easy newsletter

european atlantic forecasting system

www.project-easy.info

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introduction

The Easy Project aims to build a polycentric infrastructure for operational modelling. The modelling system includes meteorological models wave generation and propagation models, a General Ocean Circulation Model (GCM), and a system of local models coupled to the GCM by an intermediate regional model. In order to have a robust tool model validation and calibration proceedings are being undertaken in the scope of this project.

in the Galicians Rias...

Intecmar and MeteoGalicia had deployed two ocean-meteorological stations in the Ria de Vigo. The aim of these platforms is to collect meteorological data as temperature, humidity and wind, and oceanographic data as salinity, temperature and currents at different depths, to calibrate and validate the modelling of the ria.
One of these stations is located in the strait of Rande. The objective is to regard all the information of the pycnocline in this place and the flow between San Simon Bay (the shallow inner part of the ria) and the rest of the Ria de Vigo. The second station is mounted on an oceanic buoy, located at the south of Cies Islands. This buoy was deployed with the purpose to capture the influence of the entrance of the shelf water into the rias.
All data are collected in real time by mobile technology. All of them are ingested in a Data Base Server placed in MeteoGalicia with a mirror in Intecmar, and an automatic and manual quality control is applied to them. Afterwards, all of the collected data is distributed via web at http://www.meteogalicia.es and http://www.intecmar.org/plataformas. These stations become to complete the Galician Oceanographic Network initiated with a station in the Ria de Arousa.

past activities

The 3rd EASY meeting took place in Toulouse on the 7th November 2007. Beside the presence of all partners Marcel Cure from the Marine Institute in Ireland and Johan van der Mollen from CEFAS, UK were also present as observers.

in West Portuguese Coast...

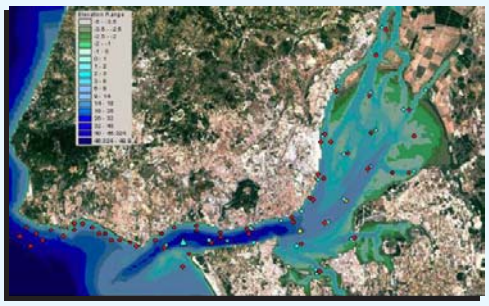
The IST is responsible for a monitoring program in the Nazaré-Óbidos area and in the Tagus River area under the scope of other two projects with respectively the companies of "Aguas do Oeste, SA" and "SANEST, SA". These data is being used to calibrate the local models being implemented in these areas.

...Nazaré - Óbidos...

The program integrates classical field data analysis (e.g. nutrients, oils, microbiology) on the water column witch is complemented with the use of sensors (YSI 6600 EDS) that permits measurements of salinity, temperature, dissolved oxygen, pH and turbidity in the all water column . ADCP (current meter) measurements are also performed. One campaign is performed each tree months, except during summer that is mensal. These data are being used to calibrate the operational local model being implemented in this area.

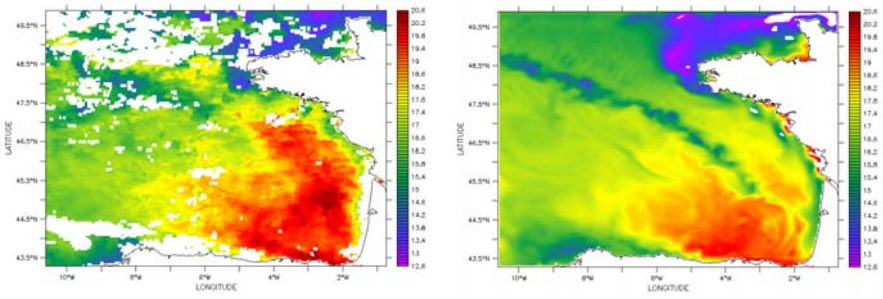
This project started two years ago, a net of monitoring stations near the coastal zone (5 in each area) was established.

...Tagus River/Estoril Coast...



Monitoring in the Tagus river and Estoril Coast area under the scope of Sanest project started almost 10 years ago. Inside the Tagus river estuary under the SIMTEJO, SA project two years of data are also available for the calibration of the operational local model being implemented in this area. The monitoring program is focused in water quality, the parameters measured the same of those measured in the Nazaré-Obidos area.

Another tool for model calibration is Satellite Images. This tools is especially important for the calibration of the large scale models as the GCM, the following figure shows a comparison between the SST MODIS at 0.4 km of resolution and the SST obtained with the NEMO-OPA model. The main features observed on the satellite imagery are well reproduced by the model (mixing on the north shelf, upwelling along the Spain coast, tidal front along the shelf break ...). Situation of 17 June 2004.



future activities

The **4th EASY meeting** will take place from the 4th to the 6th March 2008 in **Santiago de Compostela, Spain**. This meeting will count with the presence of all partners, our observers form the Marine Institute in Ireland and the CEFAS; UK, and the project consulting board.

EASY Consulting Board:

Portugal - Engº Arnaldo Pêgo (Águas de Portugal, SA), Cte. Marcelo Pamplona (Secretaria Regional das Pescas-Açores);

Espanha - Eng. Enrique Alvarez Fanjul (Puertos del Estado), Eng. Xoán Novoa Rodríguez (Centro para la prevención y lucha contra la contaminación marítima y del litoral (CEPRECO)), Engª. Marisa Fernández Cañamero (Centro Tecnológico del Mar) Eng. José Molares Vila (Centro de Investigacións Mariñas);

France - Eng. Fabrice Ardhuin (EPSHOM), Eng. Jöel Hoffman (PREVIMAR - Météo France), Eng. Michel Girin (CEDRE).