

DEFRA  
CEFAS LABORATORY, LOWESTOFT, SUFFOLK, ENGLAND, UK.

2010 RESEARCH VESSEL PROGRAMME/REPORT  
**RV CEFAS ENDEAVOUR : CRUISE 01/10**

**STAFF:**

Name	Role	Cabin	Shift
Dave Sivyer	SIC	SIC	Not specified
Dave Pearce	Moorings	C2	Not specified
Rodney Forster	1° production	B2	Not specified
Naomi Greenwood	Watch leader	B1	08:00 to 12:00 and 20:00 to 24:00
Gary Batchelor		D3	08:00 to 12:00 and 20:00 to 24:00
Emily Sear (UEA)		D4	08:00 to 12:00 and 20:00 to 24:00
Katy Owen (UEA)		D5	Not specified
Elke Neubacher	Watch leader	C3	00:00 to 04:00 and 12:00 to 16:00
Steve Millward		C4	00:00 to 04:00 and 12:00 to 16:00
Elisa Capuzzo		C1	00:00 to 04:00 and 12:00 to 16:00
Tom Hull	Watch leader	C5	04:00 to 08:00 and 16:00 to 20:00
Manuel Nicolaus		C6	04:00 to 08:00 and 16:00 to 20:00
Louise Webster		C7	04:00 to 08:00 and 16:00 to 20:00

**DURATION:** 08 January to 13 January 2010

**MOBILISE:** Lowestoft (7<sup>th</sup> and 8<sup>th</sup> January)

**DEMOBILISE:** Lowestoft (14<sup>th</sup> January)

**OPERATION AREAS:** North Sea

**FOREIGN WATERS:** None

**SEA FISHERIES AREAS:** None

**MILITARY AREAS:** None

**PORTCALLS:** None

**SMALL BOAT** Return Siemens engineer to shore 2

**TRANSFERS:** hours after sailing

**SHIFTS:** 12-4, 4-8, 8-12

## AIMS:

1. Deploy and recover a SmartBuoy at Warp, West Gabbard and Dowsing (SLA25 + E5304).
2. Deploy and recover a Waverider at West Gabbard, Tyne and Isle of May (C3212).
3. Deploy a waverider and guard buoy on the Dogger Bank (C3628).
4. Collect surface and bottom "nutrient" samples and profiles at CSEMP locations (SLA25).
5. Collect surface "nutrient samples every two hours (SLA25/DP240).
6. Collect sediment samples for lab trials of new kit (E5301)
7. Assessment of flow-through primary production instruments

