Channel Coast News

Issue 15 – July 2004

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

Regional News

South East Coastal Group

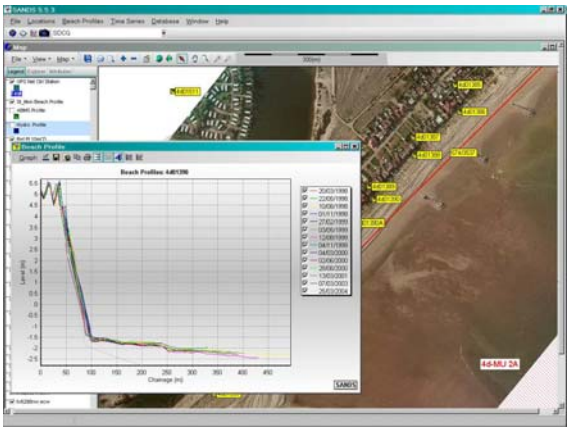
All repeat baselines are complete with the exception of the Canterbury frontage; surveying will recommence at the beginning of August. Data will be available shortly after completion of the usual QA procedures. Additional surveys have been commissioned for both the Tankerton and Folkestone coastal defence schemes. These were charged to the local authorities but have been conducted in line with the project survey specification.

For those partners who requested SANDS, installation is being arranged over the coming weeks.

South Downs Coastal Group

Gardline Environmental has now delivered 80% of the data for the SDCG hydrographic survey. The submitted data are being checked and will be distributed to the CCO and Local Authorities once QA is complete. Data from Management Units 2A, 3, 6, 12, 15A & 15B are still to be delivered.

Halcrow's data from the BMP survey for the entire MU2 & 2A (Pagham) frontages is being checked. This work is approx. 90% complete, but there are still some issues with the SANDS data to be ironed out. This data will be added to the SANDS database soon and distributed to Project Partners by mid-August.



An extensive re-organisation of the SDCG SANDS database has been completed and the latest database delivered to project partners via the FTP site. All regular-future updates will be made available in this way, and will be provided whenever any additional data or analysis has been undertaken.

Environment Agency (Southern Region)

A welcome short spell of good weather at the beginning of July enabled Kampsax to continue their 2003/04 flights. They have now completely flown the Isle of Wight and a section of SECG. Kampsax have also delivered the first set of profile data for comment.

The LiDAR contract has now been awarded to the Environment Agency Science Group. A project involving the EA to analyse biodiversity responses to climate change has been granted Interreg funding from the EU. The EA's contribution ecological data collected through the coastal monitoring programme. The project is however awaiting the final agreement of all participating organisations before it can proceed.

SCOPAC

Both Gardline and EMU have now begun their bathymetric surveys in the SCOPAC region. The topographic baseline season is underway and the ATV is making a great difference, particularly on the recent baseline survey at Sandown Bay.

Channel Coastal Observatory

Re-deployment of the Folkestone wave buoy is planned for 29 July.

Contacts

If you have any queries about the Strategic Regional Coastal Monitoring Programme, or would like a personal copy of this newsletter by email, please contact your area representative:

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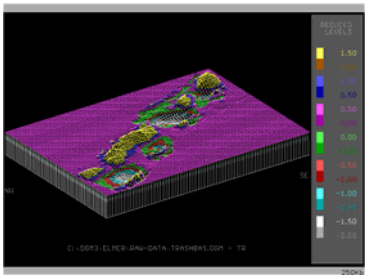
Coastal Monitoring – case study from Elmer

It was in 1991, with the construction of the two emergency rock islands at Elmer (ahead of the main scheme that most people recognize, shown below) that the need for detailed beach monitoring was put forward. A number of survey methods were considered, including the use of GPS and total stations; the latter would have required the chainman to walk more than 42km for each survey! Therefore, the survey methodology was based around ABMS profiles, supplemented by over 70 additional profiles, cross-shore and longshore, to provide a detailed picture of how the islands were performing and the beaches responding. When the full 8 island and beach recharge scheme was complete, monitoring developed into 3 monthly air surveys of the scheme frontage as well as several kms up and downdrift, starting 1995.

With ABMS more than 20 years old, the opportunity to develop a number of refinements for the Elmer monitoring was explored. The survey was flown at a contact scale of 1:3,000 rather than the 1:5,000 of ABMS; a series of extra ground control points was established and, being flown quarterly, previously unidentified seasonal variations were removed by actually measuring in all 4 seasons.

The results of the Elmer monitoring were primarily analysed with DGM, with the frontage being divided into 4 'models'. Sets of these 4 models were built for each survey and 'difference models' calculated. A number of comparisons were made, notably change since:



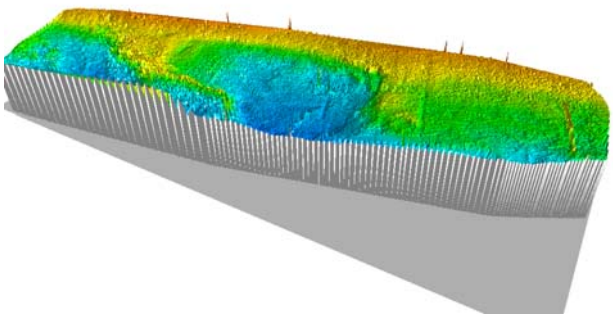
- construction
- last survey
- same season last year

The beach profile information gathered from the 20 air surveys over the 5 year project, together with the 'Elmer only' surveys have all been archived into SANDS.

The success of the Elmer beach monitoring led to the development of the Arun local beach monitoring project. This included setting up a full

set of ground control points (many requiring new monuments, when no fixed structure was available *e.g.* Pagham shingle spit and Climping sand dunes; an off-shore tide/met station; bathy surveys and the continuation and widening of the 1:3,000 quarterly air surveys to include the whole Arun frontage of 23.4km, as well as overlapping into neighbouring Chichester District and Worthing Borough Council areas.

The project was grant aided by MAFF/DEFRA, with gross costs of £300,000 over 5 years, and has been considered a success with one exception: the offshore tide and met station, which was beset by endless problems including vandalism and the contractor going into liquidation. However, plans are underway to incorporate new instrumentation on the Platform within the Programme's wave buoy/tide gauge network.



Many of the elements of this local project have now been built into the Regional Monitoring Programme. For example, the bathymetric surveys already completed (*see above*) have reduced the amount of work in the current project and the baseline of ground control markers has been incorporated. Further information can be obtained from Roger Spencer (01903 737812 or roger.spencer@arun.gov.uk)