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

DRAFT 2003 RESEARCH VESSEL PROGRAMME

PROGRAMME: RV CORYSTES: CRUISE 8

STAFF:

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NUIG – National University of Ireland Galway IMI – Irish Marine Institute

DURATION: 26th June – 9th July Approx Sailing Time 08:00 BST (HW 07:20 GMT) Approx Docking Time 07:30 on 9th

LOCALITY: Western English Channel

AIMS:

The work is generally aimed at achieving a better understanding of the dynamics of the circulation processes of the Western English Channel. In order to characterise the extent and nature of density driven and seasonal jet-like circulation which acts as a direct and rapid pathway for transport of material. The existence of exotic species in the western Channel region is evidence of the potential pathway from the Bay of Biscay or mouth of the Gironde to the UK and Irish coast. The sampling of Gyrodinium Aureolum (MixiMotoi) which is of interest due to links to HABs is a specific cruise aim. Additionally the structure of the mixing in the bottom region, and for comparisons with models a thermistor chain and ADCPS will be deployed for the period between the cruises

The main sampling aims of the cruise are:

- 1. To characterise the hydrographic structure associated with the frontal regions and investigate the transport pathways. By use of towed undulating CTDs
- 2. To undertake sampling associated with mapping and quantifying the extent of Gyrodinium Aureolum (by water samples from CTD Rosette)
- 3. Deploy ARGOS drifting bouys to quantify the Lagrangian circulation
- 4. Deploy Mooring (ADCP and thermistor chain) to study the mixing processes in the transistioanl region.
- 5. Take cores where appropriate (NIOZ corer) to investigate the relation between benthic and water columm process

6. By the use of insitu Nitrate analyses (Rosette mounted) investigate the nutrient make up of thermocline features.

PLAN (all times GMT):

RV CORYSTES will sail at approximately 0700 26^{th} June proceed through the channel to commence work with scanfish sections from 49° 30.0′ N 3° 0.0 W to 49° 30.0′ N 7° 0.0 W, thence sampling for Phyto Plankton, deployment of ARGOS bouys and moorings will be undertaken as appropriate.

Corystes will return to Lowestoft for either the evening tide on the 8^{th} or the moring tide on the 9^{th} .

Liam Fernand (Scientist-in-Charge) 7 April 2003

DISTRIBUTION: BASIC LIST+ Mr Ken Medler Dr Robin Raine Dr Kevin Horsburgh.