

Channel Coast News

Issue 5 - September 2003

The newsletter for the Southeast Strategic Regional Coastal Monitoring Programme www.channelcoast.org

Introduction

From an external viewpoint, the Regional Coastal Monitoring Programme is an exciting, innovative and proactive initiative. The component parts present interesting challenges to well established and respected techniques, while at the same time there is an admirable commitment to using state of the art technology.

There is no doubt that this programme will make considerable advances in the way in which coastal zone information is collected, managed and disseminated. We at Emu Ltd are delighted to be involved.

Bruce Tomlinson - Director, Emu Survey

Regional News

South East Coastal Group

The topographic survey contracts have now been let to the following Consultants:

1. Yanlett Creek to Horseshoe Point - Longdin and Browning
2. Minnis Bay to Dover Harbour - J.C. White
3. Lydd Ranges to Bexhill - Longdin & Browning
4. Eastbourne - Andrews Surveys

Works have commenced on Contracts 2 and 3; Contract 1 is due to commence w/c 08/09/03. Works on the Canterbury/Shepway SLA are progressing well with 95% completion of the Shepway area and 65% of the Canterbury Area. The Bathymetric Surveys have been let to:

5. Yanlet Creek to Ramsgate Harbour - Gardline Surveys
6. Ramsgate Harbour to Rye Harbour - Andrews Surveys
7. Rye Harbour to Beachy Head - Gardline Surveys

Works have commenced on Contracts 6 and 7 with good progress to date. The creation of the SANDS databases is progressing well with the majority of the available information now loaded. A demonstration will be available at the Annual Meeting, where further information on delivery can be discussed.

South Downs Coastal Group

Low Level contact photographs of the SDCG frontage have now been received from the Environment Agency. Beach profile levels from the contact photos have now

been uploaded to SANDS and analysis is ongoing. The 2001 digital Orthophotos for the SDCG region are now available via the usual channels, either in an ECW format for use in GIS packages as well as a GSF format for use as a backdrop within SANDS.

The new SDCG SANDS database is advancing well. Those partners who have requested SANDS as part of this programme will be provided with the software once the new profiles have been included. Arrangements will then also be made for additional SANDS training sessions. The Contract for hydrographic surveys between Pagham Harbour and Birling Gap was awarded to Gardline Environmental, who have now commenced work along the Brighton frontage.

SCOPAC

Contracts for bathymetric surveys were awarded to: Portland Bill to Durlleston Head – Gardline
Isle of Wight – Titan Surveys
Itchen River to Portsmouth and Chichester Harbour to Pagham – EMU Ltd
The remaining bathymetric survey contract, for the harbours, will go out to tender in the autumn.

Environment Agency

Tenders have been received for Aerial Photography & Photogrammetry; the contract will be awarded shortly. 1:5000 for the entire region and 1:3000 for SDCG and Lydd/Hythe Ranges will be flown before November. Prints and profile data will be made available within 6 weeks of flying.

A draft specification for LiDAR has now been circulated for comment, with the intention of issuing the documents by mid-September. The first survey will be undertaken in February/March 2004. An EA passive and an OS active station have been scrutinised by L&B and the University of Nottingham, after inconsistencies were found in the Ground Control Network. A decision was taken to remove the OS active station at North Foreland from the network and the final co-ordinates are now available.

Channel Coastal Observatory

Since the last Newsletter, all 6 Directional Wave Buoys and a pressure sensor have been deployed. The data are displayed in near real-time on the website.

Directional Wave Riders

Accurate estimates of the wave climate are an essential pre-requisite for coastal engineering, yet there is a dearth of long-term wave data from around the UK coastline. The UK Met Office buoys and, more recently, WaveNet buoys are a step in the right direction, but are too few in number and too far offshore to be of operational use to coastal engineers in the southeast, where directional wave information in the nearshore region is required *i.e.* about 10-12 metres water depth. To this end, the Regional Monitoring Programme has extended the network of nearshore wave monitoring equipment in the area. The data will be used to develop representative local wave climates and for analysis of extreme events, including individual storms.

Six Datawell Directional WaveRider Mk III buoys (DWR's) were deployed by EMU Ltd, from the MV



Wessex Explorer, in July 2003. The time series of wave height and direction are transmitted to a shore station, where wave parameters are calculated every half hour and sent by ftp to the Project's webserver, for display in near real-time.

The waverider buoys are located off Folkestone, Pevensey Bay, Rustington, Sandown Bay, Hayling Island and Boscombe. Their positions have been sent to the Hydrographic Office for inclusion on Admiralty charts.

The website displays the generally most useful wave parameters, including wave height, wave period and wave direction, with the addition of sea temperature,

which is measured about 0.5m below the surface. However, many more details about the waves are stored at the Channel Coastal Observatory. For example, time series of the sea surface can be reconstructed, directional wave spectra supplied (*see diagram*) or any long period waves isolated. This additional information may be of particular use when analysing individual storms, or to assess the response of beaches to given storm conditions.

Data are freely available, either in the form of wave parameters which can be downloaded directly from the website (this feature should be online in the early autumn) or, if Project Partners require more detailed wave information, from the Channel Coastal Observatory. Nearshore, real-time wave data has also a wider application and therefore notices about the DWR's are being sent to the RNLI, Fishermen's Associations and sailing and diving clubs.

What's New?

A reminder that the annual Project Partners meeting takes place on Monday 15 September at 1030, at Worthing Leisure Centre.

Contacts

If you have any queries about the Strategic Regional Coastal Monitoring Programme, or would like further information, please contact your area representative:

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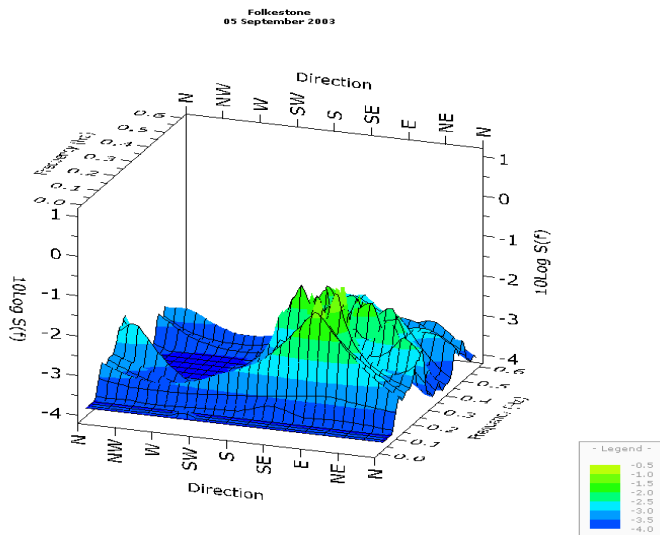
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Directional wave spectra; note bi-modal seas