartBuoy was re-deployed successfully early Tuesday morning. The tide was nearly slack so the Tryaxys trial buoy was also recovered. One surface sample was collected for calibration at 01:00 and Corystes then returned to Lowestoft on the morning tide 05:30 for the CTD unit to be replaced with FSI sn1352.

Sailed from Lowestoft at 17:30 Tuesday 28th to collect hourly CTD casts at the West Gabbard (A1228). One CTD cast at the Outer Gabbard (NMMP 475). Proceed to the Warp SmartBuoy (NMMP 467) for another limited anchor station of CTD casts for calibration purposes (A1228) and one more at Warp (NMMP 465). Leave Thames and head for the English Channel in strong northerly winds. Successful CTD casts at South Varne (NMMP 485), Selsey Bill (NMMP 495) and Off Tamar (NMMP 576). The conditions at Off Plymouth (NMMP 585) proved unsuitable for a CTD cast so a surface water sample was collected instead. The master then advised we would be laying in behind Lands End to wait for the wind to drop. After a small delay we continued towards Nash Point (NMMP 615). Between Lands End and Nash Point an RAF search and rescue helicopter landed 3 paramedics on the aft deck as part of a training exercise. The CTD rosette Surefire system failed at Nash Point and no samples were possible. After some testing a surface water sample was collected and we moved on.

The FSI CTD units were swapped and comms established with the Surefire, unfortunately the FSI sn 1366 failed again. A fault was traced to a break in the combined power and comms cable. A new connector was spliced in and all sensors appeared to working. Unfortunately the Surefire unit does not work when it is in the water (or even when it is raining hard). The CTD unit was used to obtain water column profiles, with surface water samples collected from the continuous supply, but no bottom samples were possible for the rest of the cruise.

CTD casts were collected at Cardigan Bay, Off Cardigan Bay and Liverpool Bay. A seven hour anchor station was collected at the Coastal Observatory SmartBuoy. CTD at Burbo Bight, then 3 of the Coastal Observatory grid stations sampled. Sampling had to postponed at around 14:00 as a rising swell and 40kt winds made further northerly progress imprudent. It was decided to head for the lee afforded by the Isle of Man, to wait out the weather (40 odd miles took over nine hours). Breakfast 02/2/03 forecast is for NW gale 8 still so we are staying here (Laxey Bay). 16:00 it all looks a bit better so go out to try our luck –and its good SE Isle of Man (NMMP 805) at 19:00. Off Morecombe Bay at 21:00 and Lune Deep 22:00. No improvement in the weather to 09:00 4/2/03 (Happy Birthday Ruth!) but still manage to collect surface samples at 5 Coastal Observatory grid stations. Irish Sea – surface station transect down to Celtic Deep

Off Plymouth, Central Channel successful

6/2/03 14:00 - West Gabbard to recover the SmartBuoy to download the DWM and re-deploy with an additional 25m chain in the mooring line. 16:00 continue on to Southern Bight (NMMP 395). 22:00 down to one engine and limited to 8-9kts. 7/2/03 03:30 – pick up Sonar Buoy – continue to Off Humber/Wash (NMMP 345) – CTD, Off Tyne/Tees (NMMP 285) – CTD. It was not possible to visit the Tyne or Tees NMMP sites but 2 hourly surface stations were collected in a transect from the west Dogger Bank down to the Humber, then every 30 mins between Humber and Wash.

Corystes docked around 14:00 on Saturday 8th March as planned.

Dave Sivyer  
(Scientist-in-Charge)

10/3/03

INITIALLED .....