



## Biodiversity team

Alex Tait from East Sussex County Council travelled to France in October this year with Councillors and Officers from the Local Government Association Coastal Issues Special Interest Group to look at some coastal erosion problems. Sites at Tréport, Criel-sur-Mer and St-Valery-en-Caux to Honfleur were visited. Sights included the cliff erosion at Criel and the terminal groyne that holds back the beach which results in an almost total lack of shingle below the eroding cliff.



The team also met the Mayors of St-Valery-en-Caux and Honfleur and were given some very useful briefings about their coastal management practice. East Sussex County Council will be hosting the next Coastal Issues field visit, in June 2006, and it is hoped to invite the Mayors met this year and our French and English BAR partners to join us for at least part of the two day event.

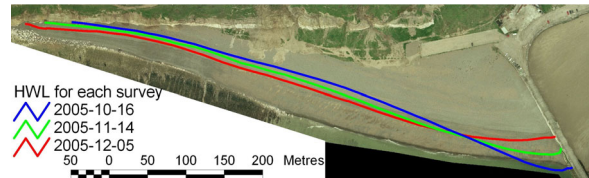
## Geomorphology team

Jerome Curoy enlisted the help of several BAR members (and one or two extra volunteers!) for two weeks of intensive work in October this year at Cayeux-sur-Mer in France. The aim was to take accurate measurements of longshore transport in an ungroyned environment.

Large amounts of data were collected each tide over a spring and neap tide cycle including measurements of the active layer thickness, beach topography and volume, grain size, tracer pebble movement and the input wave conditions. Initial analyses demonstrate that longshore and cross-shore

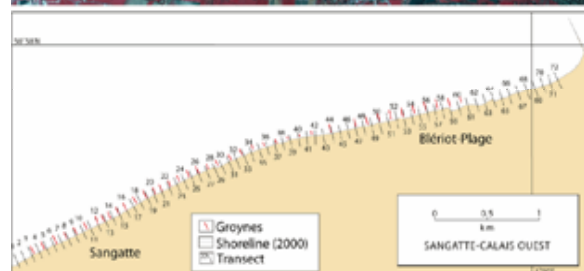
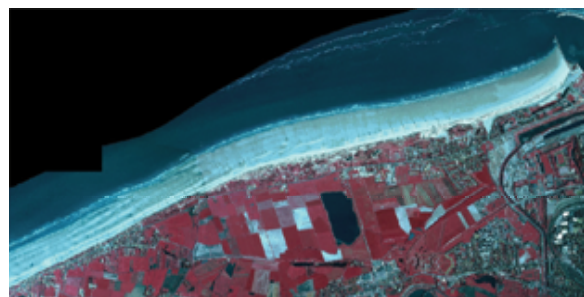
movements were significant under these conditions with tracers travelling over a hundred metres most tides.

The stormy weather at the end of October, beginning of November and around the 3rd of December had a major impact on the Sussex beaches. The southerly and southeasterly direction of the waves has in some places lead to a significant reversal of drift direction. The example below shows the change in the HWL position at Newhaven where it has retreated a maximum of 50m near the harbour arm coinciding with a drop of beach levels of up to 7m. A slide show of surface elevation changes can be seen by clicking [here](#).



## French team

The main objectives for the French team in the past few months relate to the recent dynamics of the low coasts of Nord-Pas-De-Calais, specifically the impacts of storm surges and variations of sea level on the evolution of the coastline as well as evaluation and cartographic mapping of the risks of erosion and flooding in the area.



Mapping of the evolution of coastlines, from aerial photographs and topographic surveys - Beach of Sangatte-Blériot.

Statistical analyses of high water levels generated during storm surges on the coast of Northern France have been carried out based on available data from Boulogne-sur-Mer, Calais and Dunkirk tide gauges (ca. 1956-2001), and the return periods of high water levels which may result in coastal erosion and flooding of low-lying areas were determined. The objective of this work is to improve understanding of the interactions between the dominant environmental processes, to determine the risk of storms and high sea levels, their impact and return period.

### Public participation

Faye Gillespie recently attended The River Ocean conference "Community Action on Climate Change" on the 26th November, at the Community Base on Queen's Road, Brighton. Faye presented some of the work BAR has achieved over the past two years. The presentation was called Climate Change and Coastal Trends on the Channel Coasts and included current work on beach volume losses, Uwe Dornbusch's work on low water levels and cliff retreat and also Paolo Pirazoli's work on recent evolution of surge trends.

The conference was a big success for RiverOcean and was well attended by members of the general public and local environmental organisations and educators. The presentation itself went very well and Faye received lots of positive feedback with many attendees taking the BAR interim report. It provided a good opportunity to present current research to the public.



Faye Gillespie during her presentation

Uwe Dornbusch gave a talk on coastal problems and led a field visit to St.

Margaret's Bay for visitors from the Parc Naturel Régional des Caps et Marais d'Opale which had been organised by the White Cliffs Countryside Project.

Recently funded by the French government is the *Schéma de Gestion Intégré de la Zone Côtière* (Integrated Coastal Zone Management) of the Nord-Pas-de-Calais of which, the *Université du Littoral* and *SMACOPI* are both contributing partners. The *Université du Littoral* is co-leader of the Coastal Erosion Working Group which increases the communication of results of research projects on coastal dynamics that may be valuable for improving coastline management.

Several French partners took part in the Kent & Nord-Pas-de-Calais CBNT-CINT Conference (Conservation de l'Infrastructure Naturelle Transfrontalière) in Lille on 25<sup>th</sup> October this year. The project is supported by the French-British INTERREG IIIA Program. During the conference several posters presenting the major objectives and results of the BAR/PAR Project were exhibited with contributions from SMACOPI, University of Caen, Université du Littoral and University of Sussex.

The BAR project held its Transnational meeting at the International Study Centre at Canterbury Cathedral. The meeting was well attended by many different groups and provided a good opportunity to present and discuss work achieved to date and research aims for the future.

### Contacts

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