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MFV Prowess

Cruise 1407H

REPORT

23 April -30 April 2007

Ports

Loading: Fraserburgh, 23 April

Unloading: Fraserburgh, 30 April

***In setting the cruise programme and specific objectives, etc the Scientist-in-Charge needs to be aware of the restrictions on working hours and the need to build in adequate rest days and rest breaks as set out in FRS' Working Time Policy (which is published on the Intranet). In addition, the Scientist-in-Charge must formally review the risk assessments for the cruise with staff on-board before work is commenced.**

In the interest of efficient data management it is now mandatory to return the Cruise Report, to John Morrison and the Cruise Summary Report (old ROSCOP form) to Dougal Lichtman, within four weeks of a cruise ending. In the case of the Cruise Summary Report a nil return is required, if appropriate.

Personnel

I Penny (In Charge)

D J Bova

M Stewart

Iñigo Martinez (PhD student, University of Aberdeen)

Scientific Equipment: Digital stills Camera and Aquadopp current meter to be deployed using the FRS JULIET Lander.

Objectives

1. To undertake a baited camera survey at the Nexen operated Buzzard platform site and at a control site situated nearby.
2. To obtain current information at each deployment site.

Narrative

Staff and equipment were loaded at Fraserburgh on Monday the 23rd of April. *Prowess* departed the harbour at 1030 and proceeded to the Buzzard field (57° 48' N, 0° 58' W whilst the equipment was prepared. Arriving on site, the acoustic release system was tested before a shakedown deployment was carried out to familiarize the crew and Skipper with the procedure. Problems experienced during these trials in arming the acoustic releases and getting the digital camera system operating resulted in the first survey station being delayed until 1830. Deployments continued throughout the night and into the 24 April with intermittent camera faults. During the afternoon of the 25 after a 2h delay due to camera problems, the decision was taken to switch to using the SERPENT camera system. This newer camera proved more reliable and turnaround time was reduced to an average of just over 1h between deployments. A random survey design, stratification by distance from the platform was followed, although the direction of the tide and the position of other vessels in the development zone also dictated final locations. Deployment durations were approximately 4h, alternating between the platform perimeter and the control site. Good weather on the 26 and 27 April allowed deployment of *Prowess*' RIB to take photos and video footage of the baited camera operations. Work continued unhindered into the evening of the 29 April, when at midnight the last retrieval was completed and *Prowess* made for Fraserburgh, docking at 0830.

Results

A total of 27 successful JULIET deployments were achieved collecting over 7000 stills images. Data on current speed and direction was also successfully collected for all except one of these deployments. Common species attracted to bait included hagfish, a number of flatfish species, haddock and whiting, with occasional cod and a variety of invertebrates. These photos will be analysed as part of a PhD study in collaboration with Aberdeen University.

Modifications made to the frame to house a dual acoustic release system and to the ballast clump to comply with Lifting Regulations have increased the weight and surface area of the lander and additional buoyancy was required. It was thought that this may have made JULIET more susceptible to tidal influences and as a result some deployments made covering peak tidal times suffered from an exaggerated tilt angle. The new Dyneema fibre mooring line worked well.

Iain Penny (SIC)
25 May 2007