## CRUISE REPORT

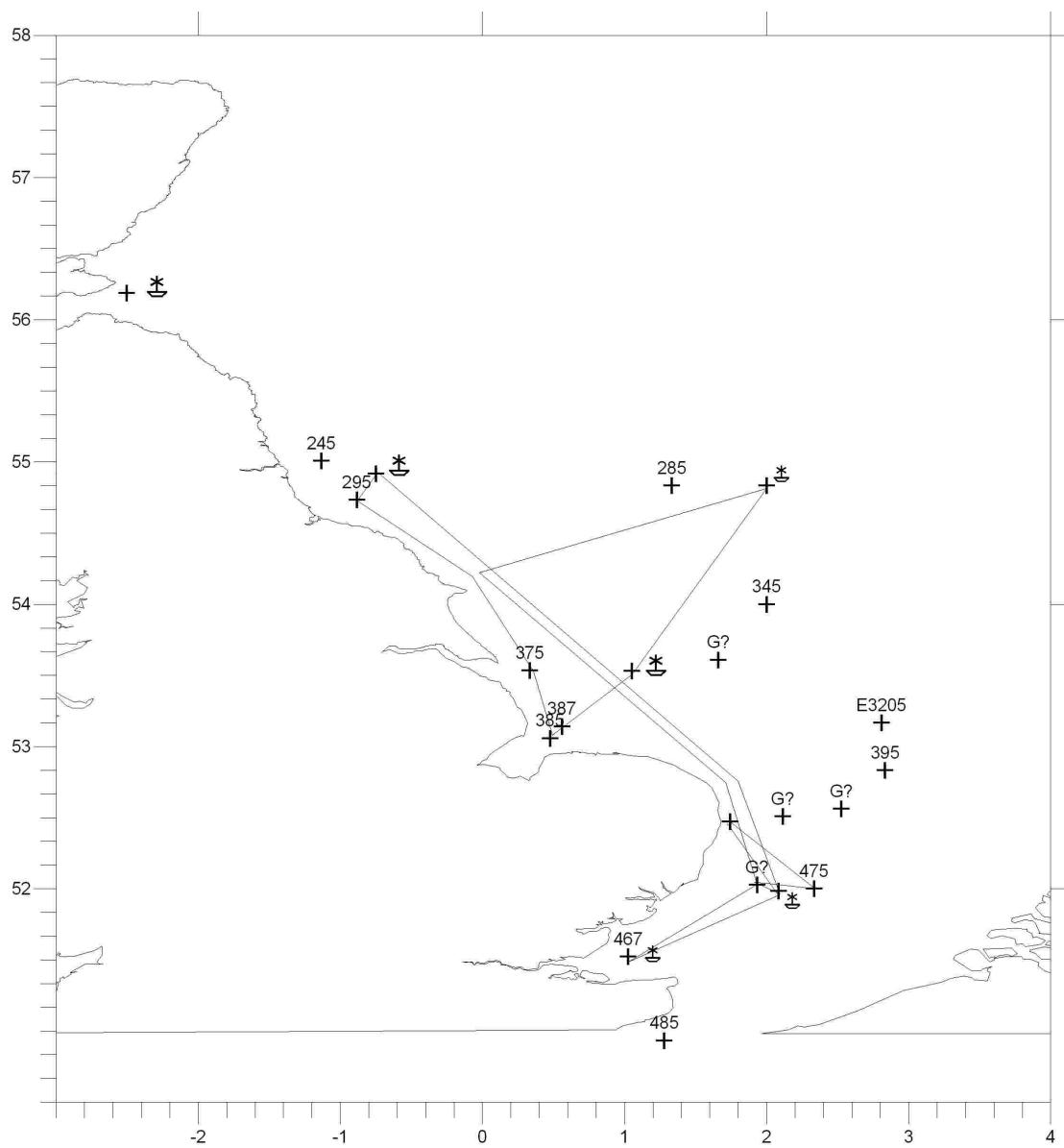


Figure 1. Cruise track for CEND 01/10

## Narrative

Cefas Endeavour sailed, as planned, at 14:30 Friday 8<sup>th</sup> Jan. Undertook engine/vibration trials until 17:30 when the engineer was taken ashore via pilot launch. The water sampling for nutrients (Aim 5) started immediately with hourly stations until arrival at the West Gabbard buoy site. A CTD rosette profile was obtained. The waverider was recovered but with the loss of the rubber cord and mooring. A replacement waverider was deployed as planned (Aim 2). The weather had deteriorated beyond the point where the SmartBuoy could be serviced. After an overnight steam to the Warp (arriving 05:30) for a CTD rosette cast (Aim 4), the SmartBuoy recovery and deployment (Aim 1), CTD and NIOZ corer was deployed (X3) to obtain some “muddy” cores (Aim 6).

The ship then proceeded to “Area 222” near the West Gabbard but it was to rough to use NIOZ corer. The weather was very poor and with a strong NE wind and 4m+ swell it was not possible to deploy any gear over the side. Water samples were collected via the continuous flow for the rest of the day and through the night (although at a reduced rate due to the low ship speed).

Sunday 10<sup>th</sup> Jan - steaming to just off Flamborough by breakfast, then headed offshore to deploy Dogger waverider. Although this was directly into the wind it made the ship movement more comfortable and safer. At first light on Monday 11<sup>th</sup> Jan (09:00) a guard buoy and waverider were deployed on Dogger Bank (Aim 3). The wind had eased considerably so the Endeavour steamed towards Dowsing collecting hourly water samples. On arrival at 16:00 the SmartBuoy was recovered and deployed (Aim 1) with water samples collected before and a CTD cast afterwards.

The Tyne waverider had stopped transmitting so after a review of the weather, the ship headed back north, via Wash, Humber and Tees (Aim 4). Water samples were collected half hourly between Wash and Humber and hourly back to Tees. On Tuesday 08:30 the Tyne waverider was recovered and a new one deployed (in around 2m swell, 25kts wind). The ship then had to run 3 engines to ensure timely arrival at the West Gabbard. The West Gabbard SmartBuoy was serviced Wednesday 12<sup>th</sup> Jan – 08:30 (Aim 1). It was only a short steam to Area 222 for gravel (10x buckets), then to Outer Gabbard for some sand (Aim 6).

The vessel docked at Lowestoft Wednesday 13<sup>th</sup> January at 19:30.

Samples were collected throughout the cruise for Aim 7 and the only aim not completed was the service of the Firth of Forth waverider due to the weather.

Dave Sivyer  
18/01/10